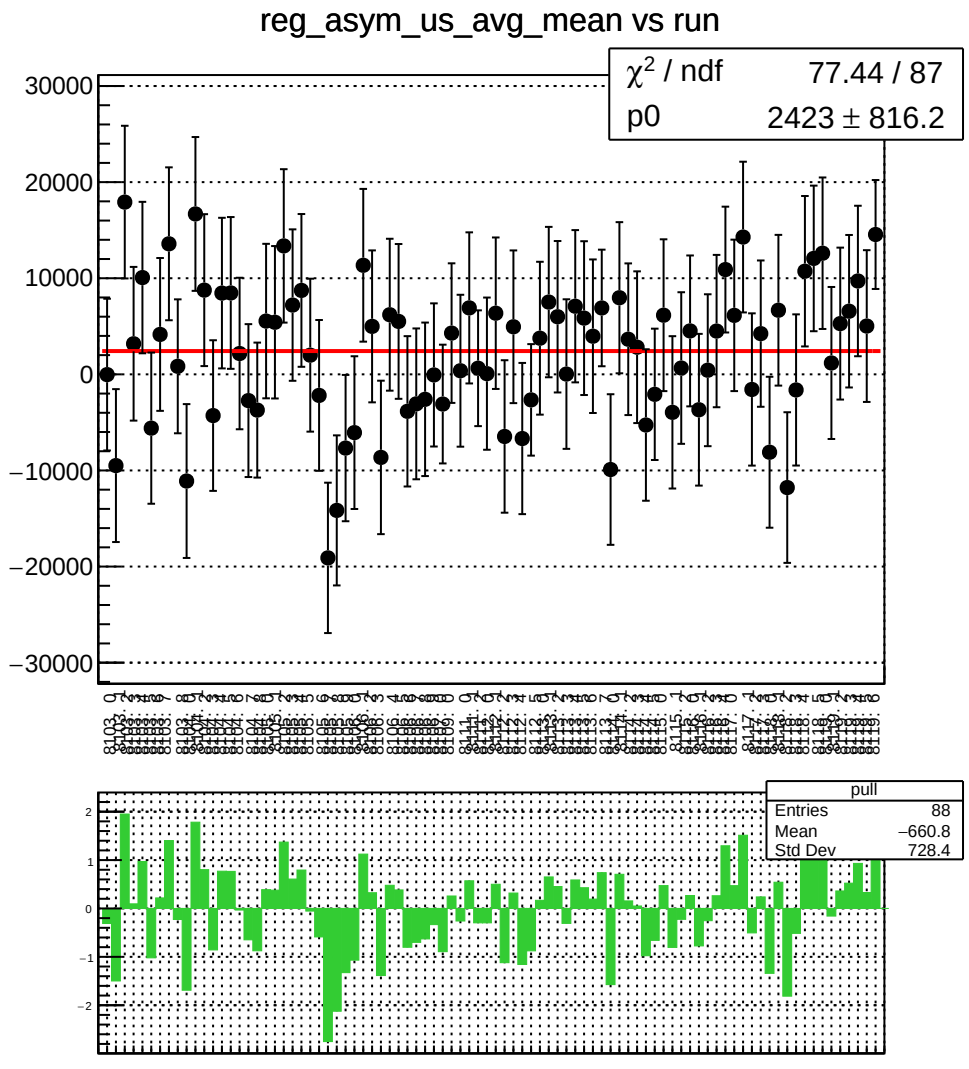
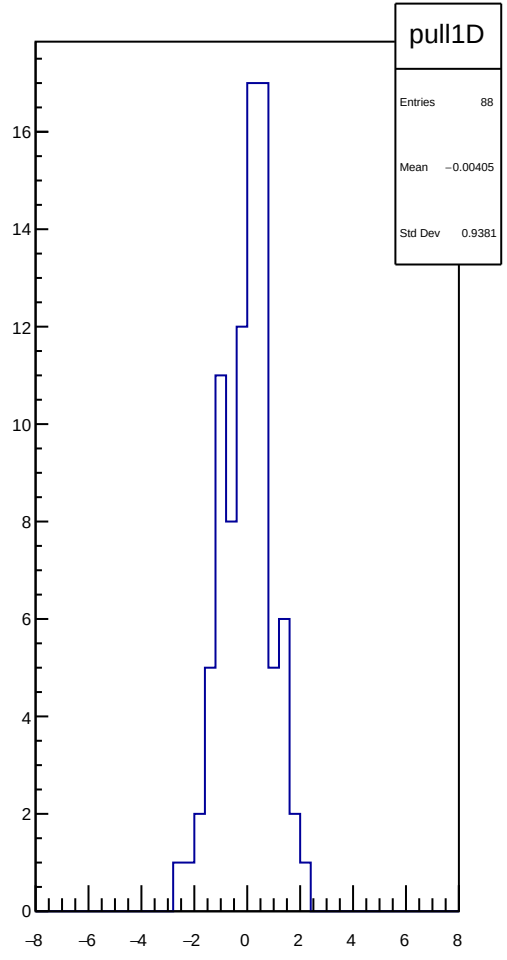
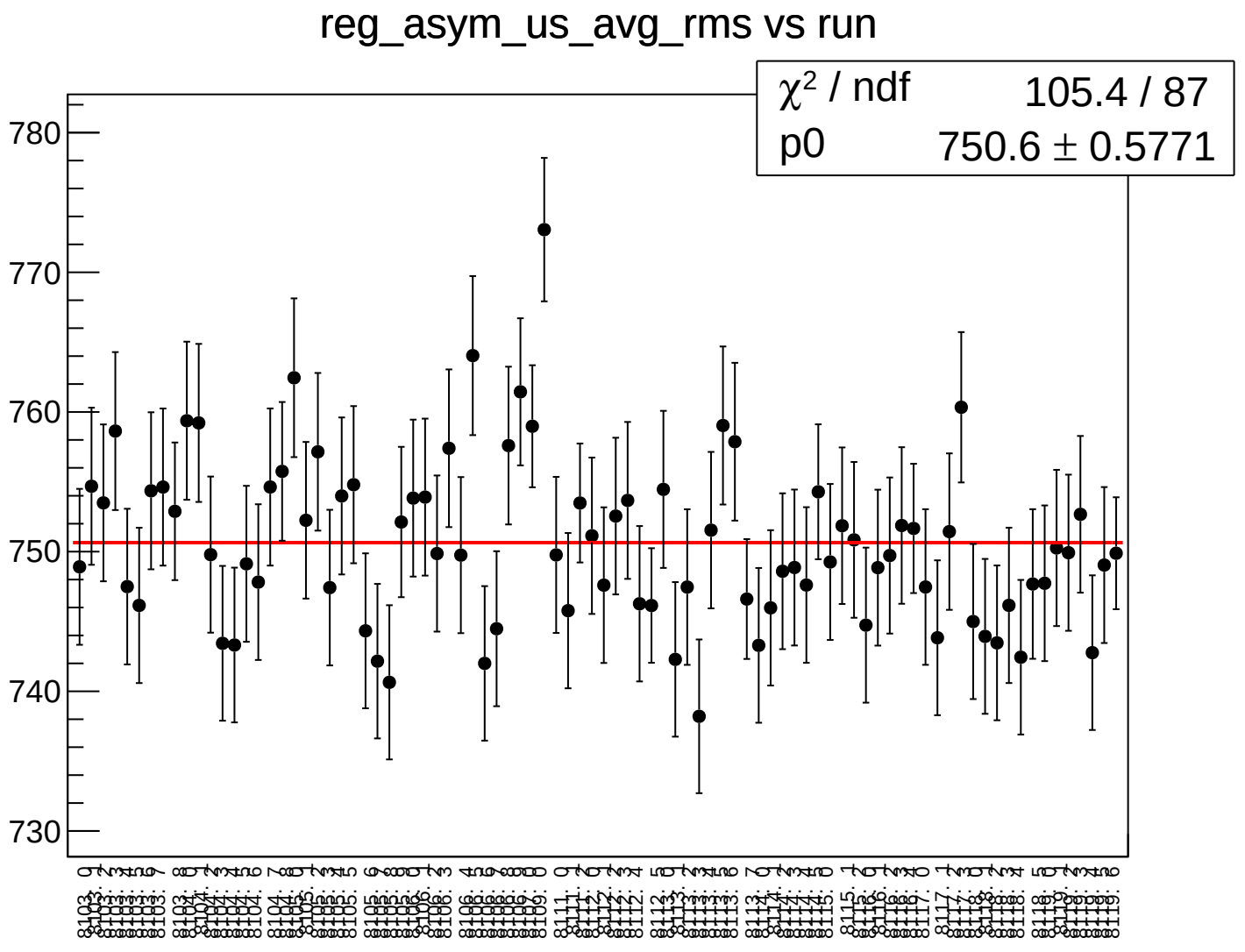
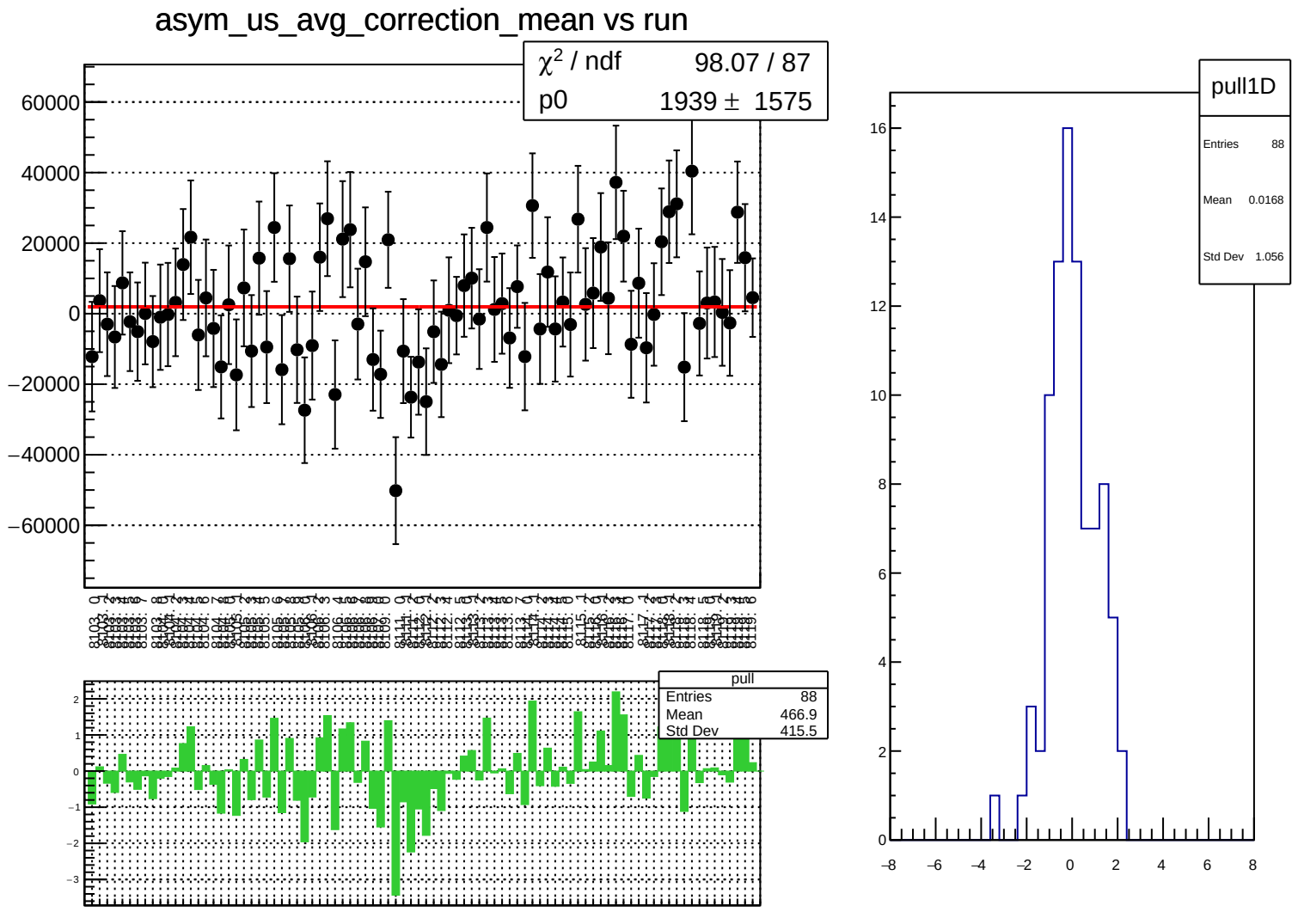
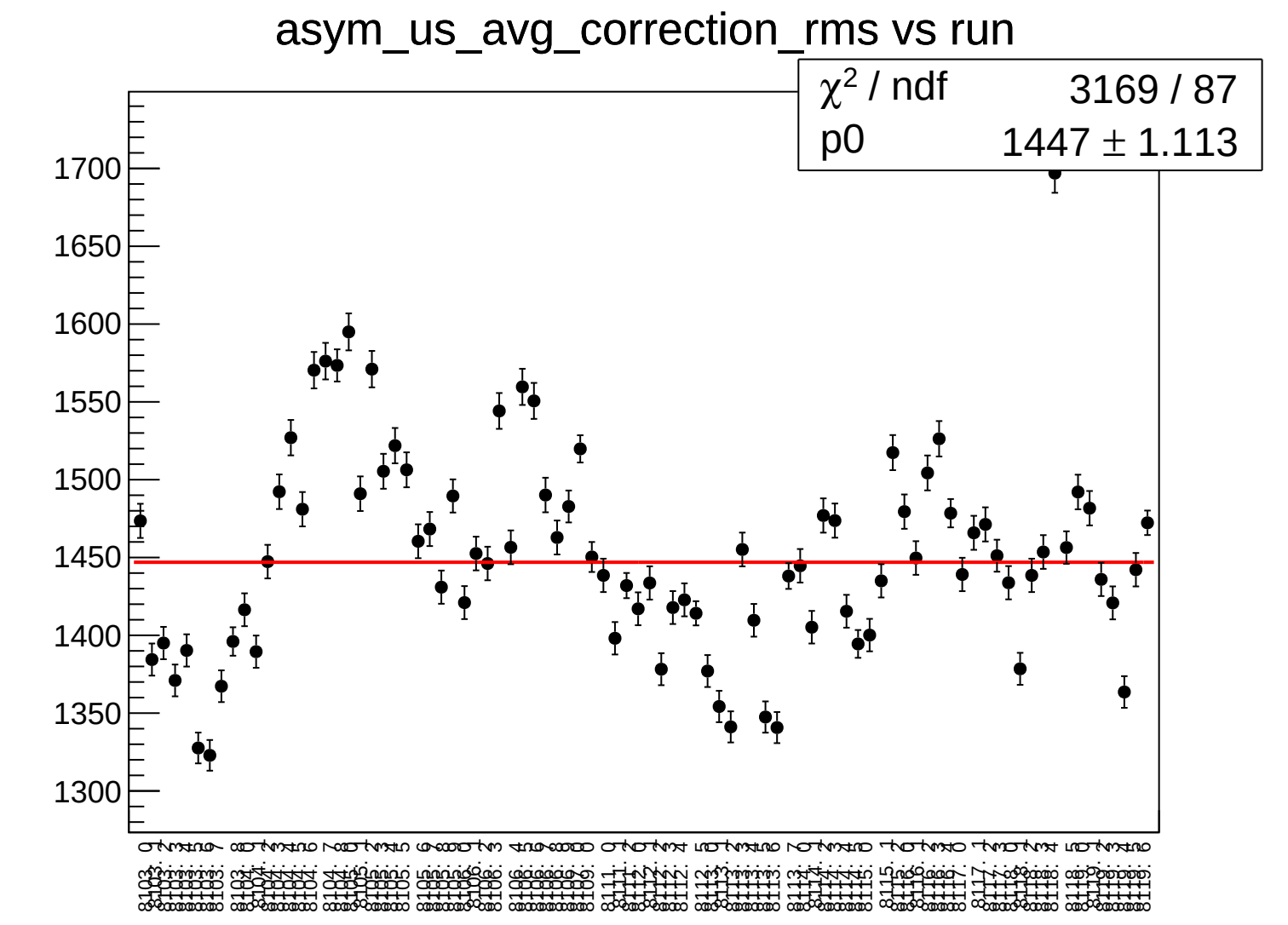
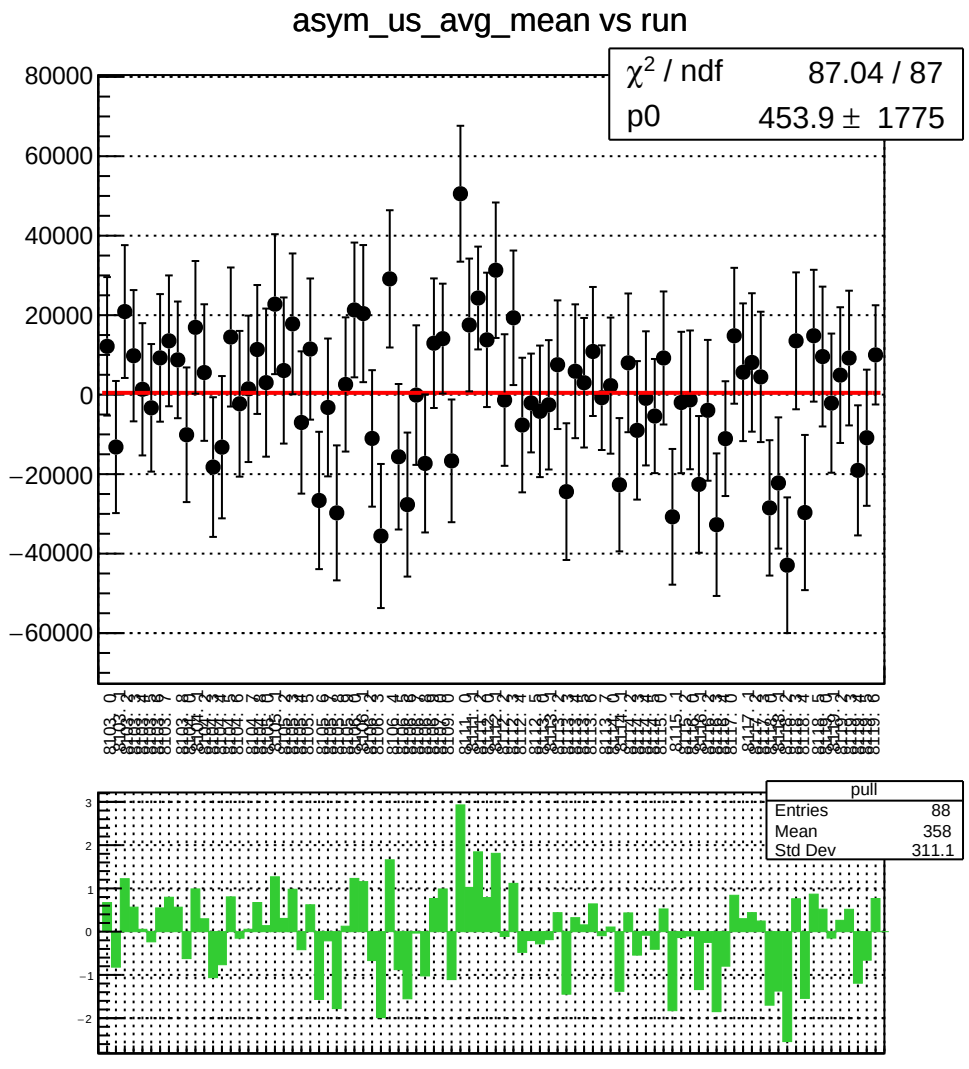

reg_asym_us_avg_mean vs run
χ² / ndf 77.44 / 87
p0 2423 ± 816.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean −660.8
Std Dev 728.4
2
1
0
−1
−2

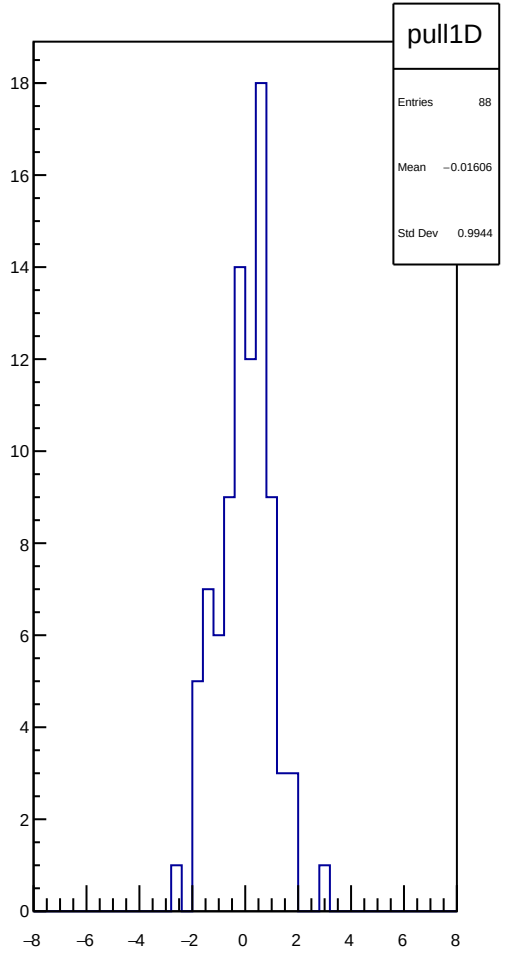

pull1D
Entries 88
Mean −0.00405
Std Dev 0.9381
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

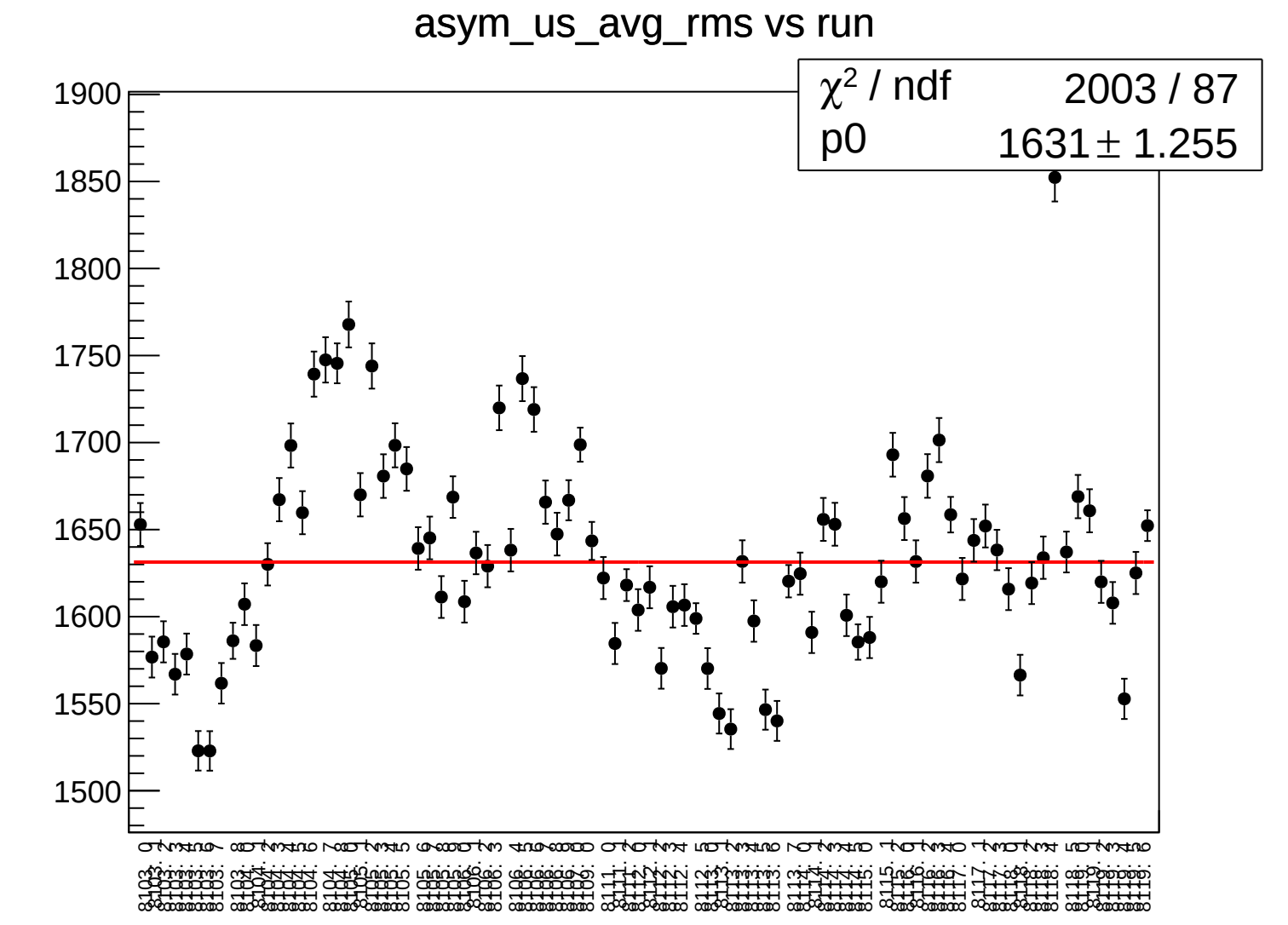

reg_asym_us_avg_rms vs run
χ² / ndf 105.4 / 87
p0 750.6 ± 0.5771
780
770
760
750
740
730

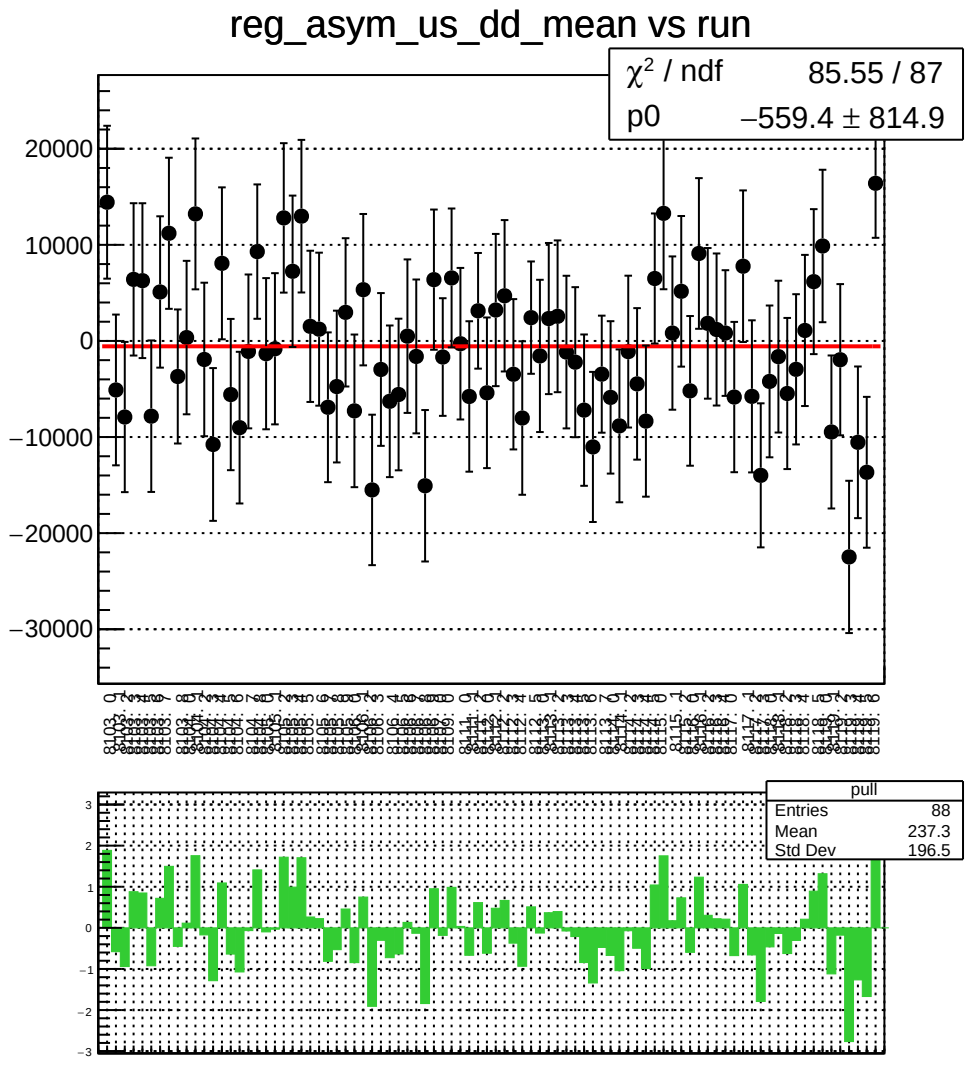

asym_us_avg_correction_mean vs run
χ² / ndf 98.07 / 87
p0 1939 ± 1575
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 466.9
Std Dev 415.5
2
1
0
−1
−2
−3
pull1D
Entries 88
Mean 0.0168
Std Dev 1.056
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

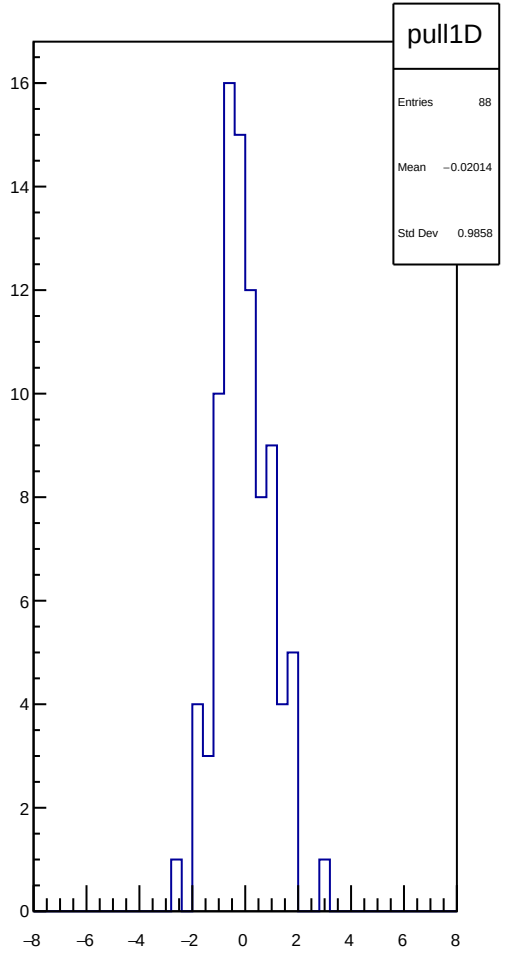

asym_us_avg_correction_rms vs run
χ² / ndf 3169 / 87
p0 1447 ± 1.113
1700
1650
1600
1550
1500
1450
1400
1350
1300

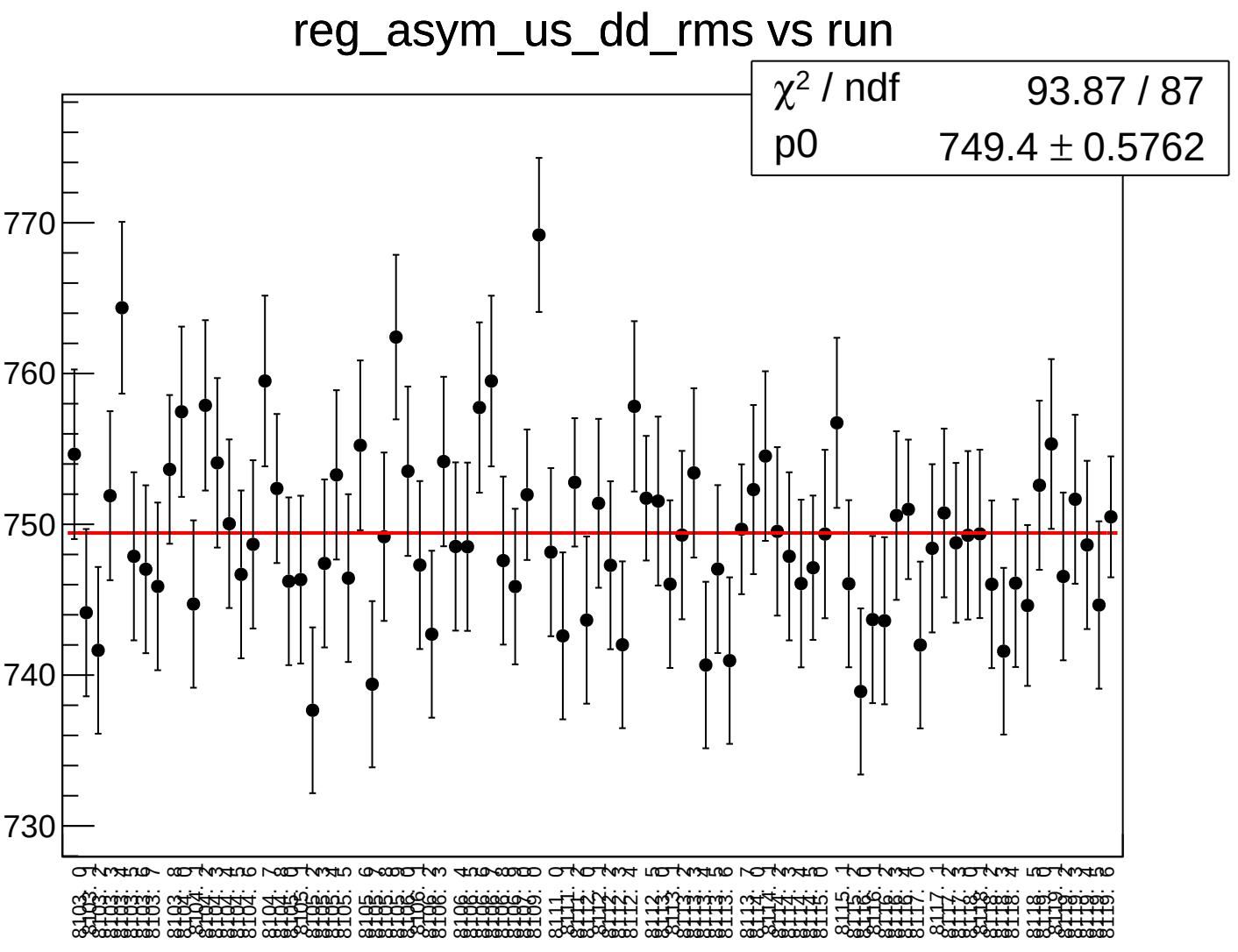

asym_us_avg_mean vs run
χ² / ndf 87.04 / 87
p0 453.9 ± 1775
pull
Entries 88
Mean 358
Std Dev 311.1

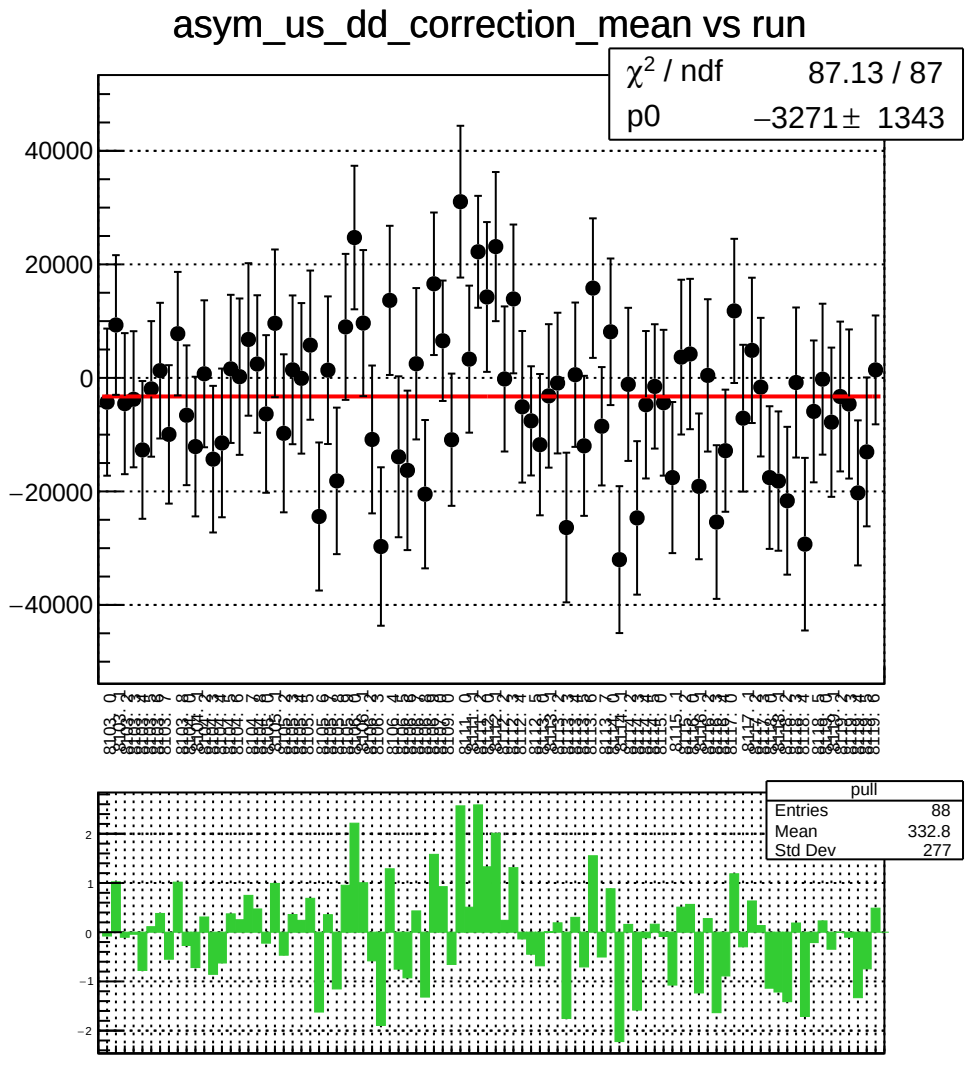

pull1D
Entries 88
Mean −0.01606
Std Dev 0.9944

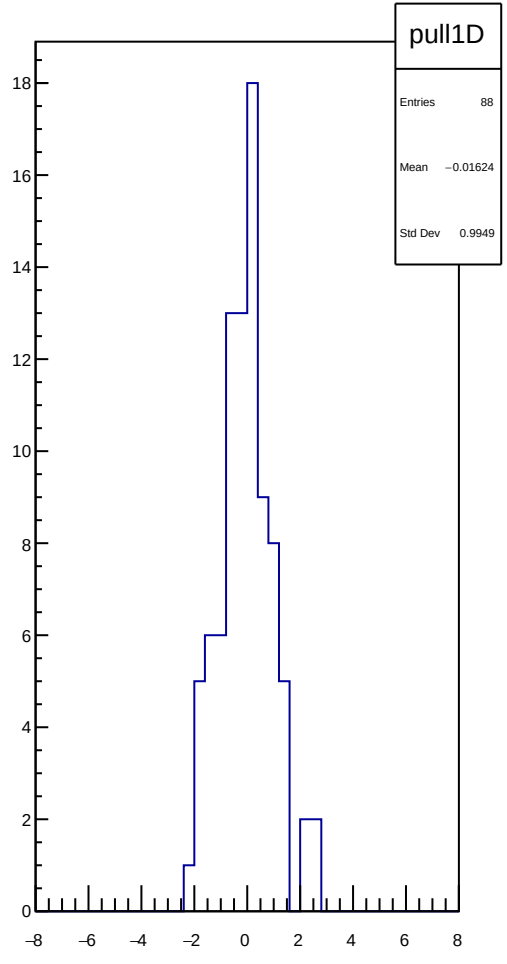

asym_us_avg_rms vs run
χ^2 / ndf 2003 / 87
p0 1631 ± 1.255
1900
1850
1800
1750
1700
1650
1600
1550
1500

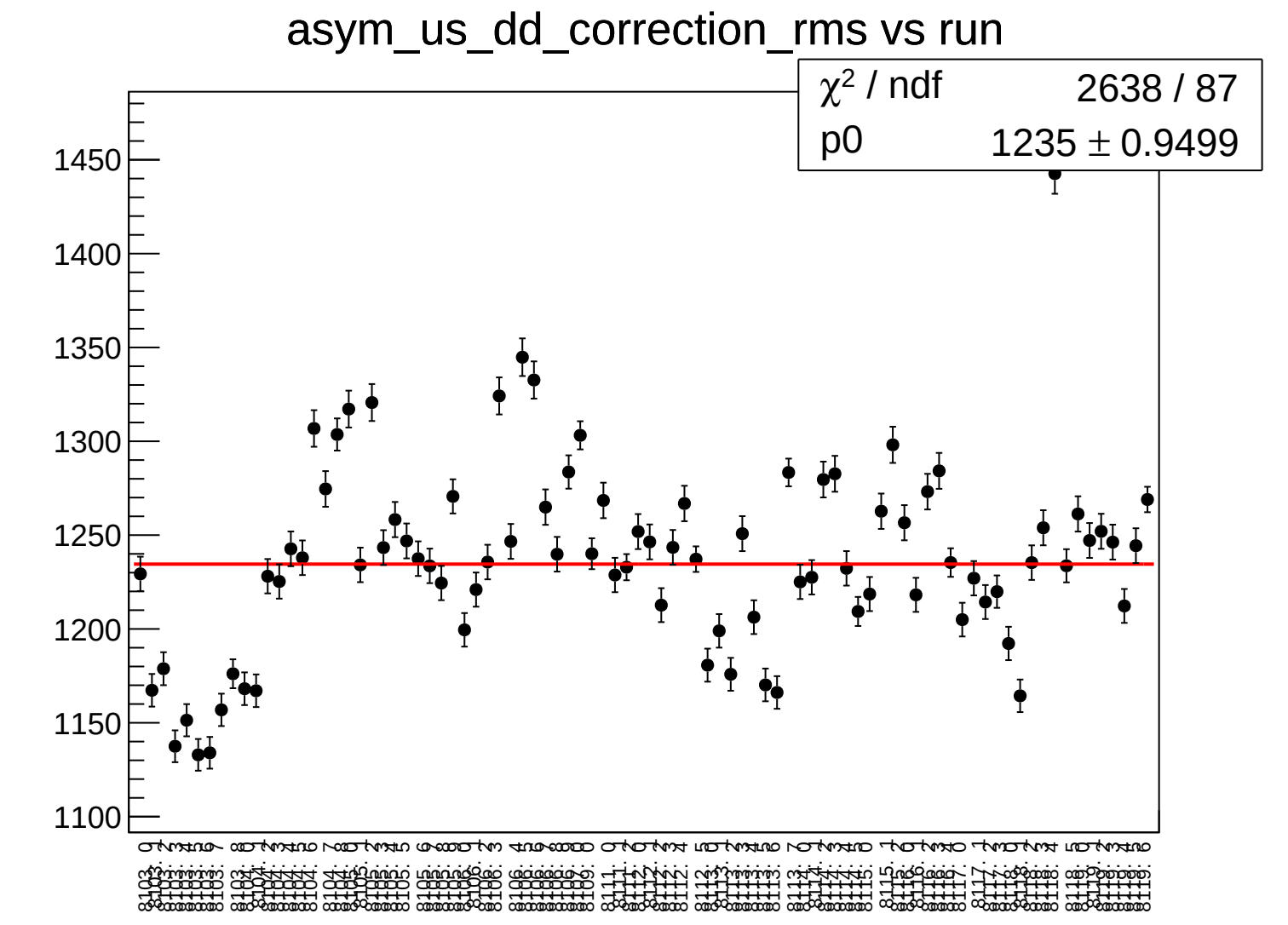

reg_asym_us_dd_mean vs run
χ² / ndf 85.55 / 87
p0 −559.4 ± 814.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 237.3
Std Dev 196.5
3
2
1
0
−1
−2
−3

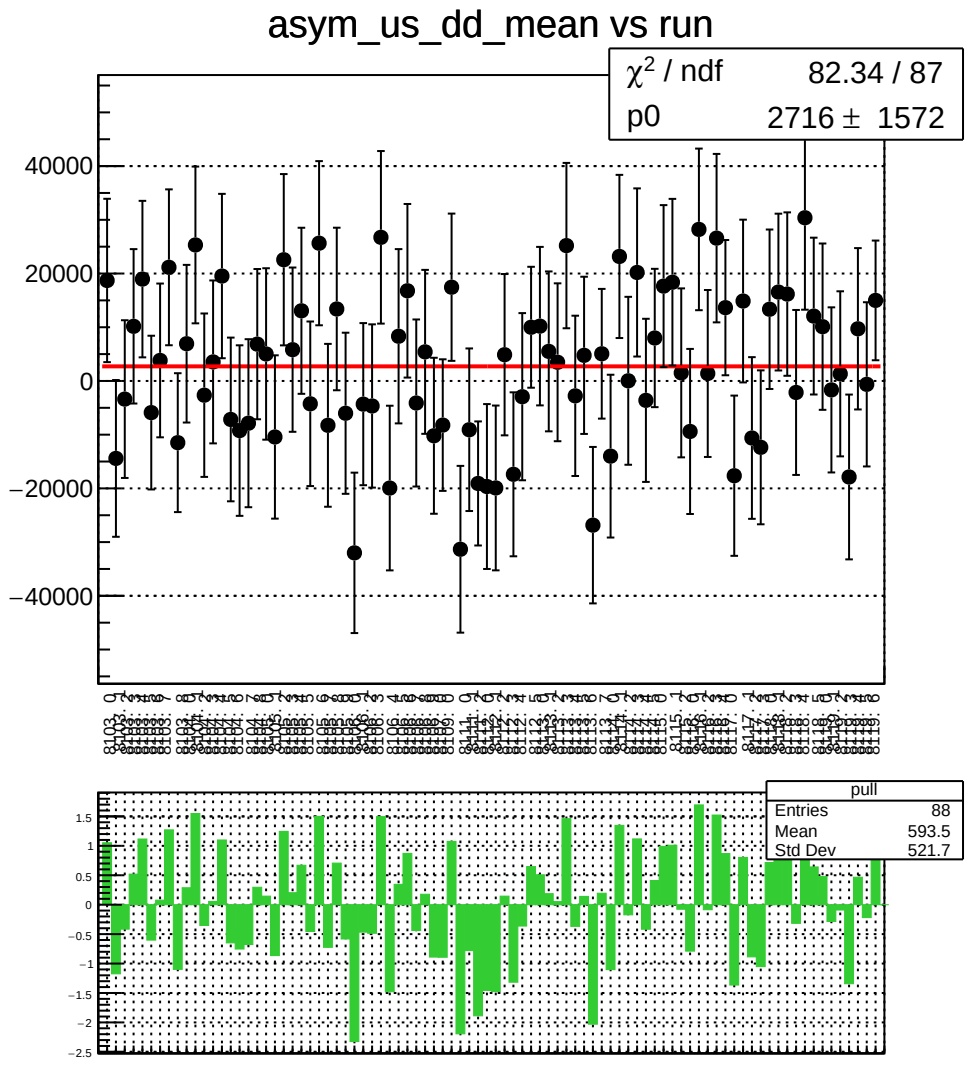

pull1D
Entries 88
Mean −0.02014
Std Dev 0.9858
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

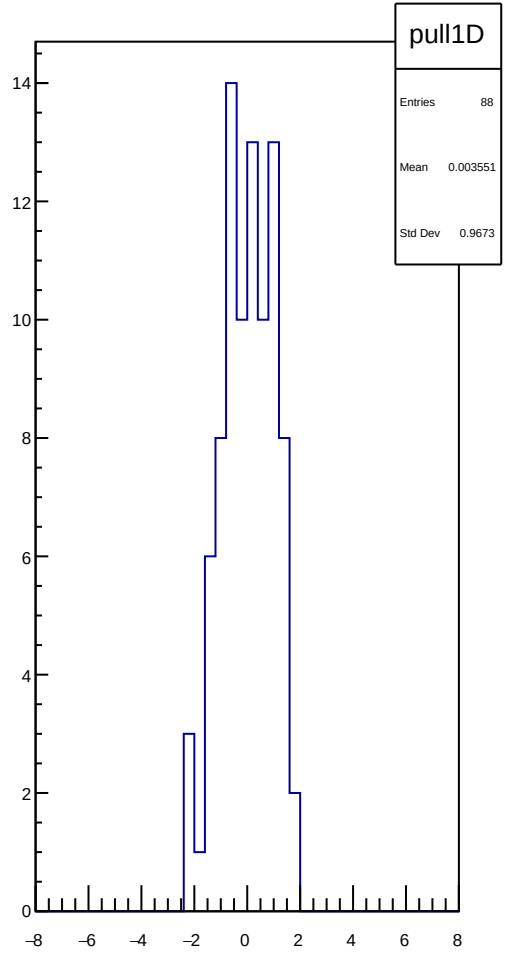

reg_asym_us_dd_rms vs run
χ² / ndf 93.87 / 87
p0 749.4 ± 0.5762
770
760
750
740
730

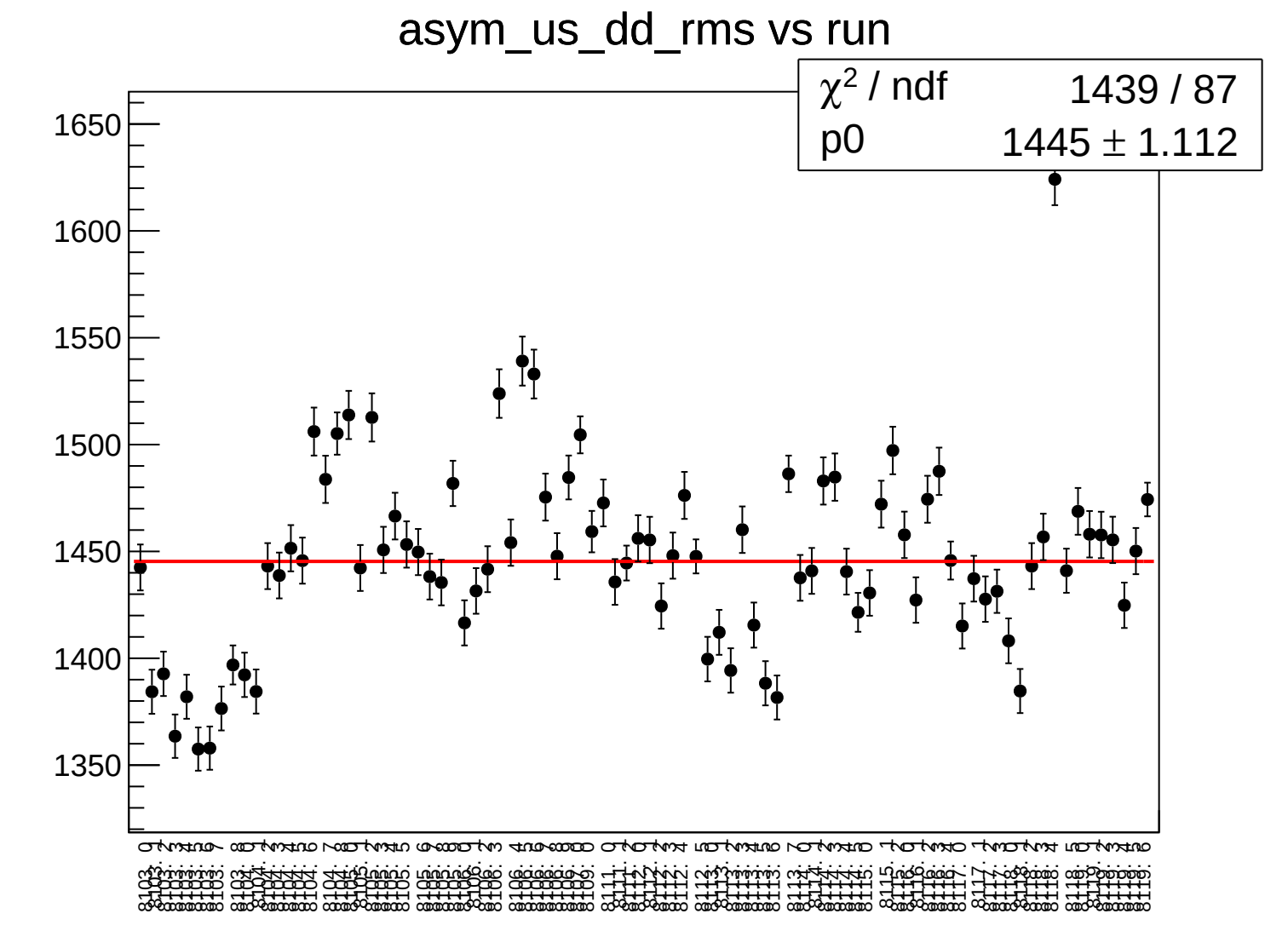

asym_us_dd_correction_mean vs run
χ² / ndf 87.13 / 87
p0 −3271 ± 1343
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 332.8
Std Dev 277
2
1
0
−1
−2

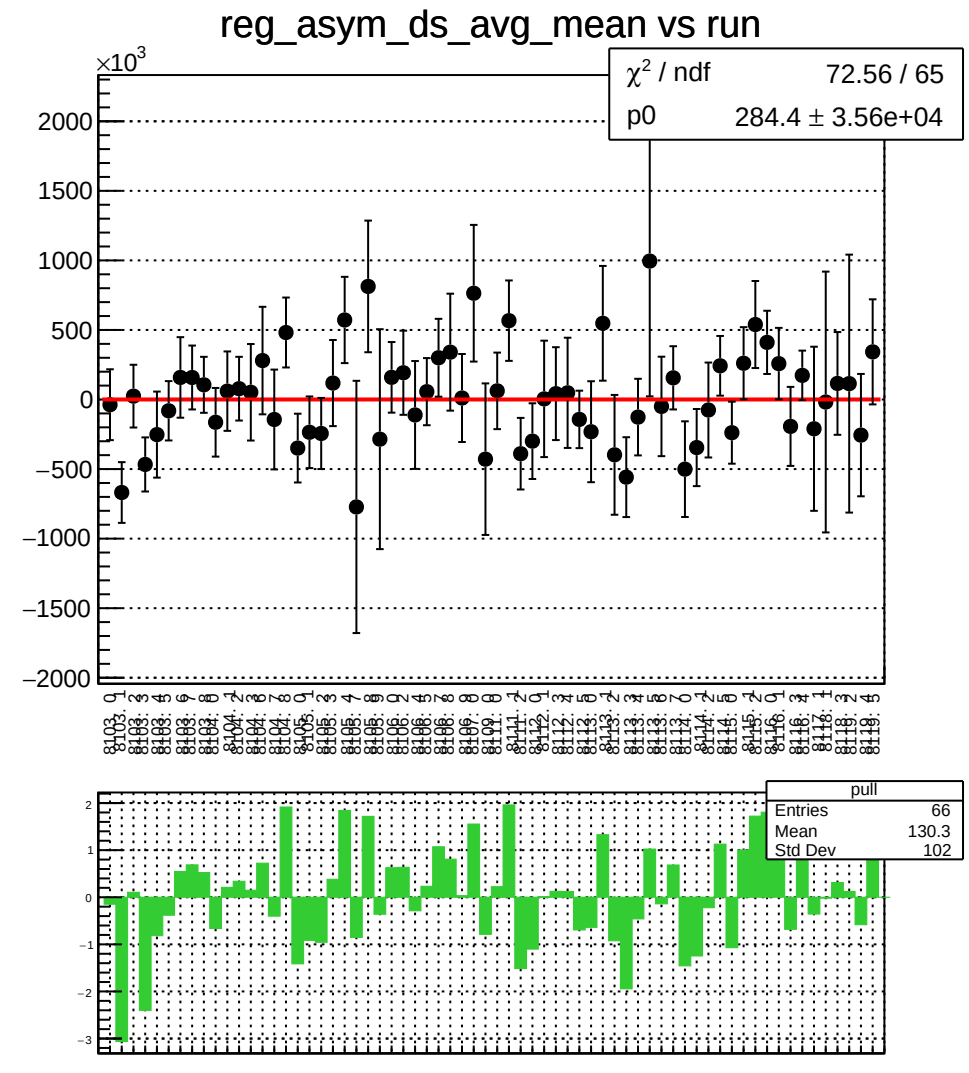

pull1D
Entries 88
Mean −0.01624
Std Dev 0.9949
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

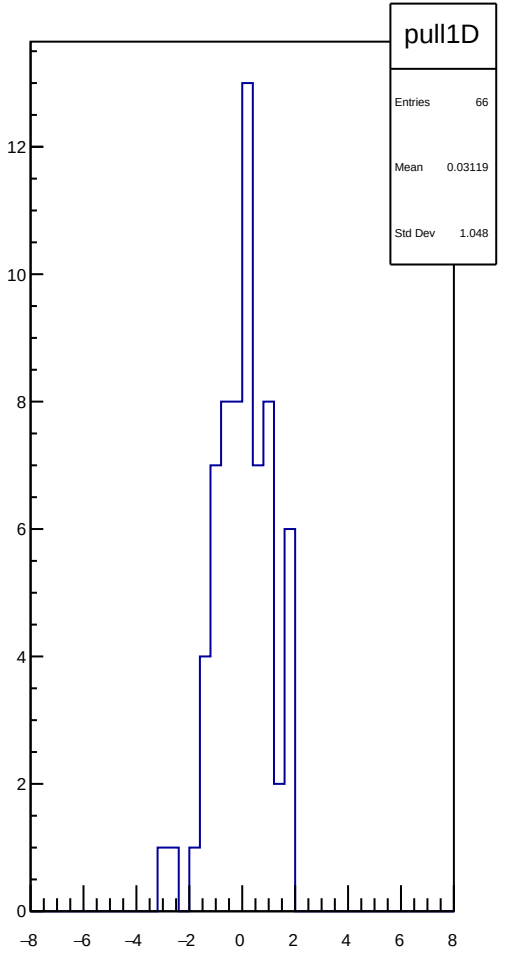

asym_us_dd_correction_rms vs run
χ² / ndf 2638 / 87
p0 1235 ± 0.9499
1450
1400
1350
1300
1250
1200
1150
1100

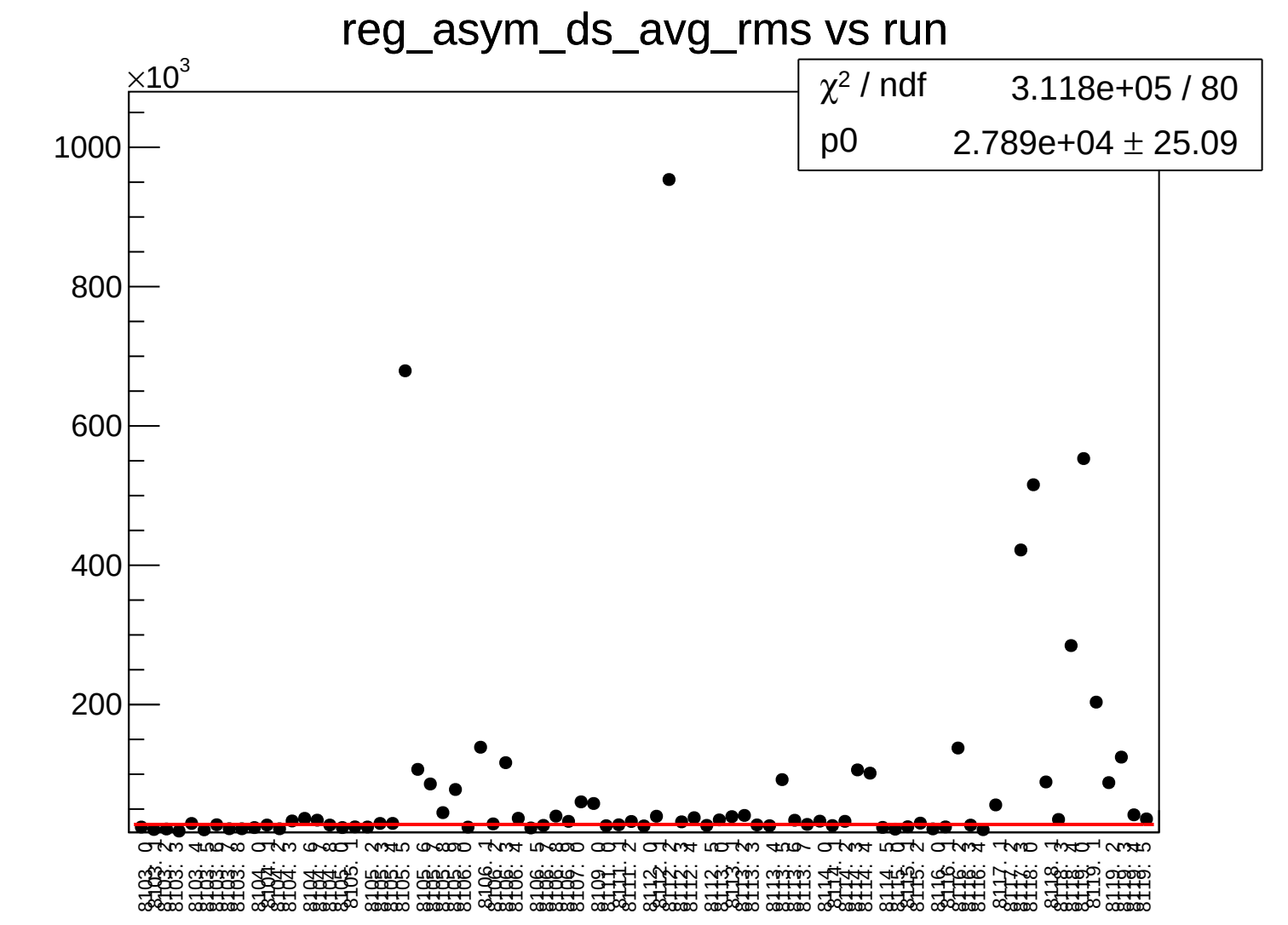

asym_us_dd_mean vs run
χ² / ndf 82.34 / 87
p0 2716 ± 1572
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 593.5
Std Dev 521.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

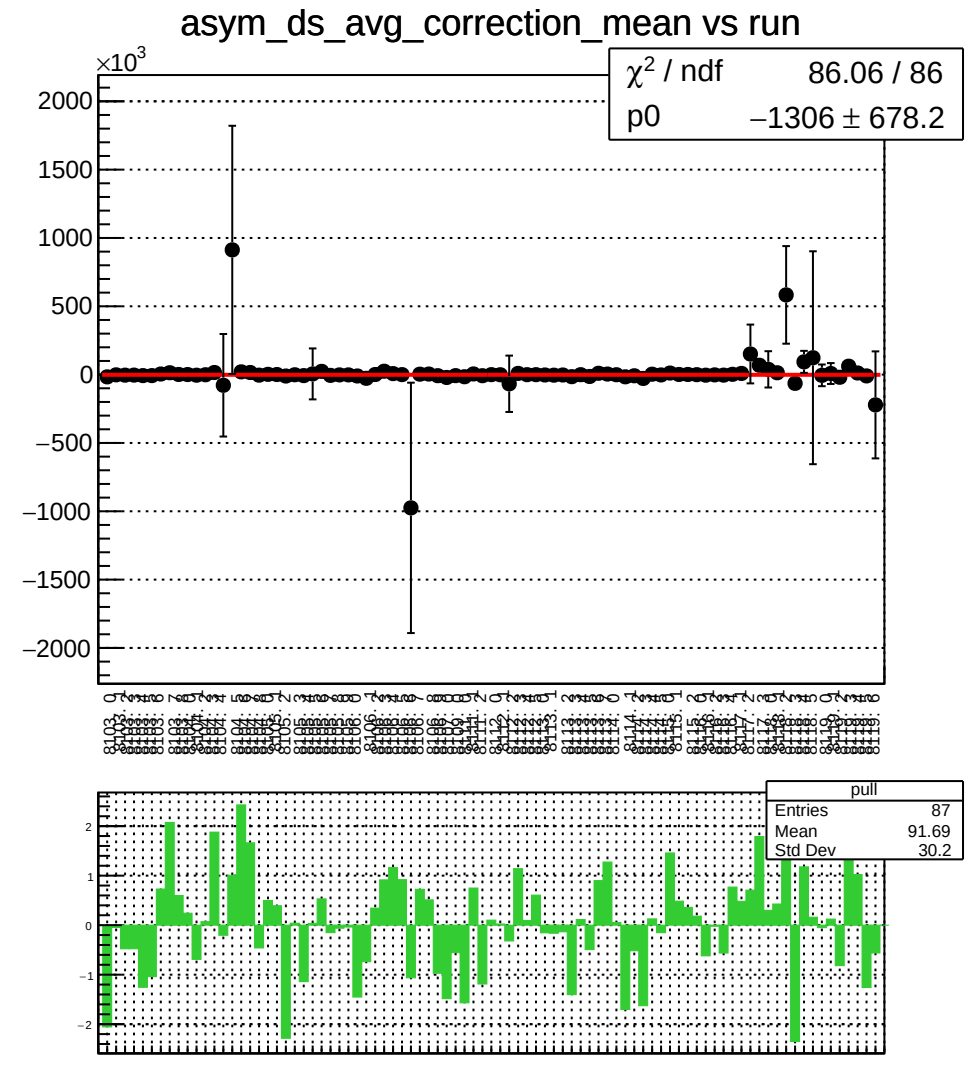

pull1D
Entries 88
Mean 0.003551
Std Dev 0.9673
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

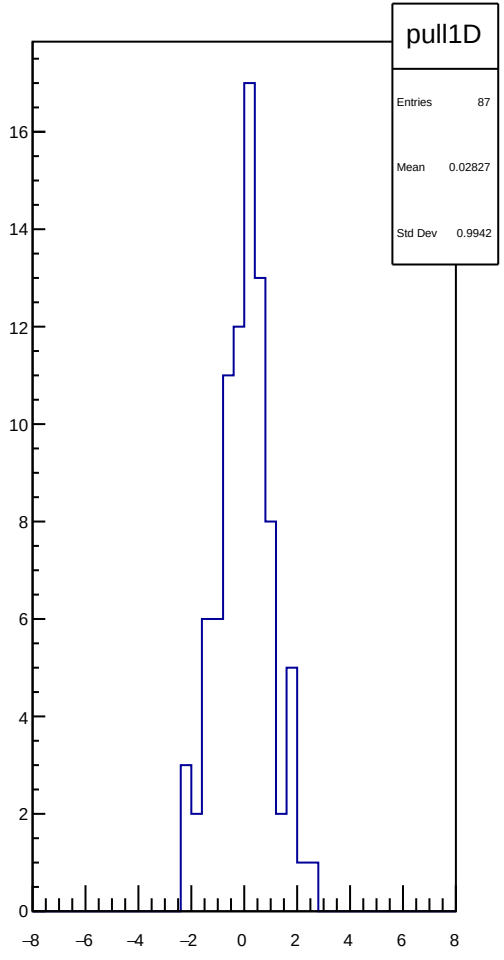

asym_us_dd_rms vs run
χ^2 / ndf 1439 / 87
p0 1445 ± 1.112
1650
1600
1550
1500
1450
1400
1350

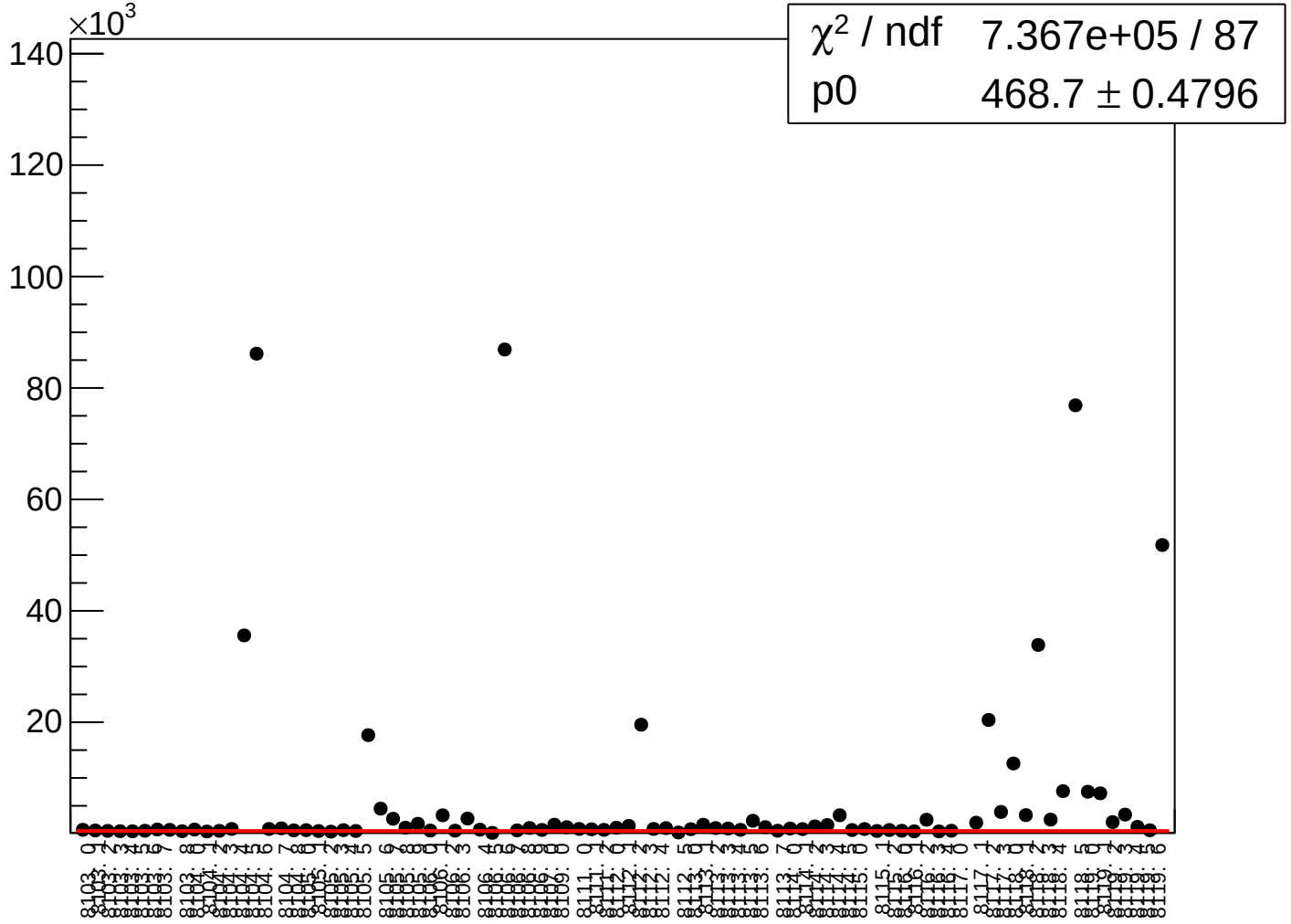

reg_asym_ds_avg_mean vs run
×10^3
χ² / ndf 72.56 / 65
p0 284.4 ± 3.56e+04
pull
Entries 66
Mean 130.3
Std Dev 102

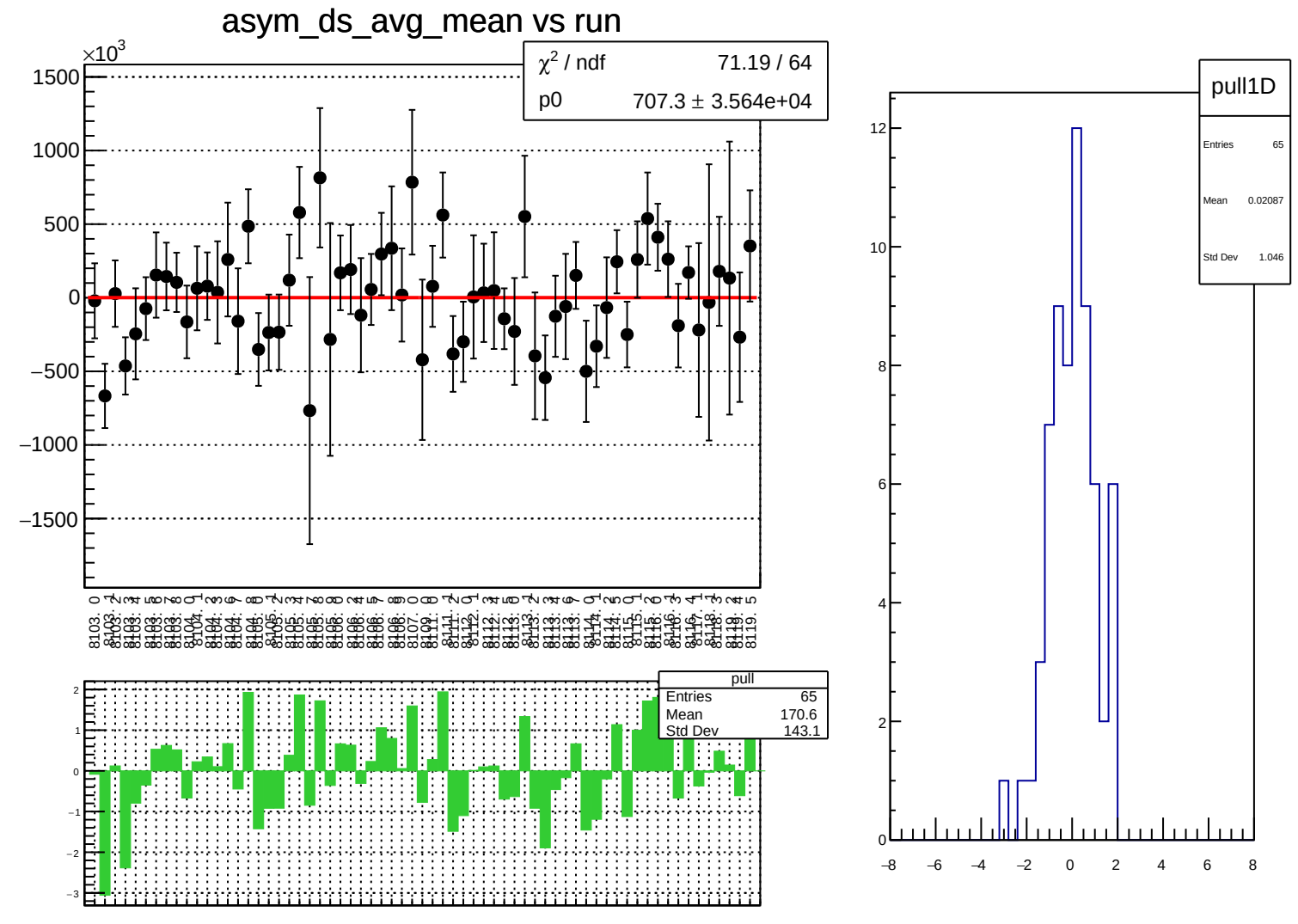

pull1D
Entries 66
Mean 0.03119
Std Dev 1.048

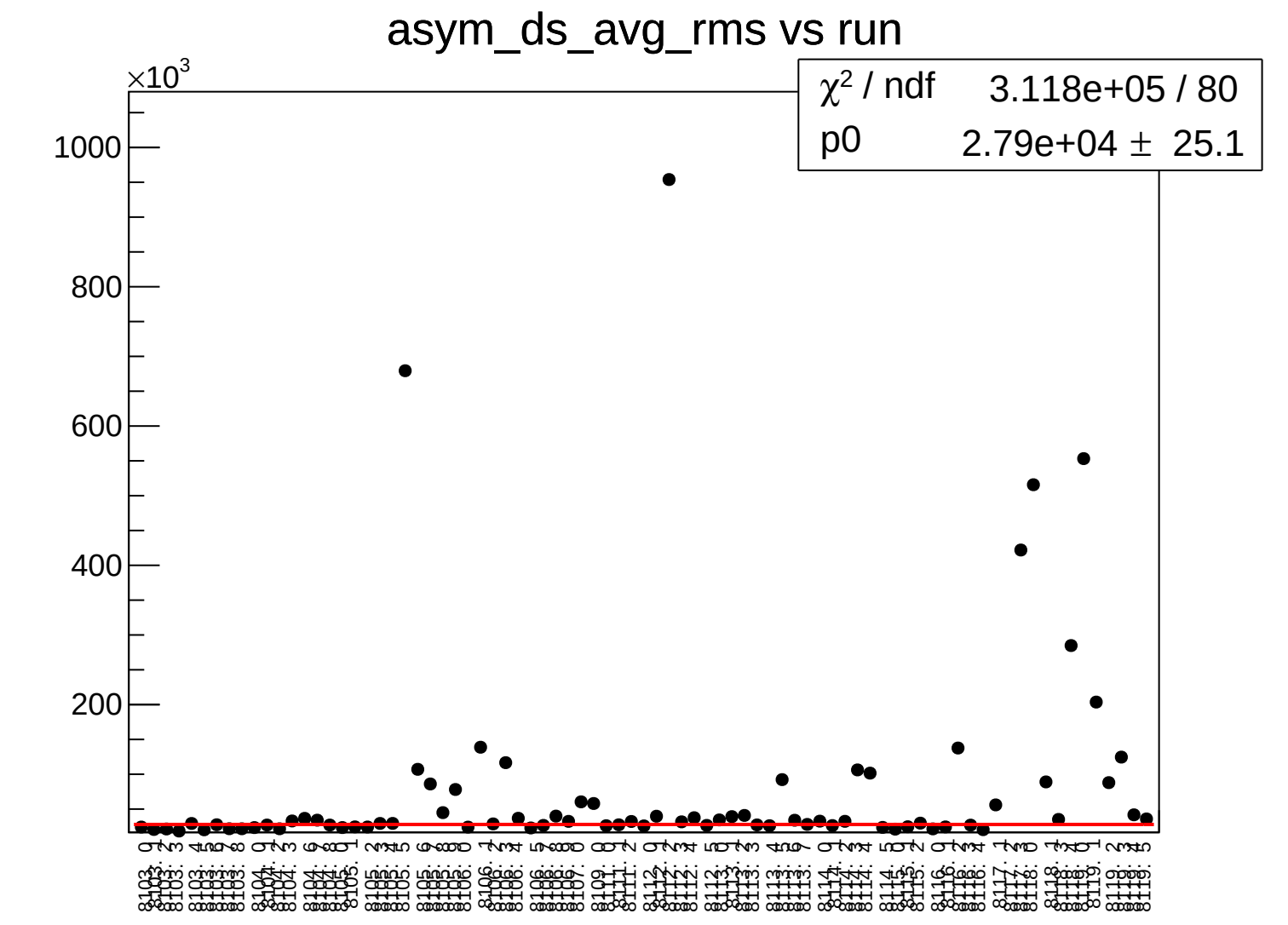

reg_asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.118e+05 / 80
p0 2.789e+04 ± 25.09

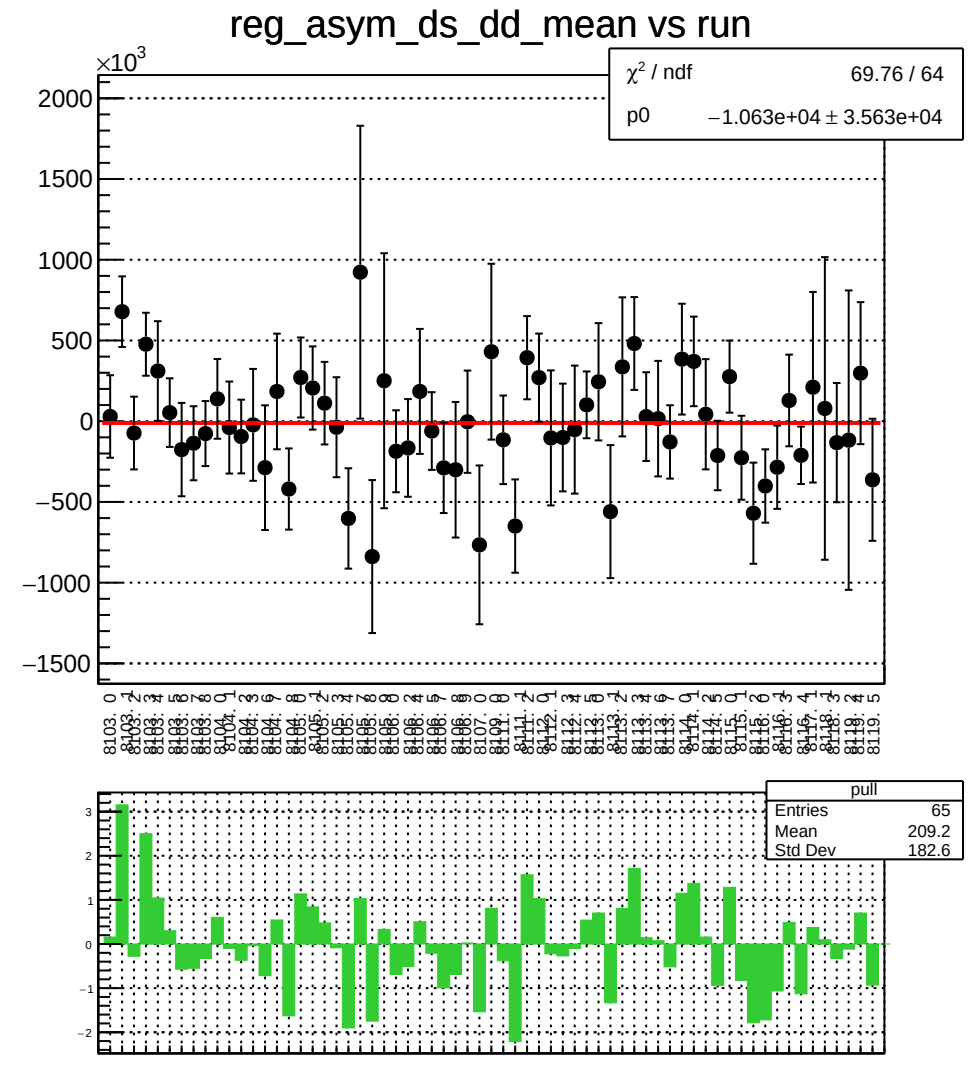

asym_ds_avg_correction_mean vs run
×10^3
χ² / ndf 86.06 / 86
p0 −1306 ± 678.2
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 87
Mean 91.69
Std Dev 30.2
2
1
0
−1
−2

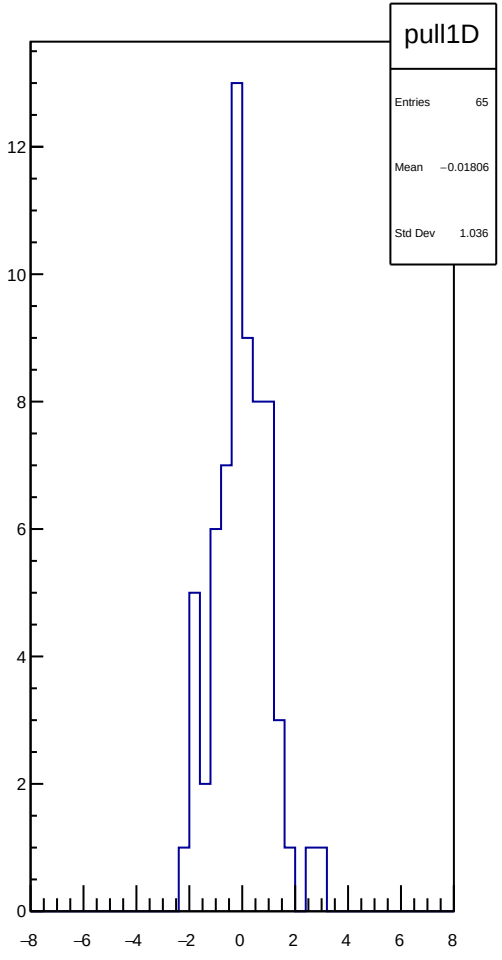

pull1D
Entries 87
Mean 0.02827
Std Dev 0.9942
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

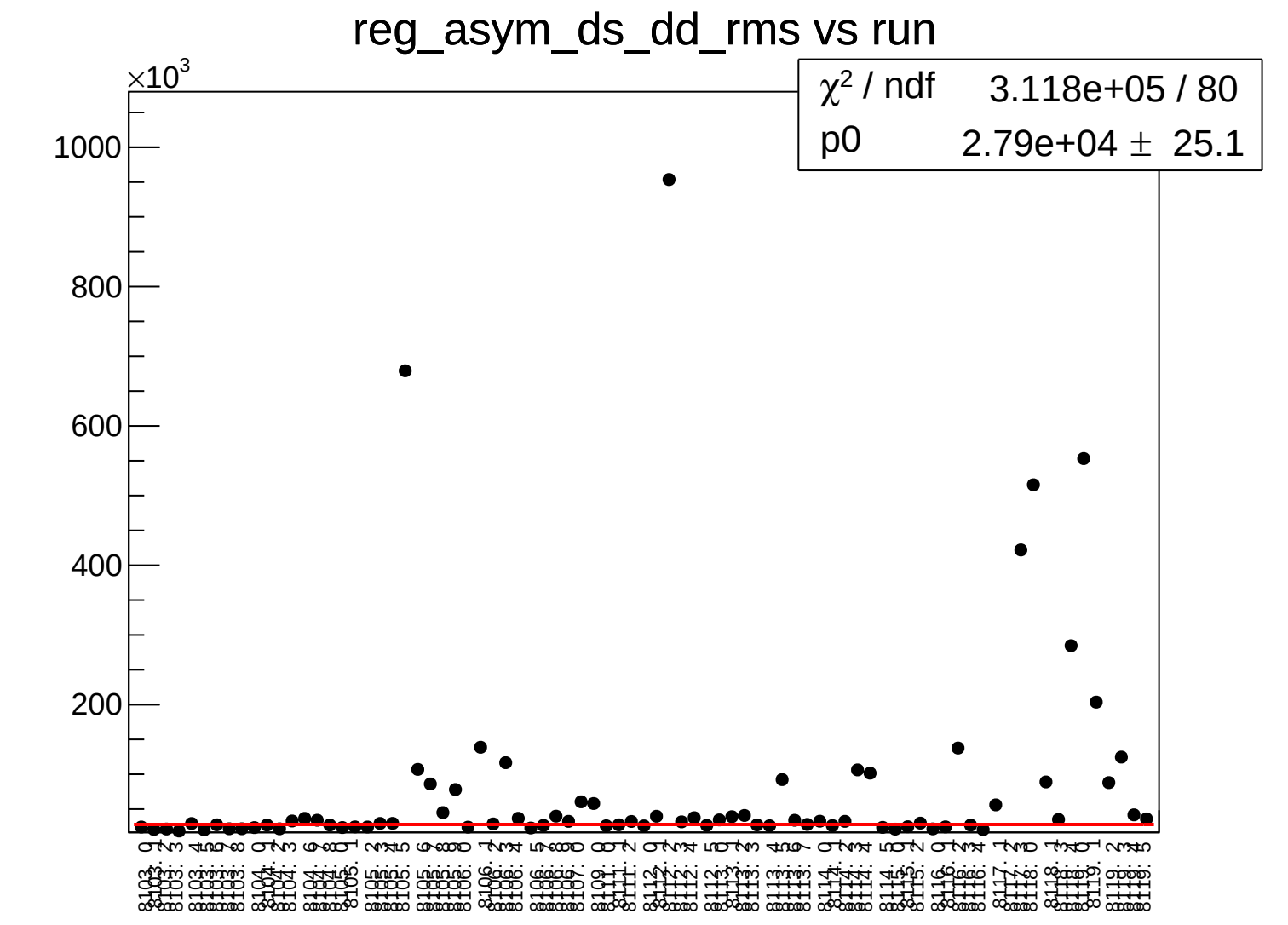

asym_ds_avg_correction_rms vs run
×10^3
140
120
100
80
60
40
20
χ² / ndf 7.367e+05 / 87
p0 468.7 ± 0.4796

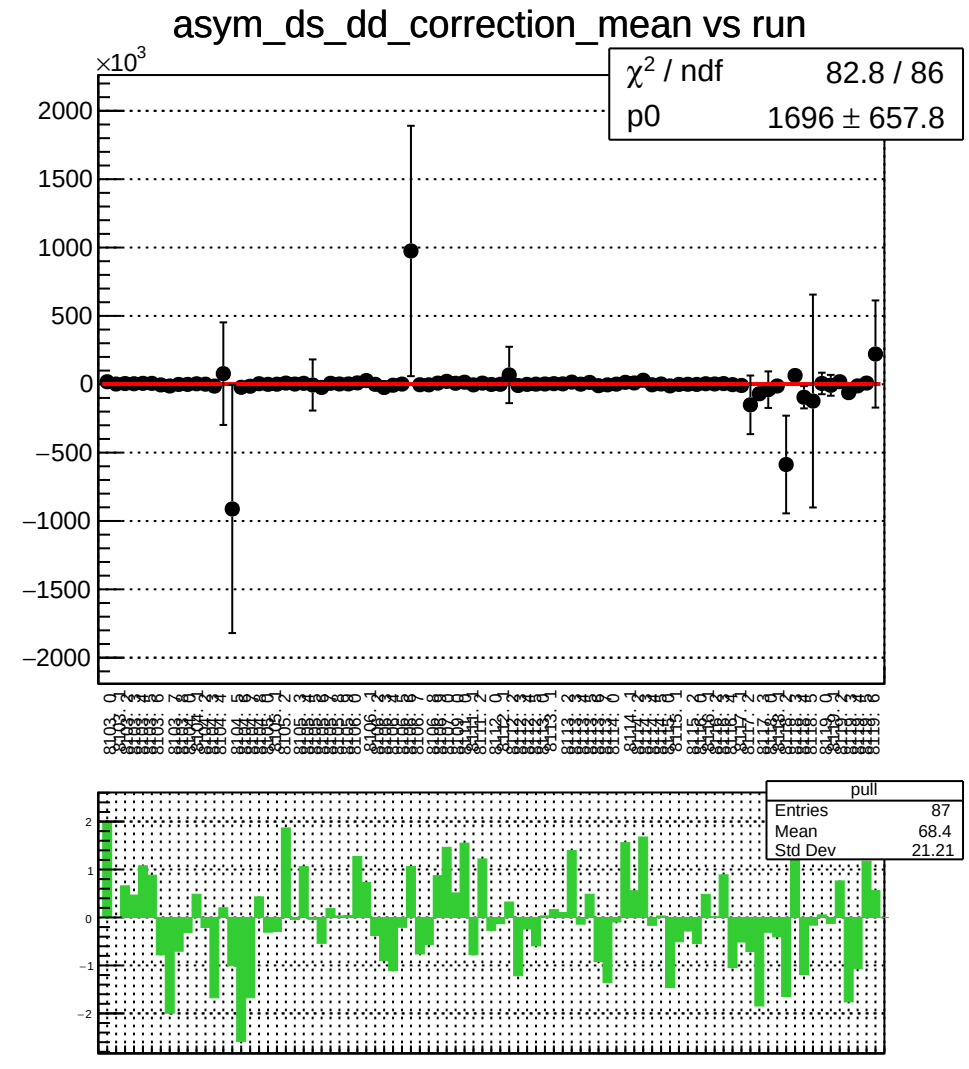

asym_ds_avg_mean vs run
×10^3
χ² / ndf 71.19 / 64
p0 707.3 ± 3.564e+04
pull
Entries 65
Mean 170.6
Std Dev 143.1
pull1D
Entries 65
Mean 0.02087
Std Dev 1.046

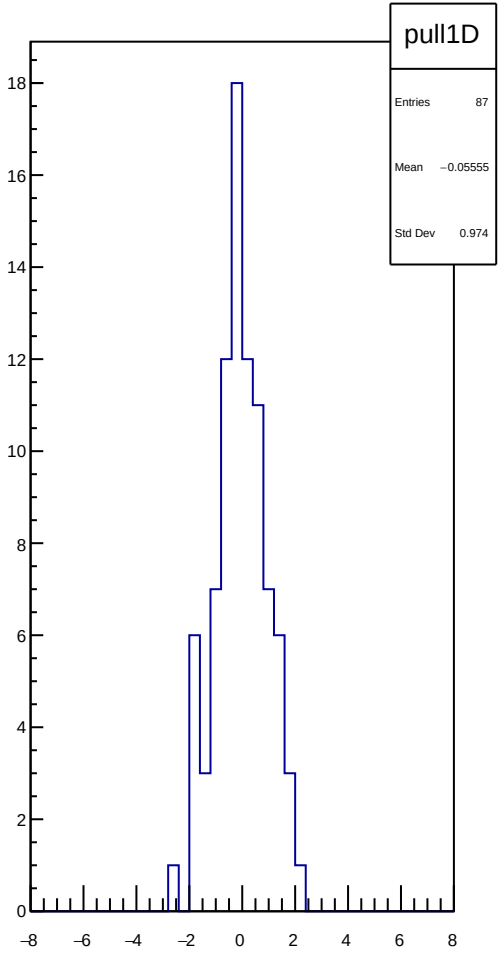

asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.118e+05 / 80
p0 2.79e+04 ± 25.1

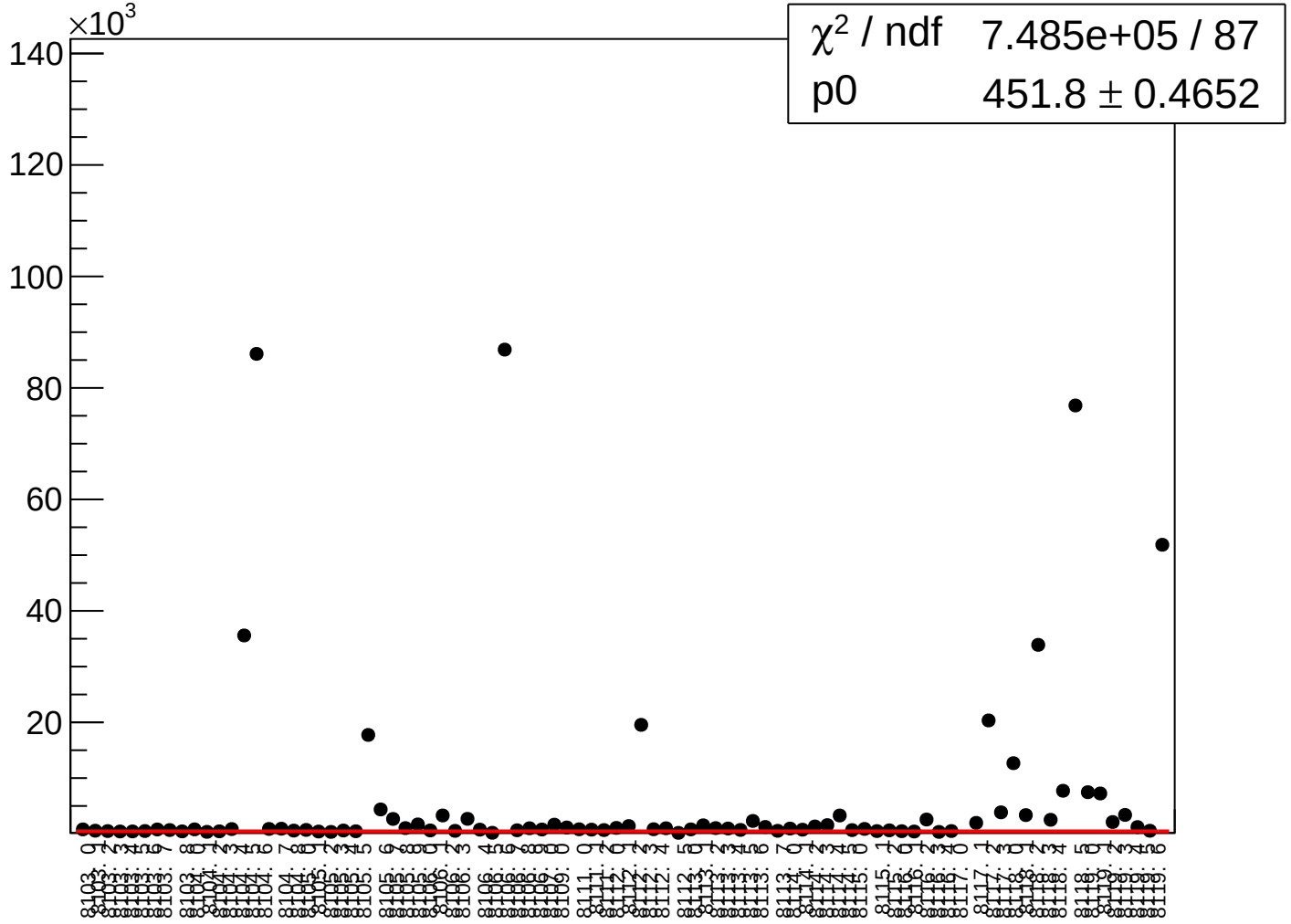

reg_asym_ds_dd_mean vs run
×10^3
χ² / ndf 69.76 / 64
p0 −1.063e+04 ± 3.563e+04
pull
Entries 65
Mean 209.2
Std Dev 182.6

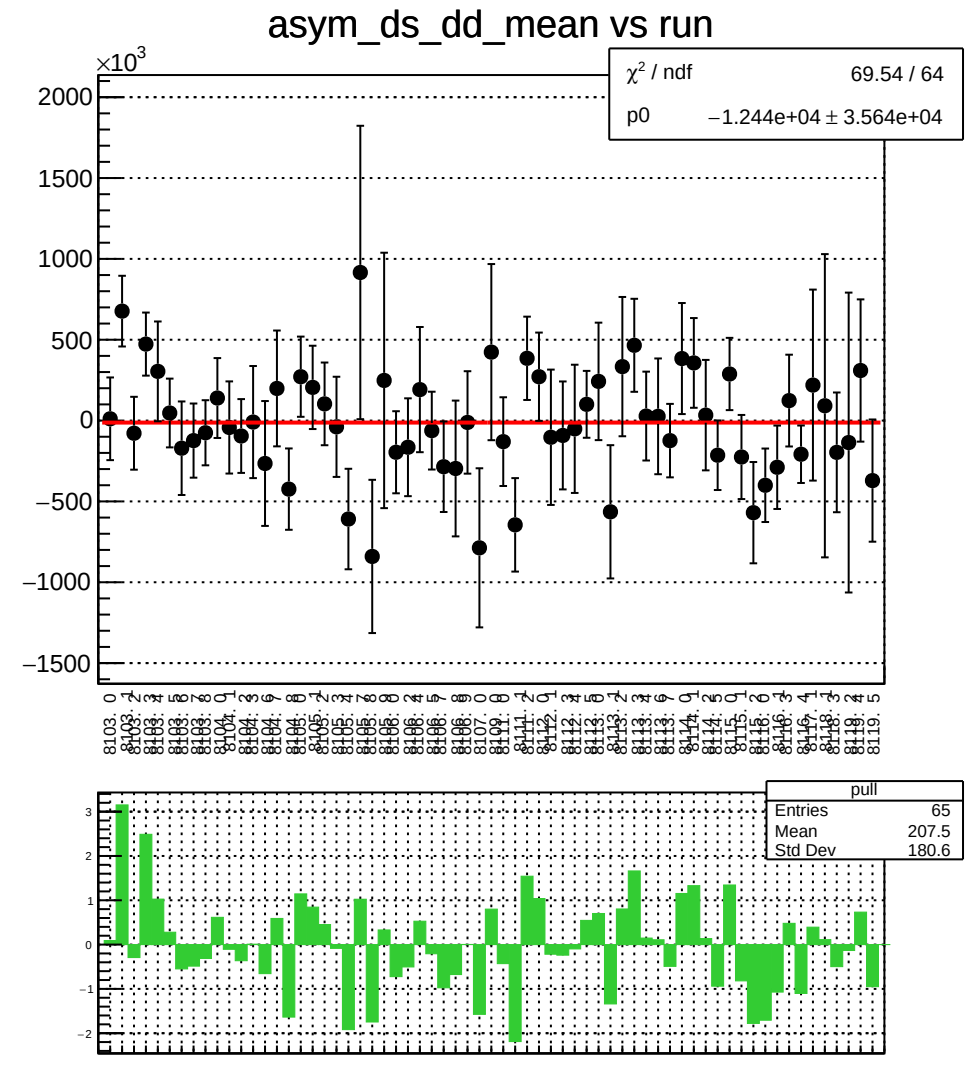

pull1D
Entries 65
Mean −0.01806
Std Dev 1.036

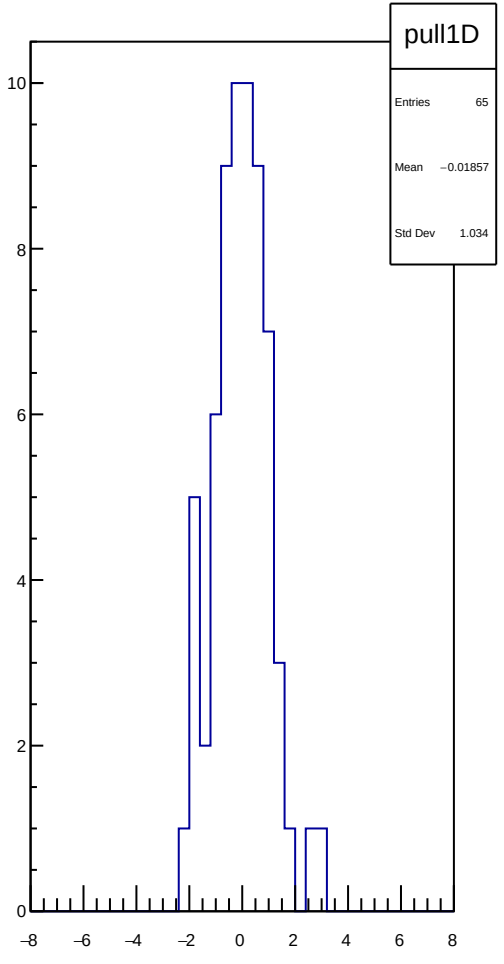

reg_asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.118e+05 / 80
p0 2.79e+04 ± 25.1

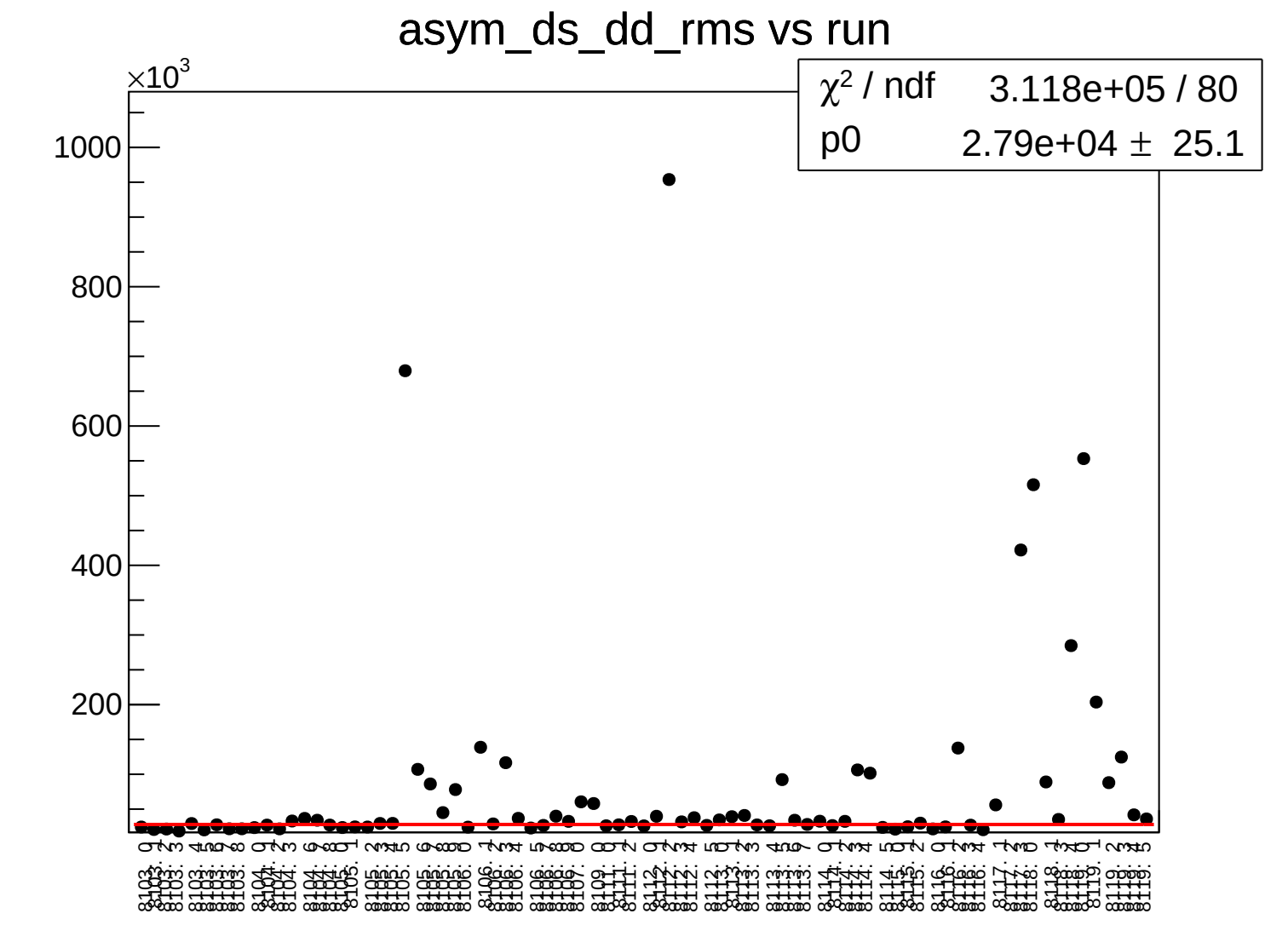

asym_ds_dd_correction_mean vs run
×10^3
χ^2 / ndf 82.8 / 86
p0 1696 ± 657.8
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 87
Mean 68.4
Std Dev 21.21
2
1
0
−1
−2

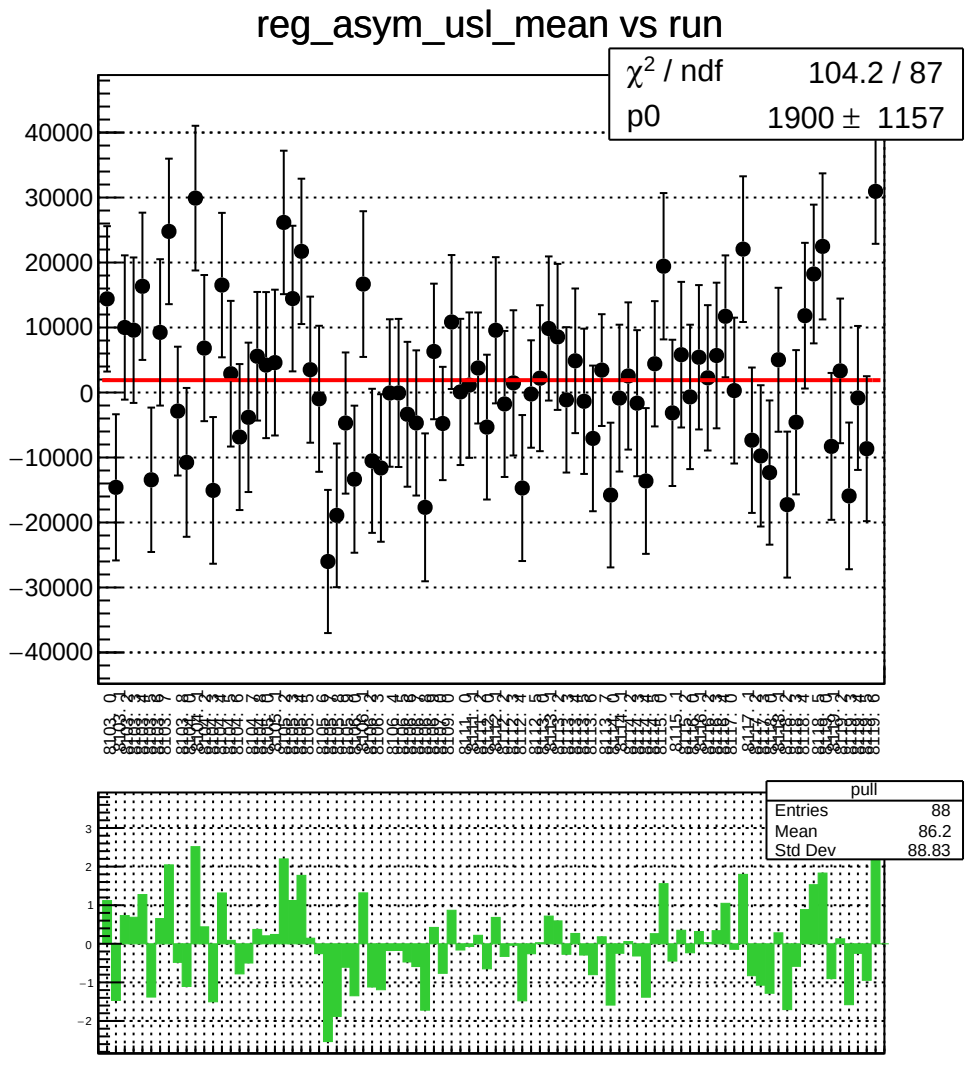

pull1D
Entries 87
Mean −0.05555
Std Dev 0.974
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

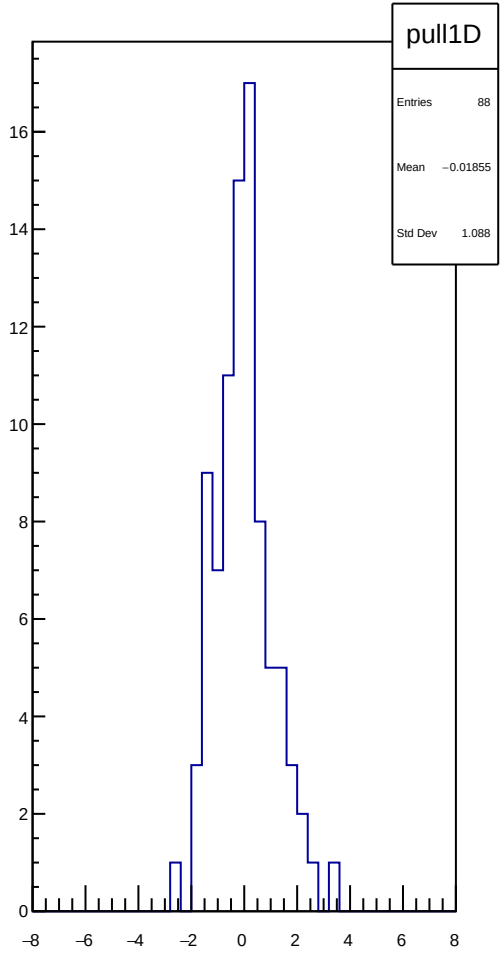

asym_ds_dd_correction_rms vs run
×10^3
140
120
100
80
60
40
20
χ² / ndf 7.485e+05 / 87
p0 451.8 ± 0.4652

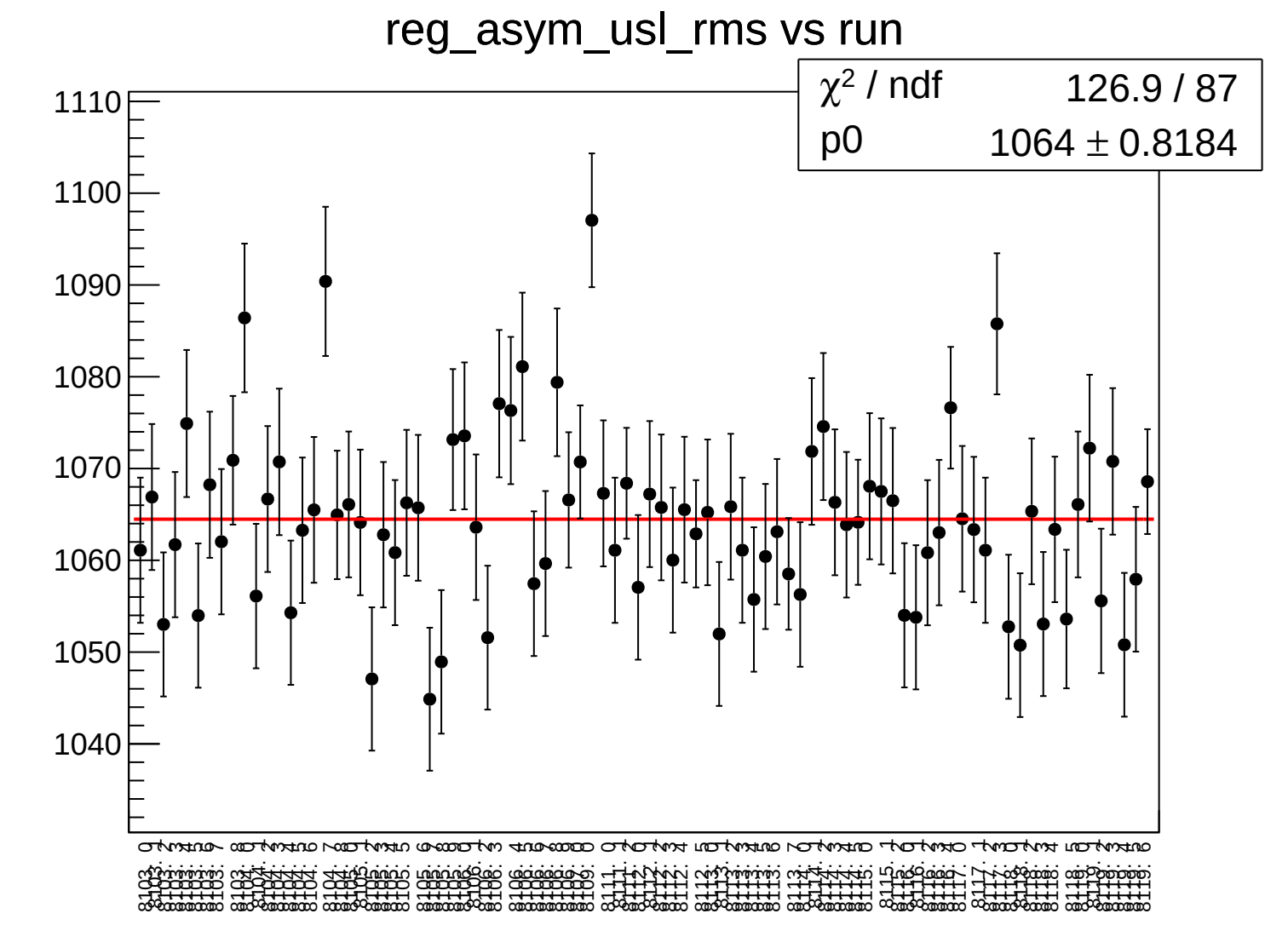

asym_ds_dd_mean vs run
×10^3
χ² / ndf 69.54 / 64
p0 −1.244e+04 ± 3.564e+04
pull
Entries 65
Mean 207.5
Std Dev 180.6

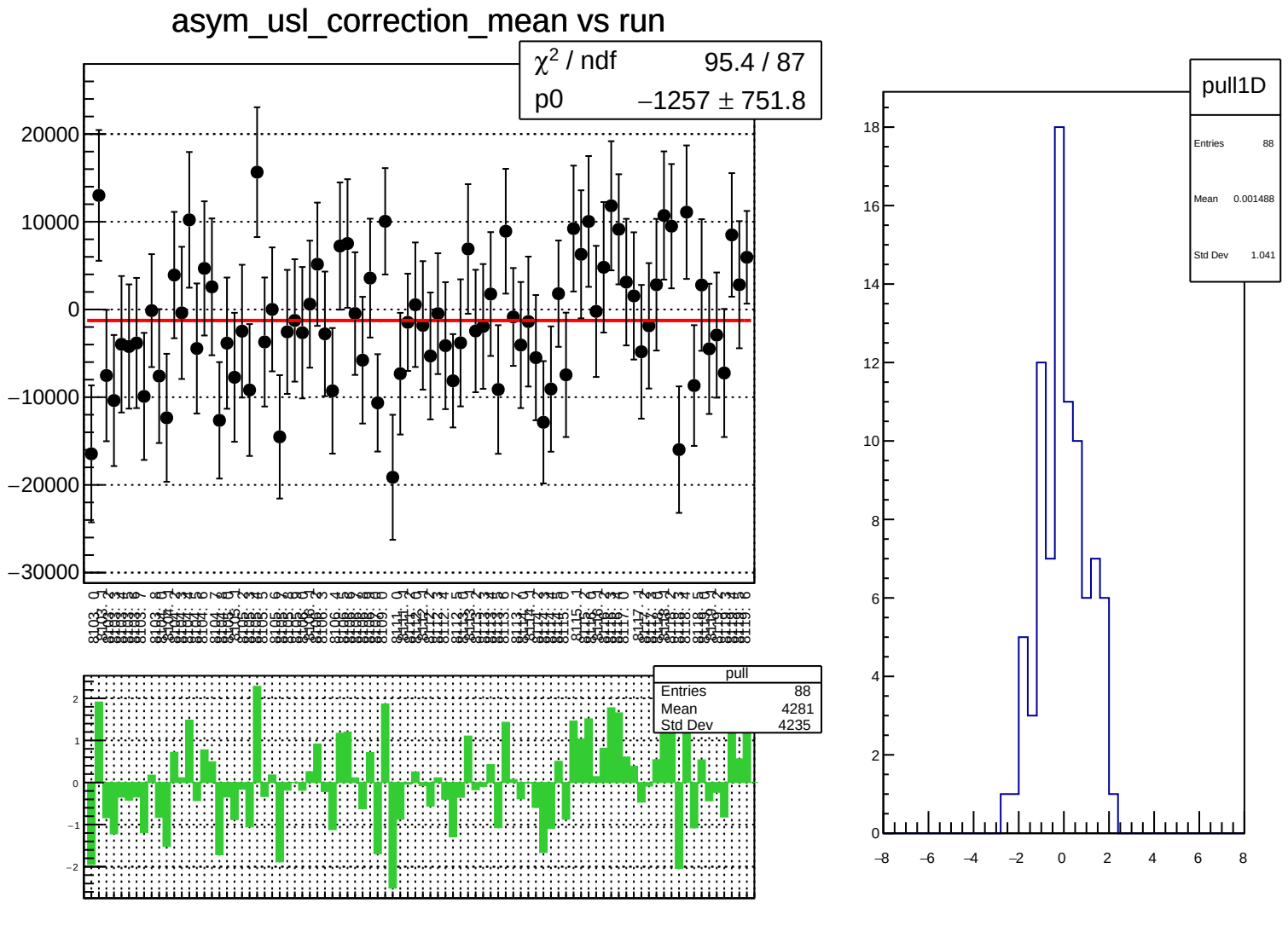

pull1D
Entries 65
Mean −0.01857
Std Dev 1.034

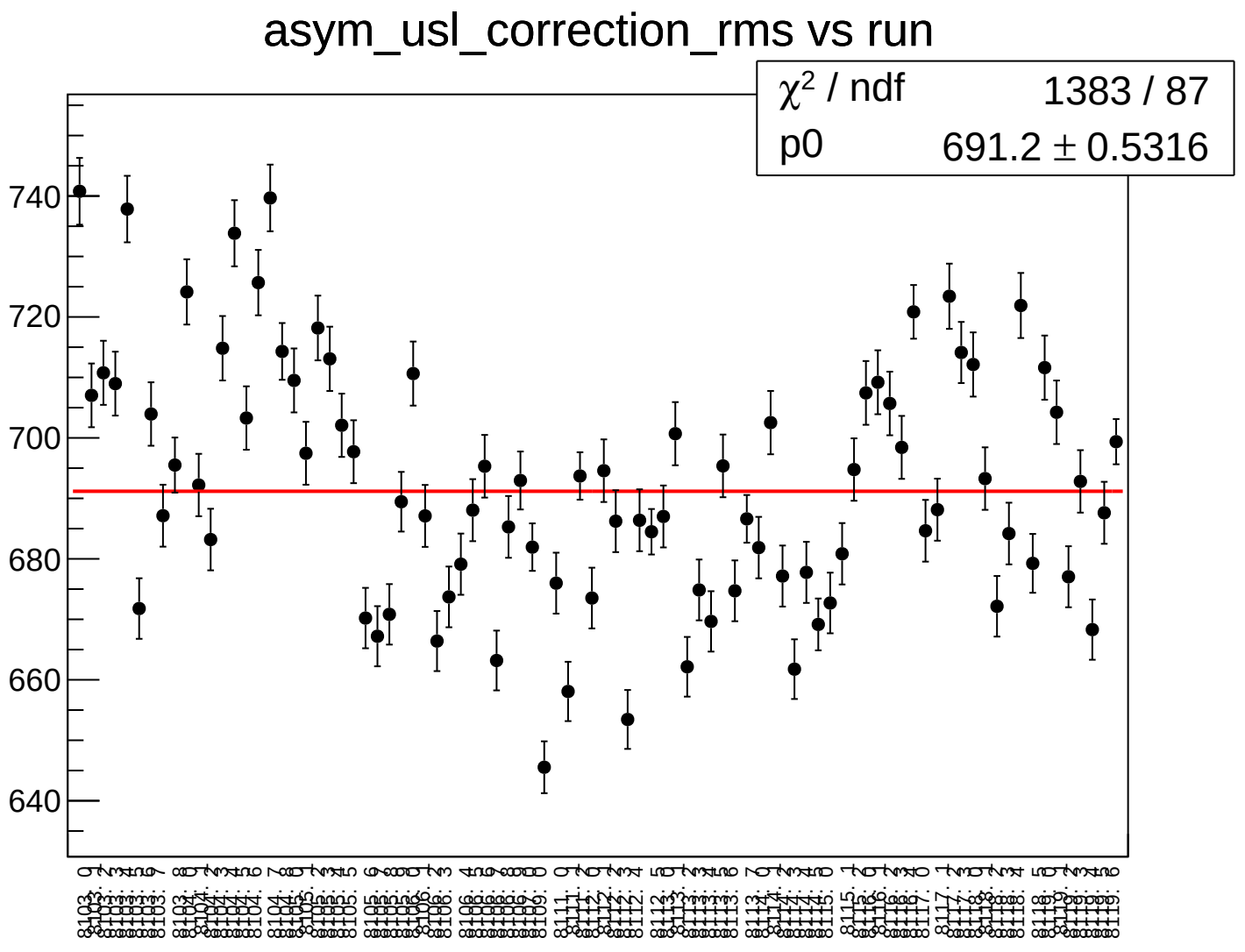

asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.118e+05 / 80
p0 2.79e+04 ± 25.1

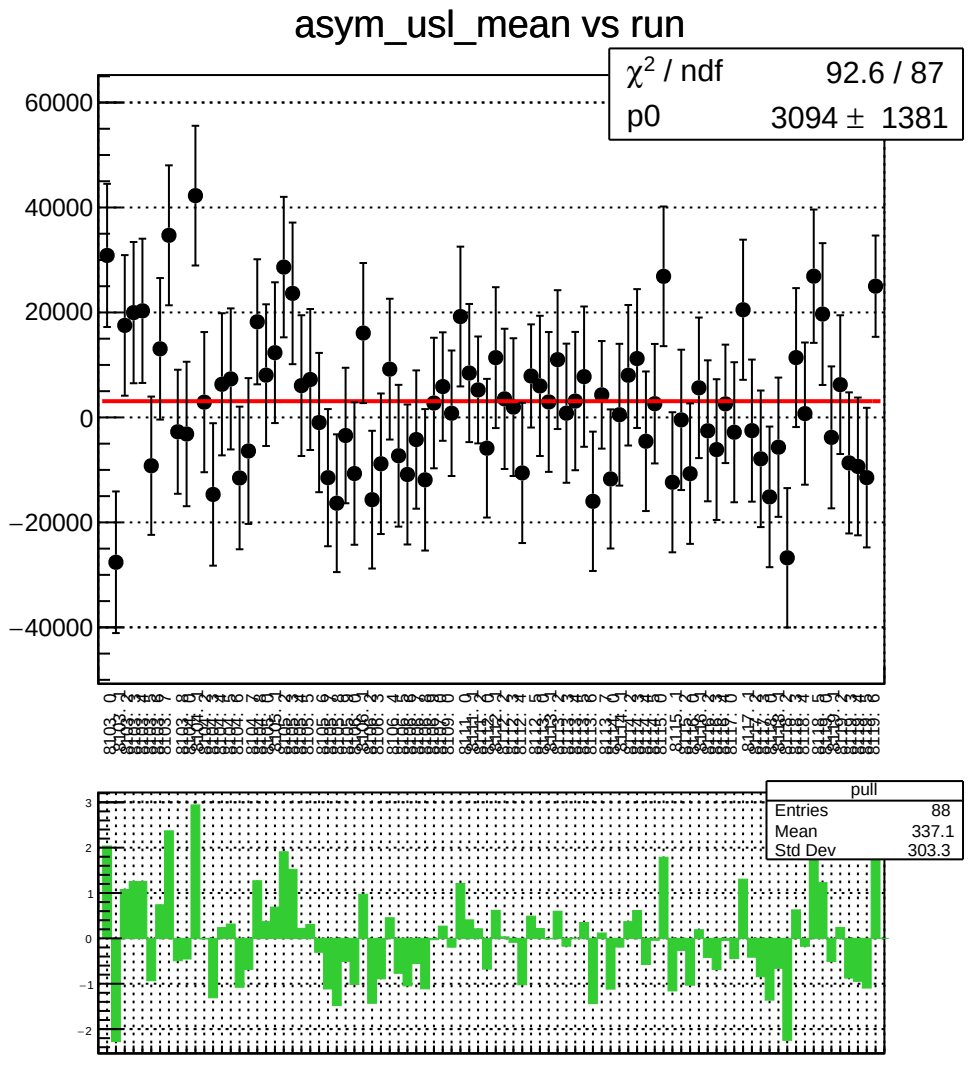

reg_asym_usl_mean vs run
χ² / ndf 104.2 / 87
p0 1900 ± 1157
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 88
Mean 86.2
Std Dev 88.83
3
2
1
0
−1
−2

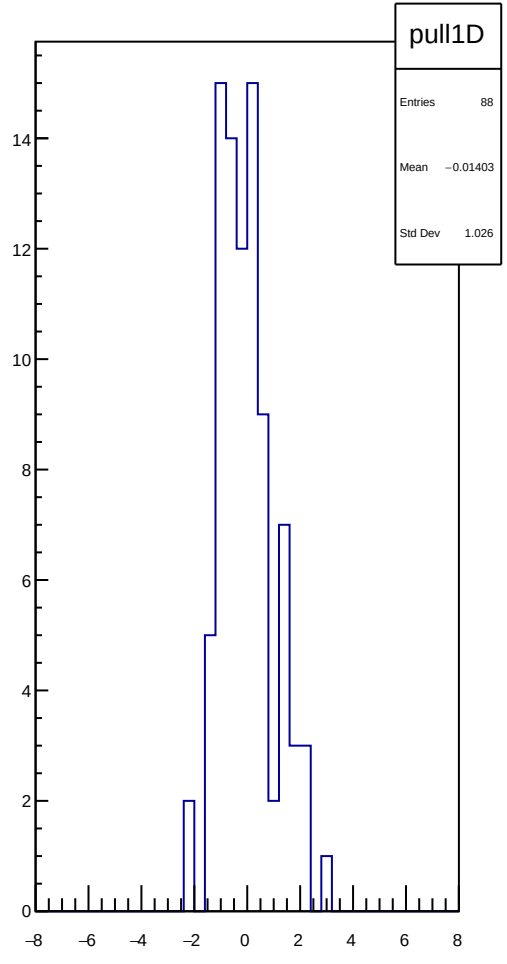

pull1D
Entries 88
Mean −0.01855
Std Dev 1.088
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

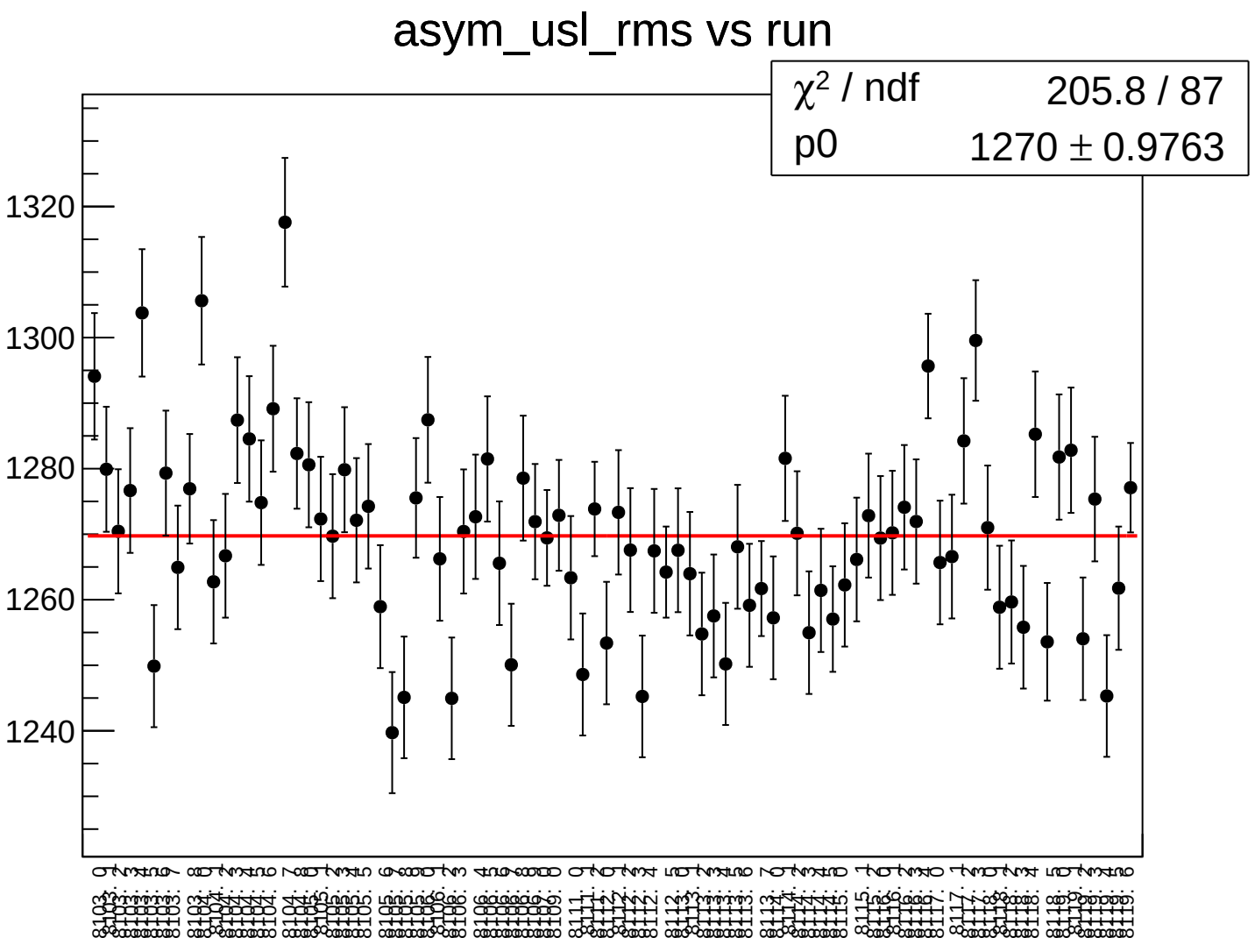

reg_asym_usl_rms vs run
χ² / ndf 126.9 / 87
p0 1064 ± 0.8184
1110
1100
1090
1080
1070
1060
1050
1040

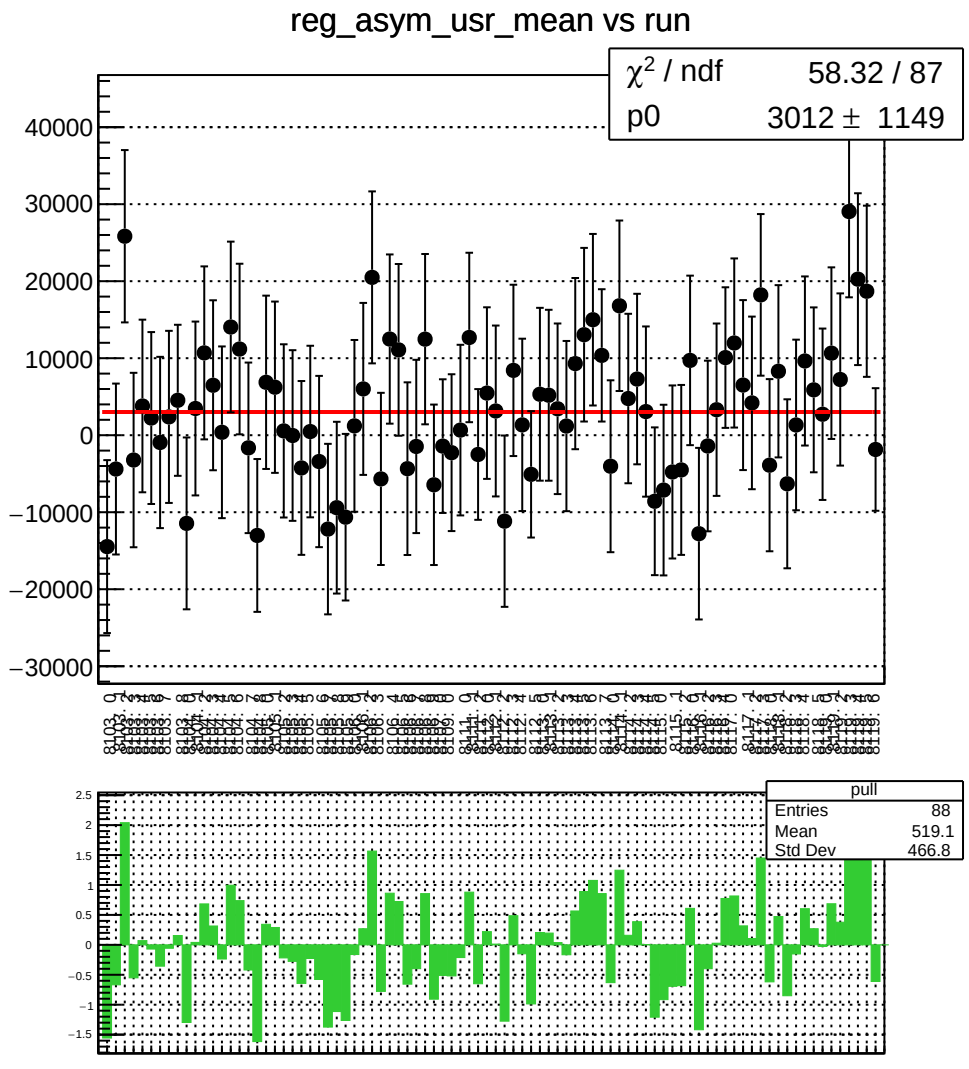

asym_usl_correction_mean vs run
χ² / ndf 95.4 / 87
p0 −1257 ± 751.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 4281
Std Dev 4235
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.001488
Std Dev 1.041
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

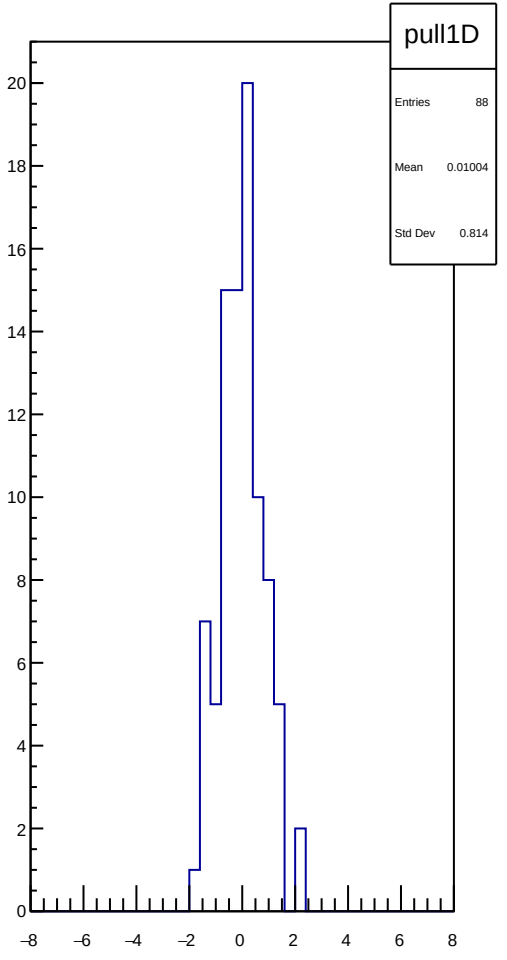

asym_usl_correction_rms vs run
χ² / ndf 1383 / 87
p0 691.2 ± 0.5316
740
720
700
680
660
640

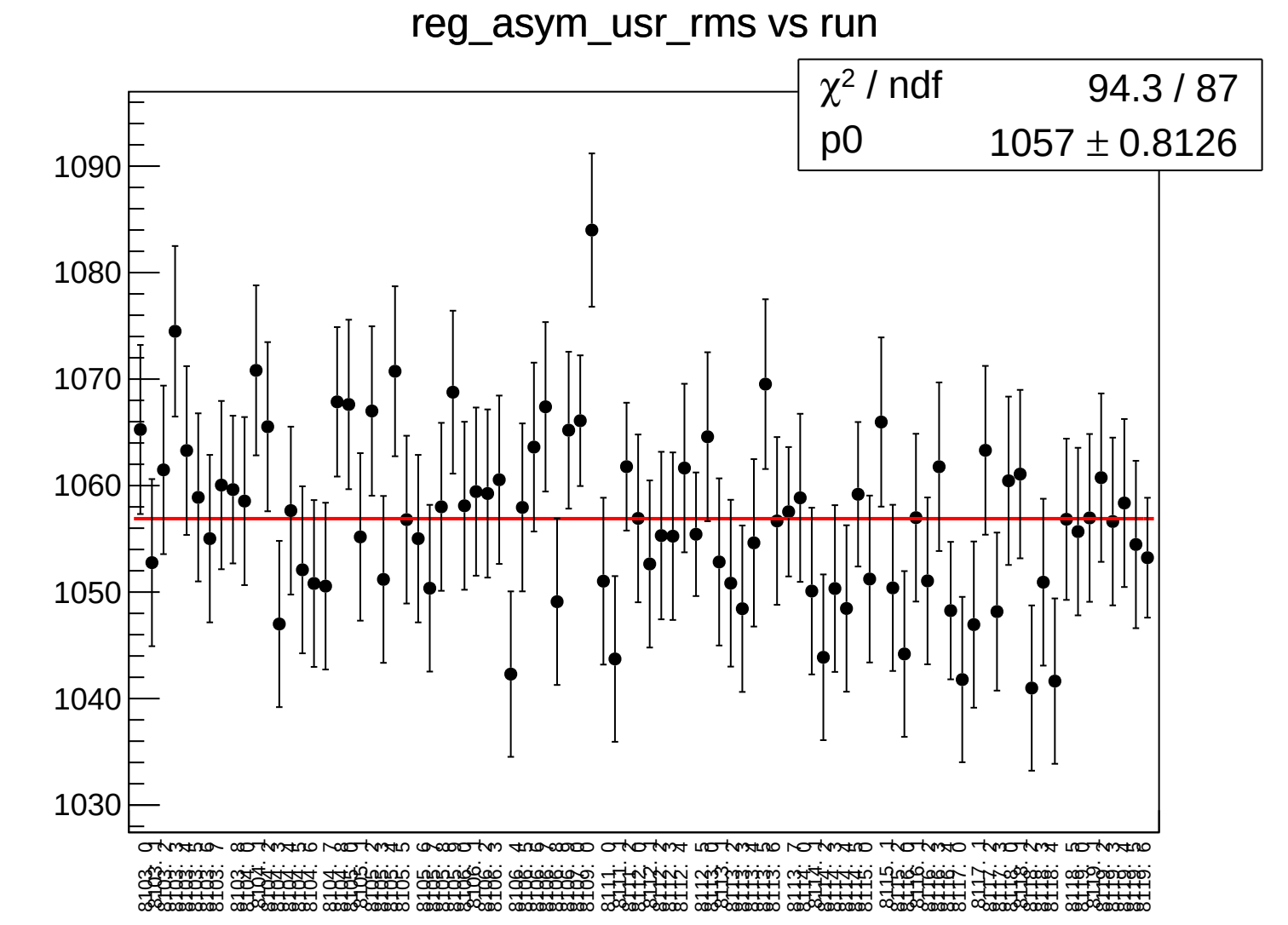

asym_usl_mean vs run
χ² / ndf 92.6 / 87
p0 3094 ± 1381
60000
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 337.1
Std Dev 303.3
3
2
1
0
−1
−2

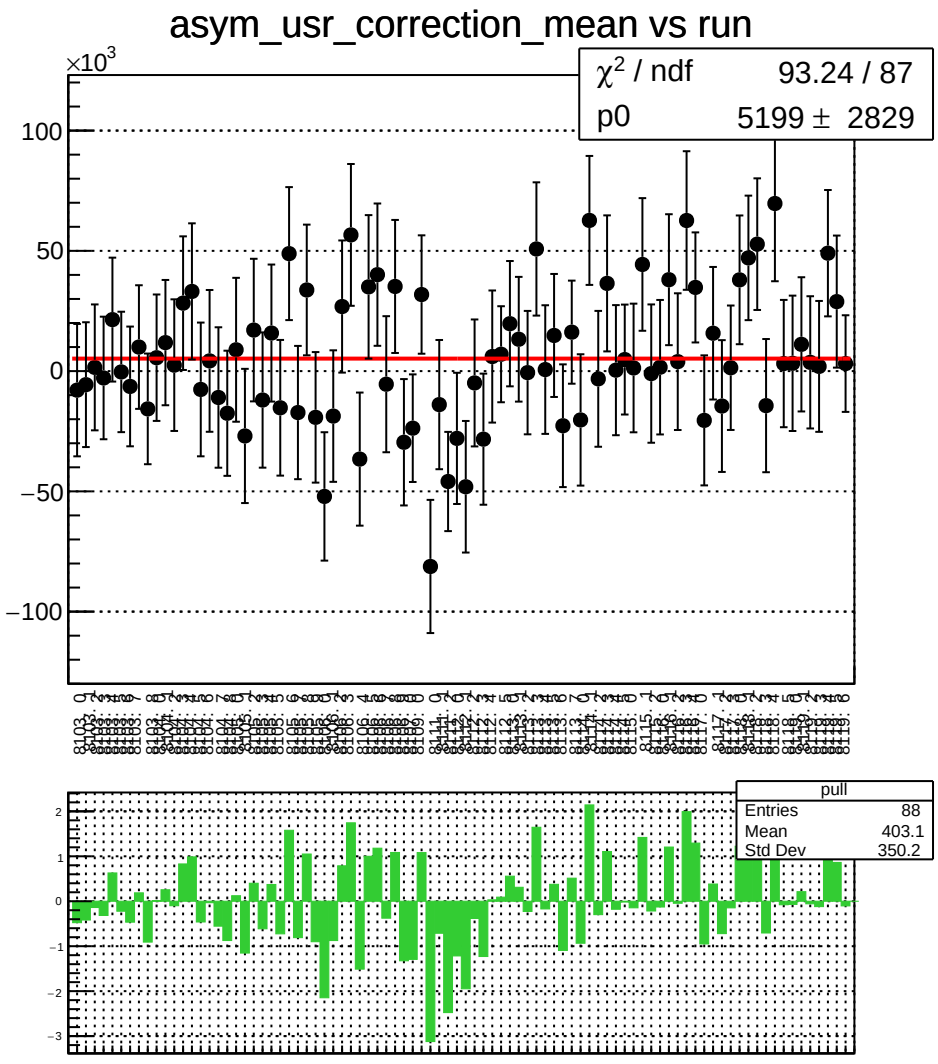

pull1D
Entries 88
Mean −0.01403
Std Dev 1.026
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

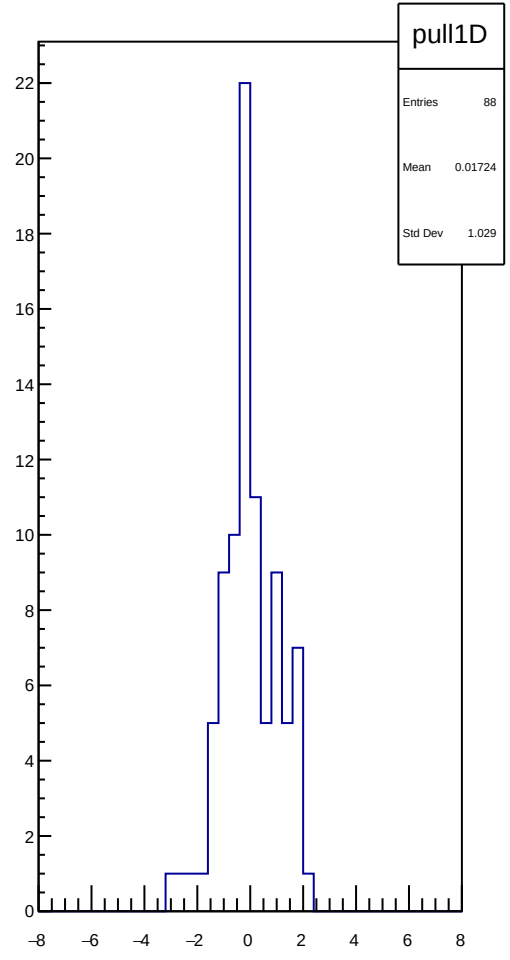

asym_usl_rms vs run
χ² / ndf 205.8 / 87
p0 1270 ± 0.9763
1320
1300
1280
1260
1240

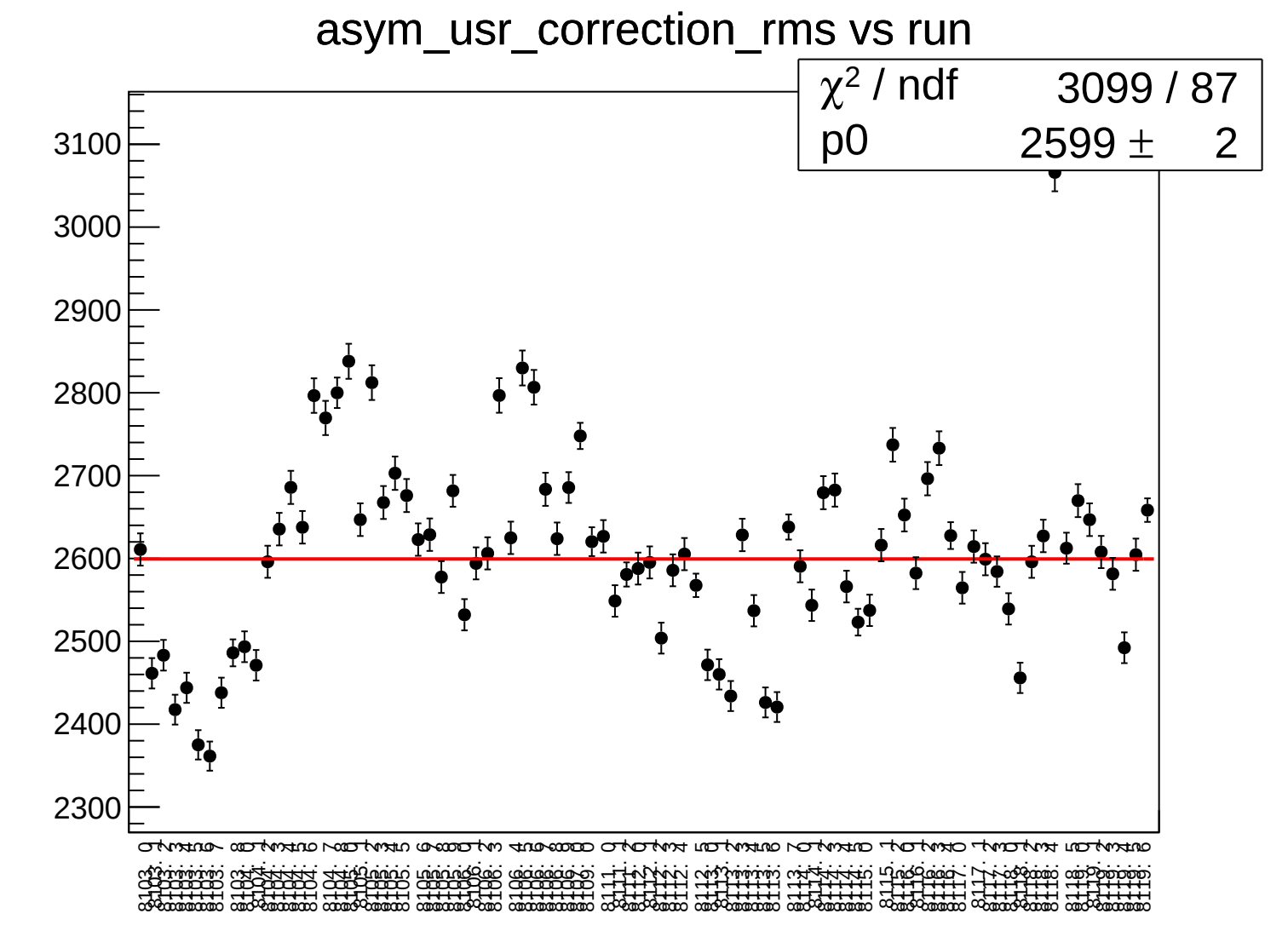

reg_asym_usr_mean vs run
χ² / ndf 58.32 / 87
p0 3012 ± 1149
pull
Entries 88
Mean 519.1
Std Dev 466.8

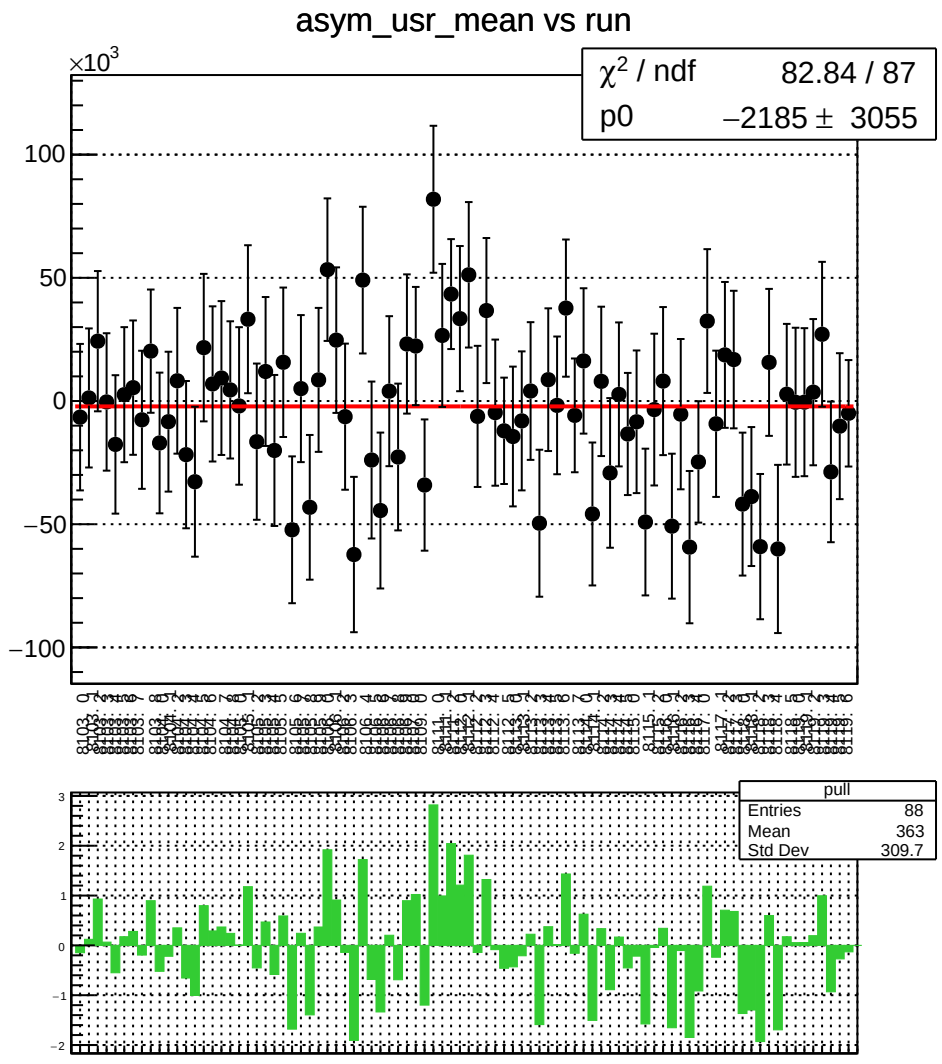

pull1D
Entries 88
Mean 0.01004
Std Dev 0.814

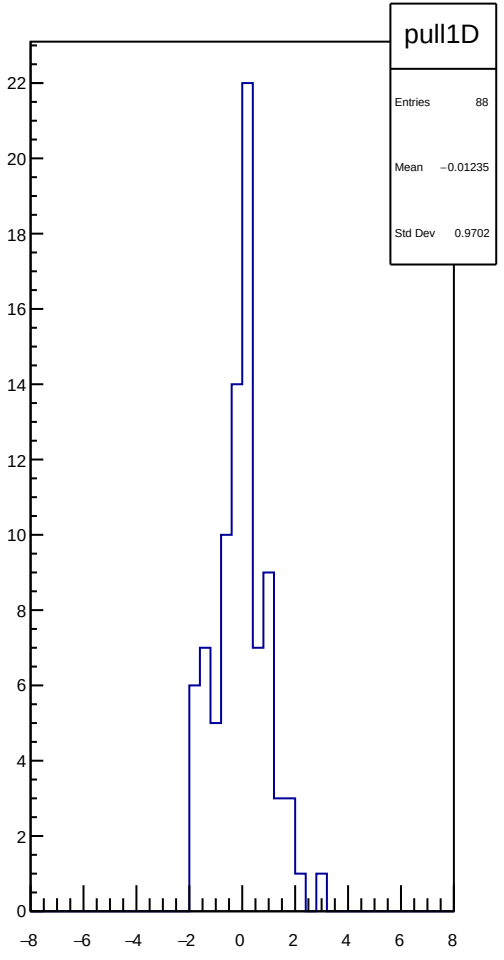

reg_asym_usr_rms vs run
χ² / ndf 94.3 / 87
p0 1057 ± 0.8126
1090
1080
1070
1060
1050
1040
1030

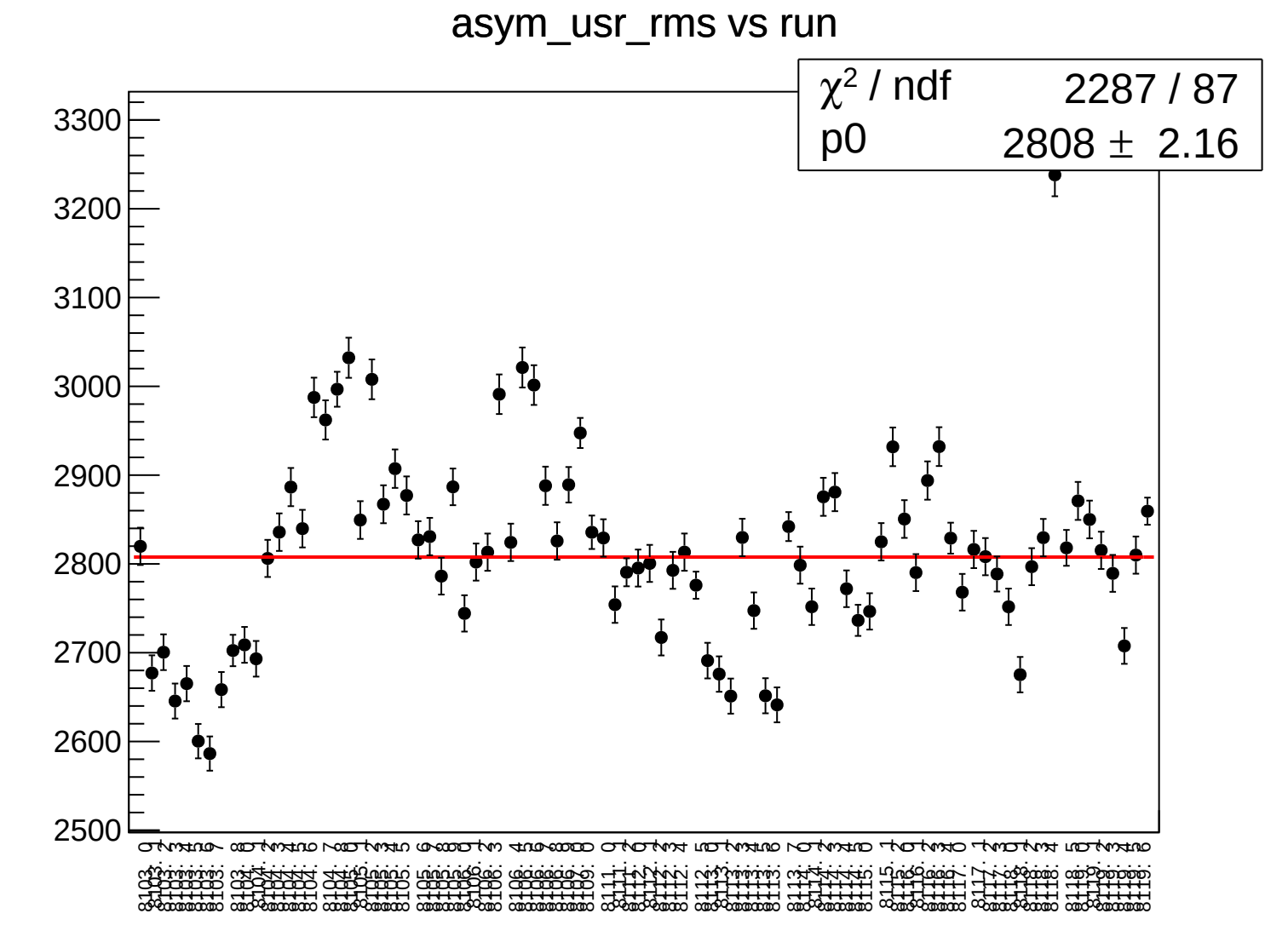

asym_usr_correction_mean vs run
×10^3
χ² / ndf 93.24 / 87
p0 5199 ± 2829
100
50
0
−50
−100
pull
Entries 88
Mean 403.1
Std Dev 350.2
2
1
0
−1
−2
−3

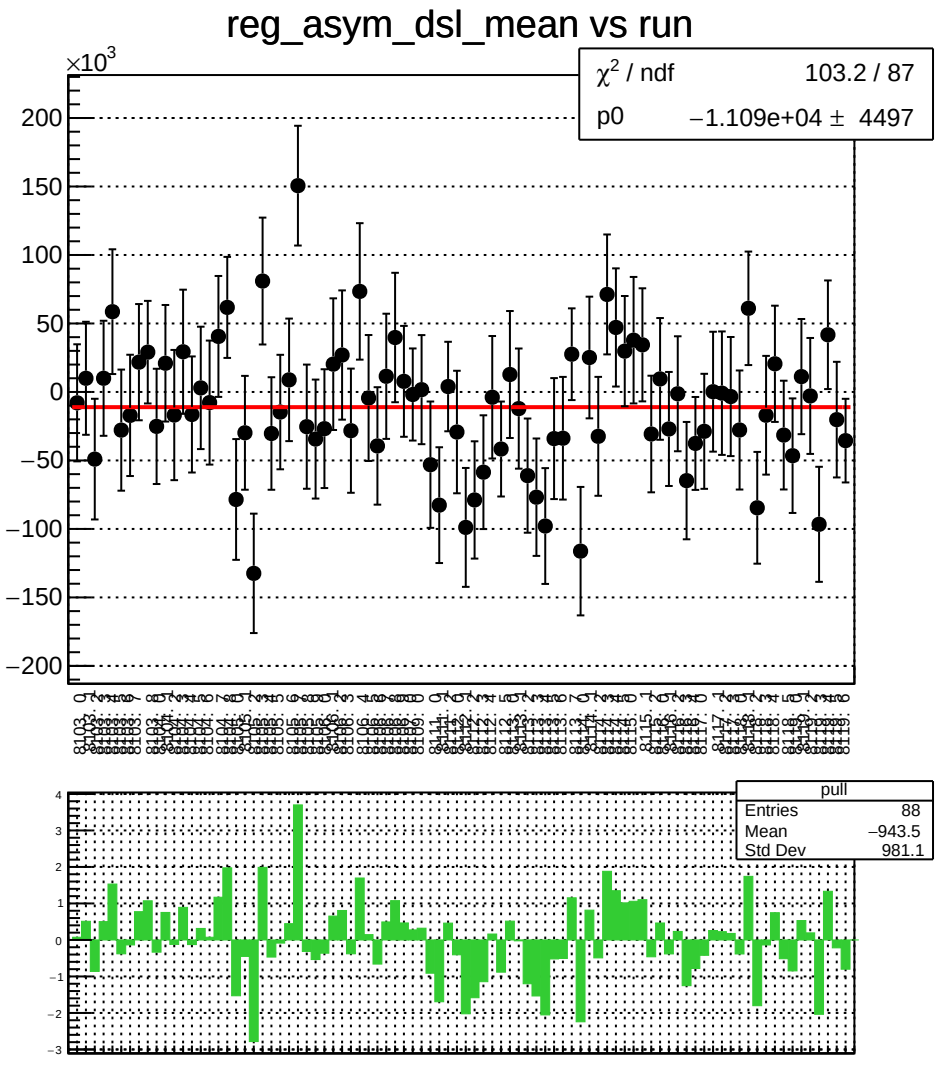

pull1D
Entries 88
Mean 0.01724
Std Dev 1.029
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

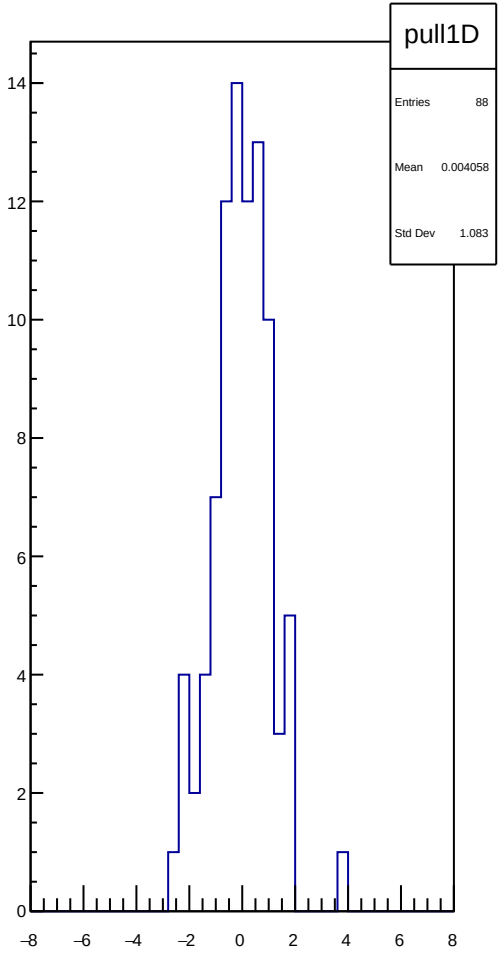

asym_usr_correction_rms vs run
χ² / ndf 3099 / 87
p0 2599 ± 2
3100
3000
2900
2800
2700
2600
2500
2400
2300

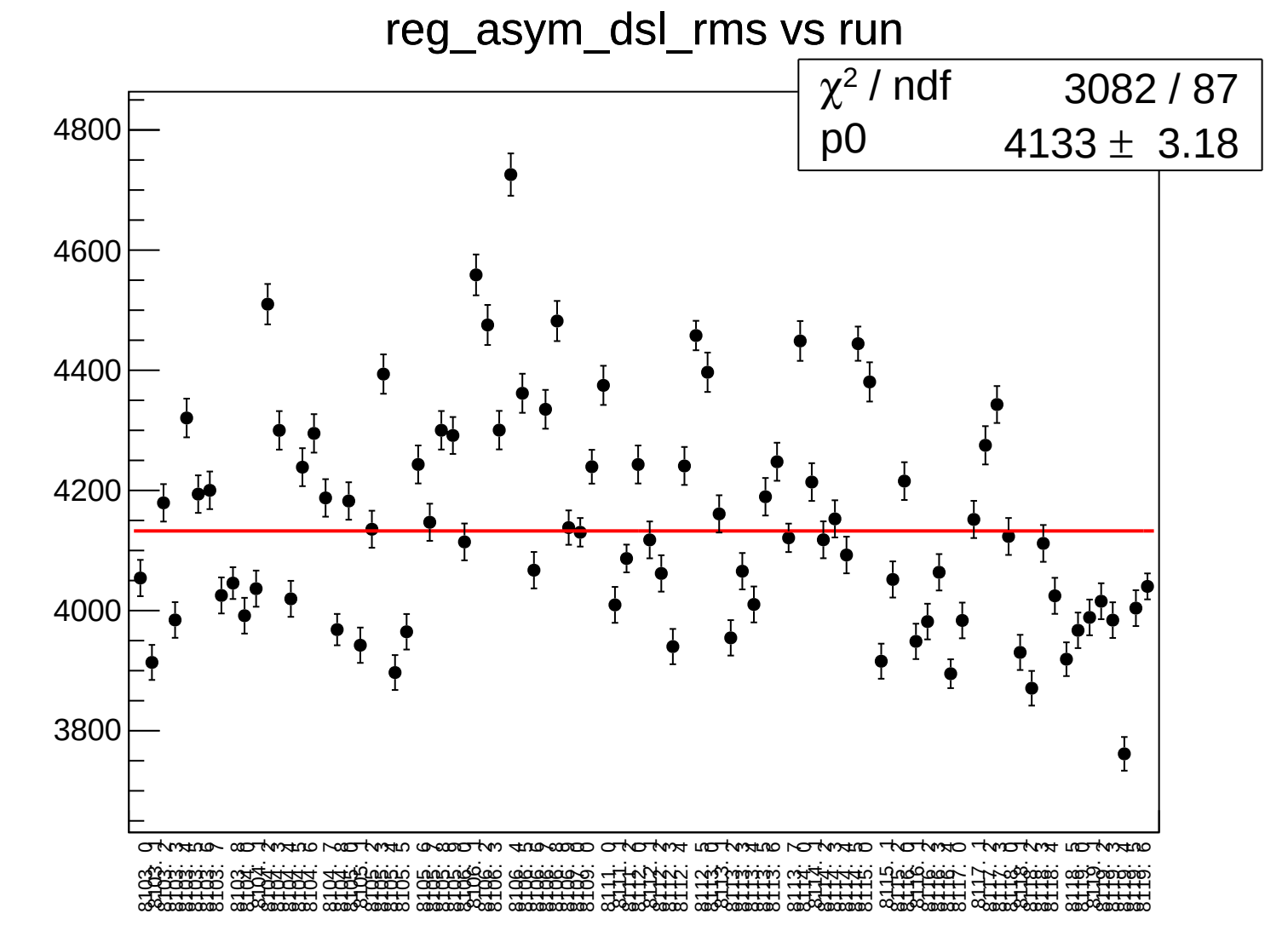

asym_usr_mean vs run
×10^3
χ^2 / ndf 82.84 / 87
p0 −2185 ± 3055
100
50
0
−50
−100
pull
Entries 88
Mean 363
Std Dev 309.7
3
2
1
0
−1
−2

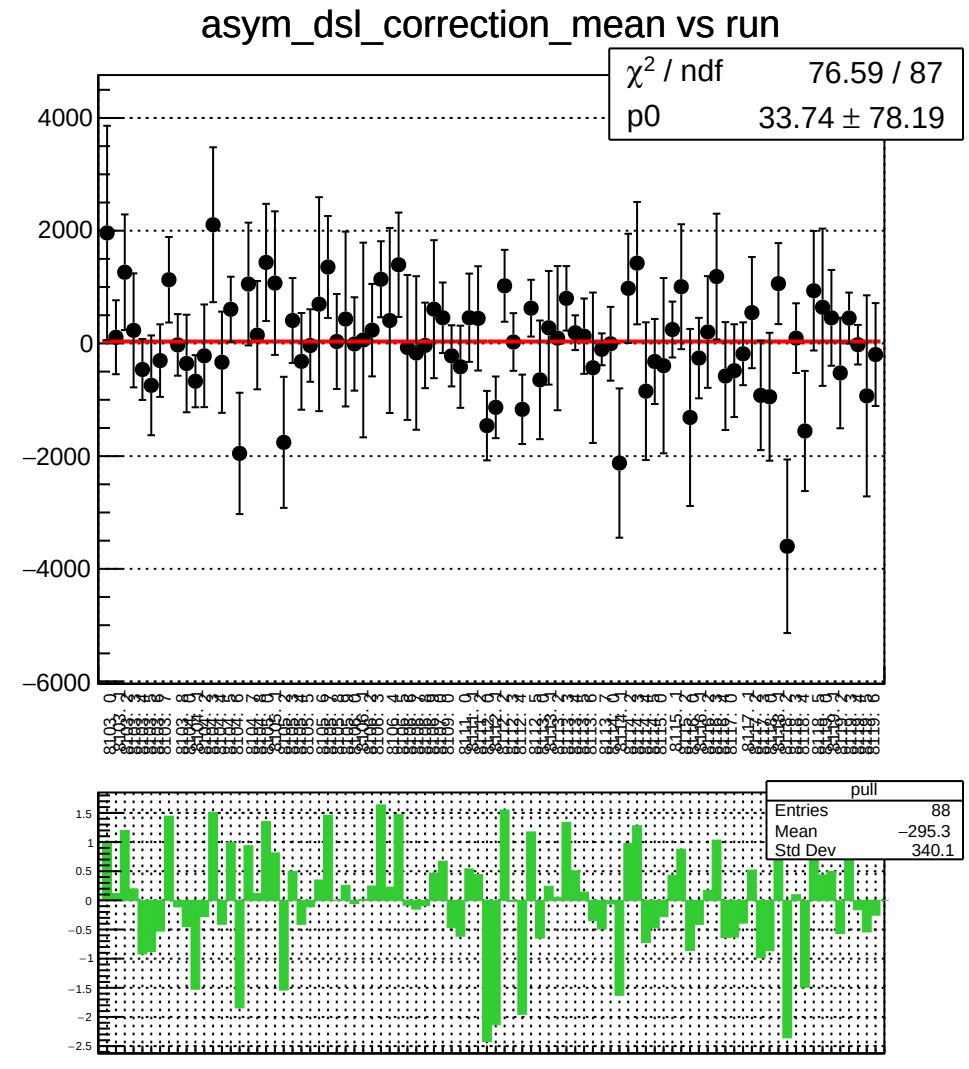

pull1D
Entries 88
Mean −0.01235
Std Dev 0.9702
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

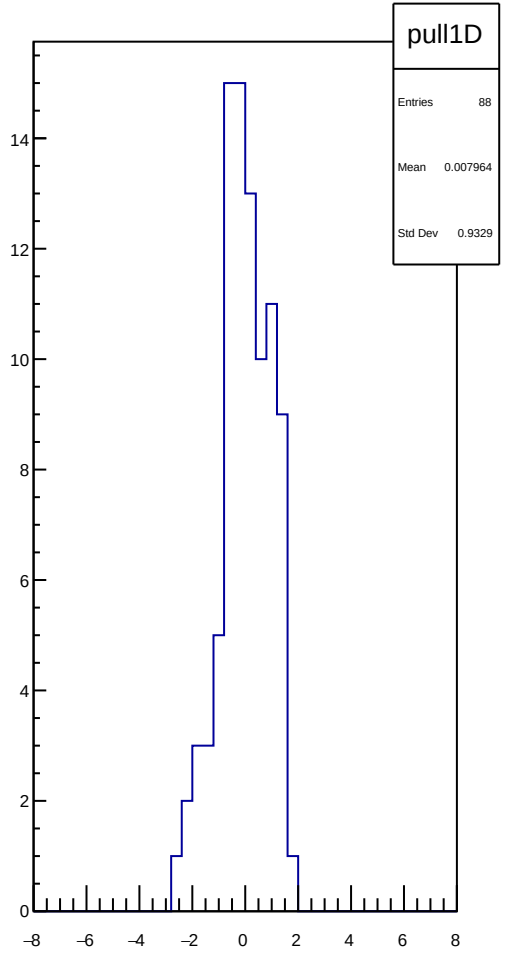

asym_usr_rms vs run
χ² / ndf 2287 / 87
p0 2808 ± 2.16
3300
3200
3100
3000
2900
2800
2700
2600
2500

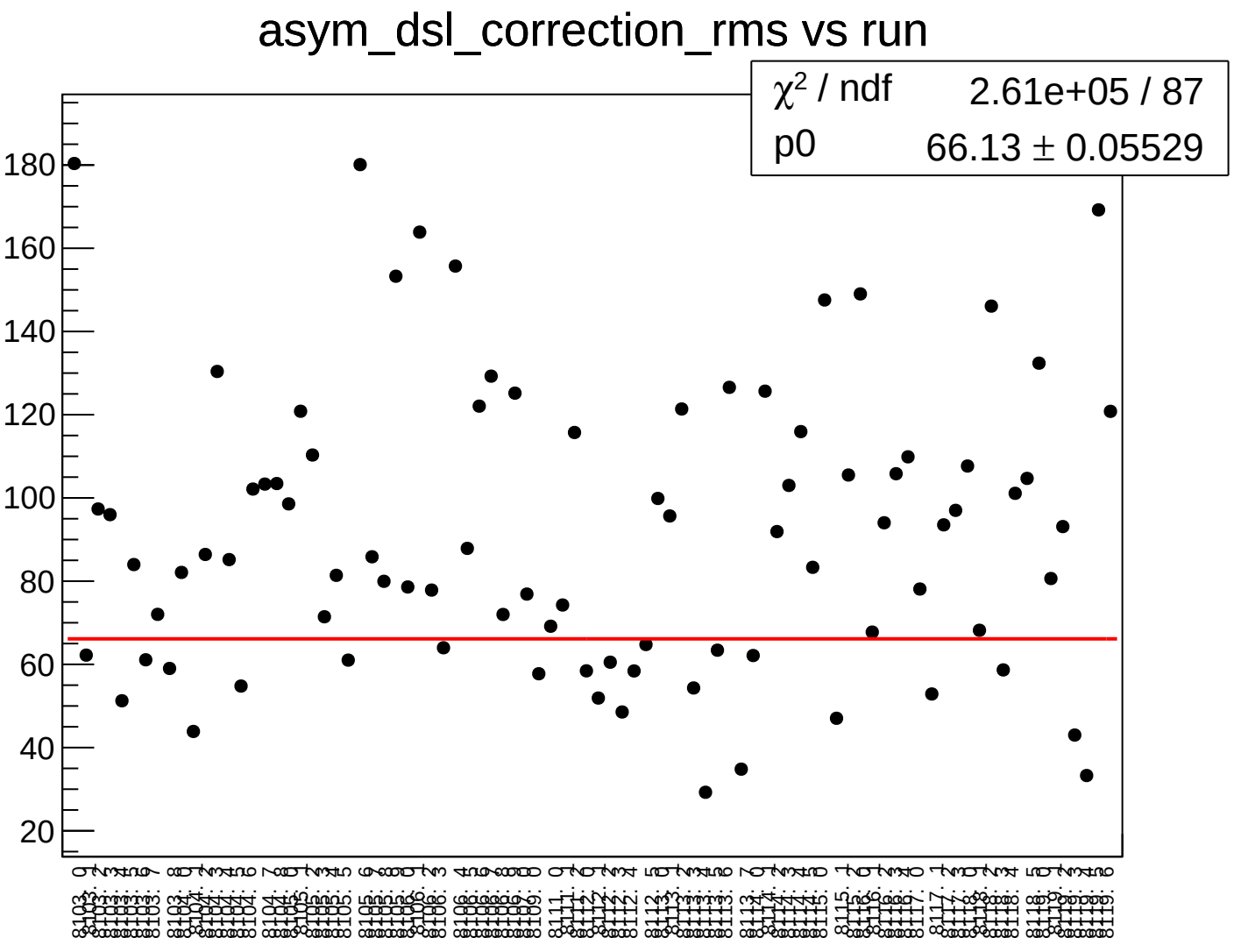

reg_asym_dsl_mean vs run
×10^3
χ² / ndf 103.2 / 87
p0 −1.109e+04 ± 4497
pull
Entries 88
Mean −943.5
Std Dev 981.1

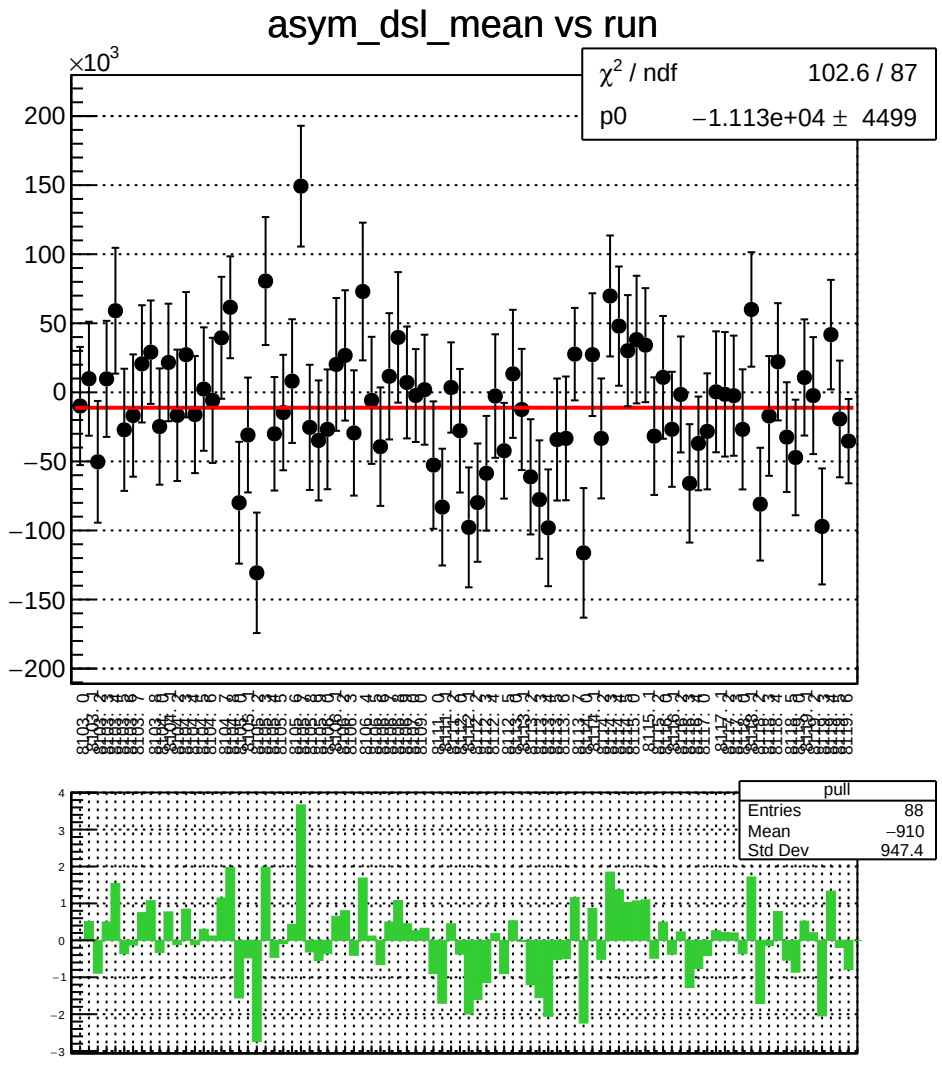

pull1D
Entries 88
Mean 0.004058
Std Dev 1.083

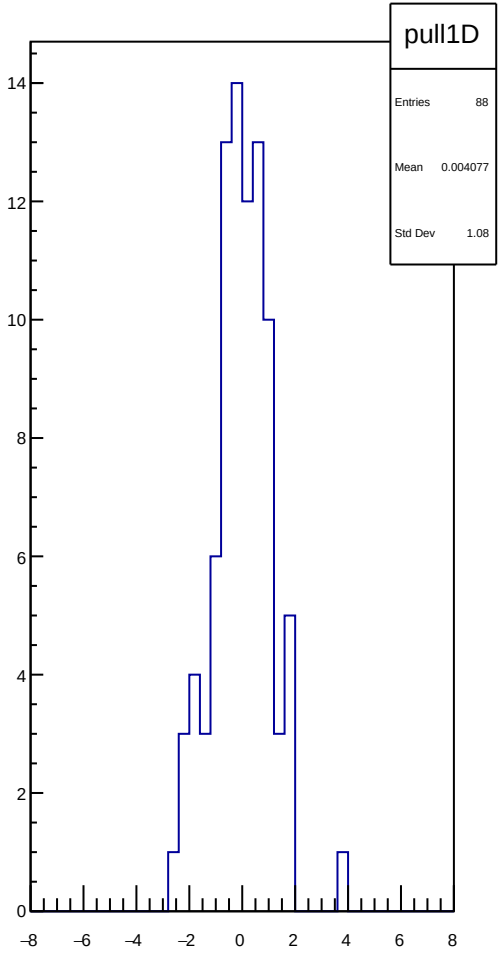

reg_asym_dsl_rms vs run
χ² / ndf 3082 / 87
p0 4133 ± 3.18
4800
4600
4400
4200
4000
3800

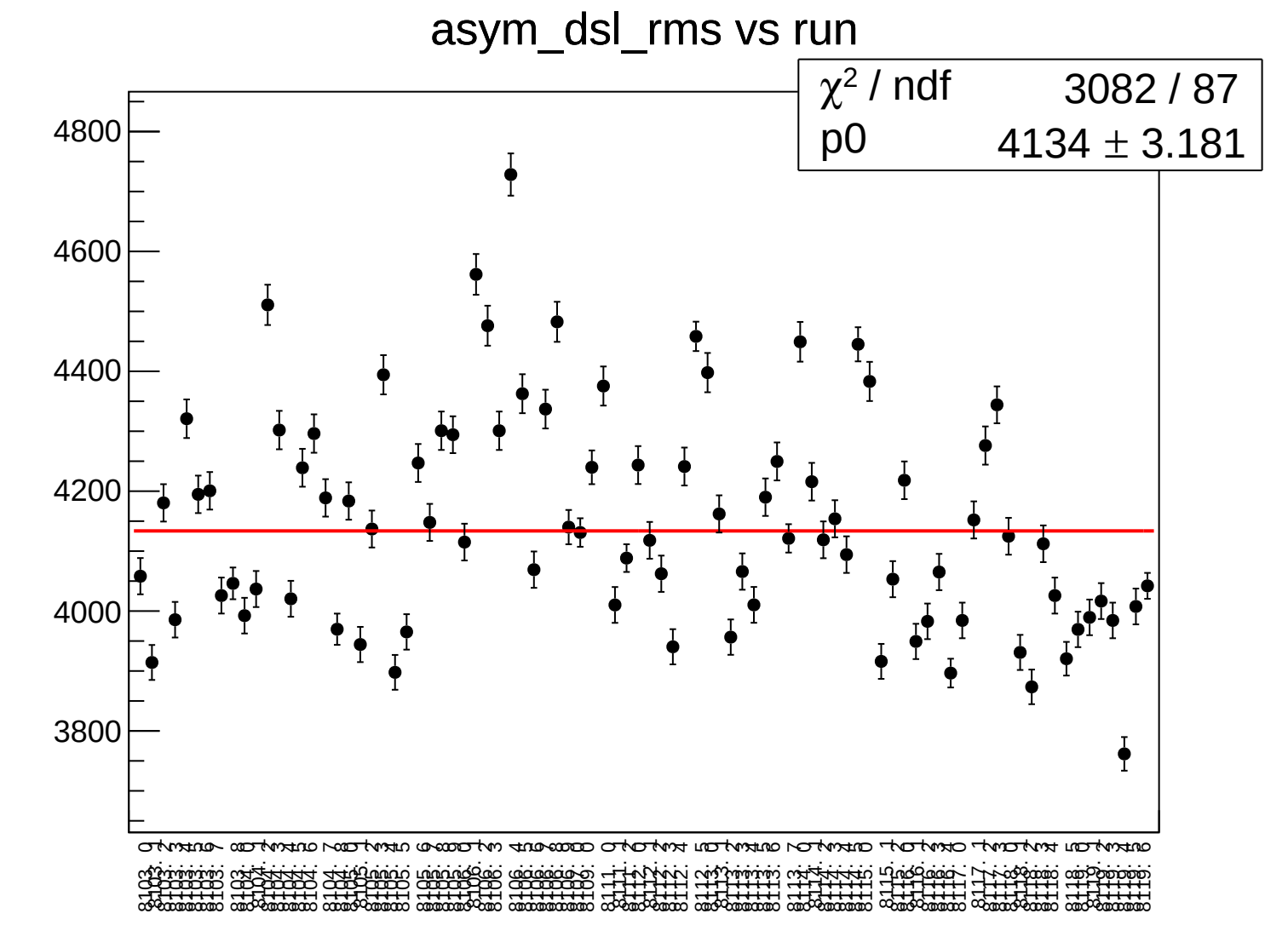

asym_dsl_correction_mean vs run
χ² / ndf 76.59 / 87
p0 33.74 ± 78.19
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean −295.3
Std Dev 340.1
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

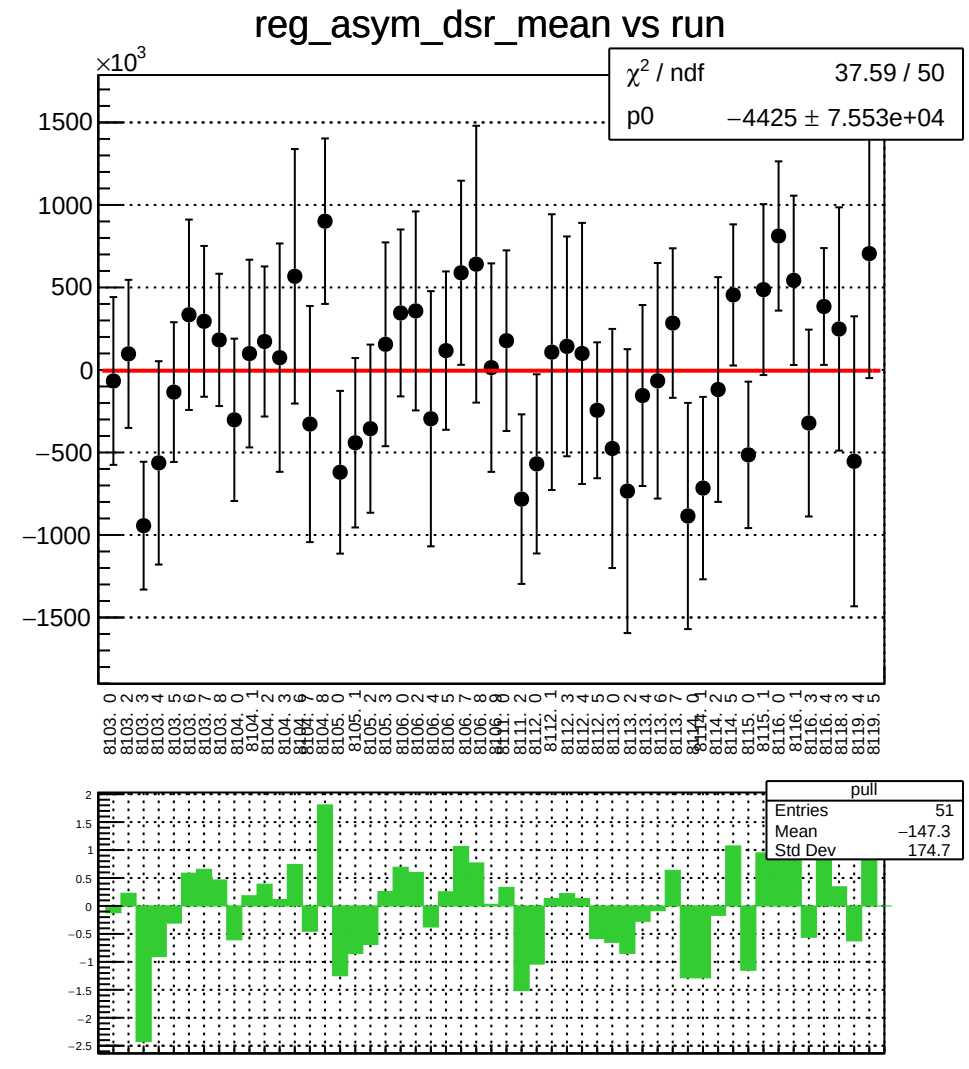

pull1D
Entries 88
Mean 0.007964
Std Dev 0.9329
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

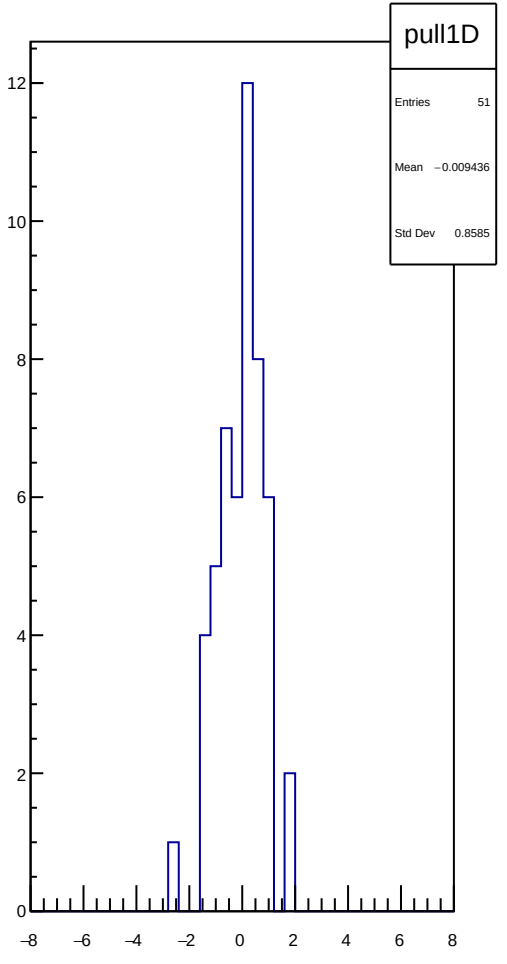

asym_dsl_correction_rms vs run
χ² / ndf 2.61e+05 / 87
p0 66.13 ± 0.05529
180
160
140
120
100
80
60
40
20

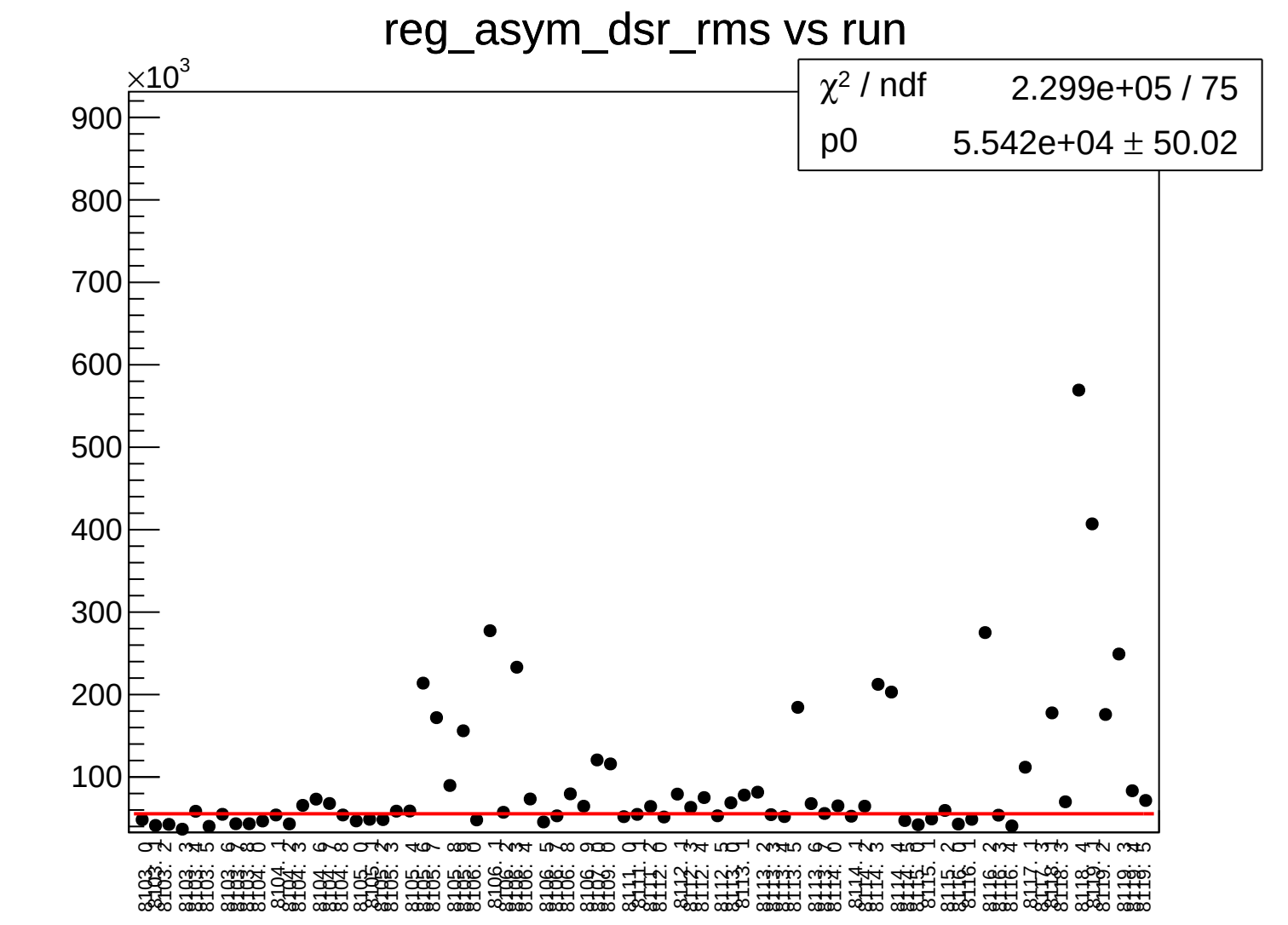

asym_dsl_mean vs run
×10^3
χ² / ndf 102.6 / 87
p0 −1.113e+04 ± 4499
pull
Entries 88
Mean −910
Std Dev 947.4

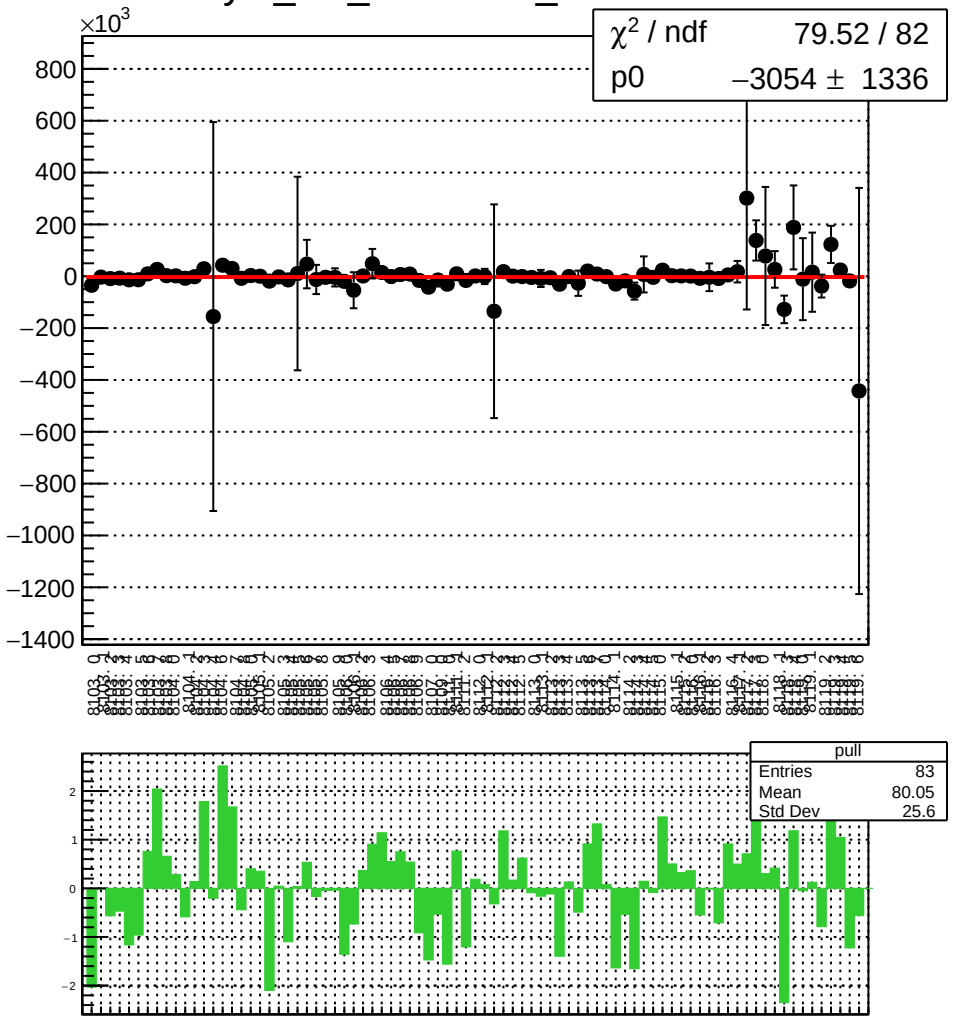

pull1D
Entries 88
Mean 0.004077
Std Dev 1.08

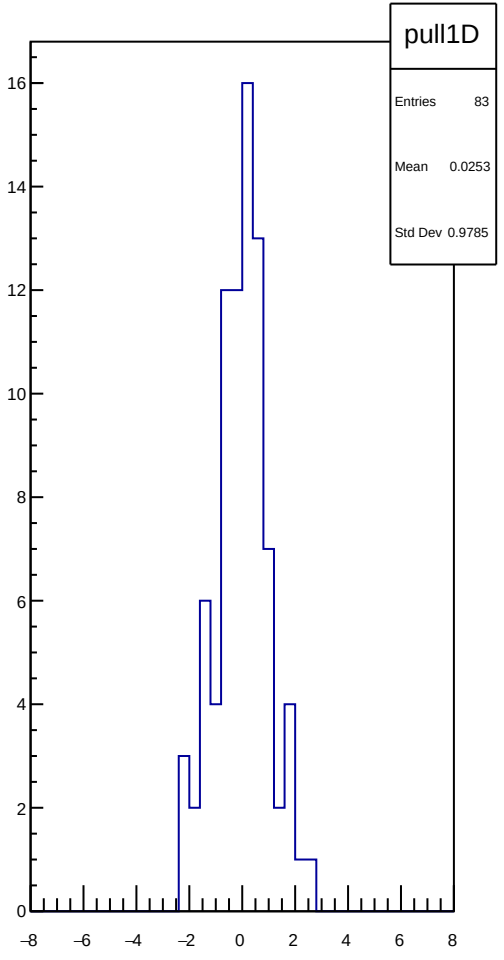

asym_dsl_rms vs run
χ² / ndf 3082 / 87
p0 4134 ± 3.181
4800
4600
4400
4200
4000
3800

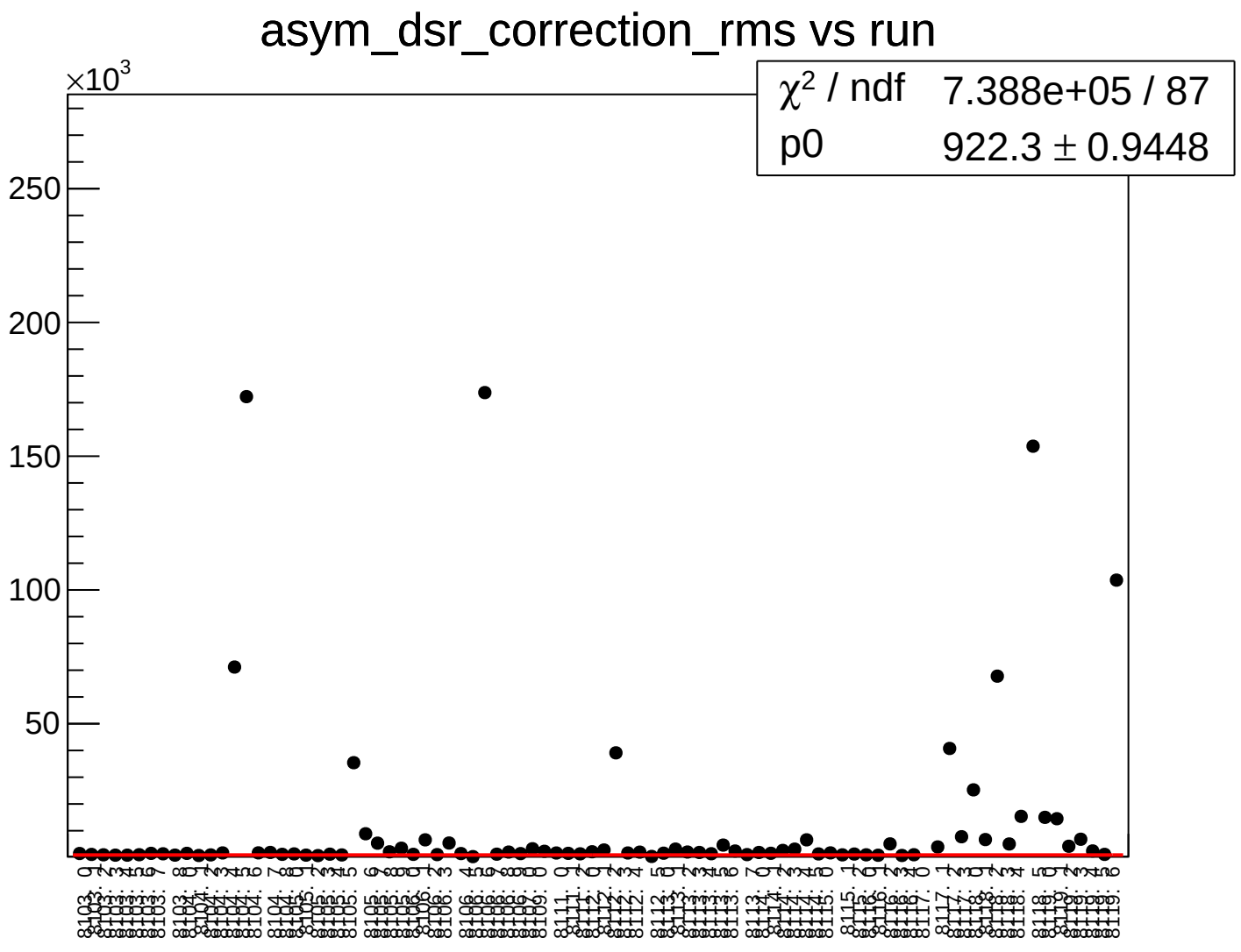

reg_asym_dsr_mean vs run
×10^3
χ² / ndf 37.59 / 50
p0 −4425 ± 7.553e+04
1500
1000
500
0
−500
−1000
−1500
pull
Entries 51
Mean −147.3
Std Dev 174.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

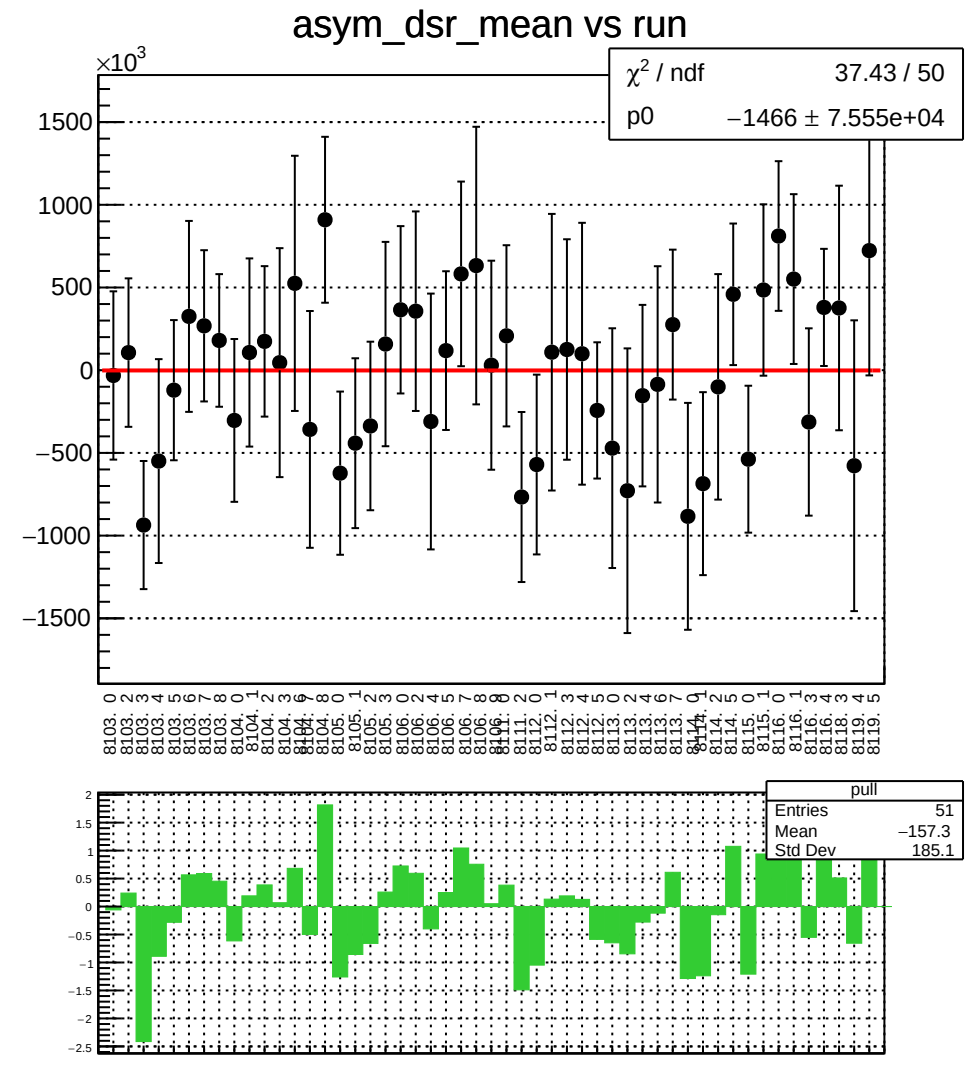

pull1D
Entries 51
Mean −0.009436
Std Dev 0.8585
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

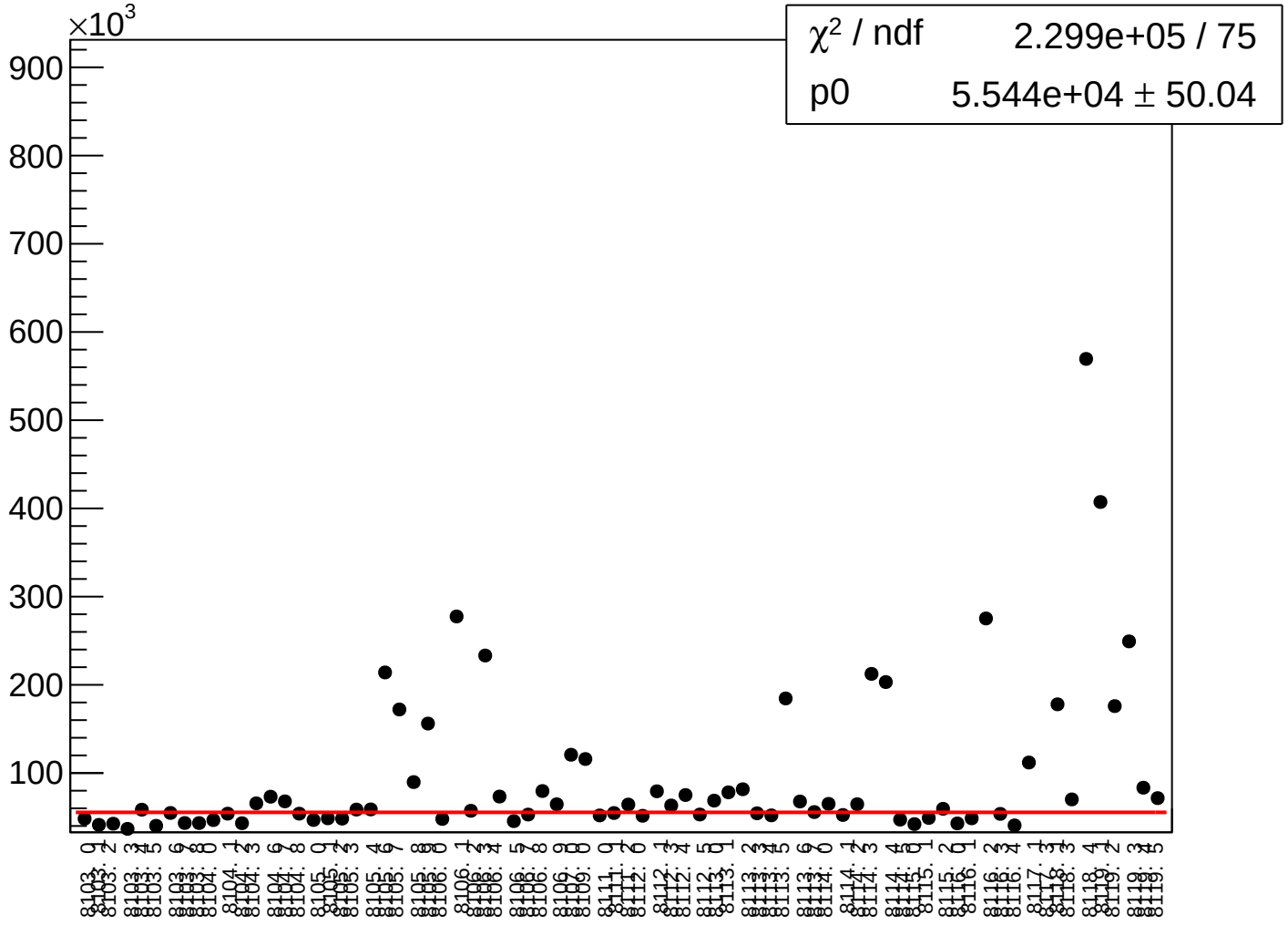

reg_asym_dsr_rms vs run
×10^3
900
800
700
600
500
400
300
200
100
χ² / ndf 2.299e+05 / 75
p0 5.542e+04 ± 50.02

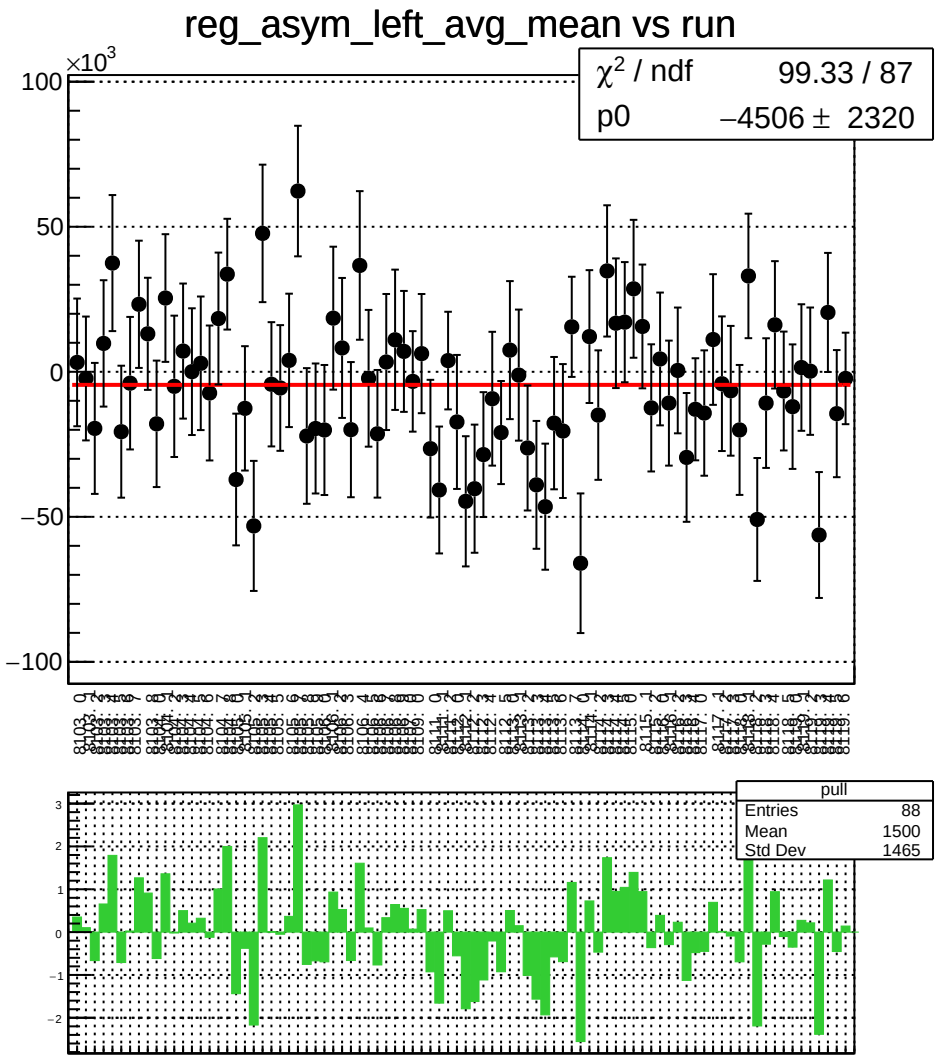

asym_dsr_correction_mean vs run
χ² / ndf 79.52 / 82
p0 −3054 ± 1336
×10³
pull
Entries 83
Mean 80.05
Std Dev 25.6

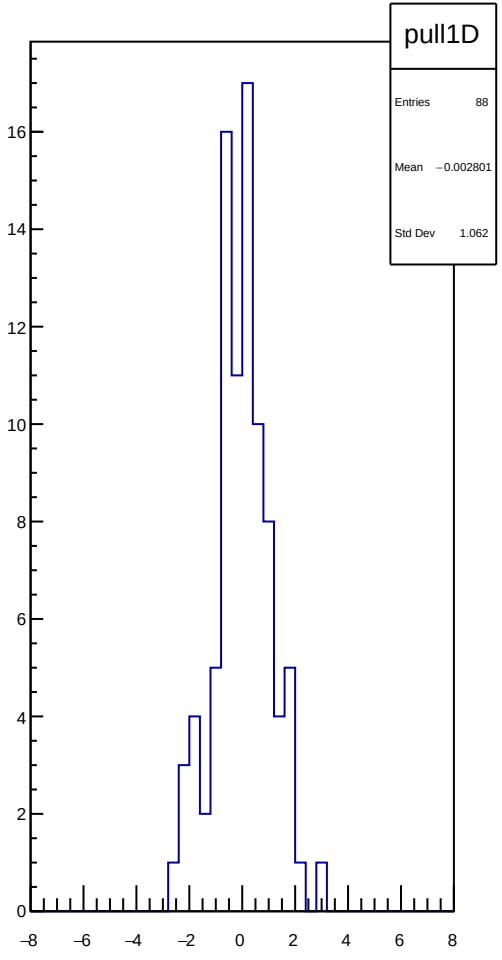

pull1D
Entries 83
Mean 0.0253
Std Dev 0.9785

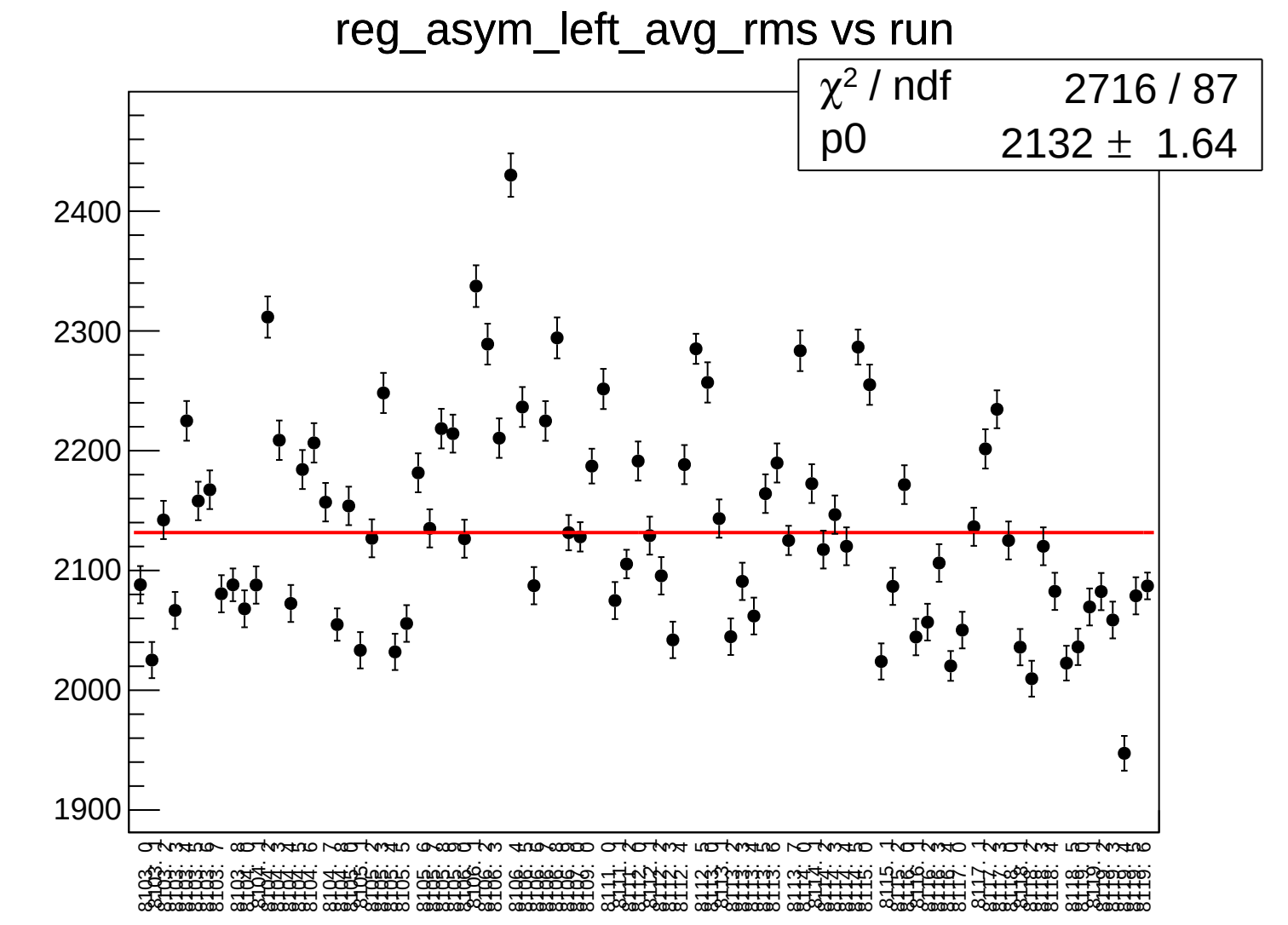

asym_dsr_correction_rms vs run
×10^3
250
200
150
100
50
χ² / ndf 7.388e+05 / 87
p0 922.3 ± 0.9448

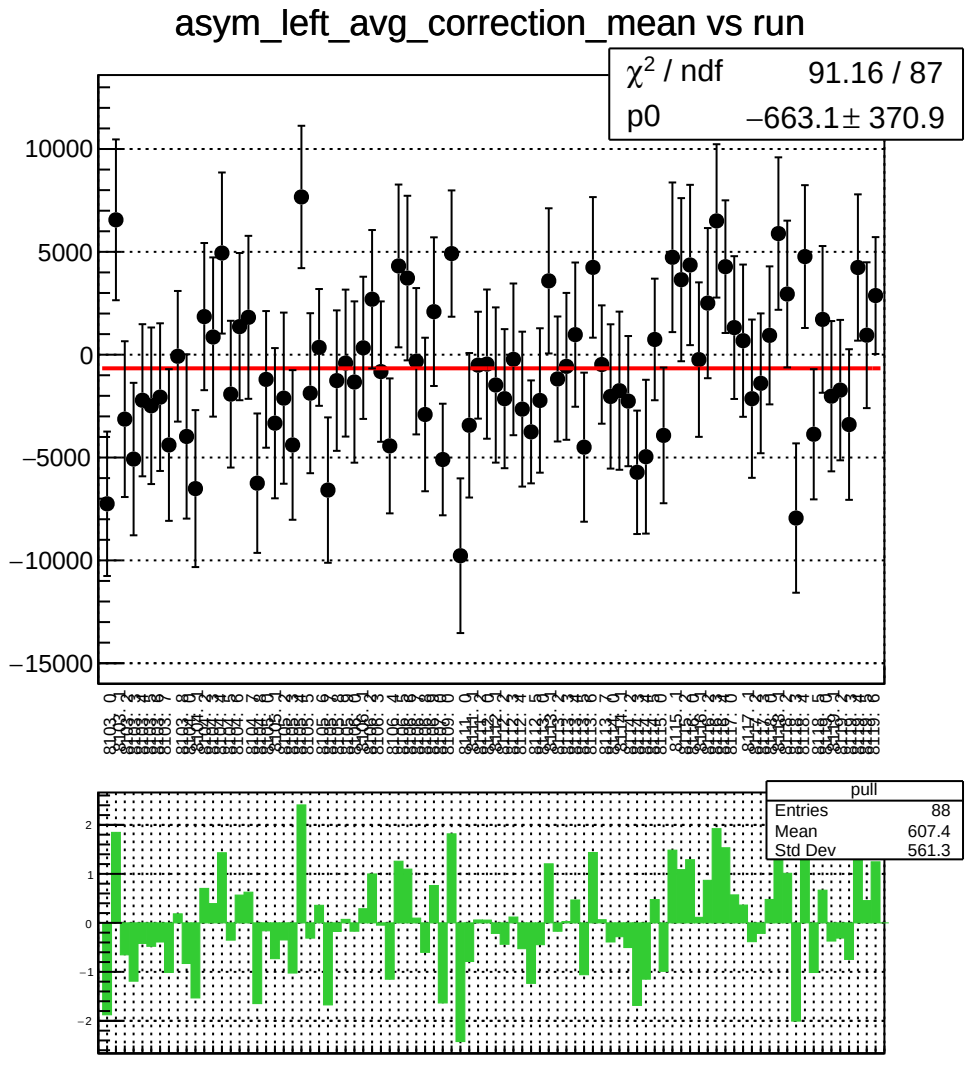

asym_dsr_mean vs run
×10^3
χ² / ndf 37.43 / 50
p0 −1466 ± 7.555e+04
1500
1000
500
0
−500
−1000
−1500
8103. 0
8103. 2
8103. 3
8103. 4
8103. 5
8103. 6
8103. 7
8103. 8
8104. 0
8104. 1
8104. 2
8104. 3
8104. 4
8104. 6
8104. 7
8104. 8
8105. 0
8105. 1
8105. 2
8105. 3
8106. 0
8106. 2
8106. 4
8106. 5
8106. 7
8106. 8
8106. 9
8111. 0
8111. 2
8112. 0
8112. 1
8112. 3
8112. 4
8112. 5
8113. 0
8113. 2
8113. 4
8113. 6
8113. 7
8114. 0
8114. 1
8114. 2
8114. 5
8115. 0
8115. 1
8116. 0
8116. 1
8116. 3
8116. 4
8118. 3
8119. 4
8119. 5
pull
Entries 51
Mean −157.3
Std Dev 185.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 51
Mean −0.009251
Std Dev 0.8566
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

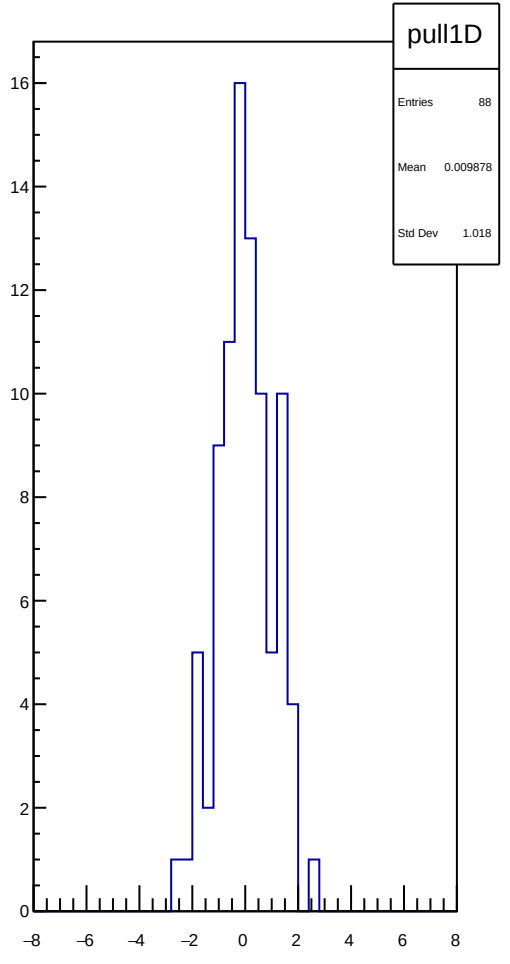

asym_dsr_rms vs run
×10^3
900
800
700
600
500
400
300
200
100
χ² / ndf 2.299e+05 / 75
p0 5.544e+04 ± 50.04

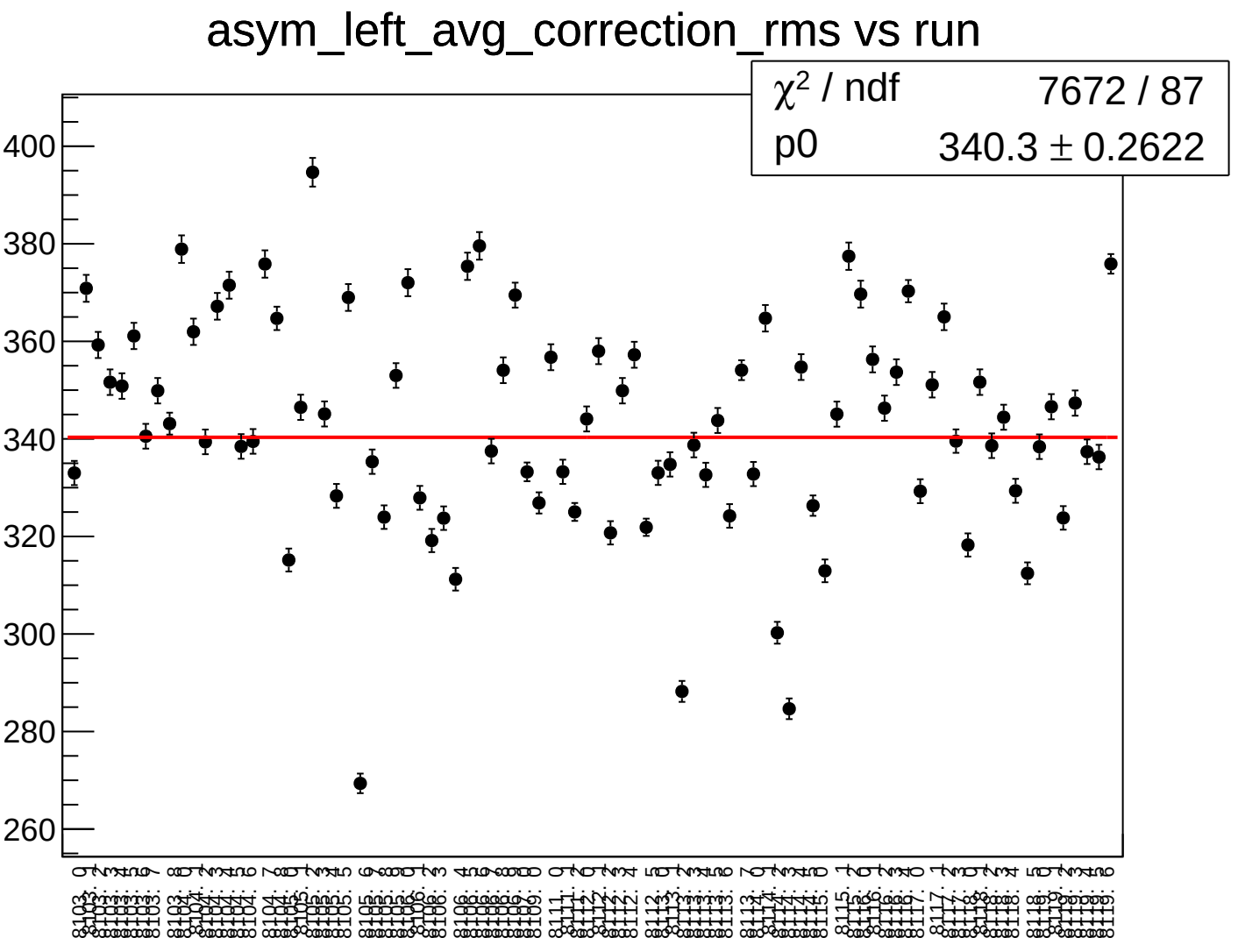

reg_asym_left_avg_mean vs run
×10^3
100
50
0
−50
−100
χ² / ndf 99.33 / 87
p0 −4506 ± 2320
pull
Entries 88
Mean 1500
Std Dev 1465
3
2
1
0
−1
−2

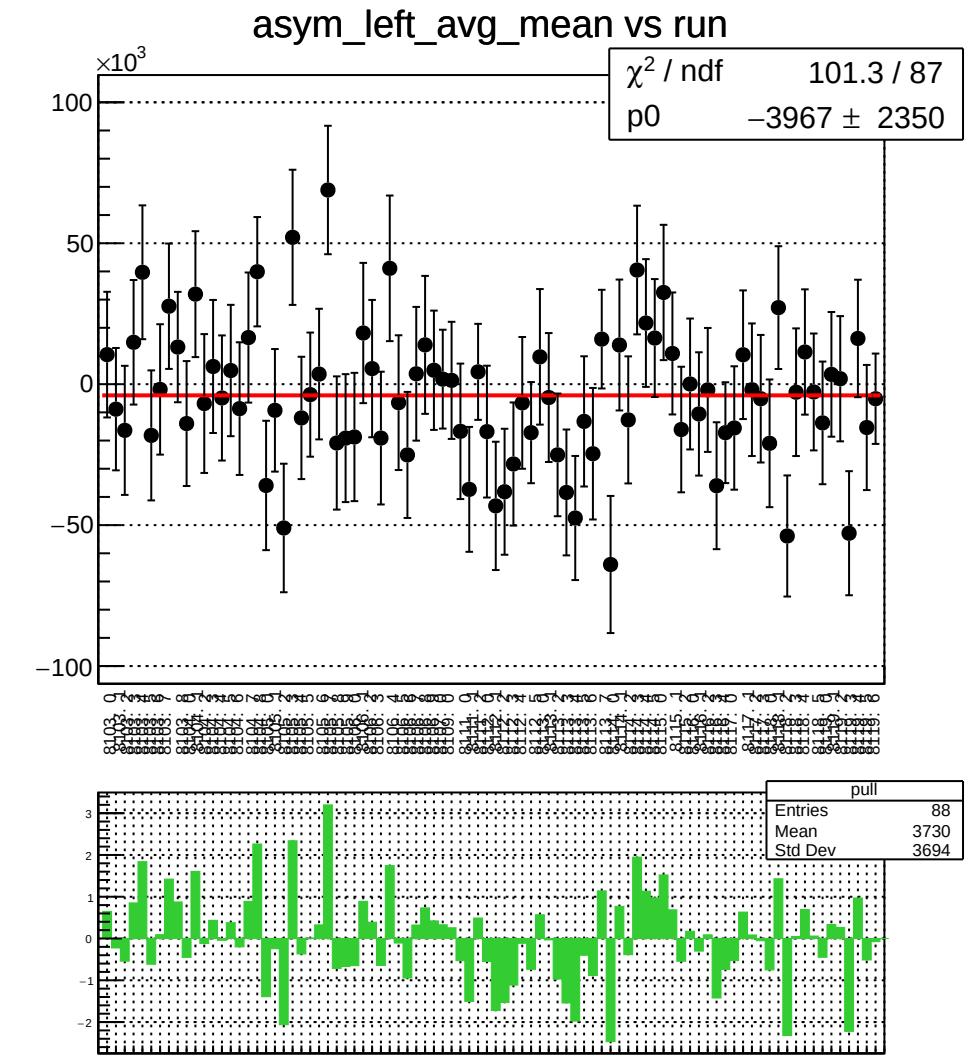

pull1D
Entries 88
Mean −0.002801
Std Dev 1.062
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

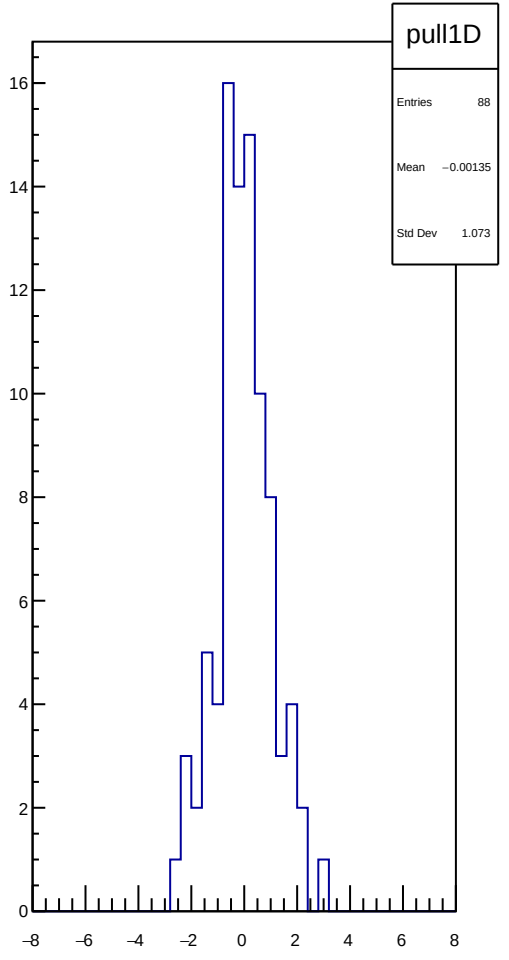

reg_asym_left_avg_rms vs run
χ^2 / ndf 2716 / 87
p0 2132 ± 1.64
2400
2300
2200
2100
2000
1900

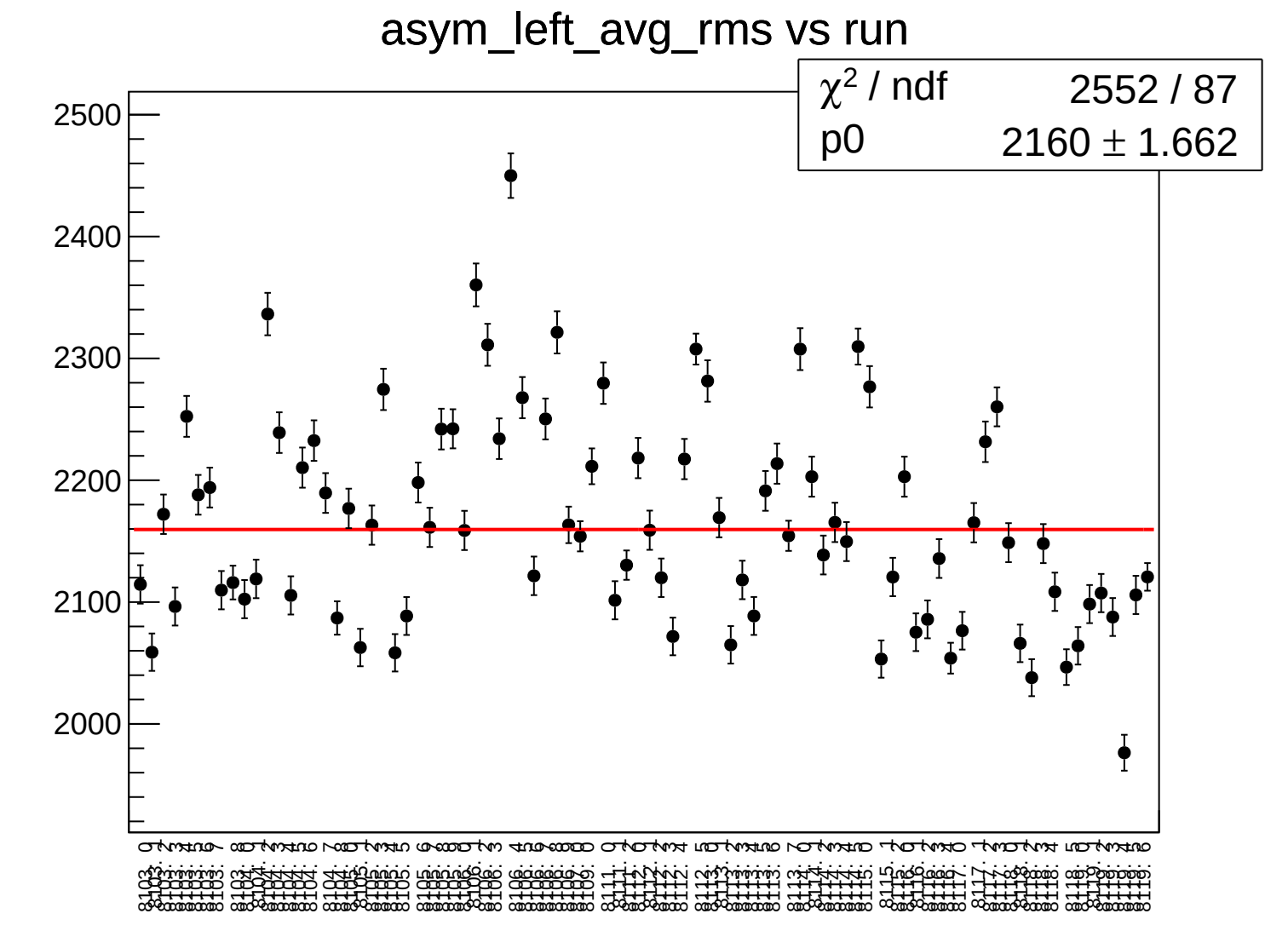

asym_left_avg_correction_mean vs run
χ² / ndf 91.16 / 87
p0 −663.1 ± 370.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 607.4
Std Dev 561.3
2
1
0
−1
−2

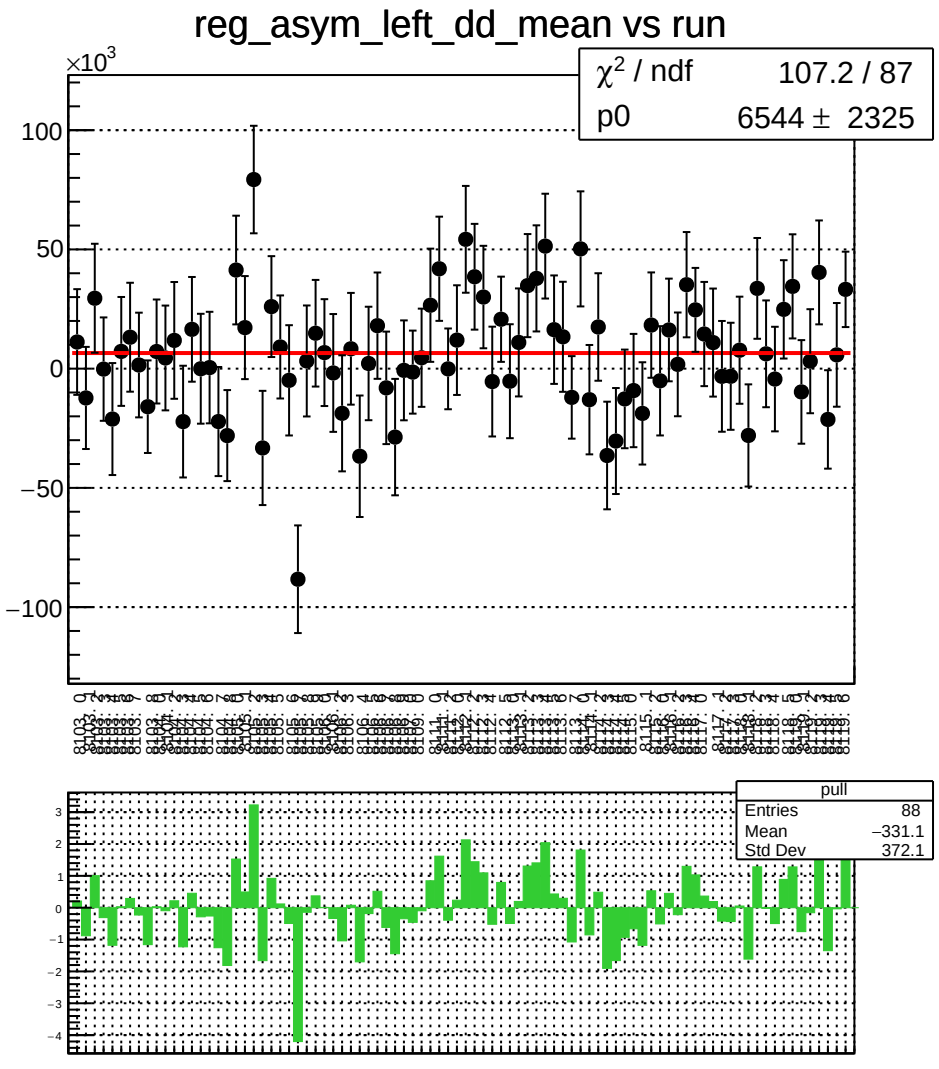

pull1D
Entries 88
Mean 0.009878
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

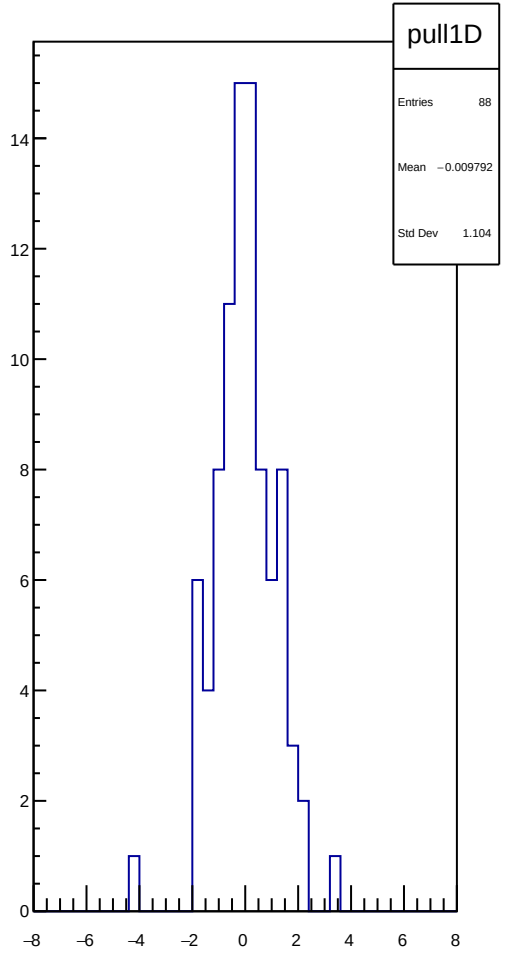

asym_left_avg_correction_rms vs run
χ² / ndf 7672 / 87
p0 340.3 ± 0.2622
400
380
360
340
320
300
280
260

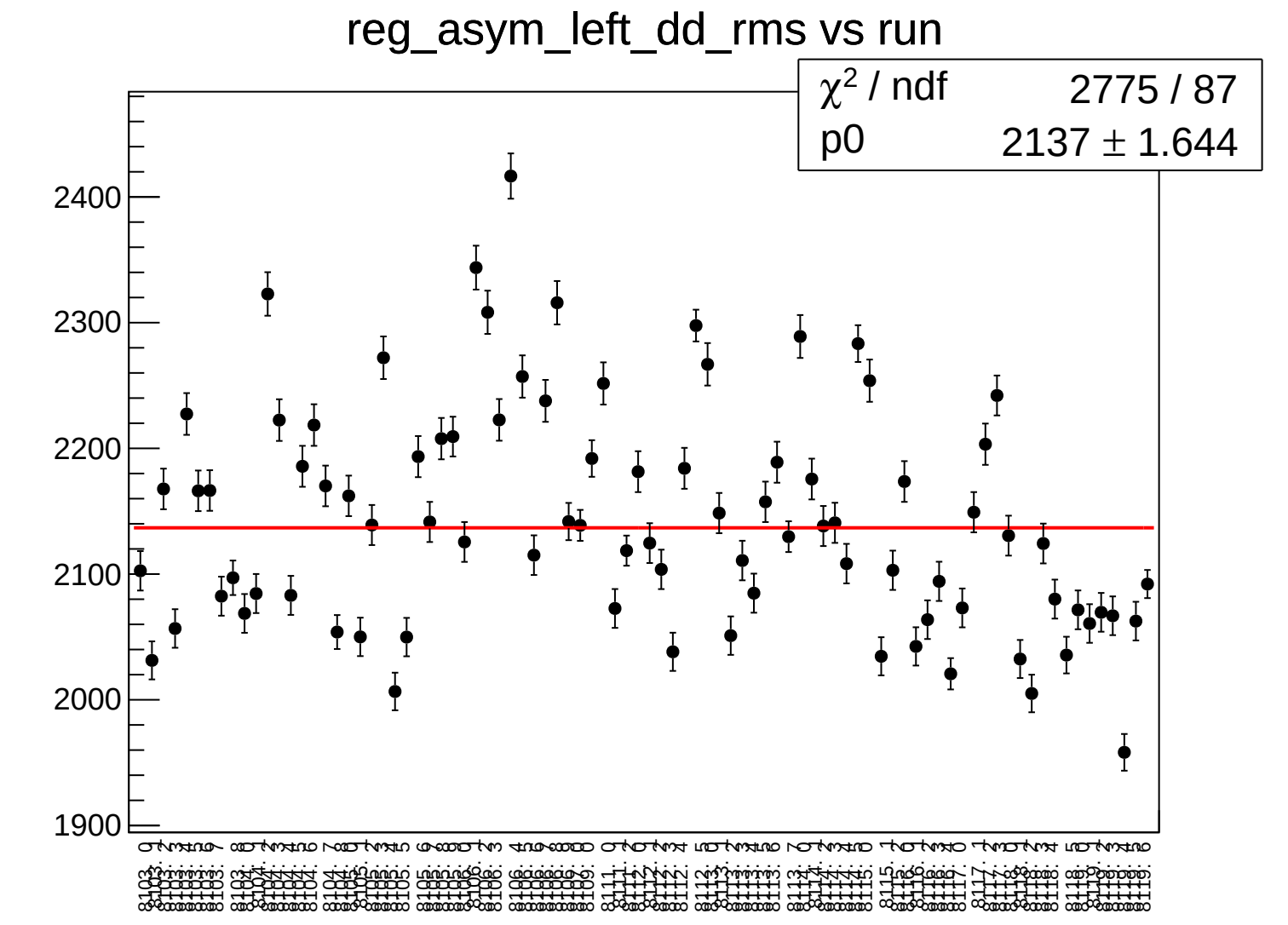

asym_left_avg_mean vs run
×10^3
χ² / ndf 101.3 / 87
p0 −3967 ± 2350
100
50
0
−50
−100
pull
Entries 88
Mean 3730
Std Dev 3694
3
2
1
0
−1
−2

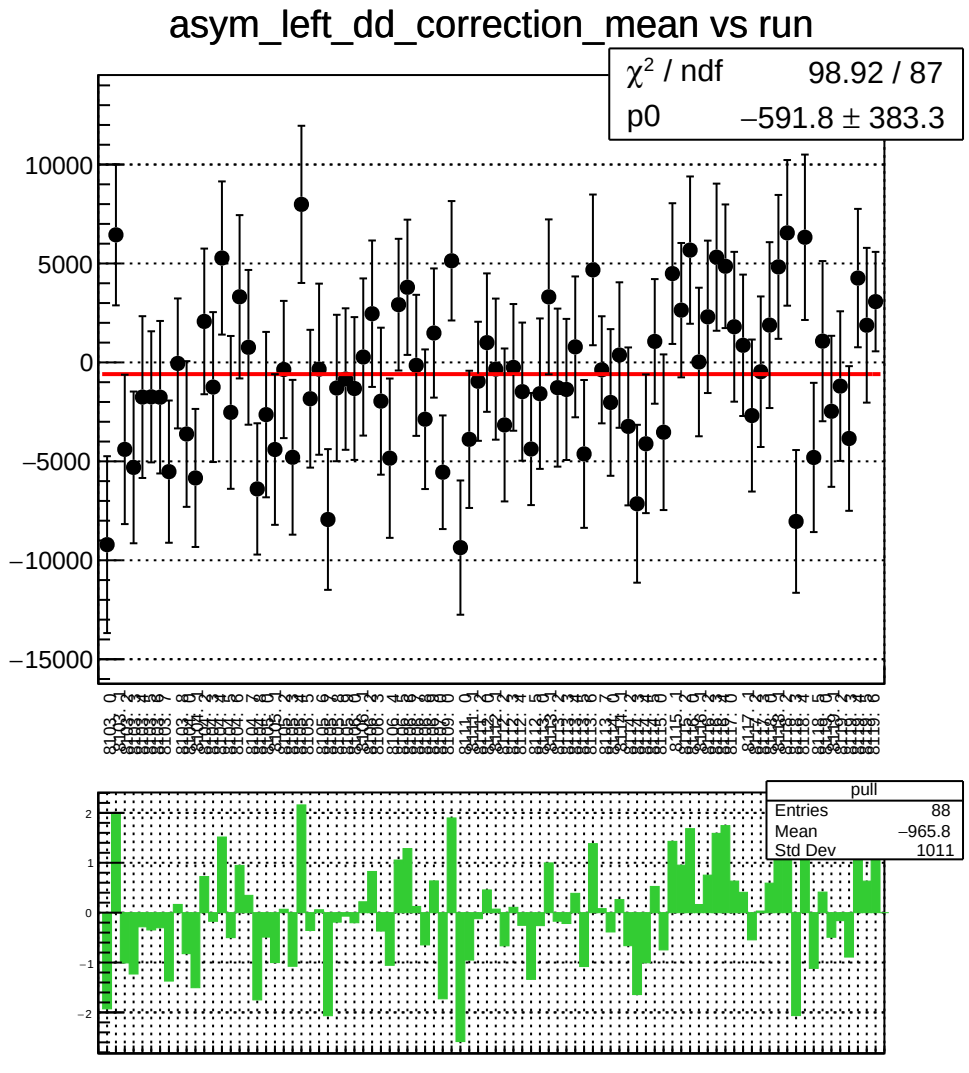

pull1D
Entries 88
Mean −0.00135
Std Dev 1.073
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

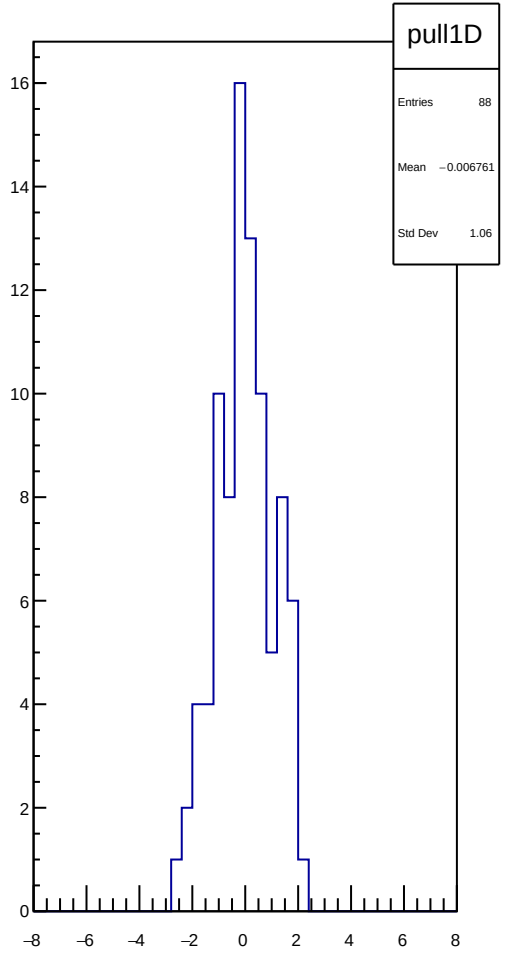

asym_left_avg_rms vs run
χ^2 / ndf 2552 / 87
p0 2160 ± 1.662
2500
2400
2300
2200
2100
2000

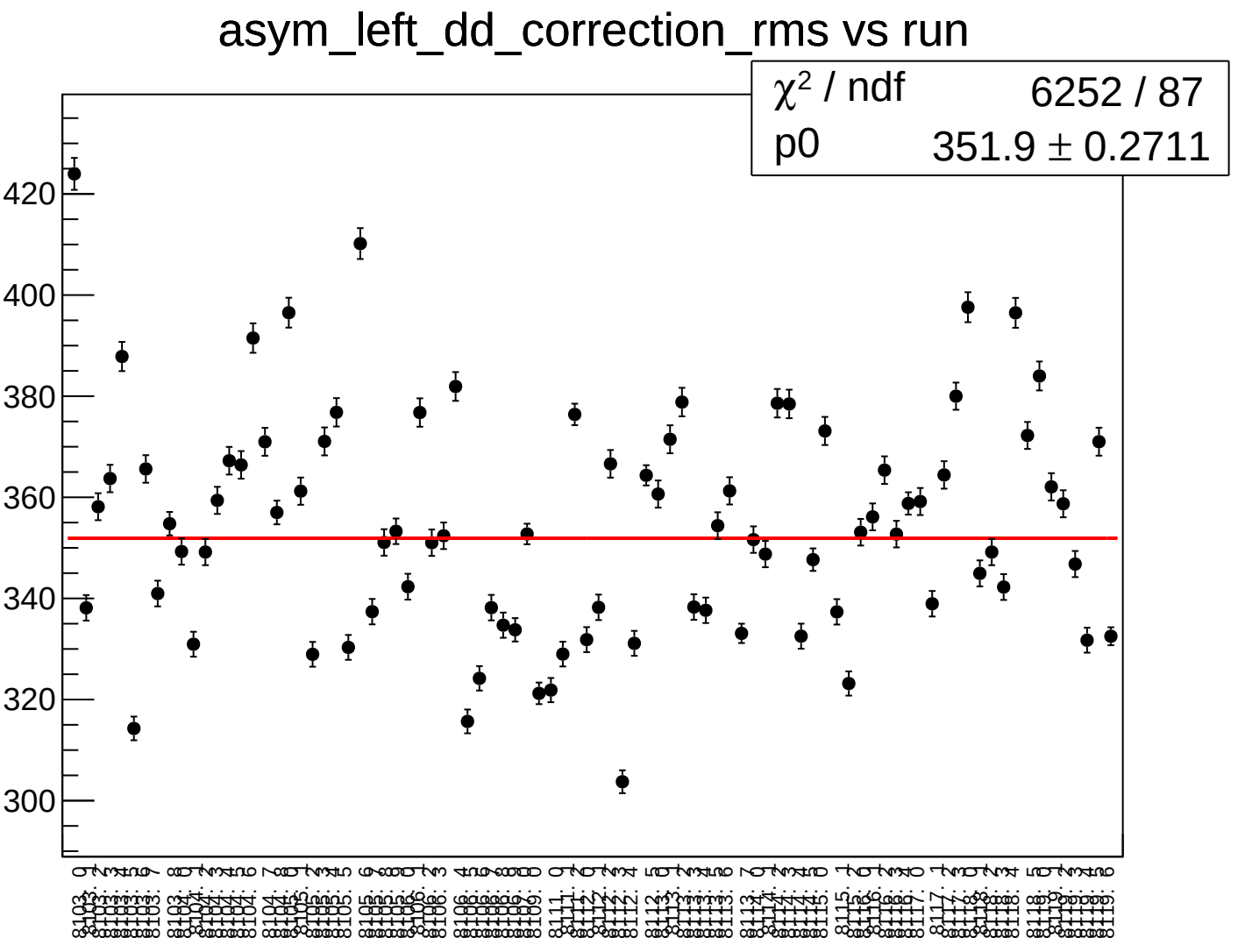

reg_asym_left_dd_mean vs run
×10^3
χ² / ndf 107.2 / 87
p0 6544 ± 2325
100
50
0
−50
−100
pull
Entries 88
Mean −331.1
Std Dev 372.1
3
2
1
0
−1
−2
−3
−4

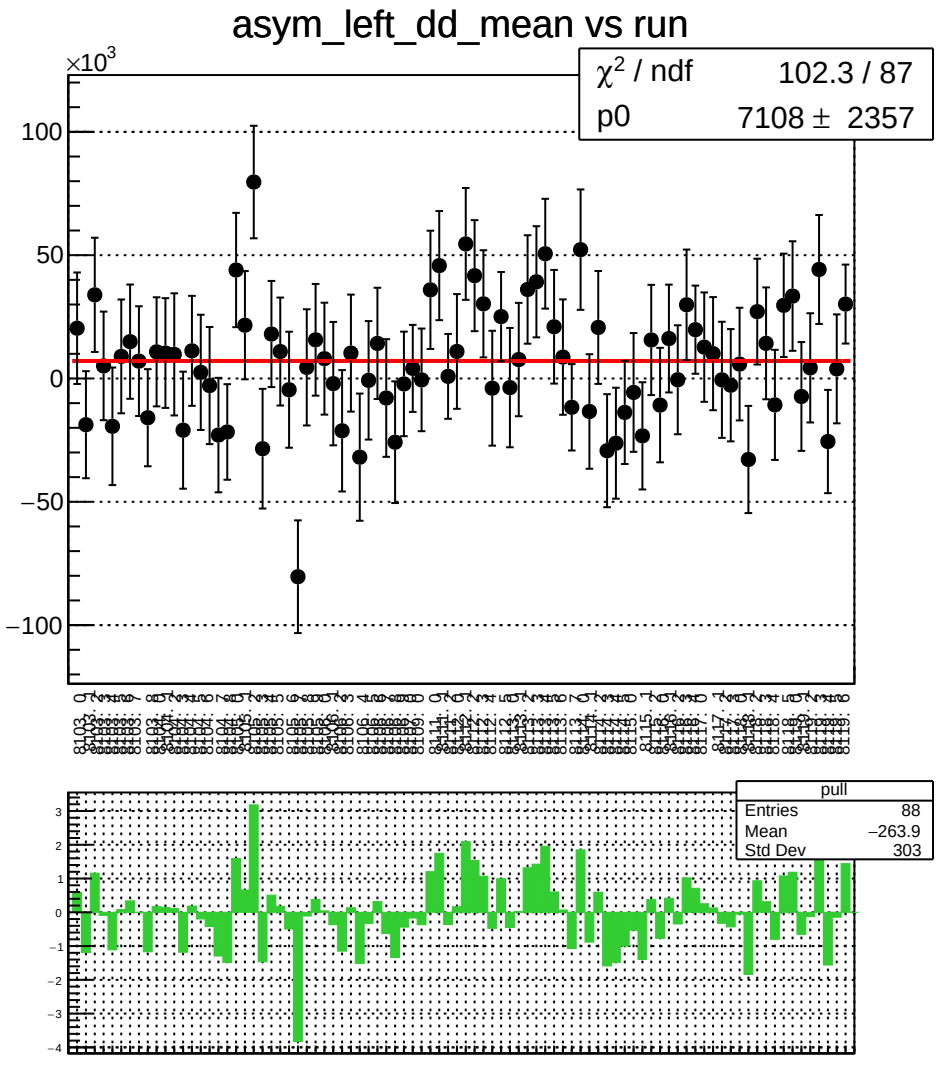

pull1D
Entries 88
Mean −0.009792
Std Dev 1.104
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

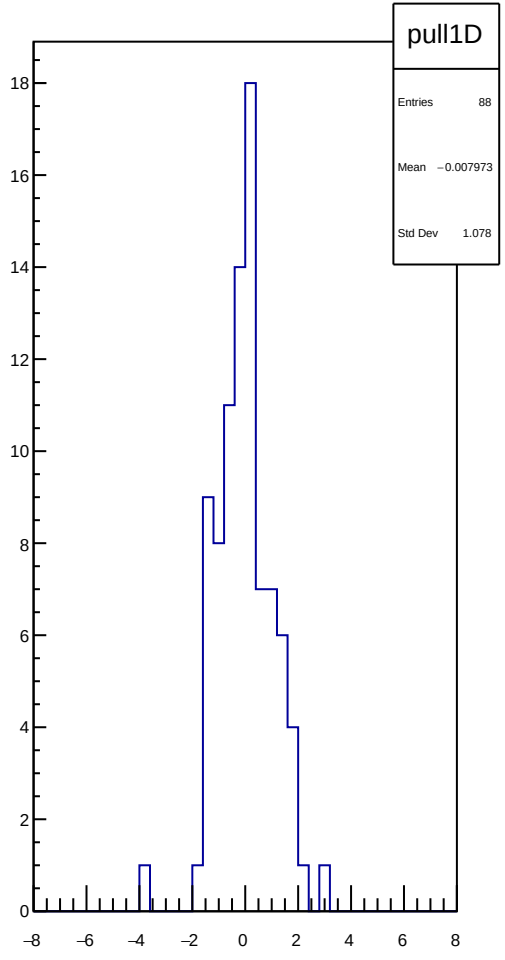

reg_asym_left_dd_rms vs run
χ^2 / ndf 2775 / 87
p0 2137 ± 1.644
2400
2300
2200
2100
2000
1900

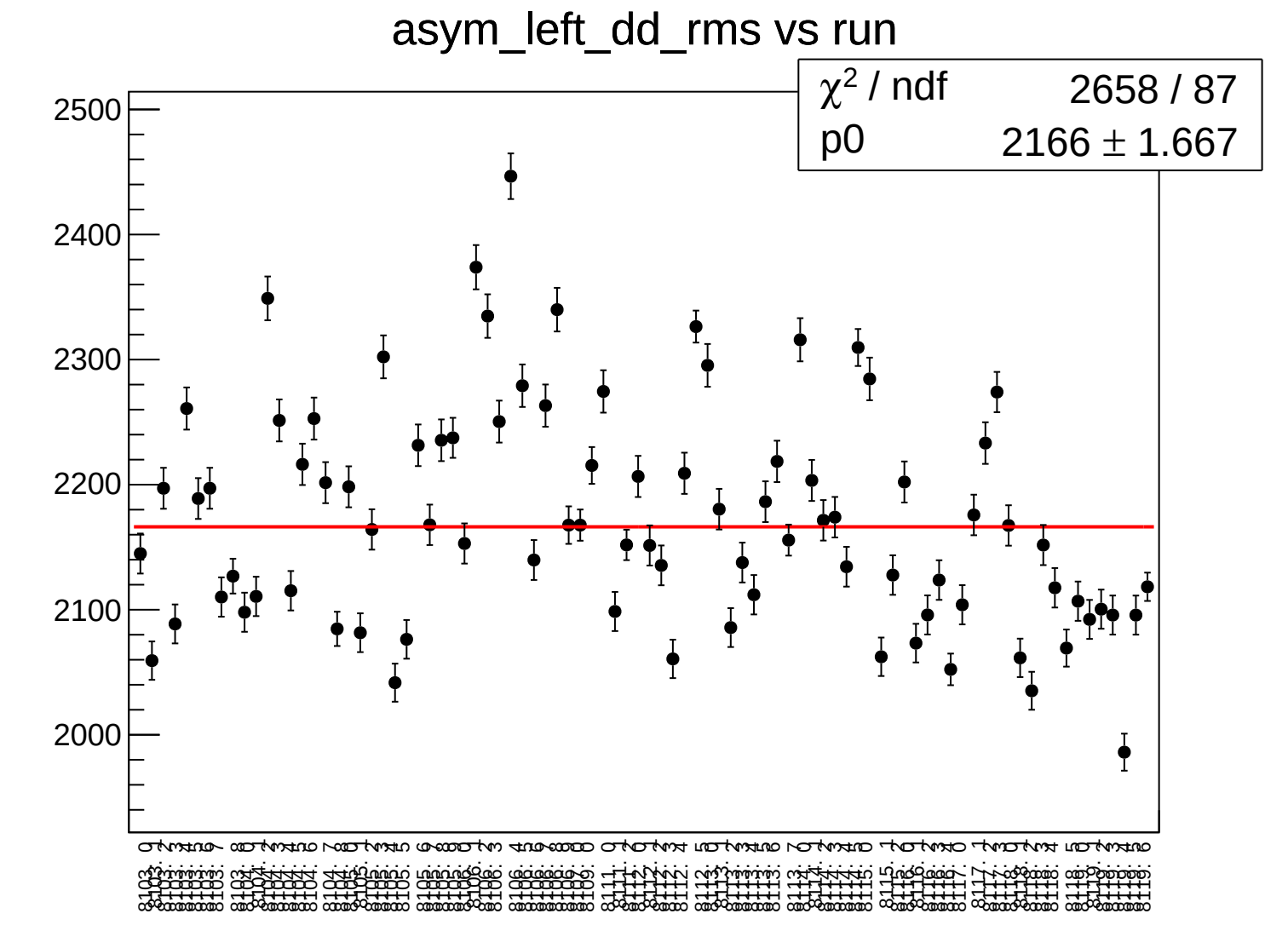

asym_left_dd_correction_mean vs run
χ² / ndf 98.92 / 87
p0 −591.8 ± 383.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean −965.8
Std Dev 1011
2
1
0
−1
−2

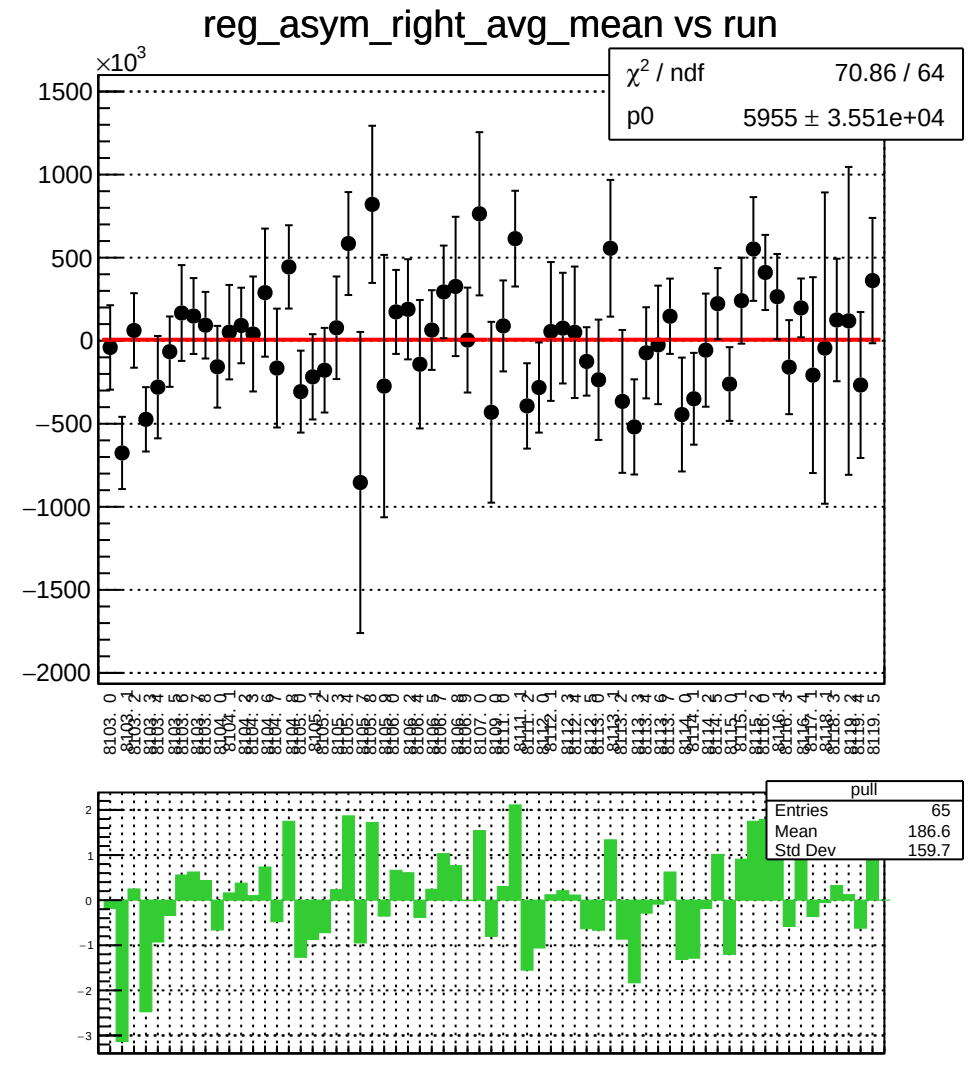

pull1D
Entries 88
Mean −0.006761
Std Dev 1.06
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

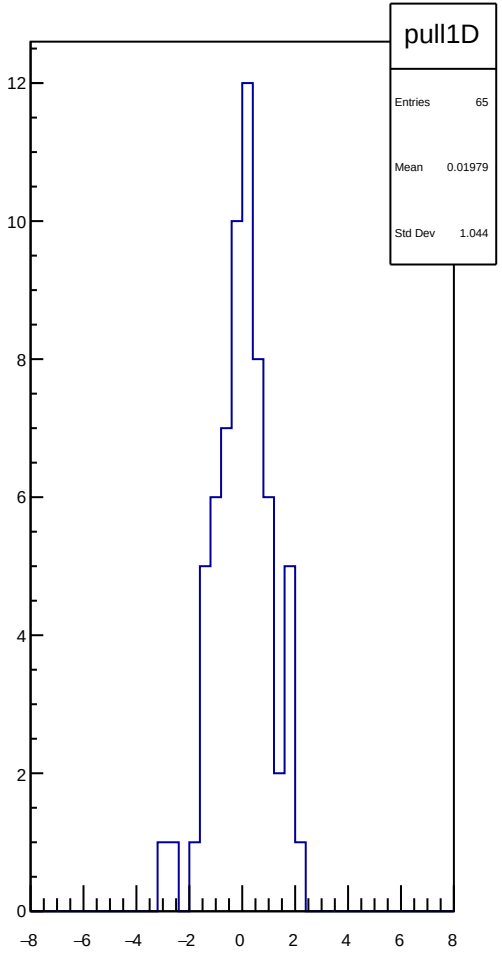

asym_left_dd_correction_rms vs run
χ² / ndf 6252 / 87
p0 351.9 ± 0.2711
420
400
380
360
340
320
300

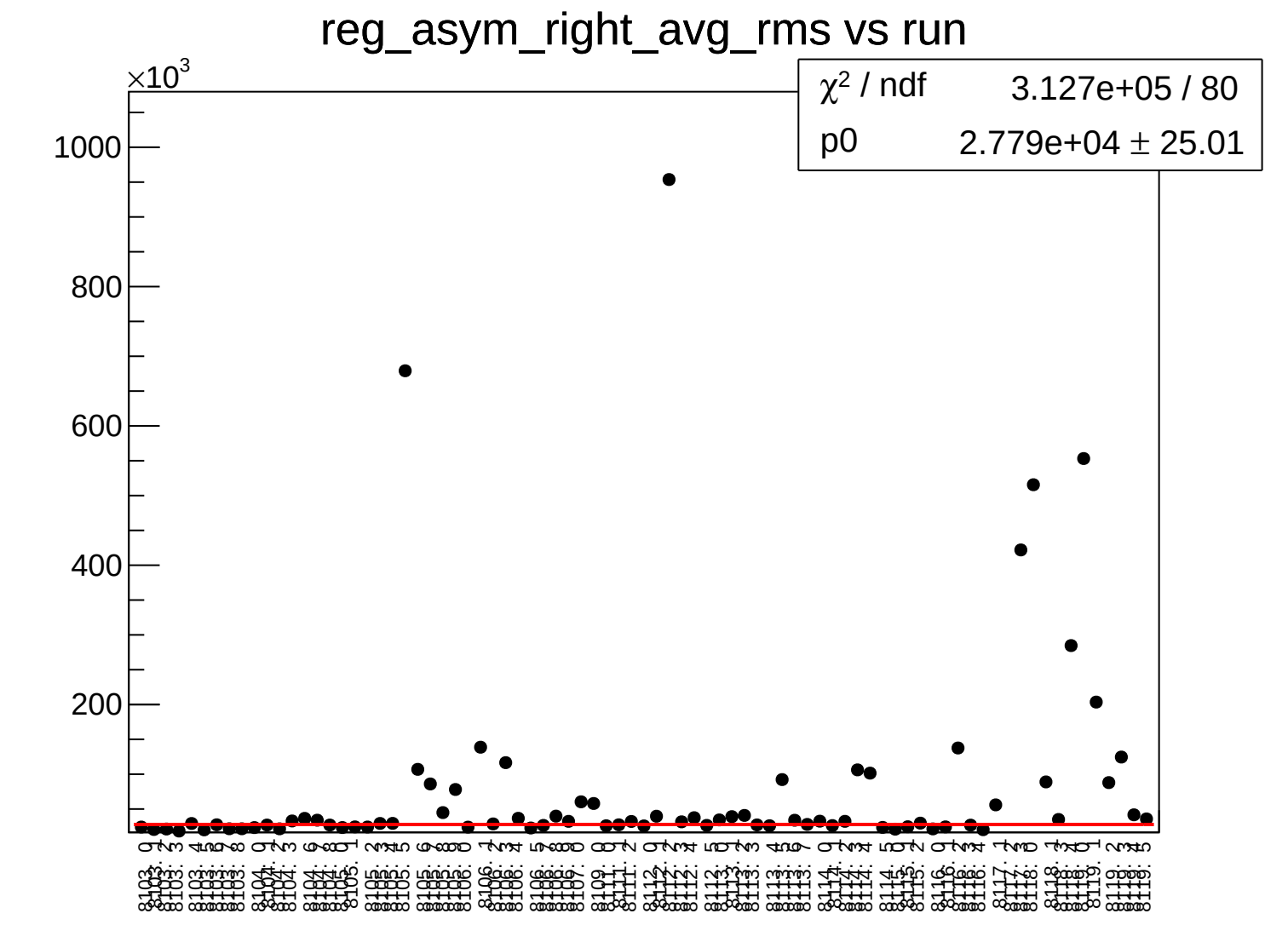

asym_left_dd_mean vs run
χ^2 / ndf 102.3 / 87
p0 7108 ± 2357
×10^3
100
50
0
−50
−100
pull
Entries 88
Mean −263.9
Std Dev 303
3
2
1
0
−1
−2
−3
−4

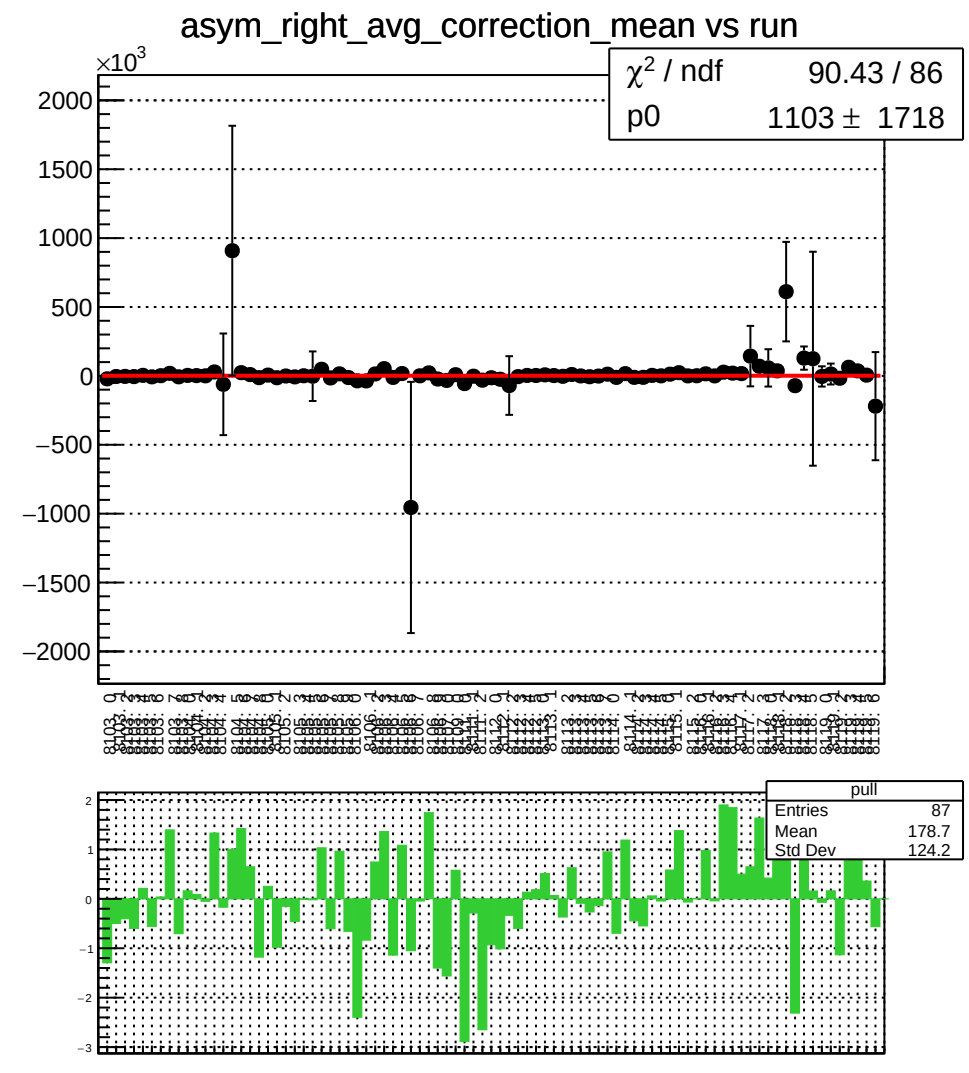

pull1D
Entries 88
Mean −0.007973
Std Dev 1.078
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

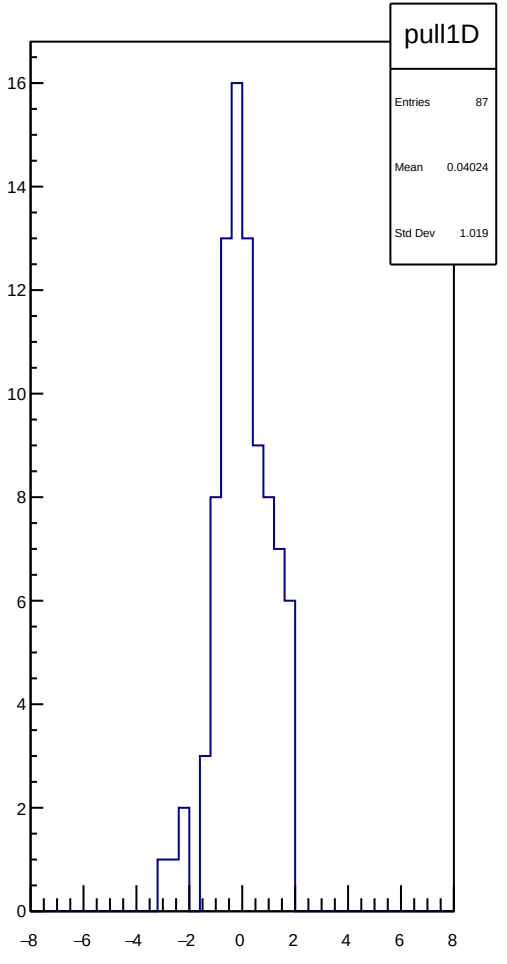

asym_left_dd_rms vs run
χ² / ndf 2658 / 87
p0 2166 ± 1.667
2500
2400
2300
2200
2100
2000

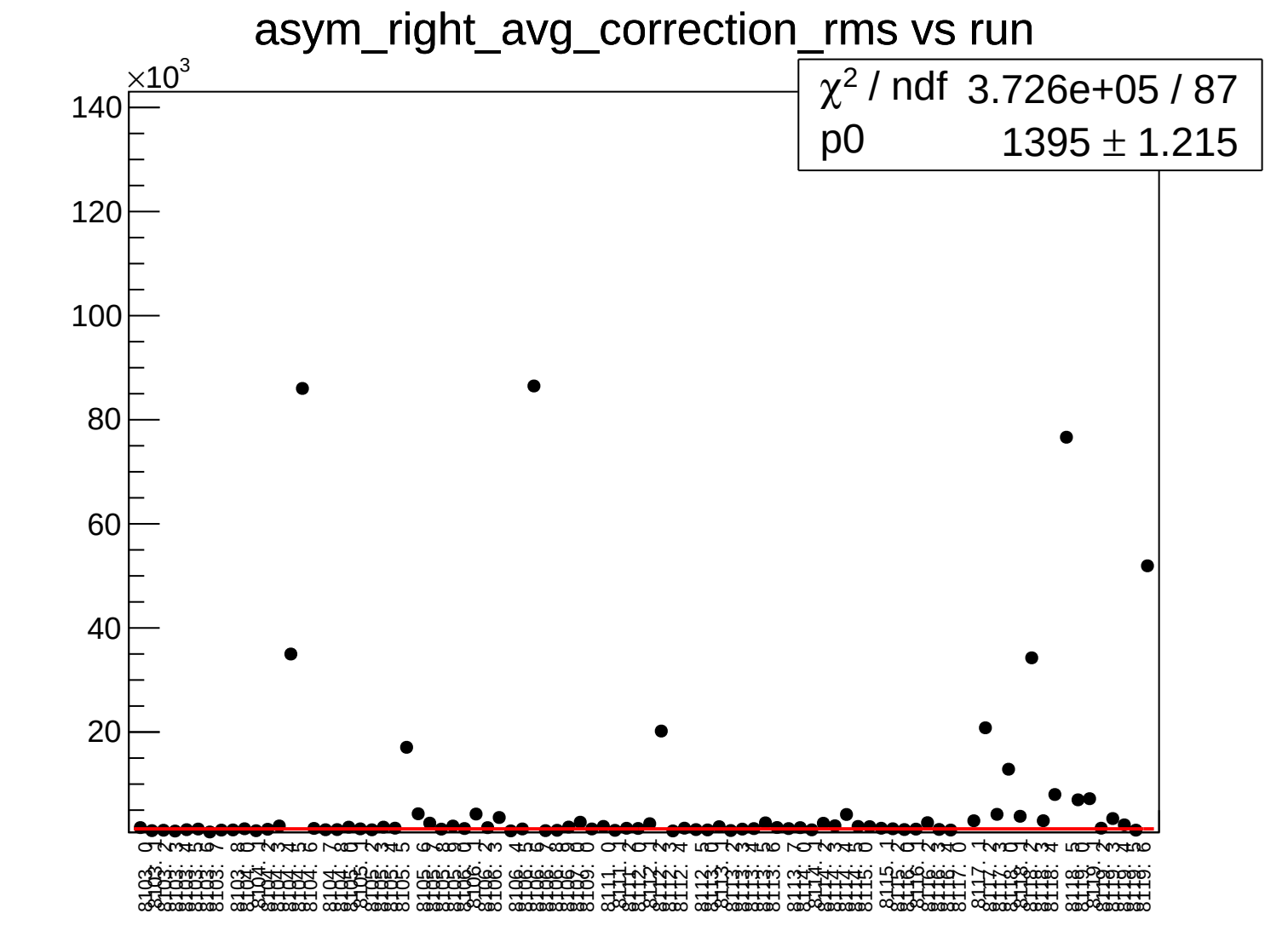

reg_asym_right_avg_mean vs run
×10^3
χ² / ndf 70.86 / 64
p0 5955 ± 3.551e+04
pull
Entries 65
Mean 186.6
Std Dev 159.7

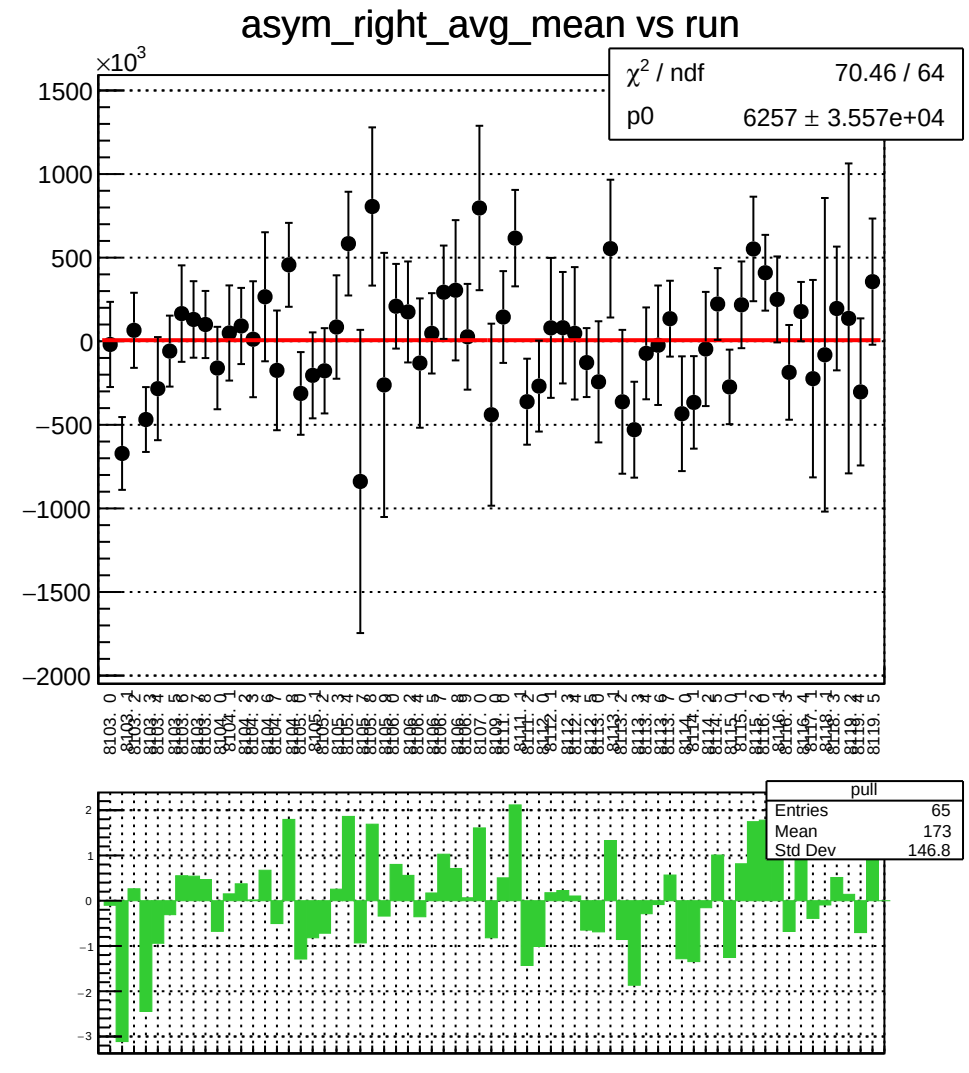

pull1D
Entries 65
Mean 0.01979
Std Dev 1.044

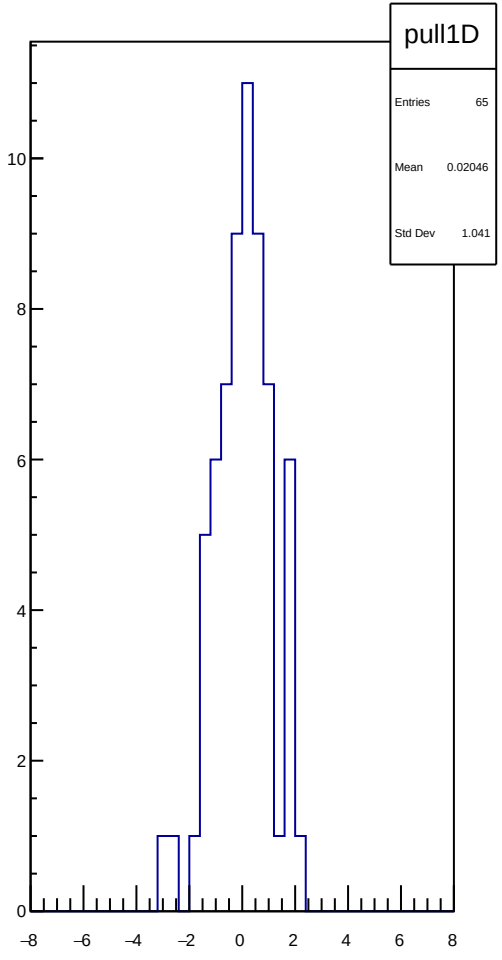

reg_asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.127e+05 / 80
p0 2.779e+04 ± 25.01

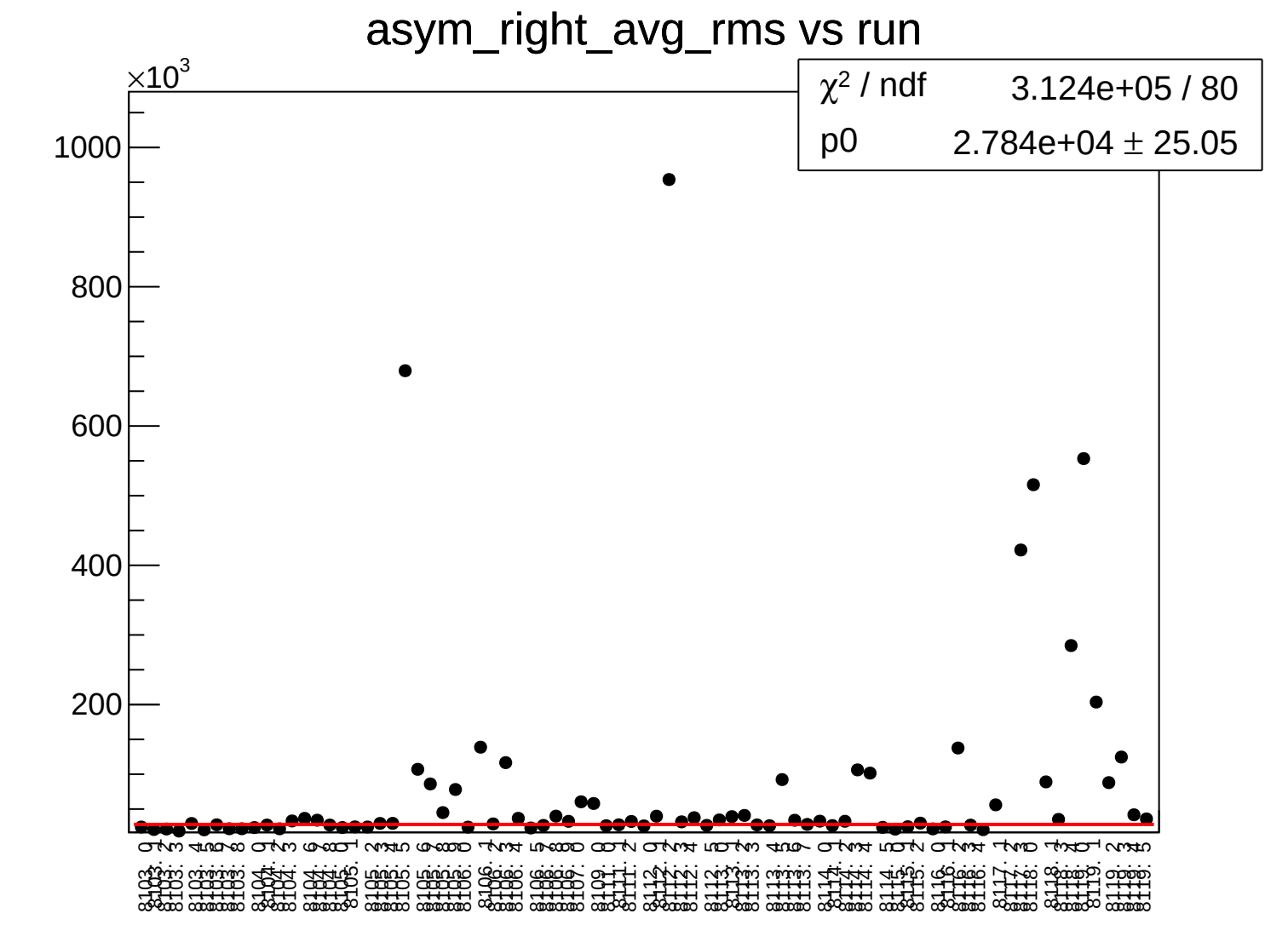

asym_right_avg_correction_mean vs run
×10^3
χ² / ndf 90.43 / 86
p0 1103 ± 1718
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 87
Mean 178.7
Std Dev 124.2
2
1
0
−1
−2
−3

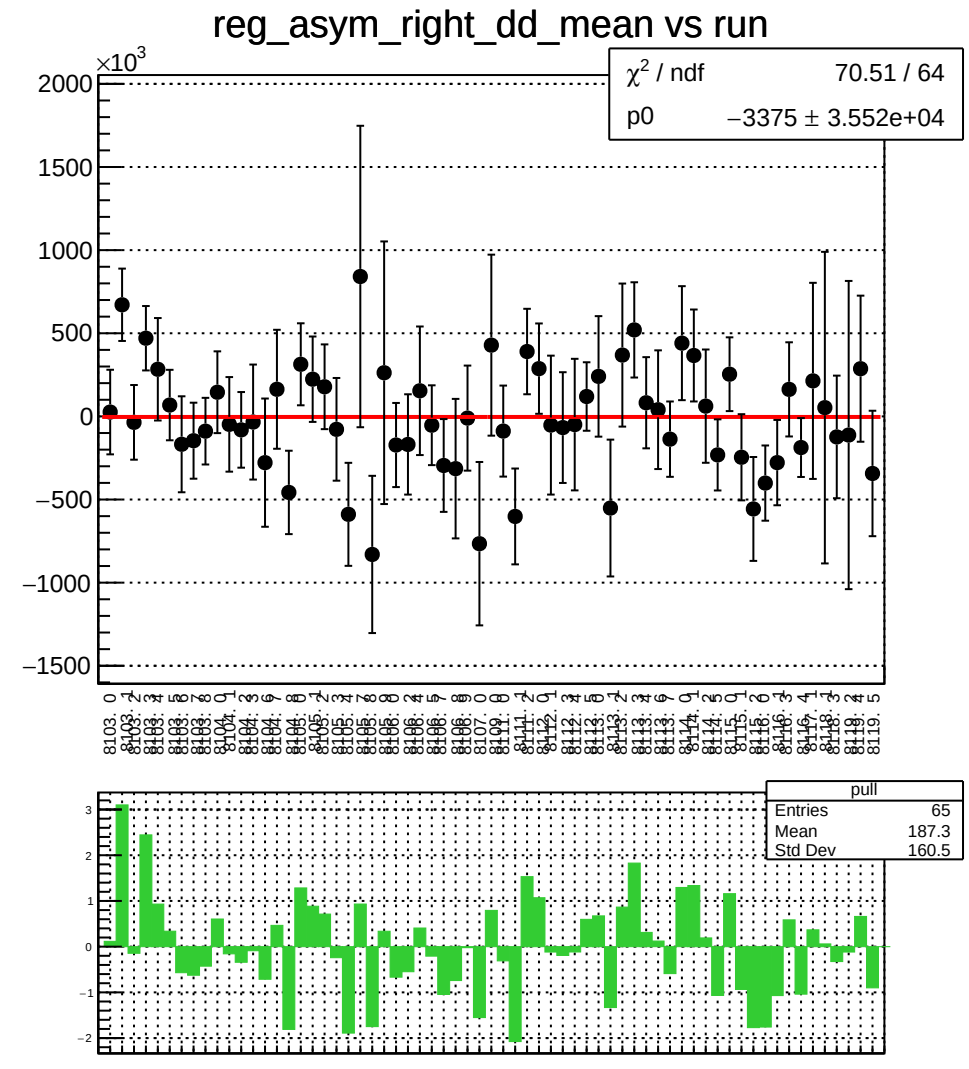

pull1D
Entries 87
Mean 0.04024
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

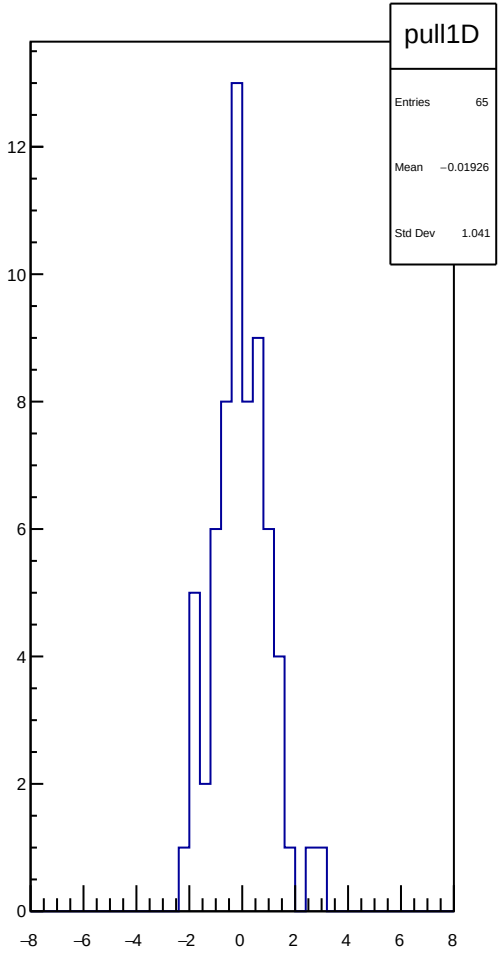

asym_right_avg_correction_rms vs run
×10^3
140
120
100
80
60
40
20
χ² / ndf 3.726e+05 / 87
p0 1395 ± 1.215

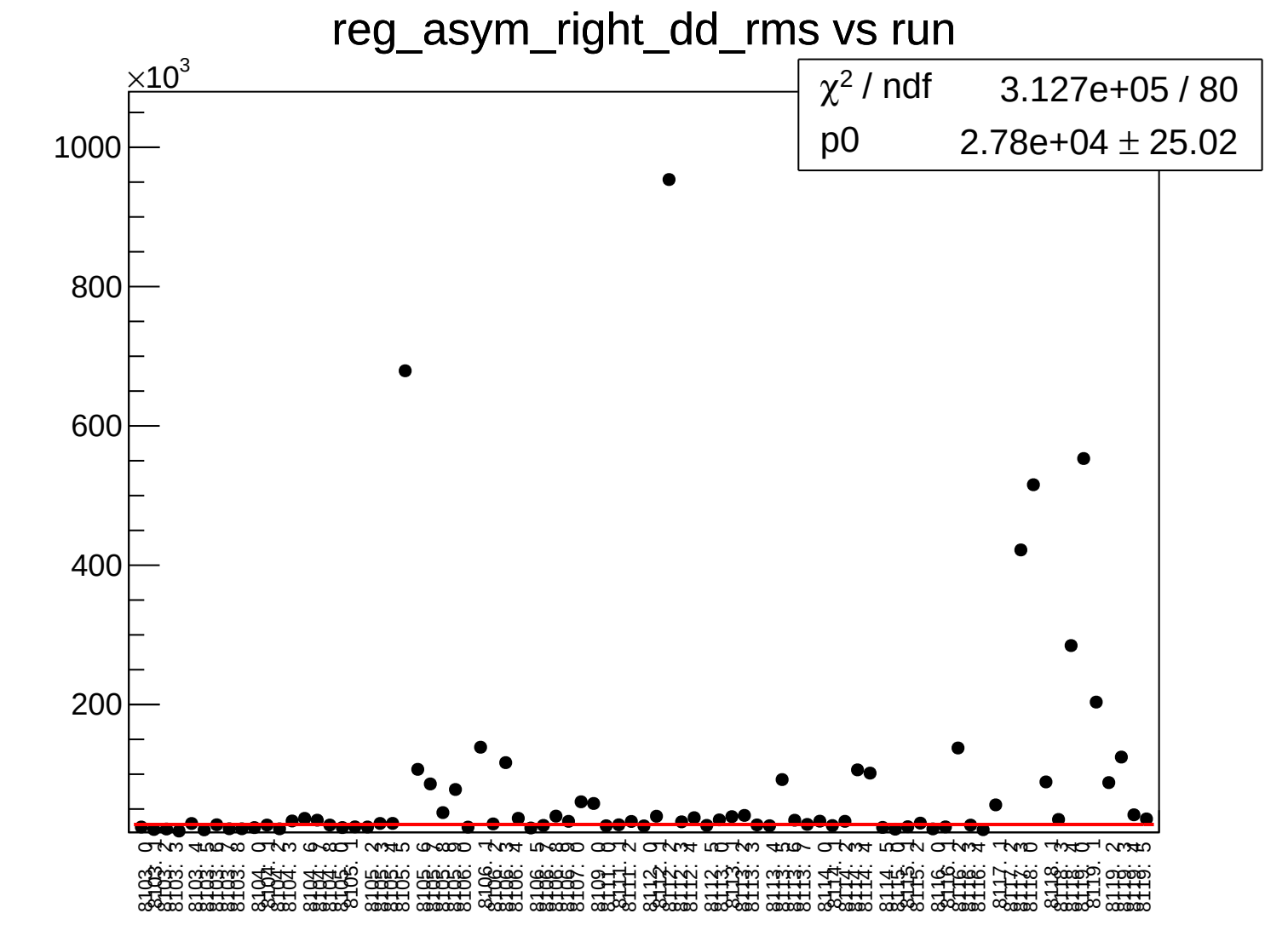

asym_right_avg_mean vs run
×10^3
χ² / ndf 70.46 / 64
p0 6257 ± 3.557e+04
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 65
Mean 173
Std Dev 146.8
2
1
0
−1
−2
−3

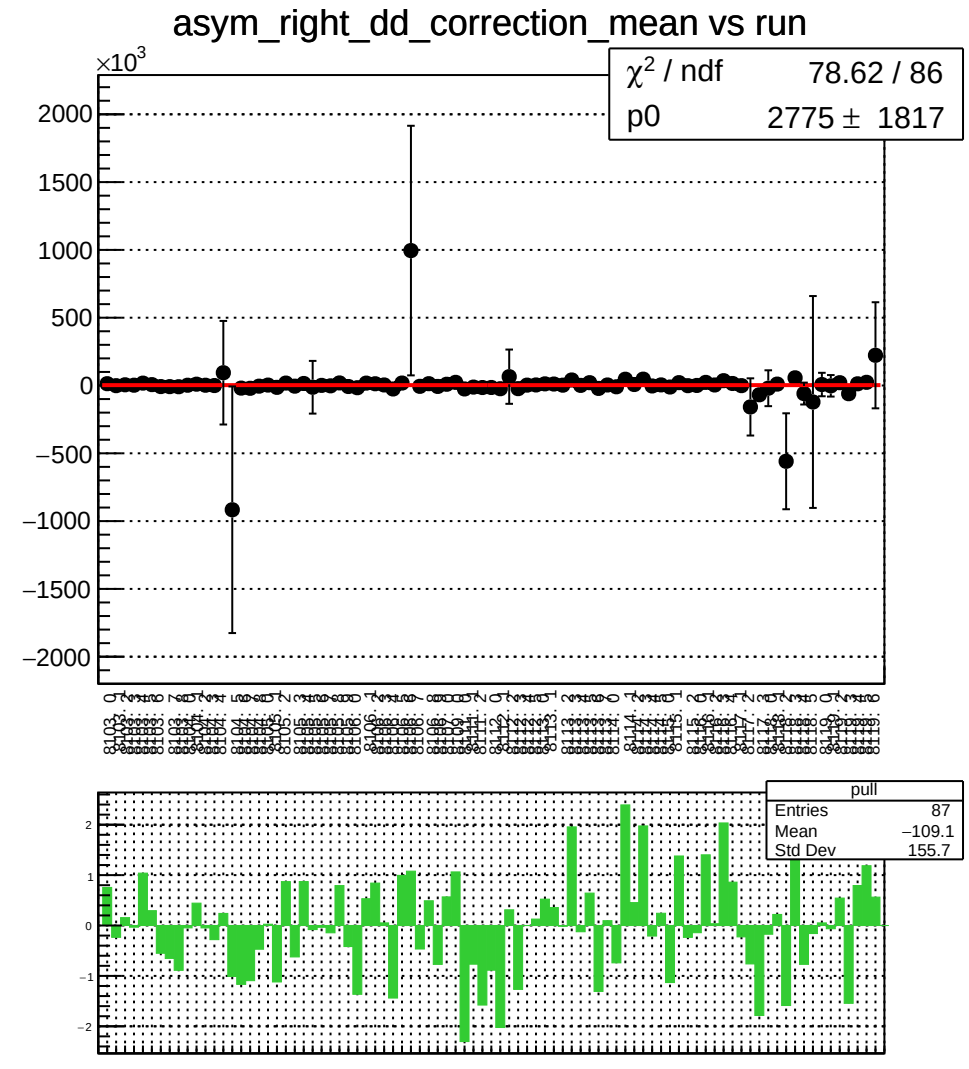

pull1D
Entries 65
Mean 0.02046
Std Dev 1.041
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

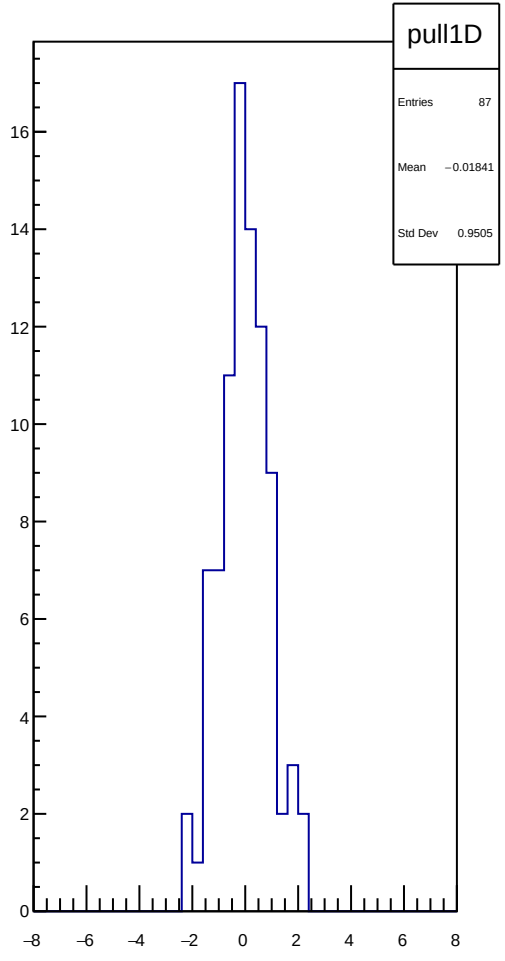

asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.124e+05 / 80
p0 2.784e+04 ± 25.05

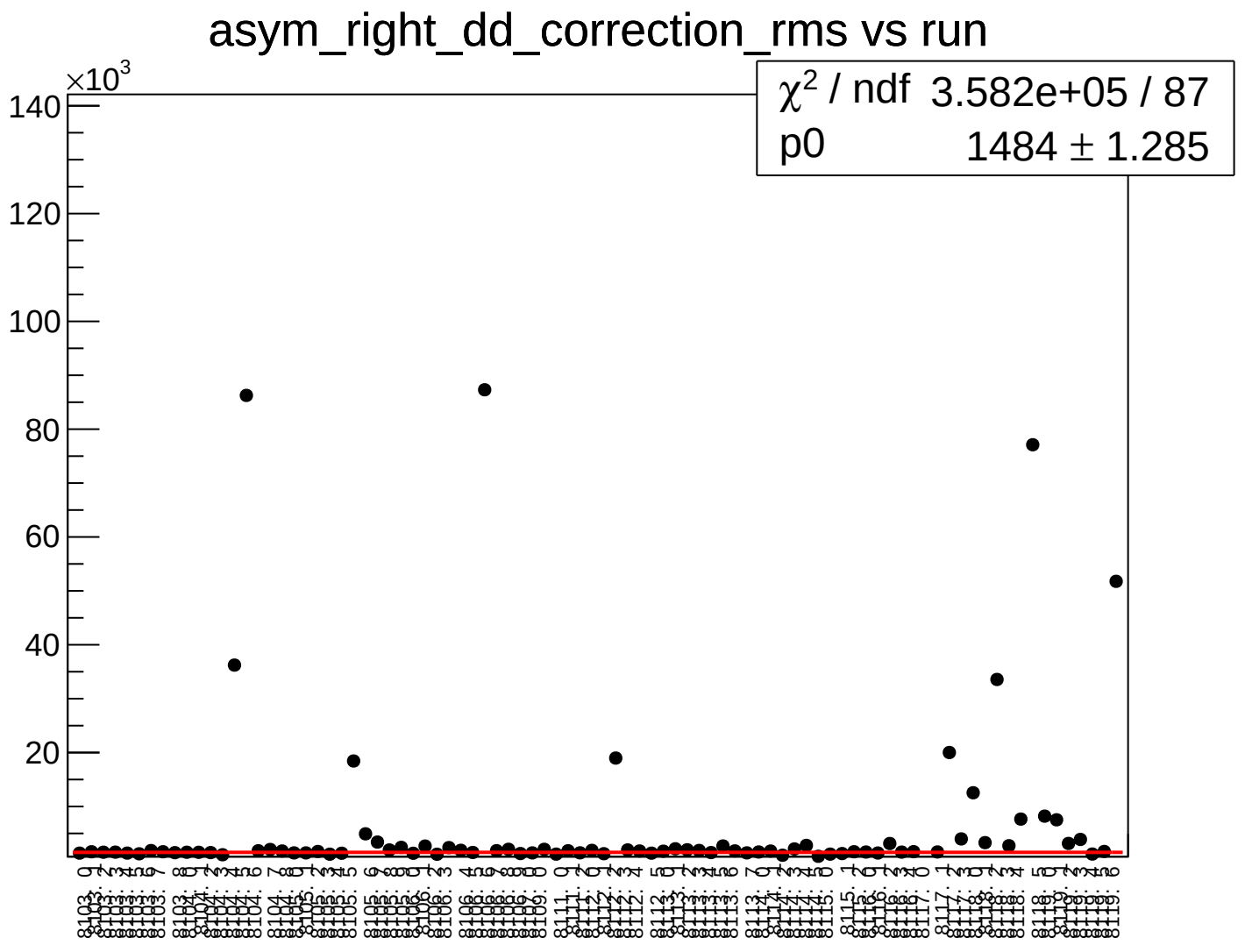

reg_asym_right_dd_mean vs run
×10^3
χ² / ndf 70.51 / 64
p0 −3375 ± 3.552e+04
pull
Entries 65
Mean 187.3
Std Dev 160.5

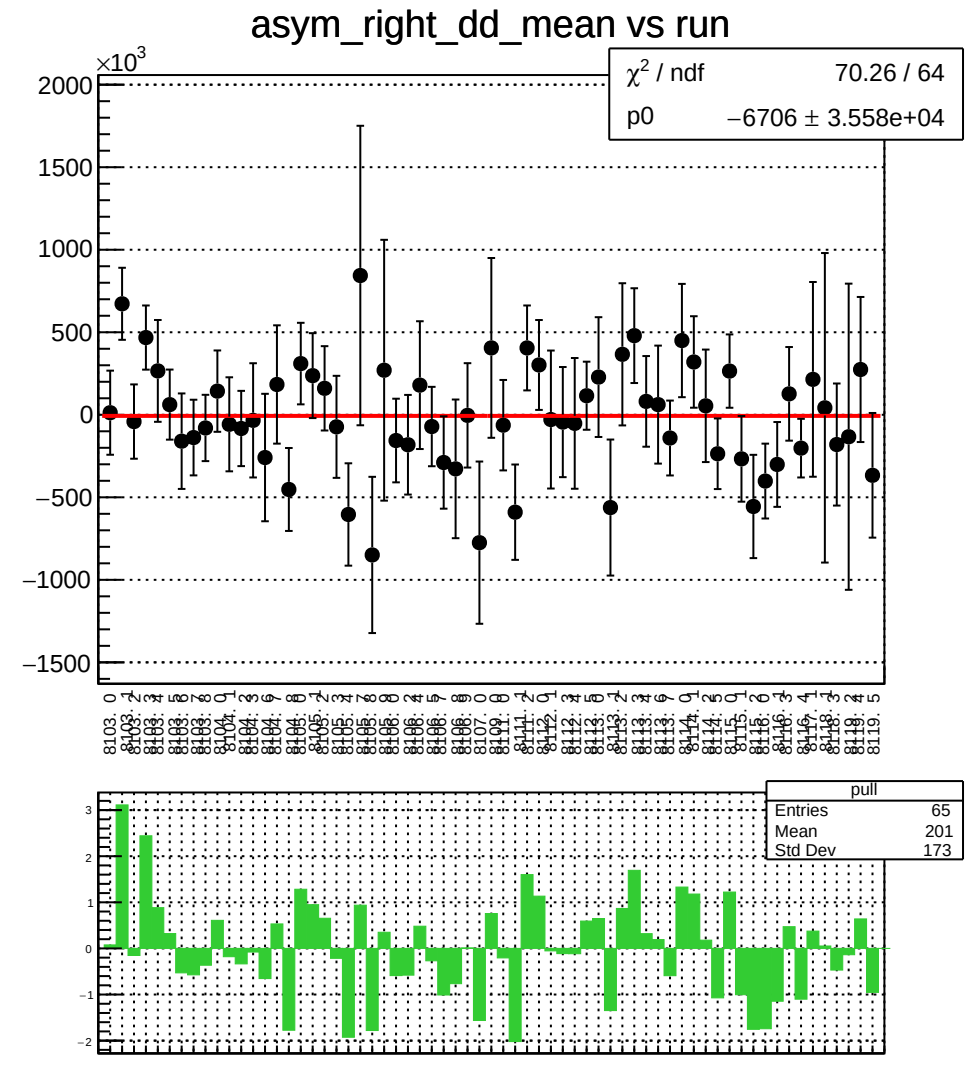

pull1D
Entries 65
Mean −0.01926
Std Dev 1.041

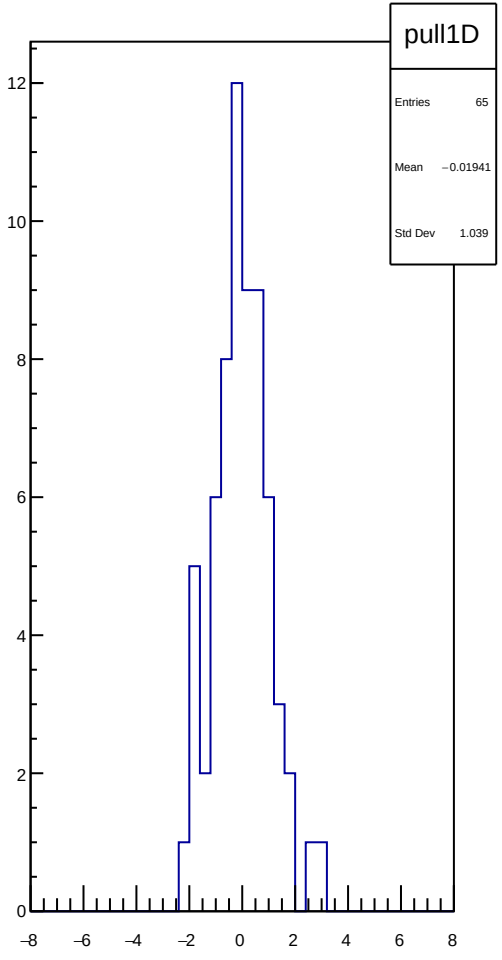

reg_asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.127e+05 / 80
p0 2.78e+04 ± 25.02

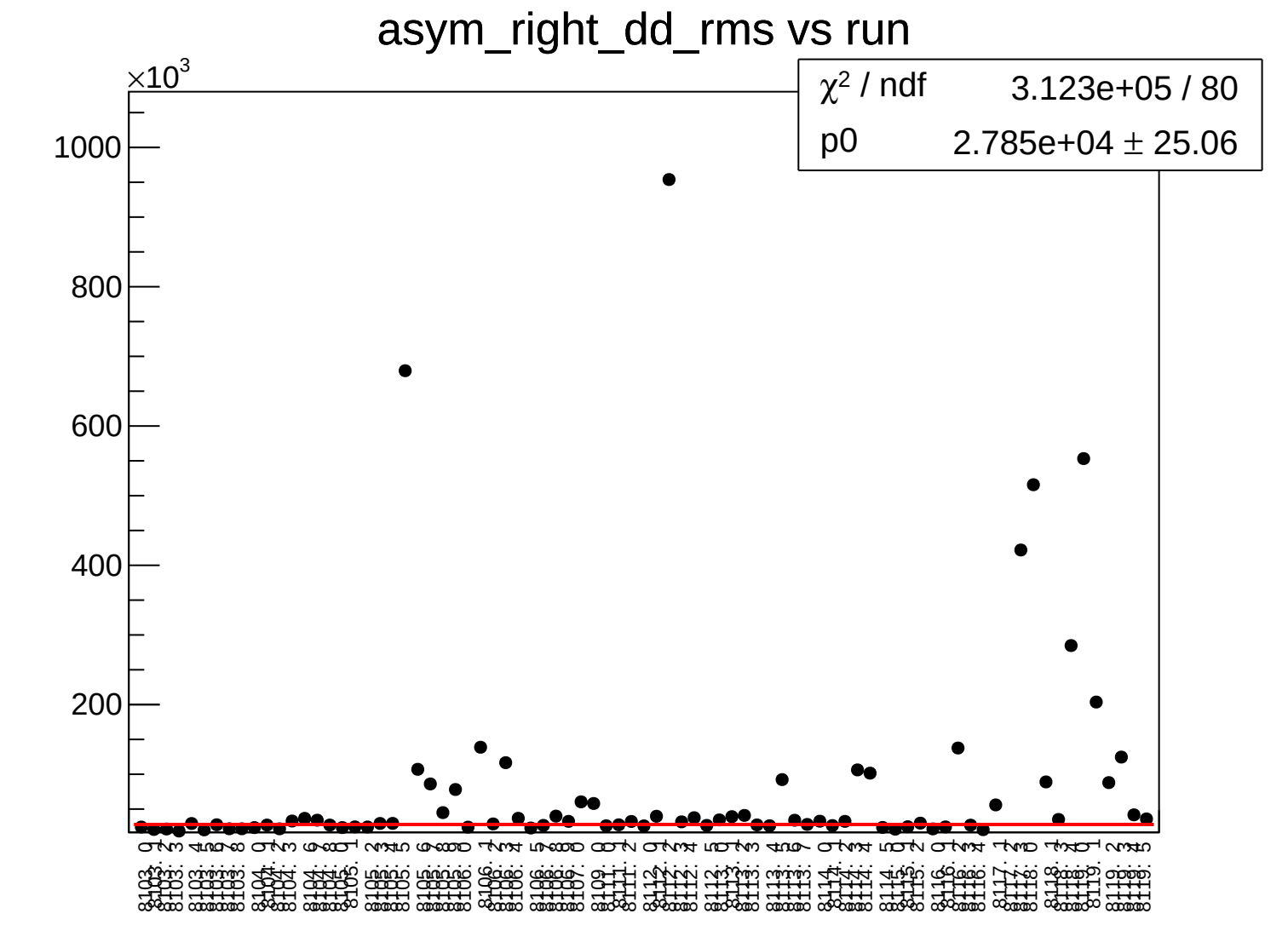

asym_right_dd_correction_mean vs run
×10^3
χ^2 / ndf 78.62 / 86
p0 2775 ± 1817
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 87
Mean −109.1
Std Dev 155.7
2
1
0
−1
−2

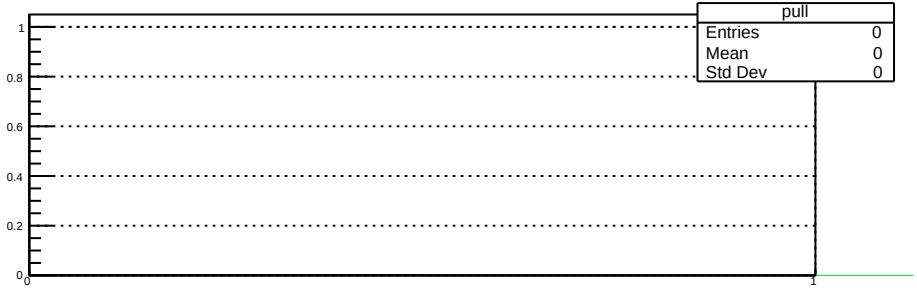

pull1D
Entries 87
Mean −0.01841
Std Dev 0.9505
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

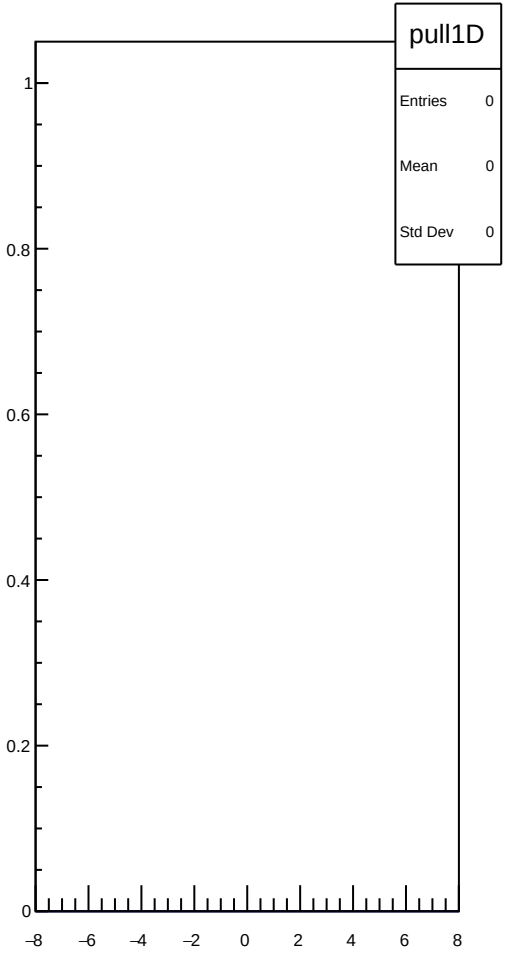

asym_right_dd_correction_rms vs run
×10^3
140
120
100
80
60
40
20
χ² / ndf 3.582e+05 / 87
p0 1484 ± 1.285

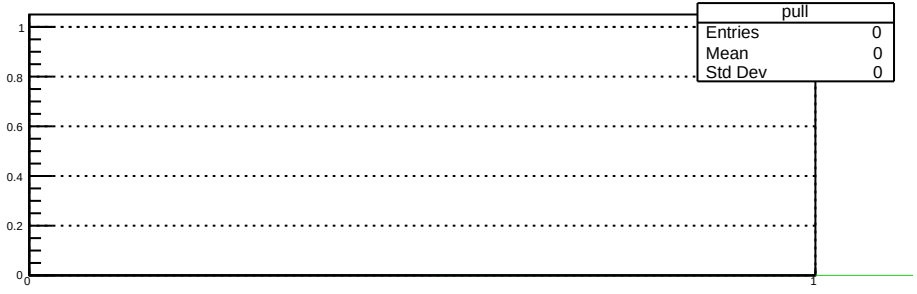

asym_right_dd_mean vs run
×10^3
χ² / ndf 70.26 / 64
p0 −6706 ± 3.558e+04
pull
Entries 65
Mean 201
Std Dev 173

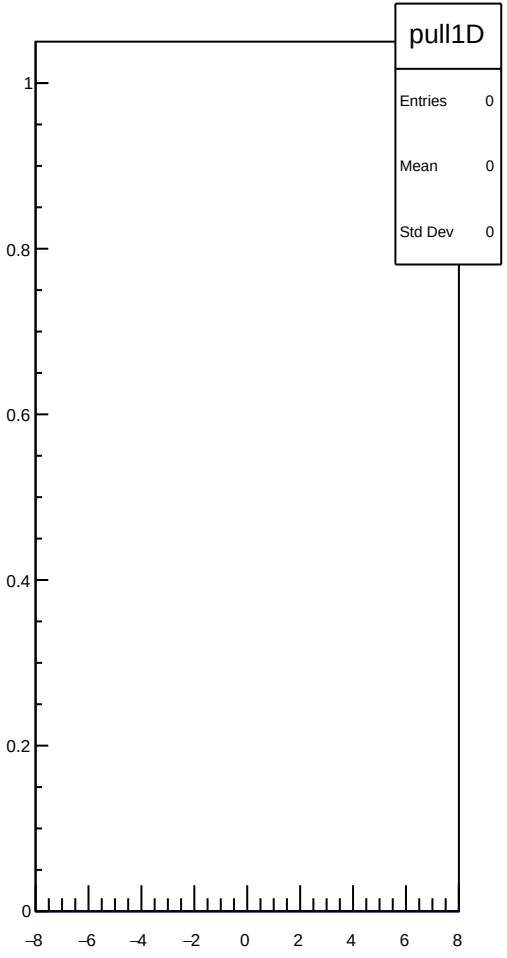

pull1D
Entries 65
Mean −0.01941
Std Dev 1.039

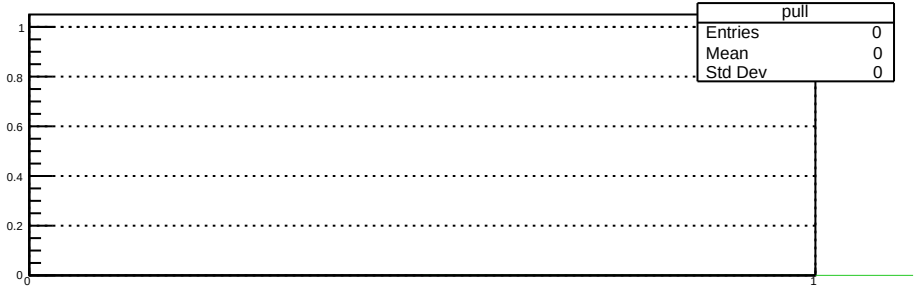

asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.123e+05 / 80
p0 2.785e+04 ± 25.06

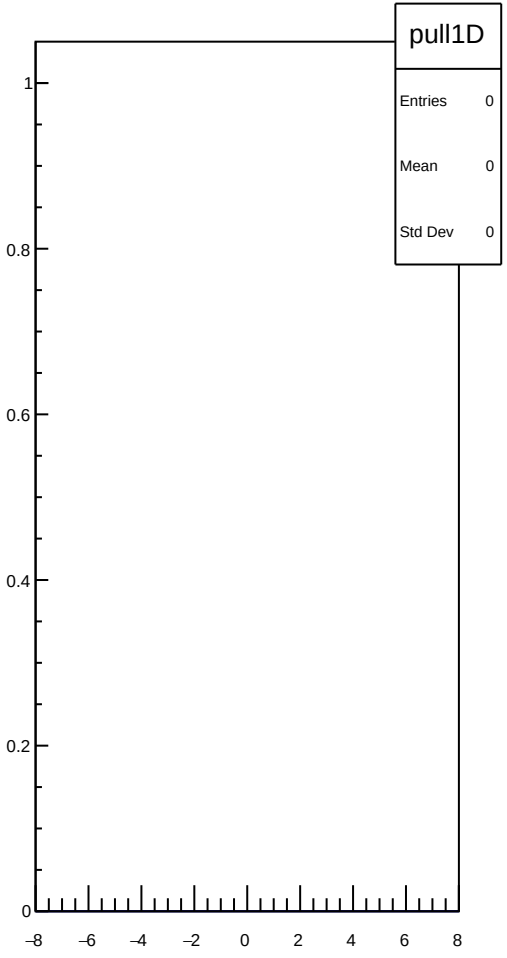

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

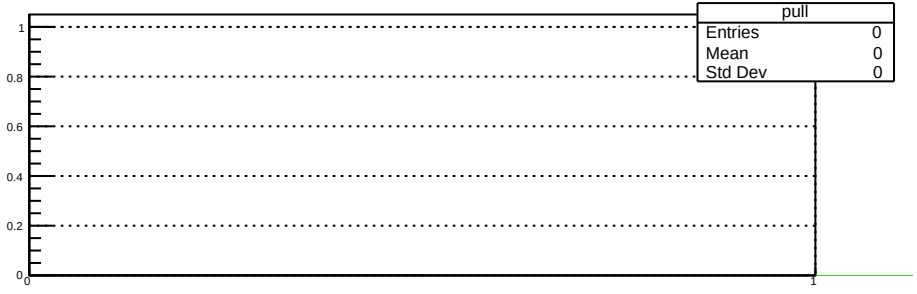

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

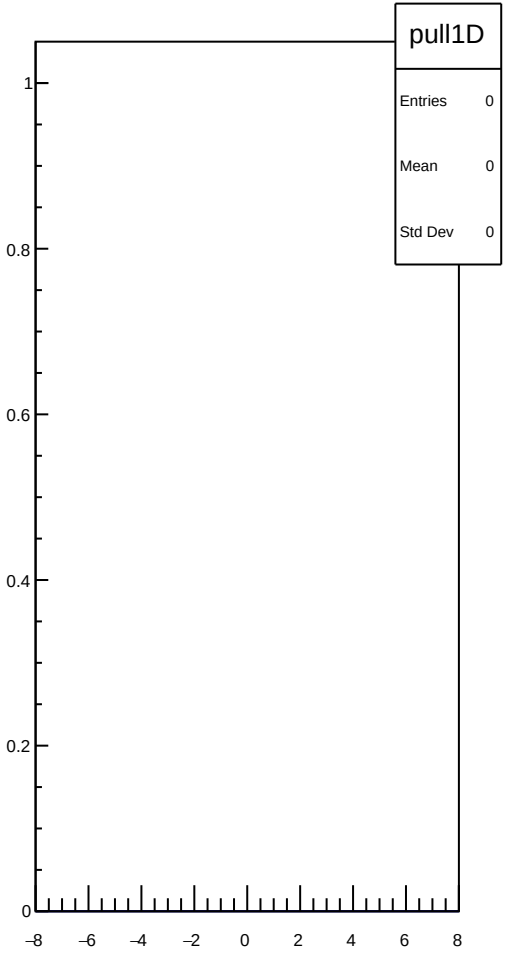

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

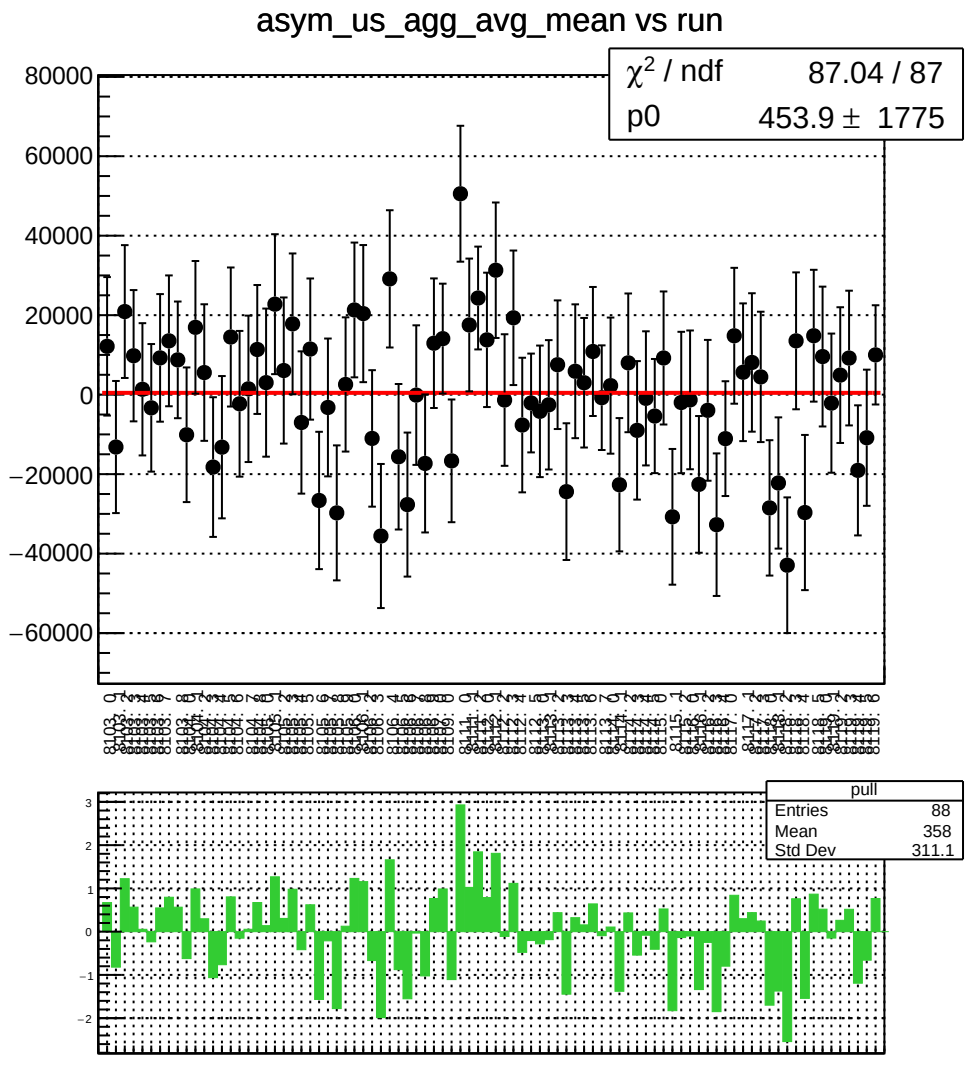

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

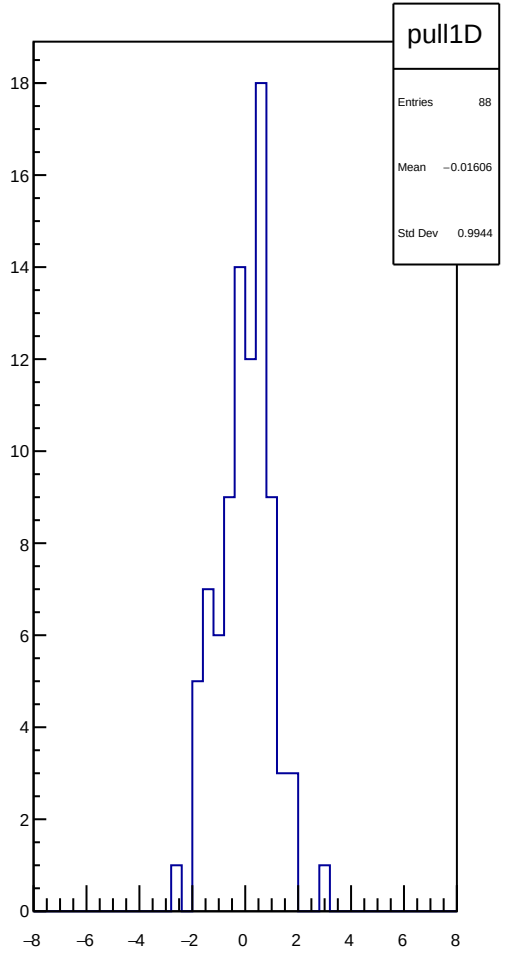

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

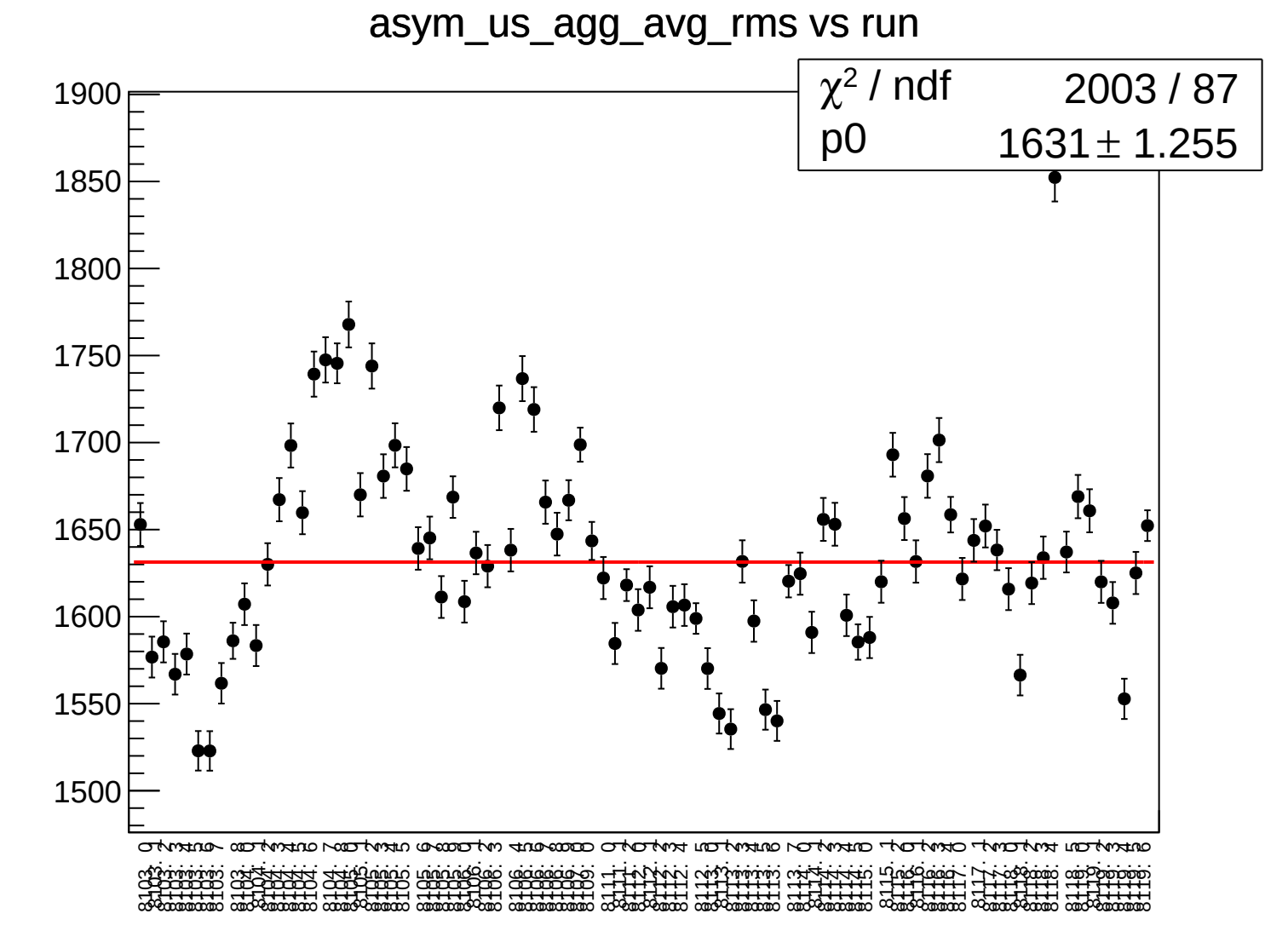

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

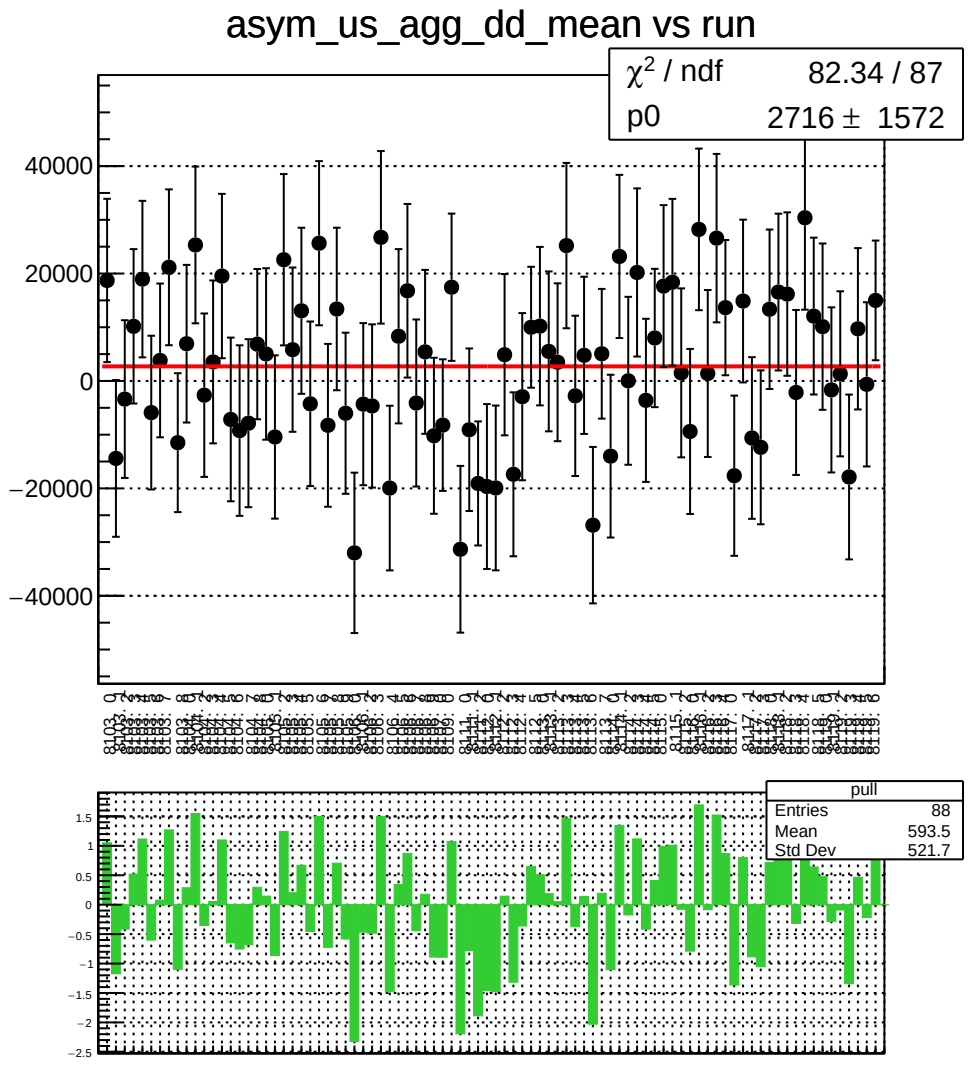

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

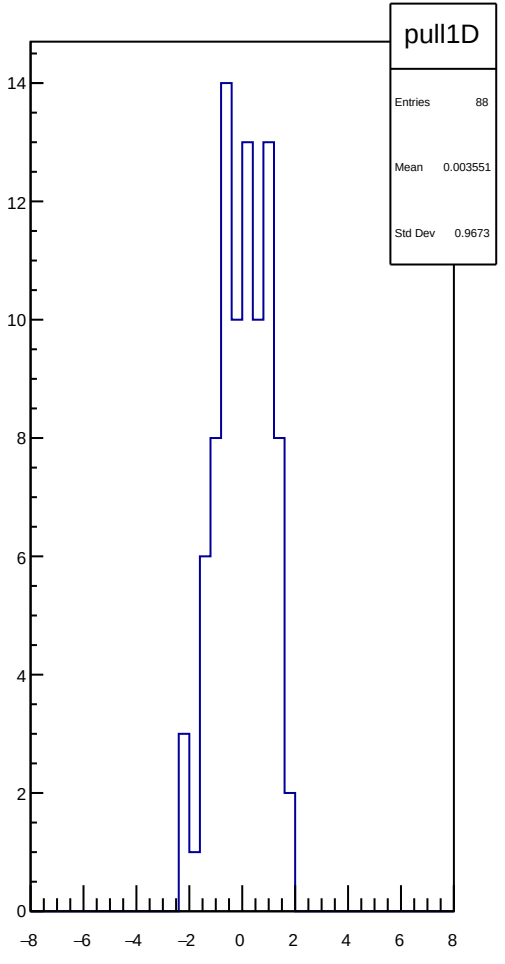

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

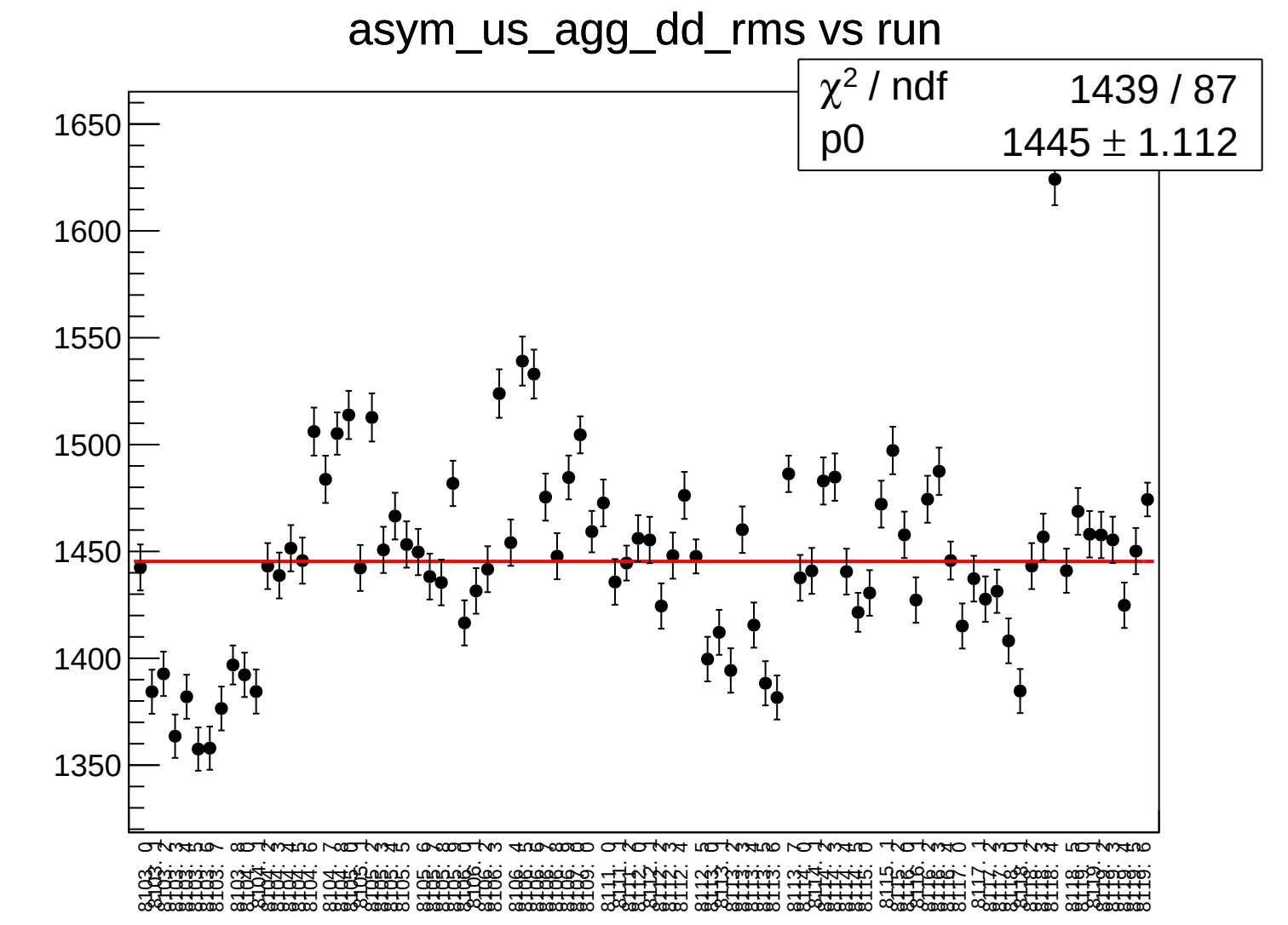

asym_us_agg_avg_mean vs run
χ² / ndf 87.04 / 87
p0 453.9 ± 1775
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 358
Std Dev 311.1
3
2
1
0
−1
−2

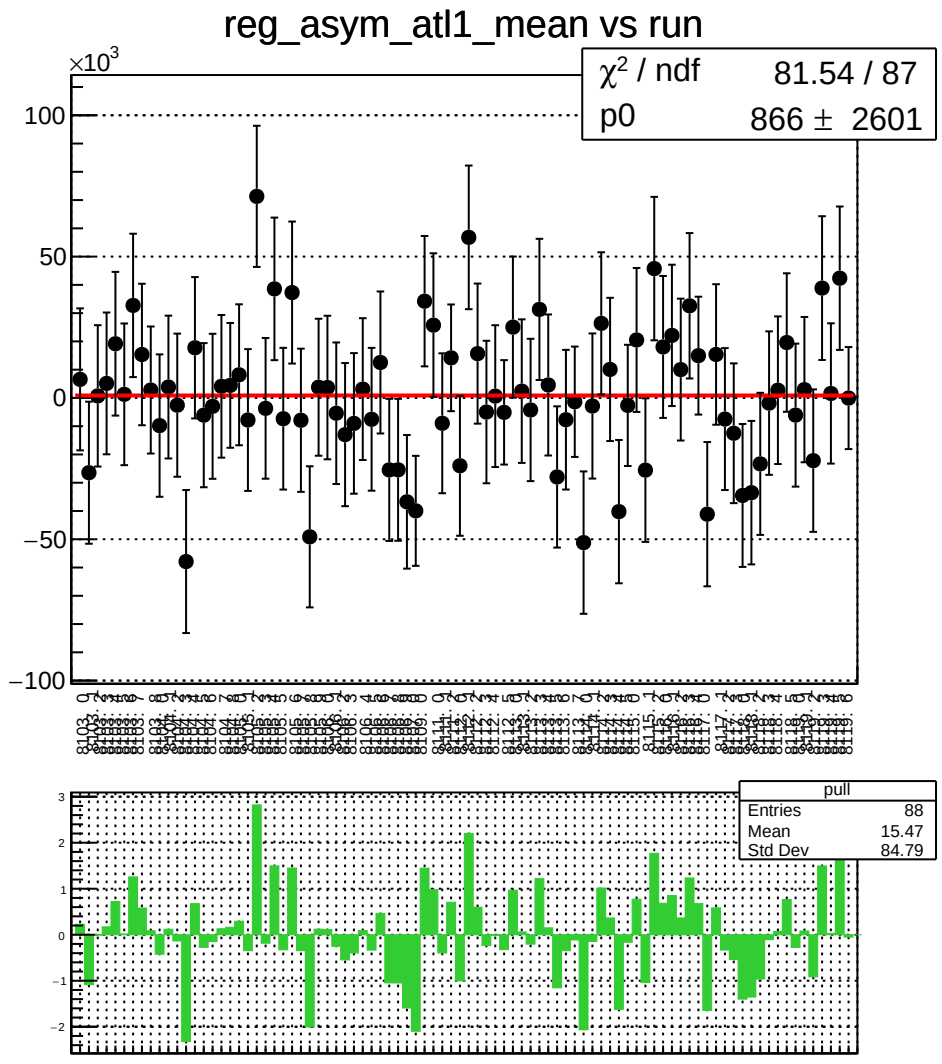

pull1D
Entries 88
Mean −0.01606
Std Dev 0.9944
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

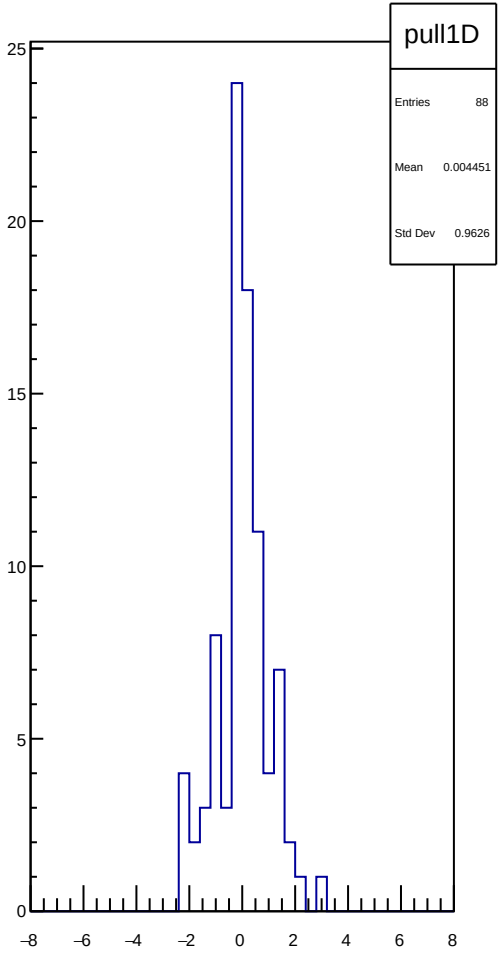

asym_us_agg_avg_rms vs run
χ^2 / ndf 2003 / 87
p0 1631 ± 1.255
1900
1850
1800
1750
1700
1650
1600
1550
1500

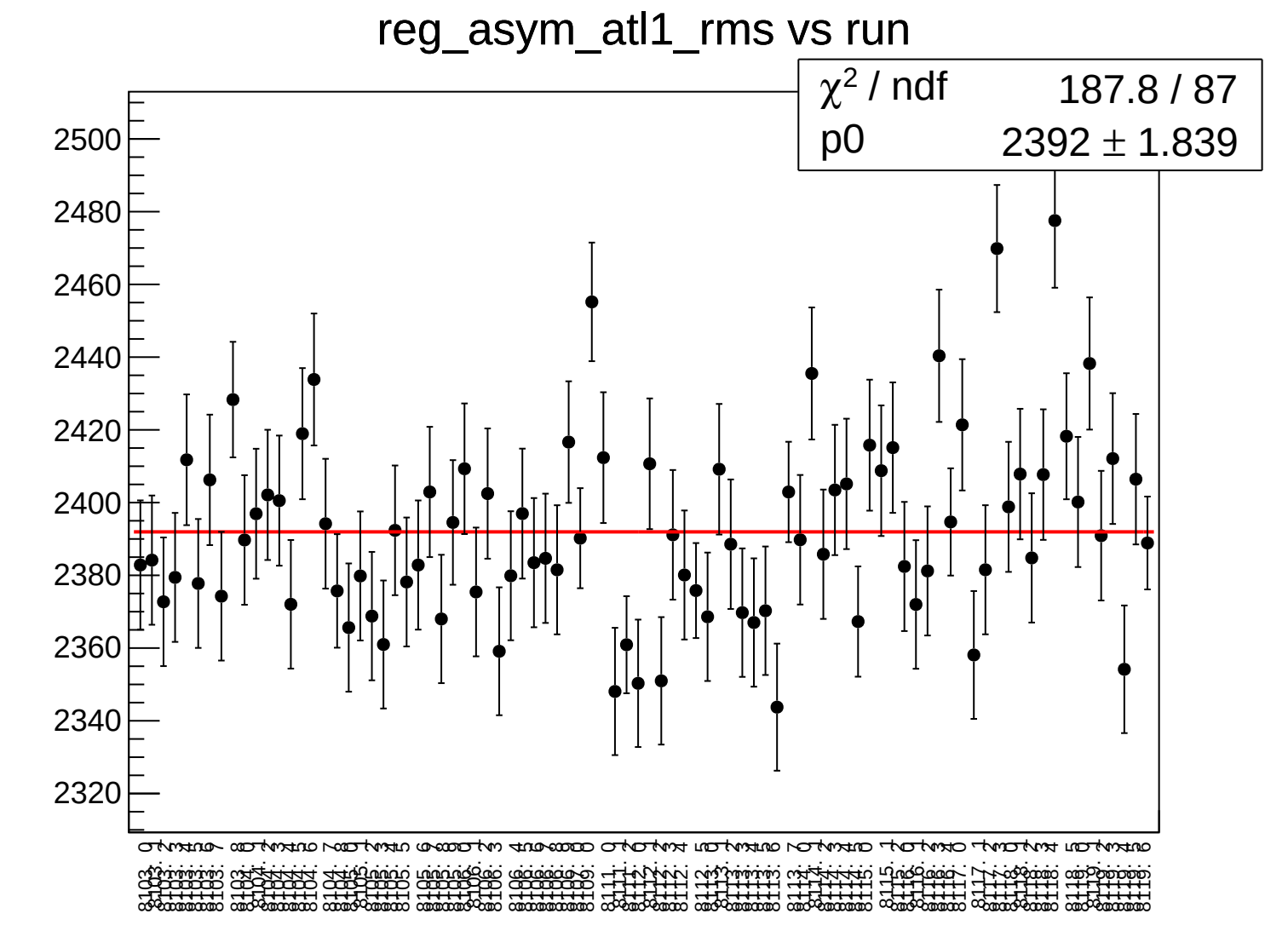

asym_us_agg_dd_mean vs run
χ² / ndf 82.34 / 87
p0 2716 ± 1572
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 593.5
Std Dev 521.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

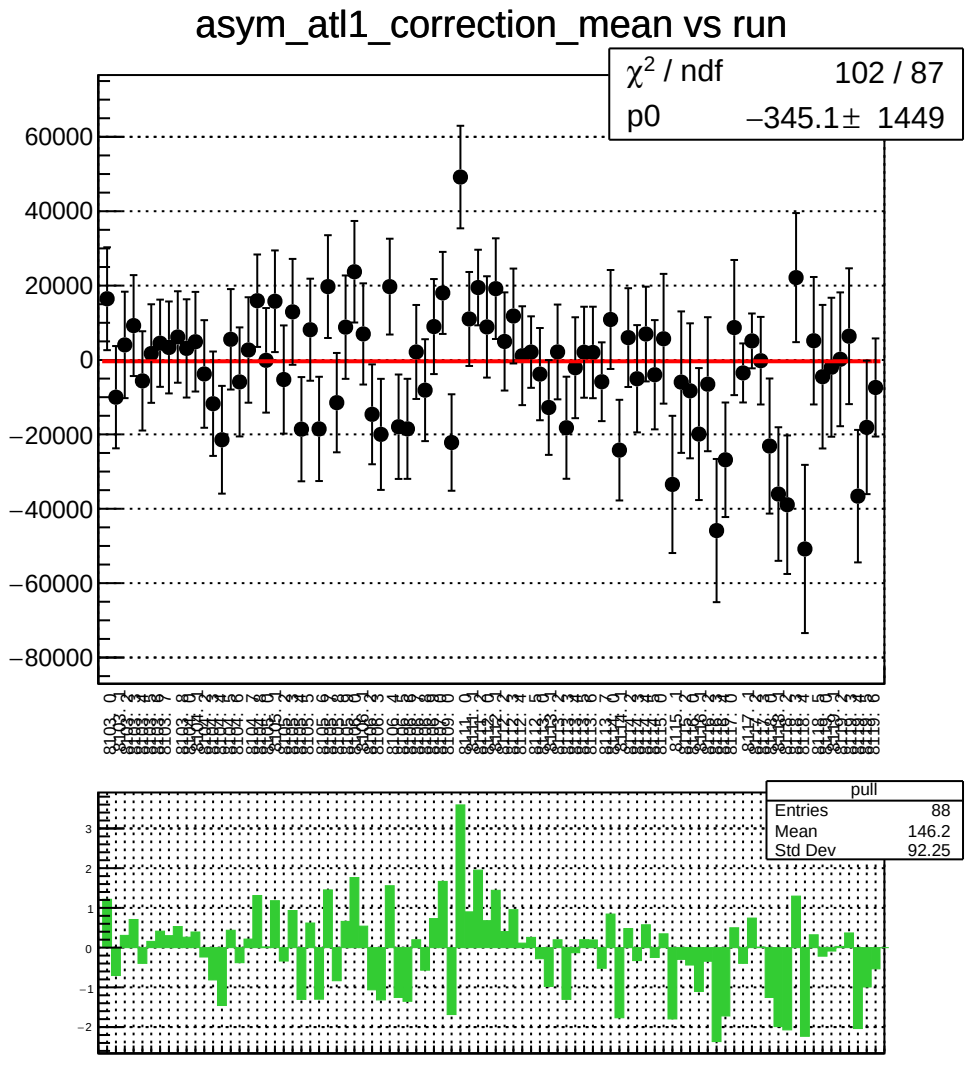

pull1D
Entries 88
Mean 0.003551
Std Dev 0.9673
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

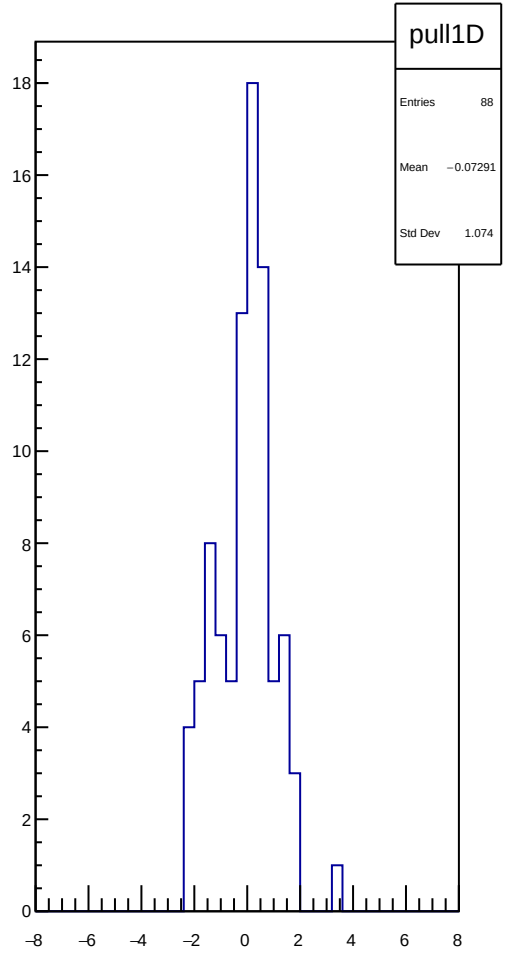

asym_us_agg_dd_rms vs run
χ² / ndf 1439 / 87
p0 1445 ± 1.112
1650
1600
1550
1500
1450
1400
1350

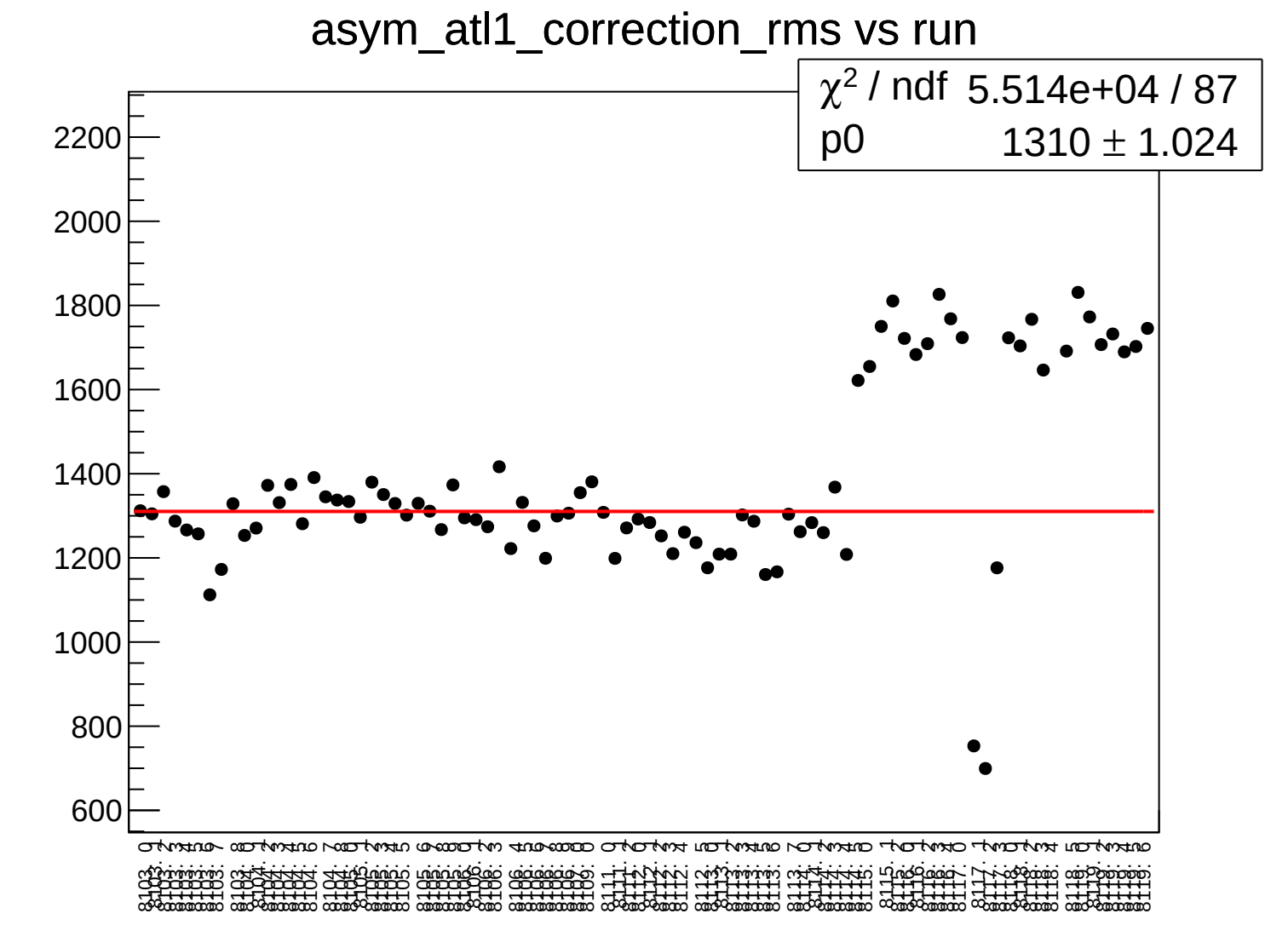

reg_asym_atl1_mean vs run
×10^3
χ² / ndf 81.54 / 87
p0 866 ± 2601
100
50
0
−50
−100
pull
Entries 88
Mean 15.47
Std Dev 84.79
3
2
1
0
−1
−2

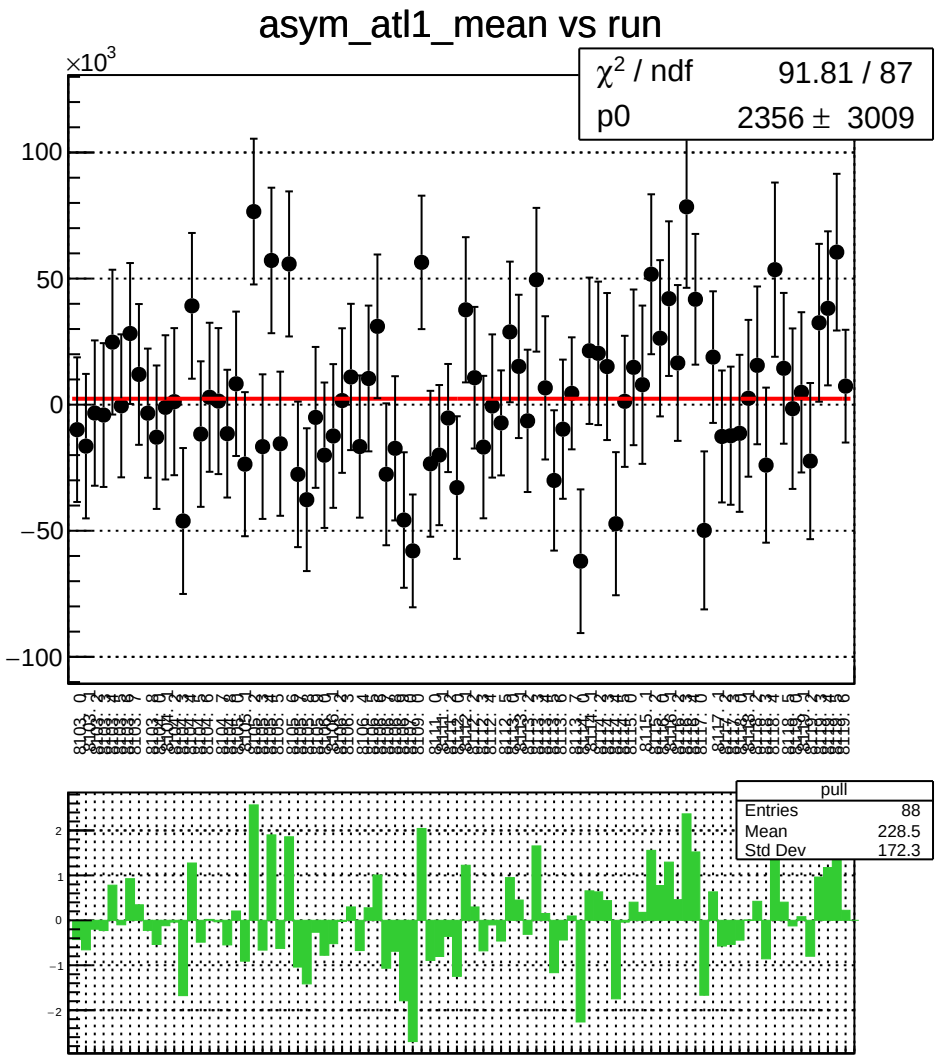

pull1D
Entries 88
Mean 0.004451
Std Dev 0.9626
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

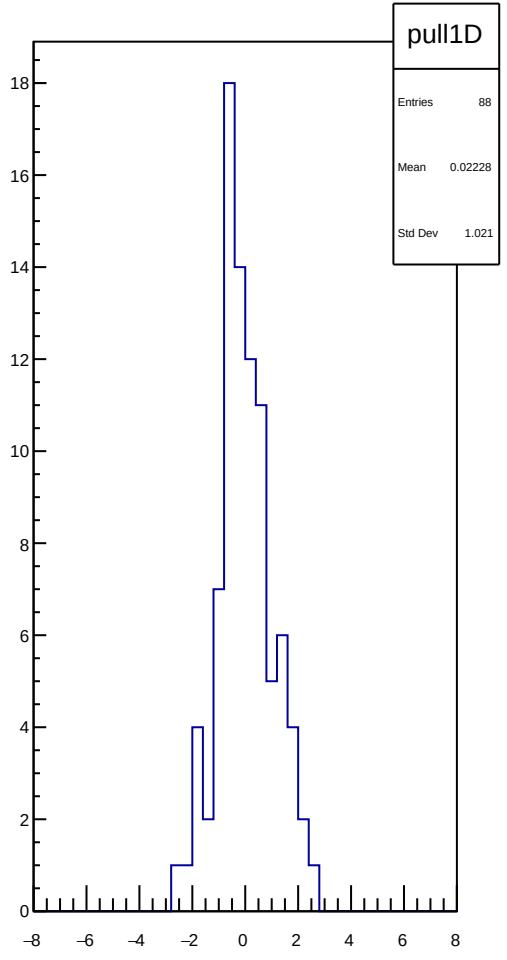

reg_asym_atl1_rms vs run
χ² / ndf 187.8 / 87
p0 2392 ± 1.839
2500
2480
2460
2440
2420
2400
2380
2360
2340
2320

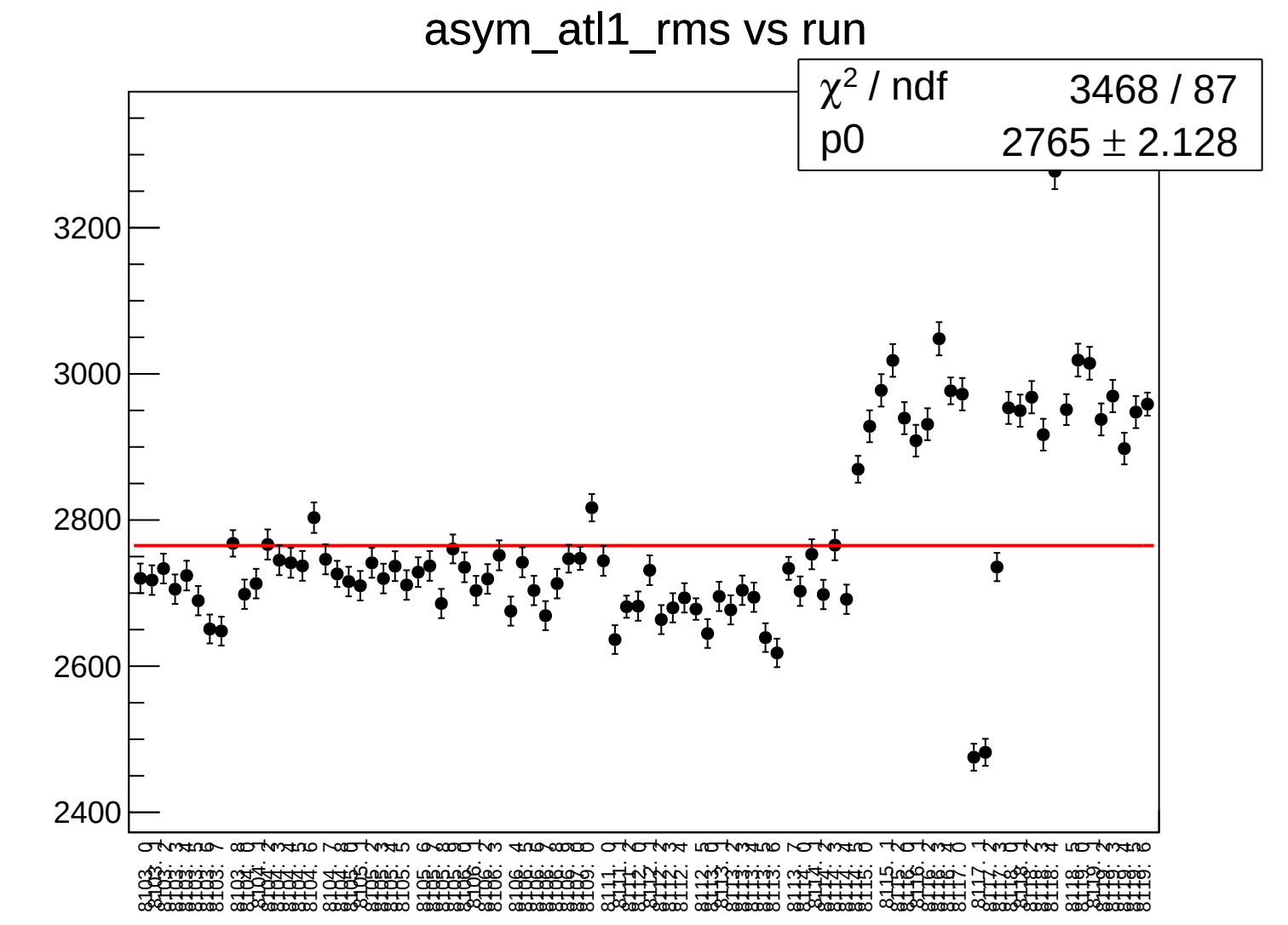

asym_atl1_correction_mean vs run
χ² / ndf 102 / 87
p0 −345.1± 1449
pull
Entries 88
Mean 146.2
Std Dev 92.25

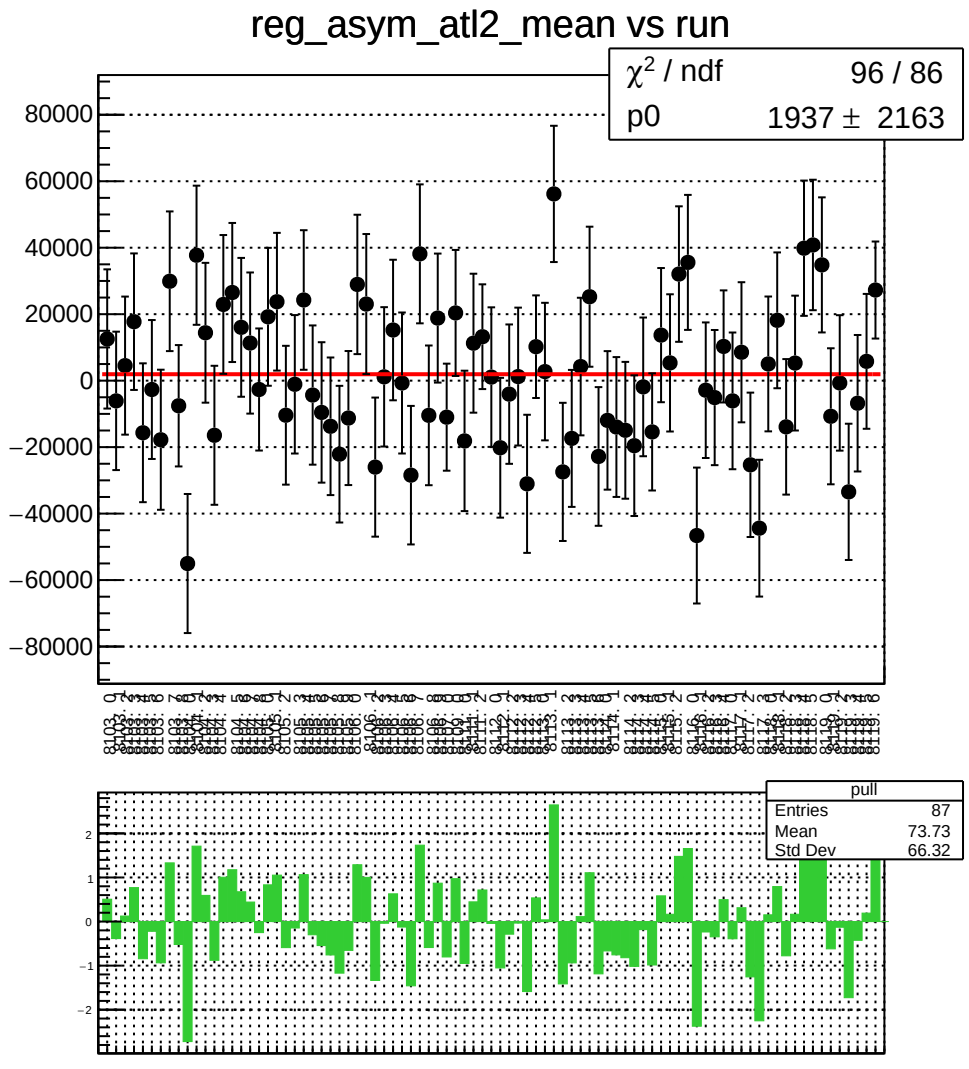

pull1D
Entries 88
Mean −0.07291
Std Dev 1.074

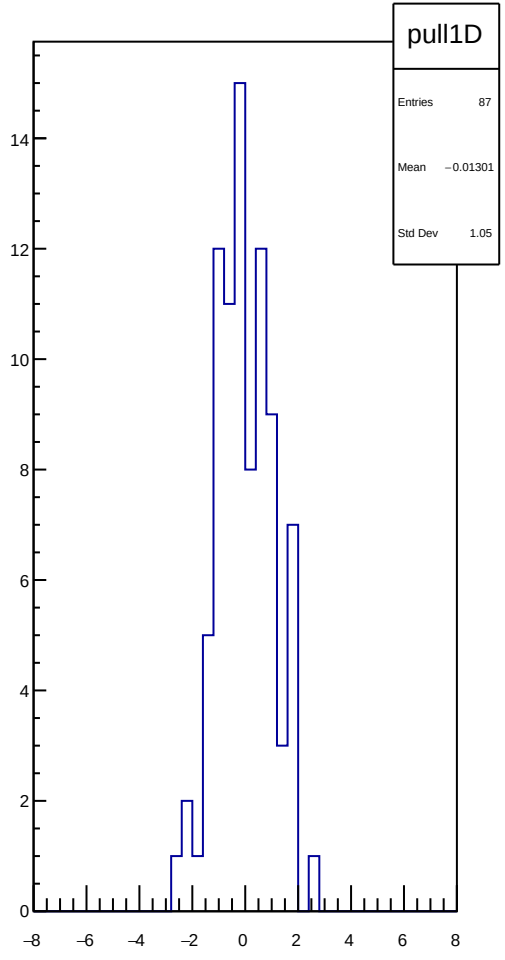

asym_atl1_correction_rms vs run
χ² / ndf 5.514e+04 / 87
p0 1310 ± 1.024
2200
2000
1800
1600
1400
1200
1000
800
600

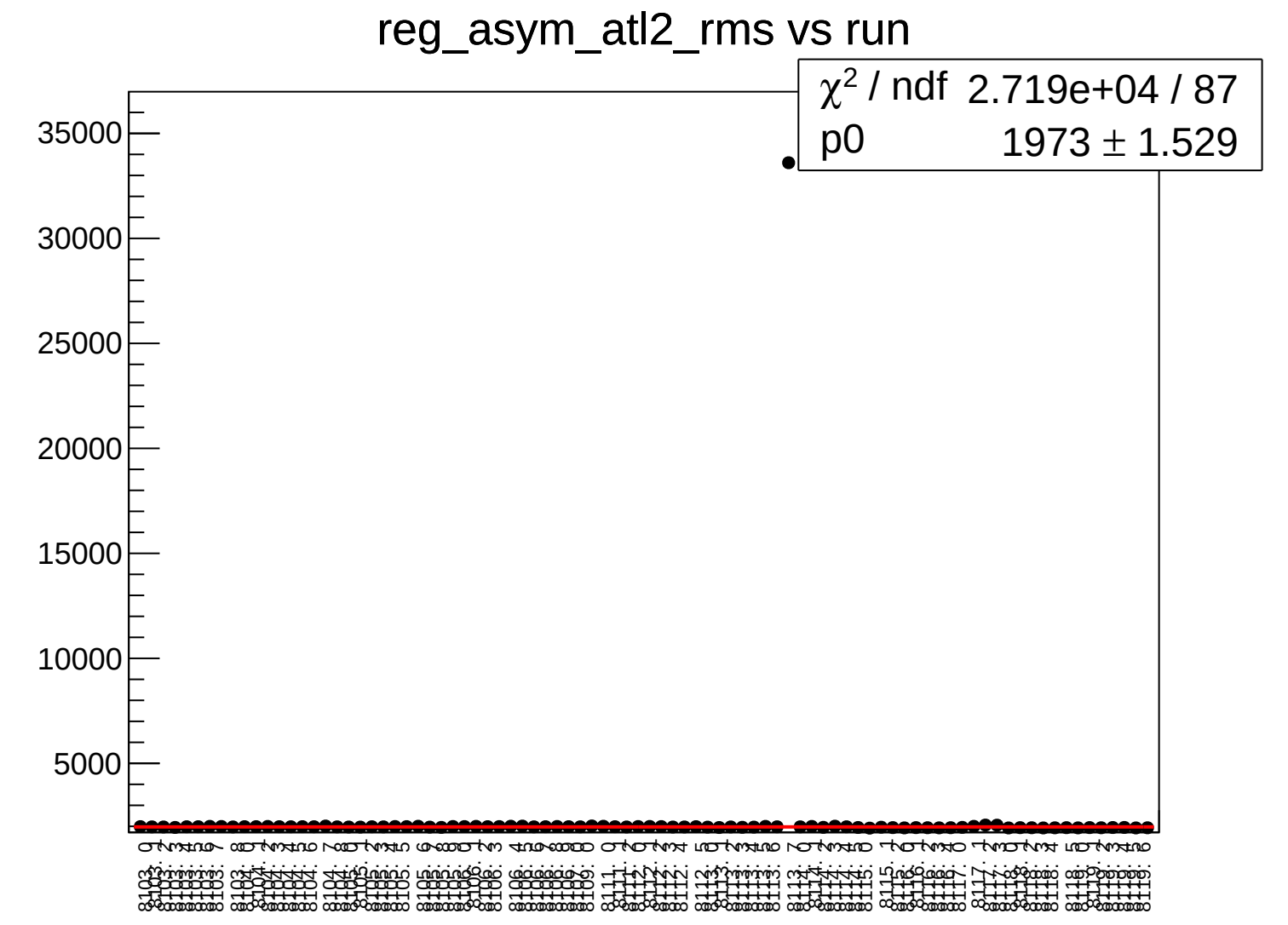

asym_atl1_mean vs run
×10^3
χ^2 / ndf 91.81 / 87
p0 2356 ± 3009
100
50
0
−50
−100
pull
Entries 88
Mean 228.5
Std Dev 172.3
2
1
0
−1
−2

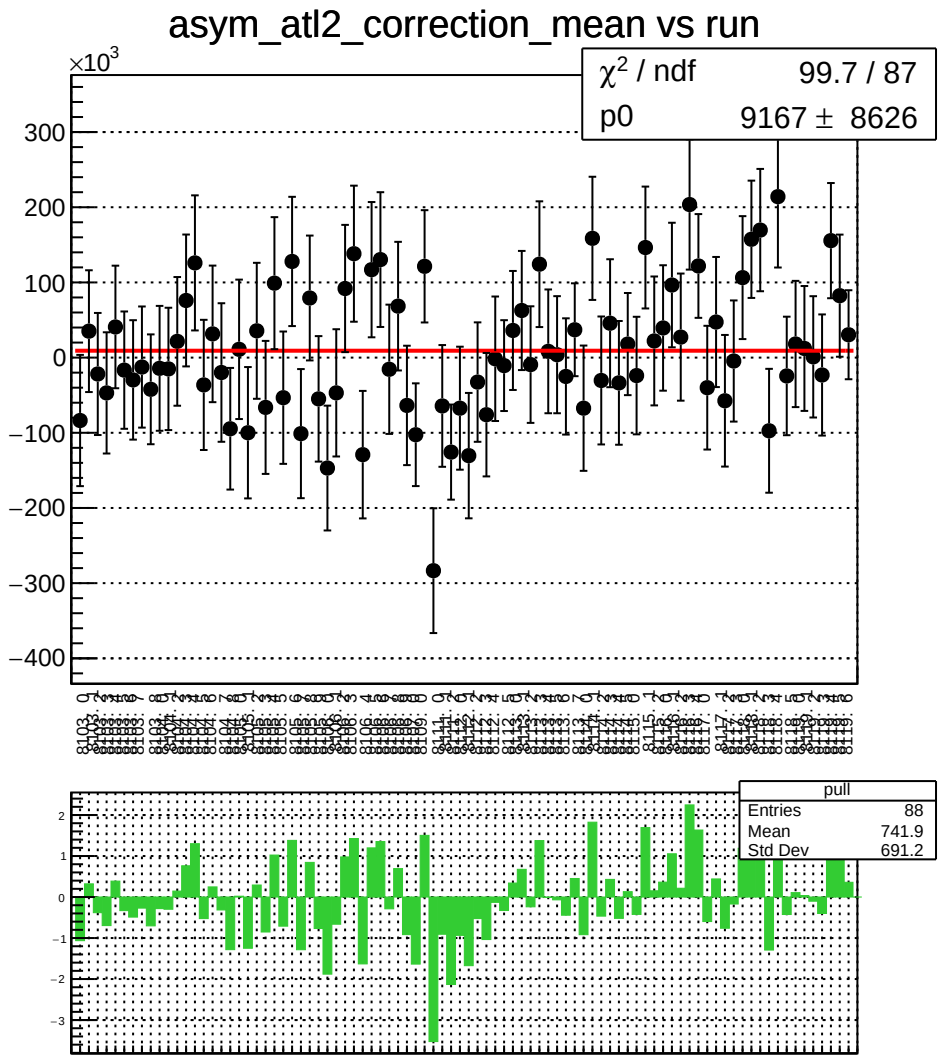

pull1D
Entries 88
Mean 0.02228
Std Dev 1.021
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

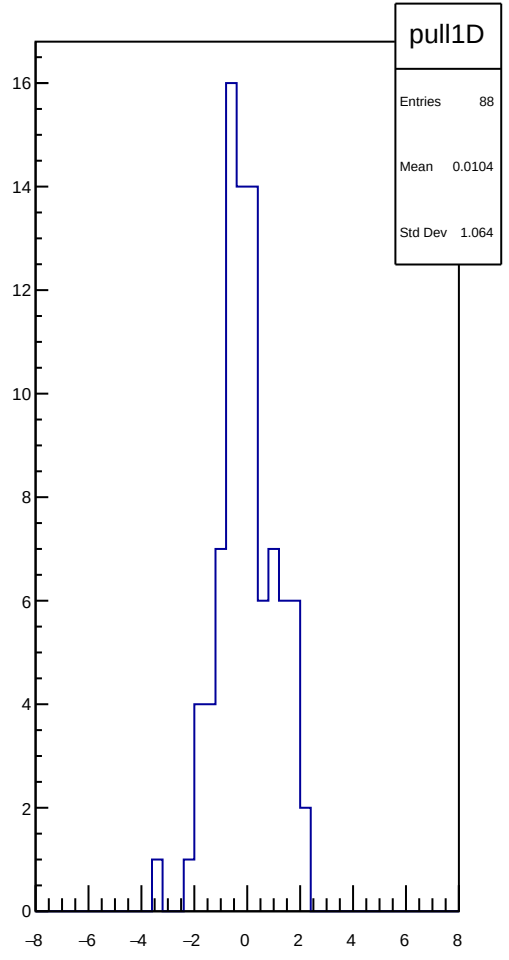

asym_atl1_rms vs run
χ² / ndf 3468 / 87
p0 2765 ± 2.128
3200
3000
2800
2600
2400

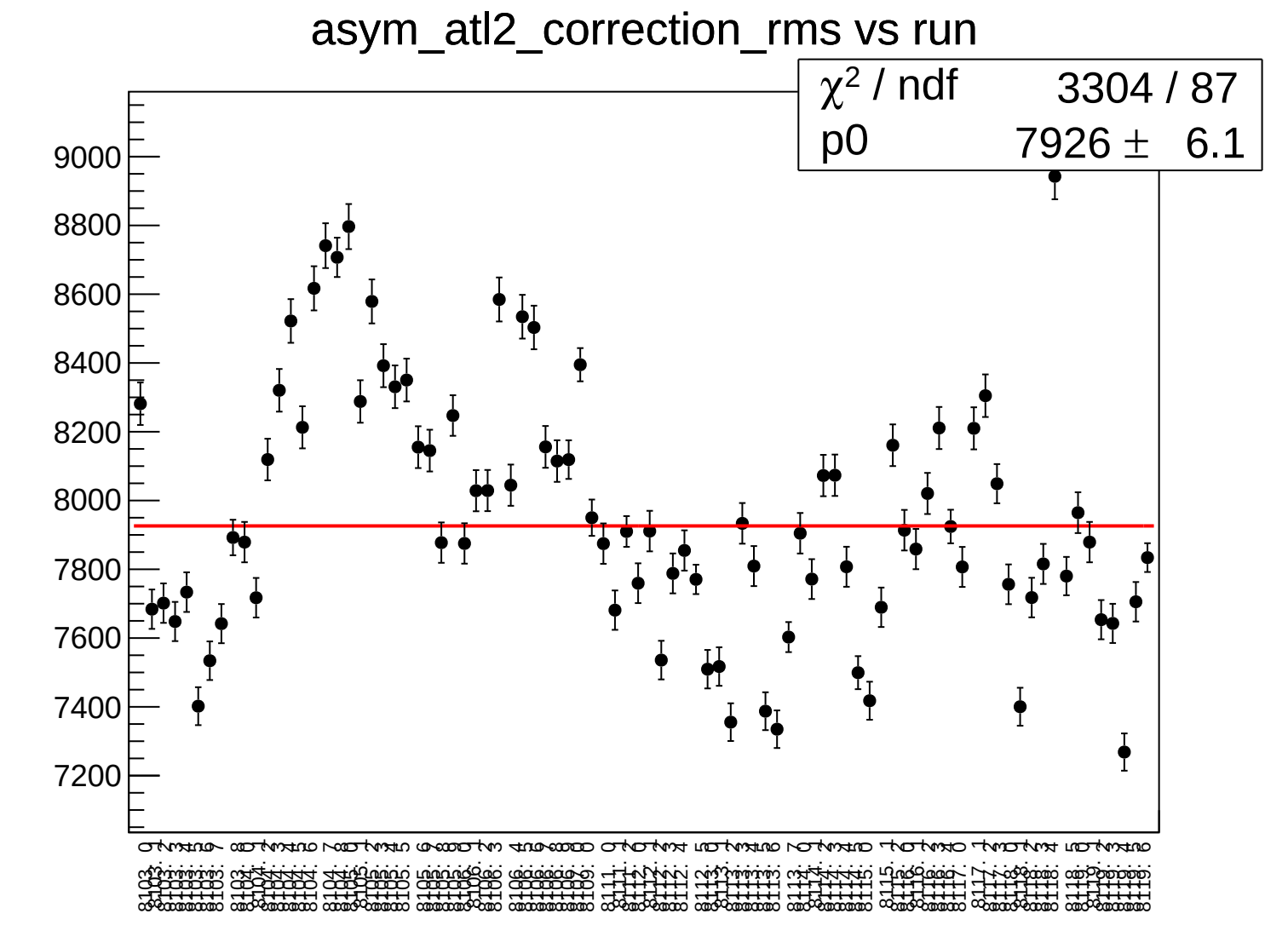

reg_asym_atl2_mean vs run
χ² / ndf 96 / 86
p0 1937 ± 2163
pull
Entries 87
Mean 73.73
Std Dev 66.32

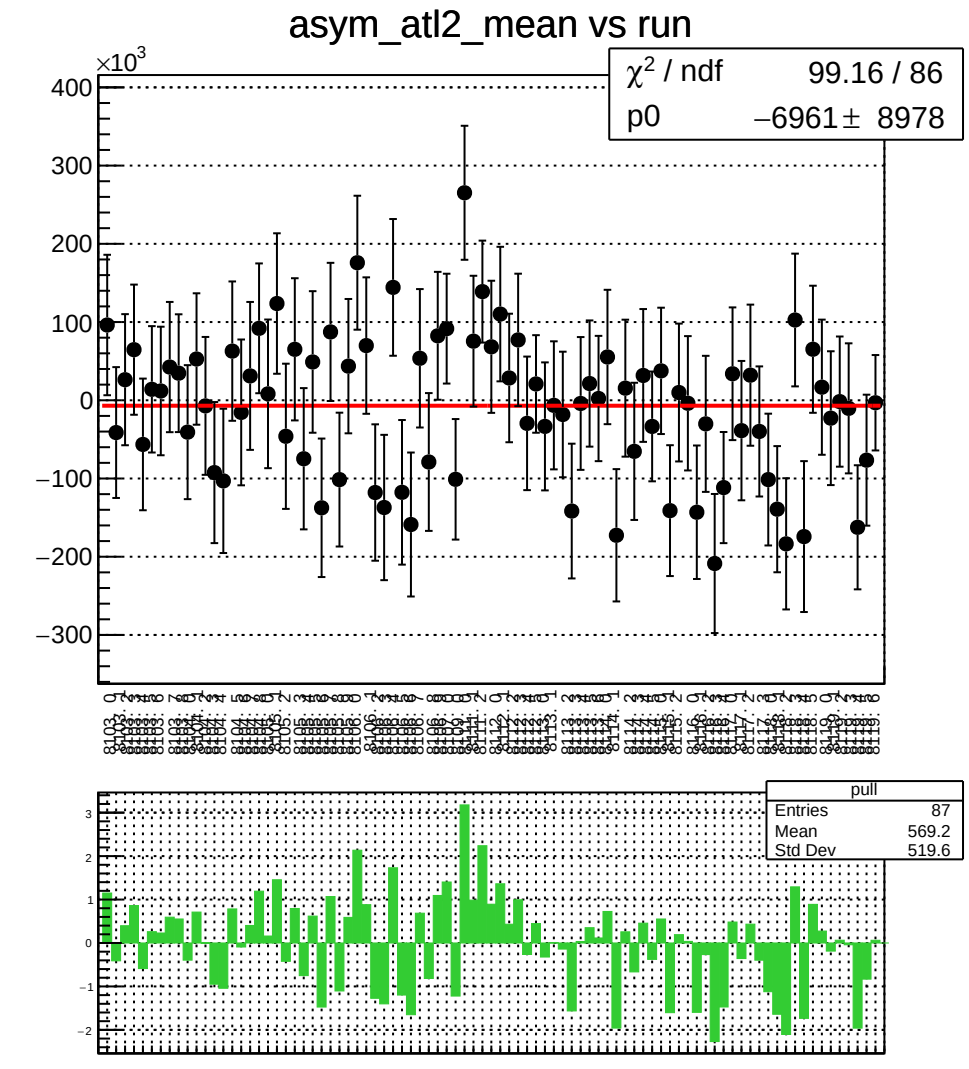

pull1D
Entries 87
Mean −0.01301
Std Dev 1.05

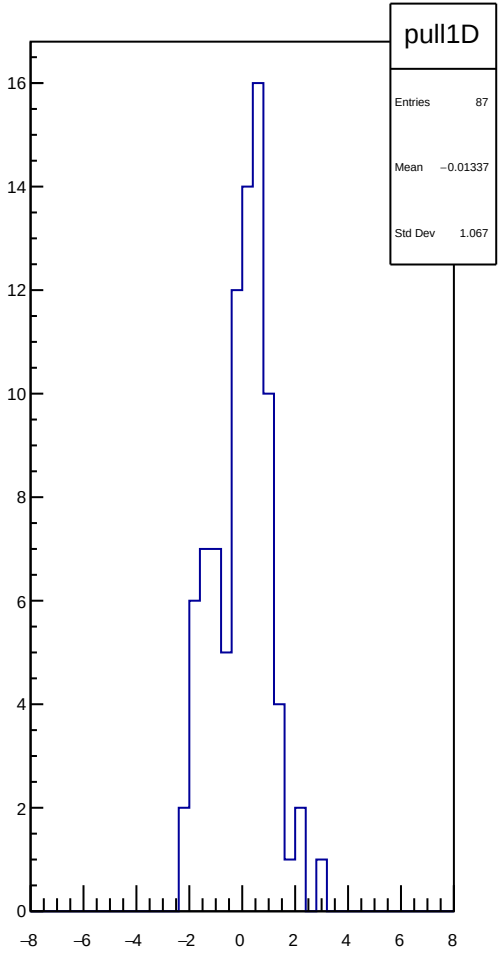

reg_asym_atl2_rms vs run
χ² / ndf 2.719e+04 / 87
p0 1973 ± 1.529
35000
30000
25000
20000
15000
10000
5000

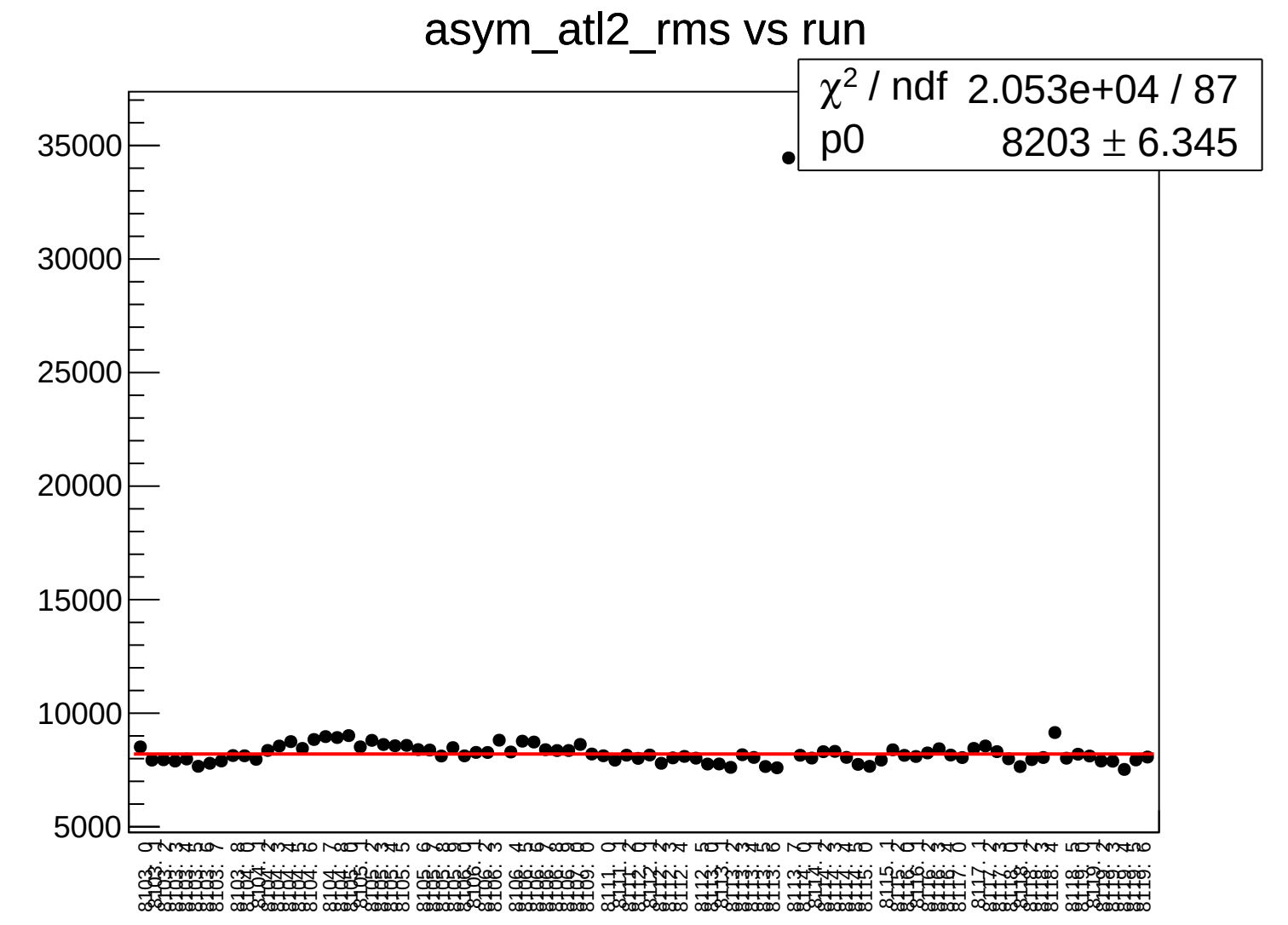

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 99.7 / 87
p0 9167 ± 8626
300
200
100
0
−100
−200
−300
−400
pull
Entries 88
Mean 741.9
Std Dev 691.2
2
1
0
−1
−2
−3

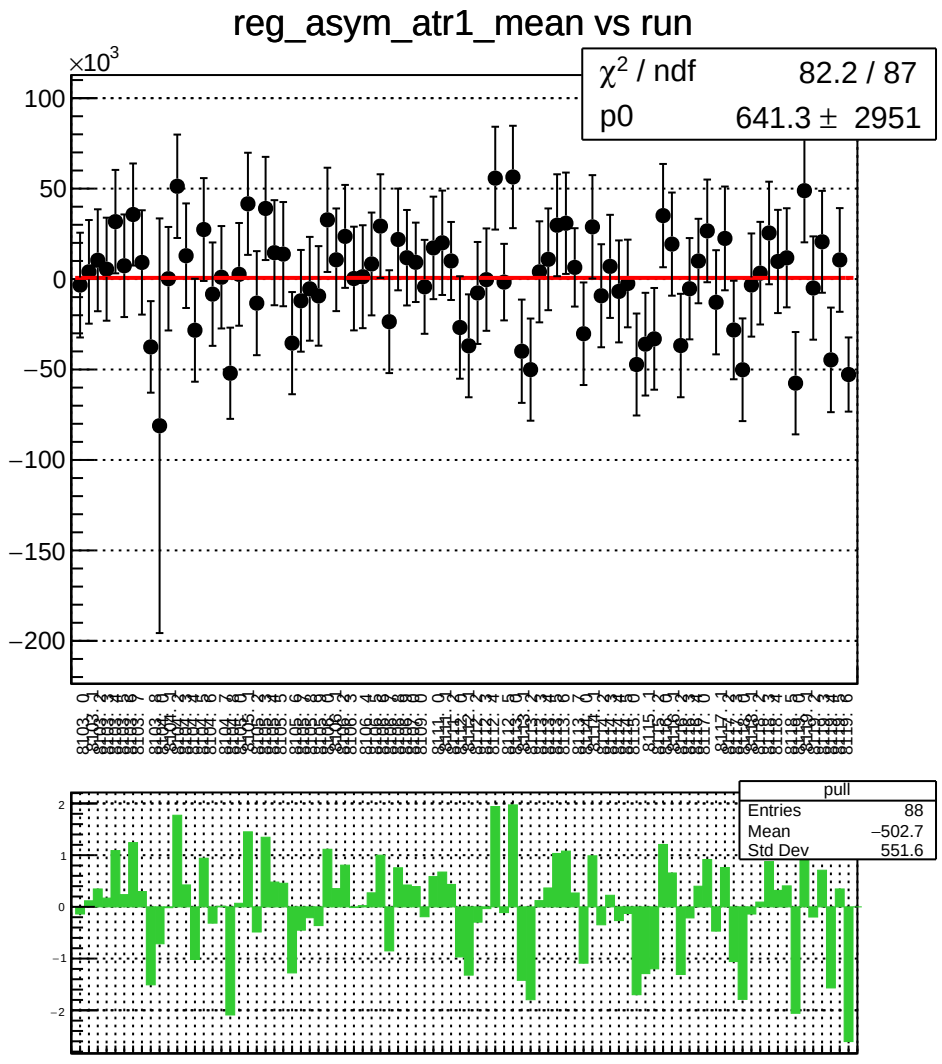

pull1D
Entries 88
Mean 0.0104
Std Dev 1.064
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

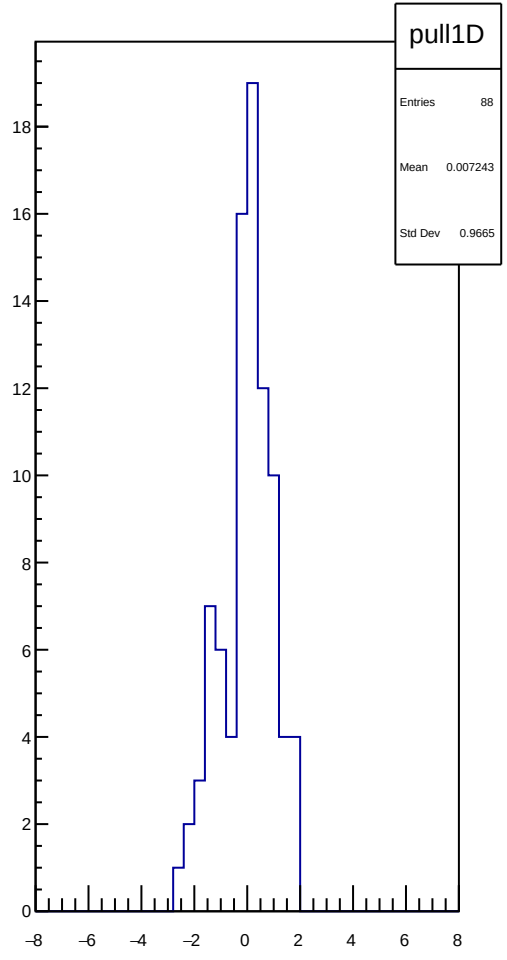

asym_atl2_correction_rms vs run
χ² / ndf 3304 / 87
p0 7926 ± 6.1
9000
8800
8600
8400
8200
8000
7800
7600
7400
7200

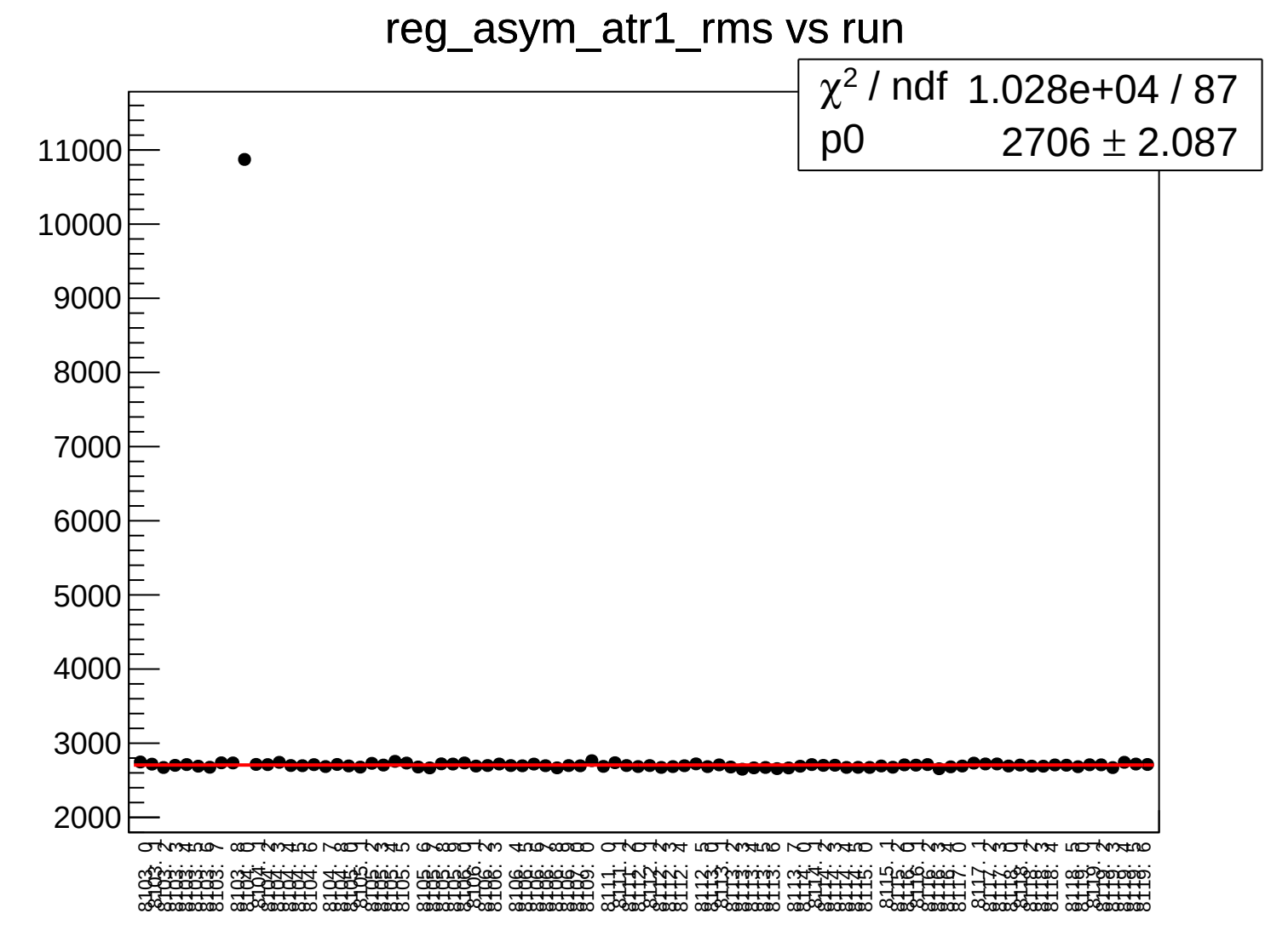

asym_atl2_mean vs run
×10^3
χ^2 / ndf 99.16 / 86
p0 −6961 ± 8978
pull
Entries 87
Mean 569.2
Std Dev 519.6

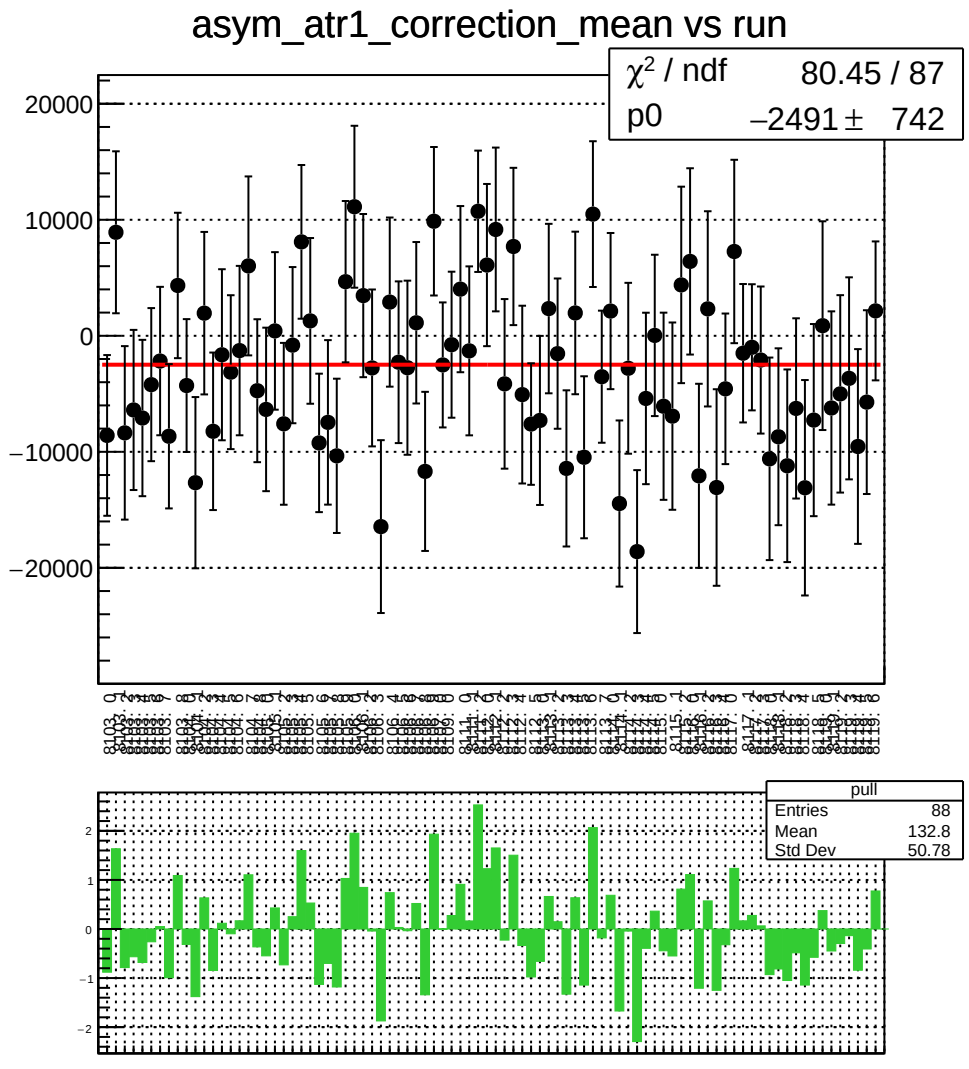

pull1D
Entries 87
Mean −0.01337
Std Dev 1.067

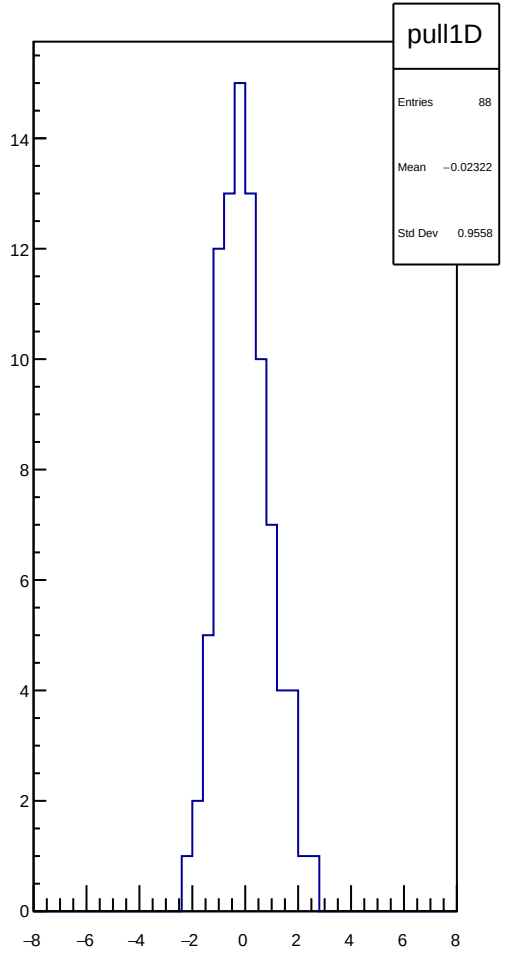

asym_atl2_rms vs run
χ² / ndf 2.053e+04 / 87
p0 8203 ± 6.345
35000
30000
25000
20000
15000
10000
5000

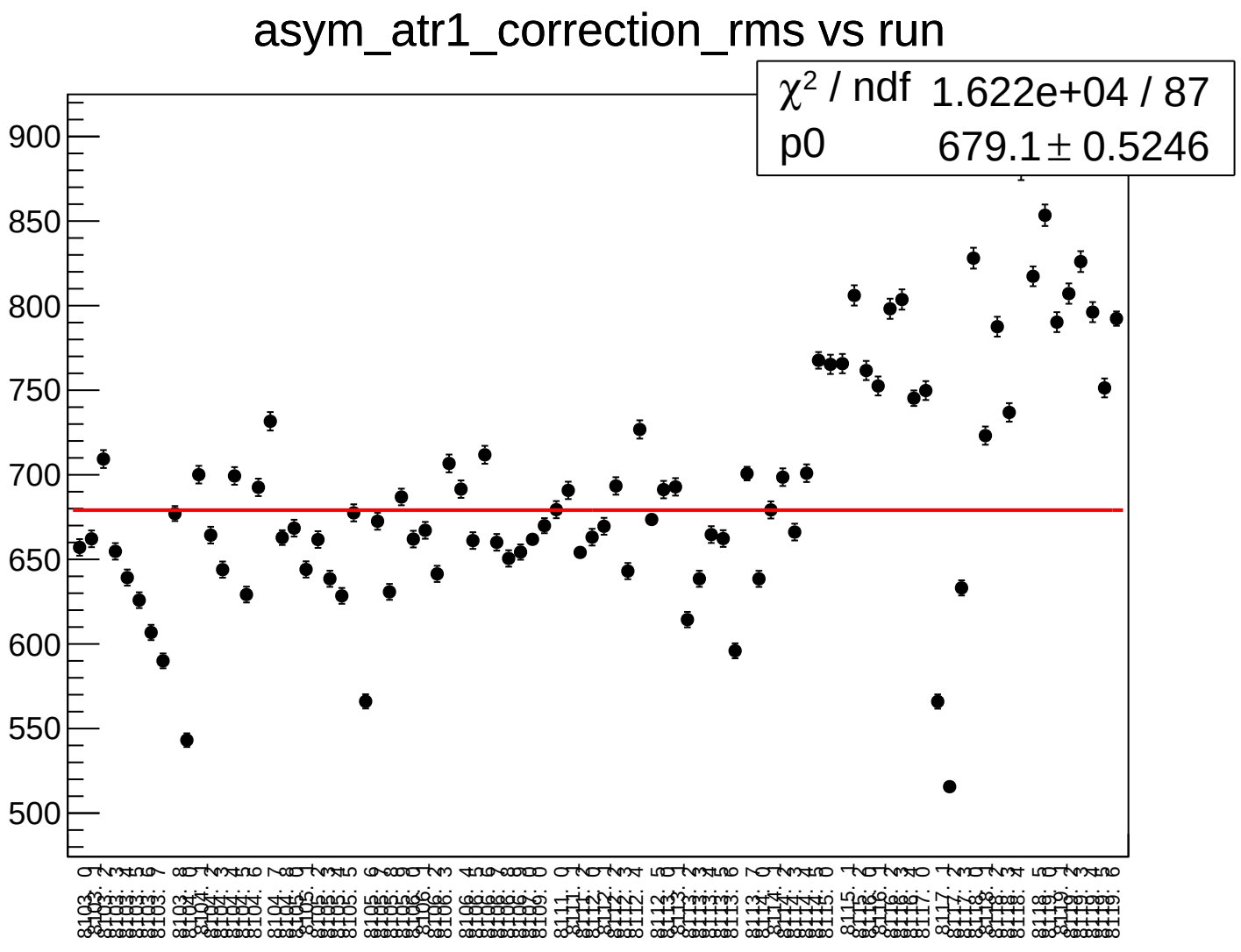

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 82.2 / 87
p0 641.3 ± 2951
100
50
0
−50
−100
−150
−200
pull
Entries 88
Mean −502.7
Std Dev 551.6
2
1
0
−1
−2

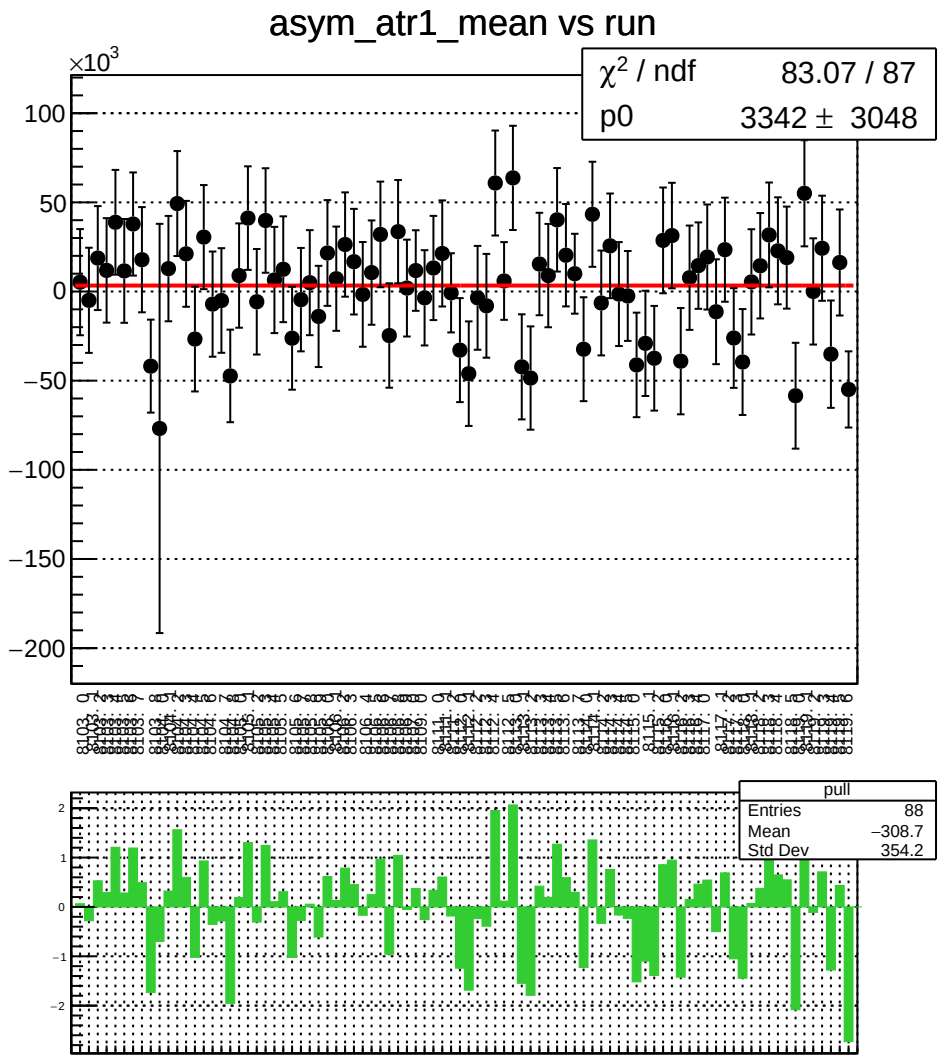

pull1D
Entries 88
Mean 0.007243
Std Dev 0.9665
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

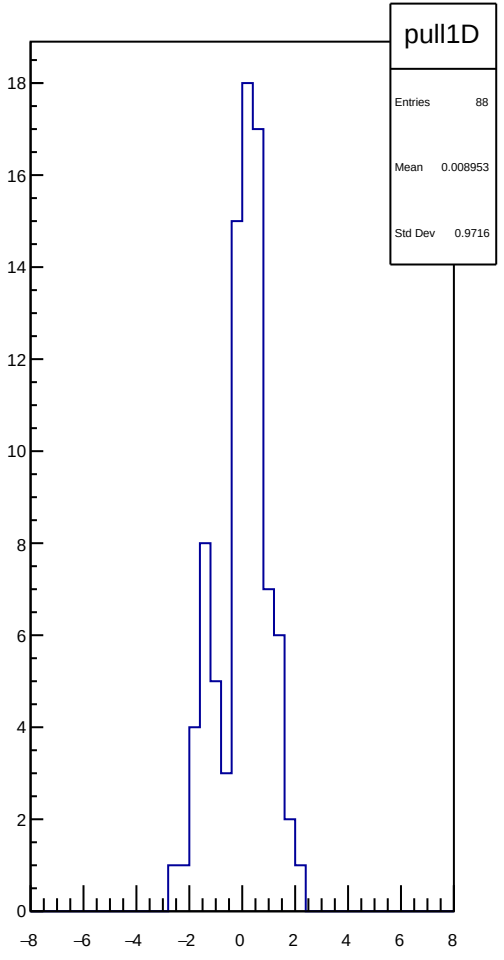

reg_asym_atr1_rms vs run
χ² / ndf 1.028e+04 / 87
p0 2706 ± 2.087
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

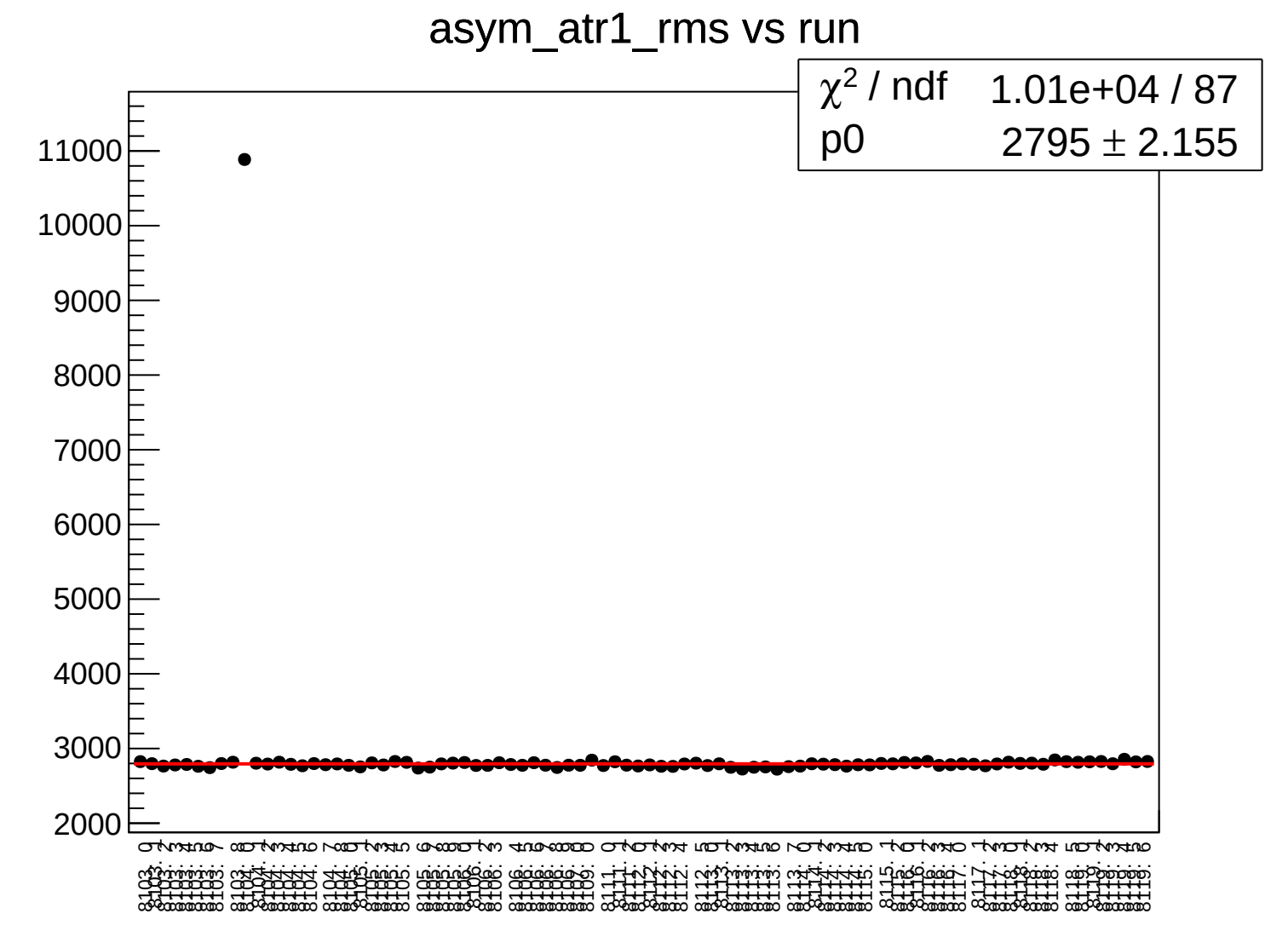

asym_atr1_correction_mean vs run
χ² / ndf 80.45 / 87
p0 −2491 ± 742
20000
10000
0
−10000
−20000
pull
Entries 88
Mean 132.8
Std Dev 50.78
2
1
0
−1
−2

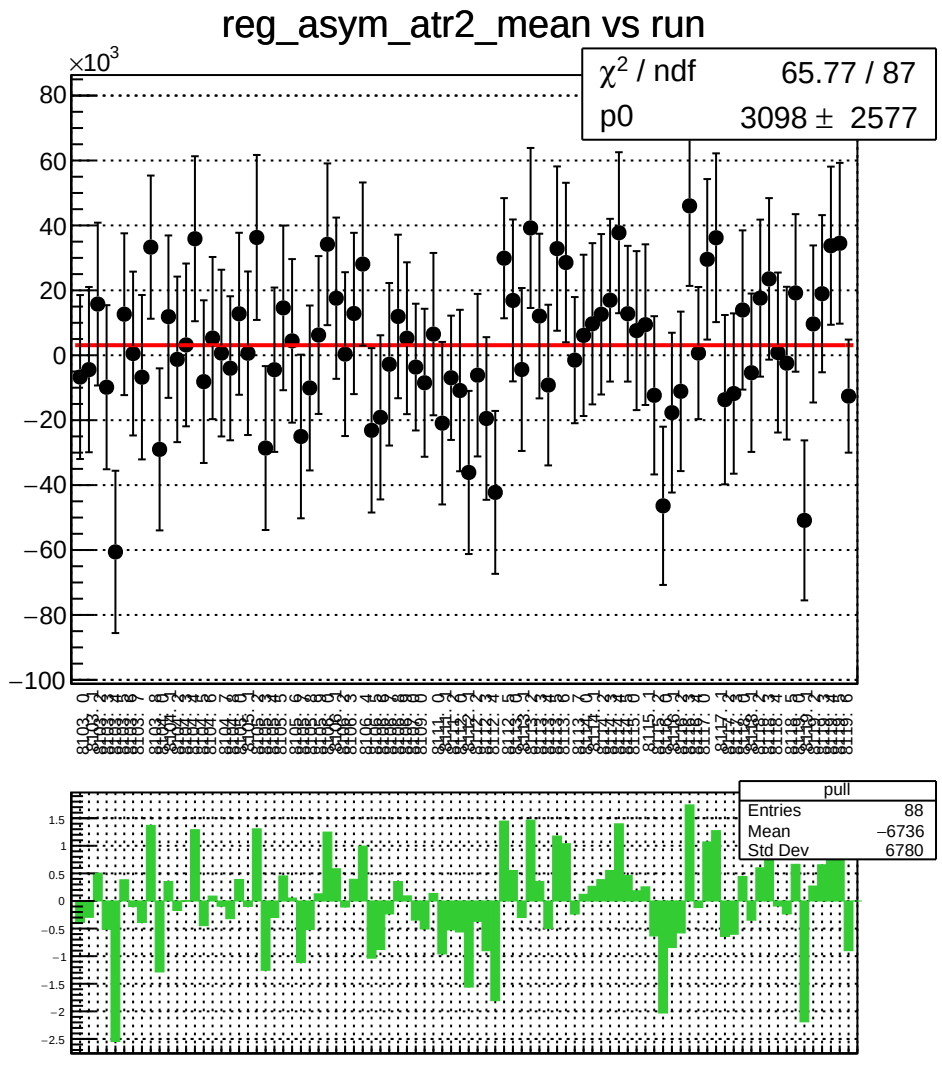

pull1D
Entries 88
Mean −0.02322
Std Dev 0.9558
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

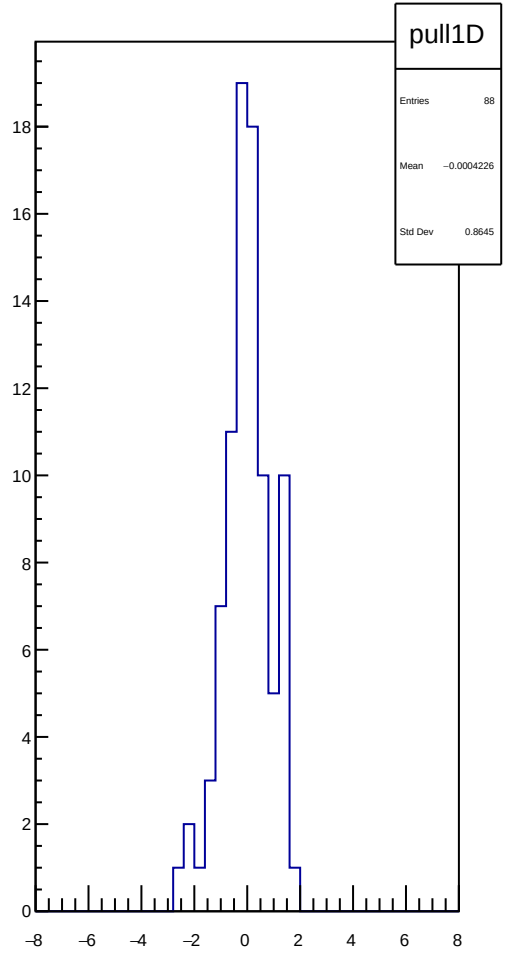

asym_atr1_correction_rms vs run
χ² / ndf 1.622e+04 / 87
p0 679.1 ± 0.5246
900
850
800
750
700
650
600
550
500

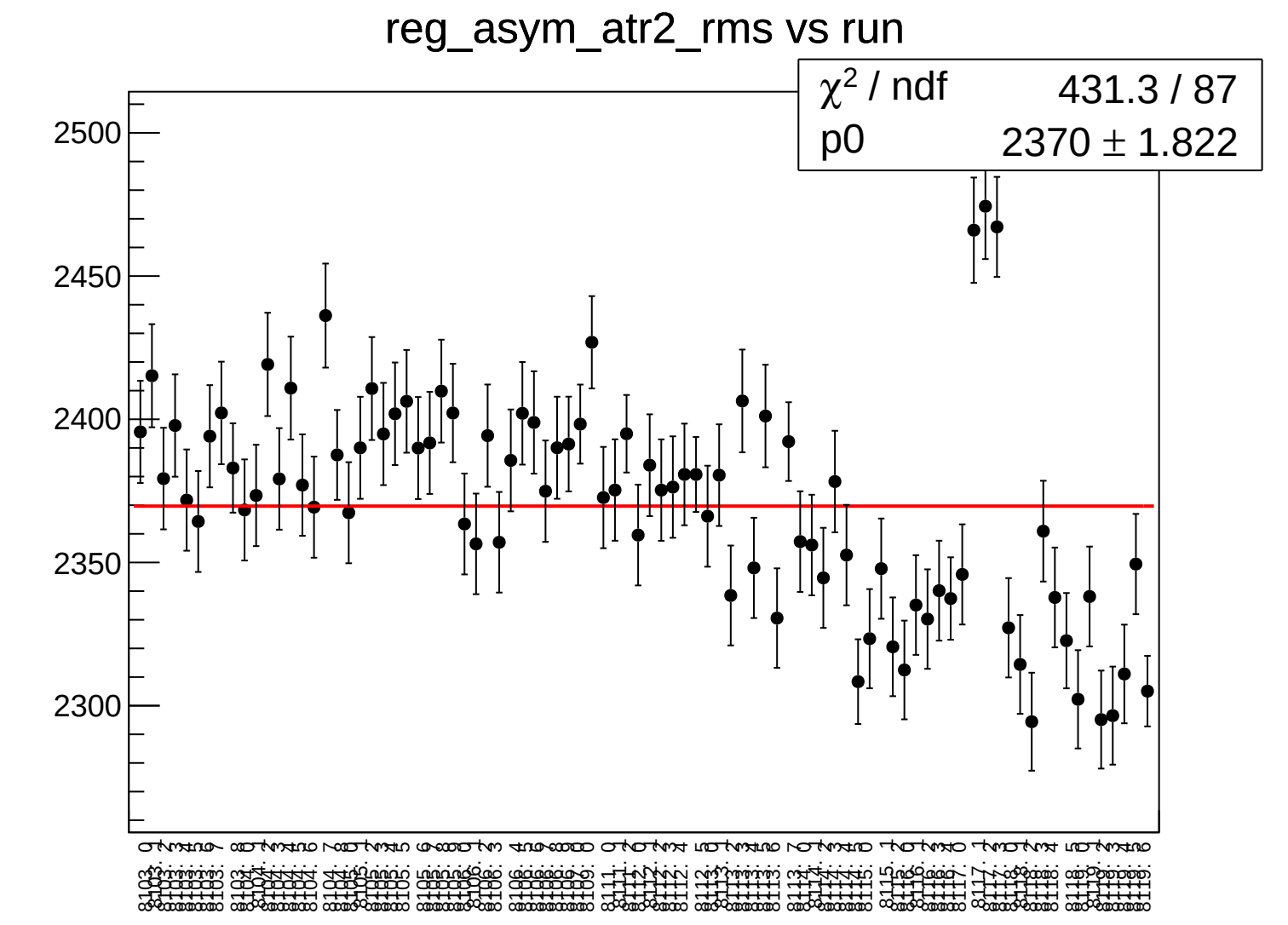

asym_atr1_mean vs run
×10^3
χ² / ndf 83.07 / 87
p0 3342 ± 3048
pull
Entries 88
Mean −308.7
Std Dev 354.2

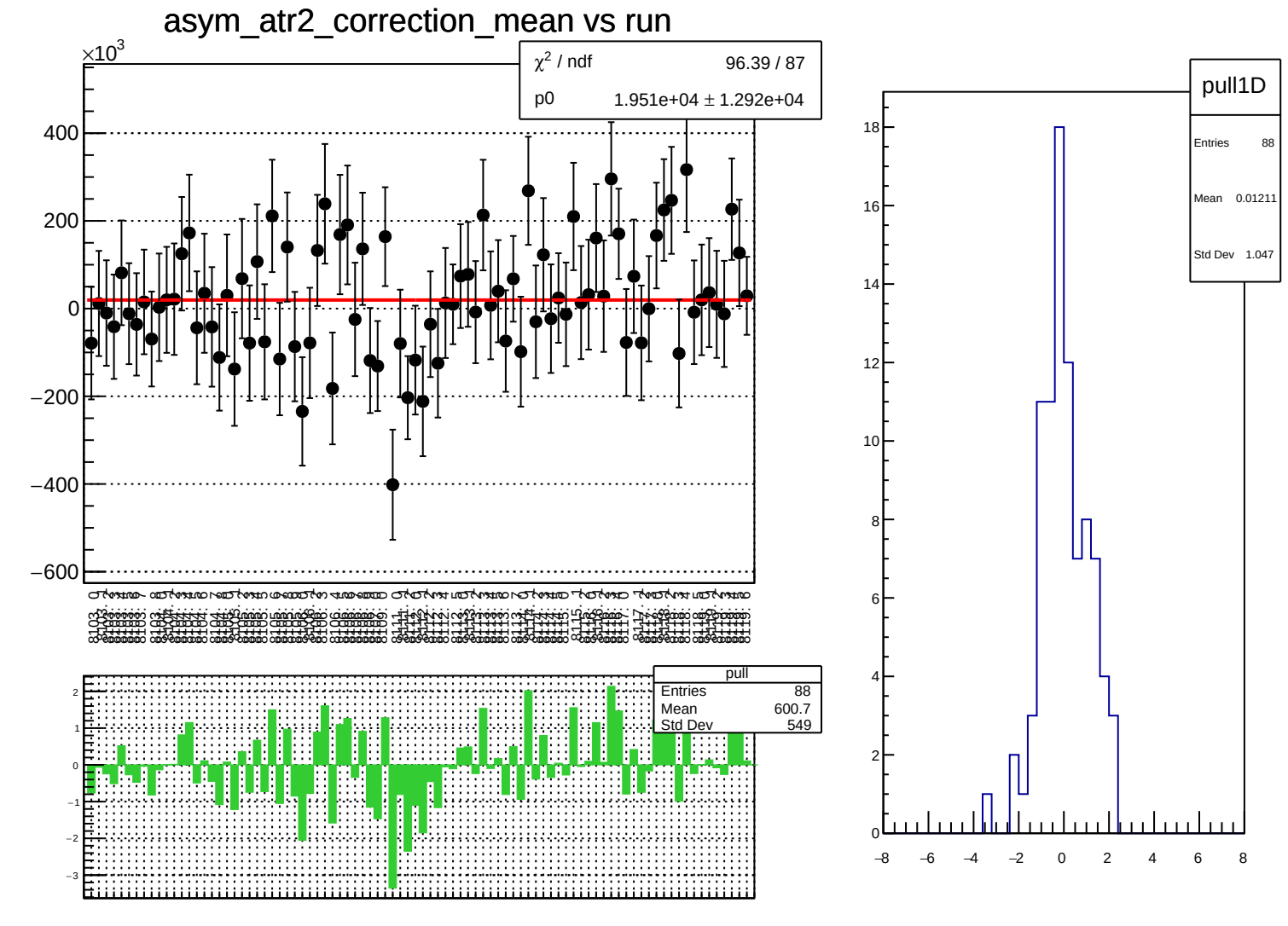

pull1D
Entries 88
Mean 0.008953
Std Dev 0.9716

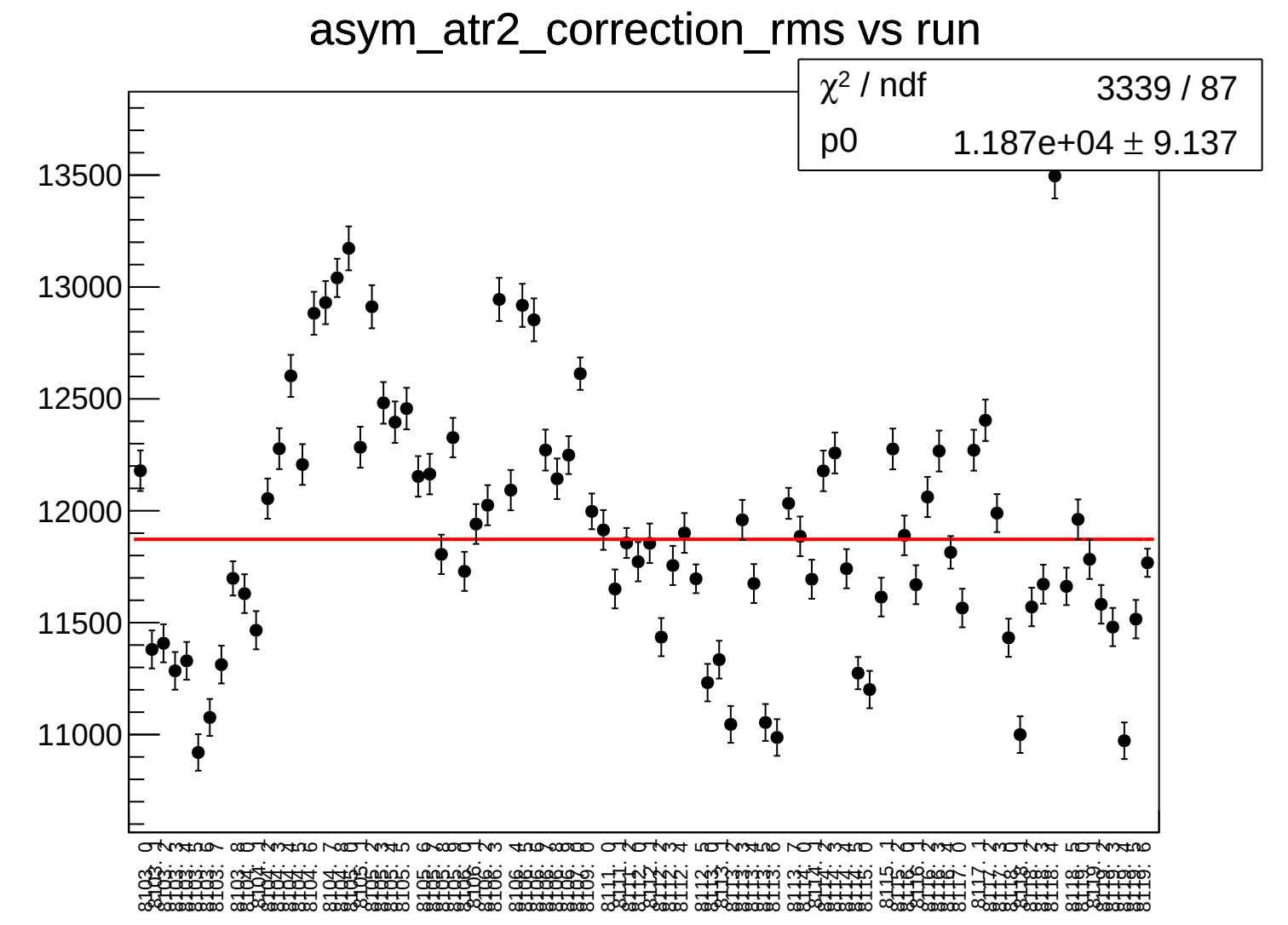

asym_atr1_rms vs run
χ^2 / ndf 1.01e+04 / 87
p0 2795 ± 2.155
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

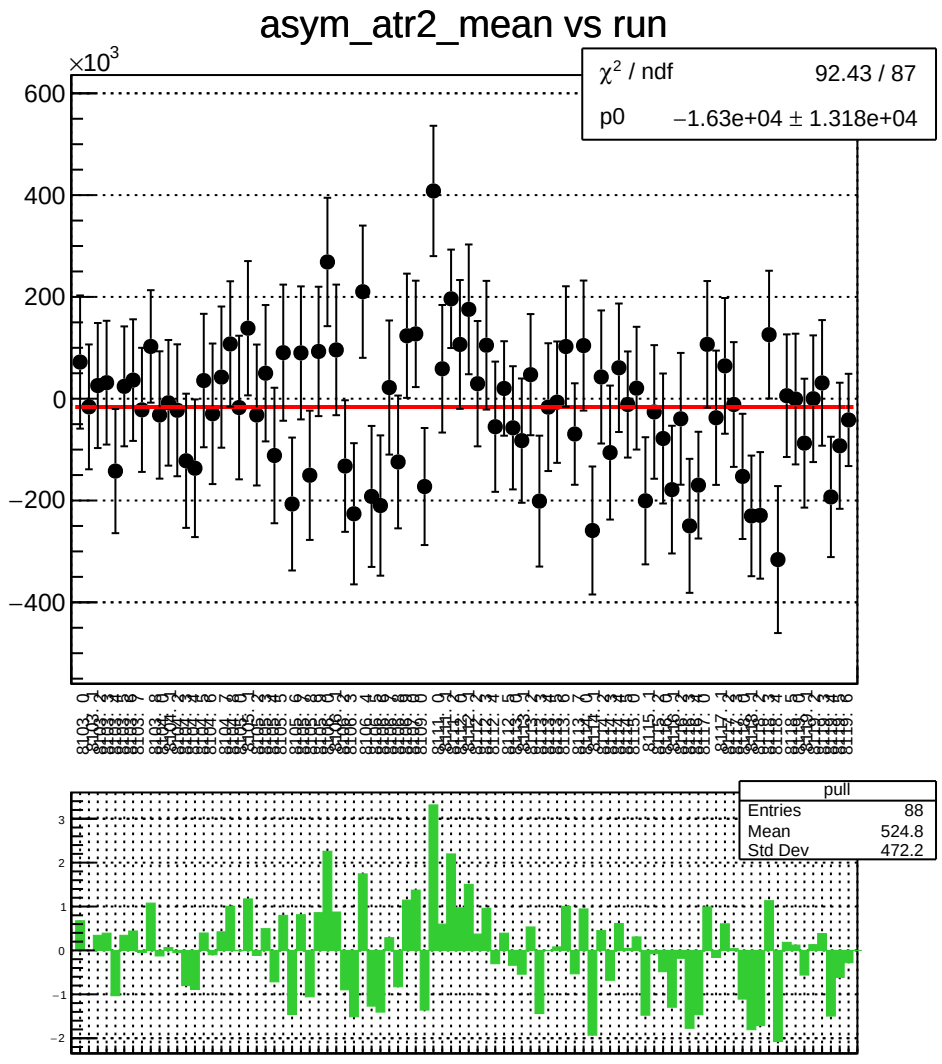

reg_asym_atr2_mean vs run
×10^3
χ^2 / ndf 65.77 / 87
p0 3098 ± 2577
pull
Entries 88
Mean −6736
Std Dev 6780

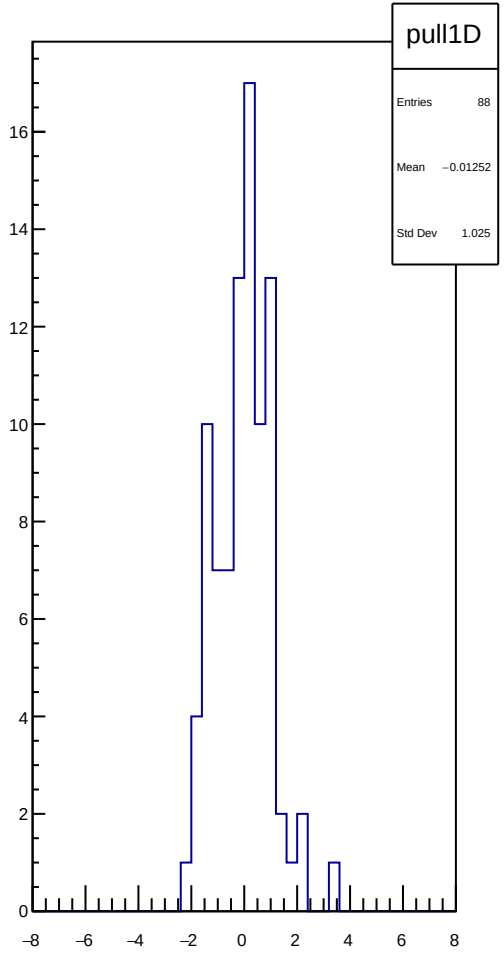

pull1D
Entries 88
Mean −0.0004226
Std Dev 0.8645

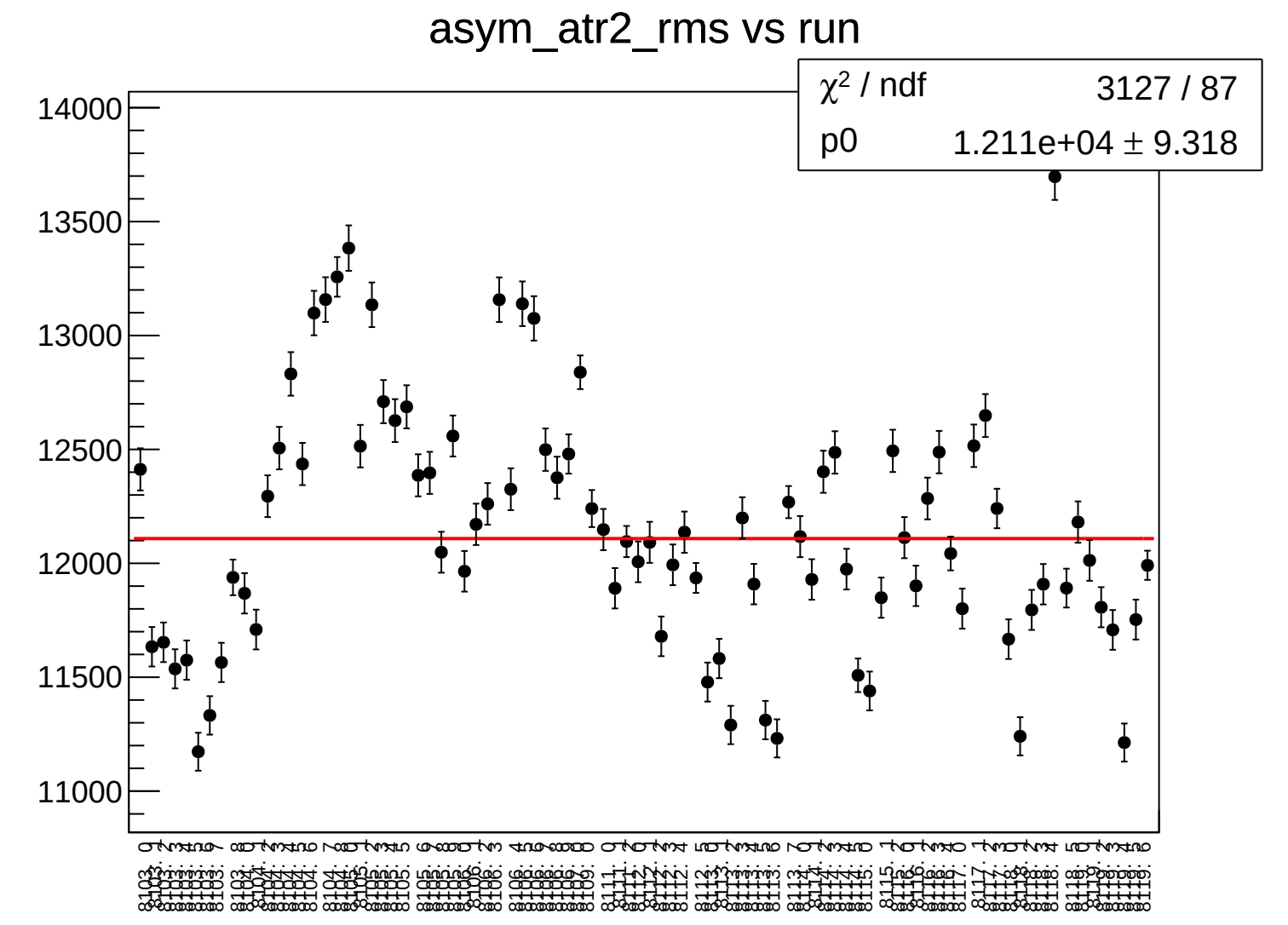

reg_asym_atr2_rms vs run
χ^2 / ndf 431.3 / 87
p0 2370 ± 1.822
2500
2450
2400
2350
2300

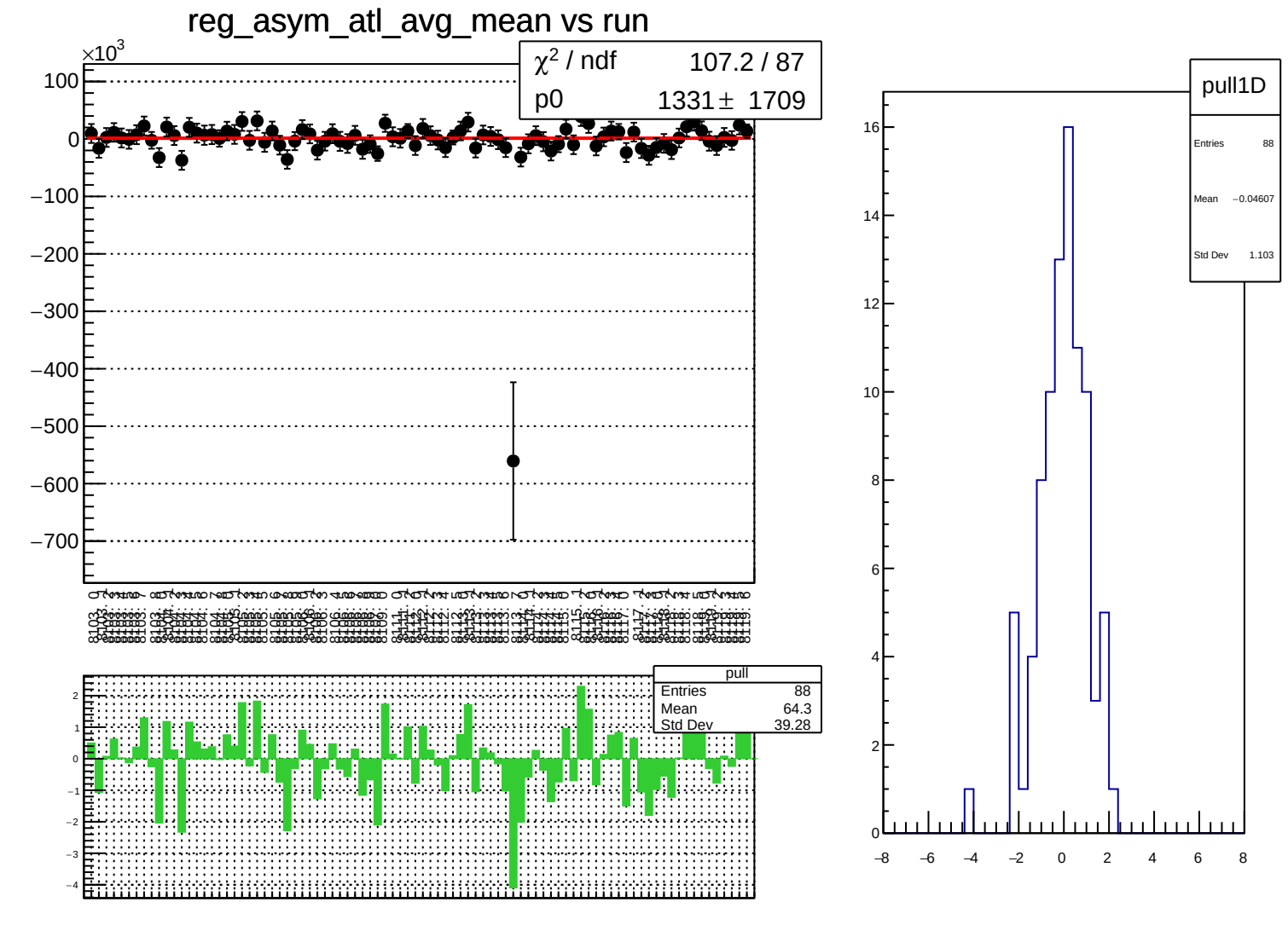

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 96.39 / 87
p0 1.951e+04 ± 1.292e+04
400
200
0
−200
−400
−600
pull
Entries 88
Mean 600.7
Std Dev 549
2
1
0
−1
−2
−3
pull1D
Entries 88
Mean 0.01211
Std Dev 1.047
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

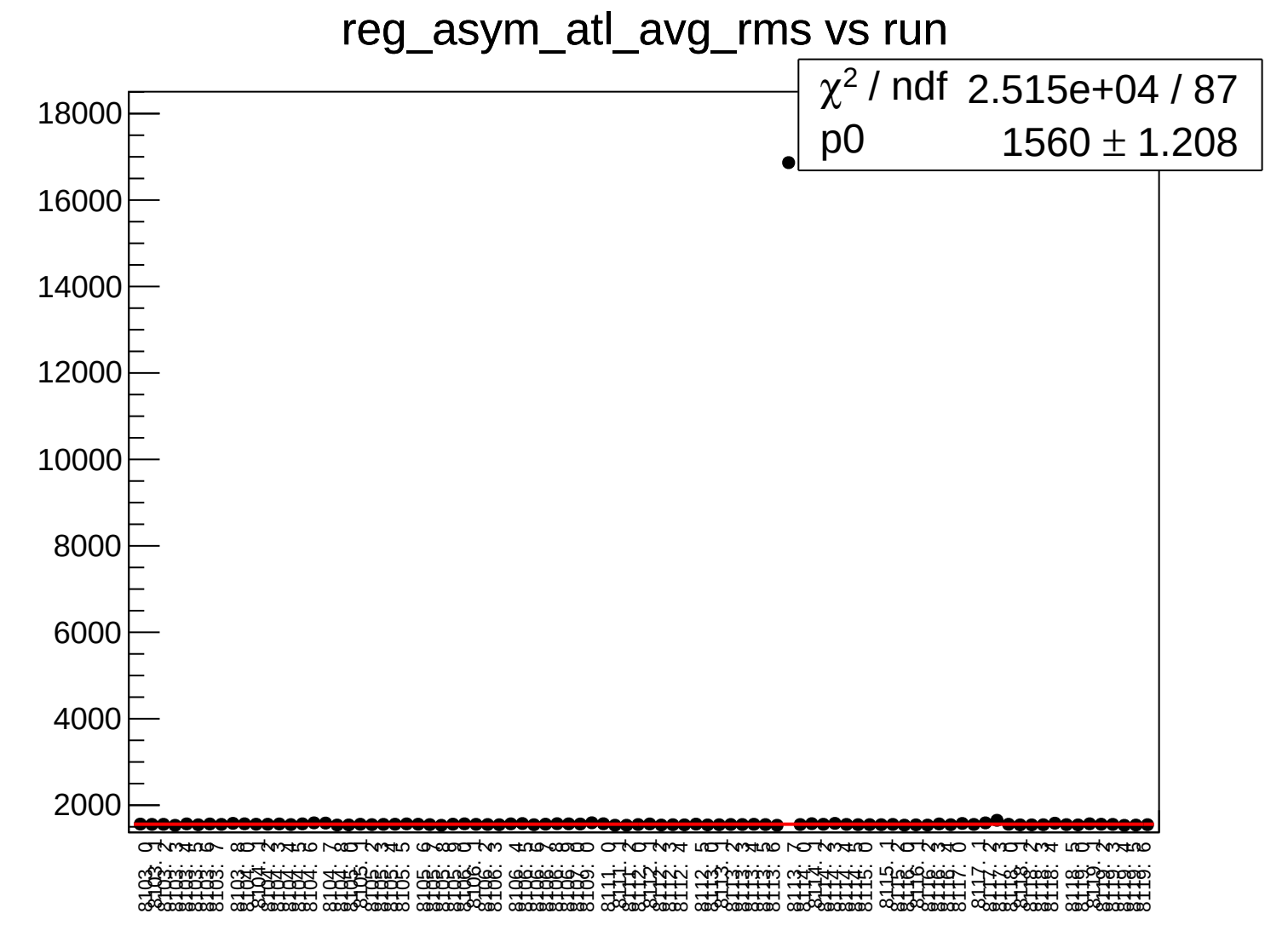

asym_atr2_correction_rms vs run
χ² / ndf 3339 / 87
p0 1.187e+04 ± 9.137
13500
13000
12500
12000
11500
11000

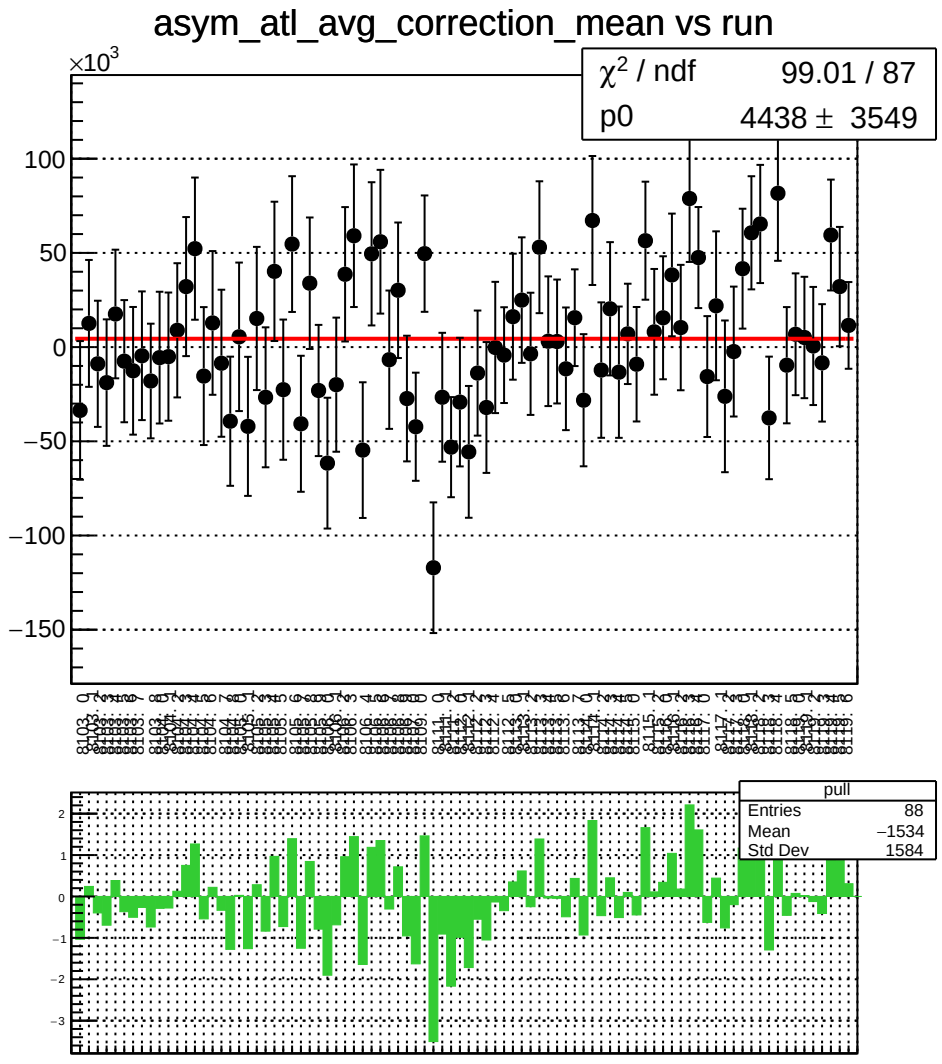

asym_atr2_mean vs run
×10^3
600
400
200
0
−200
−400
χ² / ndf 92.43 / 87
p0 −1.63e+04 ± 1.318e+04
pull
Entries 88
Mean 524.8
Std Dev 472.2
3
2
1
0
−1
−2

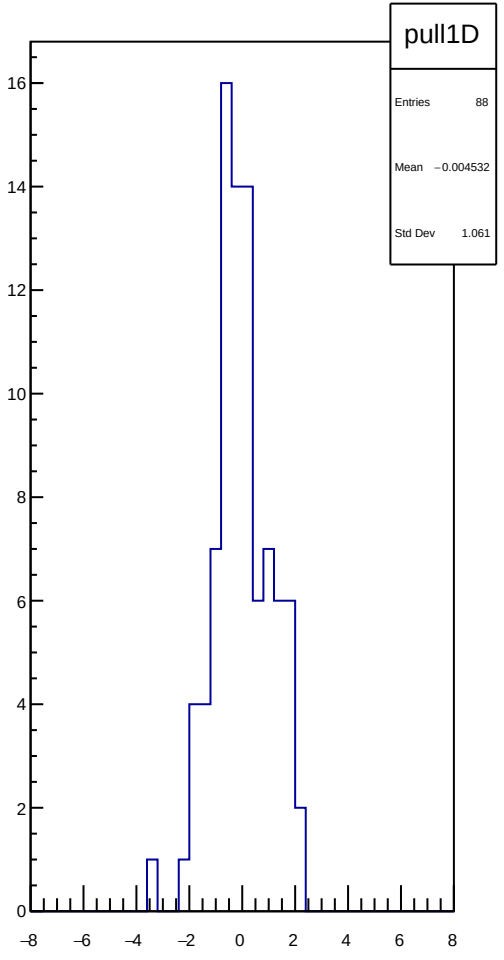

pull1D
Entries 88
Mean −0.01252
Std Dev 1.025
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

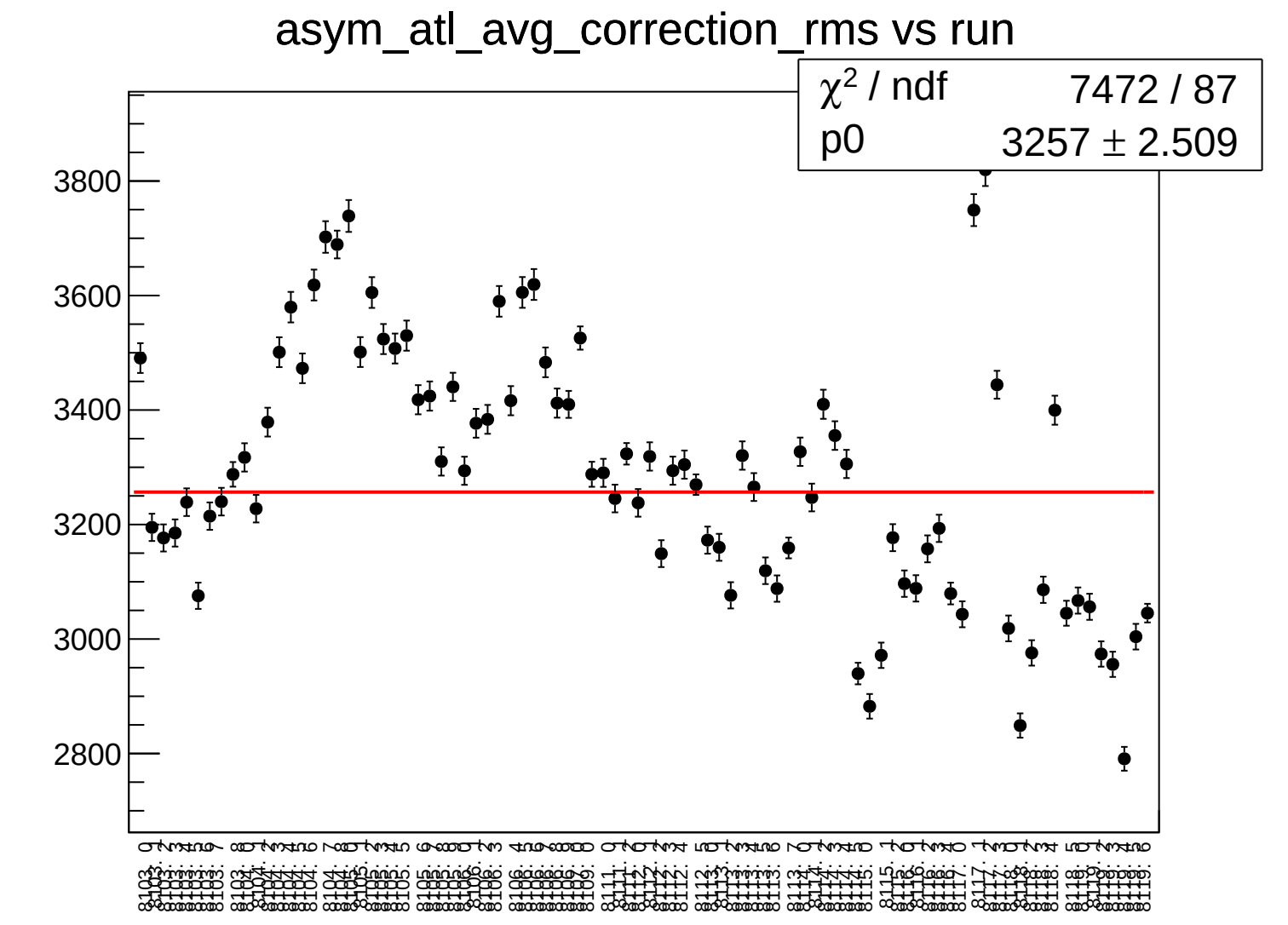

asym_atr2_rms vs run
χ² / ndf 3127 / 87
p0 1.211e+04 ± 9.318
14000
13500
13000
12500
12000
11500
11000

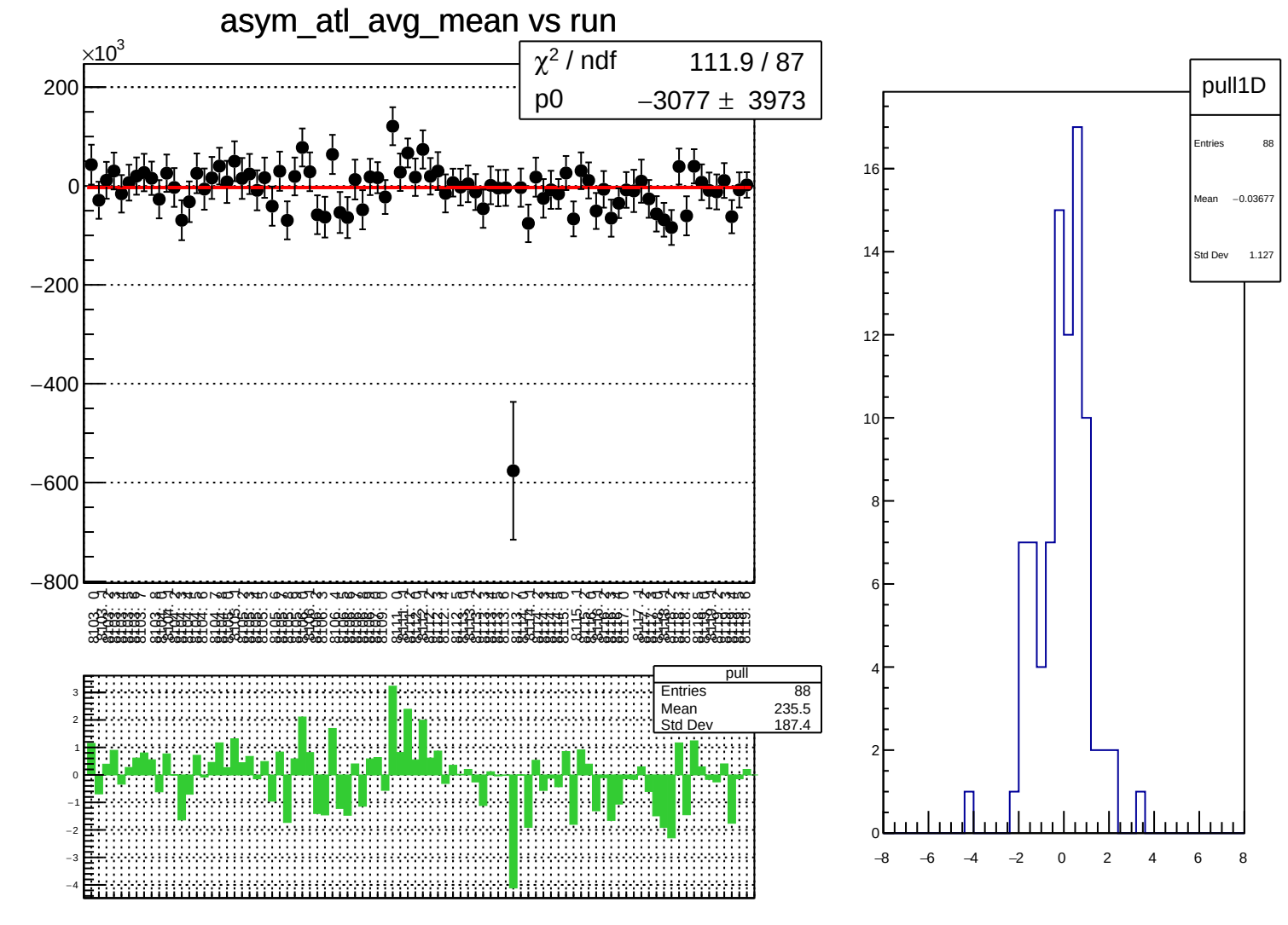

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 107.2 / 87
p0 1331 ± 1709
pull
Entries 88
Mean 64.3
Std Dev 39.28
pull1D
Entries 88
Mean −0.04607
Std Dev 1.103

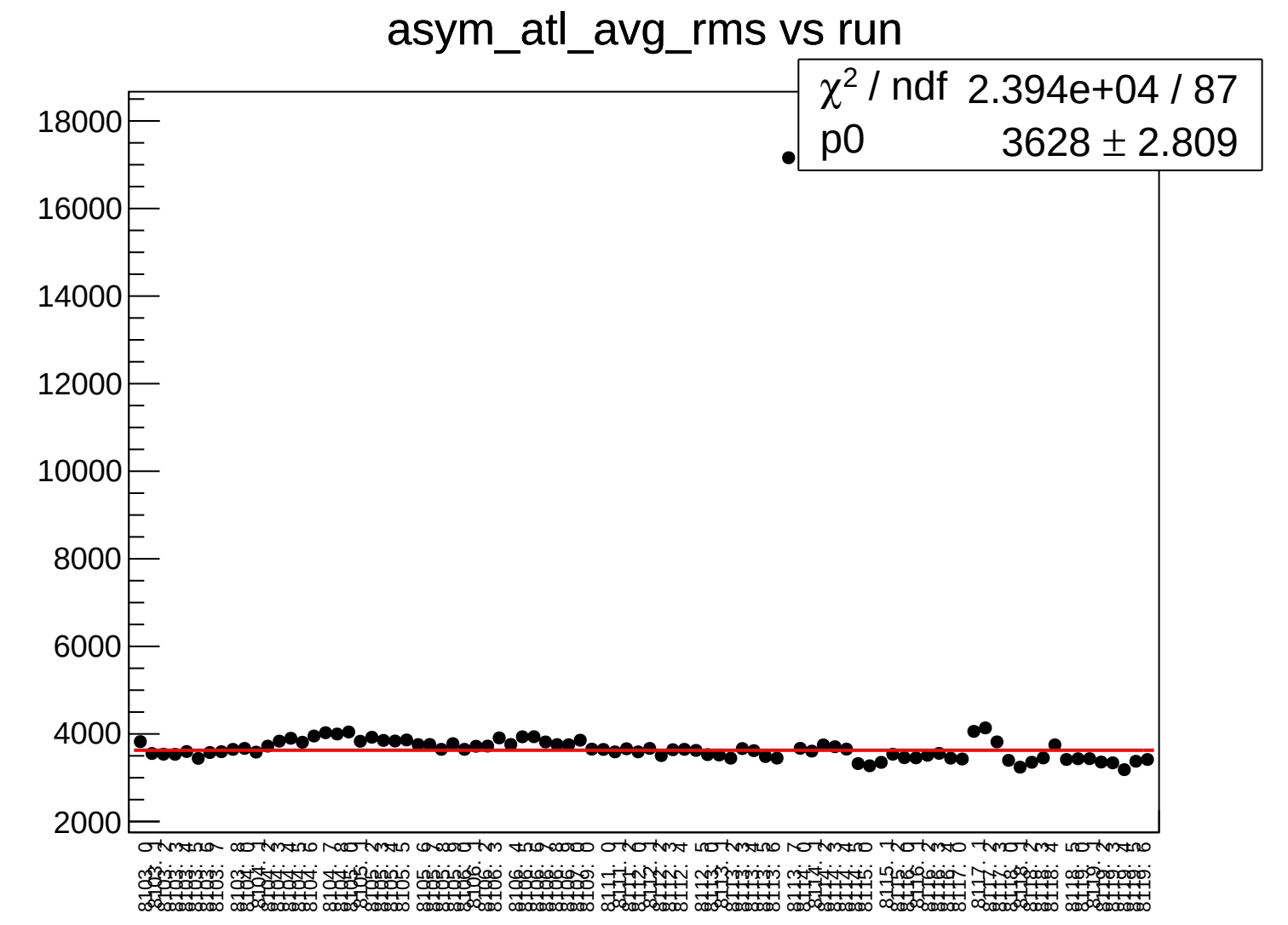

reg_asym_atl_avg_rms vs run
χ^2 / ndf 2.515e+04 / 87
p0 1560 ± 1.208
18000
16000
14000
12000
10000
8000
6000
4000
2000

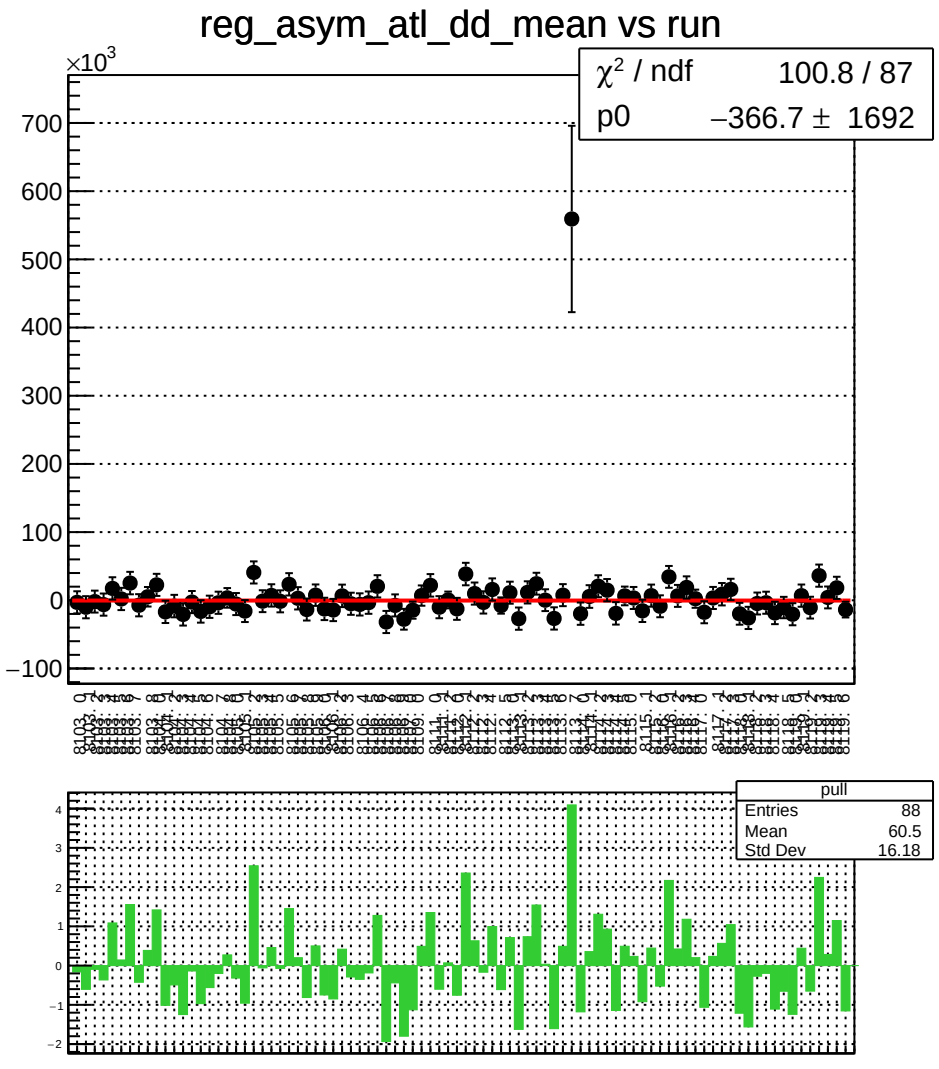

asym_atl_avg_correction_mean vs run
×10^3
χ^2 / ndf 99.01 / 87
p0 4438 ± 3549
100
50
0
−50
−100
−150
pull
Entries 88
Mean −1534
Std Dev 1584
2
1
0
−1
−2
−3

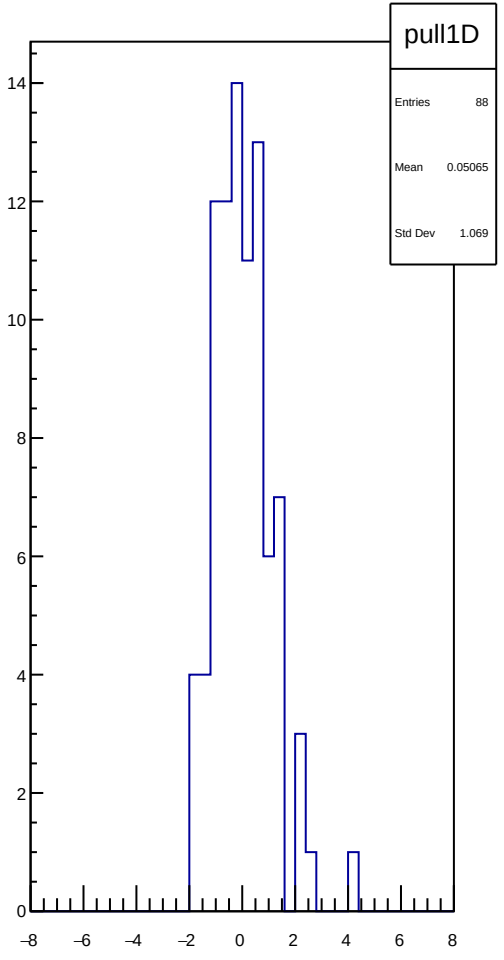

pull1D
Entries 88
Mean −0.004532
Std Dev 1.061
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

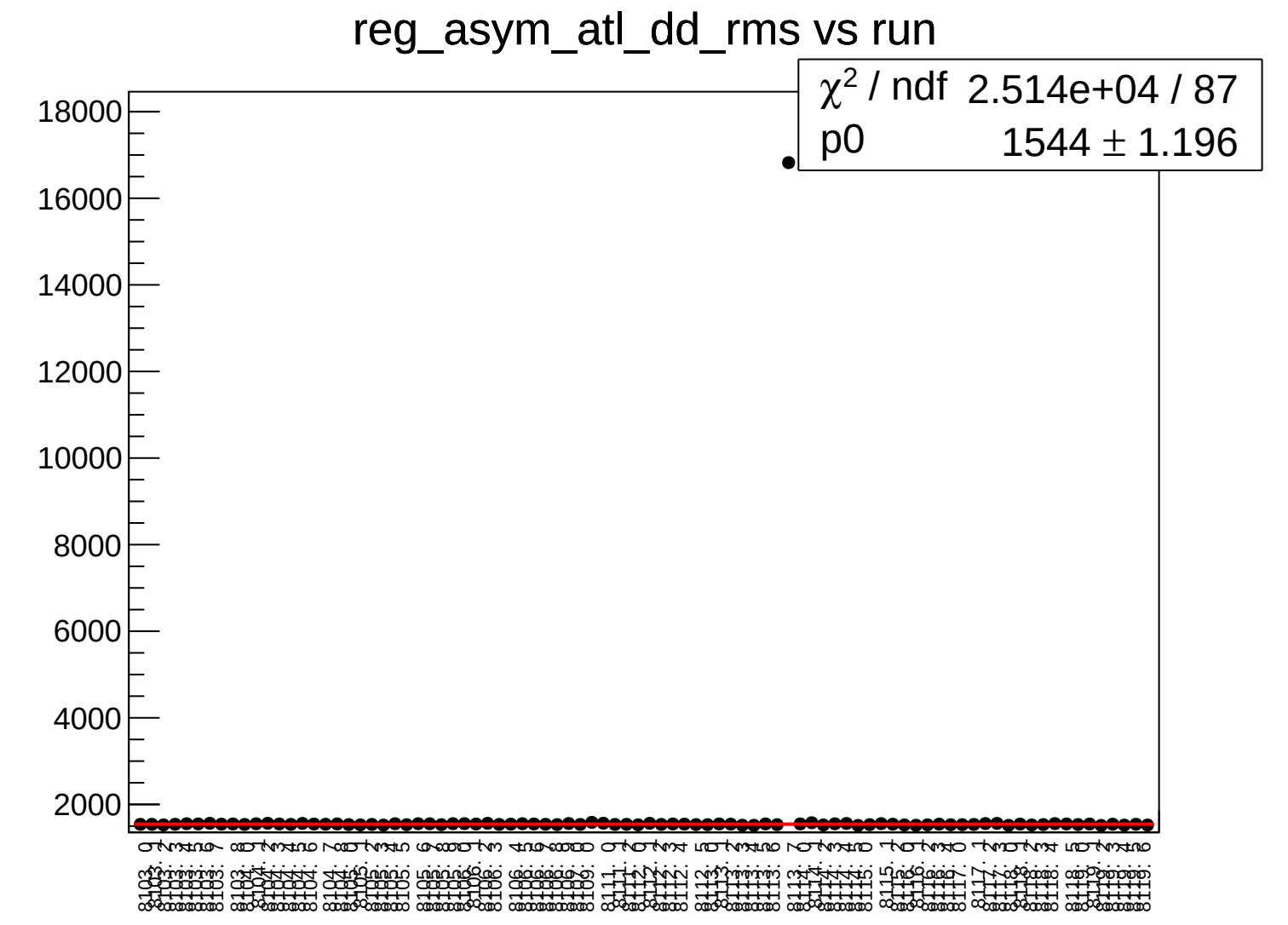

asym_atl_avg_correction_rms vs run
χ² / ndf 7472 / 87
p0 3257 ± 2.509
3800
3600
3400
3200
3000
2800

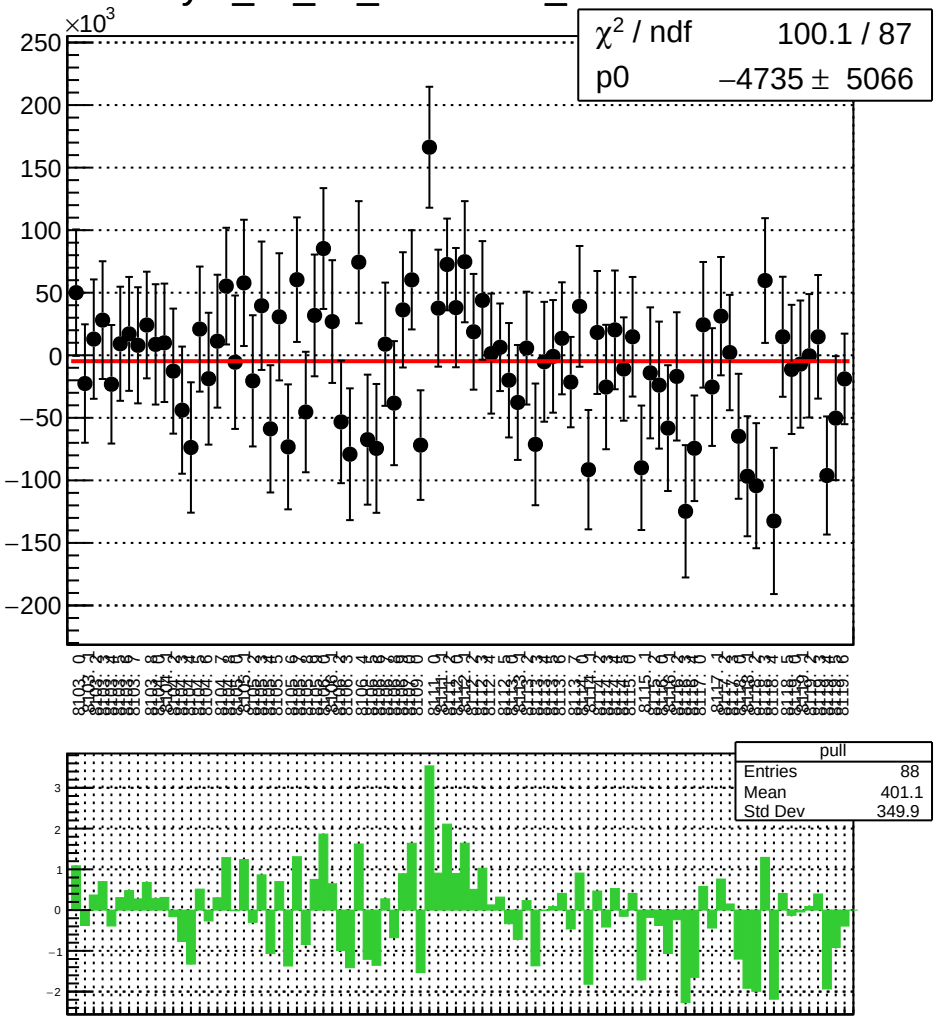

asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 111.9 / 87
p0 −3077 ± 3973
200
0
−200
−400
−600
−800
pull
Entries 88
Mean 235.5
Std Dev 187.4
3
2
1
0
−1
−2
−3
−4
pull1D
Entries 88
Mean −0.03677
Std Dev 1.127
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

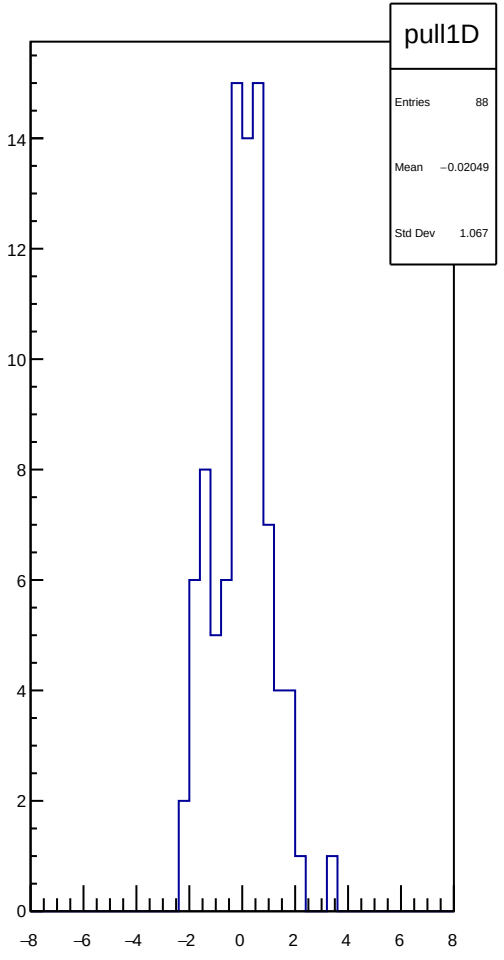

asym_atl_avg_rms vs run
χ^2 / ndf 2.394e+04 / 87
p0 3628 ± 2.809
18000
16000
14000
12000
10000
8000
6000
4000
2000

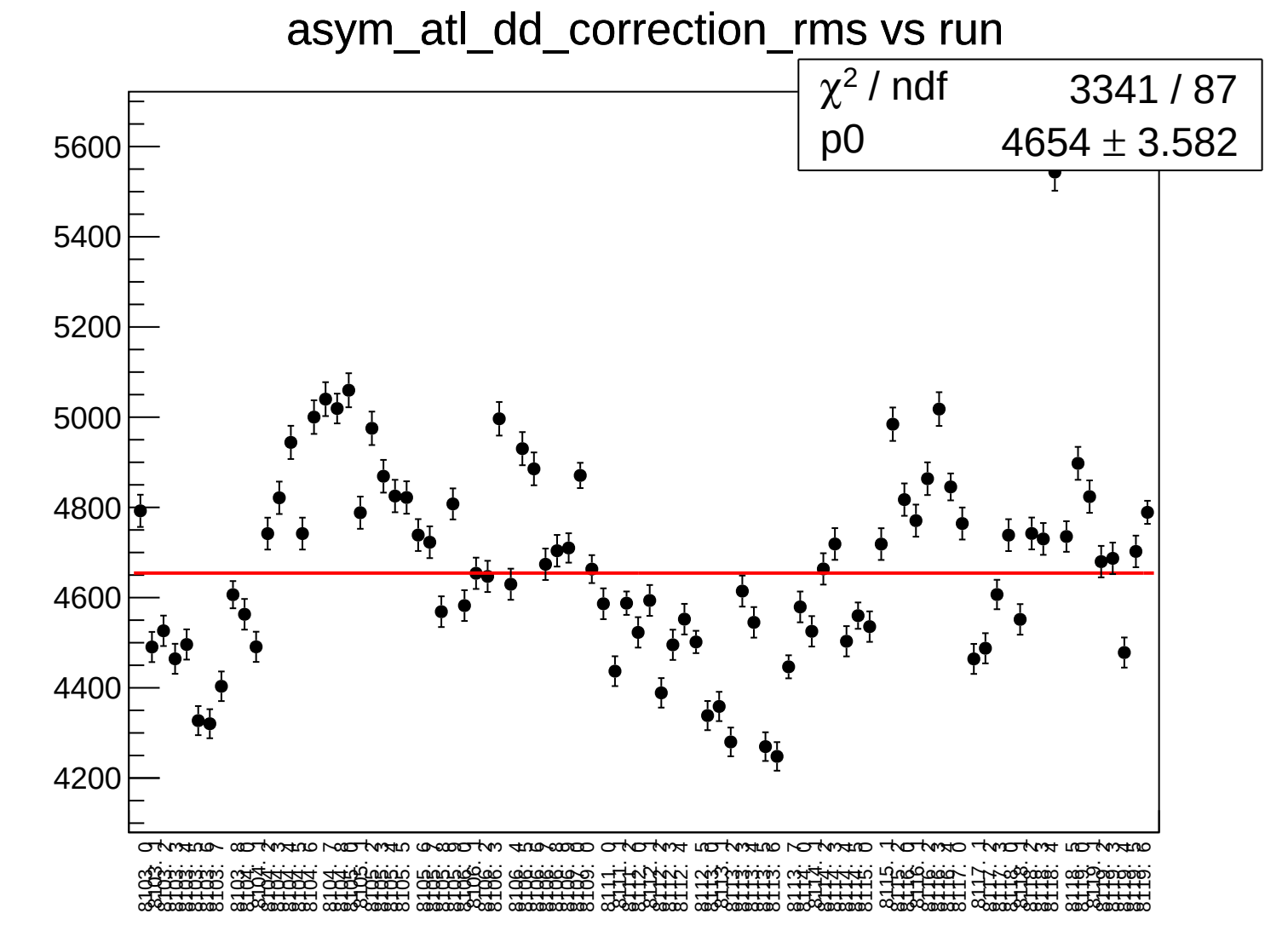

reg_asym_atl_dd_mean vs run
×10^3
χ² / ndf 100.8 / 87
p0 −366.7 ± 1692
700
600
500
400
300
200
100
0
−100
pull
Entries 88
Mean 60.5
Std Dev 16.18
4
3
2
1
0
−1
−2

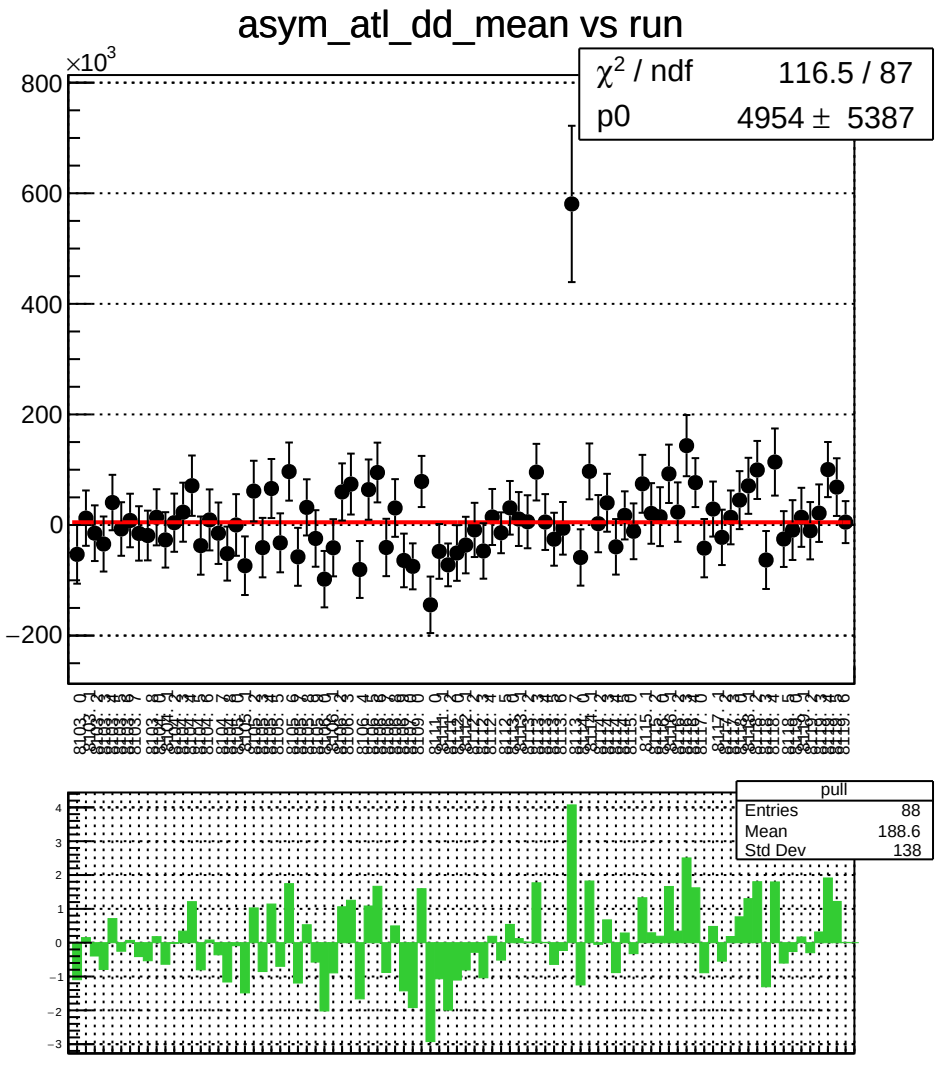

pull1D
Entries 88
Mean 0.05065
Std Dev 1.069
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

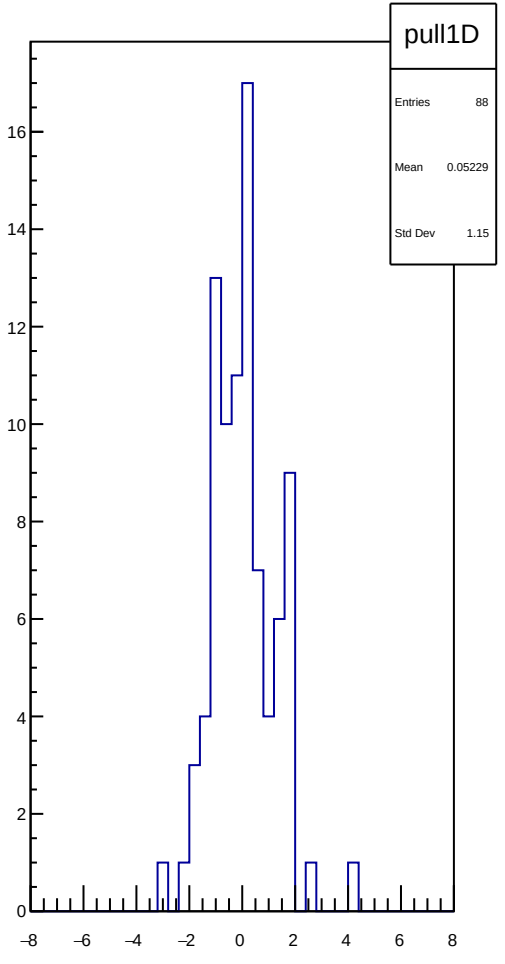

reg_asym_atl_dd_rms vs run
χ² / ndf 2.514e+04 / 87
p0 1544 ± 1.196
18000
16000
14000
12000
10000
8000
6000
4000
2000

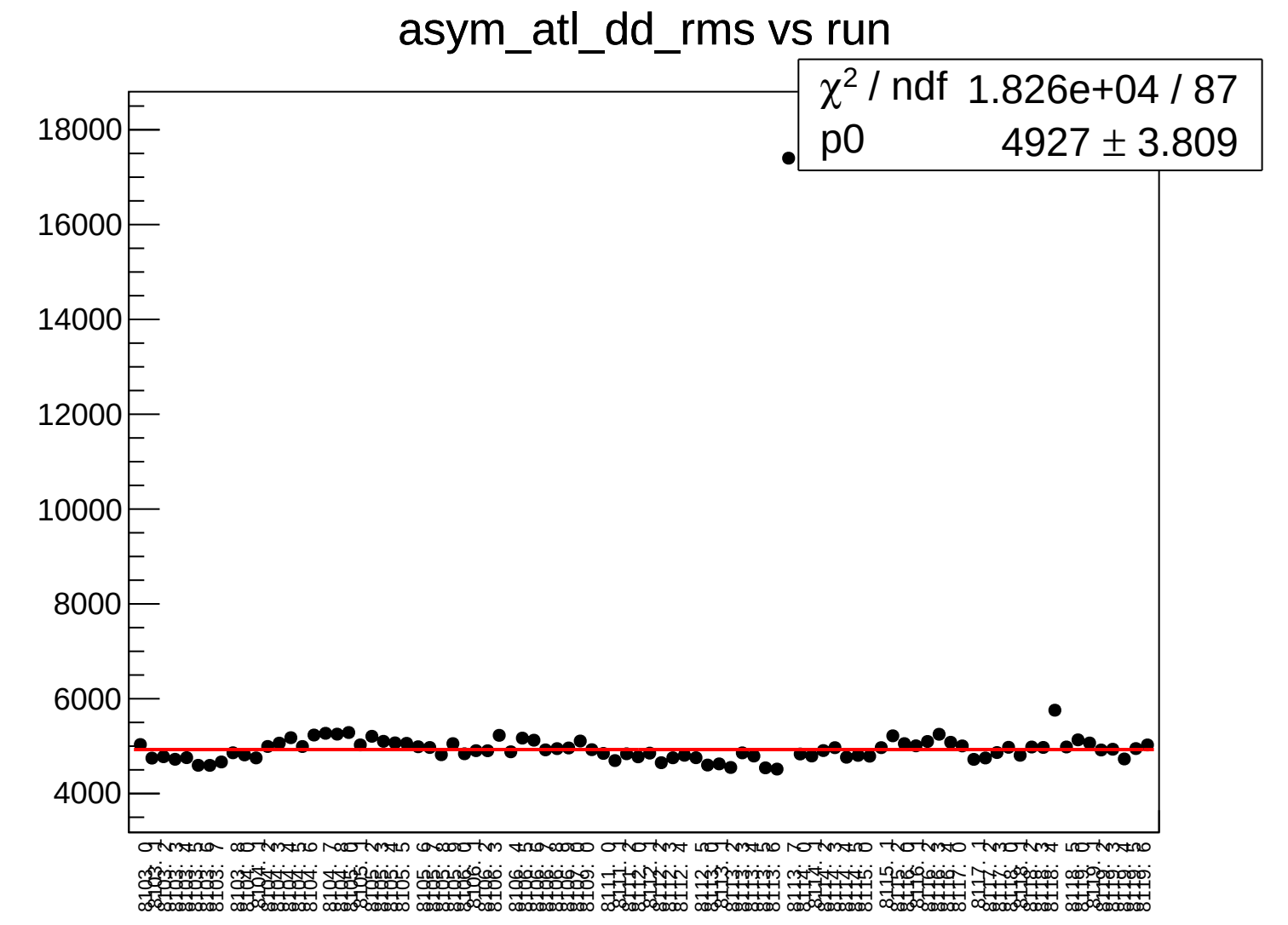

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 100.1 / 87
p0 −4735 ± 5066
pull
Entries 88
Mean 401.1
Std Dev 349.9

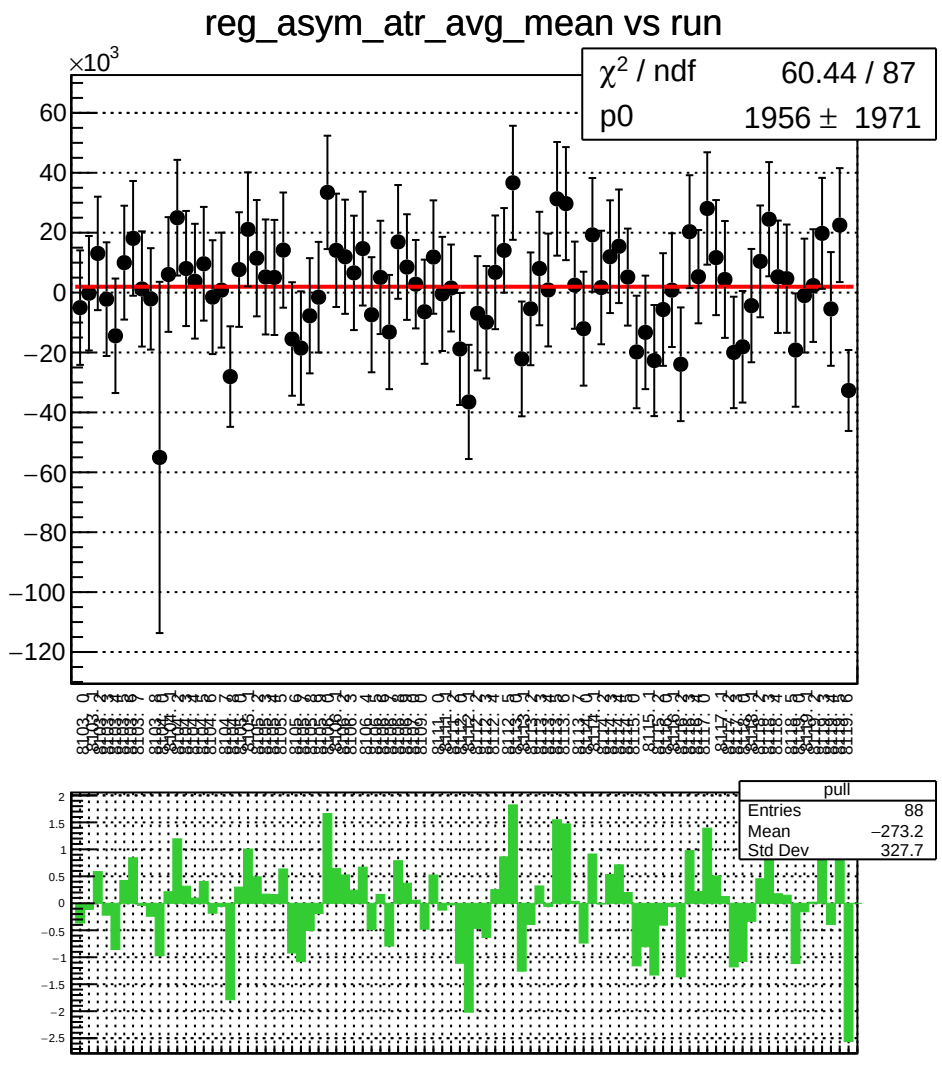

pull1D
Entries 88
Mean −0.02049
Std Dev 1.067

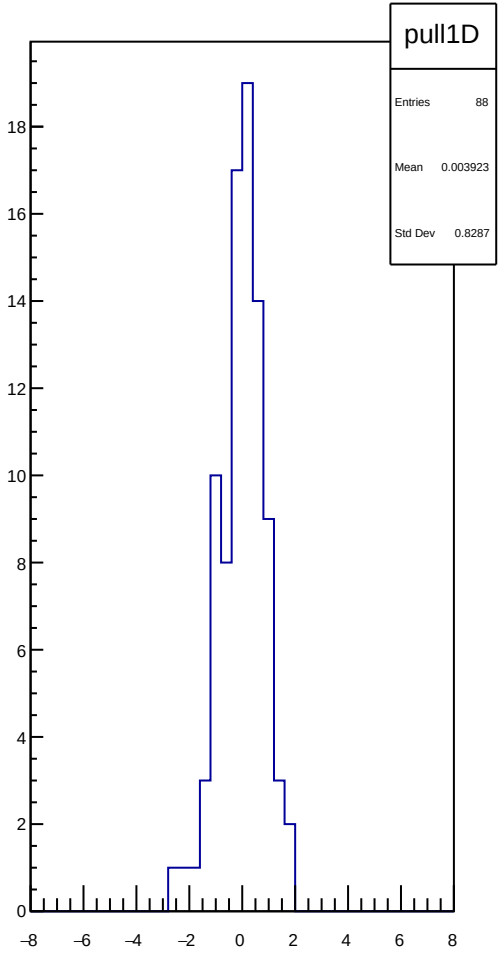

asym_atl_dd_correction_rms vs run
χ² / ndf 3341 / 87
p0 4654 ± 3.582
5600
5400
5200
5000
4800
4600
4400
4200

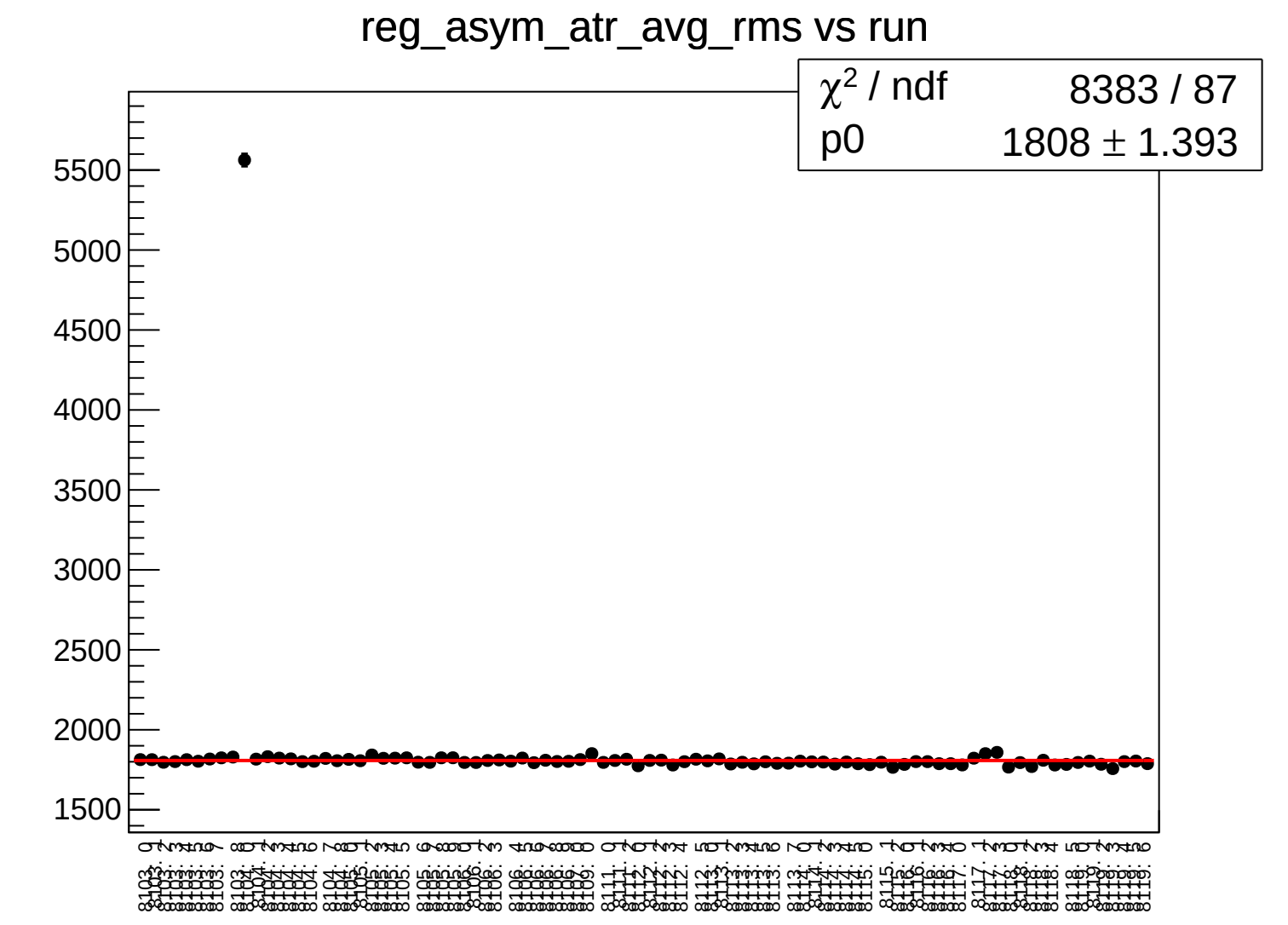

asym_atl_dd_mean vs run
×10^3
χ² / ndf 116.5 / 87
p0 4954 ± 5387
800
600
400
200
0
−200
pull
Entries 88
Mean 188.6
Std Dev 138
4
3
2
1
0
−1
−2
−3

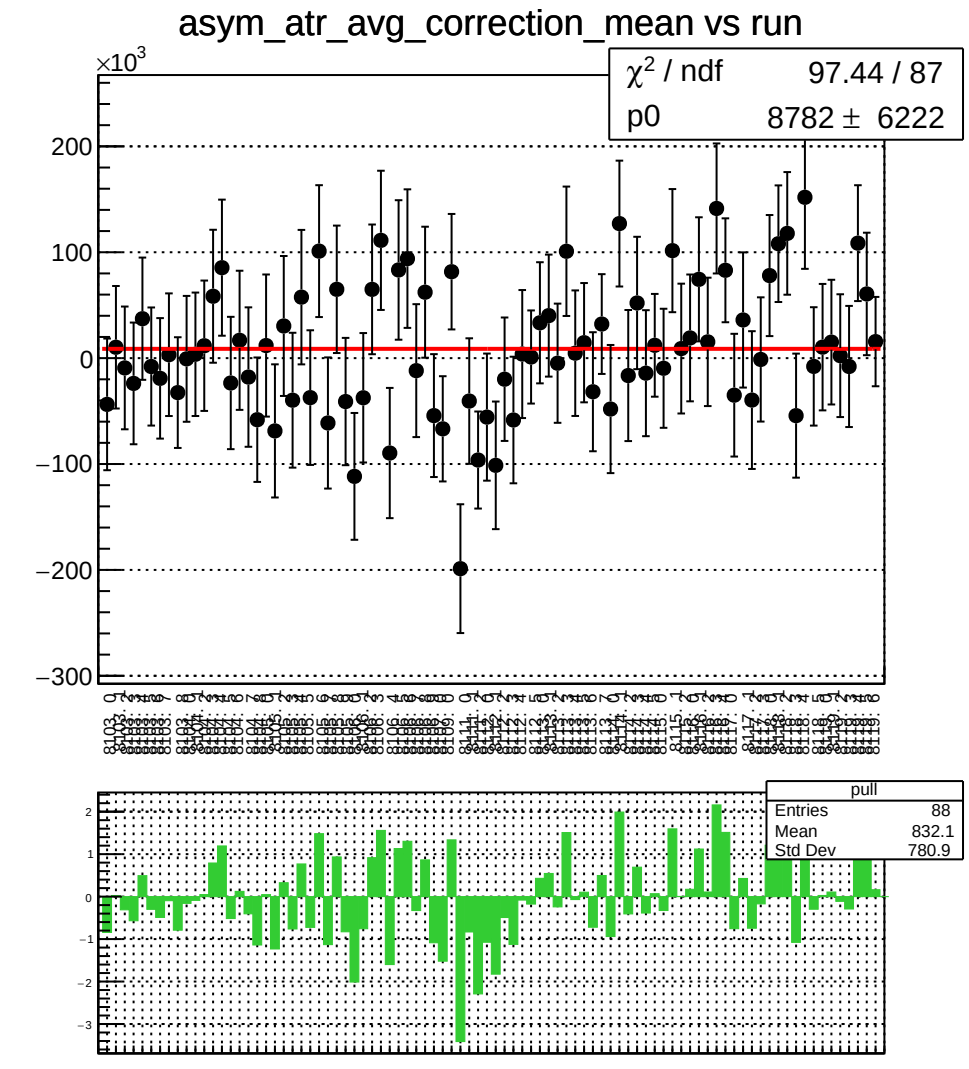

pull1D
Entries 88
Mean 0.05229
Std Dev 1.15
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

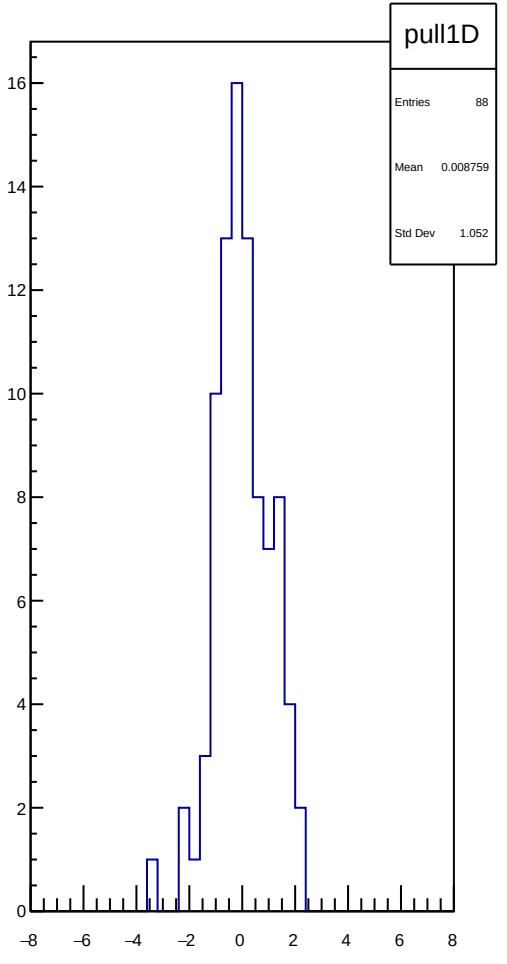

asym_atl_dd_rms vs run
χ^2 / ndf 1.826e+04 / 87
p0 4927 ± 3.809
18000
16000
14000
12000
10000
8000
6000
4000

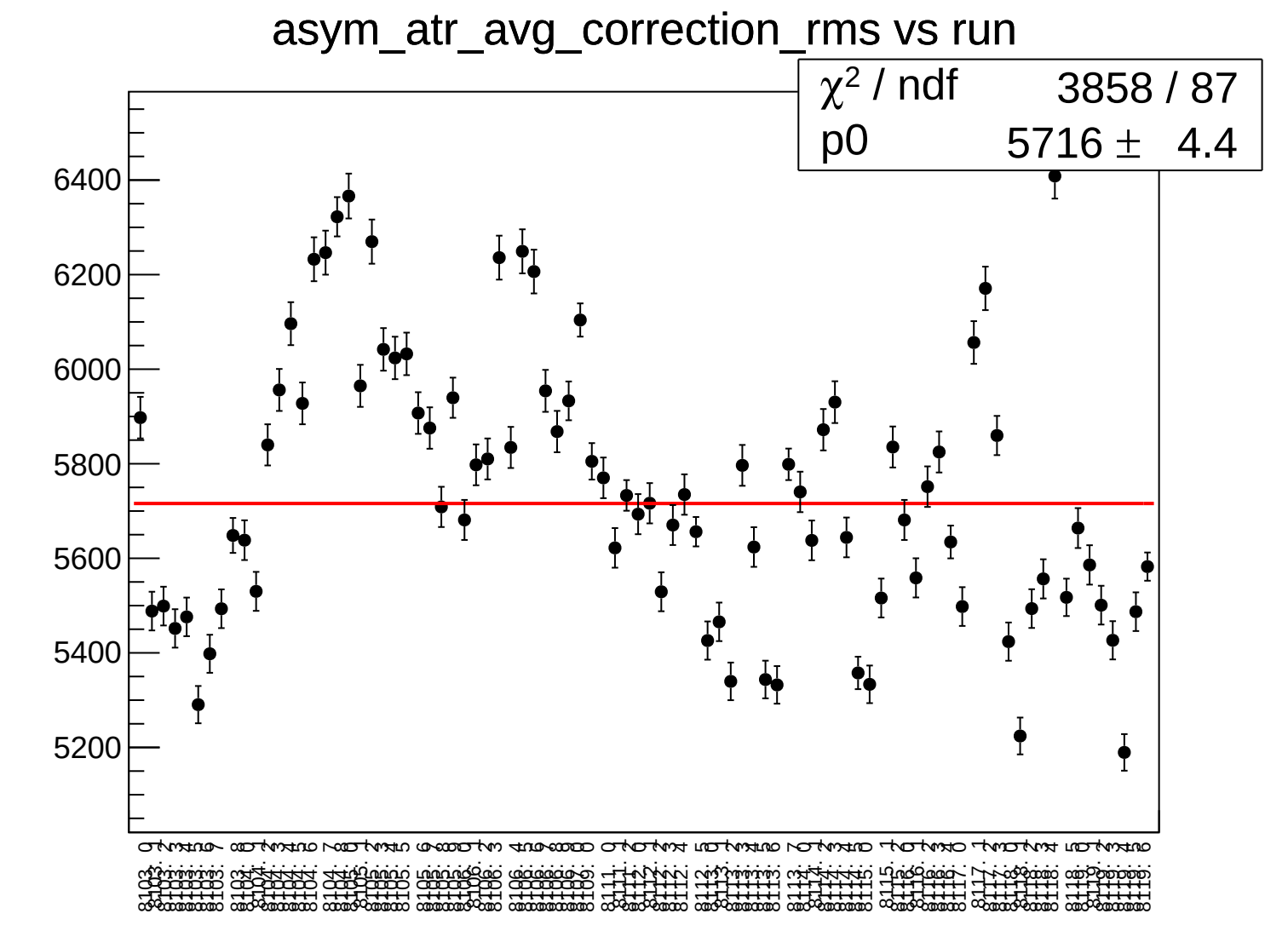

reg_asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 60.44 / 87
p0 1956 ± 1971
pull
Entries 88
Mean −273.2
Std Dev 327.7

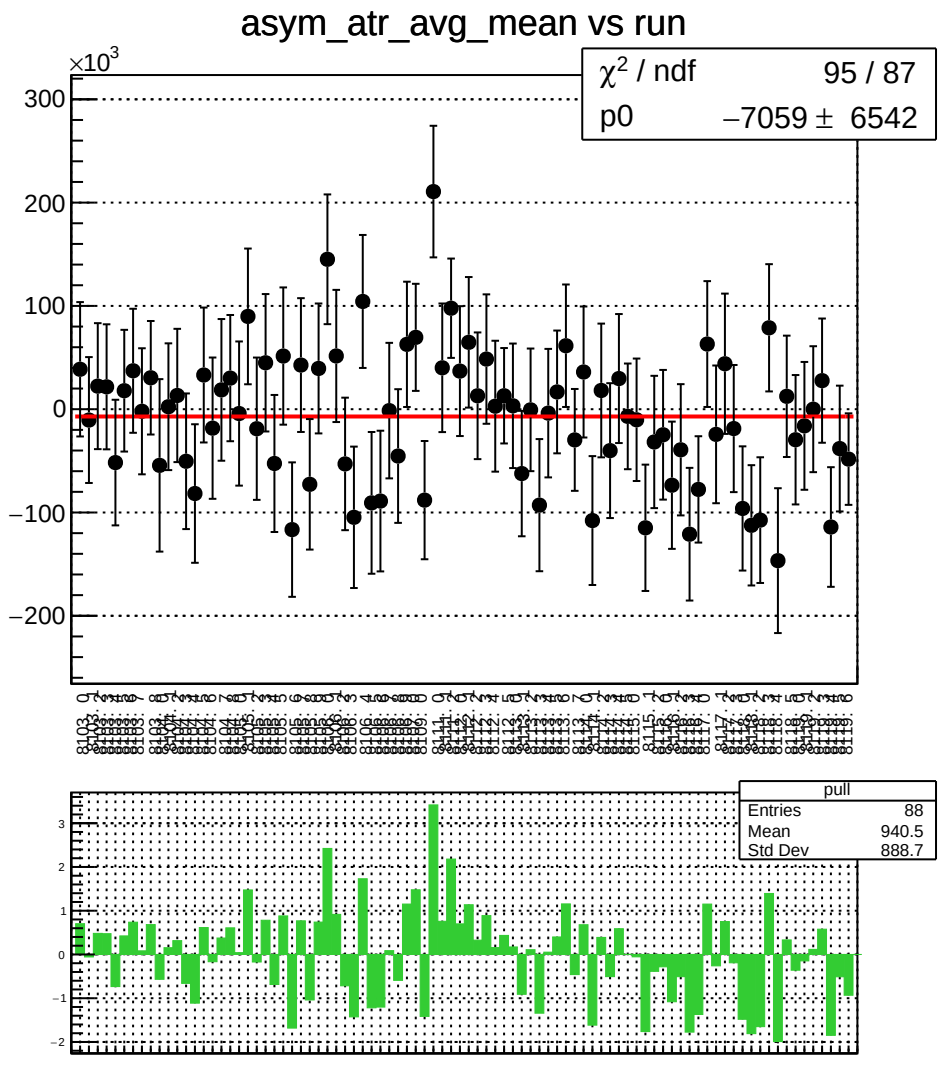

pull1D
Entries 88
Mean 0.003923
Std Dev 0.8287

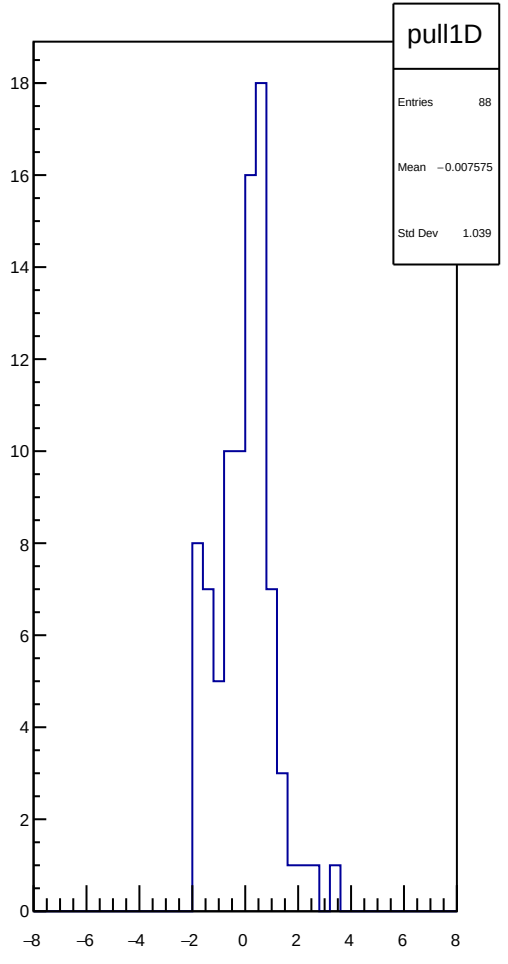

reg_asym_atr_avg_rms vs run
χ^2 / ndf 8383 / 87
p0 1808 ± 1.393
5500
5000
4500
4000
3500
3000
2500
2000
1500

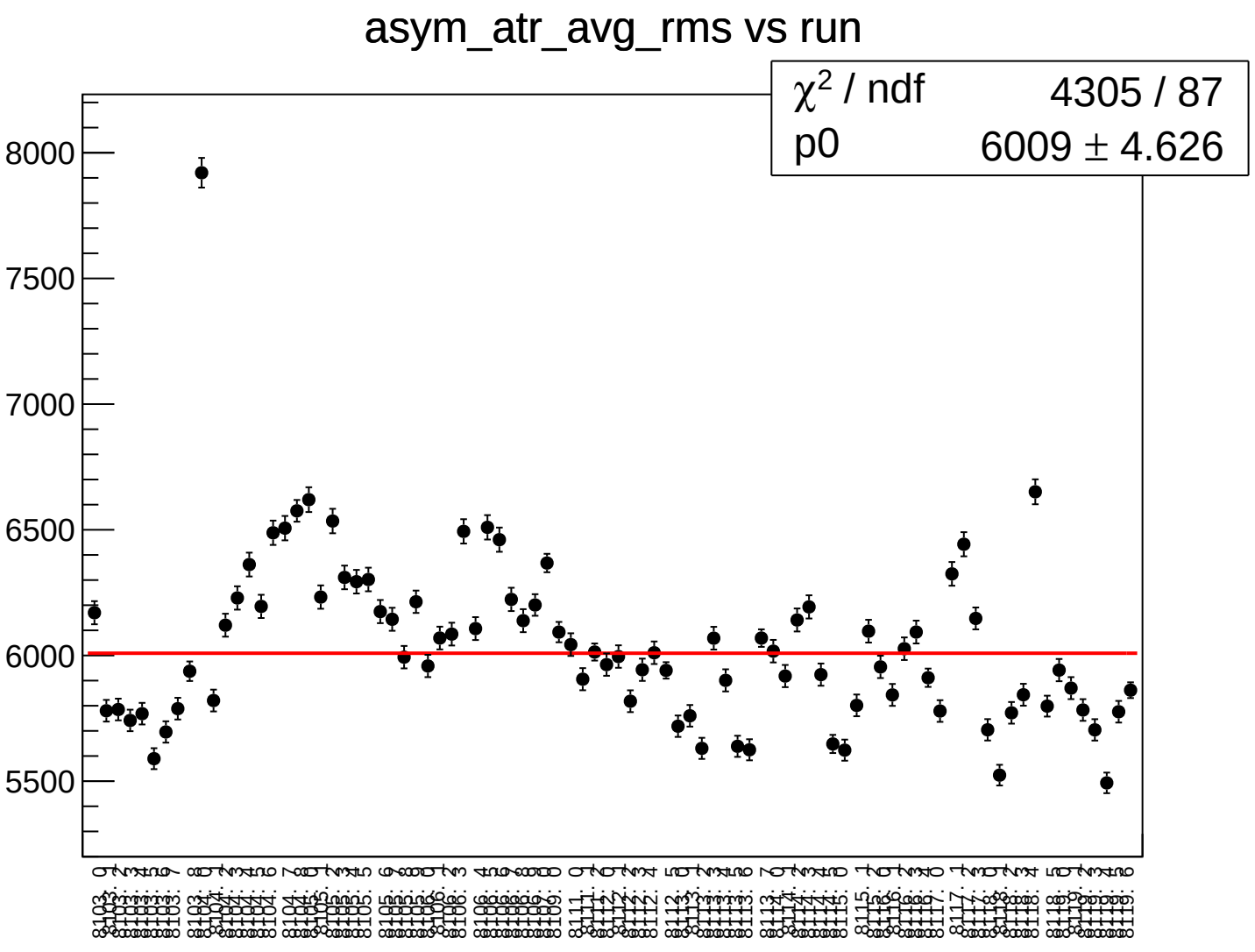

asym_atr_avg_correction_mean vs run
×10^3
χ^2 / ndf 97.44 / 87
p0 8782 ± 6222
200
100
0
−100
−200
−300
pull
Entries 88
Mean 832.1
Std Dev 780.9
2
1
0
−1
−2
−3

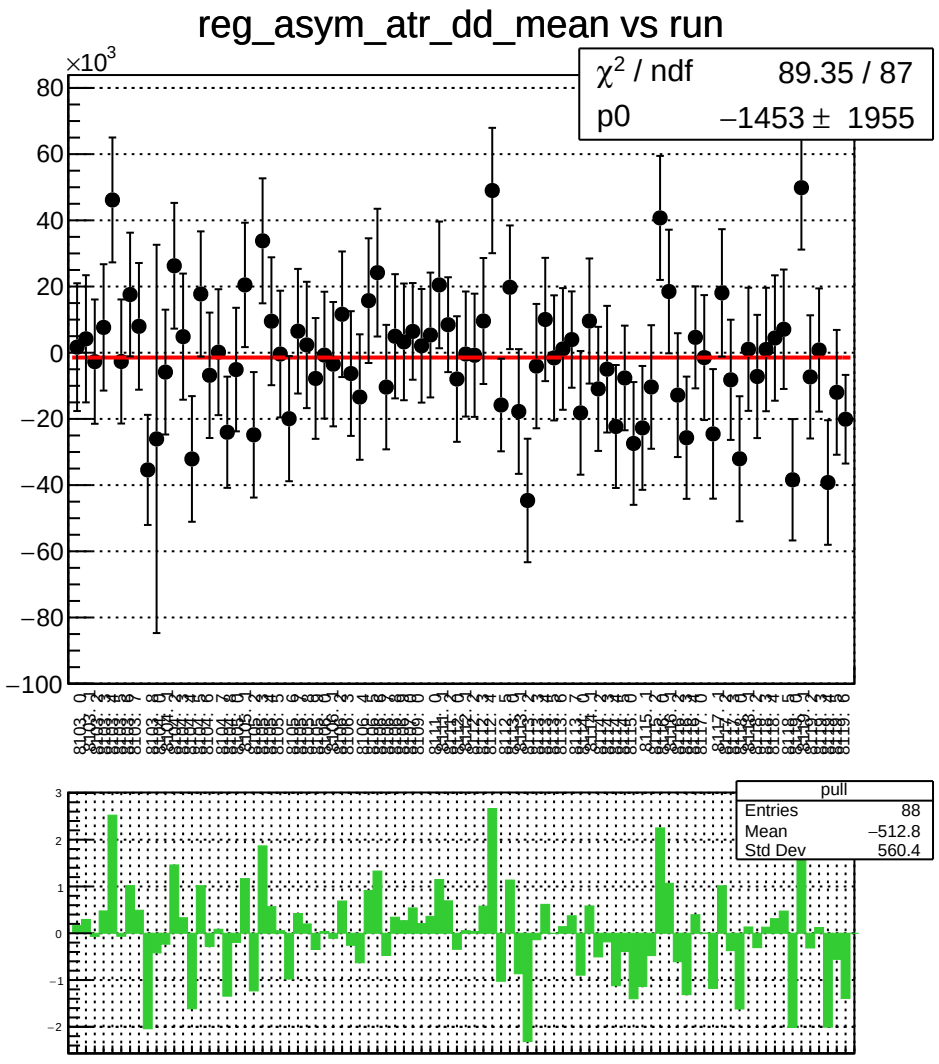

pull1D
Entries 88
Mean 0.008759
Std Dev 1.052
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

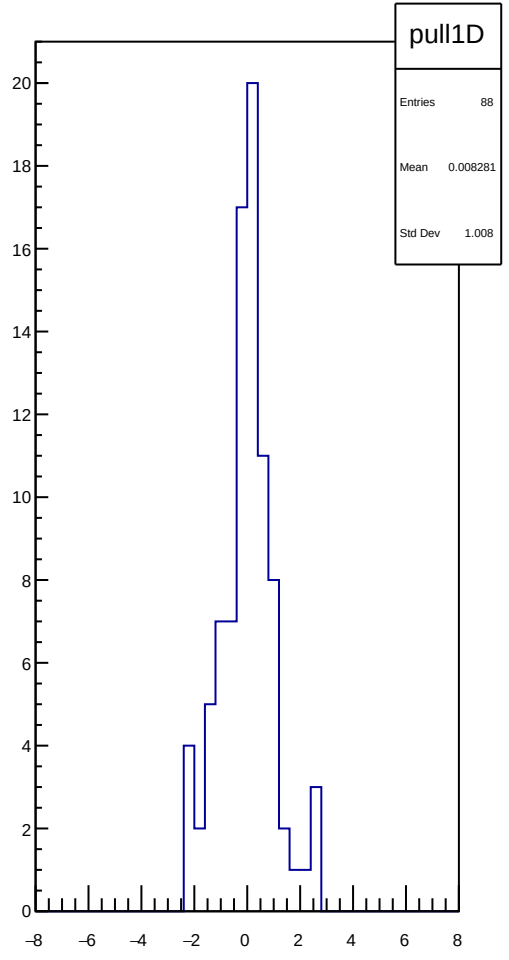

asym_atr_avg_correction_rms vs run
χ² / ndf 3858 / 87
p0 5716 ± 4.4
6400
6200
6000
5800
5600
5400
5200

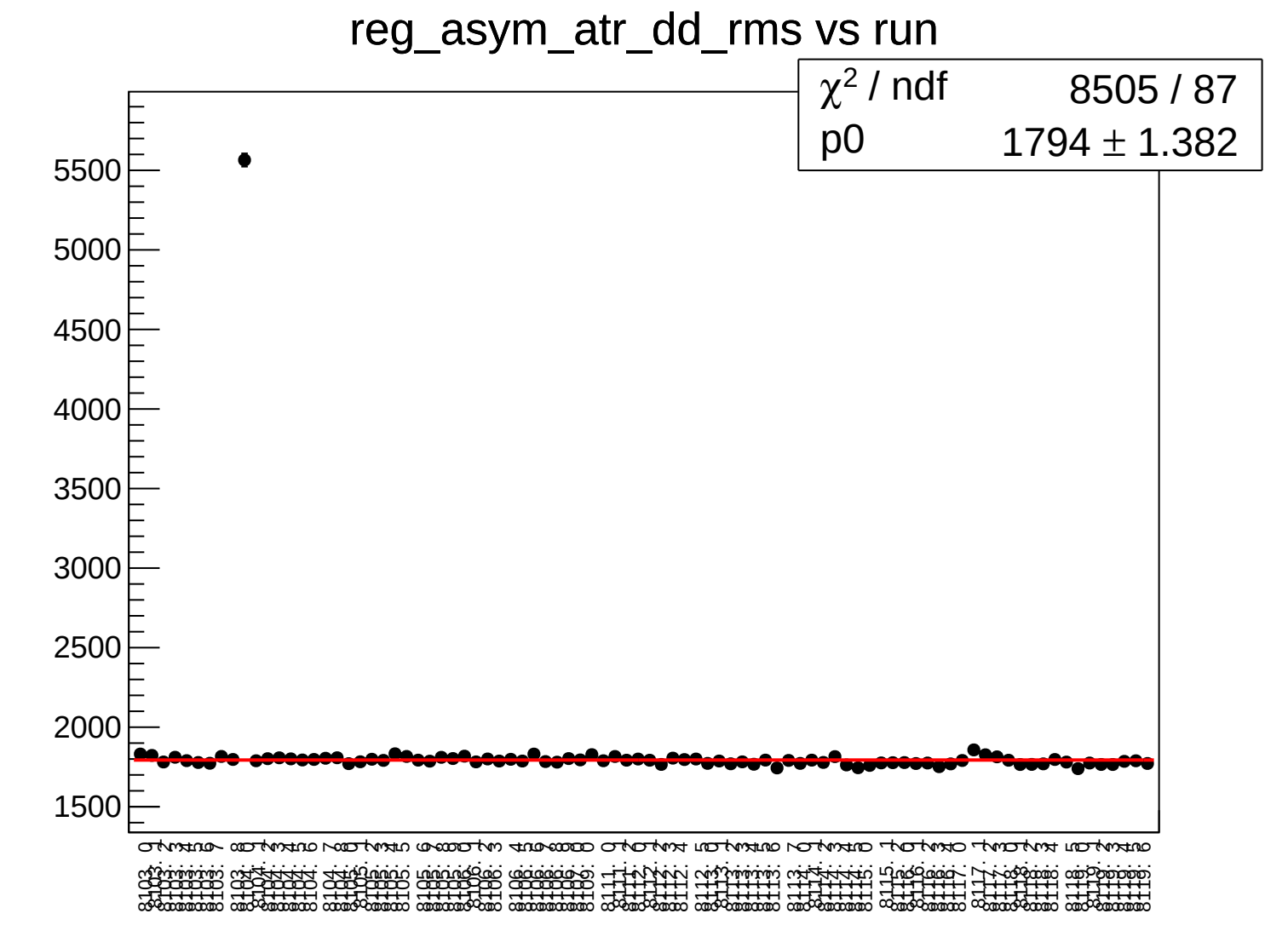

asym_atr_avg_mean vs run
×10^3
χ² / ndf 95 / 87
p0 −7059 ± 6542
300
200
100
0
−100
−200
pull
Entries 88
Mean 940.5
Std Dev 888.7
3
2
1
0
−1
−2

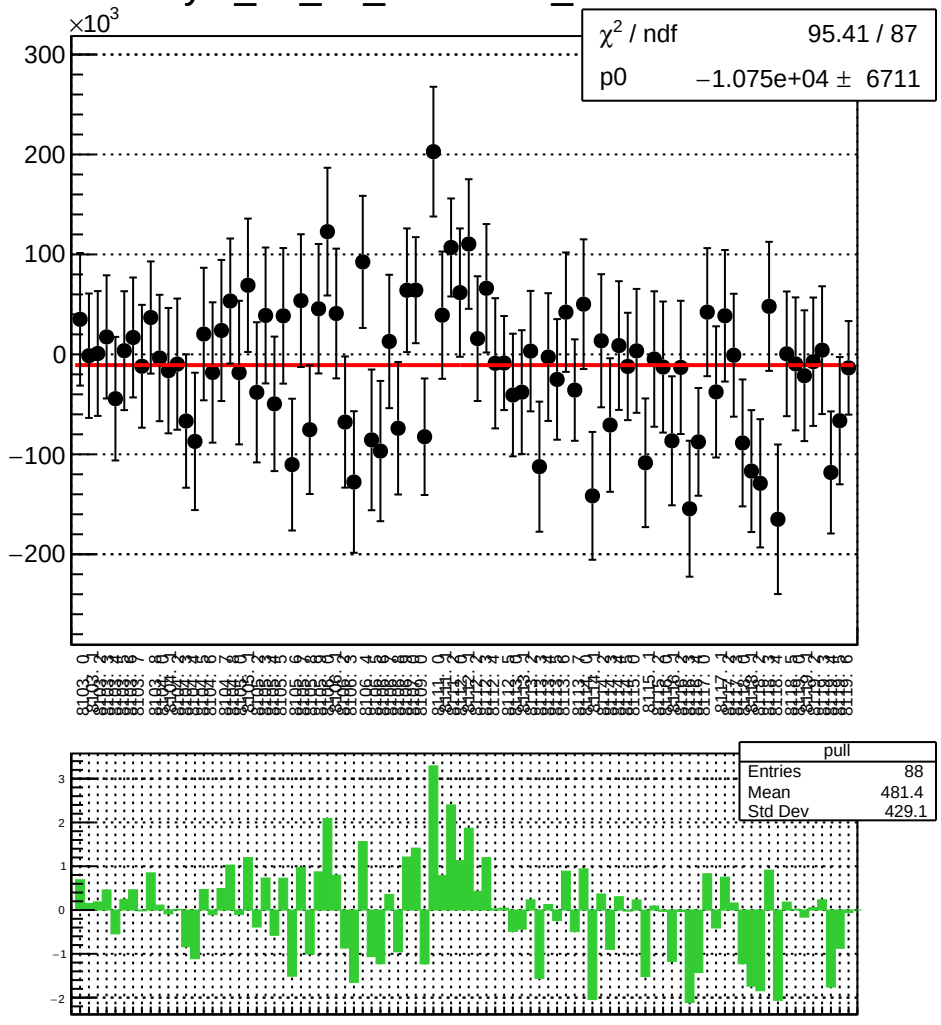

pull1D
Entries 88
Mean −0.007575
Std Dev 1.039
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

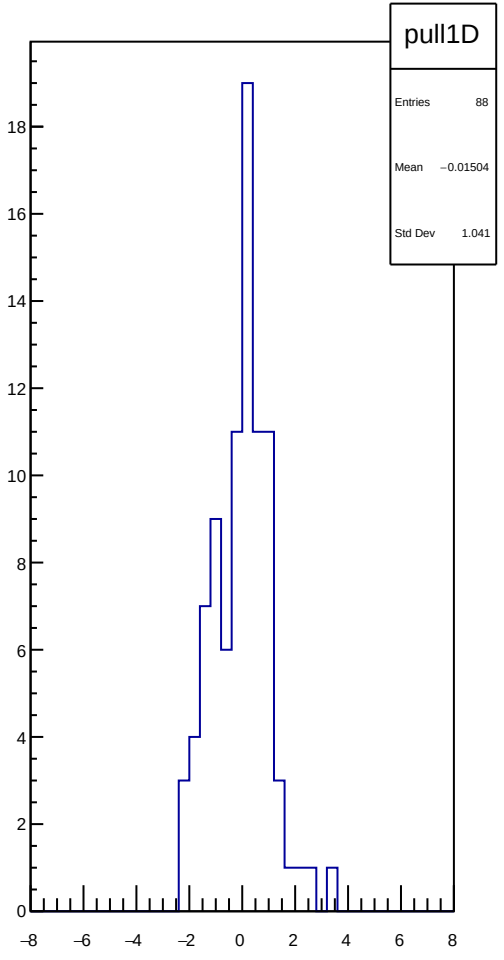

asym_atr_avg_rms vs run
χ² / ndf 4305 / 87
p0 6009 ± 4.626
8000
7500
7000
6500
6000
5500

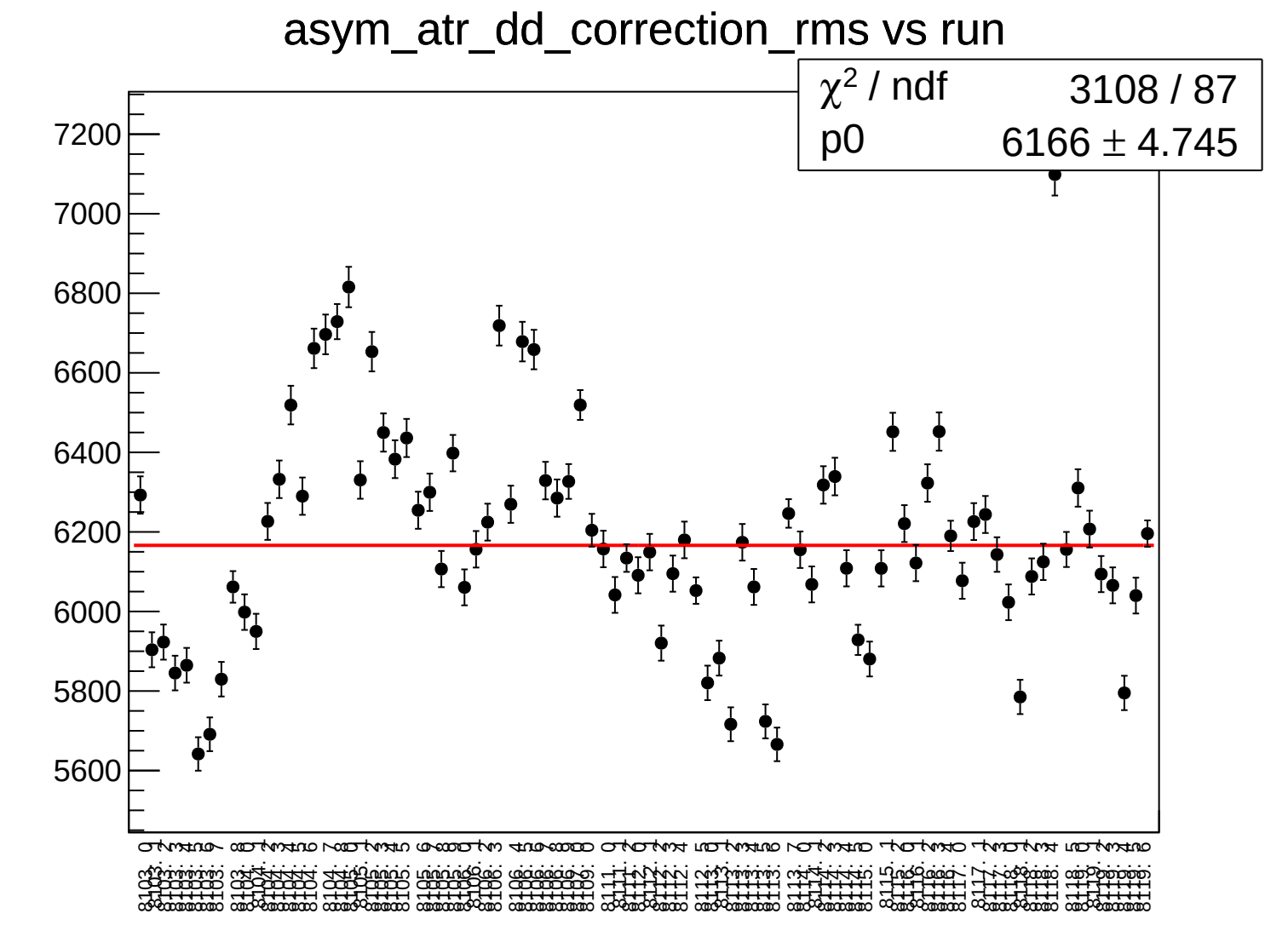

reg_asym_atr_dd_mean vs run
×10^3
χ² / ndf 89.35 / 87
p0 −1453 ± 1955
pull
Entries 88
Mean −512.8
Std Dev 560.4

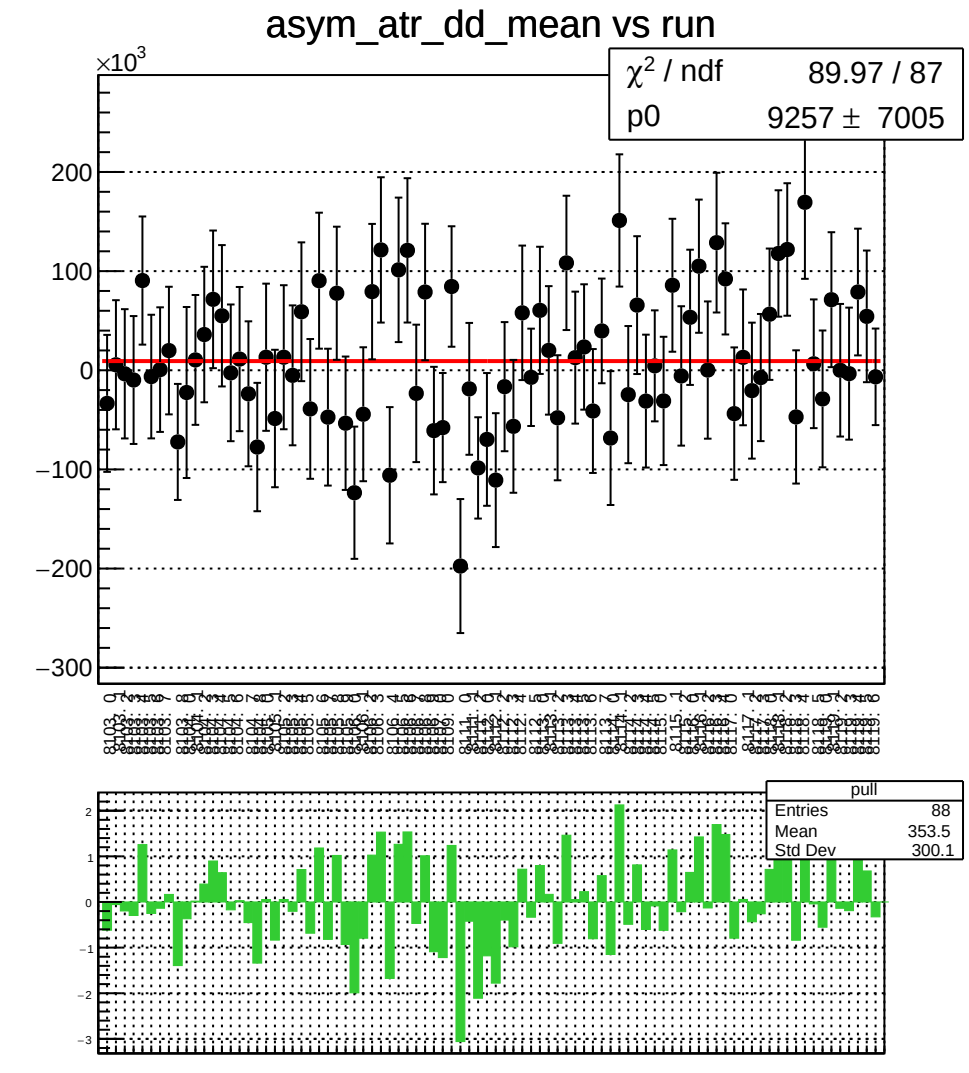

pull1D
Entries 88
Mean 0.008281
Std Dev 1.008

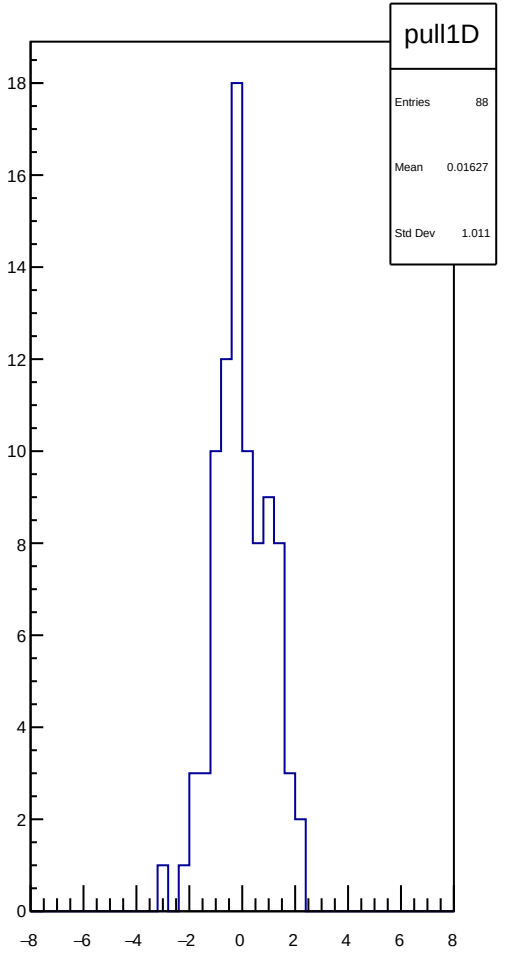

reg_asym_atr_dd_rms vs run
χ^2 / ndf 8505 / 87
p0 1794 ± 1.382
5500
5000
4500
4000
3500
3000
2500
2000
1500

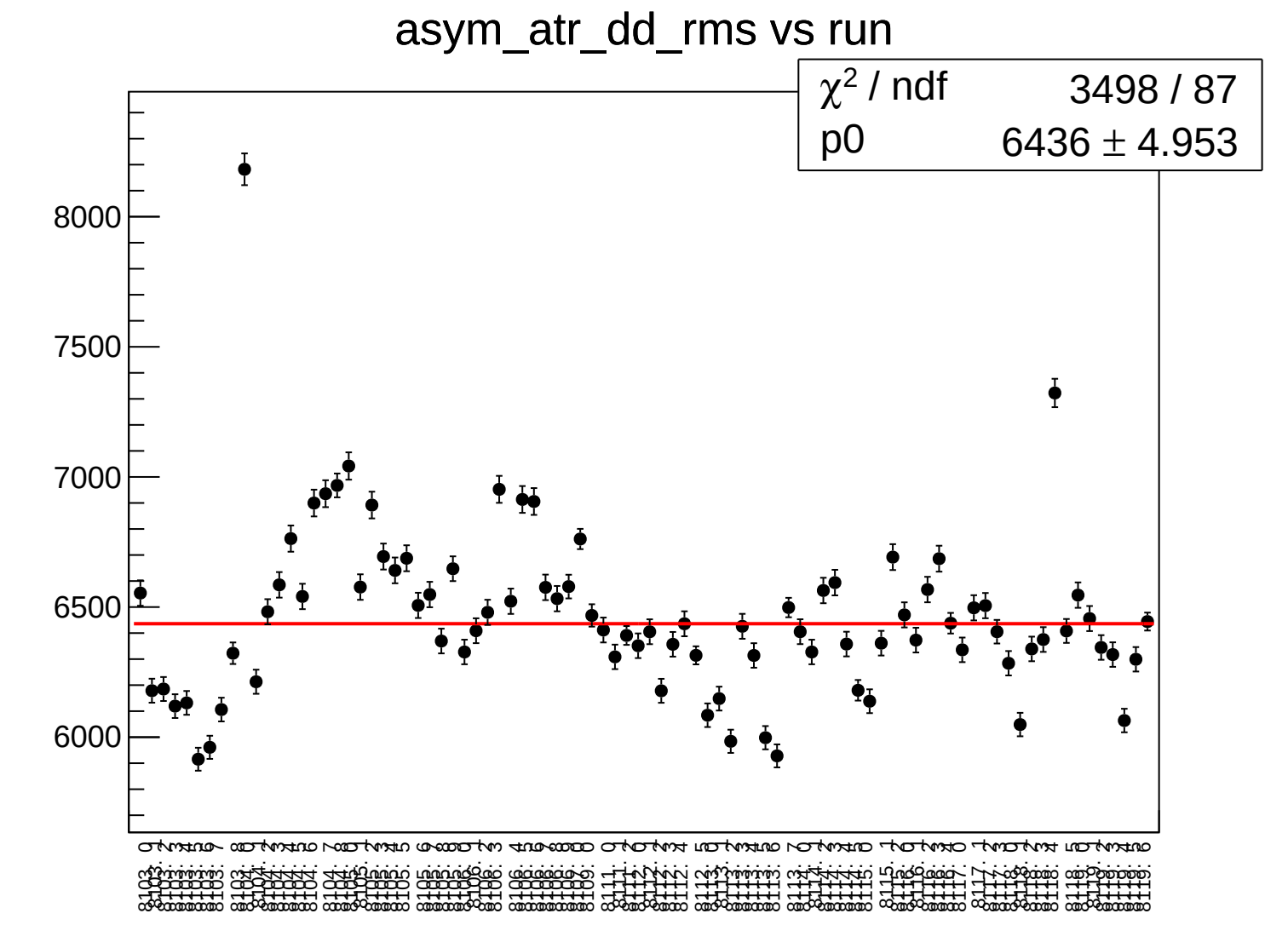

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 95.41 / 87
p0 −1.075e+04 ± 6711
pull
Entries 88
Mean 481.4
Std Dev 429.1

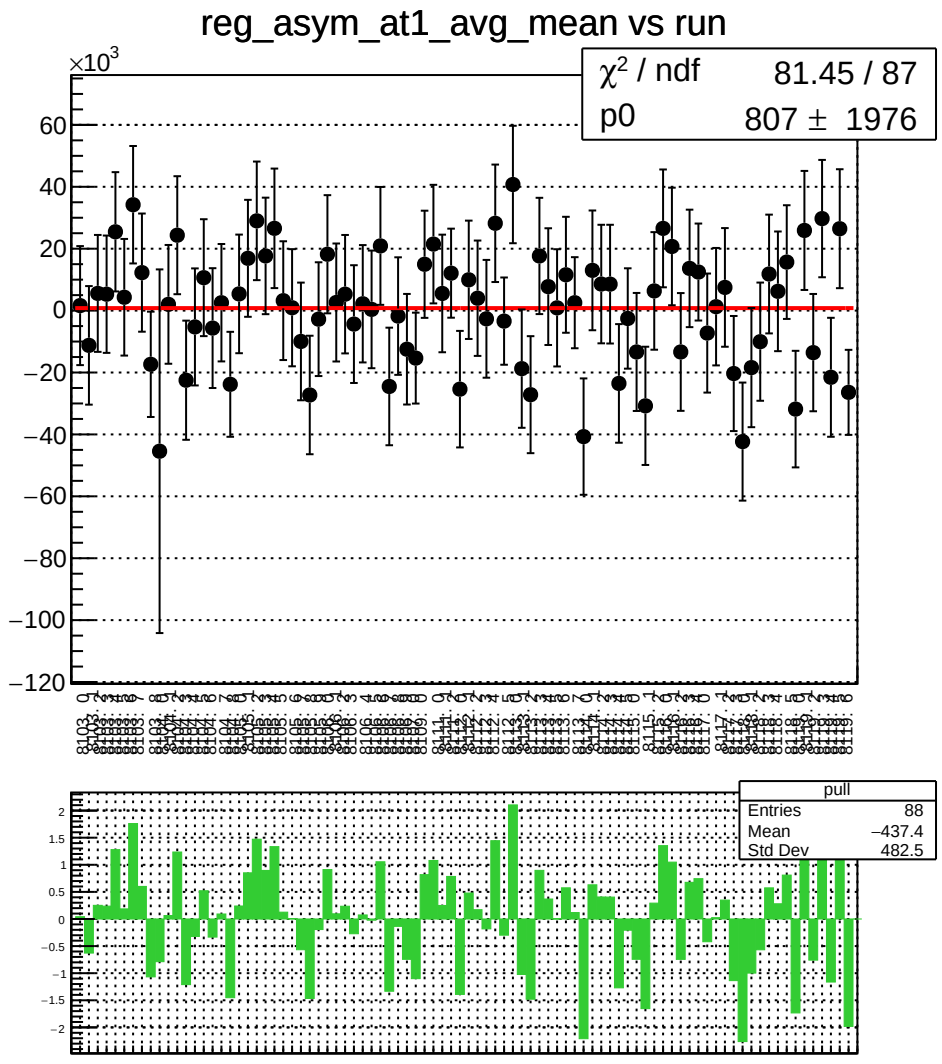

pull1D
Entries 88
Mean −0.01504
Std Dev 1.041

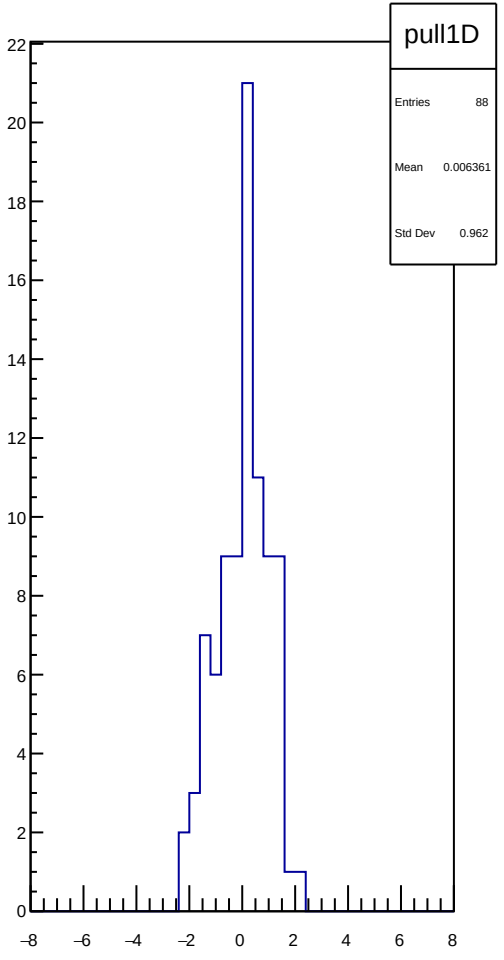

asym_atr_dd_correction_rms vs run
χ² / ndf 3108 / 87
p0 6166 ± 4.745
7200
7000
6800
6600
6400
6200
6000
5800
5600

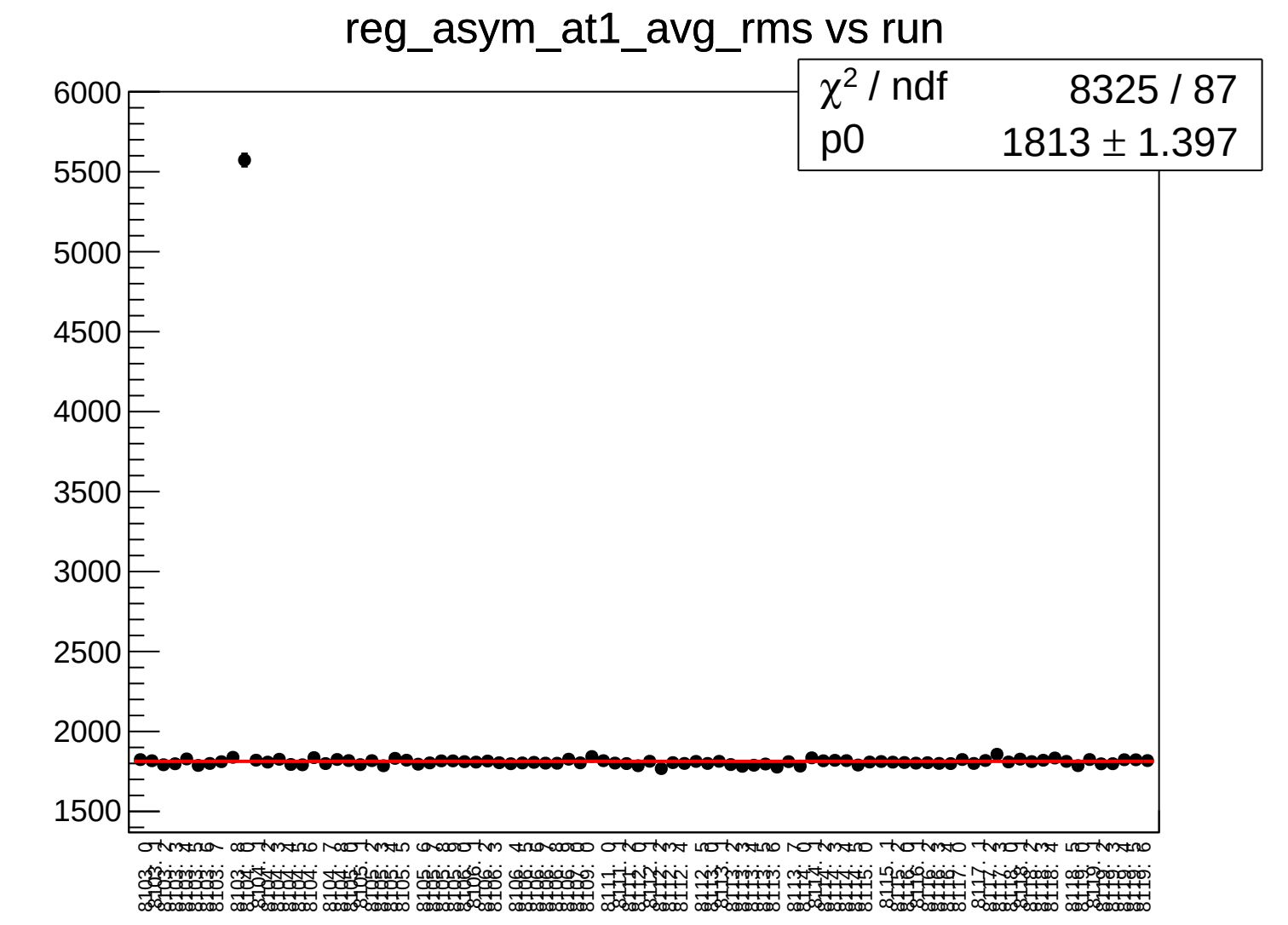

asym_atr_dd_mean vs run
×10^3
χ² / ndf 89.97 / 87
p0 9257 ± 7005
200
100
0
−100
−200
−300
pull
Entries 88
Mean 353.5
Std Dev 300.1
2
1
0
−1
−2
−3

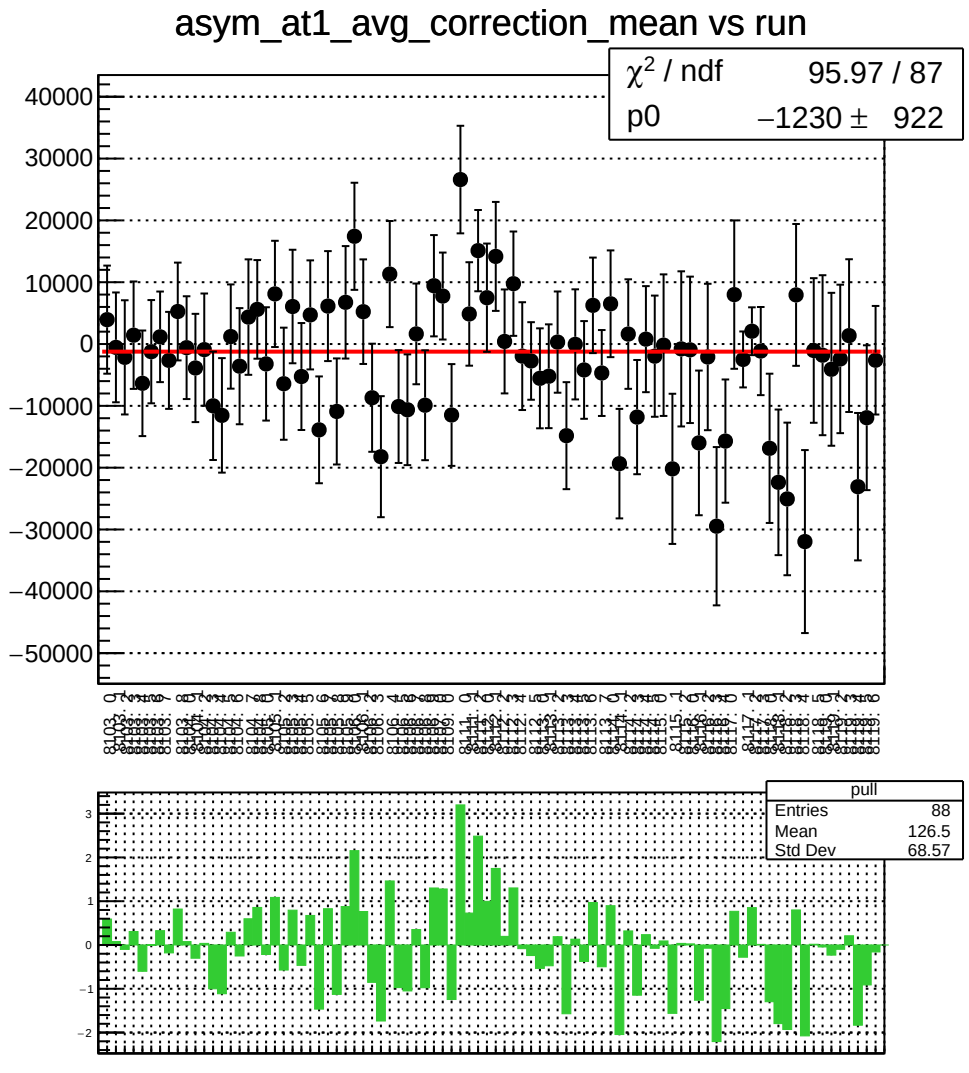

pull1D
Entries 88
Mean 0.01627
Std Dev 1.011
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

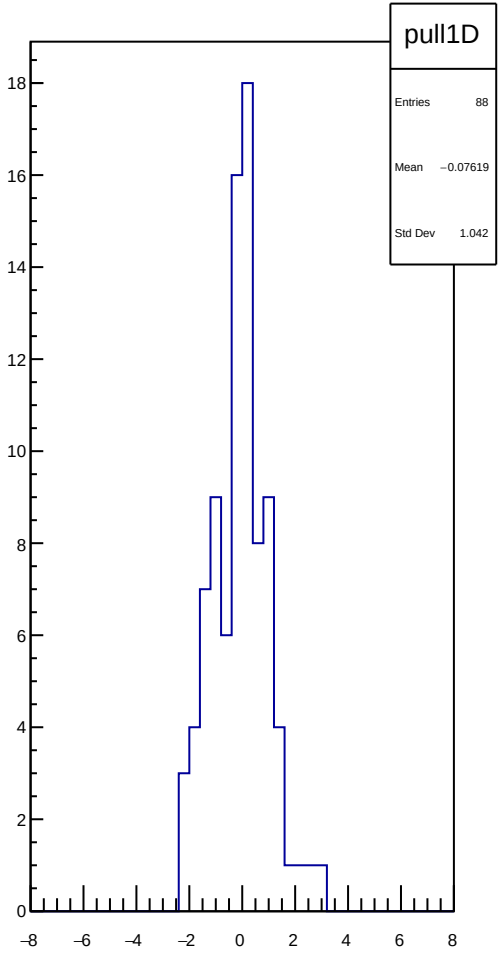

asym_atr_dd_rms vs run
χ^2 / ndf 3498 / 87
p0 6436 ± 4.953
8000
7500
7000
6500
6000

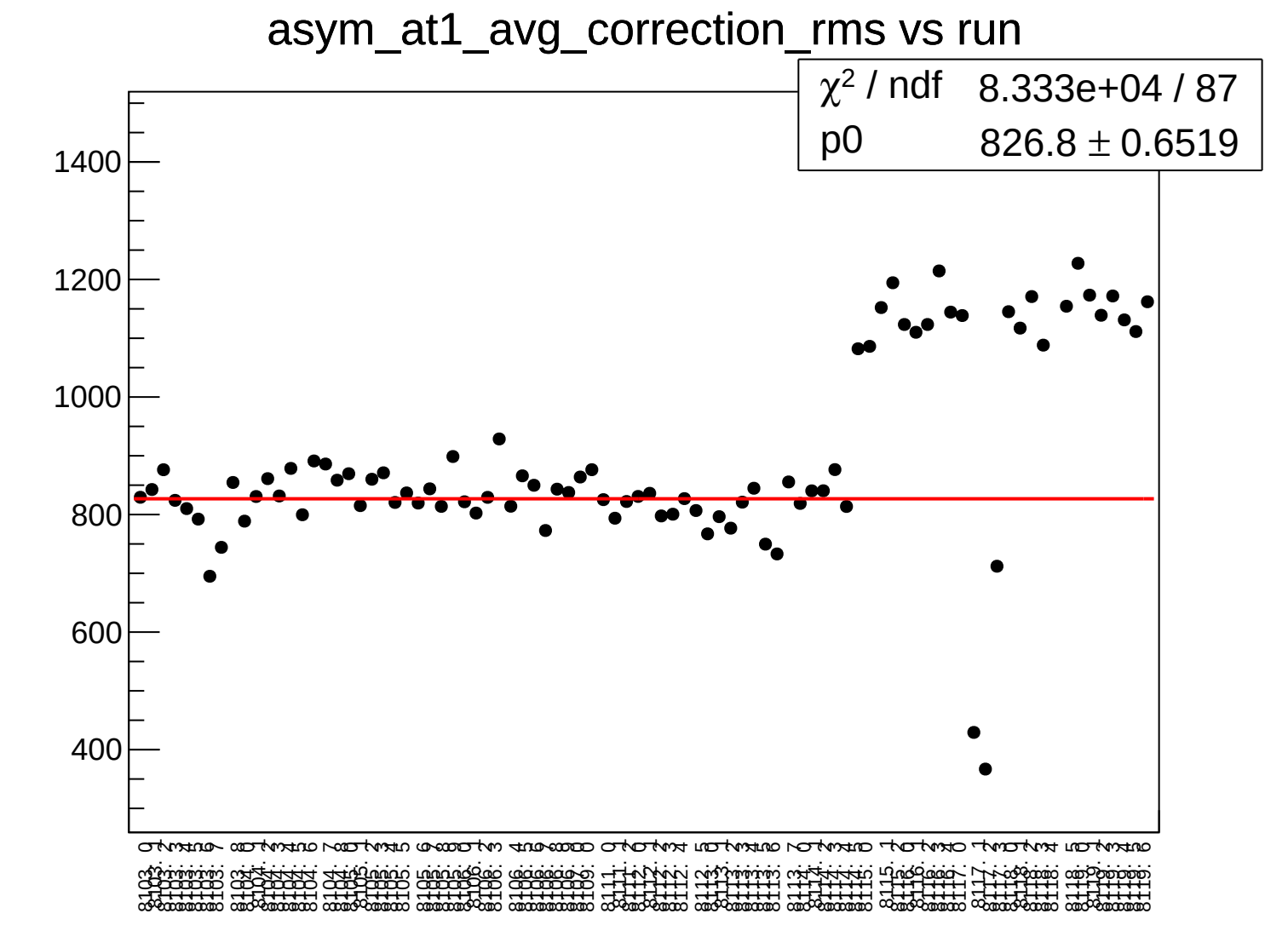

reg_asym_at1_avg_mean vs run
×10^3
χ² / ndf 81.45 / 87
p0 807 ± 1976
pull
Entries 88
Mean −437.4
Std Dev 482.5

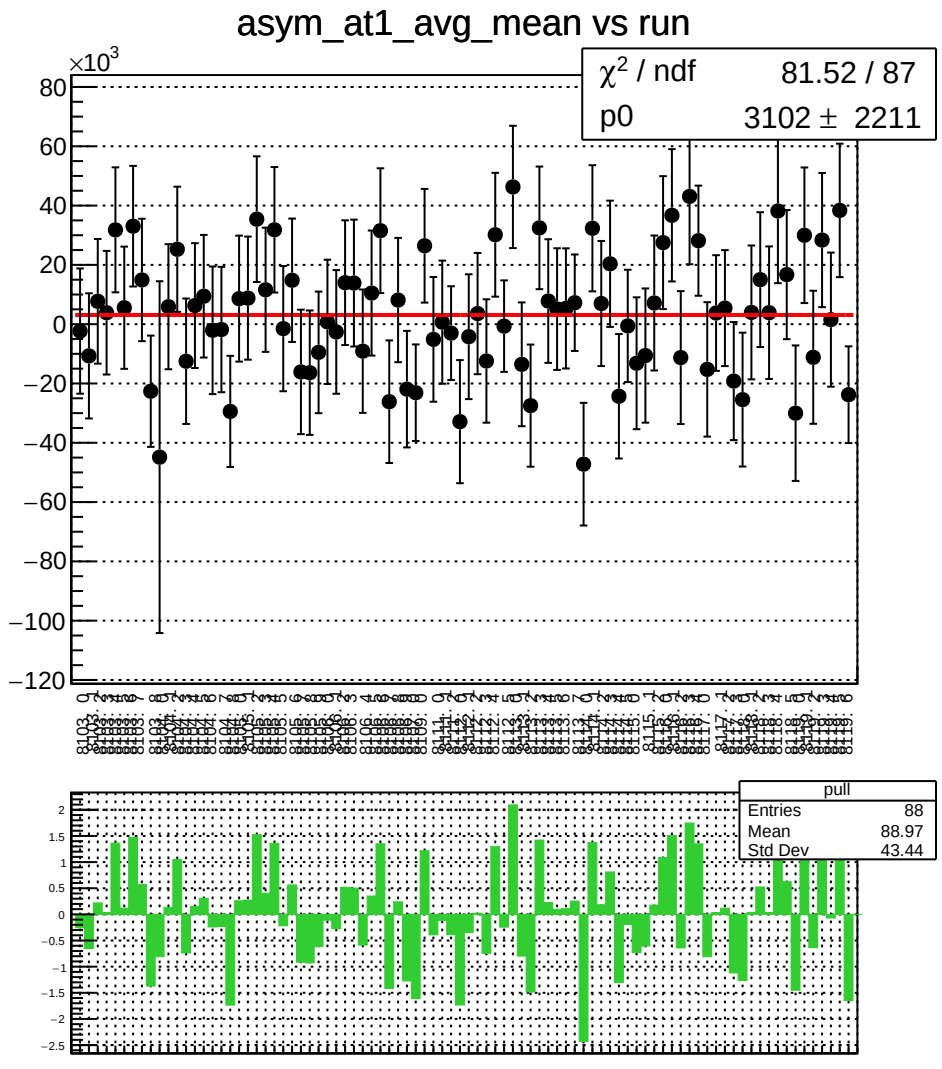

pull1D
Entries 88
Mean 0.006361
Std Dev 0.962

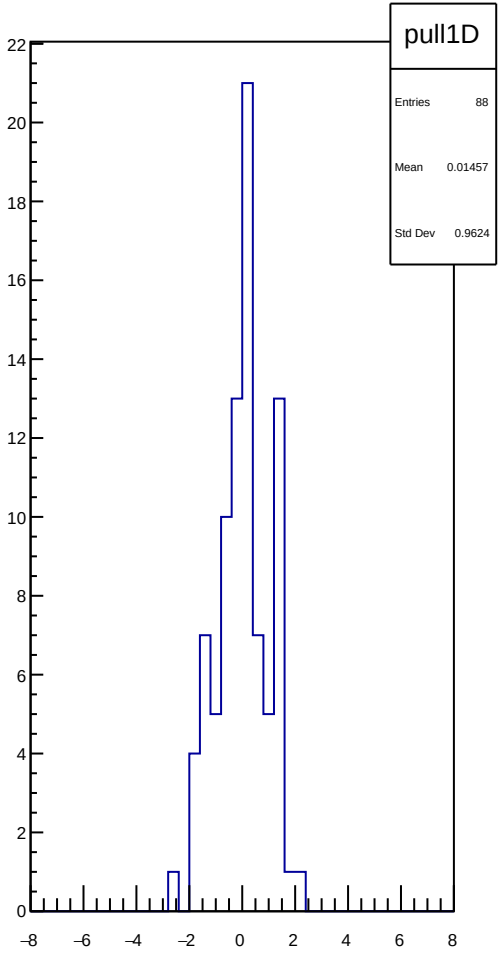

reg_asym_at1_avg_rms vs run
χ^2 / ndf 8325 / 87
p0 1813 ± 1.397
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

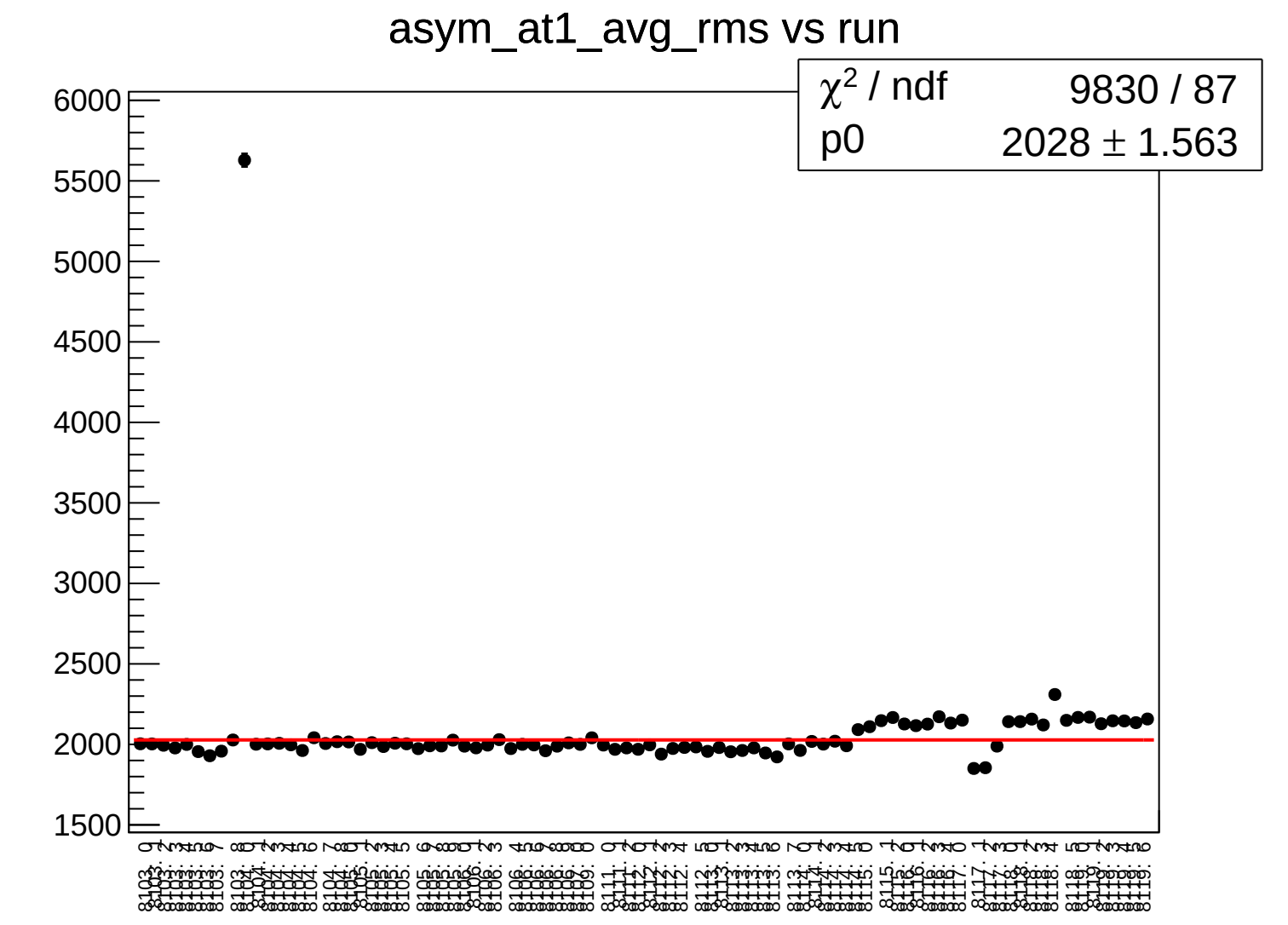

asym_at1_avg_correction_mean vs run
χ² / ndf 95.97 / 87
p0 −1230 ± 922
pull
Entries 88
Mean 126.5
Std Dev 68.57

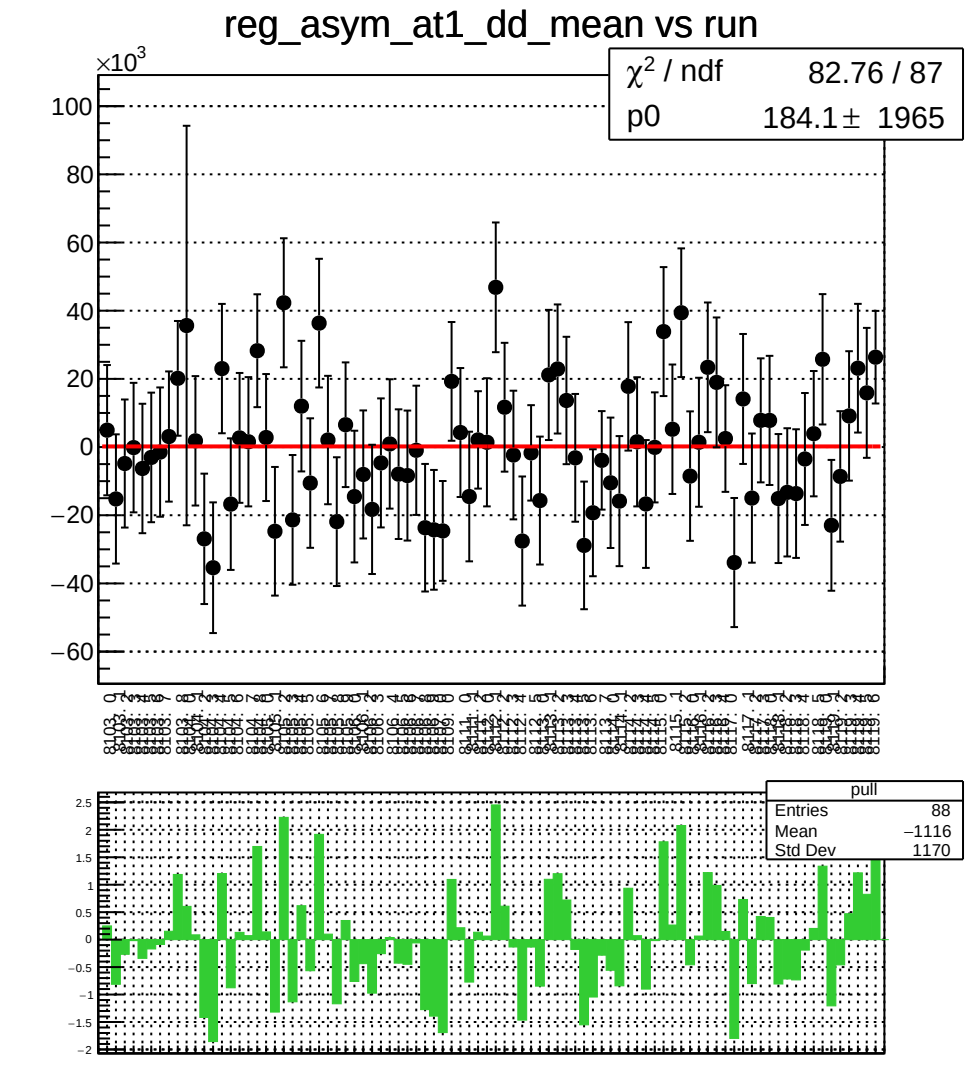

pull1D
Entries 88
Mean −0.07619
Std Dev 1.042

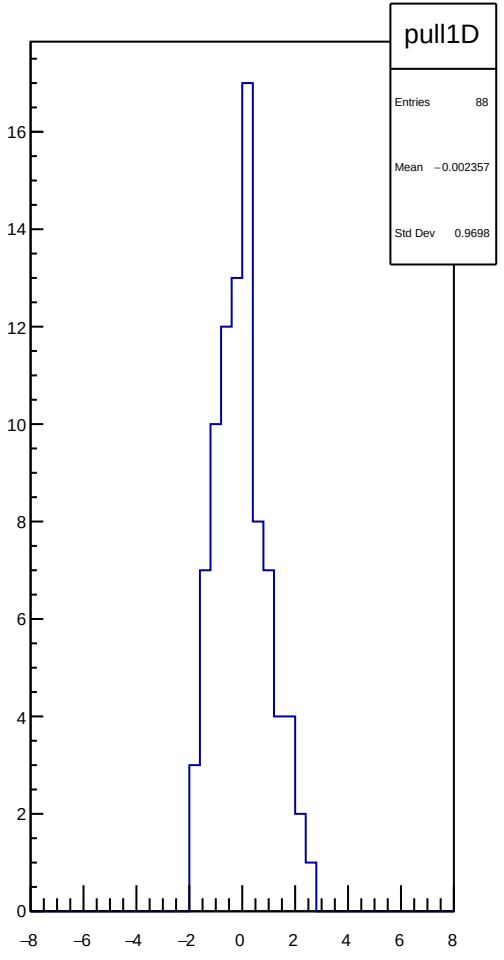

asym_at1_avg_correction_rms vs run
χ² / ndf 8.333e+04 / 87
p0 826.8 ± 0.6519
1400
1200
1000
800
600
400

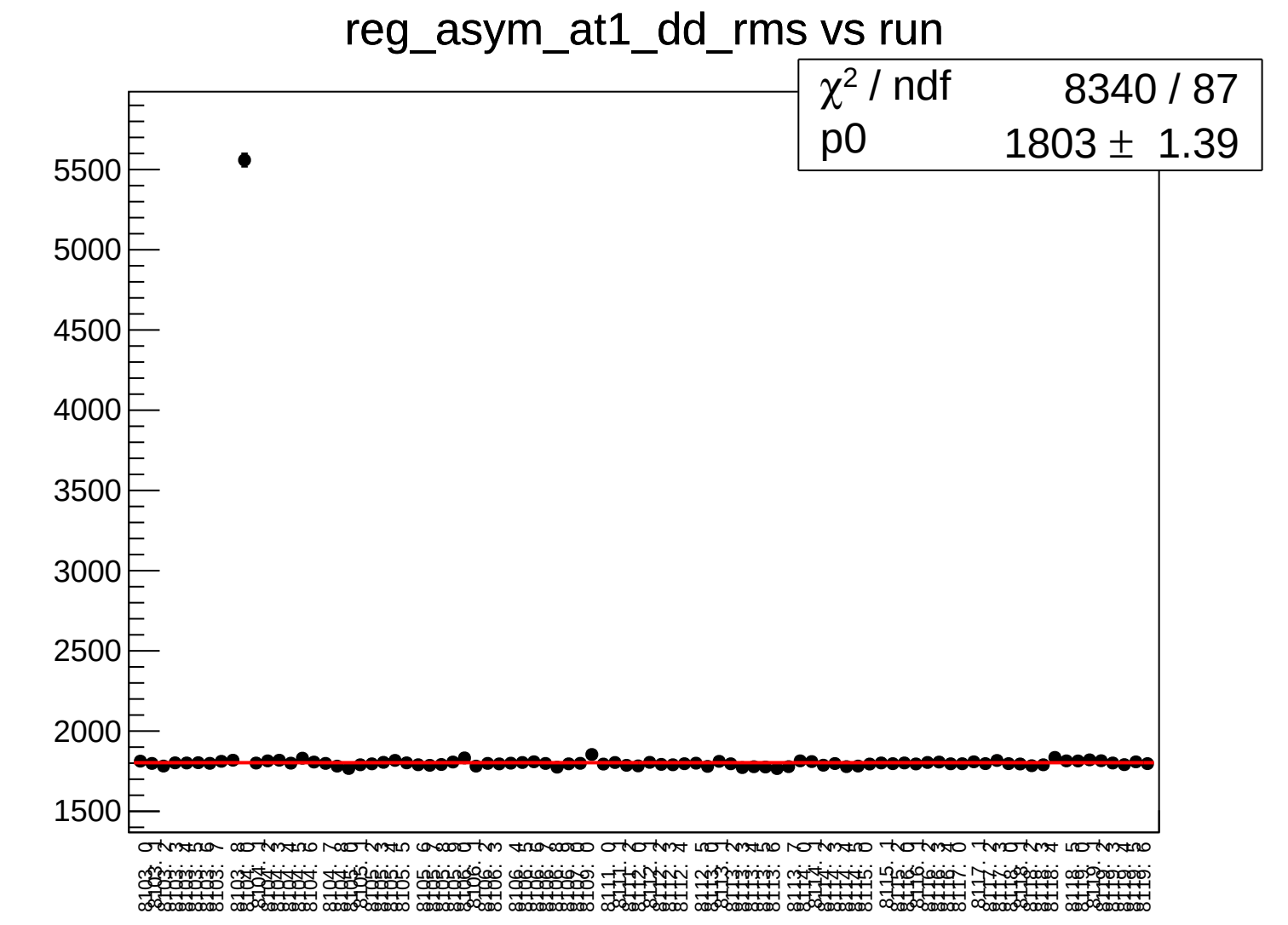

asym_at1_avg_mean vs run
×10^3
χ² / ndf 81.52 / 87
p0 3102 ± 2211
pull
Entries 88
Mean 88.97
Std Dev 43.44

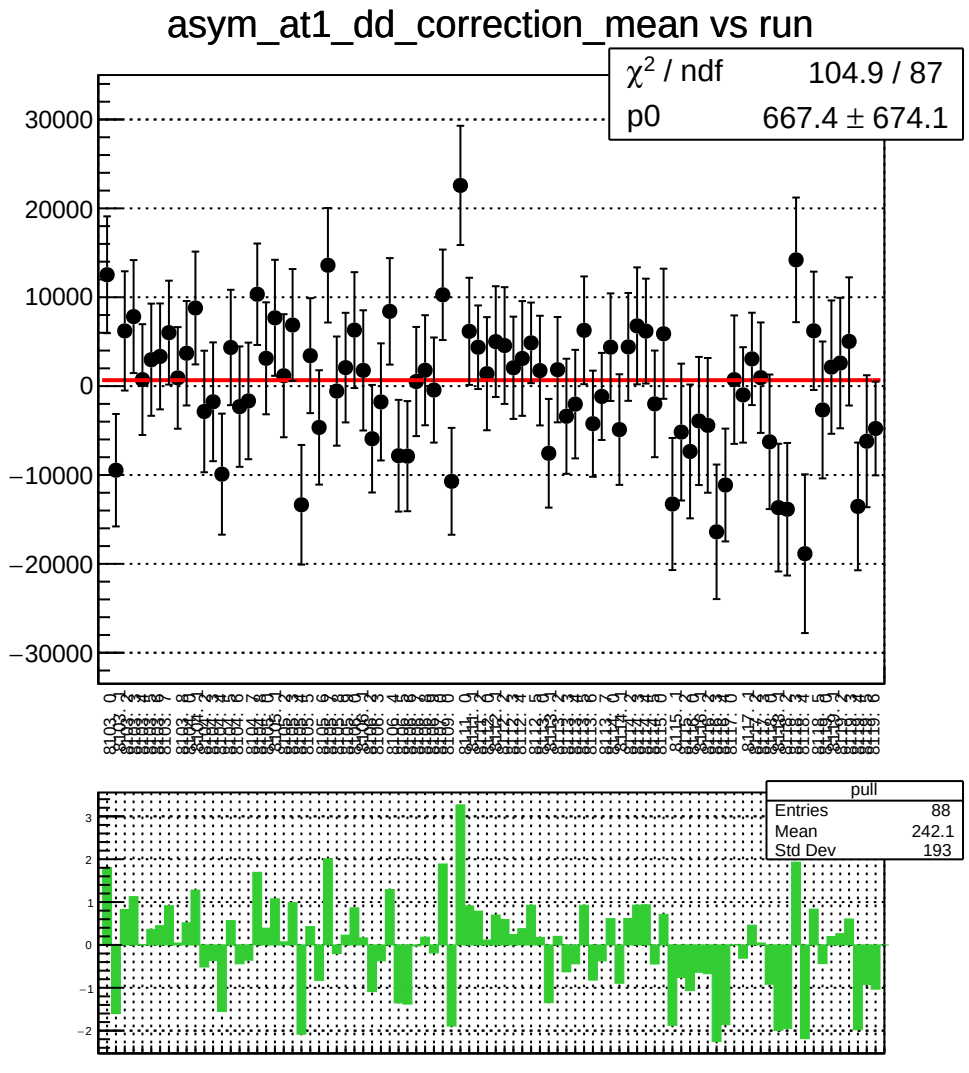

pull1D
Entries 88
Mean 0.01457
Std Dev 0.9624

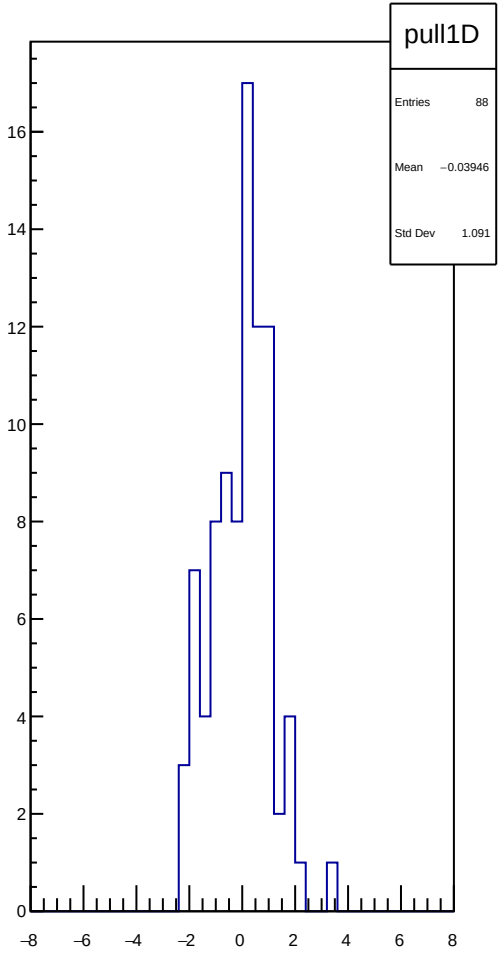

asym_at1_avg_rms vs run
χ^2 / ndf 9830 / 87
p0 2028 ± 1.563
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

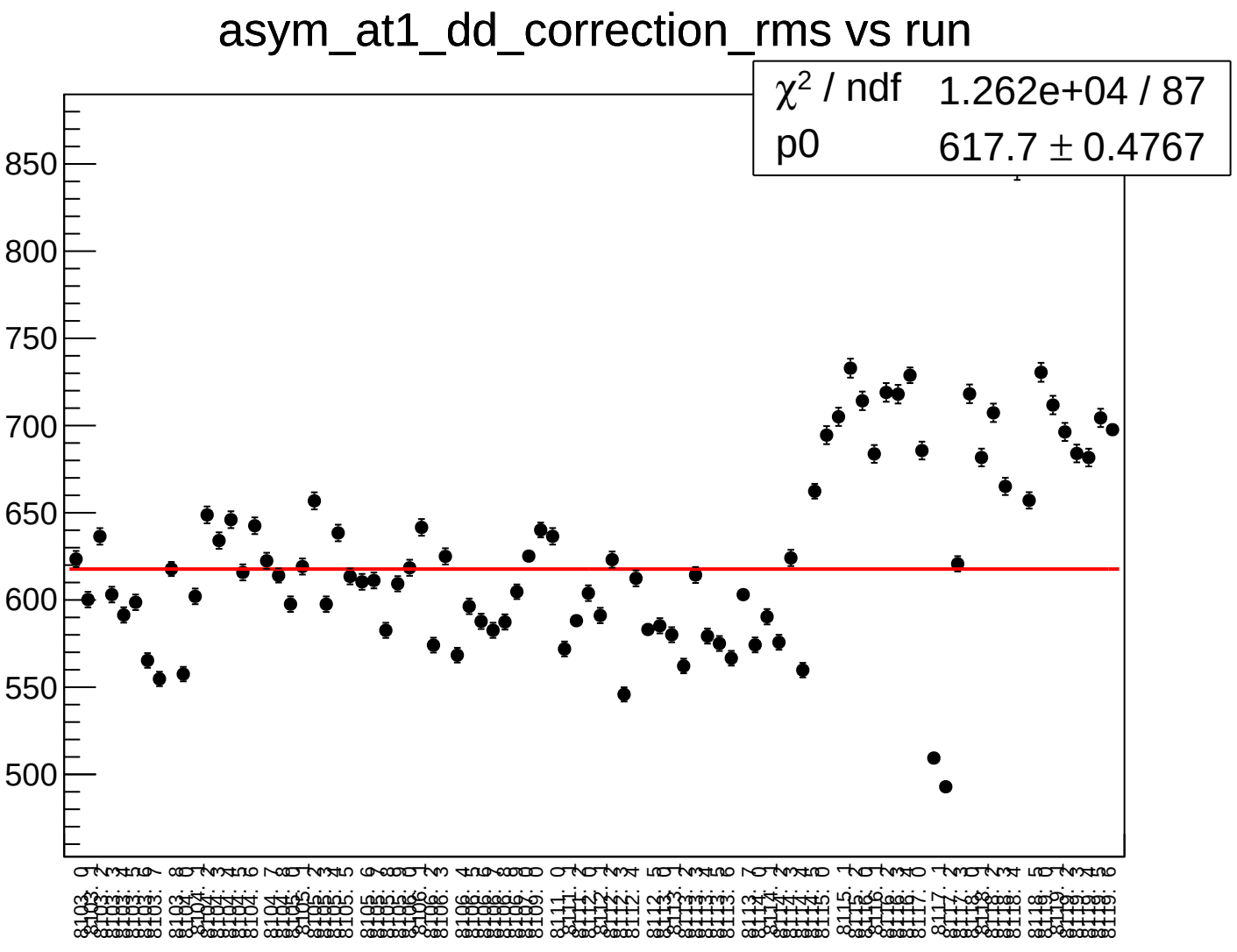

reg_asym_at1_dd_mean vs run
×10^3
χ² / ndf 82.76 / 87
p0 184.1 ± 1965
pull
Entries 88
Mean −1116
Std Dev 1170

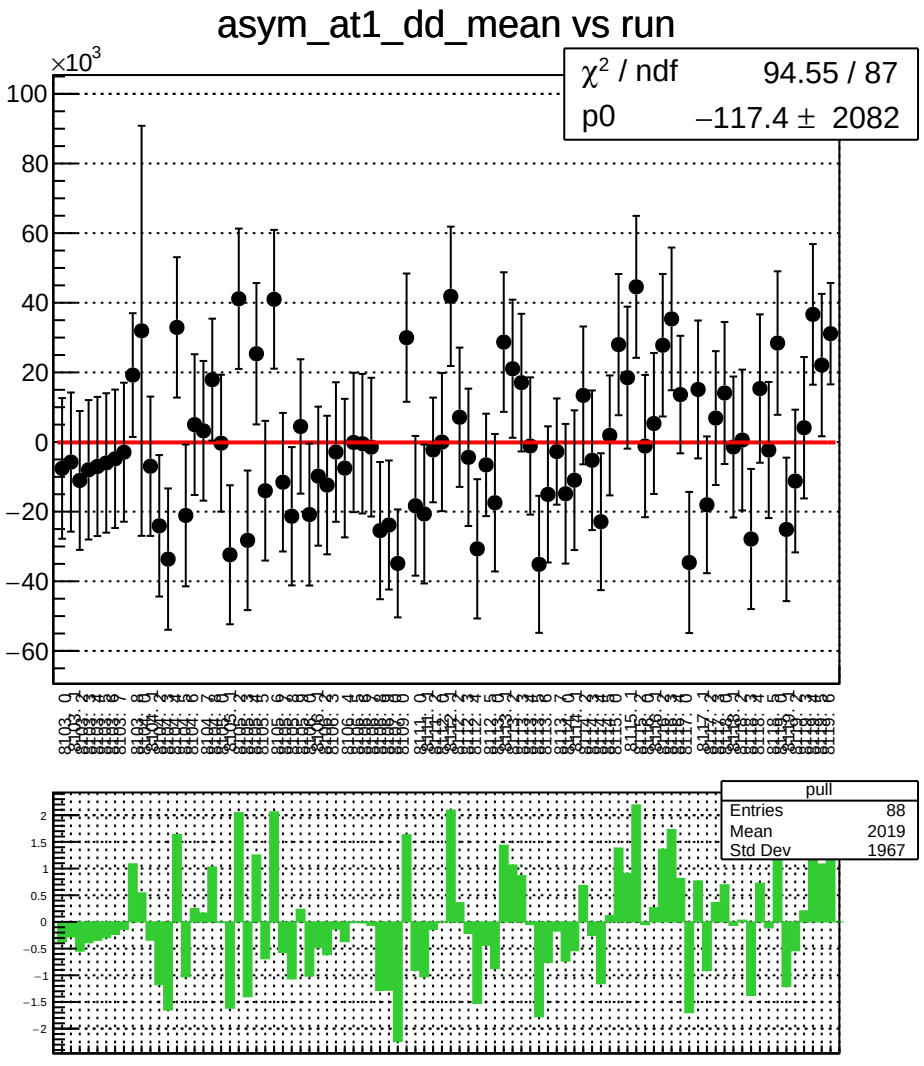

pull1D
Entries 88
Mean −0.002357
Std Dev 0.9698

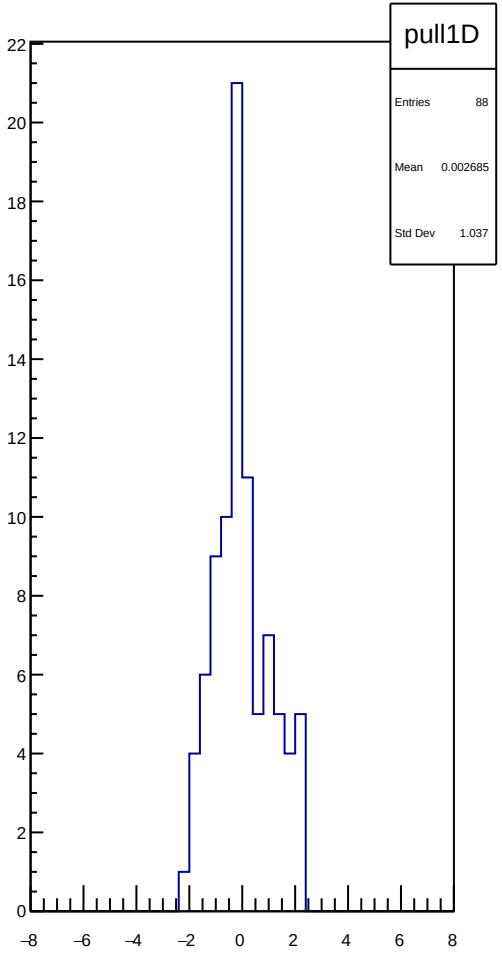

reg_asym_at1_dd_rms vs run
χ^2 / ndf 8340 / 87
p0 1803 ± 1.39
5500
5000
4500
4000
3500
3000
2500
2000
1500

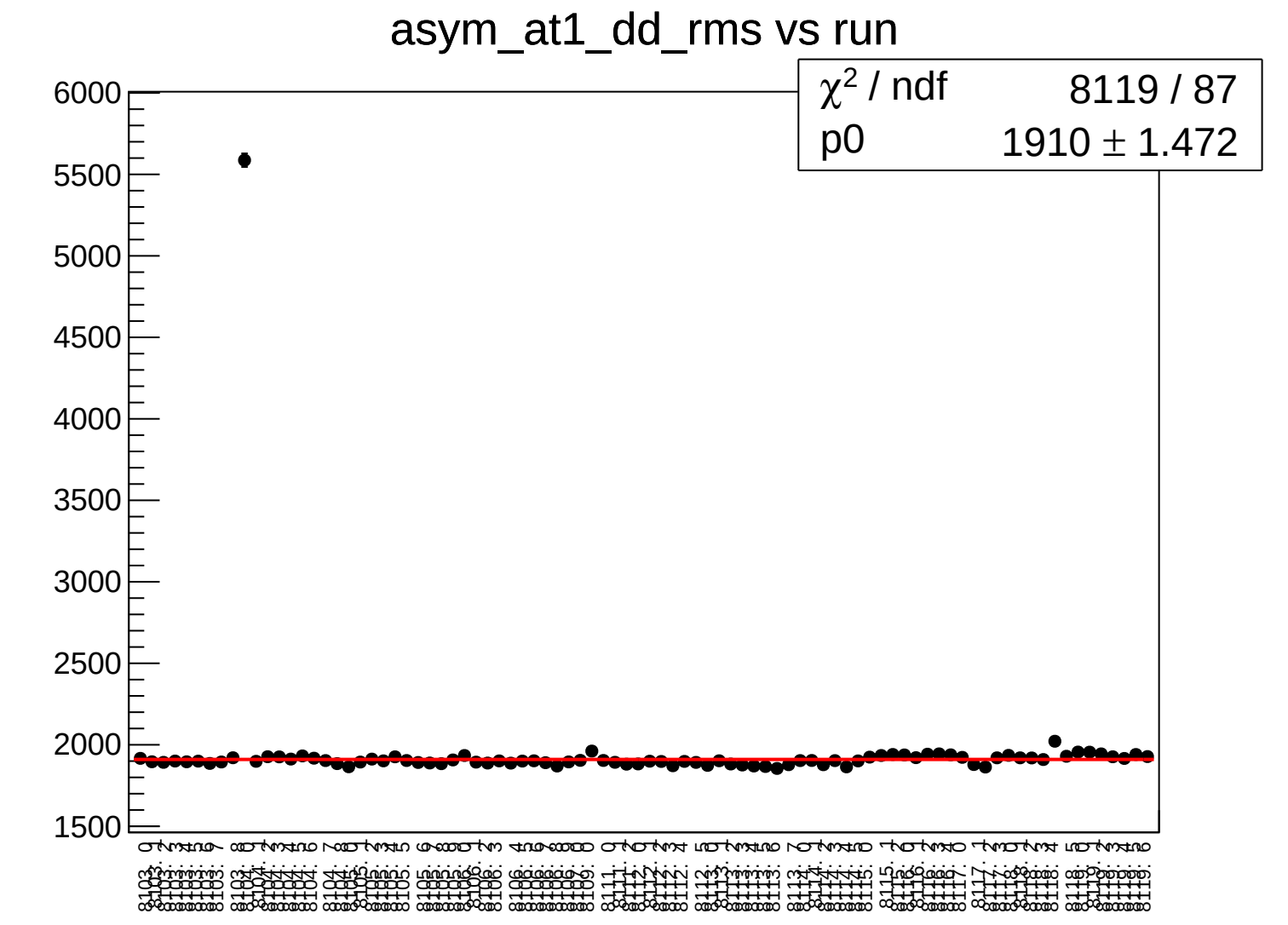

asym_at1_dd_correction_mean vs run
χ² / ndf 104.9 / 87
p0 667.4 ± 674.1
pull
Entries 88
Mean 242.1
Std Dev 193

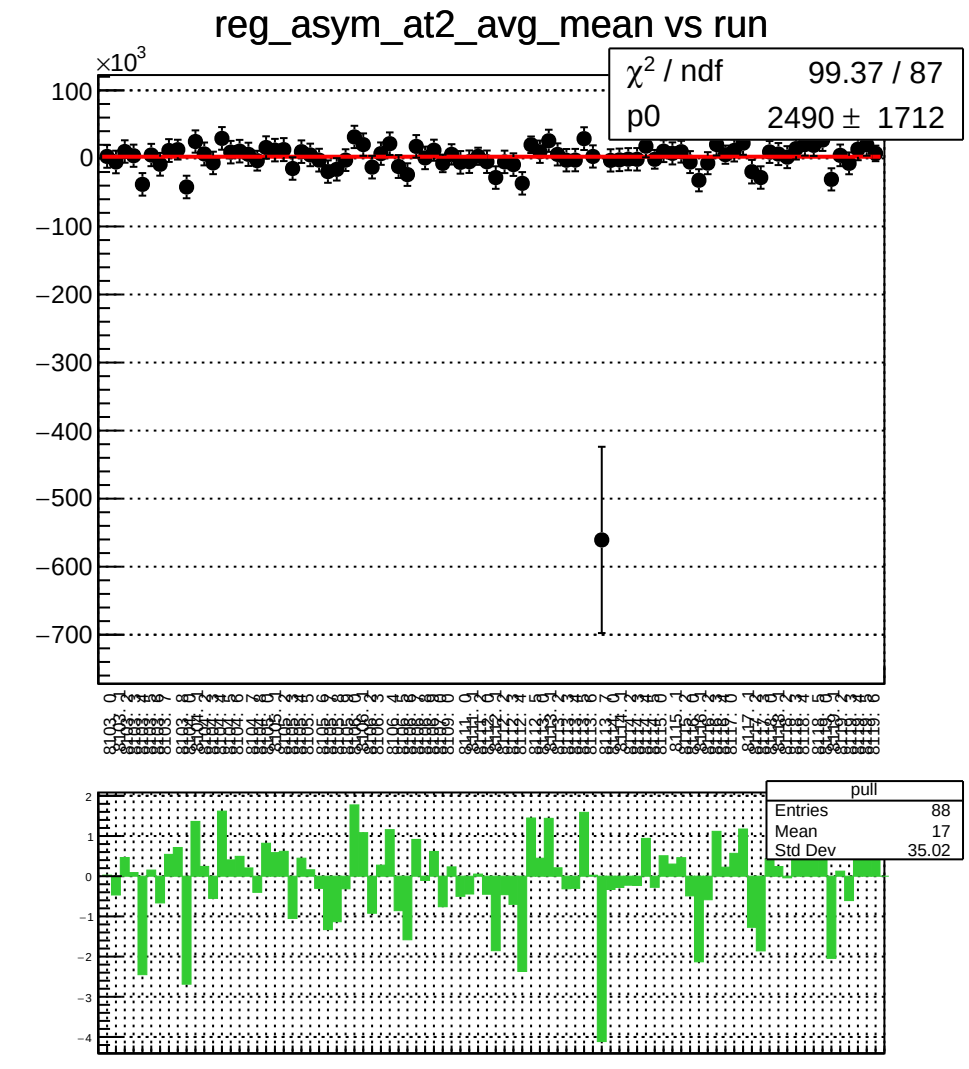

pull1D
Entries 88
Mean −0.03946
Std Dev 1.091

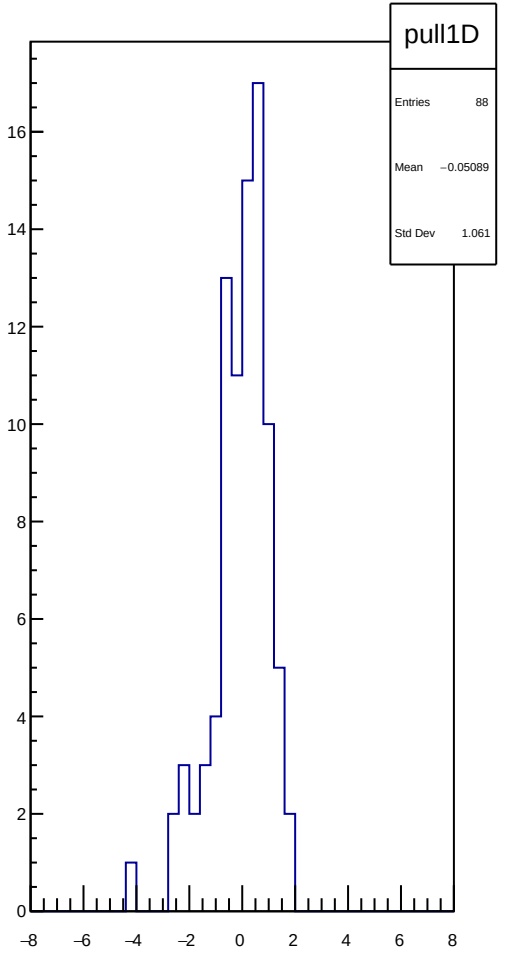

asym_at1_dd_correction_rms vs run
χ² / ndf 1.262e+04 / 87
p0 617.7 ± 0.4767
850
800
750
700
650
600
550
500

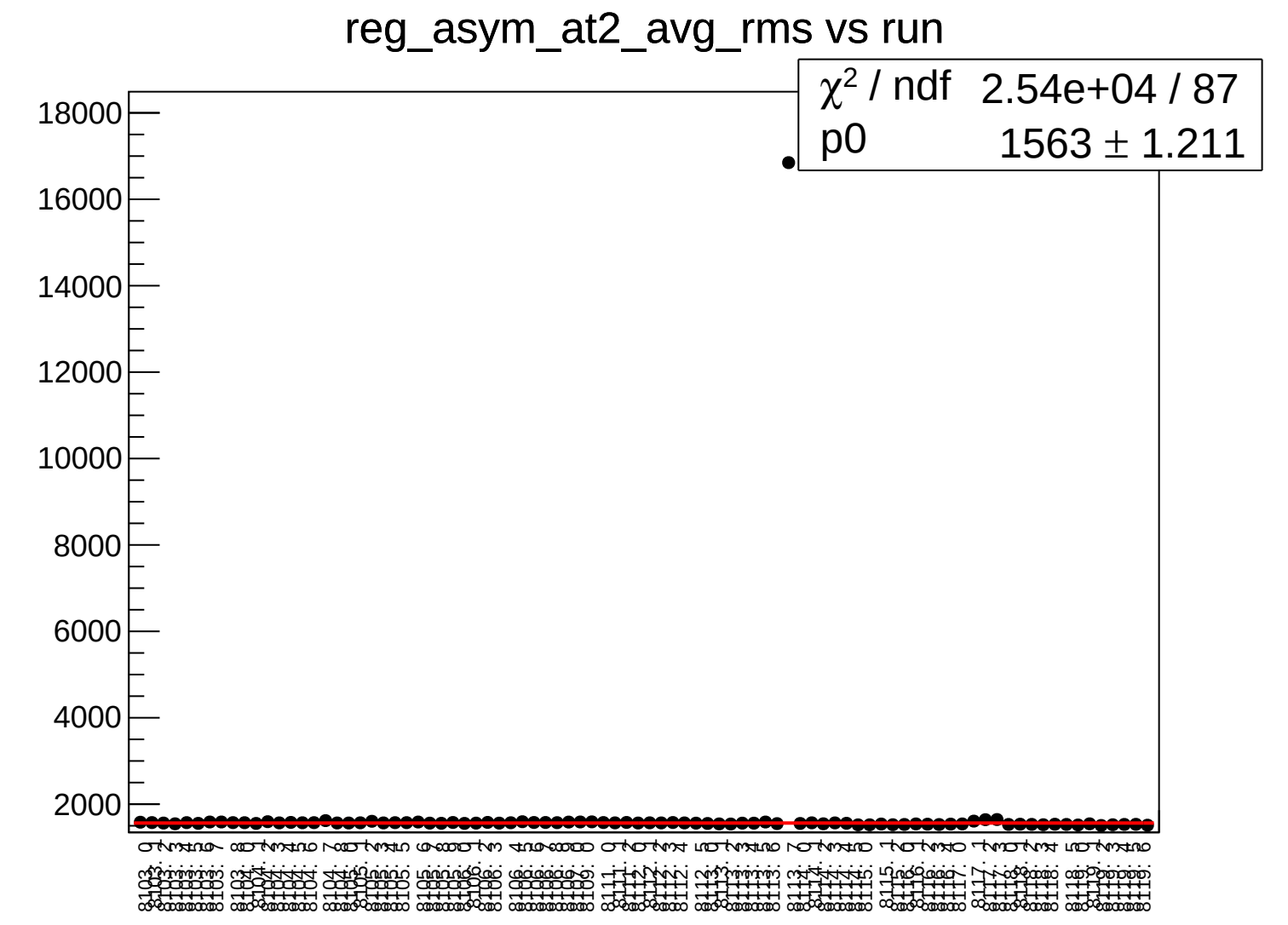

asym_at1_dd_mean vs run
×10^3
χ² / ndf 94.55 / 87
p0 −117.4 ± 2082
pull
Entries 88
Mean 2019
Std Dev 1967

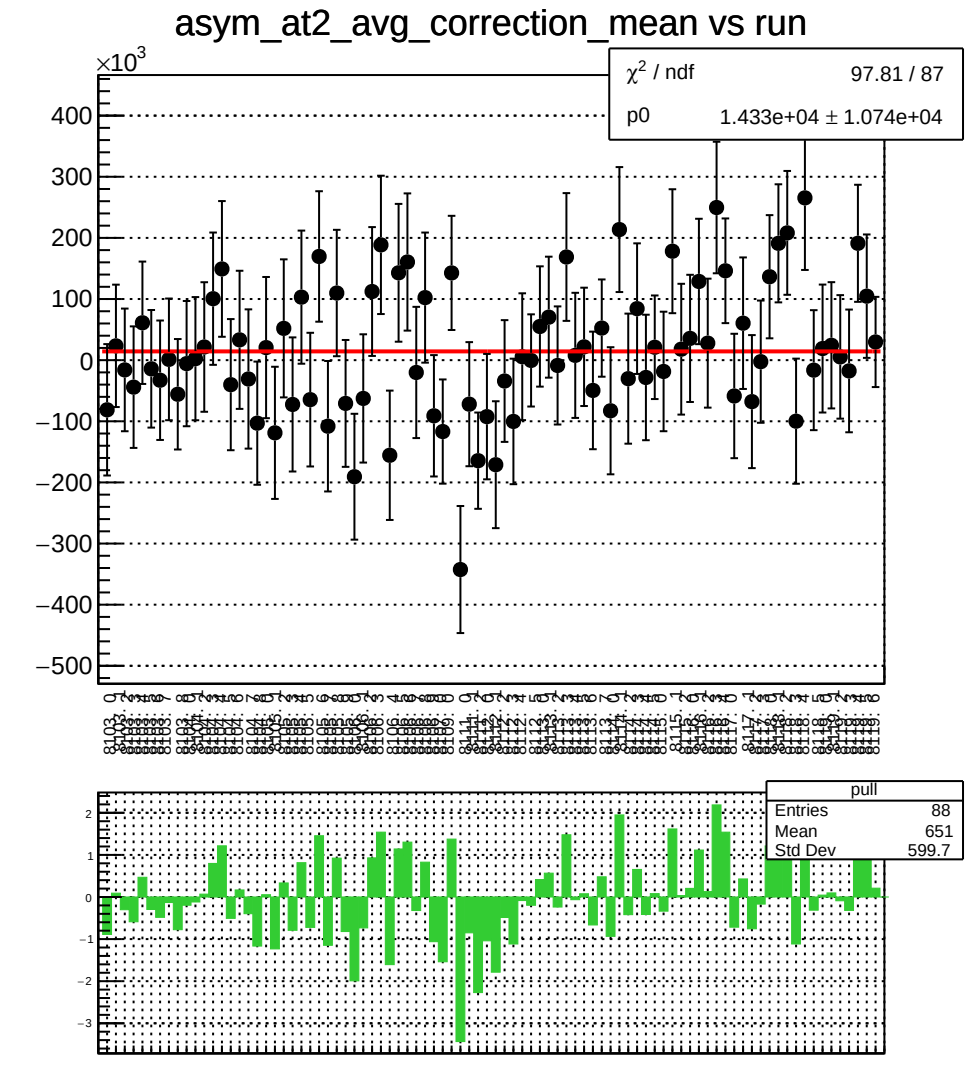

pull1D
Entries 88
Mean 0.002685
Std Dev 1.037

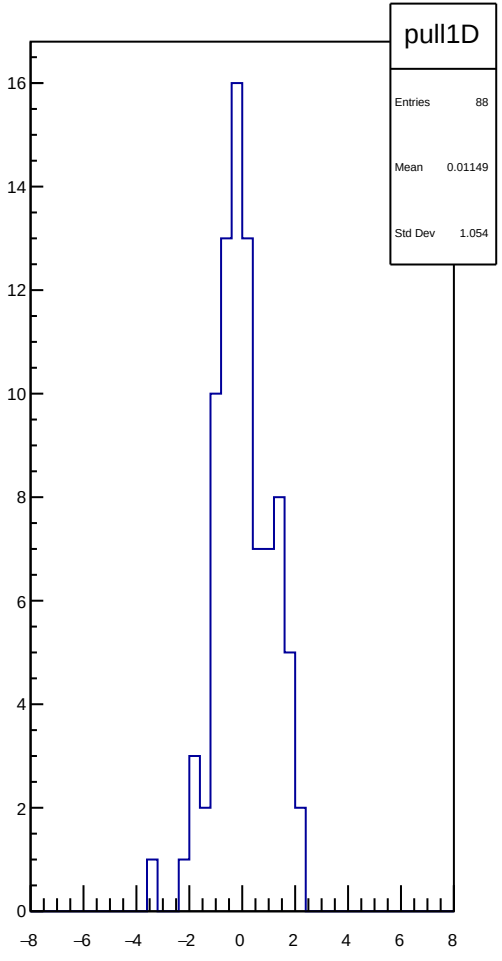

asym_at1_dd_rms vs run
χ^2 / ndf 8119 / 87
p0 1910 ± 1.472
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

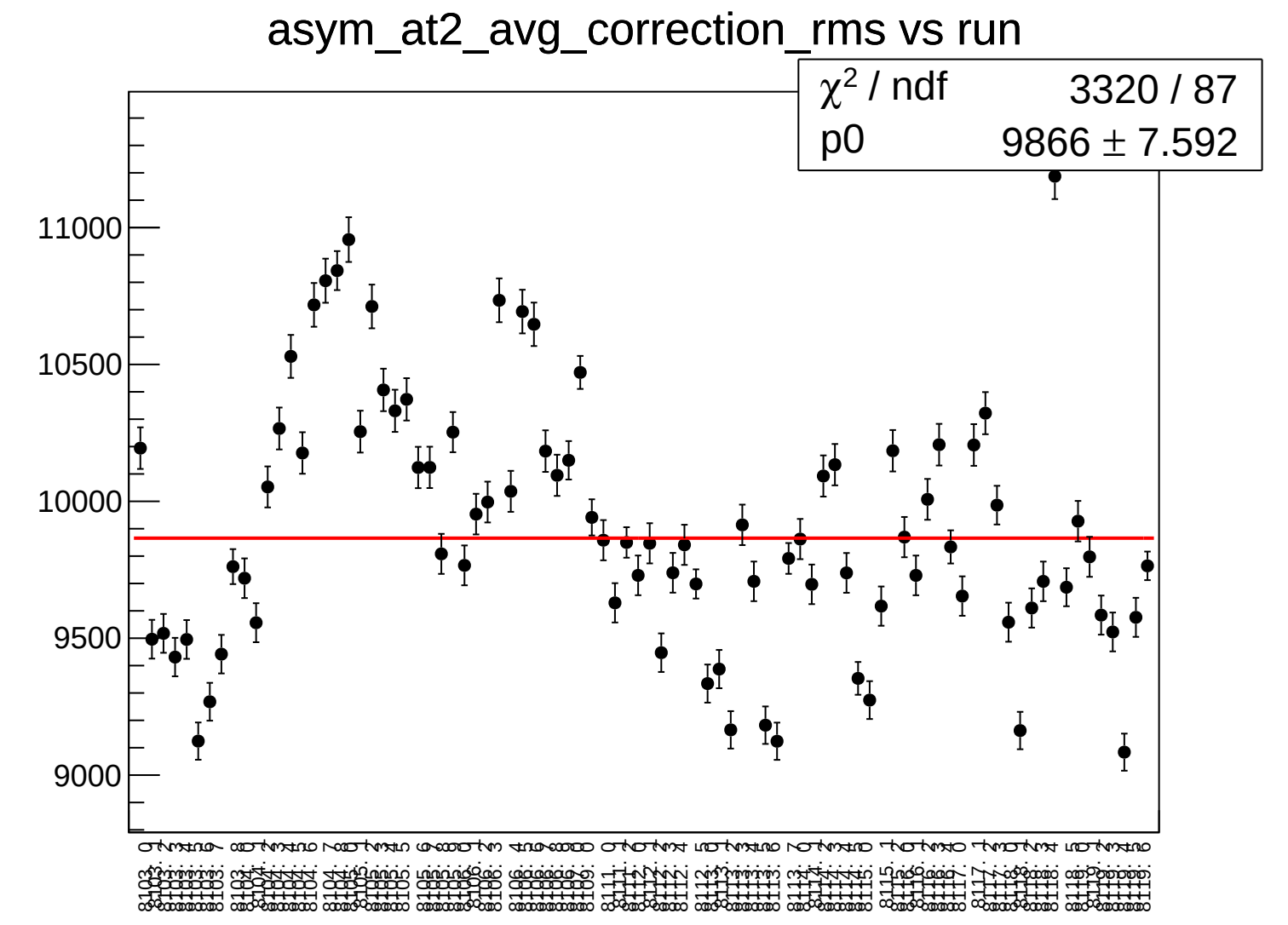

reg_asym_at2_avg_mean vs run
×10^3
χ² / ndf 99.37 / 87
p0 2490 ± 1712
100
0
−100
−200
−300
−400
−500
−600
−700
pull
Entries 88
Mean 17
Std Dev 35.02
2
1
0
−1
−2
−3
−4

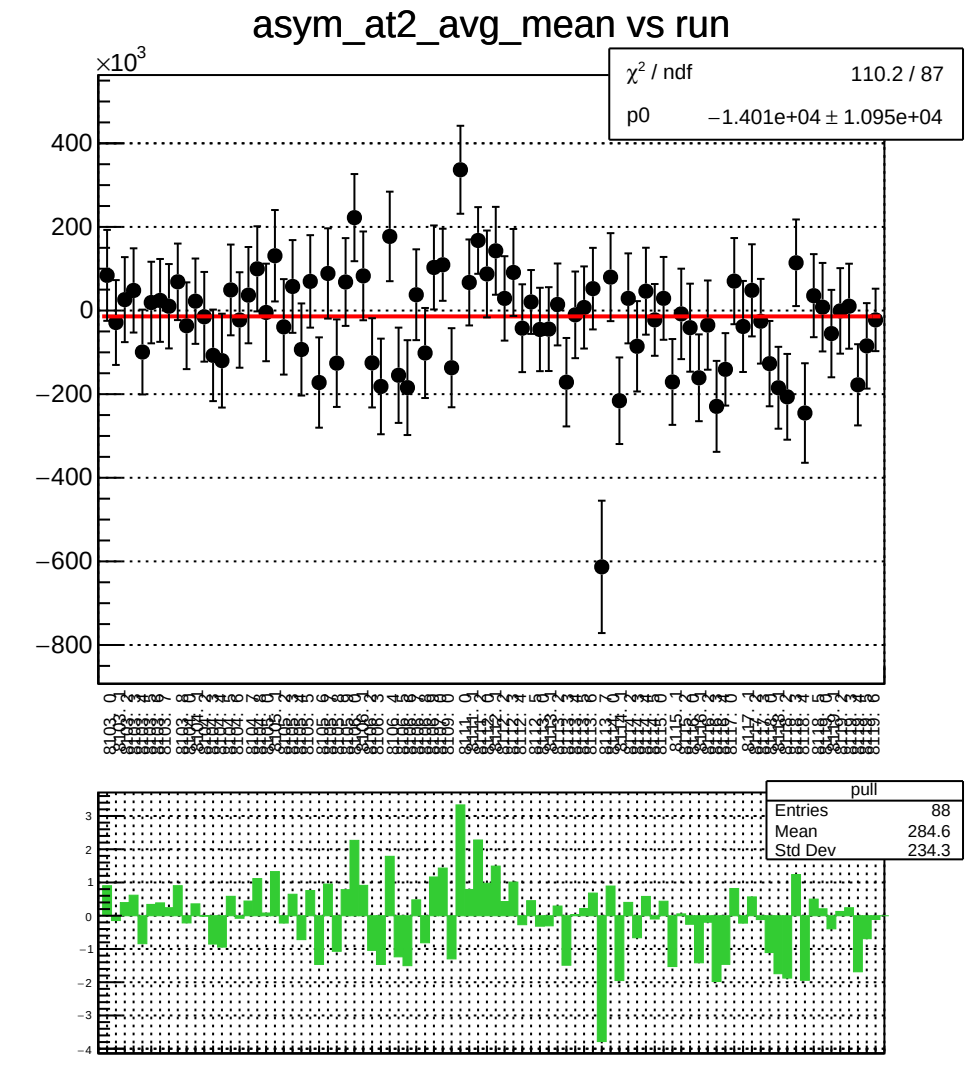

pull1D
Entries 88
Mean −0.05089
Std Dev 1.061
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

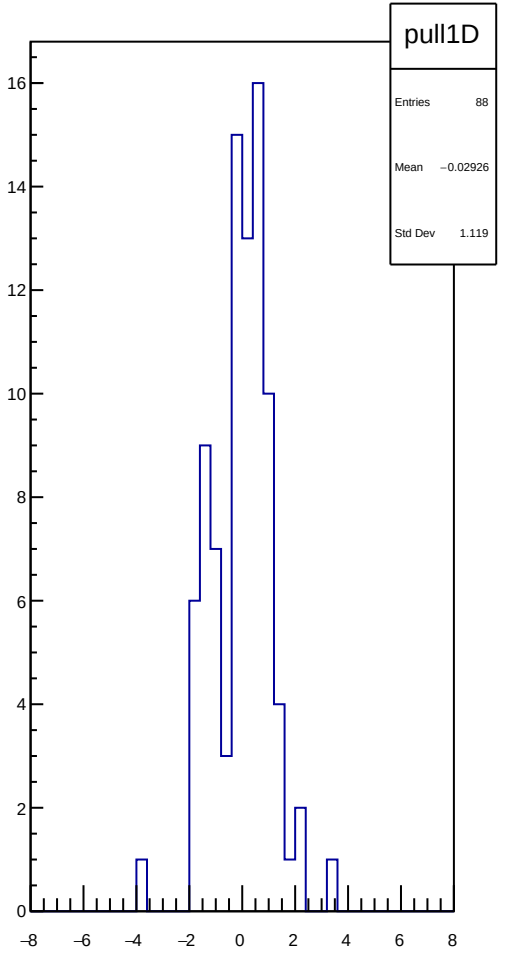

reg_asym_at2_avg_rms vs run
χ² / ndf 2.54e+04 / 87
p0 1563 ± 1.211
18000
16000
14000
12000
10000
8000
6000
4000
2000

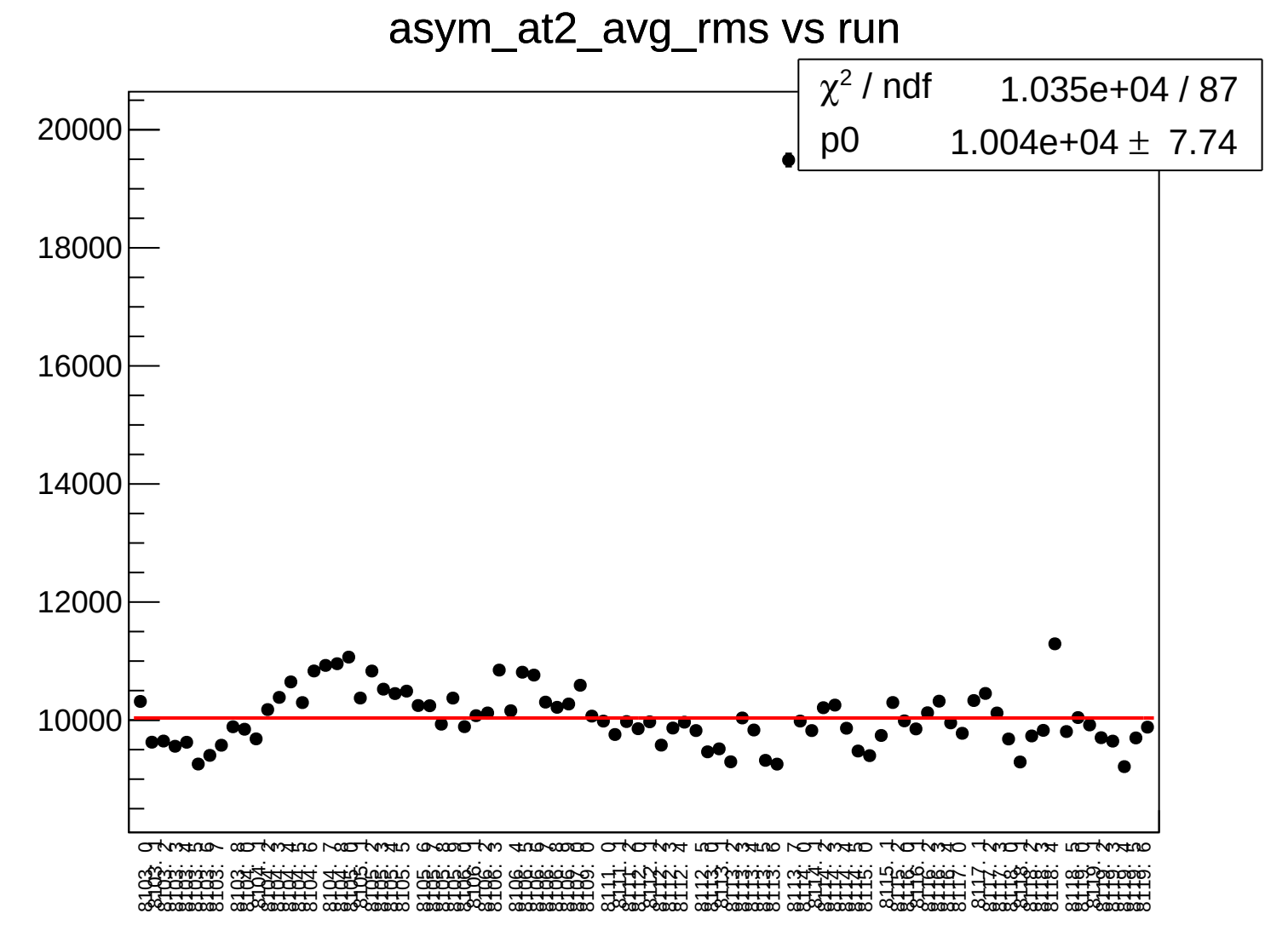

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 97.81 / 87
p0 1.433e+04 ± 1.074e+04
pull
Entries 88
Mean 651
Std Dev 599.7

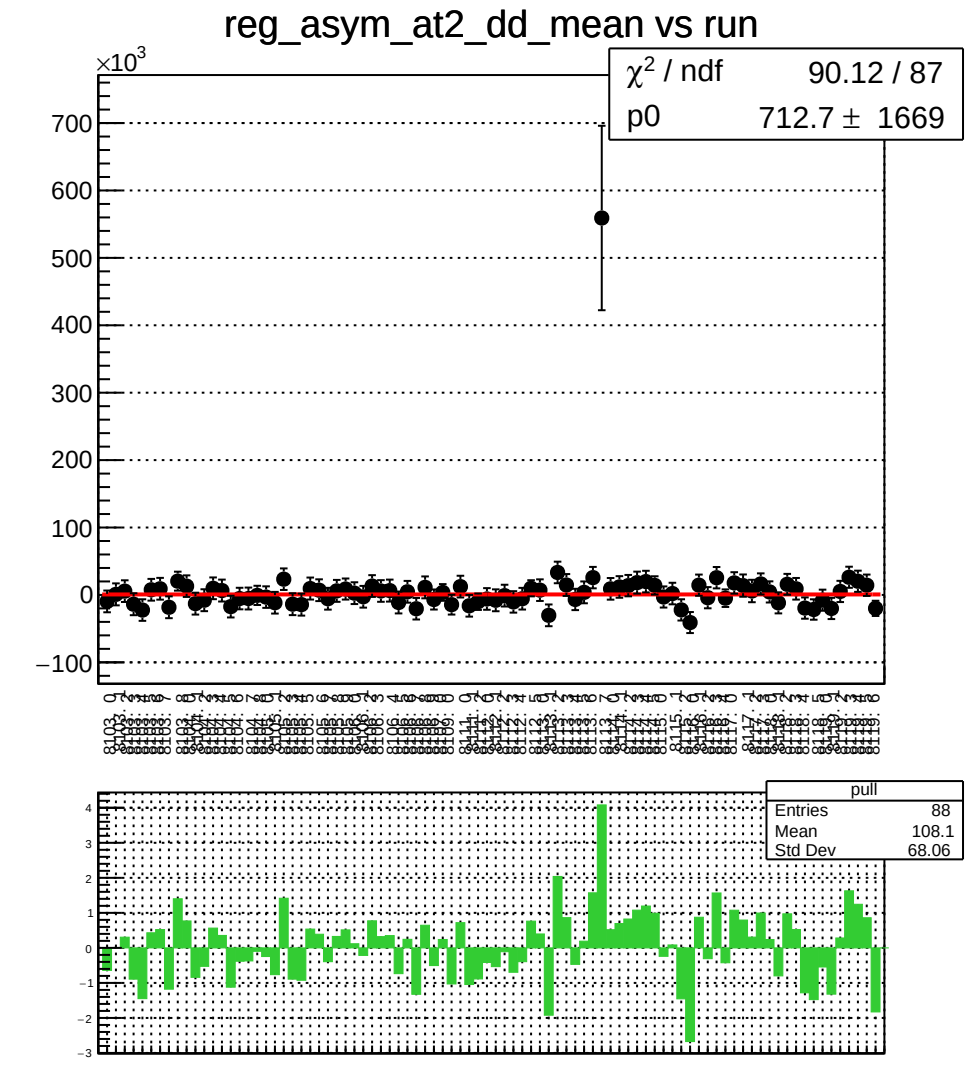

pull1D
Entries 88
Mean 0.01149
Std Dev 1.054

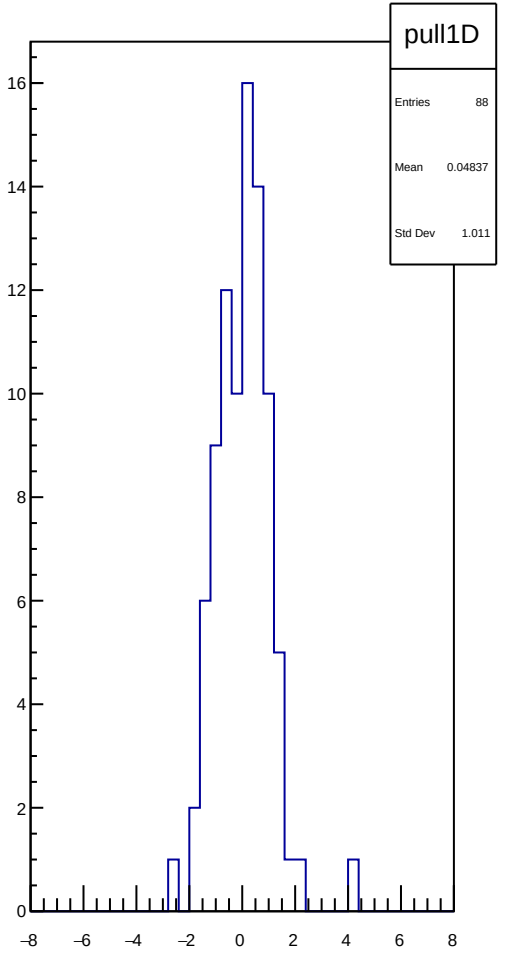

asym_at2_avg_correction_rms vs run
χ^2 / ndf 3320 / 87
p0 9866 ± 7.592
11000
10500
10000
9500
9000

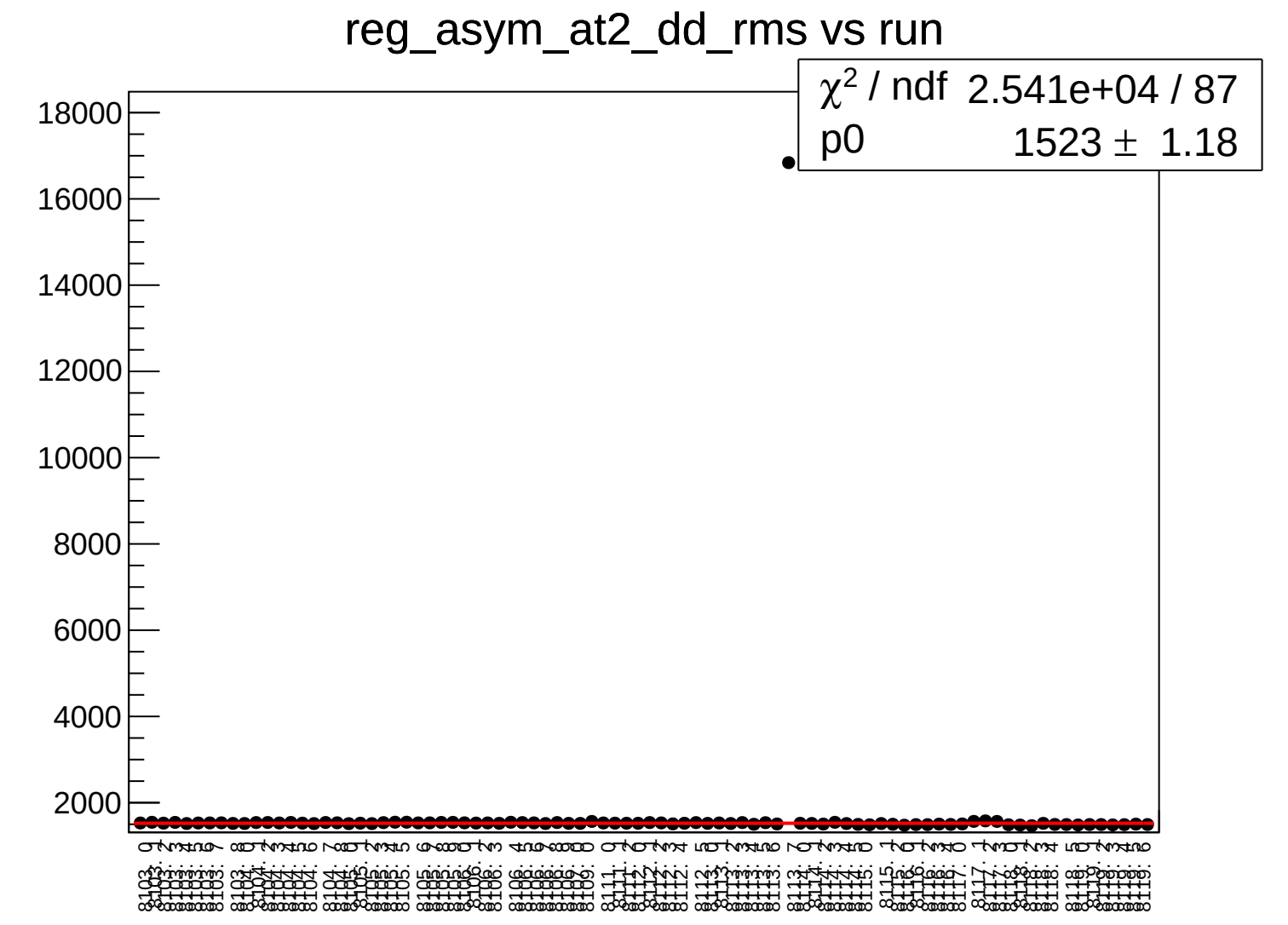

asym_at2_avg_mean vs run
×10^3
χ² / ndf 110.2 / 87
p0 −1.401e+04 ± 1.095e+04
400
200
0
−200
−400
−600
−800
pull
Entries 88
Mean 284.6
Std Dev 234.3
3
2
1
0
−1
−2
−3
−4

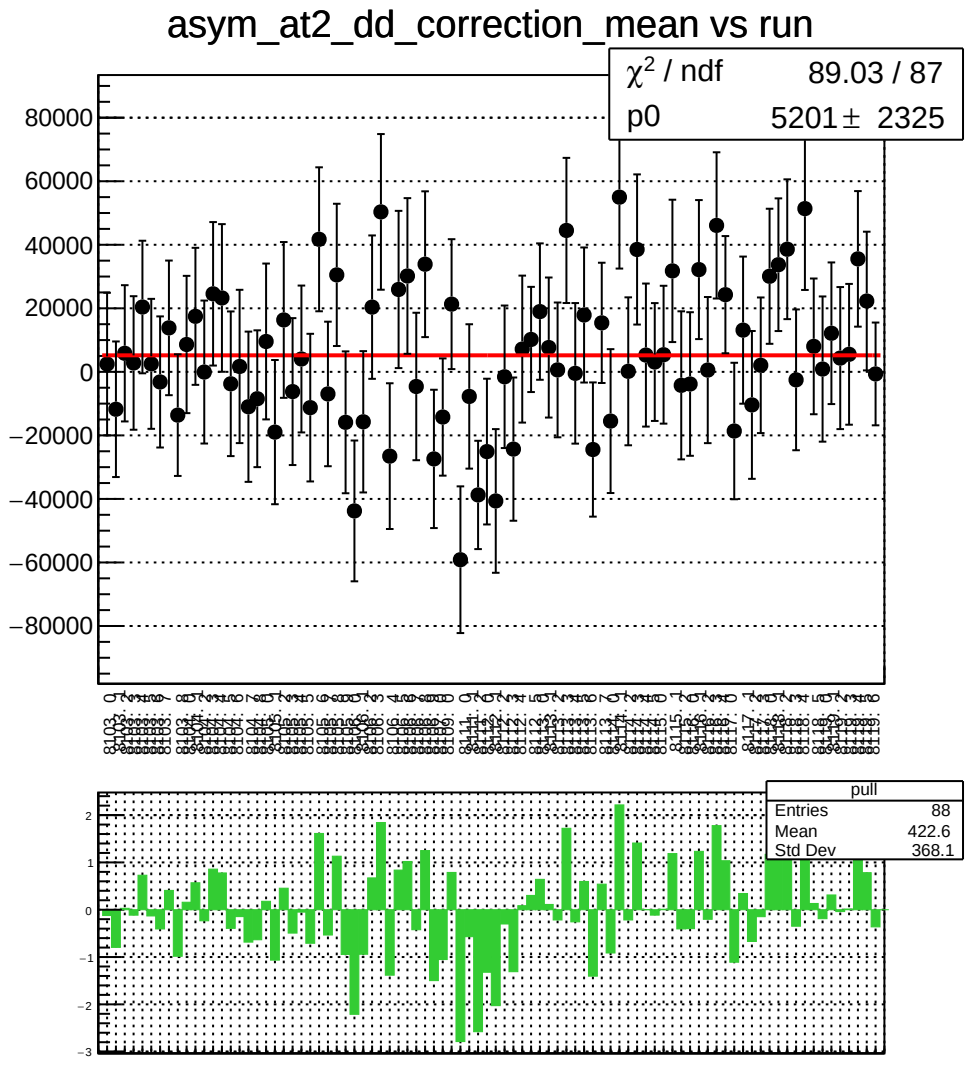

pull1D
Entries 88
Mean −0.02926
Std Dev 1.119
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

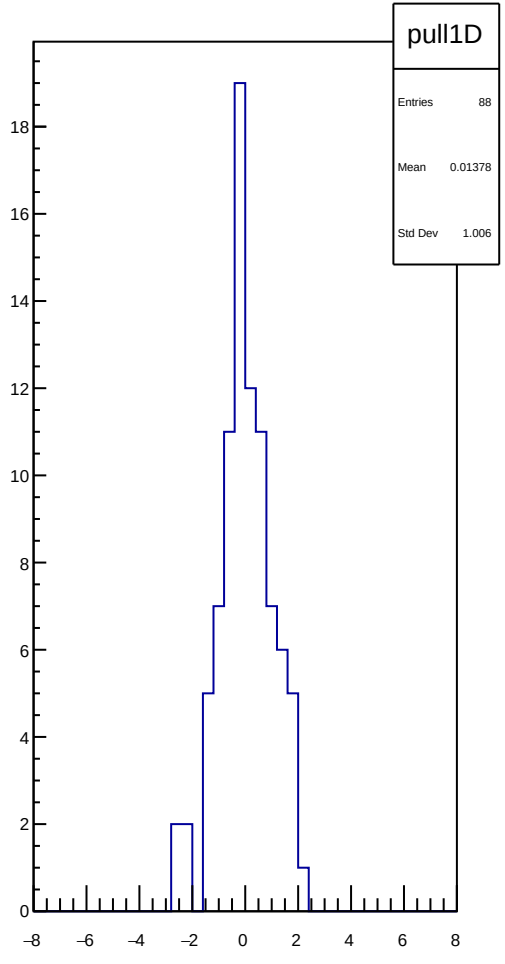

asym_at2_avg_rms vs run
χ^2 / ndf 1.035e+04 / 87
p0 1.004e+04 ± 7.74
20000
18000
16000
14000
12000
10000

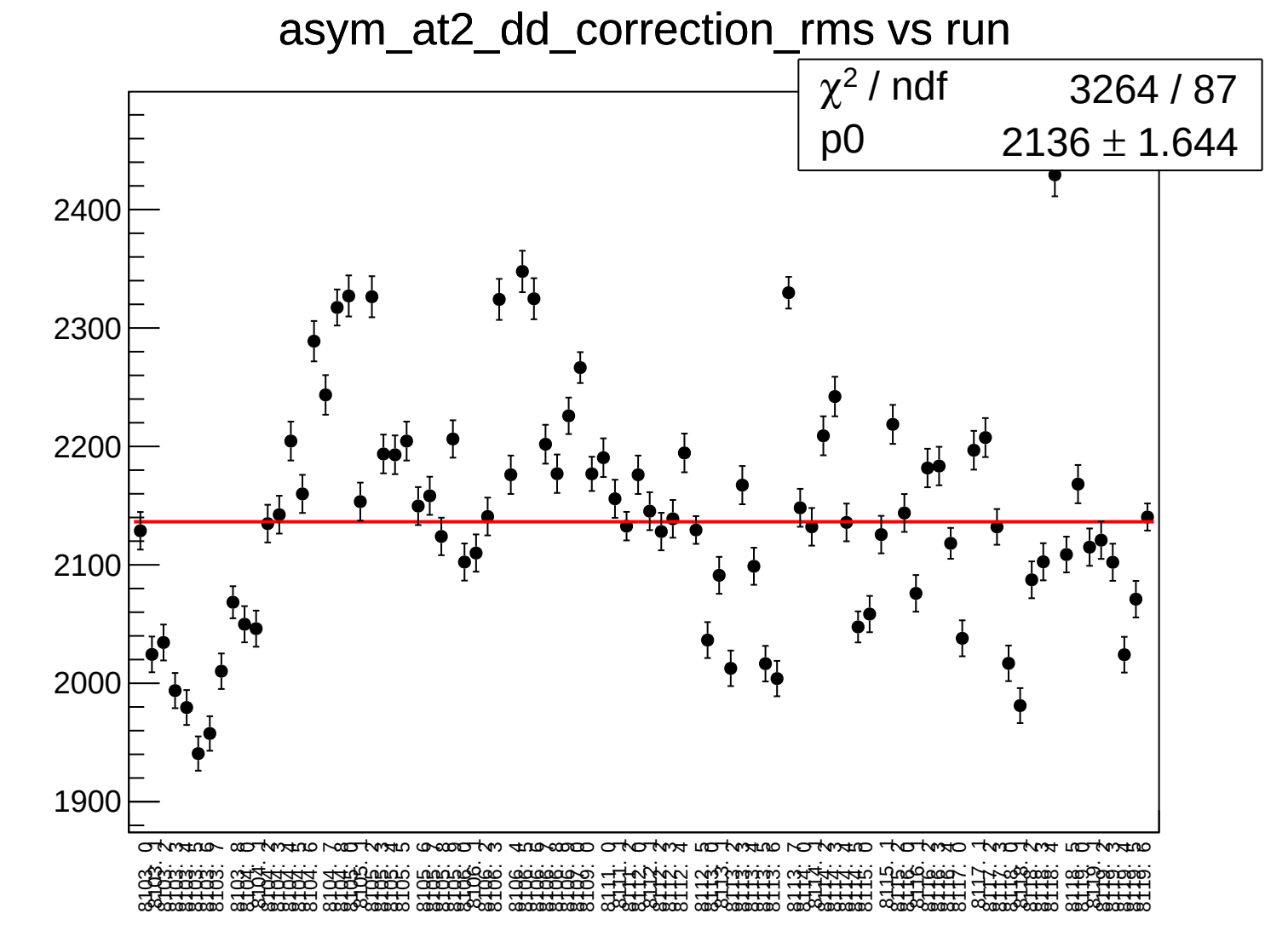

reg_asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 90.12 / 87
p0 712.7 ± 1669
pull
Entries 88
Mean 108.1
Std Dev 68.06

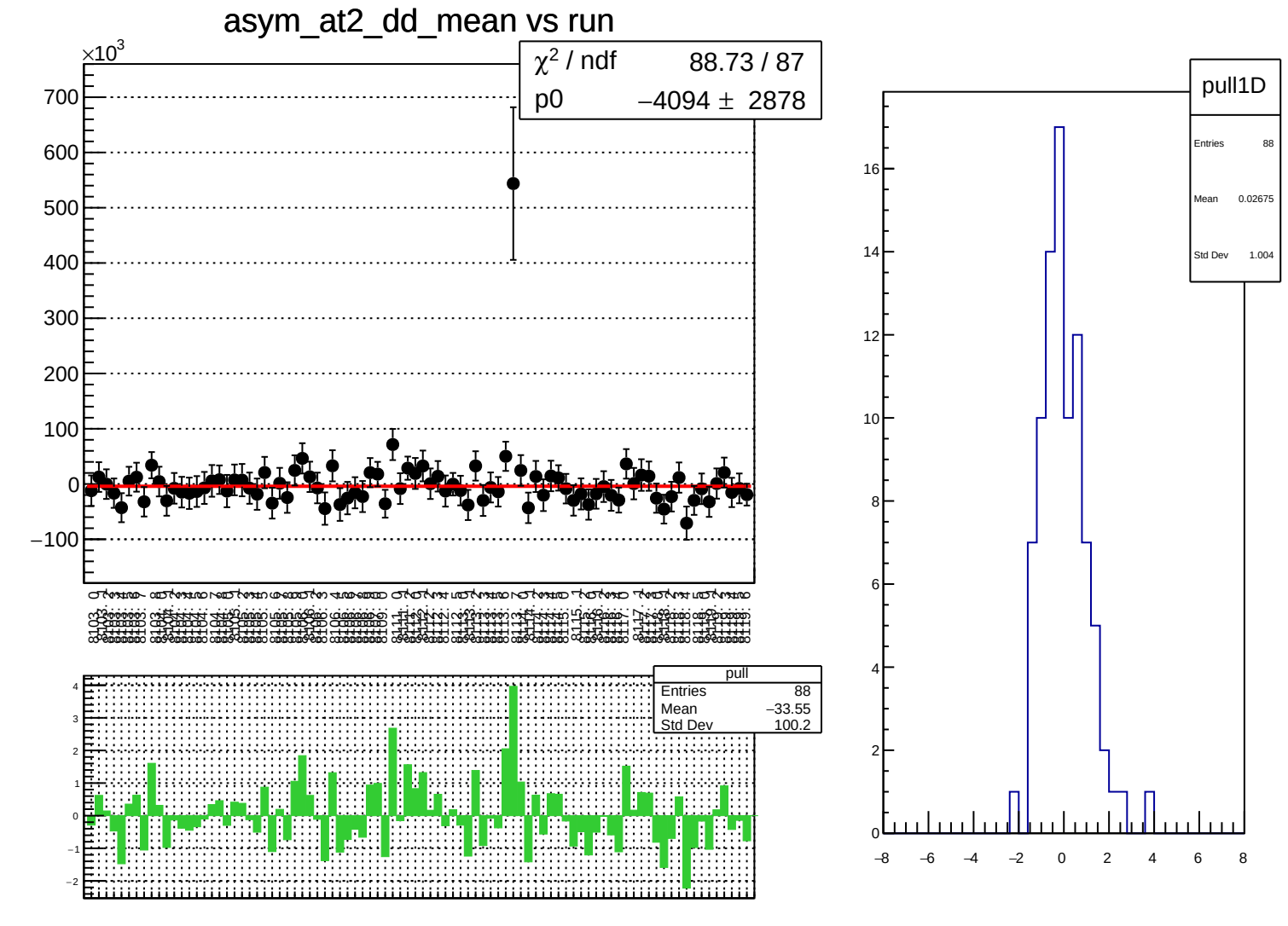

pull1D
Entries 88
Mean 0.04837
Std Dev 1.011

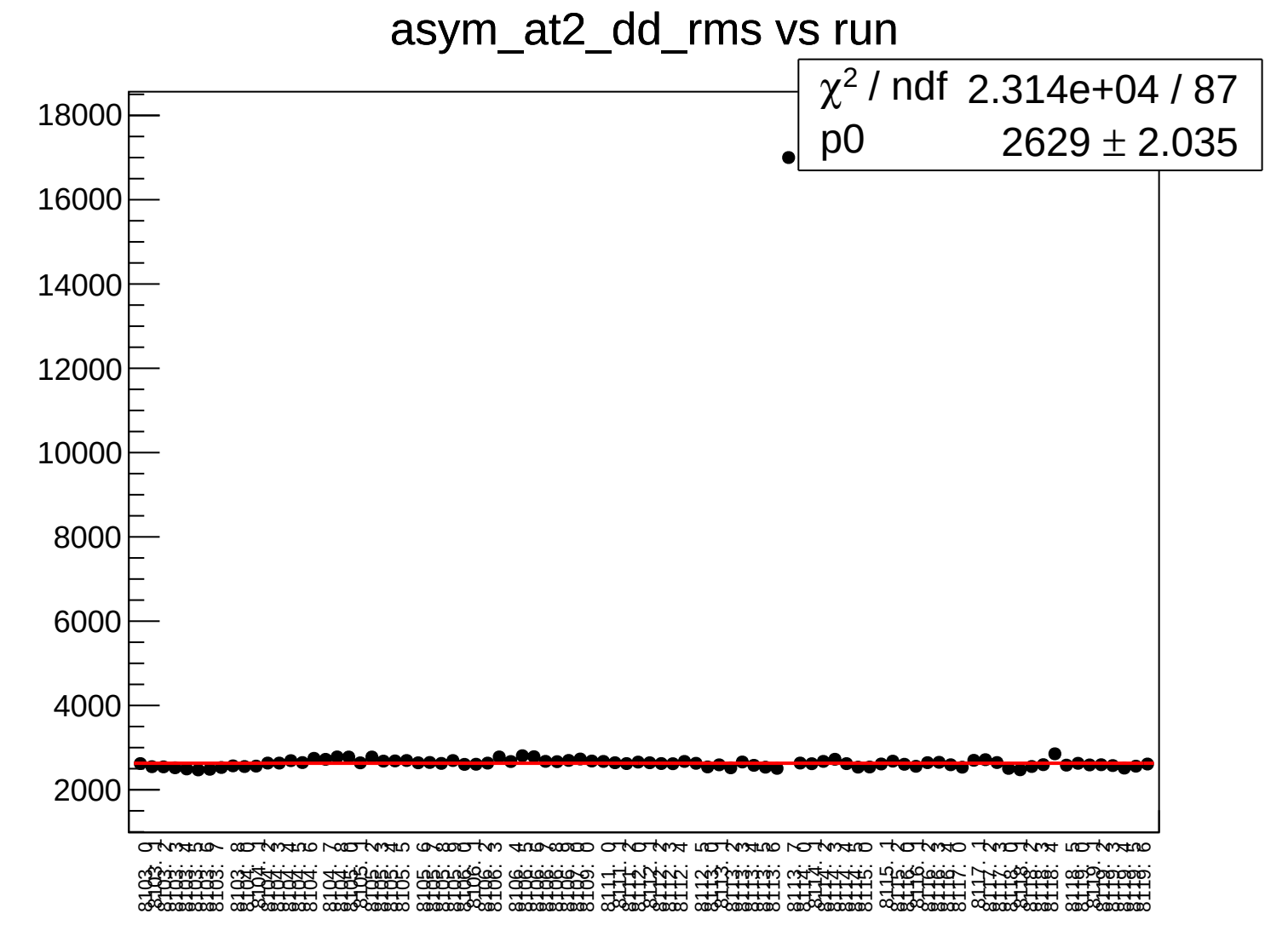

reg_asym_at2_dd_rms vs run
χ² / ndf 2.541e+04 / 87
p0 1523 ± 1.18
18000
16000
14000
12000
10000
8000
6000
4000
2000

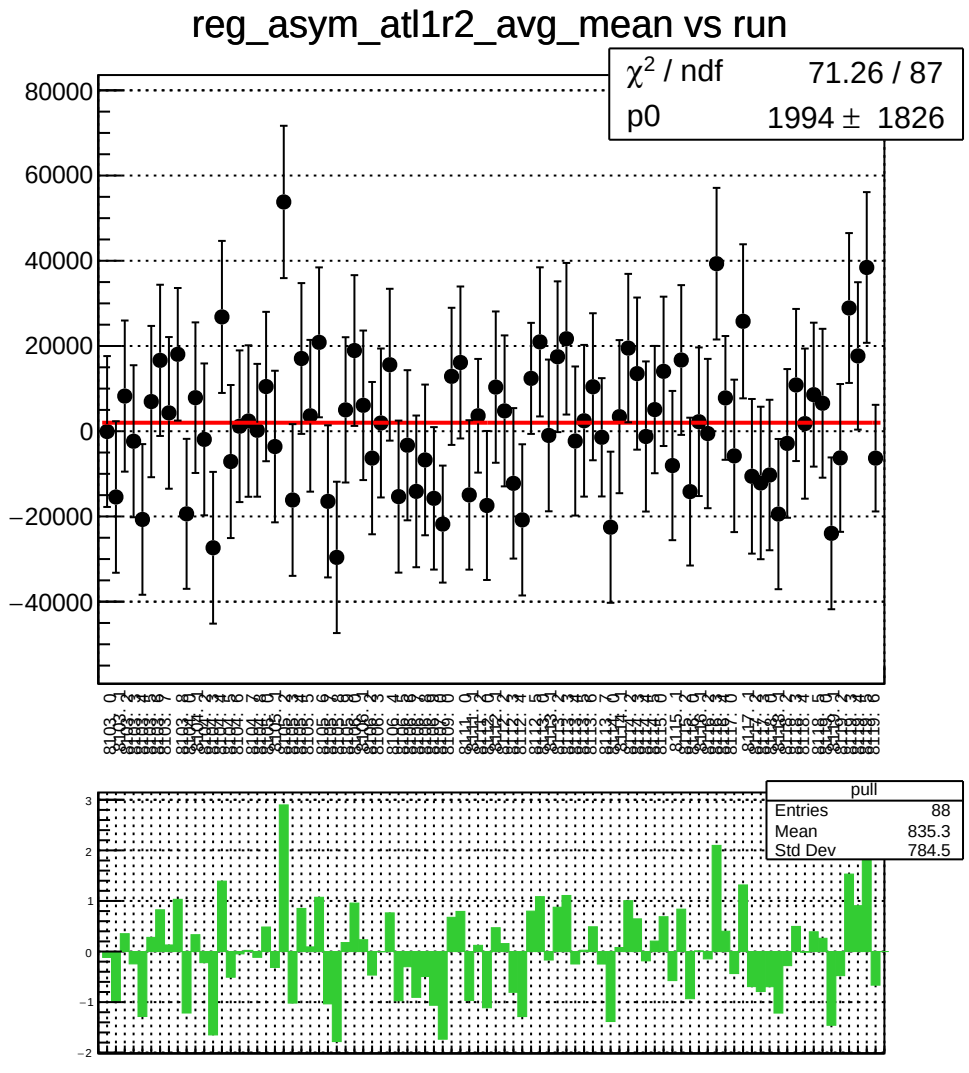

asym_at2_dd_correction_mean vs run
χ² / ndf 89.03 / 87
p0 5201 ± 2325
pull
Entries 88
Mean 422.6
Std Dev 368.1

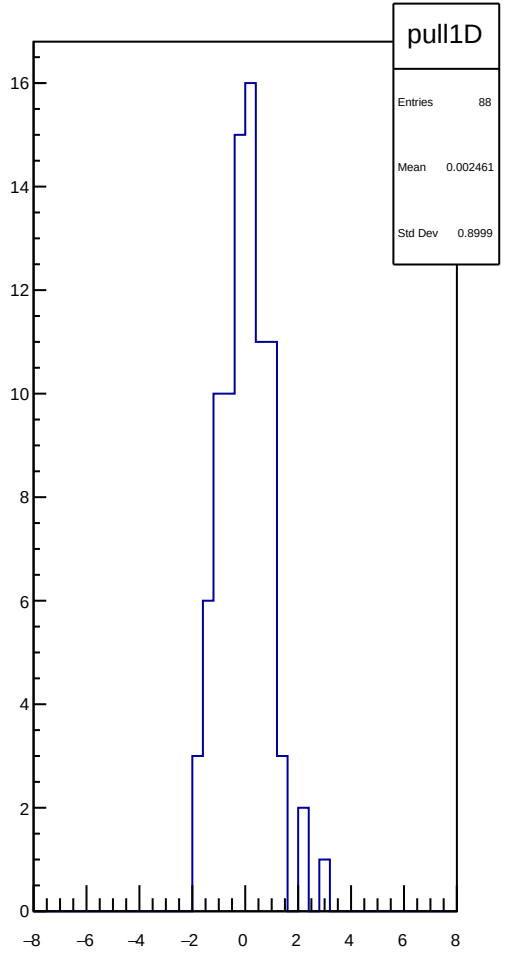

pull1D
Entries 88
Mean 0.01378
Std Dev 1.006

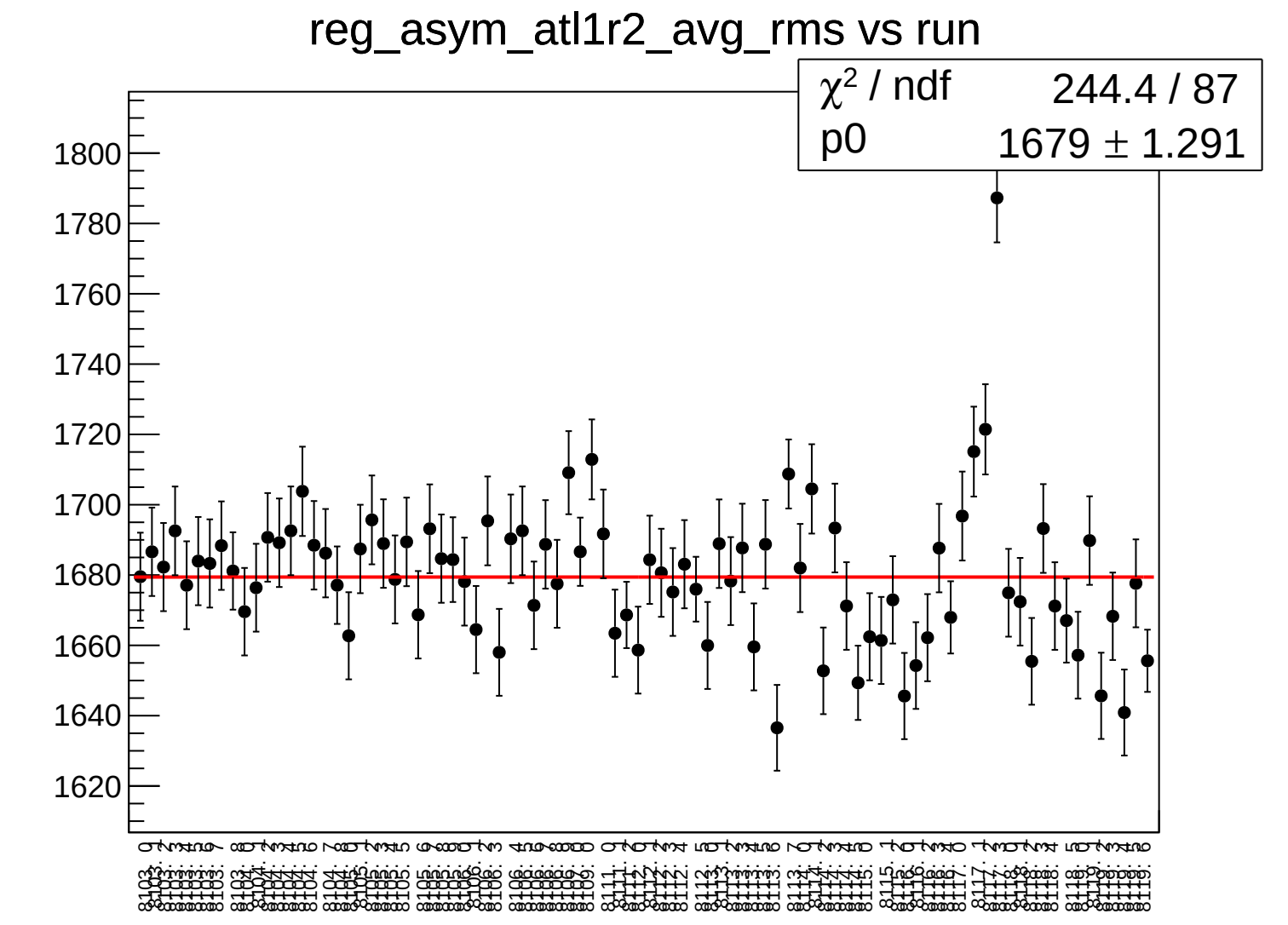

asym_at2_dd_correction_rms vs run
χ^2 / ndf 3264 / 87
p0 2136 ± 1.644
2400
2300
2200
2100
2000
1900

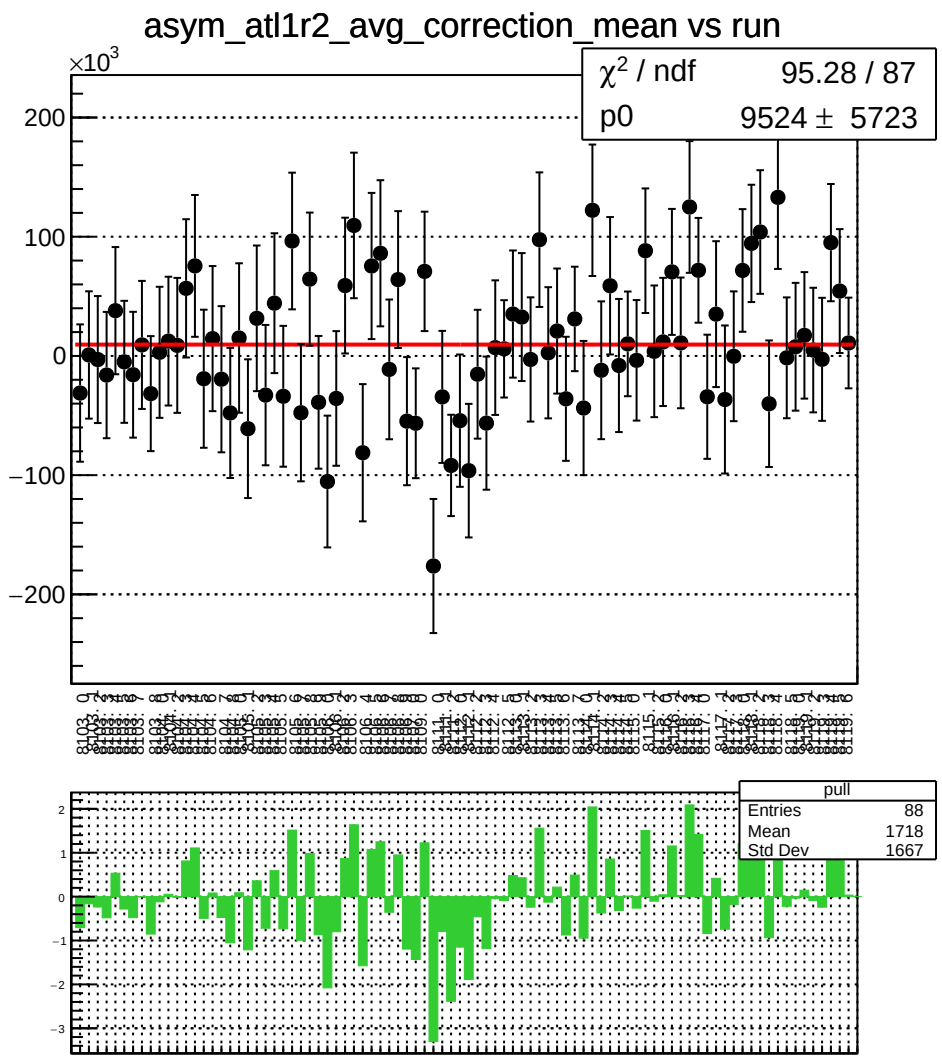

asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 88.73 / 87
p0 −4094 ± 2878
700
600
500
400
300
200
100
0
−100
pull
Entries 88
Mean −33.55
Std Dev 100.2
4
3
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.02675
Std Dev 1.004
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

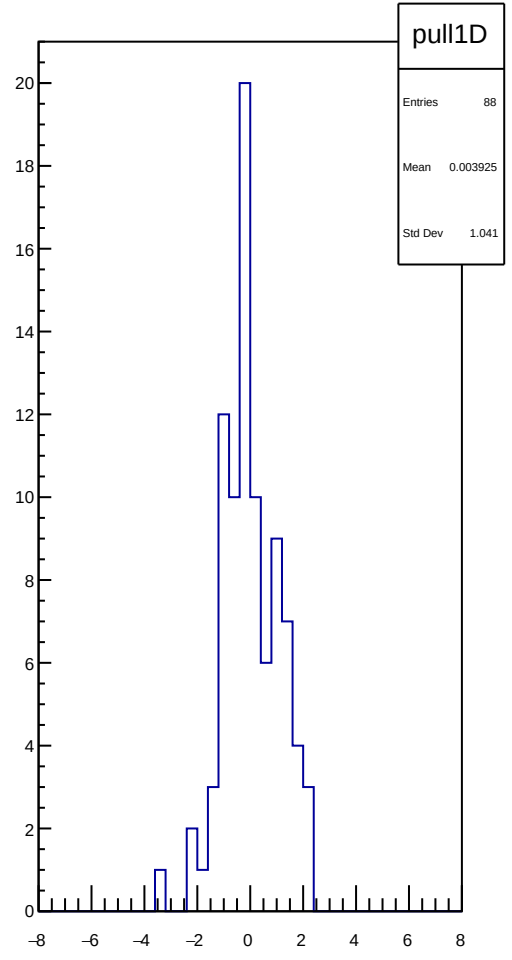

asym_at2_dd_rms vs run
χ² / ndf 2.314e+04 / 87
p0 2629 ± 2.035
18000
16000
14000
12000
10000
8000
6000
4000
2000

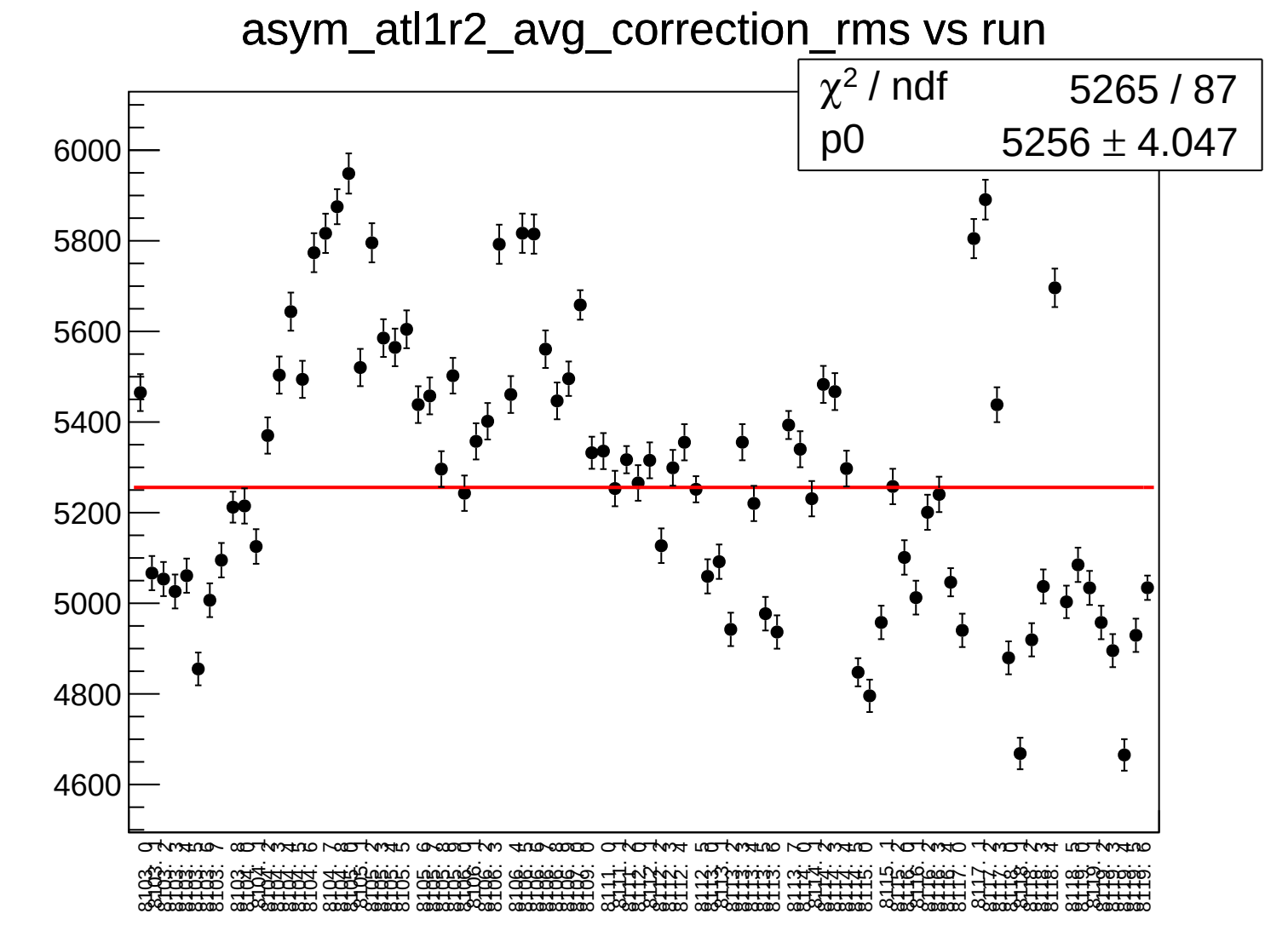

reg_asym_atl1r2_avg_mean vs run
χ² / ndf 71.26 / 87
p0 1994 ± 1826
80000
60000
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 835.3
Std Dev 784.5
3
2
1
0
−1
−2

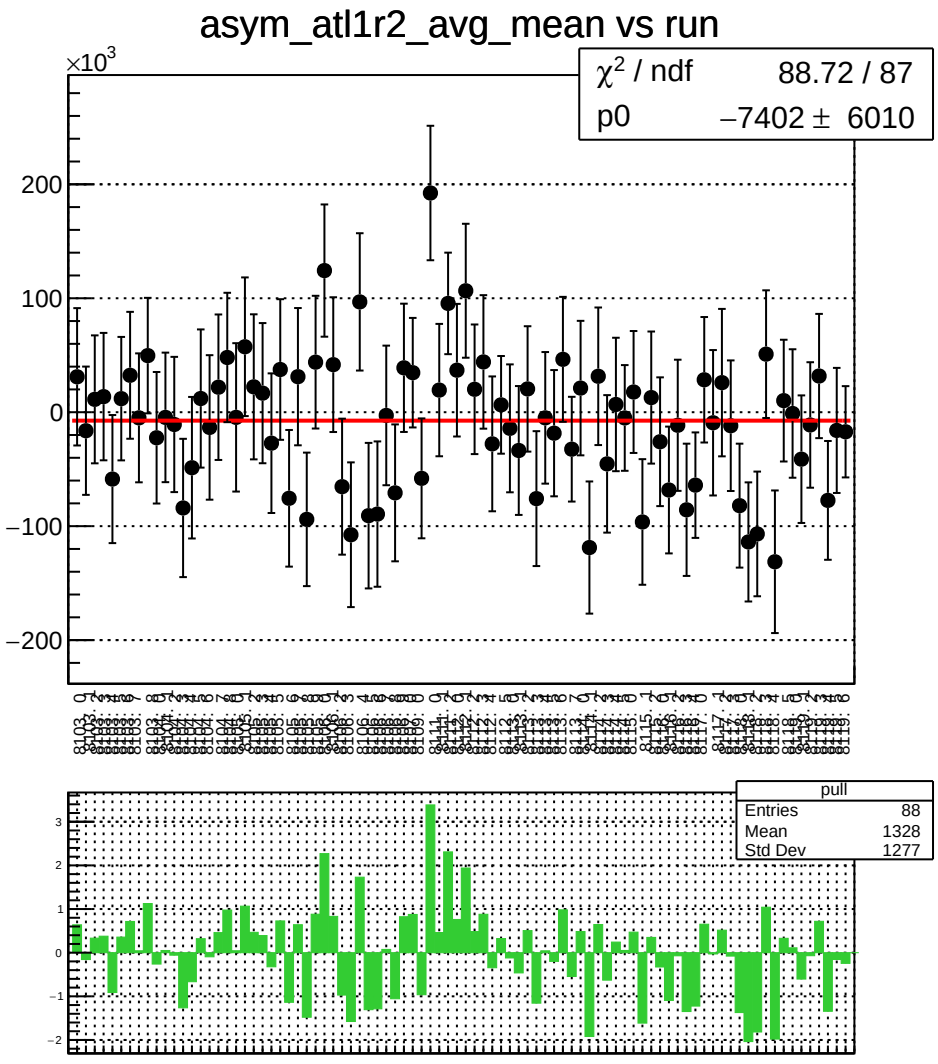

pull1D
Entries 88
Mean 0.002461
Std Dev 0.8999
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

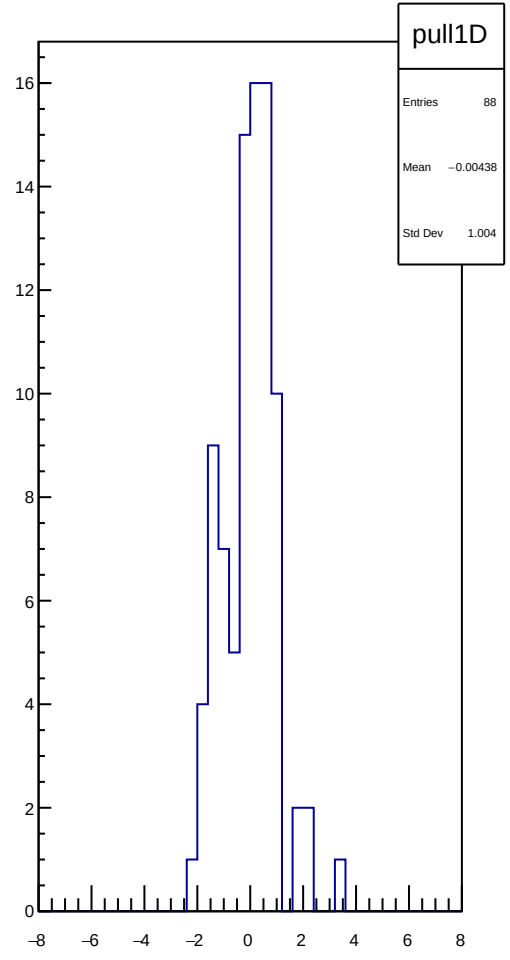

reg_asym_atl1r2_avg_rms vs run
χ^2 / ndf 244.4 / 87
p0 1679 ± 1.291
1800
1780
1760
1740
1720
1700
1680
1660
1640
1620

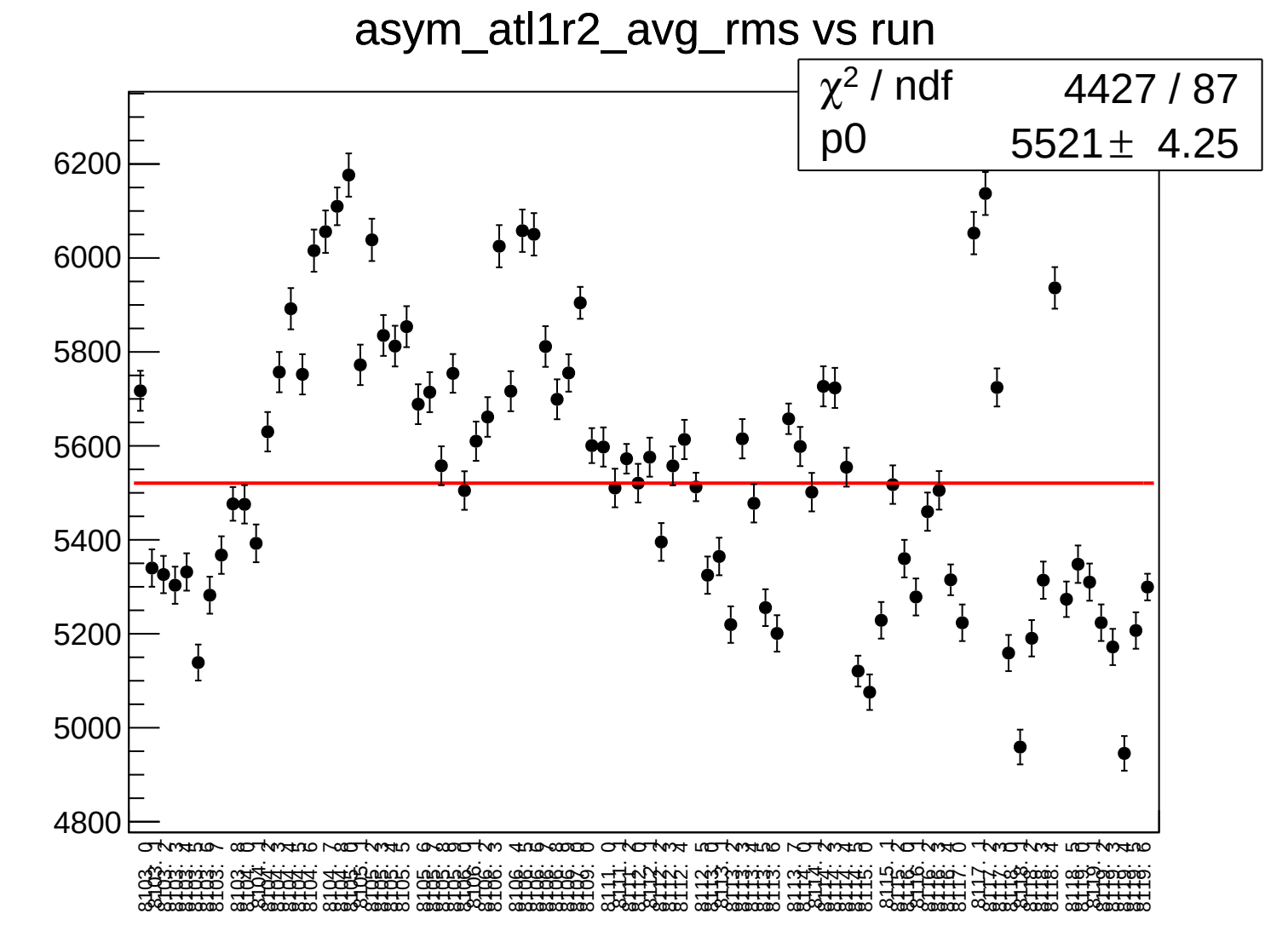

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 95.28 / 87
p0 9524 ± 5723
200
100
0
−100
−200
pull
Entries 88
Mean 1718
Std Dev 1667
2
1
0
−1
−2
−3

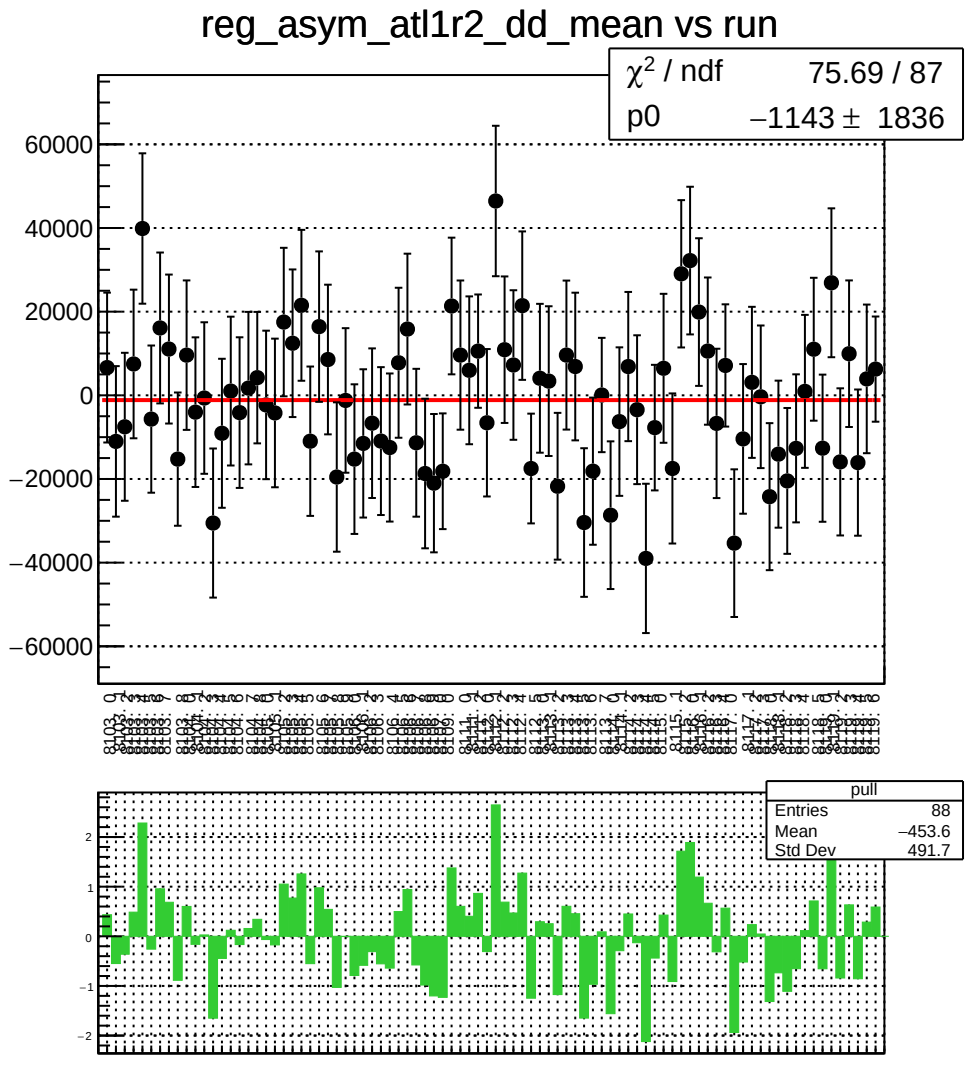

pull1D
Entries 88
Mean 0.003925
Std Dev 1.041
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

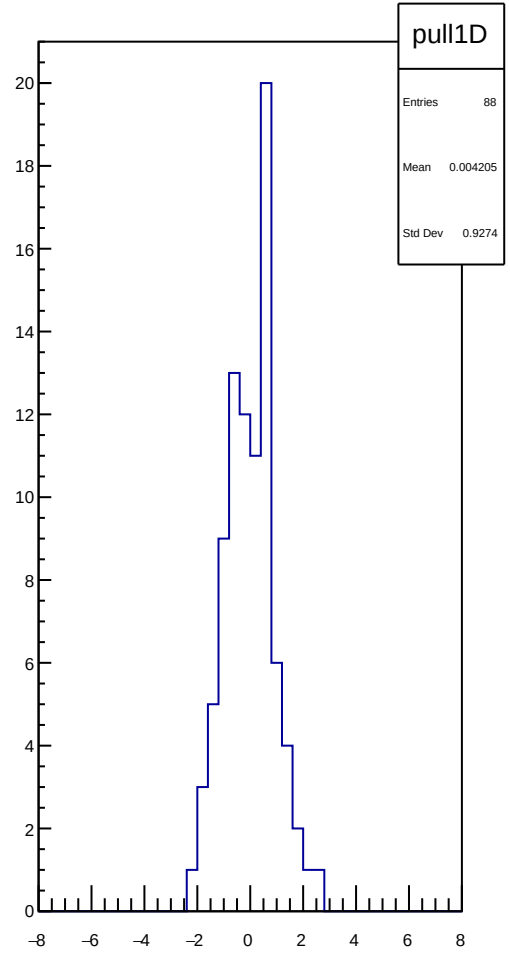

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 5265 / 87
p0 5256 ± 4.047
6000
5800
5600
5400
5200
5000
4800
4600

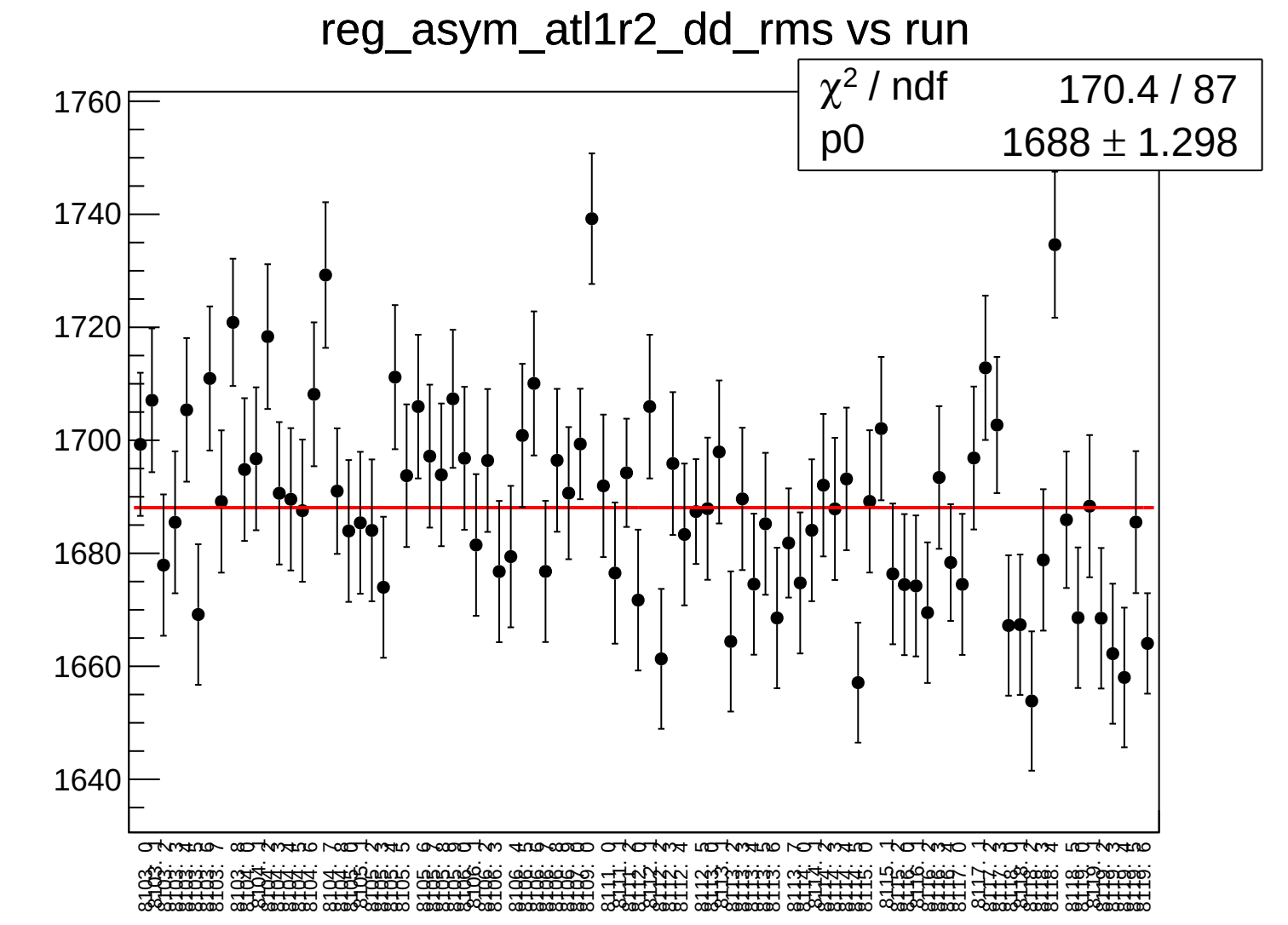

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 88.72 / 87
p0 −7402 ± 6010
200
100
0
−100
−200
pull
Entries 88
Mean 1328
Std Dev 1277
3
2
1
0
−1
−2

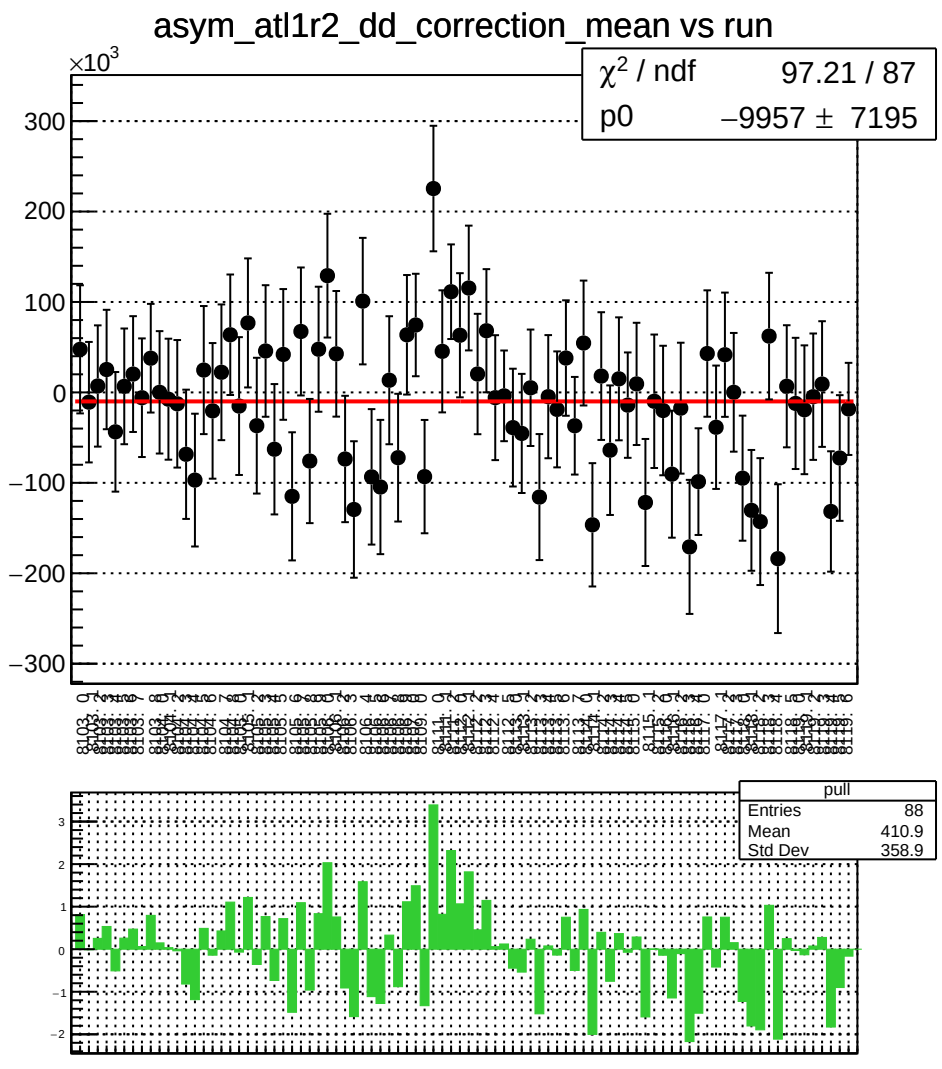

pull1D
Entries 88
Mean −0.00438
Std Dev 1.004
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

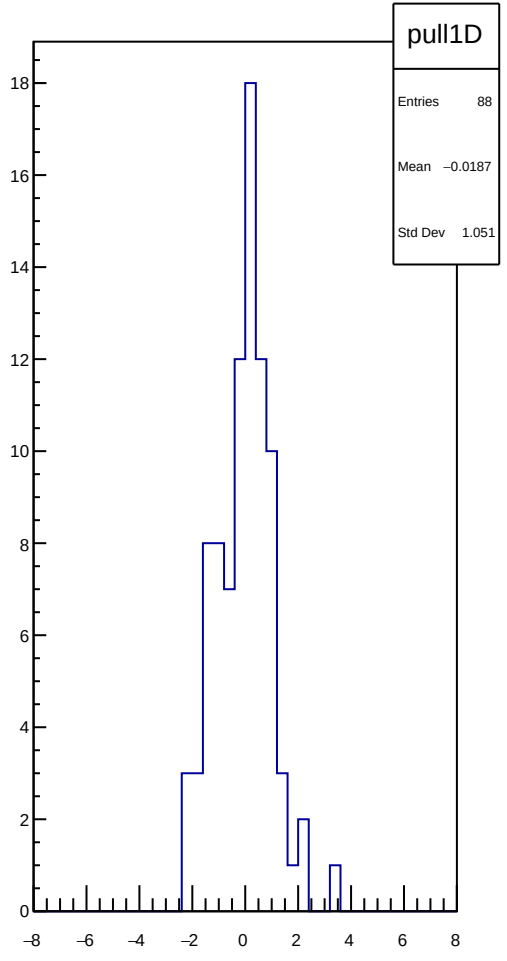

asym_atl1r2_avg_rms vs run
χ² / ndf 4427 / 87
p0 5521 ± 4.25
6200
6000
5800
5600
5400
5200
5000
4800

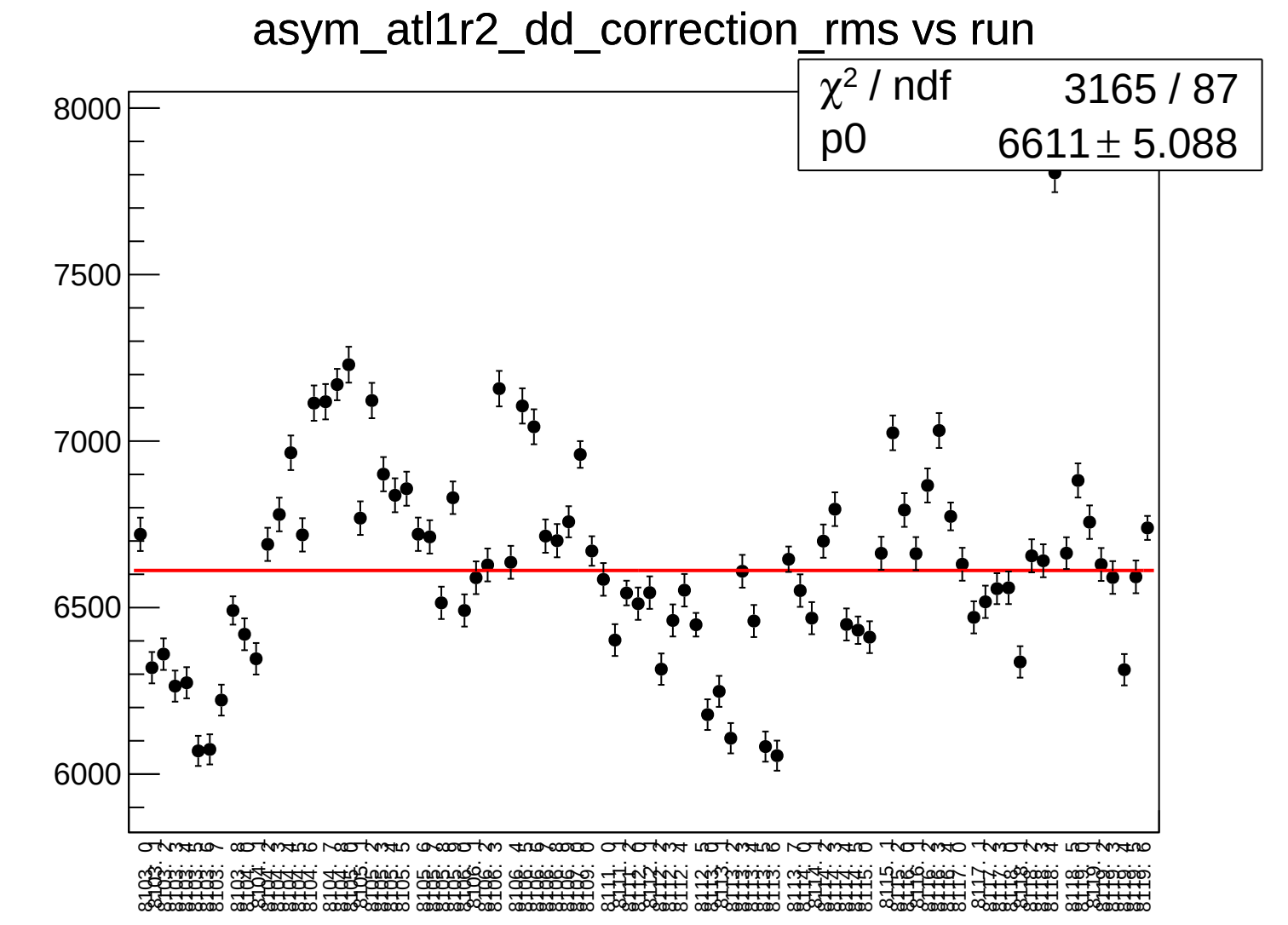

reg_asym_atl1r2_dd_mean vs run
χ² / ndf 75.69 / 87
p0 −1143 ± 1836
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean −453.6
Std Dev 491.7
2
1
0
−1
−2

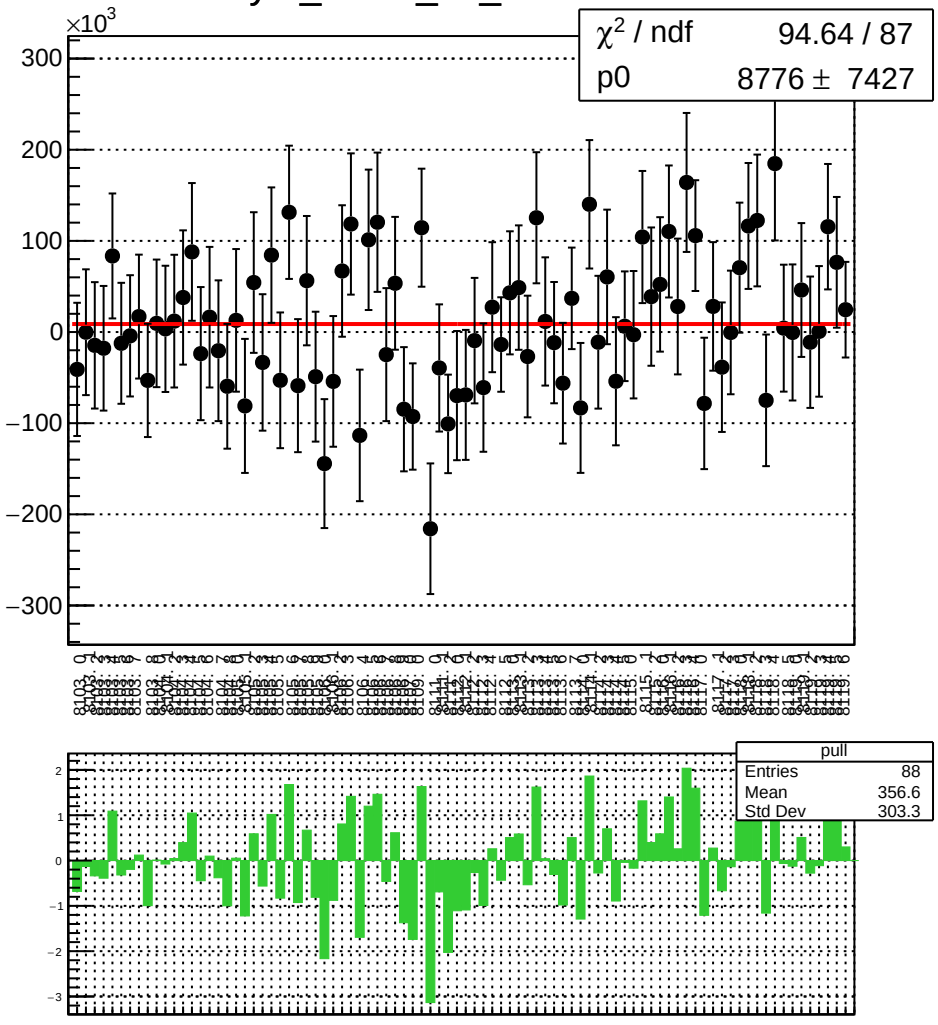

pull1D
Entries 88
Mean 0.004205
Std Dev 0.9274
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

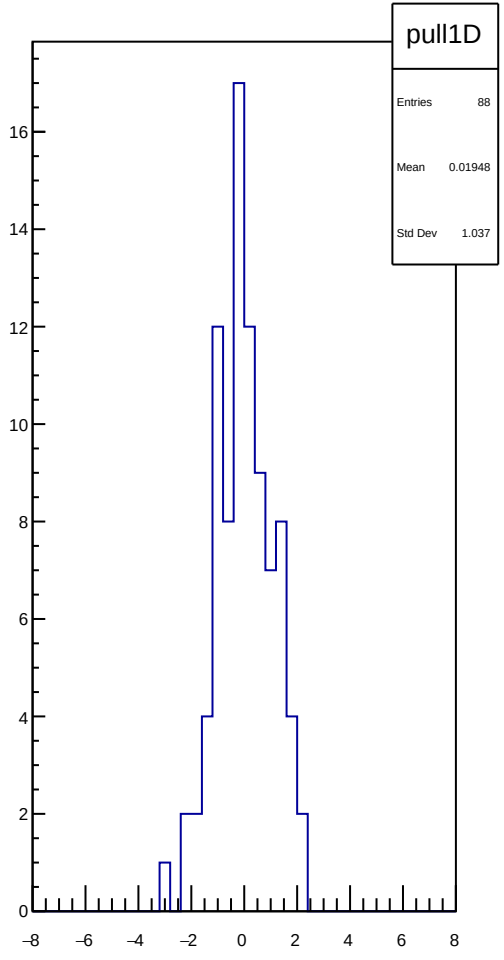

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 170.4 / 87
p0 1688 ± 1.298
1760
1740
1720
1700
1680
1660
1640

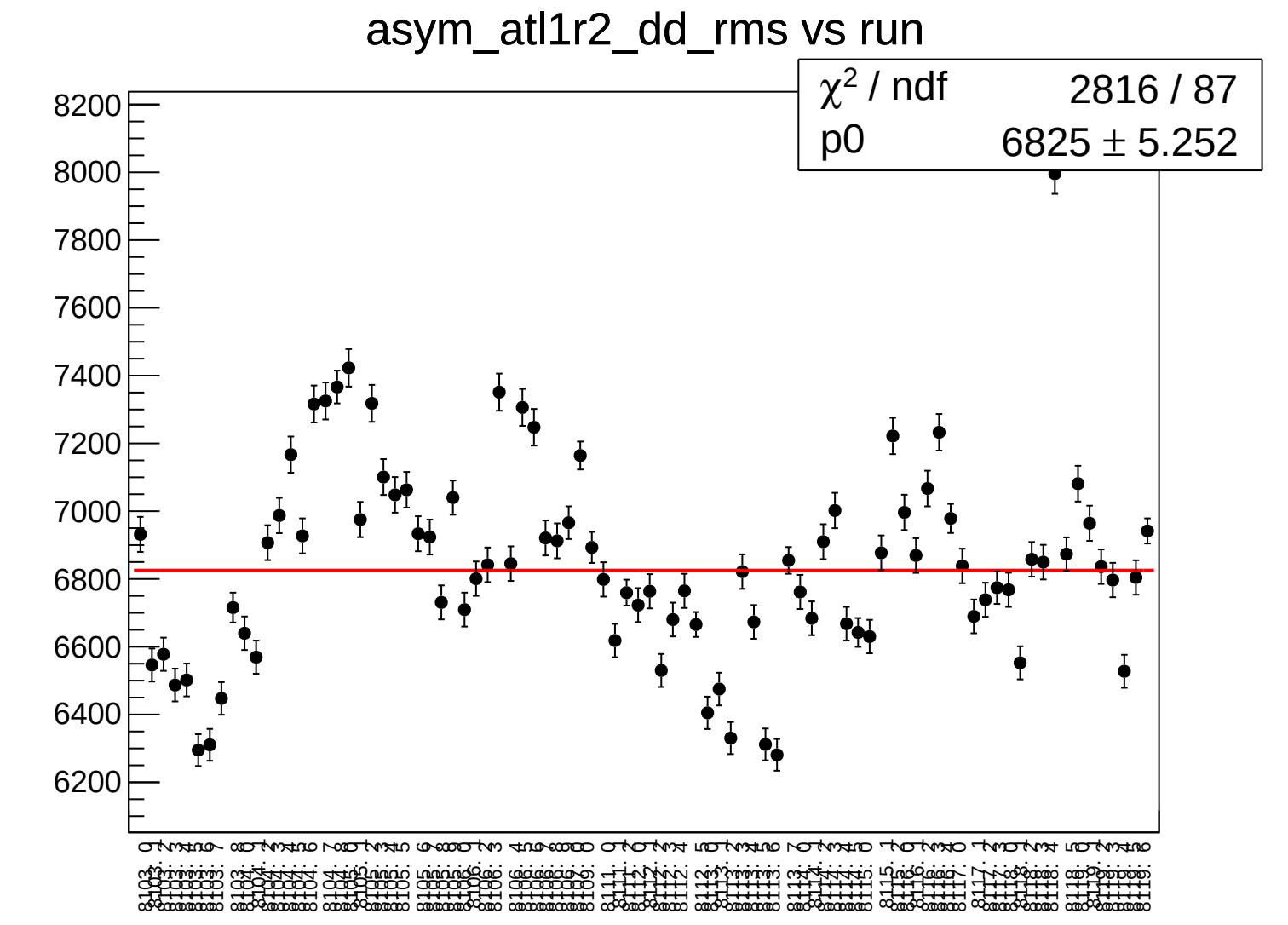

asym_atl1r2_dd_correction_mean vs run
χ^2 / ndf 97.21 / 87
p0 −9957 ± 7195
×10^3
300
200
100
0
−100
−200
−300
pull
Entries 88
Mean 410.9
Std Dev 358.9
3
2
1
0
−1
−2

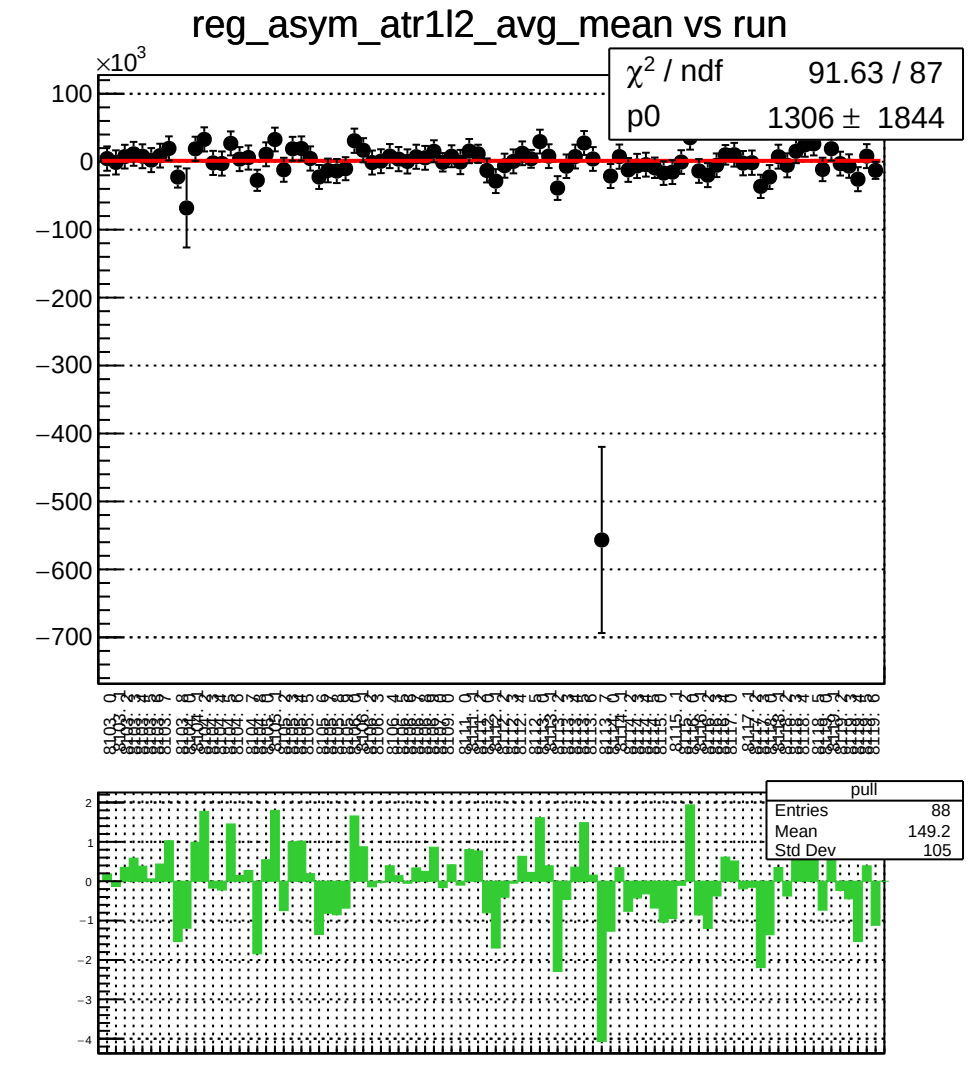

pull1D
Entries 88
Mean −0.0187
Std Dev 1.051
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

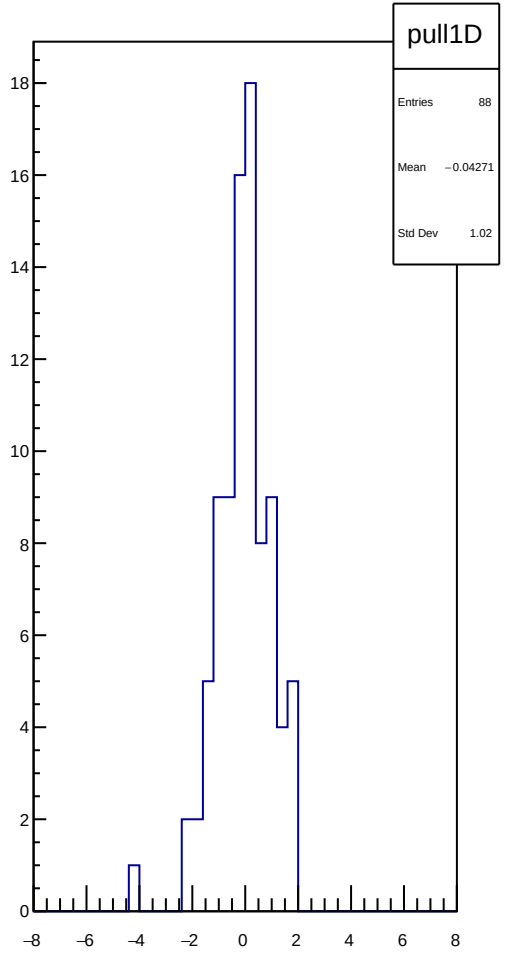

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 3165 / 87
p0 6611 ± 5.088
8000
7500
7000
6500
6000

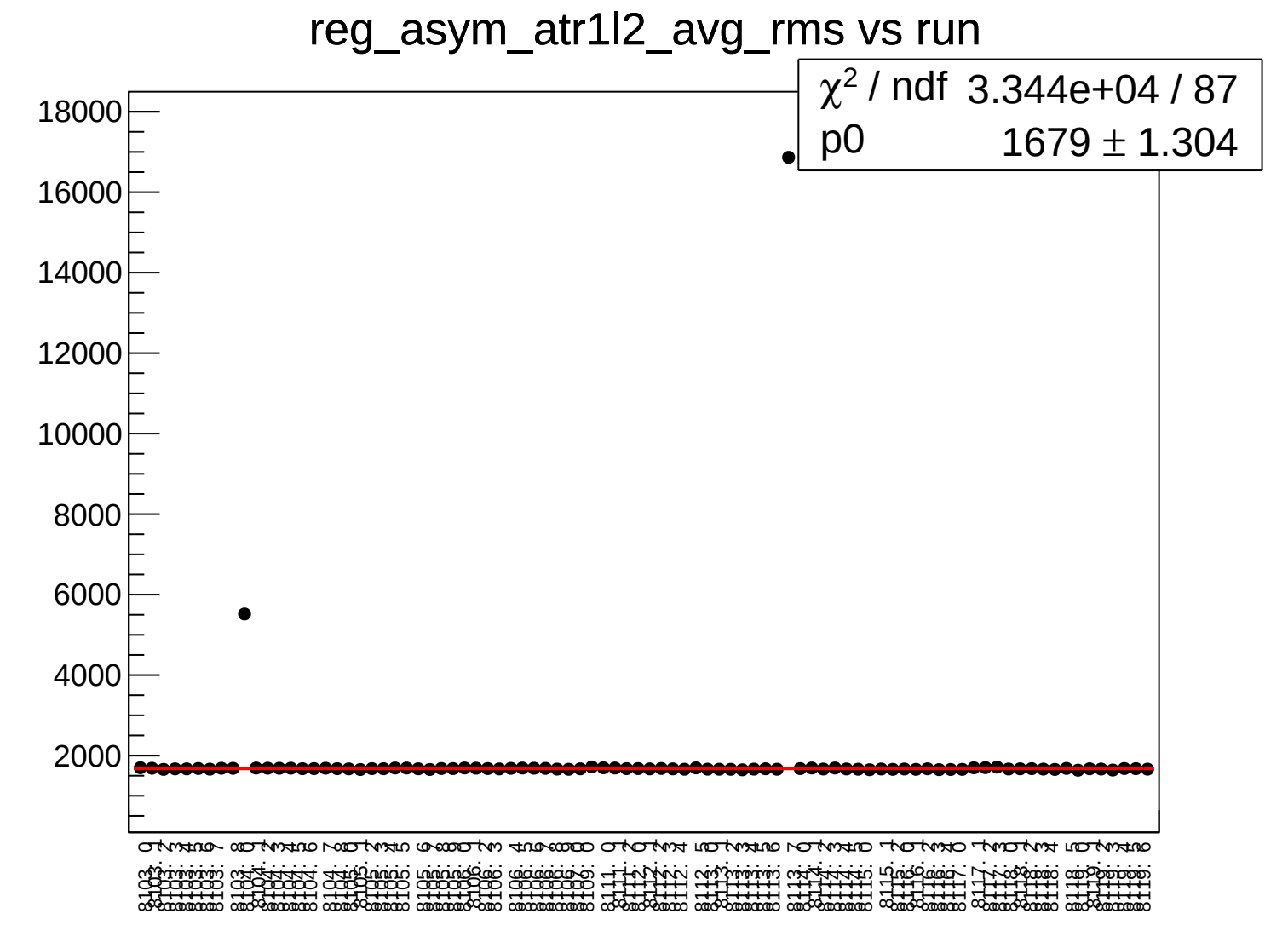

asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 94.64 / 87
p0 8776 ± 7427
pull
Entries 88
Mean 356.6
Std Dev 303.3

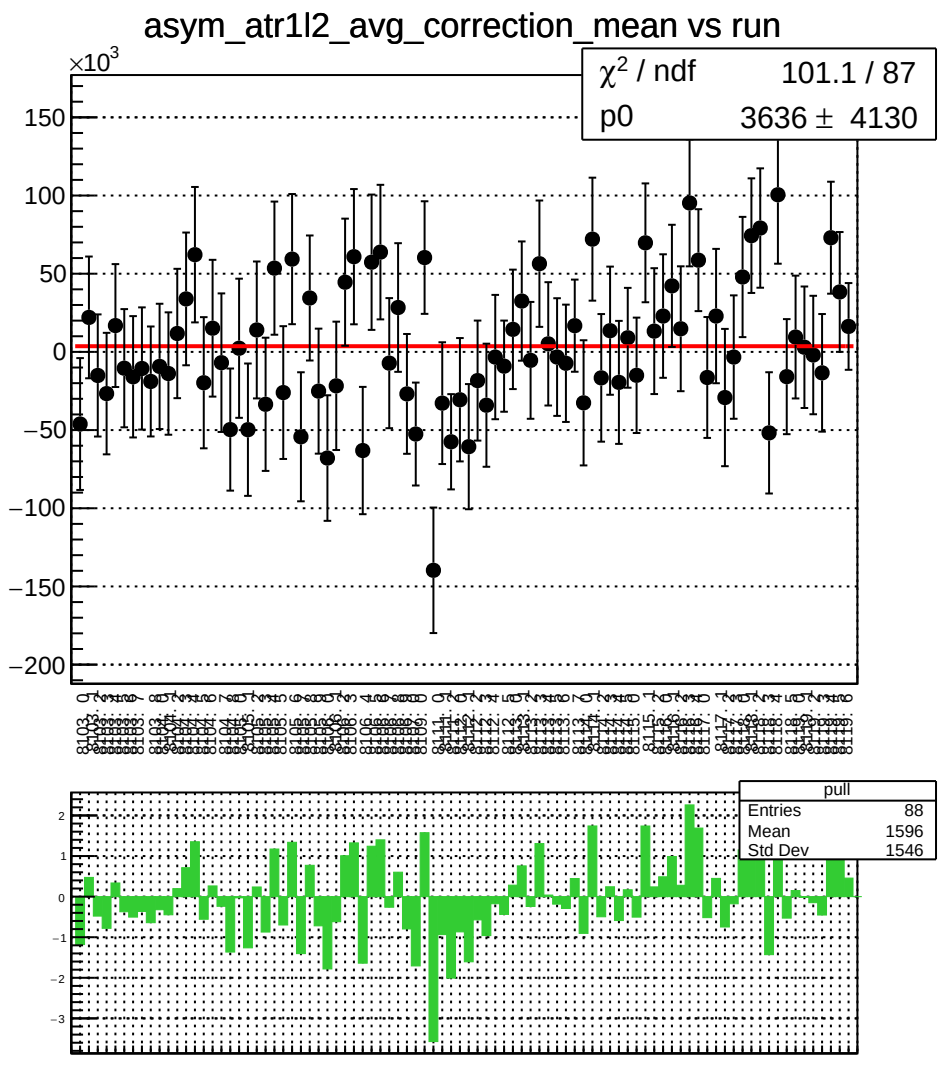

pull1D
Entries 88
Mean 0.01948
Std Dev 1.037

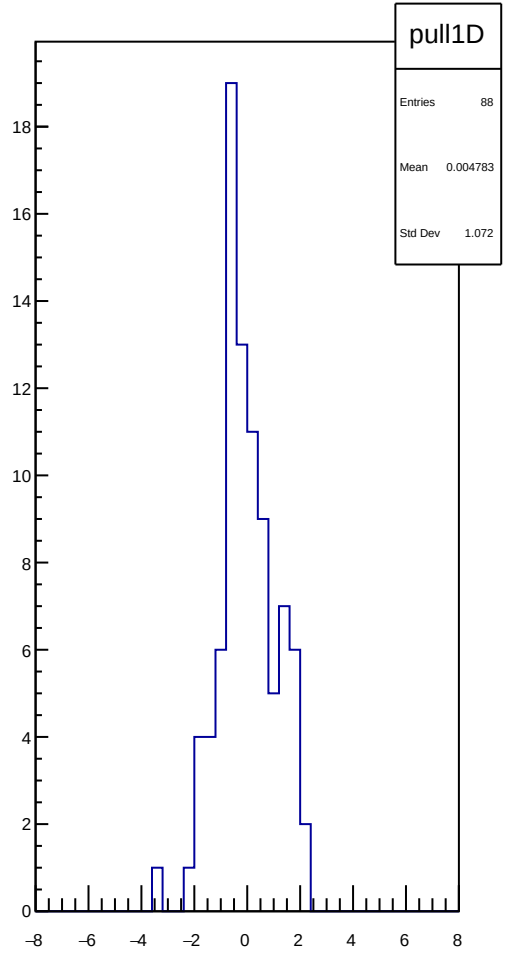

asym_atl1r2_dd_rms vs run
χ^2 / ndf 2816 / 87
p0 6825 ± 5.252
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400
6200

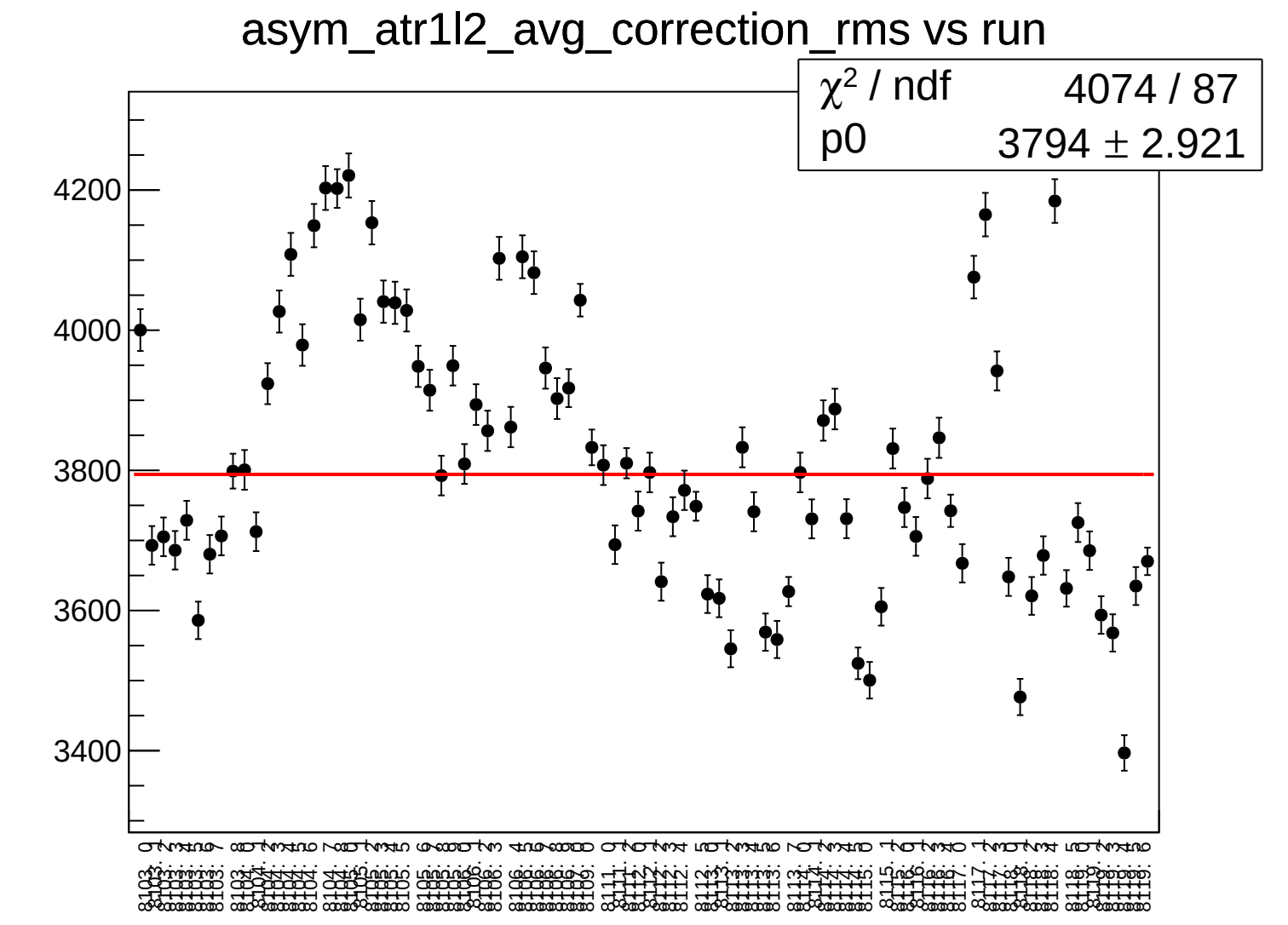

reg_asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 91.63 / 87
p0 1306 ± 1844
pull
Entries 88
Mean 149.2
Std Dev 105

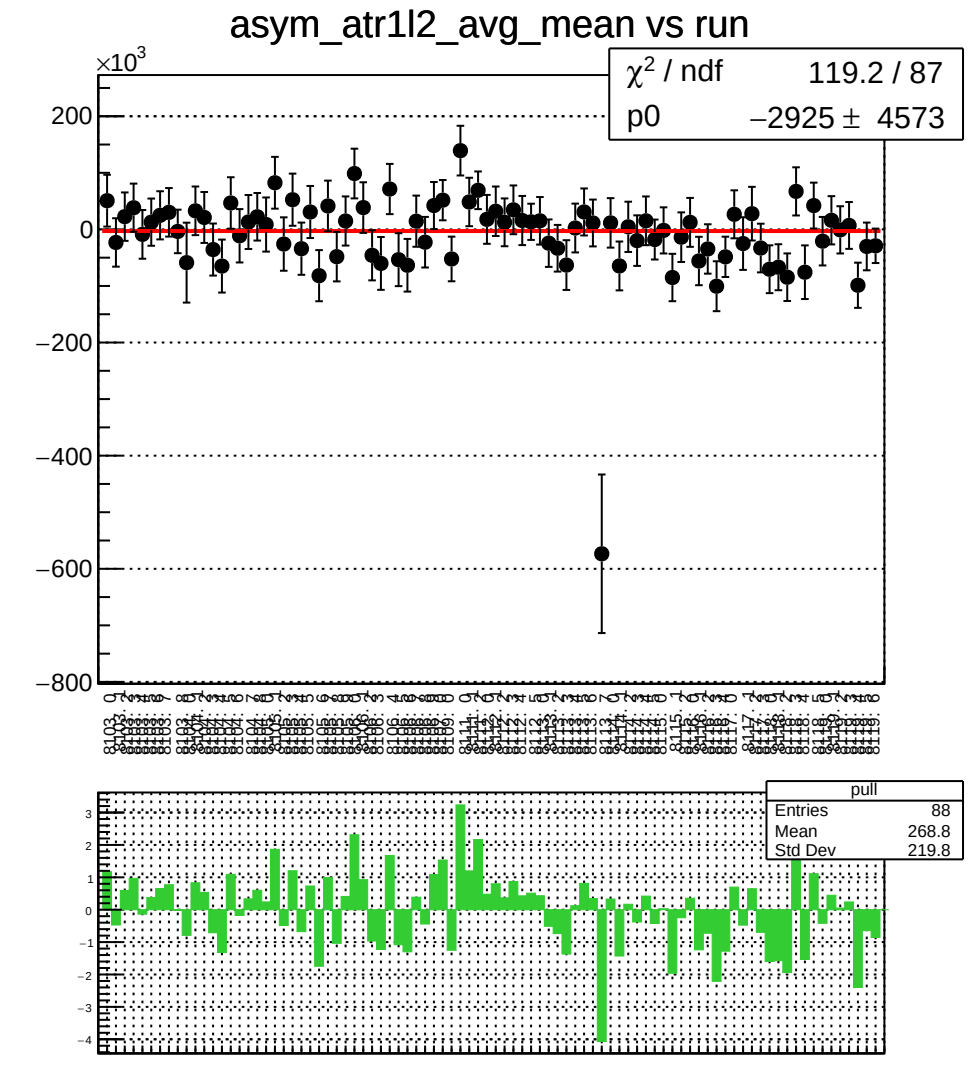

pull1D
Entries 88
Mean −0.04271
Std Dev 1.02

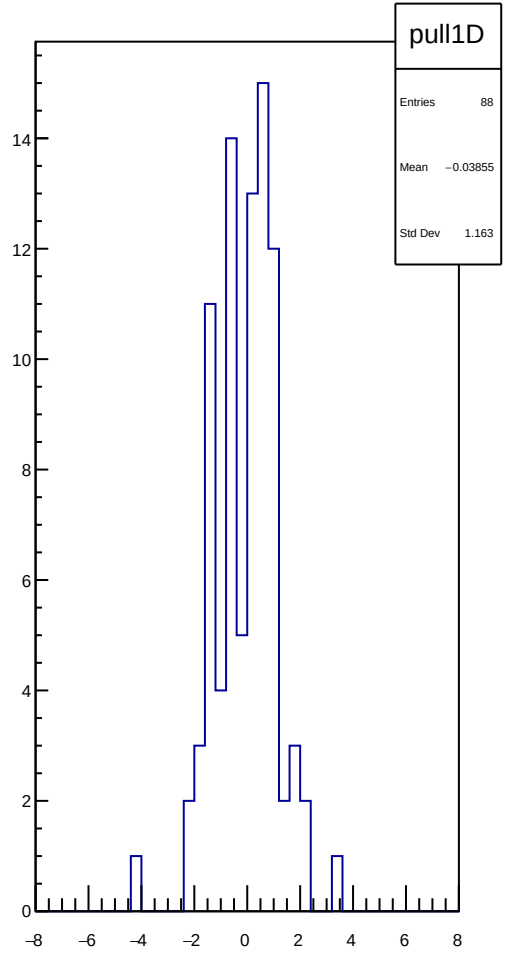

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 3.344e+04 / 87
p0 1679 ± 1.304
18000
16000
14000
12000
10000
8000
6000
4000
2000

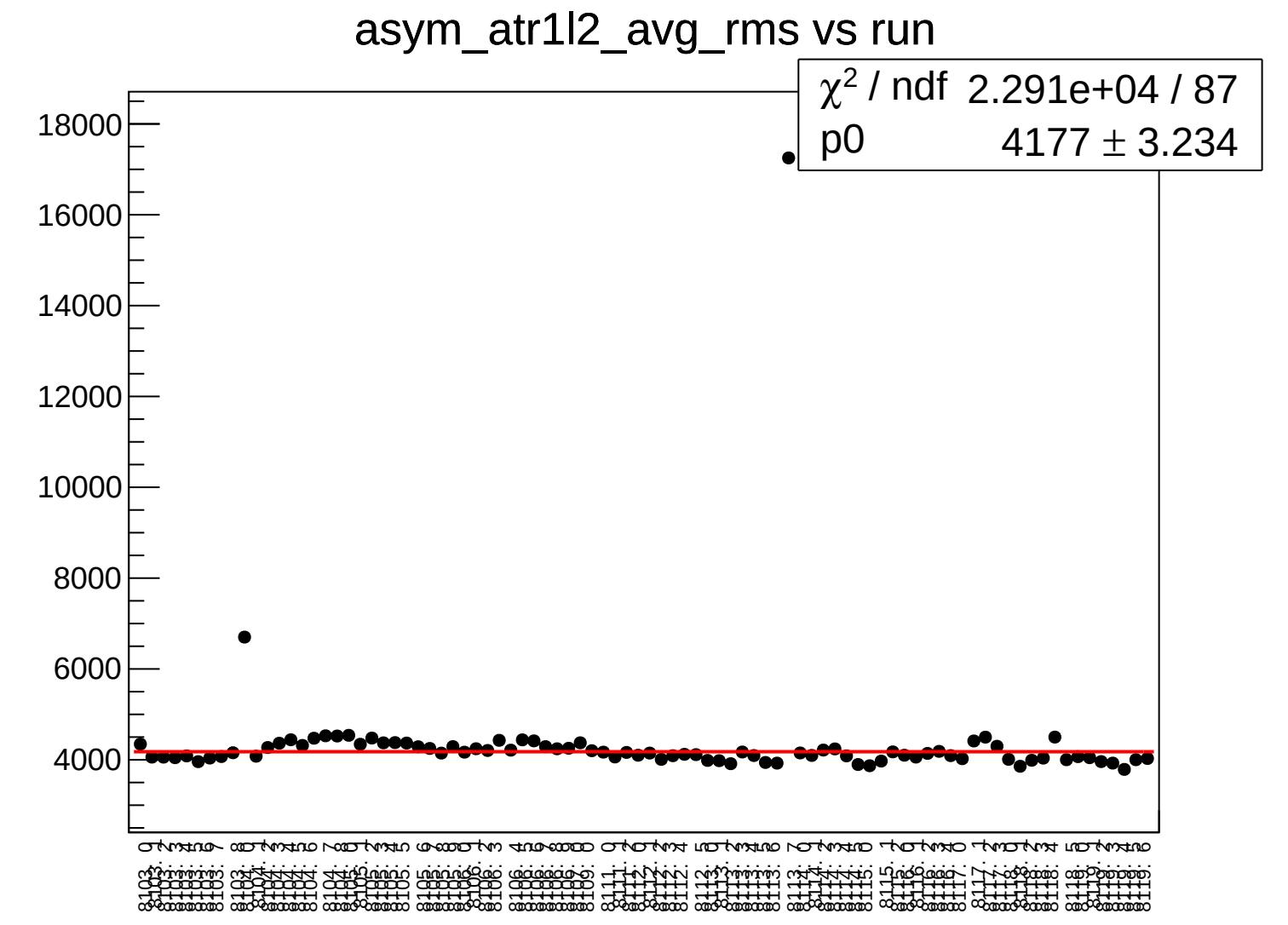

asym_atr1l2_avg_correction_mean vs run
×10^3
χ^2 / ndf 101.1 / 87
p0 3636 ± 4130
150
100
50
0
−50
−100
−150
−200
pull
Entries 88
Mean 1596
Std Dev 1546
2
1
0
−1
−2
−3

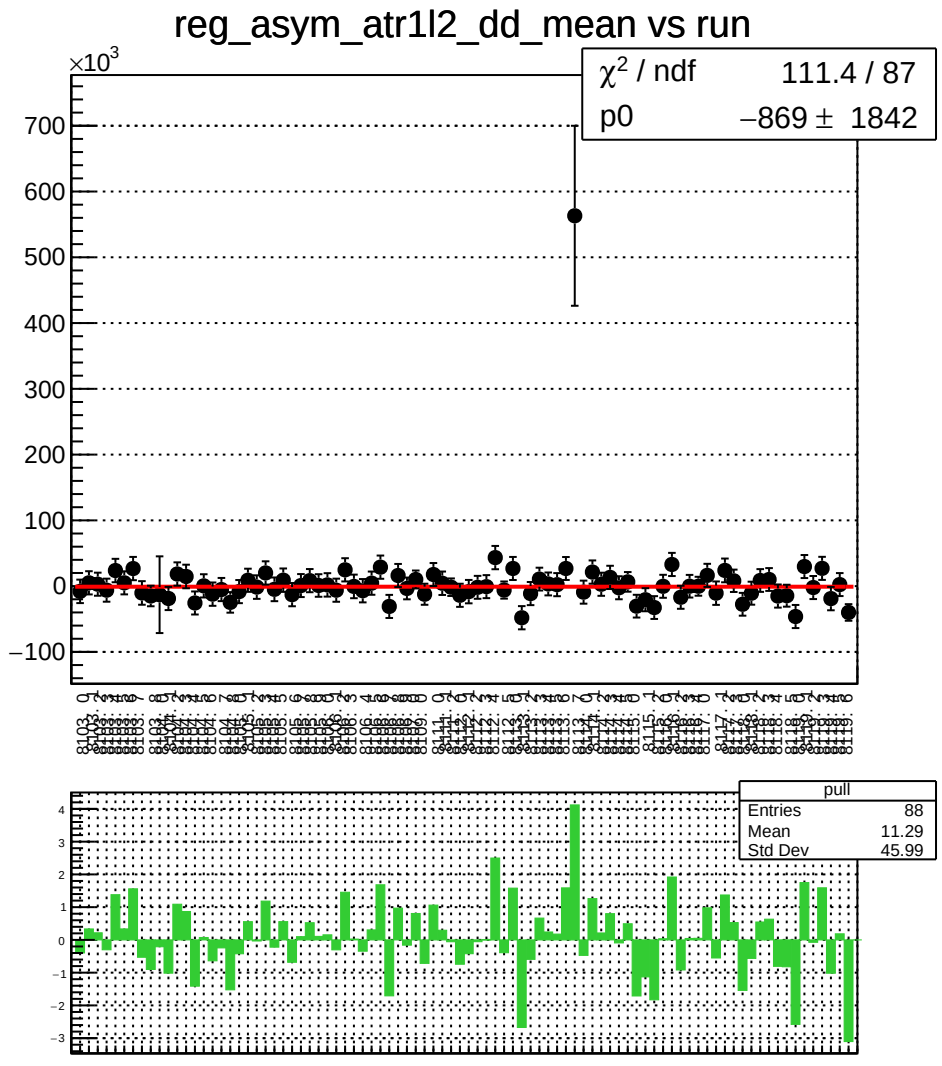

pull1D
Entries 88
Mean 0.004783
Std Dev 1.072
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

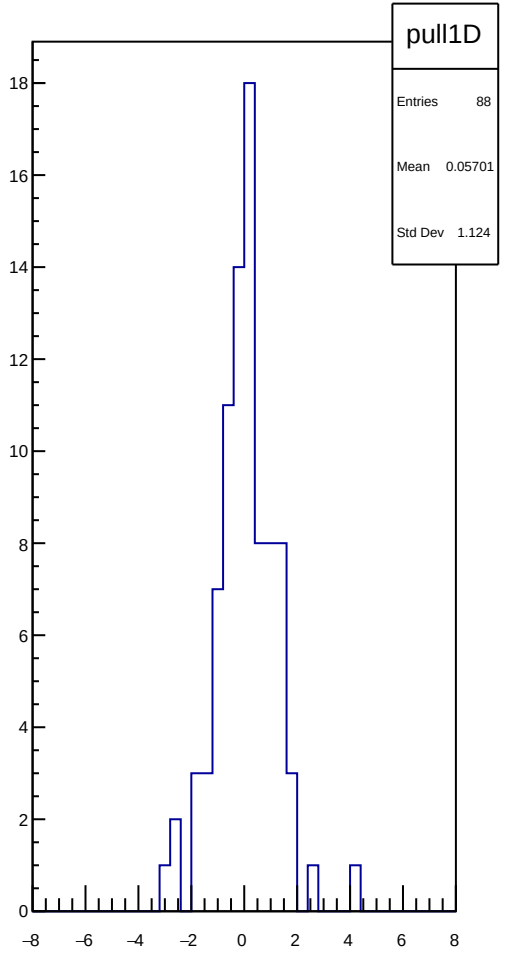

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 4074 / 87
p0 3794 ± 2.921
4200
4000
3800
3600
3400

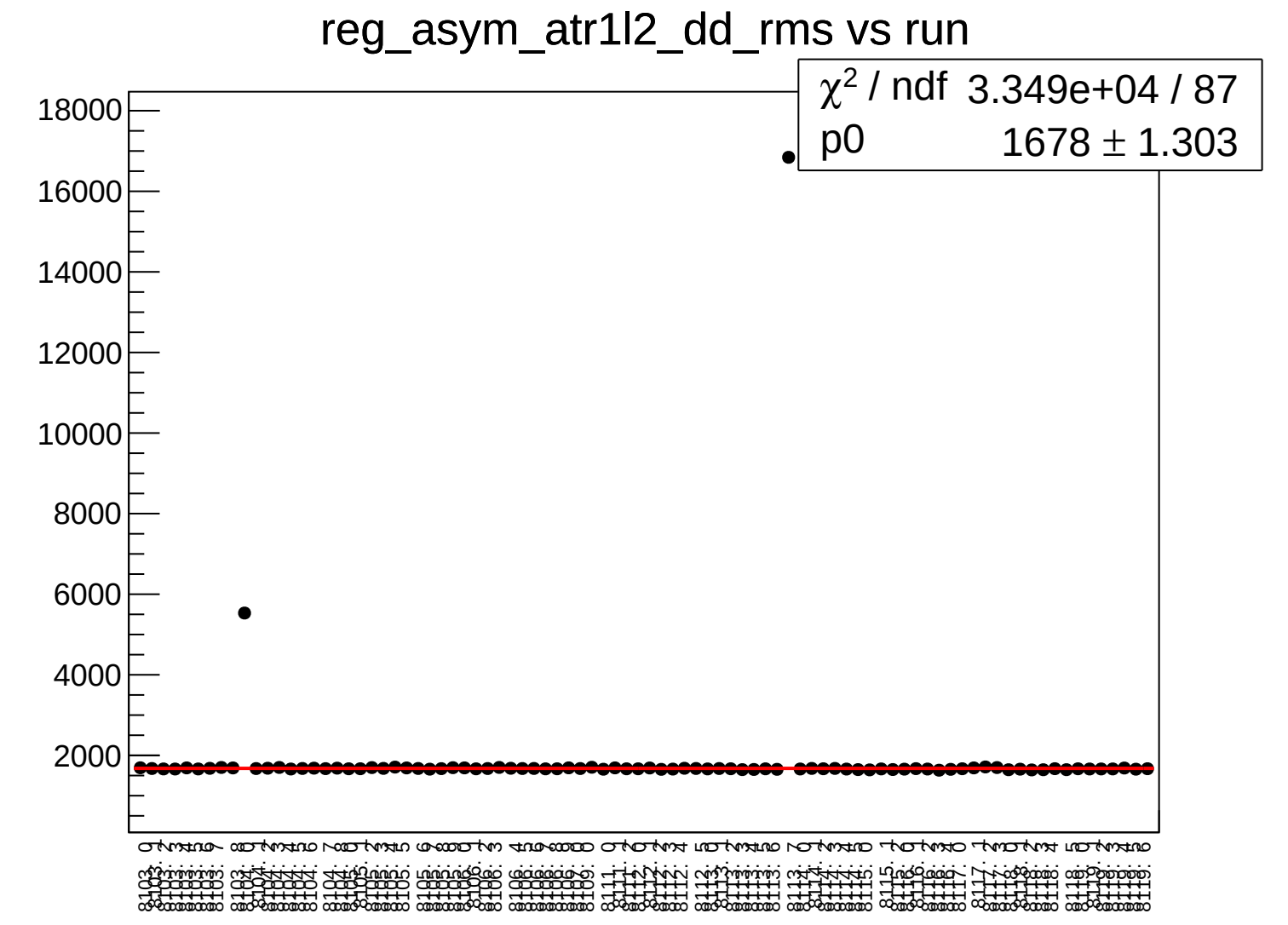

asym_atr1l2_avg_mean vs run
×10^3
χ^2 / ndf 119.2 / 87
p0 −2925 ± 4573
200
0
−200
−400
−600
−800
pull
Entries 88
Mean 268.8
Std Dev 219.8
3
2
1
0
−1
−2
−3
−4

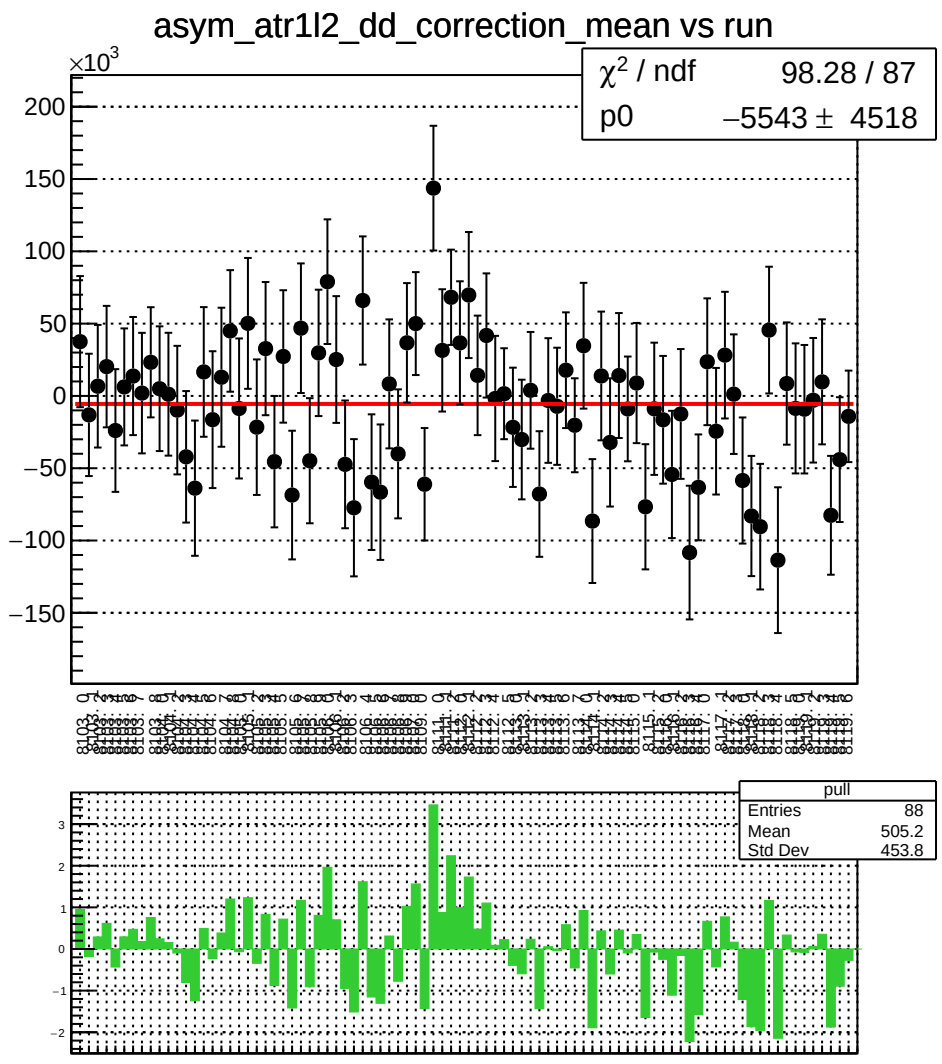

pull1D
Entries 88
Mean −0.03855
Std Dev 1.163
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

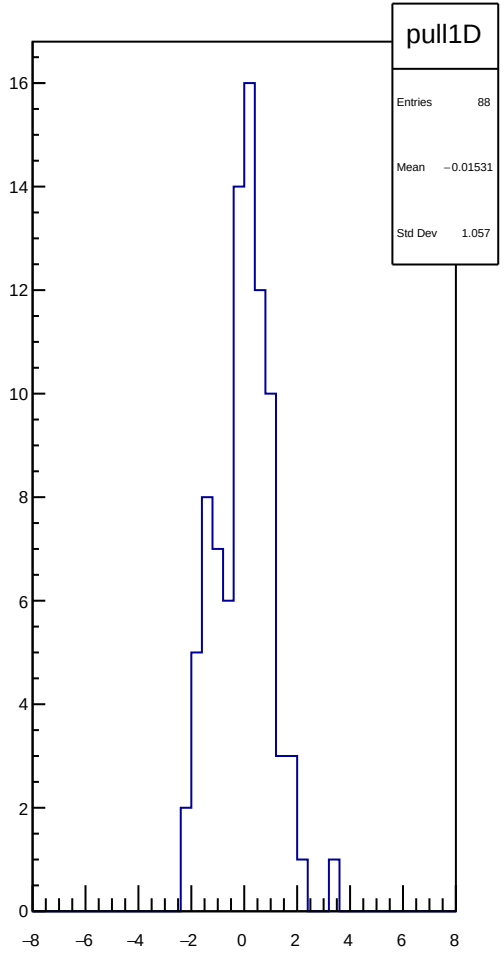

asym_atr1l2_avg_rms vs run
χ² / ndf 2.291e+04 / 87
p0 4177 ± 3.234
18000
16000
14000
12000
10000
8000
6000
4000

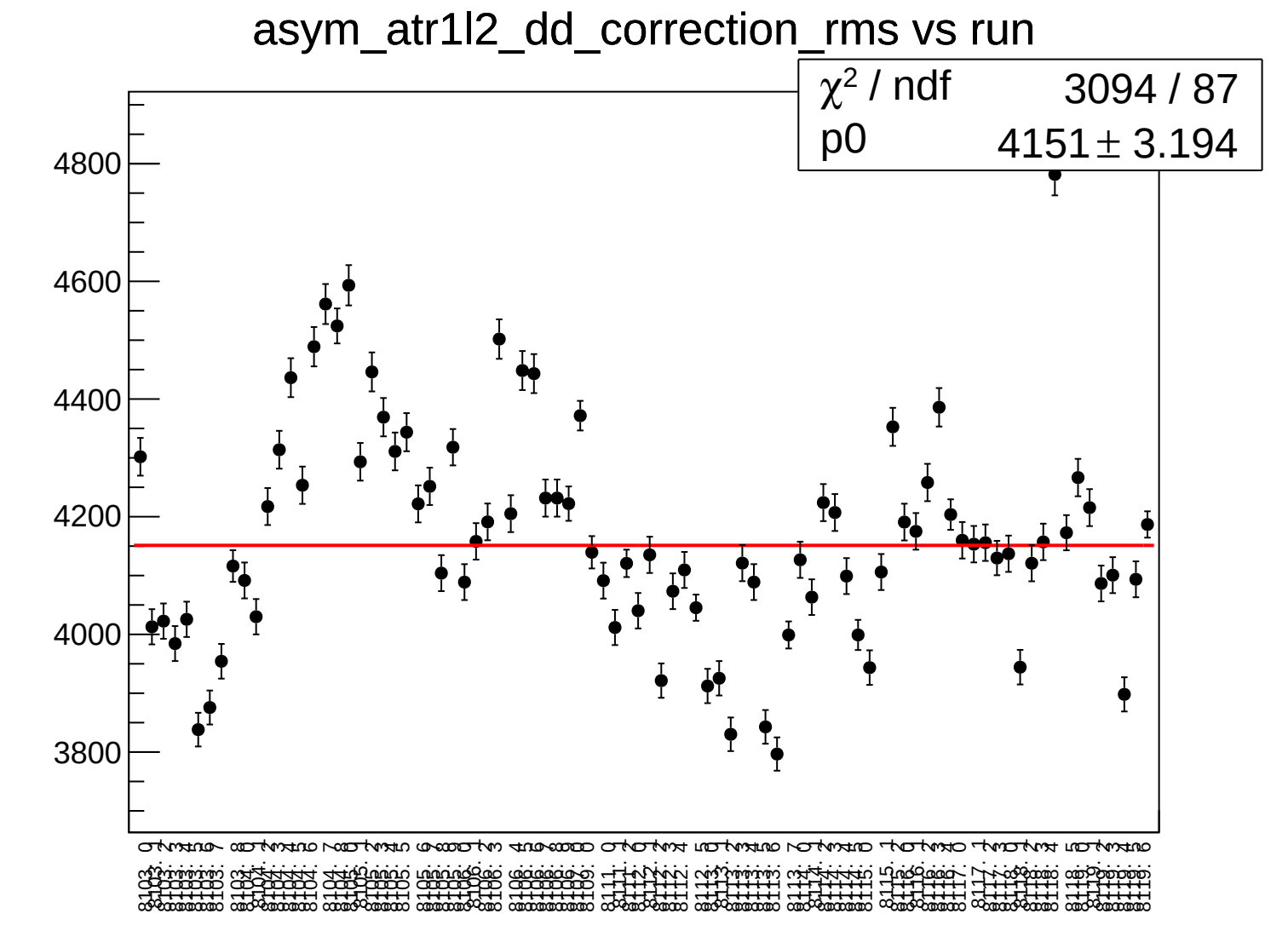

reg_asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 111.4 / 87
p0 −869 ± 1842
700
600
500
400
300
200
100
0
−100
pull
Entries 88
Mean 11.29
Std Dev 45.99
4
3
2
1
0
−1
−2
−3

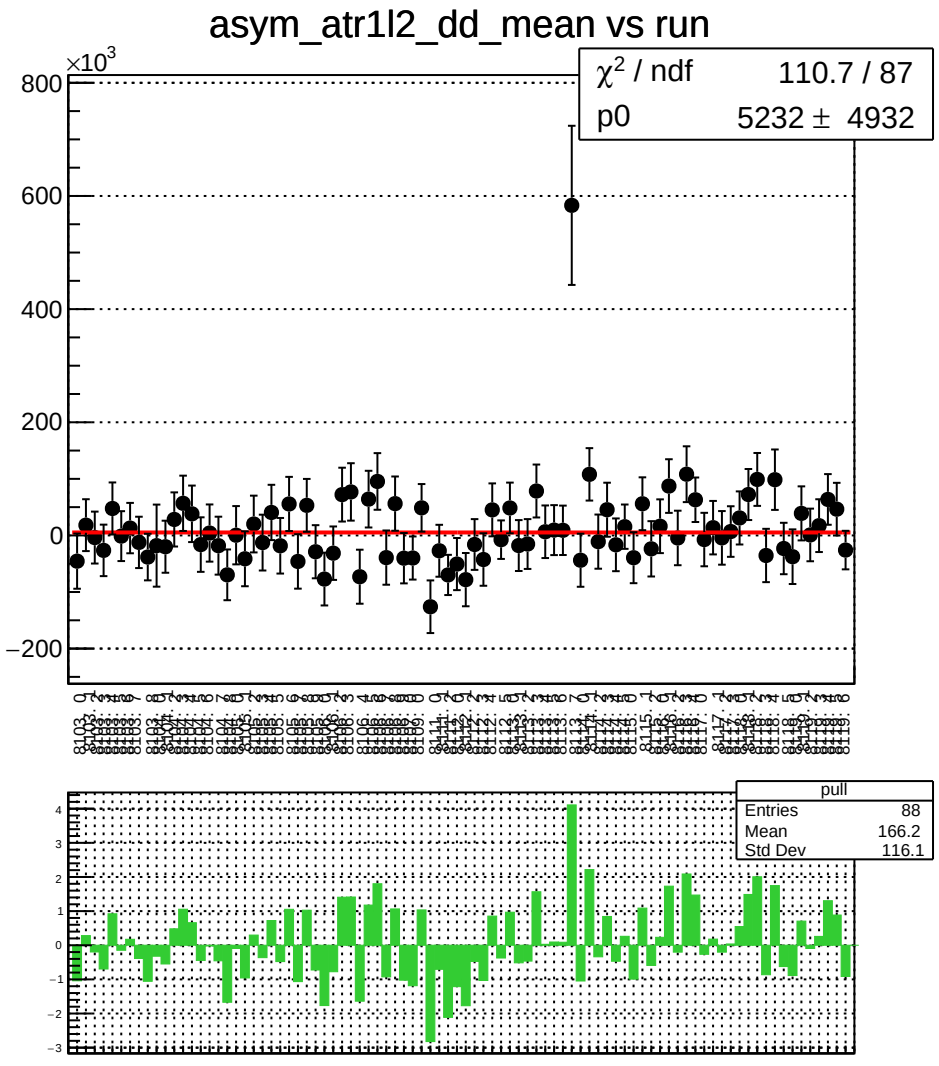

pull1D
Entries 88
Mean 0.05701
Std Dev 1.124
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

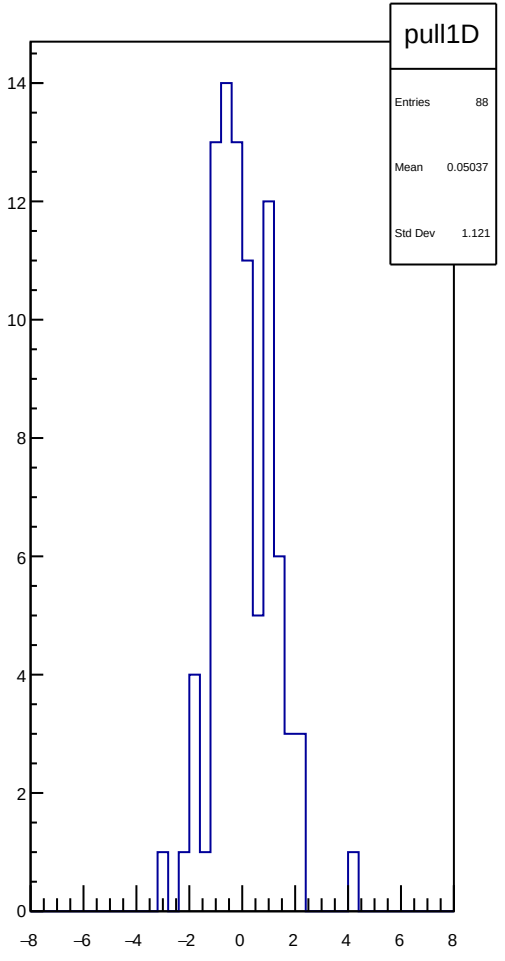

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 3.349e+04 / 87
p0 1678 ± 1.303
18000
16000
14000
12000
10000
8000
6000
4000
2000

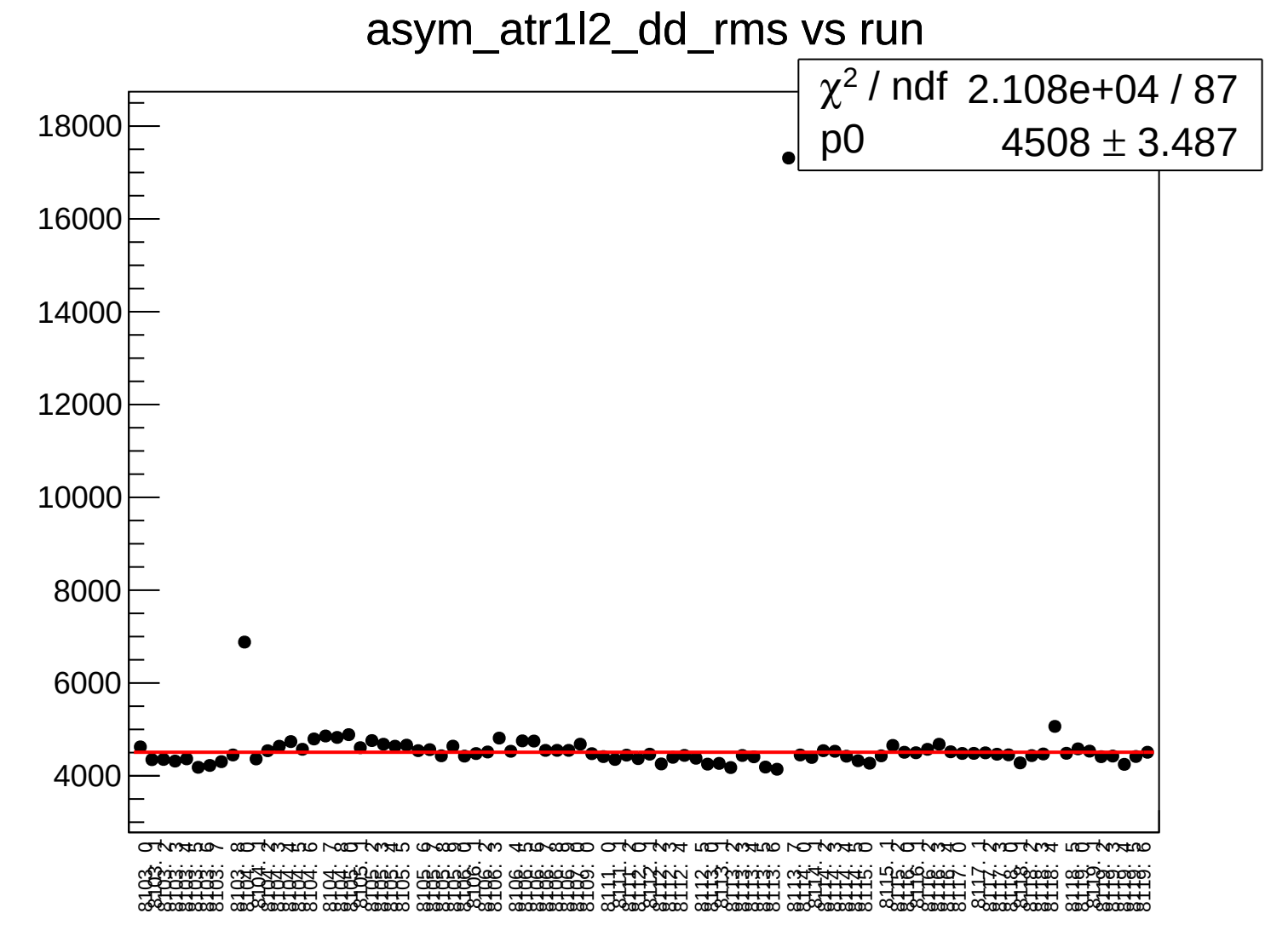

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 98.28 / 87
p0 −5543 ± 4518
200
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 505.2
Std Dev 453.8
3
2
1
0
−1
−2

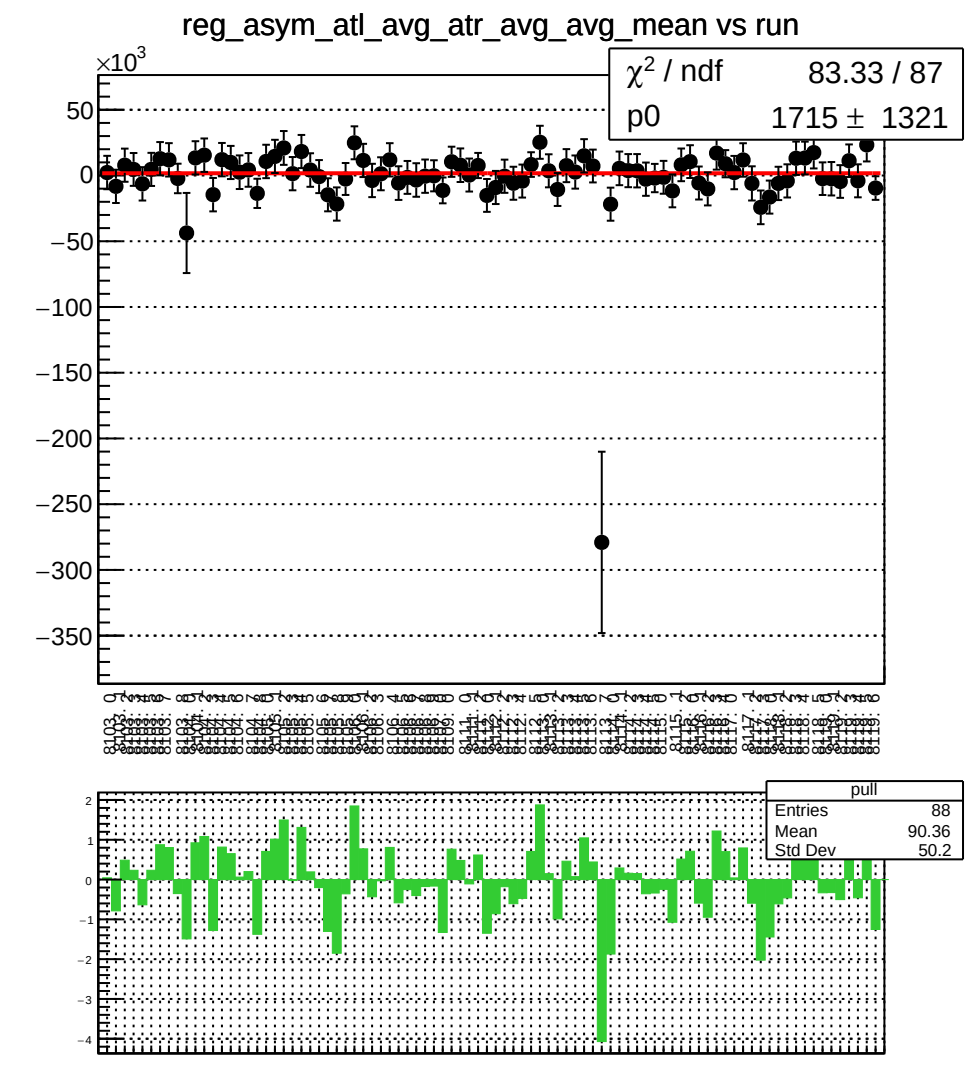

pull1D
Entries 88
Mean −0.01531
Std Dev 1.057
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

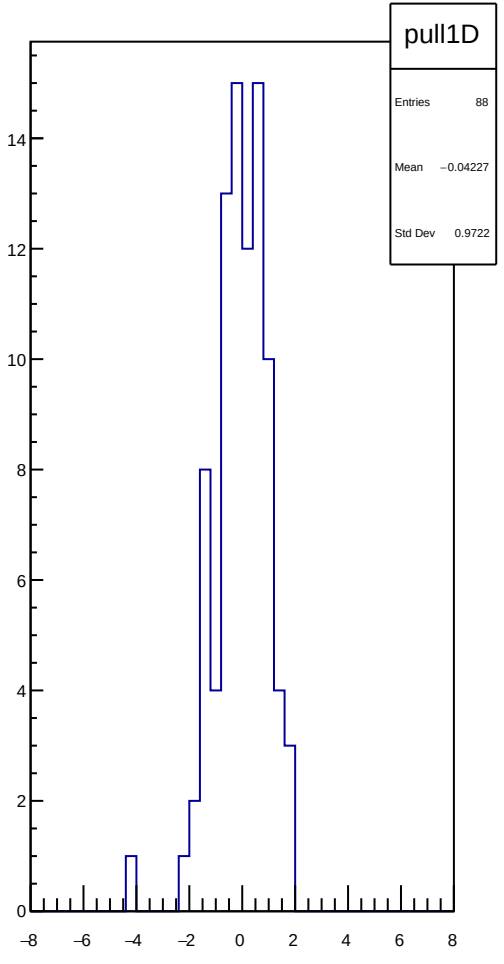

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 3094 / 87
p0 4151 ± 3.194
4800
4600
4400
4200
4000
3800

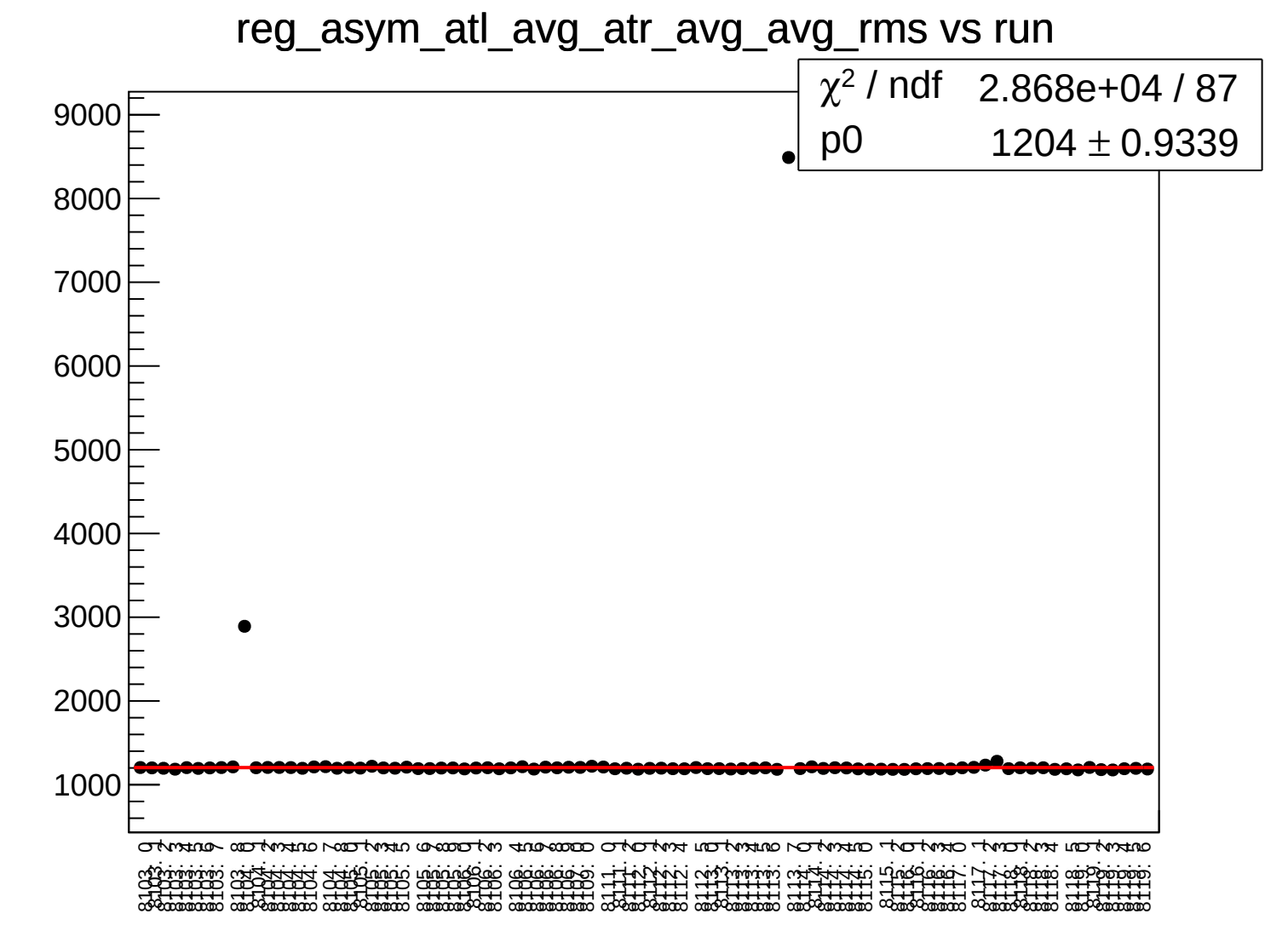

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 110.7 / 87
p0 5232 ± 4932
800
600
400
200
0
−200
pull
Entries 88
Mean 166.2
Std Dev 116.1
4
3
2
1
0
−1
−2
−3

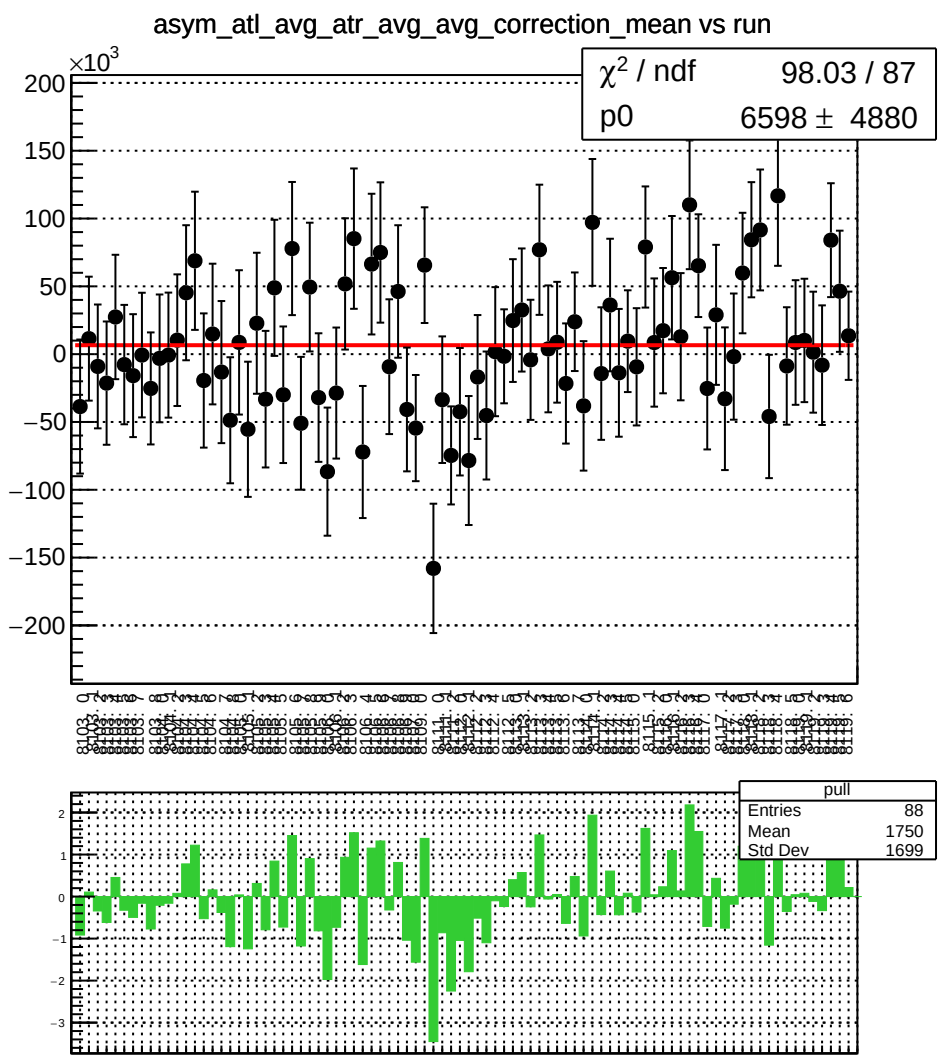

pull1D
Entries 88
Mean 0.05037
Std Dev 1.121
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

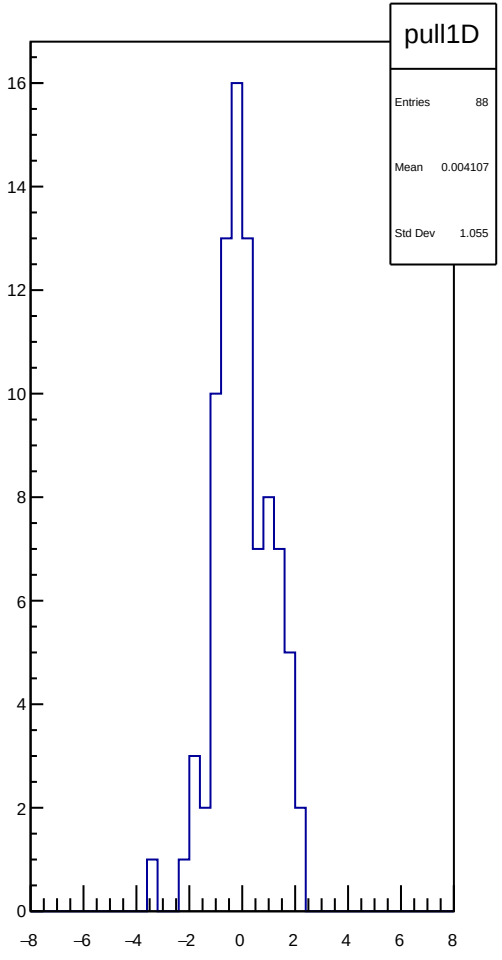

asym_atr1l2_dd_rms vs run
χ² / ndf 2.108e+04 / 87
p0 4508 ± 3.487
18000
16000
14000
12000
10000
8000
6000
4000

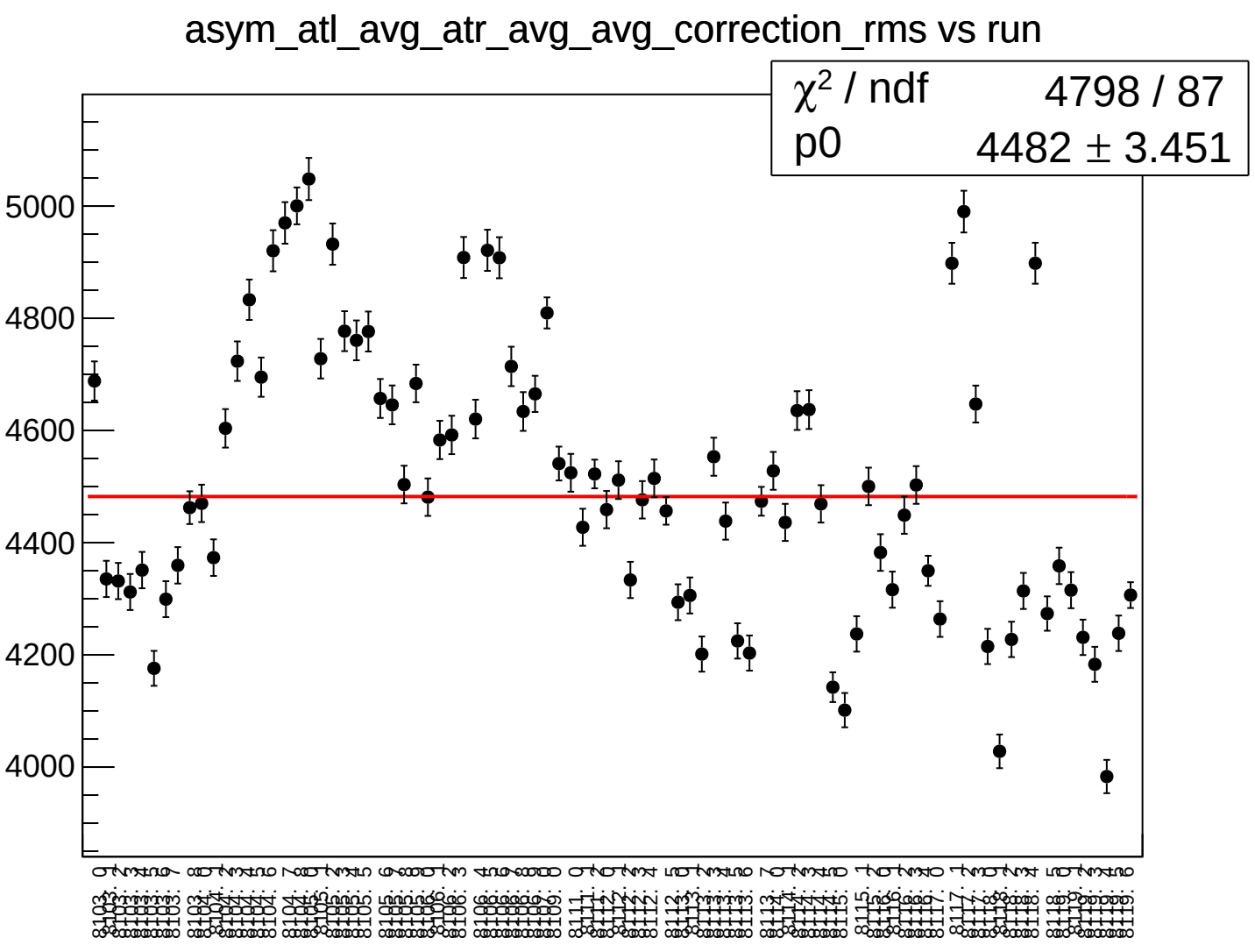

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ^2 / ndf 83.33 / 87
p0 1715 ± 1321
pull
Entries 88
Mean 90.36
Std Dev 50.2

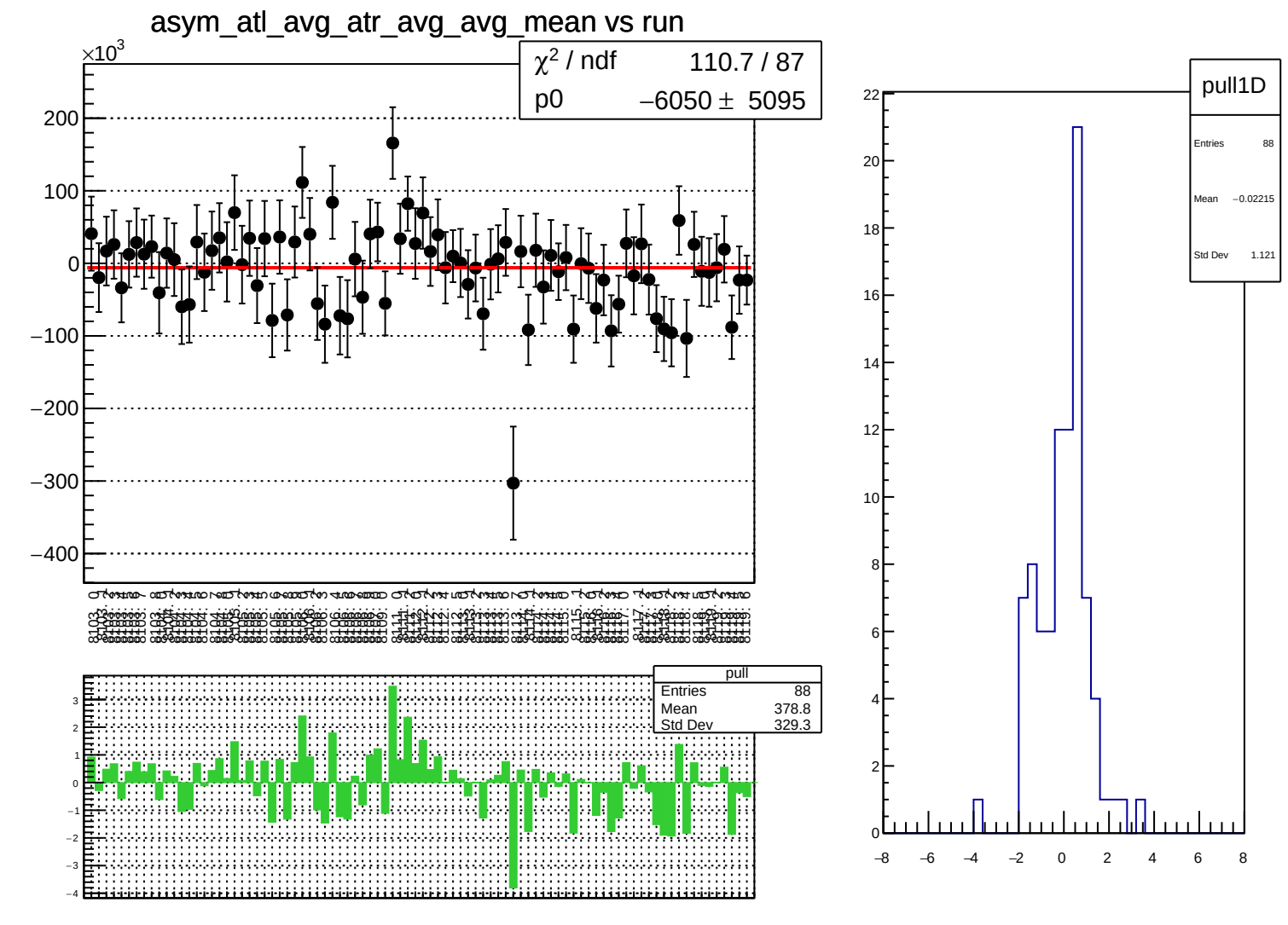

pull1D
Entries 88
Mean −0.04227
Std Dev 0.9722

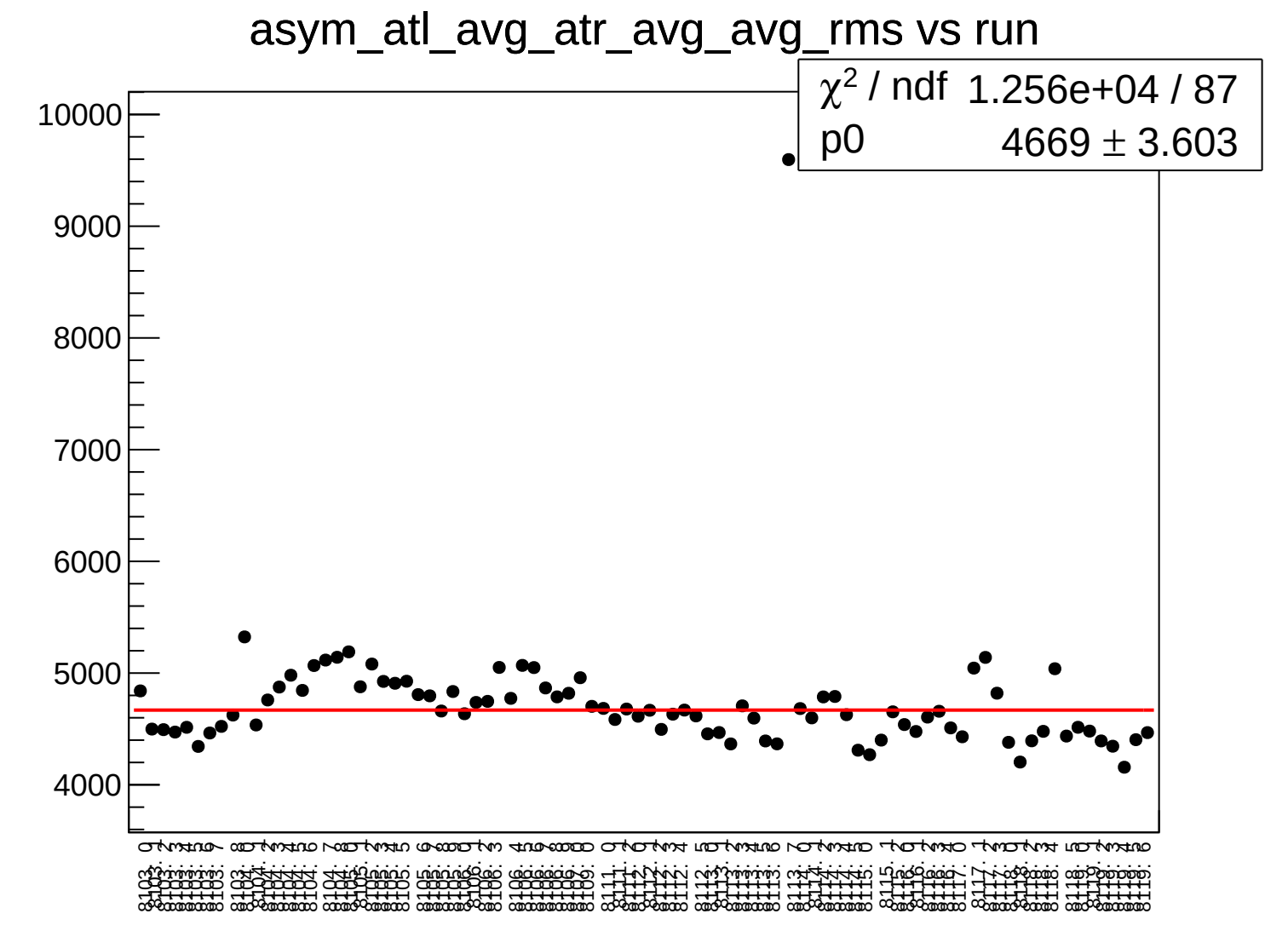

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 2.868e+04 / 87
p0 1204 ± 0.9339
9000
8000
7000
6000
5000
4000
3000
2000
1000

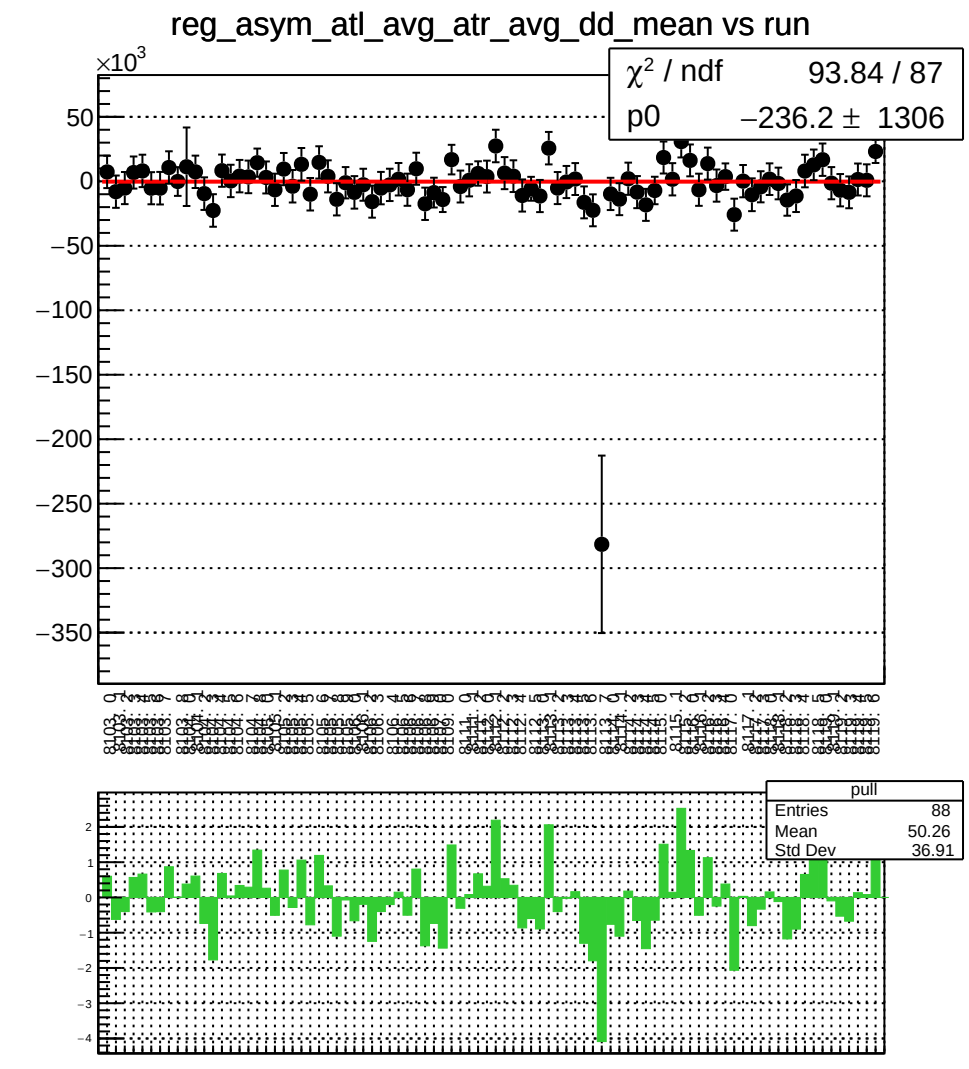

asym_atl_avg_atr_avg_avg_correction_mean vs run
×10^3
χ² / ndf 98.03 / 87
p0 6598 ± 4880
pull
Entries 88
Mean 1750
Std Dev 1699

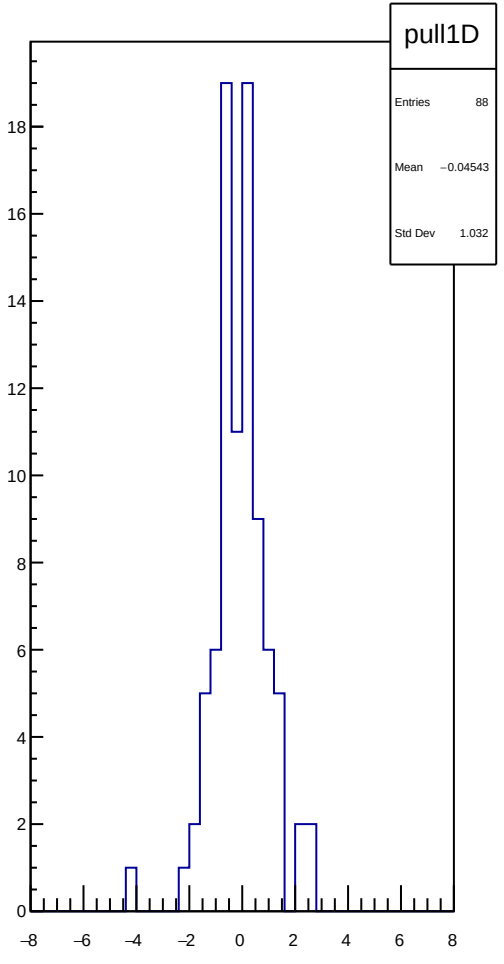

pull1D
Entries 88
Mean 0.004107
Std Dev 1.055

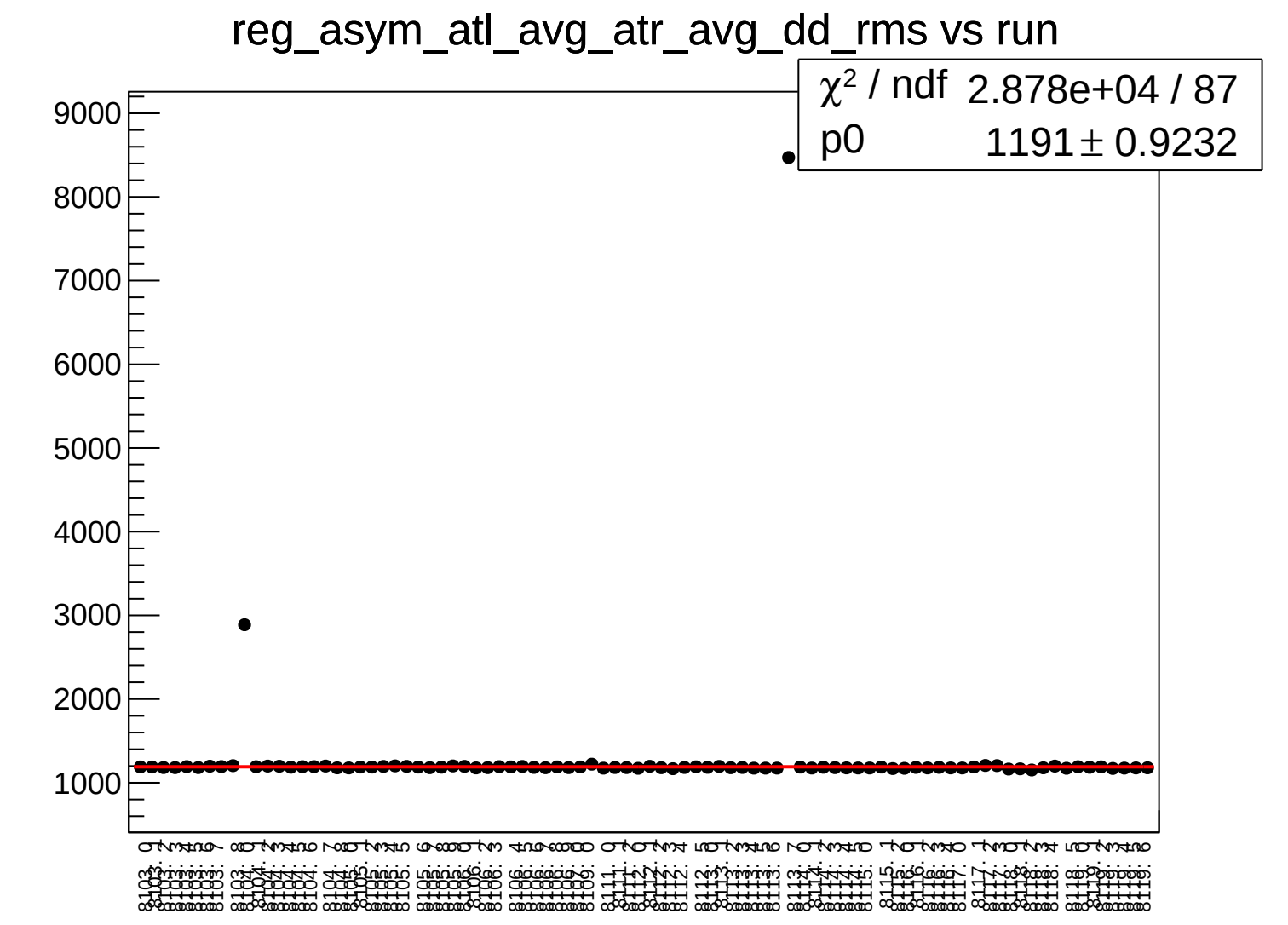

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 4798 / 87
p0 4482 ± 3.451
5000
4800
4600
4400
4200
4000

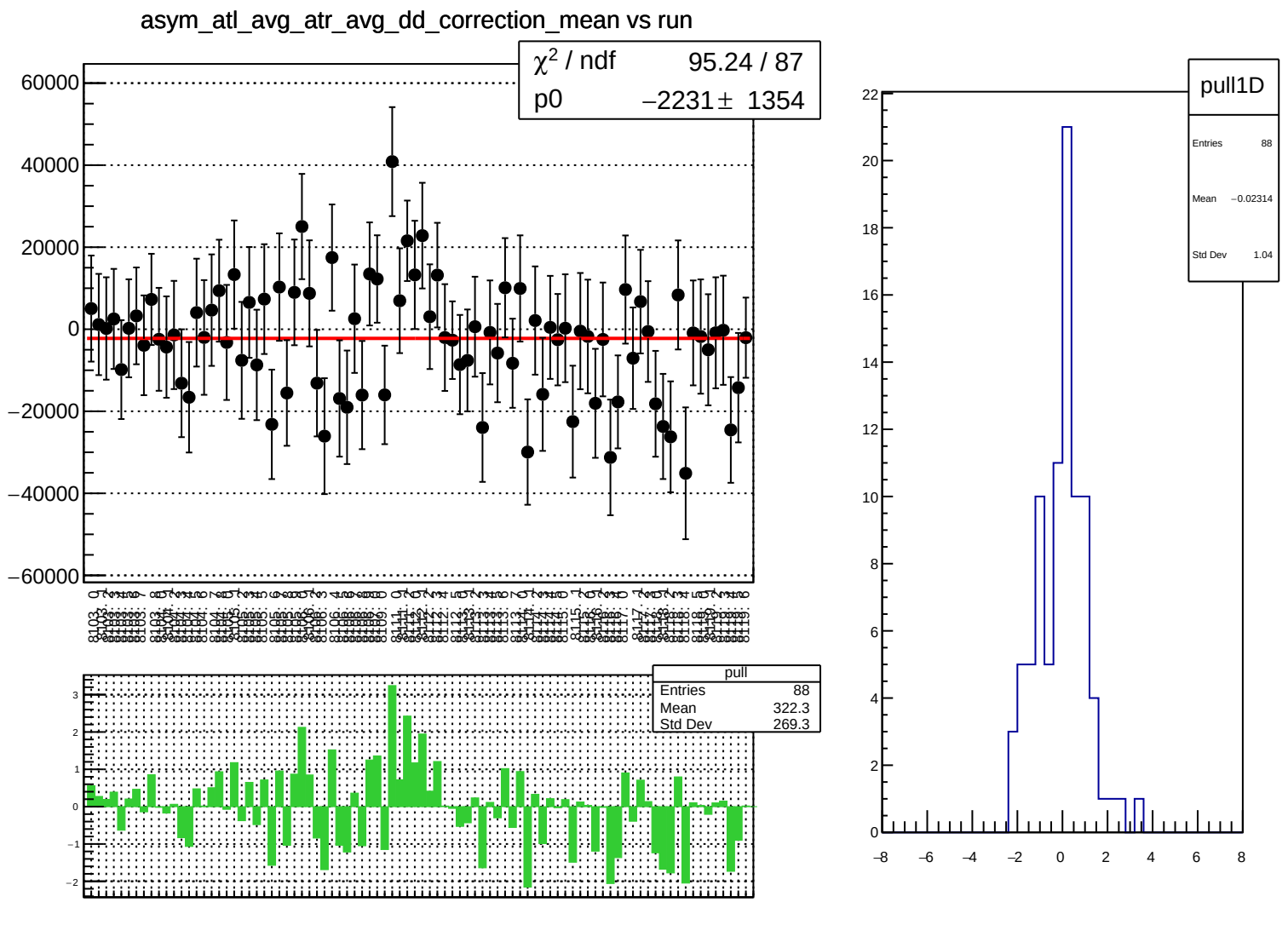

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ^2 / ndf 110.7 / 87
p0 −6050 ± 5095
200
100
0
−100
−200
−300
−400
pull
Entries 88
Mean 378.8
Std Dev 329.3
3
2
1
0
−1
−2
−3
−4
pull1D
Entries 88
Mean −0.02215
Std Dev 1.121
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

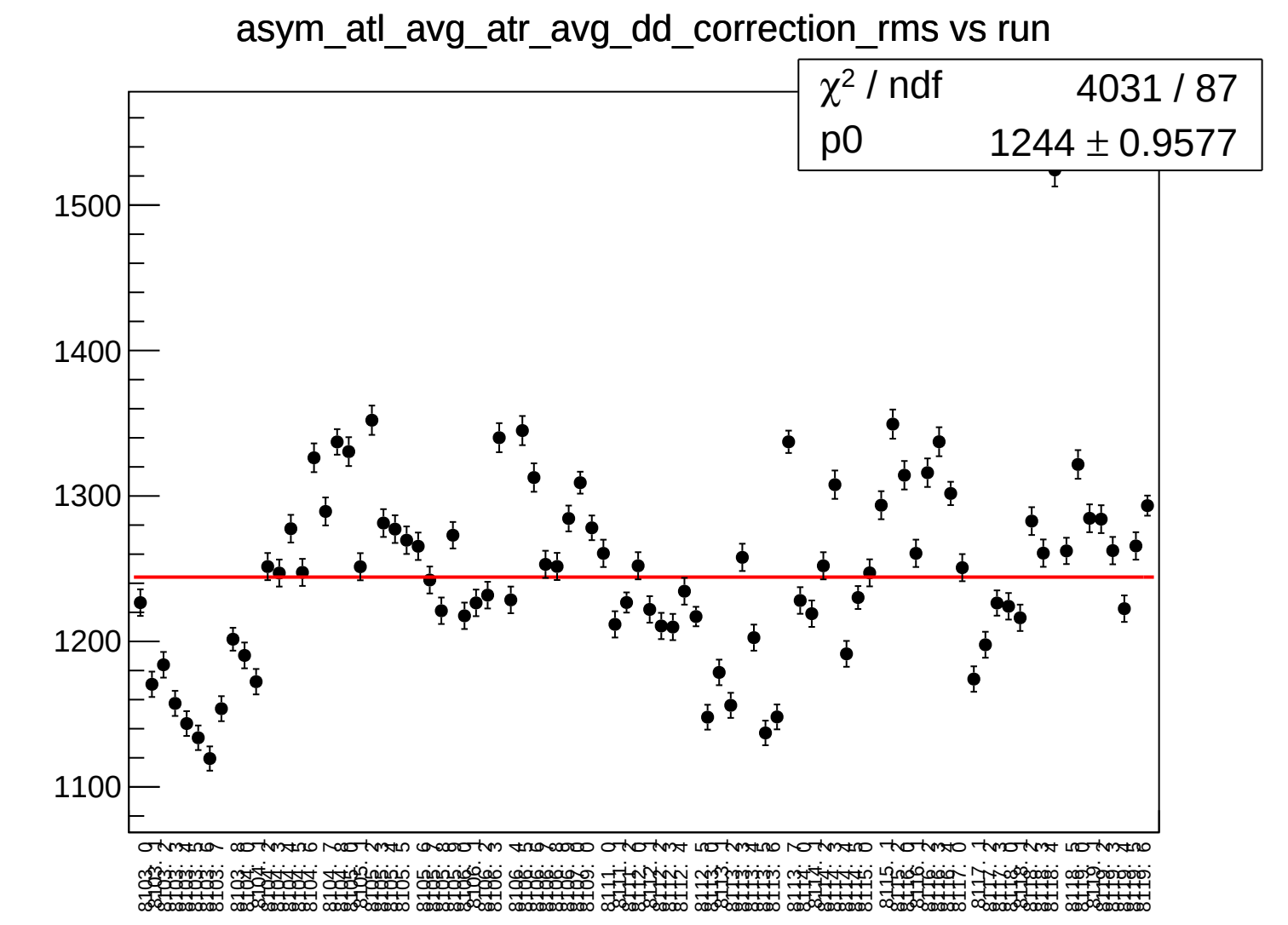

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.256e+04 / 87
p0 4669 ± 3.603
10000
9000
8000
7000
6000
5000
4000

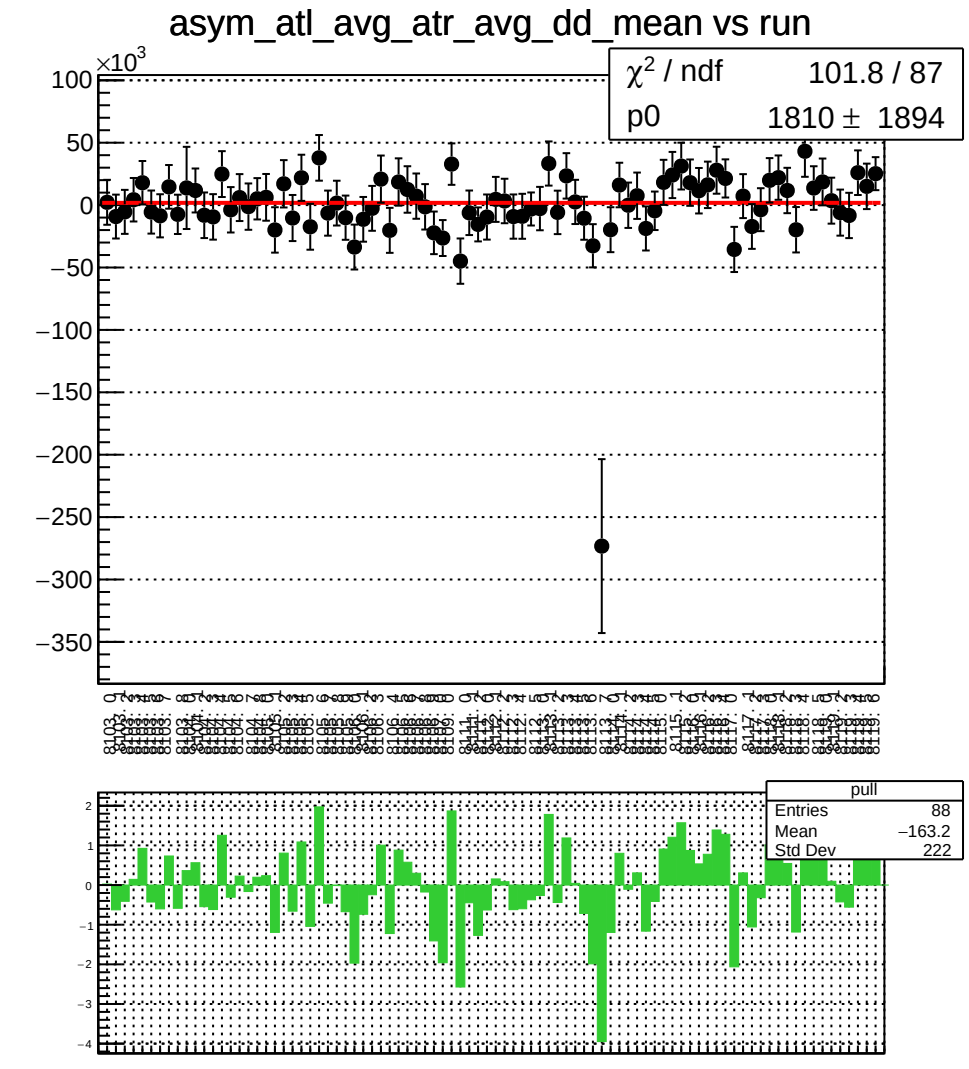

reg_asym_atl_avg_atr_avg_dd_mean vs run
×10^3
χ² / ndf 93.84 / 87
p0 −236.2 ± 1306
50
0
−50
−100
−150
−200
−250
−300
−350
pull
Entries 88
Mean 50.26
Std Dev 36.91
2
1
0
−1
−2
−3
−4

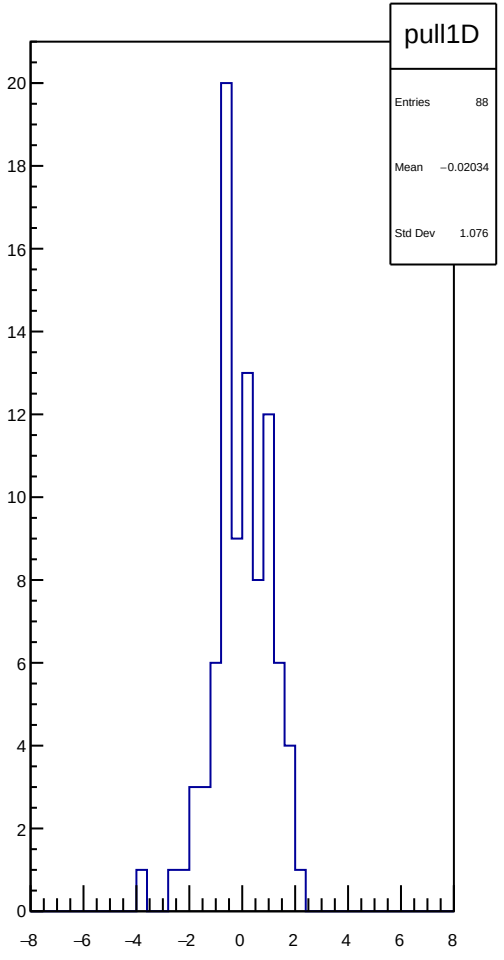

pull1D
Entries 88
Mean −0.04543
Std Dev 1.032
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

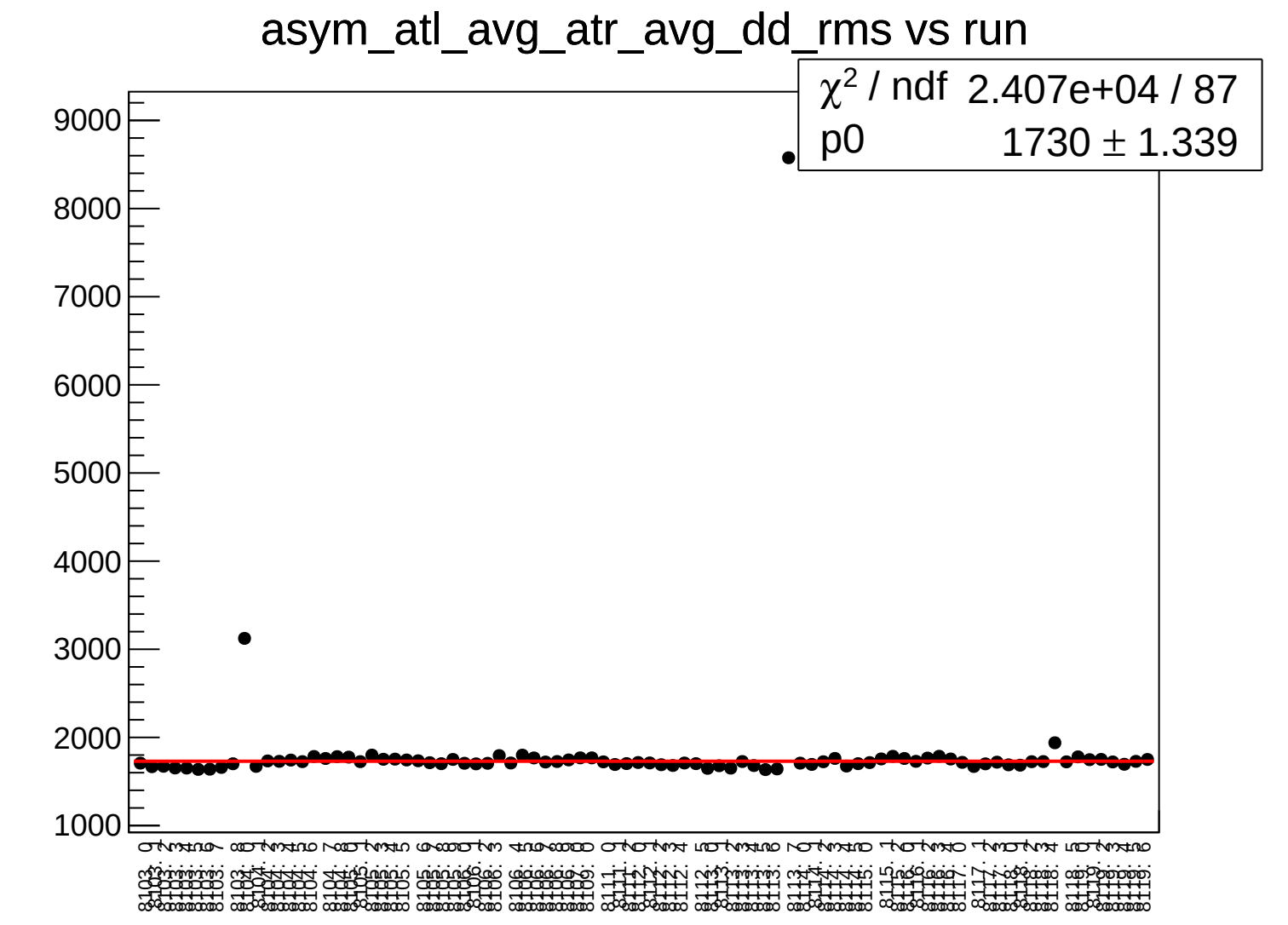

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.878e+04 / 87
p0 1191 ± 0.9232
9000
8000
7000
6000
5000
4000
3000
2000
1000

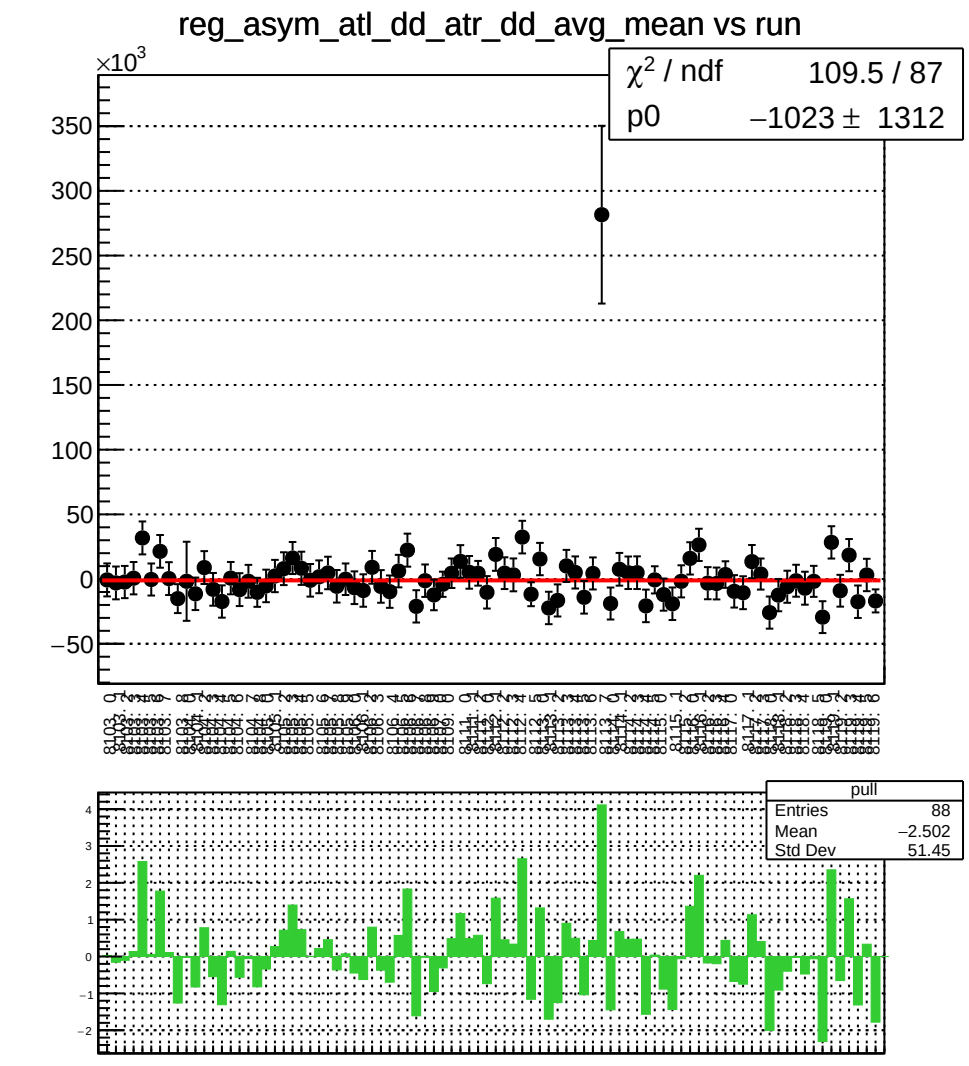

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 95.24 / 87
p0 −2231 ± 1354
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 322.3
Std Dev 269.3
3
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.02314
Std Dev 1.04
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

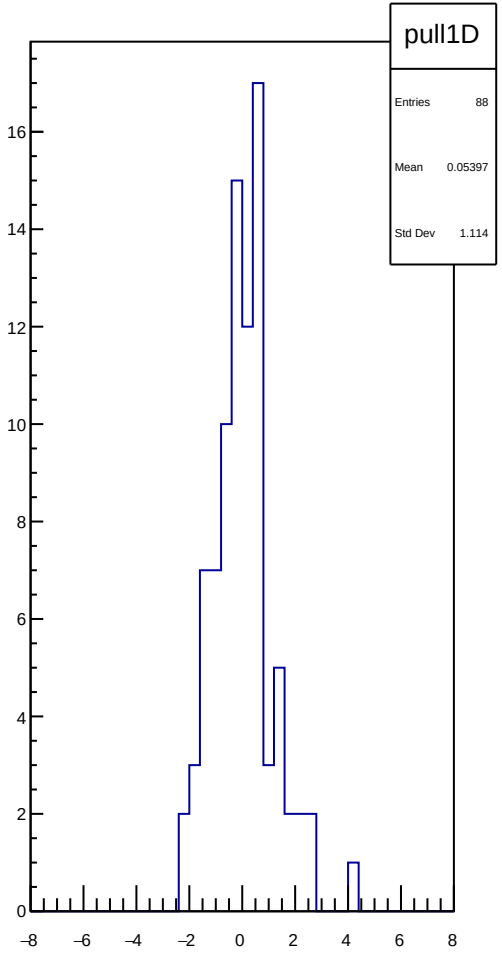

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 4031 / 87
p0 1244 ± 0.9577
1500
1400
1300
1200
1100

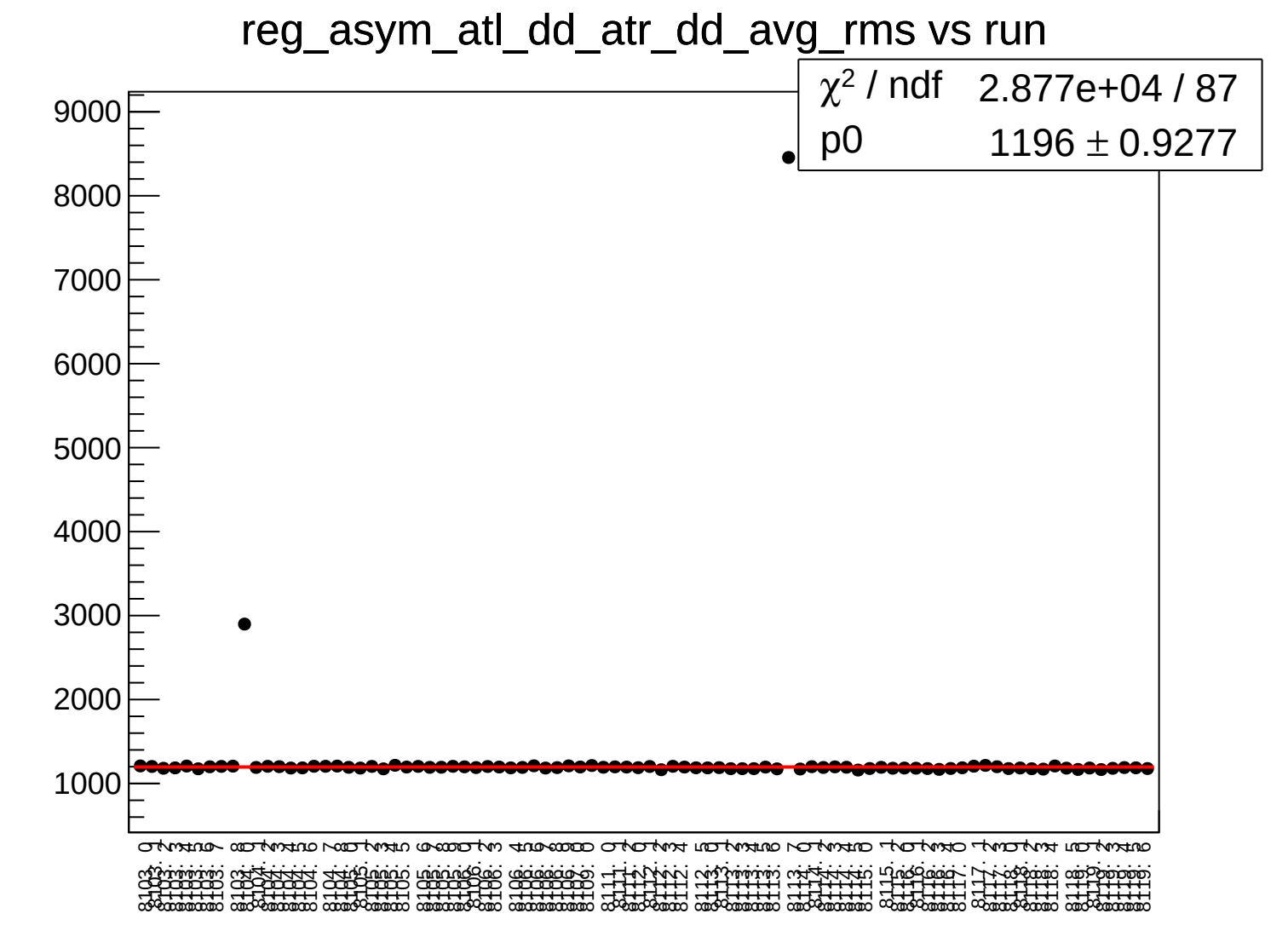

asym_atl_avg_atr_avg_dd_mean vs run
×10^3
χ² / ndf 101.8 / 87
p0 1810 ± 1894
pull
Entries 88
Mean −163.2
Std Dev 222

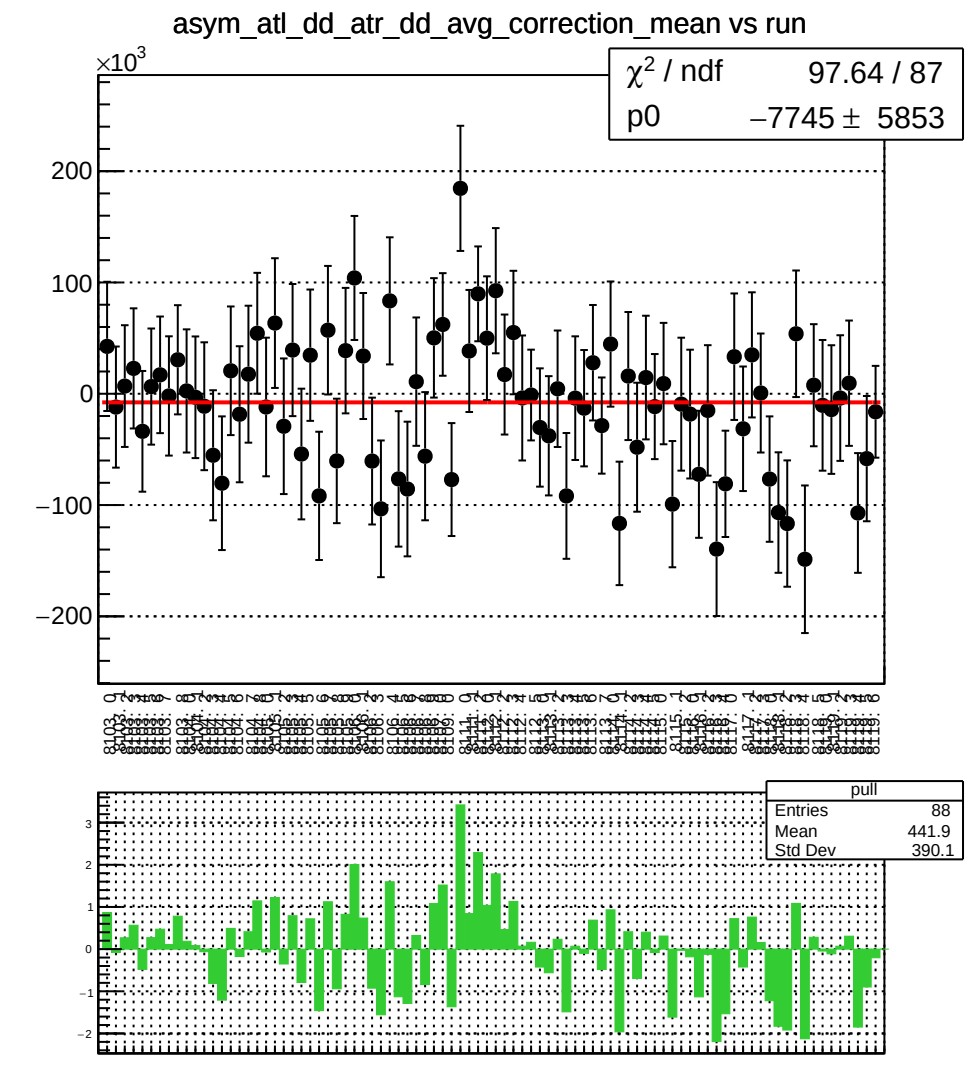

pull1D
Entries 88
Mean −0.02034
Std Dev 1.076

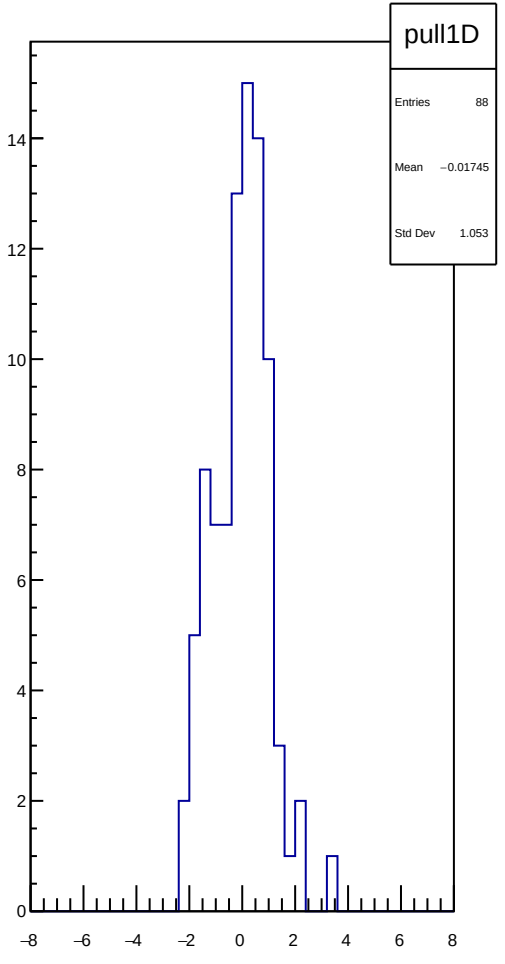

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.407e+04 / 87
p0 1730 ± 1.339
9000
8000
7000
6000
5000
4000
3000
2000
1000

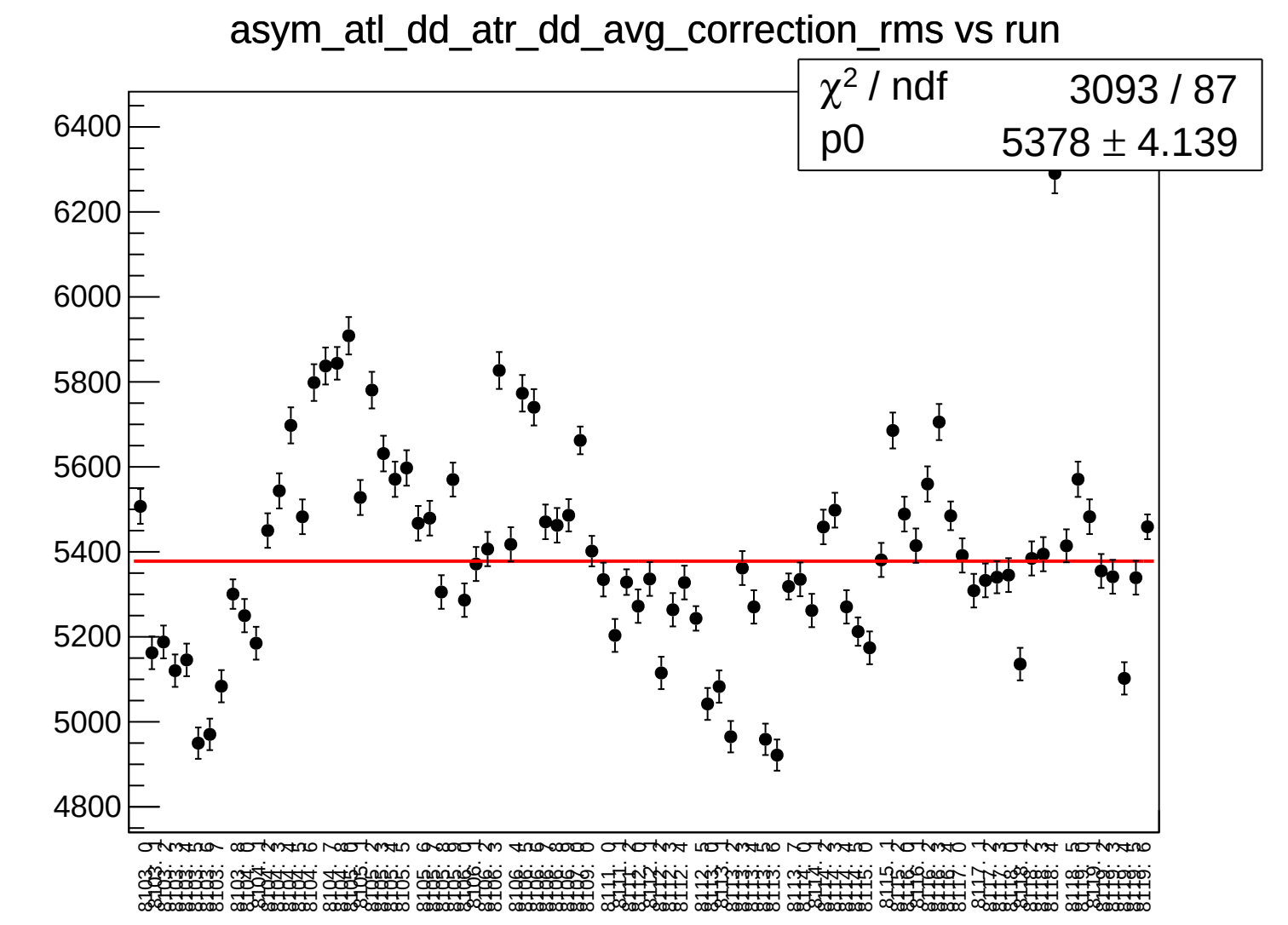

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 109.5 / 87
p0 −1023 ± 1312
350
300
250
200
150
100
50
0
−50
pull
Entries 88
Mean −2.502
Std Dev 51.45
4
3
2
1
0
−1
−2

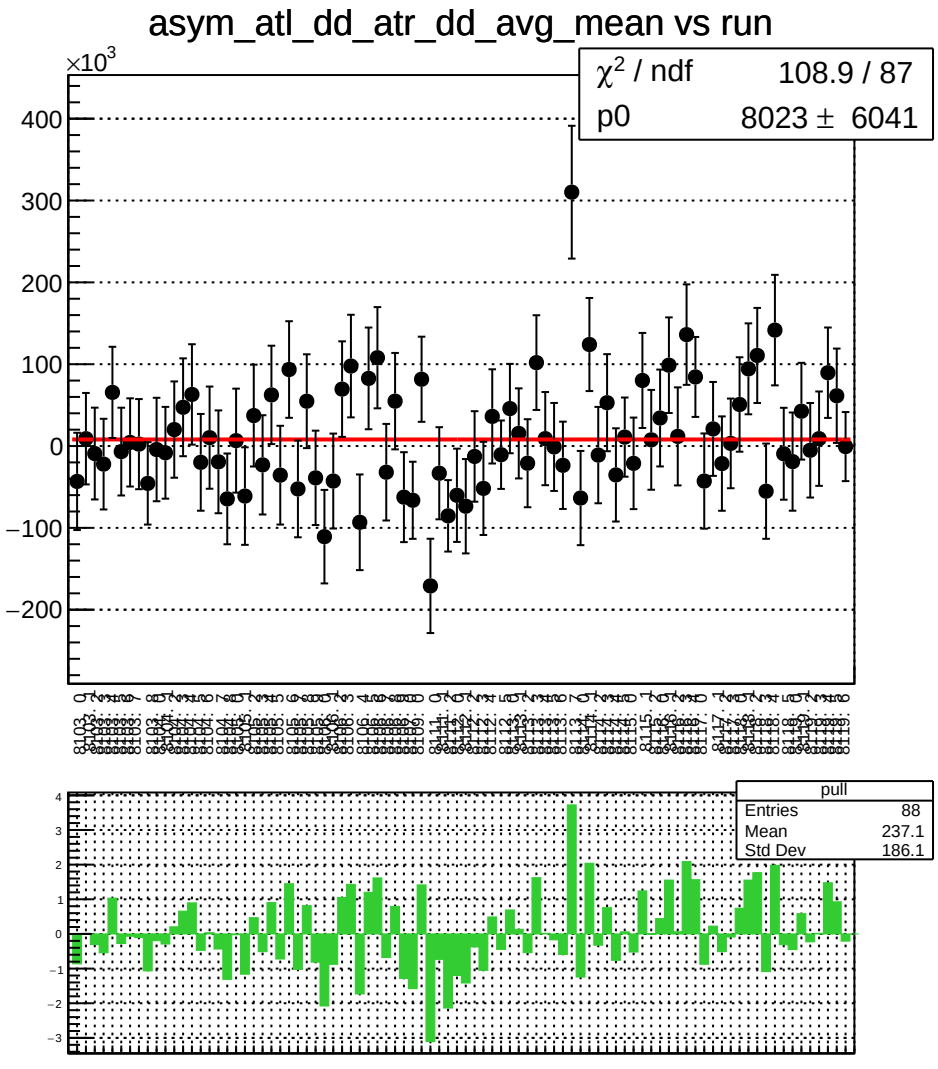

pull1D
Entries 88
Mean 0.05397
Std Dev 1.114
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

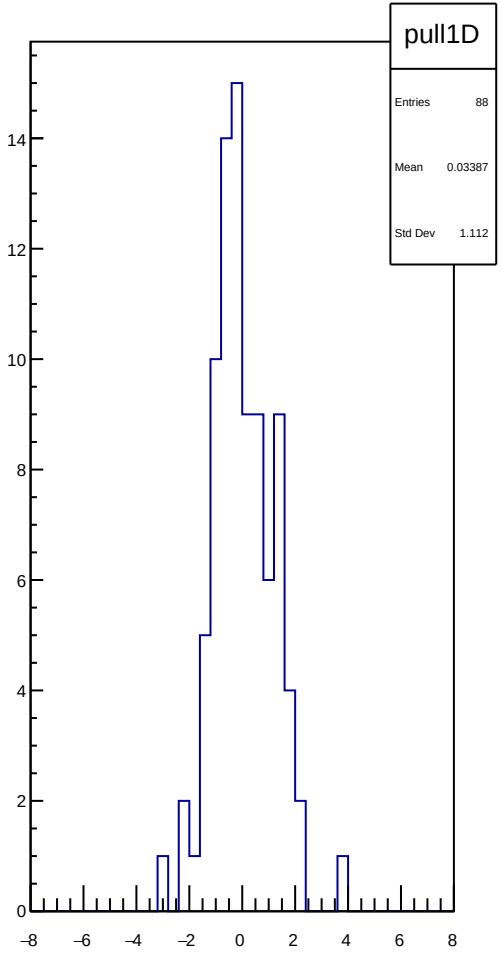

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 2.877e+04 / 87
p0 1196 ± 0.9277
9000
8000
7000
6000
5000
4000
3000
2000
1000

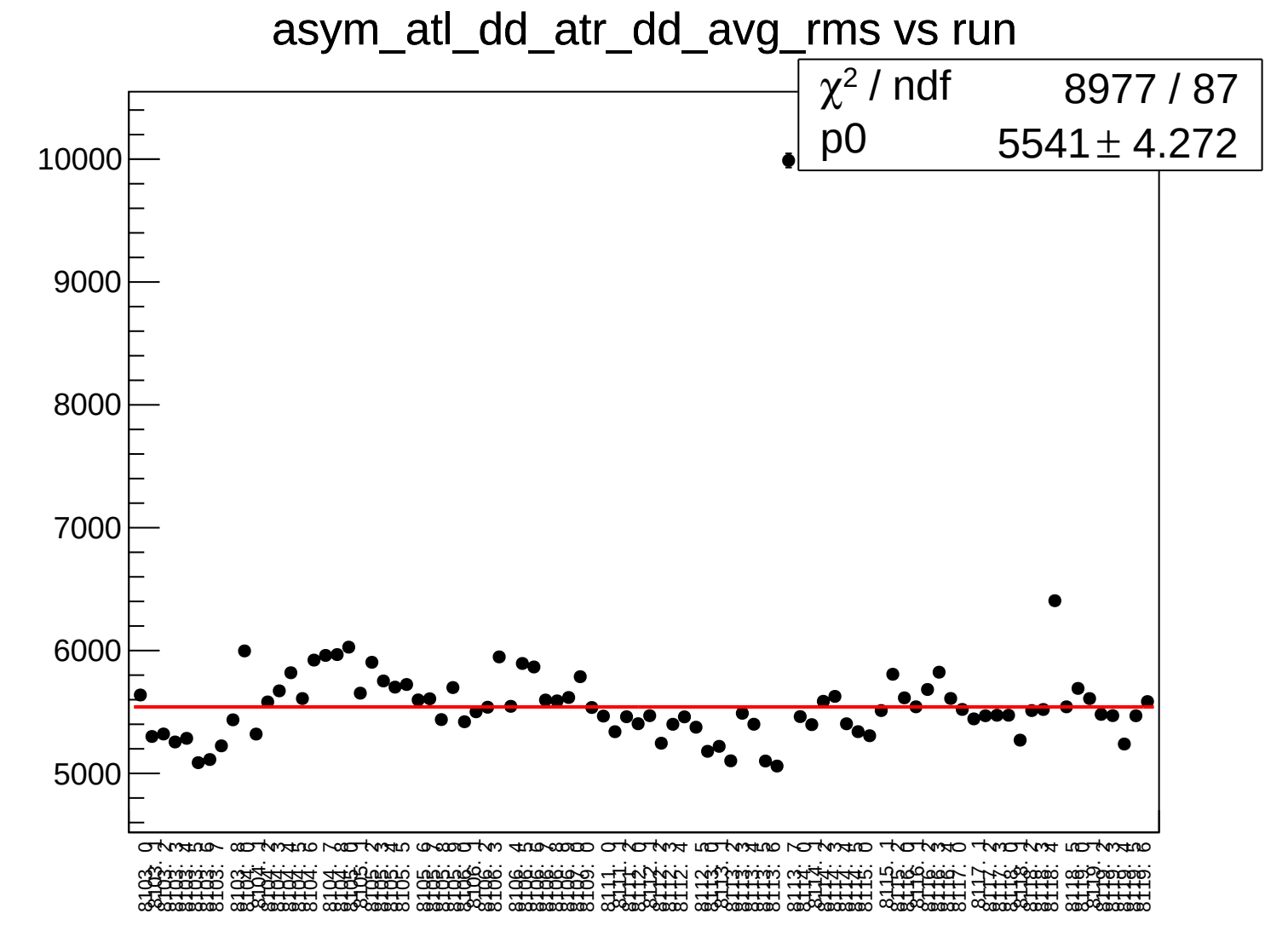

asym_atl_dd_atr_dd_avg_correction_mean vs run
×10^3
χ² / ndf 97.64 / 87
p0 −7745 ± 5853
200
100
0
−100
−200
pull
Entries 88
Mean 441.9
Std Dev 390.1
3
2
1
0
−1
−2

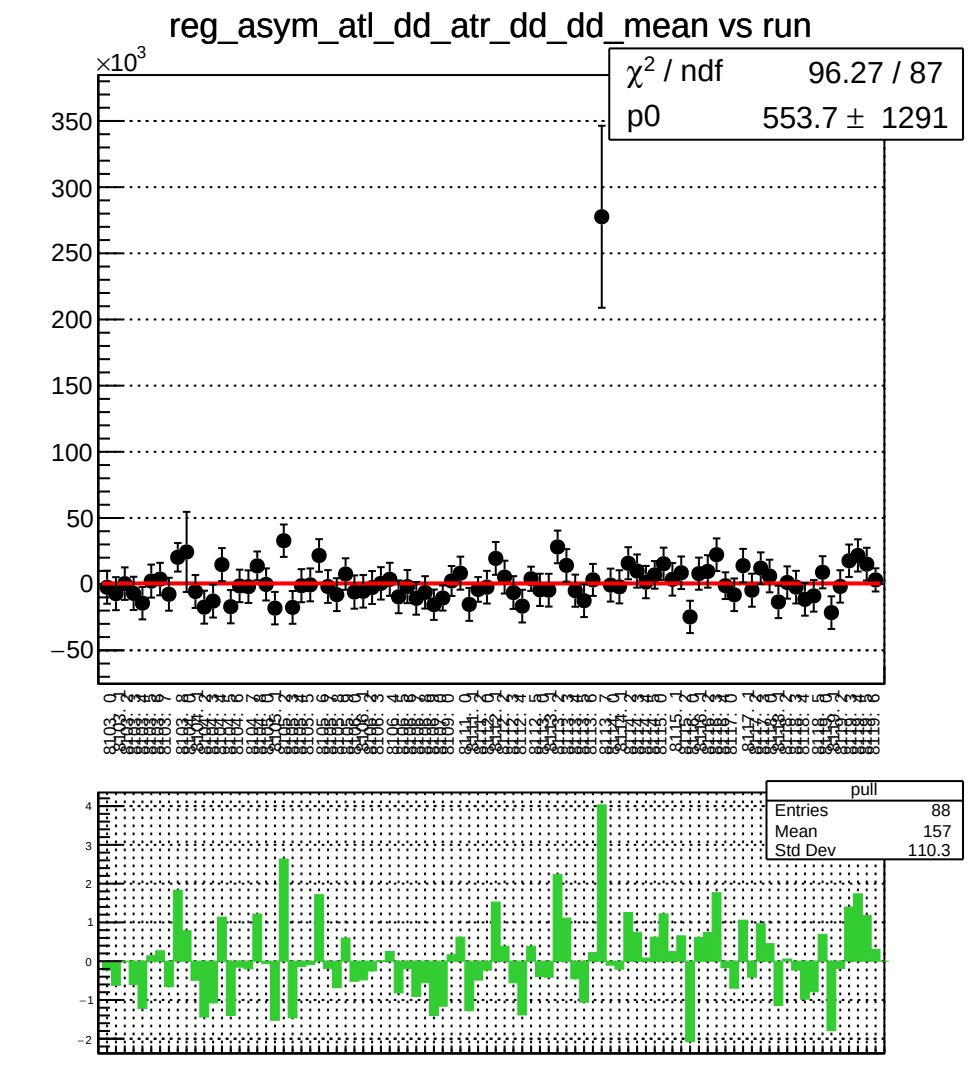

pull1D
Entries 88
Mean −0.01745
Std Dev 1.053
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

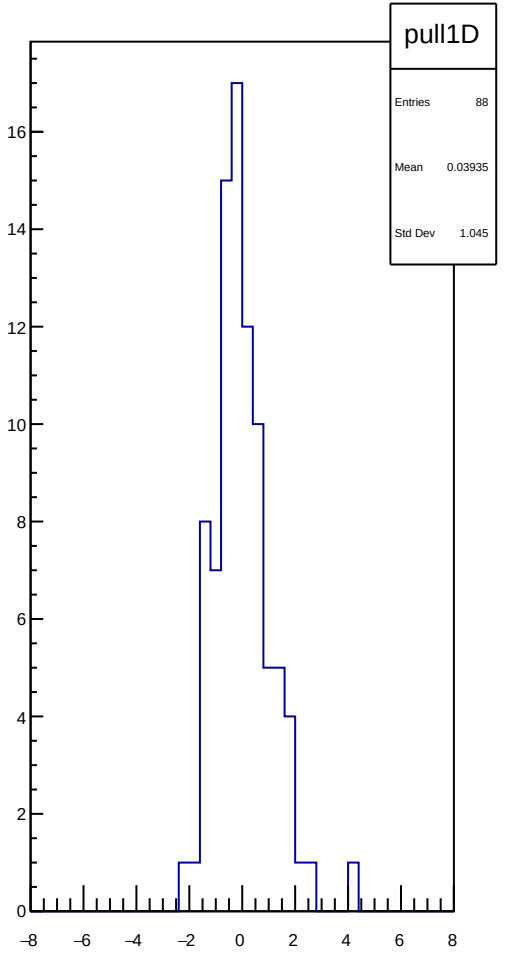

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 3093 / 87
p0 5378 ± 4.139
6400
6200
6000
5800
5600
5400
5200
5000
4800

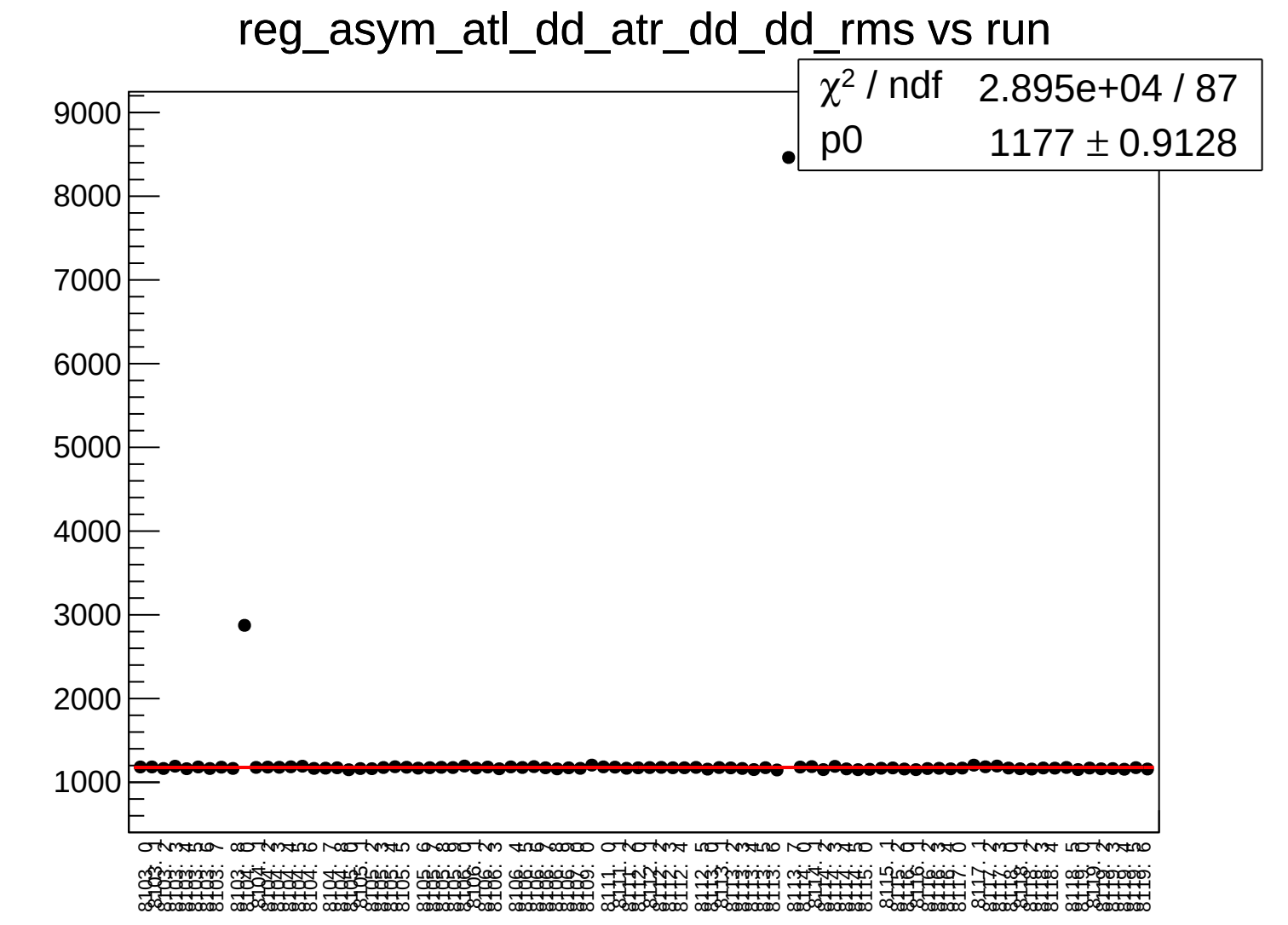

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 108.9 / 87
p0 8023 ± 6041
pull
Entries 88
Mean 237.1
Std Dev 186.1

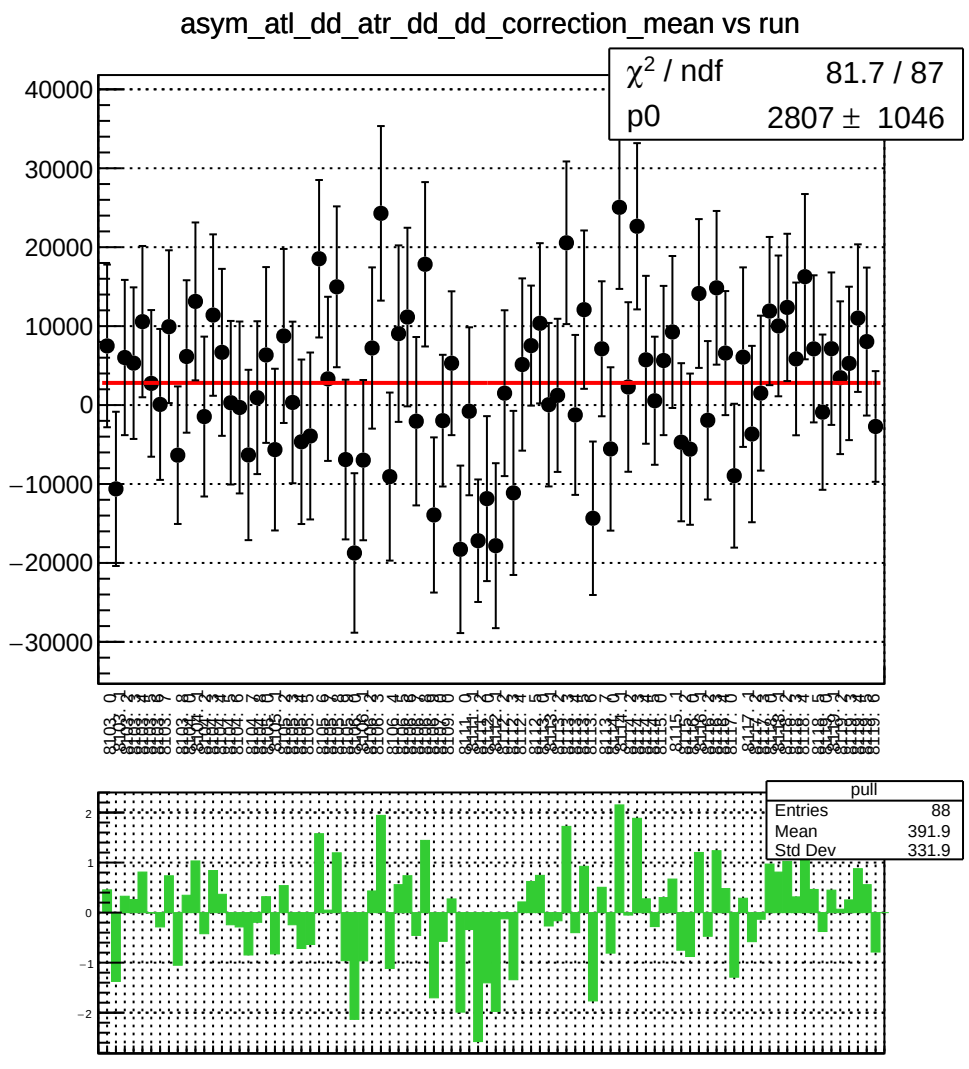

pull1D
Entries 88
Mean 0.03387
Std Dev 1.112

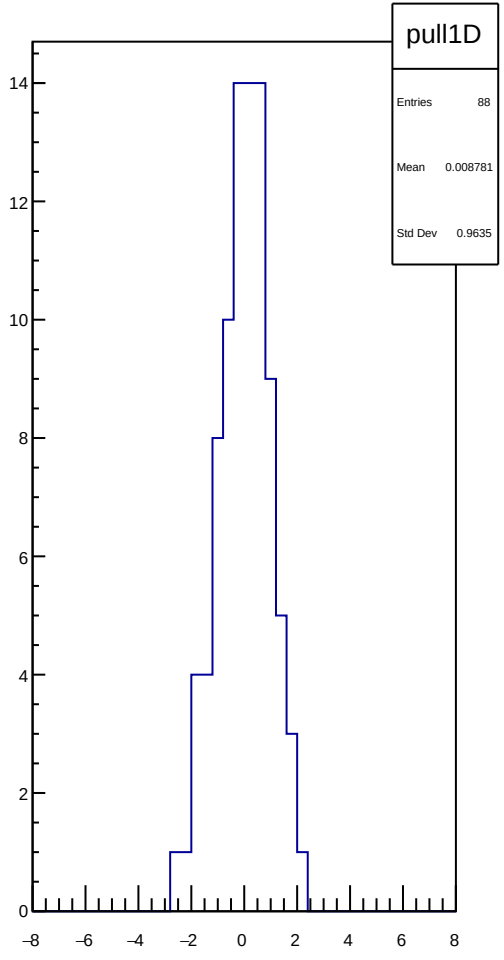

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 8977 / 87
p0 5541 ± 4.272
10000
9000
8000
7000
6000
5000

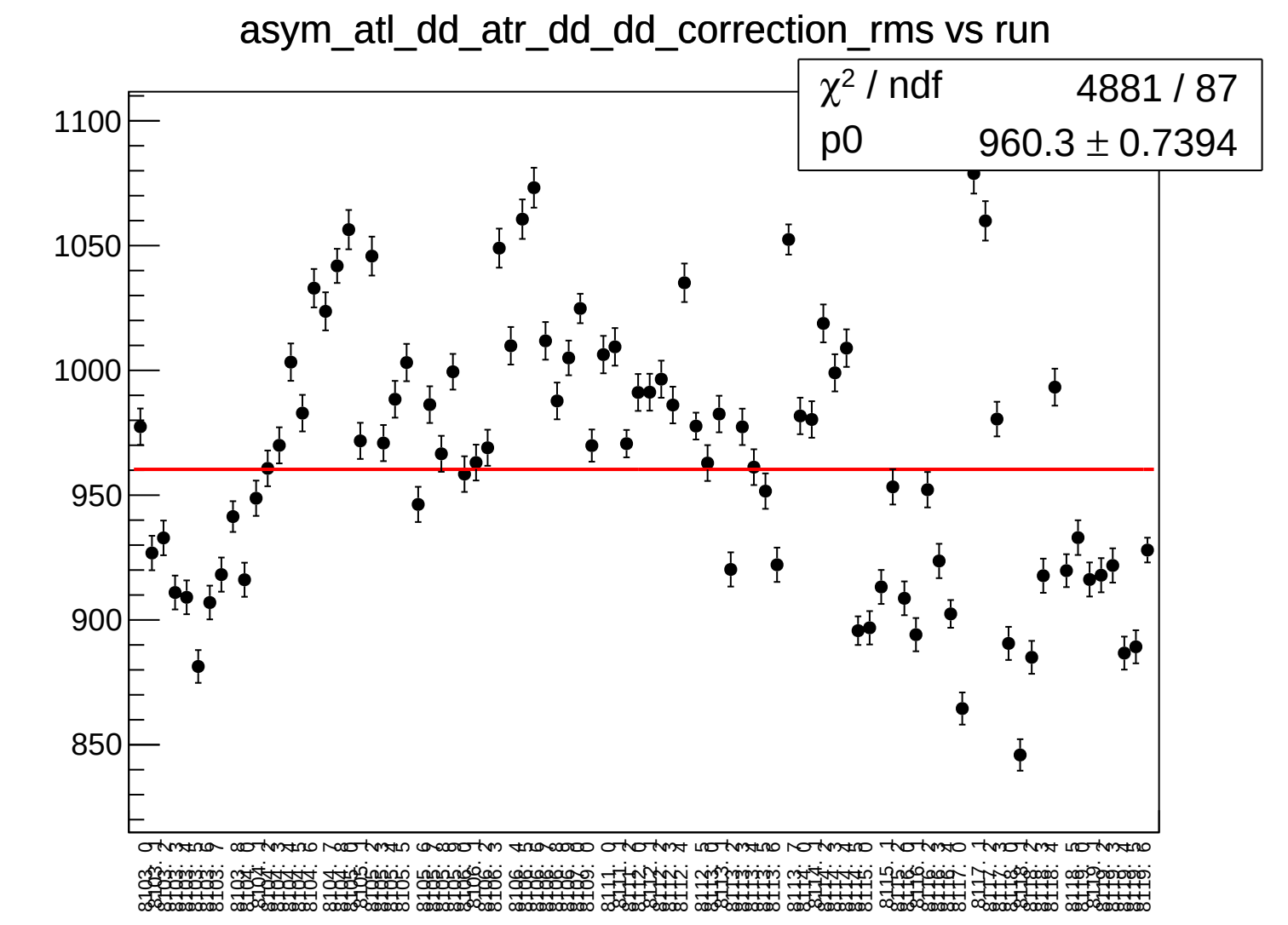

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 96.27 / 87
p0 553.7 ± 1291
×10³
pull
Entries 88
Mean 157
Std Dev 110.3

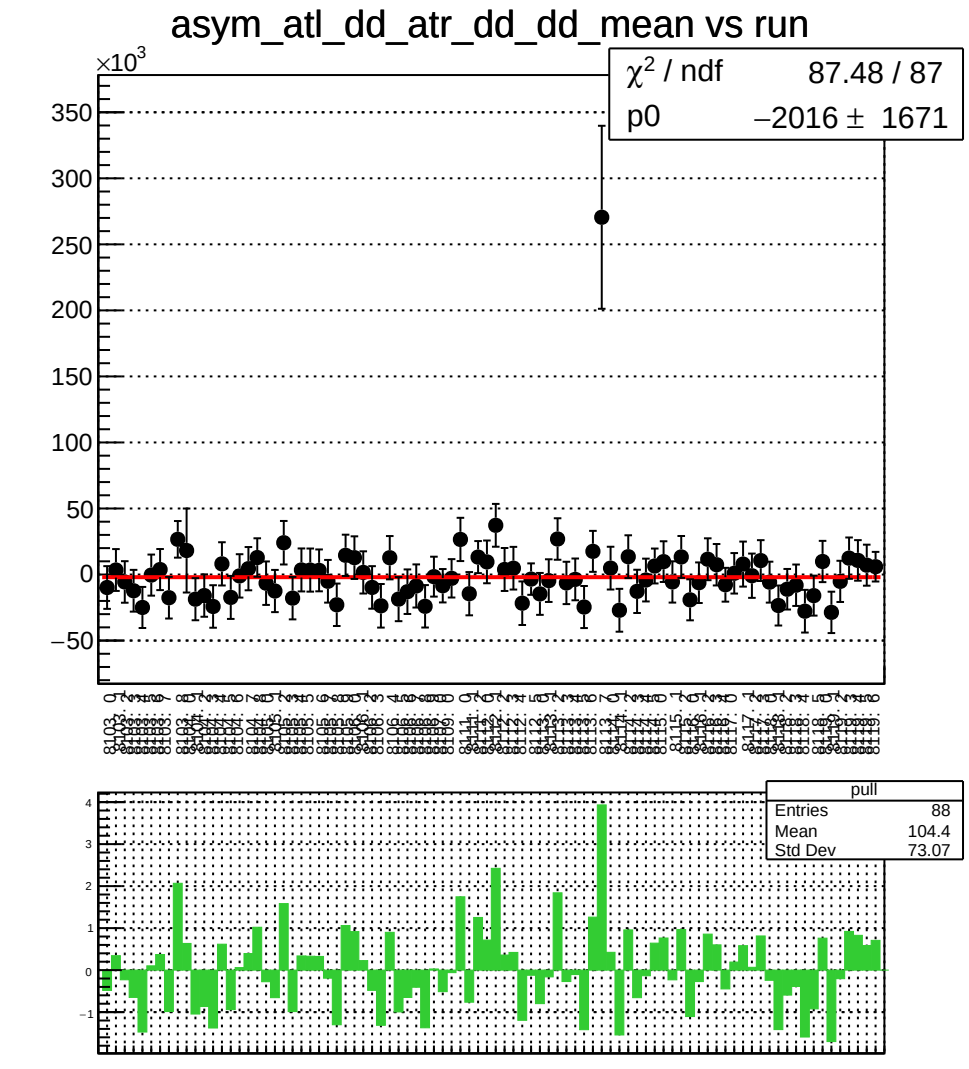

pull1D
Entries 88
Mean 0.03935
Std Dev 1.045

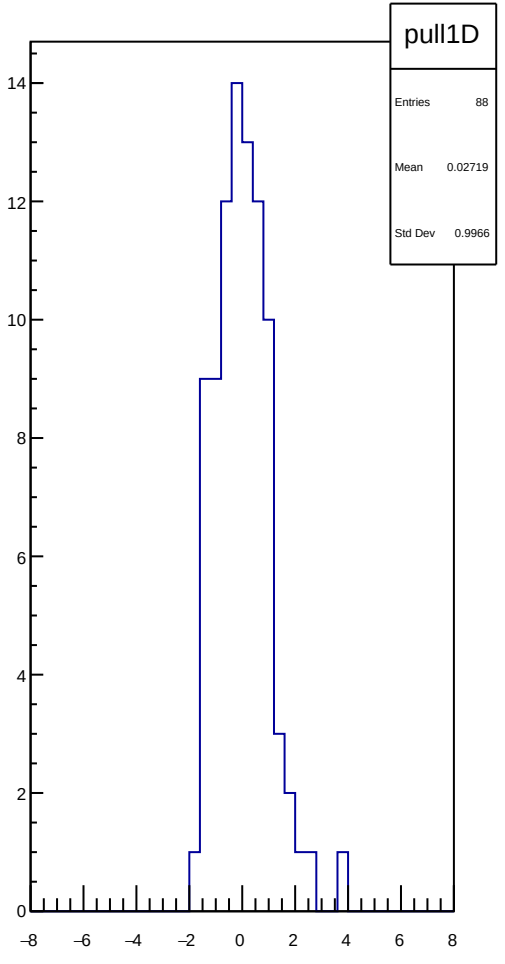

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 2.895e+04 / 87
p0 1177 ± 0.9128
9000
8000
7000
6000
5000
4000
3000
2000
1000

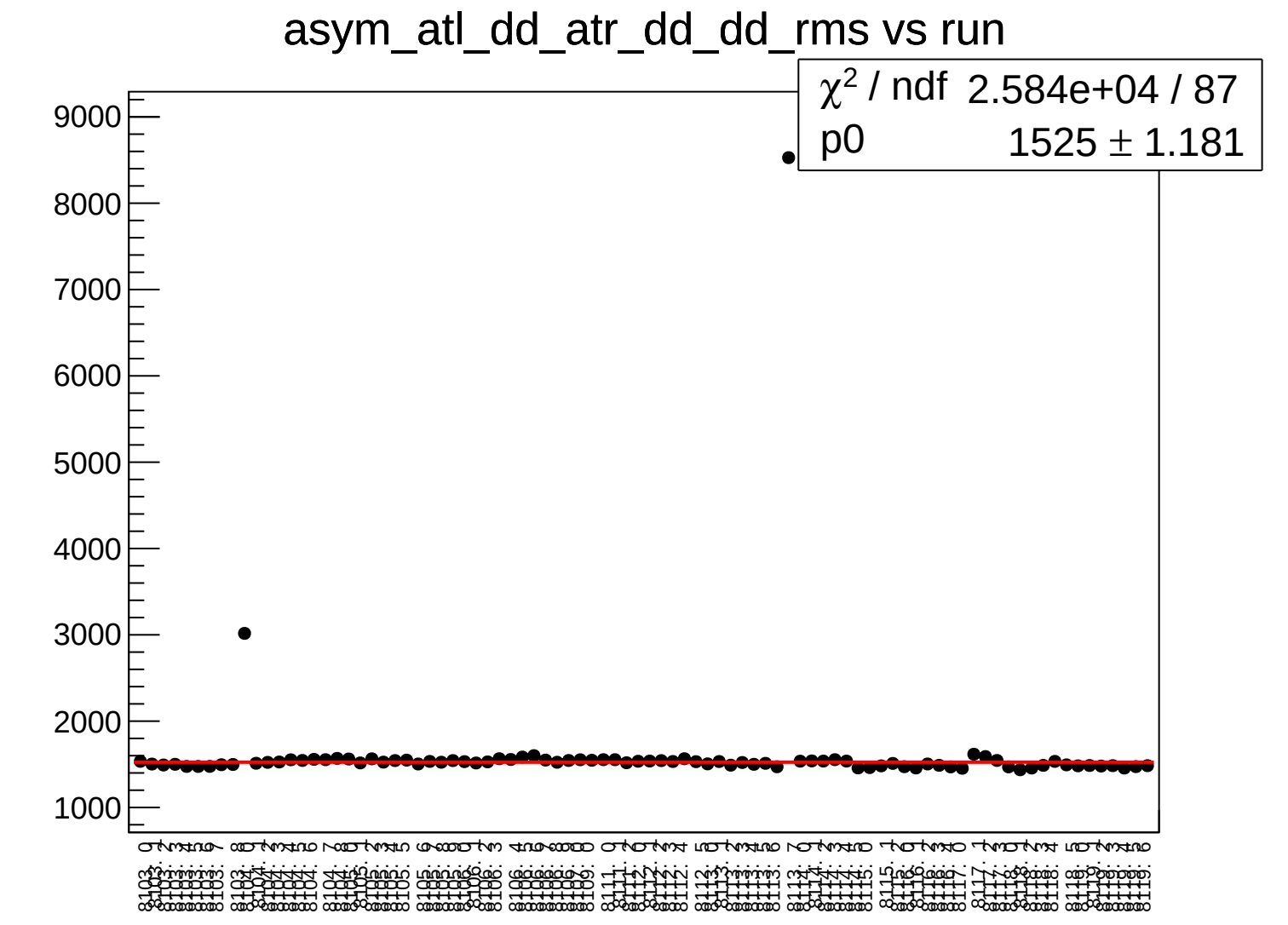

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 81.7 / 87
p0 2807 ± 1046
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 391.9
Std Dev 331.9
2
1
0
−1
−2

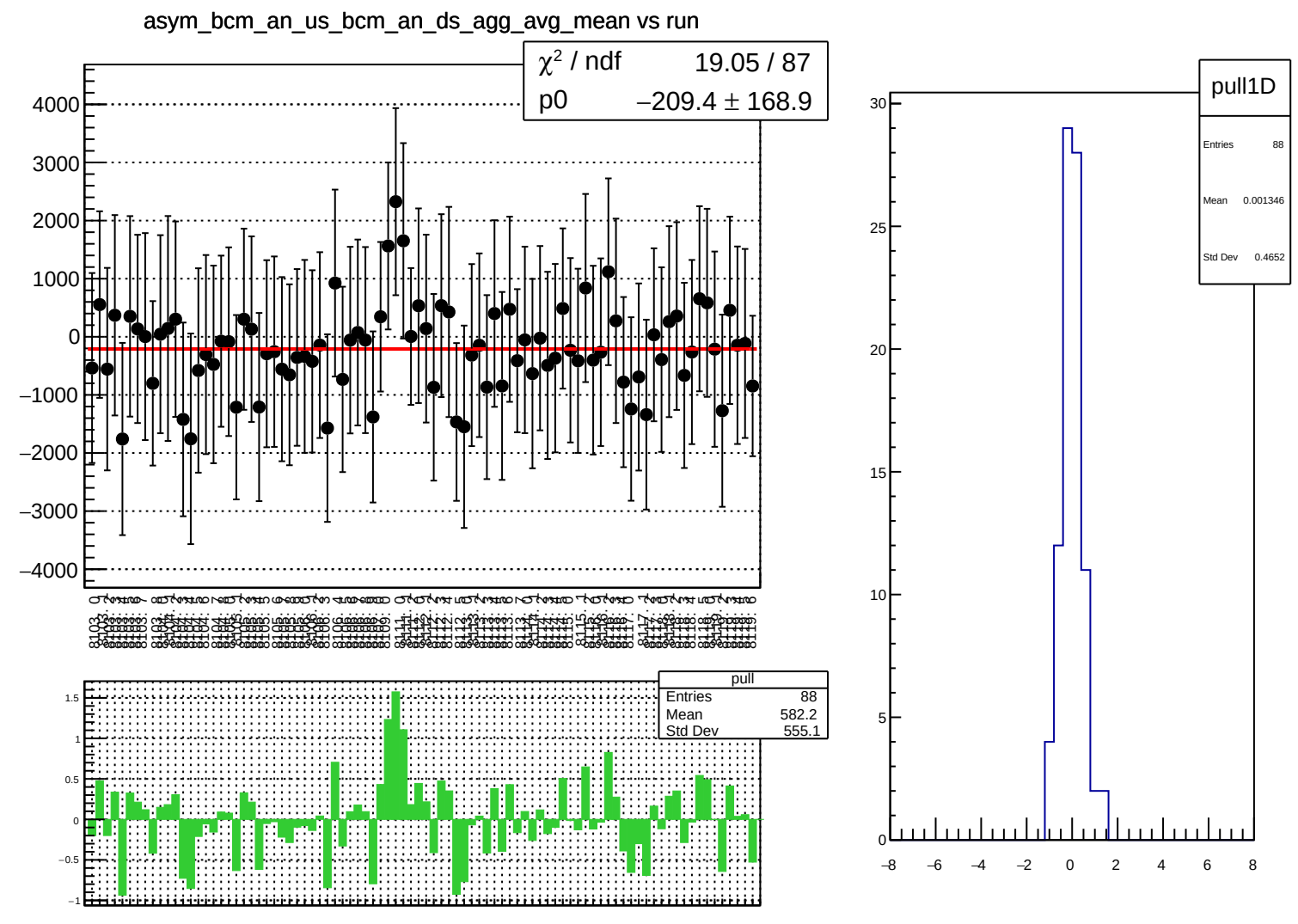

pull1D
Entries 88
Mean 0.008781
Std Dev 0.9635
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

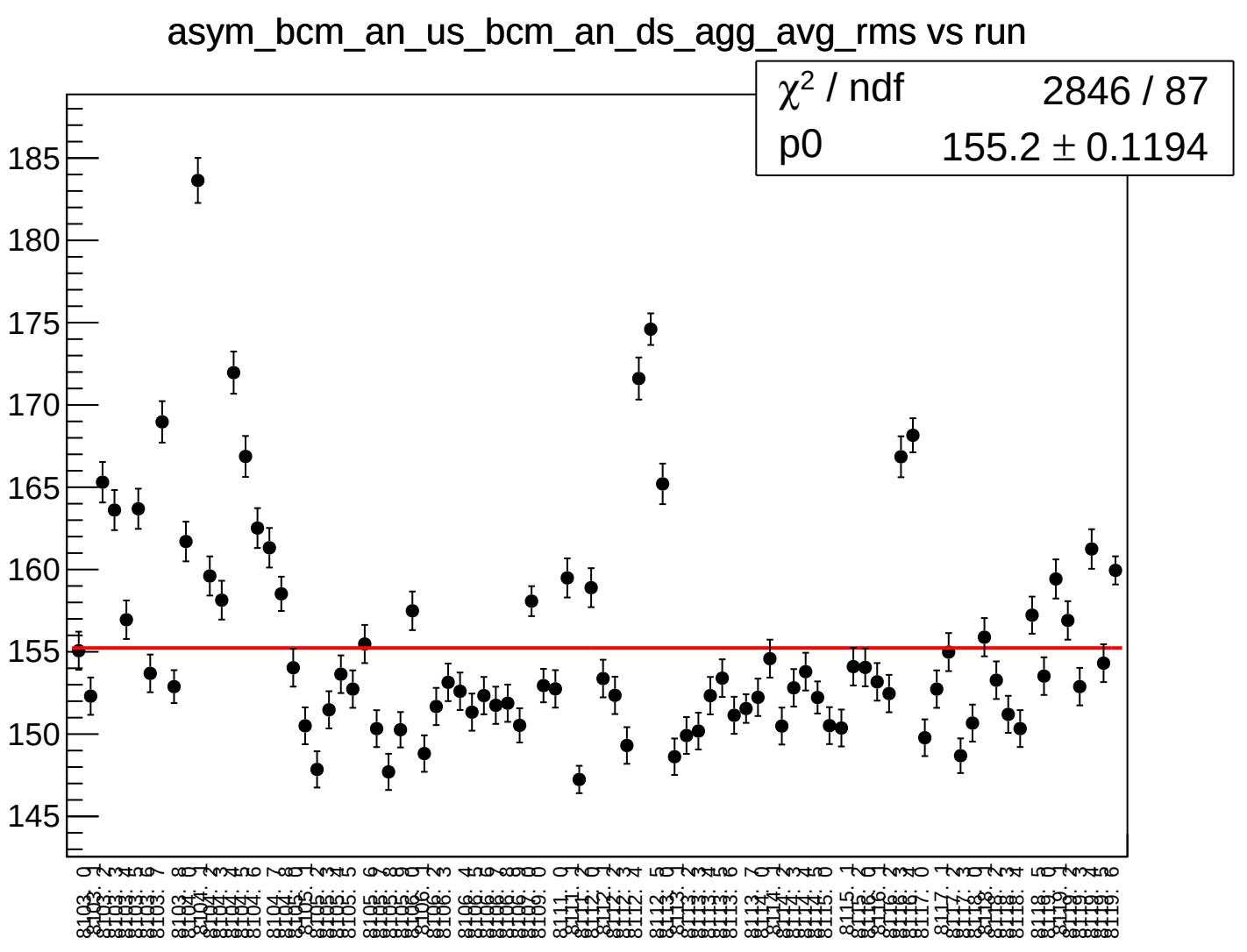

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 4881 / 87
p0 960.3 ± 0.7394
1100
1050
1000
950
900
850

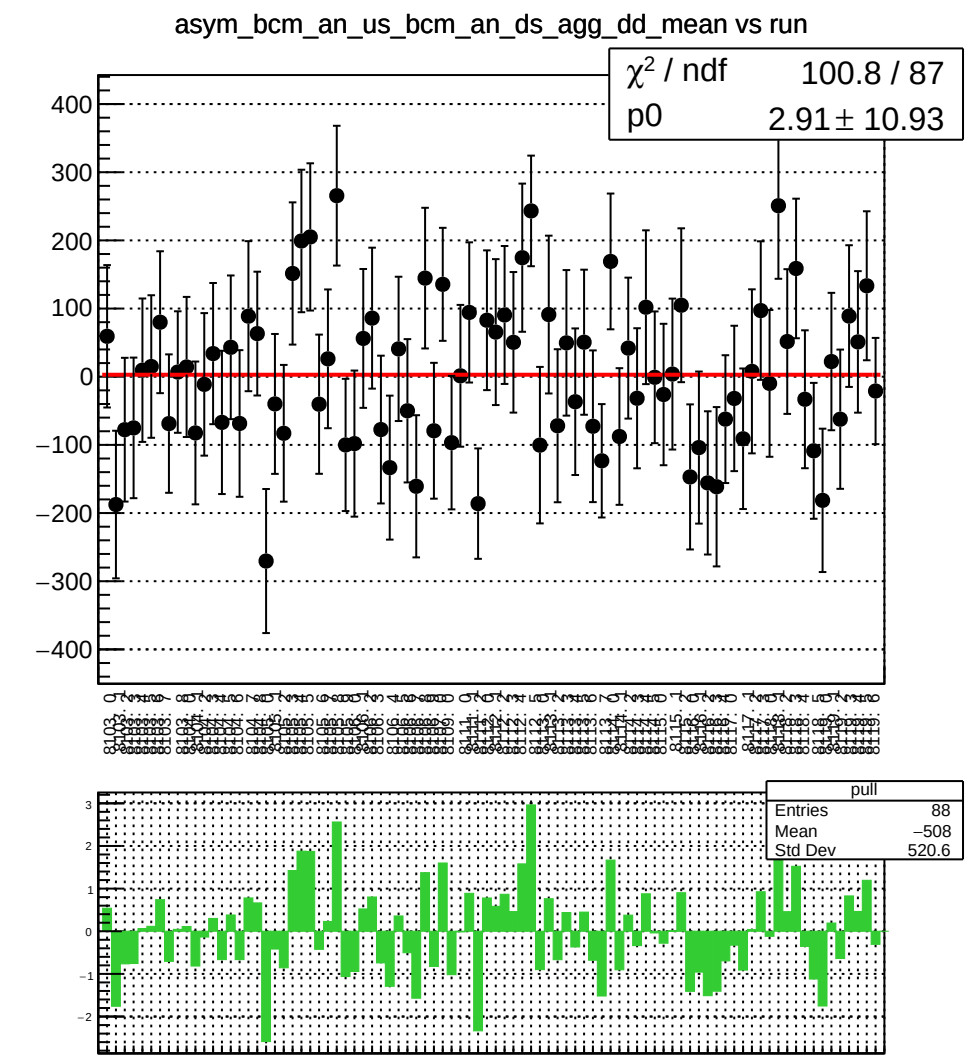

asym_atl_dd_atr_dd_dd_mean vs run
×10^3
χ² / ndf 87.48 / 87
p0 −2016 ± 1671
pull
Entries 88
Mean 104.4
Std Dev 73.07

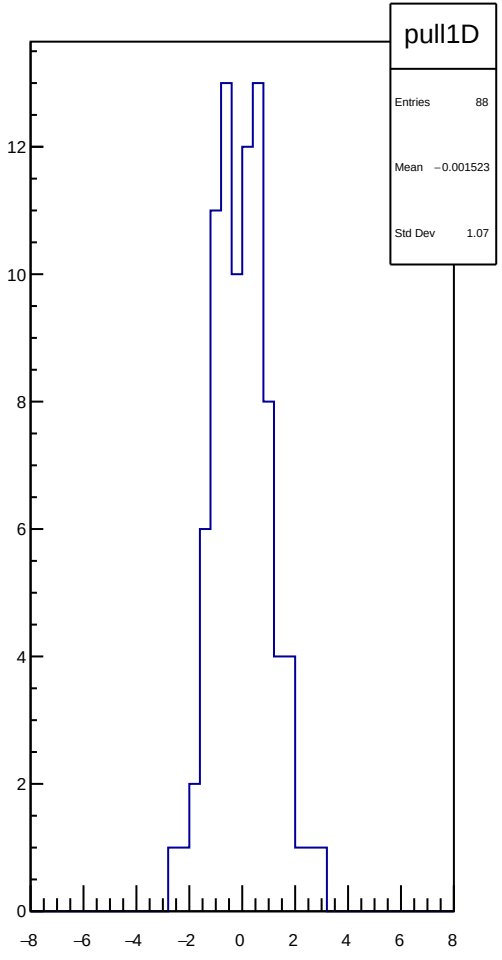

pull1D
Entries 88
Mean 0.02719
Std Dev 0.9966

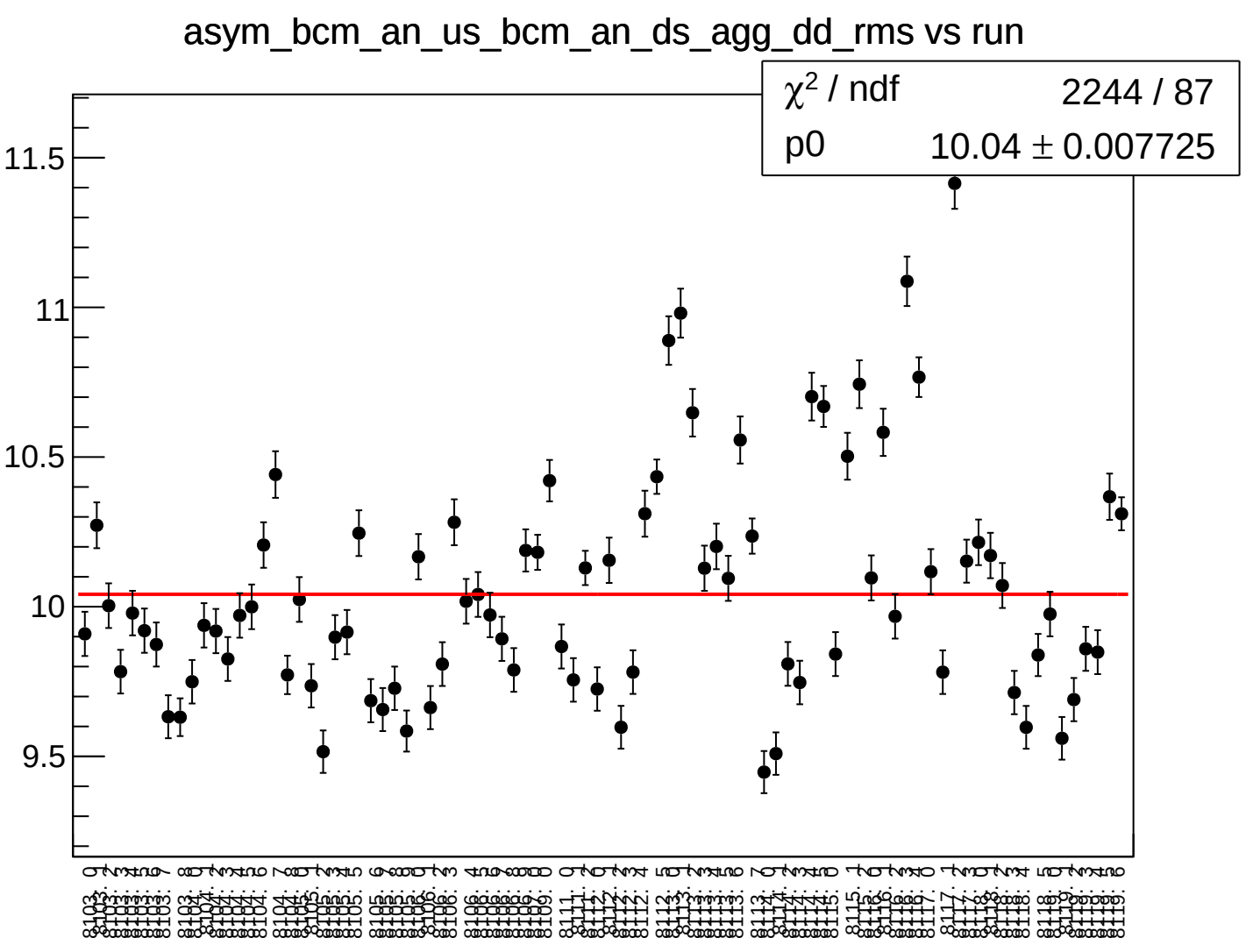

asym_atl_dd_atr_dd_dd_rms vs run
χ^2 / ndf 2.584e+04 / 87
p0 1525 ± 1.181
9000
8000
7000
6000
5000
4000
3000
2000
1000

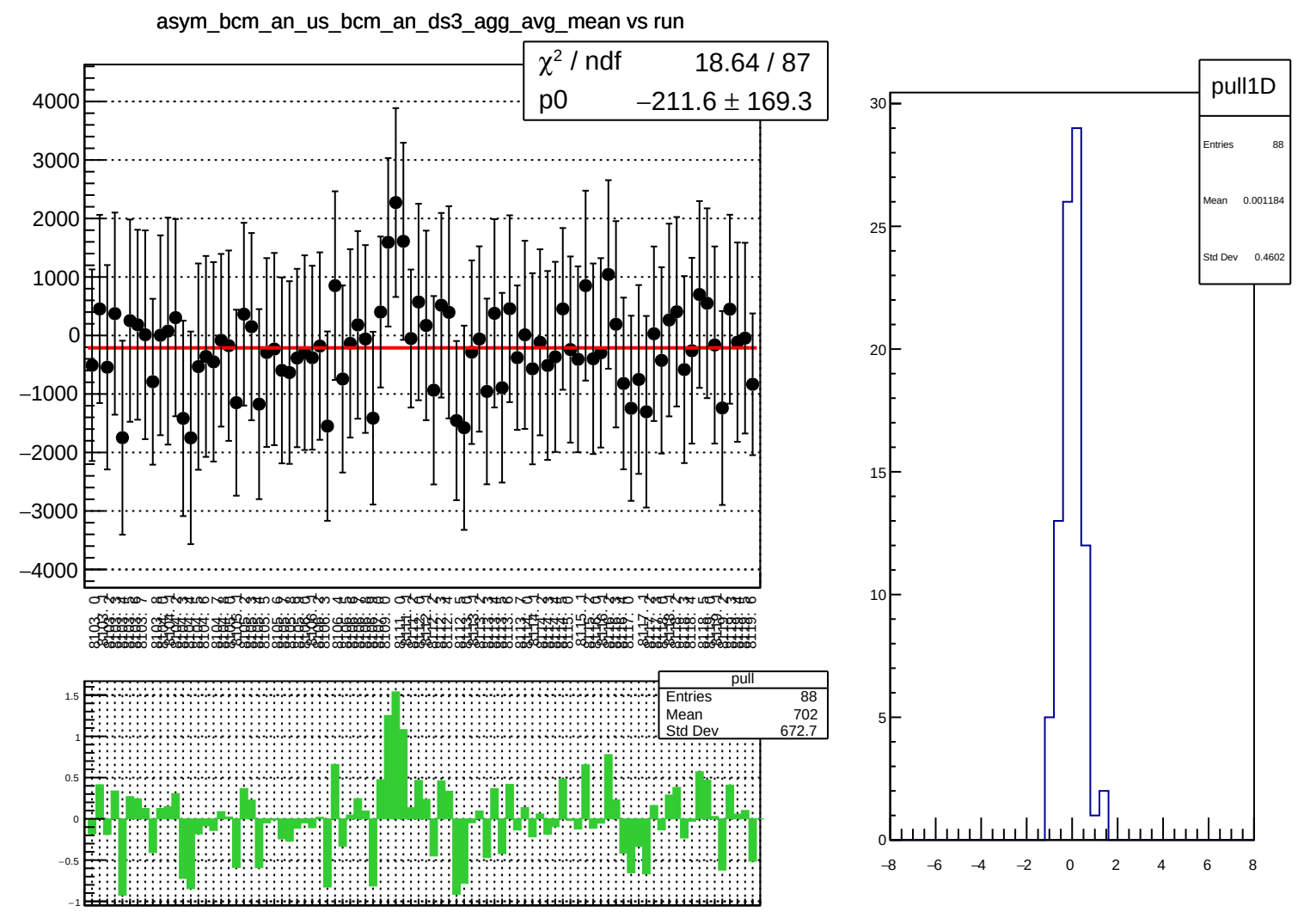

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.05 / 87
p0 −209.4 ± 168.9
pull
Entries 88
Mean 582.2
Std Dev 555.1
pull1D
Entries 88
Mean 0.001346
Std Dev 0.4652

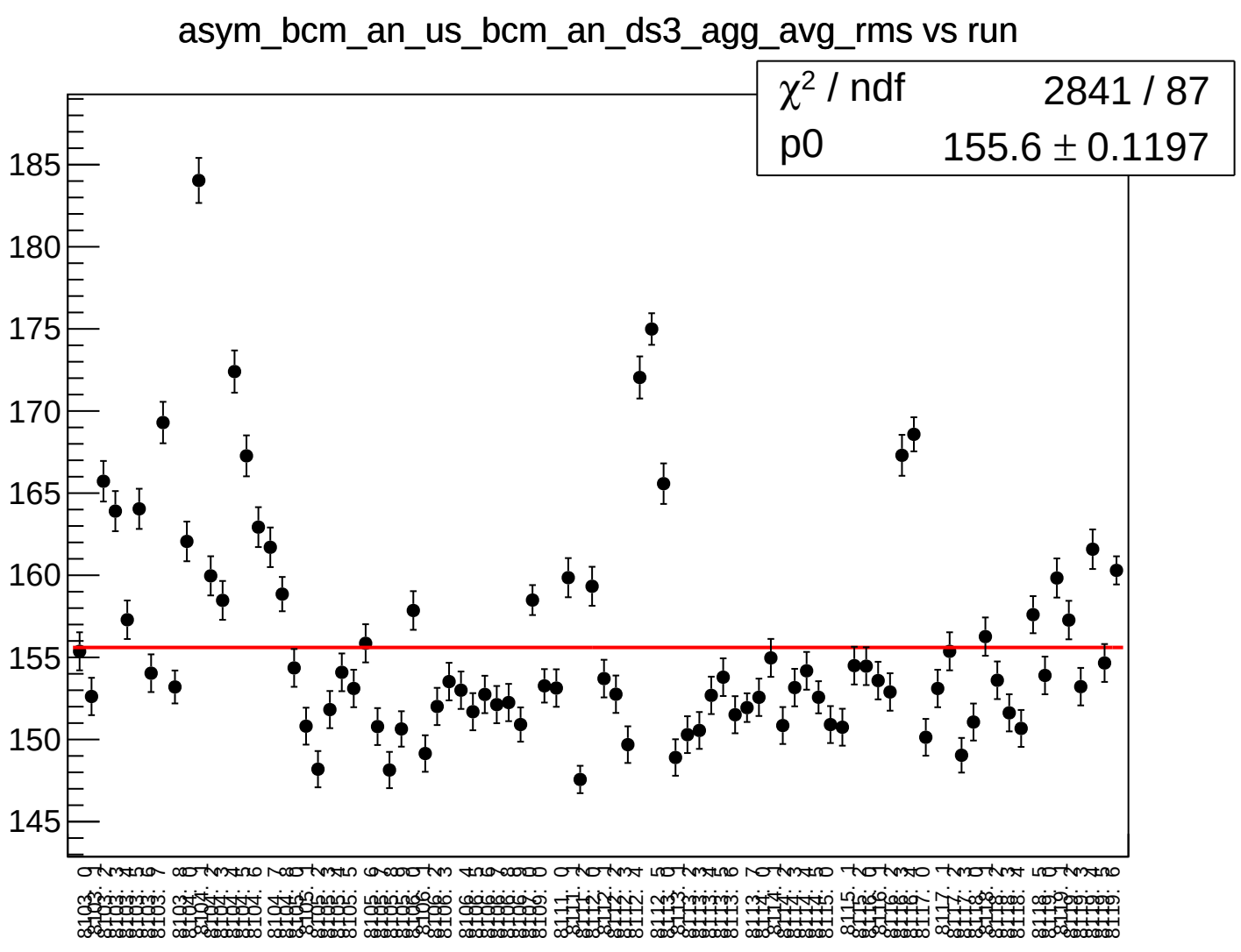

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2846 / 87
p0 155.2 ± 0.1194
185
180
175
170
165
160
155
150
145

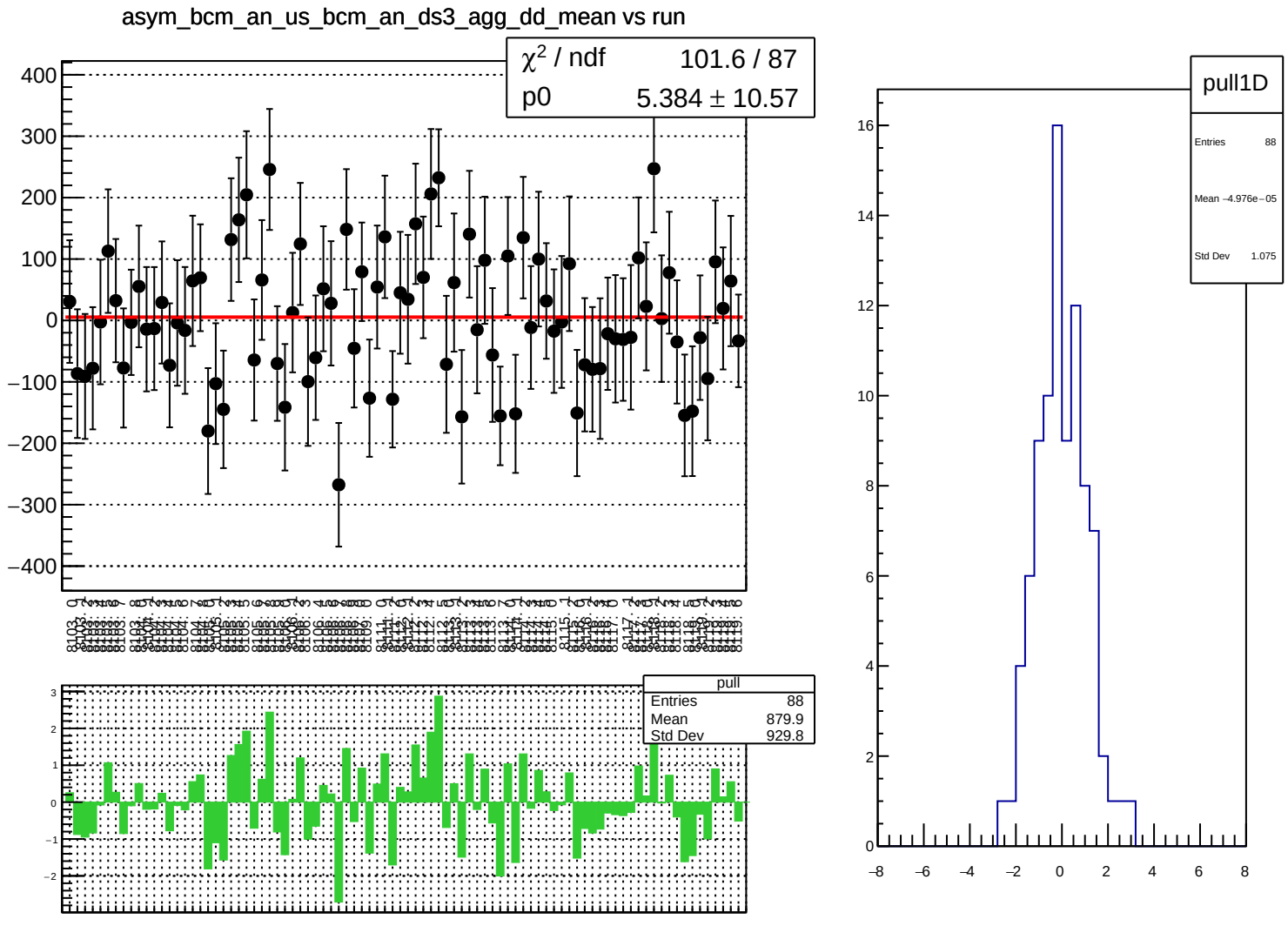

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 100.8 / 87
p0 2.91 ± 10.93
pull
Entries 88
Mean −508
Std Dev 520.6

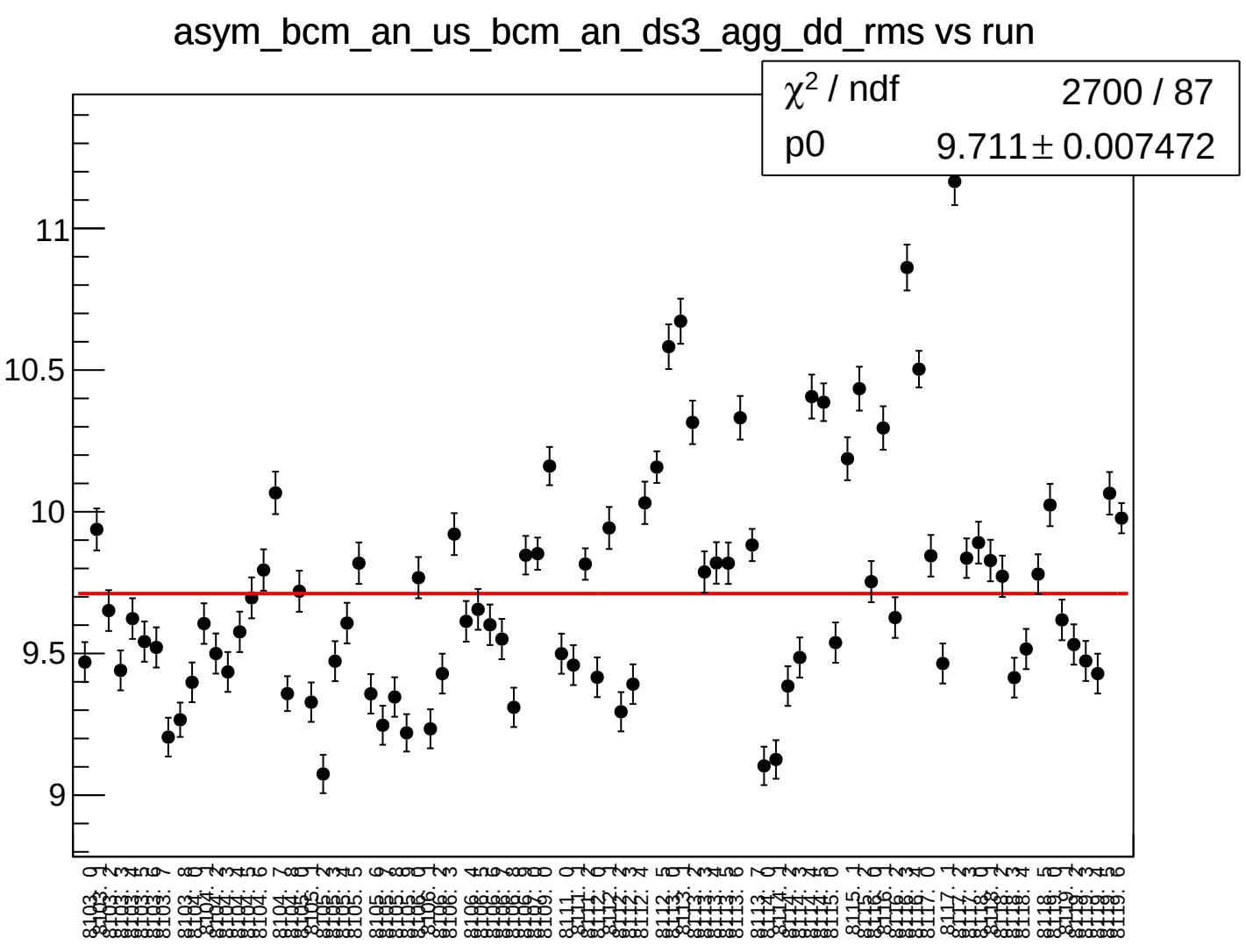

pull1D
Entries 88
Mean −0.001523
Std Dev 1.07

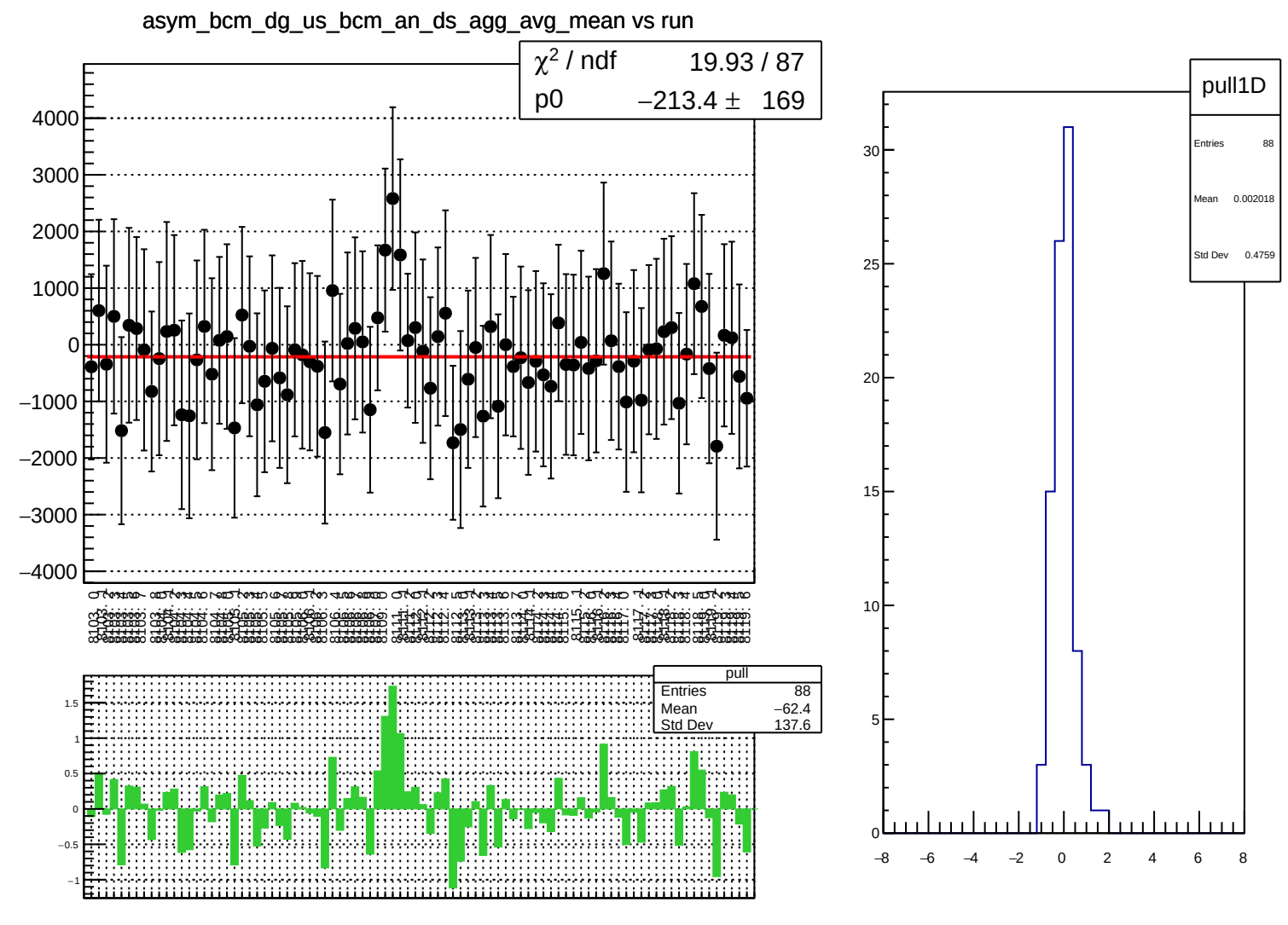

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2244 / 87
p0 10.04 ± 0.007725
11.5
11
10.5
10
9.5

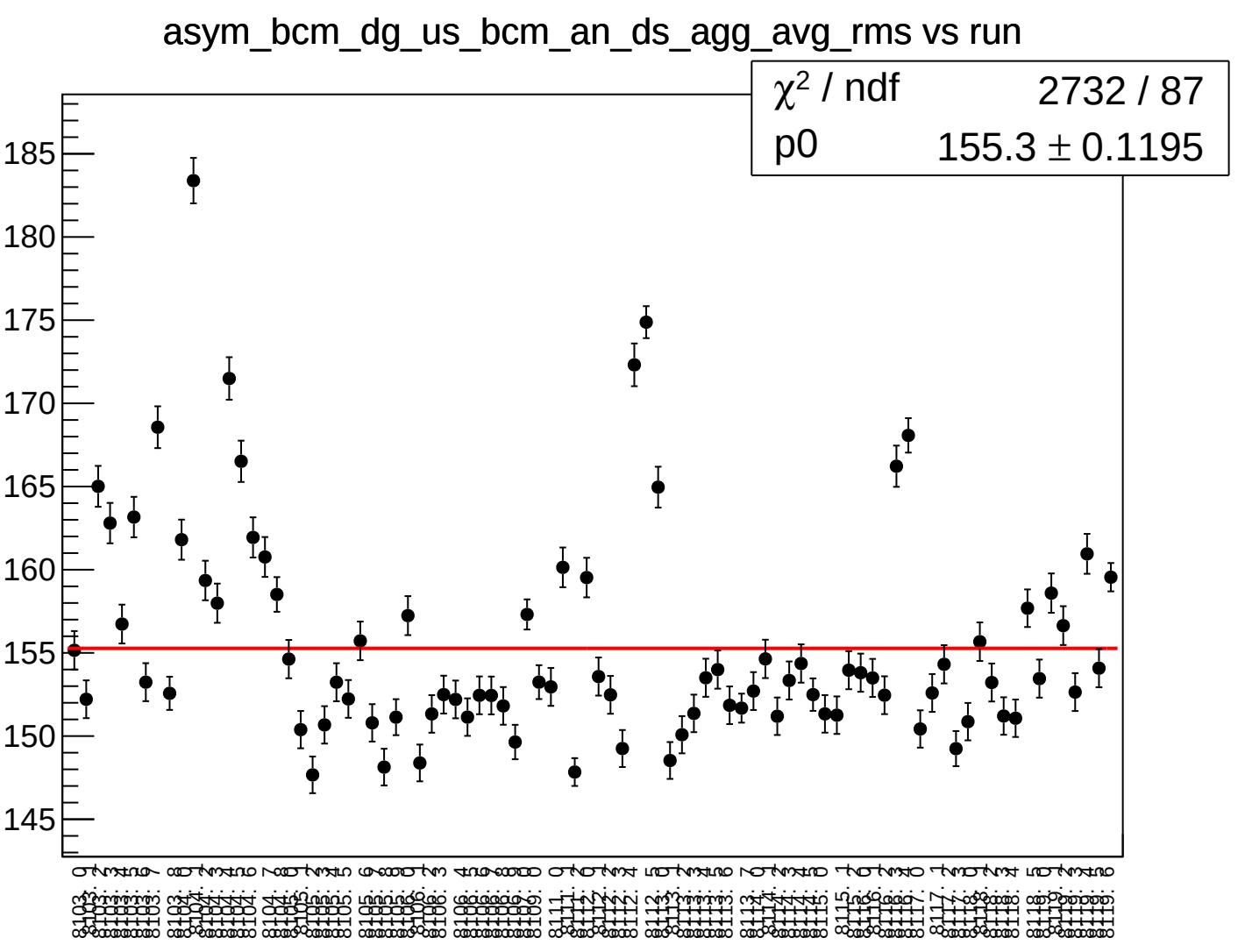

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 18.64 / 87
p0 −211.6 ± 169.3
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 88
Mean 702
Std Dev 672.7
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 88
Mean 0.001184
Std Dev 0.4602
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

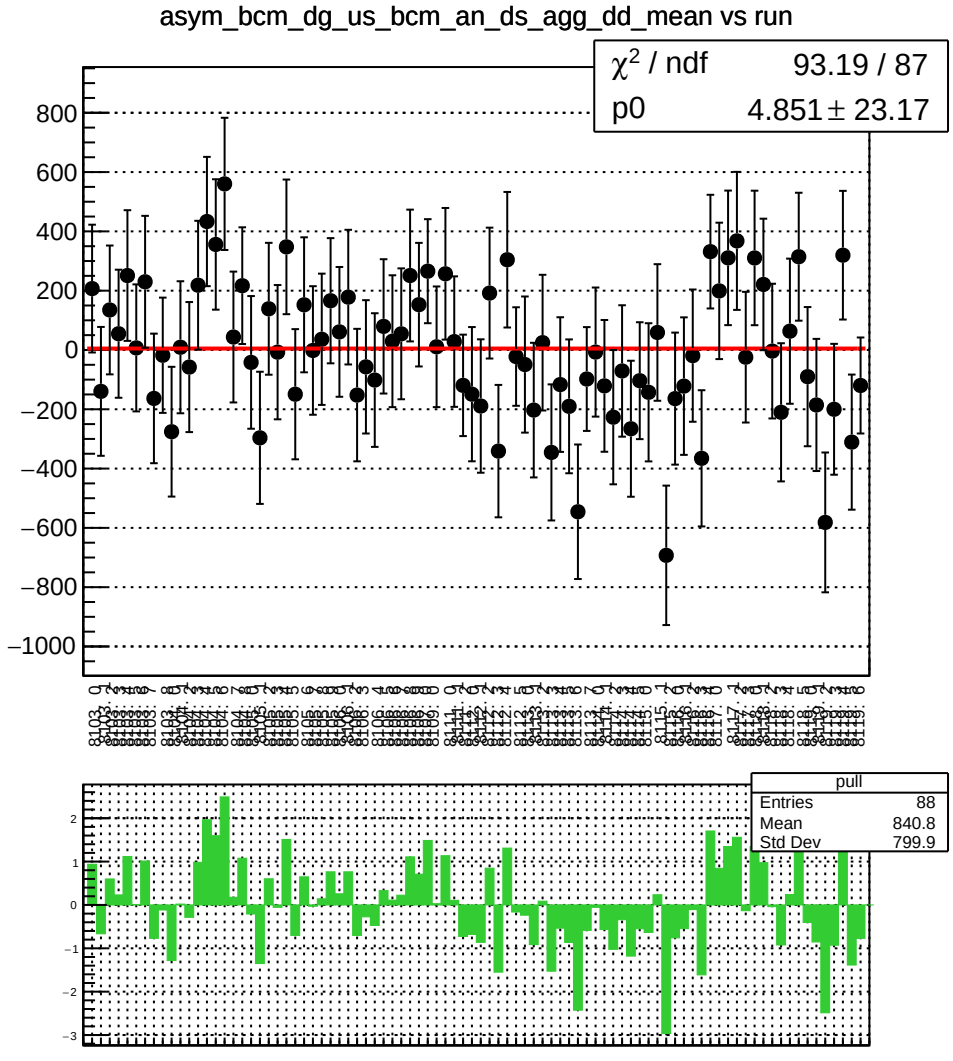

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2841 / 87
p0 155.6 ± 0.1197
185
180
175
170
165
160
155
150
145

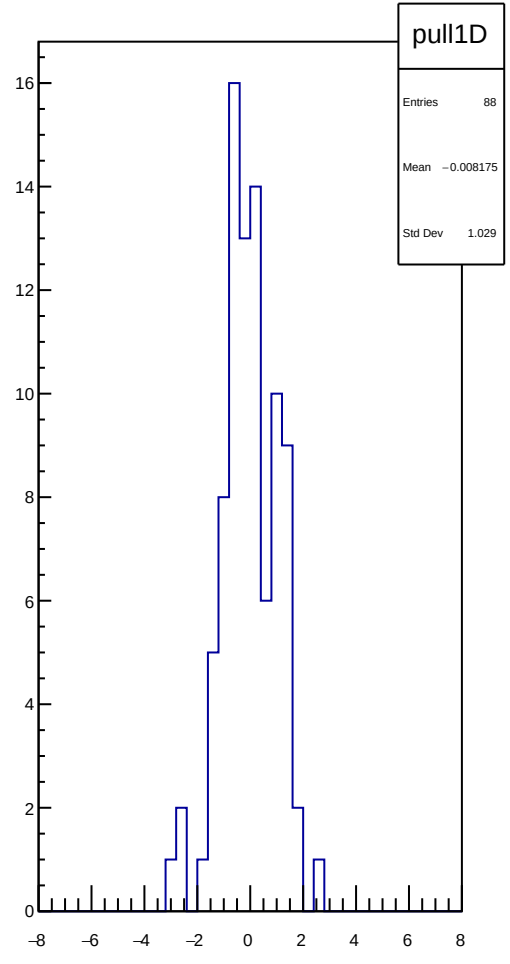

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 101.6 / 87
p0 5.384 ± 10.57
pull
Entries 88
Mean 879.9
Std Dev 929.8
pull1D
Entries 88
Mean −4.976e−05
Std Dev 1.075

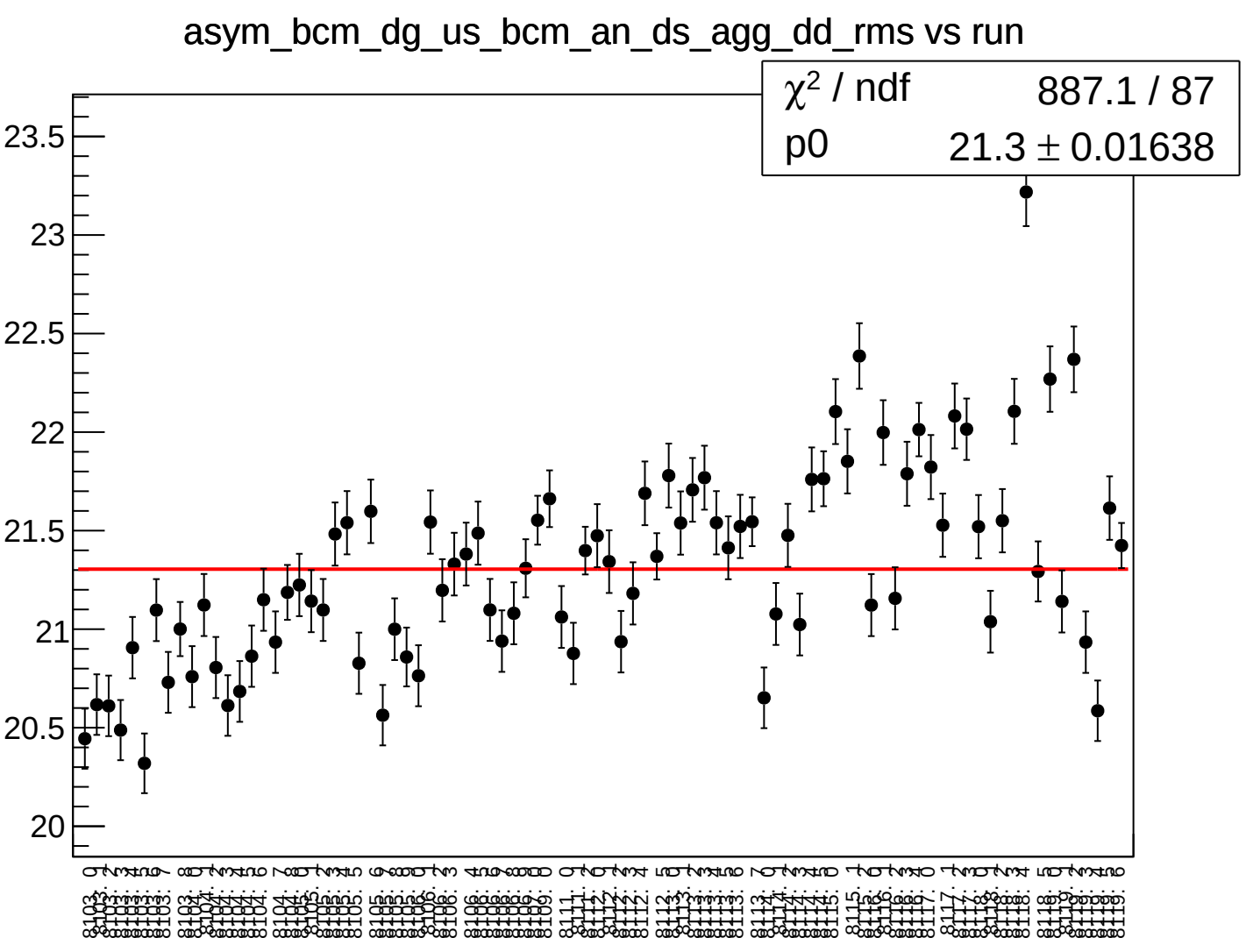

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2700 / 87
p0 9.711 ± 0.007472
11
10.5
10
9.5
9

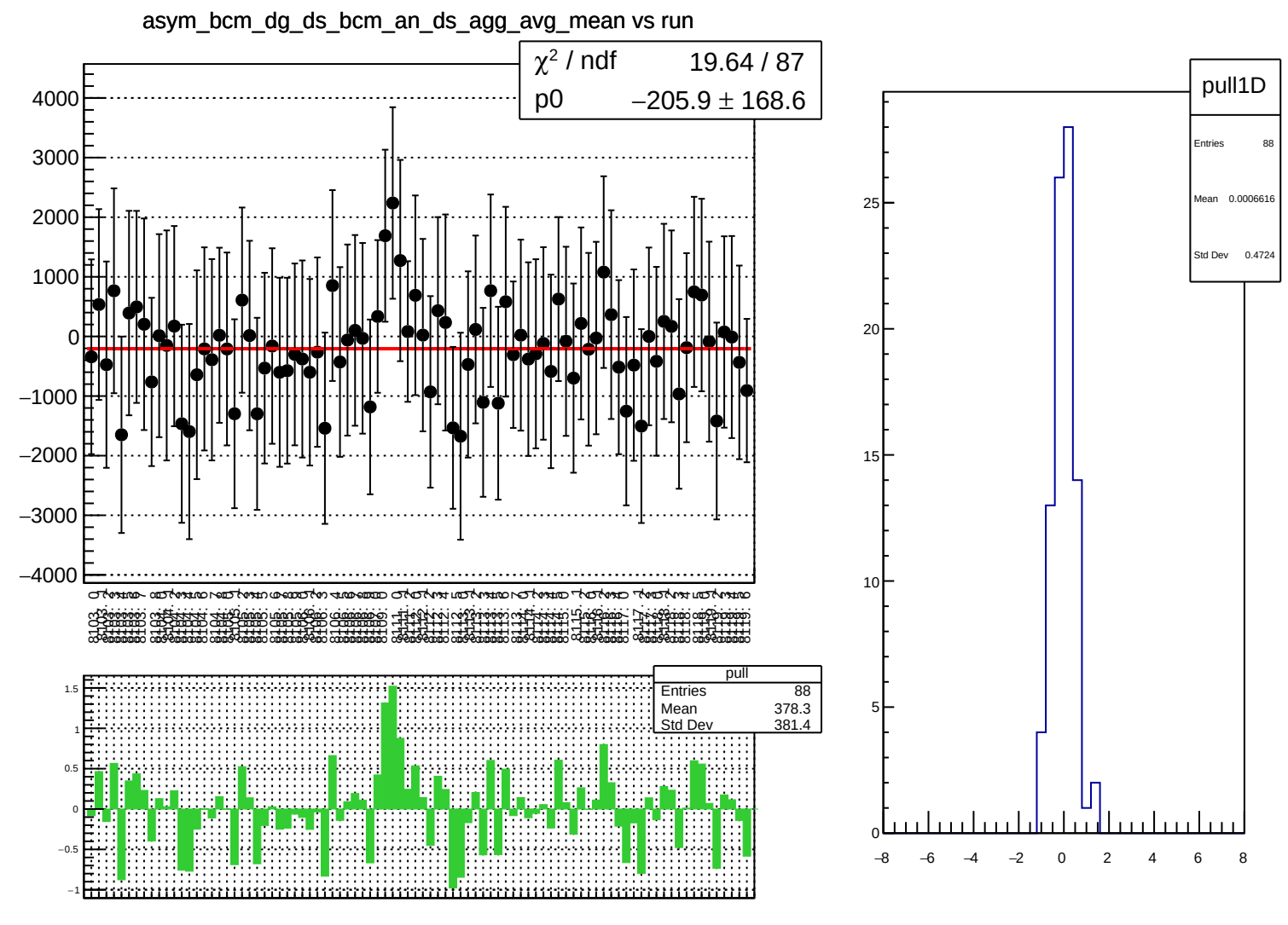

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.93 / 87
p0 −213.4 ± 169
pull
Entries 88
Mean −62.4
Std Dev 137.6
pull1D
Entries 88
Mean 0.002018
Std Dev 0.4759

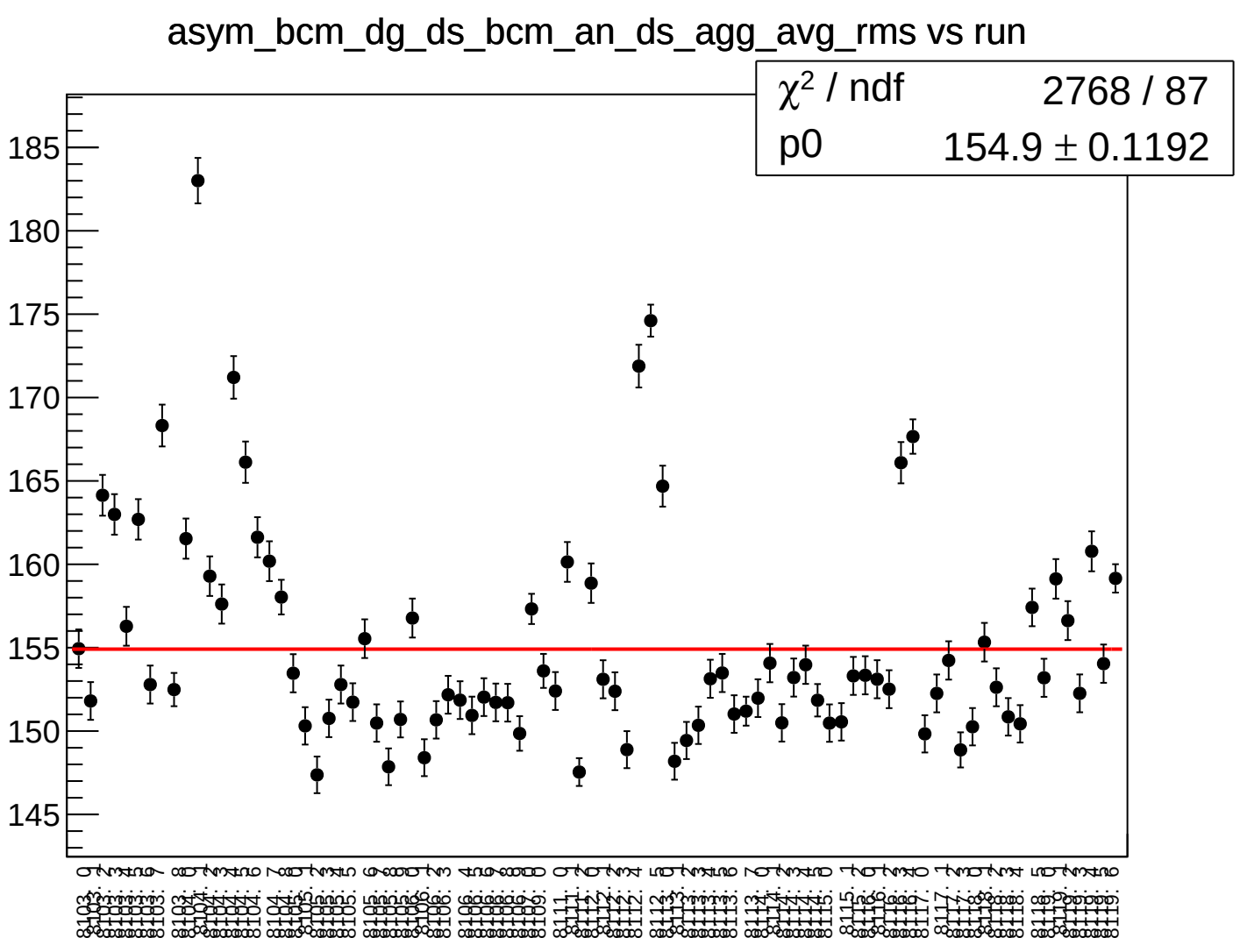

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2732 / 87
p0 155.3 ± 0.1195
185
180
175
170
165
160
155
150
145

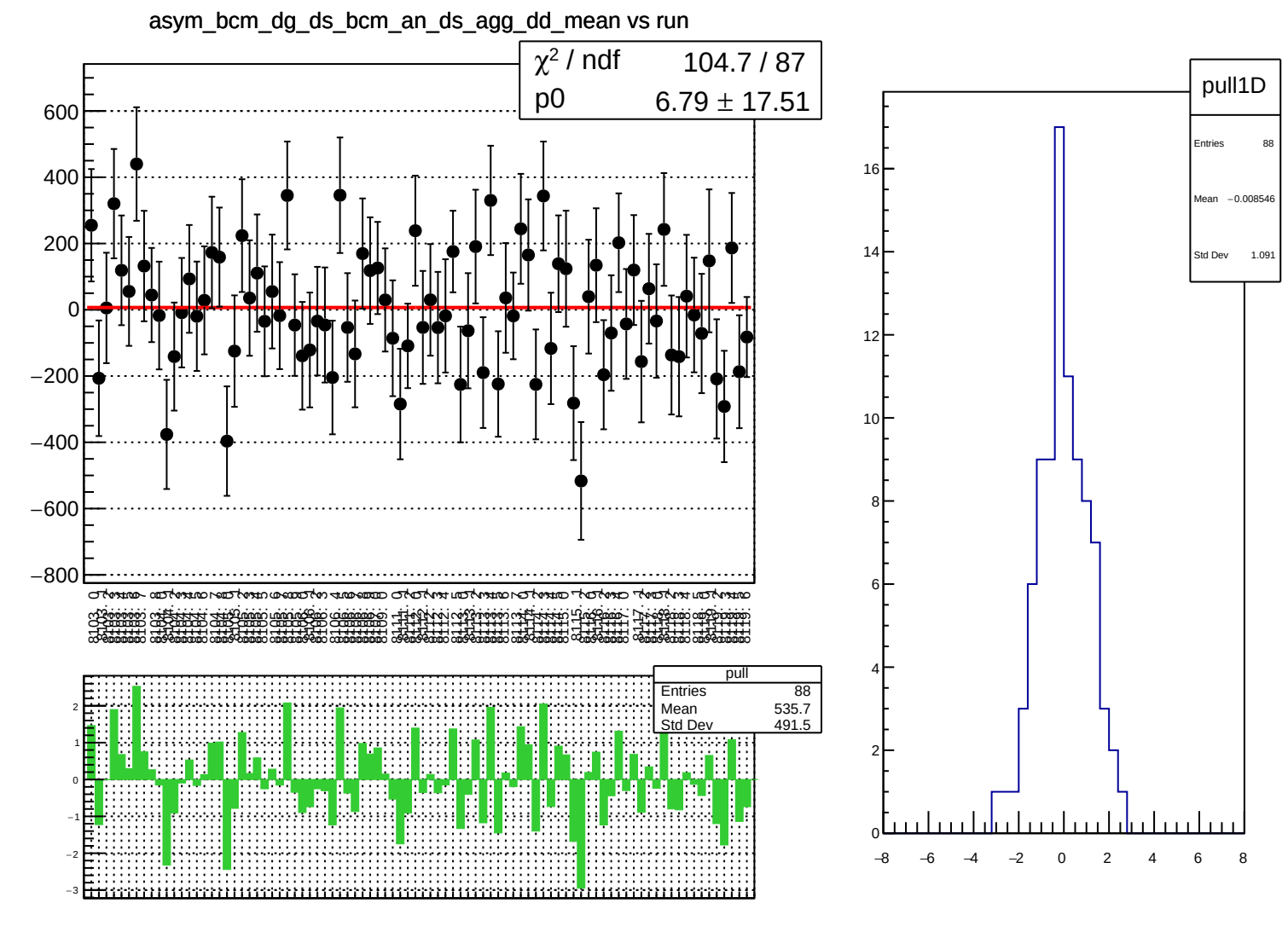

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 93.19 / 87
p0 4.851 ± 23.17
800
600
400
200
0
−200
−400
−600
−800
−1000
pull
Entries 88
Mean 840.8
Std Dev 799.9
2
1
0
−1
−2
−3

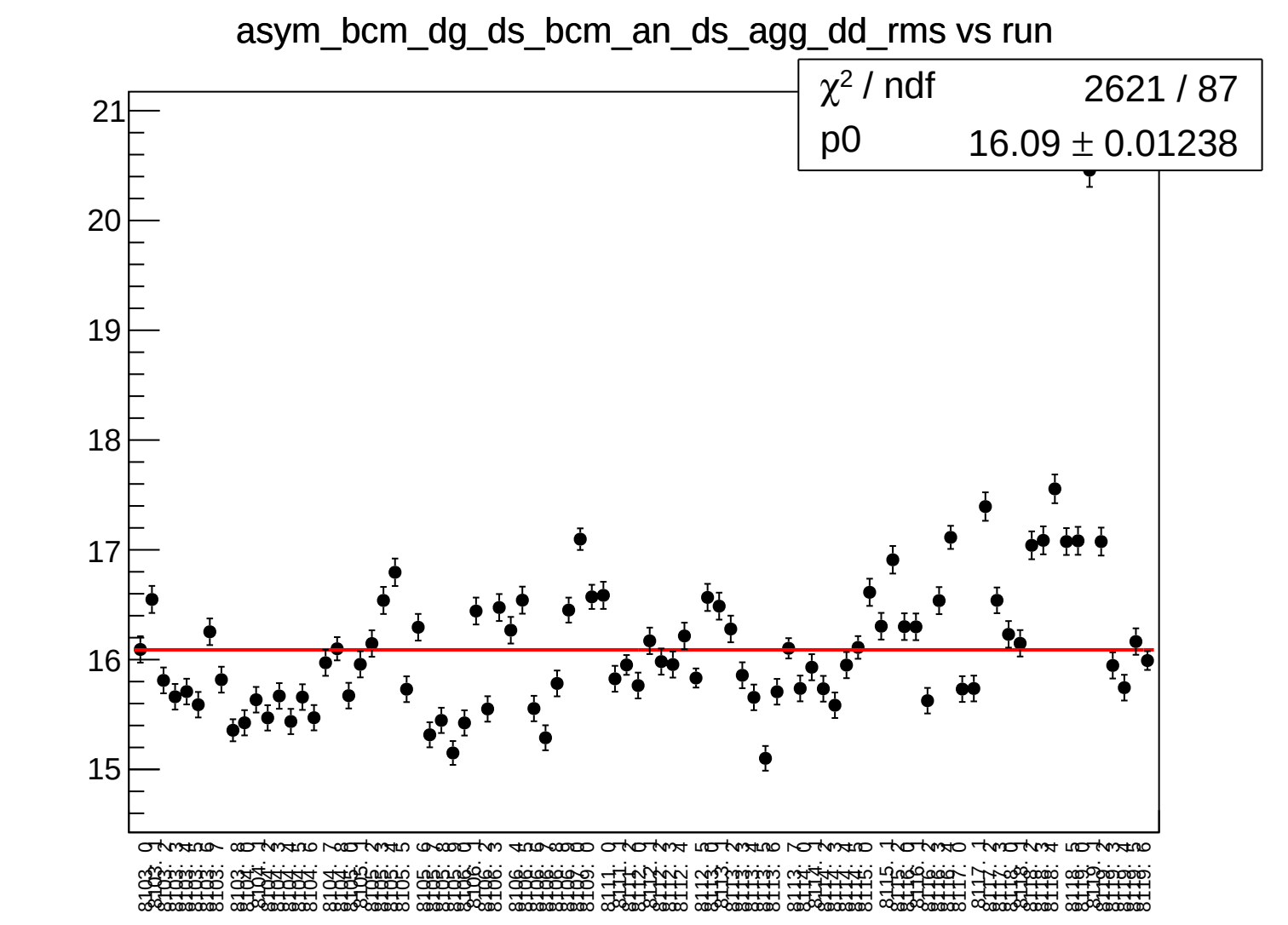

pull1D
Entries 88
Mean −0.008175
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

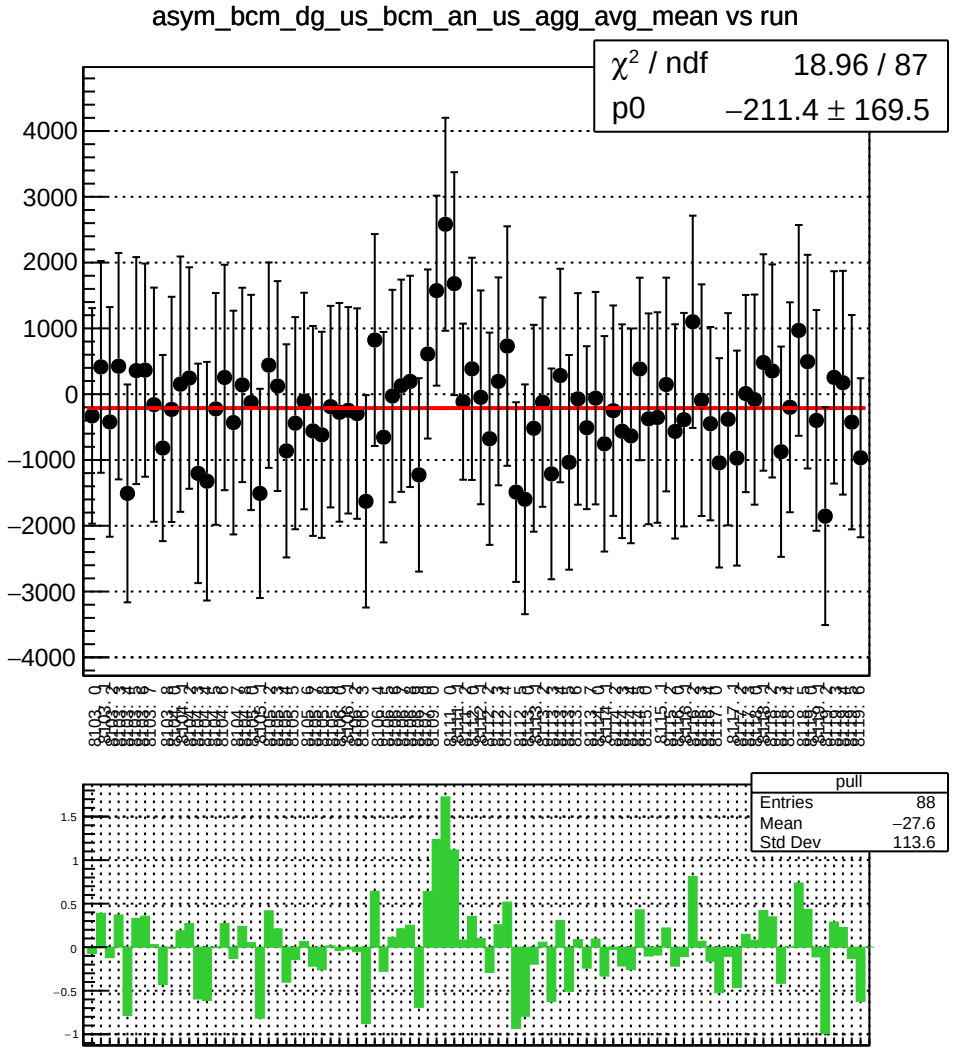

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 887.1 / 87
p0 21.3 ± 0.01638
23.5
23
22.5
22
21.5
21
20.5
20

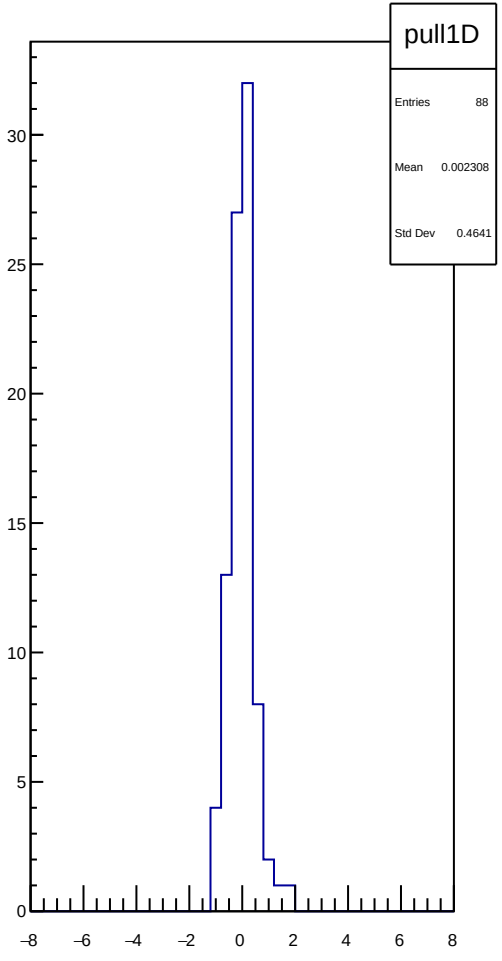

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.64 / 87
p0 −205.9 ± 168.6
pull
Entries 88
Mean 378.3
Std Dev 381.4
pull1D
Entries 88
Mean 0.0006616
Std Dev 0.4724

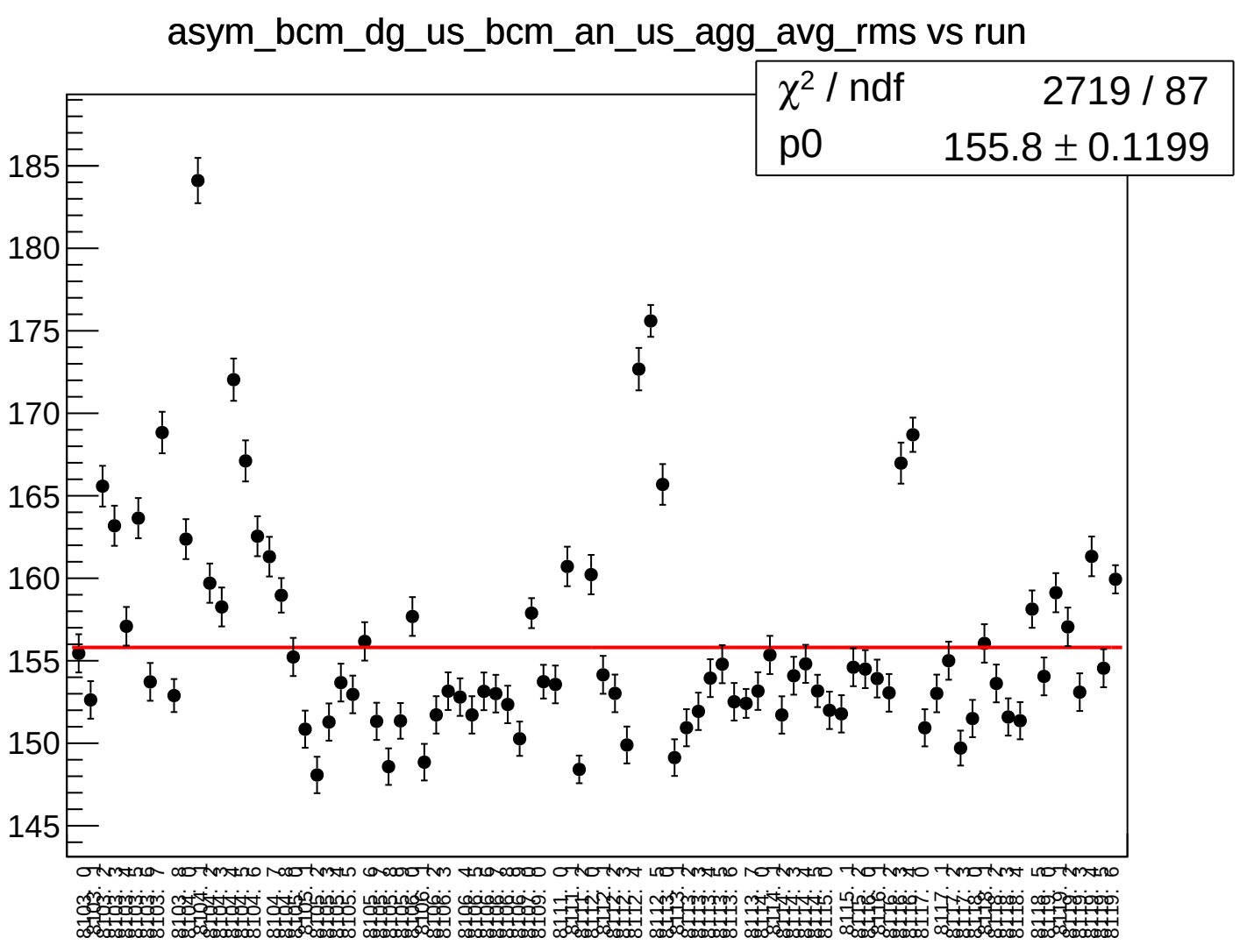

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2768 / 87
p0 154.9 ± 0.1192
185
180
175
170
165
160
155
150
145

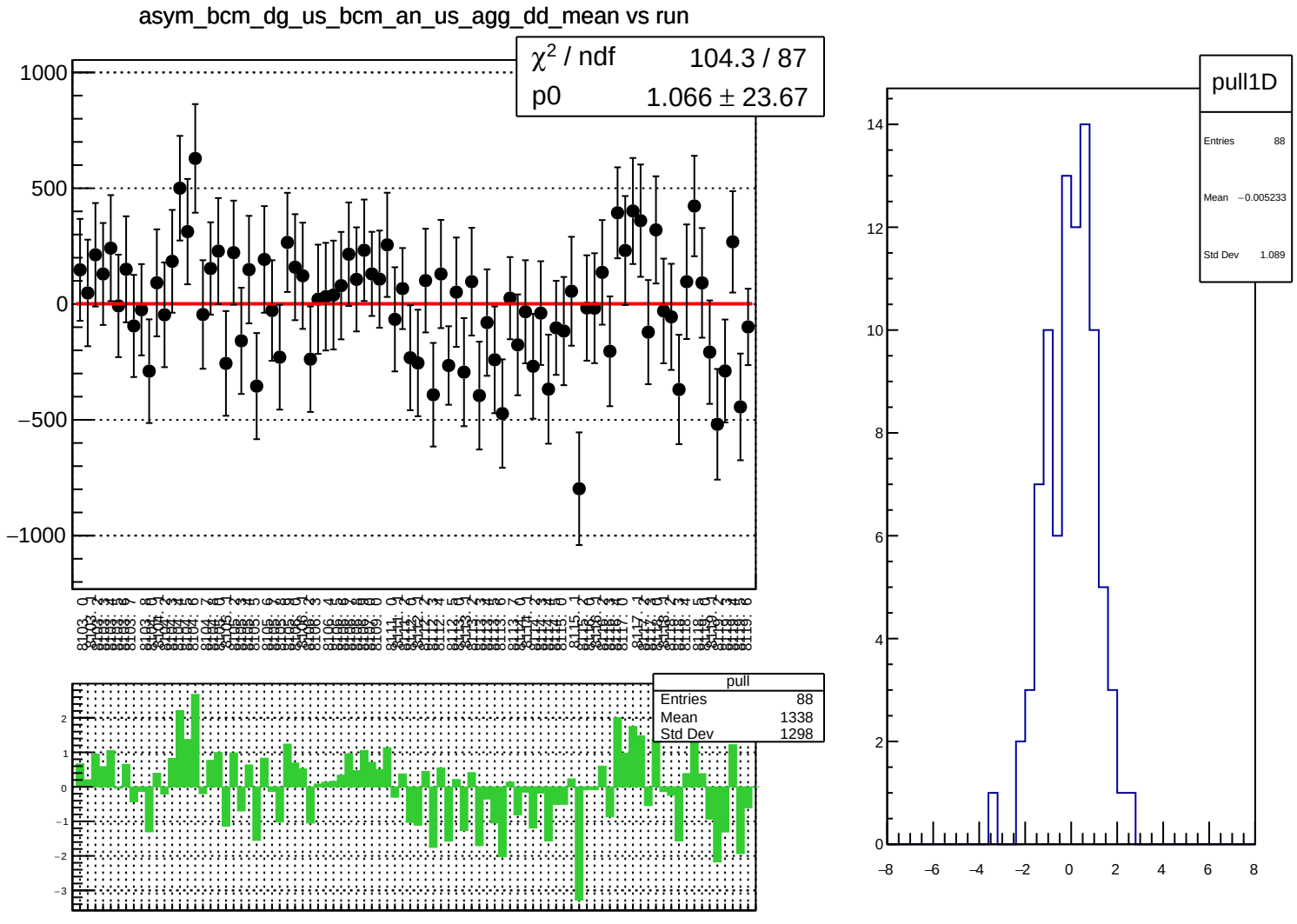

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 104.7 / 87
p0 6.79 ± 17.51
pull
Entries 88
Mean 535.7
Std Dev 491.5
pull1D
Entries 88
Mean −0.008546
Std Dev 1.091

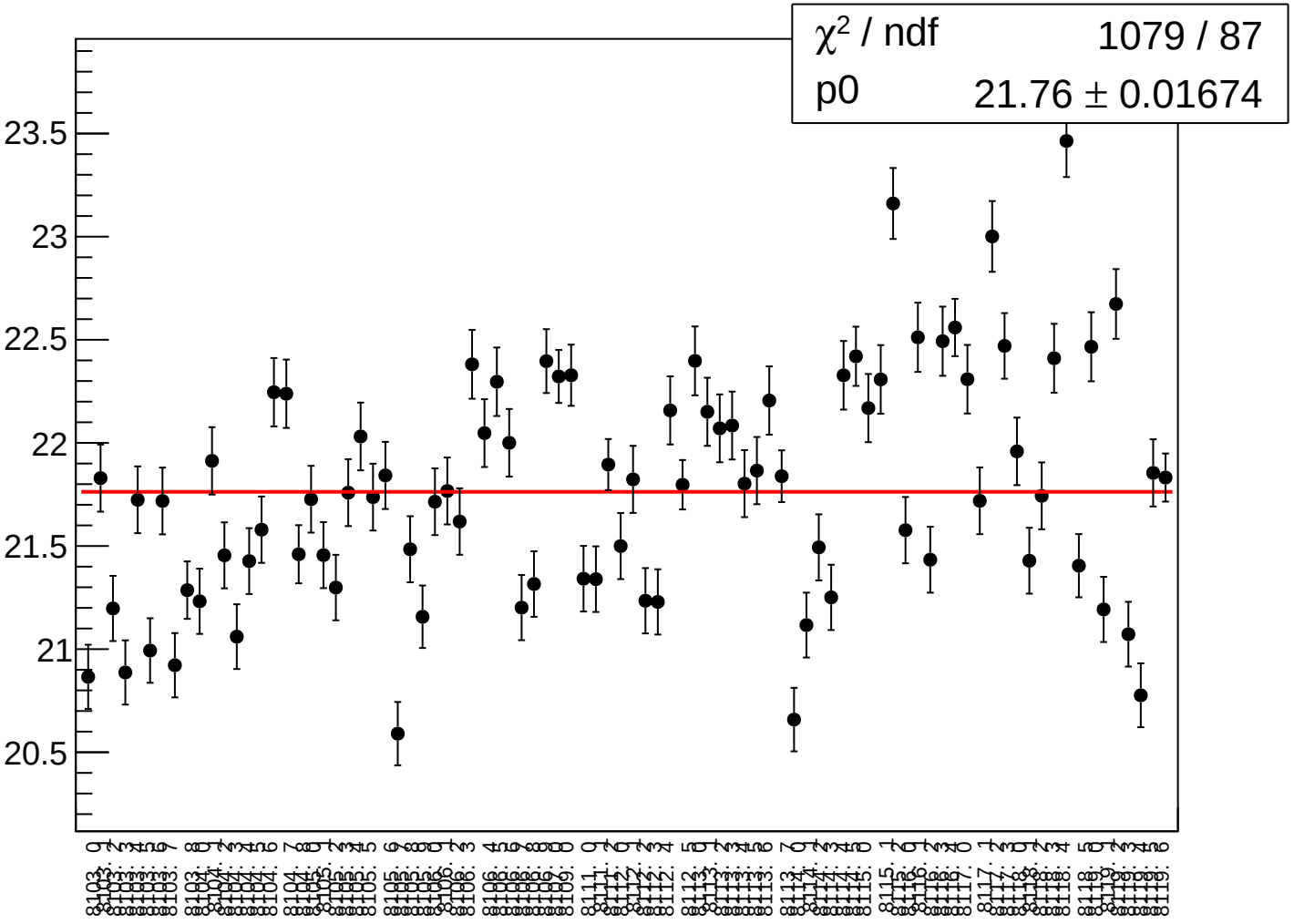

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2621 / 87
p0 16.09 ± 0.01238
21
20
19
18
17
16
15

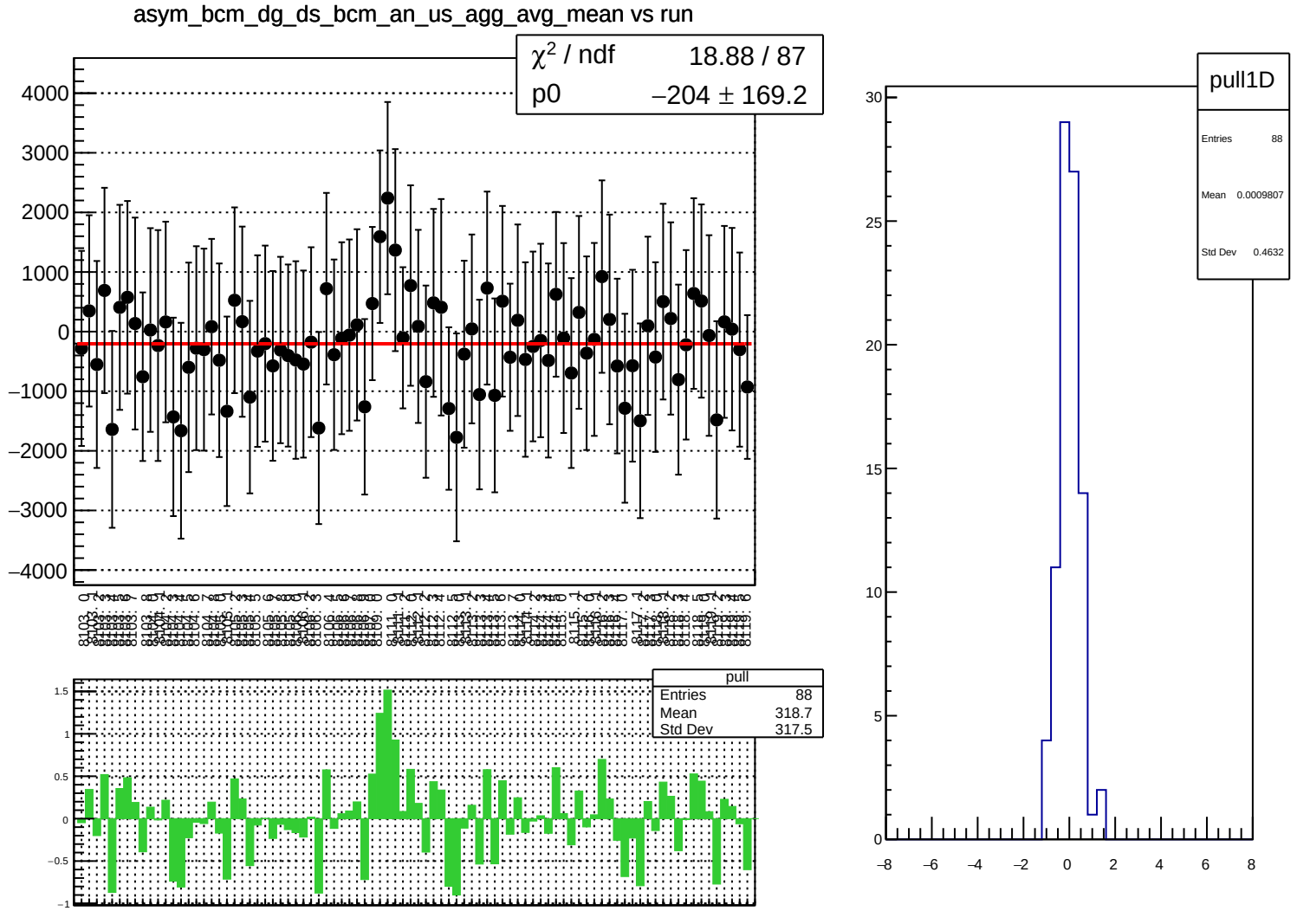

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.96 / 87
p0 −211.4 ± 169.5
pull
Entries 88
Mean −27.6
Std Dev 113.6

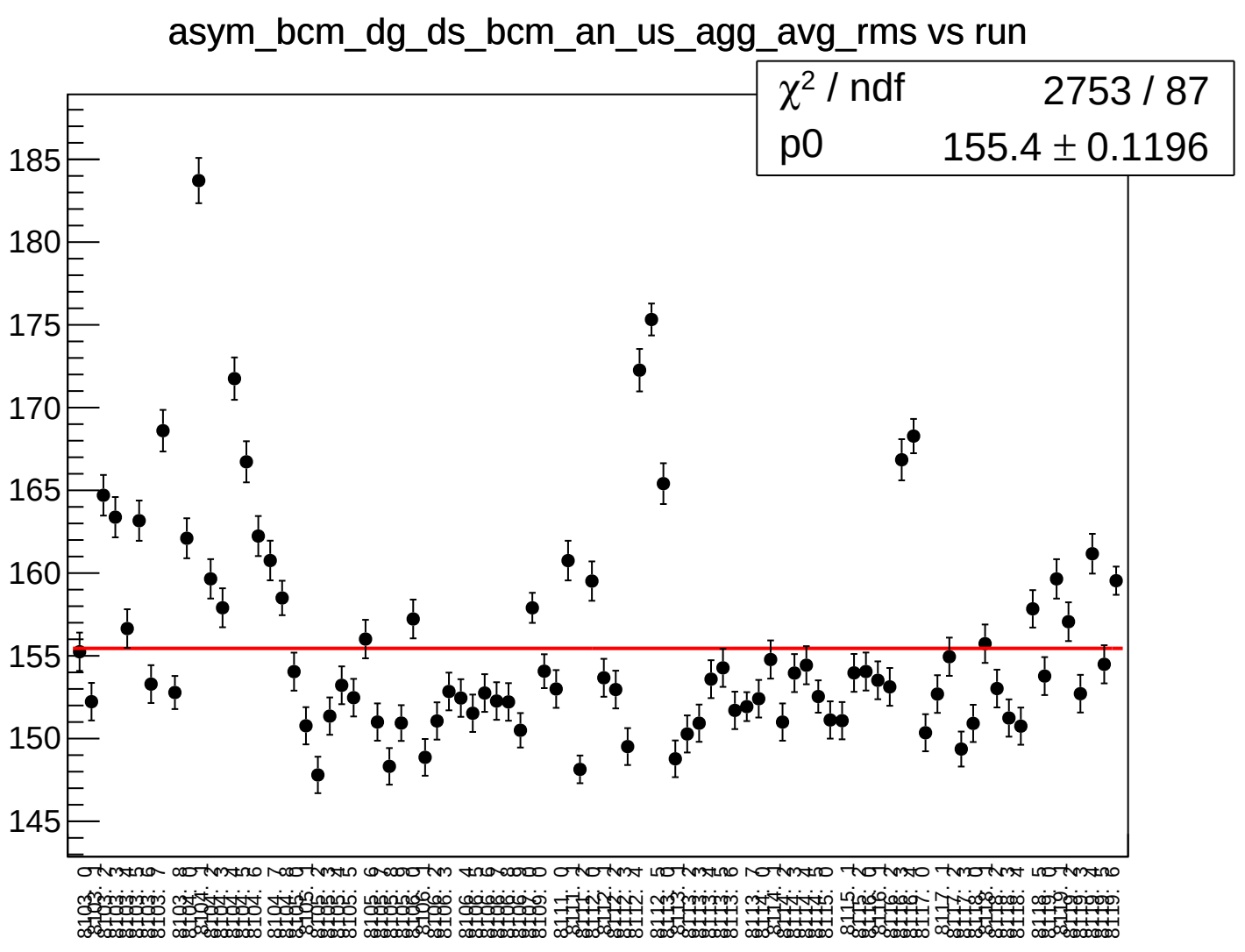

pull1D
Entries 88
Mean 0.002308
Std Dev 0.4641

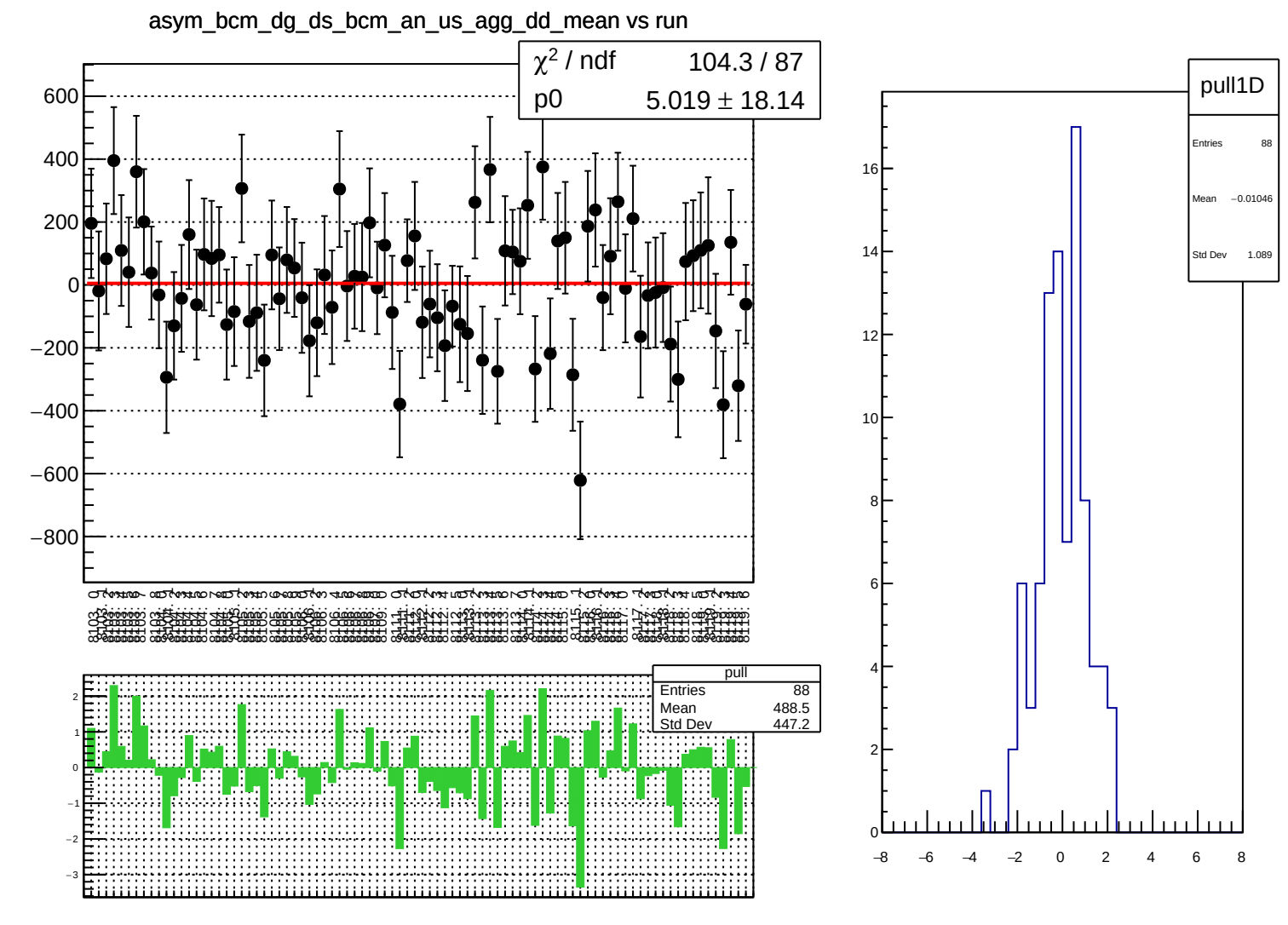

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2719 / 87
p0 155.8 ± 0.1199
185
180
175
170
165
160
155
150
145

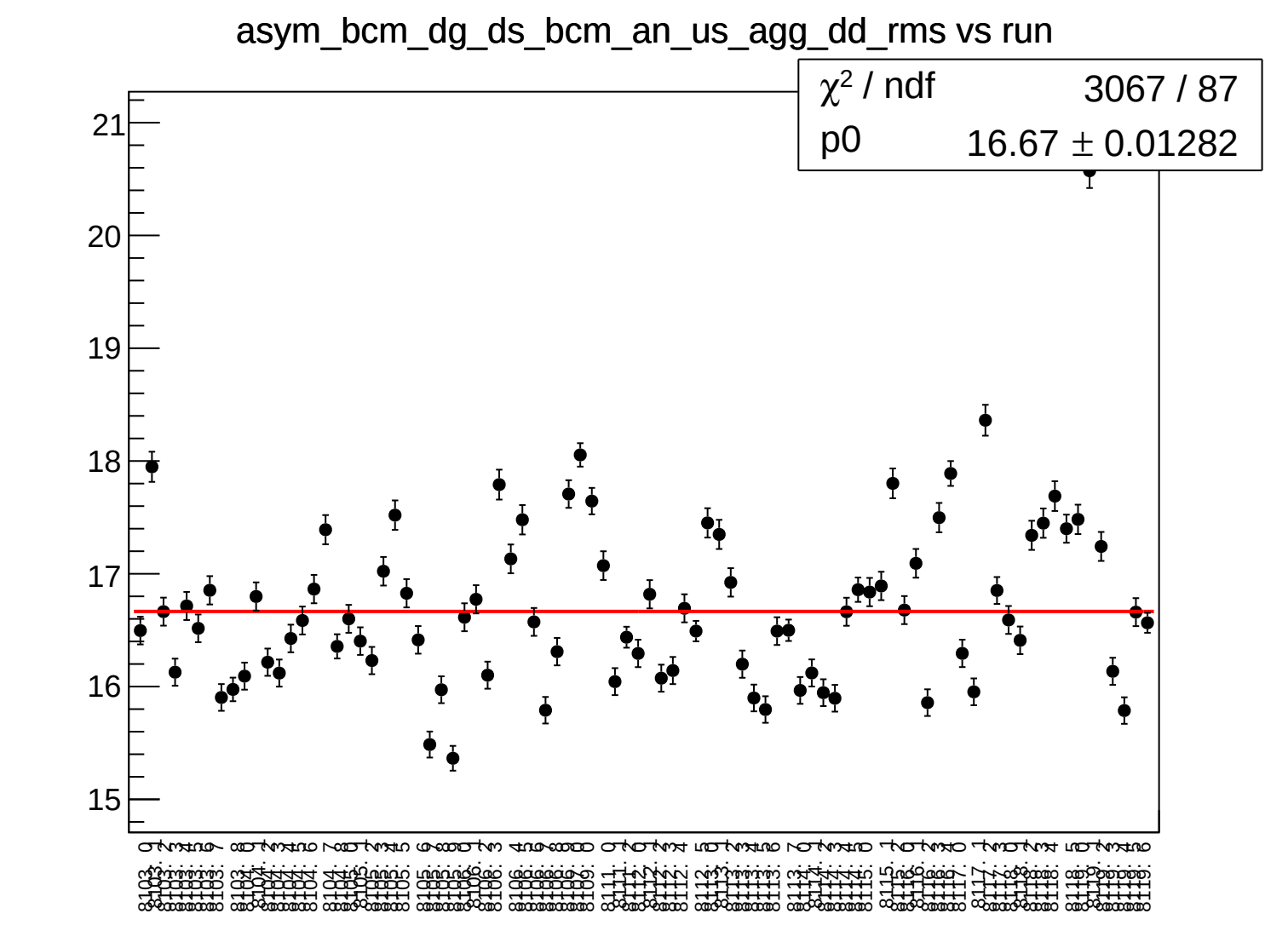

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 104.3 / 87
p0 1.066 ± 23.67
1000
500
0
−500
−1000
pull
Entries 88
Mean 1338
Std Dev 1298
2
1
0
−1
−2
−3
pull1D
Entries 88
Mean −0.005233
Std Dev 1.089
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

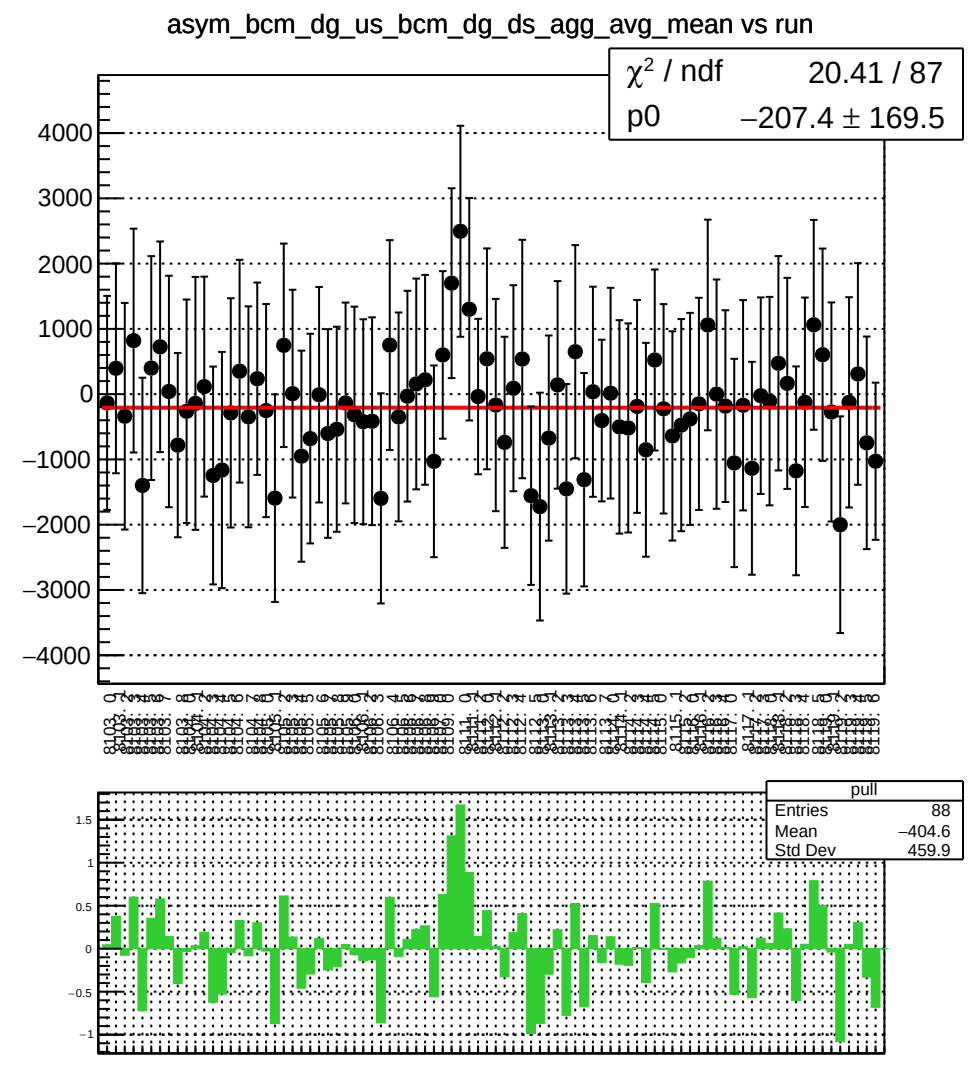

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1079 / 87
p0 21.76 ± 0.01674
23.5
23
22.5
22
21.5
21
20.5

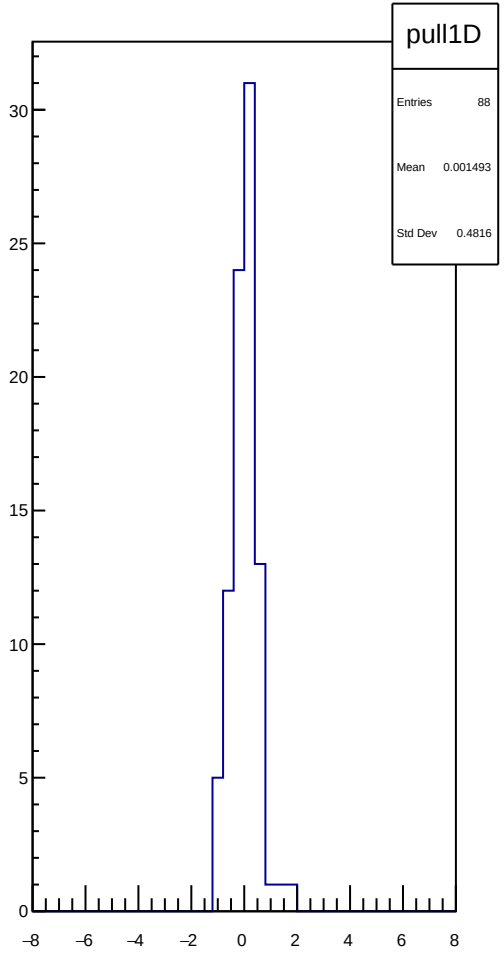

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.88 / 87
p0 −204 ± 169.2
pull
Entries 88
Mean 318.7
Std Dev 317.5
pull1D
Entries 88
Mean 0.0009807
Std Dev 0.4632

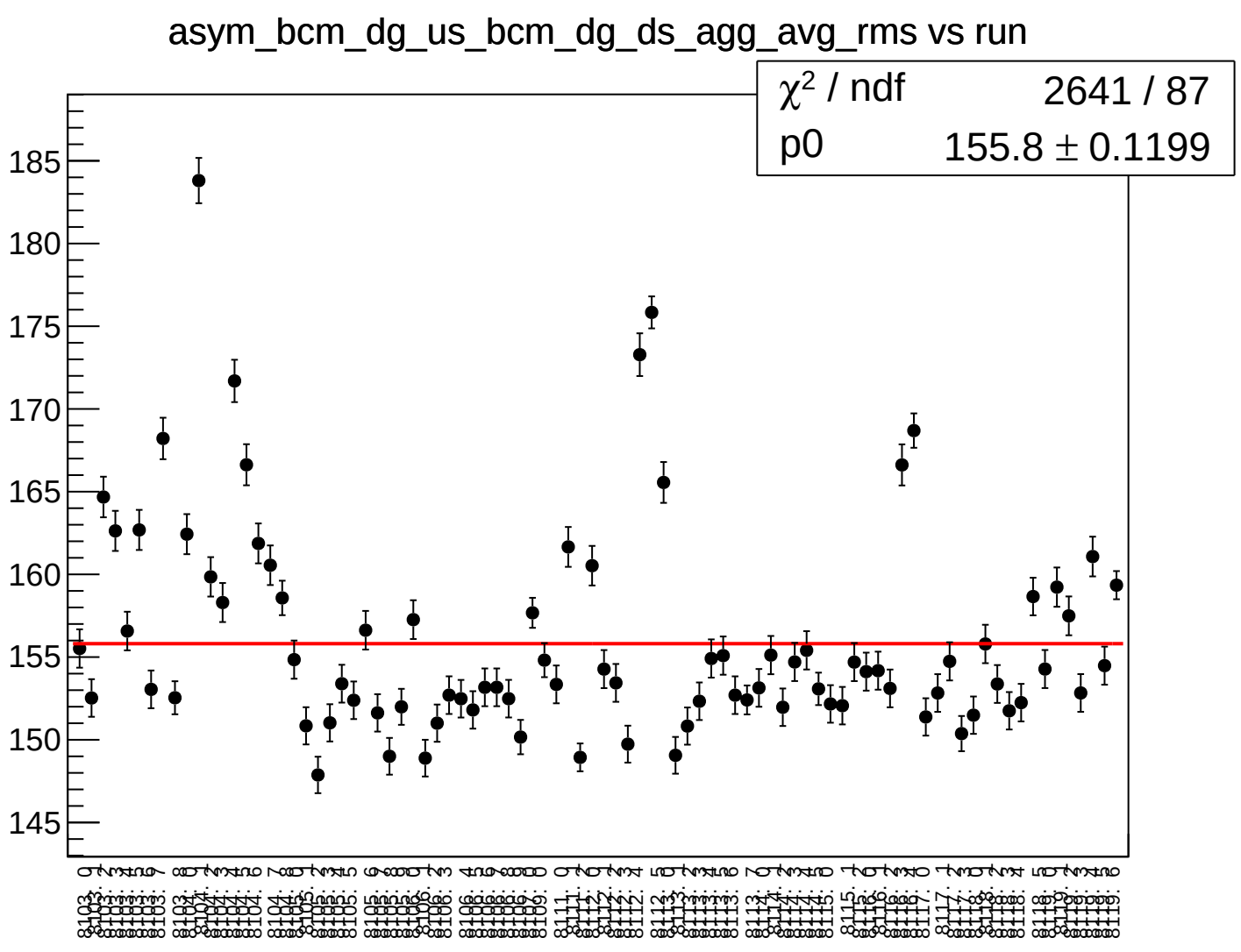

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2753 / 87
p0 155.4 ± 0.1196
185
180
175
170
165
160
155
150
145

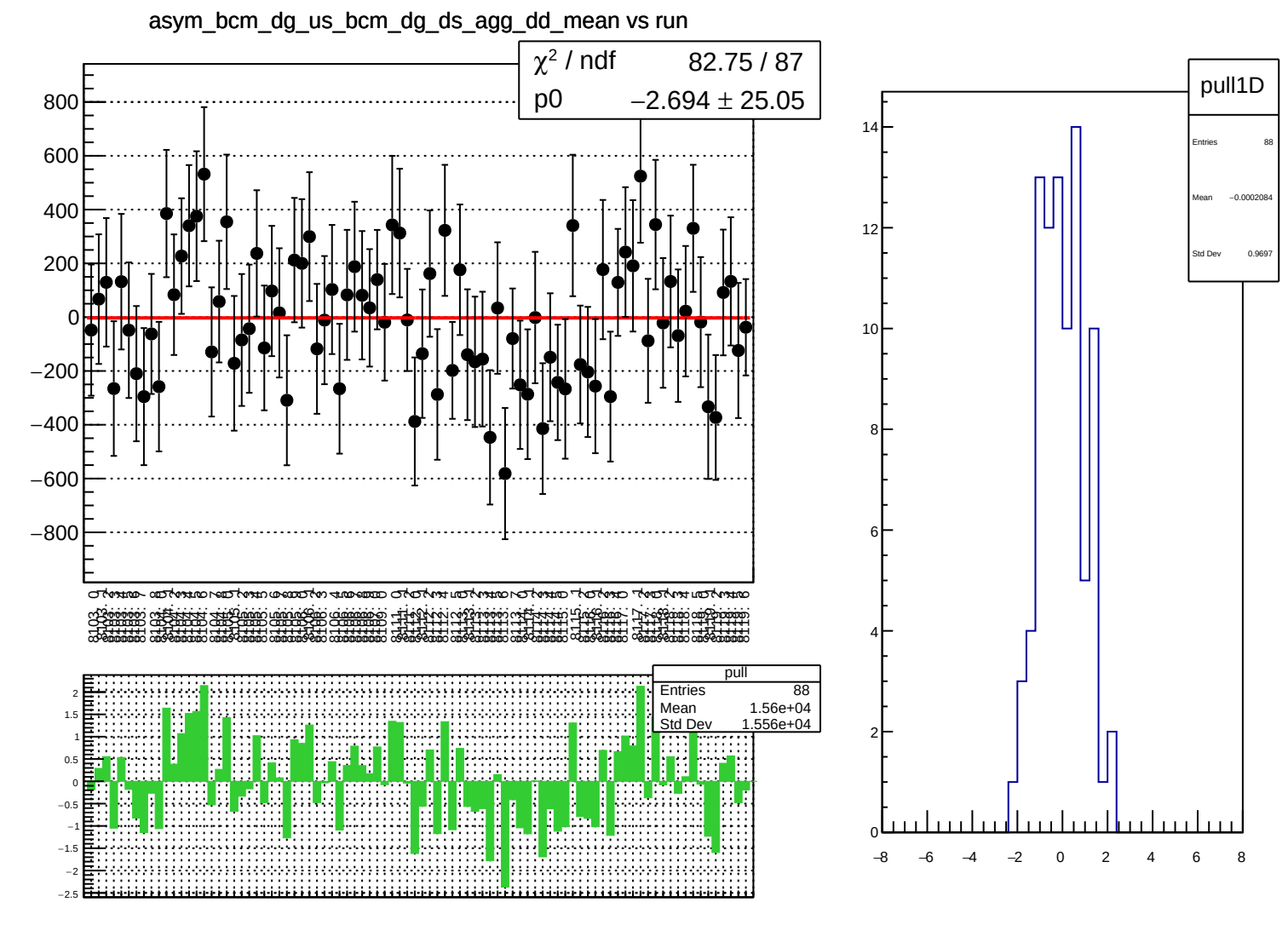

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 104.3 / 87
p0 5.019 ± 18.14
pull
Entries 88
Mean 488.5
Std Dev 447.2
pull1D
Entries 88
Mean −0.01046
Std Dev 1.089

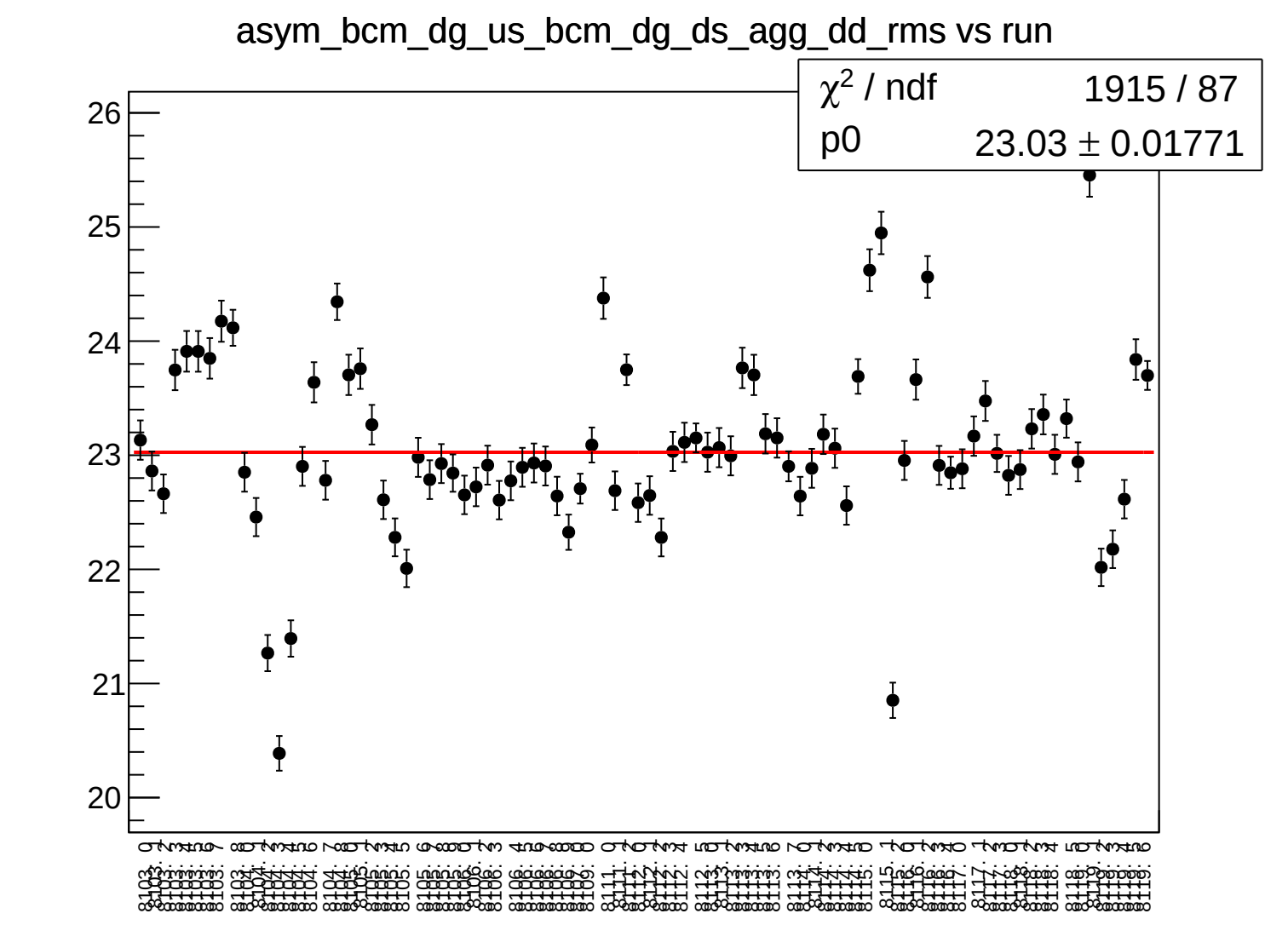

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3067 / 87
p0 16.67 ± 0.01282
21
20
19
18
17
16
15

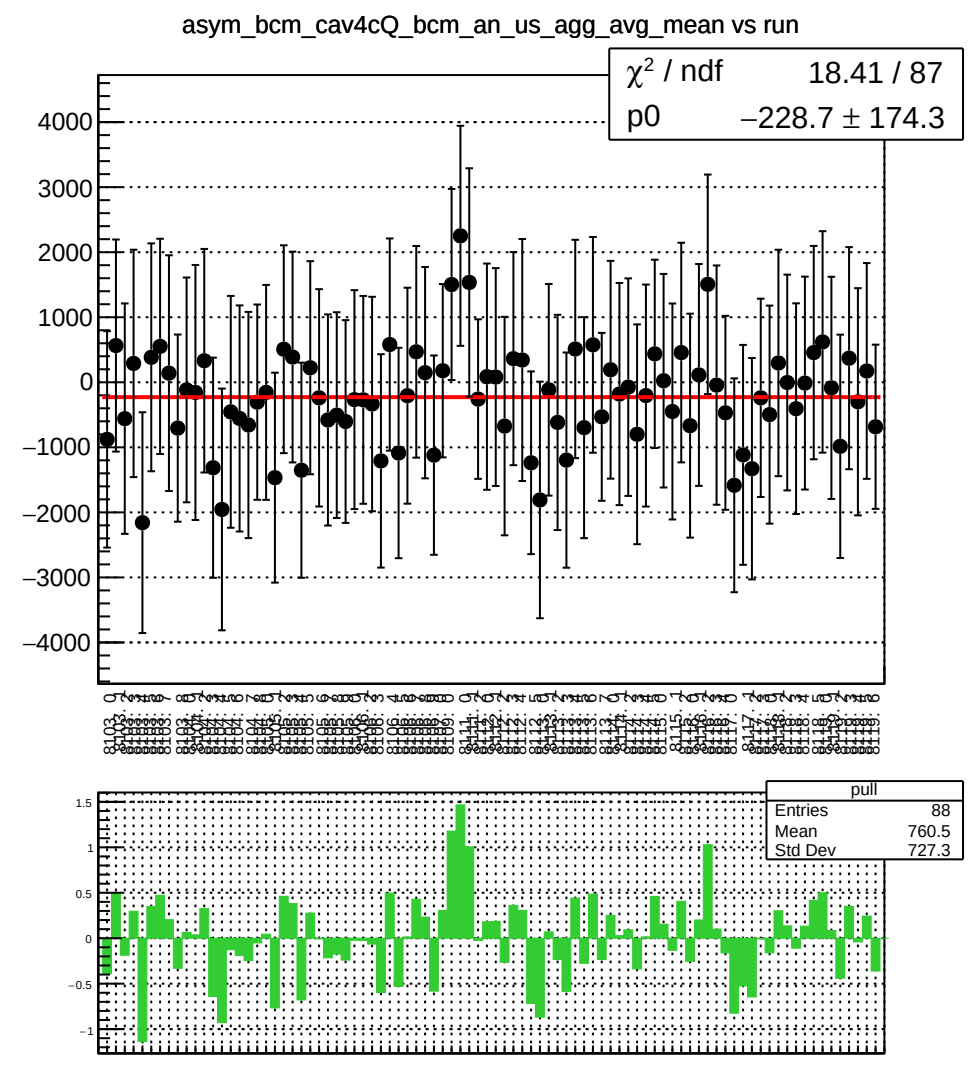

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 20.41 / 87
p0 −207.4 ± 169.5
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 88
Mean −404.6
Std Dev 459.9
1.5
1
0.5
0
−0.5
−1

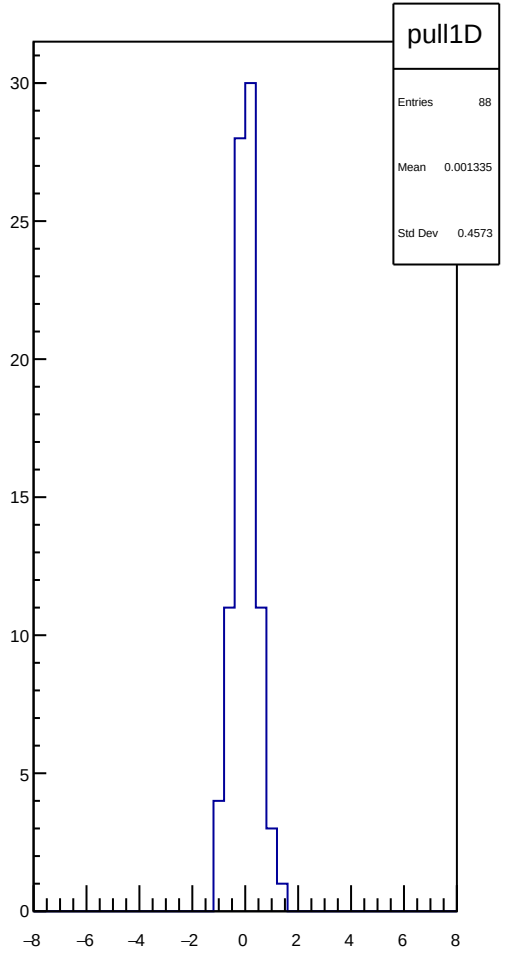

pull1D
Entries 88
Mean 0.001493
Std Dev 0.4816
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

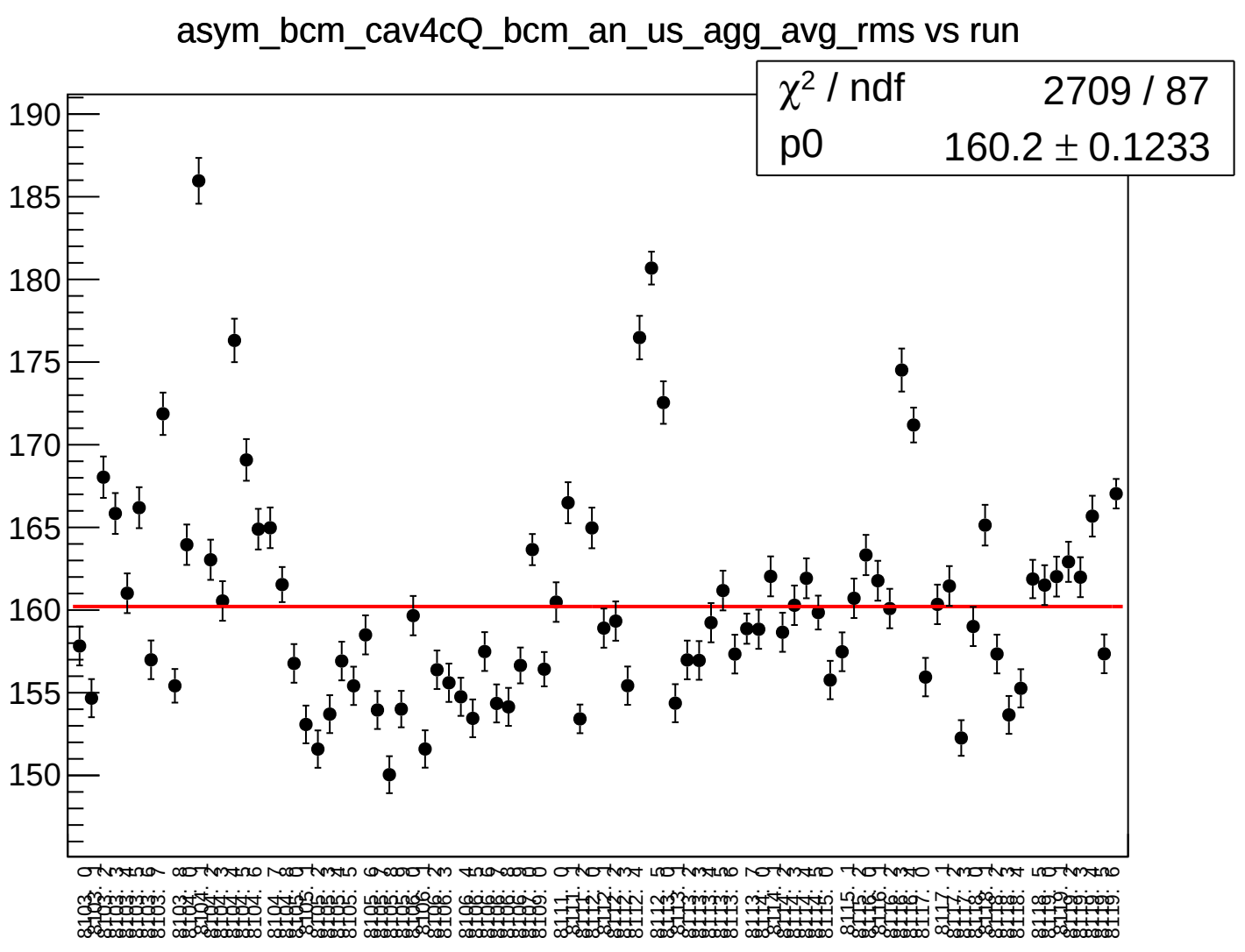

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2641 / 87
p0 155.8 ± 0.1199
185
180
175
170
165
160
155
150
145

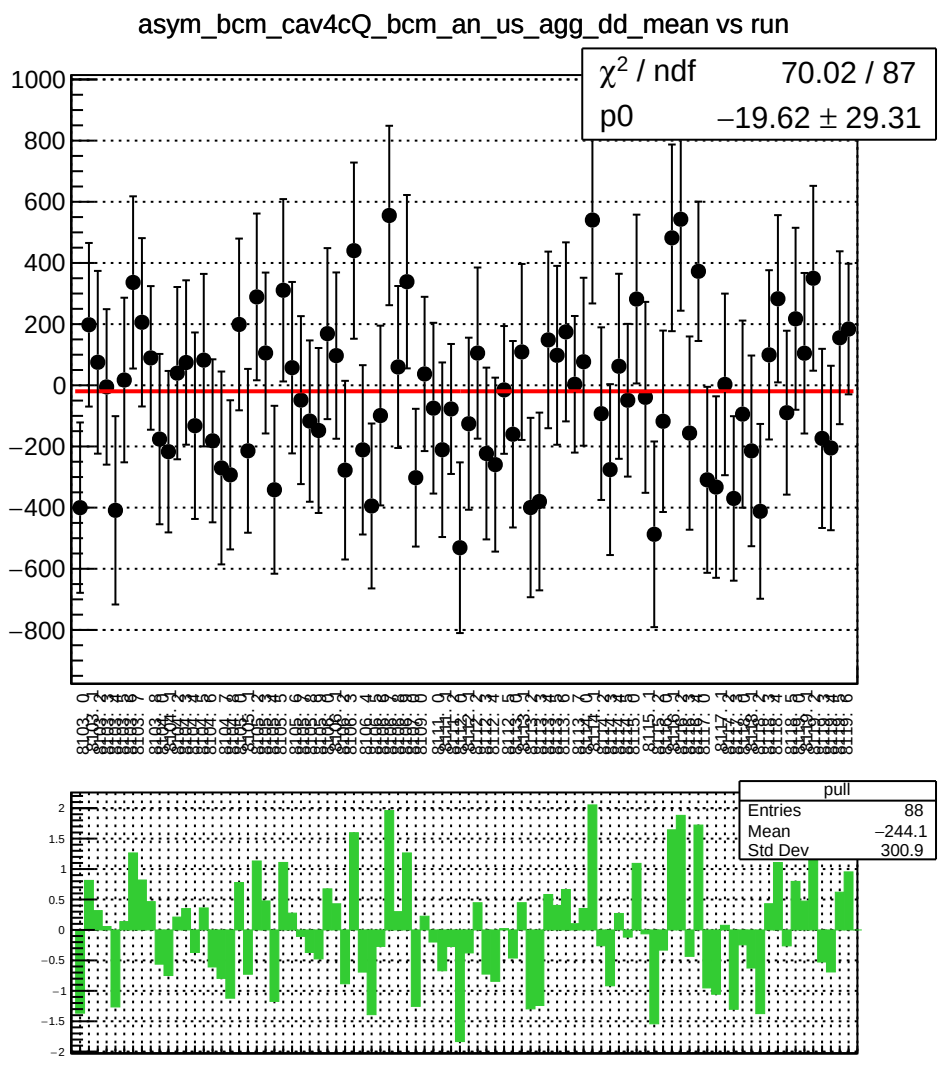

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 82.75 / 87
p0 −2.694 ± 25.05
pull
Entries 88
Mean 1.56e+04
Std Dev 1.556e+04
pull1D
Entries 88
Mean −0.0002084
Std Dev 0.9697

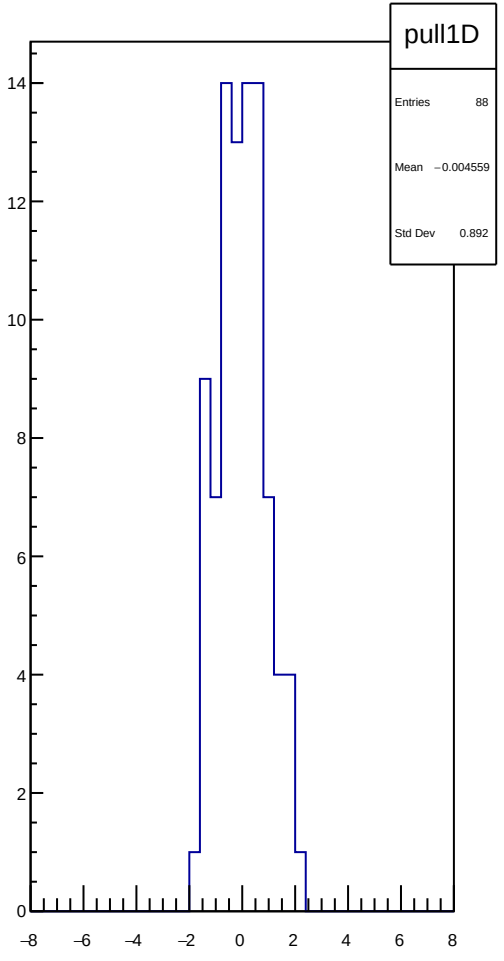

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1915 / 87
p0 23.03 ± 0.01771
26
25
24
23
22
21
20

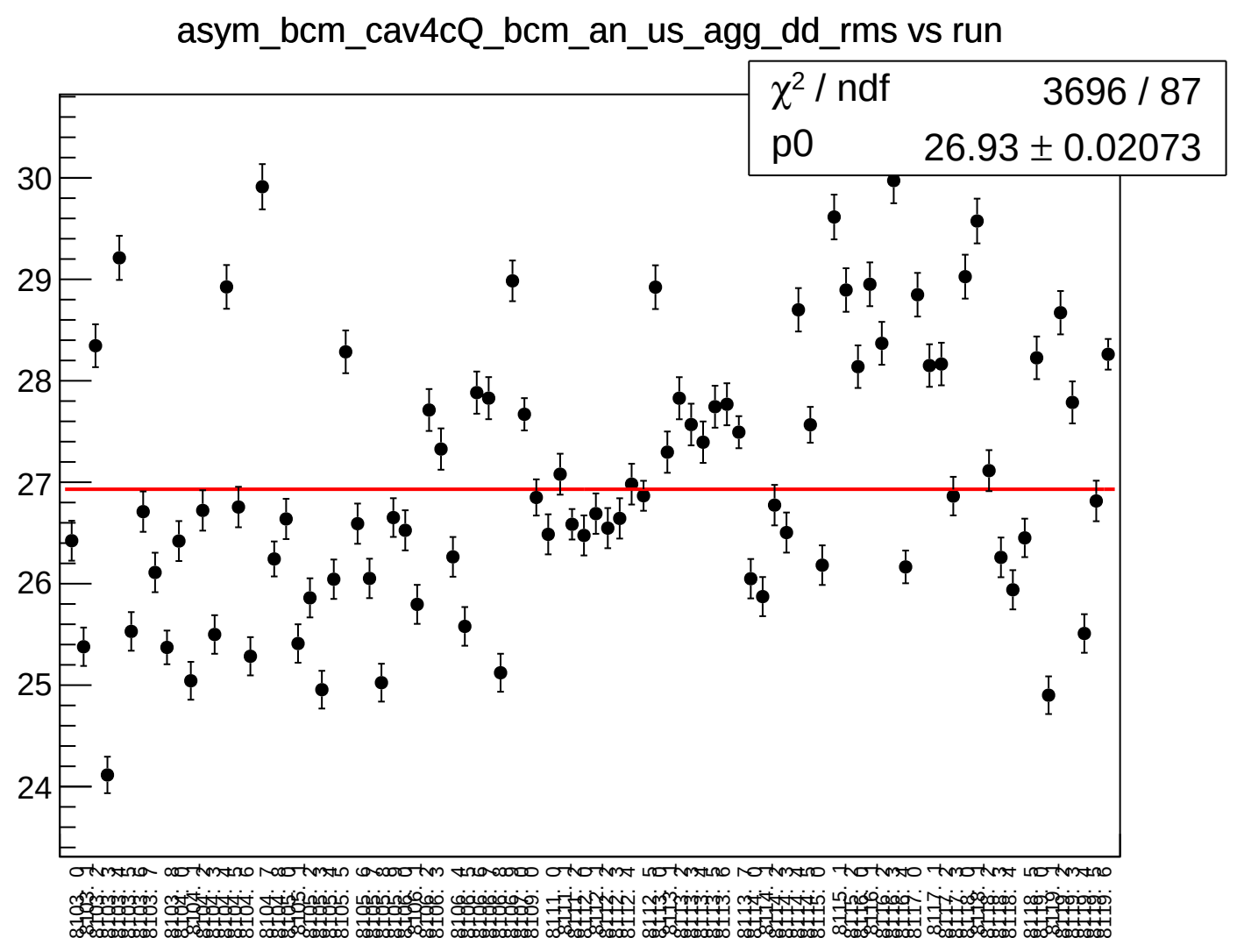

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.41 / 87
p0 −228.7 ± 174.3
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 88
Mean 760.5
Std Dev 727.3
1.5
1
0.5
0
−0.5
−1

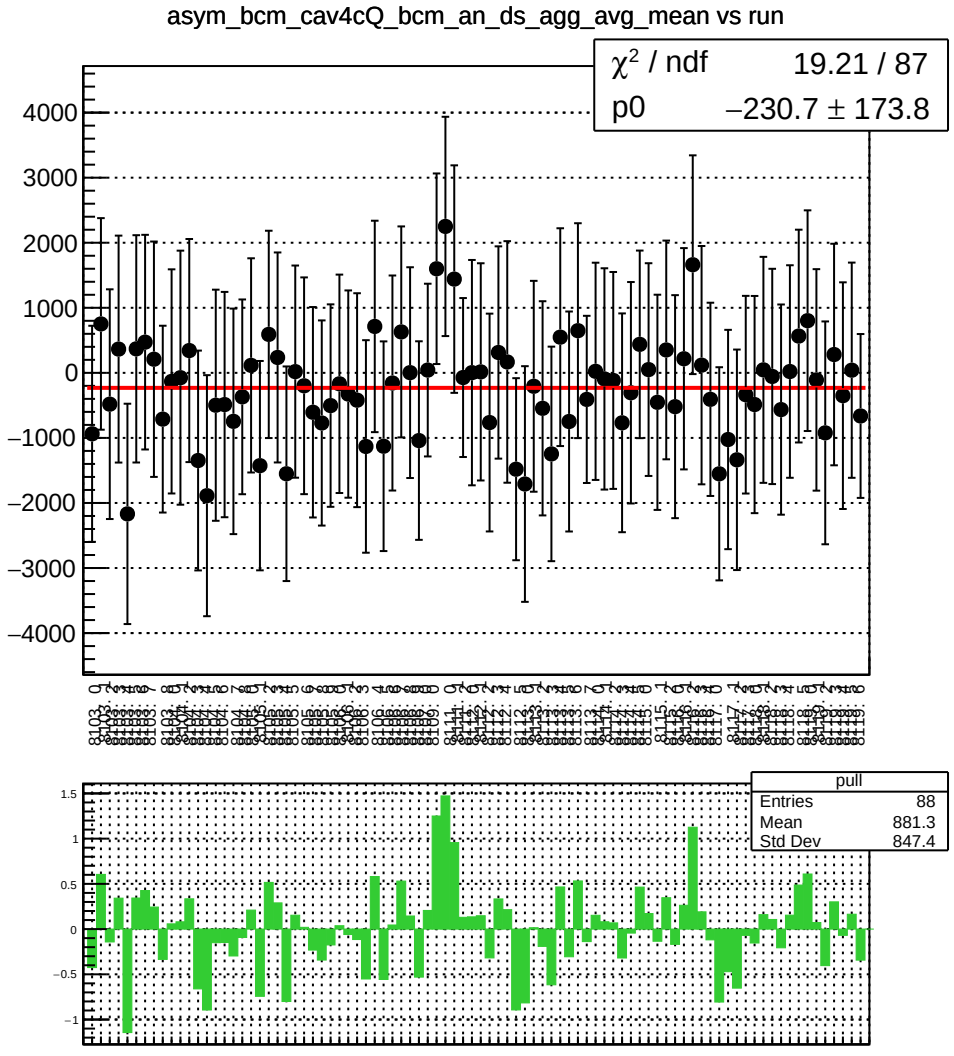

pull1D
Entries 88
Mean 0.001335
Std Dev 0.4573
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

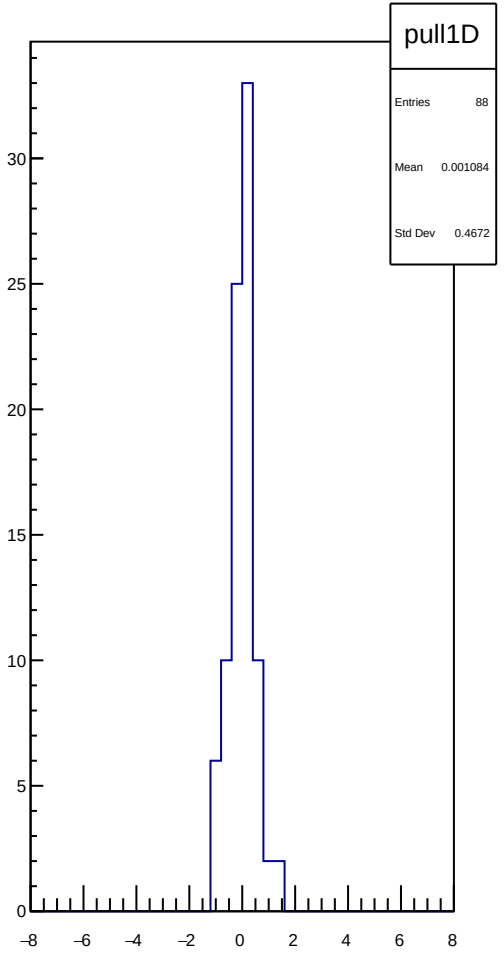

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2709 / 87
p0 160.2 ± 0.1233
190
185
180
175
170
165
160
155
150

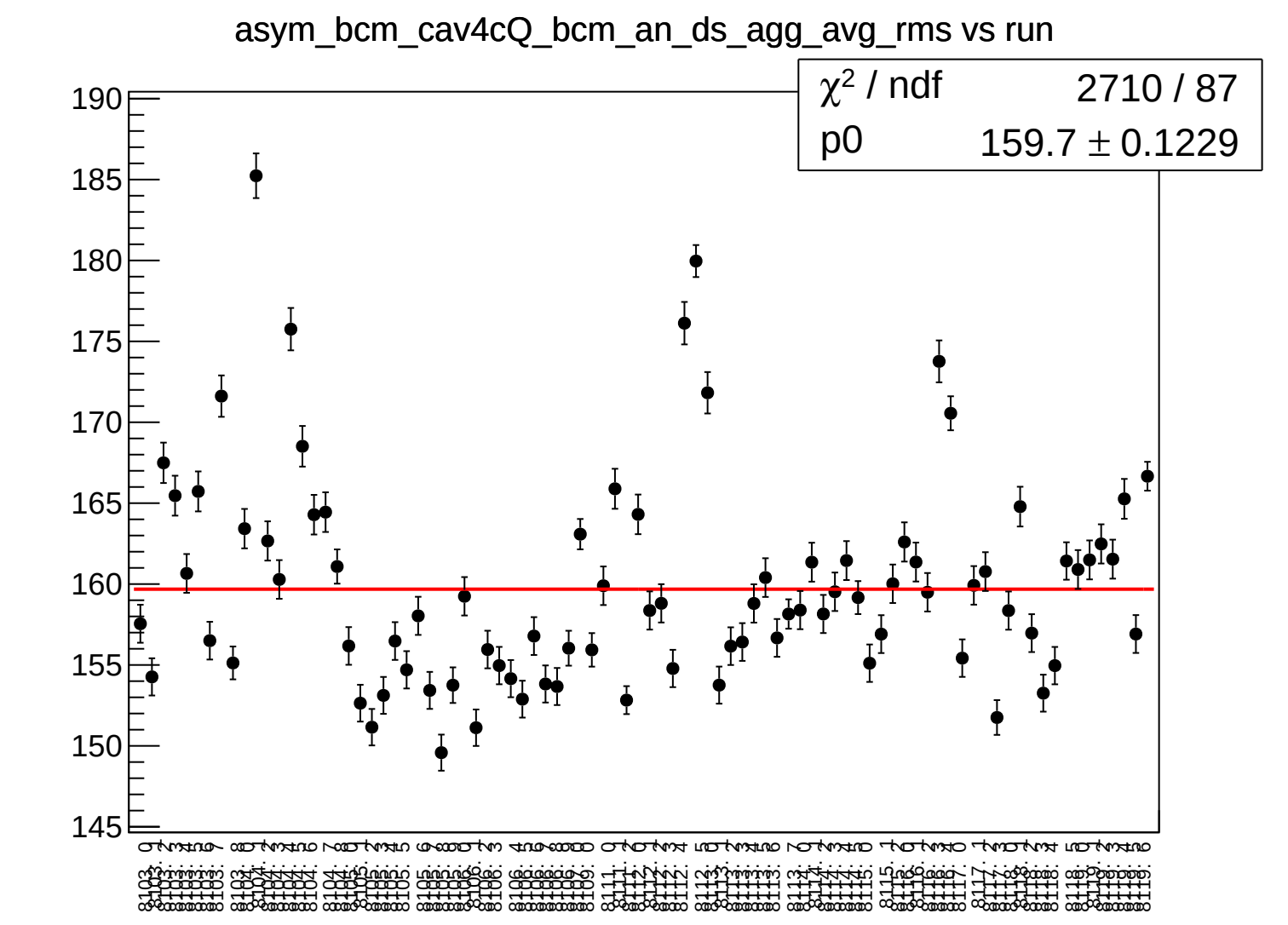

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 70.02 / 87
p0 −19.62 ± 29.31
pull
Entries 88
Mean −244.1
Std Dev 300.9

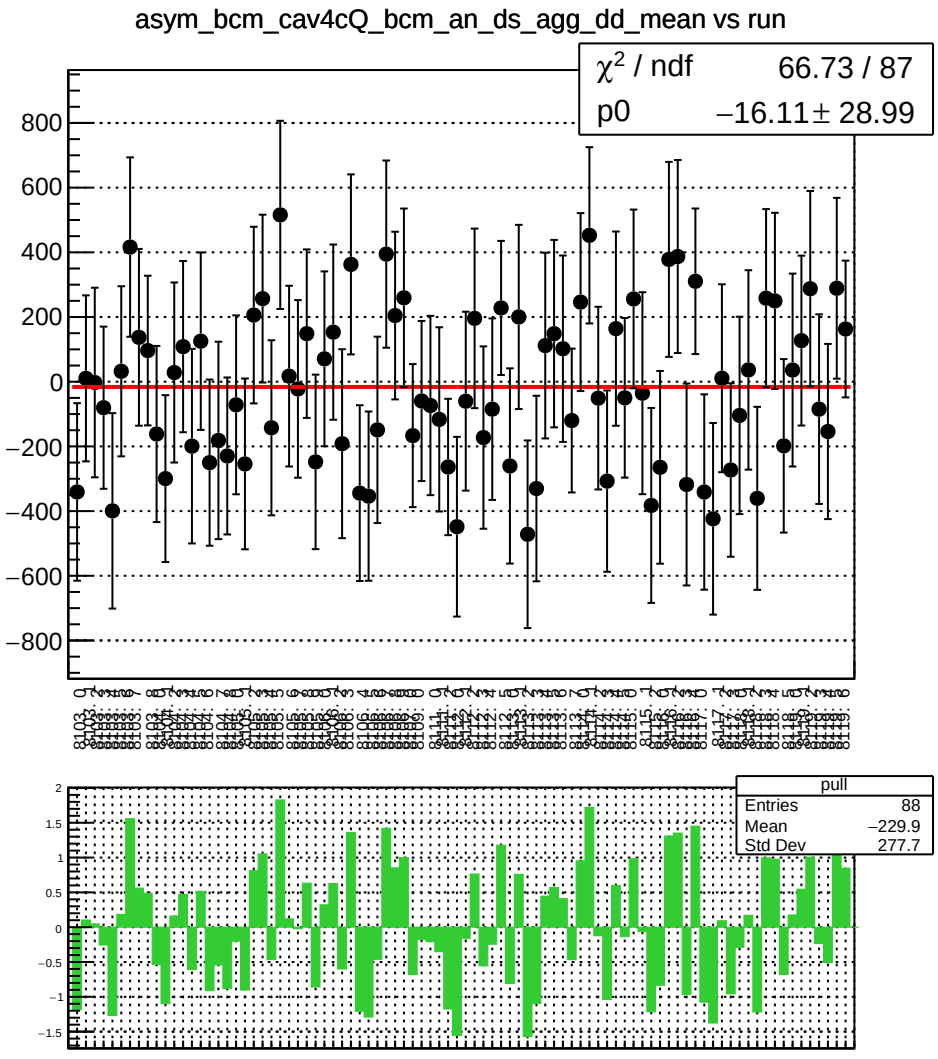

pull1D
Entries 88
Mean −0.004559
Std Dev 0.892

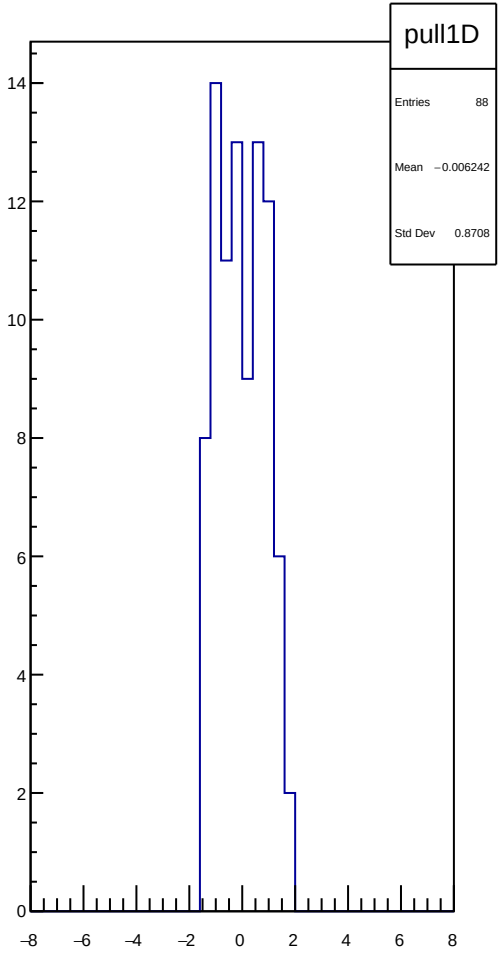

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3696 / 87
p0 26.93 ± 0.02073
30
29
28
27
26
25
24

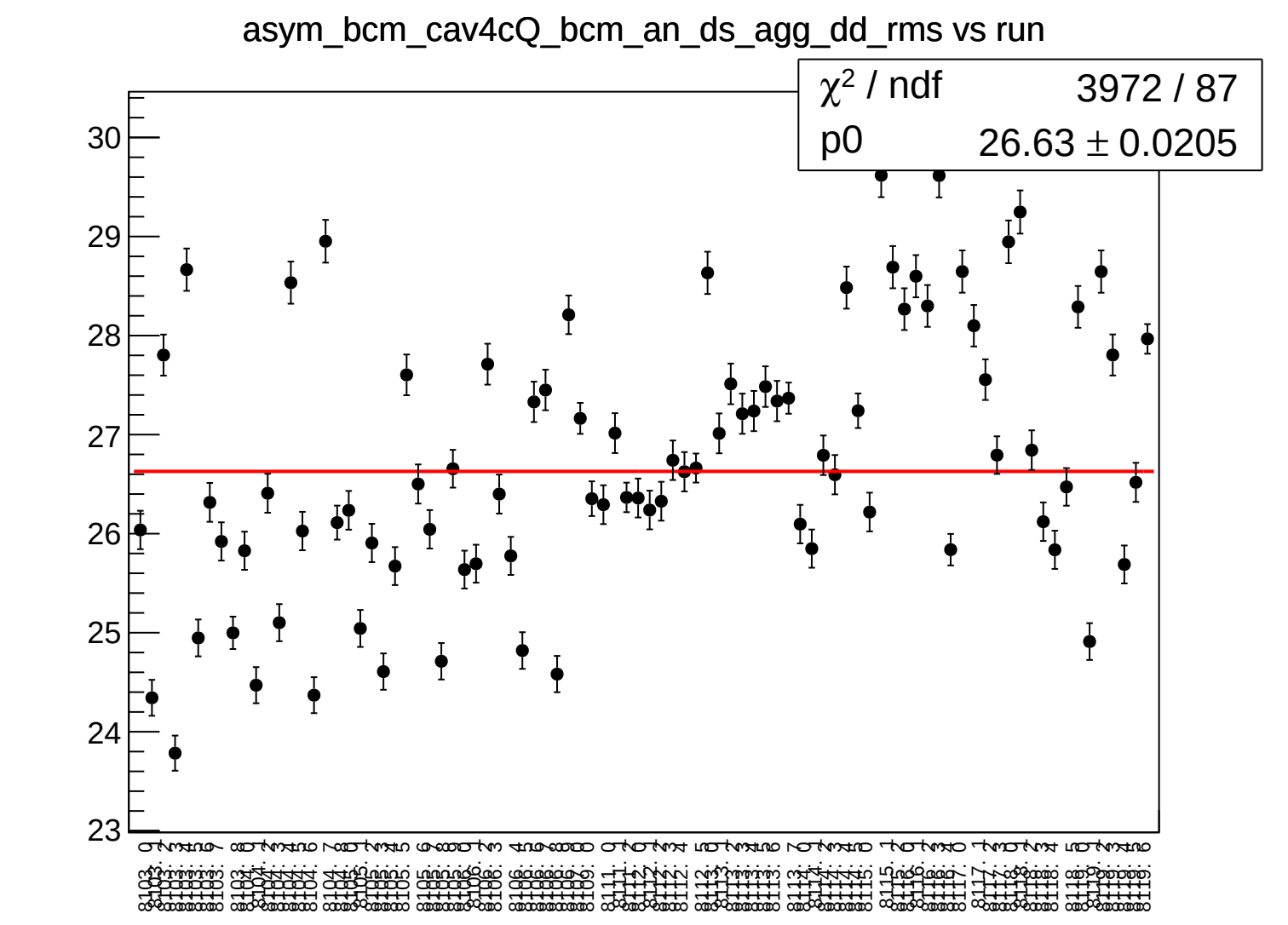

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.21 / 87
p0 −230.7 ± 173.8
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 88
Mean 881.3
Std Dev 847.4
1.5
1
0.5
0
−0.5
−1

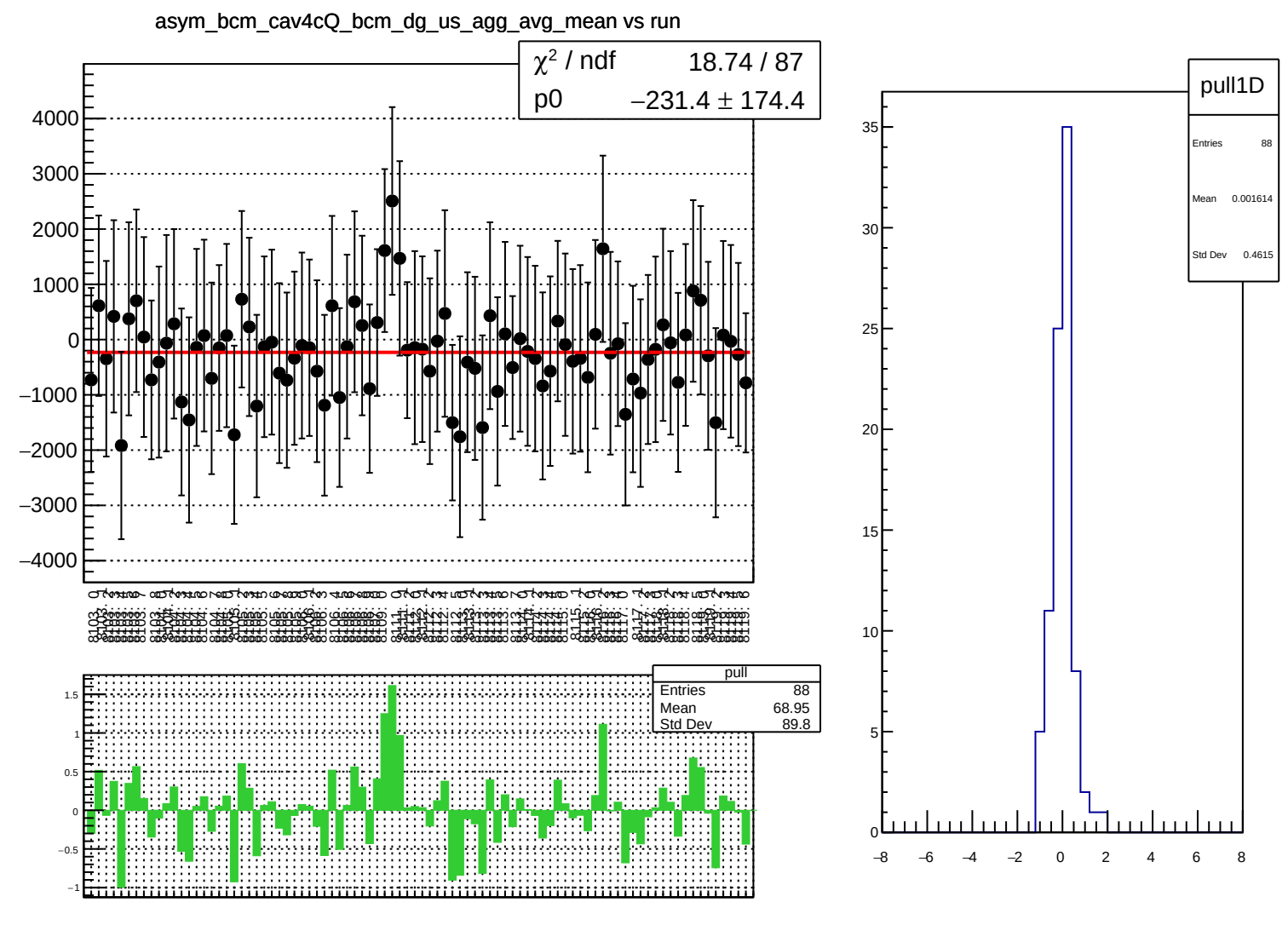

pull1D
Entries 88
Mean 0.001084
Std Dev 0.4672
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

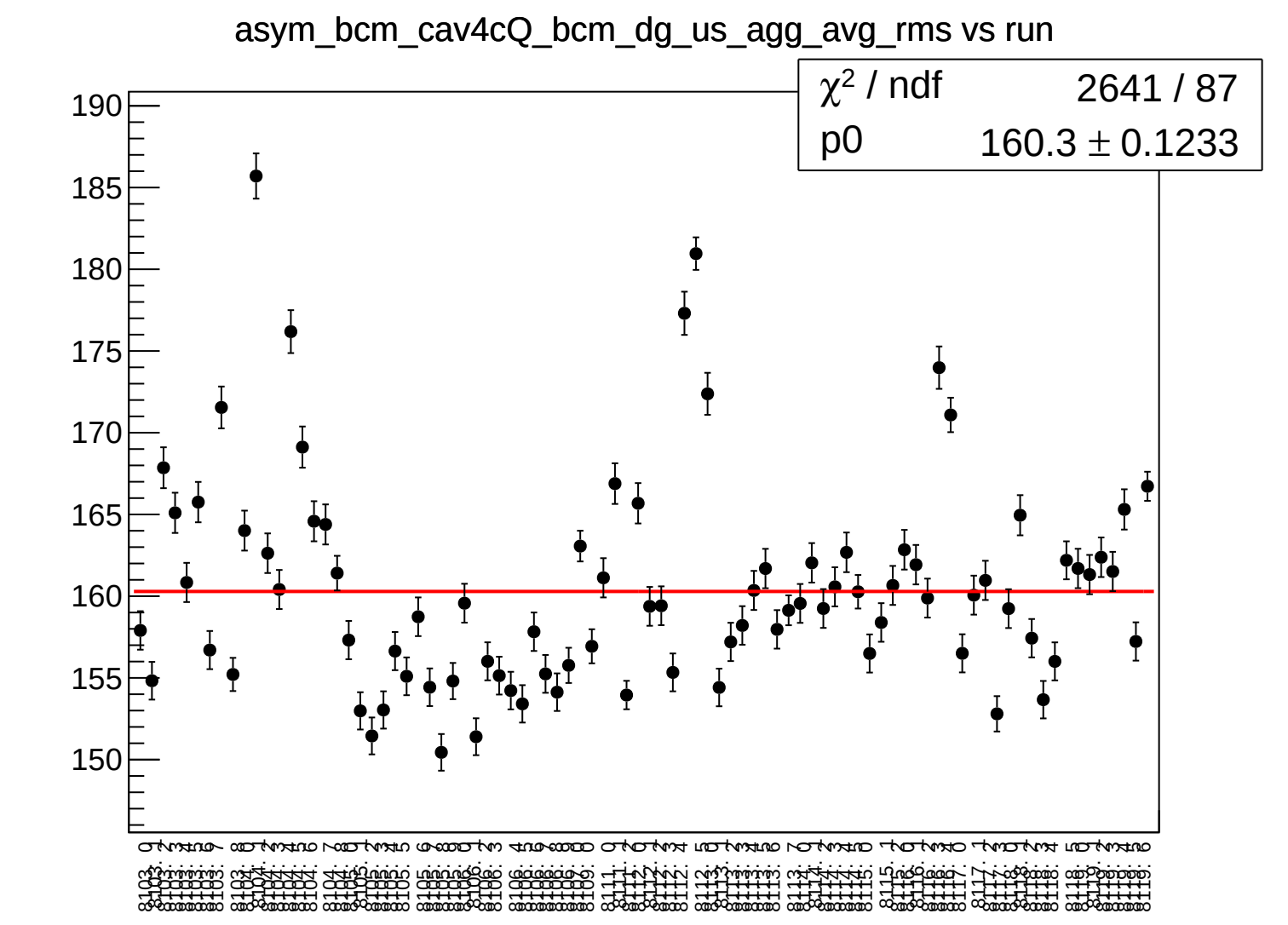

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2710 / 87
p0 159.7 ± 0.1229
190
185
180
175
170
165
160
155
150
145

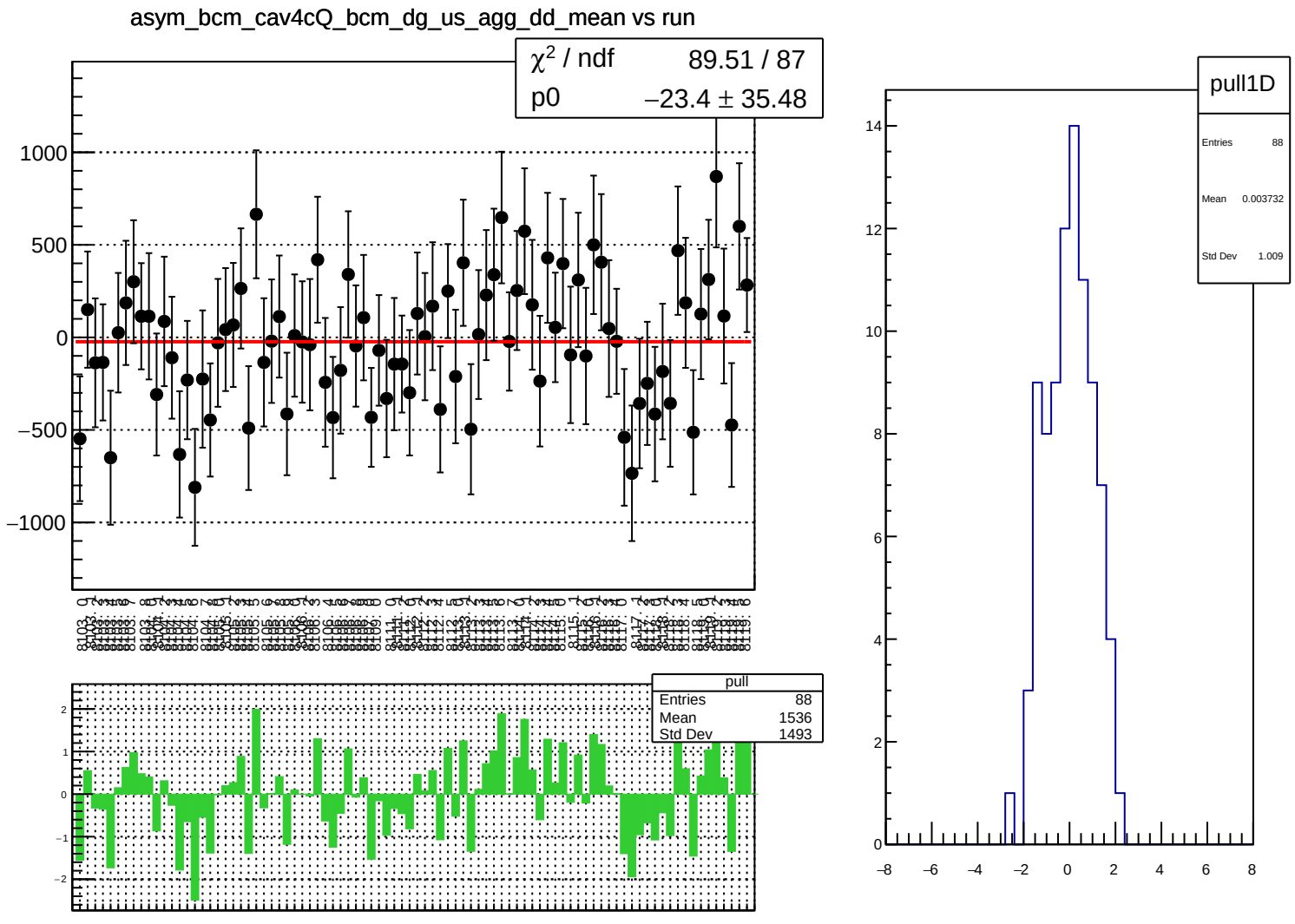

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 66.73 / 87
p0 −16.11± 28.99
pull
Entries 88
Mean −229.9
Std Dev 277.7

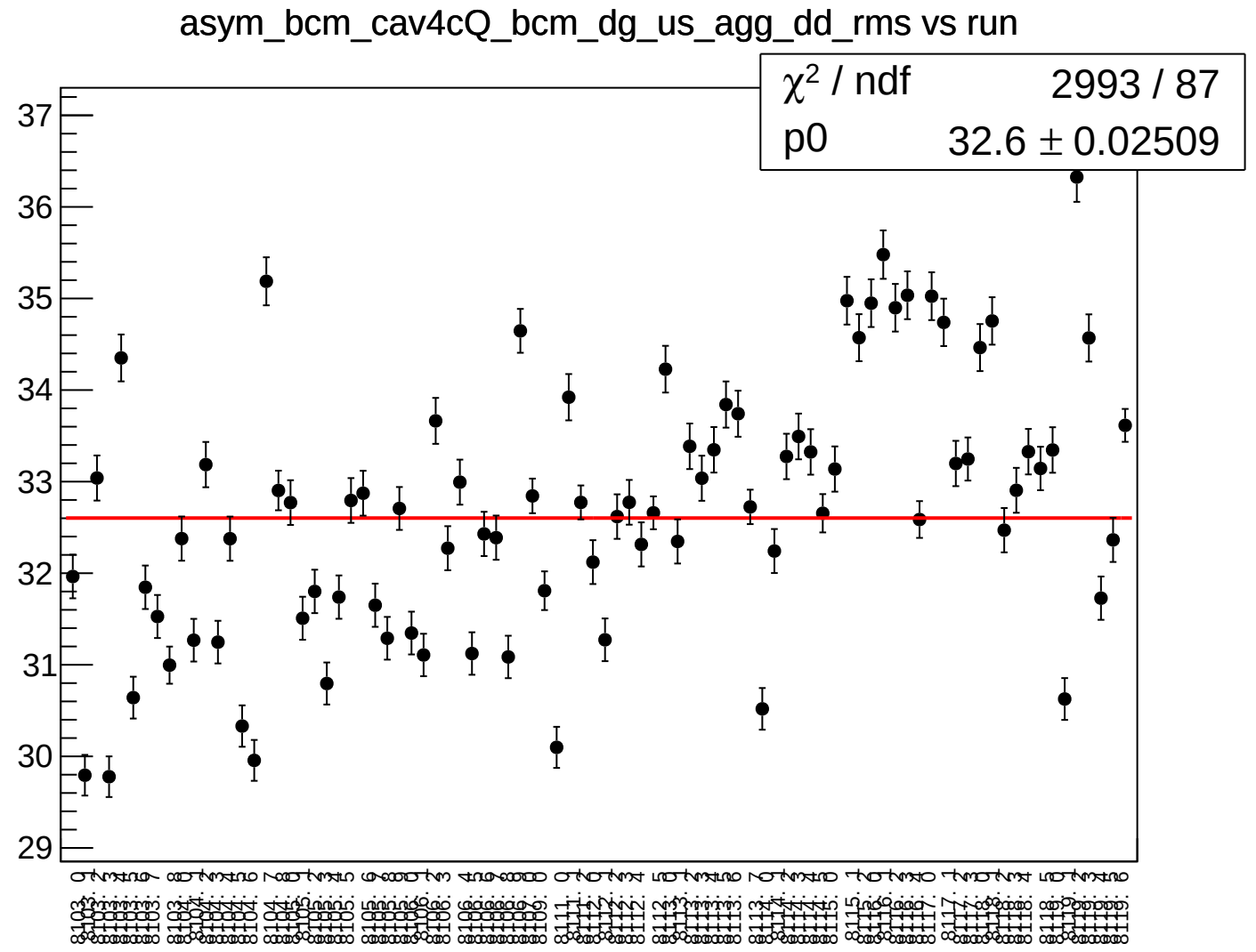

pull1D
Entries 88
Mean −0.006242
Std Dev 0.8708

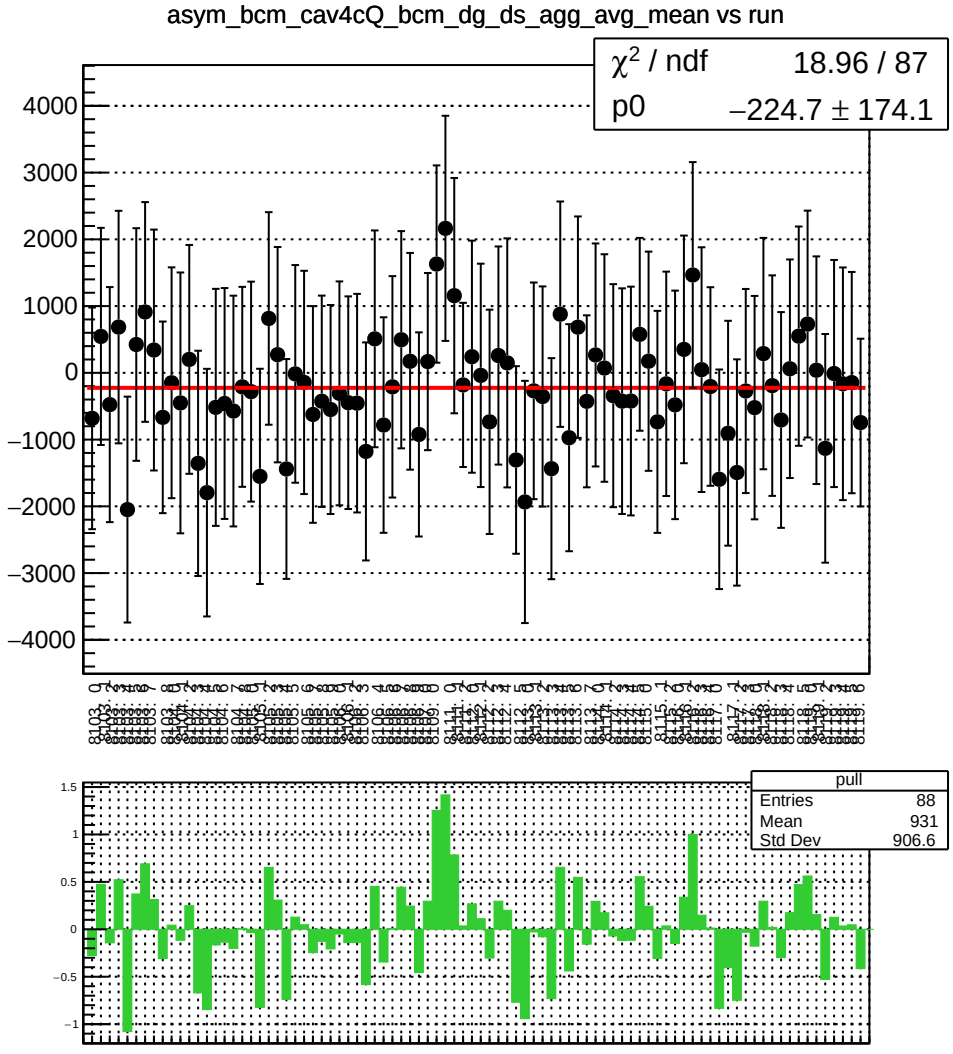

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3972 / 87
p0 26.63 ± 0.0205
30
29
28
27
26
25
24
23

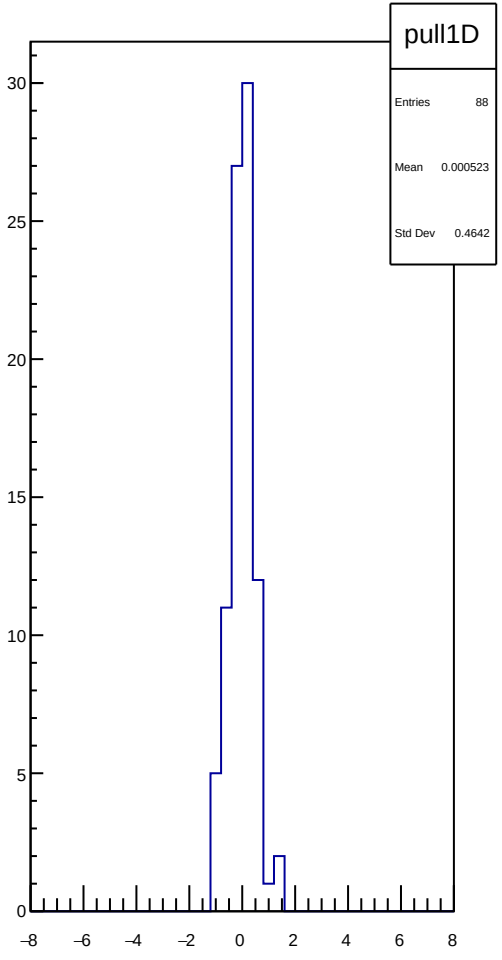

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 18.74 / 87
p0 −231.4 ± 174.4
pull
Entries 88
Mean 68.95
Std Dev 89.8
pull1D
Entries 88
Mean 0.001614
Std Dev 0.4615

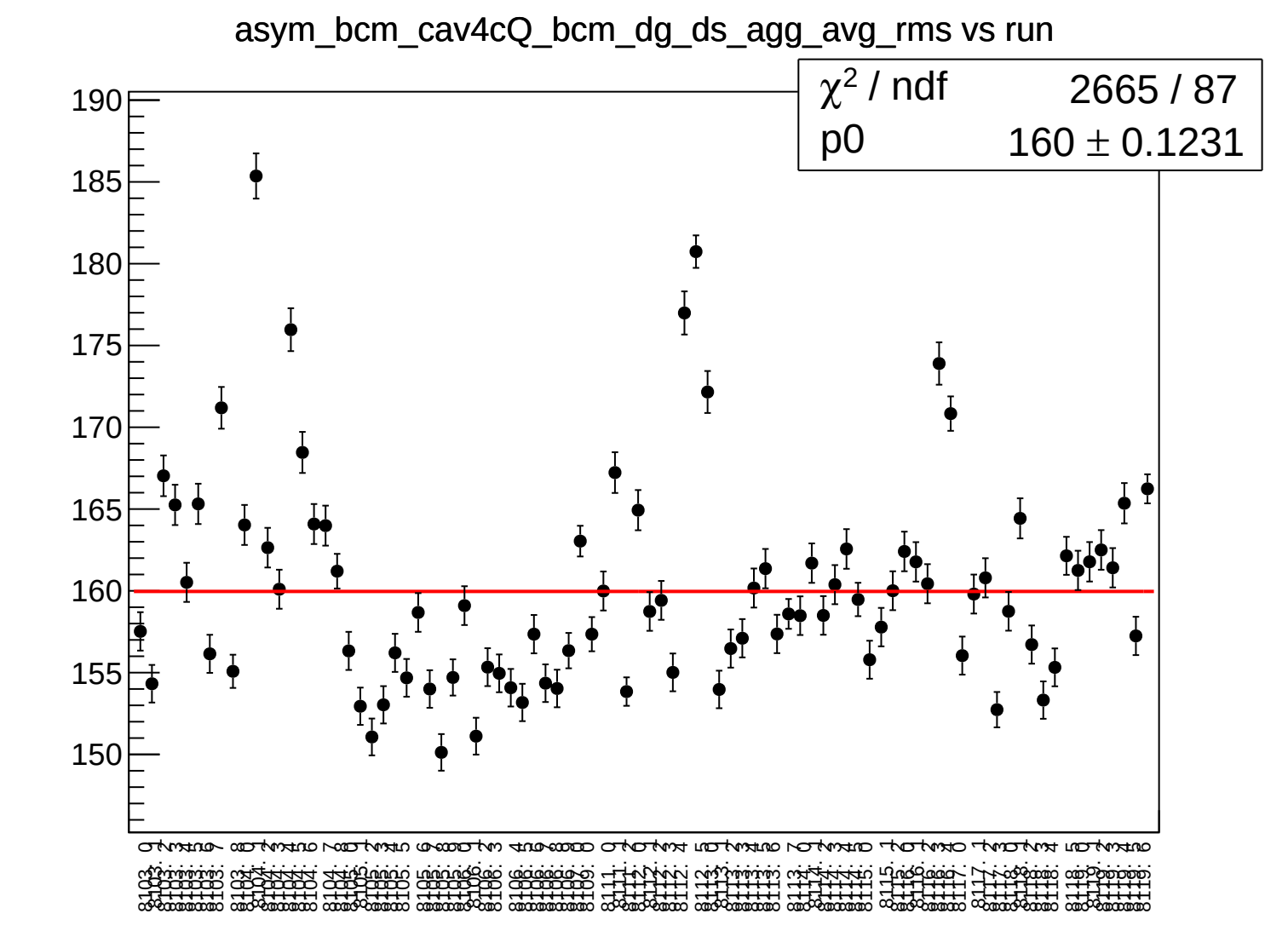

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2641 / 87
p0 160.3 ± 0.1233
190
185
180
175
170
165
160
155
150

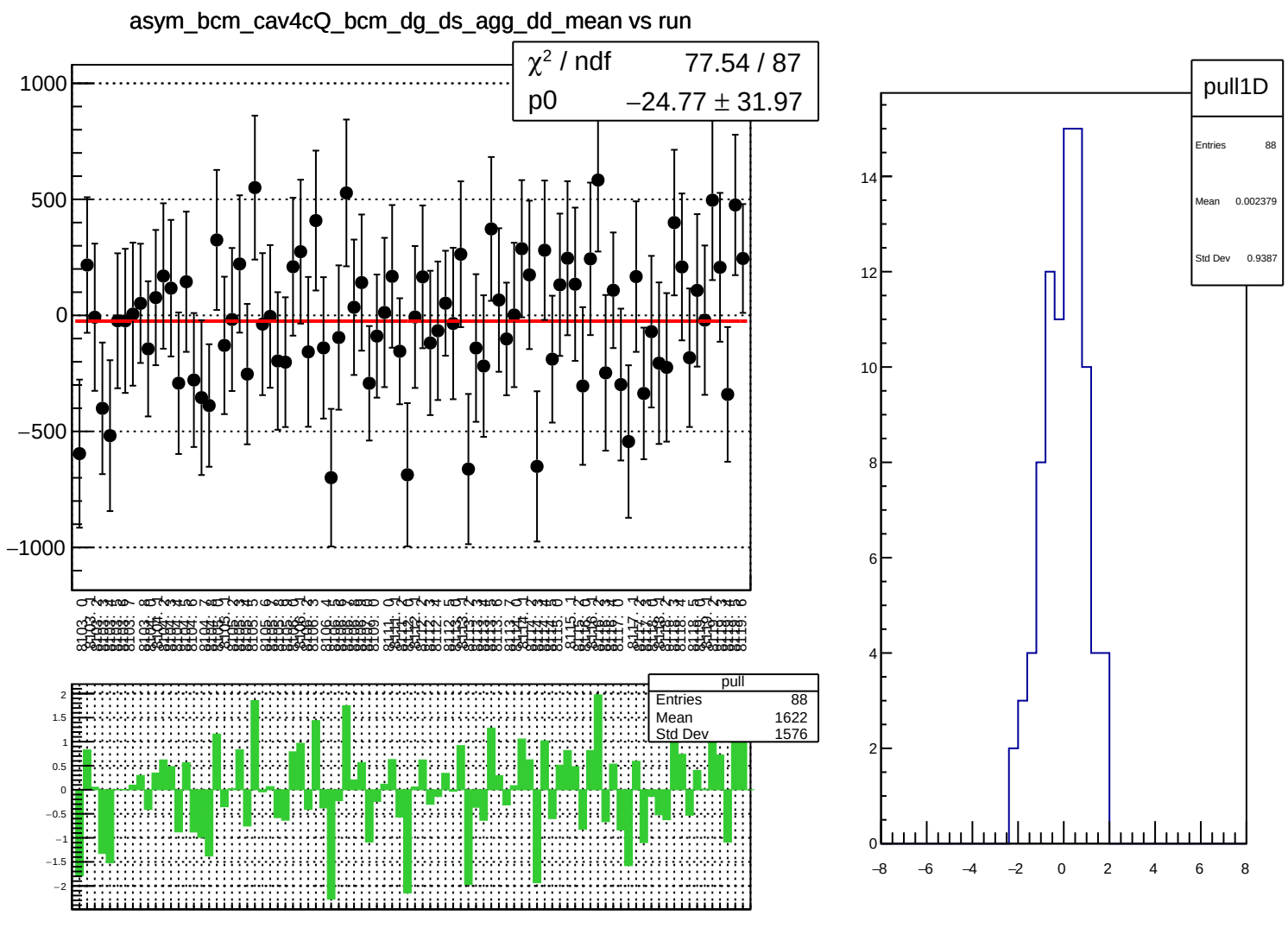

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 89.51 / 87
p0 −23.4 ± 35.48
1000
500
0
−500
−1000
pull
Entries 88
Mean 1536
Std Dev 1493
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.003732
Std Dev 1.009
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

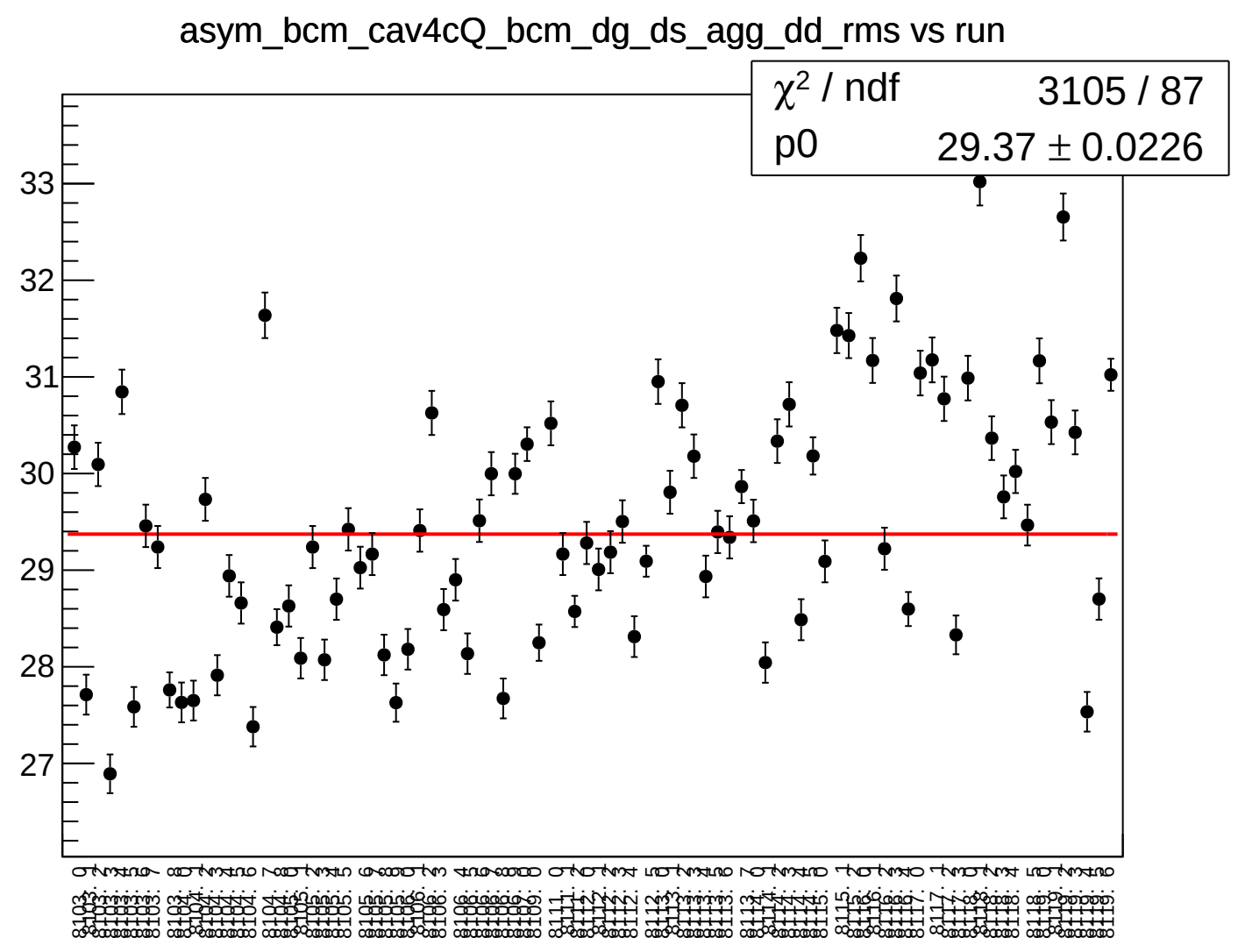

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2993 / 87
p0 32.6 ± 0.02509
37
36
35
34
33
32
31
30
29

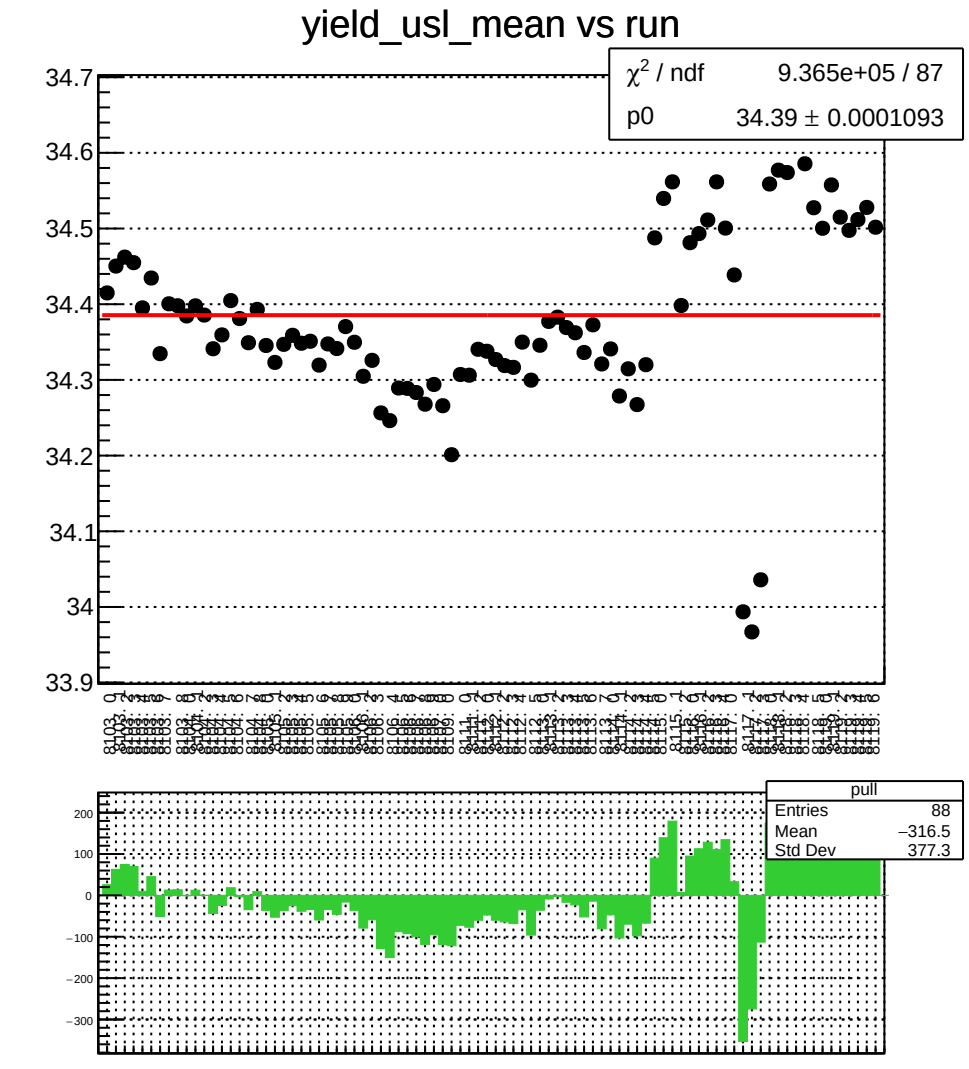

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.96 / 87
p0 −224.7 ± 174.1
pull
Entries 88
Mean 931
Std Dev 906.6

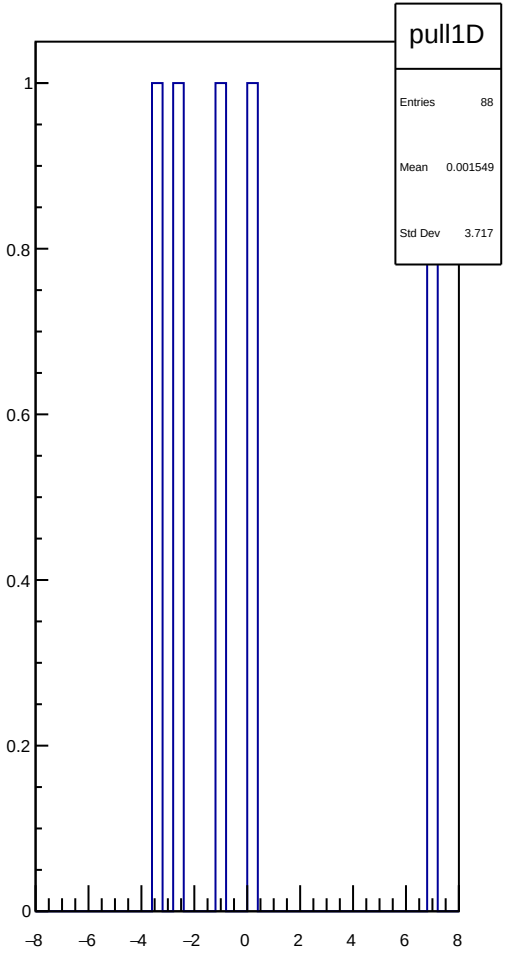

pull1D
Entries 88
Mean 0.000523
Std Dev 0.4642

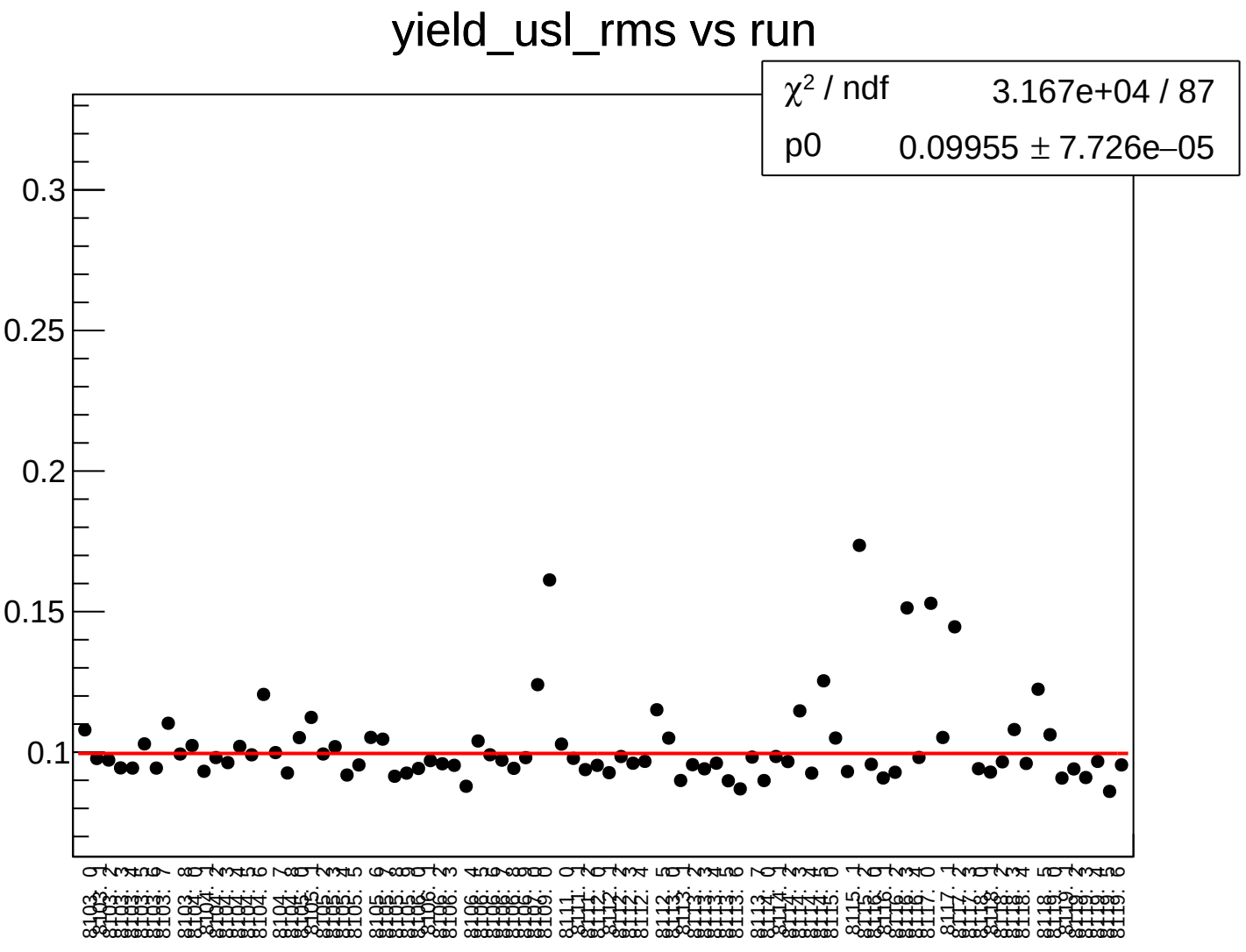

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2665 / 87
p0 160 ± 0.1231
190
185
180
175
170
165
160
155
150

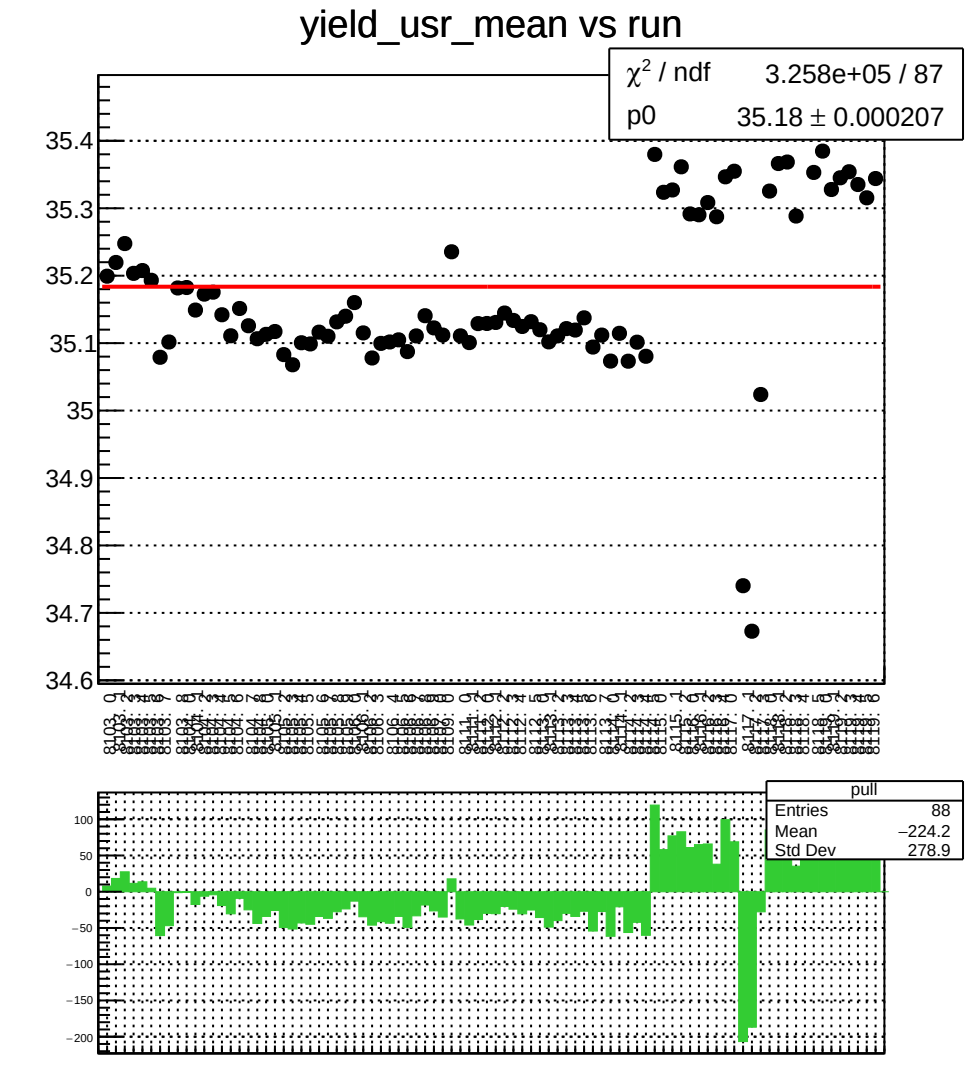

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 77.54 / 87
p0 −24.77 ± 31.97
1000
500
0
−500
−1000
pull
Entries 88
Mean 1622
Std Dev 1576
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 88
Mean 0.002379
Std Dev 0.9387
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

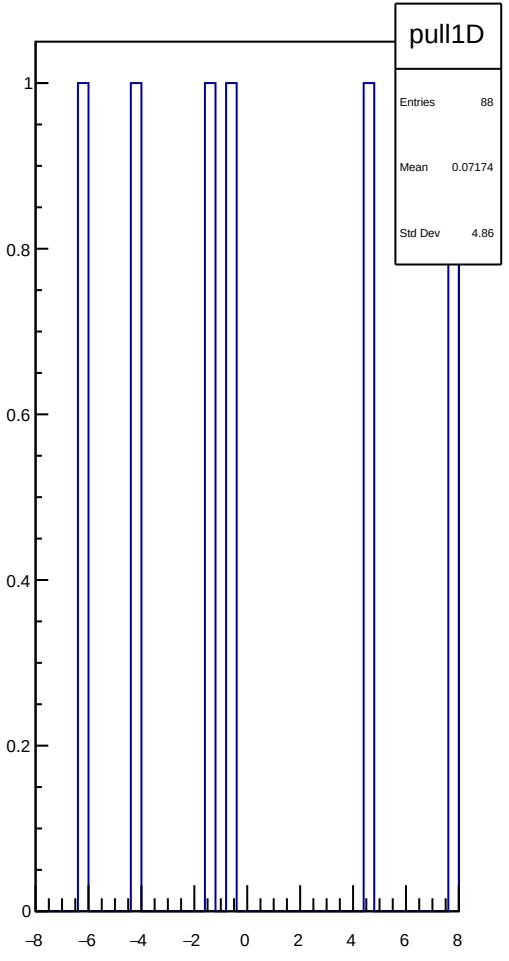

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3105 / 87
p0 29.37 ± 0.0226
33
32
31
30
29
28
27

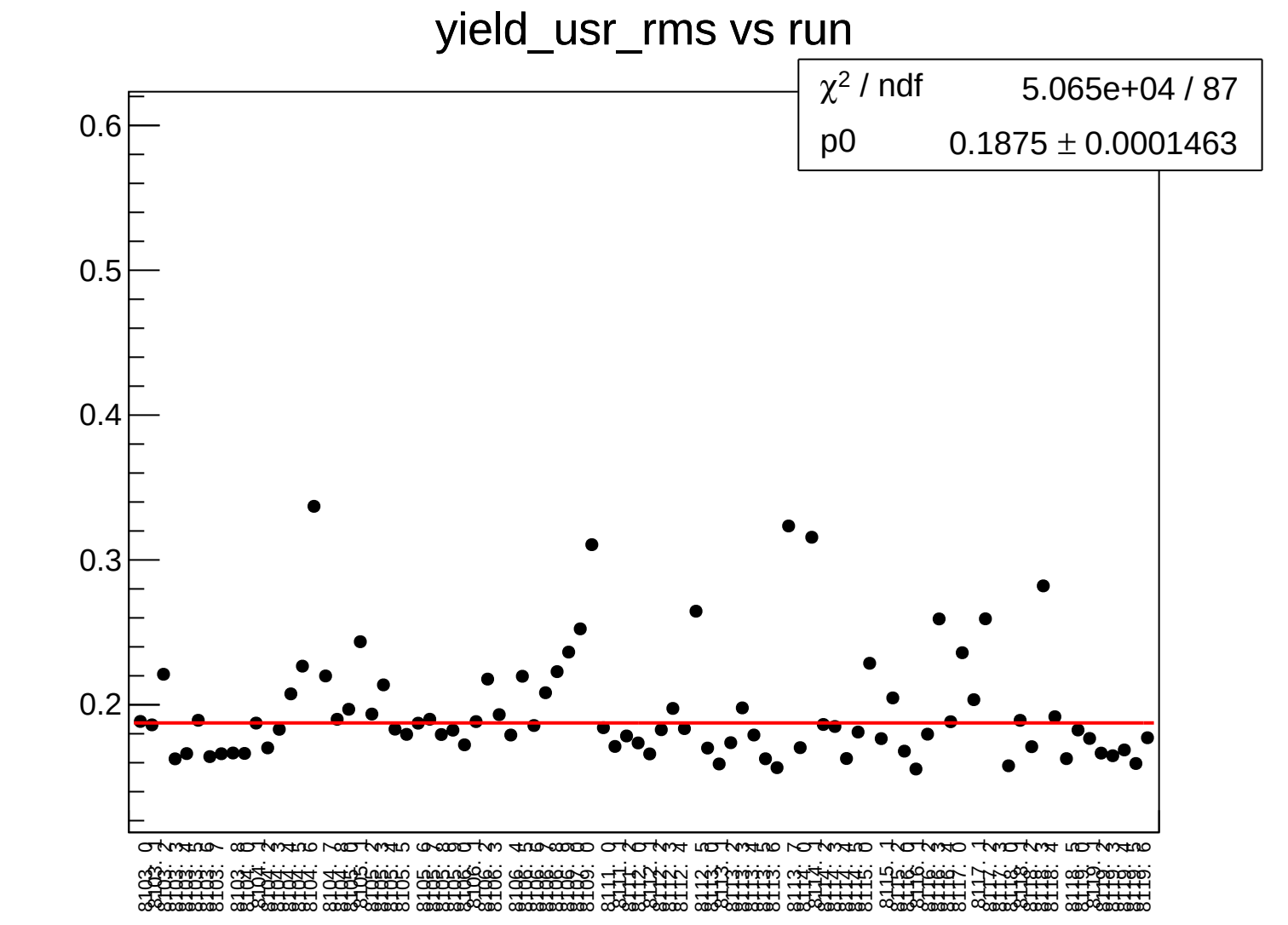

yield_usl_mean vs run
χ² / ndf 9.365e+05 / 87
p0 34.39 ± 0.0001093
34.7
34.6
34.5
34.4
34.3
34.2
34.1
34
33.9
pull
Entries 88
Mean −316.5
Std Dev 377.3
200
100
0
−100
−200
−300

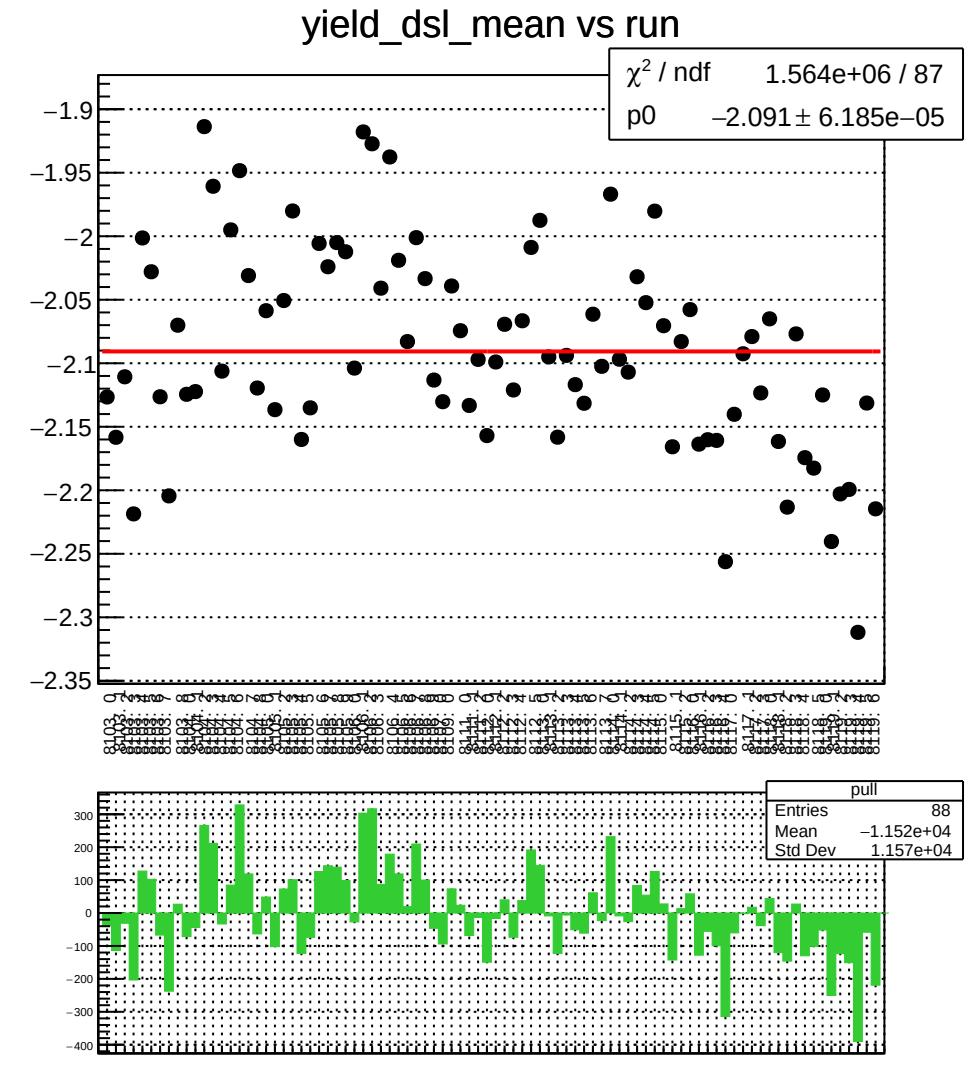

pull1D
Entries 88
Mean 0.001549
Std Dev 3.717
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

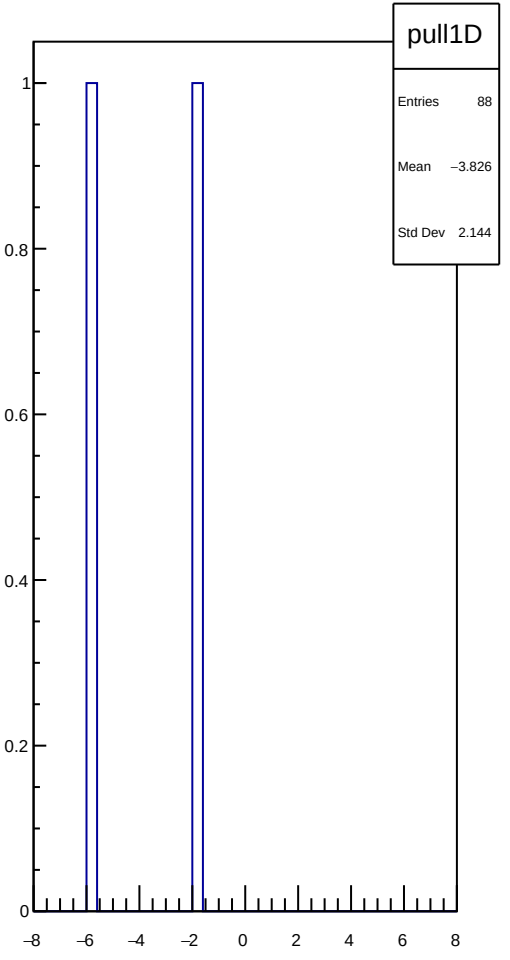

yield_usl_rms vs run
χ² / ndf 3.167e+04 / 87
p0 0.09955 ± 7.726e−05
0.3
0.25
0.2
0.15
0.1

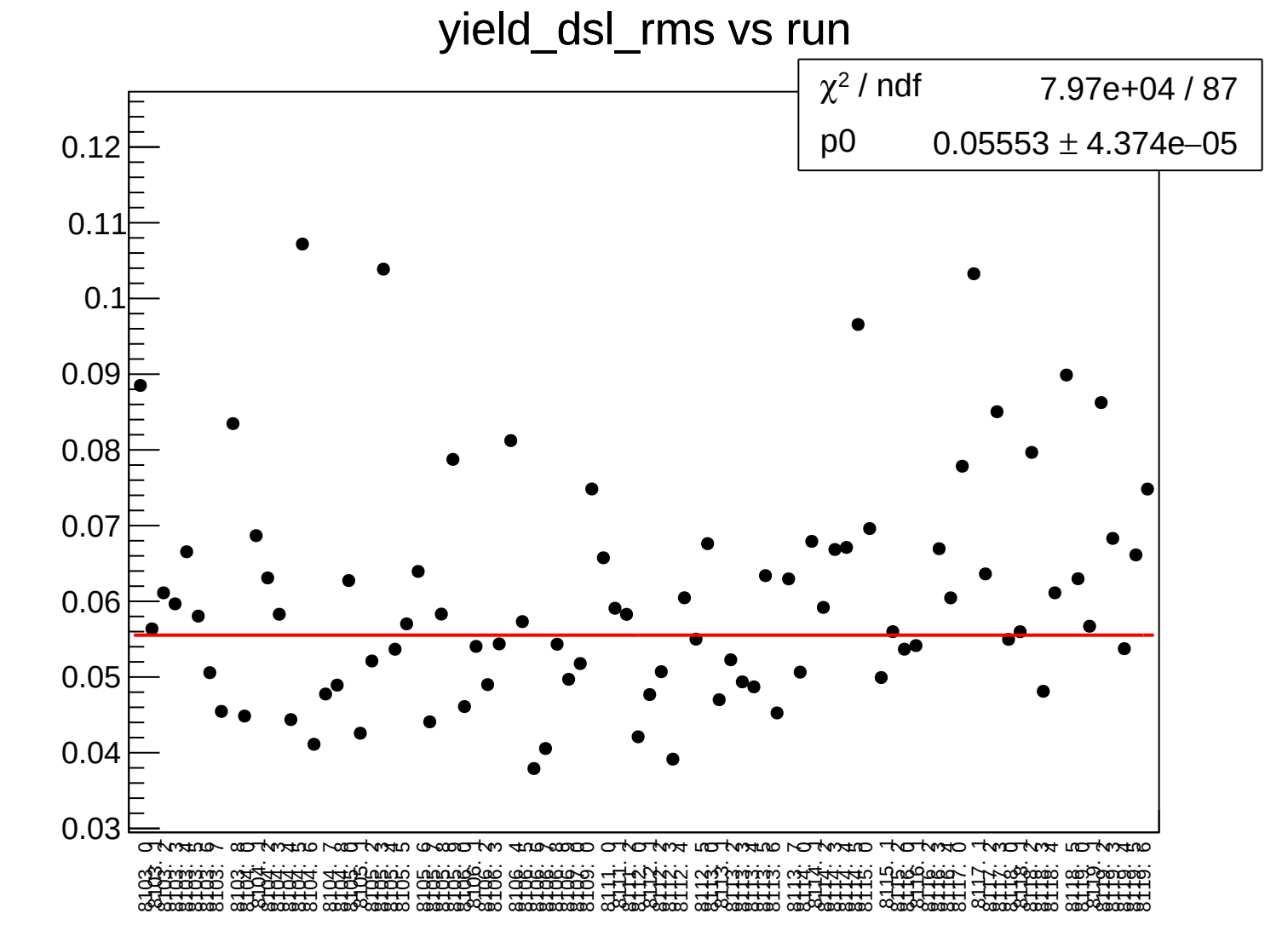

yield_usr_mean vs run
χ² / ndf 3.258e+05 / 87
p0 35.18 ± 0.000207
35.4
35.3
35.2
35.1
35
34.9
34.8
34.7
34.6
pull
Entries 88
Mean −224.2
Std Dev 278.9
100
50
0
−50
−100
−150
−200

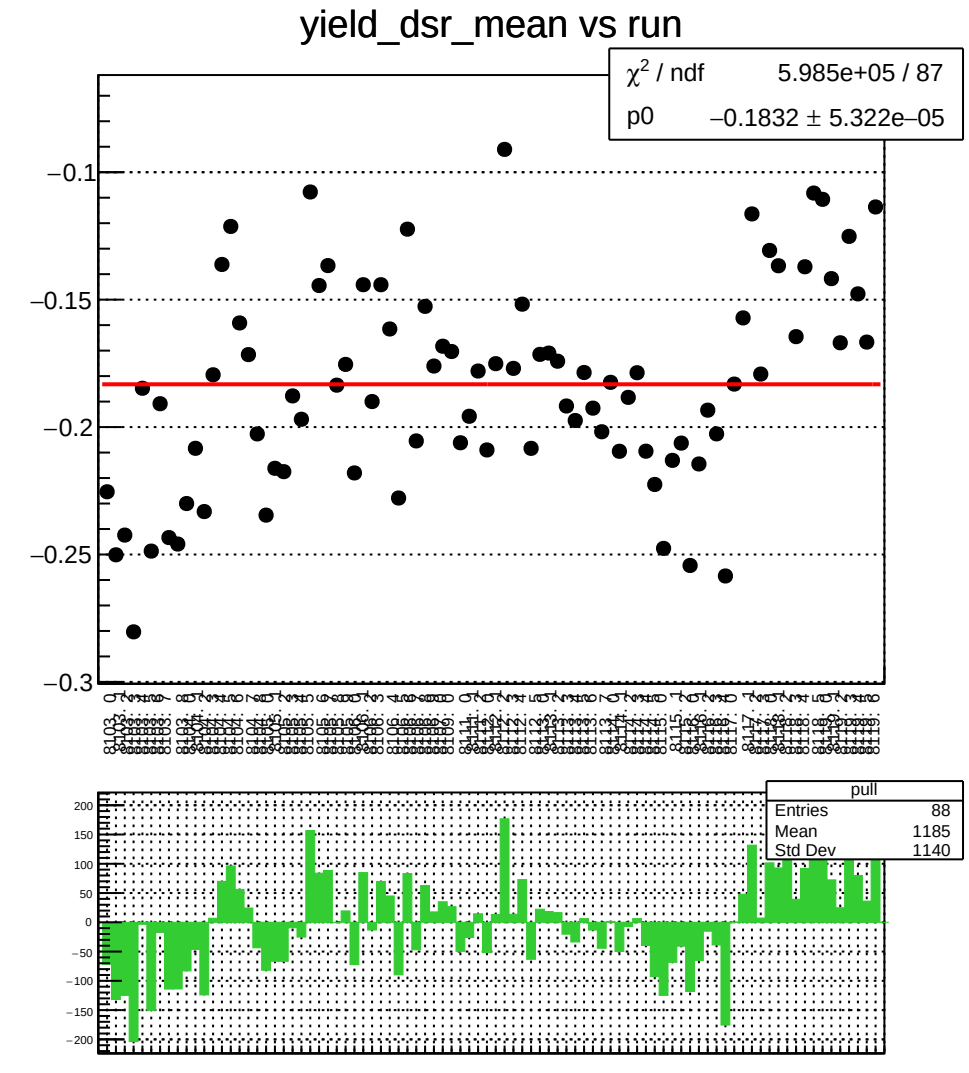

pull1D
Entries 88
Mean 0.07174
Std Dev 4.86
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

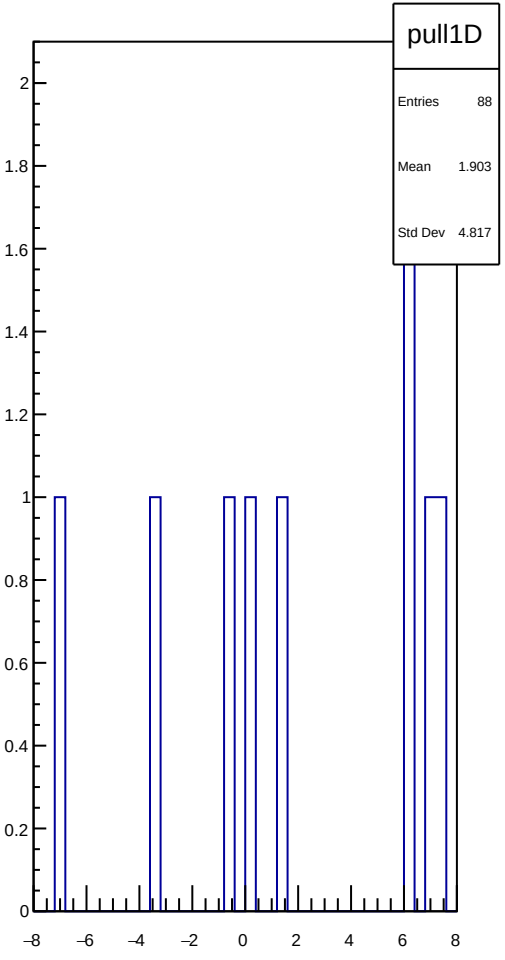

yield_usr_rms vs run
χ² / ndf 5.065e+04 / 87
p0 0.1875 ± 0.0001463
0.6
0.5
0.4
0.3
0.2

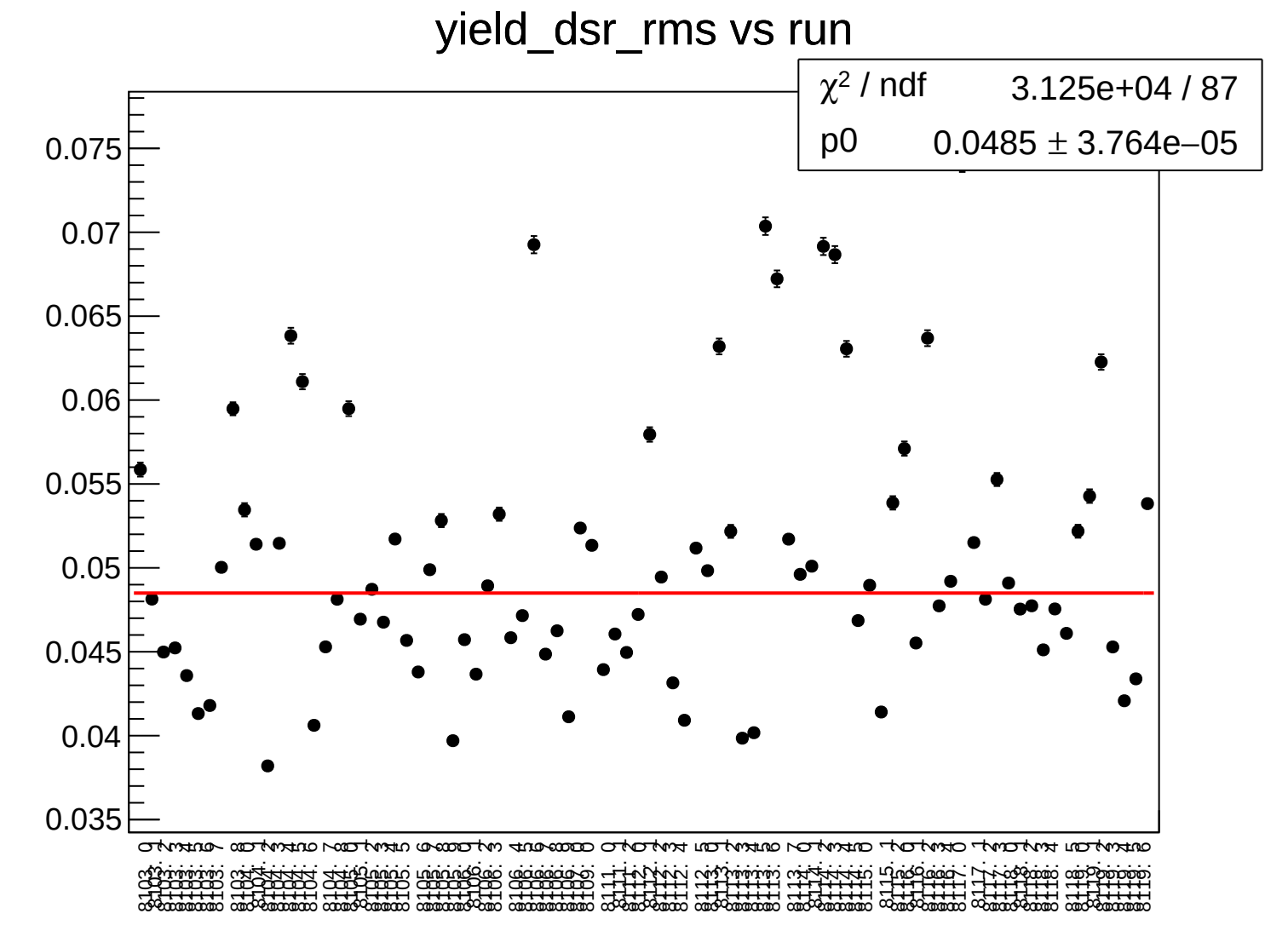

yield_dsl_mean vs run
χ² / ndf 1.564e+06 / 87
p0 −2.091 ± 6.185e−05
−1.9
−1.95
−2
−2.05
−2.1
−2.15
−2.2
−2.25
−2.3
−2.35
pull
Entries 88
Mean −1.152e+04
Std Dev 1.157e+04
300
200
100
0
−100
−200
−300
−400

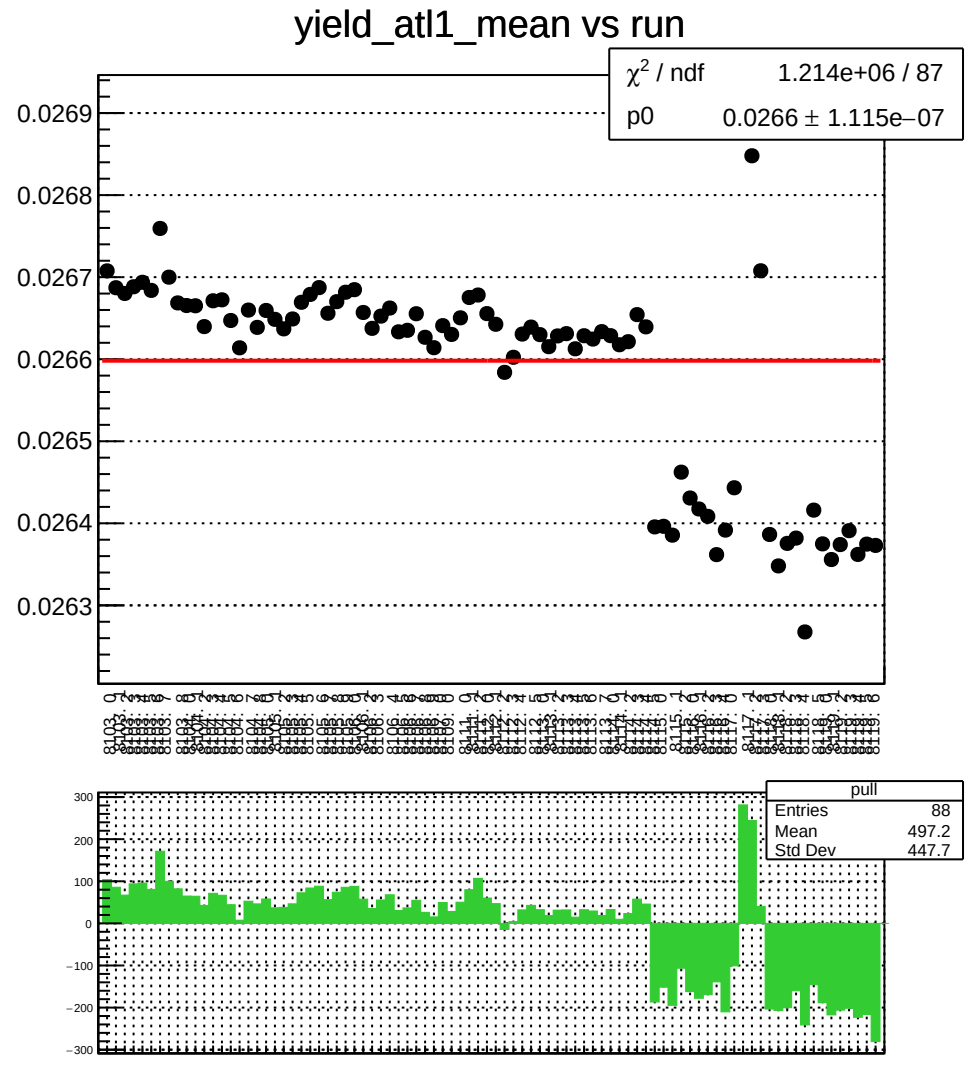

pull1D
Entries 88
Mean −3.826
Std Dev 2.144
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

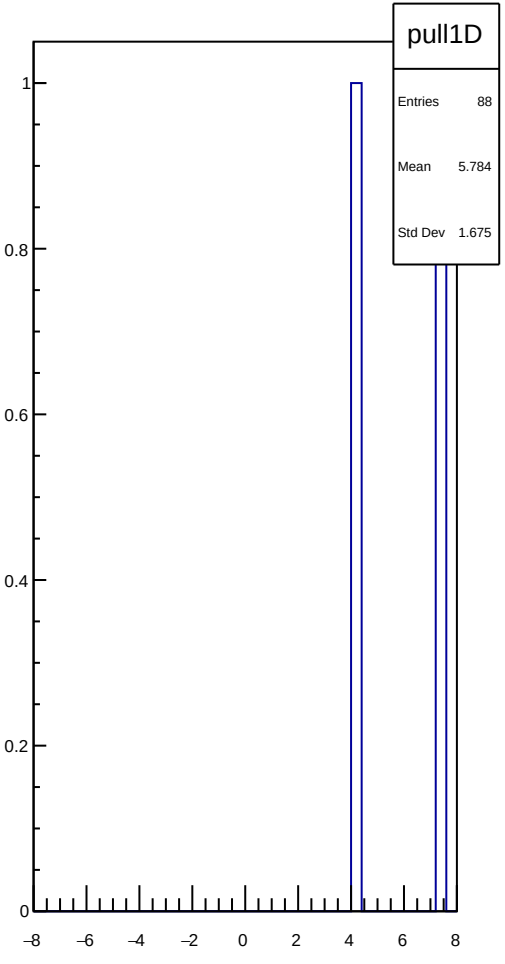

yield_dsl_rms vs run
χ² / ndf 7.97e+04 / 87
p0 0.05553 ± 4.374e−05
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

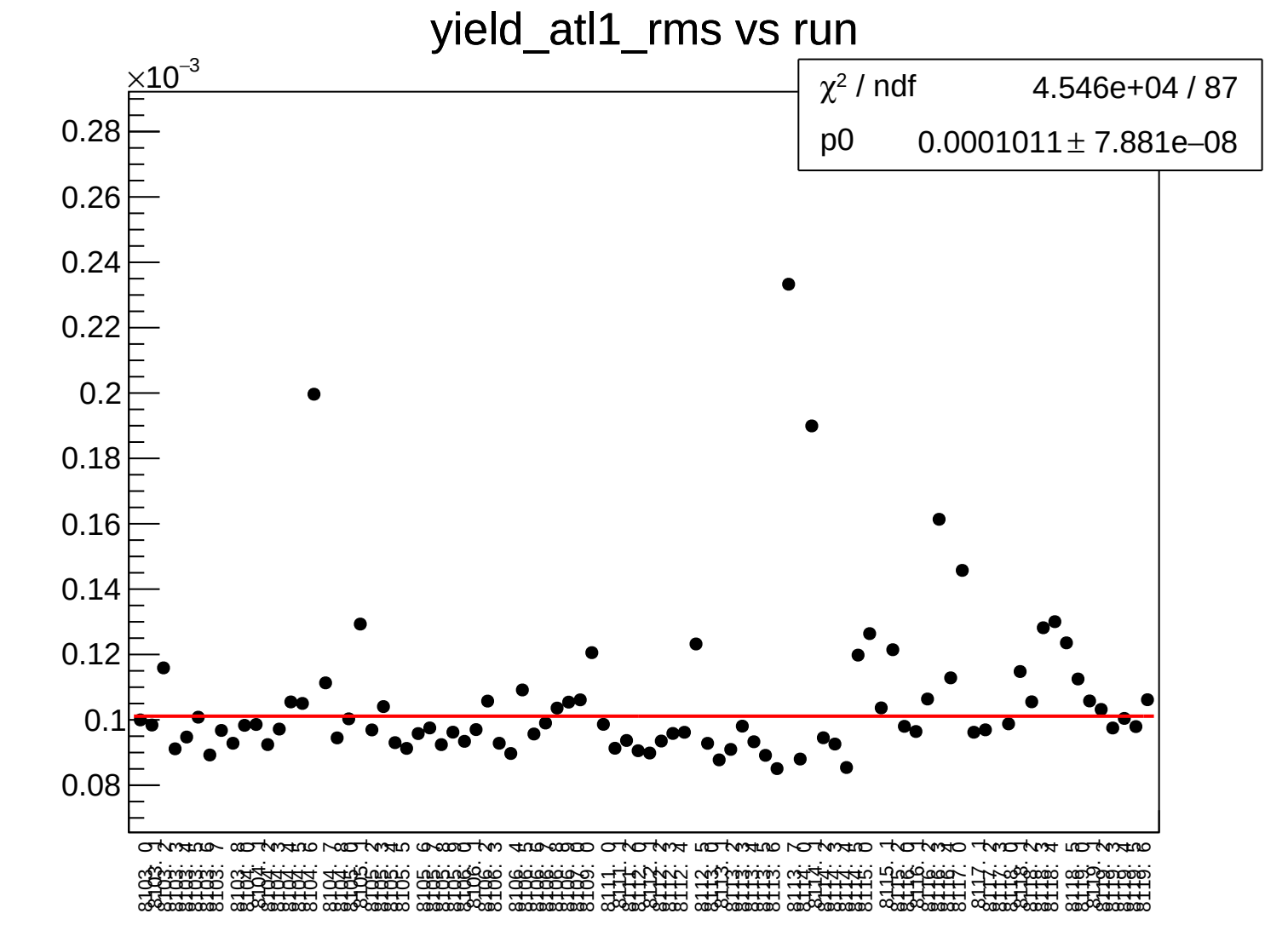

yield_dsr_mean vs run
χ² / ndf 5.985e+05 / 87
p0 −0.1832 ± 5.322e−05
−0.1
−0.15
−0.2
−0.25
−0.3
pull
Entries 88
Mean 1185
Std Dev 1140
200
150
100
50
0
−50
−100
−150
−200

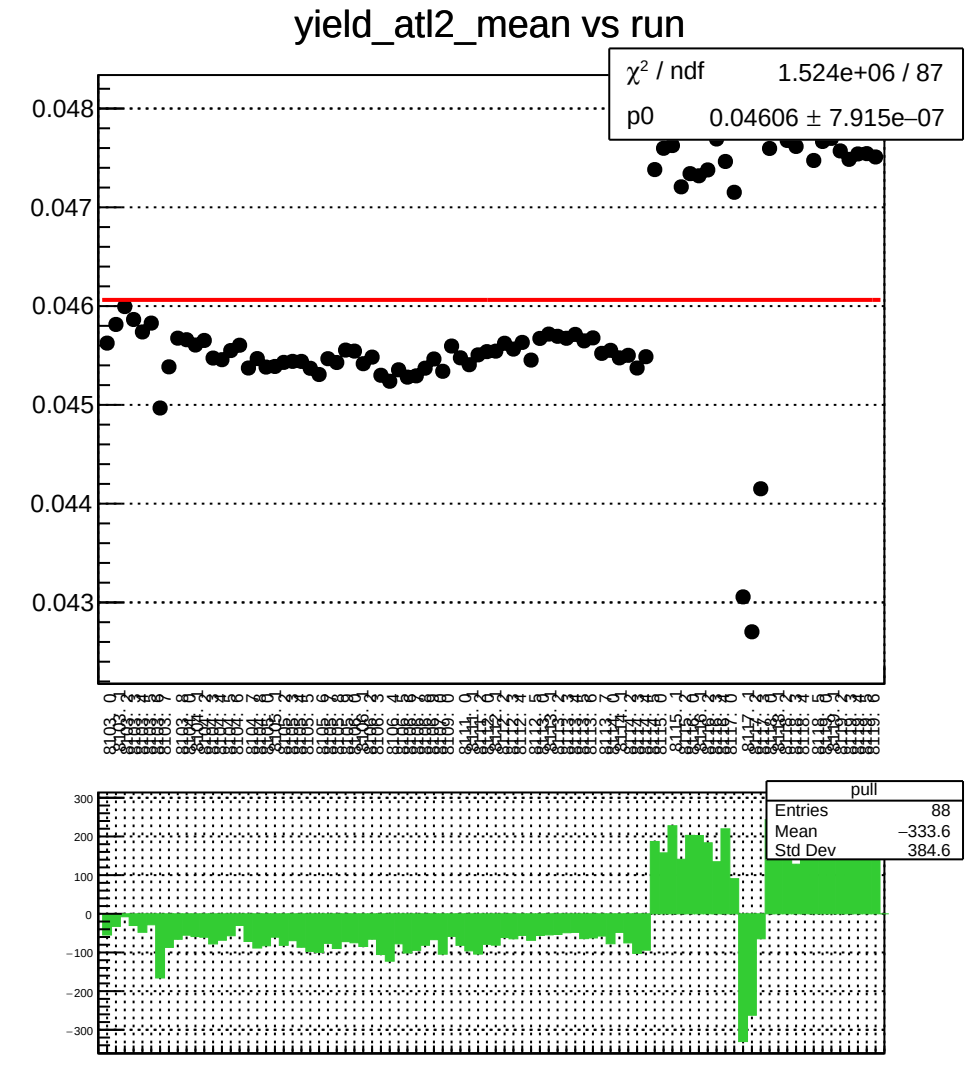

pull1D
Entries 88
Mean 1.903
Std Dev 4.817
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

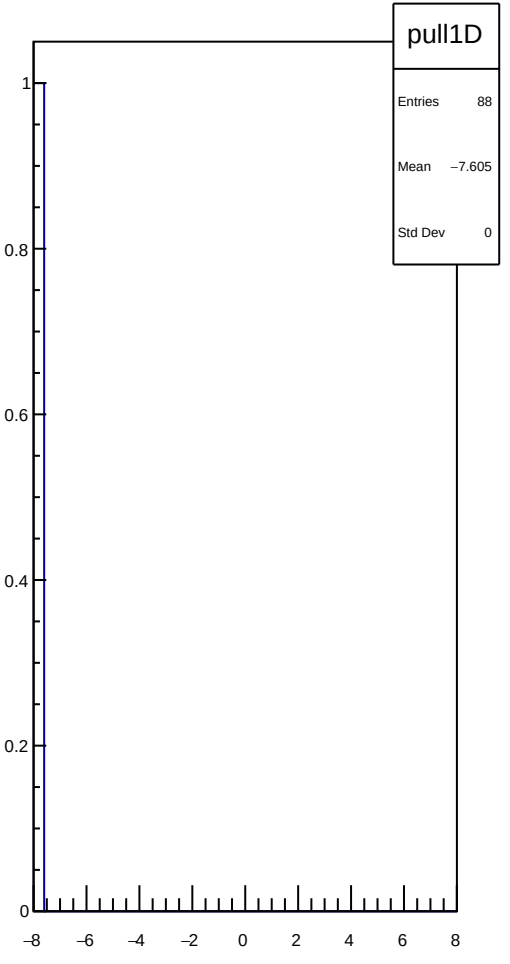

yield_dsr_rms vs run
χ² / ndf 3.125e+04 / 87
p0 0.0485 ± 3.764e−05
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
0.035

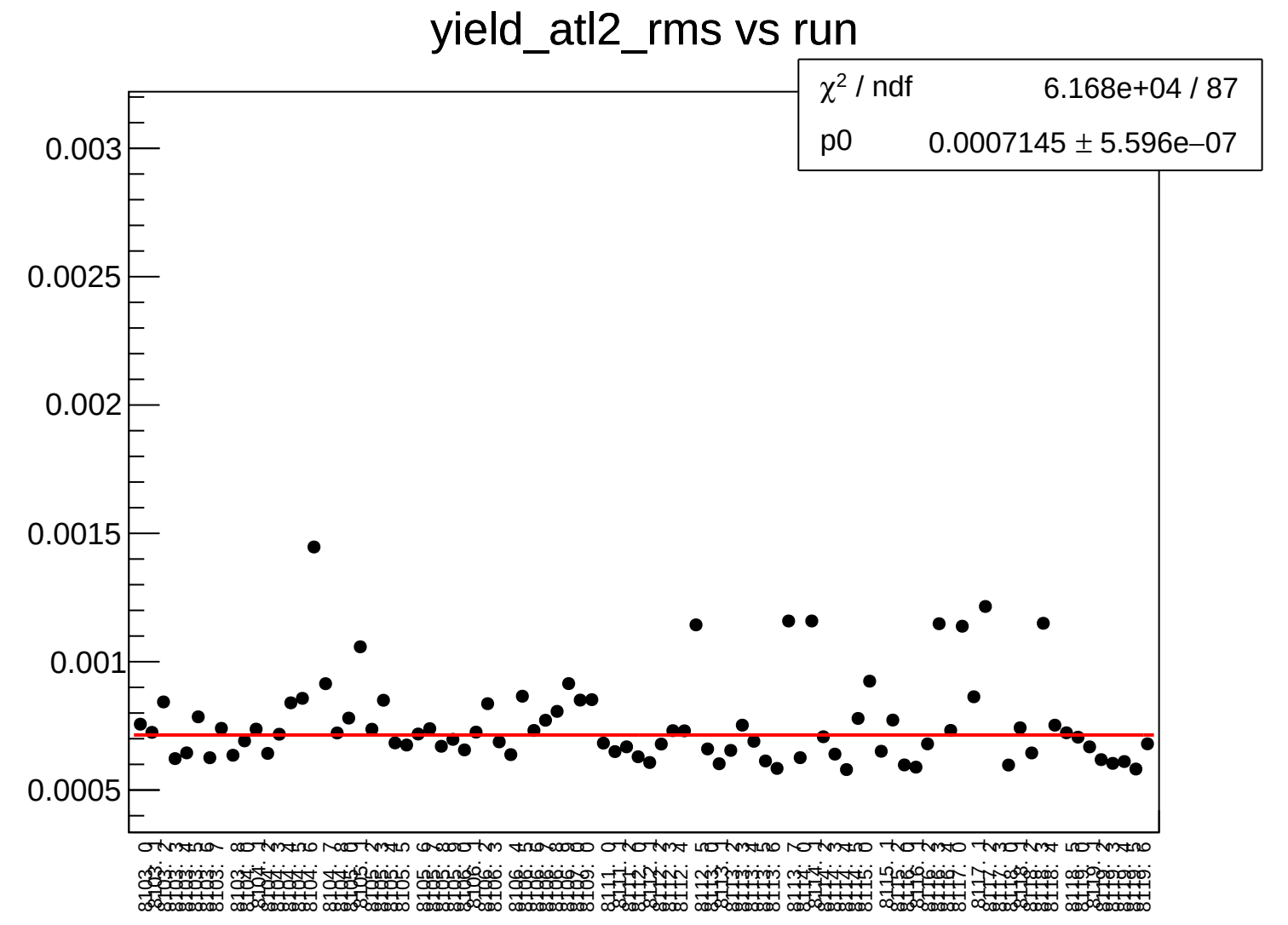

yield_atl1_mean vs run
χ² / ndf 1.214e+06 / 87
p0 0.0266 ± 1.115e−07
0.0269
0.0268
0.0267
0.0266
0.0265
0.0264
0.0263
pull
Entries 88
Mean 497.2
Std Dev 447.7
300
200
100
0
−100
−200
−300

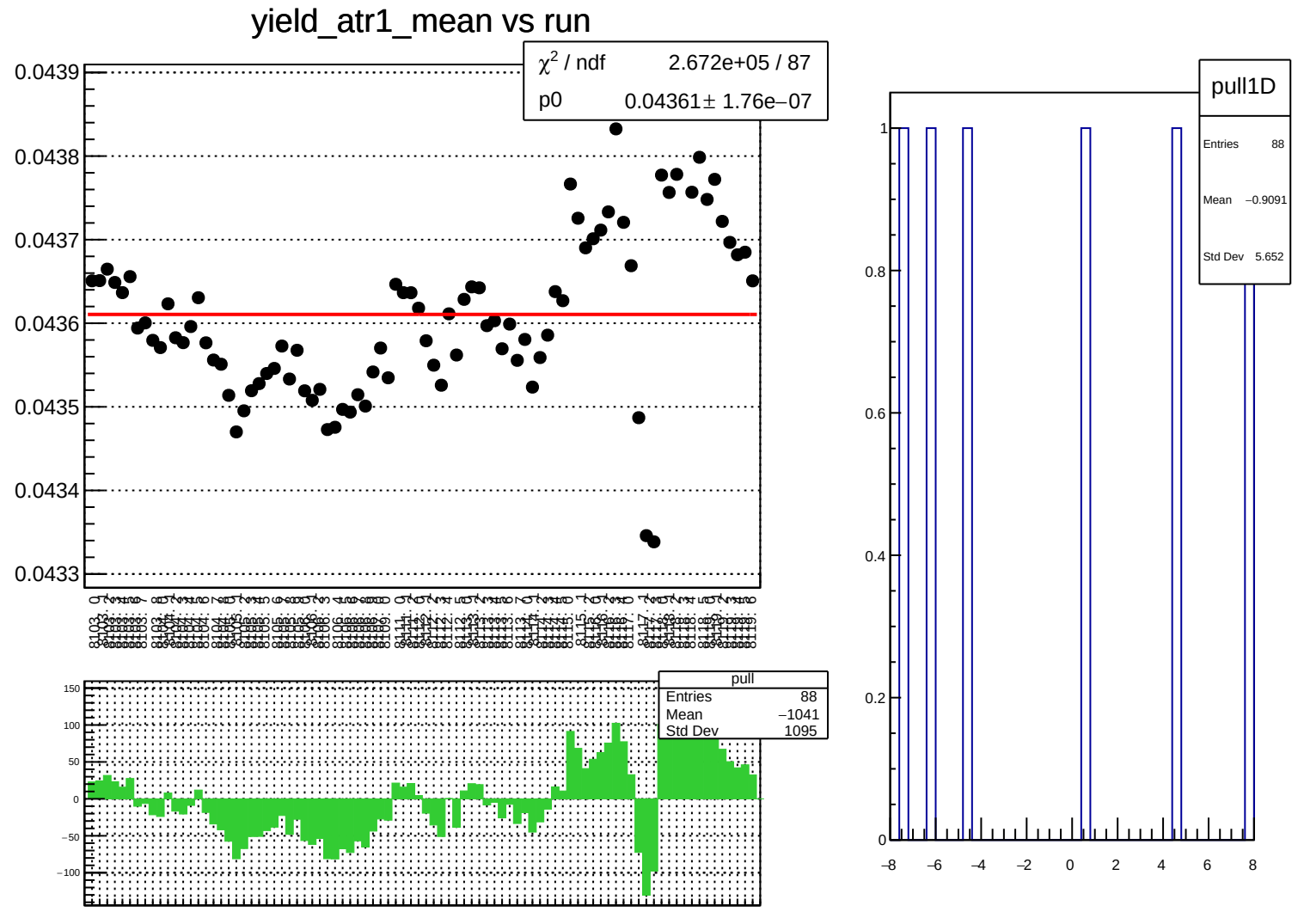

pull1D
Entries 88
Mean 5.784
Std Dev 1.675
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

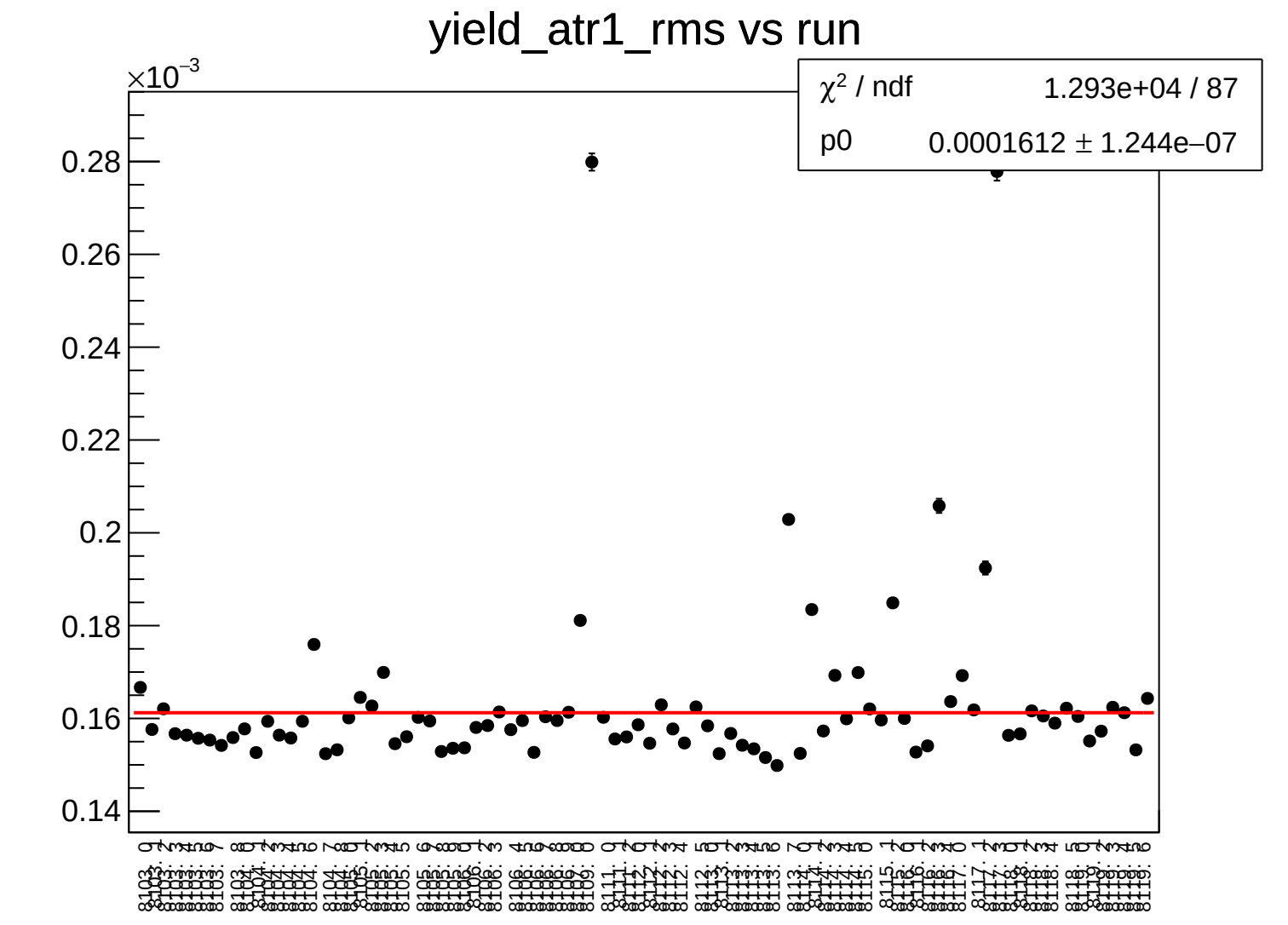

yield_atl1_rms vs run
×10⁻³
χ² / ndf 4.546e+04 / 87
p0 0.0001011 ± 7.881e−08
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08

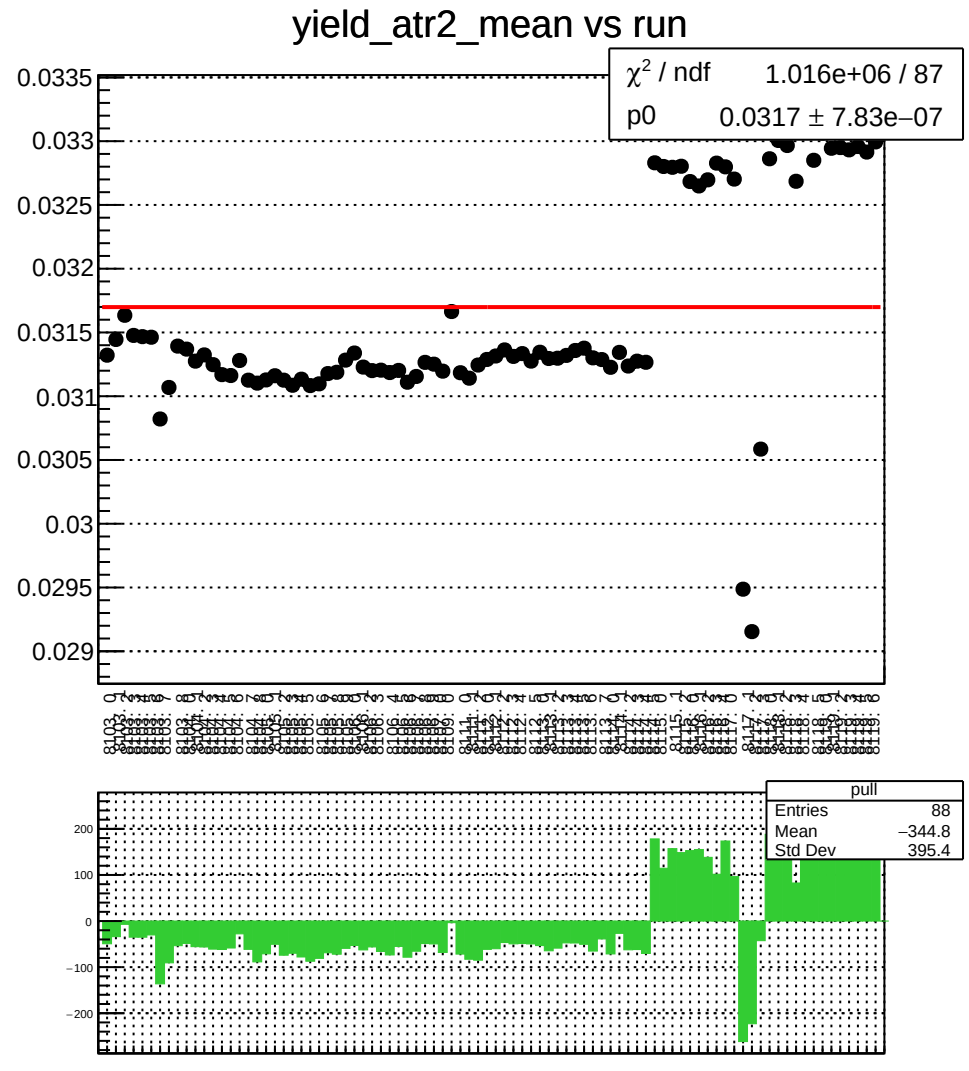

yield_atl2_mean vs run
χ² / ndf 1.524e+06 / 87
p0 0.04606 ± 7.915e−07
0.048
0.047
0.046
0.045
0.044
0.043
pull
Entries 88
Mean −333.6
Std Dev 384.6
300
200
100
0
−100
−200
−300

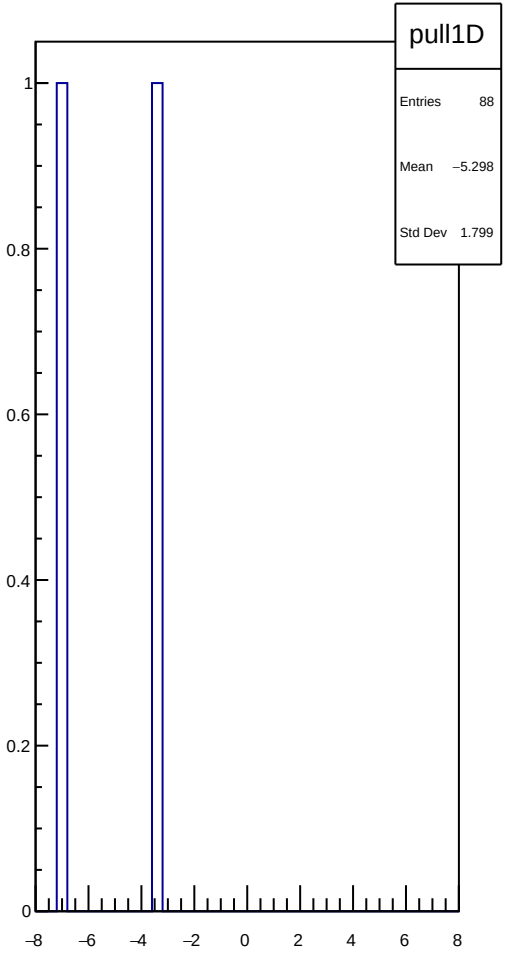

pull1D
Entries 88
Mean −7.605
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

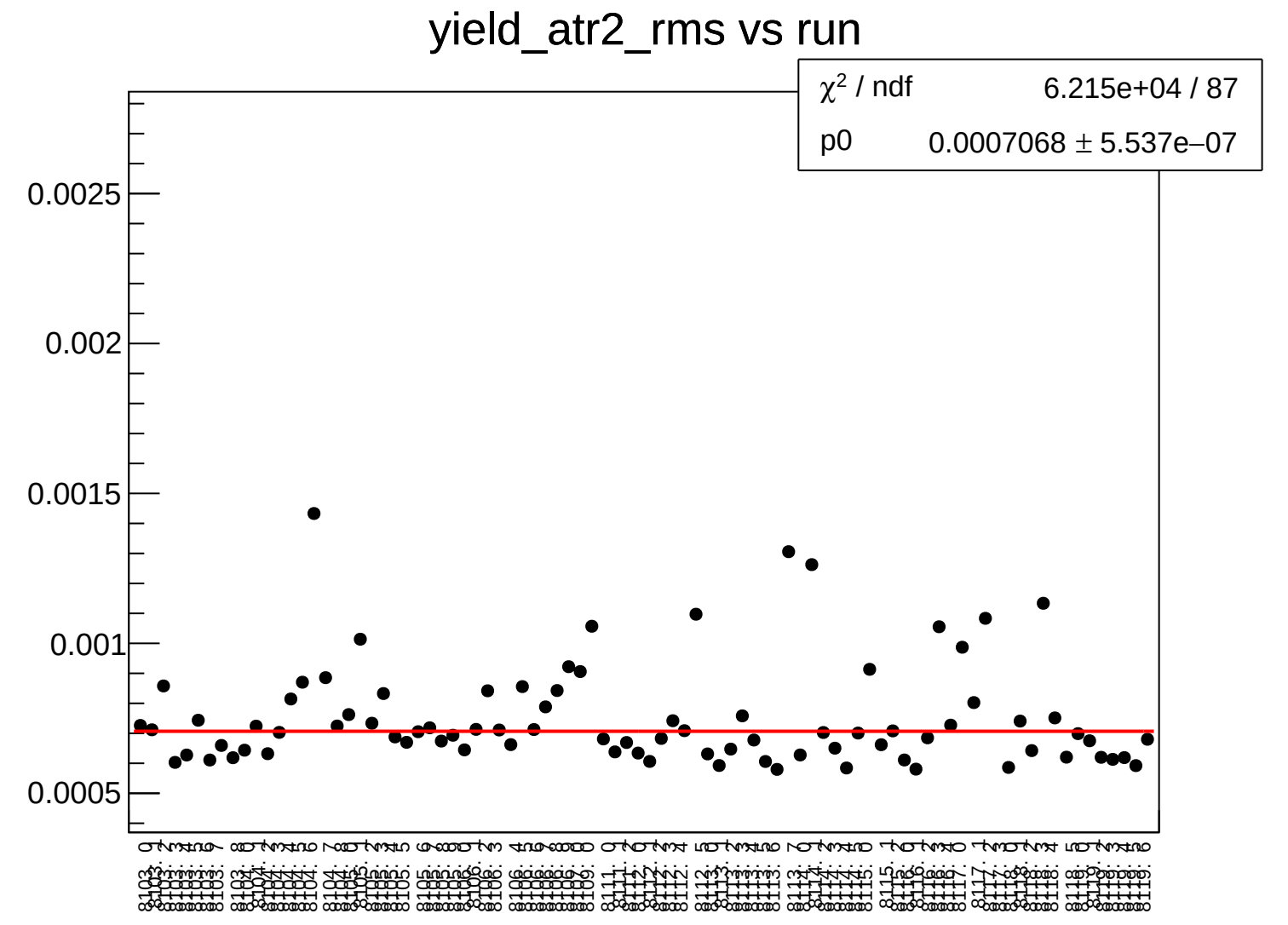

yield_atl2_rms vs run
χ² / ndf 6.168e+04 / 87
p0 0.0007145 ± 5.596e−07
0.003
0.0025
0.002
0.0015
0.001
0.0005

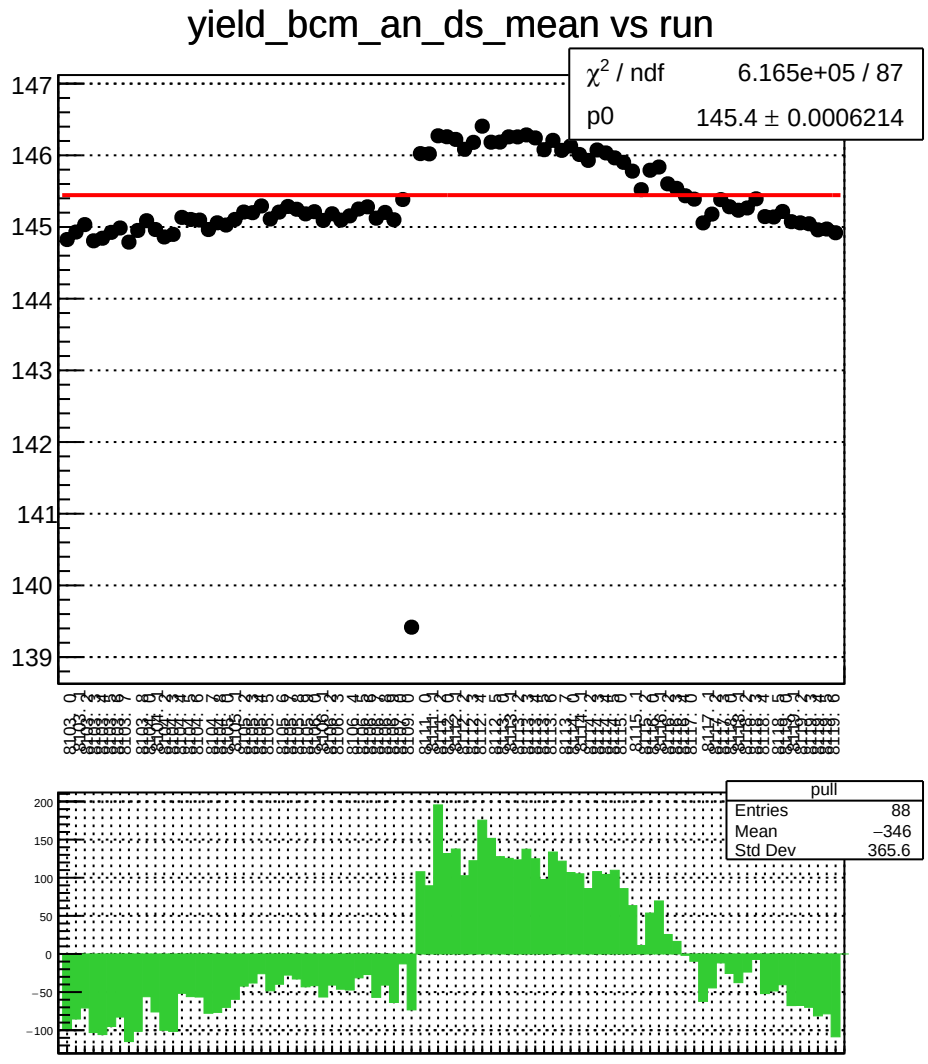

yield_atr1_mean vs run
χ² / ndf 2.672e+05 / 87
p0 0.04361± 1.76e−07
0.0439
0.0438
0.0437
0.0436
0.0435
0.0434
0.0433
pull
Entries 88
Mean −1041
Std Dev 1095
150
100
50
0
−50
−100
pull1D
Entries 88
Mean −0.9091
Std Dev 5.652
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

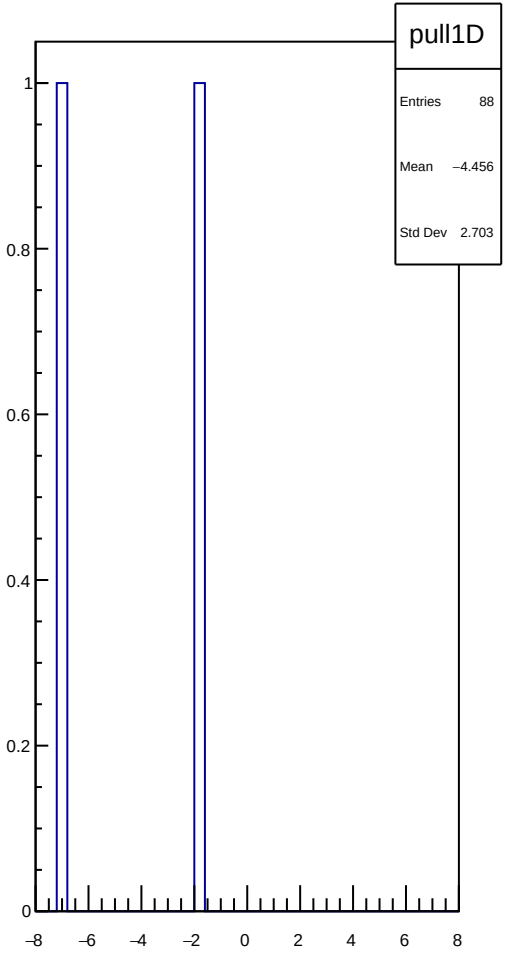

yield_atr1_rms vs run
×10⁻³
χ² / ndf 1.293e+04 / 87
p0 0.0001612 ± 1.244e−07
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14

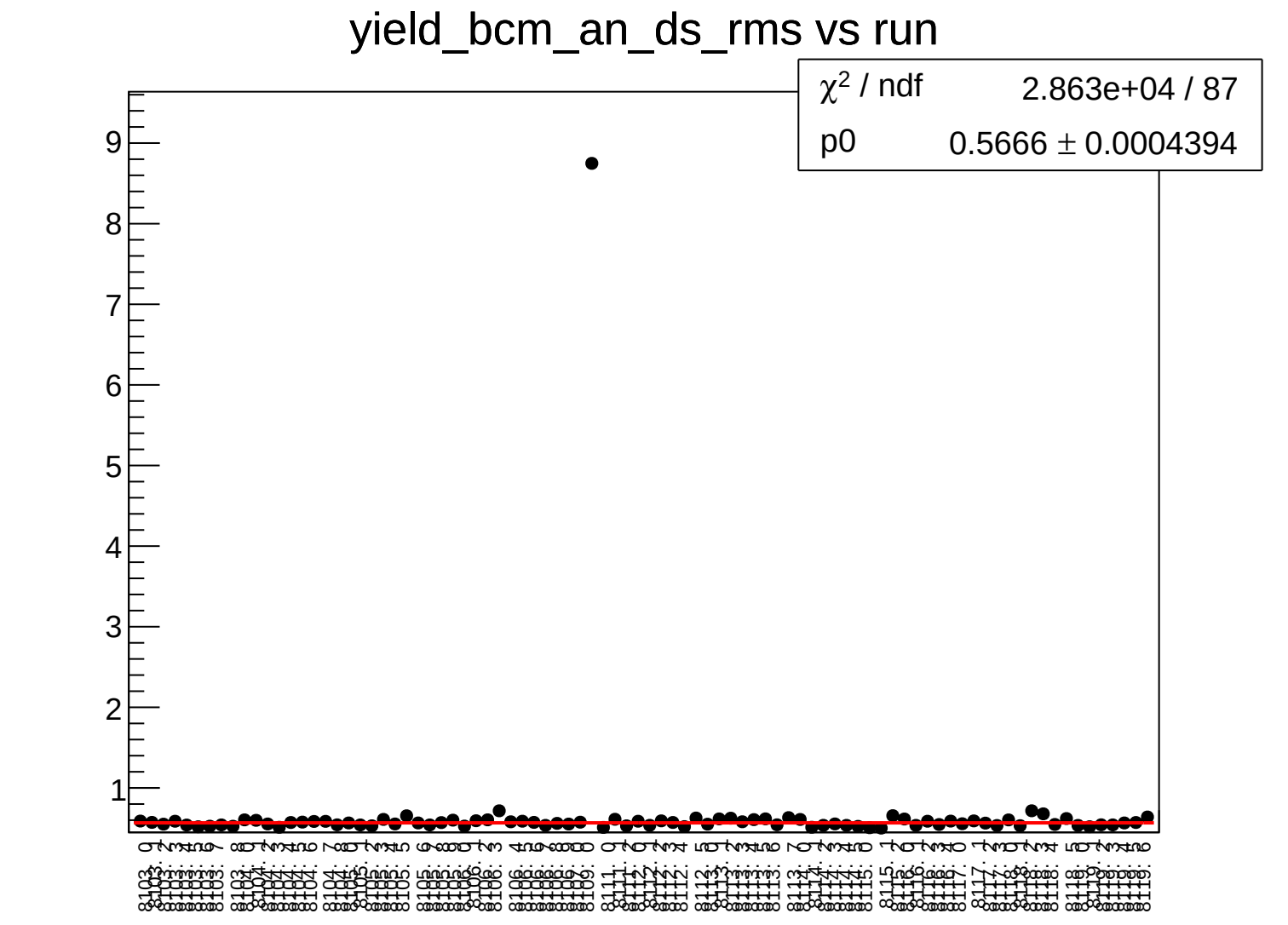

yield_atr2_mean vs run
χ² / ndf 1.016e+06 / 87
p0 0.0317 ± 7.83e−07
0.0335
0.033
0.0325
0.032
0.0315
0.031
0.0305
0.03
0.0295
0.029
pull
Entries 88
Mean −344.8
Std Dev 395.4
200
100
0
−100
−200

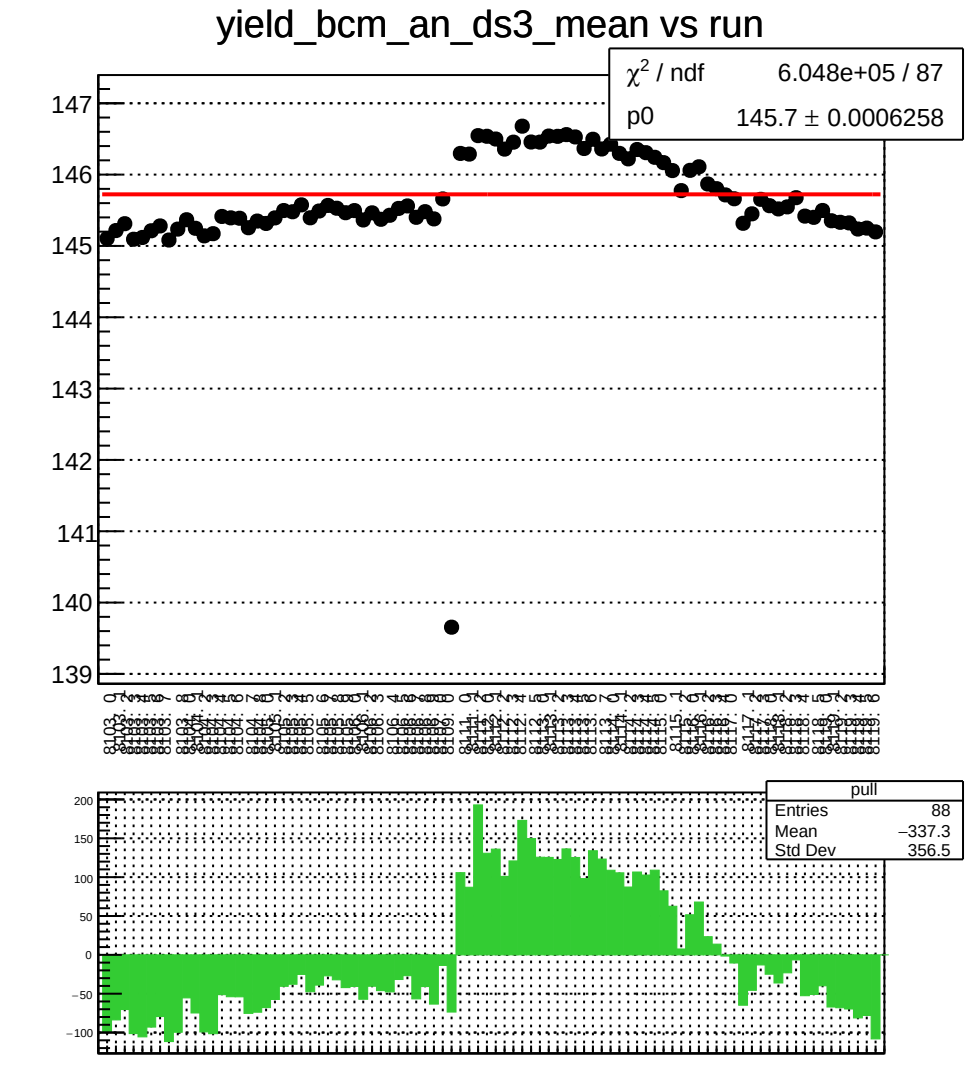

pull1D
Entries 88
Mean −5.298
Std Dev 1.799
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

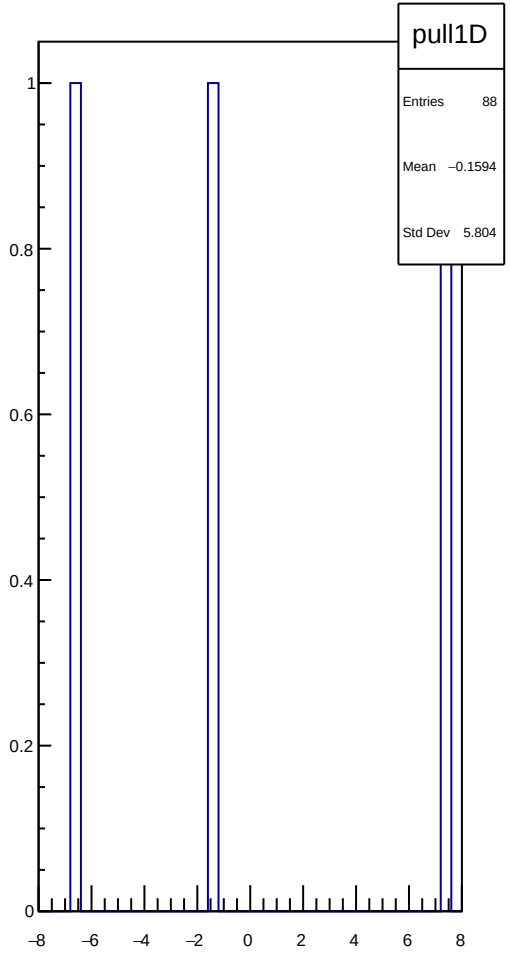

yield_atr2_rms vs run
χ² / ndf 6.215e+04 / 87
p0 0.0007068 ± 5.537e−07
0.0025
0.002
0.0015
0.001
0.0005

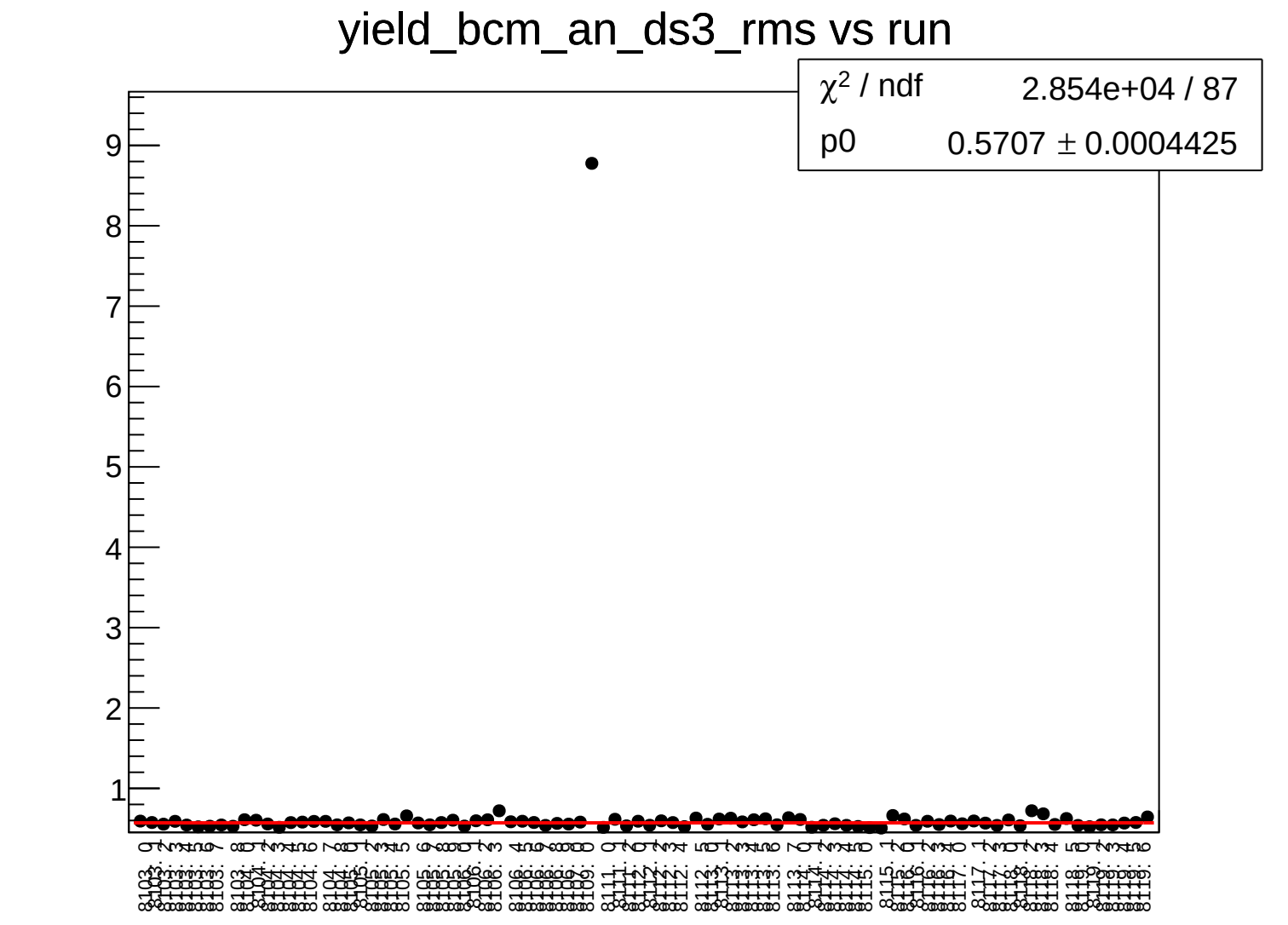

yield_bcm_an_ds_mean vs run
χ² / ndf 6.165e+05 / 87
p0 145.4 ± 0.0006214
147
146
145
144
143
142
141
140
139
pull
Entries 88
Mean −346
Std Dev 365.6
200
150
100
50
0
−50
−100

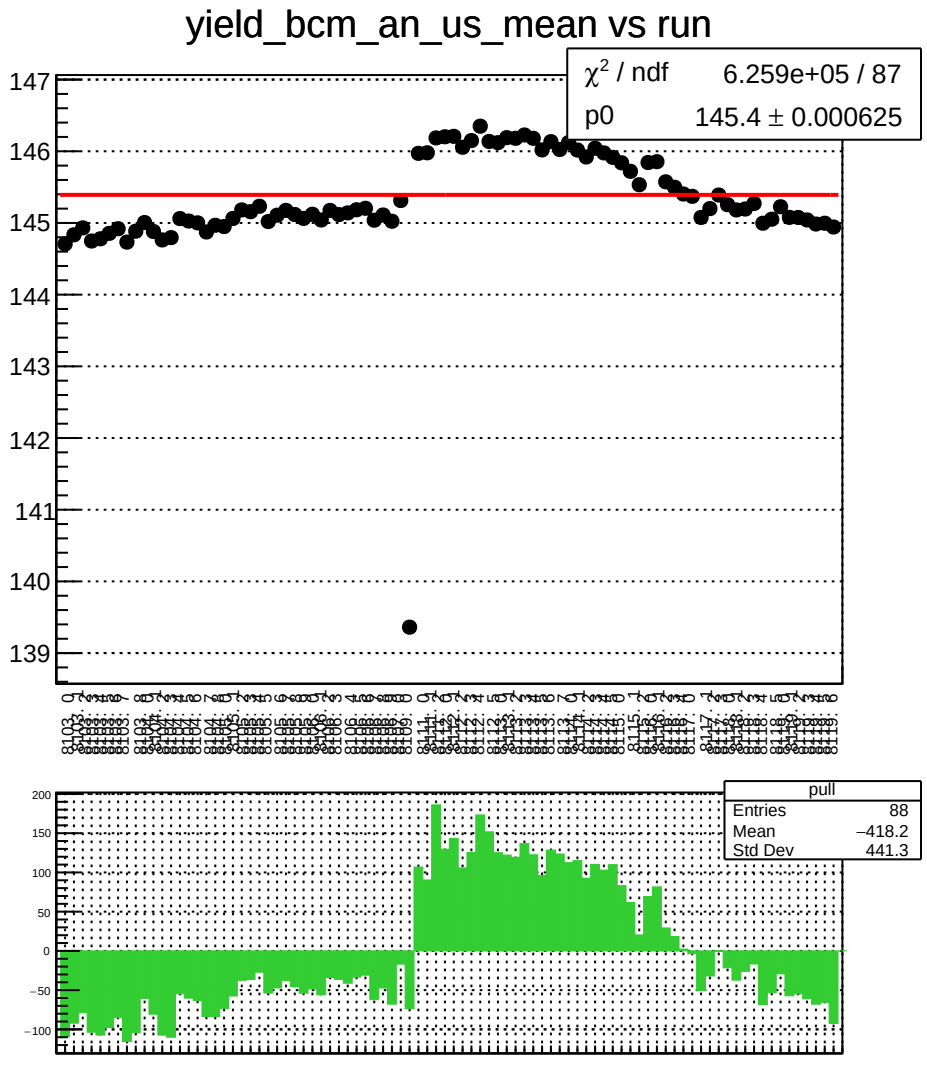

pull1D
Entries 88
Mean −4.456
Std Dev 2.703
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

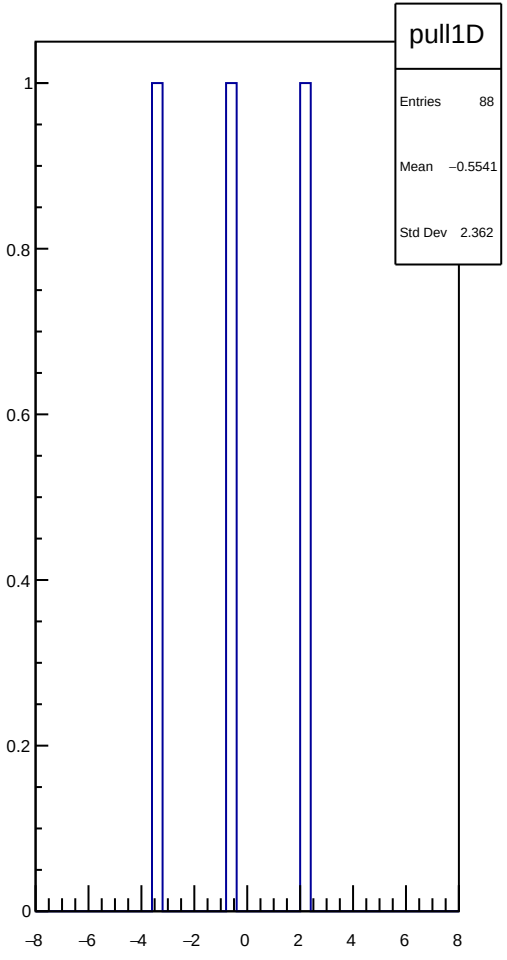

yield_bcm_an_ds_rms vs run
χ² / ndf 2.863e+04 / 87
p0 0.5666 ± 0.0004394
9
8
7
6
5
4
3
2
1

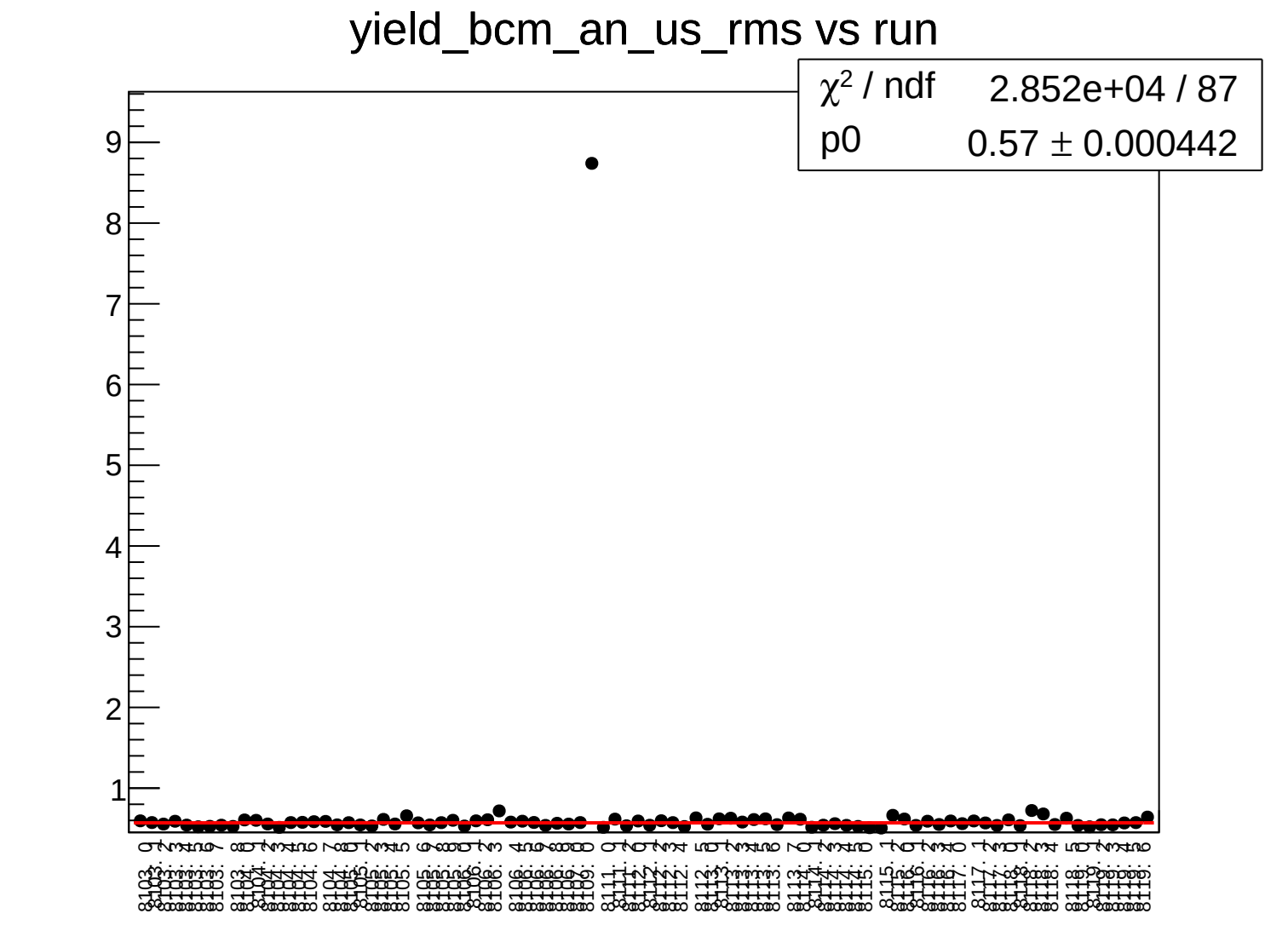

yield_bcm_an_ds3_mean vs run
χ² / ndf 6.048e+05 / 87
p0 145.7 ± 0.0006258
147
146
145
144
143
142
141
140
139
pull
Entries 88
Mean −337.3
Std Dev 356.5
200
150
100
50
0
−50
−100

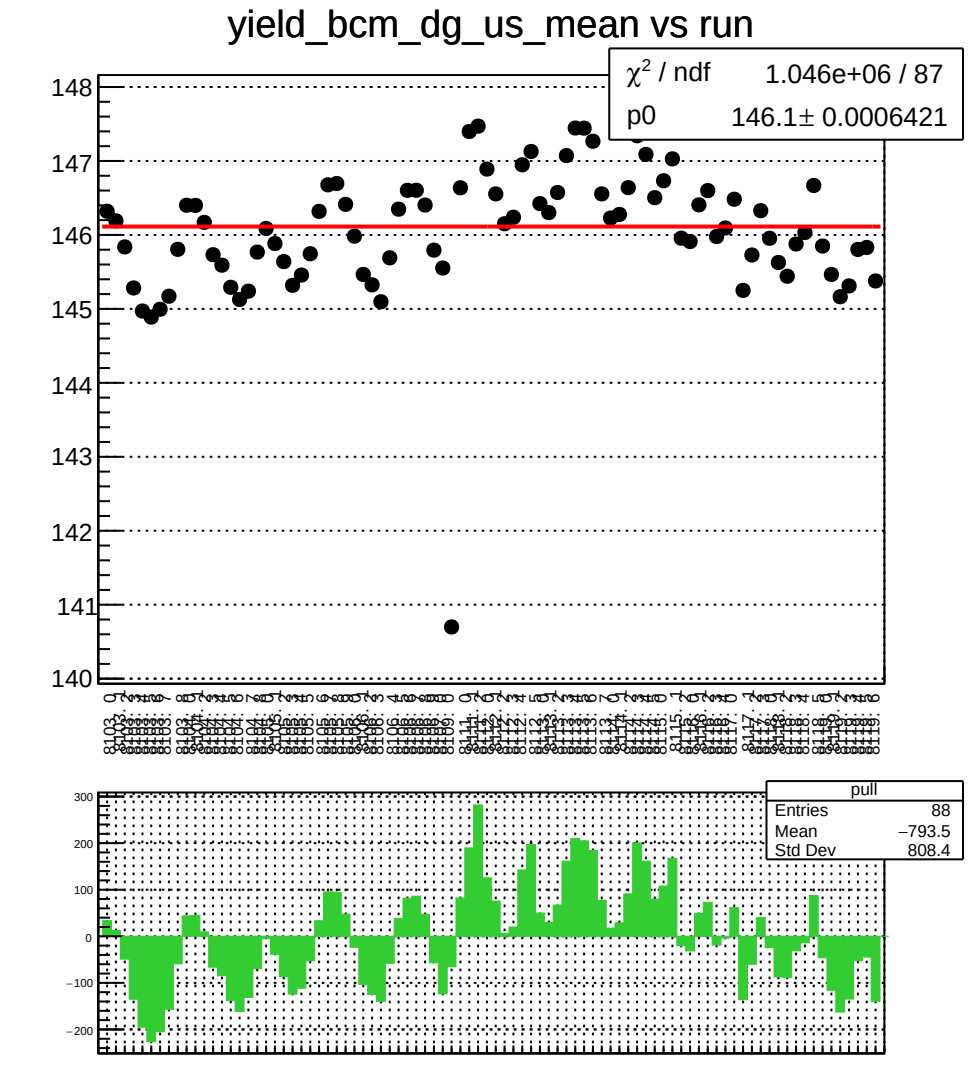

pull1D
Entries 88
Mean −0.1594
Std Dev 5.804
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

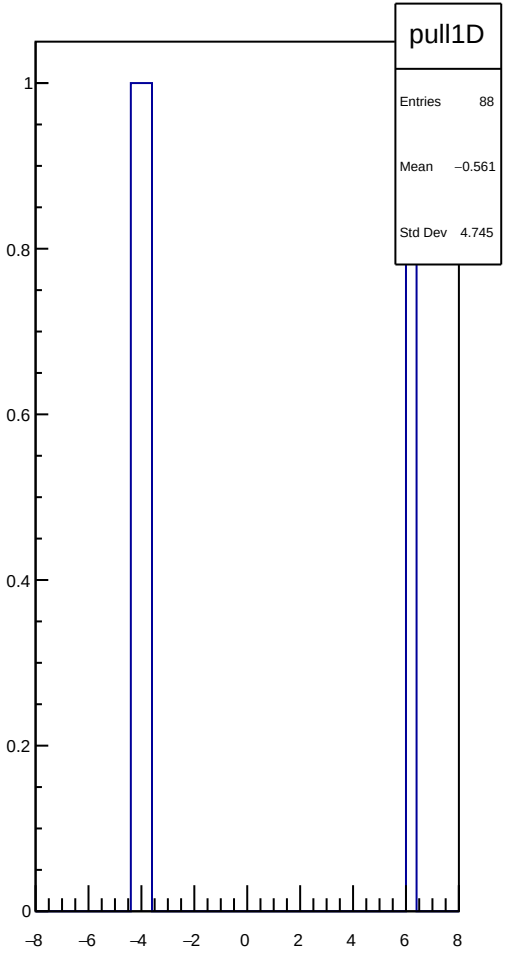

yield_bcm_an_ds3_rms vs run
χ² / ndf 2.854e+04 / 87
p0 0.5707 ± 0.0004425
9
8
7
6
5
4
3
2
1

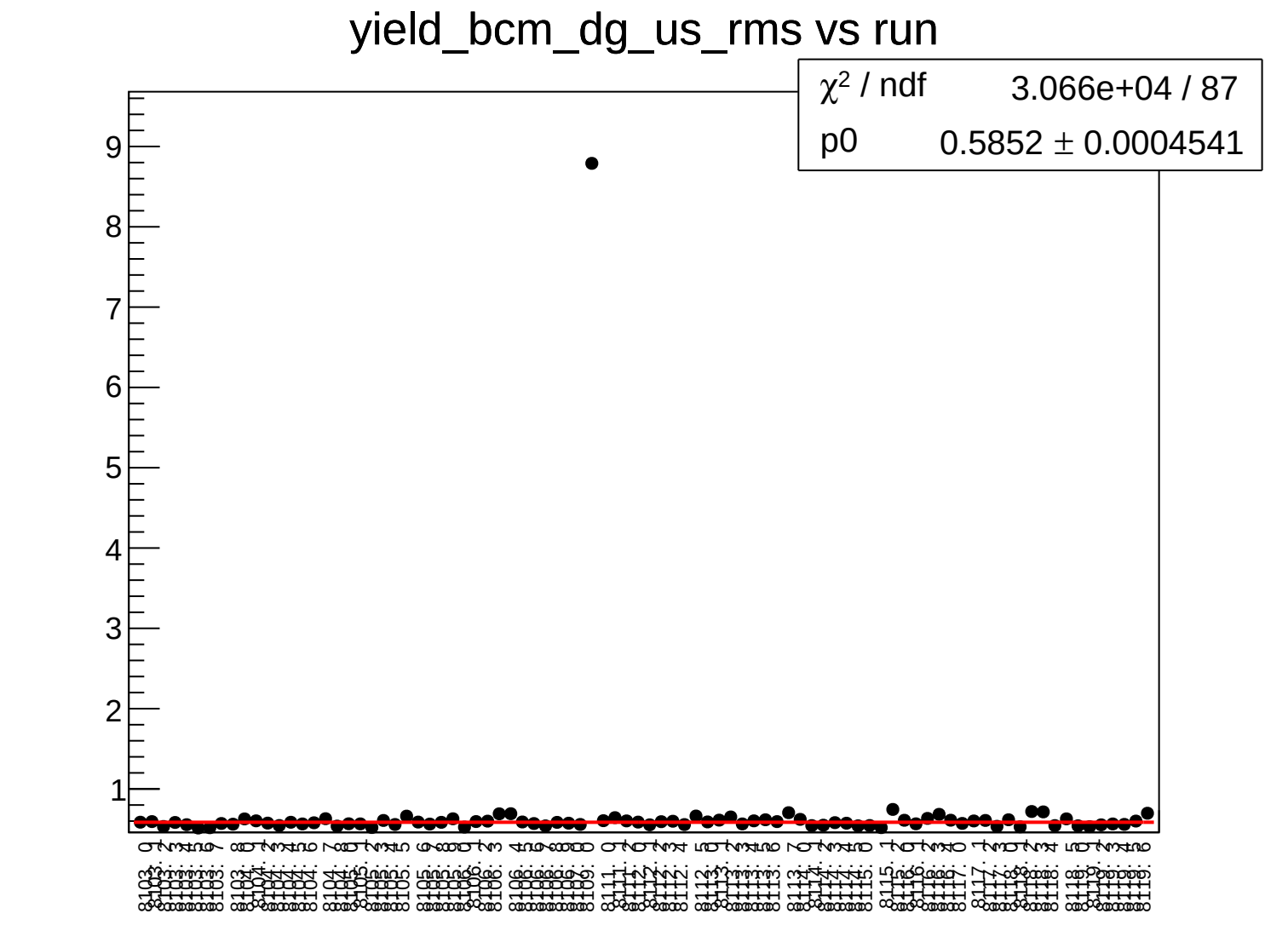

yield_bcm_an_us_mean vs run
χ² / ndf 6.259e+05 / 87
p0 145.4 ± 0.000625
147
146
145
144
143
142
141
140
139
pull
Entries 88
Mean −418.2
Std Dev 441.3
200
150
100
50
0
−50
−100

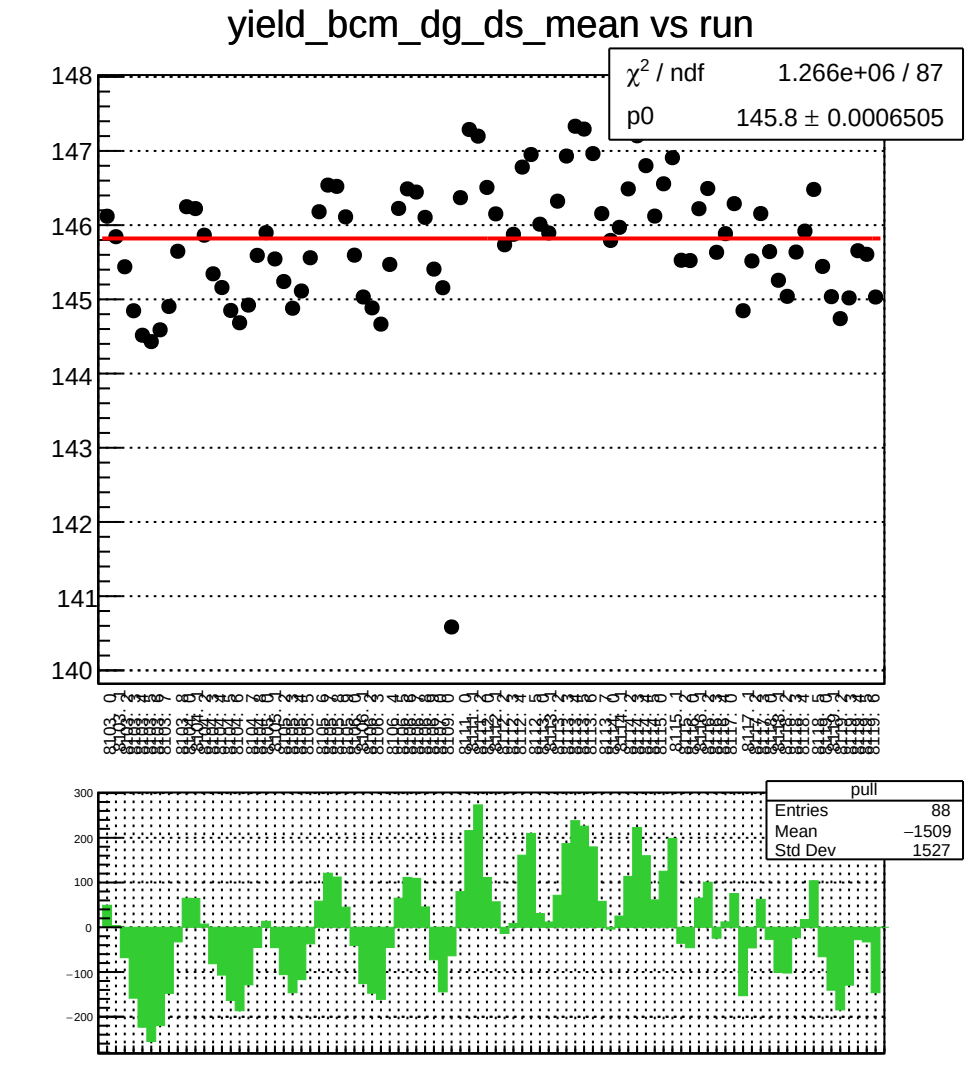

pull1D
Entries 88
Mean −0.5541
Std Dev 2.362
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

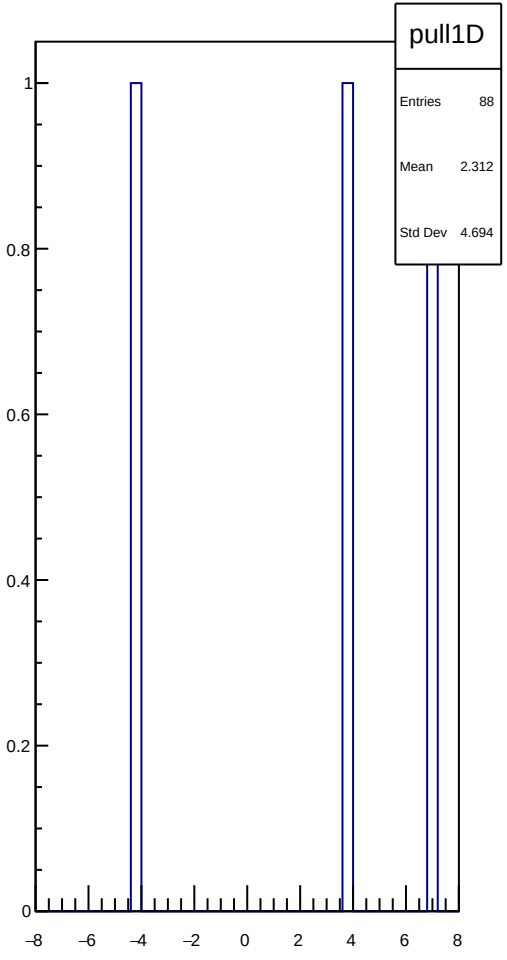

yield_bcm_an_us_rms vs run
χ² / ndf 2.852e+04 / 87
p0 0.57 ± 0.000442
9
8
7
6
5
4
3
2
1

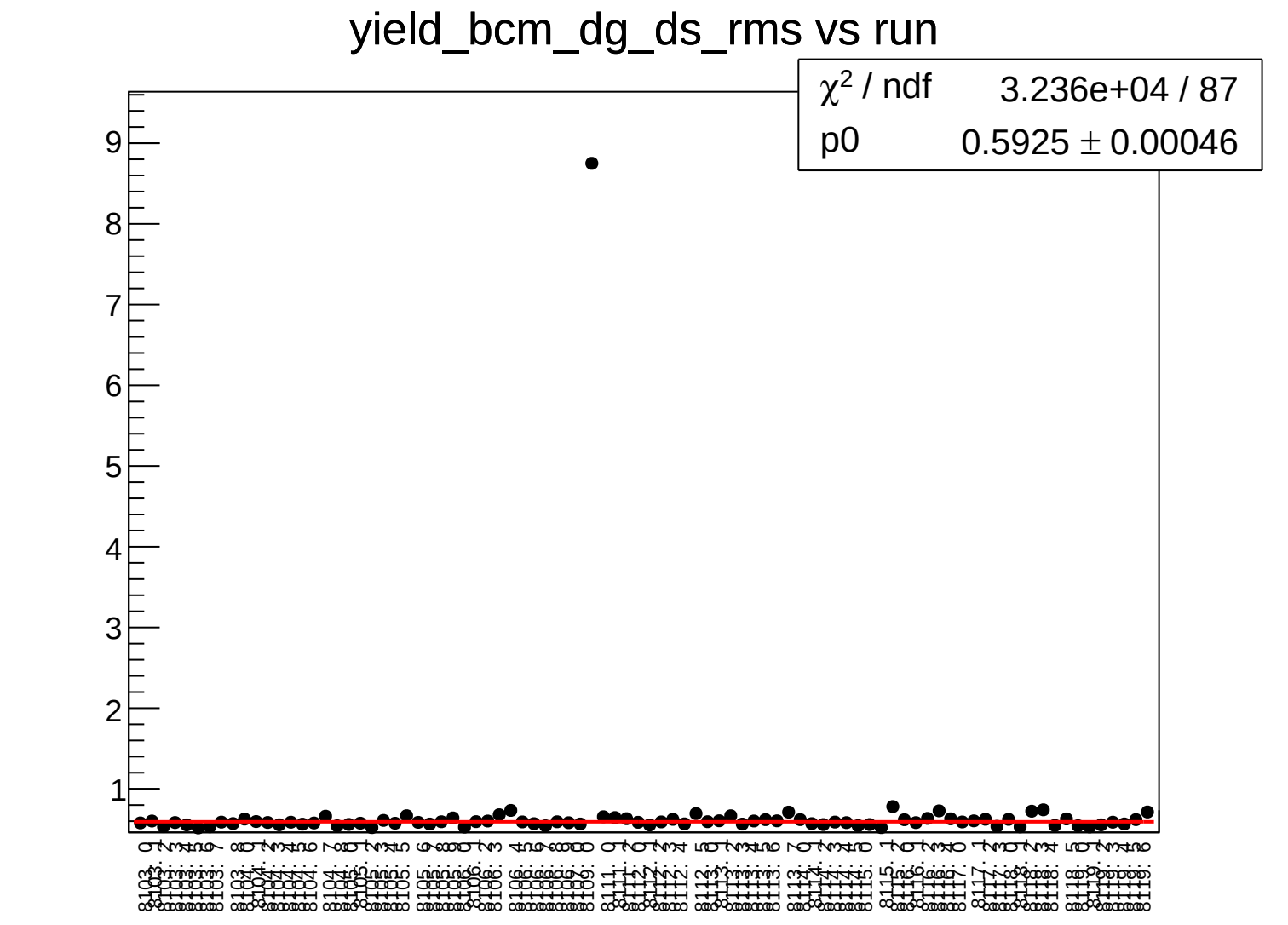

yield_bcm_dg_us_mean vs run
χ² / ndf 1.046e+06 / 87
p0 146.1± 0.0006421
148
147
146
145
144
143
142
141
140
pull
Entries 88
Mean −793.5
Std Dev 808.4
300
200
100
0
−100
−200

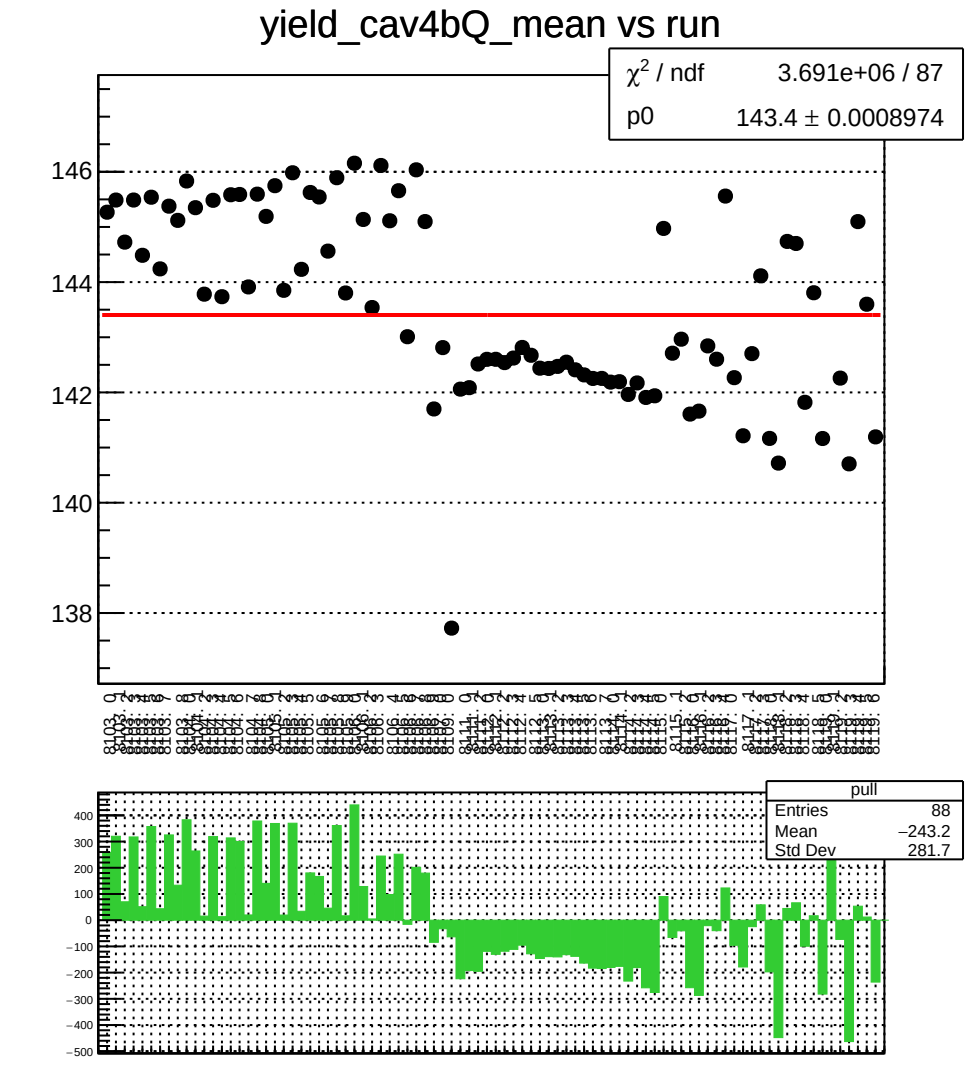

pull1D
Entries 88
Mean −0.561
Std Dev 4.745
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

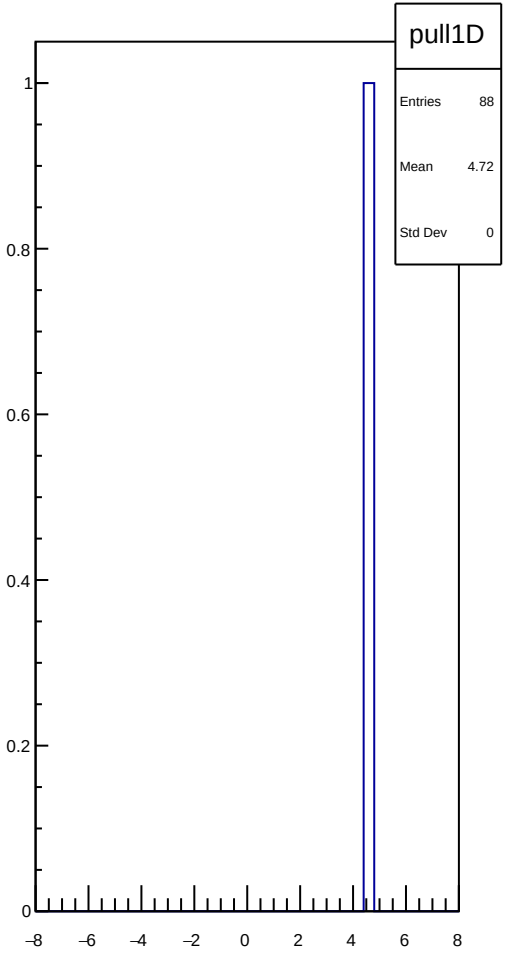

yield_bcm_dg_us_rms vs run
χ² / ndf 3.066e+04 / 87
p0 0.5852 ± 0.0004541
9
8
7
6
5
4
3
2
1

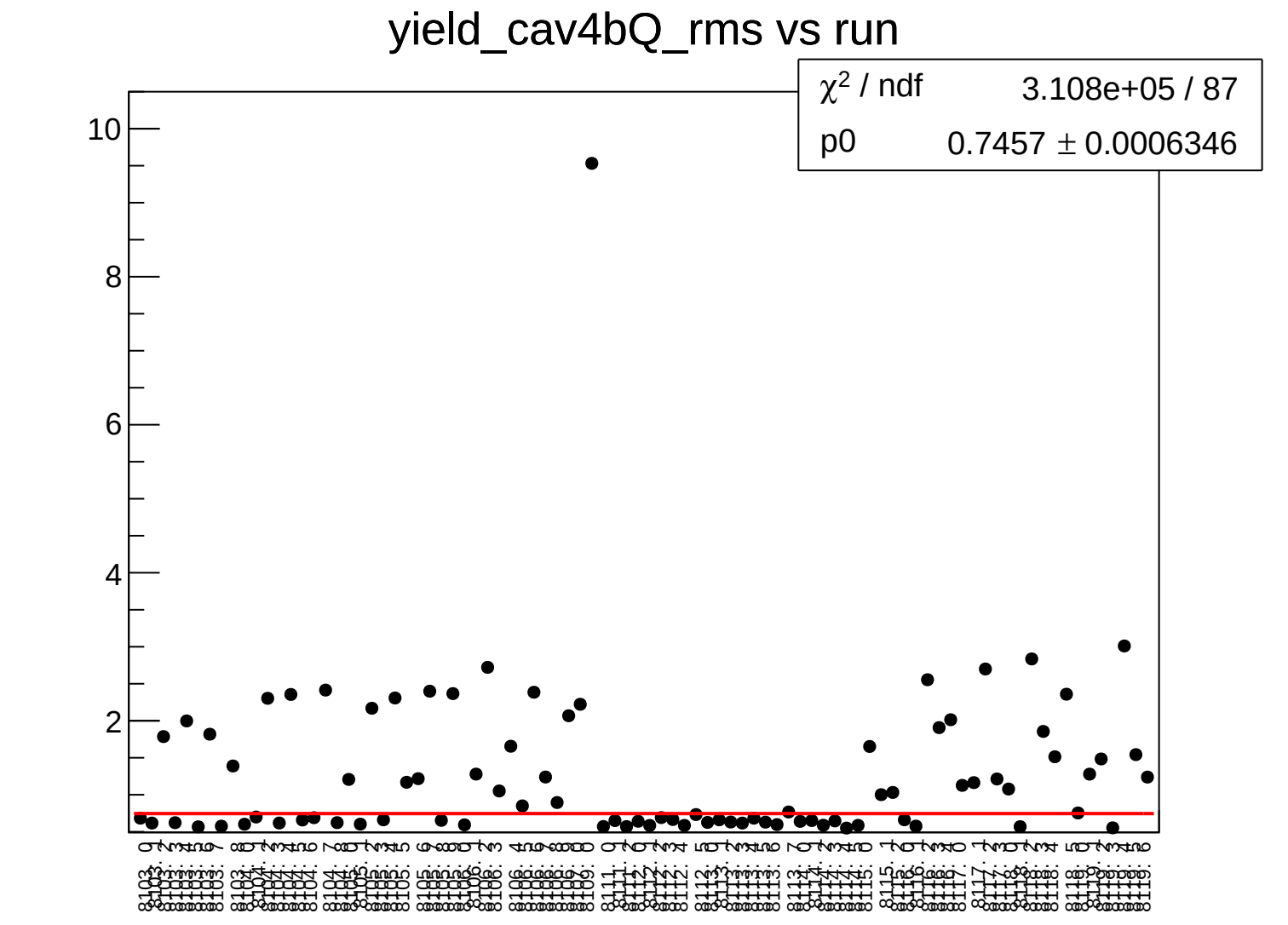

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.266e+06 / 87
p0 145.8 ± 0.0006505
148
147
146
145
144
143
142
141
140
pull
Entries 88
Mean −1509
Std Dev 1527
300
200
100
0
−100
−200

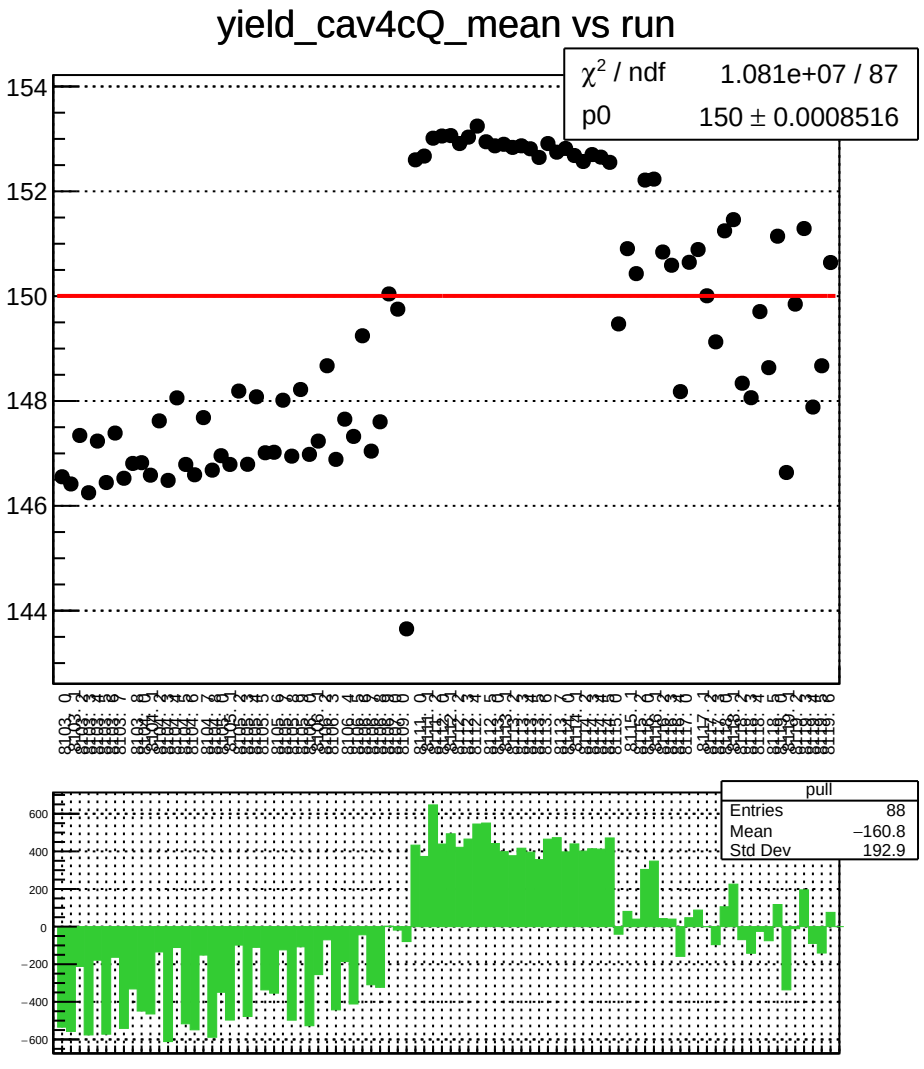

pull1D
Entries 88
Mean 2.312
Std Dev 4.694
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

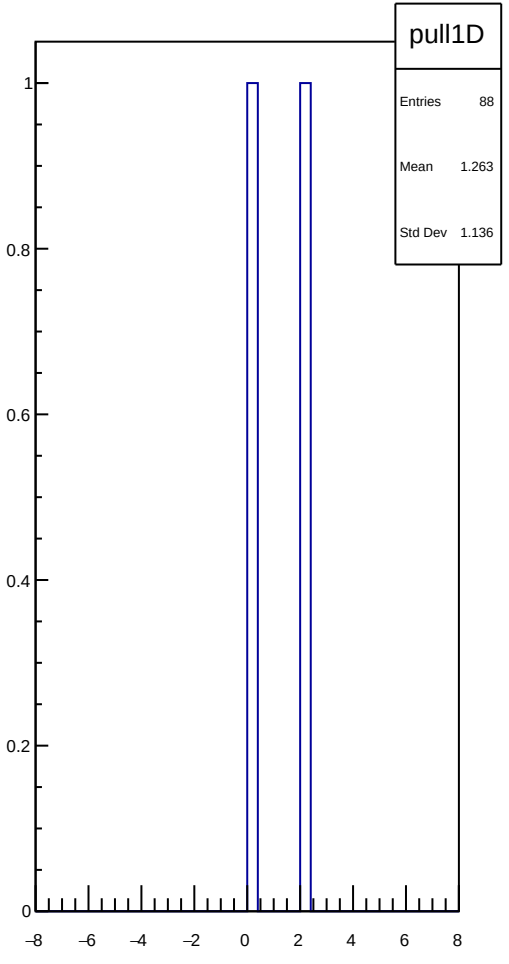

yield_bcm_dg_ds_rms vs run
χ^2 / ndf 3.236e+04 / 87
p0 0.5925 ± 0.00046
9
8
7
6
5
4
3
2
1

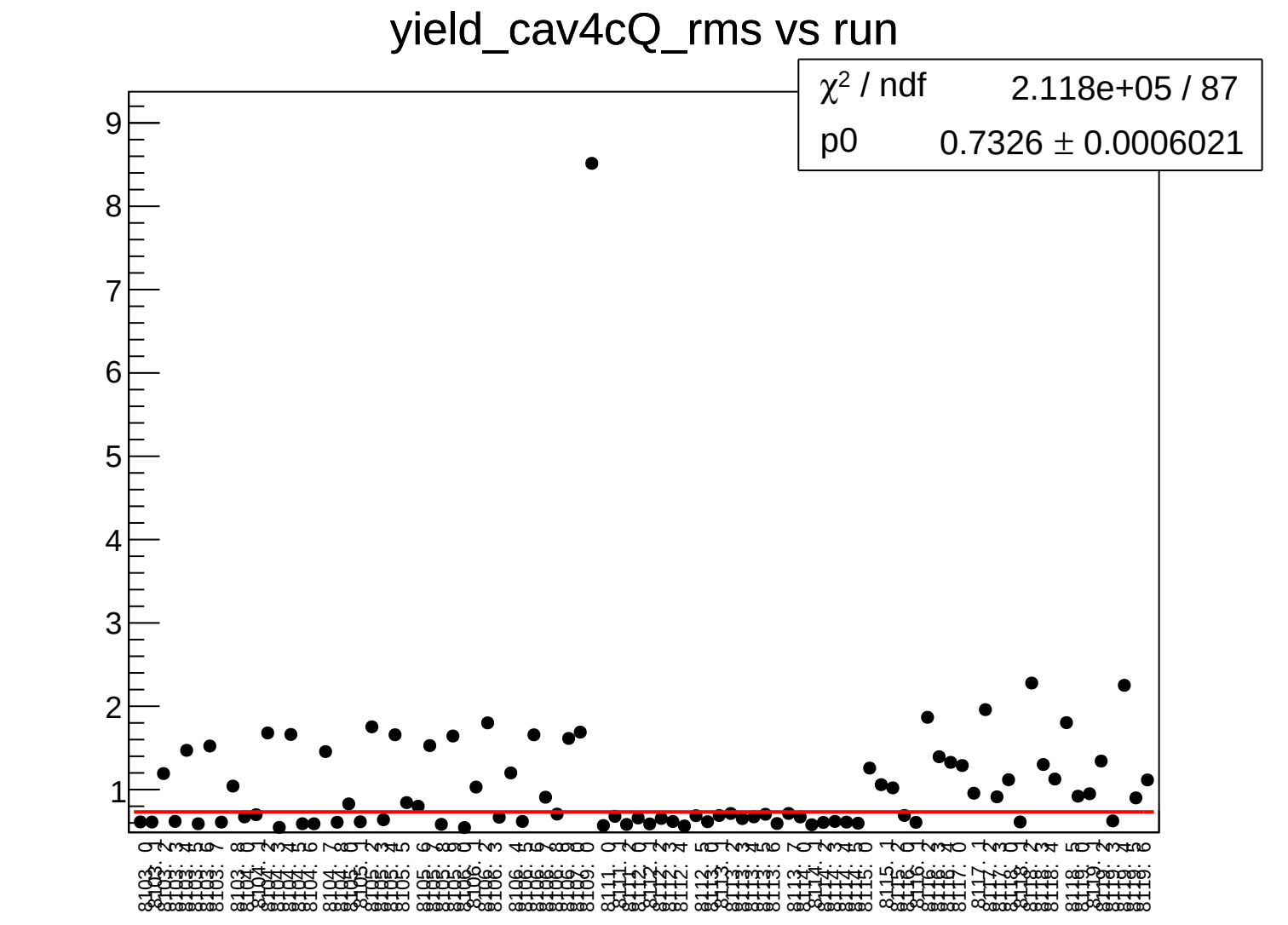

yield_cav4bQ_mean vs run
χ² / ndf 3.691e+06 / 87
p0 143.4 ± 0.0008974
146
144
142
140
138
pull
Entries 88
Mean −243.2
Std Dev 281.7
400
300
200
100
0
−100
−200
−300
−400
−500

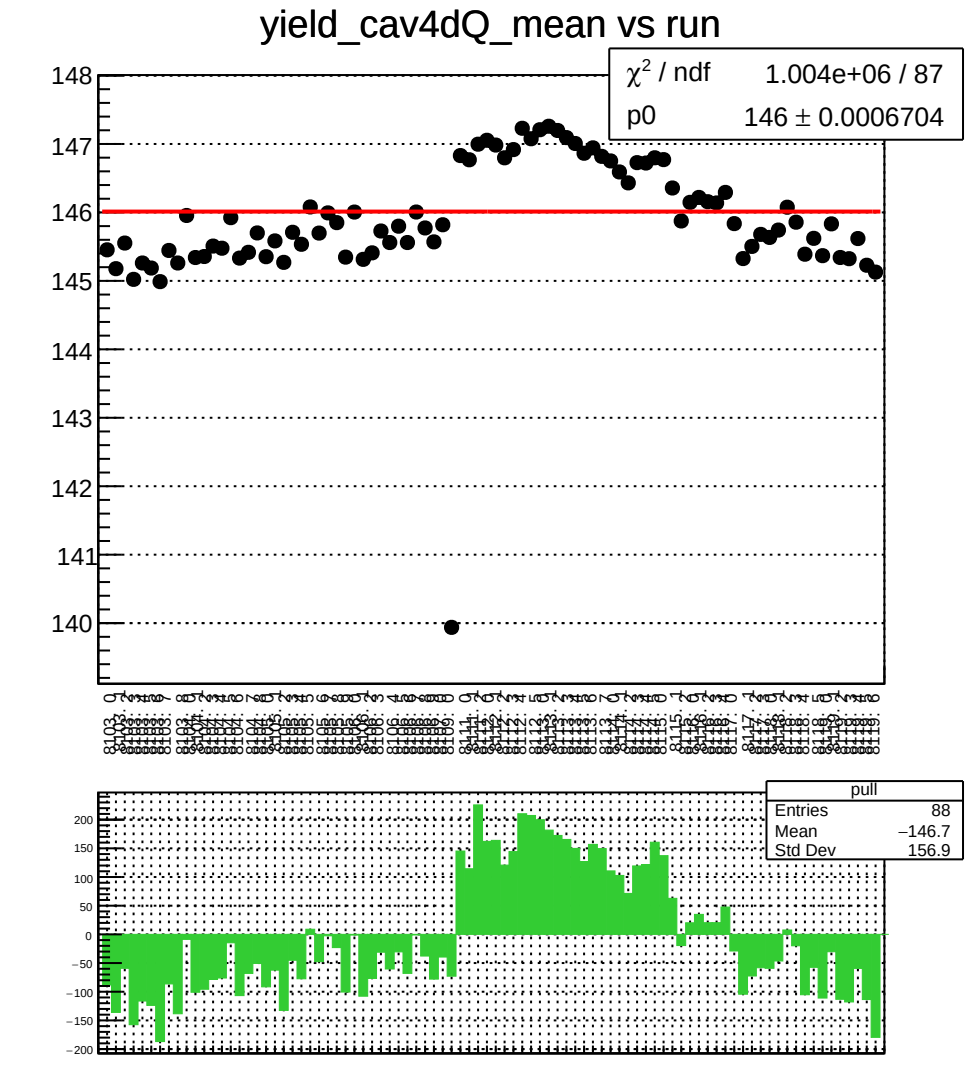

pull1D
Entries 88
Mean 4.72
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

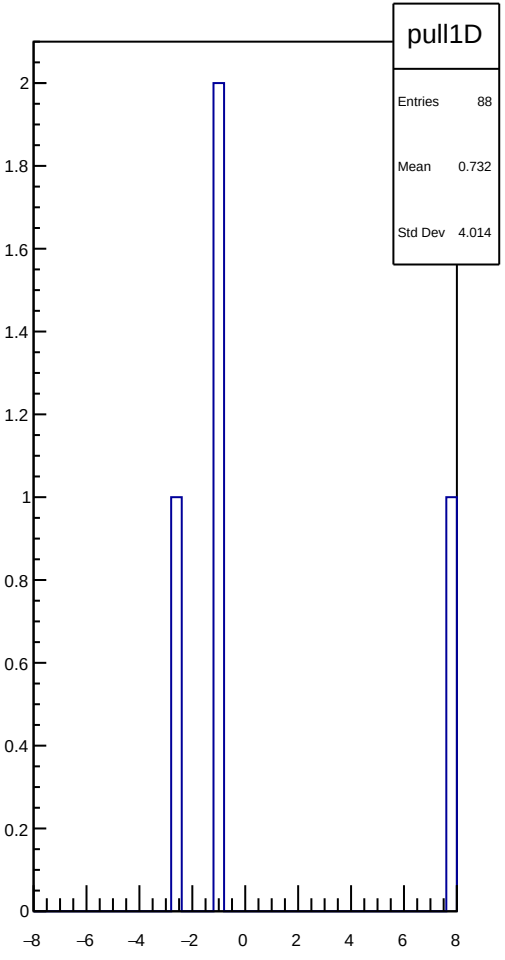

yield_cav4bQ_rms vs run
χ² / ndf 3.108e+05 / 87
p0 0.7457 ± 0.0006346
10
8
6
4
2

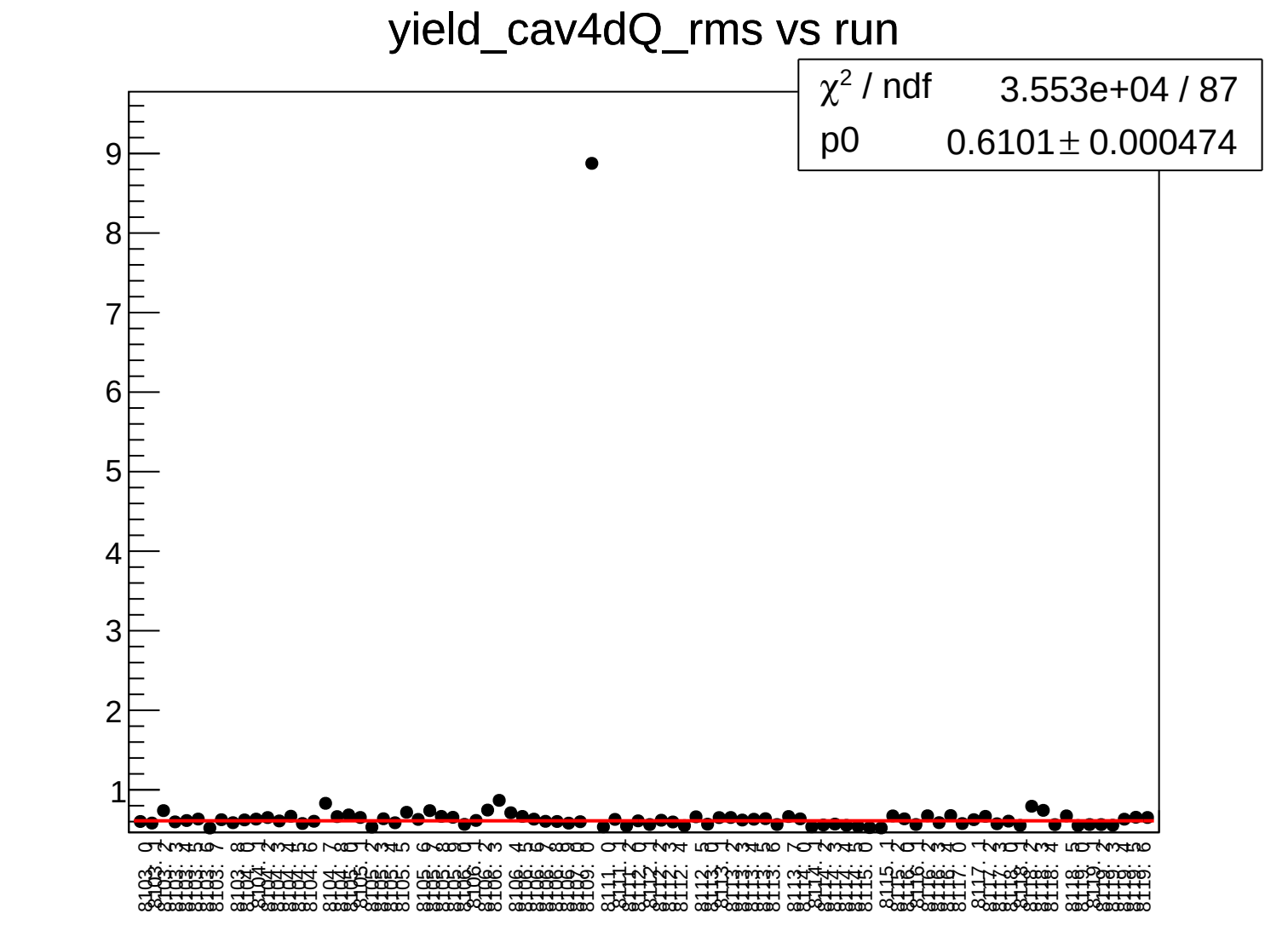

yield_cav4cQ_mean vs run
χ² / ndf 1.081e+07 / 87
p0 150 ± 0.0008516
154
152
150
148
146
144
pull
Entries 88
Mean −160.8
Std Dev 192.9
600
400
200
0
−200
−400
−600

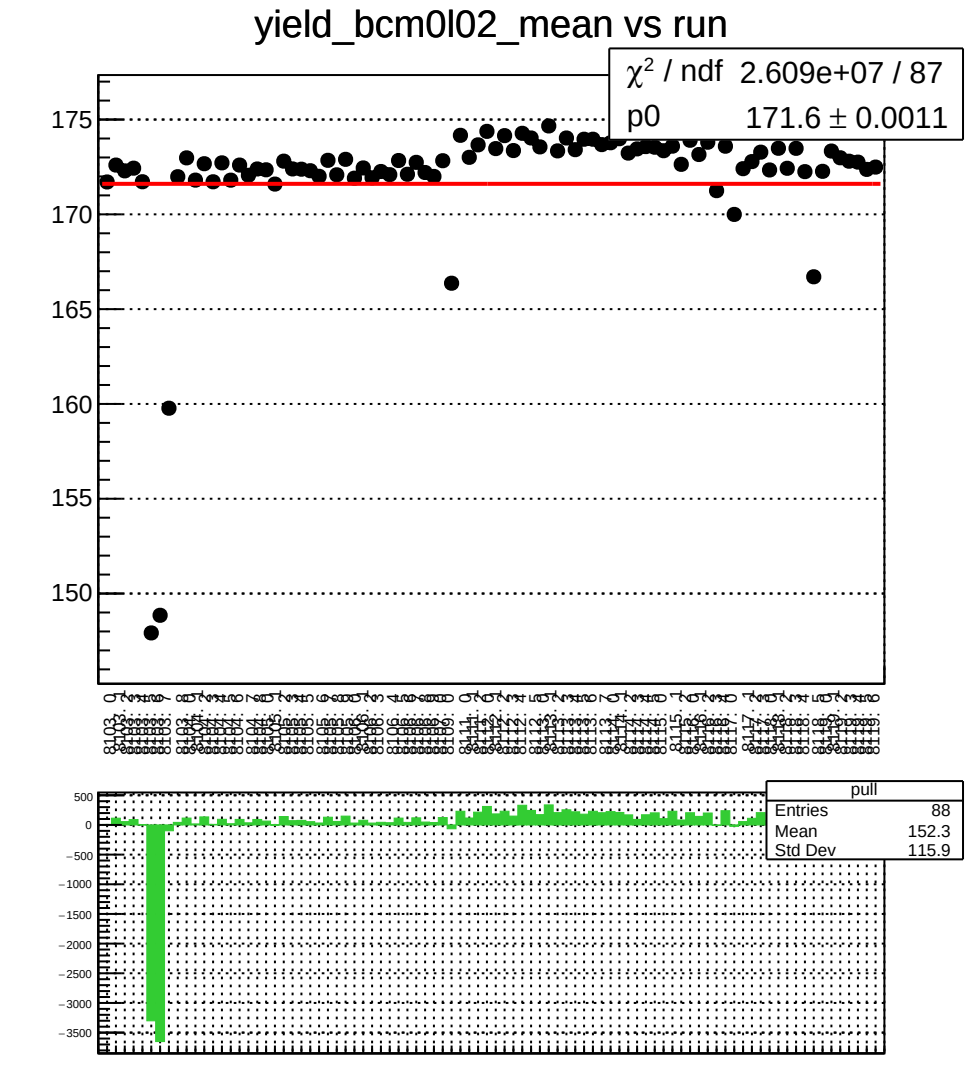

pull1D
Entries 88
Mean 1.263
Std Dev 1.136
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

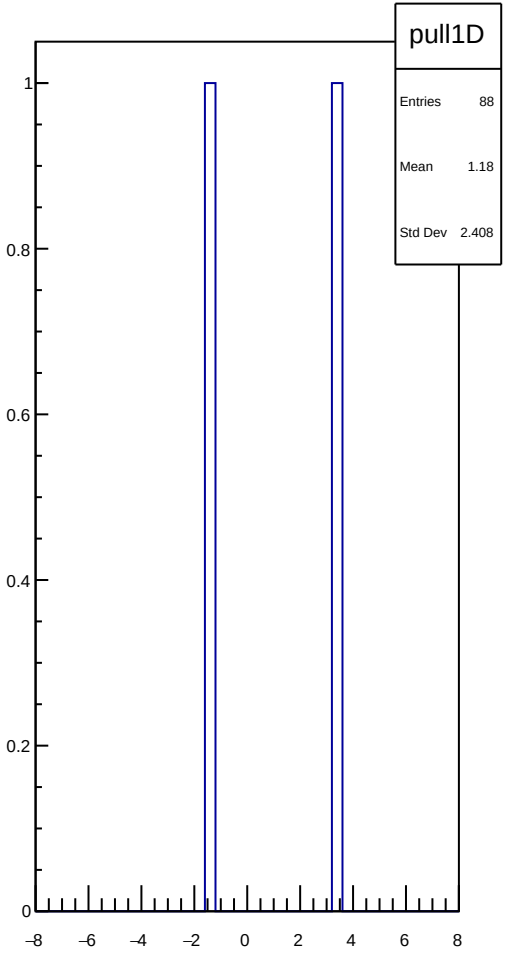

yield_cav4cQ_rms vs run
χ² / ndf 2.118e+05 / 87
p0 0.7326 ± 0.0006021
9
8
7
6
5
4
3
2
1

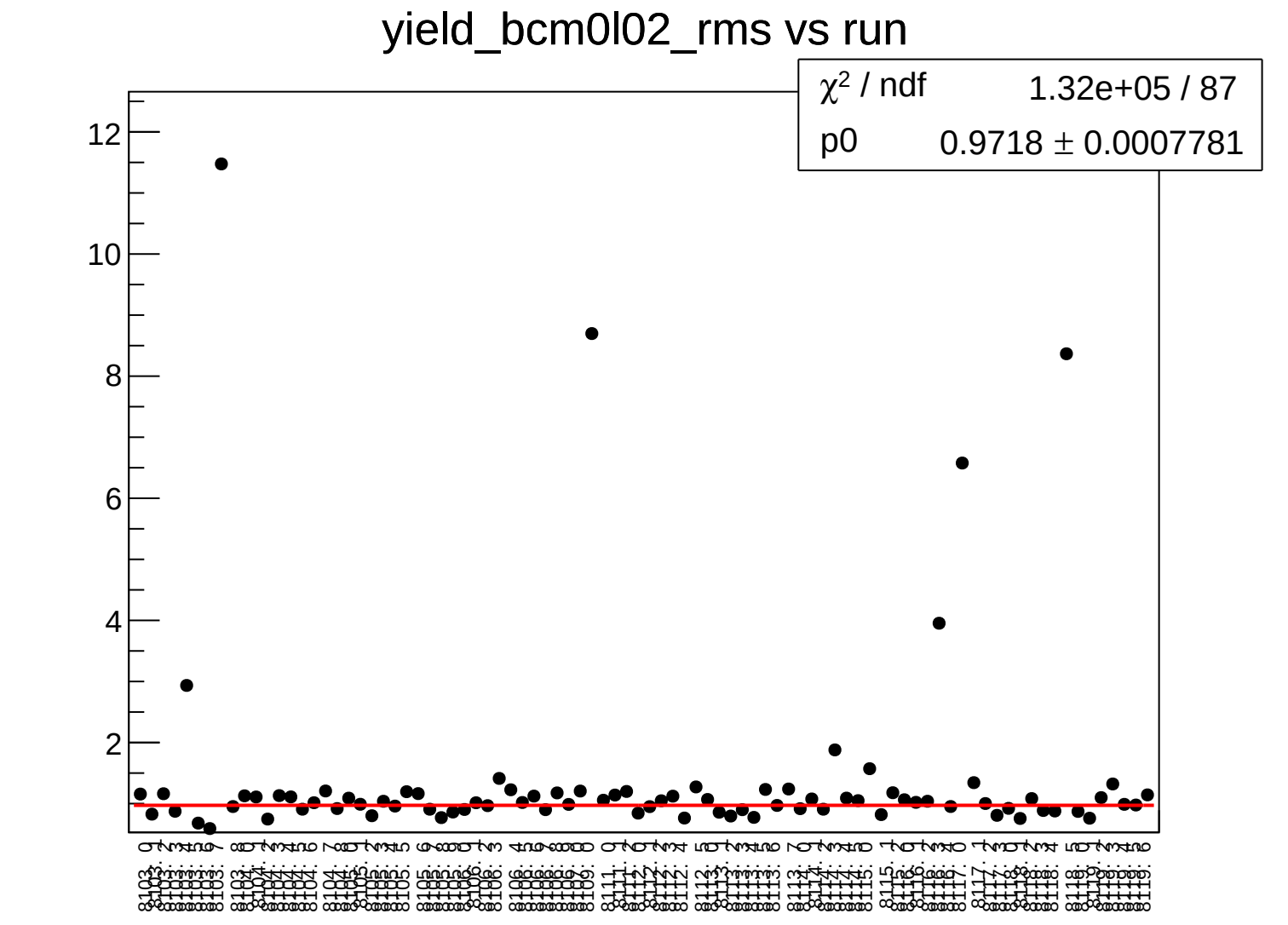

yield_cav4dQ_mean vs run
χ² / ndf 1.004e+06 / 87
p0 146 ± 0.0006704
148
147
146
145
144
143
142
141
140
pull
Entries 88
Mean −146.7
Std Dev 156.9
200
150
100
50
0
−50
−100
−150
−200

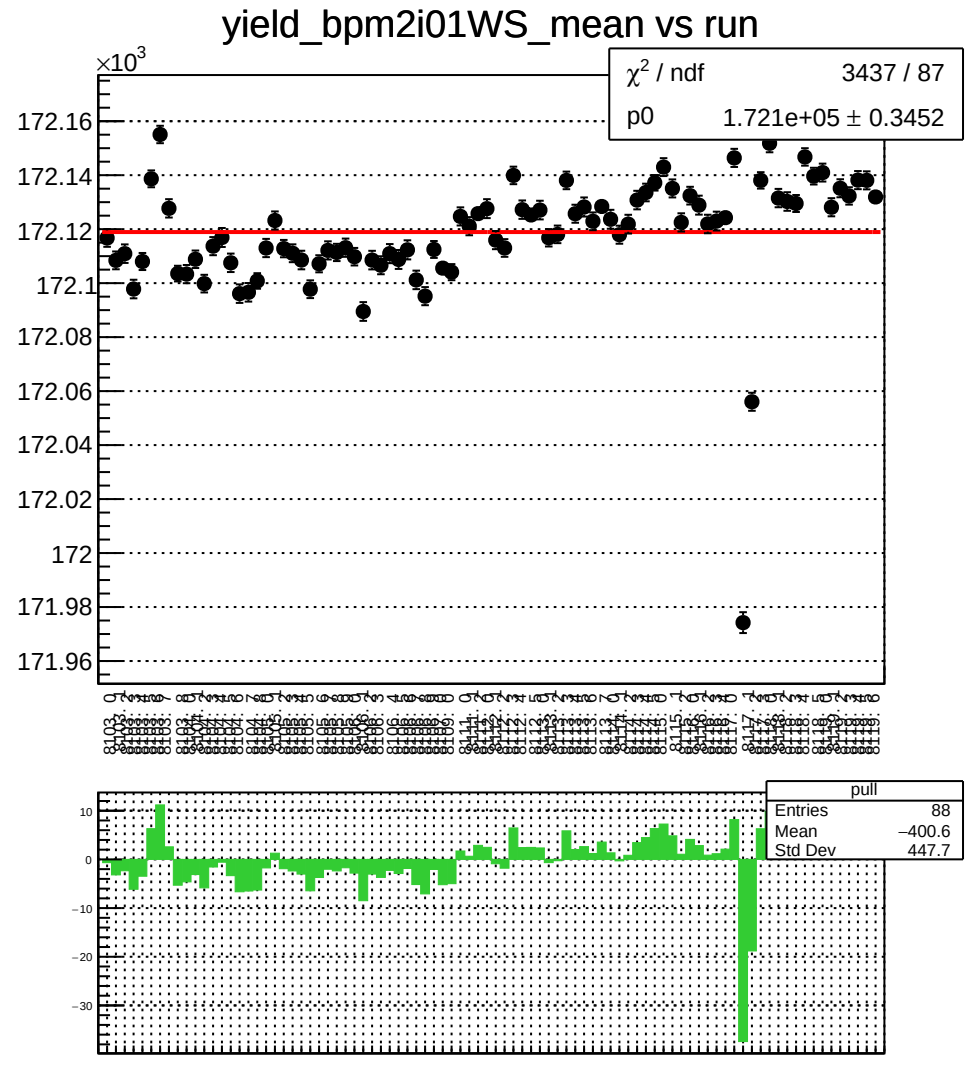

pull1D
Entries 88
Mean 0.732
Std Dev 4.014
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

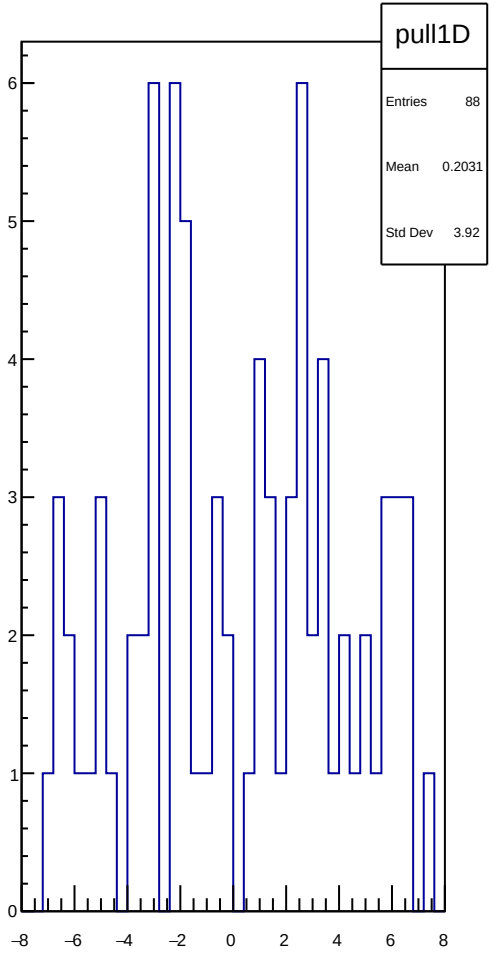

yield_cav4dQ_rms vs run
χ^2 / ndf 3.553e+04 / 87
p0 0.6101 ± 0.000474
9
8
7
6
5
4
3
2
1

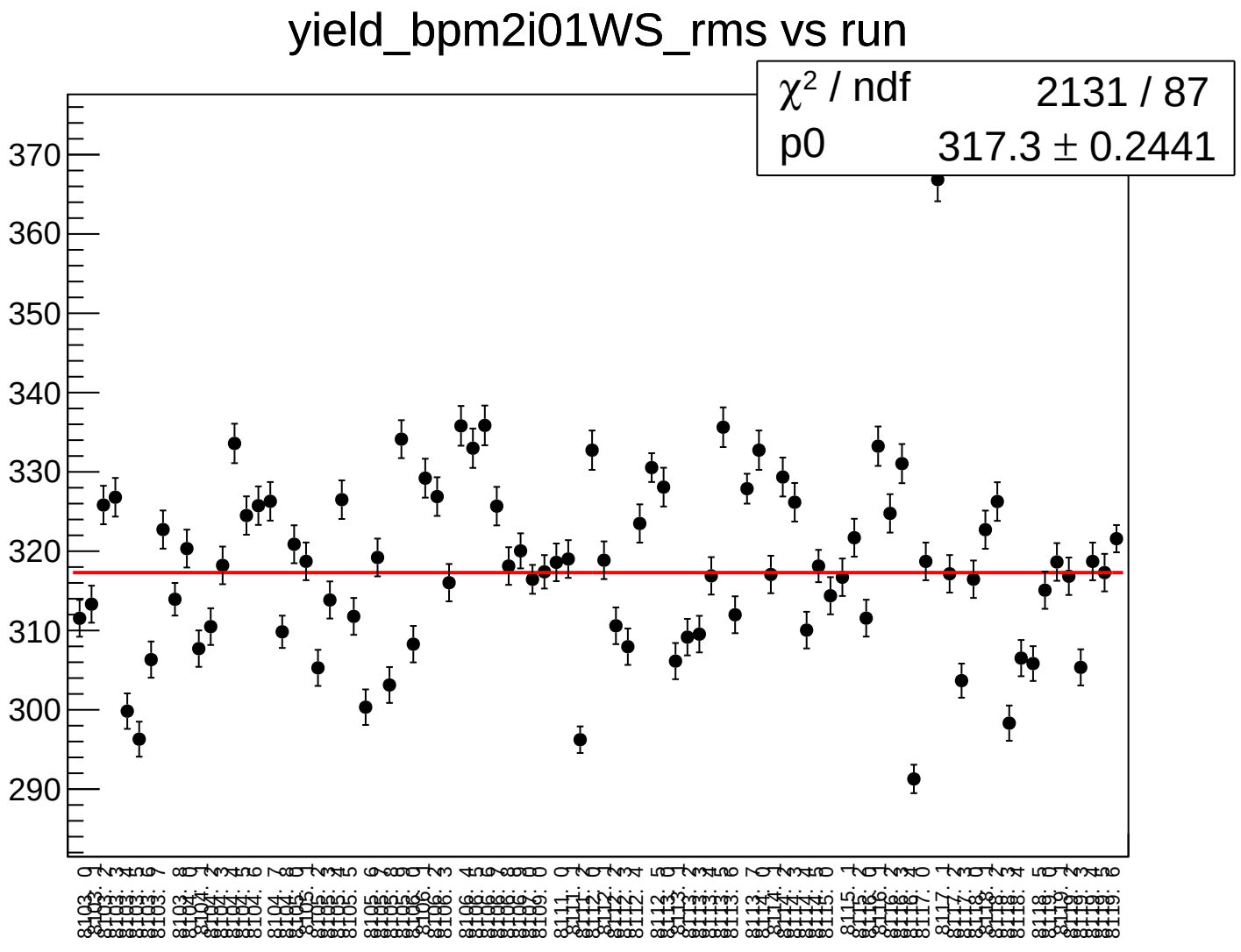

yield_bcm0l02_mean vs run
χ² / ndf 2.609e+07 / 87
p0 171.6 ± 0.0011
175
170
165
160
155
150
pull
Entries 88
Mean 152.3
Std Dev 115.9
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500

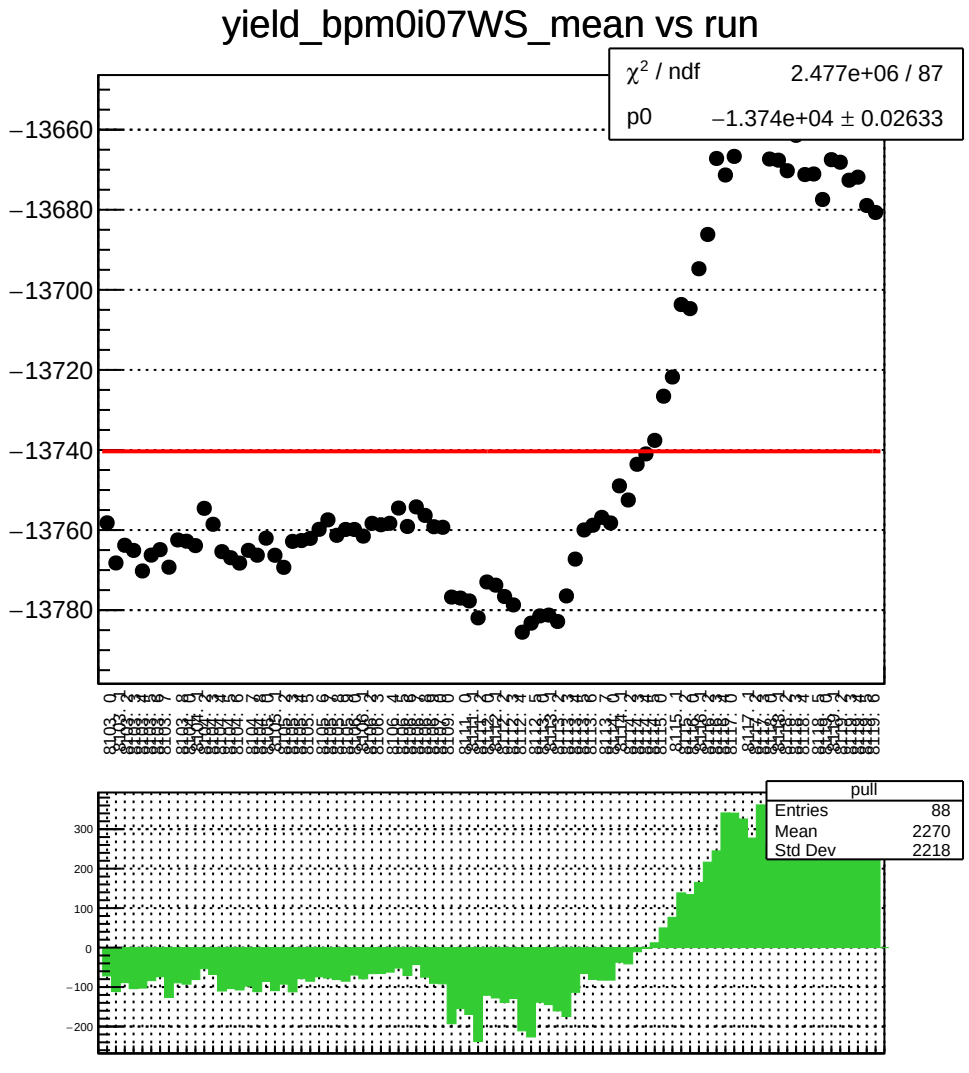

pull1D
Entries 88
Mean 1.18
Std Dev 2.408
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

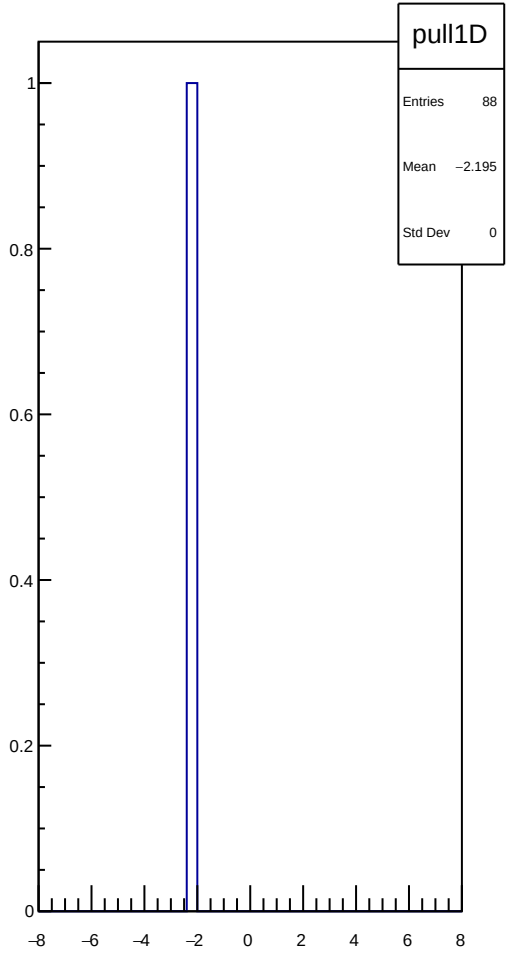

yield_bcm0l02_rms vs run
χ² / ndf 1.32e+05 / 87
p0 0.9718 ± 0.0007781
12
10
8
6
4
2

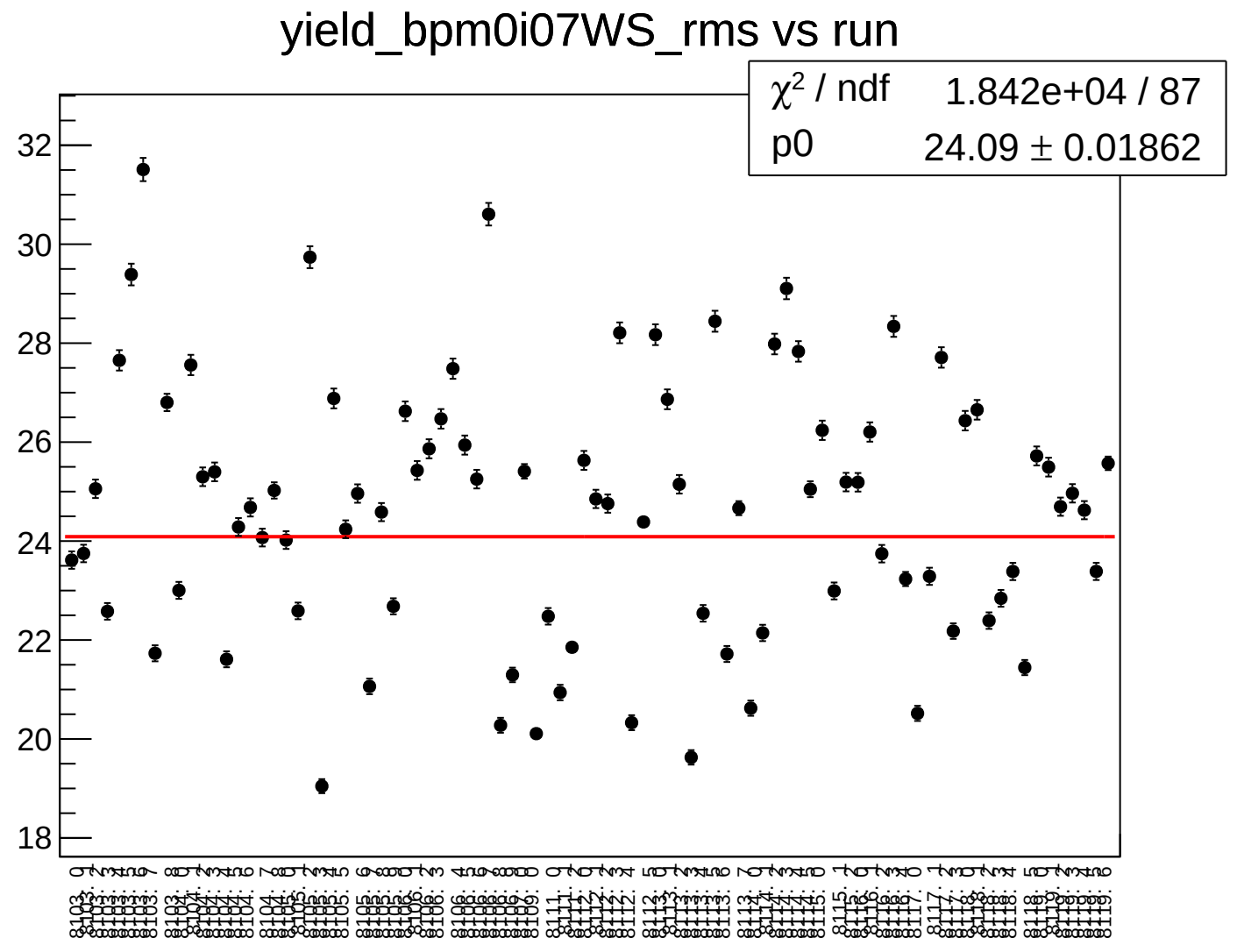

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 3437 / 87
p0 1.721e+05 ± 0.3452
172.16
172.14
172.12
172.1
172.08
172.06
172.04
172.02
172
171.98
171.96
pull
Entries 88
Mean −400.6
Std Dev 447.7
10
0
−10
−20
−30

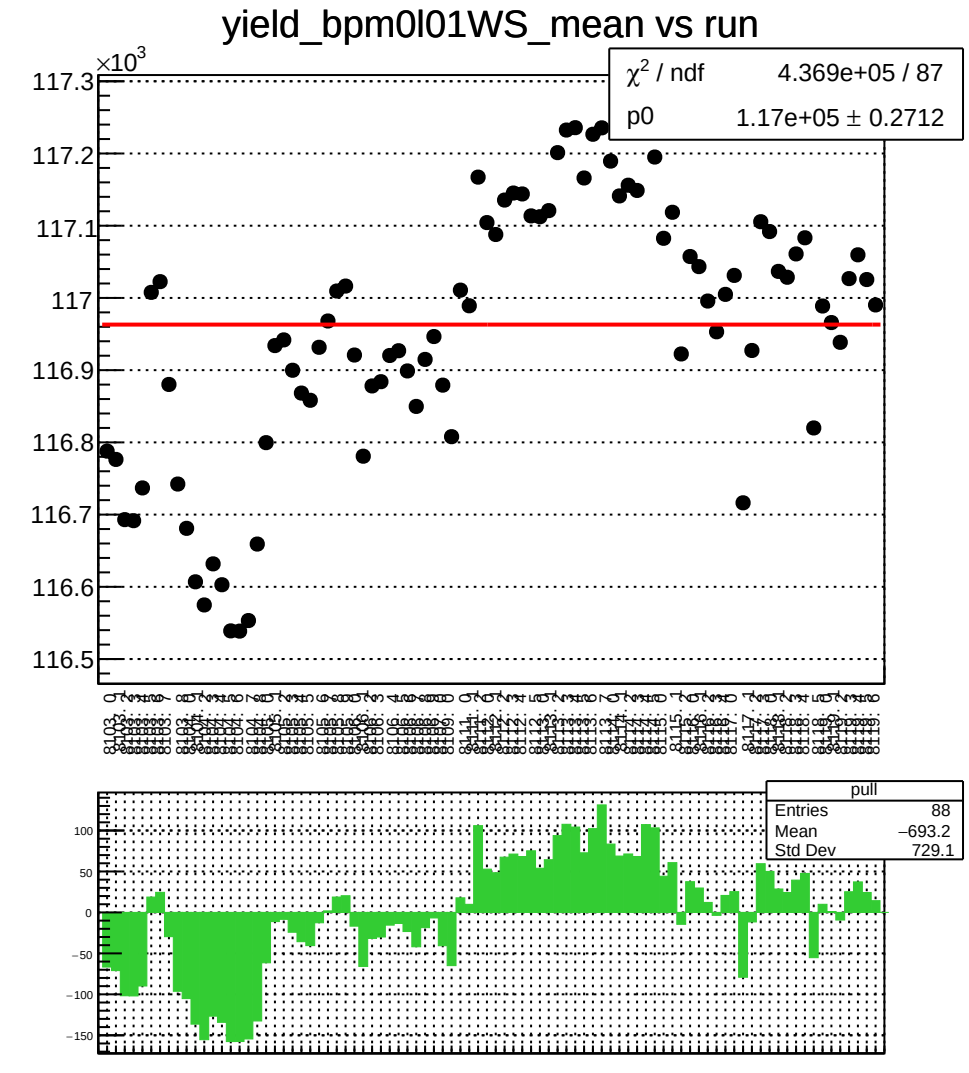

pull1D
Entries 88
Mean 0.2031
Std Dev 3.92
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

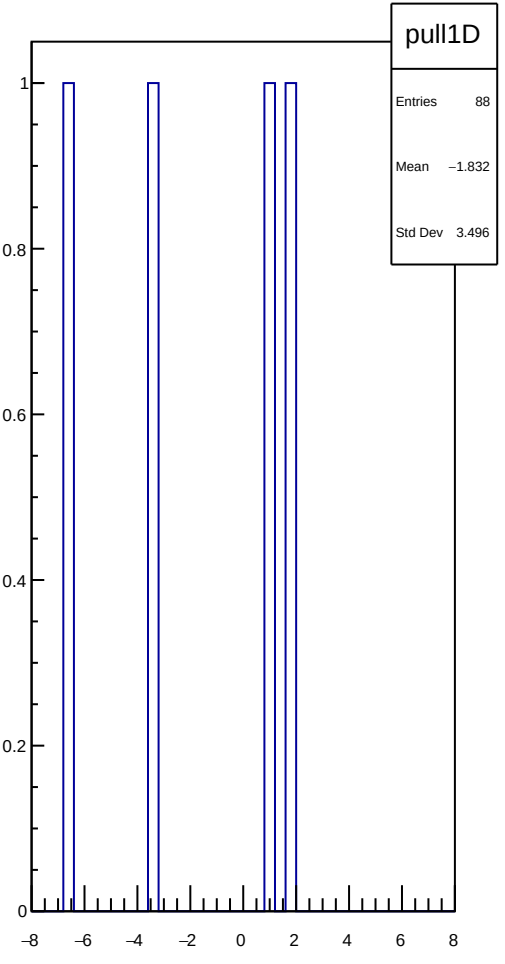

yield_bpm2i01WS_rms vs run
χ² / ndf 2131 / 87
p0 317.3 ± 0.2441
370
360
350
340
330
320
310
300
290

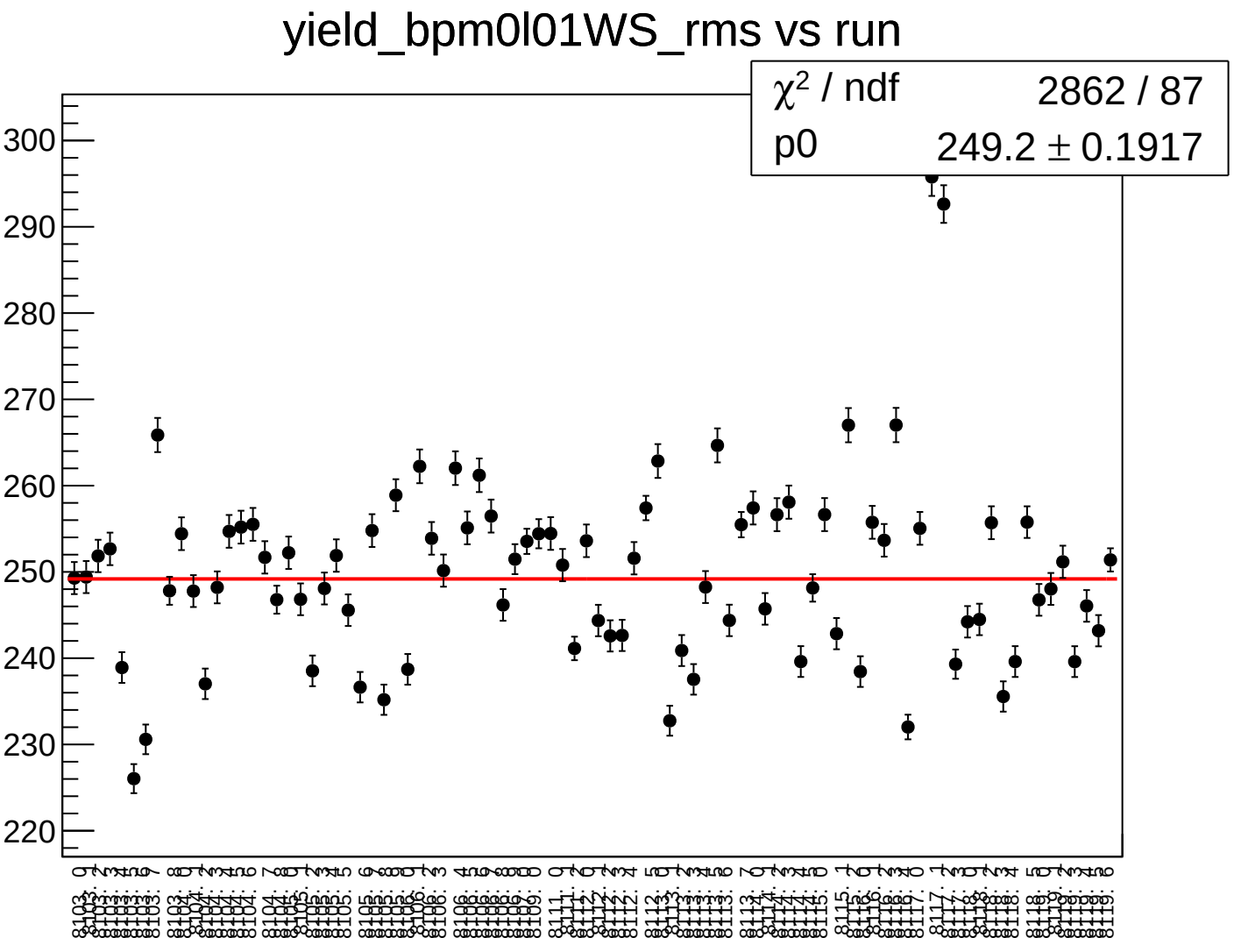

yield_bpm0i07WS_mean vs run
χ² / ndf 2.477e+06 / 87
p0 −1.374e+04 ± 0.02633
−13660
−13680
−13700
−13720
−13740
−13760
−13780
pull
Entries 88
Mean 2270
Std Dev 2218
300
200
100
0
−100
−200

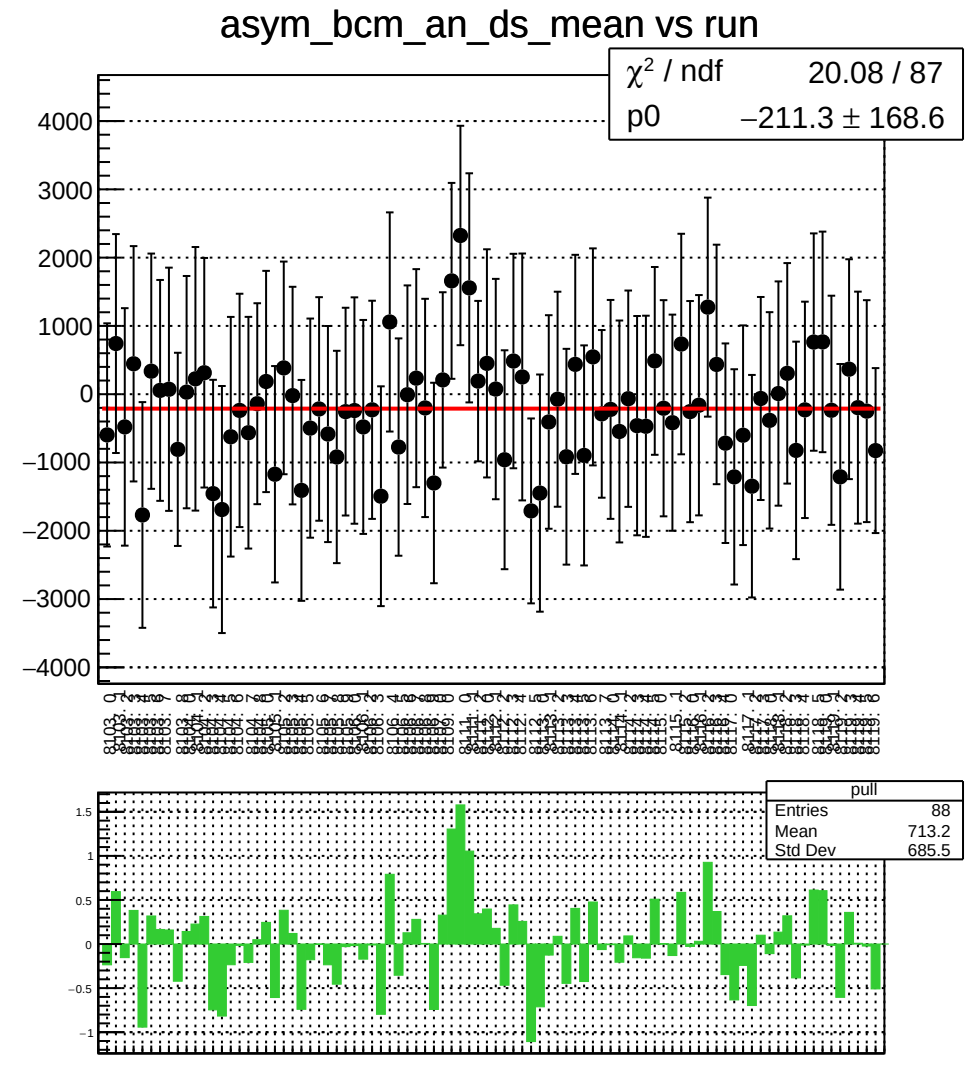

pull1D
Entries 88
Mean −2.195
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

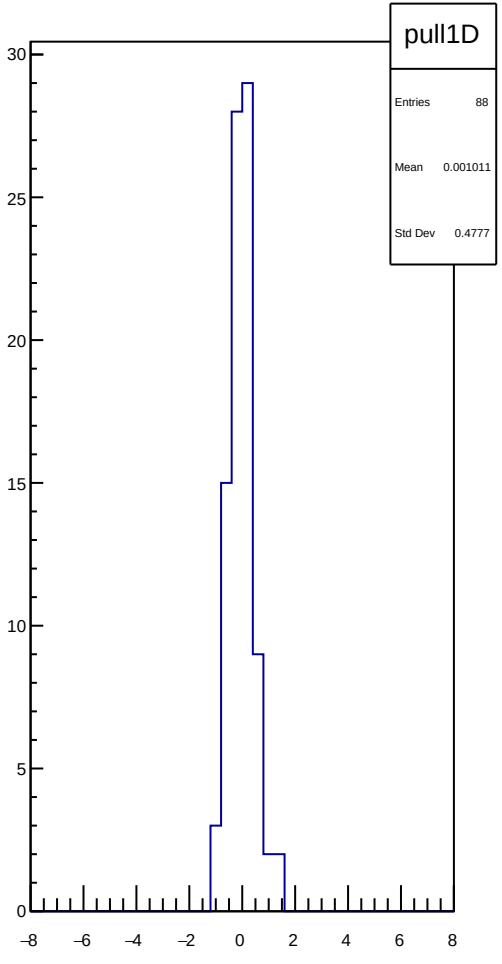

yield_bpm0i07WS_rms vs run
χ^2 / ndf 1.842e+04 / 87
p0 24.09 ± 0.01862
32
30
28
26
24
22
20
18

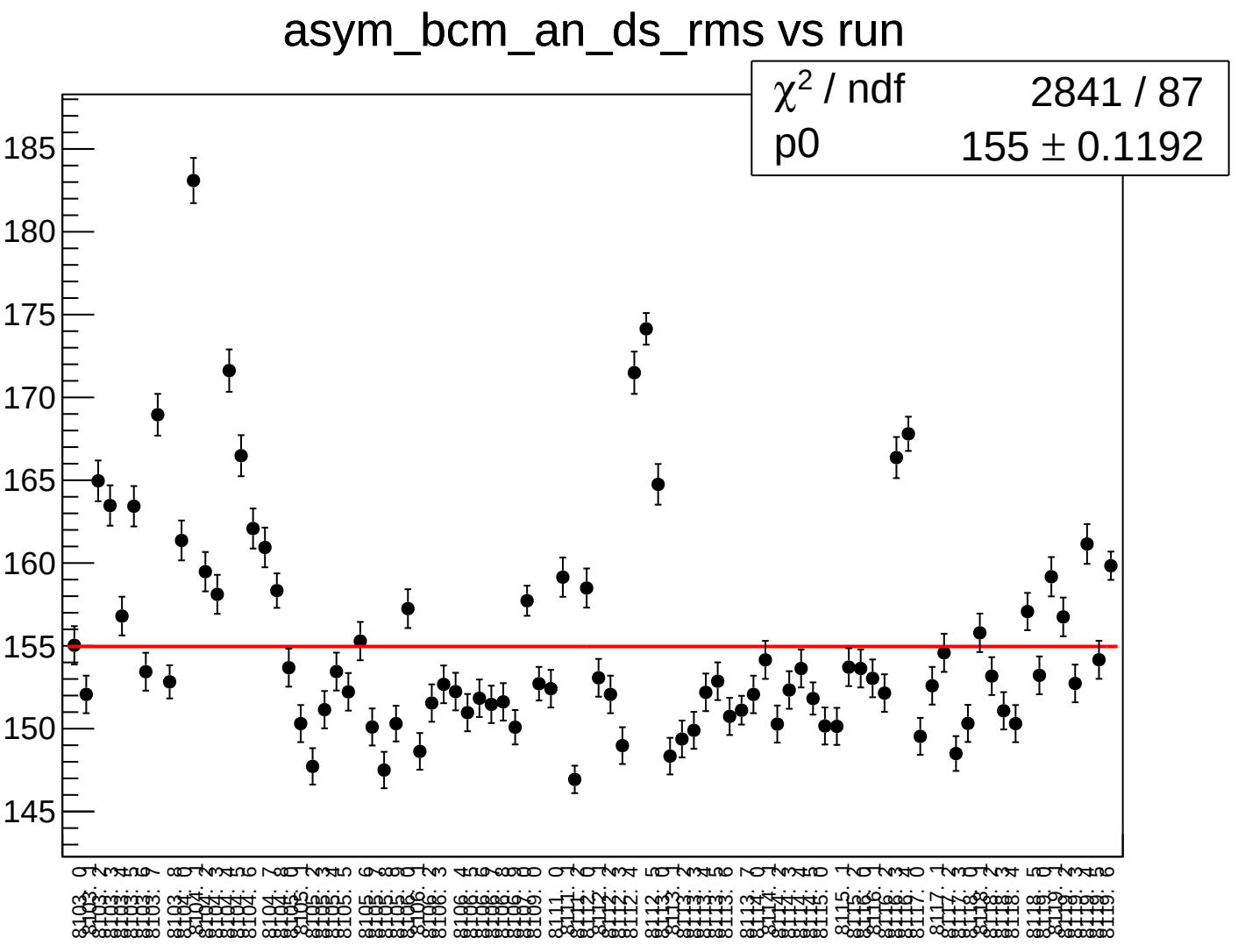

yield_bpm0l01WS_mean vs run
×10^3
117.3
117.2
117.1
117
116.9
116.8
116.7
116.6
116.5
χ² / ndf 4.369e+05 / 87
p0 1.17e+05 ± 0.2712
pull
Entries 88
Mean −693.2
Std Dev 729.1
100
50
0
−50
−100
−150

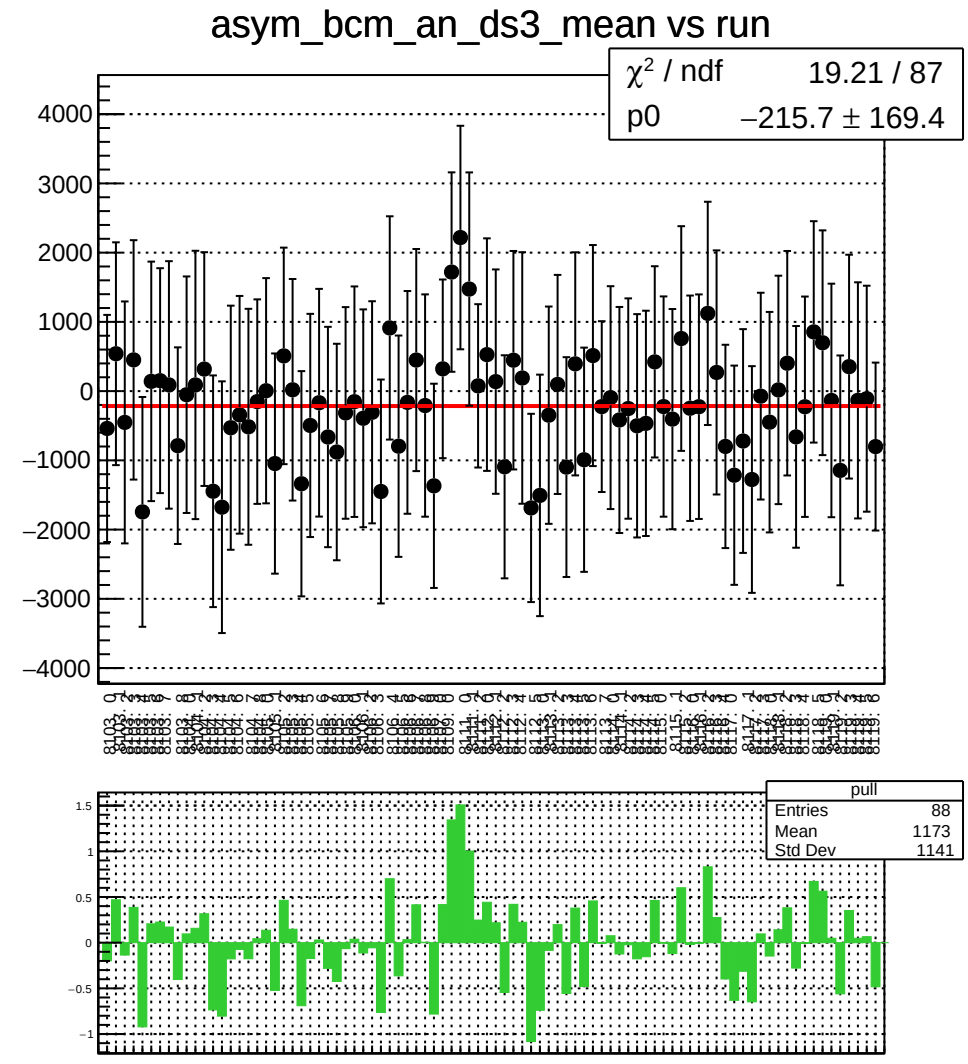

pull1D
Entries 88
Mean −1.832
Std Dev 3.496
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

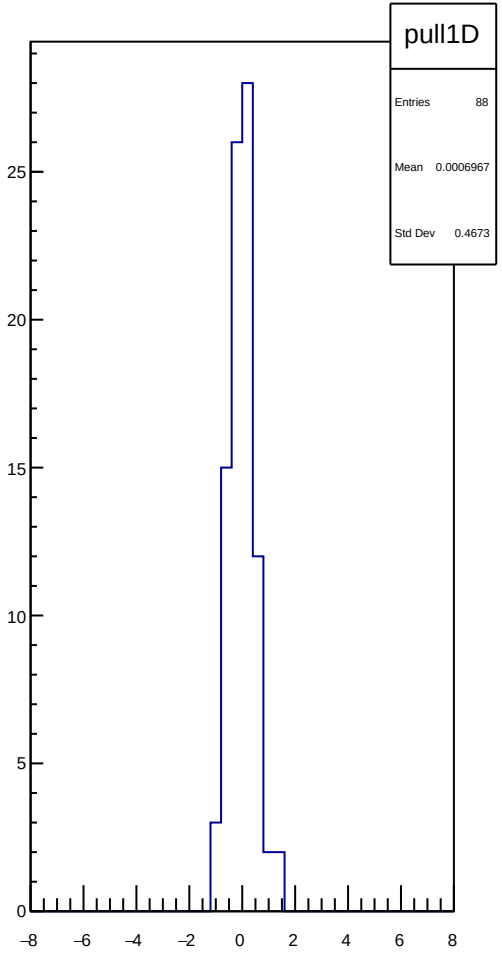

yield_bpm0l01WS_rms vs run
χ² / ndf 2862 / 87
p0 249.2 ± 0.1917
300
290
280
270
260
250
240
230
220

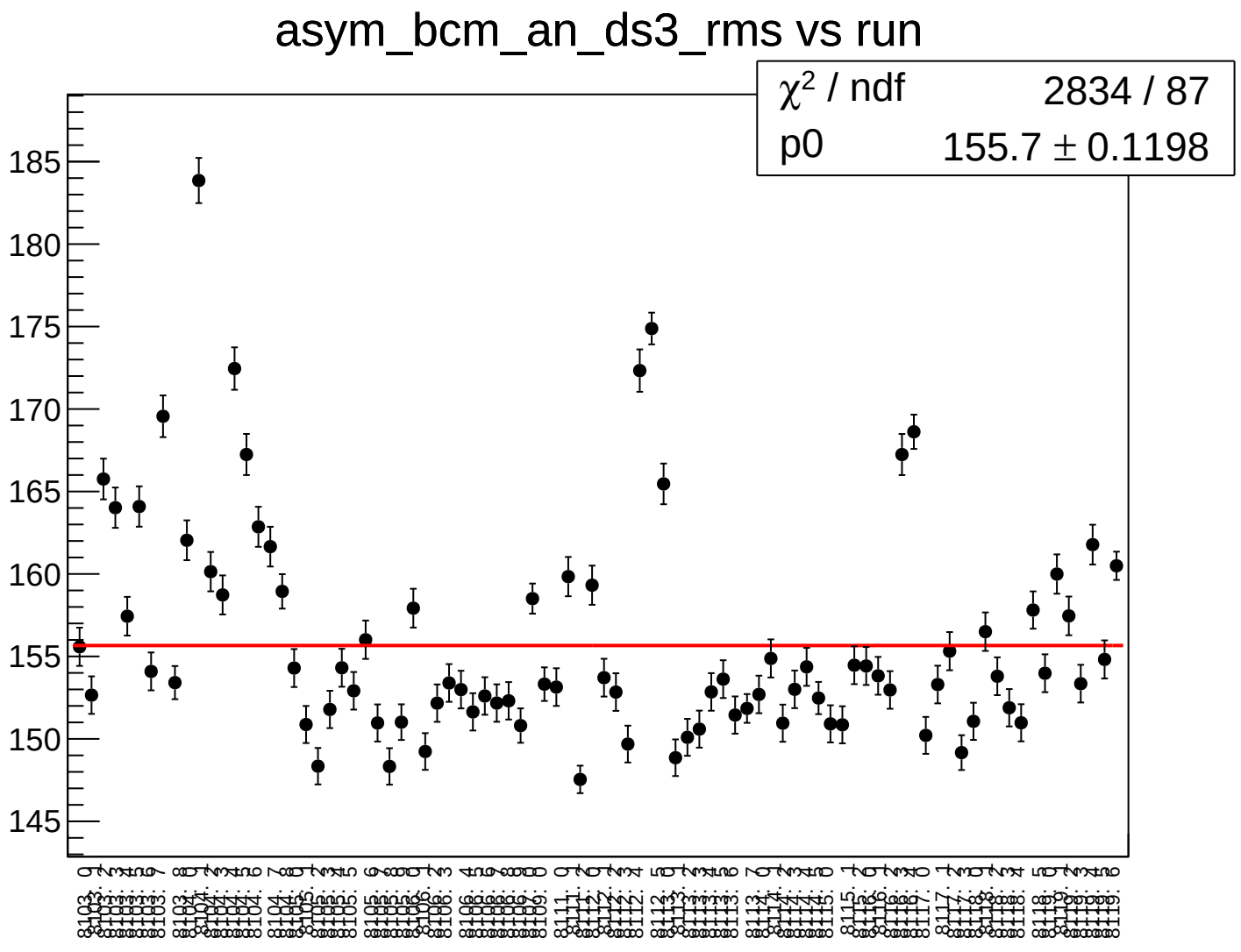

asym_bcm_an_ds_mean vs run
χ² / ndf 20.08 / 87
p0 −211.3 ± 168.6
pull
Entries 88
Mean 713.2
Std Dev 685.5

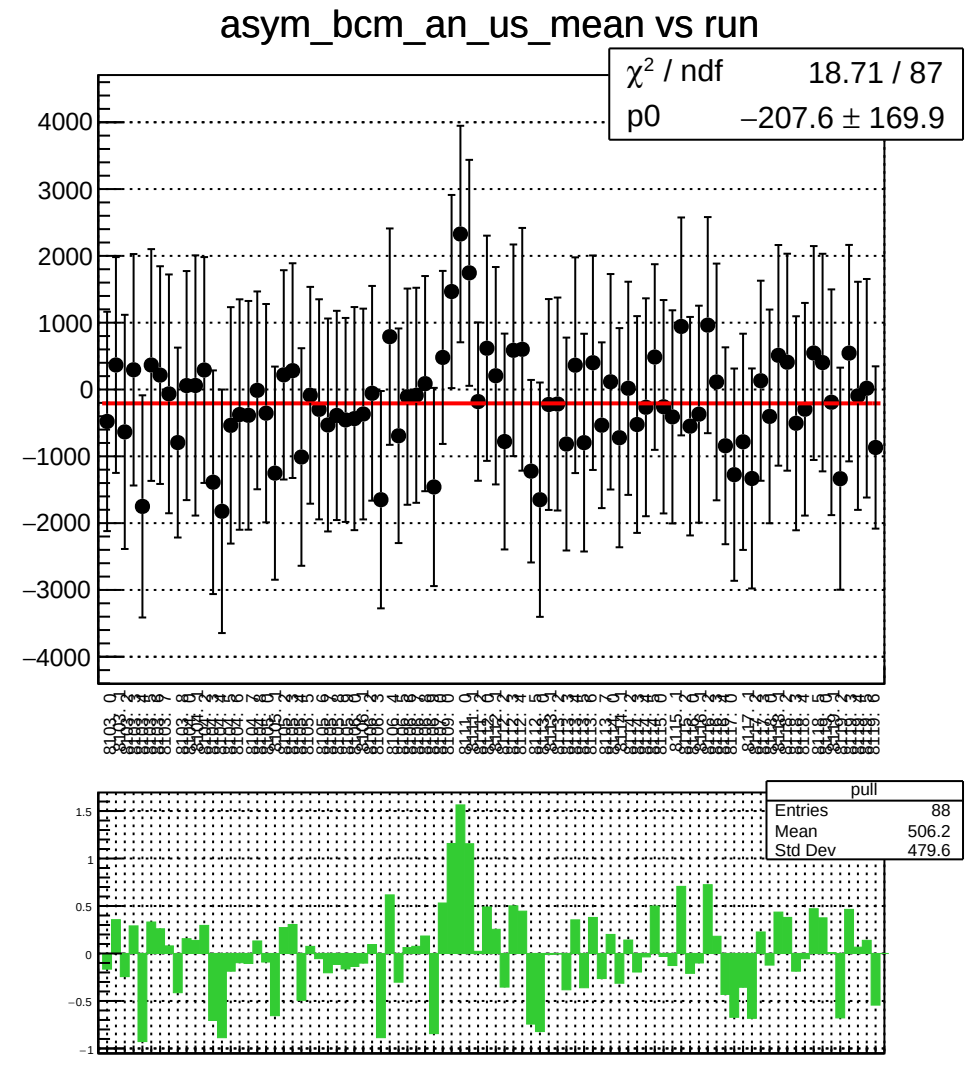

pull1D
Entries 88
Mean 0.001011
Std Dev 0.4777

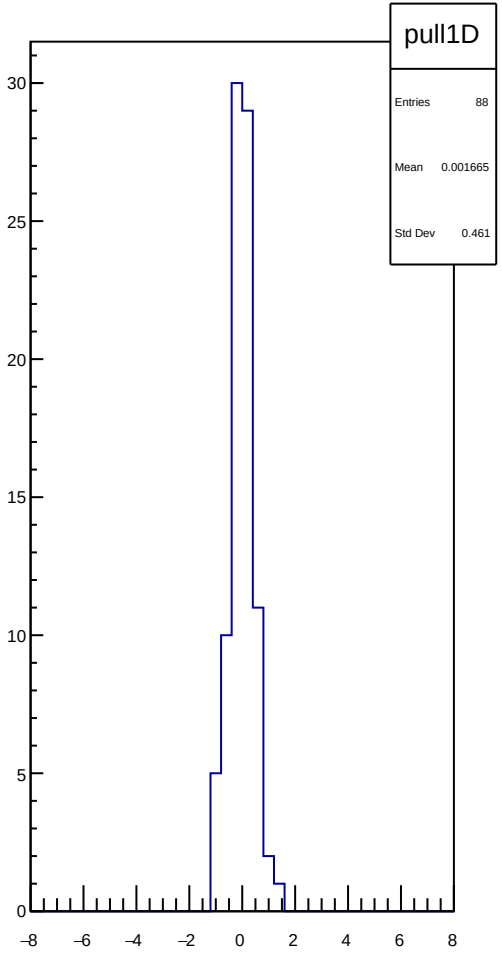

asym_bcm_an_ds_rms vs run
χ^2 / ndf 2841 / 87
p0 155 ± 0.1192
185
180
175
170
165
160
155
150
145

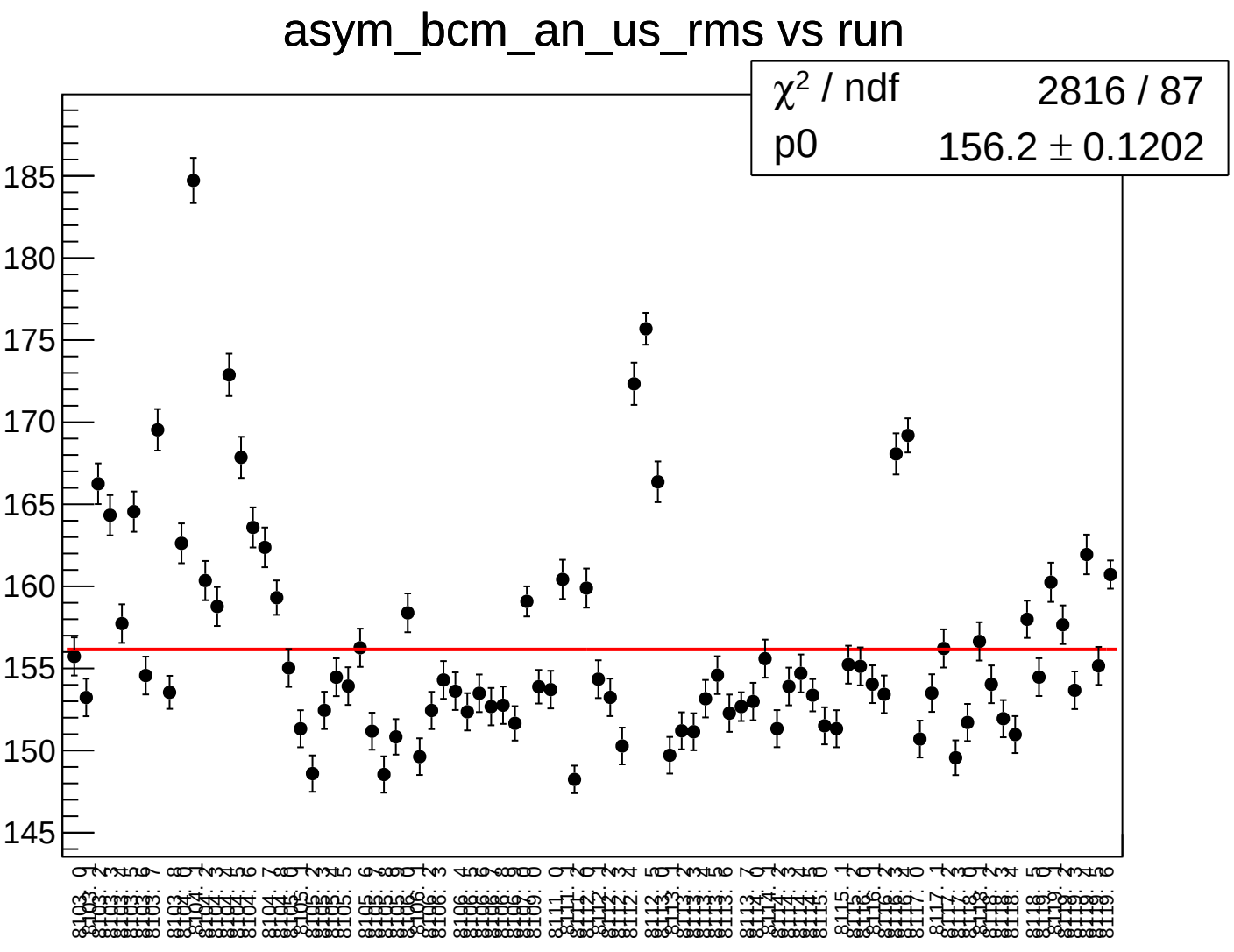

asym_bcm_an_ds3_mean vs run
χ² / ndf 19.21 / 87
p0 −215.7 ± 169.4
pull
Entries 88
Mean 1173
Std Dev 1141

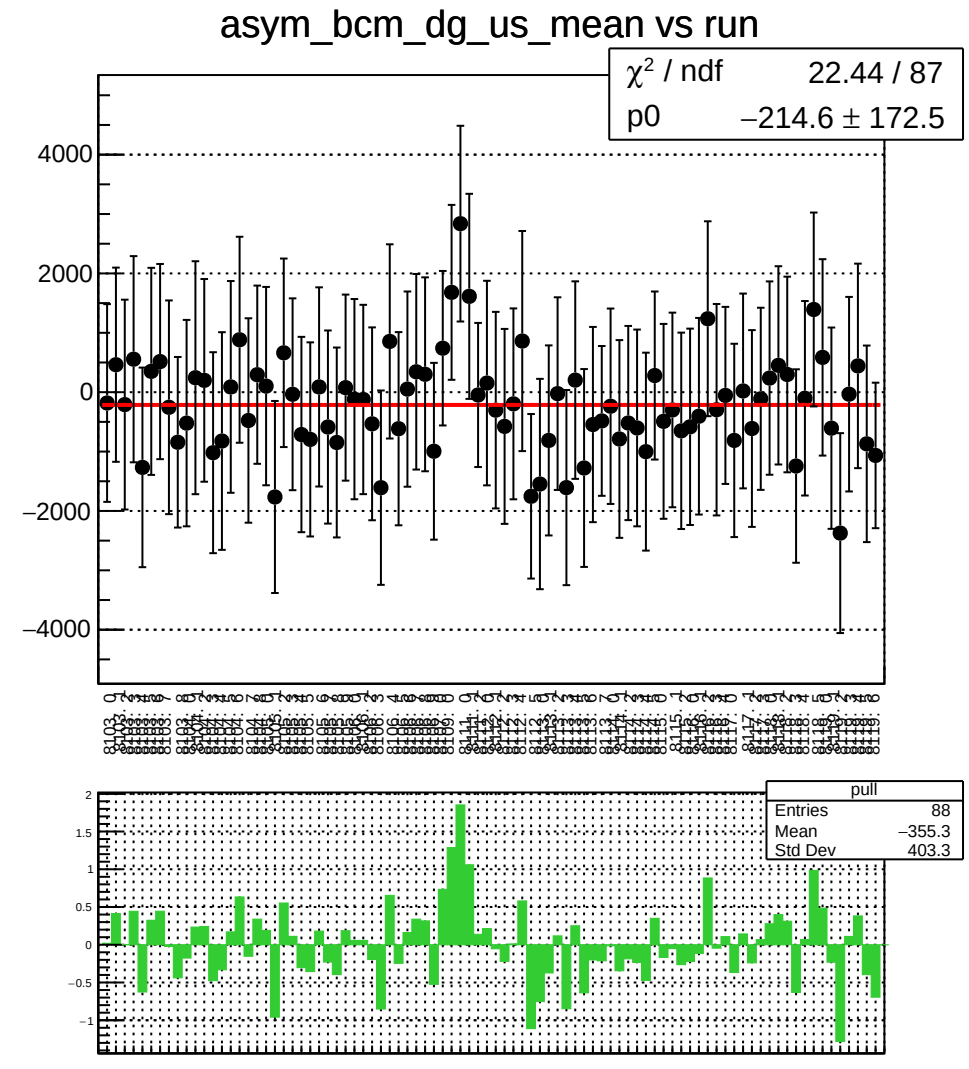

pull1D
Entries 88
Mean 0.0006967
Std Dev 0.4673

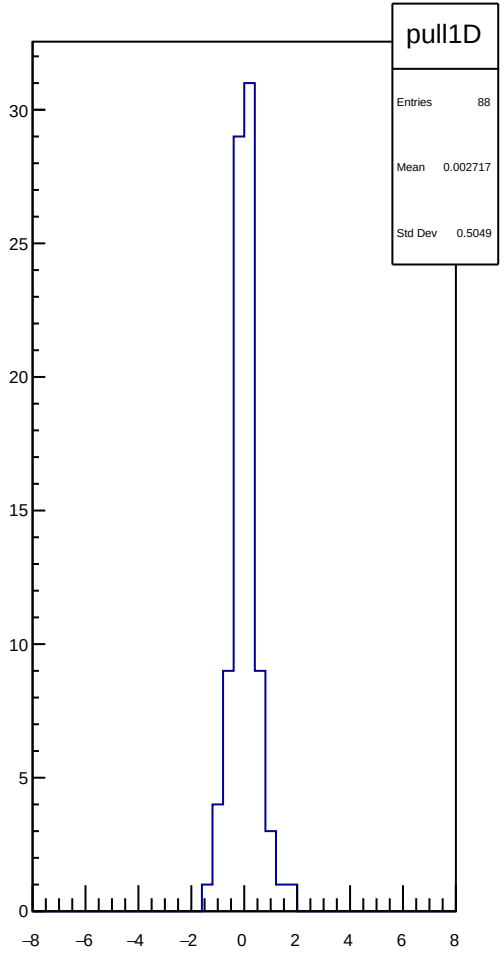

asym_bcm_an_ds3_rms vs run
χ² / ndf 2834 / 87
p0 155.7 ± 0.1198
185
180
175
170
165
160
155
150
145

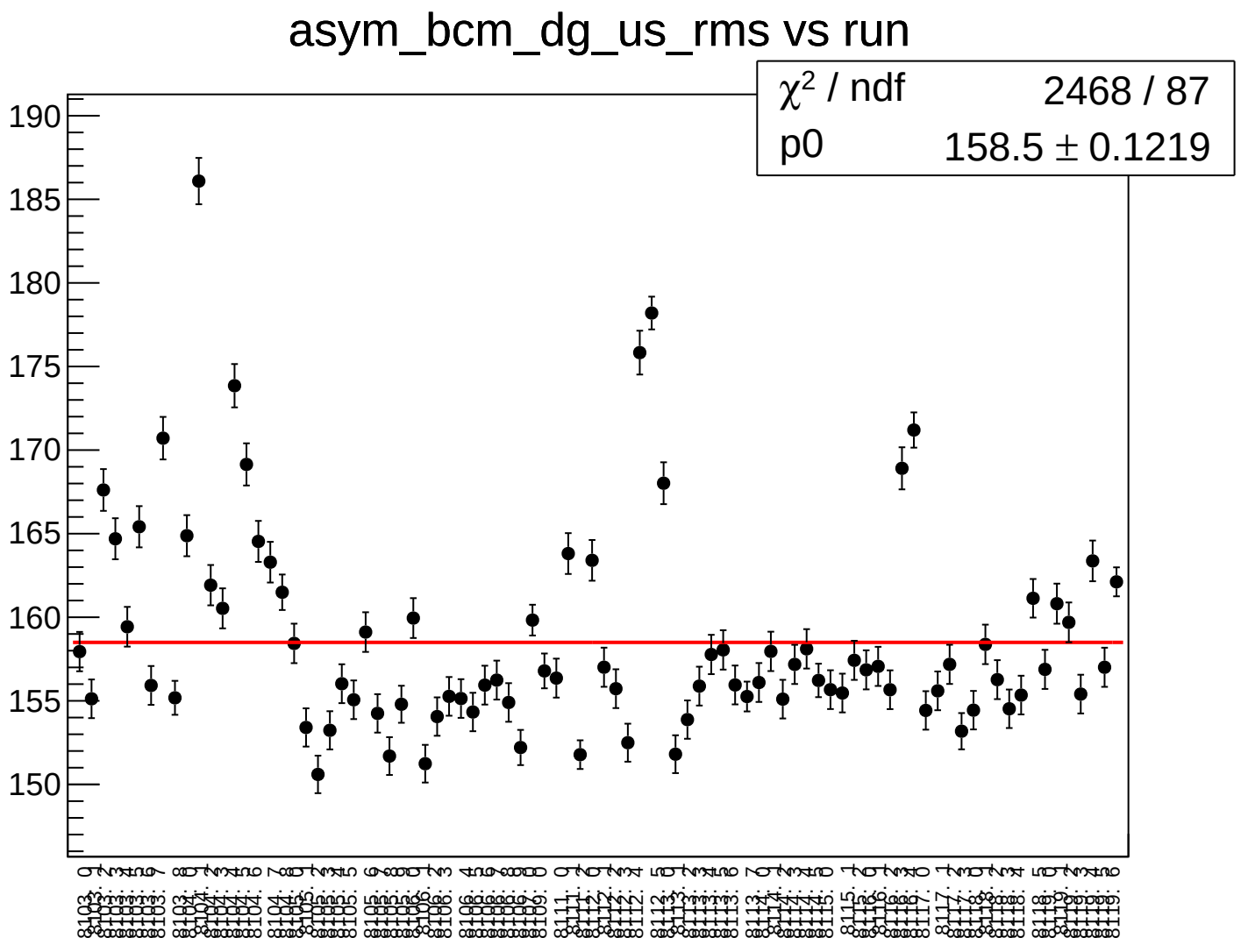

asym_bcm_an_us_mean vs run
χ² / ndf 18.71 / 87
p0 −207.6 ± 169.9
pull
Entries 88
Mean 506.2
Std Dev 479.6

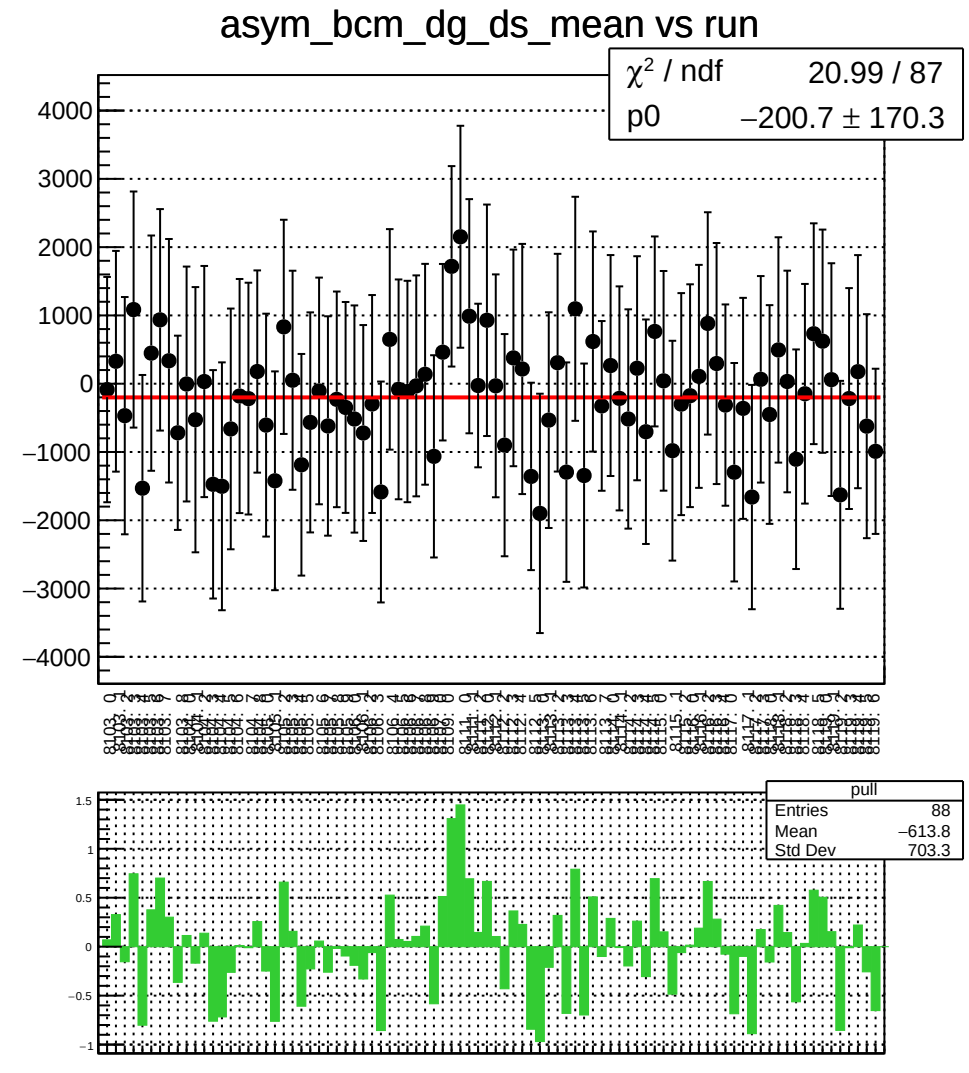

pull1D
Entries 88
Mean 0.001665
Std Dev 0.461

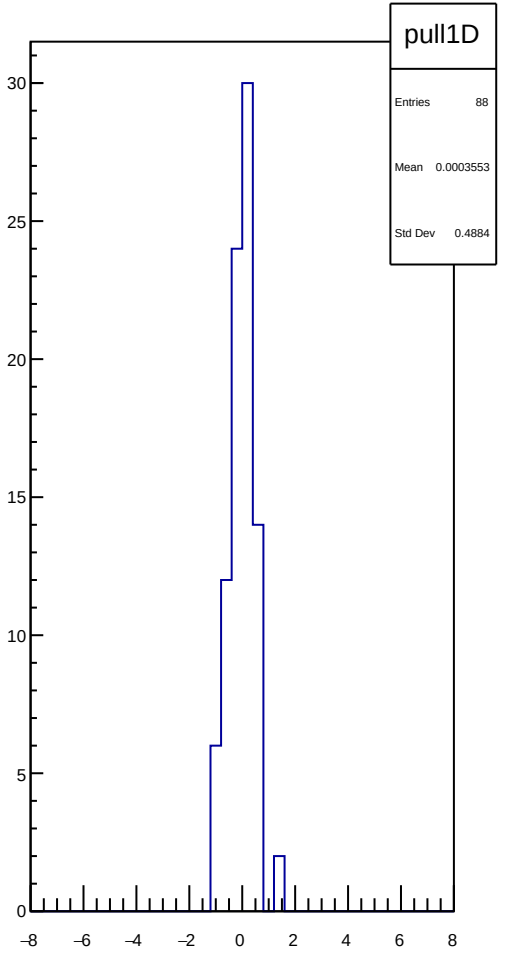

asym_bcm_an_us_rms vs run
χ² / ndf 2816 / 87
p0 156.2 ± 0.1202
185
180
175
170
165
160
155
150
145

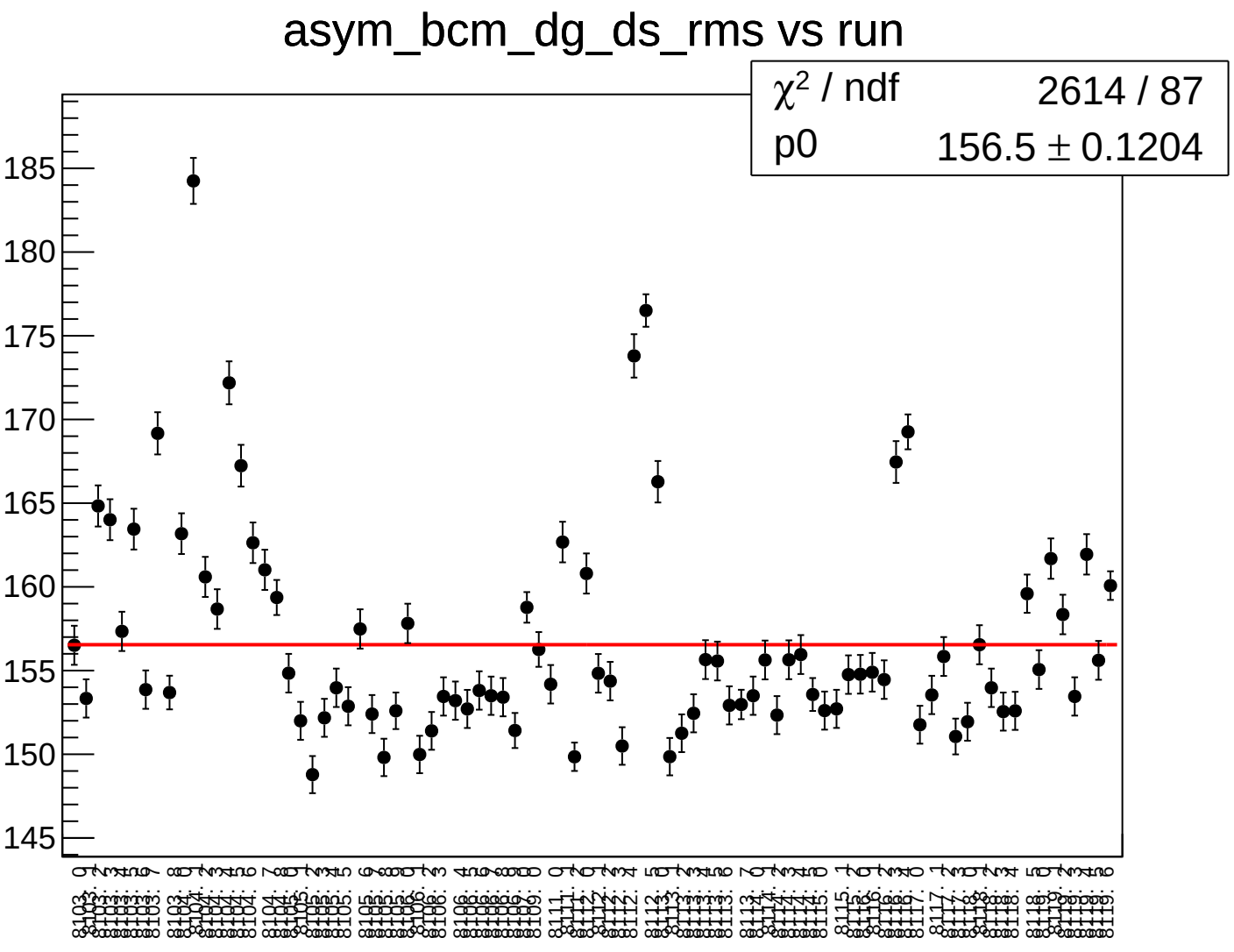

asym_bcm_dg_us_mean vs run
χ² / ndf 22.44 / 87
p0 −214.6 ± 172.5
4000
2000
0
−2000
−4000
pull
Entries 88
Mean −355.3
Std Dev 403.3
2
1.5
1
0.5
0
−0.5
−1

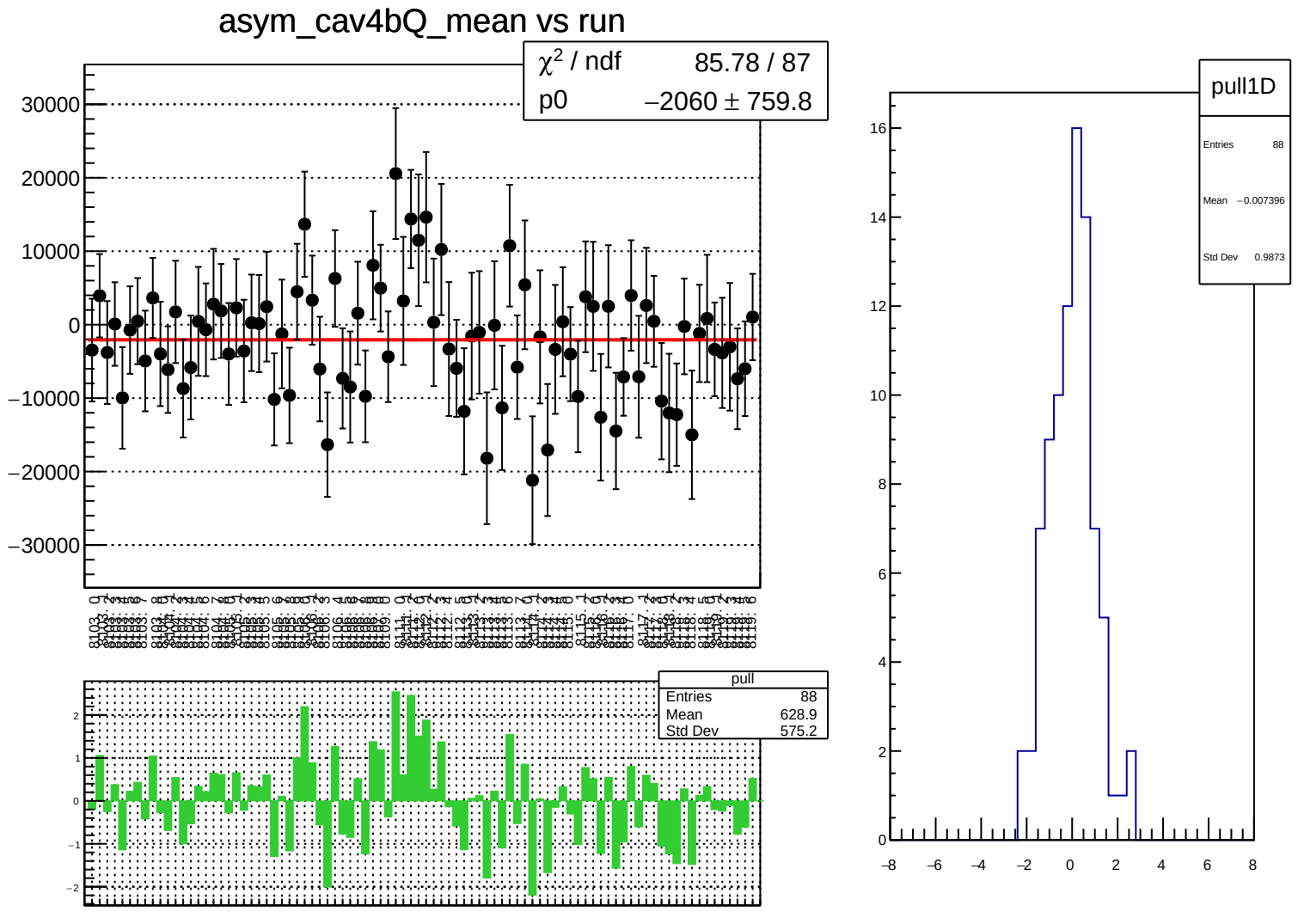

pull1D
Entries 88
Mean 0.002717
Std Dev 0.5049
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

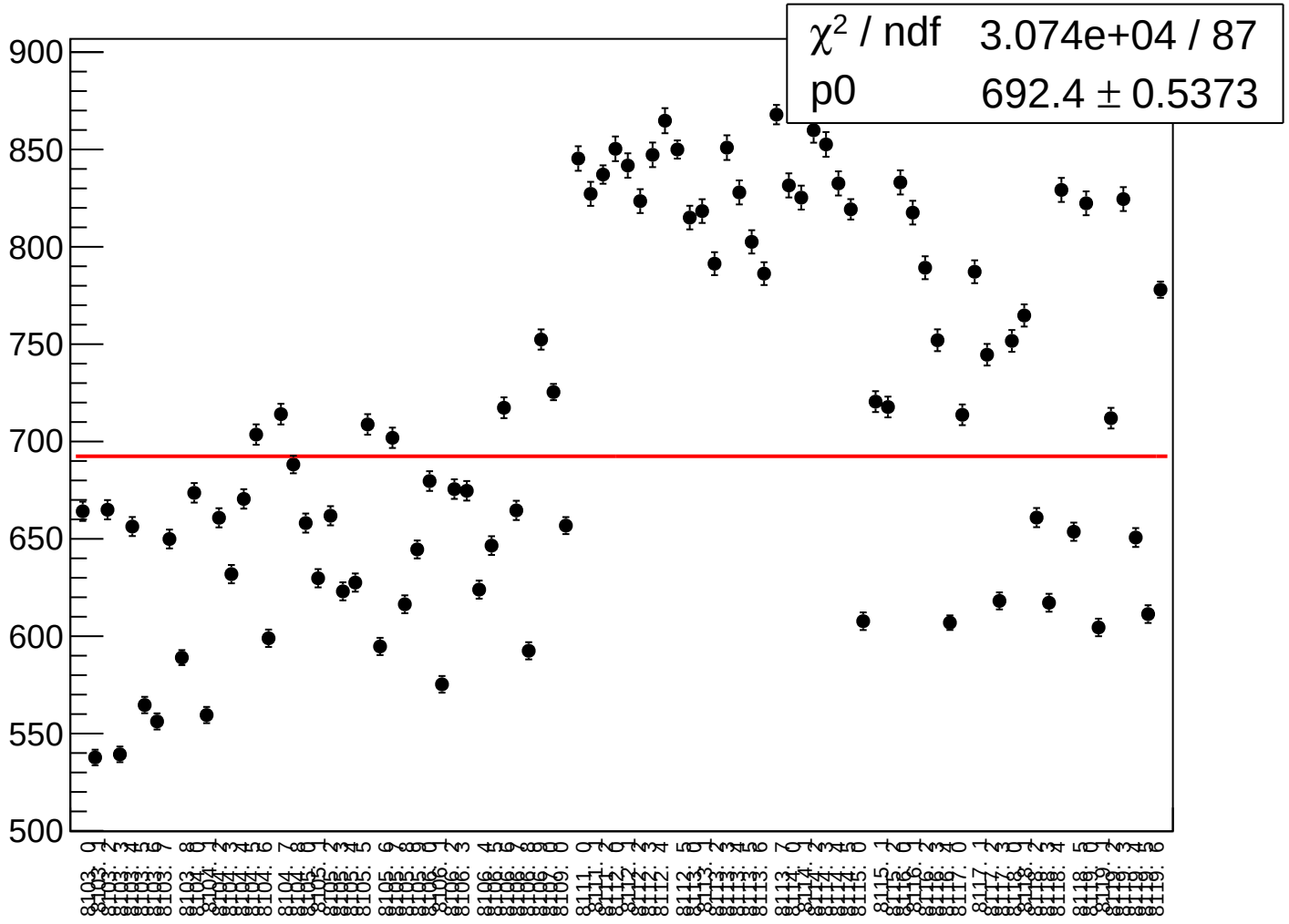

asym_bcm_dg_us_rms vs run
χ² / ndf 2468 / 87
p0 158.5 ± 0.1219
190
185
180
175
170
165
160
155
150

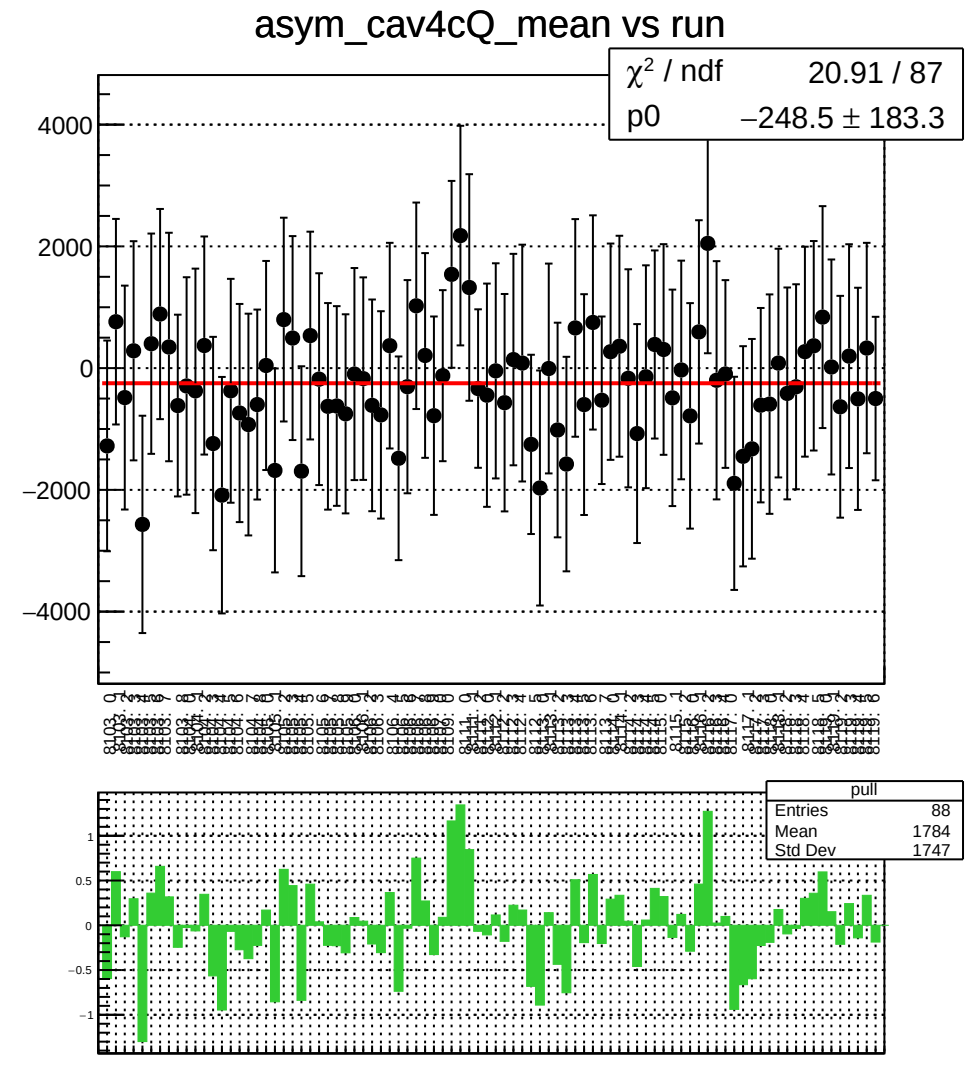

asym_bcm_dg_ds_mean vs run
χ² / ndf 20.99 / 87
p0 −200.7 ± 170.3
pull
Entries 88
Mean −613.8
Std Dev 703.3

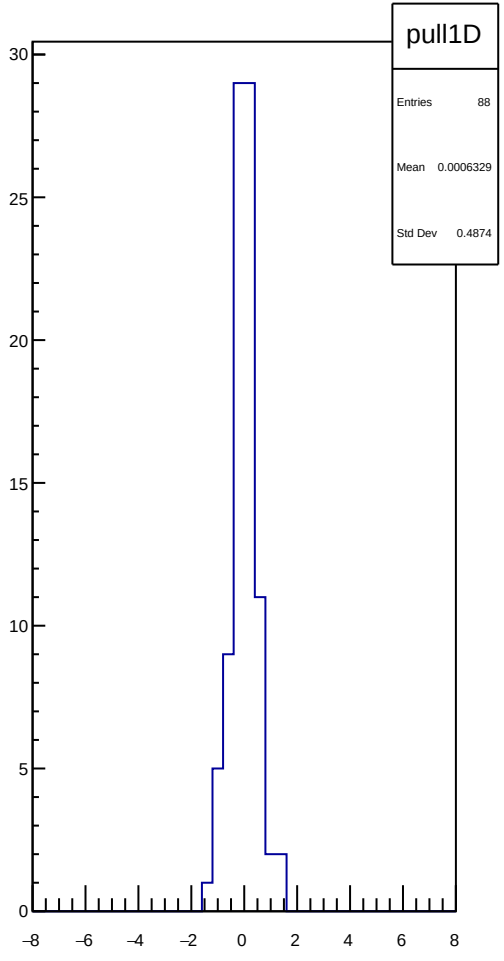

pull1D
Entries 88
Mean 0.0003553
Std Dev 0.4884

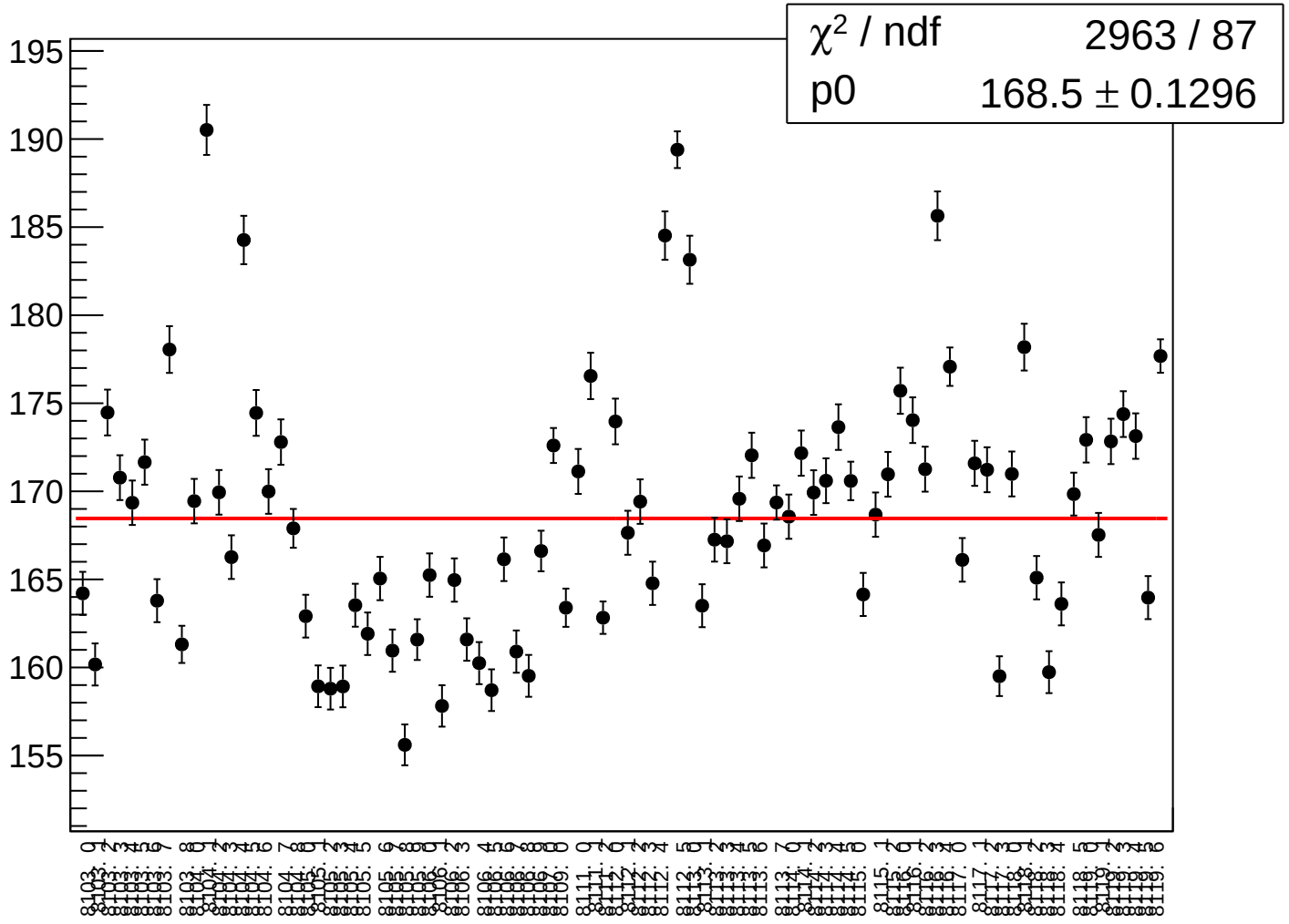

asym_bcm_dg_ds_rms vs run
χ² / ndf 2614 / 87
p0 156.5 ± 0.1204
185
180
175
170
165
160
155
150
145

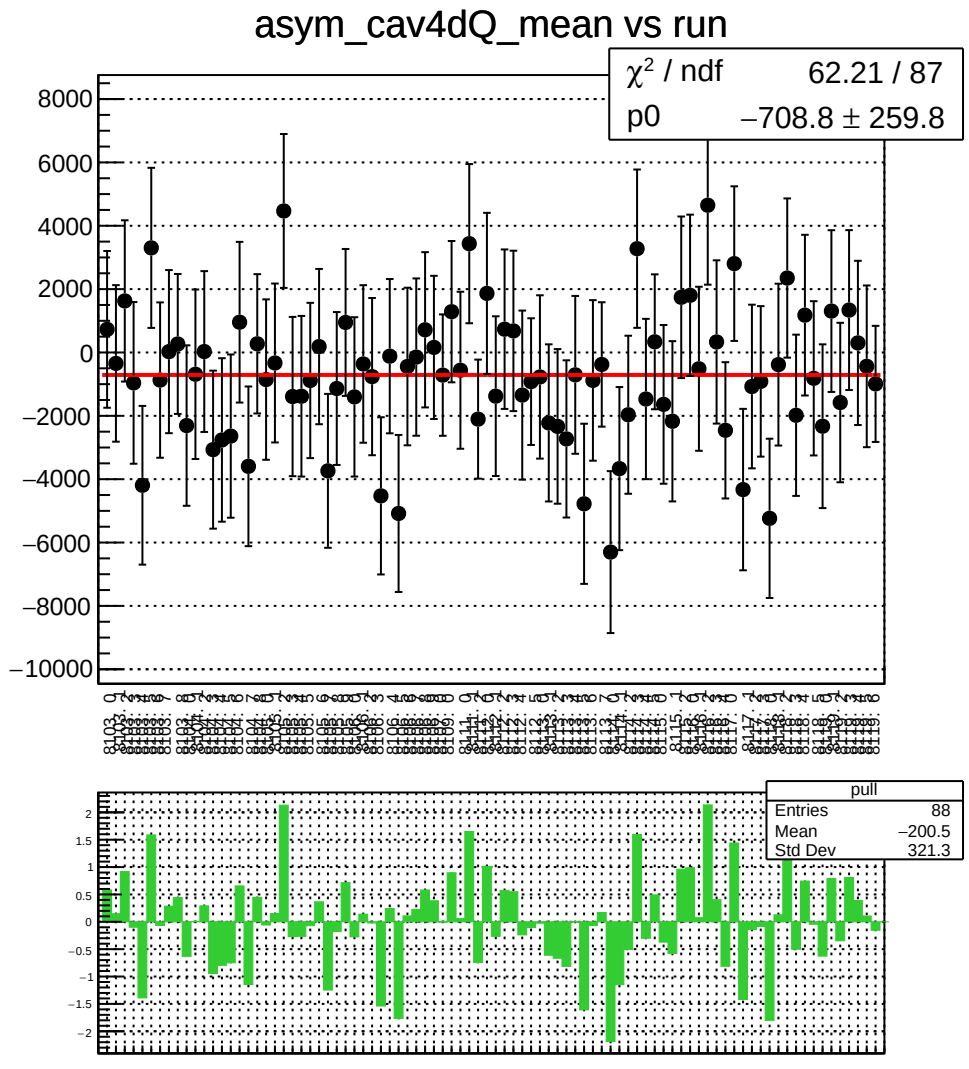

asym_cav4bQ_mean vs run
χ² / ndf 85.78 / 87
p0 −2060 ± 759.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 628.9
Std Dev 575.2
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.007396
Std Dev 0.9873
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

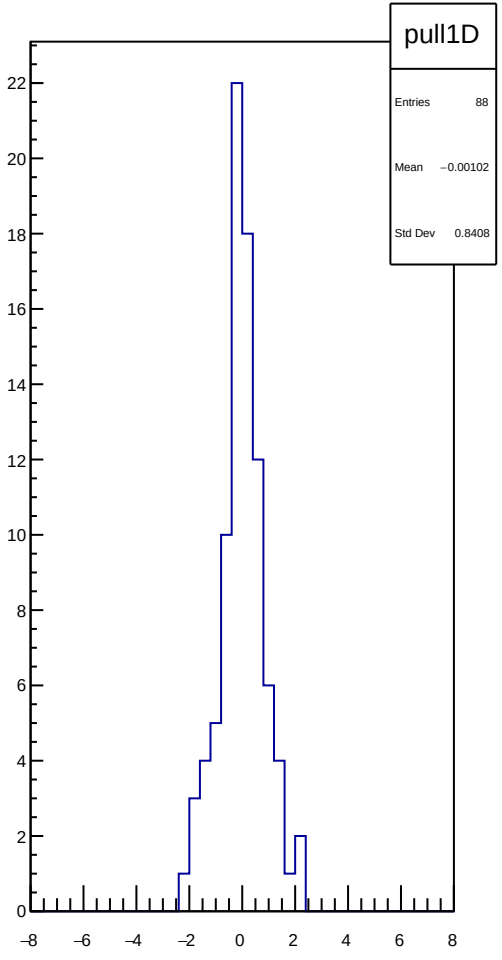

asym_cav4bQ_rms vs run
χ² / ndf 3.074e+04 / 87
p0 692.4 ± 0.5373
900
850
800
750
700
650
600
550
500

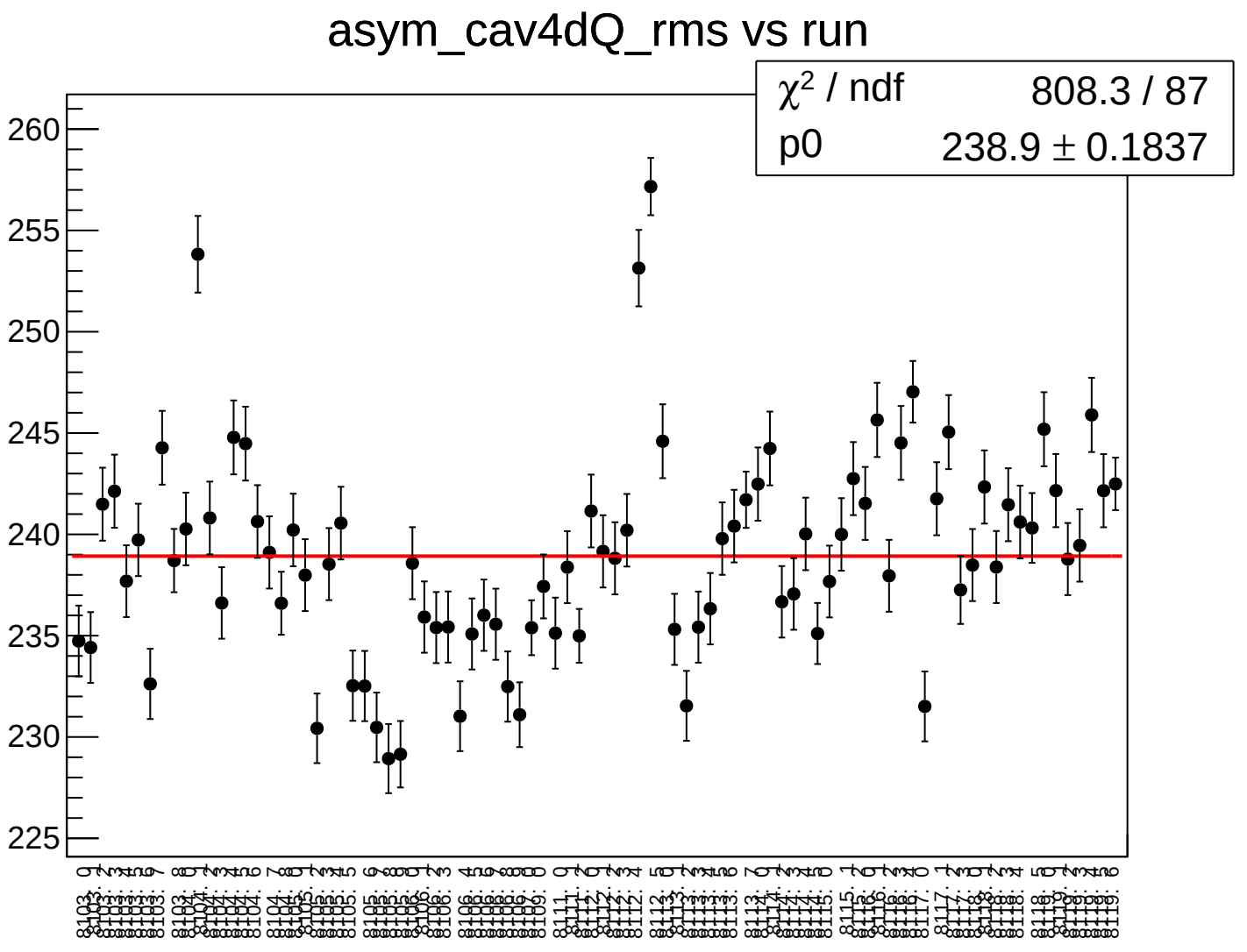

asym_cav4cQ_mean vs run
χ² / ndf 20.91 / 87
p0 −248.5 ± 183.3
4000
2000
0
−2000
−4000
pull
Entries 88
Mean 1784
Std Dev 1747
1
0.5
0
−0.5
−1

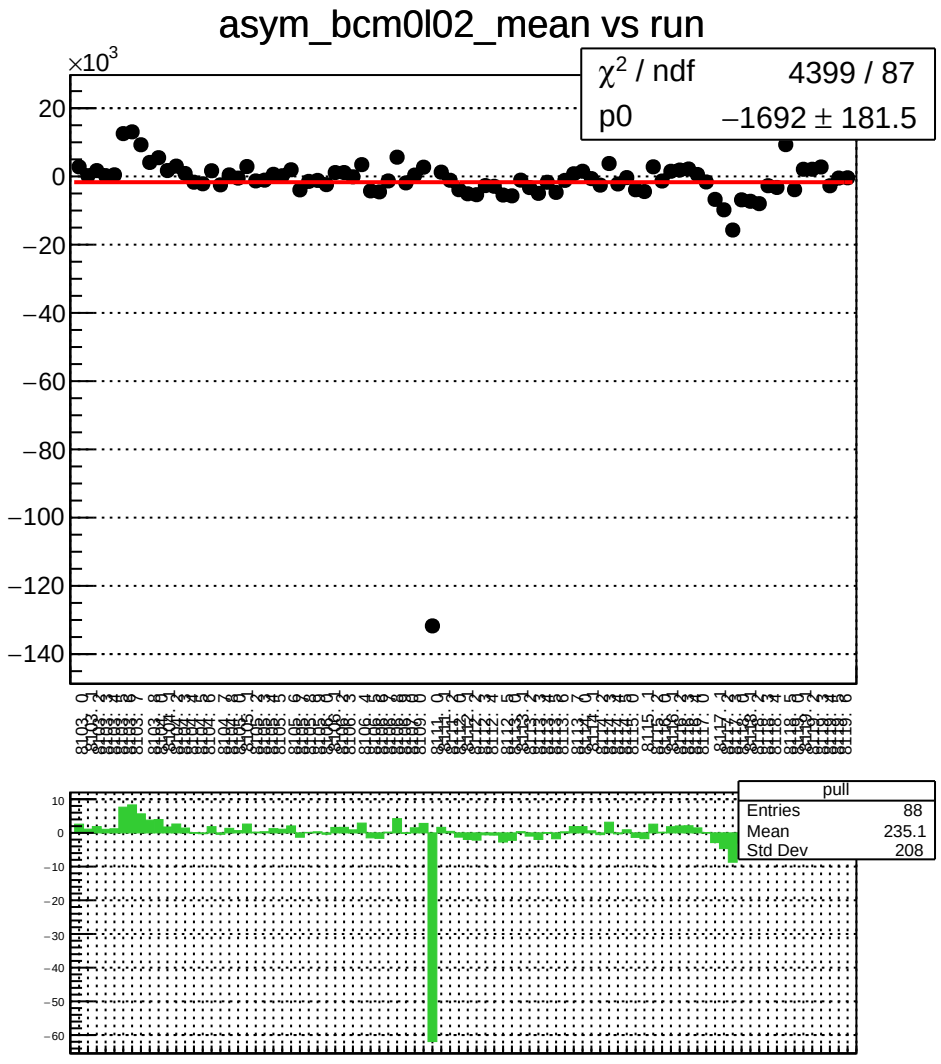

pull1D
Entries 88
Mean 0.0006329
Std Dev 0.4874
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

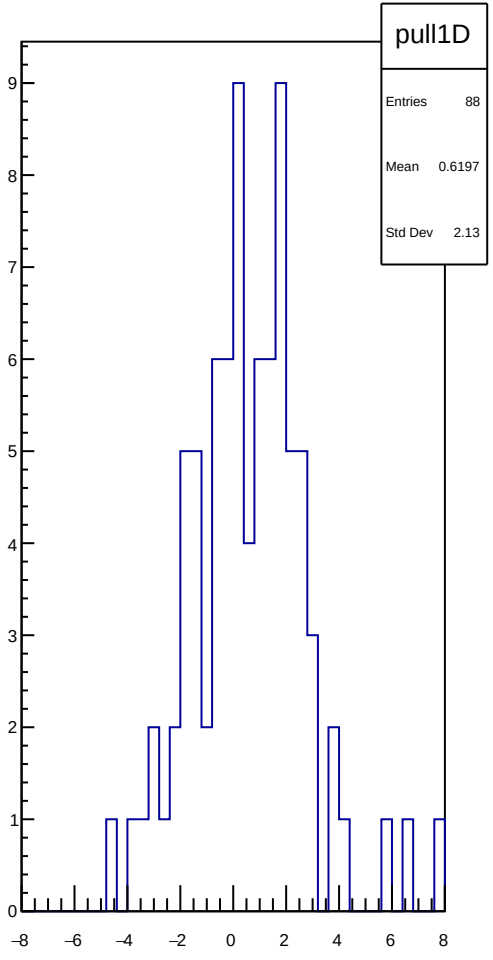

asym_cav4cQ_rms vs run
χ² / ndf 2963 / 87
p0 168.5 ± 0.1296
195
190
185
180
175
170
165
160
155

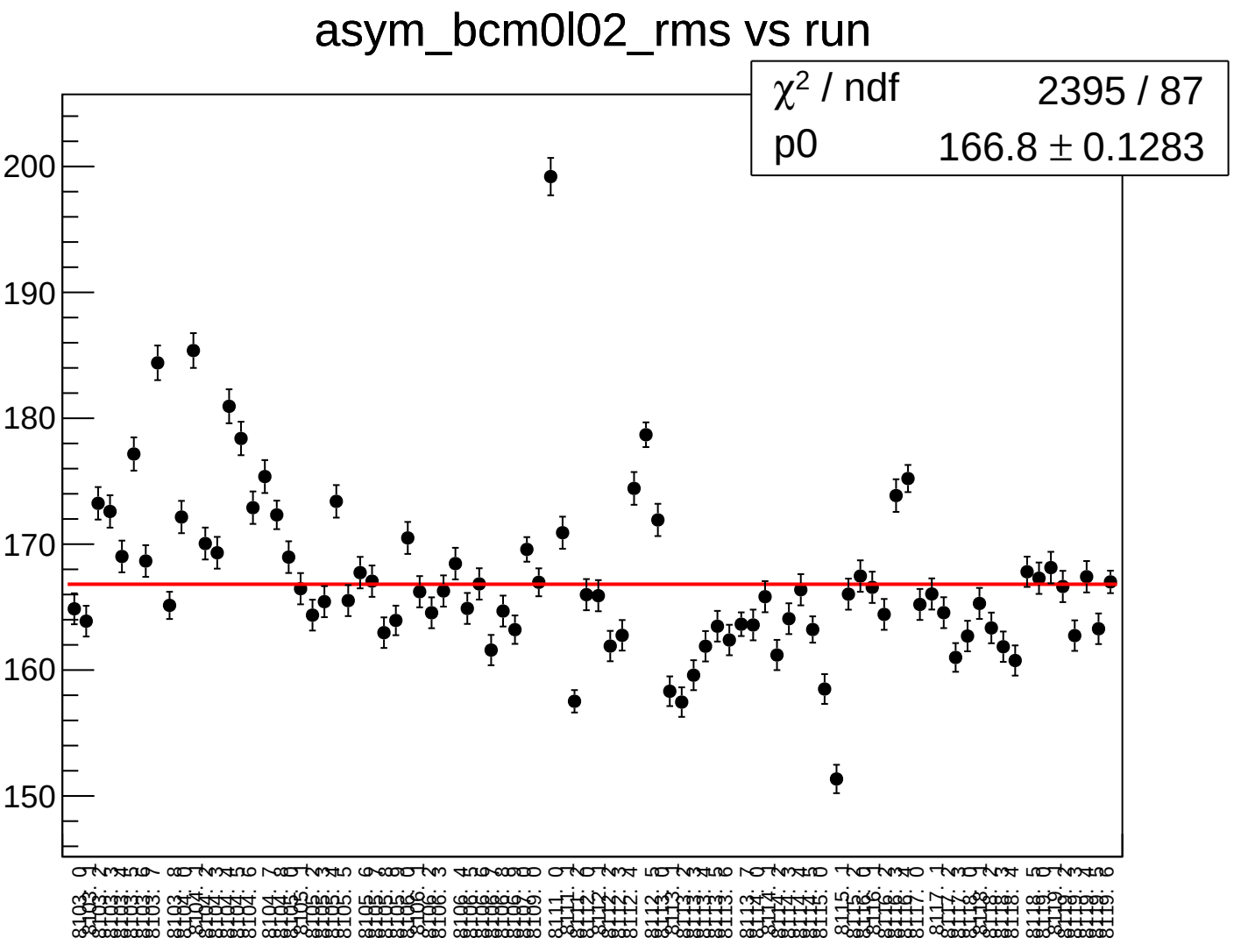

asym_cav4dQ_mean vs run
χ² / ndf 62.21 / 87
p0 −708.8 ± 259.8
pull
Entries 88
Mean −200.5
Std Dev 321.3

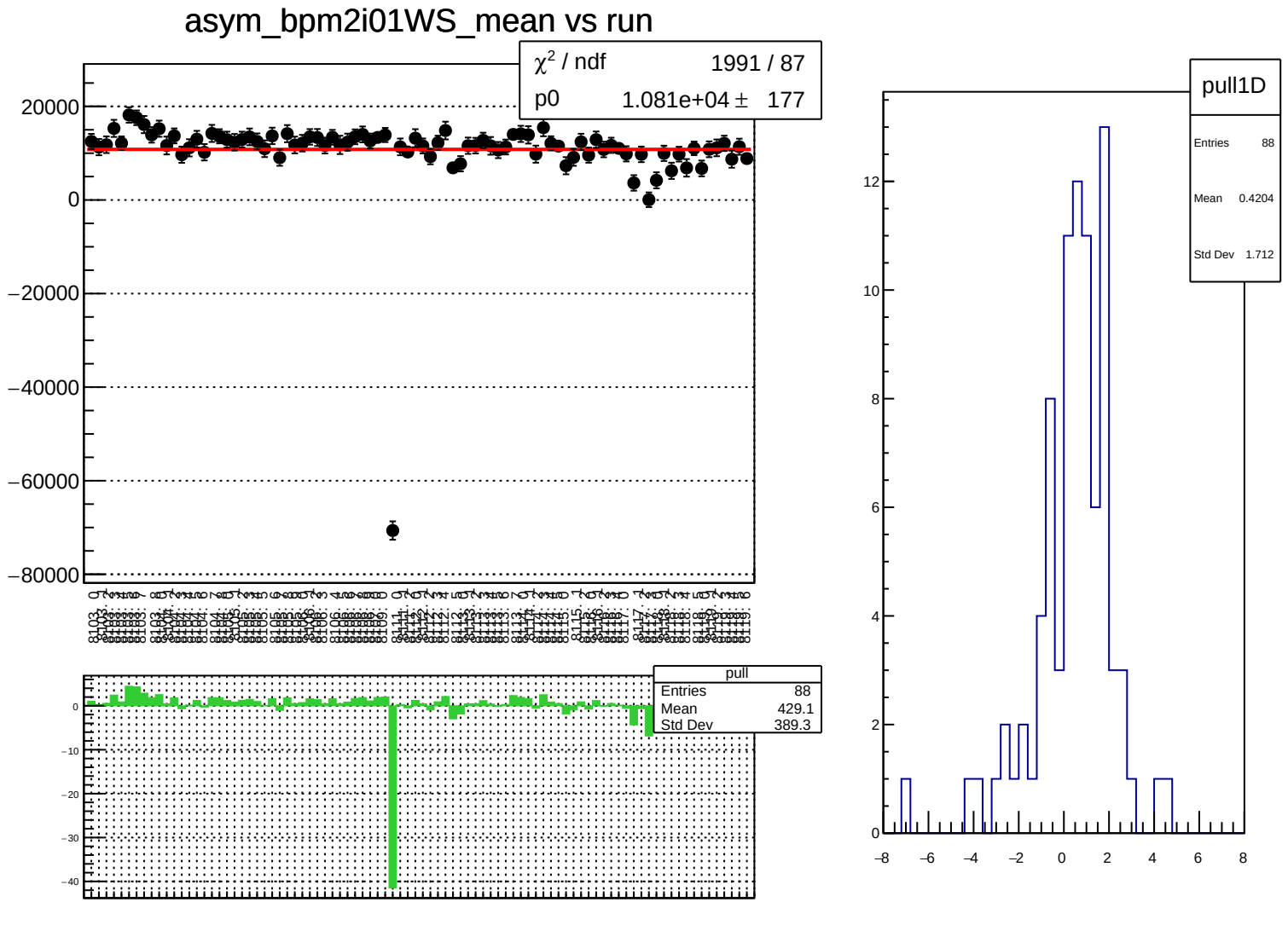

pull1D
Entries 88
Mean −0.00102
Std Dev 0.8408

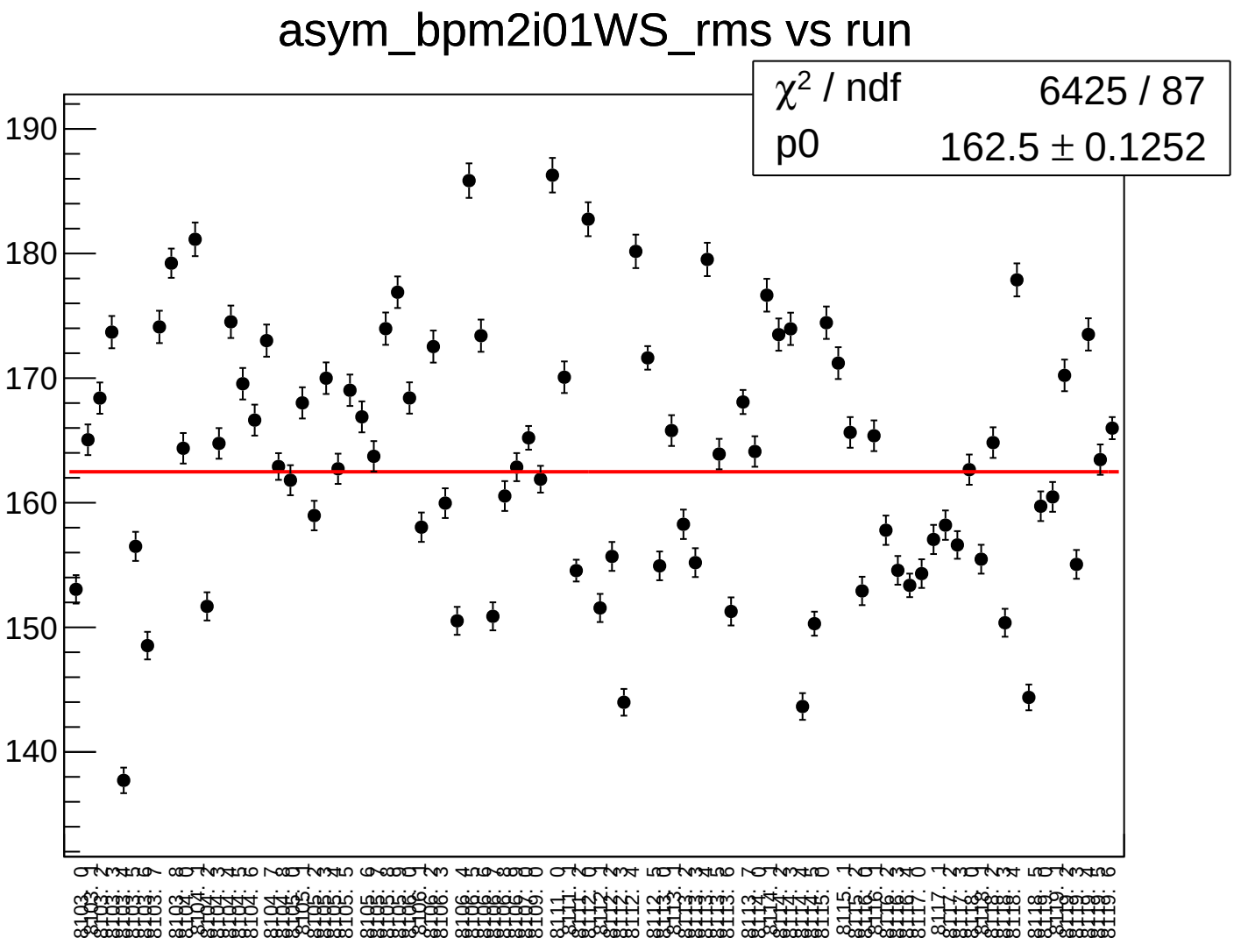

asym_cav4dQ_rms vs run
χ² / ndf 808.3 / 87
p0 238.9 ± 0.1837
260
255
250
245
240
235
230
225

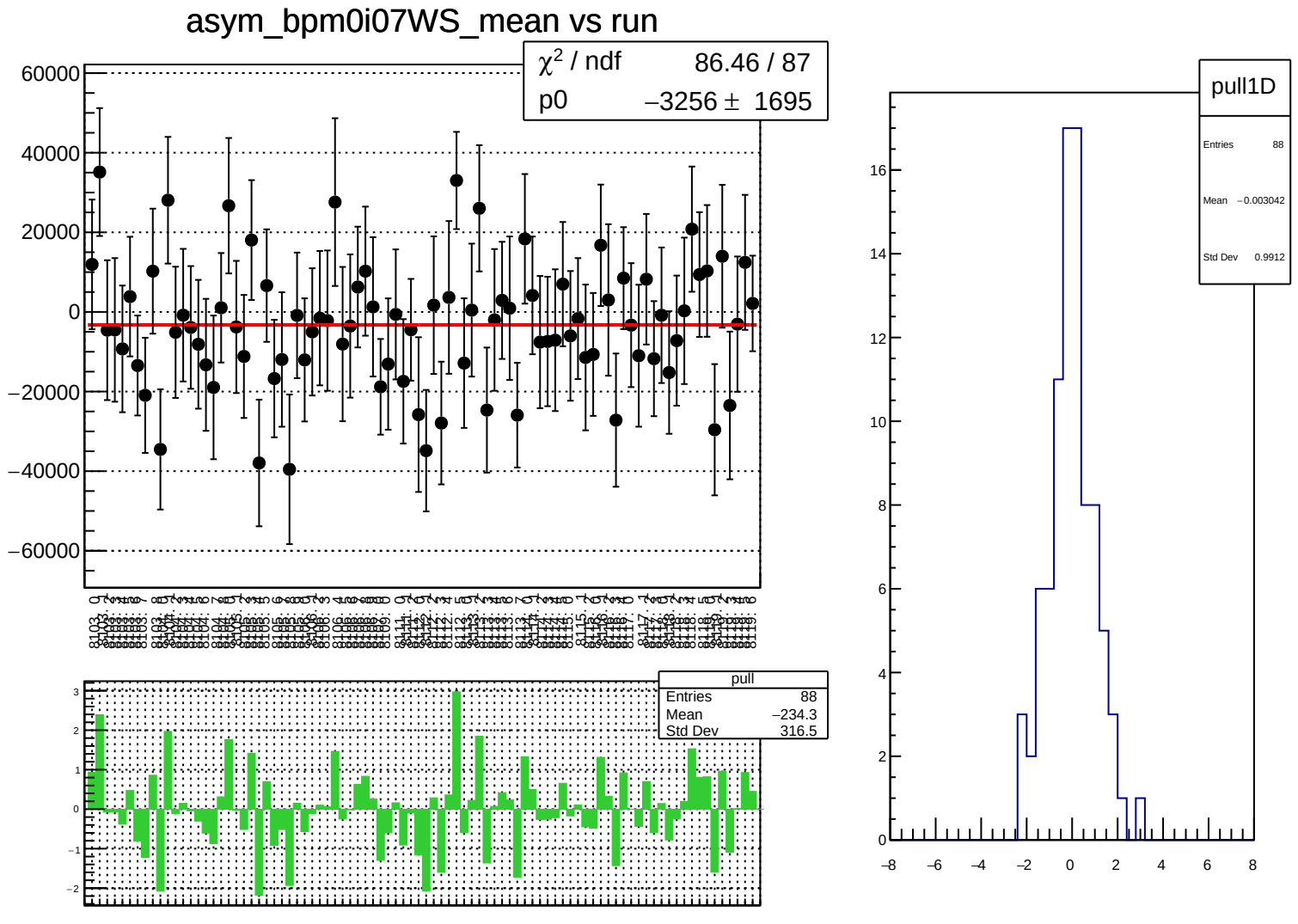

asym_bcm0l02_mean vs run
×10^3
χ^2 / ndf 4399 / 87
p0 −1692 ± 181.5
pull
Entries 88
Mean 235.1
Std Dev 208

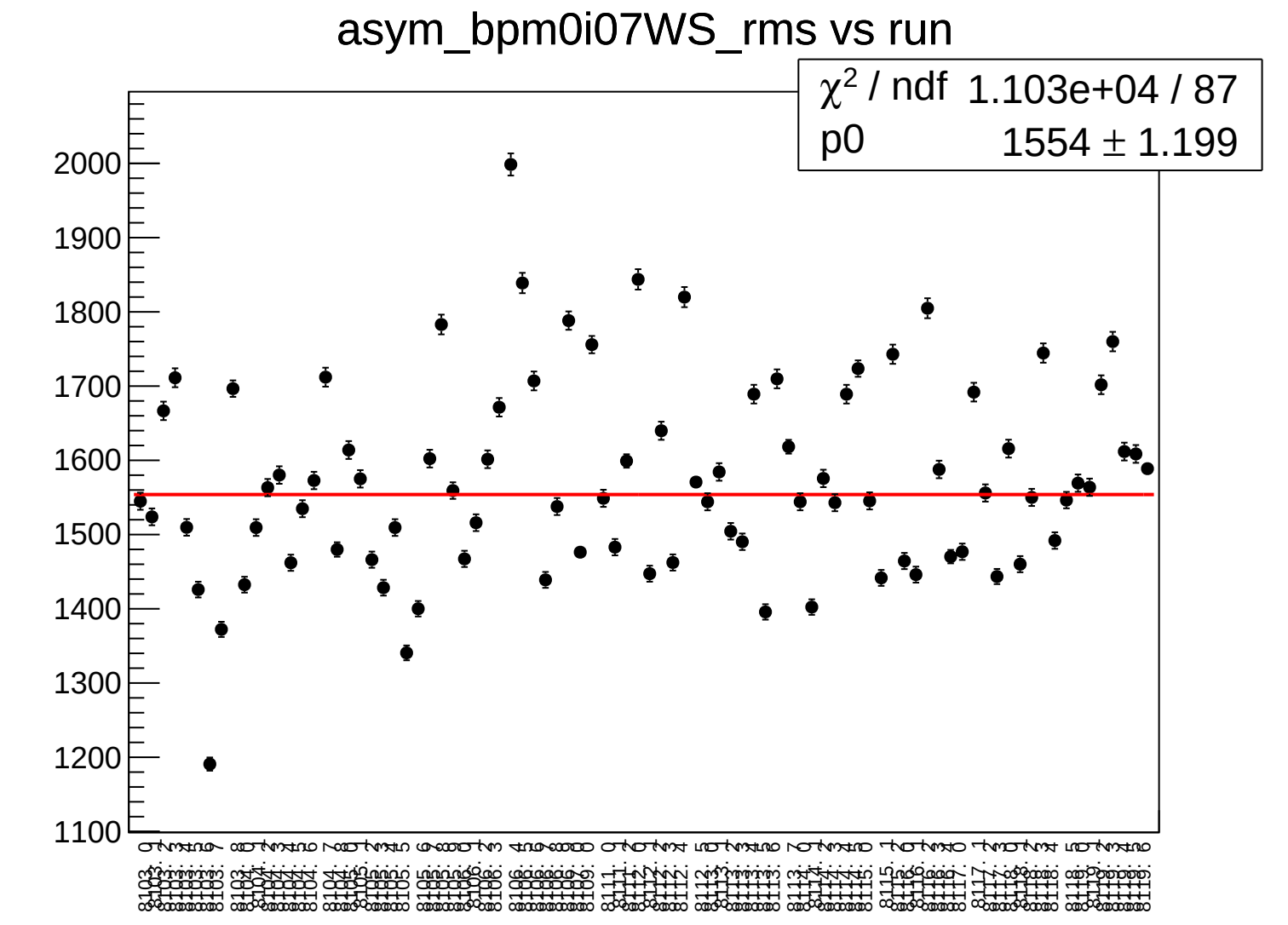

pull1D
Entries 88
Mean 0.6197
Std Dev 2.13

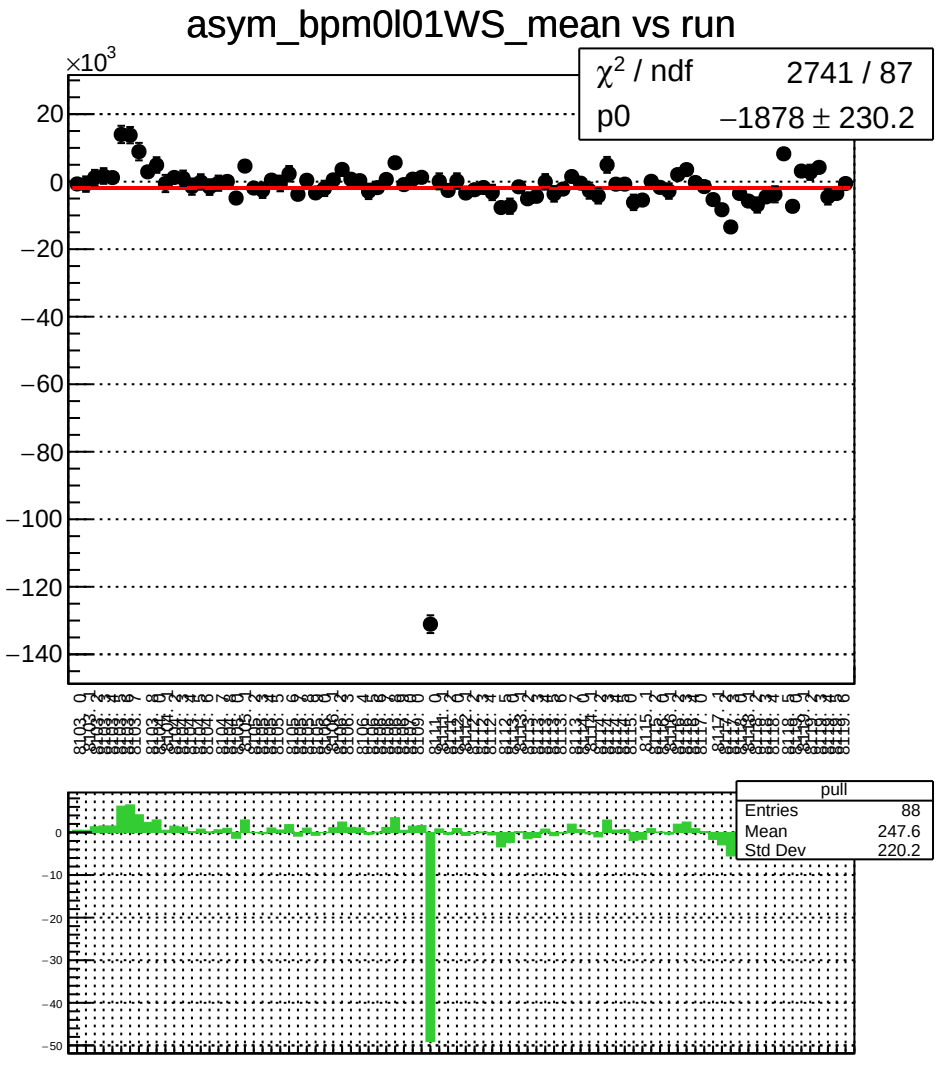

asym_bcm0l02_rms vs run
χ² / ndf 2395 / 87
p0 166.8 ± 0.1283
200
190
180
170
160
150

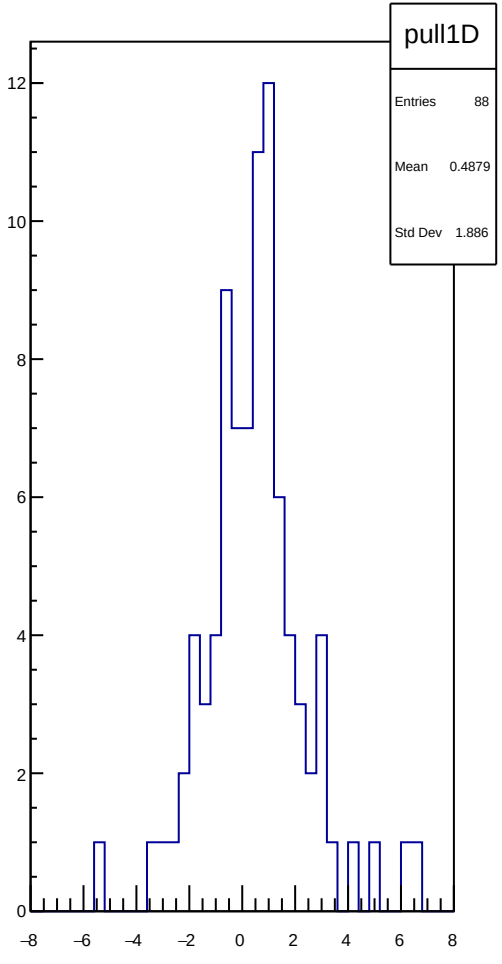

asym_bpm2i01WS_mean vs run
χ² / ndf 1991 / 87
p0 1.081e+04 ± 177
20000
0
−20000
−40000
−60000
−80000
pull
Entries 88
Mean 429.1
Std Dev 389.3
0
−10
−20
−30
−40
pull1D
Entries 88
Mean 0.4204
Std Dev 1.712
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

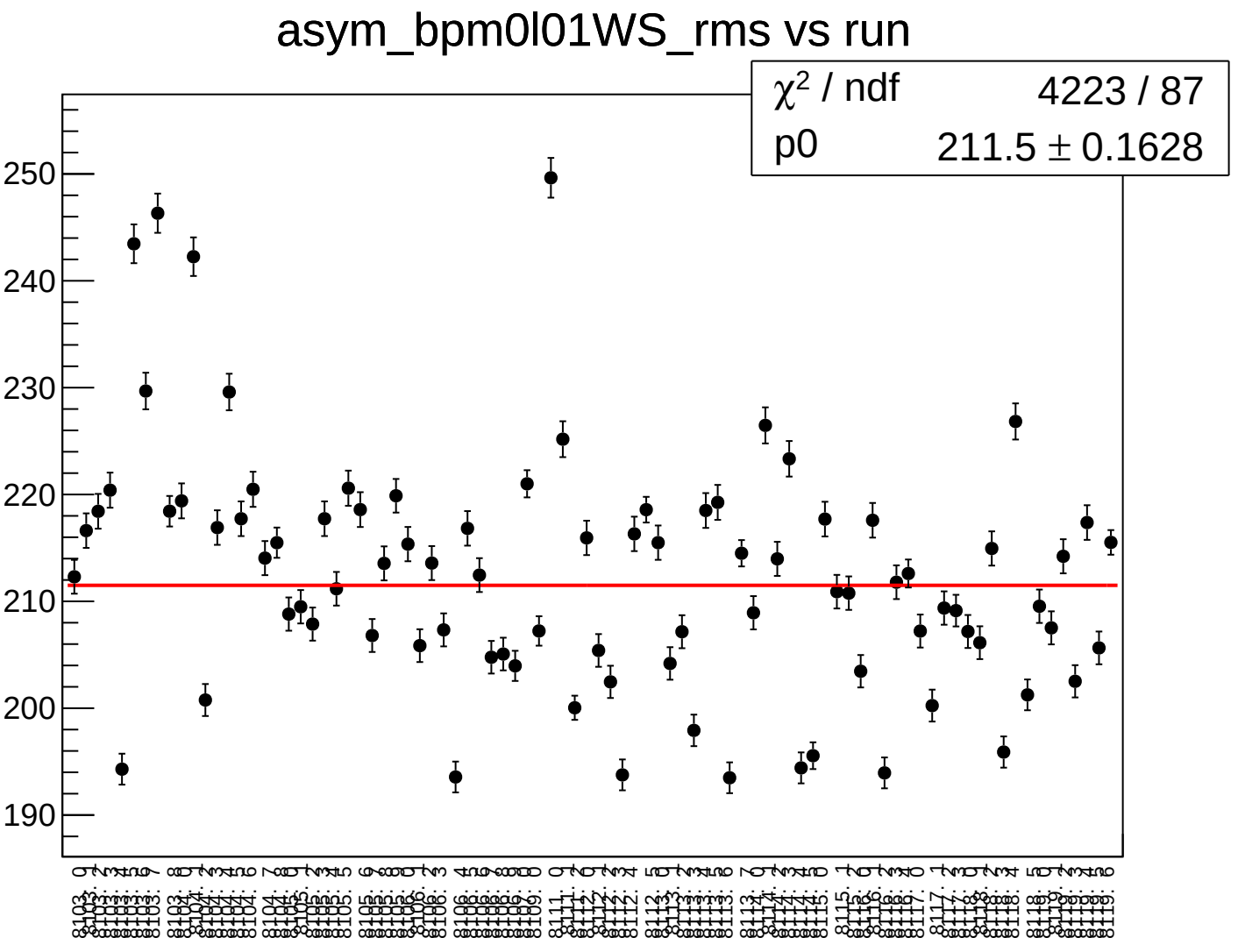

asym_bpm2i01WS_rms vs run
χ² / ndf 6425 / 87
p0 162.5 ± 0.1252
190
180
170
160
150
140

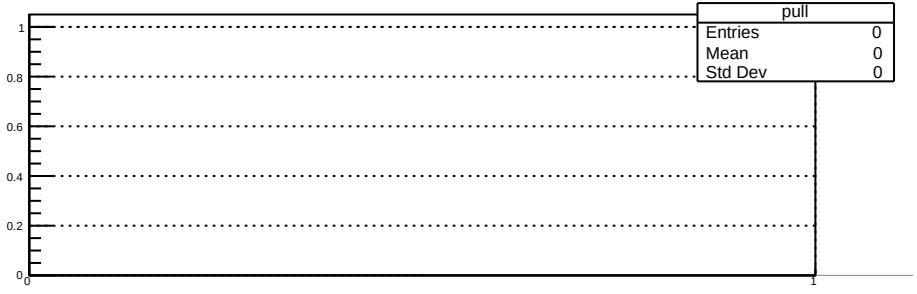

asym_bpm0i07WS_mean vs run
χ² / ndf 86.46 / 87
p0 −3256 ± 1695
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean −234.3
Std Dev 316.5
3
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.003042
Std Dev 0.9912
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

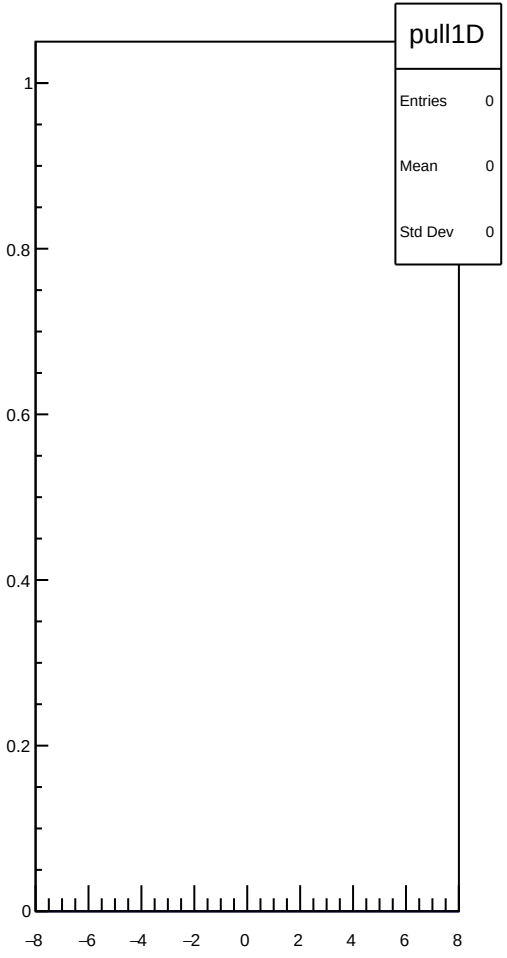

asym_bpm0i07WS_rms vs run
χ^2 / ndf 1.103e+04 / 87
p0 1554 ± 1.199
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100

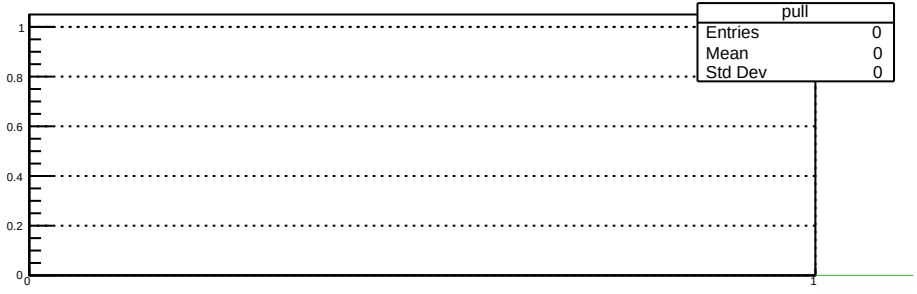

asym_bpm0l01WS_mean vs run
×10^3
χ^2 / ndf 2741 / 87
p0 −1878 ± 230.2
pull
Entries 88
Mean 247.6
Std Dev 220.2

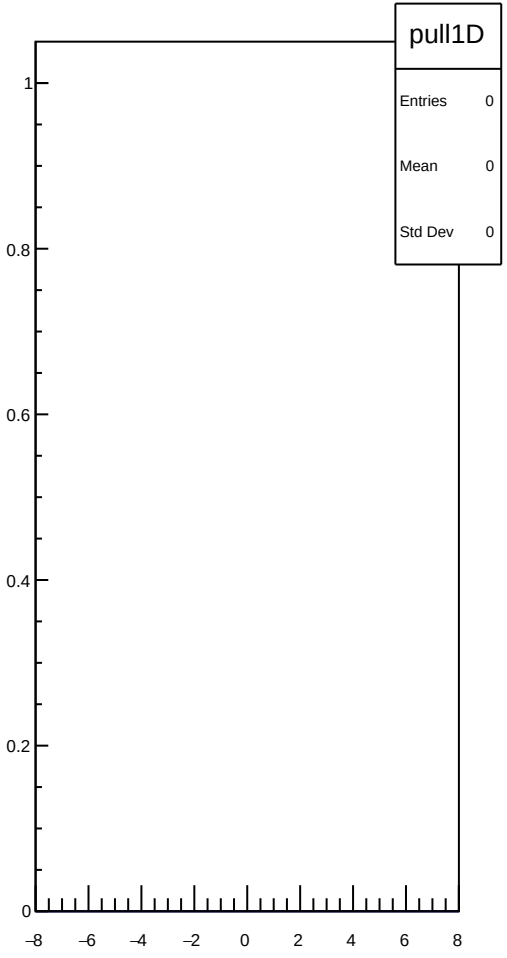

pull1D
Entries 88
Mean 0.4879
Std Dev 1.886

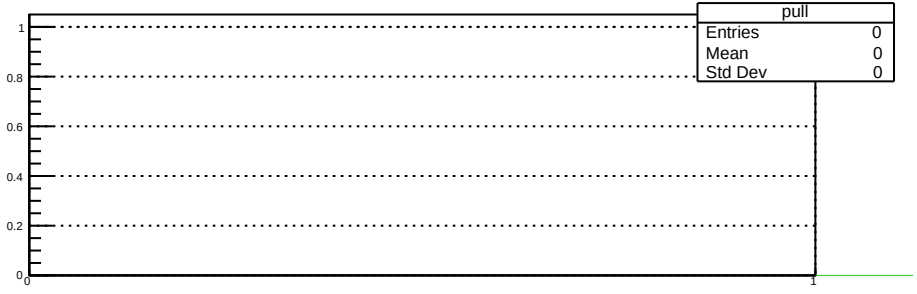

asym_bpm0l01WS_rms vs run
χ² / ndf 4223 / 87
p0 211.5 ± 0.1628
250
240
230
220
210
200
190

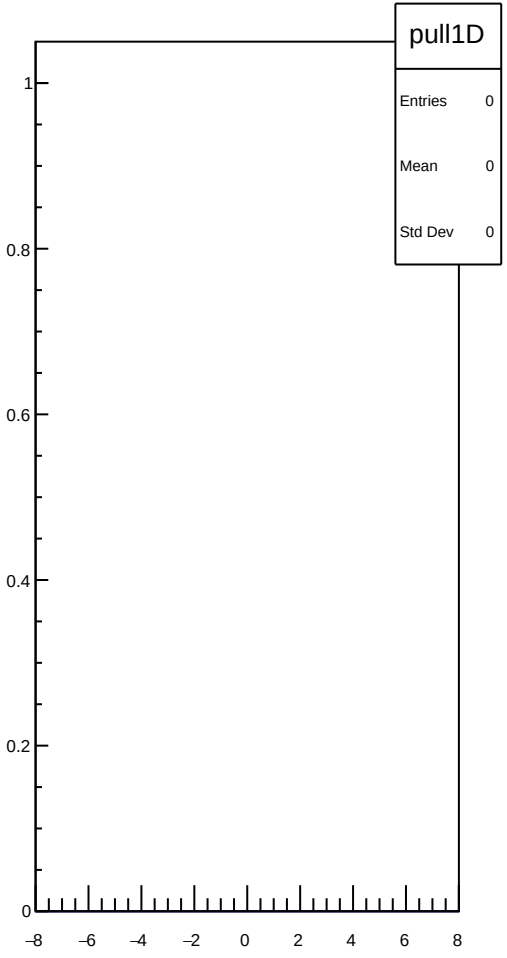

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

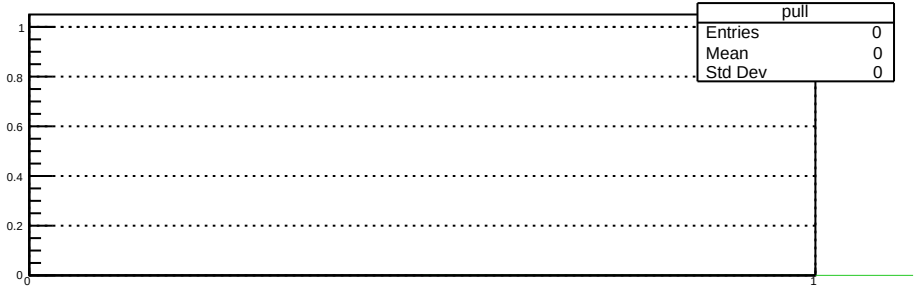

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

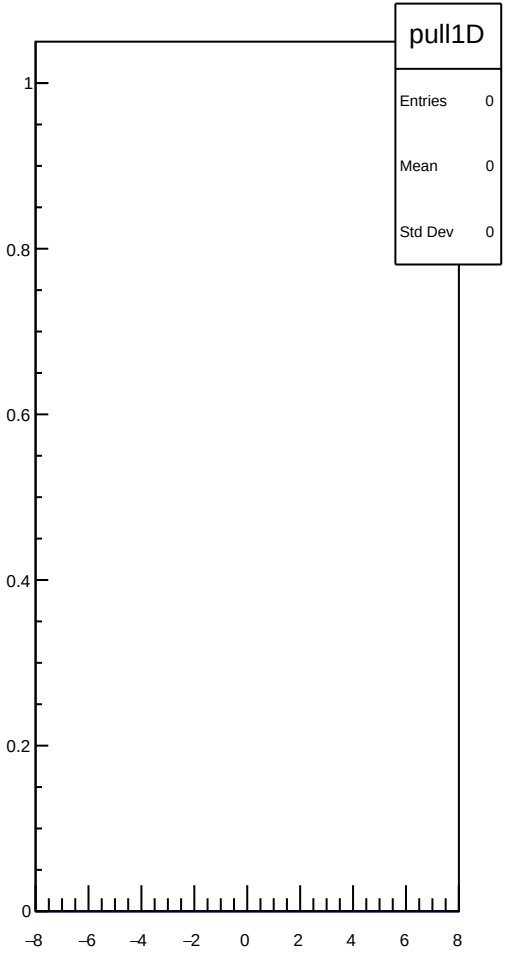

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

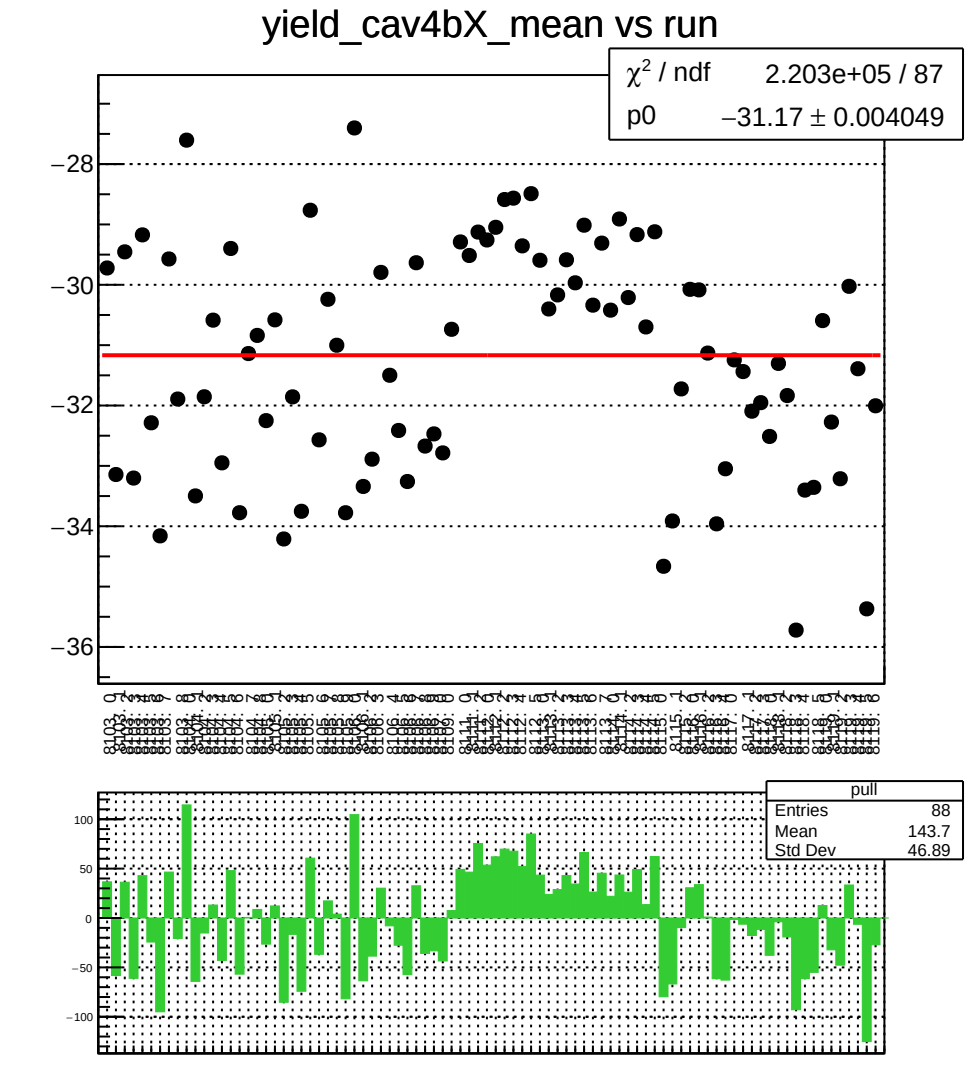

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

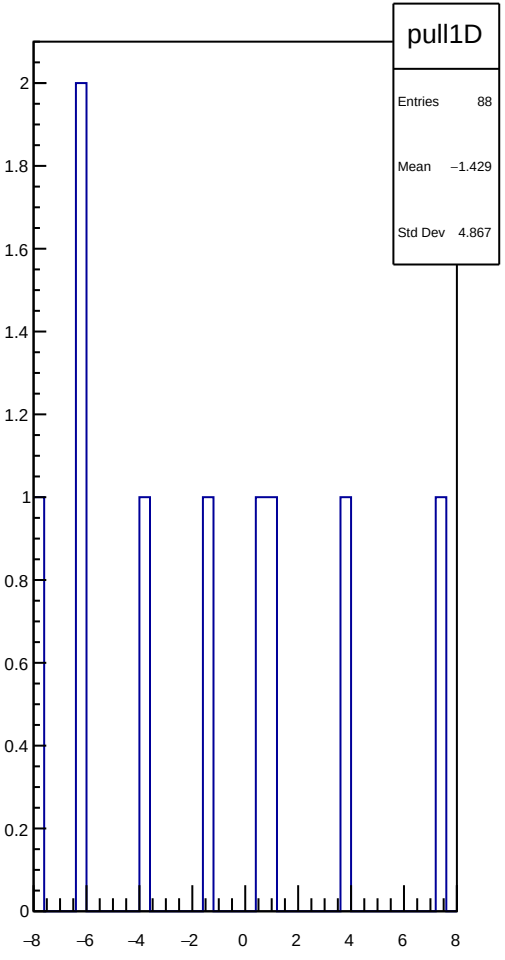

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

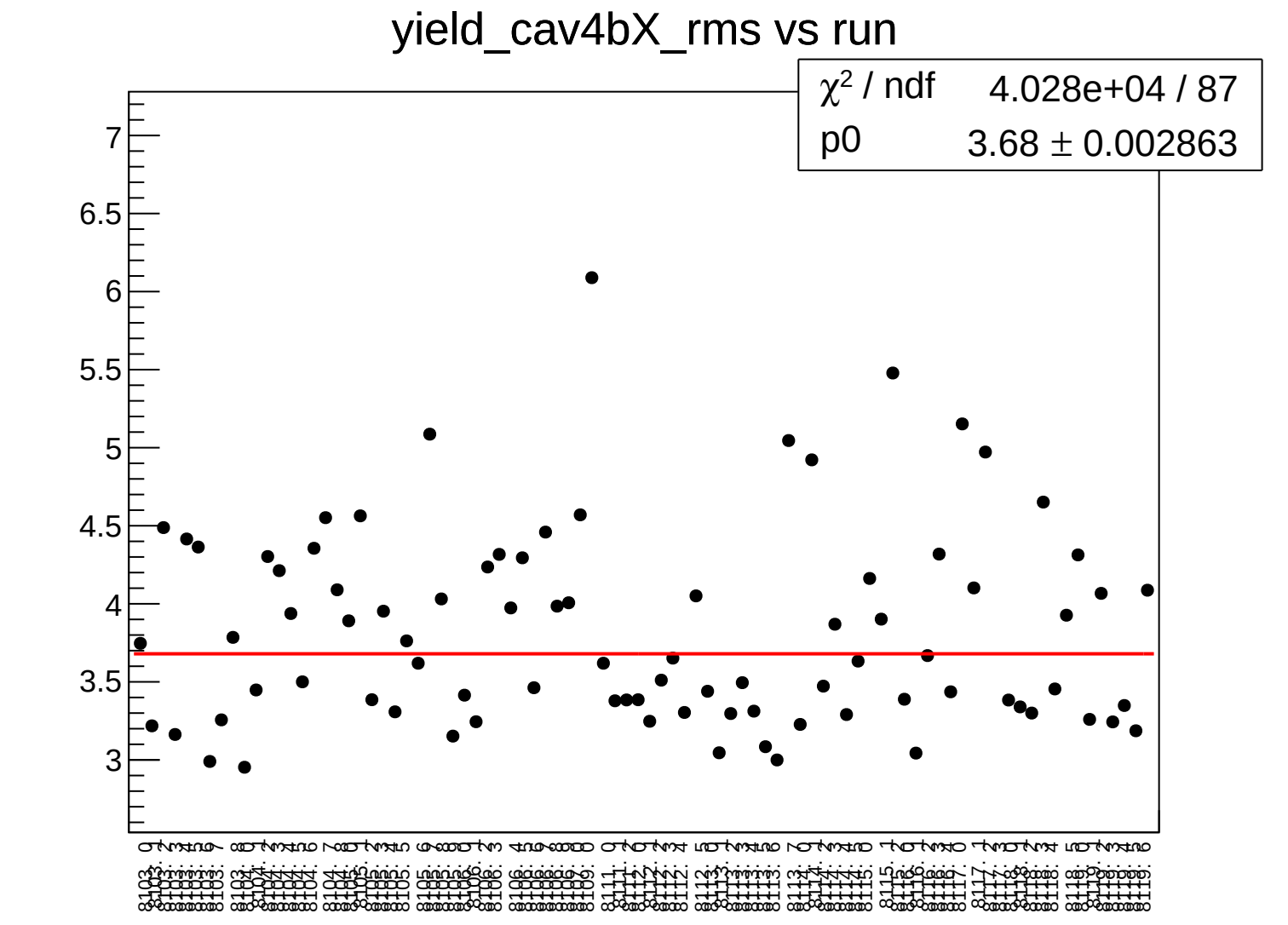

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

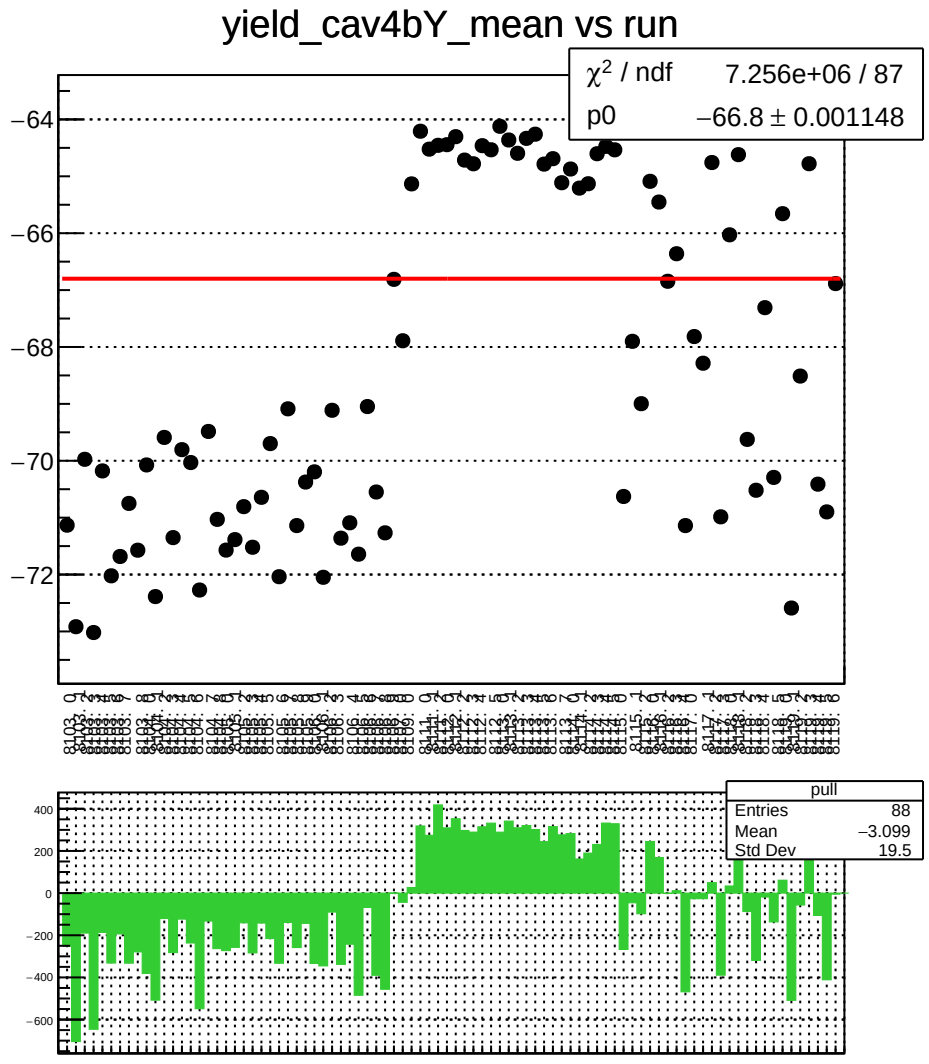

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

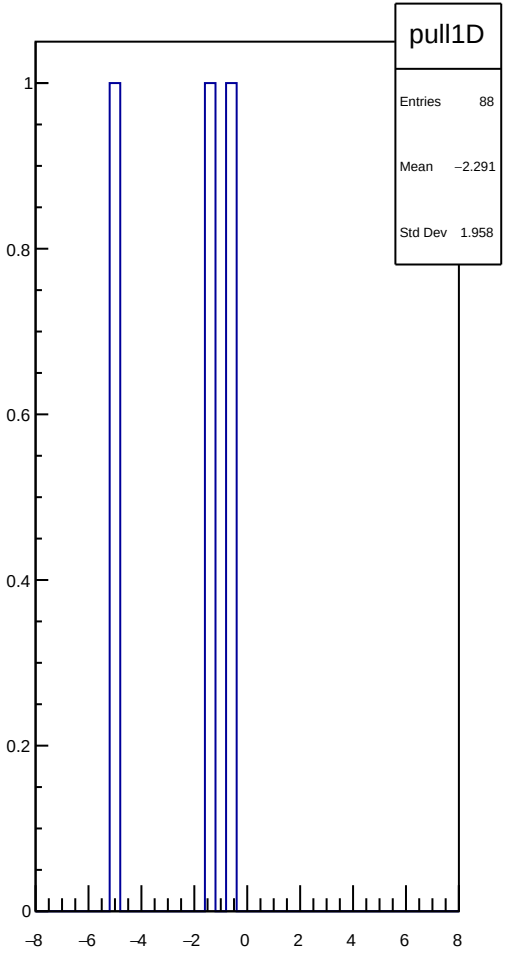

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

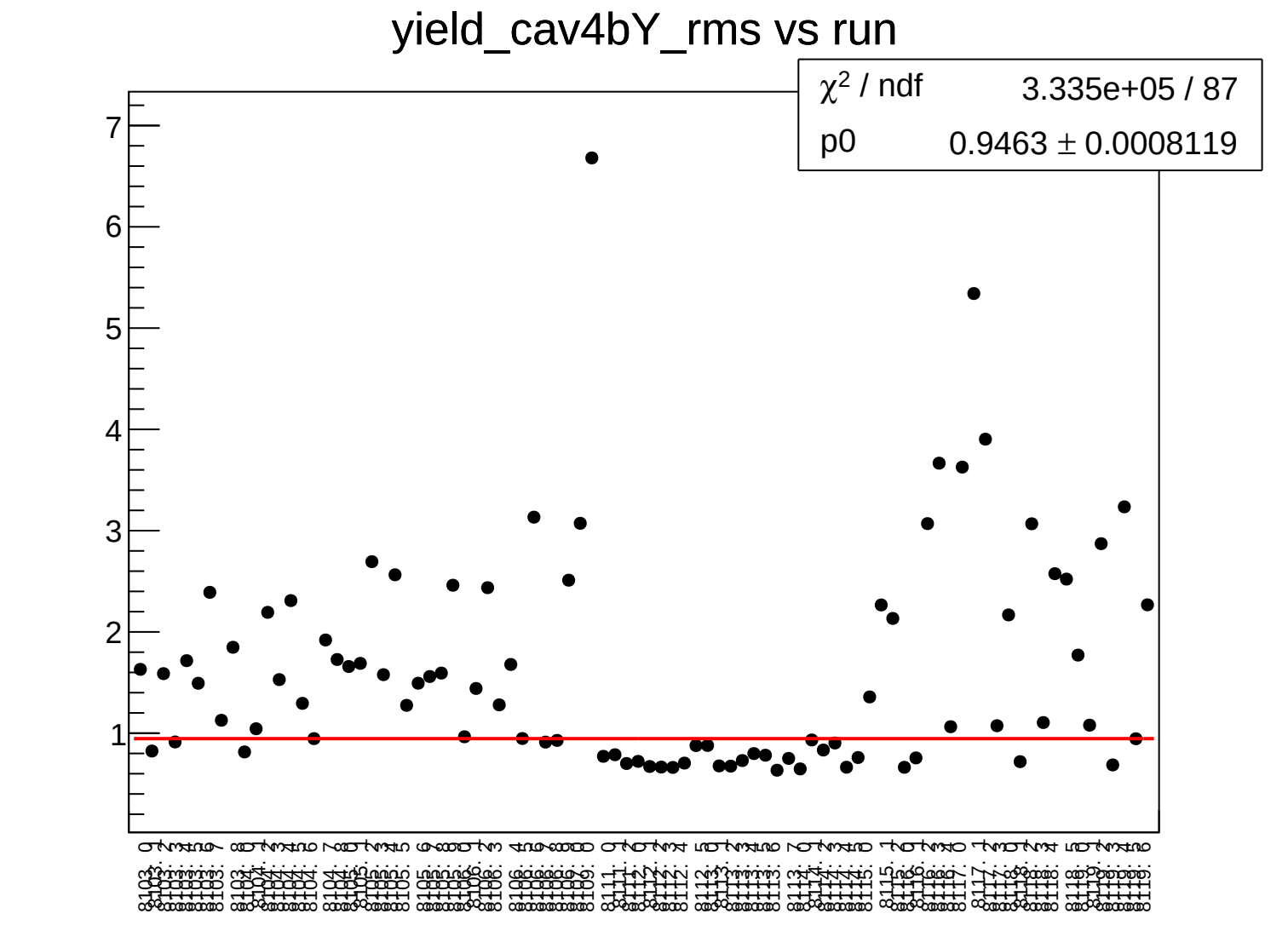

yield_cav4bX_mean vs run
χ² / ndf 2.203e+05 / 87
p0 −31.17 ± 0.004049
−28
−30
−32
−34
−36
pull
Entries 88
Mean 143.7
Std Dev 46.89
100
50
0
−50
−100

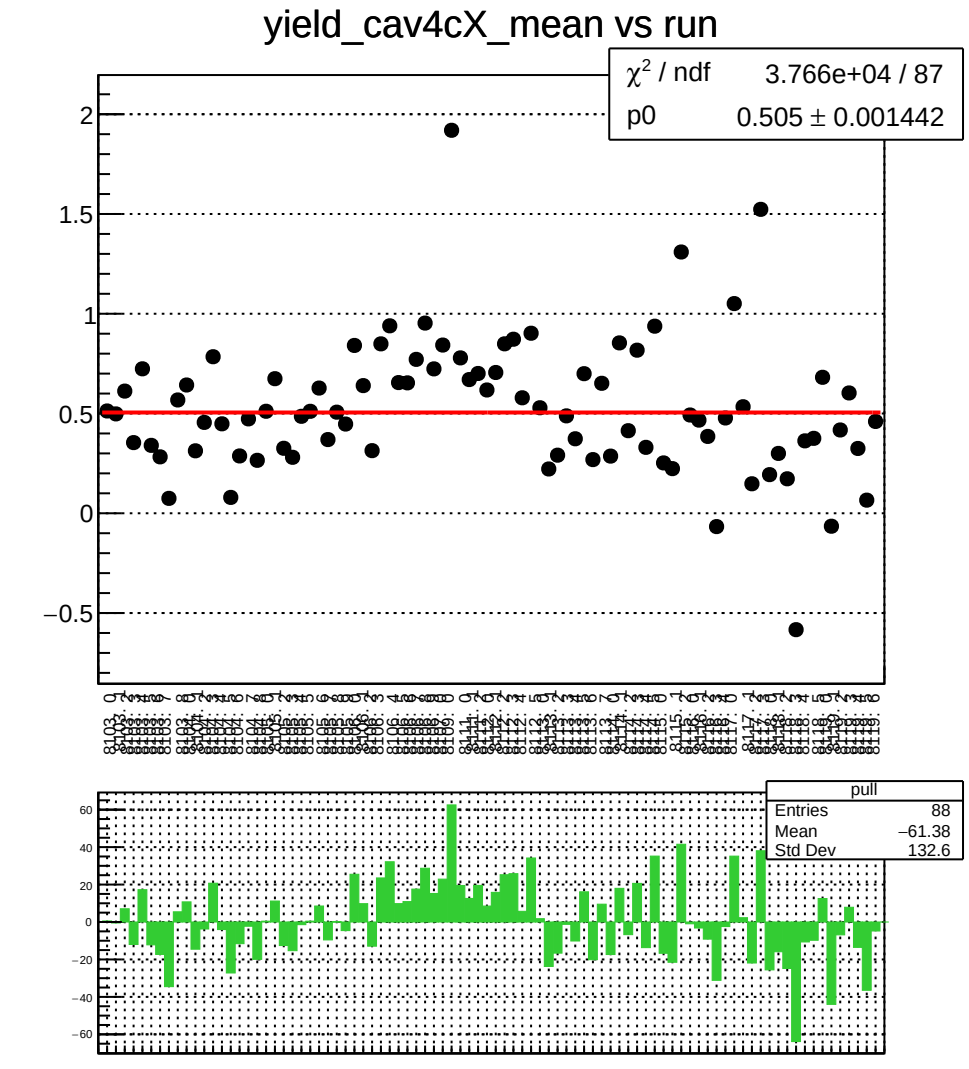

pull1D
Entries 88
Mean −1.429
Std Dev 4.867
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

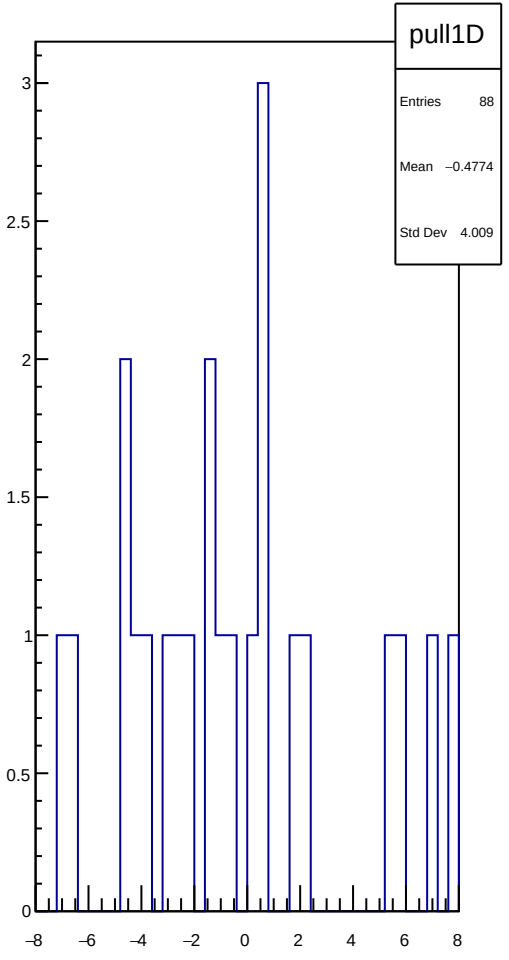

yield_cav4bX_rms vs run
χ² / ndf 4.028e+04 / 87
p0 3.68 ± 0.002863
7
6.5
6
5.5
5
4.5
4
3.5
3

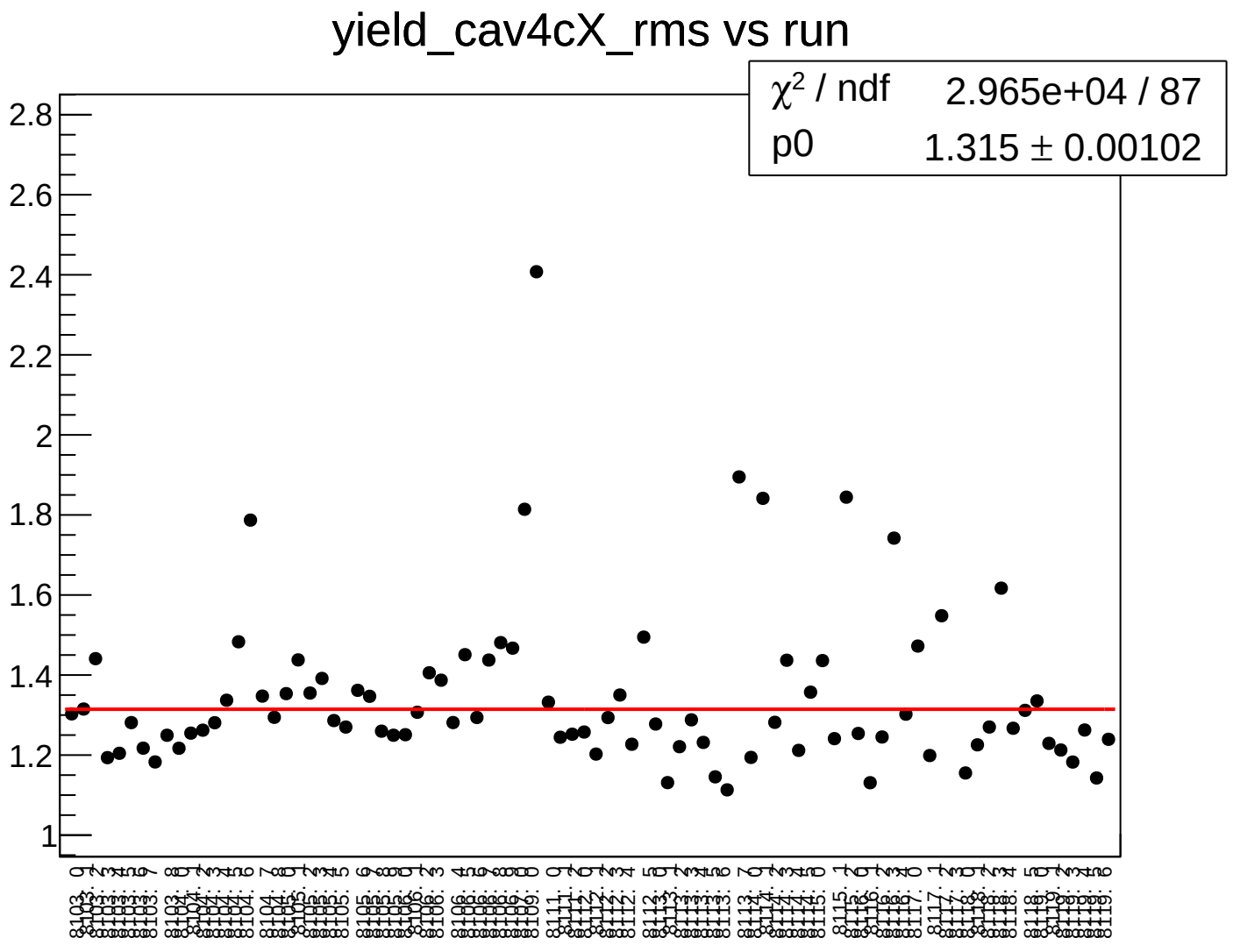

yield_cav4bY_mean vs run
χ² / ndf 7.256e+06 / 87
p0 −66.8 ± 0.001148
−64
−66
−68
−70
−72
pull
Entries 88
Mean −3.099
Std Dev 19.5
400
200
0
−200
−400
−600

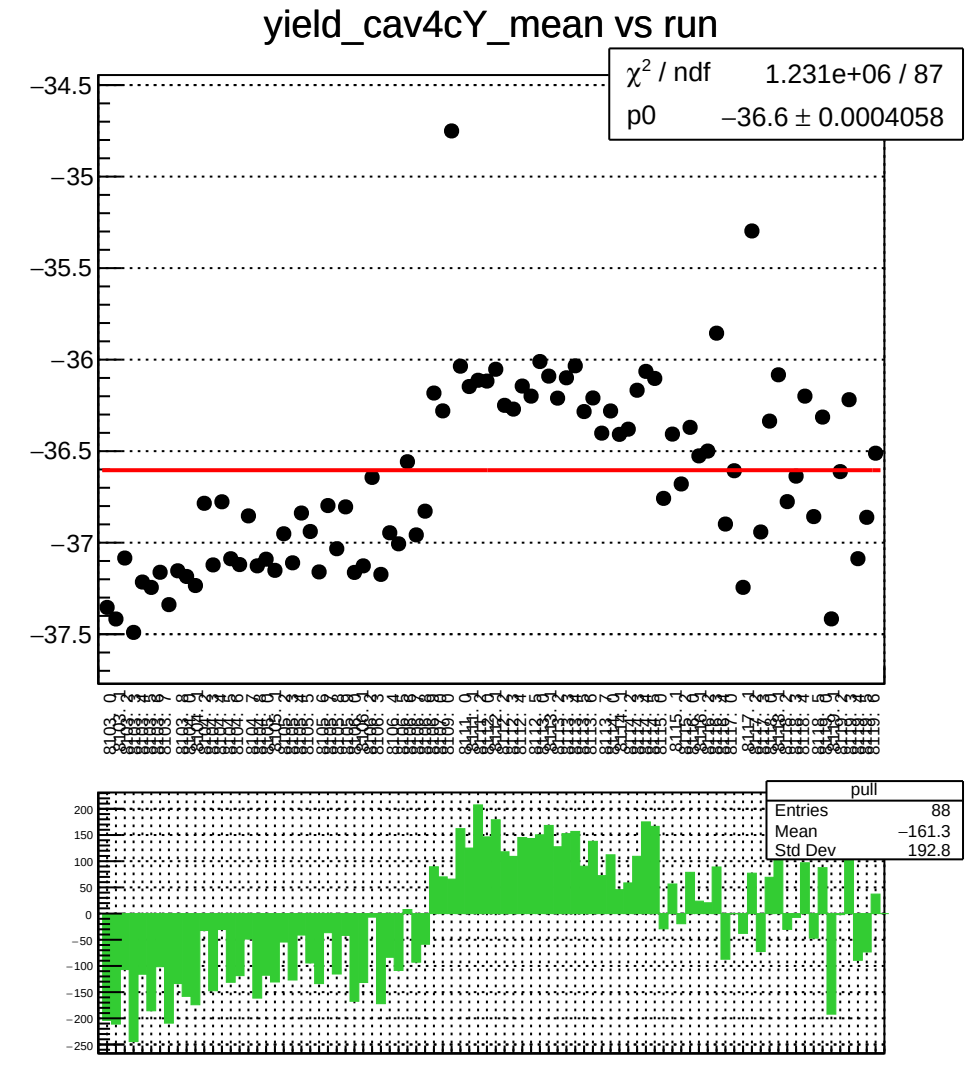

pull1D
Entries 88
Mean −2.291
Std Dev 1.958
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

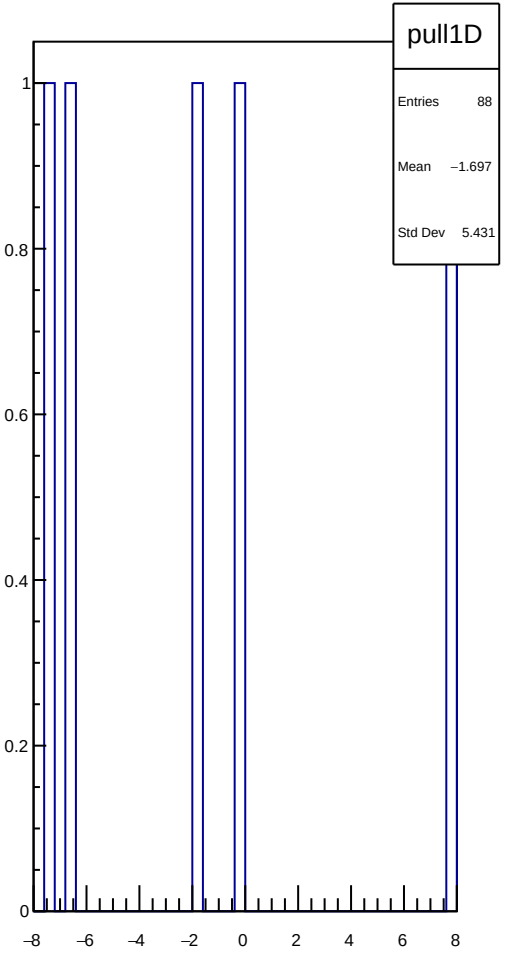

yield_cav4bY_rms vs run
χ2 / ndf 3.335e+05 / 87
p0 0.9463 ± 0.0008119
7
6
5
4
3
2
1

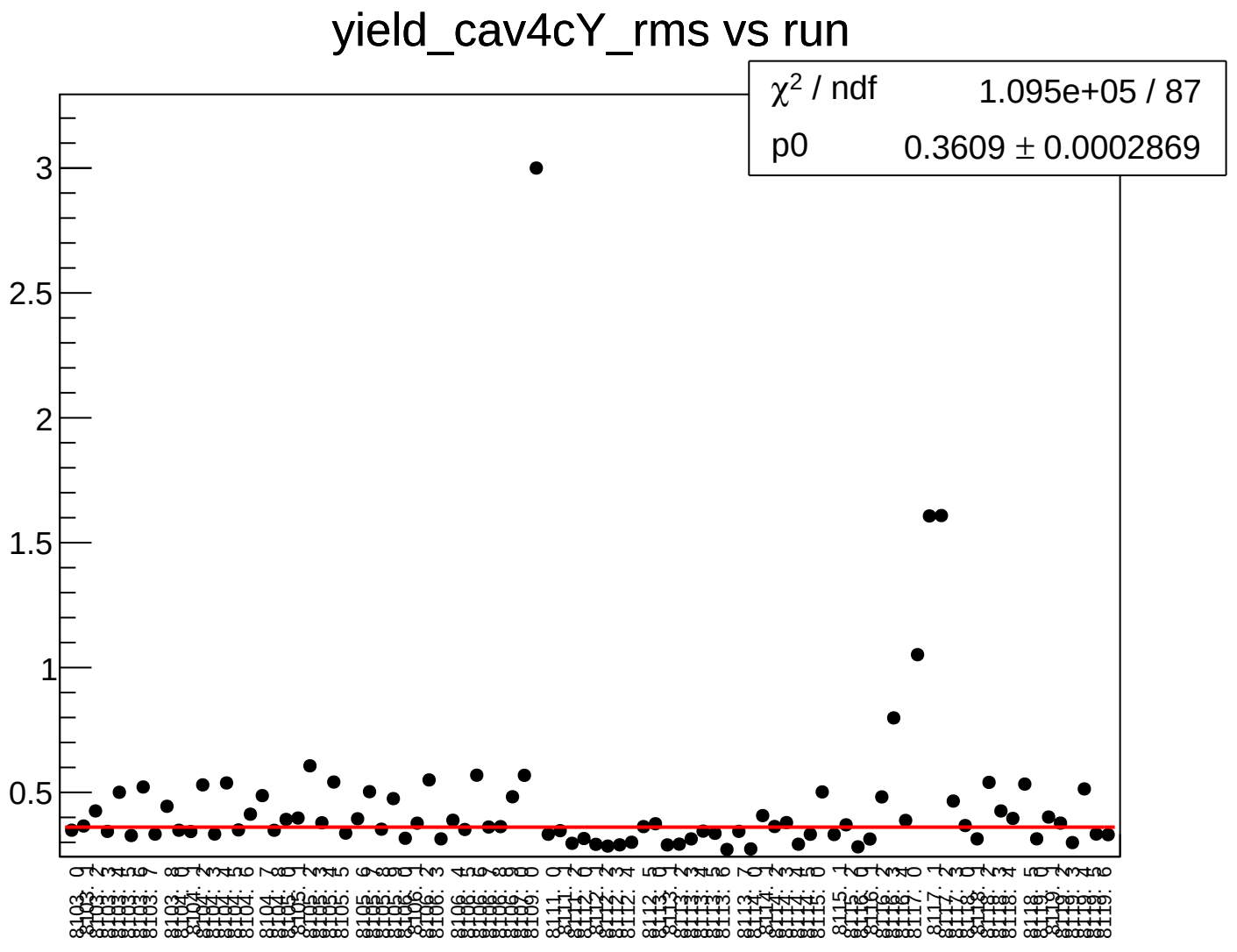

yield_cav4cX_mean vs run
χ² / ndf 3.766e+04 / 87
p0 0.505 ± 0.001442
pull
Entries 88
Mean −61.38
Std Dev 132.6

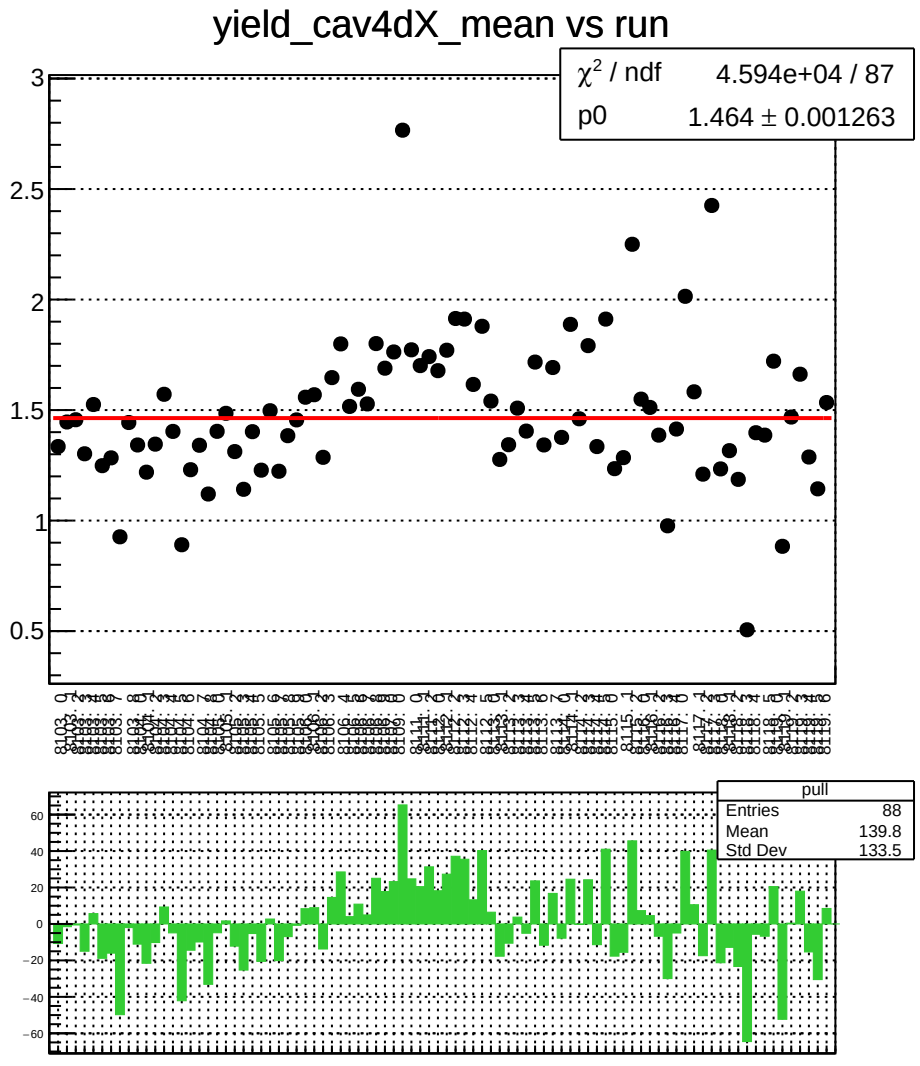

pull1D
Entries 88
Mean −0.4774
Std Dev 4.009

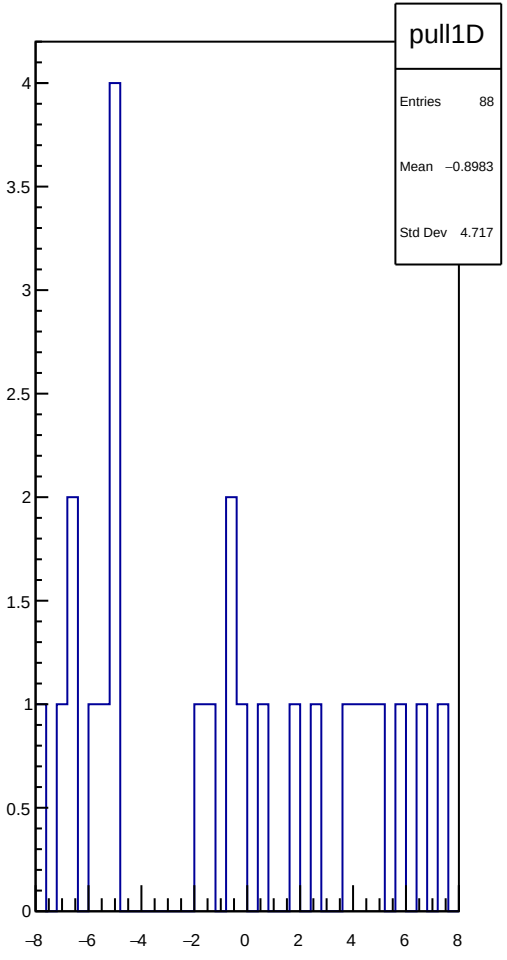

yield_cav4cX_rms vs run
χ² / ndf 2.965e+04 / 87
p0 1.315 ± 0.00102
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1


yield_cav4cY_mean vs run
χ² / ndf 1.231e+06 / 87
p0 −36.6 ± 0.0004058
pull
Entries 88
Mean −161.3
Std Dev 192.8

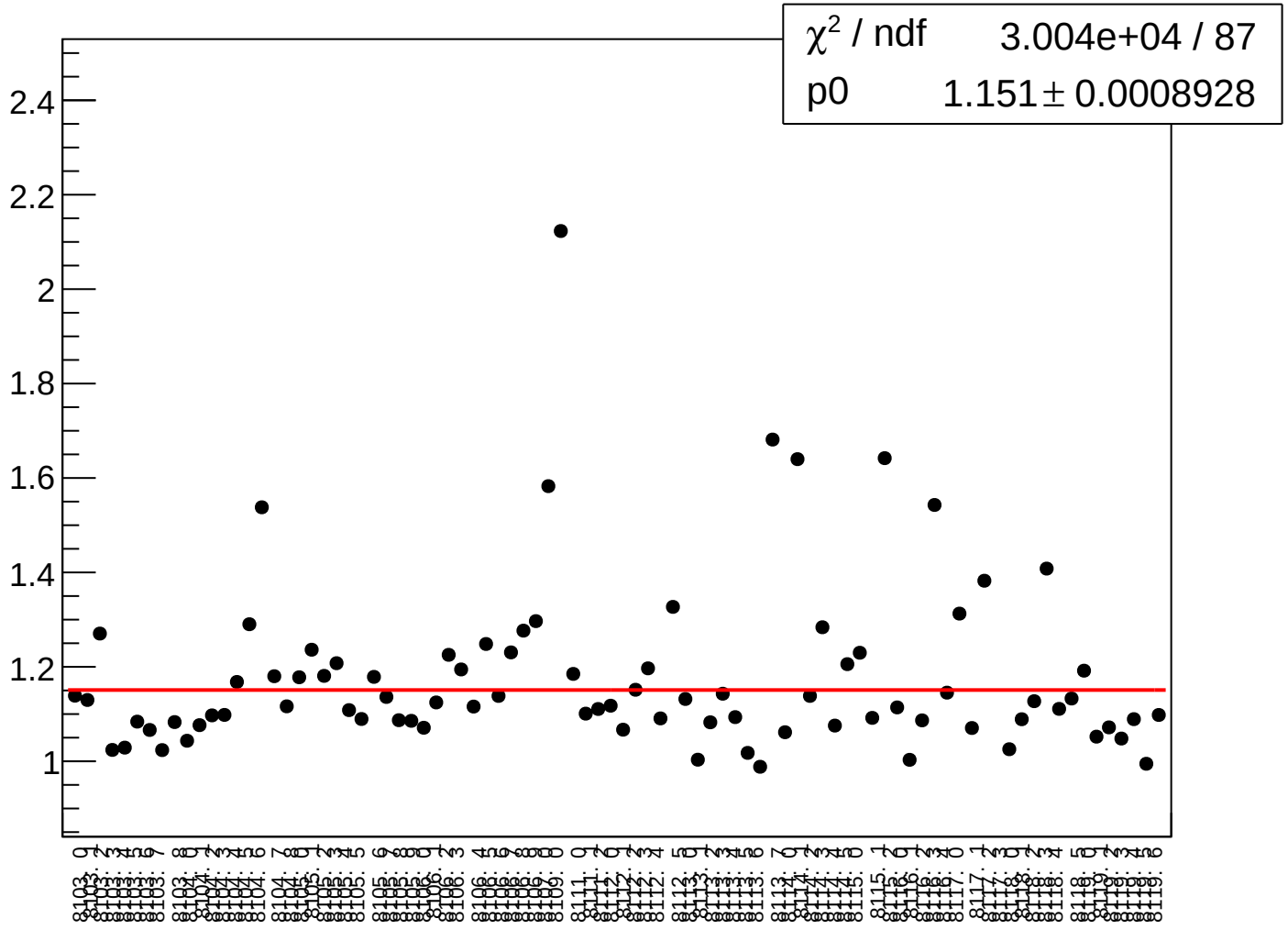

pull1D
Entries 88
Mean −1.697
Std Dev 5.431

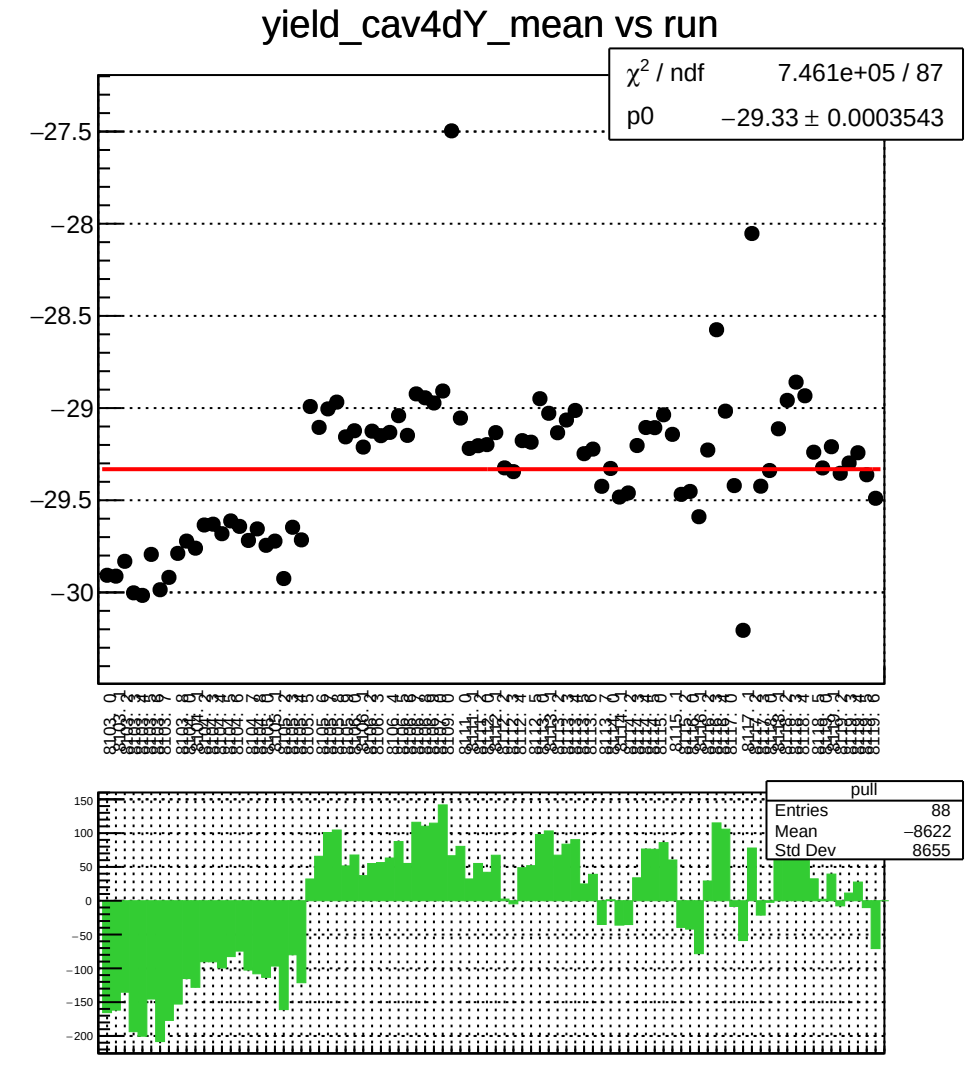

yield_cav4cY_rms vs run
χ² / ndf 1.095e+05 / 87
p0 0.3609 ± 0.0002869
3
2.5
2
1.5
1
0.5

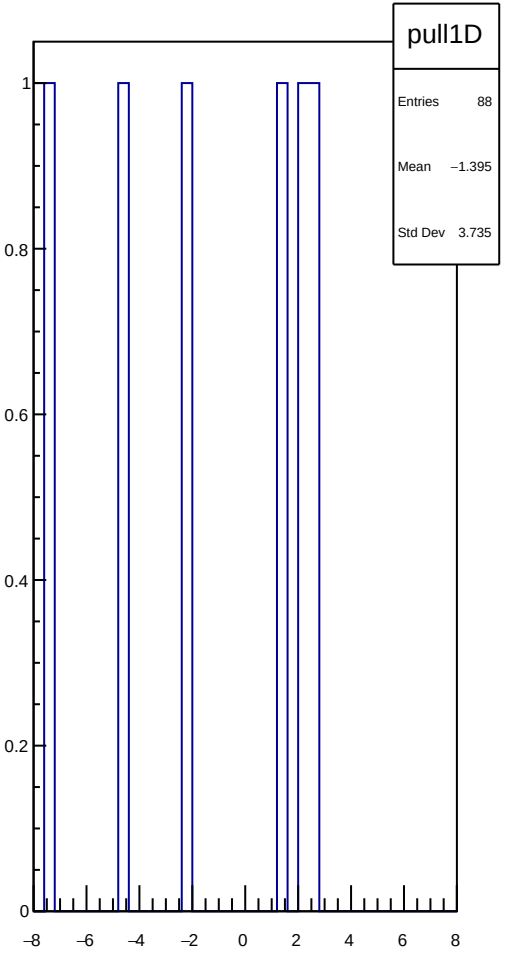

yield_cav4dX_mean vs run
χ² / ndf 4.594e+04 / 87
p0 1.464 ± 0.001263
pull
Entries 88
Mean 139.8
Std Dev 133.5

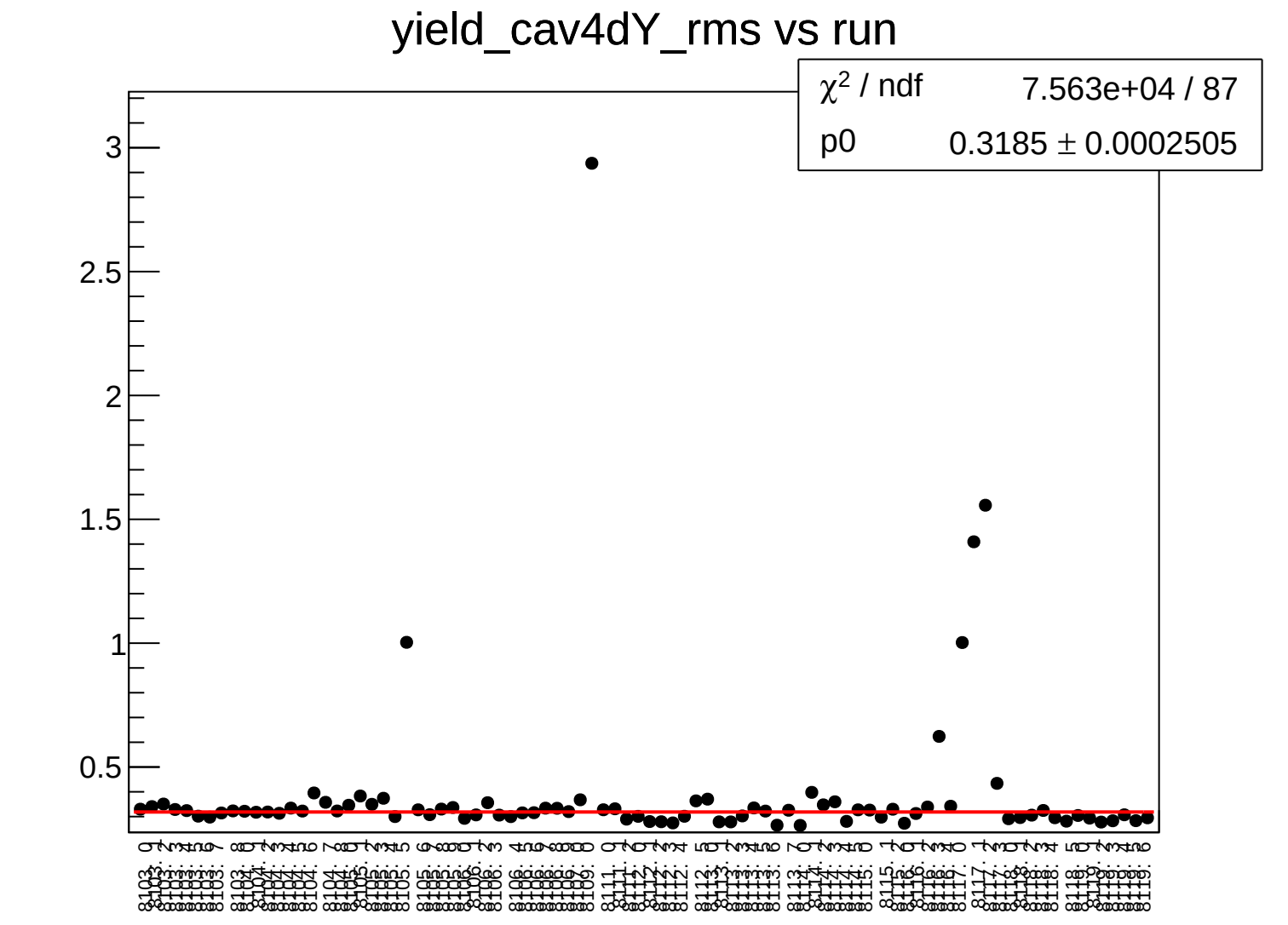

pull1D
Entries 88
Mean −0.8983
Std Dev 4.717

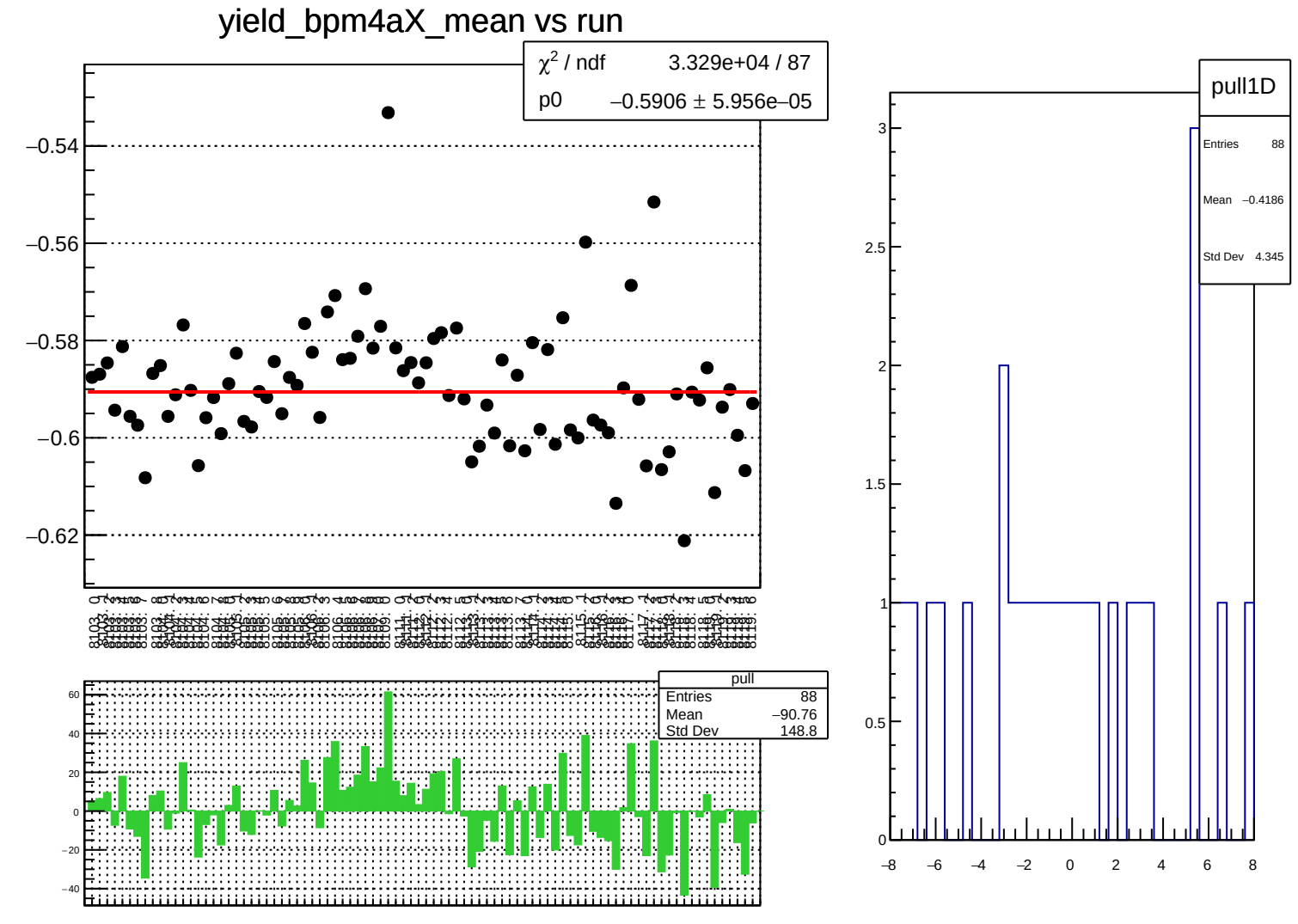
yield_cav4dX_rms vs run

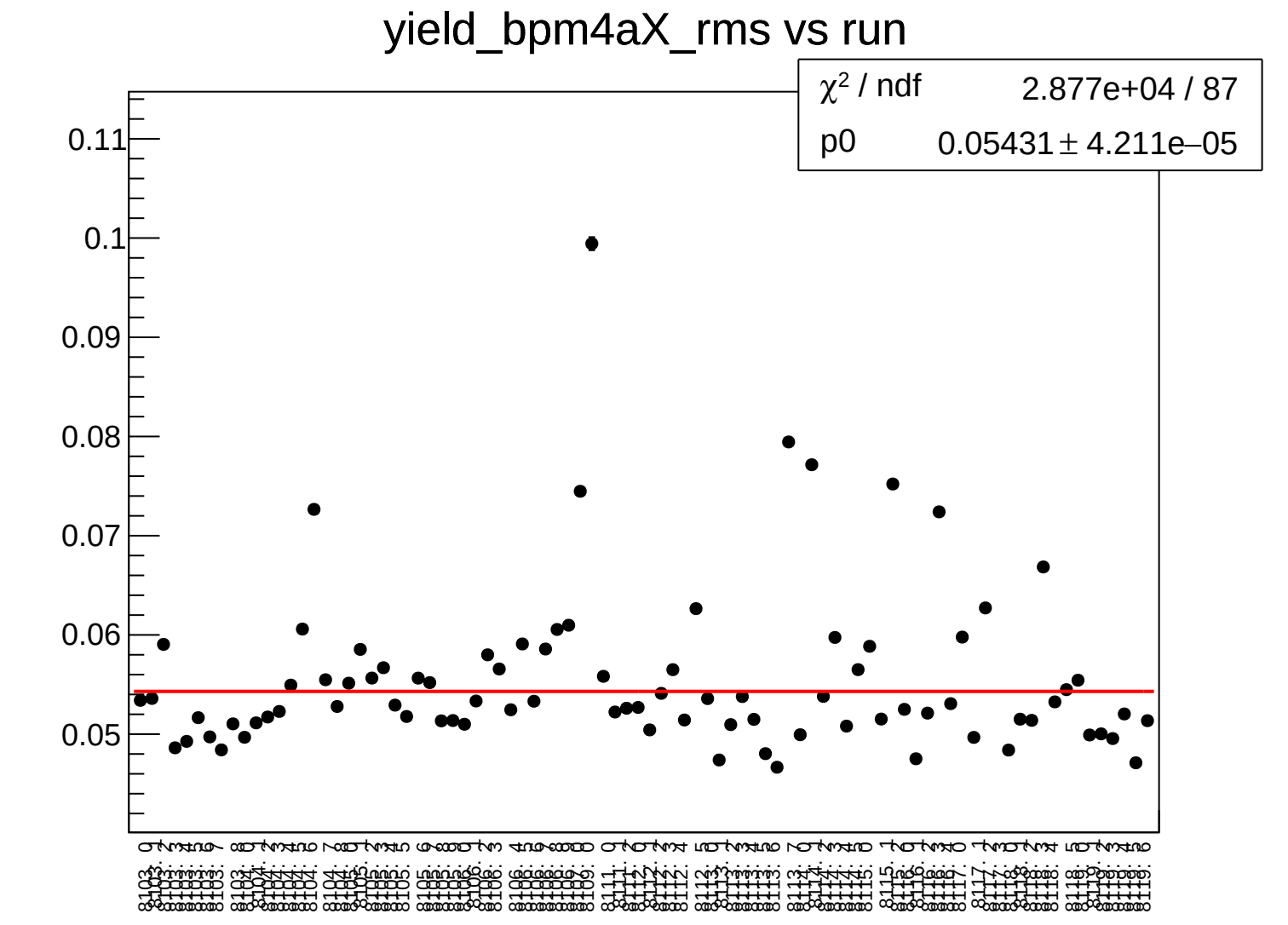


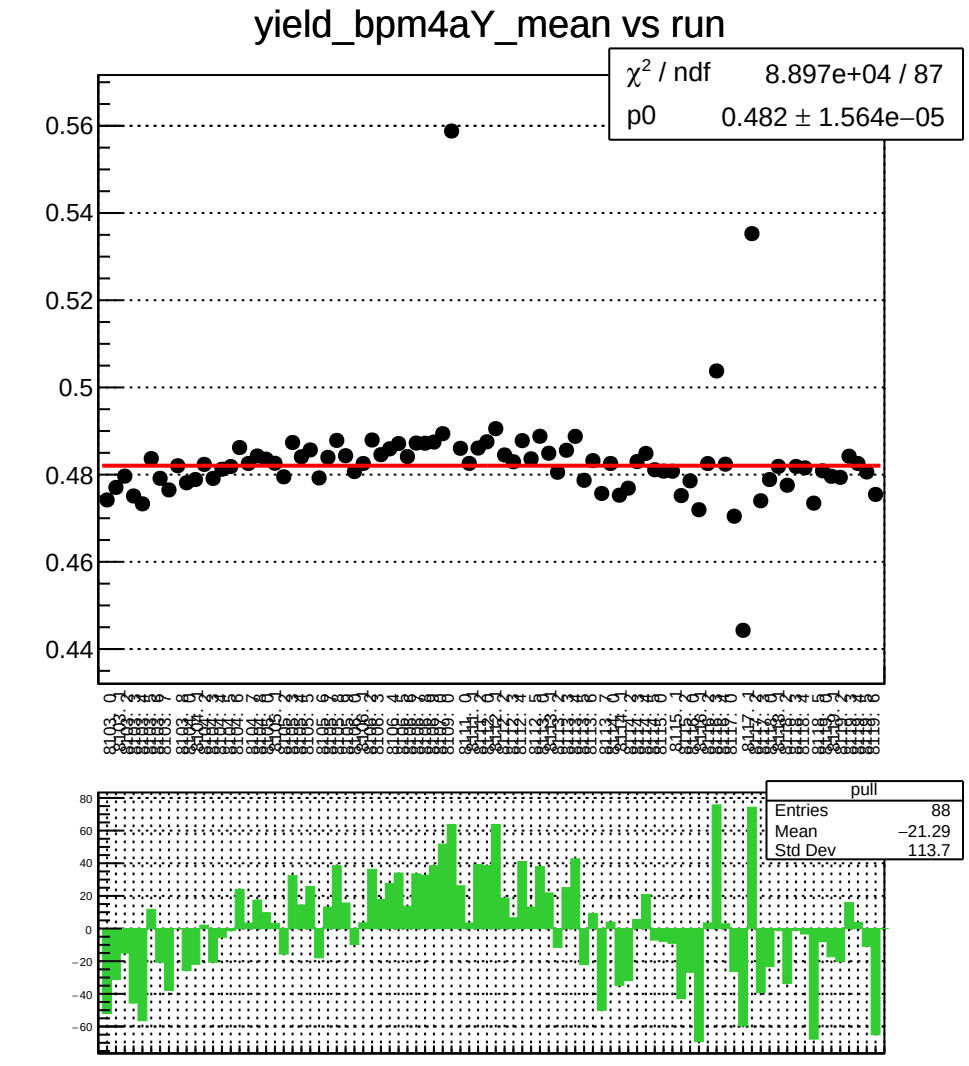

yield_cav4dY_mean vs run
χ² / ndf 7.461e+05 / 87
p0 −29.33 ± 0.0003543
−27.5
−28
−28.5
−29
−29.5
−30
pull
Entries 88
Mean −8622
Std Dev 8655
150
100
50
0
−50
−100
−150
−200

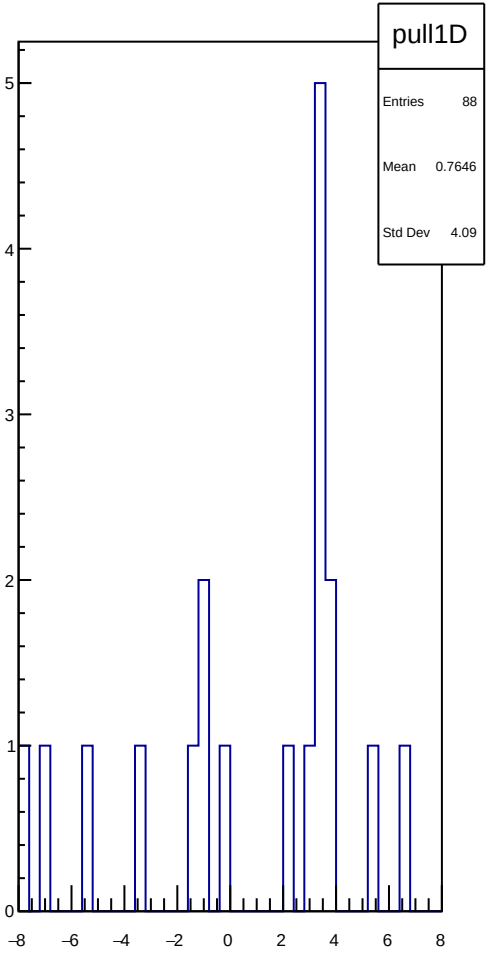

pull1D
Entries 88
Mean −1.395
Std Dev 3.735
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

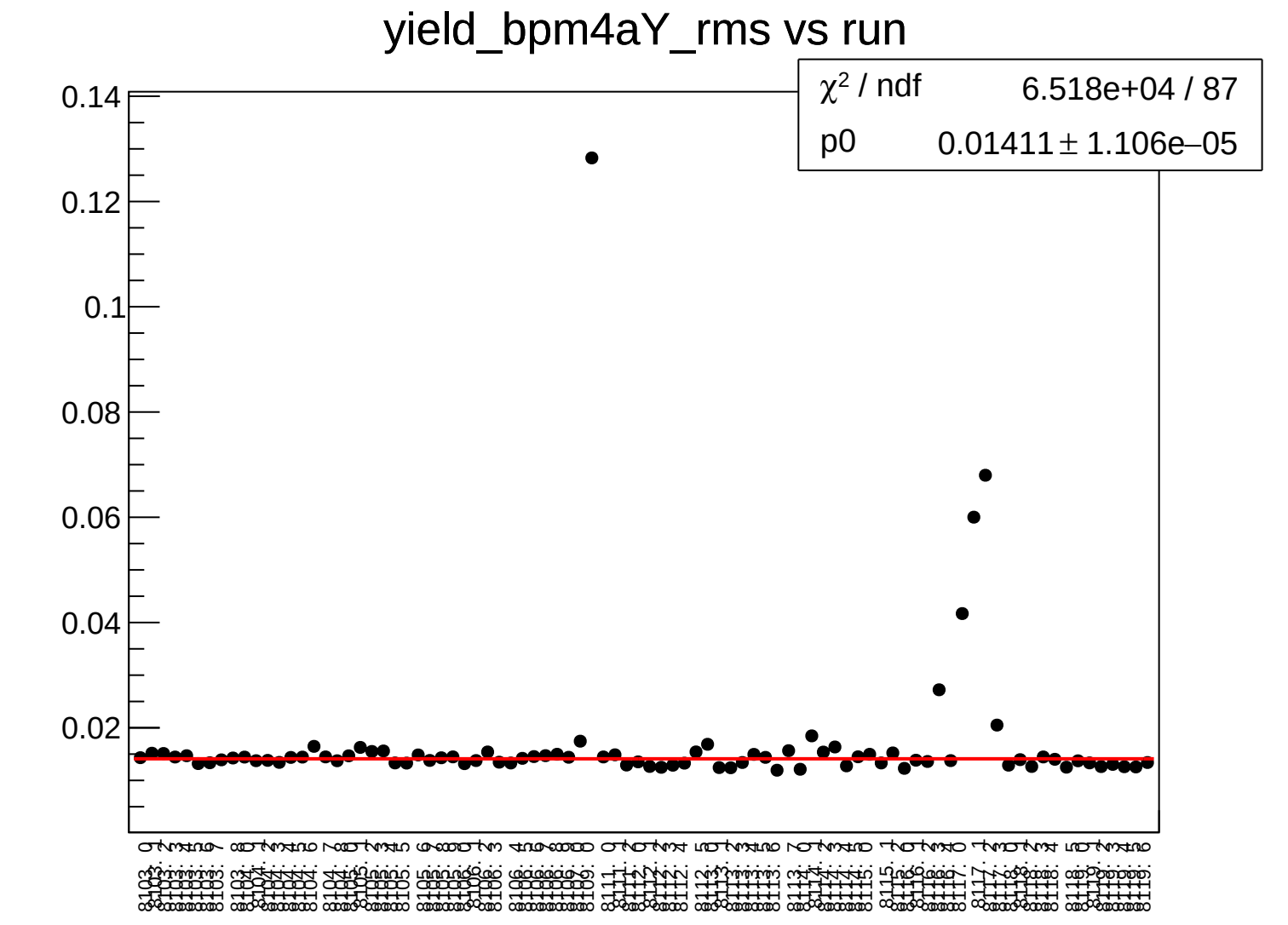

yield_cav4dY_rms vs run
χ² / ndf 7.563e+04 / 87
p0 0.3185 ± 0.0002505
3
2.5
2
1.5
1
0.5

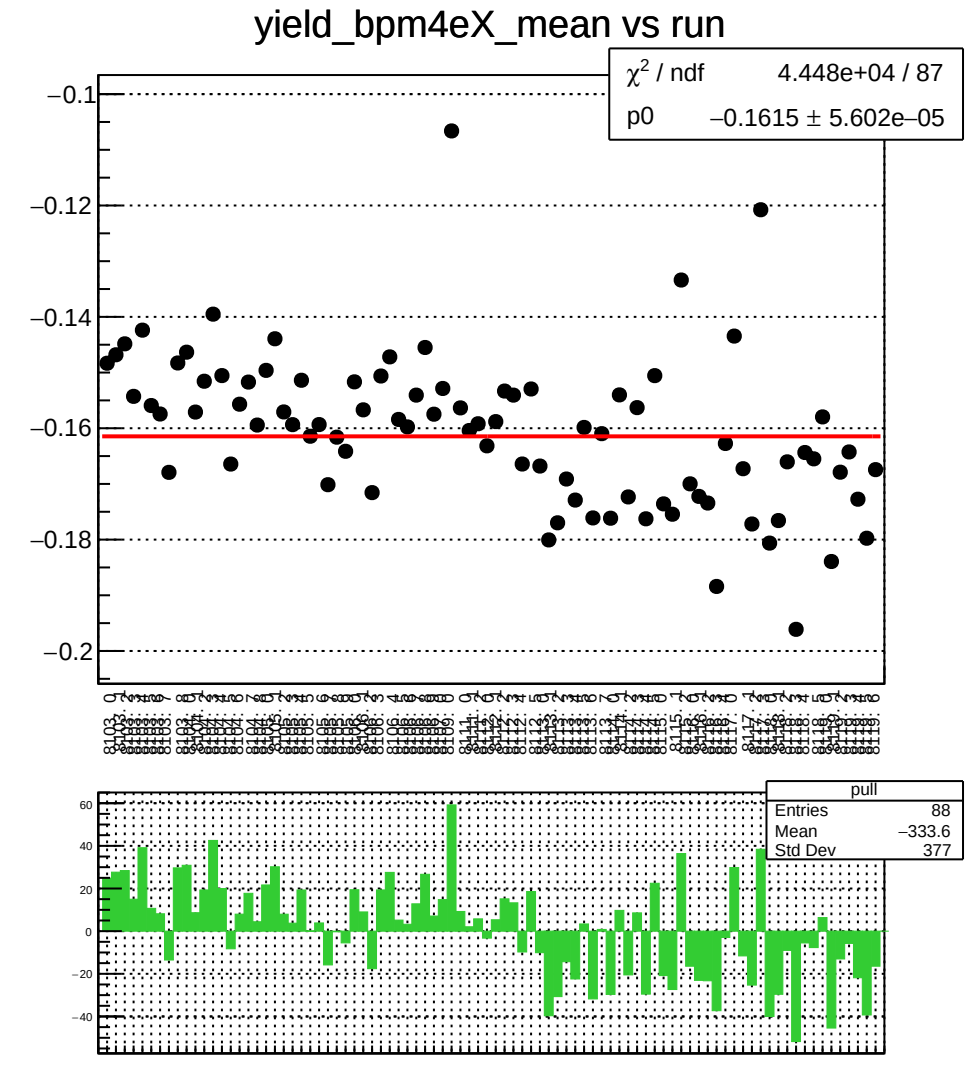

yield_bpm4aX_mean vs run
χ² / ndf 3.329e+04 / 87
p0 −0.5906 ± 5.956e−05
−0.54
−0.56
−0.58
−0.6
−0.62
pull
Entries 88
Mean −90.76
Std Dev 148.8
60
40
20
0
−20
−40
pull1D
Entries 88
Mean −0.4186
Std Dev 4.345
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

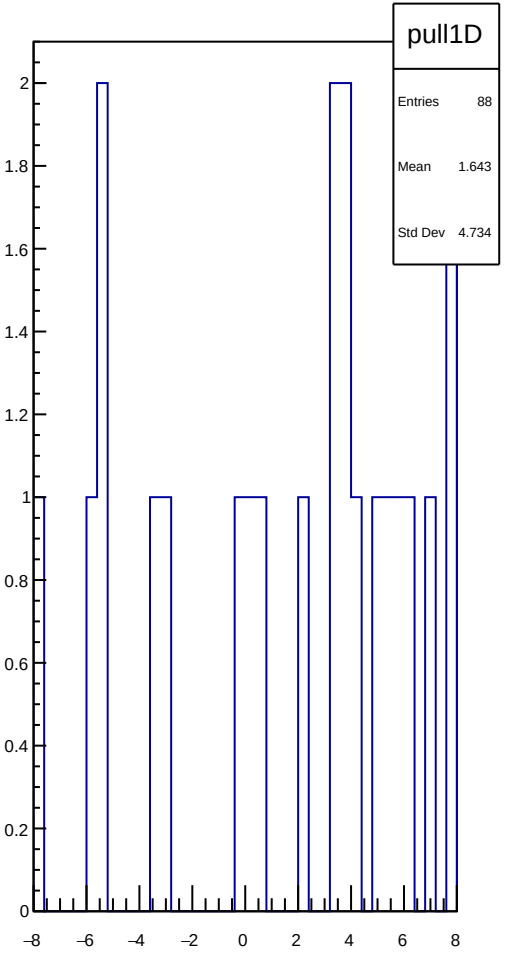

yield_bpm4aX_rms vs run
χ² / ndf 2.877e+04 / 87
p0 0.05431 ± 4.211e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05

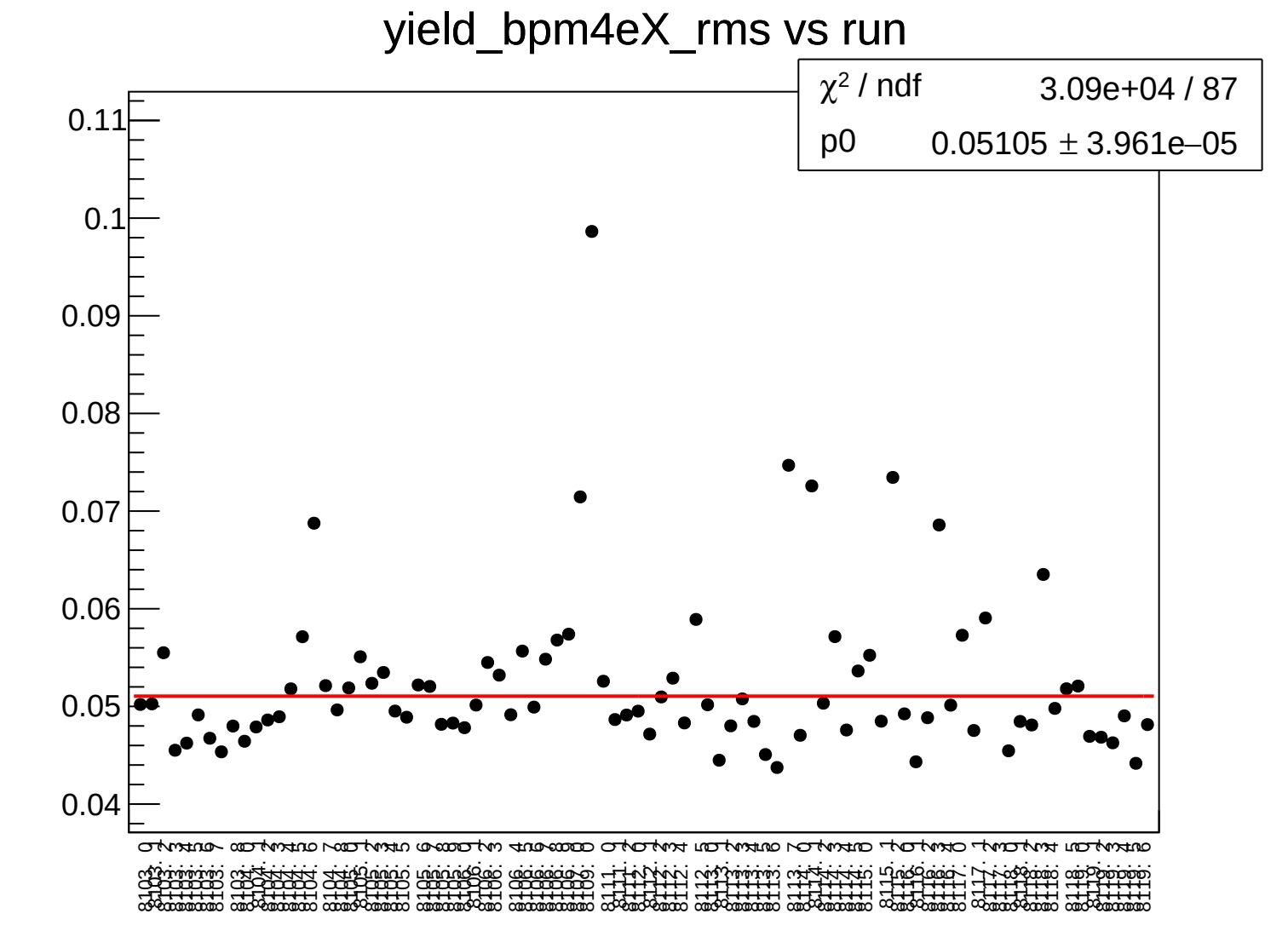

yield_bpm4aY_mean vs run
χ² / ndf 8.897e+04 / 87
p0 0.482 ± 1.564e−05
0.56
0.54
0.52
0.5
0.48
0.46
0.44
pull
Entries 88
Mean −21.29
Std Dev 113.7
80
60
40
20
0
−20
−40
−60

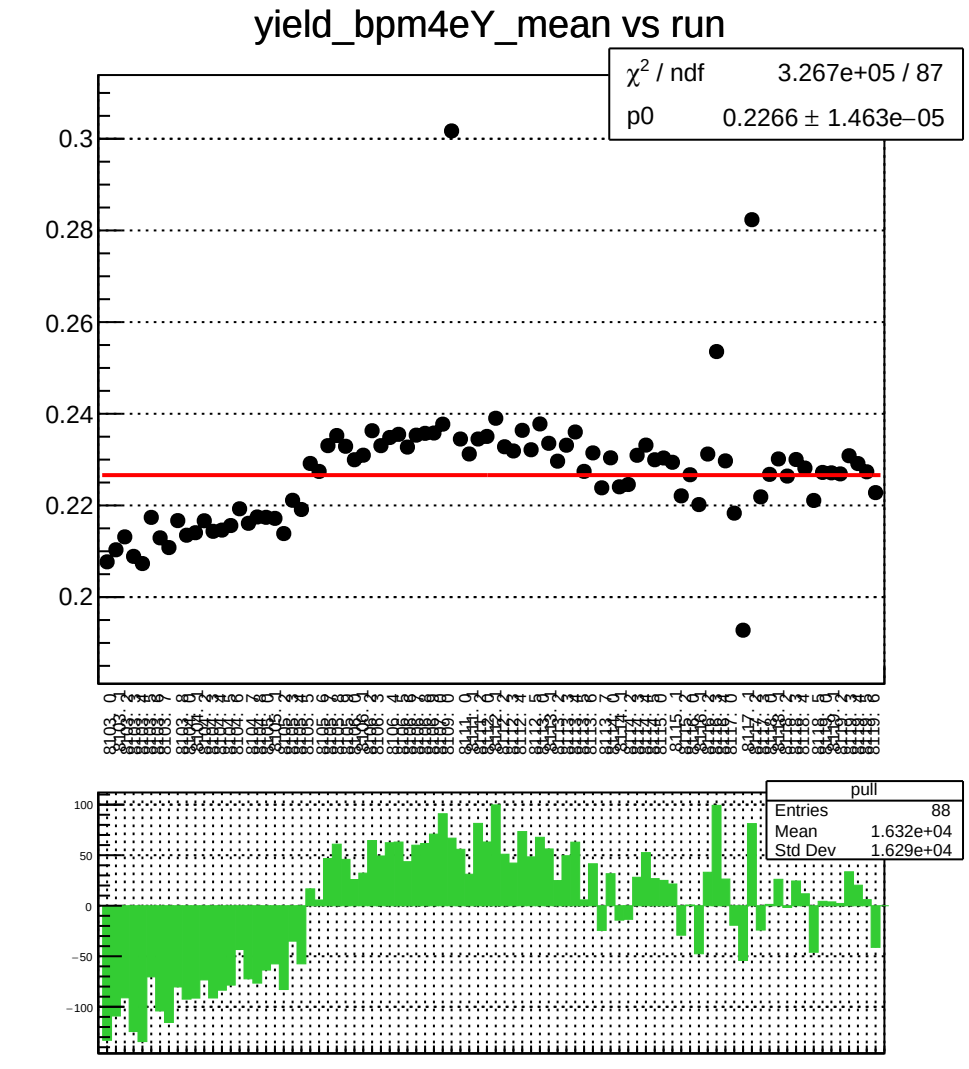

pull1D
Entries 88
Mean 0.7646
Std Dev 4.09
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

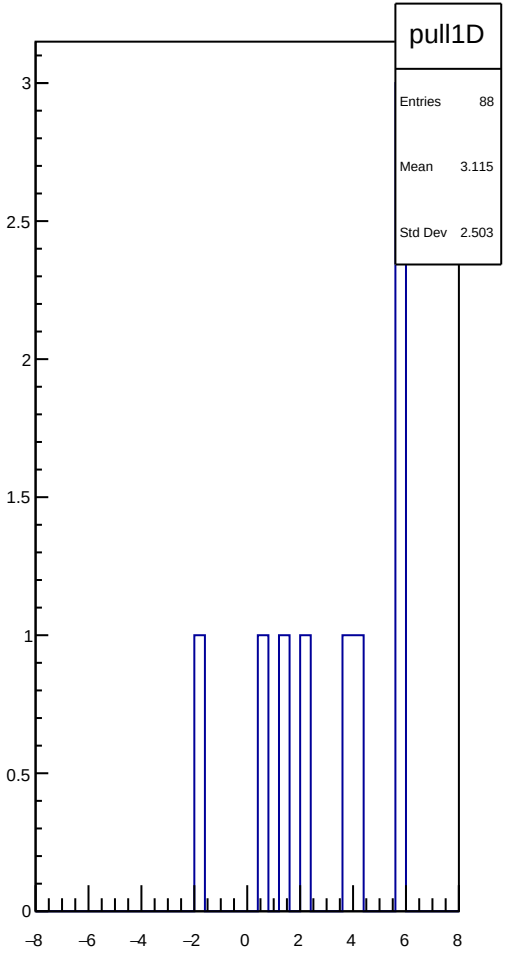

yield_bpm4aY_rms vs run
χ² / ndf 6.518e+04 / 87
p0 0.01411 ± 1.106e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

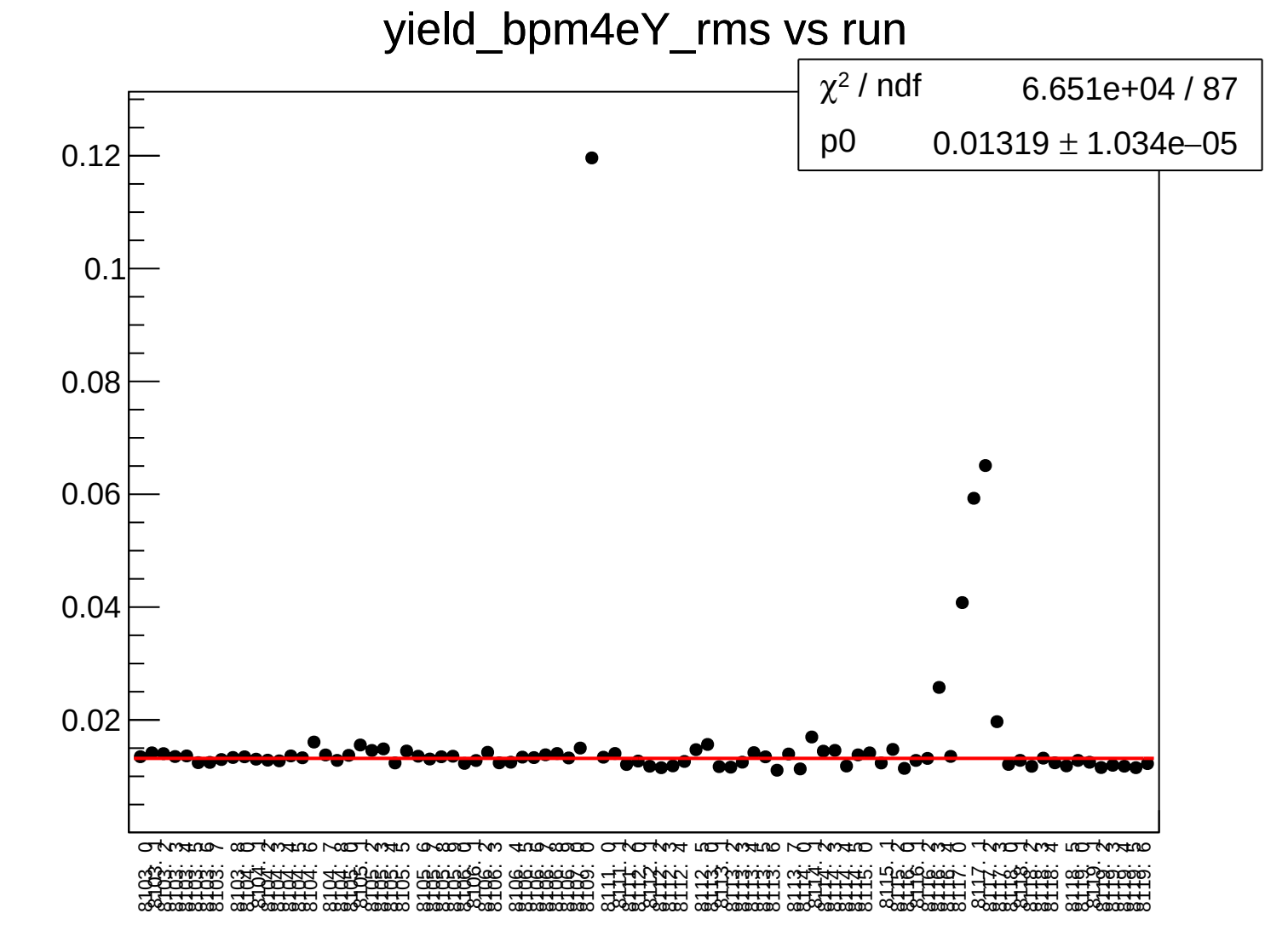

yield_bpm4eX_mean vs run
χ² / ndf 4.448e+04 / 87
p0 −0.1615 ± 5.602e−05
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
pull
Entries 88
Mean −333.6
Std Dev 377
60
40
20
0
−20
−40

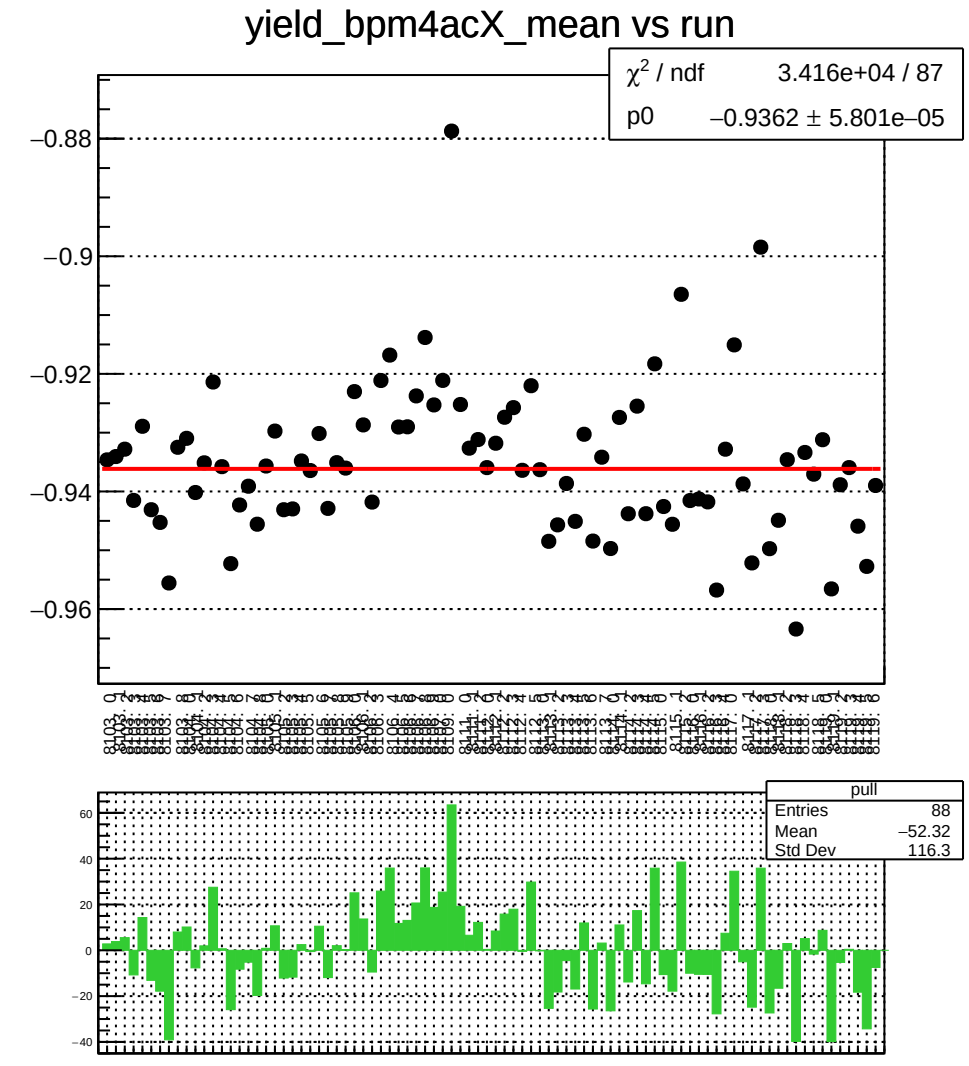

pull1D
Entries 88
Mean 1.643
Std Dev 4.734
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

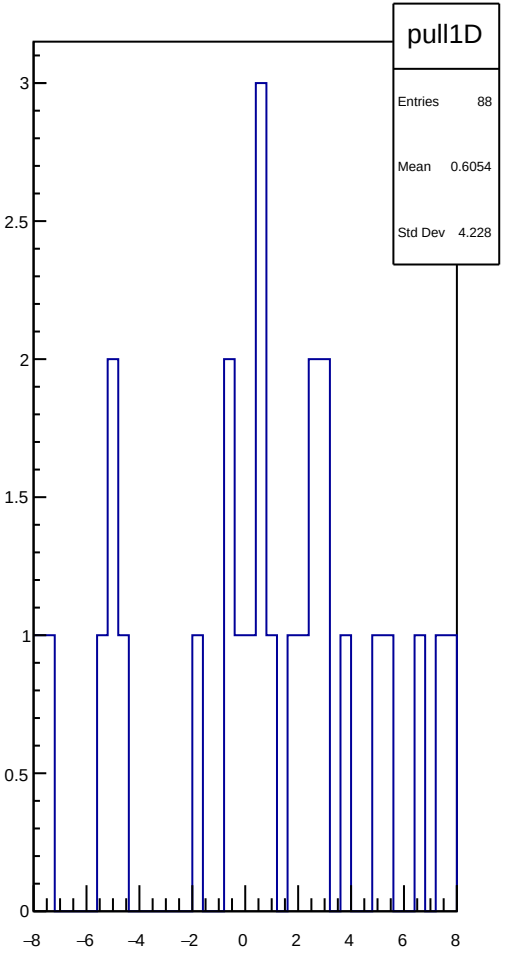

yield_bpm4eX_rms vs run
χ² / ndf 3.09e+04 / 87
p0 0.05105 ± 3.961e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

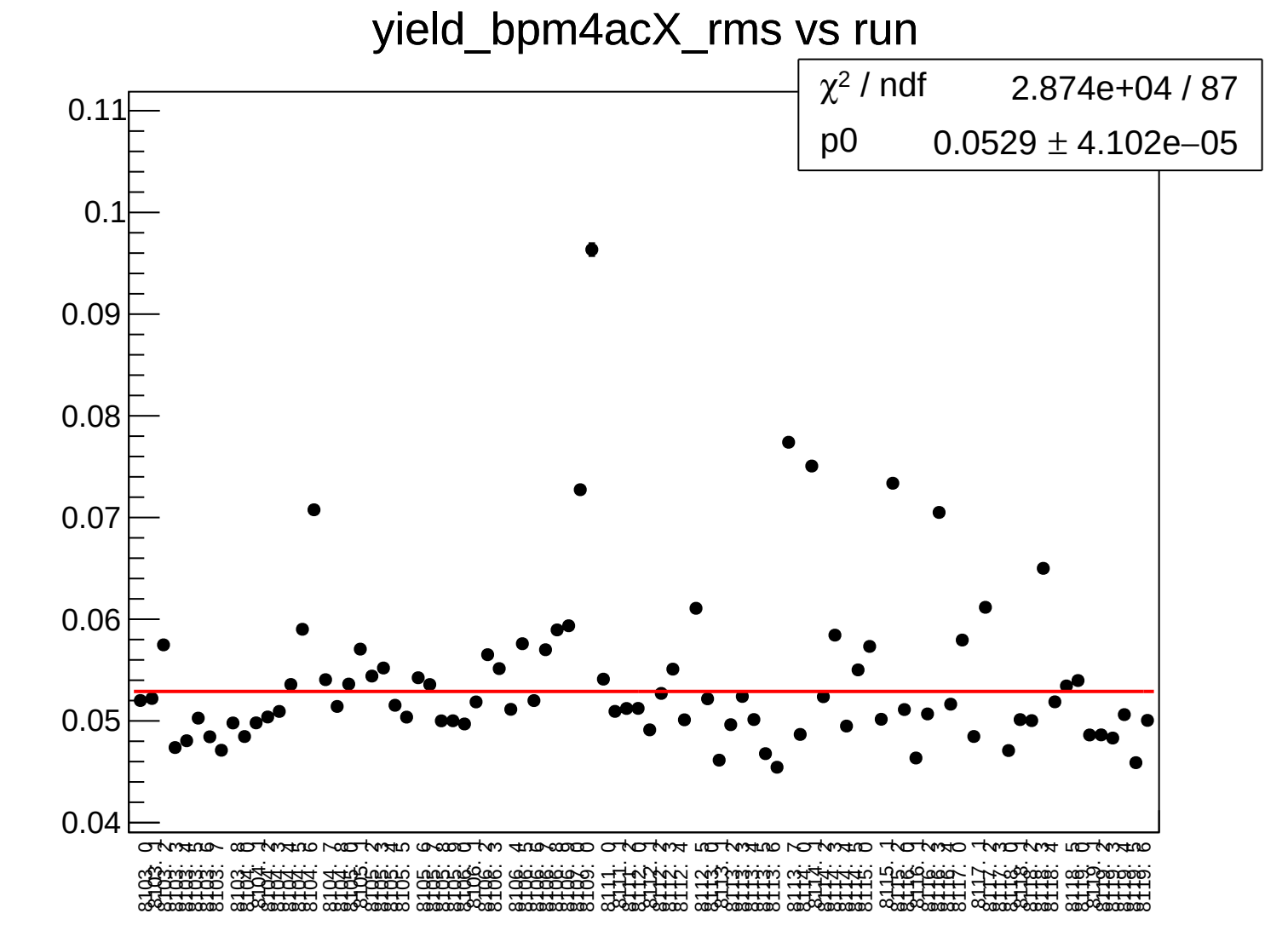

yield_bpm4eY_mean vs run
χ² / ndf 3.267e+05 / 87
p0 0.2266 ± 1.463e−05
0.3
0.28
0.26
0.24
0.22
0.2
pull
Entries 88
Mean 1.632e+04
Std Dev 1.629e+04
100
50
0
−50
−100

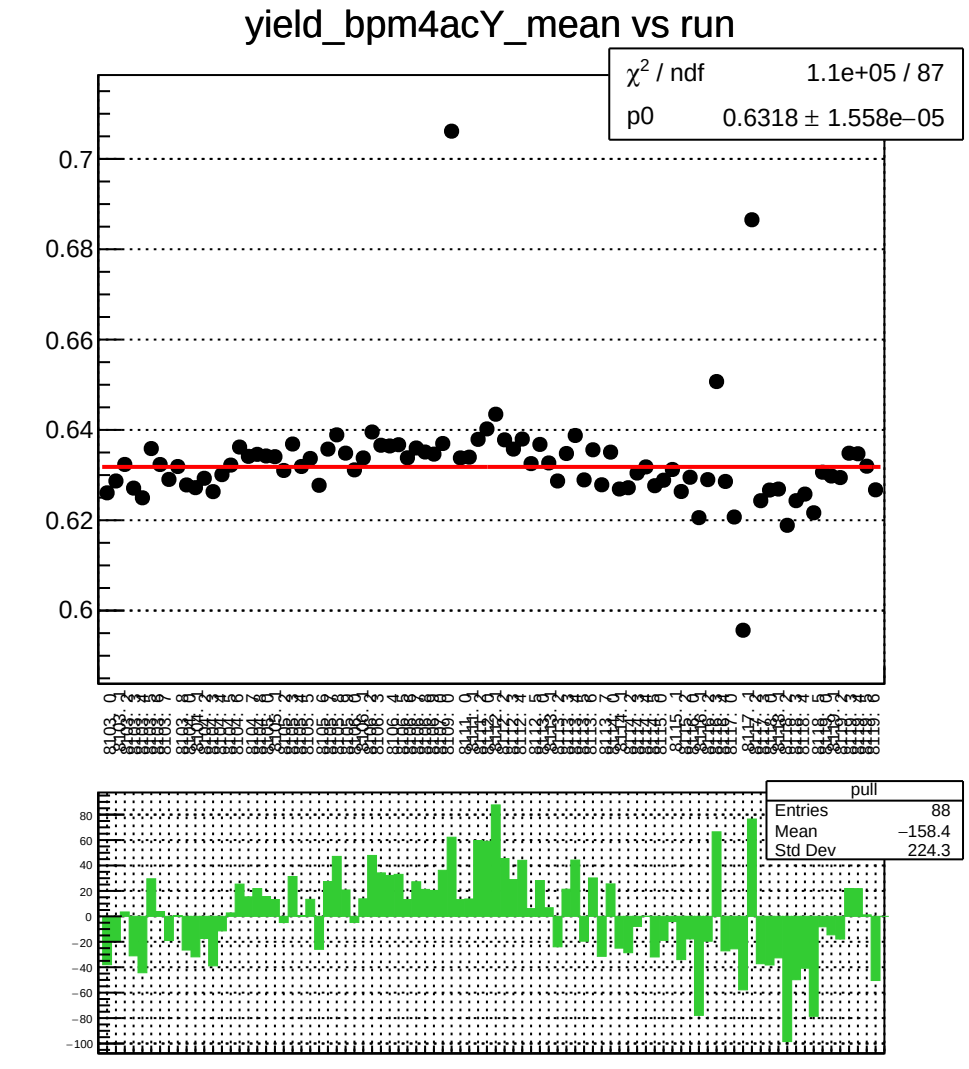

pull1D
Entries 88
Mean 3.115
Std Dev 2.503
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

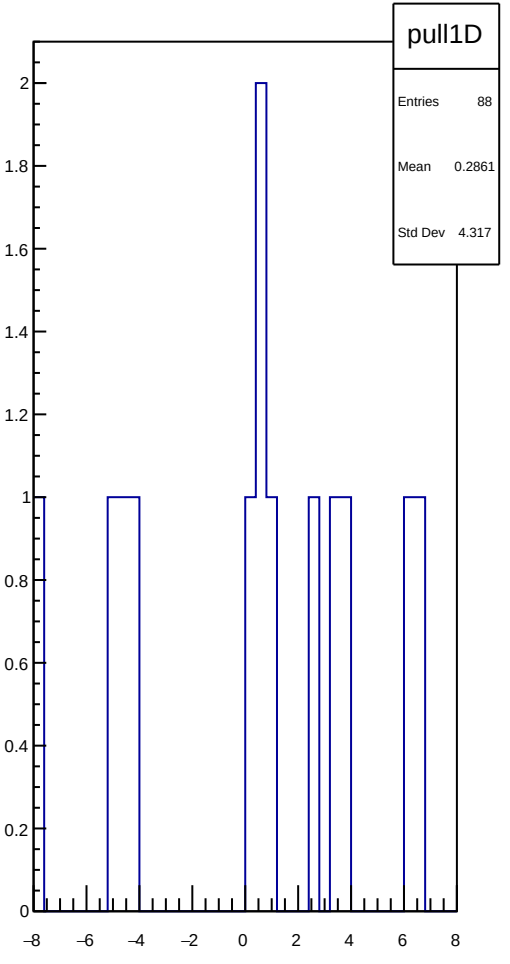

yield_bpm4eY_rms vs run
χ² / ndf 6.651e+04 / 87
p0 0.01319 ± 1.034e–05
0.12
0.1
0.08
0.06
0.04
0.02

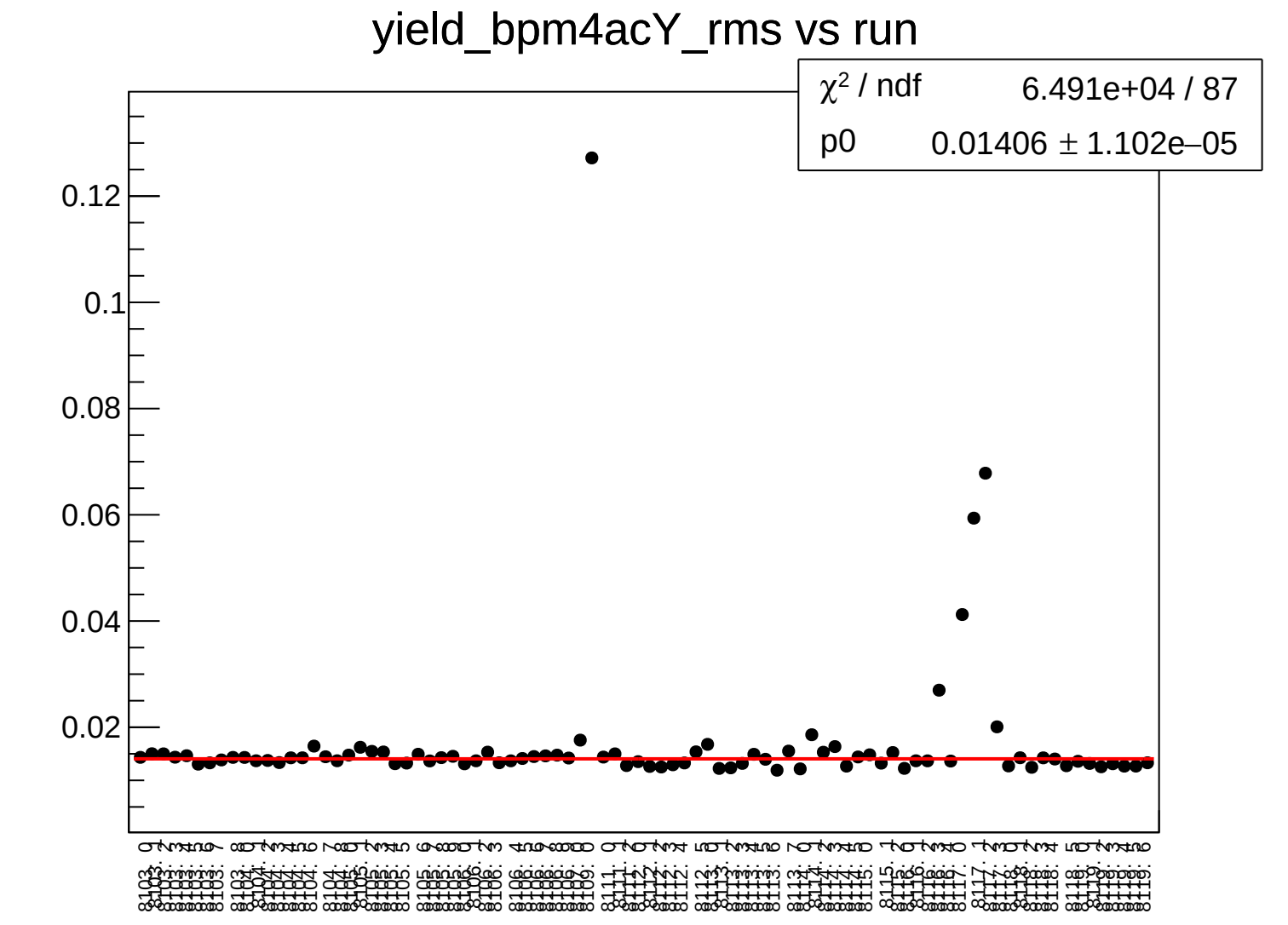

yield_bpm4acX_mean vs run
χ² / ndf 3.416e+04 / 87
p0 −0.9362 ± 5.801e−05
−0.88
−0.9
−0.92
−0.94
−0.96
pull
Entries 88
Mean −52.32
Std Dev 116.3
60
40
20
0
−20
−40

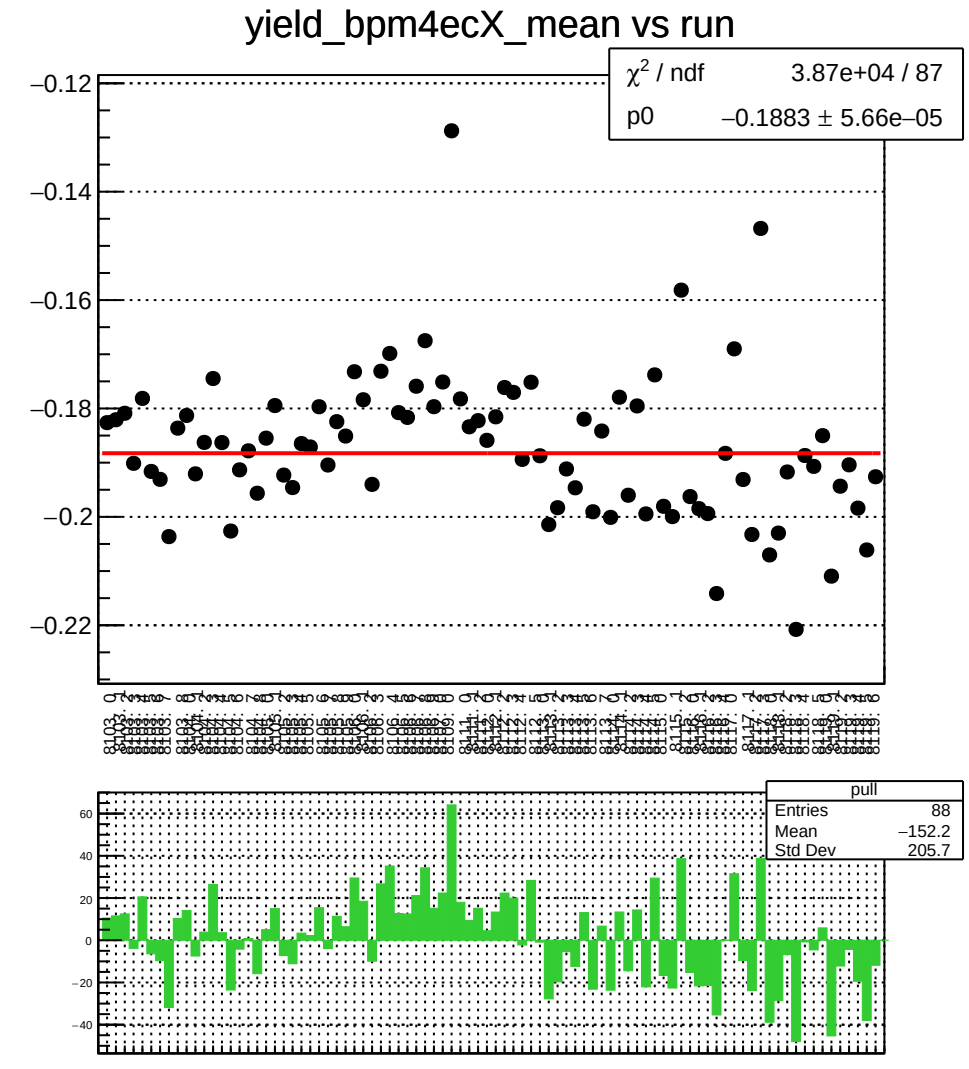

pull1D
Entries 88
Mean 0.6054
Std Dev 4.228
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

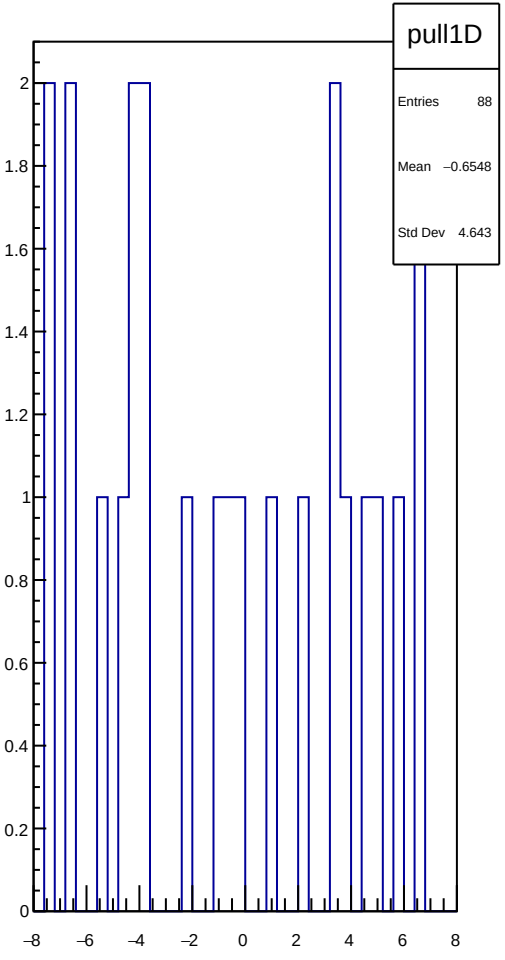

yield_bpm4acX_rms vs run
χ² / ndf 2.874e+04 / 87
p0 0.0529 ± 4.102e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

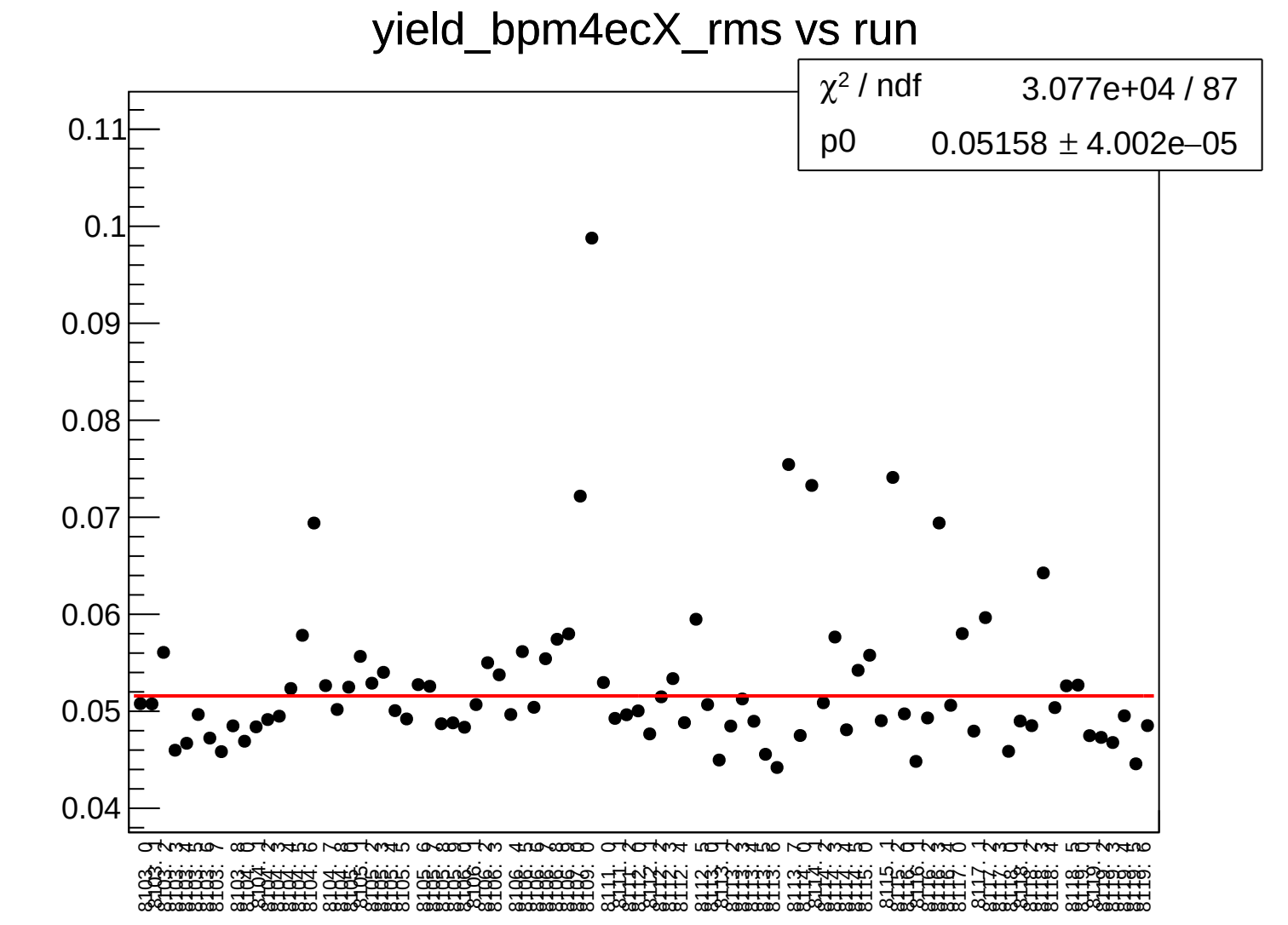

yield_bpm4acY_mean vs run
χ² / ndf 1.1e+05 / 87
p0 0.6318 ± 1.558e−05
0.7
0.68
0.66
0.64
0.62
0.6
pull
Entries 88
Mean −158.4
Std Dev 224.3
80
60
40
20
0
−20
−40
−60
−80
−100

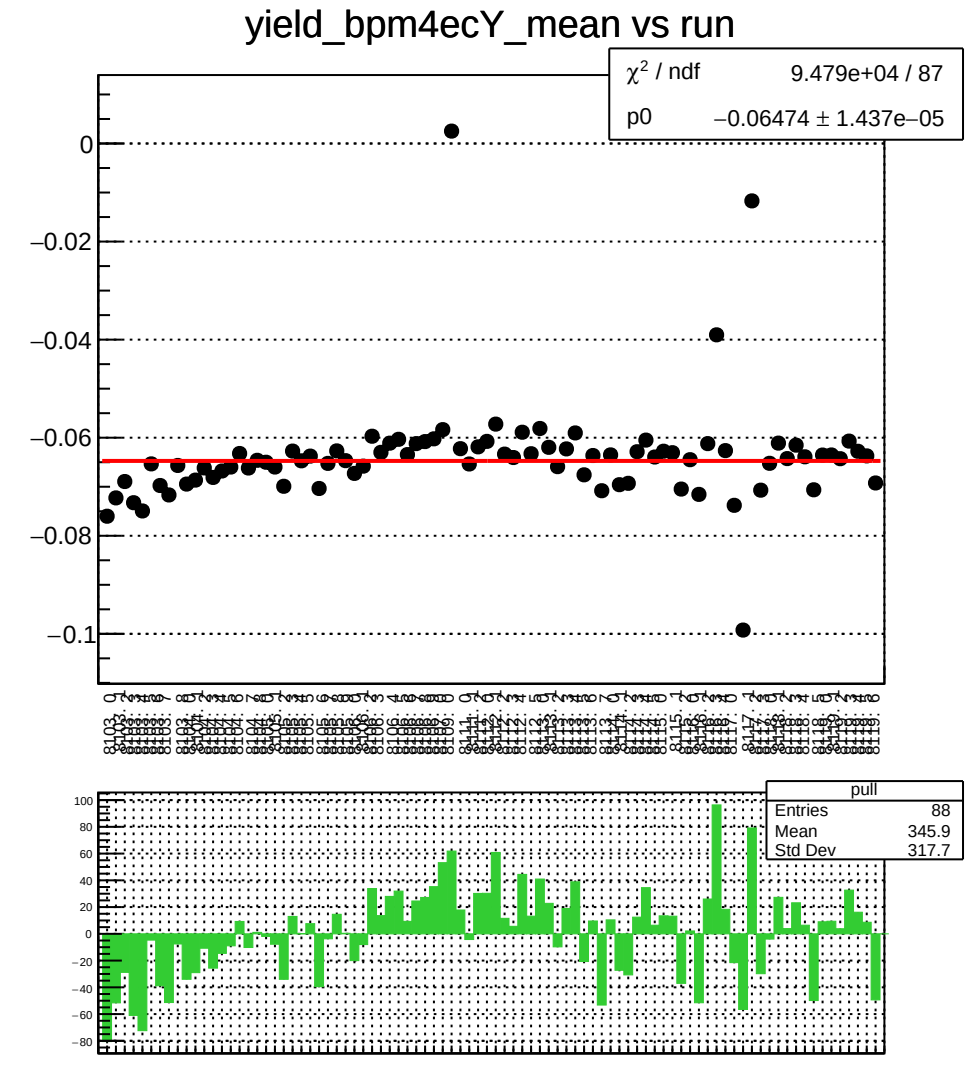

pull1D
Entries 88
Mean 0.2861
Std Dev 4.317
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

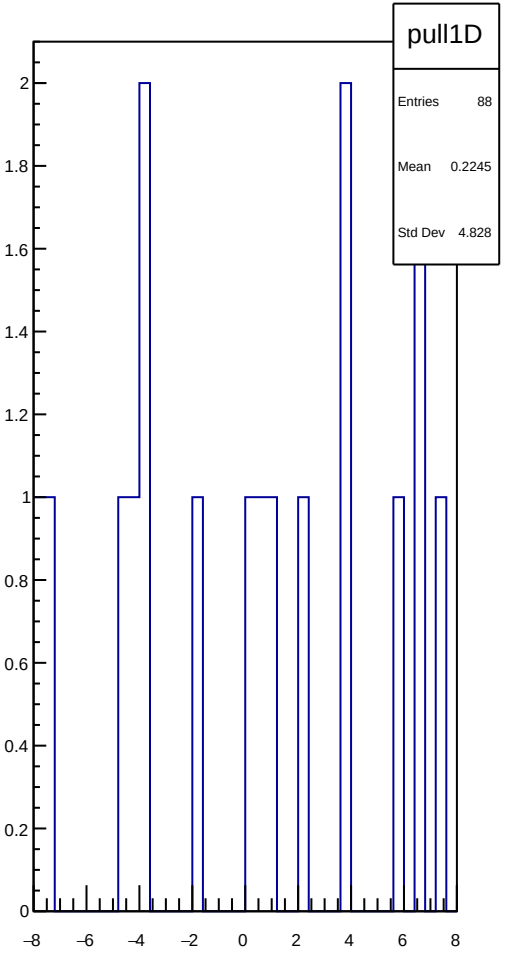

yield_bpm4acY_rms vs run
χ² / ndf 6.491e+04 / 87
p0 0.01406 ± 1.102e–05
0.12
0.1
0.08
0.06
0.04
0.02

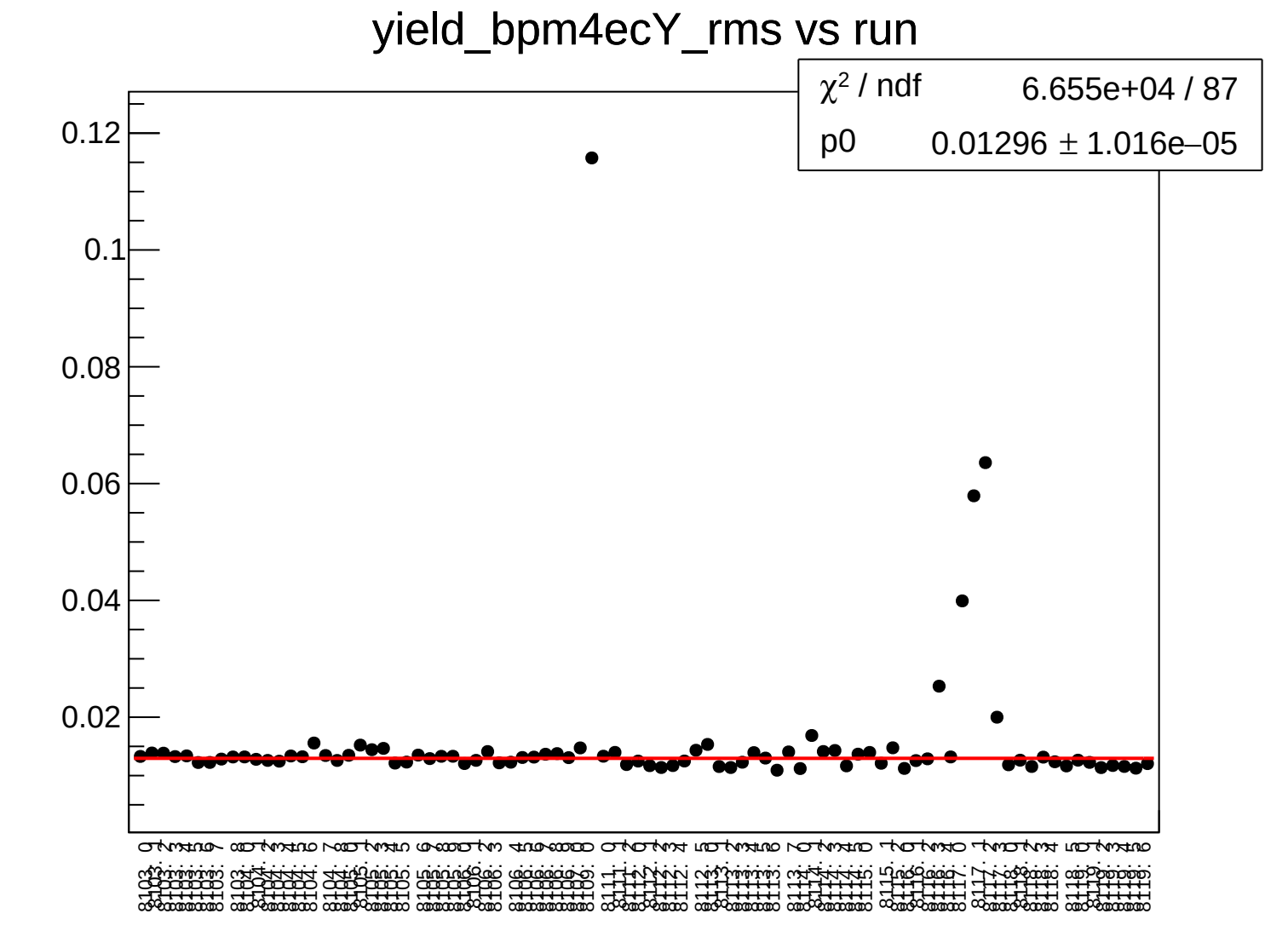

yield_bpm4ecX_mean vs run
χ² / ndf 3.87e+04 / 87
p0 −0.1883 ± 5.66e−05
−0.12
−0.14
−0.16
−0.18
−0.2
−0.22
pull
Entries 88
Mean −152.2
Std Dev 205.7
60
40
20
0
−20
−40

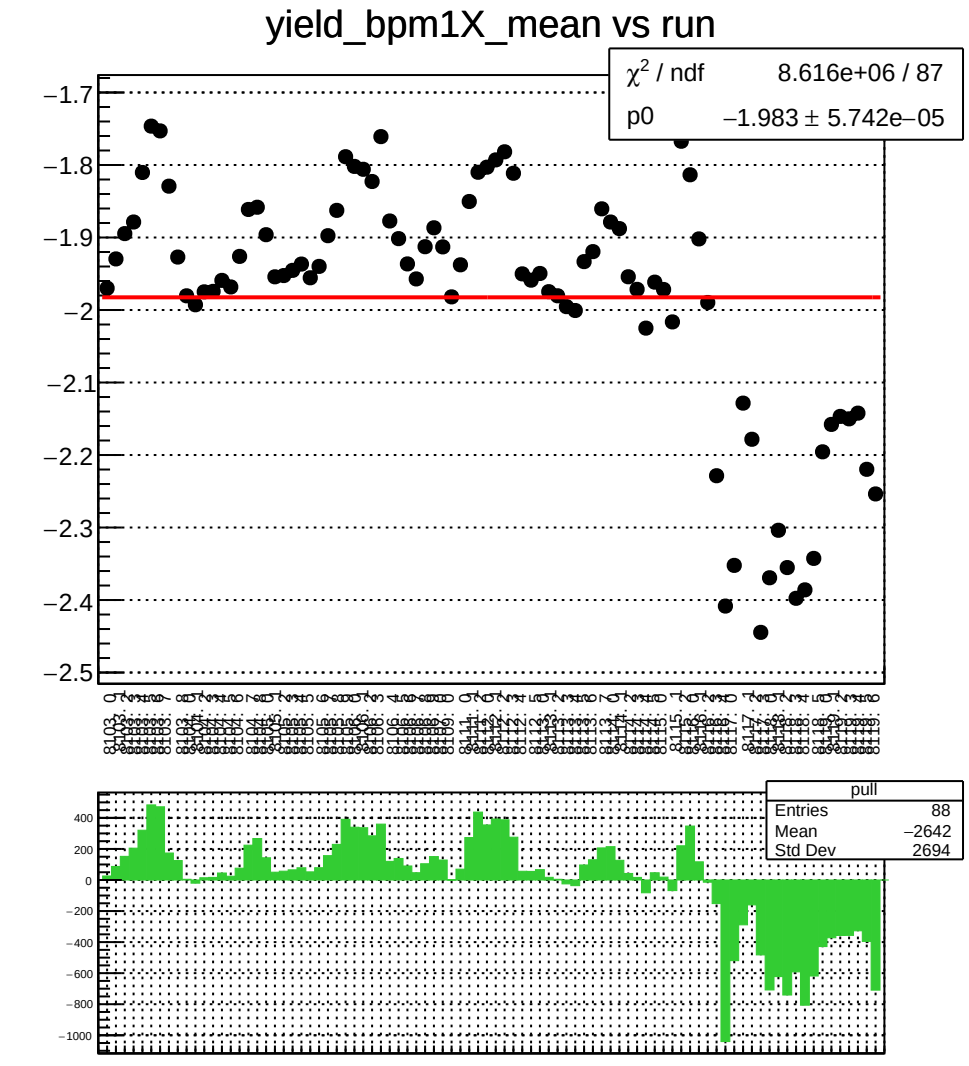

pull1D
Entries 88
Mean −0.6548
Std Dev 4.643
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

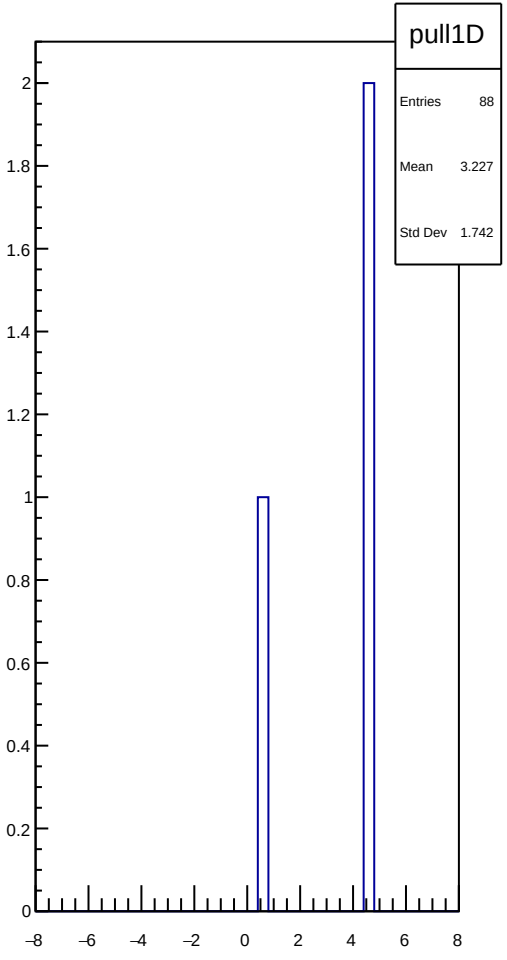

yield_bpm4ecX_rms vs run
χ² / ndf 3.077e+04 / 87
p0 0.05158 ± 4.002e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

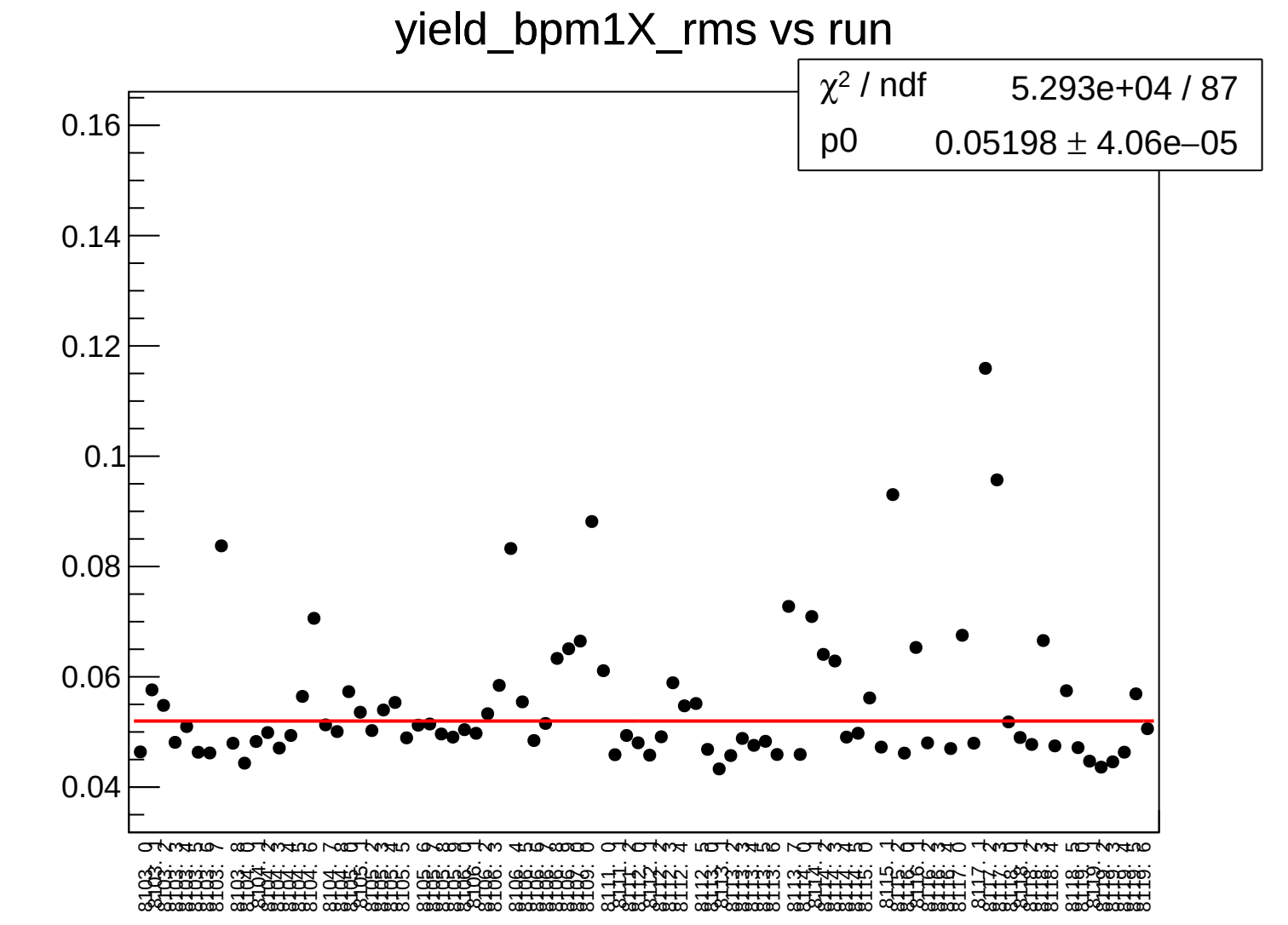

yield_bpm4ecY_mean vs run
χ² / ndf 9.479e+04 / 87
p0 −0.06474 ± 1.437e−05
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull
Entries 88
Mean 345.9
Std Dev 317.7
100
80
60
40
20
0
−20
−40
−60
−80

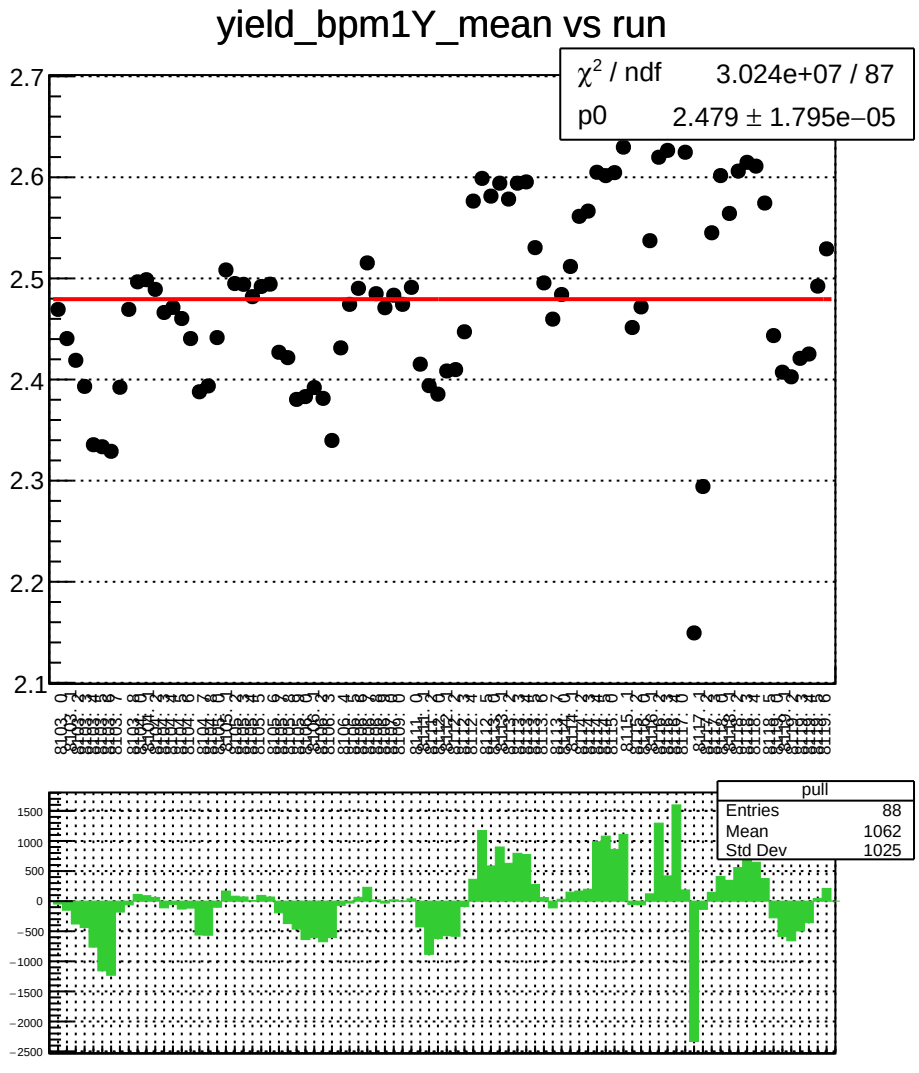

pull1D
Entries 88
Mean 0.2245
Std Dev 4.828
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

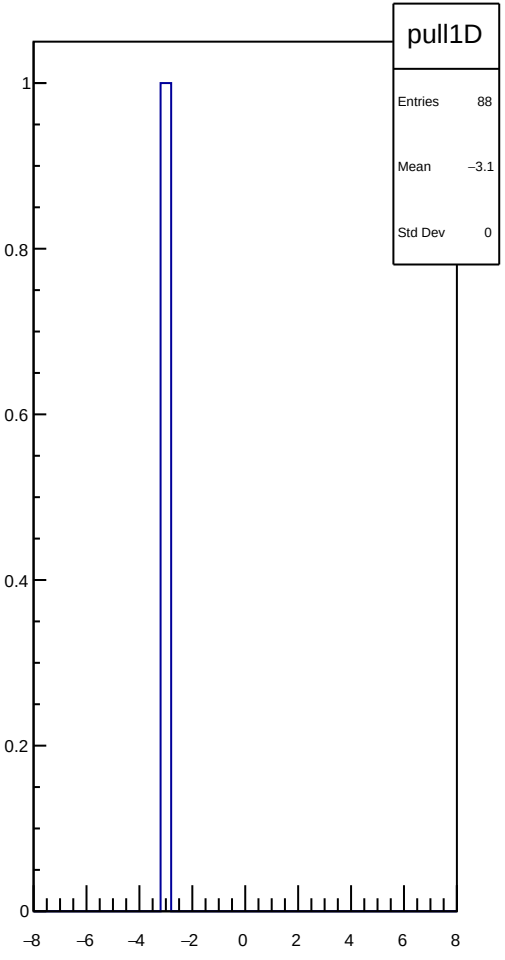

yield_bpm4ecY_rms vs run
χ² / ndf 6.655e+04 / 87
p0 0.01296 ± 1.016e–05
0.12
0.1
0.08
0.06
0.04
0.02

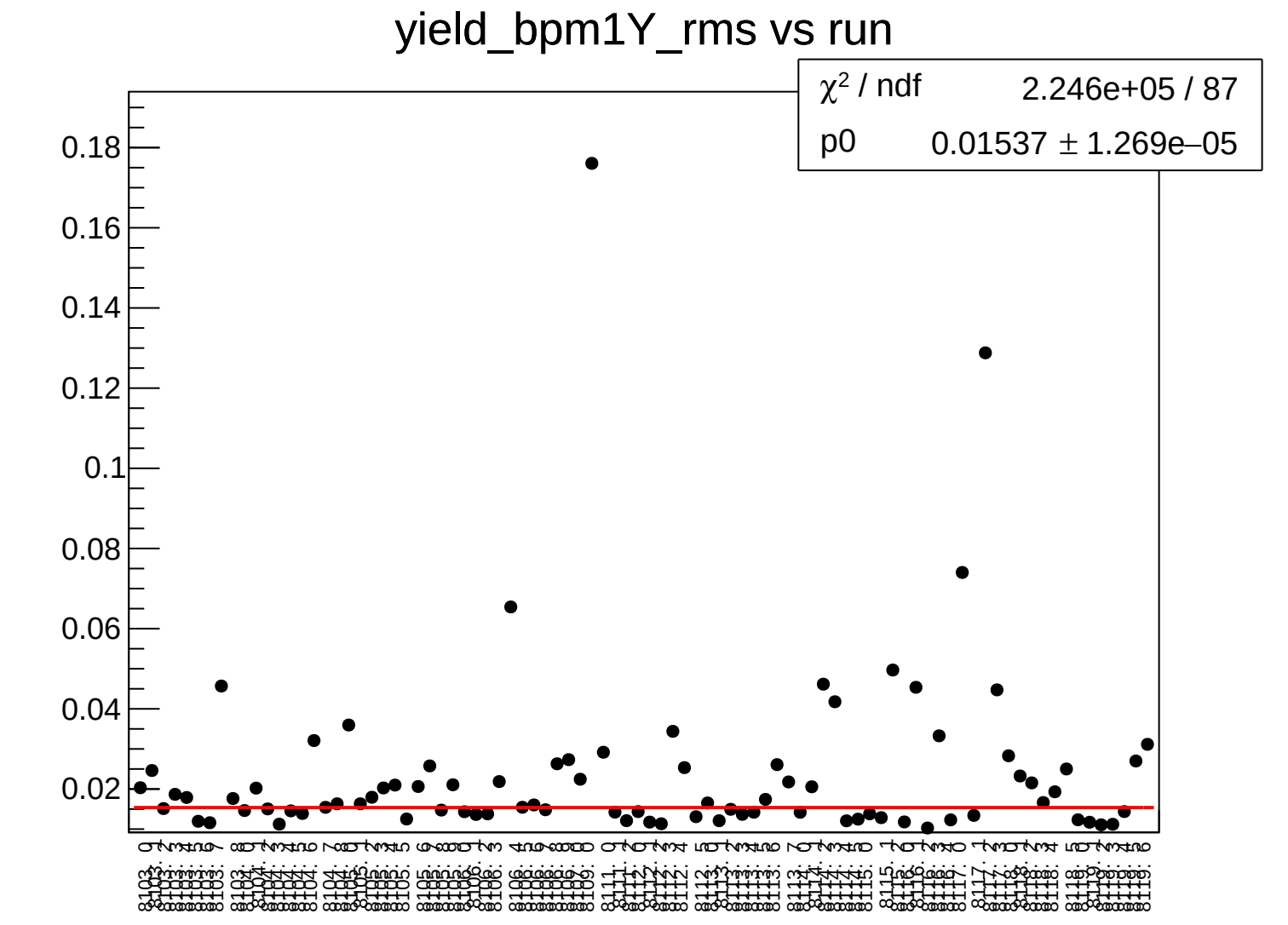

yield_bpm1X_mean vs run
χ² / ndf 8.616e+06 / 87
p0 −1.983 ± 5.742e−05
pull
Entries 88
Mean −2642
Std Dev 2694

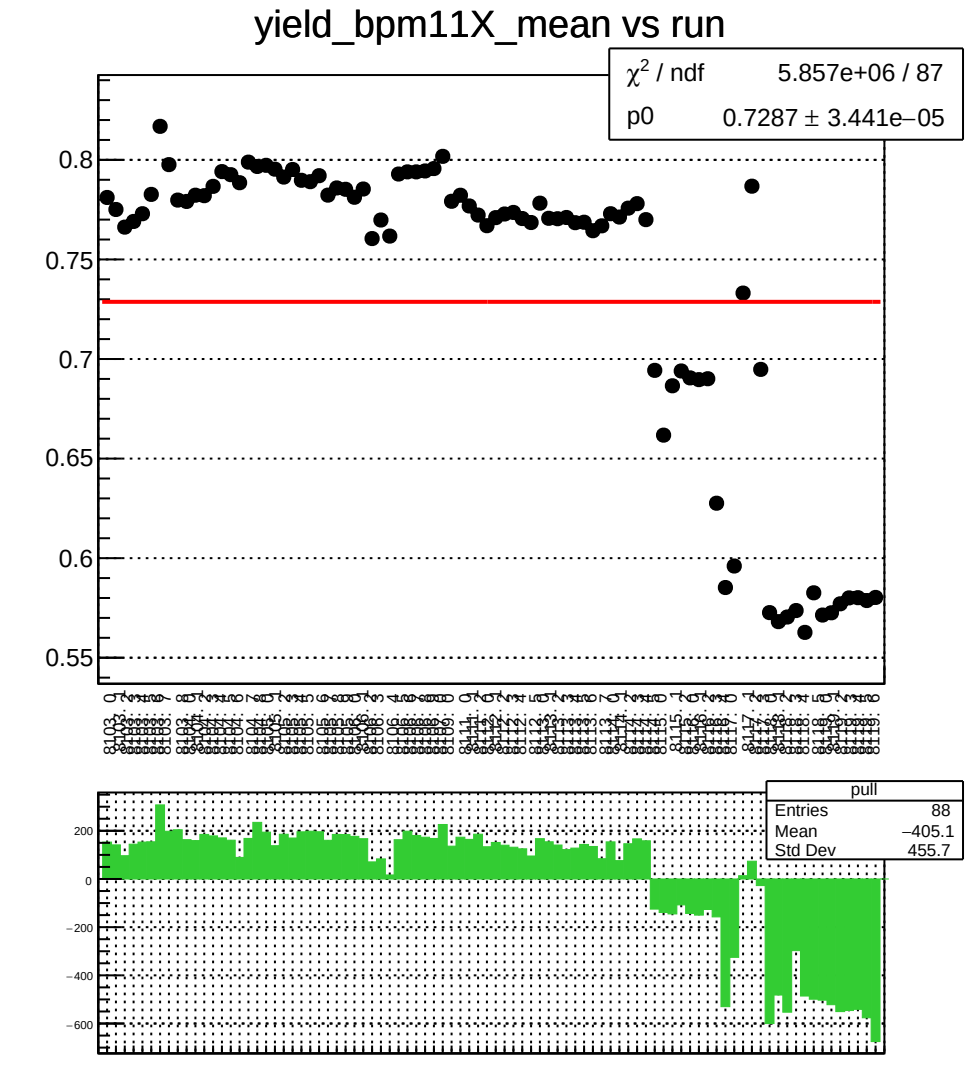

pull1D
Entries 88
Mean 3.227
Std Dev 1.742

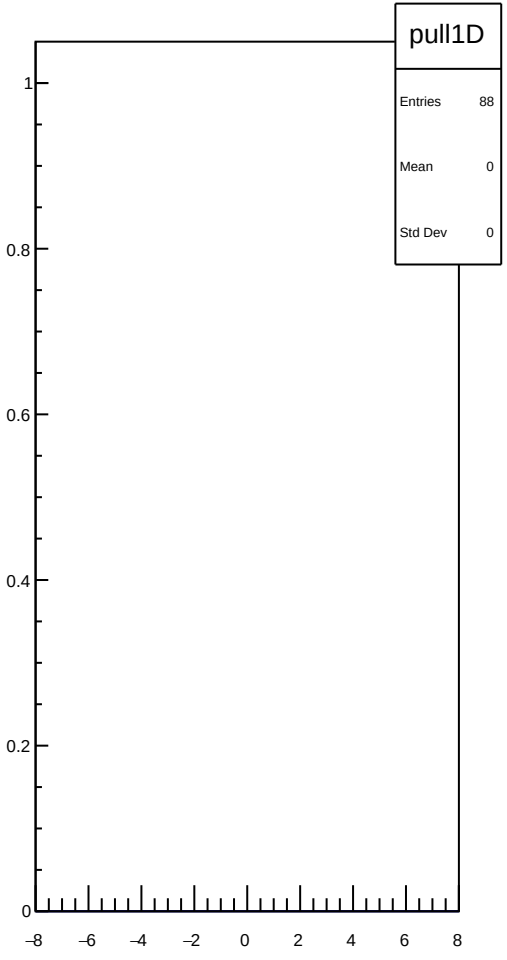

yield_bpm1X_rms vs run
χ² / ndf 5.293e+04 / 87
p0 0.05198 ± 4.06e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

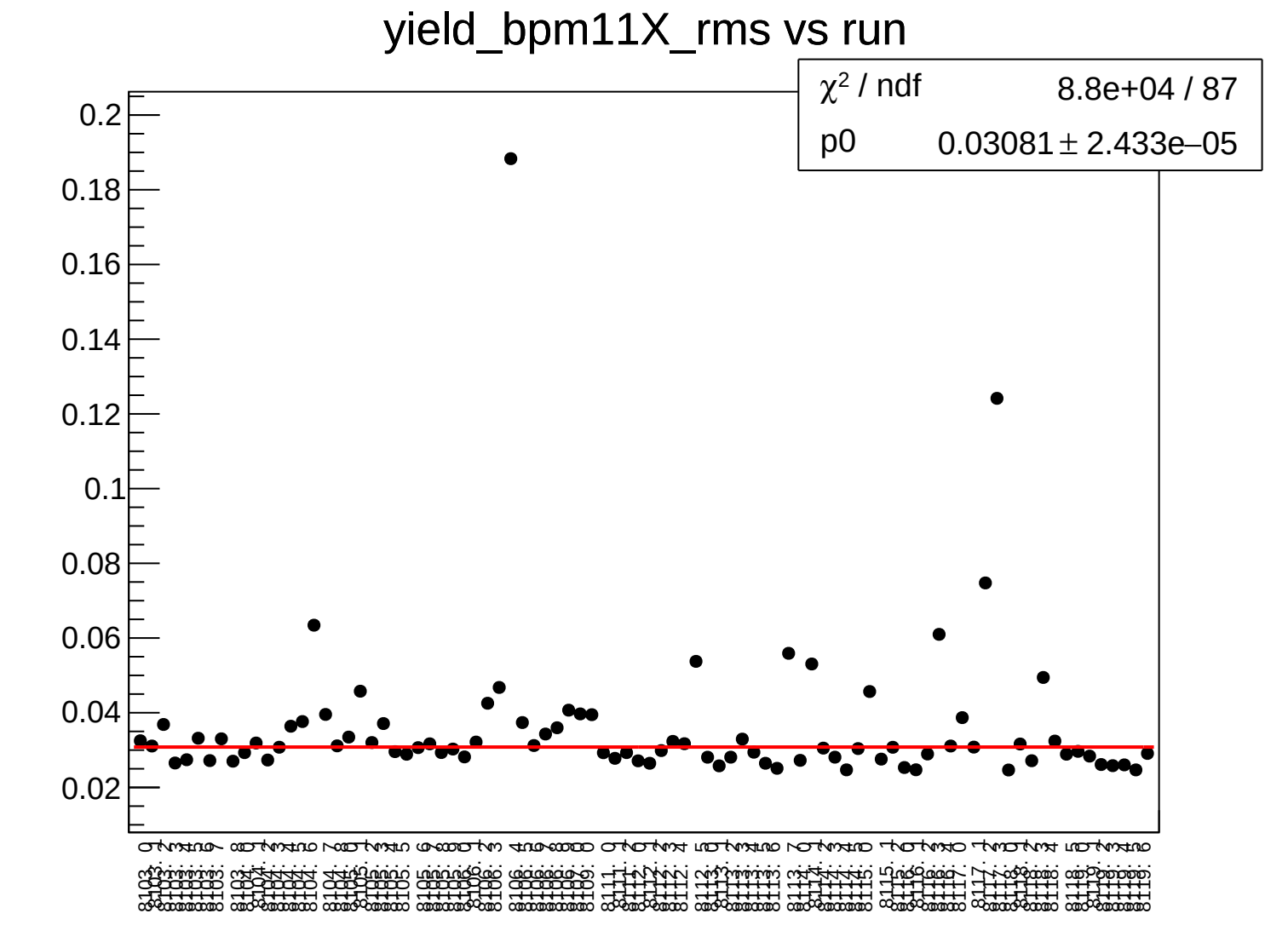

yield_bpm1Y_mean vs run
χ² / ndf 3.024e+07 / 87
p0 2.479 ± 1.795e−05
pull
Entries 88
Mean 1062
Std Dev 1025

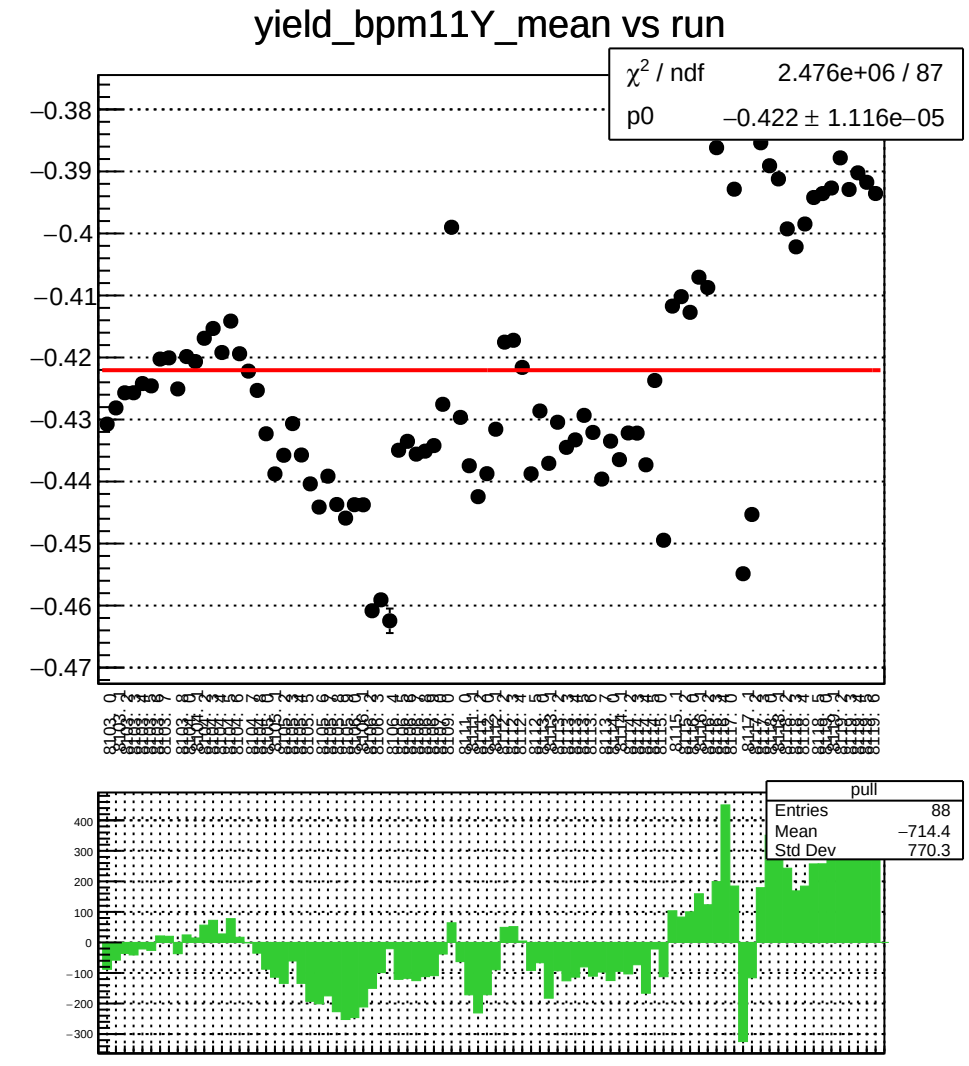

pull1D
Entries 88
Mean −3.1
Std Dev 0

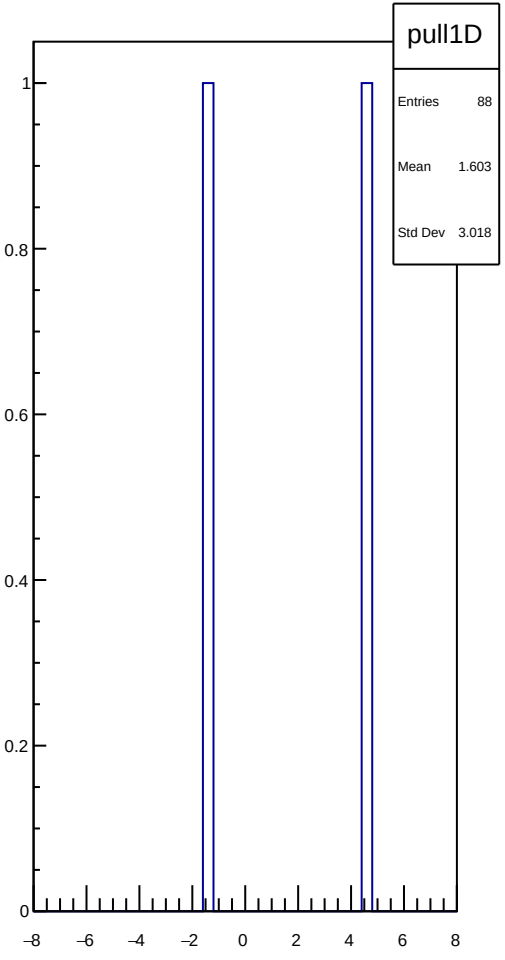

yield_bpm1Y_rms vs run
χ² / ndf 2.246e+05 / 87
p0 0.01537 ± 1.269e–05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

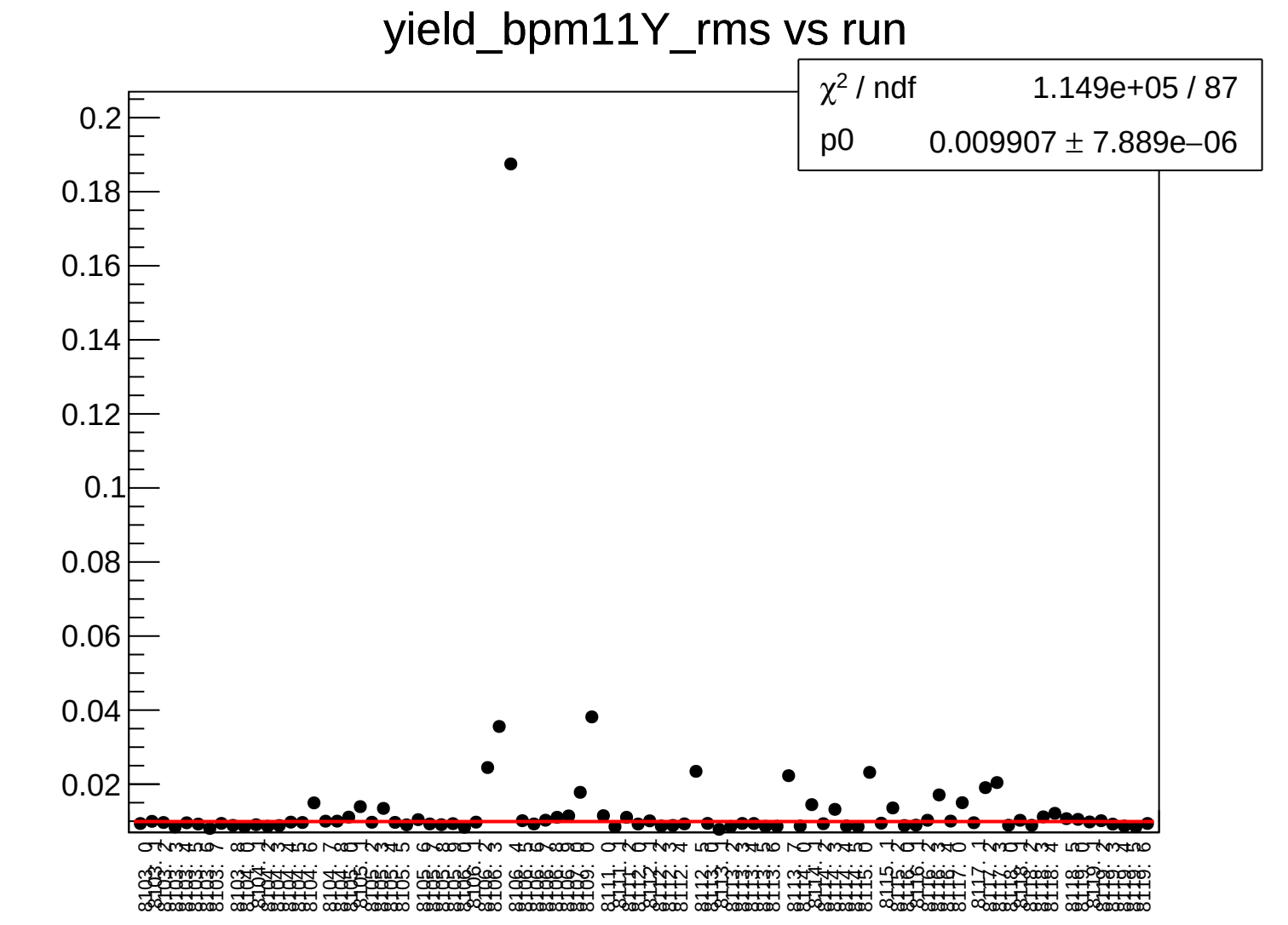

yield_bpm11X_mean vs run
χ² / ndf 5.857e+06 / 87
p0 0.7287 ± 3.441e−05
0.8
0.75
0.7
0.65
0.6
0.55
pull
Entries 88
Mean −405.1
Std Dev 455.7
200
0
−200
−400
−600

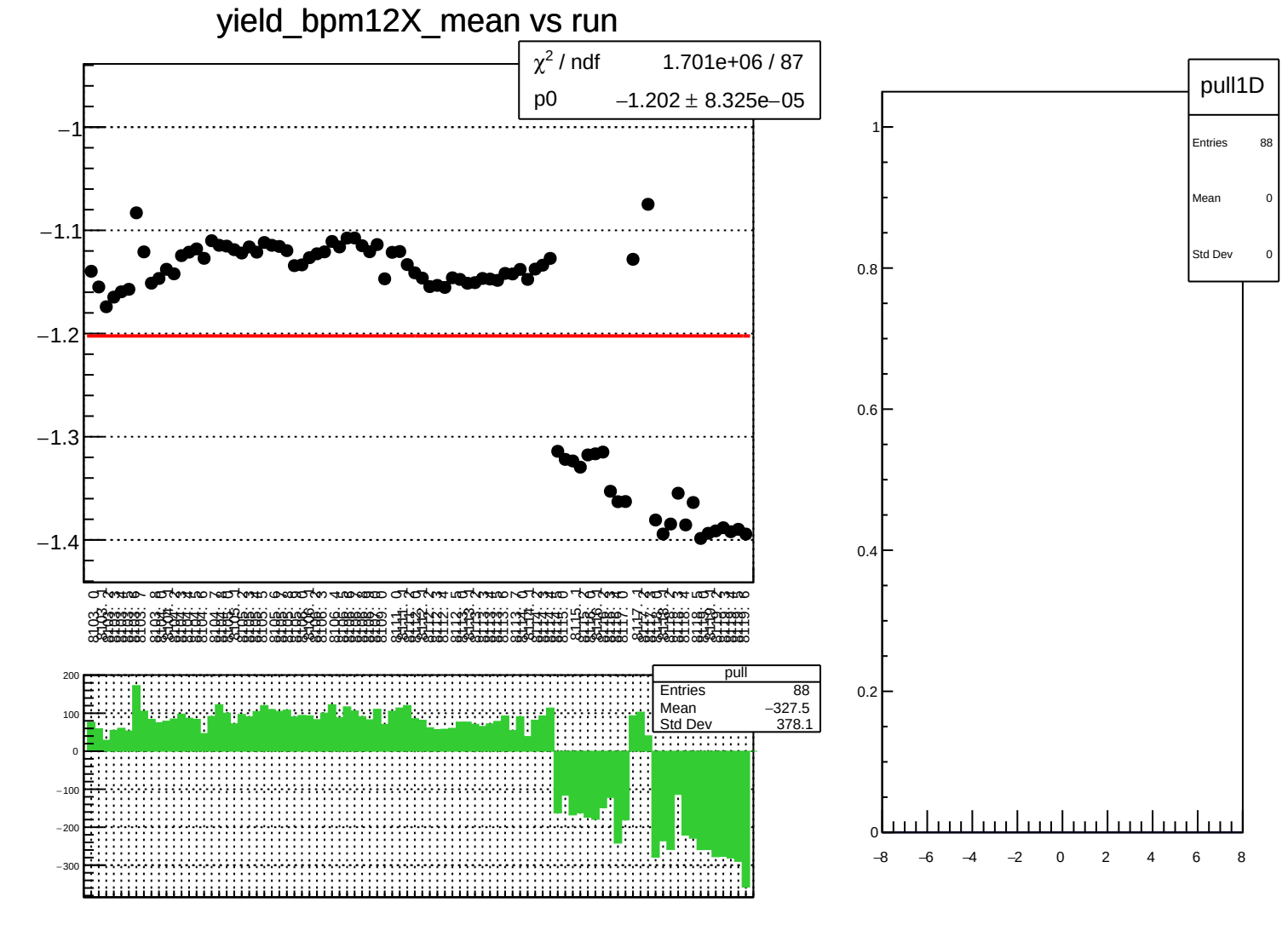

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

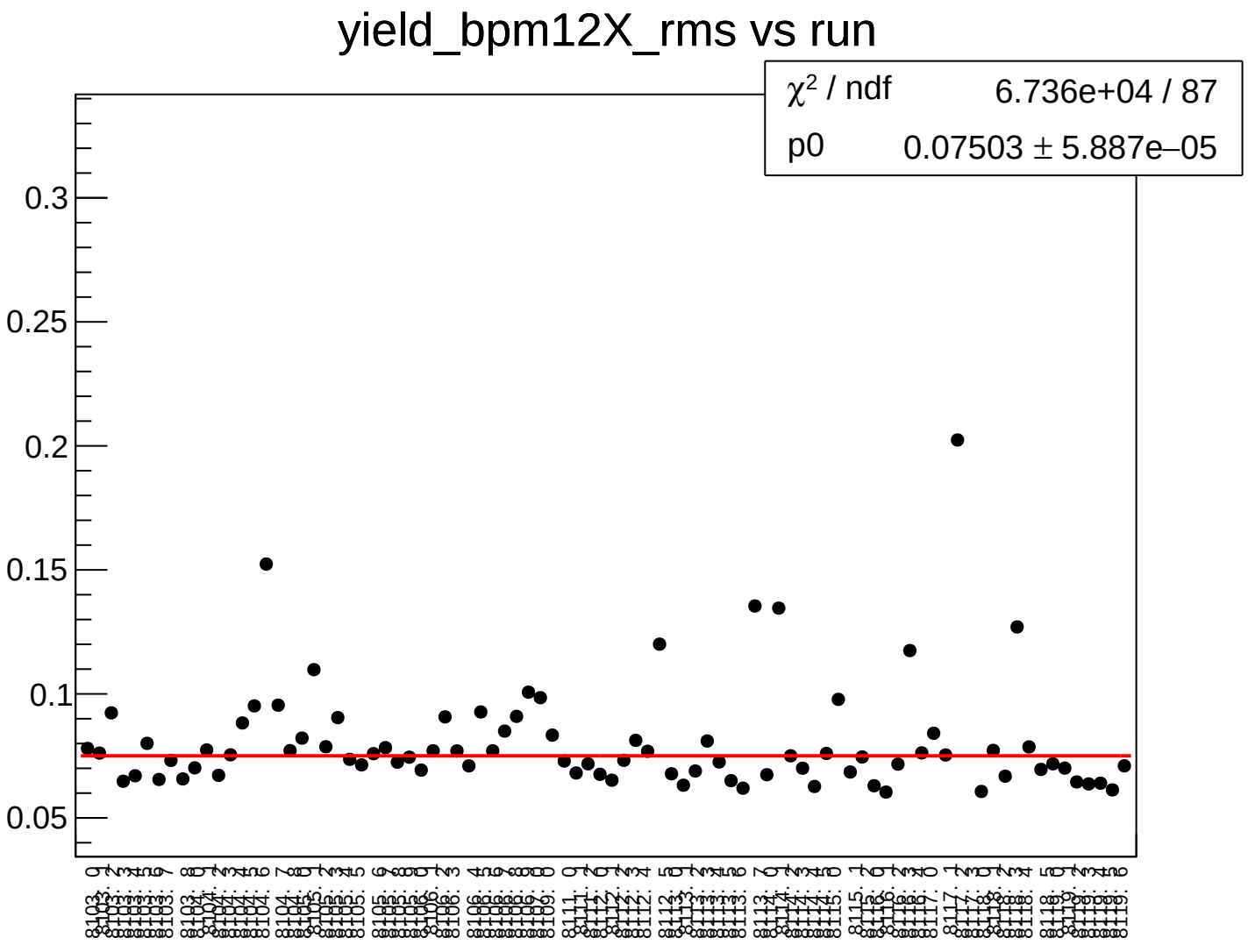

yield_bpm11X_rms vs run
χ² / ndf 8.8e+04 / 87
p0 0.03081 ± 2.433e–05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

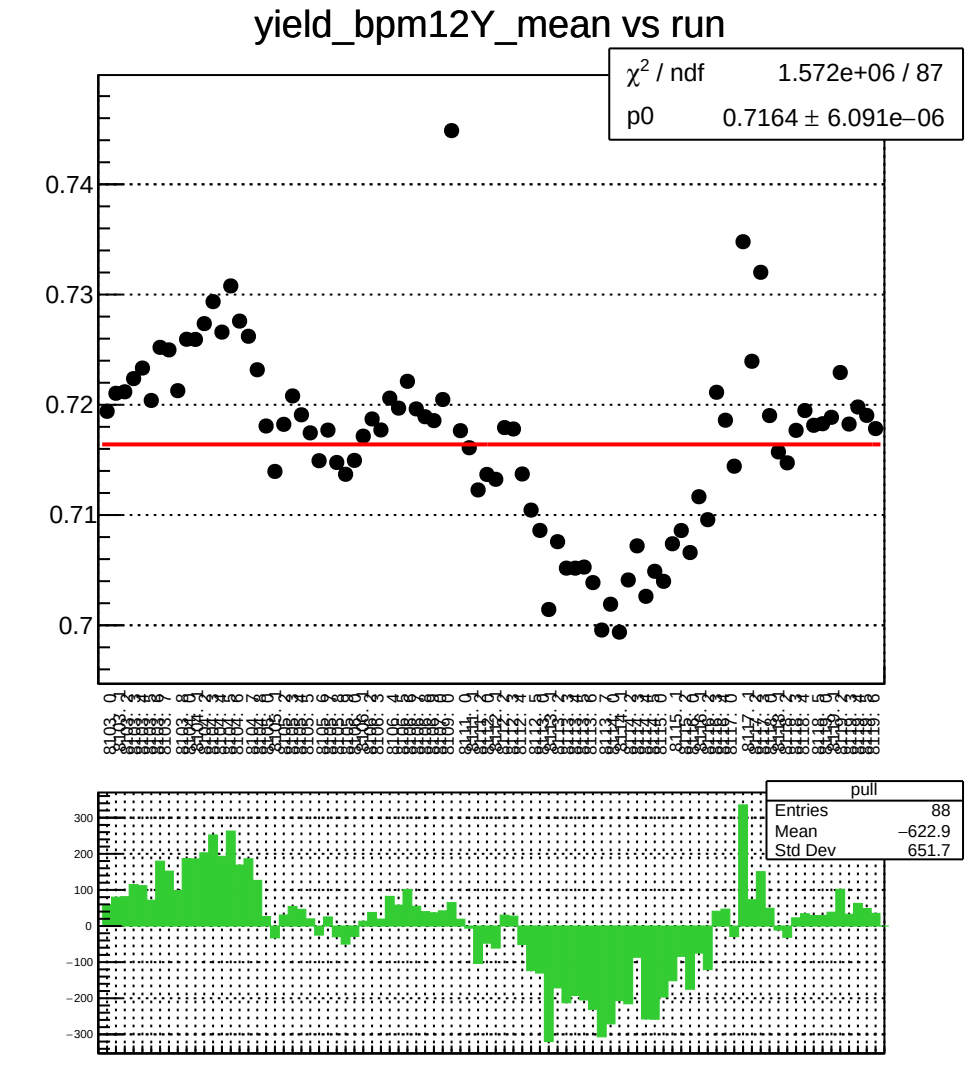

yield_bpm11Y_mean vs run
χ² / ndf 2.476e+06 / 87
p0 −0.422 ± 1.116e−05
−0.38
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
−0.46
−0.47
pull
Entries 88
Mean −714.4
Std Dev 770.3
400
300
200
100
0
−100
−200
−300

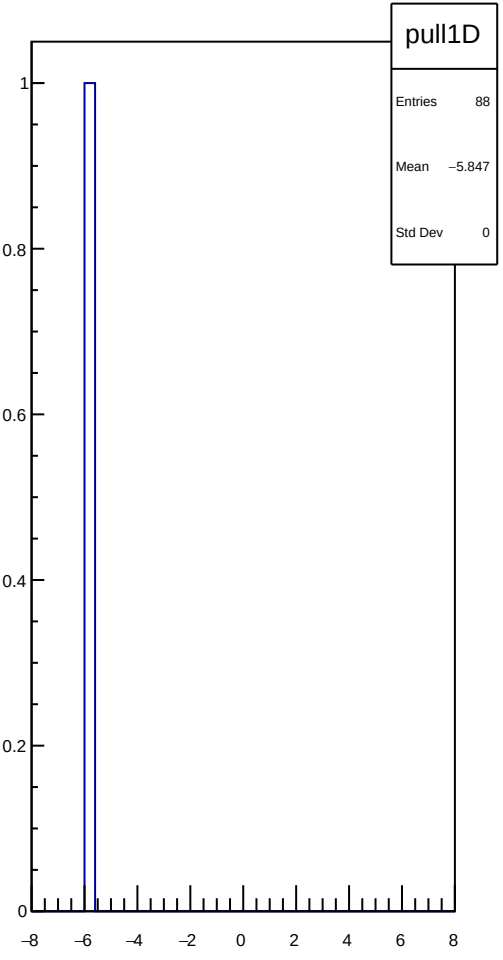

pull1D
Entries 88
Mean 1.603
Std Dev 3.018
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

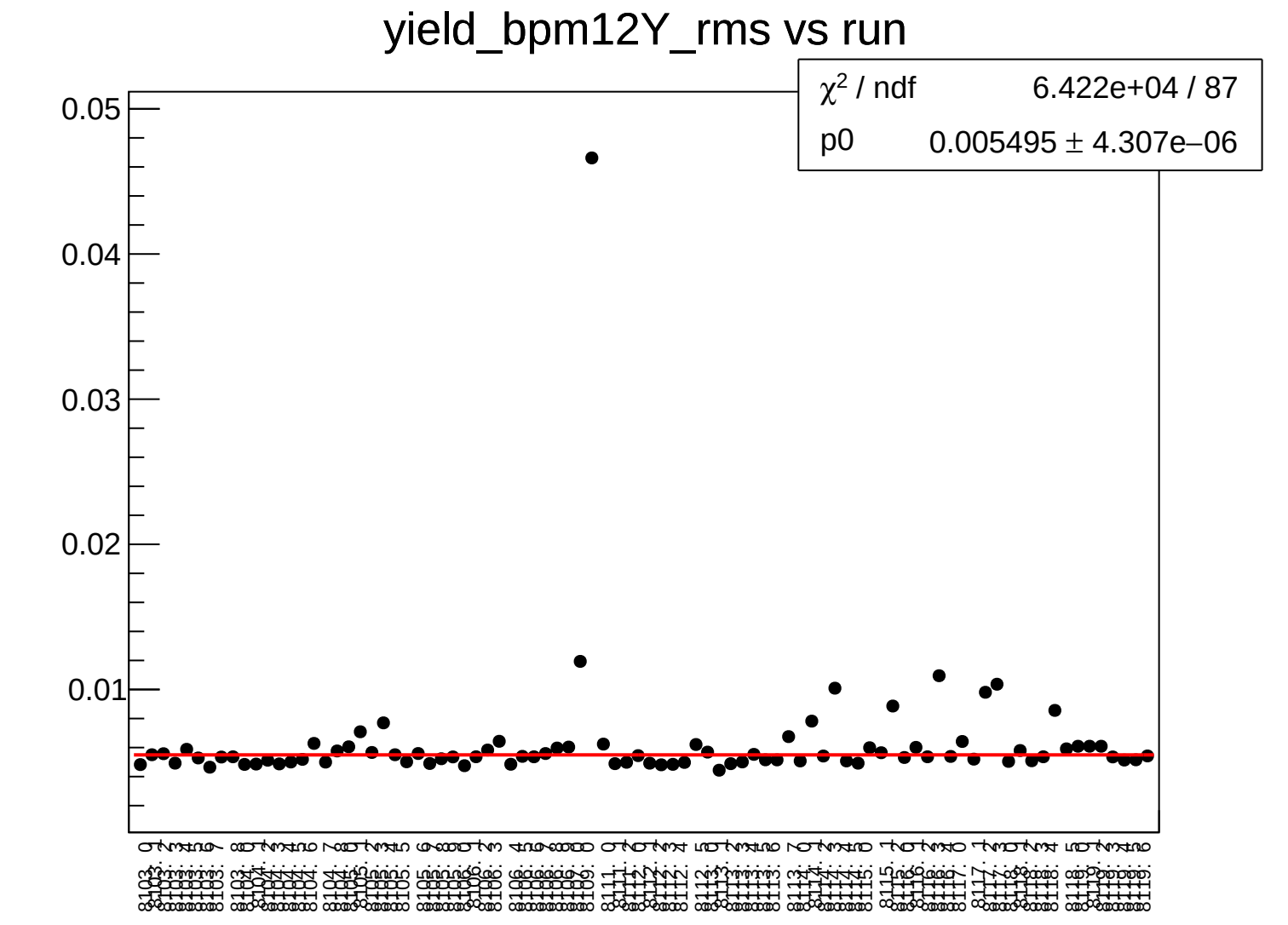

yield_bpm11Y_rms vs run
χ² / ndf 1.149e+05 / 87
p0 0.009907 ± 7.889e−06
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

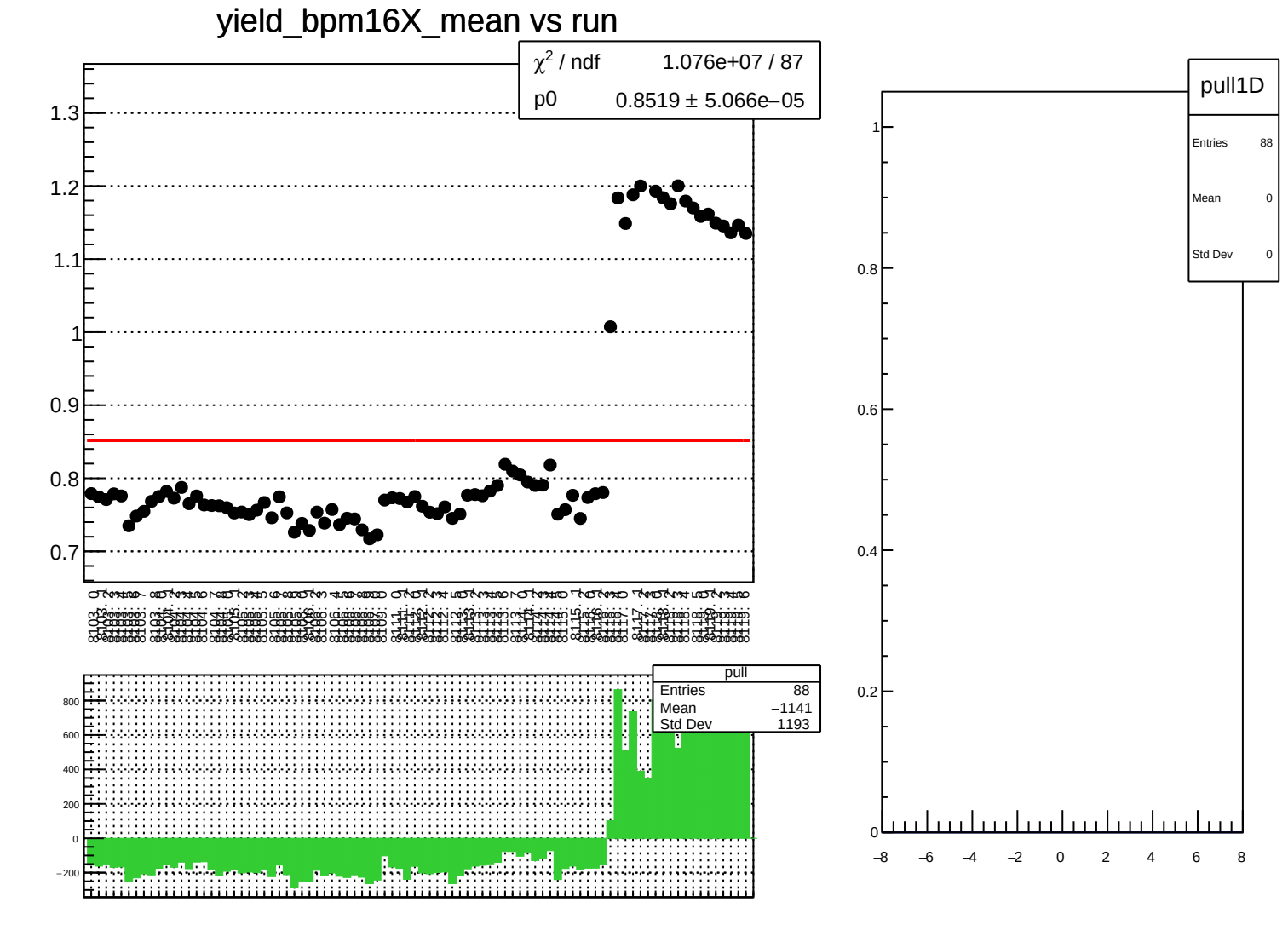

yield_bpm12X_mean vs run
χ² / ndf 1.701e+06 / 87
p0 −1.202 ± 8.325e−05
−1
−1.1
−1.2
−1.3
−1.4
pull
Entries 88
Mean −327.5
Std Dev 378.1
200
100
0
−100
−200
−300
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

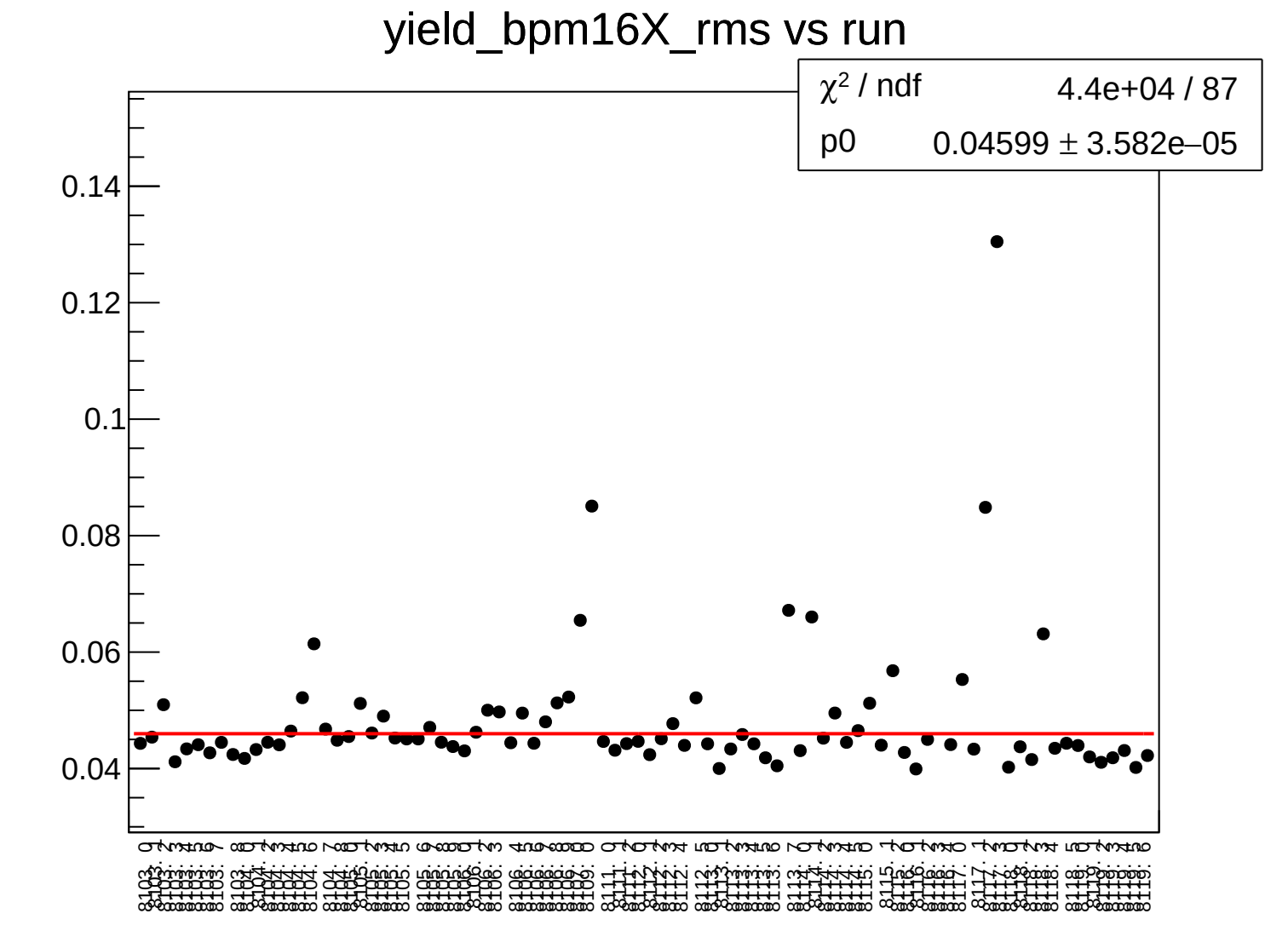

yield_bpm12X_rms vs run
χ² / ndf 6.736e+04 / 87
p0 0.07503 ± 5.887e–05
0.3
0.25
0.2
0.15
0.1
0.05

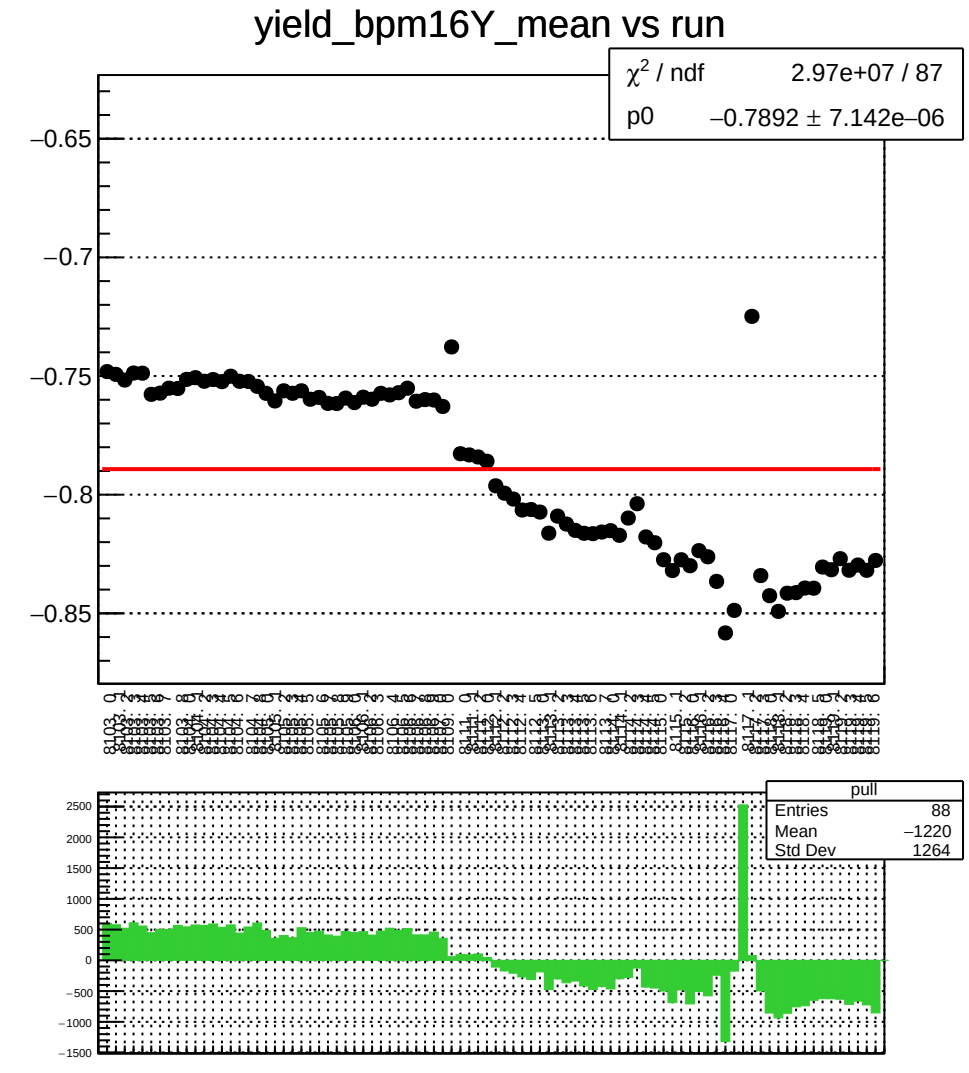

yield_bpm12Y_mean vs run
χ² / ndf 1.572e+06 / 87
p0 0.7164 ± 6.091e−06
0.74
0.73
0.72
0.71
0.7
pull
Entries 88
Mean −622.9
Std Dev 651.7
300
200
100
0
−100
−200
−300

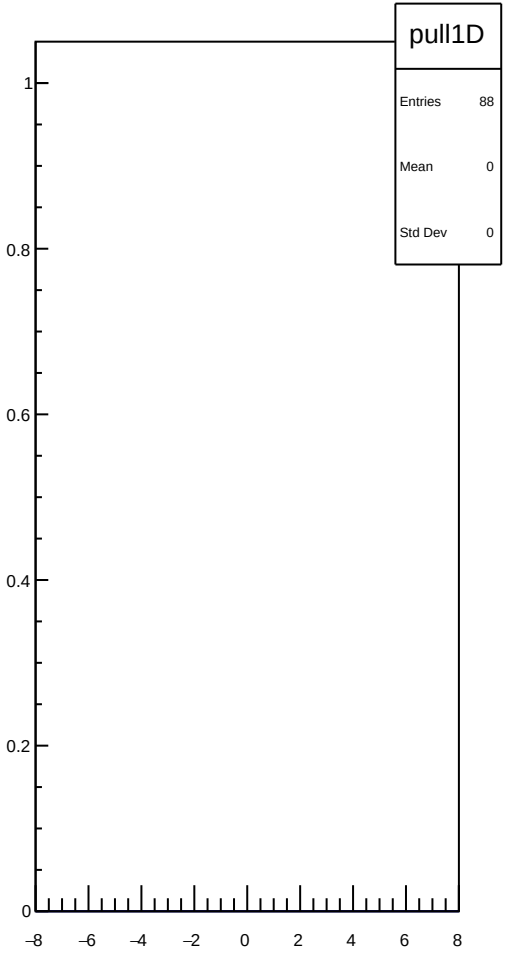

pull1D
Entries 88
Mean −5.847
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

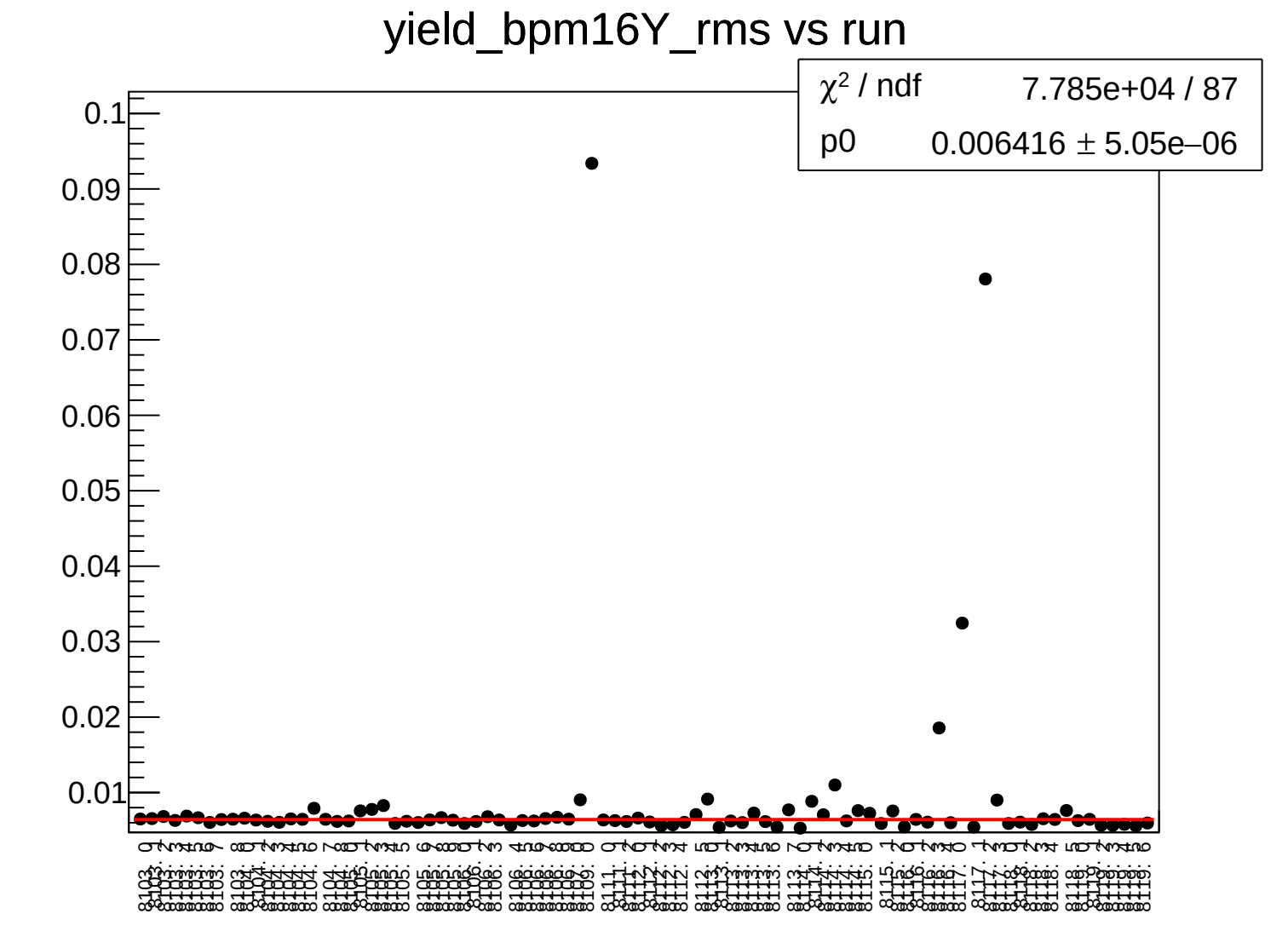

yield_bpm12Y_rms vs run
χ² / ndf 6.422e+04 / 87
p0 0.005495 ± 4.307e−06
0.05
0.04
0.03
0.02
0.01

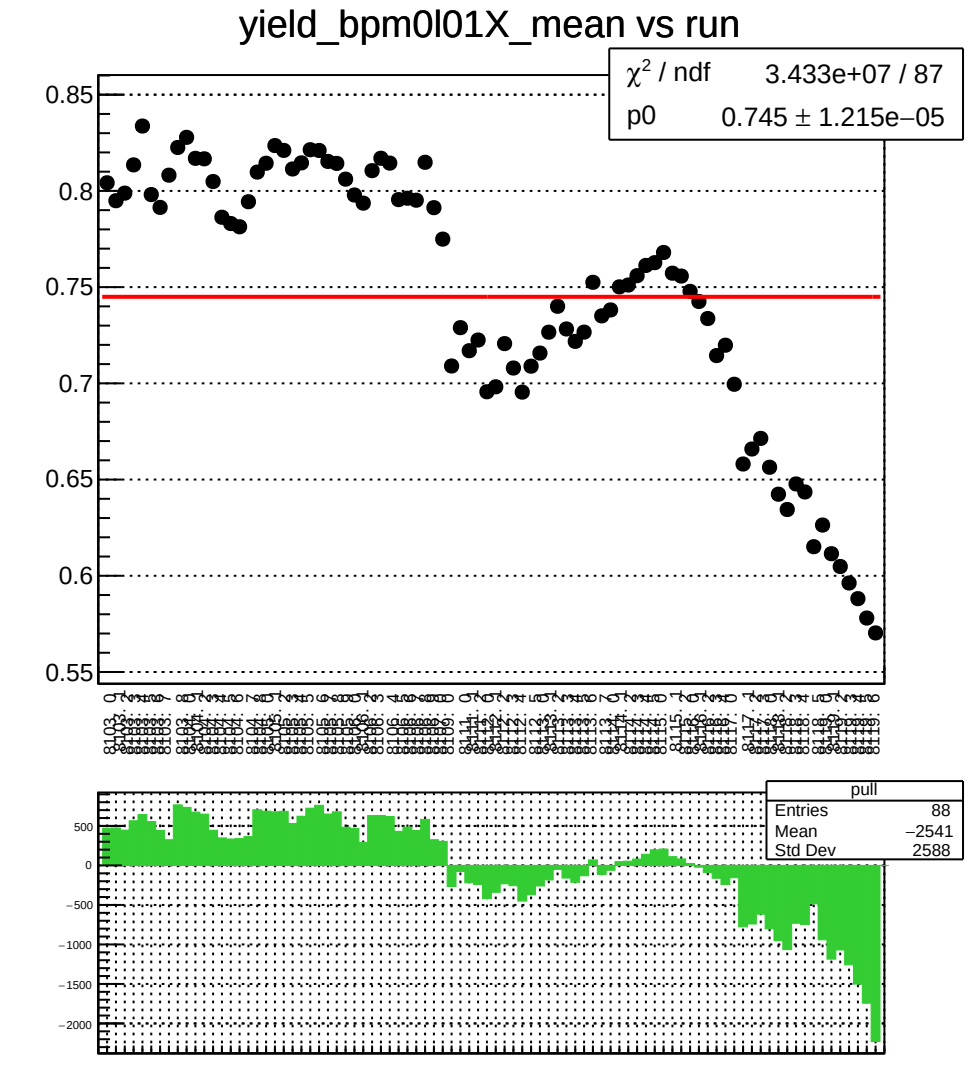

yield_bpm16X_mean vs run
χ² / ndf 1.076e+07 / 87
p0 0.8519 ± 5.066e−05
pull
Entries 88
Mean −1141
Std Dev 1193
pull1D
Entries 88
Mean 0
Std Dev 0

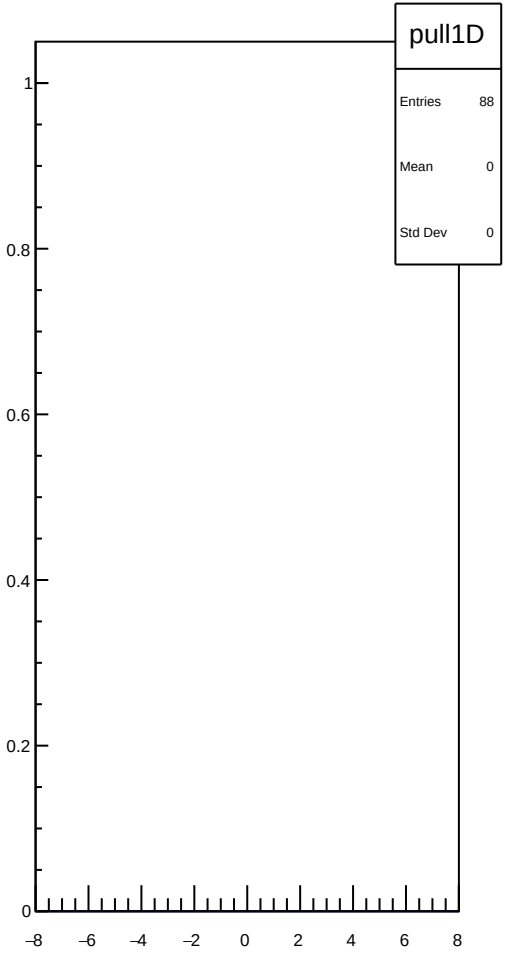

yield_bpm16X_rms vs run
χ² / ndf 4.4e+04 / 87
p0 0.04599 ± 3.582e−05
0.14
0.12
0.1
0.08
0.06
0.04

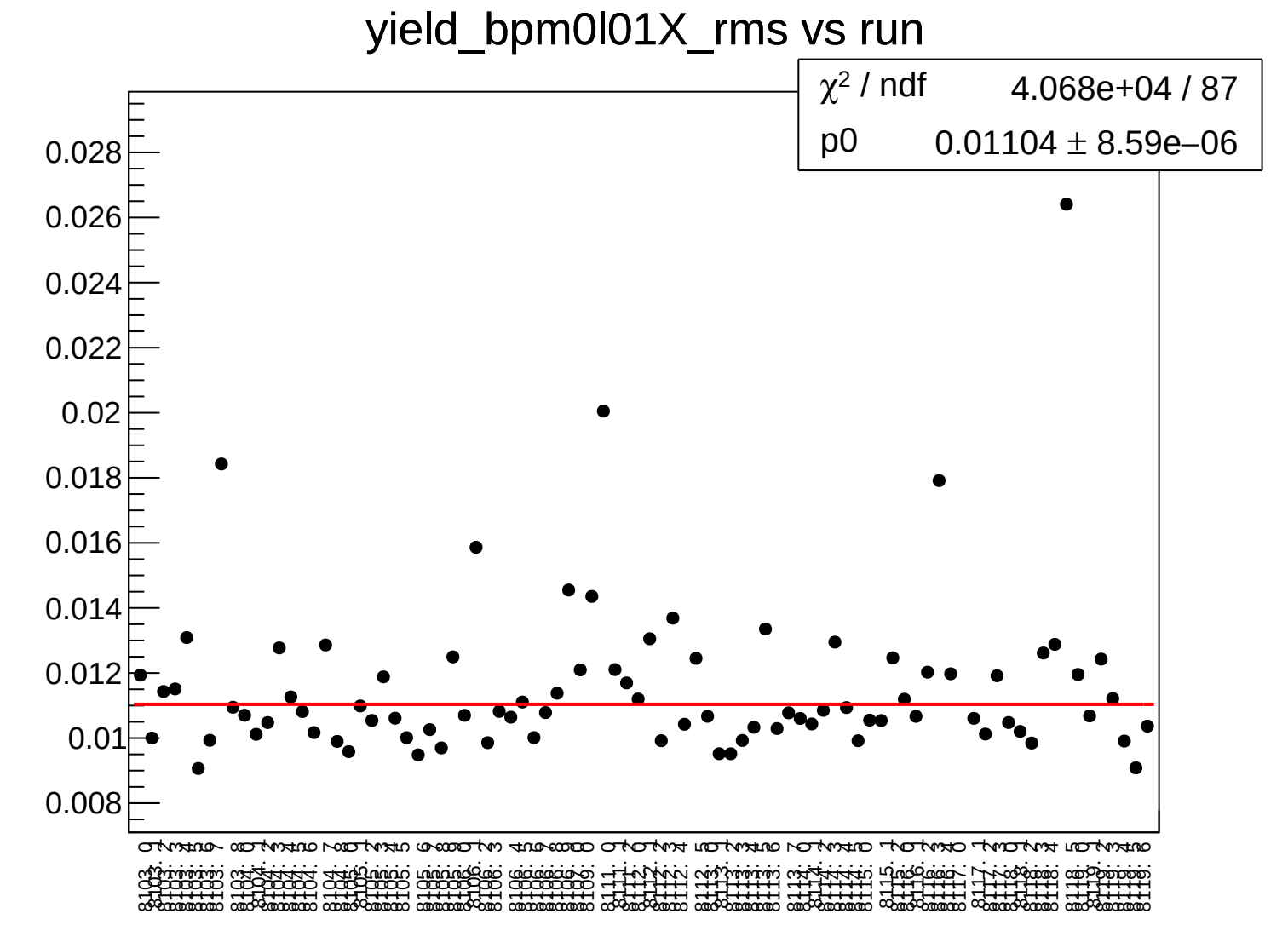

yield_bpm16Y_mean vs run
χ² / ndf 2.97e+07 / 87
p0 −0.7892 ± 7.142e−06
−0.65
−0.7
−0.75
−0.8
−0.85
pull
Entries 88
Mean −1220
Std Dev 1264
2500
2000
1500
1000
500
0
−500
−1000
−1500

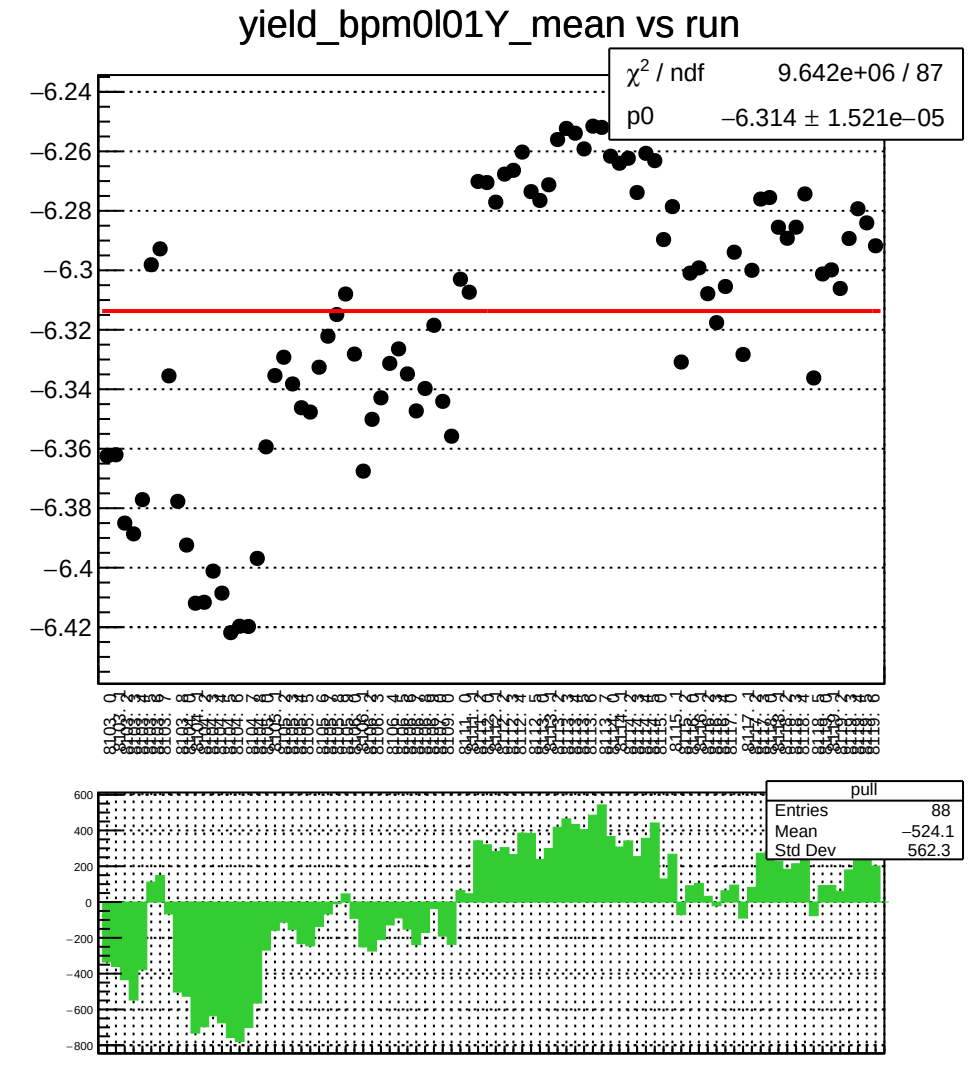

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

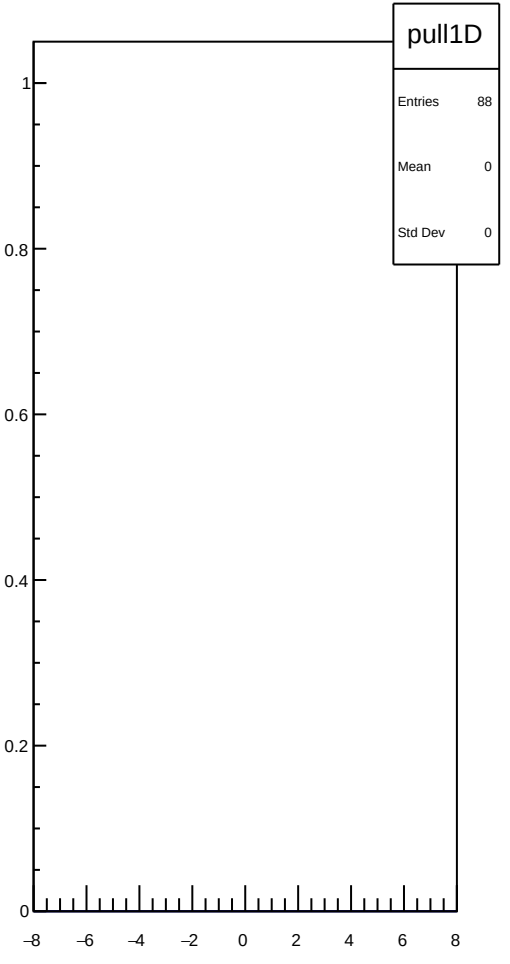

yield_bpm16Y_rms vs run
χ² / ndf 7.785e+04 / 87
p0 0.006416 ± 5.05e–06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

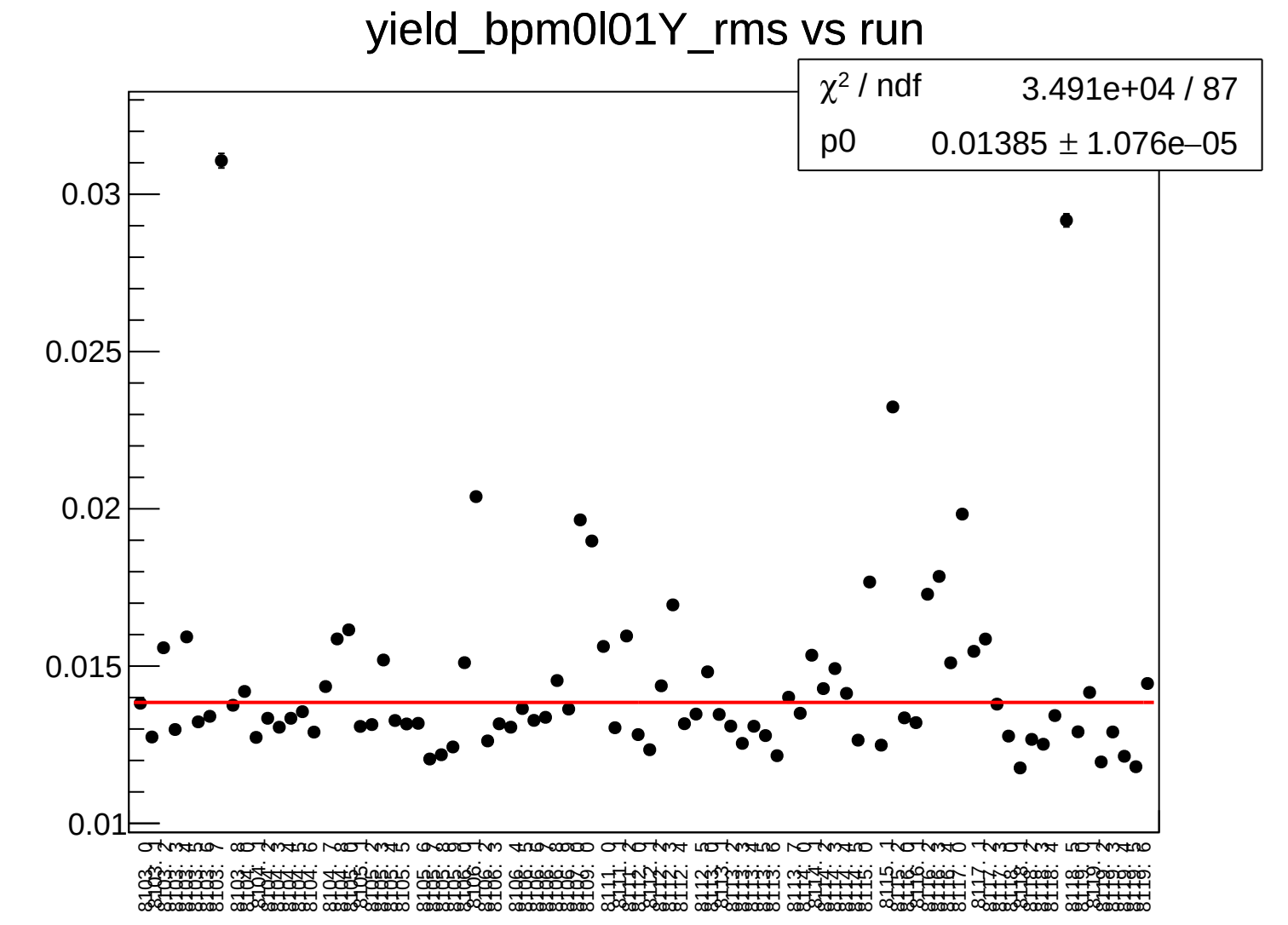

yield_bpm0l01X_mean vs run
χ² / ndf 3.433e+07 / 87
p0 0.745 ± 1.215e−05
0.85
0.8
0.75
0.7
0.65
0.6
0.55
pull
Entries 88
Mean −2541
Std Dev 2588
500
0
−500
−1000
−1500
−2000

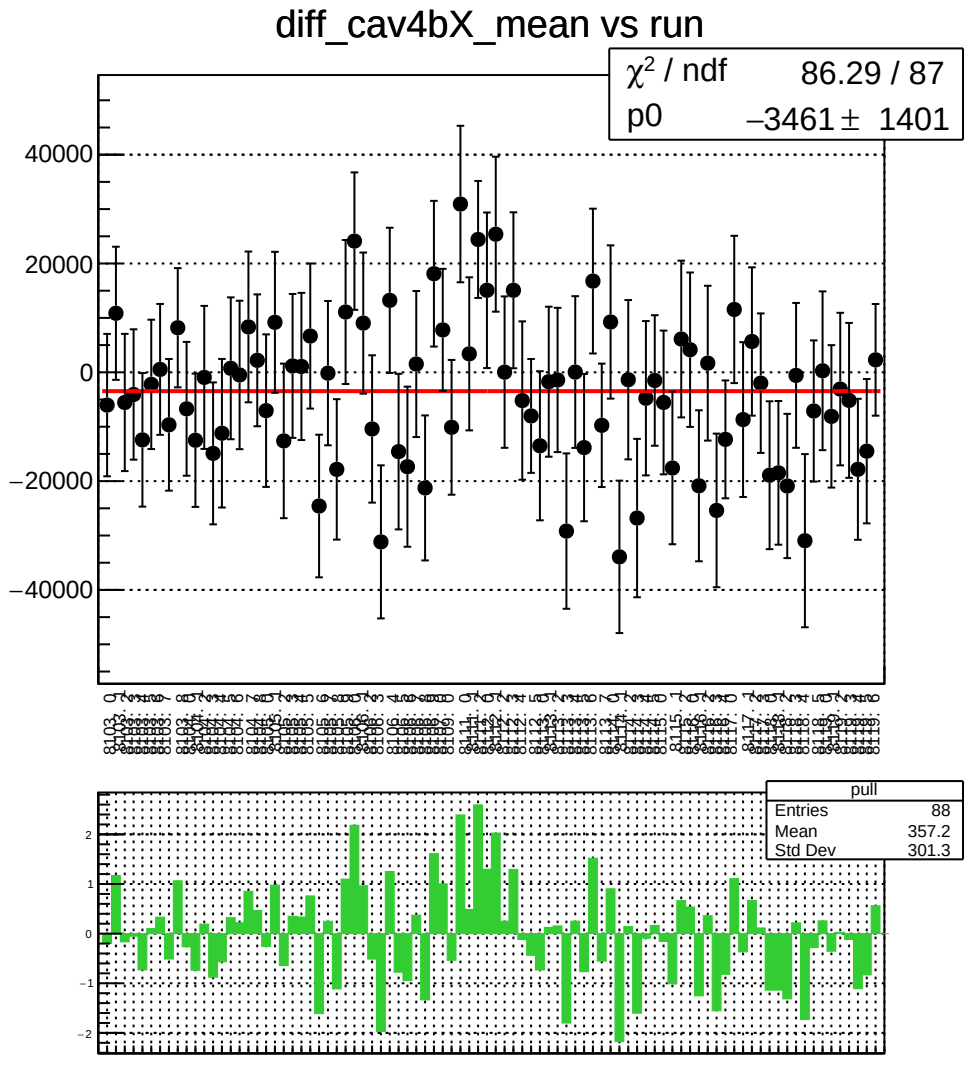

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

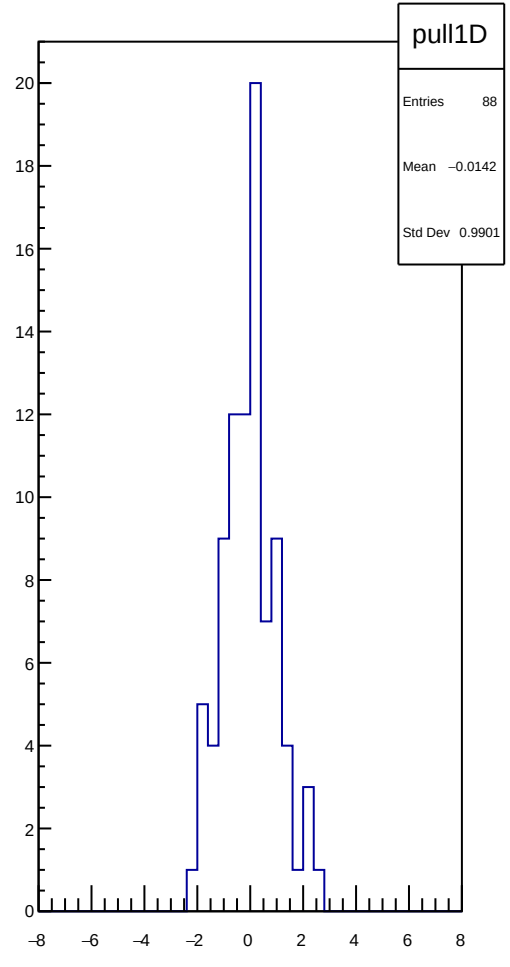

yield_bpm0l01X_rms vs run
χ² / ndf 4.068e+04 / 87
p0 0.01104 ± 8.59e−06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

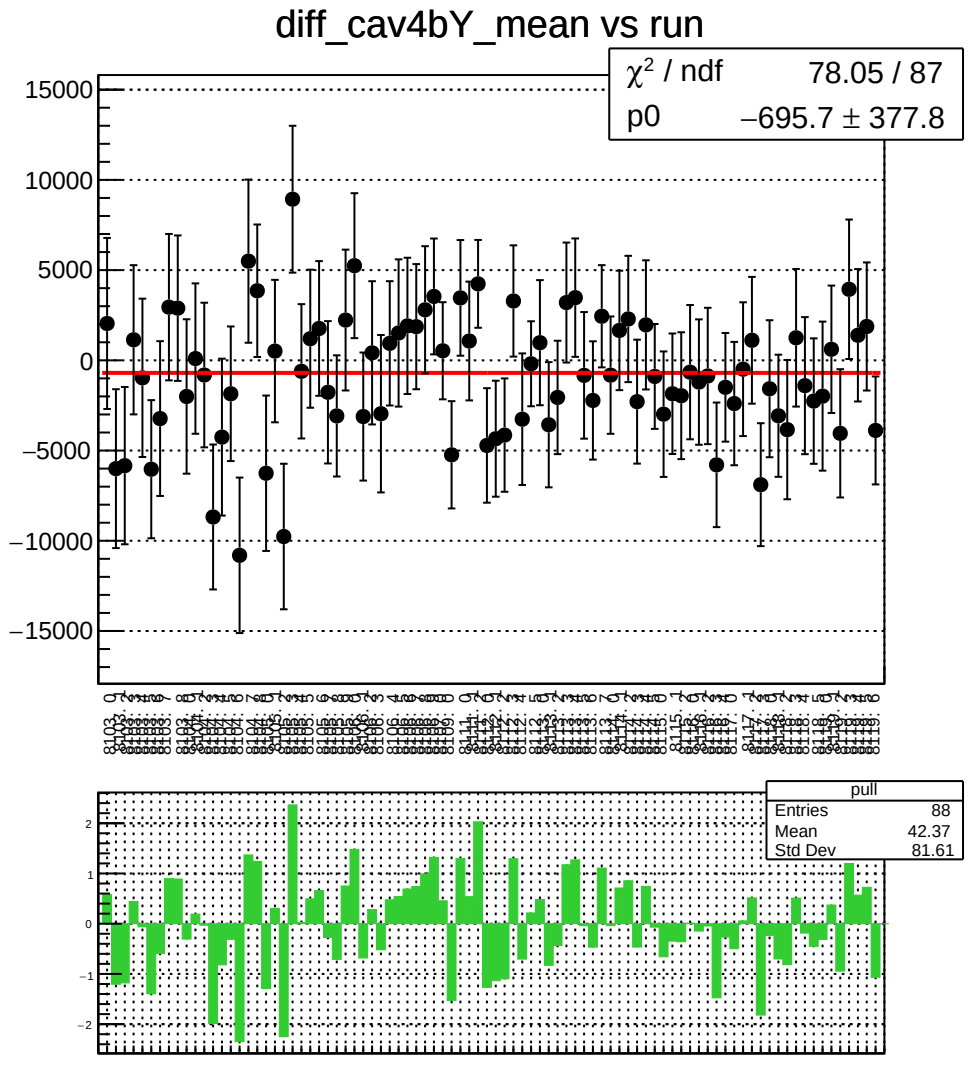

yield_bpm0l01Y_mean vs run
χ² / ndf 9.642e+06 / 87
p0 −6.314 ± 1.521e−05
−6.24
−6.26
−6.28
−6.3
−6.32
−6.34
−6.36
−6.38
−6.4
−6.42
pull
Entries 88
Mean −524.1
Std Dev 562.3
600
400
200
0
−200
−400
−600
−800

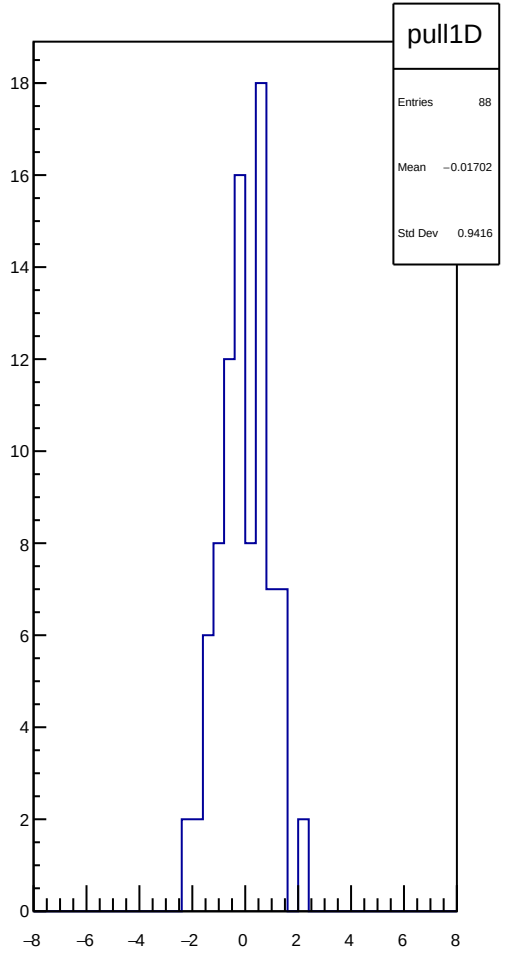

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

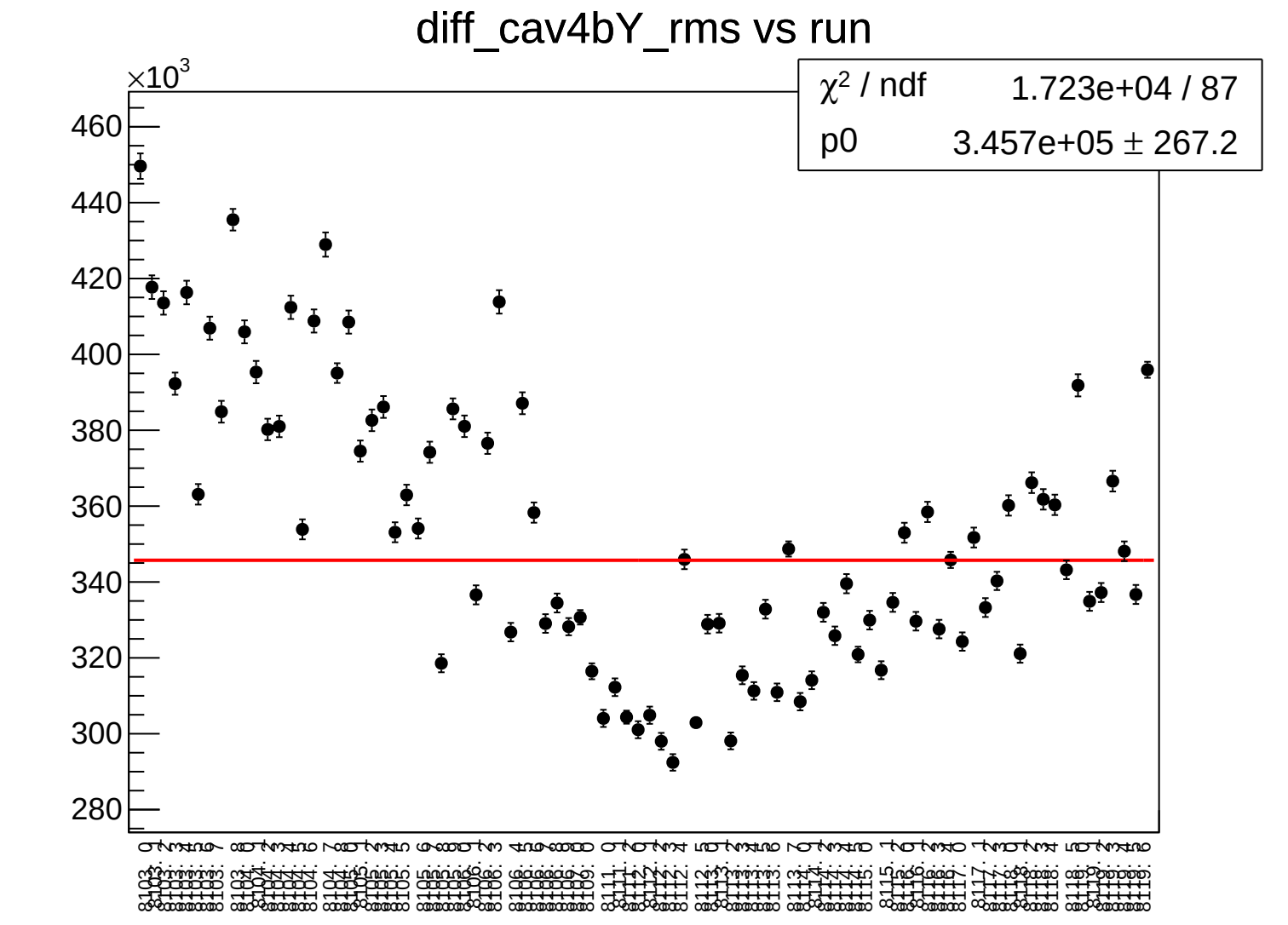

yield_bpm0l01Y_rms vs run
χ² / ndf 3.491e+04 / 87
p0 0.01385 ± 1.076e−05
0.03
0.025
0.02
0.015
0.01

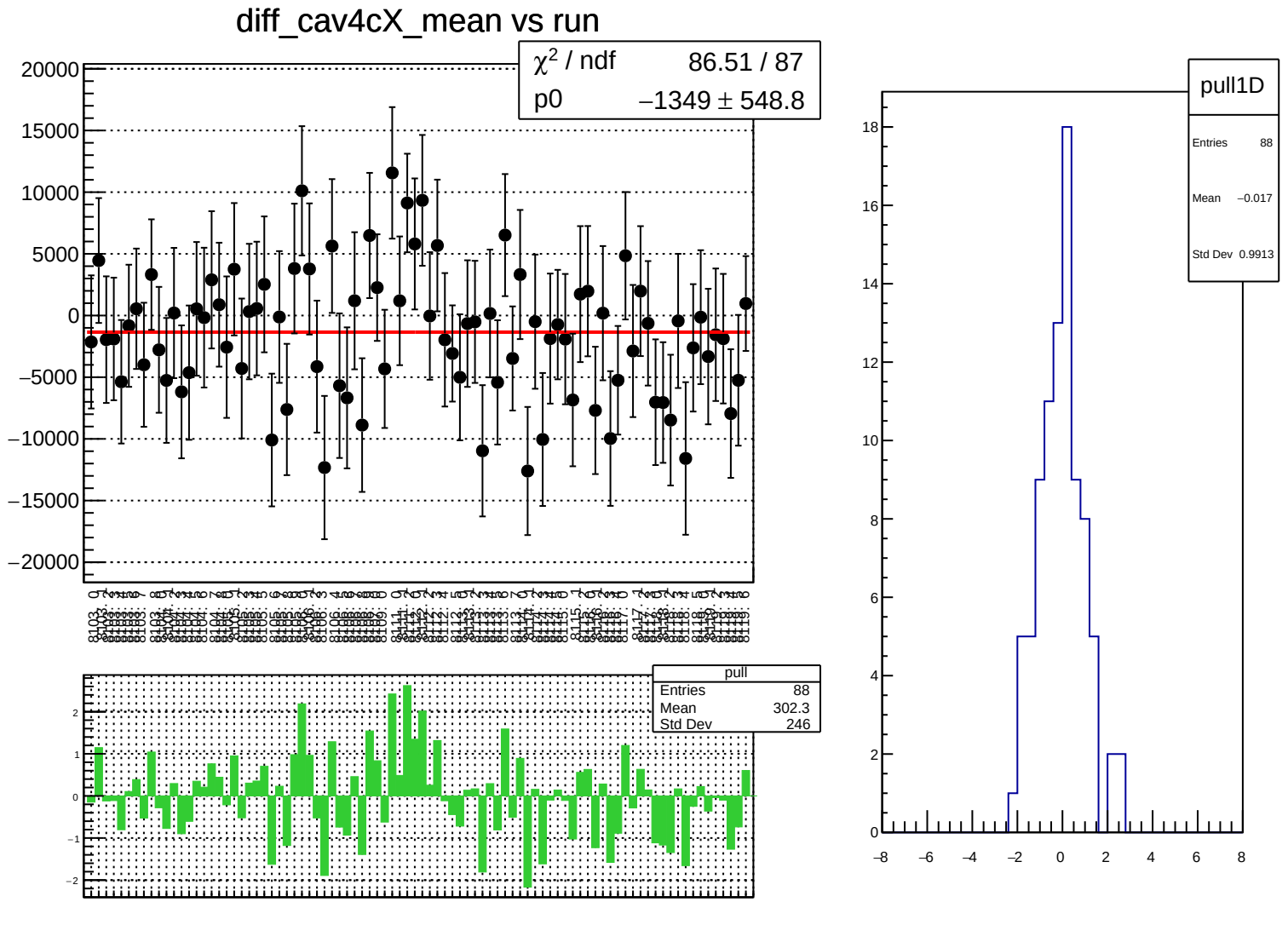

diff_cav4bX_mean vs run
χ² / ndf 86.29 / 87
p0 −3461 ± 1401
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 357.2
Std Dev 301.3
2
1
0
−1
−2

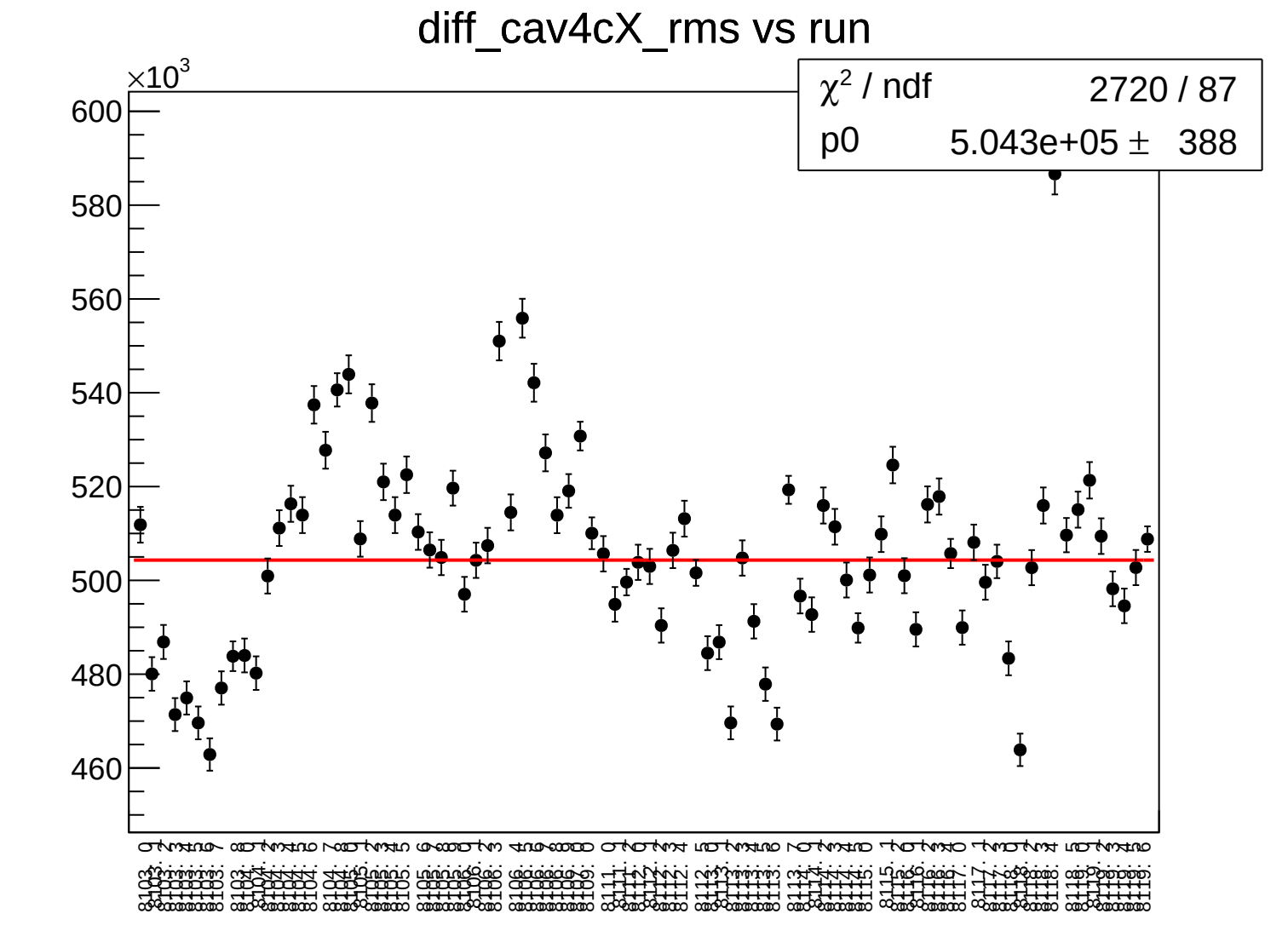

pull1D
Entries 88
Mean −0.0142
Std Dev 0.9901
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

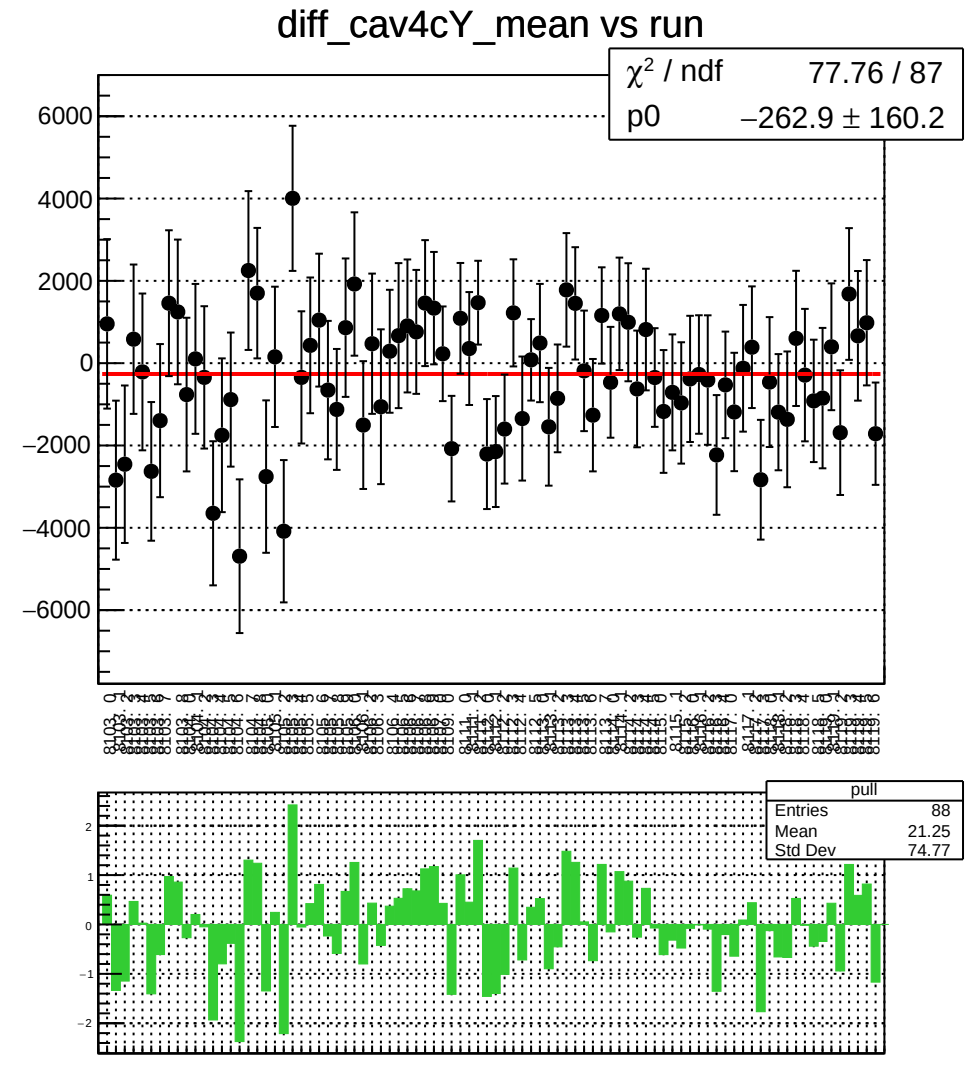

diff_cav4bY_mean vs run
χ² / ndf 78.05 / 87
p0 −695.7 ± 377.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 42.37
Std Dev 81.61
2
1
0
−1
−2

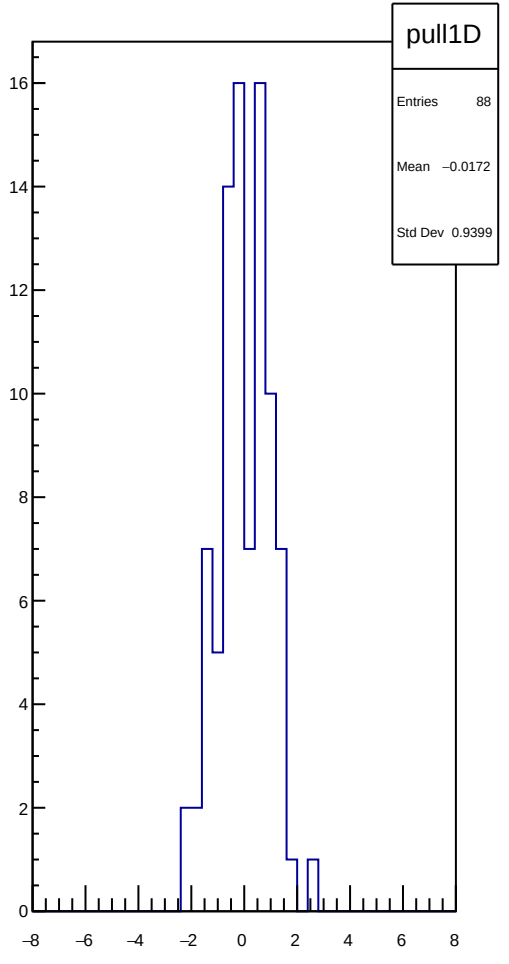

pull1D
Entries 88
Mean −0.01702
Std Dev 0.9416
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

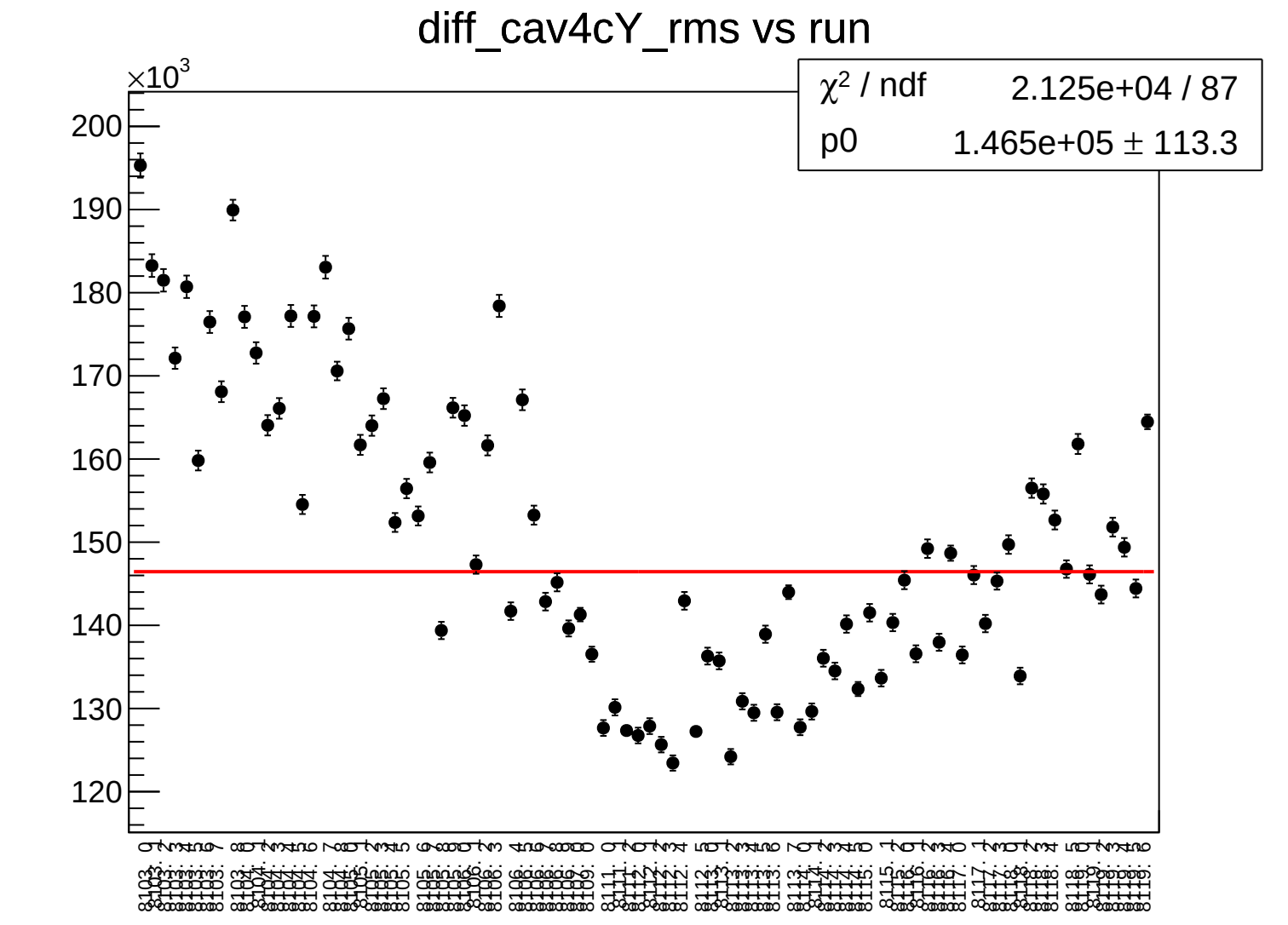

diff_cav4bY_rms vs run
×10^3
χ² / ndf 1.723e+04 / 87
p0 3.457e+05 ± 267.2
460
440
420
400
380
360
340
320
300
280

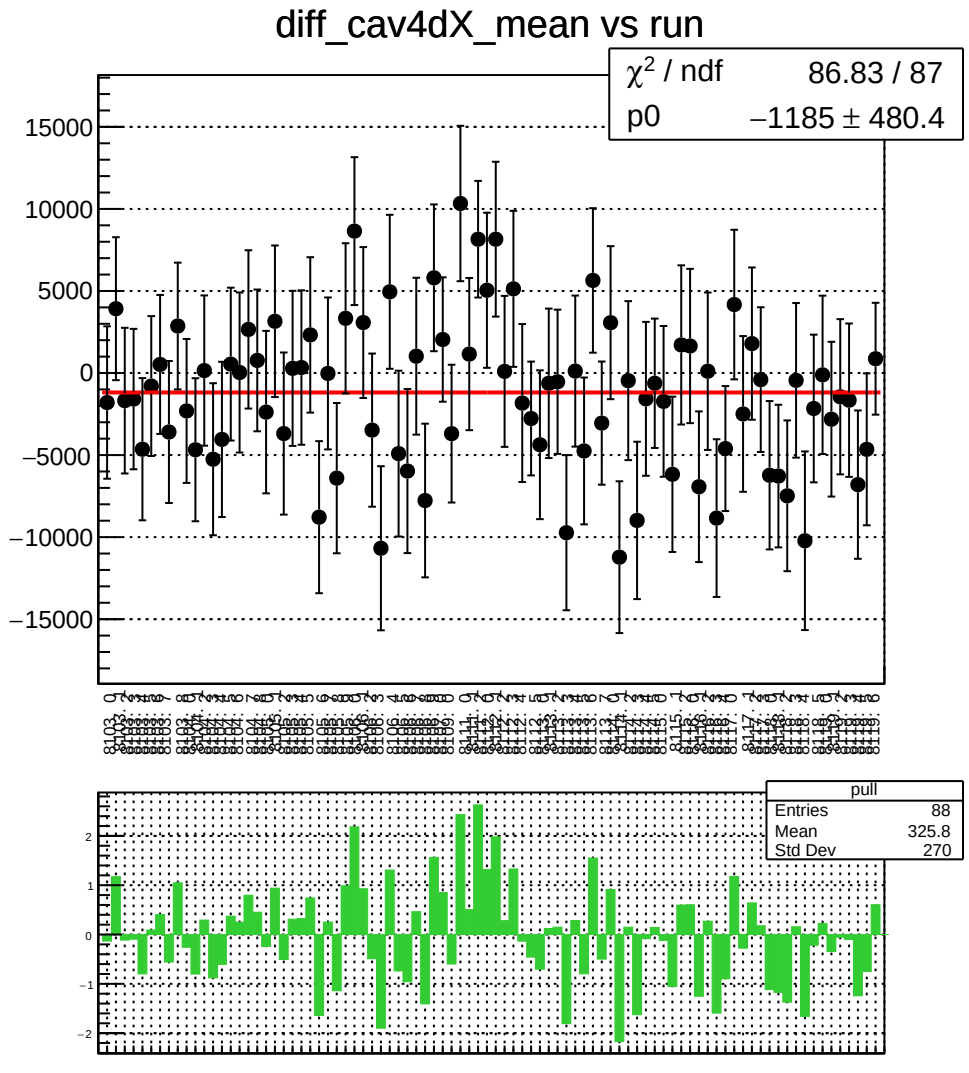

diff_cav4cX_mean vs run
χ^2 / ndf 86.51 / 87
p0 −1349 ± 548.8
pull
Entries 88
Mean 302.3
Std Dev 246
pull1D
Entries 88
Mean −0.017
Std Dev 0.9913

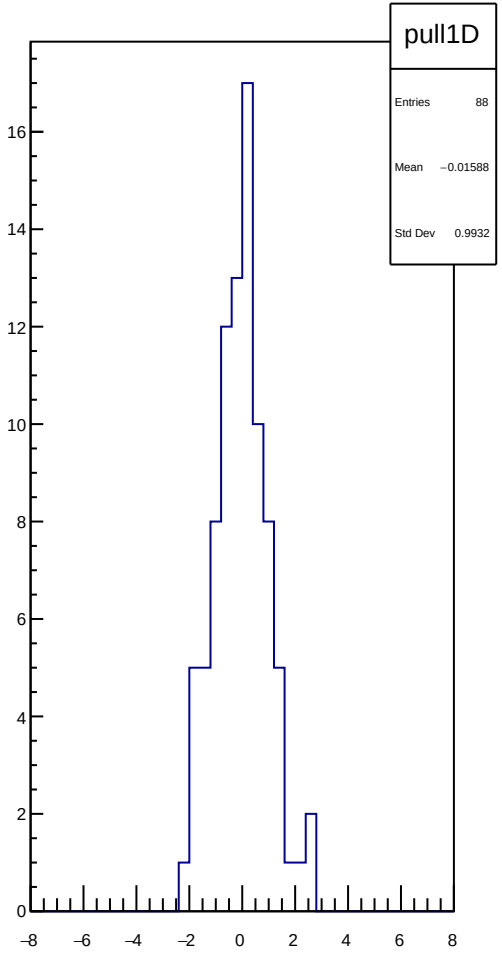

diff_cav4cX_rms vs run
×10^3
600
580
560
540
520
500
480
460
χ² / ndf 2720 / 87
p0 5.043e+05 ± 388

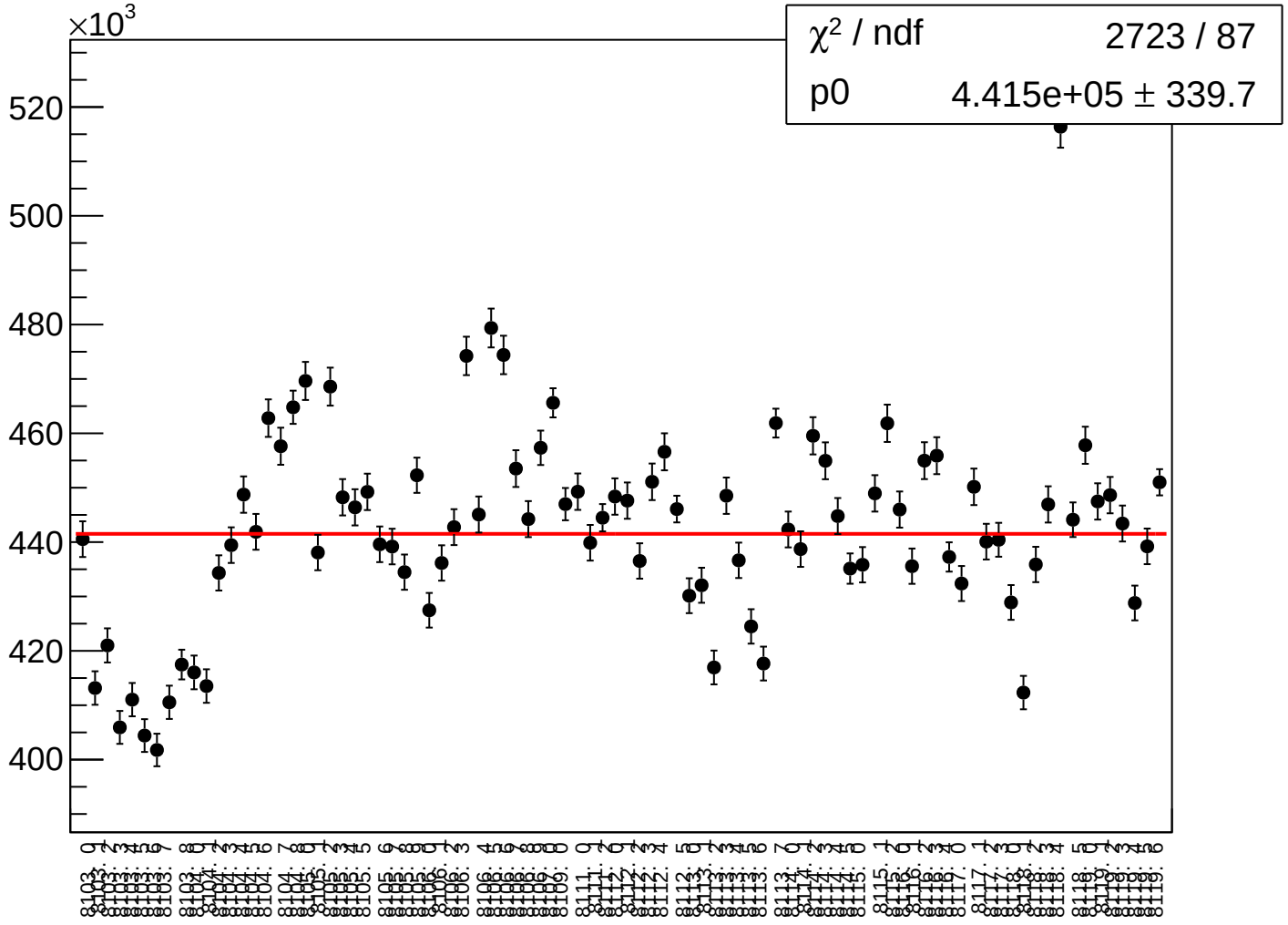

diff_cav4cY_mean vs run
χ² / ndf 77.76 / 87
p0 −262.9 ± 160.2
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean 21.25
Std Dev 74.77
2
1
0
−1
−2

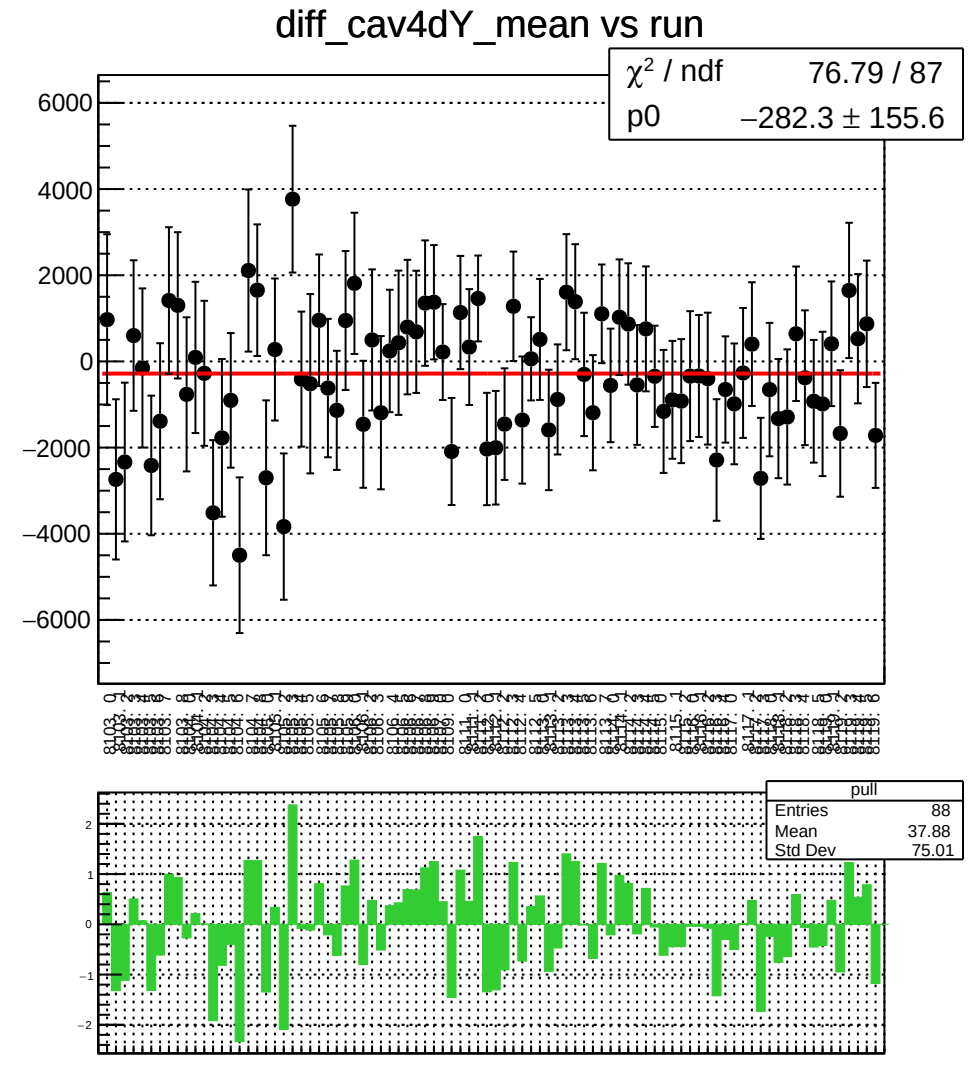

pull1D
Entries 88
Mean −0.0172
Std Dev 0.9399
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

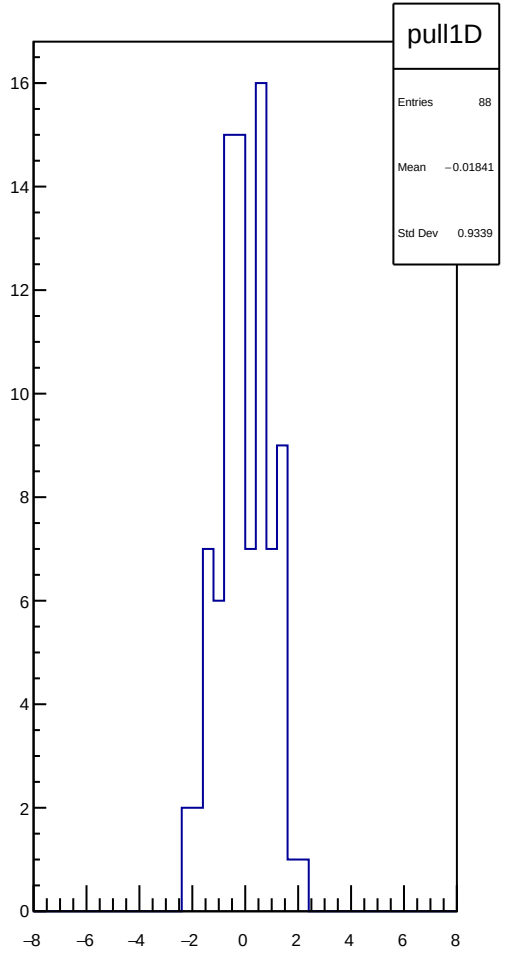

diff_cav4cY_rms vs run
×10^3
χ² / ndf 2.125e+04 / 87
p0 1.465e+05 ± 113.3
200
190
180
170
160
150
140
130
120

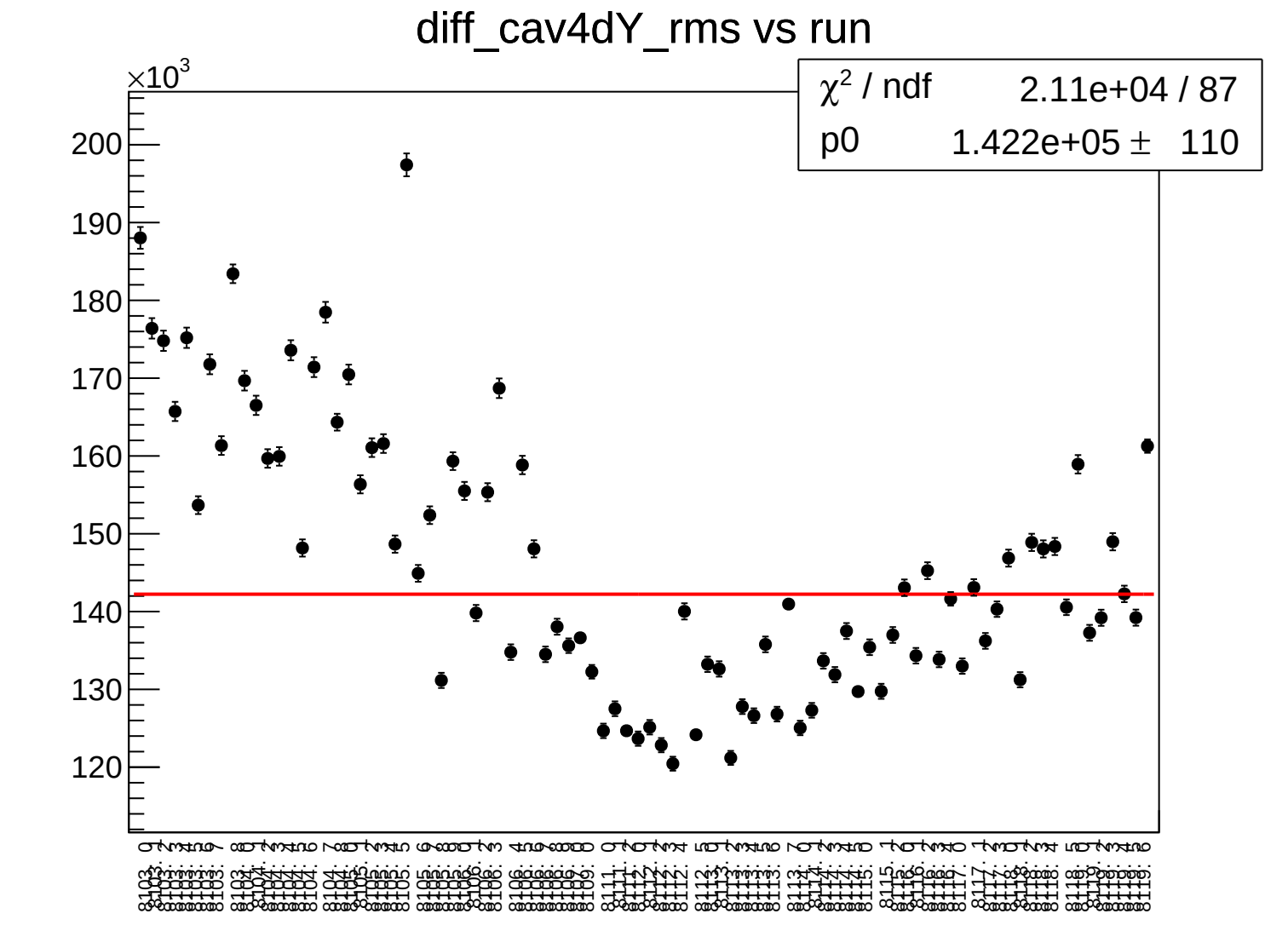

diff_cav4dX_mean vs run
χ² / ndf 86.83 / 87
p0 −1185 ± 480.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 325.8
Std Dev 270
2
1
0
−1
−2

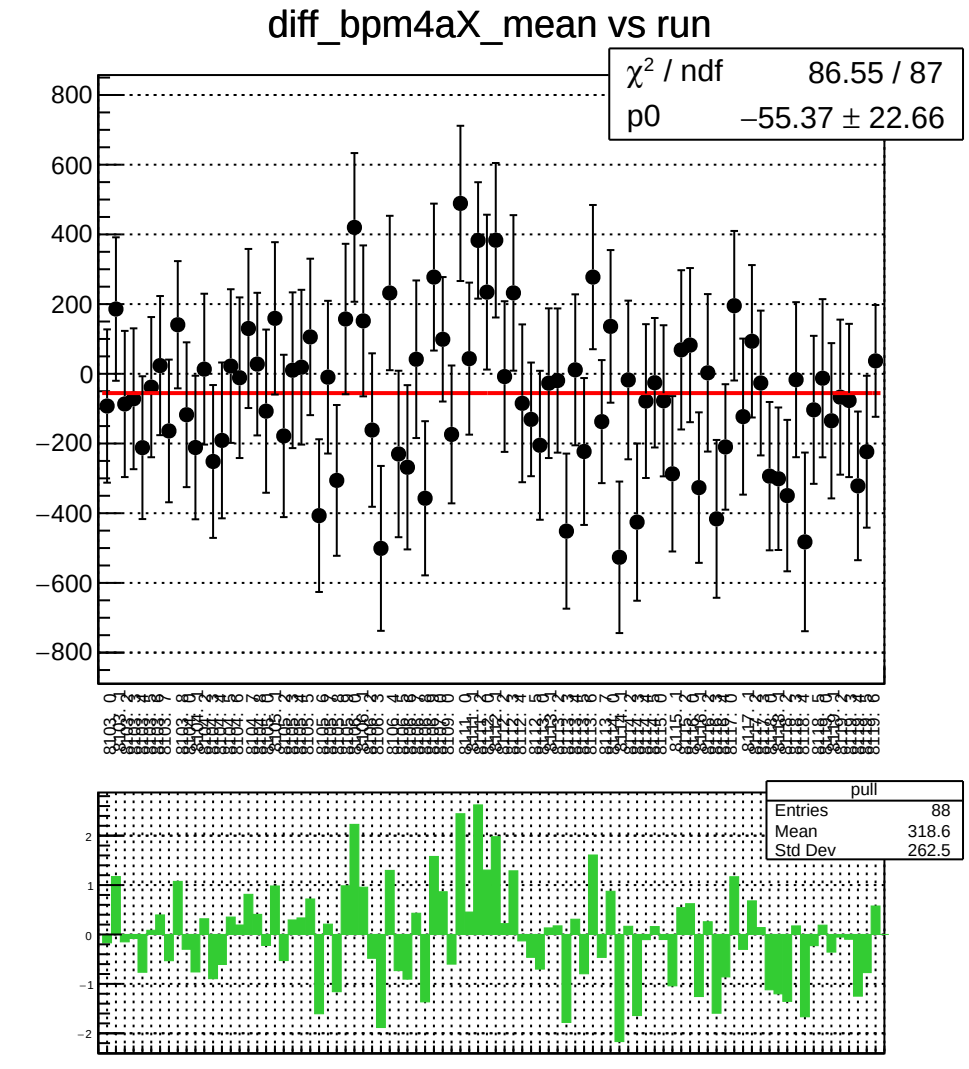

pull1D
Entries 88
Mean −0.01588
Std Dev 0.9932
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

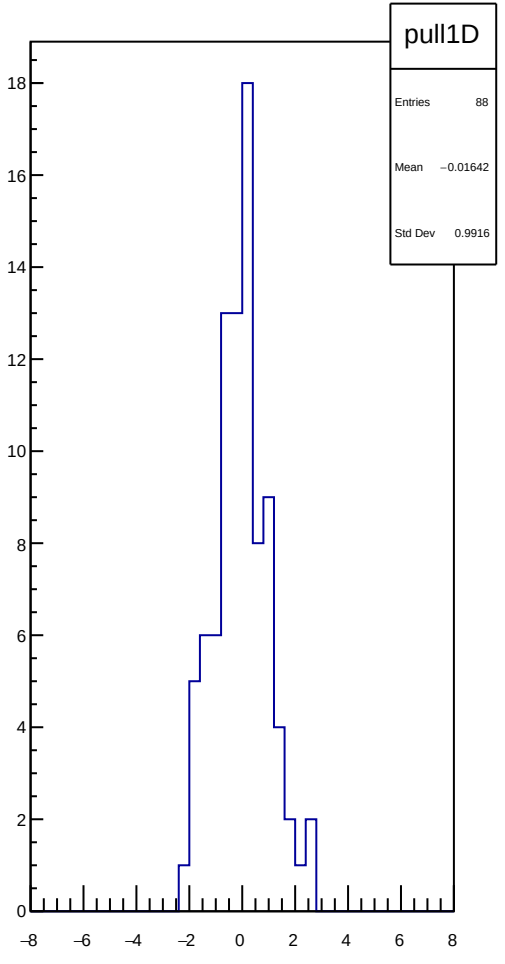

diff_cav4dX_rms vs run
×10^3
χ² / ndf 2723 / 87
p0 4.415e+05 ± 339.7
520
500
480
460
440
420
400

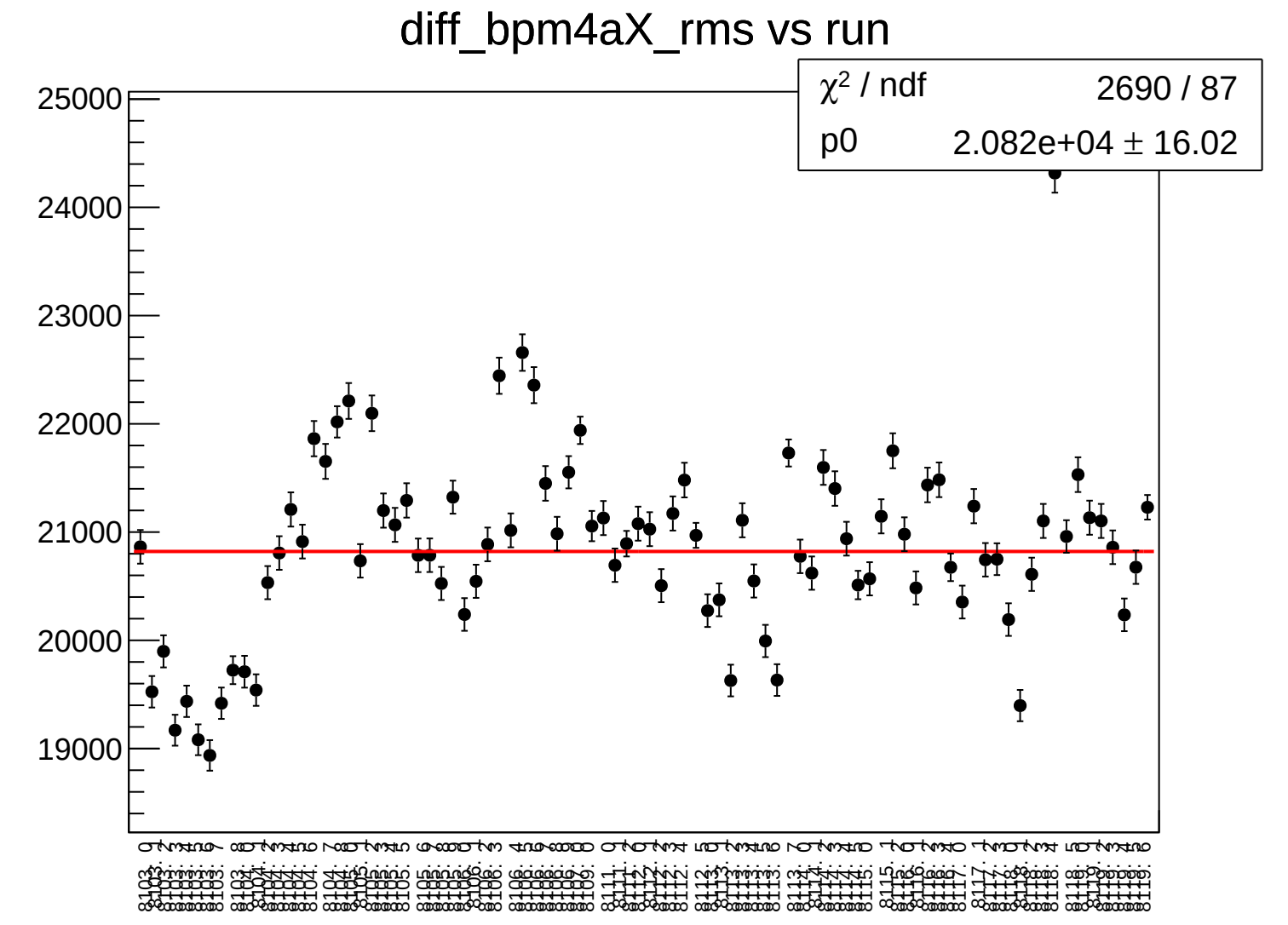

diff_cav4dY_mean vs run
χ² / ndf 76.79 / 87
p0 −282.3 ± 155.6
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean 37.88
Std Dev 75.01
2
1
0
−1
−2

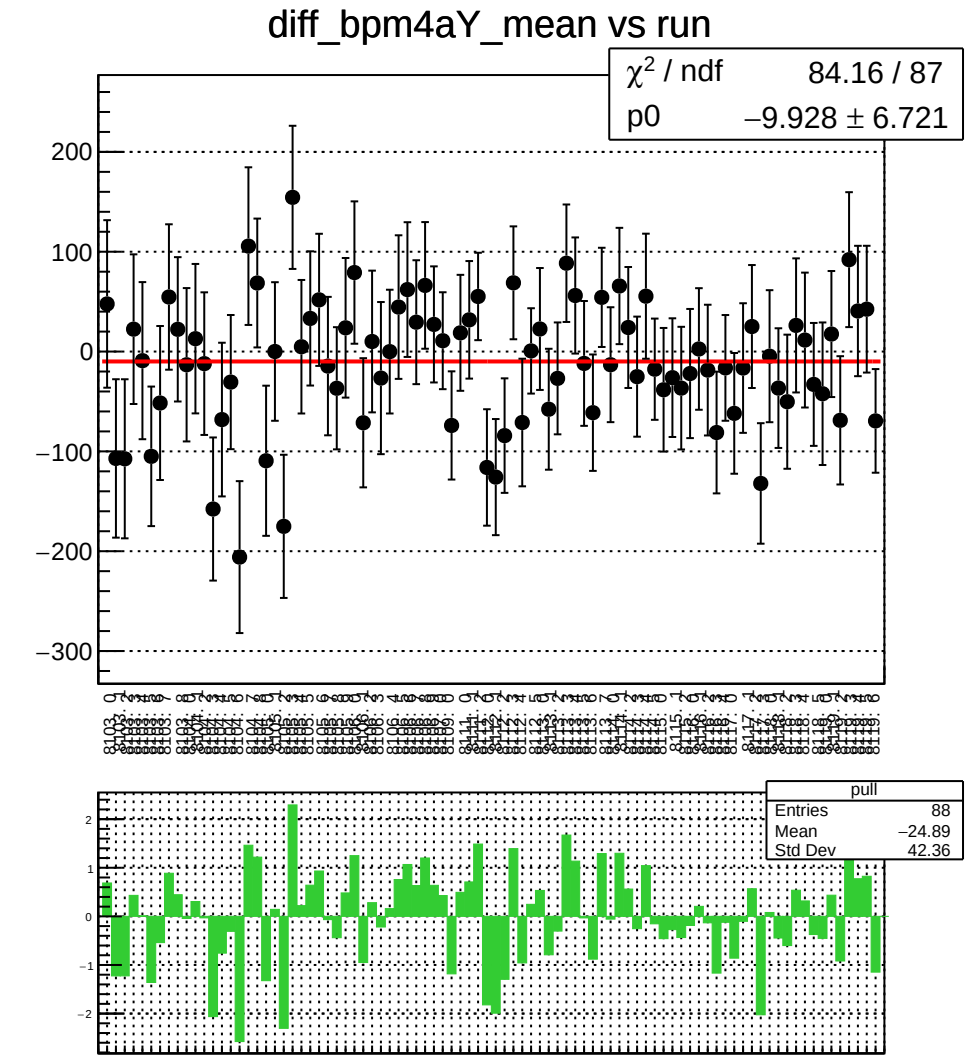

pull1D
Entries 88
Mean −0.01841
Std Dev 0.9339
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

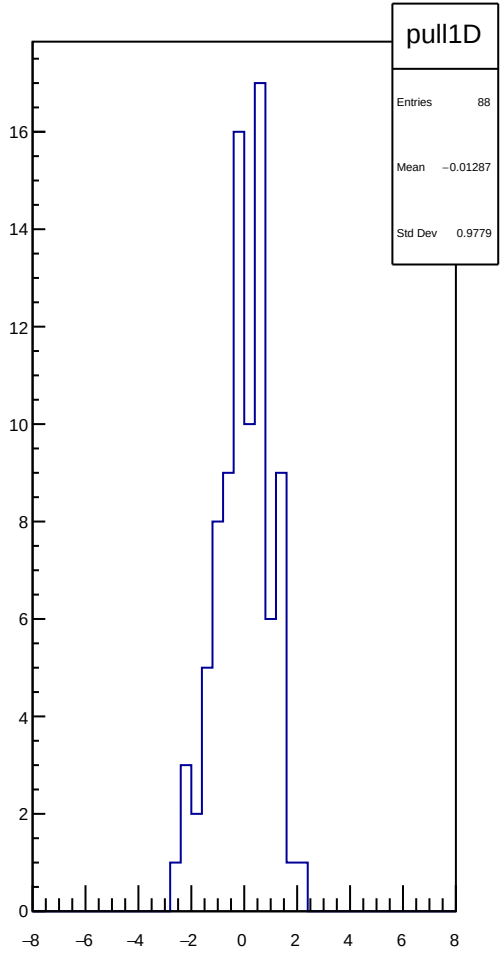

diff_cav4dY_rms vs run
×10^3
χ^2 / ndf 2.11e+04 / 87
p0 1.422e+05 ± 110
200
190
180
170
160
150
140
130
120

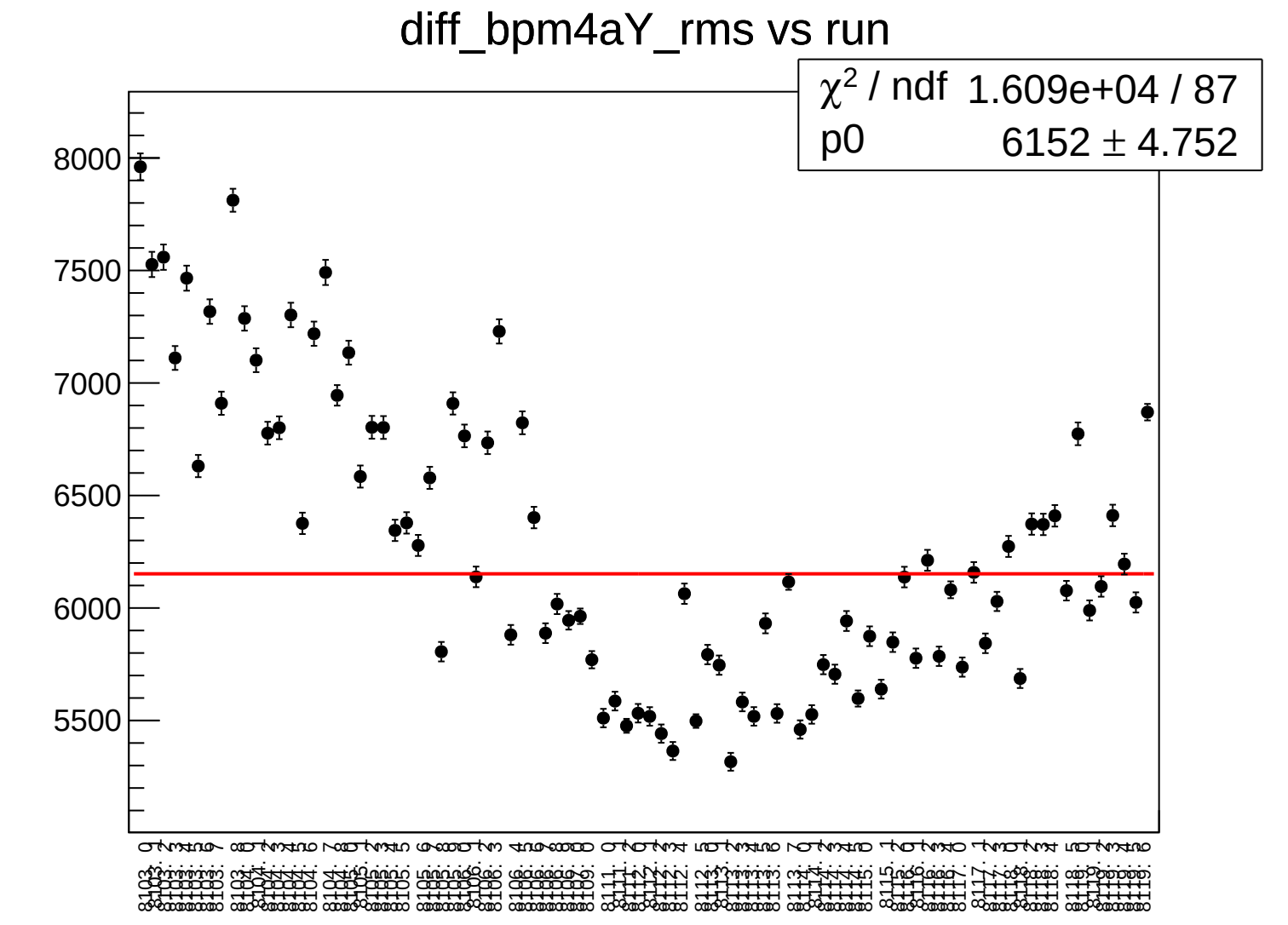

diff_bpm4aX_mean vs run
χ² / ndf 86.55 / 87
p0 −55.37 ± 22.66
pull
Entries 88
Mean 318.6
Std Dev 262.5

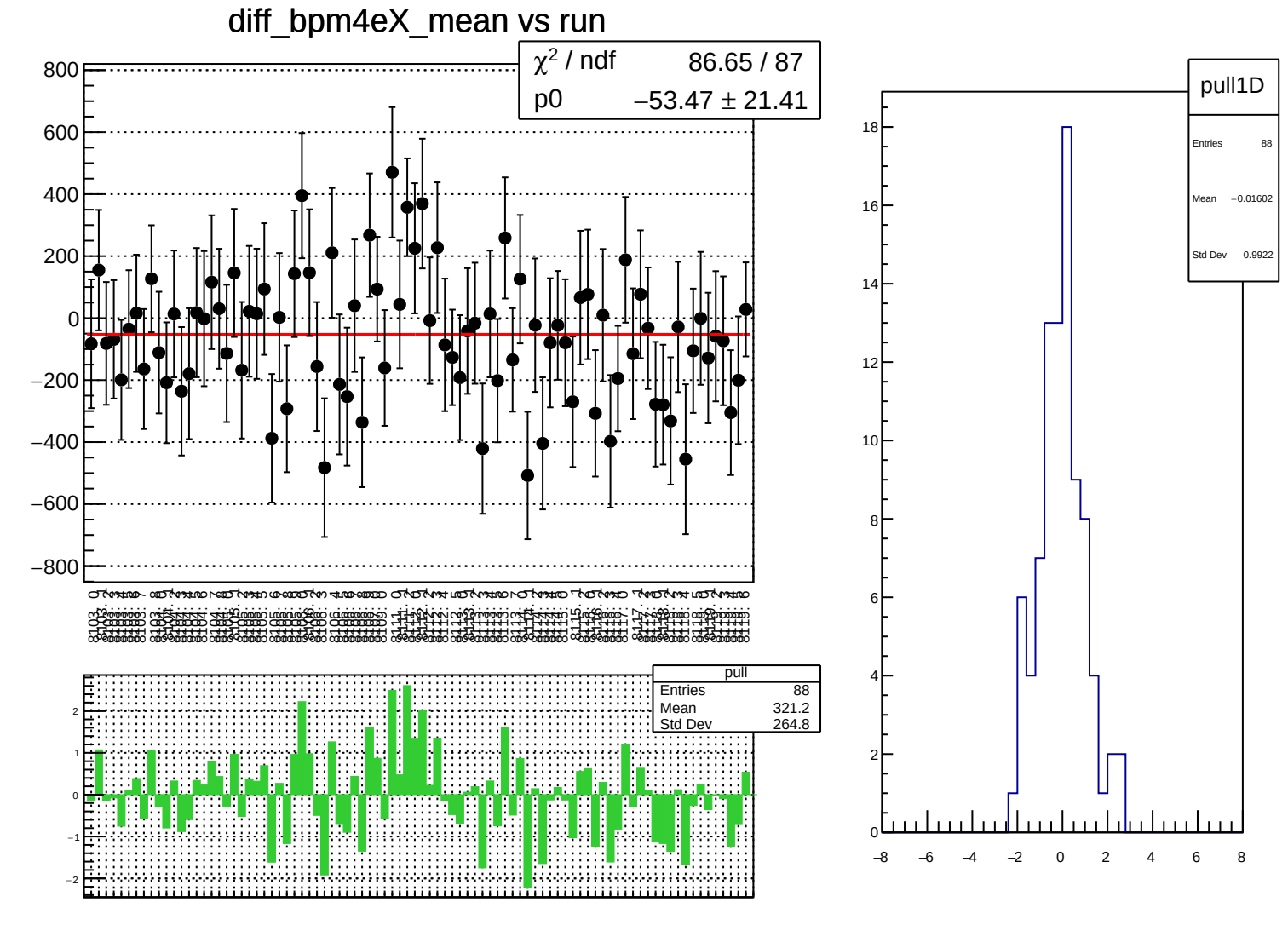

pull1D
Entries 88
Mean −0.01642
Std Dev 0.9916

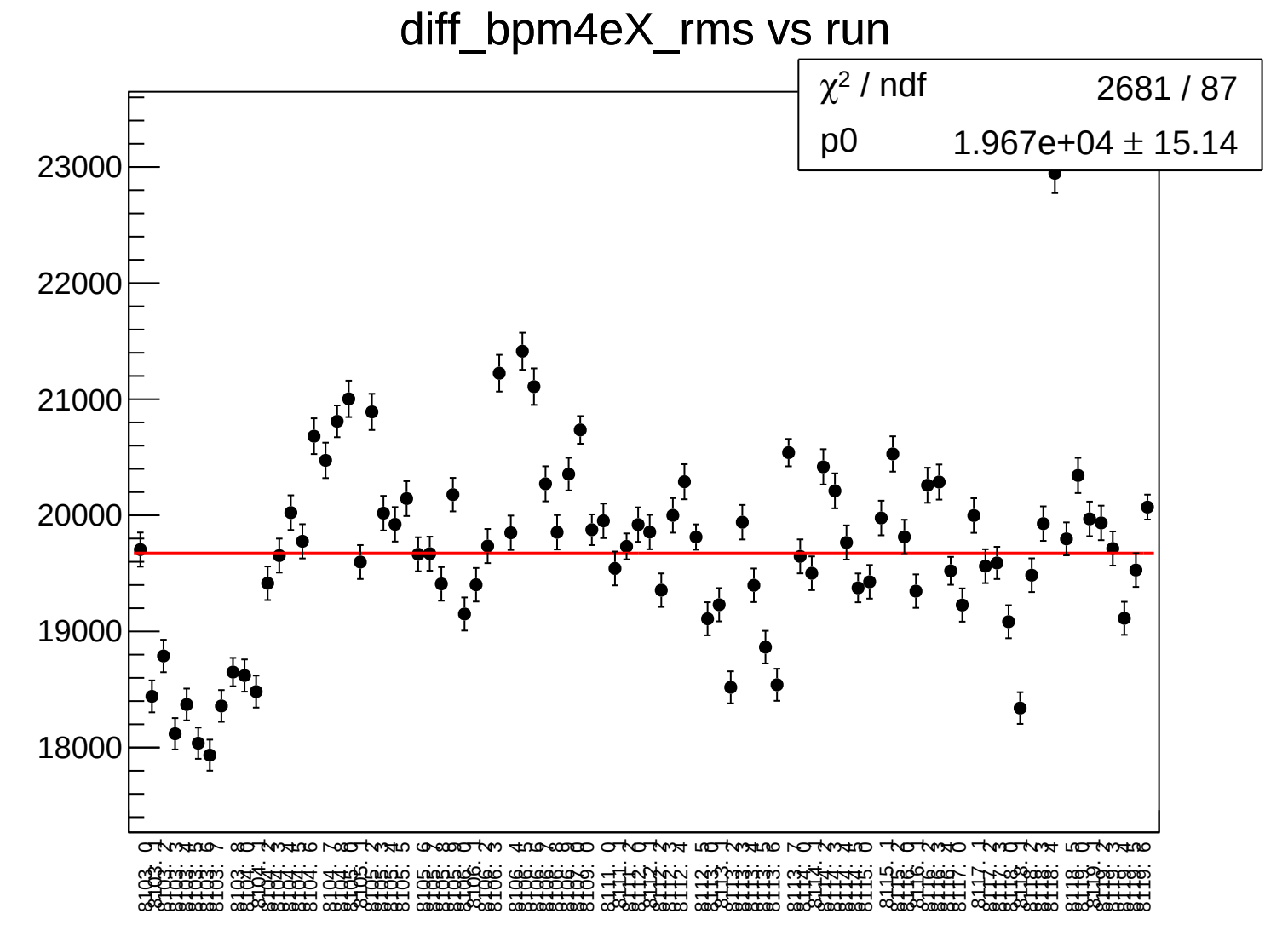

diff_bpm4aX_rms vs run
χ² / ndf 2690 / 87
p0 2.082e+04 ± 16.02
25000
24000
23000
22000
21000
20000
19000

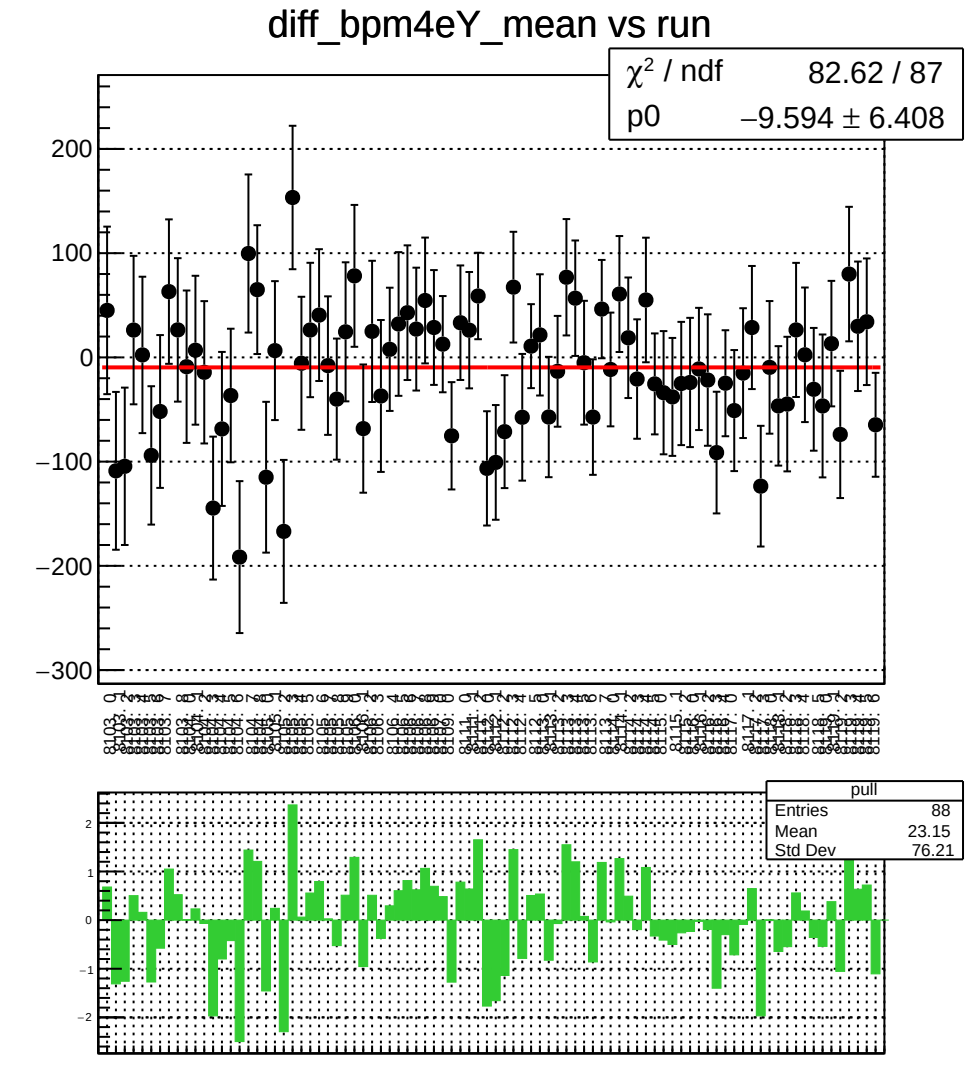

diff_bpm4aY_mean vs run
χ² / ndf 84.16 / 87
p0 −9.928 ± 6.721
200
100
0
−100
−200
−300
pull
Entries 88
Mean −24.89
Std Dev 42.36
2
1
0
−1
−2

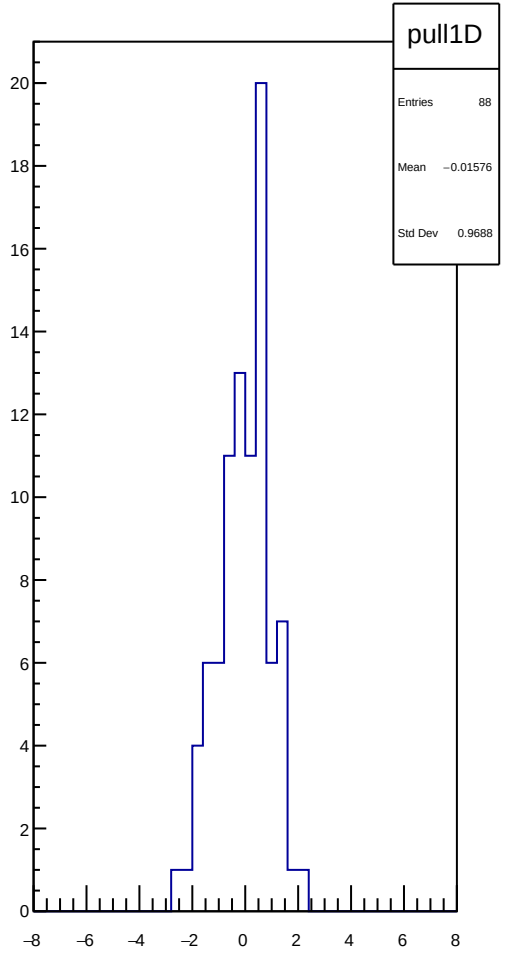

pull1D
Entries 88
Mean −0.01287
Std Dev 0.9779
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

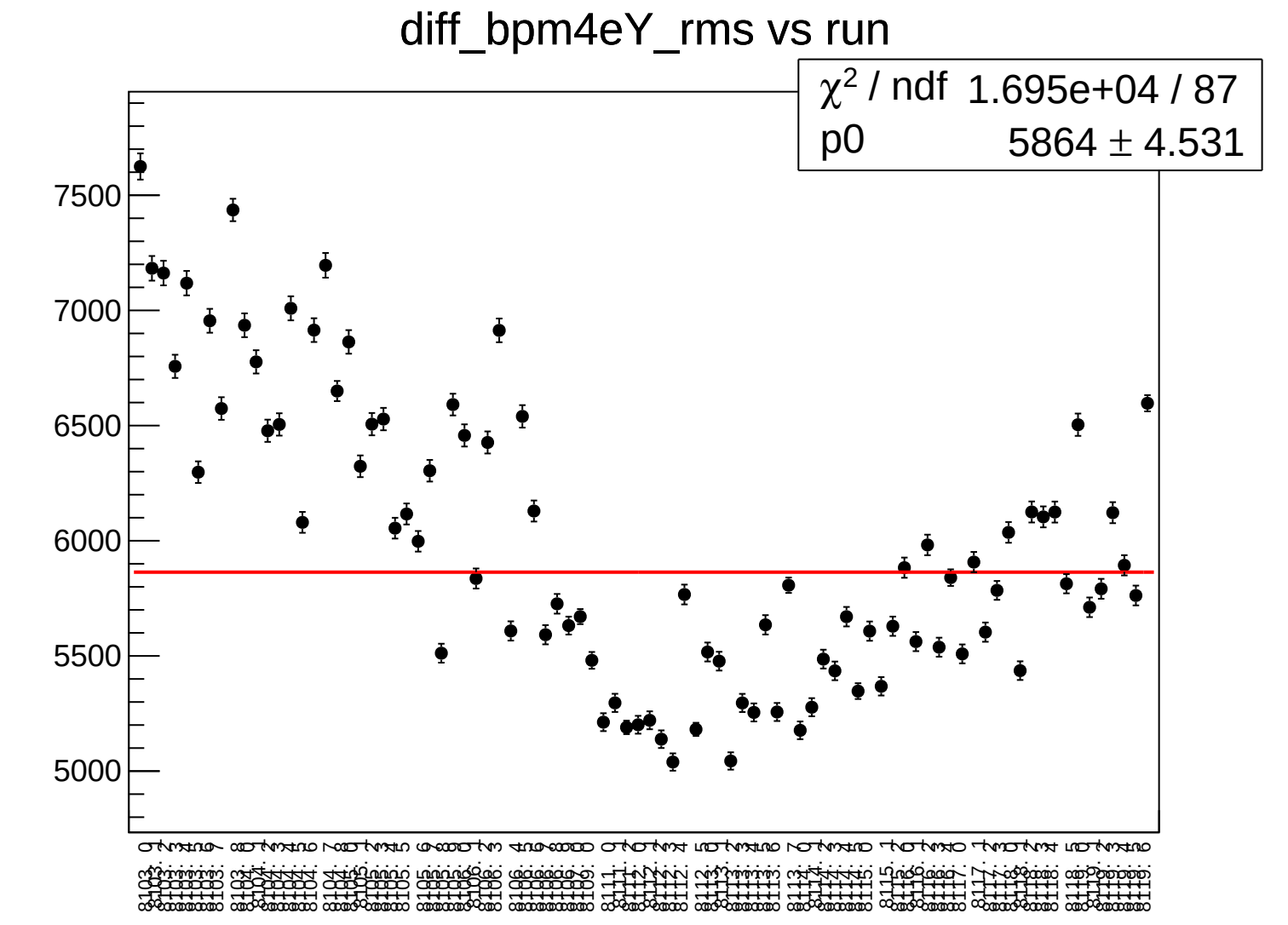

diff_bpm4aY_rms vs run
χ² / ndf 1.609e+04 / 87
p0 6152 ± 4.752
8000
7500
7000
6500
6000
5500

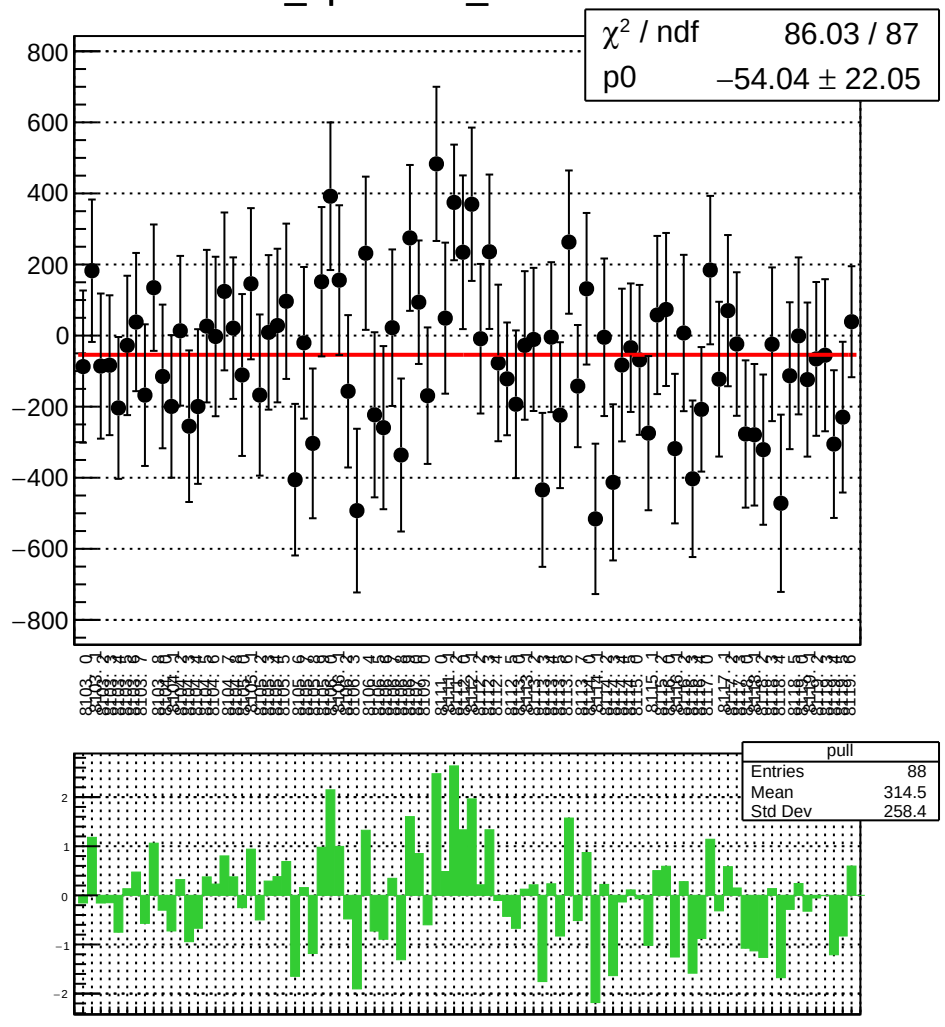

diff_bpm4eX_mean vs run
χ² / ndf 86.65 / 87
p0 −53.47 ± 21.41
pull
Entries 88
Mean 321.2
Std Dev 264.8
pull1D
Entries 88
Mean −0.01602
Std Dev 0.9922

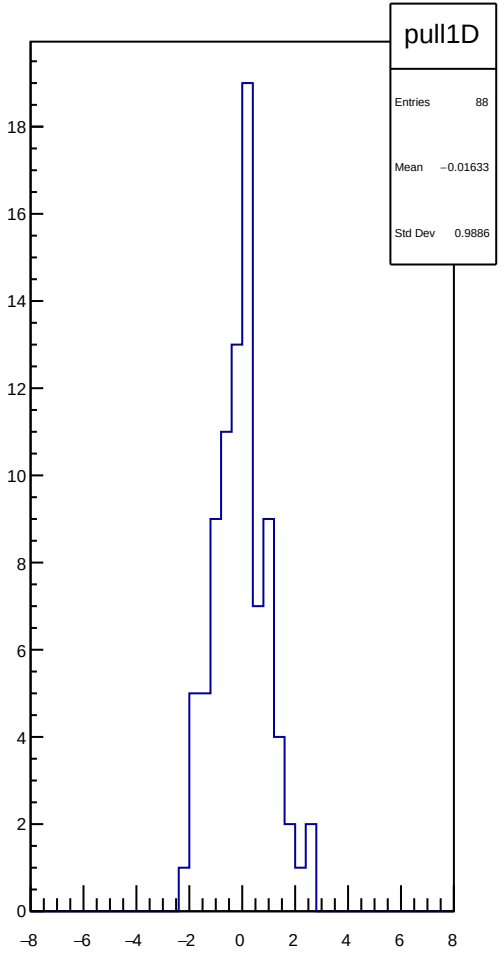

diff_bpm4eX_rms vs run
χ² / ndf 2681 / 87
p0 1.967e+04 ± 15.14
23000
22000
21000
20000
19000
18000

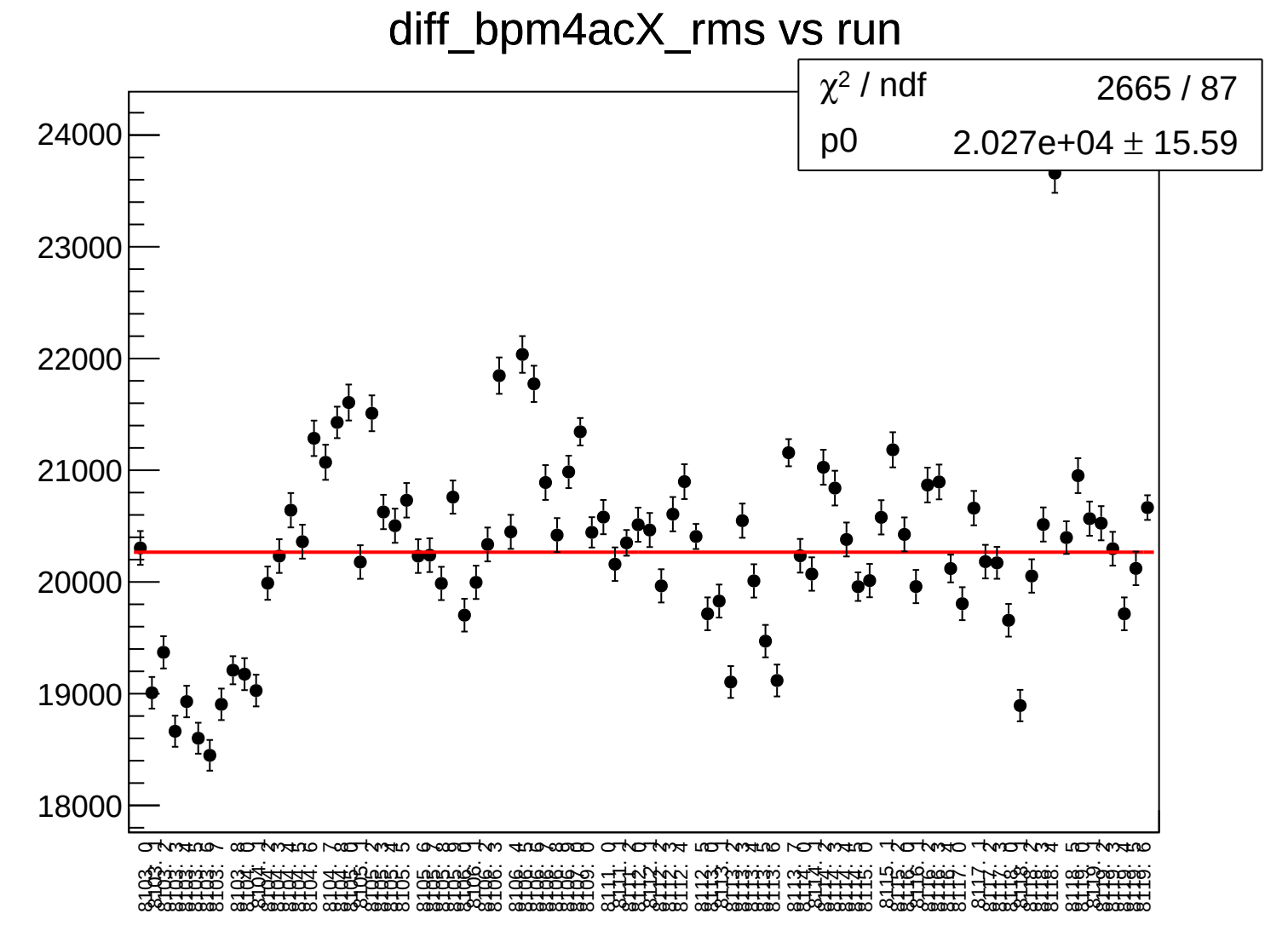

diff_bpm4eY_mean vs run
χ² / ndf 82.62 / 87
p0 −9.594 ± 6.408
pull
Entries 88
Mean 23.15
Std Dev 76.21

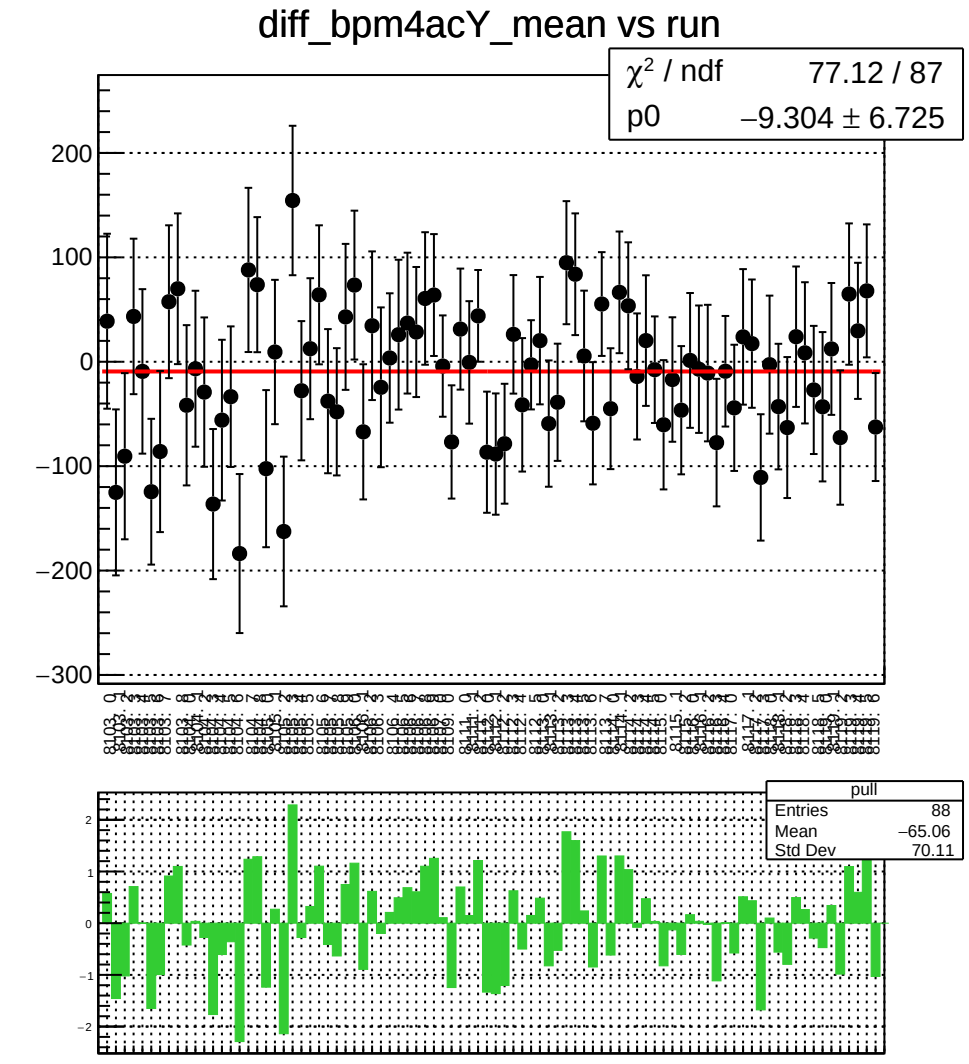

pull1D
Entries 88
Mean −0.01576
Std Dev 0.9688

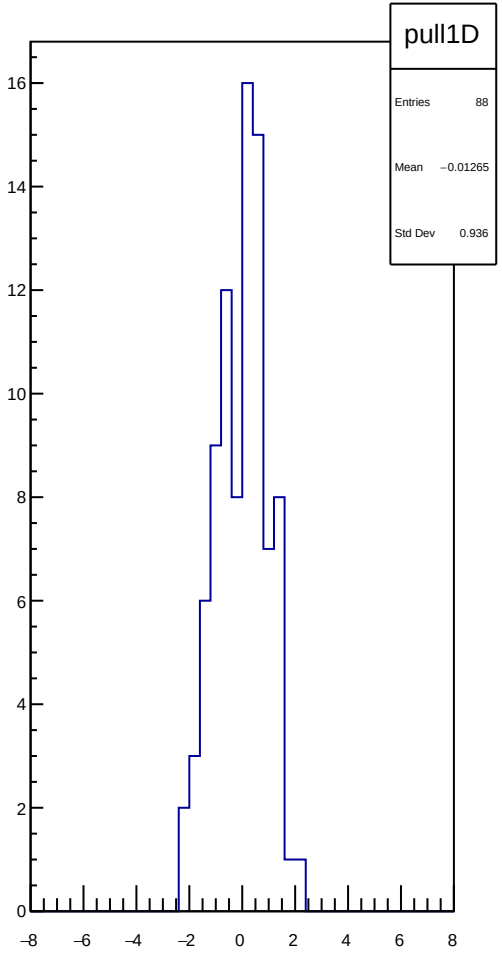

diff_bpm4eY_rms vs run
χ² / ndf 1.695e+04 / 87
p0 5864 ± 4.531
7500
7000
6500
6000
5500
5000

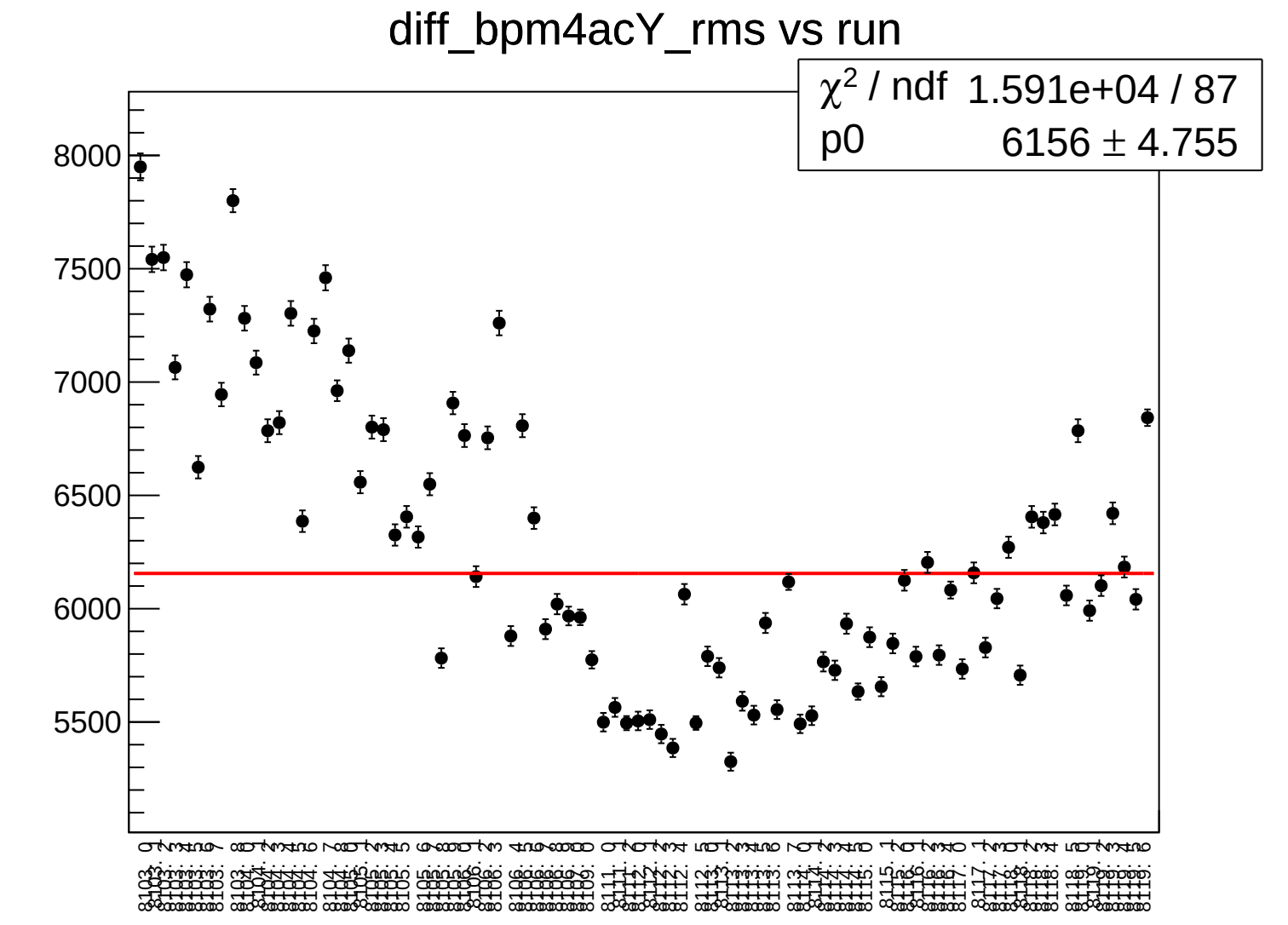

diff_bpm4acX_mean vs run
χ² / ndf 86.03 / 87
p0 −54.04 ± 22.05
pull
Entries 88
Mean 314.5
Std Dev 258.4

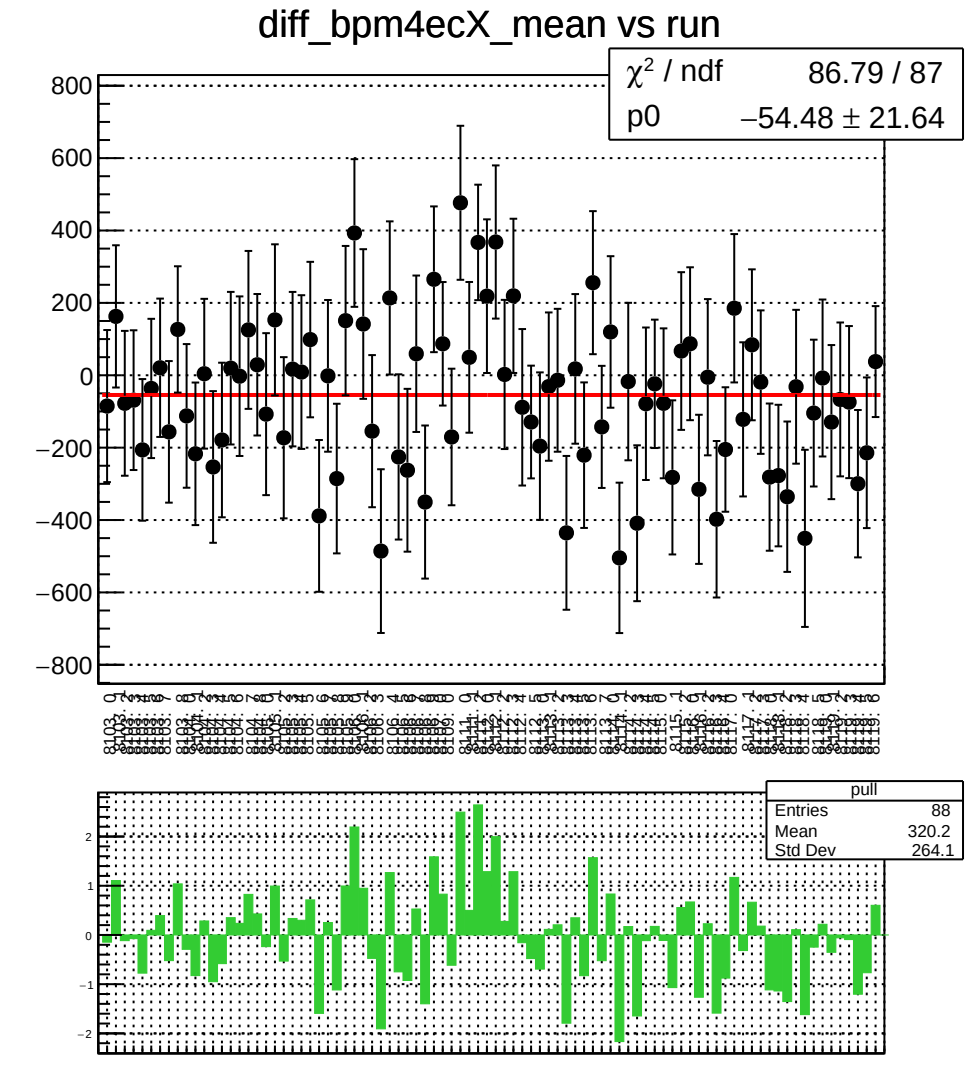

pull1D
Entries 88
Mean −0.01633
Std Dev 0.9886

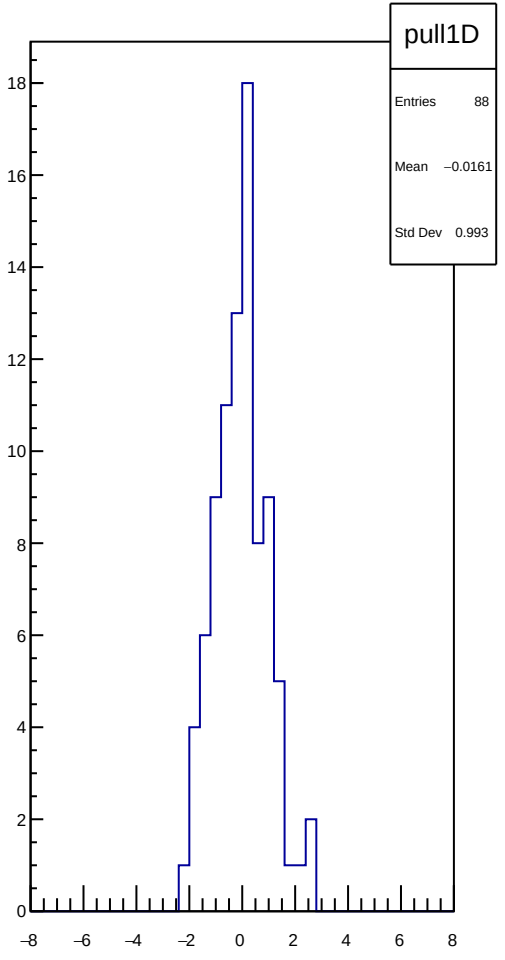

diff_bpm4acX_rms vs run
χ² / ndf 2665 / 87
p0 2.027e+04 ± 15.59
24000
23000
22000
21000
20000
19000
18000

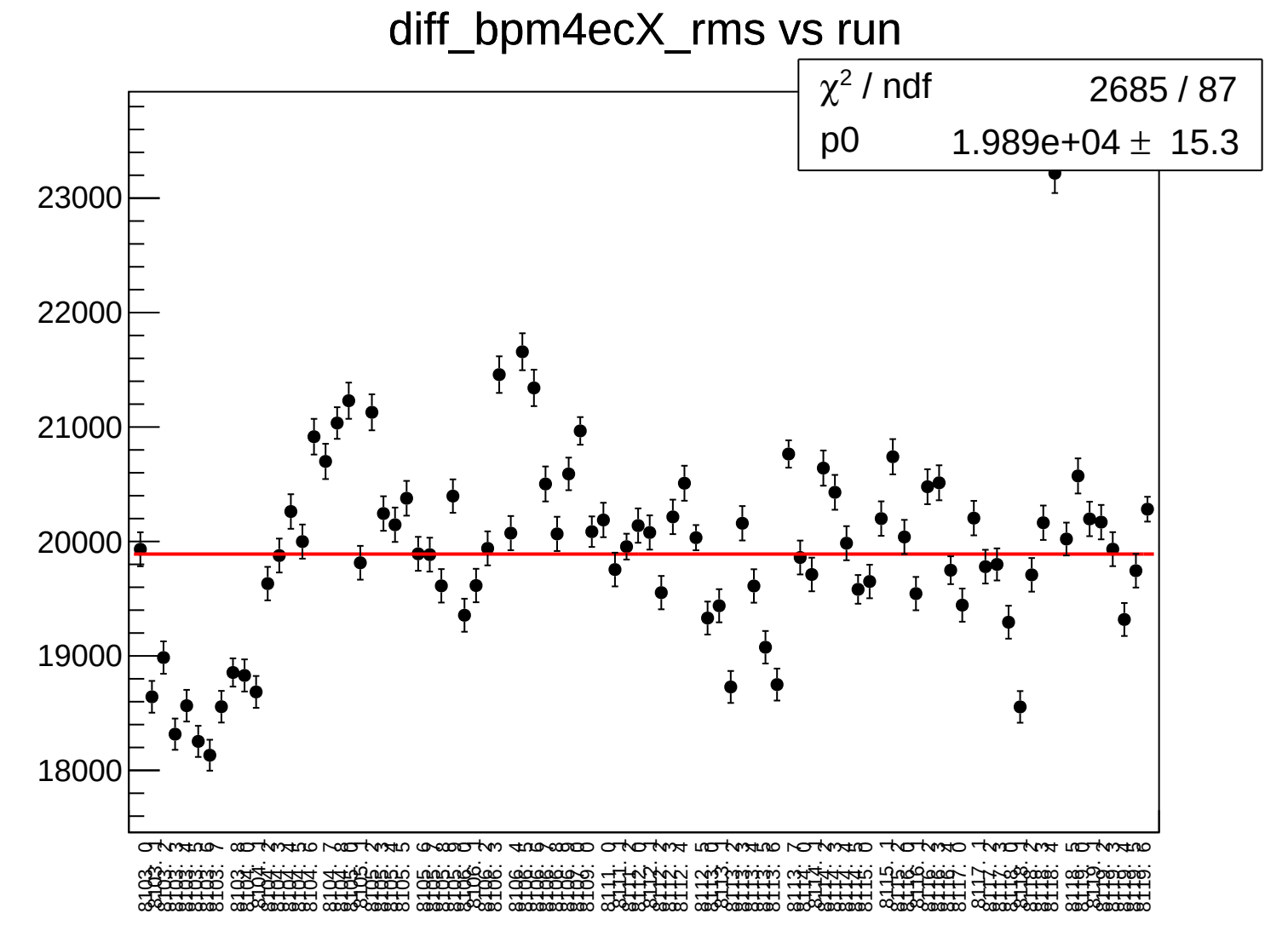

diff_bpm4acY_mean vs run
χ² / ndf 77.12 / 87
p0 −9.304 ± 6.725
pull
Entries 88
Mean −65.06
Std Dev 70.11

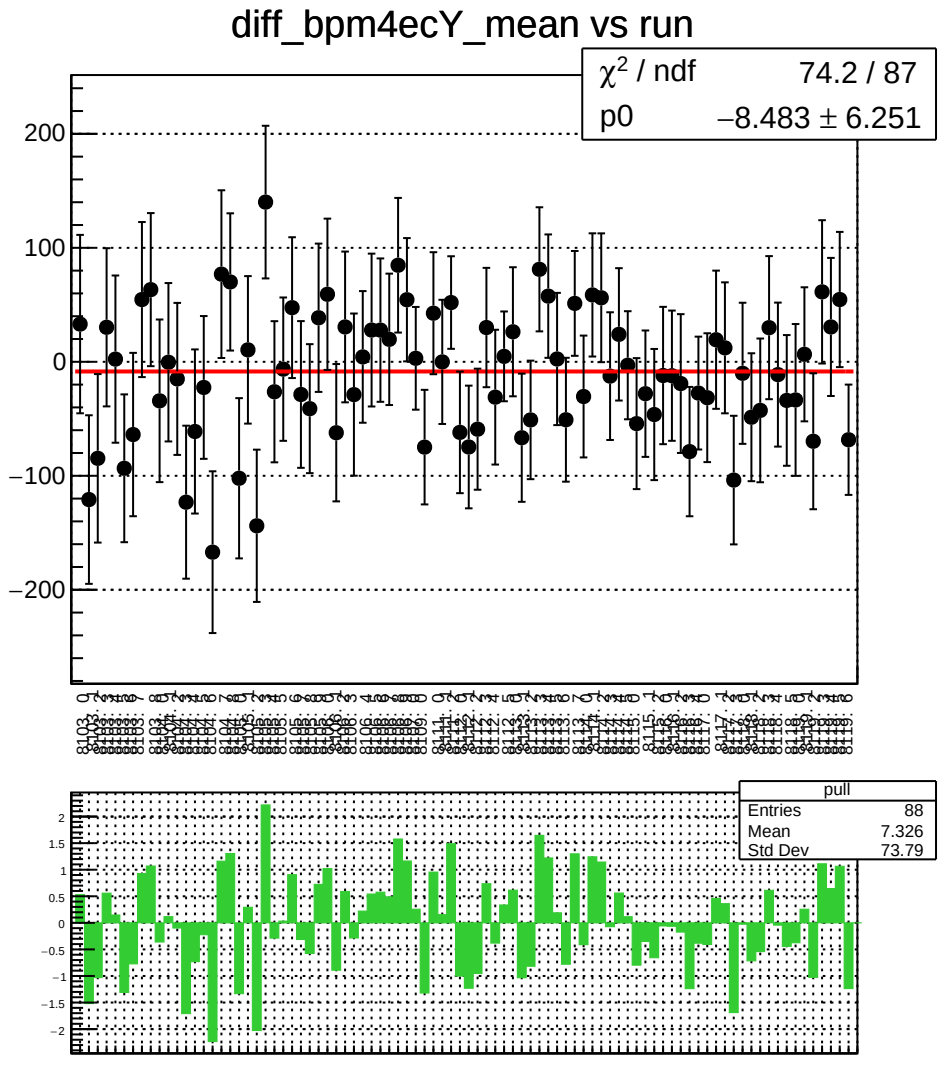

pull1D
Entries 88
Mean −0.01265
Std Dev 0.936

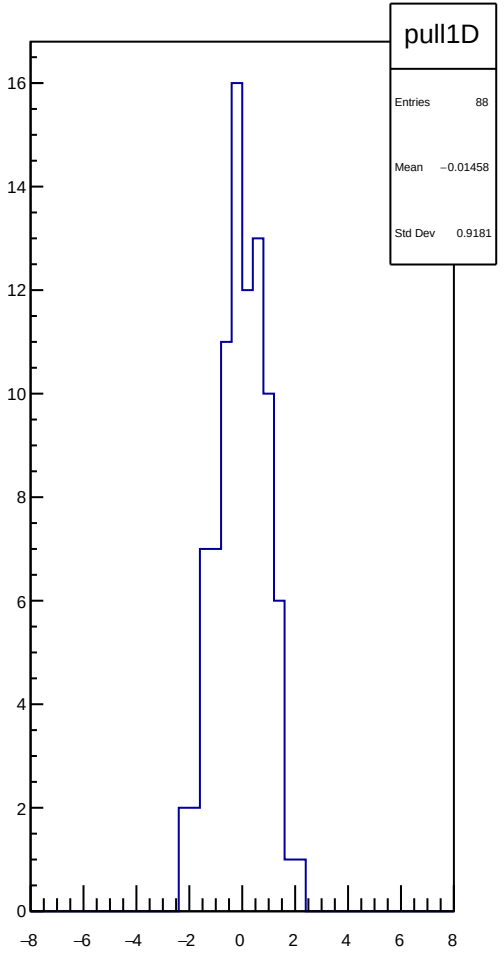

diff_bpm4acY_rms vs run
χ² / ndf 1.591e+04 / 87
p0 6156 ± 4.755
8000
7500
7000
6500
6000
5500

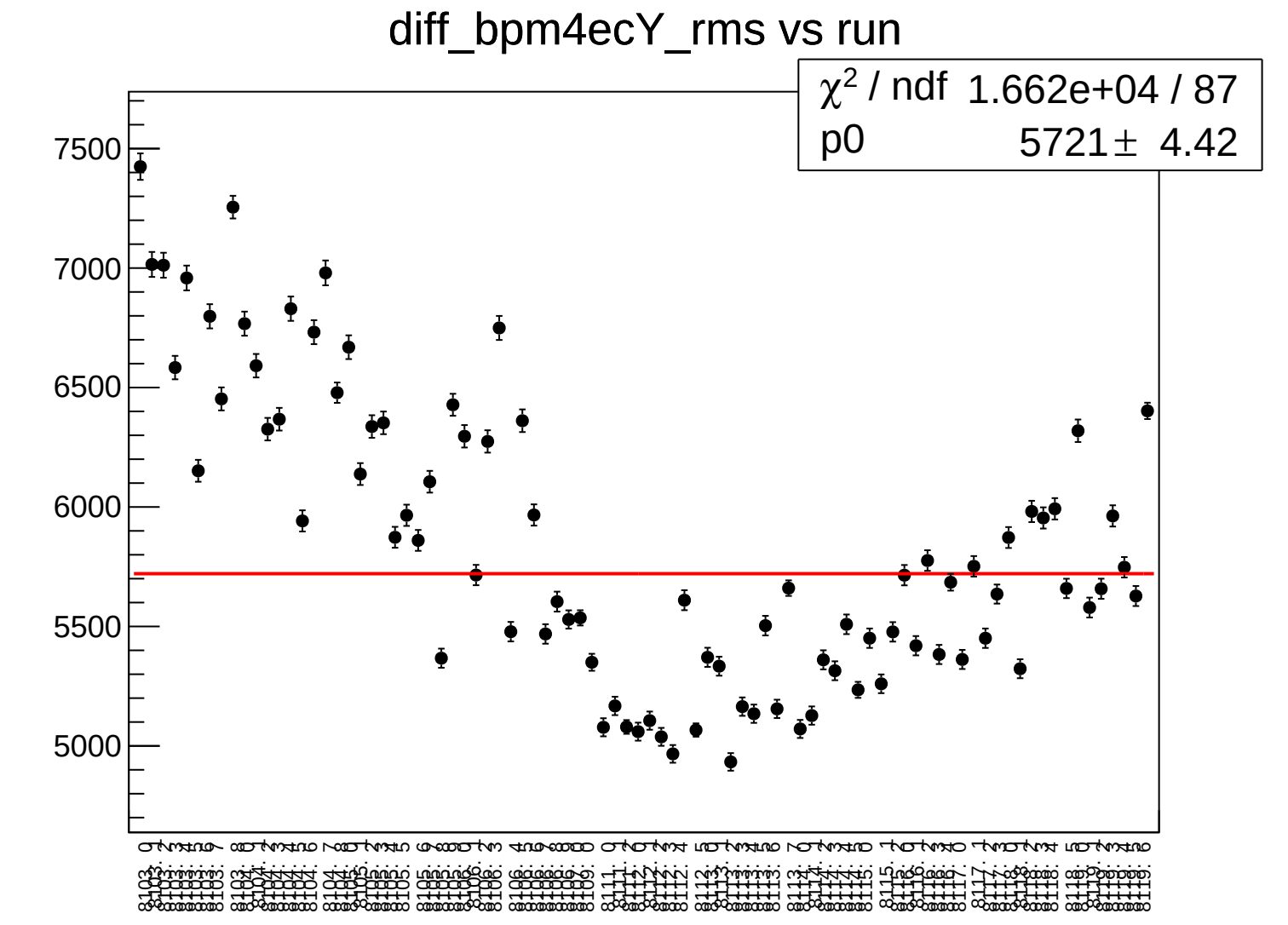

diff_bpm4ecX_mean vs run
χ² / ndf 86.79 / 87
p0 −54.48 ± 21.64
pull
Entries 88
Mean 320.2
Std Dev 264.1

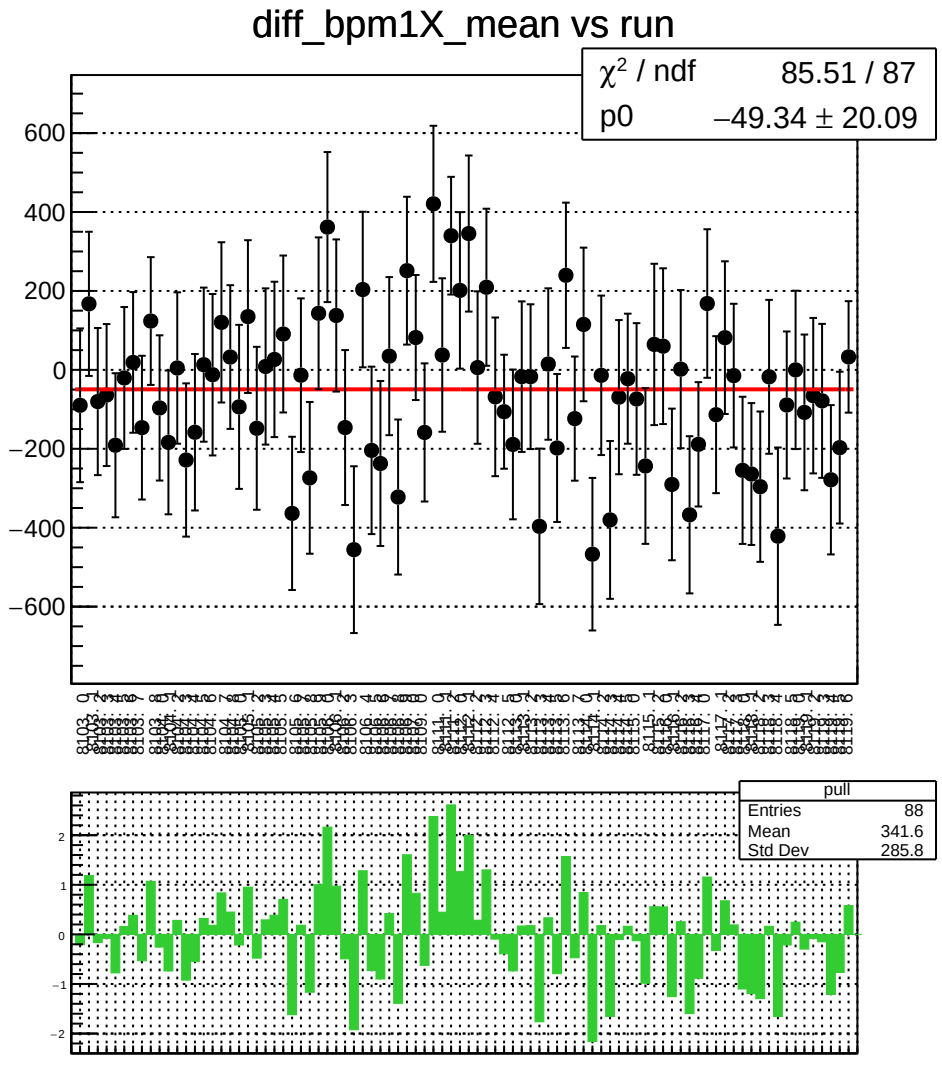

pull1D
Entries 88
Mean −0.0161
Std Dev 0.993

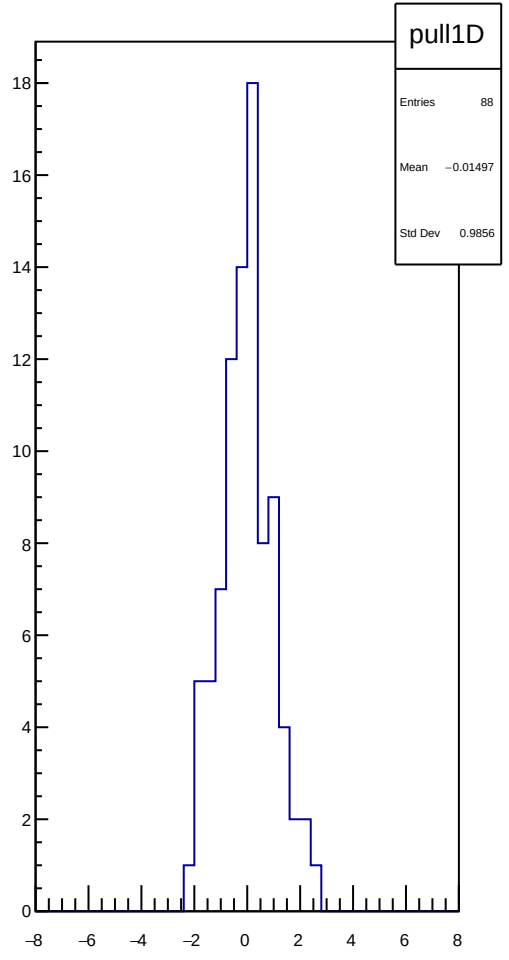

diff_bpm4ecX_rms vs run
χ² / ndf 2685 / 87
p0 1.989e+04 ± 15.3
23000
22000
21000
20000
19000
18000

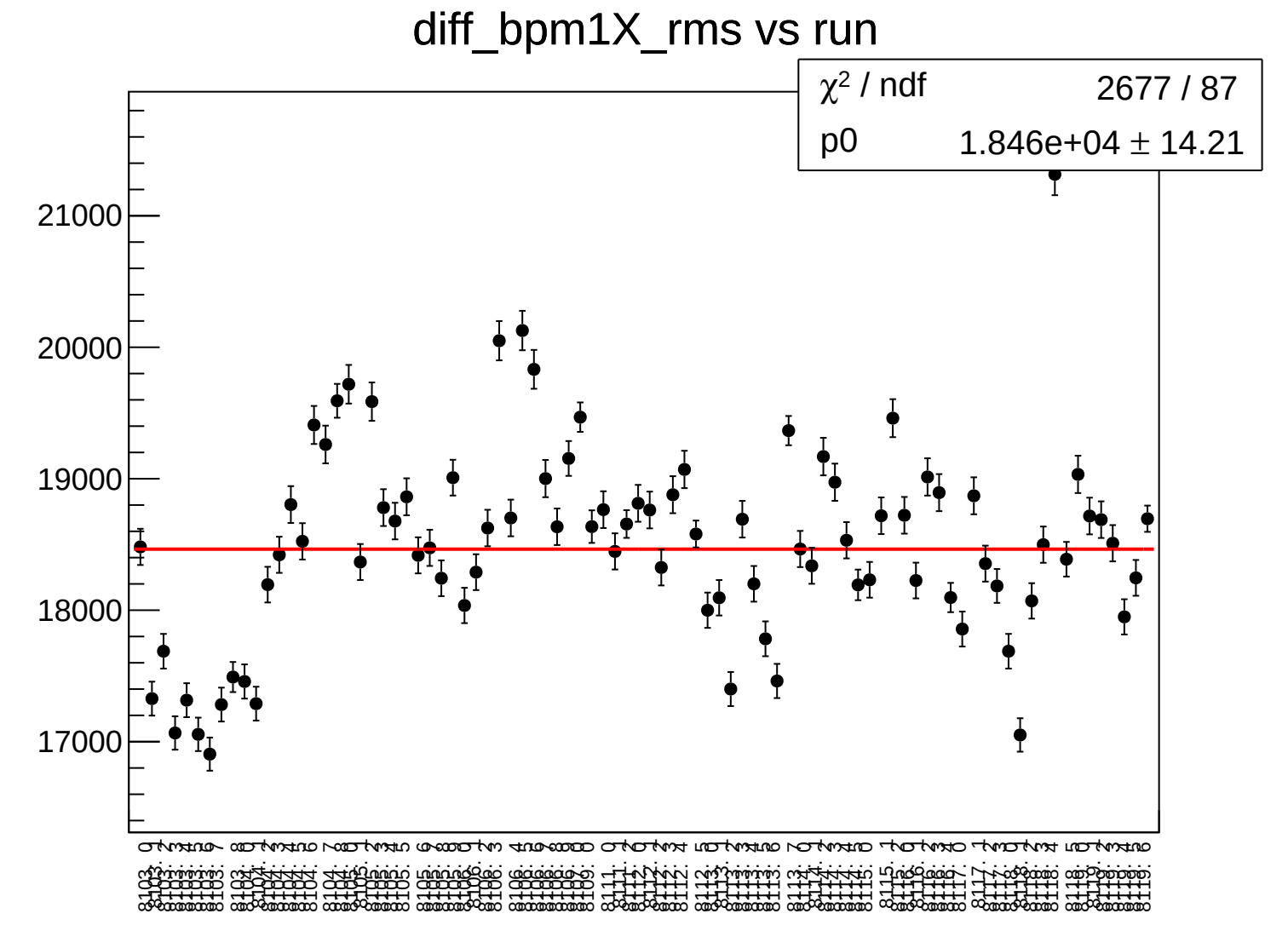

diff_bpm4ecY_mean vs run
χ² / ndf 74.2 / 87
p0 −8.483 ± 6.251
200
100
0
−100
−200
pull
Entries 88
Mean 7.326
Std Dev 73.79
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

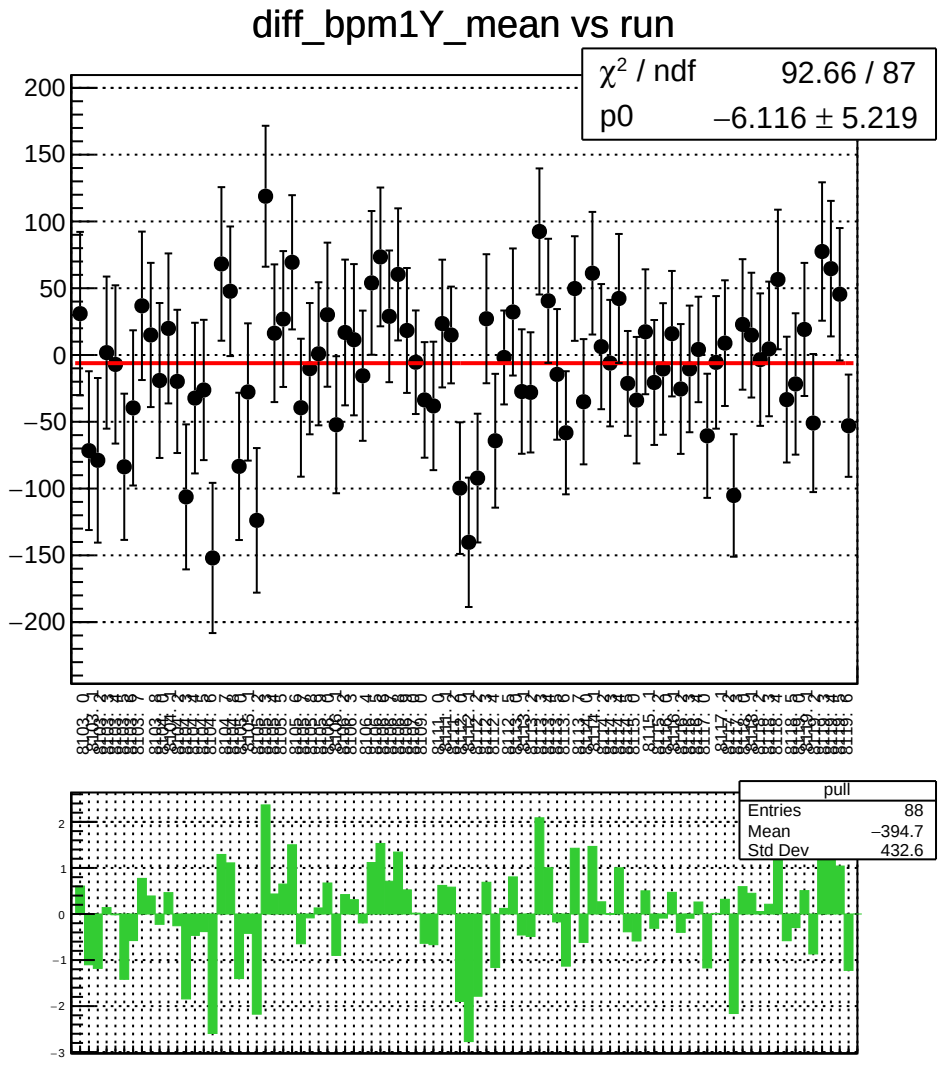

pull1D
Entries 88
Mean −0.01458
Std Dev 0.9181
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

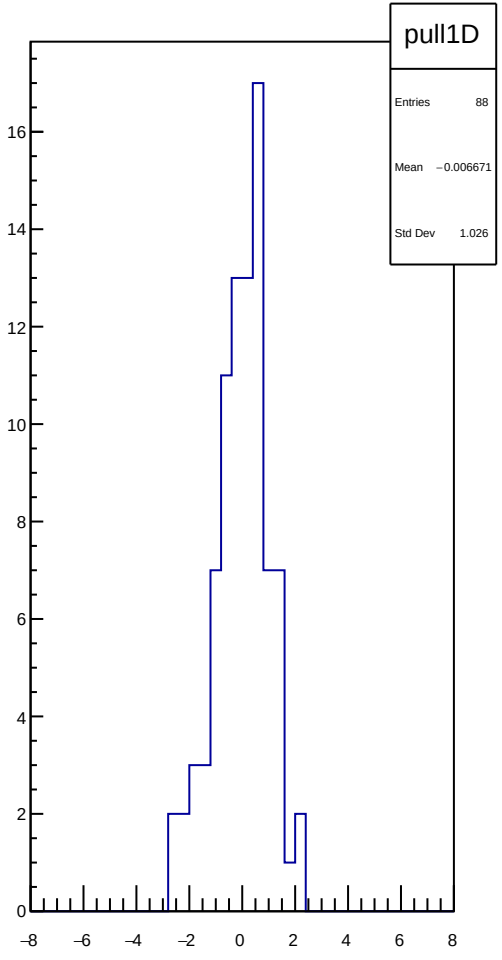

diff_bpm4ecY_rms vs run
χ² / ndf 1.662e+04 / 87
p0 5721 ± 4.42
7500
7000
6500
6000
5500
5000

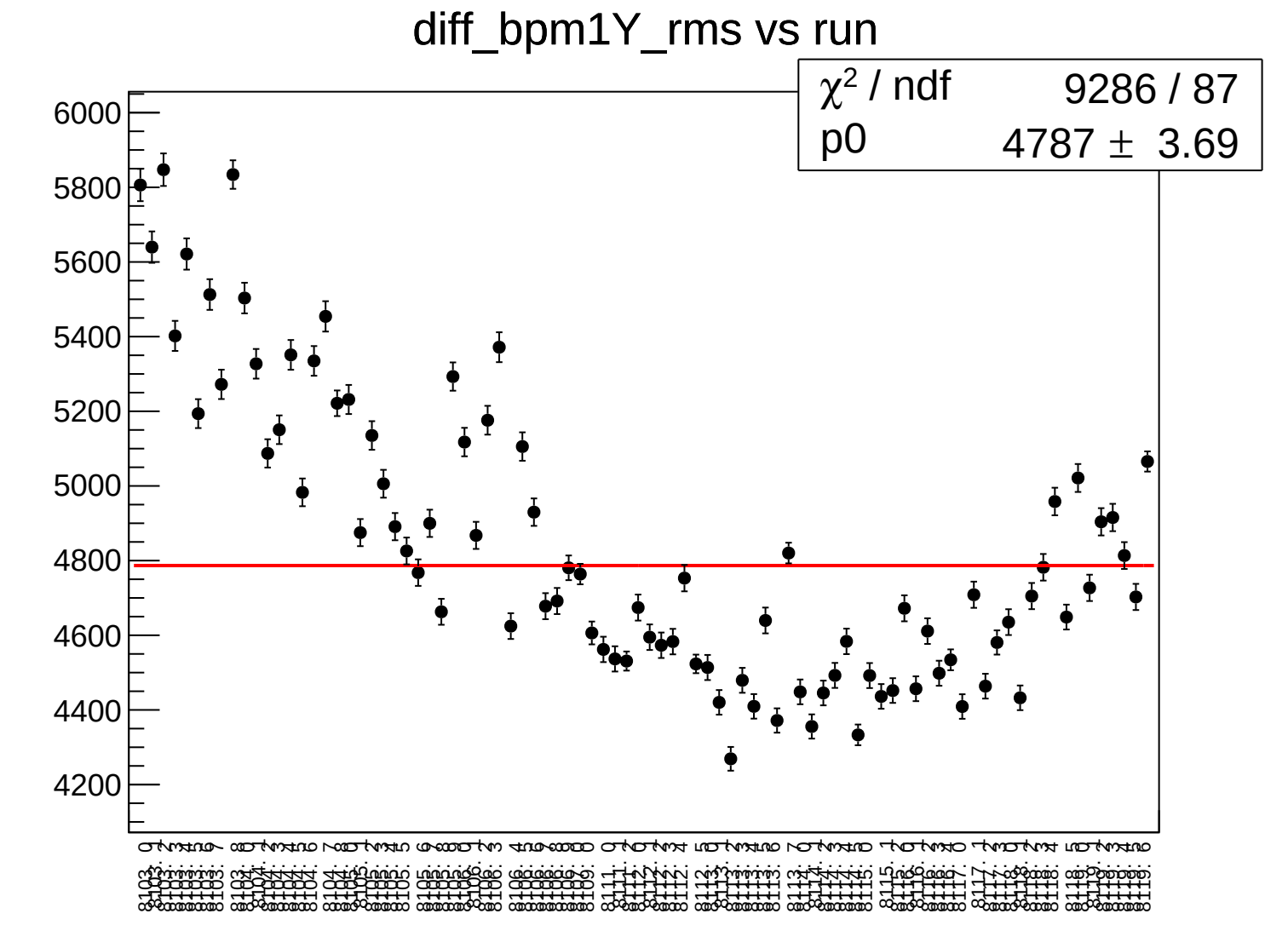

diff_bpm1X_mean vs run
χ² / ndf 85.51 / 87
p0 −49.34 ± 20.09
600
400
200
0
−200
−400
−600
pull
Entries 88
Mean 341.6
Std Dev 285.8
2
1
0
−1
−2

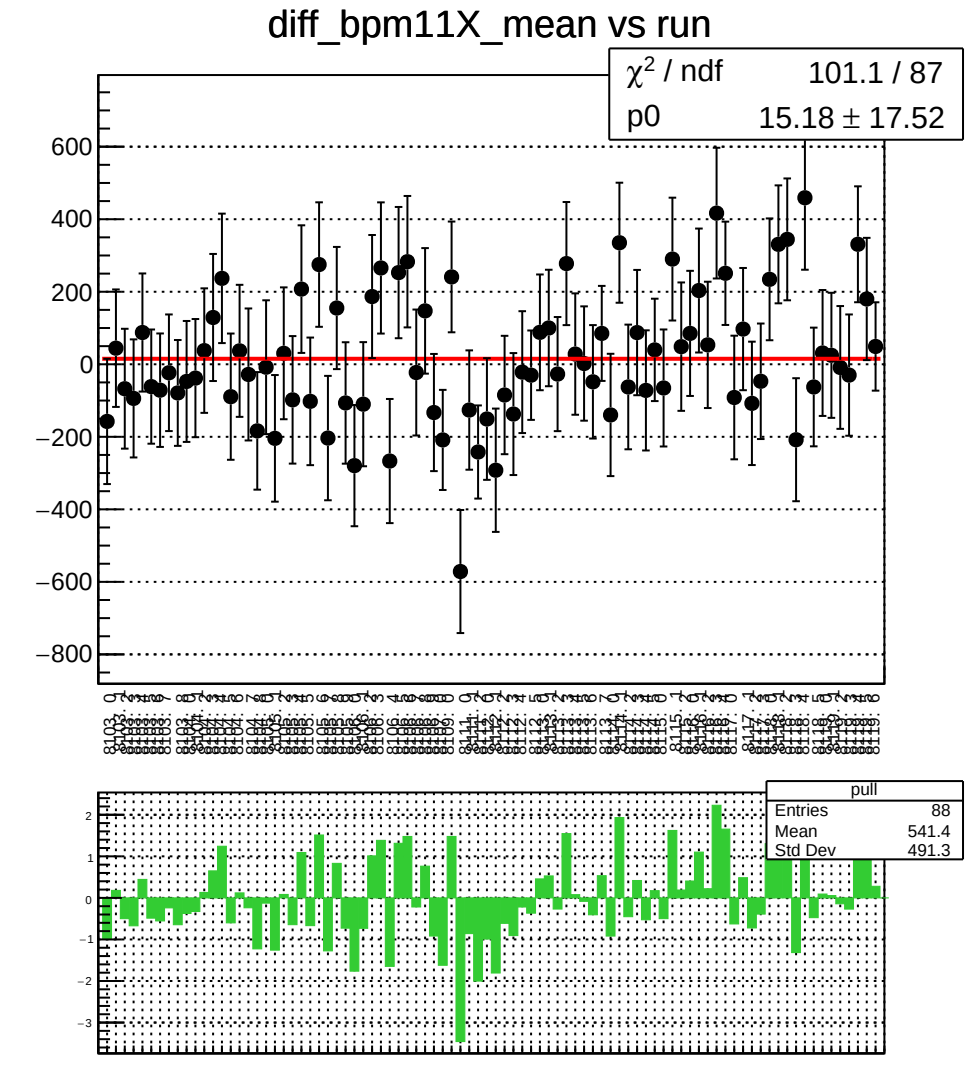

pull1D
Entries 88
Mean −0.01497
Std Dev 0.9856
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

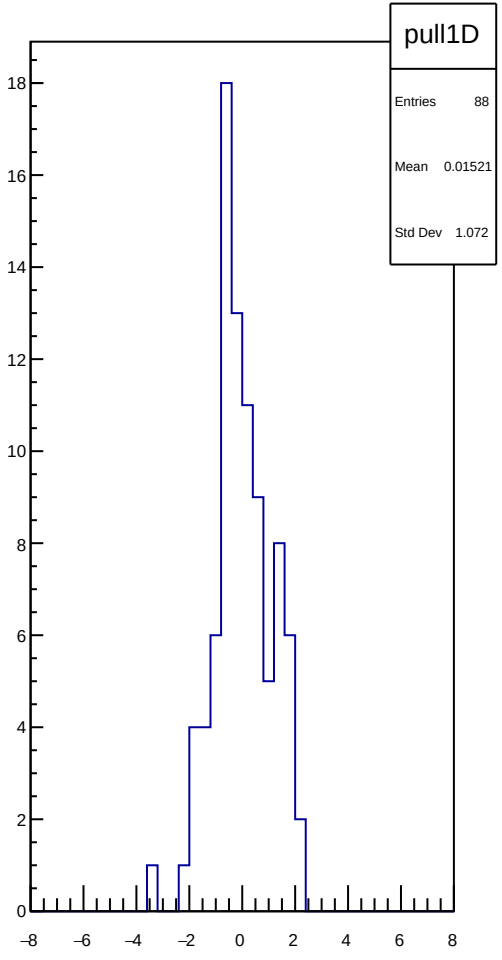

diff_bpm1X_rms vs run
χ² / ndf 2677 / 87
p0 1.846e+04 ± 14.21
21000
20000
19000
18000
17000

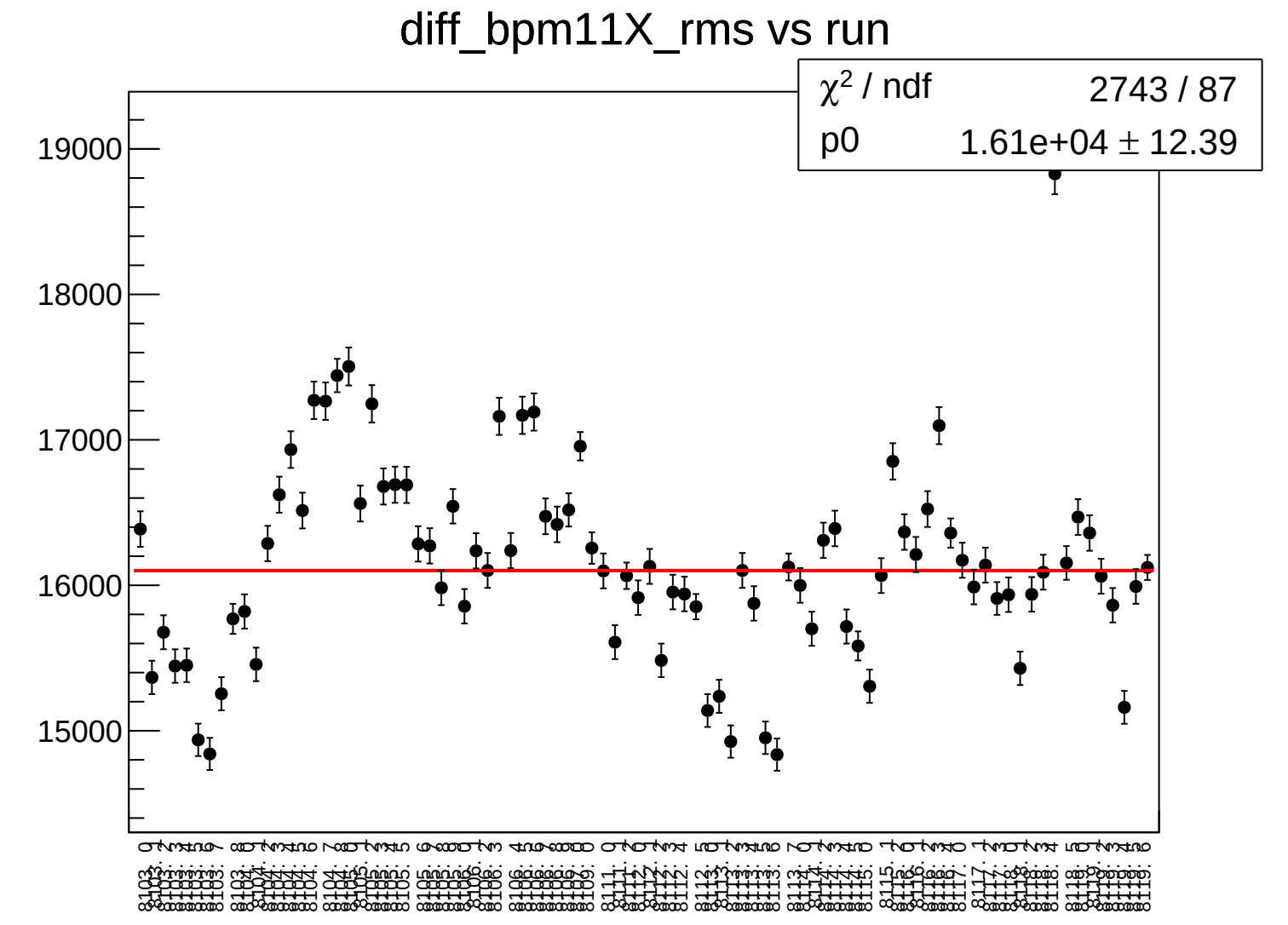

diff_bpm1Y_mean vs run
χ² / ndf 92.66 / 87
p0 −6.116 ± 5.219
pull
Entries 88
Mean −394.7
Std Dev 432.6

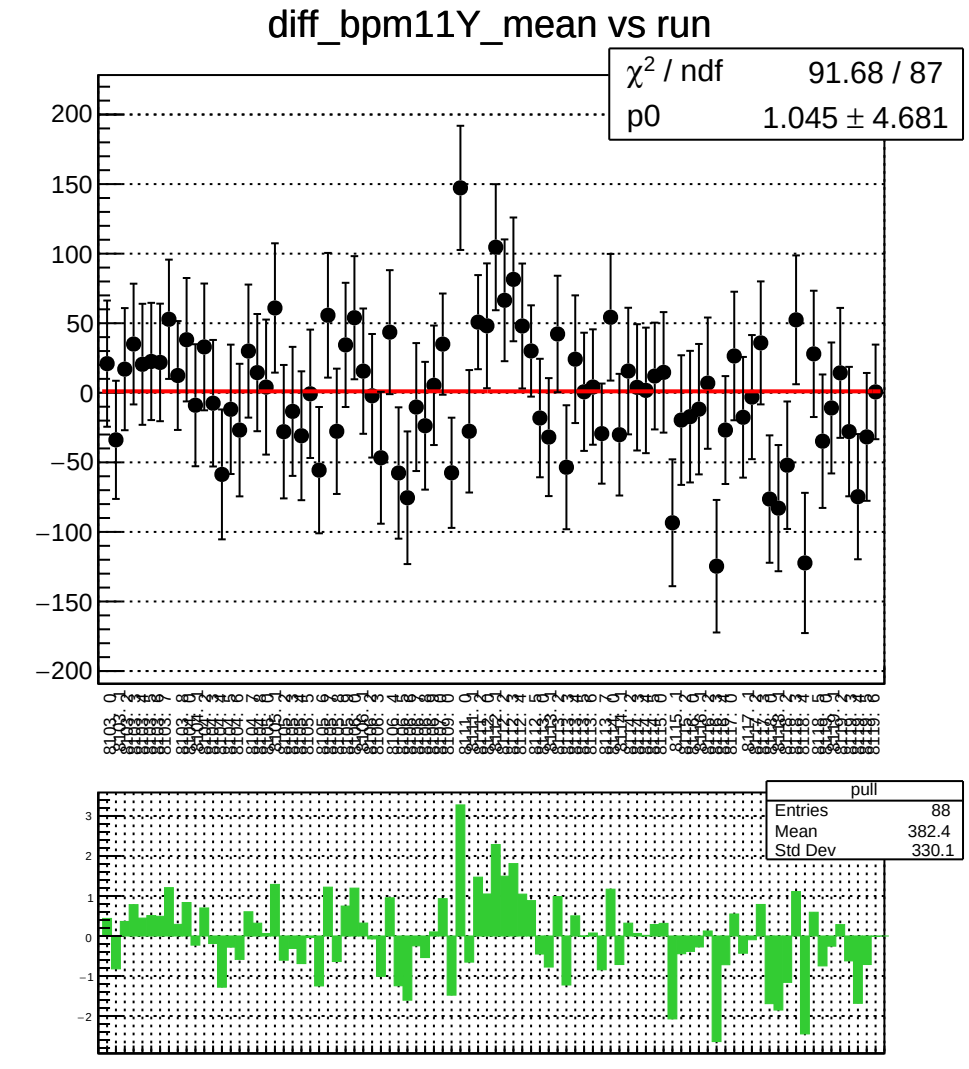

pull1D
Entries 88
Mean −0.006671
Std Dev 1.026

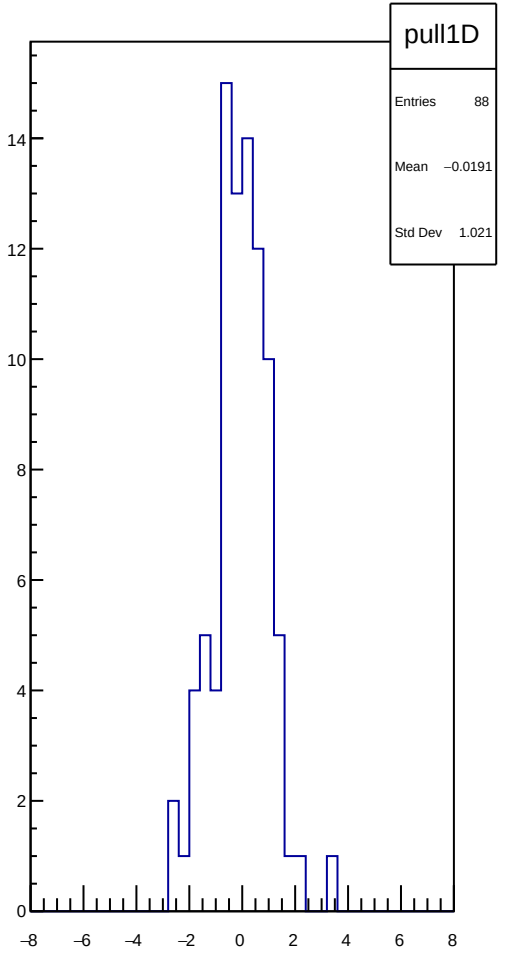

diff_bpm1Y_rms vs run
χ² / ndf 9286 / 87
p0 4787 ± 3.69
6000
5800
5600
5400
5200
5000
4800
4600
4400
4200

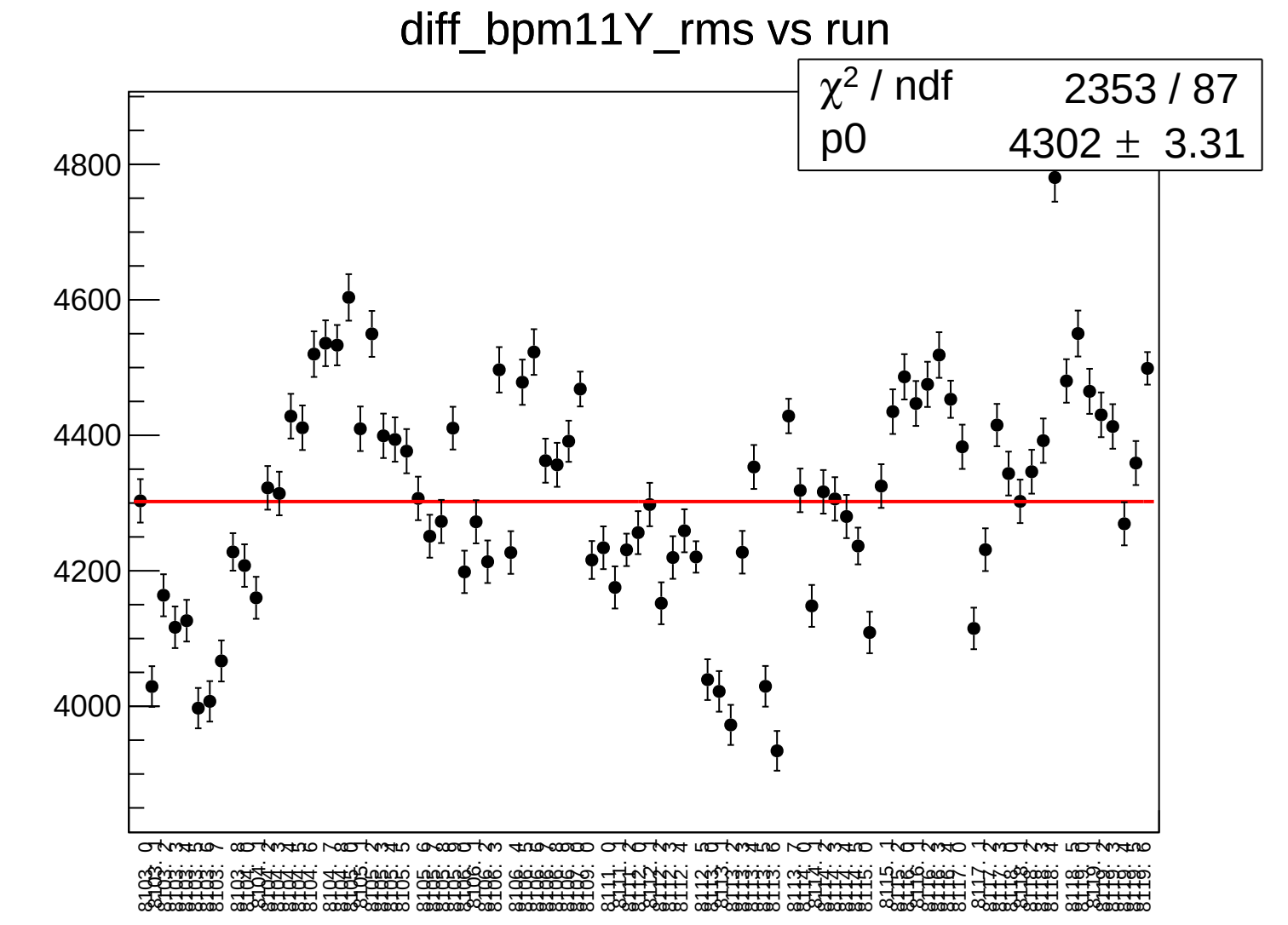

diff_bpm11X_mean vs run
χ^2 / ndf 101.1 / 87
p0 15.18 ± 17.52
pull
Entries 88
Mean 541.4
Std Dev 491.3

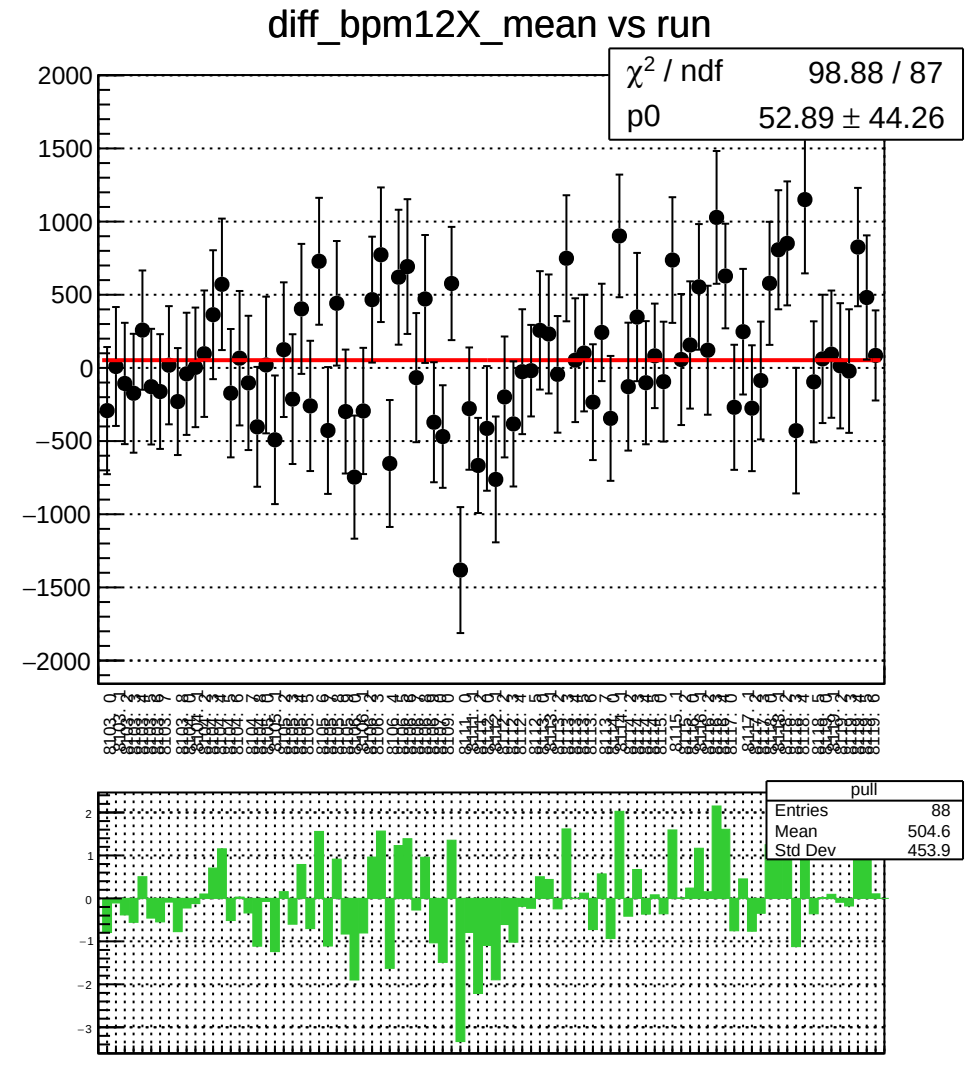

pull1D
Entries 88
Mean 0.01521
Std Dev 1.072

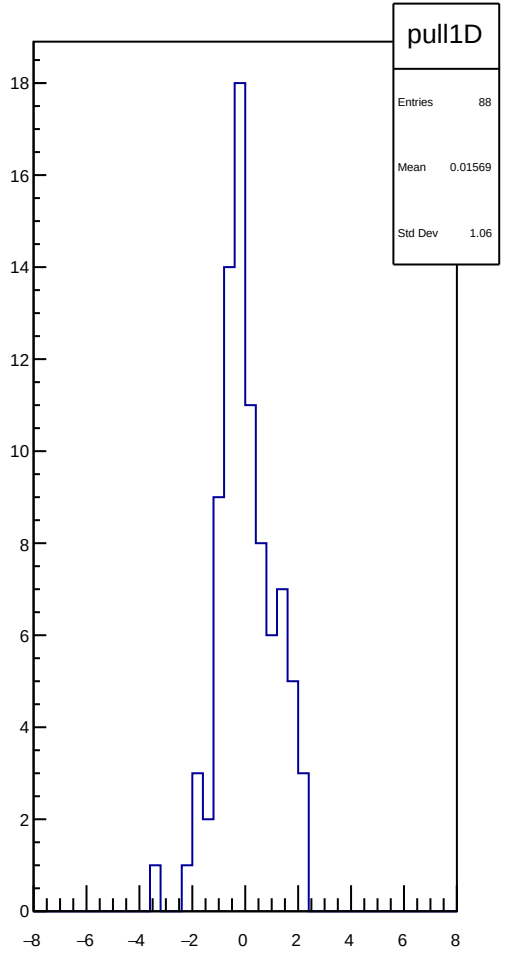

diff_bpm11X_rms vs run
χ² / ndf 2743 / 87
p0 1.61e+04 ± 12.39
19000
18000
17000
16000
15000


diff_bpm11Y_mean vs run
χ^2 / ndf 91.68 / 87
p0 1.045 ± 4.681
pull
Entries 88
Mean 382.4
Std Dev 330.1

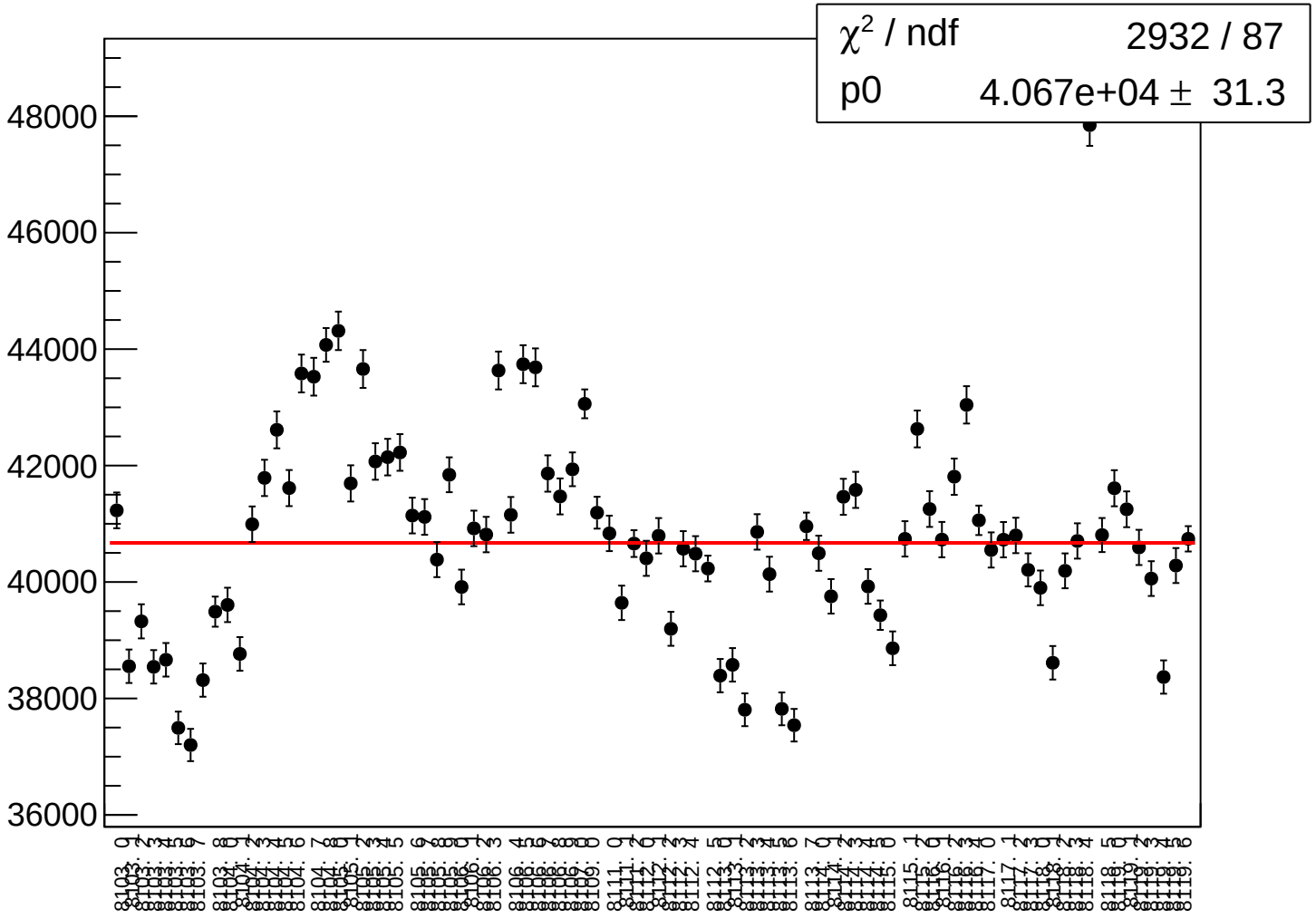

pull1D
Entries 88
Mean −0.0191
Std Dev 1.021

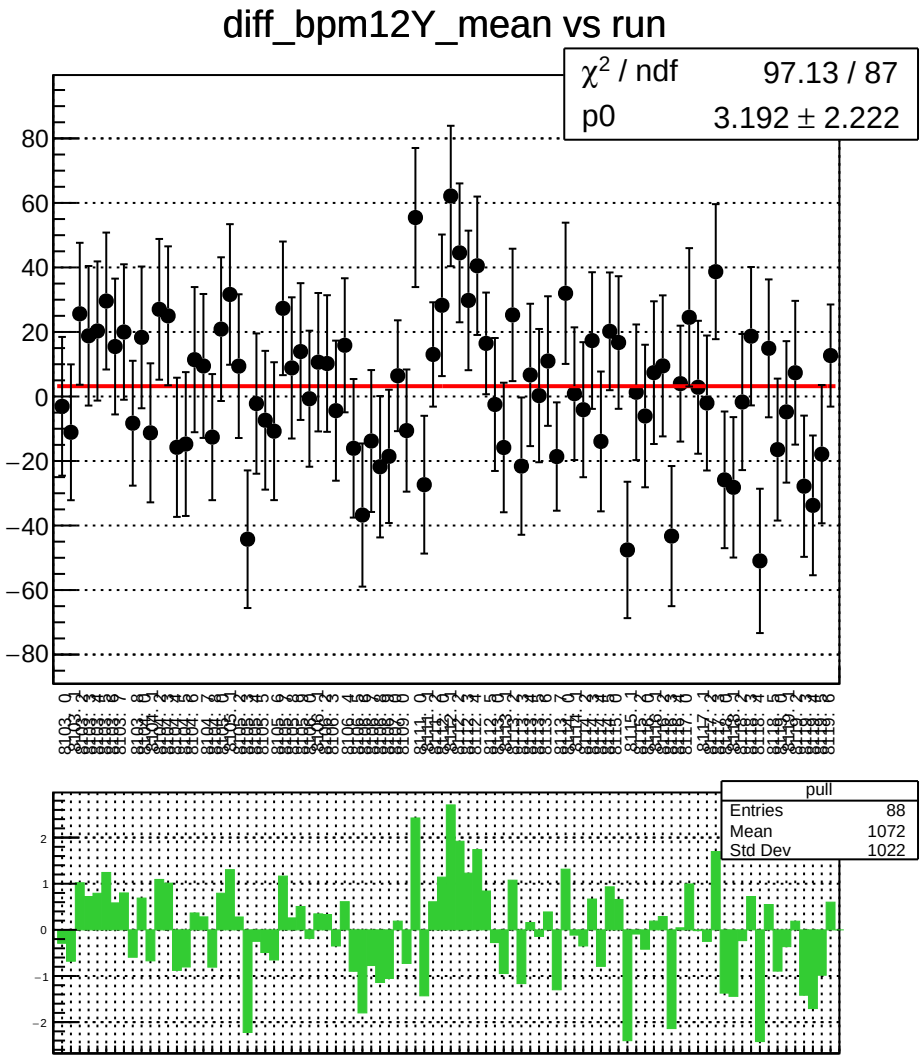

diff_bpm11Y_rms vs run
χ² / ndf 2353 / 87
p0 4302 ± 3.31
4800
4600
4400
4200
4000

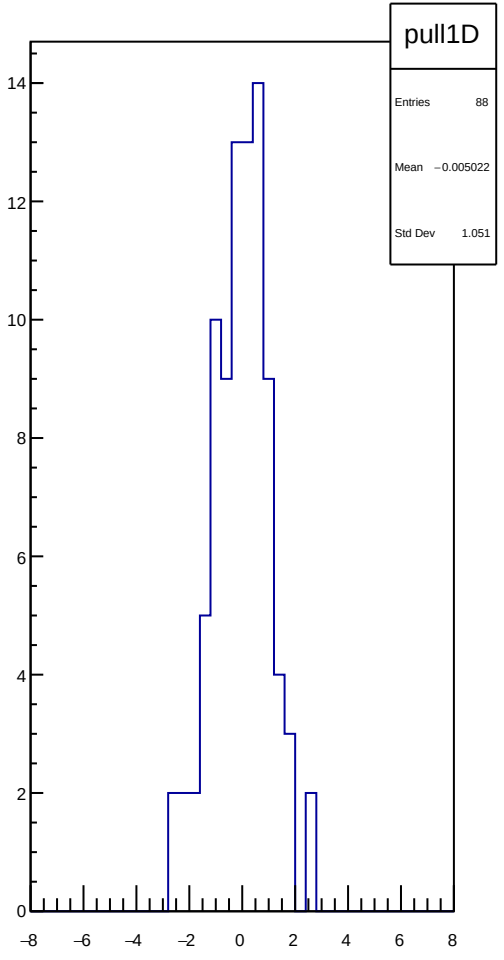

diff_bpm12X_mean vs run
χ² / ndf 98.88 / 87
p0 52.89 ± 44.26
pull
Entries 88
Mean 504.6
Std Dev 453.9

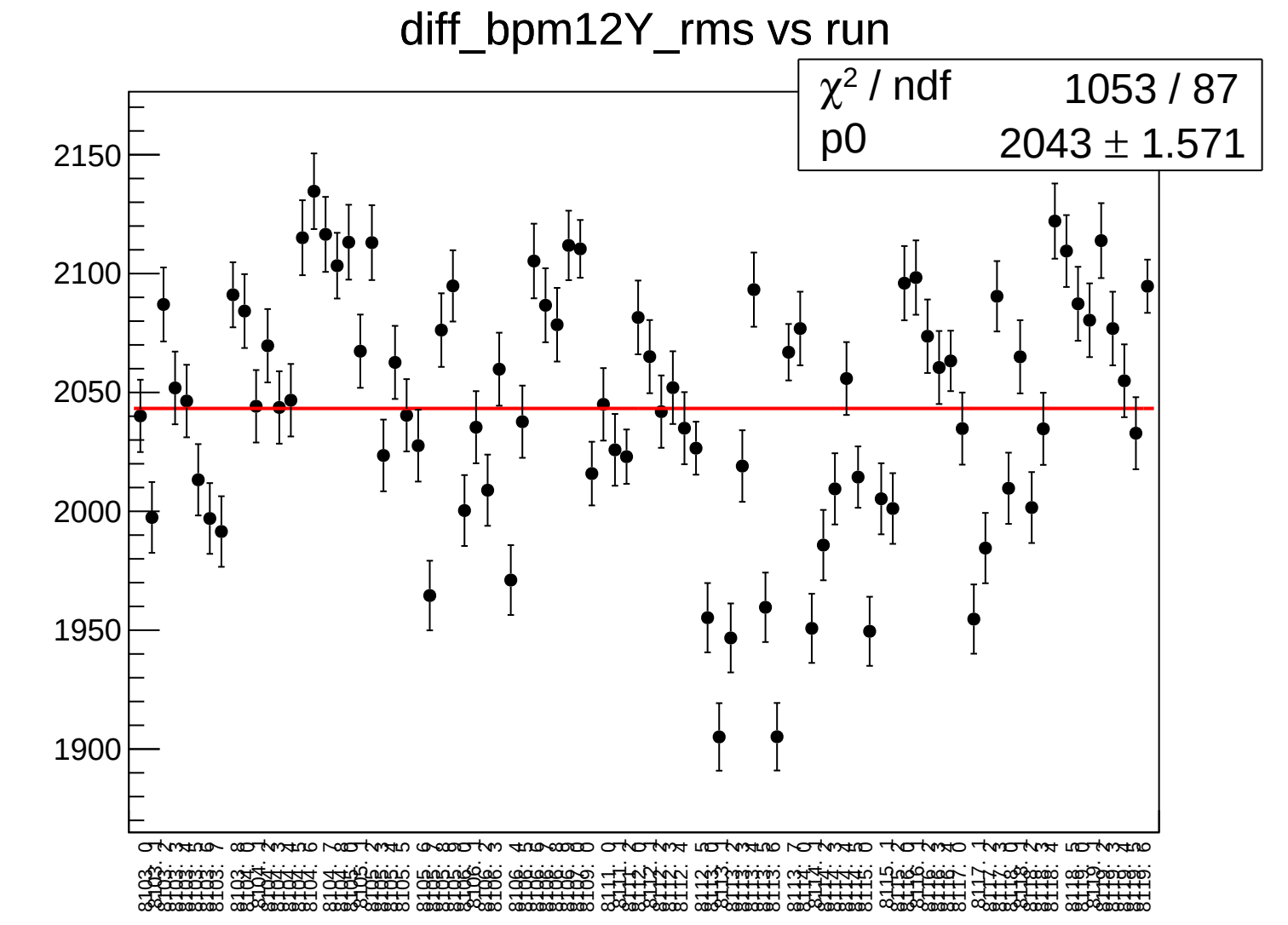

pull1D
Entries 88
Mean 0.01569
Std Dev 1.06

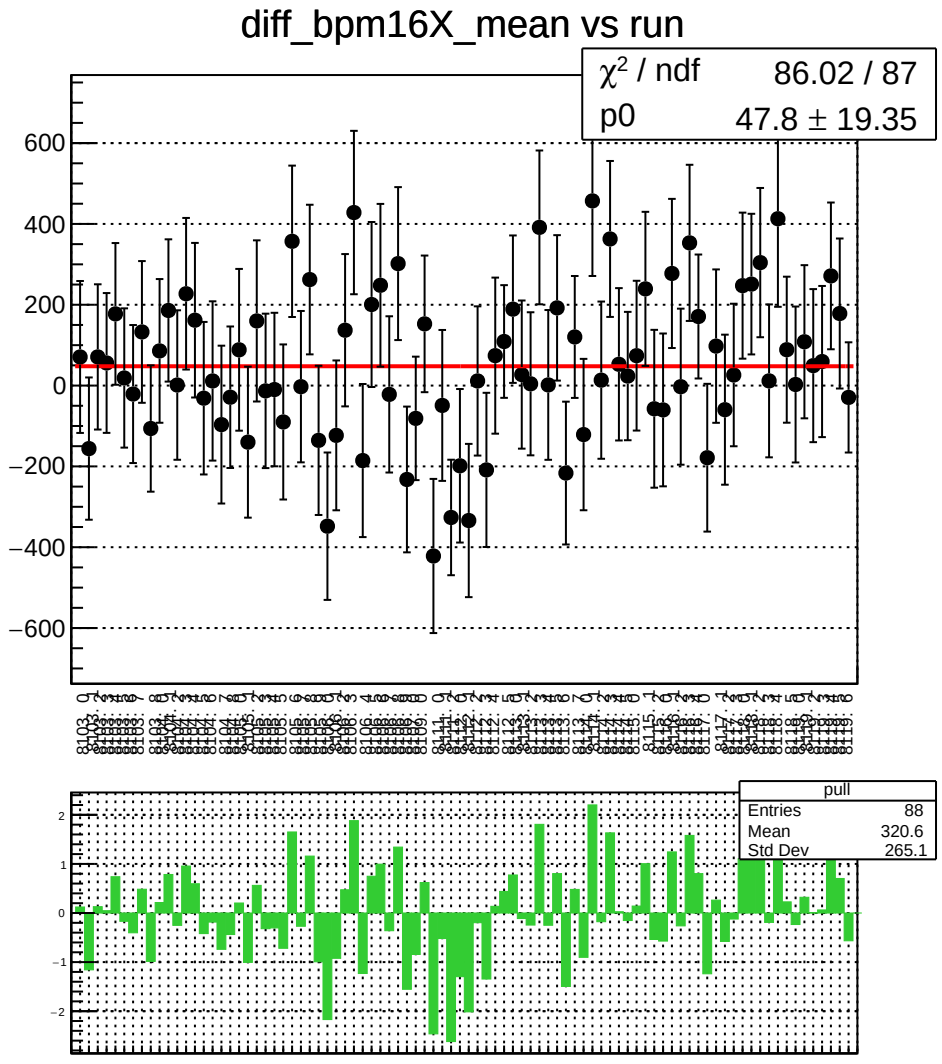
diff_bpm12X_rms vs run

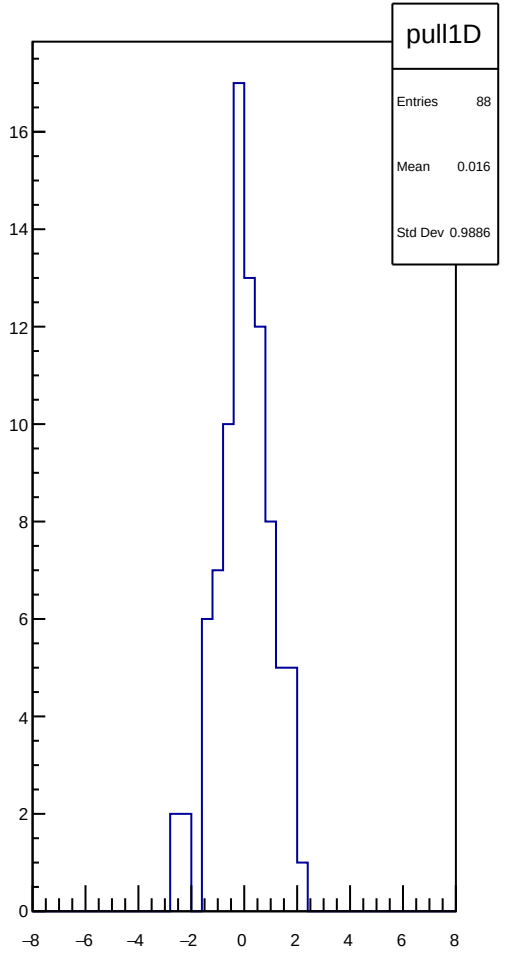


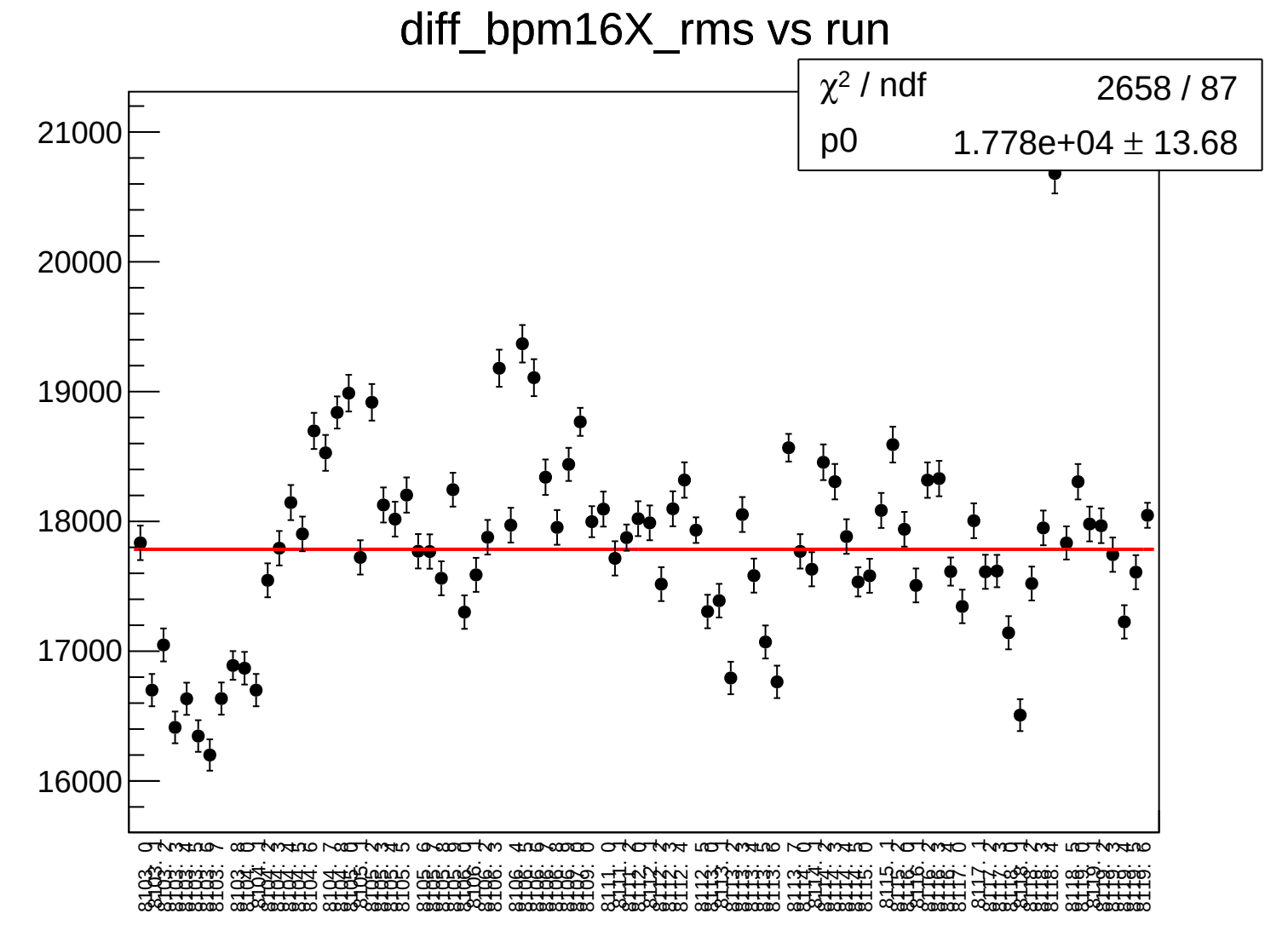

diff_bpm12Y_mean vs run
χ² / ndf 97.13 / 87
p0 3.192 ± 2.222
pull
Entries 88
Mean 1072
Std Dev 1022

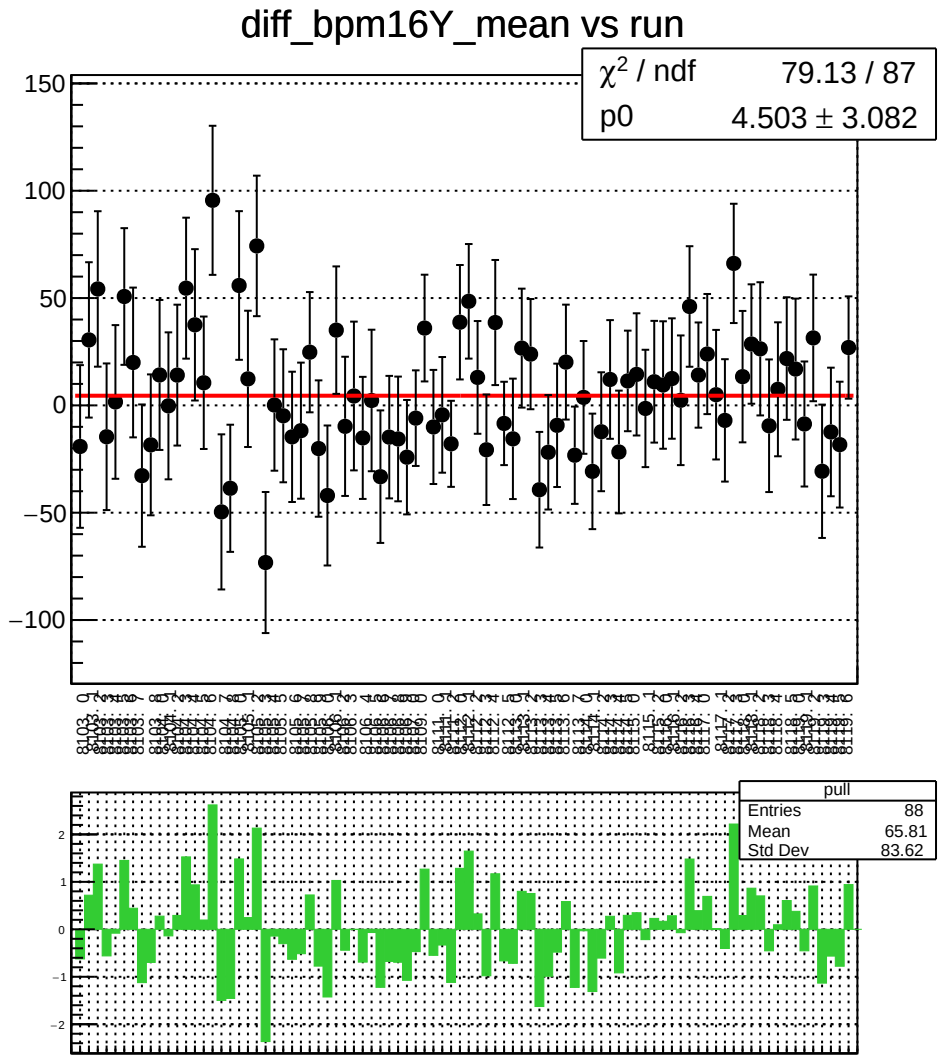

pull1D
Entries 88
Mean −0.005022
Std Dev 1.051

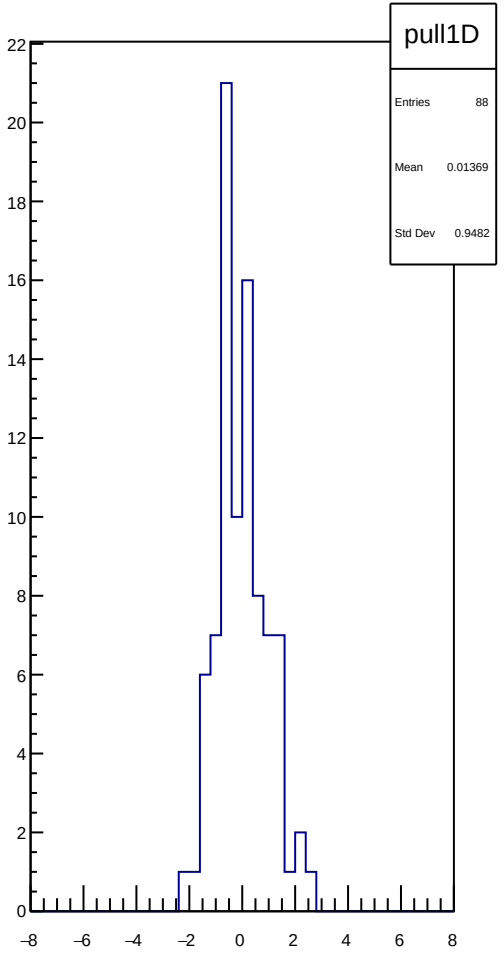

diff_bpm12Y_rms vs run
χ² / ndf 1053 / 87
p0 2043 ± 1.571
2150
2100
2050
2000
1950
1900

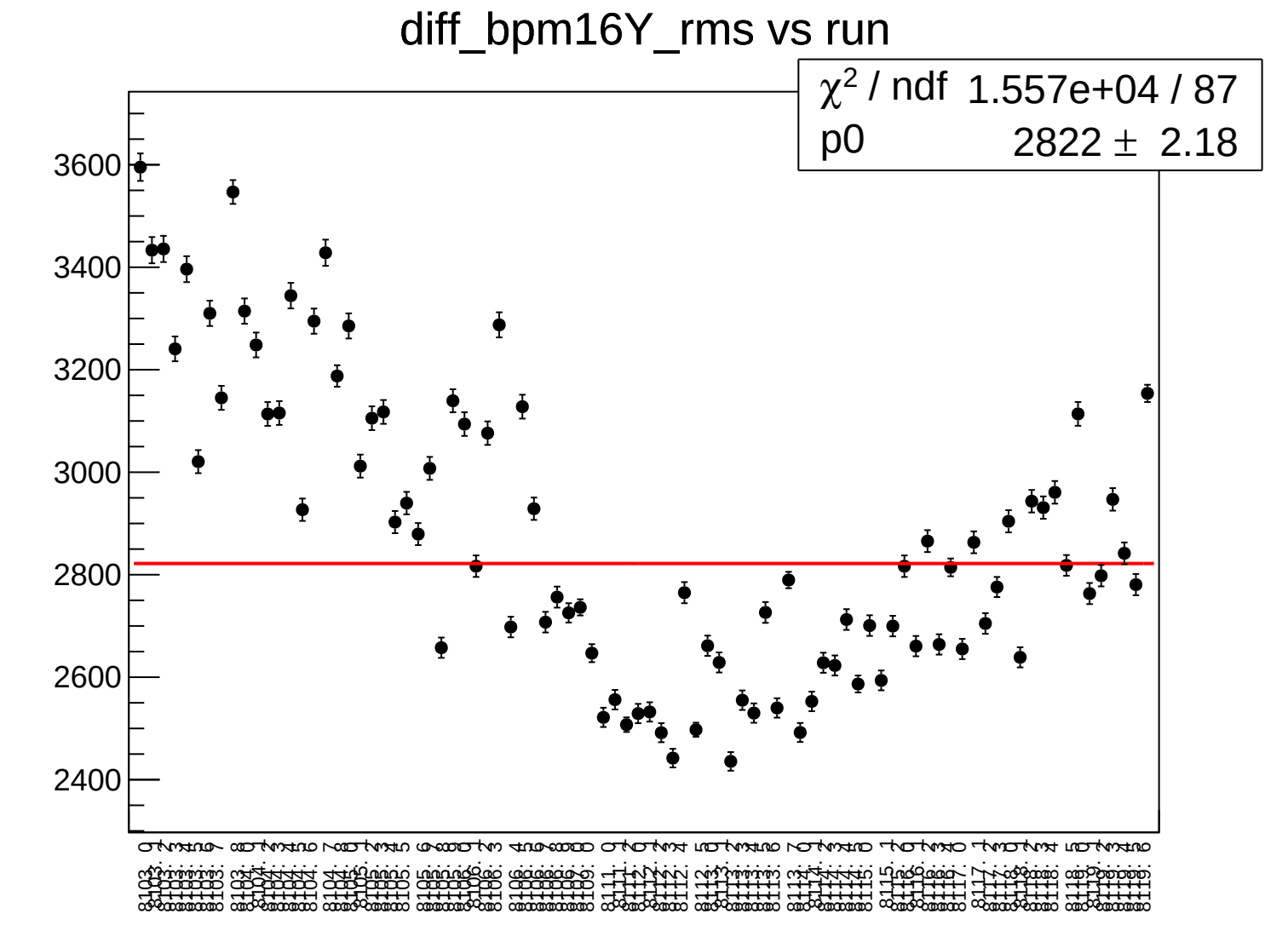

diff_bpm16X_mean vs run
χ² / ndf 86.02 / 87
p0 47.8 ± 19.35
600
400
200
0
−200
−400
−600
pull
Entries 88
Mean 320.6
Std Dev 265.1
2
1
0
−1
−2

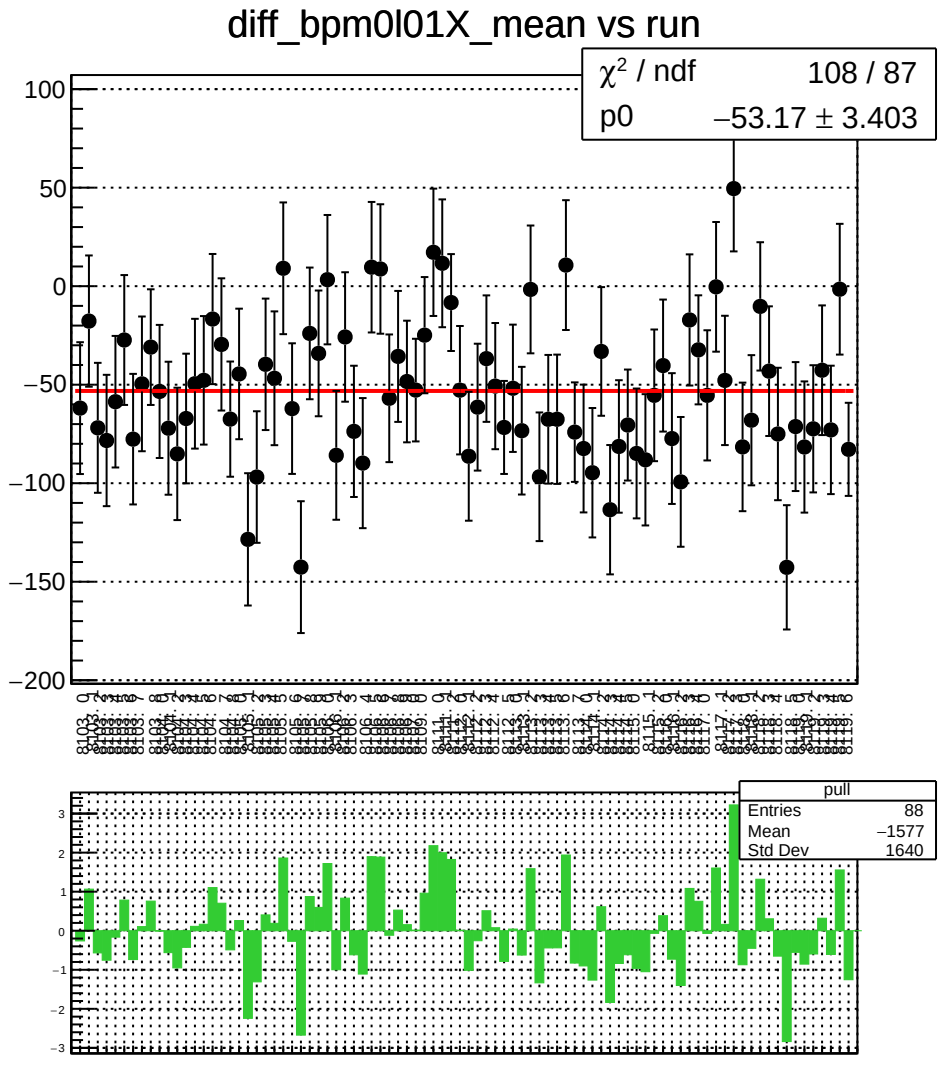

pull1D
Entries 88
Mean 0.016
Std Dev 0.9886
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

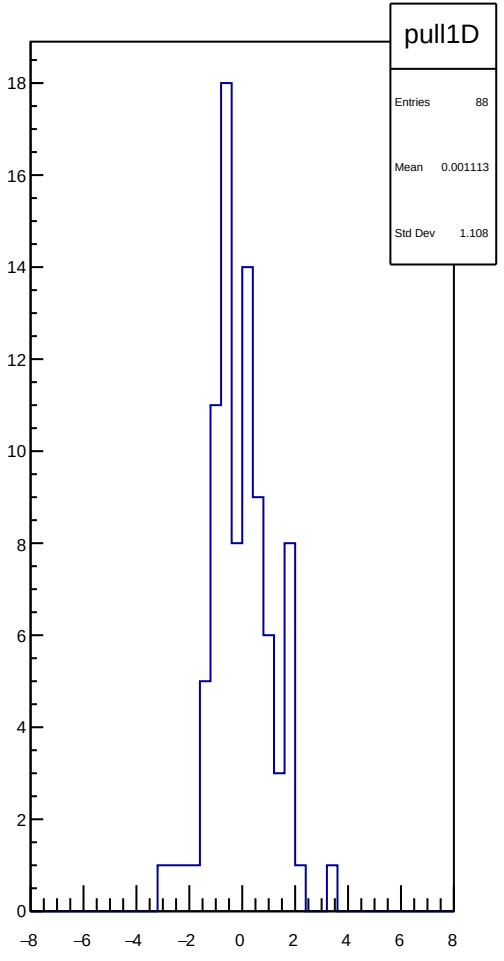

diff_bpm16X_rms vs run
χ² / ndf 2658 / 87
p0 1.778e+04 ± 13.68
21000
20000
19000
18000
17000
16000

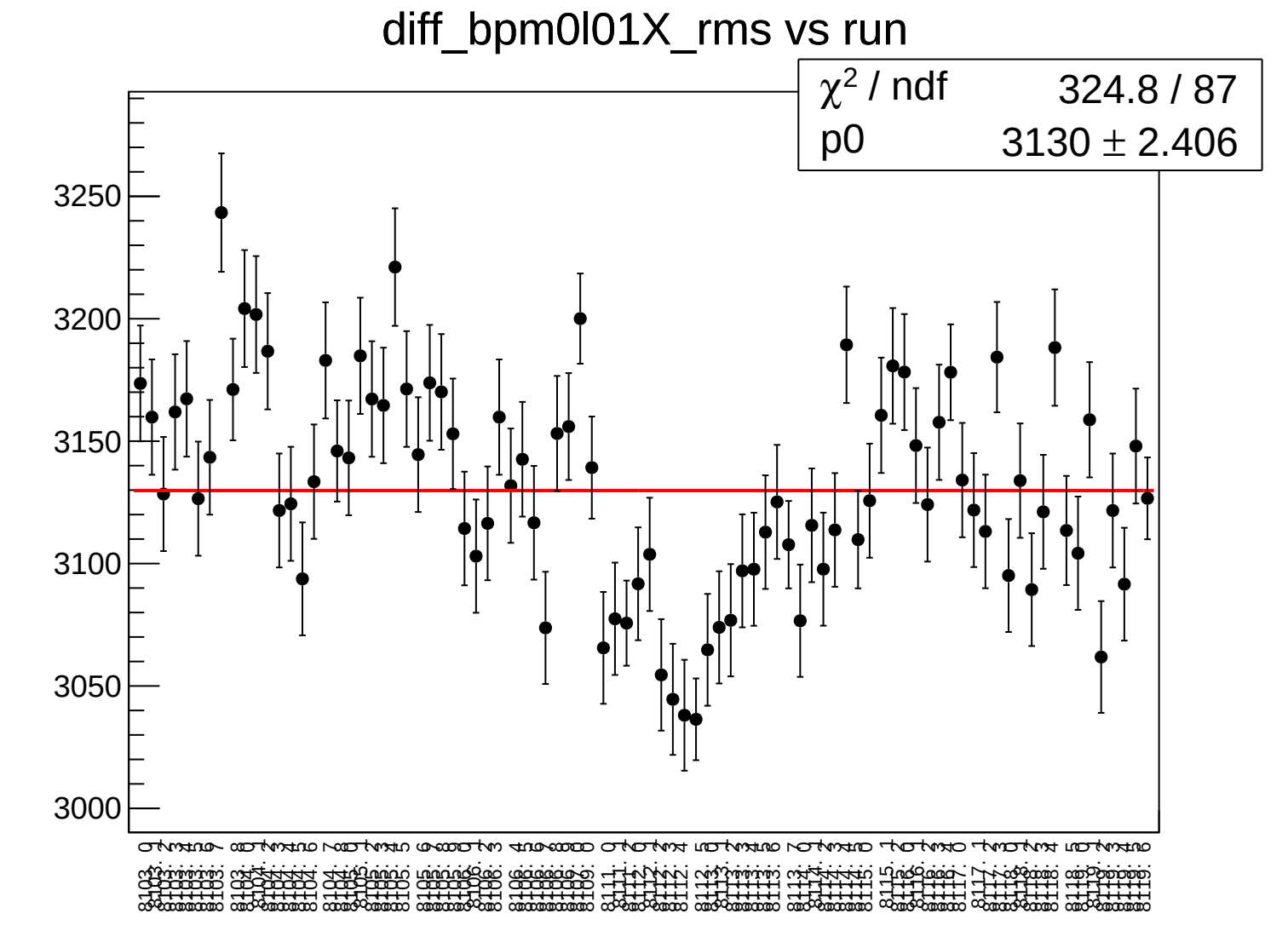

diff_bpm16Y_mean vs run
χ² / ndf 79.13 / 87
p0 4.503 ± 3.082
150
100
50
0
−50
−100
pull
Entries 88
Mean 65.81
Std Dev 83.62
2
1
0
−1
−2

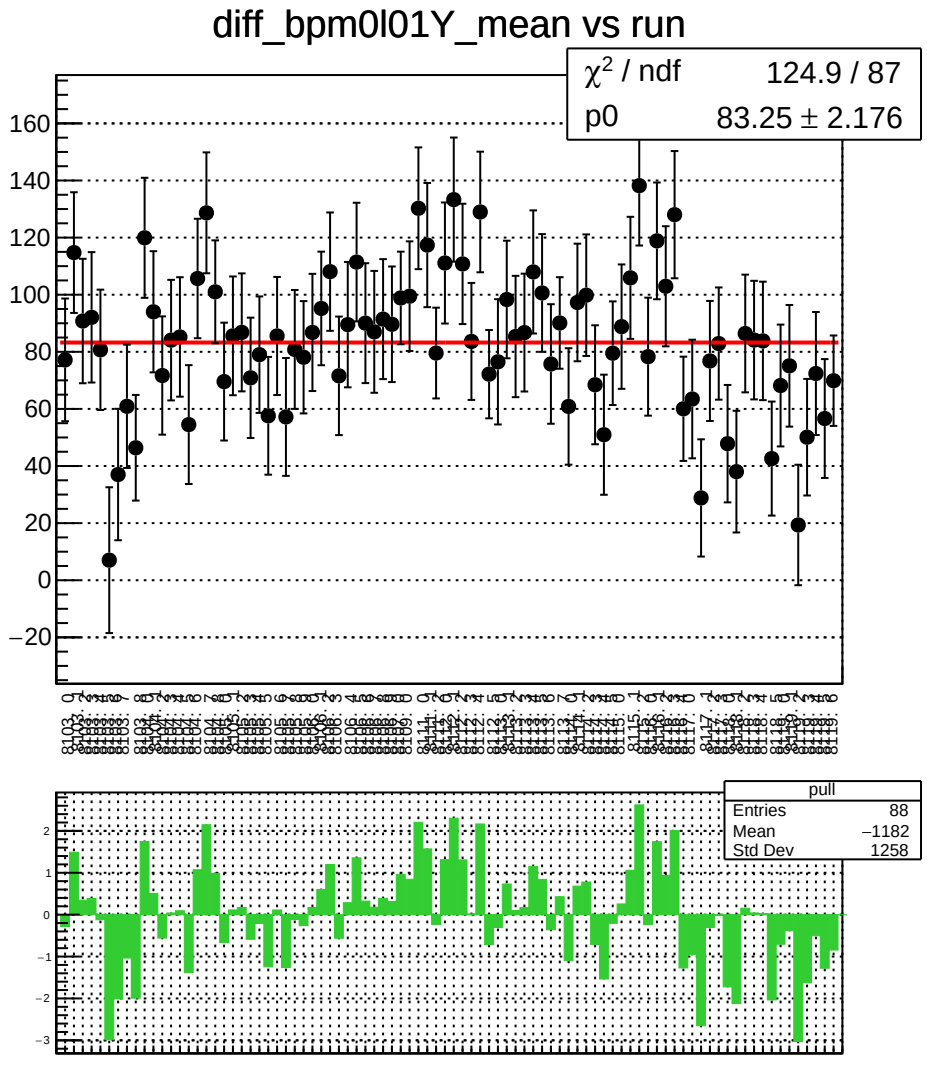

pull1D
Entries 88
Mean 0.01369
Std Dev 0.9482
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

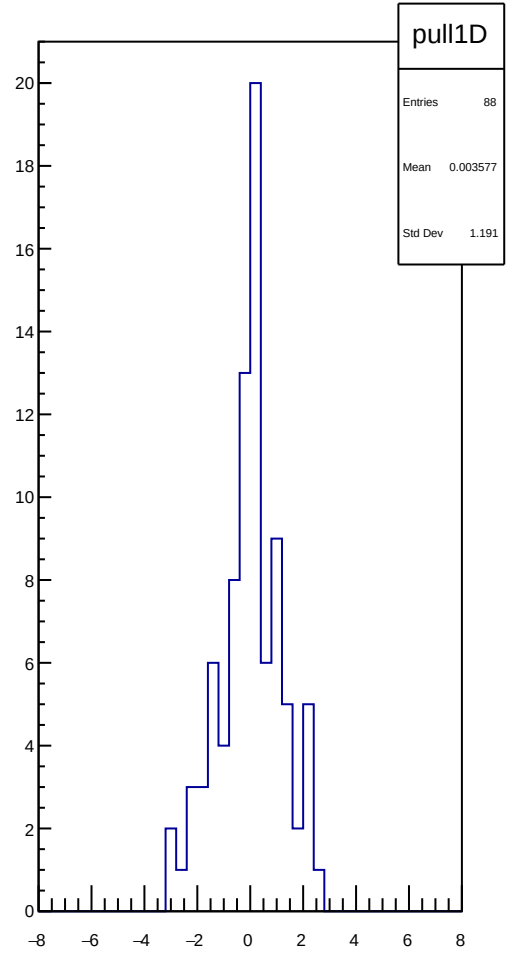

diff_bpm16Y_rms vs run
χ² / ndf 1.557e+04 / 87
p0 2822 ± 2.18
3600
3400
3200
3000
2800
2600
2400

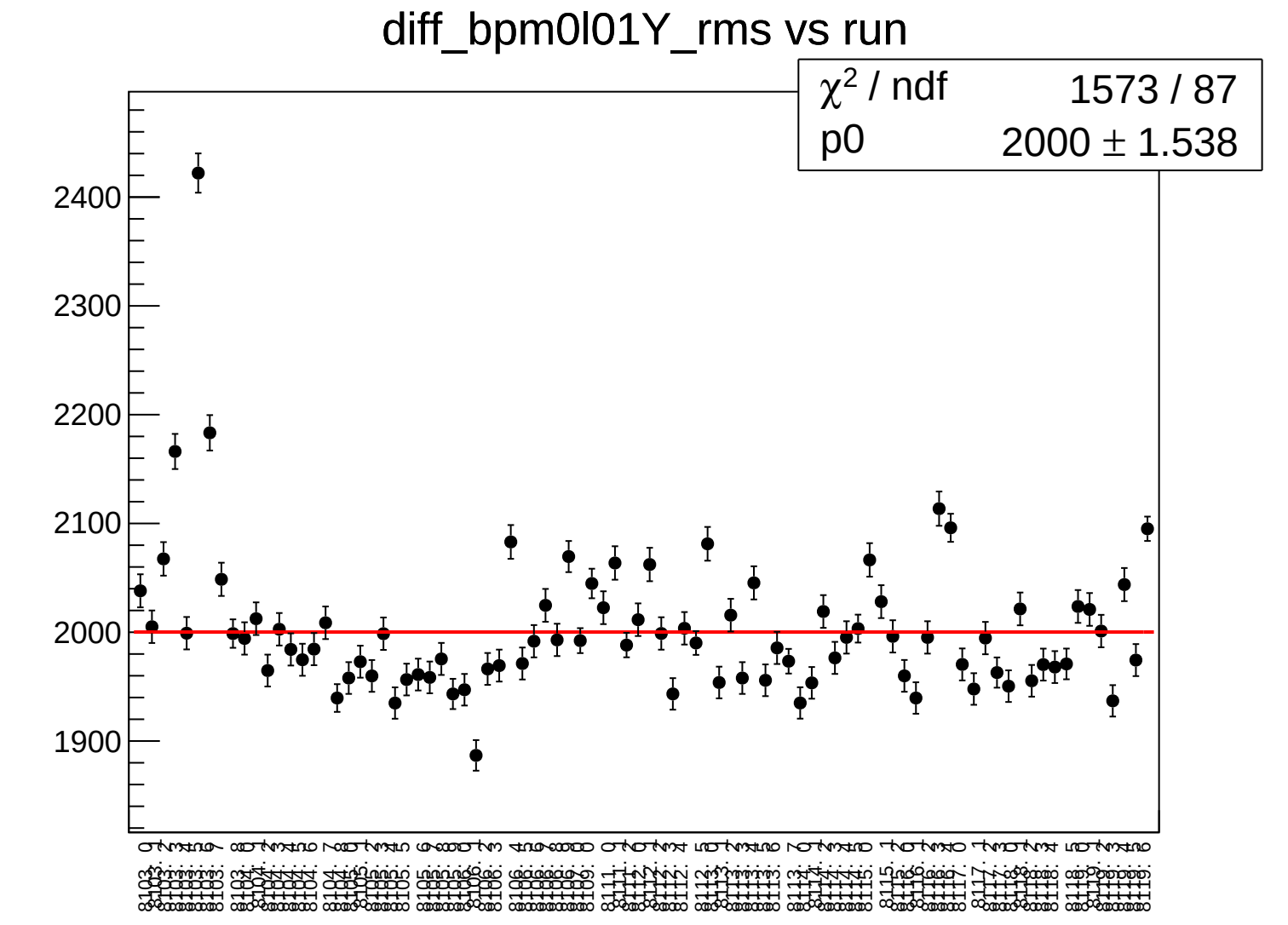

diff_bpm0l01X_mean vs run
χ² / ndf 108 / 87
p0 −53.17 ± 3.403
pull
Entries 88
Mean −1577
Std Dev 1640

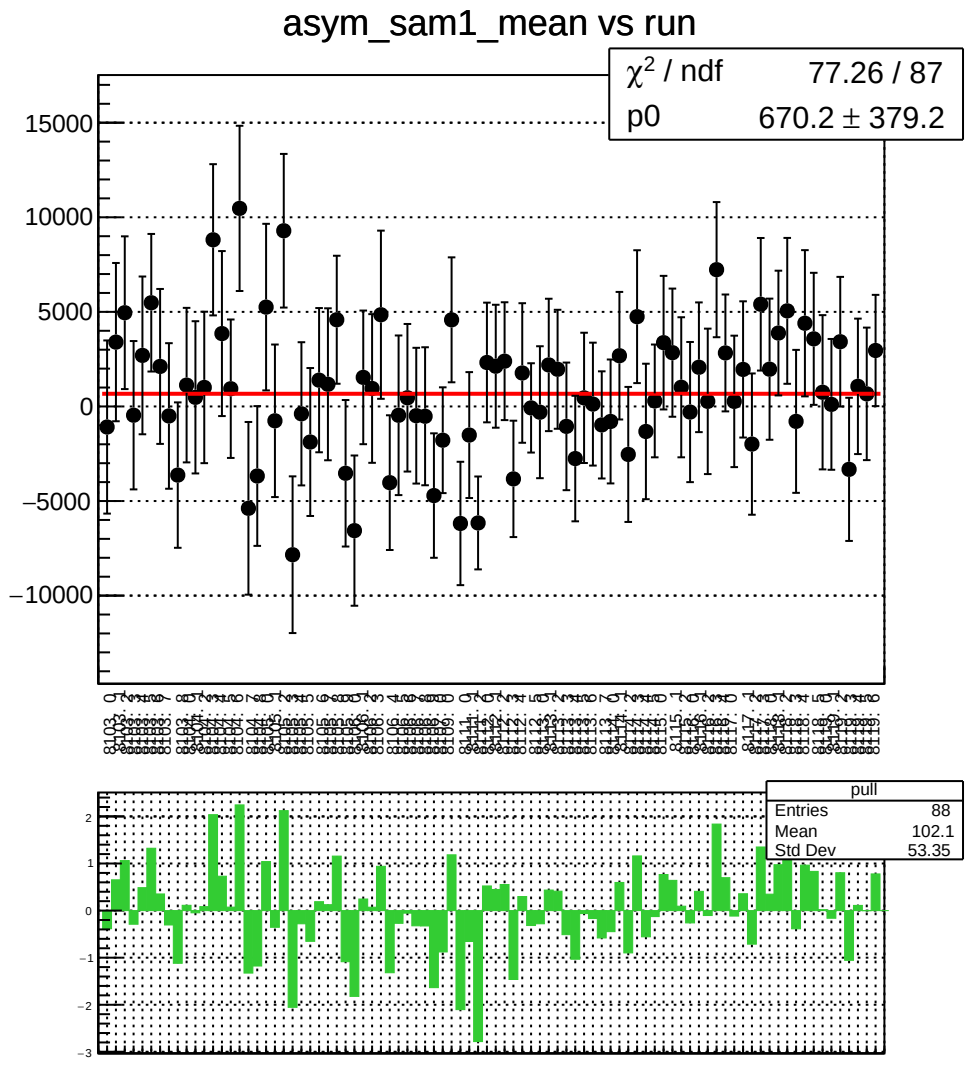

pull1D
Entries 88
Mean 0.001113
Std Dev 1.108

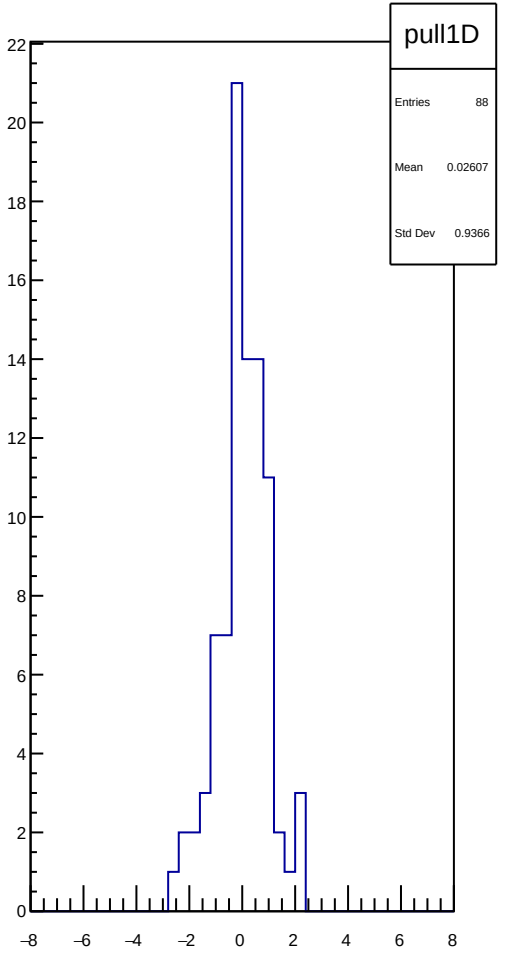

diff_bpm0l01X_rms vs run
χ² / ndf 324.8 / 87
p0 3130 ± 2.406
3250
3200
3150
3100
3050
3000

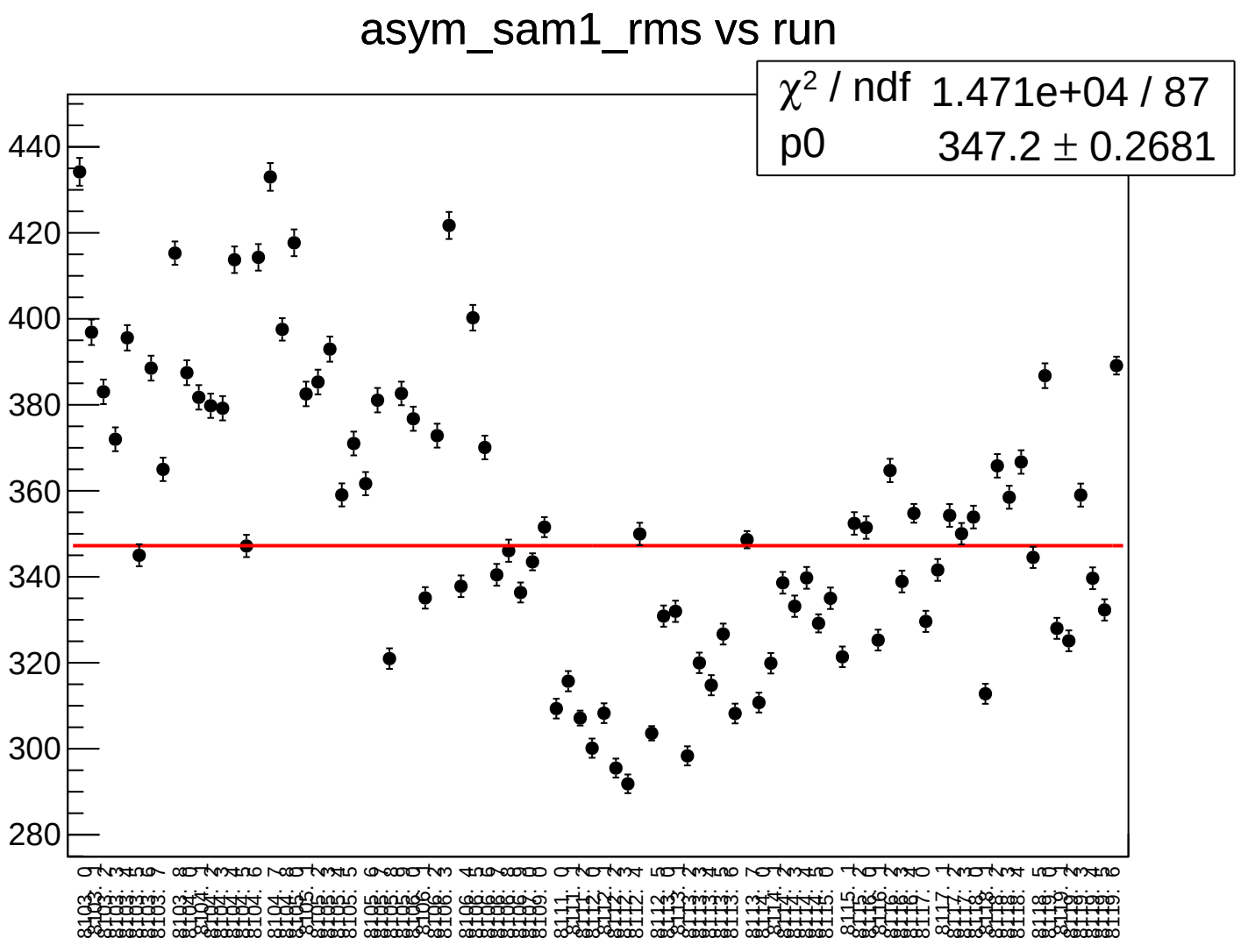

diff_bpm0l01Y_mean vs run
χ^2 / ndf 124.9 / 87
p0 83.25 ± 2.176
pull
Entries 88
Mean −1182
Std Dev 1258

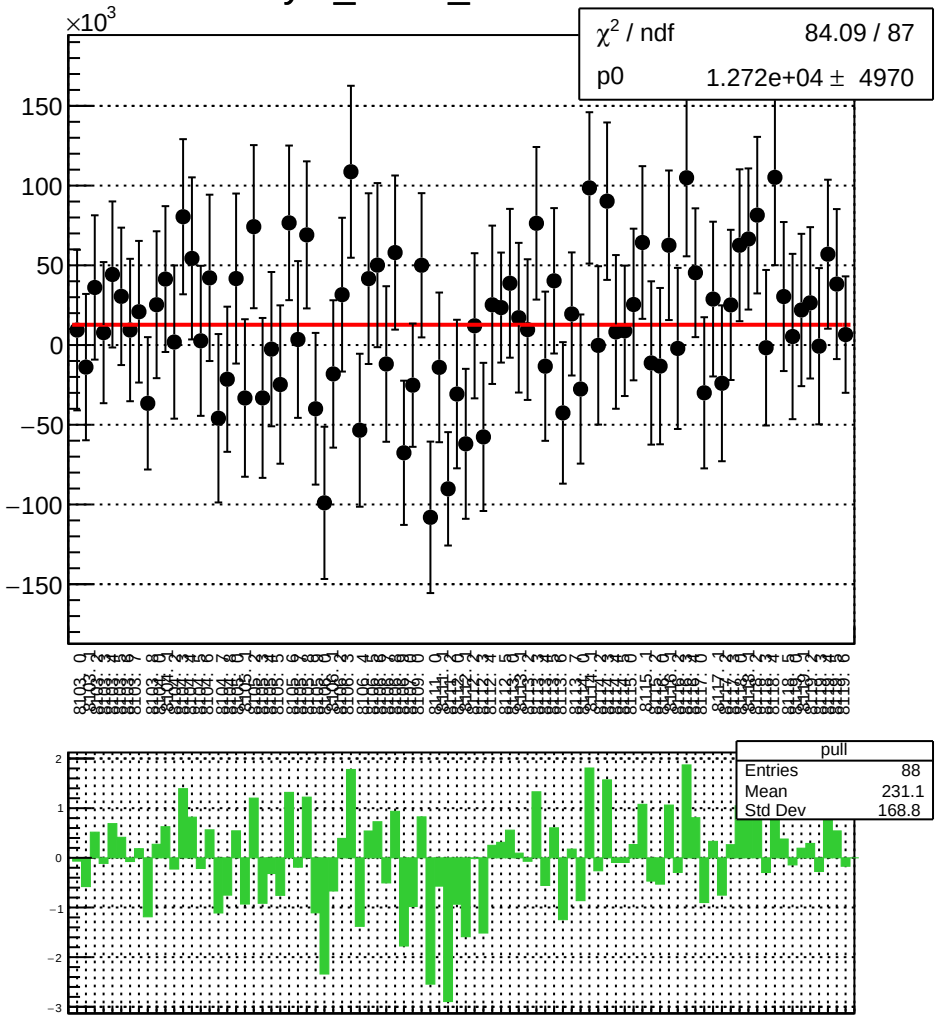

pull1D
Entries 88
Mean 0.003577
Std Dev 1.191

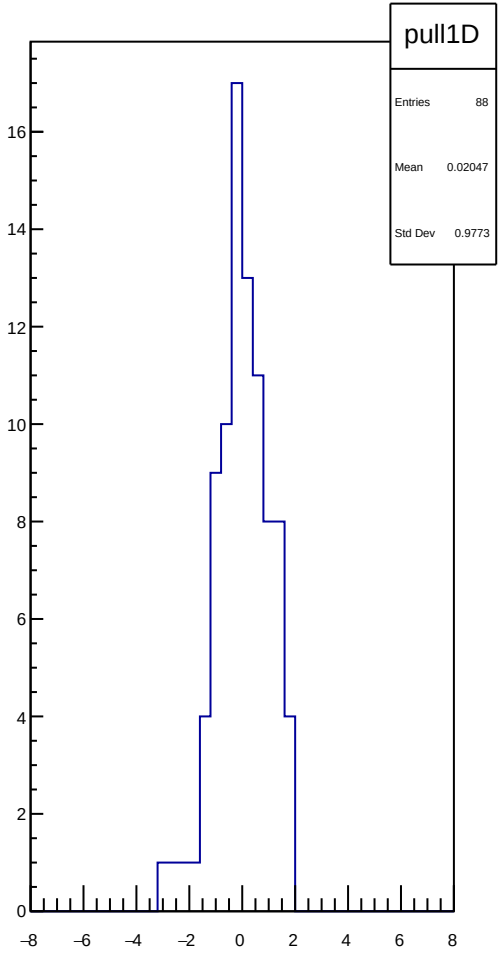

diff_bpm0l01Y_rms vs run
χ² / ndf 1573 / 87
p0 2000 ± 1.538
2400
2300
2200
2100
2000
1900

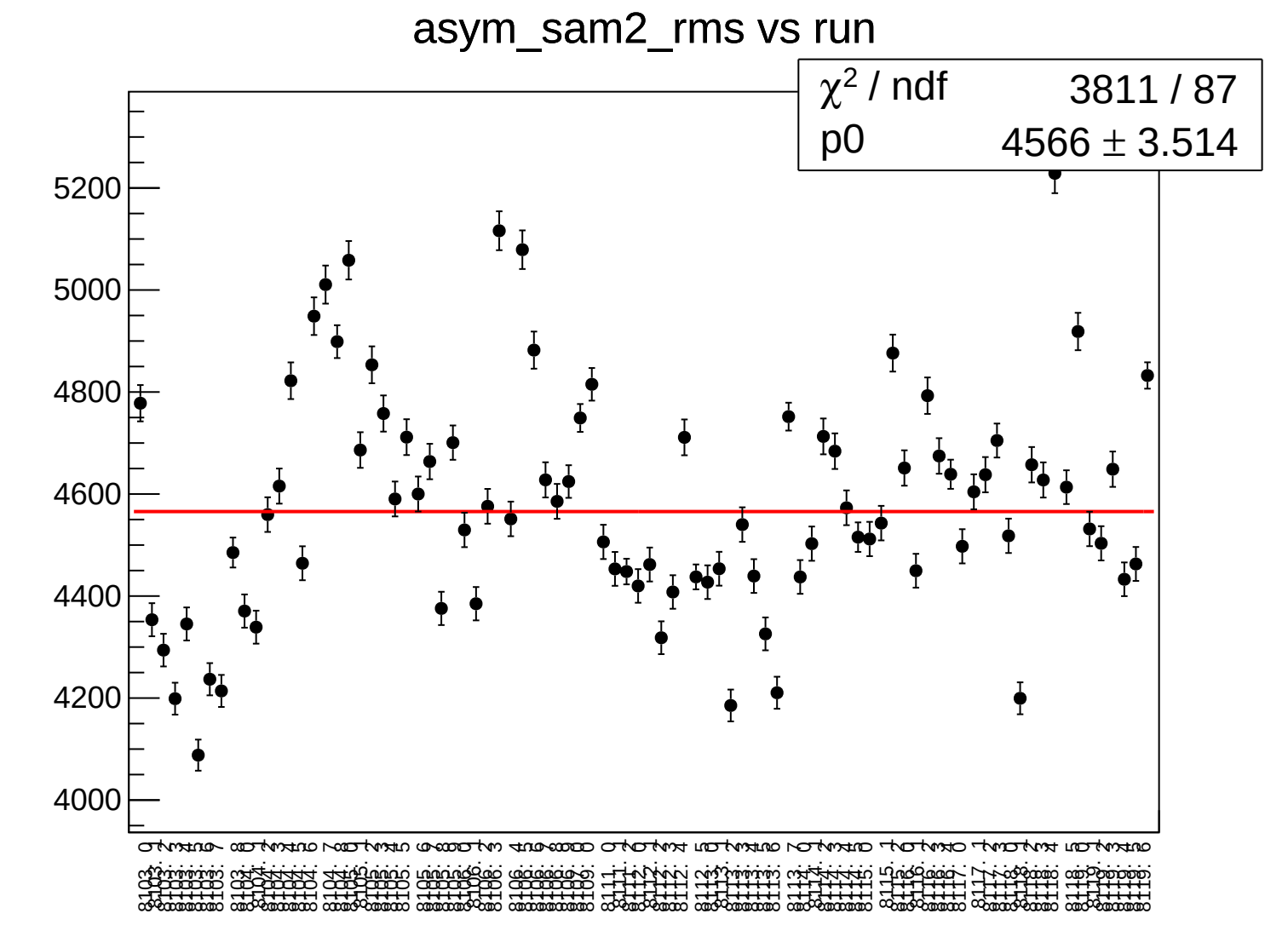

asym_sam1_mean vs run
χ² / ndf 77.26 / 87
p0 670.2 ± 379.2
15000
10000
5000
0
−5000
−10000
pull
Entries 88
Mean 102.1
Std Dev 53.35
2
1
0
−1
−2
−3

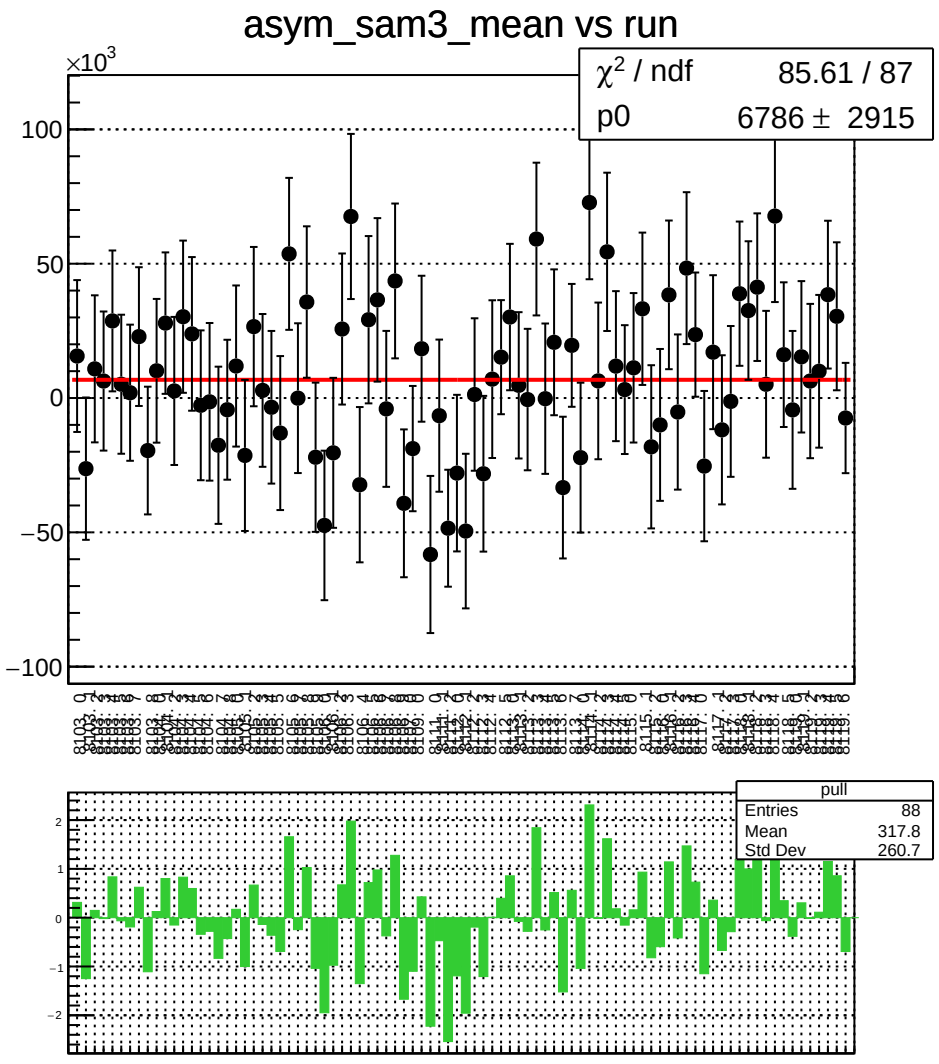

pull1D
Entries 88
Mean 0.02607
Std Dev 0.9366
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

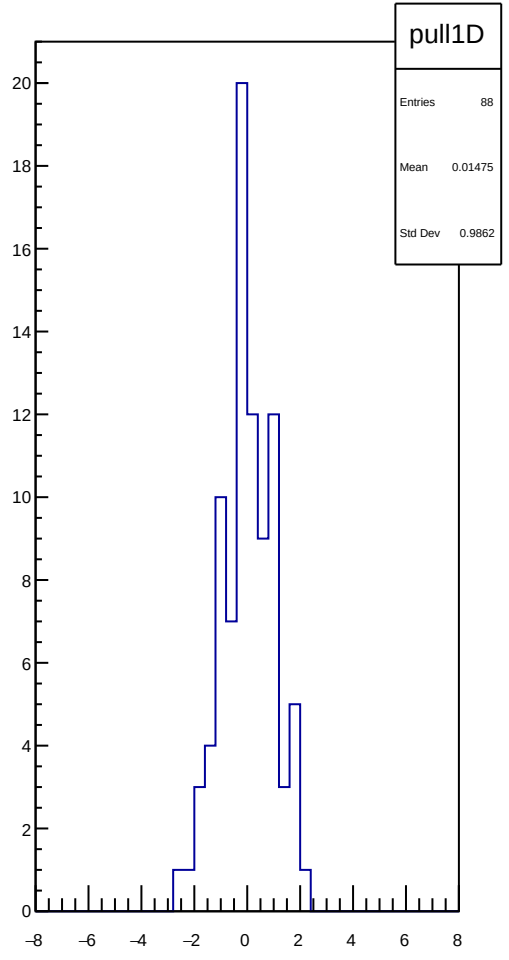

asym_sam1_rms vs run
χ² / ndf 1.471e+04 / 87
p0 347.2 ± 0.2681
440
420
400
380
360
340
320
300
280

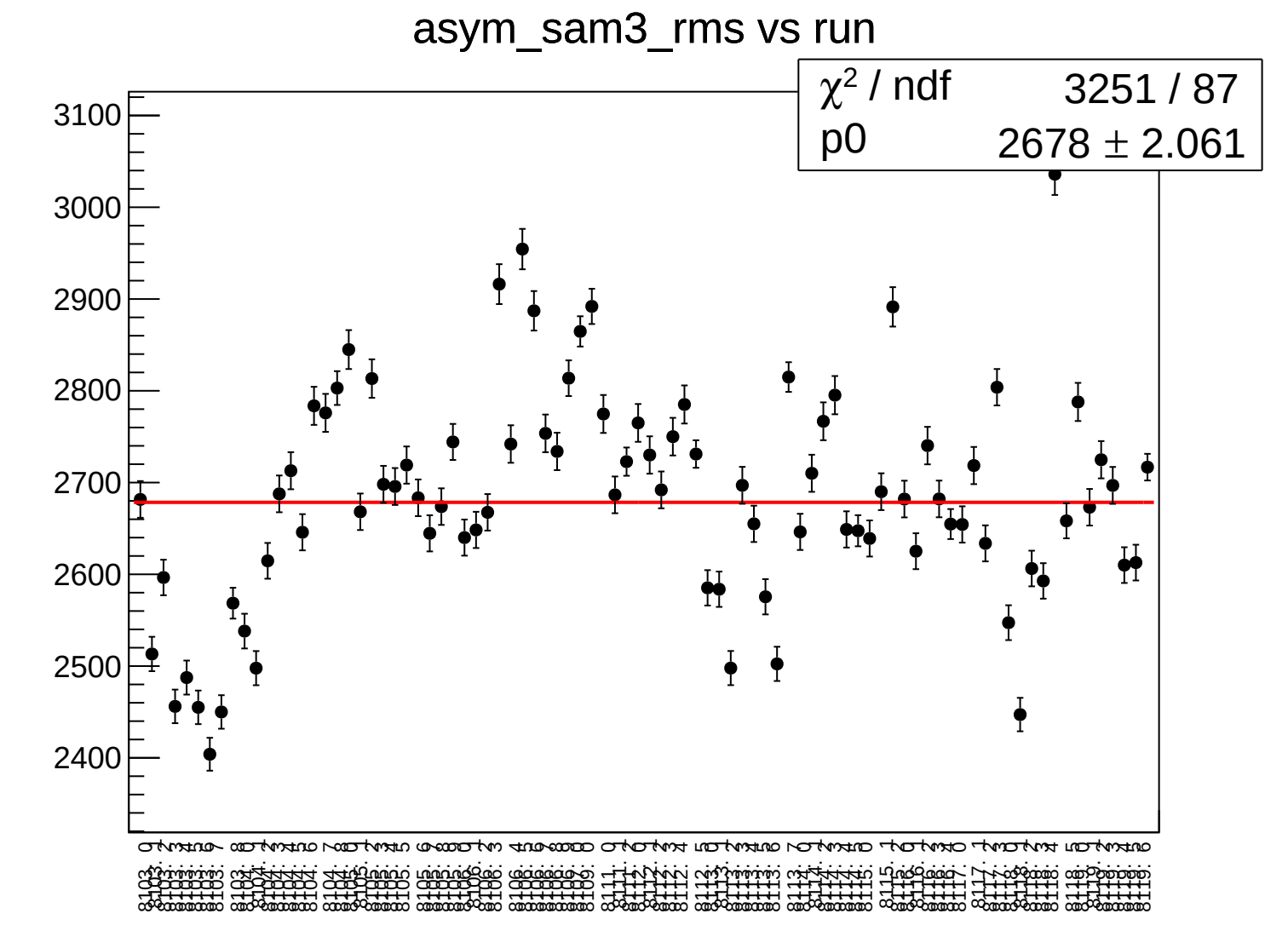

asym_sam2_mean vs run
×10^3
χ² / ndf 84.09 / 87
p0 1.272e+04 ± 4970
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 231.1
Std Dev 168.8
2
1
0
−1
−2
−3

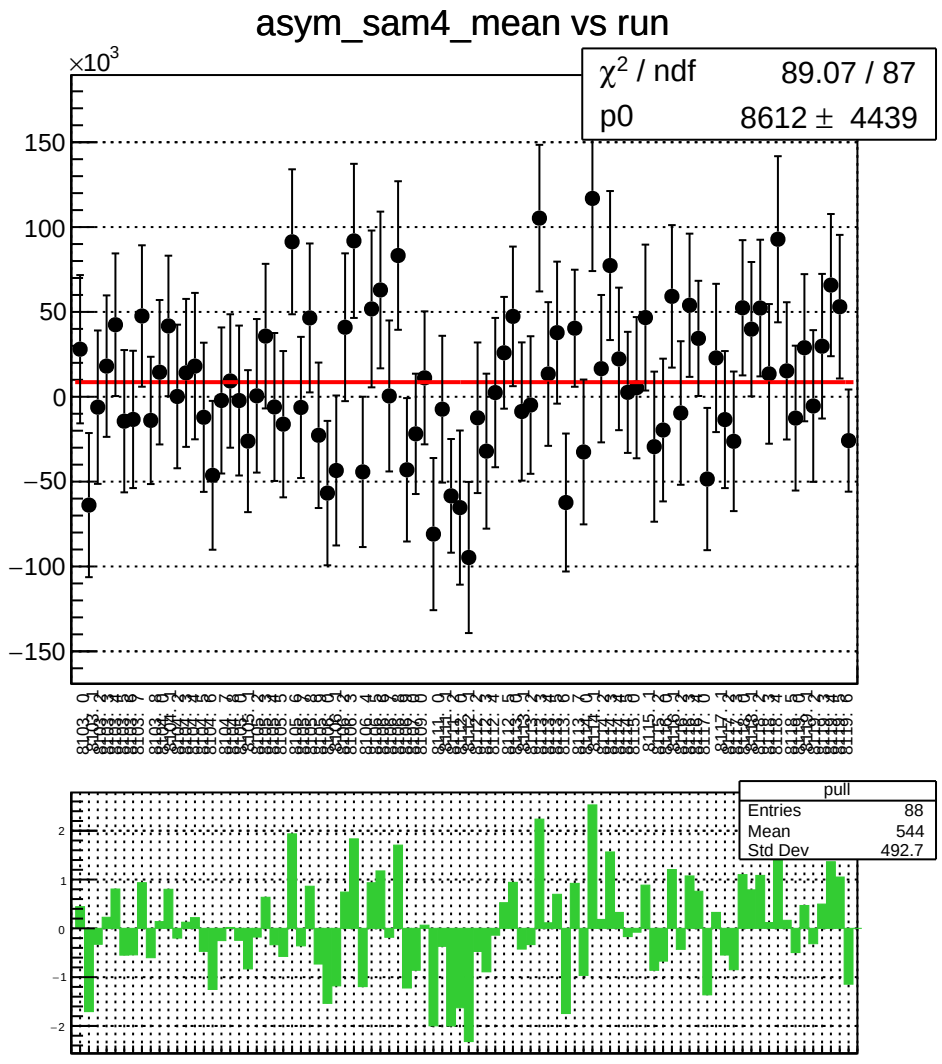

pull1D
Entries 88
Mean 0.02047
Std Dev 0.9773
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

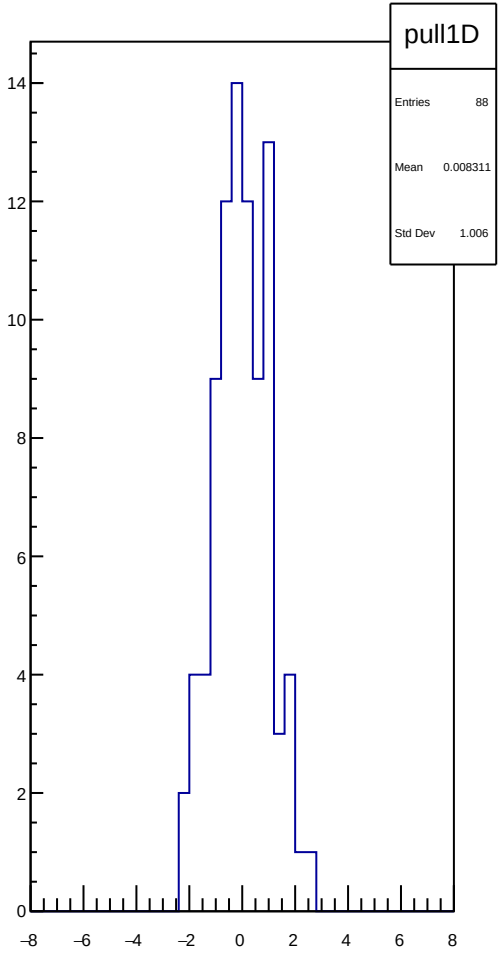

asym_sam2_rms vs run
χ^2 / ndf 3811 / 87
p0 4566 ± 3.514
5200
5000
4800
4600
4400
4200
4000

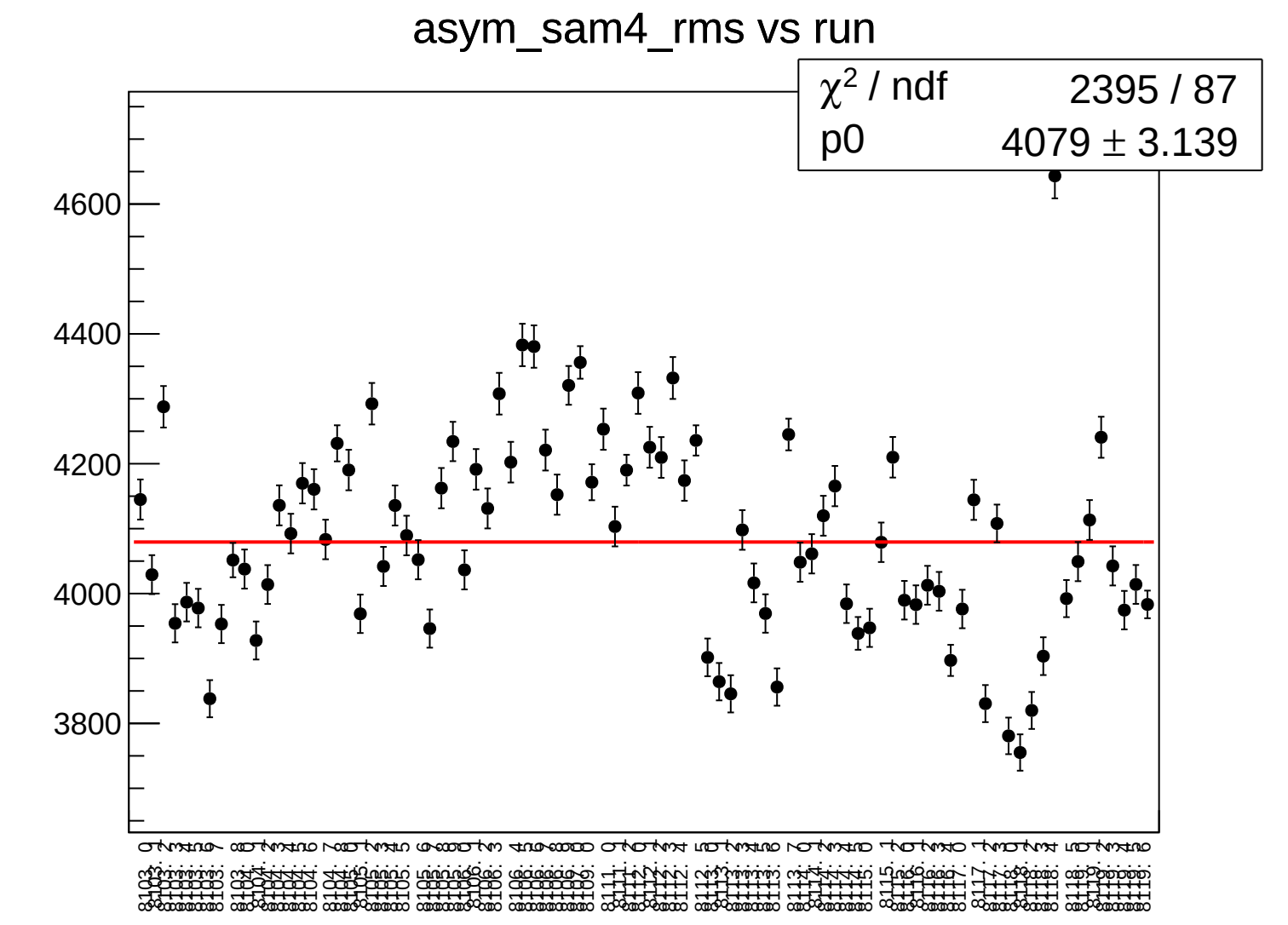

asym_sam3_mean vs run
×10^3
χ^2 / ndf 85.61 / 87
p0 6786 ± 2915
100
50
0
−50
−100
pull
Entries 88
Mean 317.8
Std Dev 260.7
2
1
0
−1
−2

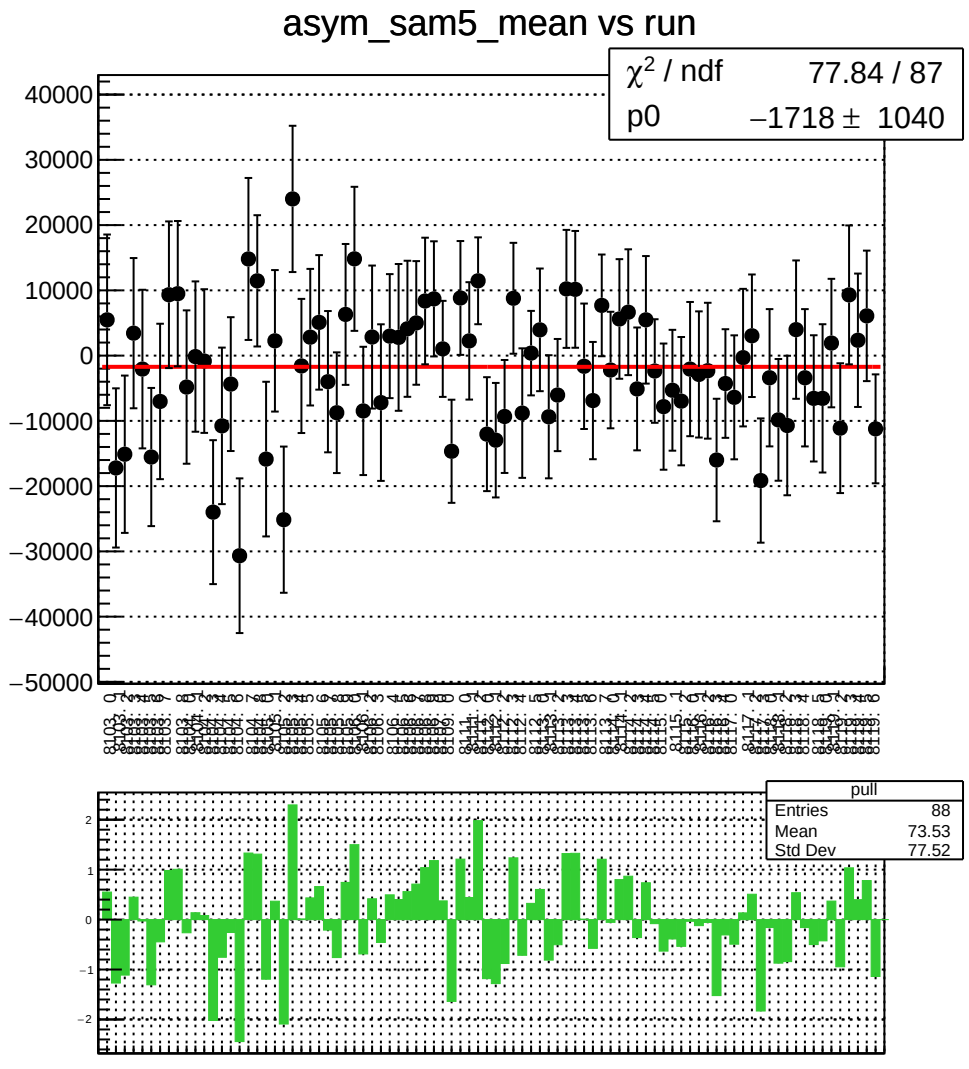

pull1D
Entries 88
Mean 0.01475
Std Dev 0.9862
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

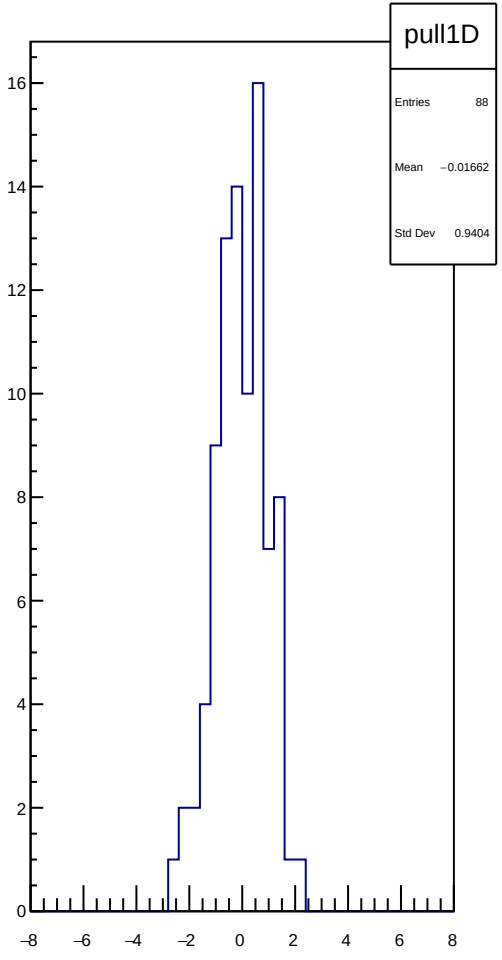

asym_sam3_rms vs run
χ^2 / ndf 3251 / 87
p0 2678 ± 2.061
3100
3000
2900
2800
2700
2600
2500
2400

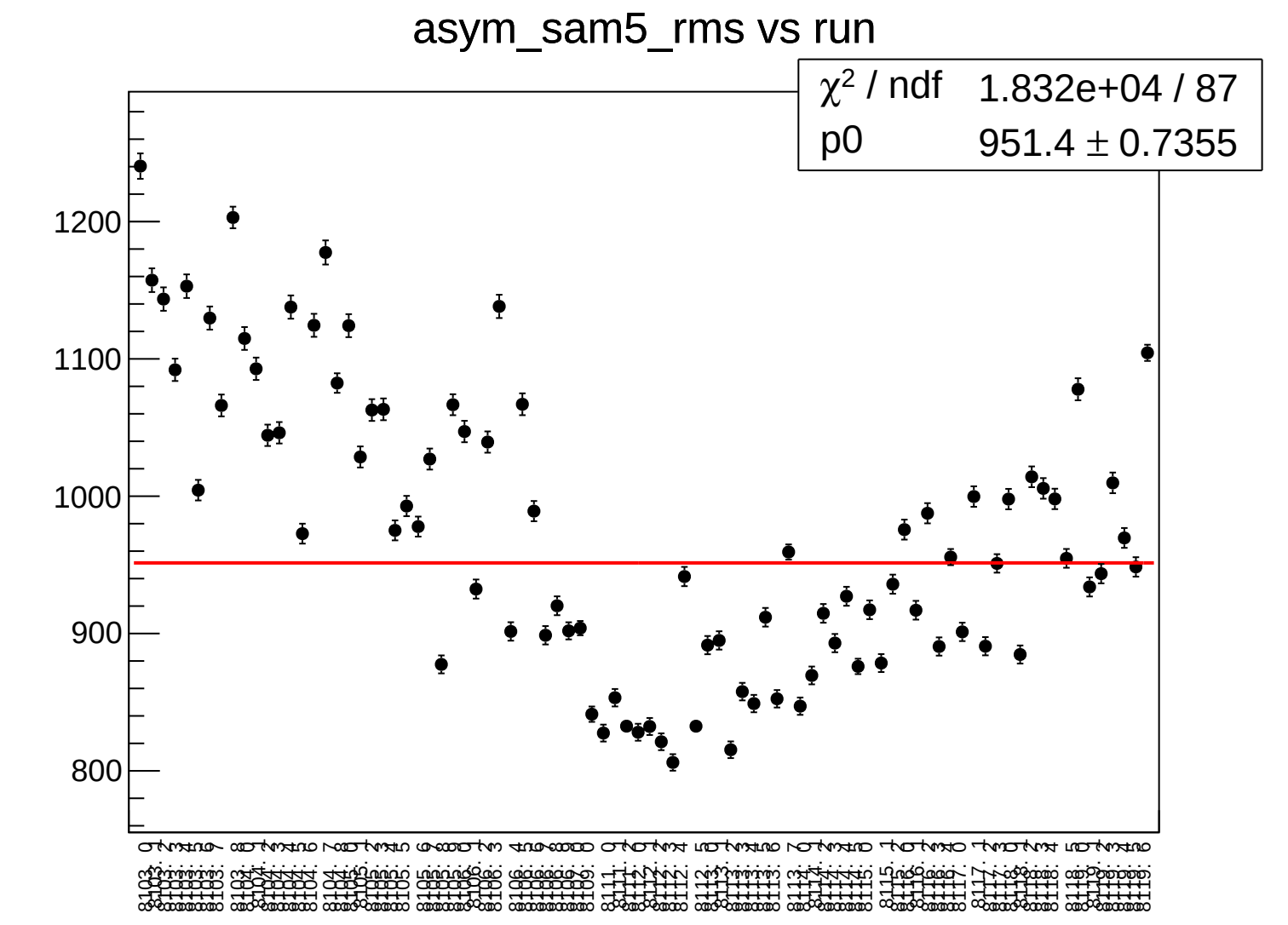

asym_sam4_mean vs run
×10^3
χ² / ndf 89.07 / 87
p0 8612 ± 4439
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 544
Std Dev 492.7
2
1
0
−1
−2

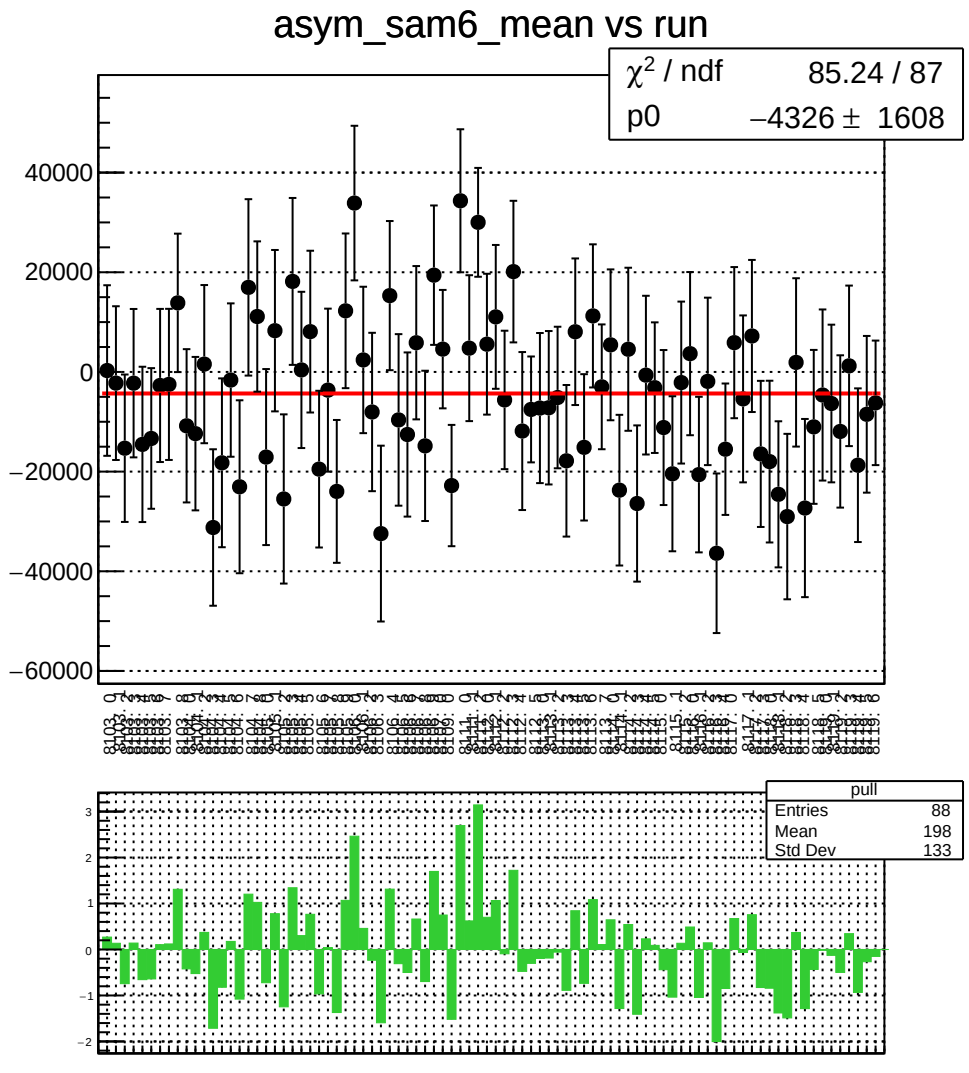

pull1D
Entries 88
Mean 0.008311
Std Dev 1.006
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

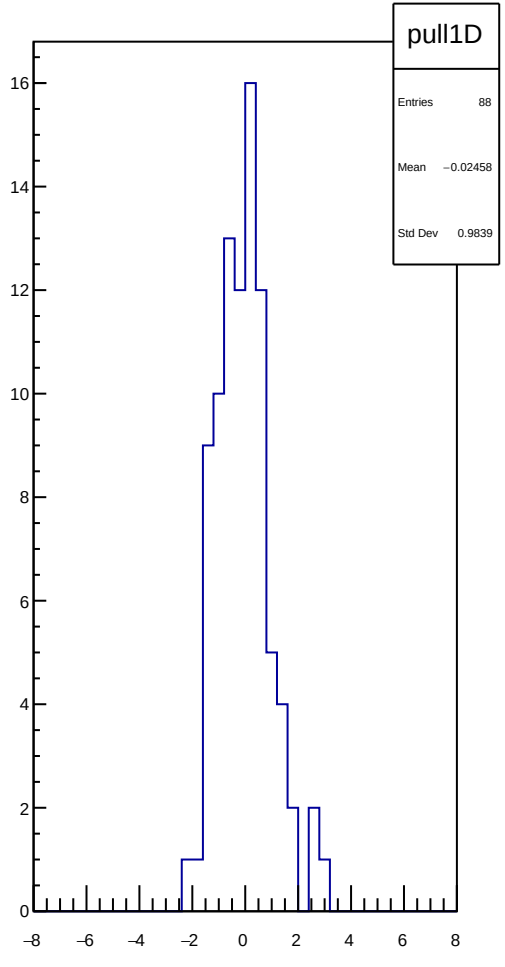

asym_sam4_rms vs run
χ² / ndf 2395 / 87
p0 4079 ± 3.139
4600
4400
4200
4000
3800

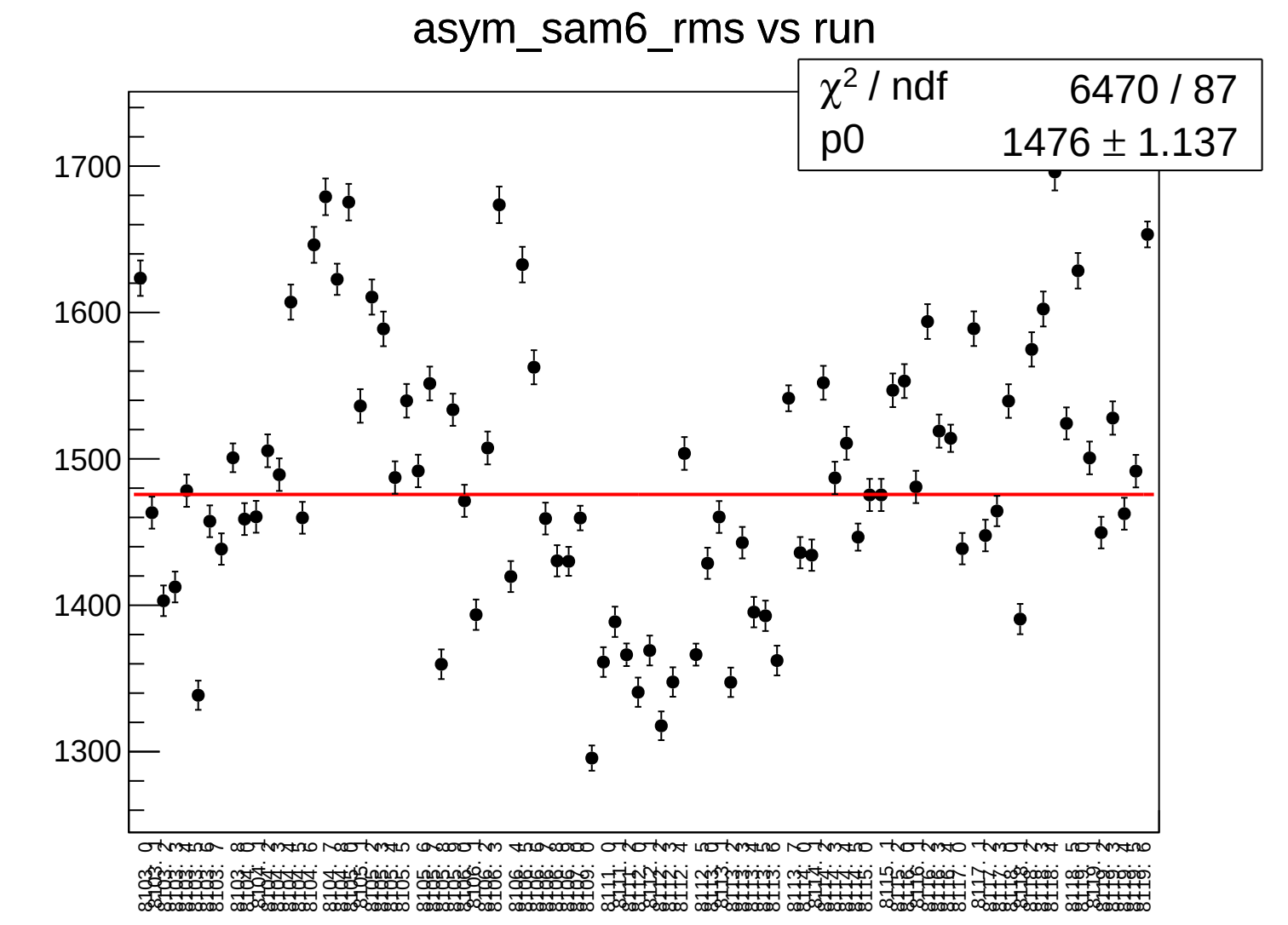

asym_sam5_mean vs run
χ² / ndf 77.84 / 87
p0 −1718 ± 1040
pull
Entries 88
Mean 73.53
Std Dev 77.52

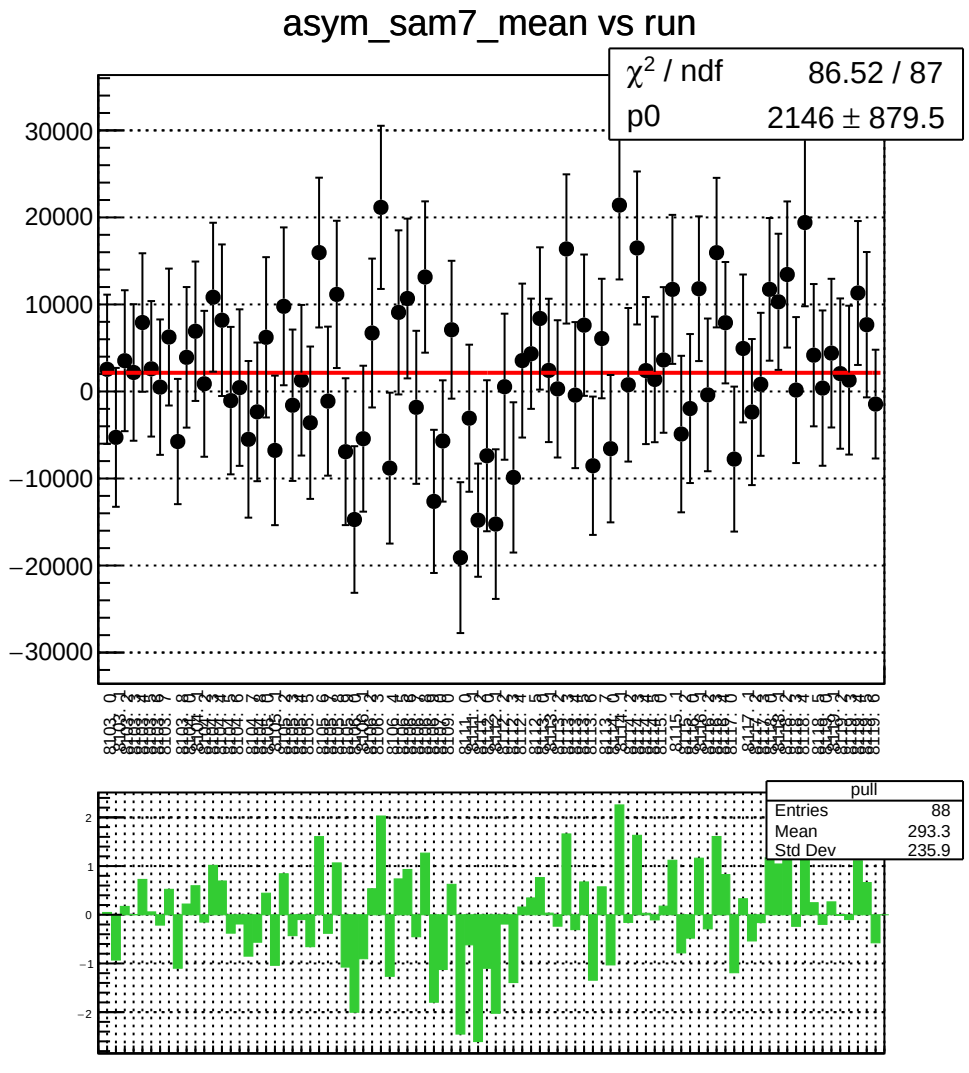

pull1D
Entries 88
Mean −0.01662
Std Dev 0.9404

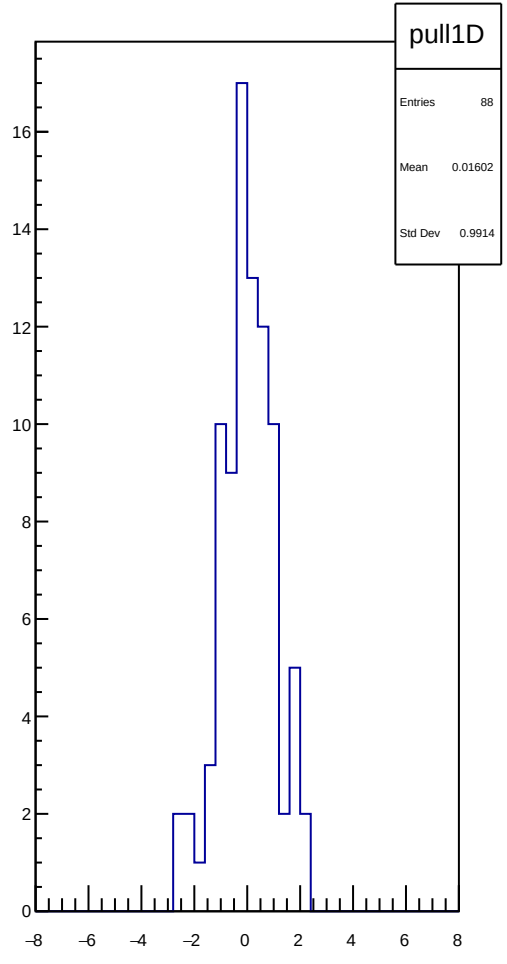

asym_sam5_rms vs run
χ² / ndf 1.832e+04 / 87
p0 951.4 ± 0.7355
1200
1100
1000
900
800

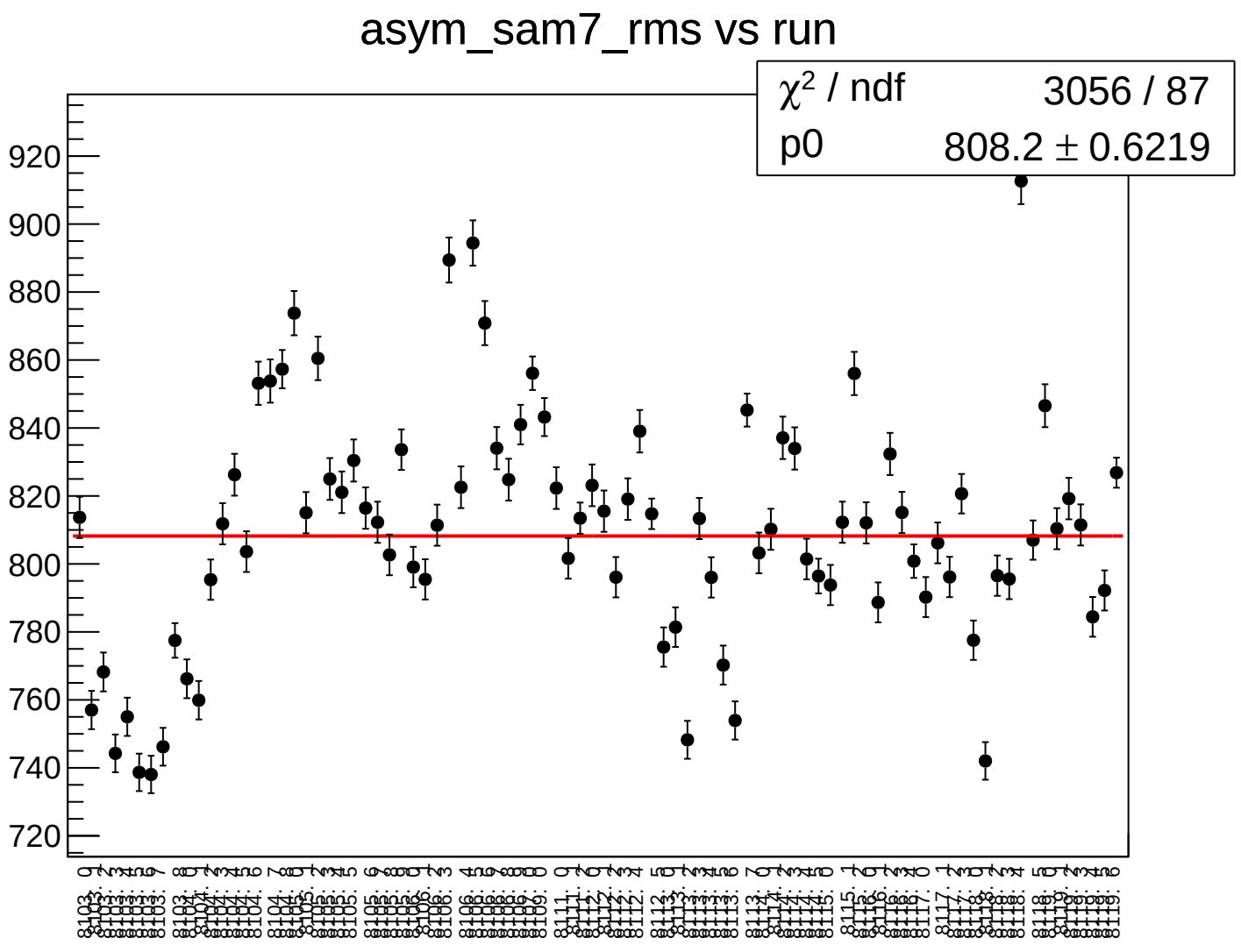

asym_sam6_mean vs run
χ² / ndf 85.24 / 87
p0 −4326 ± 1608
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 198
Std Dev 133
3
2
1
0
−1
−2

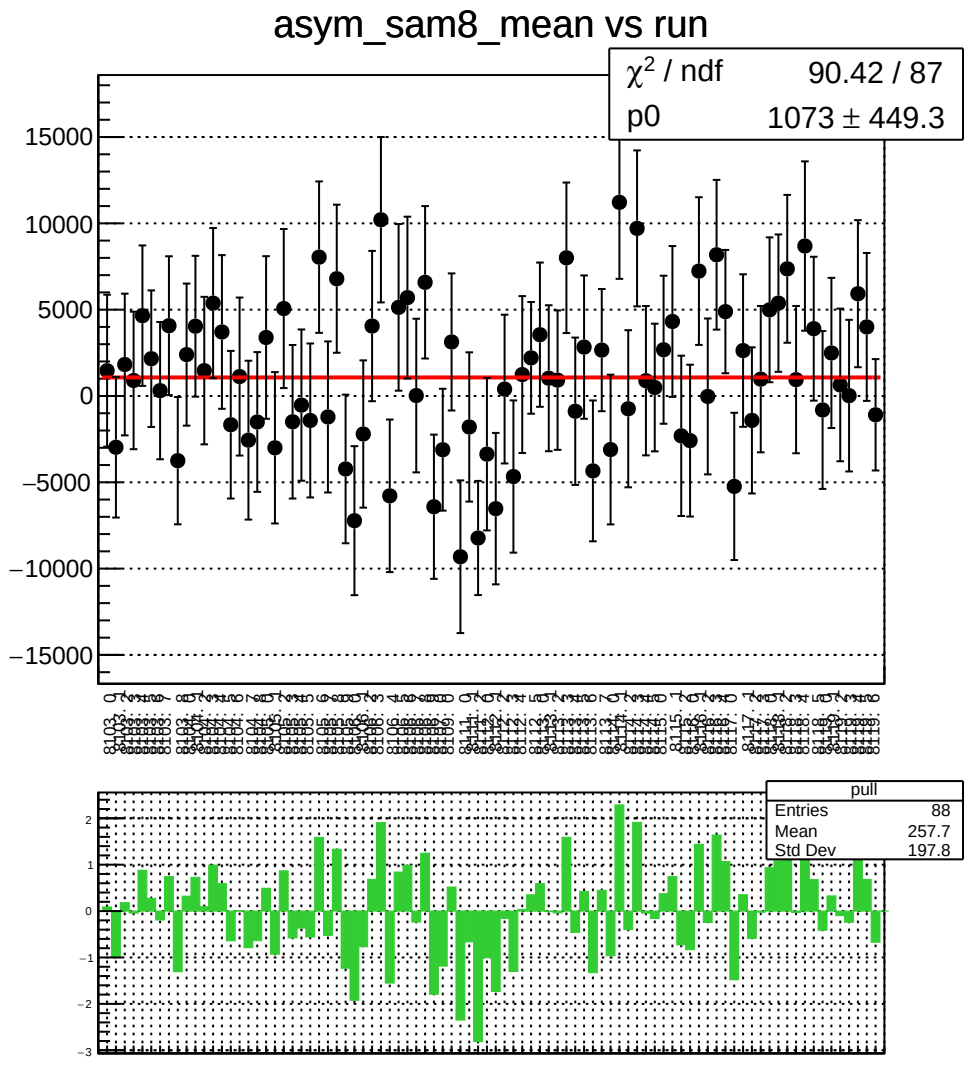

pull1D
Entries 88
Mean −0.02458
Std Dev 0.9839
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

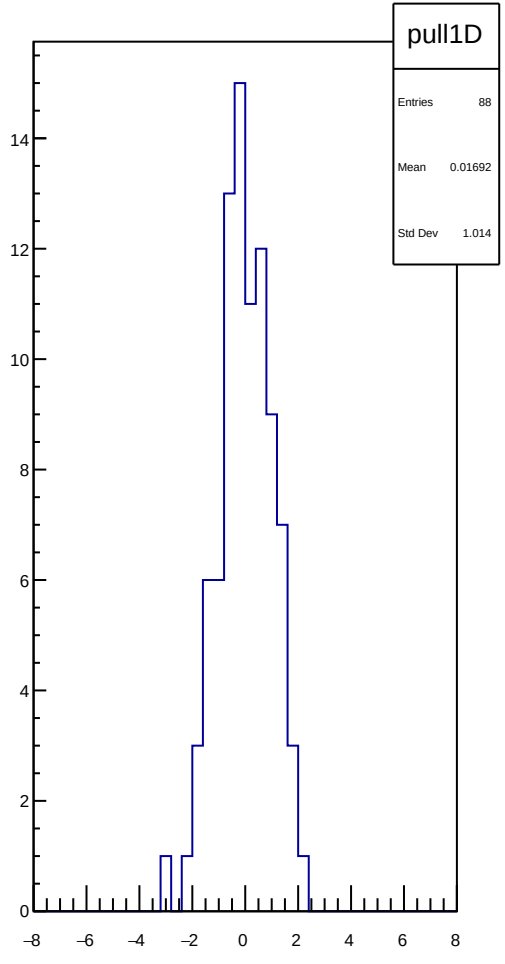

asym_sam6_rms vs run
χ² / ndf 6470 / 87
p0 1476 ± 1.137
1700
1600
1500
1400
1300

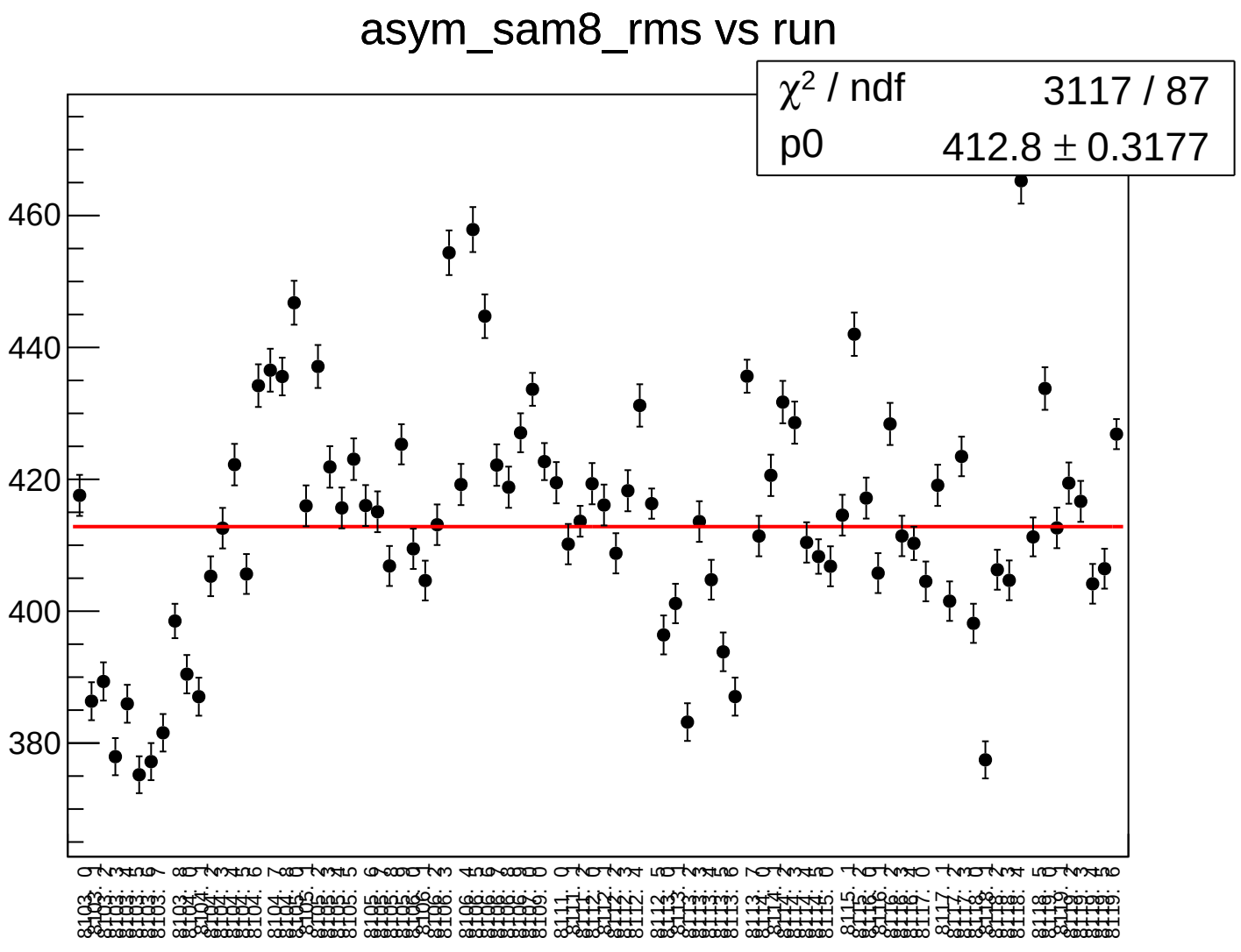

asym_sam7_mean vs run
χ² / ndf 86.52 / 87
p0 2146 ± 879.5
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 293.3
Std Dev 235.9
2
1
0
−1
−2

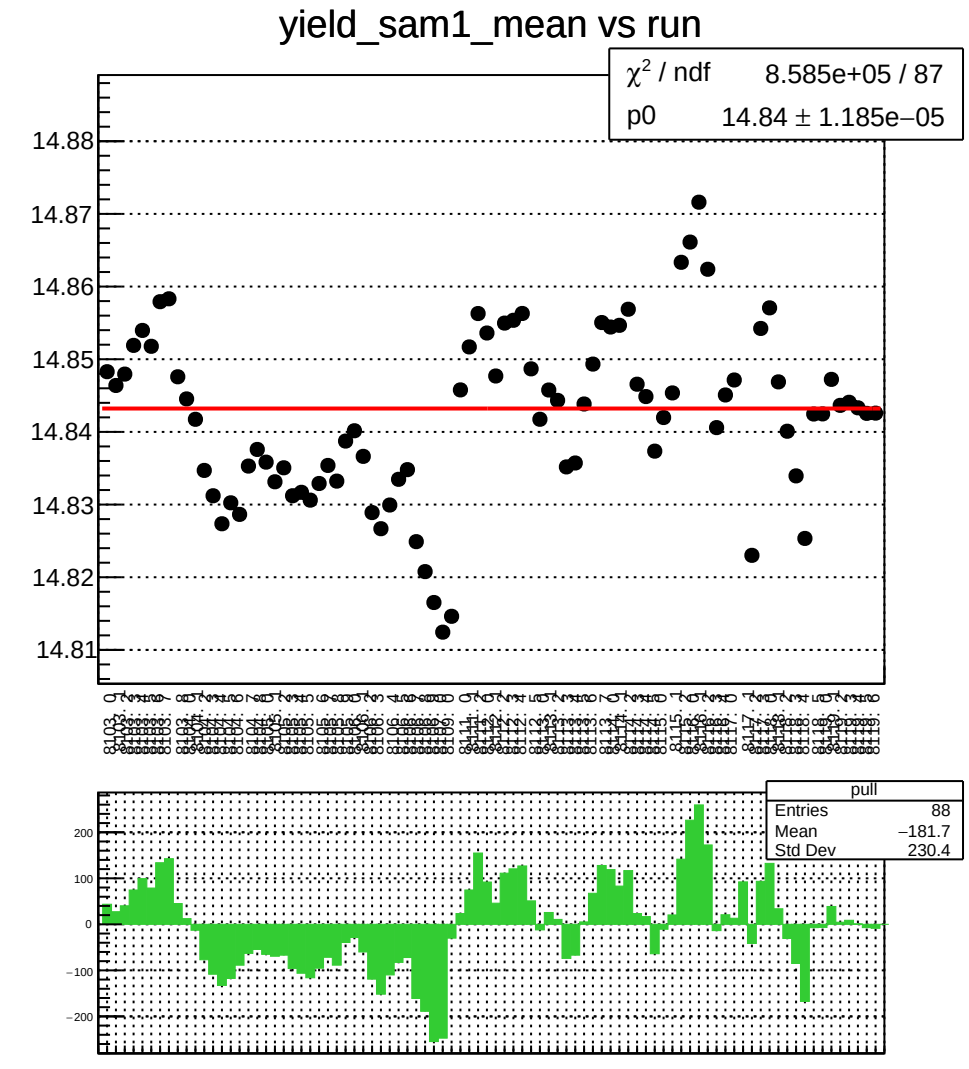

pull1D
Entries 88
Mean 0.01602
Std Dev 0.9914
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

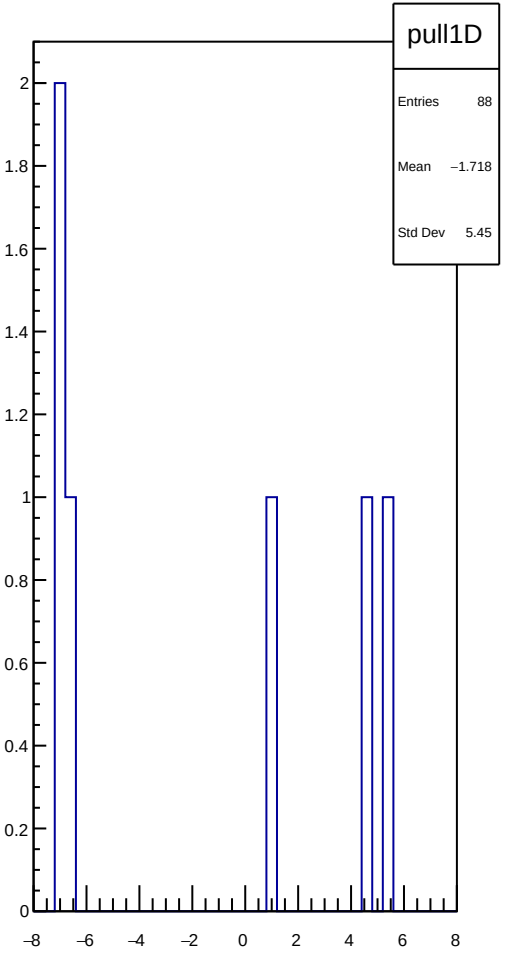

asym_sam7_rms vs run
χ² / ndf 3056 / 87
p0 808.2 ± 0.6219
920
900
880
860
840
820
800
780
760
740
720

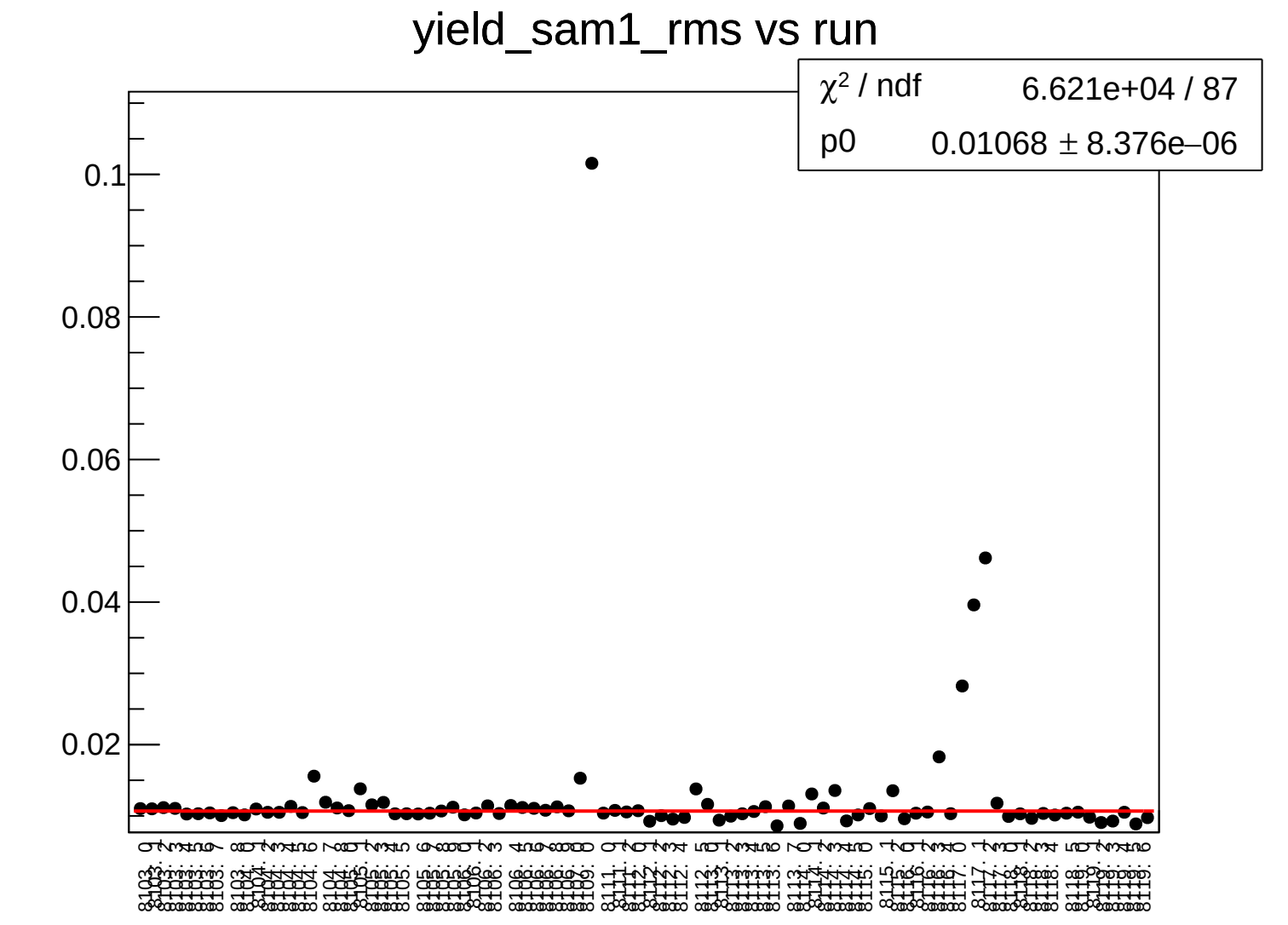

asym_sam8_mean vs run
χ² / ndf 90.42 / 87
p0 1073 ± 449.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 257.7
Std Dev 197.8
2
1
0
−1
−2
−3

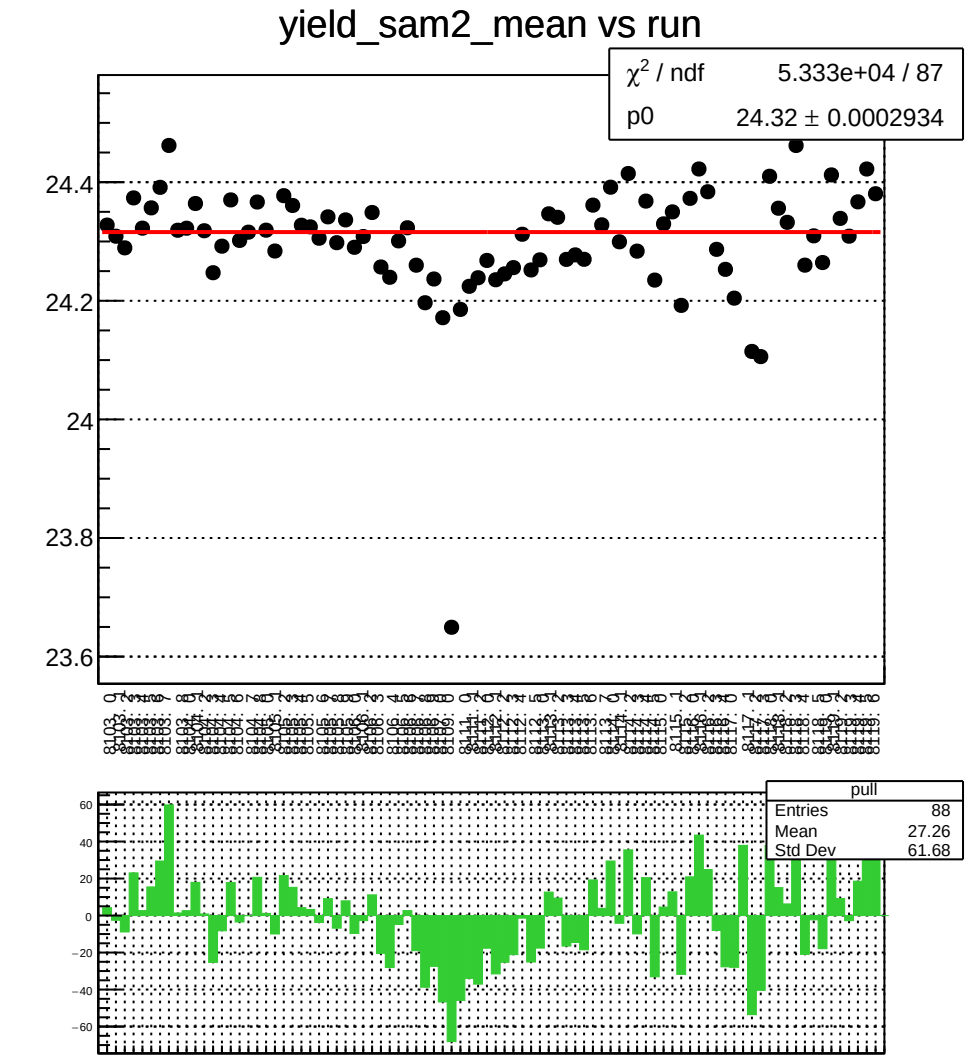

pull1D
Entries 88
Mean 0.01692
Std Dev 1.014
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

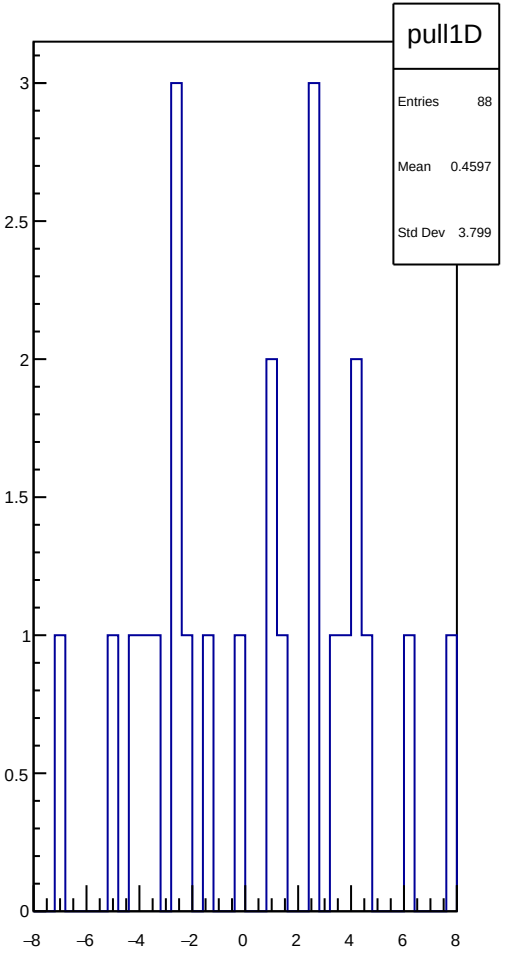

asym_sam8_rms vs run
χ² / ndf 3117 / 87
p0 412.8 ± 0.3177
460
440
420
400
380

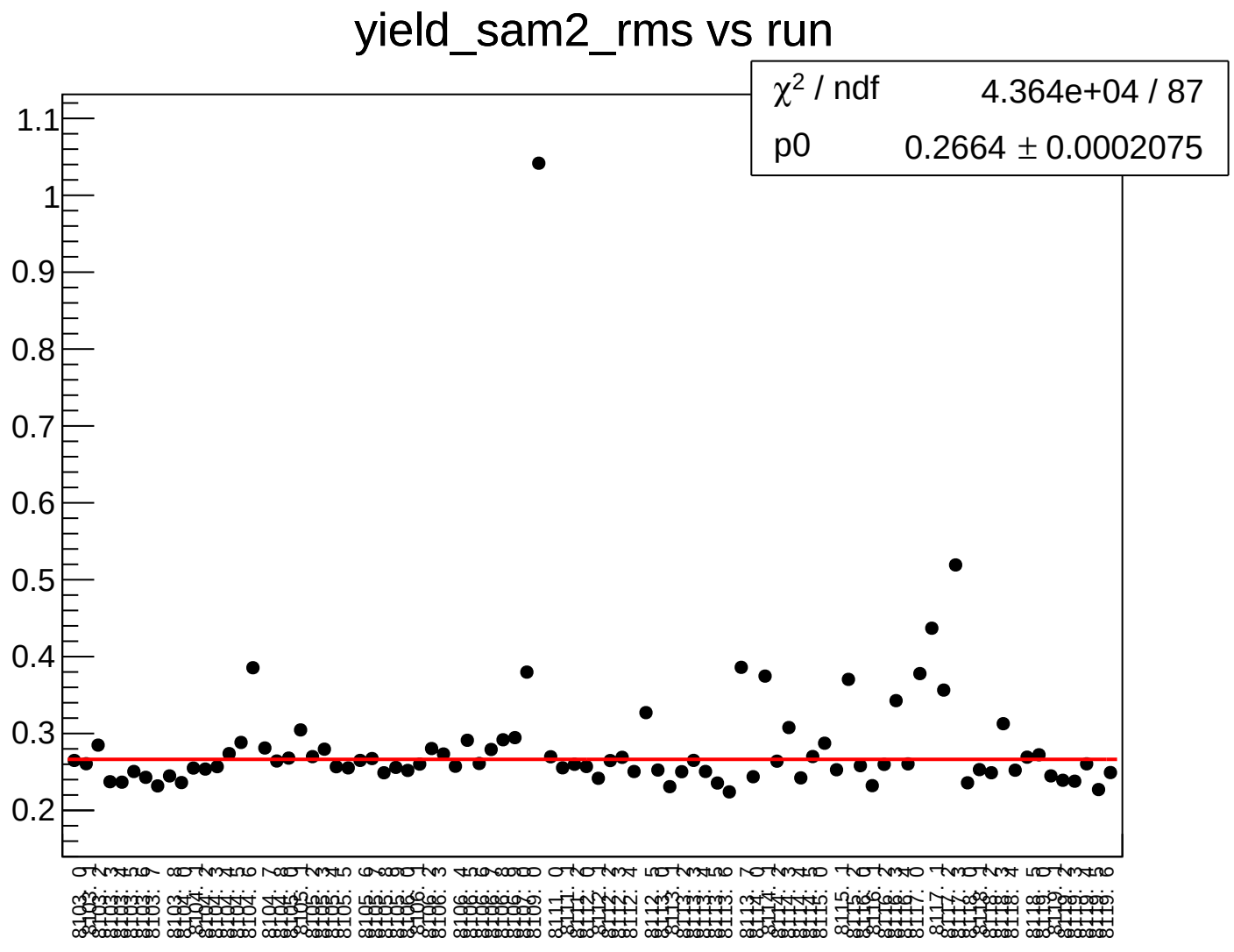

yield_sam1_mean vs run
χ² / ndf 8.585e+05 / 87
p0 14.84 ± 1.185e−05
14.88
14.87
14.86
14.85
14.84
14.83
14.82
14.81
pull
Entries 88
Mean −181.7
Std Dev 230.4
200
100
0
−100
−200

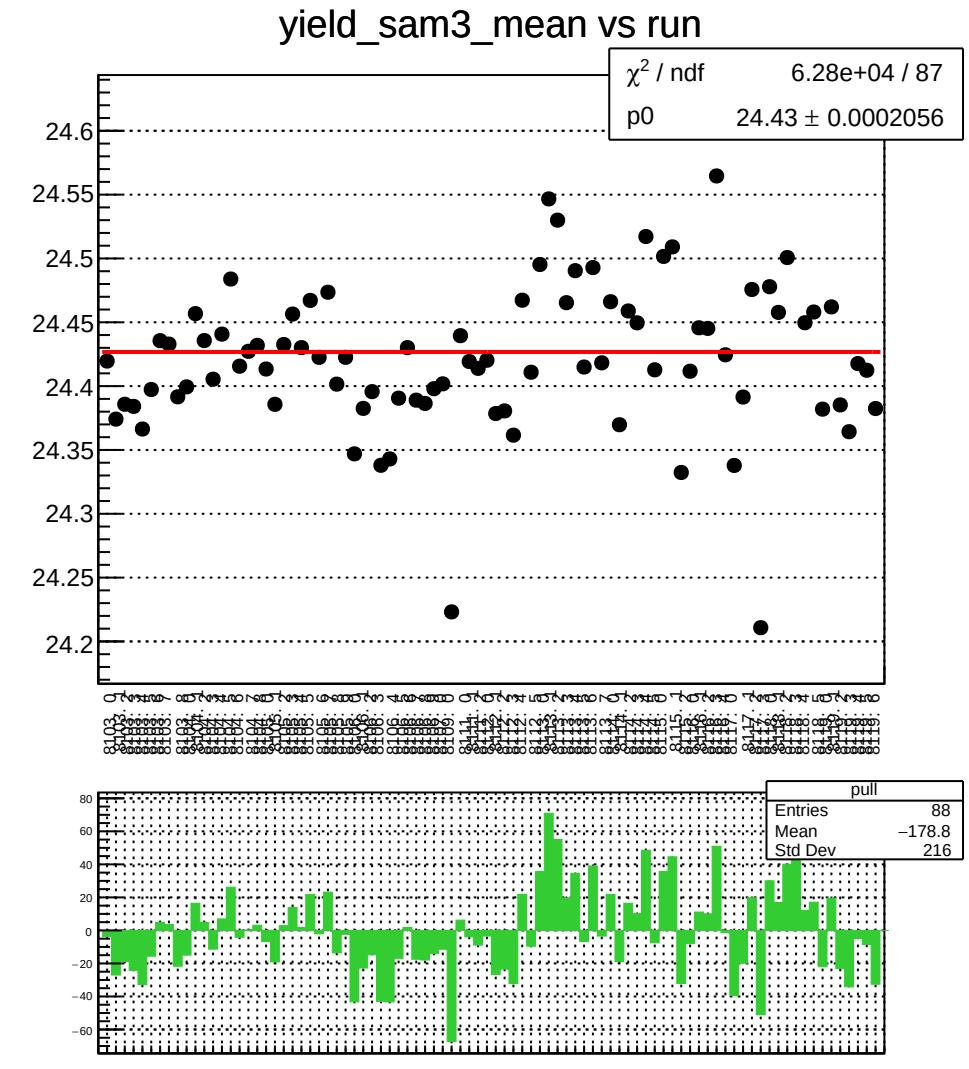

pull1D
Entries 88
Mean −1.718
Std Dev 5.45
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

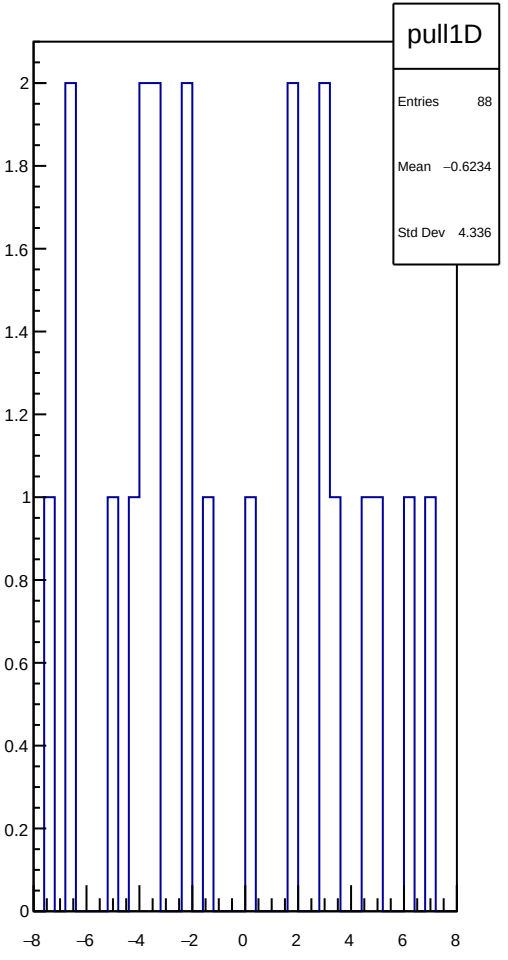

yield_sam1_rms vs run
χ² / ndf 6.621e+04 / 87
p0 0.01068 ± 8.376e–06
0.1
0.08
0.06
0.04
0.02

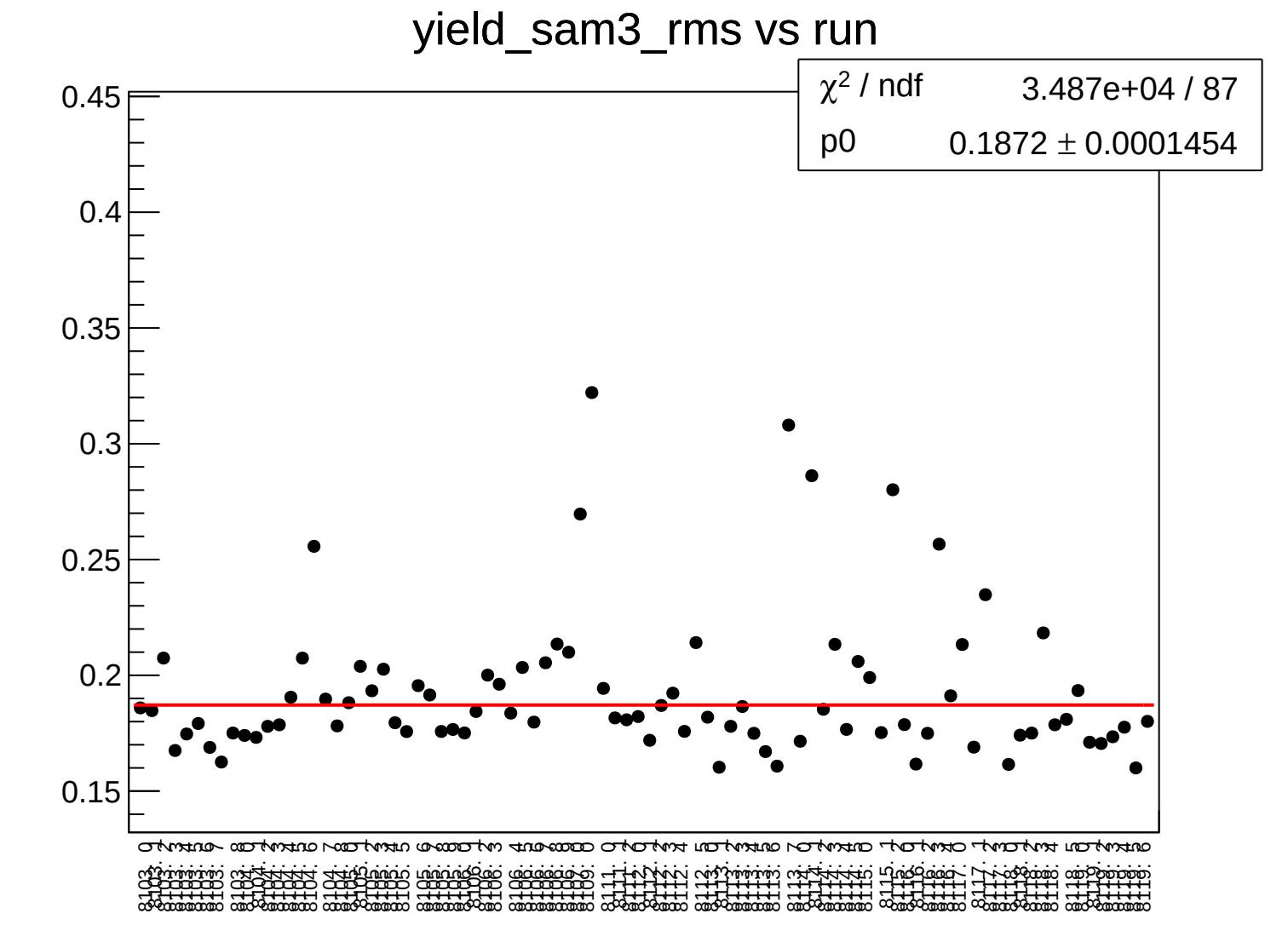

yield_sam2_mean vs run
χ² / ndf 5.333e+04 / 87
p0 24.32 ± 0.0002934
24.4
24.2
24
23.8
23.6
pull
Entries 88
Mean 27.26
Std Dev 61.68
60
40
20
0
−20
−40
−60

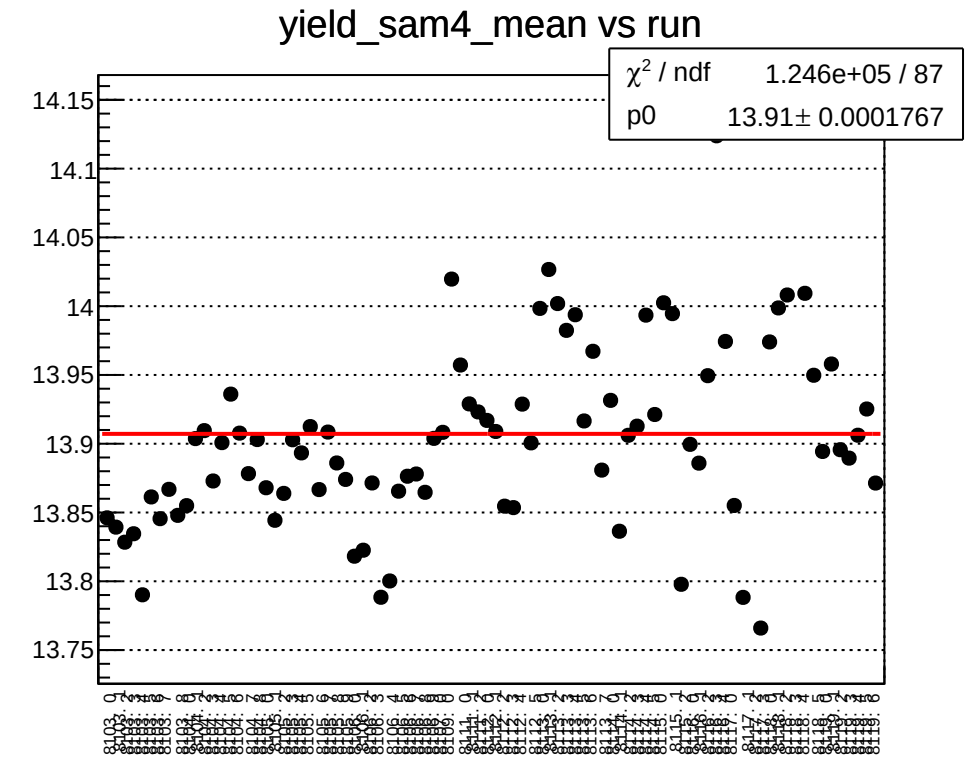

pull1D
Entries 88
Mean 0.4597
Std Dev 3.799
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

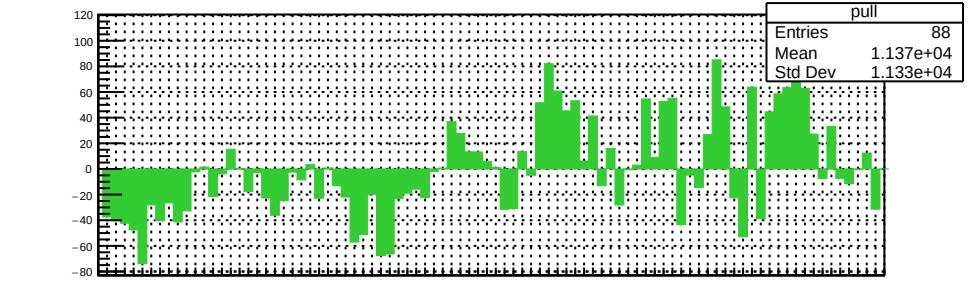

yield_sam2_rms vs run
χ² / ndf 4.364e+04 / 87
p0 0.2664 ± 0.0002075
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2

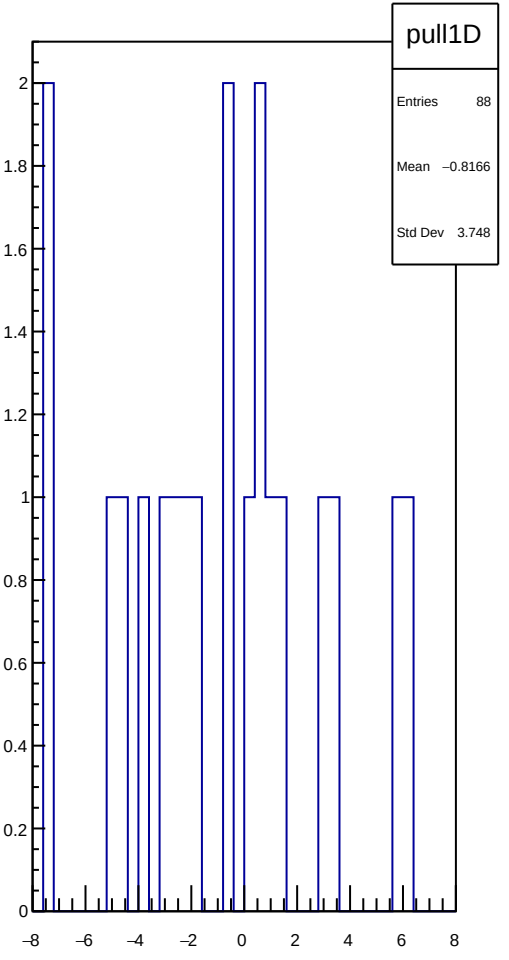

yield_sam3_mean vs run
χ² / ndf 6.28e+04 / 87
p0 24.43 ± 0.0002056
24.6
24.55
24.5
24.45
24.4
24.35
24.3
24.25
24.2
pull
Entries 88
Mean −178.8
Std Dev 216
80
60
40
20
0
−20
−40
−60

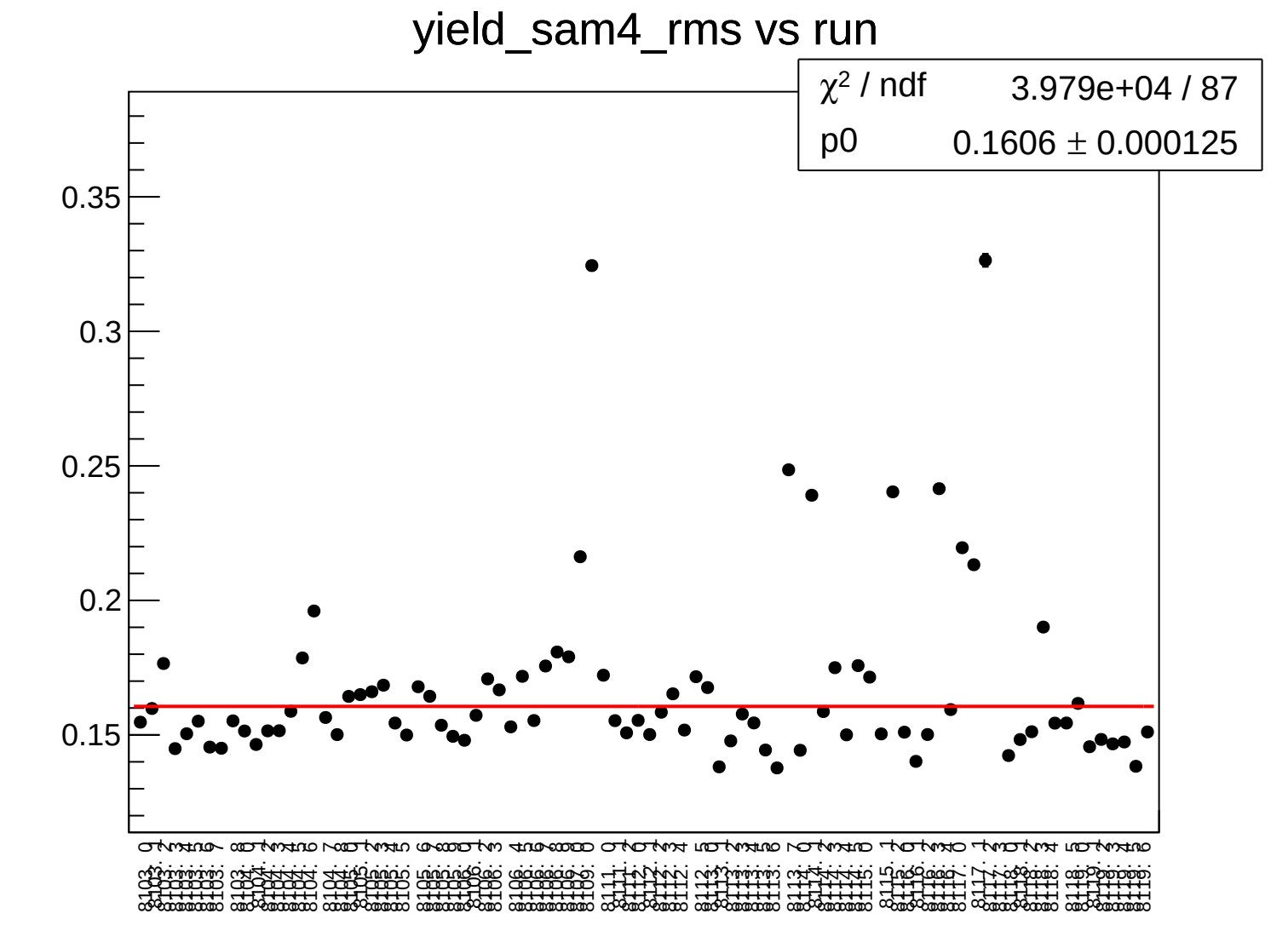

pull1D
Entries 88
Mean −0.6234
Std Dev 4.336
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

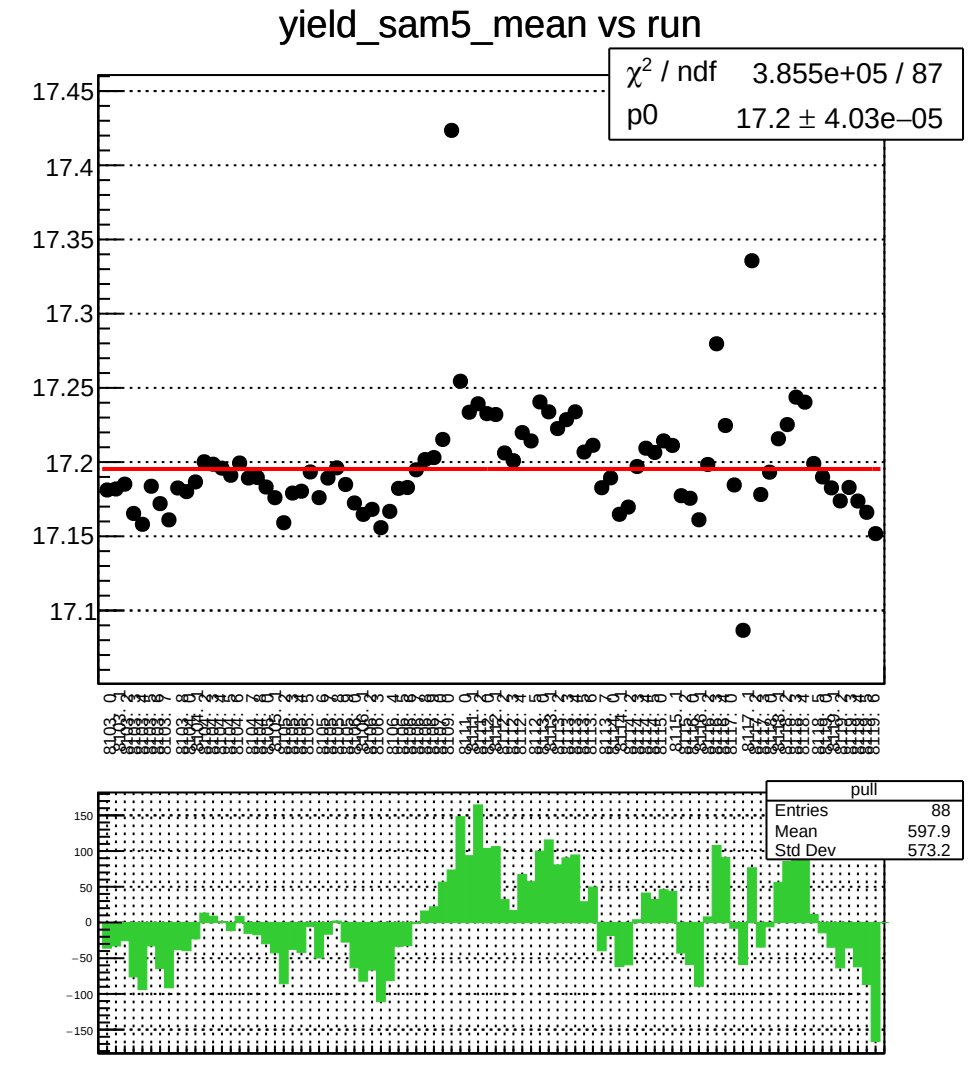

yield_sam3_rms vs run
χ² / ndf 3.487e+04 / 87
p0 0.1872 ± 0.0001454
0.45
0.4
0.35
0.3
0.25
0.2
0.15

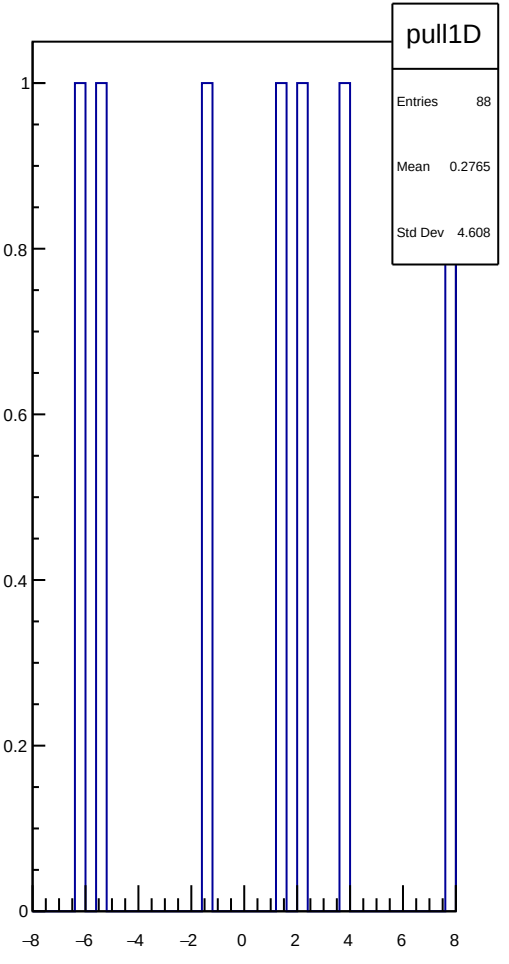

yield_sam4_mean vs run
χ² / ndf 1.246e+05 / 87
p0 13.91± 0.0001767
14.15
14.1
14.05
14
13.95
13.9
13.85
13.8
13.75

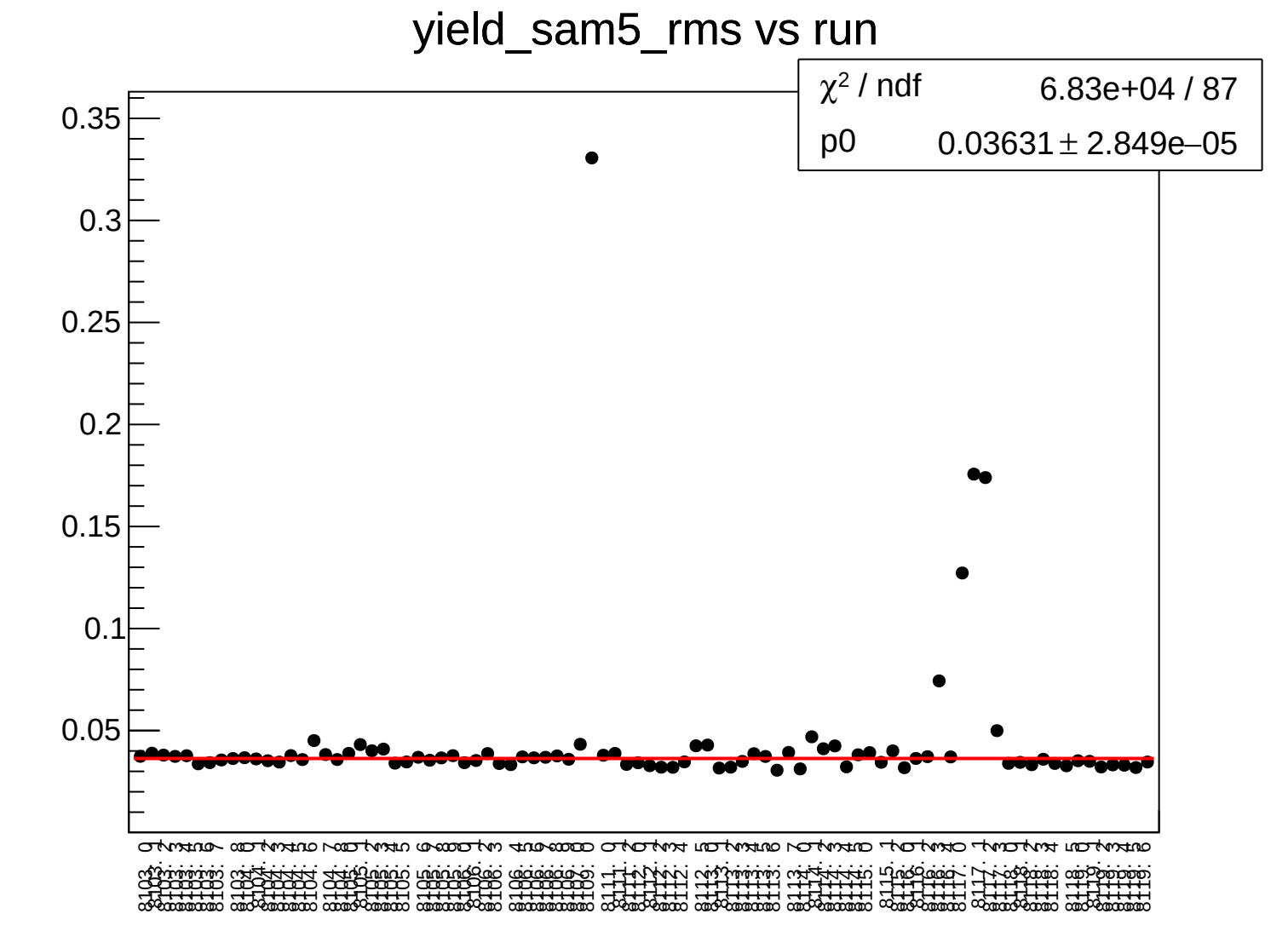

pull
Entries 88
Mean 1.137e+04
Std Dev 1.133e+04
120
100
80
60
40
20
0
−20
−40
−60
−80

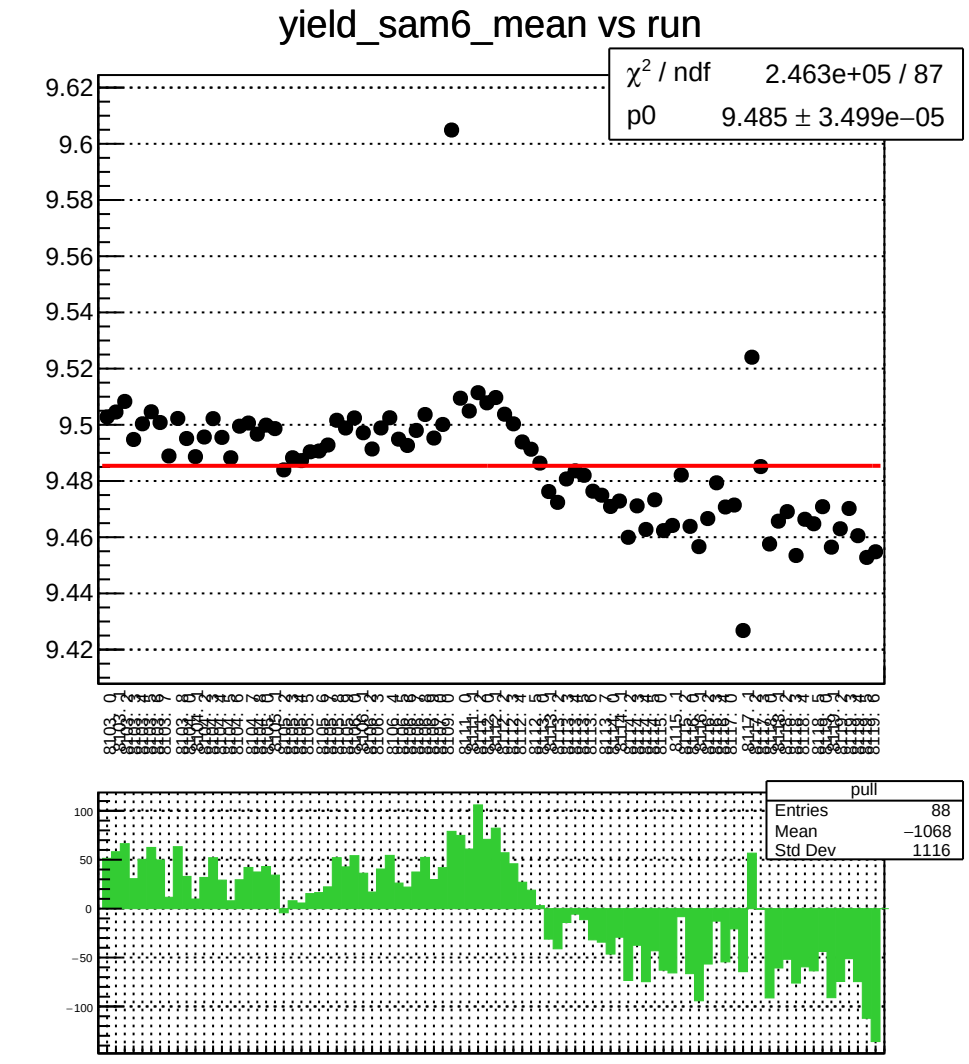

pull1D
Entries 88
Mean −0.8166
Std Dev 3.748
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

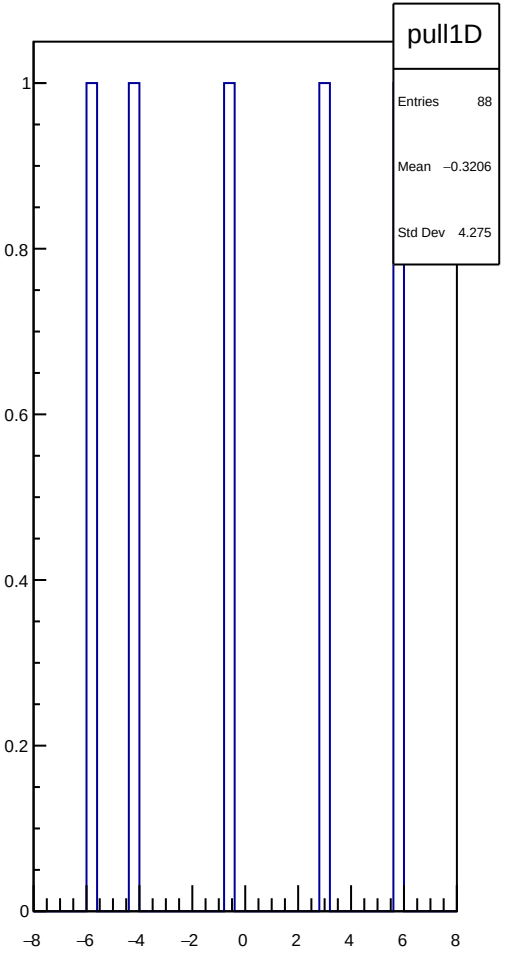

yield_sam4_rms vs run
χ² / ndf 3.979e+04 / 87
p0 0.1606 ± 0.000125
0.35
0.3
0.25
0.2
0.15

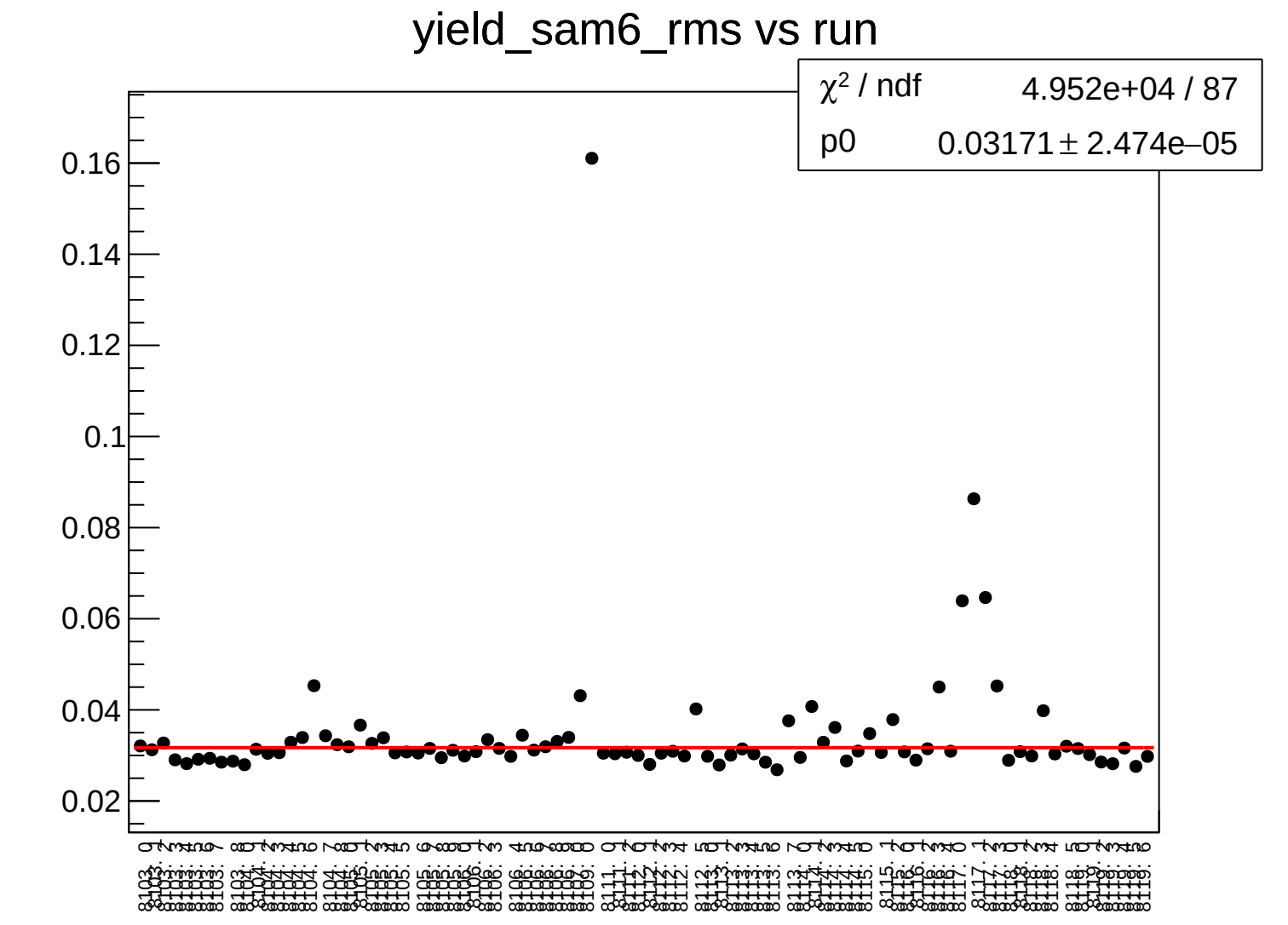

yield_sam5_mean vs run
χ² / ndf 3.855e+05 / 87
p0 17.2 ± 4.03e−05
17.45
17.4
17.35
17.3
17.25
17.2
17.15
17.1
pull
Entries 88
Mean 597.9
Std Dev 573.2
150
100
50
0
−50
−100
−150

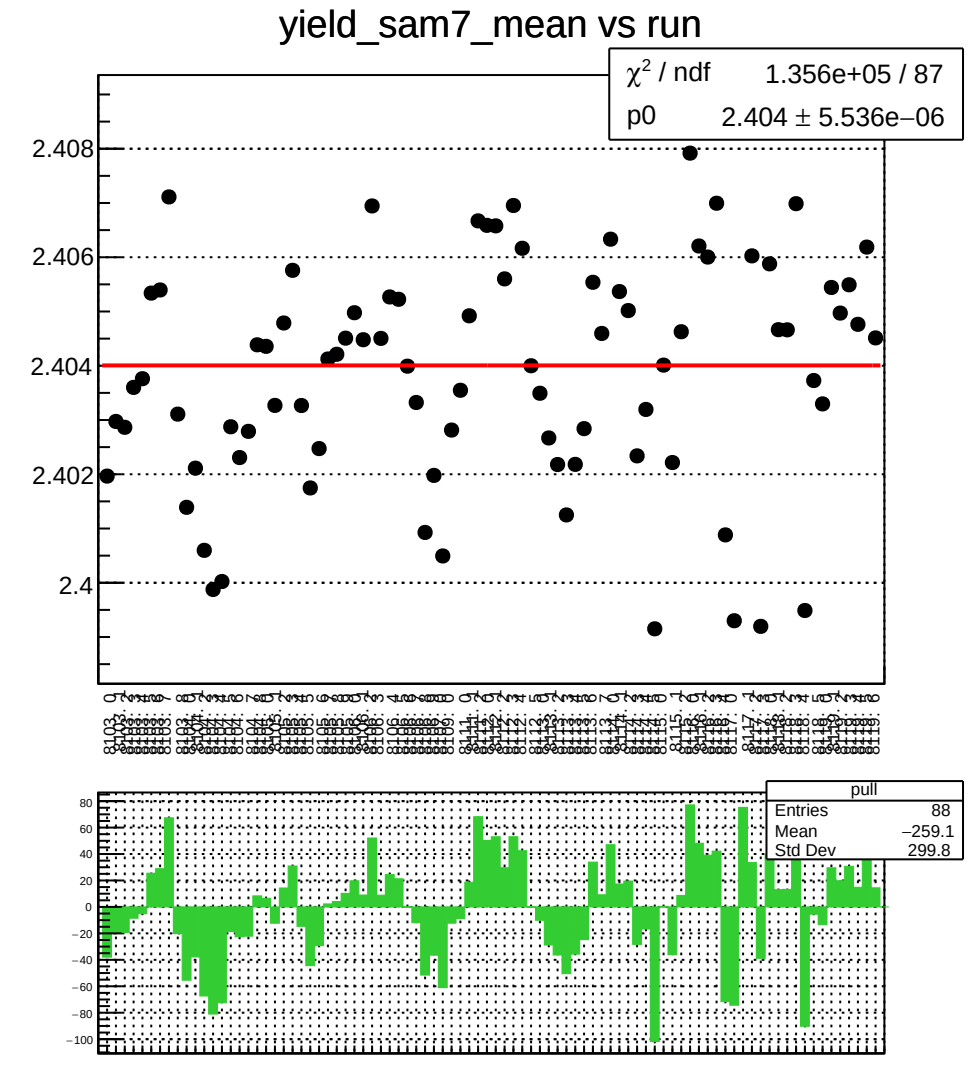

pull1D
Entries 88
Mean 0.2765
Std Dev 4.608
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

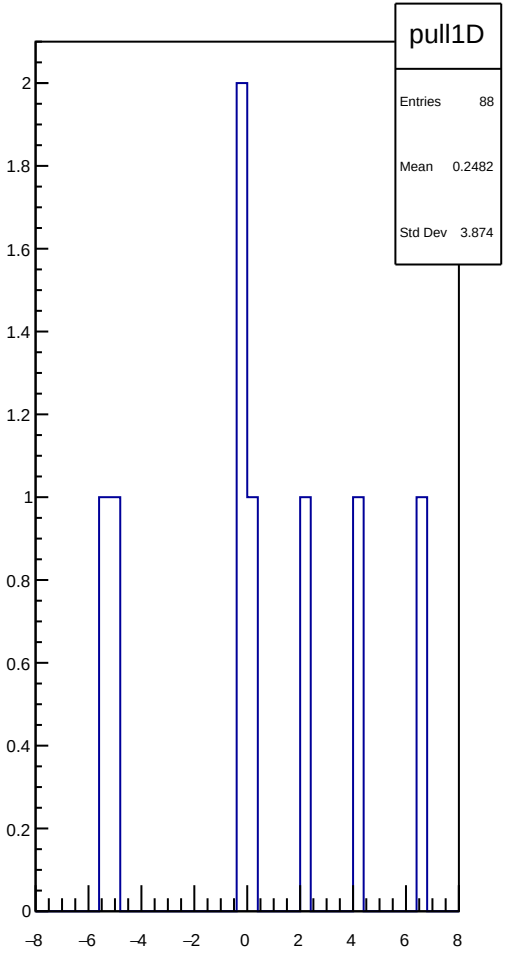

yield_sam5_rms vs run
χ² / ndf 6.83e+04 / 87
p0 0.03631 ± 2.849e–05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

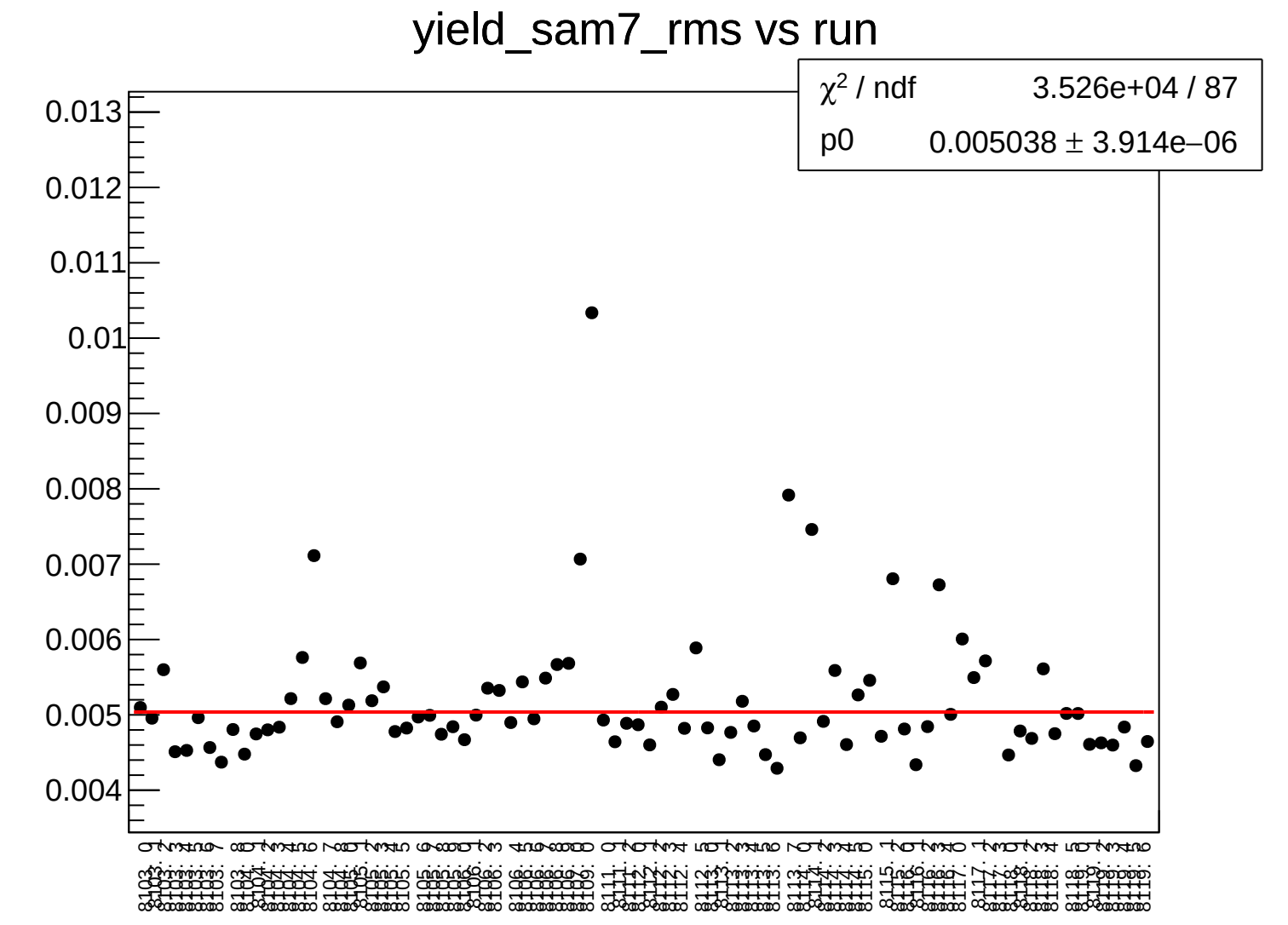

yield_sam6_mean vs run
χ² / ndf 2.463e+05 / 87
p0 9.485 ± 3.499e−05
9.62
9.6
9.58
9.56
9.54
9.52
9.5
9.48
9.46
9.44
9.42
pull
Entries 88
Mean −1068
Std Dev 1116
100
50
0
−50
−100

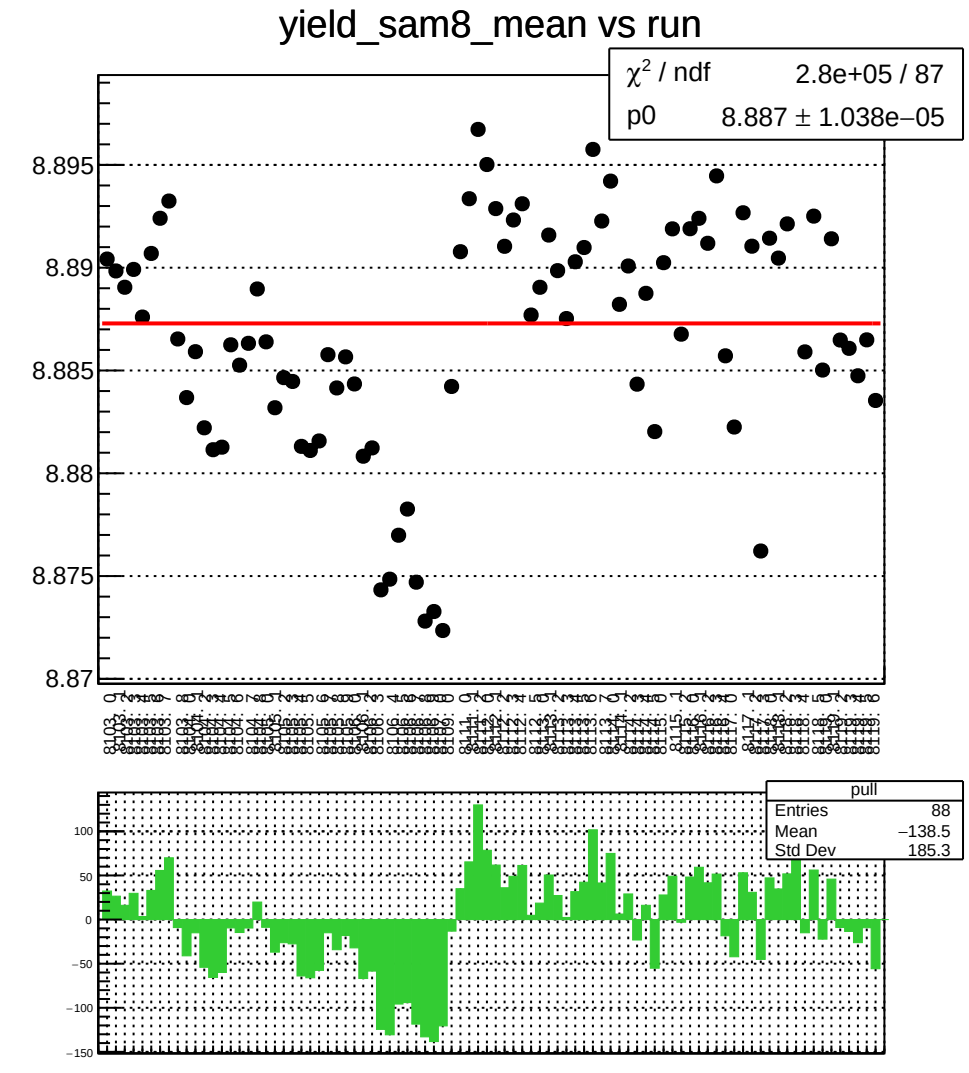

pull1D
Entries 88
Mean −0.3206
Std Dev 4.275
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

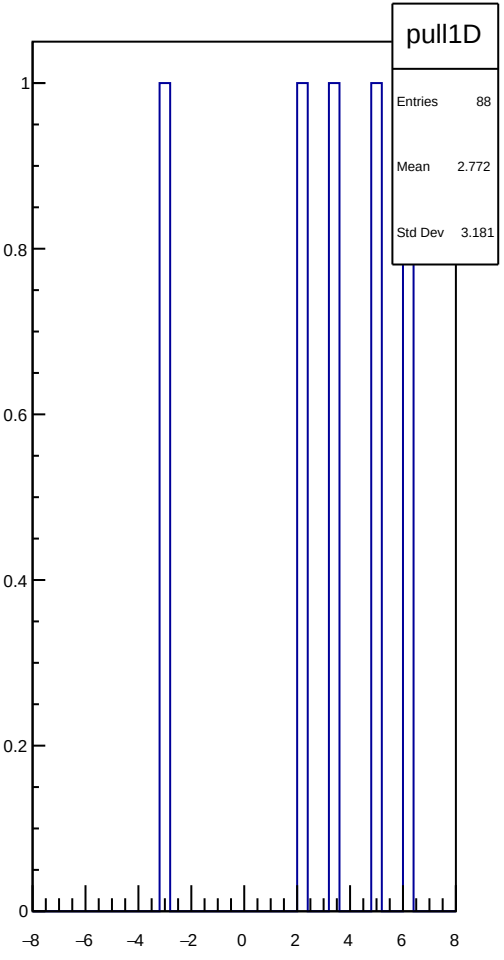

yield_sam6_rms vs run
χ² / ndf 4.952e+04 / 87
p0 0.03171 ± 2.474e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

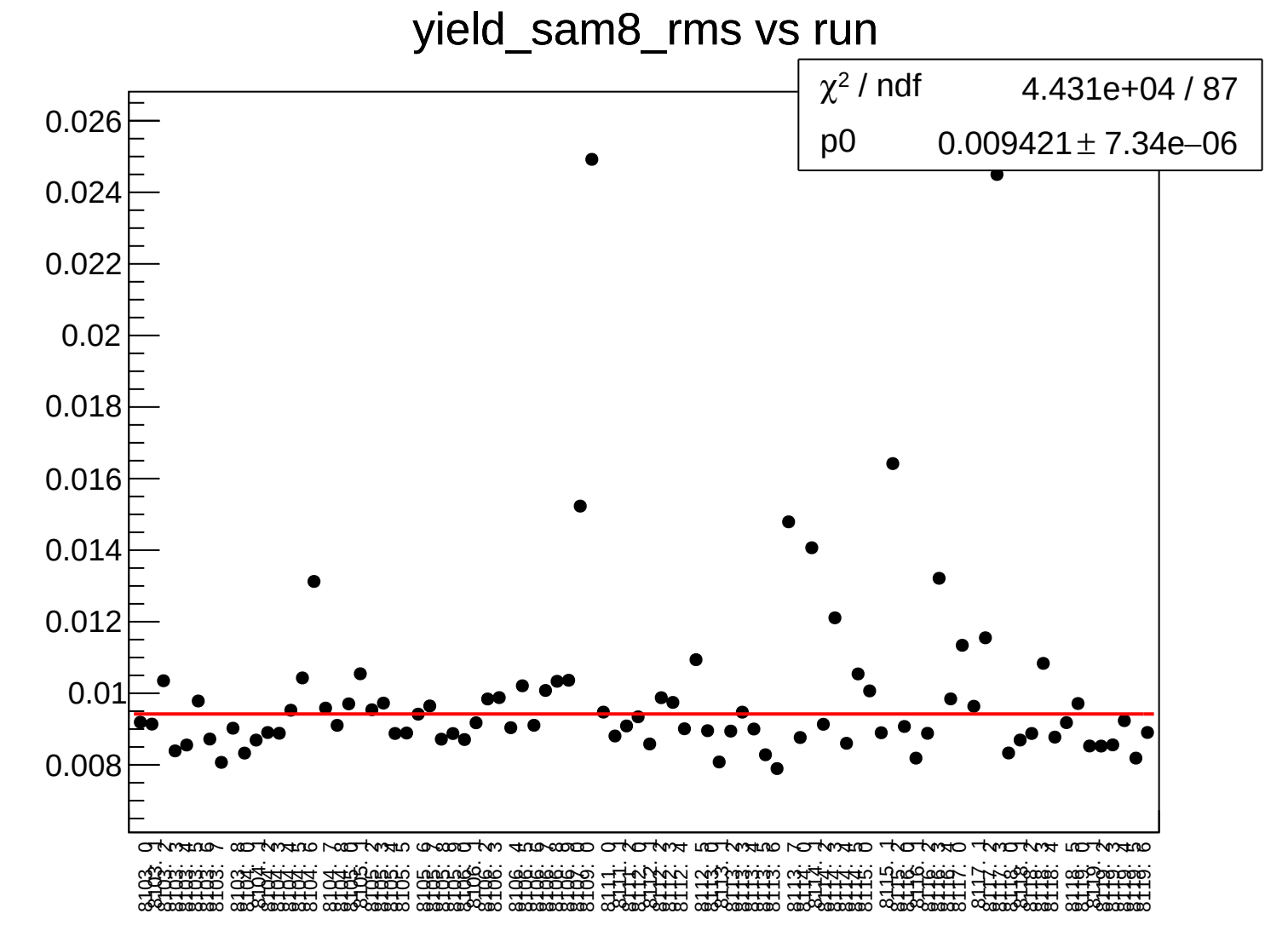

yield_sam7_mean vs run
χ² / ndf 1.356e+05 / 87
p0 2.404 ± 5.536e−06
2.408
2.406
2.404
2.402
2.4
pull
Entries 88
Mean −259.1
Std Dev 299.8
80
60
40
20
0
−20
−40
−60
−80
−100

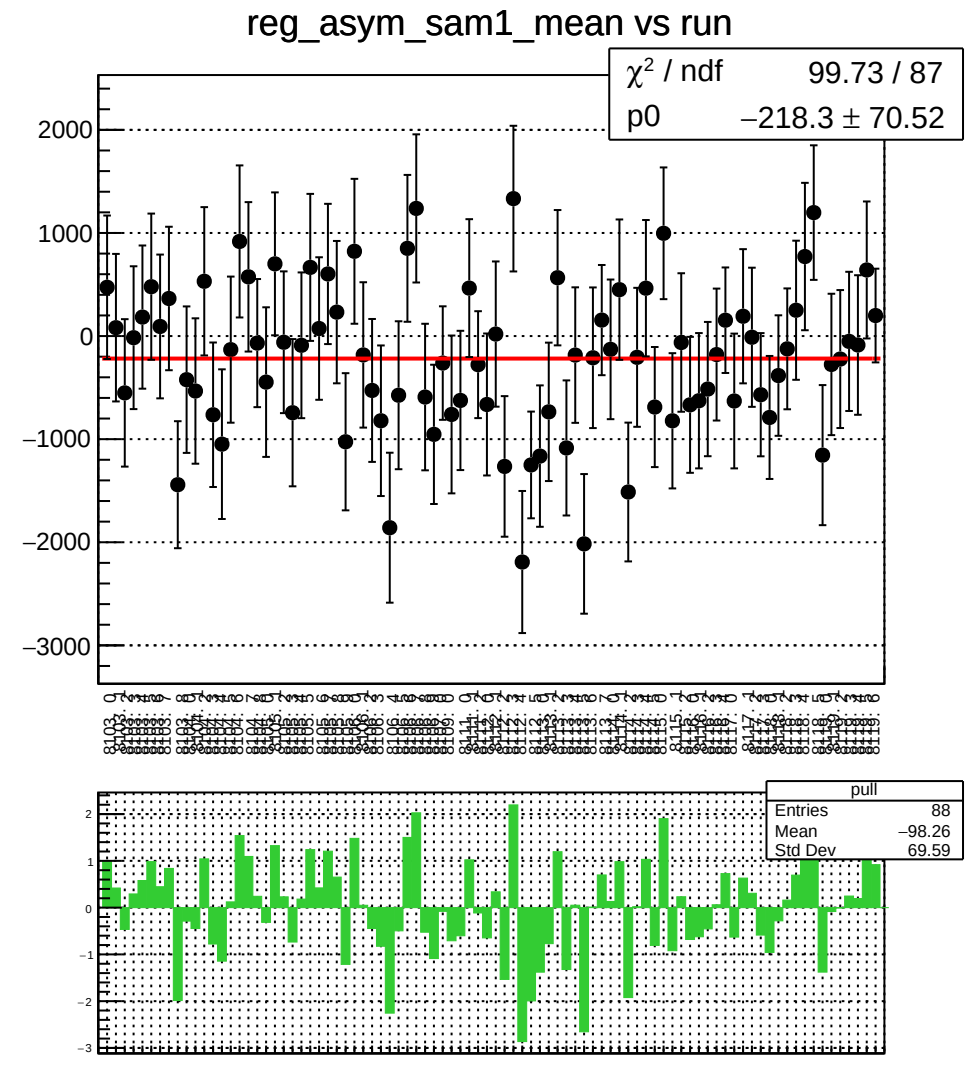

pull1D
Entries 88
Mean 0.2482
Std Dev 3.874
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

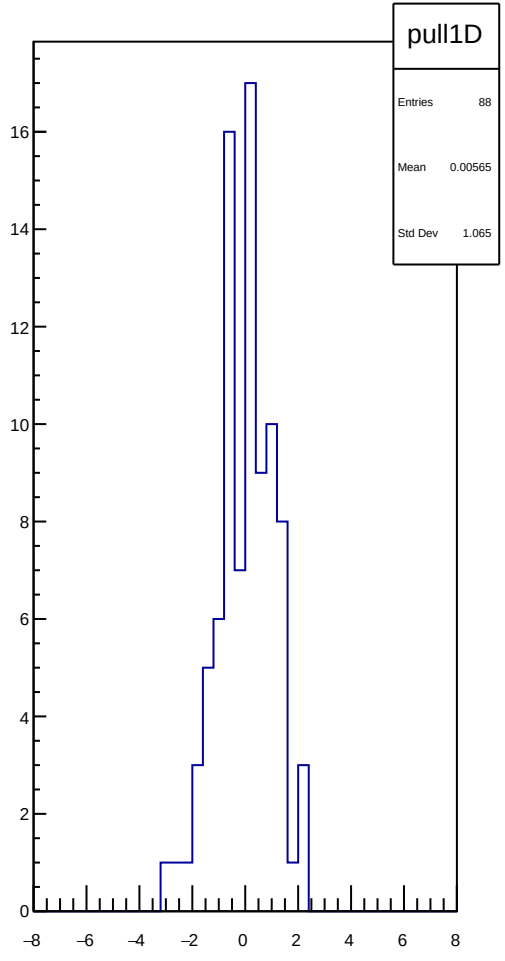

yield_sam7_rms vs run
χ² / ndf 3.526e+04 / 87
p0 0.005038 ± 3.914e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

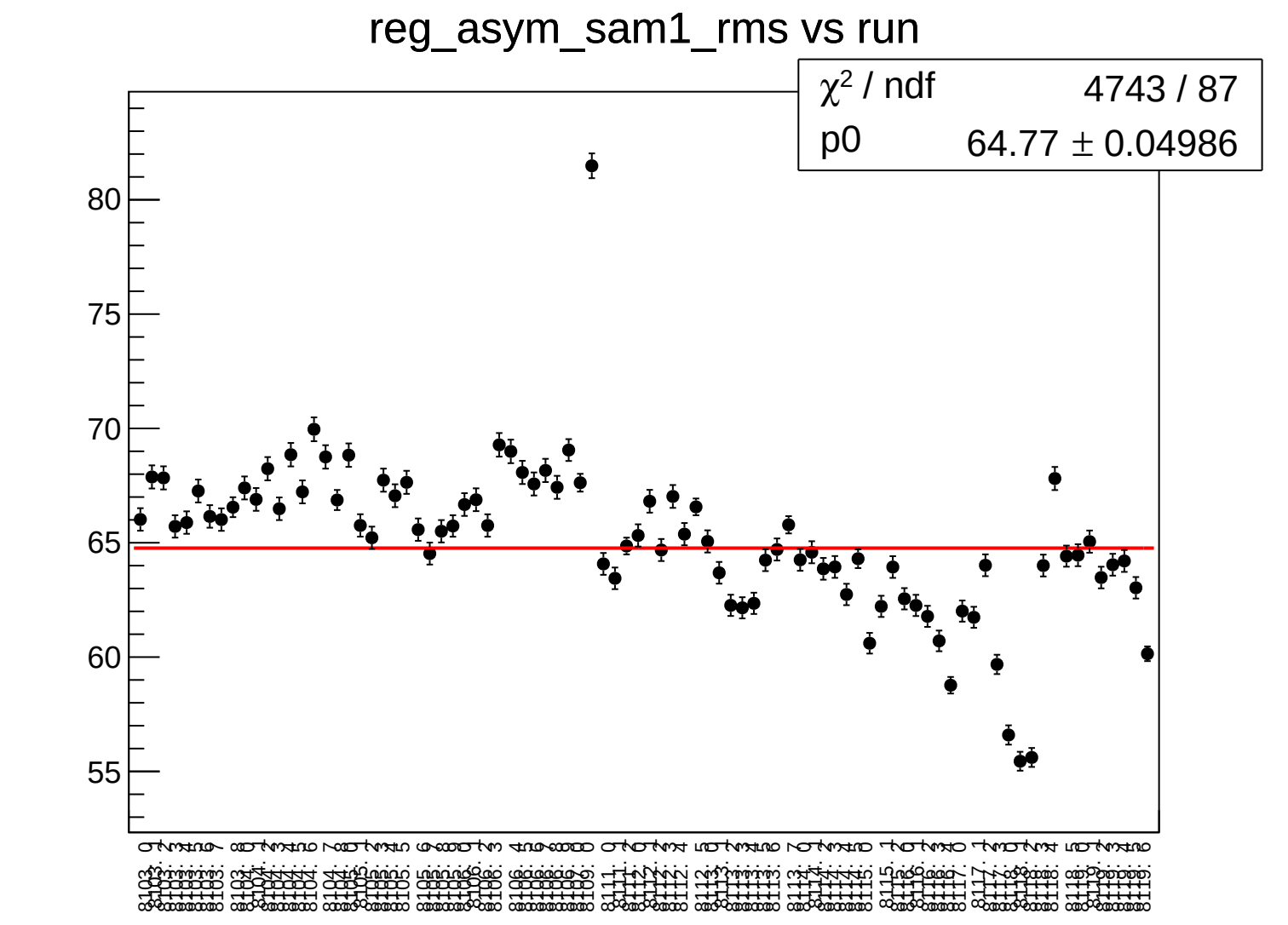

yield_sam8_mean vs run
χ² / ndf 2.8e+05 / 87
p0 8.887 ± 1.038e−05
8.895
8.89
8.885
8.88
8.875
8.87
pull
Entries 88
Mean −138.5
Std Dev 185.3
100
50
0
−50
−100
−150

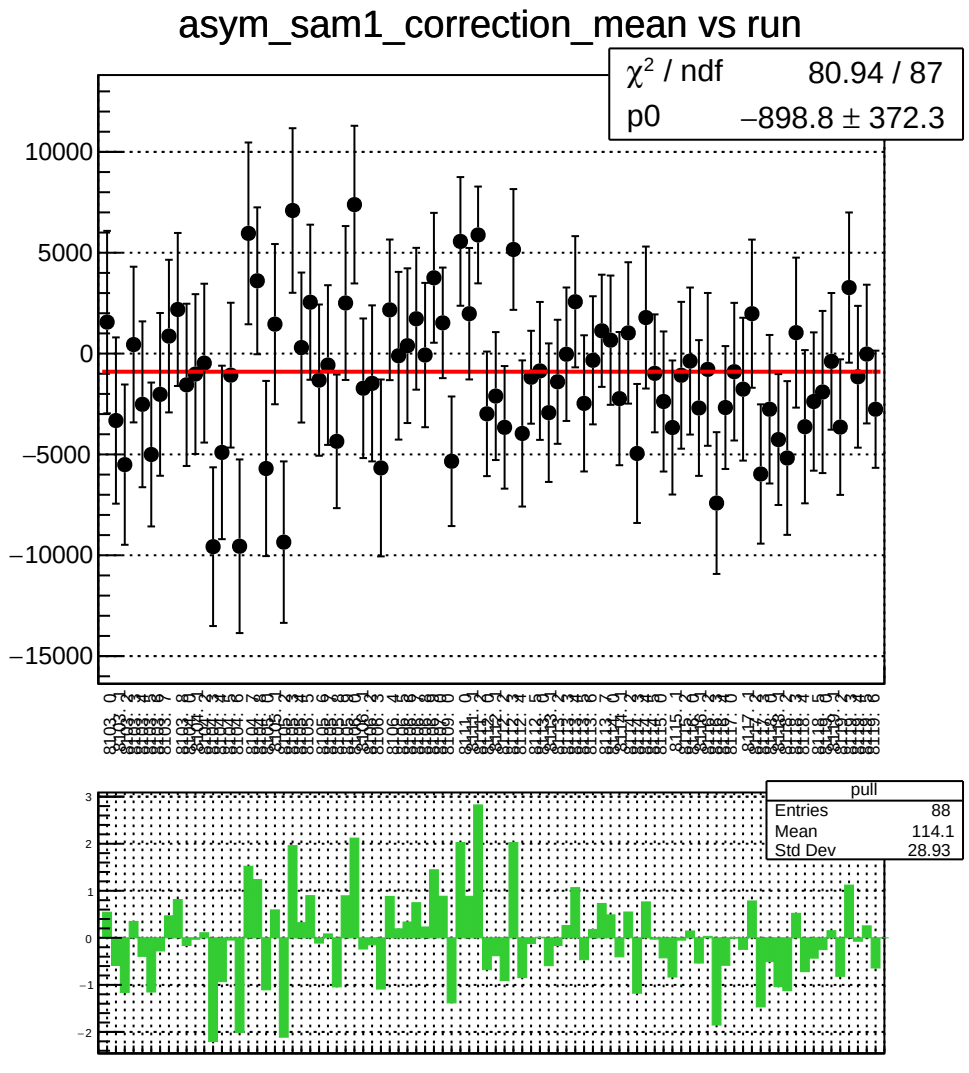

pull1D
Entries 88
Mean 2.772
Std Dev 3.181
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

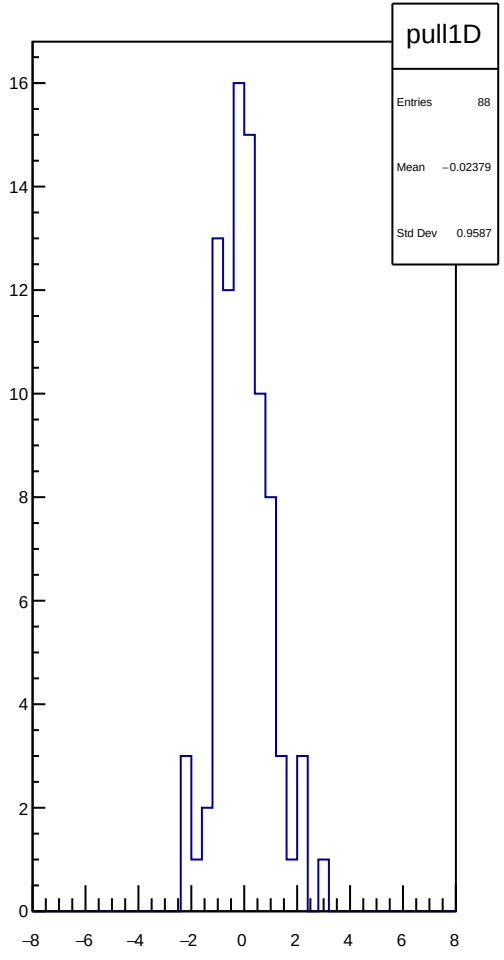

yield_sam8_rms vs run
χ² / ndf 4.431e+04 / 87
p0 0.009421 ± 7.34e−06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008


reg_asym_sam1_mean vs run
χ² / ndf 99.73 / 87
p0 −218.3 ± 70.52
2000
1000
0
−1000
−2000
−3000
pull
Entries 88
Mean −98.26
Std Dev 69.59
2
1
0
−1
−2
−3

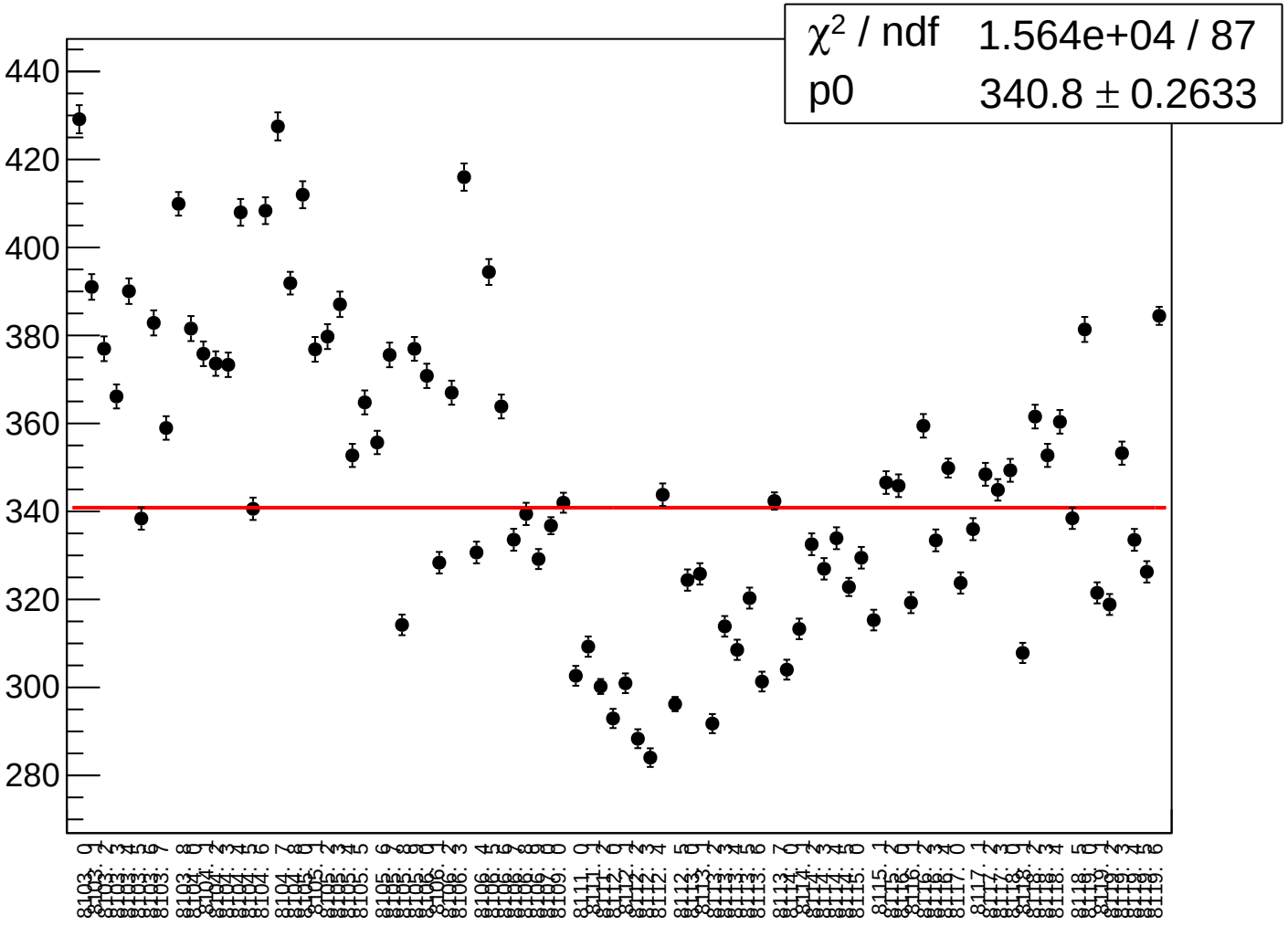

pull1D
Entries 88
Mean 0.00565
Std Dev 1.065
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

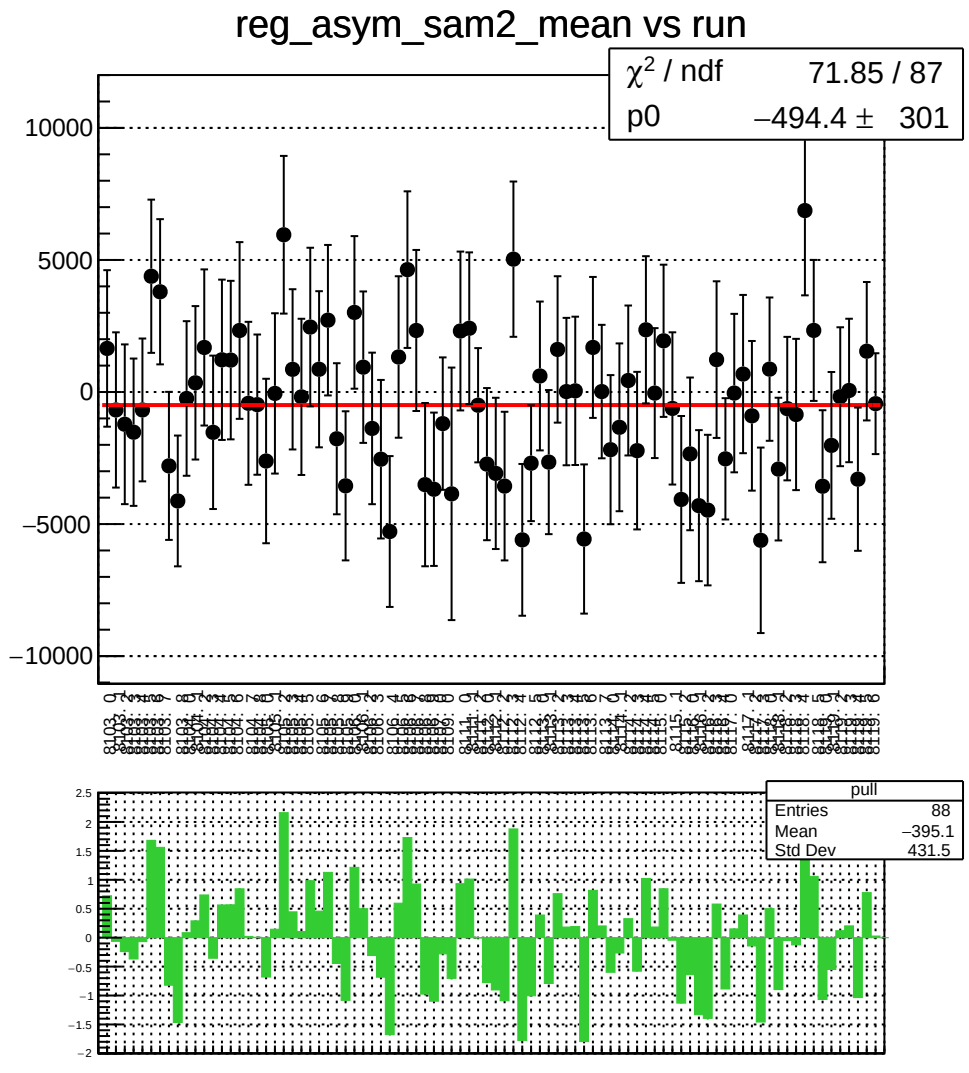

reg_asym_sam1_rms vs run
χ² / ndf 4743 / 87
p0 64.77 ± 0.04986
80
75
70
65
60
55

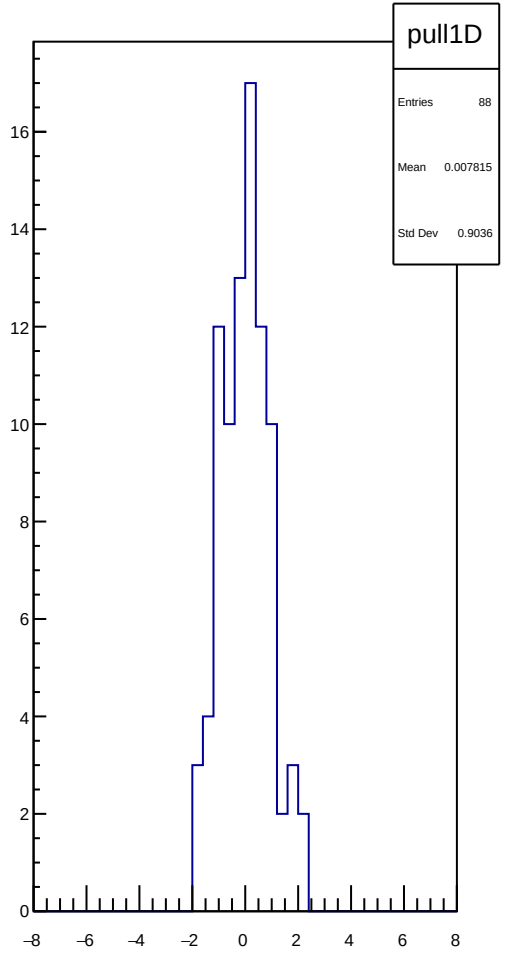

asym_sam1_correction_mean vs run
χ² / ndf 80.94 / 87
p0 −898.8 ± 372.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 114.1
Std Dev 28.93
3
2
1
0
−1
−2

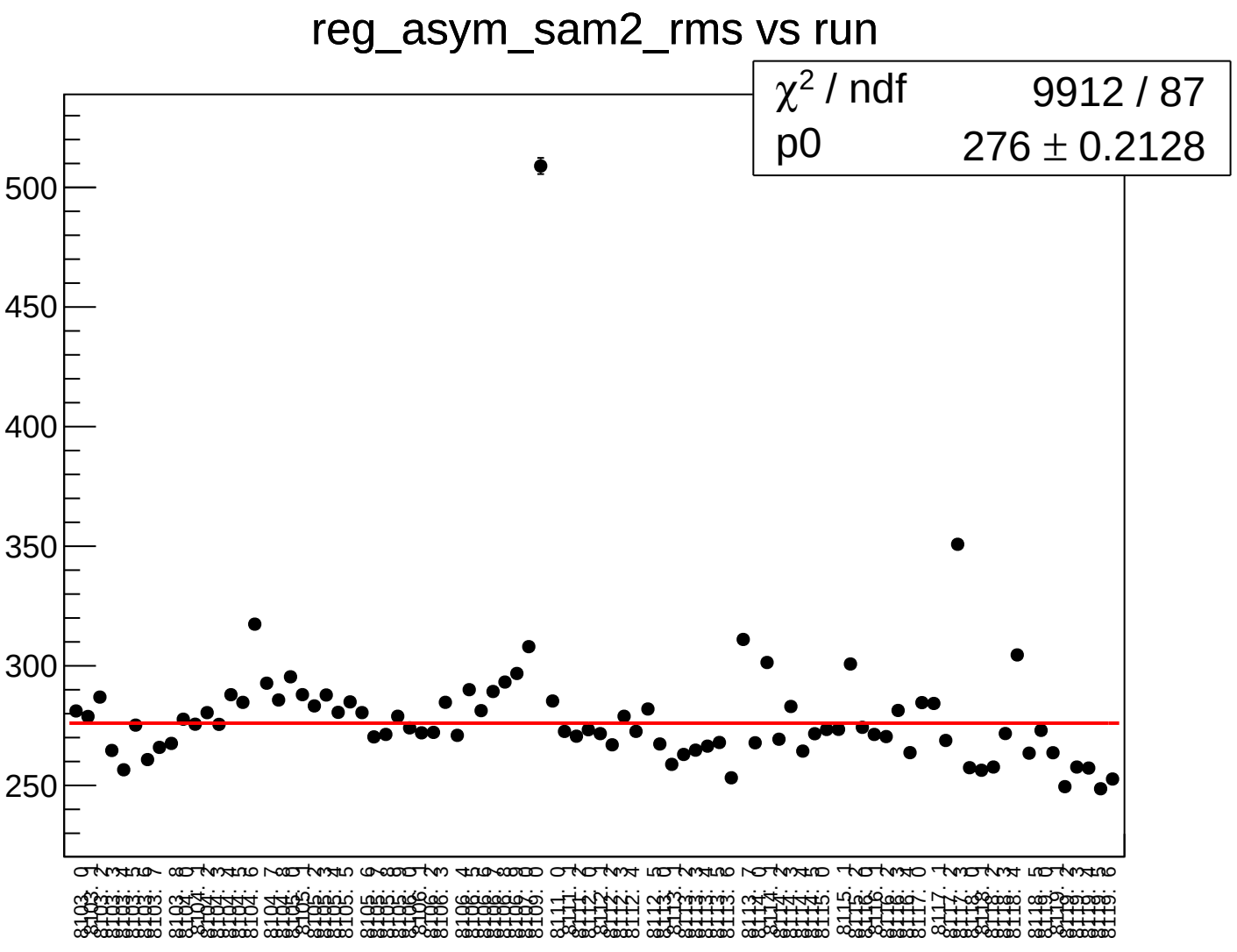

pull1D
Entries 88
Mean −0.02379
Std Dev 0.9587
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

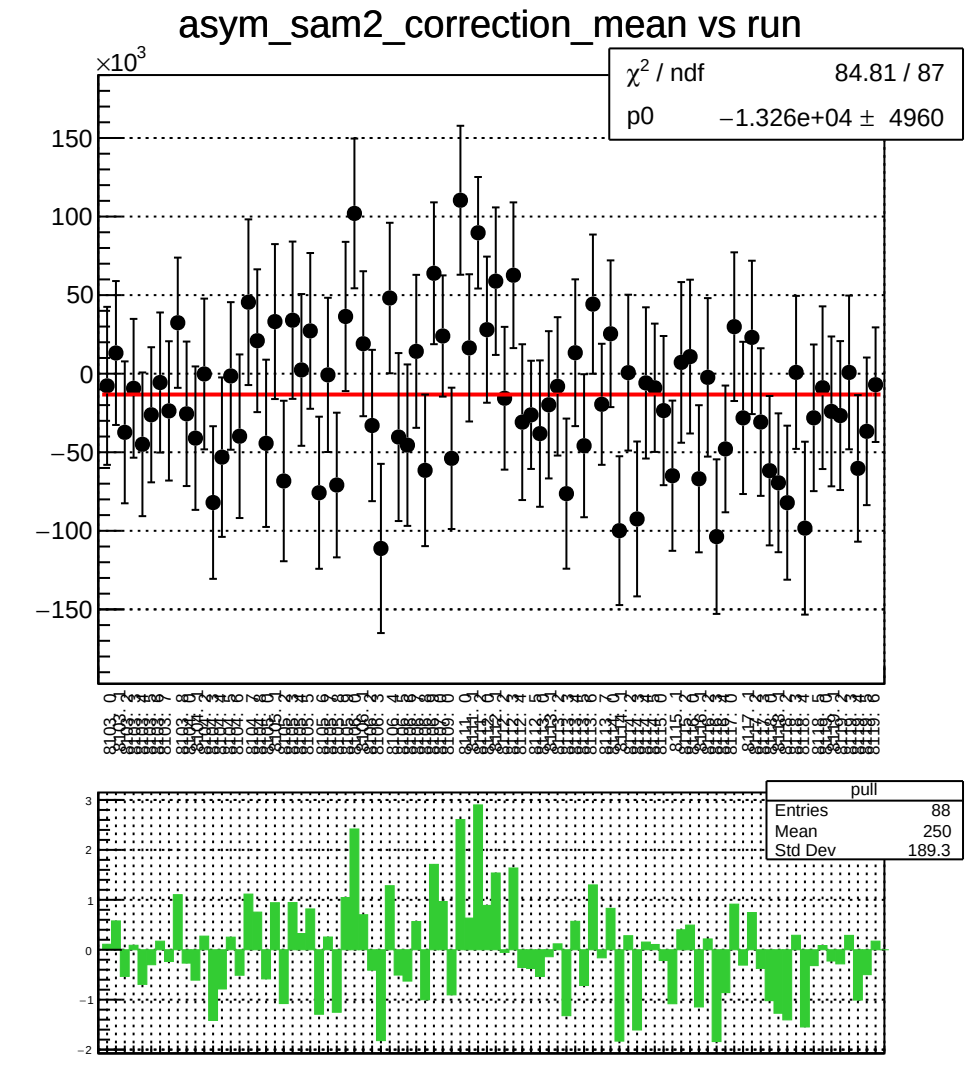
asym_sam1_correction_rms vs run

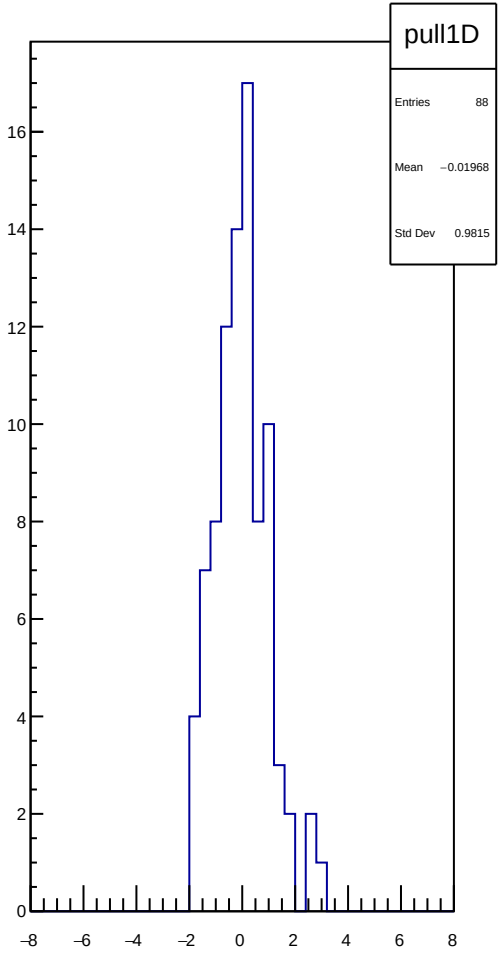


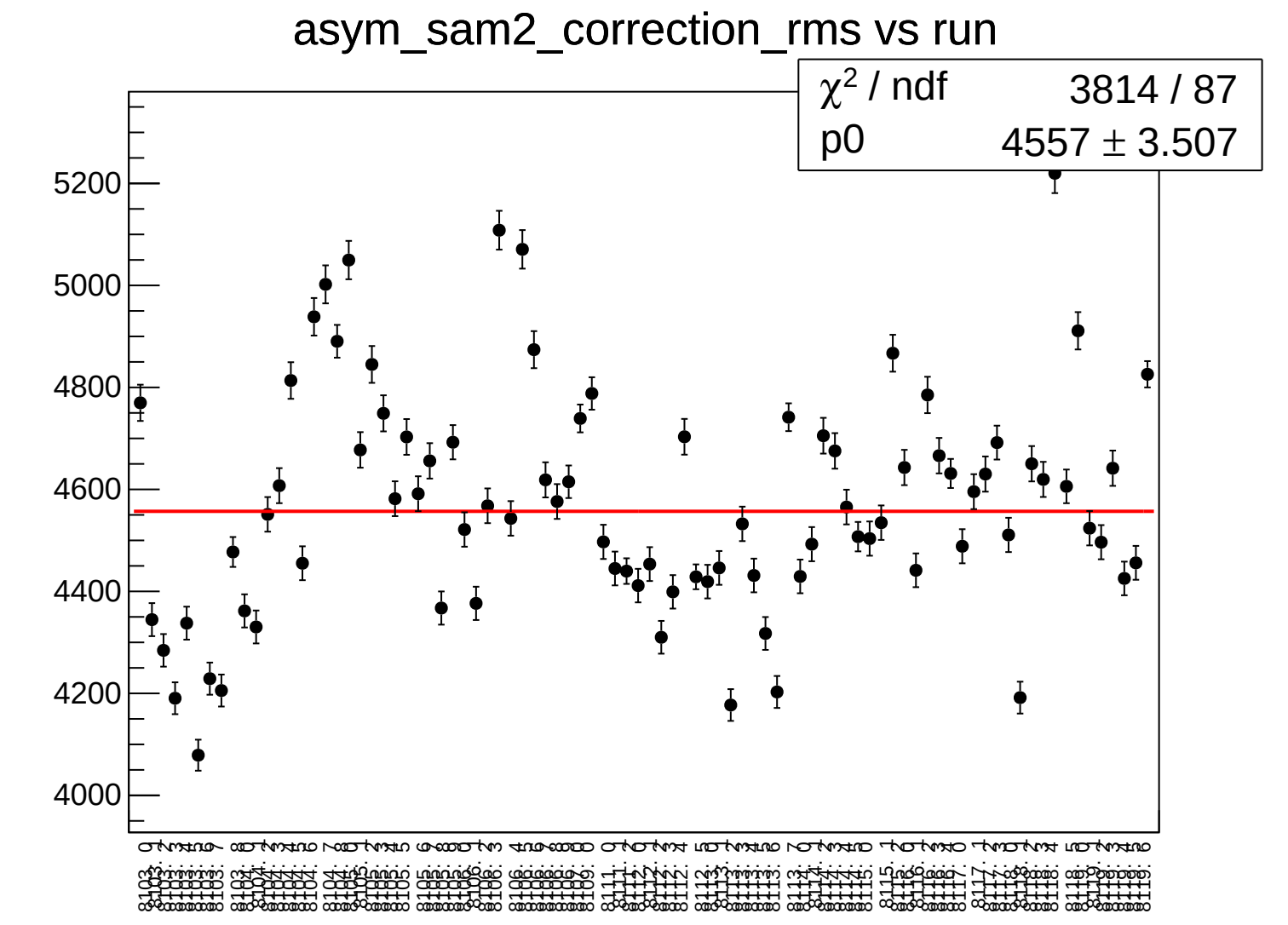

reg_asym_sam2_mean vs run
χ² / ndf 71.85 / 87
p0 −494.4 ± 301
10000
5000
0
−5000
−10000
pull
Entries 88
Mean −395.1
Std Dev 431.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

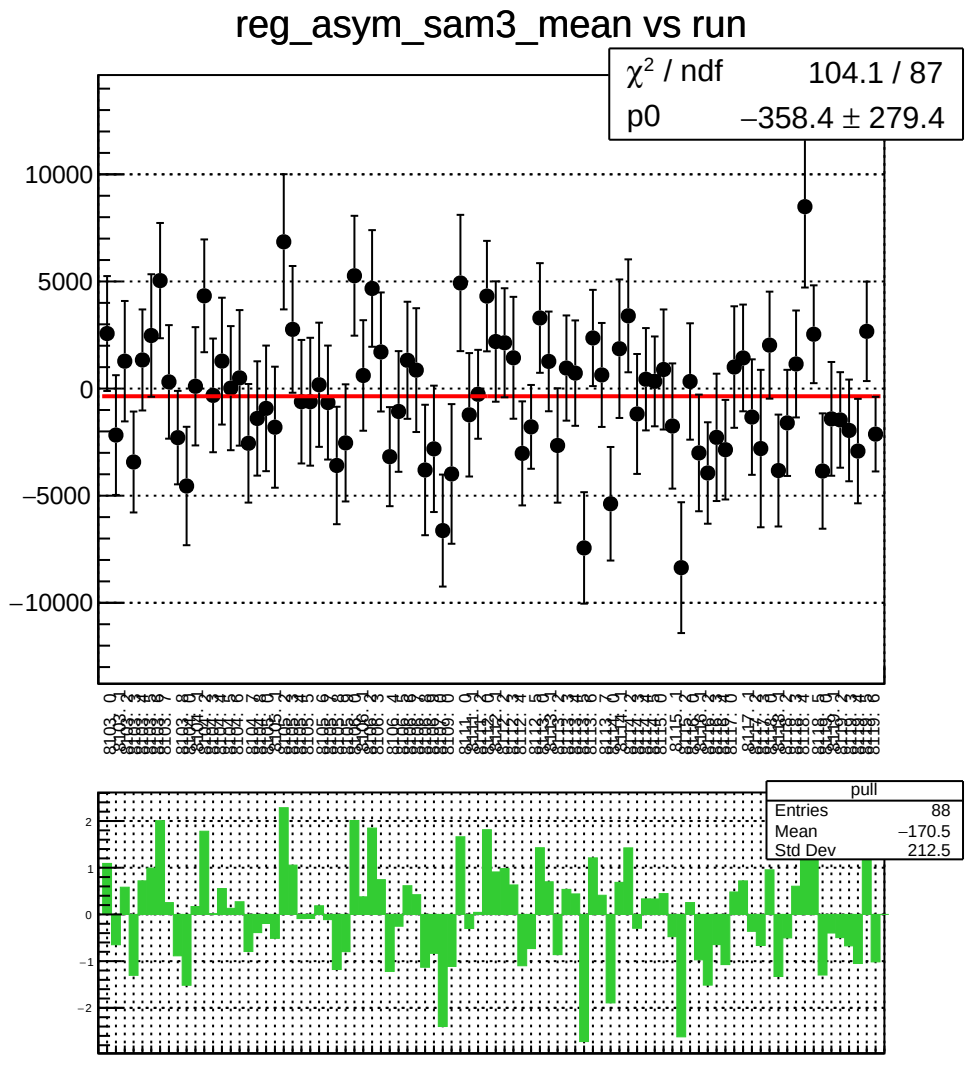

pull1D
Entries 88
Mean 0.007815
Std Dev 0.9036
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

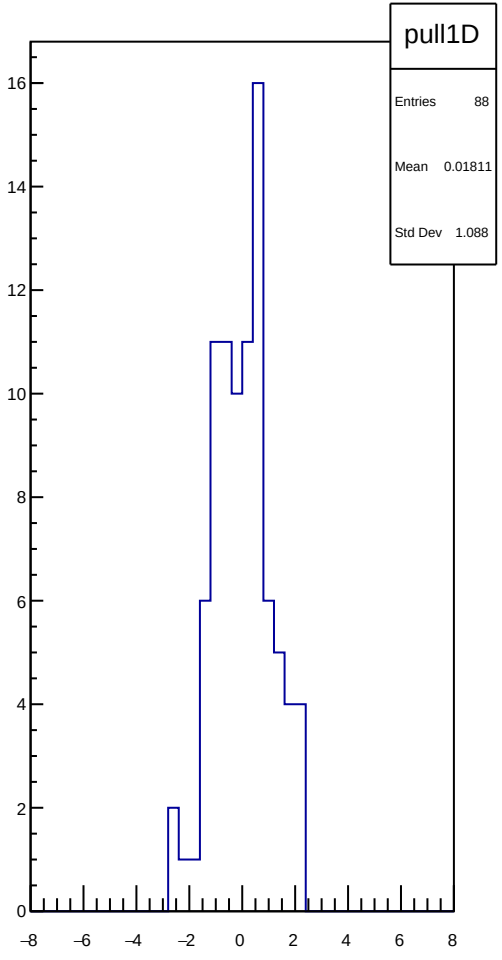

reg_asym_sam2_rms vs run
χ² / ndf 9912 / 87
p0 276 ± 0.2128
500
450
400
350
300
250

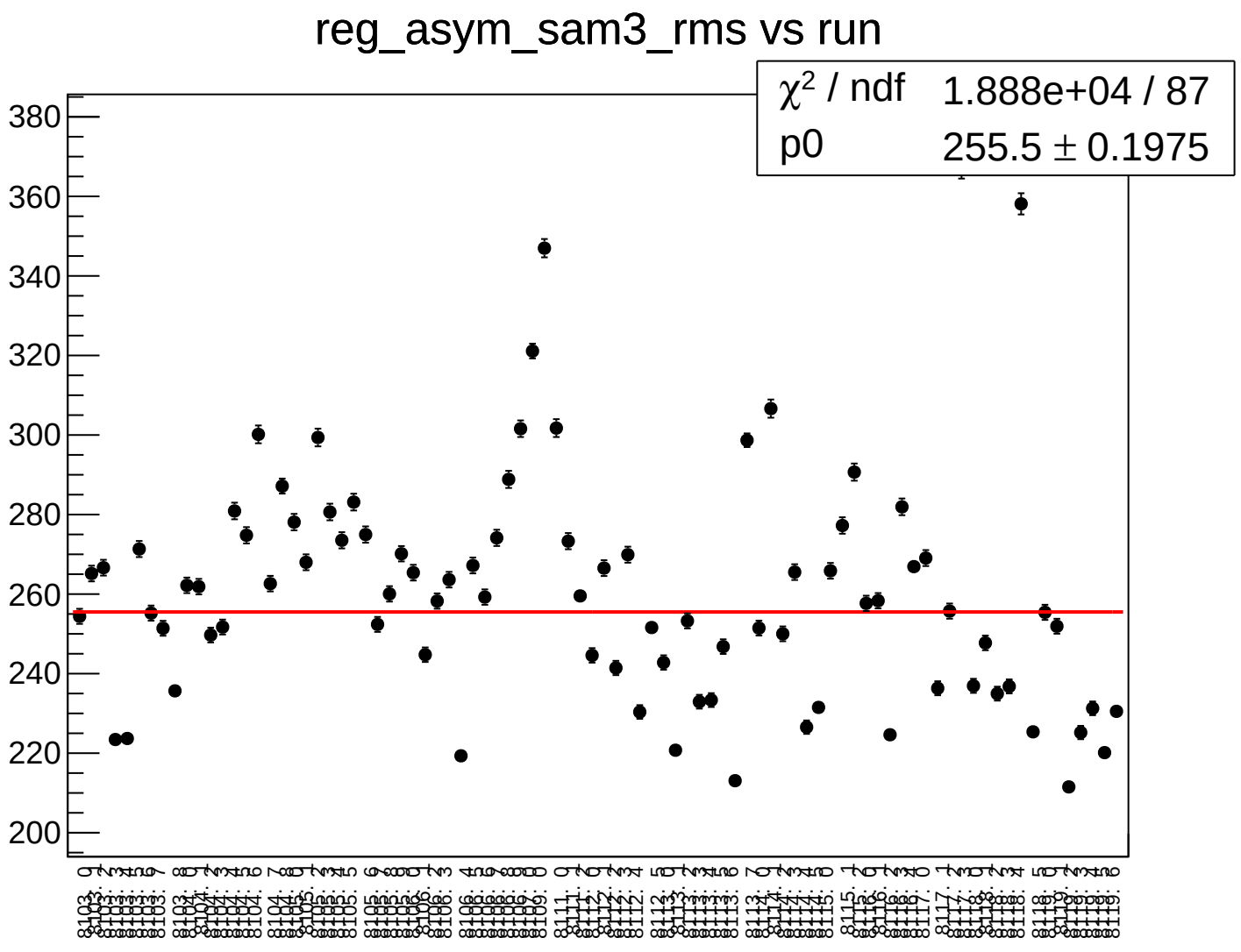

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 84.81 / 87
p0 −1.326e+04 ± 4960
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 250
Std Dev 189.3
3
2
1
0
−1
−2

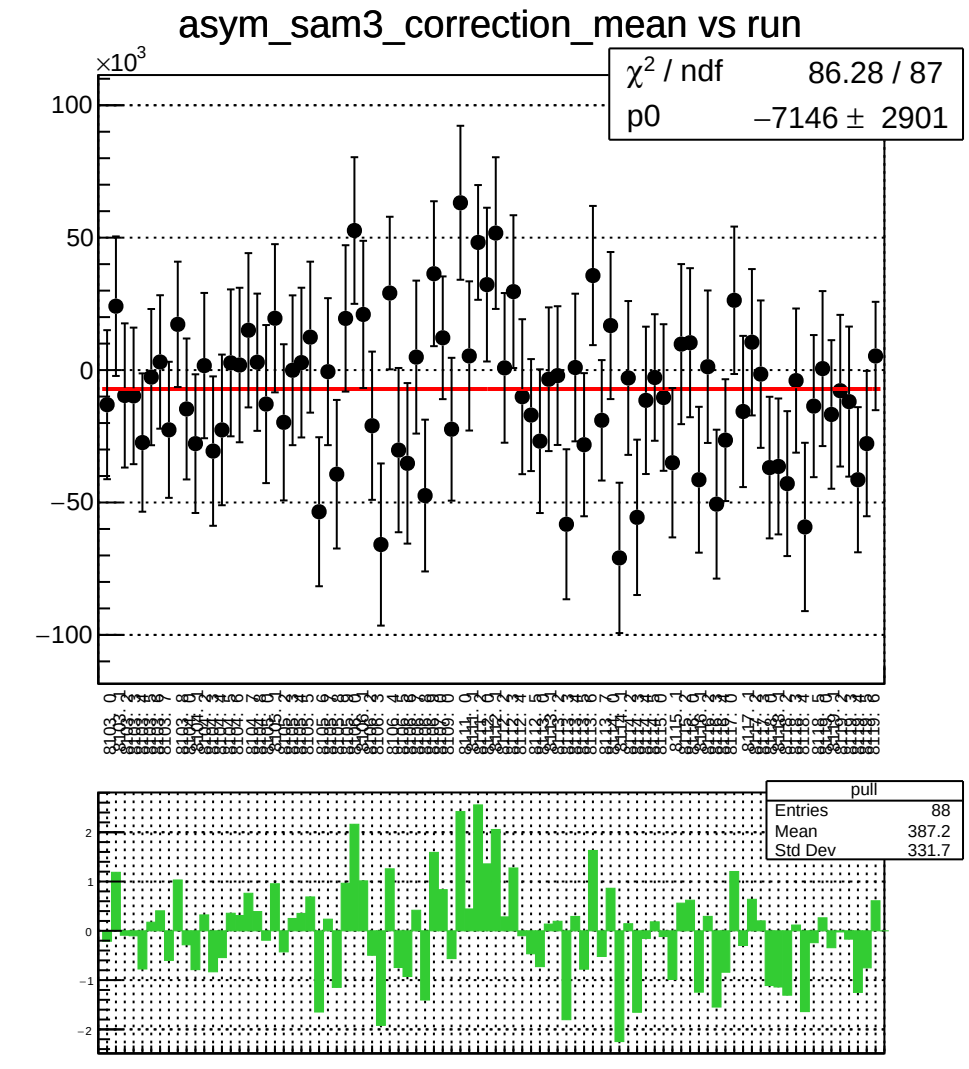

pull1D
Entries 88
Mean −0.01968
Std Dev 0.9815
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

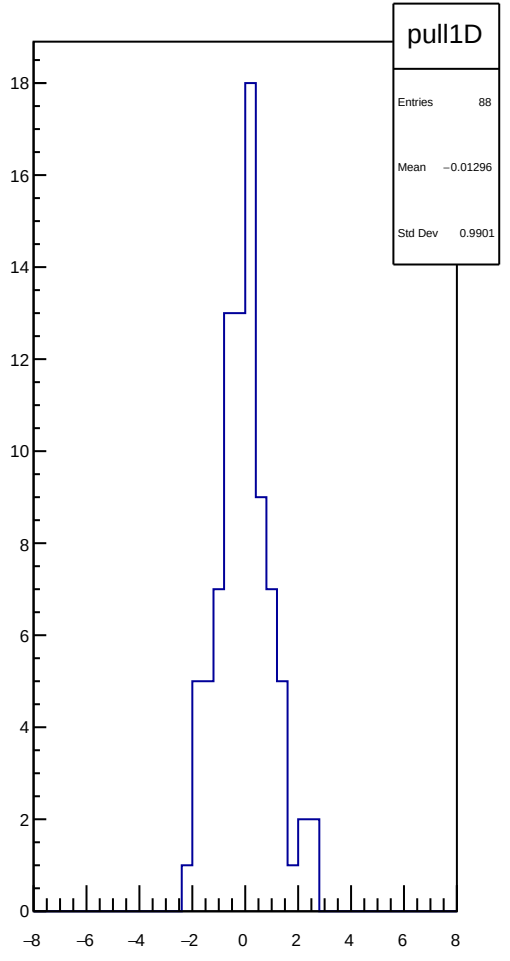

asym_sam2_correction_rms vs run
χ² / ndf 3814 / 87
p0 4557 ± 3.507
5200
5000
4800
4600
4400
4200
4000

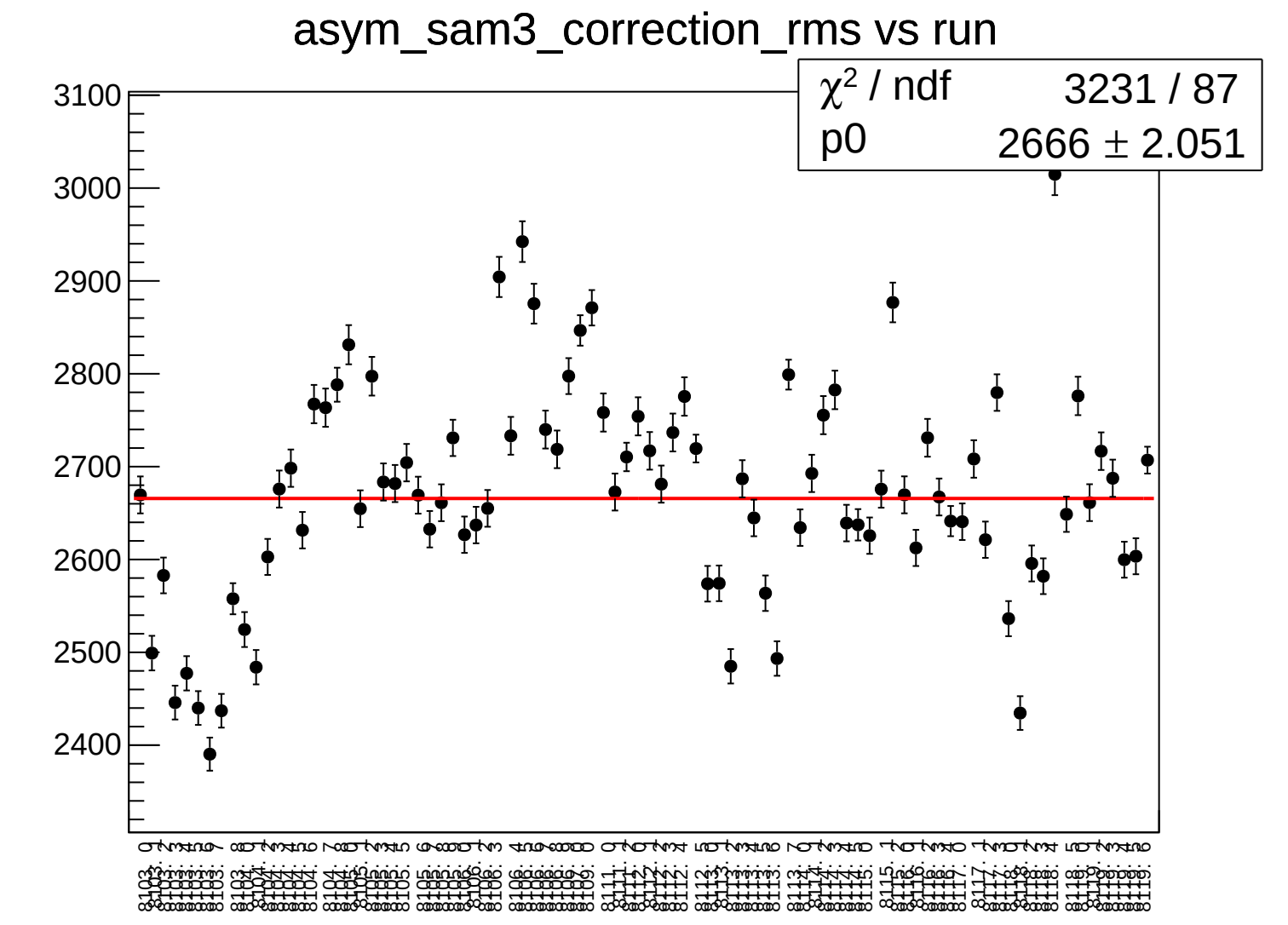

reg_asym_sam3_mean vs run
χ² / ndf 104.1 / 87
p0 −358.4 ± 279.4
10000
5000
0
−5000
−10000
pull
Entries 88
Mean −170.5
Std Dev 212.5
2
1
0
−1
−2

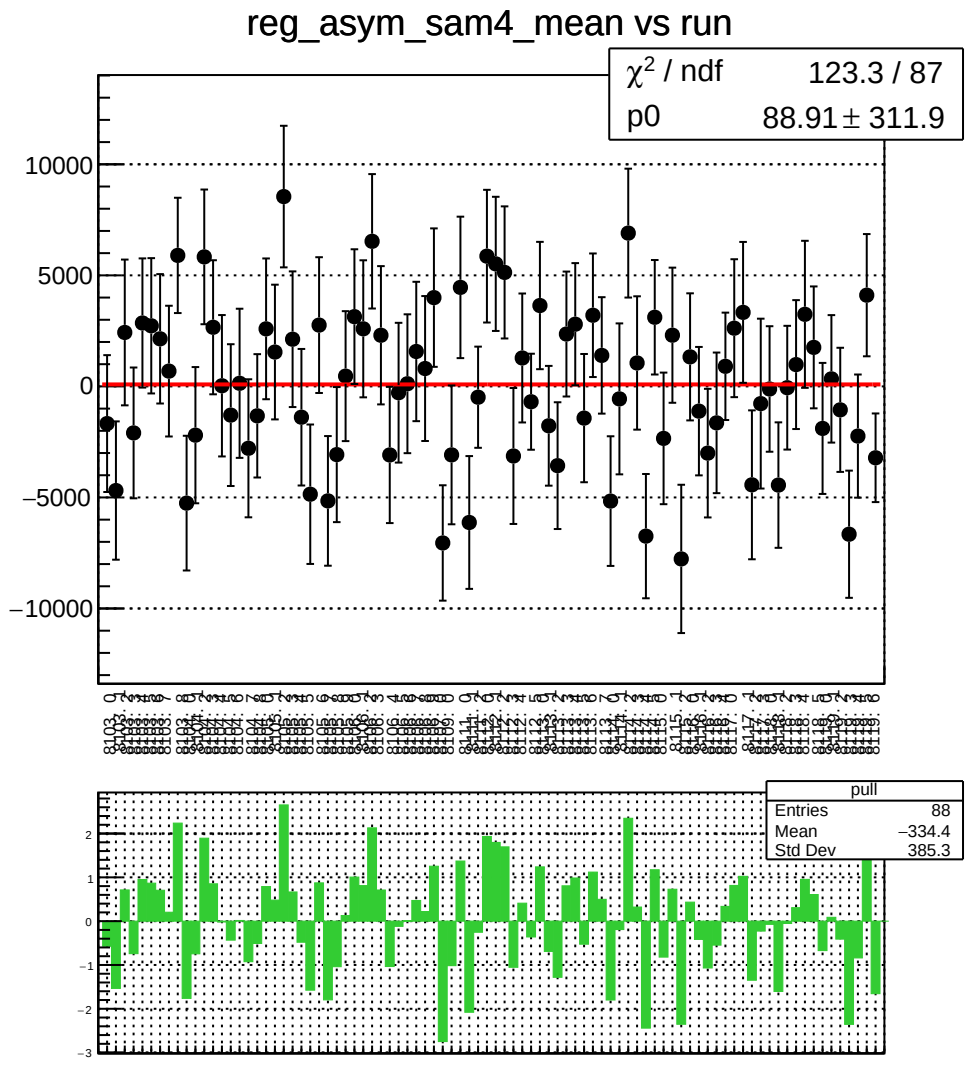

pull1D
Entries 88
Mean 0.01811
Std Dev 1.088
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

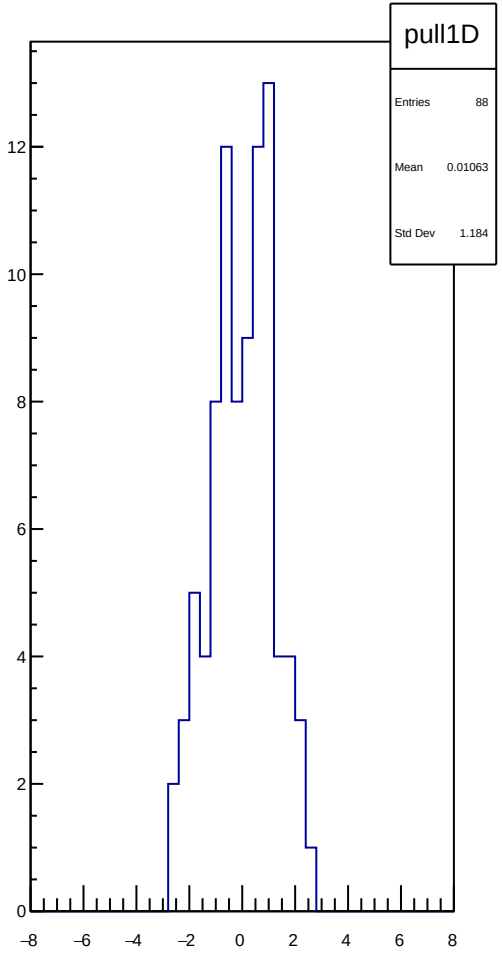

reg_asym_sam3_rms vs run
χ² / ndf 1.888e+04 / 87
p0 255.5 ± 0.1975
380
360
340
320
300
280
260
240
220
200

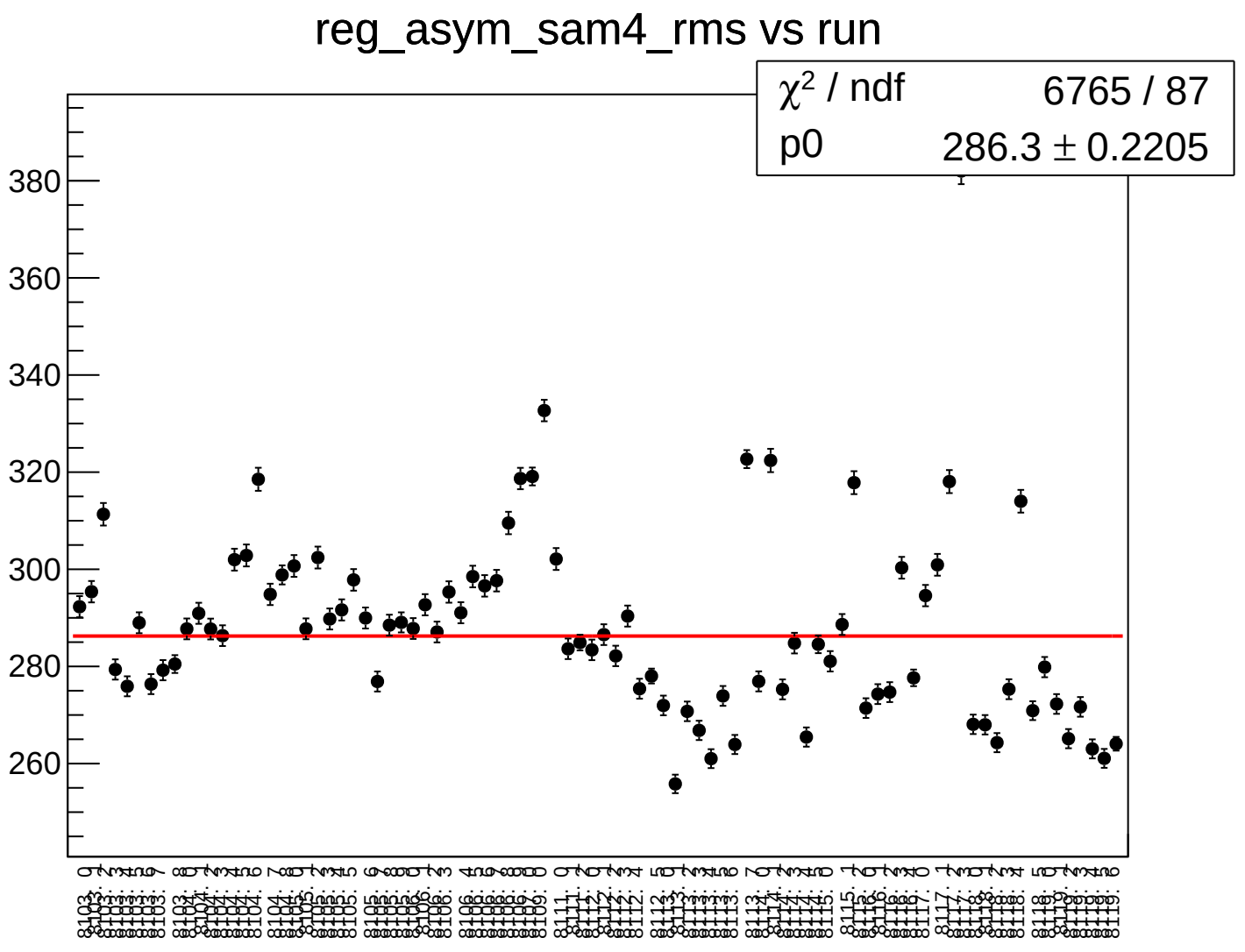

asym_sam3_correction_mean vs run
×10^3
χ² / ndf 86.28 / 87
p0 −7146 ± 2901
100
50
0
−50
−100
pull
Entries 88
Mean 387.2
Std Dev 331.7
2
1
0
−1
−2

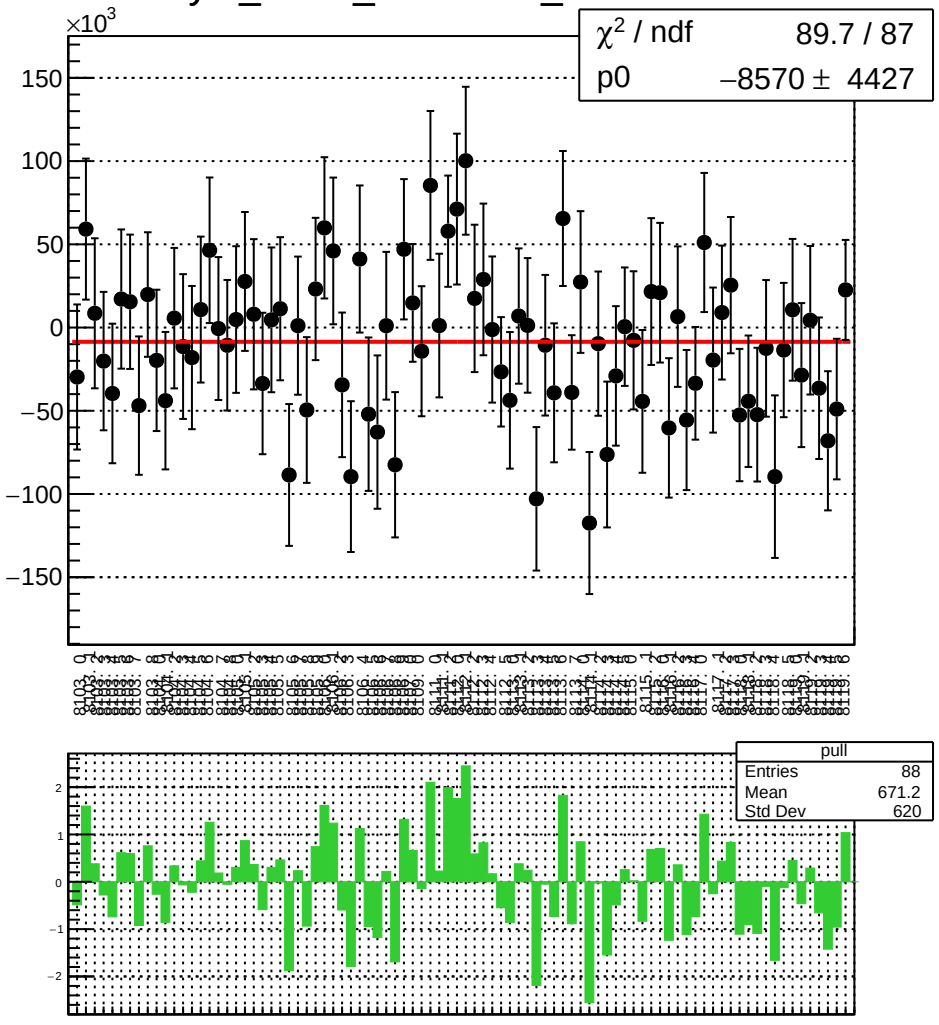

pull1D
Entries 88
Mean −0.01296
Std Dev 0.9901
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

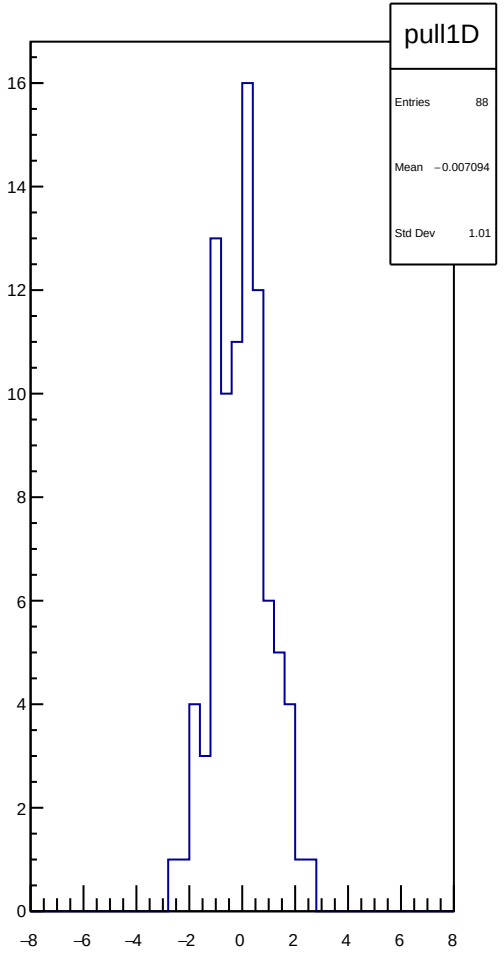

asym_sam3_correction_rms vs run
χ² / ndf 3231 / 87
p0 2666 ± 2.051
3100
3000
2900
2800
2700
2600
2500
2400

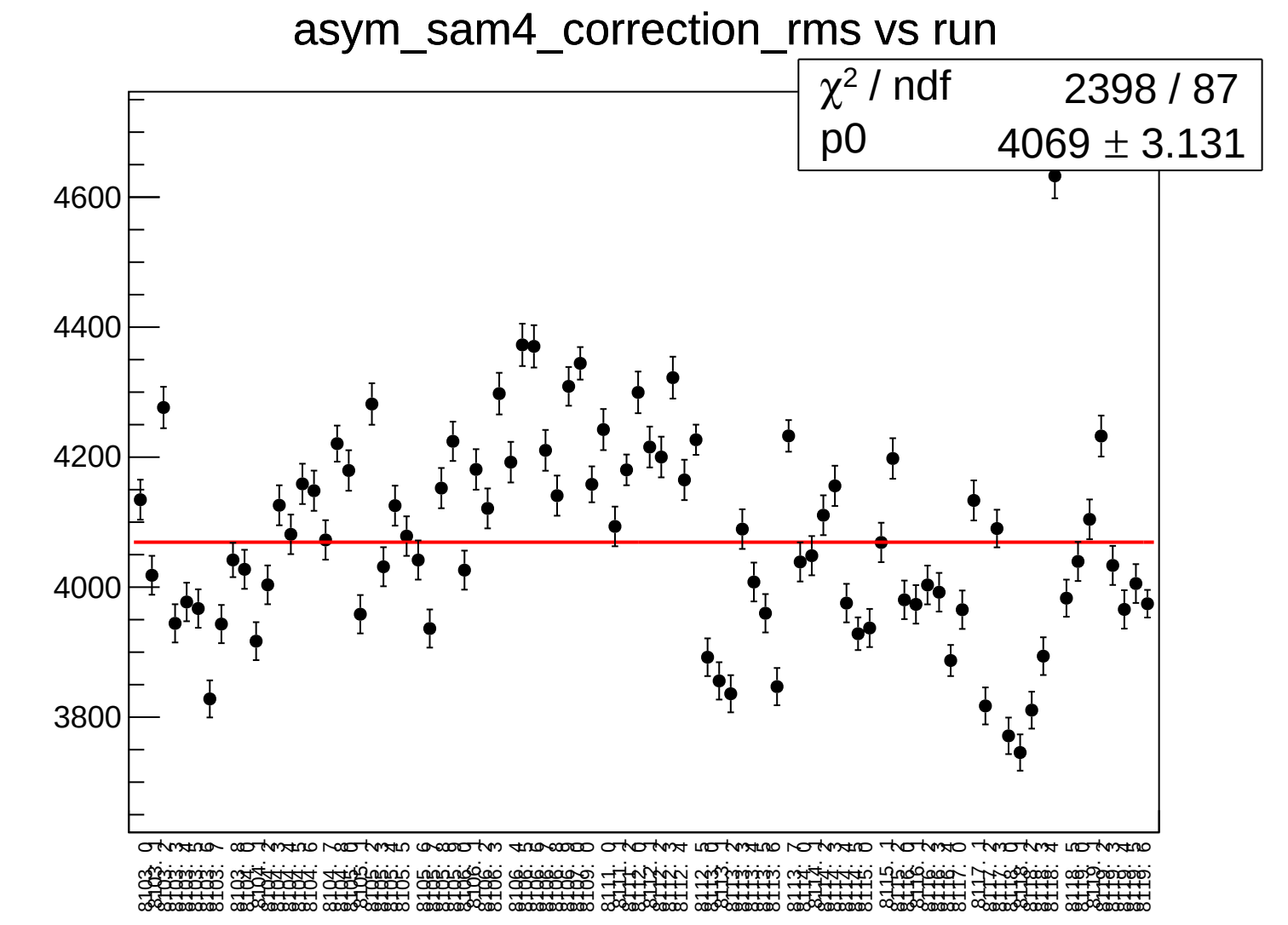

reg_asym_sam4_mean vs run
χ² / ndf 123.3 / 87
p0 88.91 ± 311.9
10000
5000
0
−5000
−10000
pull
Entries 88
Mean −334.4
Std Dev 385.3
2
1
0
−1
−2
−3

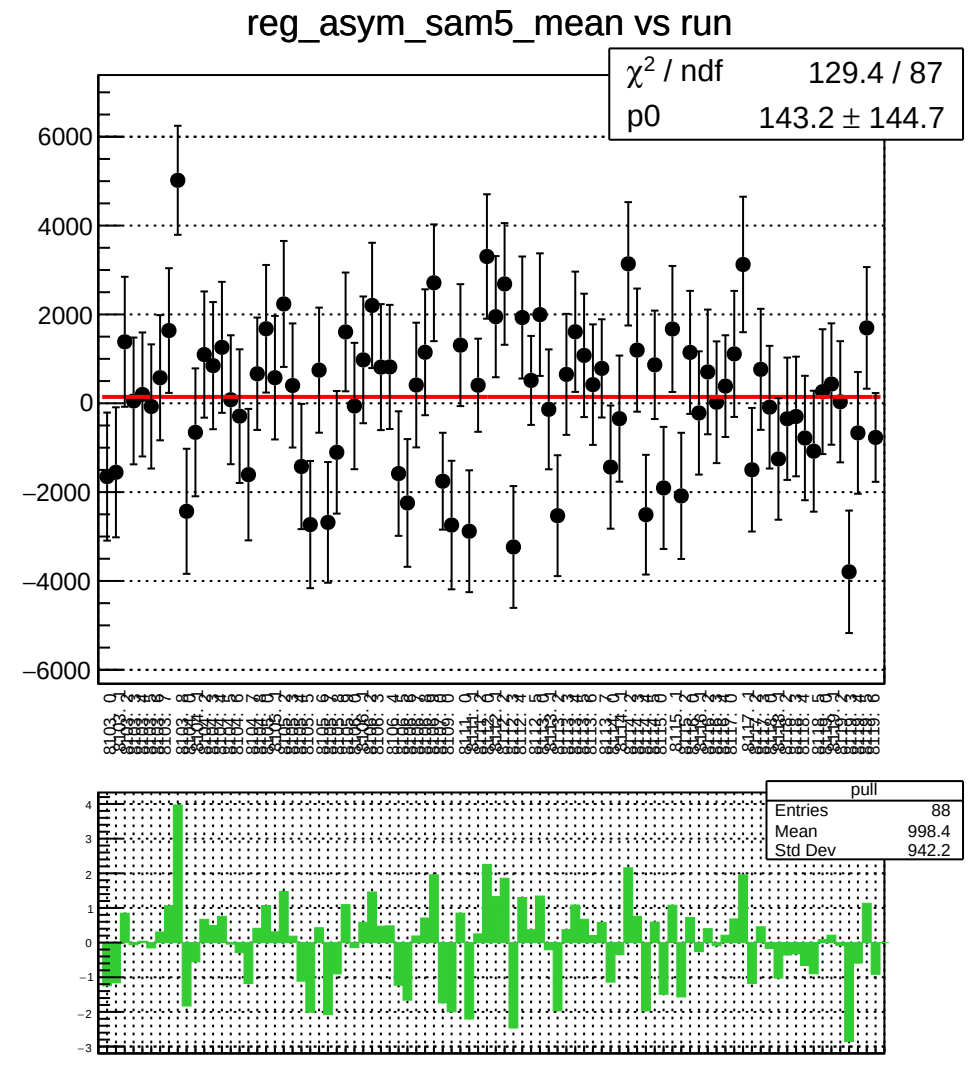

pull1D
Entries 88
Mean 0.01063
Std Dev 1.184
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

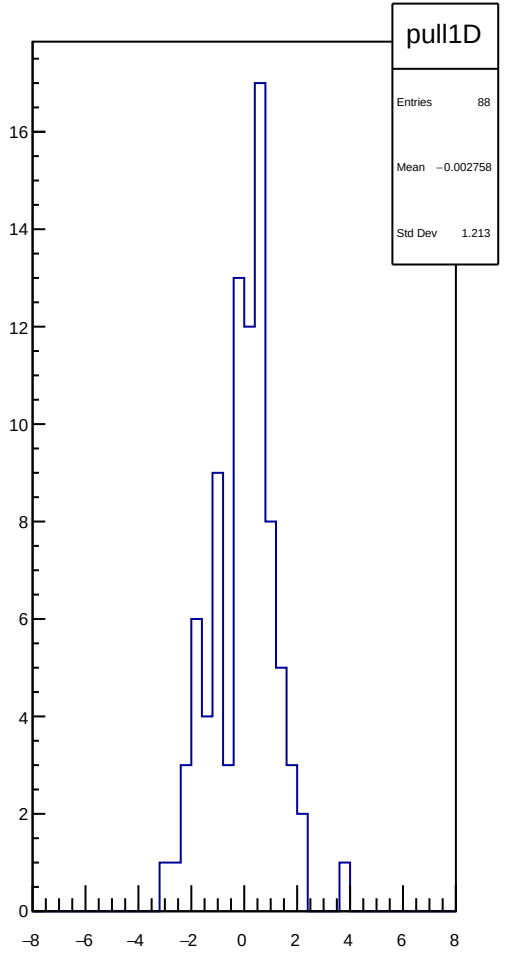

reg_asym_sam4_rms vs run
χ² / ndf 6765 / 87
p0 286.3 ± 0.2205
380
360
340
320
300
280
260

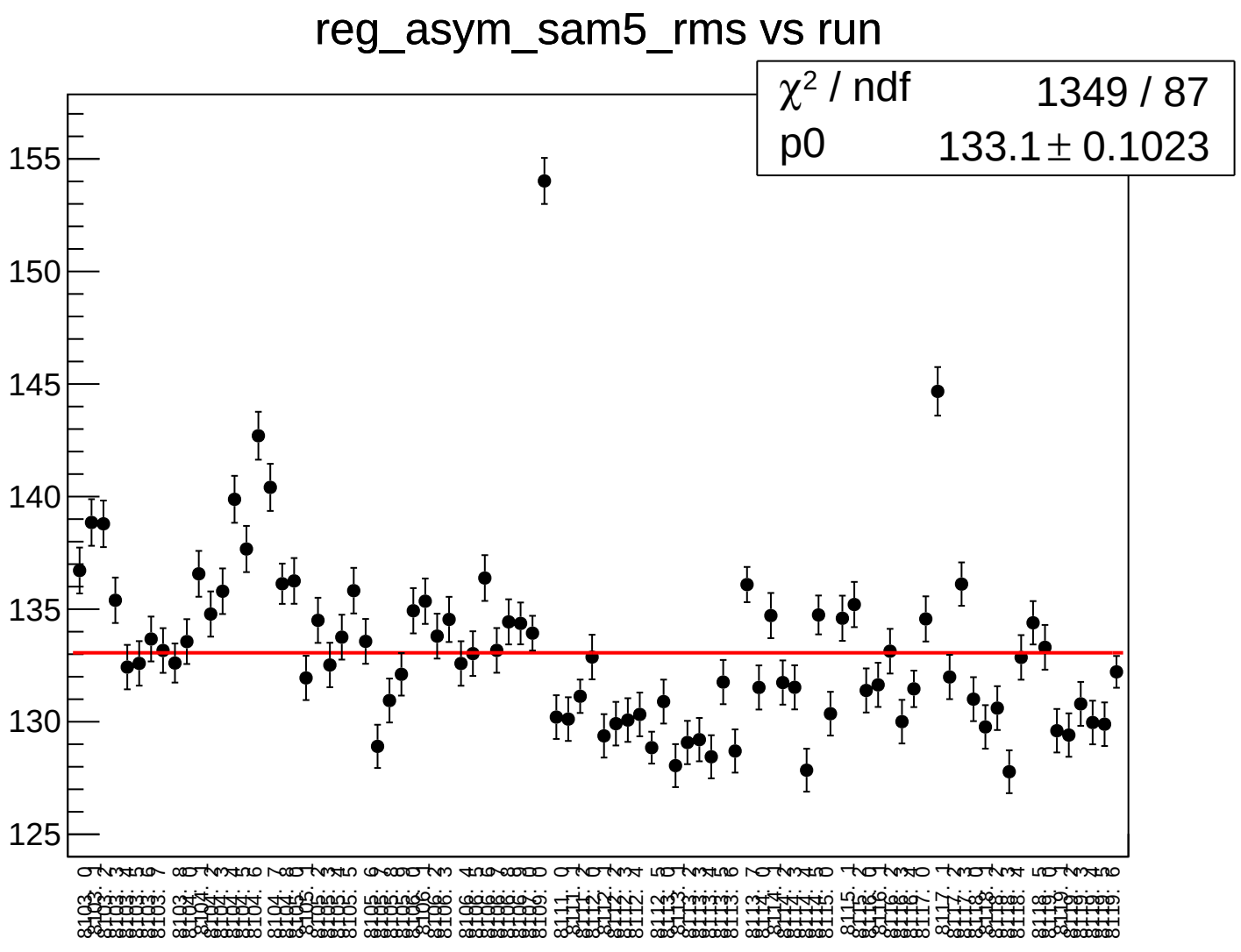

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 89.7 / 87
p0 −8570 ± 4427
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 671.2
Std Dev 620
2
1
0
−1
−2

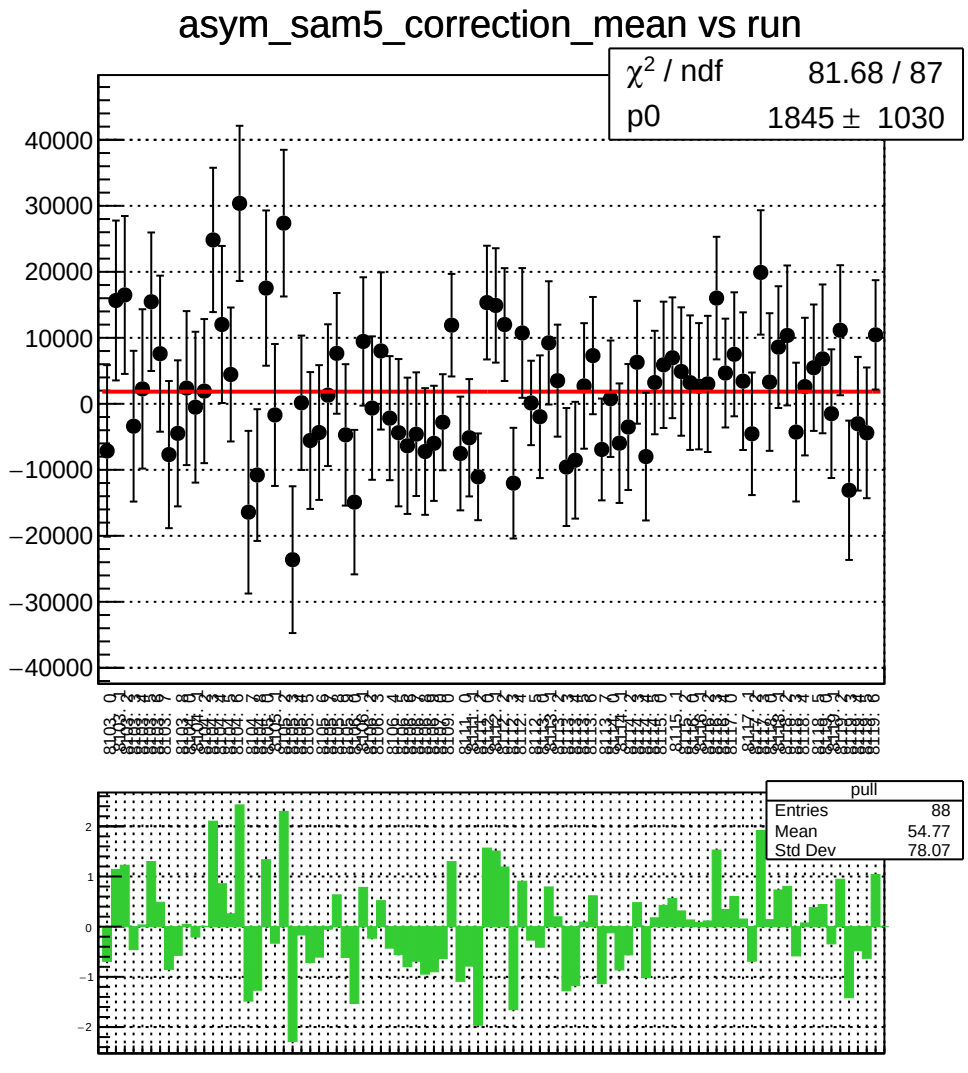

pull1D
Entries 88
Mean −0.007094
Std Dev 1.01
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

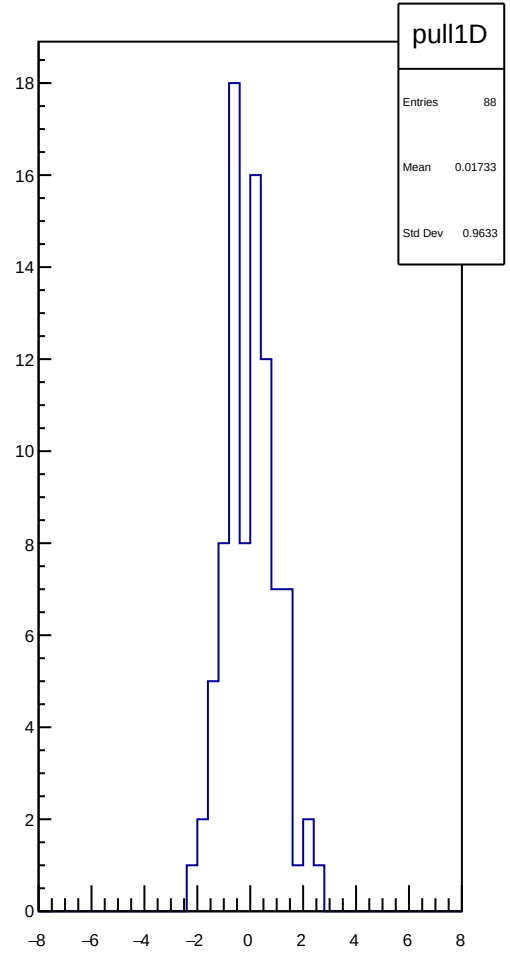

asym_sam4_correction_rms vs run
χ² / ndf 2398 / 87
p0 4069 ± 3.131
4600
4400
4200
4000
3800

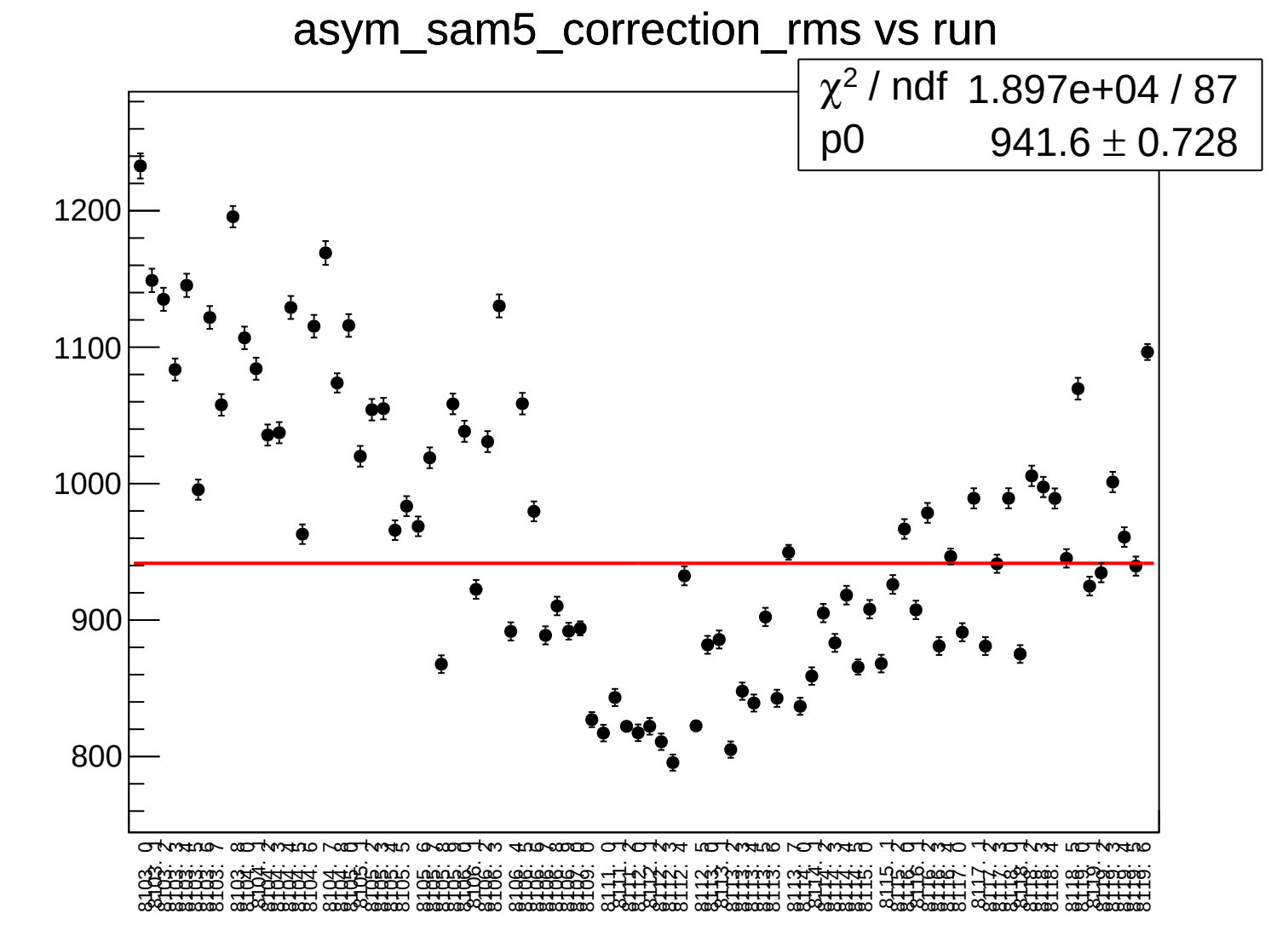

reg_asym_sam5_mean vs run
χ^2 / ndf 129.4 / 87
p0 143.2 ± 144.7
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean 998.4
Std Dev 942.2
4
3
2
1
0
−1
−2
−3

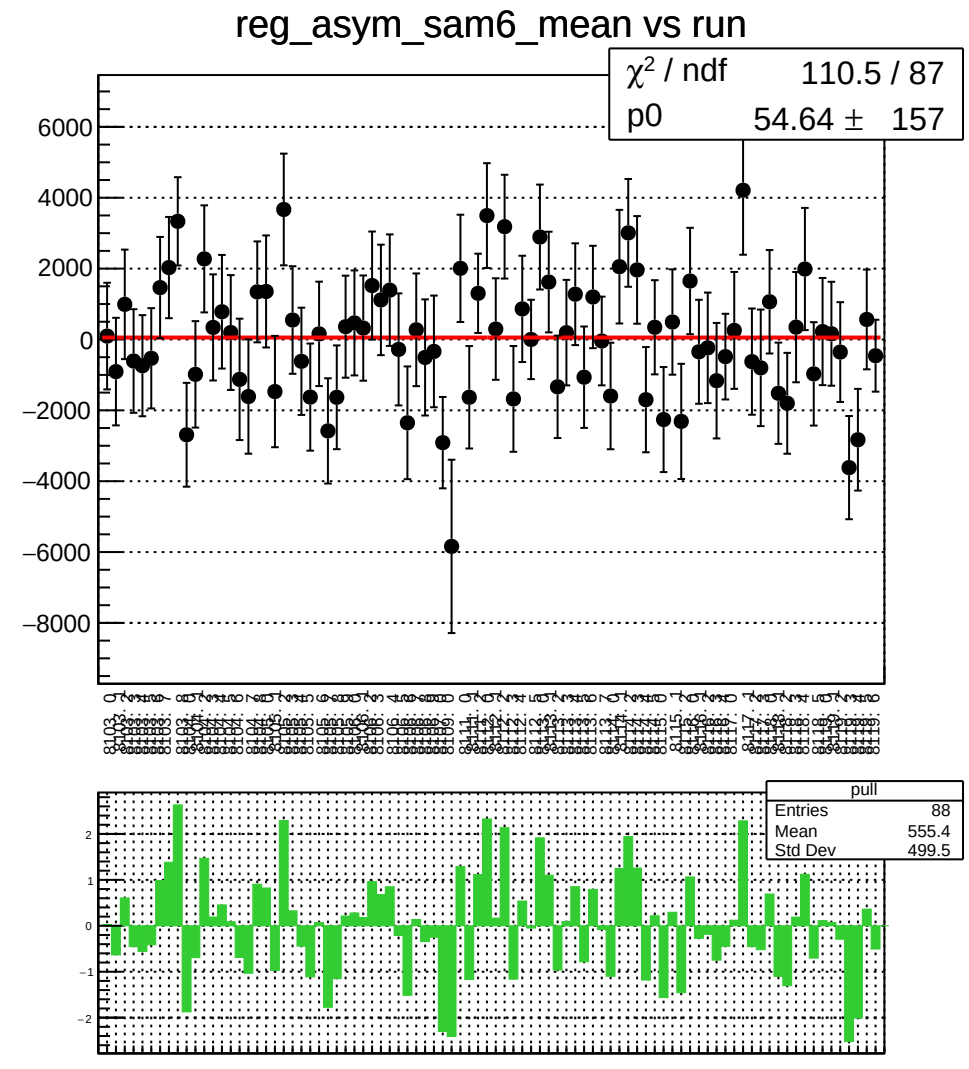

pull1D
Entries 88
Mean −0.002758
Std Dev 1.213
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

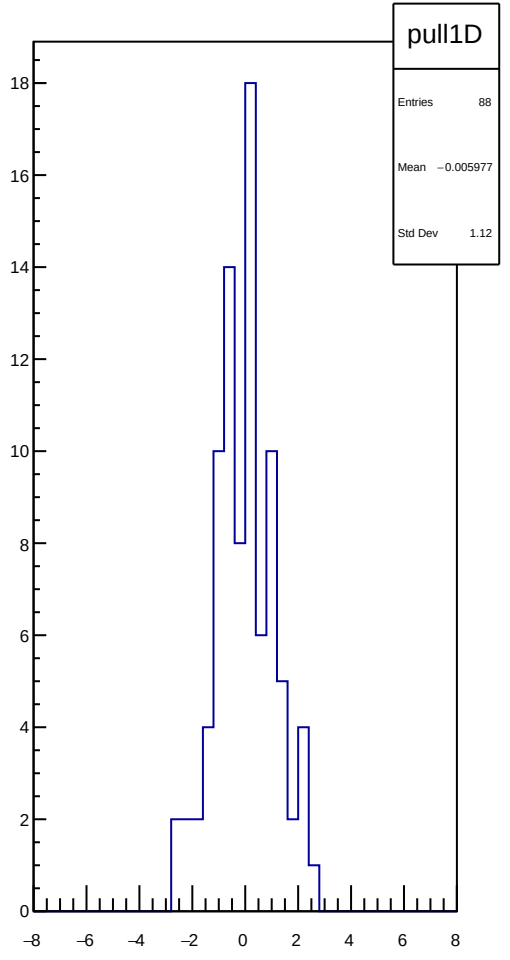

reg_asym_sam5_rms vs run
χ² / ndf 1349 / 87
p0 133.1 ± 0.1023
155
150
145
140
135
130
125

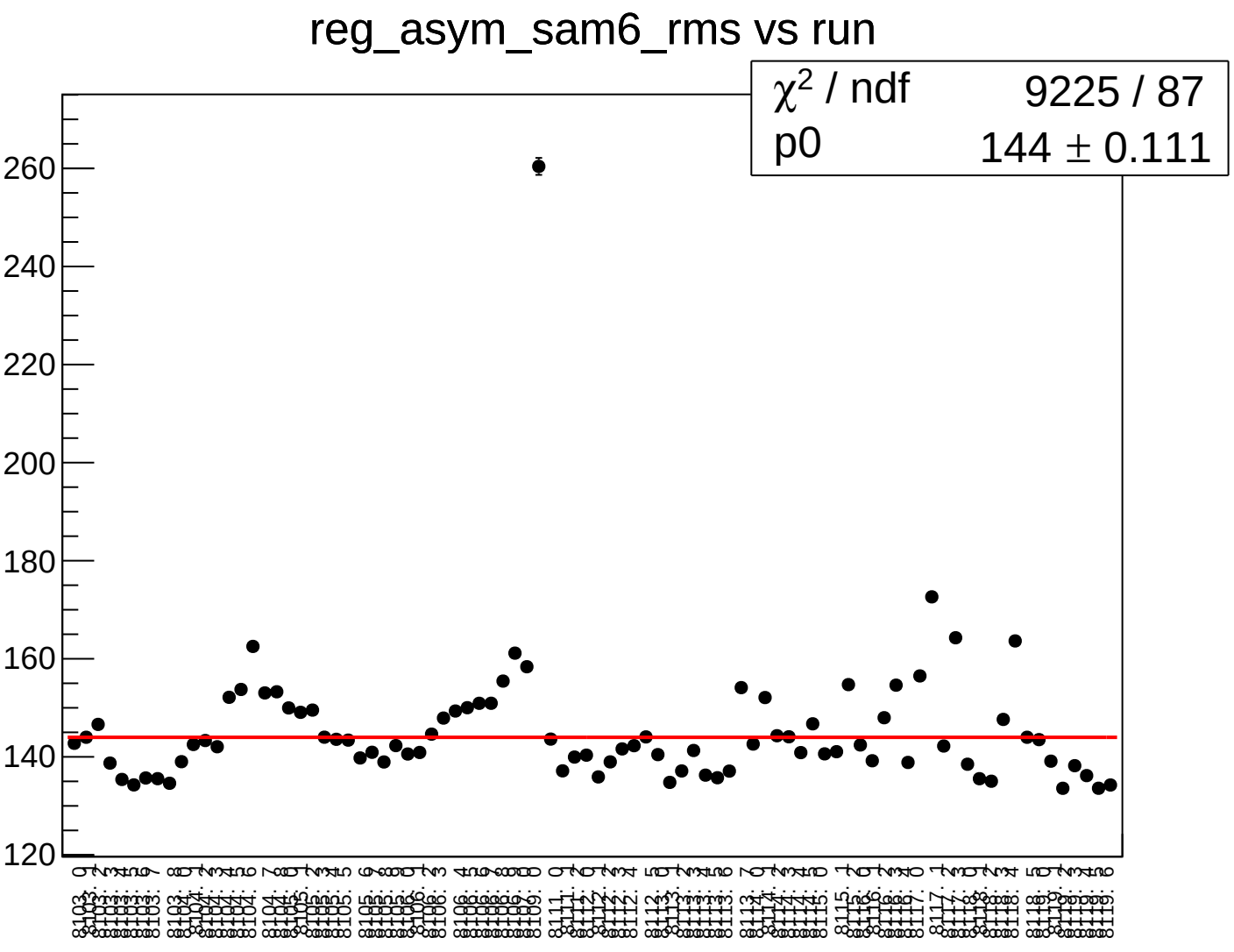

asym_sam5_correction_mean vs run
χ² / ndf 81.68 / 87
p0 1845 ± 1030
pull
Entries 88
Mean 54.77
Std Dev 78.07

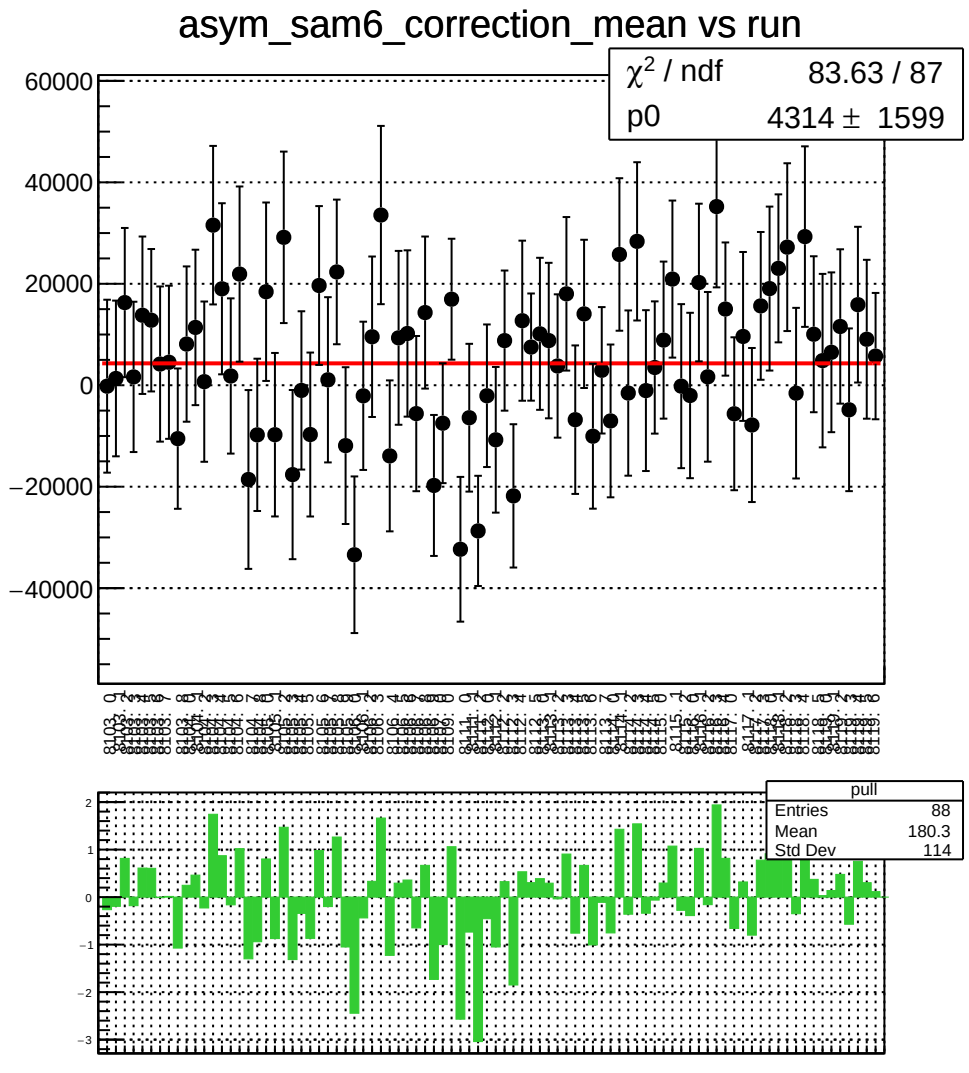

pull1D
Entries 88
Mean 0.01733
Std Dev 0.9633

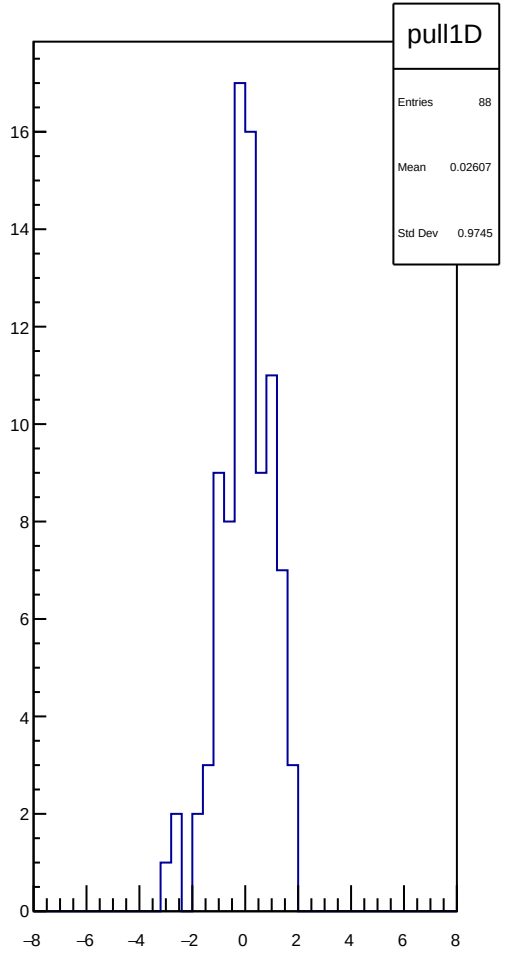

asym_sam5_correction_rms vs run
χ² / ndf 1.897e+04 / 87
p0 941.6 ± 0.728
1200
1100
1000
900
800

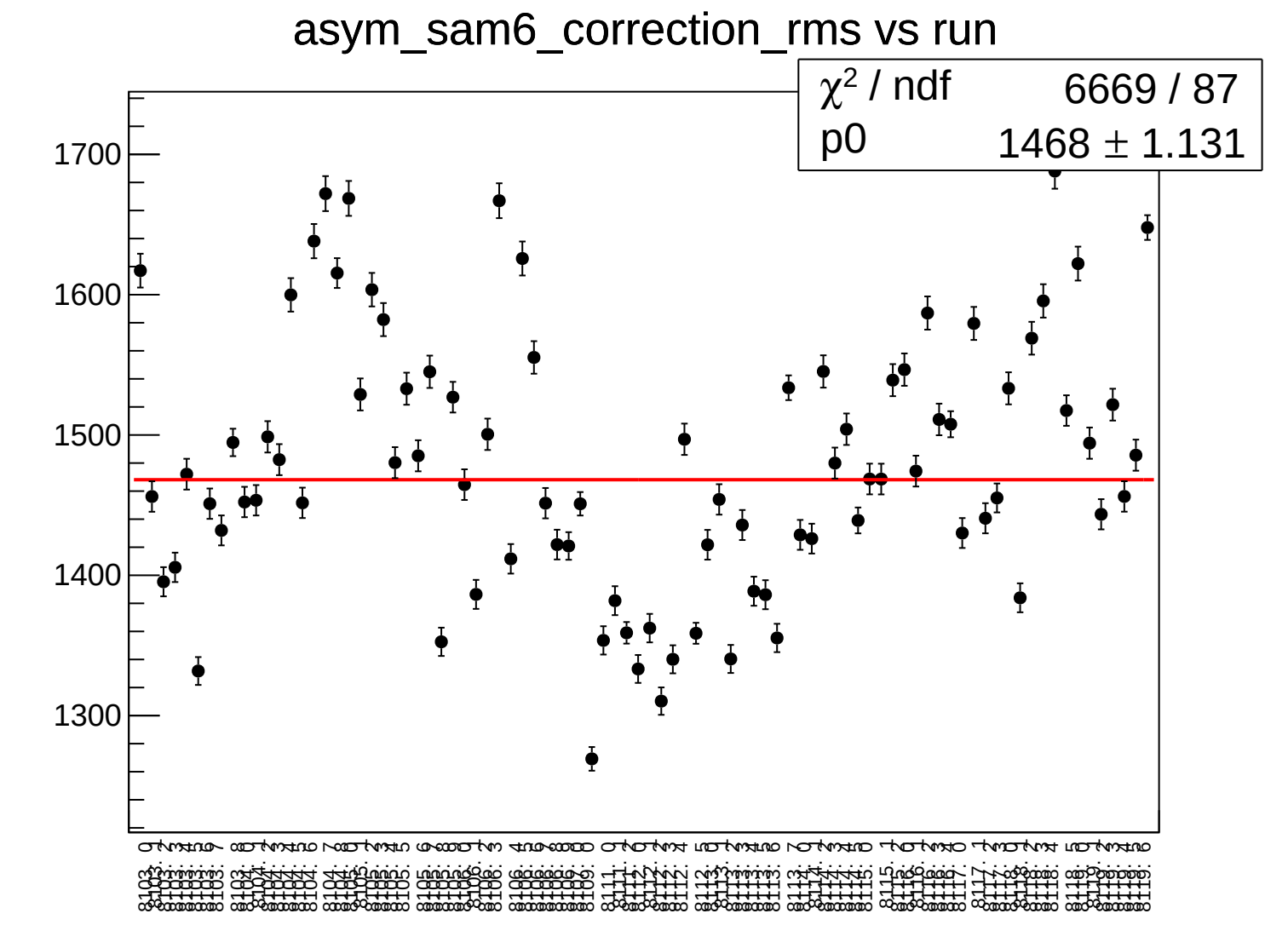

reg_asym_sam6_mean vs run
χ² / ndf 110.5 / 87
p0 54.64 ± 157
pull
Entries 88
Mean 555.4
Std Dev 499.5

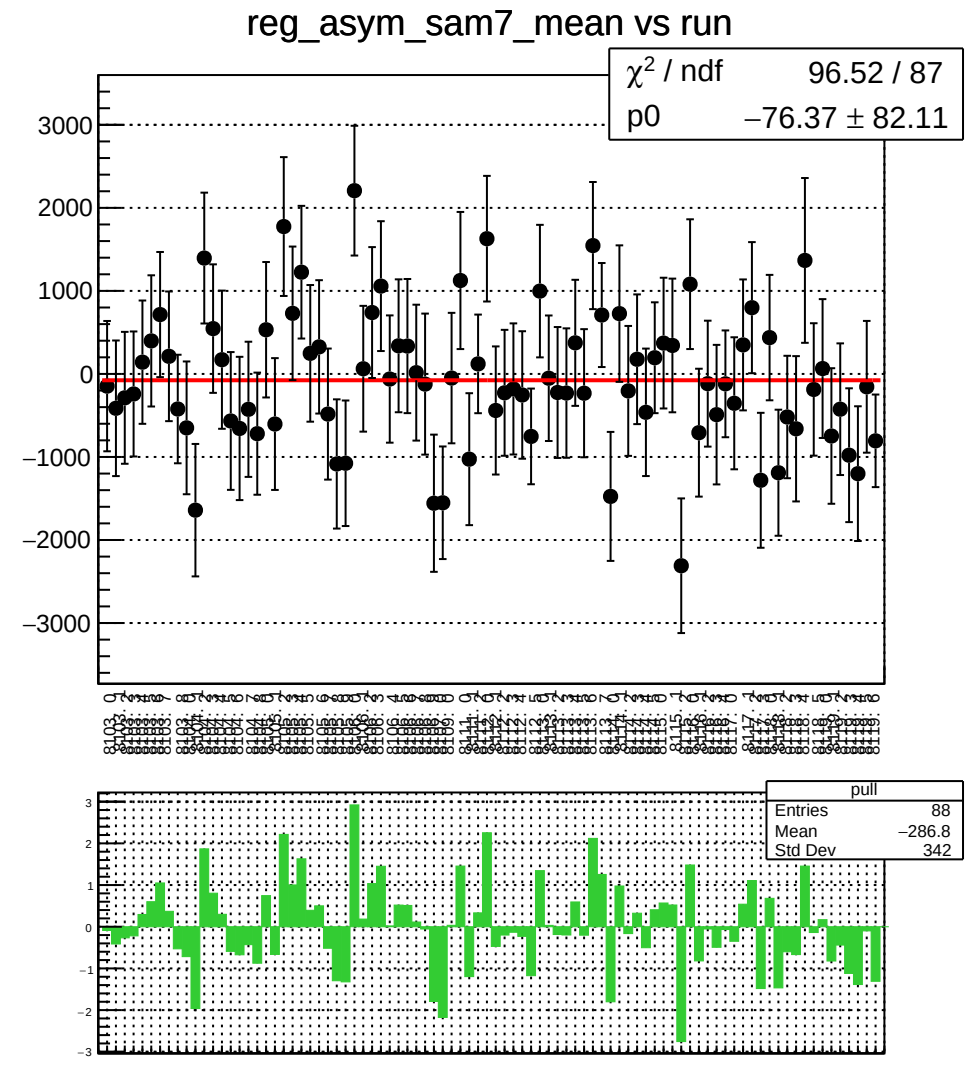

pull1D
Entries 88
Mean −0.005977
Std Dev 1.12

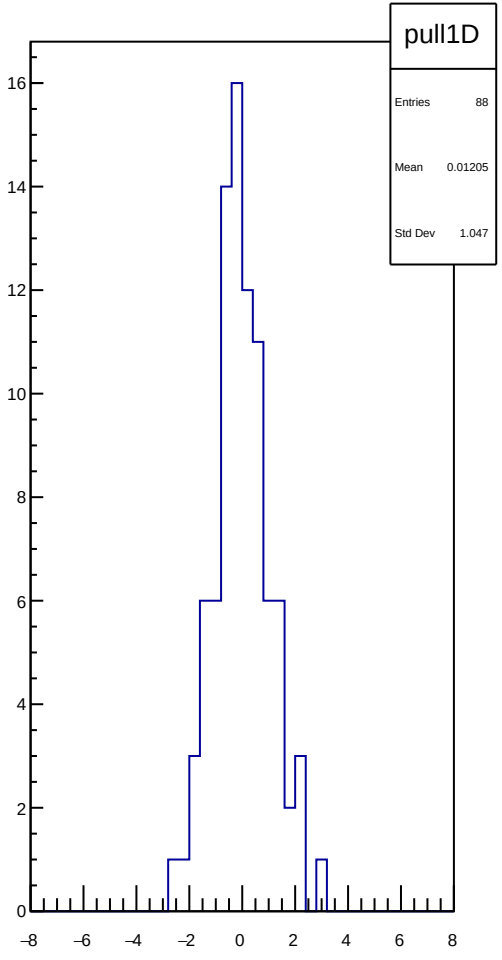

reg_asym_sam6_rms vs run
χ^2 / ndf 9225 / 87
p0 144 ± 0.111
260
240
220
200
180
160
140
120

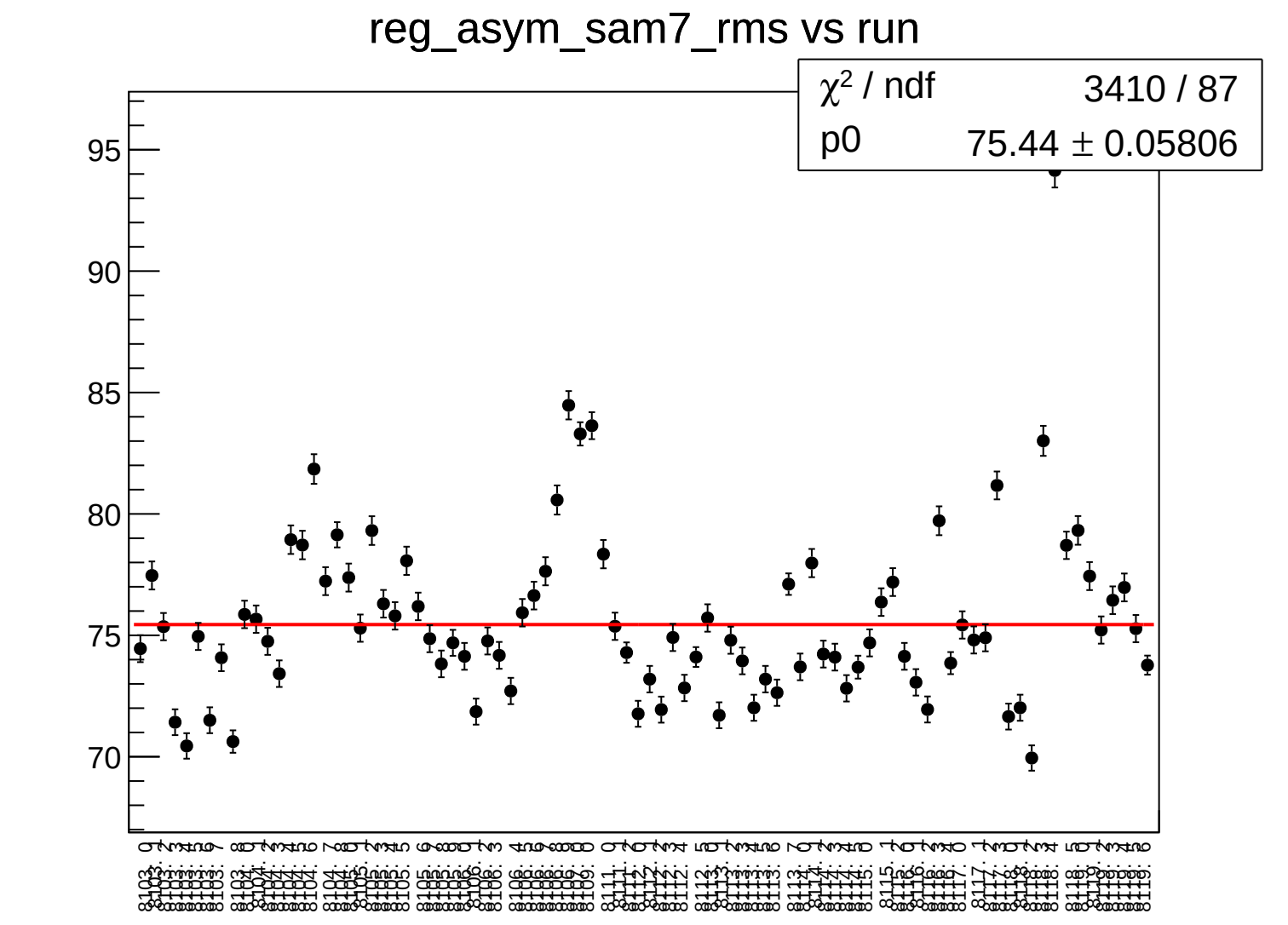

asym_sam6_correction_mean vs run
χ² / ndf 83.63 / 87
p0 4314 ± 1599
60000
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 180.3
Std Dev 114
2
1
0
−1
−2
−3

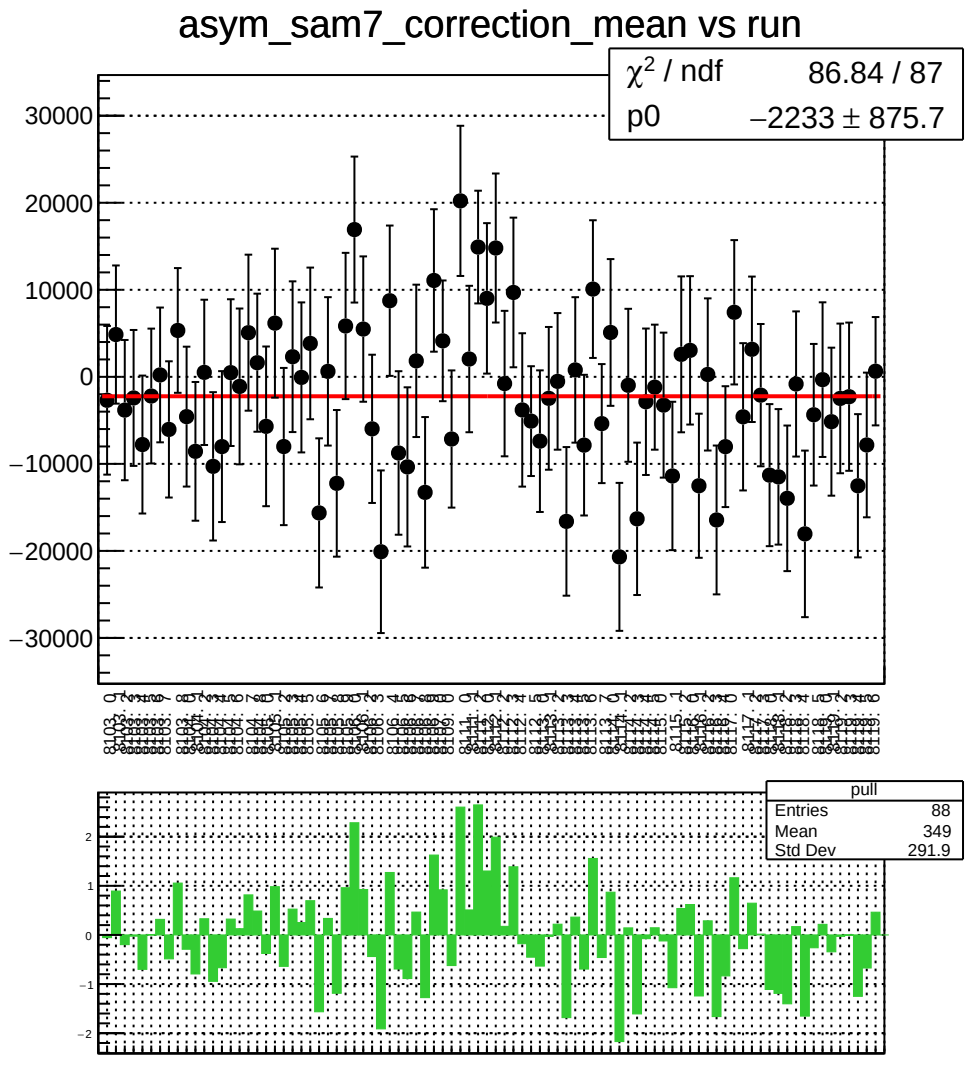

pull1D
Entries 88
Mean 0.02607
Std Dev 0.9745
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

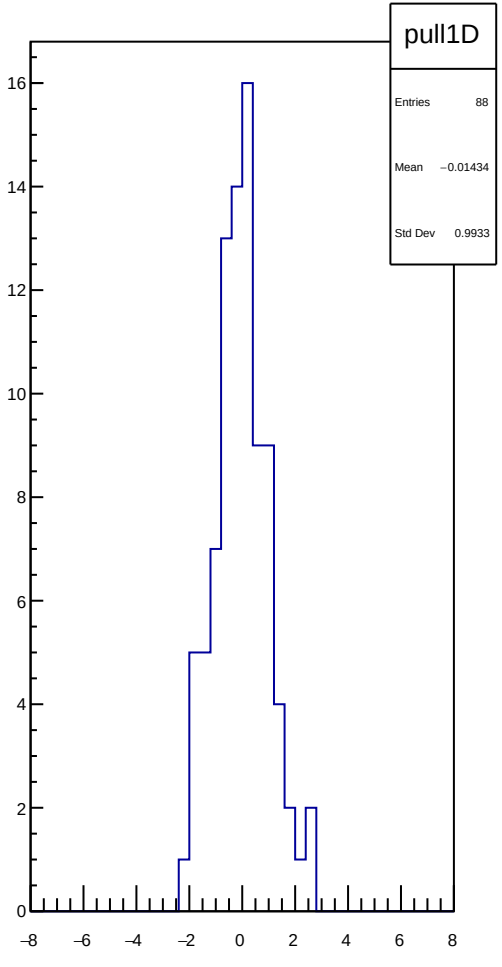

asym_sam6_correction_rms vs run
χ² / ndf 6669 / 87
p0 1468 ± 1.131
1700
1600
1500
1400
1300

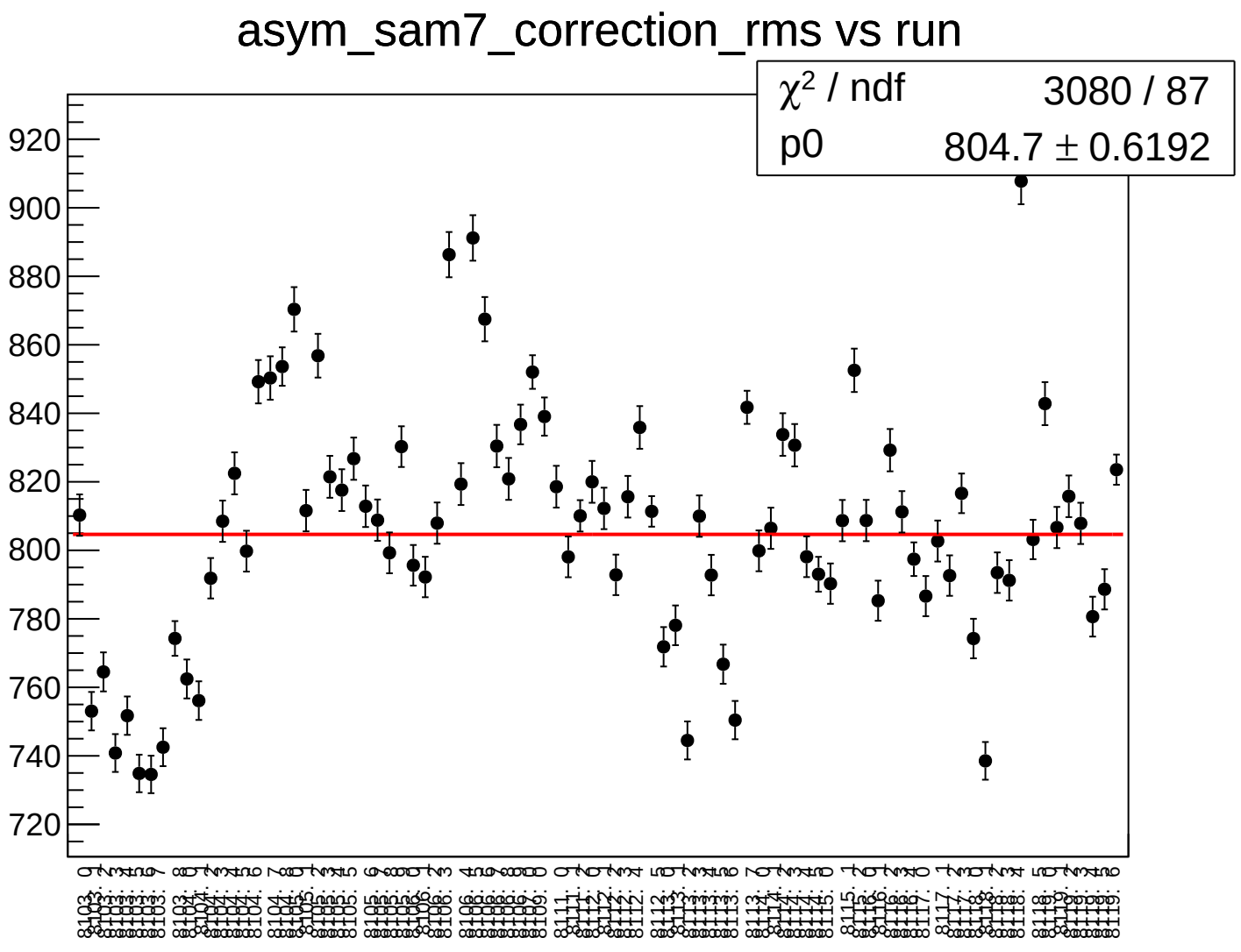

reg_asym_sam7_mean vs run
χ² / ndf 96.52 / 87
p0 −76.37 ± 82.11
pull
Entries 88
Mean −286.8
Std Dev 342

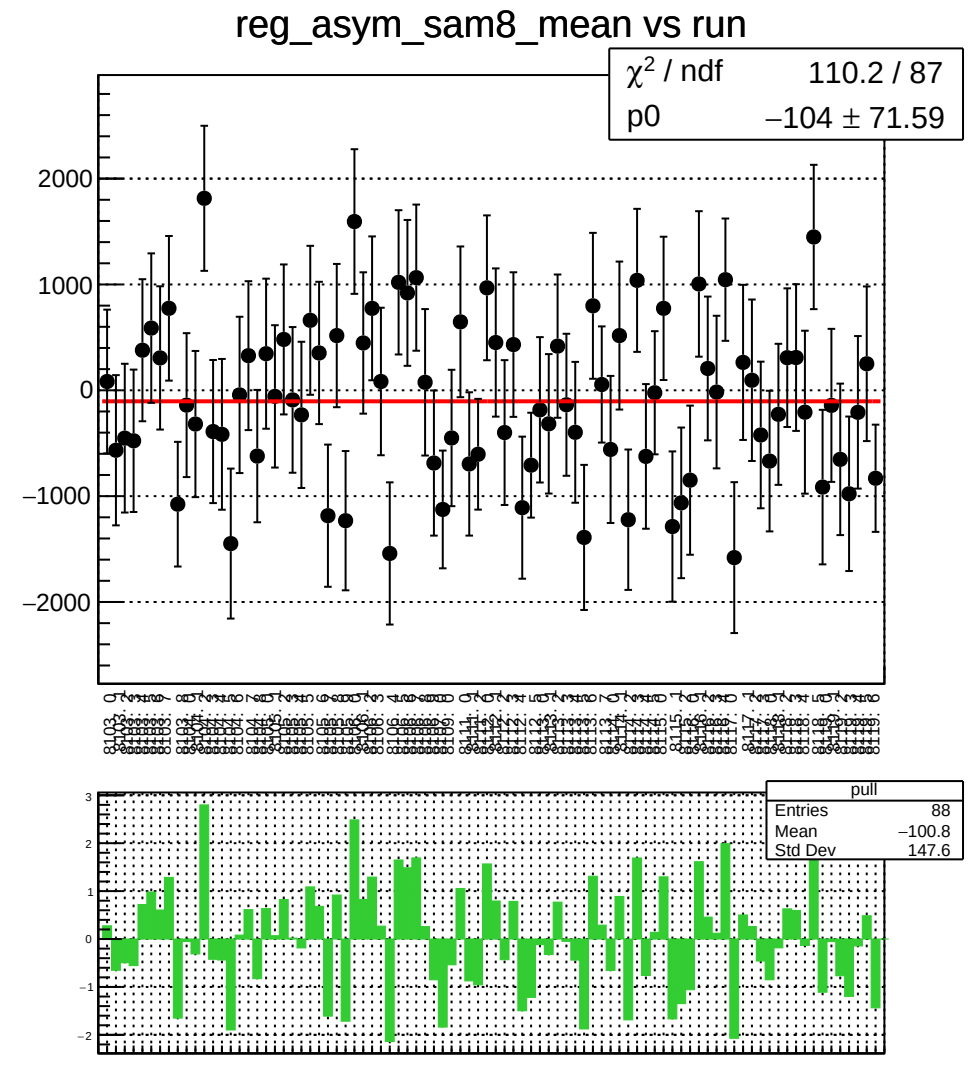

pull1D
Entries 88
Mean 0.01205
Std Dev 1.047

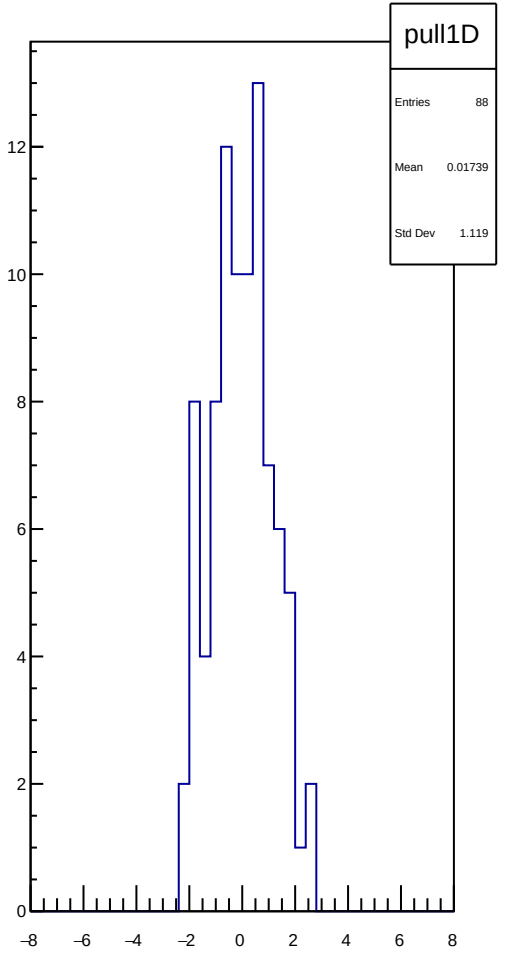

reg_asym_sam7_rms vs run
χ^2 / ndf 3410 / 87
p0 75.44 ± 0.05806
95
90
85
80
75
70

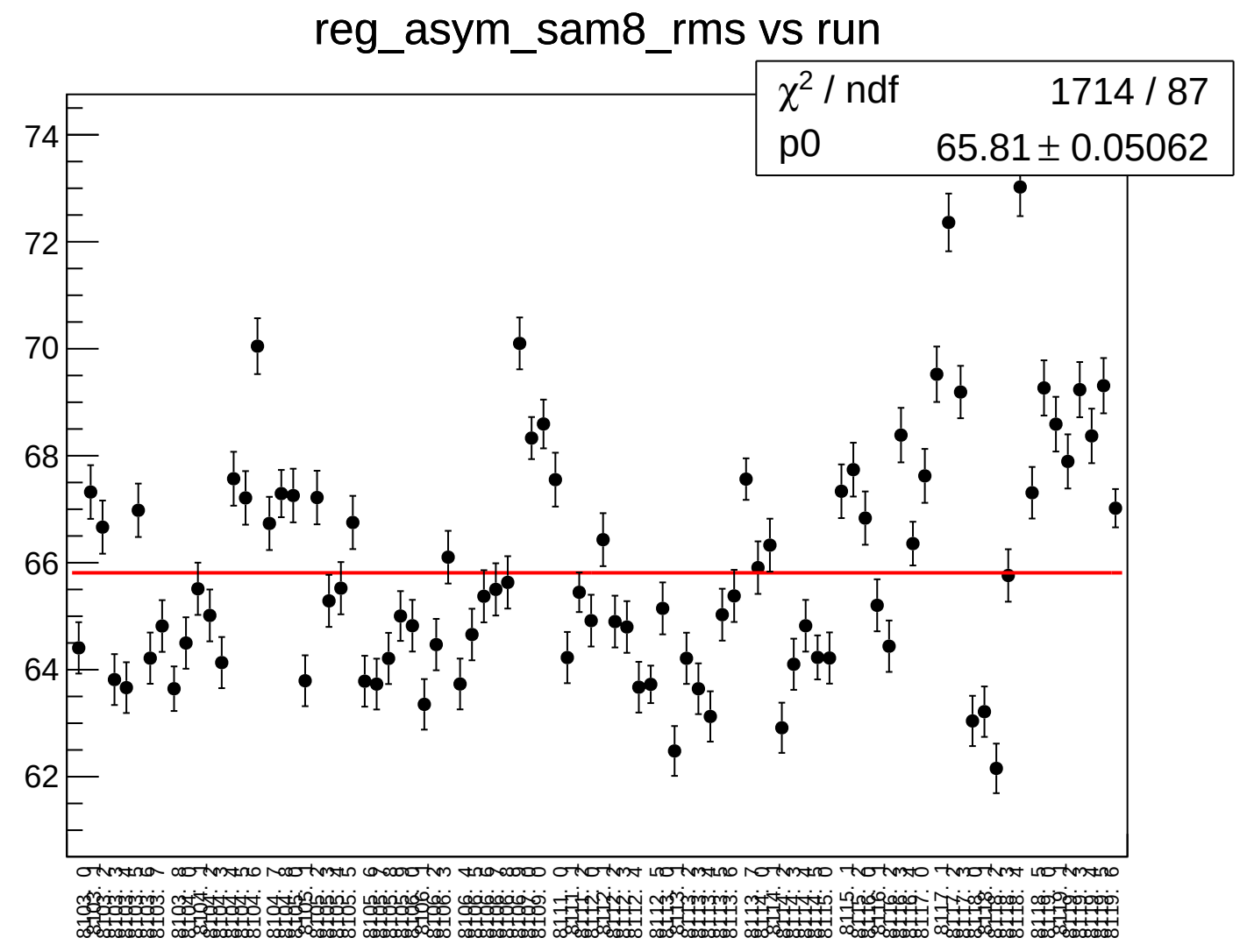

asym_sam7_correction_mean vs run
χ² / ndf 86.84 / 87
p0 −2233 ± 875.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 349
Std Dev 291.9
2
1
0
−1
−2

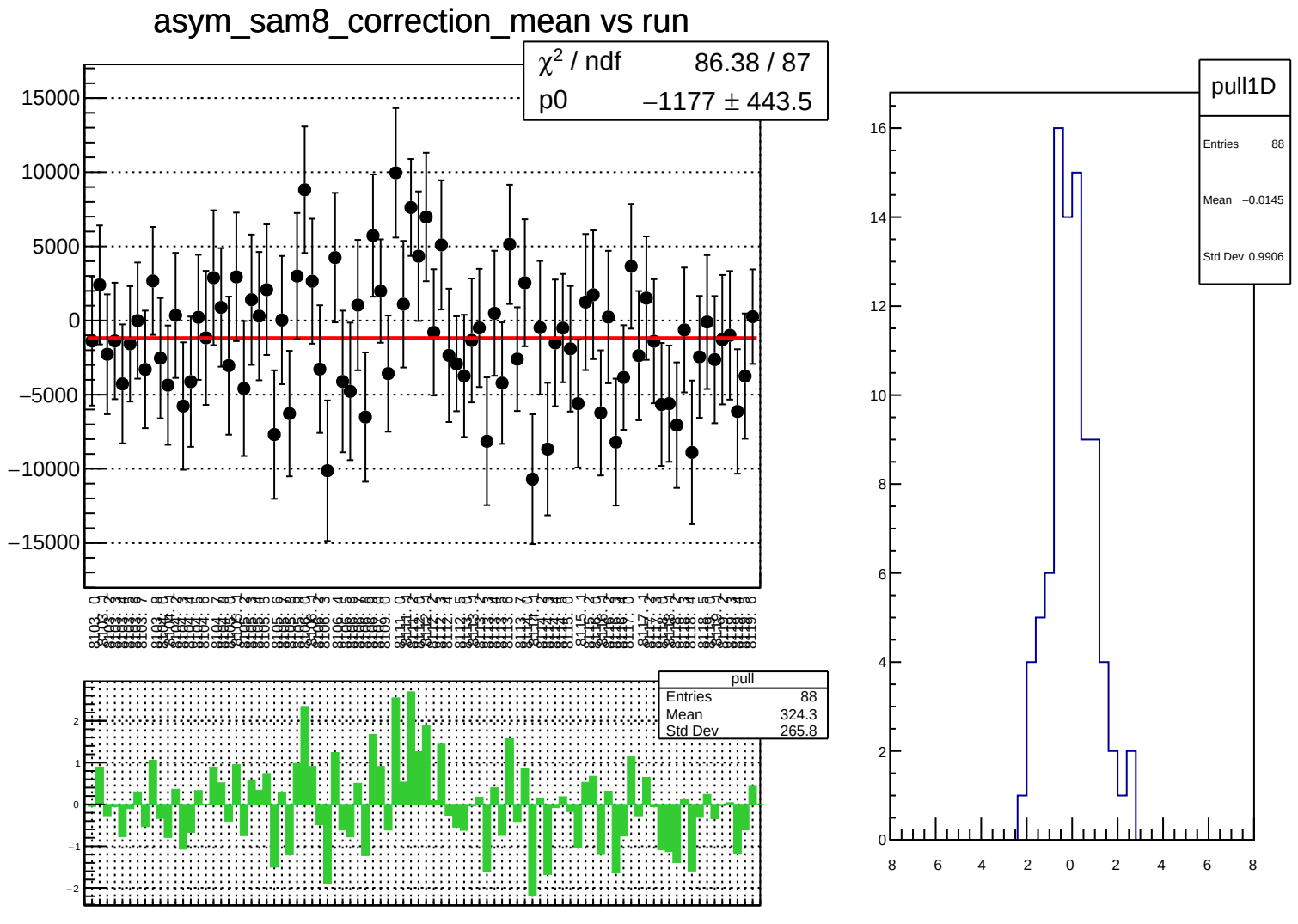

pull1D
Entries 88
Mean −0.01434
Std Dev 0.9933
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

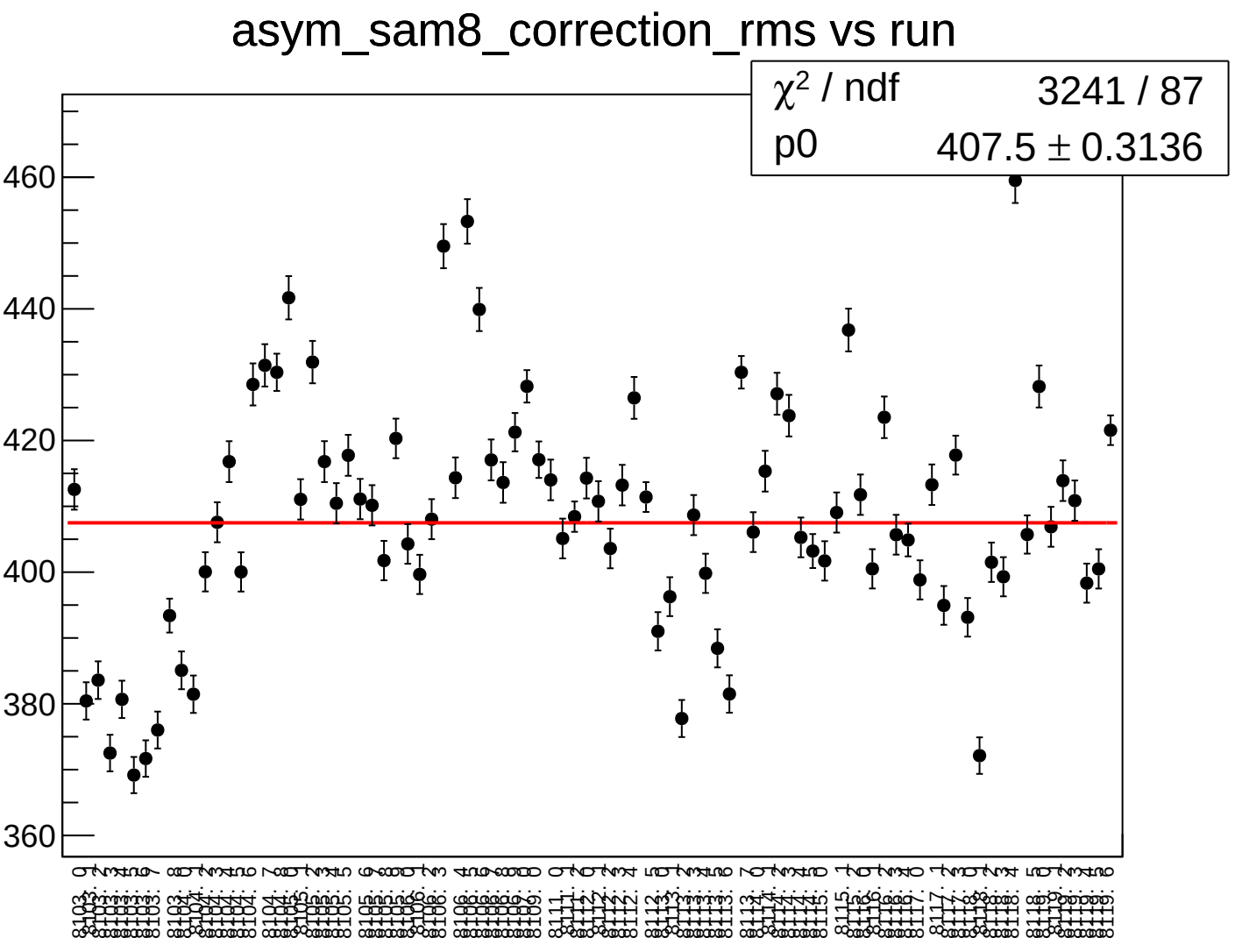

asym_sam7_correction_rms vs run
χ² / ndf 3080 / 87
p0 804.7 ± 0.6192
920
900
880
860
840
820
800
780
760
740
720

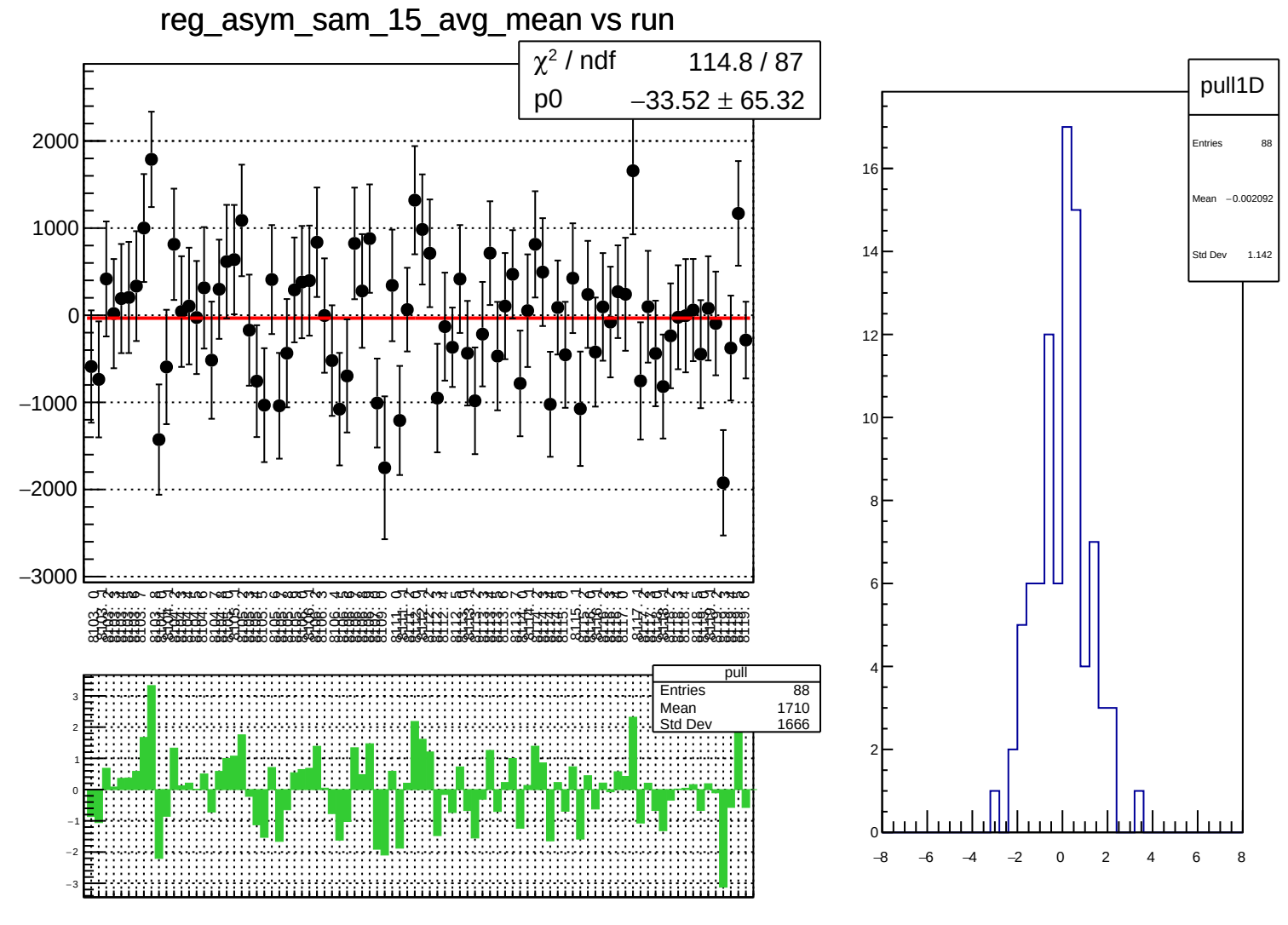

reg_asym_sam8_mean vs run
χ² / ndf 110.2 / 87
p0 −104 ± 71.59
2000
1000
0
−1000
−2000
pull
Entries 88
Mean −100.8
Std Dev 147.6
3
2
1
0
−1
−2

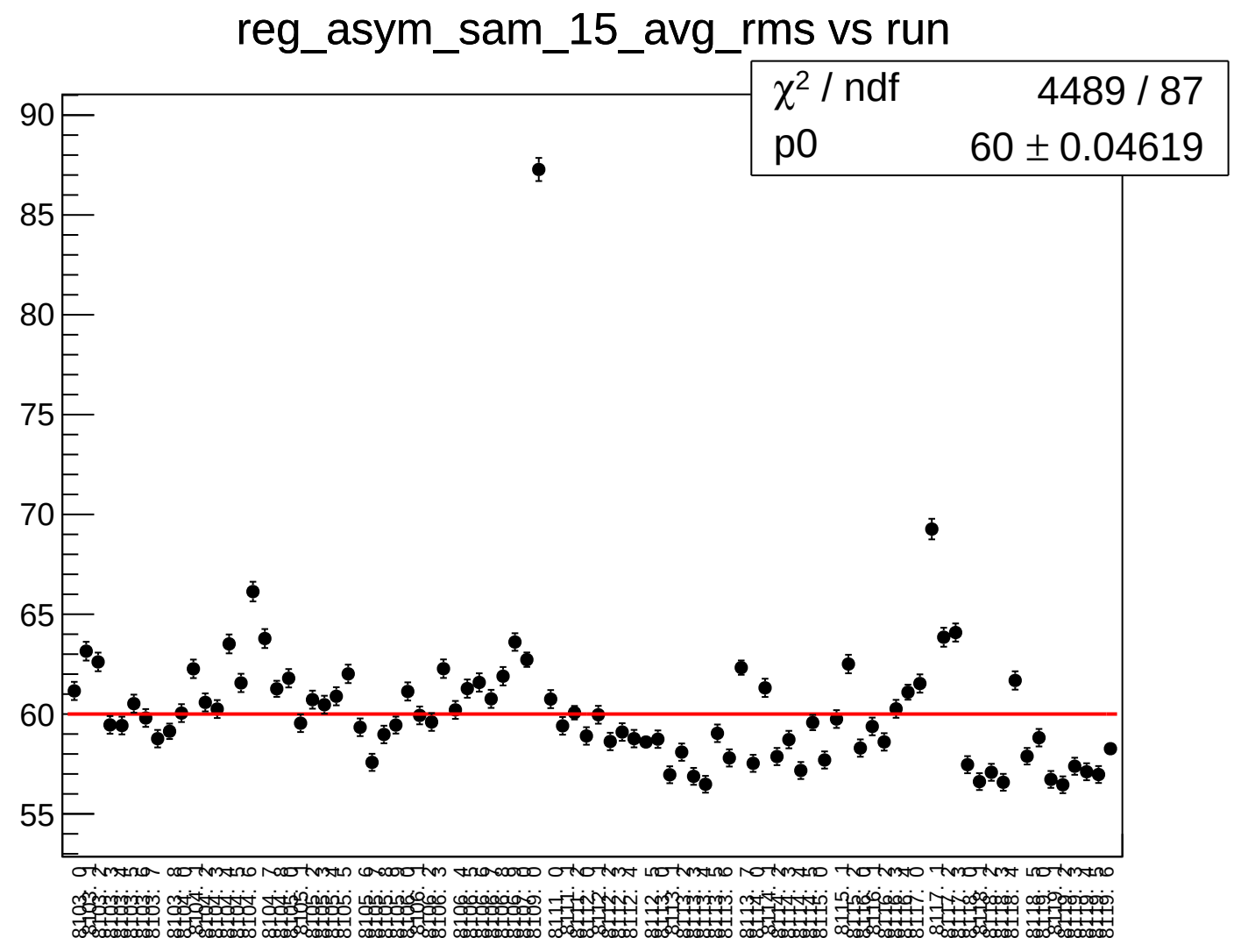

pull1D
Entries 88
Mean 0.01739
Std Dev 1.119
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

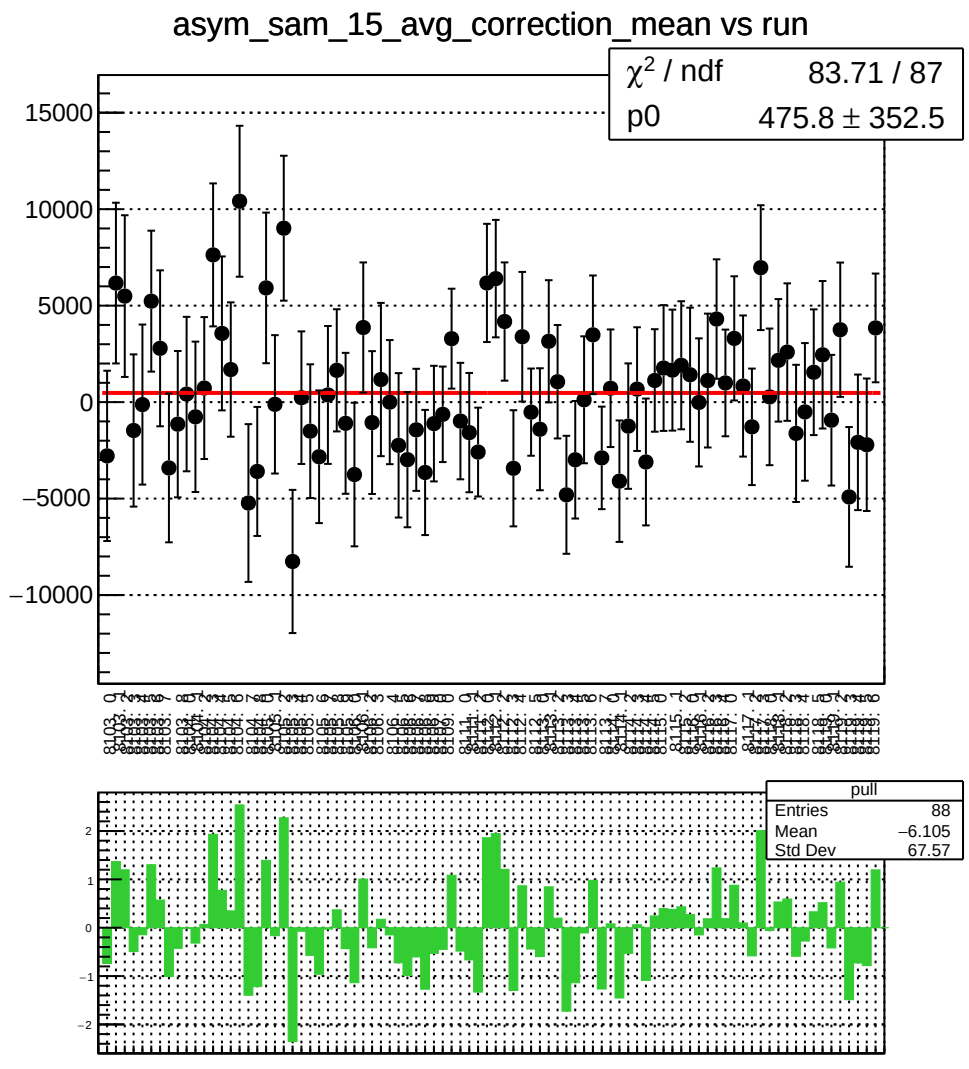

reg_asym_sam8_rms vs run
χ² / ndf 1714 / 87
p0 65.81 ± 0.05062
74
72
70
68
66
64
62

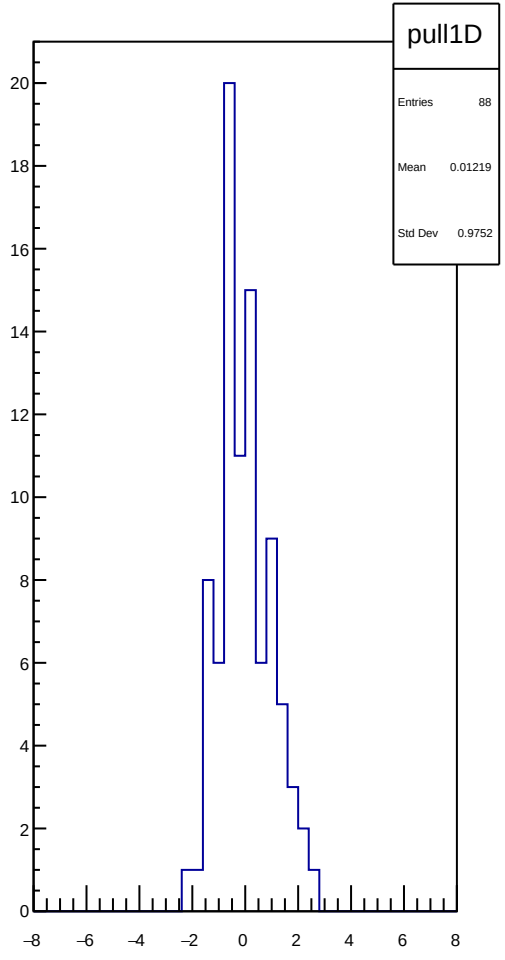

asym_sam8_correction_mean vs run
χ² / ndf 86.38 / 87
p0 −1177 ± 443.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 324.3
Std Dev 265.8
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.0145
Std Dev 0.9906
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

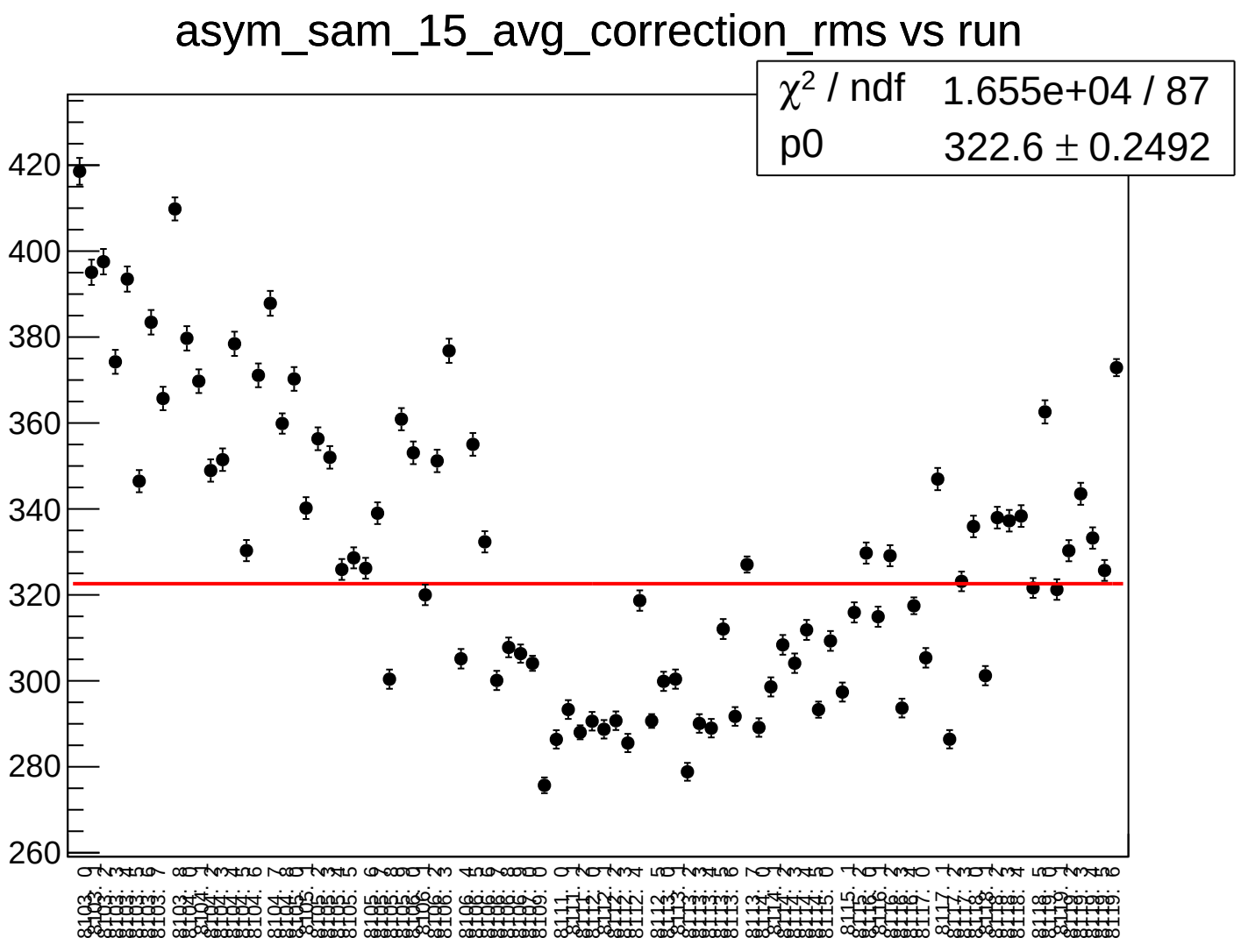

asym_sam8_correction_rms vs run
χ² / ndf 3241 / 87
p0 407.5 ± 0.3136
460
440
420
400
380
360

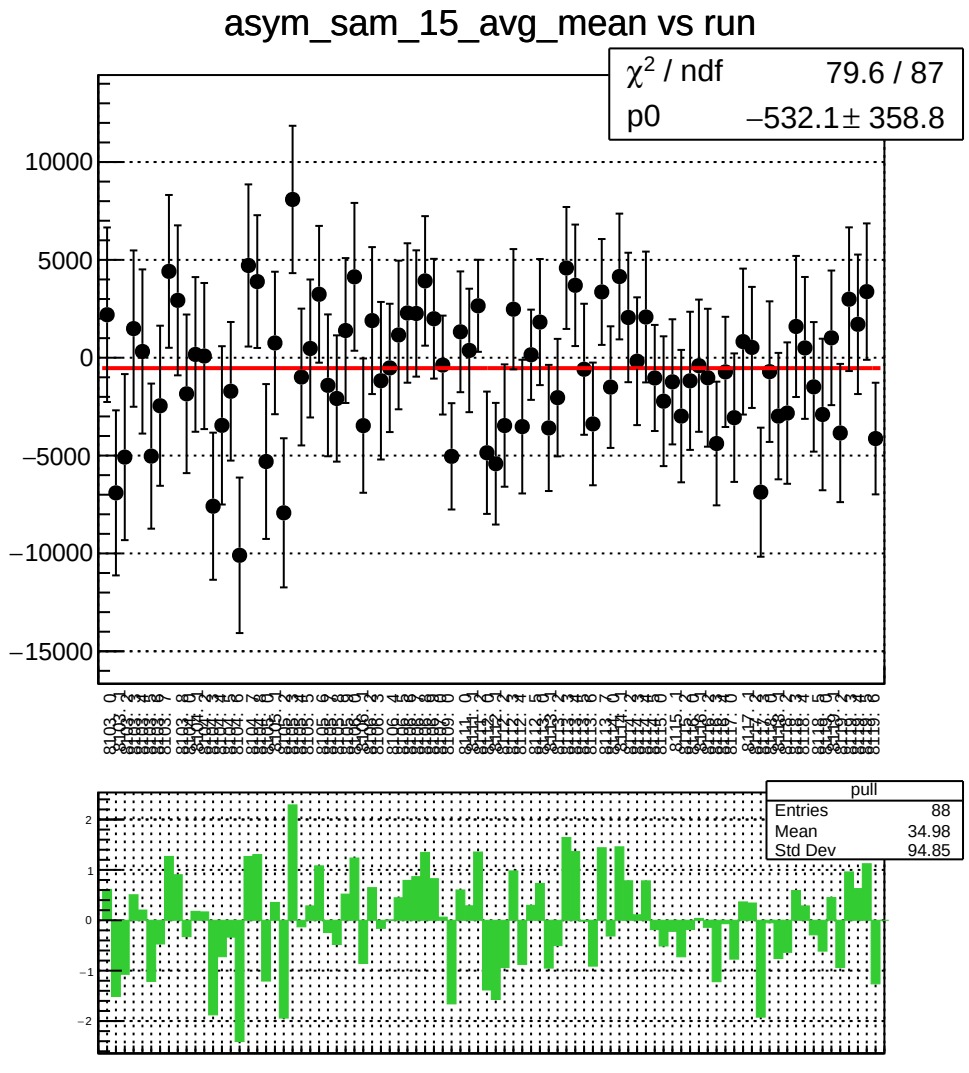

reg_asym_sam_15_avg_mean vs run
χ² / ndf 114.8 / 87
p0 −33.52 ± 65.32
2000
1000
0
−1000
−2000
−3000
pull
Entries 88
Mean 1710
Std Dev 1666
3
2
1
0
−1
−2
−3
pull1D
Entries 88
Mean −0.002092
Std Dev 1.142
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

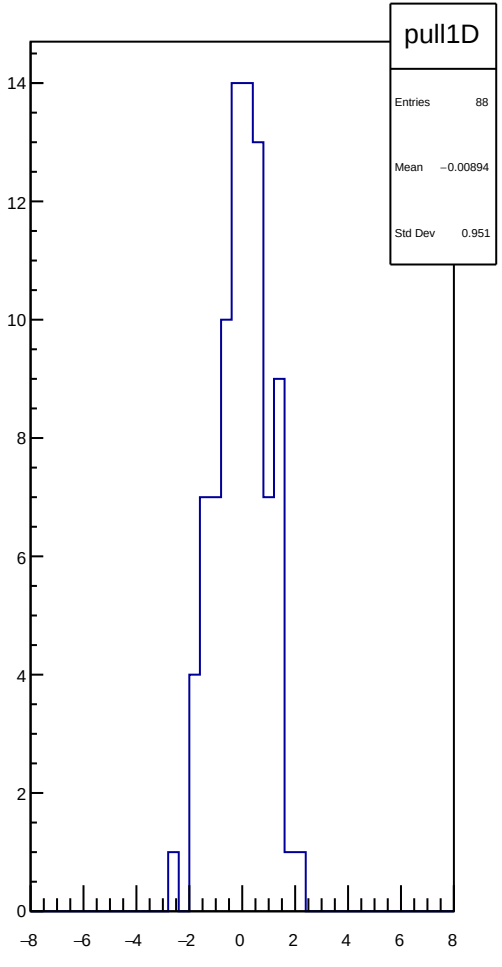

reg_asym_sam_15_avg_rms vs run
χ² / ndf 4489 / 87
p0 60 ± 0.04619
90
85
80
75
70
65
60
55

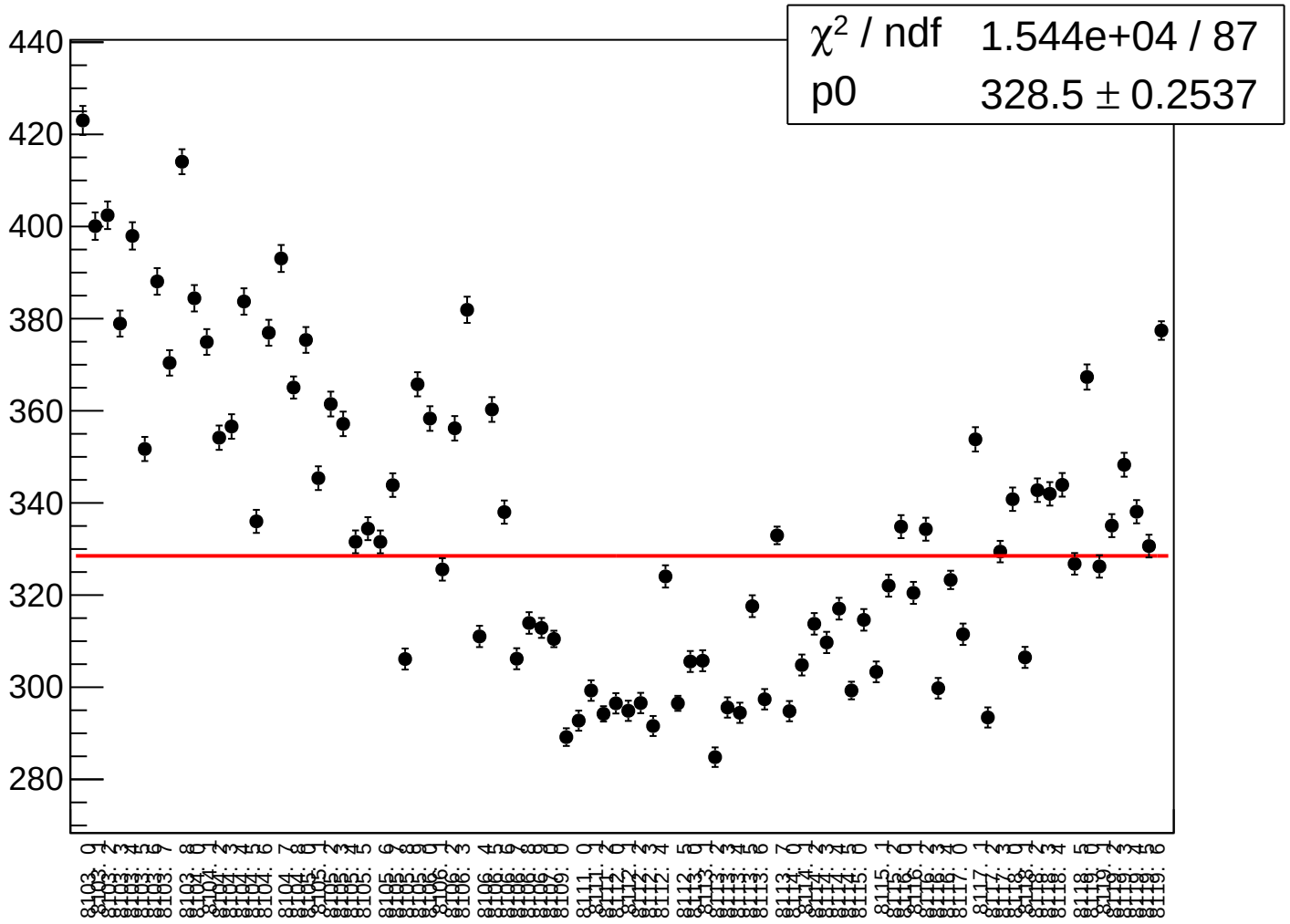

asym_sam_15_avg_correction_mean vs run
χ² / ndf 83.71 / 87
p0 475.8 ± 352.5
15000
10000
5000
0
−5000
−10000
pull
Entries 88
Mean −6.105
Std Dev 67.57
2
1
0
−1
−2

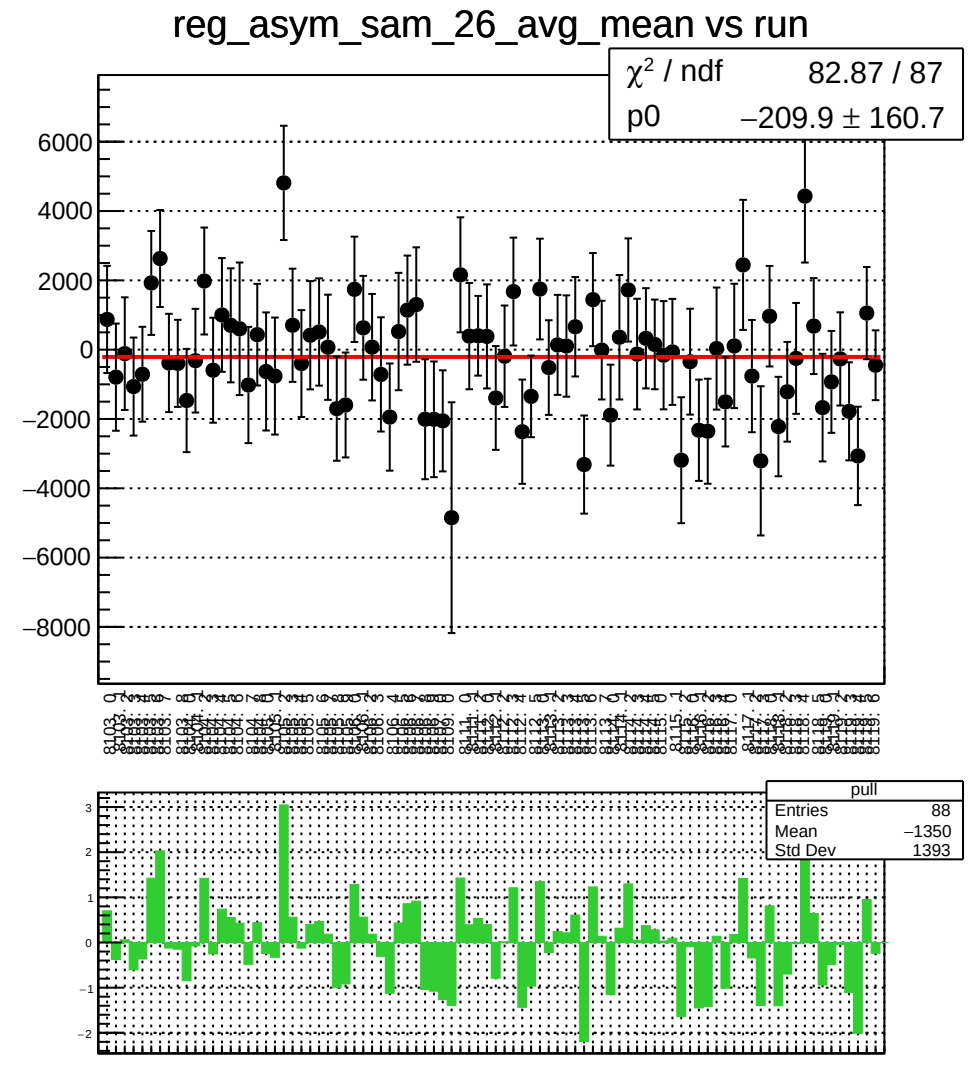

pull1D
Entries 88
Mean 0.01219
Std Dev 0.9752
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

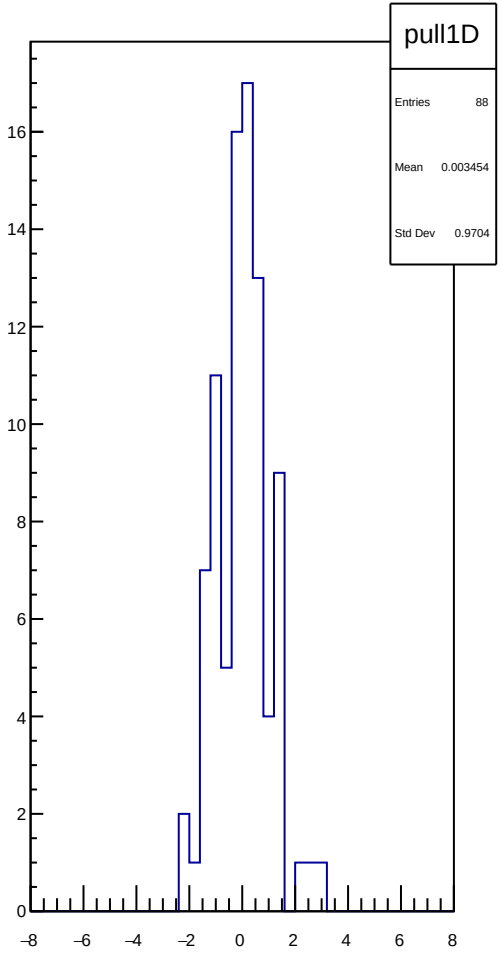

asym_sam_15_avg_correction_rms vs run
χ² / ndf 1.655e+04 / 87
p0 322.6 ± 0.2492
420
400
380
360
340
320
300
280
260

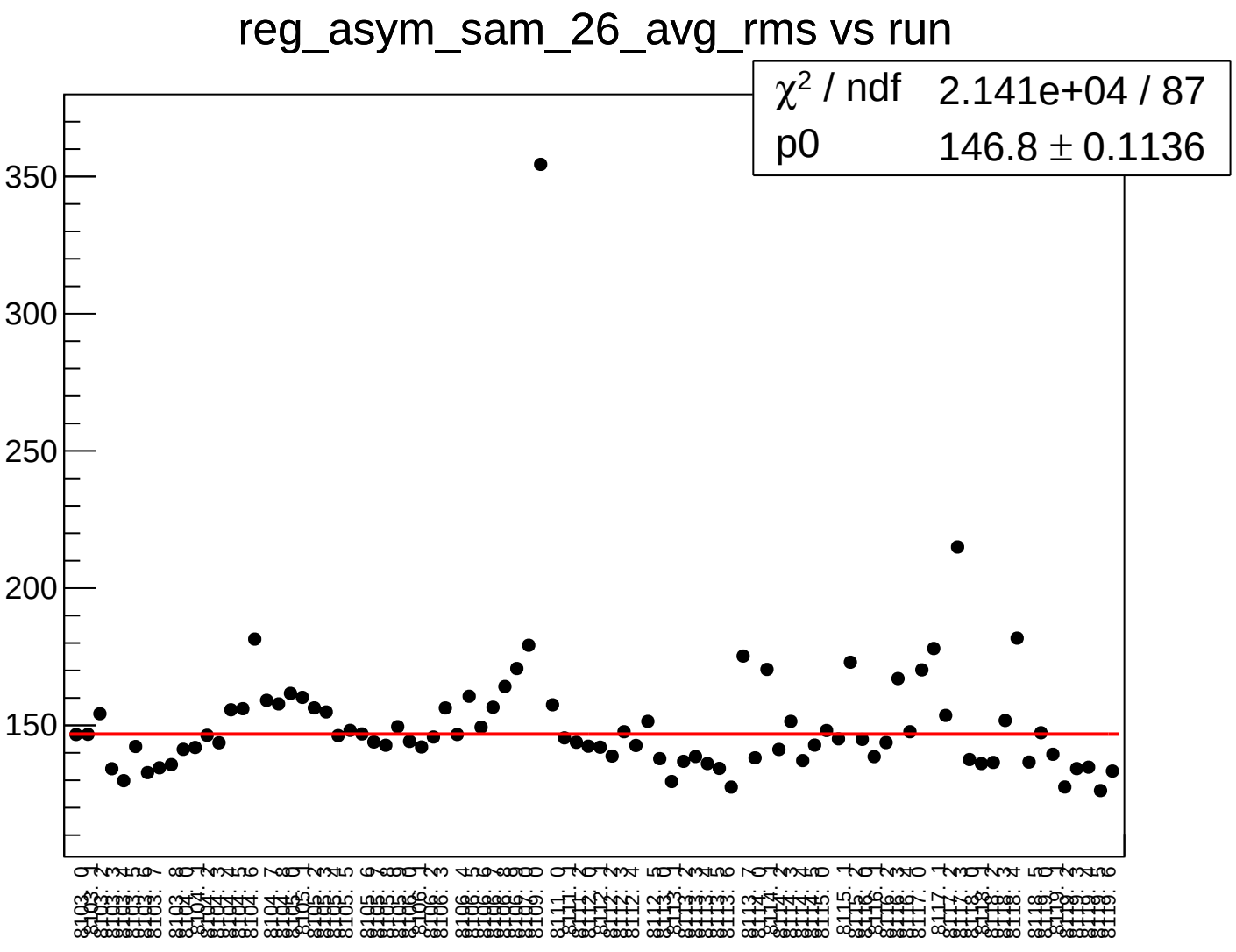

asym_sam_15_avg_mean vs run
χ² / ndf 79.6 / 87
p0 −532.1± 358.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean 34.98
Std Dev 94.85
2
1
0
−1
−2

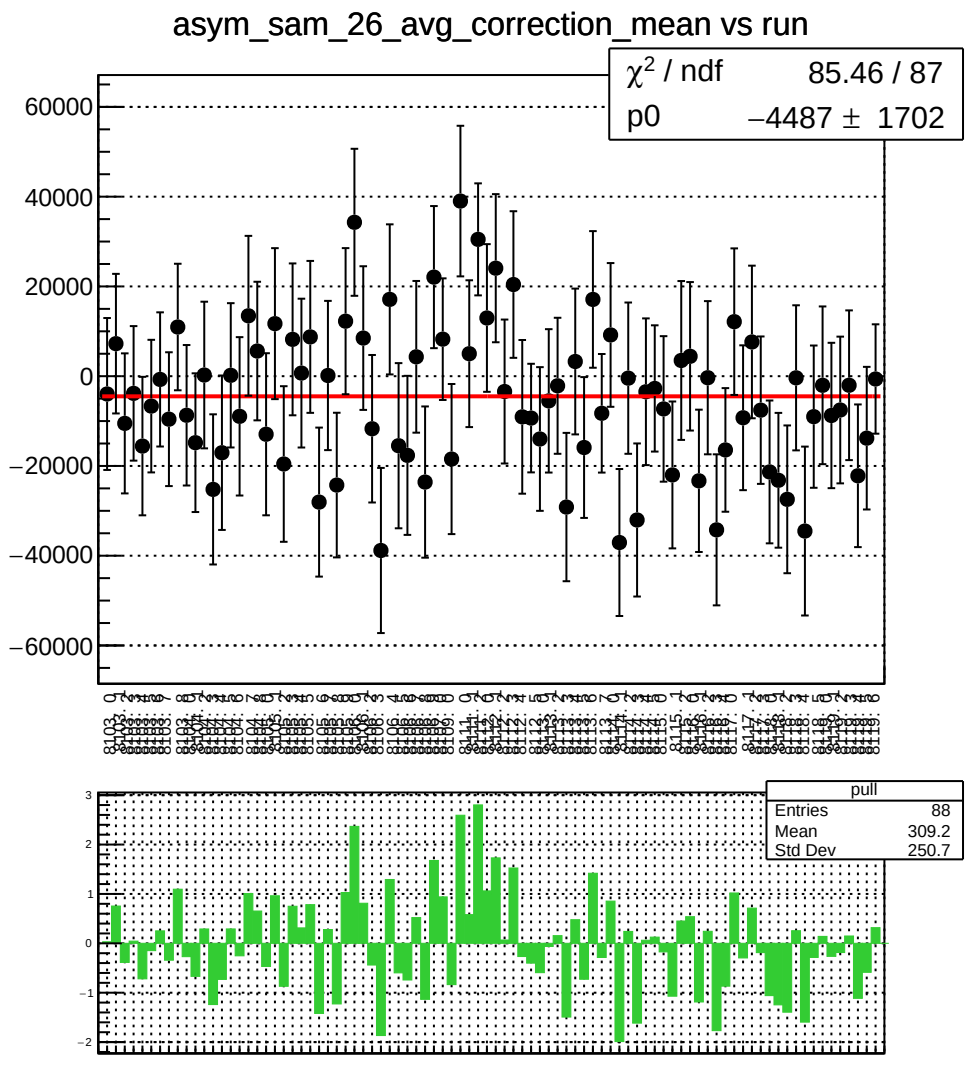

pull1D
Entries 88
Mean −0.00894
Std Dev 0.951
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

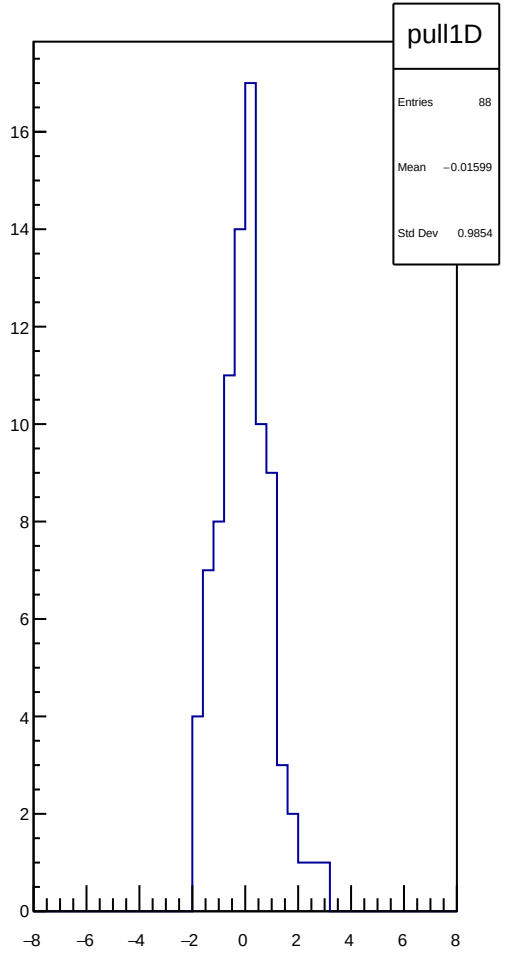

asym_sam_15_avg_rms vs run
χ^2 / ndf 1.544e+04 / 87
p0 328.5 ± 0.2537
440
420
400
380
360
340
320
300
280

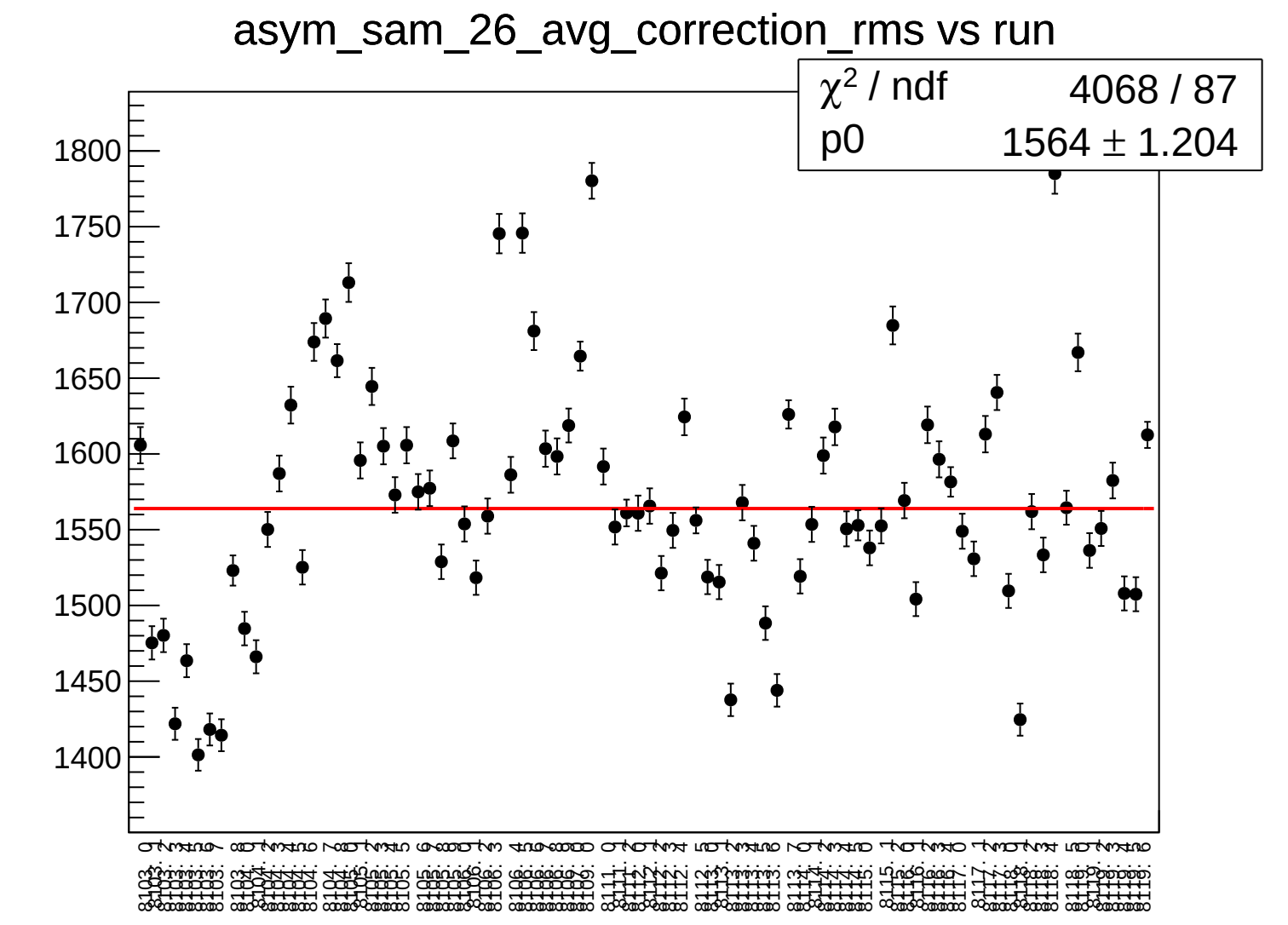

reg_asym_sam_26_avg_mean vs run
χ² / ndf 82.87 / 87
p0 −209.9 ± 160.7
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 88
Mean −1350
Std Dev 1393
3
2
1
0
−1
−2

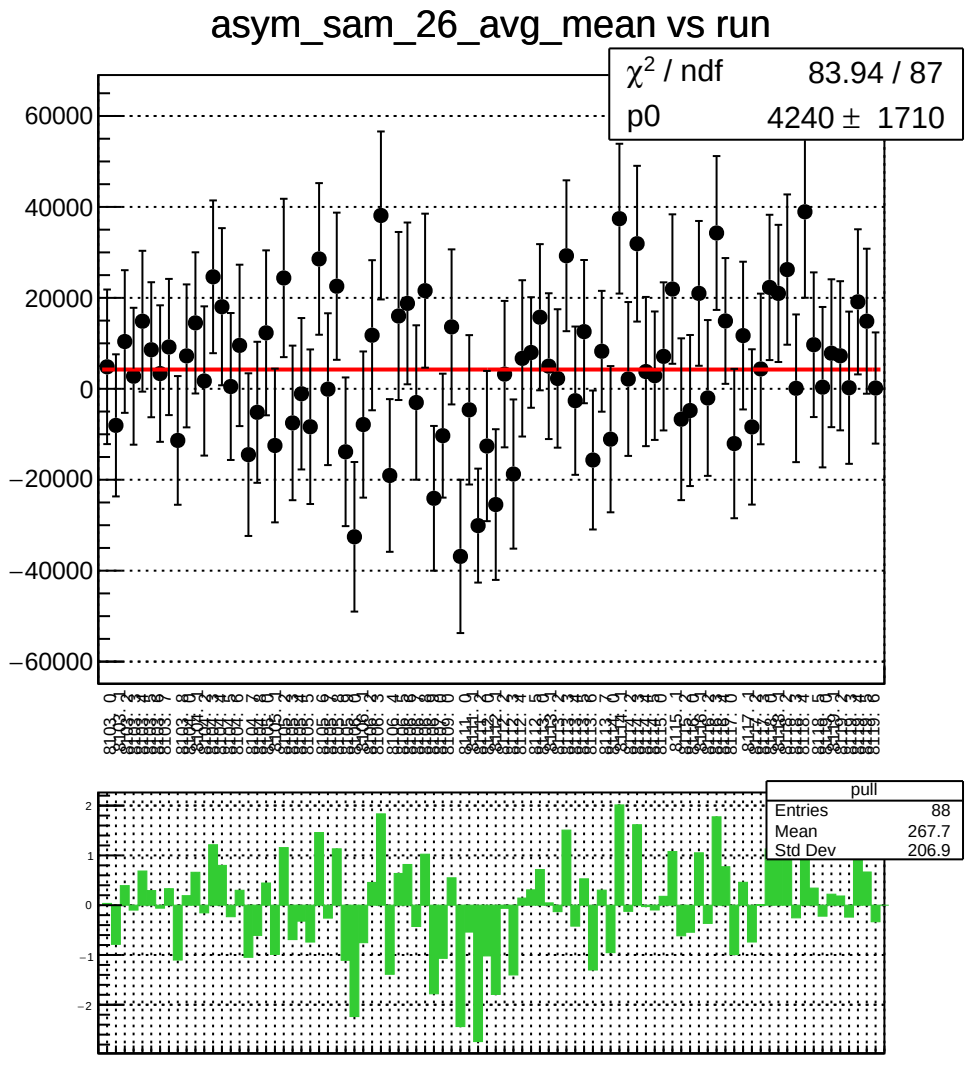

pull1D
Entries 88
Mean 0.003454
Std Dev 0.9704
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

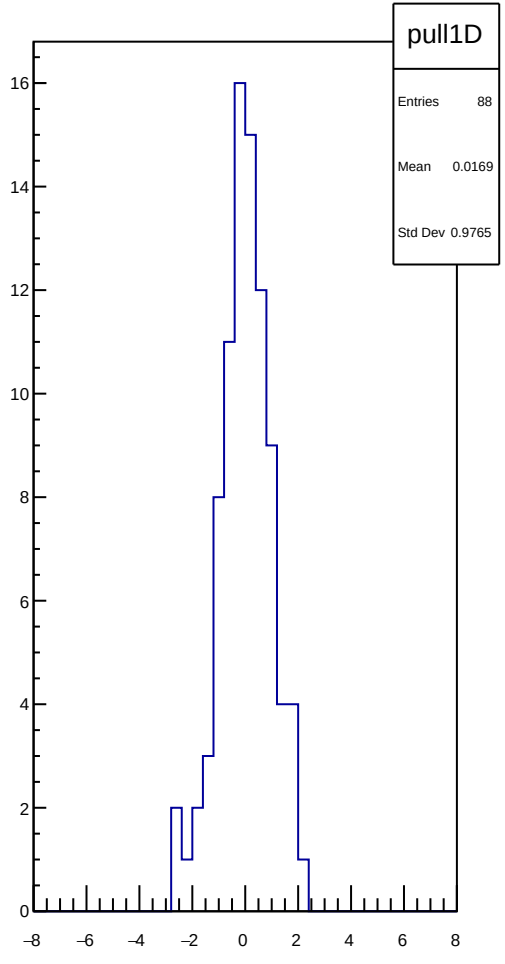

reg_asym_sam_26_avg_rms vs run
χ² / ndf 2.141e+04 / 87
p0 146.8 ± 0.1136
350
300
250
200
150

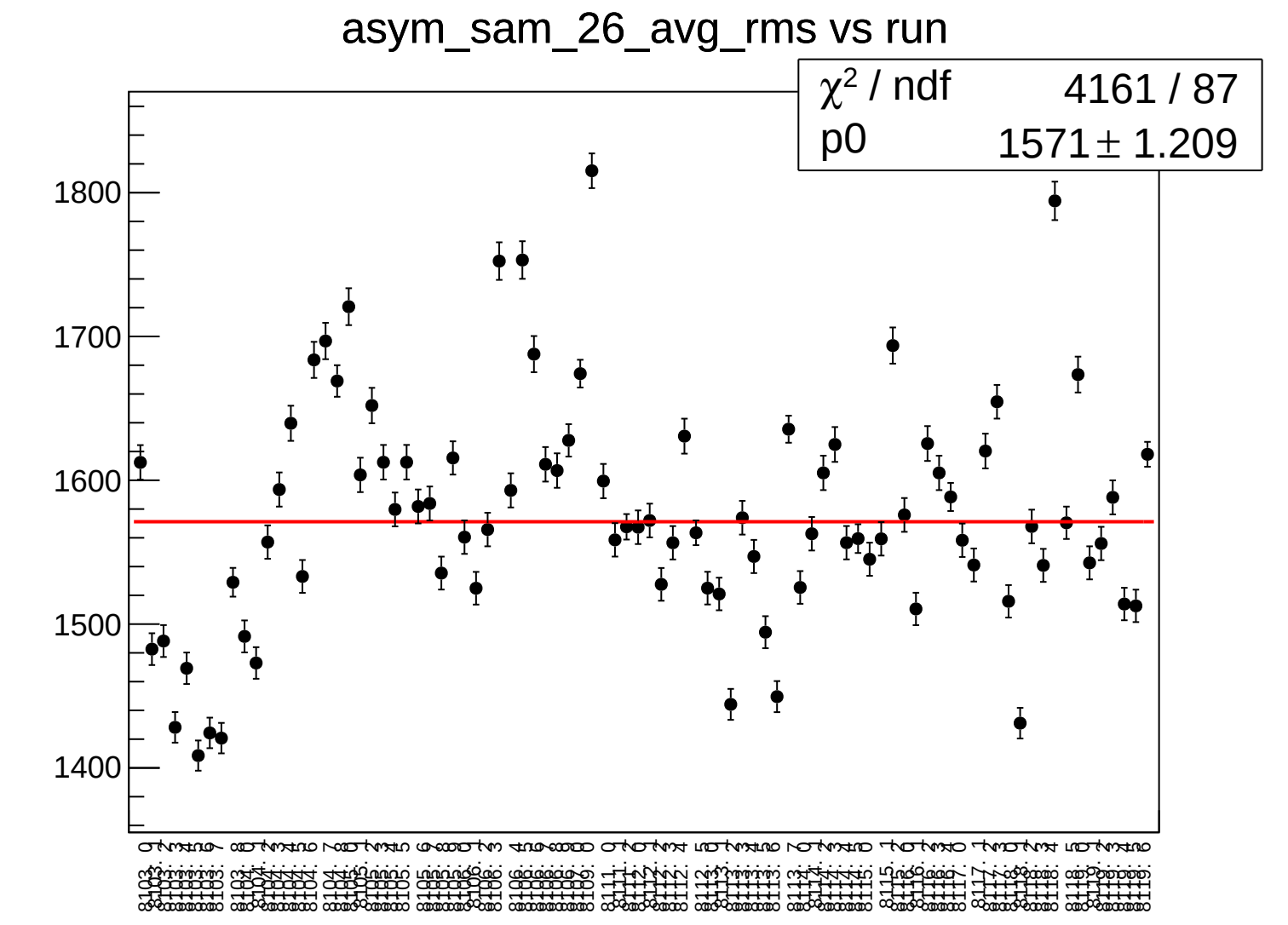

asym_sam_26_avg_correction_mean vs run
χ² / ndf 85.46 / 87
p0 −4487 ± 1702
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 309.2
Std Dev 250.7
3
2
1
0
−1
−2

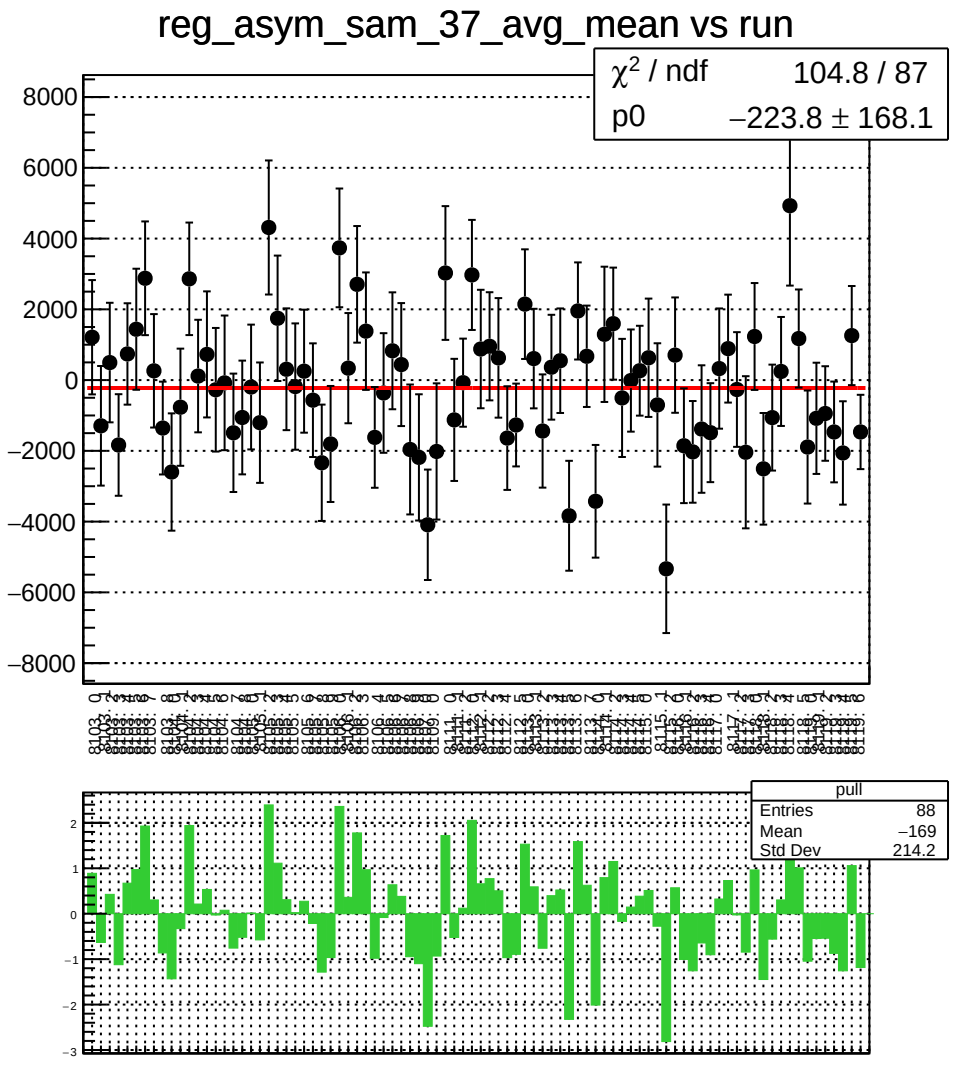

pull1D
Entries 88
Mean −0.01599
Std Dev 0.9854
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

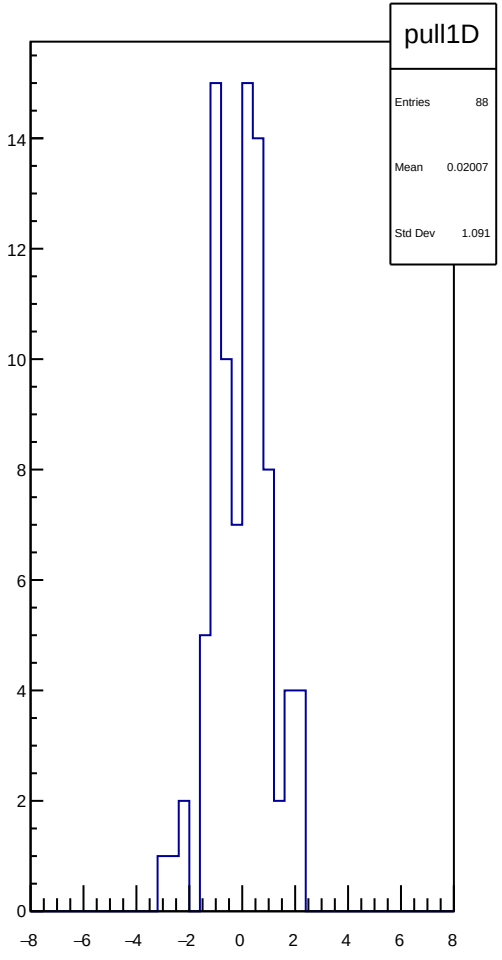

asym_sam_26_avg_correction_rms vs run
χ² / ndf 4068 / 87
p0 1564 ± 1.204
1800
1750
1700
1650
1600
1550
1500
1450
1400

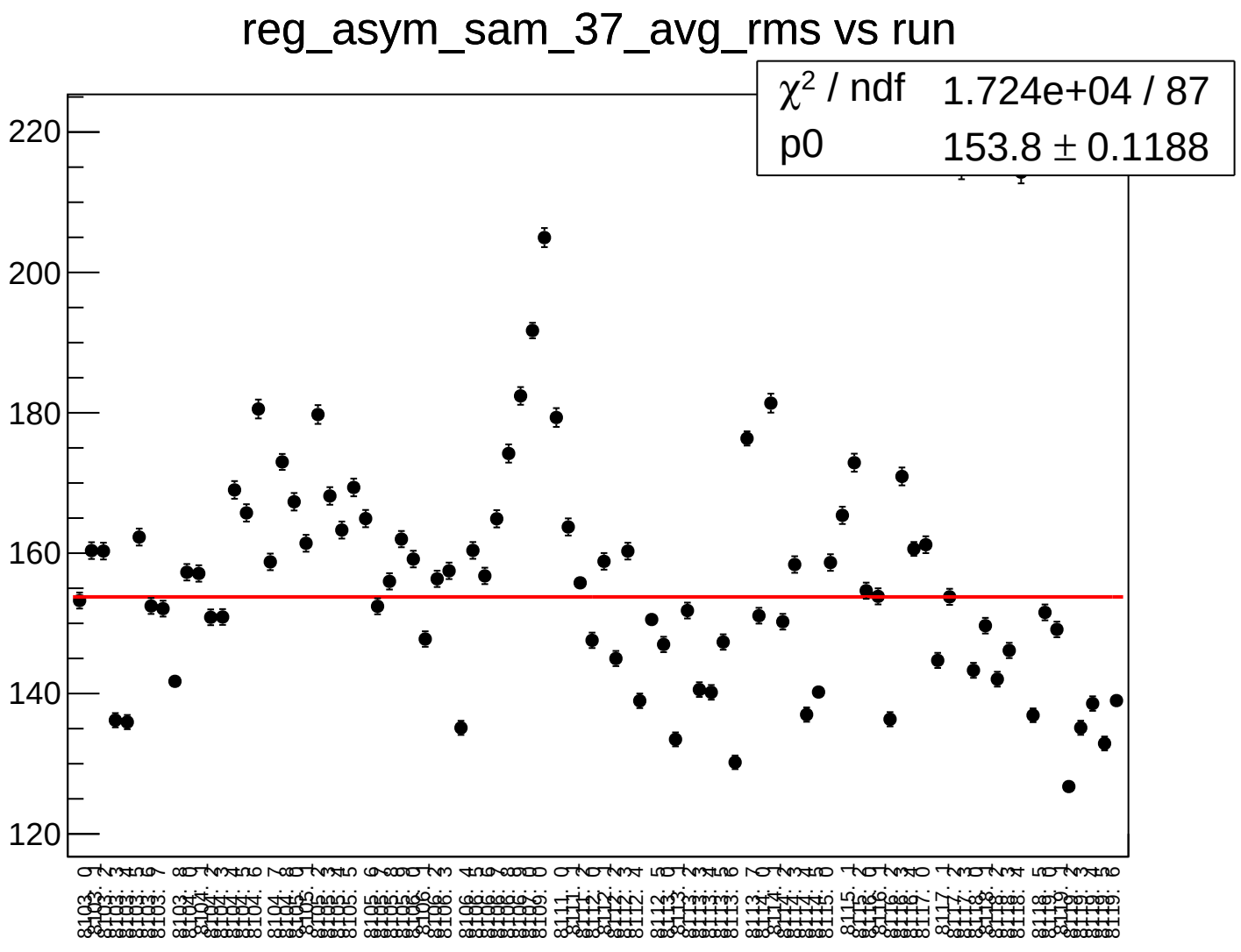

asym_sam_26_avg_mean vs run
χ² / ndf 83.94 / 87
p0 4240 ± 1710
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 267.7
Std Dev 206.9
2
1
0
−1
−2

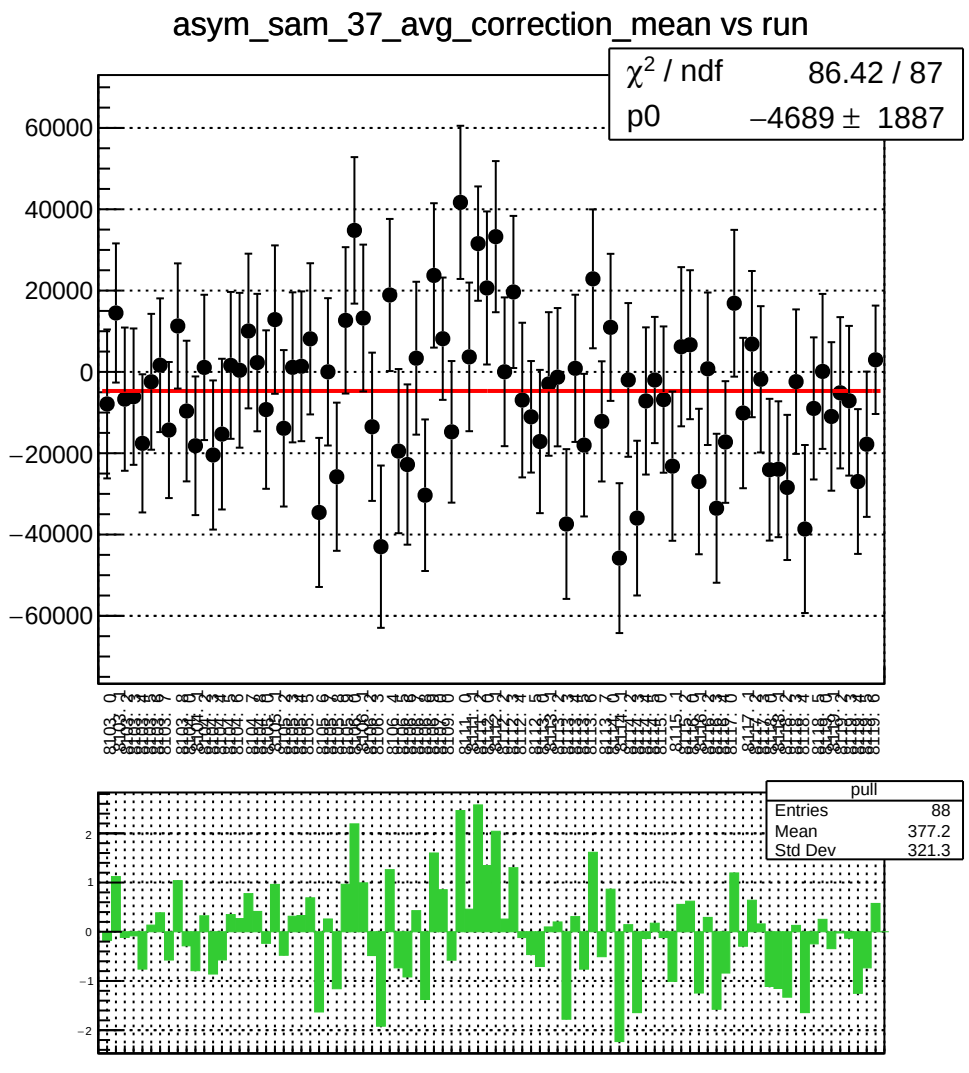

pull1D
Entries 88
Mean 0.0169
Std Dev 0.9765
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

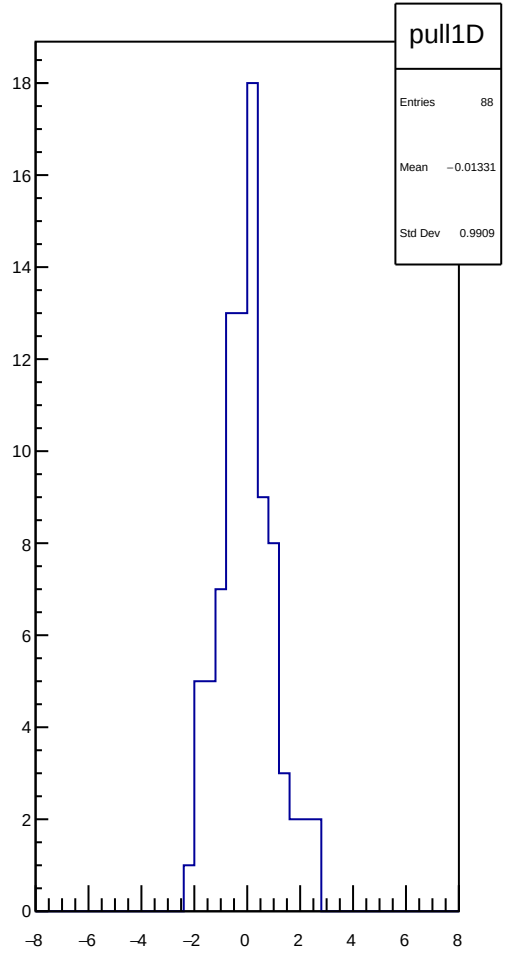

asym_sam_26_avg_rms vs run
χ² / ndf 4161 / 87
p0 1571 ± 1.209
1800
1700
1600
1500
1400

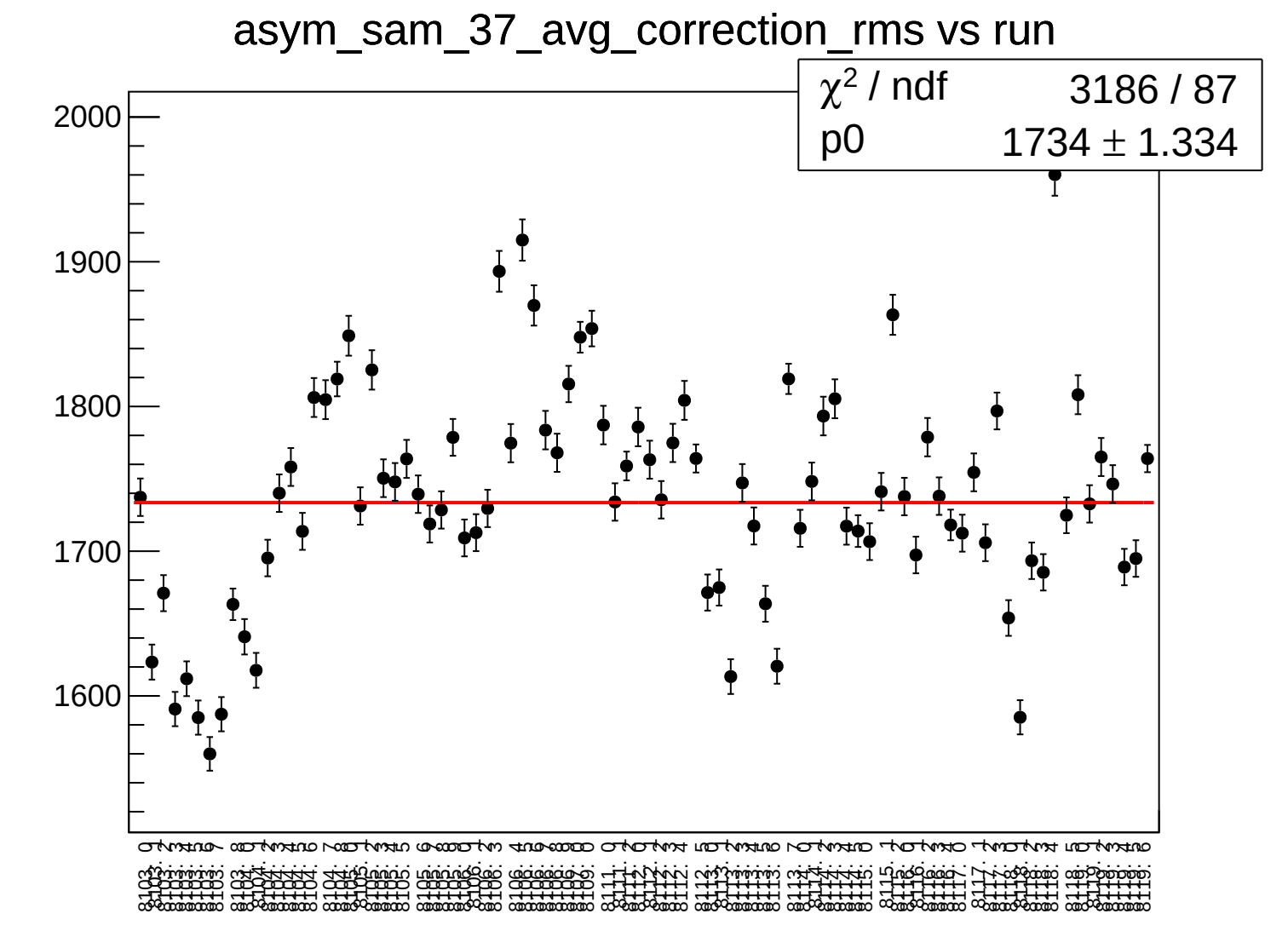

reg_asym_sam_37_avg_mean vs run
χ² / ndf 104.8 / 87
p0 −223.8 ± 168.1
pull
Entries 88
Mean −169
Std Dev 214.2

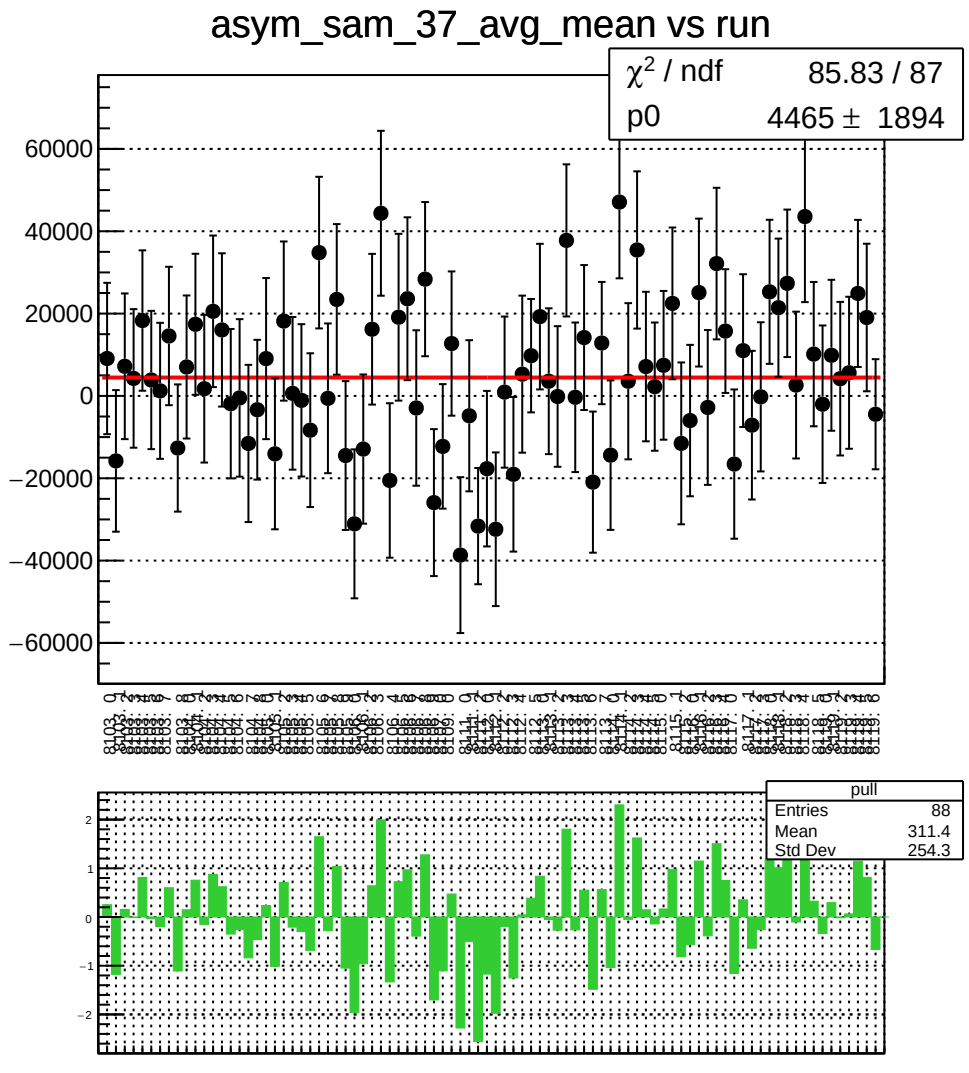

pull1D
Entries 88
Mean 0.02007
Std Dev 1.091

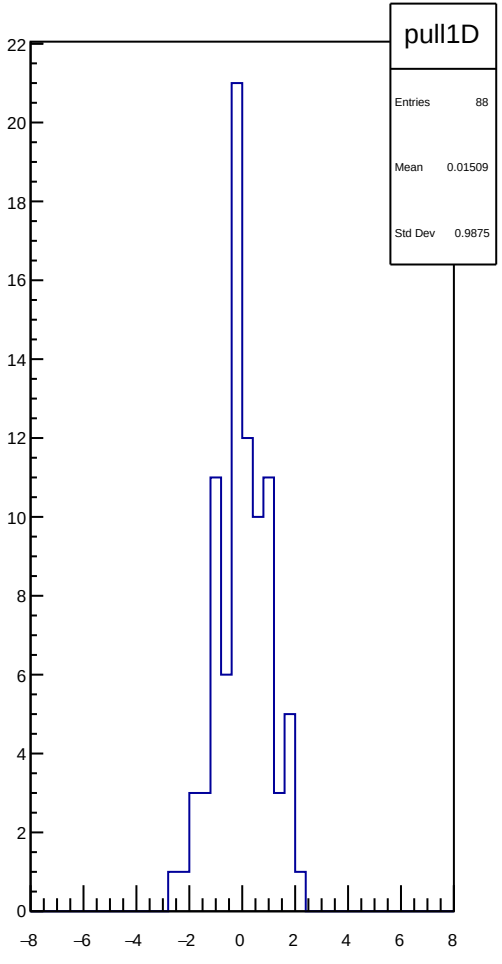

reg_asym_sam_37_avg_rms vs run
χ² / ndf 1.724e+04 / 87
p0 153.8 ± 0.1188
220
200
180
160
140
120

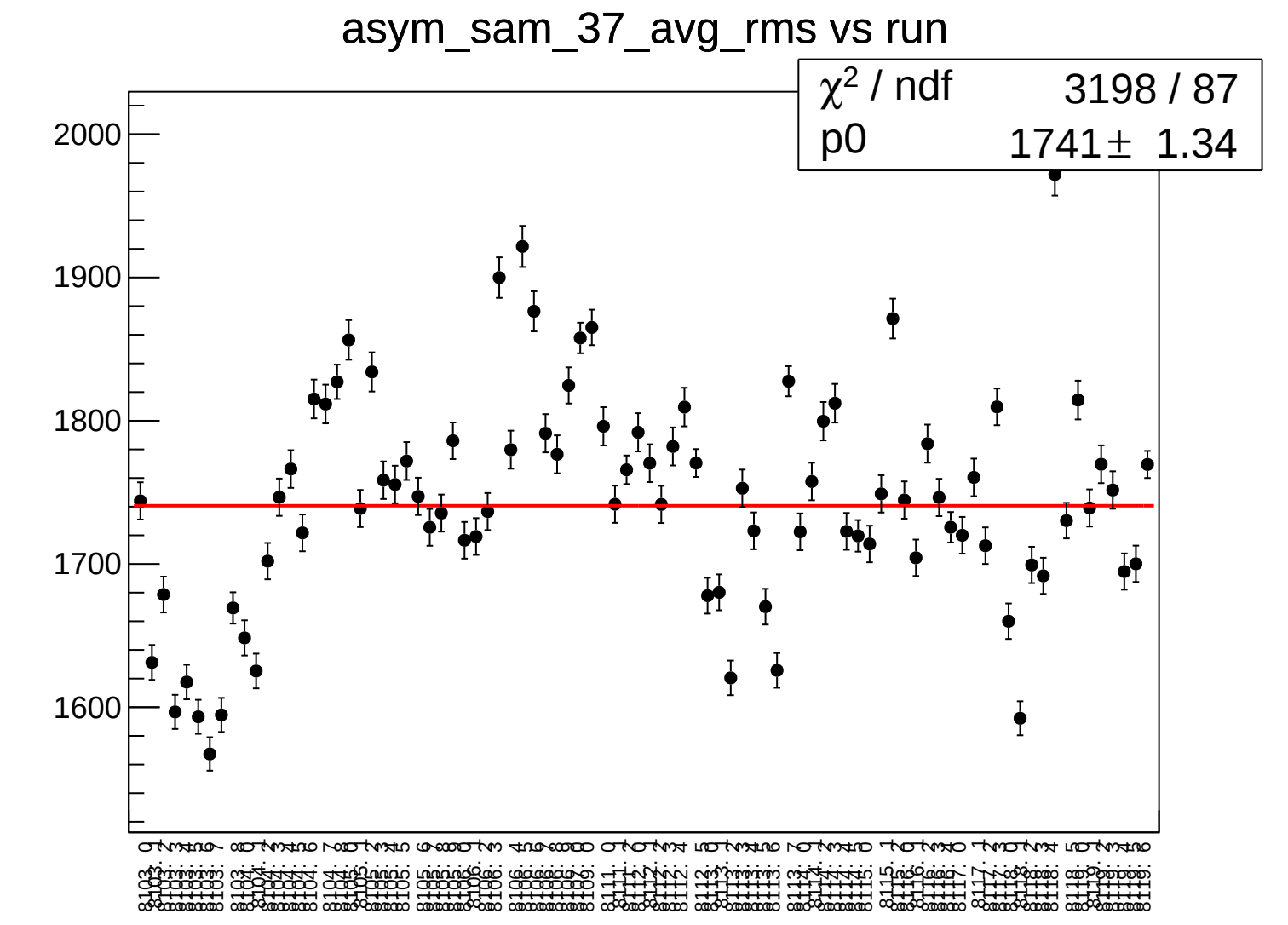

asym_sam_37_avg_correction_mean vs run
χ² / ndf 86.42 / 87
p0 −4689 ± 1887
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 377.2
Std Dev 321.3
2
1
0
−1
−2

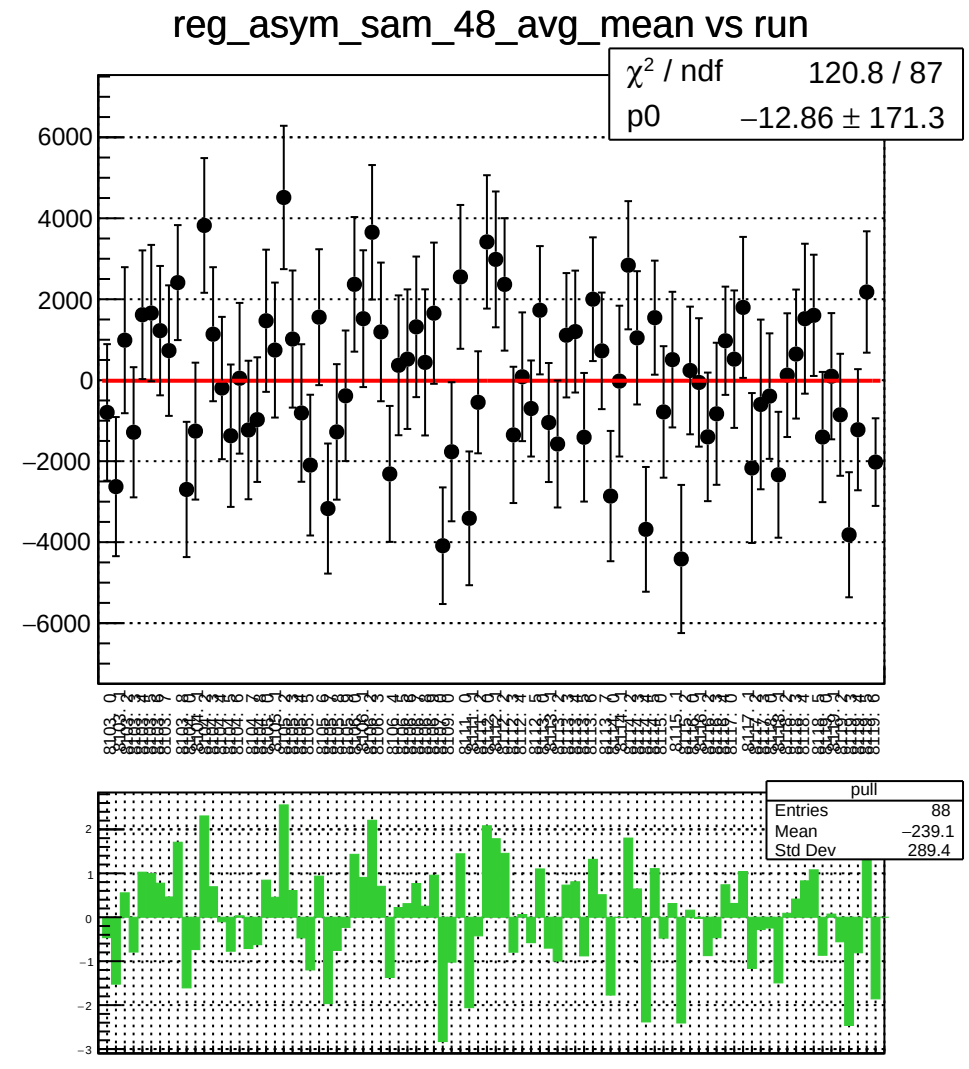

pull1D
Entries 88
Mean −0.01331
Std Dev 0.9909
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

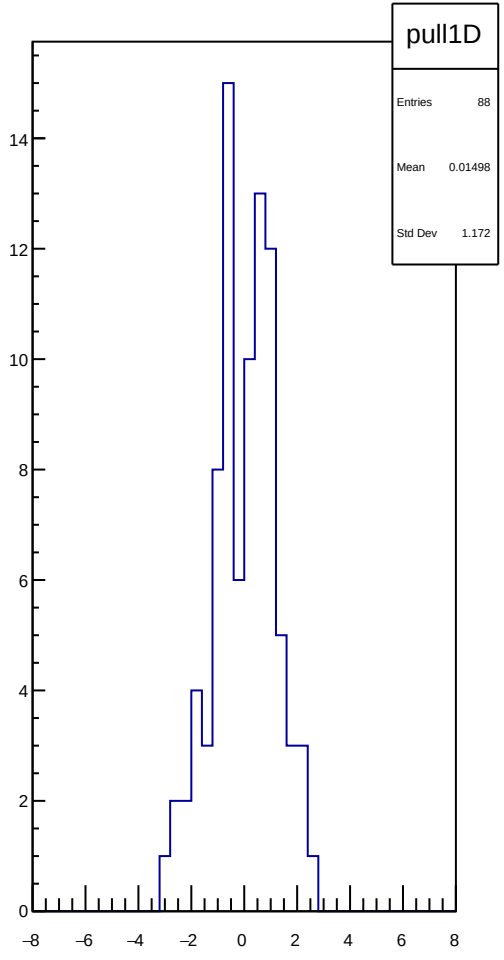

asym_sam_37_avg_correction_rms vs run
χ² / ndf 3186 / 87
p0 1734 ± 1.334
2000
1900
1800
1700
1600

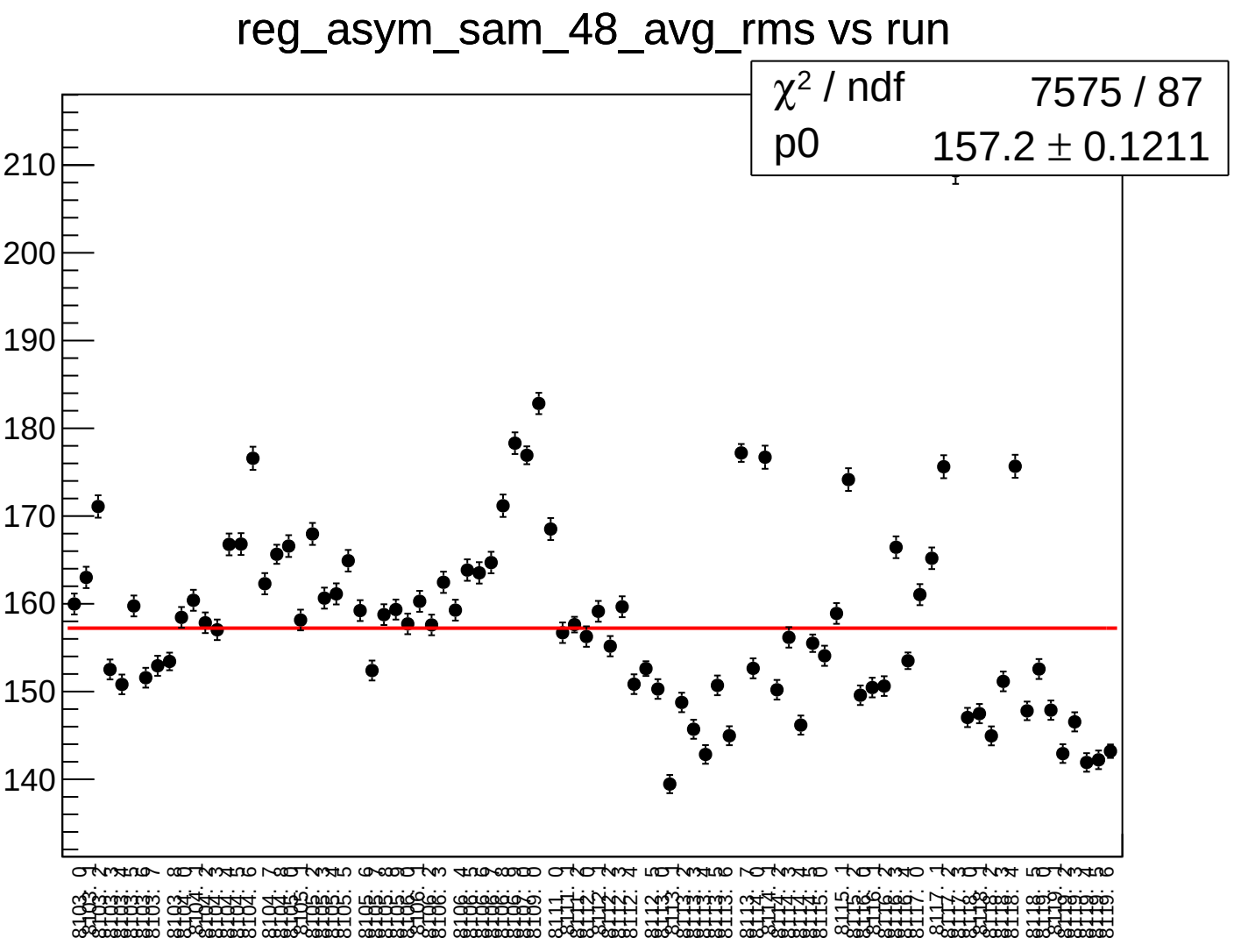

asym_sam_37_avg_mean vs run
χ² / ndf 85.83 / 87
p0 4465 ± 1894
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 311.4
Std Dev 254.3
2
1
0
−1
−2

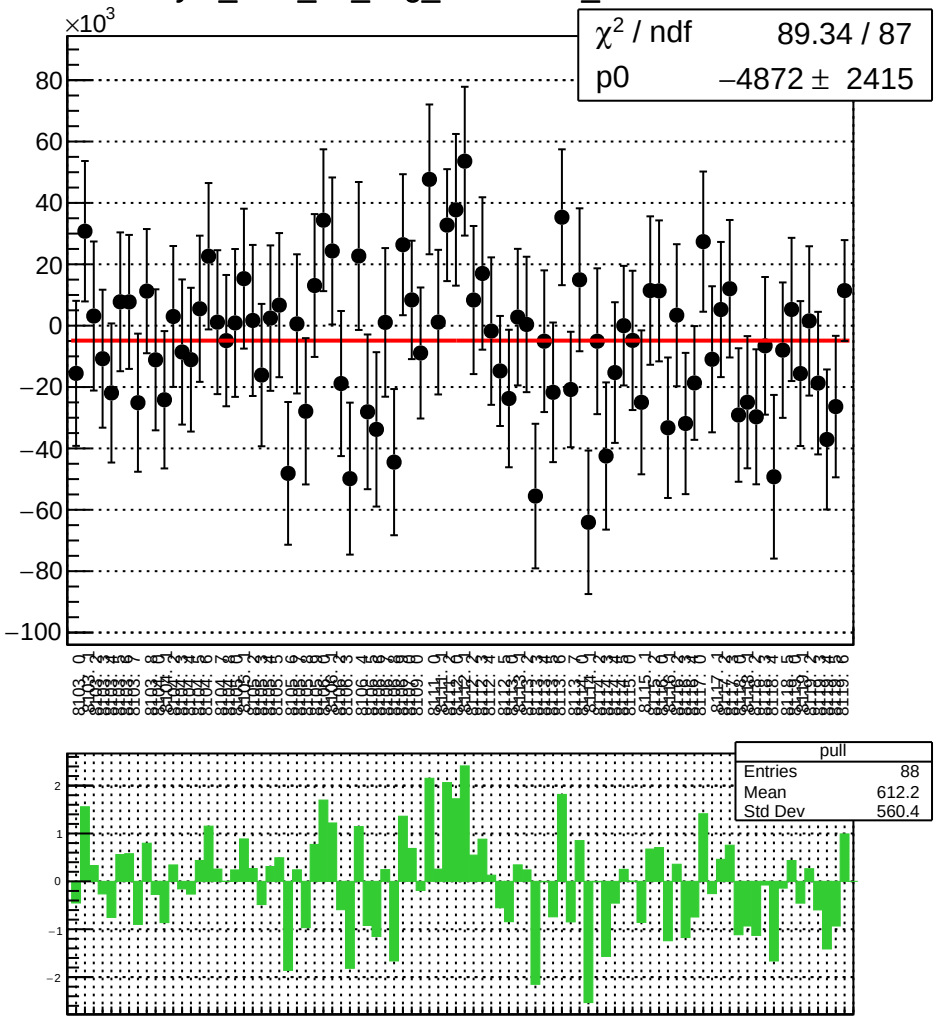

pull1D
Entries 88
Mean 0.01509
Std Dev 0.9875
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

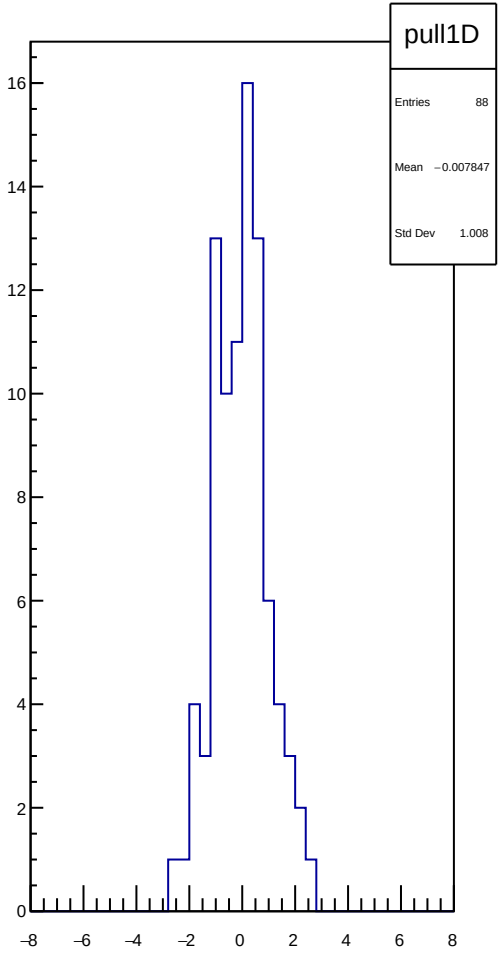

asym_sam_37_avg_rms vs run
χ² / ndf 3198 / 87
p0 1741 ± 1.34
2000
1900
1800
1700
1600

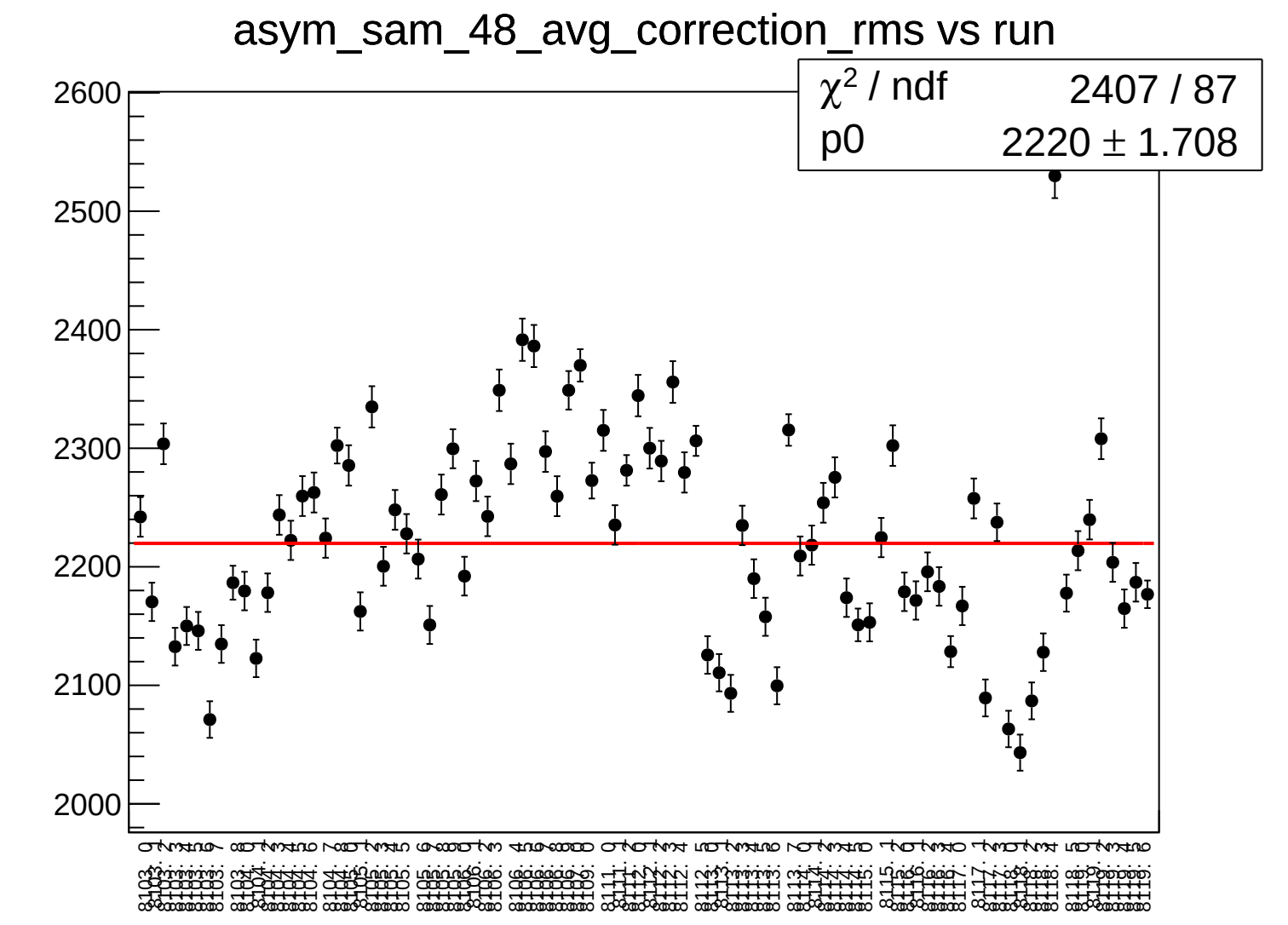

reg_asym_sam_48_avg_mean vs run
χ² / ndf 120.8 / 87
p0 −12.86 ± 171.3
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean −239.1
Std Dev 289.4
2
1
0
−1
−2
−3

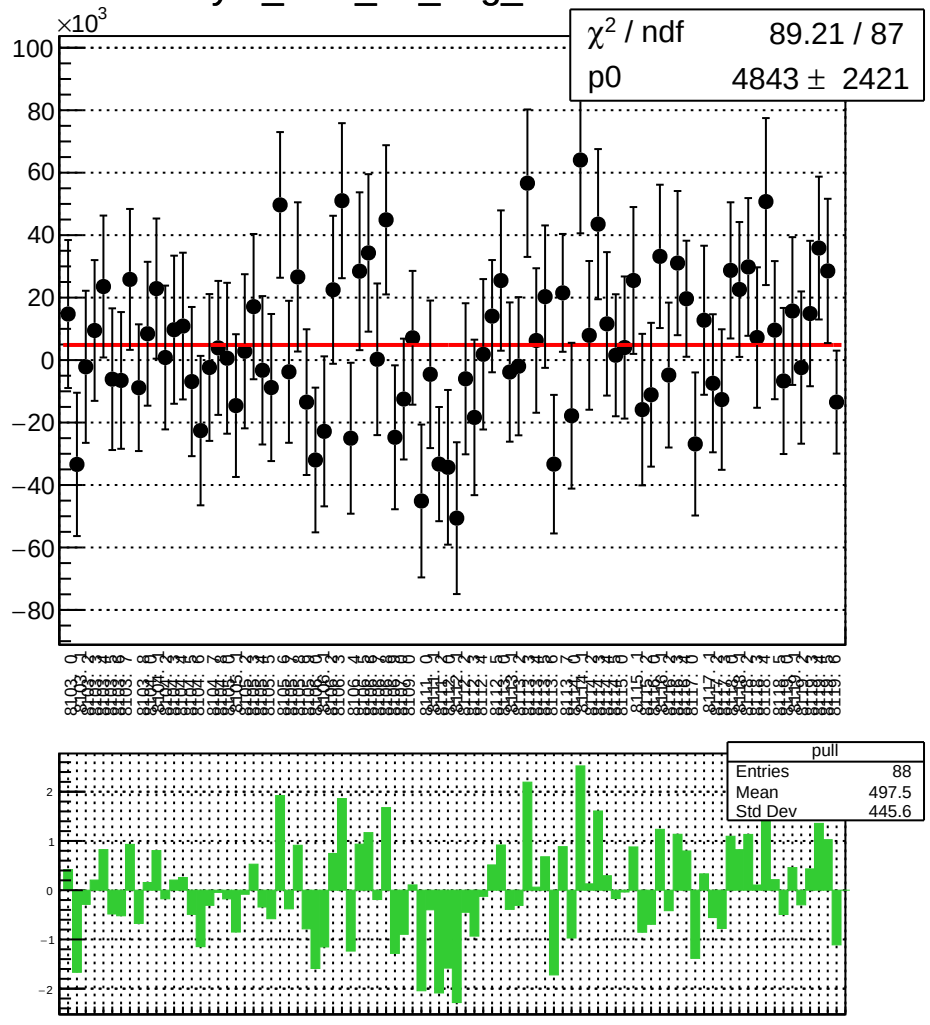

pull1D
Entries 88
Mean 0.01498
Std Dev 1.172
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

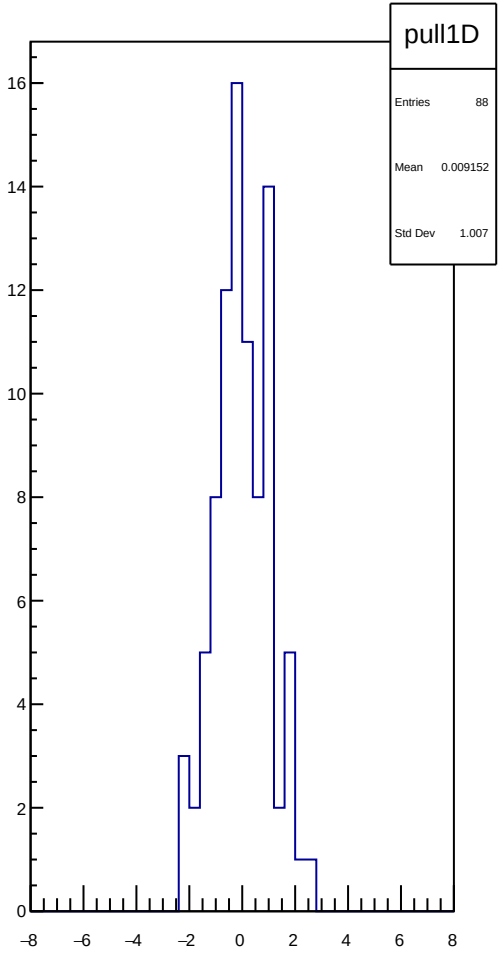

reg_asym_sam_48_avg_rms vs run
χ² / ndf 7575 / 87
p0 157.2 ± 0.1211
210
200
190
180
170
160
150
140

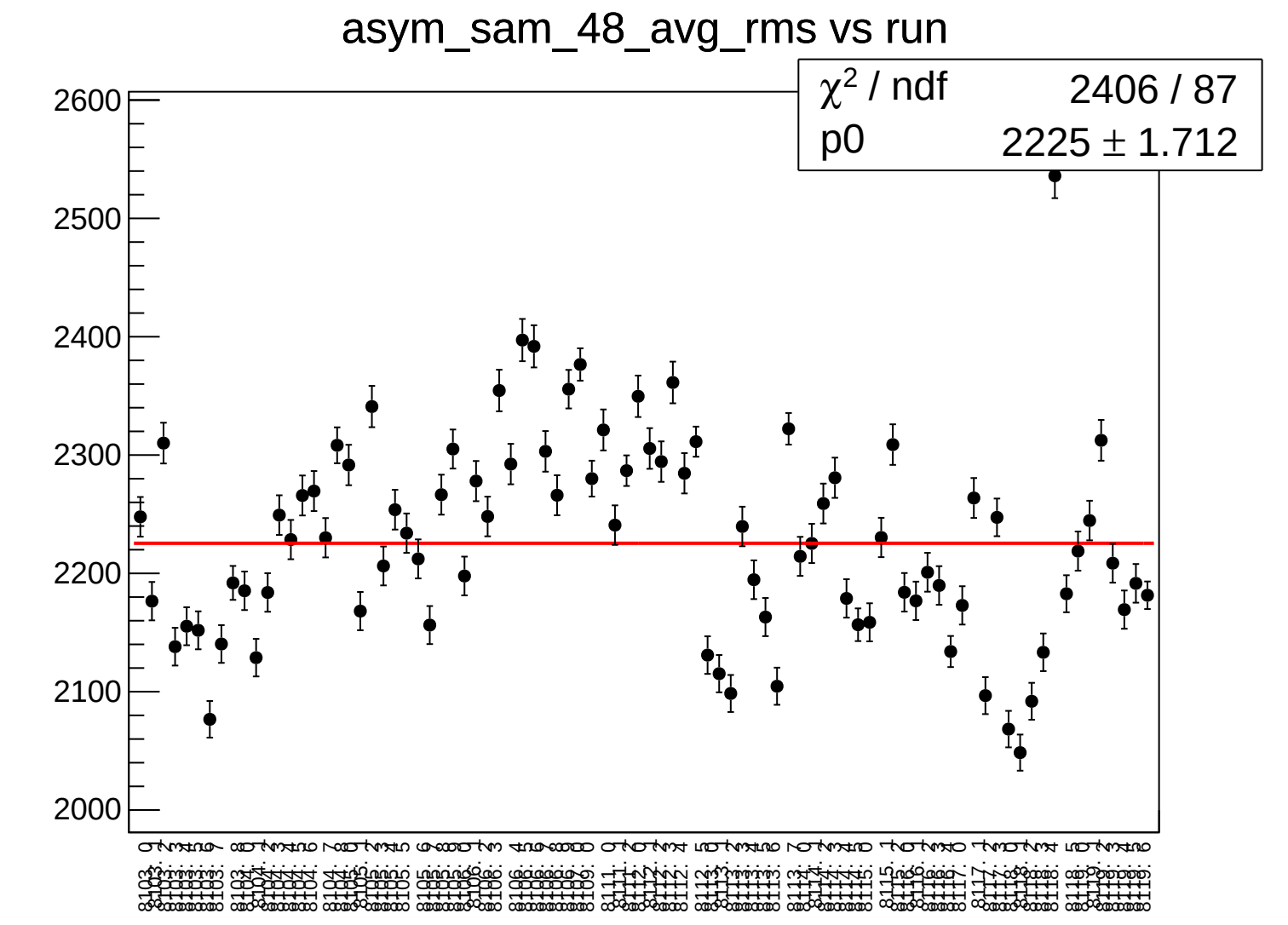

asym_sam_48_avg_correction_mean vs run
χ² / ndf 89.34 / 87
p0 −4872 ± 2415
pull
Entries 88
Mean 612.2
Std Dev 560.4

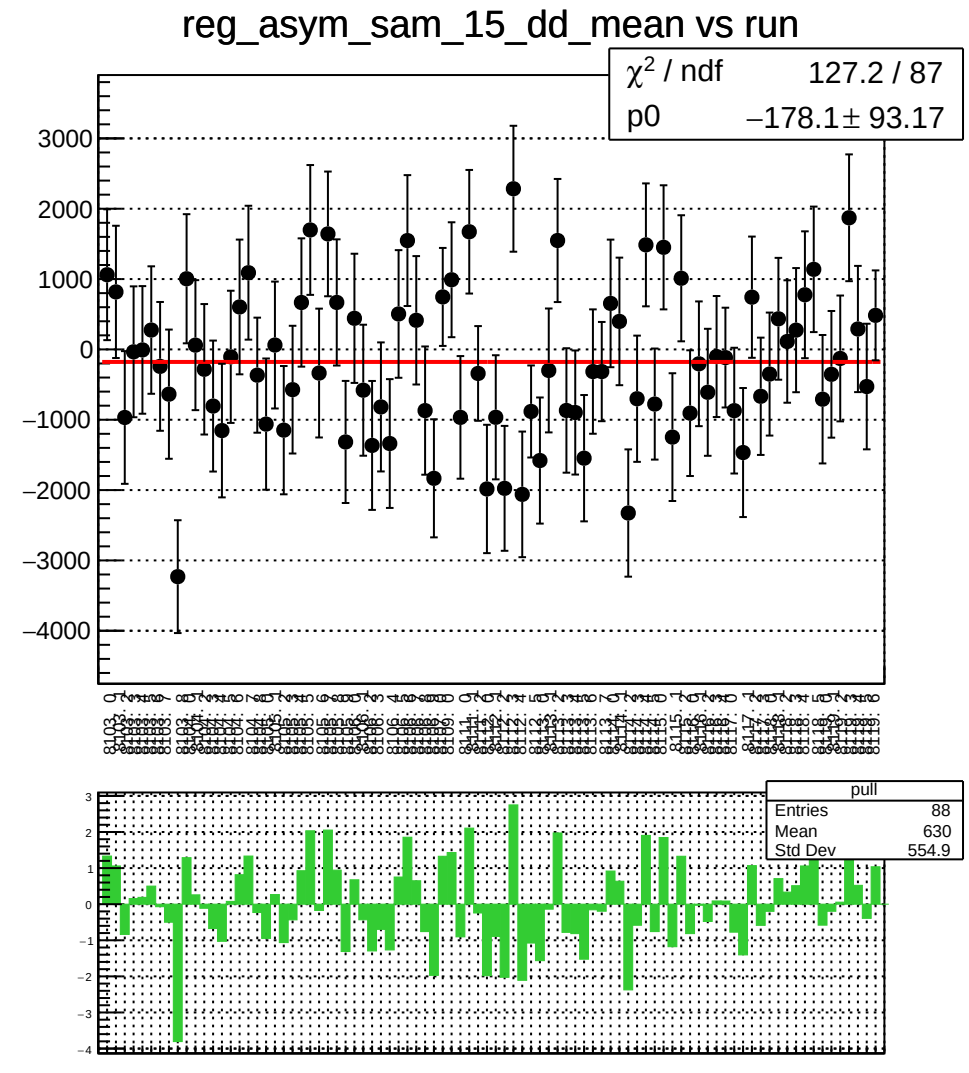

pull1D
Entries 88
Mean −0.007847
Std Dev 1.008

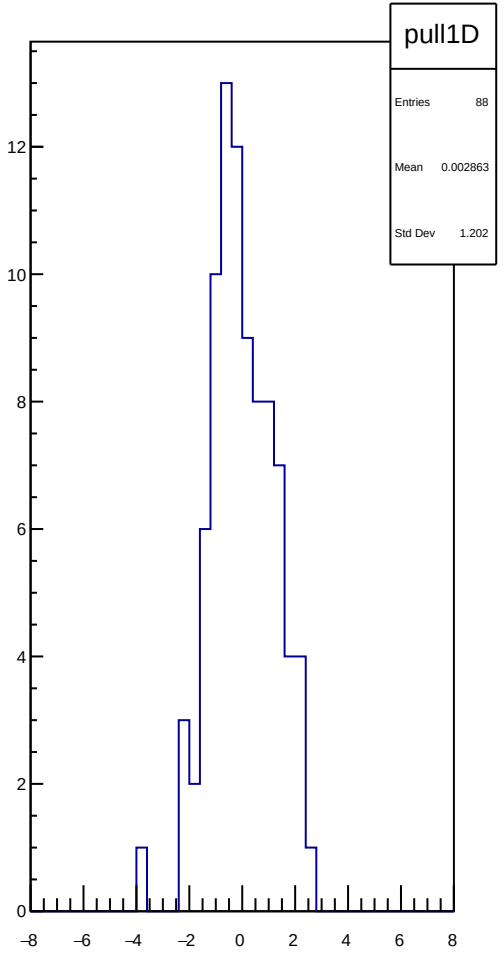

asym_sam_48_avg_correction_rms vs run
χ² / ndf 2407 / 87
p0 2220 ± 1.708
2600
2500
2400
2300
2200
2100
2000

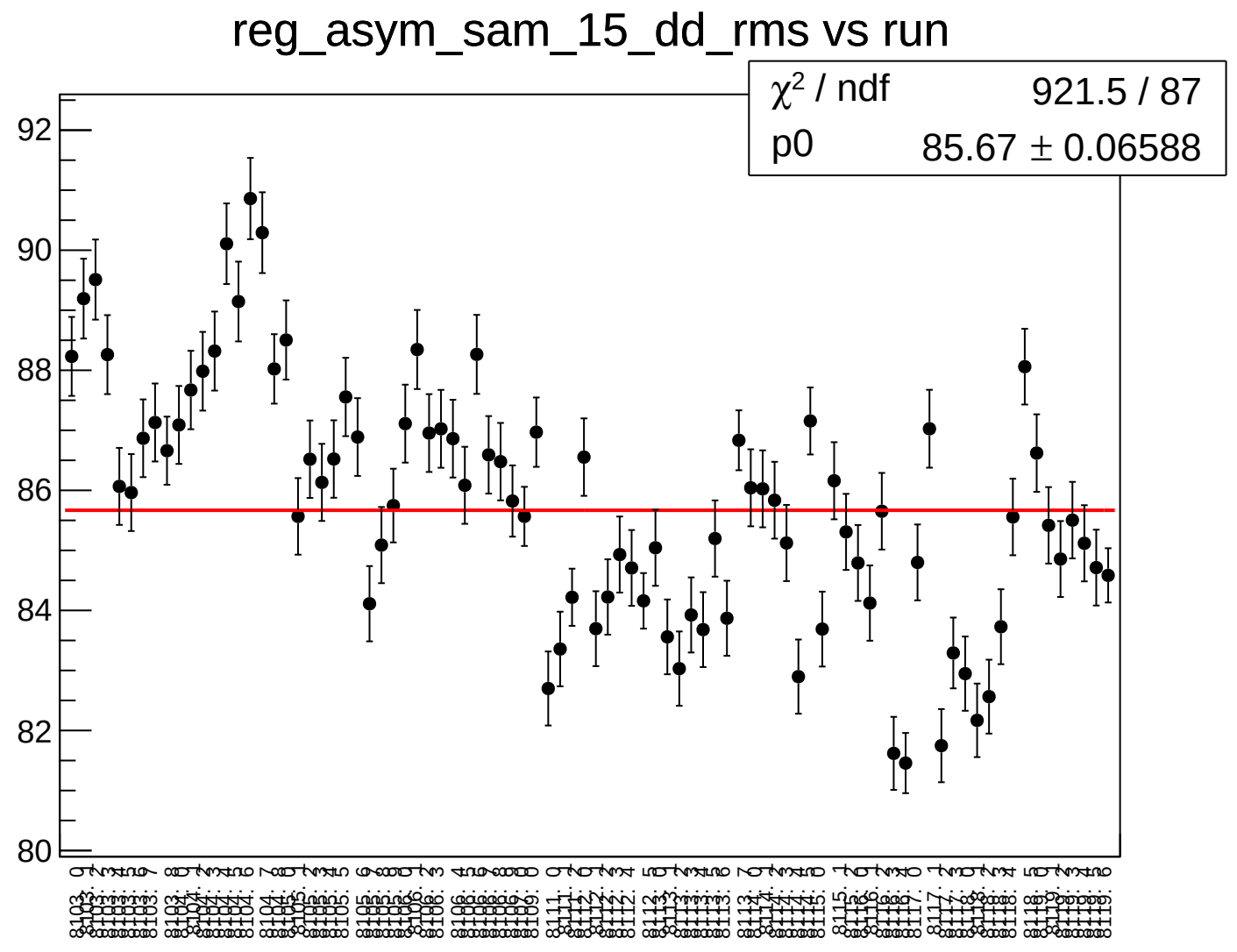

asym_sam_48_avg_mean vs run
×10^3
χ^2 / ndf 89.21 / 87
p0 4843 ± 2421
pull
Entries 88
Mean 497.5
Std Dev 445.6

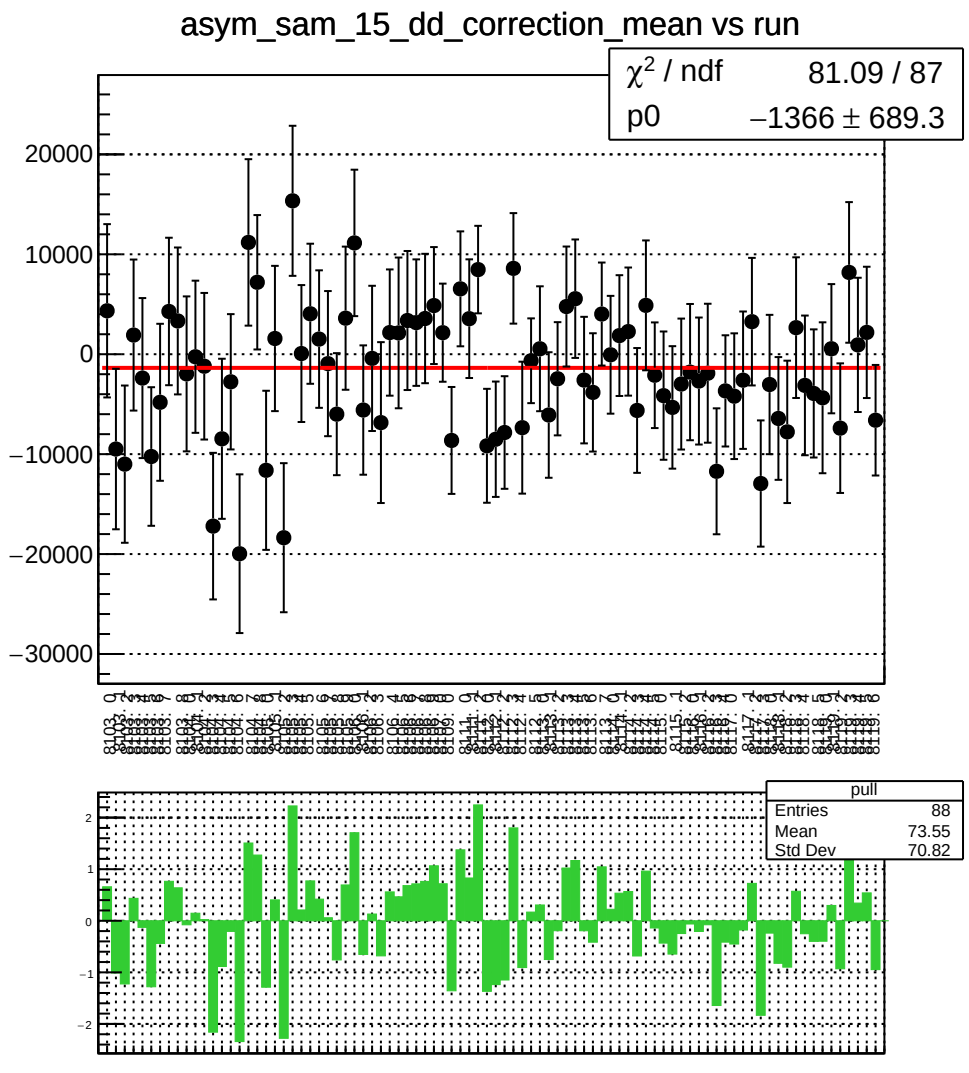

pull1D
Entries 88
Mean 0.009152
Std Dev 1.007

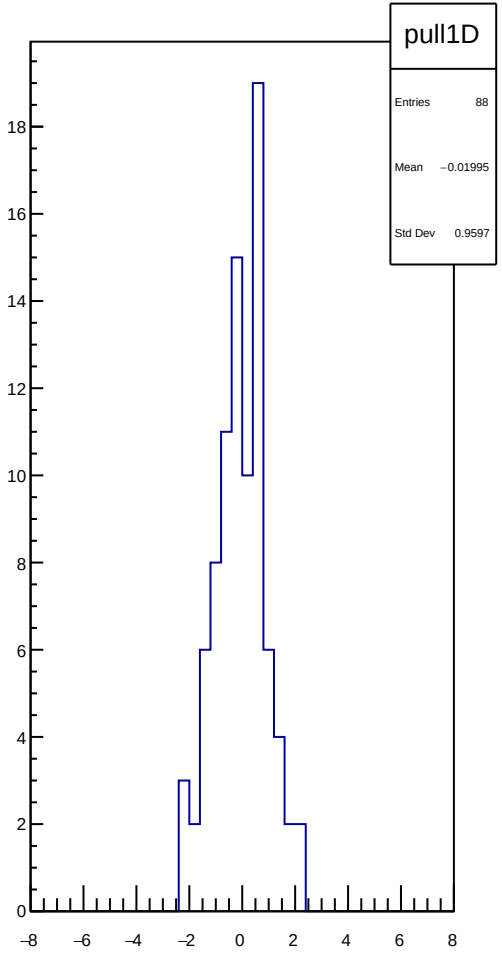

asym_sam_48_avg_rms vs run
χ² / ndf 2406 / 87
p0 2225 ± 1.712
2600
2500
2400
2300
2200
2100
2000

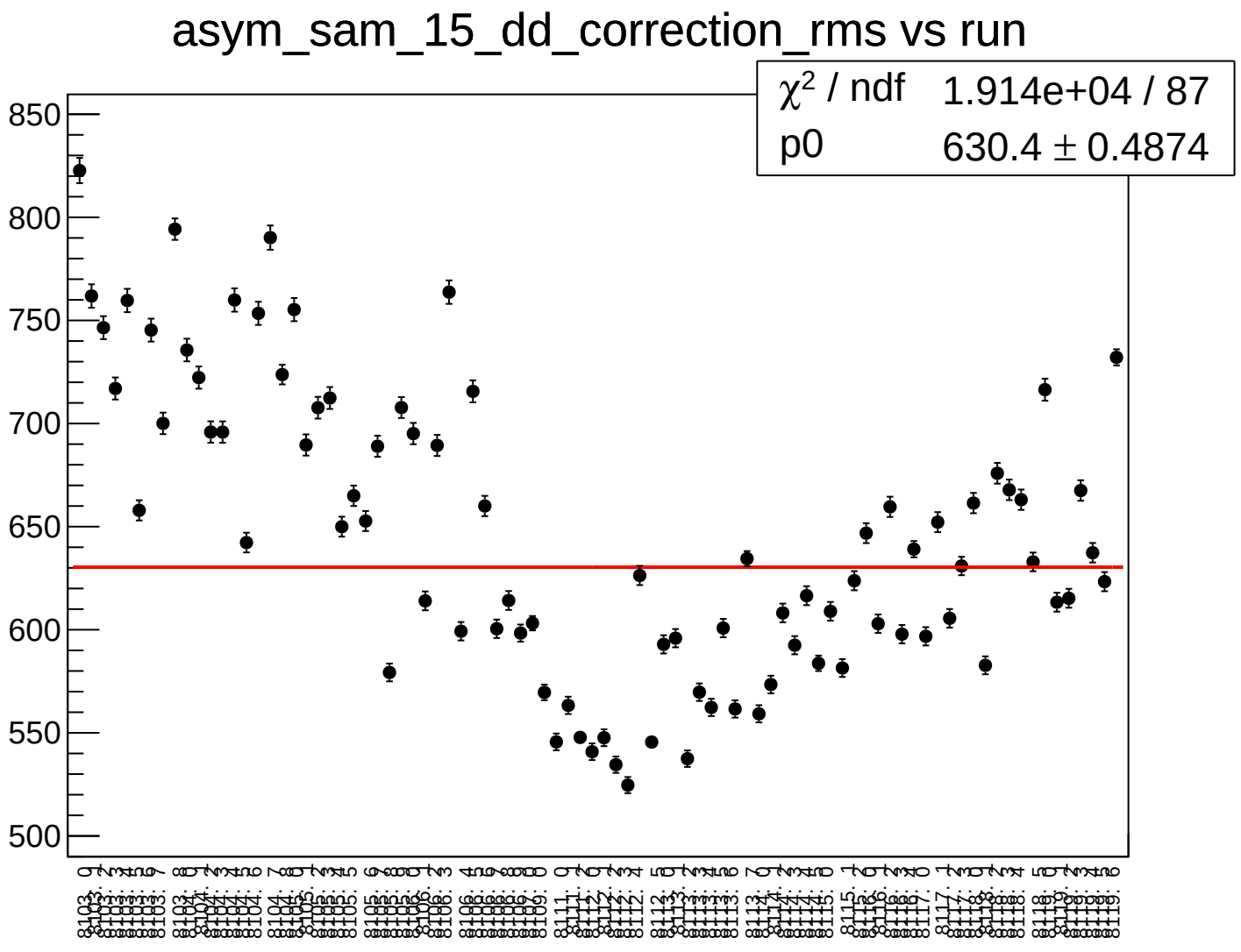

reg_asym_sam_15_dd_mean vs run
χ² / ndf 127.2 / 87
p0 −178.1± 93.17
pull
Entries 88
Mean 630
Std Dev 554.9

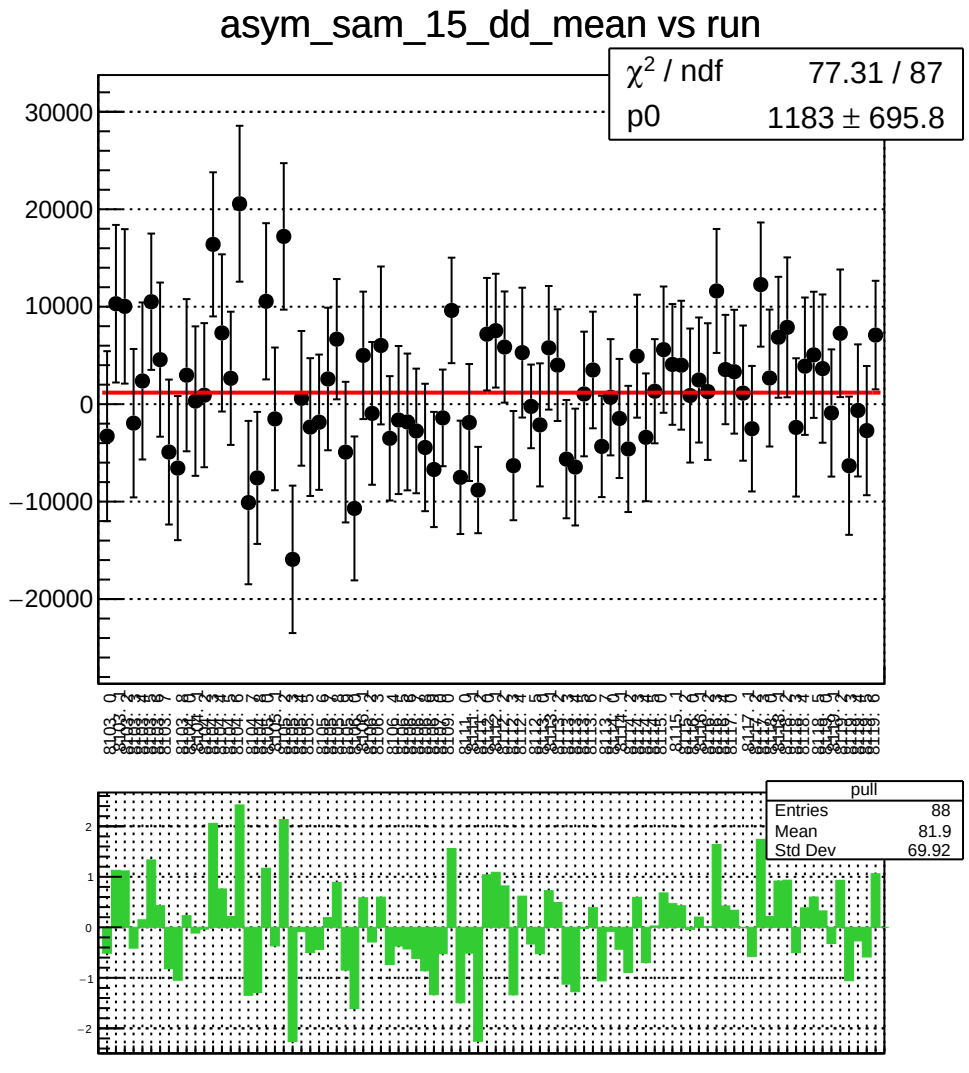

pull1D
Entries 88
Mean 0.002863
Std Dev 1.202

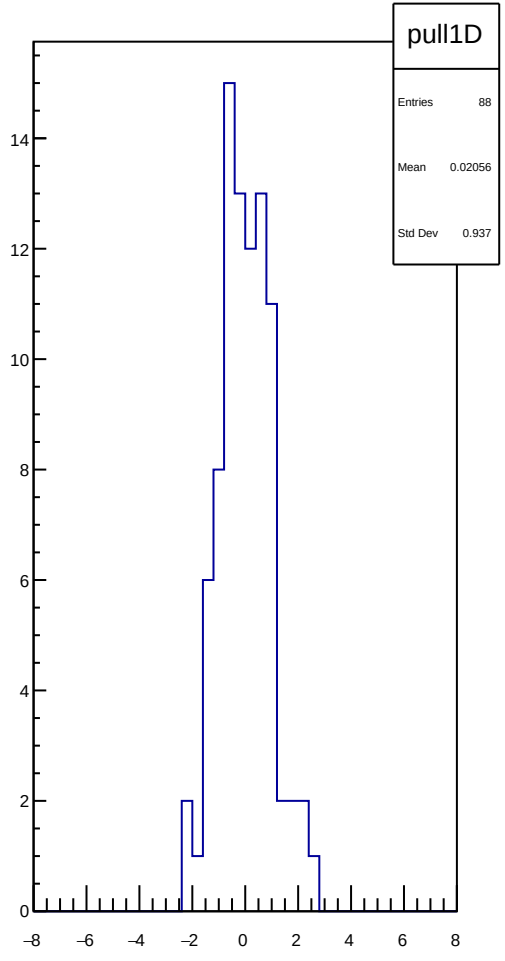

reg_asym_sam_15_dd_rms vs run
χ² / ndf 921.5 / 87
p0 85.67 ± 0.06588
92
90
88
86
84
82
80

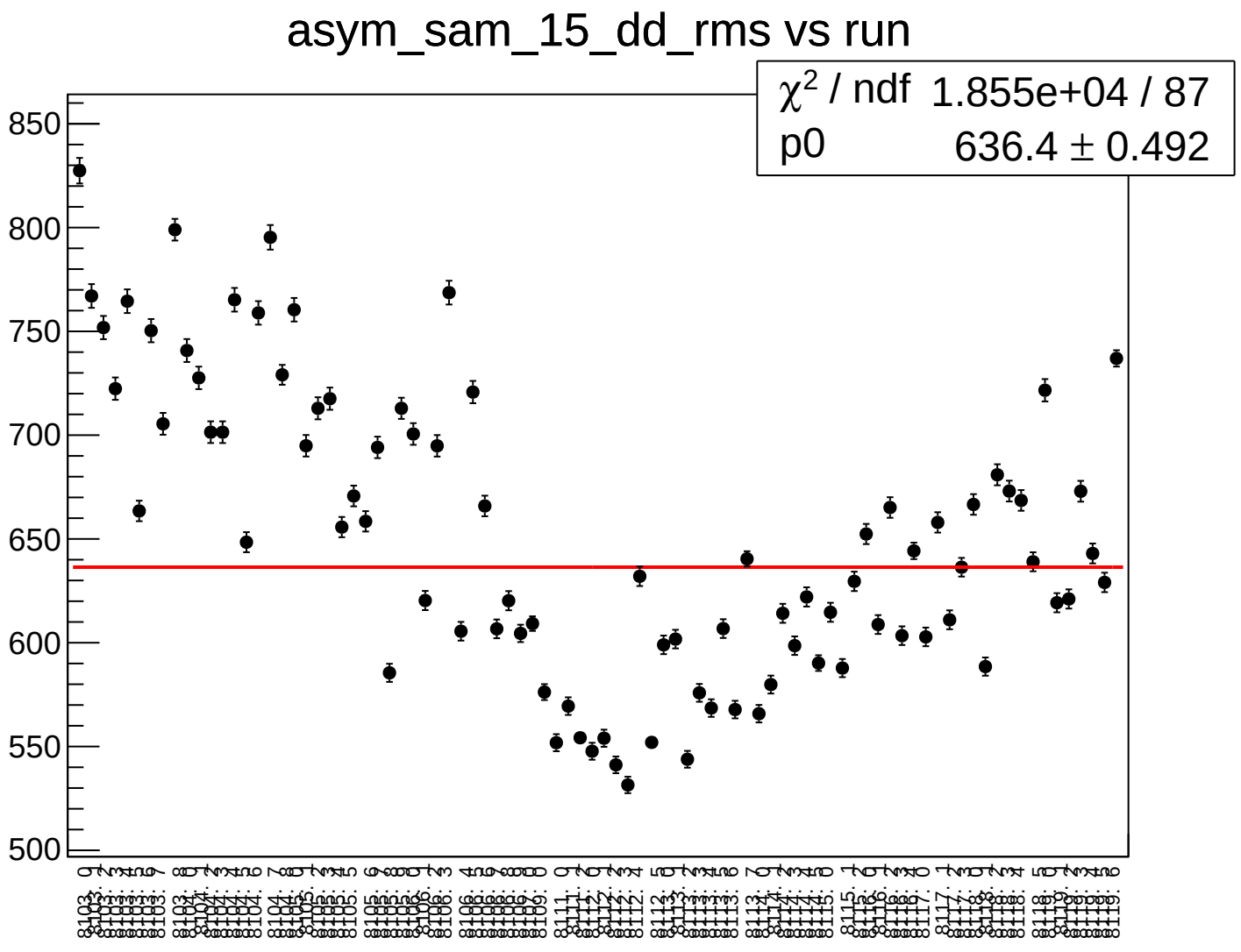

asym_sam_15_dd_correction_mean vs run
χ² / ndf 81.09 / 87
p0 −1366 ± 689.3
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 73.55
Std Dev 70.82
2
1
0
−1
−2

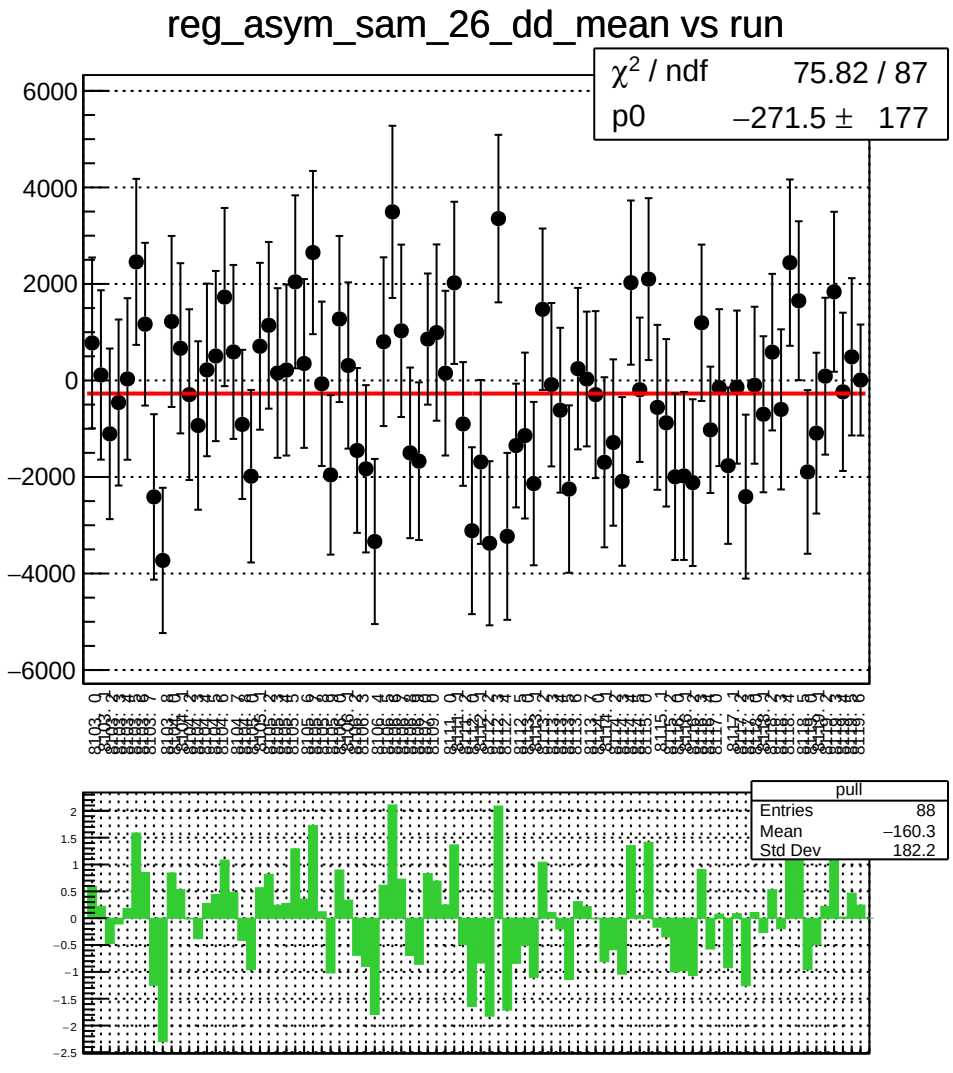

pull1D
Entries 88
Mean −0.01995
Std Dev 0.9597
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

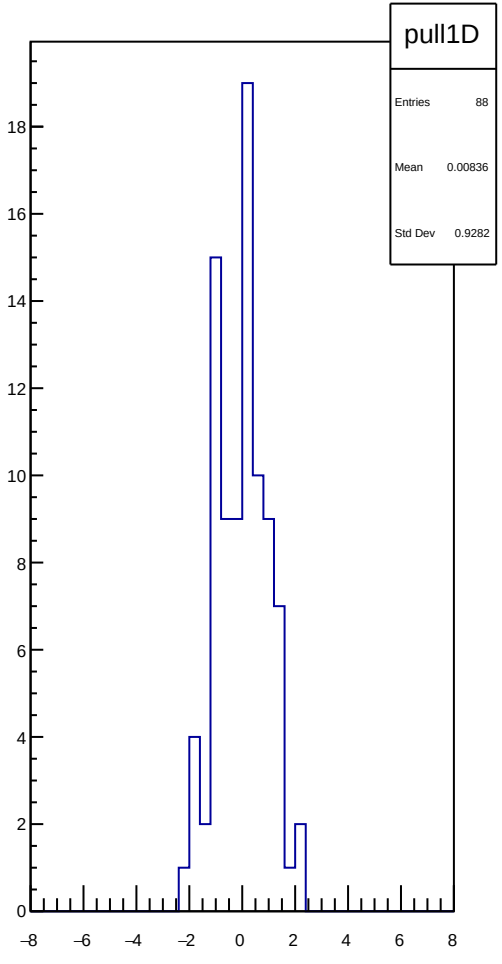

asym_sam_15_dd_correction_rms vs run
χ² / ndf 1.914e+04 / 87
p0 630.4 ± 0.4874
850
800
750
700
650
600
550
500

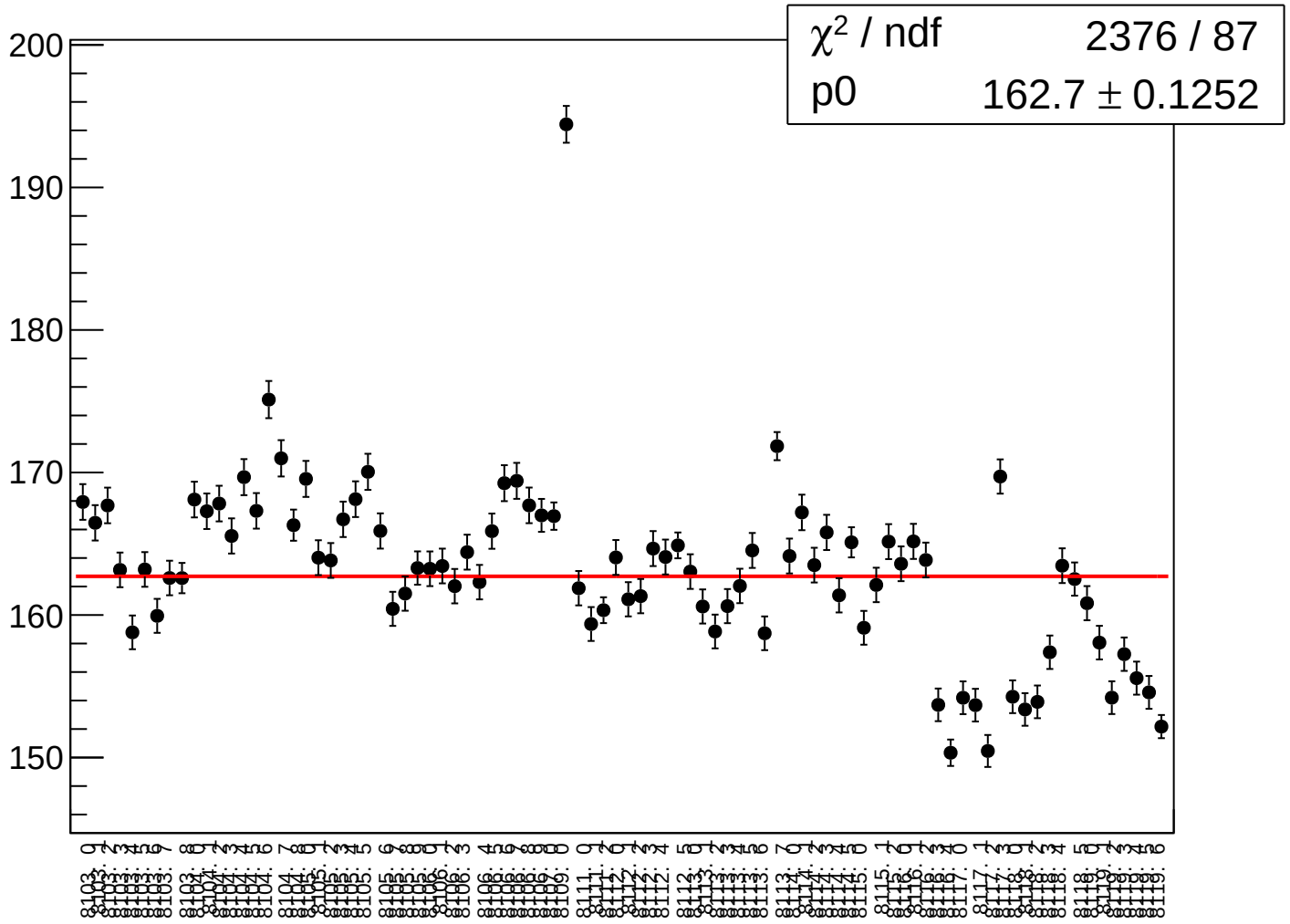

asym_sam_15_dd_mean vs run
χ² / ndf 77.31 / 87
p0 1183 ± 695.8
30000
20000
10000
0
−10000
−20000
pull
Entries 88
Mean 81.9
Std Dev 69.92
2
1
0
−1
−2

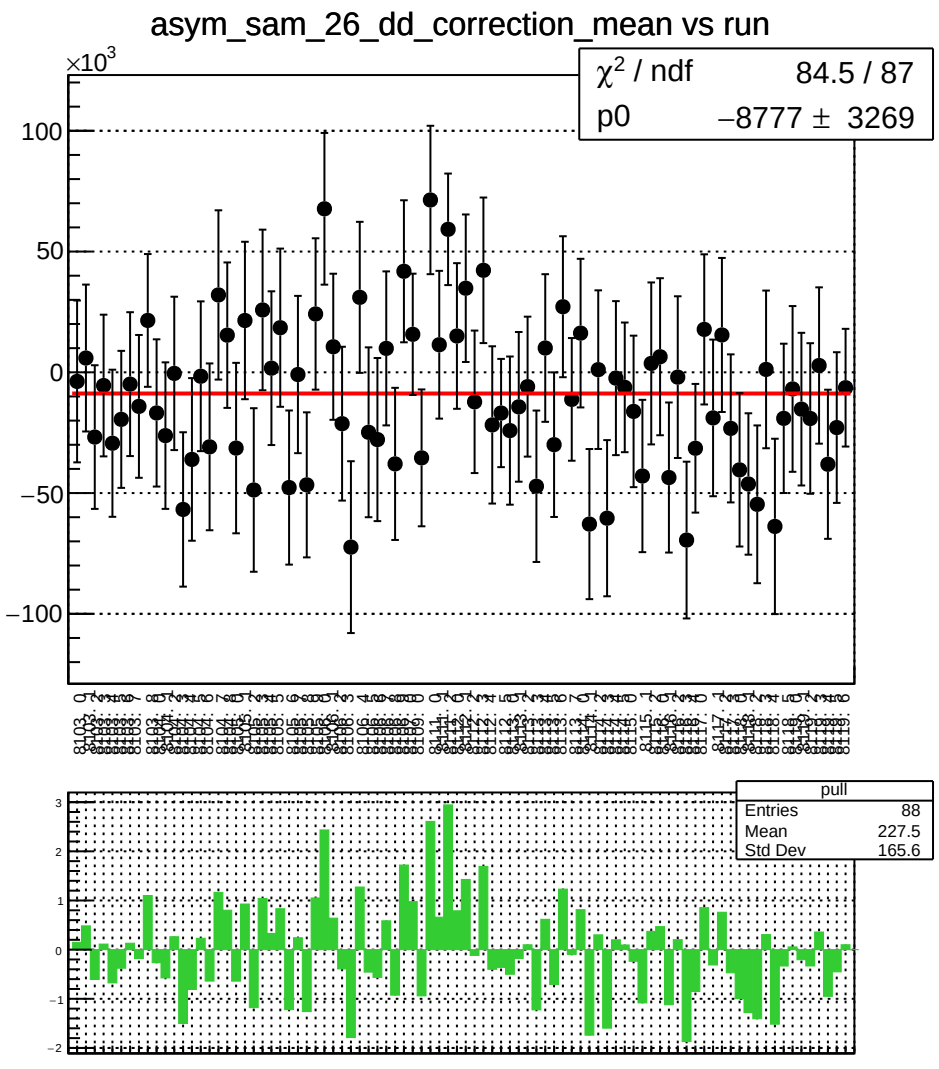

pull1D
Entries 88
Mean 0.02056
Std Dev 0.937
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

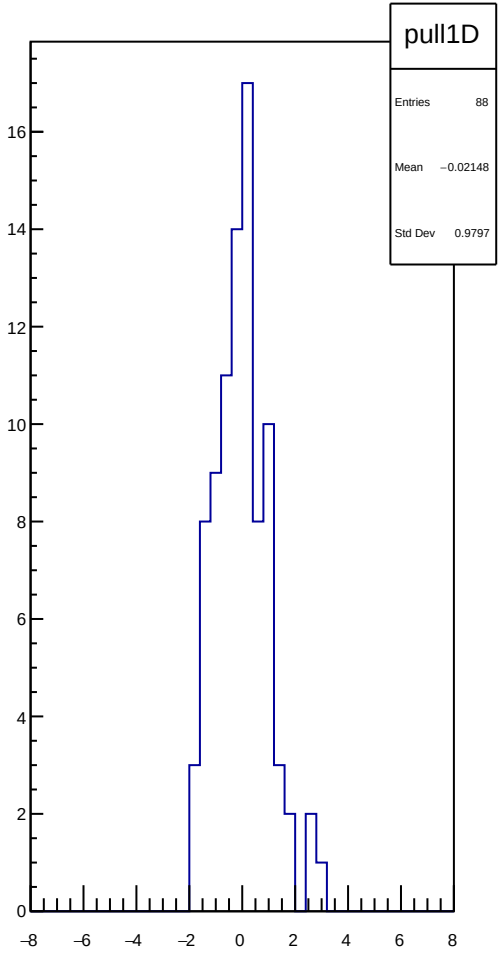

asym_sam_15_dd_rms vs run
χ^2 / ndf 1.855e+04 / 87
p0 636.4 ± 0.492
850
800
750
700
650
600
550
500

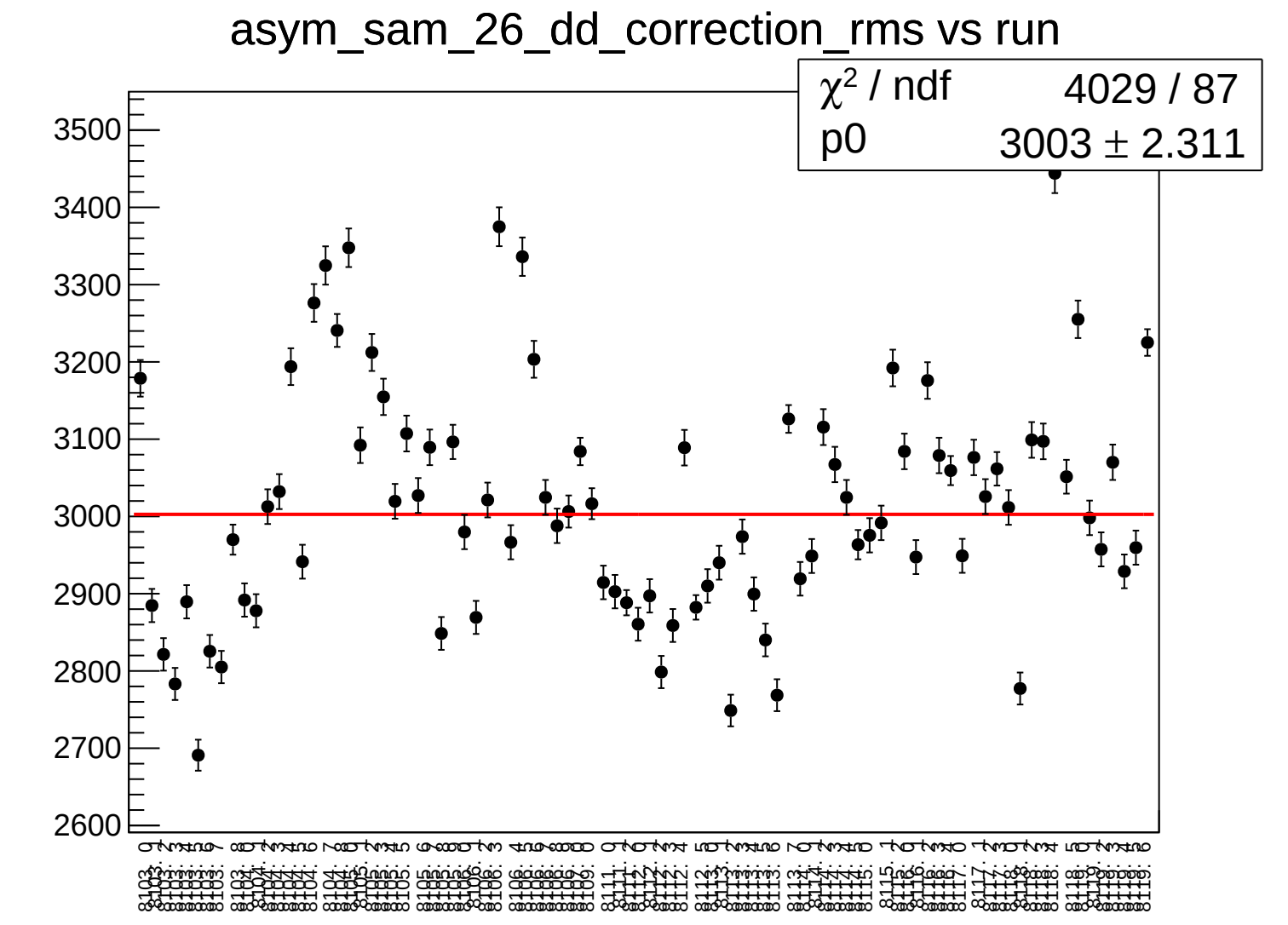

reg_asym_sam_26_dd_mean vs run
χ² / ndf 75.82 / 87
p0 −271.5 ± 177
pull
Entries 88
Mean −160.3
Std Dev 182.2

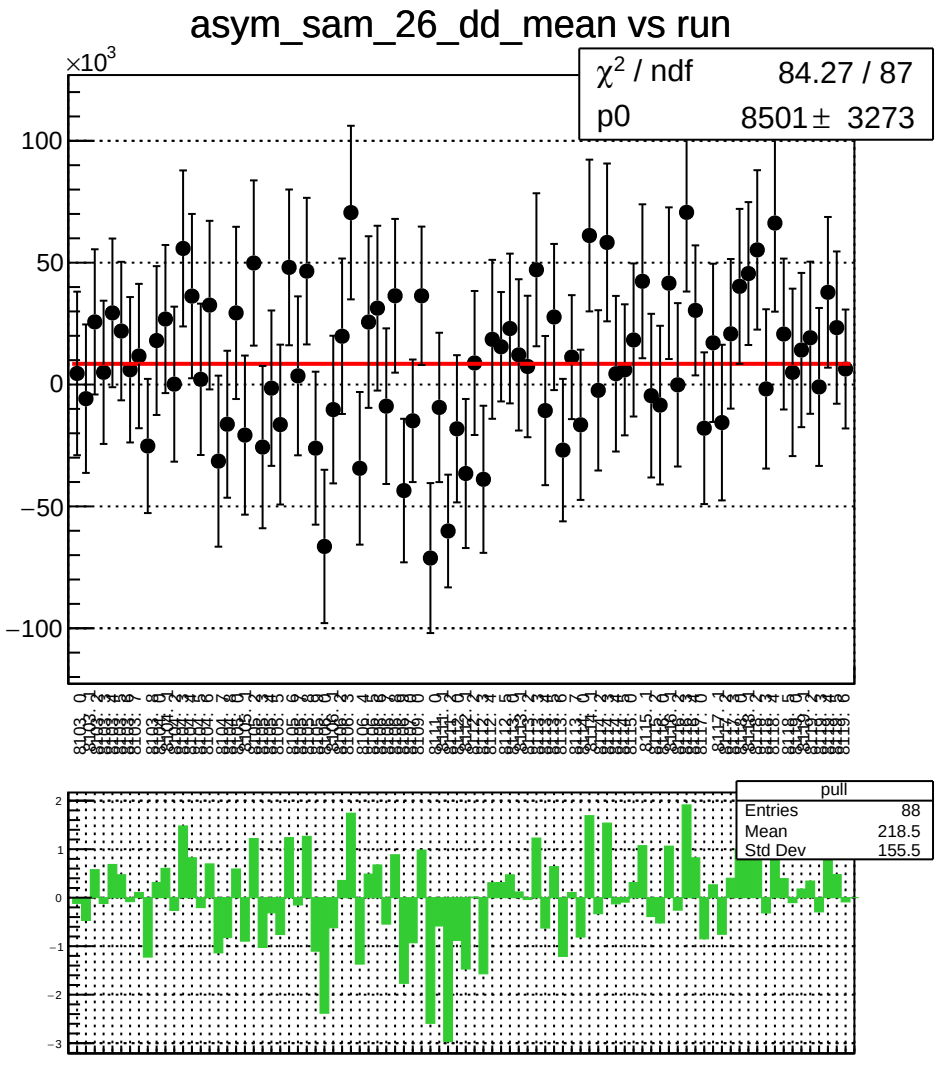

pull1D
Entries 88
Mean 0.00836
Std Dev 0.9282

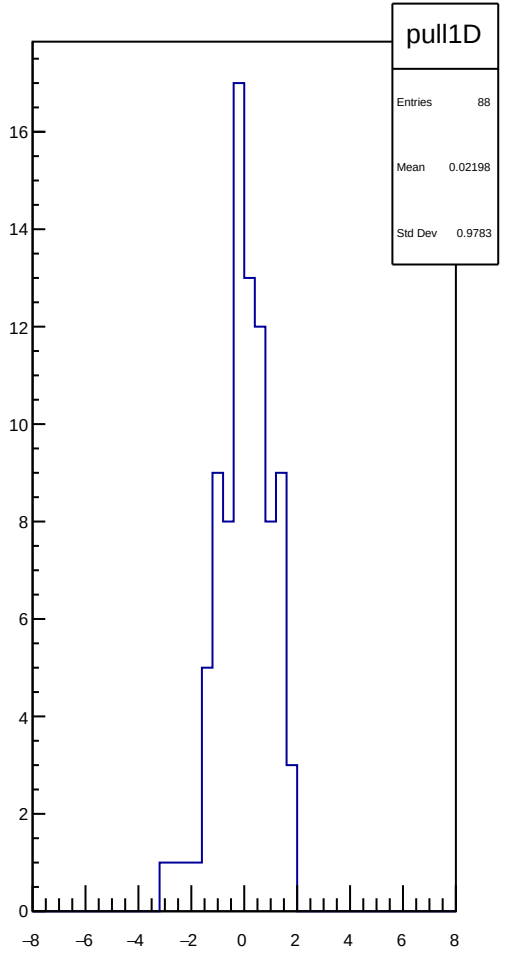

reg_asym_sam_26_dd_rms vs run
χ² / ndf 2376 / 87
p0 162.7 ± 0.1252
200
190
180
170
160
150

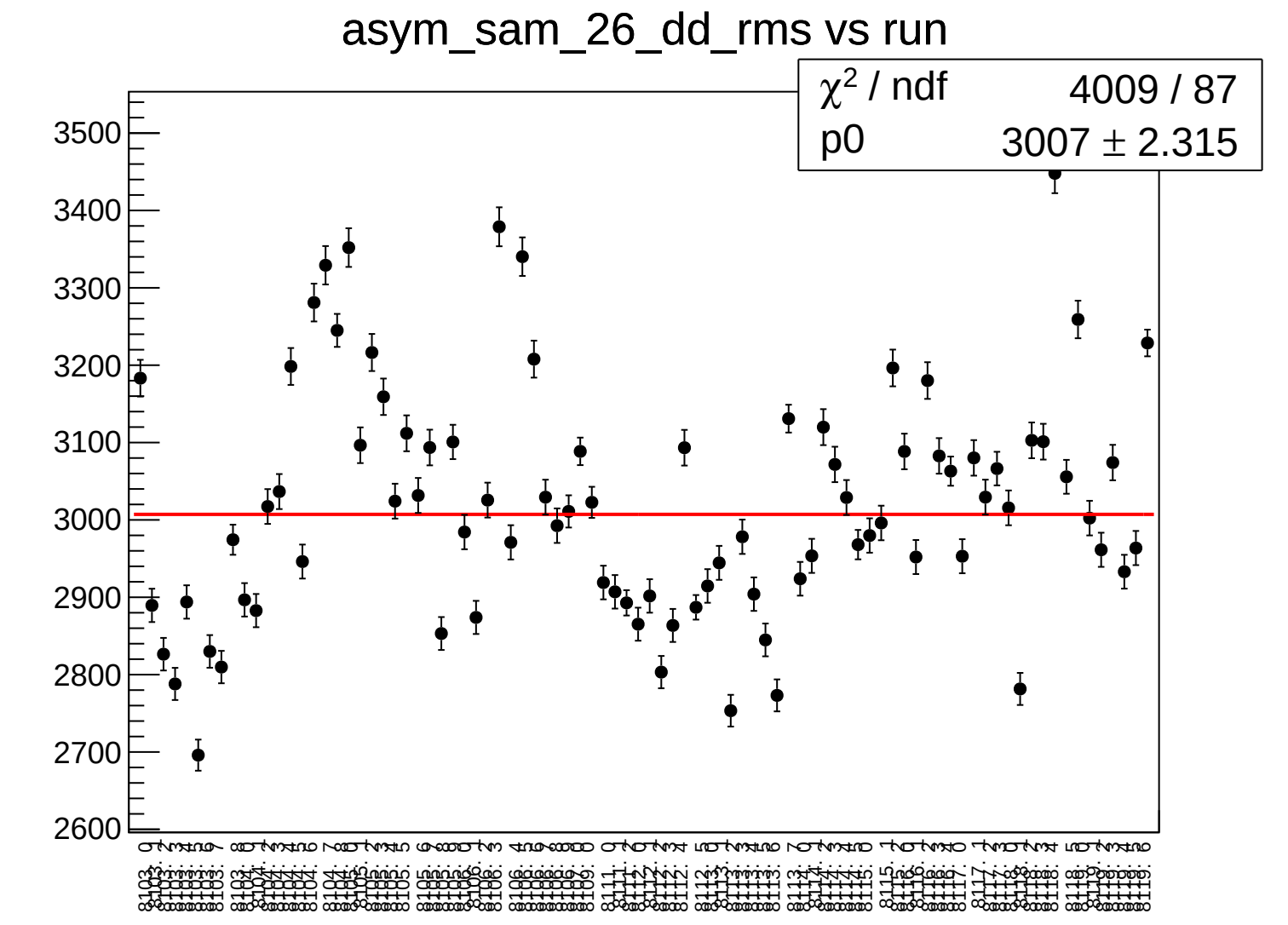

asym_sam_26_dd_correction_mean vs run
×10^3
χ² / ndf 84.5 / 87
p0 −8777 ± 3269
100
50
0
−50
−100
pull
Entries 88
Mean 227.5
Std Dev 165.6
3
2
1
0
−1
−2

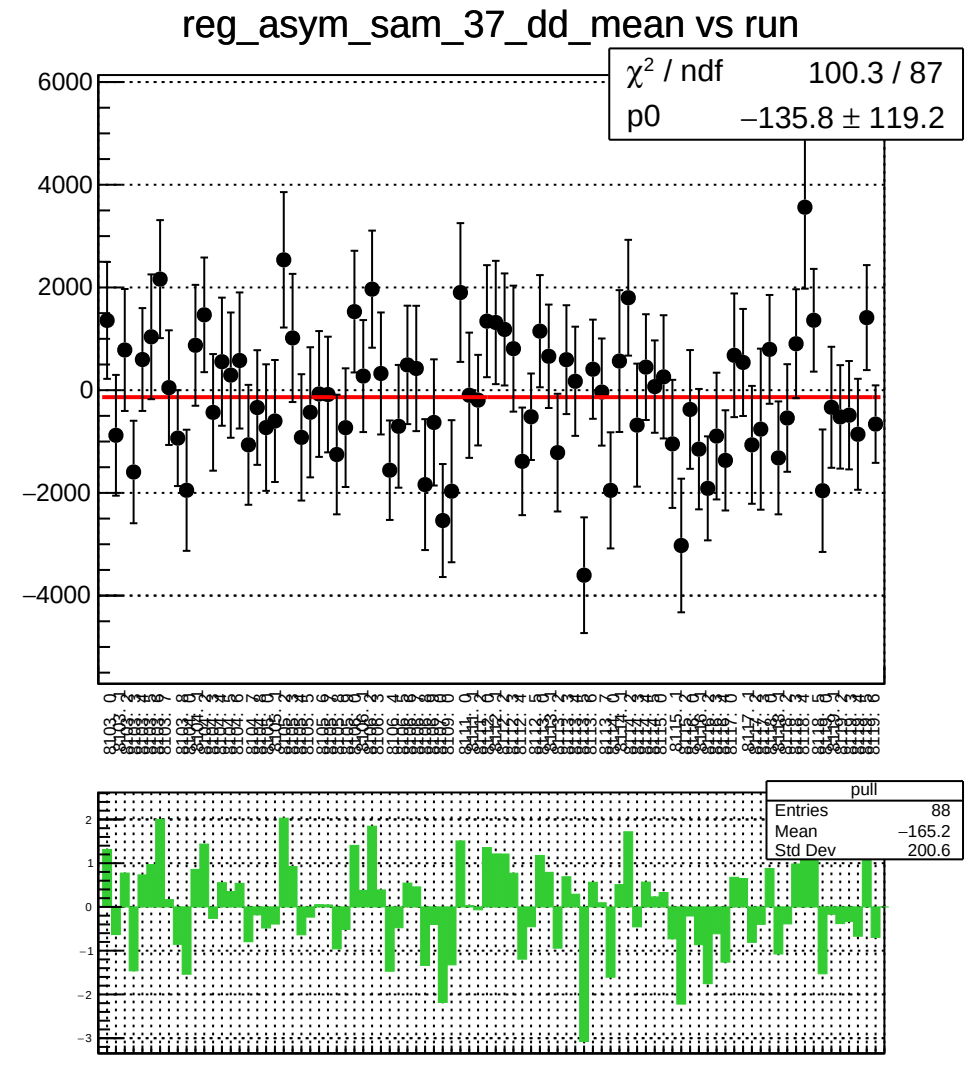

pull1D
Entries 88
Mean −0.02148
Std Dev 0.9797
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

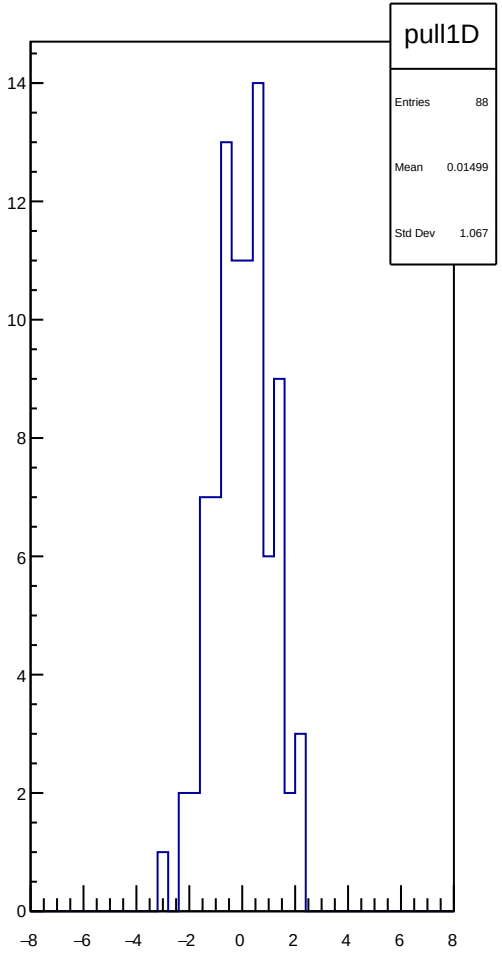

asym_sam_26_dd_correction_rms vs run
χ² / ndf 4029 / 87
p0 3003 ± 2.311
3500
3400
3300
3200
3100
3000
2900
2800
2700
2600


asym_sam_26_dd_mean vs run
×10^3
χ² / ndf 84.27 / 87
p0 8501 ± 3273
100
50
0
−50
−100
pull
Entries 88
Mean 218.5
Std Dev 155.5
2
1
0
−1
−2
−3

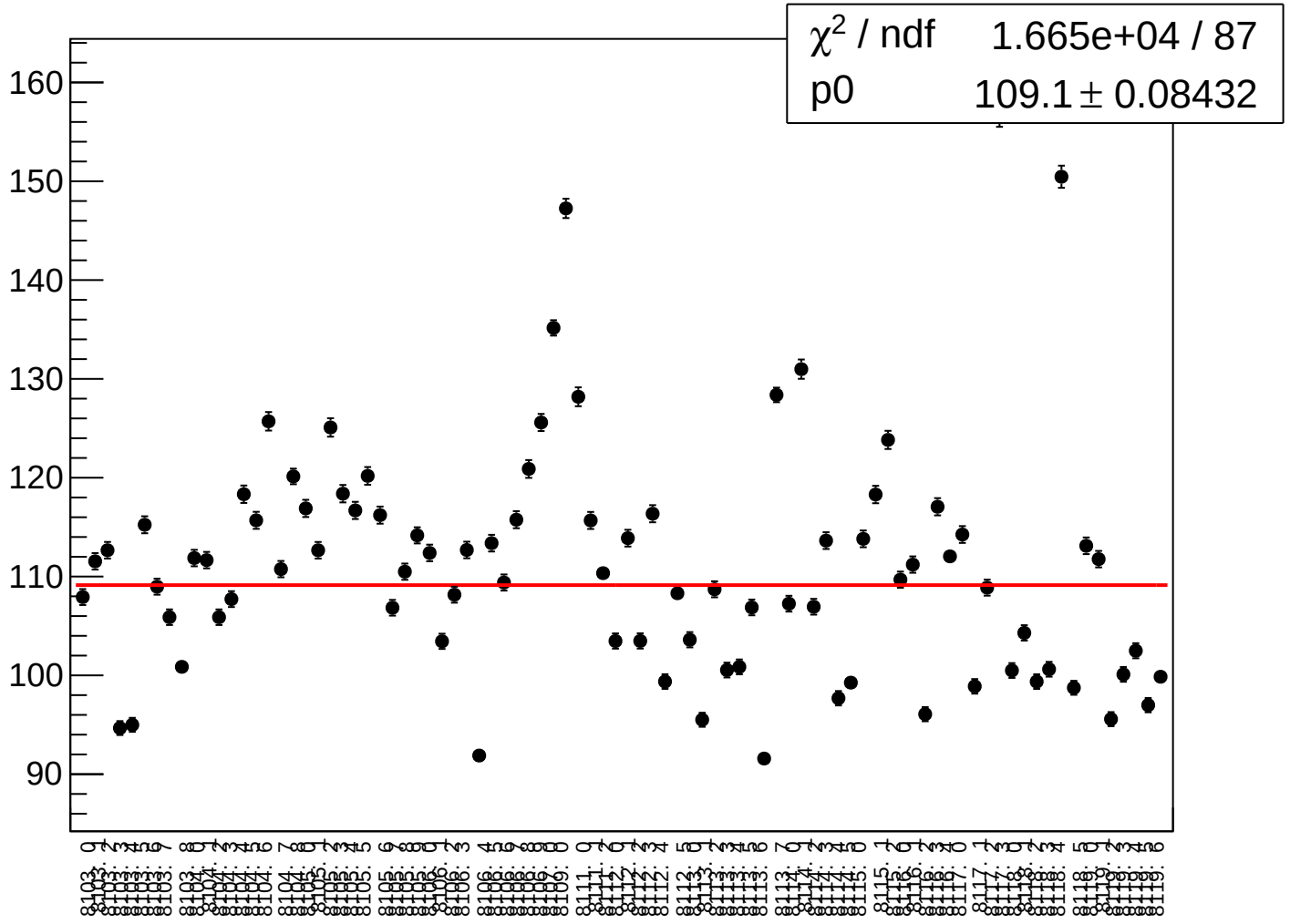

pull1D
Entries 88
Mean 0.02198
Std Dev 0.9783
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

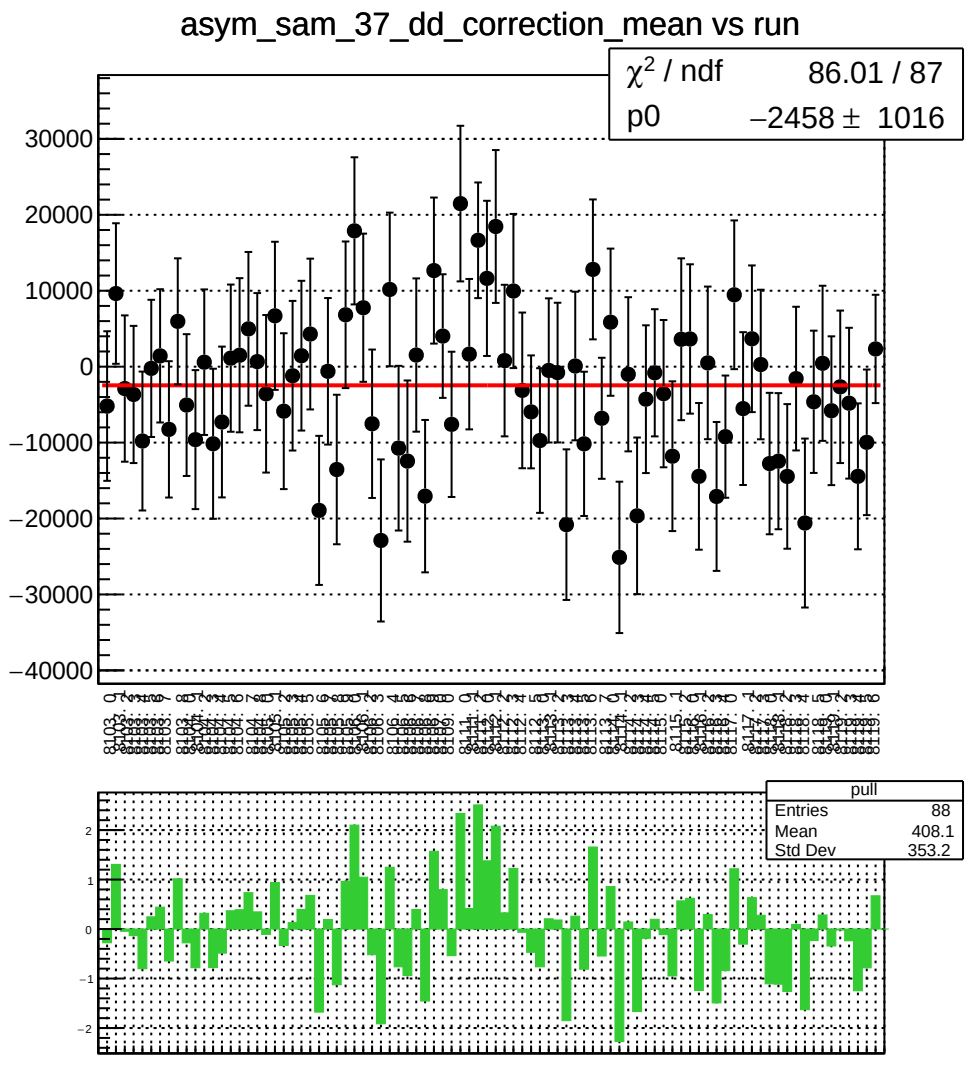

asym_sam_26_dd_rms vs run
χ² / ndf 4009 / 87
p0 3007 ± 2.315
3500
3400
3300
3200
3100
3000
2900
2800
2700
2600

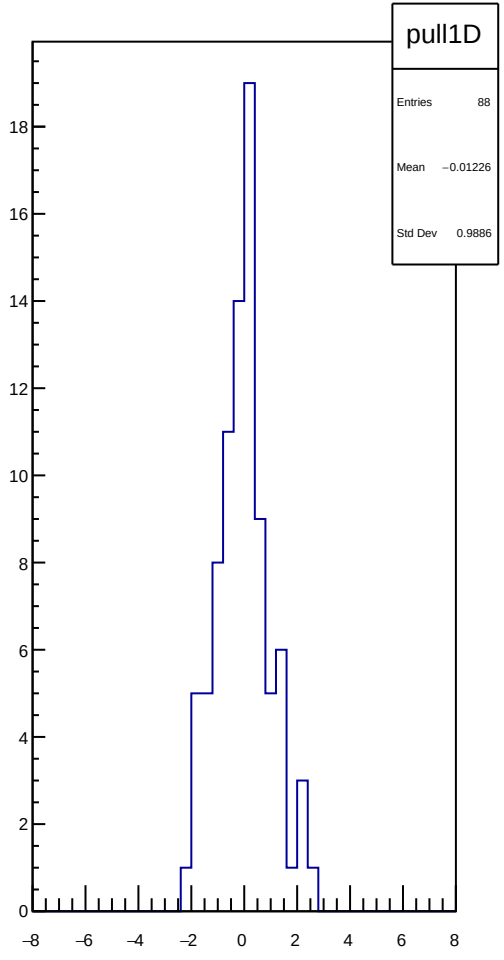

reg_asym_sam_37_dd_mean vs run
χ² / ndf 100.3 / 87
p0 −135.8 ± 119.2
6000
4000
2000
0
−2000
−4000
pull
Entries 88
Mean −165.2
Std Dev 200.6
2
1
0
−1
−2
−3

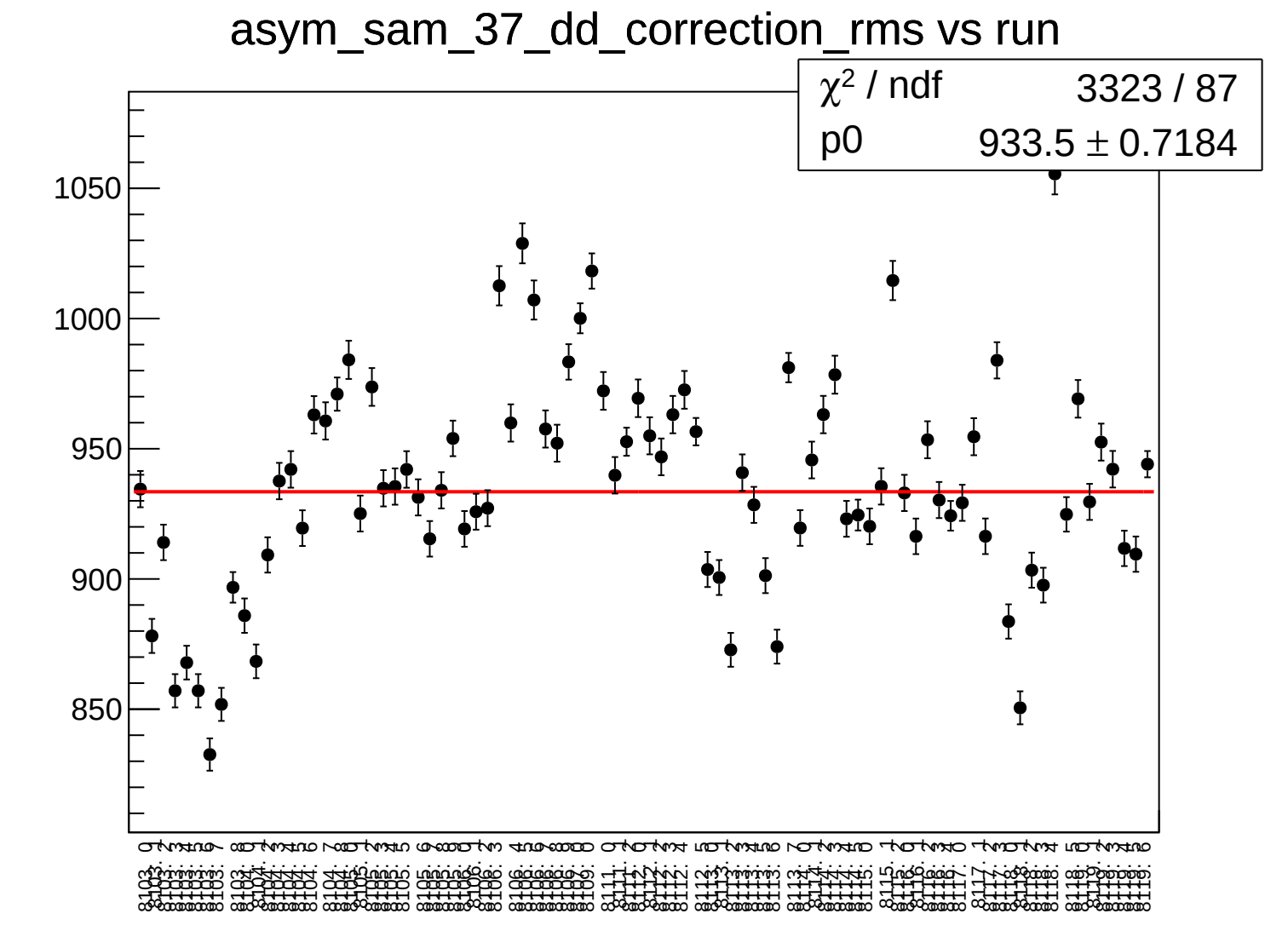

pull1D
Entries 88
Mean 0.01499
Std Dev 1.067
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

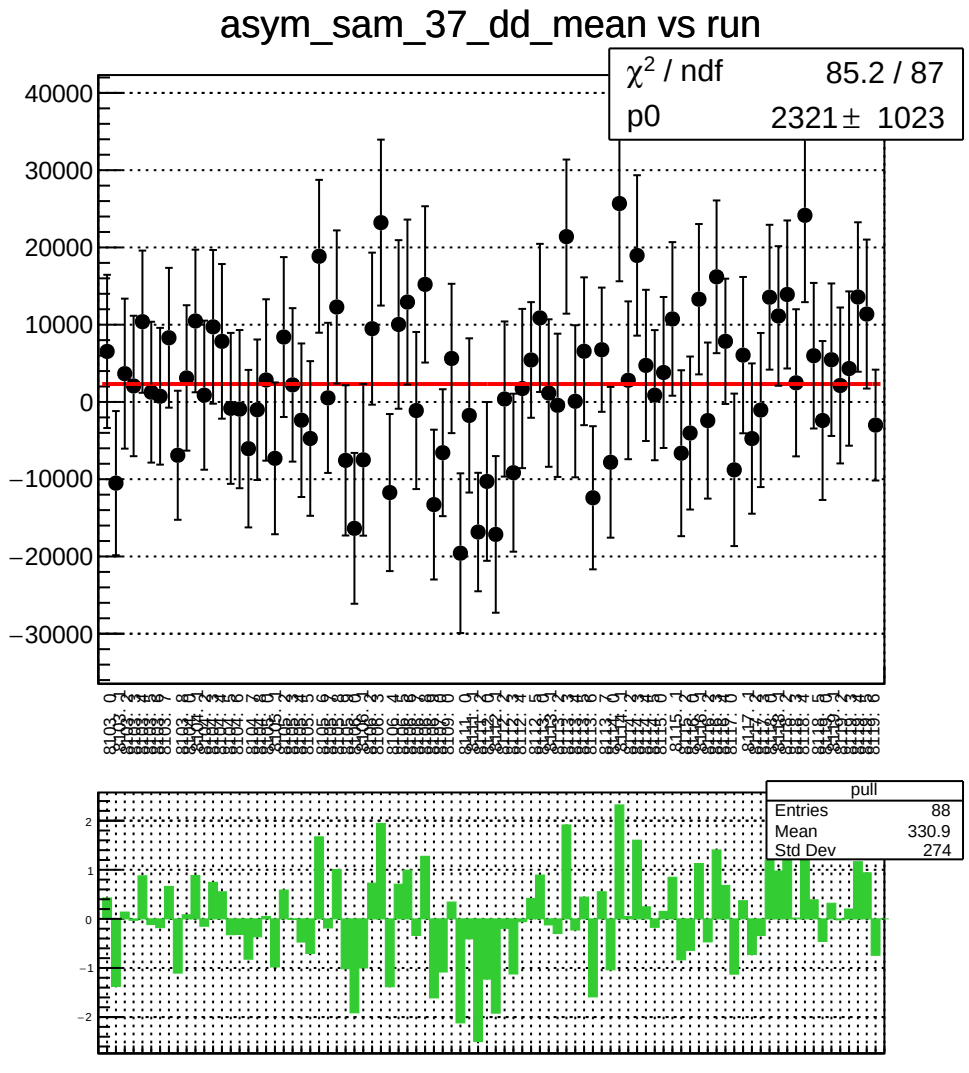
reg_asym_sam_37_dd_rms vs run

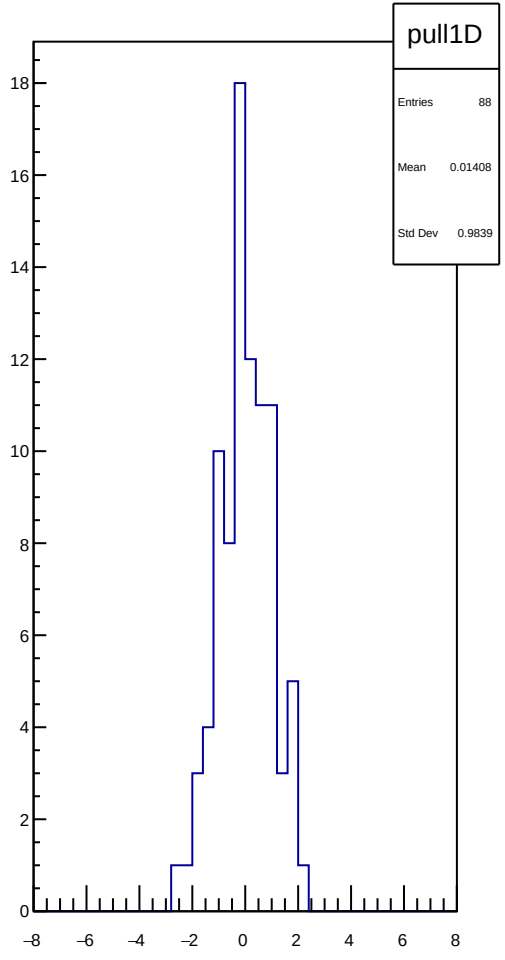


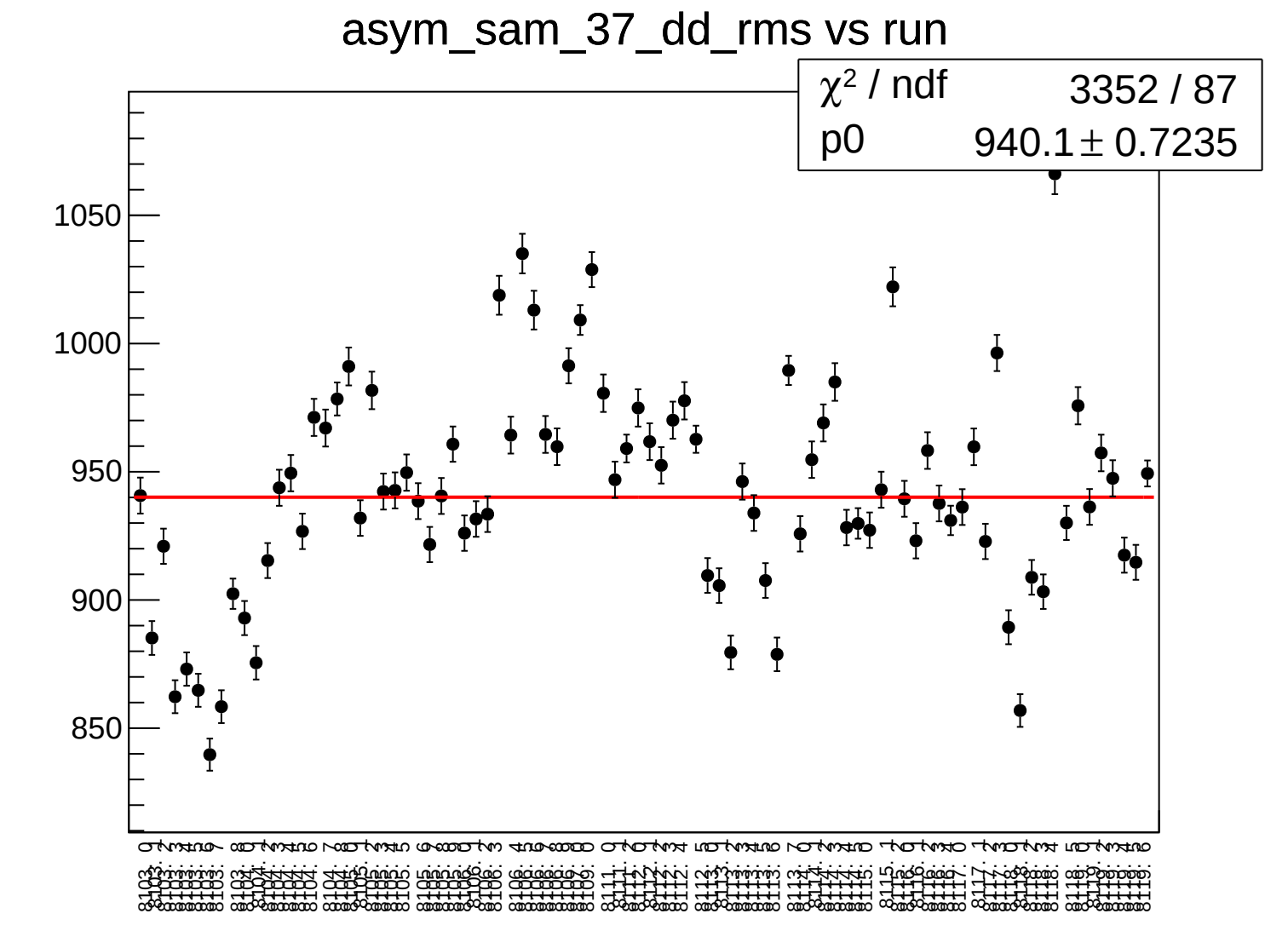

asym_sam_37_dd_correction_mean vs run
χ² / ndf 86.01 / 87
p0 −2458 ± 1016
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 88
Mean 408.1
Std Dev 353.2
2
1
0
−1
−2

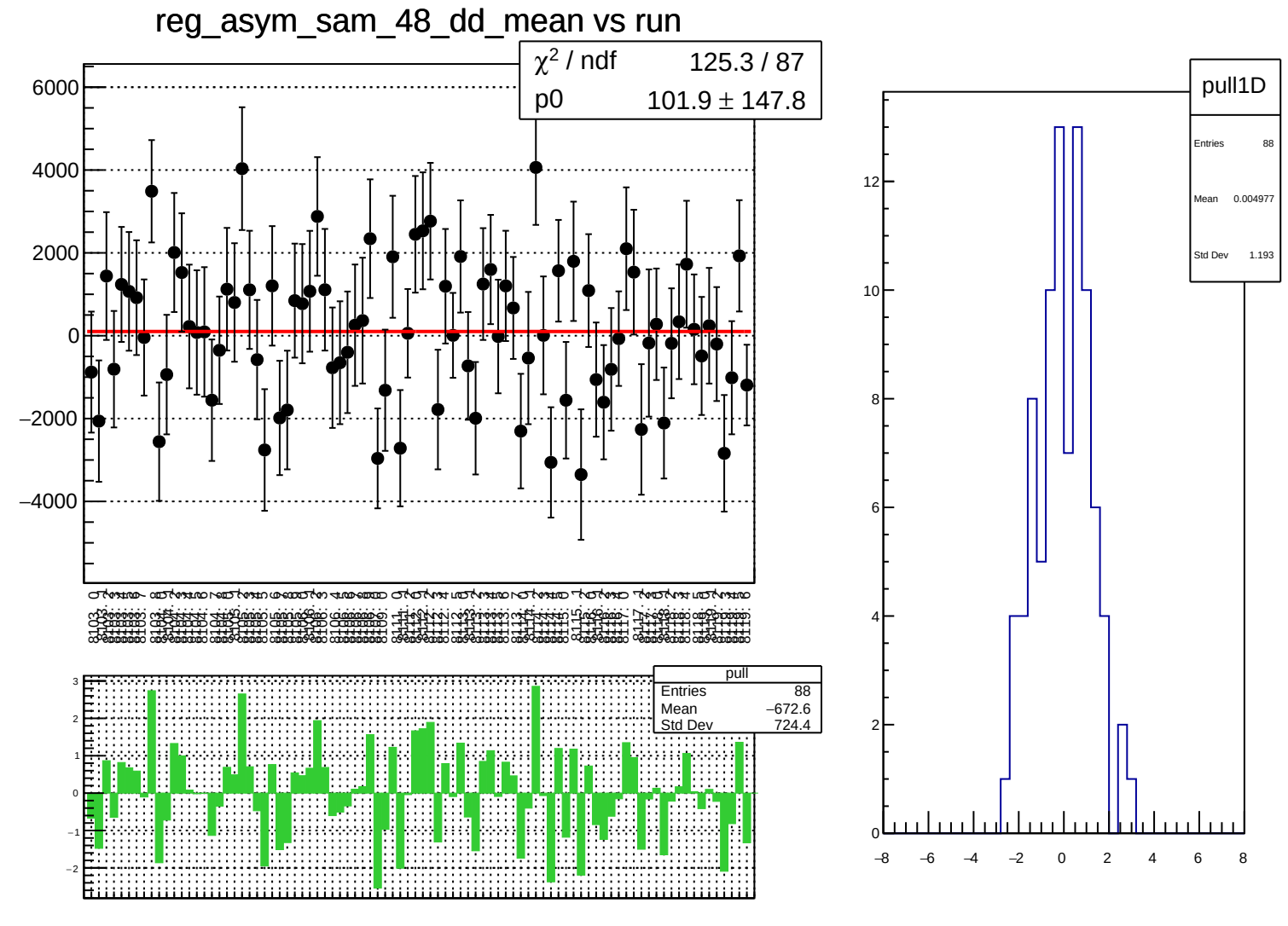

pull1D
Entries 88
Mean −0.01226
Std Dev 0.9886
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

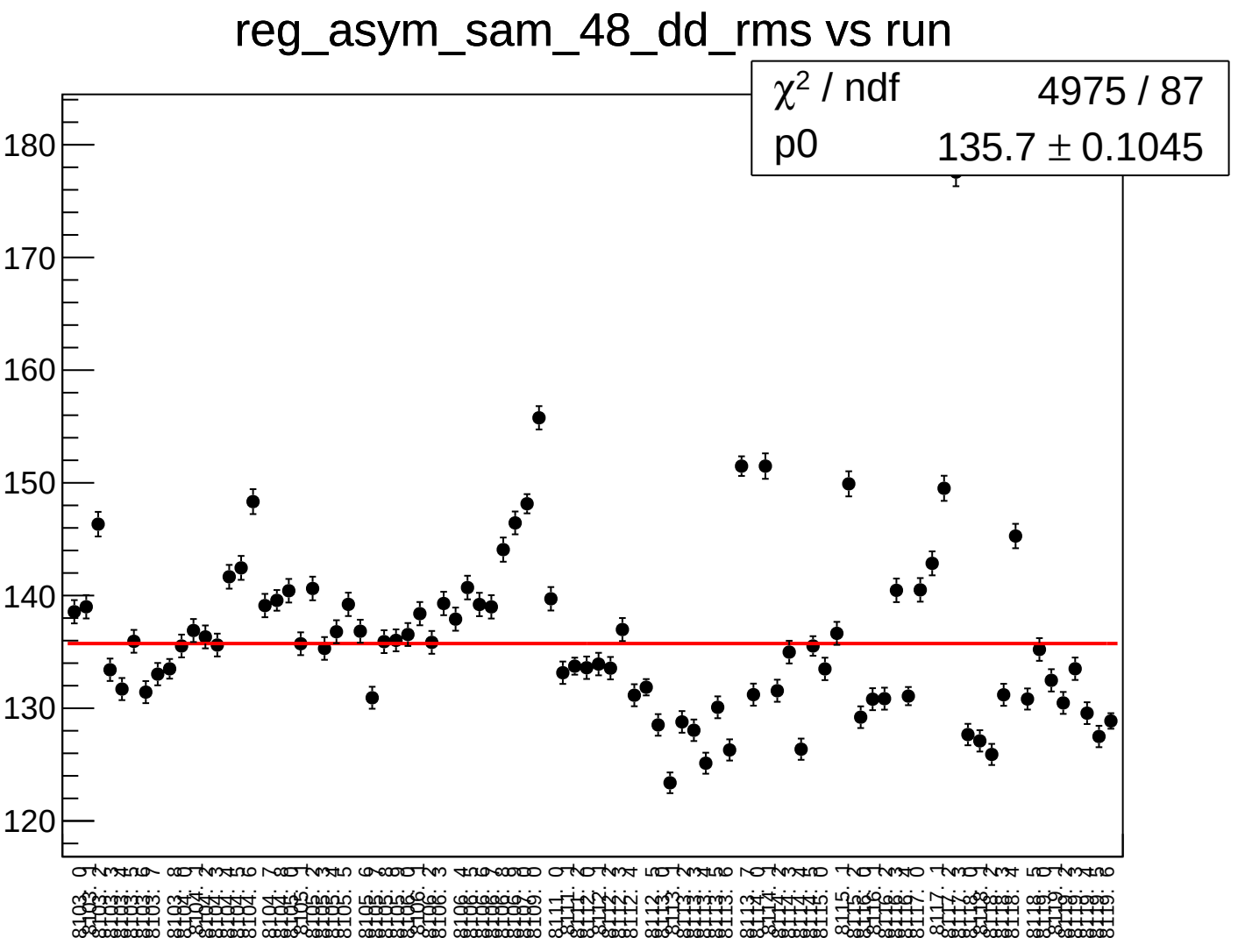

asym_sam_37_dd_correction_rms vs run
χ^2 / ndf 3323 / 87
p0 933.5 ± 0.7184
1050
1000
950
900
850

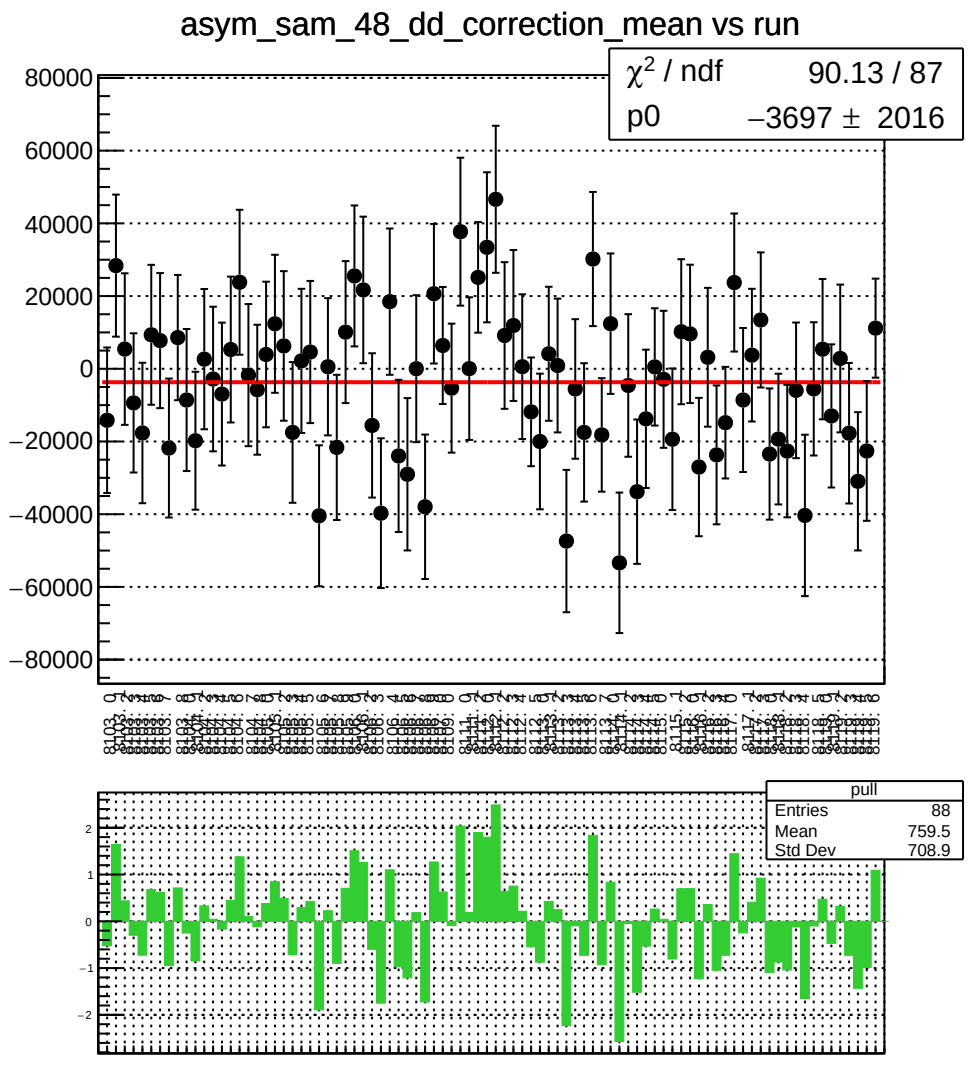

asym_sam_37_dd_mean vs run
χ² / ndf 85.2 / 87
p0 2321 ± 1023
pull
Entries 88
Mean 330.9
Std Dev 274

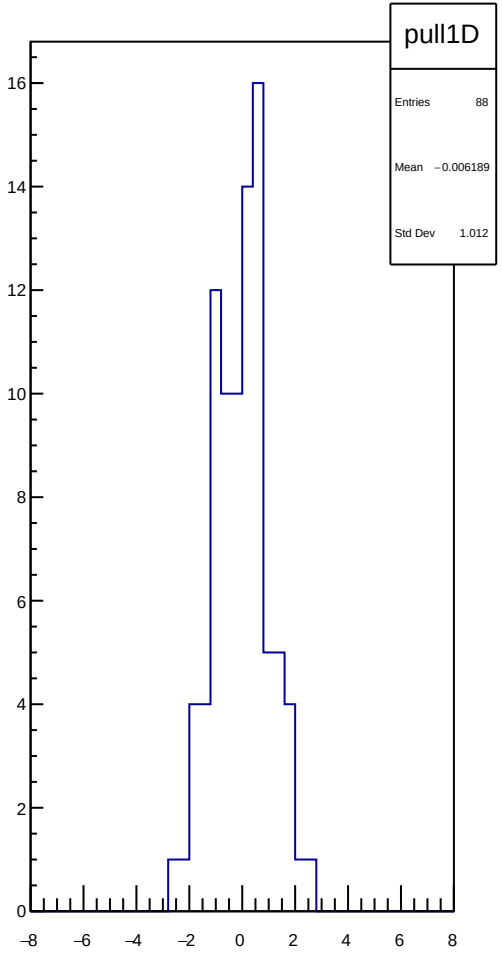

pull1D
Entries 88
Mean 0.01408
Std Dev 0.9839

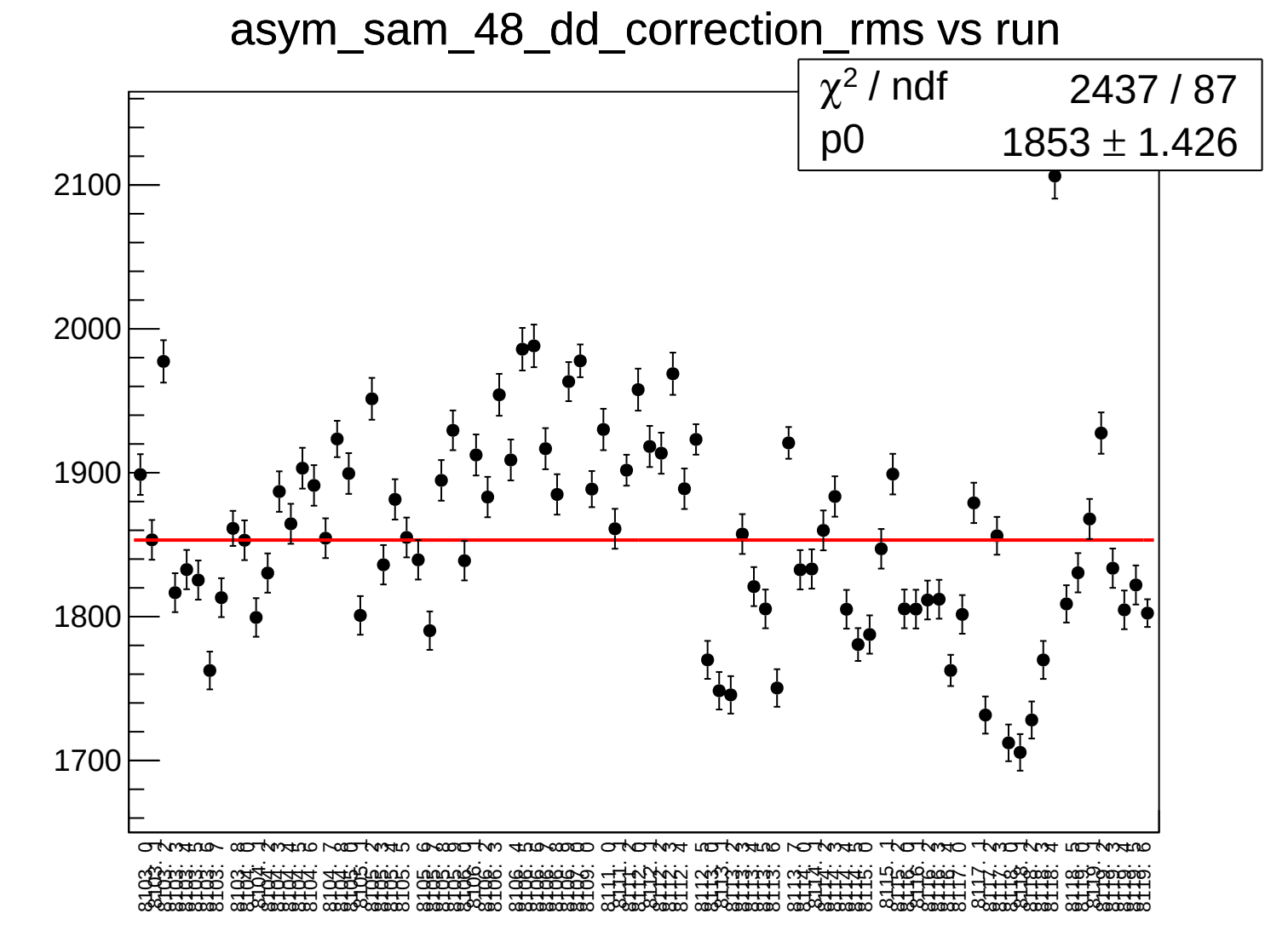

asym_sam_37_dd_rms vs run
χ² / ndf 3352 / 87
p0 940.1 ± 0.7235
1050
1000
950
900
850

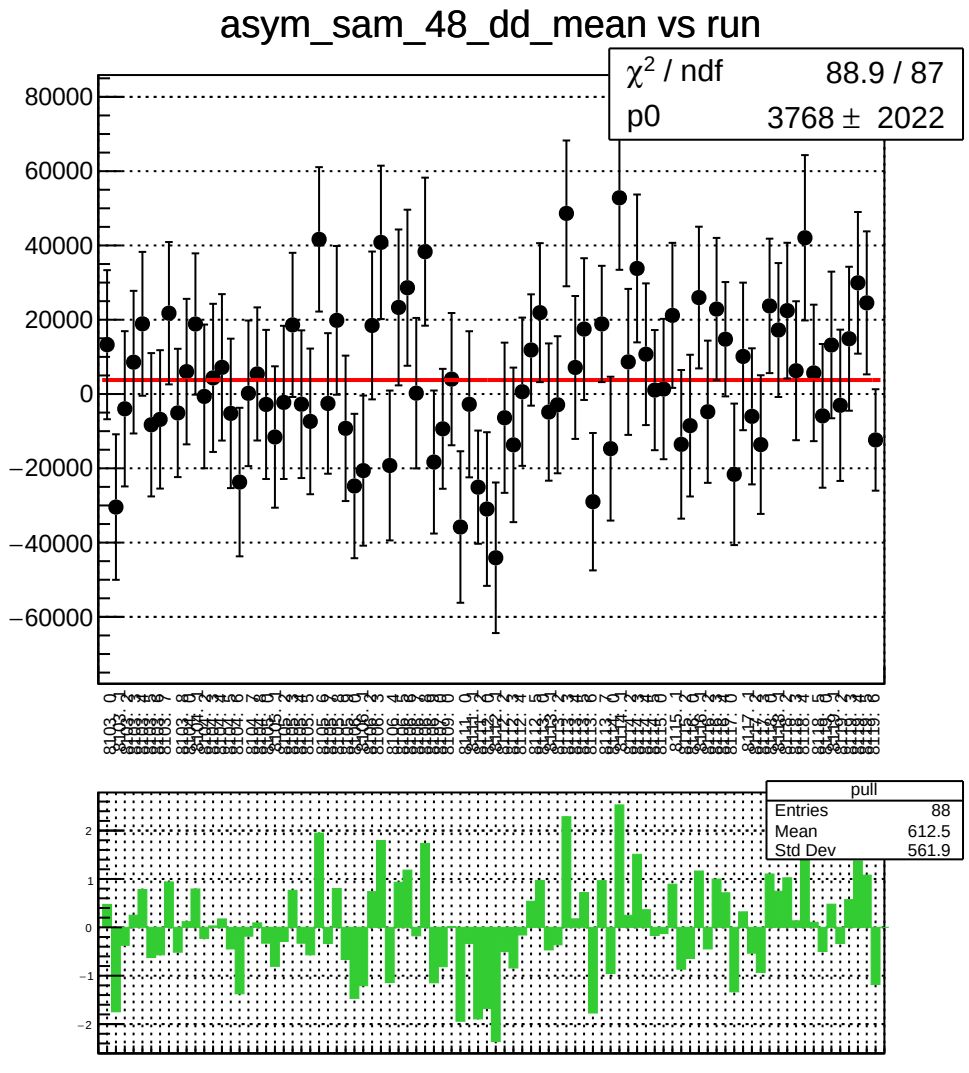

reg_asym_sam_48_dd_mean vs run
χ² / ndf 125.3 / 87
p0 101.9 ± 147.8
6000
4000
2000
0
−2000
−4000
pull
Entries 88
Mean −672.6
Std Dev 724.4
3
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.004977
Std Dev 1.193
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

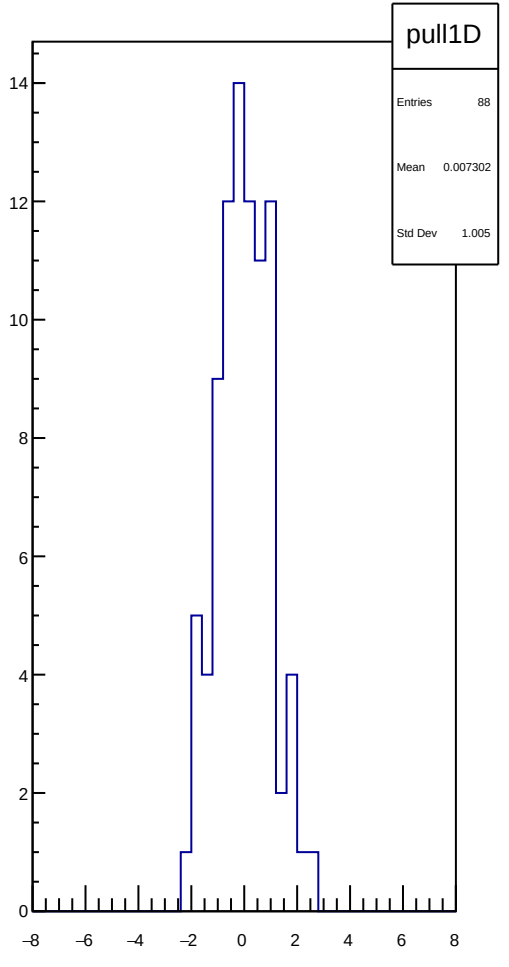

reg_asym_sam_48_dd_rms vs run
χ² / ndf 4975 / 87
p0 135.7 ± 0.1045
180
170
160
150
140
130
120

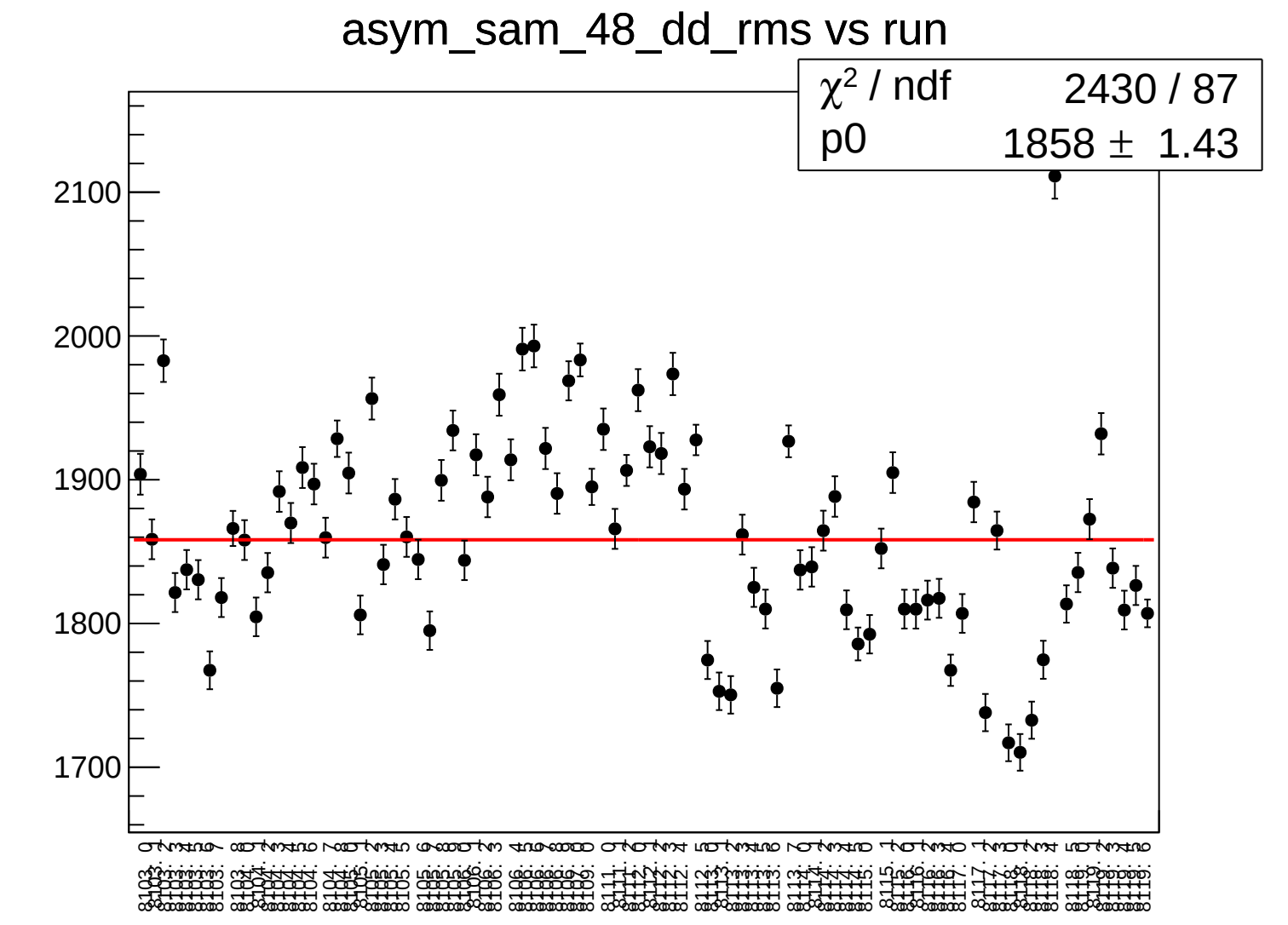

asym_sam_48_dd_correction_mean vs run
χ² / ndf 90.13 / 87
p0 −3697 ± 2016
pull
Entries 88
Mean 759.5
Std Dev 708.9

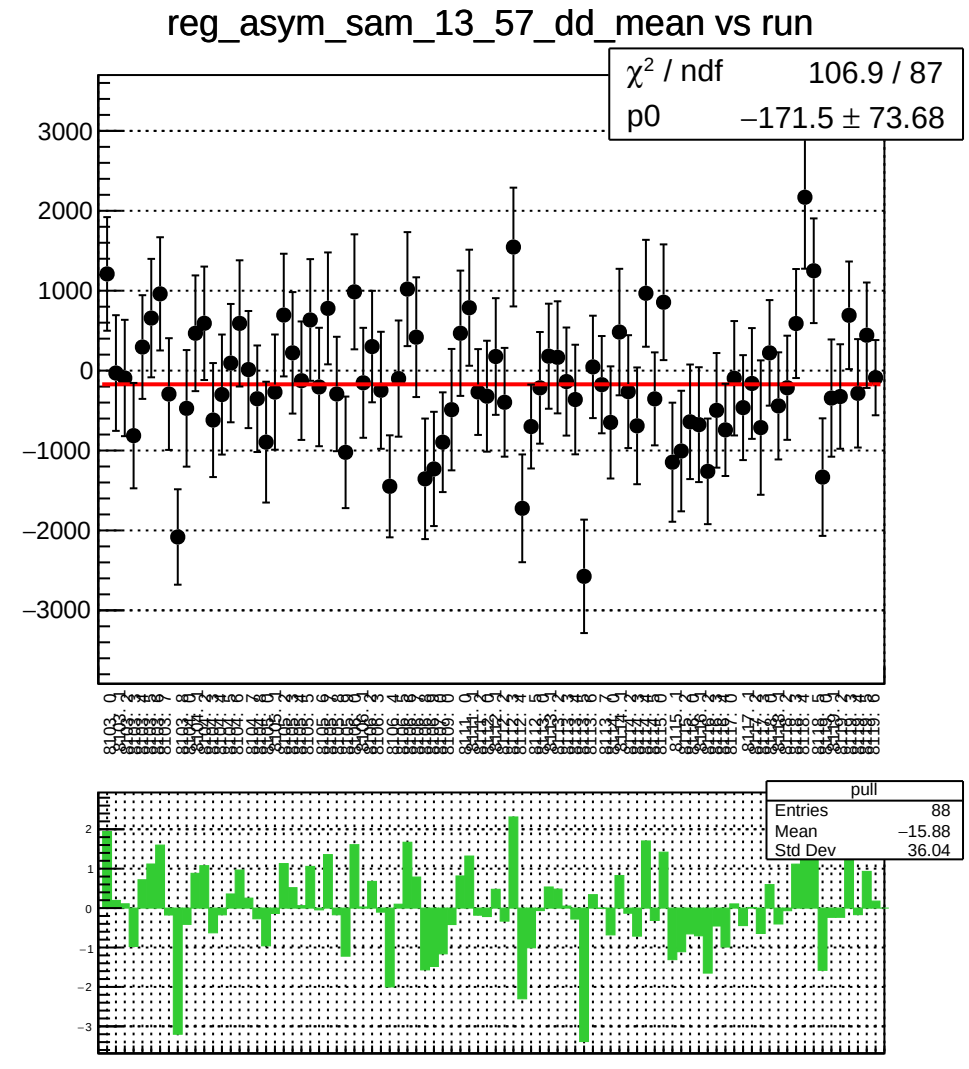

pull1D
Entries 88
Mean −0.006189
Std Dev 1.012

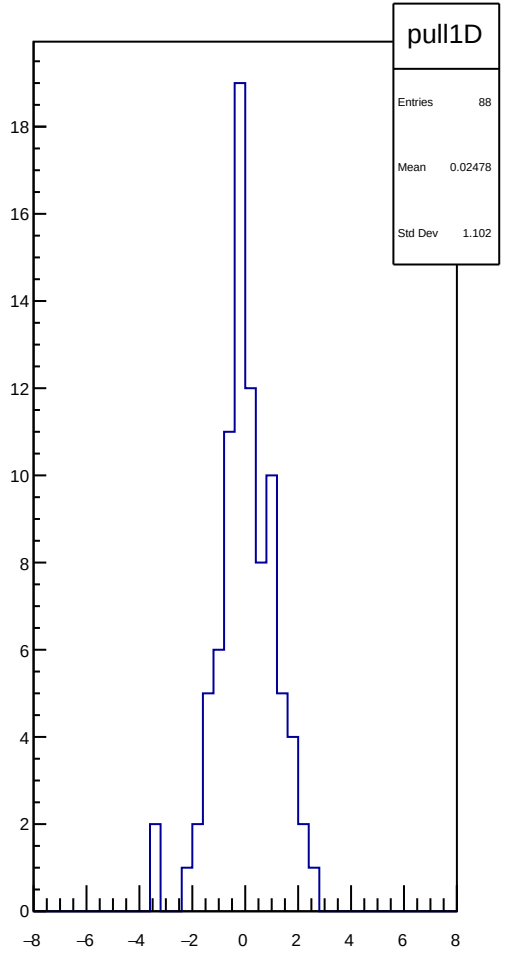

asym_sam_48_dd_correction_rms vs run
χ² / ndf 2437 / 87
p0 1853 ± 1.426
2100
2000
1900
1800
1700

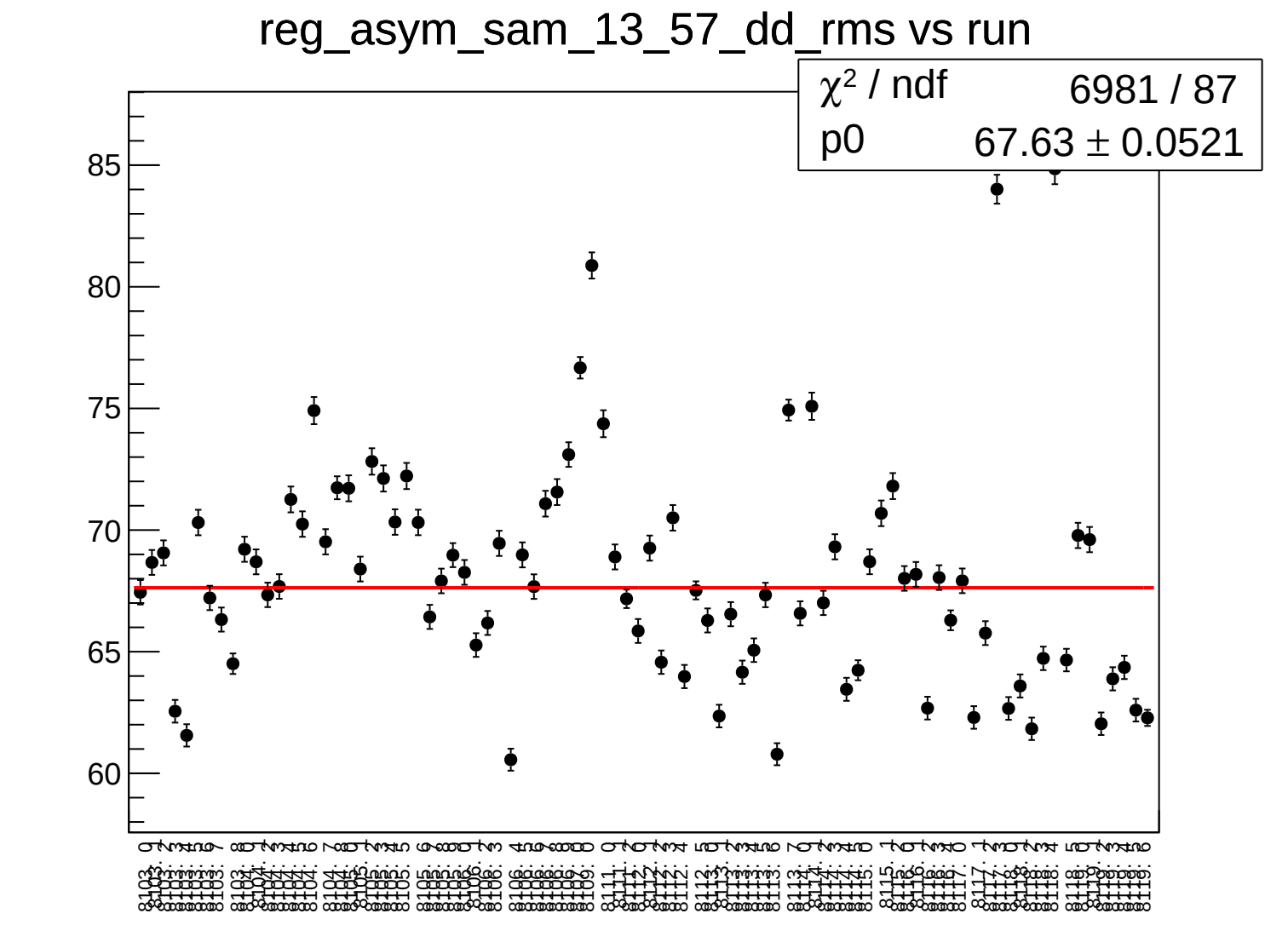

asym_sam_48_dd_mean vs run
χ² / ndf 88.9 / 87
p0 3768 ± 2022
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 612.5
Std Dev 561.9
2
1
0
−1
−2

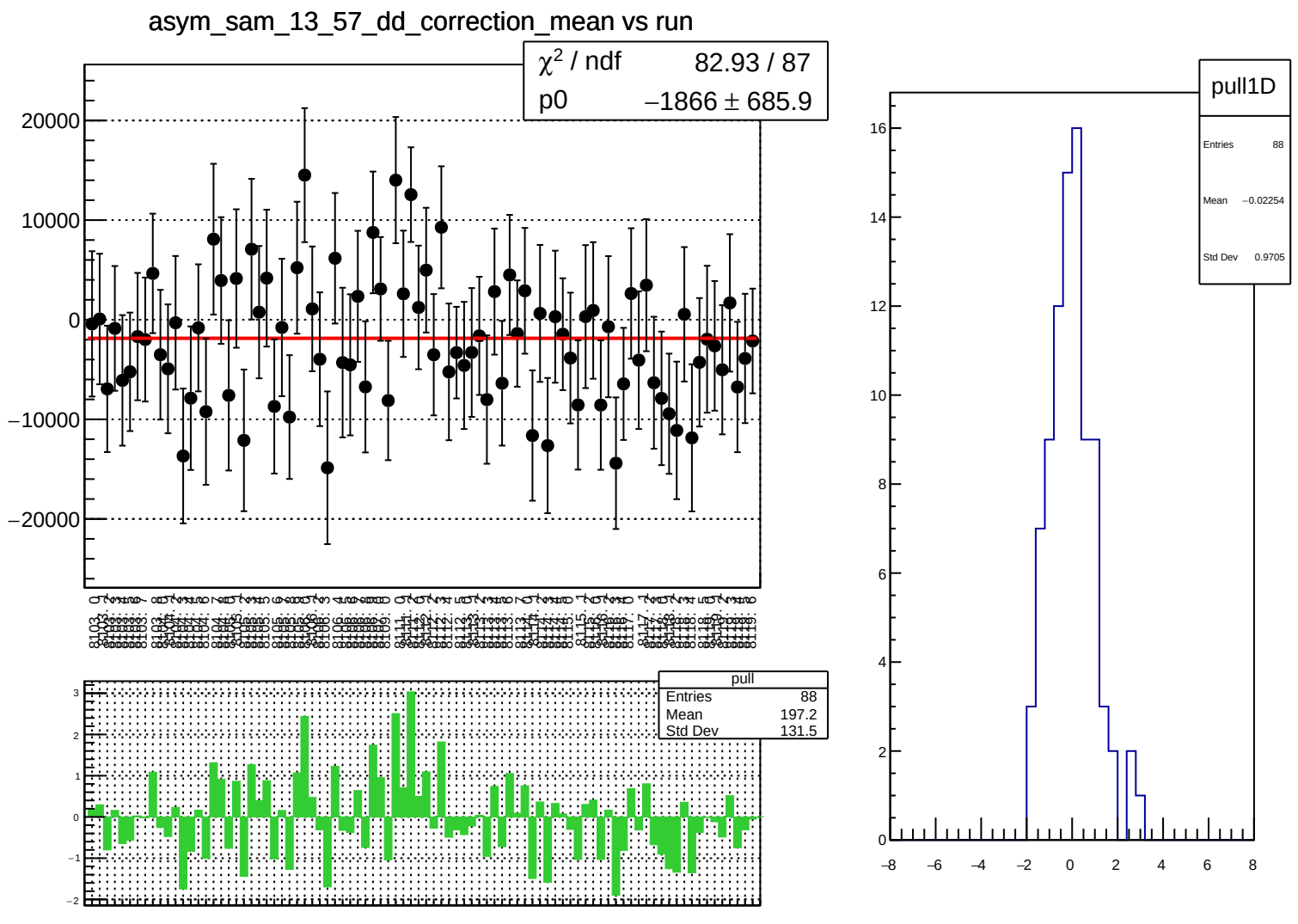

pull1D
Entries 88
Mean 0.007302
Std Dev 1.005
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

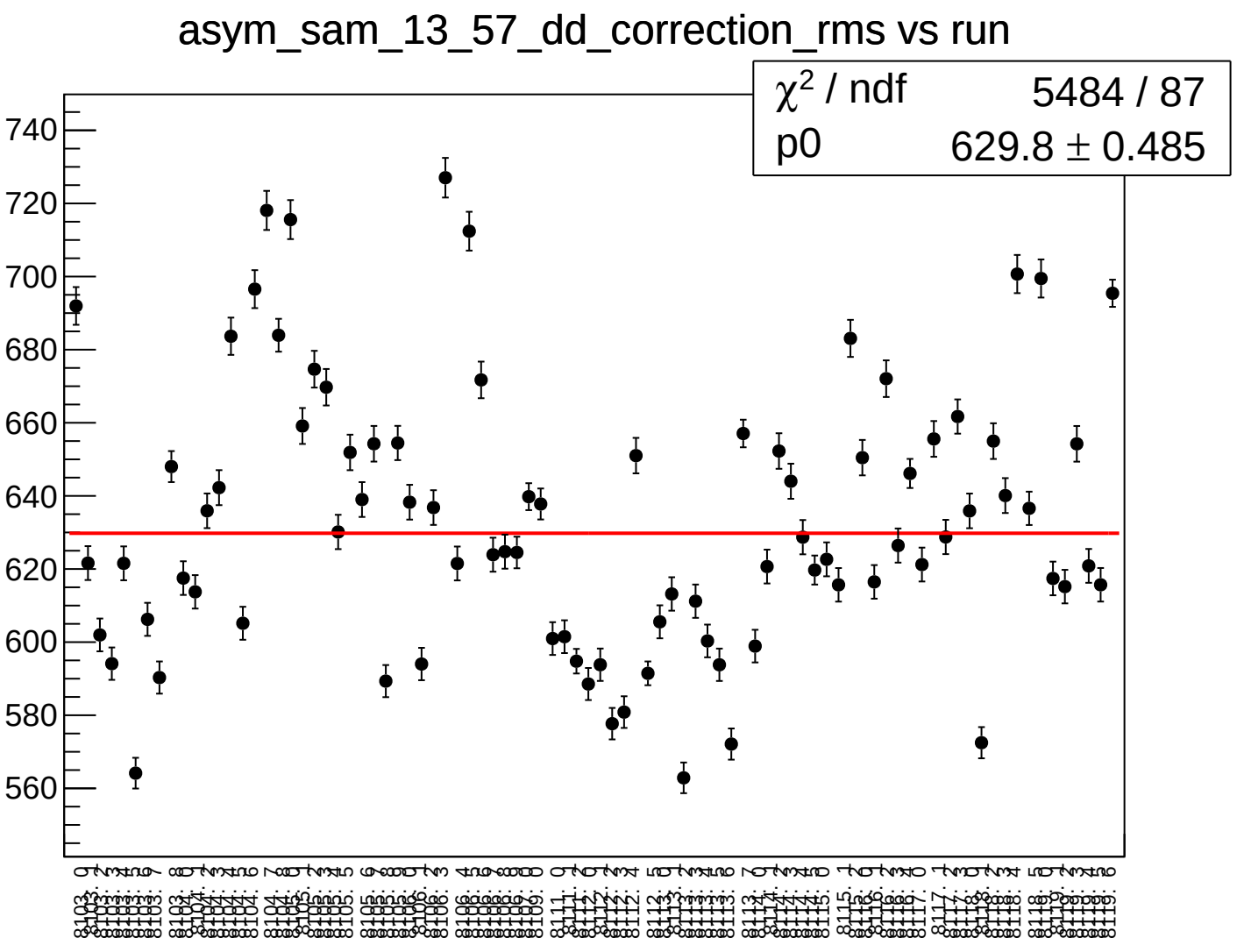

asym_sam_48_dd_rms vs run
χ² / ndf 2430 / 87
p0 1858 ± 1.43
2100
2000
1900
1800
1700

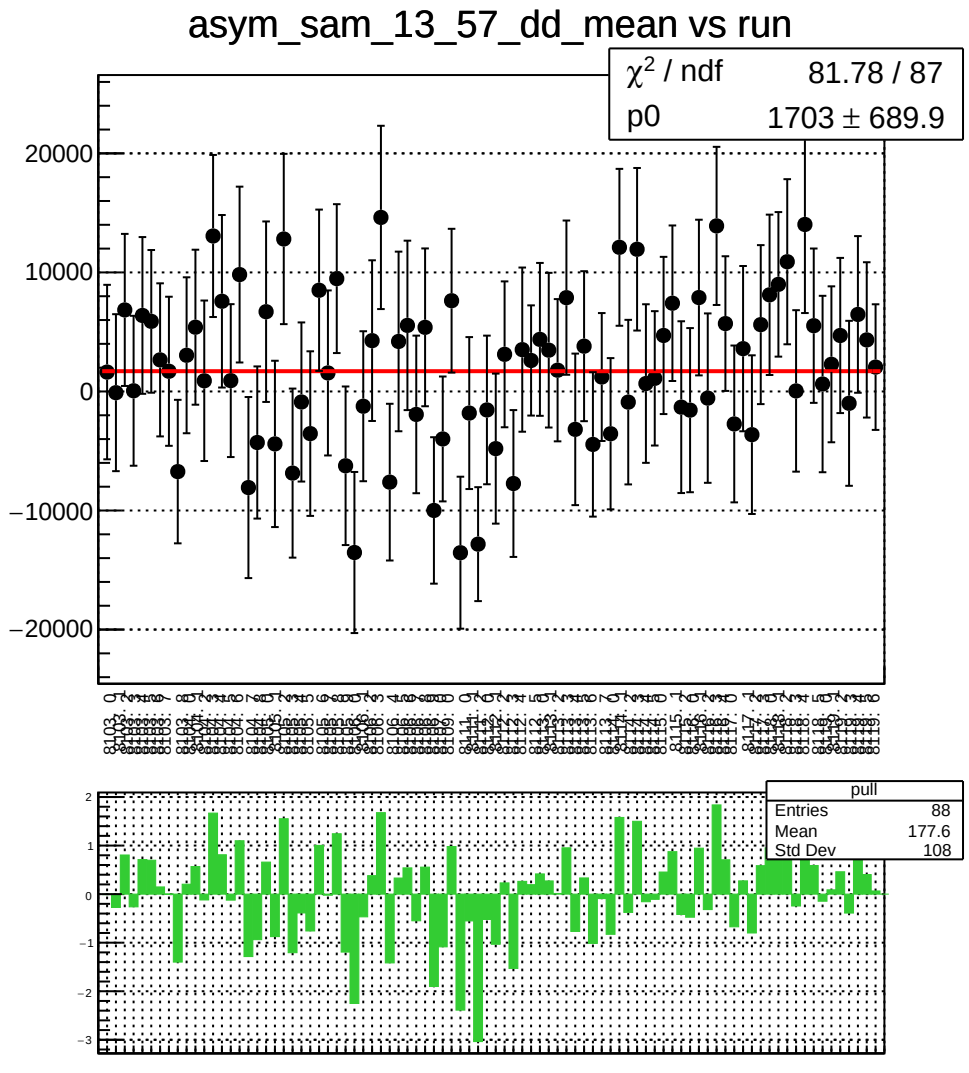

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 106.9 / 87
p0 −171.5 ± 73.68
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 88
Mean −15.88
Std Dev 36.04
2
1
0
−1
−2
−3

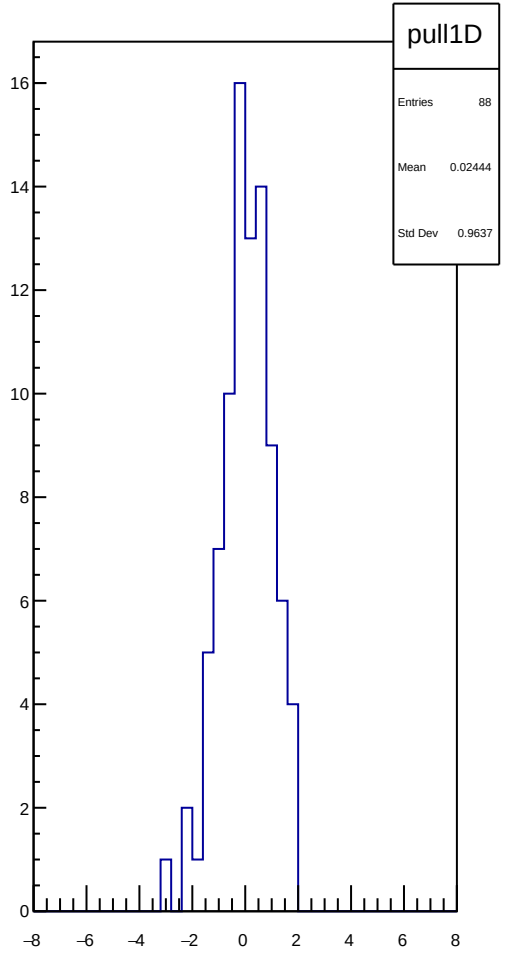

pull1D
Entries 88
Mean 0.02478
Std Dev 1.102
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

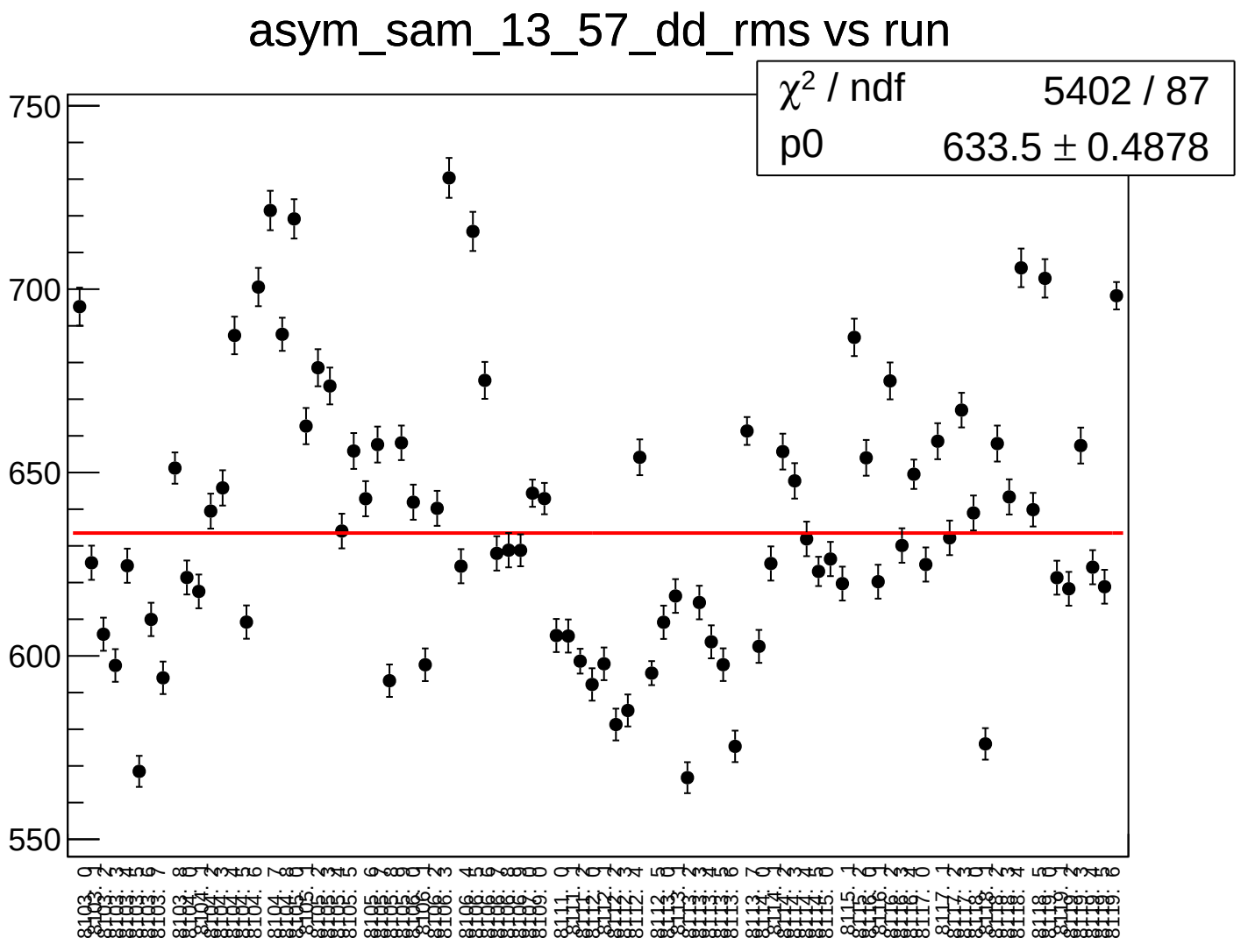

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 6981 / 87
p0 67.63 ± 0.0521
85
80
75
70
65
60

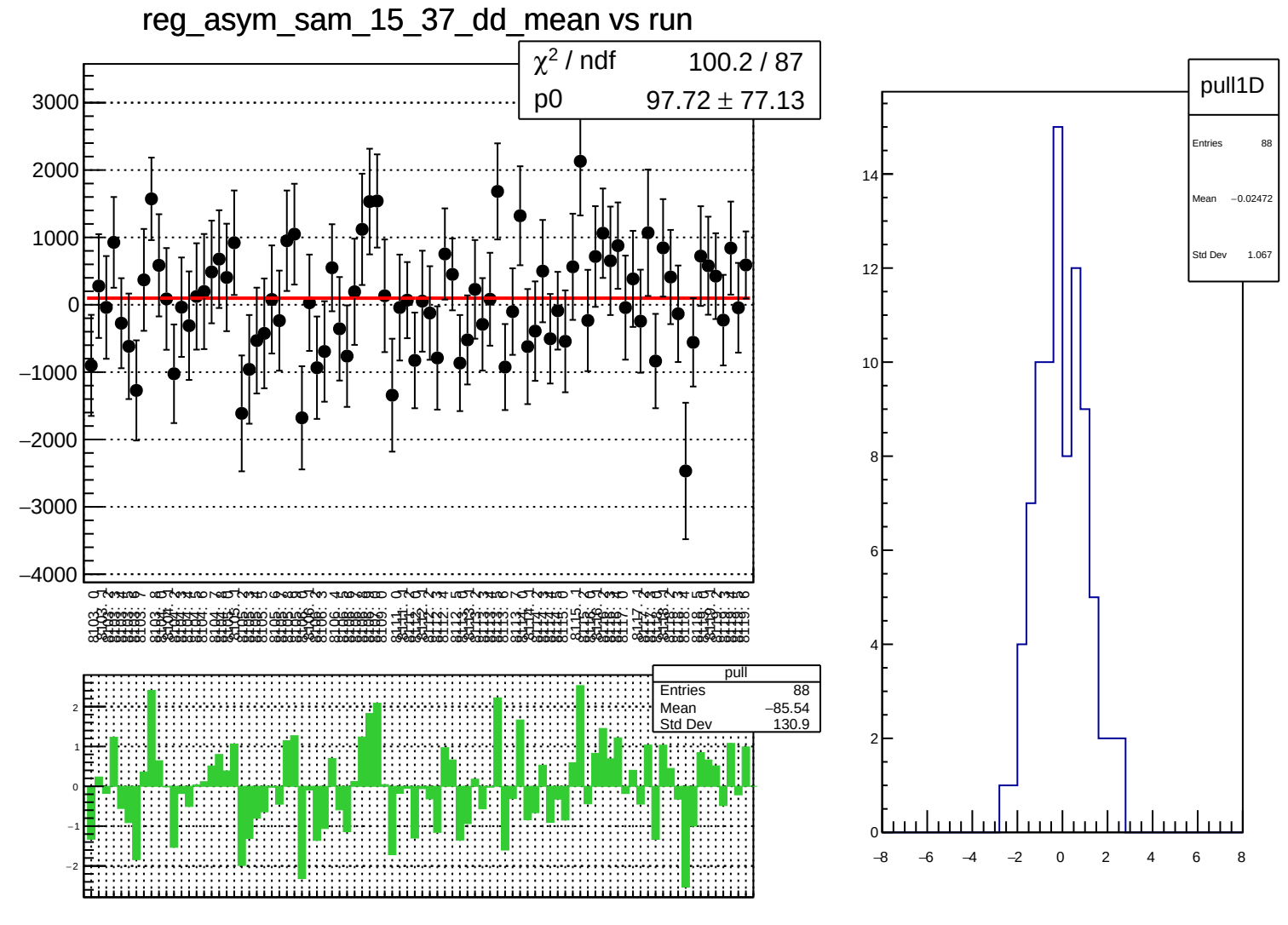

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 82.93 / 87
p0 −1866 ± 685.9
20000
10000
0
−10000
−20000
pull
Entries 88
Mean 197.2
Std Dev 131.5
3
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.02254
Std Dev 0.9705
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

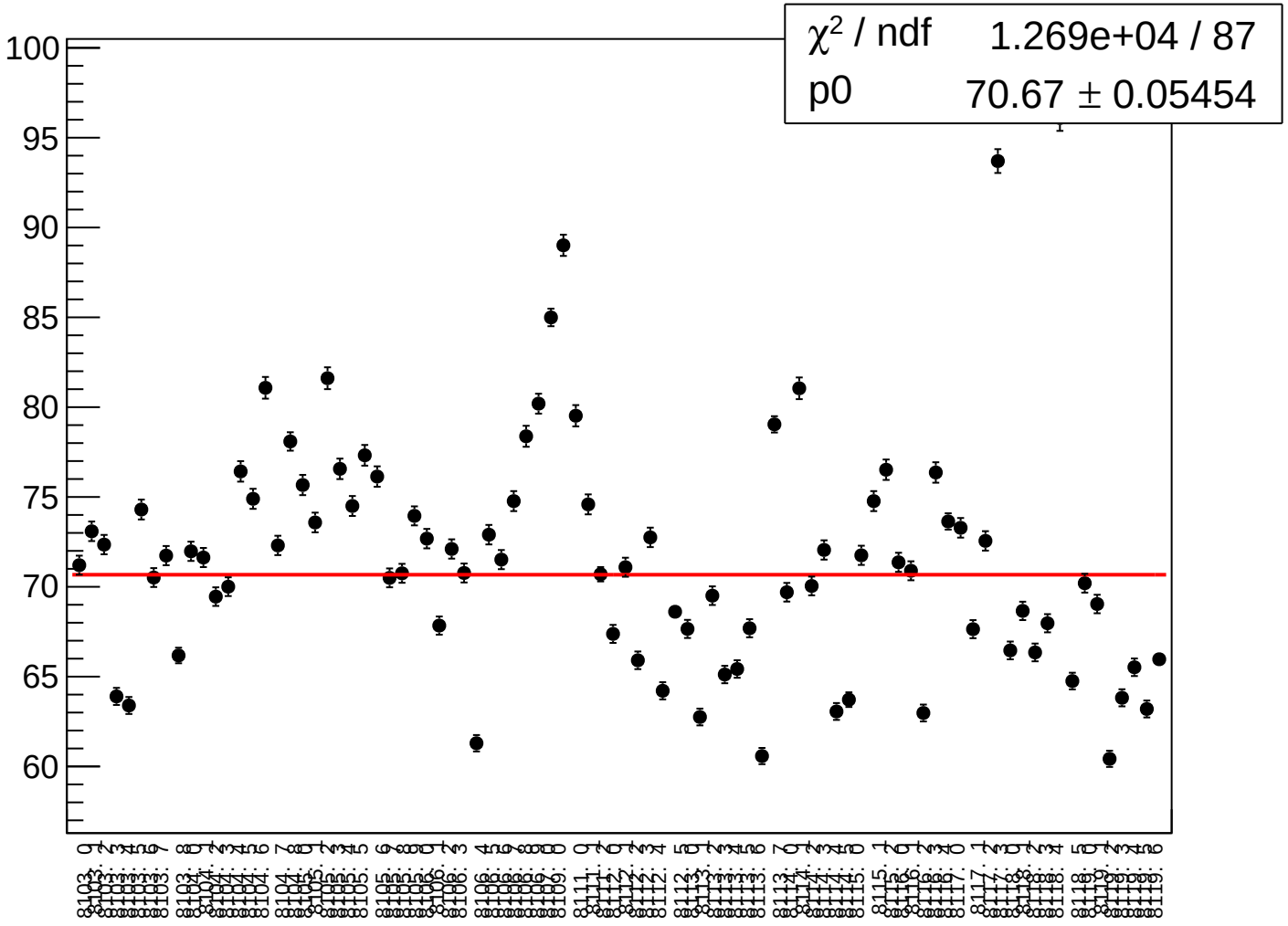

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 5484 / 87
p0 629.8 ± 0.485
740
720
700
680
660
640
620
600
580
560

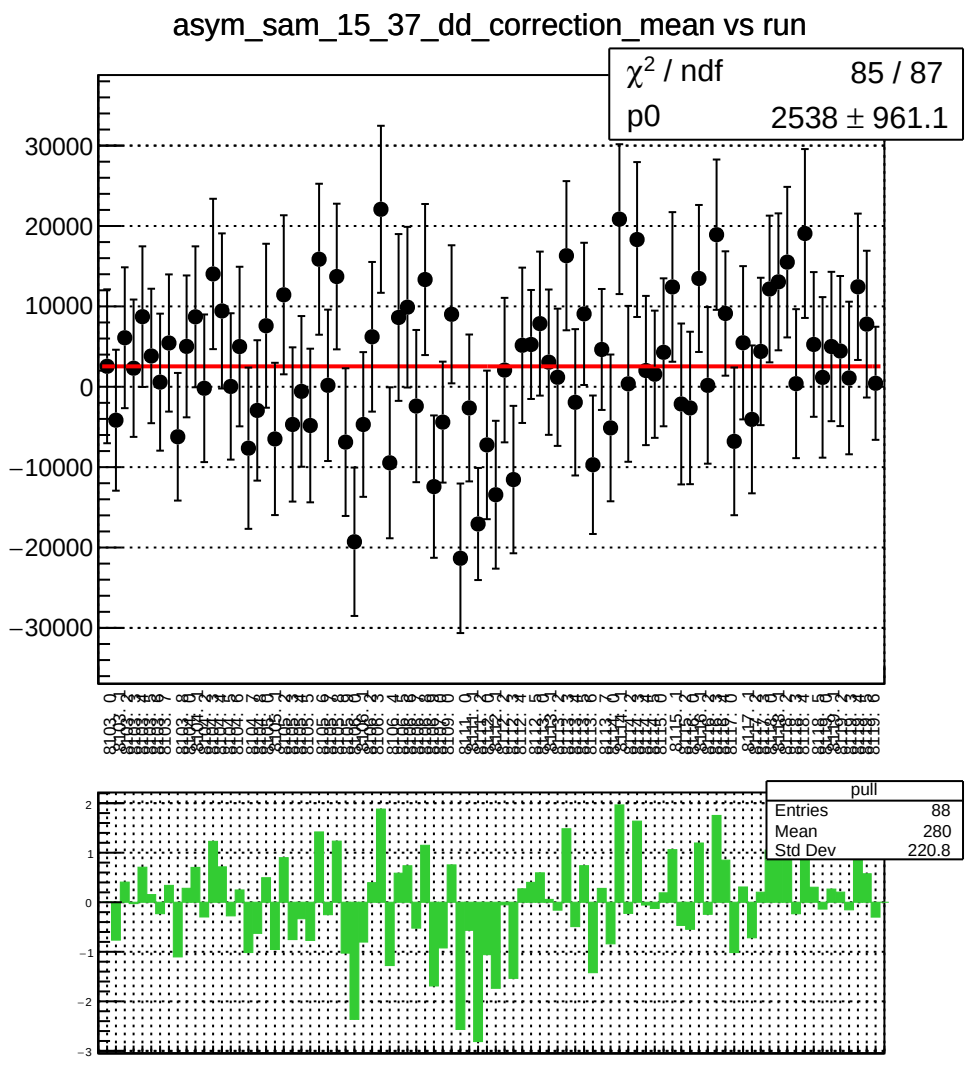

asym_sam_13_57_dd_mean vs run
χ² / ndf 81.78 / 87
p0 1703 ± 689.9
20000
10000
0
−10000
−20000
pull
Entries 88
Mean 177.6
Std Dev 108
2
1
0
−1
−2
−3

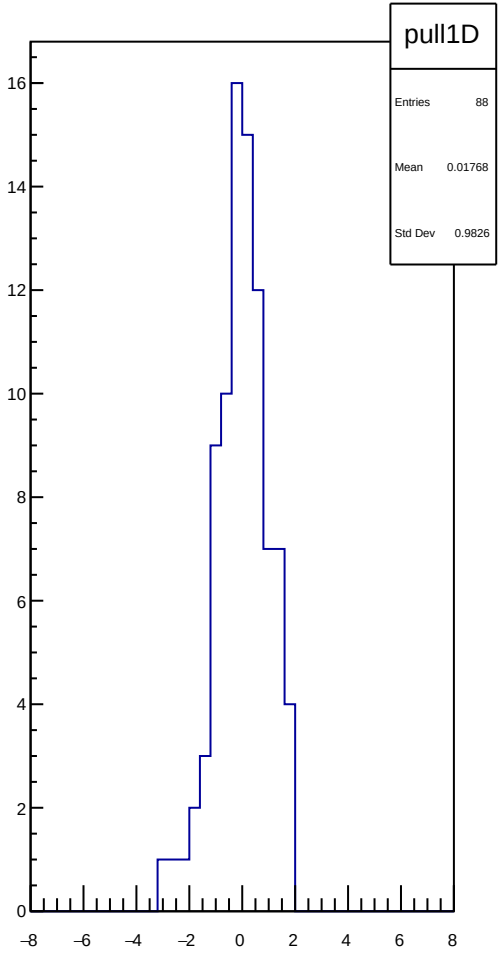

pull1D
Entries 88
Mean 0.02444
Std Dev 0.9637
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

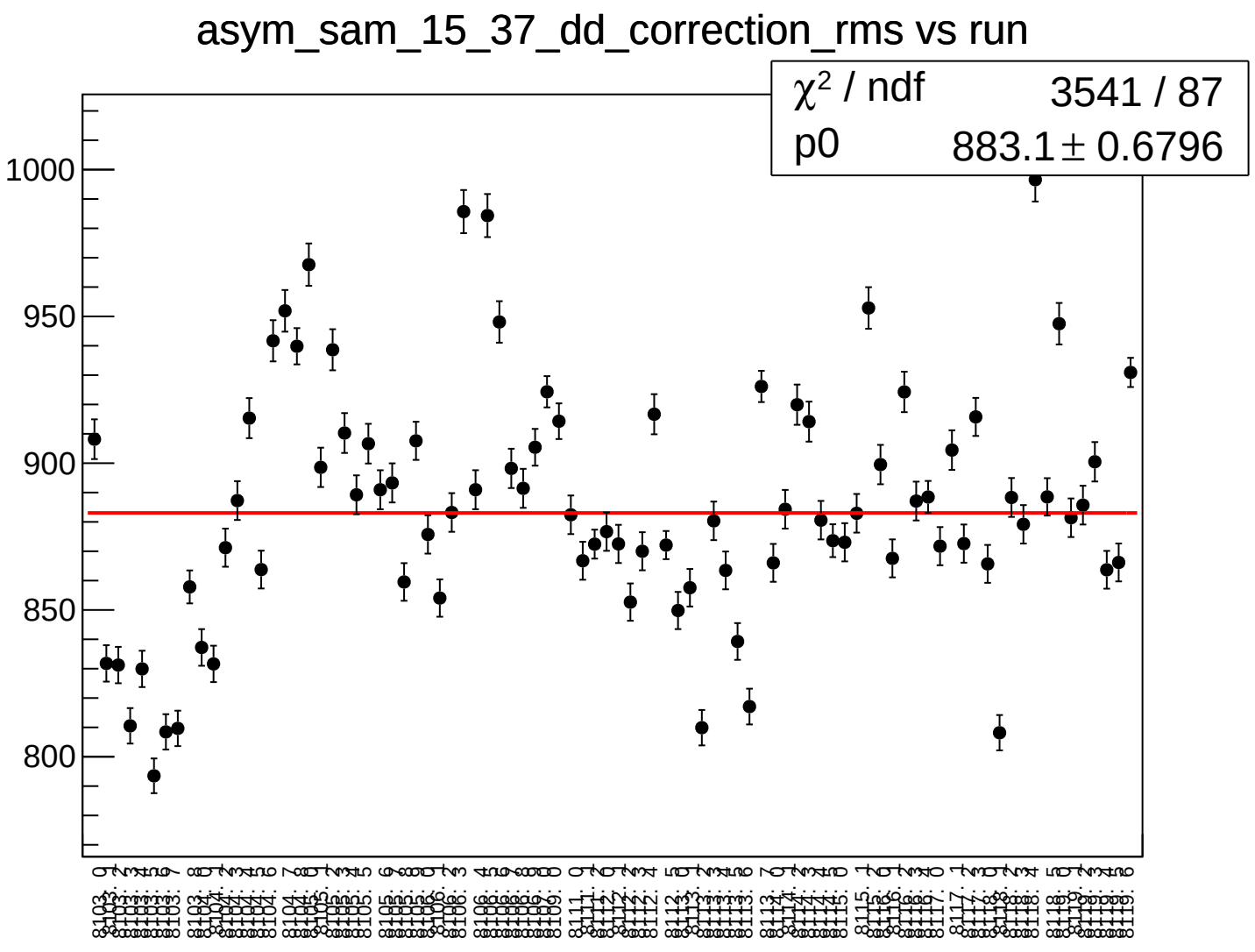

asym_sam_13_57_dd_rms vs run
χ² / ndf 5402 / 87
p0 633.5 ± 0.4878
750
700
650
600
550

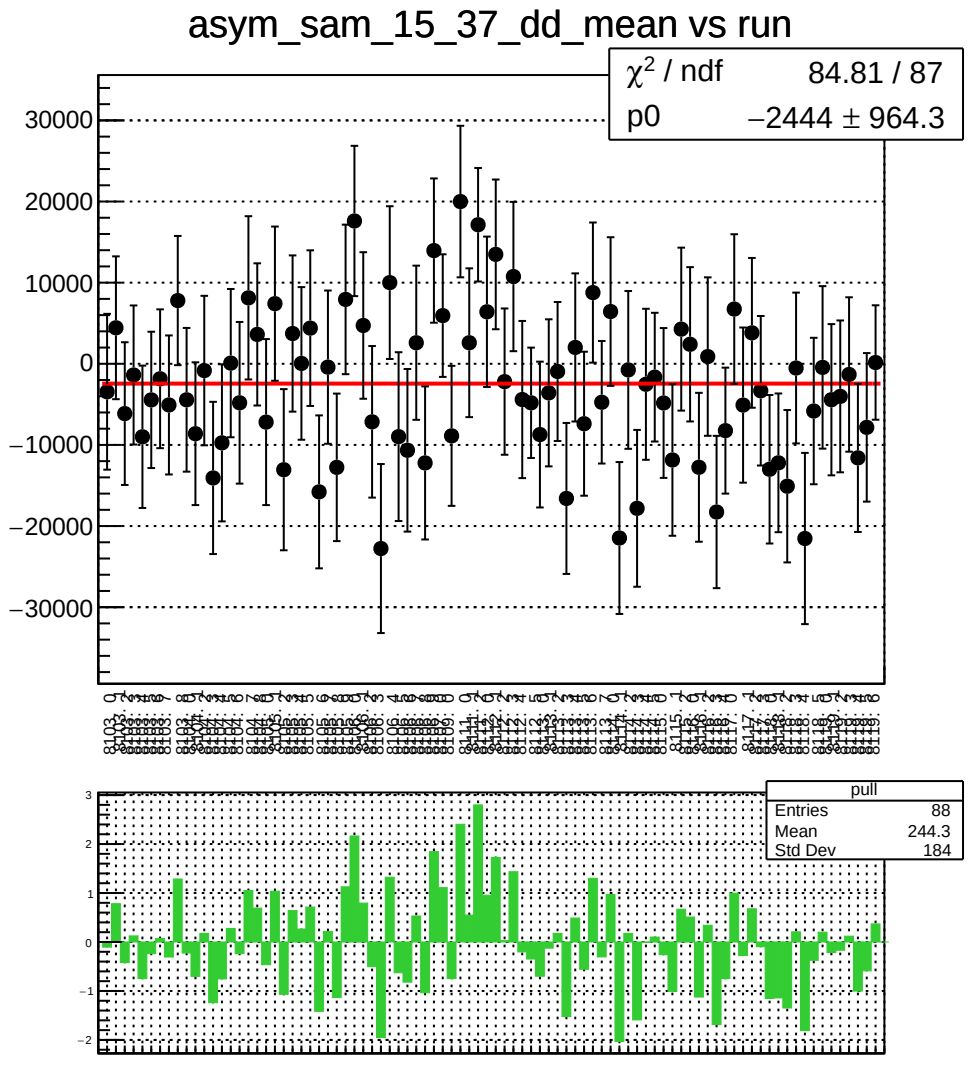

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 100.2 / 87
p0 97.72 ± 77.13
pull
Entries 88
Mean −85.54
Std Dev 130.9
pull1D
Entries 88
Mean −0.02472
Std Dev 1.067

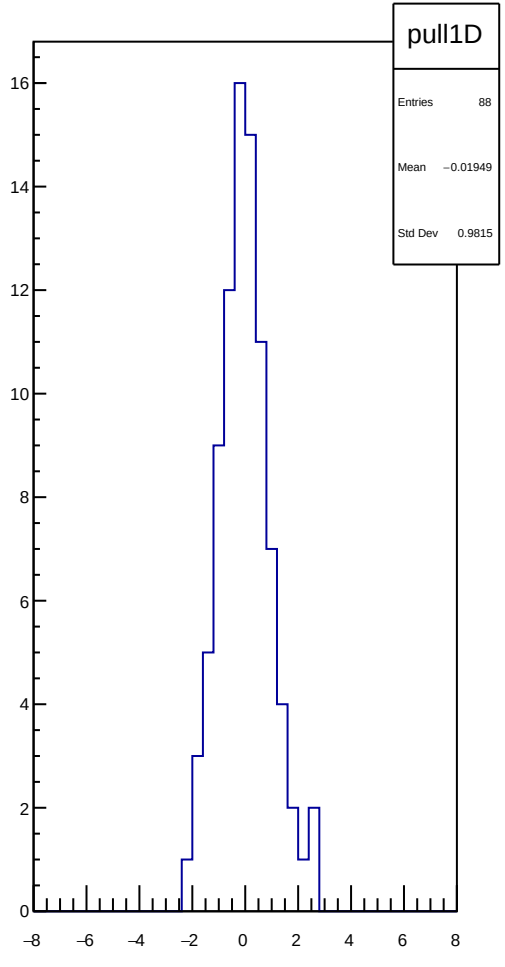

reg_asym_sam_15_37_dd_rms vs run
χ^2 / ndf 1.269e+04 / 87
p0 70.67 ± 0.05454
100
95
90
85
80
75
70
65
60

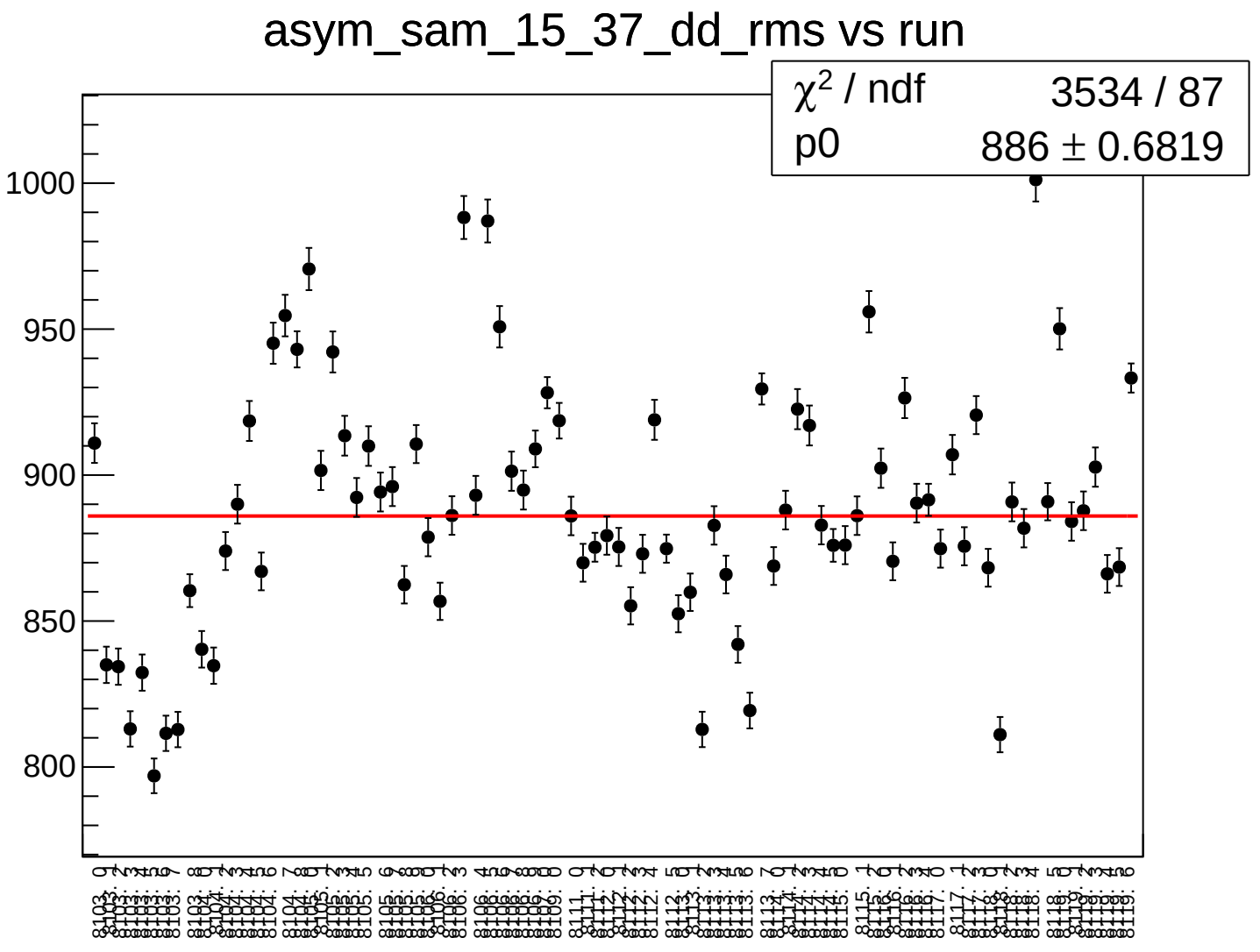

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 85 / 87
p0 2538 ± 961.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 280
Std Dev 220.8
2
1
0
−1
−2
−3

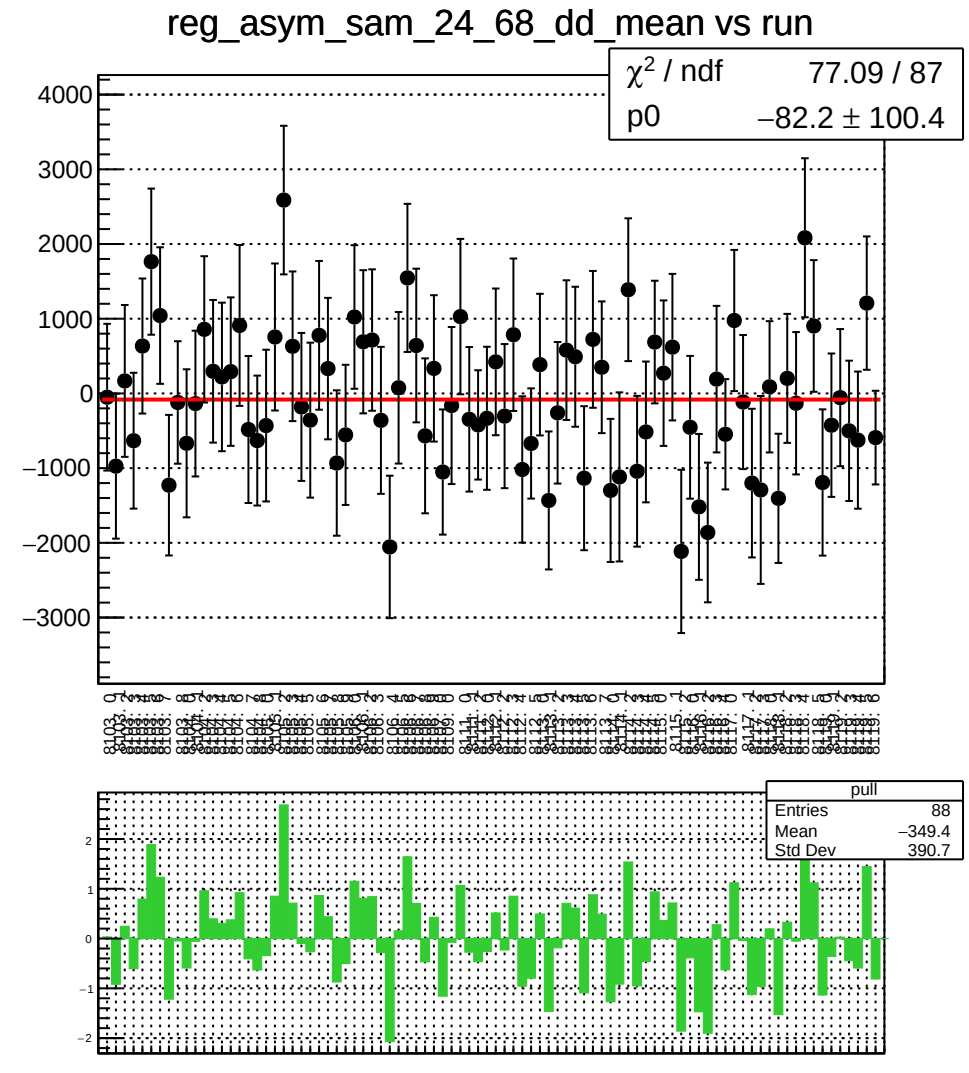

pull1D
Entries 88
Mean 0.01768
Std Dev 0.9826
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

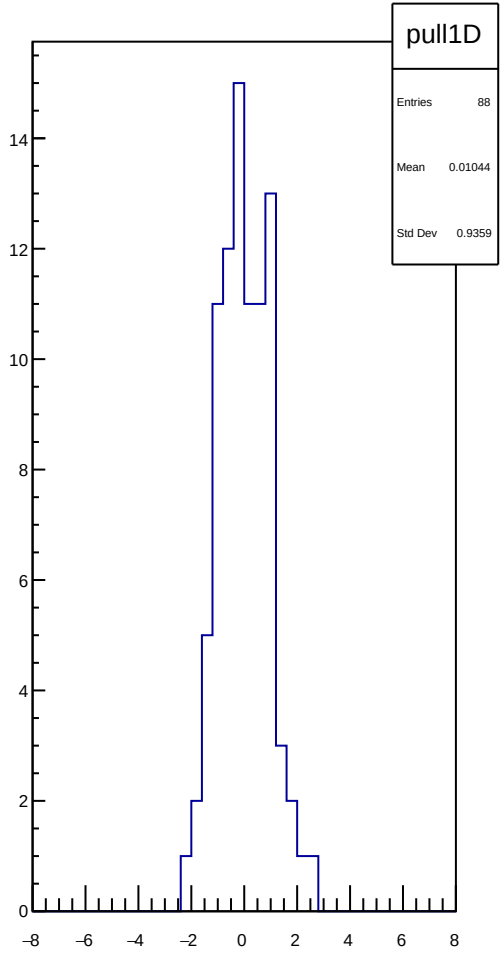

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 3541 / 87
p0 883.1 ± 0.6796
1000
950
900
850
800

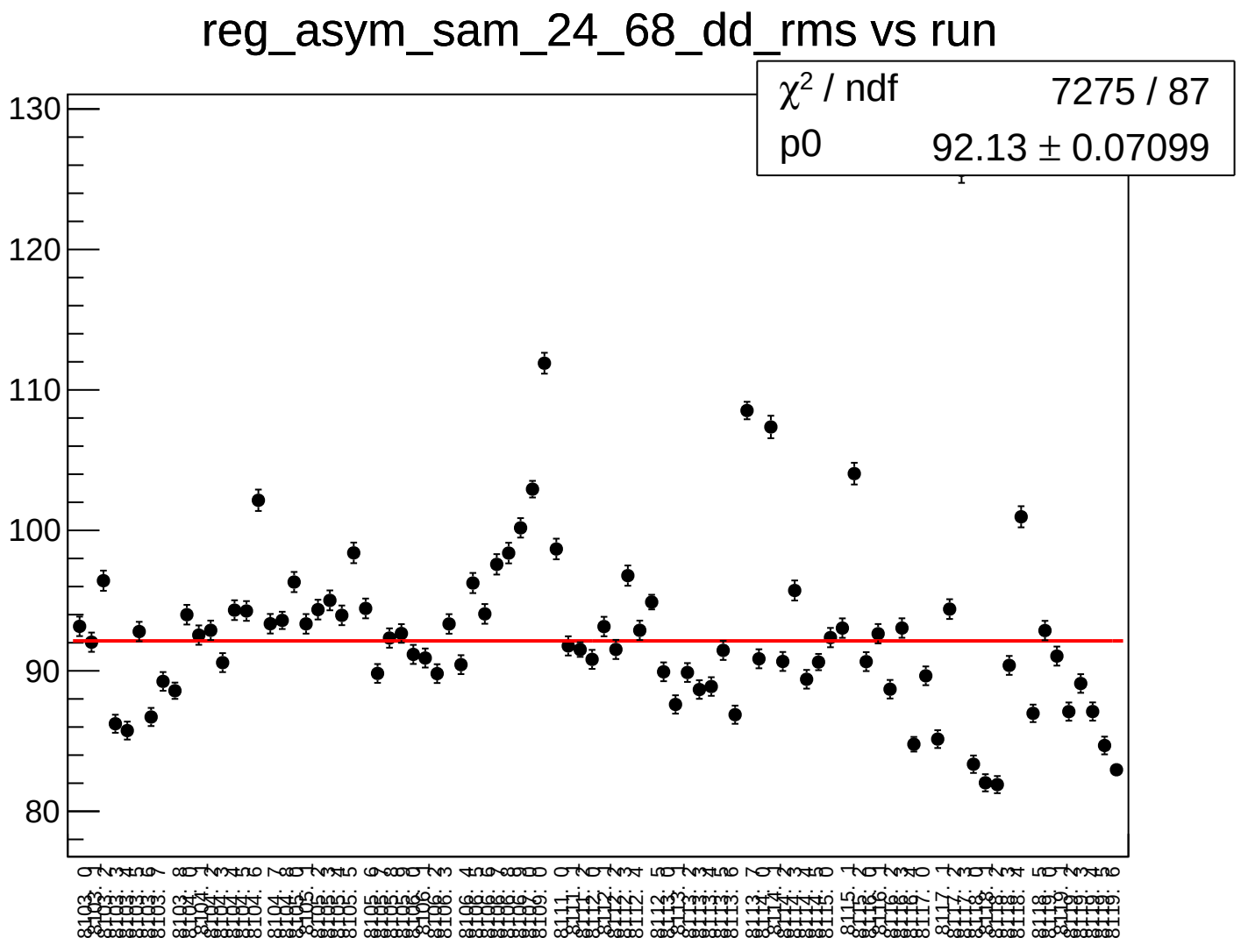

asym_sam_15_37_dd_mean vs run
χ² / ndf 84.81 / 87
p0 −2444 ± 964.3
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 244.3
Std Dev 184
3
2
1
0
−1
−2

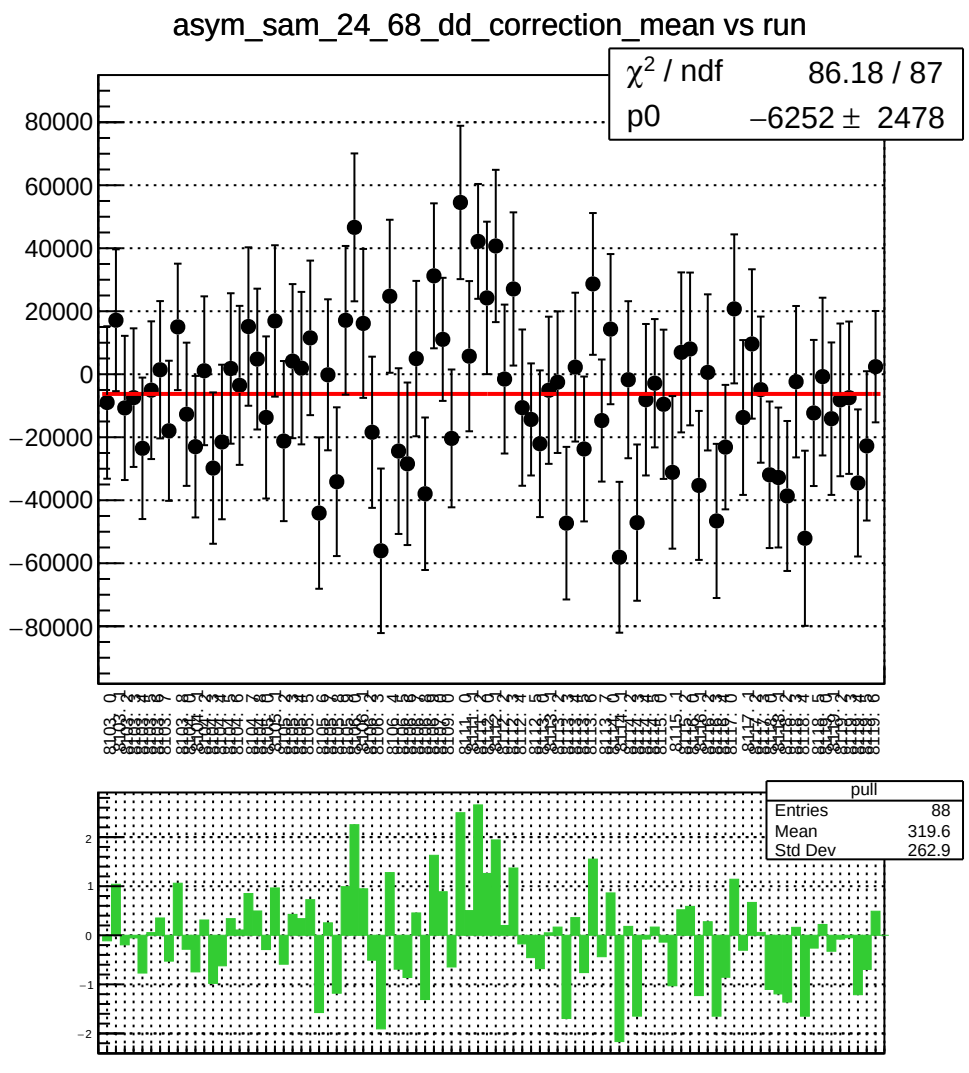

pull1D
Entries 88
Mean −0.01949
Std Dev 0.9815
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

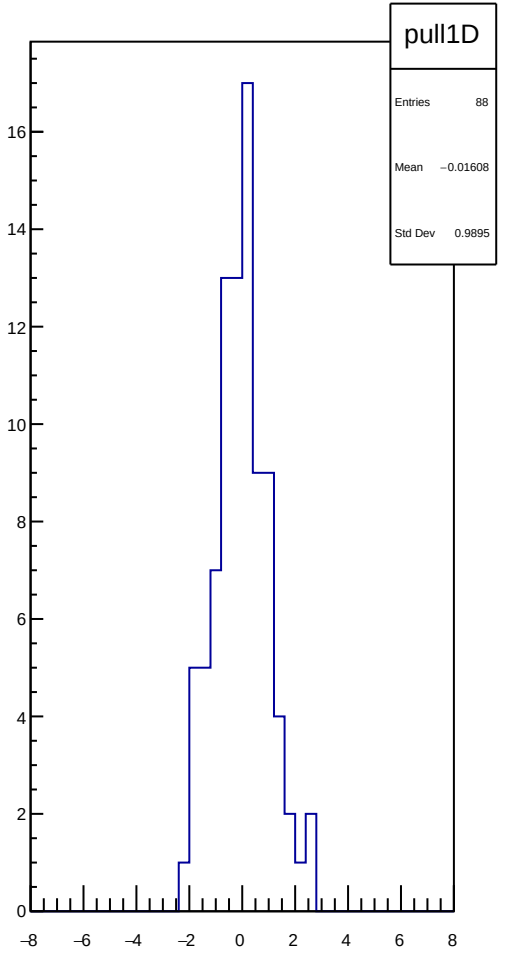

asym_sam_15_37_dd_rms vs run
χ² / ndf 3534 / 87
p0 886 ± 0.6819
1000
950
900
850
800

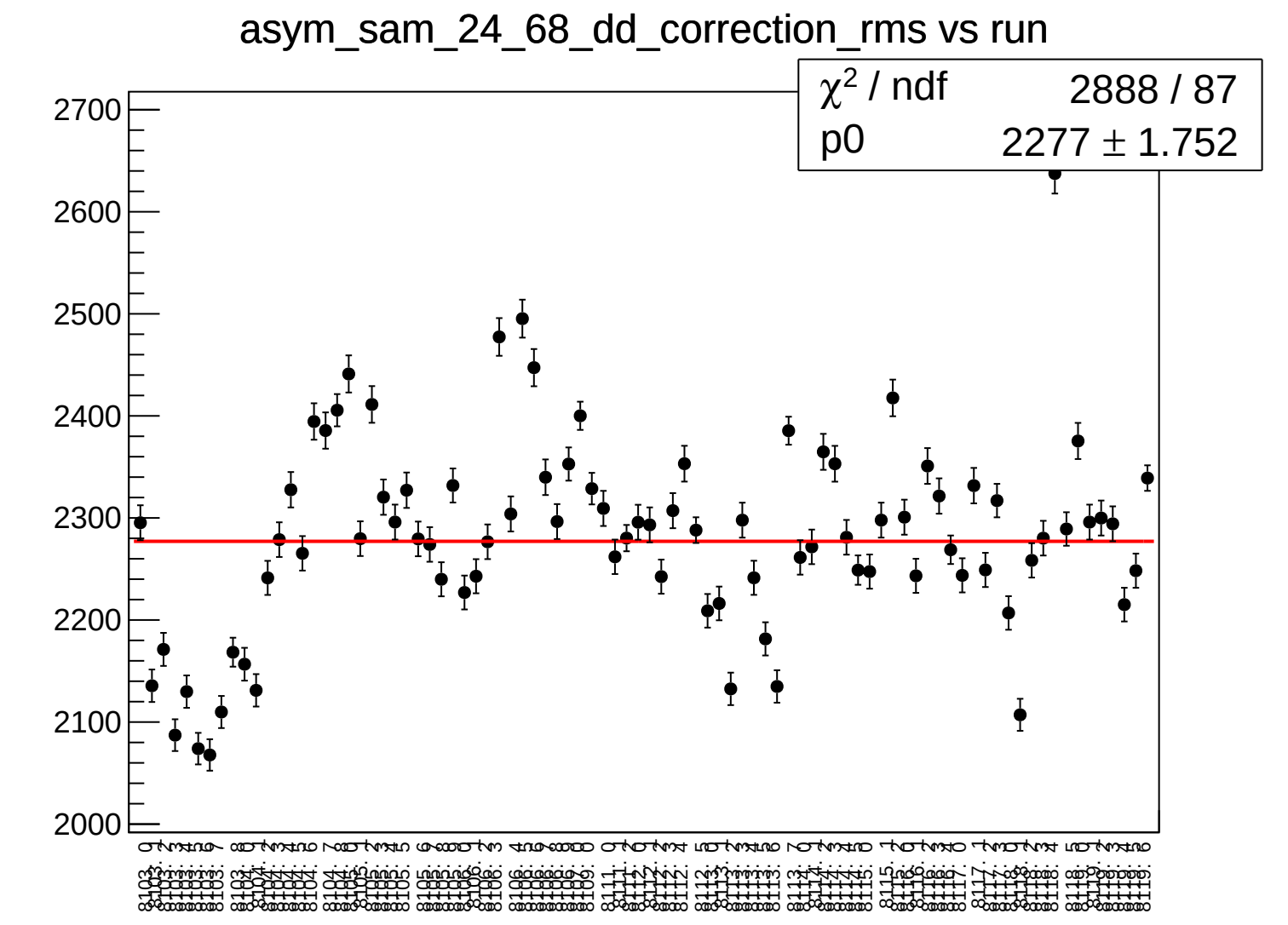

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 77.09 / 87
p0 −82.2 ± 100.4
4000
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 88
Mean −349.4
Std Dev 390.7
2
1
0
−1
−2

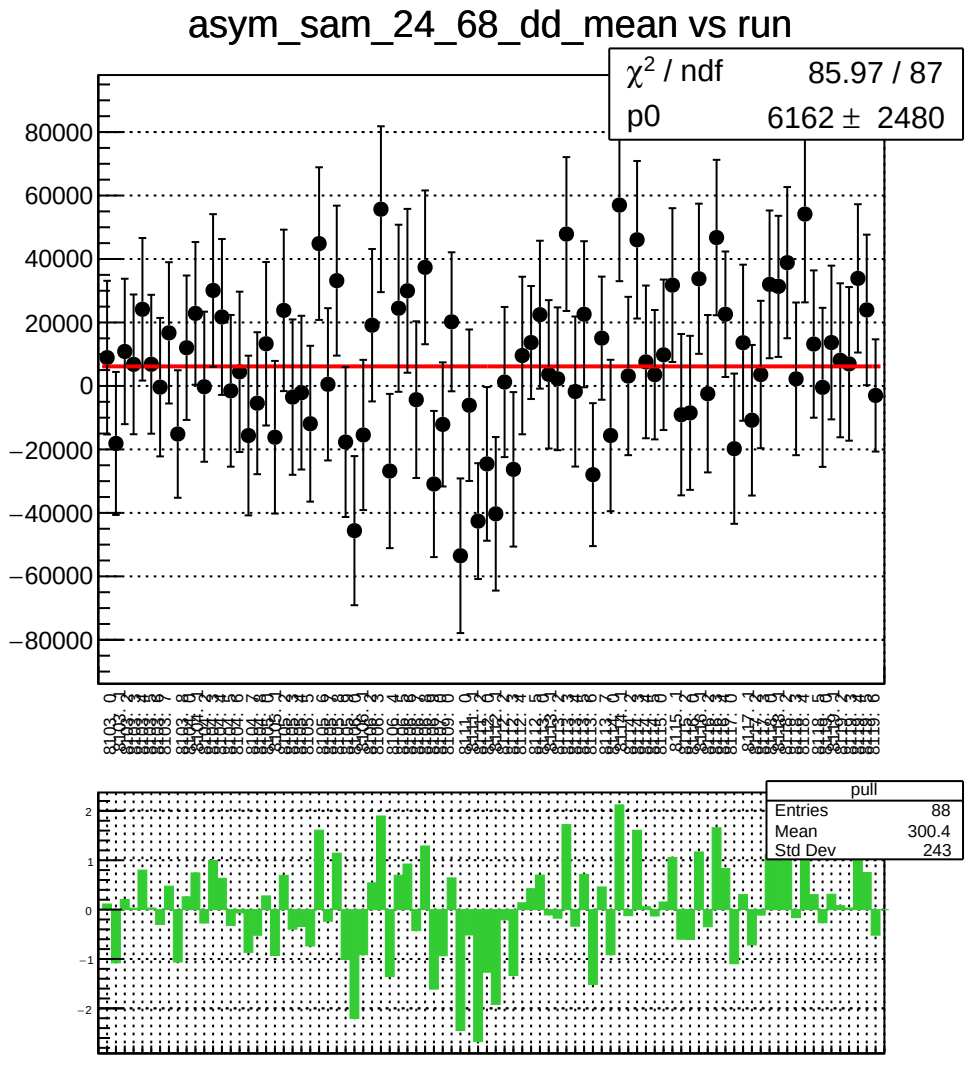

pull1D
Entries 88
Mean 0.01044
Std Dev 0.9359
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

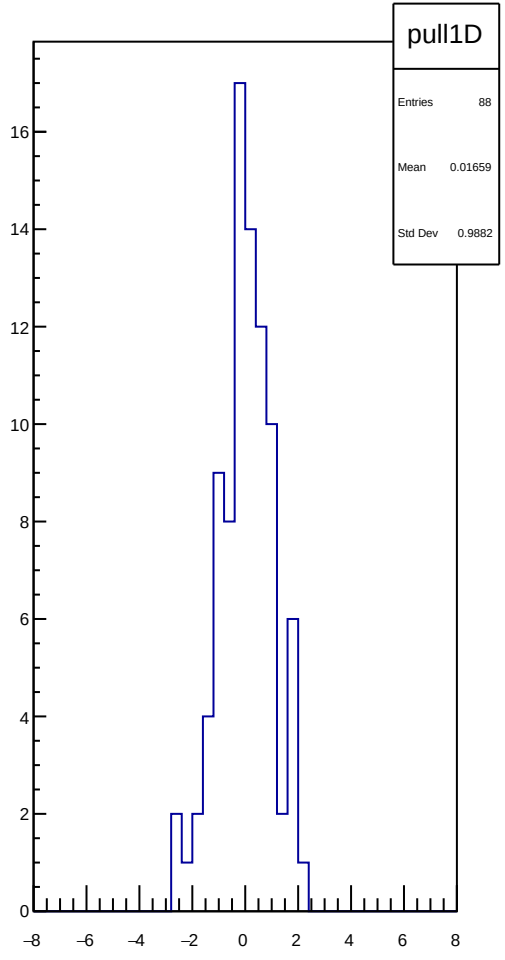

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 7275 / 87
p0 92.13 ± 0.07099
130
120
110
100
90
80

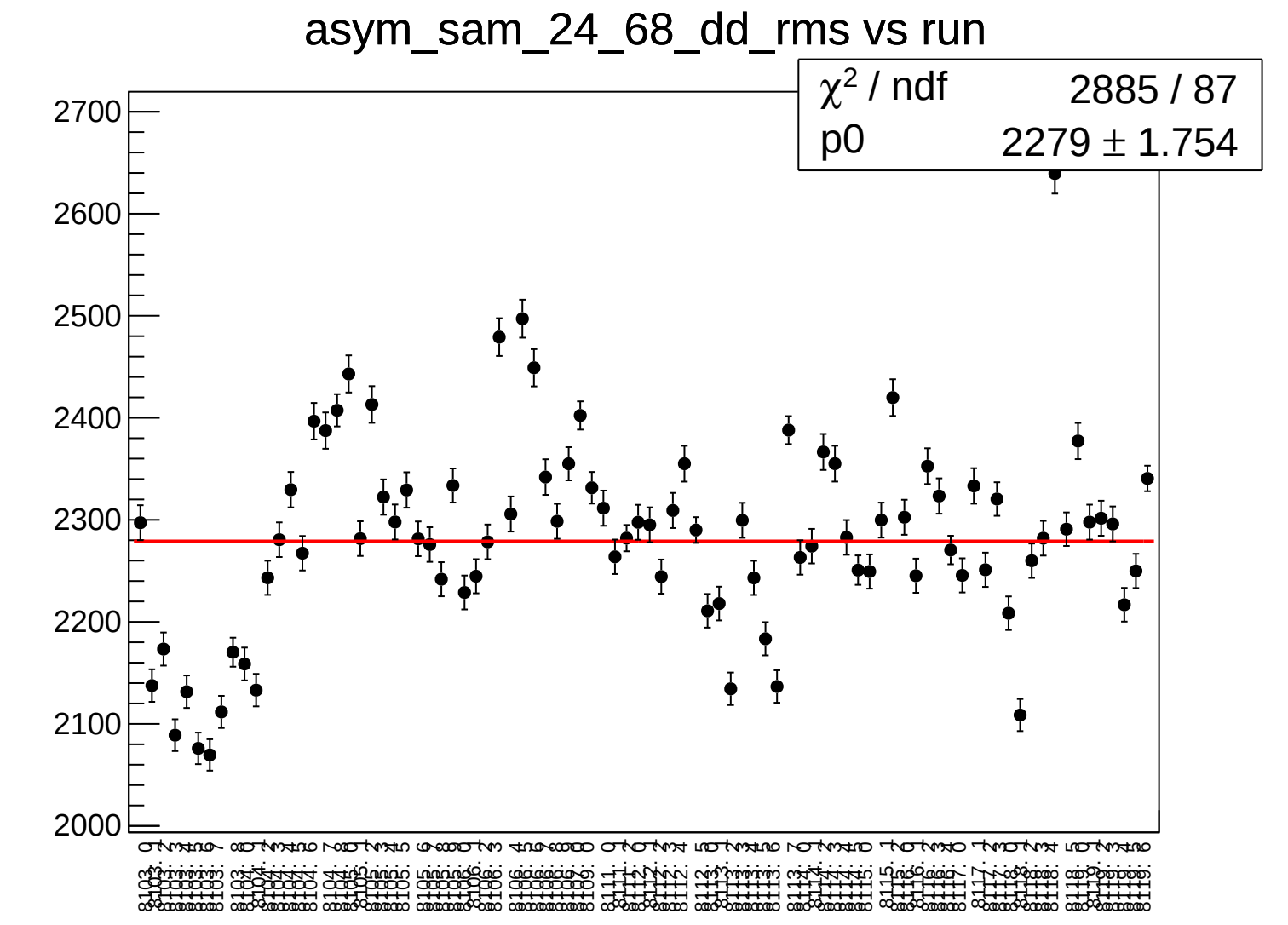

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 86.18 / 87
p0 −6252 ± 2478
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 88
Mean 319.6
Std Dev 262.9
2
1
0
−1
−2

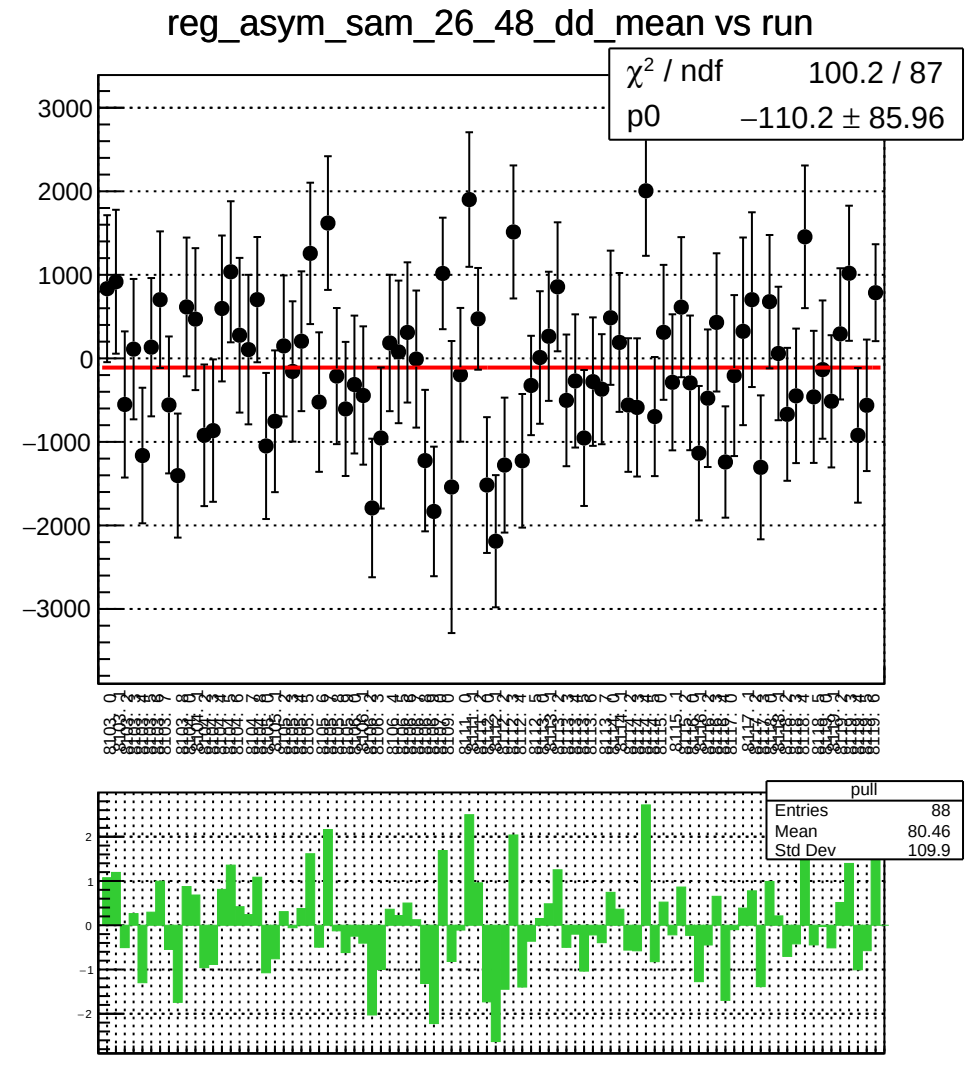

pull1D
Entries 88
Mean −0.01608
Std Dev 0.9895
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

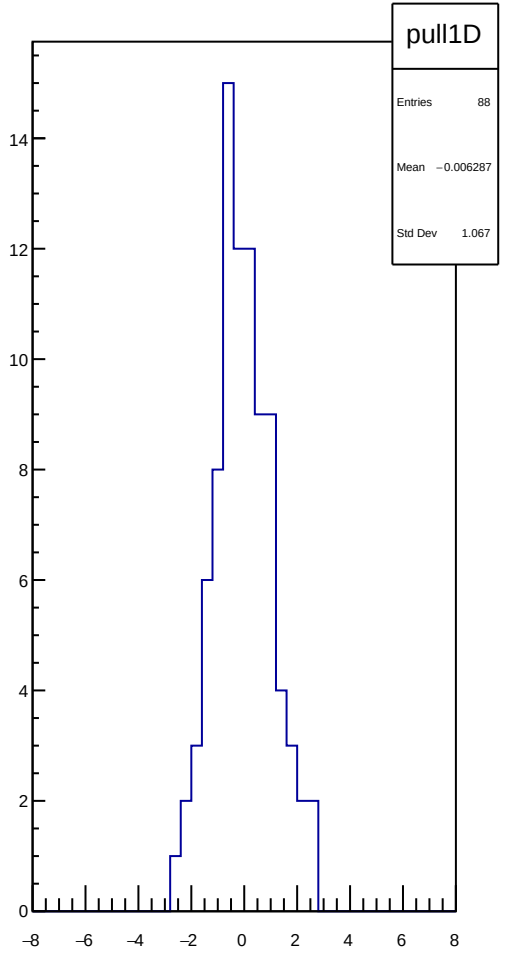

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 2888 / 87
p0 2277 ± 1.752
2700
2600
2500
2400
2300
2200
2100
2000

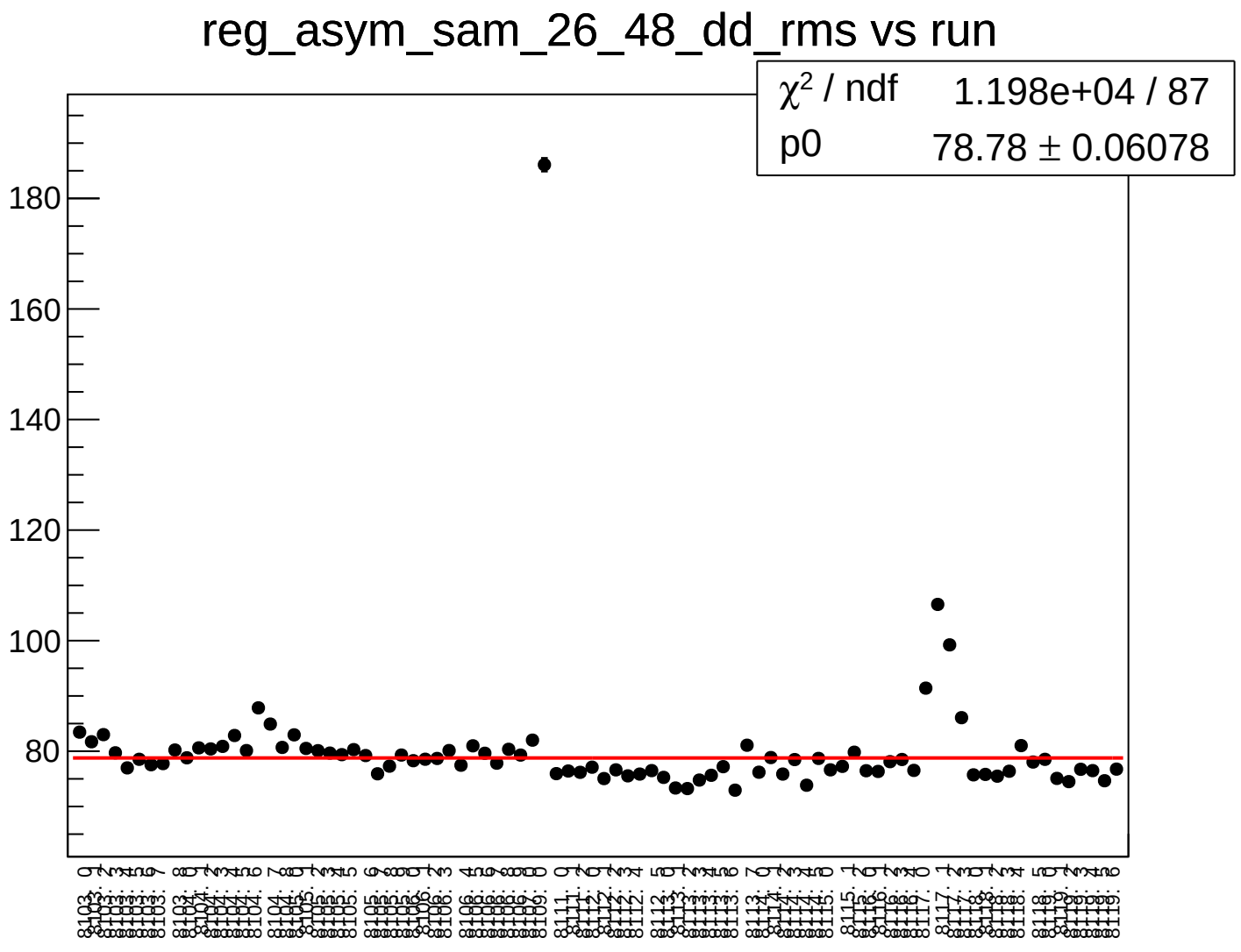

asym_sam_24_68_dd_mean vs run
χ² / ndf 85.97 / 87
p0 6162 ± 2480
pull
Entries 88
Mean 300.4
Std Dev 243

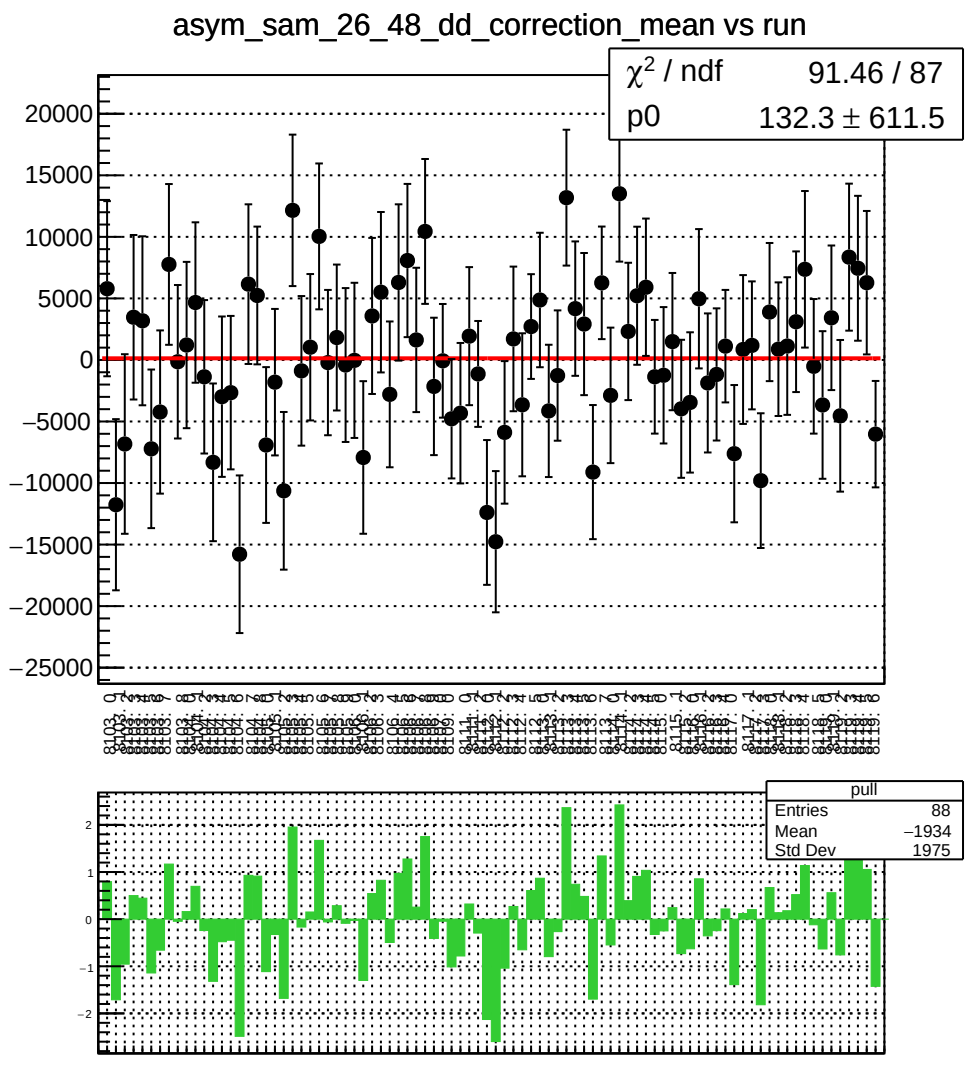

pull1D
Entries 88
Mean 0.01659
Std Dev 0.9882

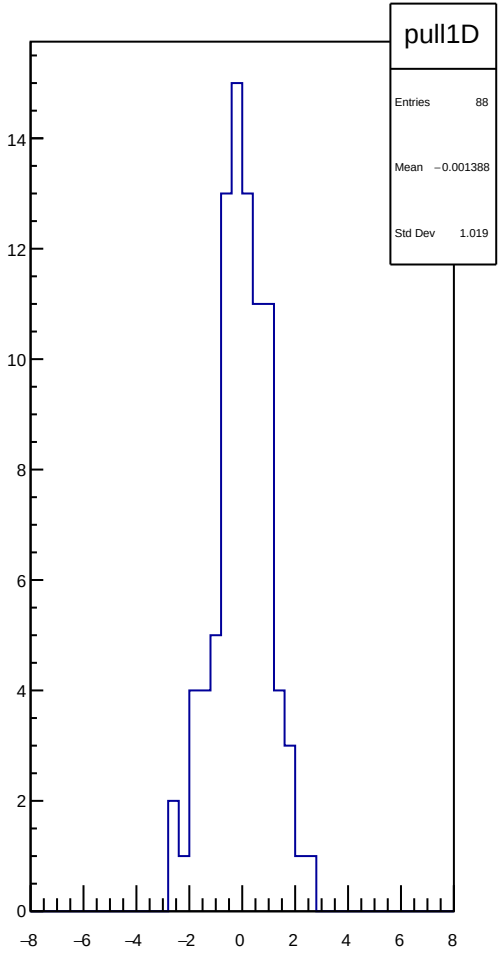

asym_sam_24_68_dd_rms vs run
χ^2 / ndf 2885 / 87
p0 2279 ± 1.754
2700
2600
2500
2400
2300
2200
2100
2000

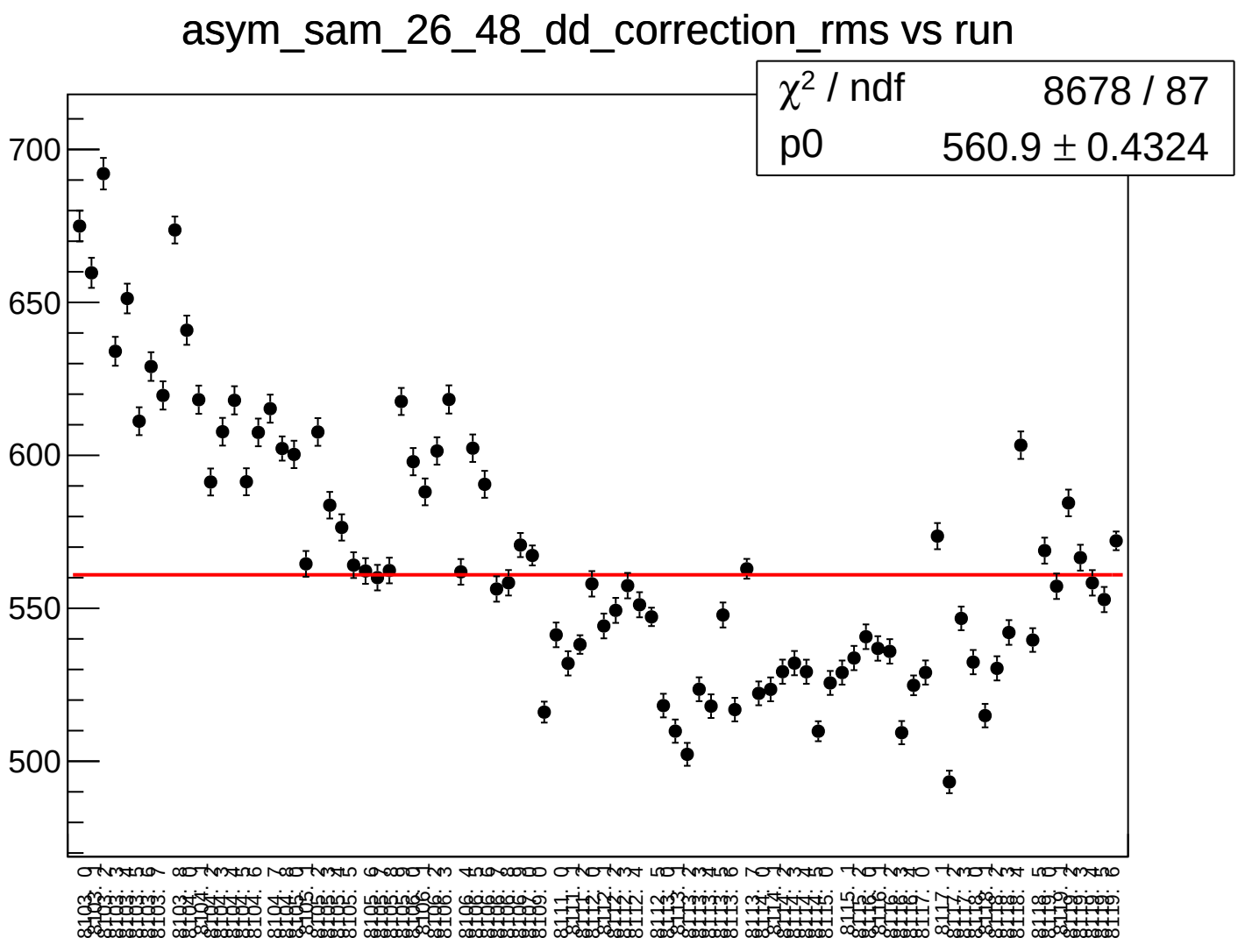

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 100.2 / 87
p0 −110.2 ± 85.96
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 88
Mean 80.46
Std Dev 109.9
2
1
0
−1
−2

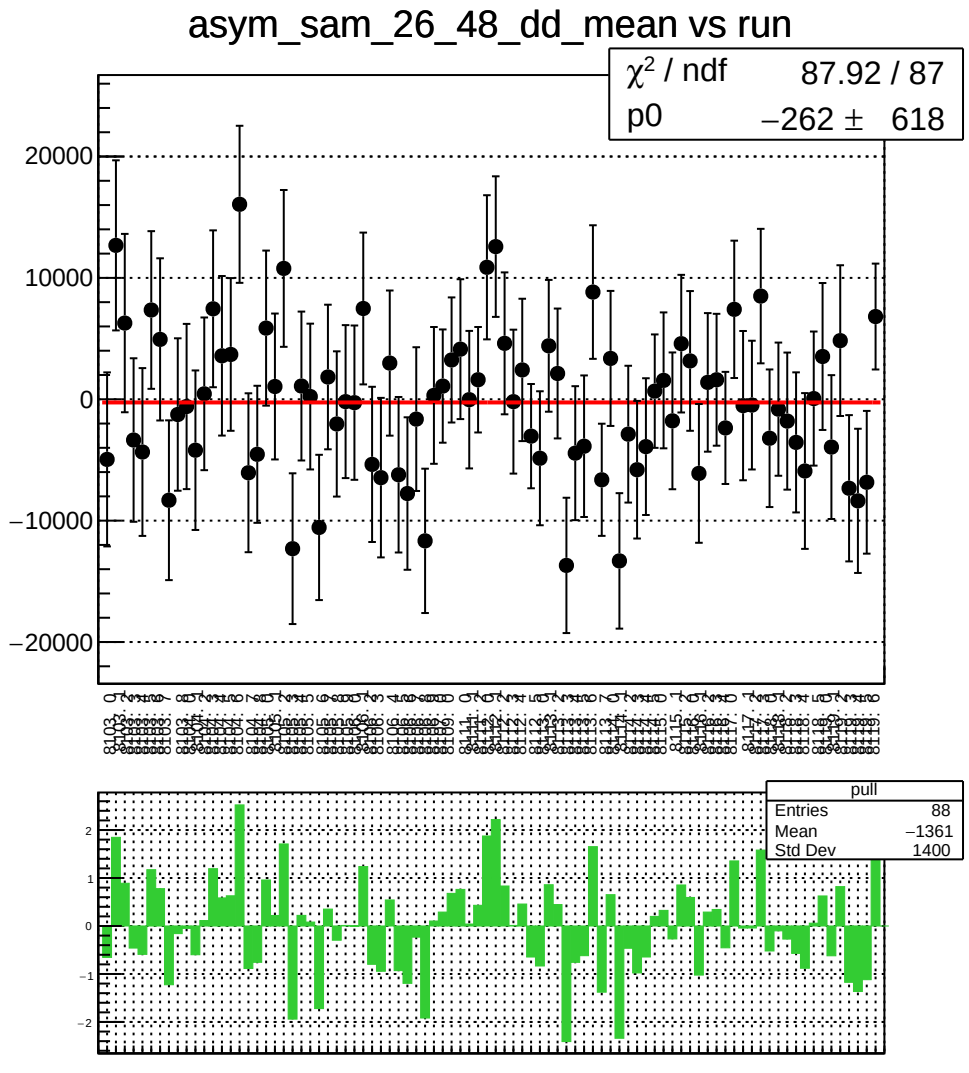

pull1D
Entries 88
Mean −0.006287
Std Dev 1.067
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

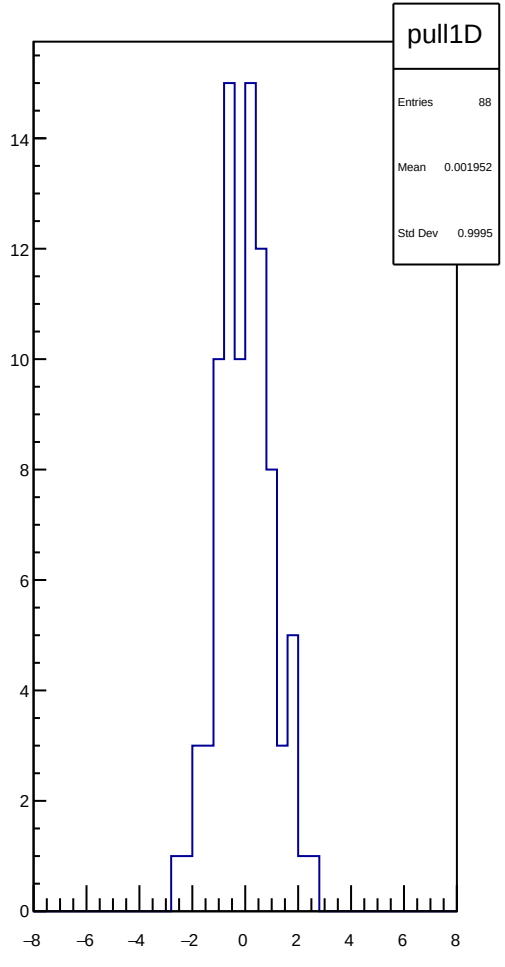

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 1.198e+04 / 87
p0 78.78 ± 0.06078
180
160
140
120
100
80

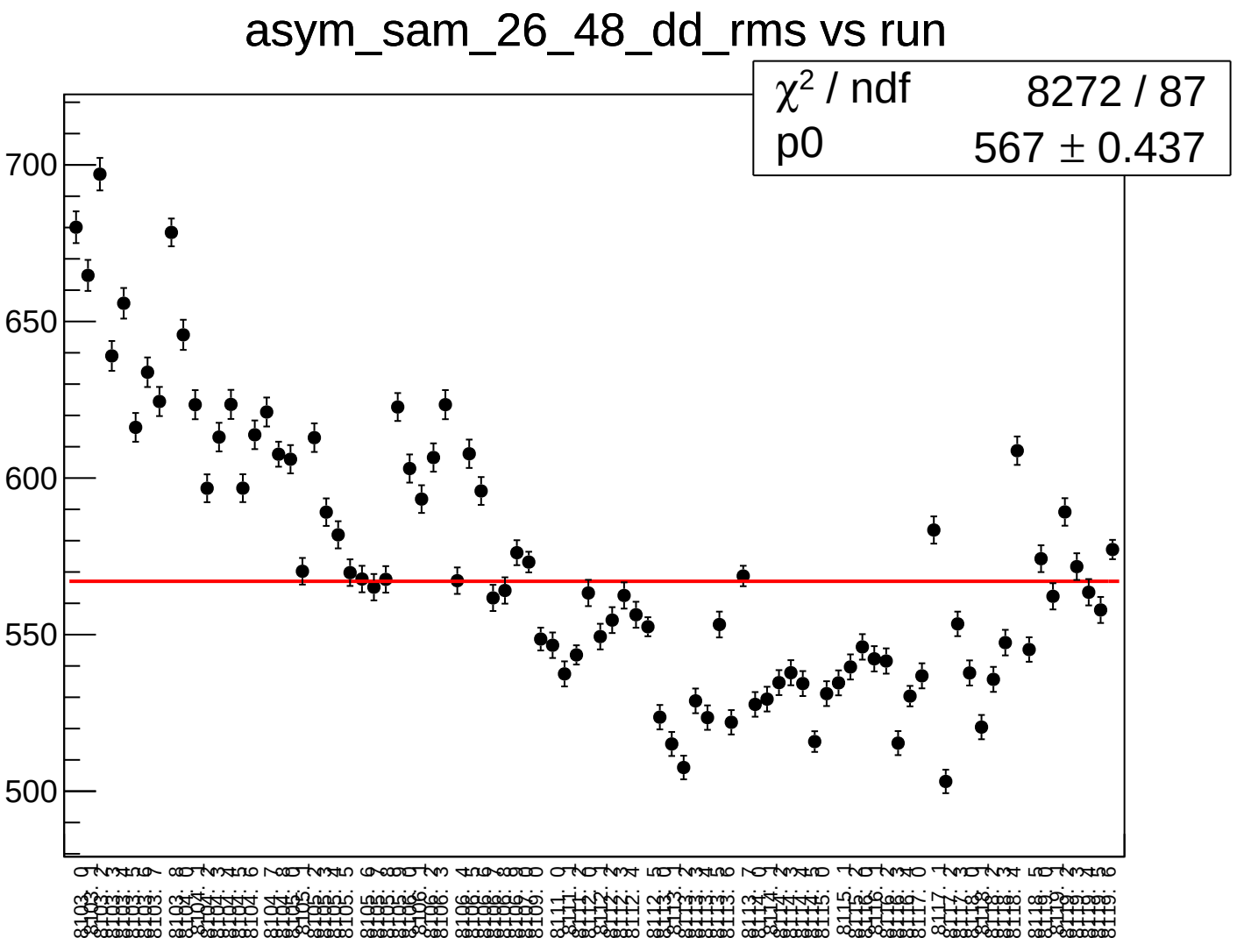

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 91.46 / 87
p0 132.3 ± 611.5
pull
Entries 88
Mean −1934
Std Dev 1975

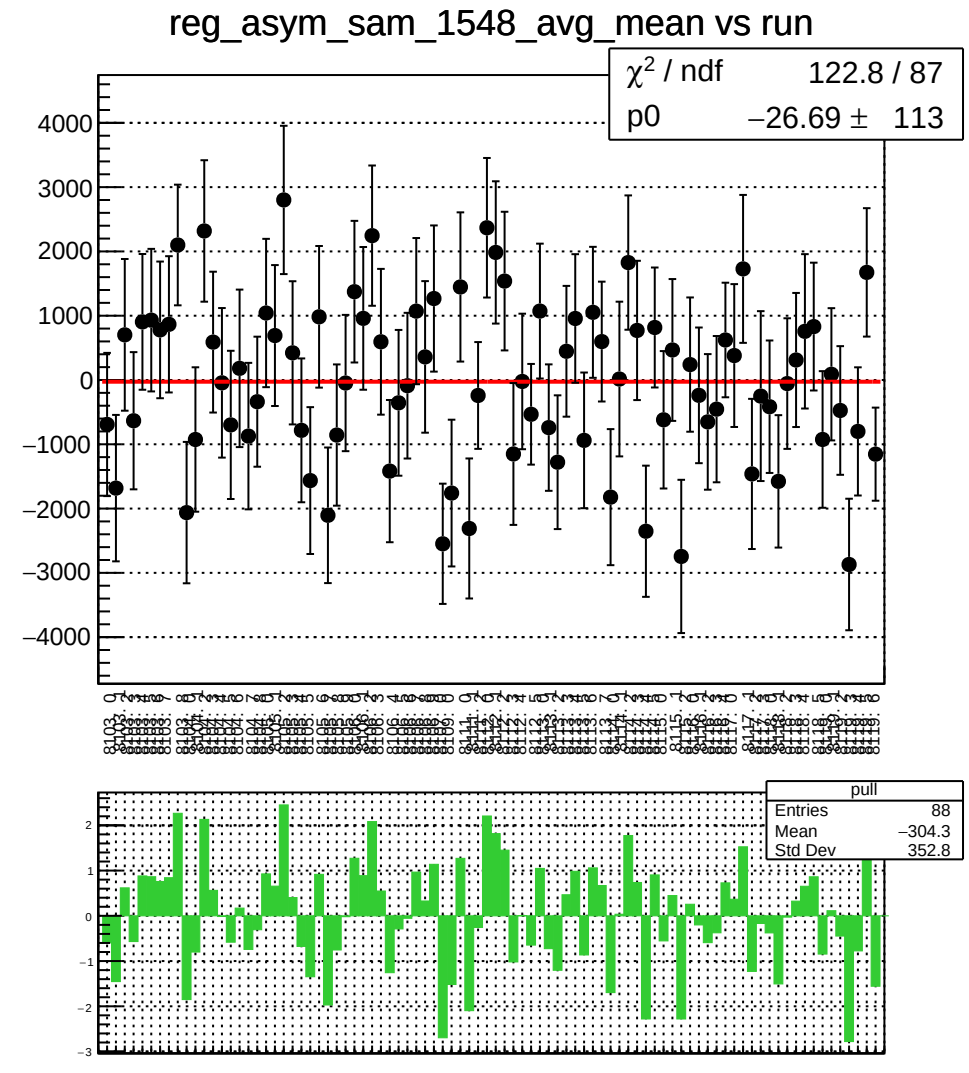

pull1D
Entries 88
Mean −0.001388
Std Dev 1.019

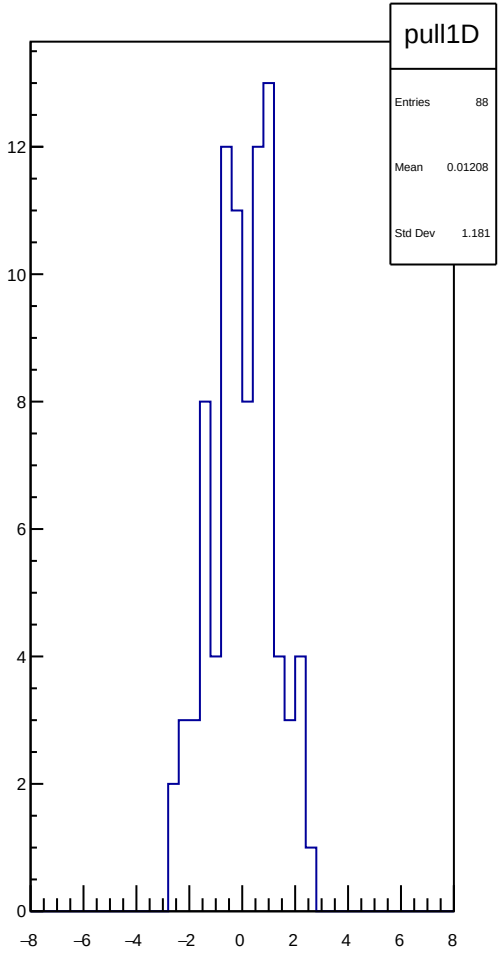

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 8678 / 87
p0 560.9 ± 0.4324
700
650
600
550
500


asym_sam_26_48_dd_mean vs run
χ² / ndf 87.92 / 87
p0 −262 ± 618
20000
10000
0
−10000
−20000
pull
Entries 88
Mean −1361
Std Dev 1400
2
1
0
−1
−2

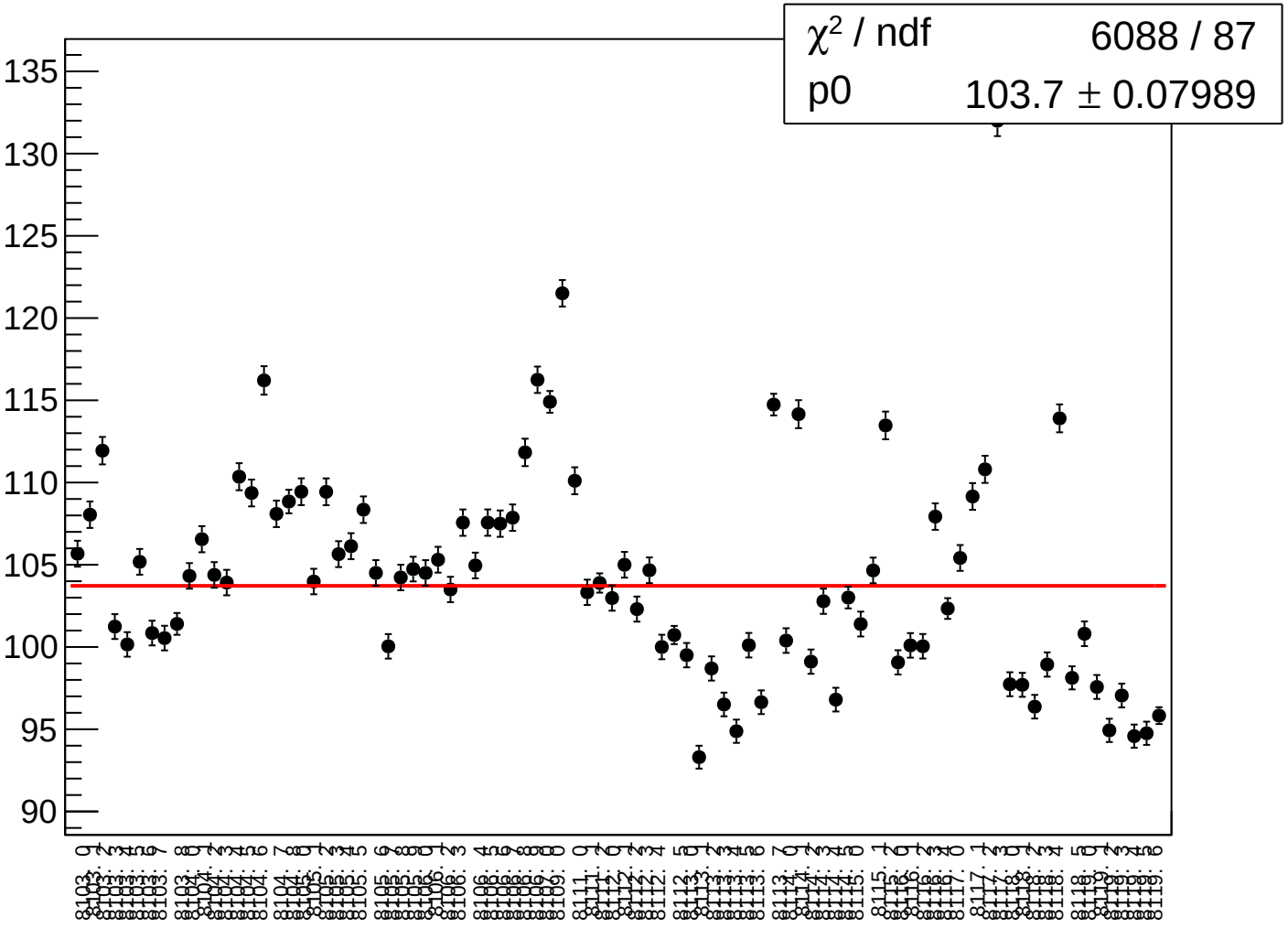

pull1D
Entries 88
Mean 0.001952
Std Dev 0.9995
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

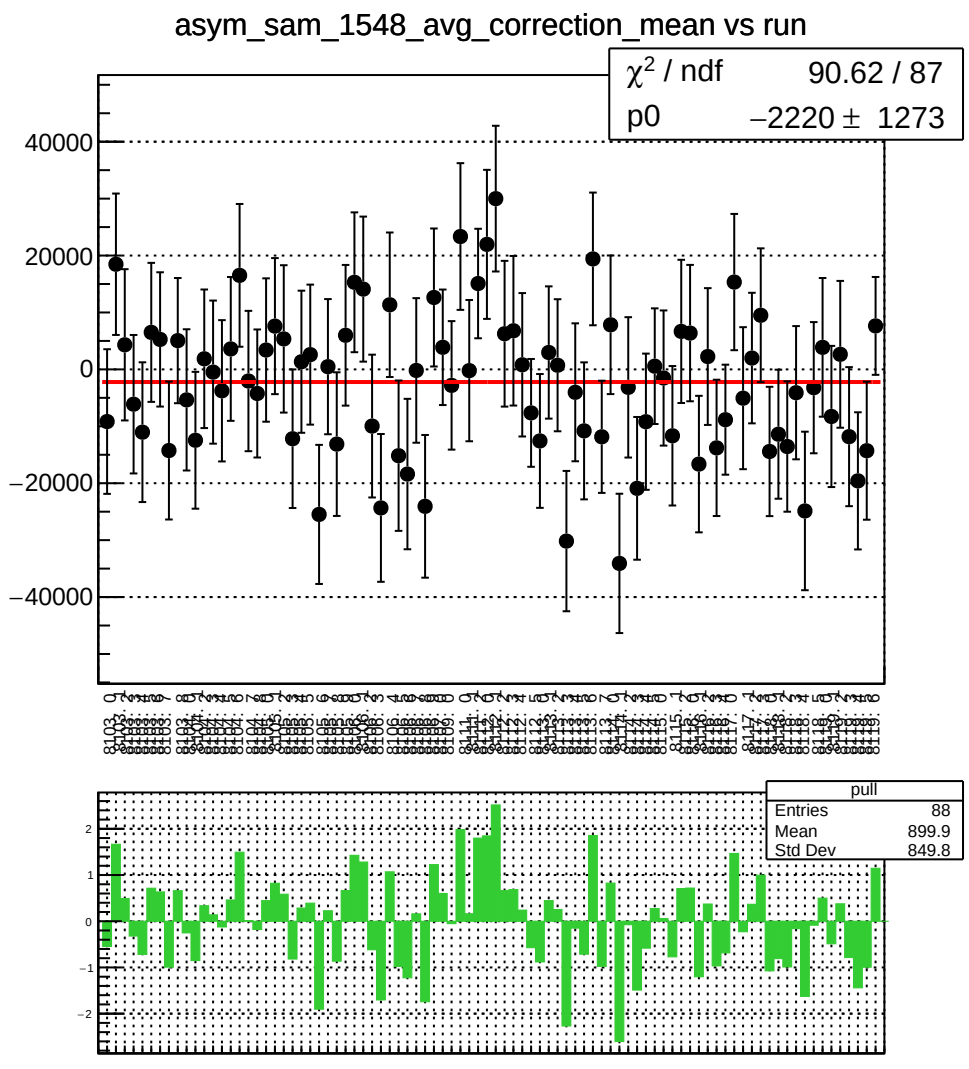

asym_sam_26_48_dd_rms vs run
χ² / ndf 8272 / 87
p0 567 ± 0.437
700
650
600
550
500

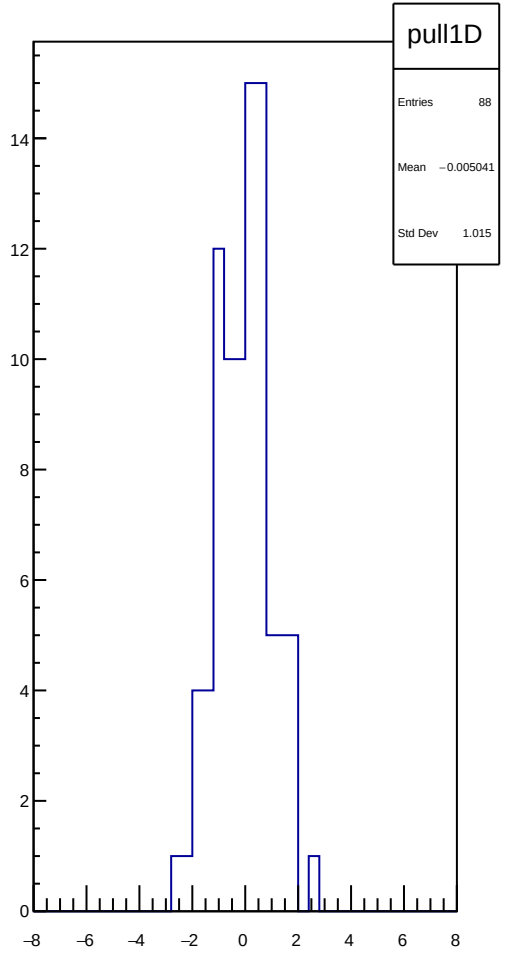

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 122.8 / 87
p0 −26.69 ± 113
pull
Entries 88
Mean −304.3
Std Dev 352.8

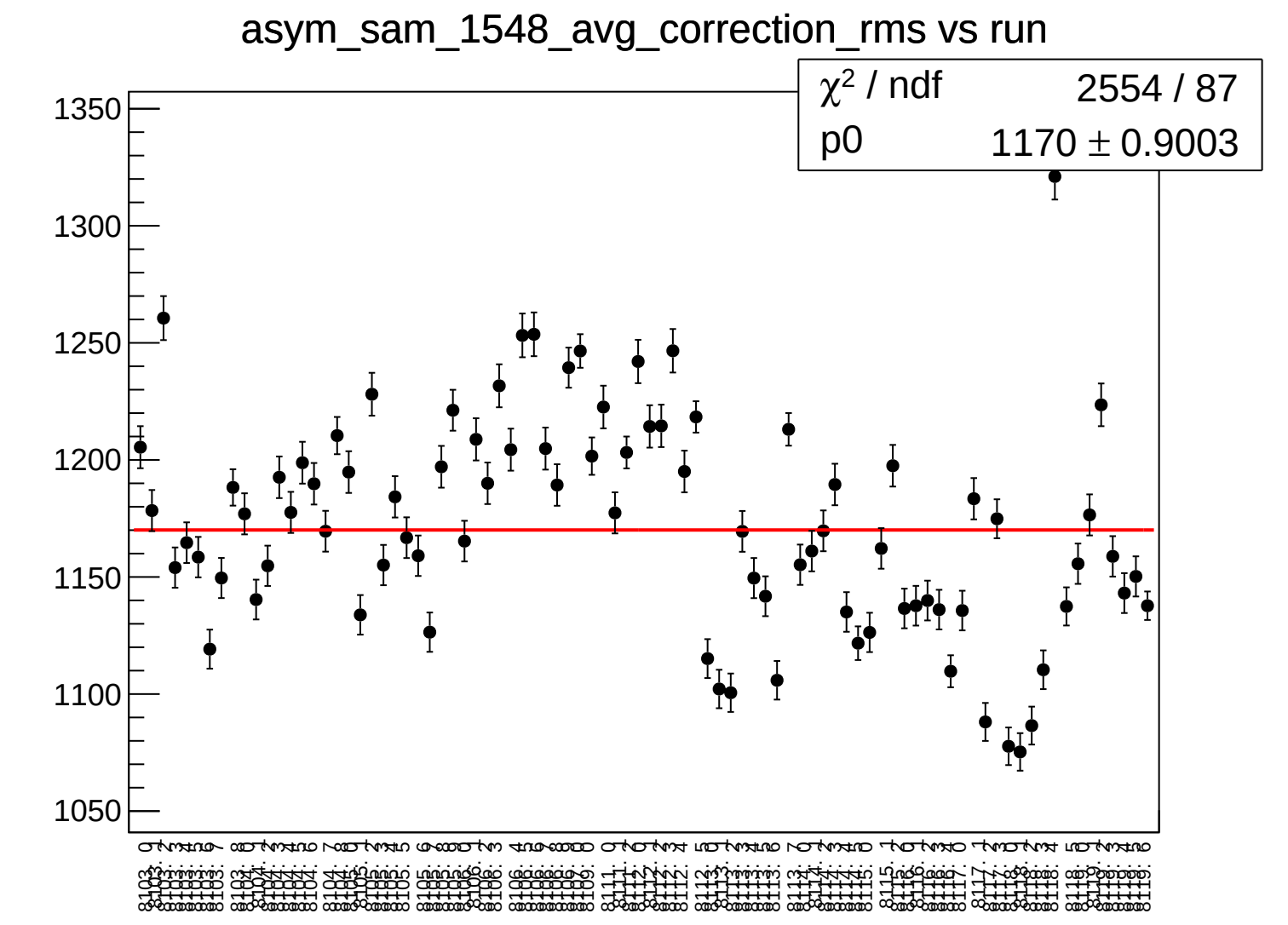

pull1D
Entries 88
Mean 0.01208
Std Dev 1.181

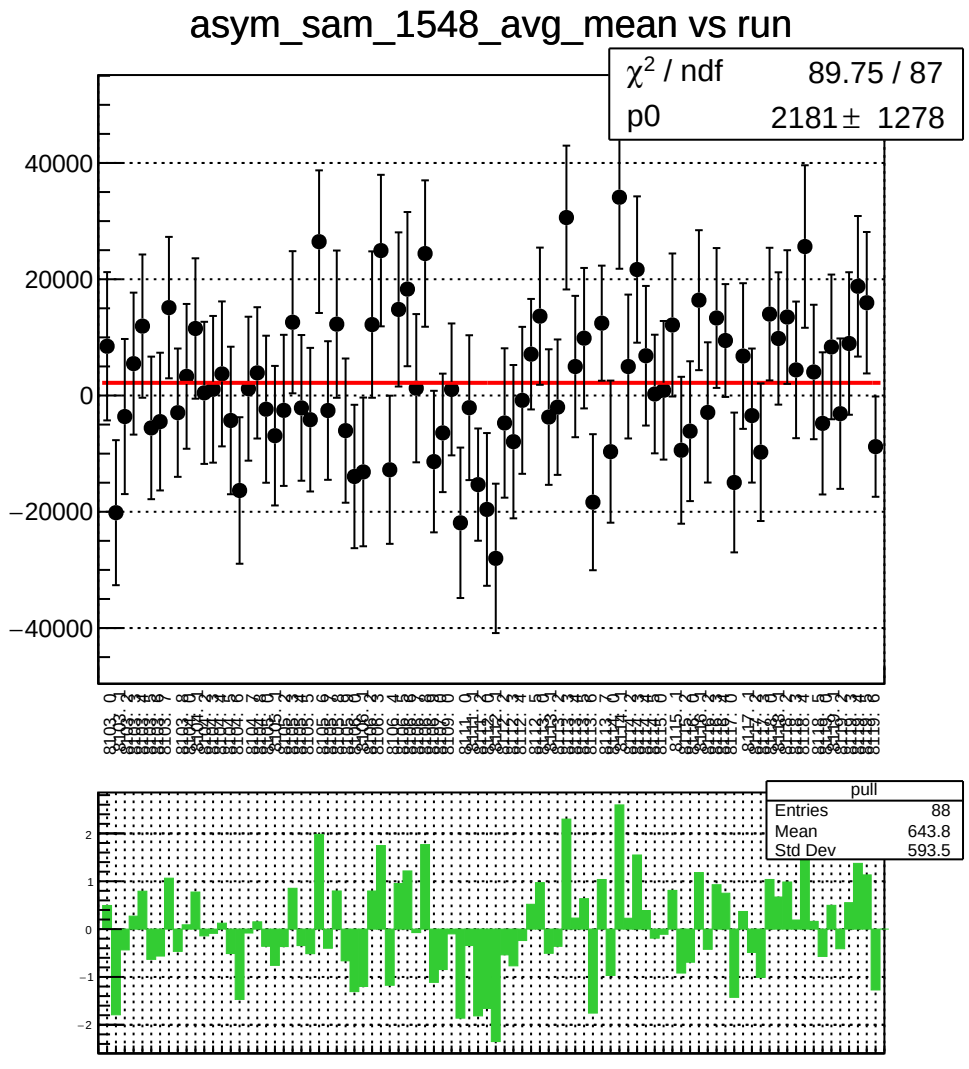
reg_asym_sam_1548_avg_rms vs run

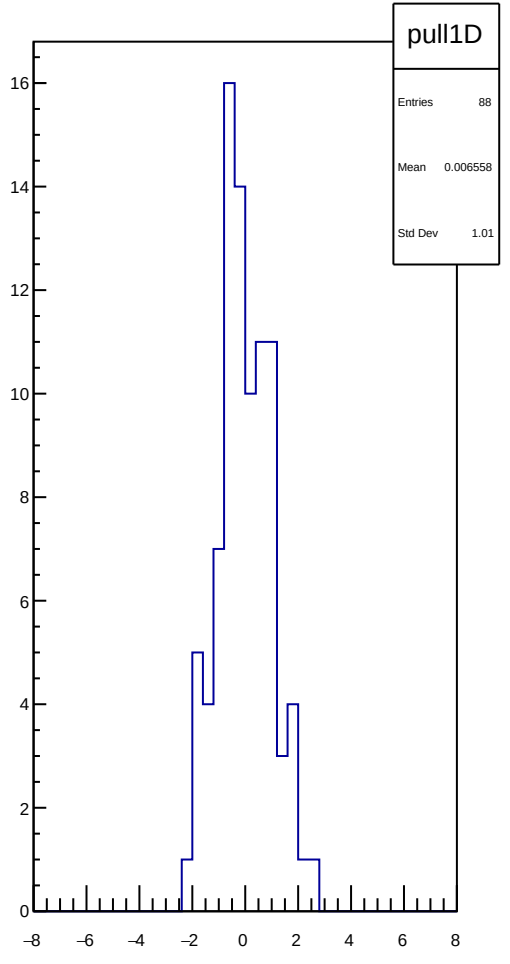


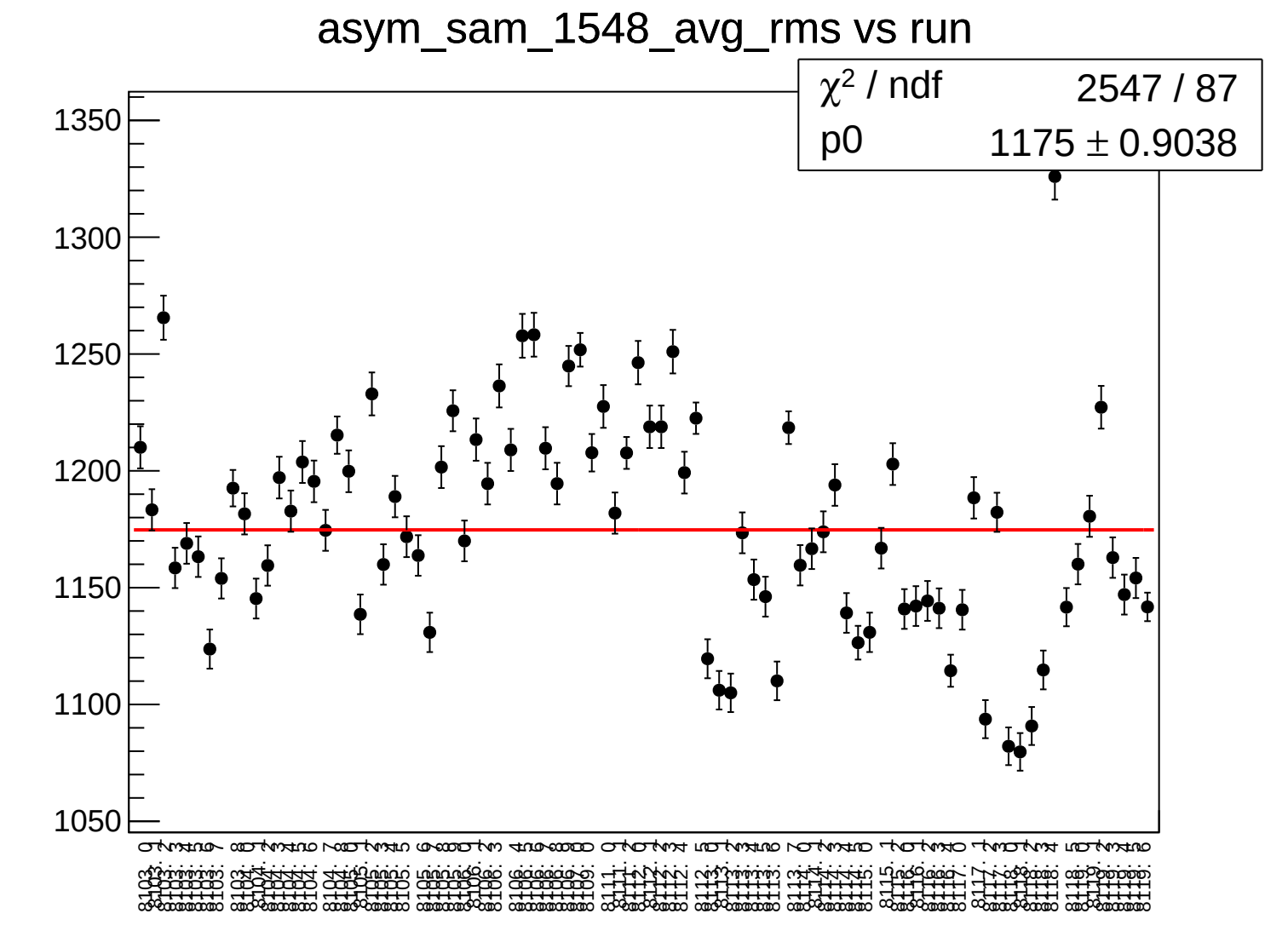

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 90.62 / 87
p0 −2220 ± 1273
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 899.9
Std Dev 849.8
2
1
0
−1
−2

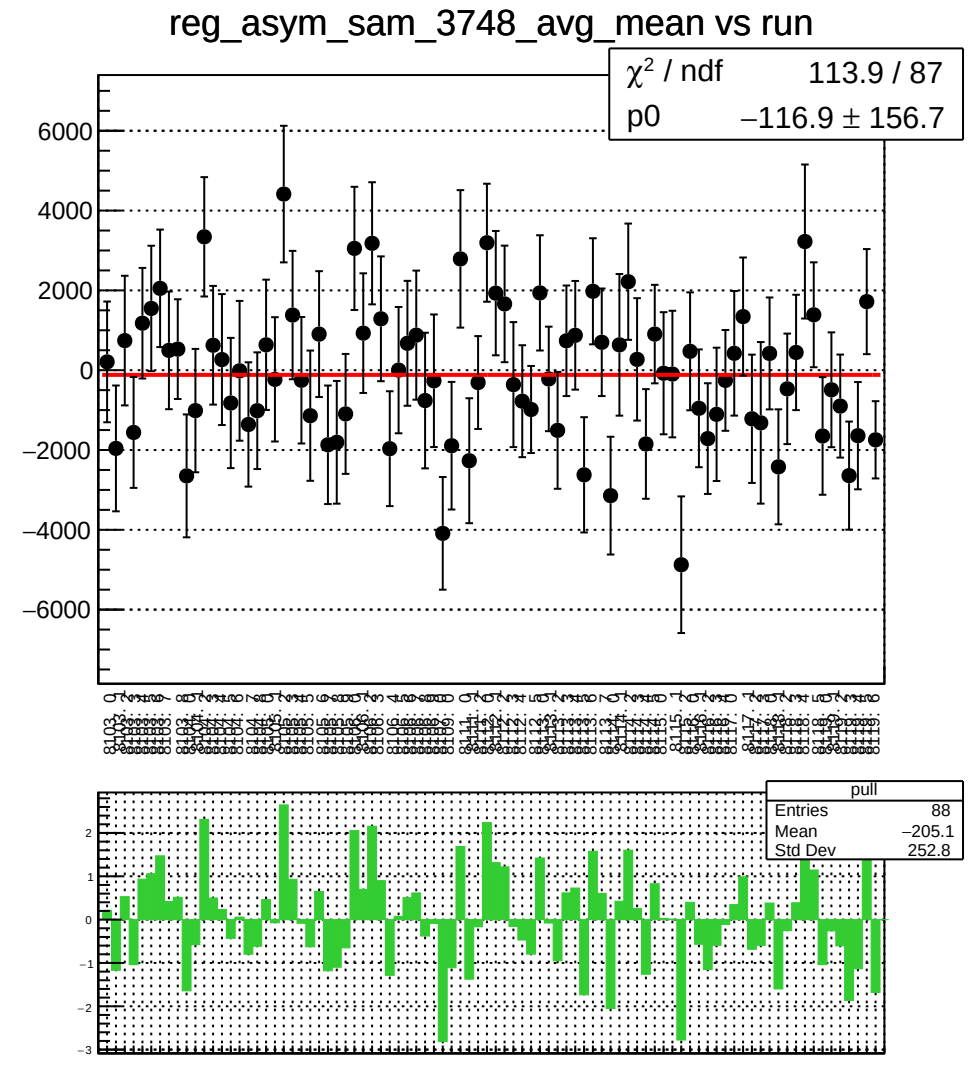

pull1D
Entries 88
Mean −0.005041
Std Dev 1.015
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

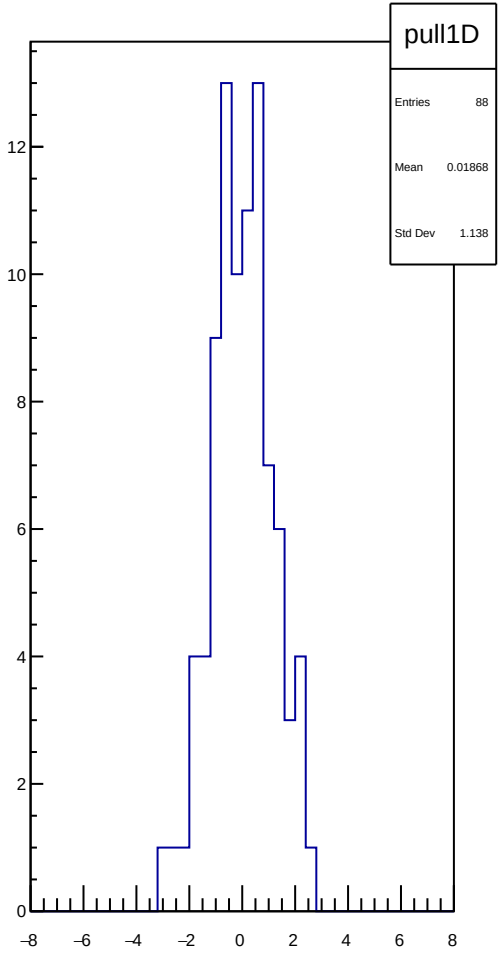

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 2554 / 87
p0 1170 ± 0.9003
1350
1300
1250
1200
1150
1100
1050

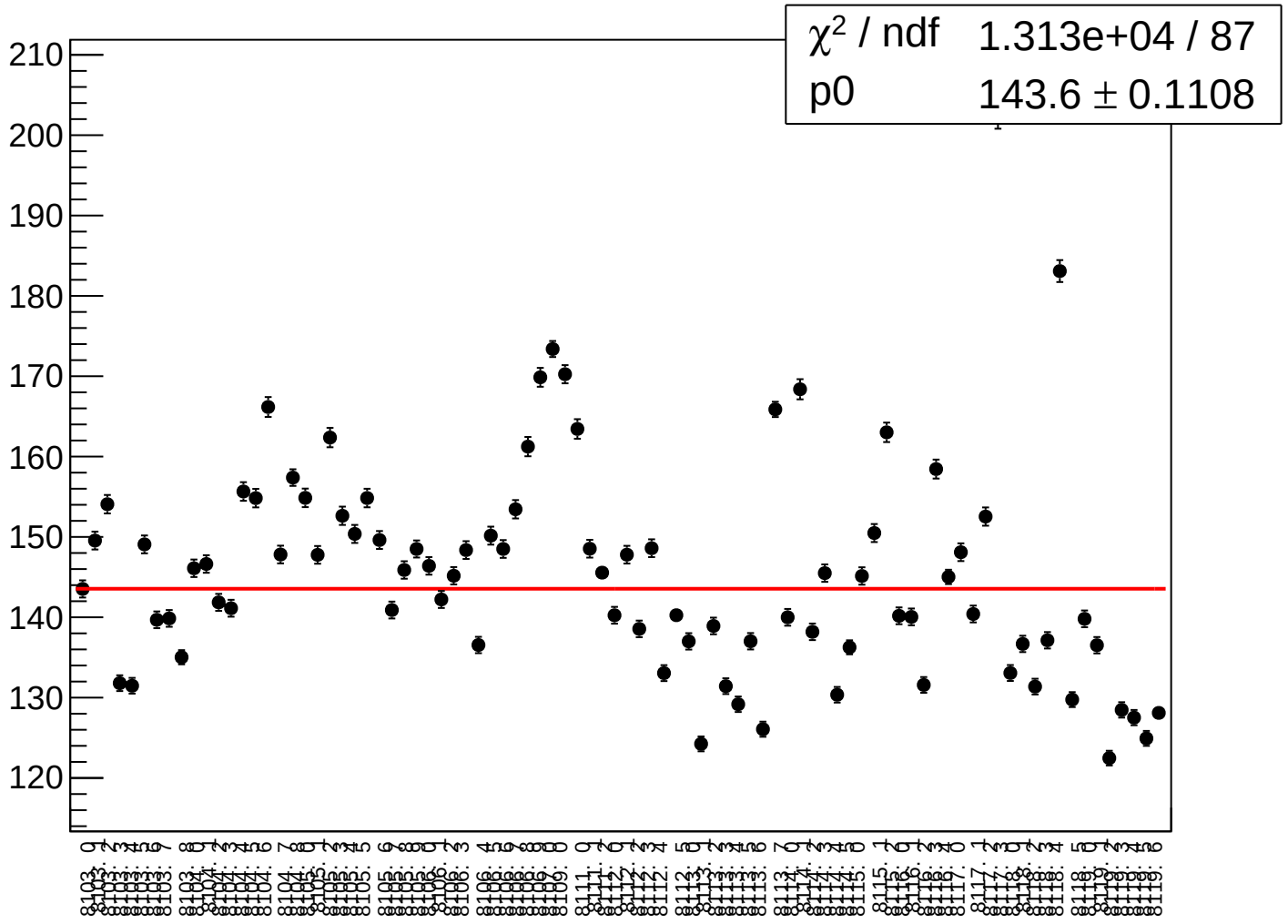

asym_sam_1548_avg_mean vs run
χ² / ndf 89.75 / 87
p0 2181 ± 1278
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 643.8
Std Dev 593.5
2
1
0
−1
−2

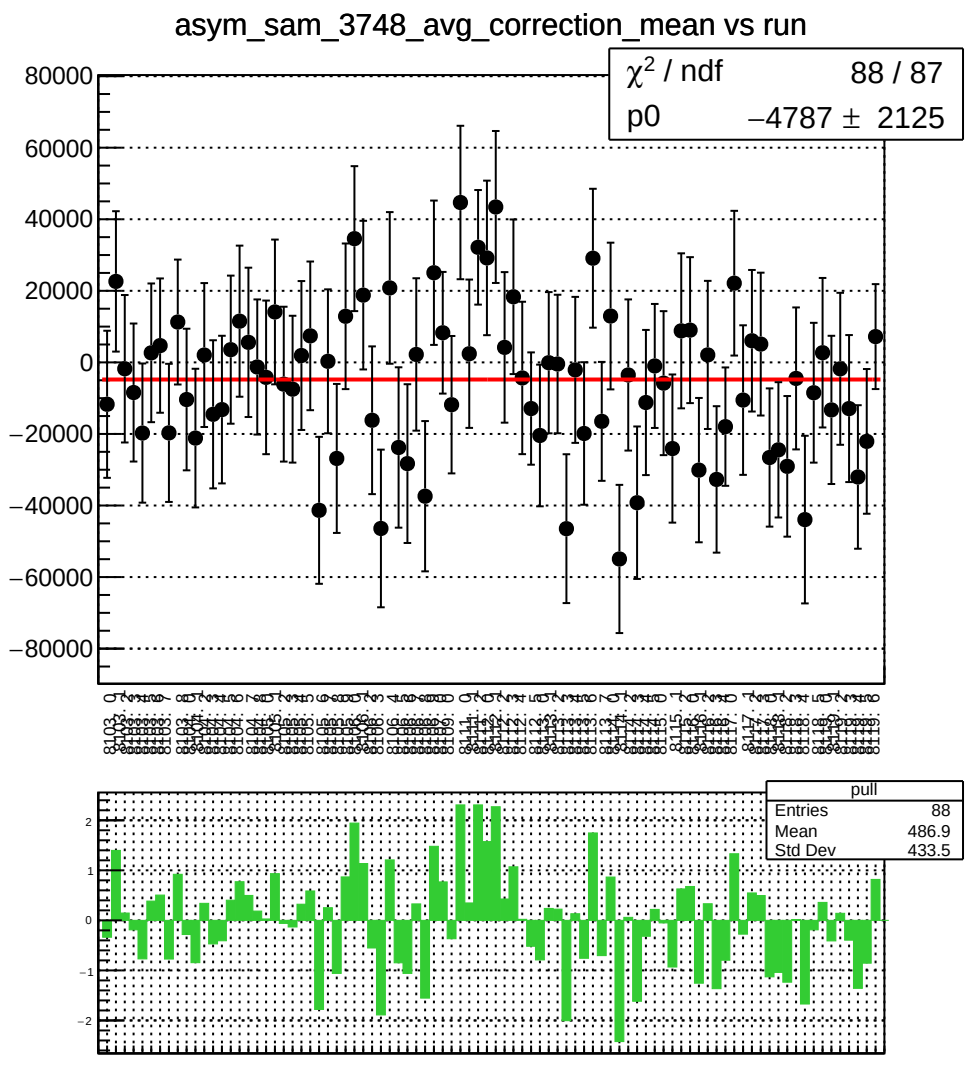

pull1D
Entries 88
Mean 0.006558
Std Dev 1.01
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

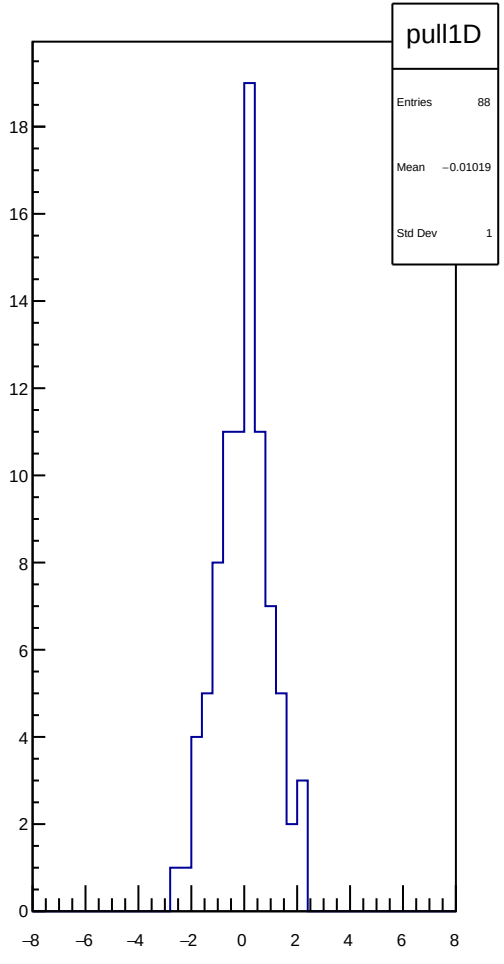

asym_sam_1548_avg_rms vs run
χ² / ndf 2547 / 87
p0 1175 ± 0.9038
1350
1300
1250
1200
1150
1100
1050

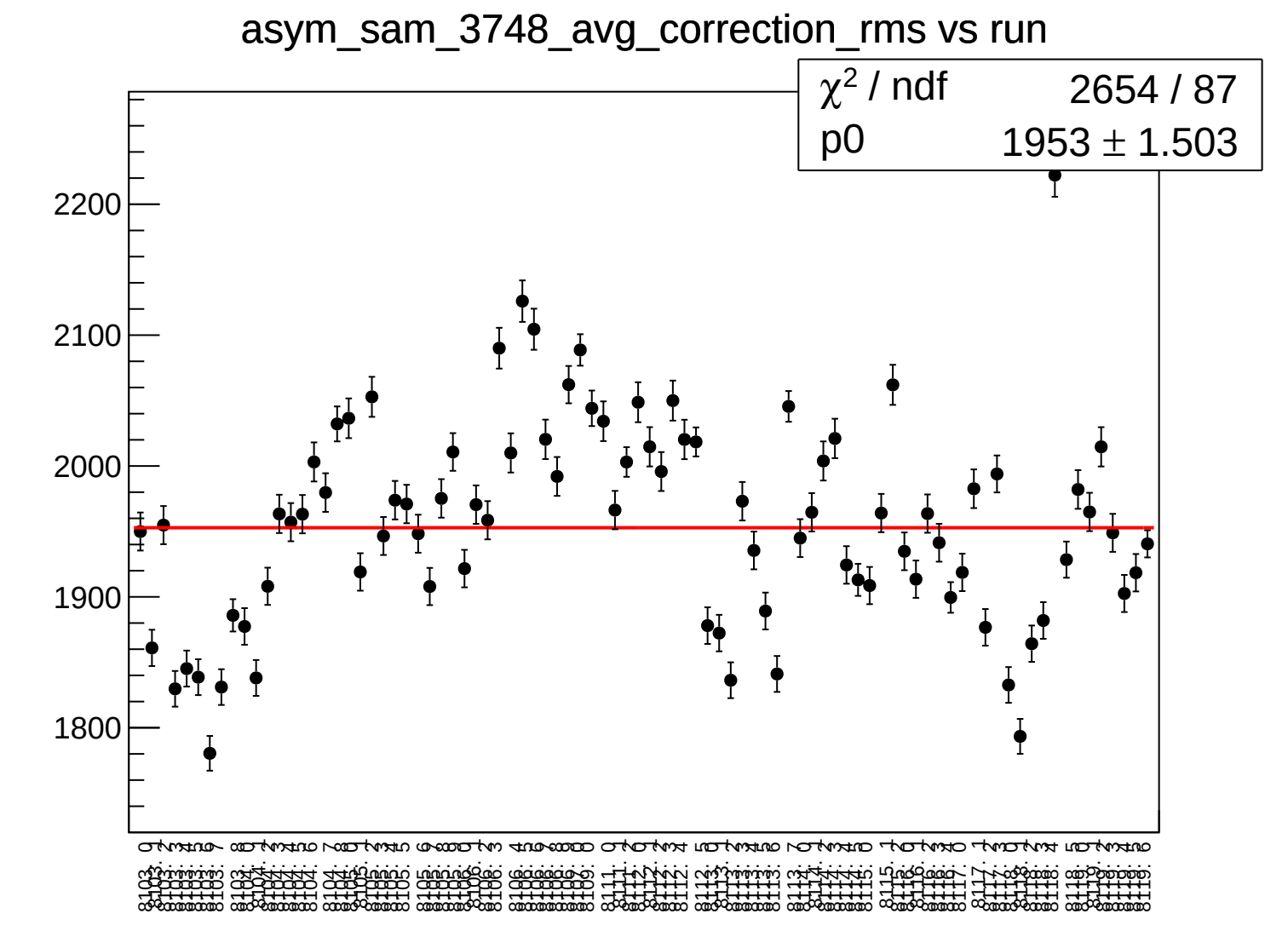

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 113.9 / 87
p0 −116.9 ± 156.7
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean −205.1
Std Dev 252.8
2
1
0
−1
−2
−3

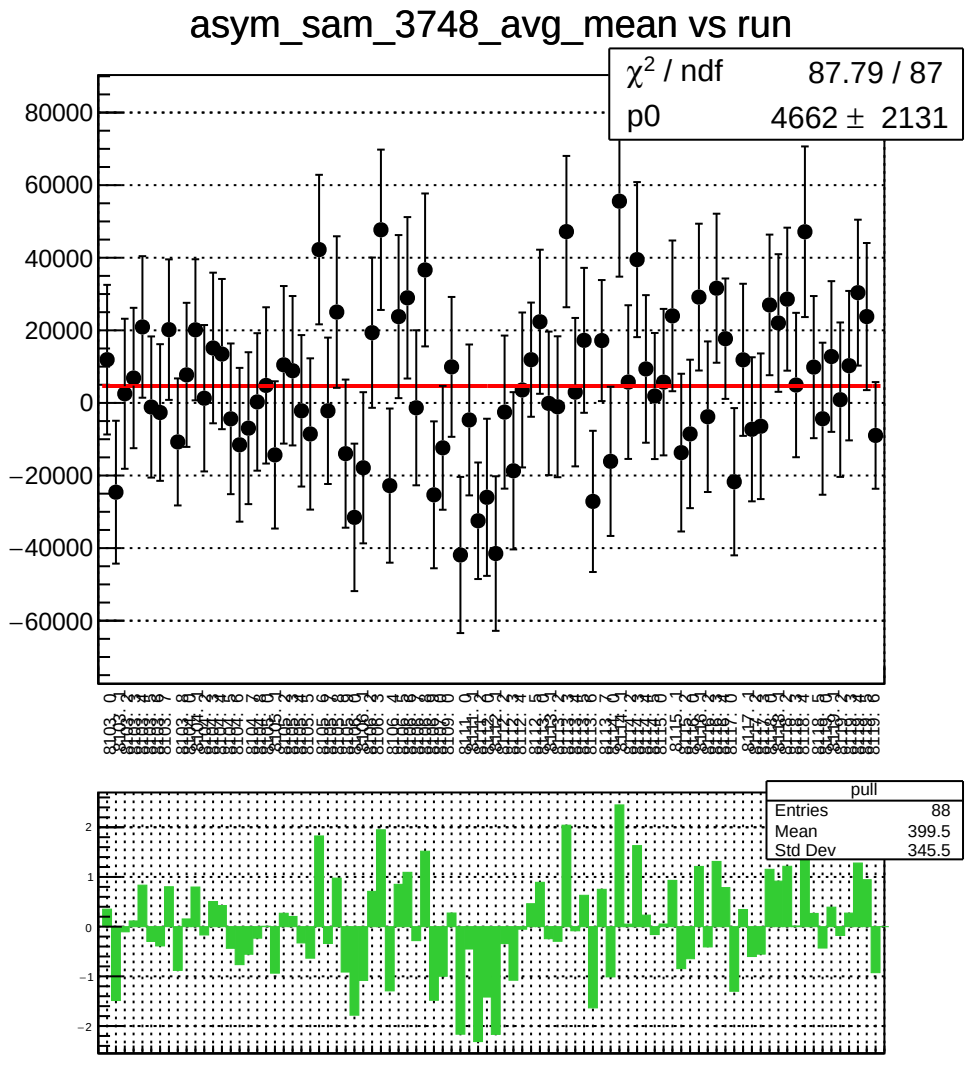

pull1D
Entries 88
Mean 0.01868
Std Dev 1.138
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

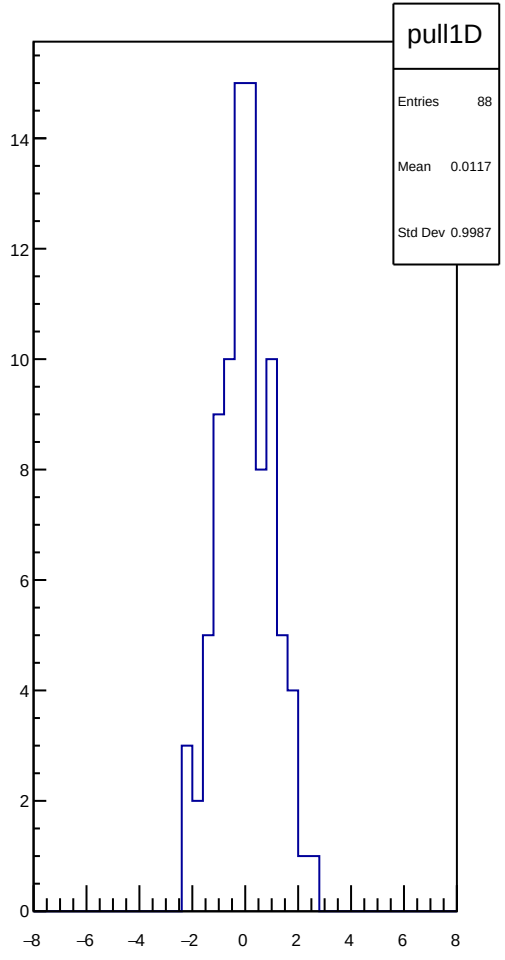

reg_asym_sam_3748_avg_rms vs run
χ^2 / ndf 1.313e+04 / 87
p0 143.6 ± 0.1108
210
200
190
180
170
160
150
140
130
120

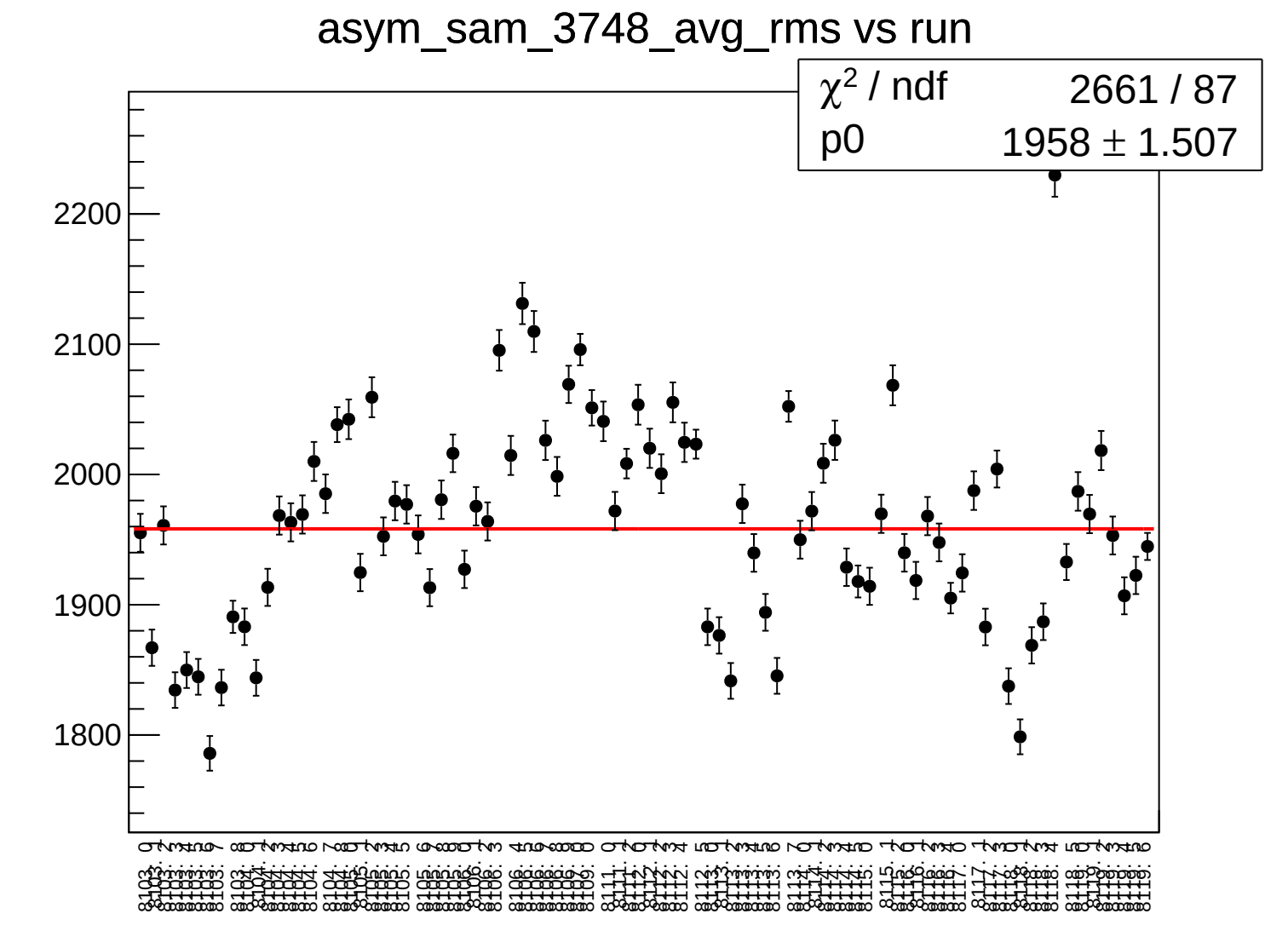

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 88 / 87
p0 −4787 ± 2125
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 88
Mean 486.9
Std Dev 433.5
2
1
0
−1
−2

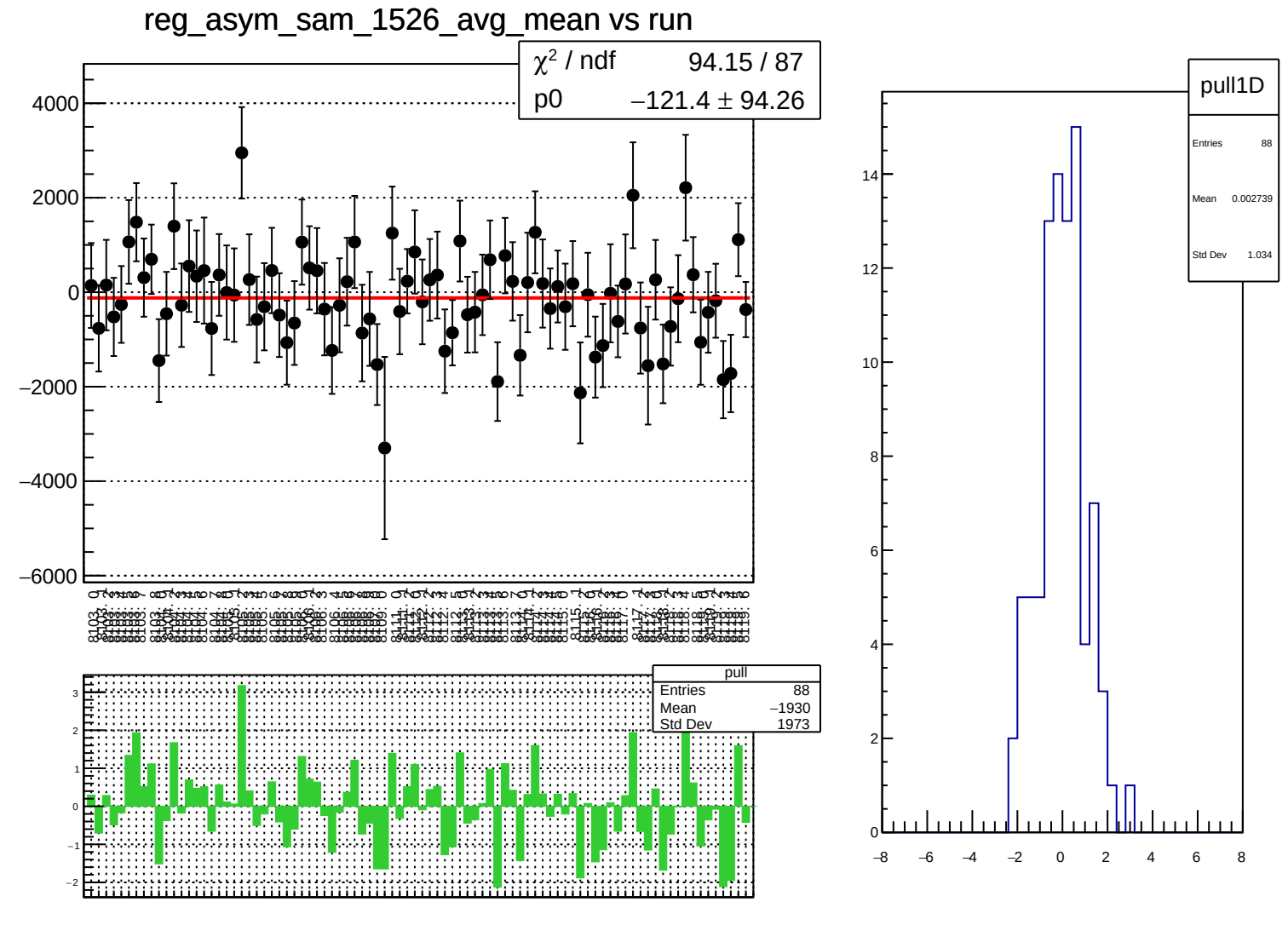

pull1D
Entries 88
Mean −0.01019
Std Dev 1
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

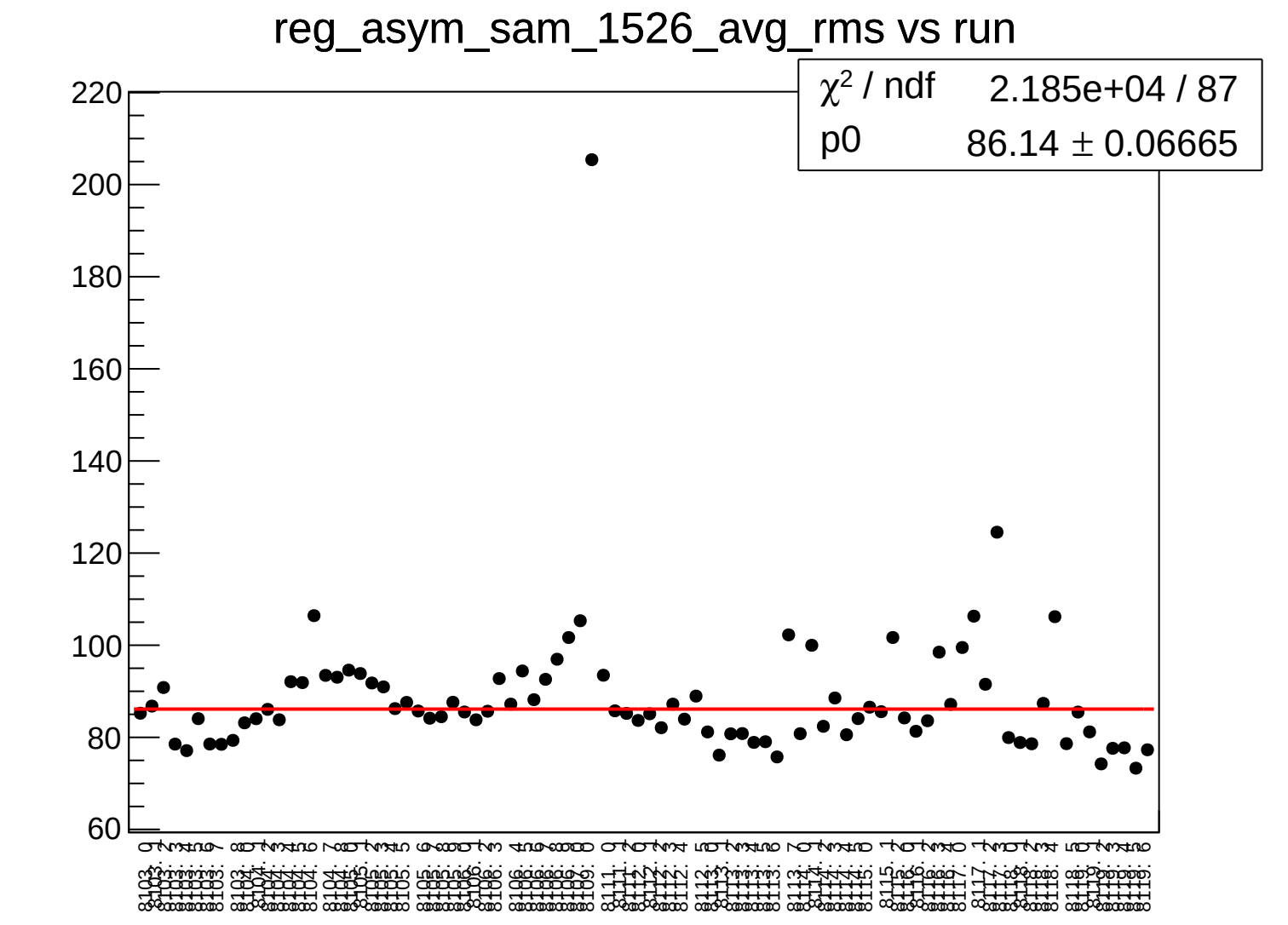

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 2654 / 87
p0 1953 ± 1.503
2200
2100
2000
1900
1800

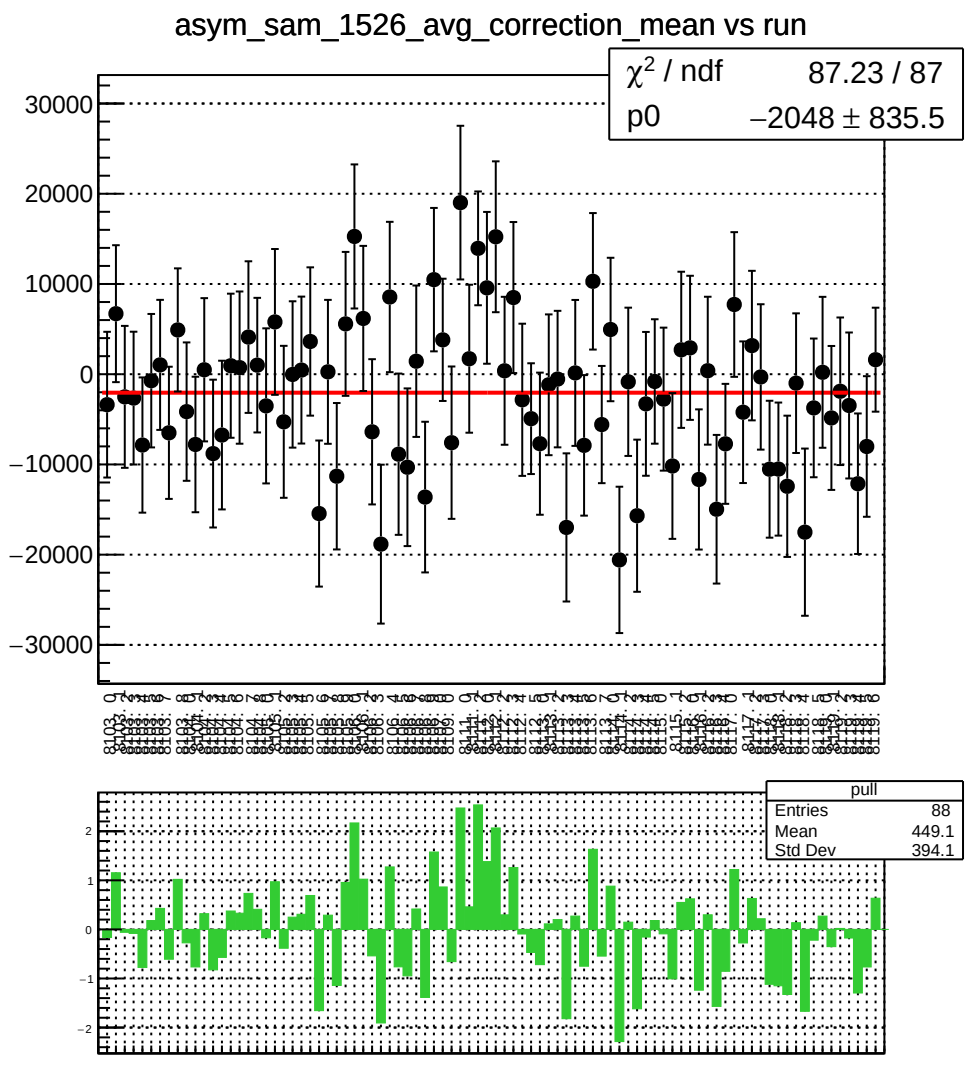

asym_sam_3748_avg_mean vs run
χ² / ndf 87.79 / 87
p0 4662 ± 2131
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 399.5
Std Dev 345.5
2
1
0
−1
−2

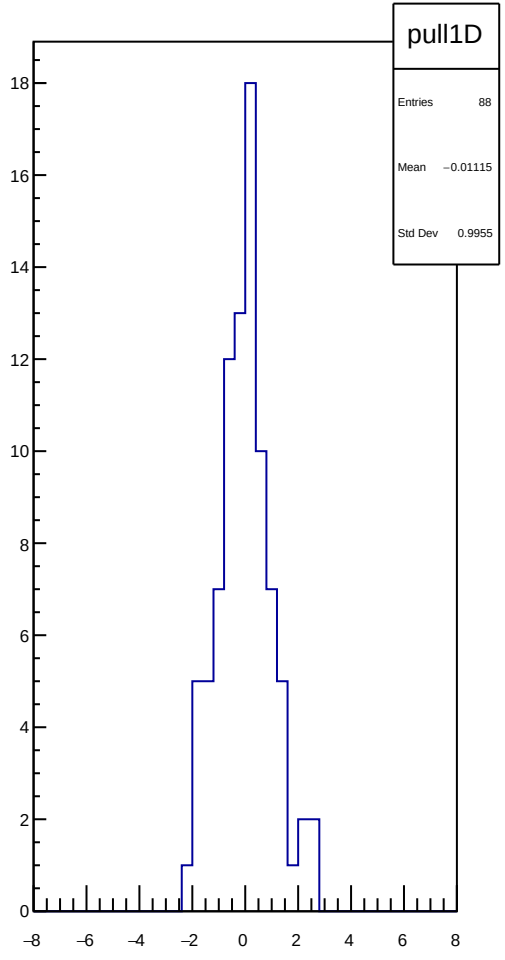

pull1D
Entries 88
Mean 0.0117
Std Dev 0.9987
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

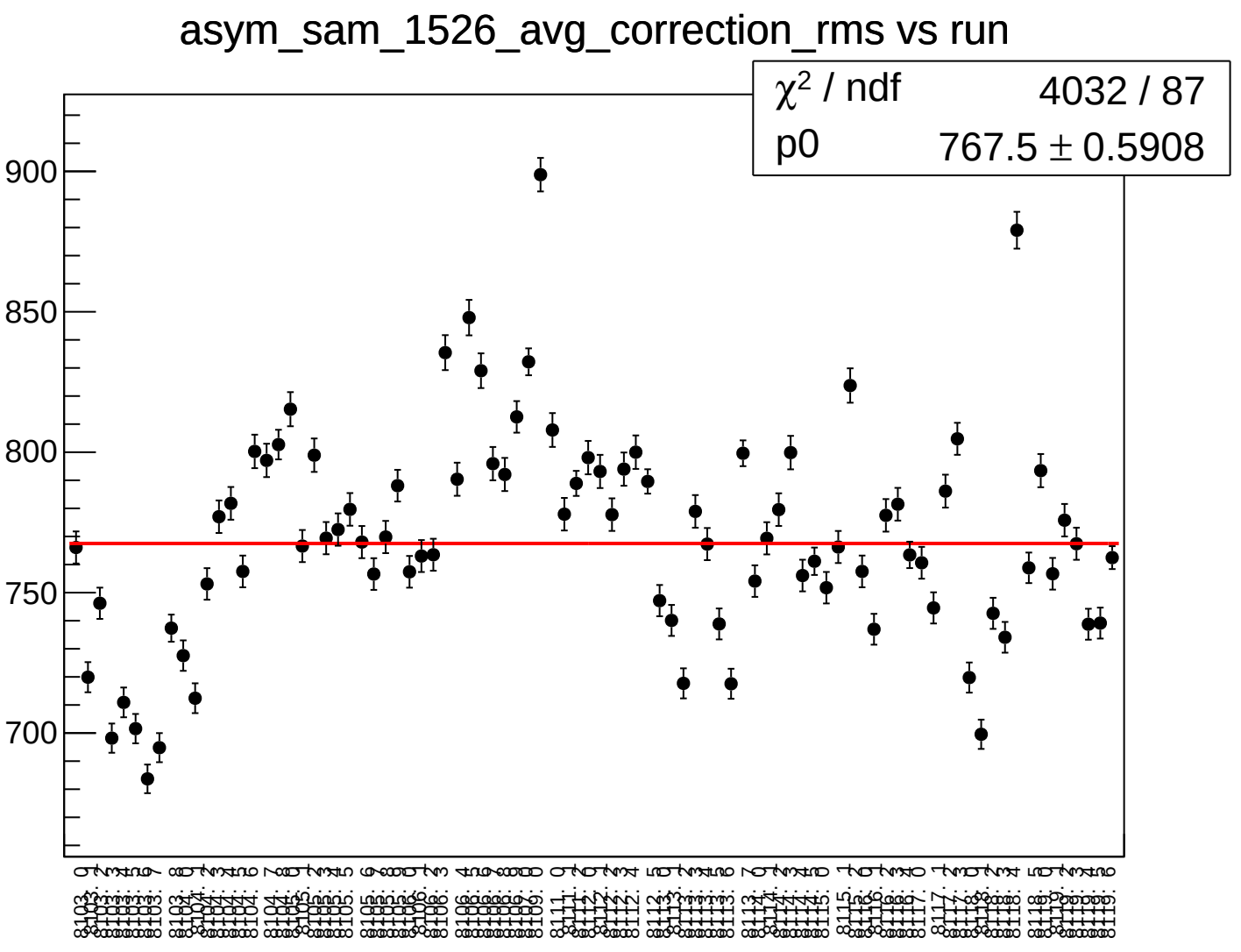

asym_sam_3748_avg_rms vs run
χ^2 / ndf 2661 / 87
p0 1958 ± 1.507
2200
2100
2000
1900
1800

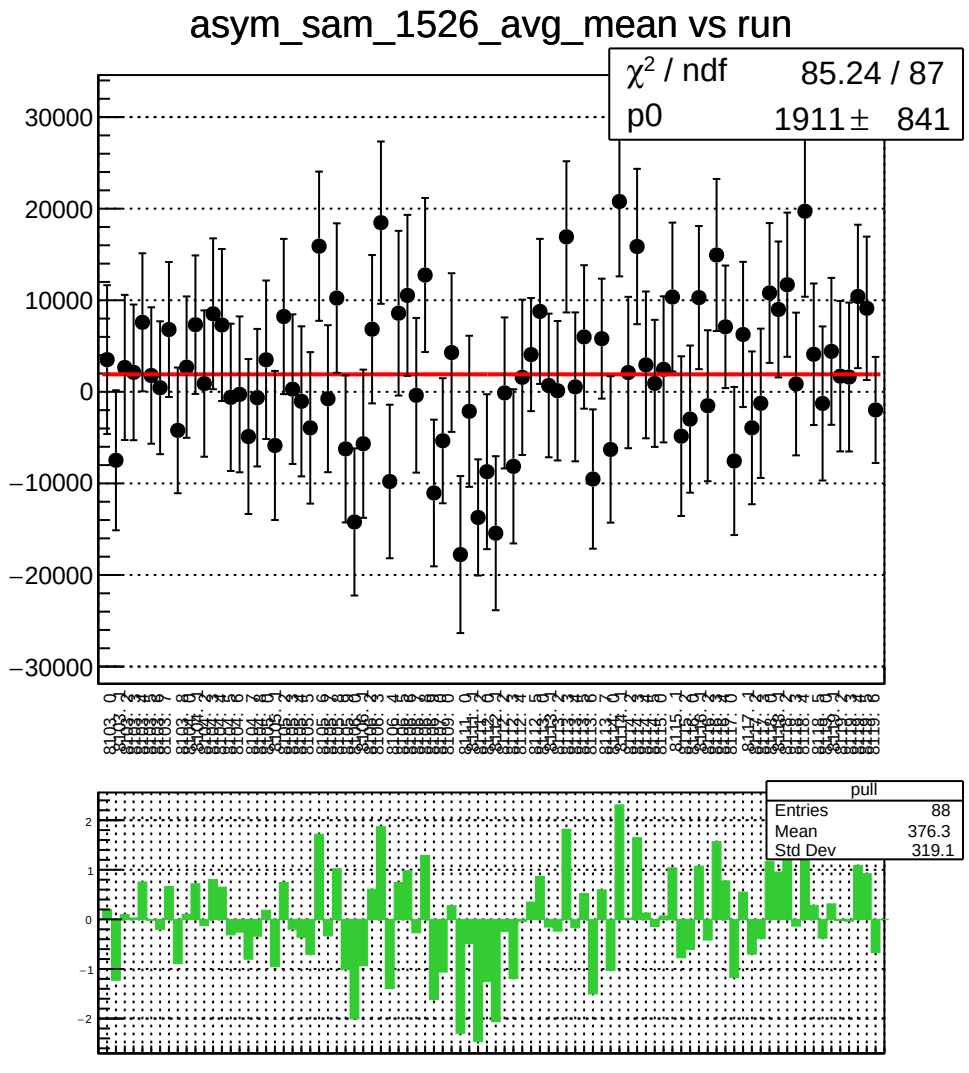

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 94.15 / 87
p0 −121.4 ± 94.26
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean −1930
Std Dev 1973
3
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.002739
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

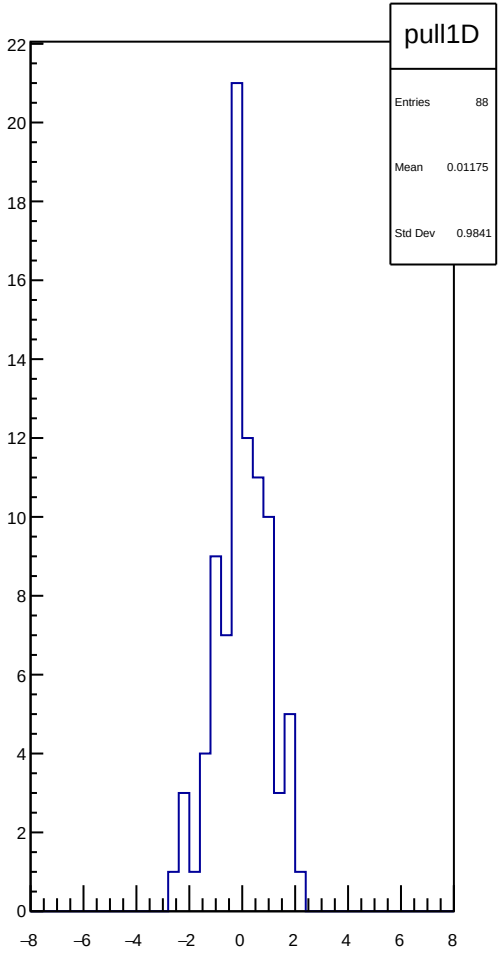

reg_asym_sam_1526_avg_rms vs run
χ^2 / ndf 2.185e+04 / 87
p0 86.14 ± 0.06665
220
200
180
160
140
120
100
80
60

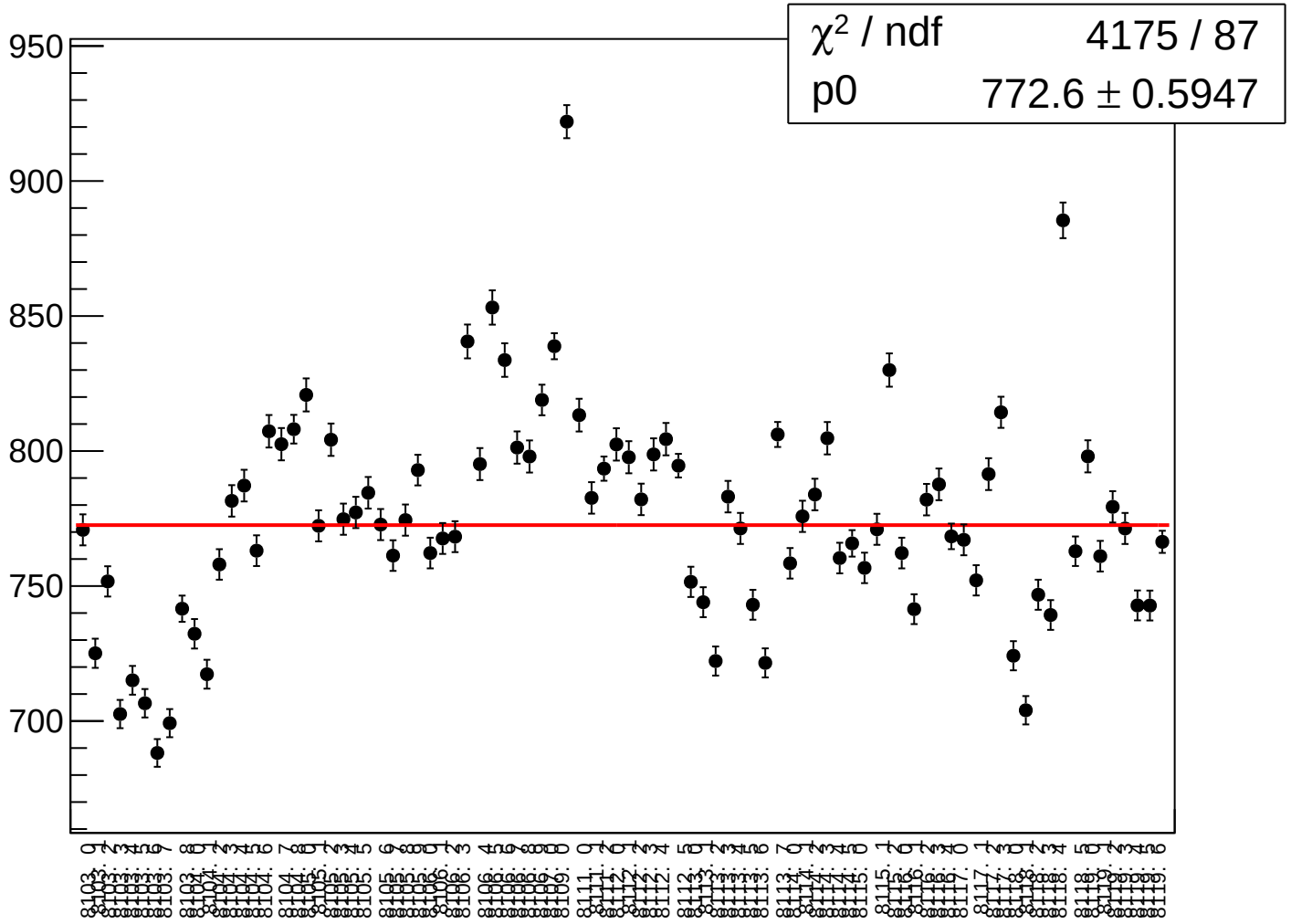

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 87.23 / 87
p0 −2048 ± 835.5
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 449.1
Std Dev 394.1
2
1
0
−1
−2

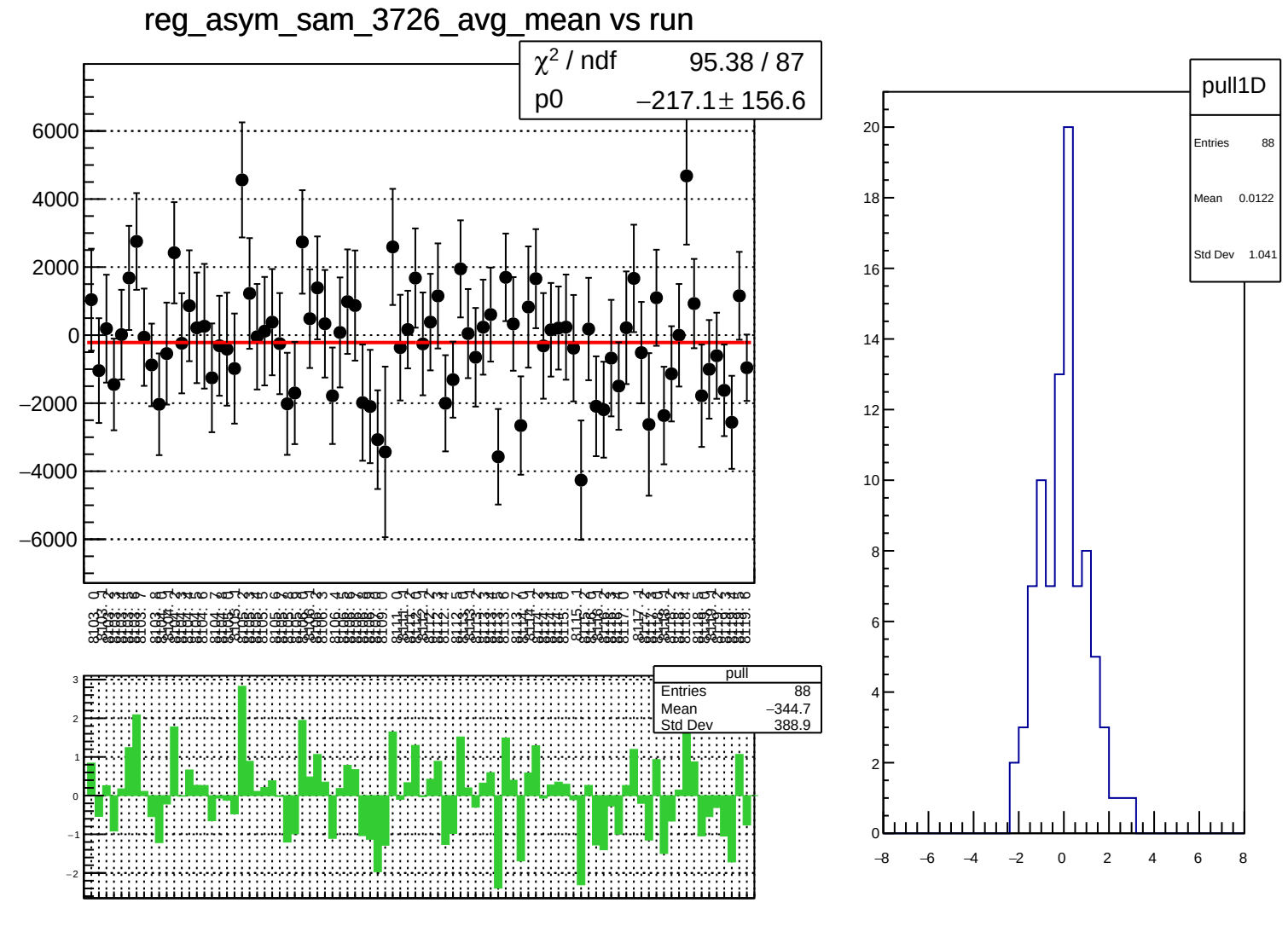

pull1D
Entries 88
Mean −0.01115
Std Dev 0.9955
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

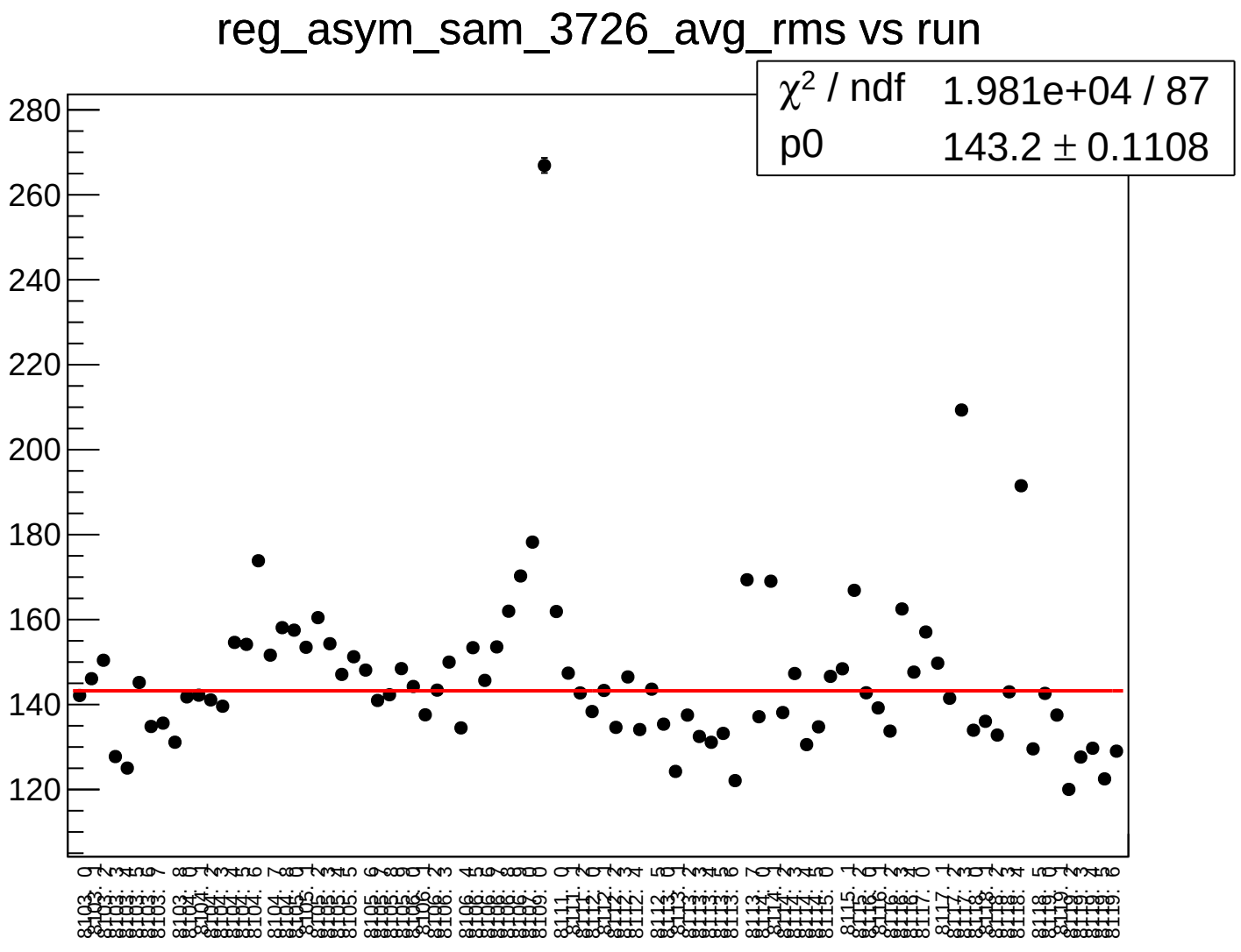

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 4032 / 87
p0 767.5 ± 0.5908
900
850
800
750
700

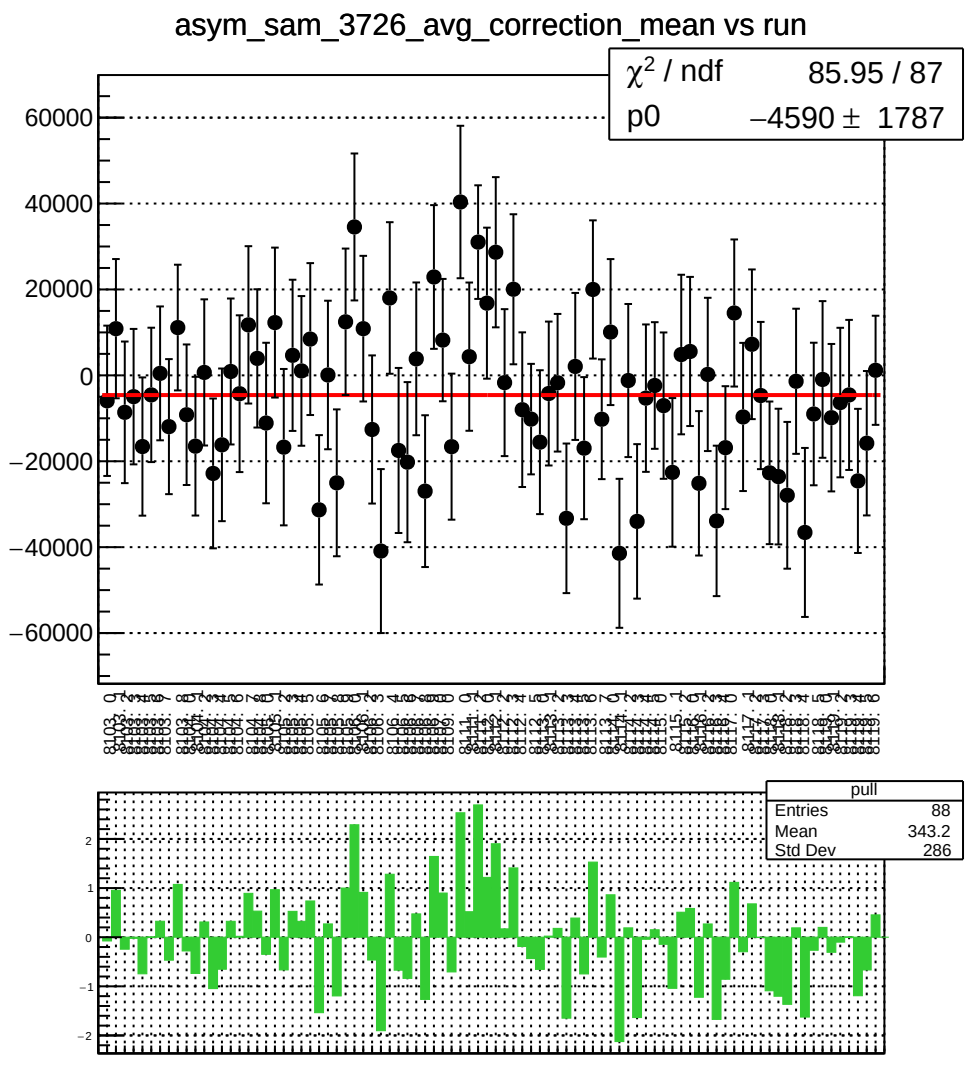

asym_sam_1526_avg_mean vs run
χ² / ndf 85.24 / 87
p0 1911 ± 841
pull
Entries 88
Mean 376.3
Std Dev 319.1

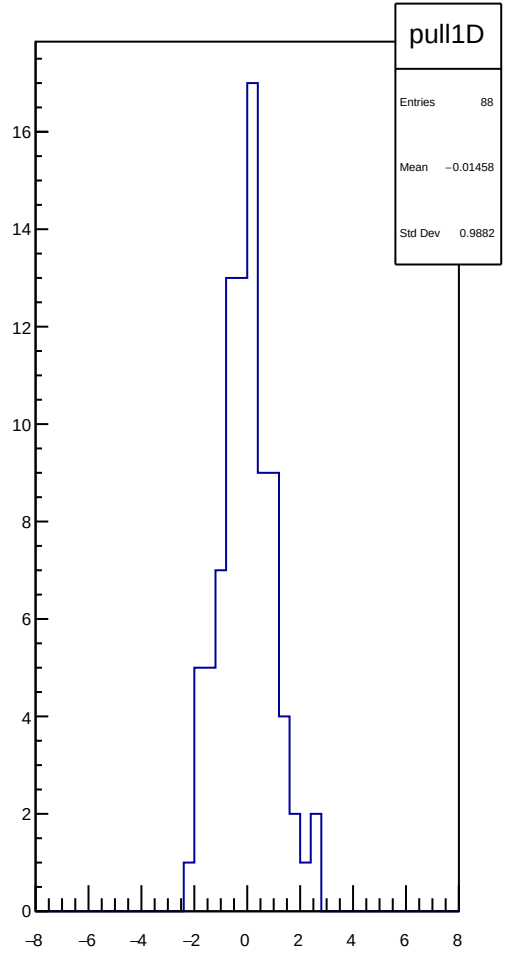

pull1D
Entries 88
Mean 0.01175
Std Dev 0.9841

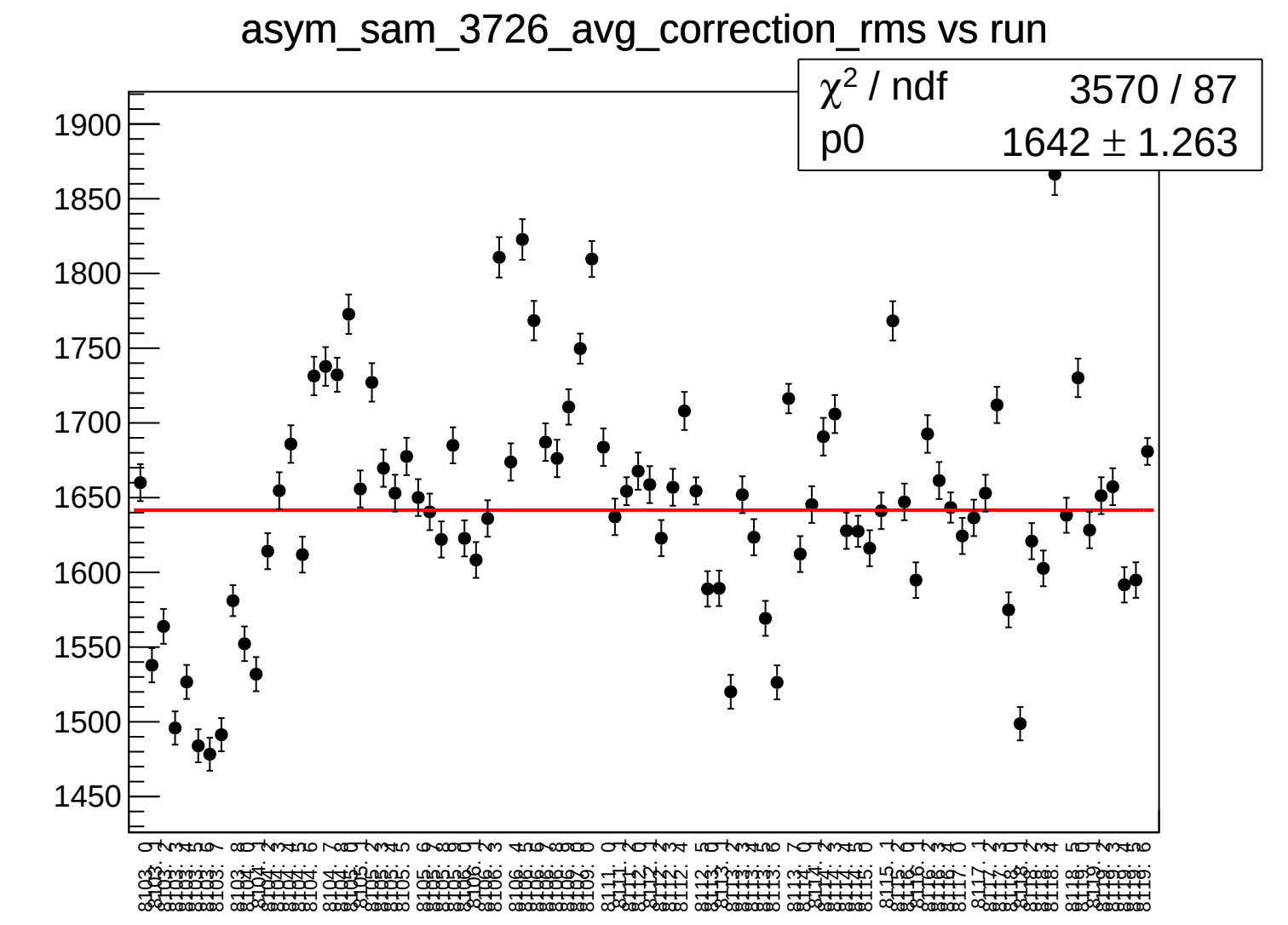

asym_sam_1526_avg_rms vs run
χ² / ndf 4175 / 87
p0 772.6 ± 0.5947
950
900
850
800
750
700

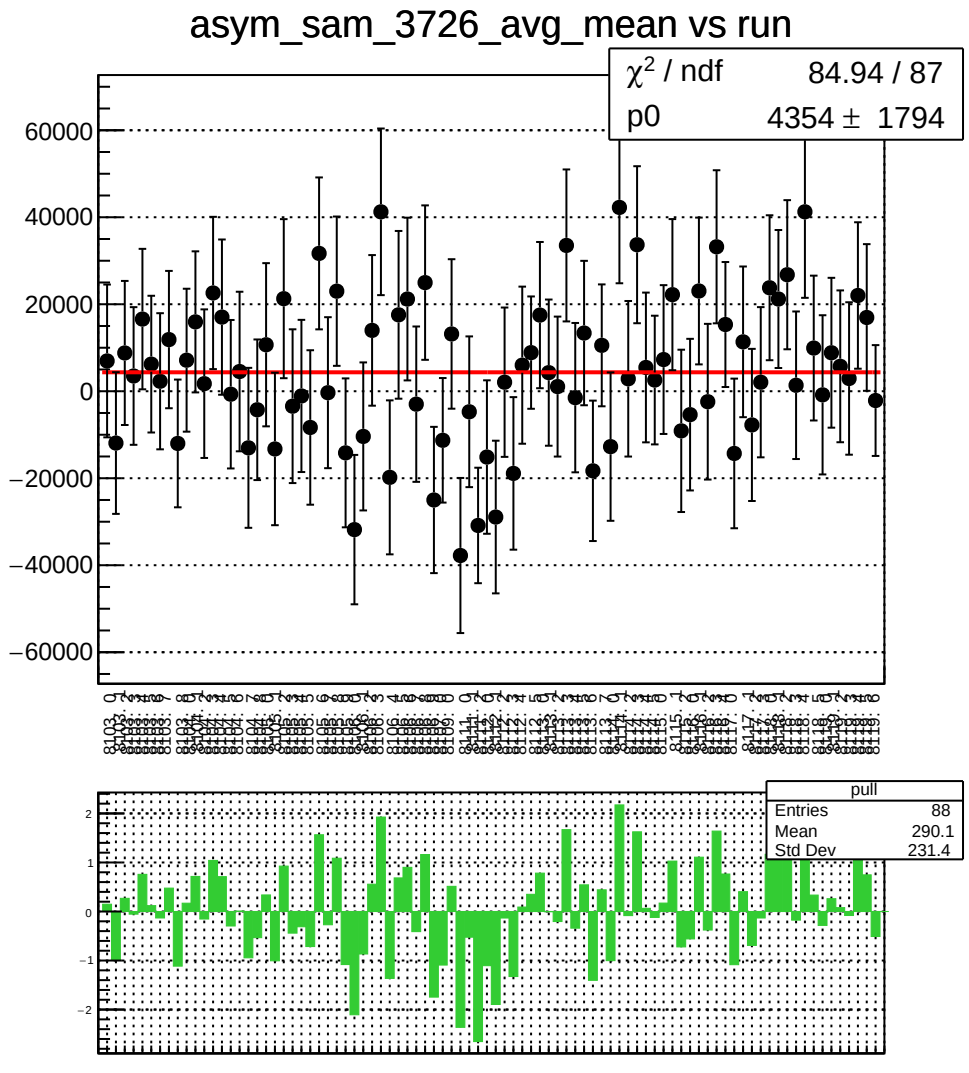

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 95.38 / 87
p0 −217.1± 156.6
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean −344.7
Std Dev 388.9
3
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.0122
Std Dev 1.041
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

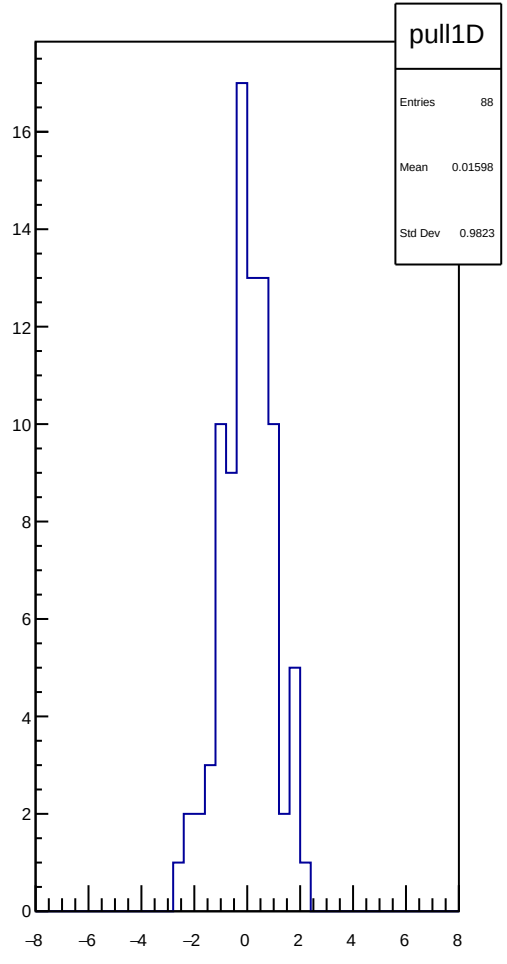

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 1.981e+04 / 87
p0 143.2 ± 0.1108
280
260
240
220
200
180
160
140
120

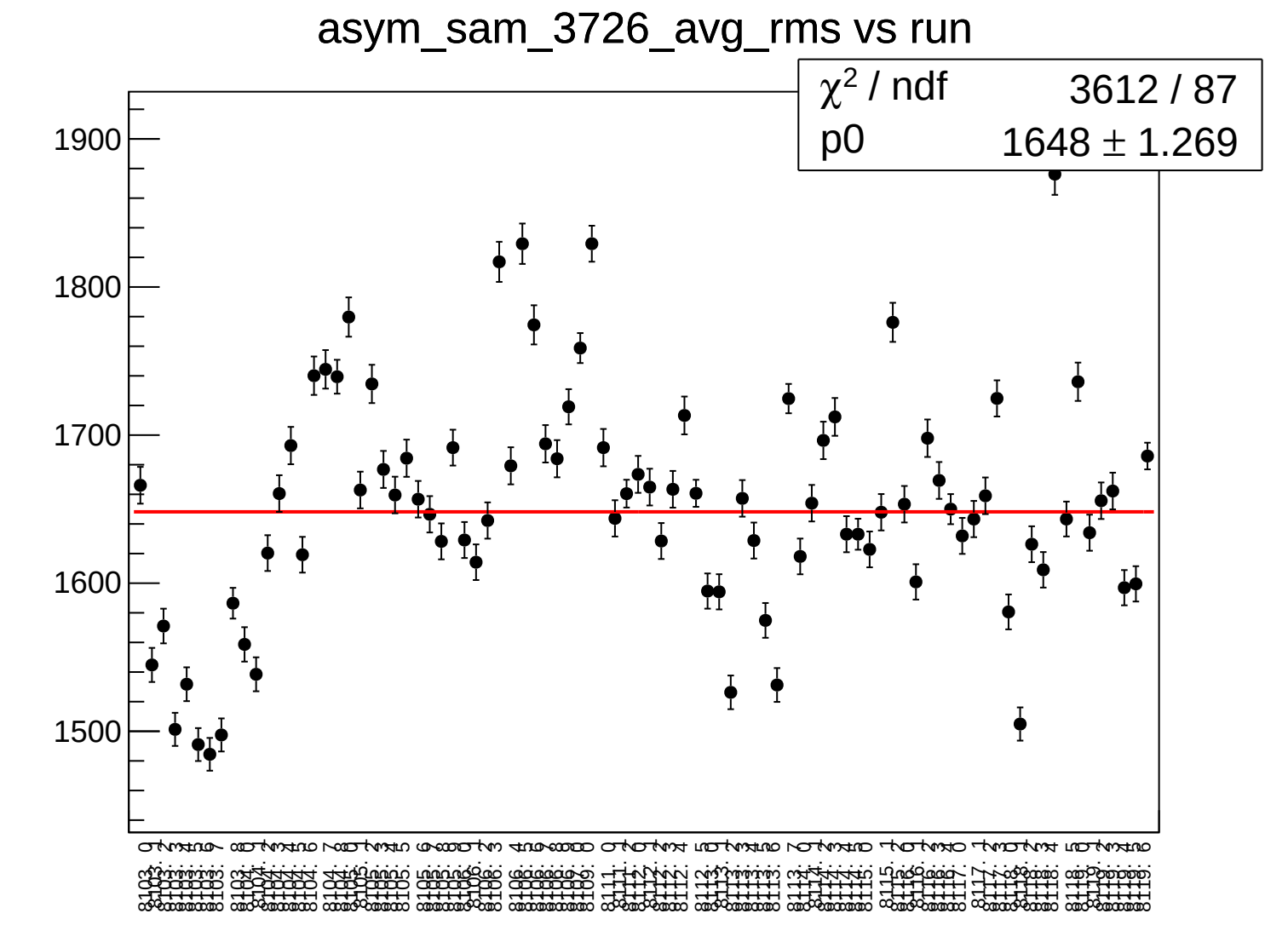

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 85.95 / 87
p0 −4590 ± 1787
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 343.2
Std Dev 286
2
1
0
−1
−2

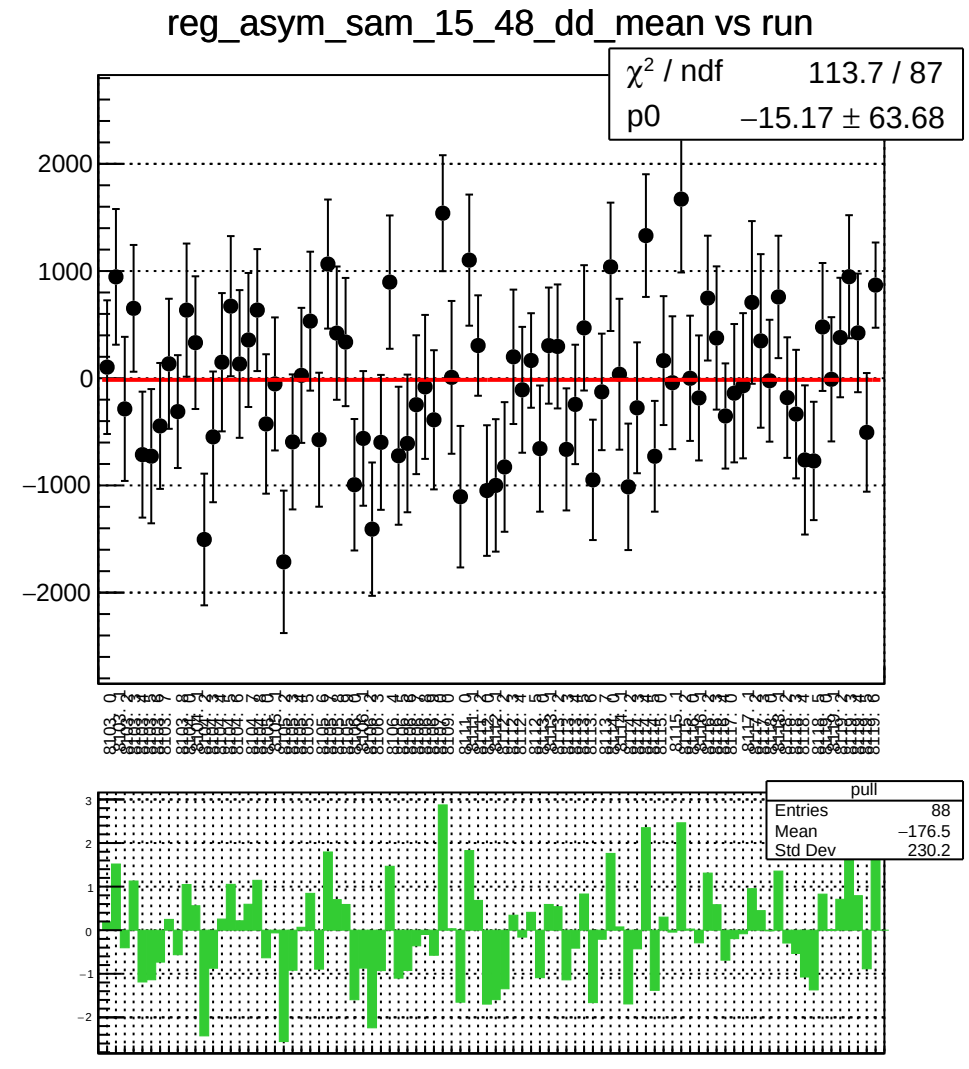

pull1D
Entries 88
Mean −0.01458
Std Dev 0.9882
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

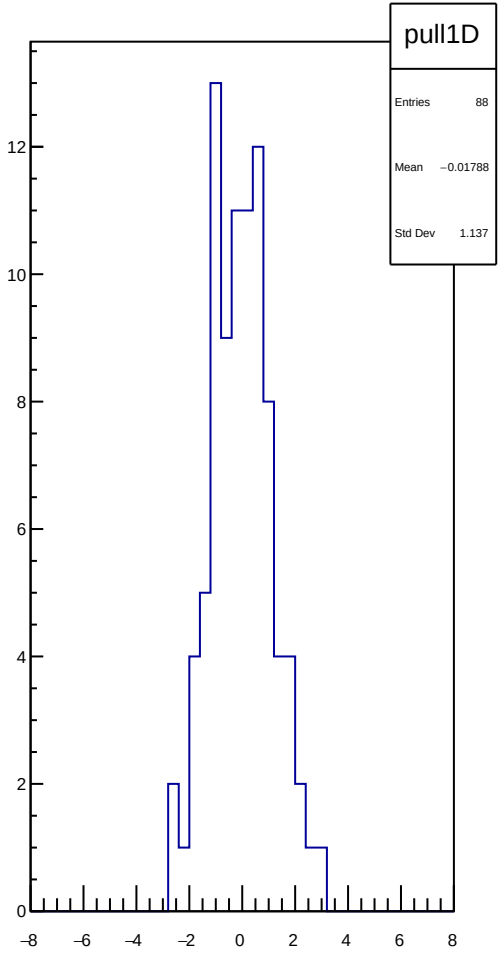

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 3570 / 87
p0 1642 ± 1.263
1900
1850
1800
1750
1700
1650
1600
1550
1500
1450

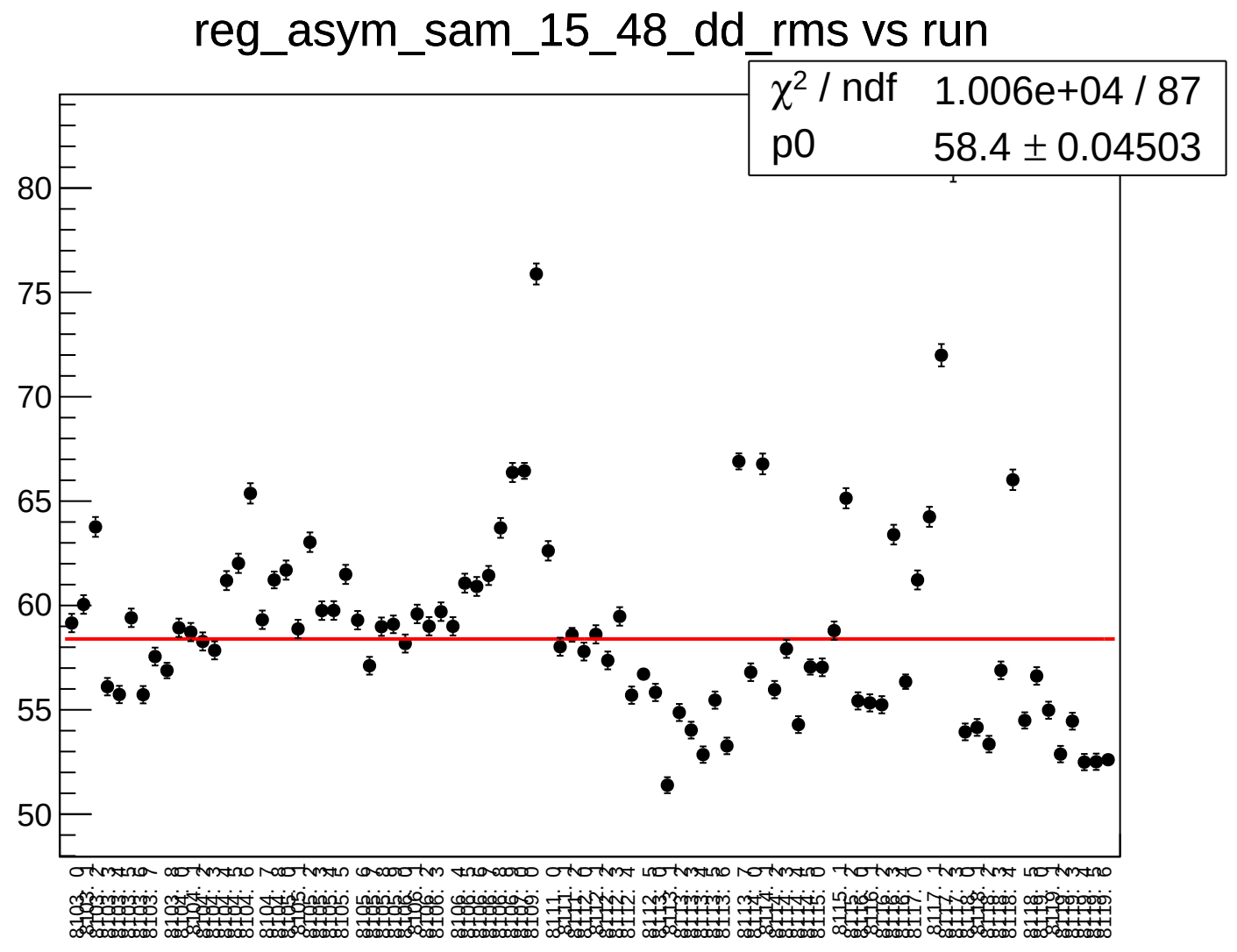

asym_sam_3726_avg_mean vs run
χ² / ndf 84.94 / 87
p0 4354 ± 1794
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 290.1
Std Dev 231.4
2
1
0
−1
−2

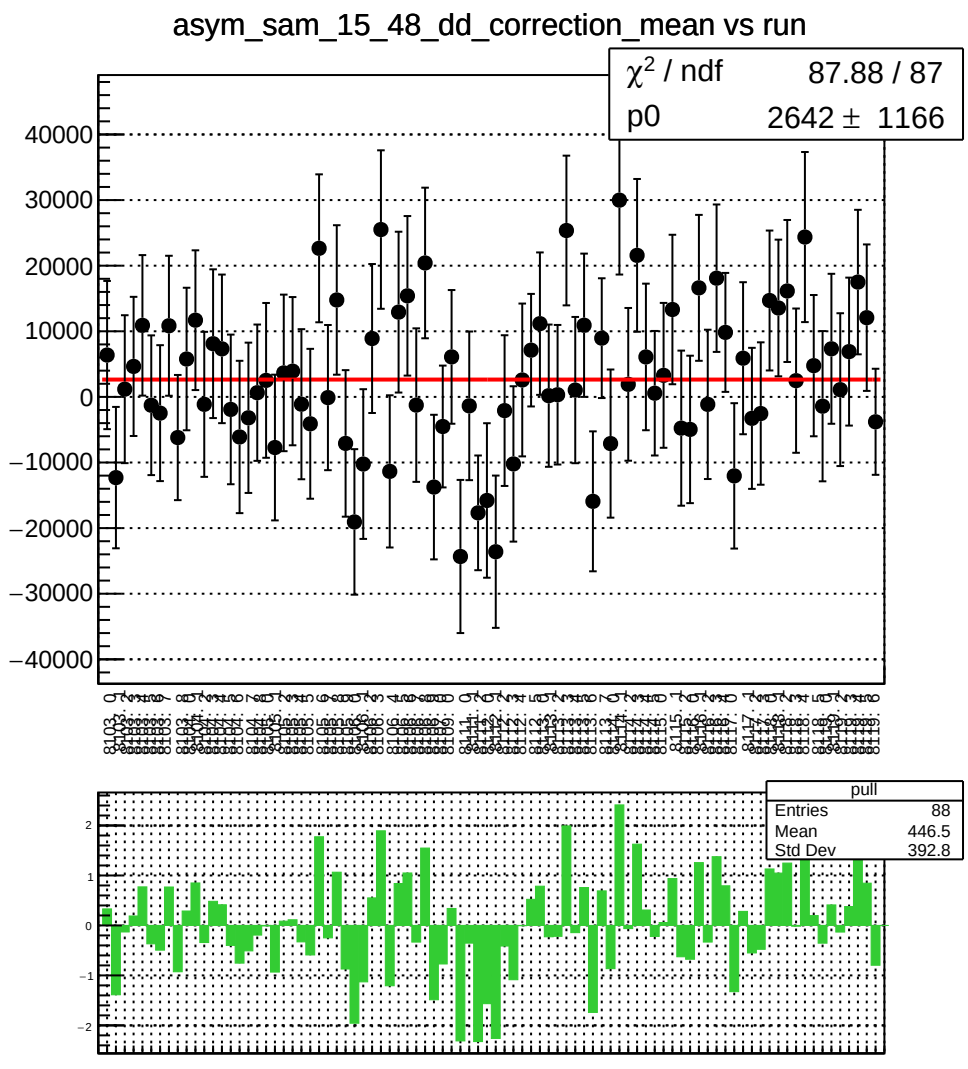

pull1D
Entries 88
Mean 0.01598
Std Dev 0.9823
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

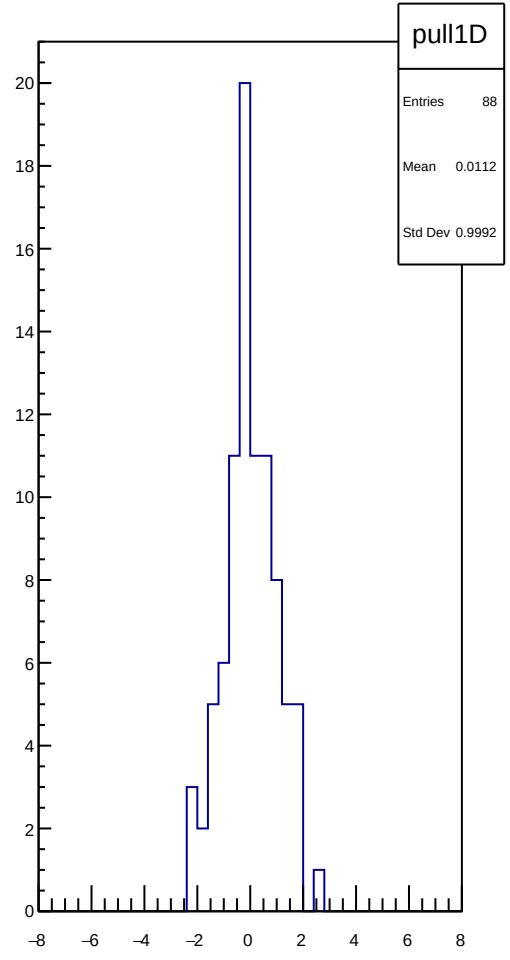

asym_sam_3726_avg_rms vs run
χ² / ndf 3612 / 87
p0 1648 ± 1.269
1900
1800
1700
1600
1500

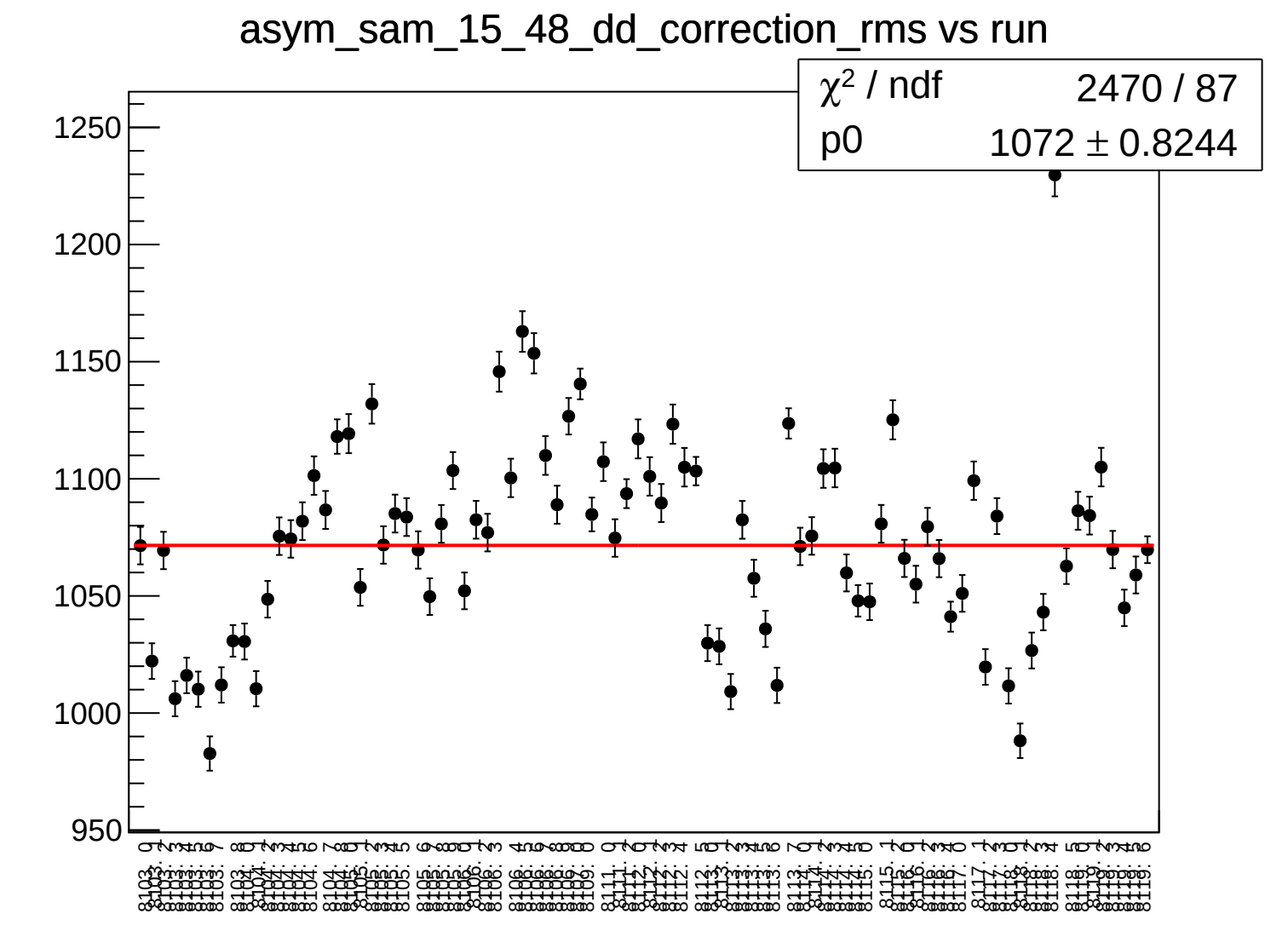

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 113.7 / 87
p0 −15.17 ± 63.68
2000
1000
0
−1000
−2000
pull
Entries 88
Mean −176.5
Std Dev 230.2
3
2
1
0
−1
−2

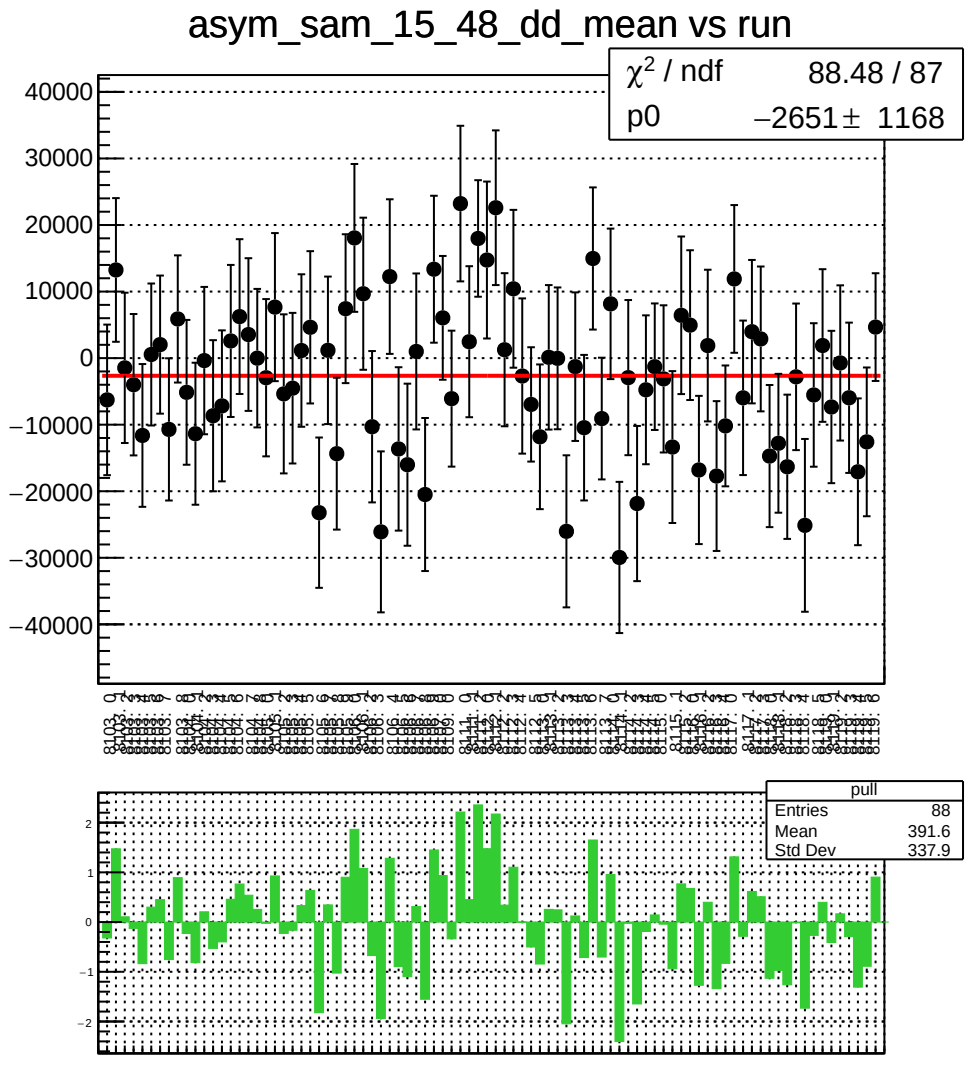

pull1D
Entries 88
Mean −0.01788
Std Dev 1.137
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

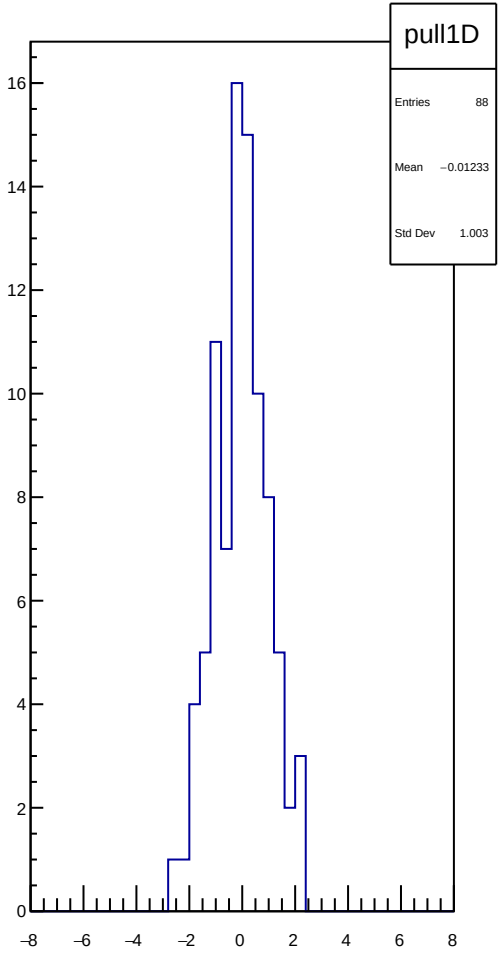

reg_asym_sam_15_48_dd_rms vs run
χ² / ndf 1.006e+04 / 87
p0 58.4 ± 0.04503
80
75
70
65
60
55
50

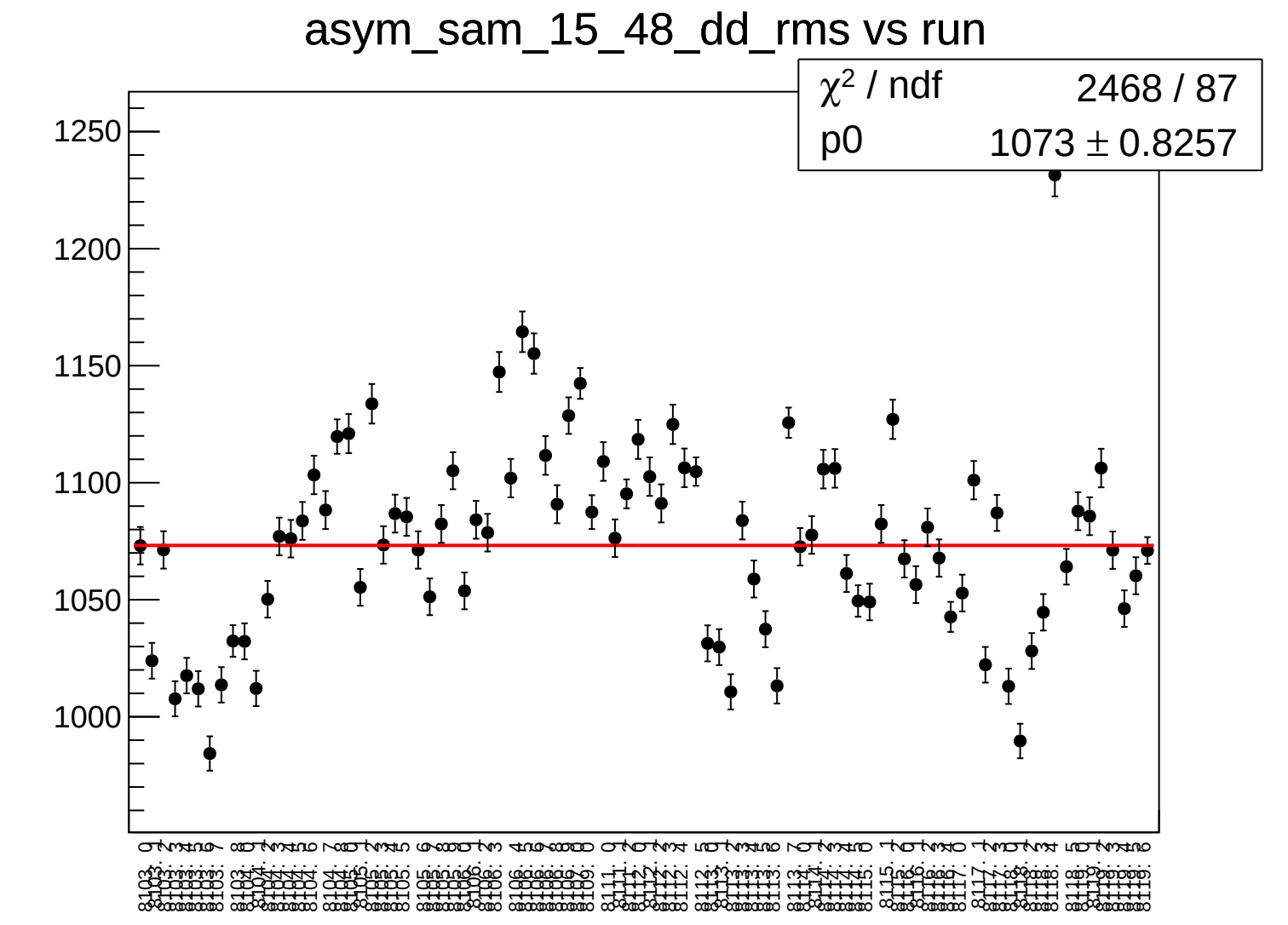

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 87.88 / 87
p0 2642 ± 1166
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 88
Mean 446.5
Std Dev 392.8
2
1
0
−1
−2

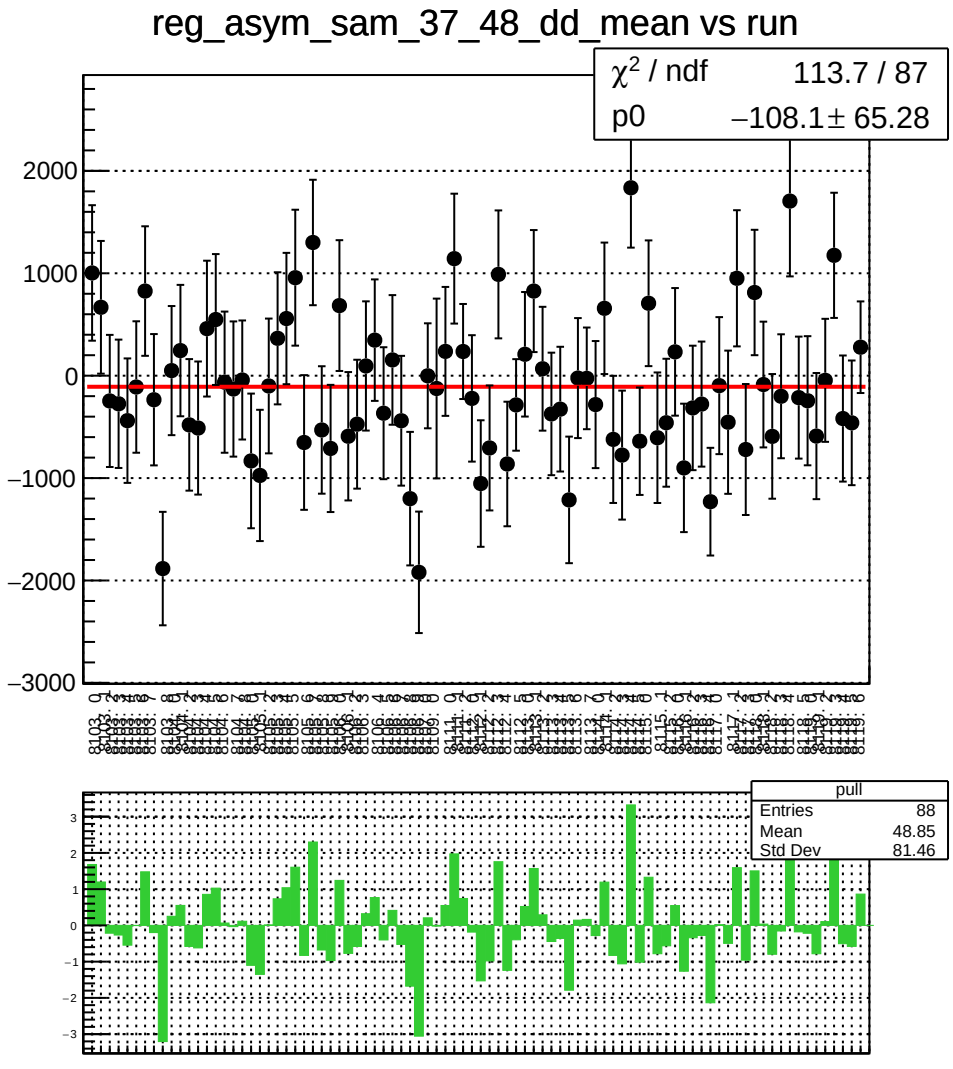

pull1D
Entries 88
Mean 0.0112
Std Dev 0.9992
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

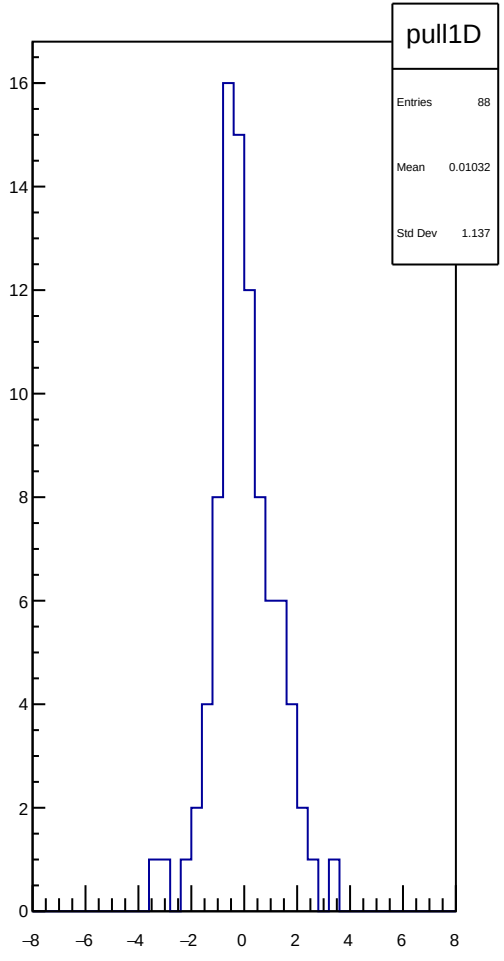

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 2470 / 87
p0 1072 ± 0.8244
1250
1200
1150
1100
1050
1000
950

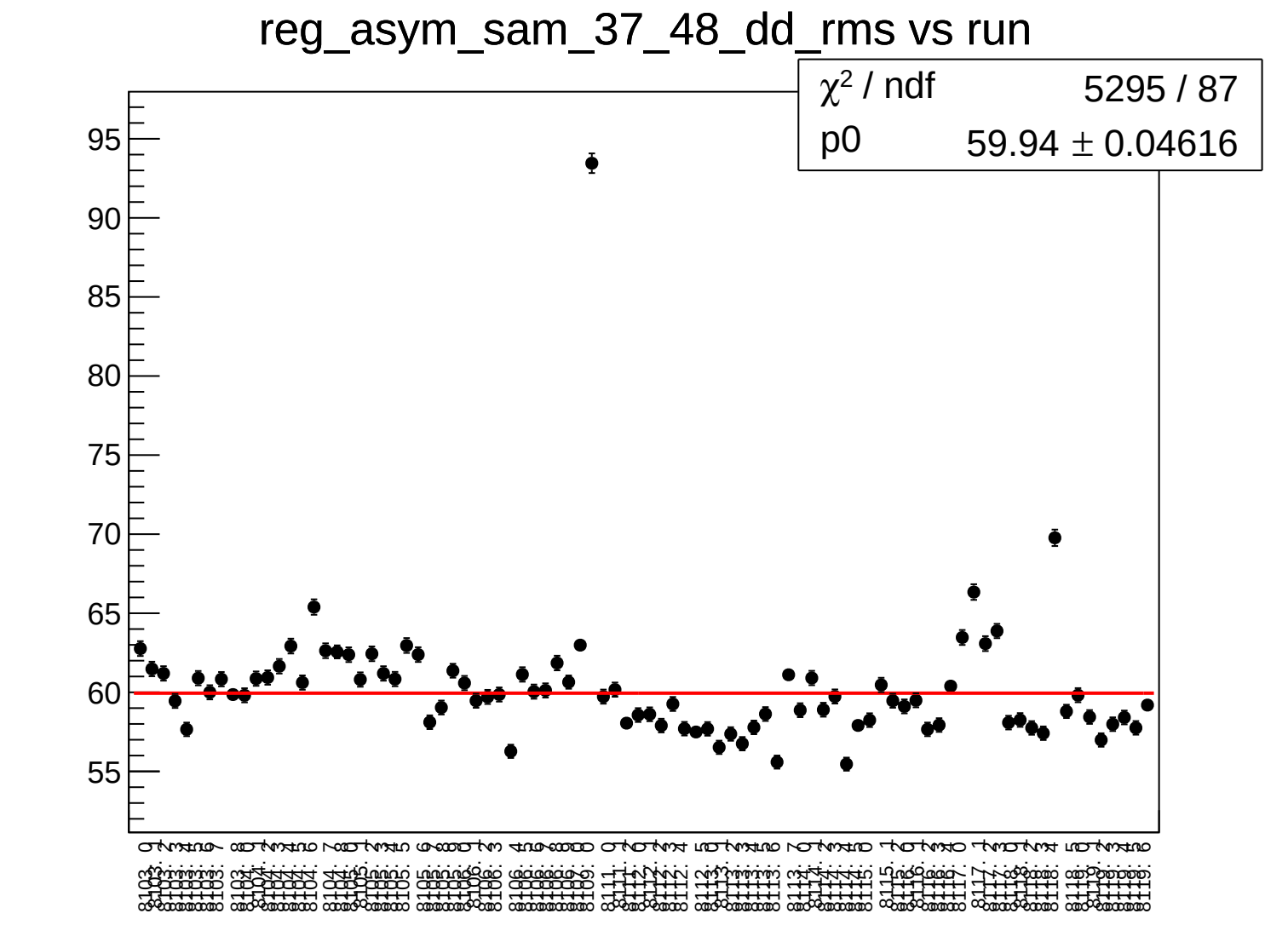

asym_sam_15_48_dd_mean vs run
χ² / ndf 88.48 / 87
p0 −2651 ± 1168
pull
Entries 88
Mean 391.6
Std Dev 337.9

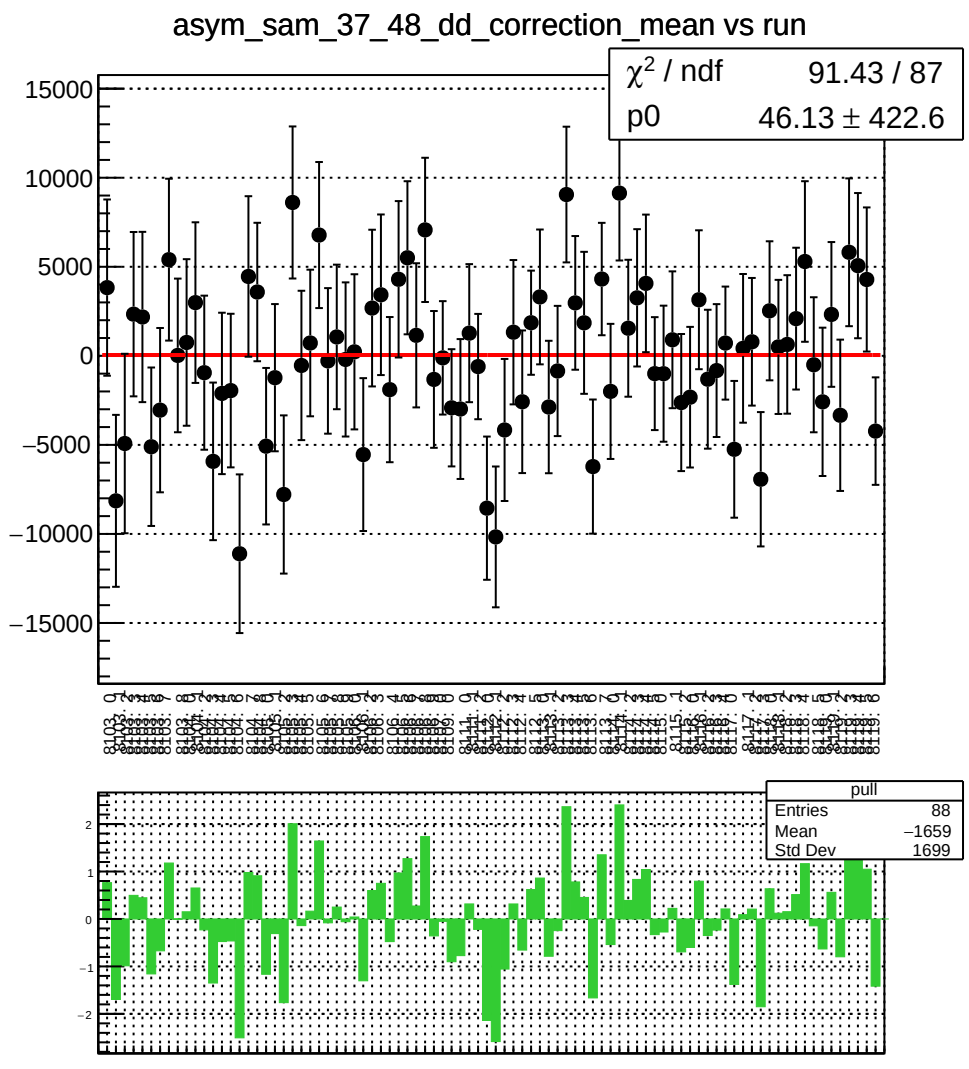

pull1D
Entries 88
Mean −0.01233
Std Dev 1.003

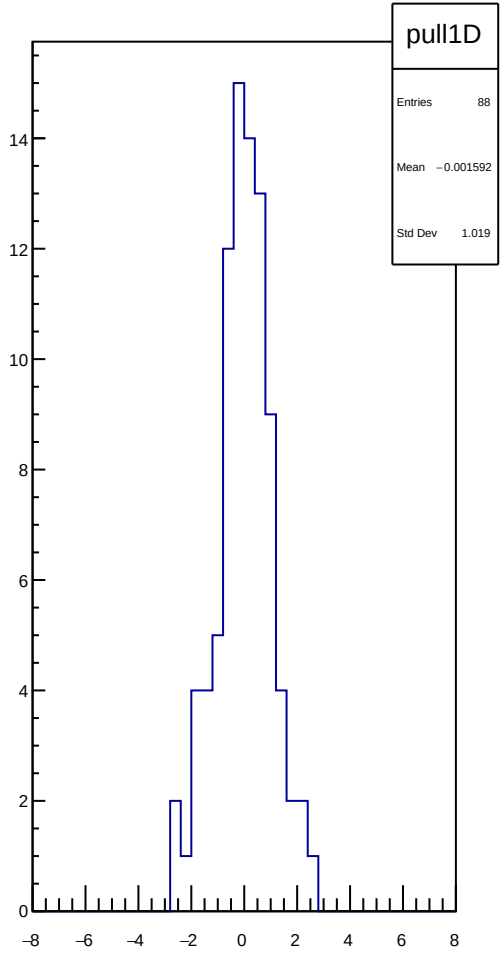

asym_sam_15_48_dd_rms vs run
χ² / ndf 2468 / 87
p0 1073 ± 0.8257
1250
1200
1150
1100
1050
1000

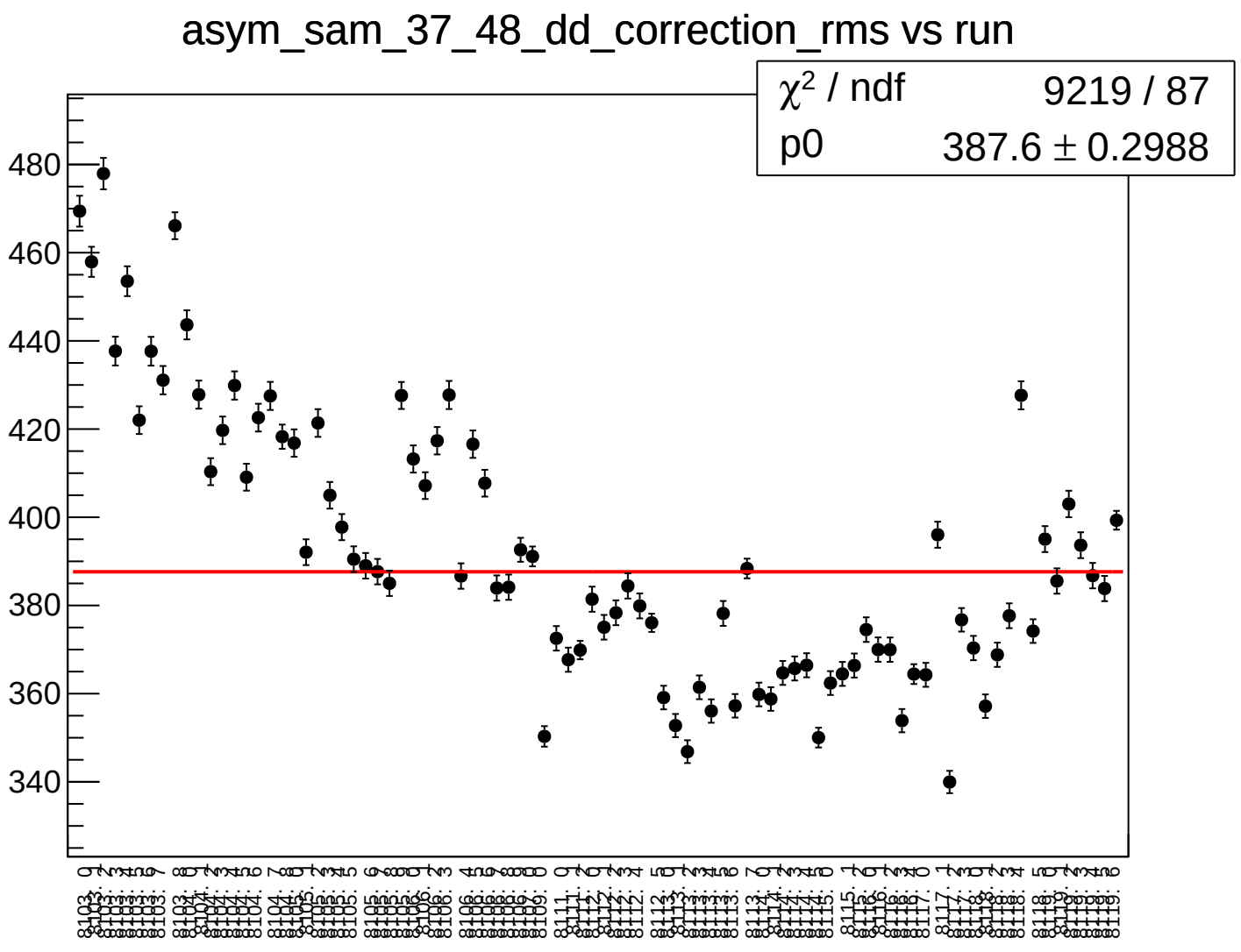

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 113.7 / 87
p0 −108.1± 65.28
2000
1000
0
−1000
−2000
−3000
pull
Entries 88
Mean 48.85
Std Dev 81.46
3
2
1
0
−1
−2
−3

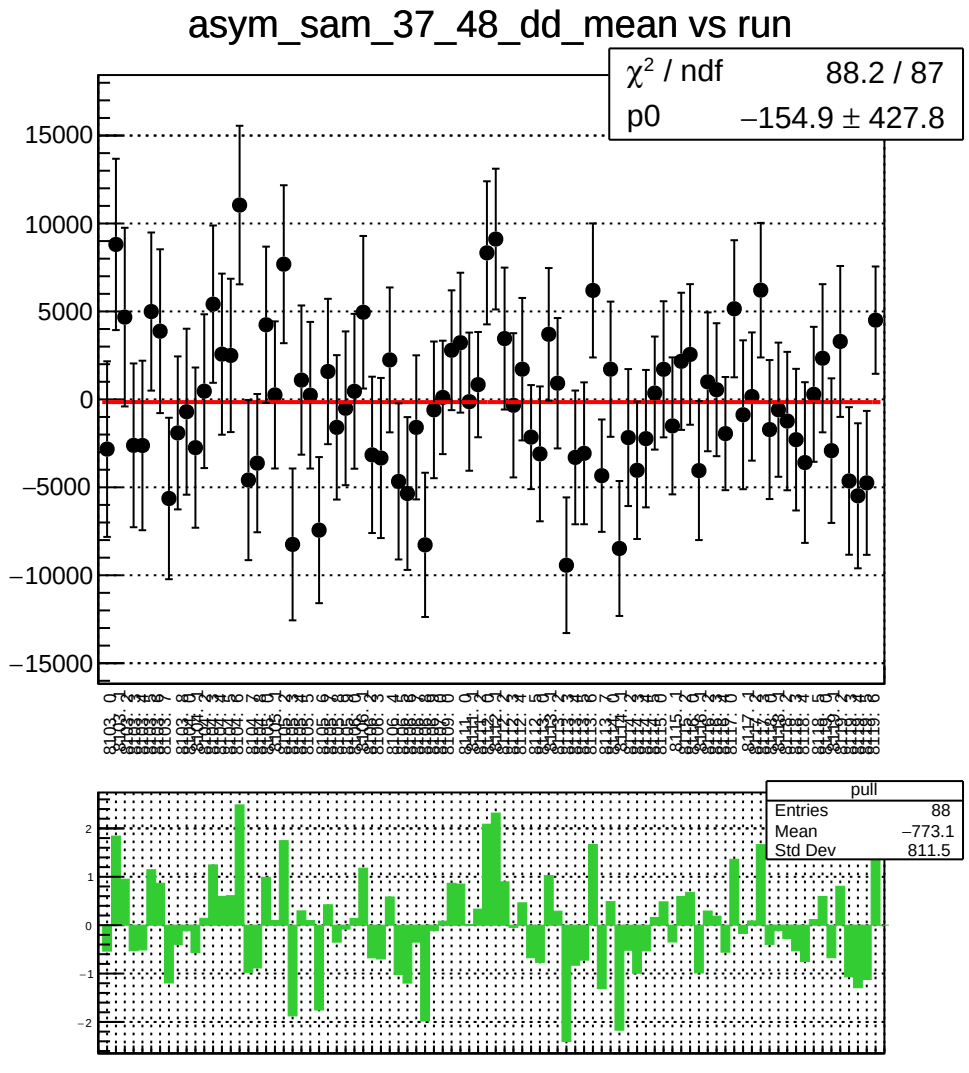

pull1D
Entries 88
Mean 0.01032
Std Dev 1.137
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

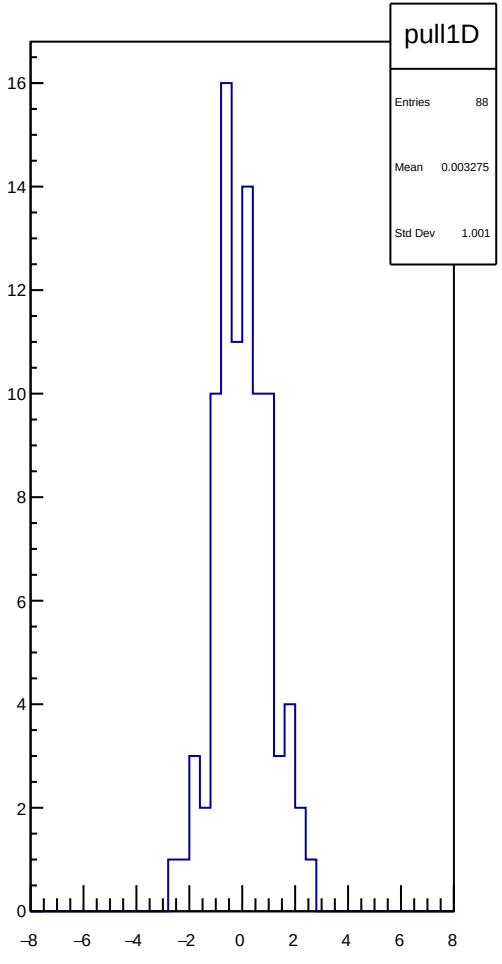

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 5295 / 87
p0 59.94 ± 0.04616
95
90
85
80
75
70
65
60
55

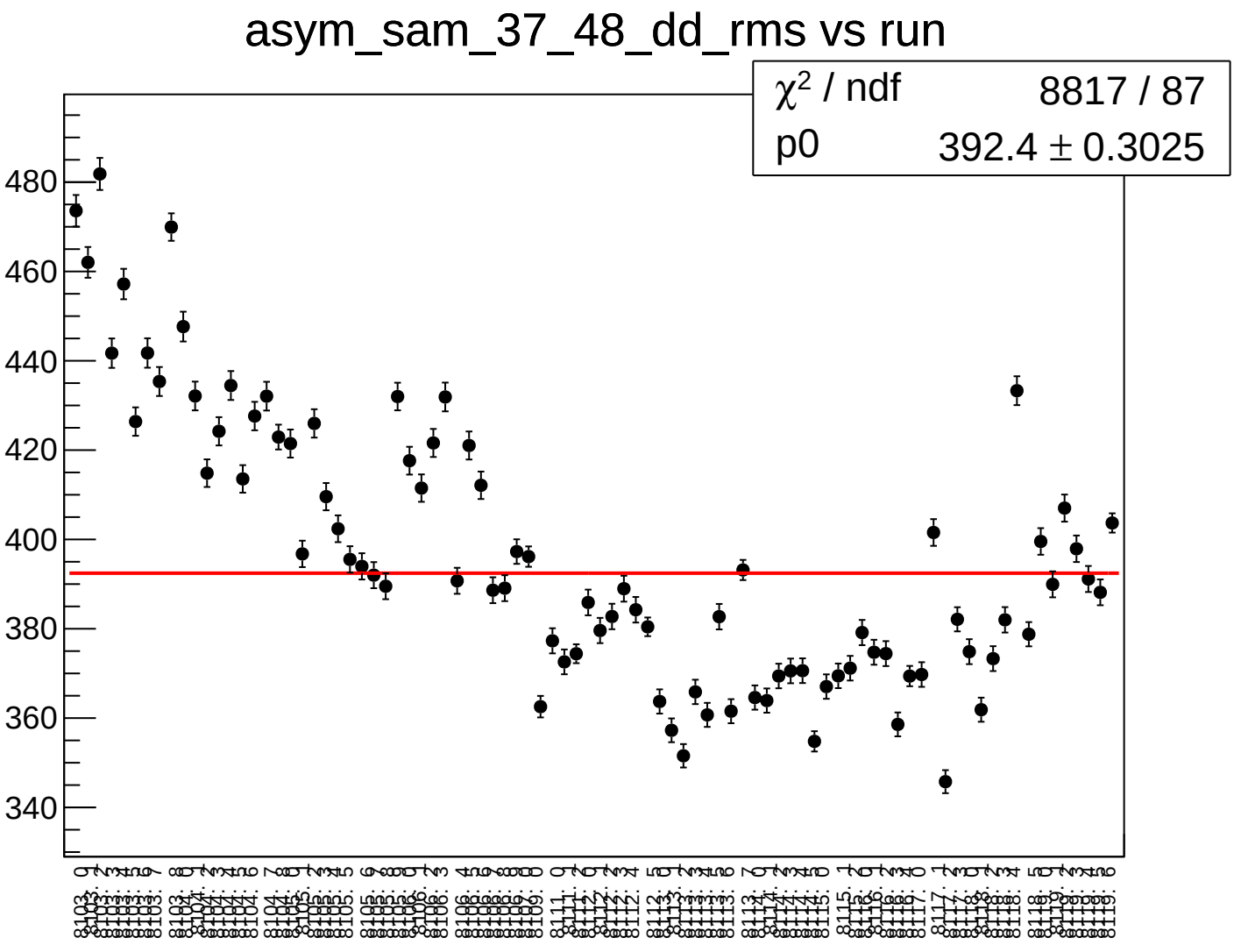

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 91.43 / 87
p0 46.13 ± 422.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean −1659
Std Dev 1699
2
1
0
−1
−2

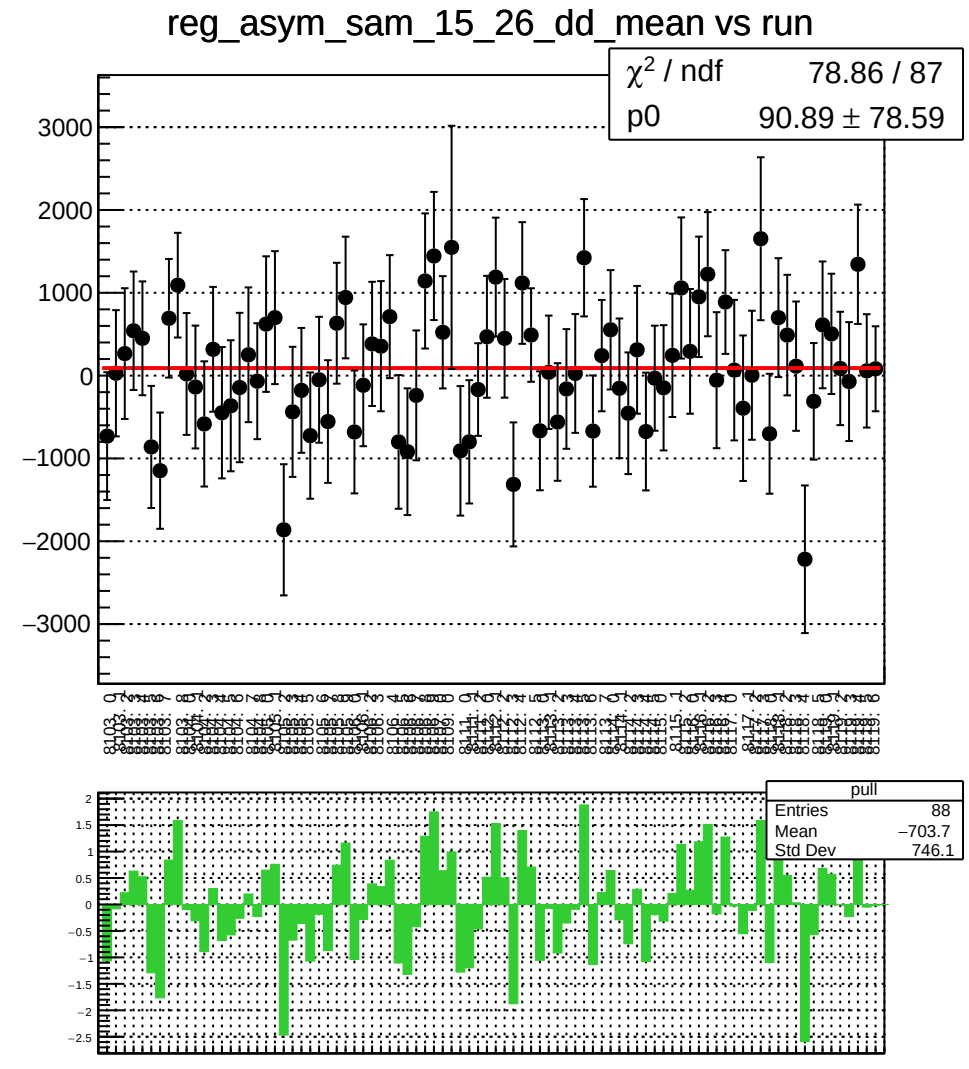

pull1D
Entries 88
Mean −0.001592
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

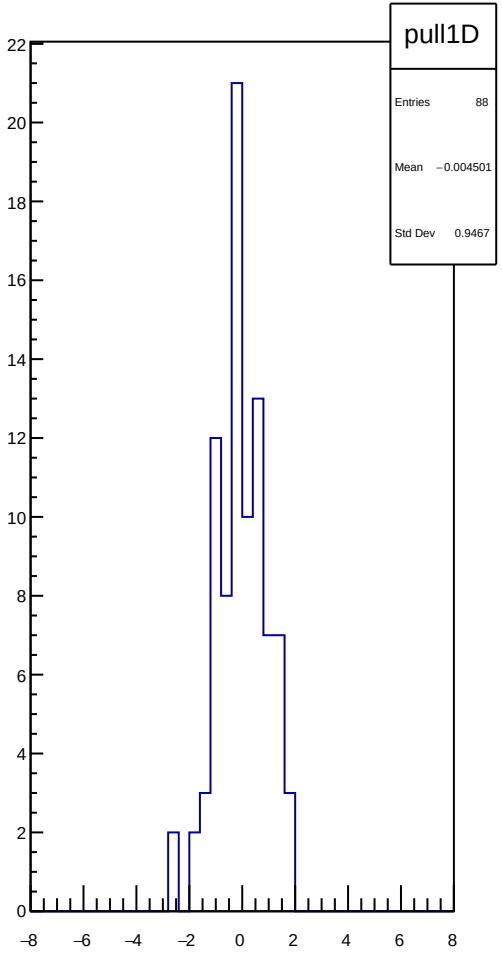

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 9219 / 87
p0 387.6 ± 0.2988
480
460
440
420
400
380
360
340

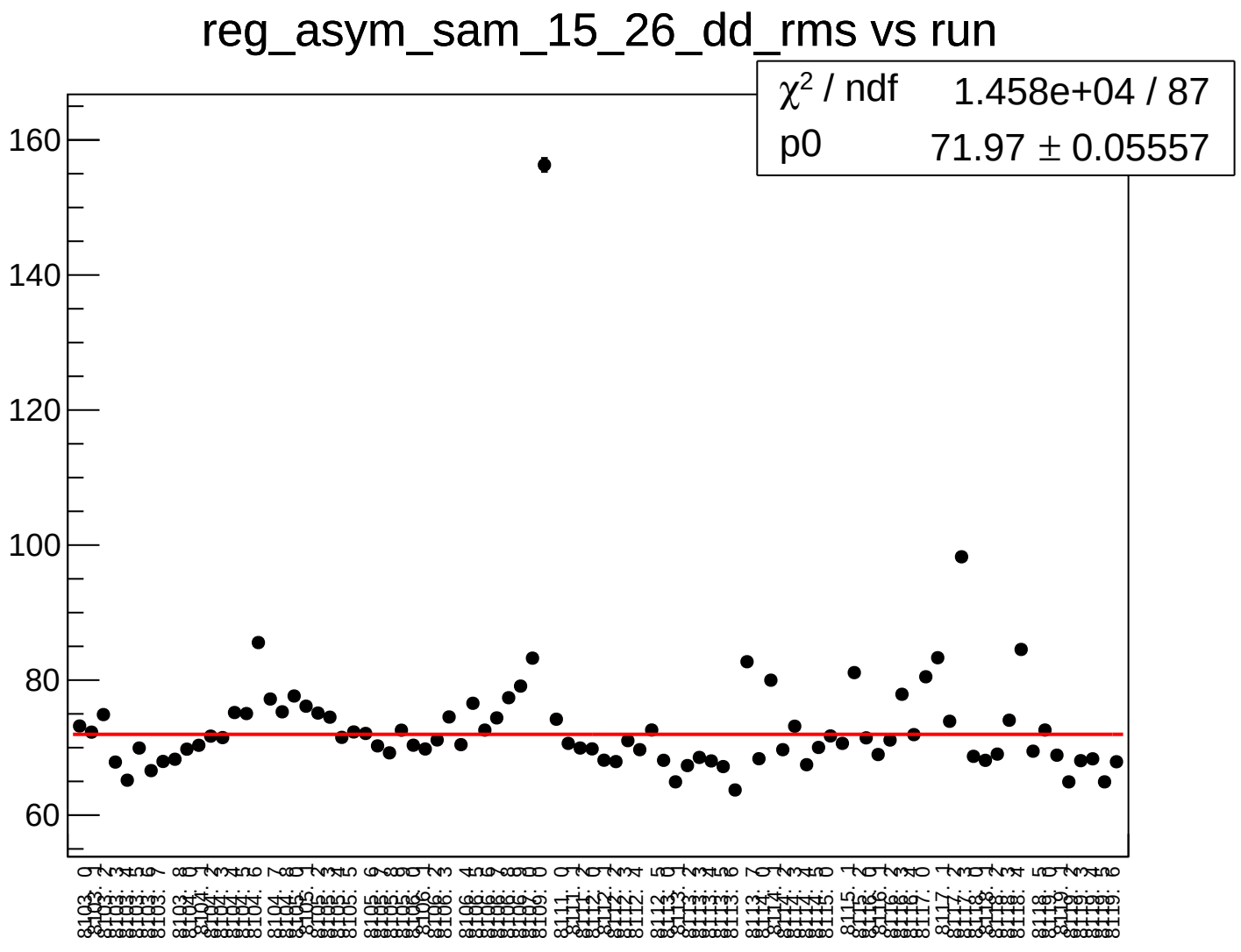

asym_sam_37_48_dd_mean vs run
χ² / ndf 88.2 / 87
p0 −154.9 ± 427.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 88
Mean −773.1
Std Dev 811.5
2
1
0
−1
−2

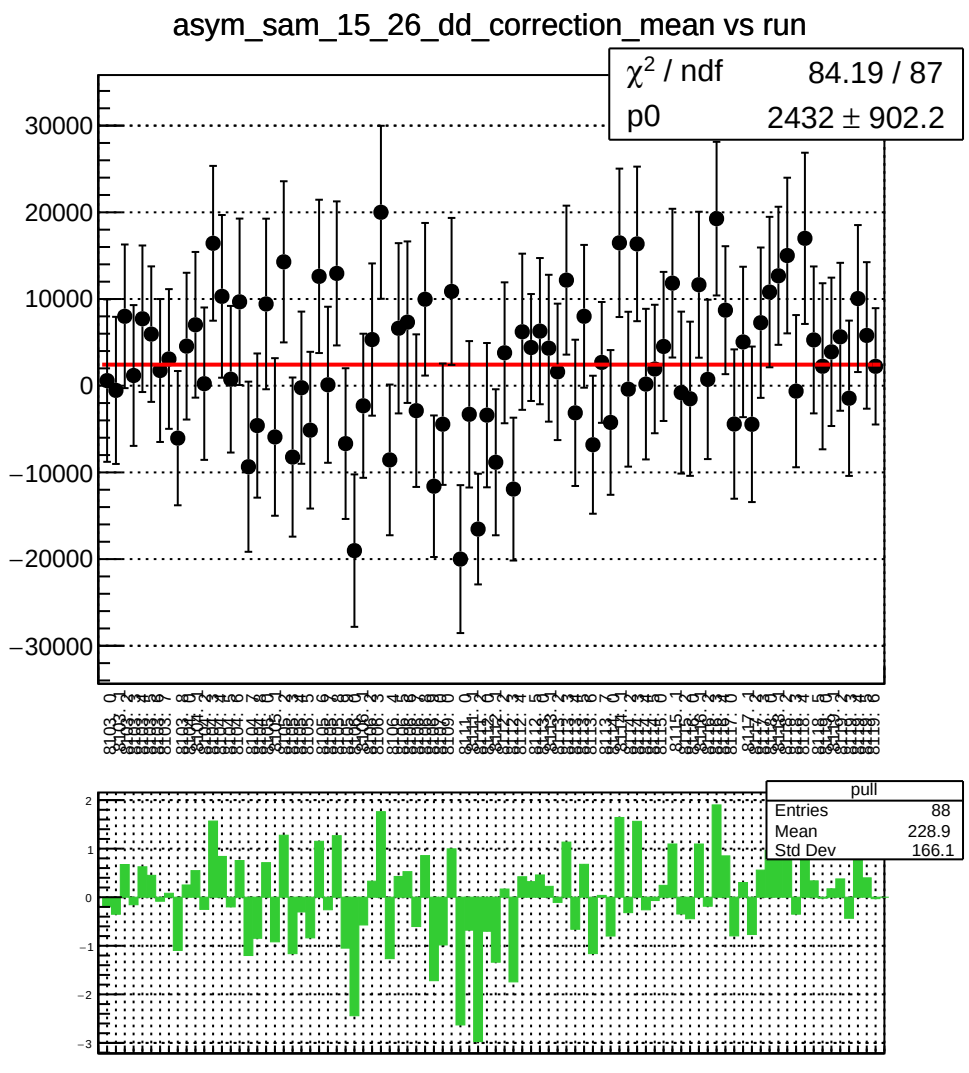

pull1D
Entries 88
Mean 0.003275
Std Dev 1.001
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

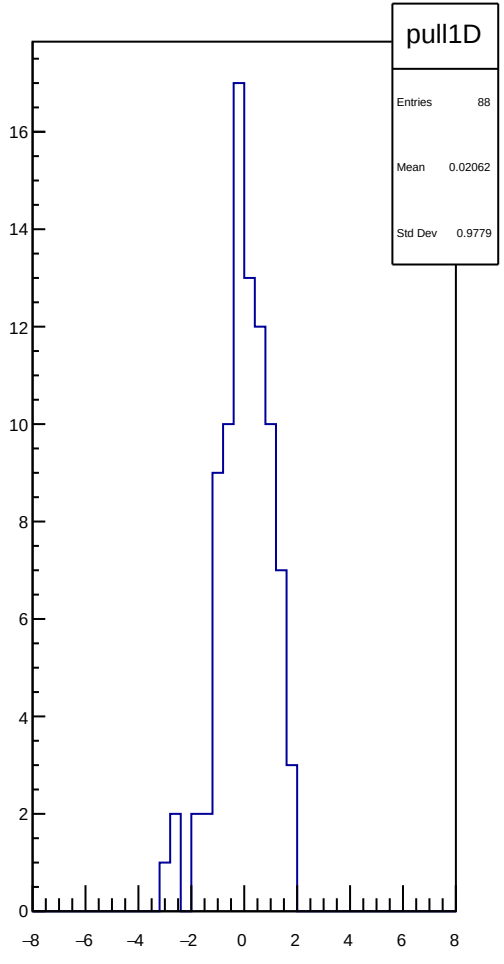

asym_sam_37_48_dd_rms vs run
χ^2 / ndf 8817 / 87
p0 392.4 ± 0.3025
480
460
440
420
400
380
360
340

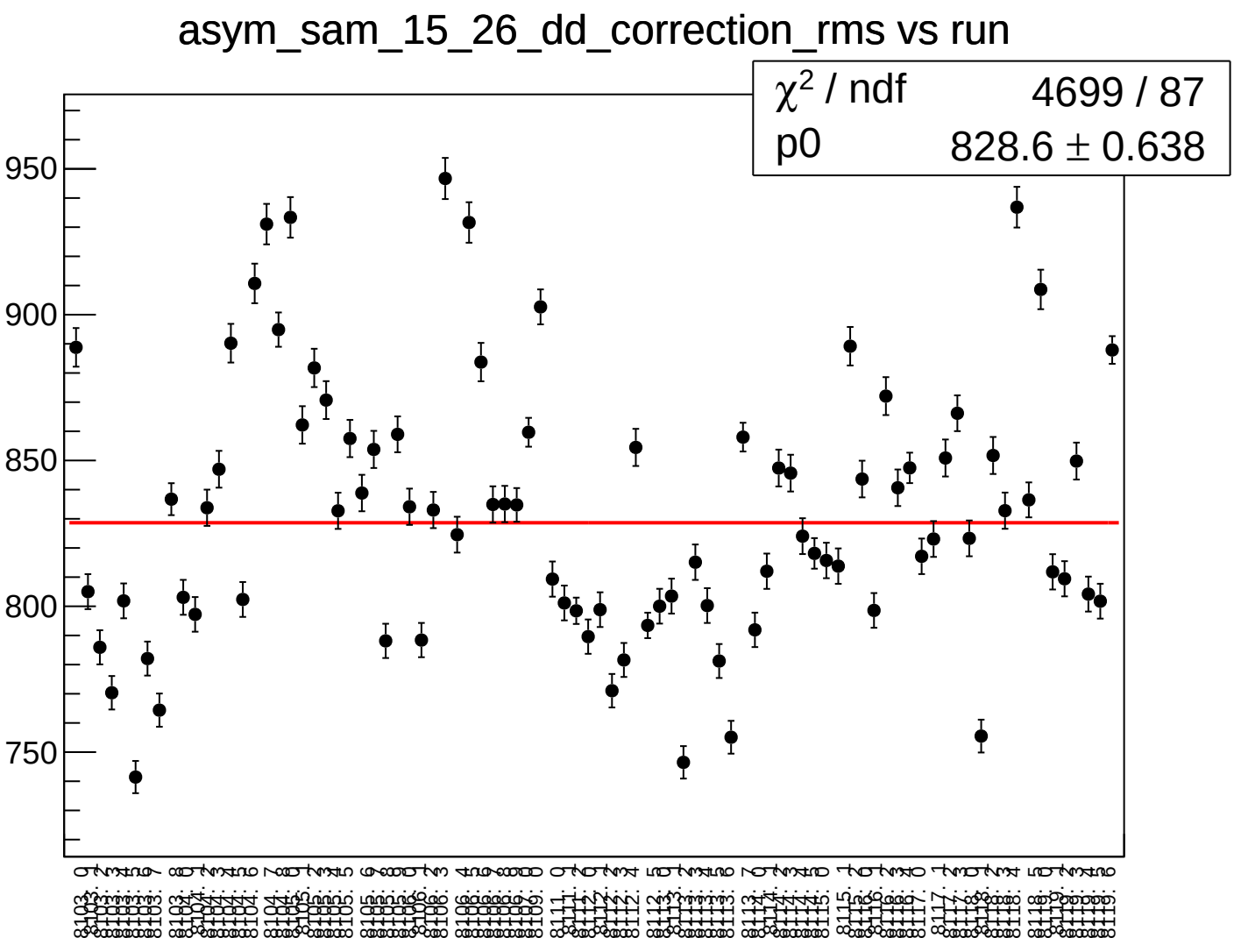

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 78.86 / 87
p0 90.89 ± 78.59
pull
Entries 88
Mean −703.7
Std Dev 746.1

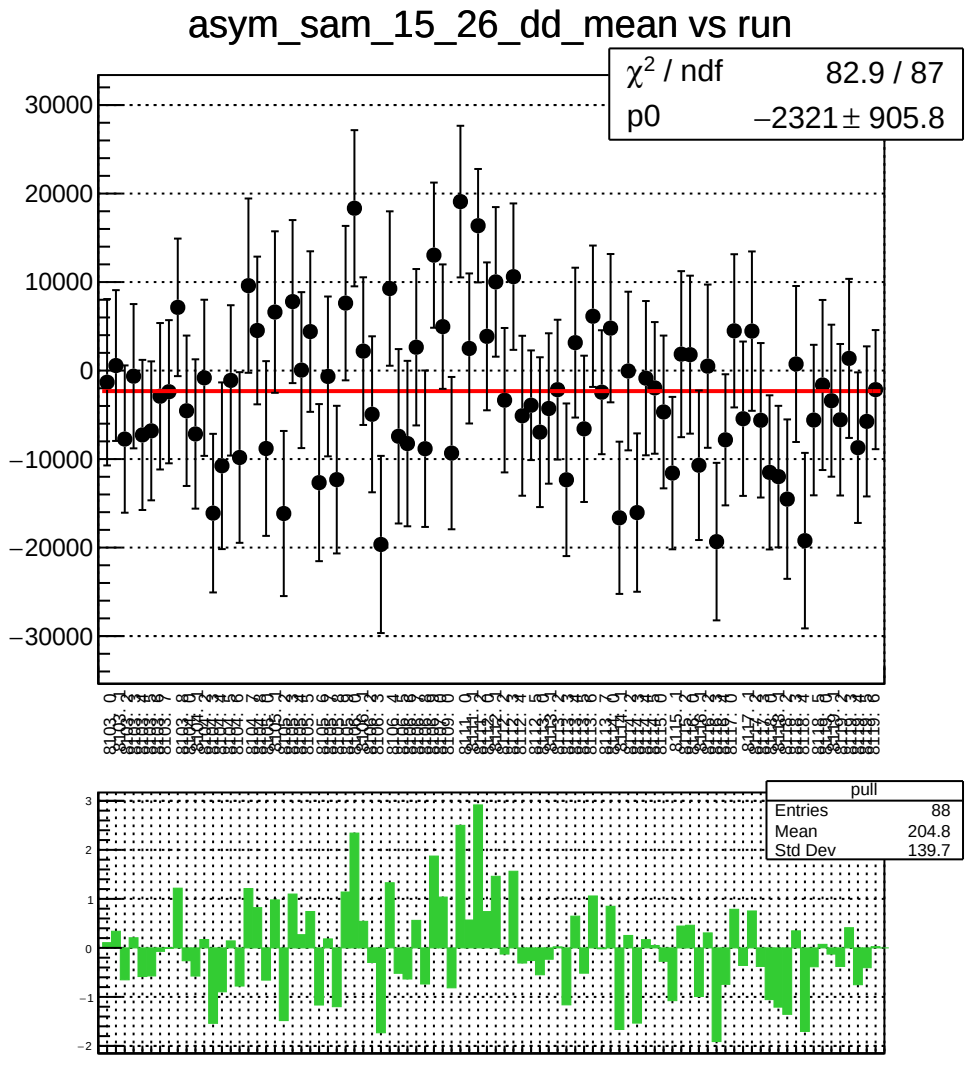

pull1D
Entries 88
Mean −0.004501
Std Dev 0.9467

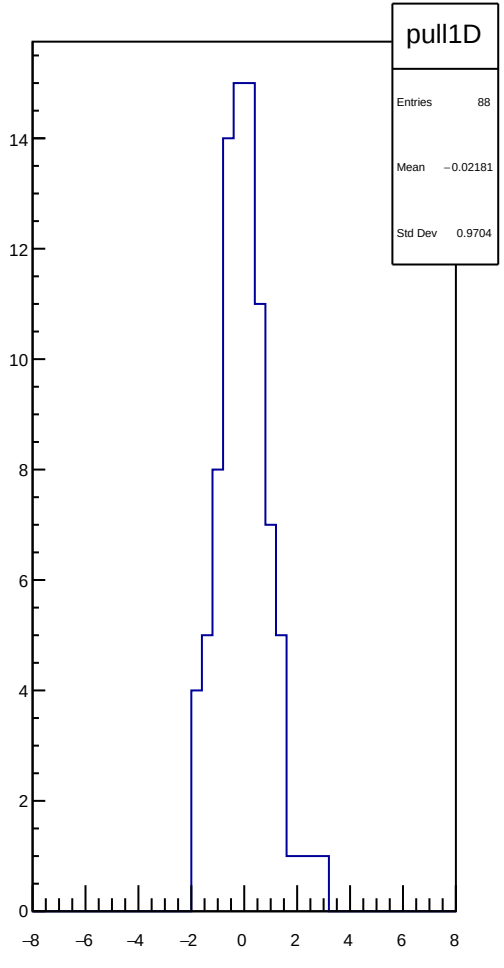

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 1.458e+04 / 87
p0 71.97 ± 0.05557
160
140
120
100
80
60

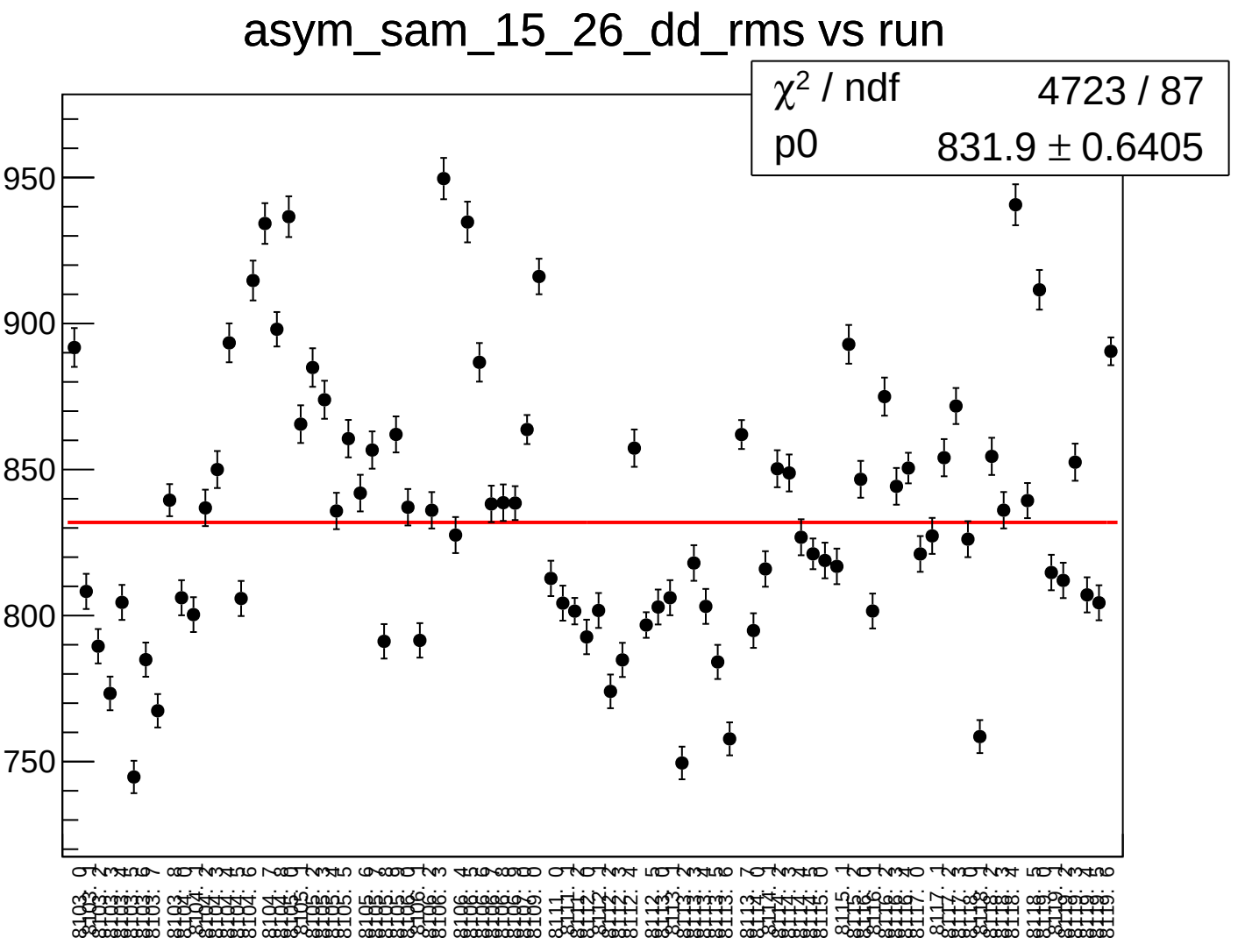

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 84.19 / 87
p0 2432 ± 902.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 228.9
Std Dev 166.1
2
1
0
−1
−2
−3

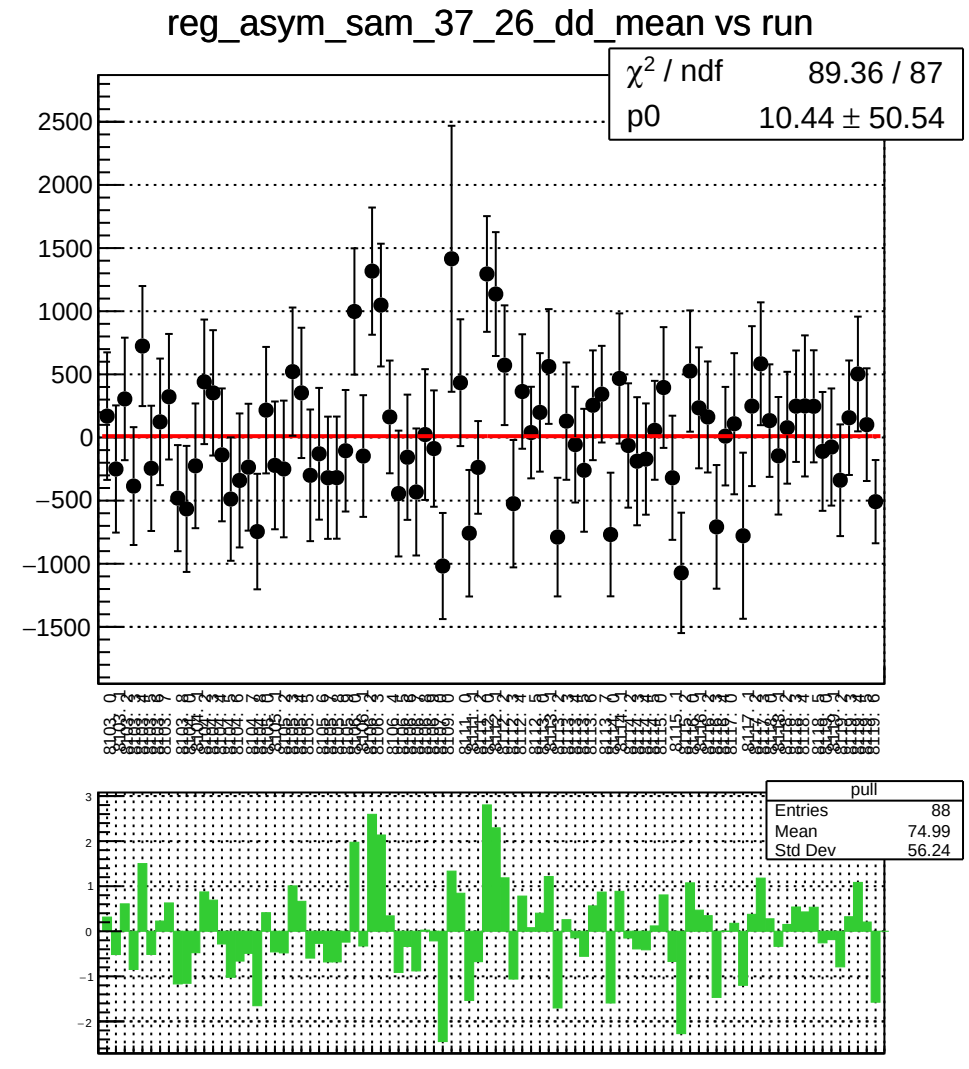

pull1D
Entries 88
Mean 0.02062
Std Dev 0.9779
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

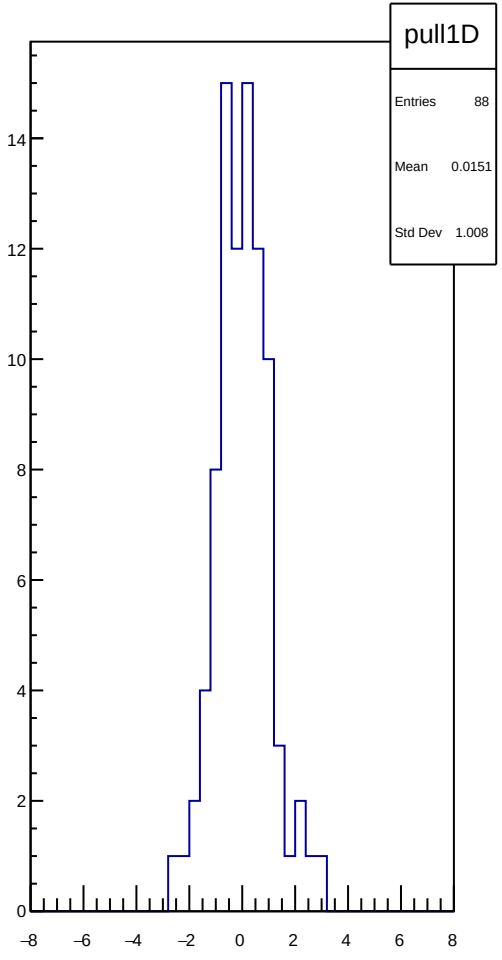

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 4699 / 87
p0 828.6 ± 0.638
950
900
850
800
750

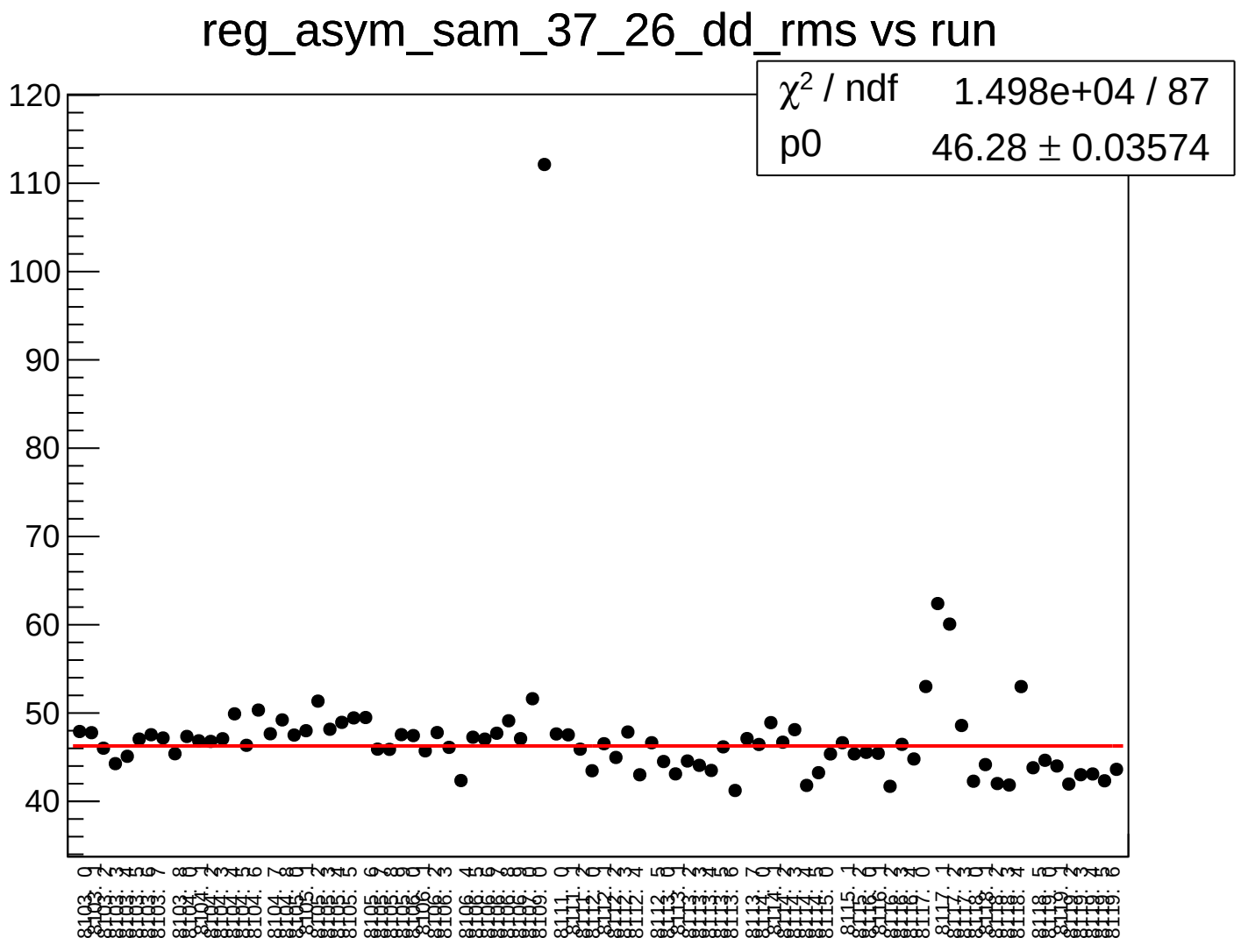

asym_sam_15_26_dd_mean vs run
χ² / ndf 82.9 / 87
p0 −2321 ± 905.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 88
Mean 204.8
Std Dev 139.7
3
2
1
0
−1
−2

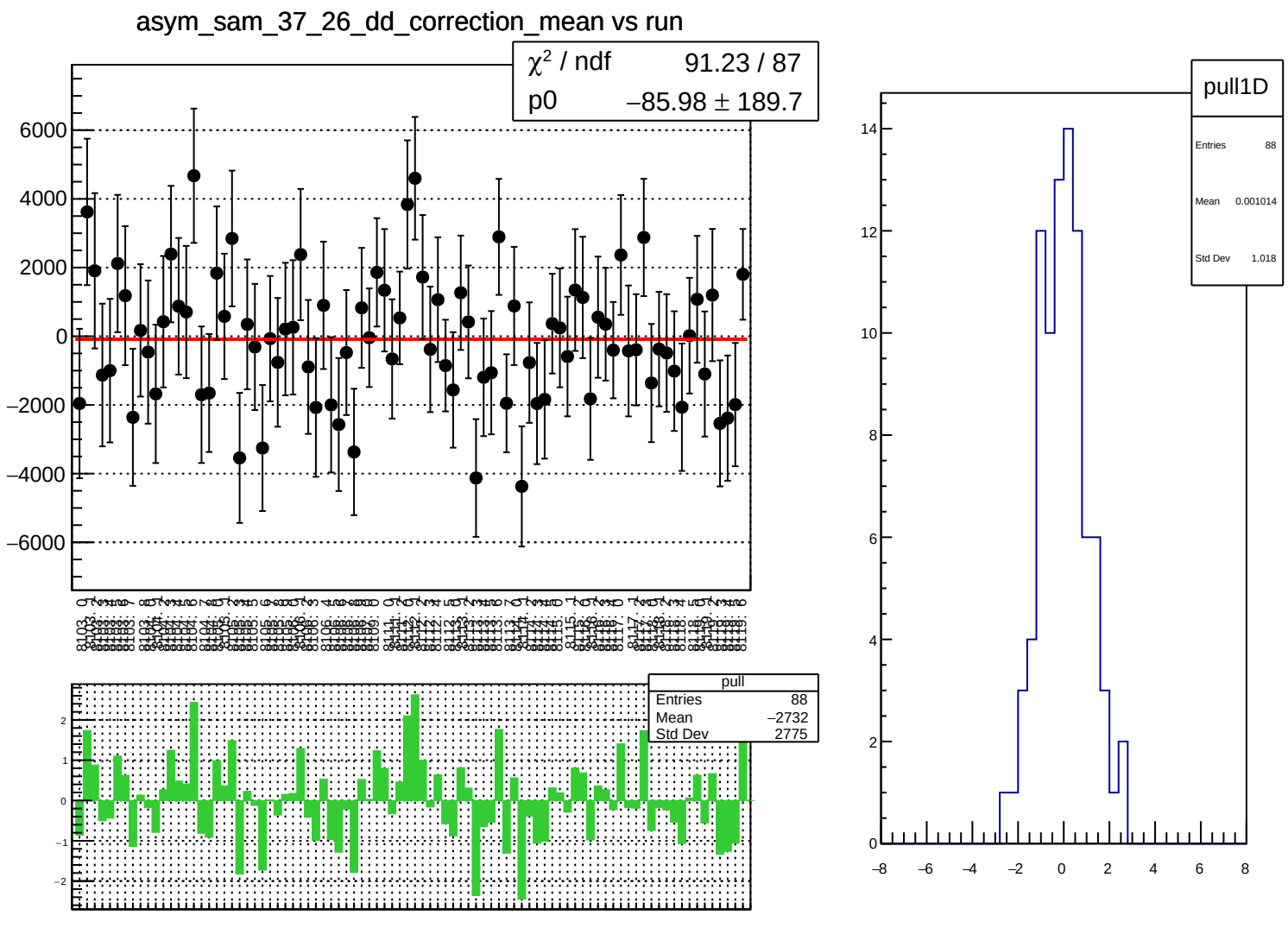

pull1D
Entries 88
Mean −0.02181
Std Dev 0.9704
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

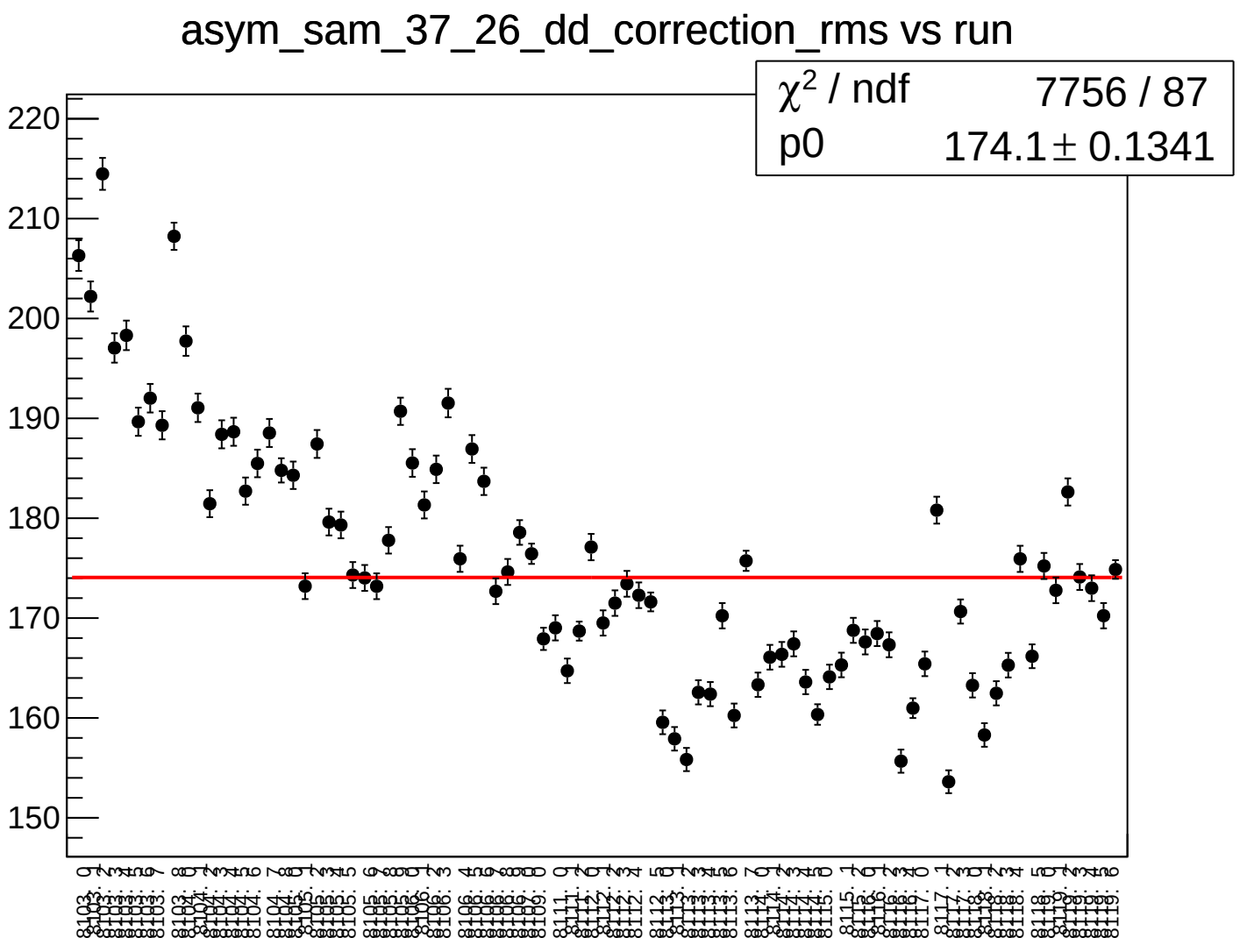

asym_sam_15_26_dd_rms vs run
χ² / ndf 4723 / 87
p0 831.9 ± 0.6405
950
900
850
800
750

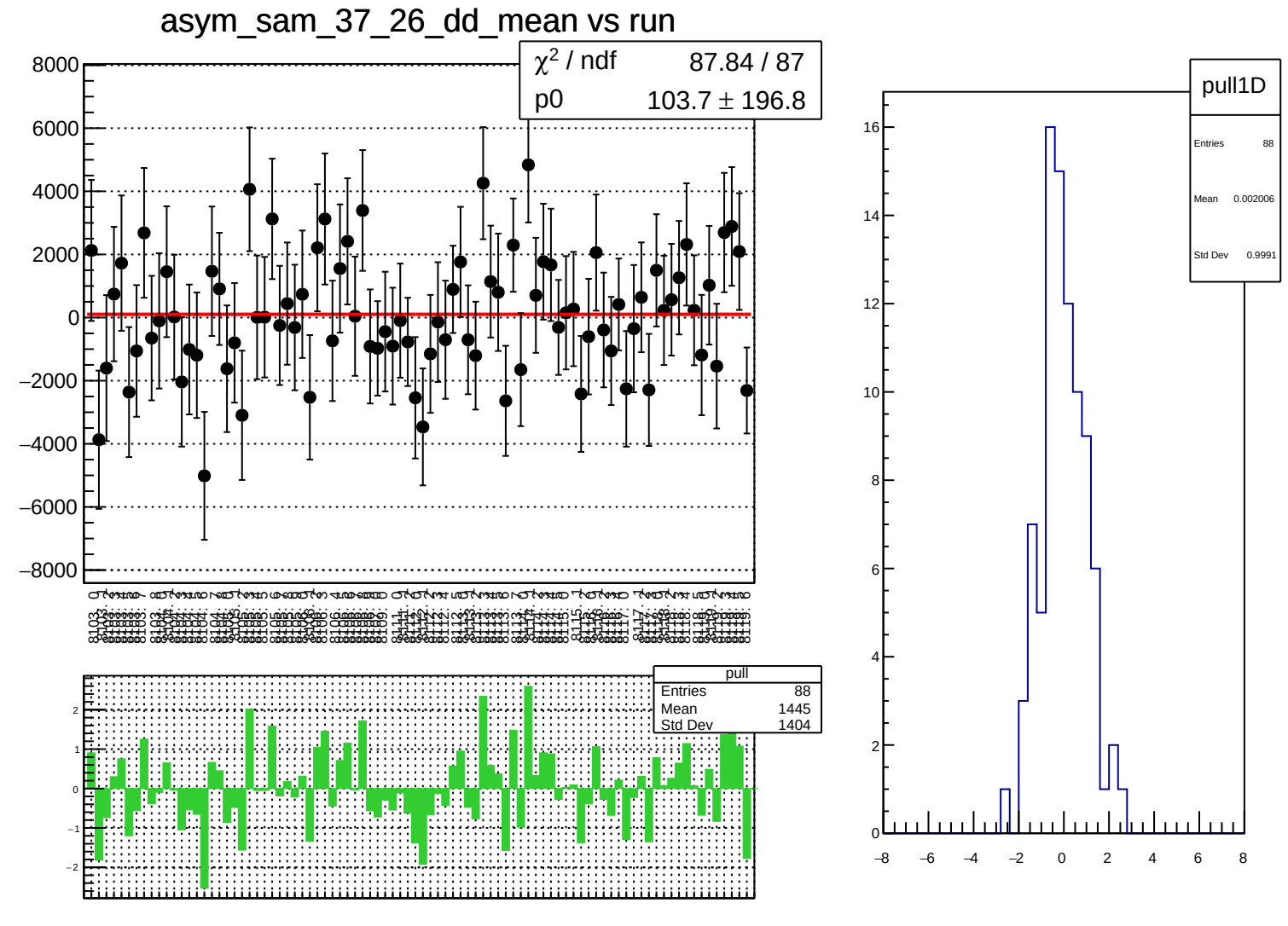

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 89.36 / 87
p0 10.44 ± 50.54
pull
Entries 88
Mean 74.99
Std Dev 56.24

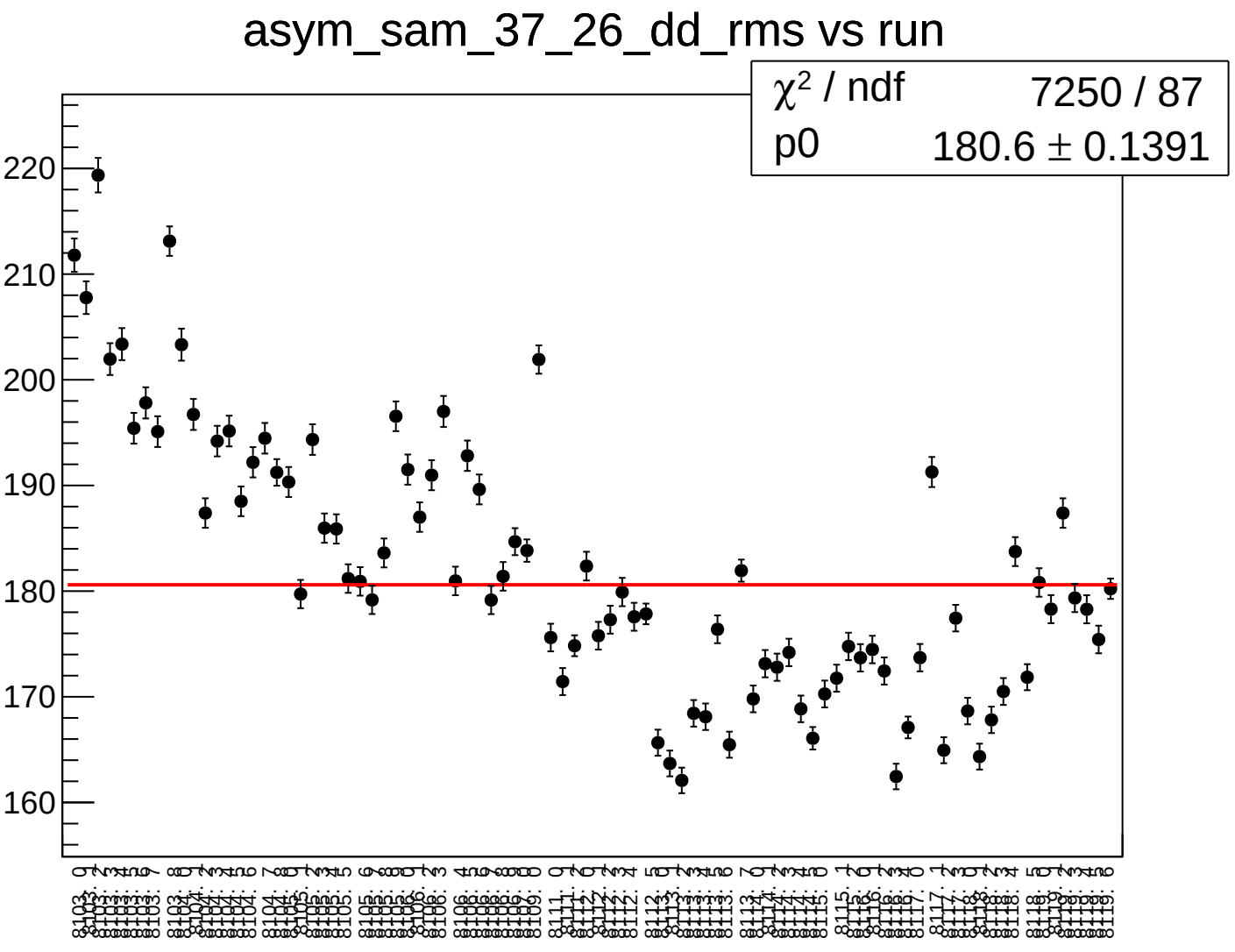

pull1D
Entries 88
Mean 0.0151
Std Dev 1.008

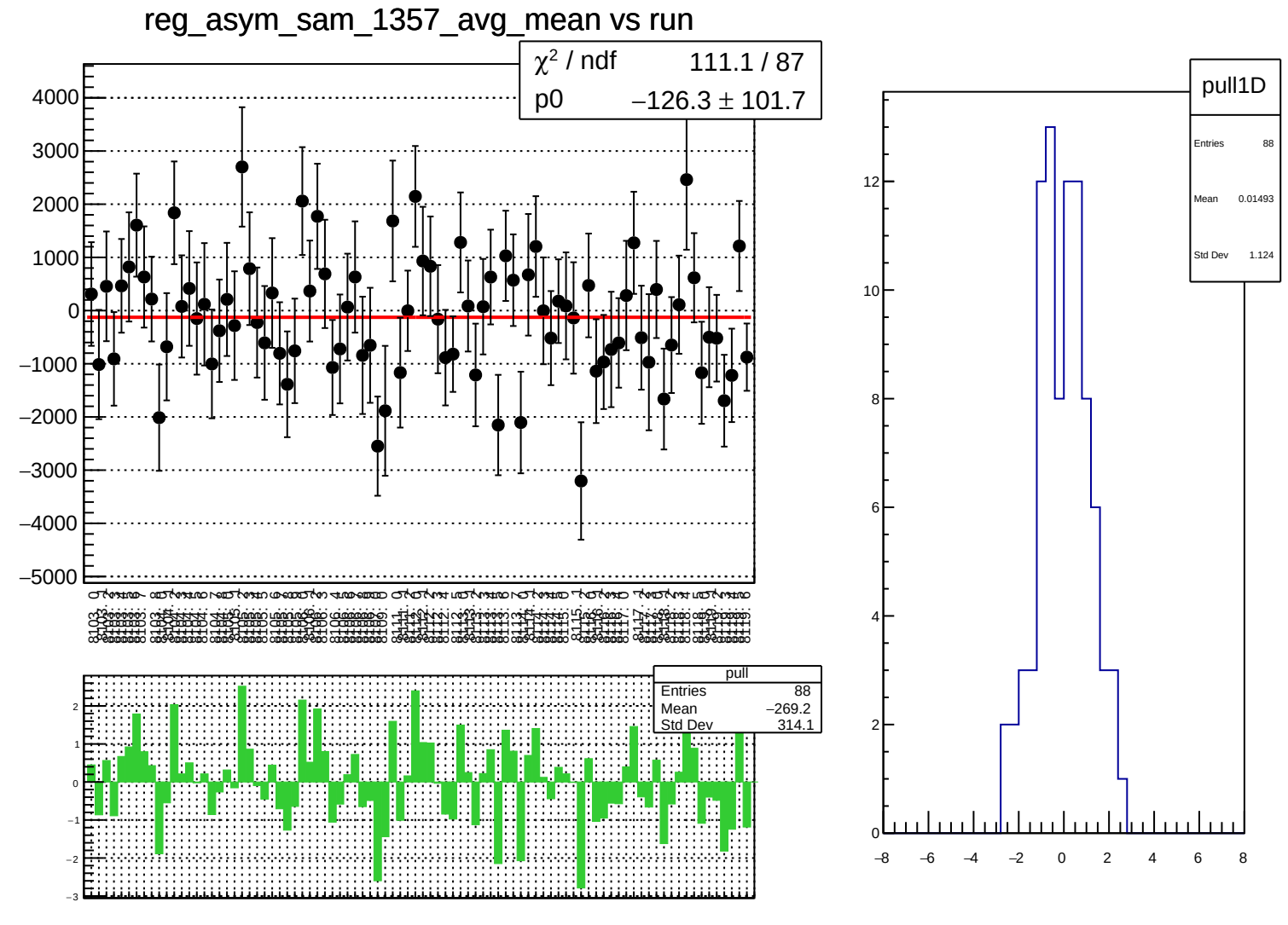

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 1.498e+04 / 87
p0 46.28 ± 0.03574
120
110
100
90
80
70
60
50
40

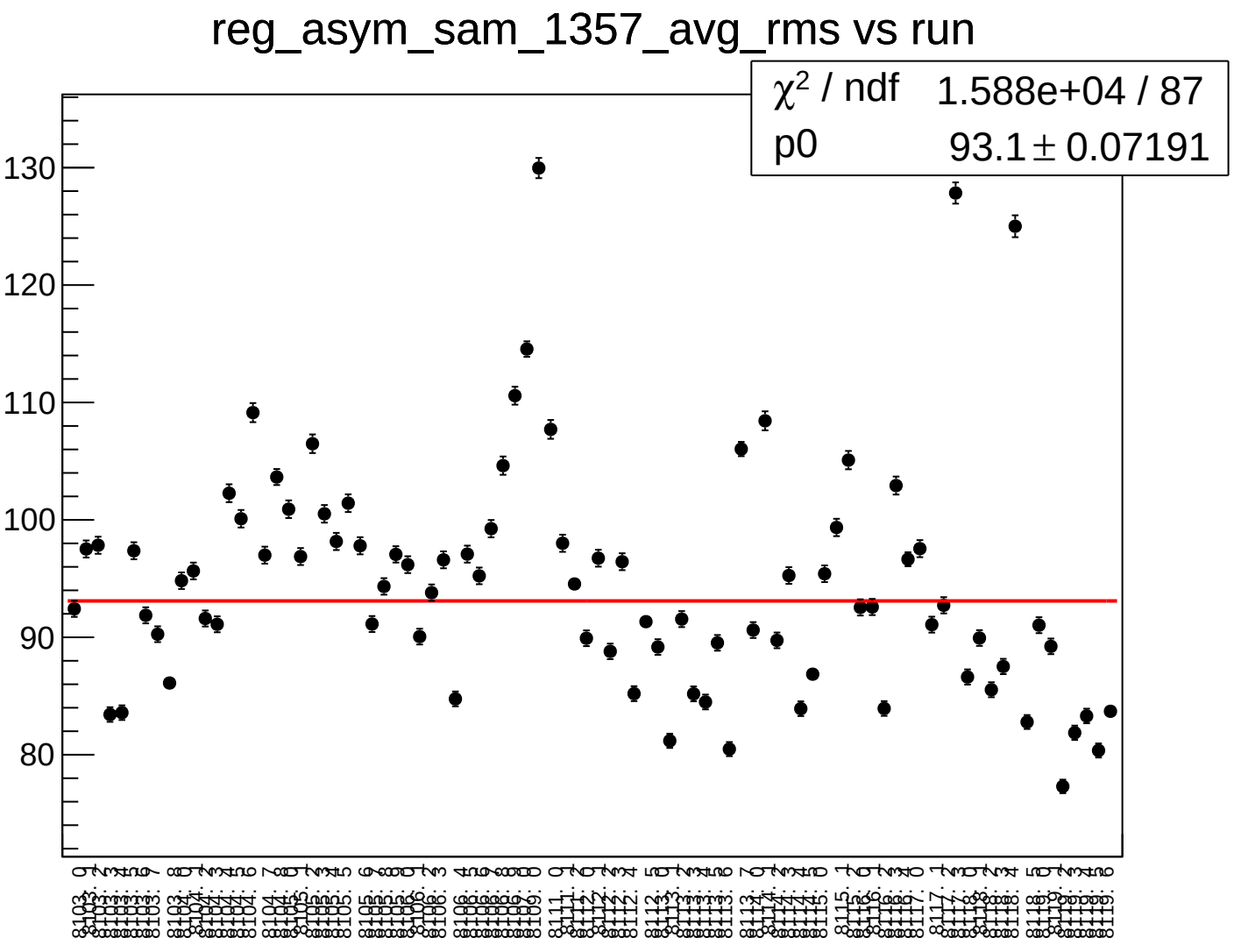

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 91.23 / 87
p0 −85.98 ± 189.7
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean −2732
Std Dev 2775
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.001014
Std Dev 1.018
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

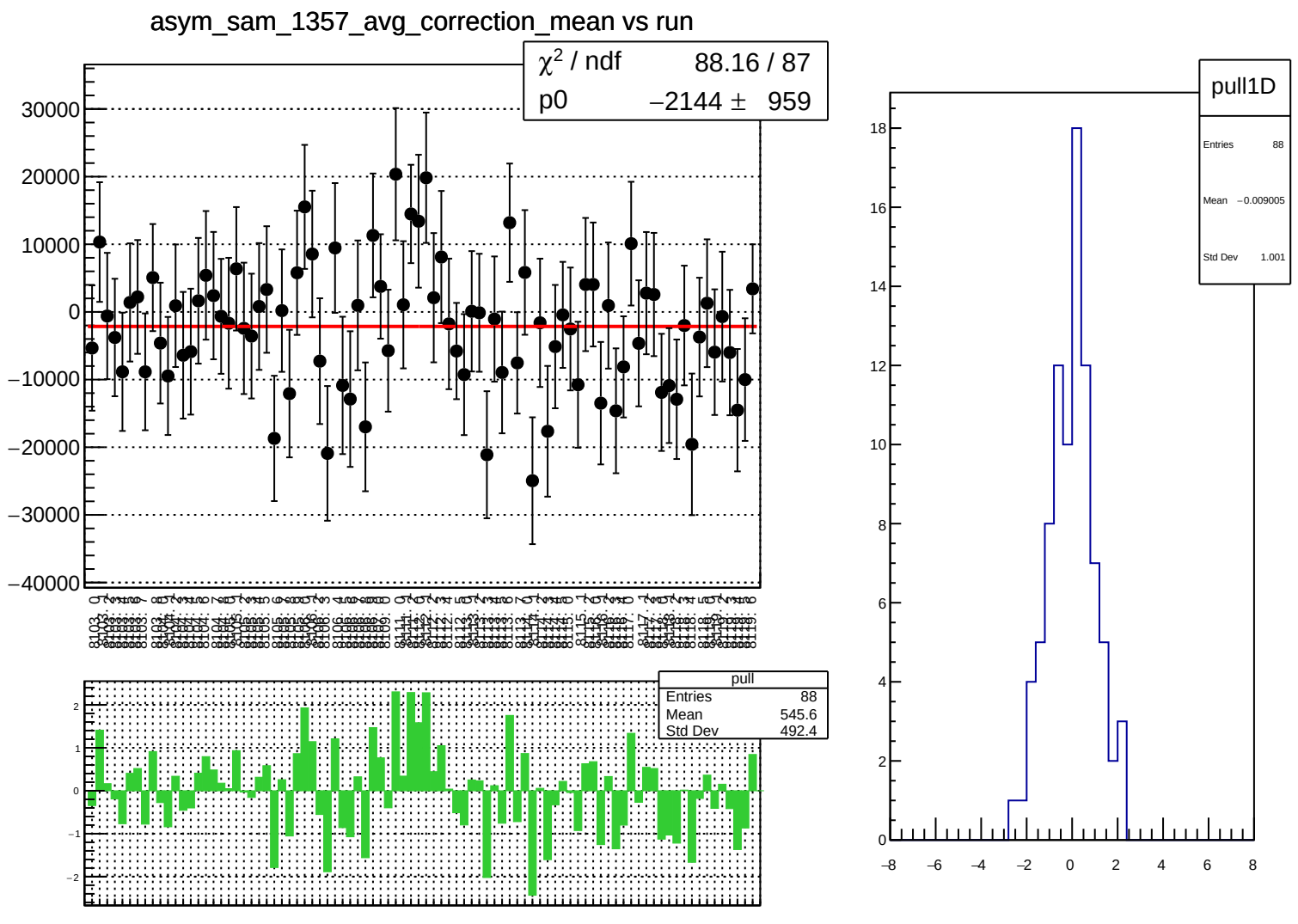

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 7756 / 87
p0 174.1 ± 0.1341
220
210
200
190
180
170
160
150

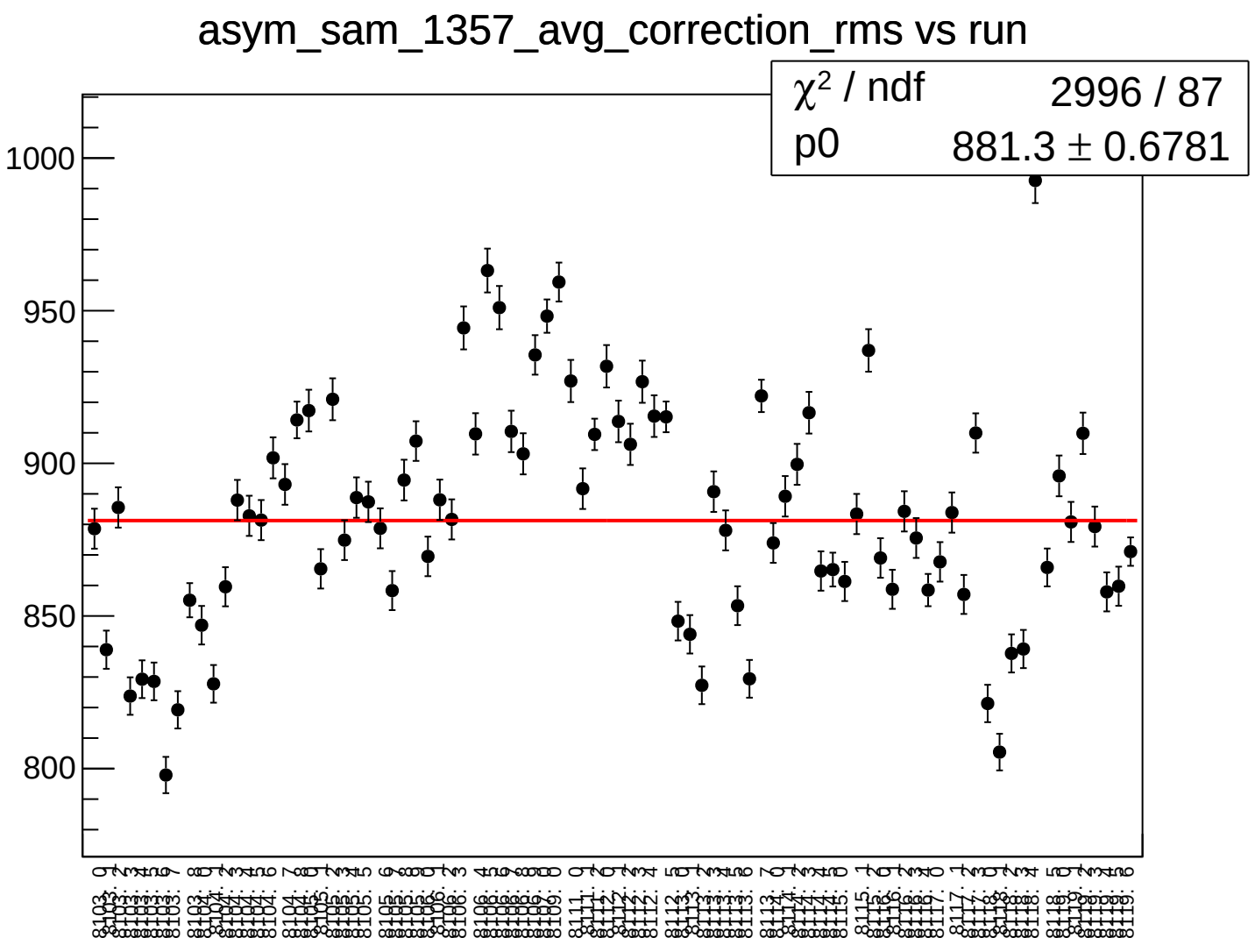

asym_sam_37_26_dd_mean vs run
χ² / ndf 87.84 / 87
p0 103.7 ± 196.8
pull
Entries 88
Mean 1445
Std Dev 1404
pull1D
Entries 88
Mean 0.002006
Std Dev 0.9991

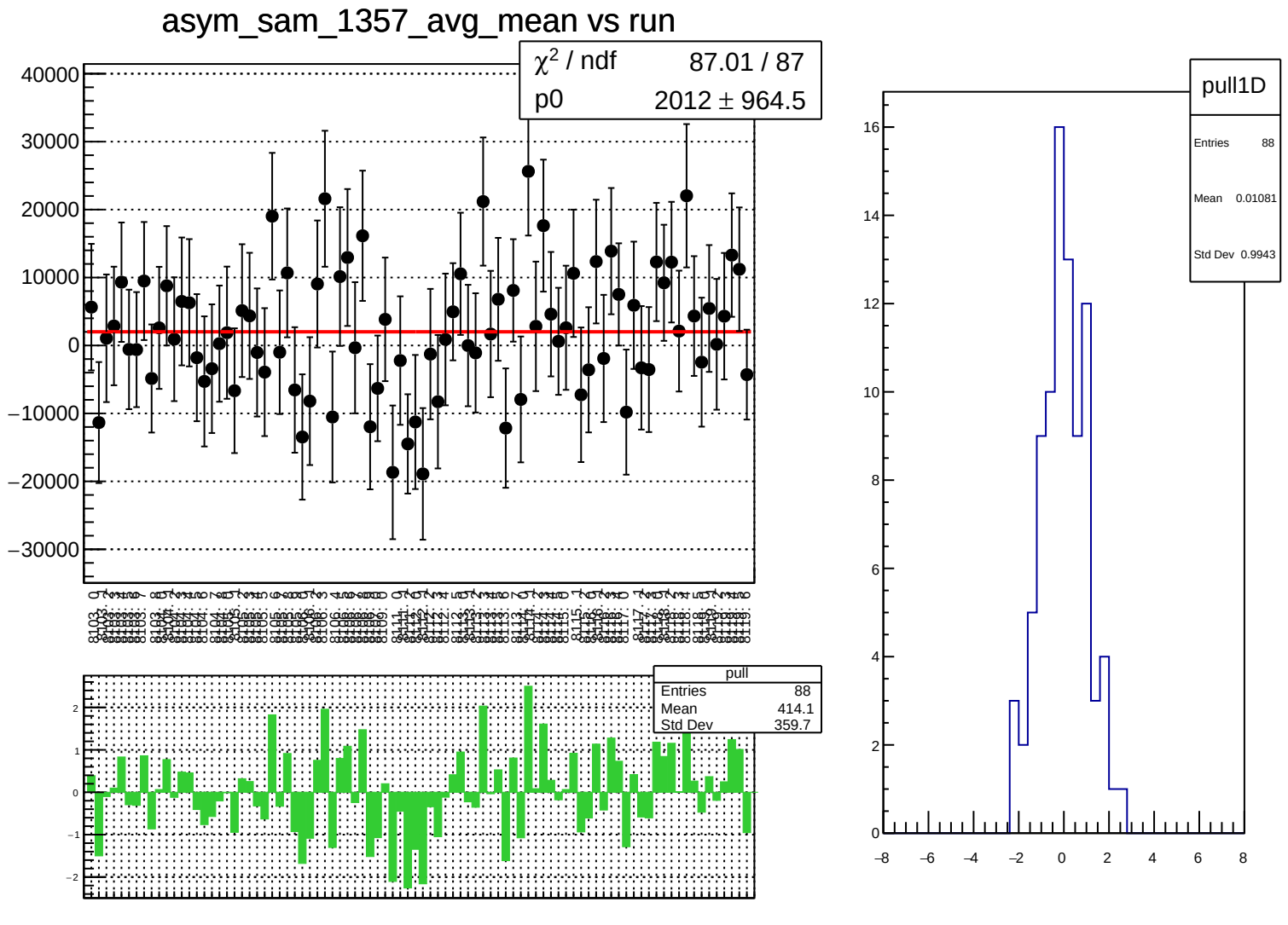

asym_sam_37_26_dd_rms vs run
χ² / ndf 7250 / 87
p0 180.6 ± 0.1391
220
210
200
190
180
170
160

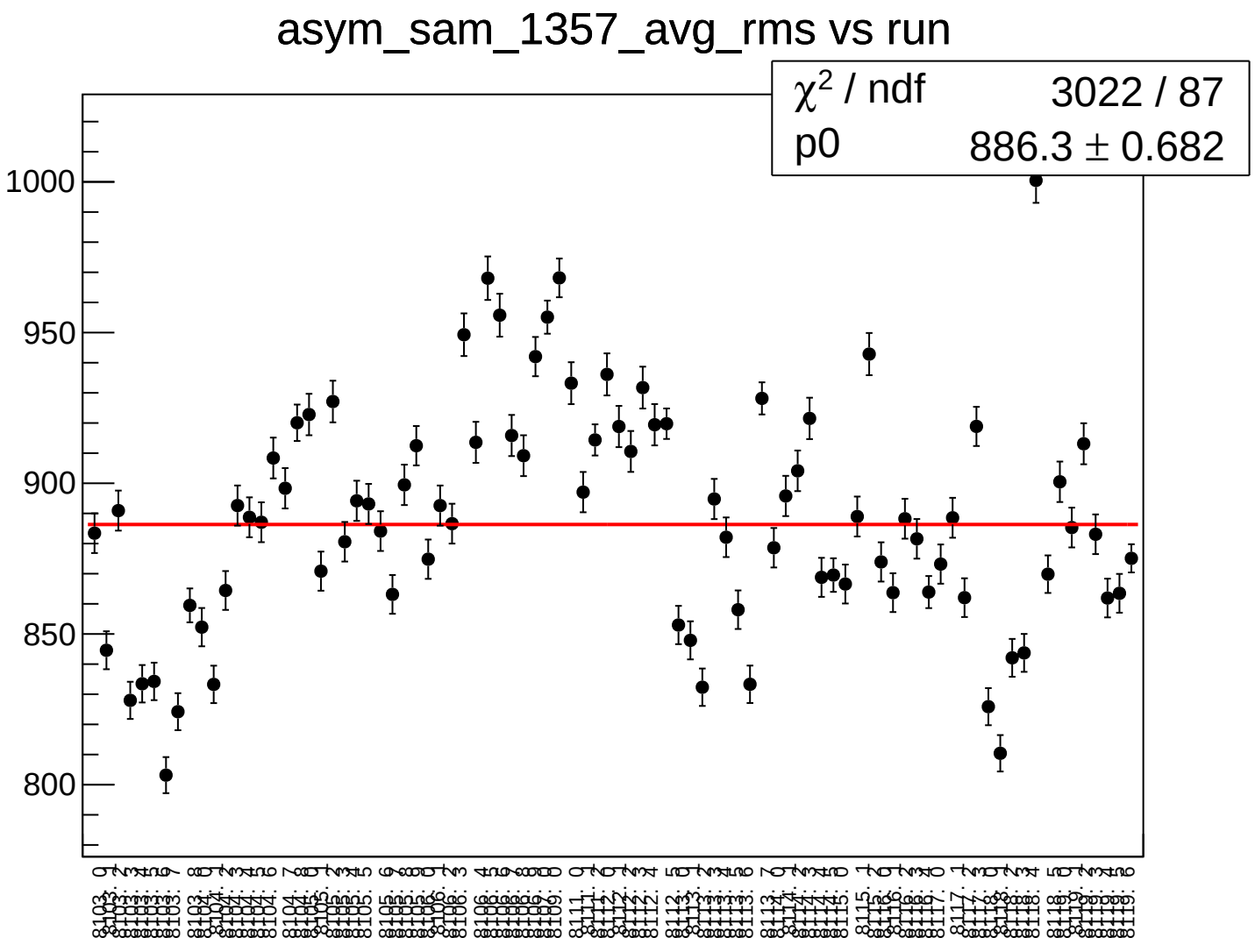

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 111.1 / 87
p0 −126.3 ± 101.7
pull
Entries 88
Mean −269.2
Std Dev 314.1
pull1D
Entries 88
Mean 0.01493
Std Dev 1.124

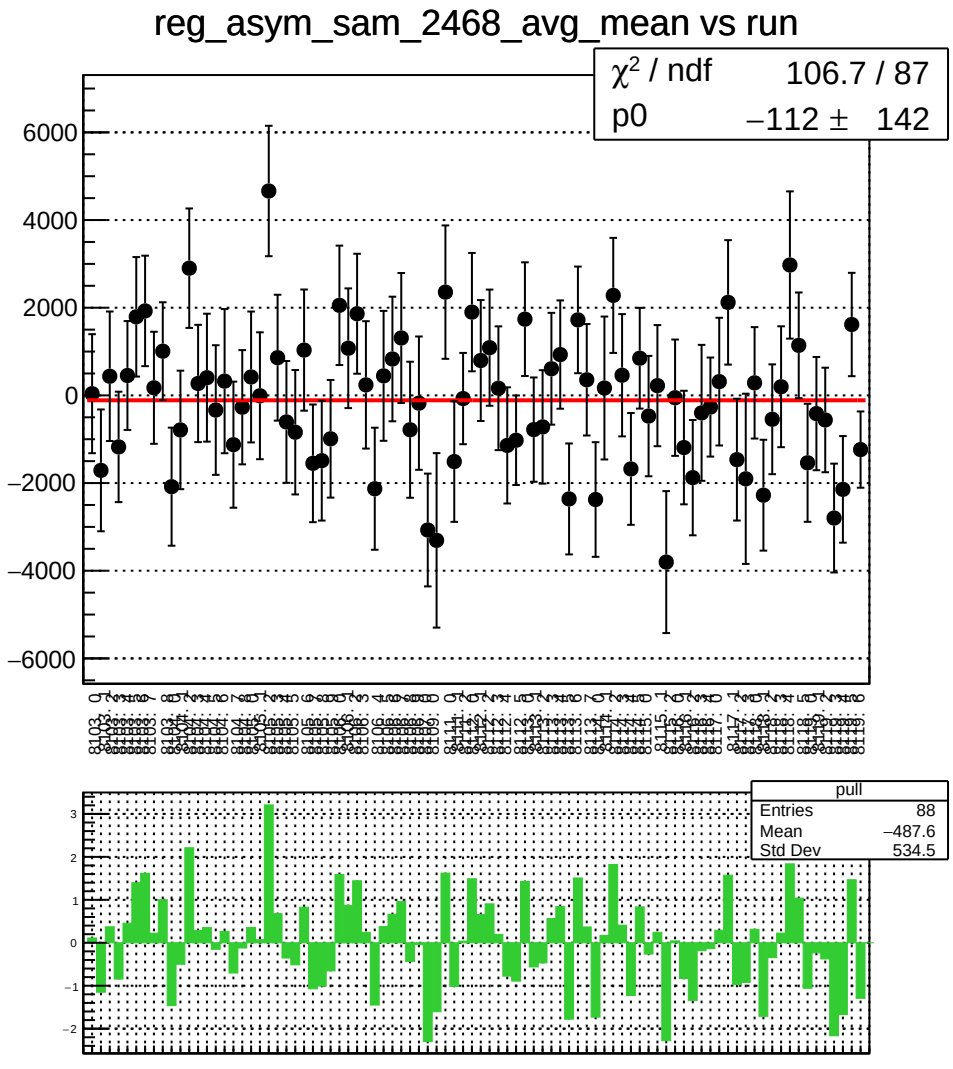

reg_asym_sam_1357_avg_rms vs run
χ^2 / ndf 1.588e+04 / 87
p0 93.1 ± 0.07191
130
120
110
100
90
80

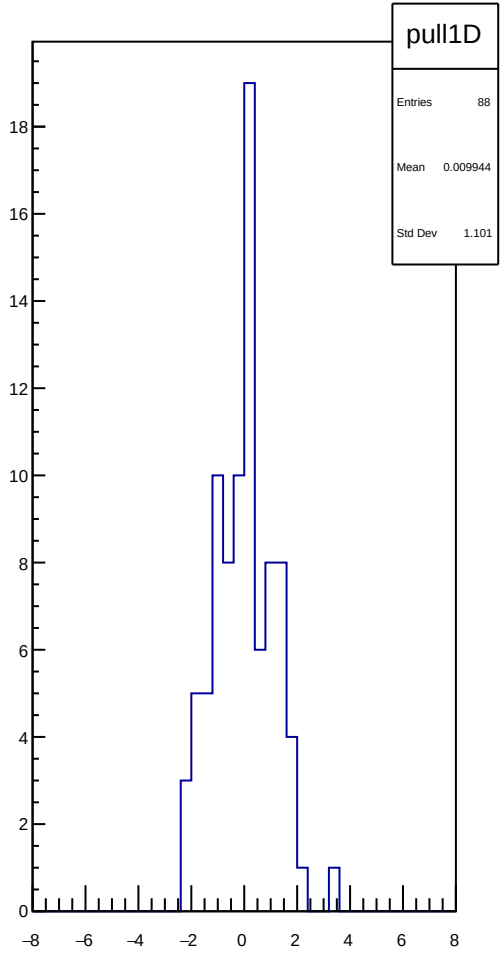

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 88.16 / 87
p0 −2144 ± 959
pull
Entries 88
Mean 545.6
Std Dev 492.4
pull1D
Entries 88
Mean −0.009005
Std Dev 1.001

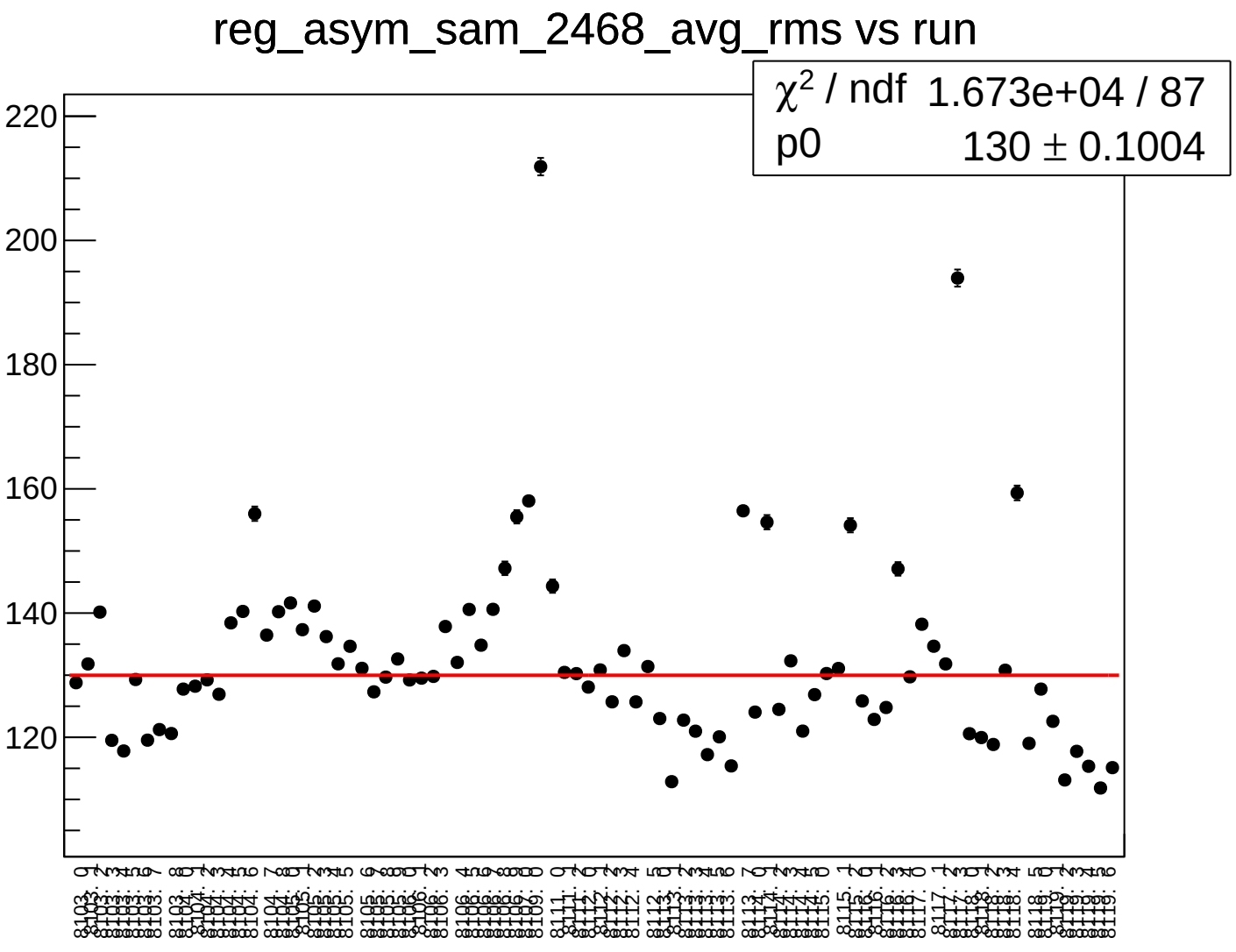

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 2996 / 87
p0 881.3 ± 0.6781
1000
950
900
850
800

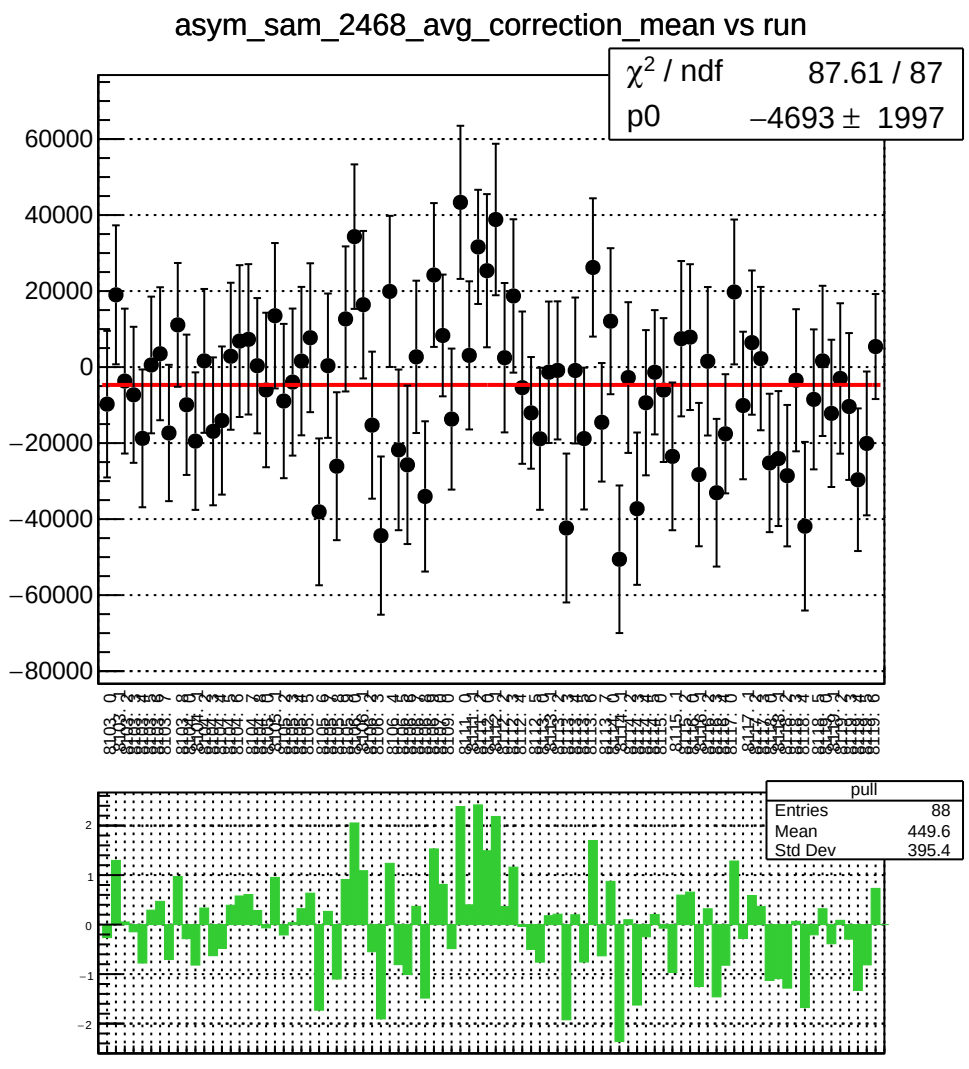

asym_sam_1357_avg_mean vs run
χ² / ndf 87.01 / 87
p0 2012 ± 964.5
pull
Entries 88
Mean 414.1
Std Dev 359.7
pull1D
Entries 88
Mean 0.01081
Std Dev 0.9943

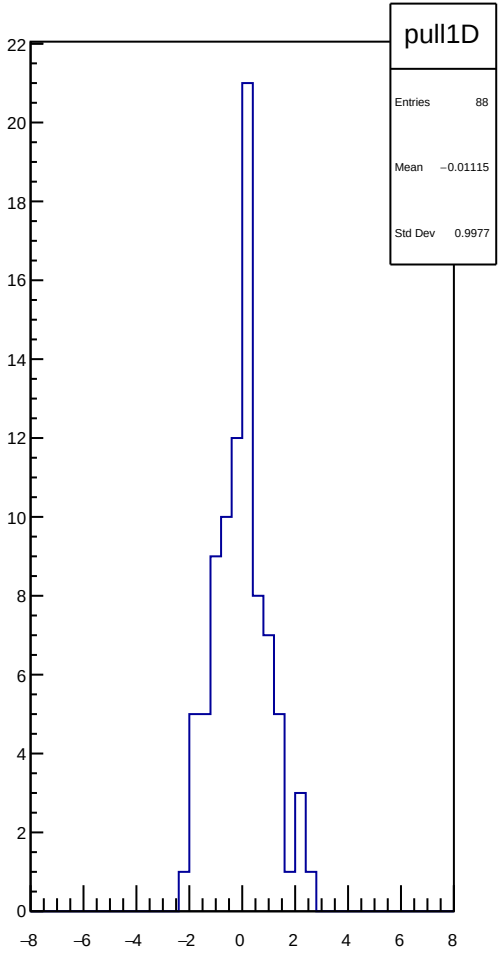

asym_sam_1357_avg_rms vs run
χ² / ndf 3022 / 87
p0 886.3 ± 0.682
1000
950
900
850
800

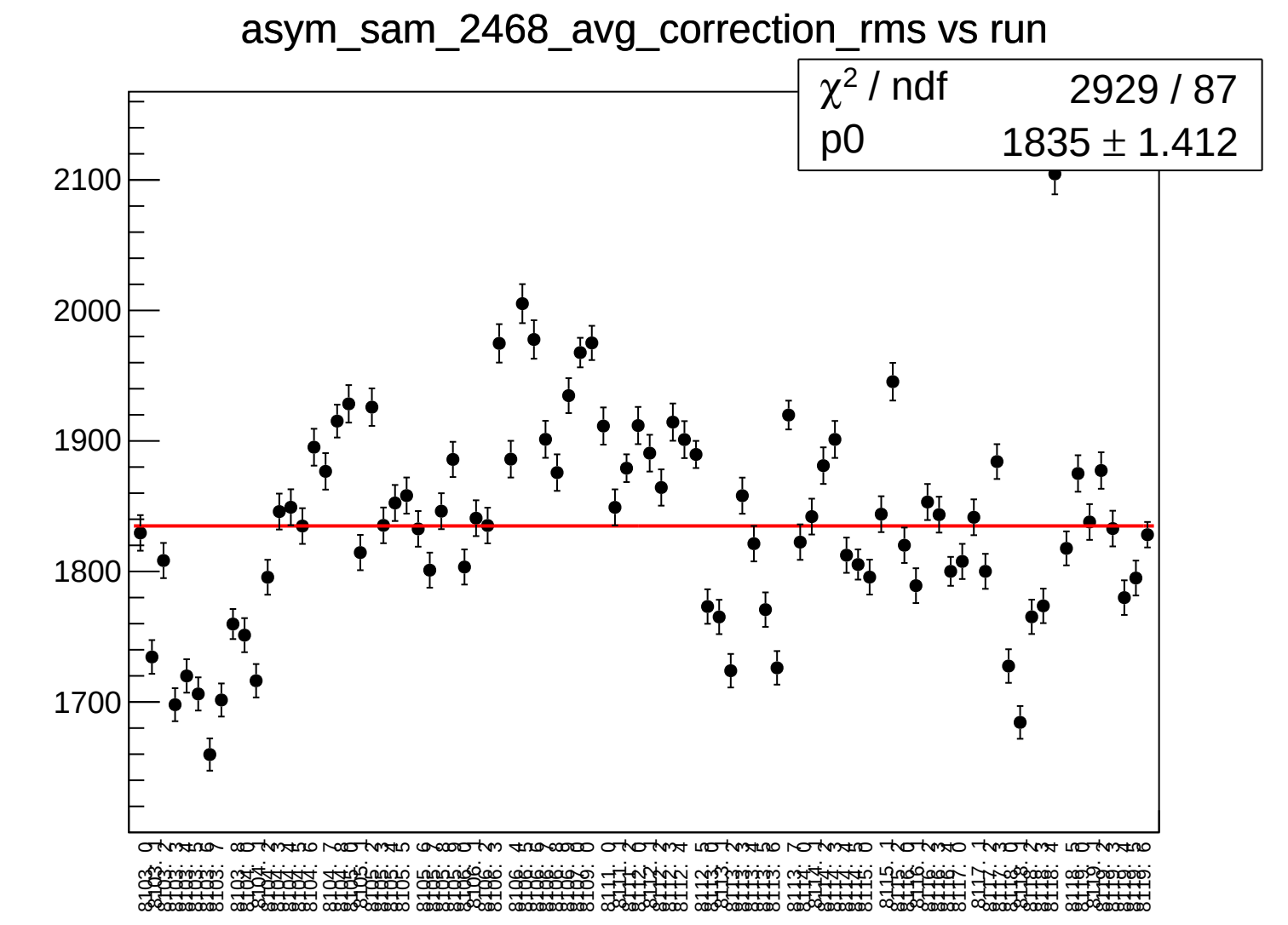

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 106.7 / 87
p0 −112 ± 142
pull
Entries 88
Mean −487.6
Std Dev 534.5

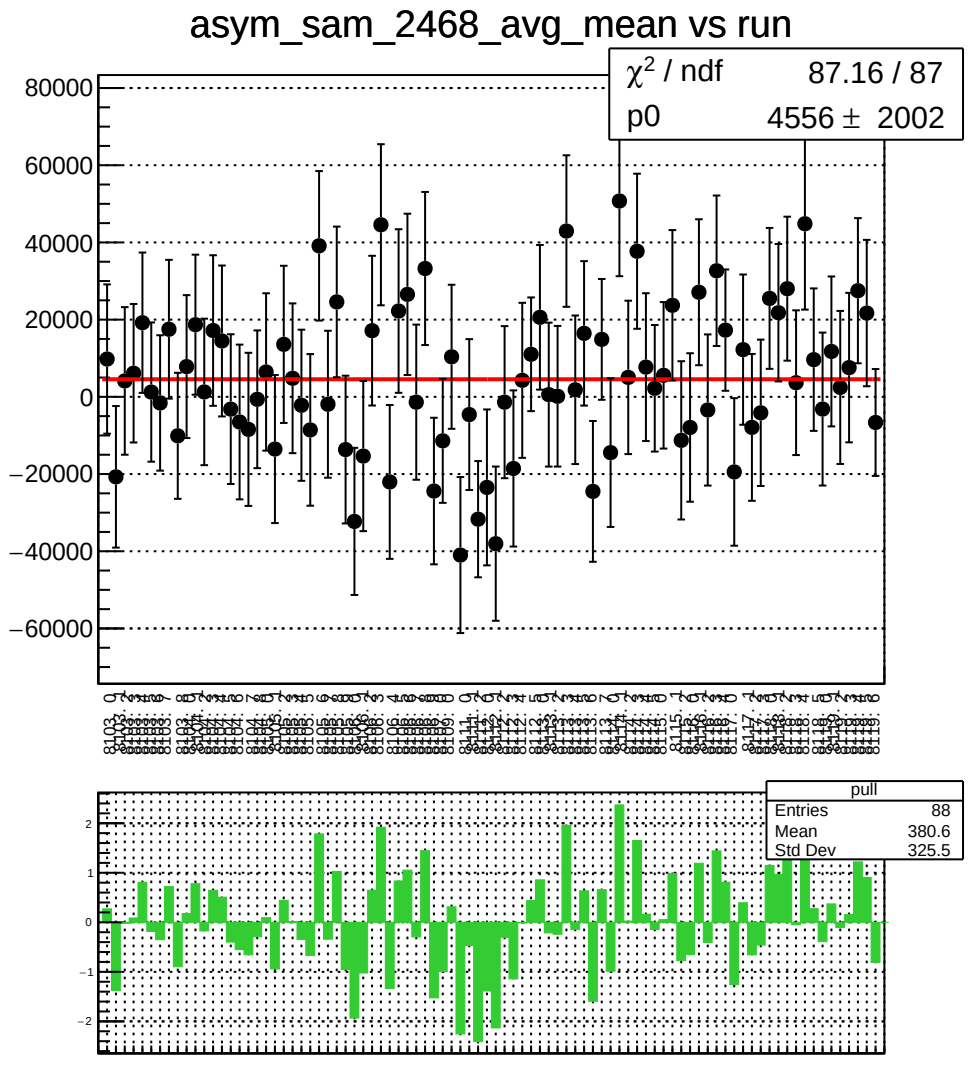

pull1D
Entries 88
Mean 0.009944
Std Dev 1.101

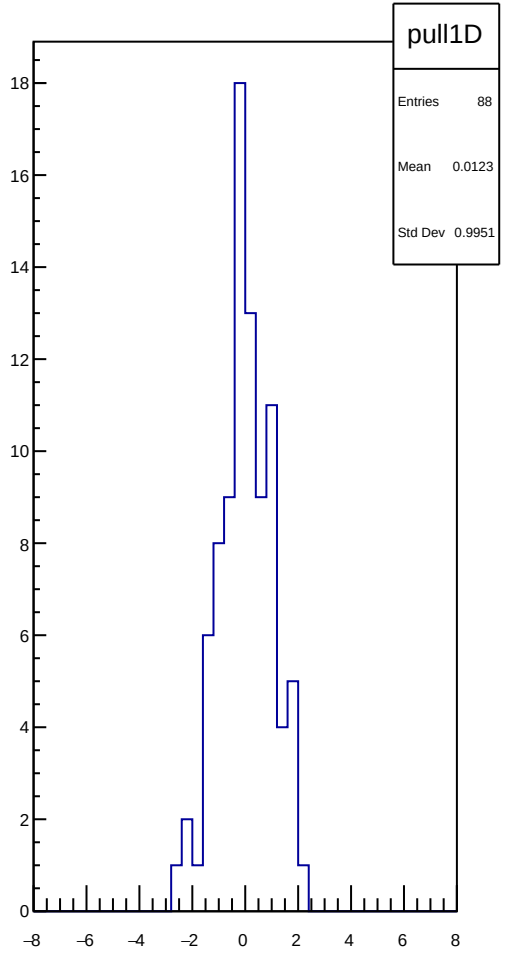

reg_asym_sam_2468_avg_rms vs run
χ^2 / ndf 1.673e+04 / 87
p0 130 ± 0.1004
220
200
180
160
140
120

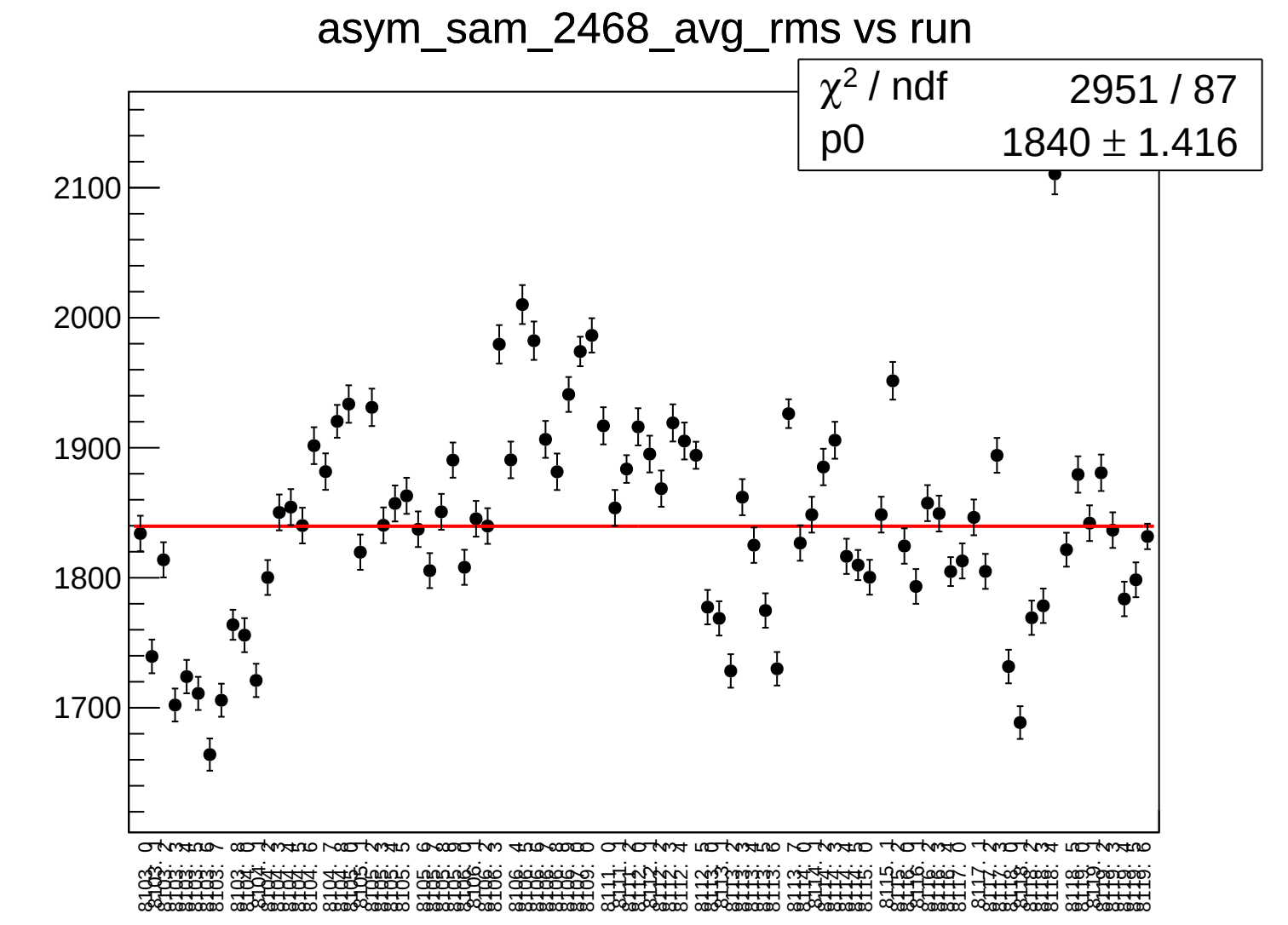

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 87.61 / 87
p0 −4693 ± 1997
pull
Entries 88
Mean 449.6
Std Dev 395.4

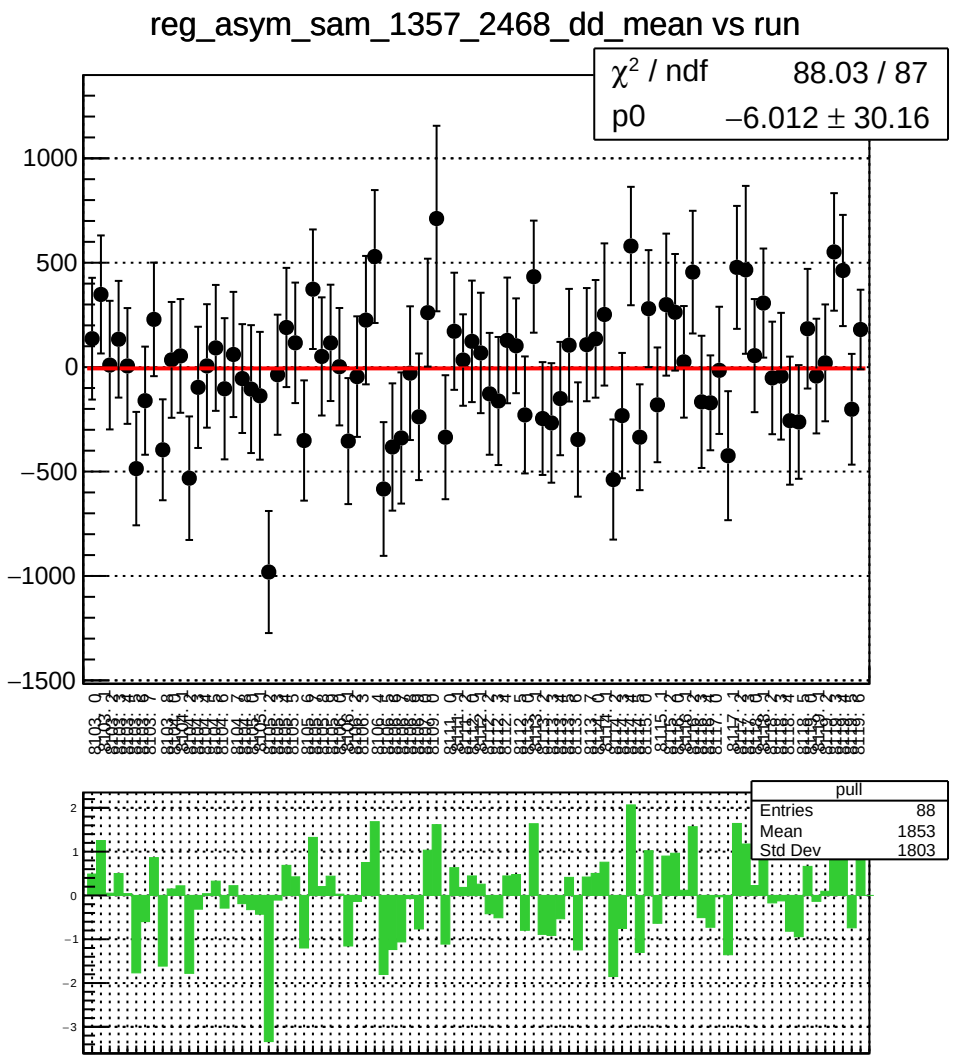

pull1D
Entries 88
Mean −0.01115
Std Dev 0.9977

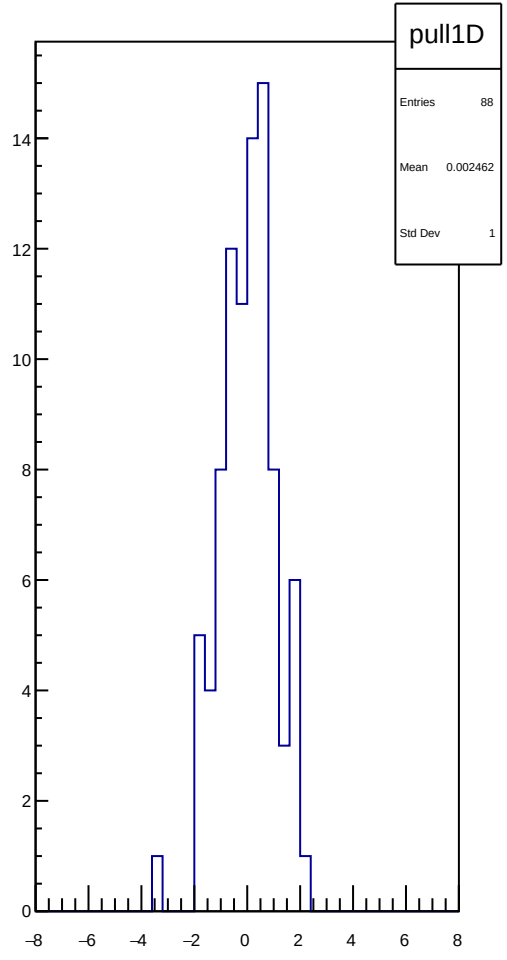

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 2929 / 87
p0 1835 ± 1.412
2100
2000
1900
1800
1700

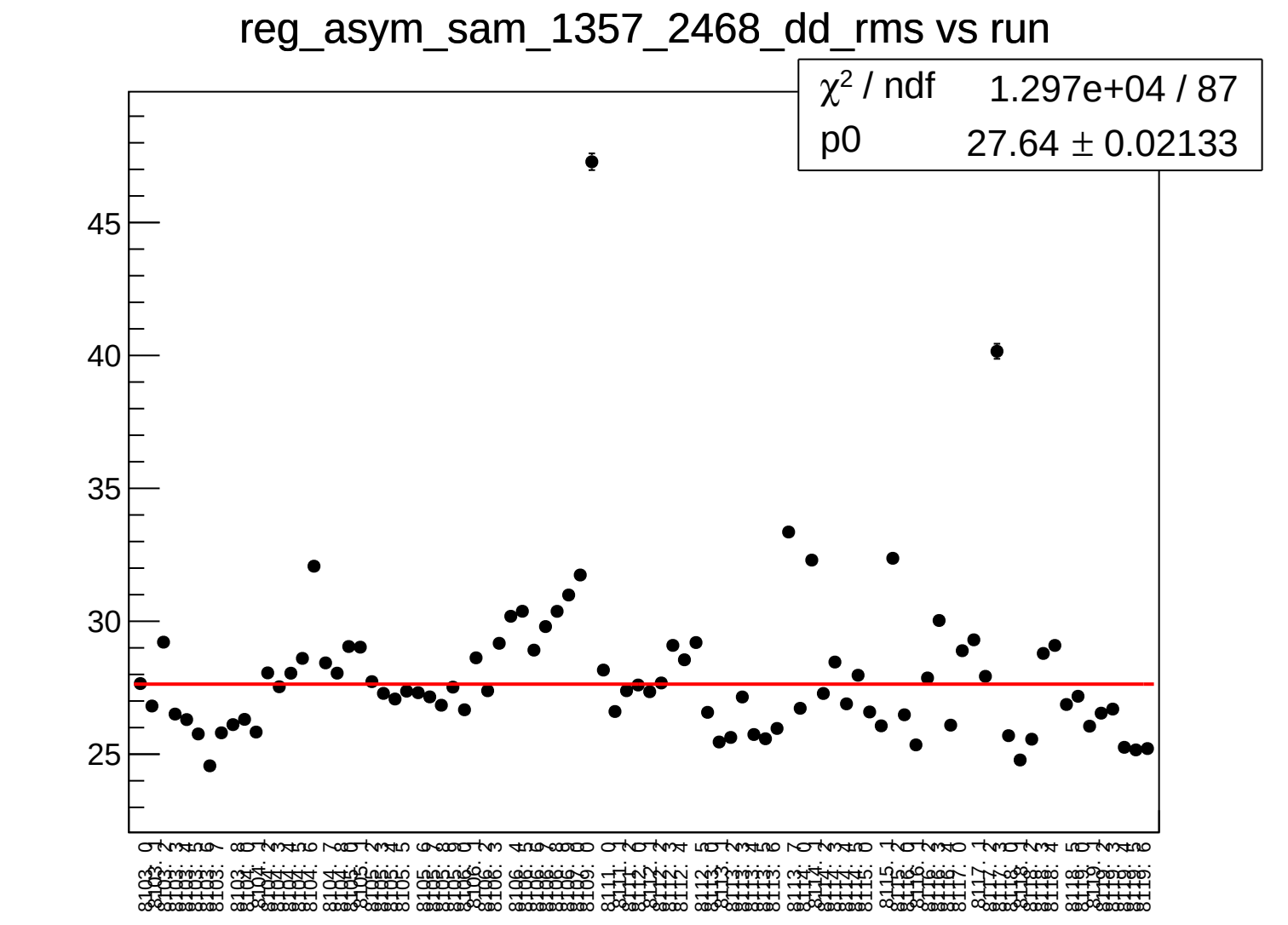

asym_sam_2468_avg_mean vs run
χ² / ndf 87.16 / 87
p0 4556 ± 2002
pull
Entries 88
Mean 380.6
Std Dev 325.5

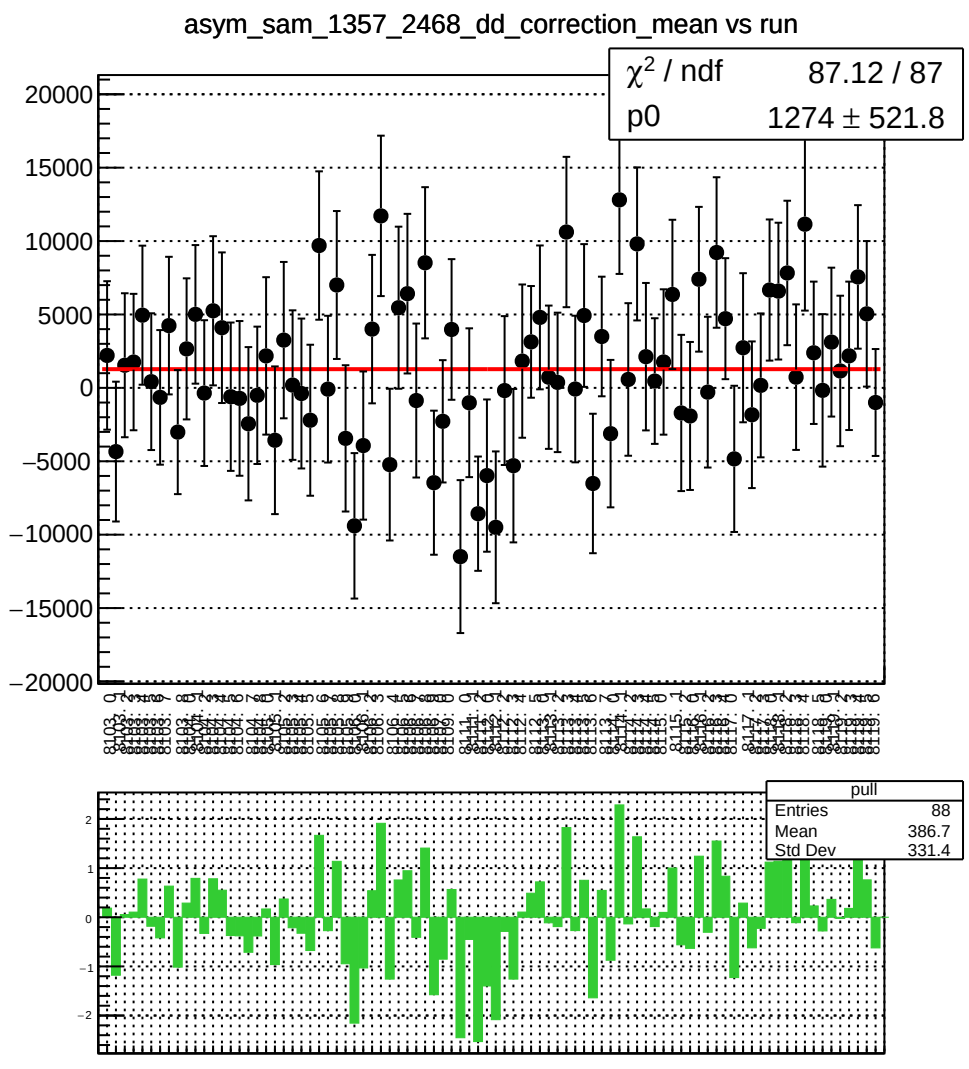

pull1D
Entries 88
Mean 0.0123
Std Dev 0.9951

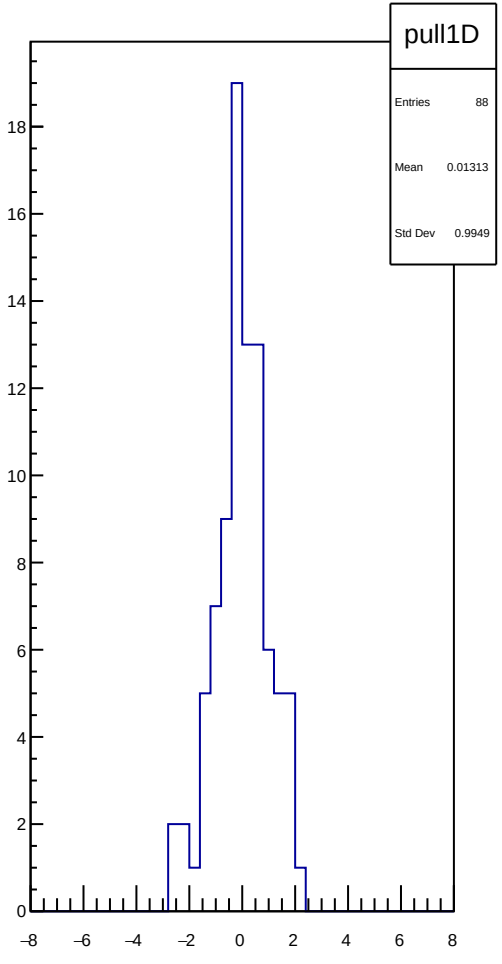

asym_sam_2468_avg_rms vs run
χ^2 / ndf 2951 / 87
p0 1840 ± 1.416
2100
2000
1900
1800
1700

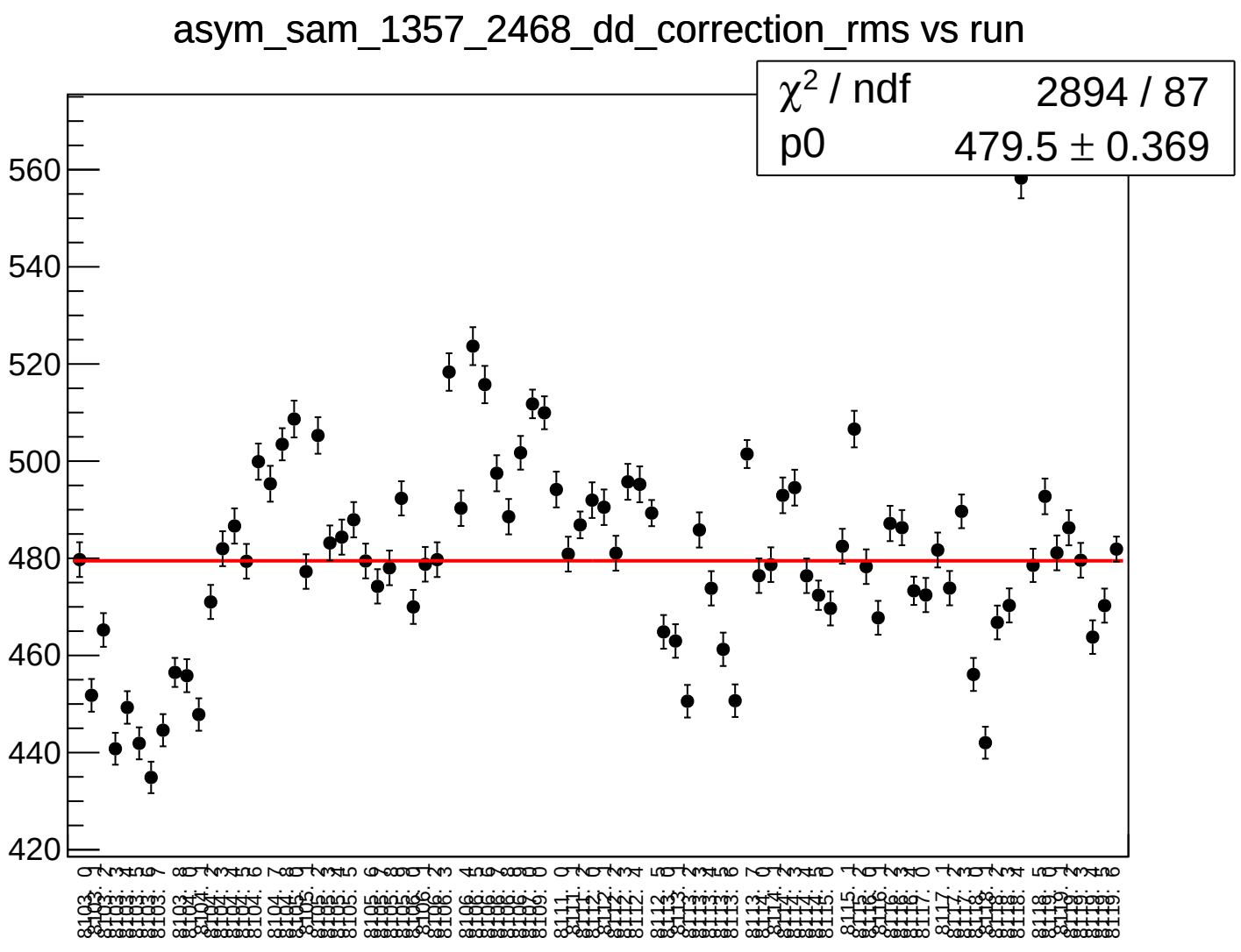

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 88.03 / 87
p0 −6.012 ± 30.16
1000
500
0
−500
−1000
−1500
pull
Entries 88
Mean 1853
Std Dev 1803
2
1
0
−1
−2
−3

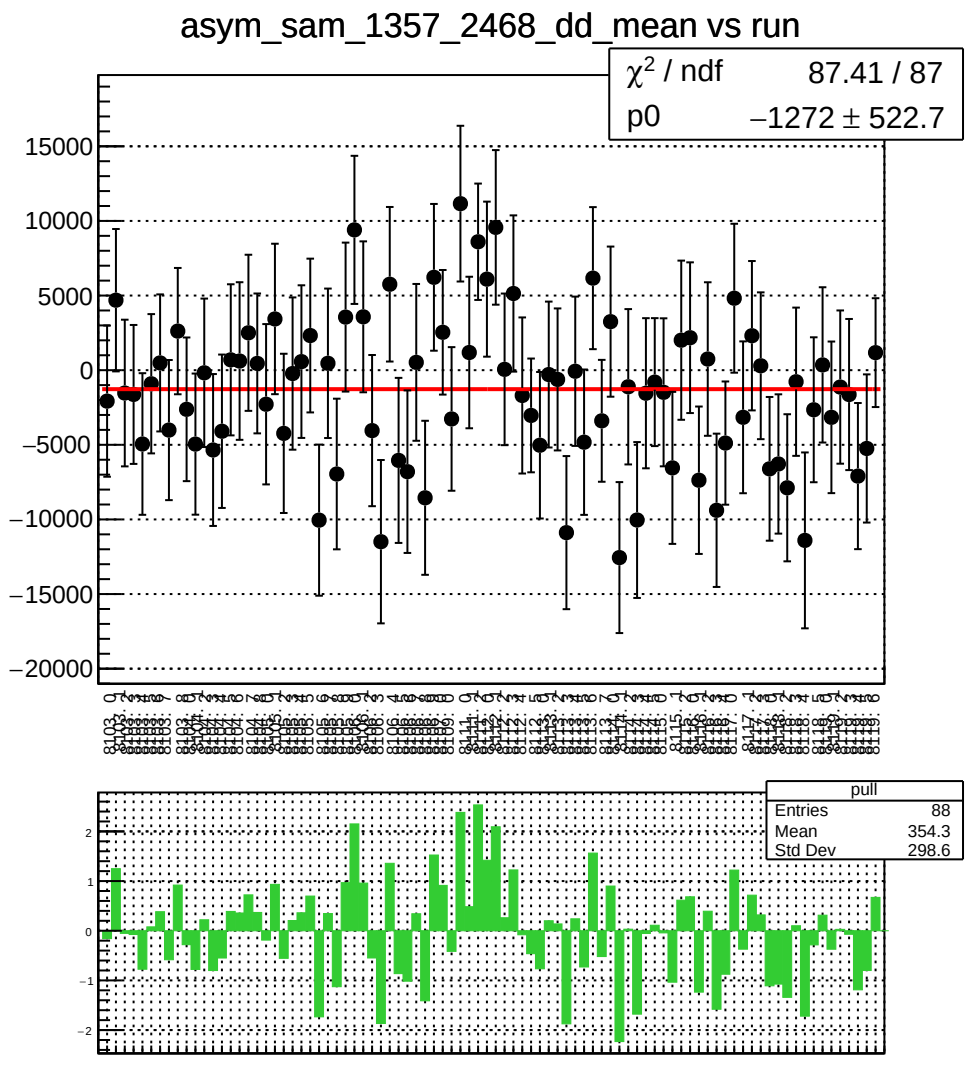

pull1D
Entries 88
Mean 0.002462
Std Dev 1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

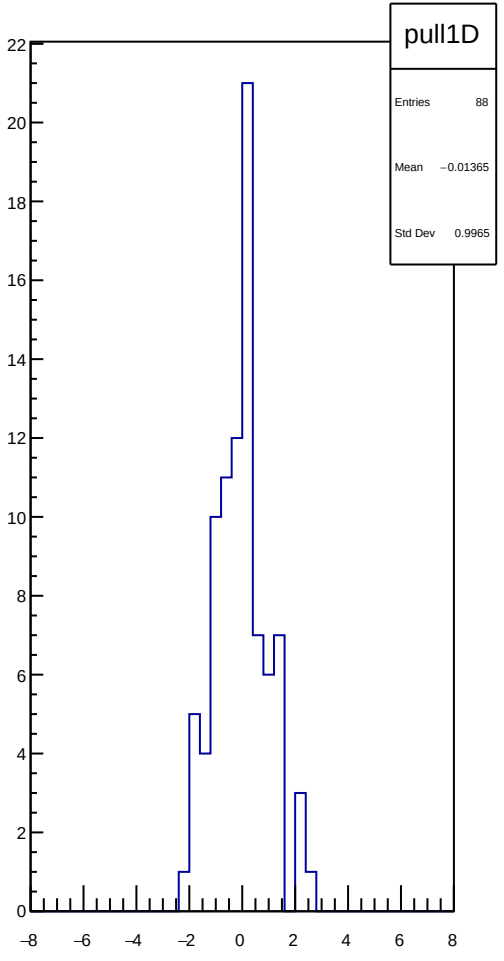

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.297e+04 / 87
p0 27.64 ± 0.02133
45
40
35
30
25

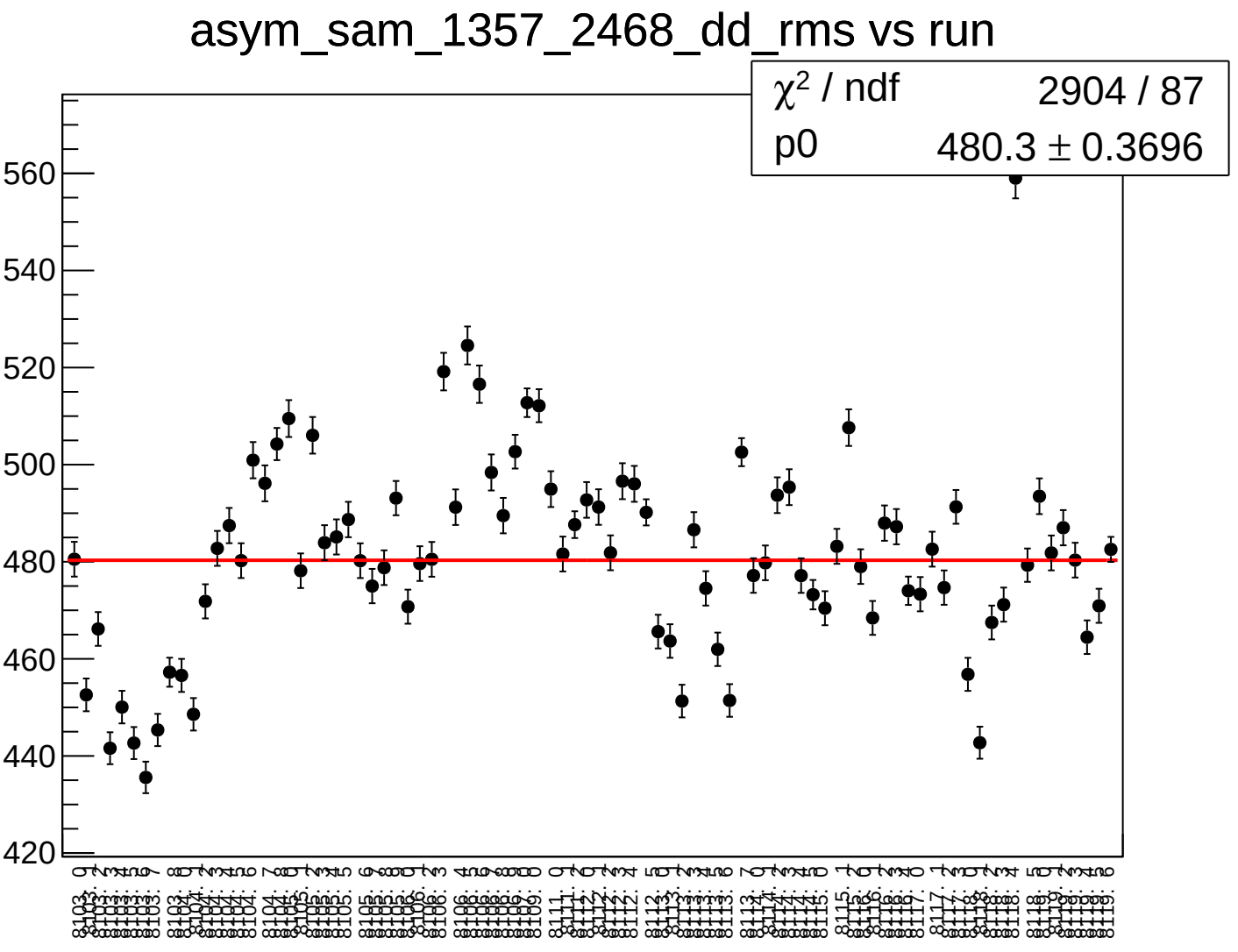

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 87.12 / 87
p0 1274 ± 521.8
pull
Entries 88
Mean 386.7
Std Dev 331.4

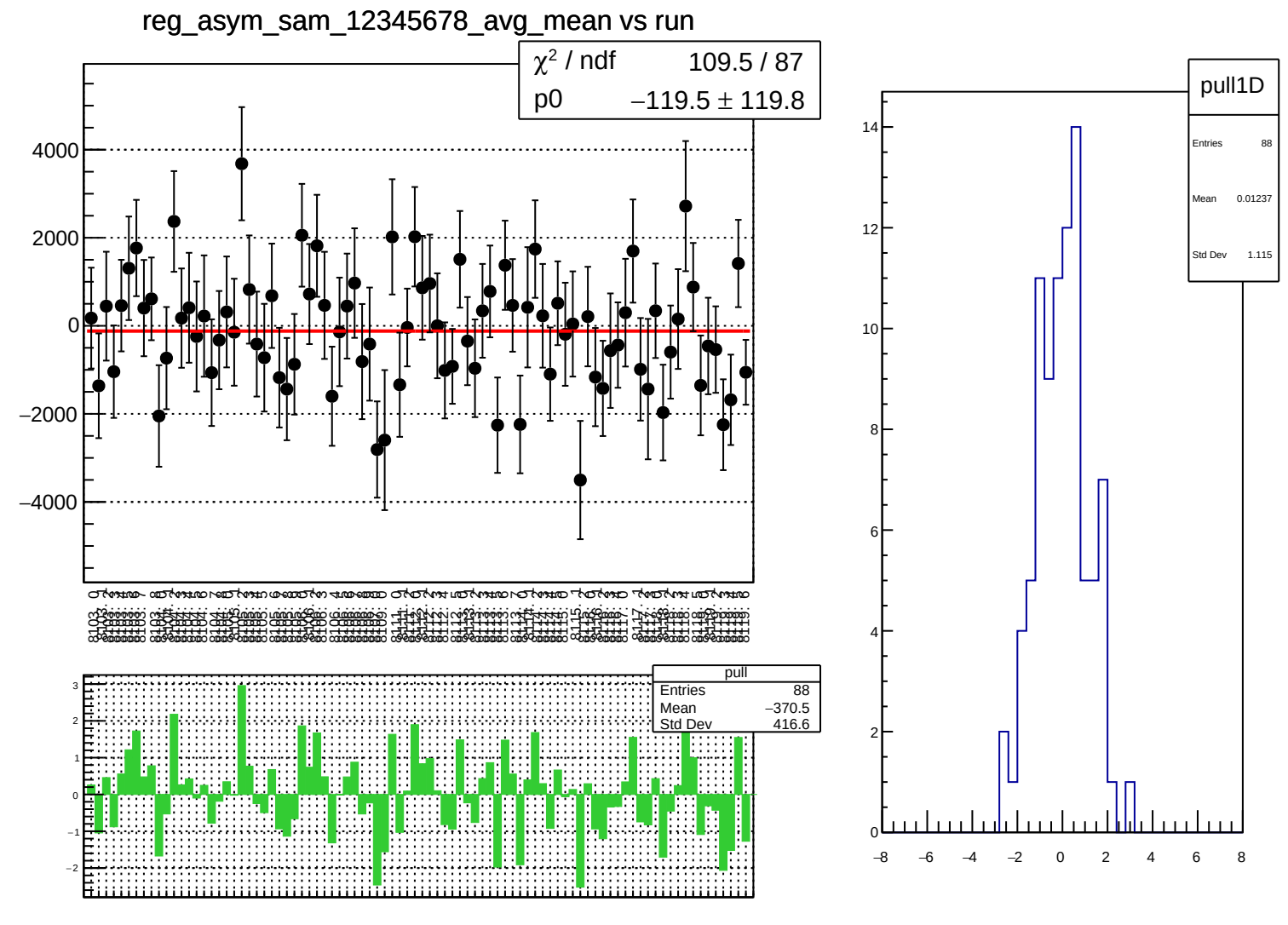

pull1D
Entries 88
Mean 0.01313
Std Dev 0.9949

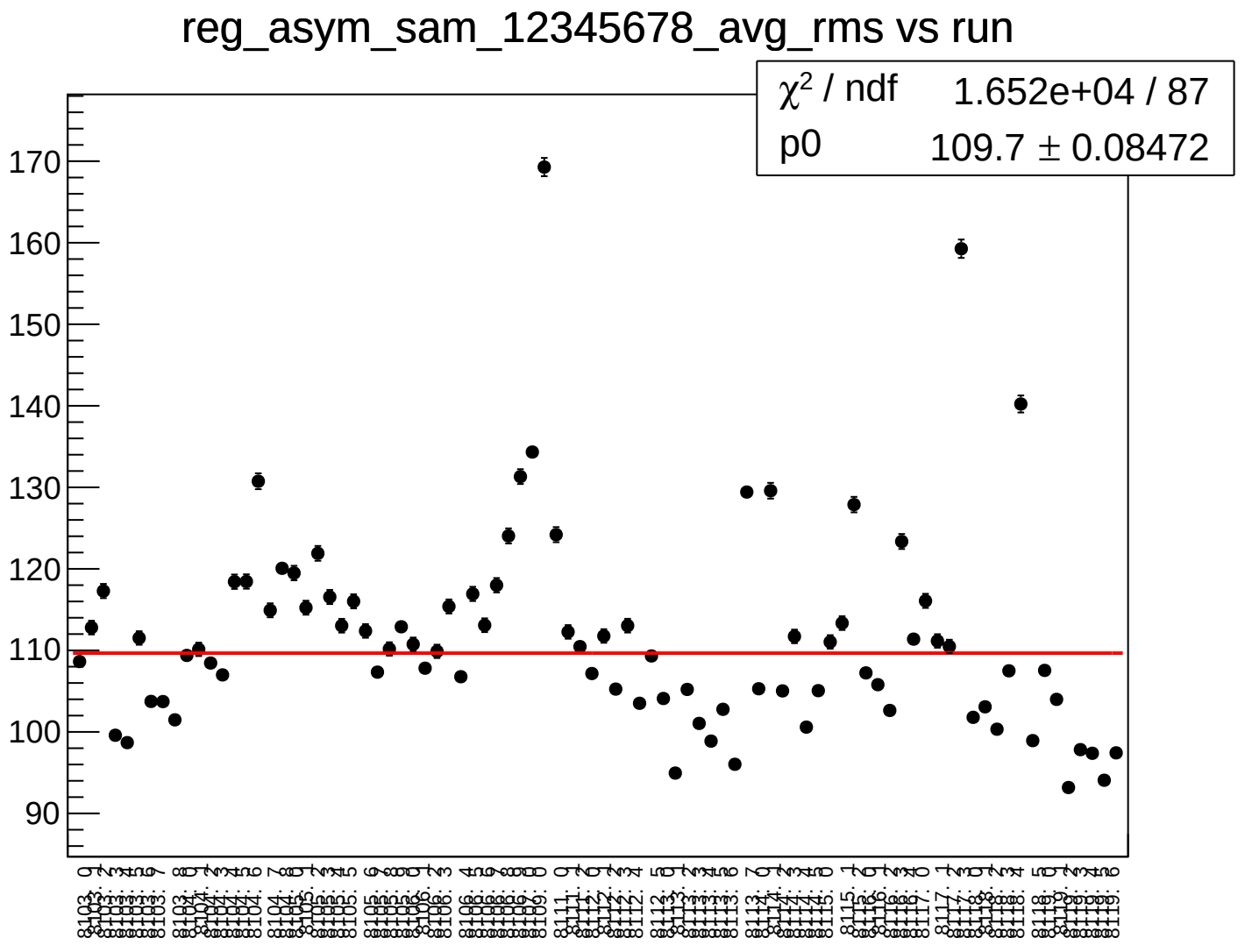

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 2894 / 87
p0 479.5 ± 0.369
560
540
520
500
480
460
440
420

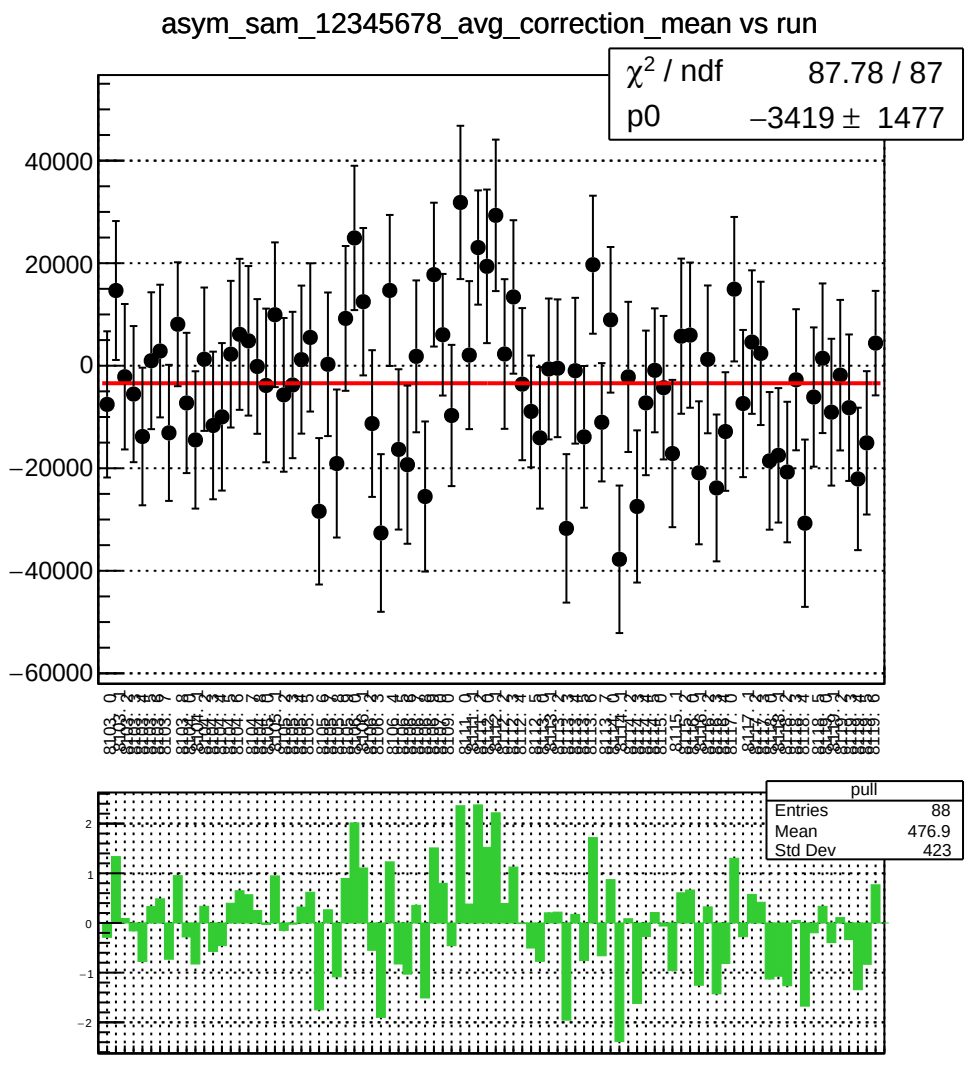

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 87.41 / 87
p0 −1272 ± 522.7
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 88
Mean 354.3
Std Dev 298.6
2
1
0
−1
−2

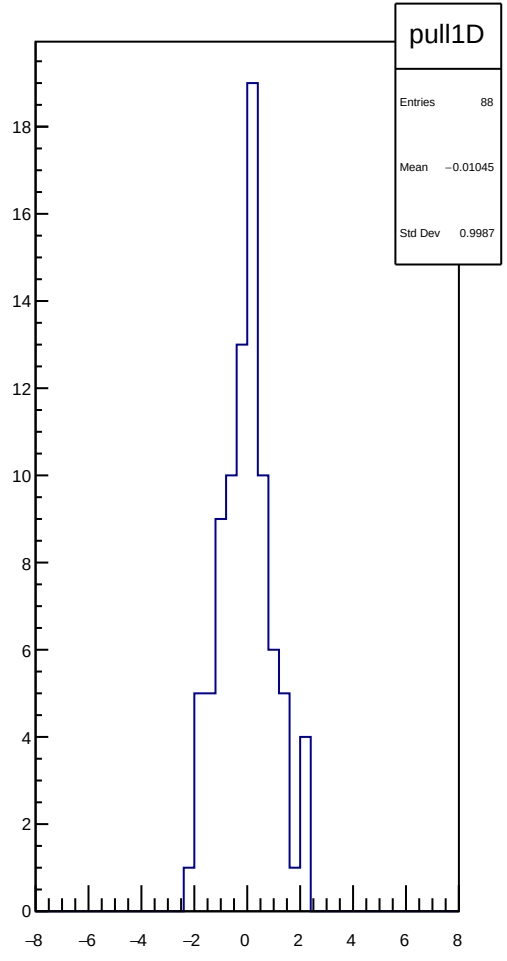

pull1D
Entries 88
Mean −0.01365
Std Dev 0.9965
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

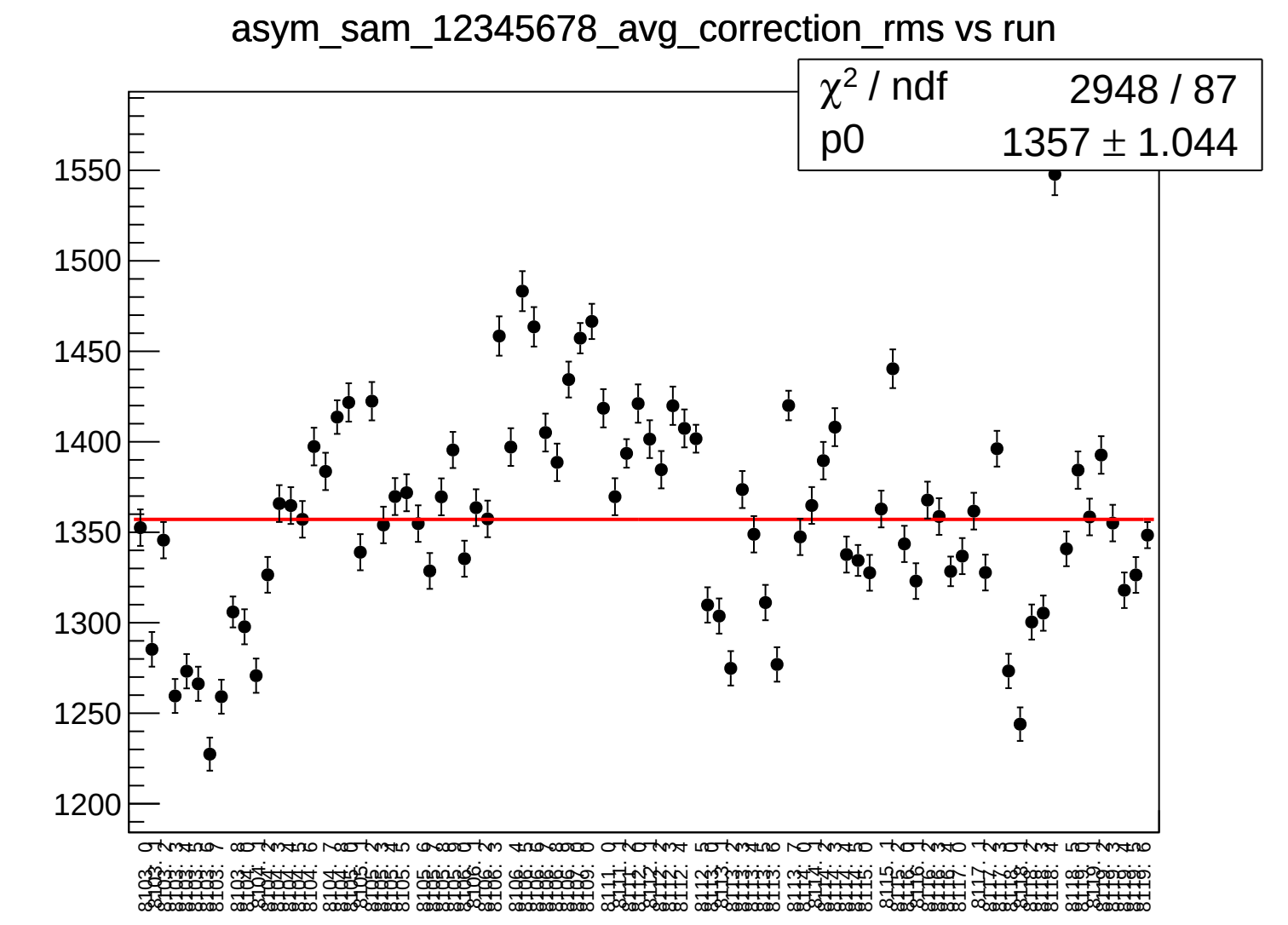

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 2904 / 87
p0 480.3 ± 0.3696
560
540
520
500
480
460
440
420

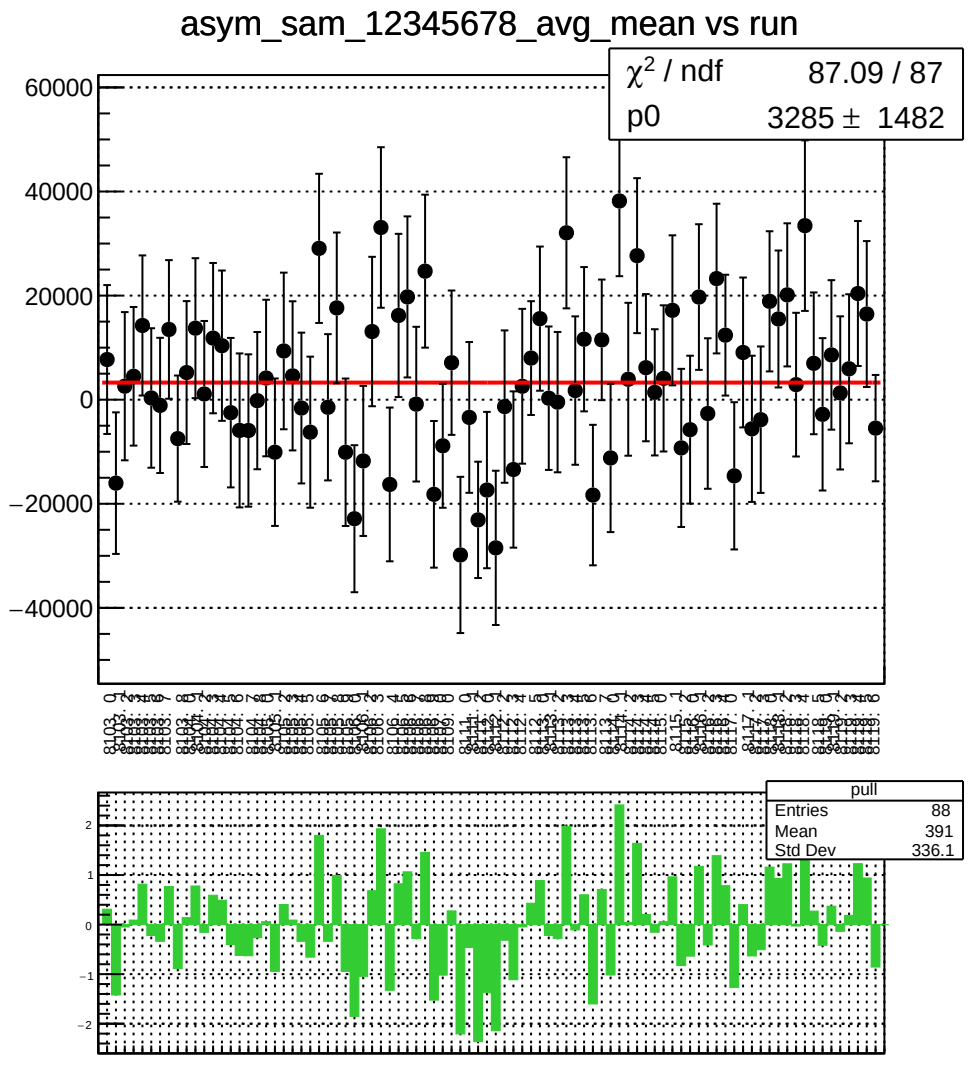

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 109.5 / 87
p0 −119.5 ± 119.8
4000
2000
0
−2000
−4000
pull
Entries 88
Mean −370.5
Std Dev 416.6
3
2
1
0
−1
−2
pull1D
Entries 88
Mean 0.01237
Std Dev 1.115
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

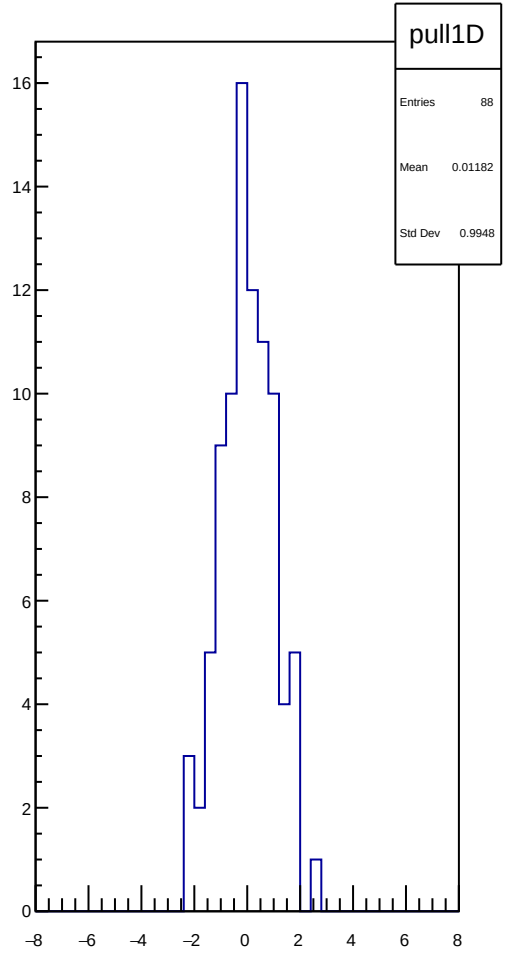

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 1.652e+04 / 87
p0 109.7 ± 0.08472
170
160
150
140
130
120
110
100
90

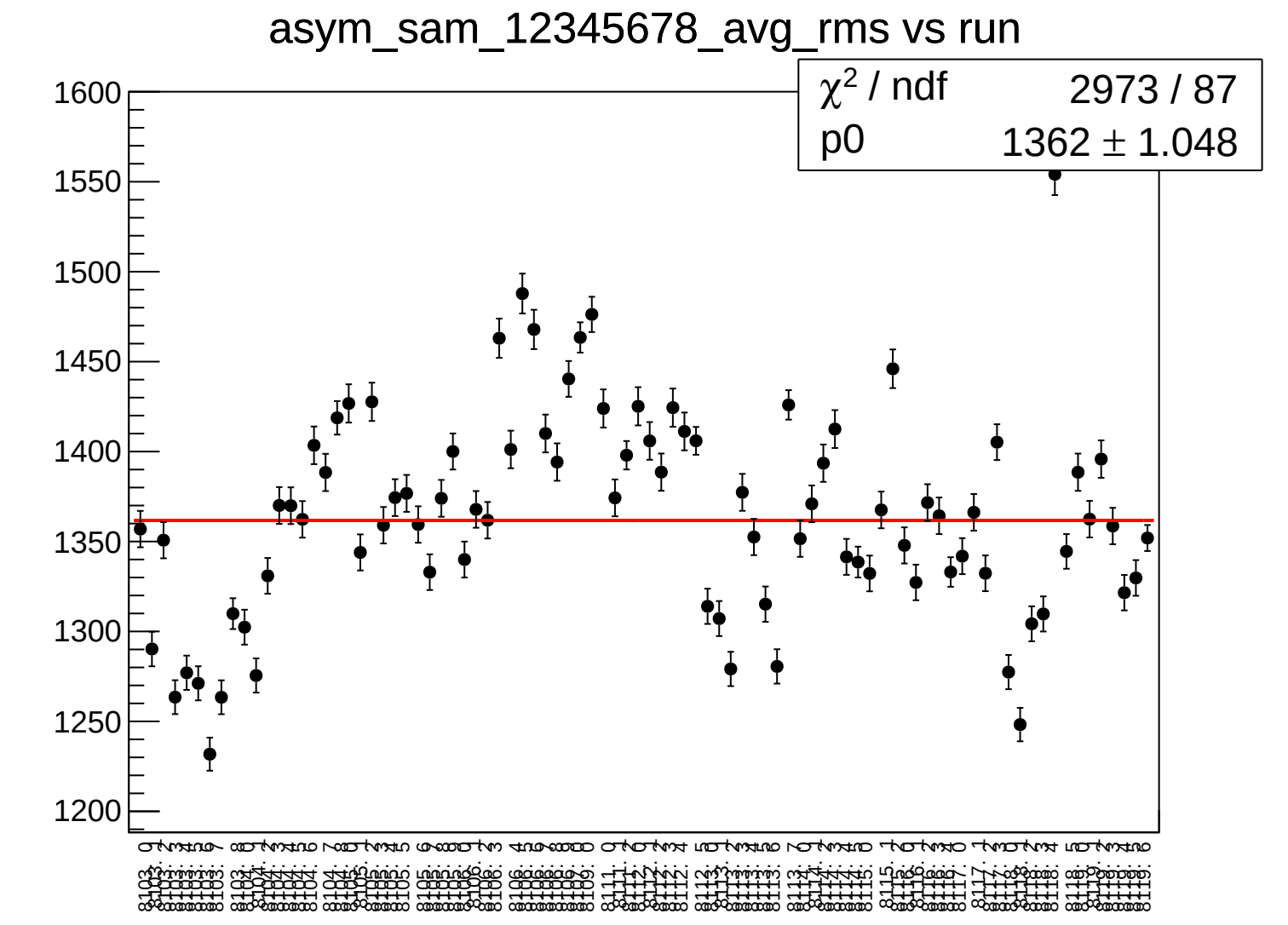

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 87.78 / 87
p0 −3419 ± 1477
40000
20000
0
−20000
−40000
−60000
pull
Entries 88
Mean 476.9
Std Dev 423
2
1
0
−1
−2

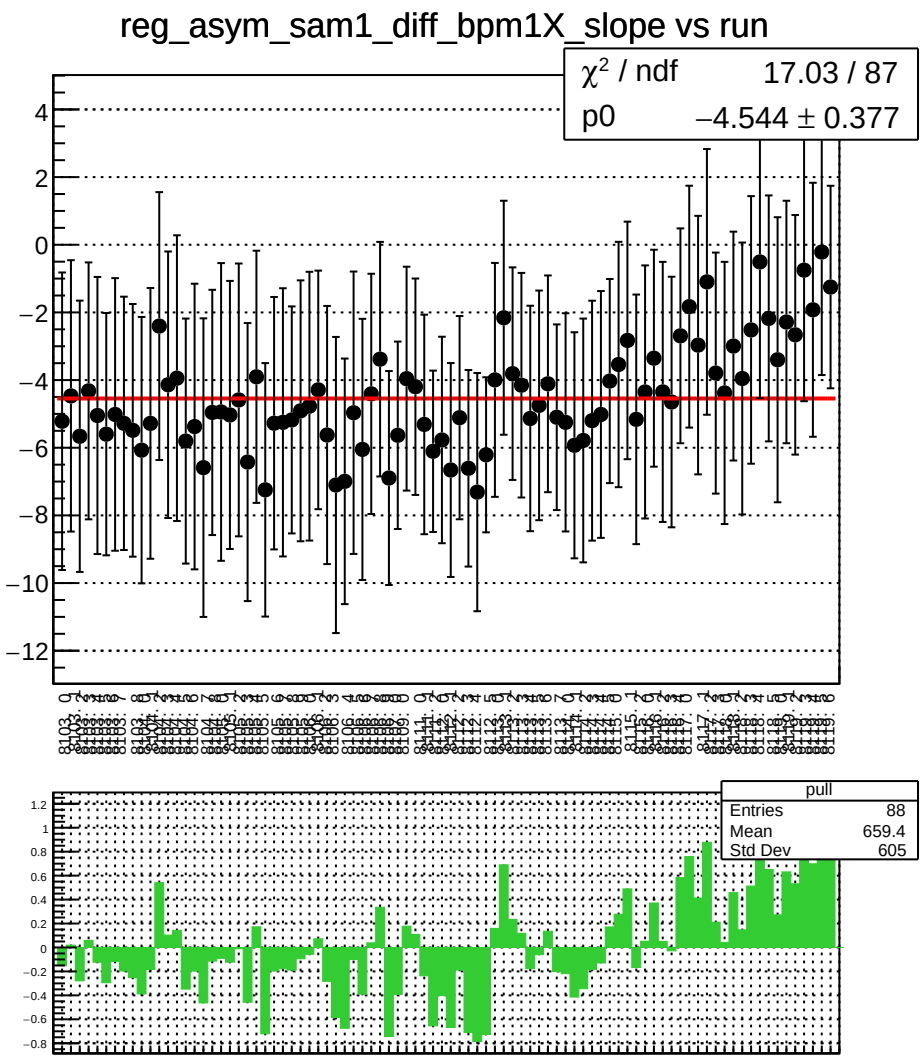

pull1D
Entries 88
Mean −0.01045
Std Dev 0.9987
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

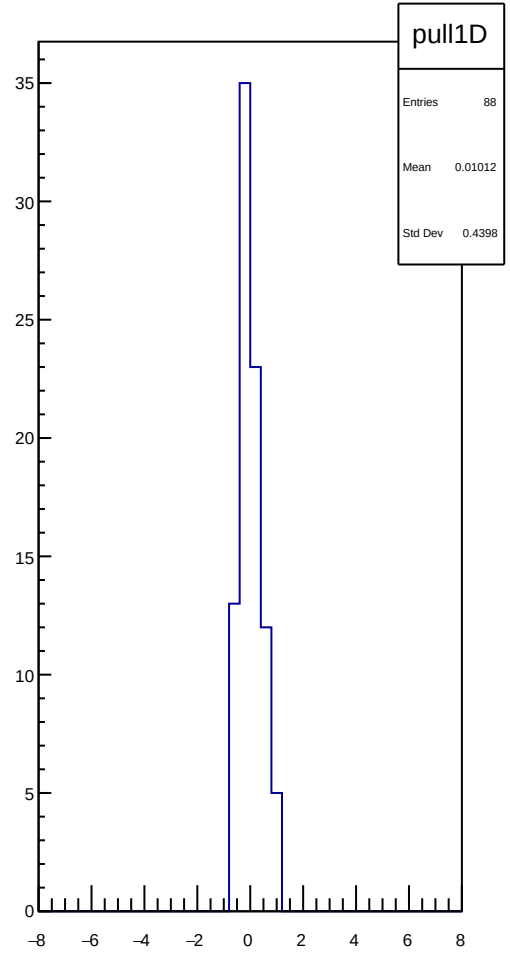

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 2948 / 87
p0 1357 ± 1.044
1550
1500
1450
1400
1350
1300
1250
1200

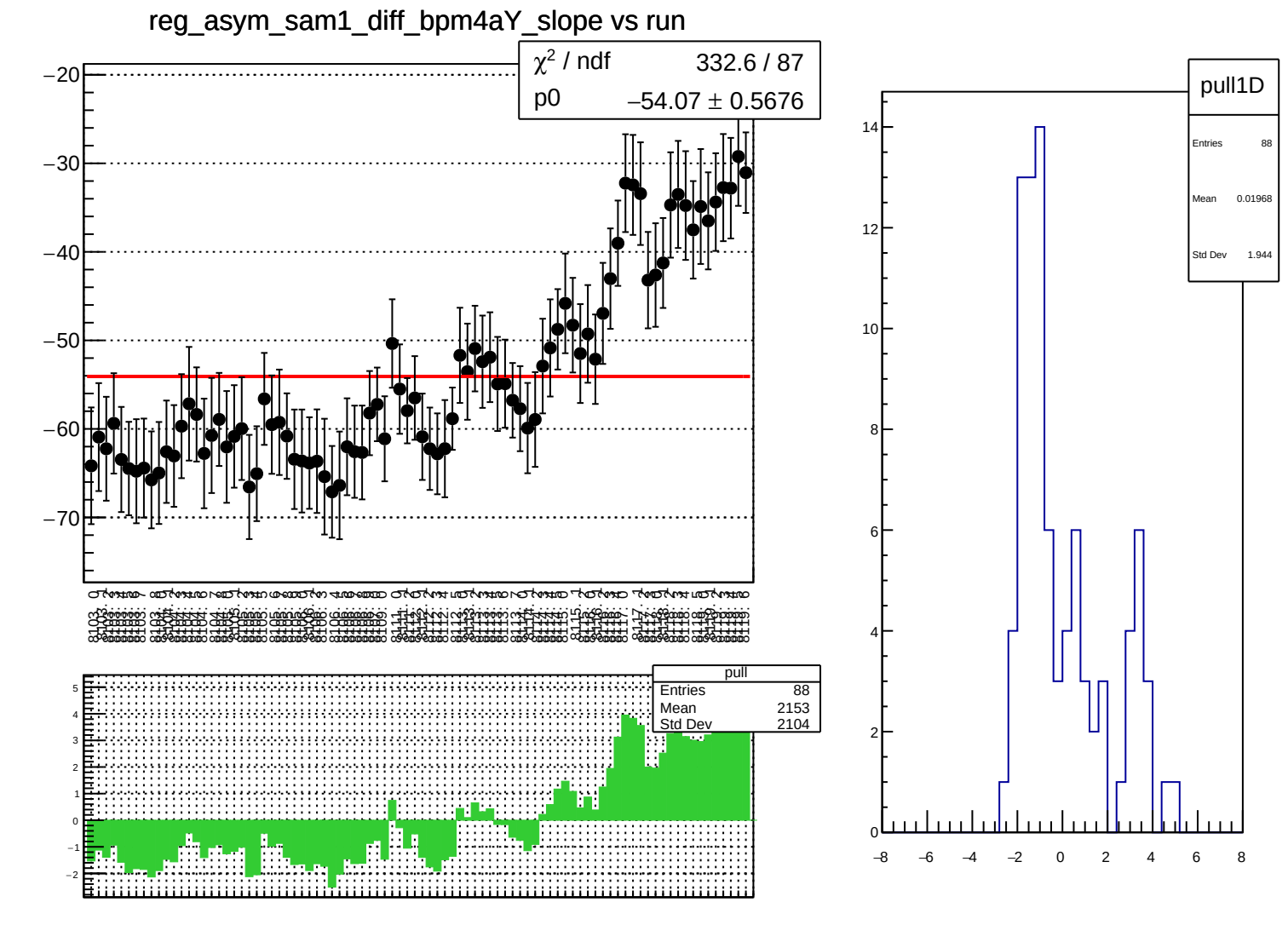

asym_sam_12345678_avg_mean vs run
χ² / ndf 87.09 / 87
p0 3285 ± 1482
60000
40000
20000
0
−20000
−40000
pull
Entries 88
Mean 391
Std Dev 336.1
2
1
0
−1
−2

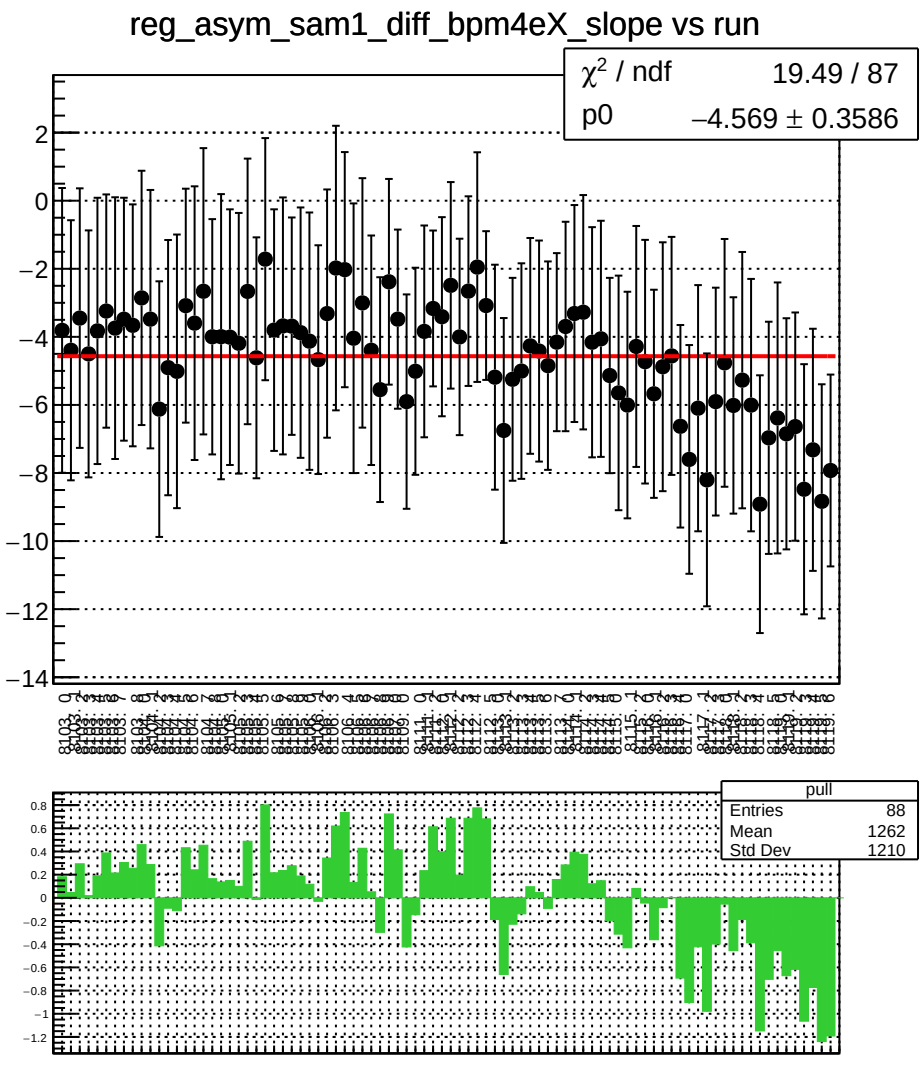

pull1D
Entries 88
Mean 0.01182
Std Dev 0.9948
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

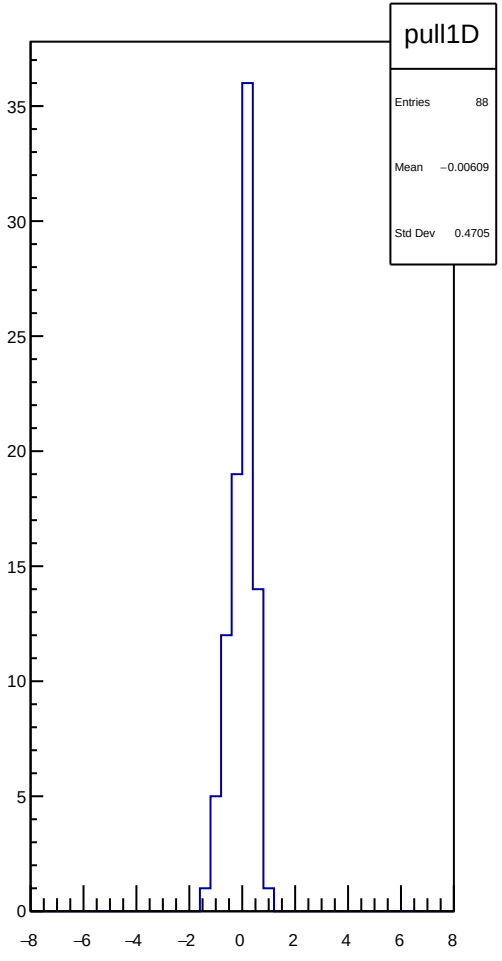

asym_sam_12345678_avg_rms vs run
χ² / ndf 2973 / 87
p0 1362 ± 1.048
1600
1550
1500
1450
1400
1350
1300
1250
1200

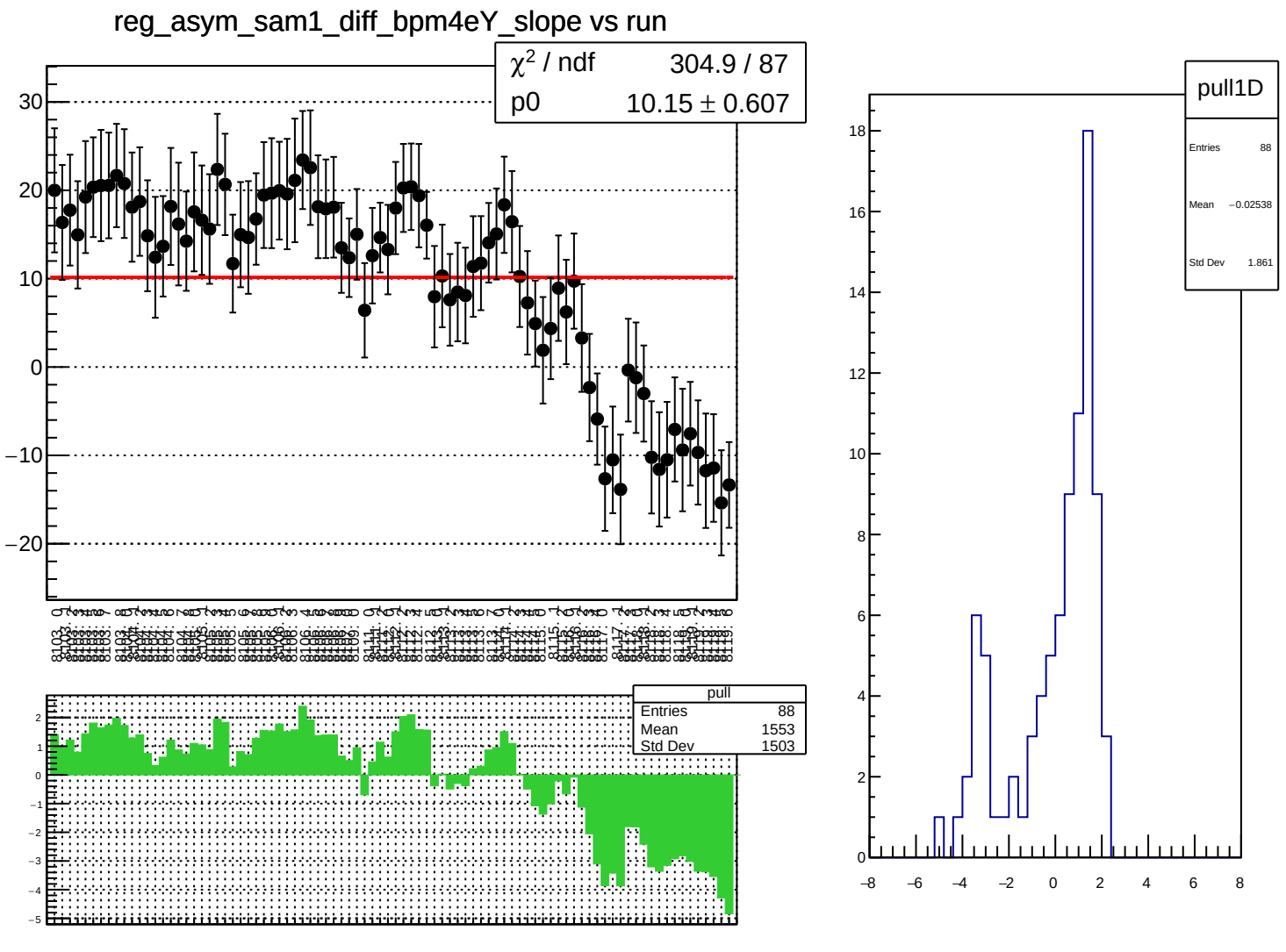

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 17.03 / 87
p0 −4.544 ± 0.377
pull
Entries 88
Mean 659.4
Std Dev 605

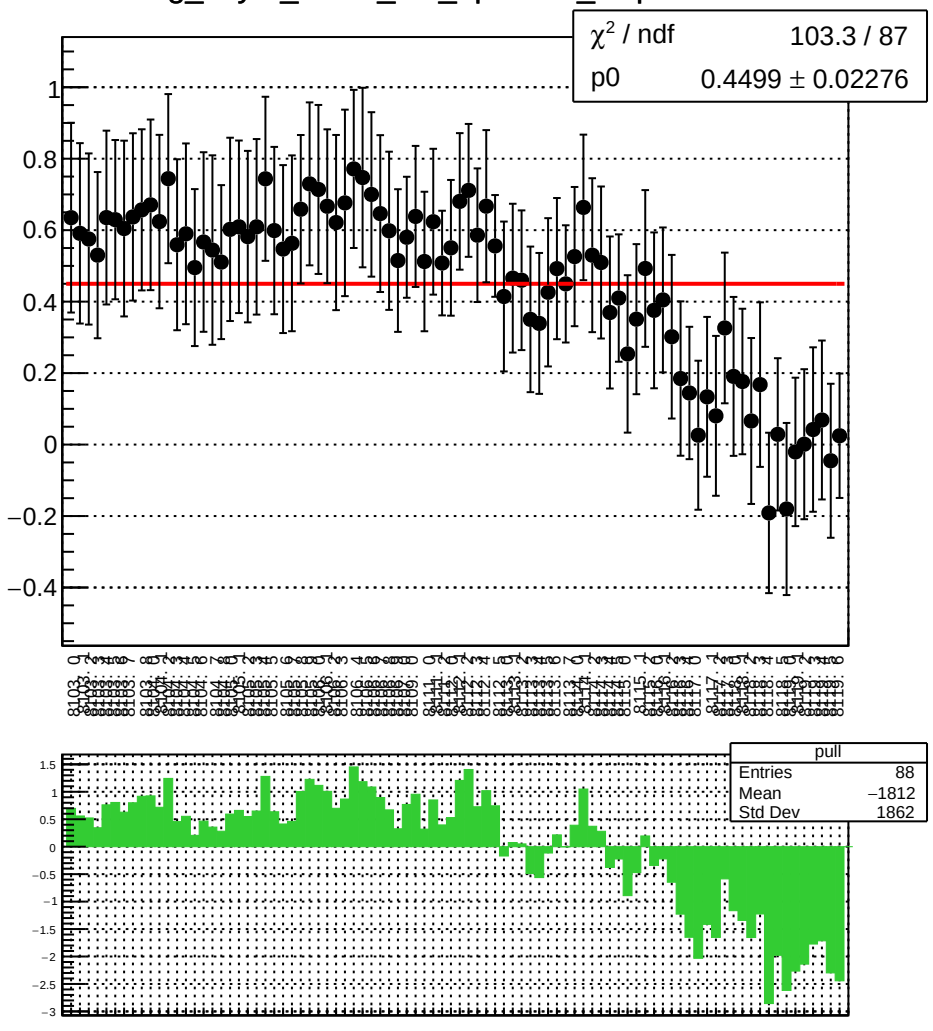

pull1D
Entries 88
Mean 0.01012
Std Dev 0.4398

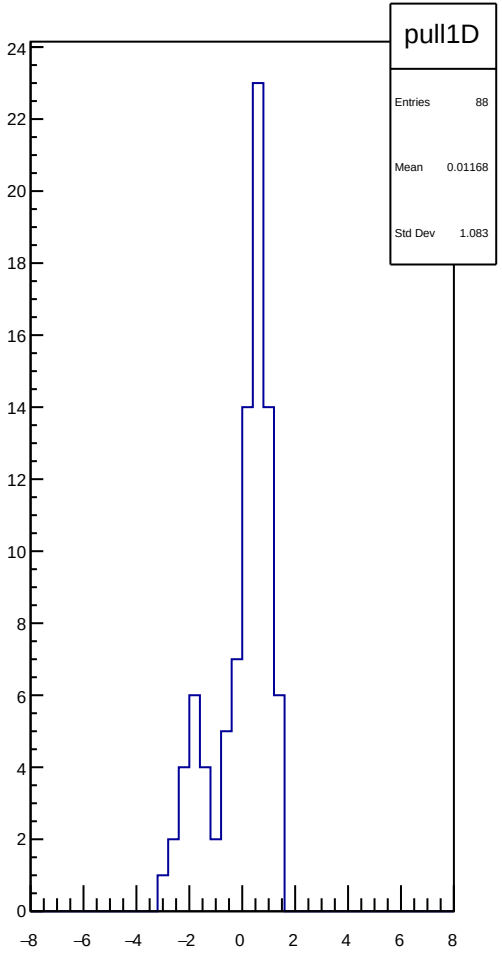

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 332.6 / 87
p0 −54.07 ± 0.5676
pull
Entries 88
Mean 2153
Std Dev 2104
pull1D
Entries 88
Mean 0.01968
Std Dev 1.944

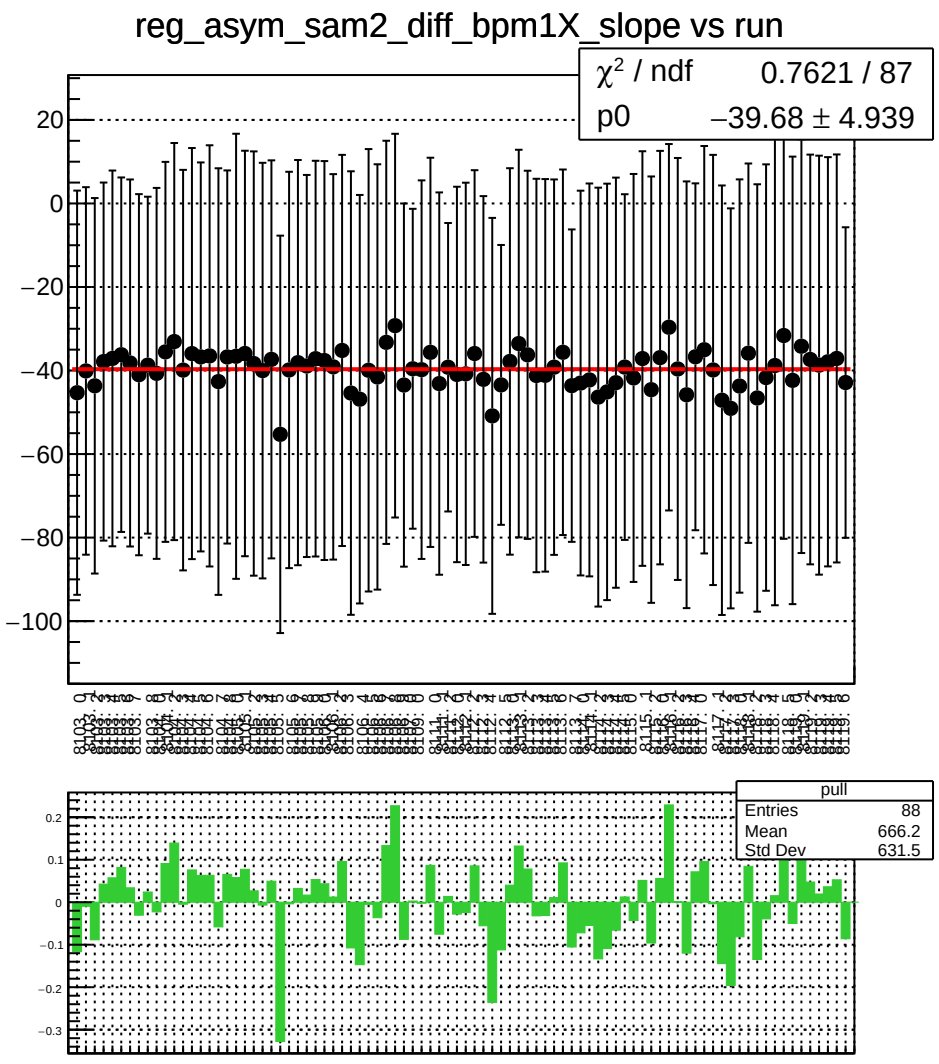

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 19.49 / 87
p0 −4.569 ± 0.3586
pull
Entries 88
Mean 1262
Std Dev 1210

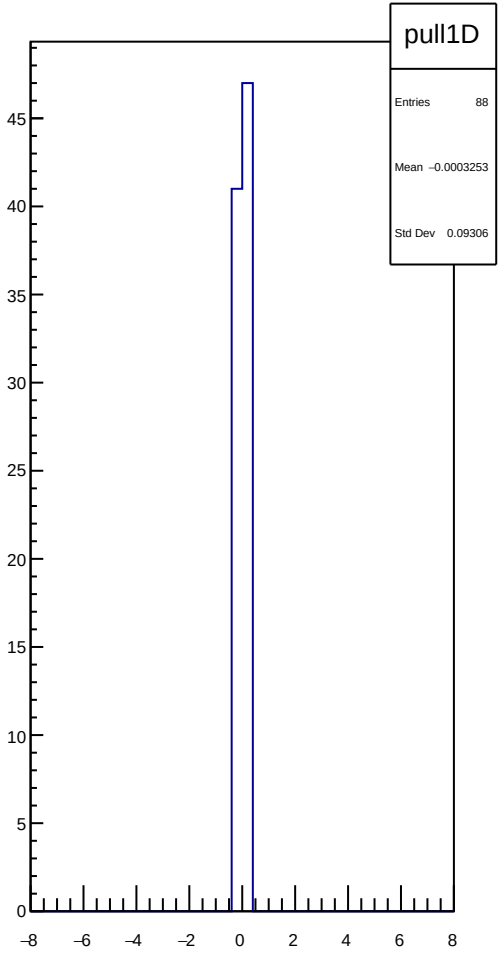

pull1D
Entries 88
Mean −0.00609
Std Dev 0.4705

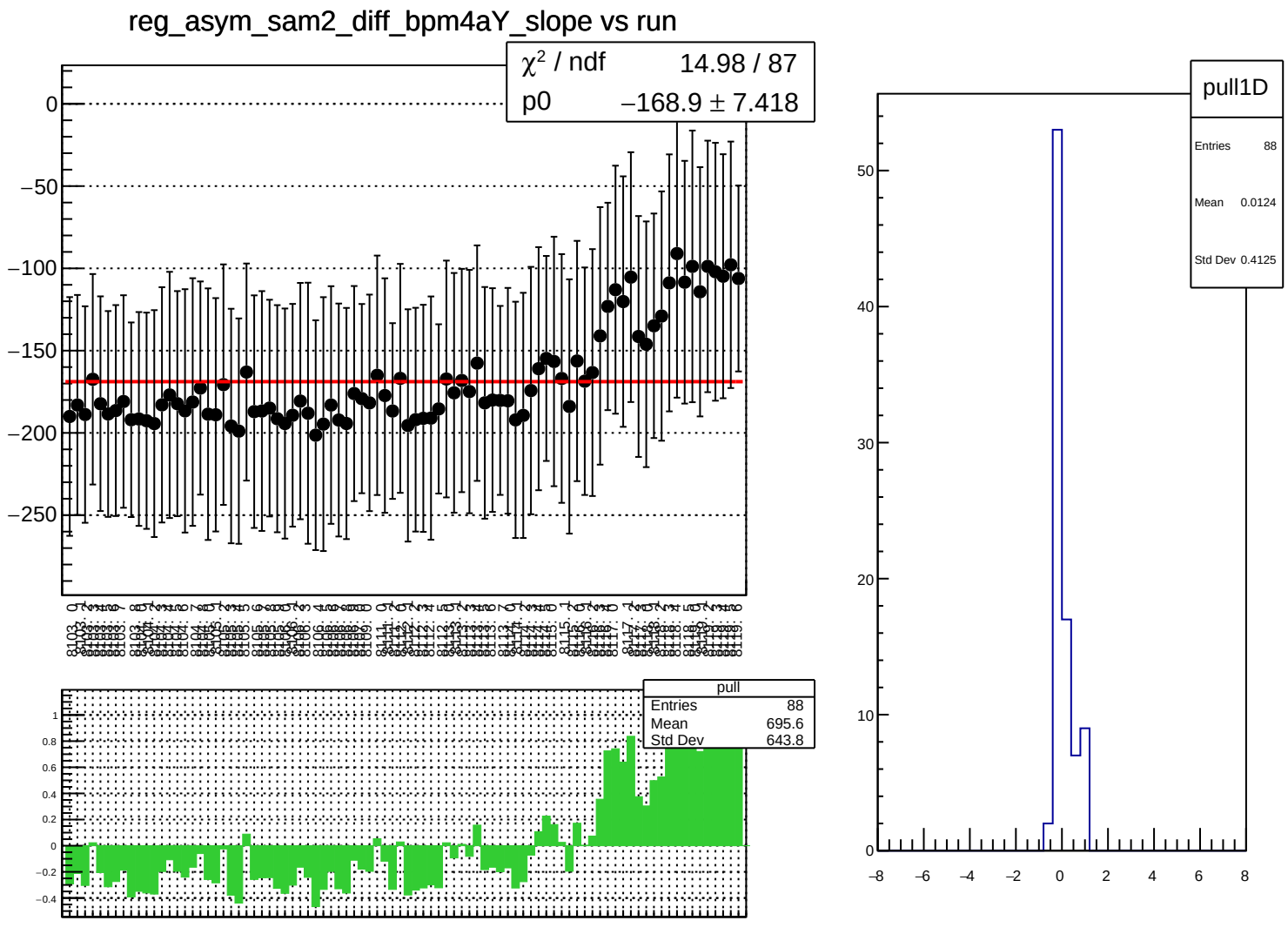

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 304.9 / 87
p0 10.15 ± 0.607
pull
Entries 88
Mean 1553
Std Dev 1503
pull1D
Entries 88
Mean −0.02538
Std Dev 1.861

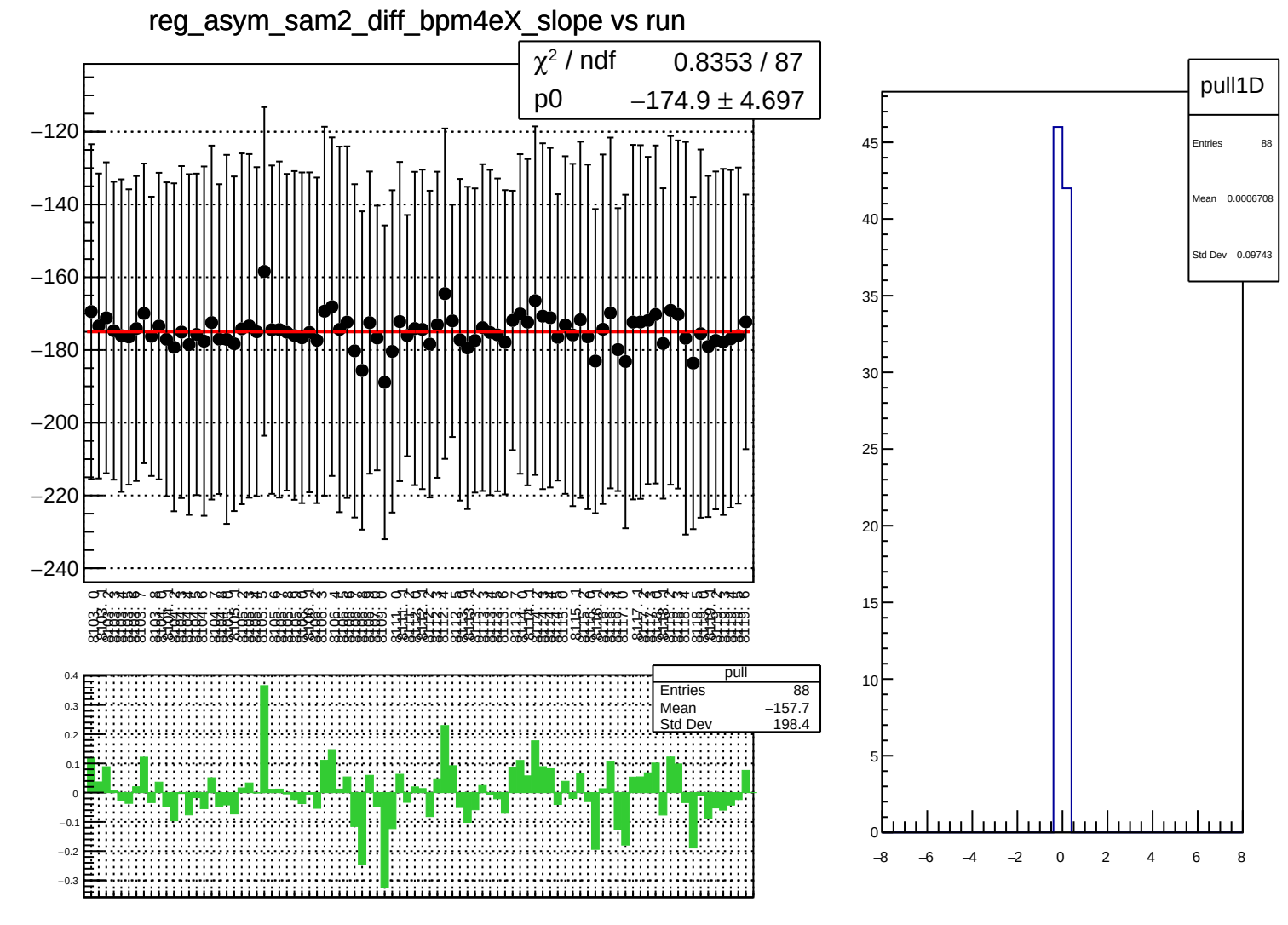

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 103.3 / 87
p0 0.4499 ± 0.02276
pull
Entries 88
Mean −1812
Std Dev 1862

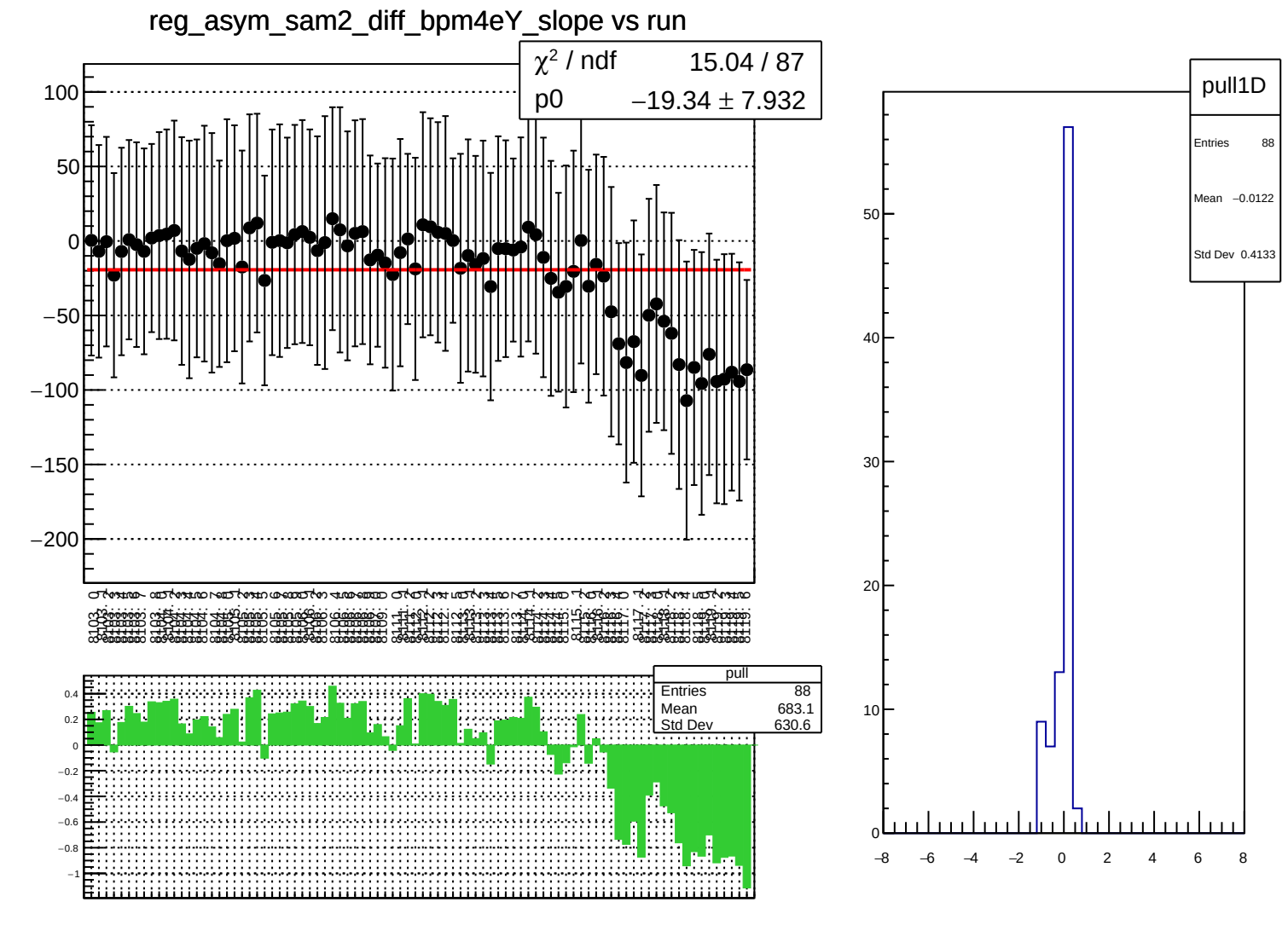

pull1D
Entries 88
Mean 0.01168
Std Dev 1.083

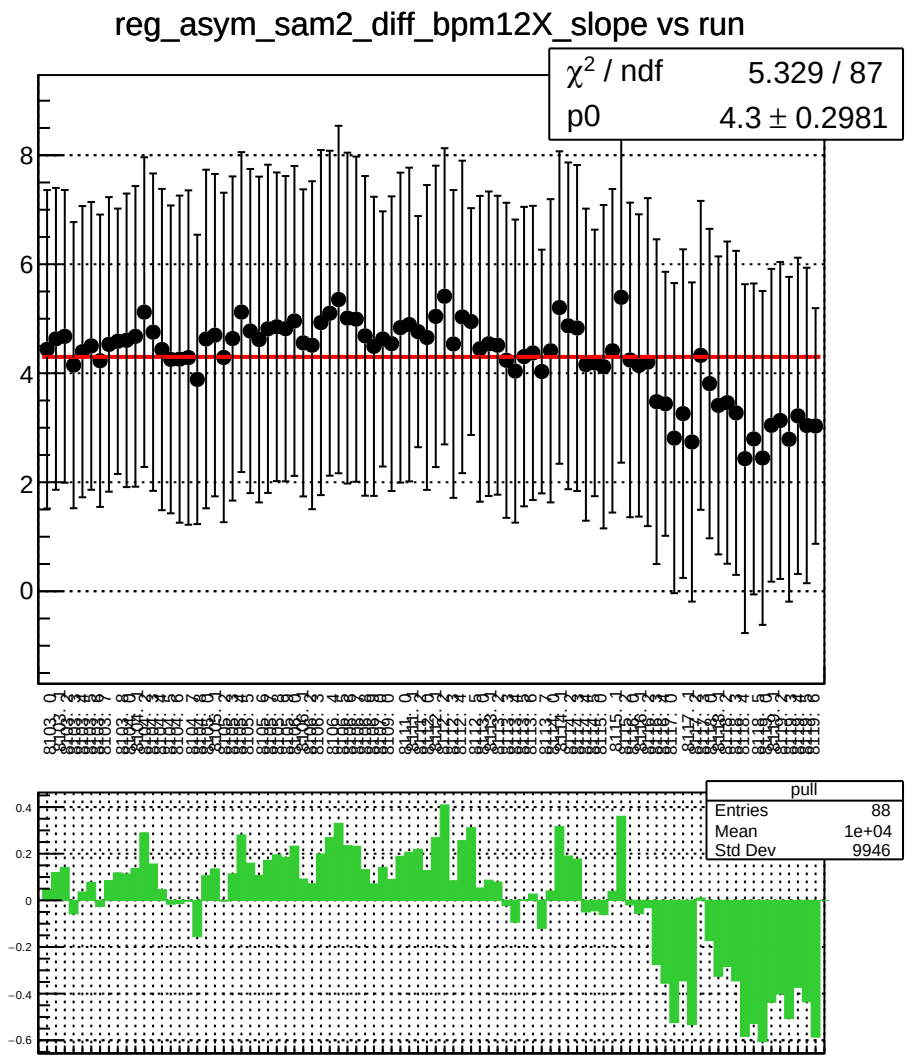

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 0.7621 / 87
p0 −39.68 ± 4.939
pull
Entries 88
Mean 666.2
Std Dev 631.5

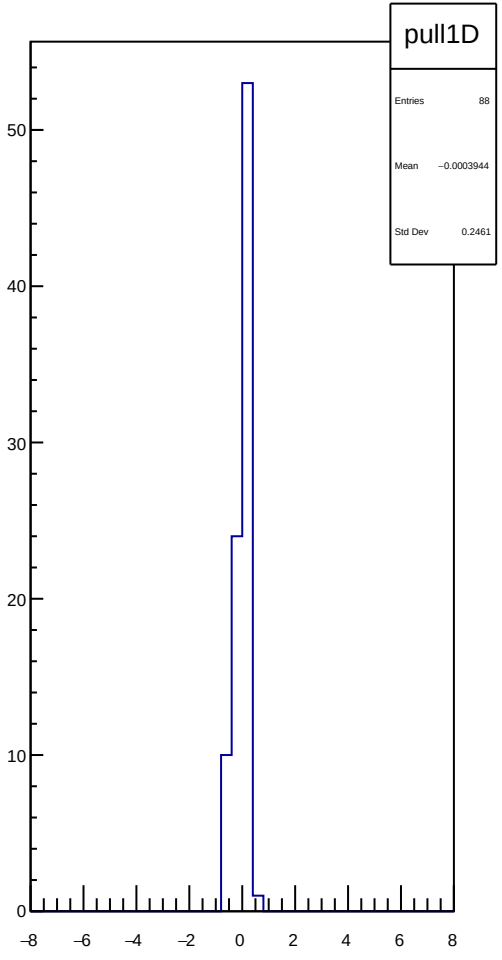

pull1D
Entries 88
Mean −0.0003253
Std Dev 0.09306

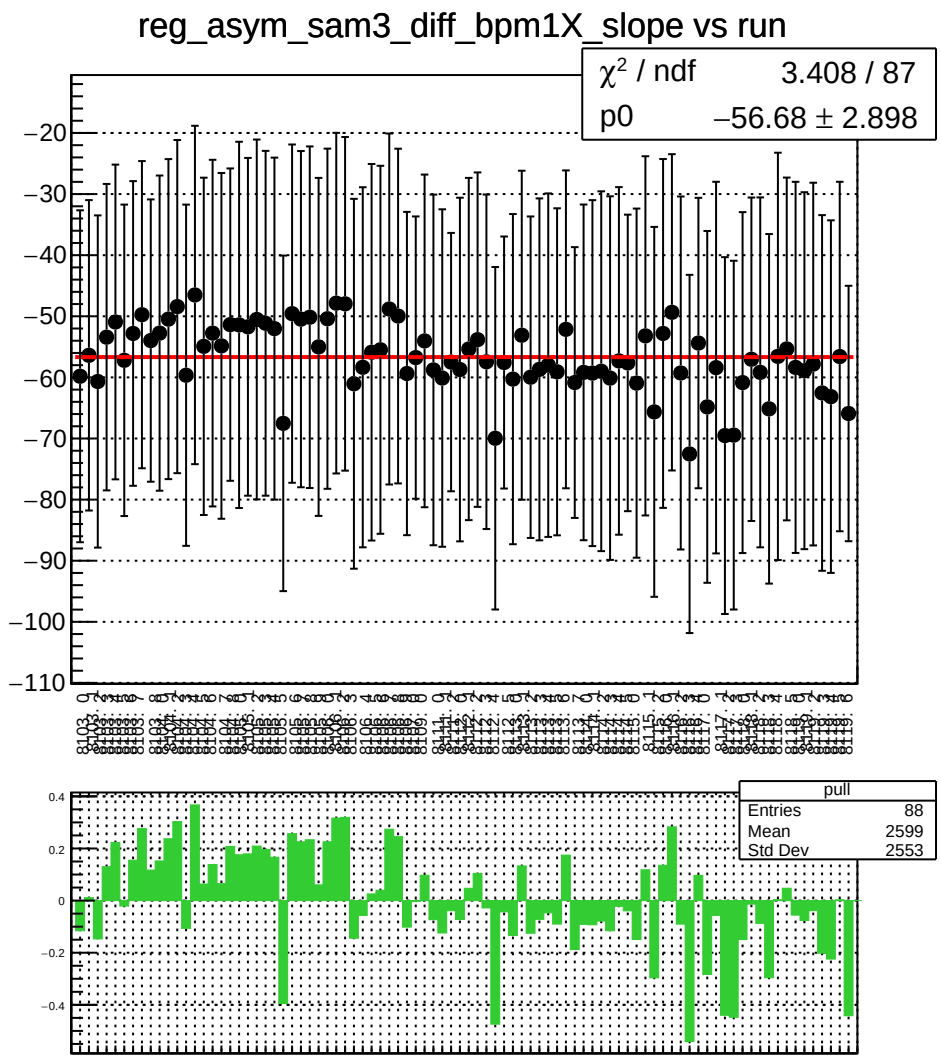

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 14.98 / 87
p0 −168.9 ± 7.418
0
−50
−100
−150
−200
−250
pull
Entries 88
Mean 695.6
Std Dev 643.8
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 88
Mean 0.0124
Std Dev 0.4125
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

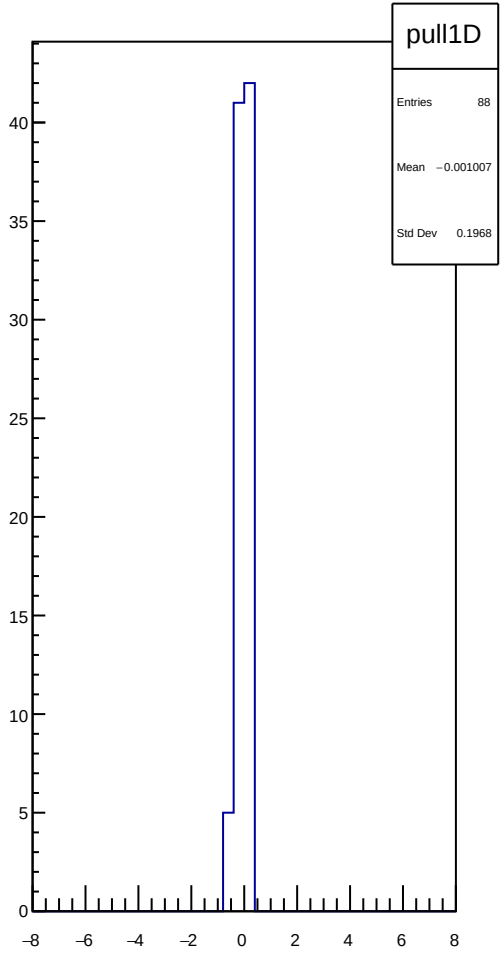

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 0.8353 / 87
p0 −174.9 ± 4.697
pull
Entries 88
Mean −157.7
Std Dev 198.4
pull1D
Entries 88
Mean 0.0006708
Std Dev 0.09743

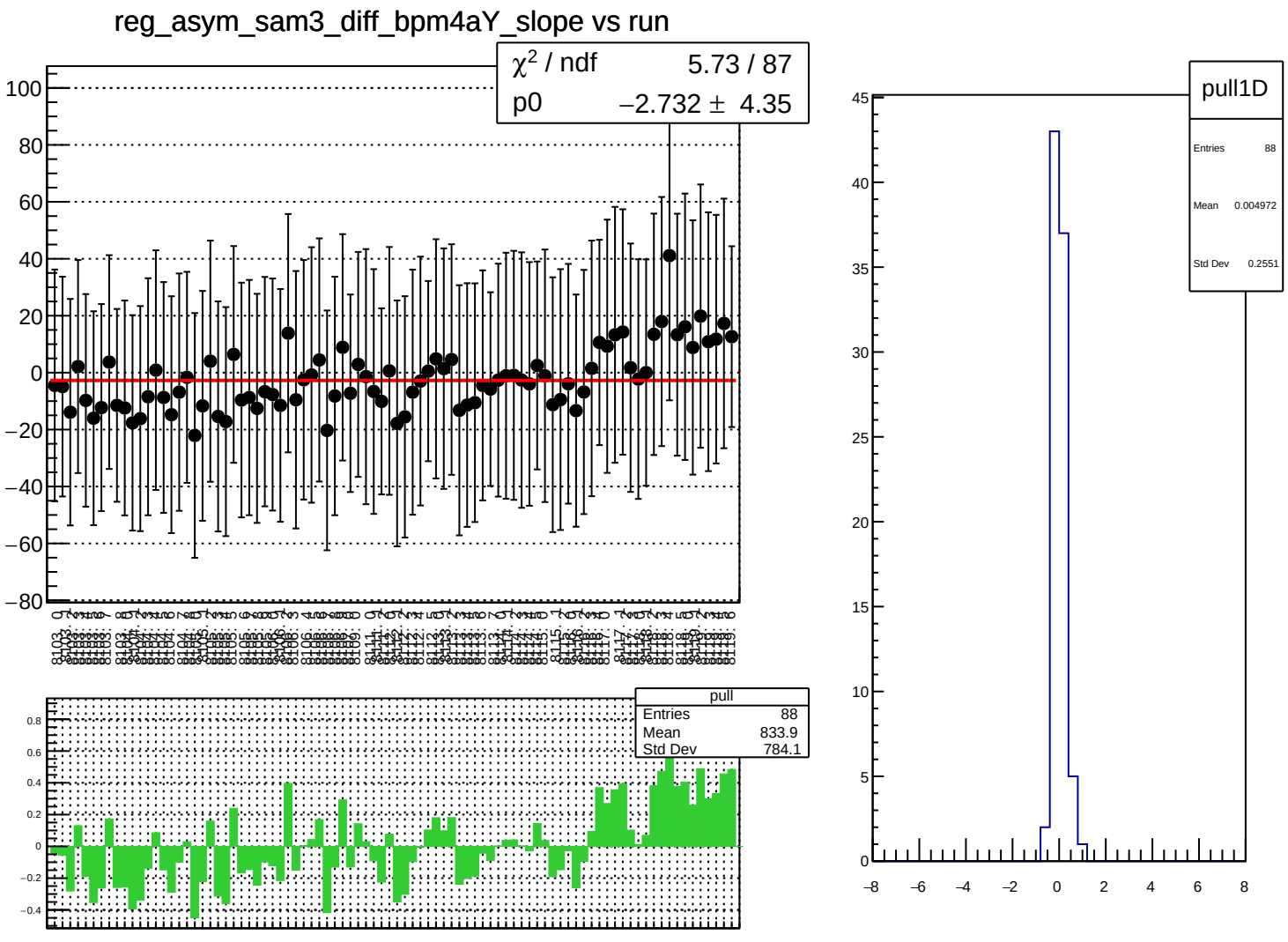

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 15.04 / 87
p0 −19.34 ± 7.932
pull
Entries 88
Mean 683.1
Std Dev 630.6
pull1D
Entries 88
Mean −0.0122
Std Dev 0.4133

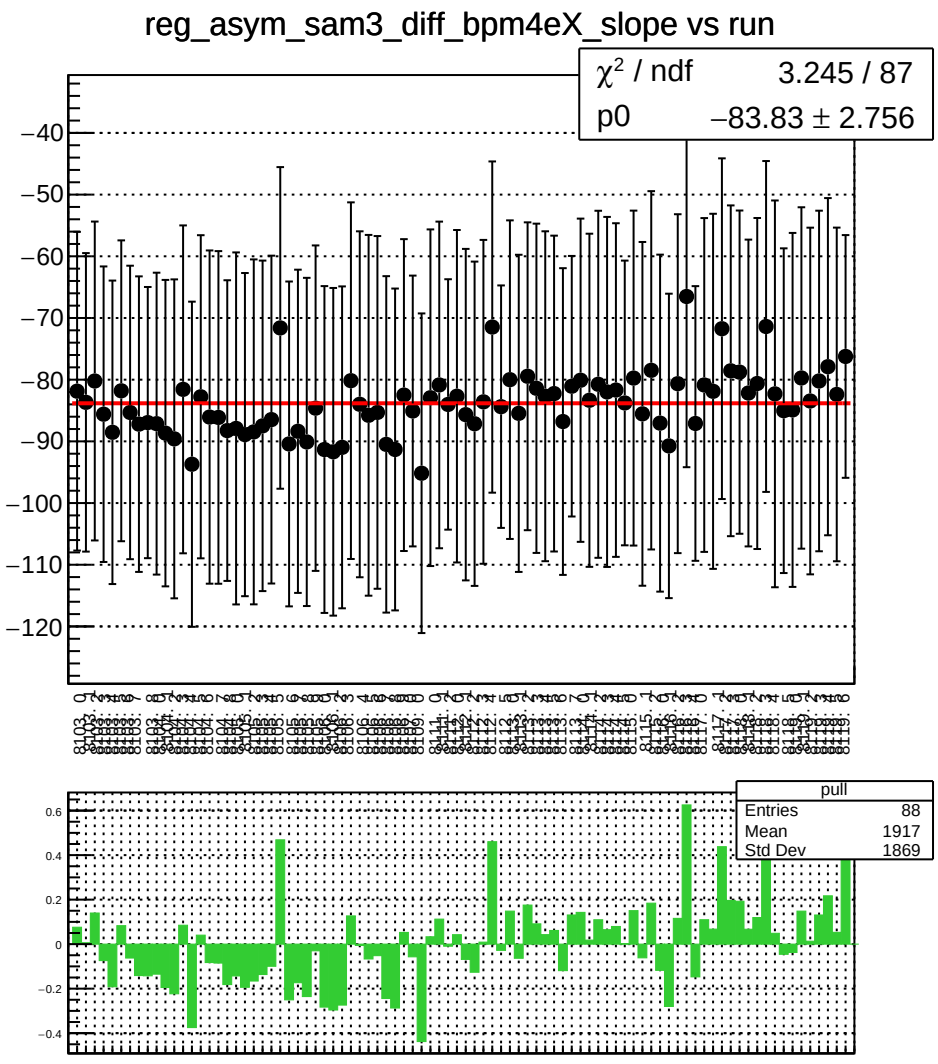

reg_asym_sam2_diff_bpm12X_slope vs run
χ^2 / ndf 5.329 / 87
p0 4.3 ± 0.2981
pull
Entries 88
Mean 1e+04
Std Dev 9946

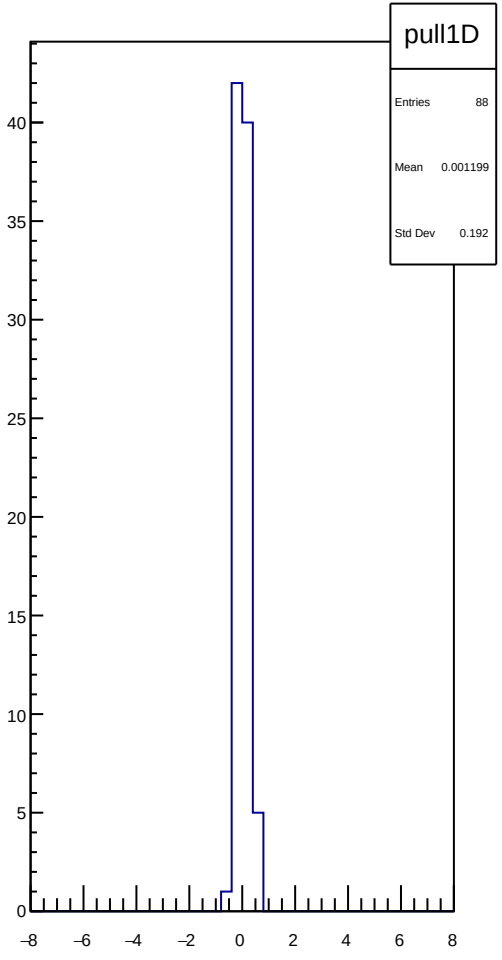

pull1D
Entries 88
Mean −0.0003944
Std Dev 0.2461

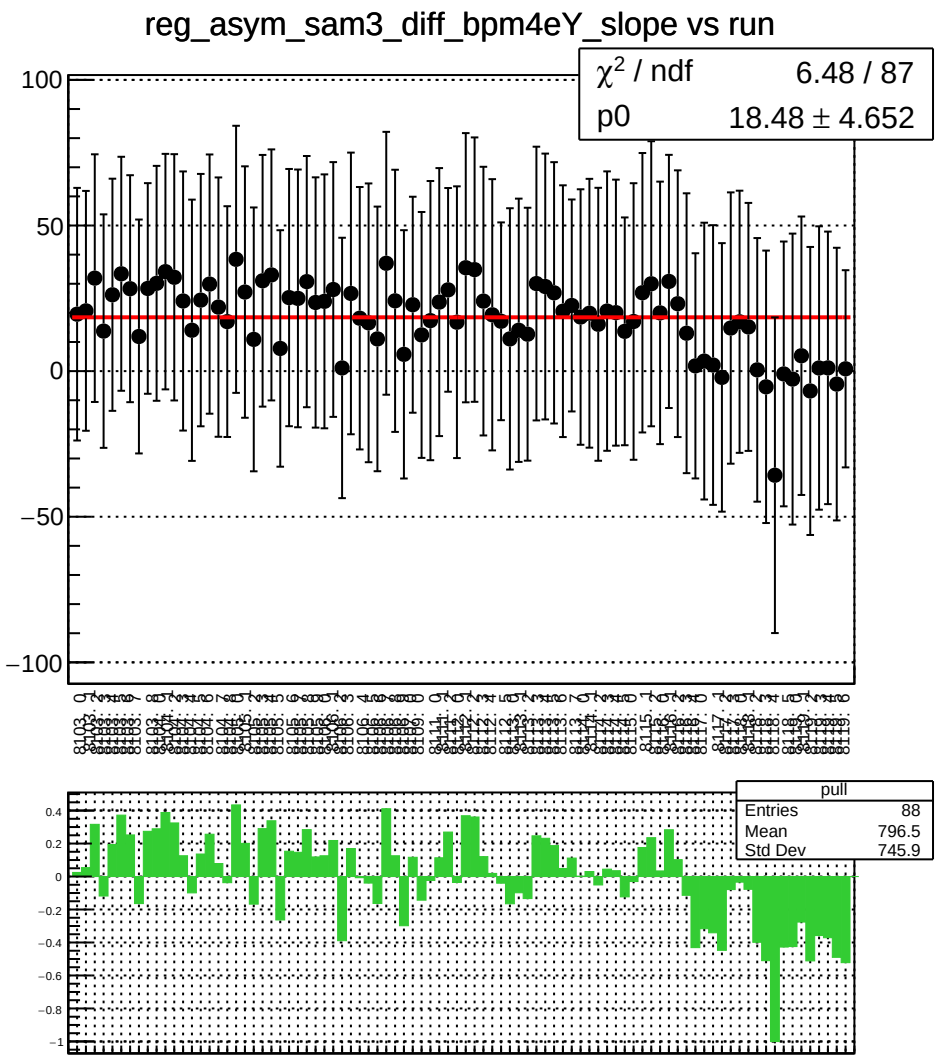

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 3.408 / 87
p0 −56.68 ± 2.898
pull
Entries 88
Mean 2599
Std Dev 2553

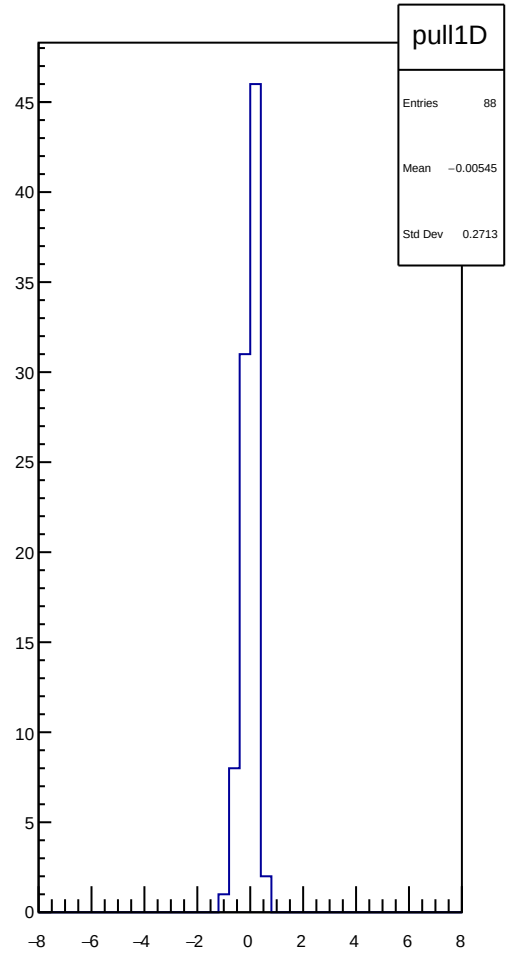

pull1D
Entries 88
Mean −0.001007
Std Dev 0.1968

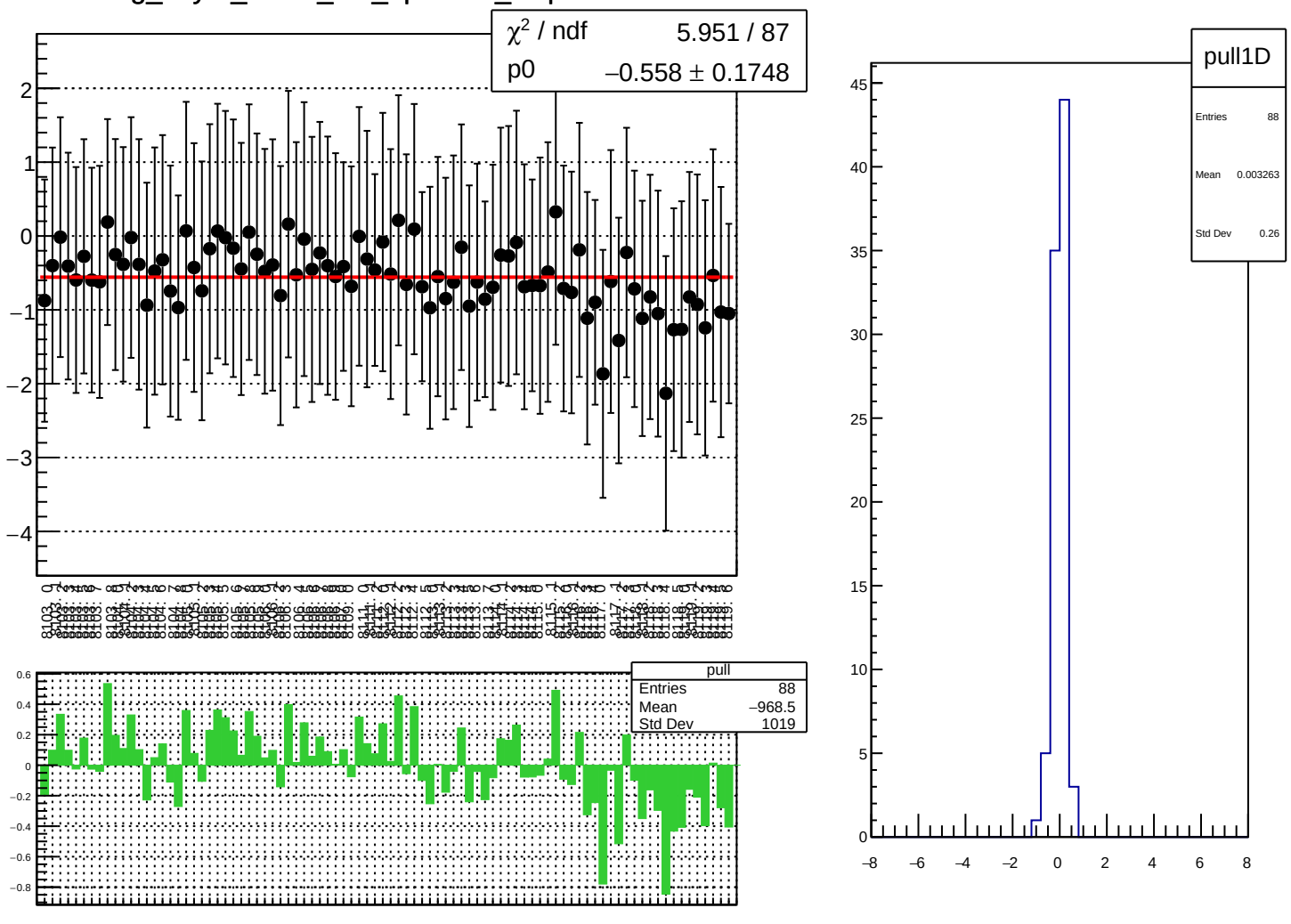

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 5.73 / 87
p0 −2.732 ± 4.35
pull
Entries 88
Mean 833.9
Std Dev 784.1
pull1D
Entries 88
Mean 0.004972
Std Dev 0.2551

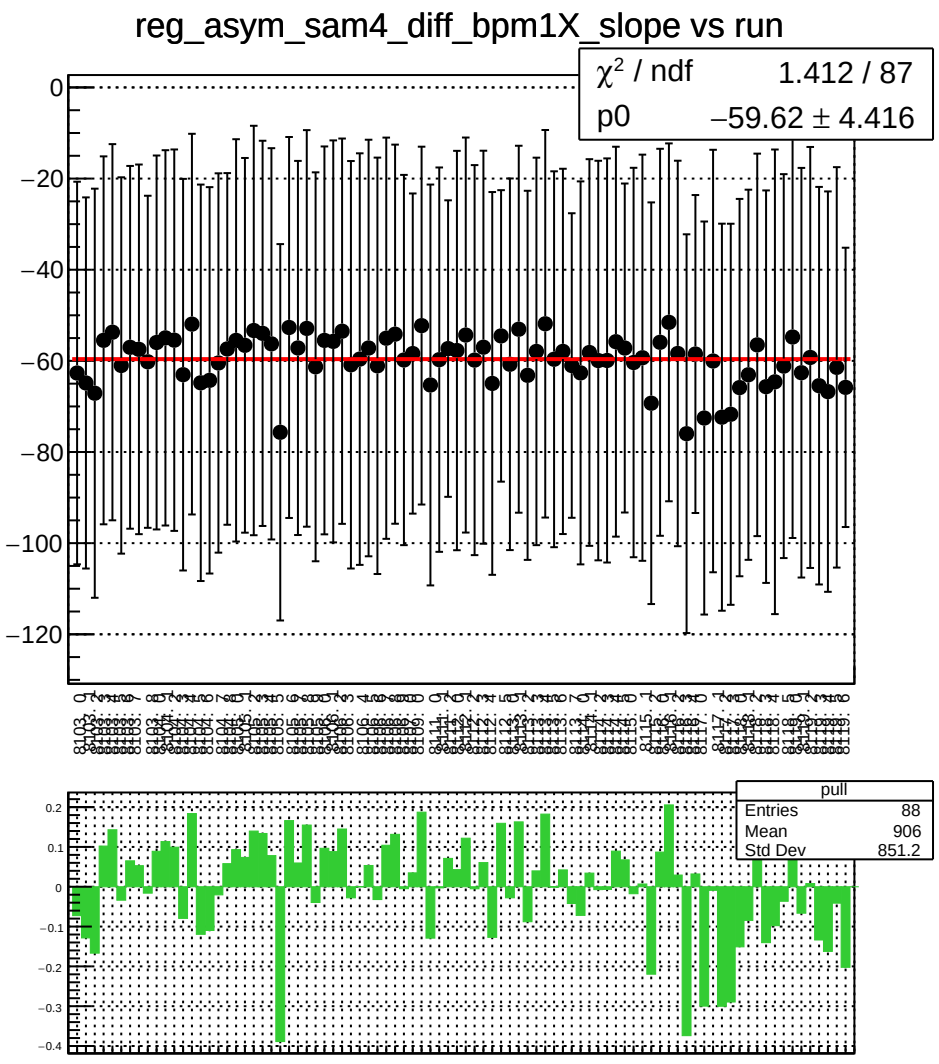

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 3.245 / 87
p0 −83.83 ± 2.756
pull
Entries 88
Mean 1917
Std Dev 1869

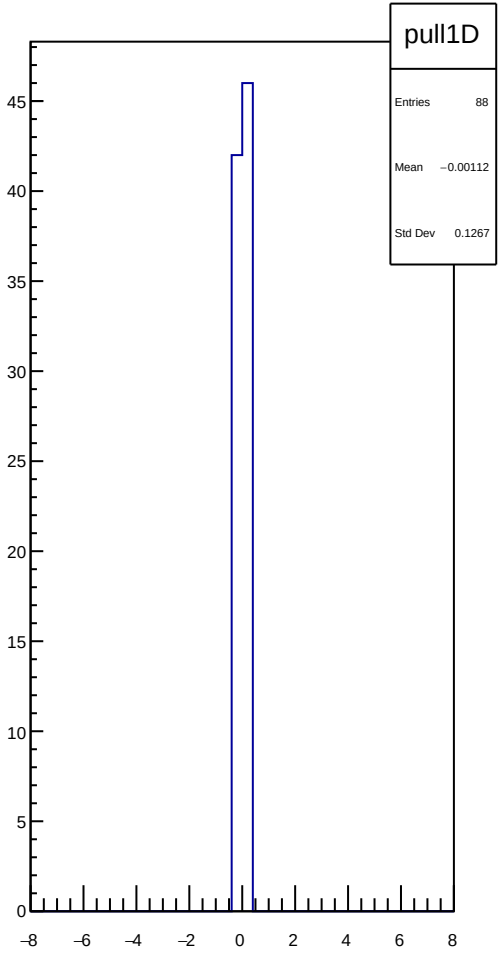

pull1D
Entries 88
Mean 0.001199
Std Dev 0.192

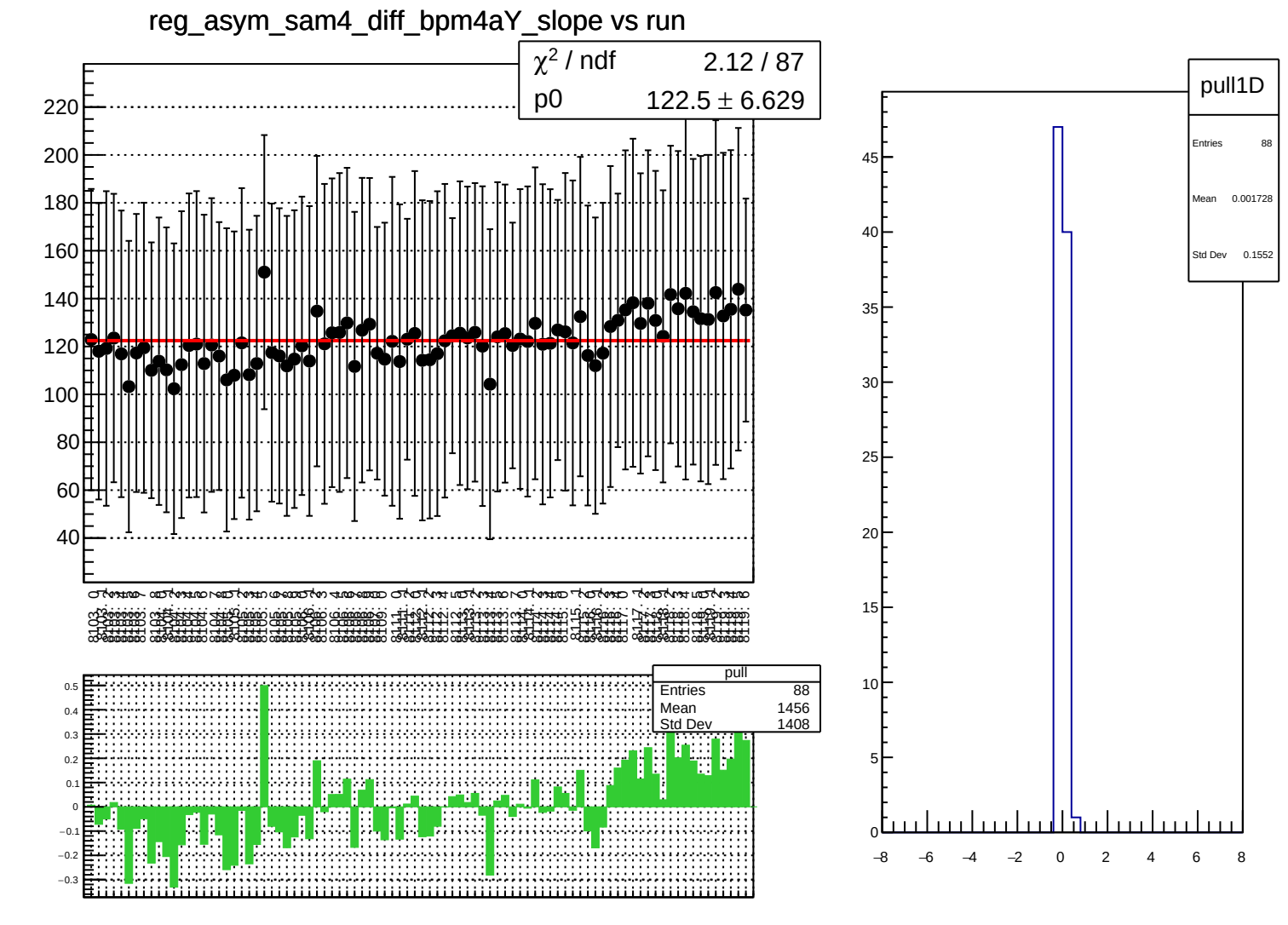

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 6.48 / 87
p0 18.48 ± 4.652
pull
Entries 88
Mean 796.5
Std Dev 745.9

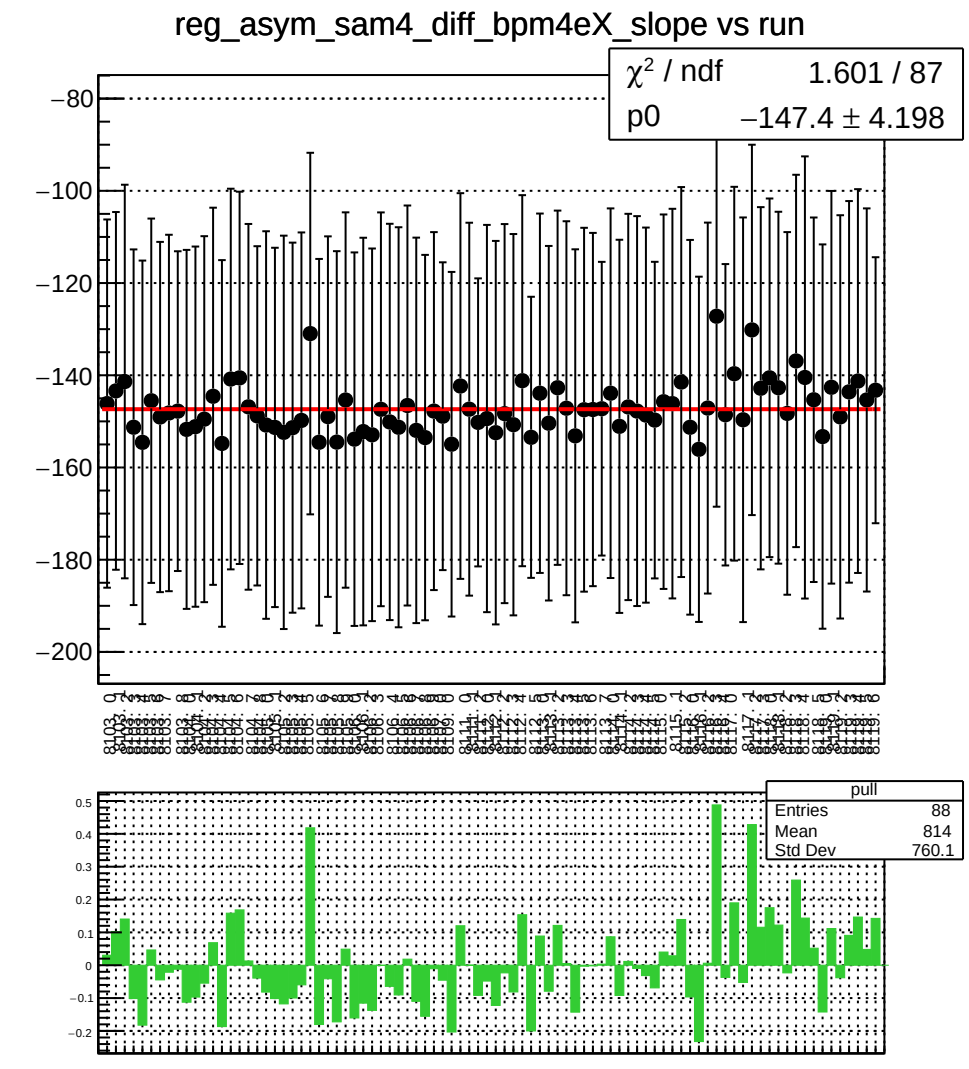

pull1D
Entries 88
Mean −0.00545
Std Dev 0.2713

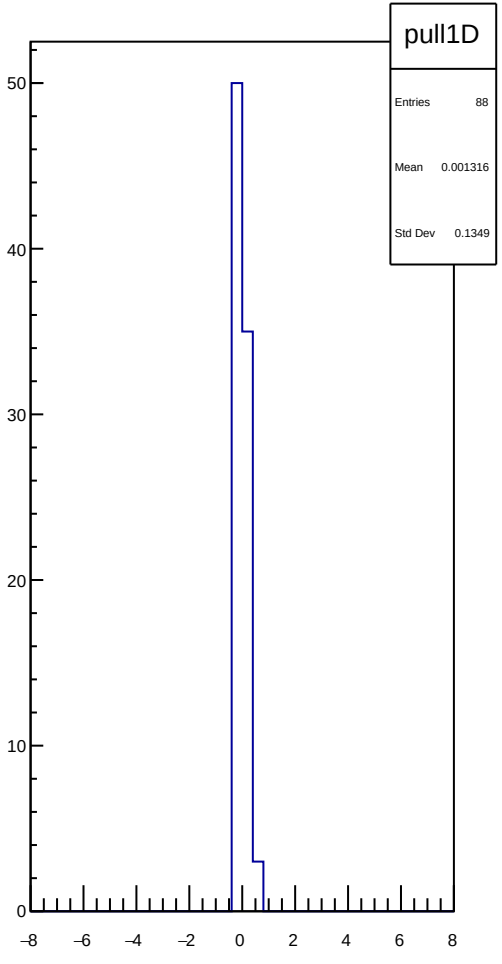

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 5.951 / 87
p0 −0.558 ± 0.1748
pull
Entries 88
Mean −968.5
Std Dev 1019
pull1D
Entries 88
Mean 0.003263
Std Dev 0.26

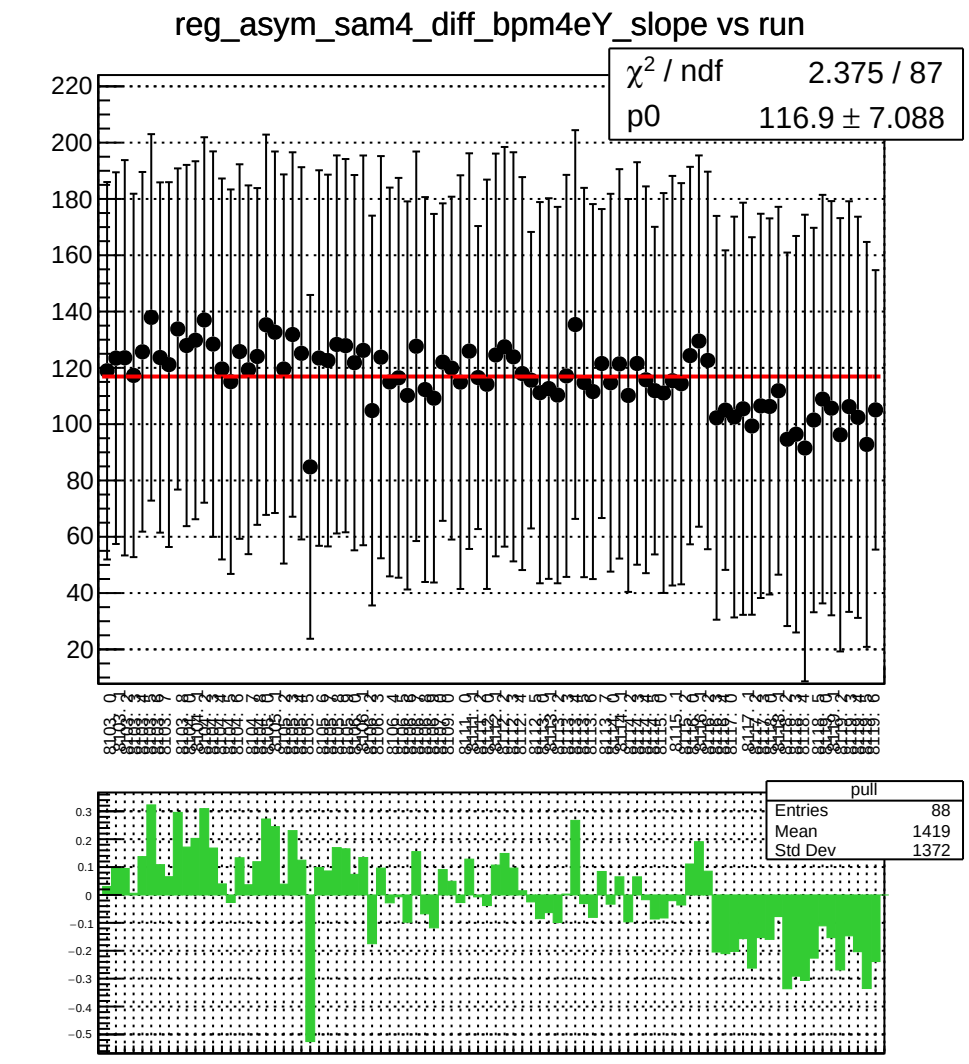

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 1.412 / 87
p0 −59.62 ± 4.416
pull
Entries 88
Mean 906
Std Dev 851.2

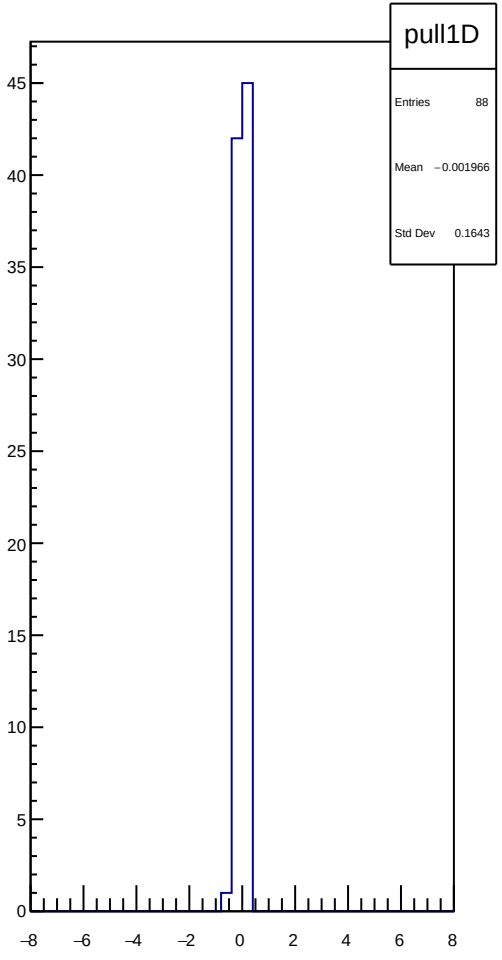

pull1D
Entries 88
Mean −0.00112
Std Dev 0.1267

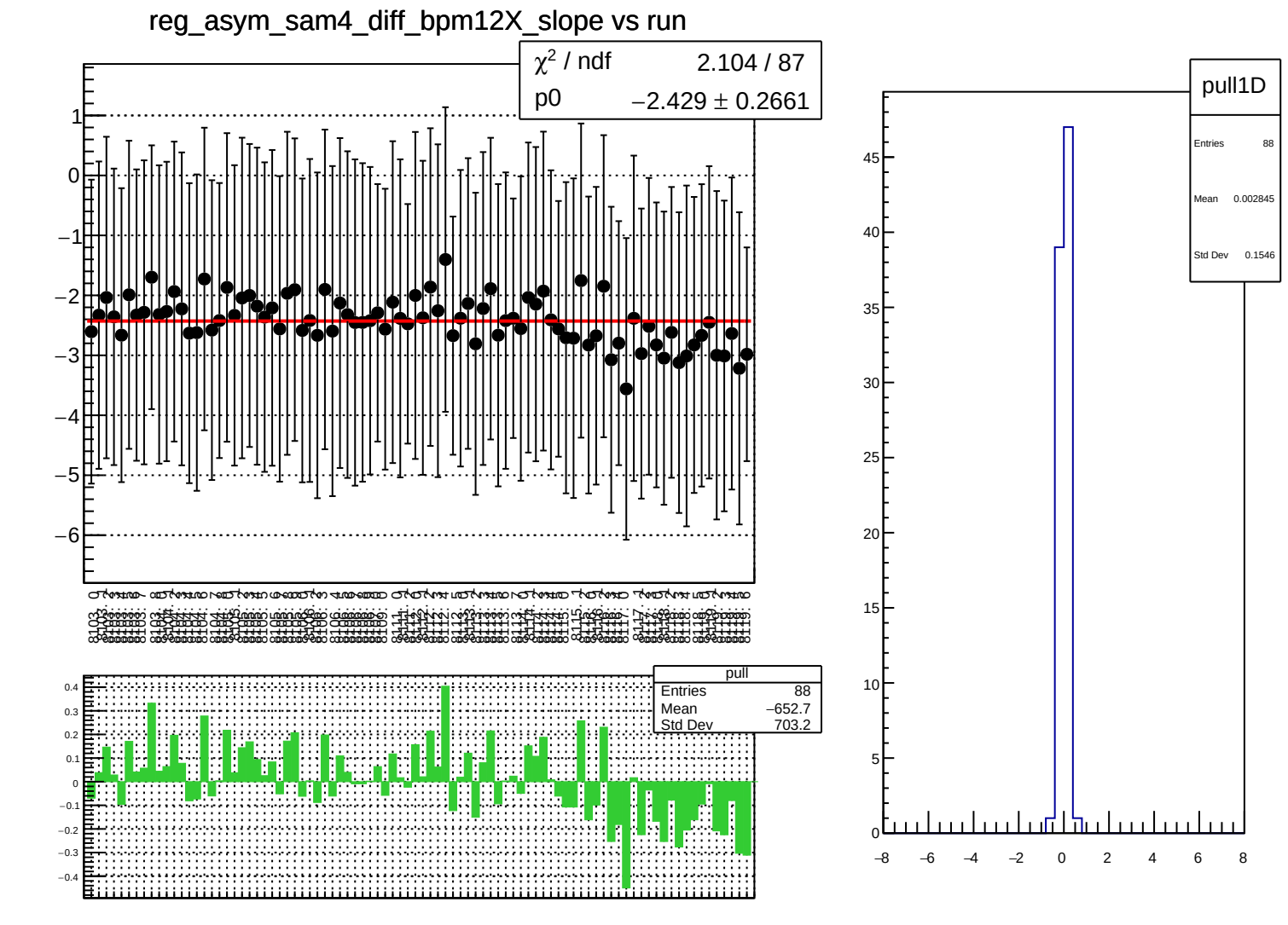

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 2.12 / 87
p0 122.5 ± 6.629
pull
Entries 88
Mean 1456
Std Dev 1408
pull1D
Entries 88
Mean 0.001728
Std Dev 0.1552

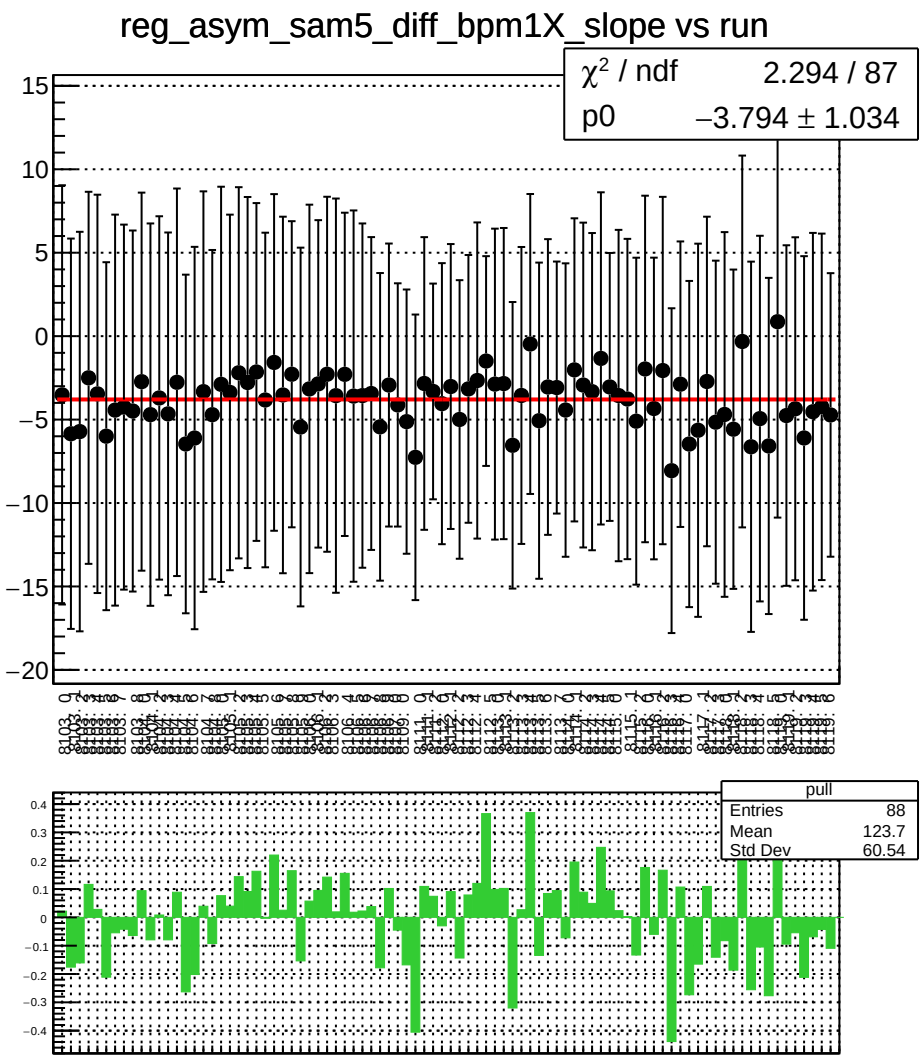

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 1.601 / 87
p0 −147.4 ± 4.198
pull
Entries 88
Mean 814
Std Dev 760.1

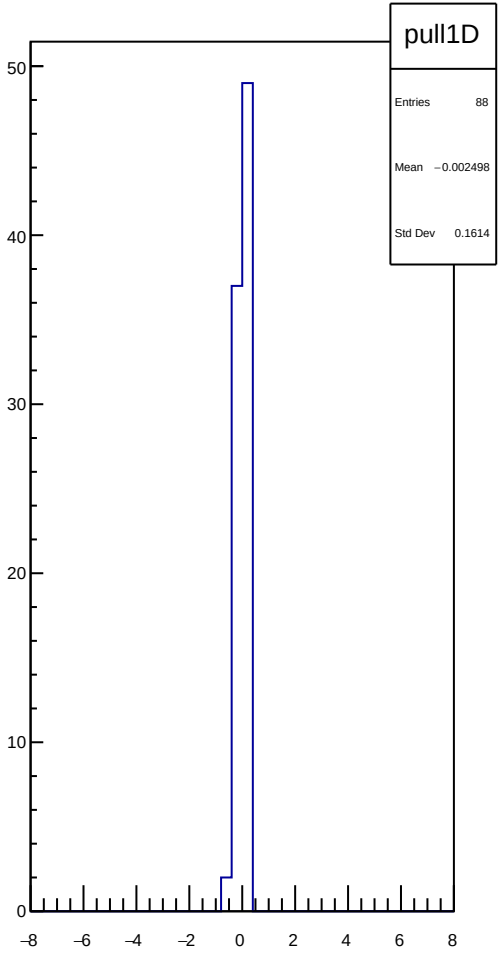

pull1D
Entries 88
Mean 0.001316
Std Dev 0.1349

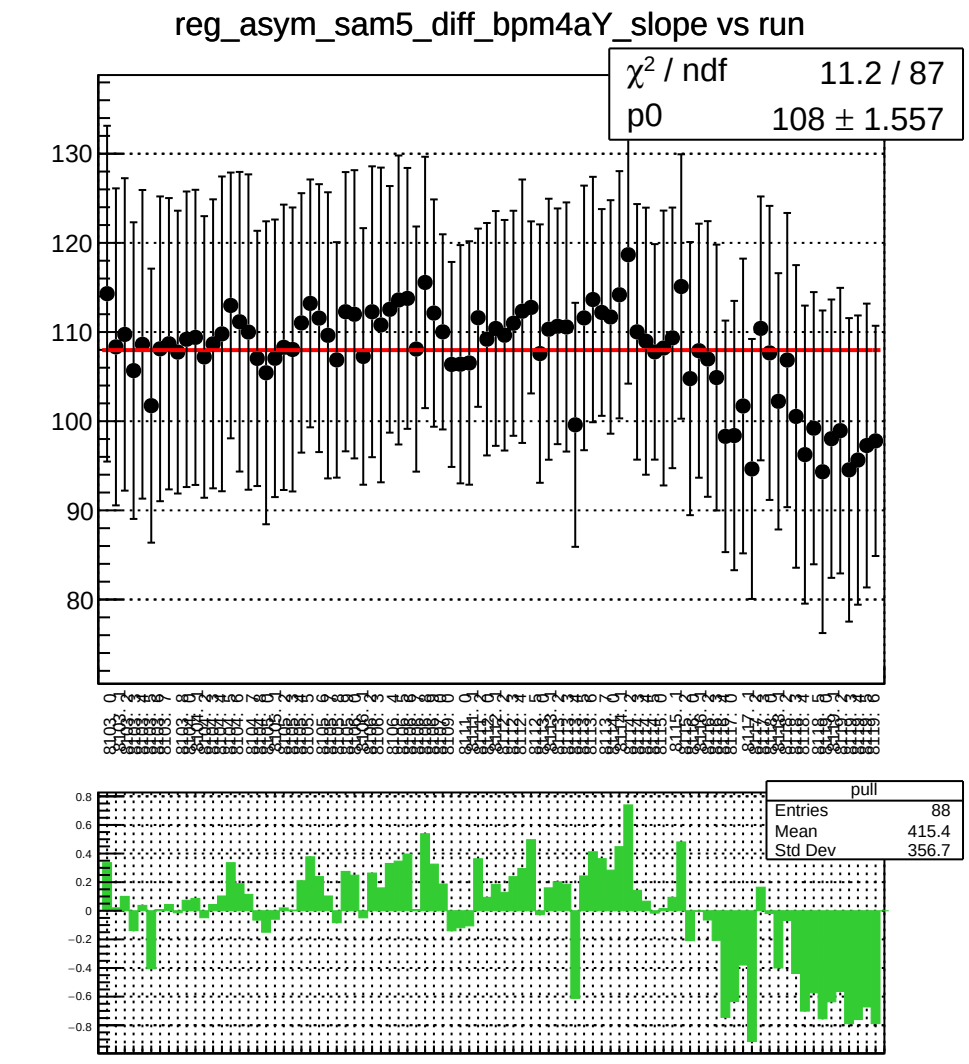

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 2.375 / 87
p0 116.9 ± 7.088
pull
Entries 88
Mean 1419
Std Dev 1372

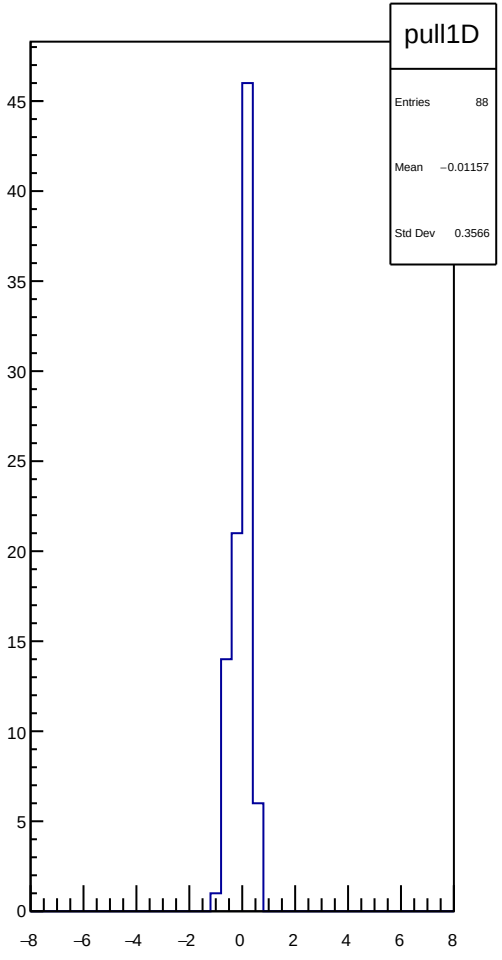

pull1D
Entries 88
Mean −0.001966
Std Dev 0.1643

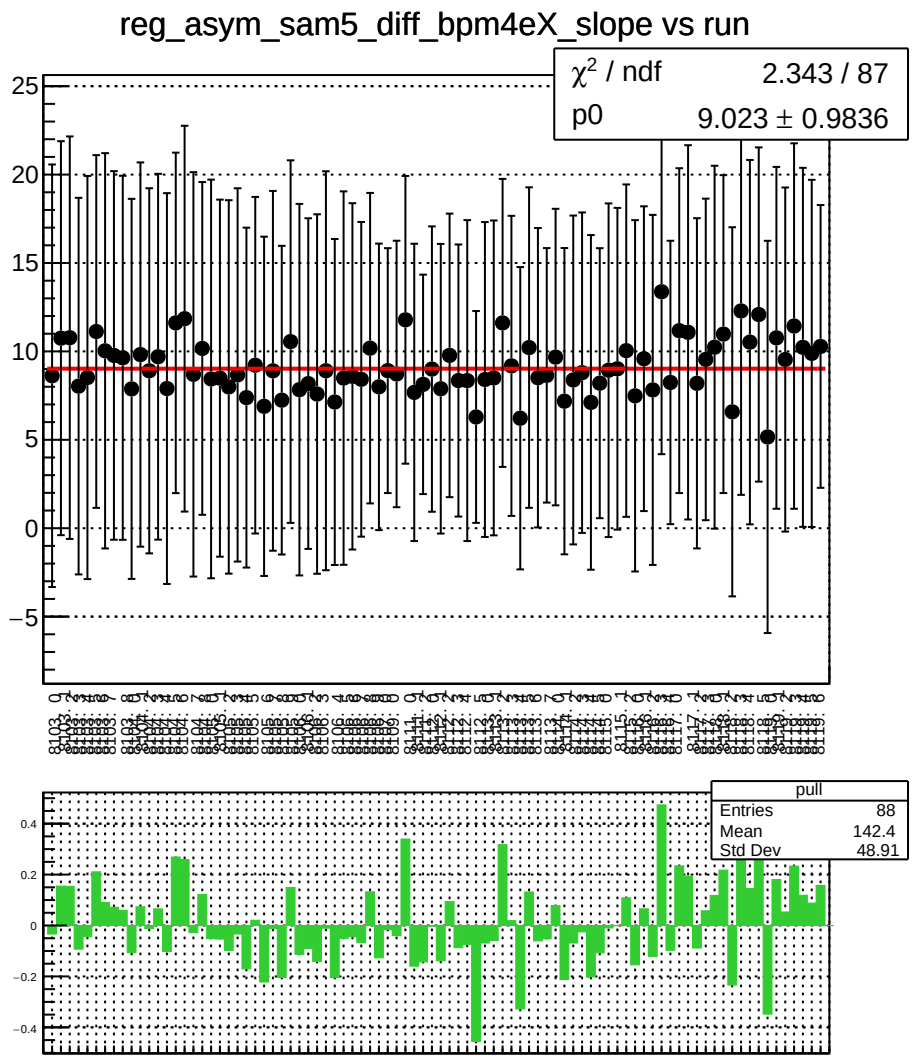

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 2.104 / 87
p0 −2.429 ± 0.2661
pull
Entries 88
Mean −652.7
Std Dev 703.2
pull1D
Entries 88
Mean 0.002845
Std Dev 0.1546

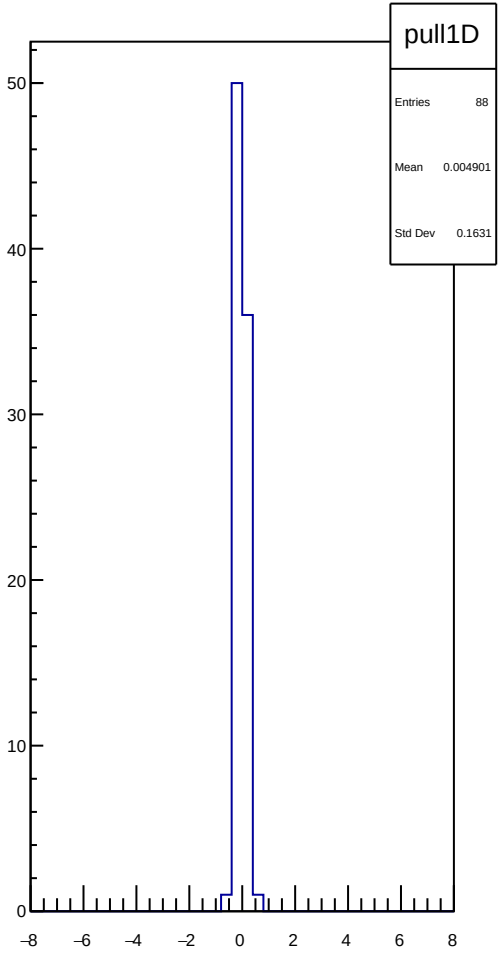

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 2.294 / 87
p0 −3.794 ± 1.034
pull
Entries 88
Mean 123.7
Std Dev 60.54

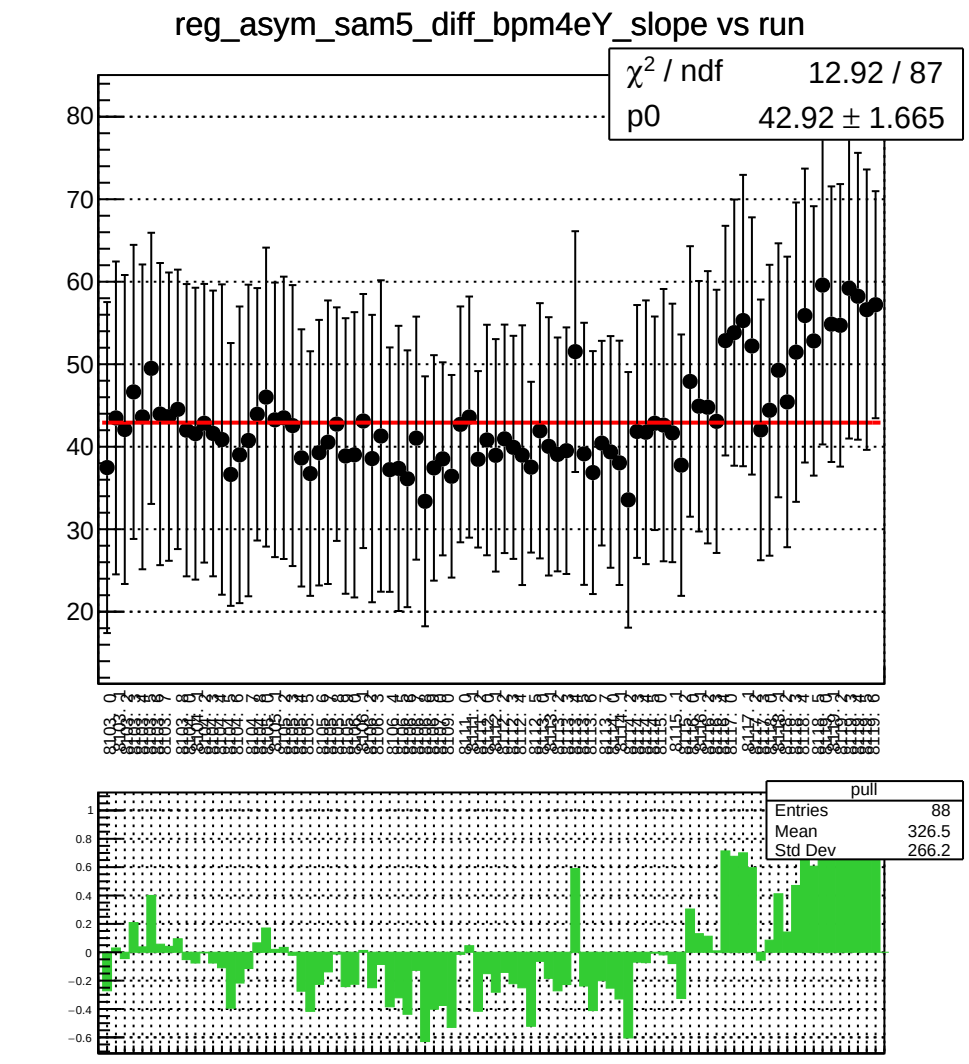

pull1D
Entries 88
Mean −0.002498
Std Dev 0.1614

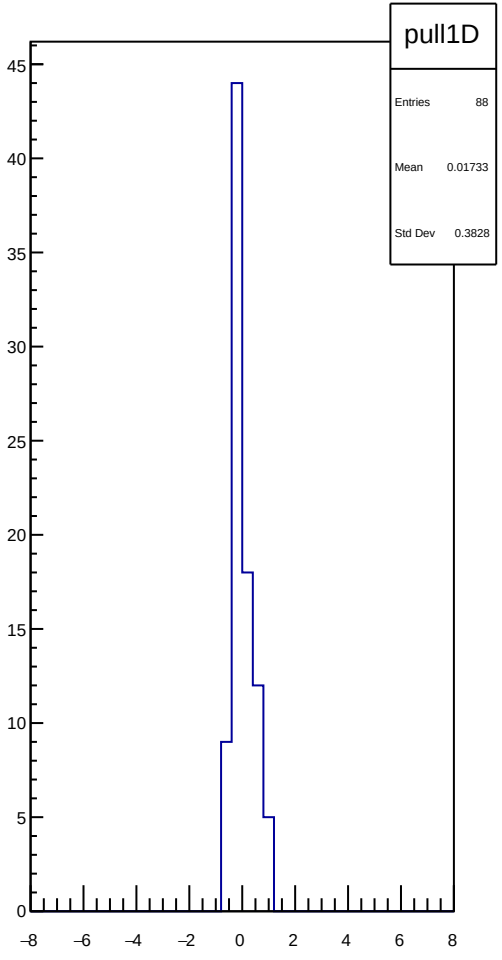

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 11.2 / 87
p0 108 ± 1.557
pull
Entries 88
Mean 415.4
Std Dev 356.7

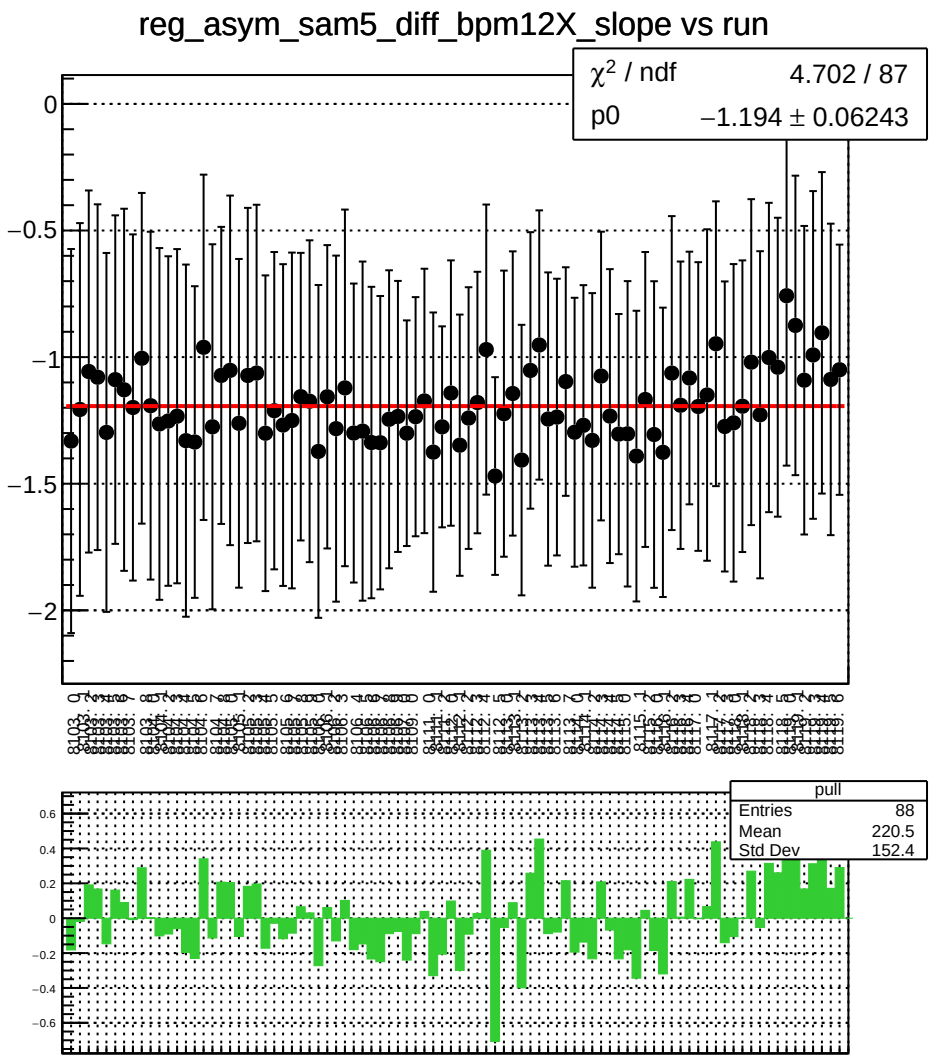

pull1D
Entries 88
Mean −0.01157
Std Dev 0.3566

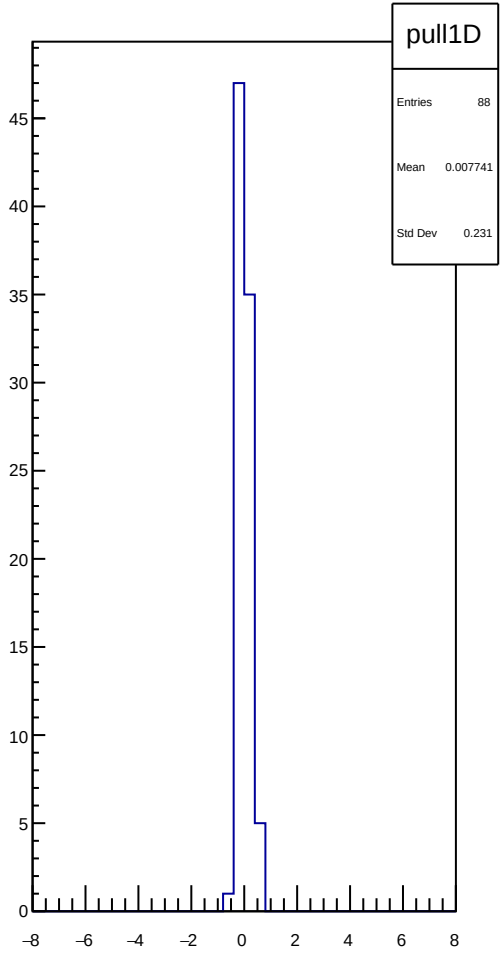

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 2.343 / 87
p0 9.023 ± 0.9836
pull
Entries 88
Mean 142.4
Std Dev 48.91

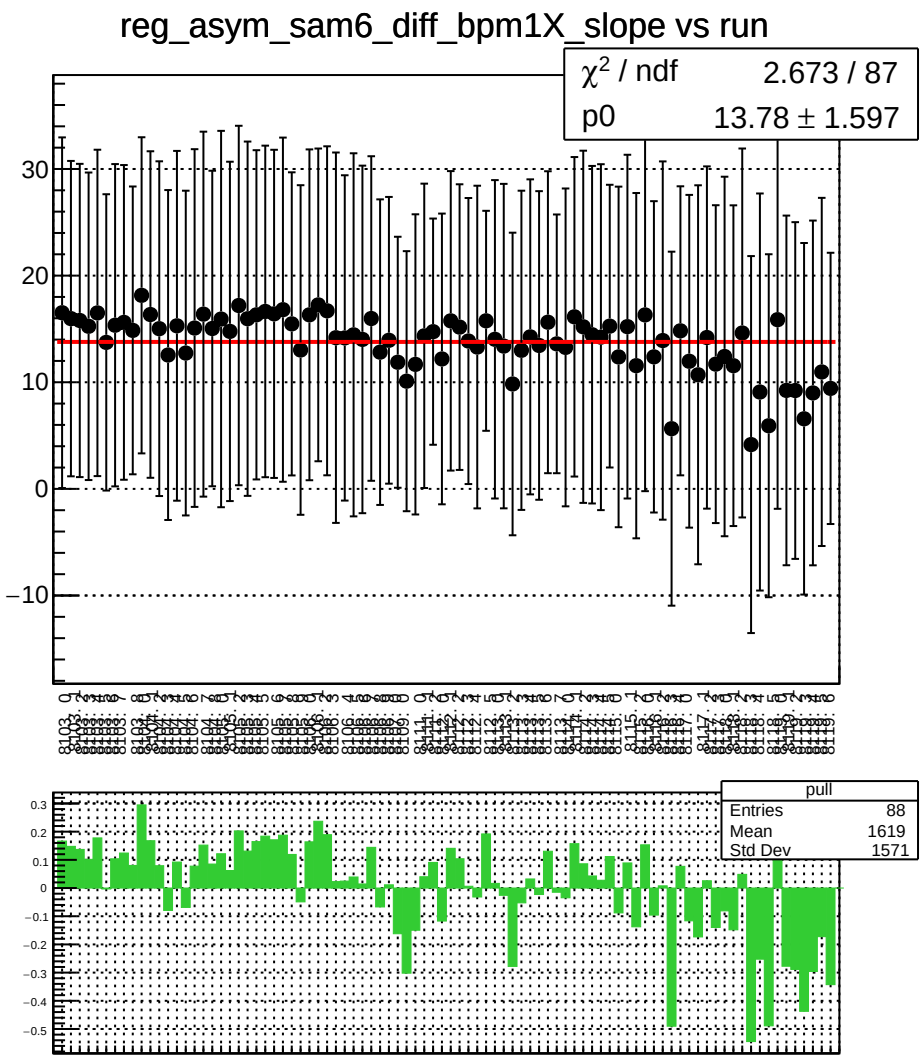

pull1D
Entries 88
Mean 0.004901
Std Dev 0.1631

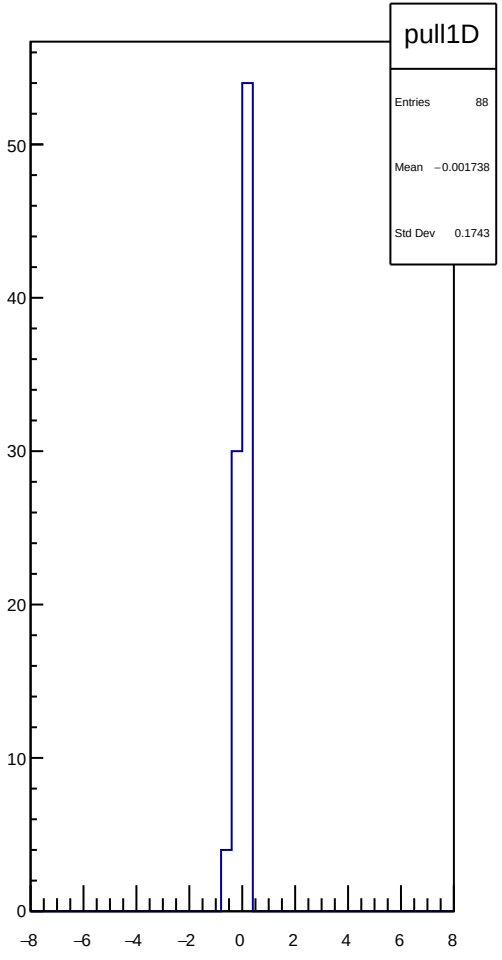

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 12.92 / 87
p0 42.92 ± 1.665
pull
Entries 88
Mean 326.5
Std Dev 266.2

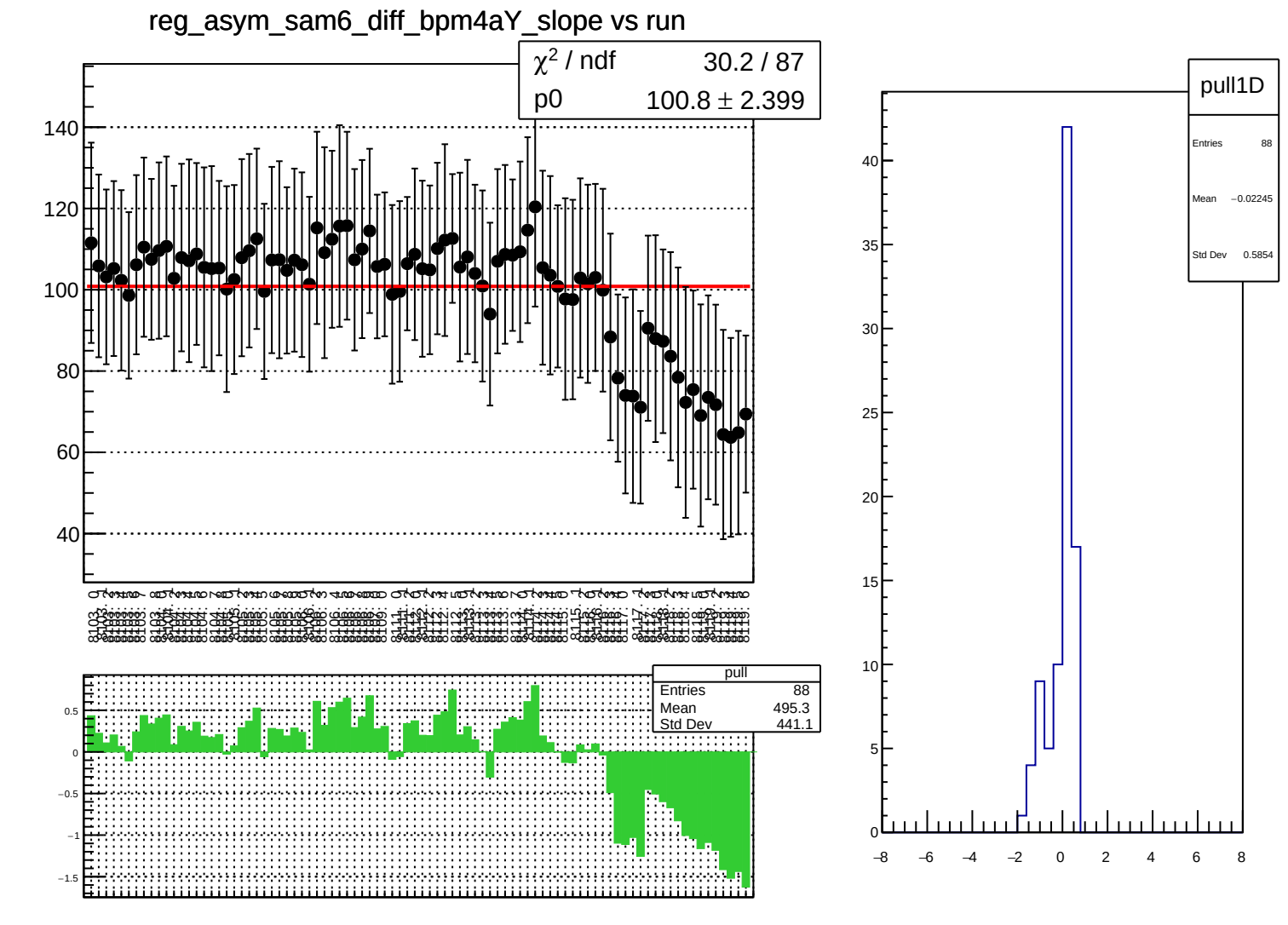

pull1D
Entries 88
Mean 0.01733
Std Dev 0.3828

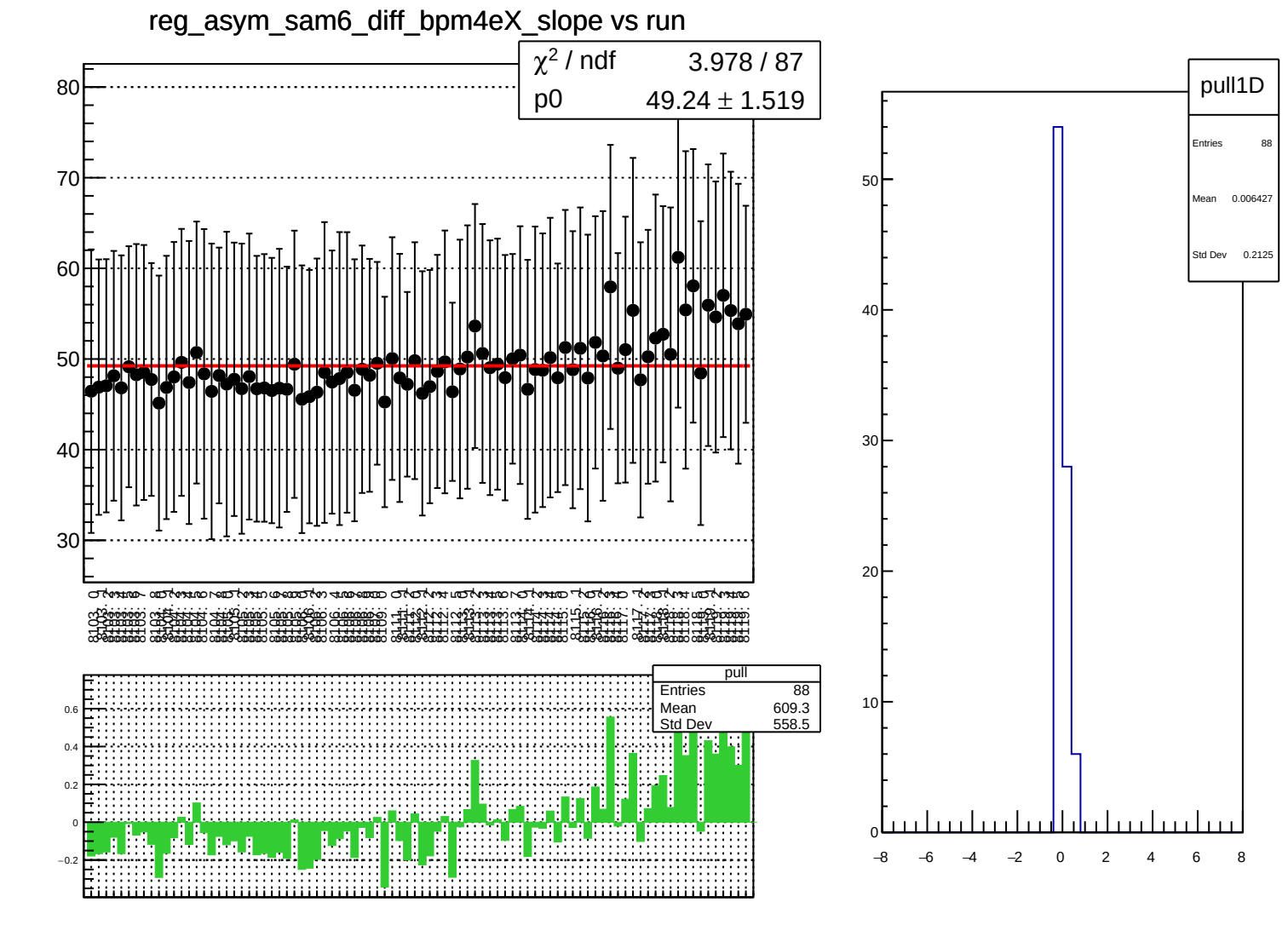

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 4.702 / 87
p0 −1.194 ± 0.06243
pull
Entries 88
Mean 220.5
Std Dev 152.4

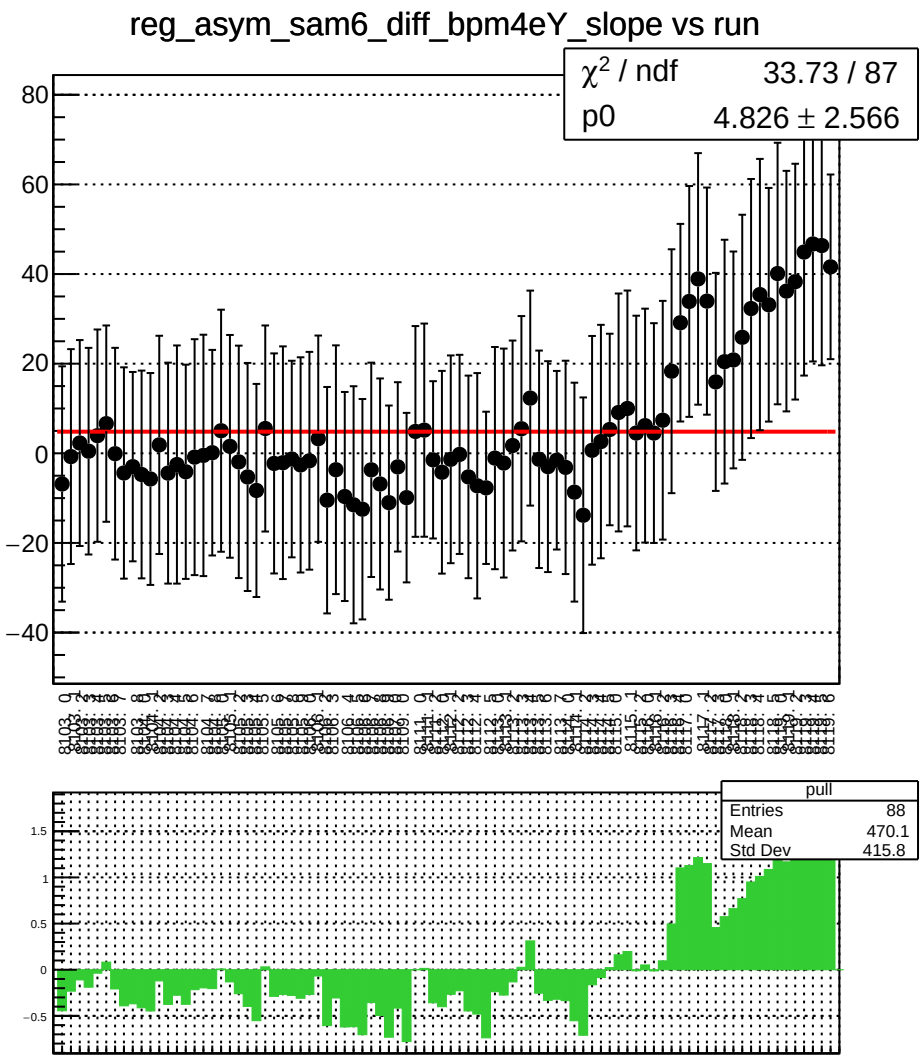

pull1D
Entries 88
Mean 0.007741
Std Dev 0.231

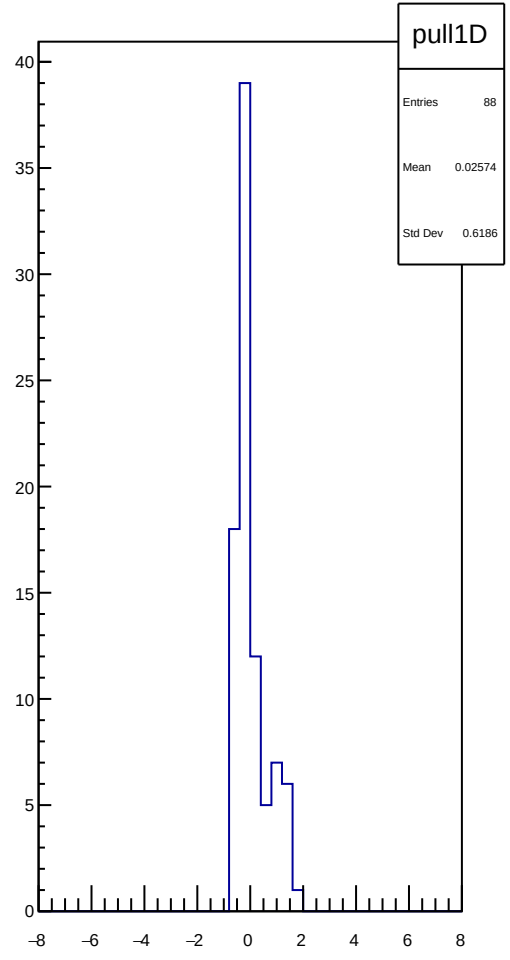

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 2.673 / 87
p0 13.78 ± 1.597
30
20
10
0
−10
pull
Entries 88
Mean 1619
Std Dev 1571
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

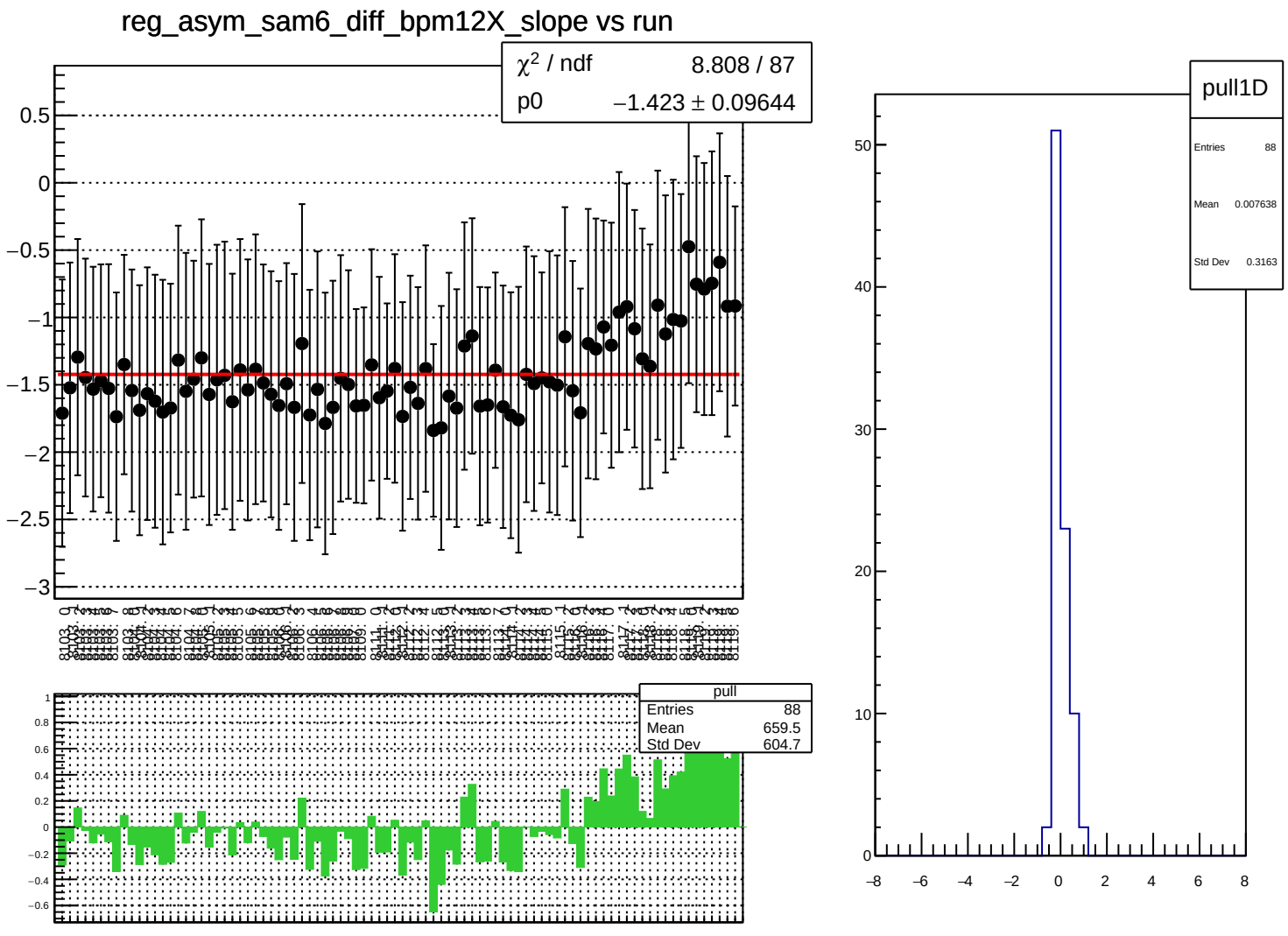

pull1D
Entries 88
Mean −0.001738
Std Dev 0.1743
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

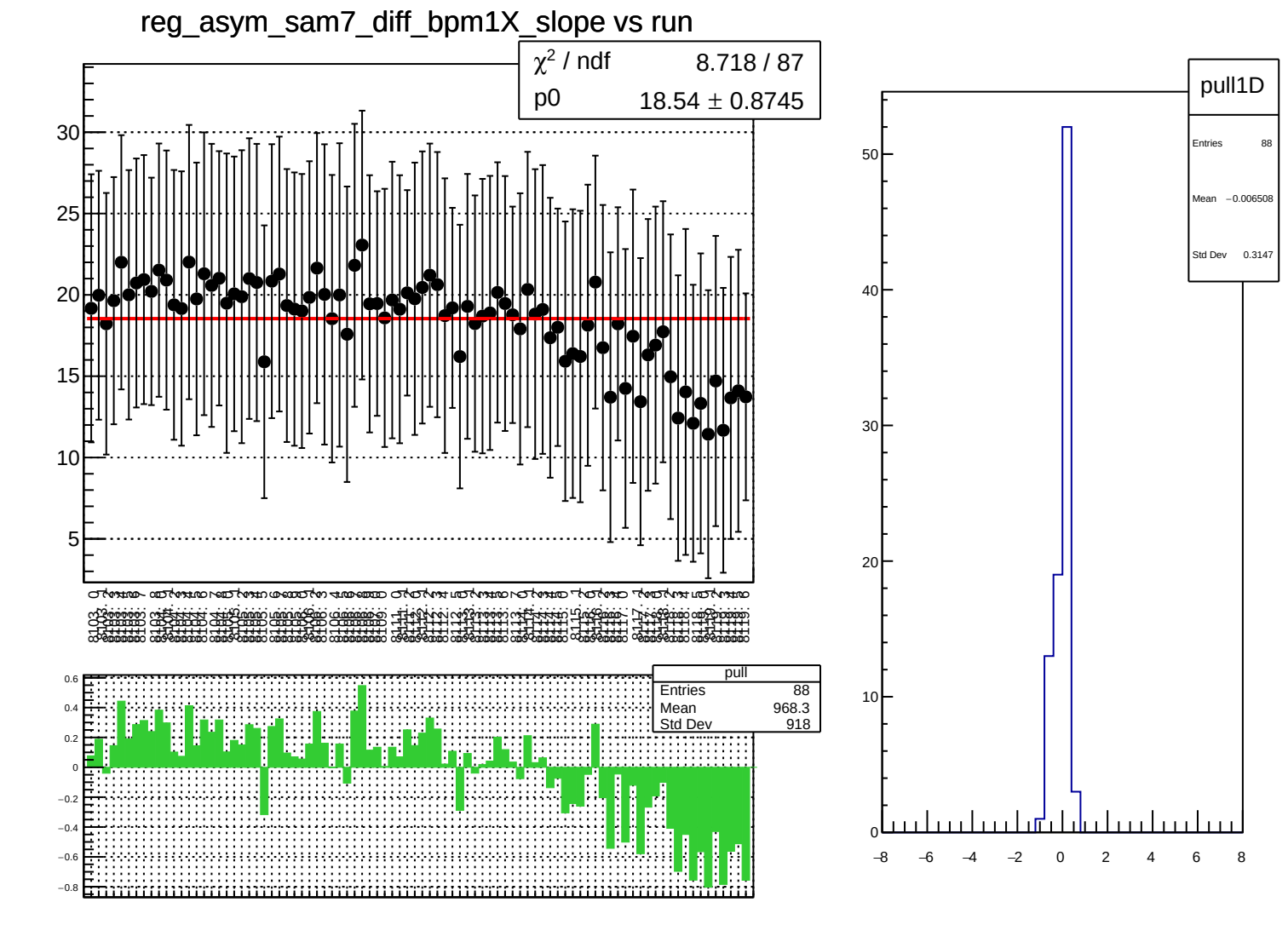

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 30.2 / 87
p0 100.8 ± 2.399
140
120
100
80
60
40
pull
Entries 88
Mean 495.3
Std Dev 441.1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.02245
Std Dev 0.5854
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

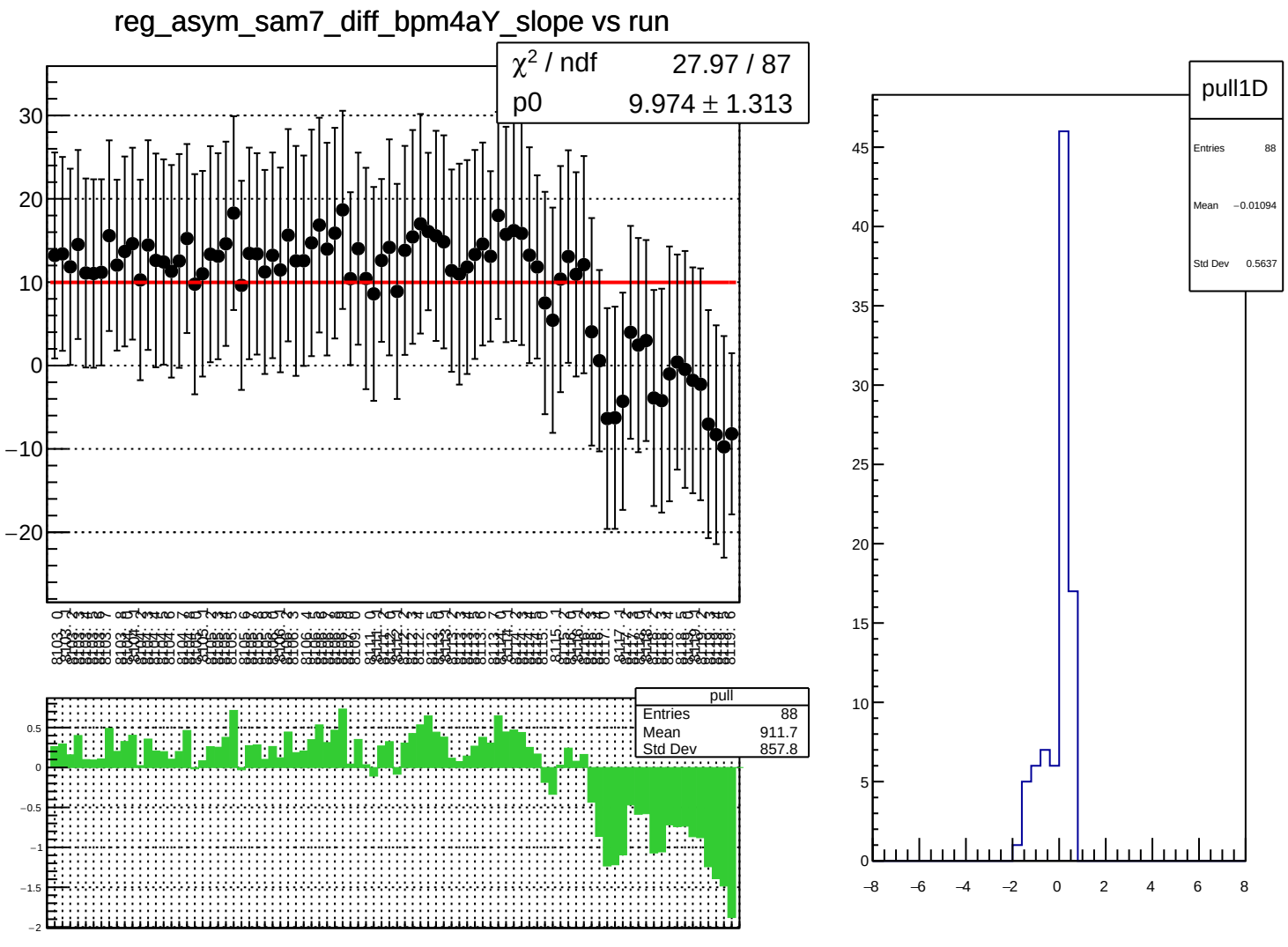

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 3.978 / 87
p0 49.24 ± 1.519
pull
Entries 88
Mean 609.3
Std Dev 558.5
pull1D
Entries 88
Mean 0.006427
Std Dev 0.2125

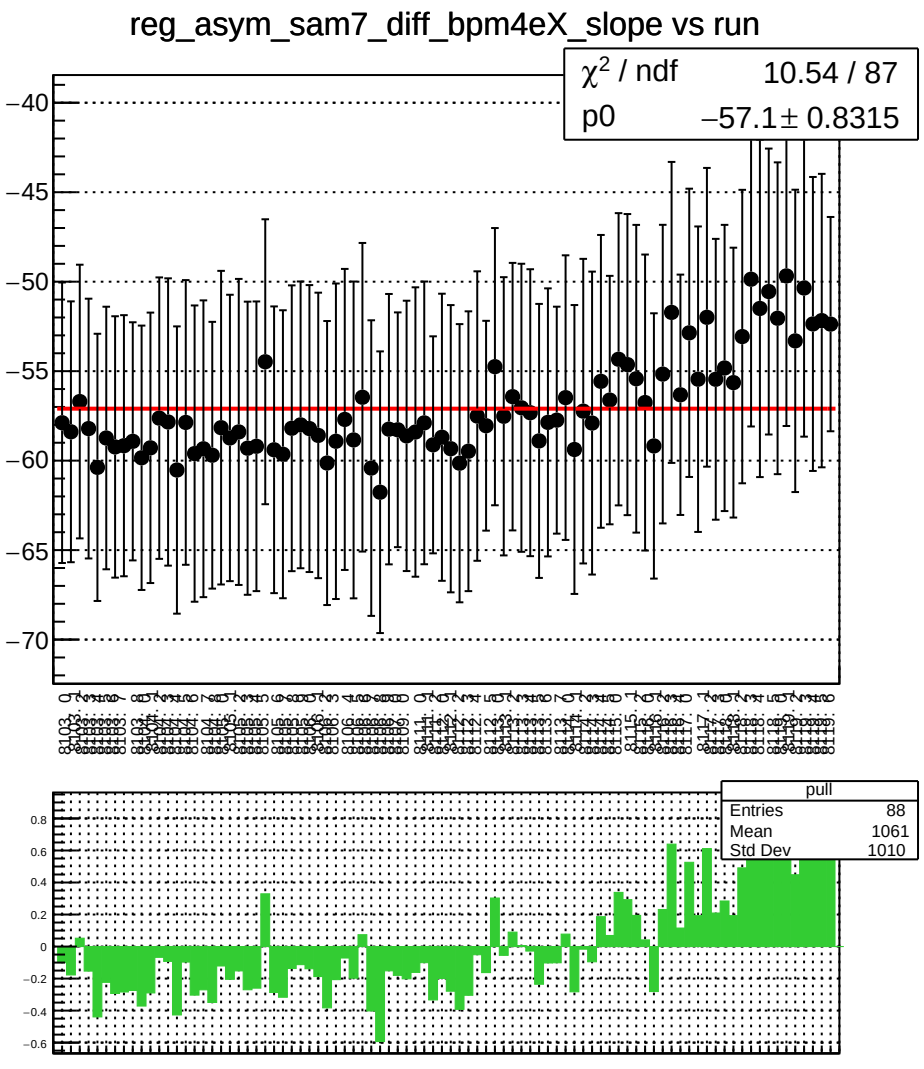

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 33.73 / 87
p0 4.826 ± 2.566
pull
Entries 88
Mean 470.1
Std Dev 415.8

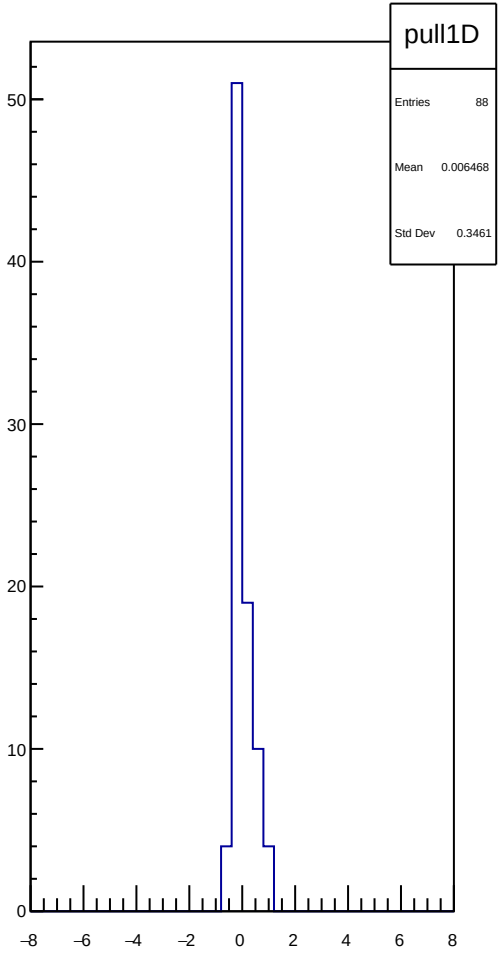

pull1D
Entries 88
Mean 0.02574
Std Dev 0.6186

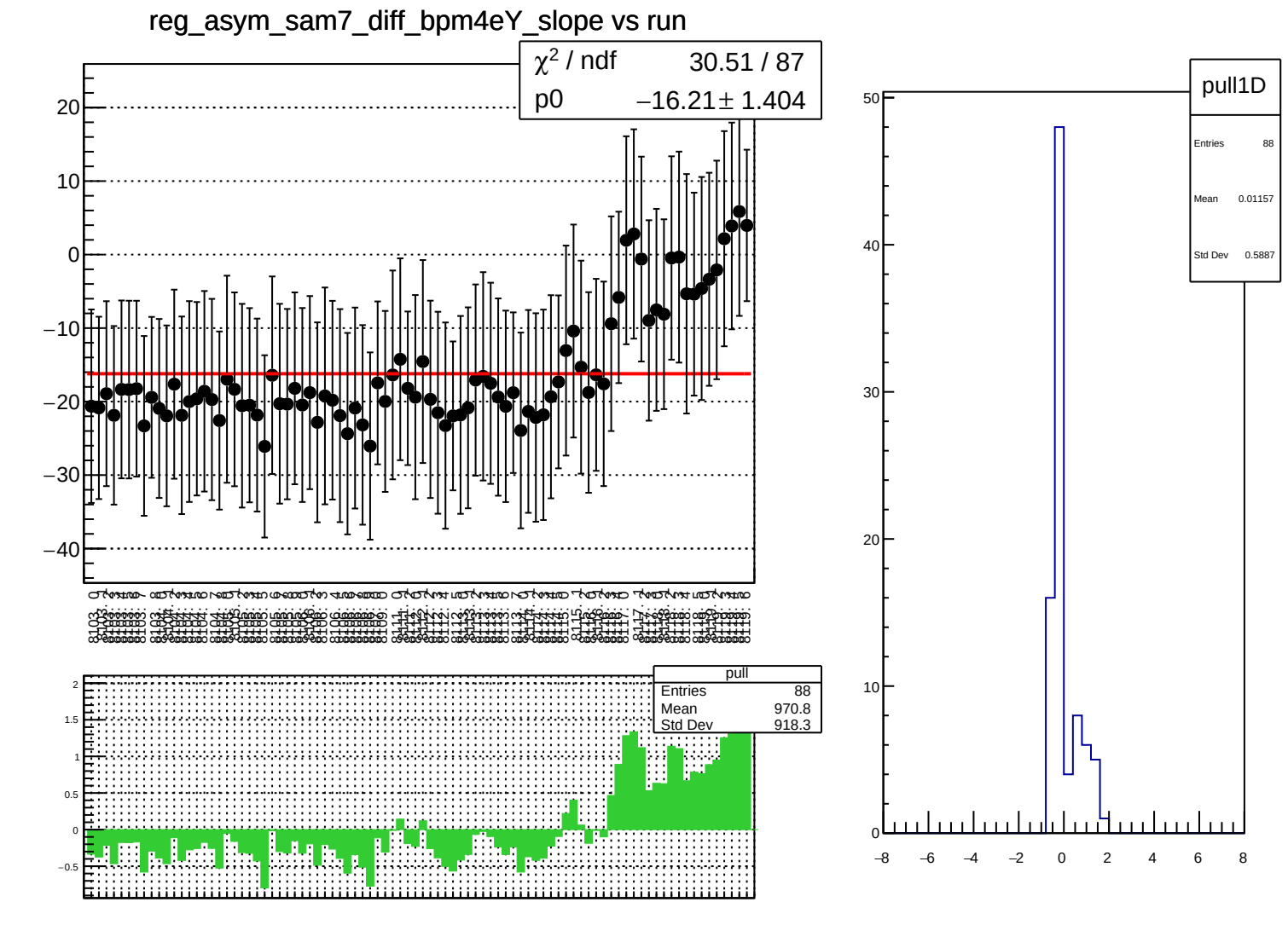

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 8.808 / 87
p0 −1.423 ± 0.09644
pull
Entries 88
Mean 659.5
Std Dev 604.7
pull1D
Entries 88
Mean 0.007638
Std Dev 0.3163

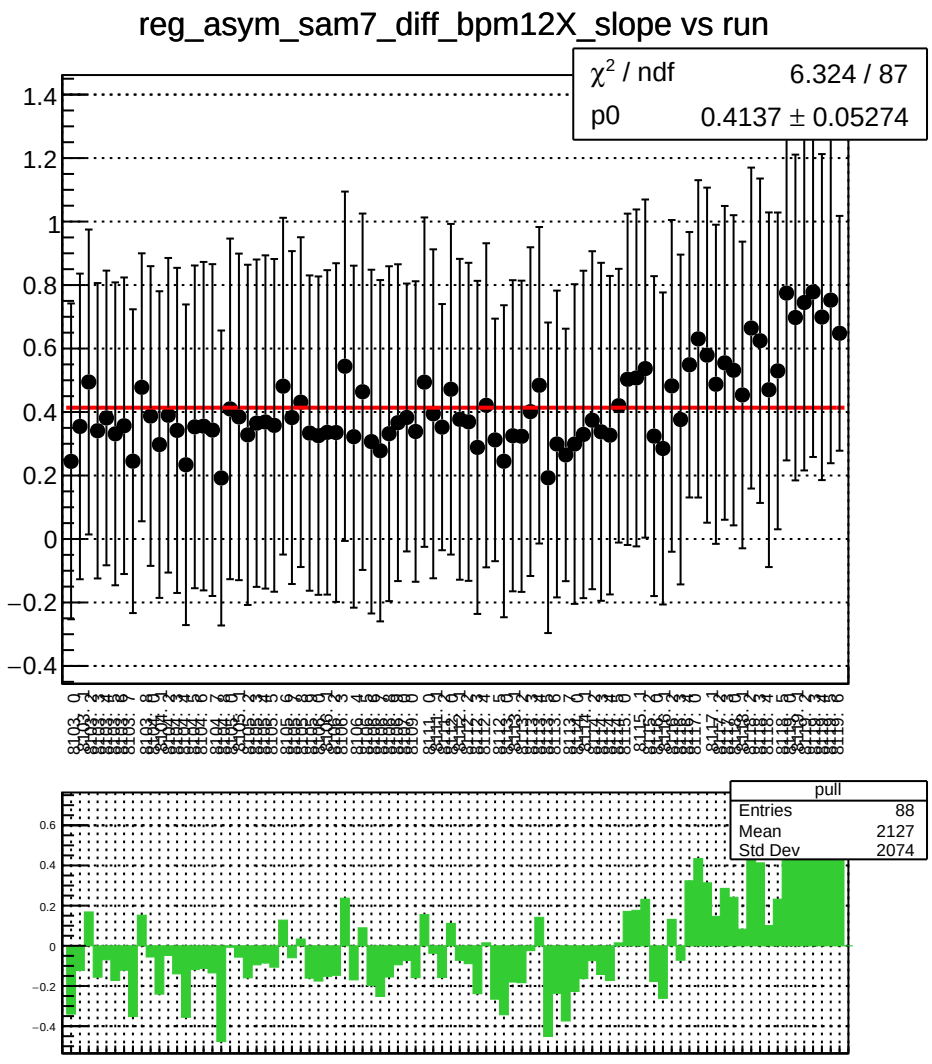

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 8.718 / 87
p0 18.54 ± 0.8745
pull
Entries 88
Mean 968.3
Std Dev 918
pull1D
Entries 88
Mean −0.006508
Std Dev 0.3147

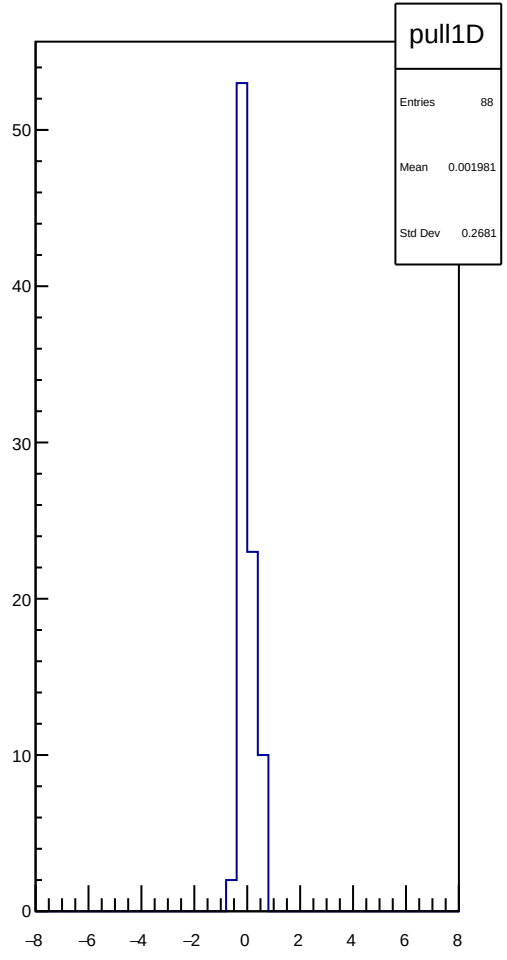

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 27.97 / 87
p0 9.974 ± 1.313
pull
Entries 88
Mean 911.7
Std Dev 857.8
pull1D
Entries 88
Mean −0.01094
Std Dev 0.5637

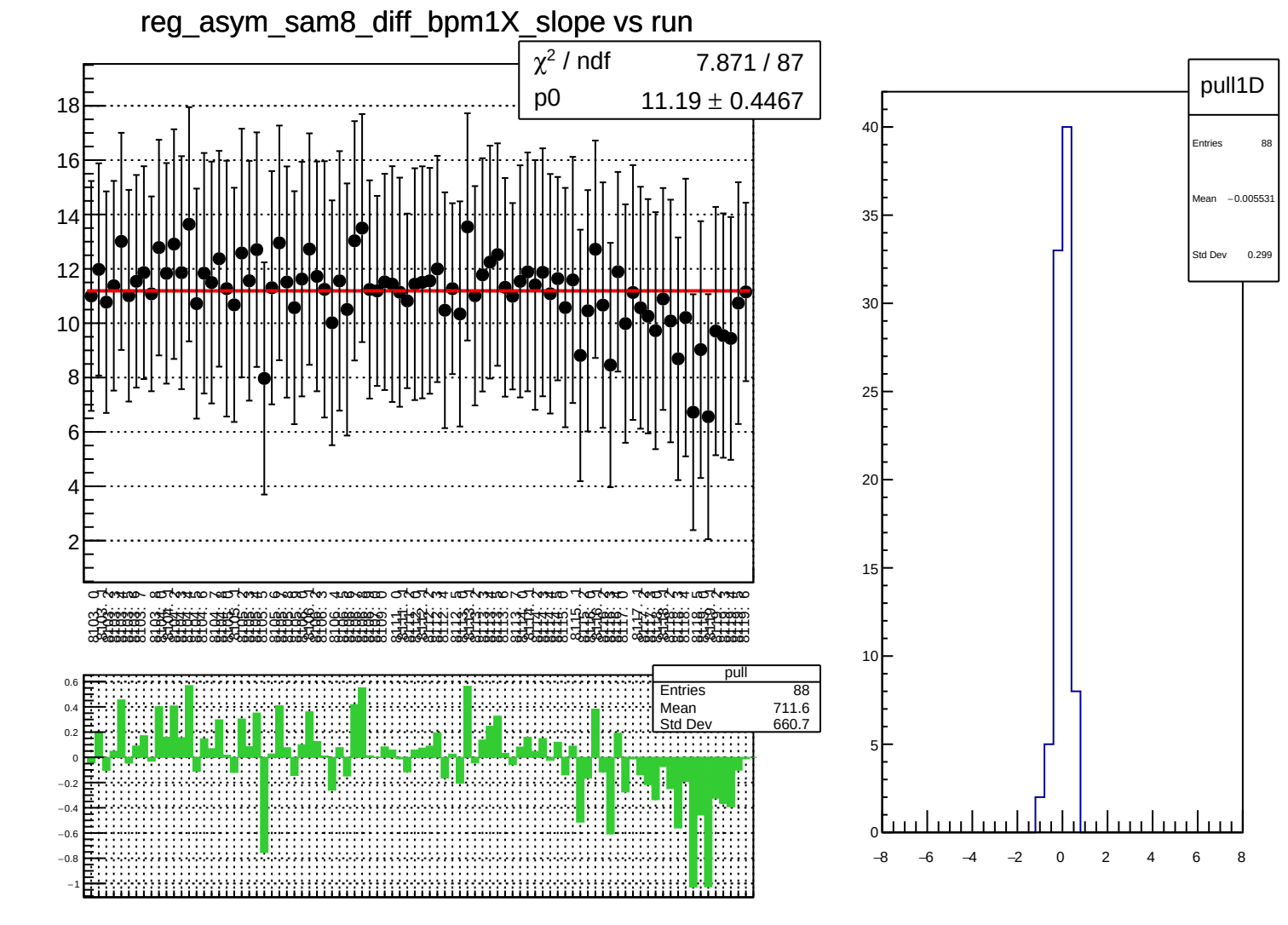

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 10.54 / 87
p0 −57.1 ± 0.8315
pull
Entries 88
Mean 1061
Std Dev 1010

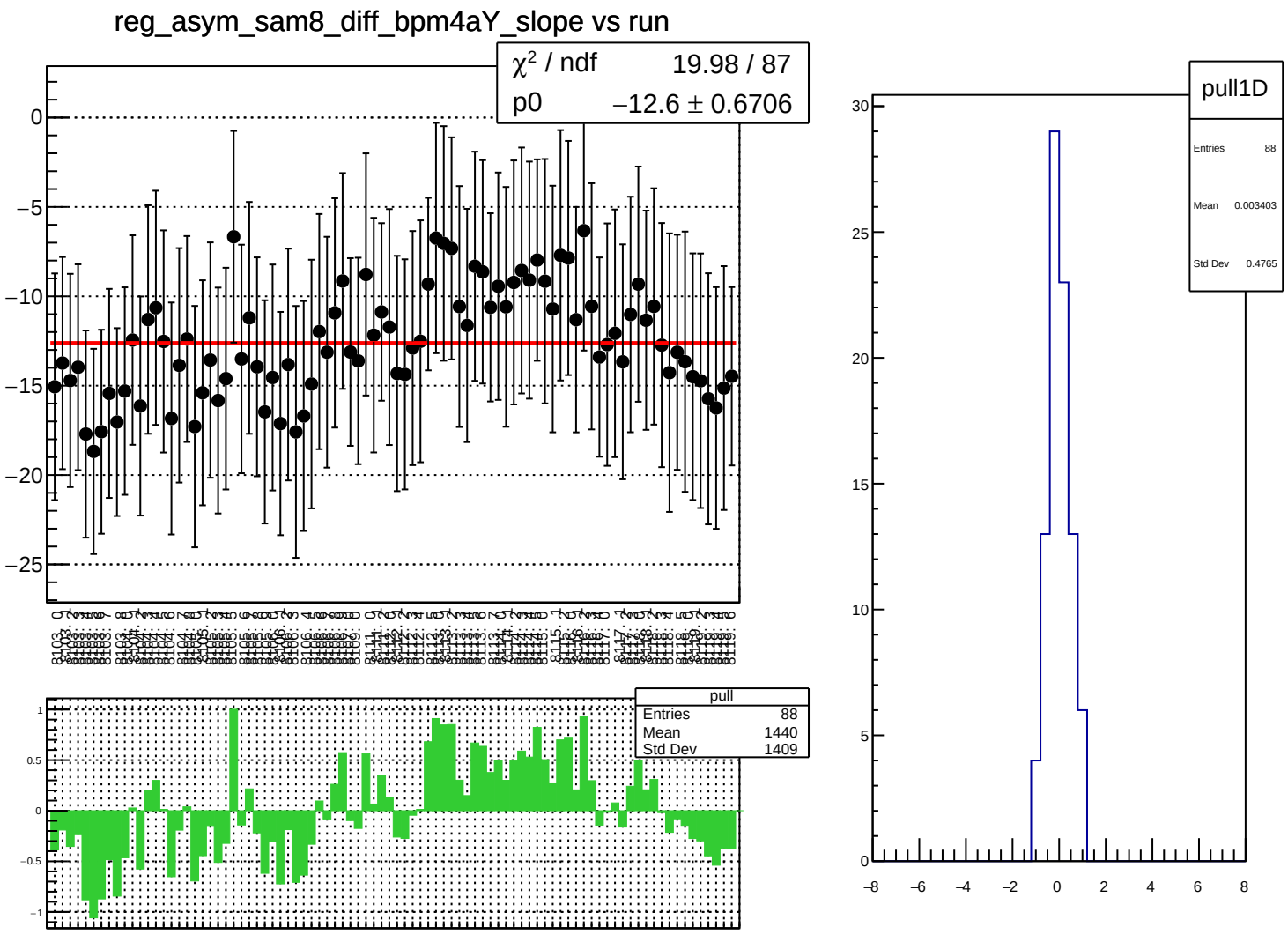

pull1D
Entries 88
Mean 0.006468
Std Dev 0.3461

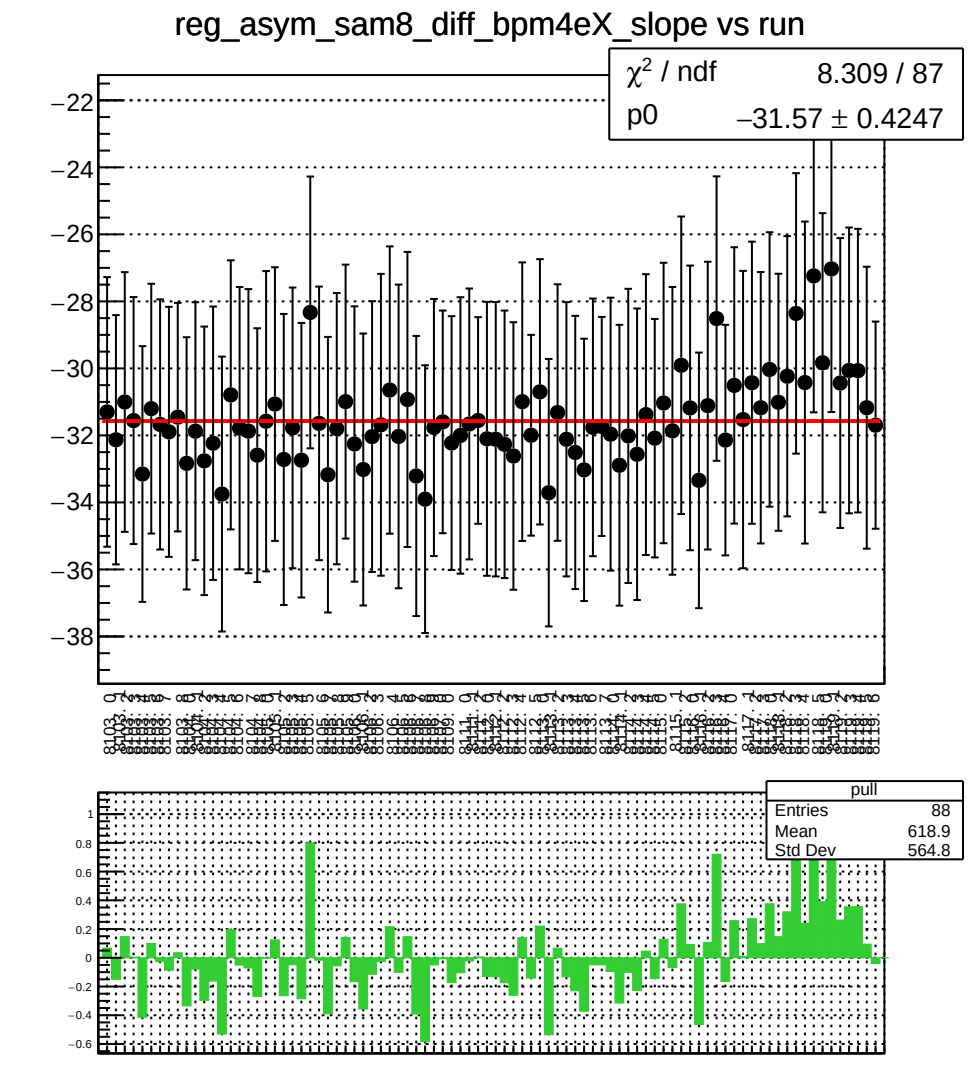

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 30.51 / 87
p0 −16.21± 1.404
pull
Entries 88
Mean 970.8
Std Dev 918.3
pull1D
Entries 88
Mean 0.01157
Std Dev 0.5887

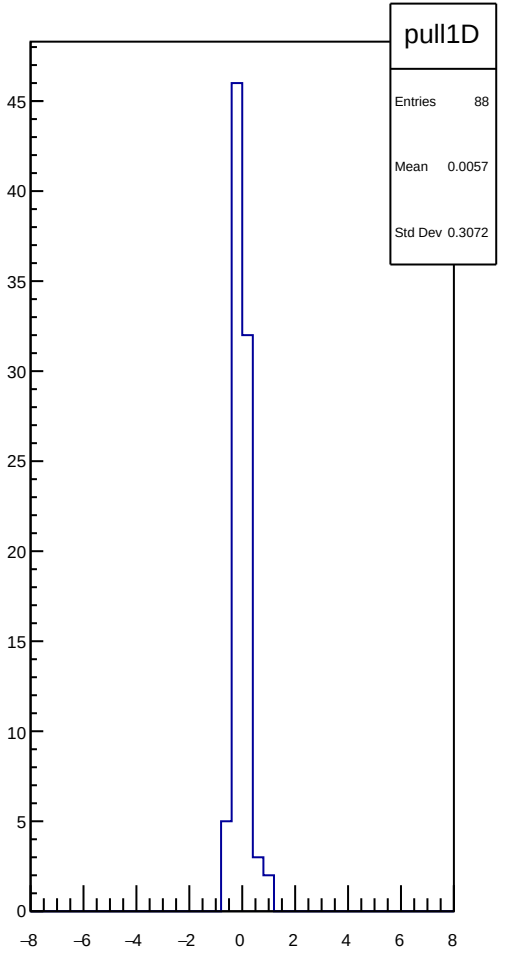

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 6.324 / 87
p0 0.4137 ± 0.05274
pull
Entries 88
Mean 2127
Std Dev 2074

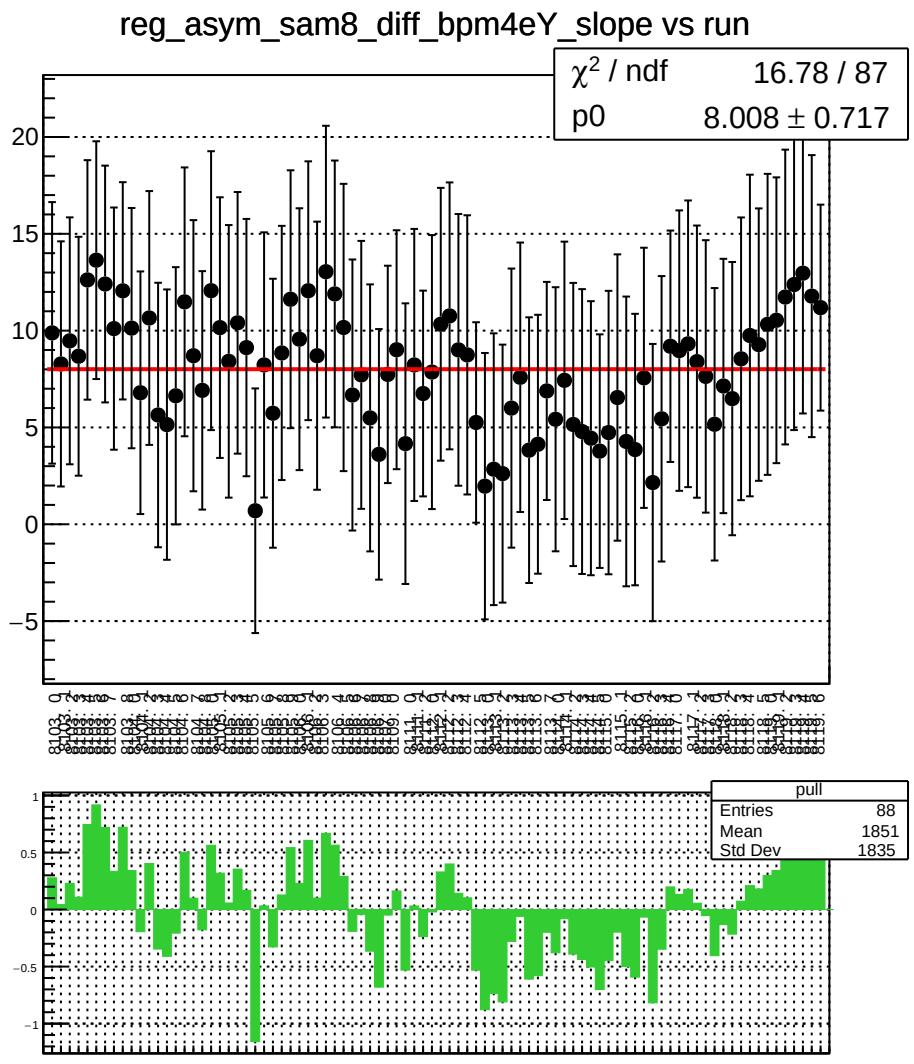

pull1D
Entries 88
Mean 0.001981
Std Dev 0.2681

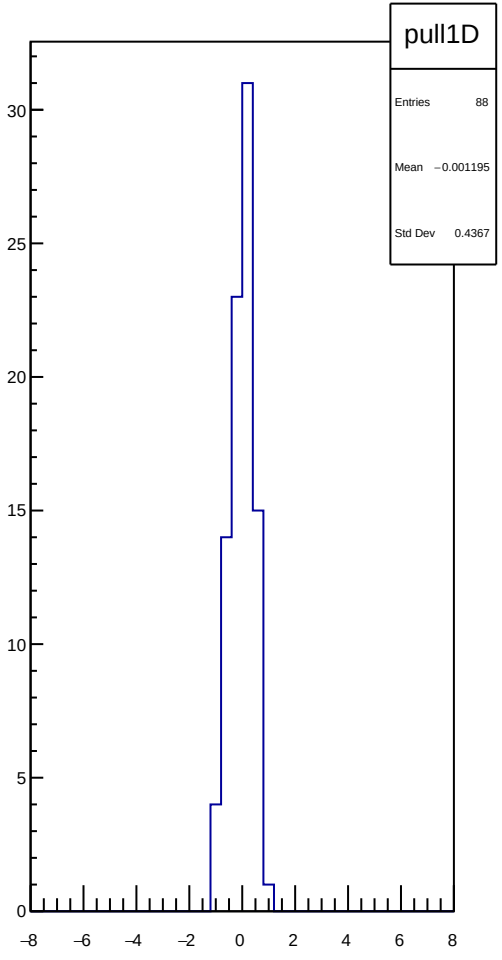

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 7.871 / 87
p0 11.19 ± 0.4467
pull
Entries 88
Mean 711.6
Std Dev 660.7
pull1D
Entries 88
Mean −0.005531
Std Dev 0.299

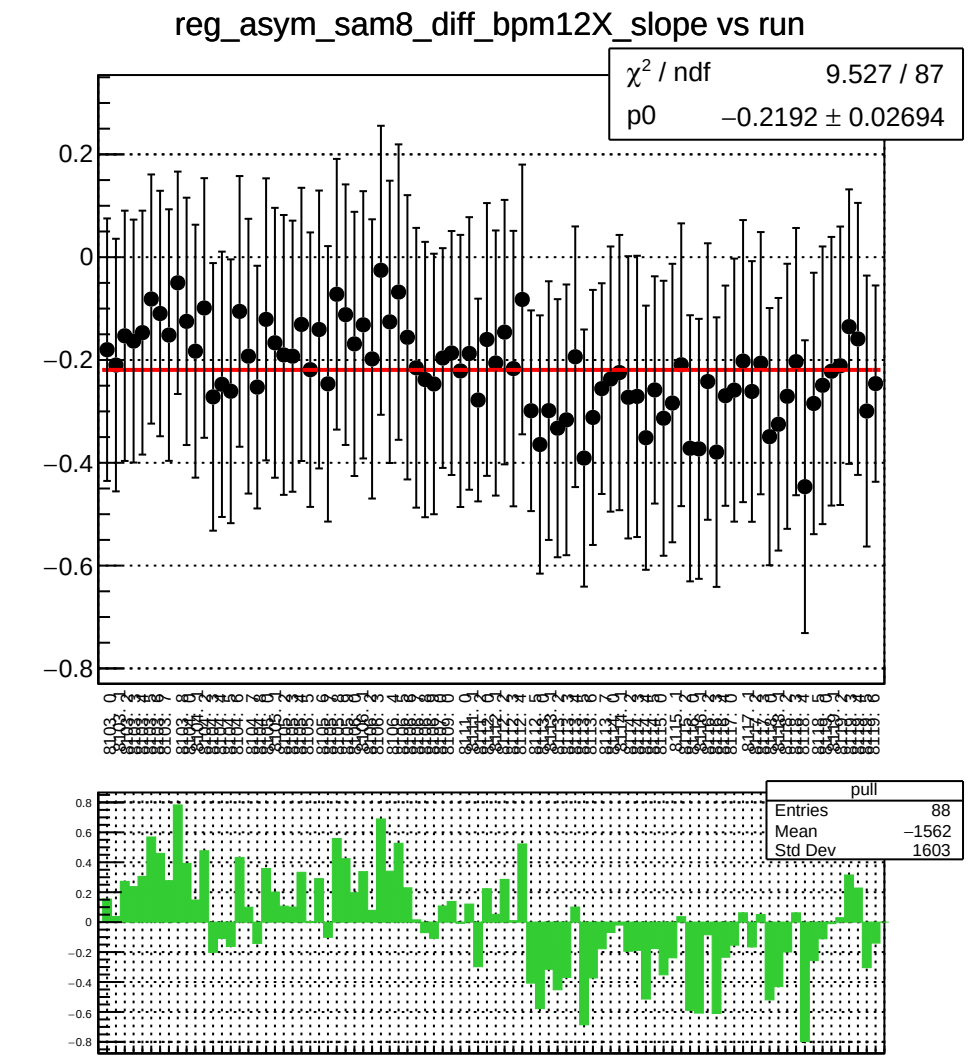

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 19.98 / 87
p0 −12.6 ± 0.6706
pull
Entries 88
Mean 1440
Std Dev 1409
pull1D
Entries 88
Mean 0.003403
Std Dev 0.4765

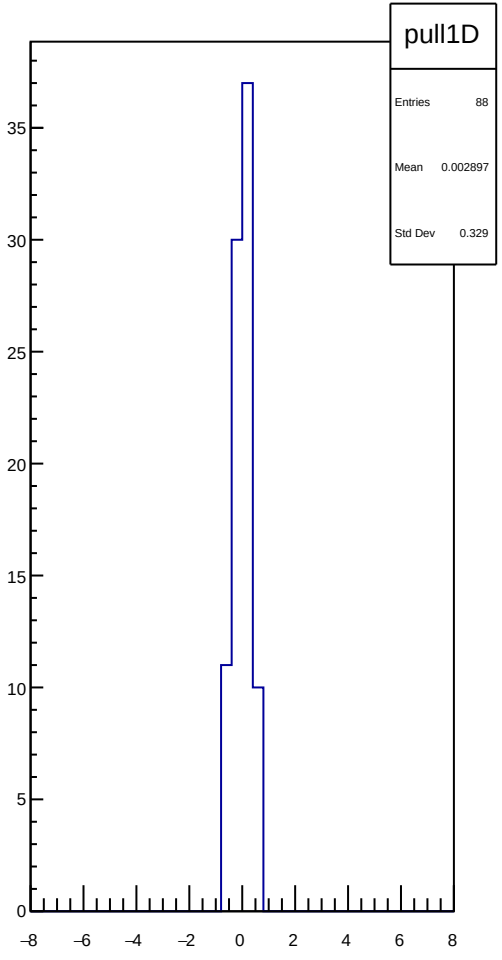

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 8.309 / 87
p0 −31.57 ± 0.4247
pull
Entries 88
Mean 618.9
Std Dev 564.8

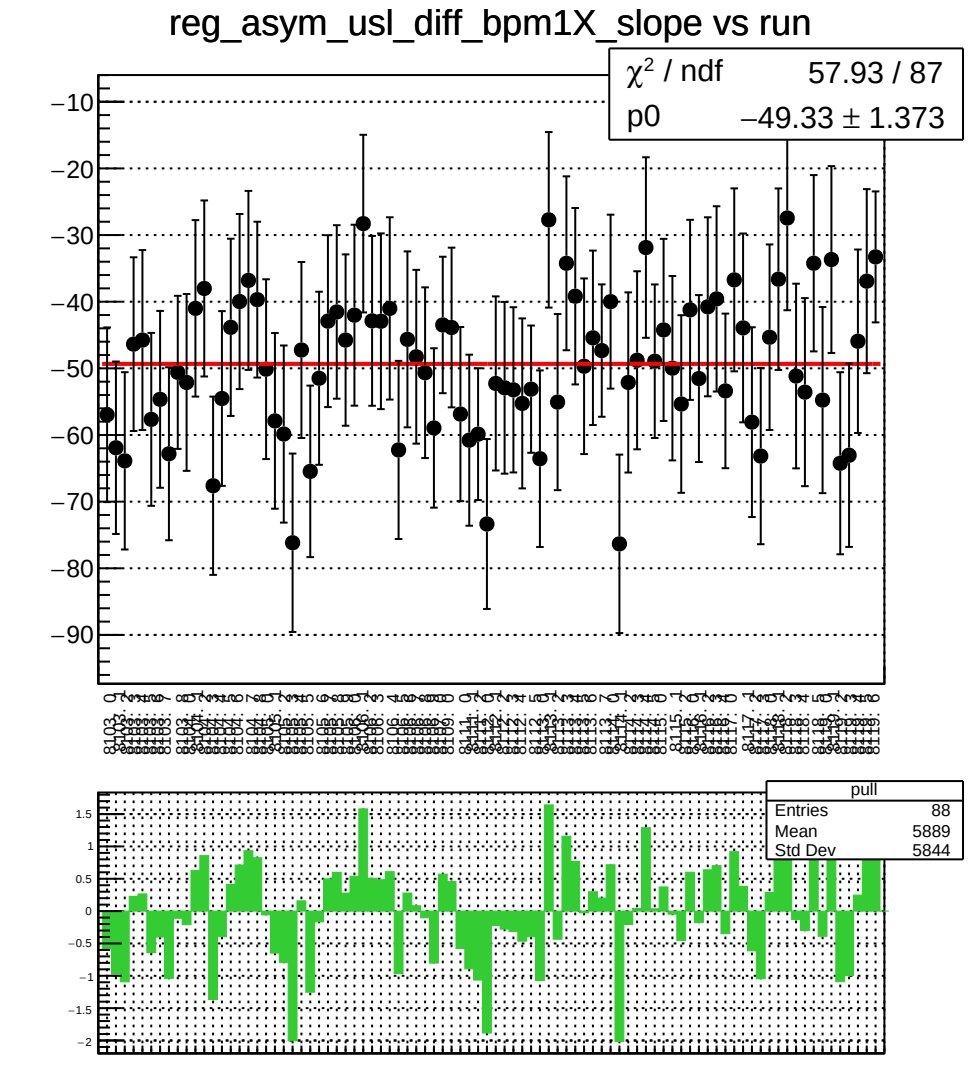

pull1D
Entries 88
Mean 0.0057
Std Dev 0.3072

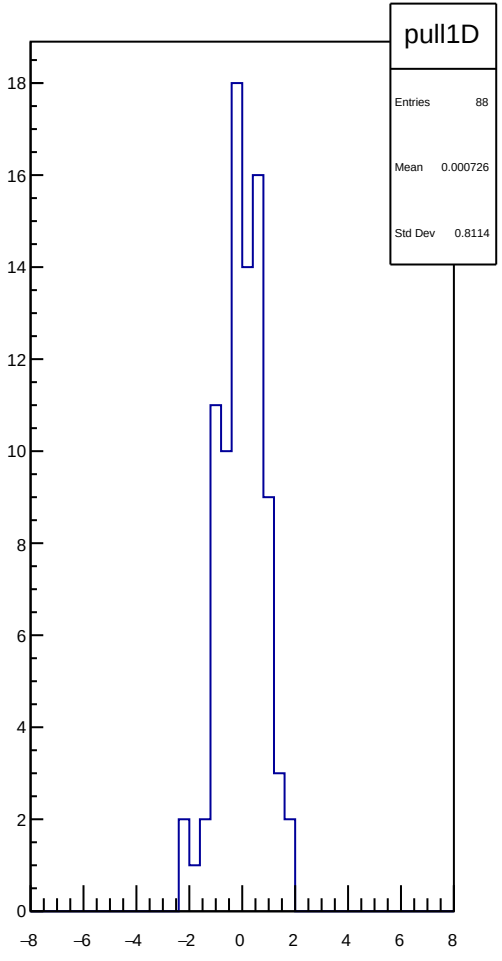

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 16.78 / 87
p0 8.008 ± 0.717
pull
Entries 88
Mean 1851
Std Dev 1835

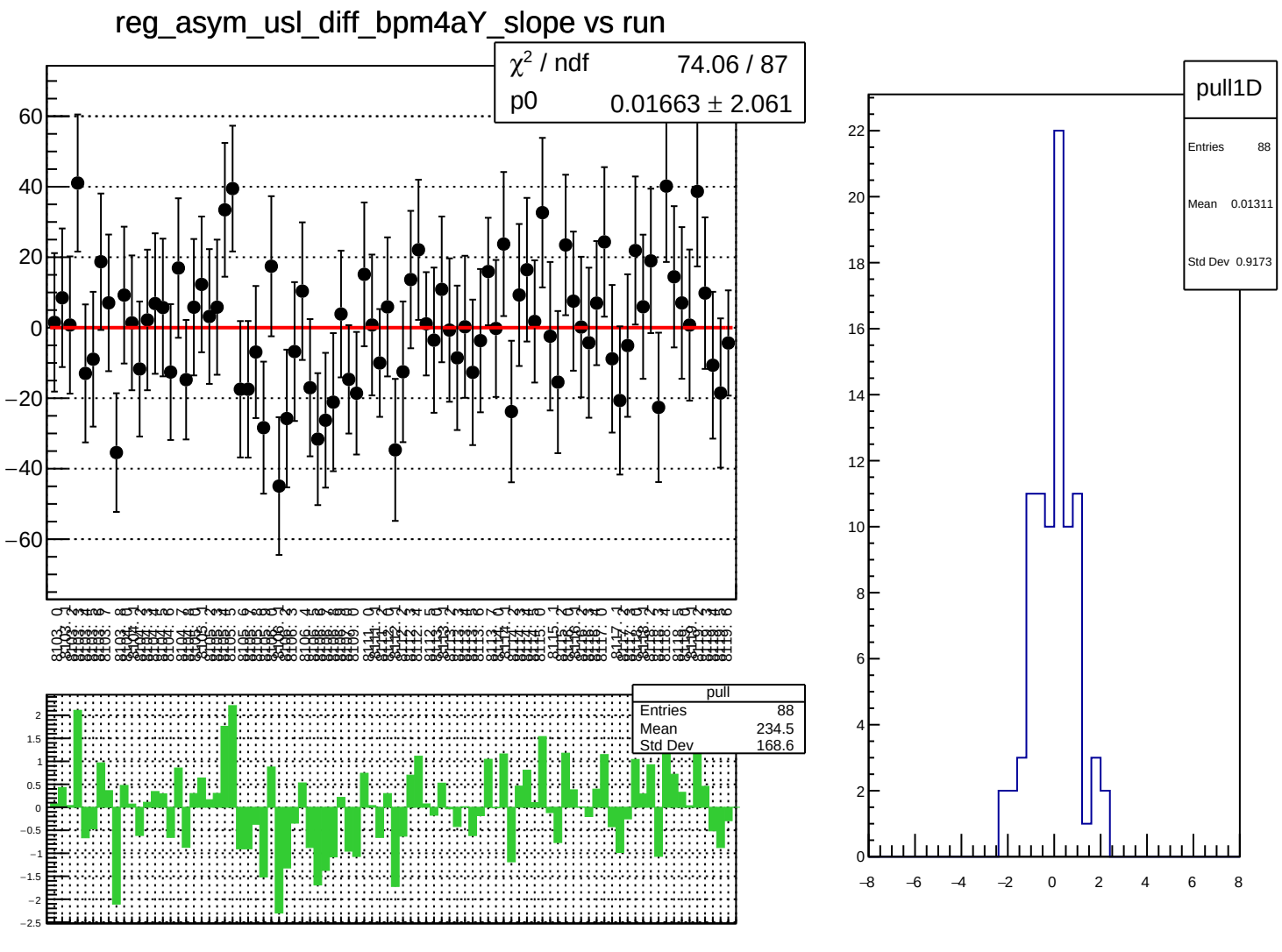

pull1D
Entries 88
Mean −0.001195
Std Dev 0.4367

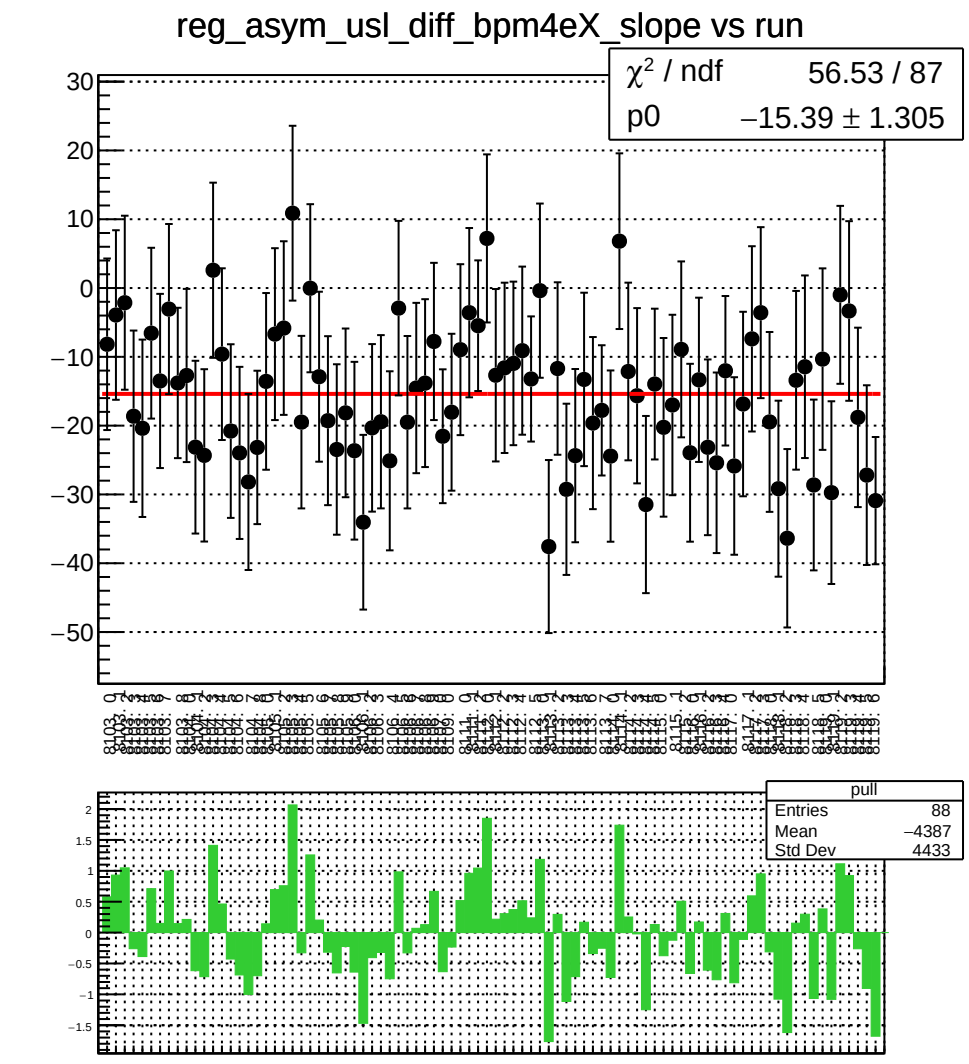

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 9.527 / 87
p0 −0.2192 ± 0.02694
pull
Entries 88
Mean −1562
Std Dev 1603

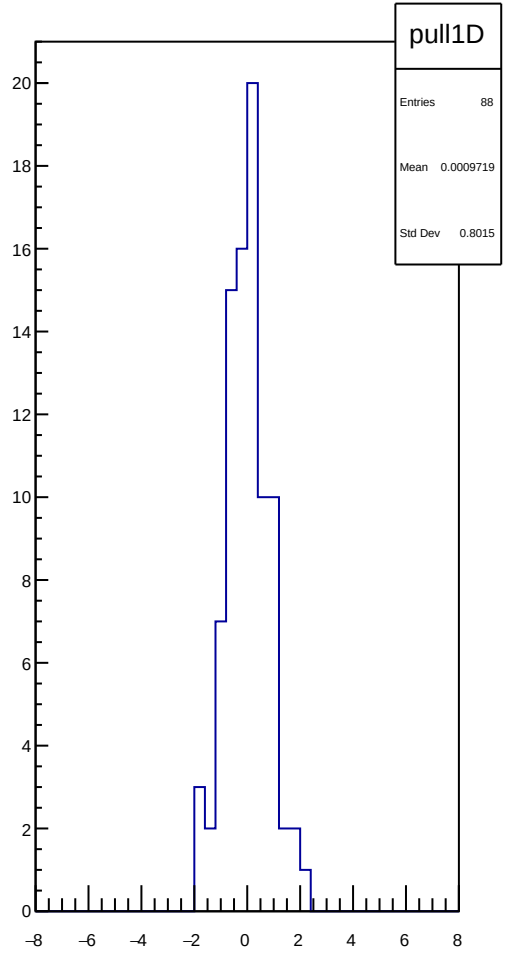

pull1D
Entries 88
Mean 0.002897
Std Dev 0.329

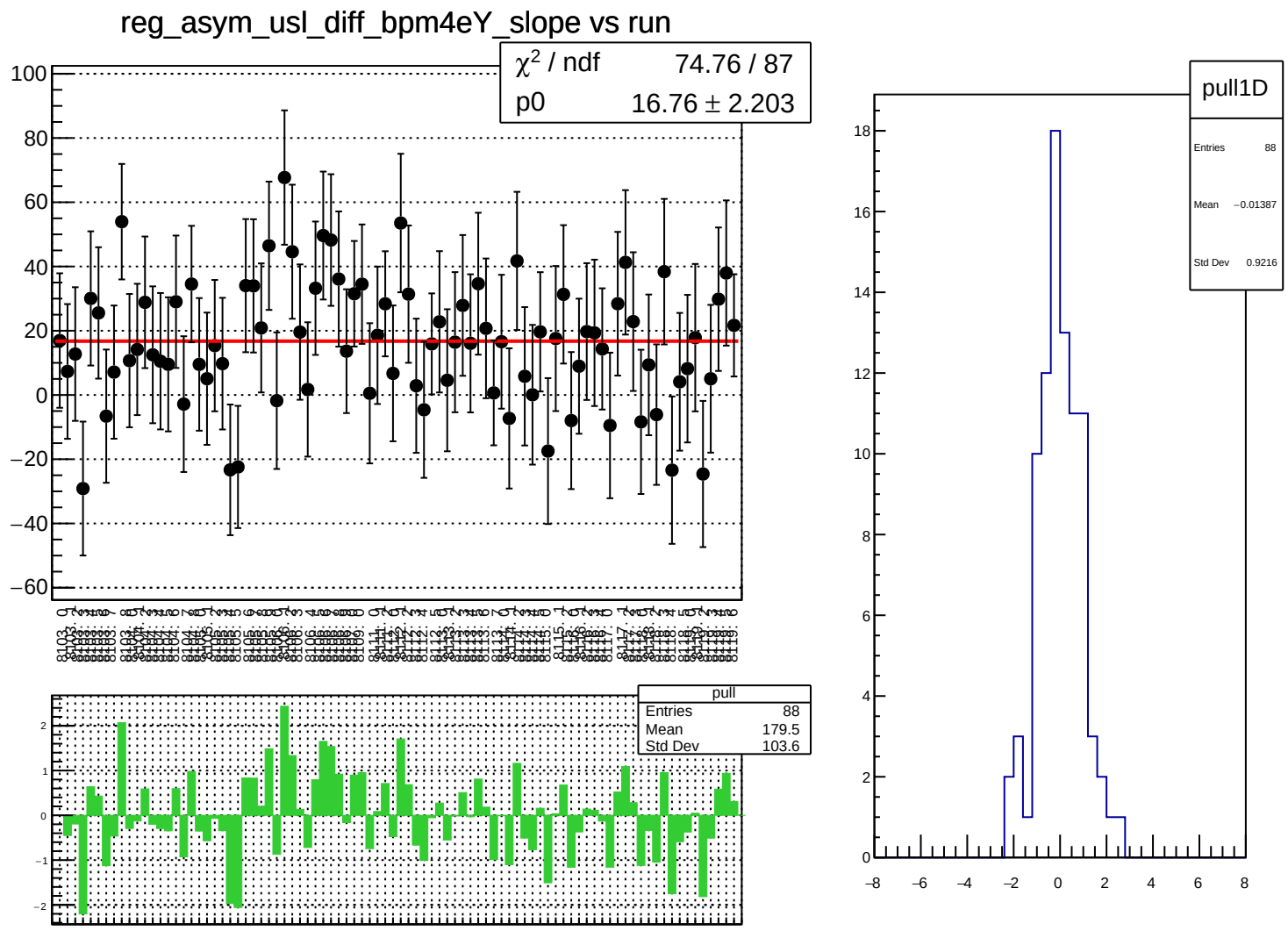

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 57.93 / 87
p0 −49.33 ± 1.373
pull
Entries 88
Mean 5889
Std Dev 5844

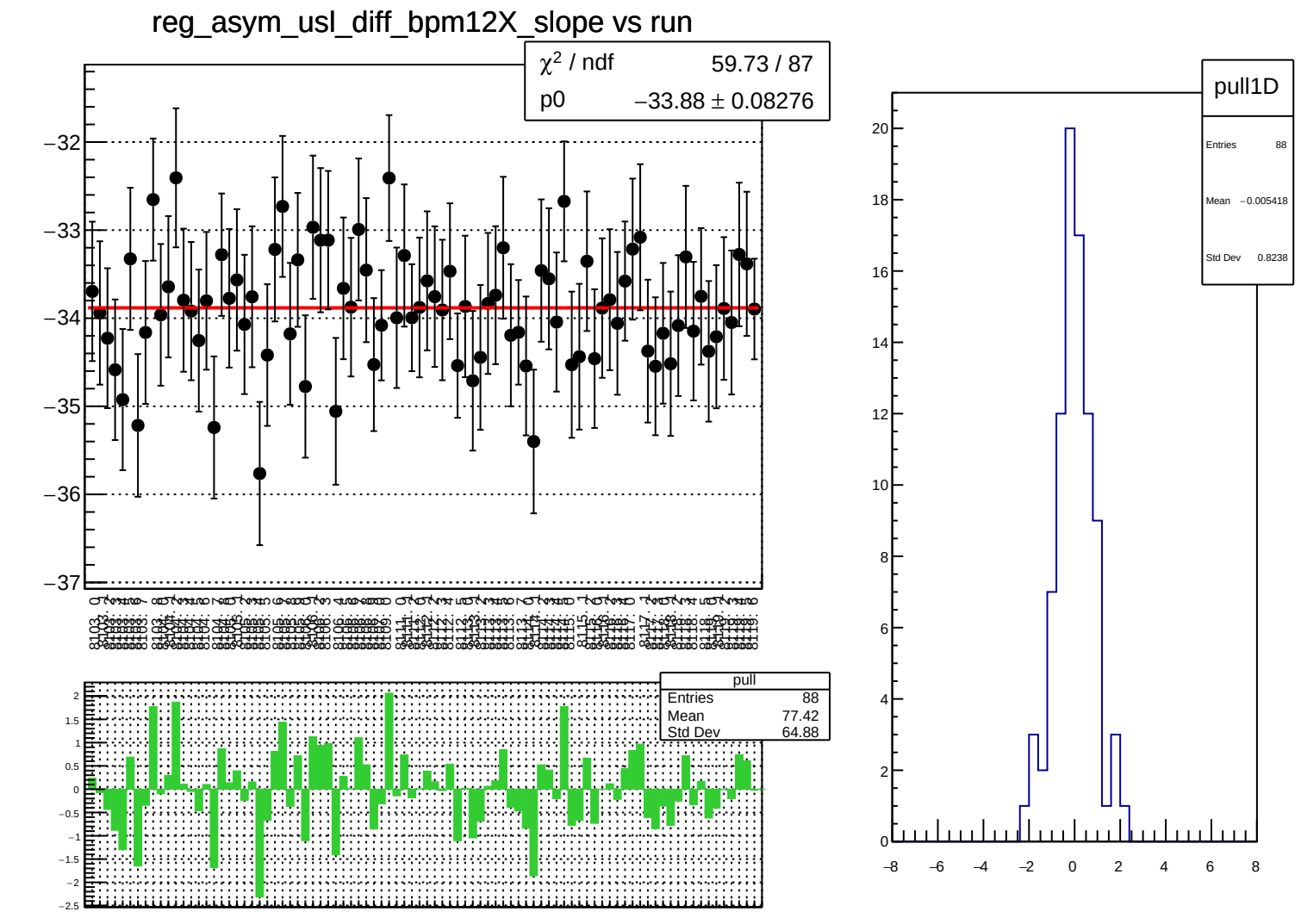

pull1D
Entries 88
Mean 0.000726
Std Dev 0.8114

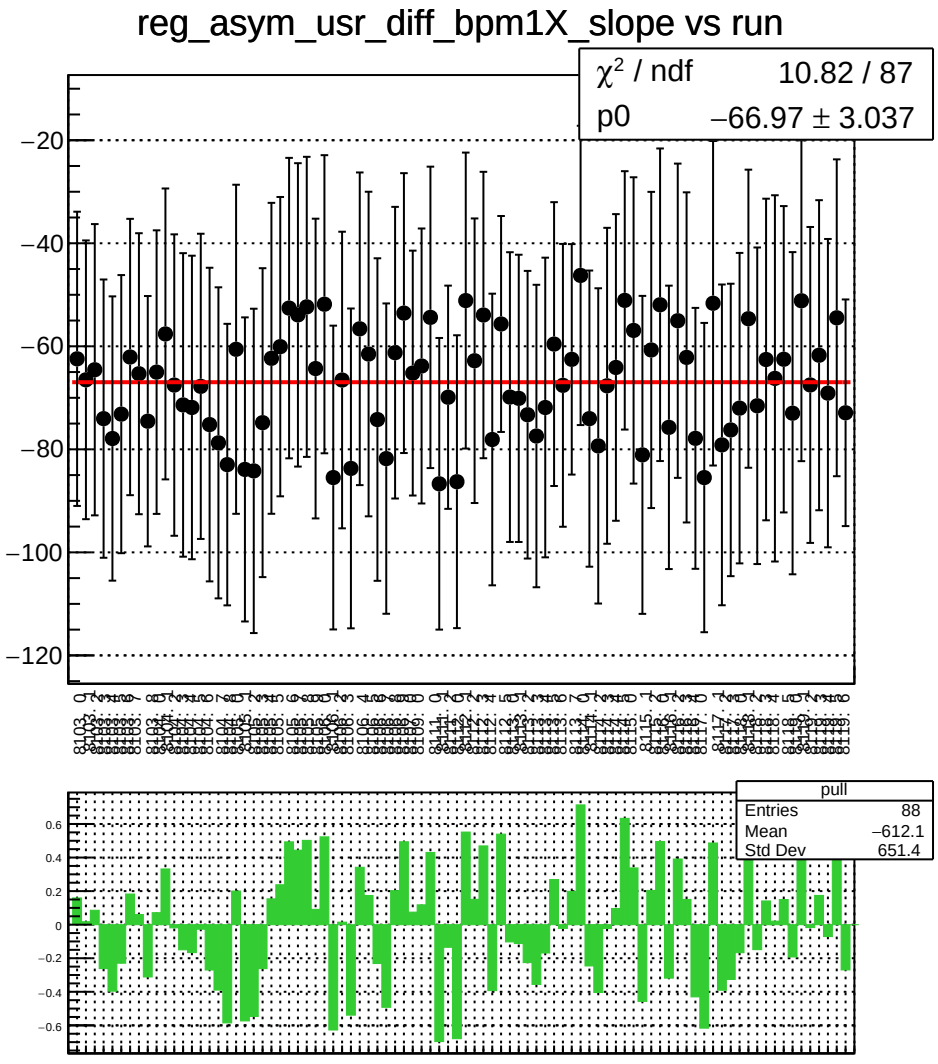

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 74.06 / 87
p0 0.01663 ± 2.061
pull
Entries 88
Mean 234.5
Std Dev 168.6
pull1D
Entries 88
Mean 0.01311
Std Dev 0.9173

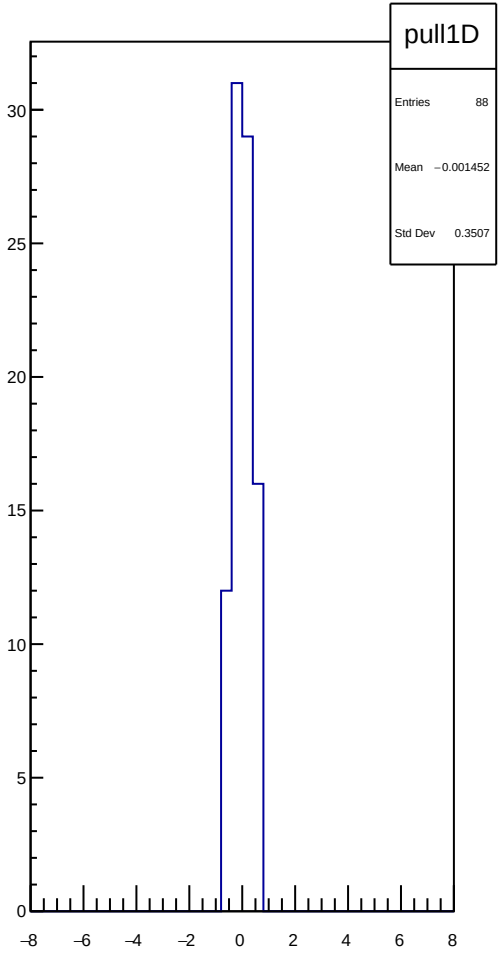

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 56.53 / 87
p0 −15.39 ± 1.305
pull
Entries 88
Mean −4387
Std Dev 4433

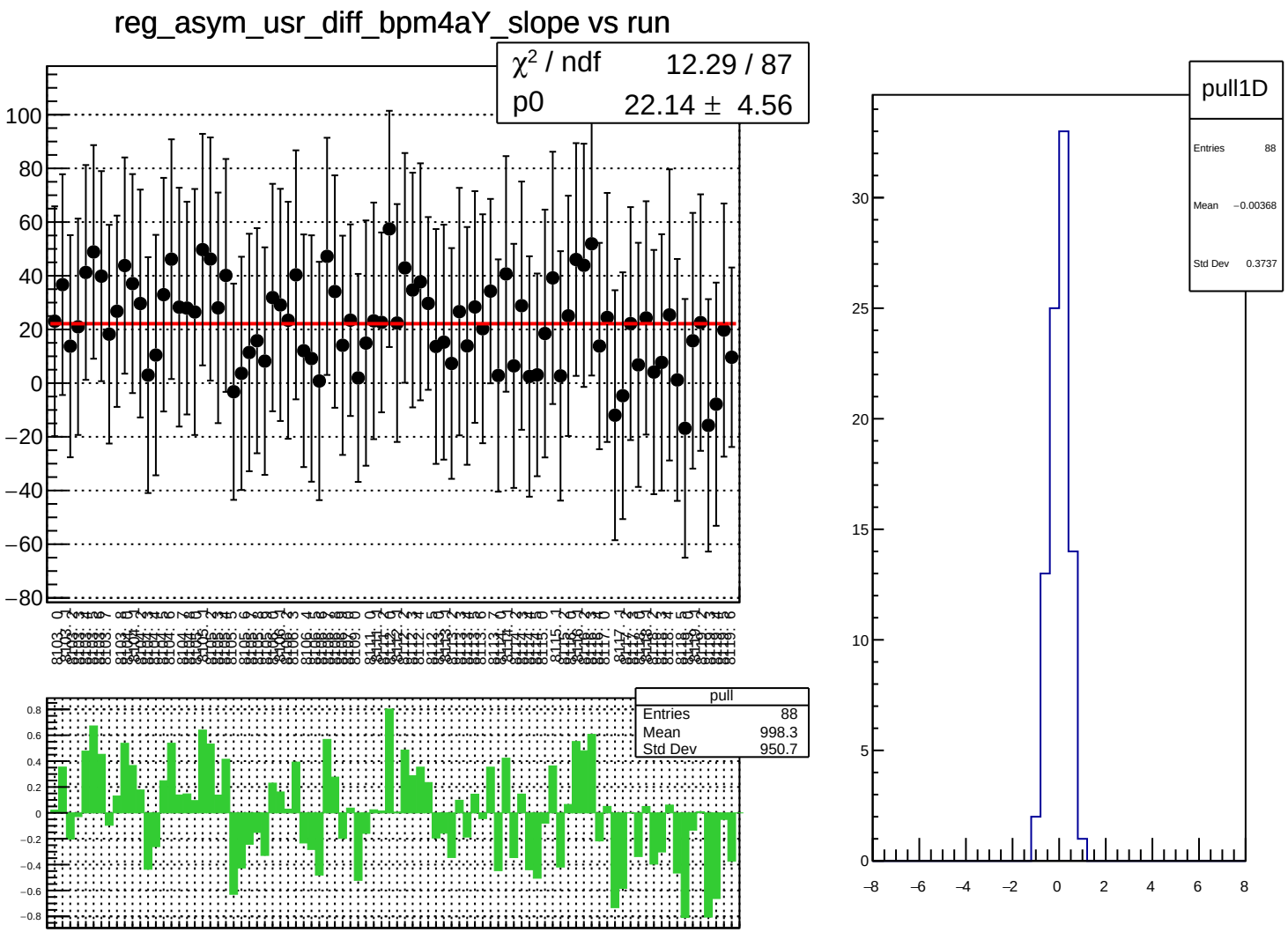

pull1D
Entries 88
Mean 0.0009719
Std Dev 0.8015

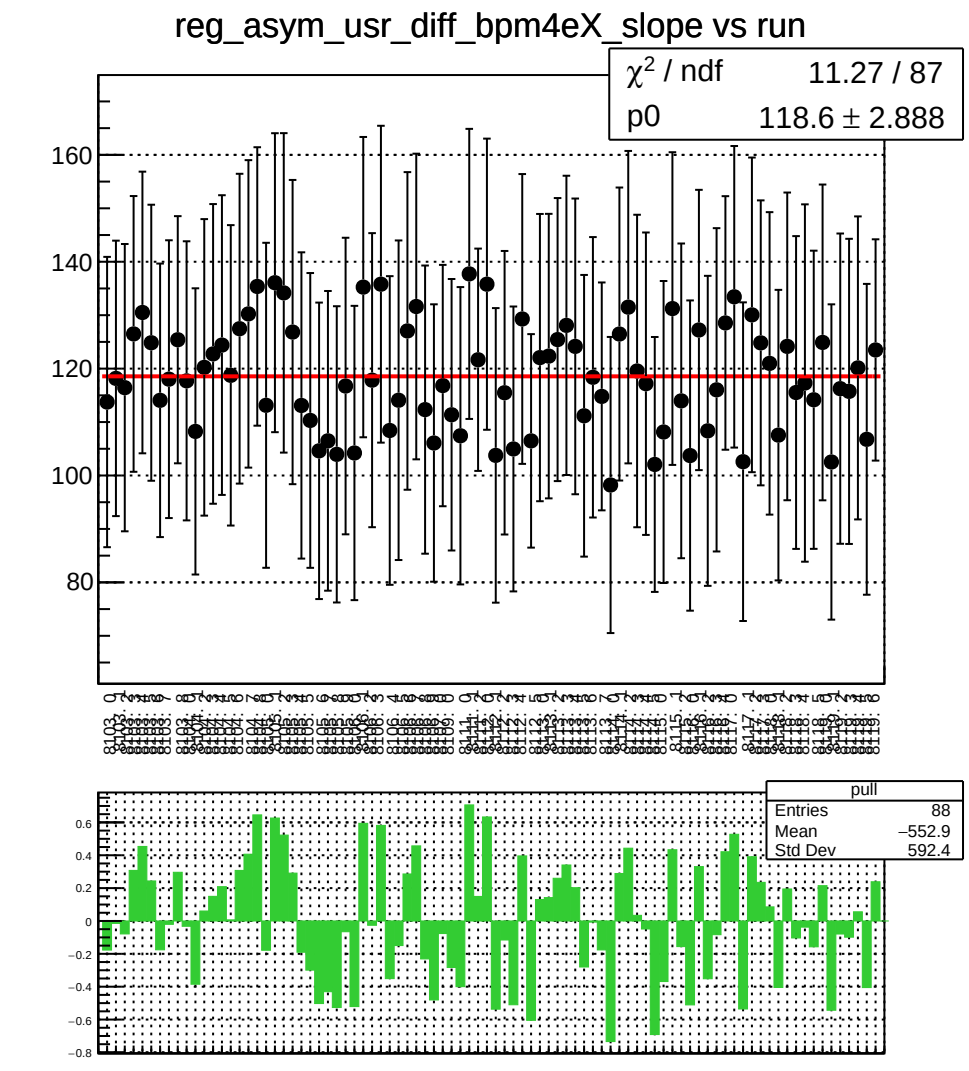

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 74.76 / 87
p0 16.76 ± 2.203
pull
Entries 88
Mean 179.5
Std Dev 103.6
pull1D
Entries 88
Mean −0.01387
Std Dev 0.9216

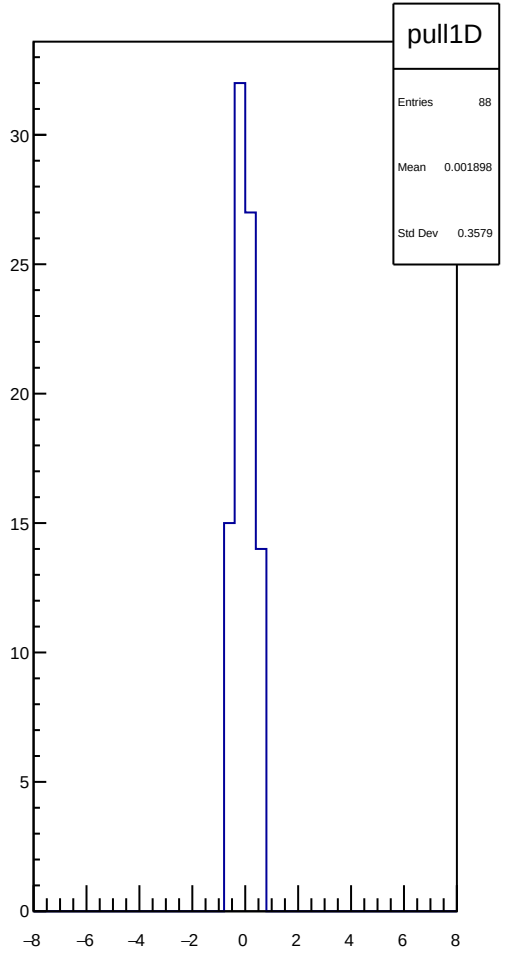

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 59.73 / 87
p0 −33.88 ± 0.08276
pull
Entries 88
Mean 77.42
Std Dev 64.88
pull1D
Entries 88
Mean −0.005418
Std Dev 0.8238

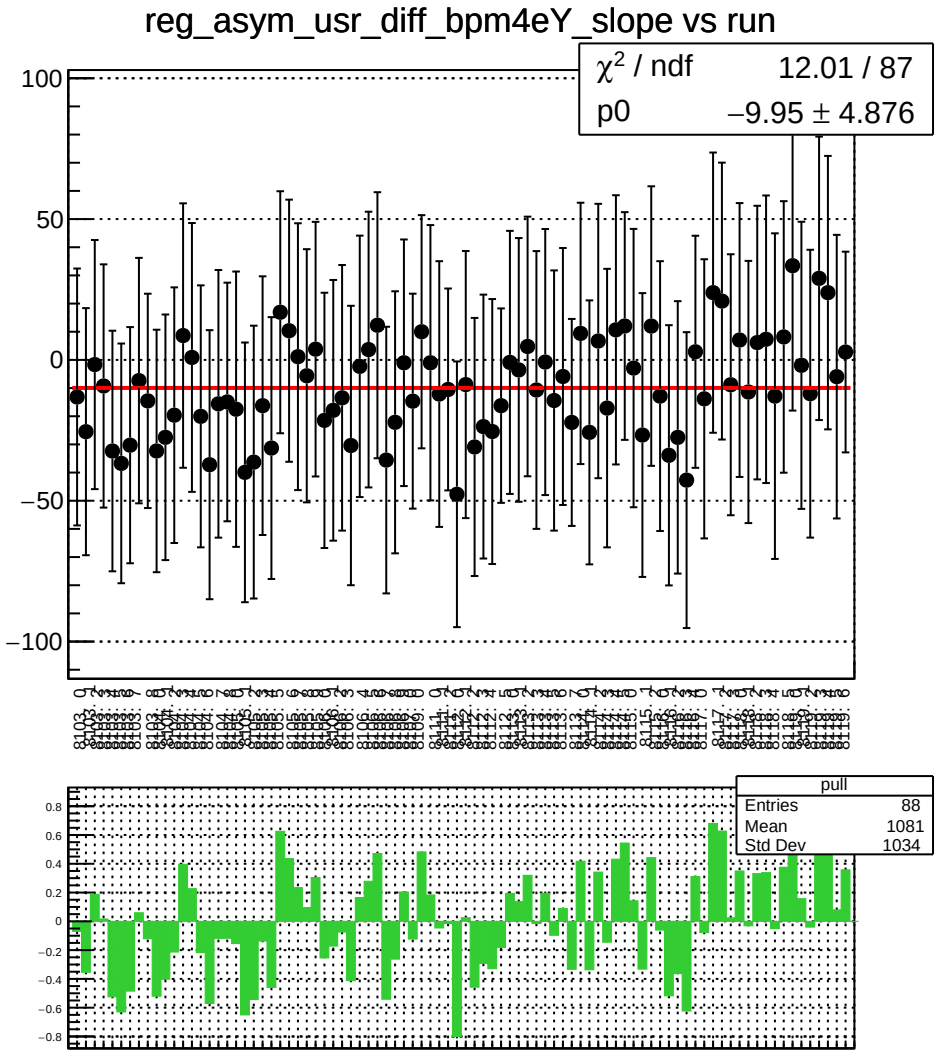

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 10.82 / 87
p0 −66.97 ± 3.037
pull
Entries 88
Mean −612.1
Std Dev 651.4

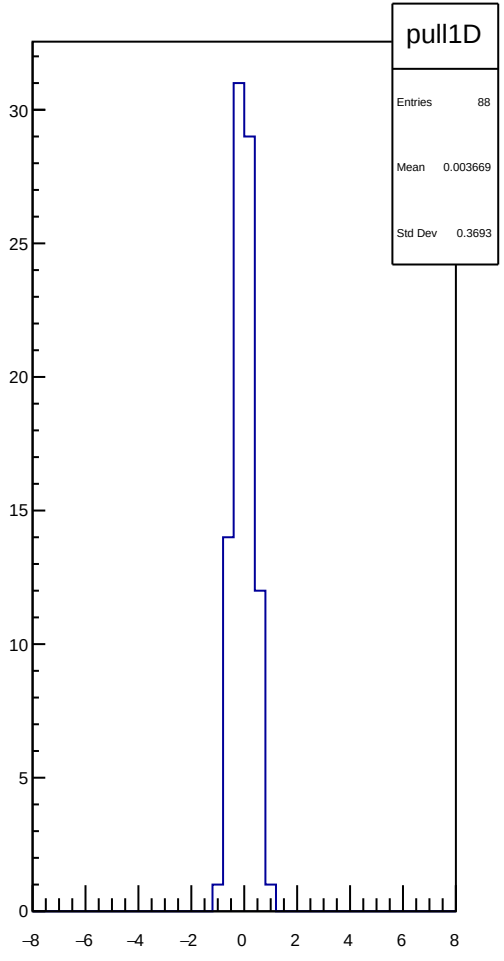

pull1D
Entries 88
Mean −0.001452
Std Dev 0.3507

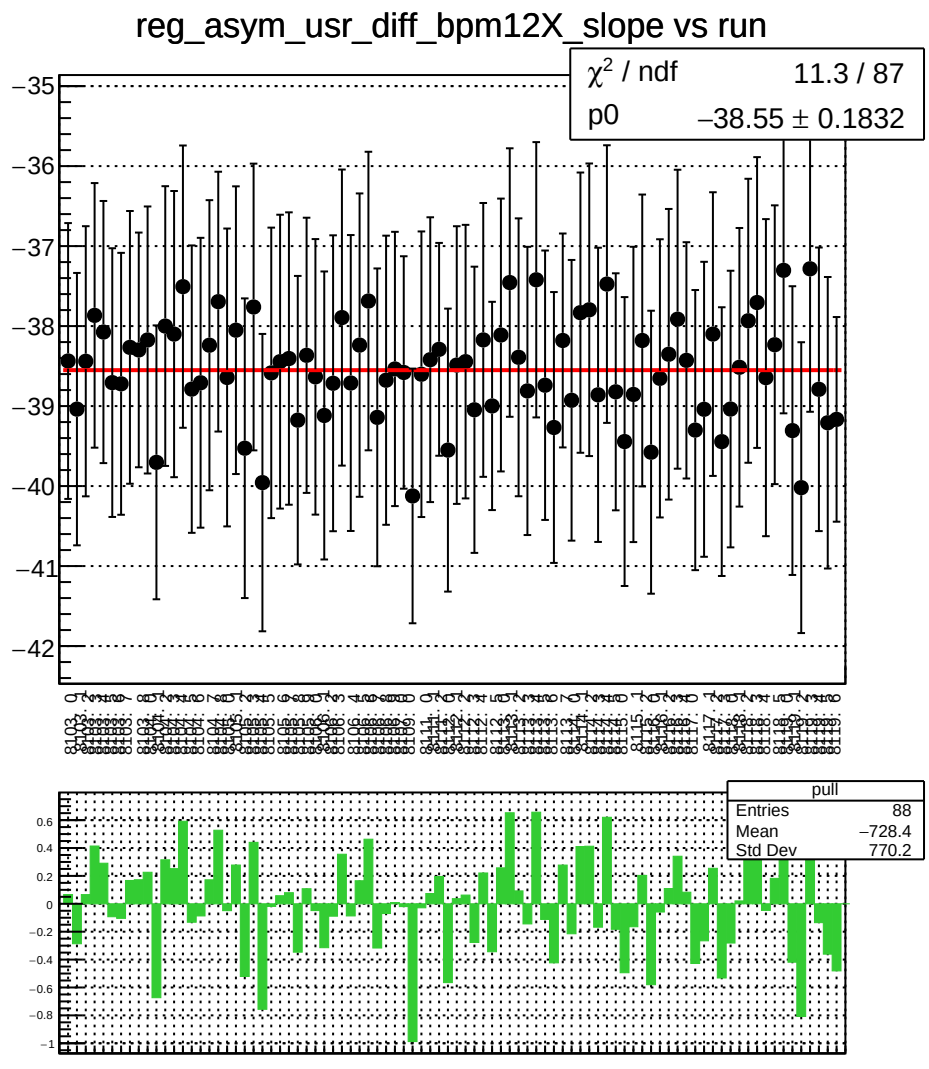

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 12.29 / 87
p0 22.14 ± 4.56
pull
Entries 88
Mean 998.3
Std Dev 950.7
pull1D
Entries 88
Mean −0.00368
Std Dev 0.3737

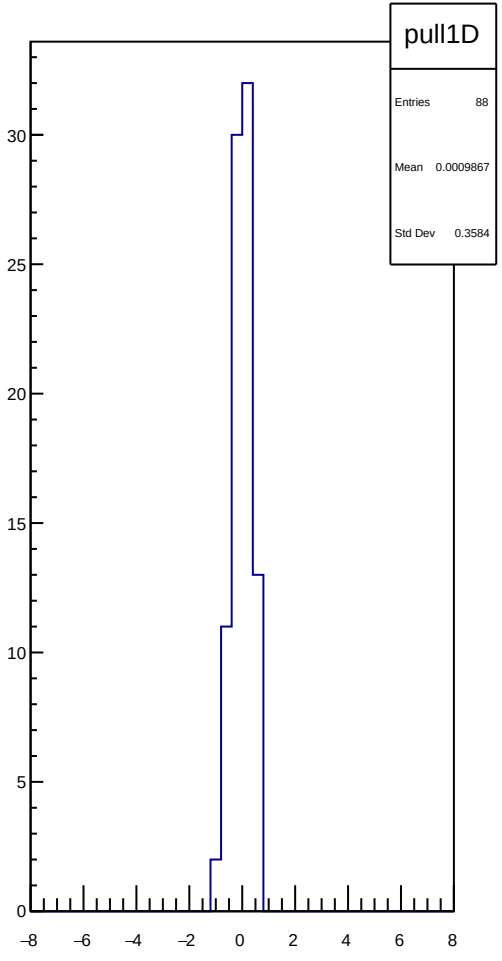

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 11.27 / 87
p0 118.6 ± 2.888
160
140
120
100
80
pull
Entries 88
Mean −552.9
Std Dev 592.4
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

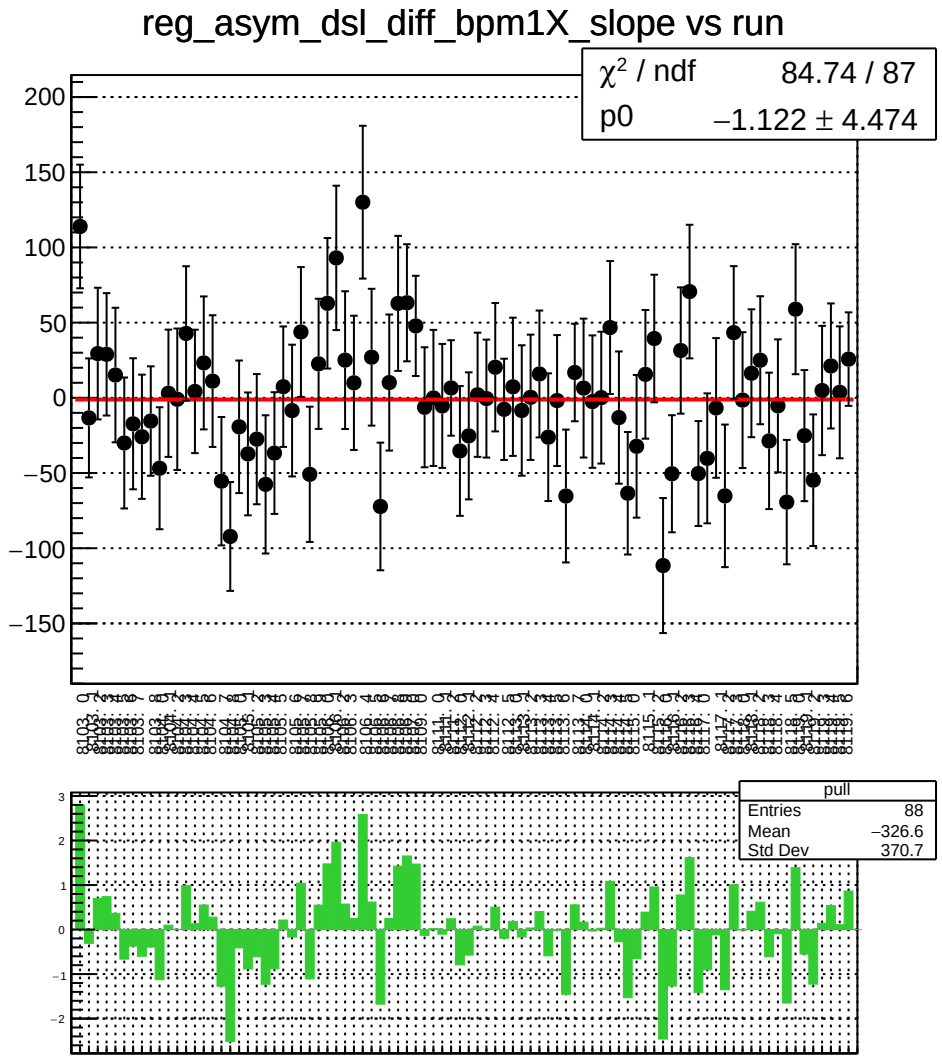

pull1D
Entries 88
Mean 0.001898
Std Dev 0.3579
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

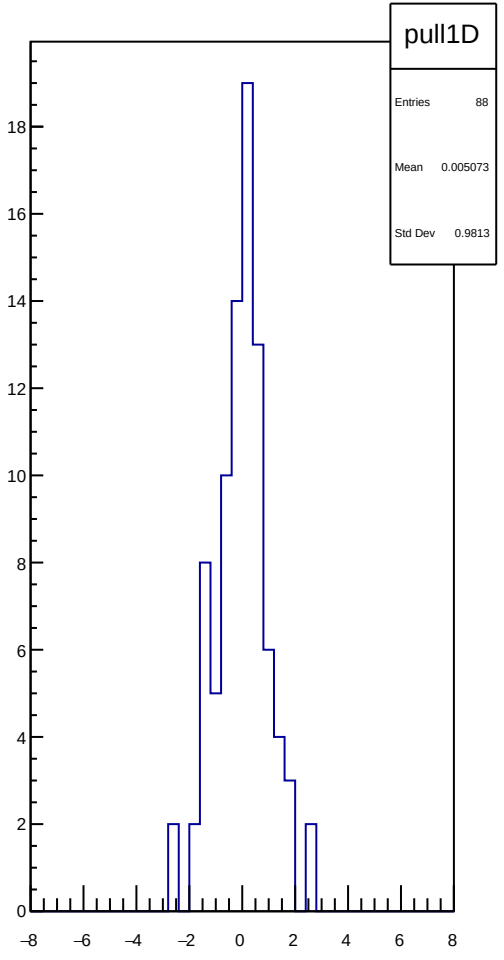

reg_asym_usr_diff_bpm4eY_slope vs run
χ^2 / ndf 12.01 / 87
p0 −9.95 ± 4.876
100
50
0
−50
−100
pull
Entries 88
Mean 1081
Std Dev 1034
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

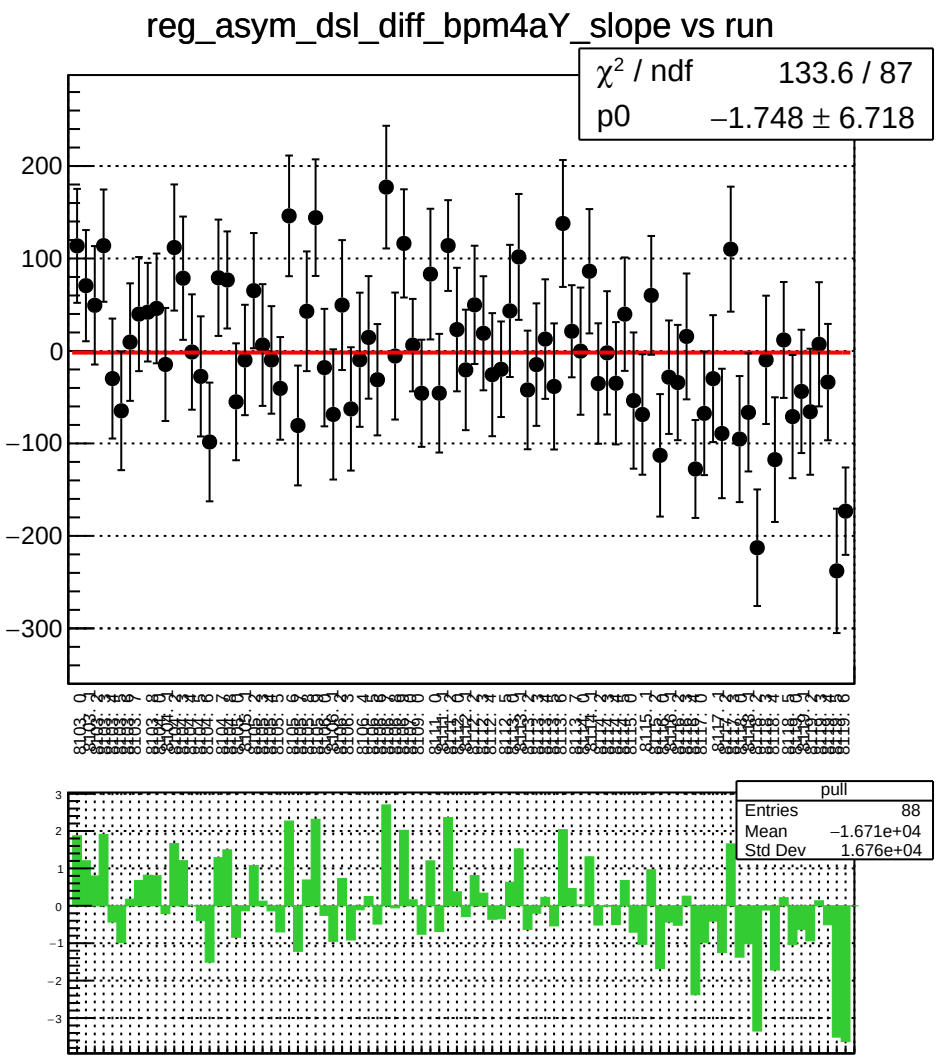

pull1D
Entries 88
Mean 0.003669
Std Dev 0.3693
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

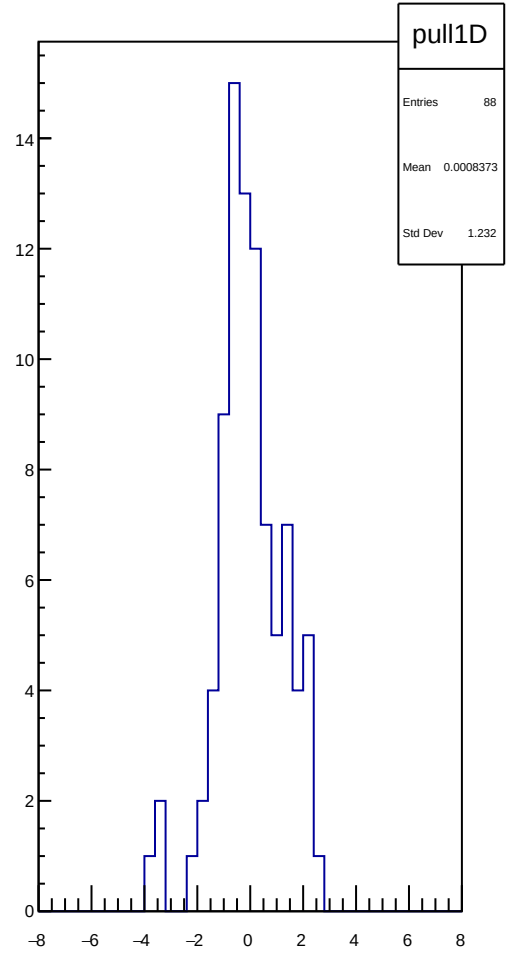

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 11.3 / 87
p0 −38.55 ± 0.1832
pull
Entries 88
Mean −728.4
Std Dev 770.2

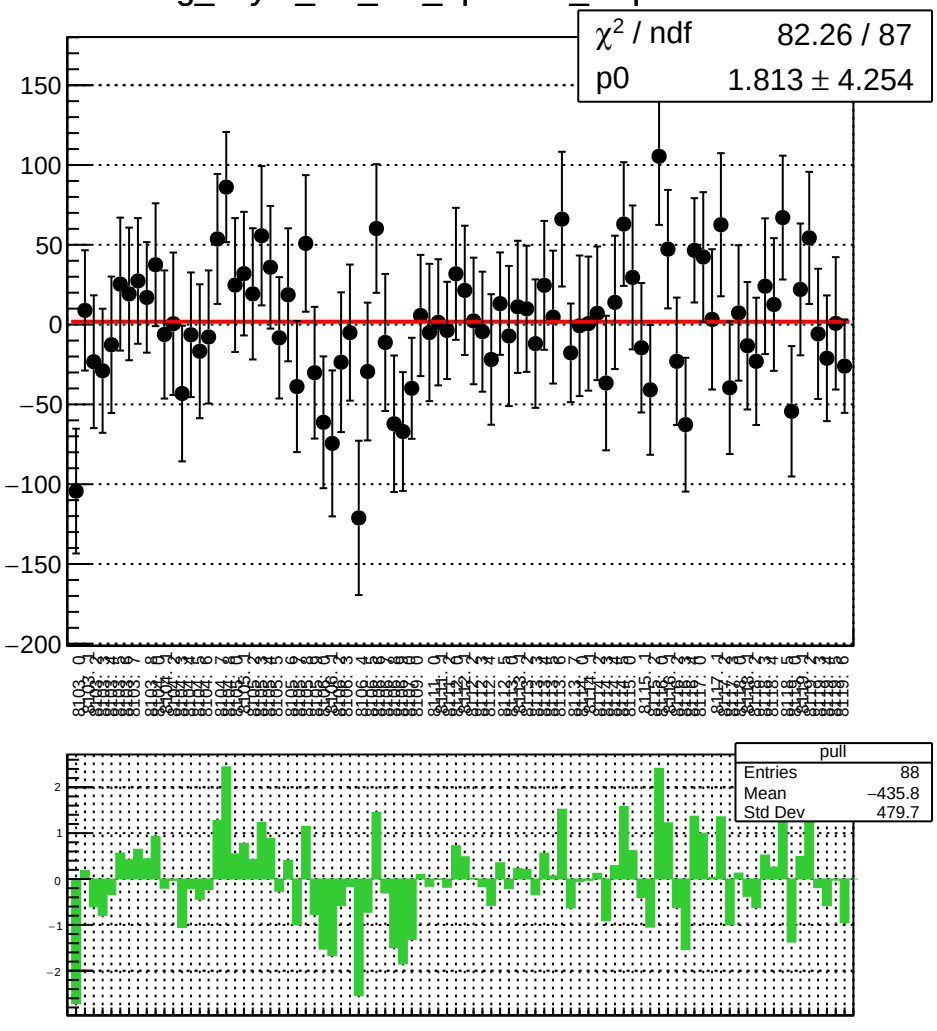

pull1D
Entries 88
Mean 0.0009867
Std Dev 0.3584

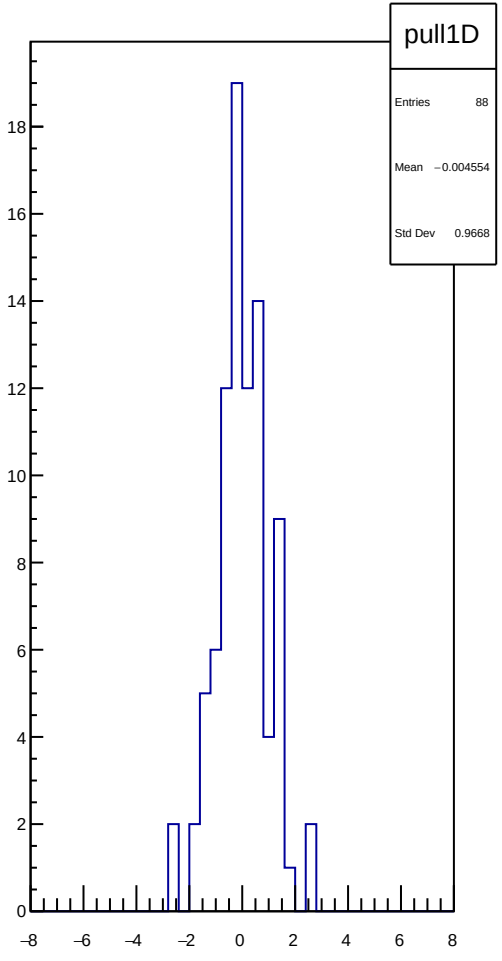

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 84.74 / 87
p0 −1.122 ± 4.474
pull
Entries 88
Mean −326.6
Std Dev 370.7

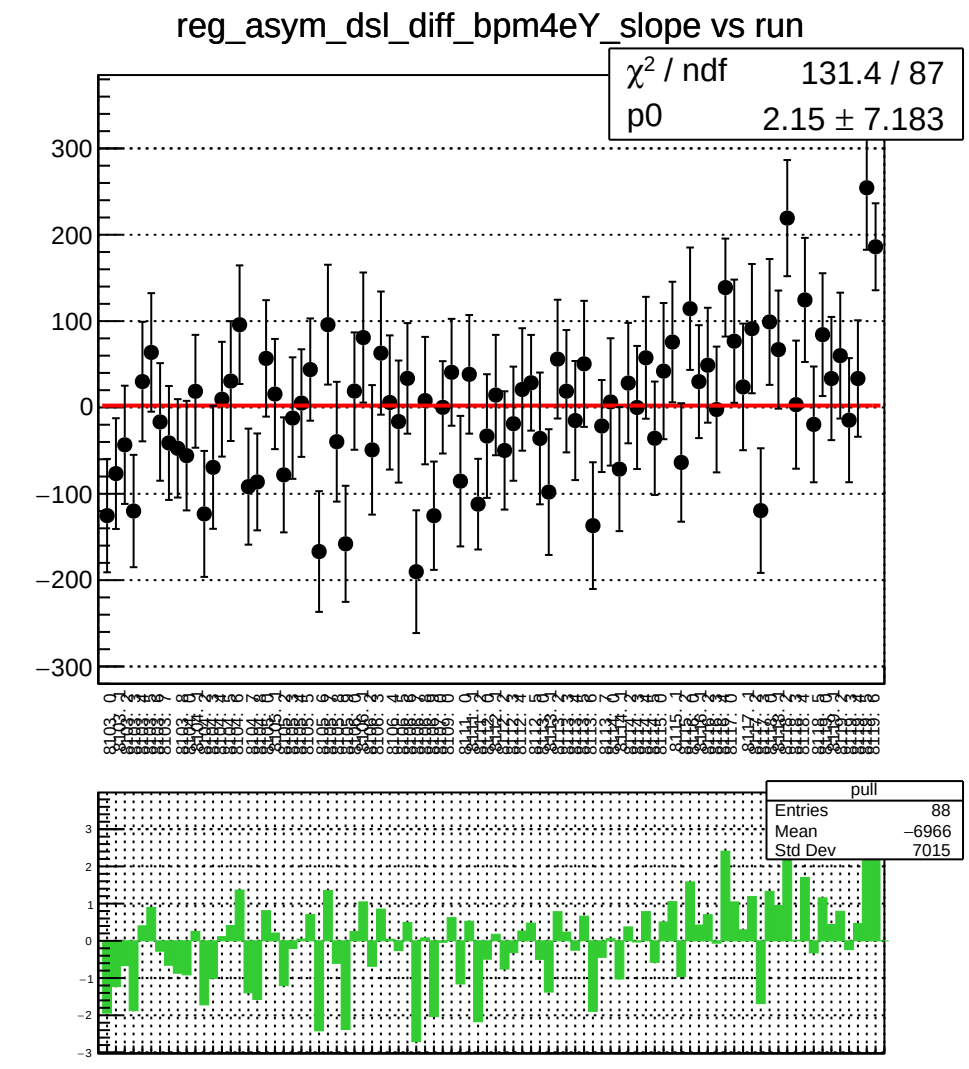

pull1D
Entries 88
Mean 0.005073
Std Dev 0.9813

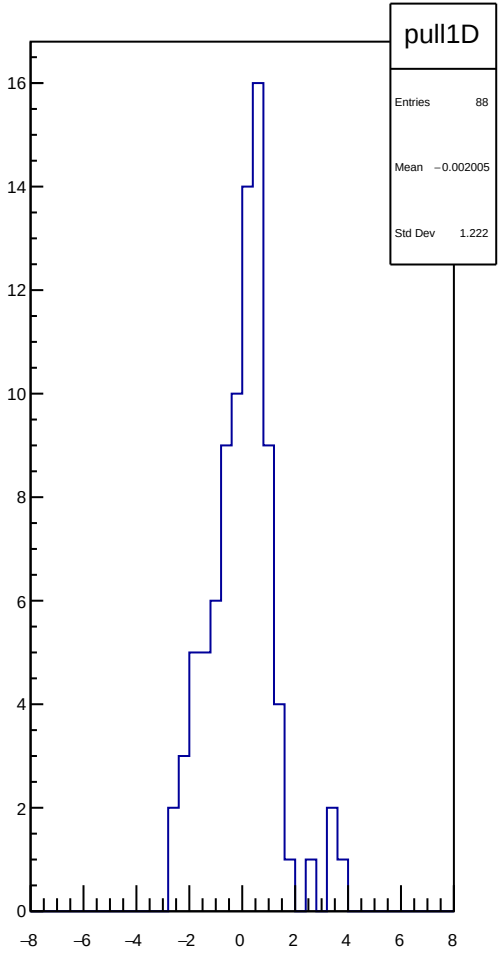

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 133.6 / 87
p0 −1.748 ± 6.718
200
100
0
−100
−200
−300
pull
Entries 88
Mean −1.671e+04
Std Dev 1.676e+04
3
2
1
0
−1
−2
−3

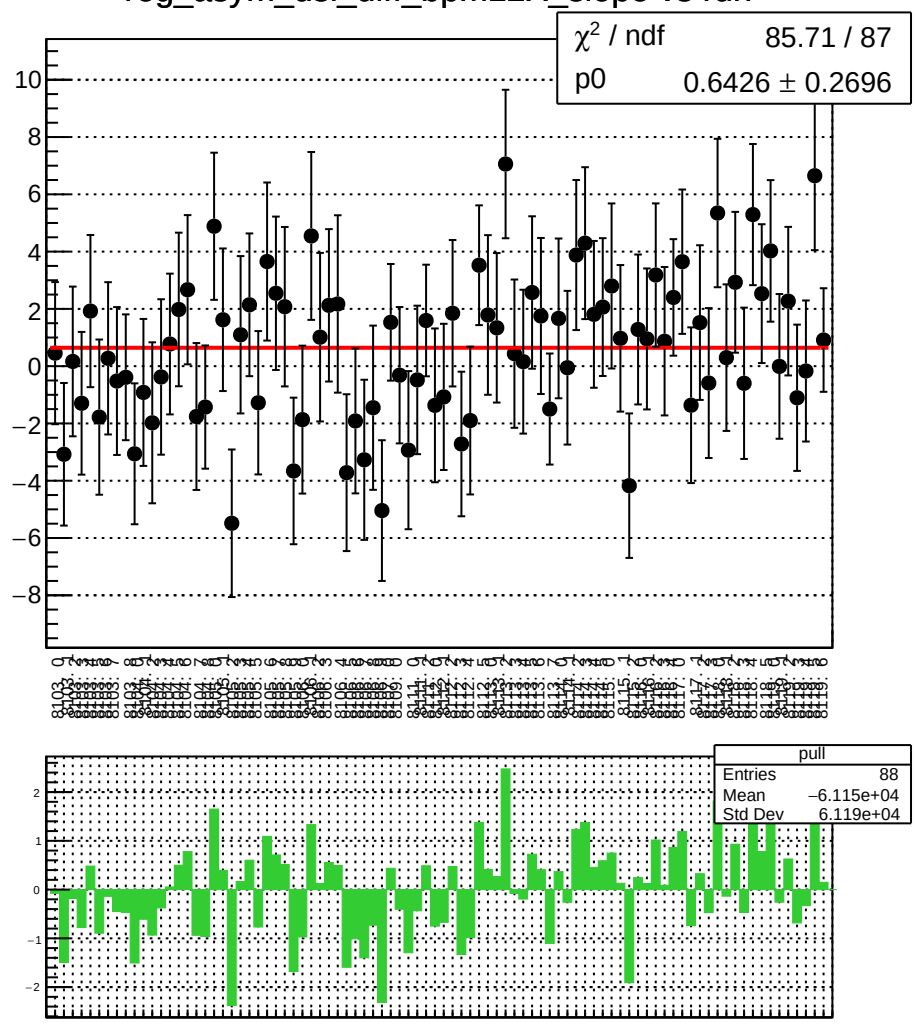

pull1D
Entries 88
Mean 0.0008373
Std Dev 1.232
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

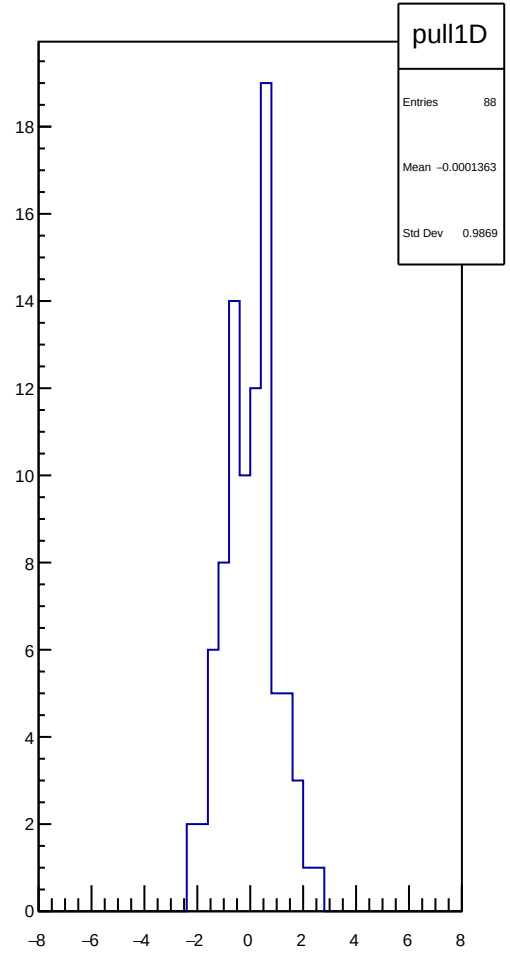

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 82.26 / 87
p0 1.813 ± 4.254
pull
Entries 88
Mean −435.8
Std Dev 479.7

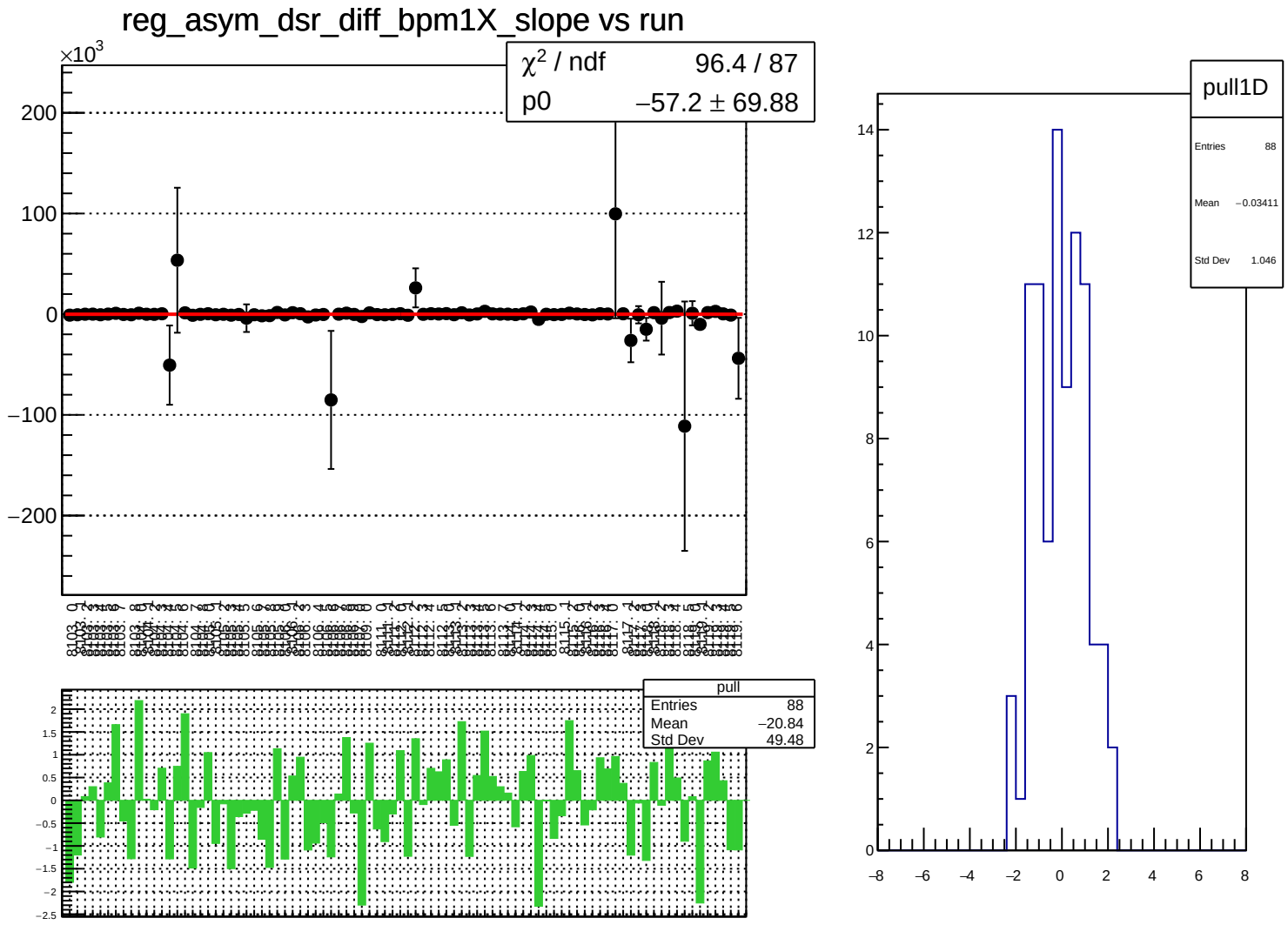

pull1D
Entries 88
Mean −0.004554
Std Dev 0.9668

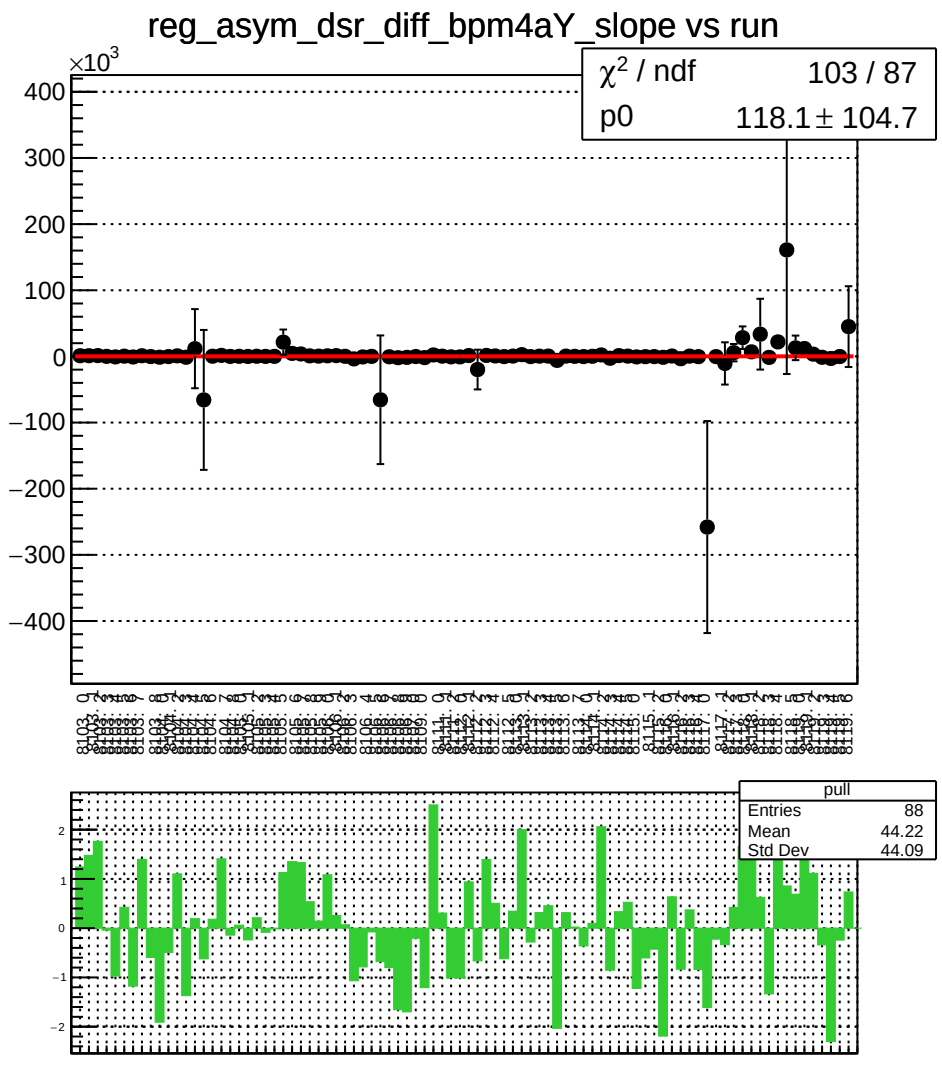

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 131.4 / 87
p0 2.15 ± 7.183
pull
Entries 88
Mean −6966
Std Dev 7015

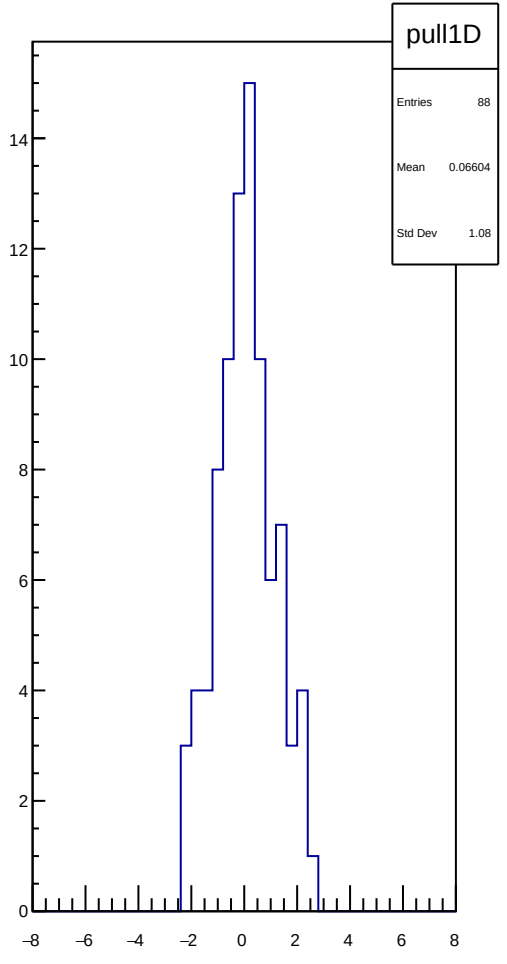

pull1D
Entries 88
Mean −0.002005
Std Dev 1.222

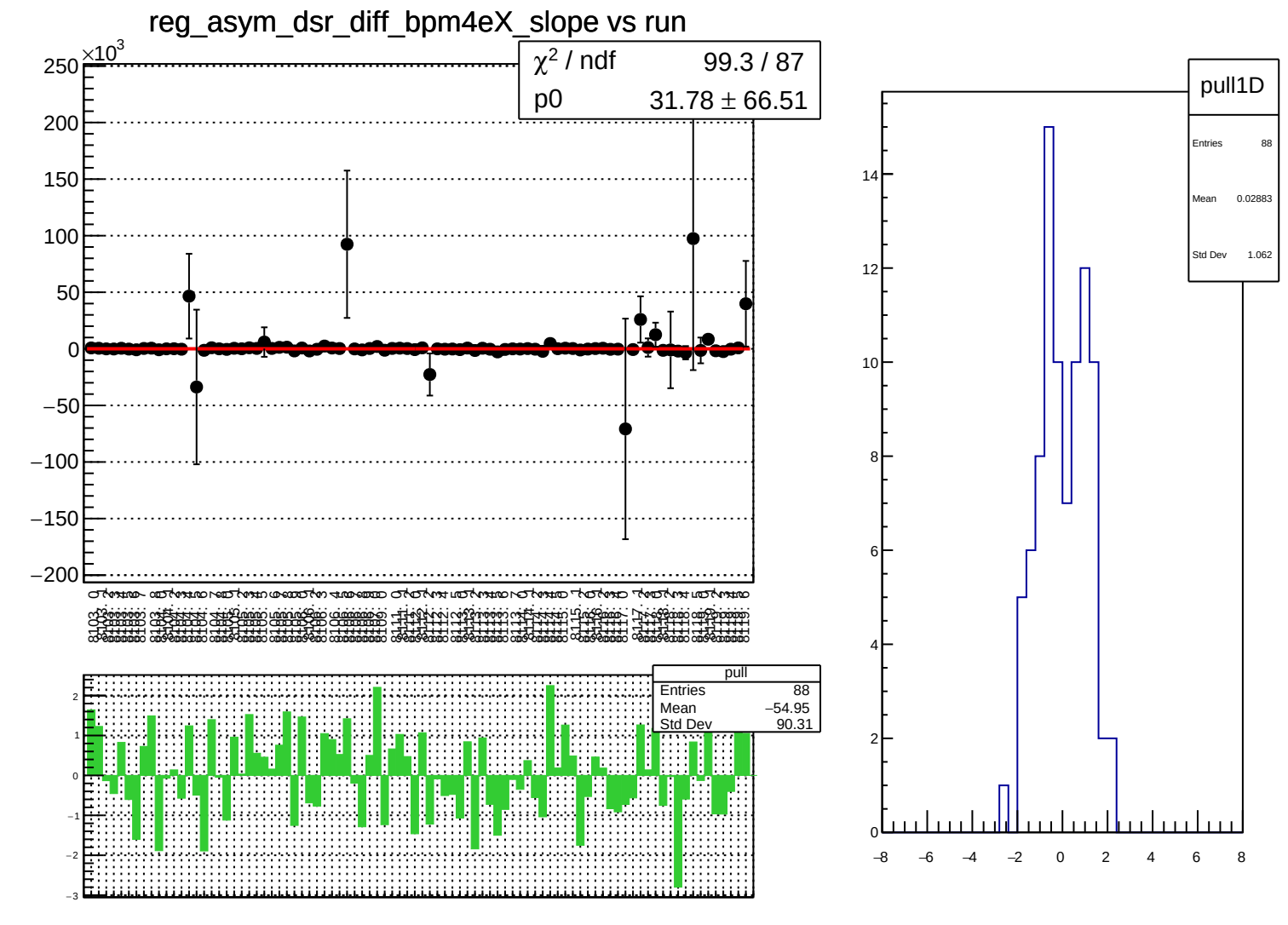

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 85.71 / 87
p0 0.6426 ± 0.2696
pull
Entries 88
Mean −6.115e+04
Std Dev 6.119e+04

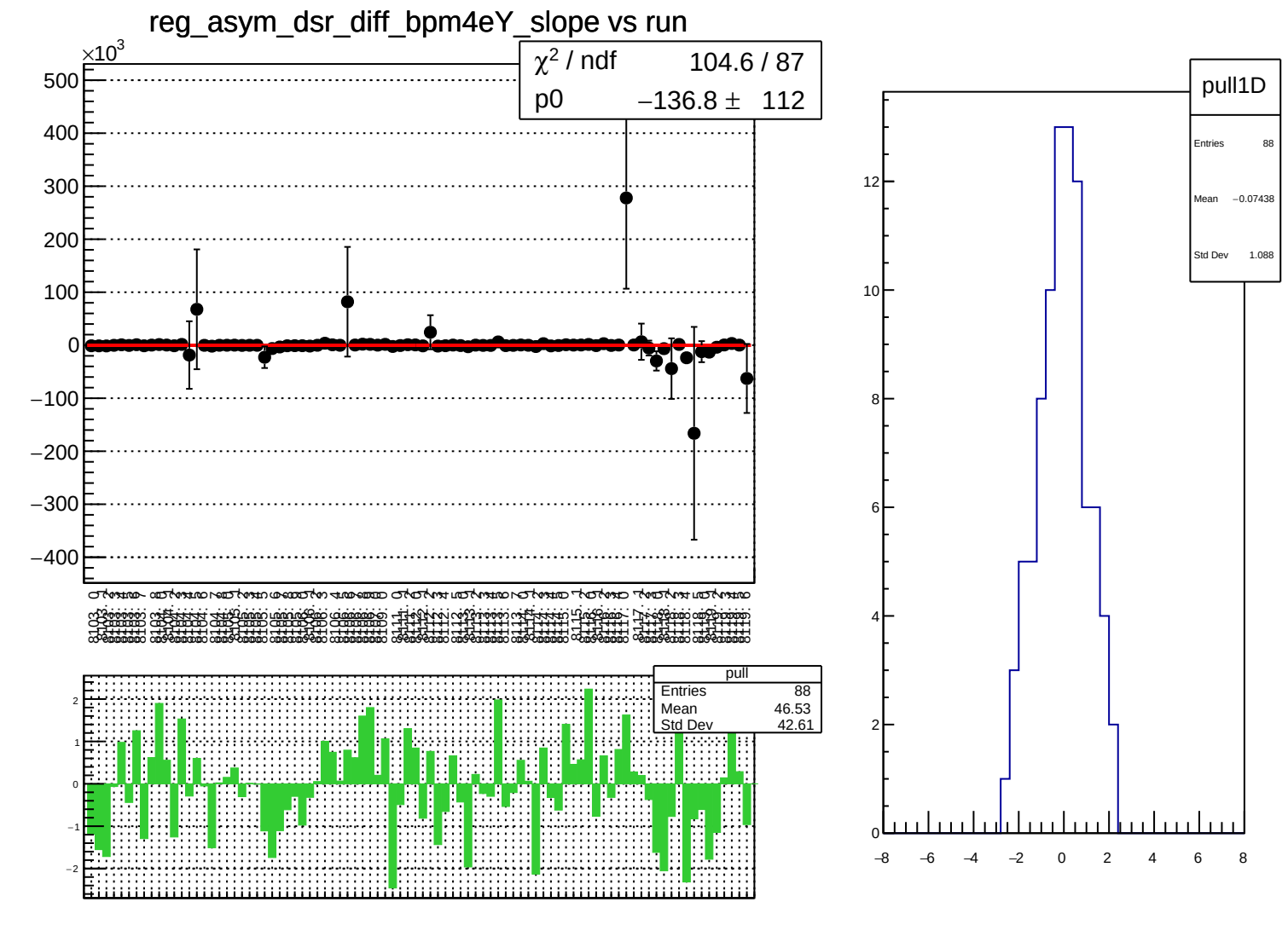

pull1D
Entries 88
Mean −0.0001363
Std Dev 0.9869

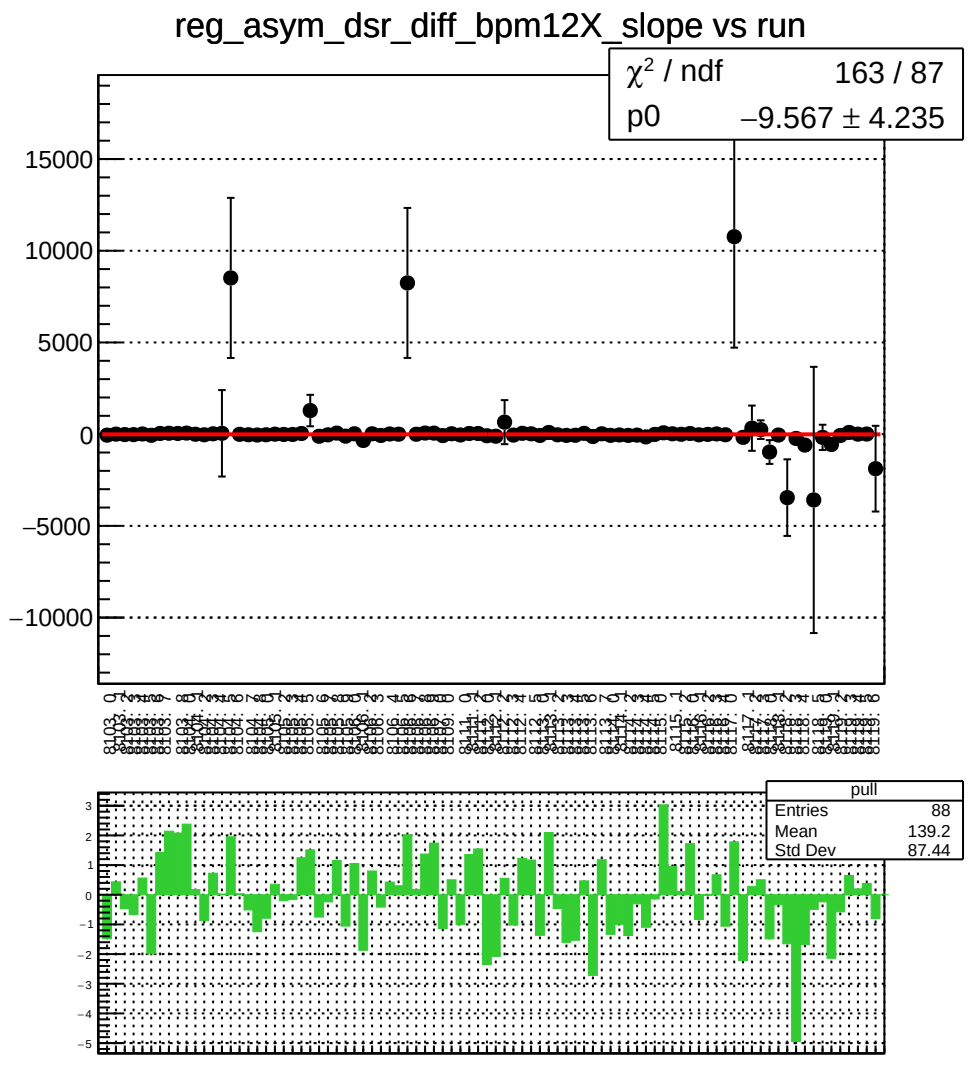

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 96.4 / 87
p0 −57.2 ± 69.88
×10³
200
100
0
−100
−200
pull
Entries 88
Mean −20.84
Std Dev 49.48
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 88
Mean −0.03411
Std Dev 1.046
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

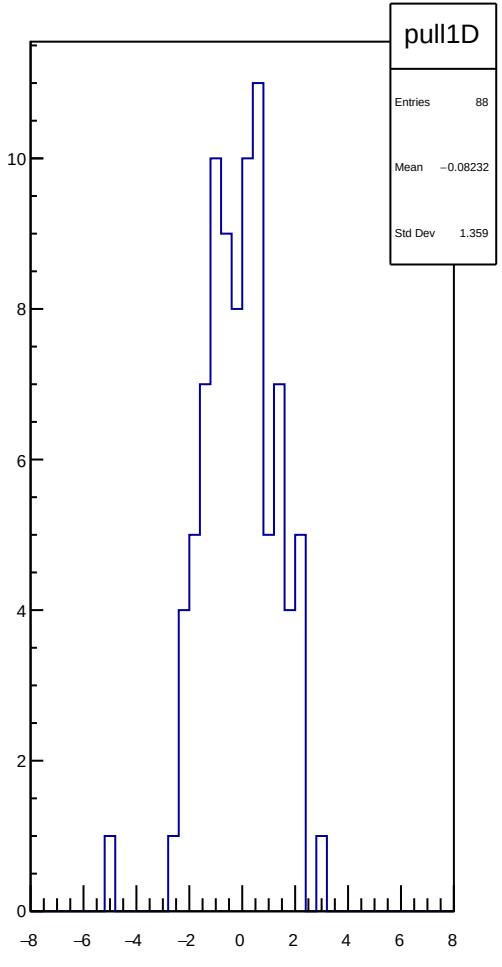

reg_asym_dsr_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 103 / 87
p0 118.1 ± 104.7
pull
Entries 88
Mean 44.22
Std Dev 44.09

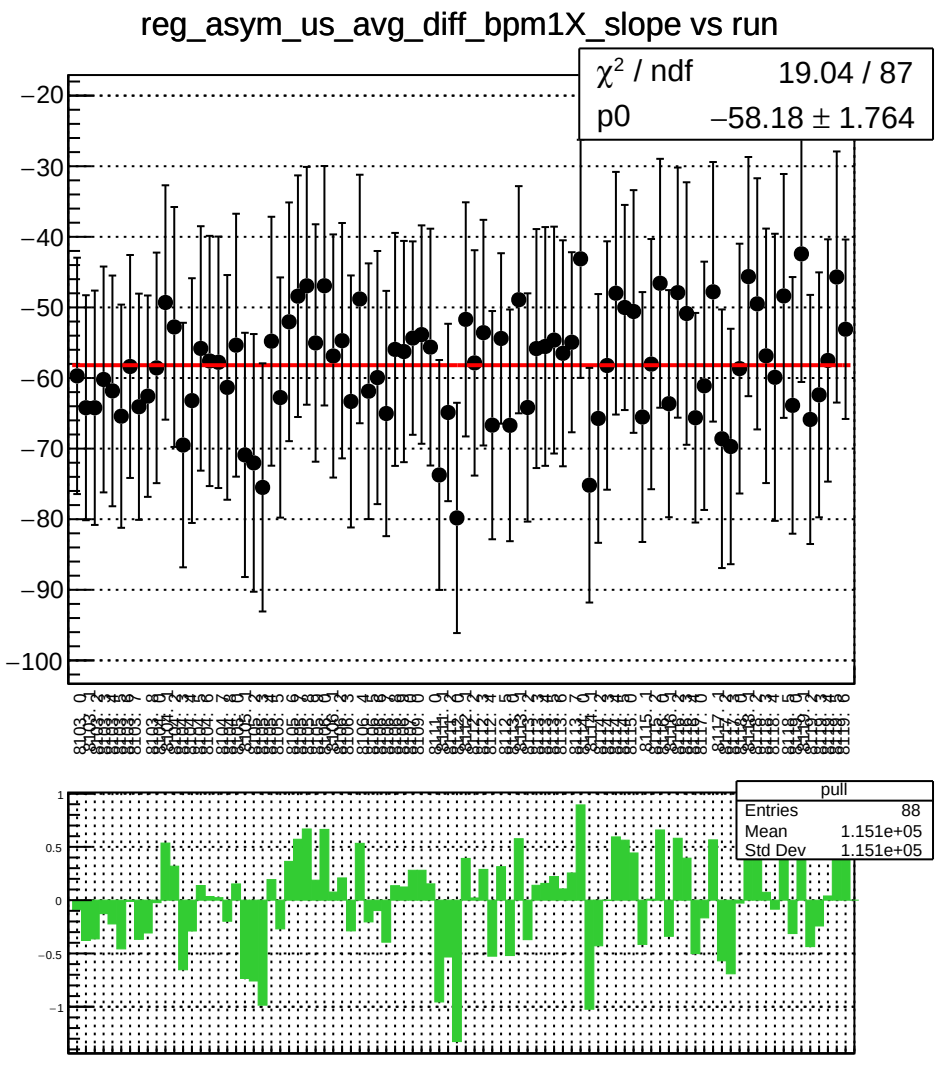

pull1D
Entries 88
Mean 0.06604
Std Dev 1.08

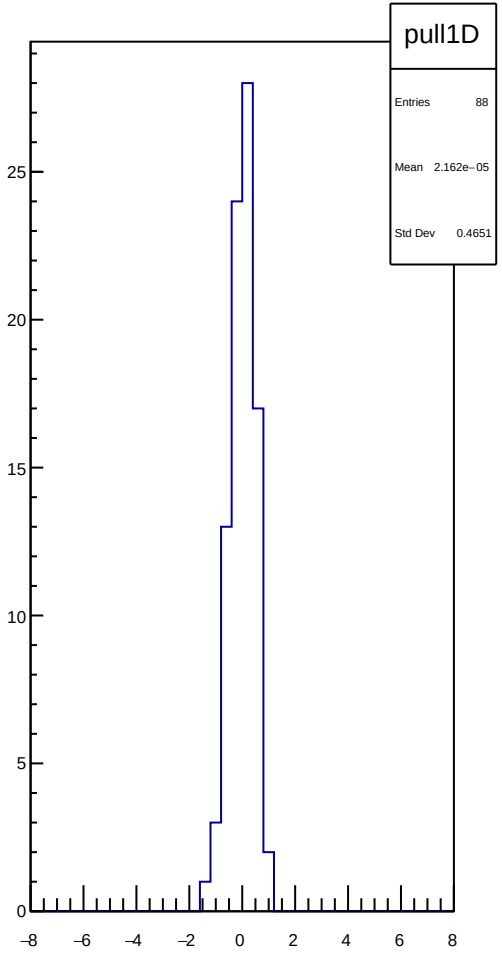

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 99.3 / 87
p0 31.78 ± 66.51
×10³
pull
Entries 88
Mean −54.95
Std Dev 90.31
pull1D
Entries 88
Mean 0.02883
Std Dev 1.062

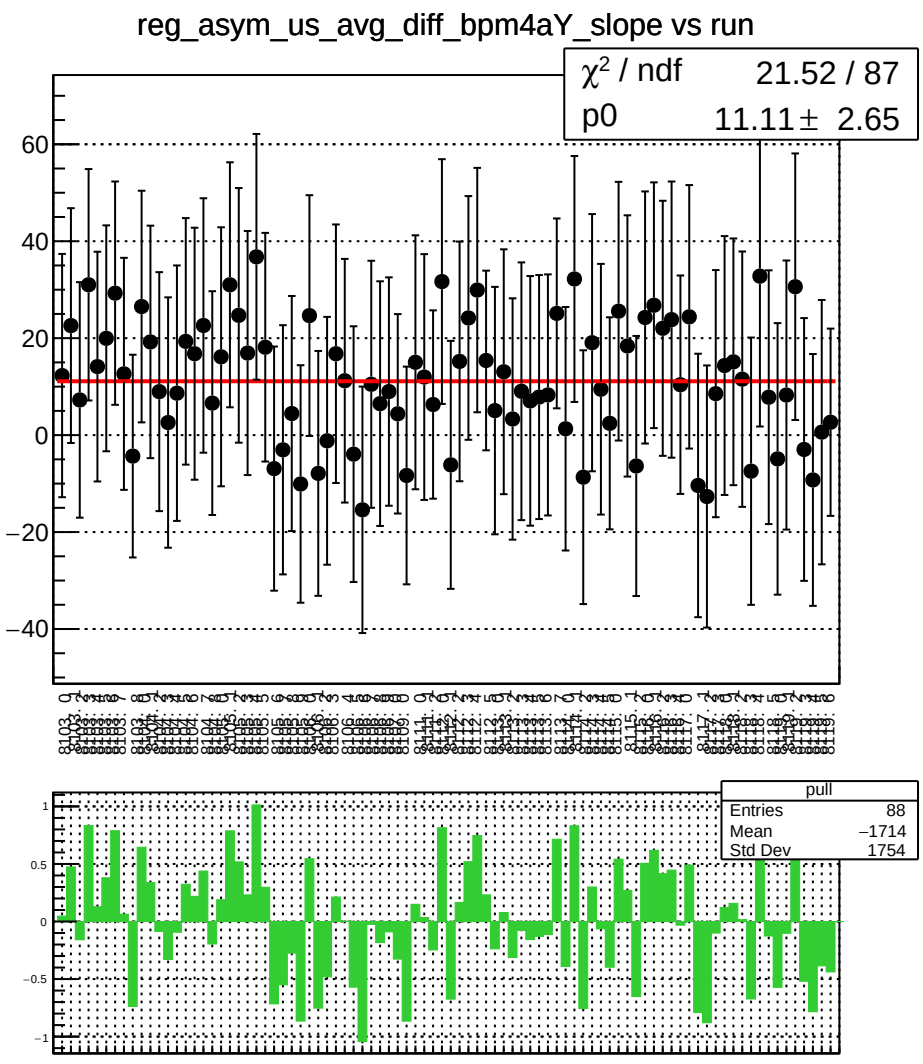

reg_asym_dsr_diff_bpm4eY_slope vs run
χ2 / ndf 104.6 / 87
p0 −136.8 ± 112
pull
Entries 88
Mean 46.53
Std Dev 42.61
pull1D
Entries 88
Mean −0.07438
Std Dev 1.088

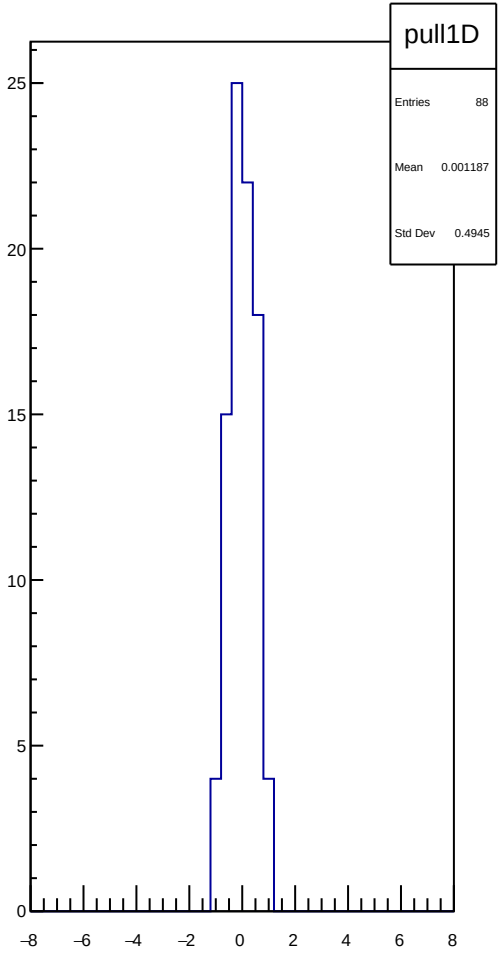

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 163 / 87
p0 −9.567 ± 4.235
15000
10000
5000
0
−5000
−10000
pull
Entries 88
Mean 139.2
Std Dev 87.44
3
2
1
0
−1
−2
−3
−4
−5

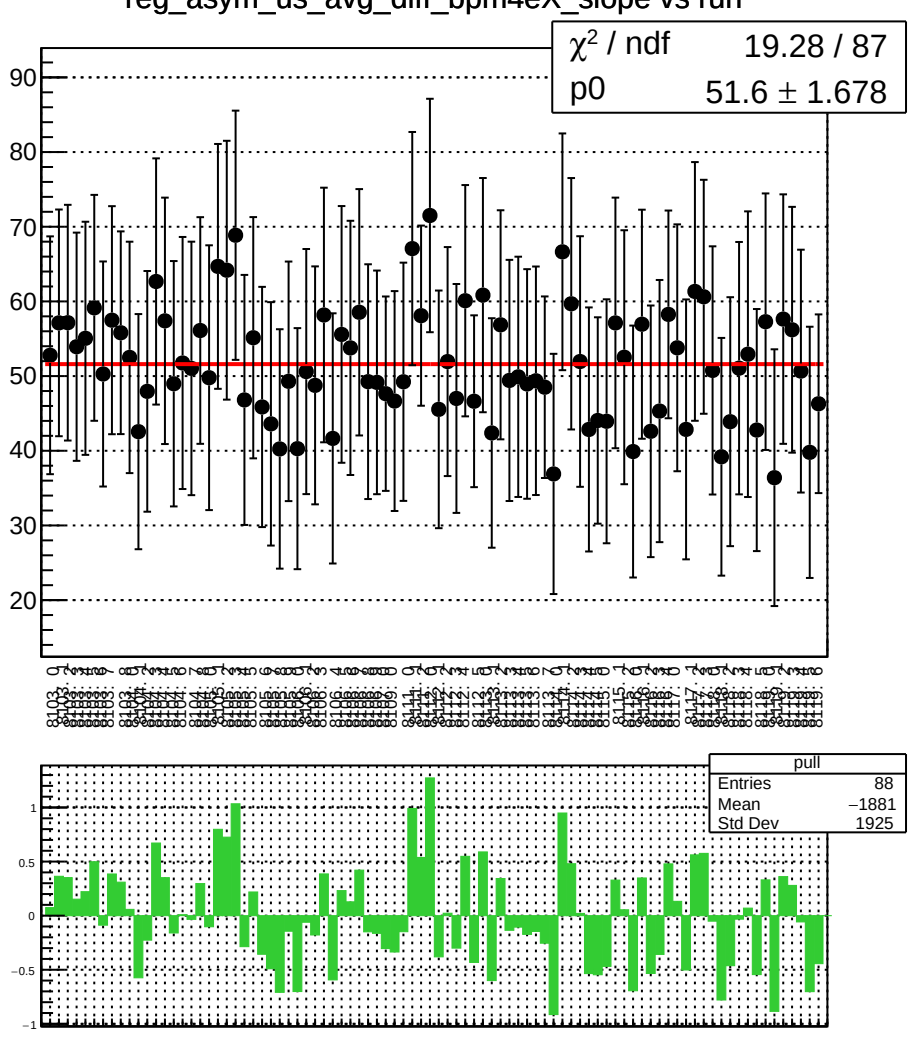

pull1D
Entries 88
Mean −0.08232
Std Dev 1.359
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

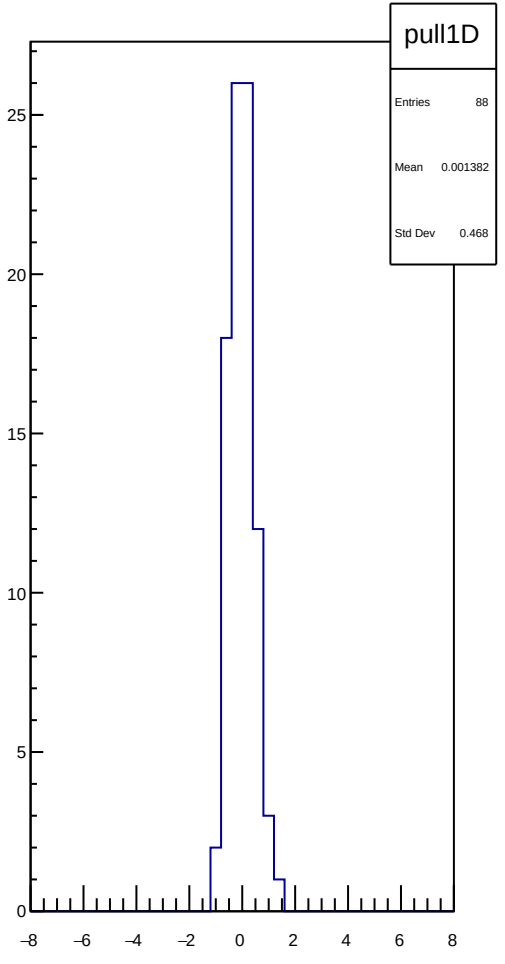

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 19.04 / 87
p0 −58.18 ± 1.764
pull
Entries 88
Mean 1.151e+05
Std Dev 1.151e+05

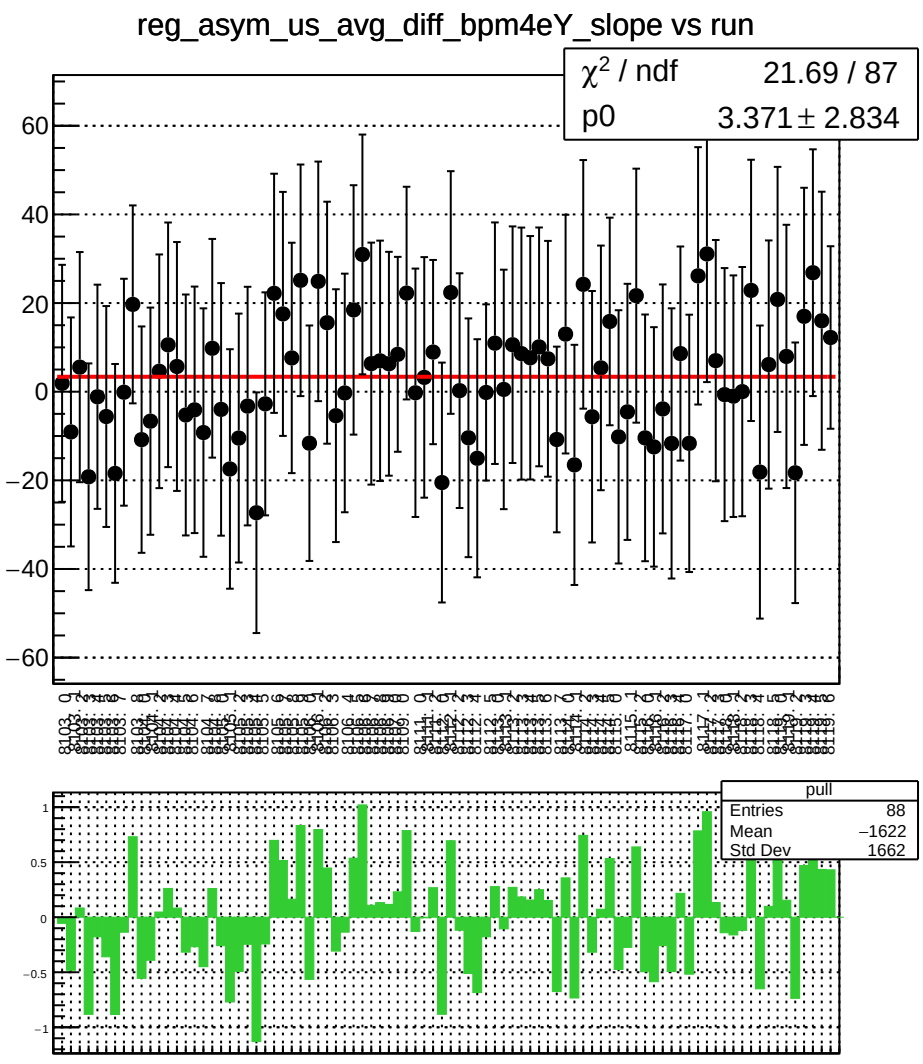

pull1D
Entries 88
Mean 2.162e−05
Std Dev 0.4651

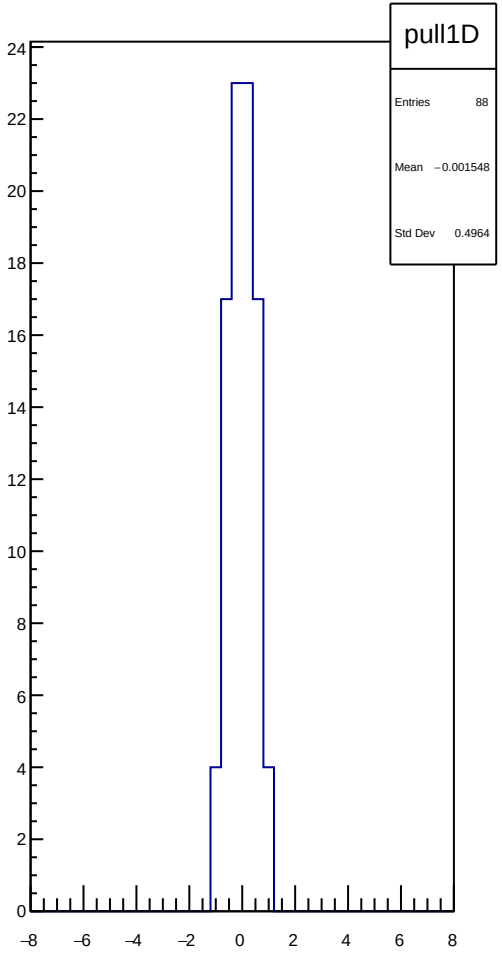

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 21.52 / 87
p0 11.11 ± 2.65
pull
Entries 88
Mean −1714
Std Dev 1754

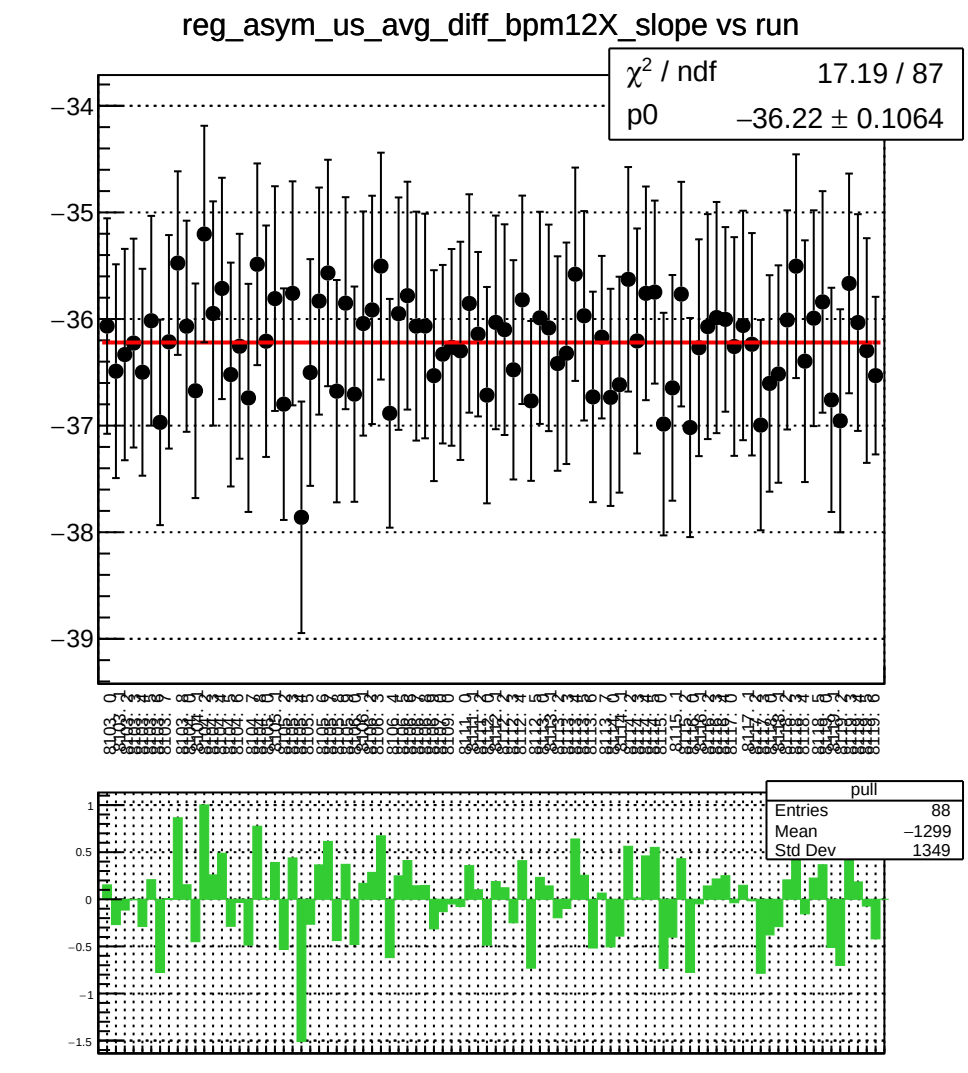

pull1D
Entries 88
Mean 0.001187
Std Dev 0.4945

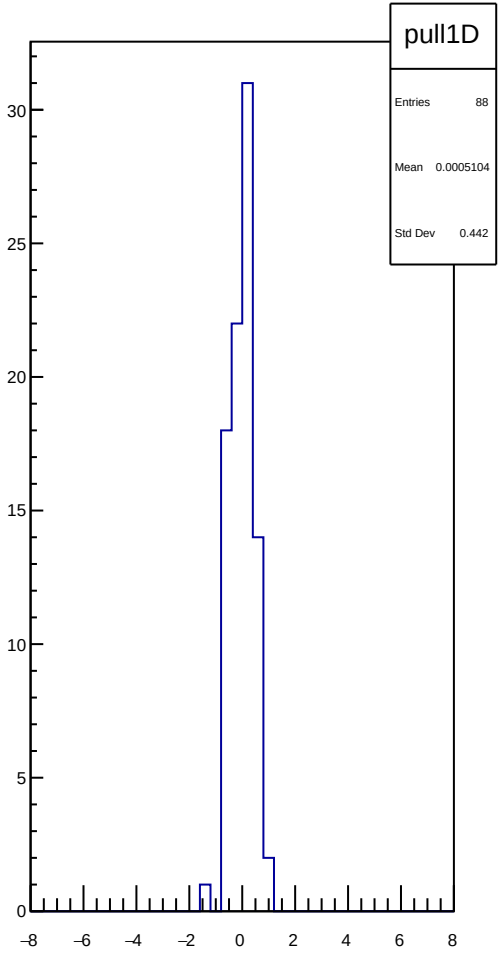

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 19.28 / 87
p0 51.6 ± 1.678
pull
Entries 88
Mean −1881
Std Dev 1925

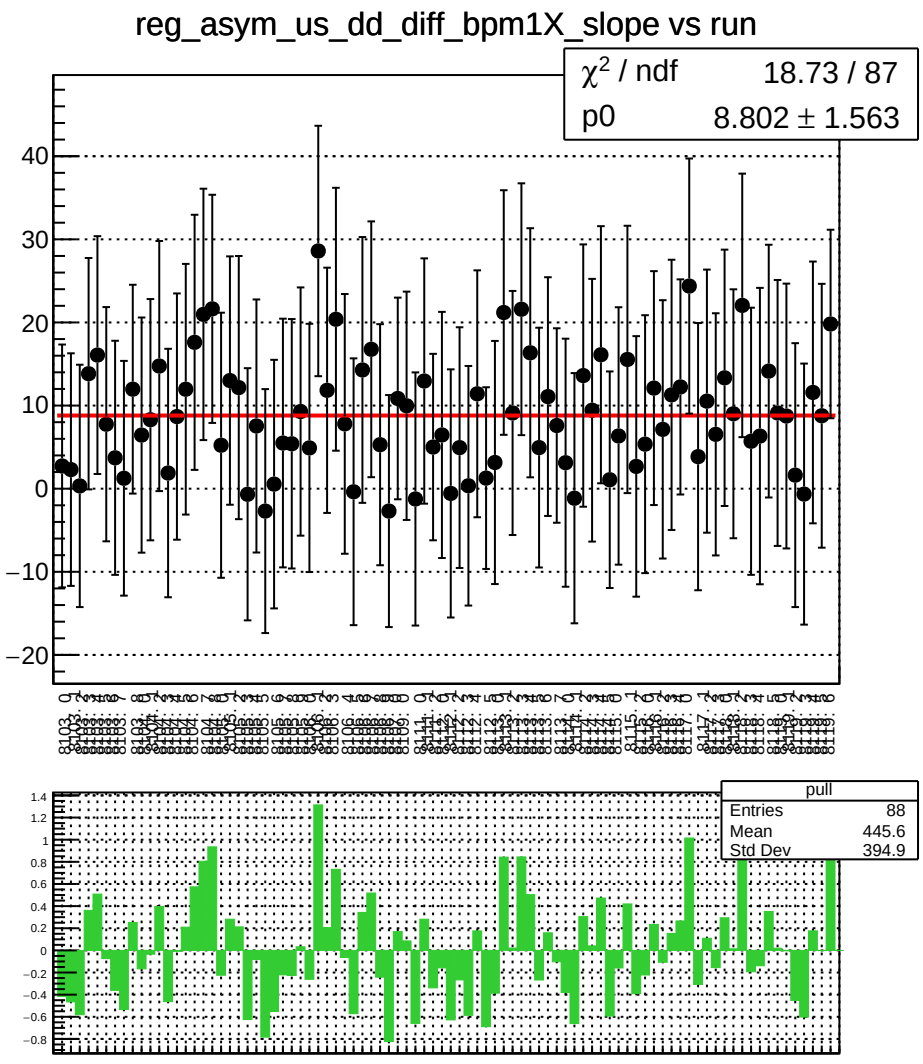

pull1D
Entries 88
Mean 0.001382
Std Dev 0.468

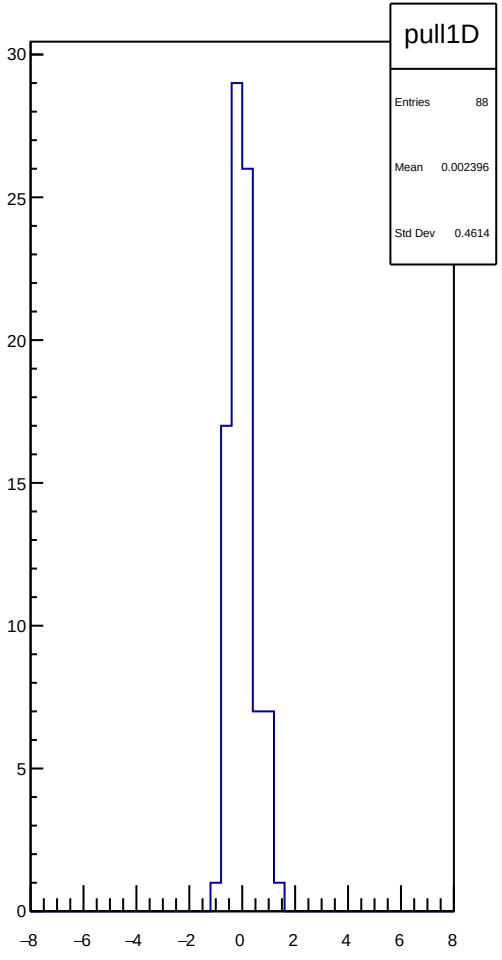

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 21.69 / 87
p0 3.371 ± 2.834
pull
Entries 88
Mean −1622
Std Dev 1662

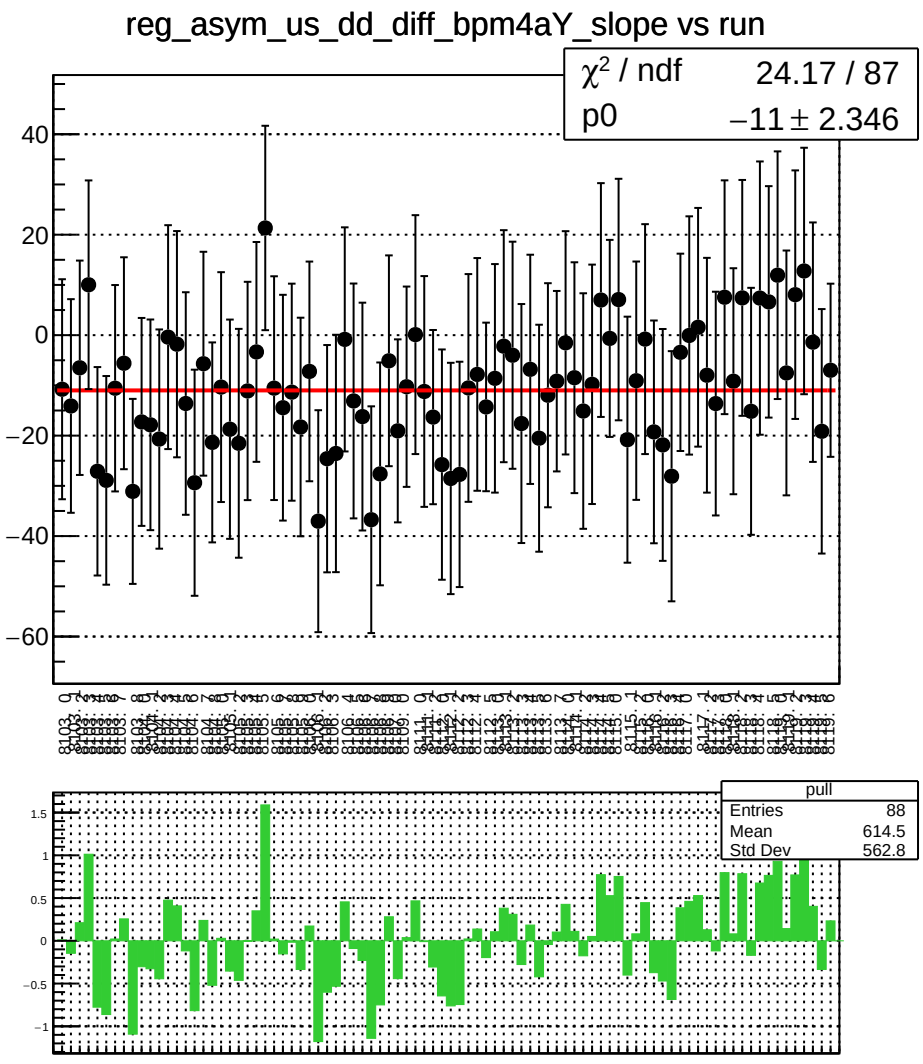

pull1D
Entries 88
Mean −0.001548
Std Dev 0.4964

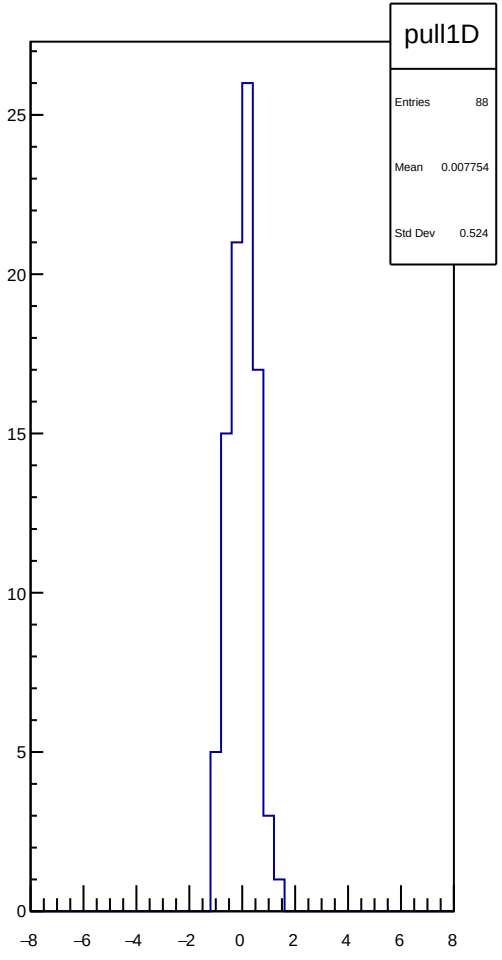

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 17.19 / 87
p0 −36.22 ± 0.1064
pull
Entries 88
Mean −1299
Std Dev 1349

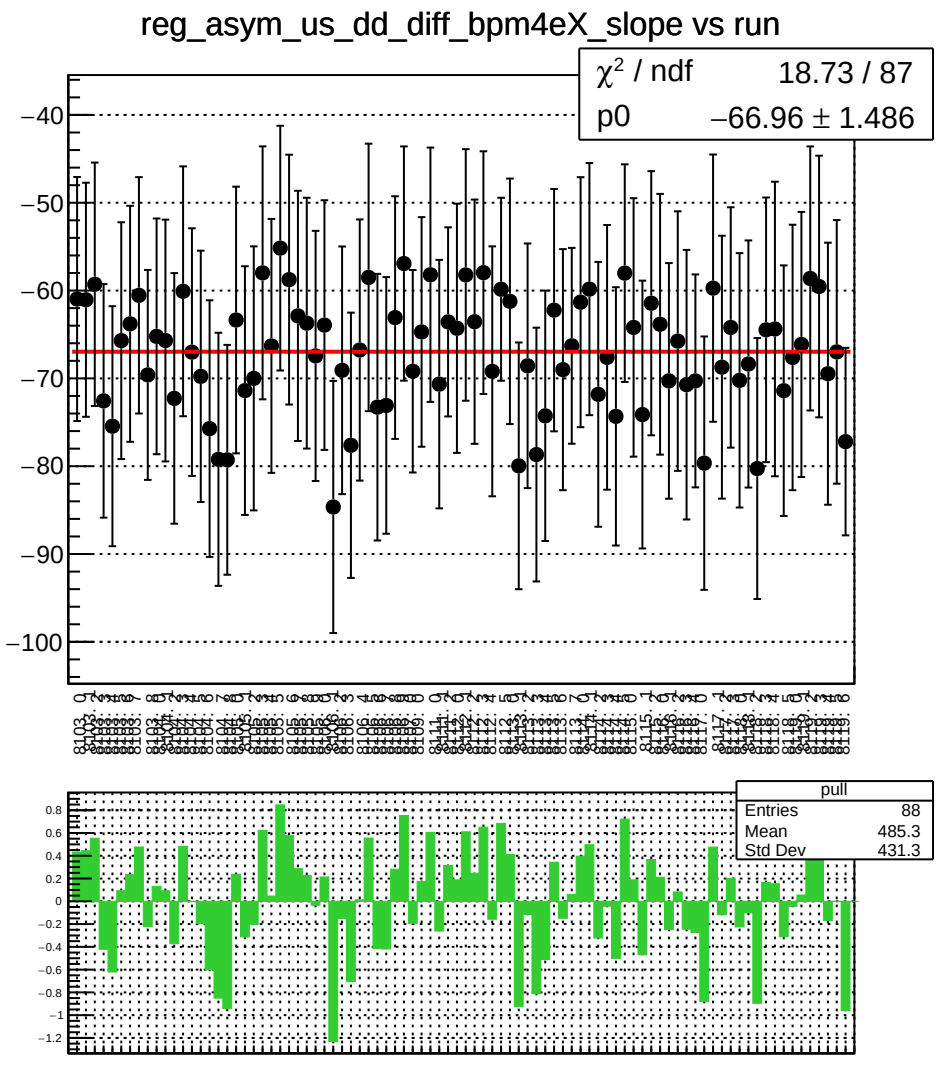

pull1D
Entries 88
Mean 0.0005104
Std Dev 0.442

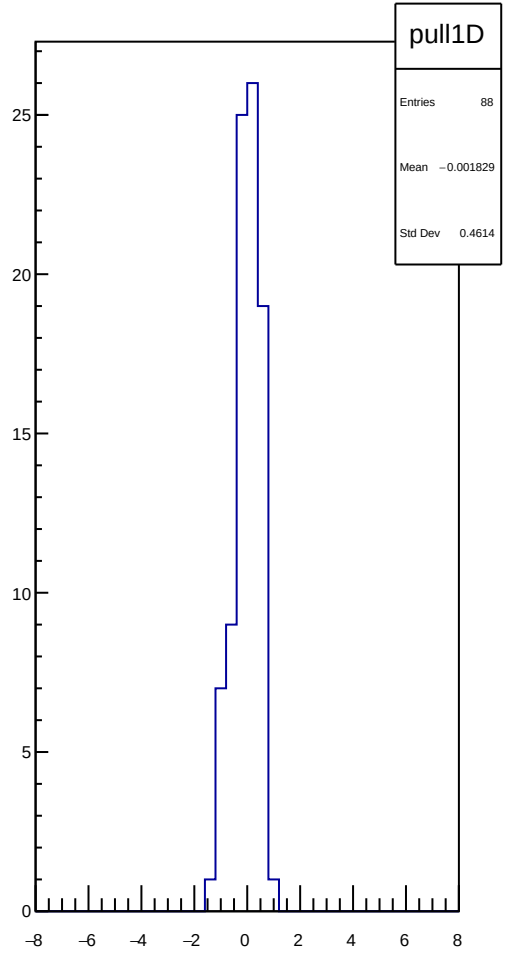

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 18.73 / 87
p0 8.802 ± 1.563
pull
Entries 88
Mean 445.6
Std Dev 394.9

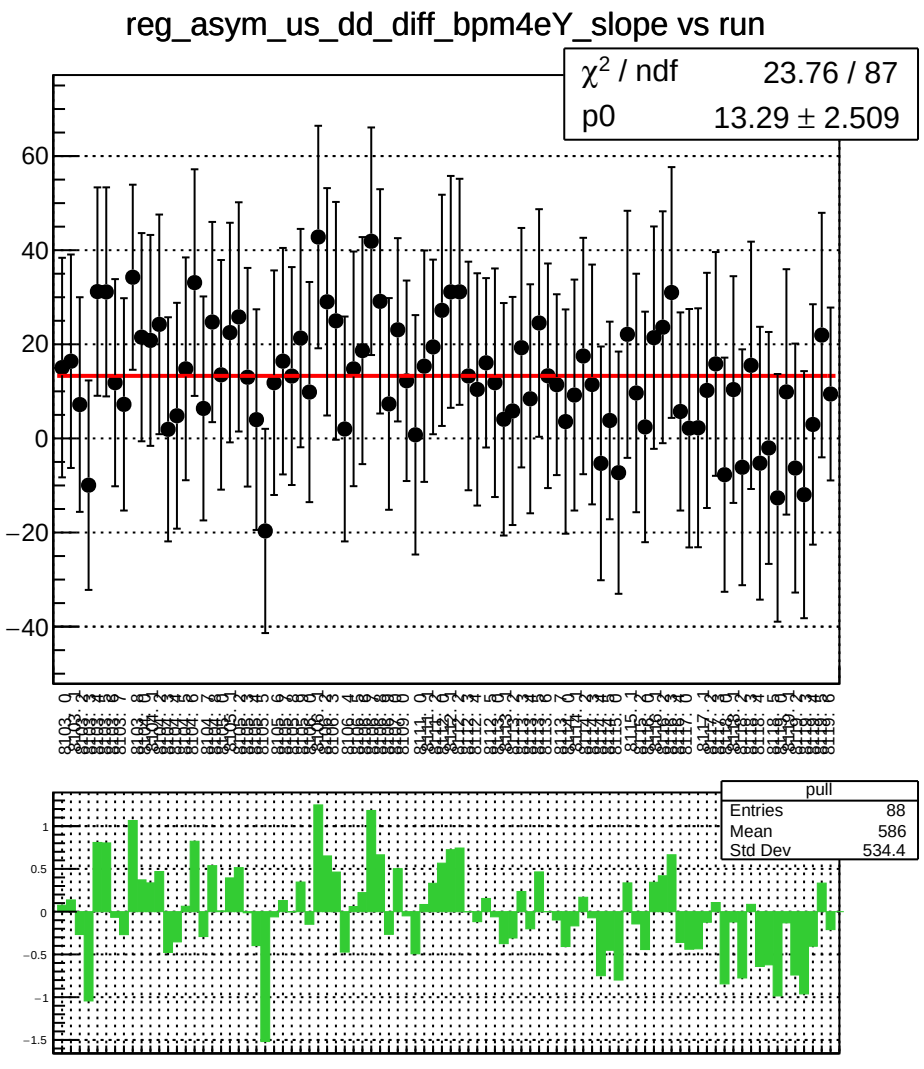

pull1D
Entries 88
Mean 0.002396
Std Dev 0.4614

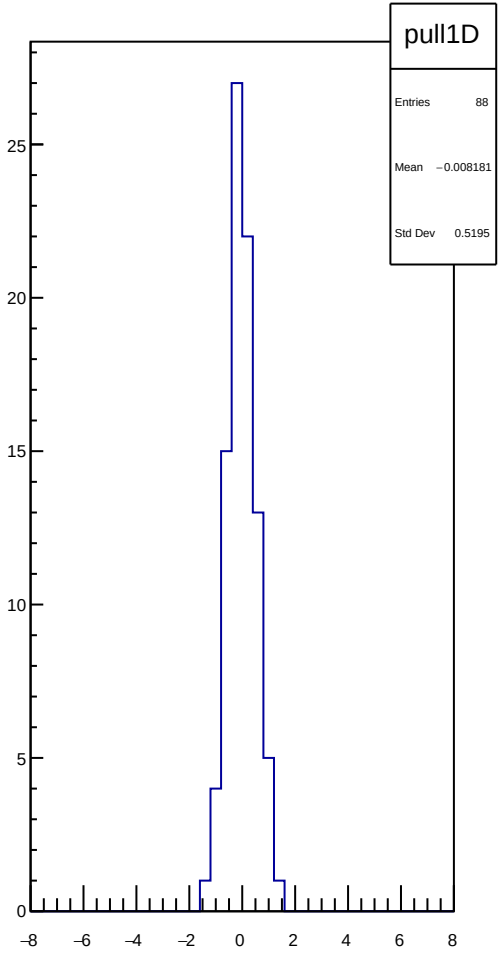

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 24.17 / 87
p0 −11 ± 2.346
pull
Entries 88
Mean 614.5
Std Dev 562.8

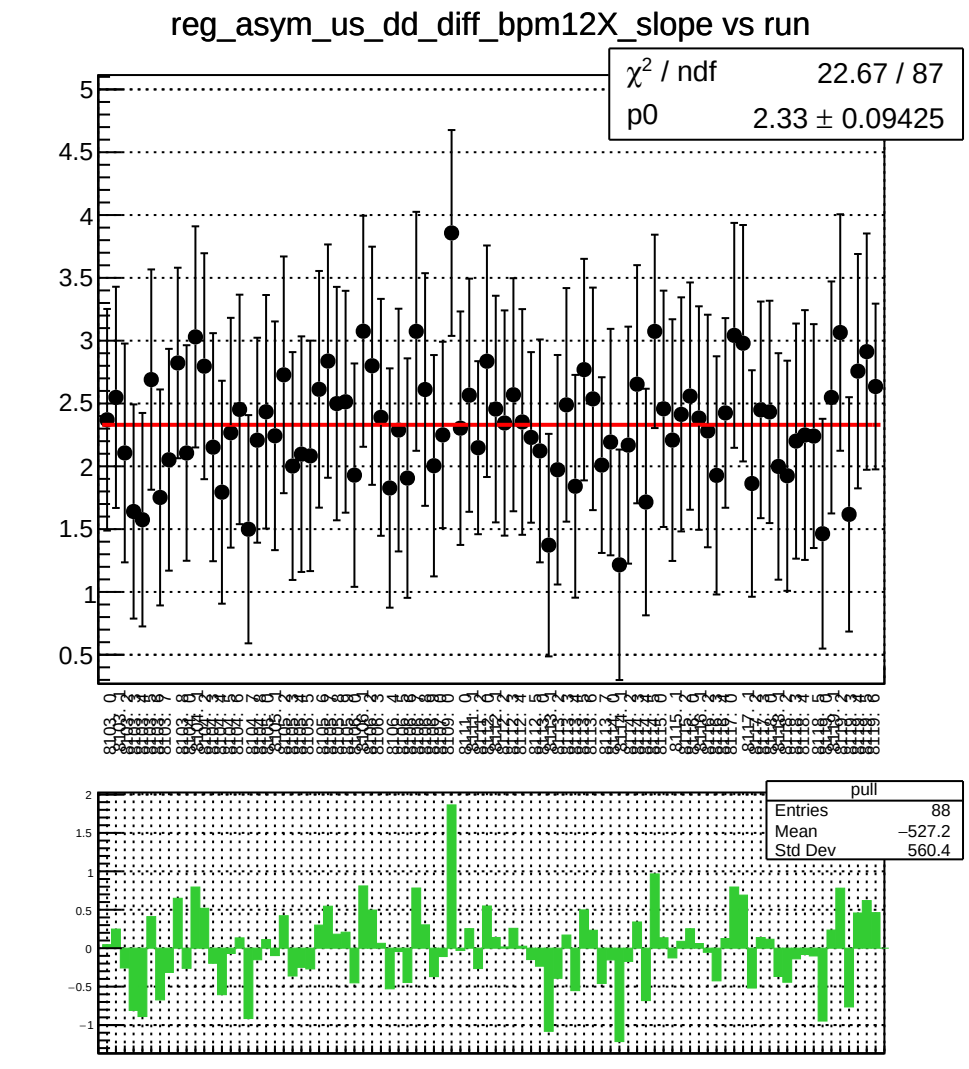

pull1D
Entries 88
Mean 0.007754
Std Dev 0.524

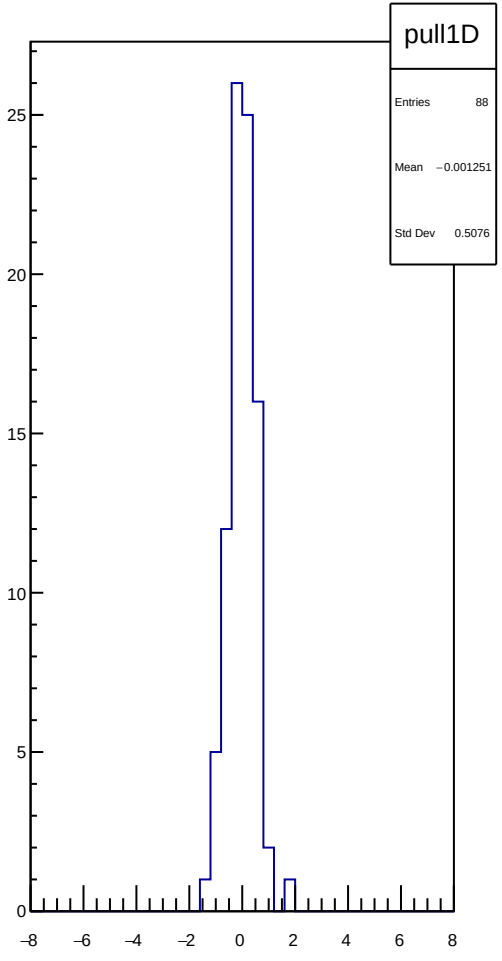

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.73 / 87
p0 −66.96 ± 1.486
pull
Entries 88
Mean 485.3
Std Dev 431.3

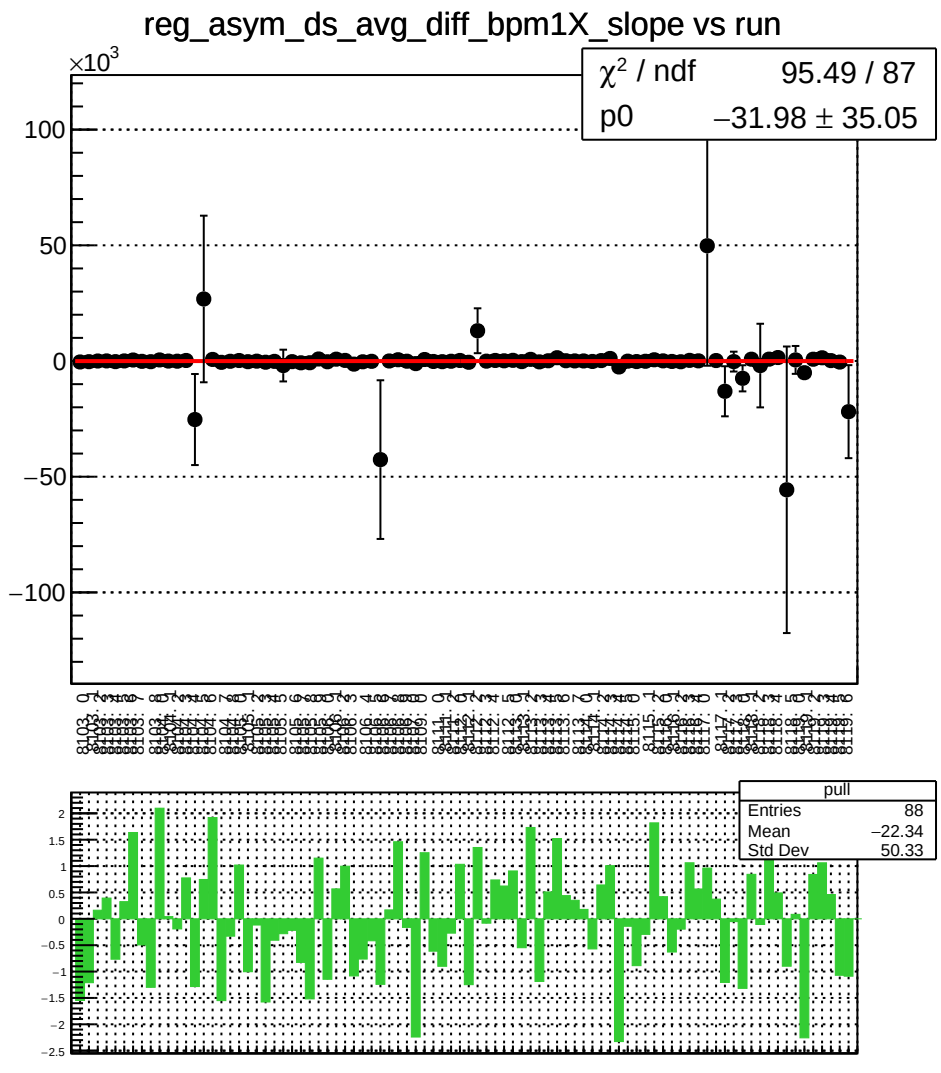

pull1D
Entries 88
Mean −0.001829
Std Dev 0.4614

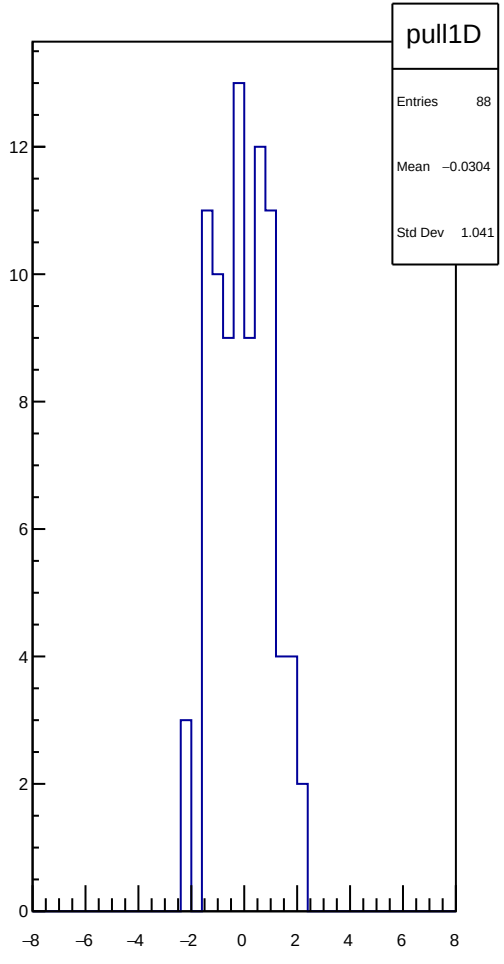

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 23.76 / 87
p0 13.29 ± 2.509
pull
Entries 88
Mean 586
Std Dev 534.4

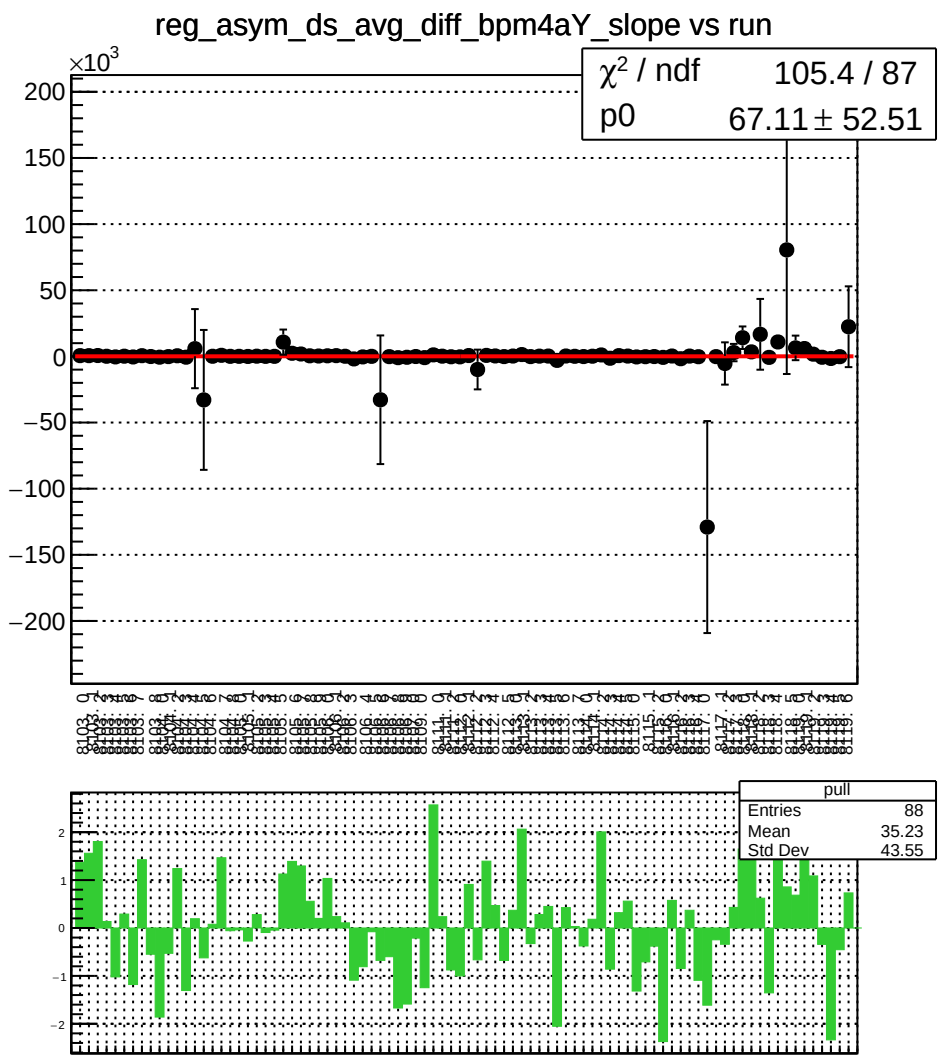

pull1D
Entries 88
Mean −0.008181
Std Dev 0.5195

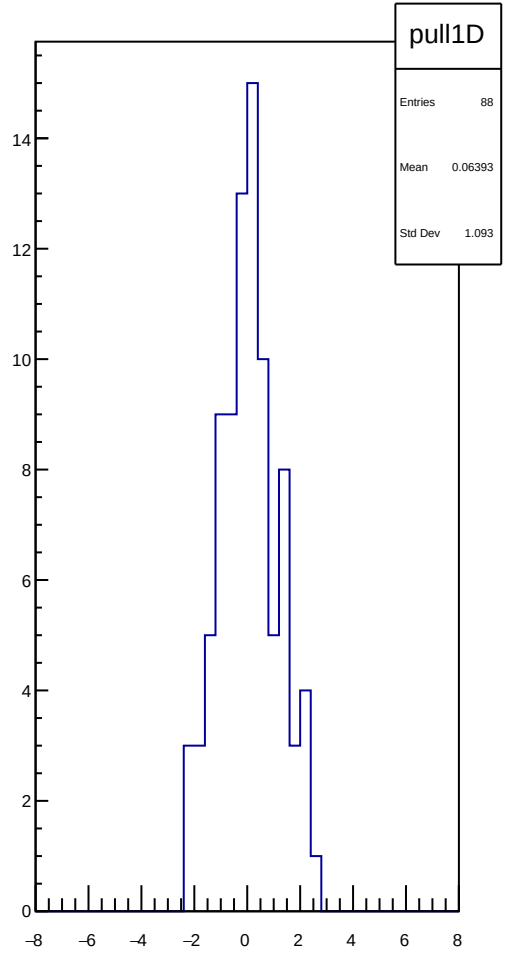

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 22.67 / 87
p0 2.33 ± 0.09425
pull
Entries 88
Mean −527.2
Std Dev 560.4

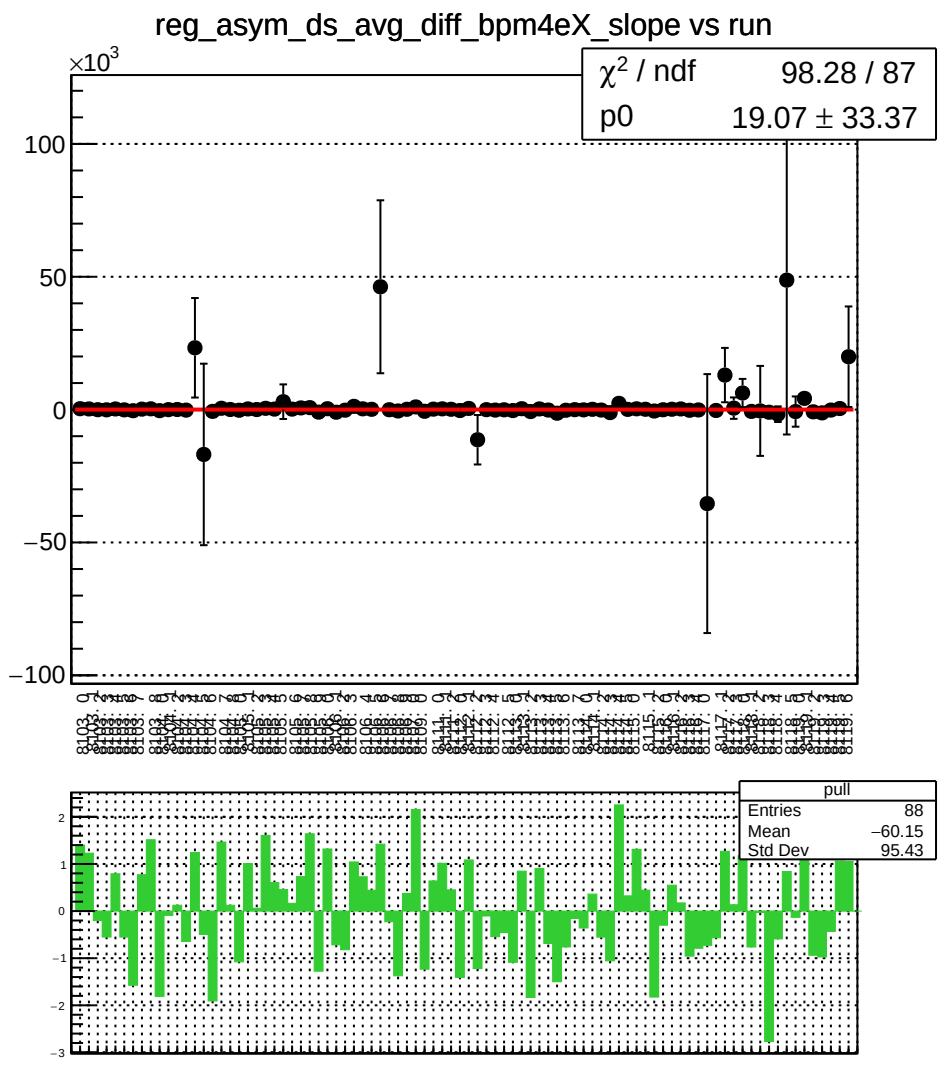

pull1D
Entries 88
Mean −0.001251
Std Dev 0.5076

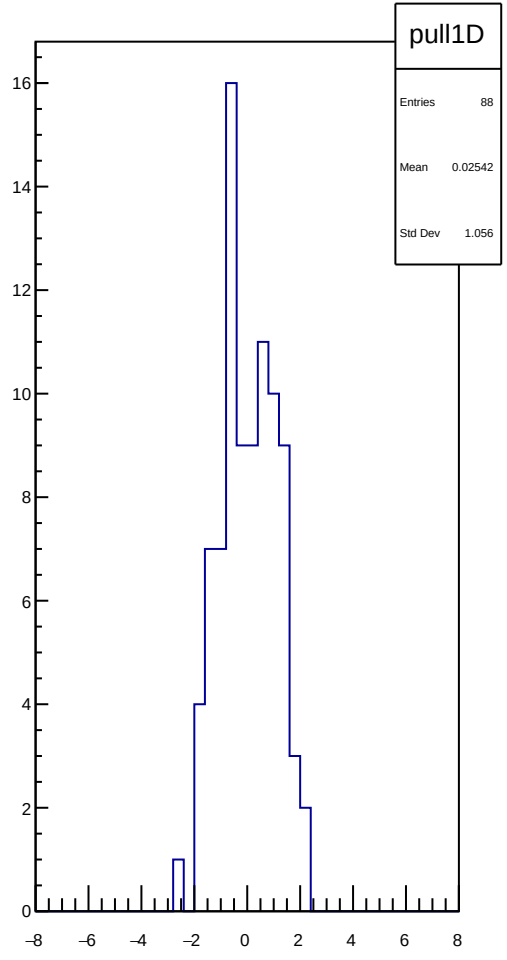

reg_asym_ds_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 95.49 / 87
p0 −31.98 ± 35.05
100
50
0
−50
−100
pull
Entries 88
Mean −22.34
Std Dev 50.33
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

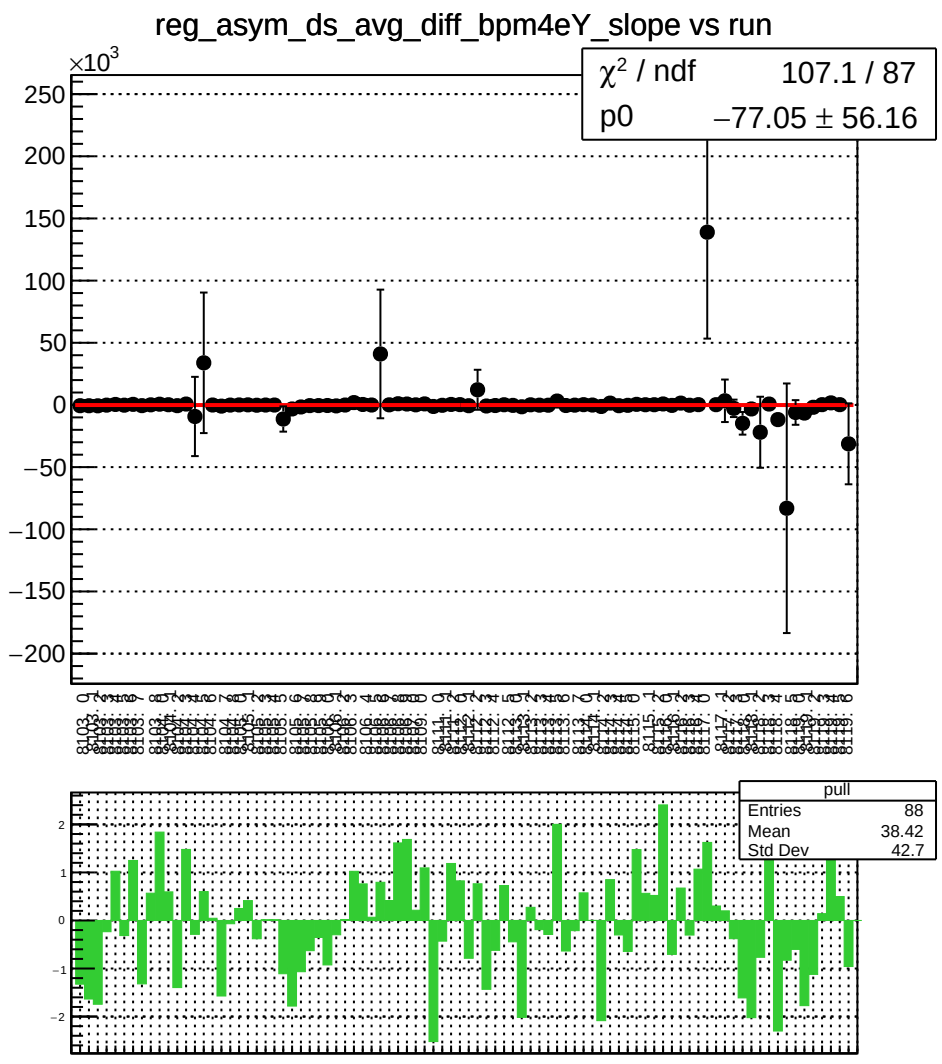

pull1D
Entries 88
Mean −0.0304
Std Dev 1.041
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

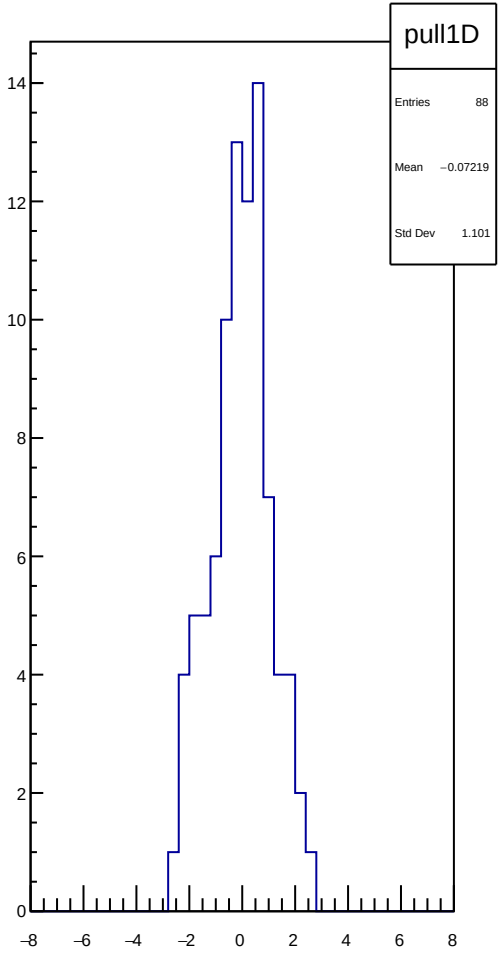

reg_asym_ds_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 105.4 / 87
p0 67.11 ± 52.51
pull
Entries 88
Mean 35.23
Std Dev 43.55

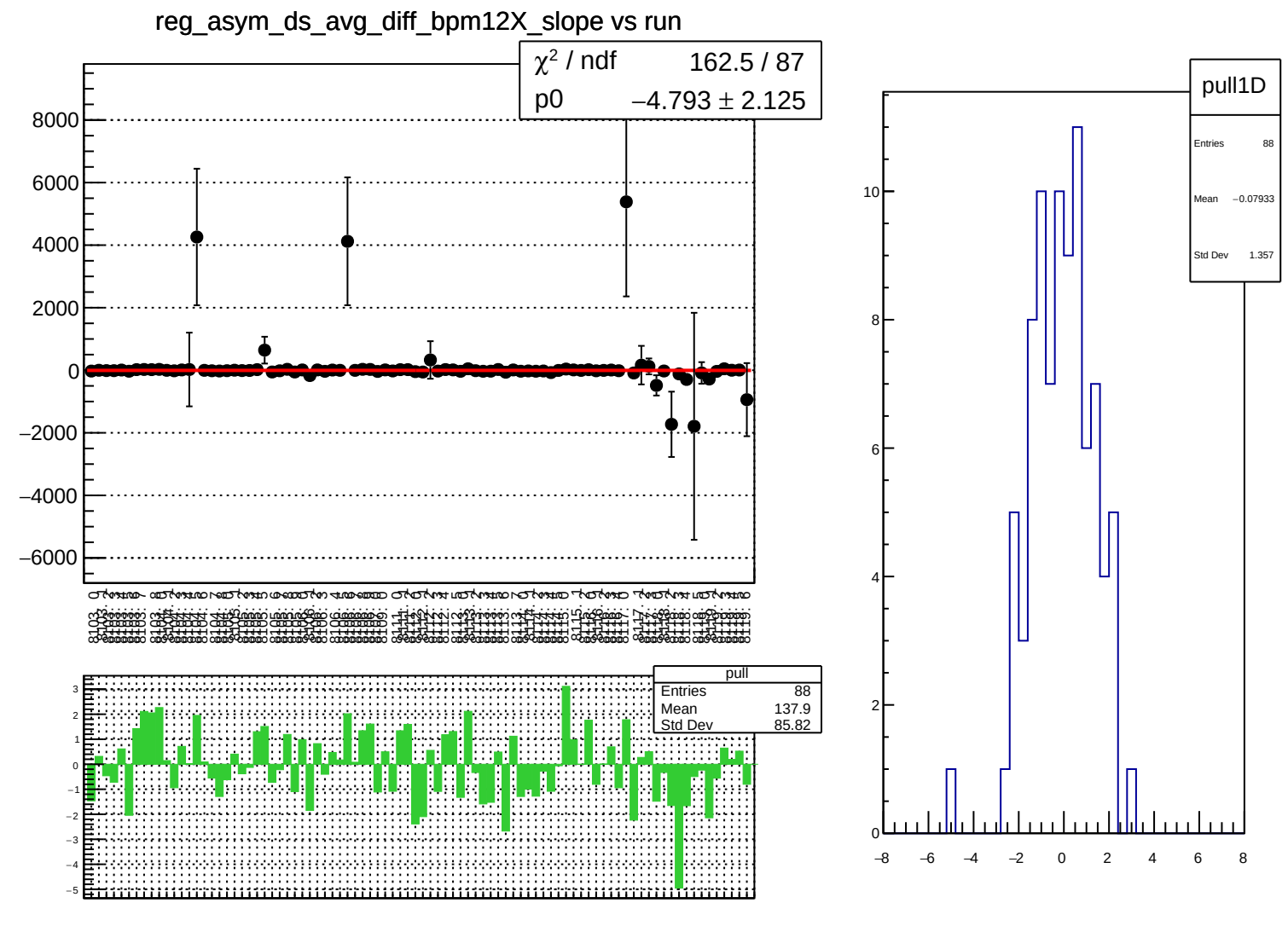

pull1D
Entries 88
Mean 0.06393
Std Dev 1.093

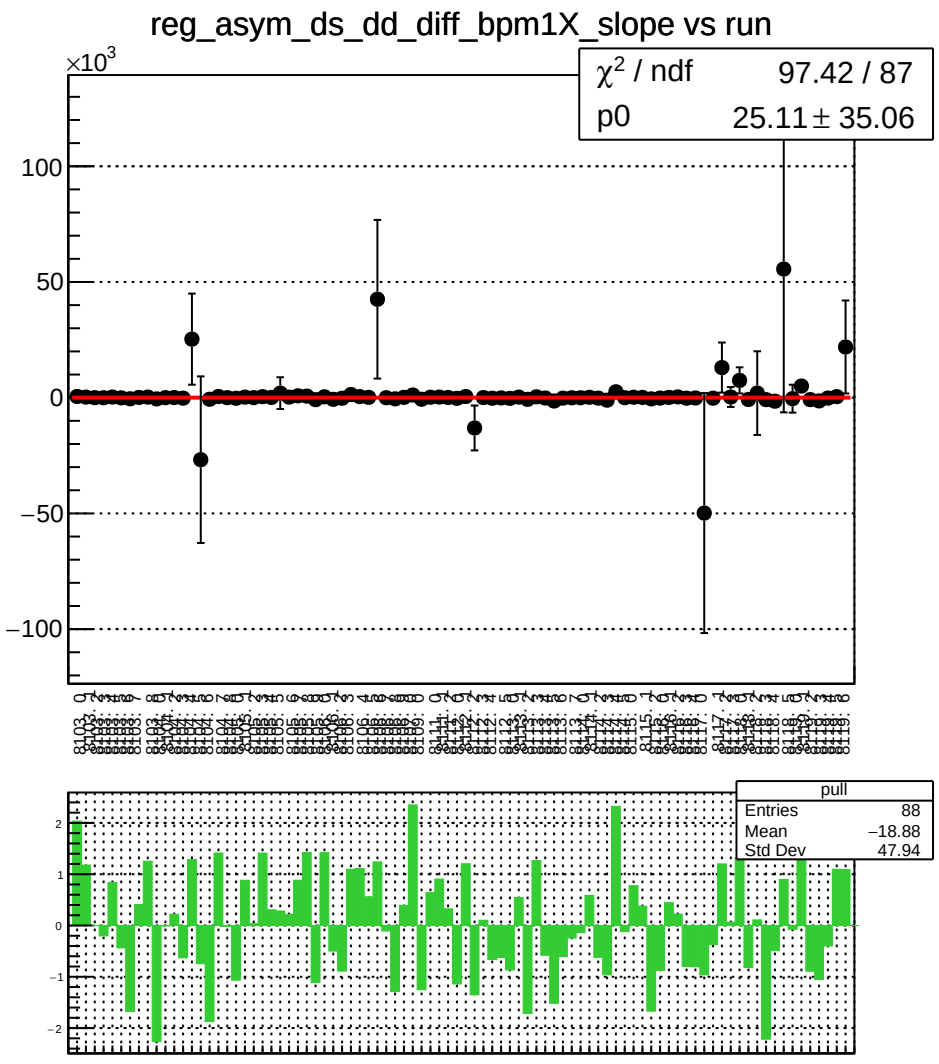

reg_asym_ds_avg_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 98.28 / 87
p0 19.07 ± 33.37
100
50
0
−50
−100
pull
Entries 88
Mean −60.15
Std Dev 95.43
2
1
0
−1
−2
−3

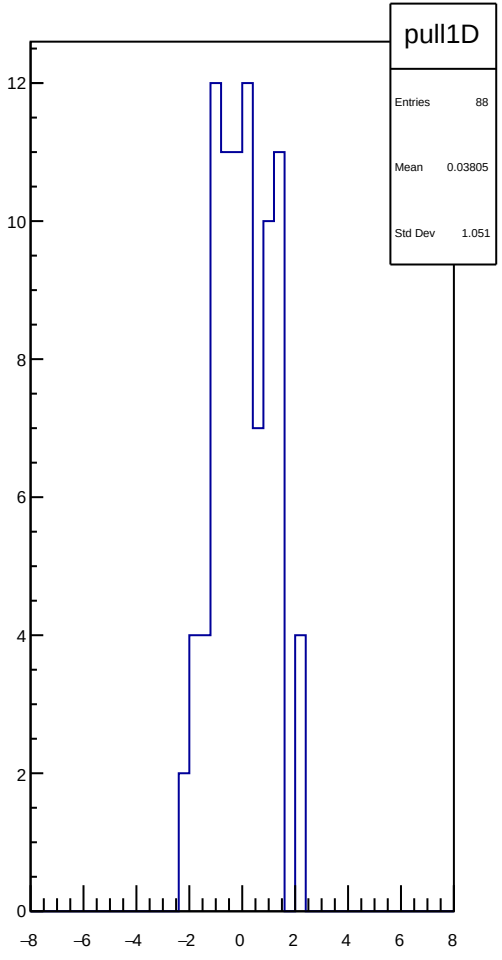

pull1D
Entries 88
Mean 0.02542
Std Dev 1.056
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

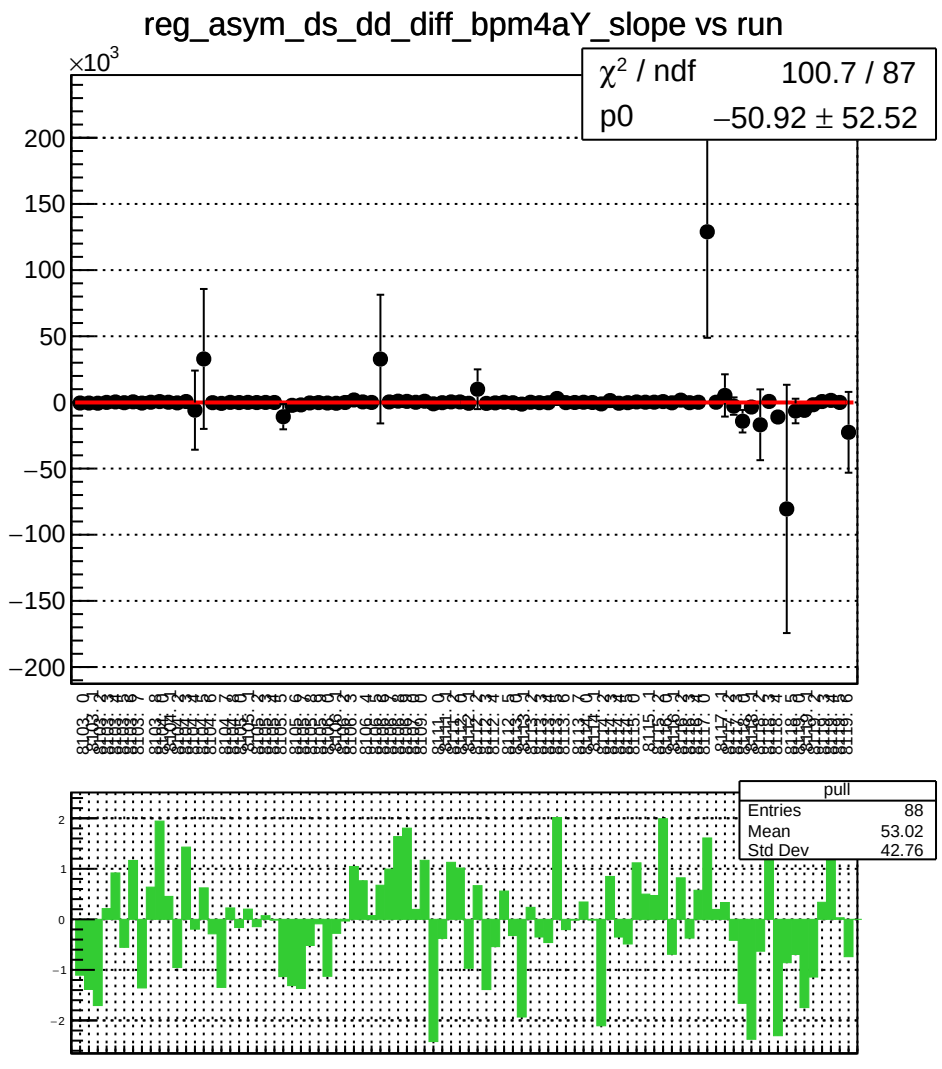

reg_asym_ds_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 107.1 / 87
p0 −77.05 ± 56.16
pull
Entries 88
Mean 38.42
Std Dev 42.7

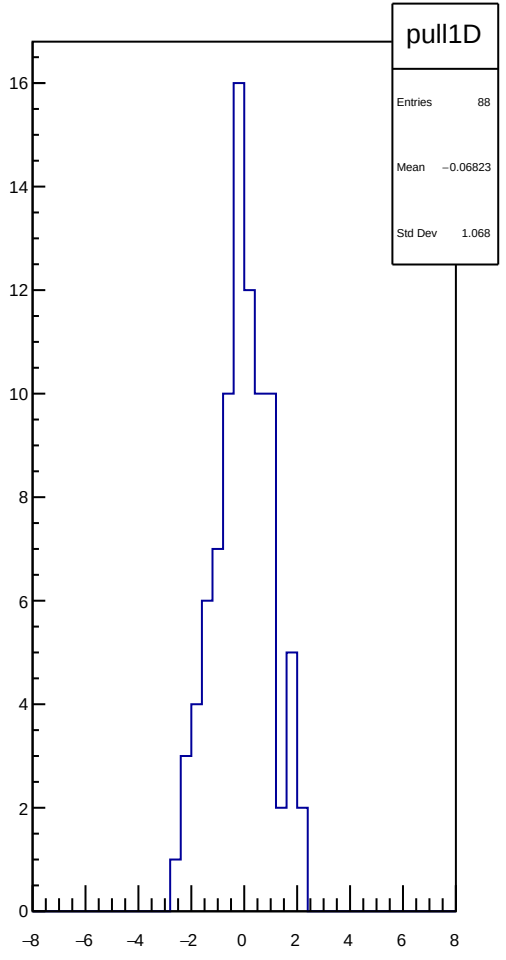

pull1D
Entries 88
Mean −0.07219
Std Dev 1.101

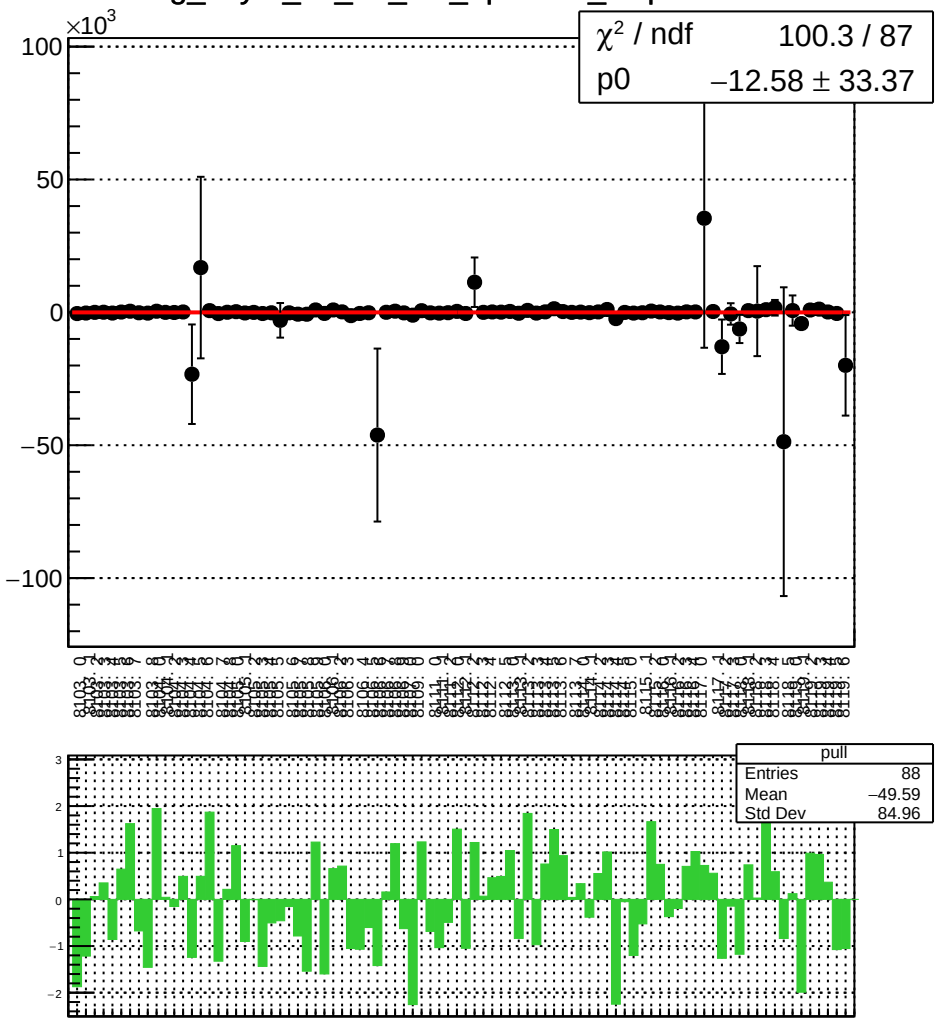

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 162.5 / 87
p0 −4.793 ± 2.125
pull
Entries 88
Mean 137.9
Std Dev 85.82
pull1D
Entries 88
Mean −0.07933
Std Dev 1.357

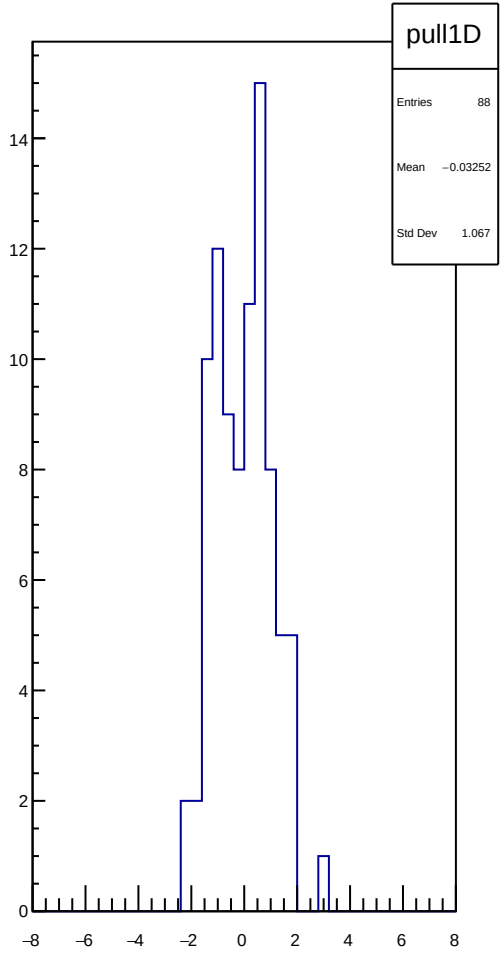

reg_asym_ds_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 97.42 / 87
p0 25.11 ± 35.06
100
50
0
−50
−100
pull
Entries 88
Mean −18.88
Std Dev 47.94
2
1
0
−1
−2

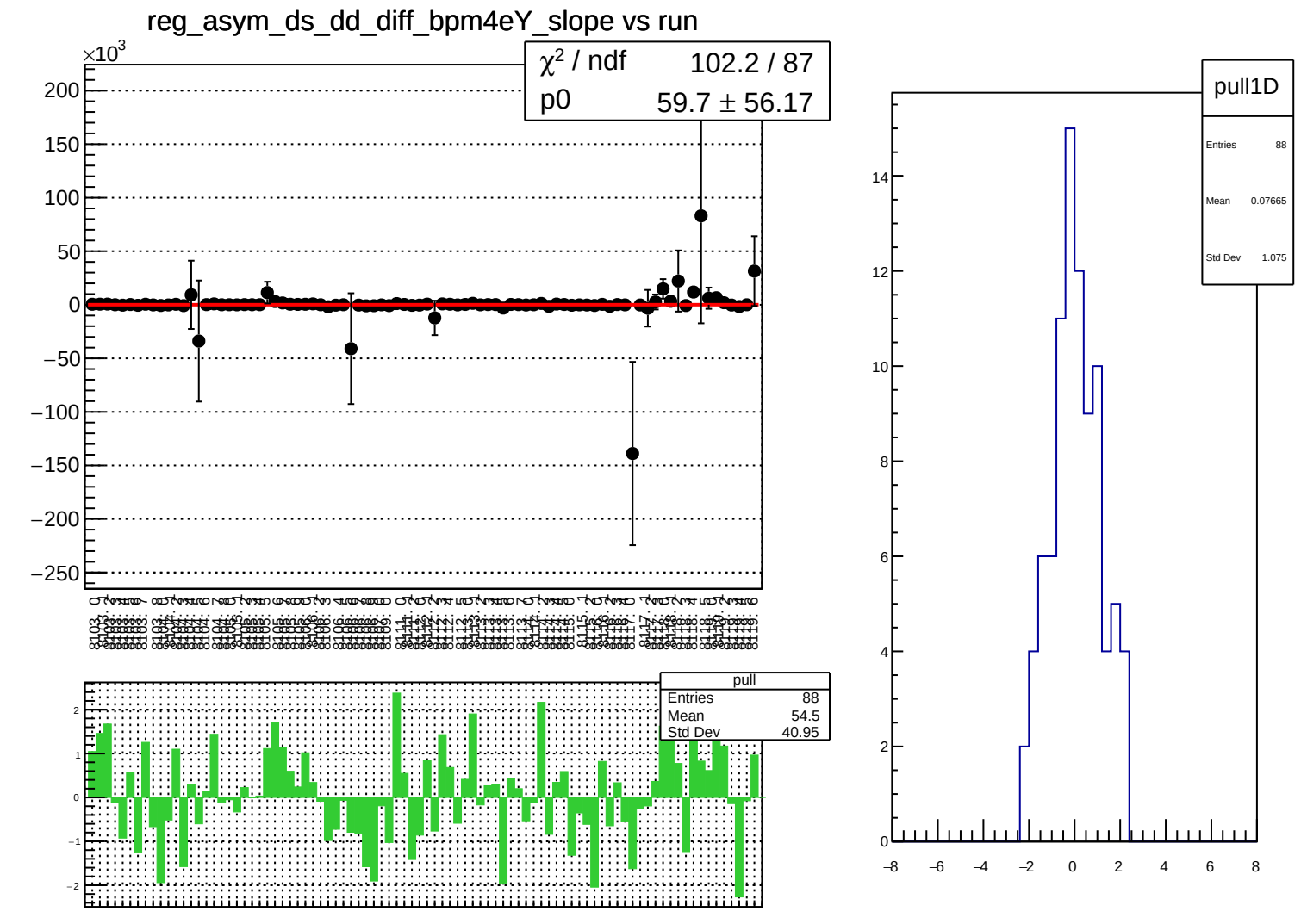

pull1D
Entries 88
Mean 0.03805
Std Dev 1.051
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

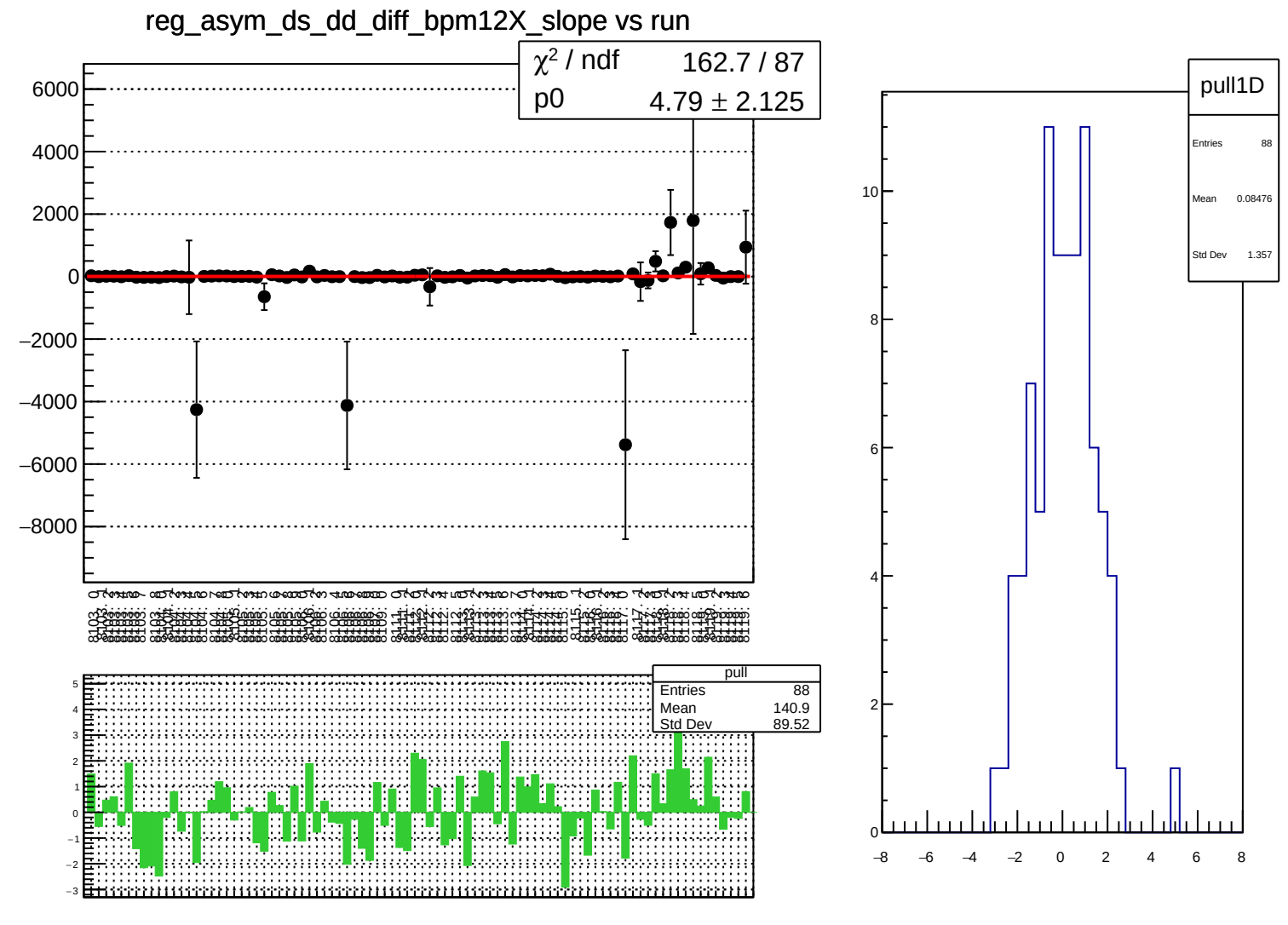

reg_asym_ds_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 100.7 / 87
p0 −50.92 ± 52.52
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 88
Mean 53.02
Std Dev 42.76
2
1
0
−1
−2

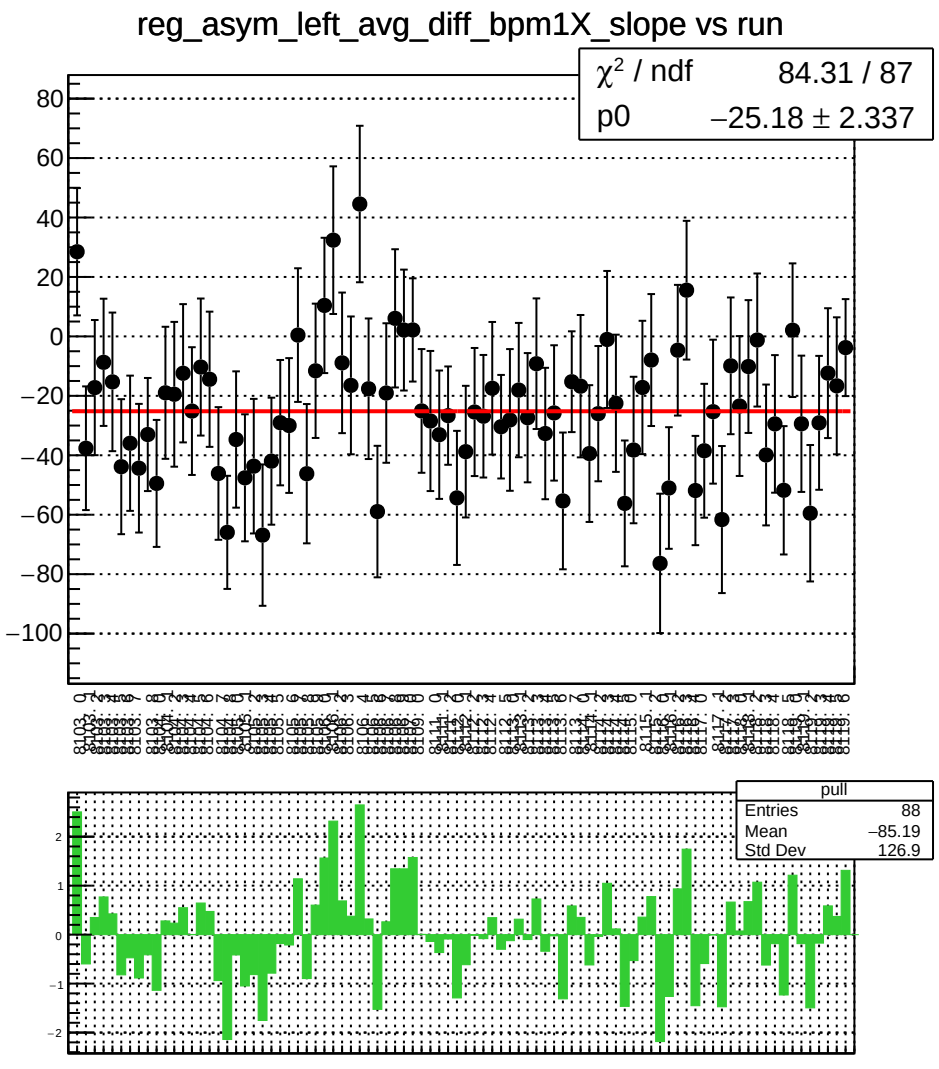

pull1D
Entries 88
Mean −0.06823
Std Dev 1.068
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

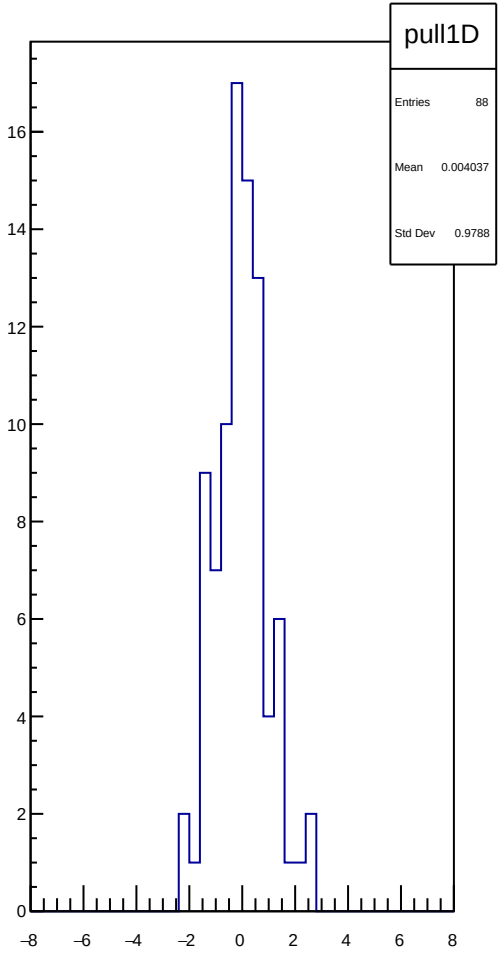

reg_asym_ds_dd_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 100.3 / 87
p0 −12.58 ± 33.37
pull
Entries 88
Mean −49.59
Std Dev 84.96

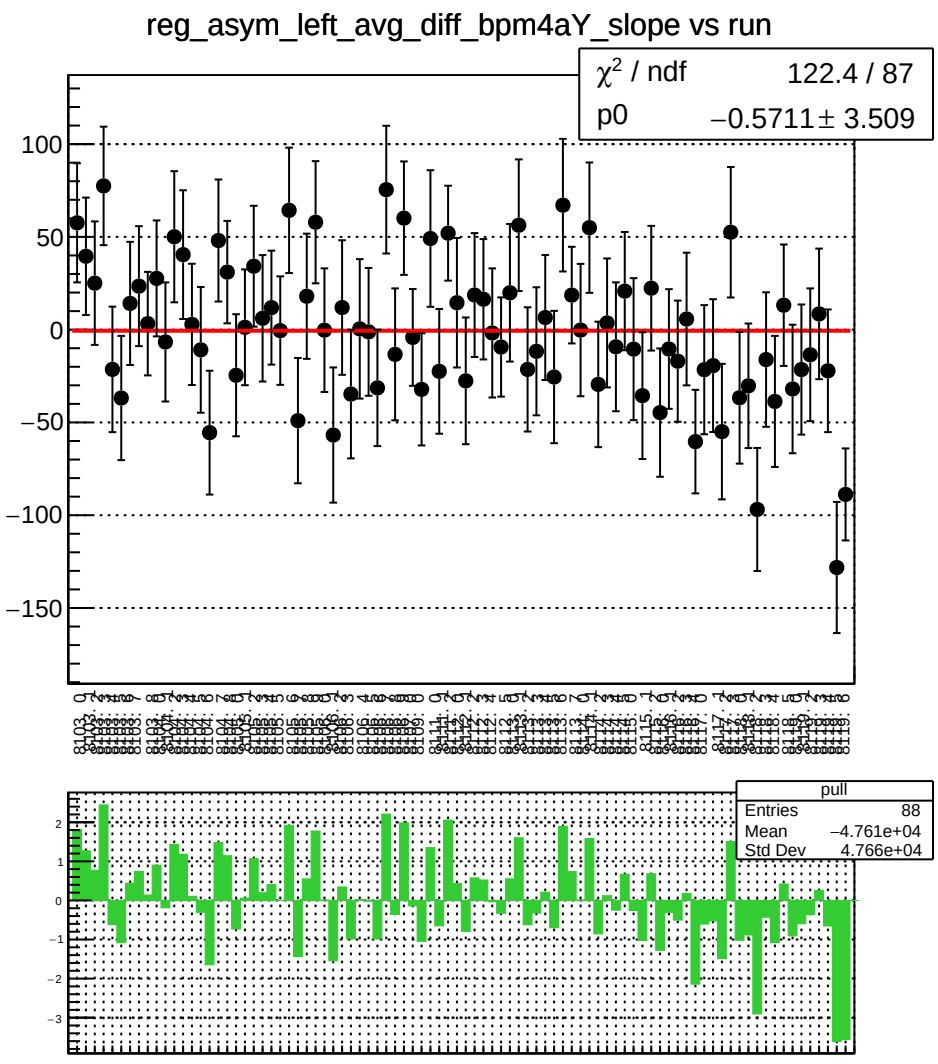

pull1D
Entries 88
Mean −0.03252
Std Dev 1.067

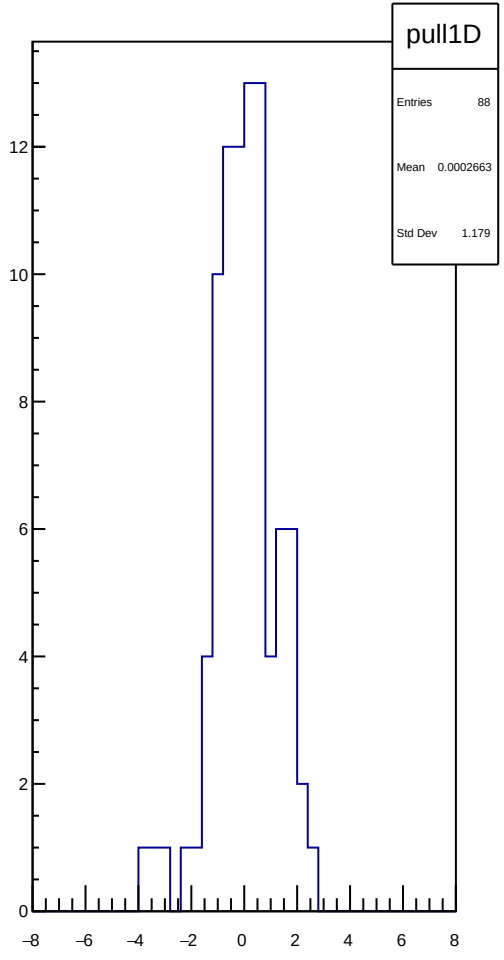

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 102.2 / 87
p0 59.7 ± 56.17
×10³
pull
Entries 88
Mean 54.5
Std Dev 40.95
pull1D
Entries 88
Mean 0.07665
Std Dev 1.075

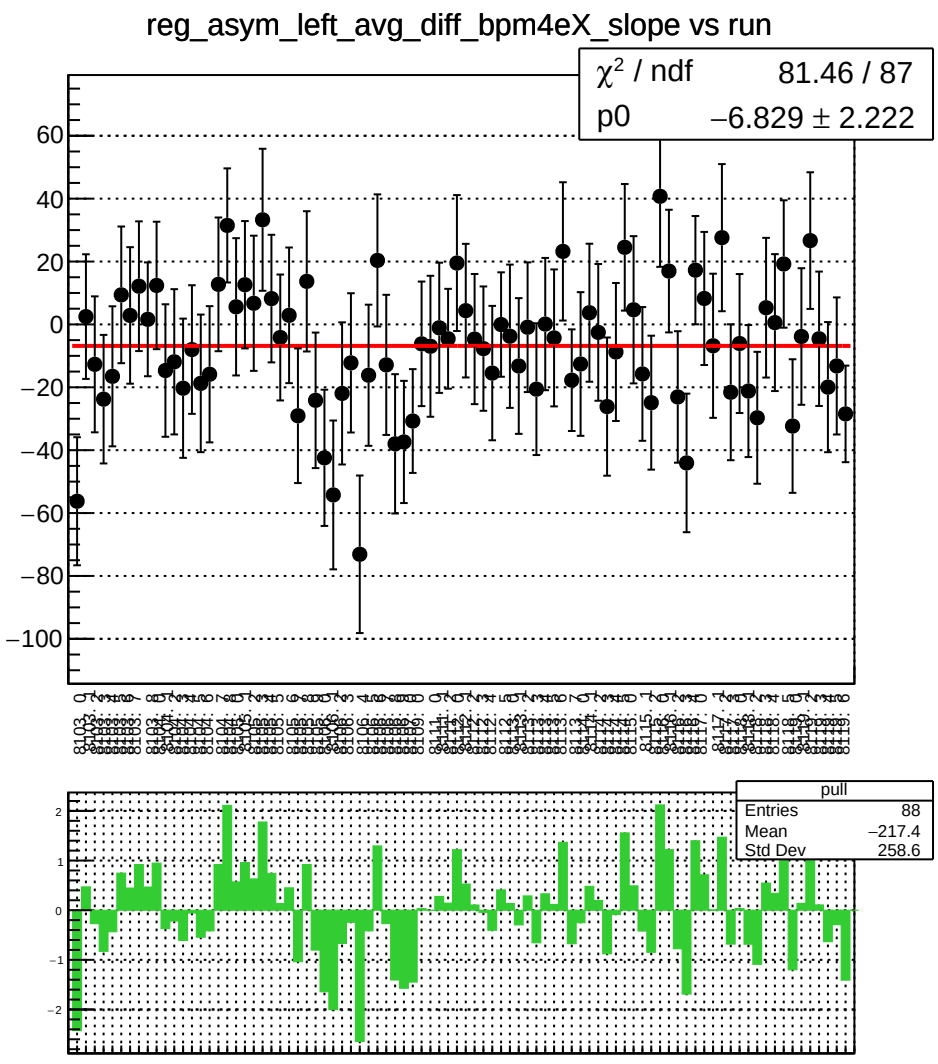

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 162.7 / 87
p0 4.79 ± 2.125
pull
Entries 88
Mean 140.9
Std Dev 89.52
pull1D
Entries 88
Mean 0.08476
Std Dev 1.357

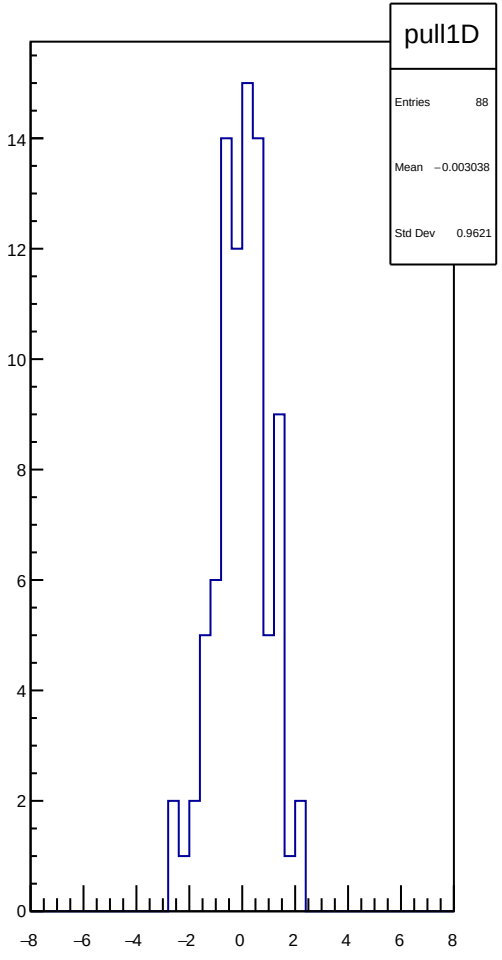

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 84.31 / 87
p0 −25.18 ± 2.337
pull
Entries 88
Mean −85.19
Std Dev 126.9

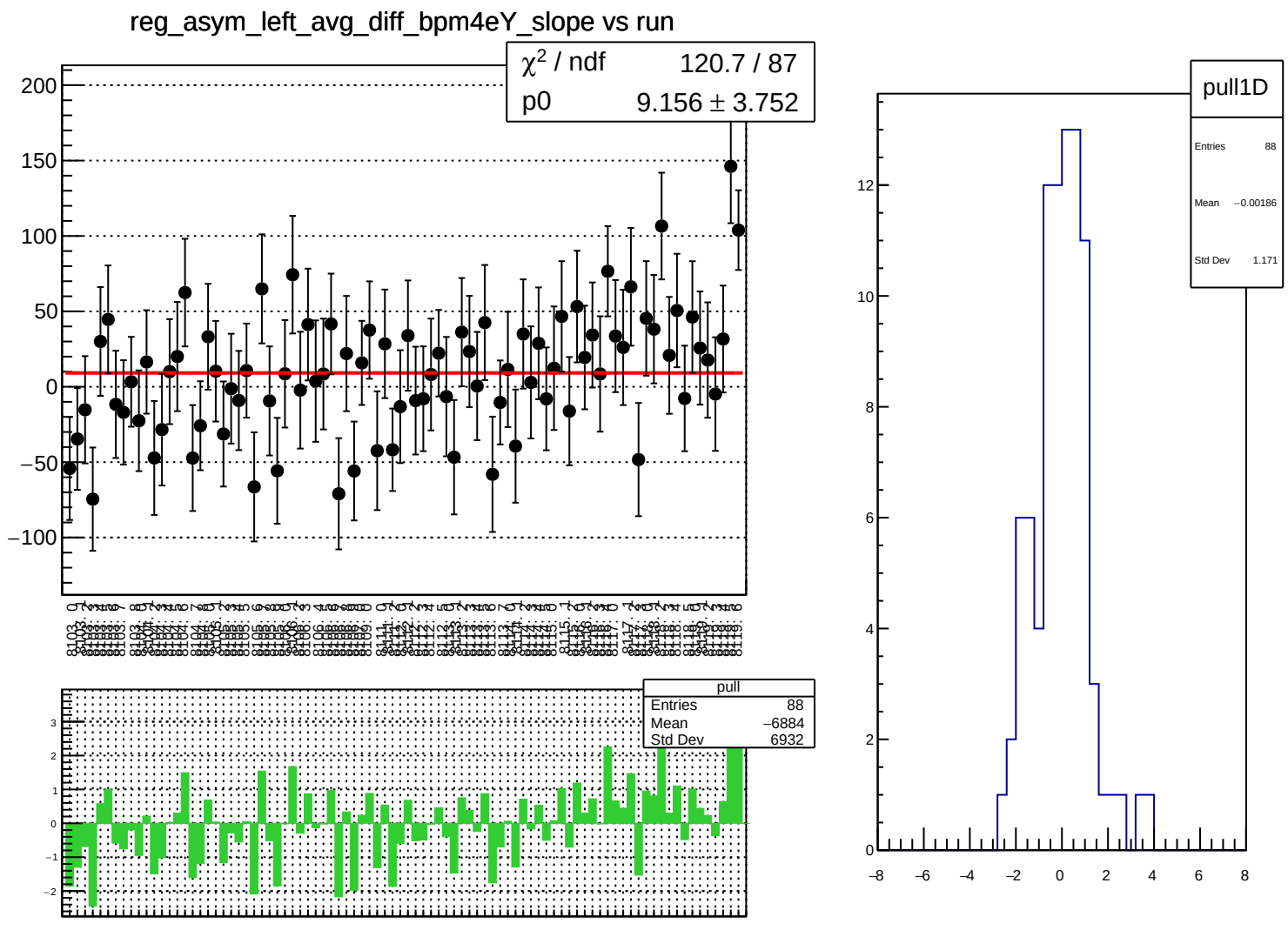

pull1D
Entries 88
Mean 0.004037
Std Dev 0.9788

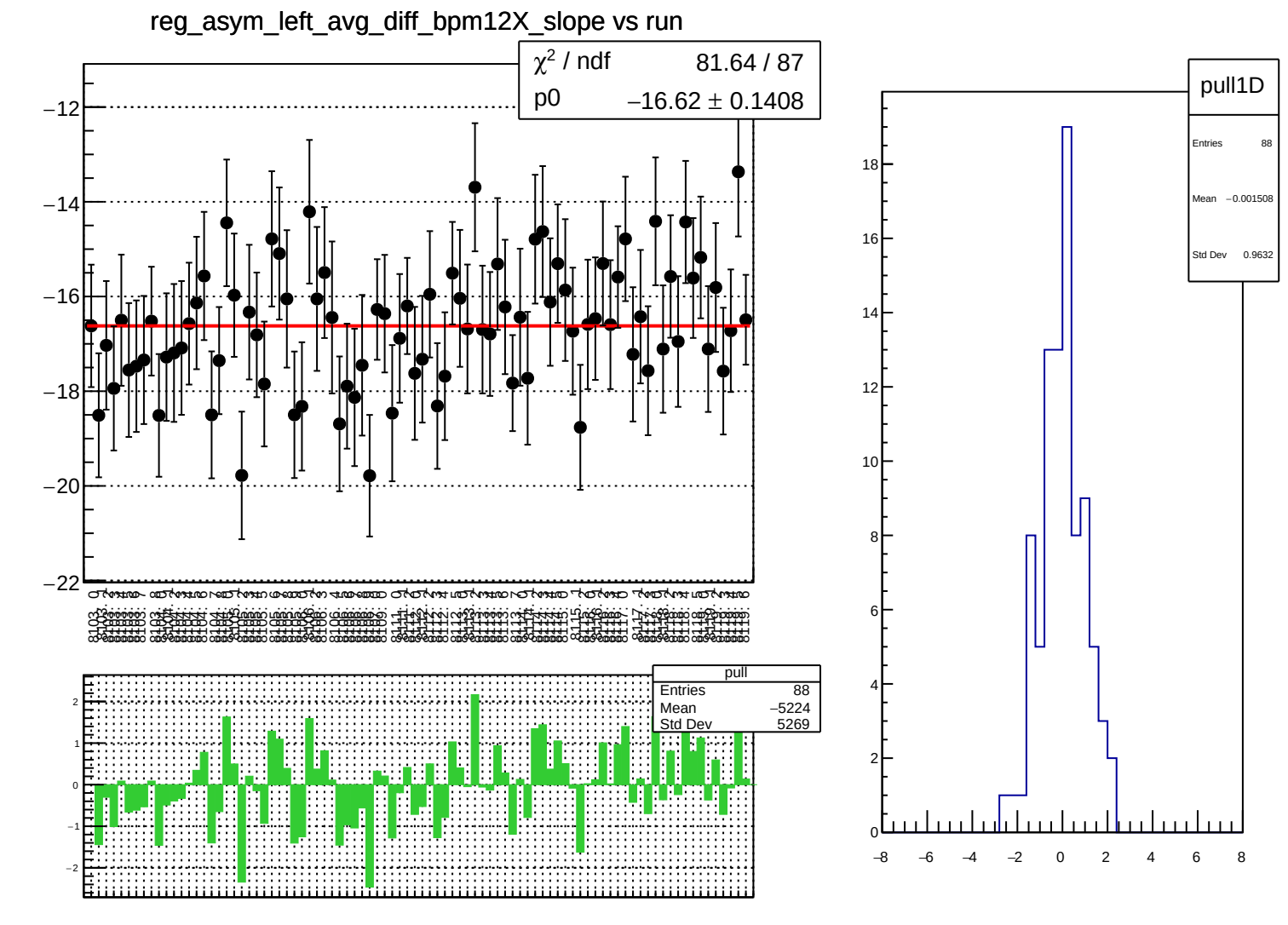

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 122.4 / 87
p0 −0.5711 ± 3.509
100
50
0
−50
−100
−150
pull
Entries 88
Mean −4.761e+04
Std Dev 4.766e+04
2
1
0
−1
−2
−3

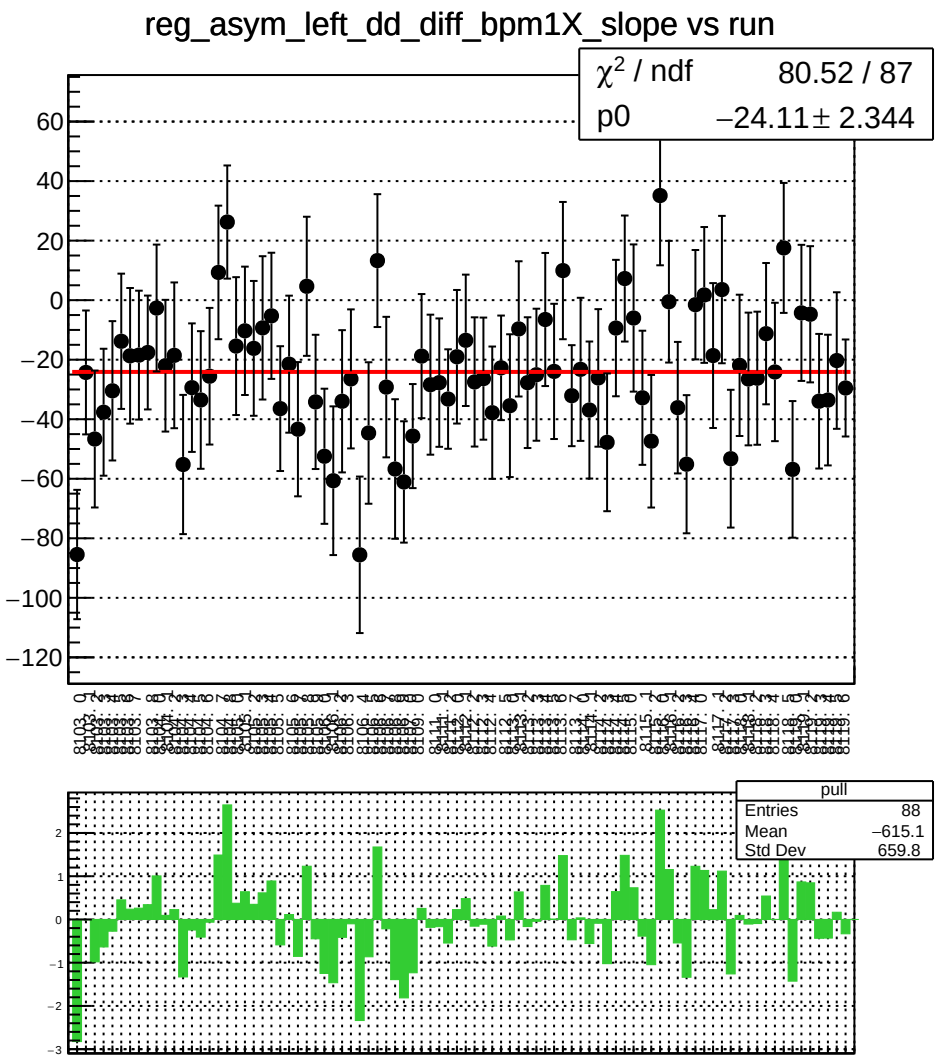

pull1D
Entries 88
Mean 0.0002663
Std Dev 1.179
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

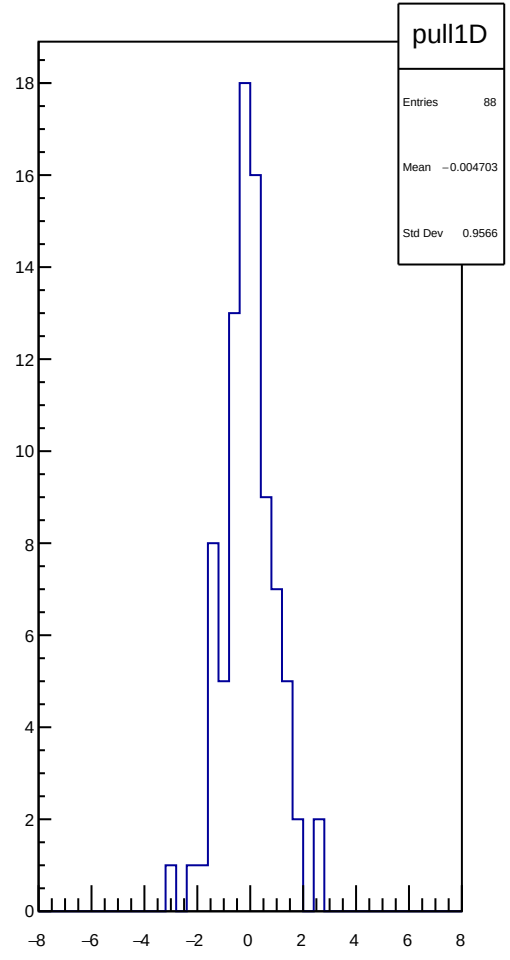

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 81.46 / 87
p0 −6.829 ± 2.222
pull
Entries 88
Mean −217.4
Std Dev 258.6

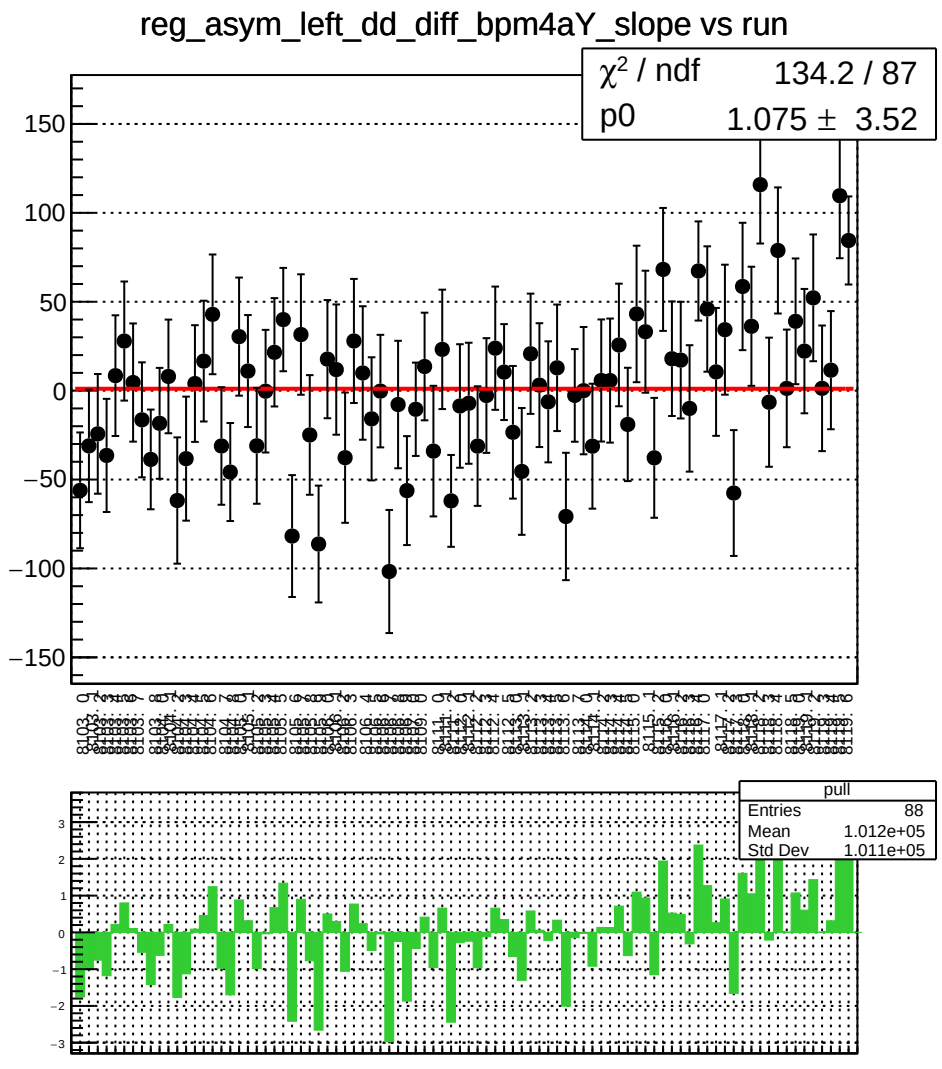

pull1D
Entries 88
Mean −0.003038
Std Dev 0.9621

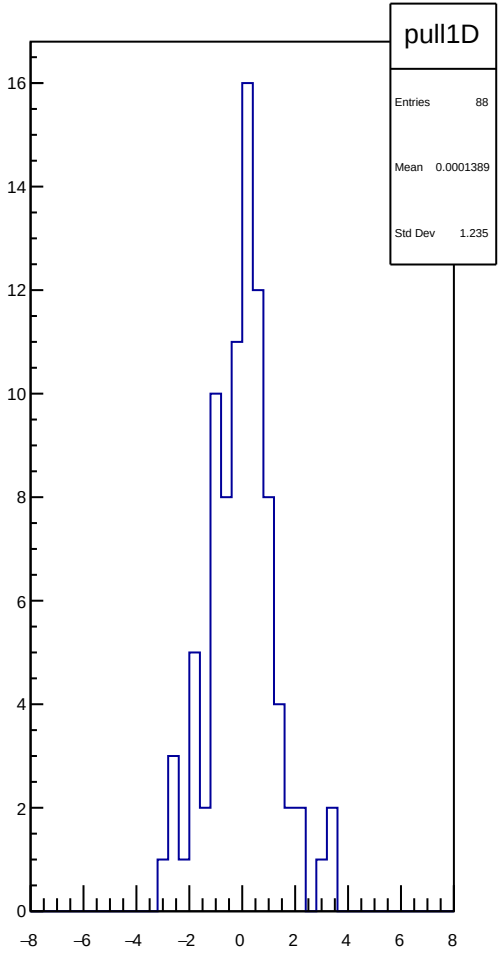

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 120.7 / 87
p0 9.156 ± 3.752
pull
Entries 88
Mean −6884
Std Dev 6932
pull1D
Entries 88
Mean −0.00186
Std Dev 1.171

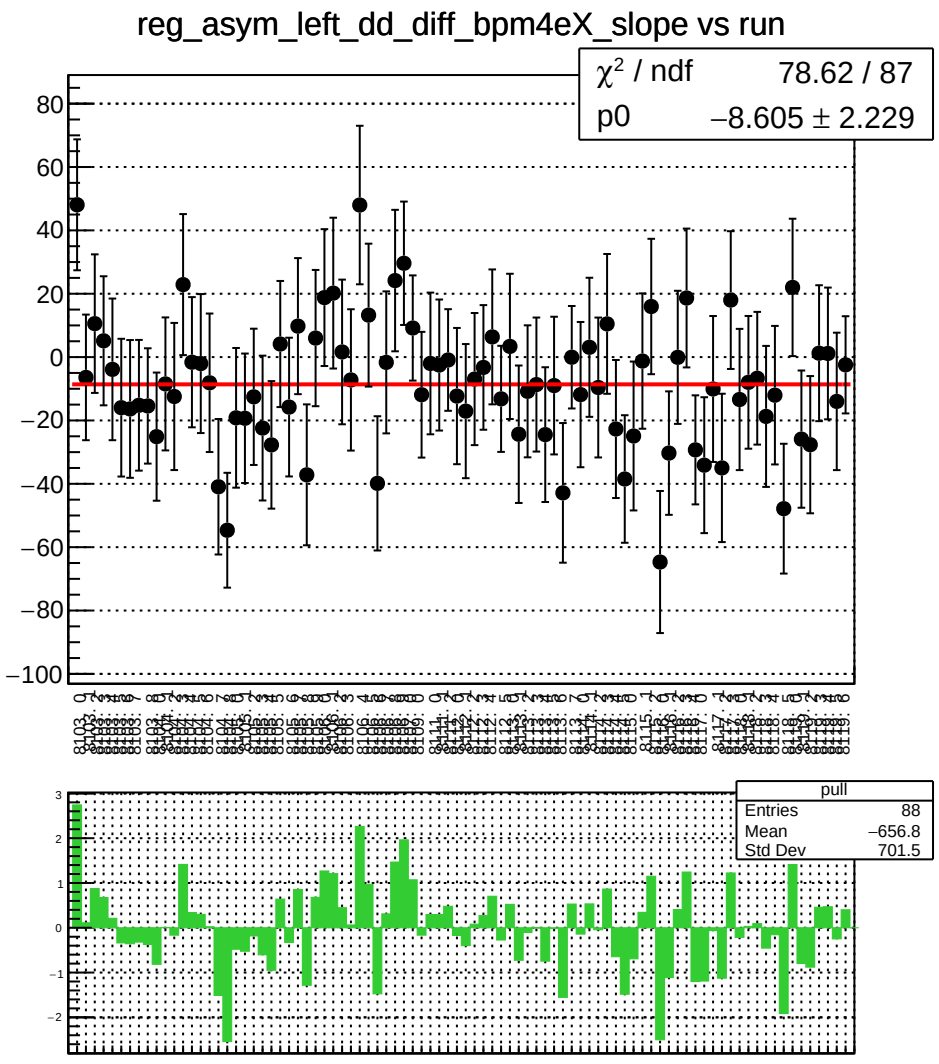

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 81.64 / 87
p0 −16.62 ± 0.1408
pull
Entries 88
Mean −5224
Std Dev 5269
pull1D
Entries 88
Mean −0.001508
Std Dev 0.9632

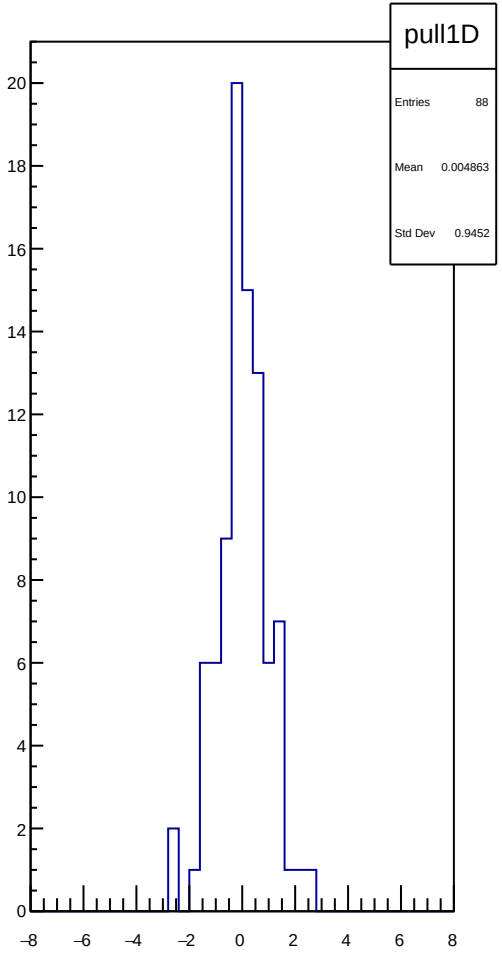

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 80.52 / 87
p0 −24.11 ± 2.344
pull
Entries 88
Mean −615.1
Std Dev 659.8

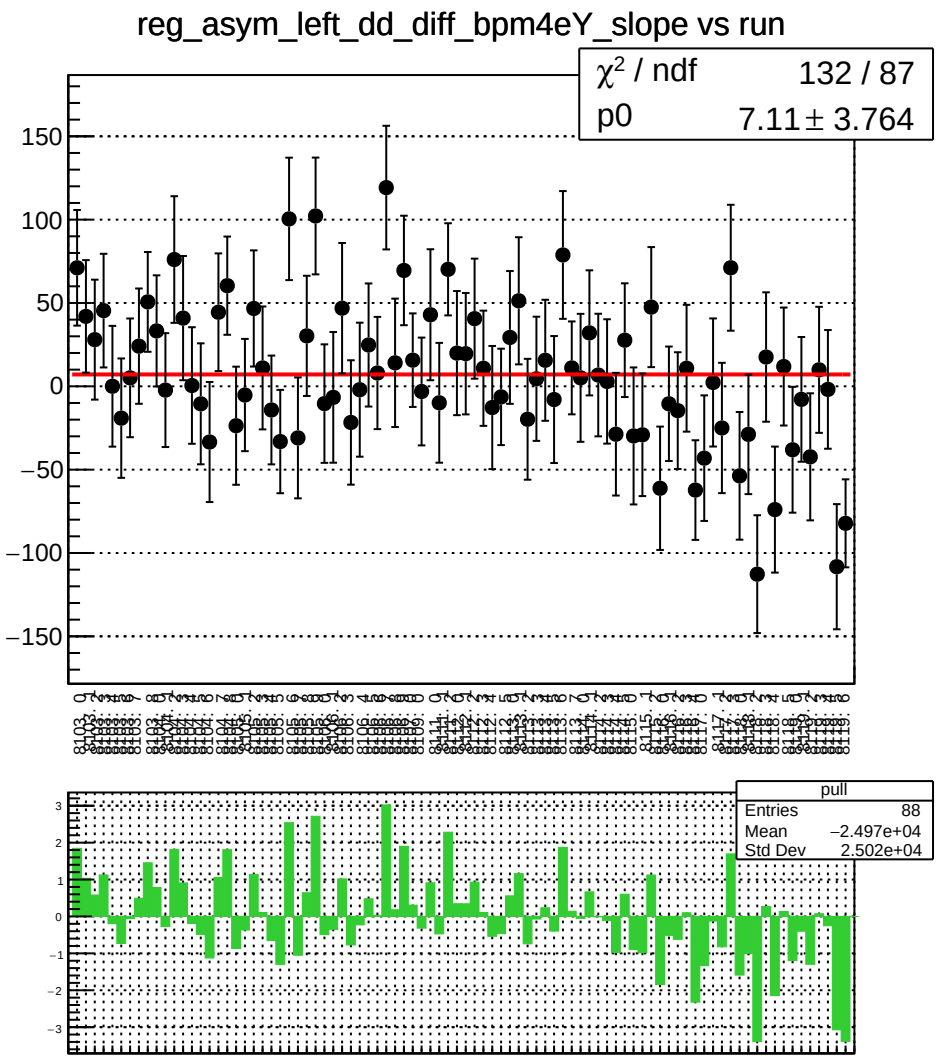

pull1D
Entries 88
Mean −0.004703
Std Dev 0.9566

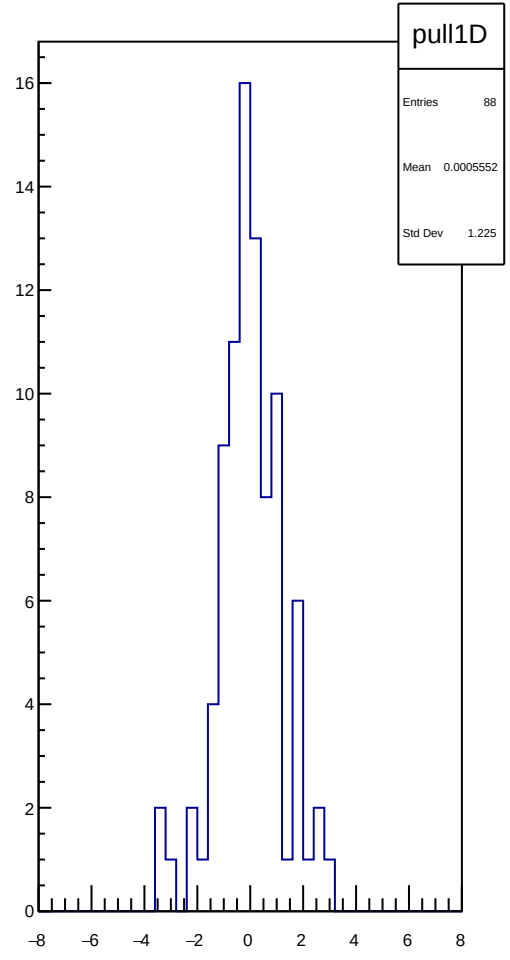

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 134.2 / 87
p0 1.075 ± 3.52
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 1.012e+05
Std Dev 1.011e+05
3
2
1
0
−1
−2
−3

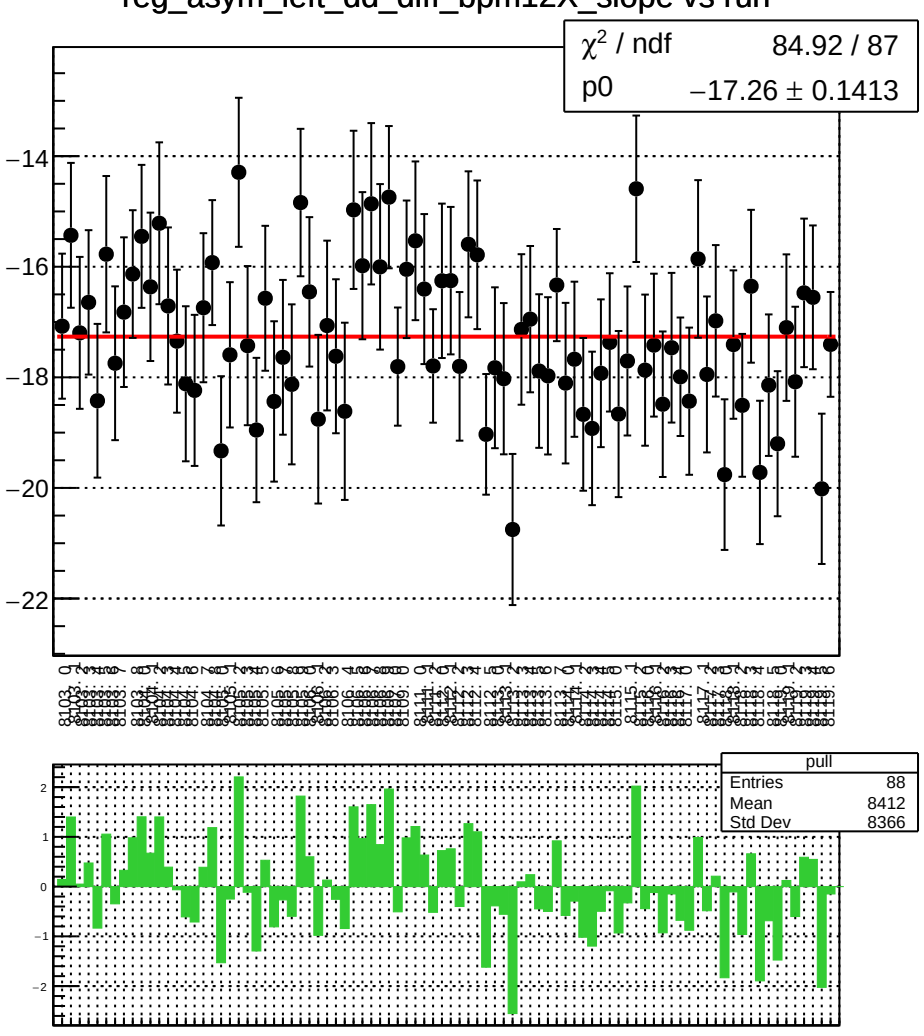

pull1D
Entries 88
Mean 0.0001389
Std Dev 1.235
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

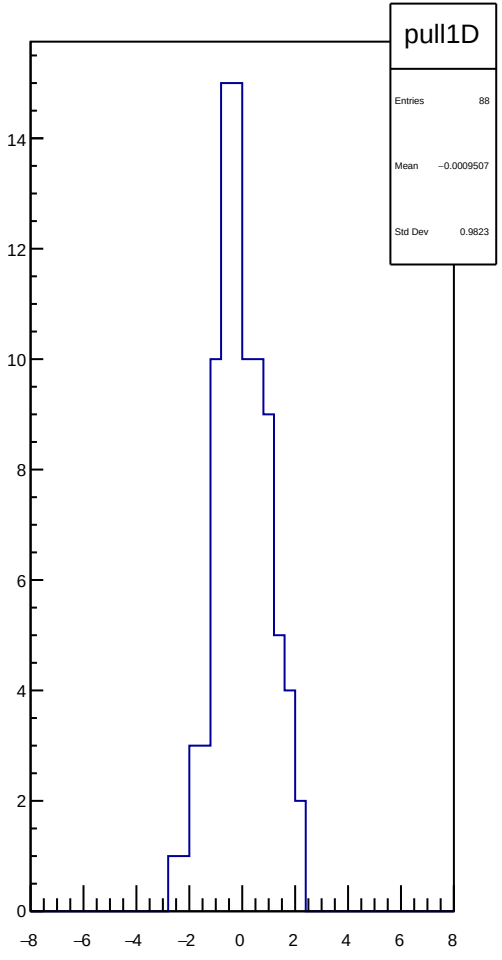

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 78.62 / 87
p0 −8.605 ± 2.229
pull
Entries 88
Mean −656.8
Std Dev 701.5

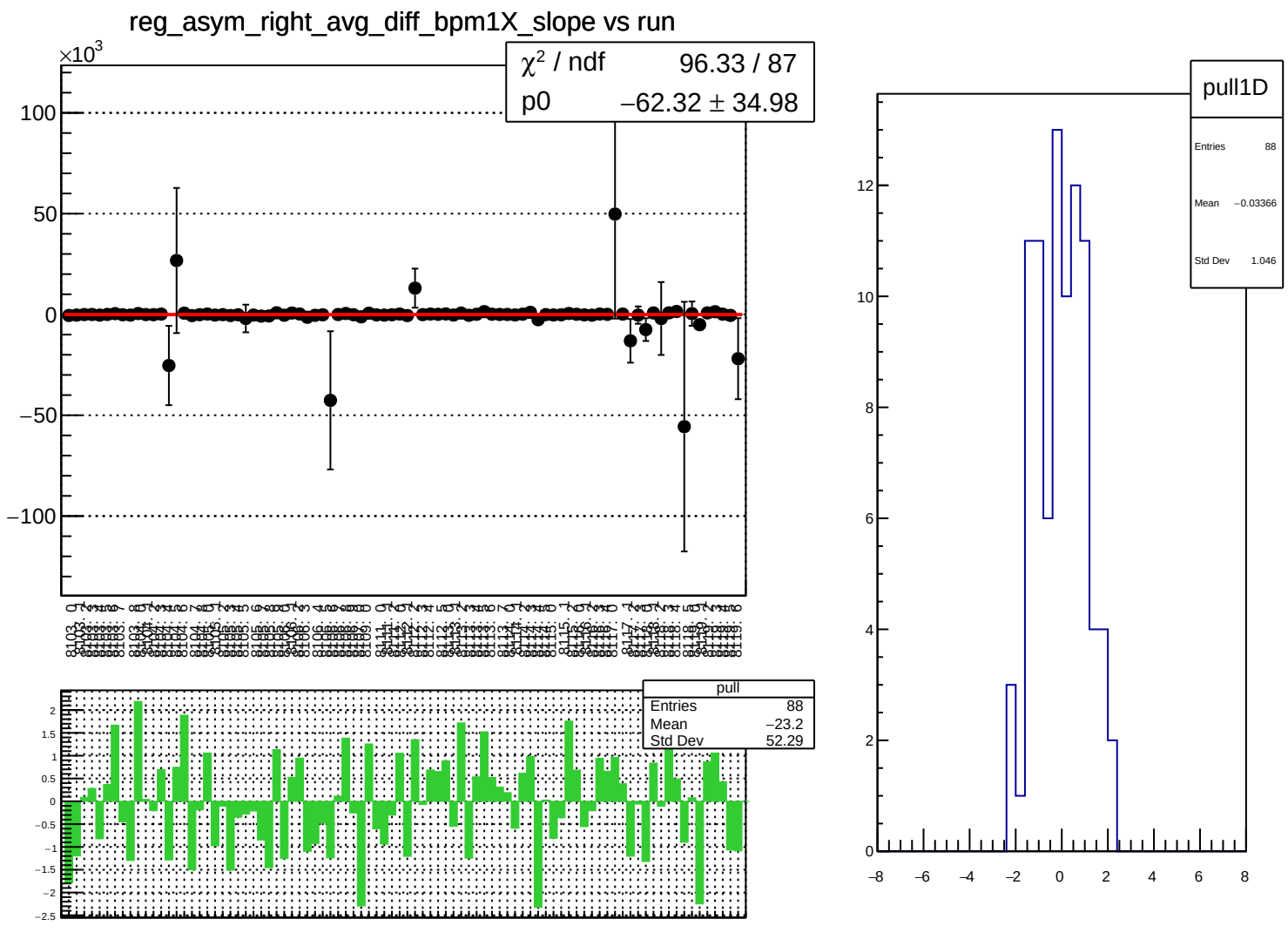

pull1D
Entries 88
Mean 0.004863
Std Dev 0.9452

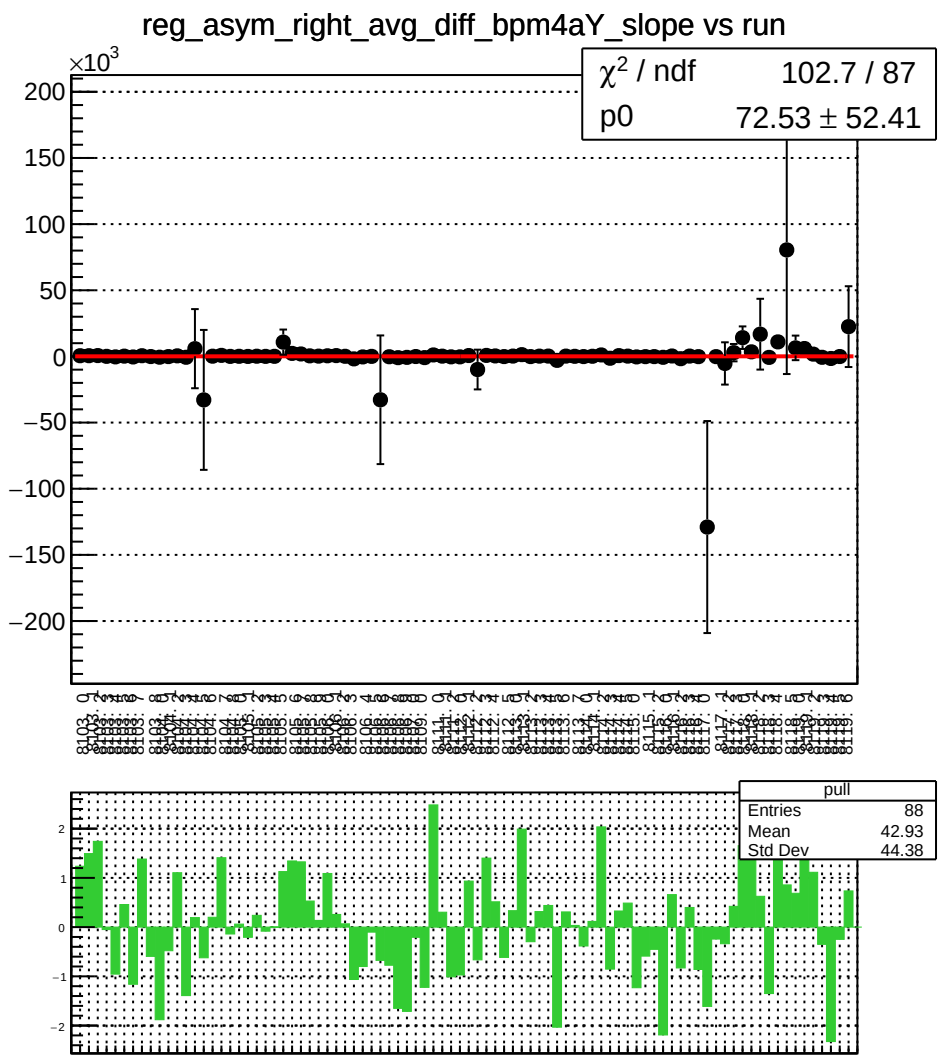

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 132 / 87
p0 7.11 ± 3.764
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean −2.497e+04
Std Dev 2.502e+04
3
2
1
0
−1
−2
−3

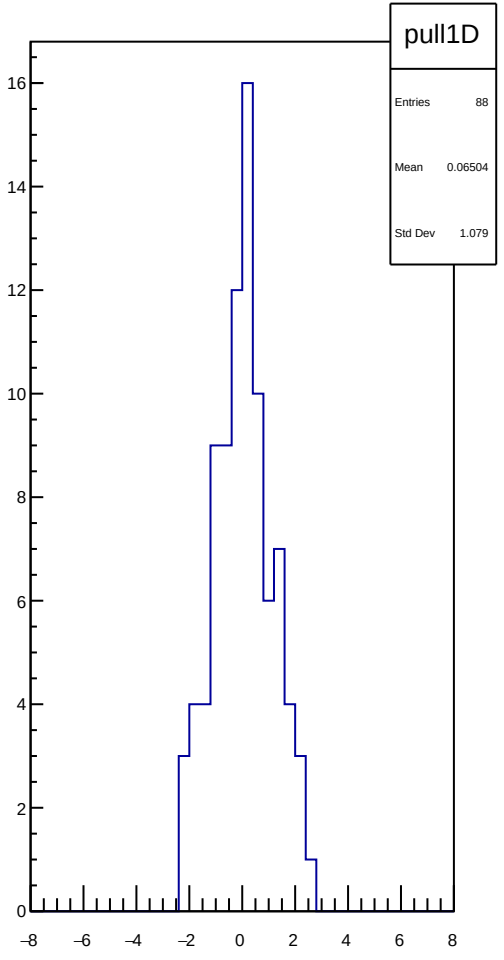

pull1D
Entries 88
Mean 0.0005552
Std Dev 1.225
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

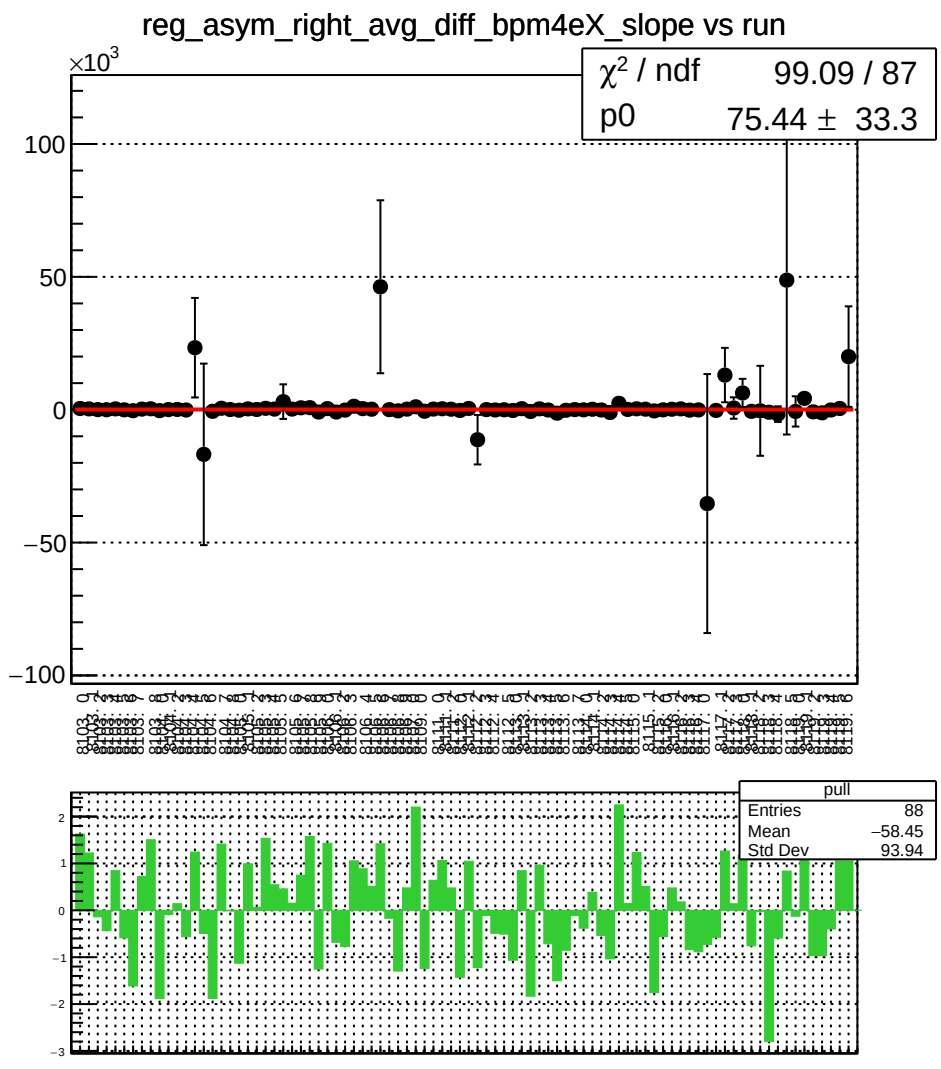

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 84.92 / 87
p0 −17.26 ± 0.1413
−14
−16
−18
−20
−22
pull
Entries 88
Mean 8412
Std Dev 8366
2
1
0
−1
−2

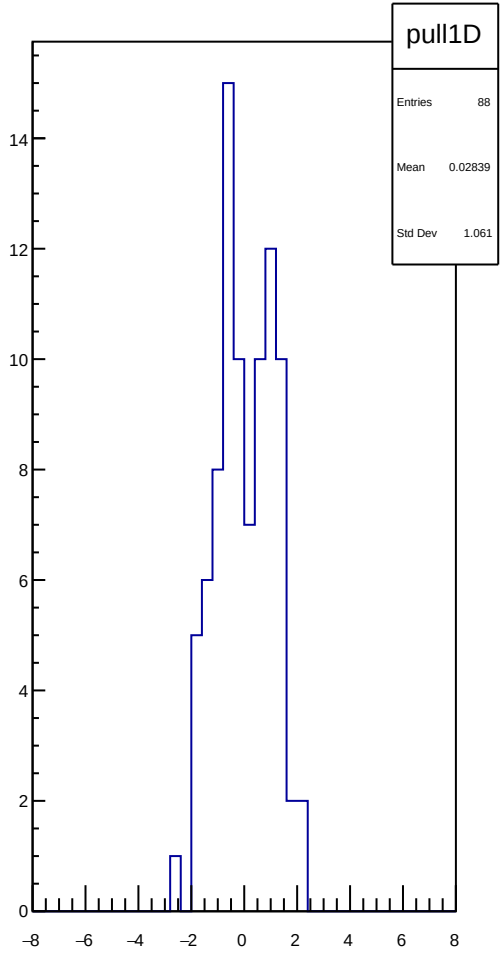

pull1D
Entries 88
Mean −0.0009507
Std Dev 0.9823
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

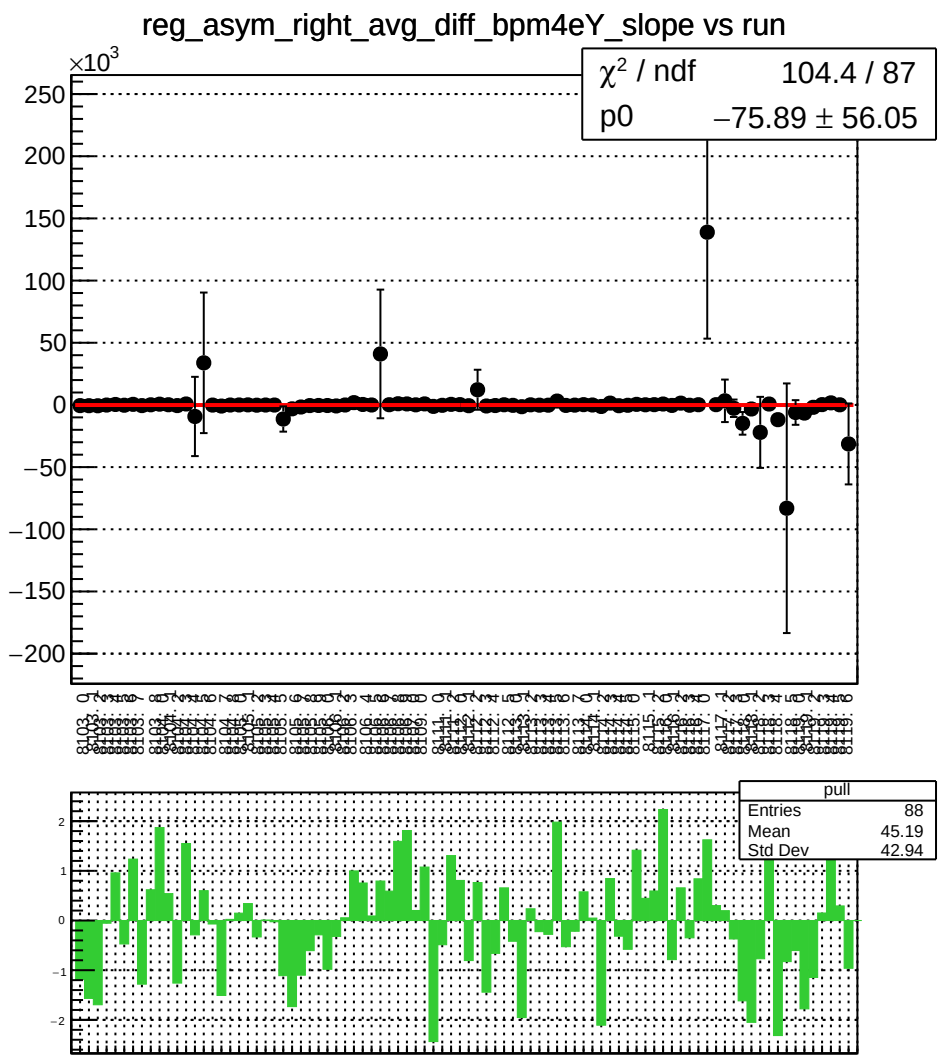

reg_asym_right_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 96.33 / 87
p0 −62.32 ± 34.98
100
50
0
−50
−100
pull
Entries 88
Mean −23.2
Std Dev 52.29
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 88
Mean −0.03366
Std Dev 1.046
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

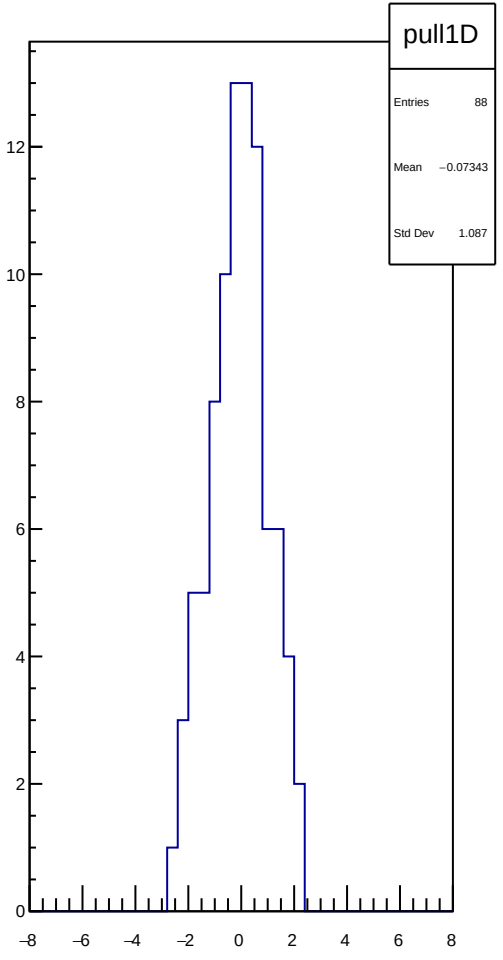

reg_asym_right_avg_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 102.7 / 87
p0 72.53 ± 52.41
pull
Entries 88
Mean 42.93
Std Dev 44.38

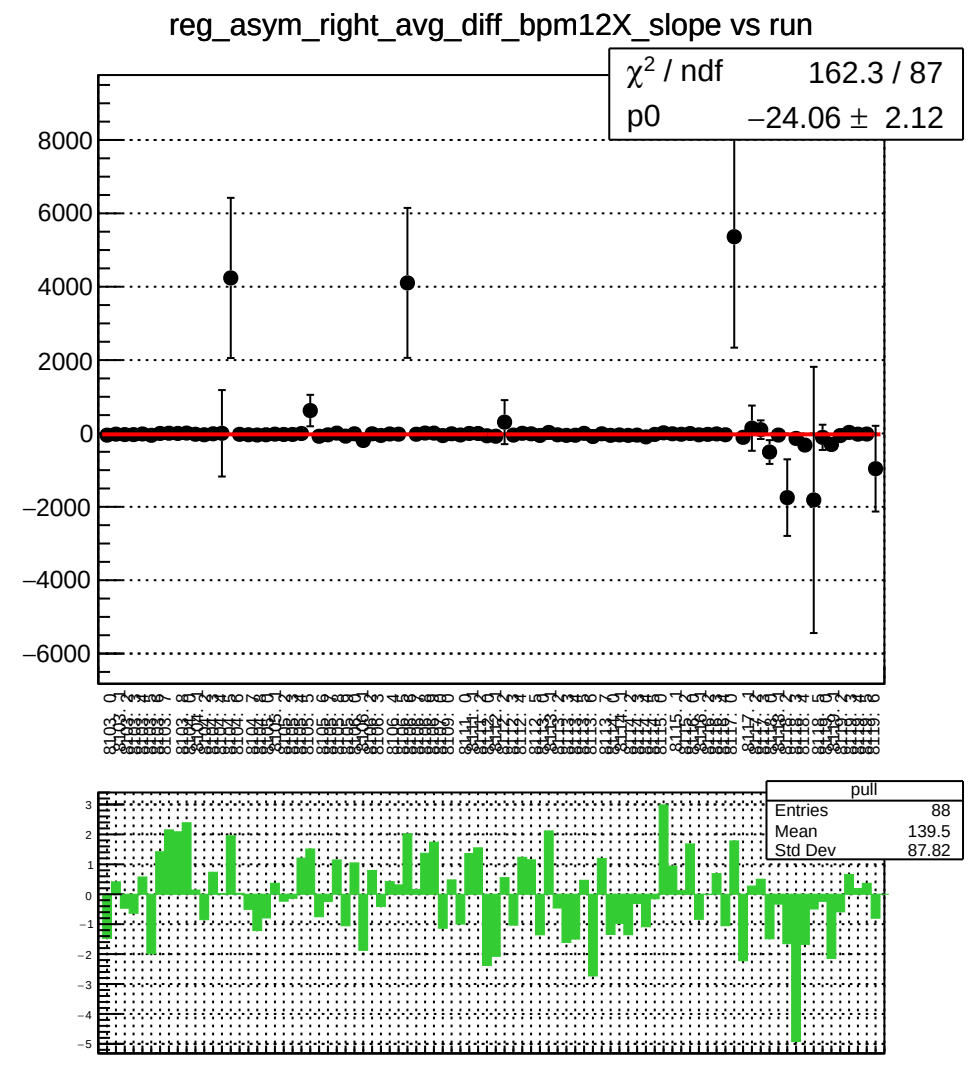

pull1D
Entries 88
Mean 0.06504
Std Dev 1.079

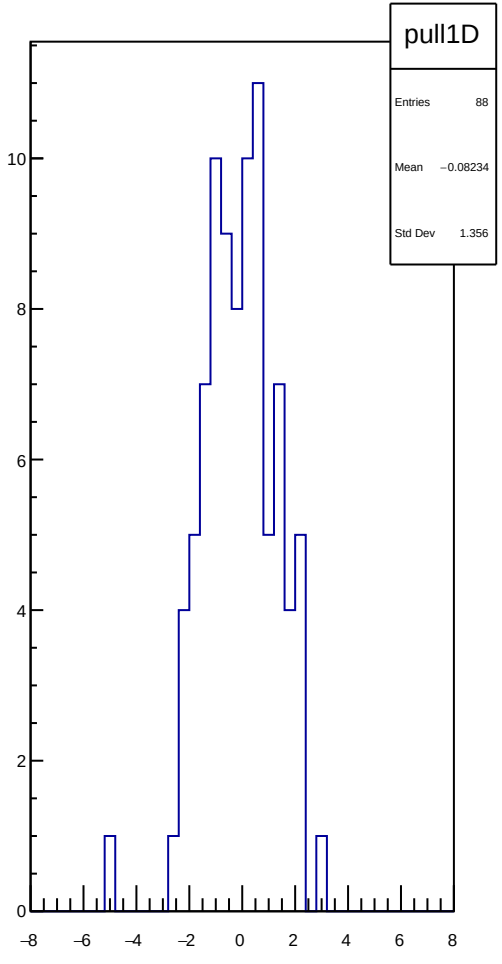

reg_asym_right_avg_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 99.09 / 87
p0 75.44 ± 33.3
100
50
0
−50
−100
pull
Entries 88
Mean −58.45
Std Dev 93.94
2
1
0
−1
−2
−3

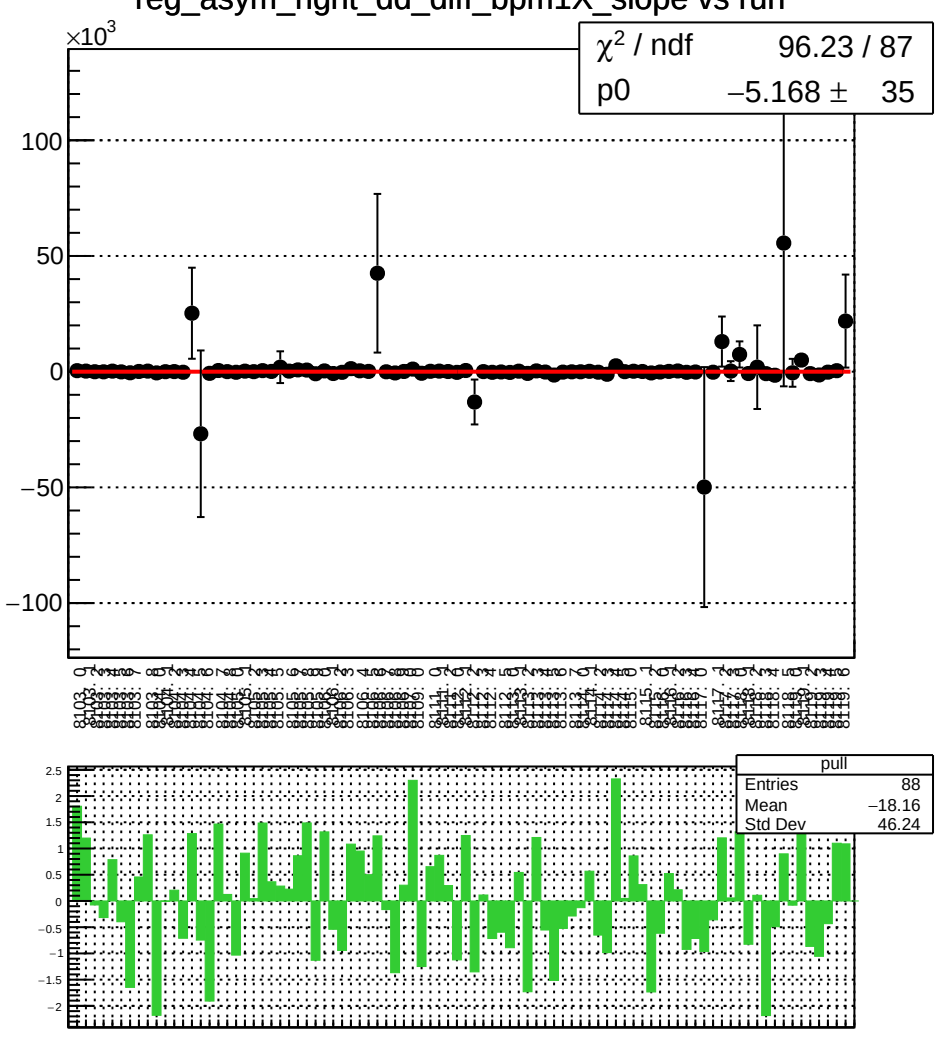

pull1D
Entries 88
Mean 0.02839
Std Dev 1.061
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

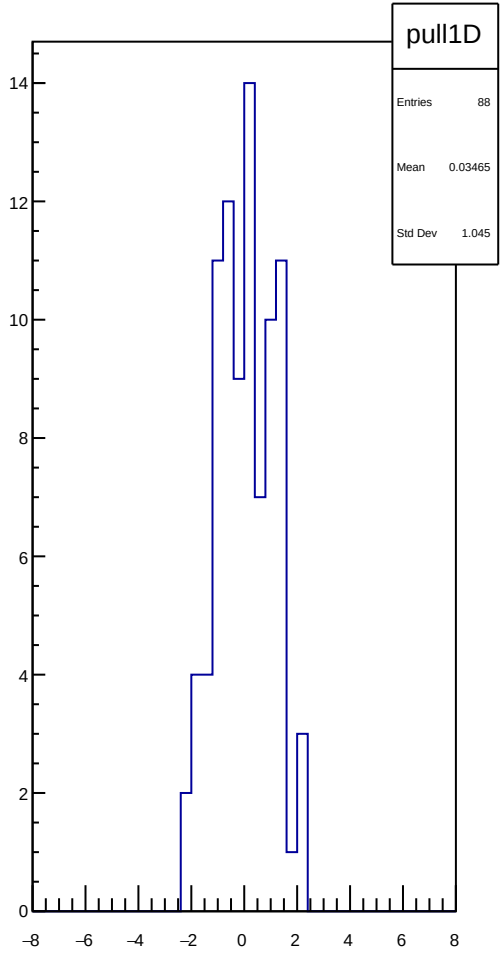

reg_asym_right_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 104.4 / 87
p0 −75.89 ± 56.05
pull
Entries 88
Mean 45.19
Std Dev 42.94

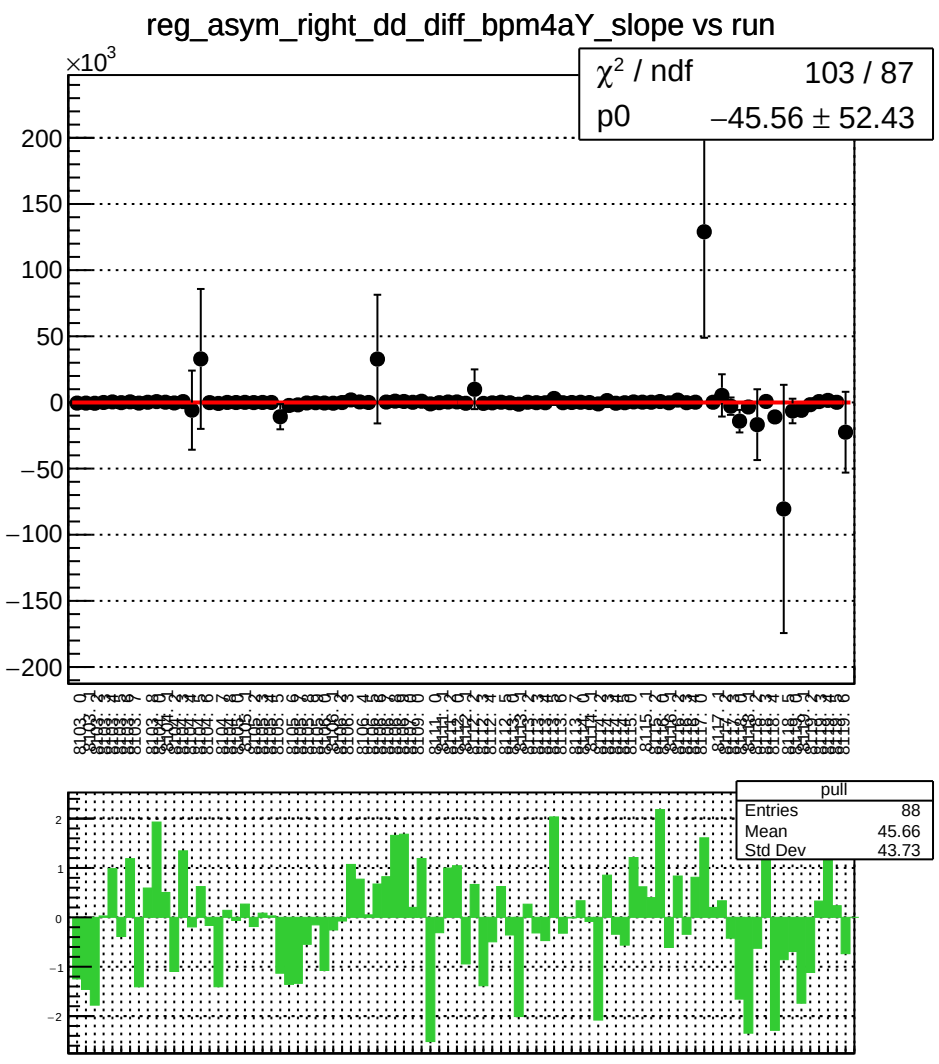

pull1D
Entries 88
Mean −0.07343
Std Dev 1.087

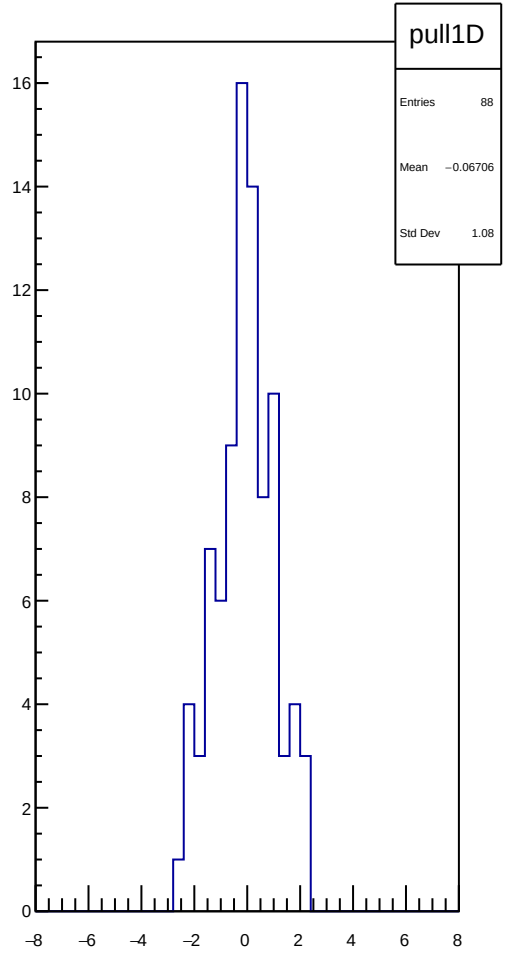

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 162.3 / 87
p0 −24.06 ± 2.12
pull
Entries 88
Mean 139.5
Std Dev 87.82

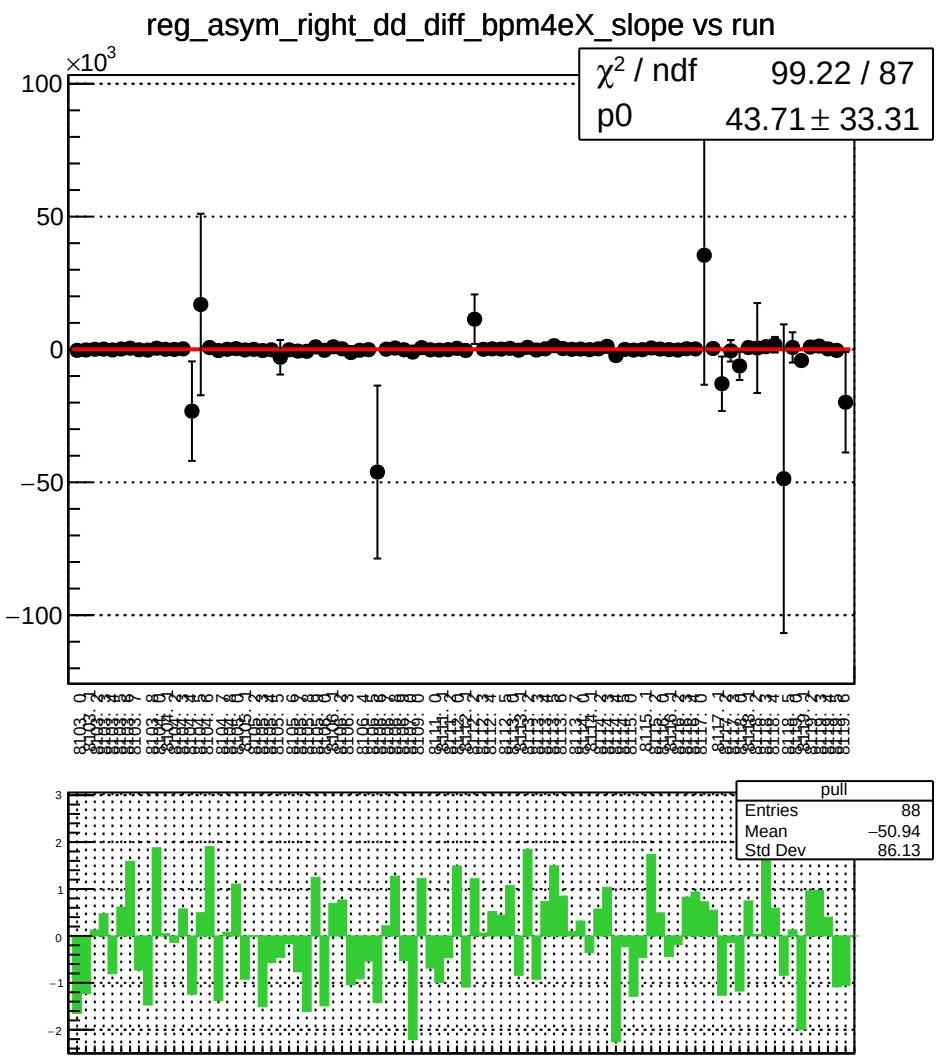

pull1D
Entries 88
Mean −0.08234
Std Dev 1.356

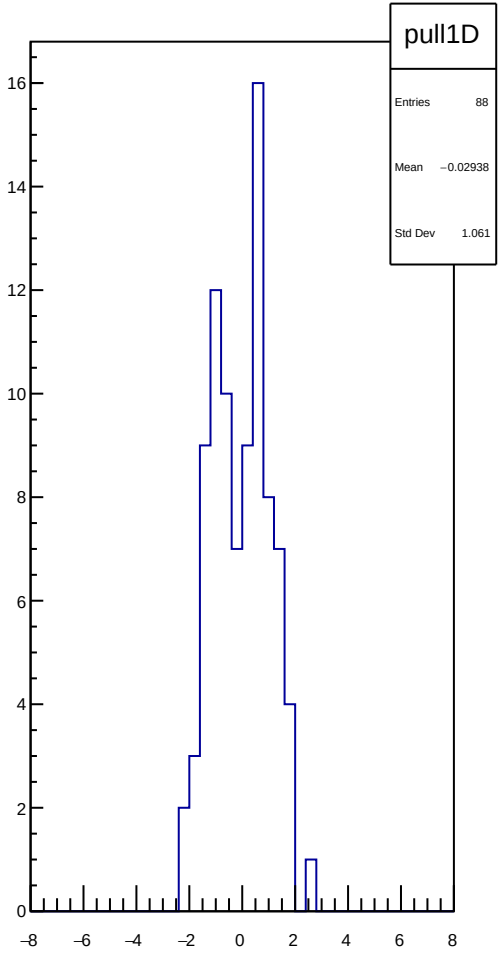

reg_asym_right_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 96.23 / 87
p0 −5.168 ± 35
100
50
0
−50
−100
pull
Entries 88
Mean −18.16
Std Dev 46.24
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

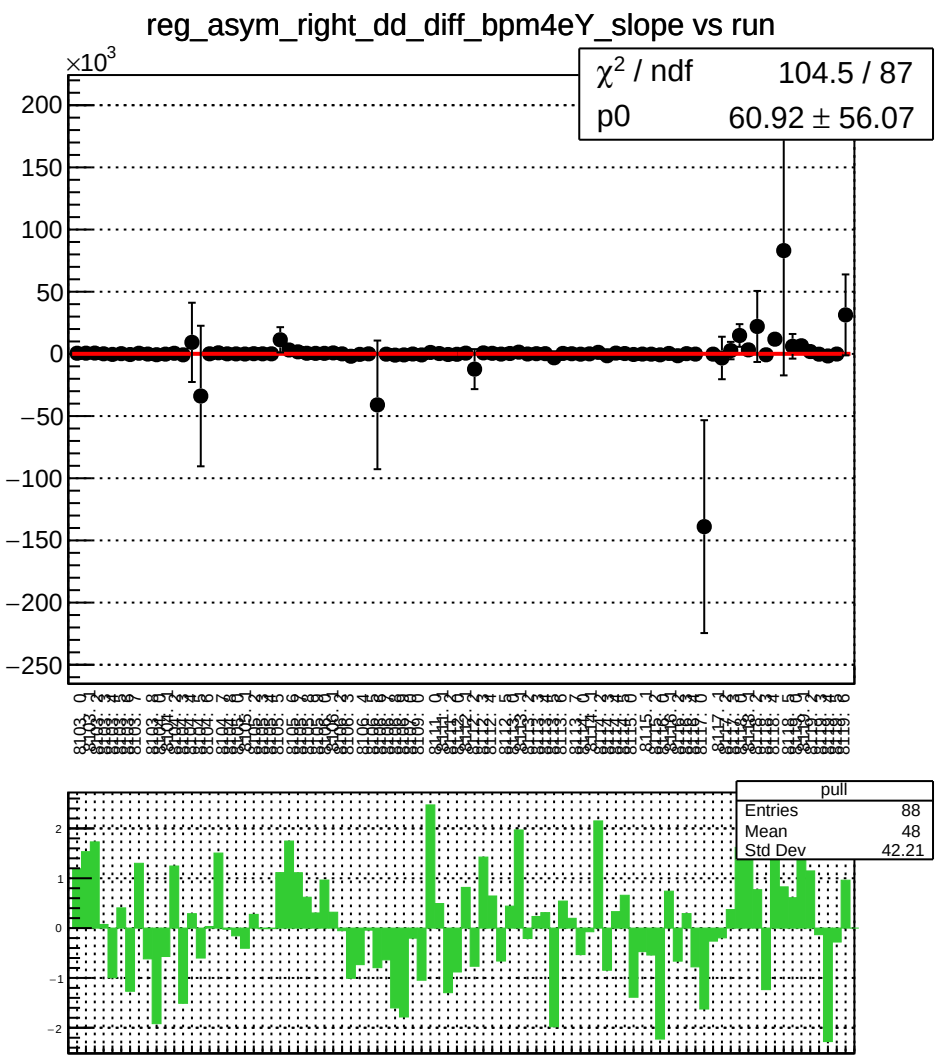

pull1D
Entries 88
Mean 0.03465
Std Dev 1.045
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

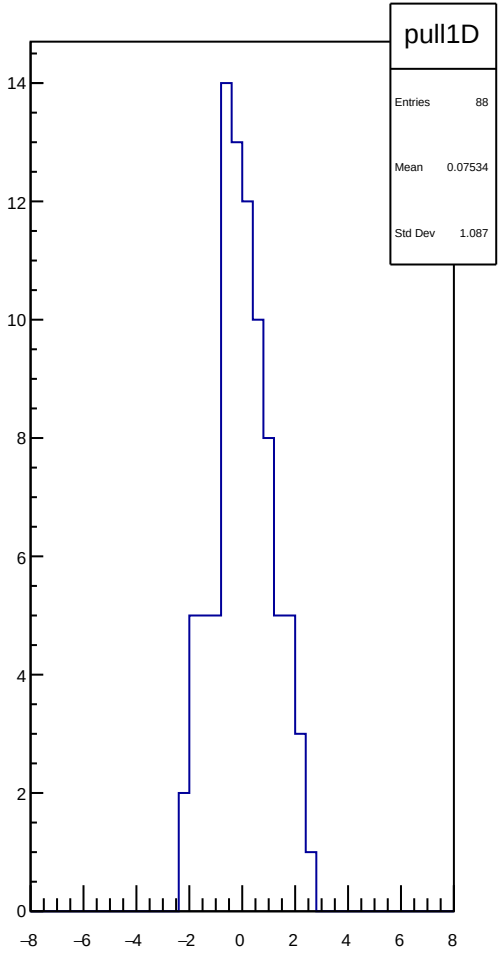

reg_asym_right_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 103 / 87
p0 −45.56 ± 52.43
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 88
Mean 45.66
Std Dev 43.73
2
1
0
−1
−2

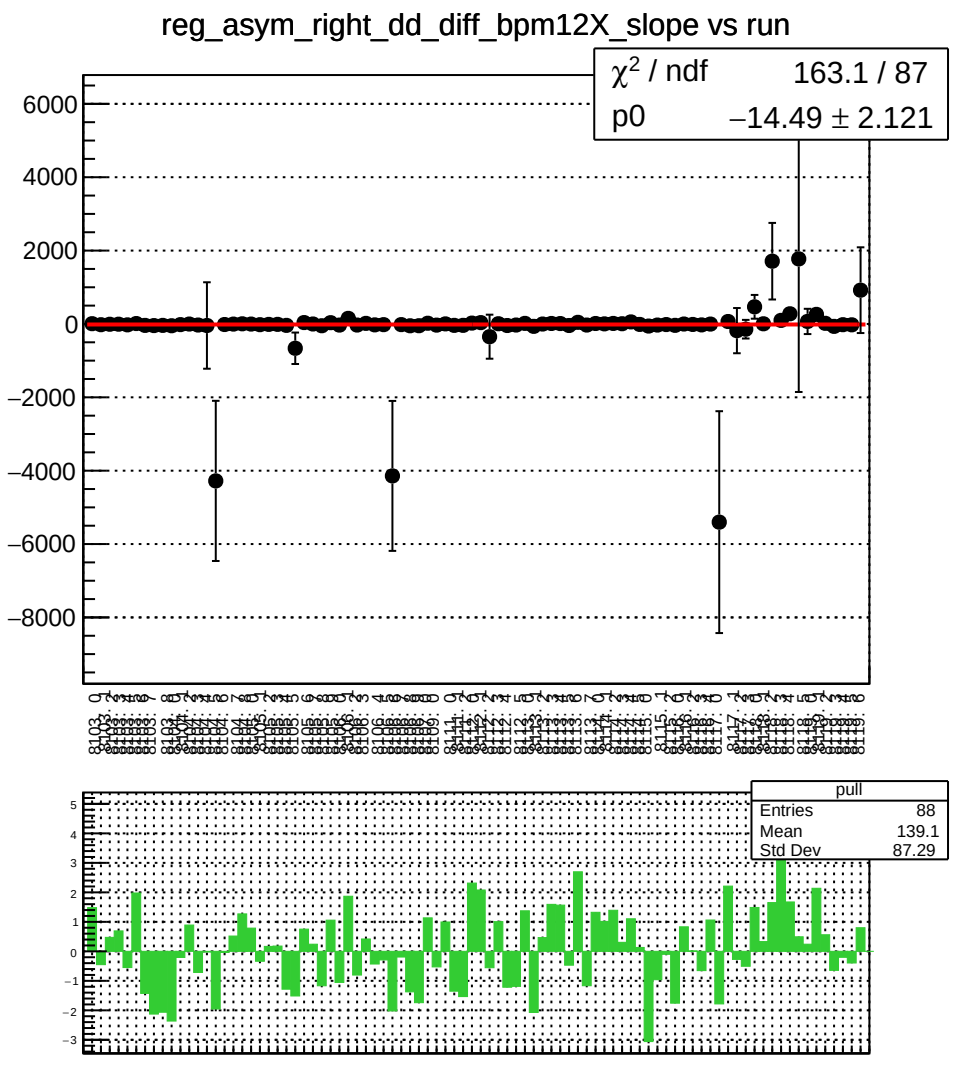

pull1D
Entries 88
Mean −0.06706
Std Dev 1.08
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

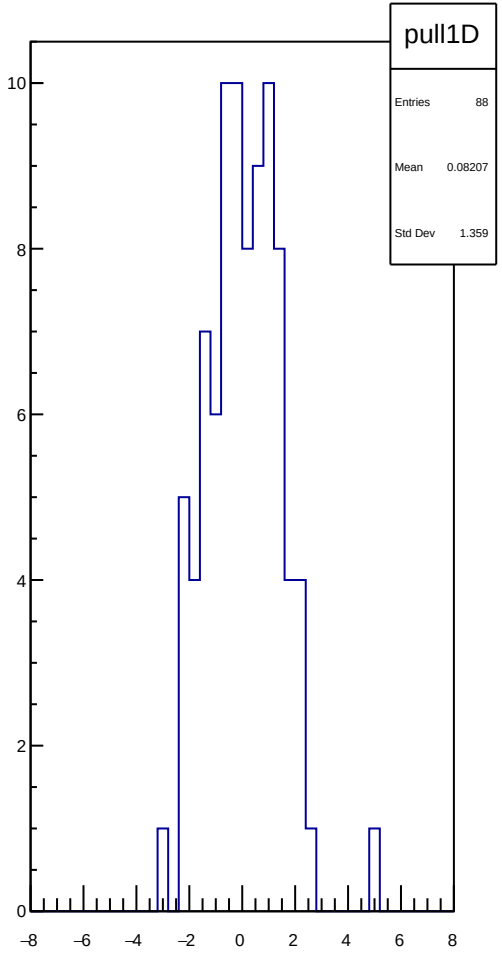

reg_asym_right_dd_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 99.22 / 87
p0 43.71 ± 33.31
pull
Entries 88
Mean −50.94
Std Dev 86.13

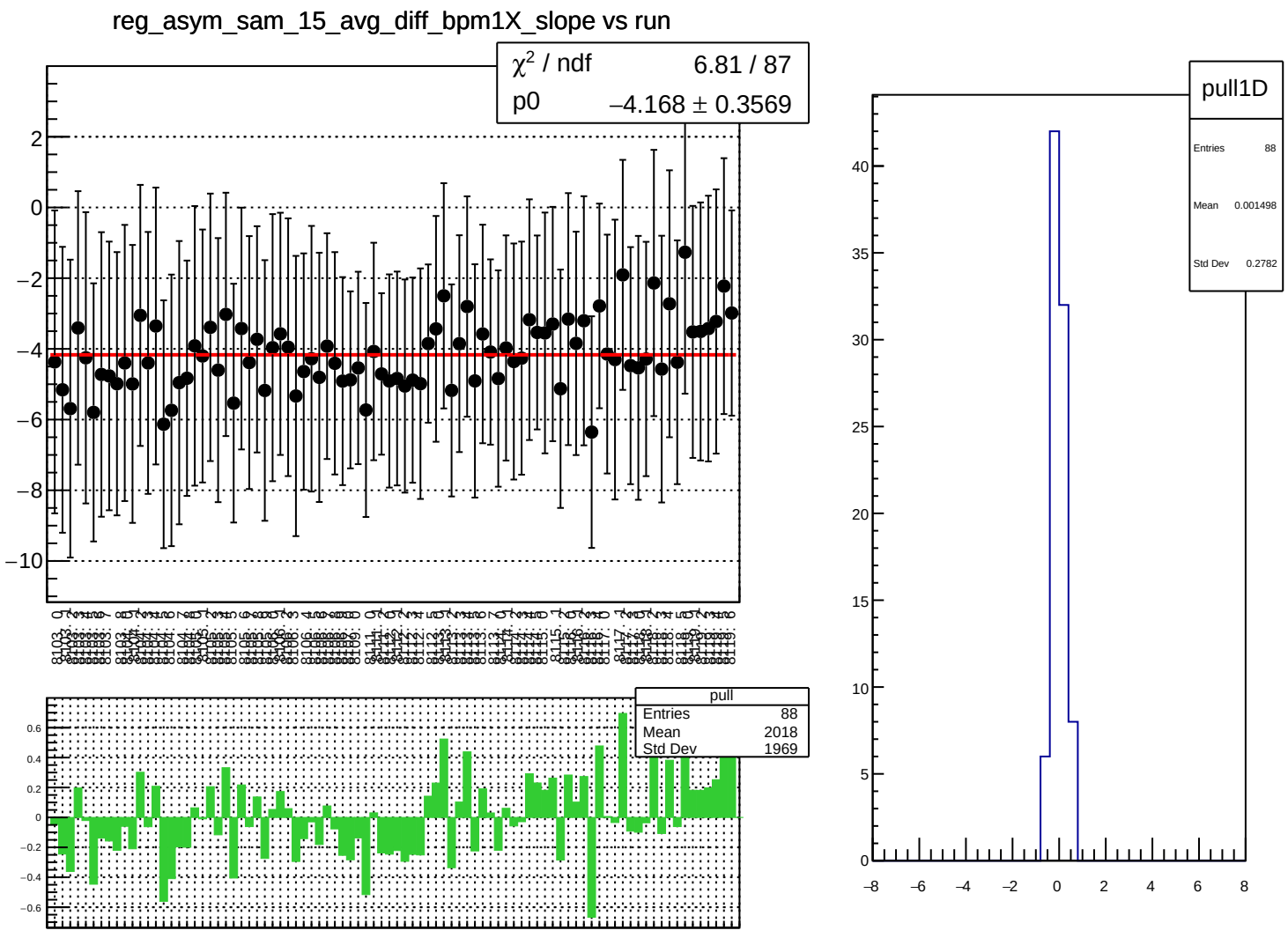

pull1D
Entries 88
Mean −0.02938
Std Dev 1.061

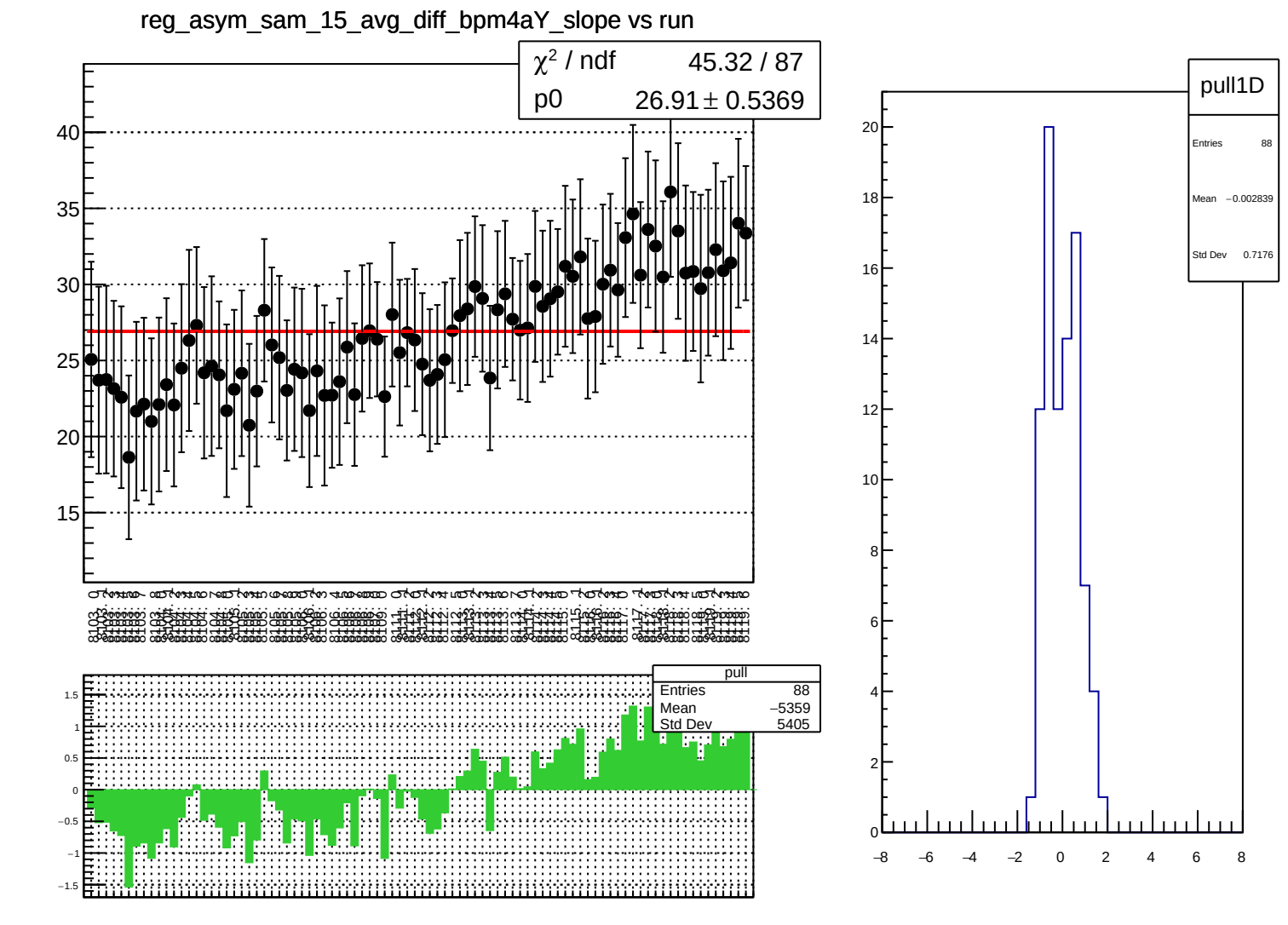

reg_asym_right_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 104.5 / 87
p0 60.92 ± 56.07
pull
Entries 88
Mean 48
Std Dev 42.21

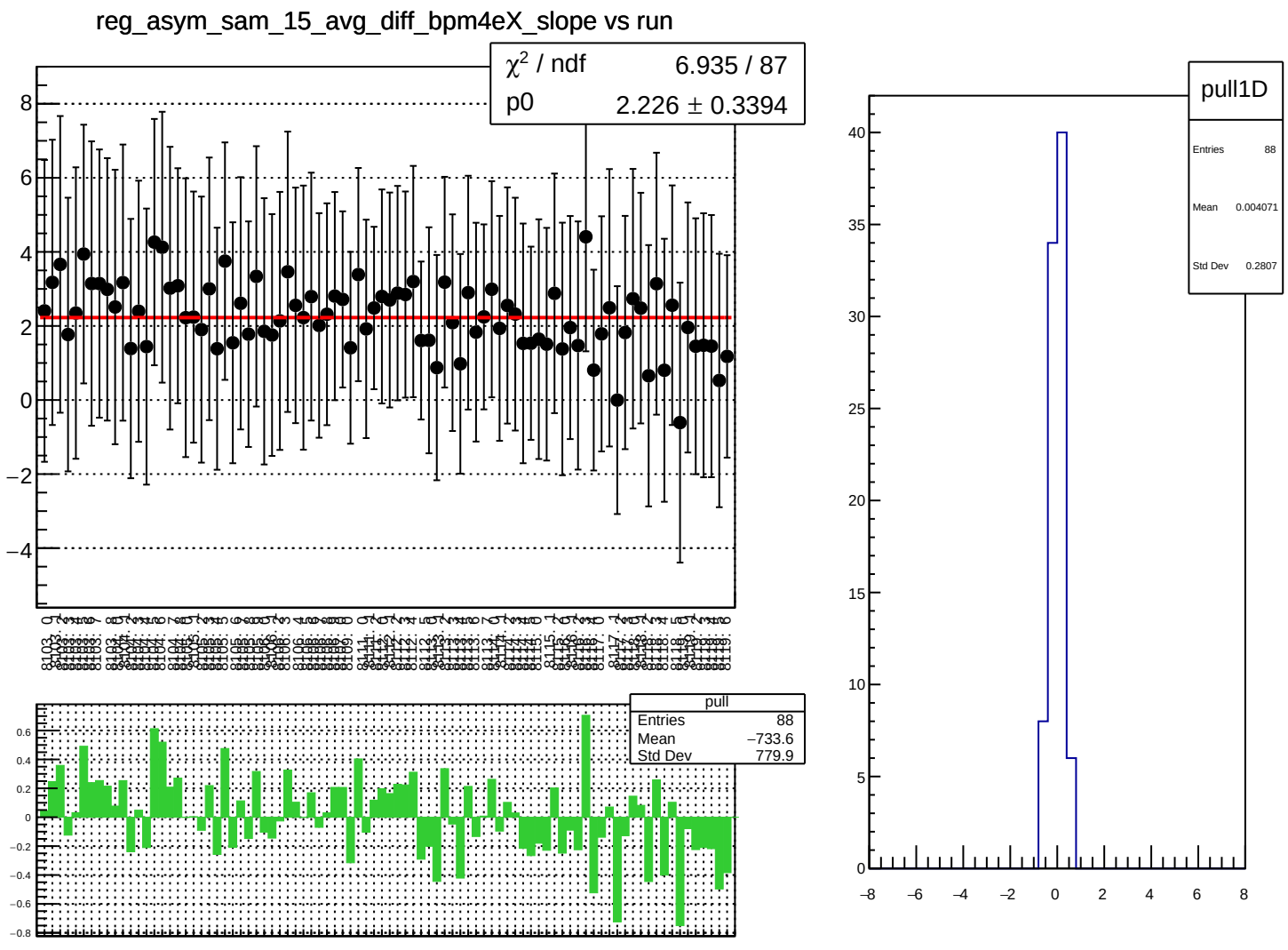

pull1D
Entries 88
Mean 0.07534
Std Dev 1.087

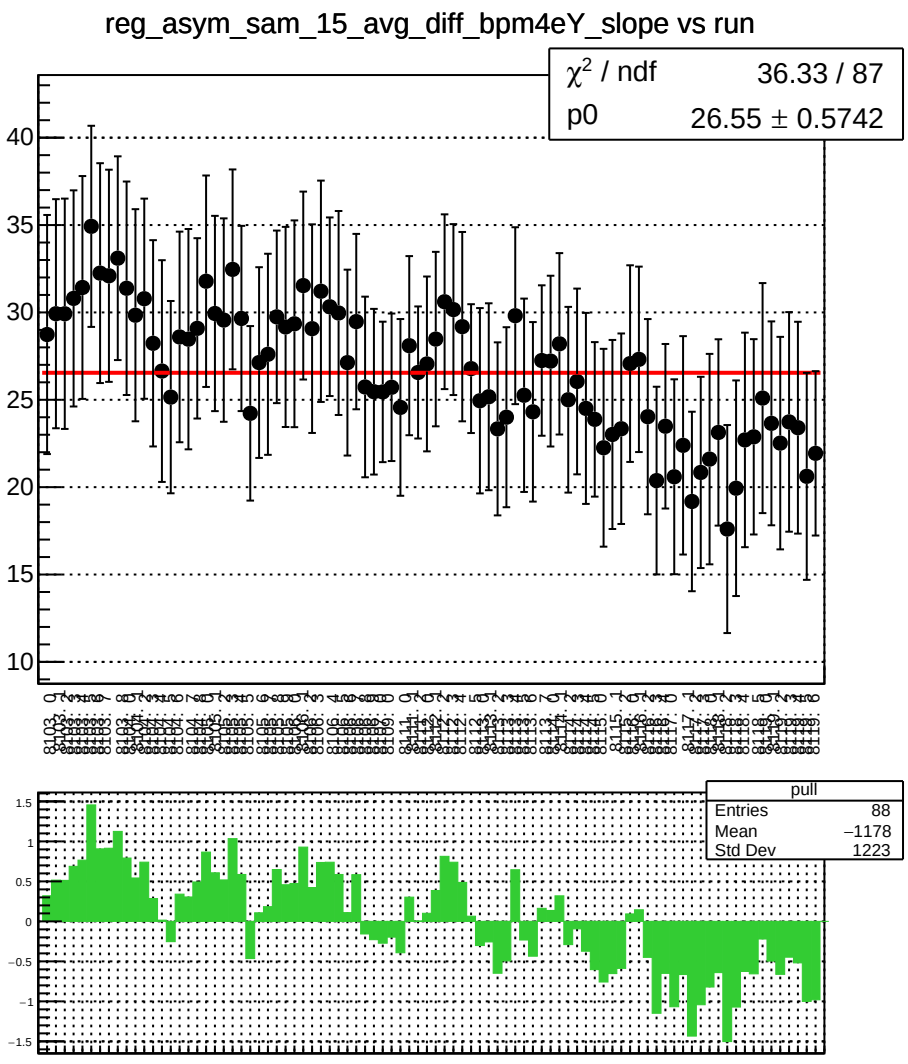

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 163.1 / 87
p0 −14.49 ± 2.121
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 88
Mean 139.1
Std Dev 87.29
5
4
3
2
1
0
−1
−2
−3

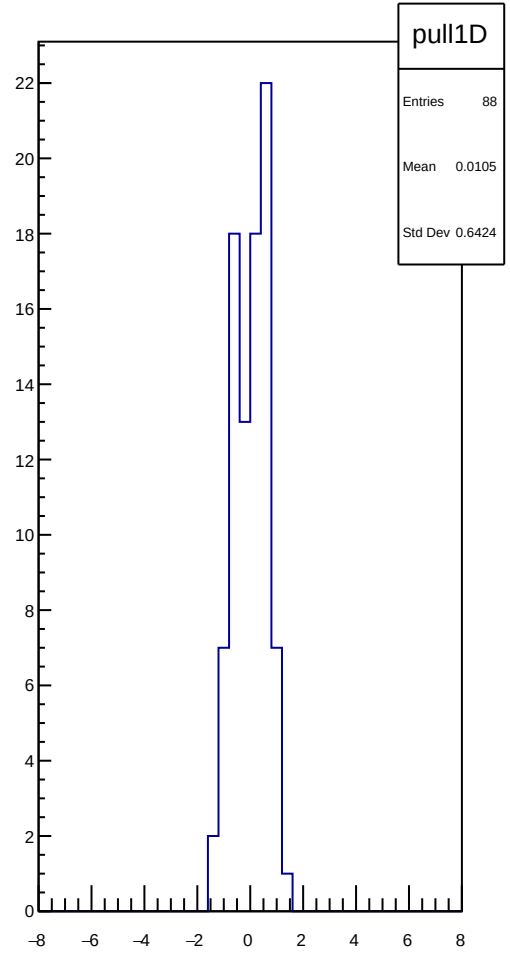

pull1D
Entries 88
Mean 0.08207
Std Dev 1.359
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

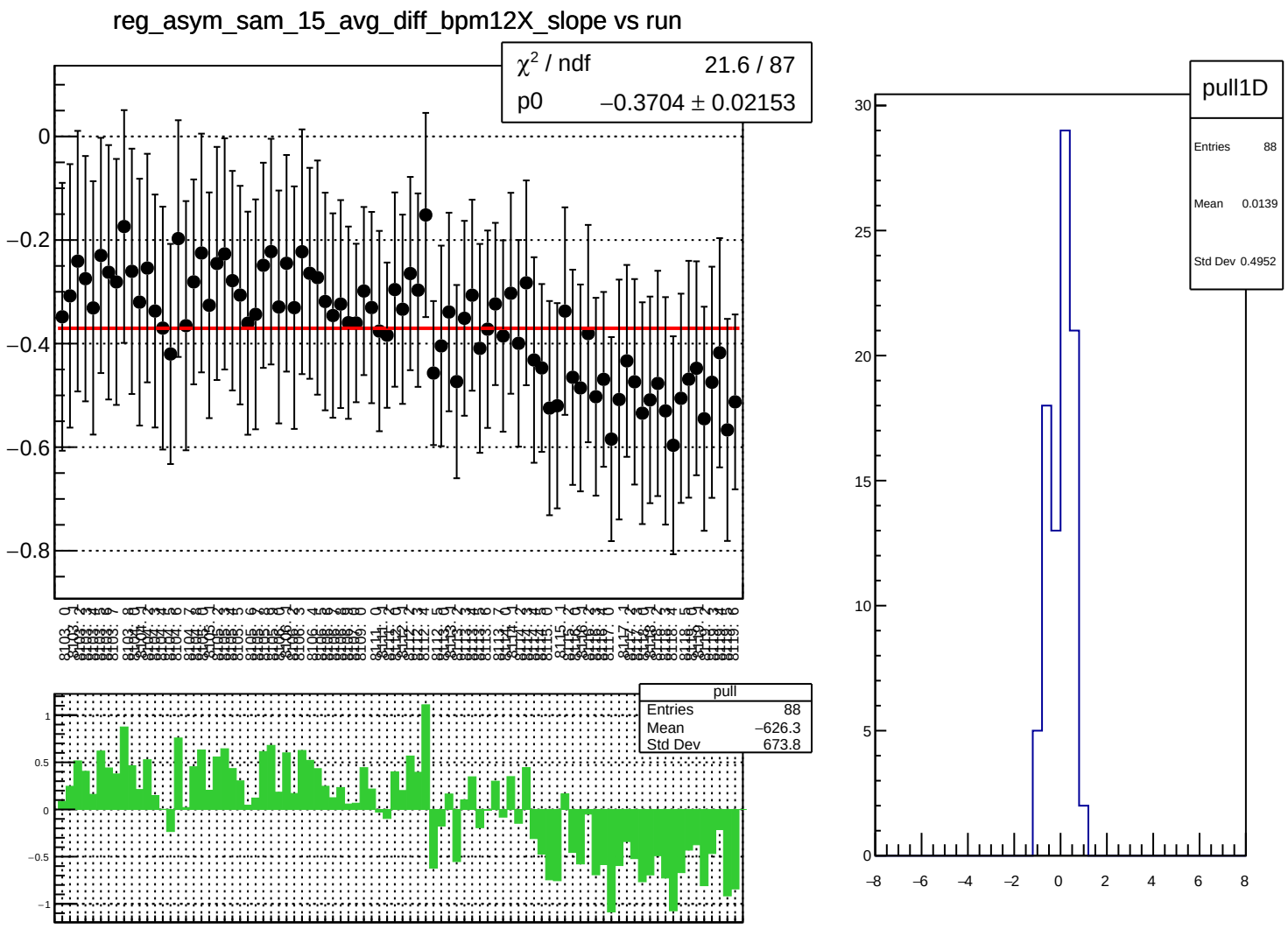

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 6.81 / 87
p0 −4.168 ± 0.3569
pull
Entries 88
Mean 2018
Std Dev 1969
pull1D
Entries 88
Mean 0.001498
Std Dev 0.2782

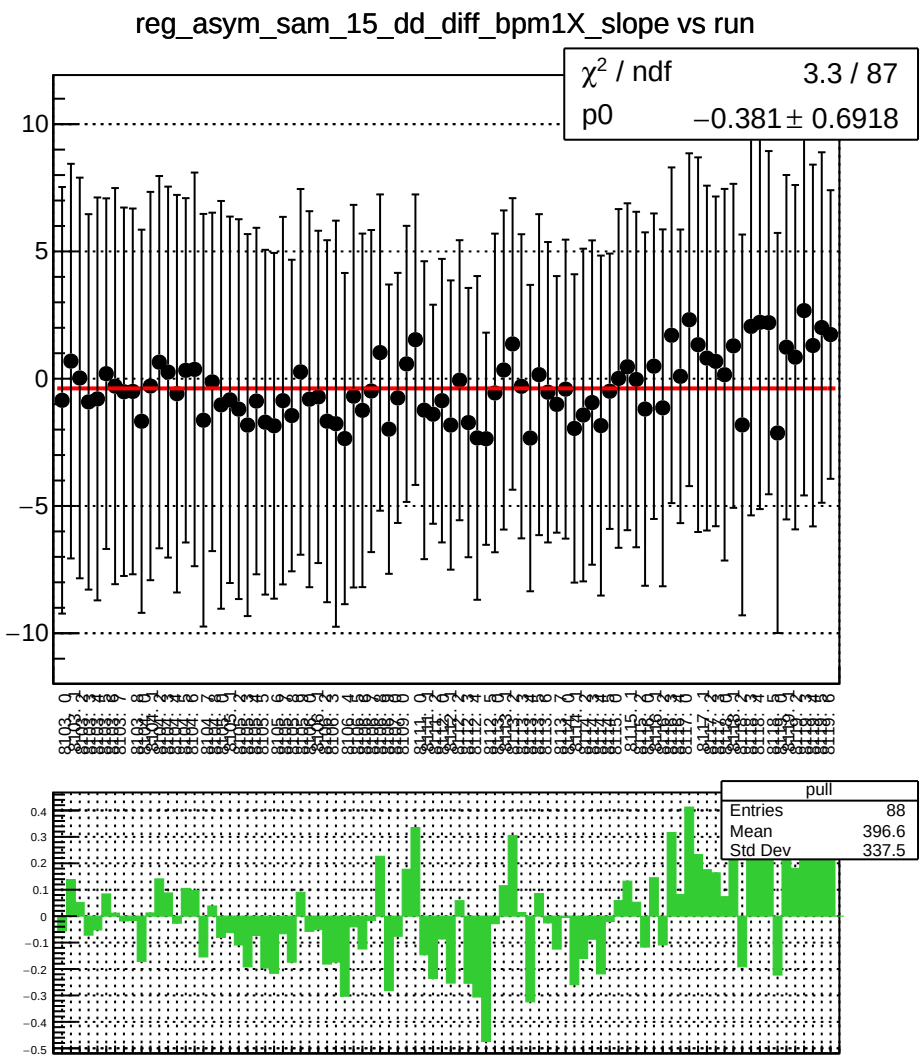

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 45.32 / 87
p0 26.91 ± 0.5369
pull
Entries 88
Mean −5359
Std Dev 5405
pull1D
Entries 88
Mean −0.002839
Std Dev 0.7176

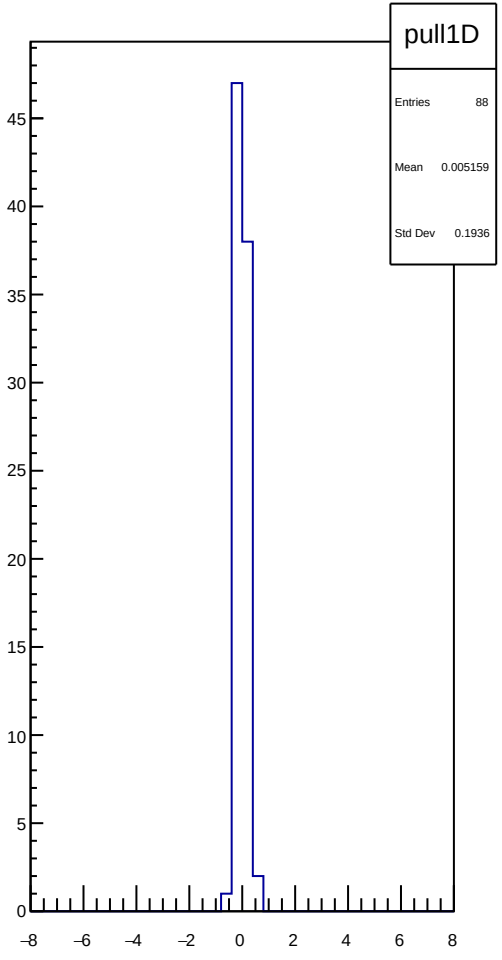

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.935 / 87
p0 2.226 ± 0.3394
pull
Entries 88
Mean −733.6
Std Dev 779.9
pull1D
Entries 88
Mean 0.004071
Std Dev 0.2807

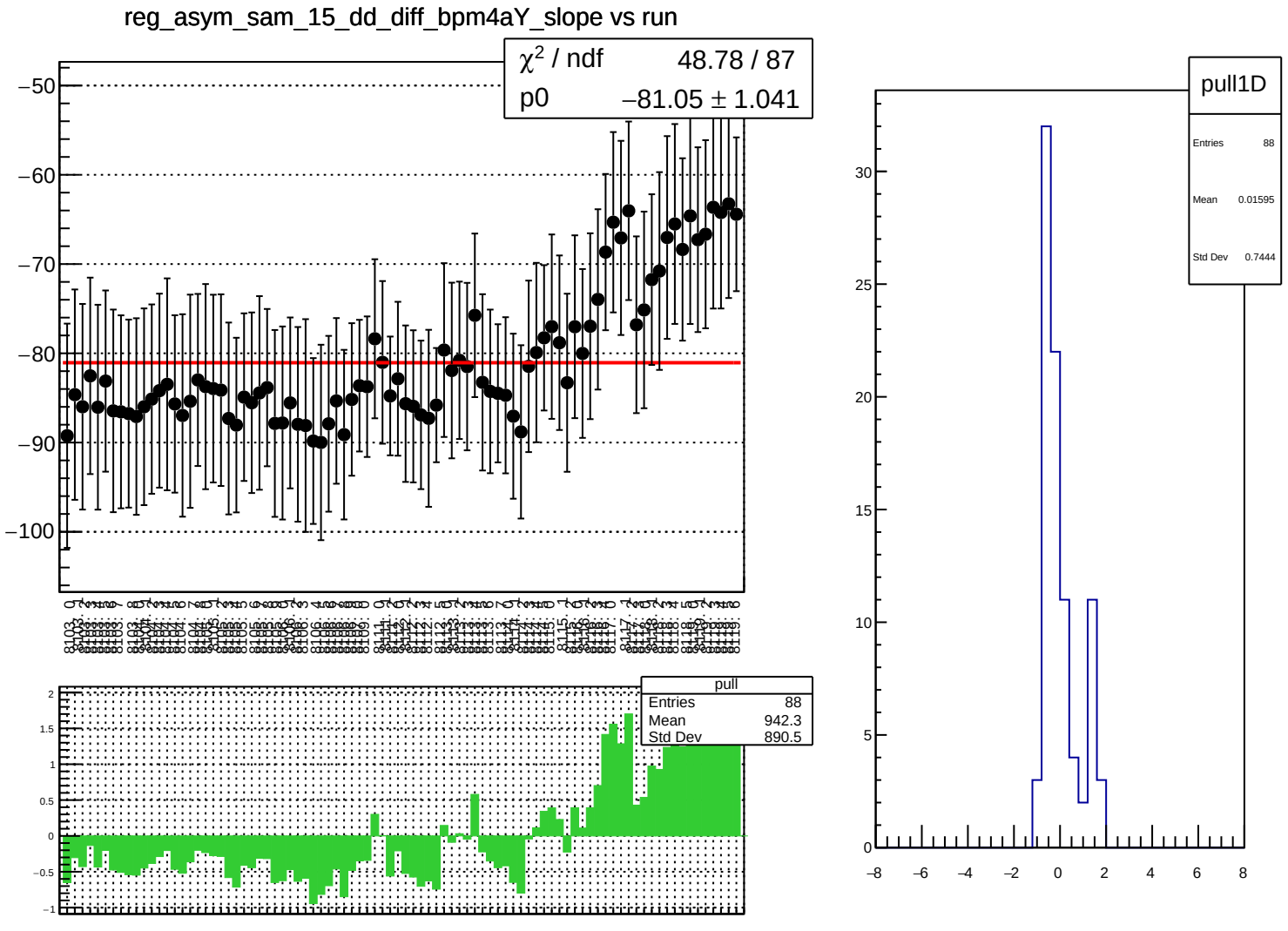

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 36.33 / 87
p0 26.55 ± 0.5742
pull
Entries 88
Mean −1178
Std Dev 1223

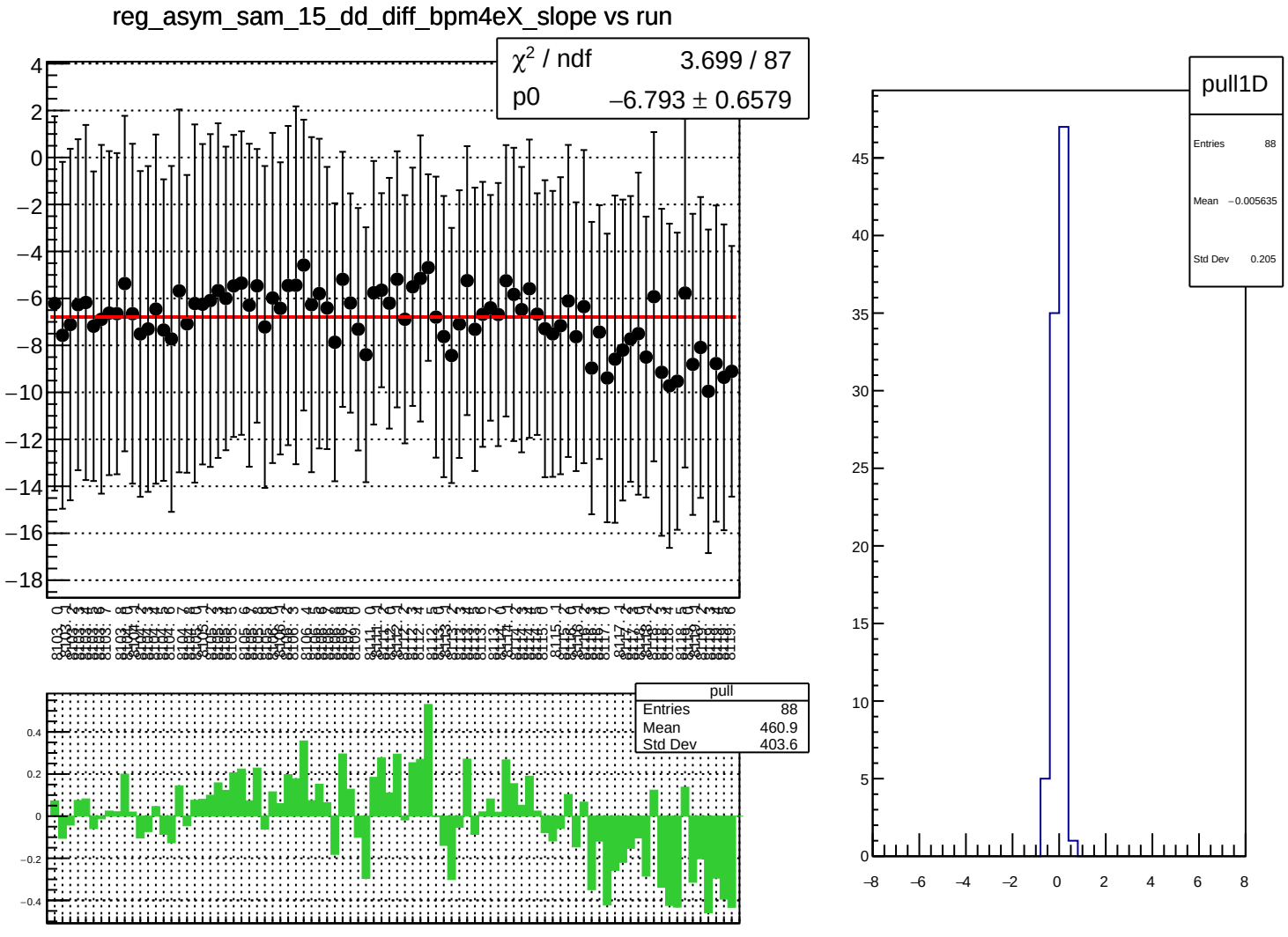

pull1D
Entries 88
Mean 0.0105
Std Dev 0.6424

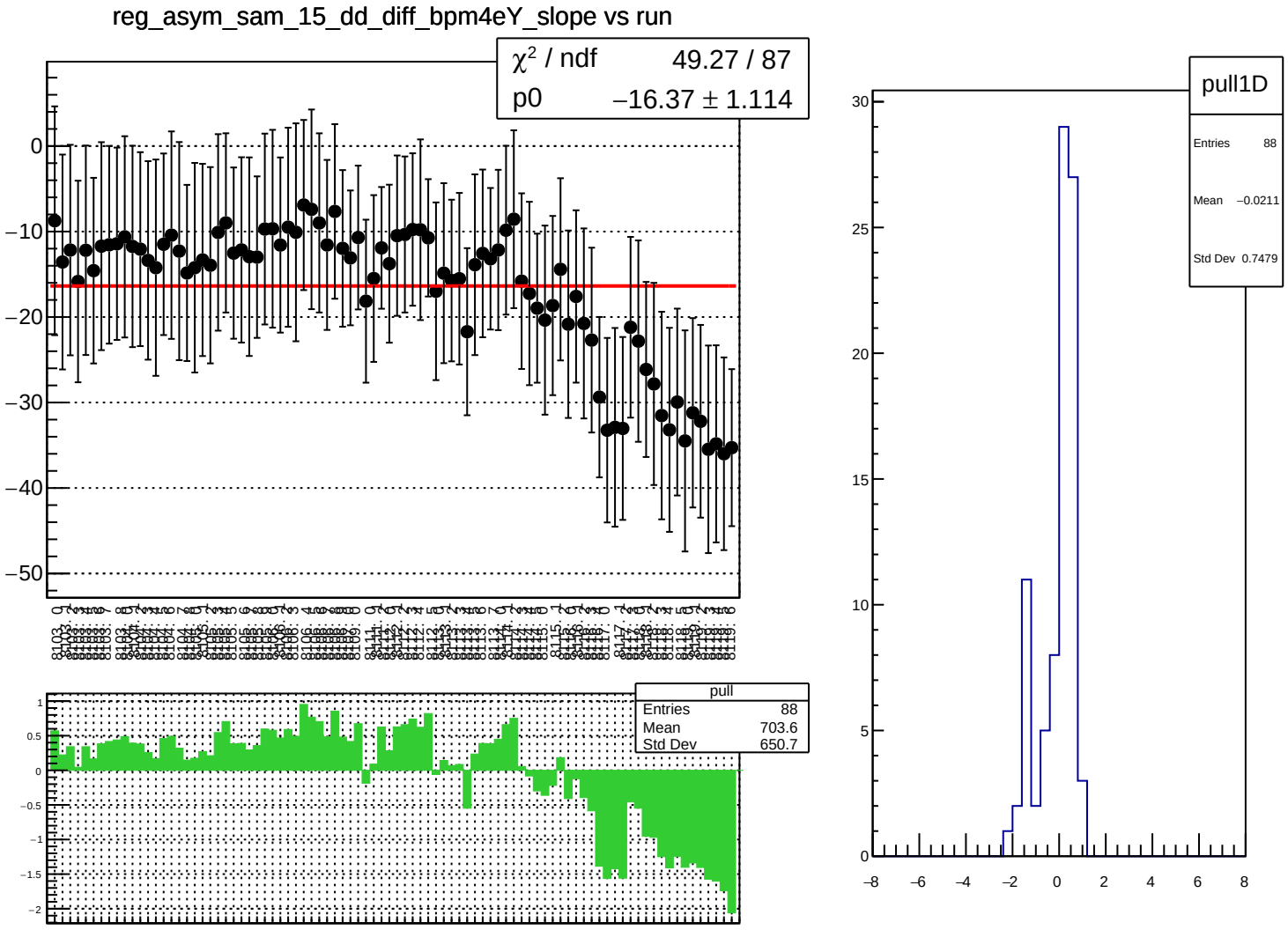

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 21.6 / 87
p0 −0.3704 ± 0.02153
0
−0.2
−0.4
−0.6
−0.8
pull
Entries 88
Mean −626.3
Std Dev 673.8
1
0.5
0
−0.5
−1
pull1D
Entries 88
Mean 0.0139
Std Dev 0.4952
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

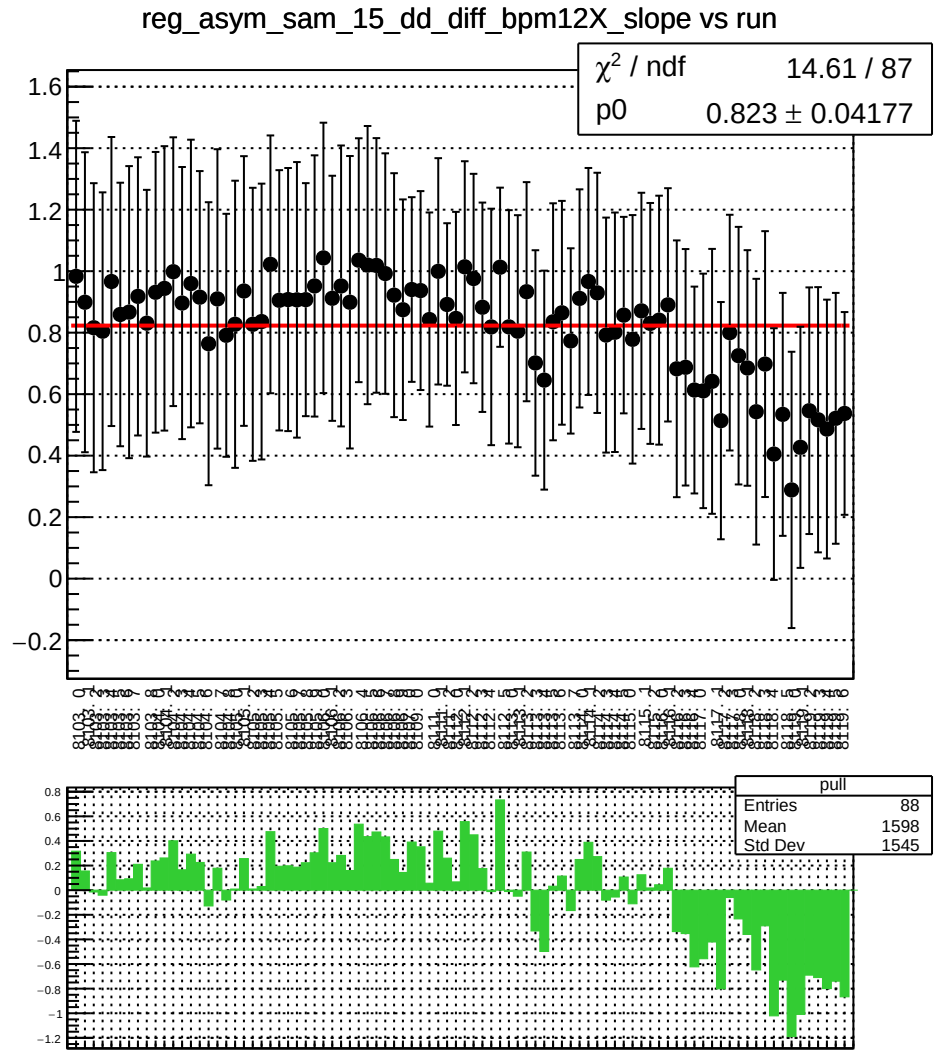

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 3.3 / 87
p0 −0.381 ± 0.6918
pull
Entries 88
Mean 396.6
Std Dev 337.5

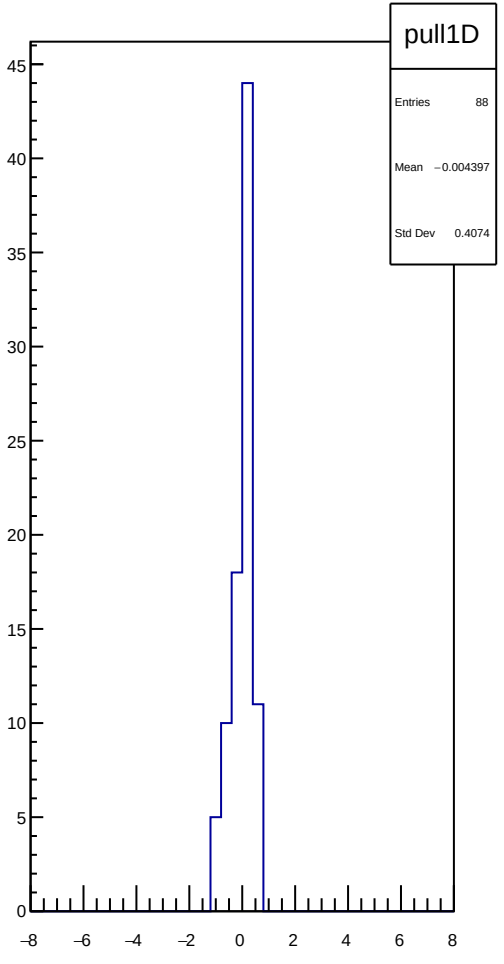

pull1D
Entries 88
Mean 0.005159
Std Dev 0.1936

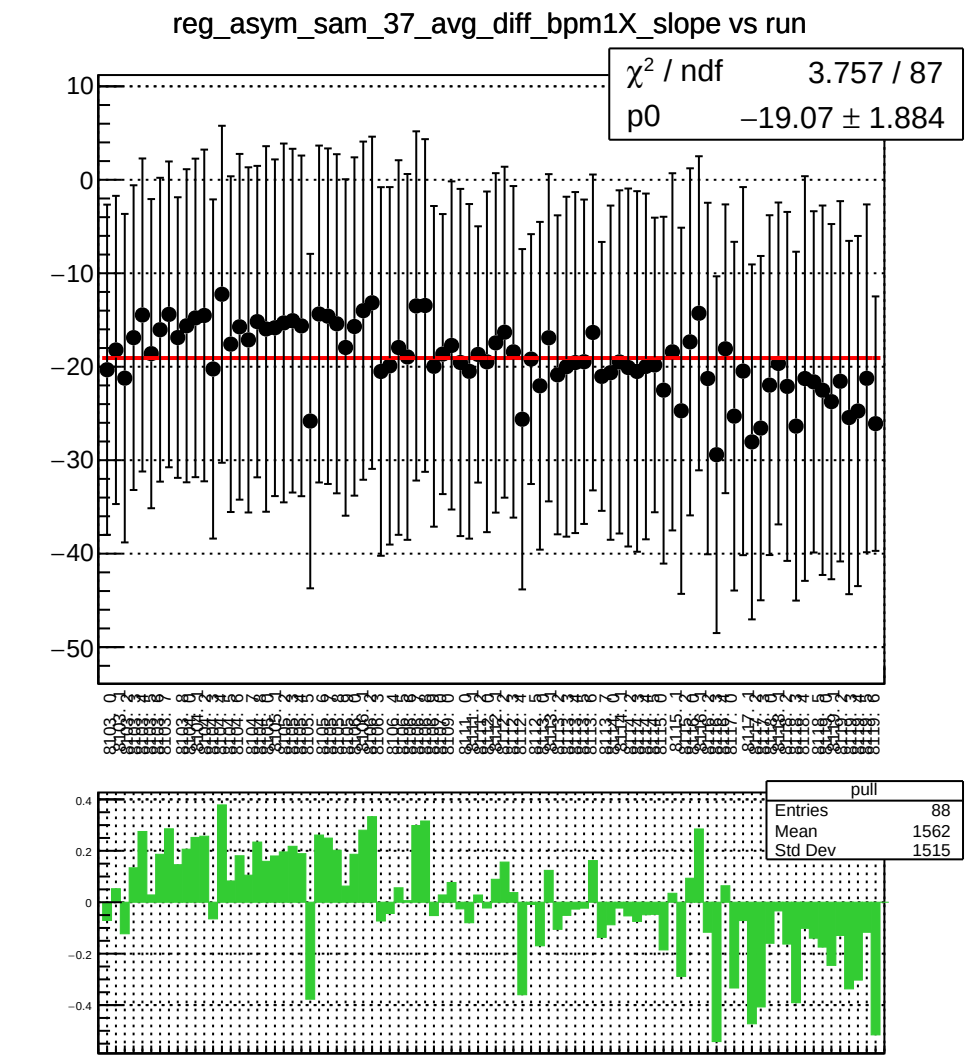

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 48.78 / 87
p0 −81.05 ± 1.041
pull
Entries 88
Mean 942.3
Std Dev 890.5
pull1D
Entries 88
Mean 0.01595
Std Dev 0.7444

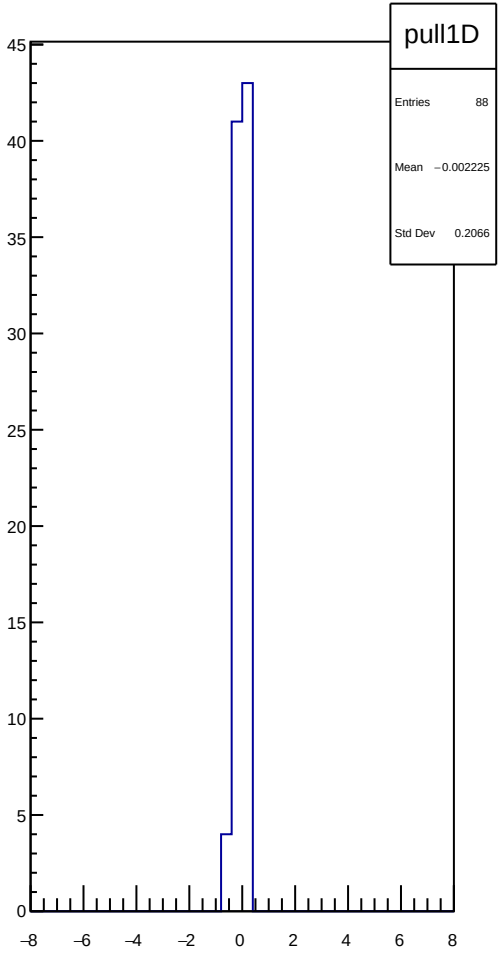

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.699 / 87
p0 −6.793 ± 0.6579
pull
Entries 88
Mean 460.9
Std Dev 403.6
pull1D
Entries 88
Mean −0.005635
Std Dev 0.205

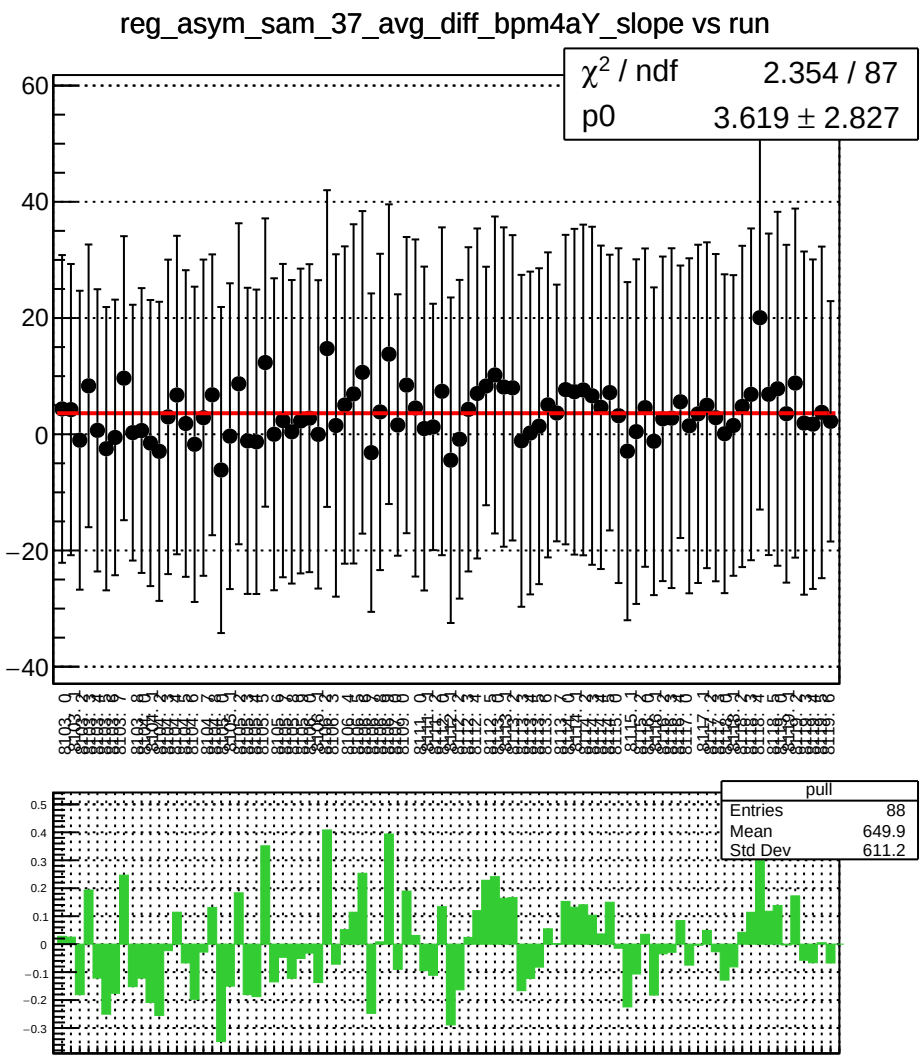

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 49.27 / 87
p0 −16.37 ± 1.114
pull
Entries 88
Mean 703.6
Std Dev 650.7
pull1D
Entries 88
Mean −0.0211
Std Dev 0.7479

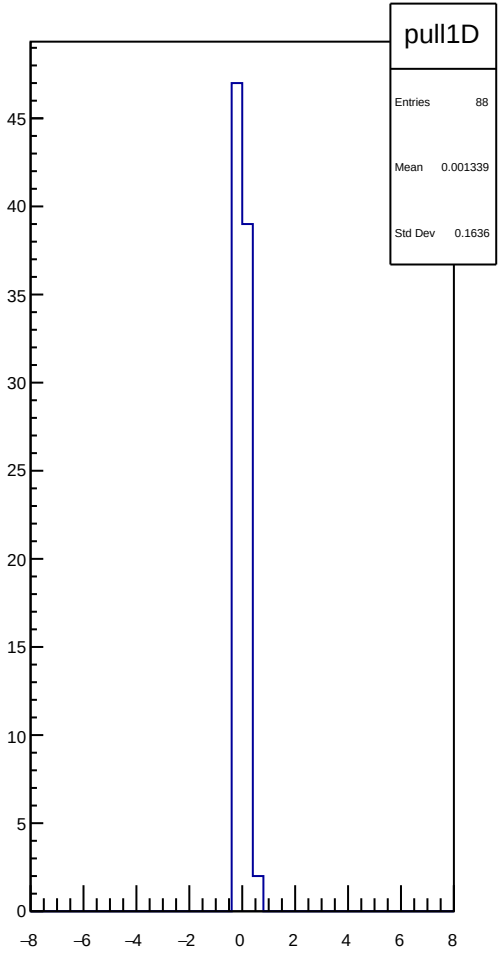

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 14.61 / 87
p0 0.823 ± 0.04177
pull
Entries 88
Mean 1598
Std Dev 1545

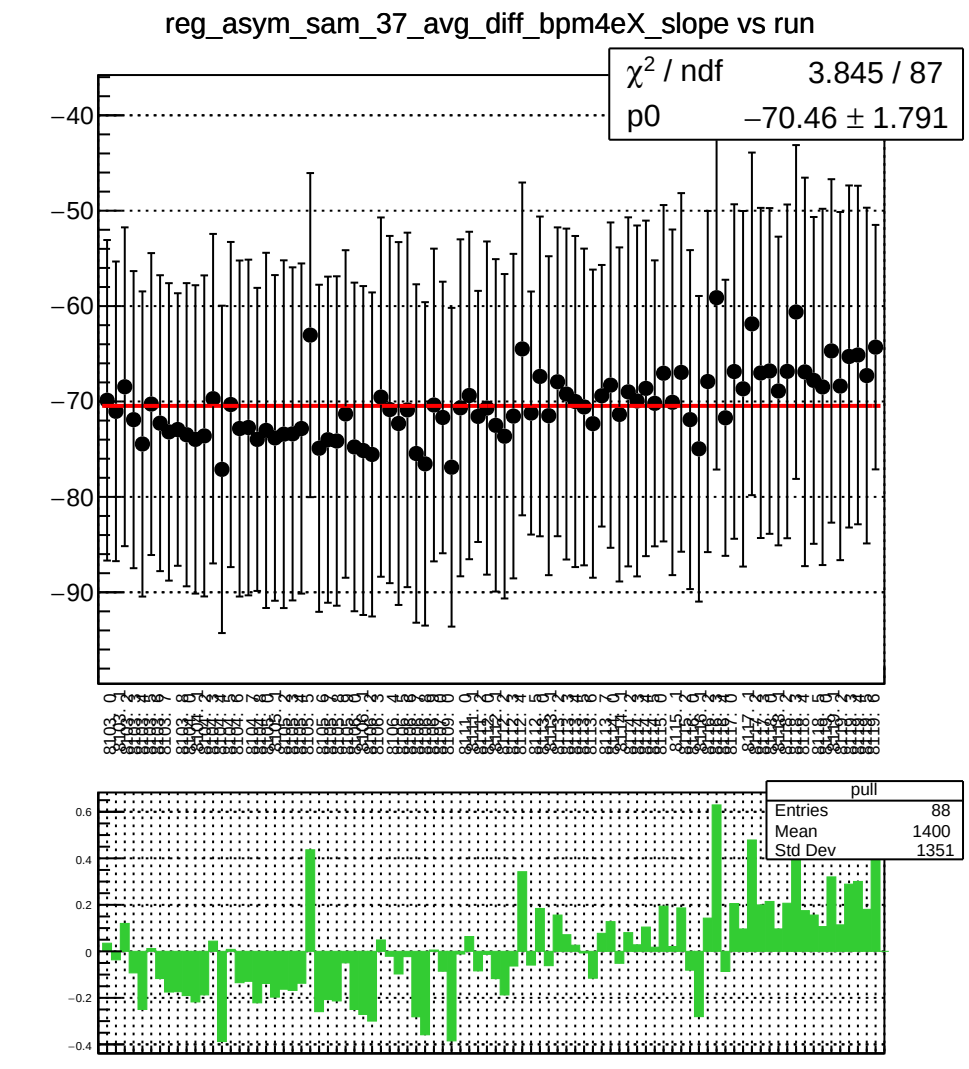

pull1D
Entries 88
Mean −0.004397
Std Dev 0.4074

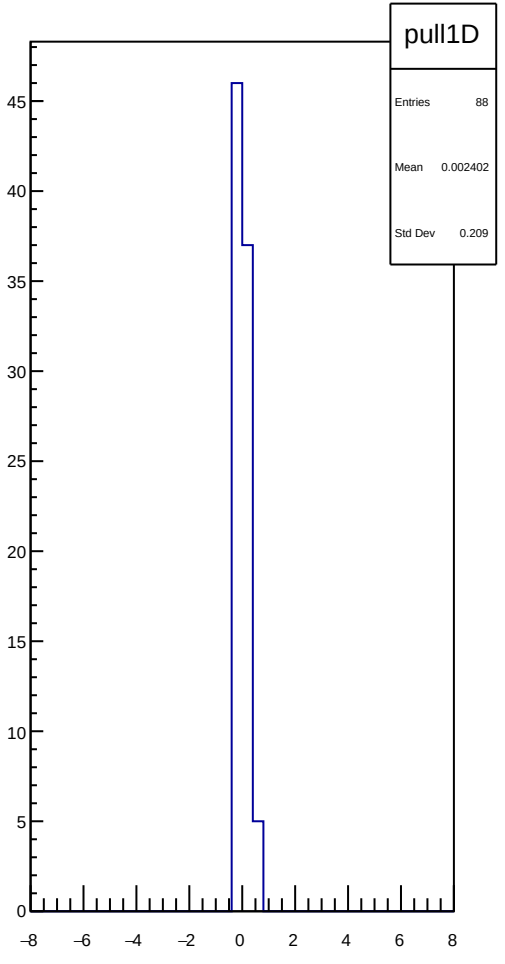

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 3.757 / 87
p0 −19.07 ± 1.884
pull
Entries 88
Mean 1562
Std Dev 1515

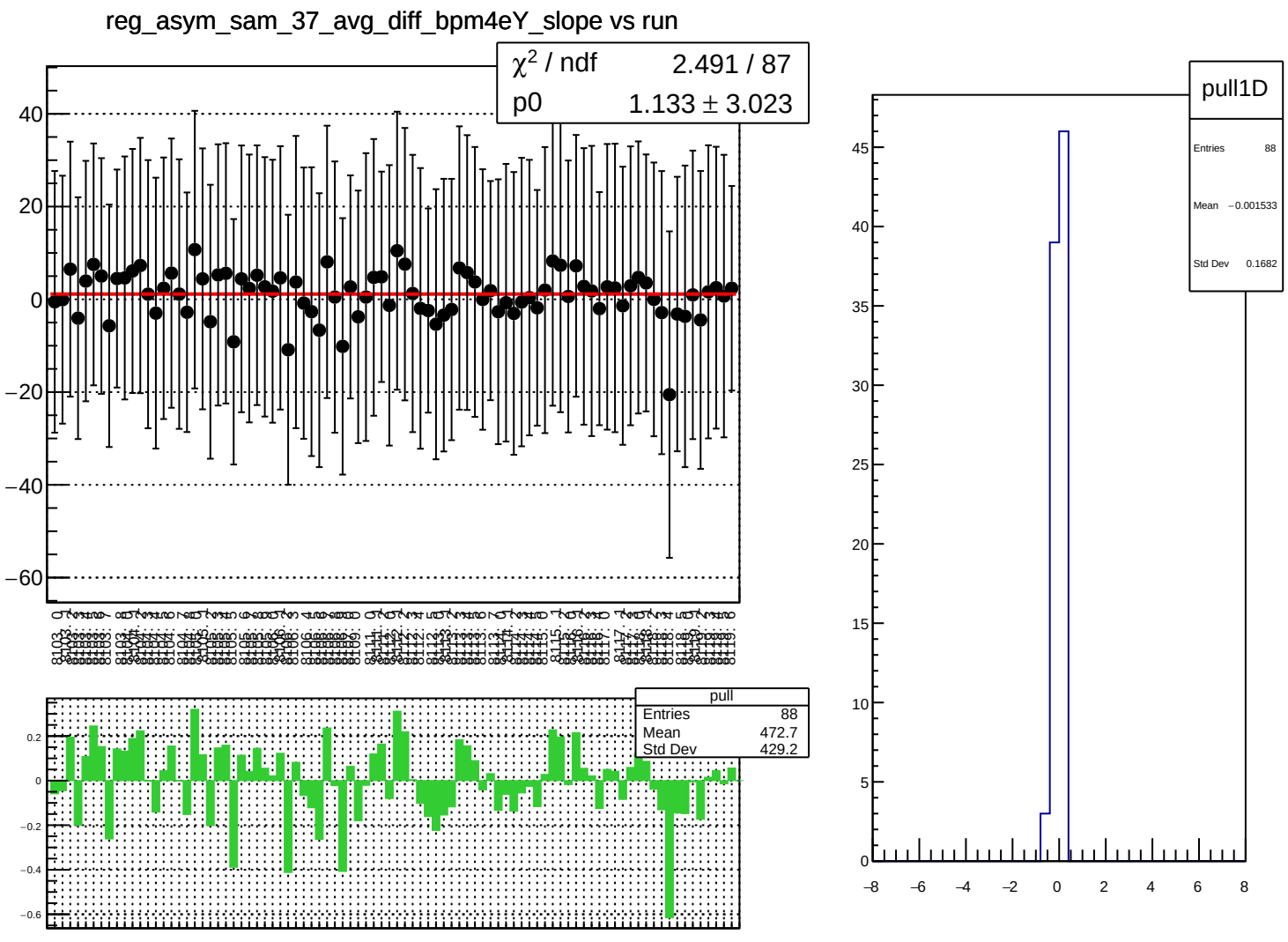

pull1D
Entries 88
Mean −0.002225
Std Dev 0.2066

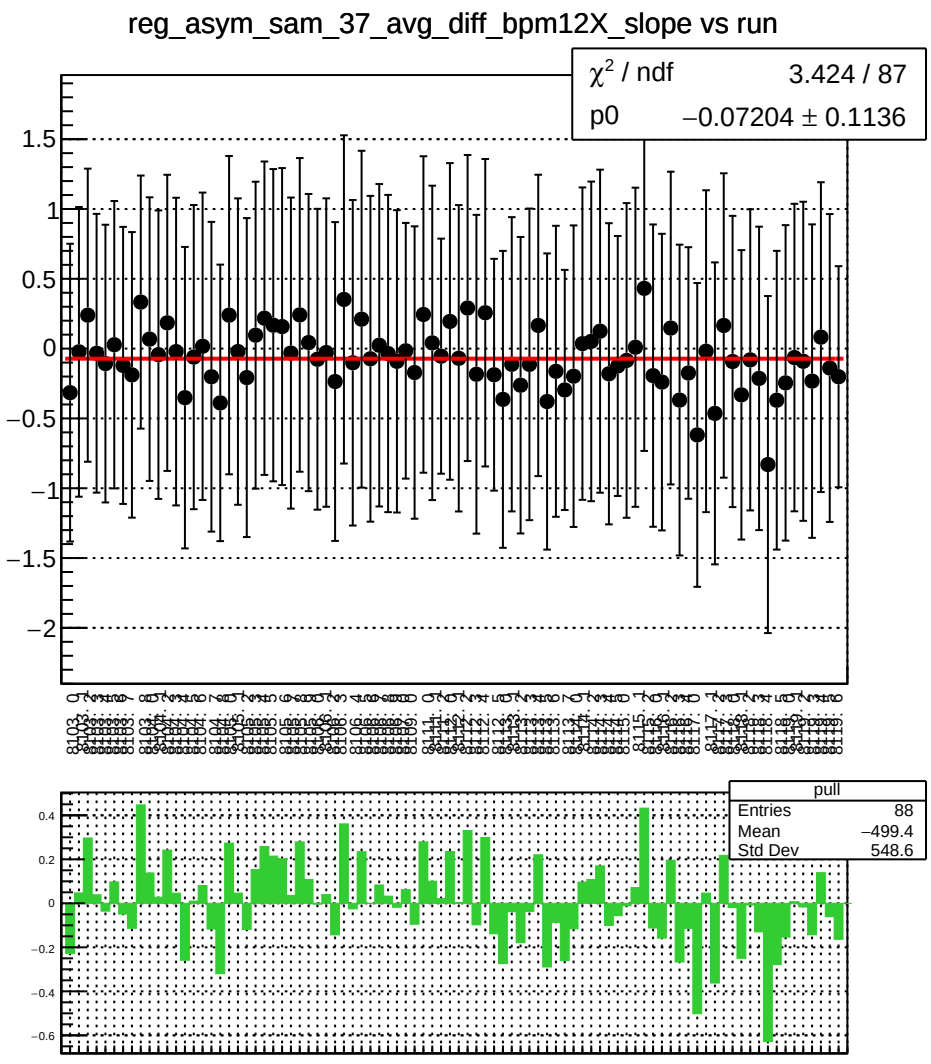

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.354 / 87
p0 3.619 ± 2.827
pull
Entries 88
Mean 649.9
Std Dev 611.2

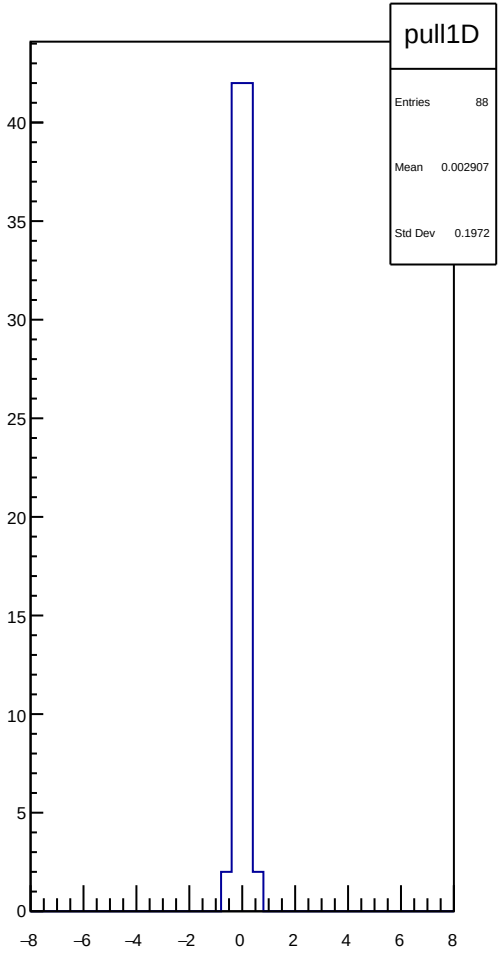

pull1D
Entries 88
Mean 0.001339
Std Dev 0.1636

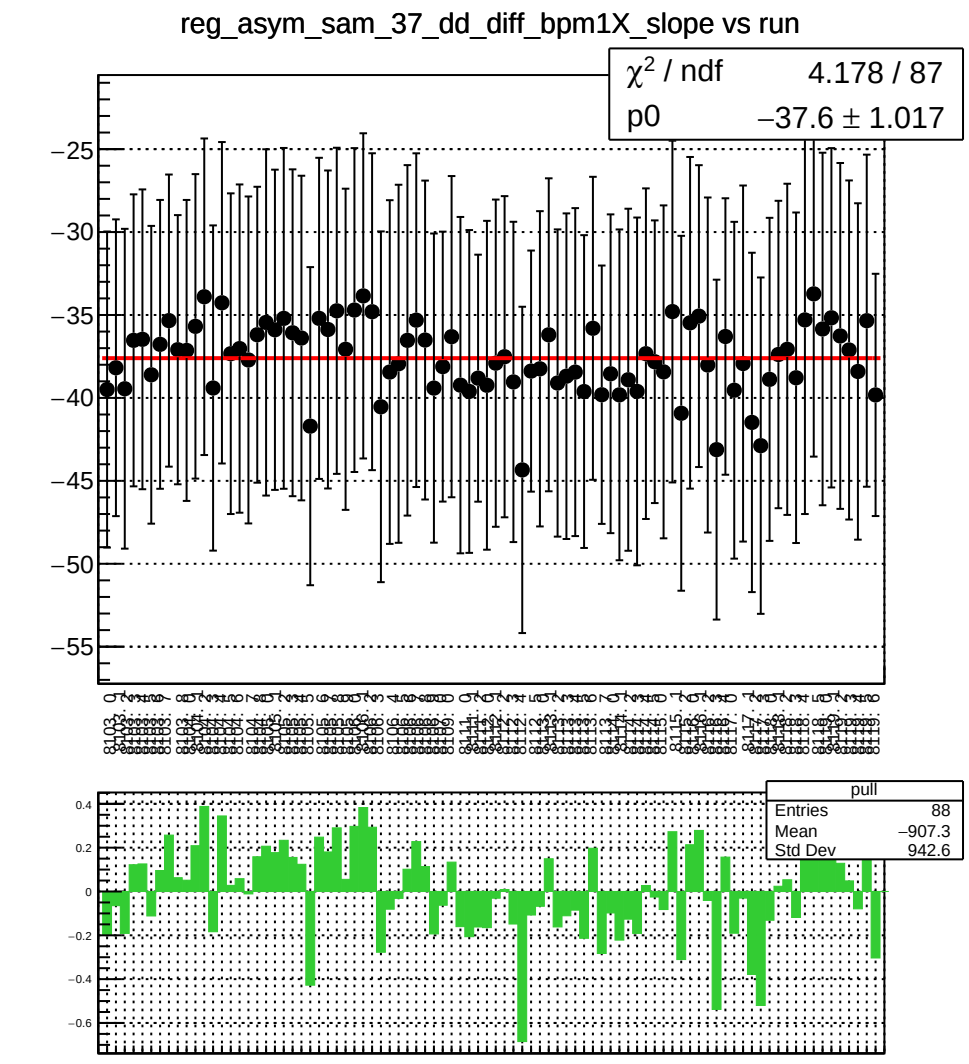

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.845 / 87
p0 −70.46 ± 1.791
pull
Entries 88
Mean 1400
Std Dev 1351

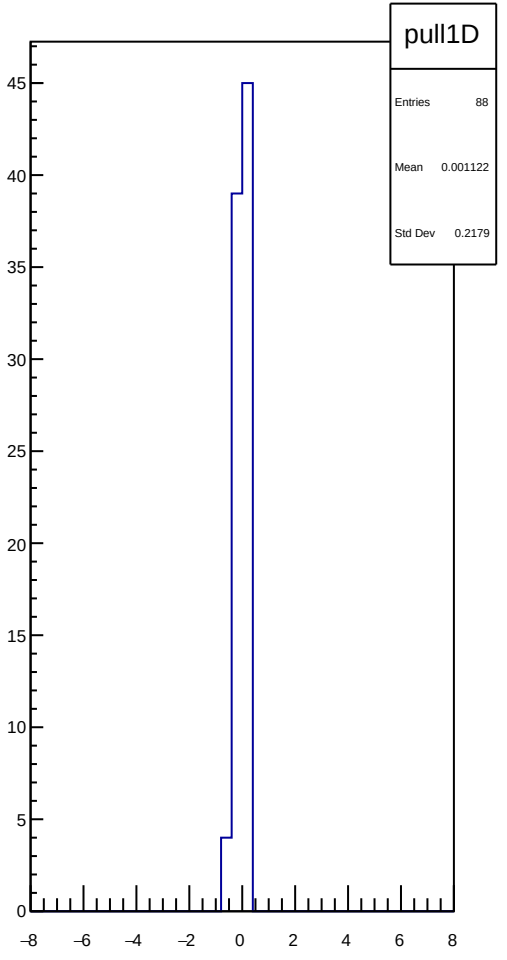

pull1D
Entries 88
Mean 0.002402
Std Dev 0.209

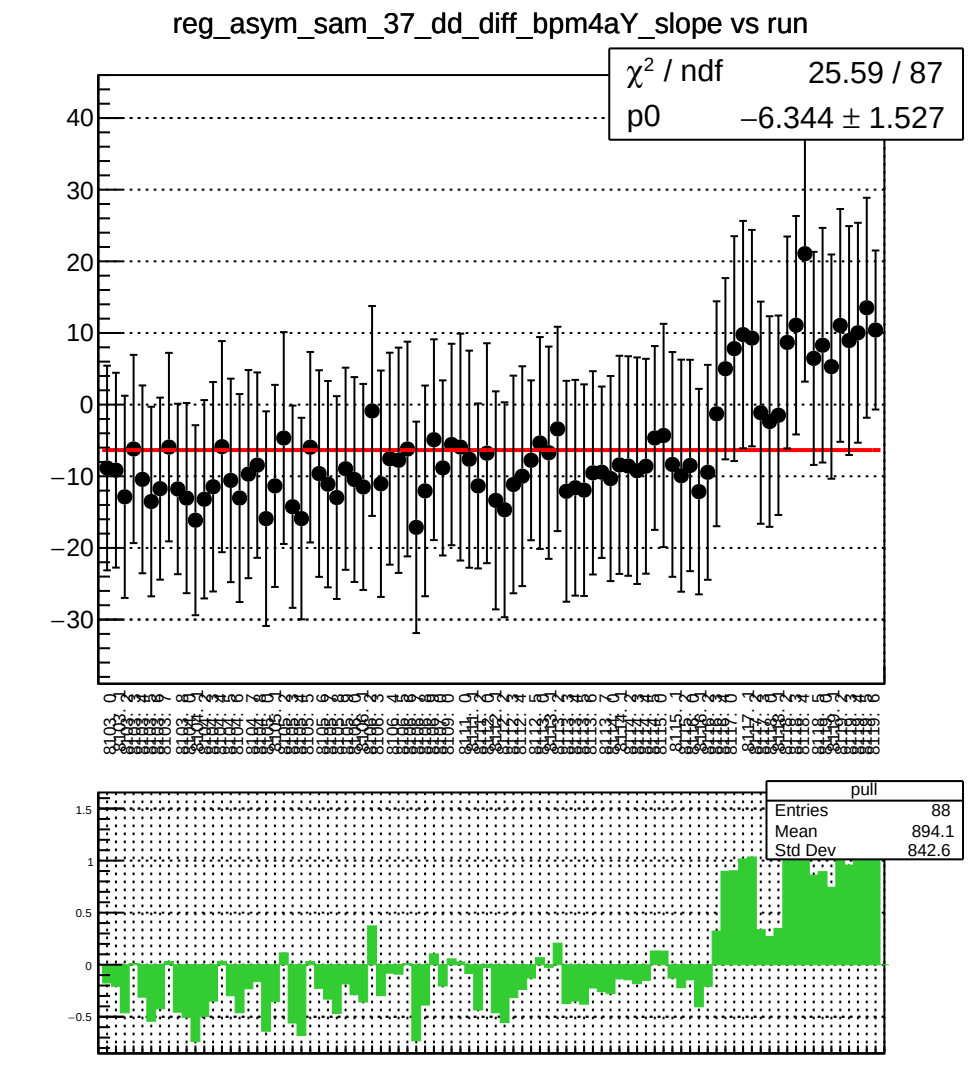

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.491 / 87
p0 1.133 ± 3.023
pull
Entries 88
Mean 472.7
Std Dev 429.2
pull1D
Entries 88
Mean −0.001533
Std Dev 0.1682

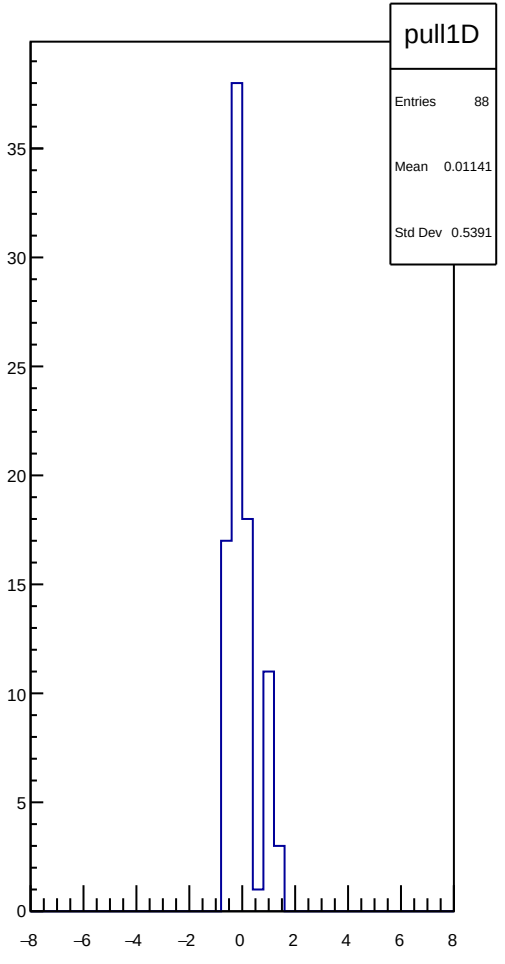

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 3.424 / 87
p0 −0.07204 ± 0.1136
pull
Entries 88
Mean −499.4
Std Dev 548.6

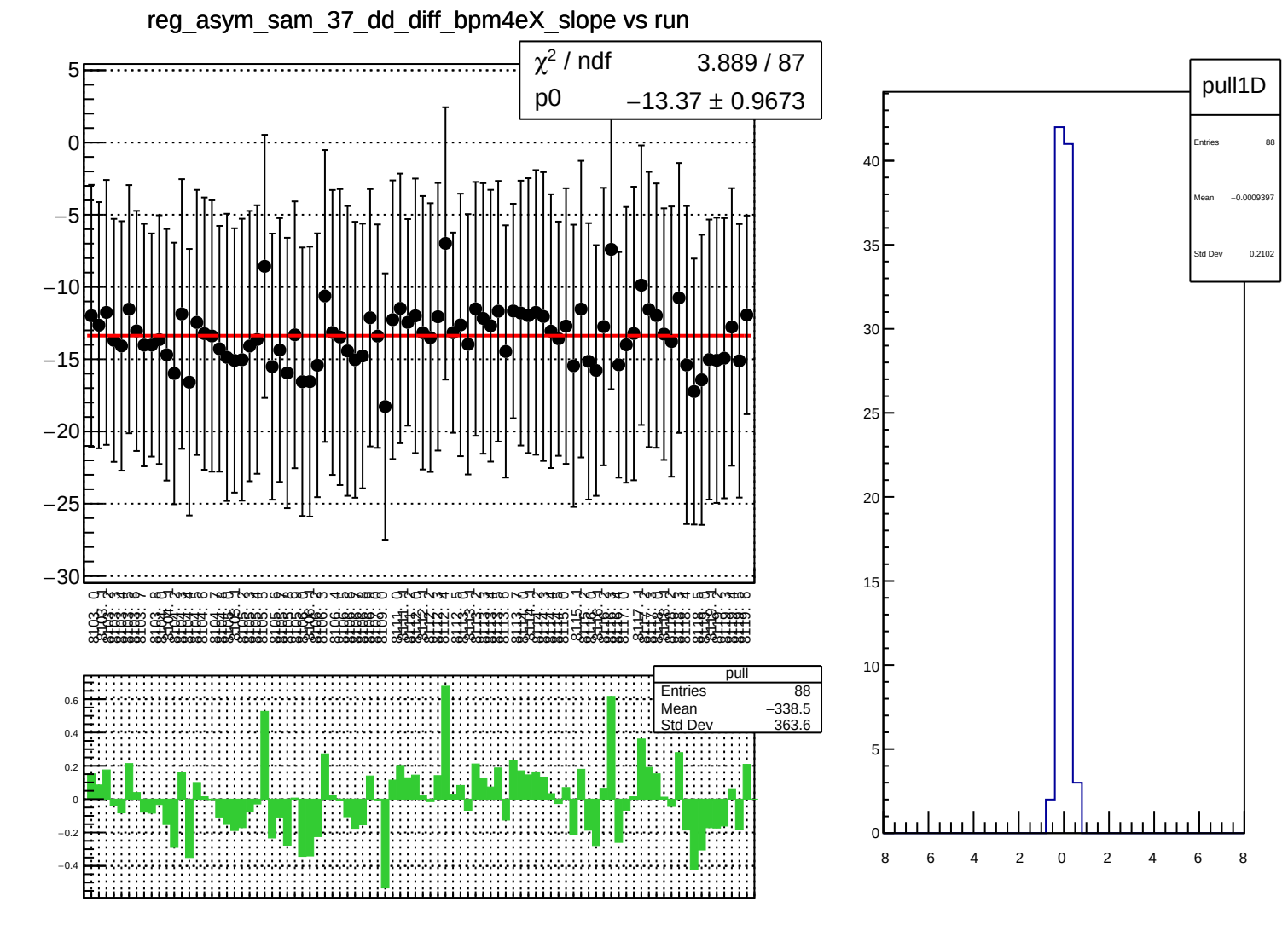

pull1D
Entries 88
Mean 0.002907
Std Dev 0.1972

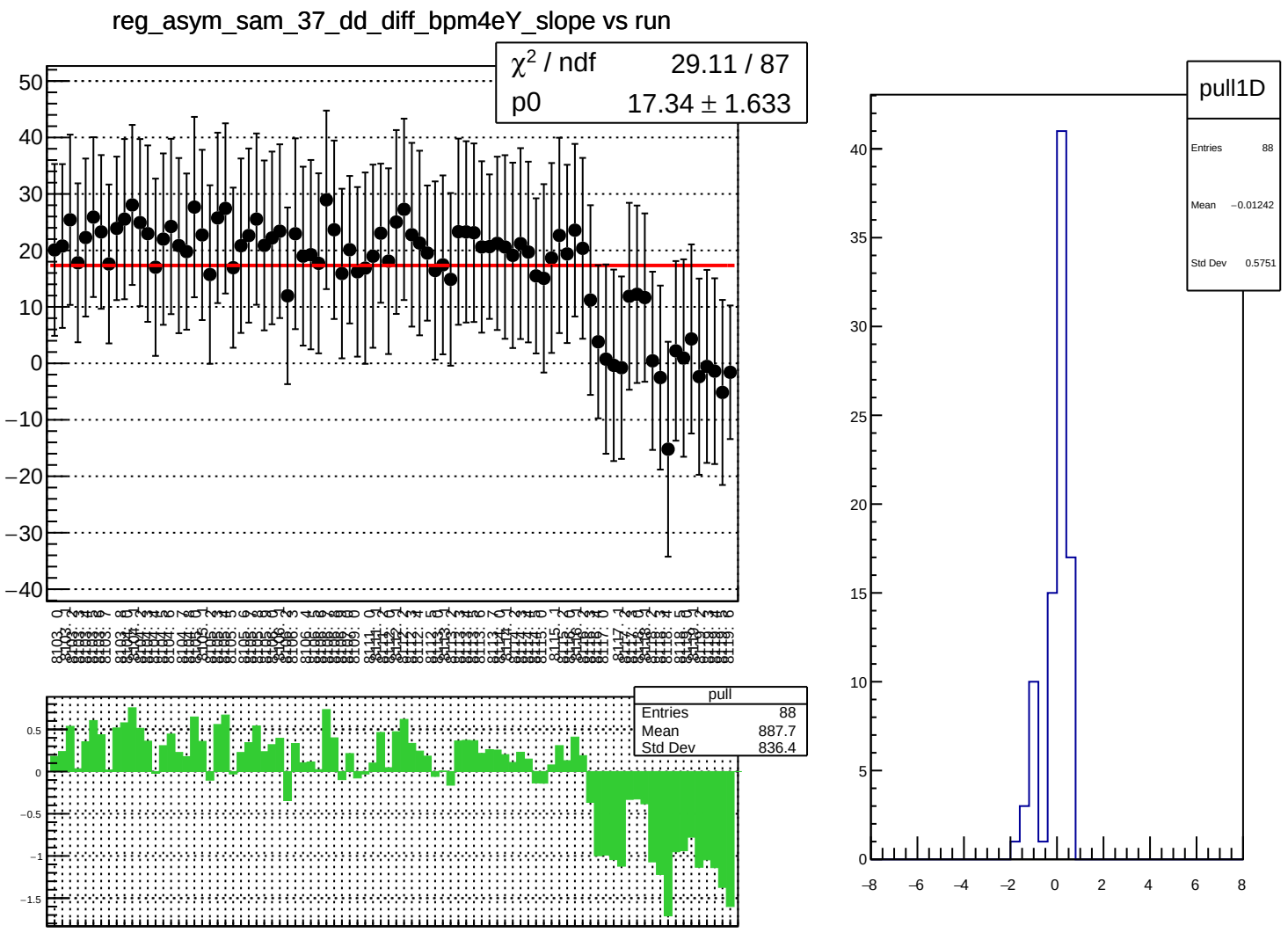

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 4.178 / 87
p0 −37.6 ± 1.017
pull
Entries 88
Mean −907.3
Std Dev 942.6

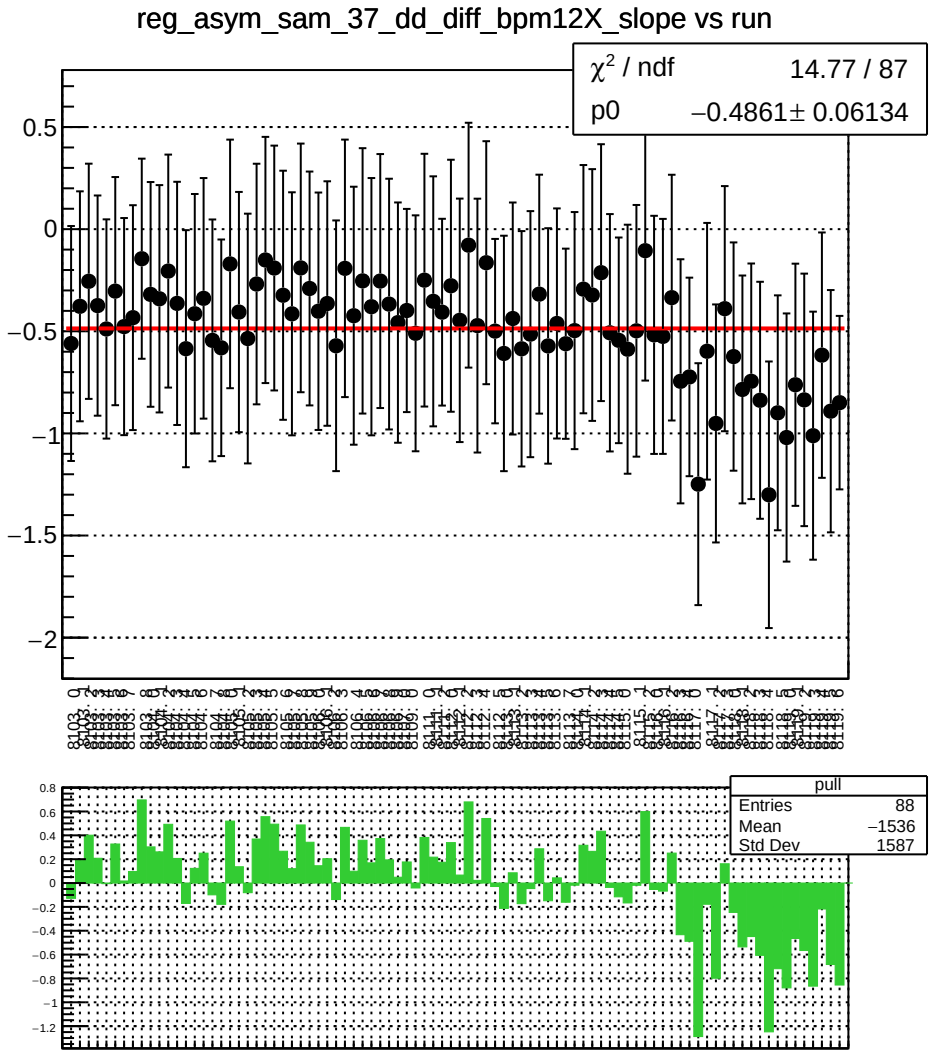

pull1D
Entries 88
Mean 0.001122
Std Dev 0.2179

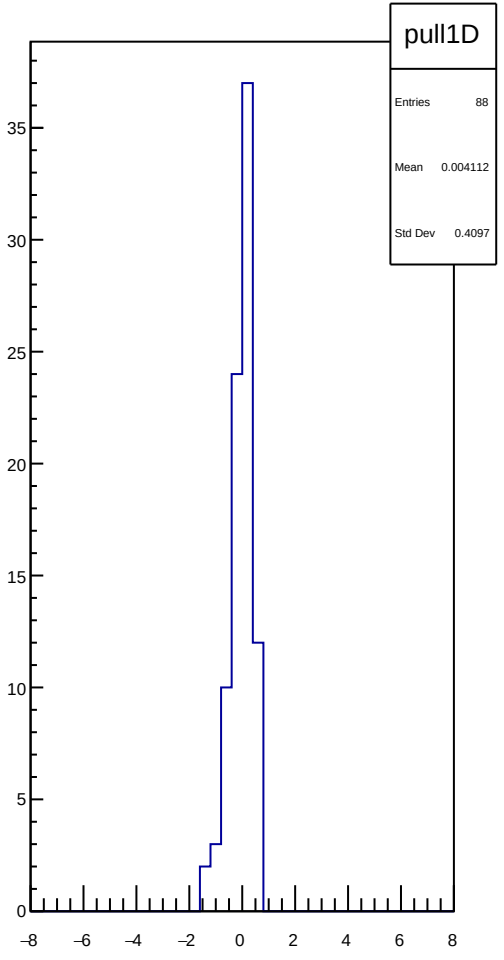

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 25.59 / 87
p0 −6.344 ± 1.527
pull
Entries 88
Mean 894.1
Std Dev 842.6

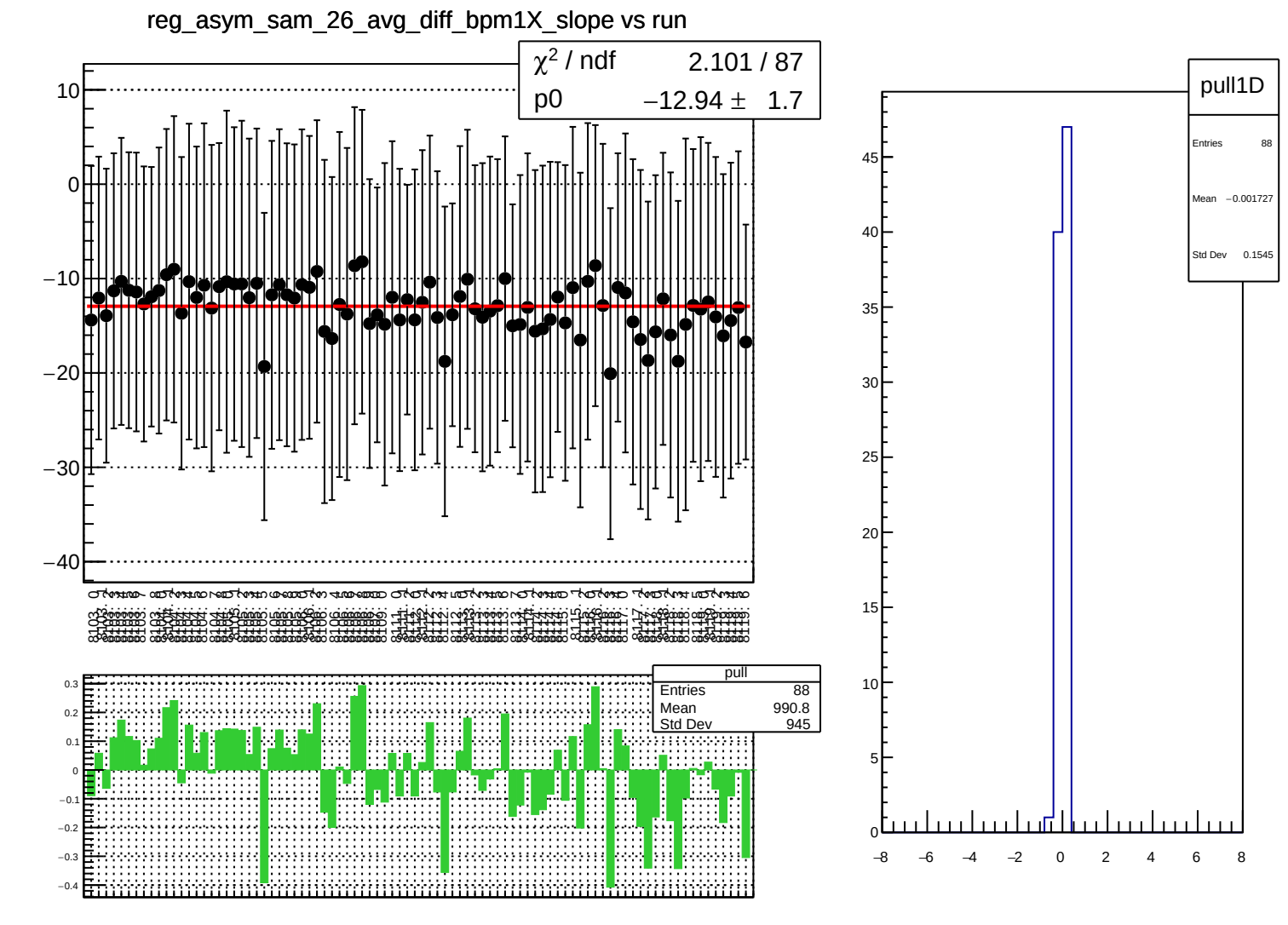

pull1D
Entries 88
Mean 0.01141
Std Dev 0.5391

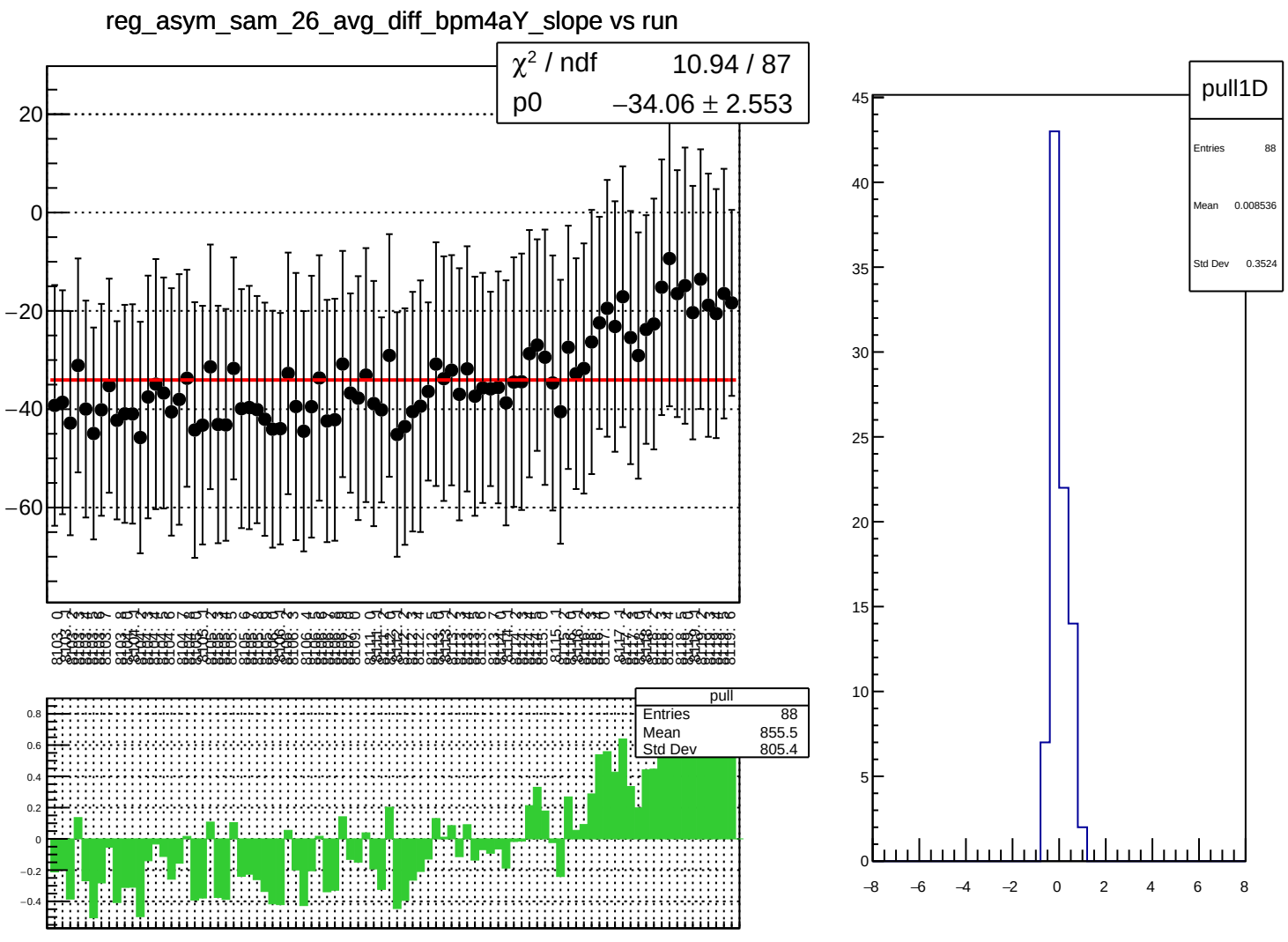

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.889 / 87
p0 −13.37 ± 0.9673
pull
Entries 88
Mean −338.5
Std Dev 363.6
pull1D
Entries 88
Mean −0.0009397
Std Dev 0.2102

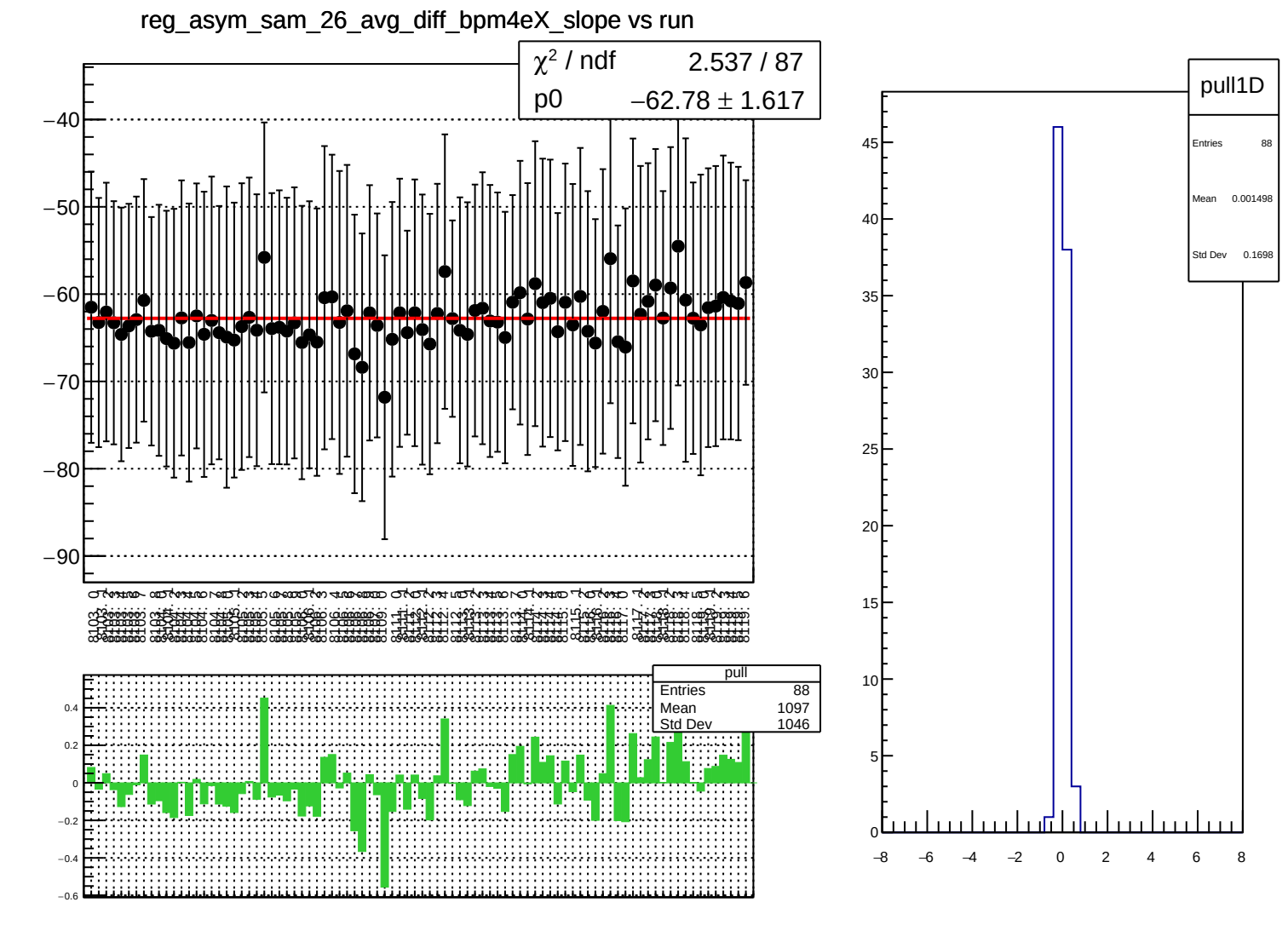

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 29.11 / 87
p0 17.34 ± 1.633
pull
Entries 88
Mean 887.7
Std Dev 836.4
pull1D
Entries 88
Mean −0.01242
Std Dev 0.5751

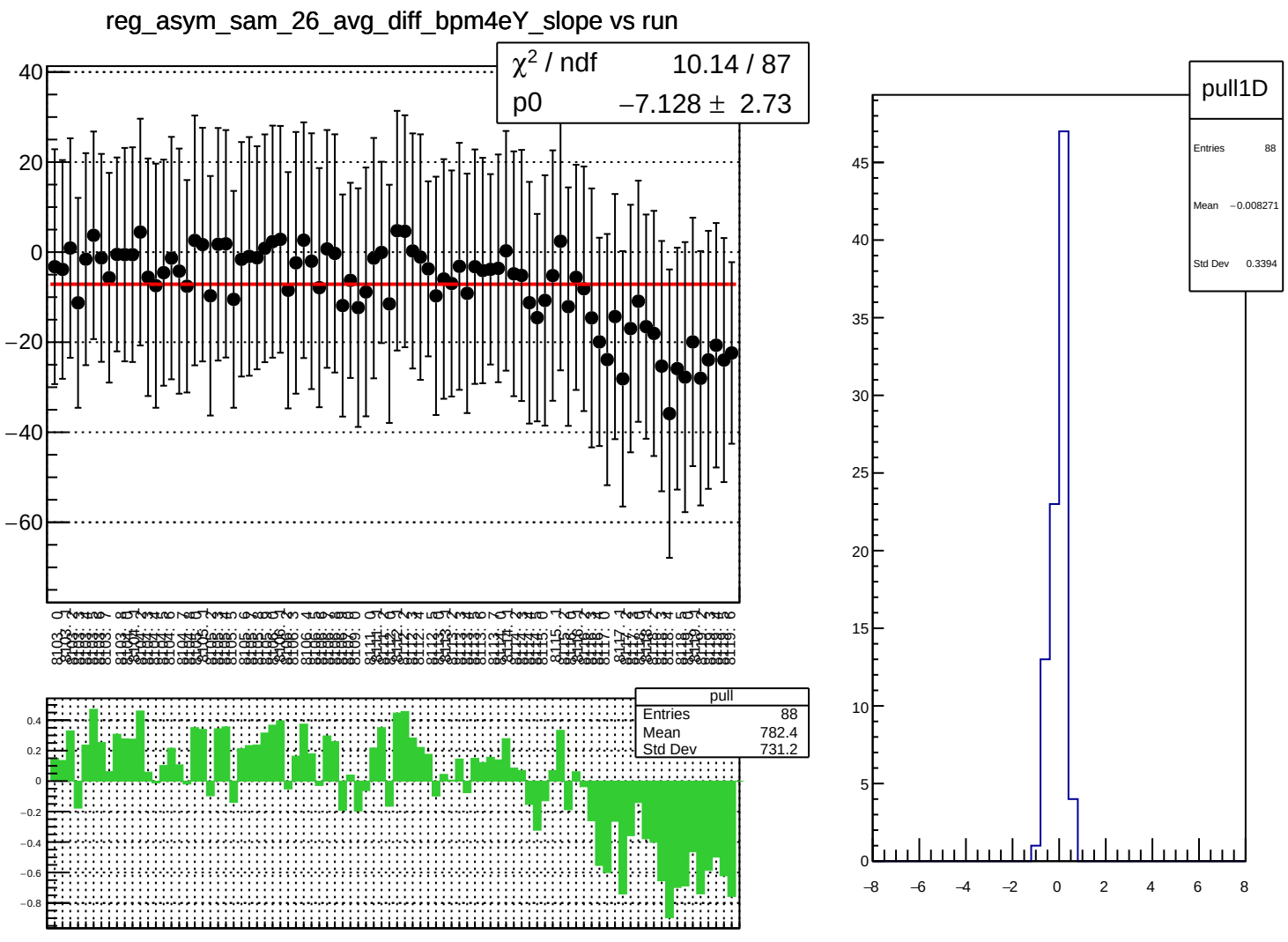

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 14.77 / 87
p0 −0.4861± 0.06134
pull
Entries 88
Mean −1536
Std Dev 1587

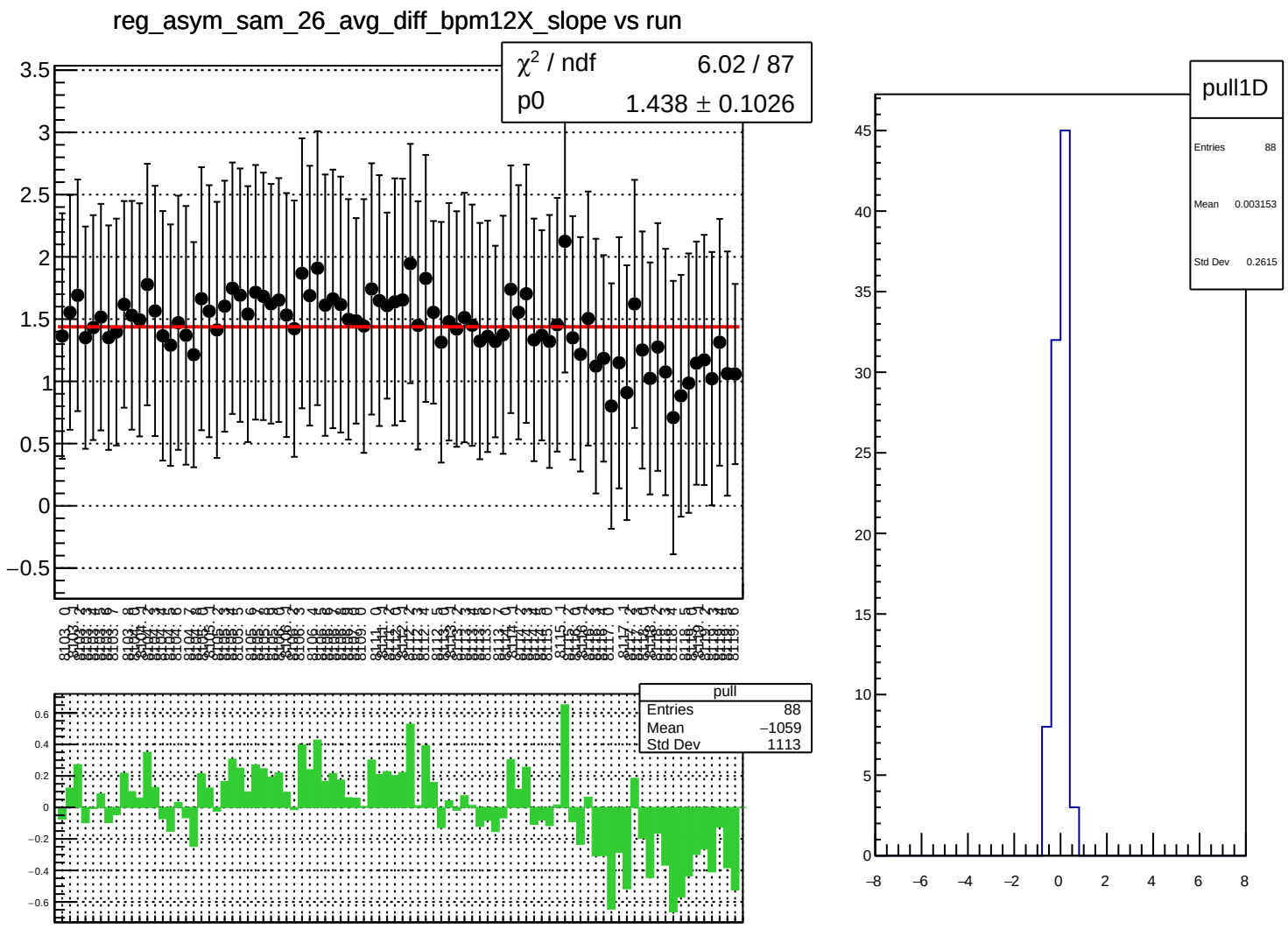

pull1D
Entries 88
Mean 0.004112
Std Dev 0.4097

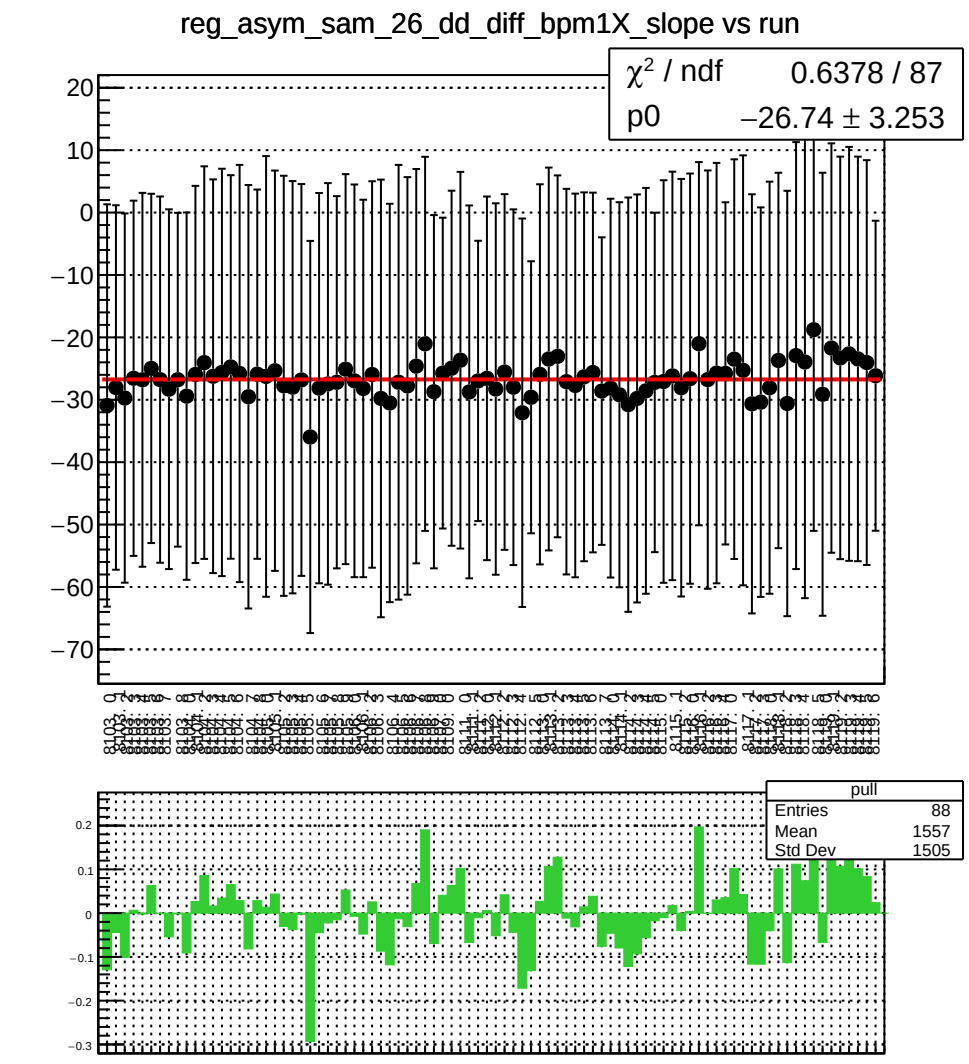

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 2.101 / 87
p0 −12.94 ± 1.7
pull
Entries 88
Mean 990.8
Std Dev 945
pull1D
Entries 88
Mean −0.001727
Std Dev 0.1545

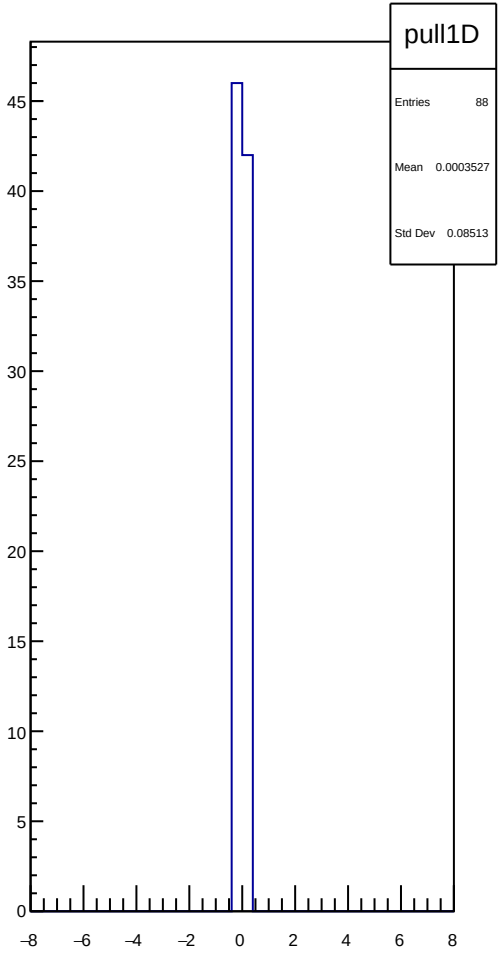

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.94 / 87
p0 −34.06 ± 2.553
pull
Entries 88
Mean 855.5
Std Dev 805.4
pull1D
Entries 88
Mean 0.008536
Std Dev 0.3524

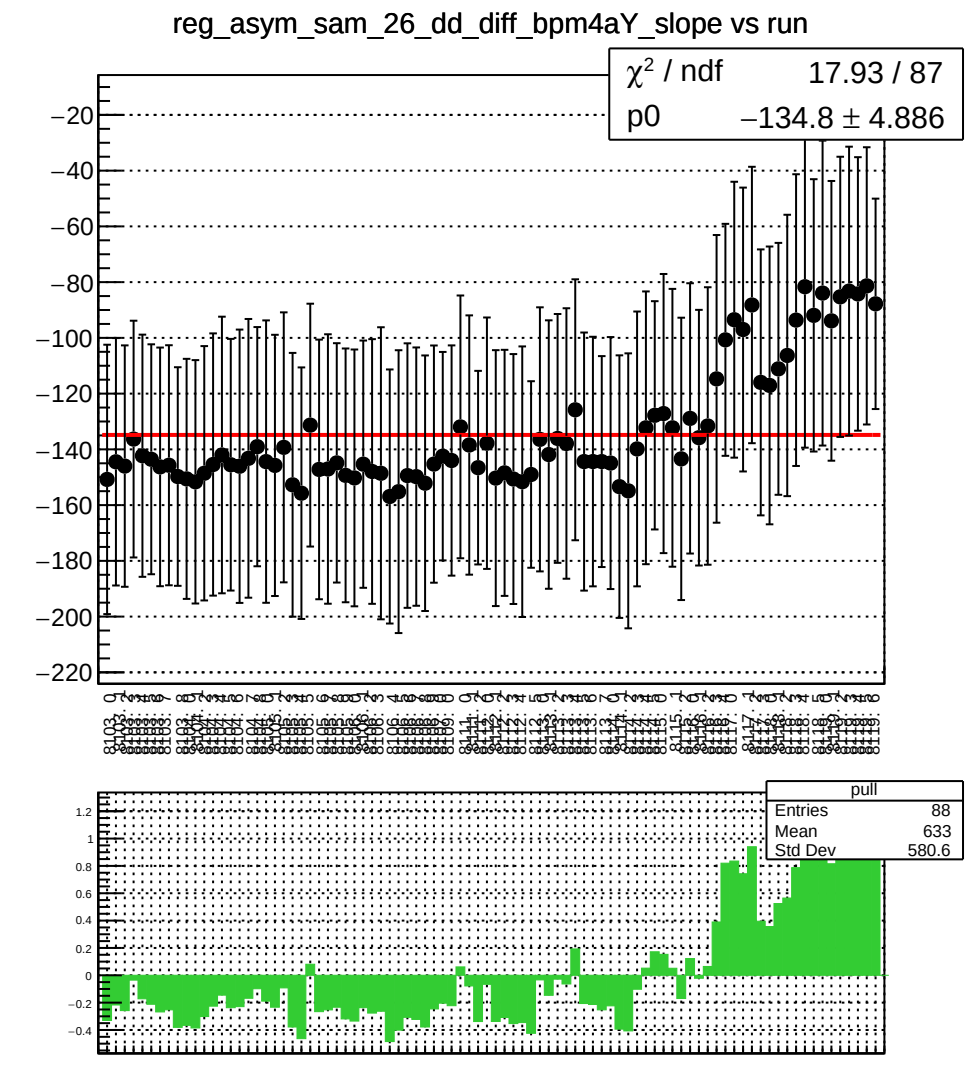

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.537 / 87
p0 −62.78 ± 1.617
pull
Entries 88
Mean 1097
Std Dev 1046
pull1D
Entries 88
Mean 0.001498
Std Dev 0.1698

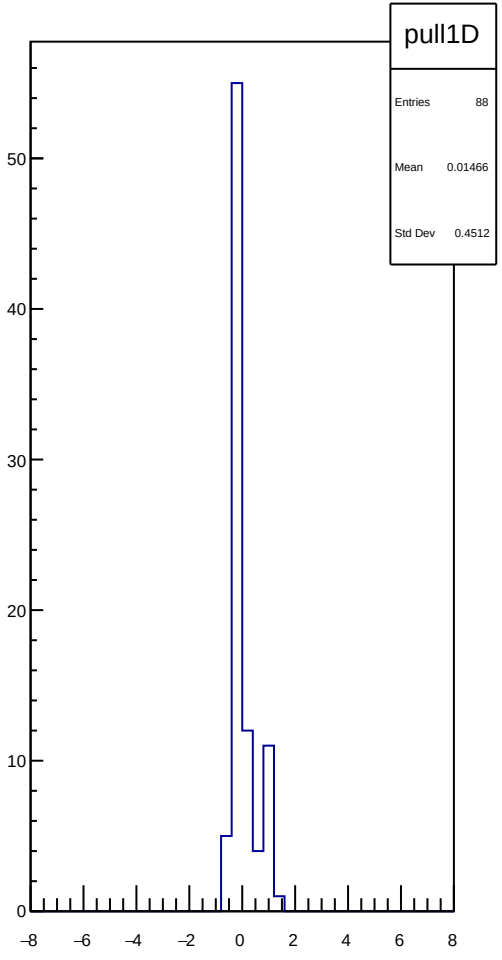

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.14 / 87
p0 −7.128 ± 2.73
pull
Entries 88
Mean 782.4
Std Dev 731.2
pull1D
Entries 88
Mean −0.008271
Std Dev 0.3394

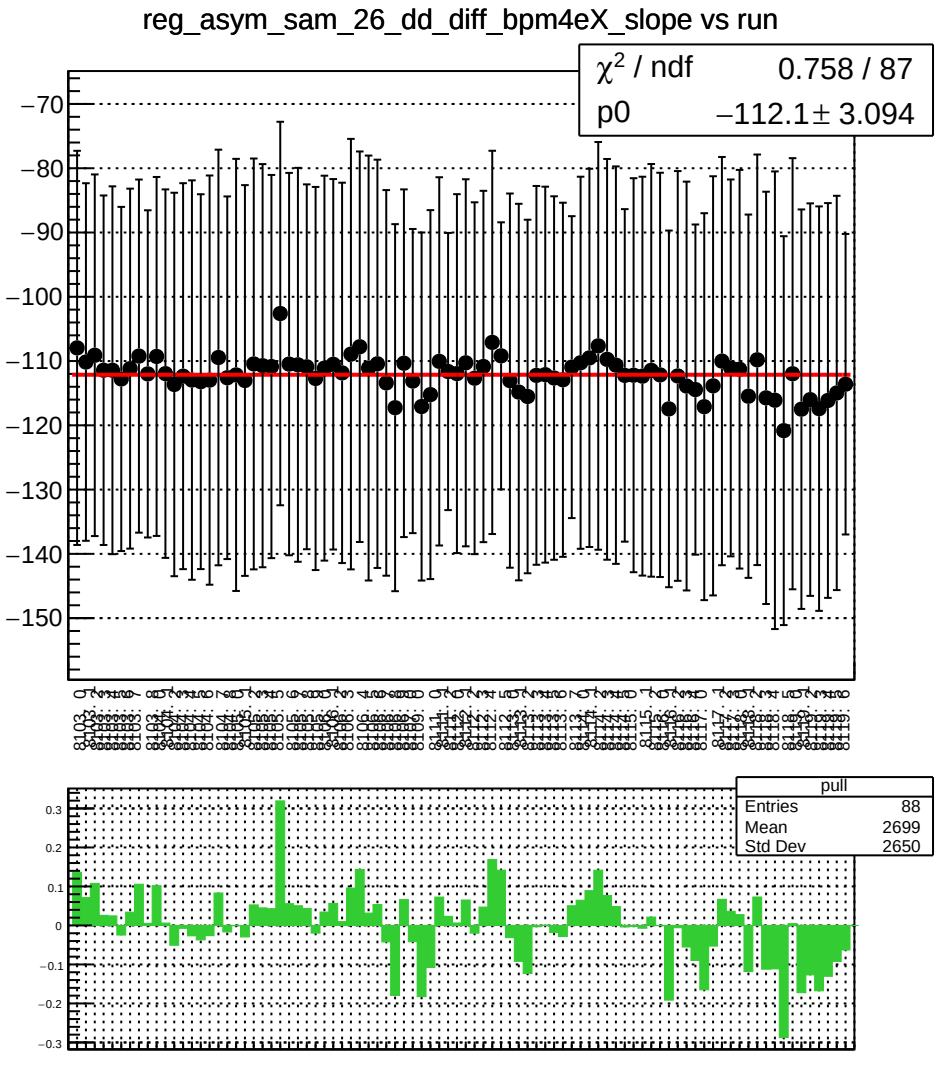

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 6.02 / 87
p0 1.438 ± 0.1026
pull
Entries 88
Mean −1059
Std Dev 1113
pull1D
Entries 88
Mean 0.003153
Std Dev 0.2615

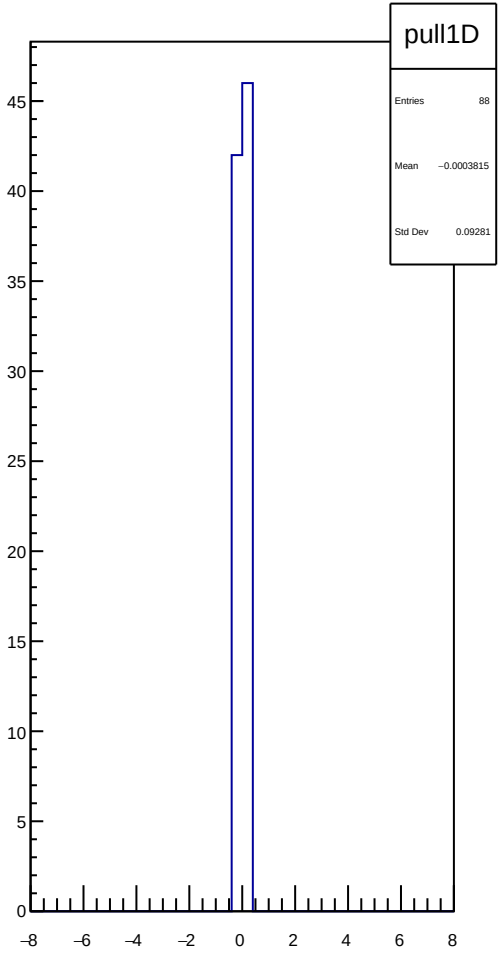

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 0.6378 / 87
p0 −26.74 ± 3.253
pull
Entries 88
Mean 1557
Std Dev 1505

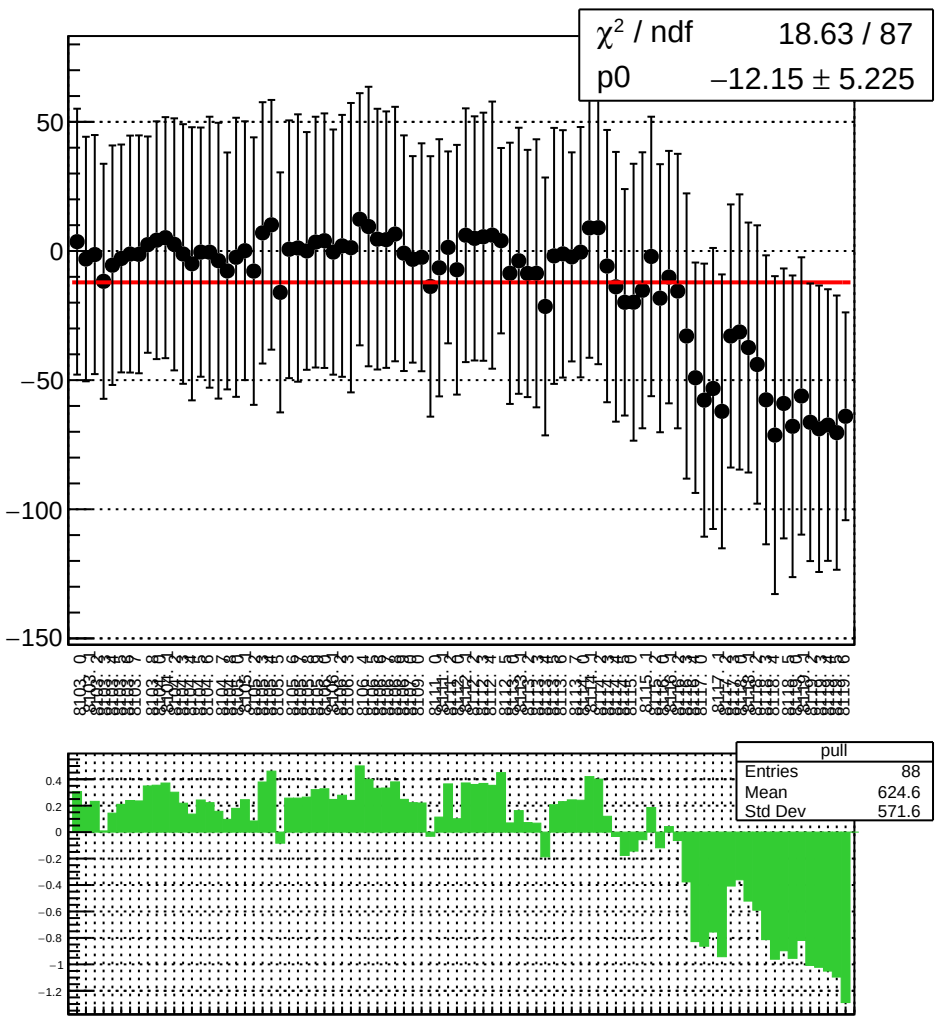

pull1D
Entries 88
Mean 0.0003527
Std Dev 0.08513

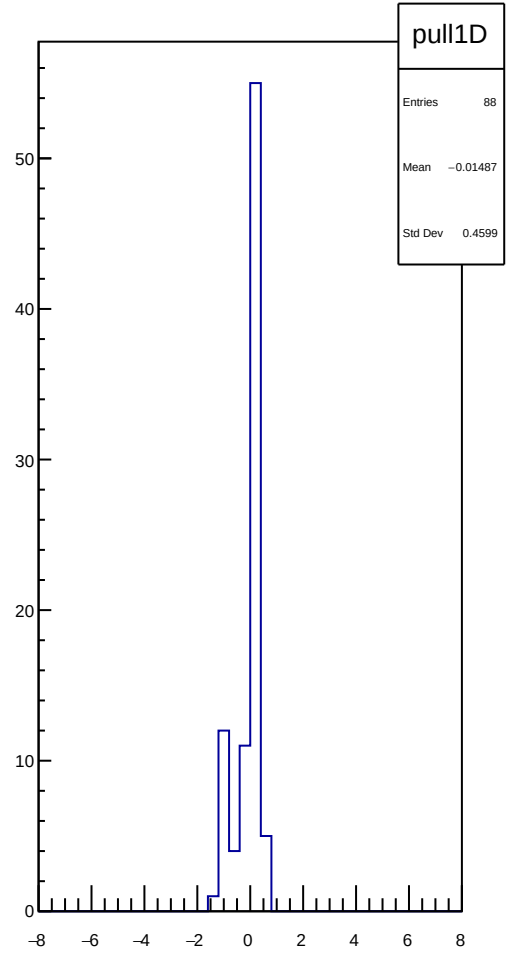

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 17.93 / 87
p0 −134.8 ± 4.886
pull
Entries 88
Mean 633
Std Dev 580.6

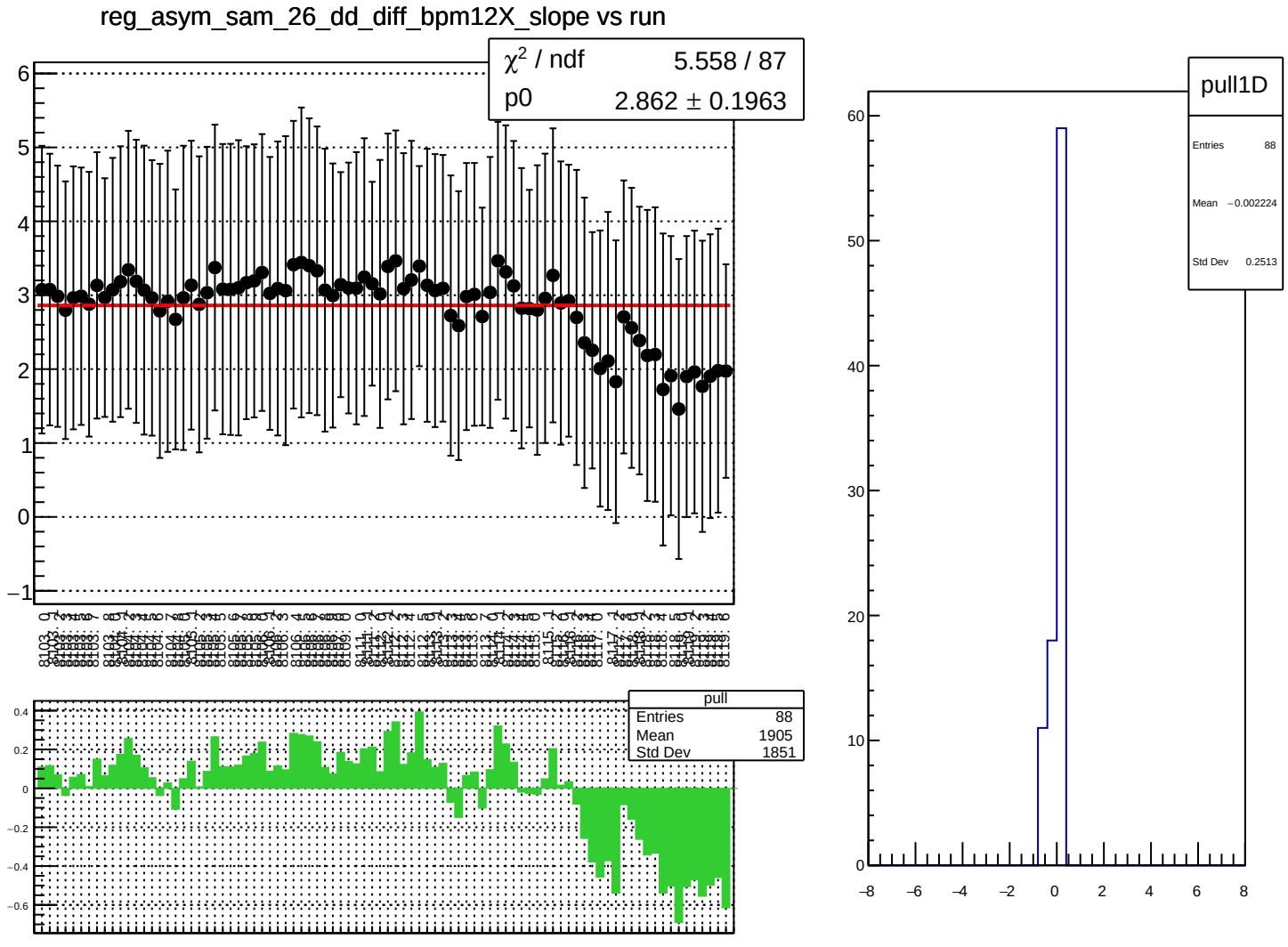

pull1D
Entries 88
Mean 0.01466
Std Dev 0.4512

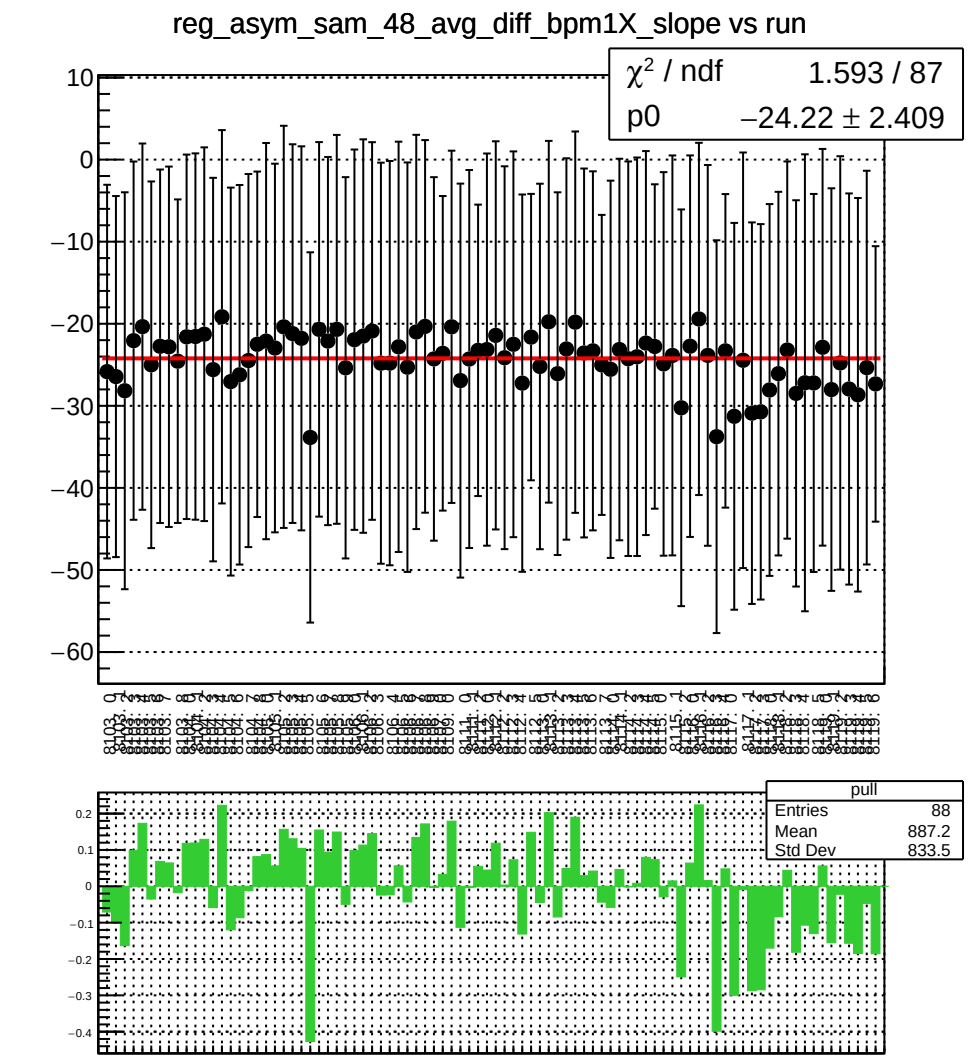

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.758 / 87
p0 −112.1± 3.094
pull
Entries 88
Mean 2699
Std Dev 2650

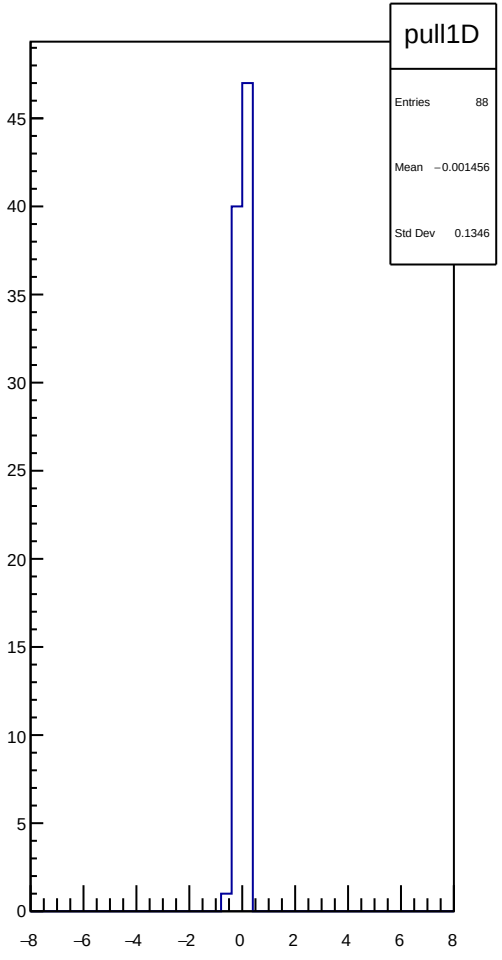

pull1D
Entries 88
Mean −0.0003815
Std Dev 0.09281

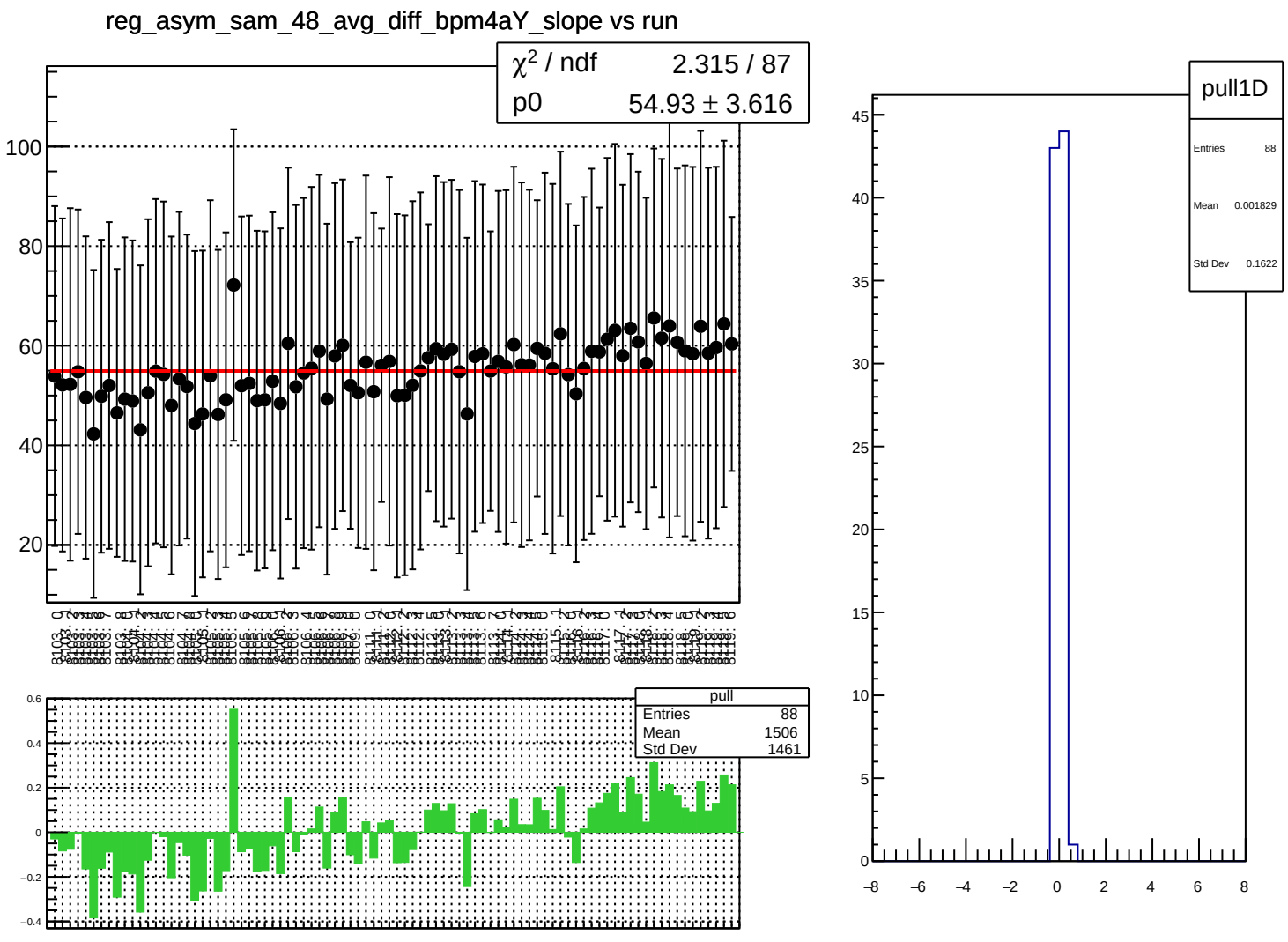

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 18.63 / 87
p0 −12.15 ± 5.225
50
0
−50
−100
−150
pull
Entries 88
Mean 624.6
Std Dev 571.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

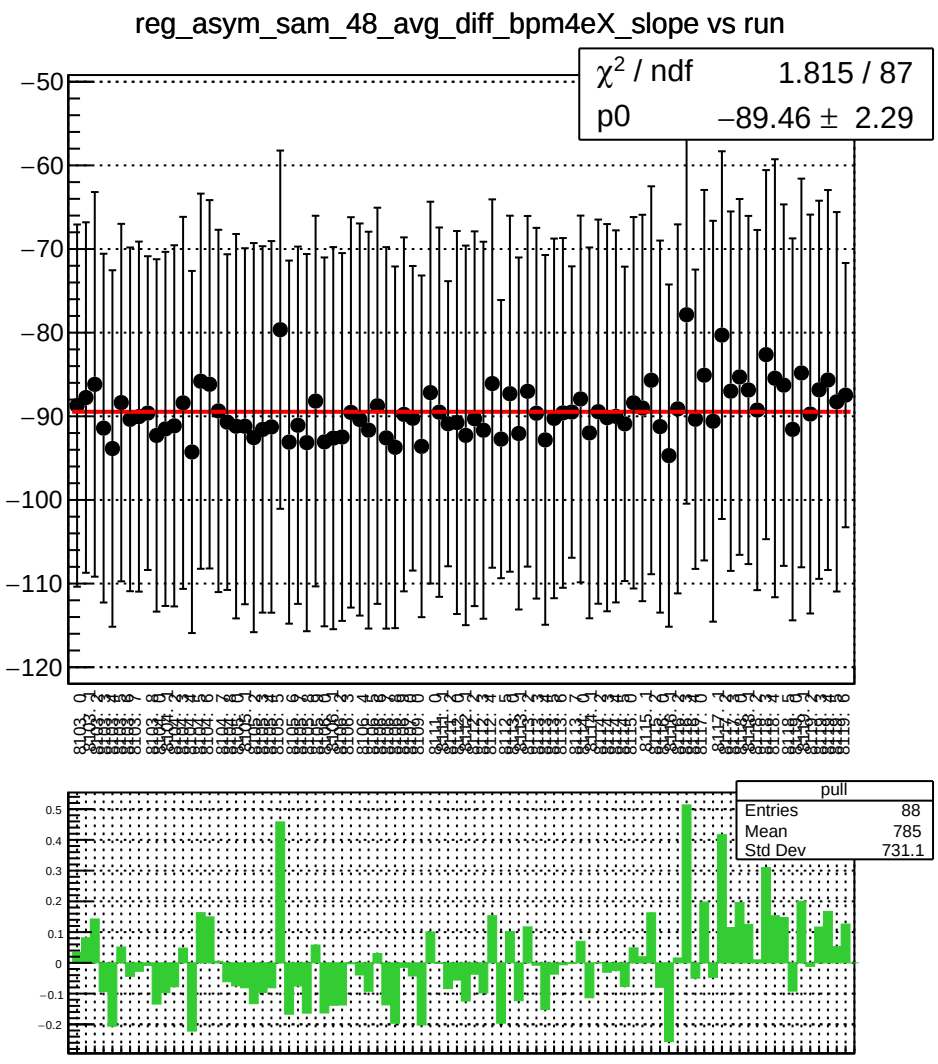

pull1D
Entries 88
Mean −0.01487
Std Dev 0.4599
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

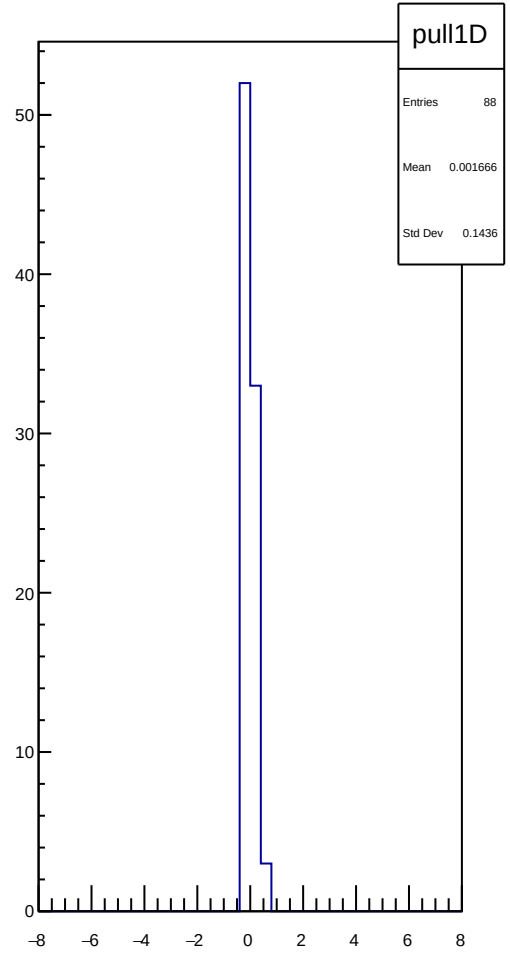

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 5.558 / 87
p0 2.862 ± 0.1963
pull
Entries 88
Mean 1905
Std Dev 1851
pull1D
Entries 88
Mean −0.002224
Std Dev 0.2513

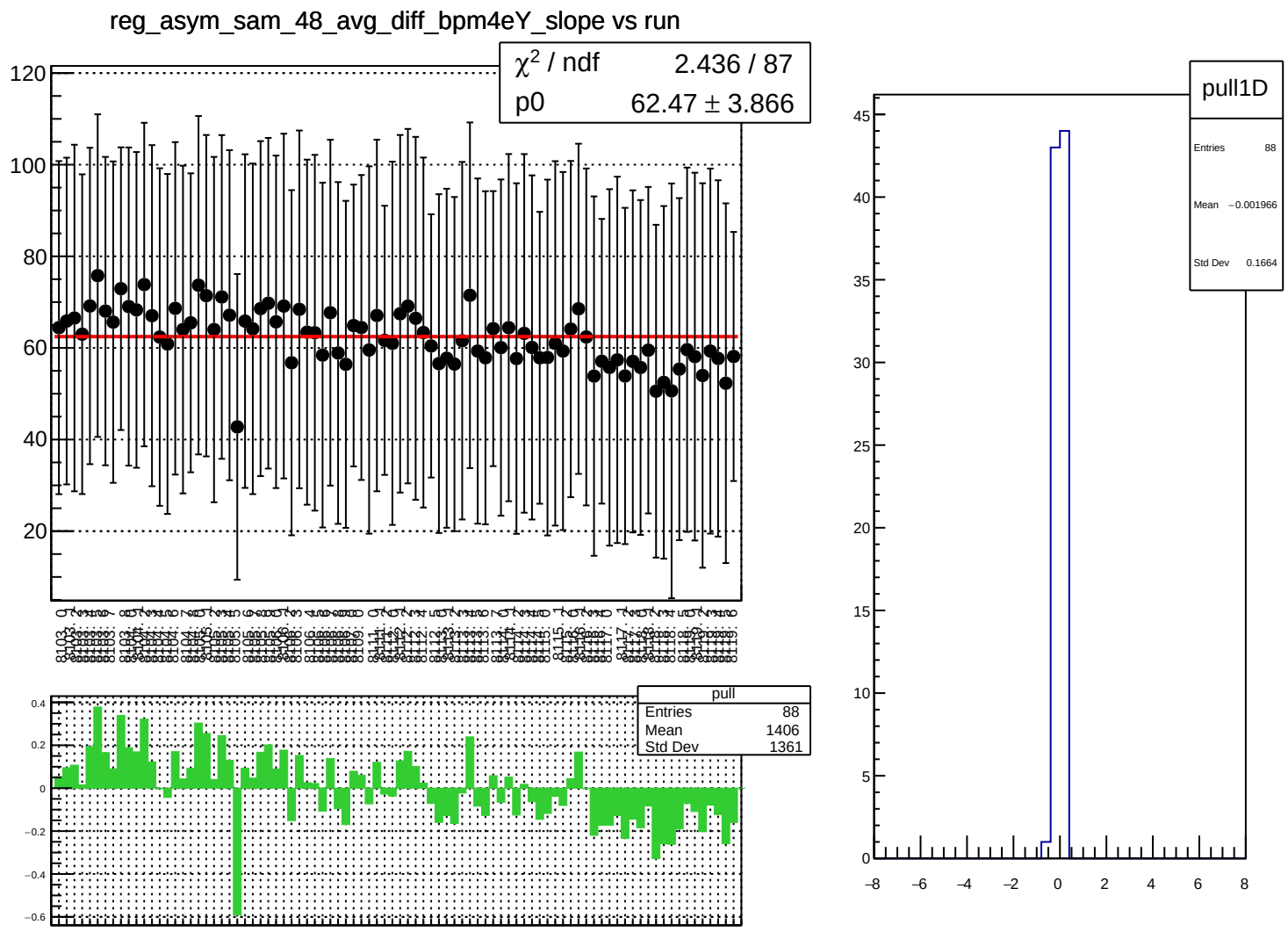

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 1.593 / 87
p0 −24.22 ± 2.409
pull
Entries 88
Mean 887.2
Std Dev 833.5

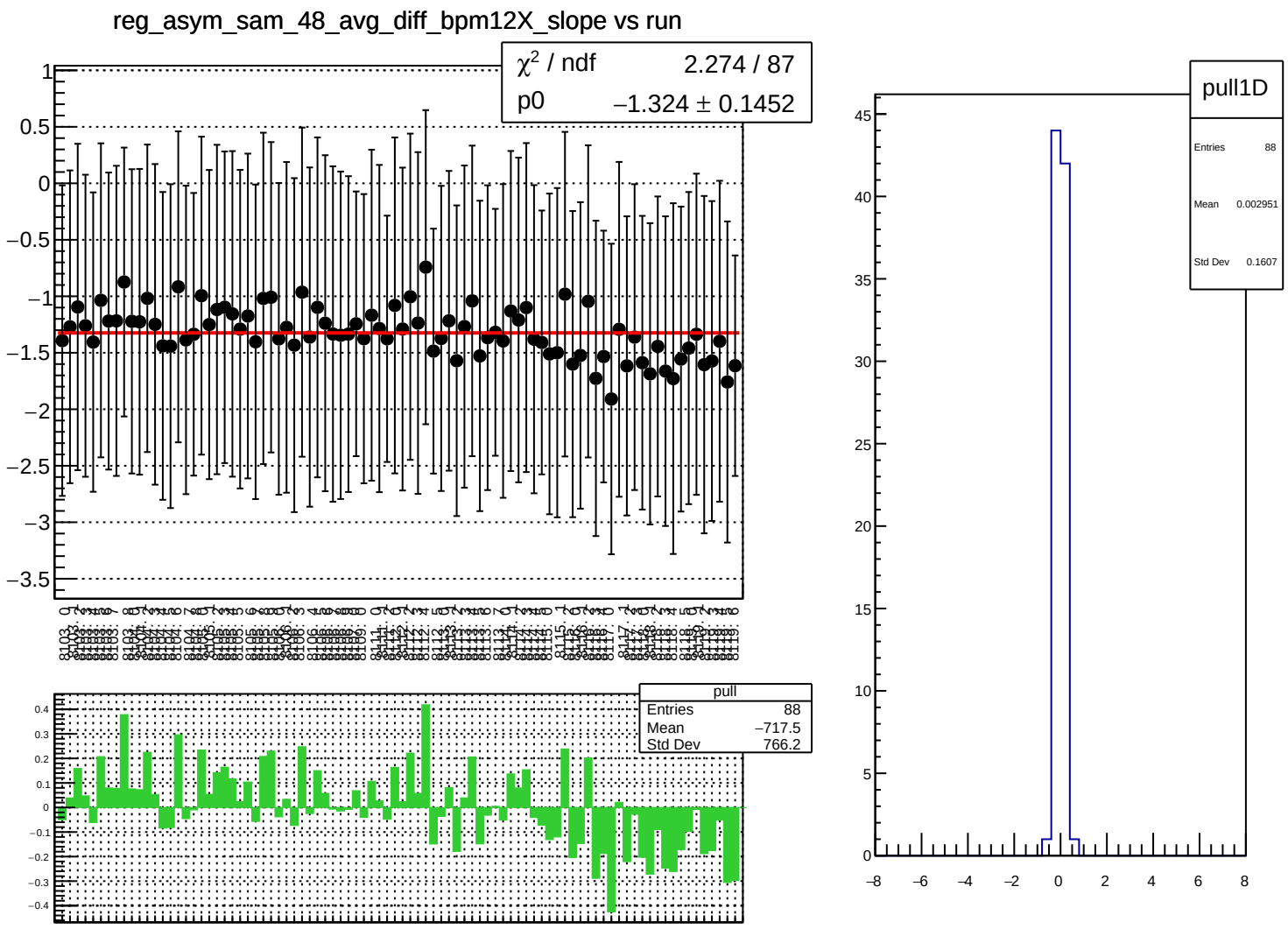

pull1D
Entries 88
Mean −0.001456
Std Dev 0.1346

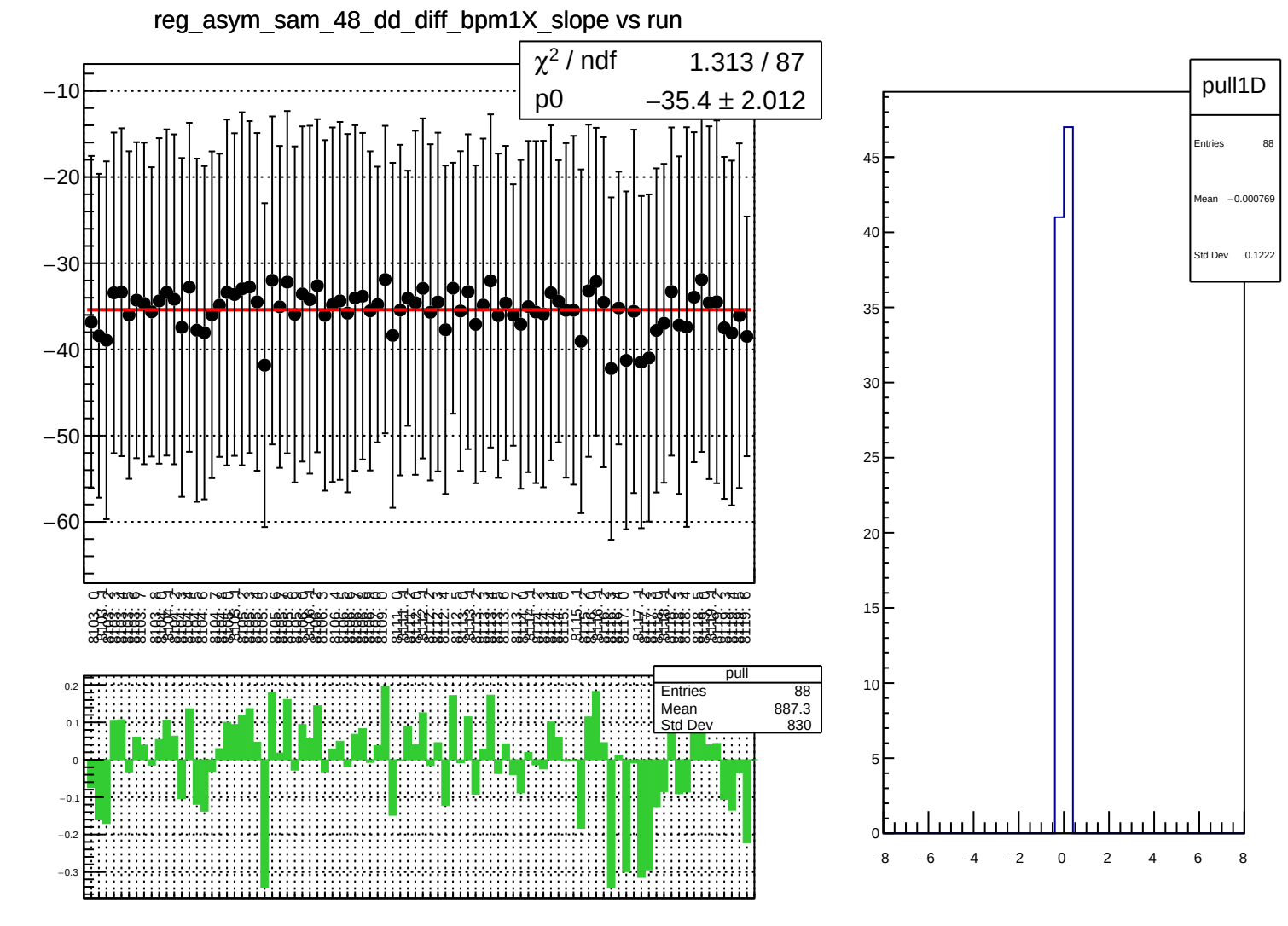

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.315 / 87
p0 54.93 ± 3.616
pull
Entries 88
Mean 1506
Std Dev 1461
pull1D
Entries 88
Mean 0.001829
Std Dev 0.1622

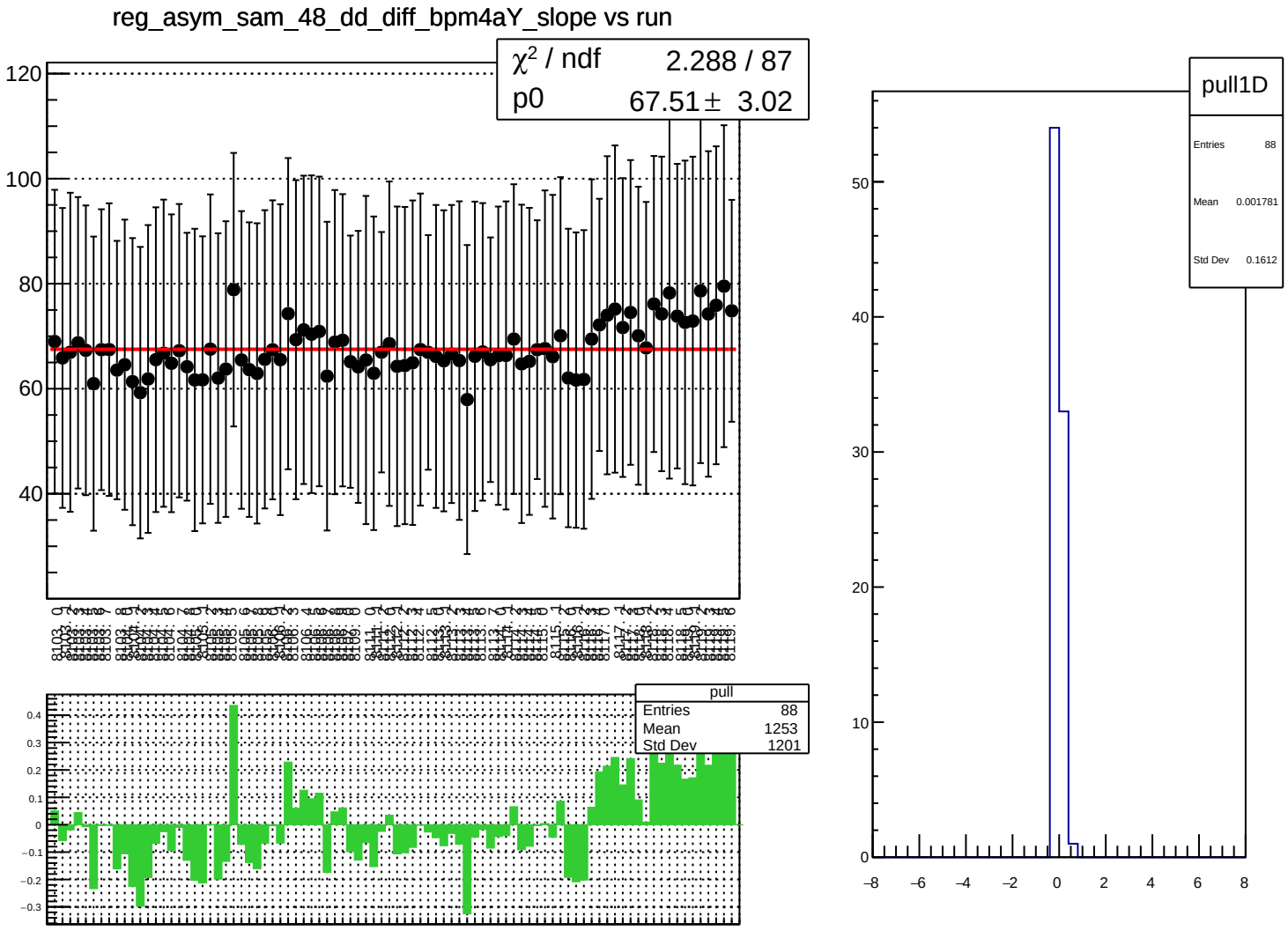

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.815 / 87
p0 −89.46 ± 2.29
pull
Entries 88
Mean 785
Std Dev 731.1

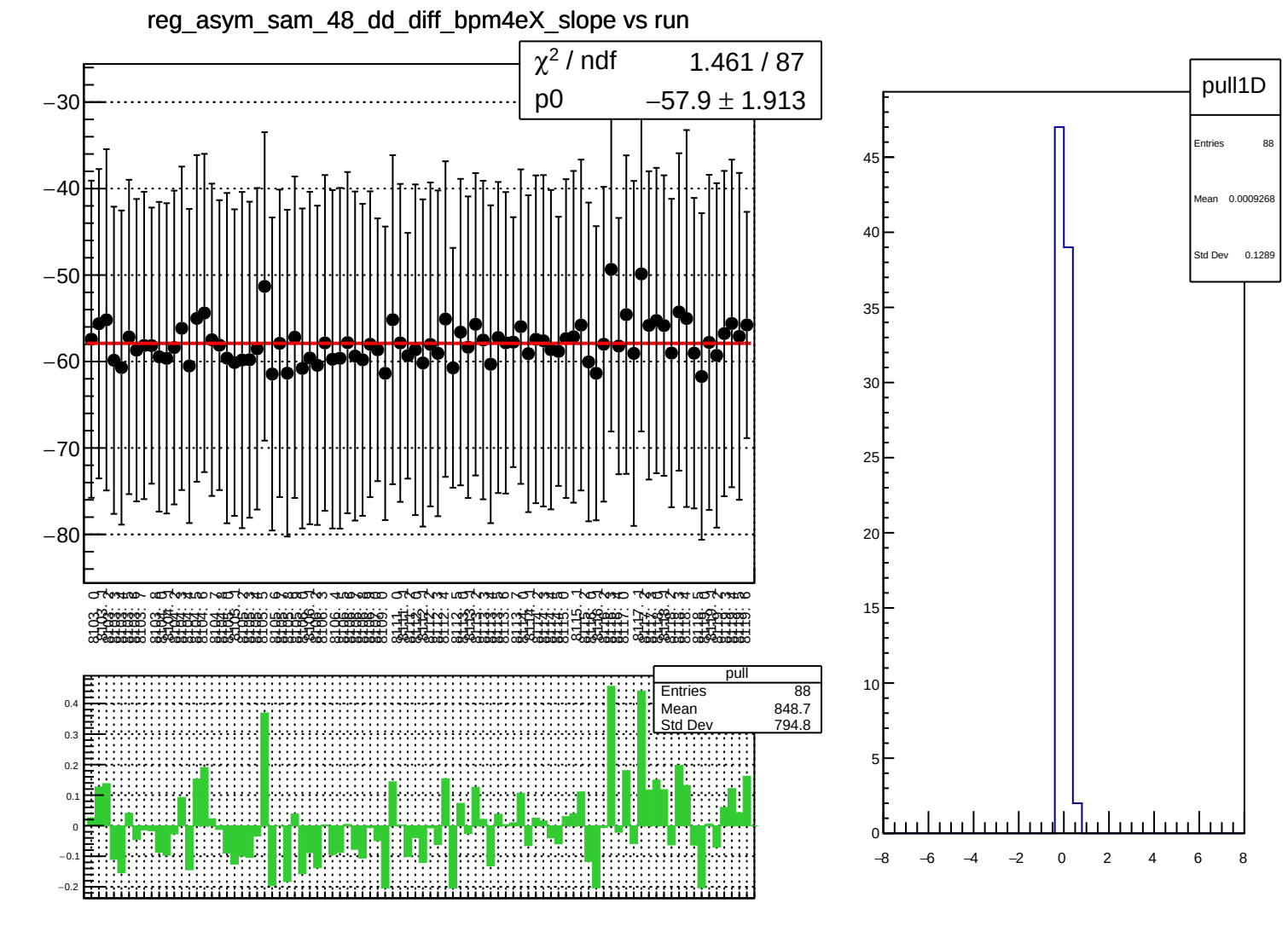

pull1D
Entries 88
Mean 0.001666
Std Dev 0.1436

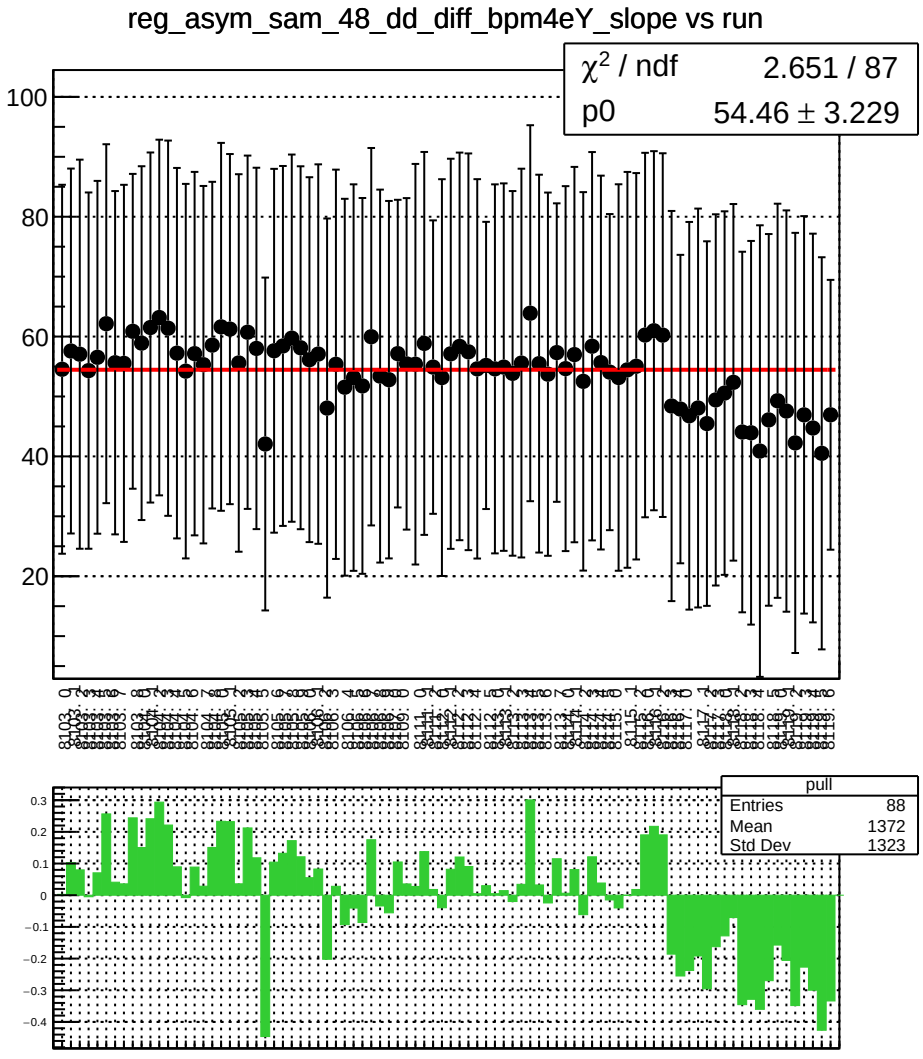

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.436 / 87
p0 62.47 ± 3.866
pull
Entries 88
Mean 1406
Std Dev 1361
pull1D
Entries 88
Mean −0.001966
Std Dev 0.1664

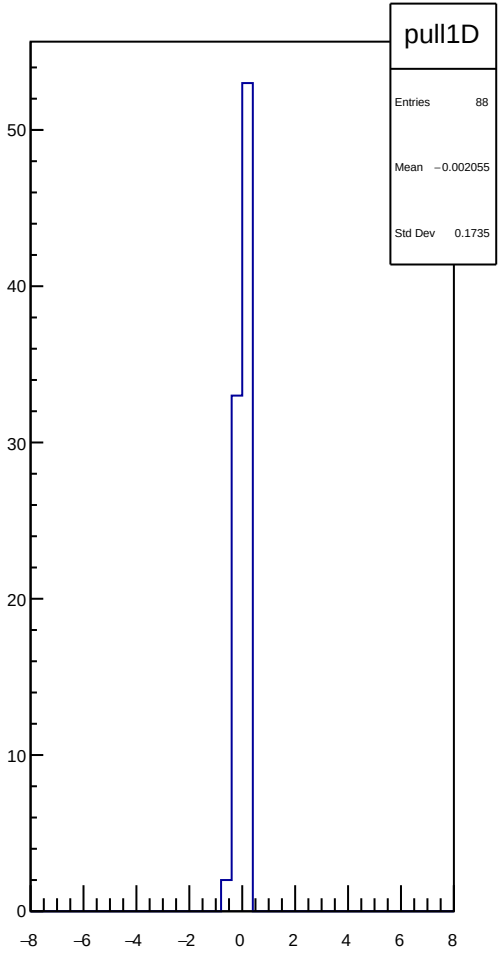

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 2.274 / 87
p0 −1.324 ± 0.1452
pull
Entries 88
Mean −717.5
Std Dev 766.2
pull1D
Entries 88
Mean 0.002951
Std Dev 0.1607

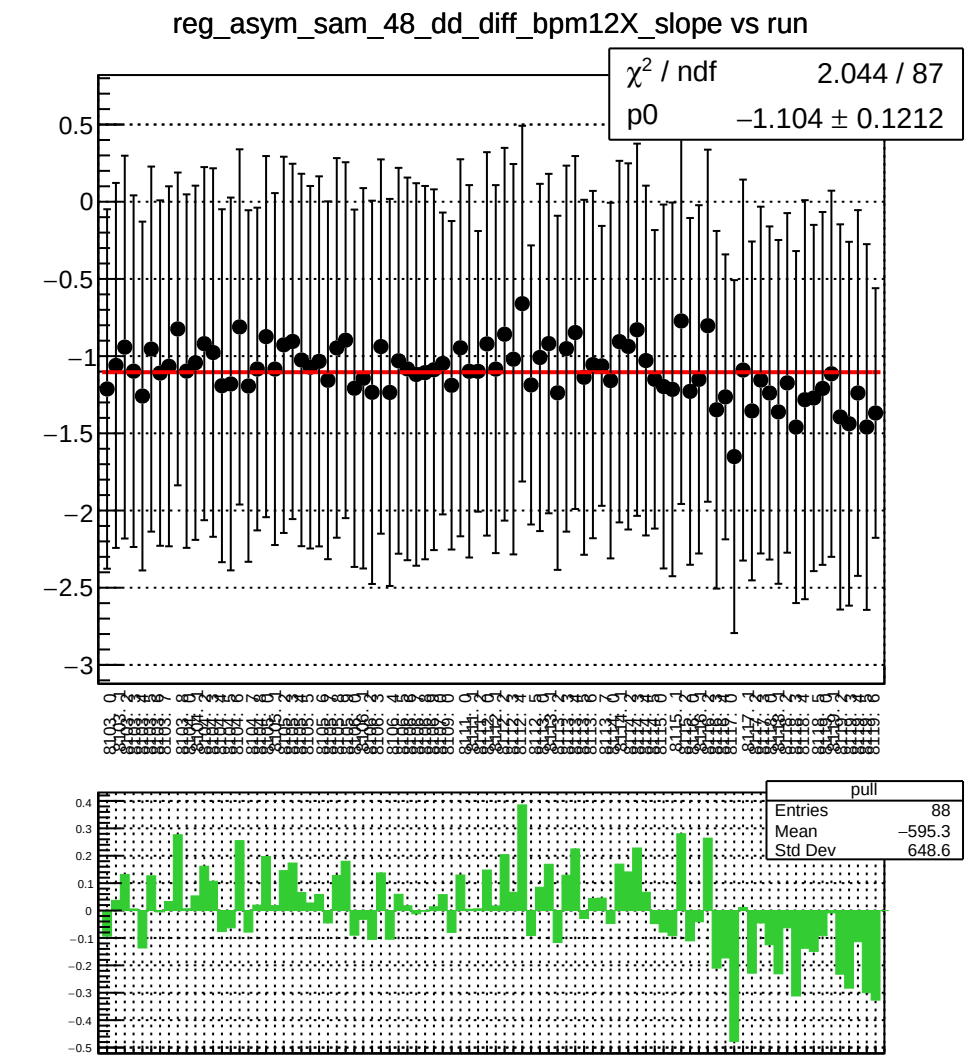

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.313 / 87
p0 −35.4 ± 2.012
−10
−20
−30
−40
−50
−60
pull
Entries 88
Mean 887.3
Std Dev 830
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 88
Mean −0.000769
Std Dev 0.1222
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

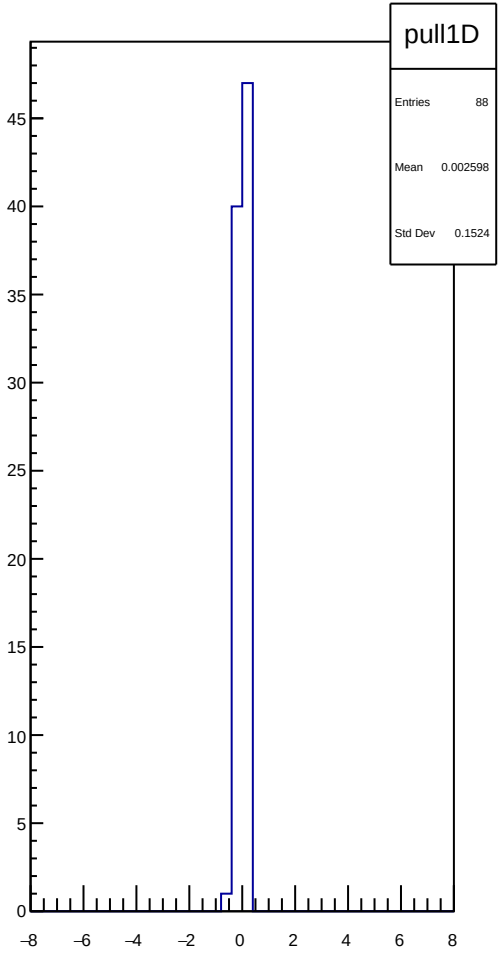

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.288 / 87
p0 67.51 ± 3.02
120
100
80
60
40
pull
Entries 88
Mean 1253
Std Dev 1201
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 88
Mean 0.001781
Std Dev 0.1612
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

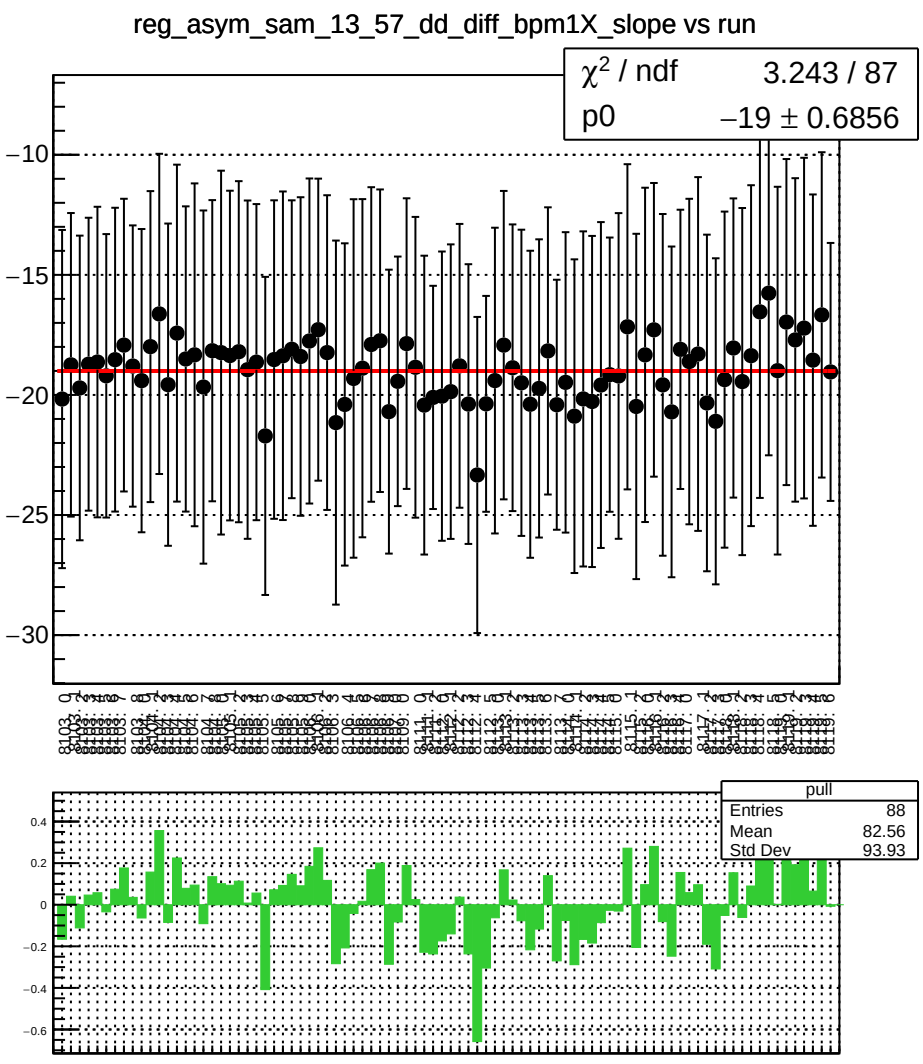

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.461 / 87
p0 −57.9 ± 1.913
−30
−40
−50
−60
−70
−80
pull
Entries 88
Mean 848.7
Std Dev 794.8
0.4
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 88
Mean 0.0009268
Std Dev 0.1289
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

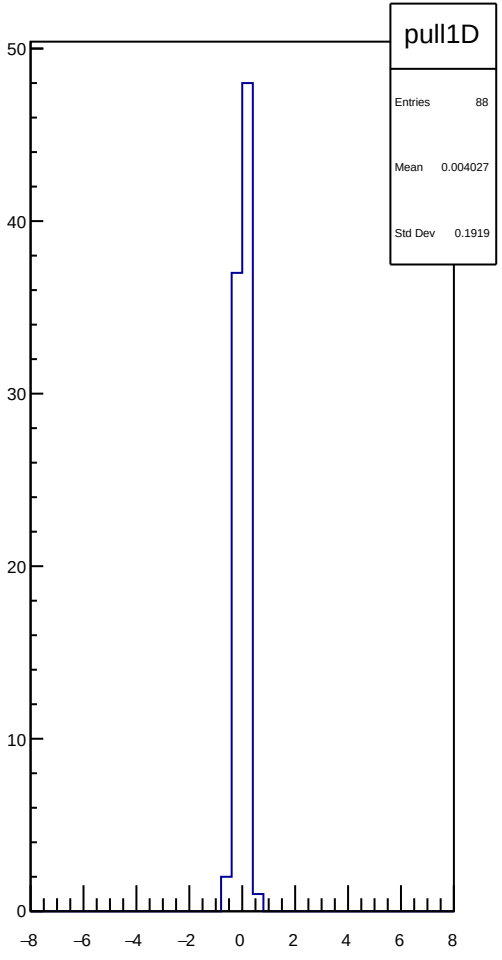

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.651 / 87
p0 54.46 ± 3.229
pull
Entries 88
Mean 1372
Std Dev 1323

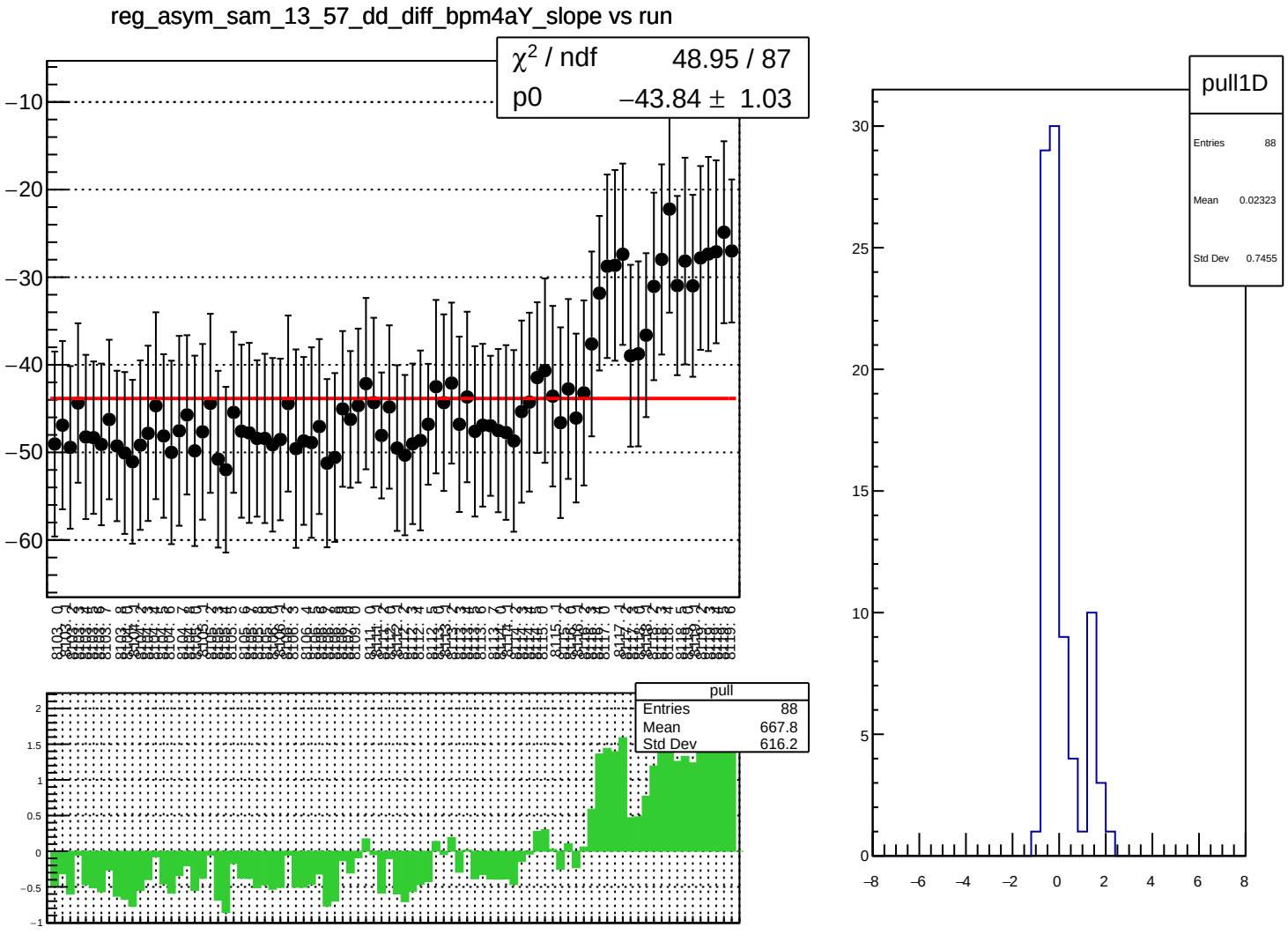

pull1D
Entries 88
Mean −0.002055
Std Dev 0.1735

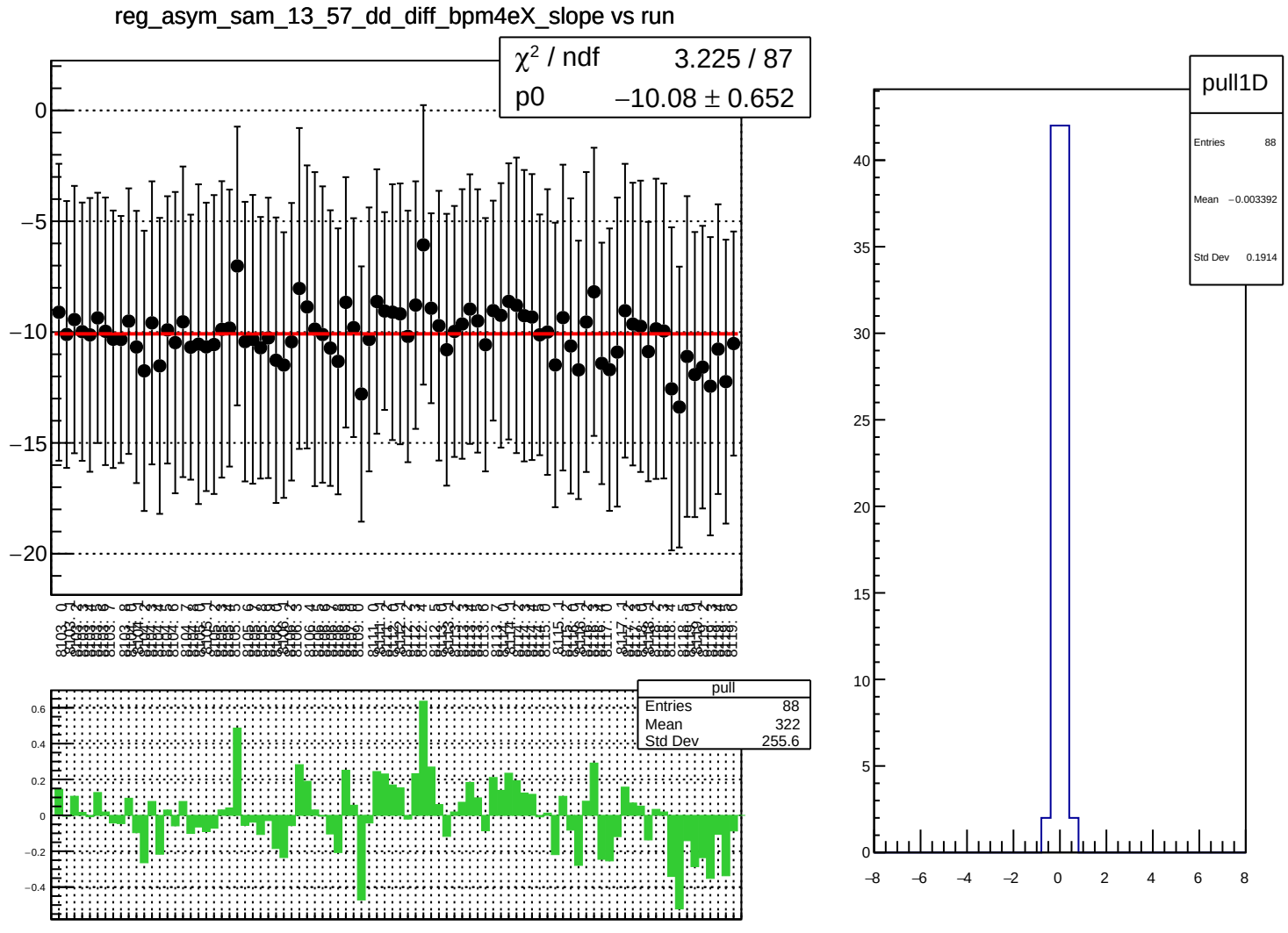

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 2.044 / 87
p0 −1.104 ± 0.1212
pull
Entries 88
Mean −595.3
Std Dev 648.6

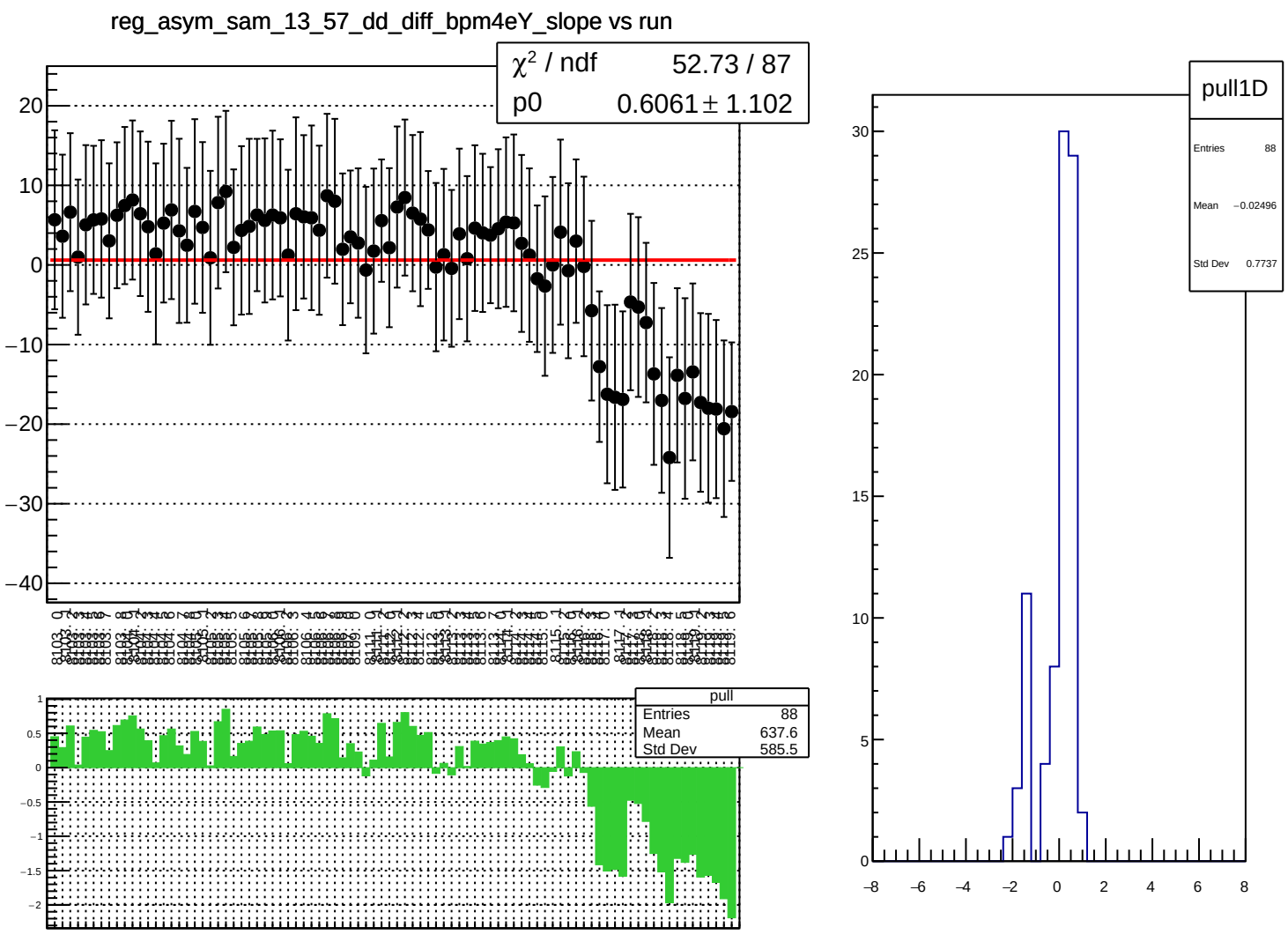

pull1D
Entries 88
Mean 0.002598
Std Dev 0.1524

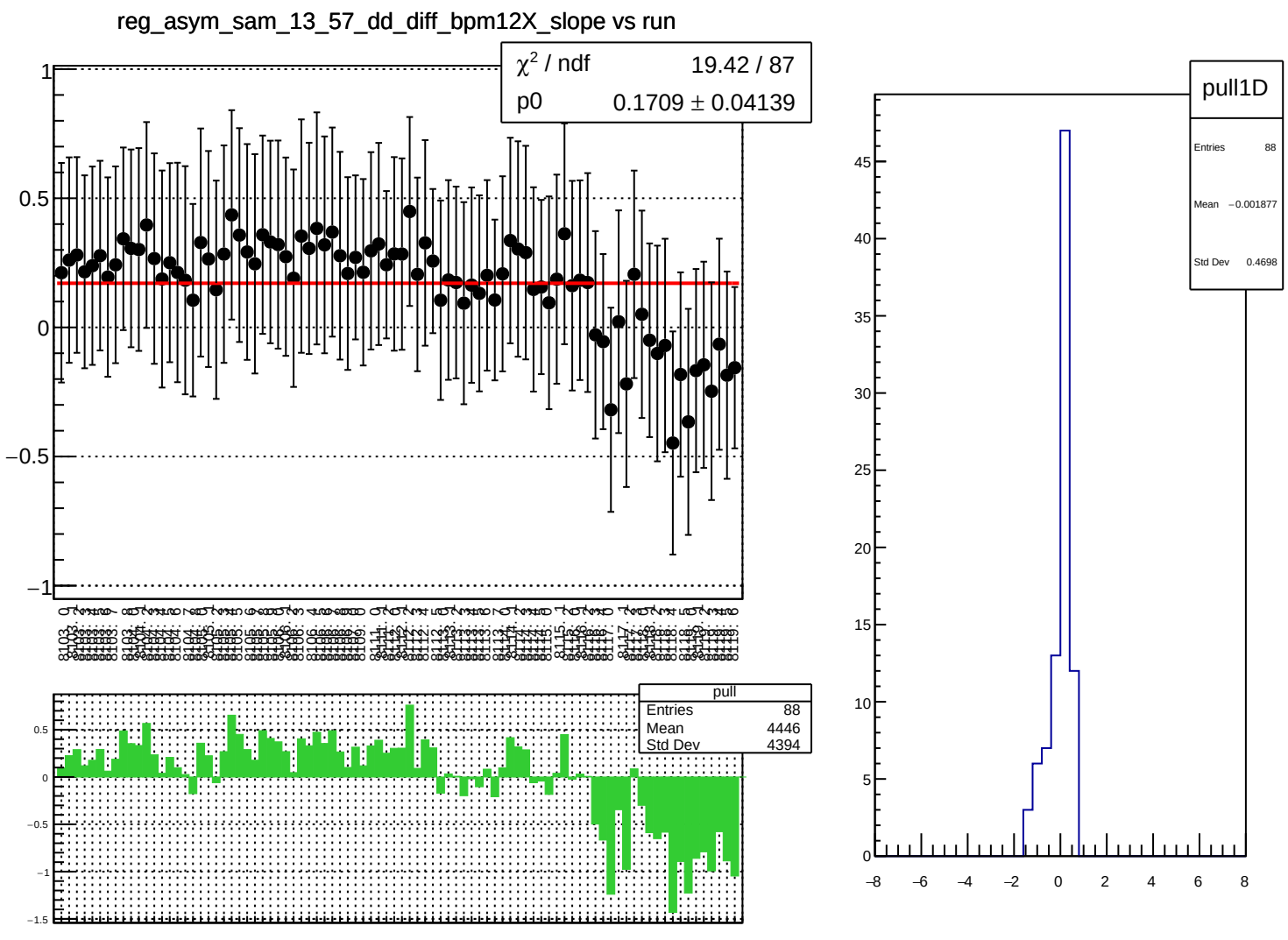

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 3.243 / 87
p0 −19 ± 0.6856
pull
Entries 88
Mean 82.56
Std Dev 93.93

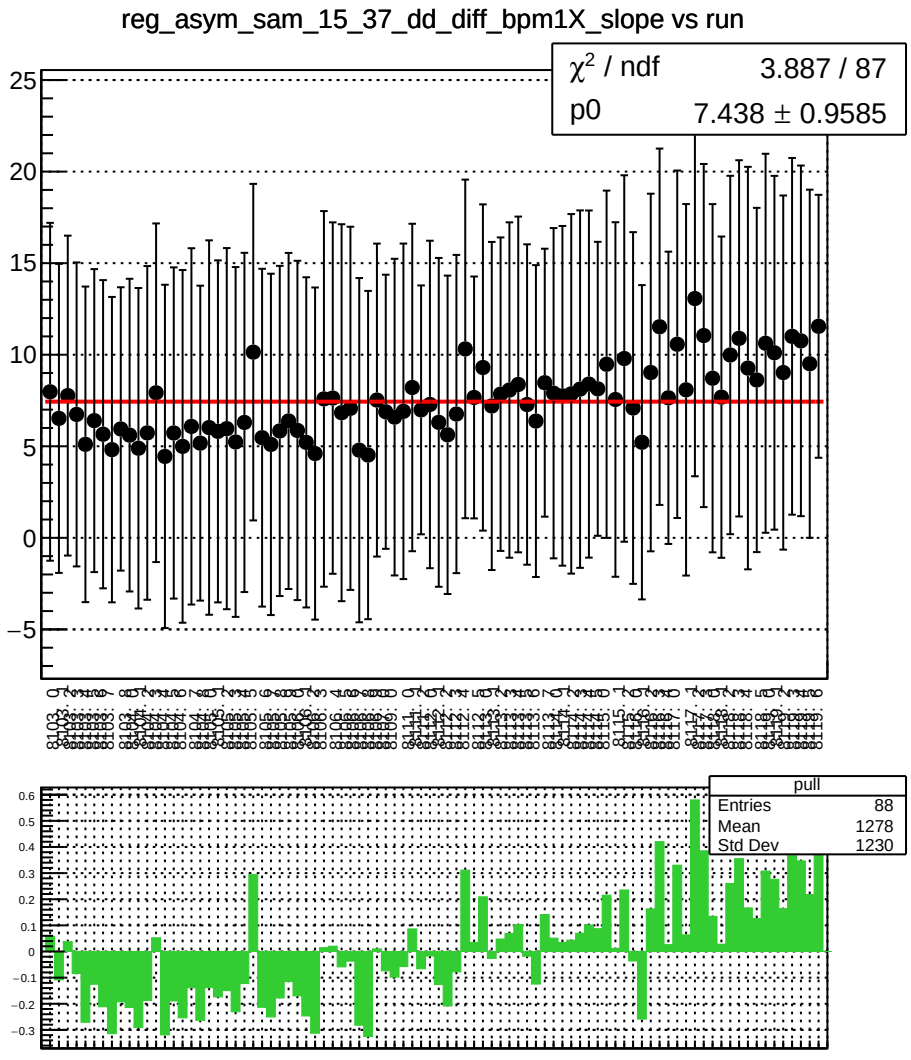

pull1D
Entries 88
Mean 0.004027
Std Dev 0.1919

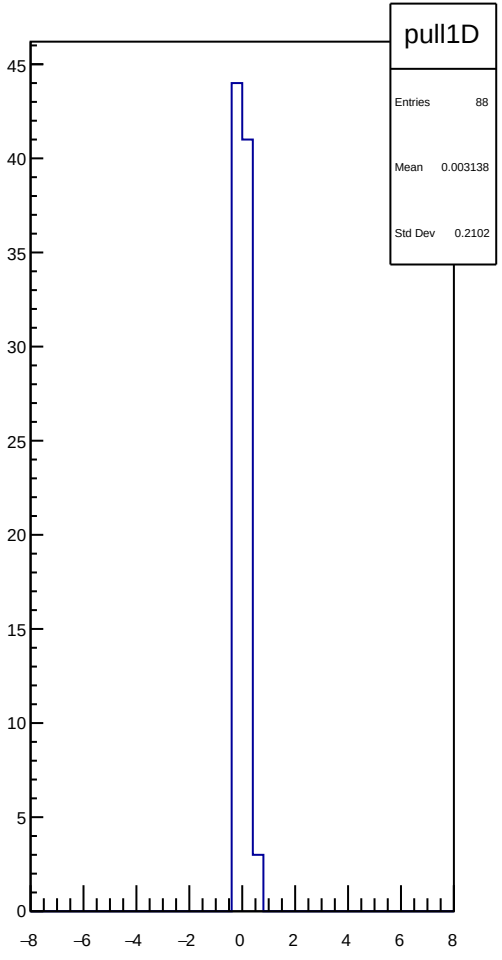

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 48.95 / 87
p0 −43.84 ± 1.03
pull
Entries 88
Mean 667.8
Std Dev 616.2
pull1D
Entries 88
Mean 0.02323
Std Dev 0.7455

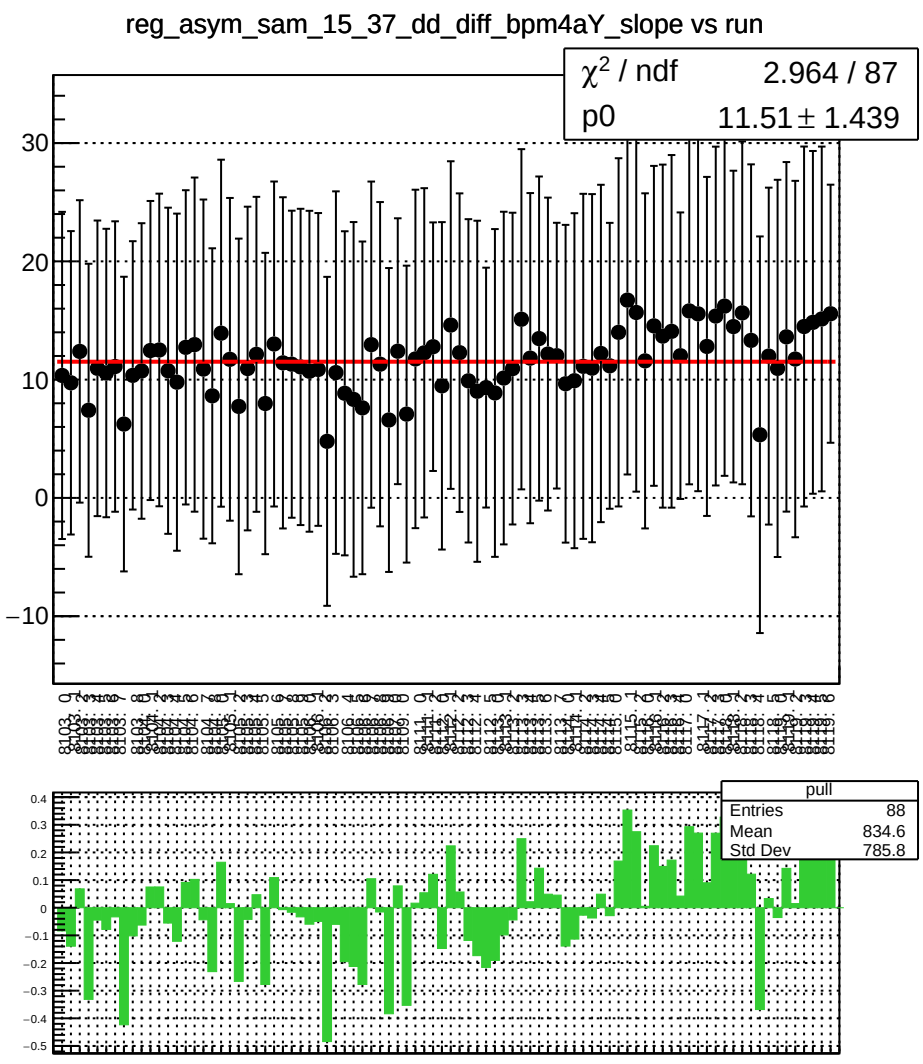

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.225 / 87
p0 −10.08 ± 0.652
pull
Entries 88
Mean 322
Std Dev 255.6
pull1D
Entries 88
Mean −0.003392
Std Dev 0.1914

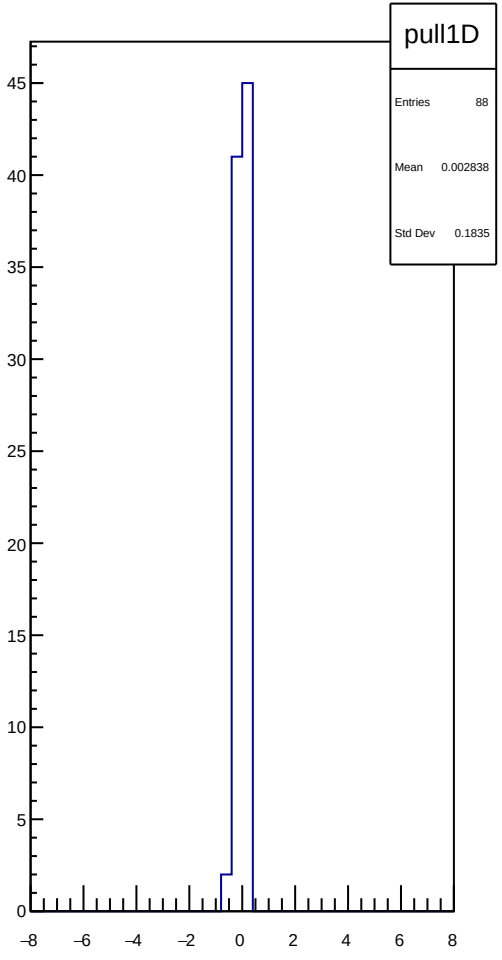

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 52.73 / 87
p0 0.6061 ± 1.102
pull
Entries 88
Mean 637.6
Std Dev 585.5
pull1D
Entries 88
Mean −0.02496
Std Dev 0.7737

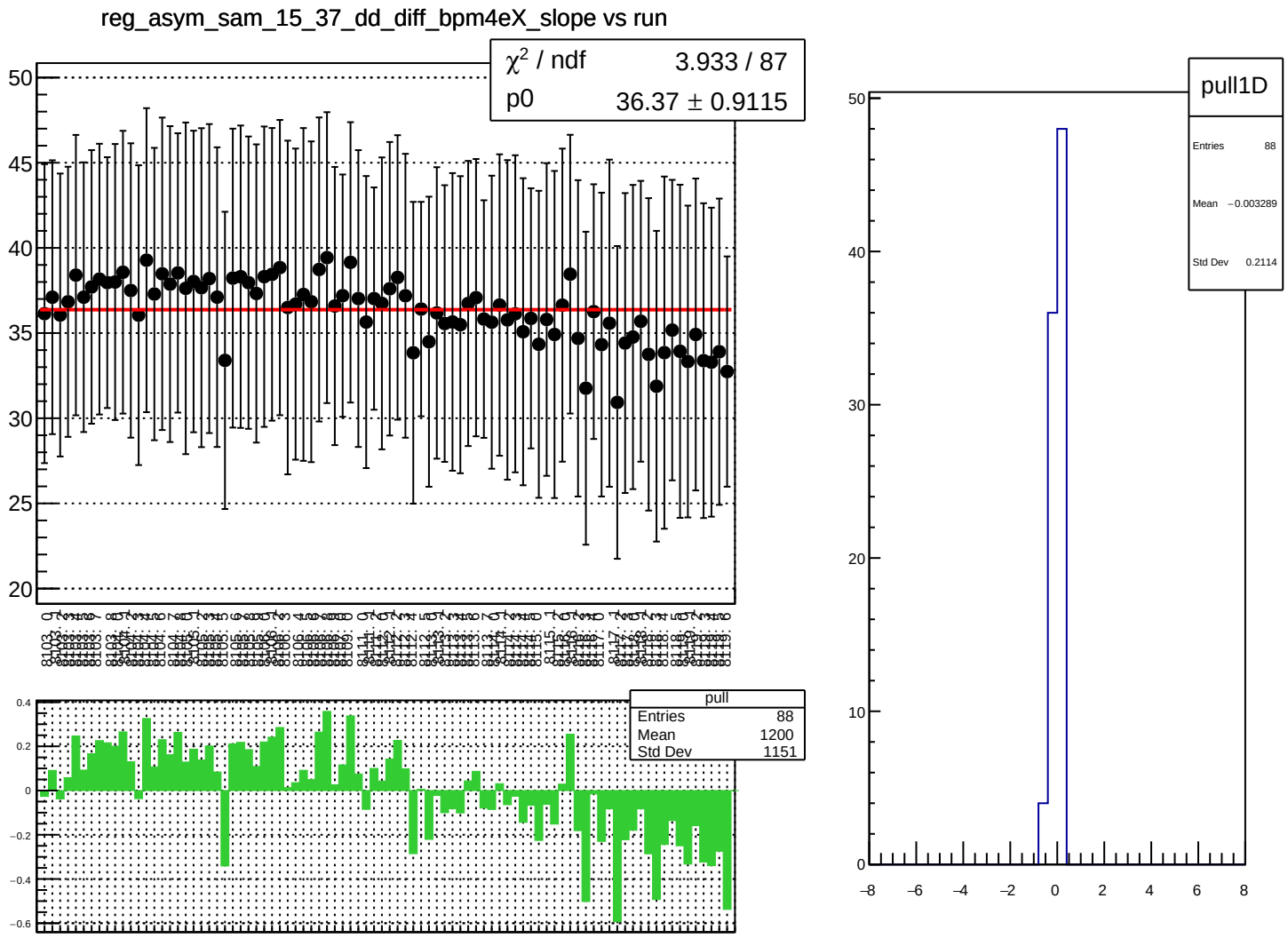

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 19.42 / 87
p0 0.1709 ± 0.04139
pull
Entries 88
Mean 4446
Std Dev 4394
pull1D
Entries 88
Mean −0.001877
Std Dev 0.4698

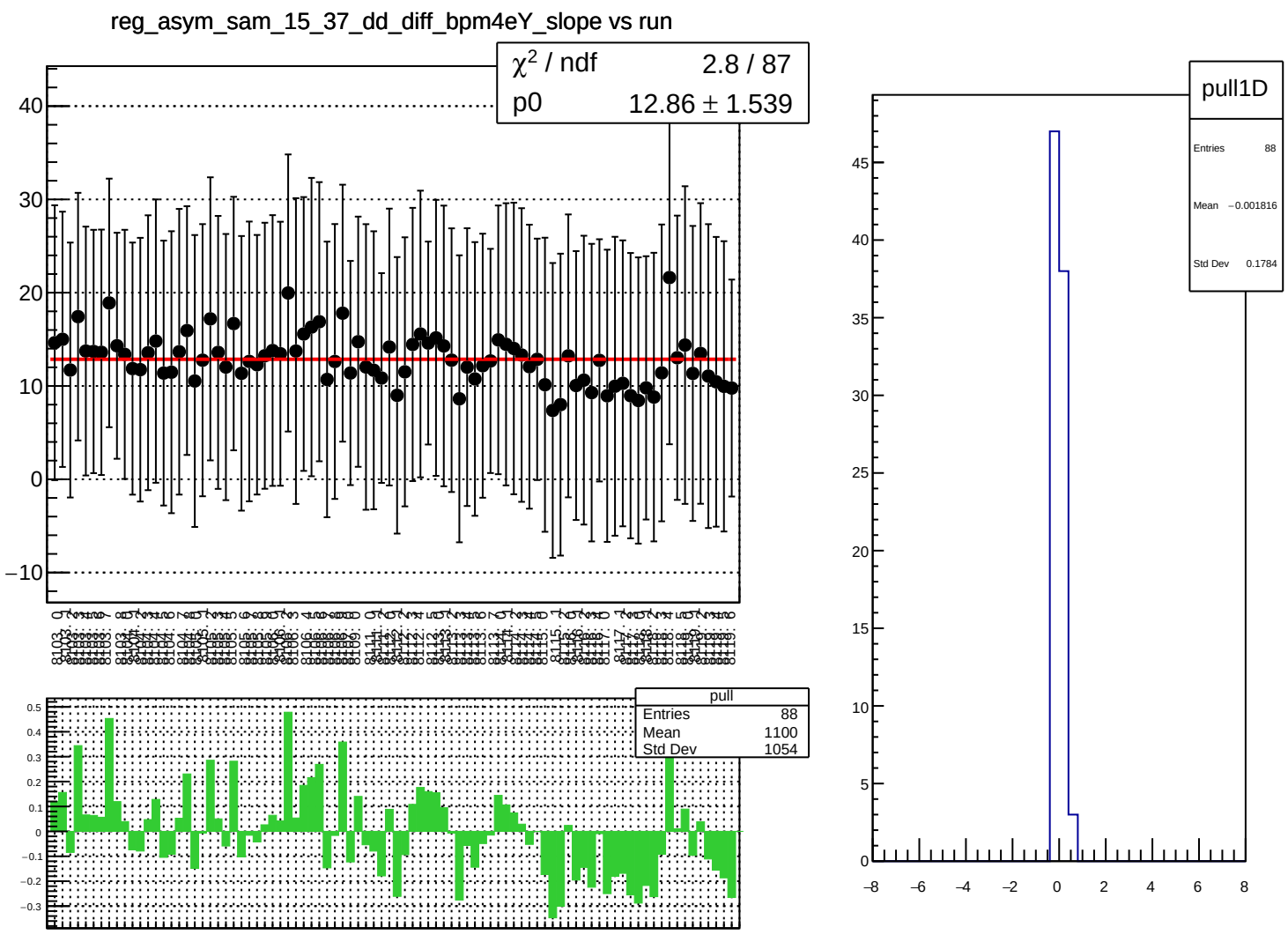

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 3.887 / 87
p0 7.438 ± 0.9585
pull
Entries 88
Mean 1278
Std Dev 1230

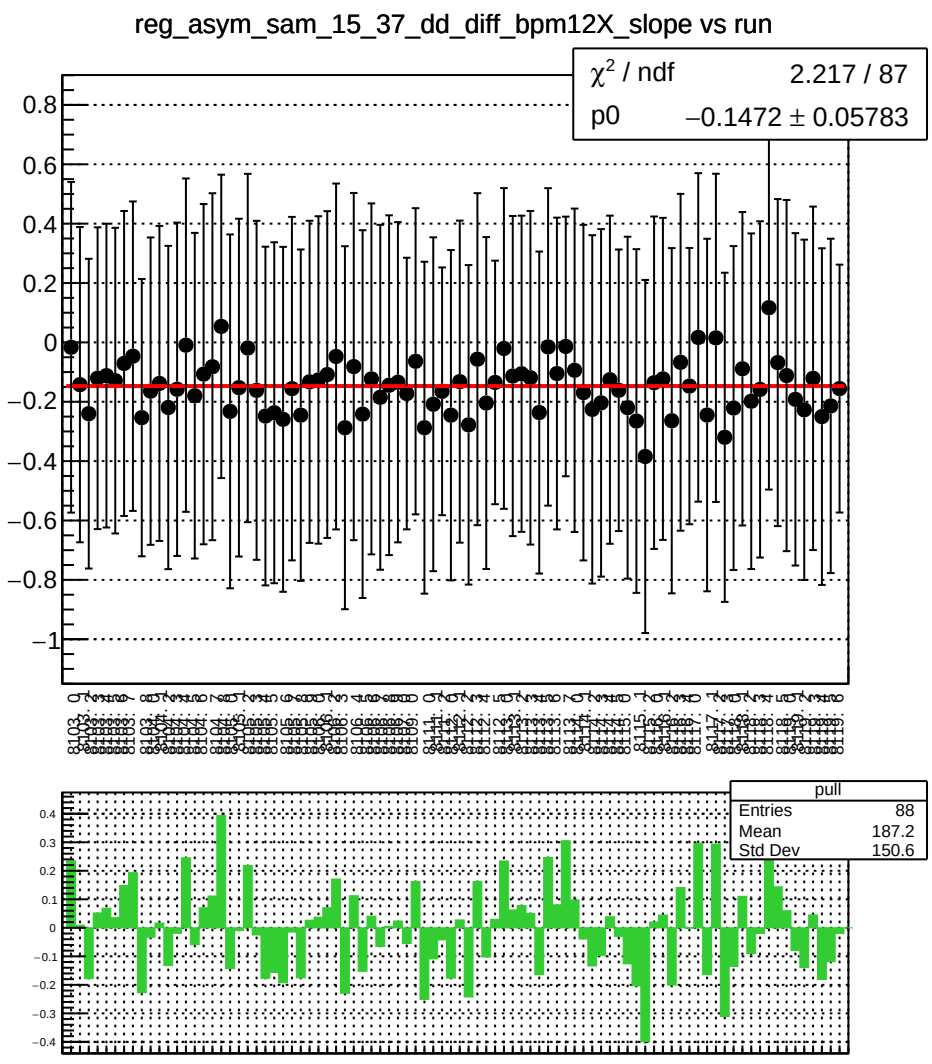

pull1D
Entries 88
Mean 0.003138
Std Dev 0.2102

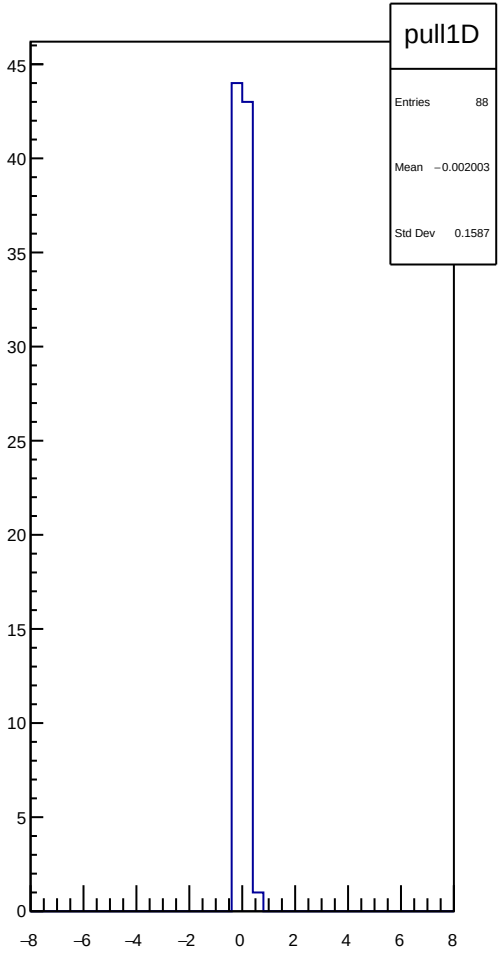

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.964 / 87
p0 11.51 ± 1.439
pull
Entries 88
Mean 834.6
Std Dev 785.8

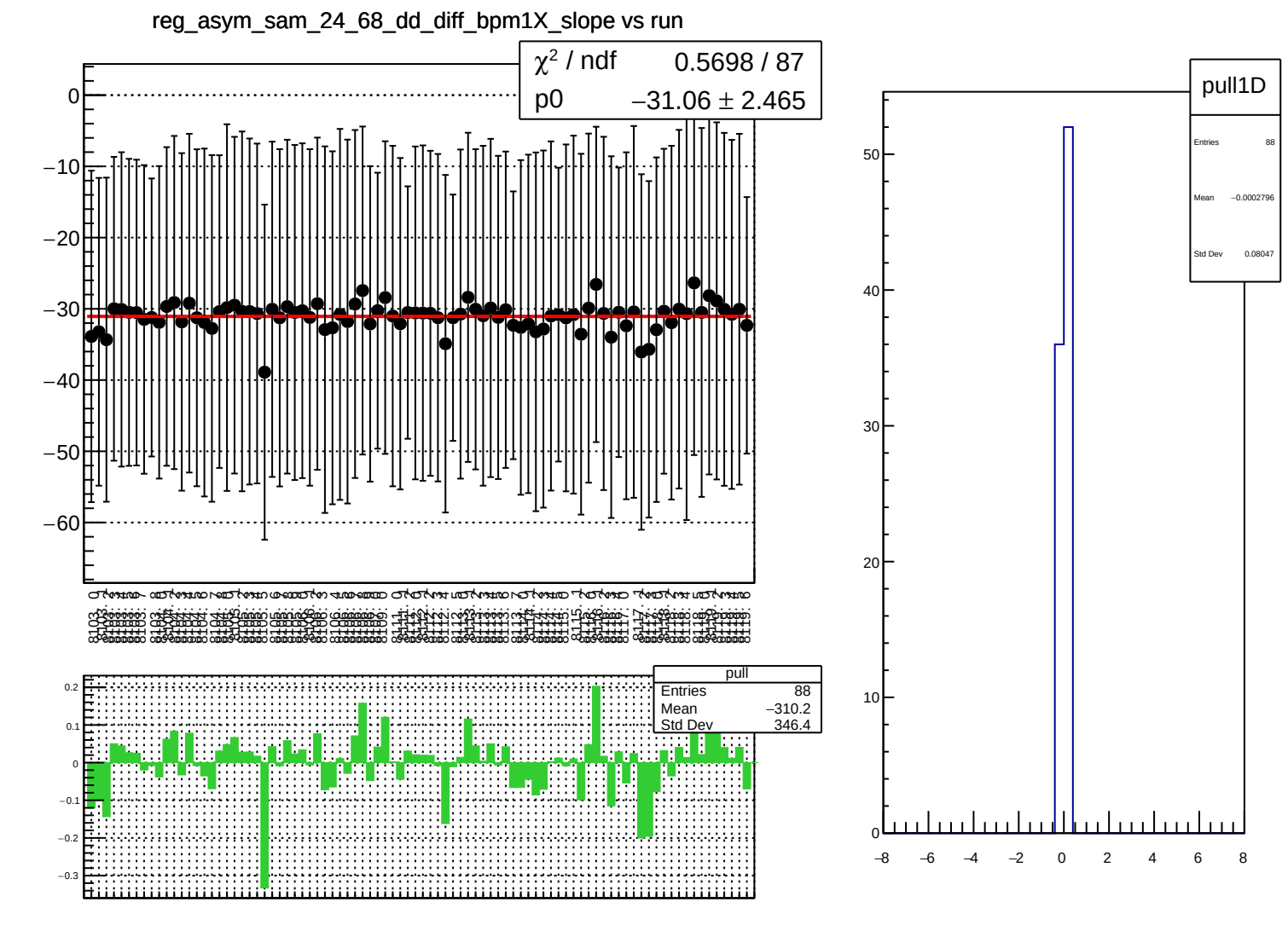

pull1D
Entries 88
Mean 0.002838
Std Dev 0.1835

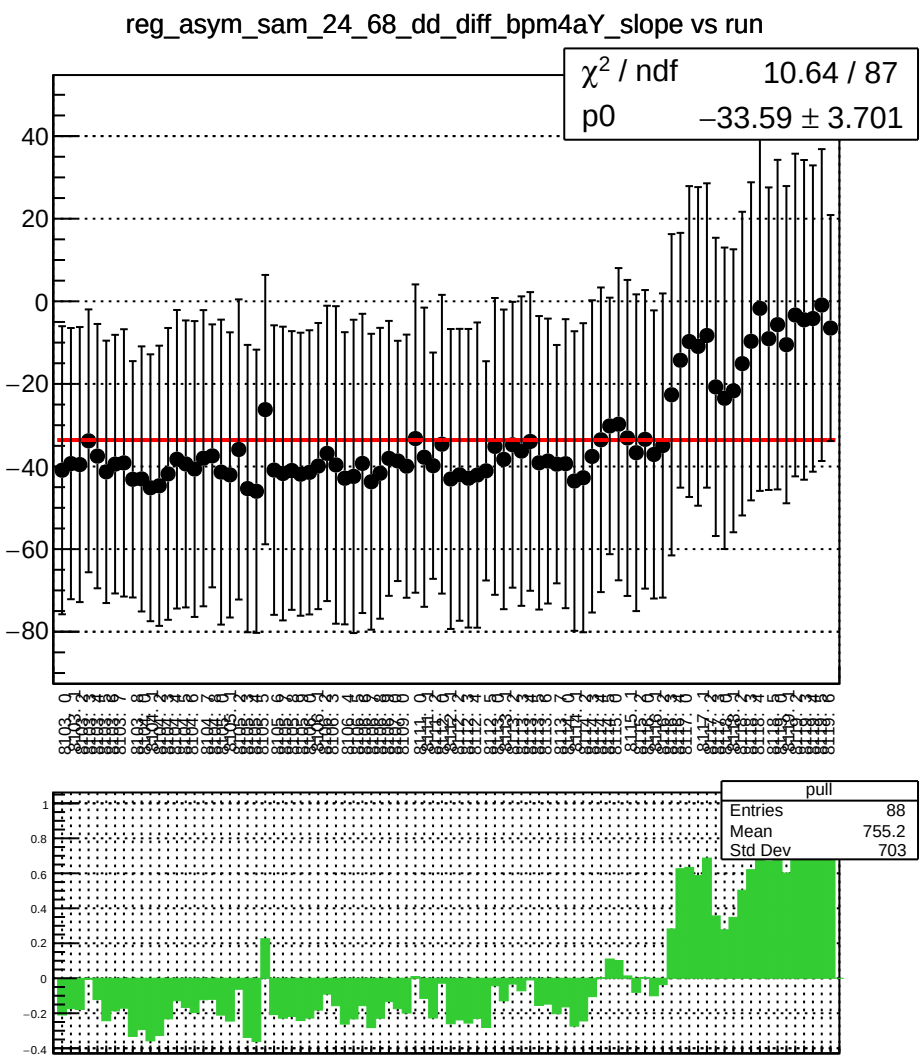

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.933 / 87
p0 36.37 ± 0.9115
pull
Entries 88
Mean 1200
Std Dev 1151
pull1D
Entries 88
Mean −0.003289
Std Dev 0.2114

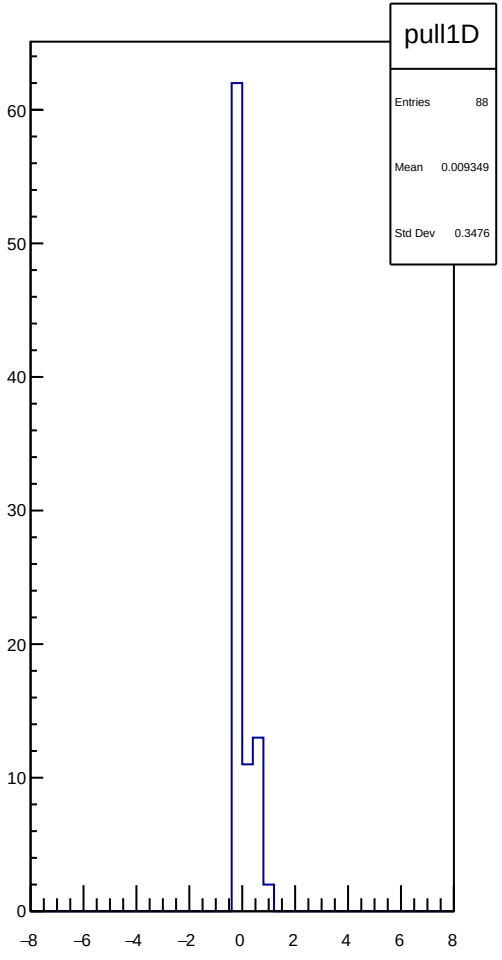

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.8 / 87
p0 12.86 ± 1.539
pull
Entries 88
Mean 1100
Std Dev 1054
pull1D
Entries 88
Mean −0.001816
Std Dev 0.1784

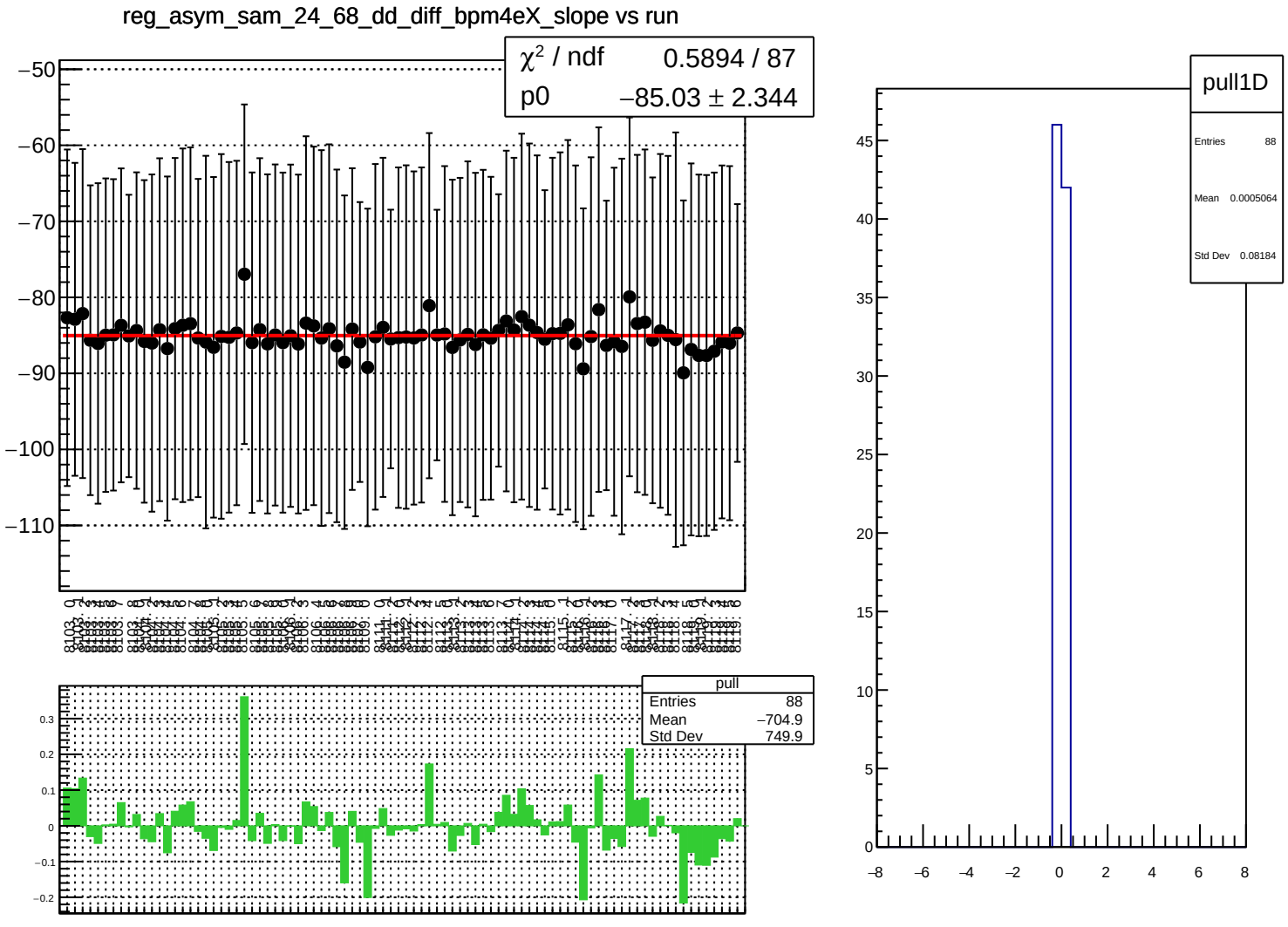

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 2.217 / 87
p0 −0.1472 ± 0.05783
pull
Entries 88
Mean 187.2
Std Dev 150.6

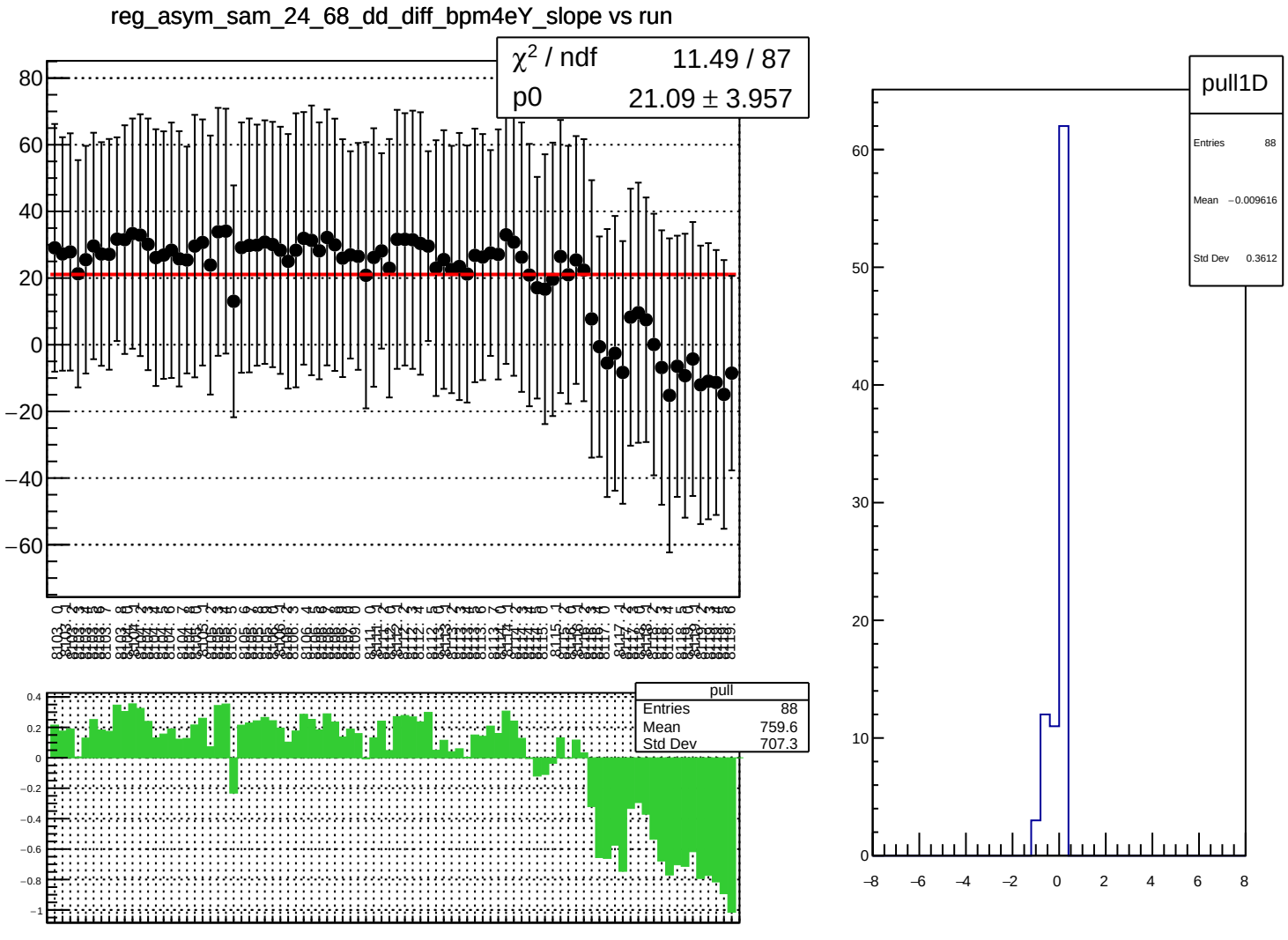

pull1D
Entries 88
Mean −0.002003
Std Dev 0.1587

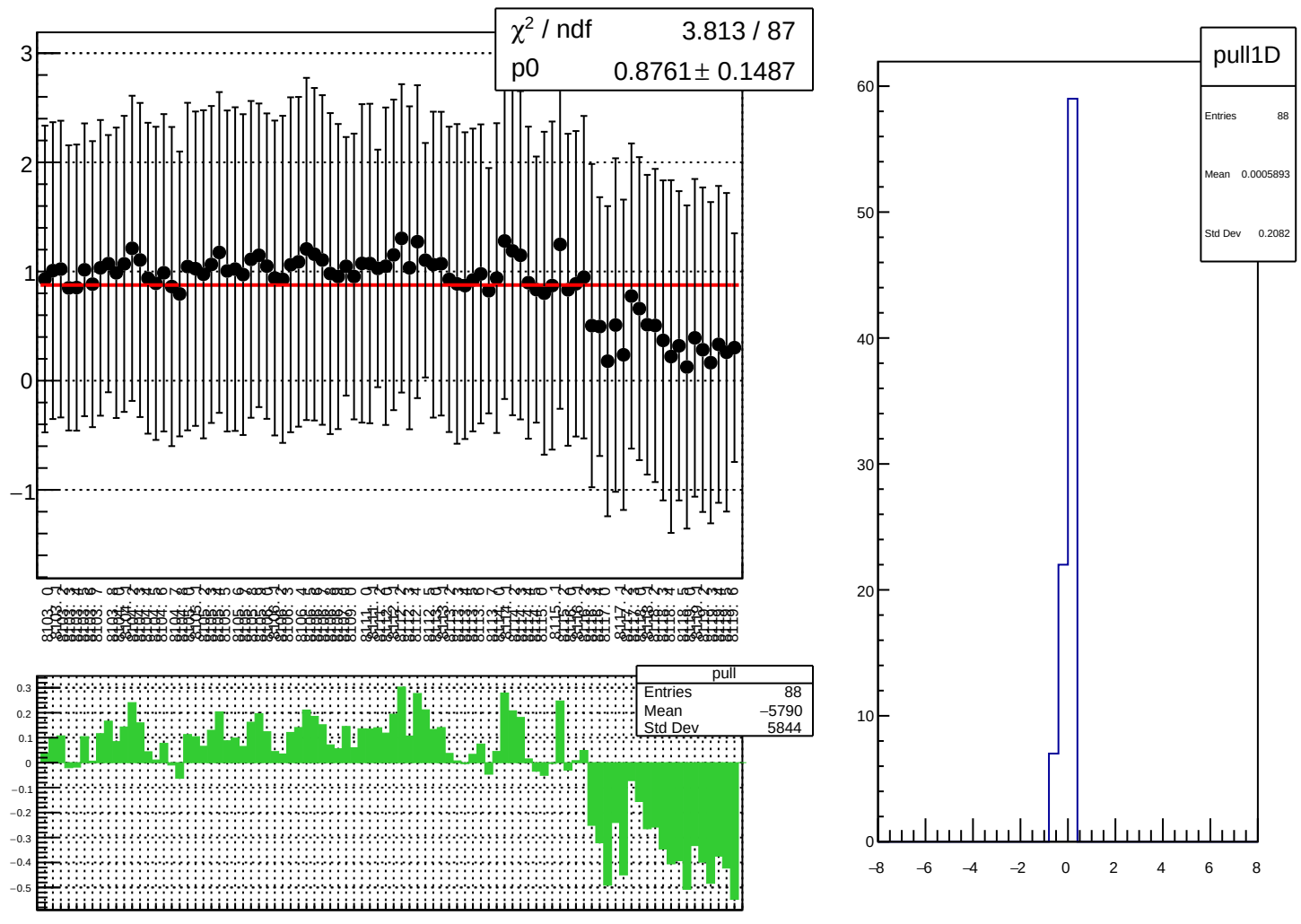

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 0.5698 / 87
p0 −31.06 ± 2.465
pull
Entries 88
Mean −310.2
Std Dev 346.4
pull1D
Entries 88
Mean −0.0002796
Std Dev 0.08047

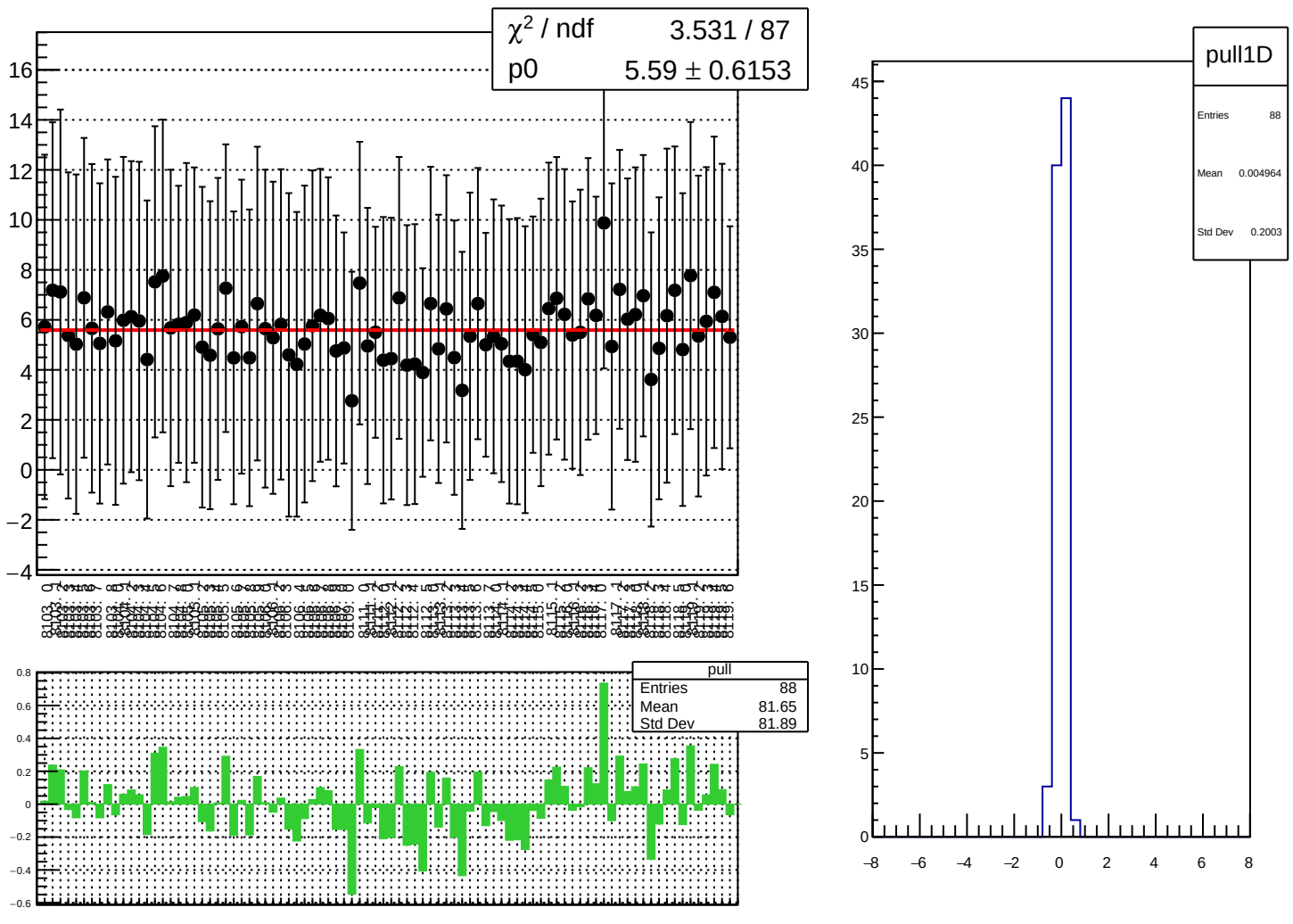

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.64 / 87
p0 −33.59 ± 3.701
pull
Entries 88
Mean 755.2
Std Dev 703

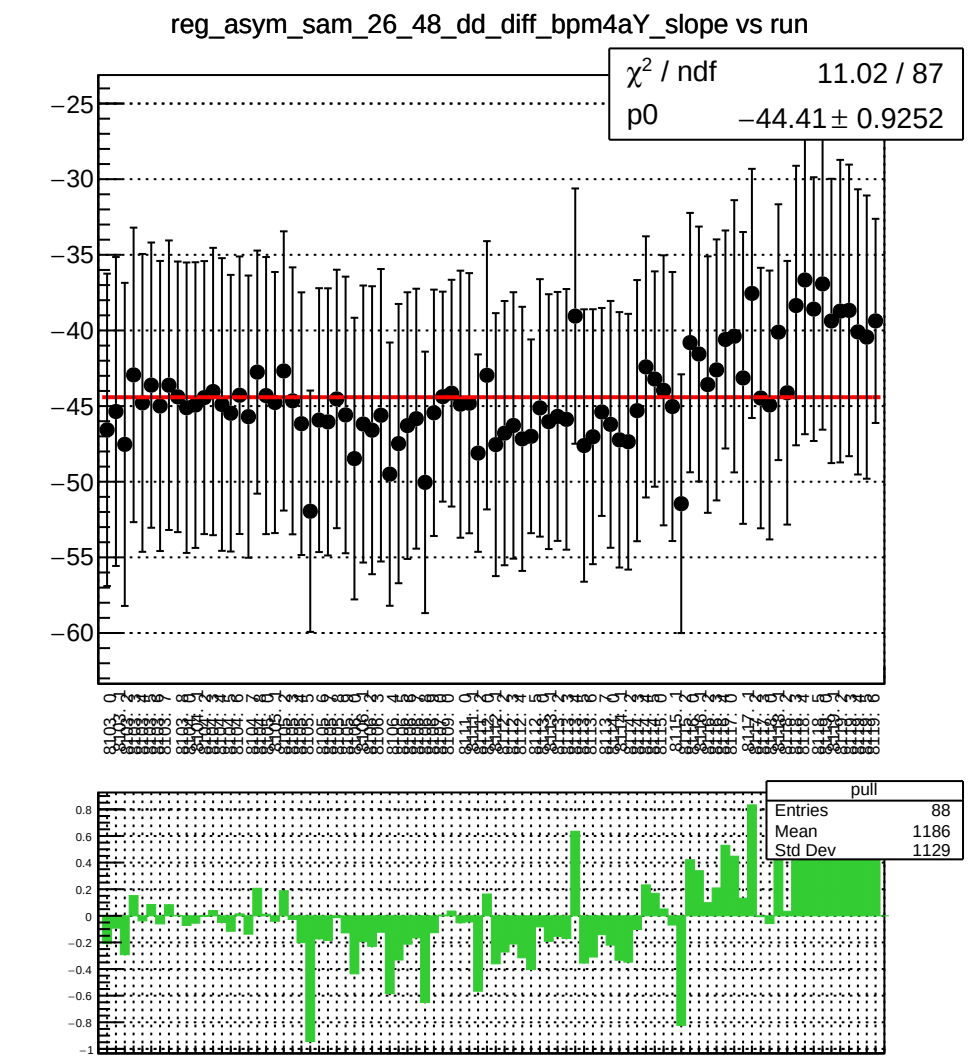

pull1D
Entries 88
Mean 0.009349
Std Dev 0.3476

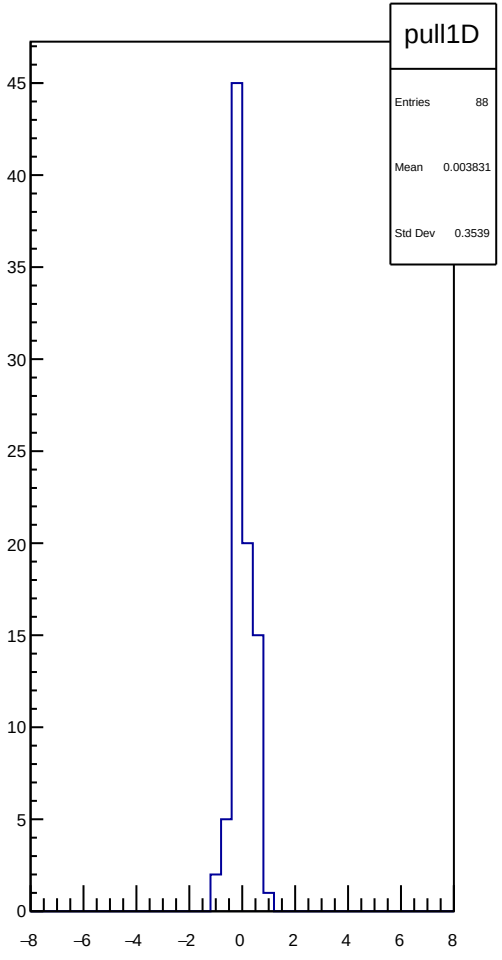

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.5894 / 87
p0 −85.03 ± 2.344
pull
Entries 88
Mean −704.9
Std Dev 749.9
pull1D
Entries 88
Mean 0.0005064
Std Dev 0.08184

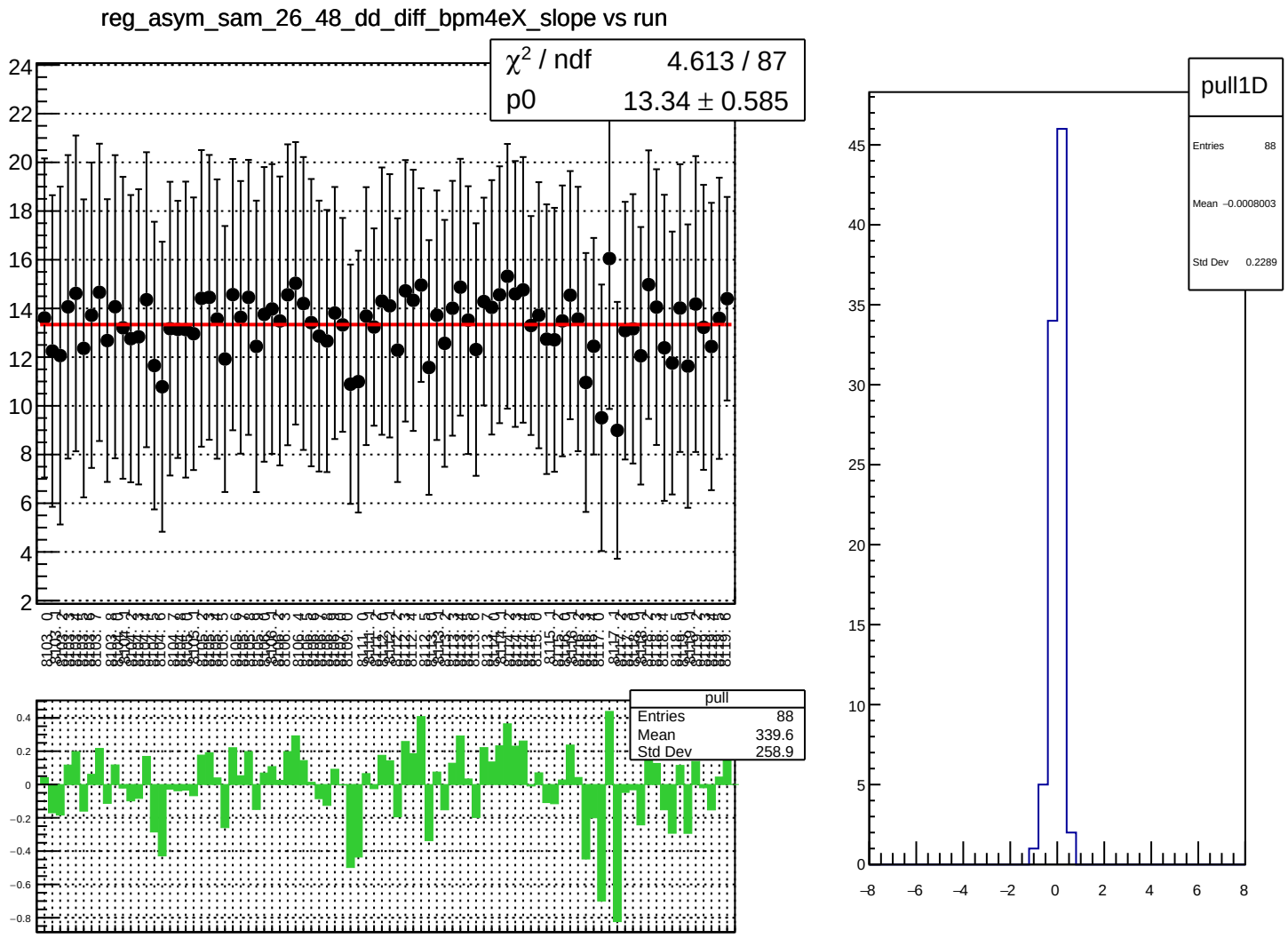

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 11.49 / 87
p0 21.09 ± 3.957
pull
Entries 88
Mean 759.6
Std Dev 707.3
pull1D
Entries 88
Mean −0.009616
Std Dev 0.3612

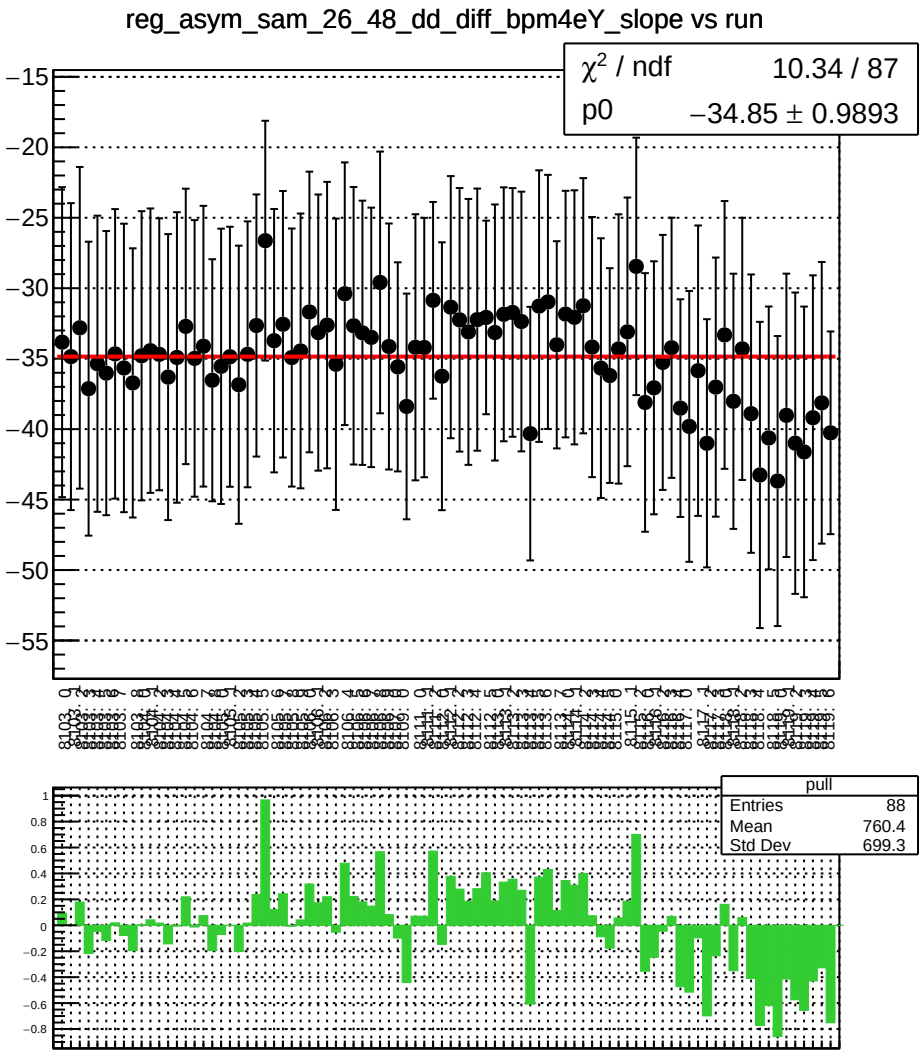

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 3.813 / 87
p0 0.8761± 0.1487
pull
Entries 88
Mean −5790
Std Dev 5844
pull1D
Entries 88
Mean 0.0005893
Std Dev 0.2082

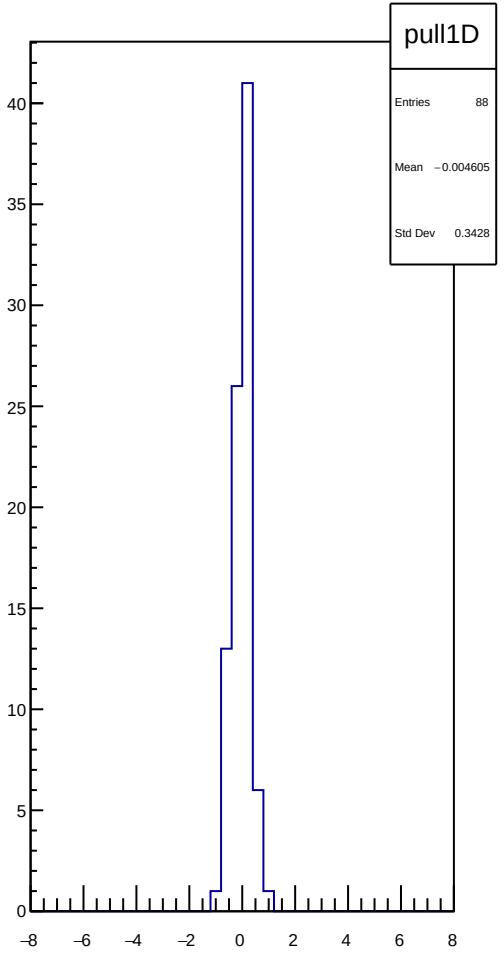

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 3.531 / 87
p0 5.59 ± 0.6153
pull
Entries 88
Mean 81.65
Std Dev 81.89
pull1D
Entries 88
Mean 0.004964
Std Dev 0.2003

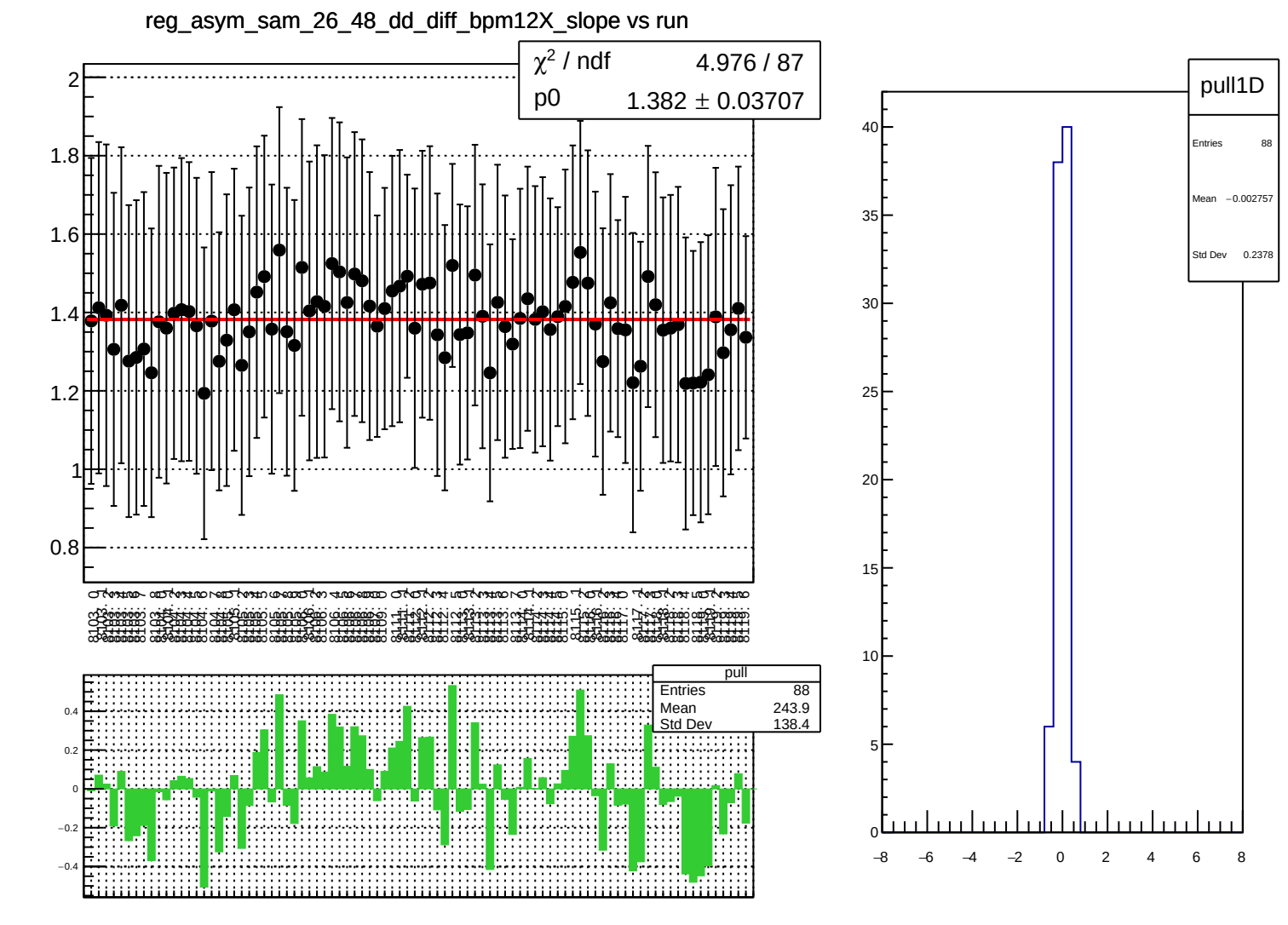

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.02 / 87
p0 −44.41 ± 0.9252
pull
Entries 88
Mean 1186
Std Dev 1129

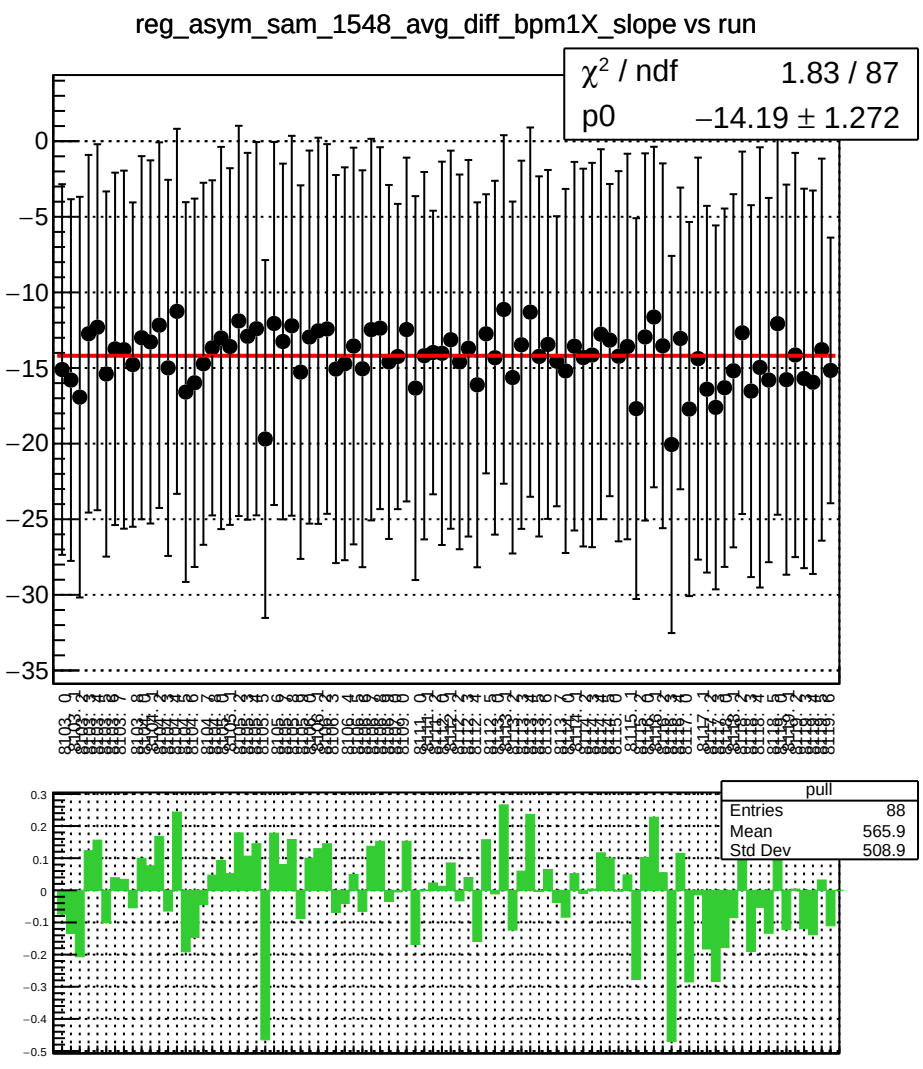

pull1D
Entries 88
Mean 0.003831
Std Dev 0.3539

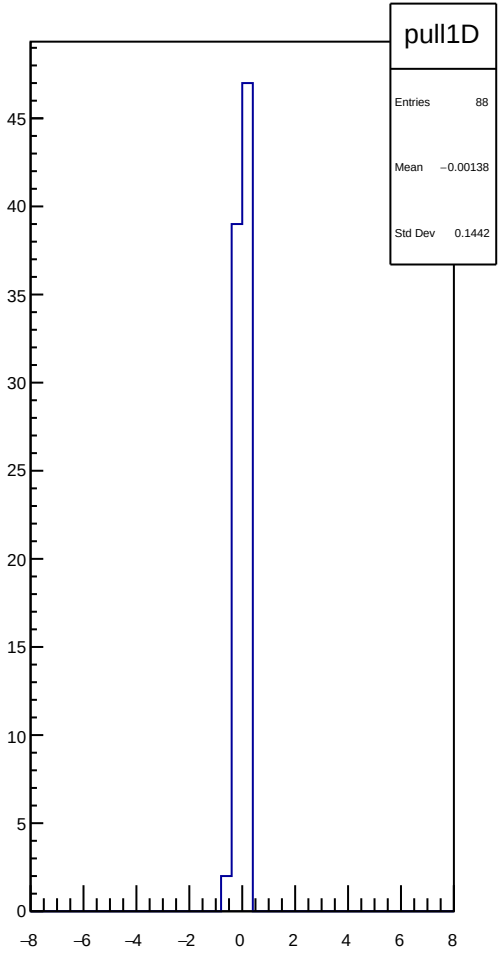

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.613 / 87
p0 13.34 ± 0.585
pull
Entries 88
Mean 339.6
Std Dev 258.9
pull1D
Entries 88
Mean −0.0008003
Std Dev 0.2289

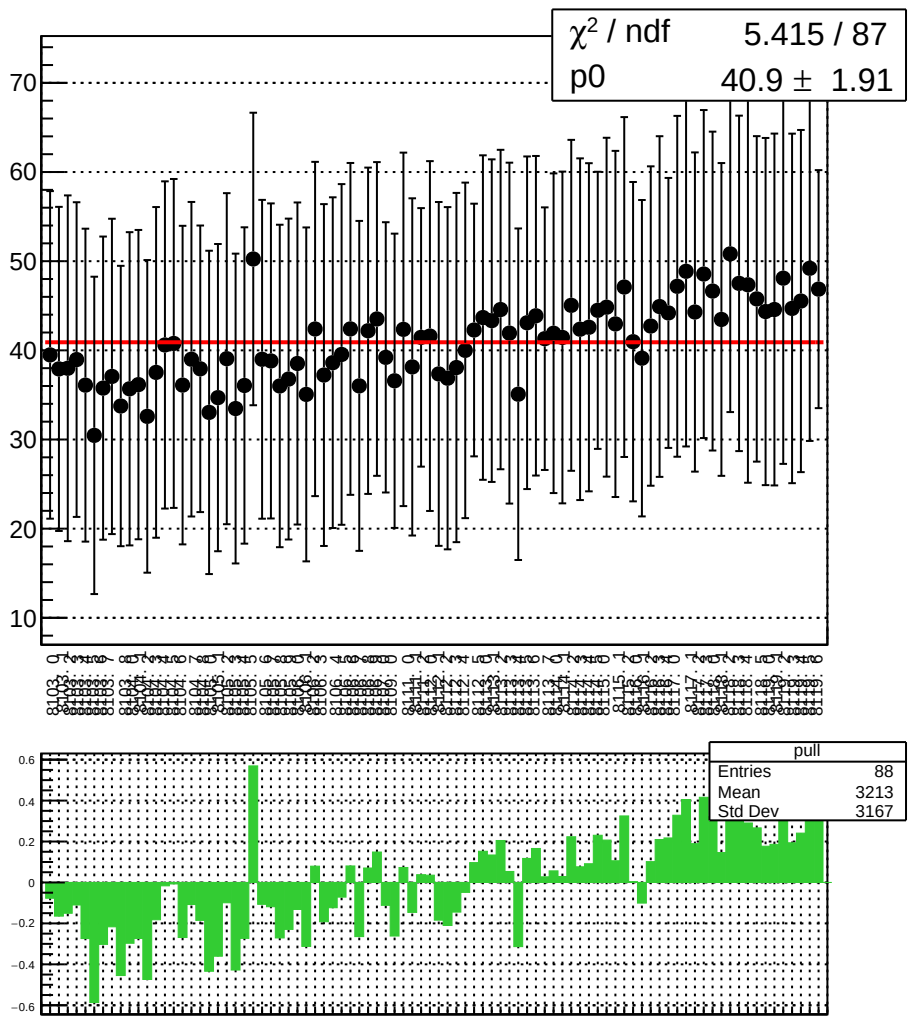

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.34 / 87
p0 −34.85 ± 0.9893
pull
Entries 88
Mean 760.4
Std Dev 699.3

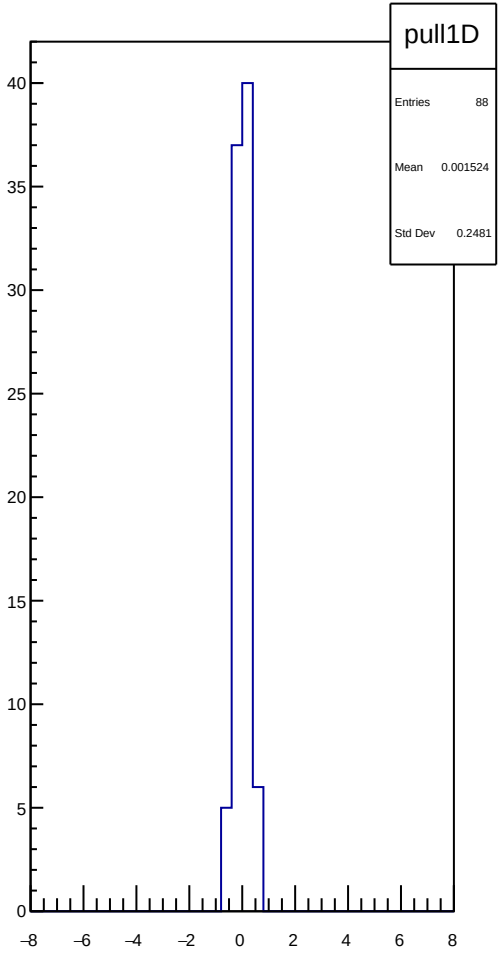

pull1D
Entries 88
Mean −0.004605
Std Dev 0.3428

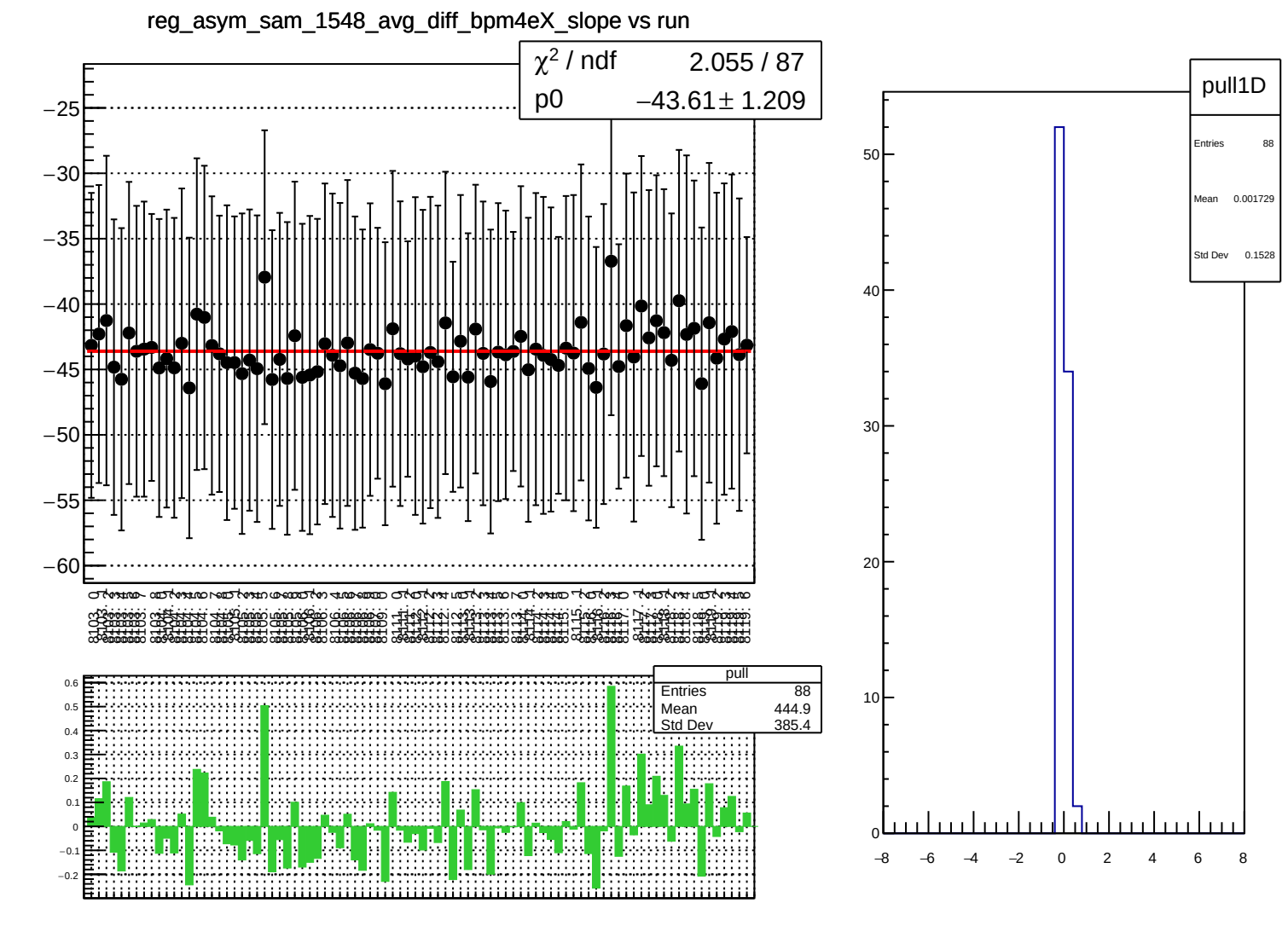

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 4.976 / 87
p0 1.382 ± 0.03707
pull
Entries 88
Mean 243.9
Std Dev 138.4
pull1D
Entries 88
Mean −0.002757
Std Dev 0.2378

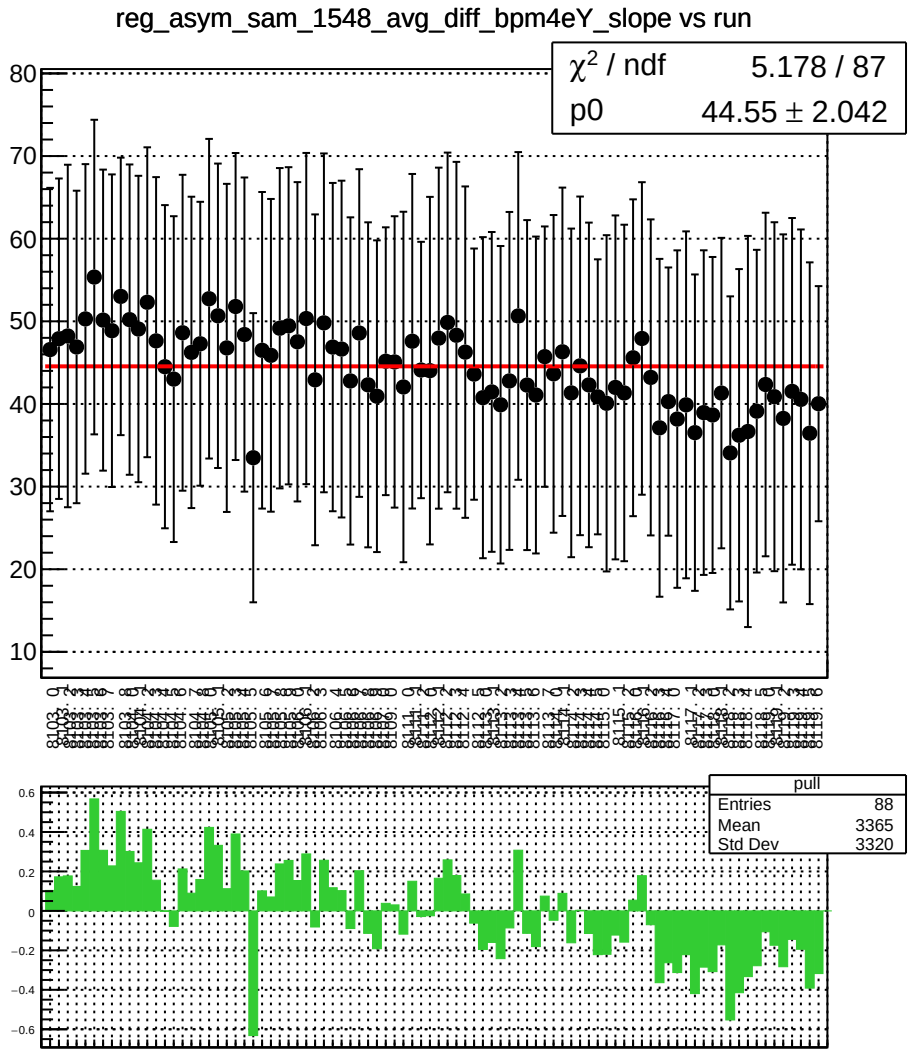

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 1.83 / 87
p0 −14.19 ± 1.272
pull
Entries 88
Mean 565.9
Std Dev 508.9

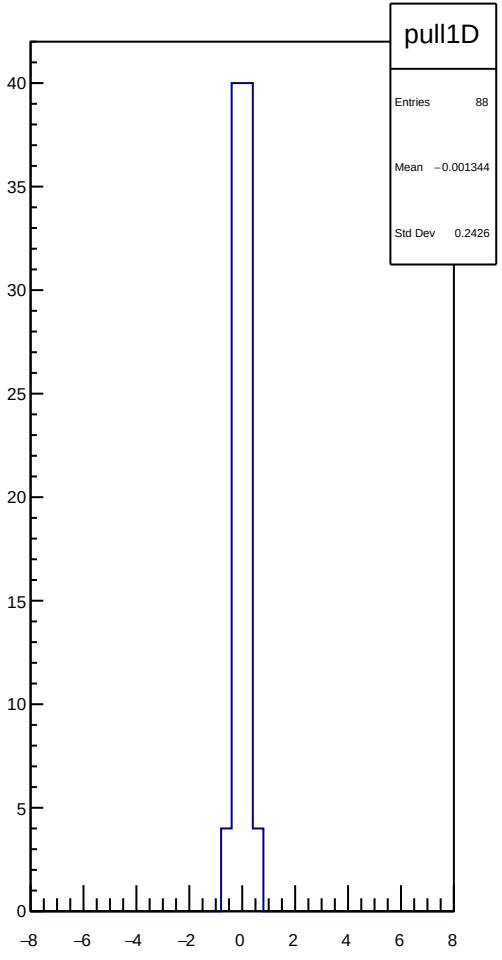

pull1D
Entries 88
Mean −0.00138
Std Dev 0.1442

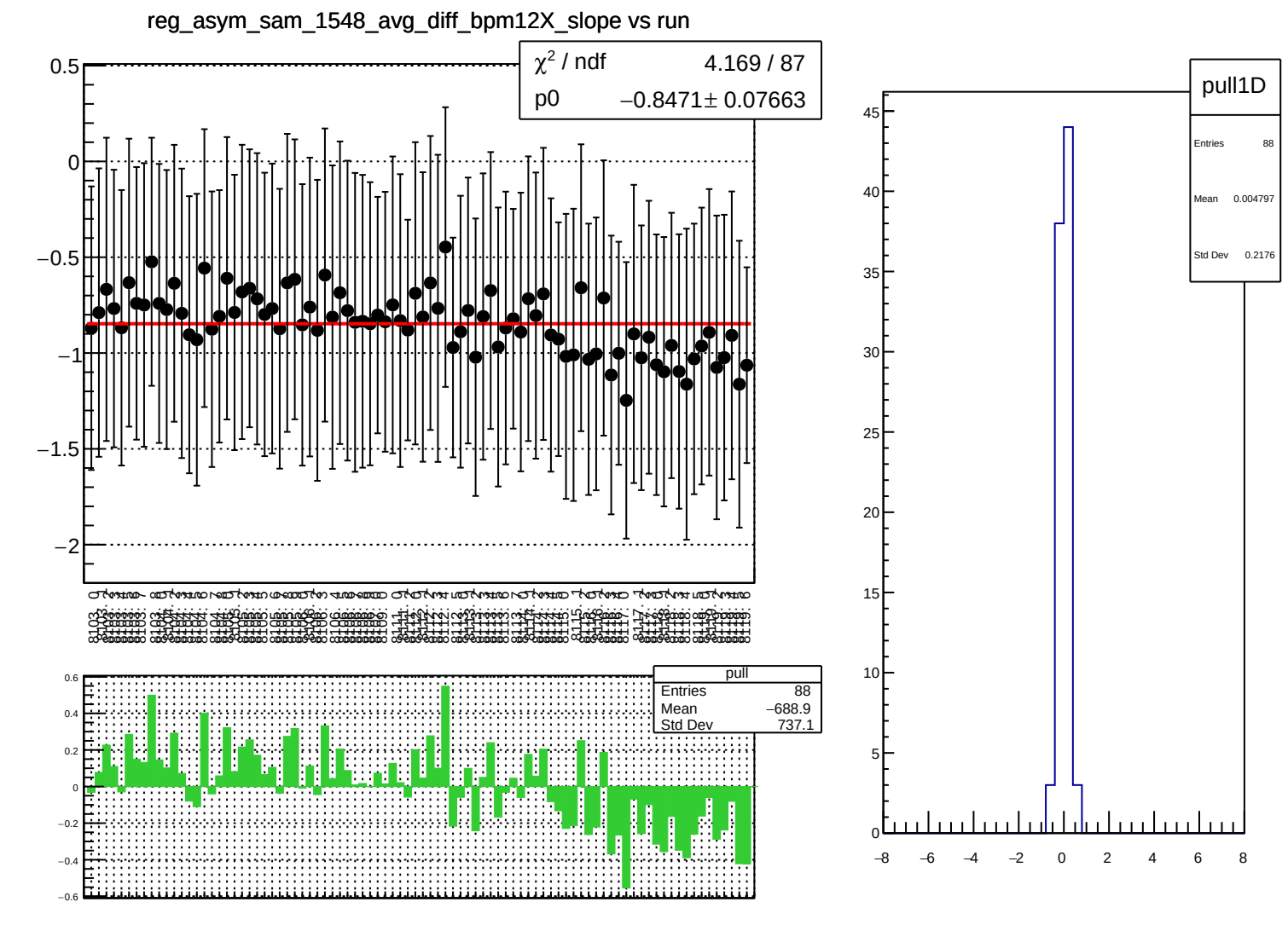

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.415 / 87
p0 40.9 ± 1.91
pull
Entries 88
Mean 3213
Std Dev 3167

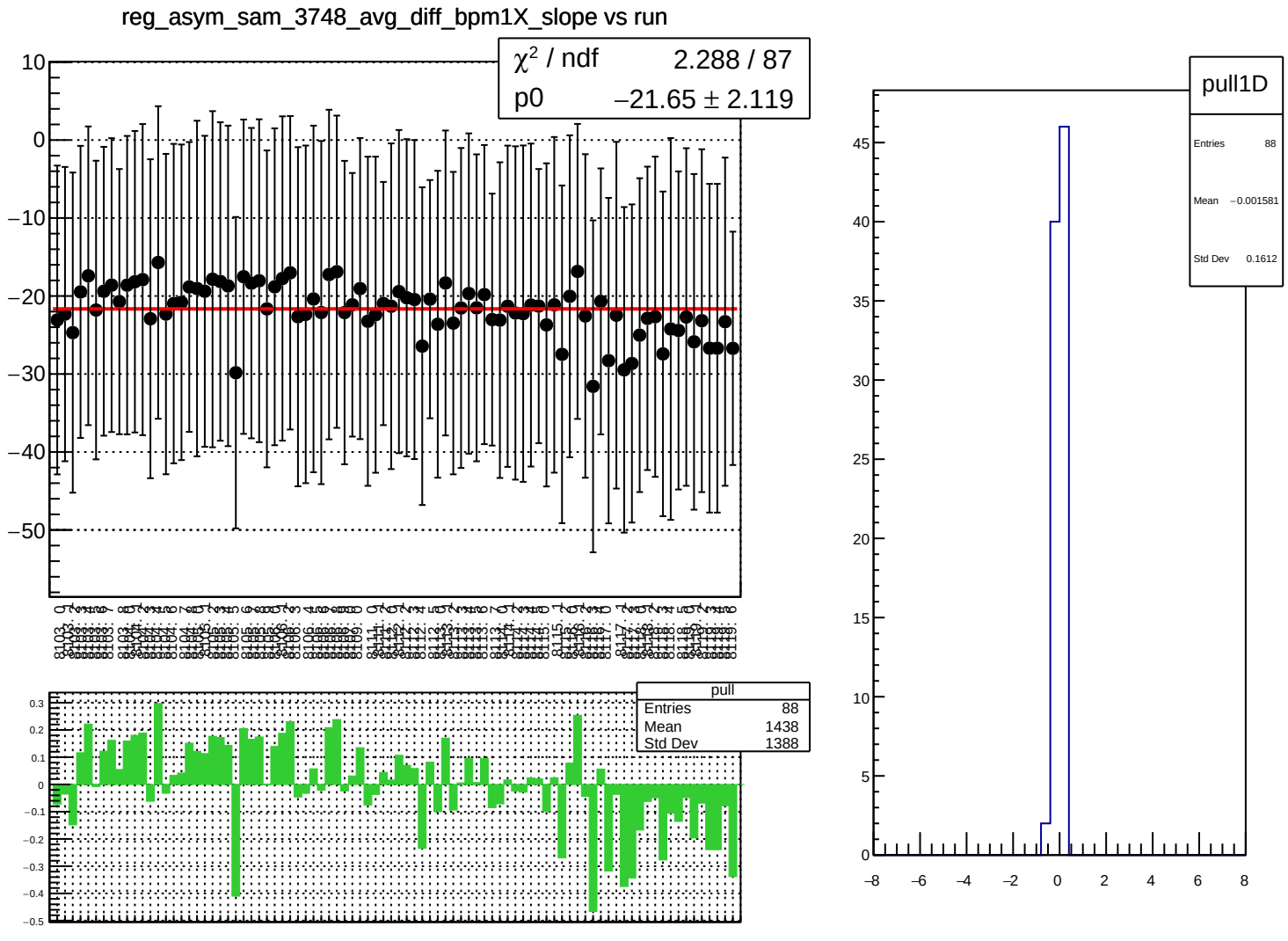

pull1D
Entries 88
Mean 0.001524
Std Dev 0.2481

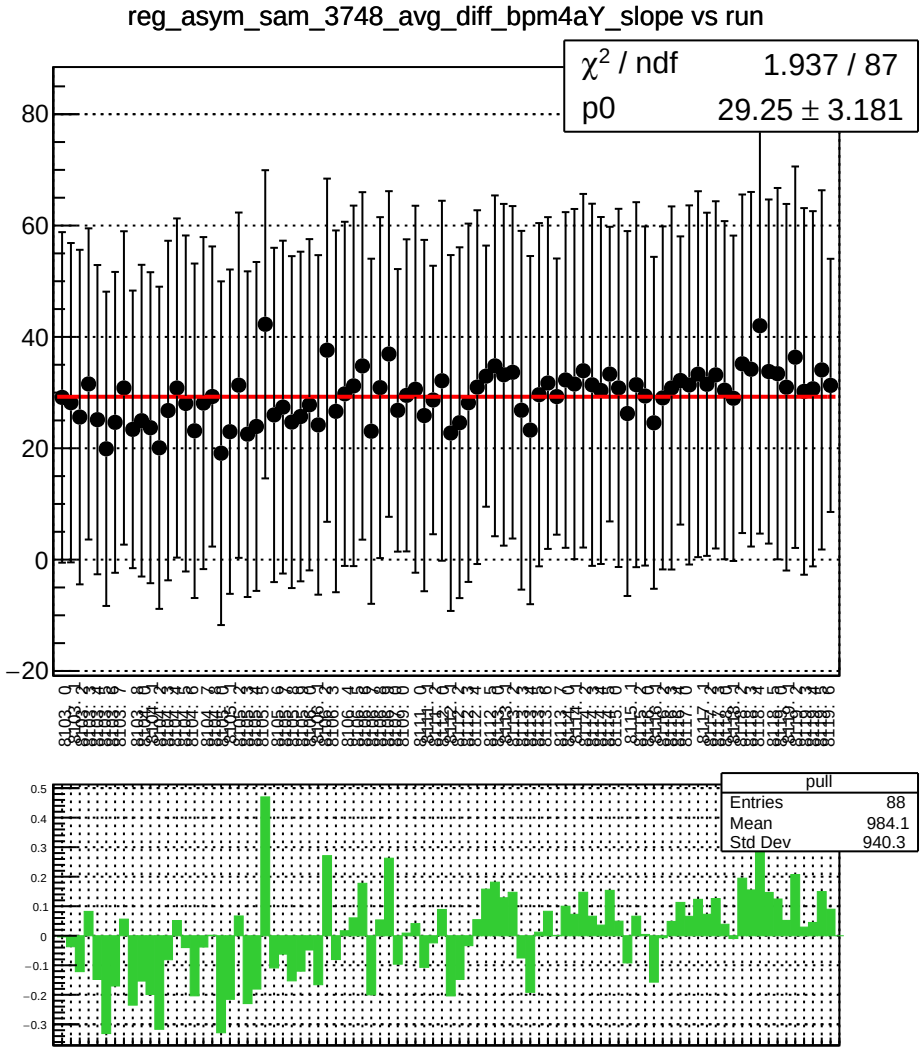

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.055 / 87
p0 −43.61 ± 1.209
pull
Entries 88
Mean 444.9
Std Dev 385.4
pull1D
Entries 88
Mean 0.001729
Std Dev 0.1528

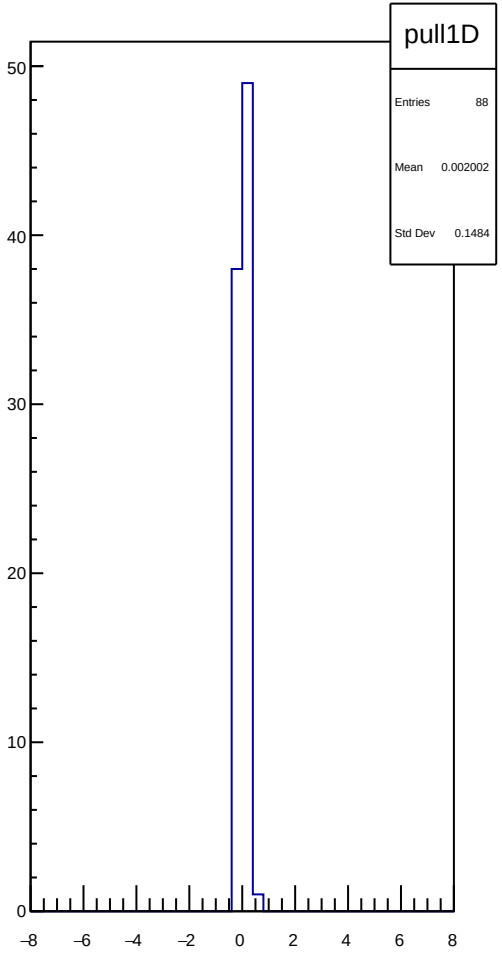

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.178 / 87
p0 44.55 ± 2.042
pull
Entries 88
Mean 3365
Std Dev 3320

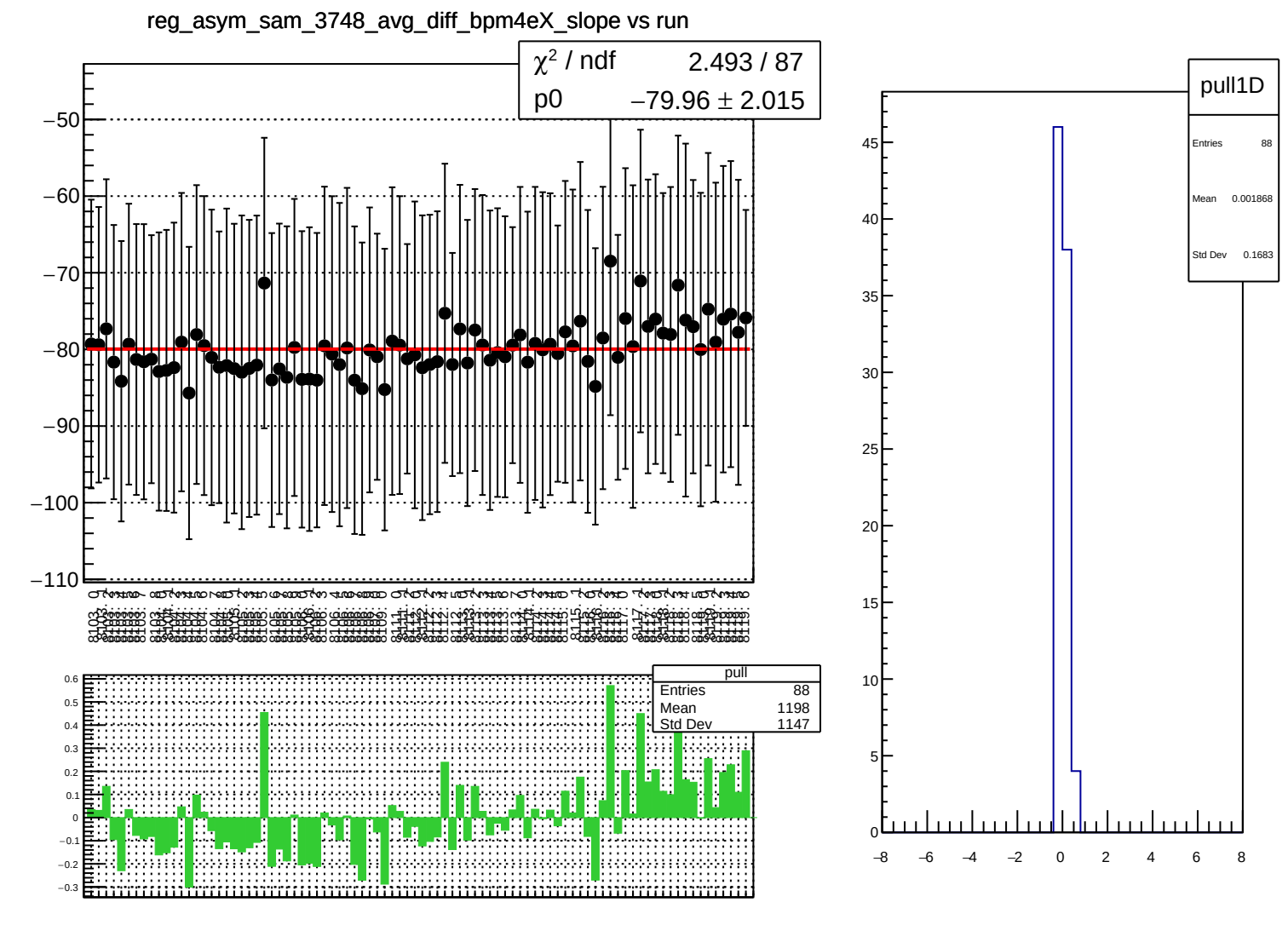

pull1D
Entries 88
Mean −0.001344
Std Dev 0.2426

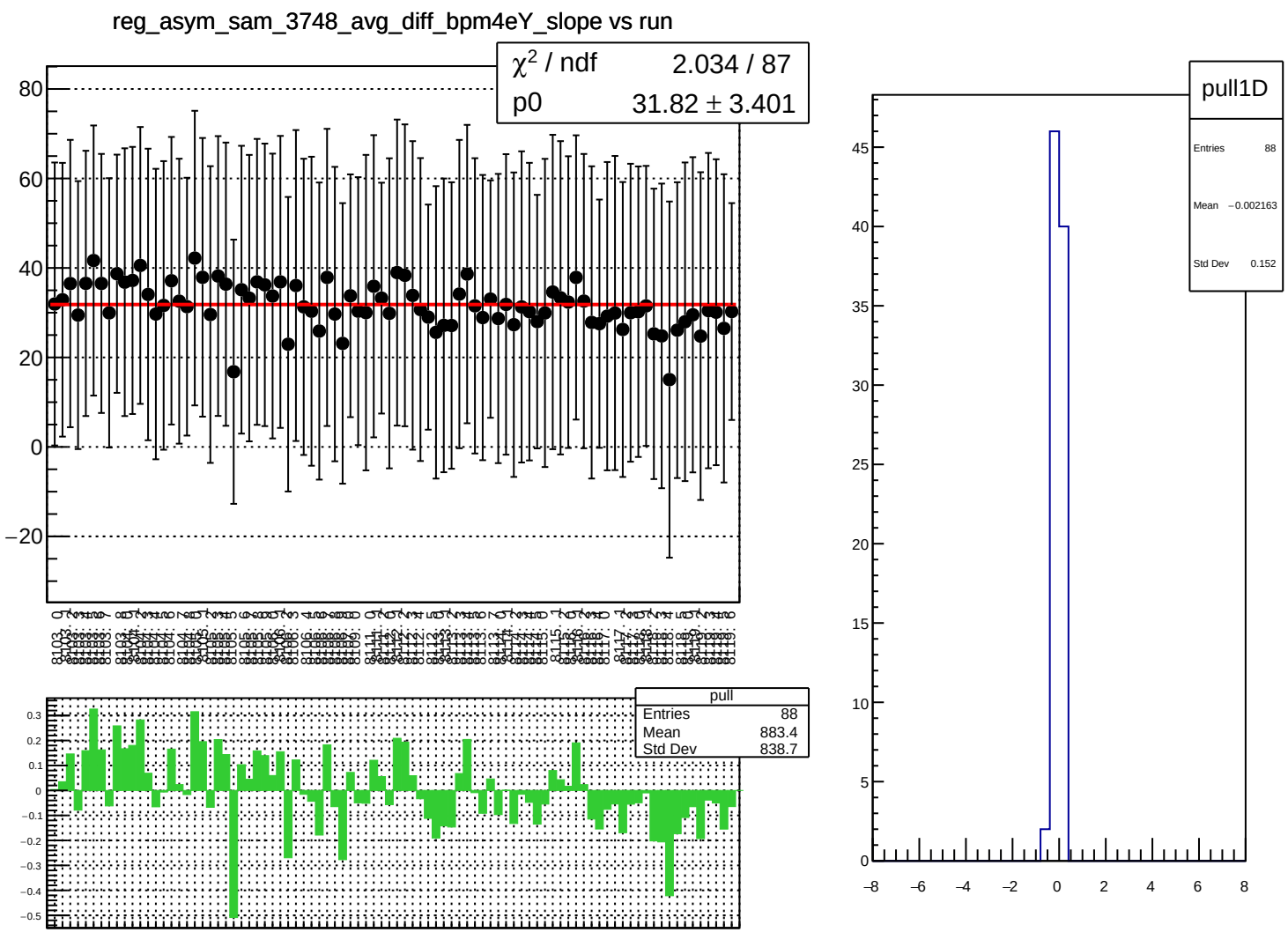

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 4.169 / 87
p0 −0.8471± 0.07663
pull
Entries 88
Mean −688.9
Std Dev 737.1
pull1D
Entries 88
Mean 0.004797
Std Dev 0.2176

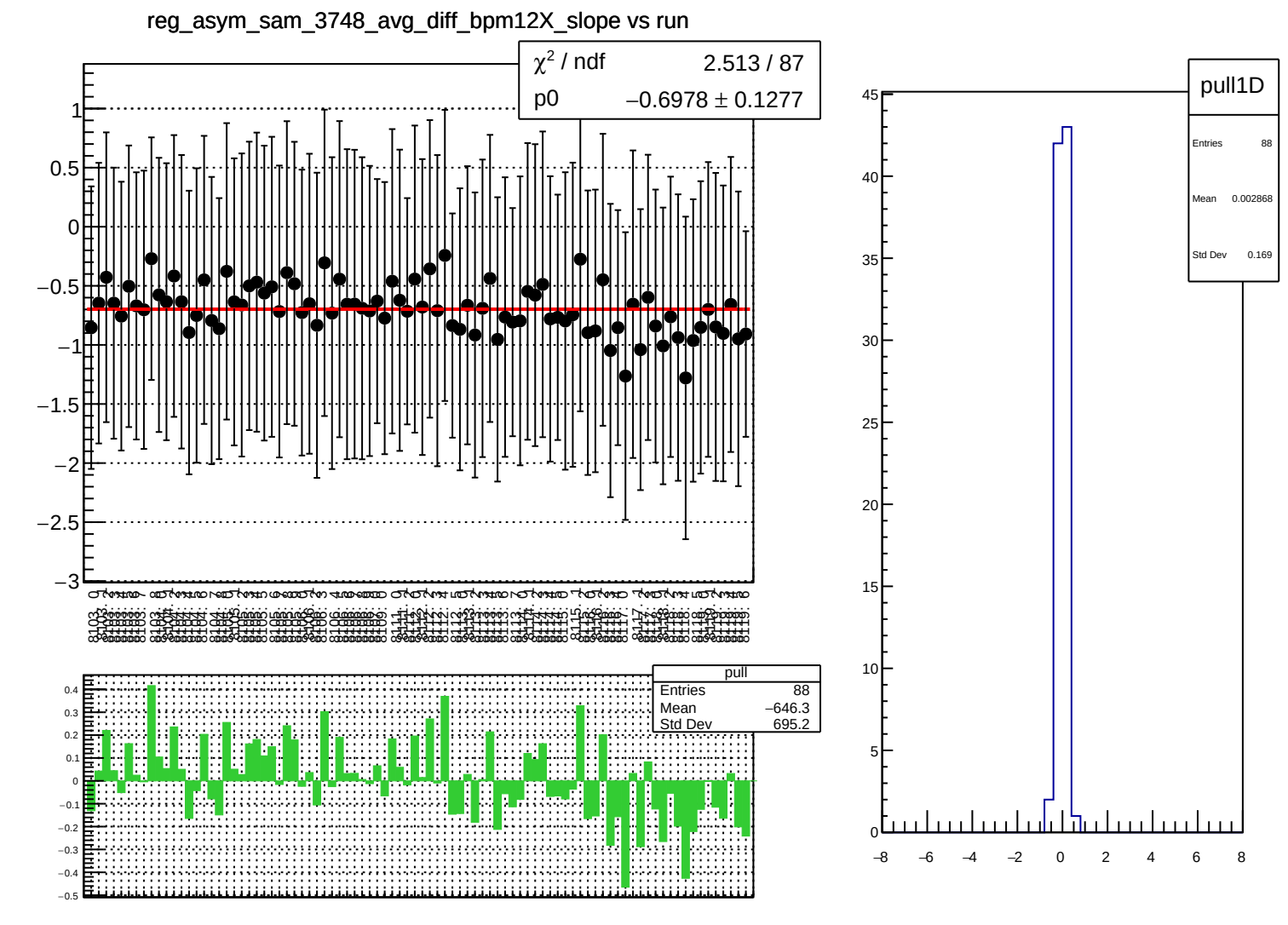

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 2.288 / 87
p0 −21.65 ± 2.119
pull
Entries 88
Mean 1438
Std Dev 1388
pull1D
Entries 88
Mean −0.001581
Std Dev 0.1612

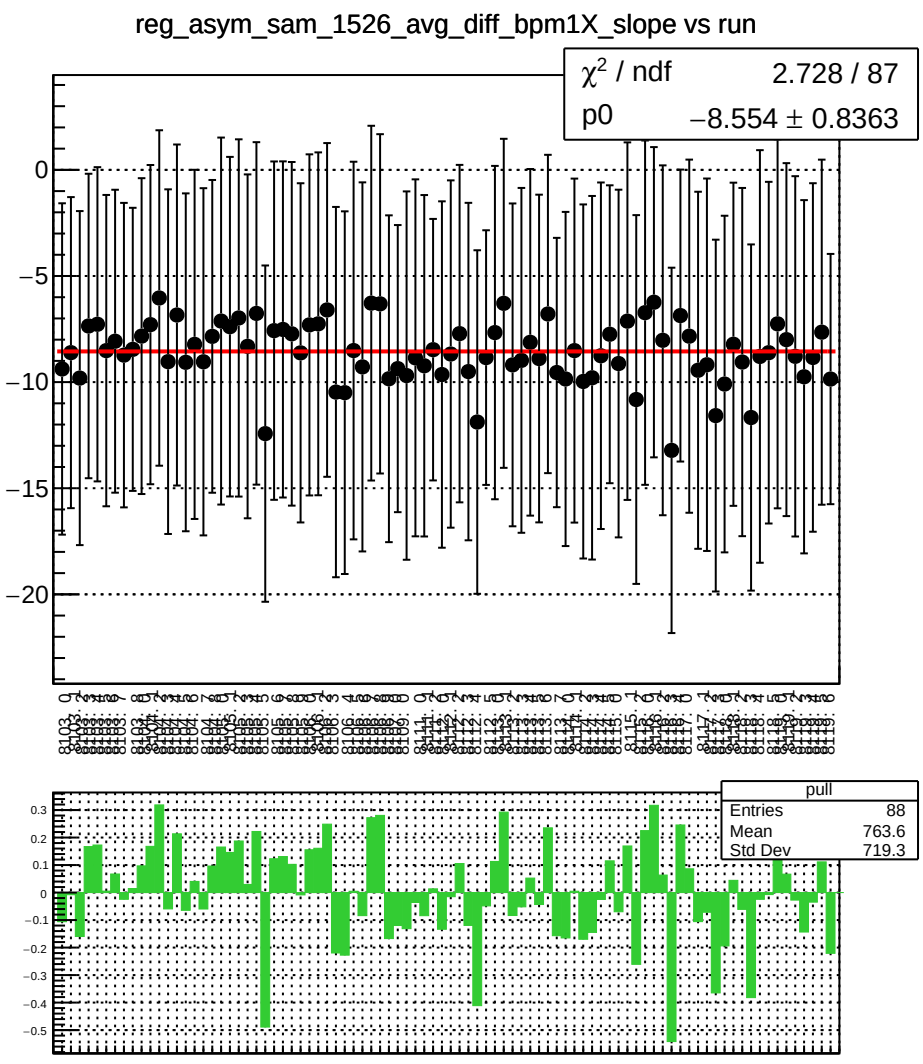

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.937 / 87
p0 29.25 ± 3.181
pull
Entries 88
Mean 984.1
Std Dev 940.3

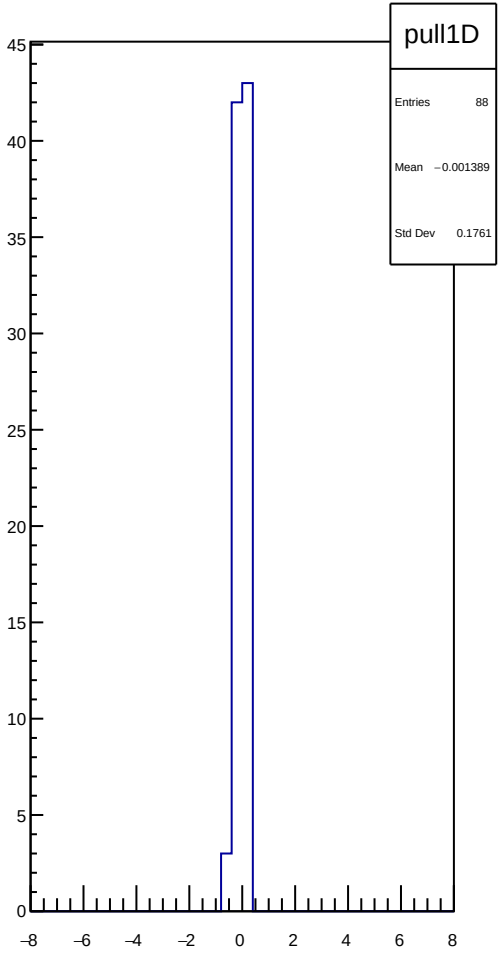

pull1D
Entries 88
Mean 0.002002
Std Dev 0.1484

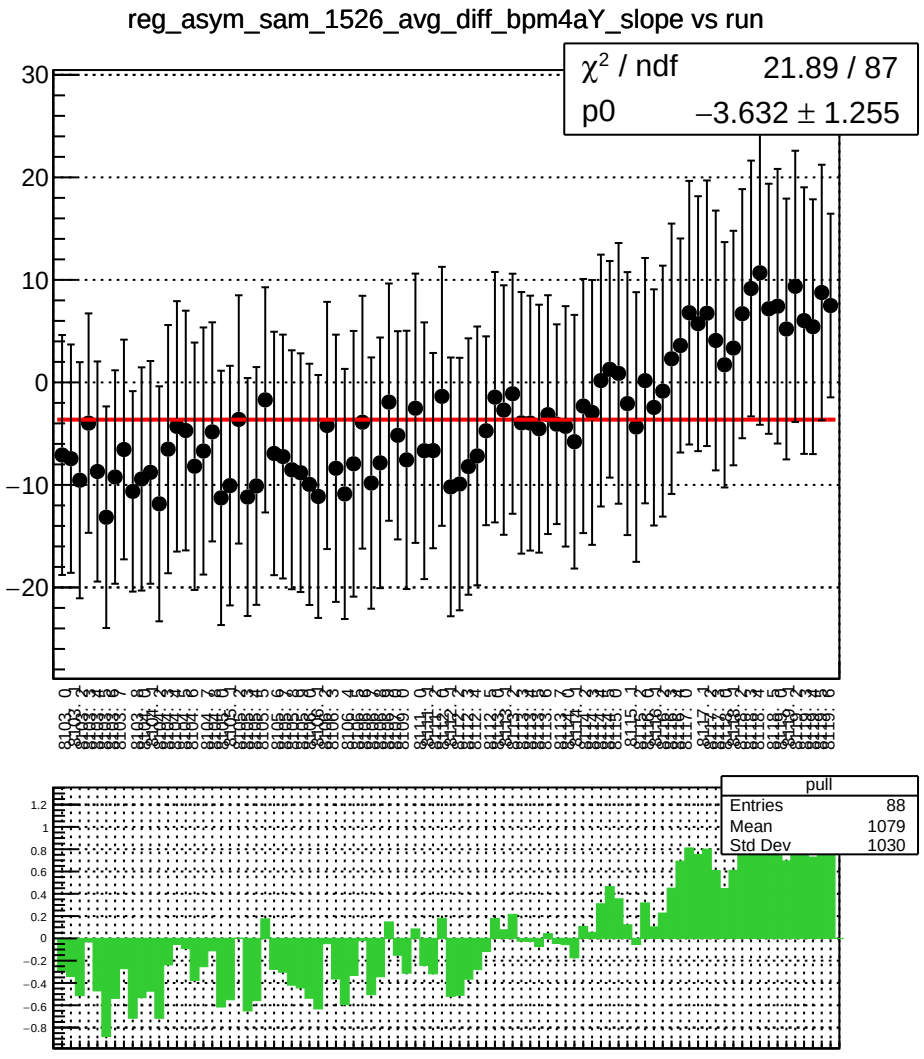

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.493 / 87
p0 −79.96 ± 2.015
pull
Entries 88
Mean 1198
Std Dev 1147
pull1D
Entries 88
Mean 0.001868
Std Dev 0.1683

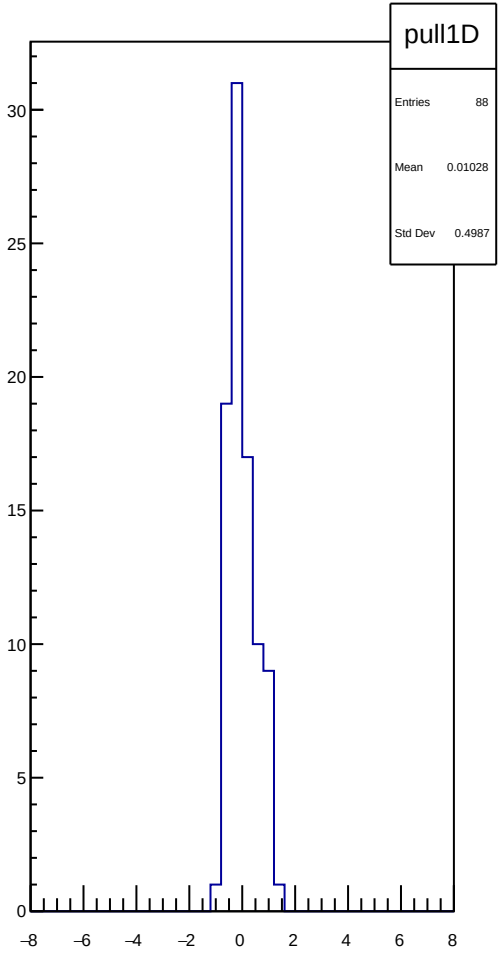

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.034 / 87
p0 31.82 ± 3.401
pull
Entries 88
Mean 883.4
Std Dev 838.7
pull1D
Entries 88
Mean −0.002163
Std Dev 0.152

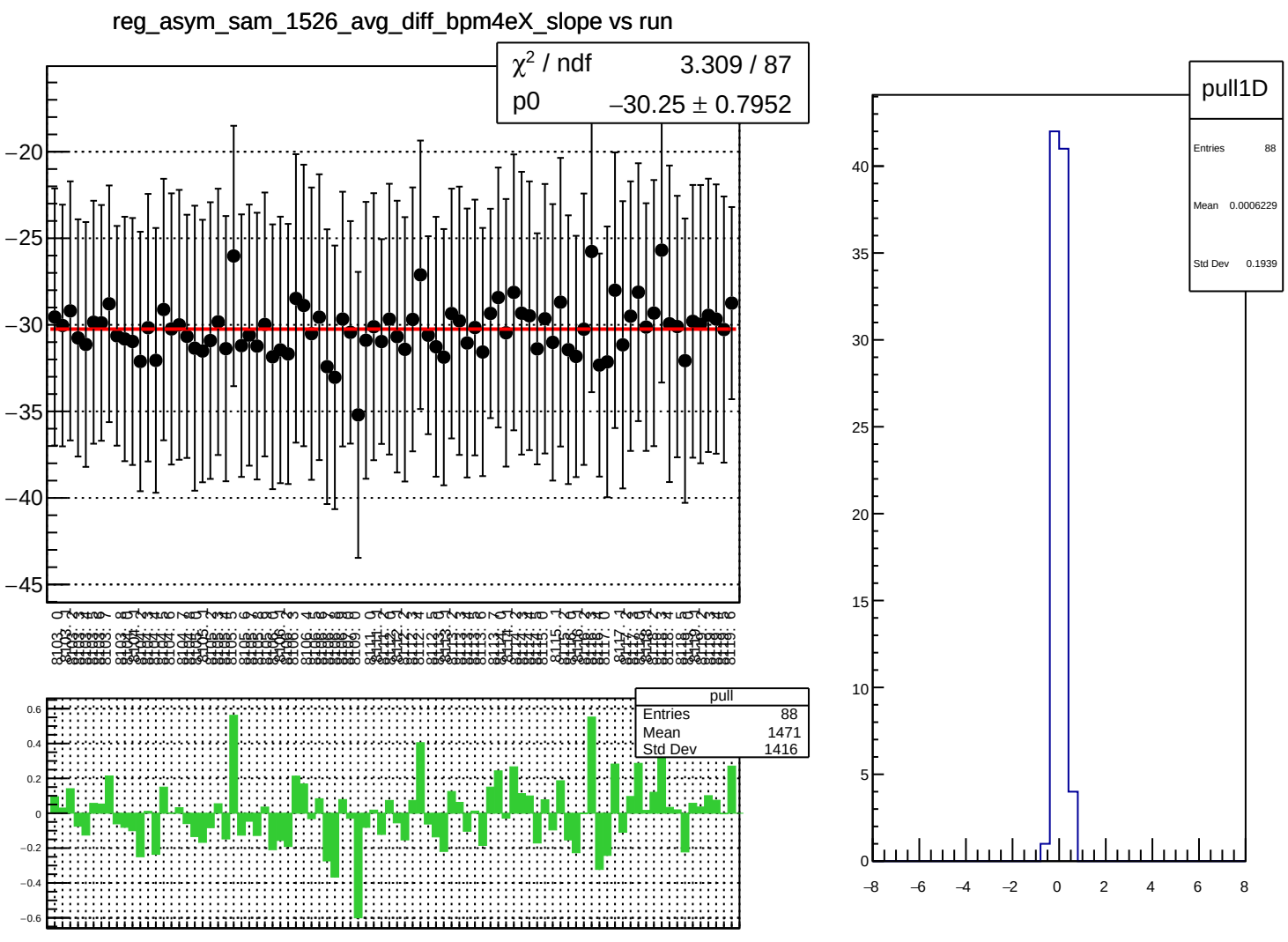

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 2.513 / 87
p0 −0.6978 ± 0.1277
pull
Entries 88
Mean −646.3
Std Dev 695.2
pull1D
Entries 88
Mean 0.002868
Std Dev 0.169

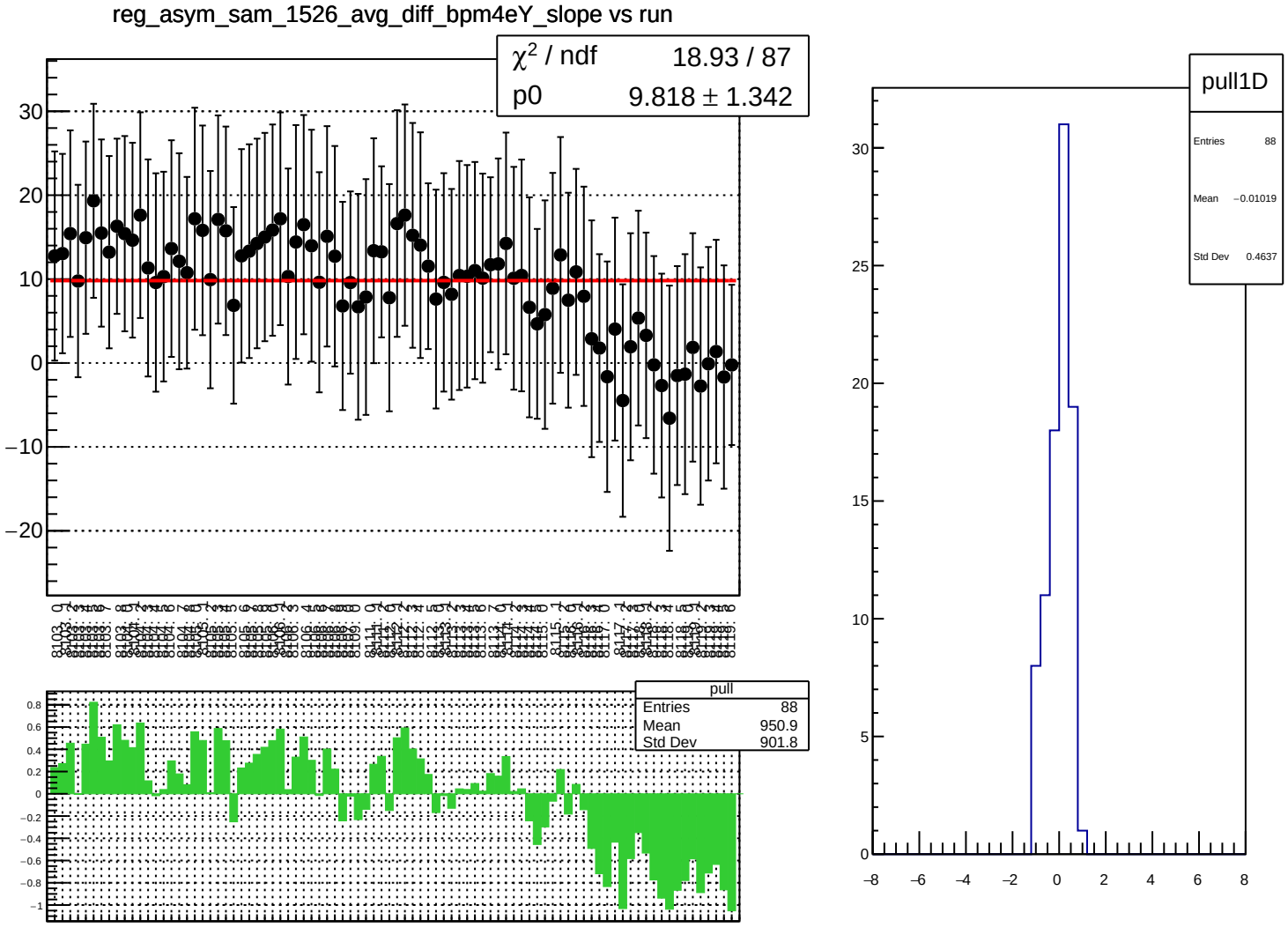

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 2.728 / 87
p0 −8.554 ± 0.8363
pull
Entries 88
Mean 763.6
Std Dev 719.3

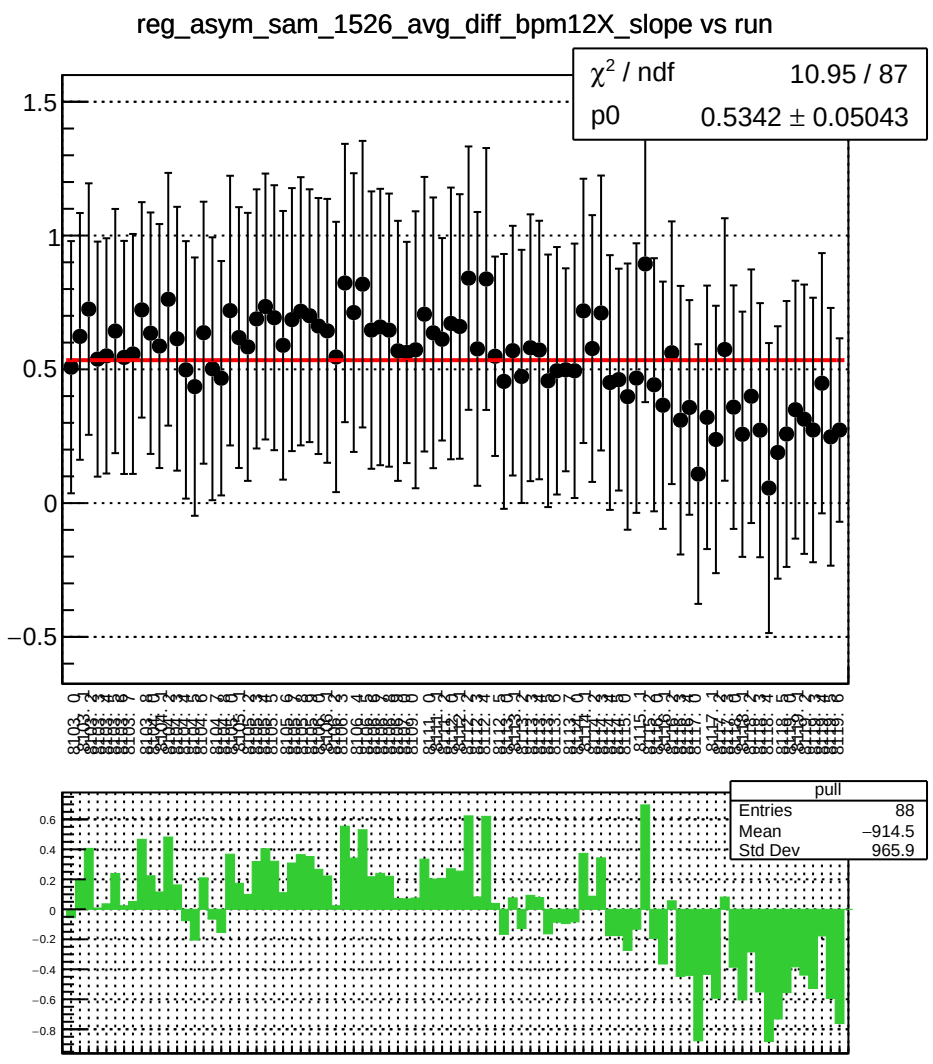

pull1D
Entries 88
Mean −0.001389
Std Dev 0.1761

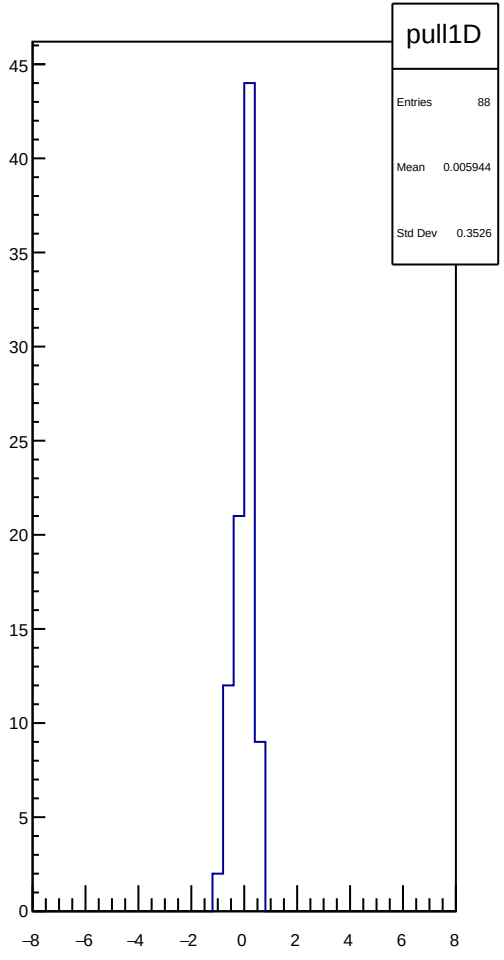

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 21.89 / 87
p0 −3.632 ± 1.255
pull
Entries 88
Mean 1079
Std Dev 1030

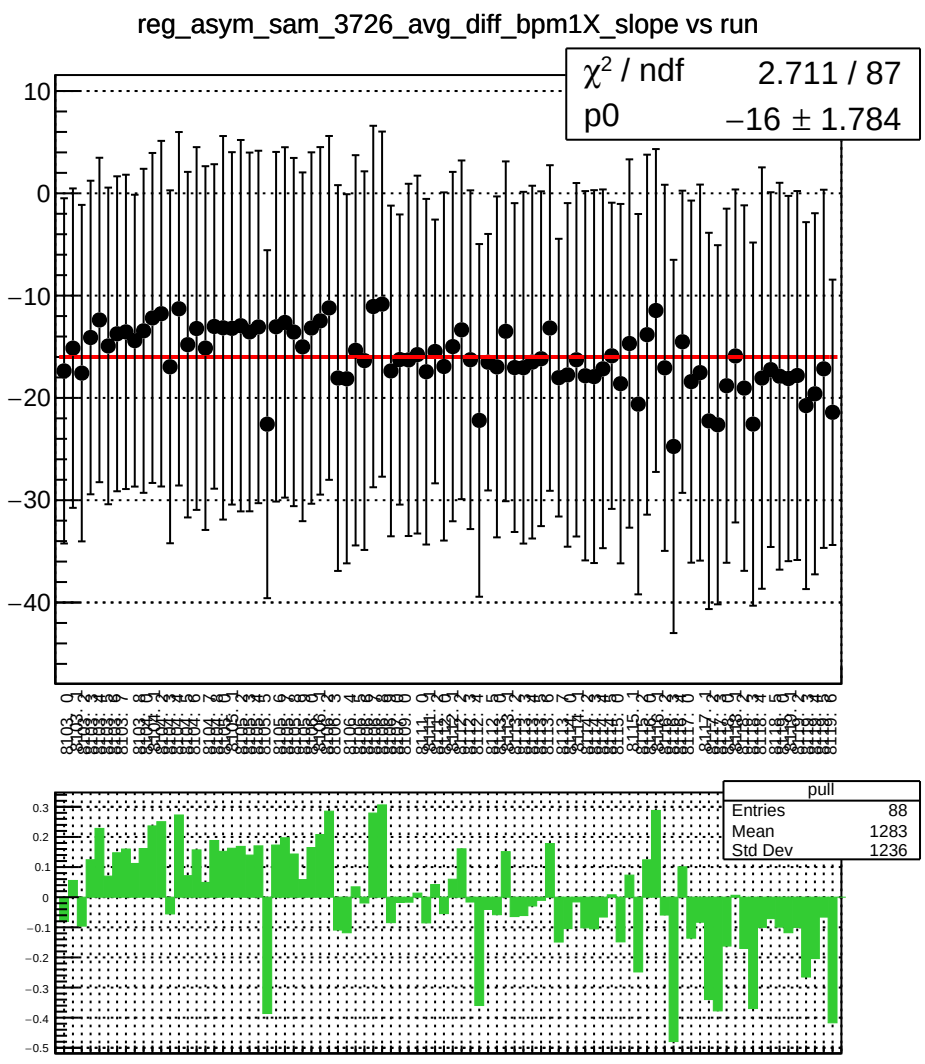

pull1D
Entries 88
Mean 0.01028
Std Dev 0.4987

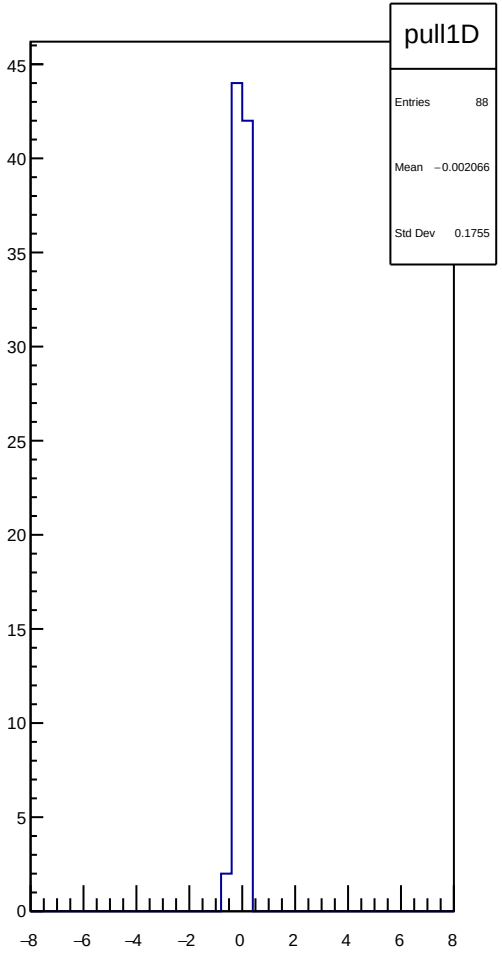

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.309 / 87
p0 −30.25 ± 0.7952
pull
Entries 88
Mean 1471
Std Dev 1416
pull1D
Entries 88
Mean 0.0006229
Std Dev 0.1939

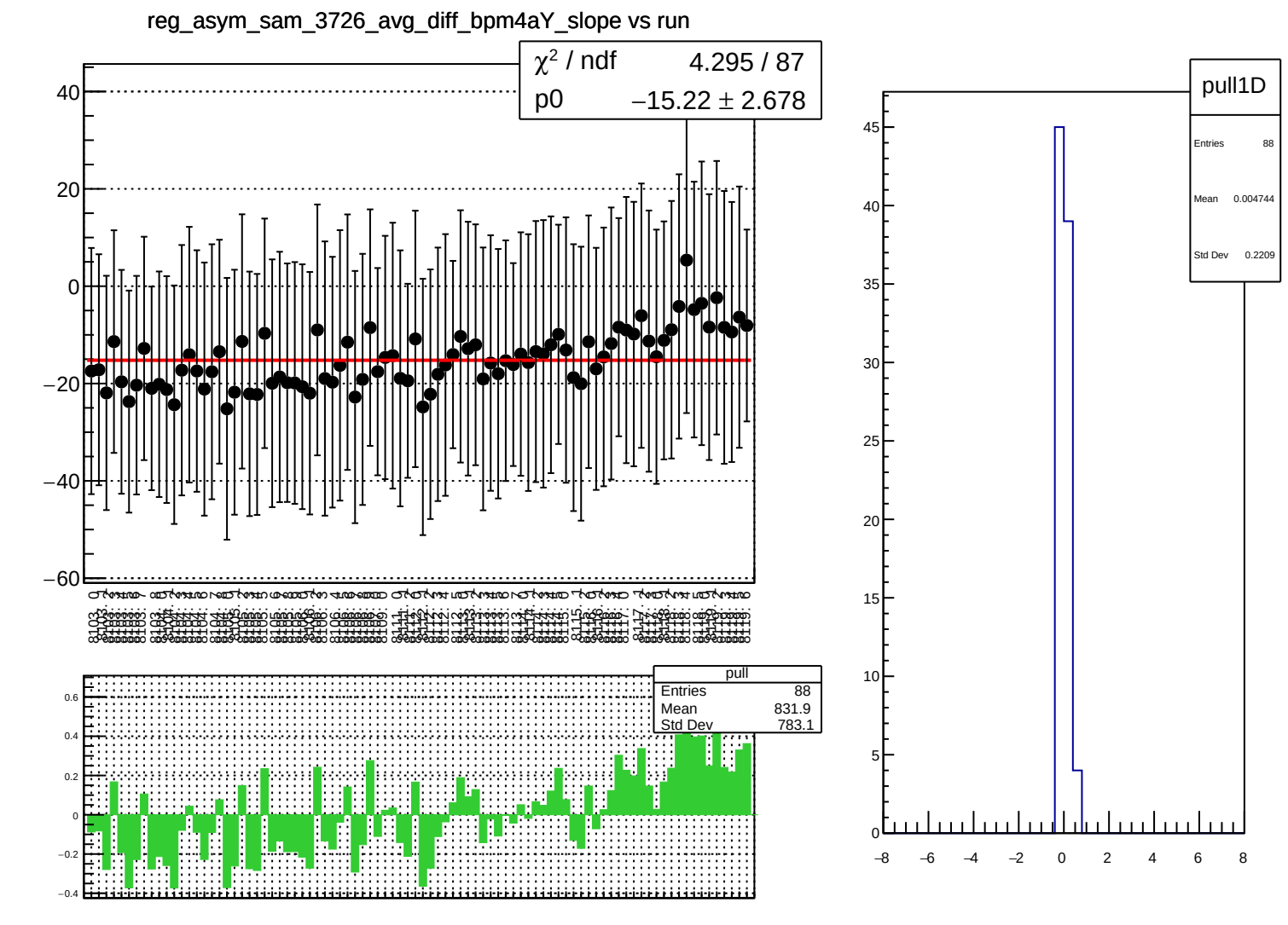

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 18.93 / 87
p0 9.818 ± 1.342
pull
Entries 88
Mean 950.9
Std Dev 901.8
pull1D
Entries 88
Mean −0.01019
Std Dev 0.4637

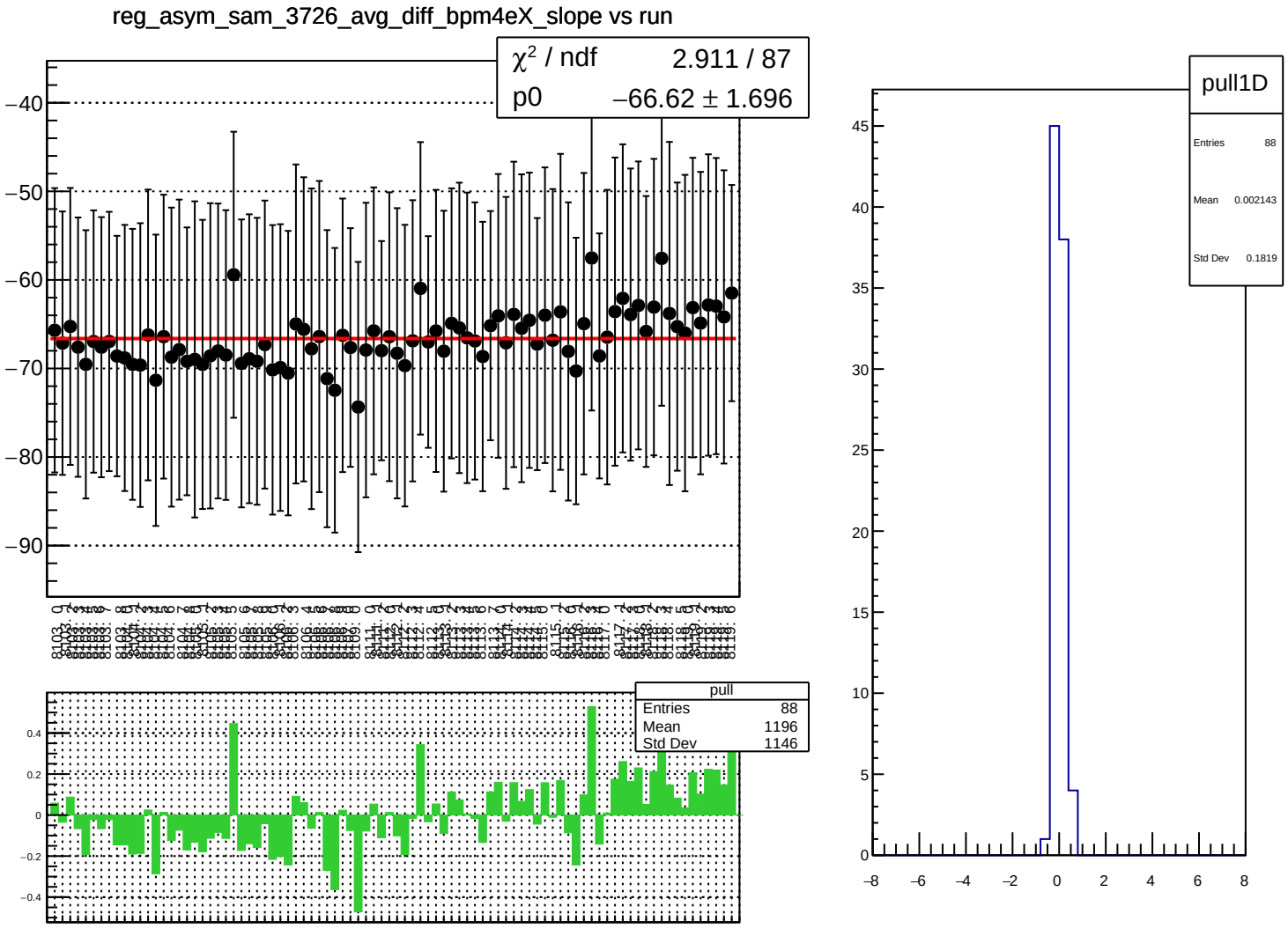

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 10.95 / 87
p0 0.5342 ± 0.05043
1.5
1
0.5
0
−0.5
pull
Entries 88
Mean −914.5
Std Dev 965.9
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

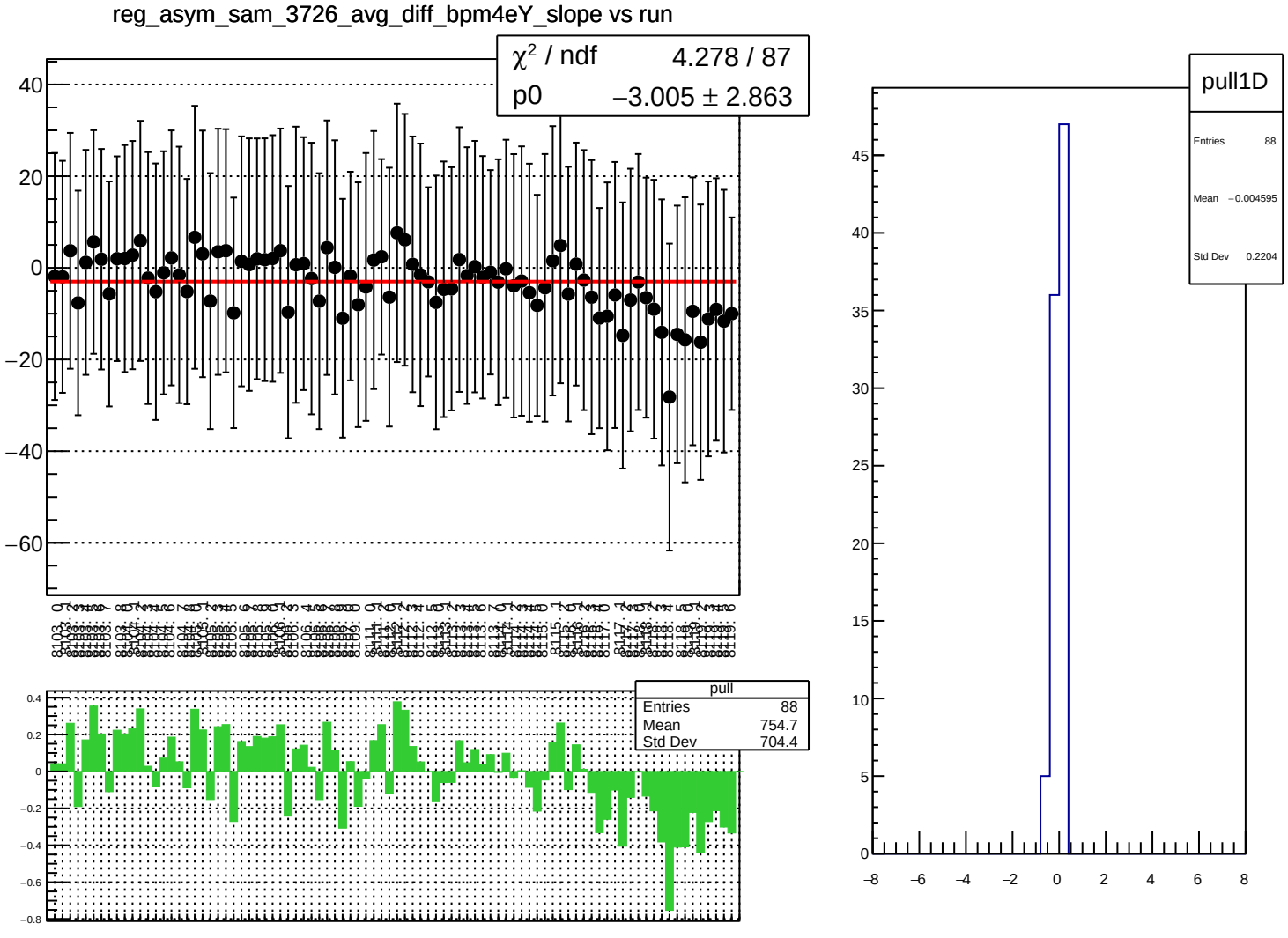

pull1D
Entries 88
Mean 0.005944
Std Dev 0.3526
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

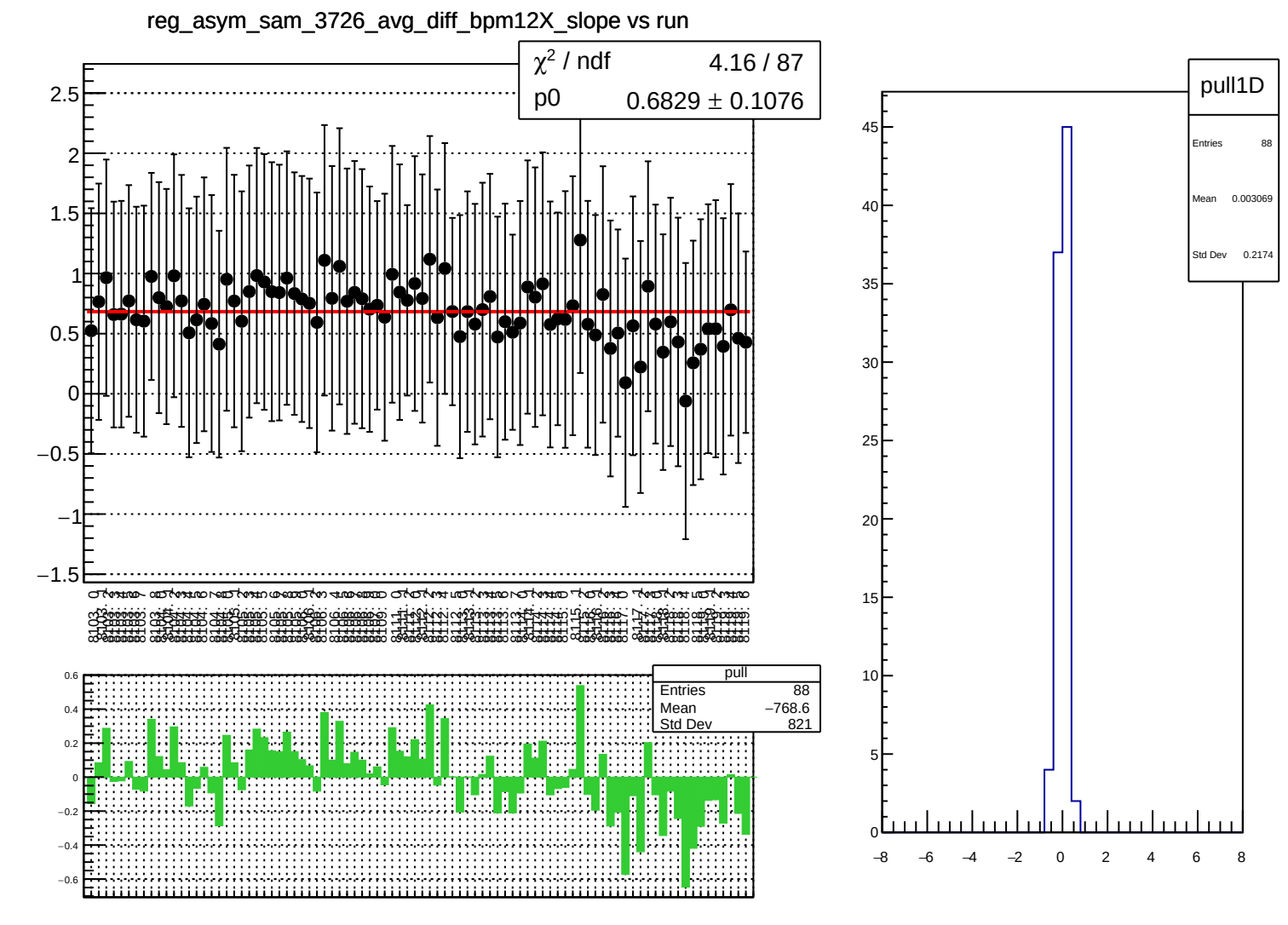

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 2.711 / 87
p0 −16 ± 1.784
pull
Entries 88
Mean 1283
Std Dev 1236

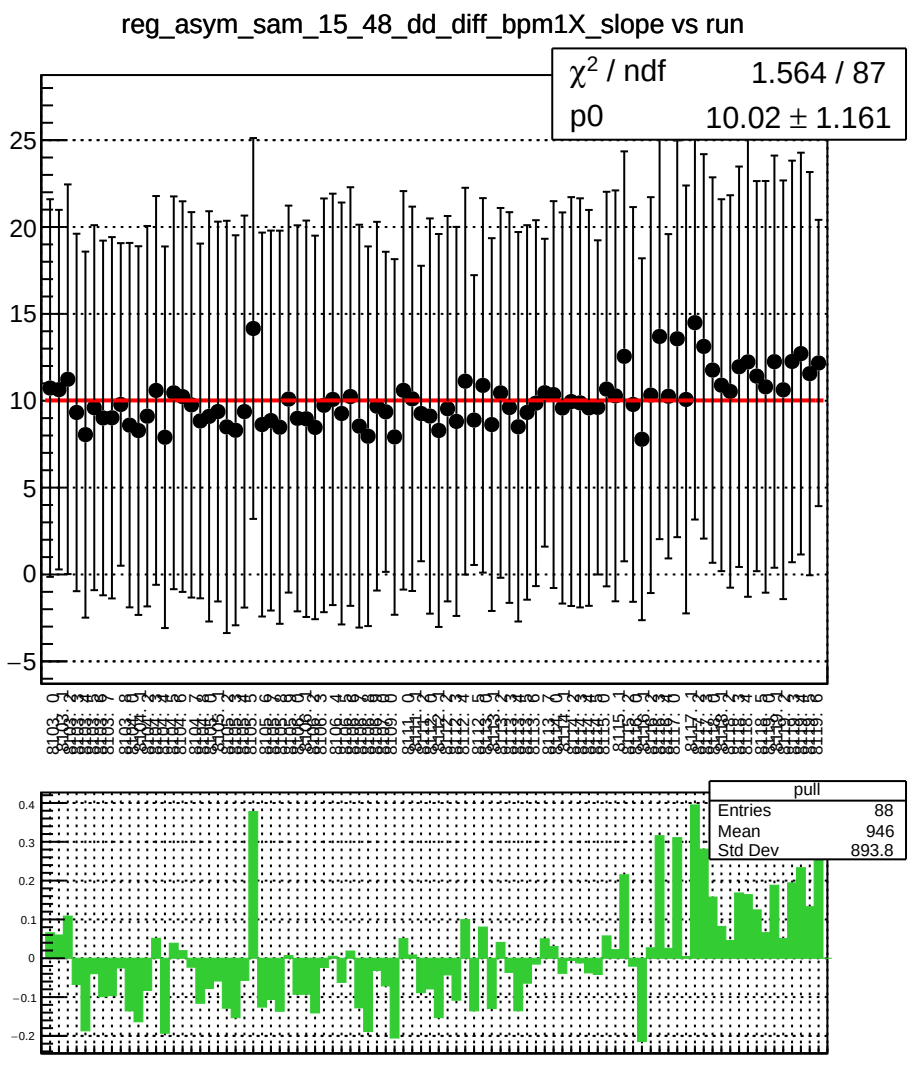

pull1D
Entries 88
Mean −0.002066
Std Dev 0.1755

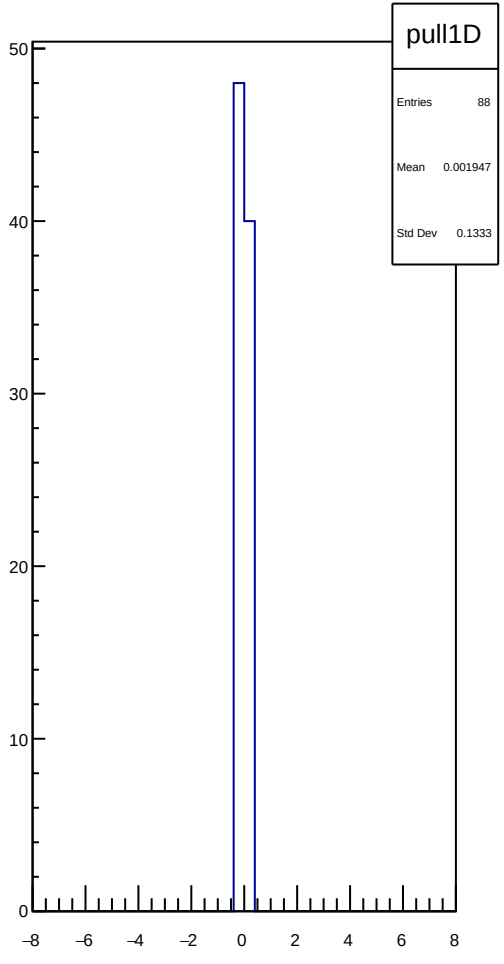

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.295 / 87
p0 −15.22 ± 2.678
pull
Entries 88
Mean 831.9
Std Dev 783.1
pull1D
Entries 88
Mean 0.004744
Std Dev 0.2209

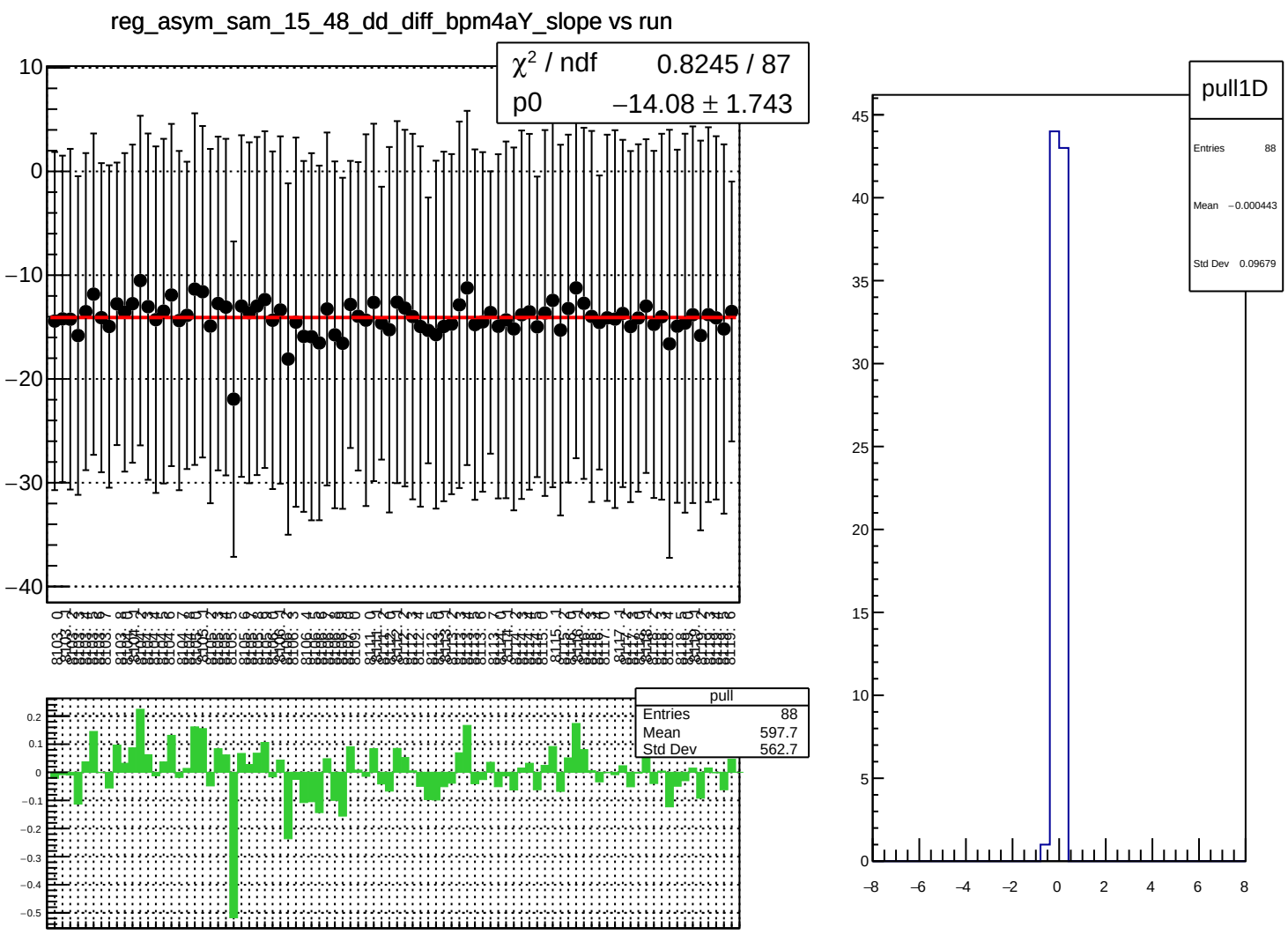

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.911 / 87
p0 −66.62 ± 1.696
pull
Entries 88
Mean 1196
Std Dev 1146
pull1D
Entries 88
Mean 0.002143
Std Dev 0.1819

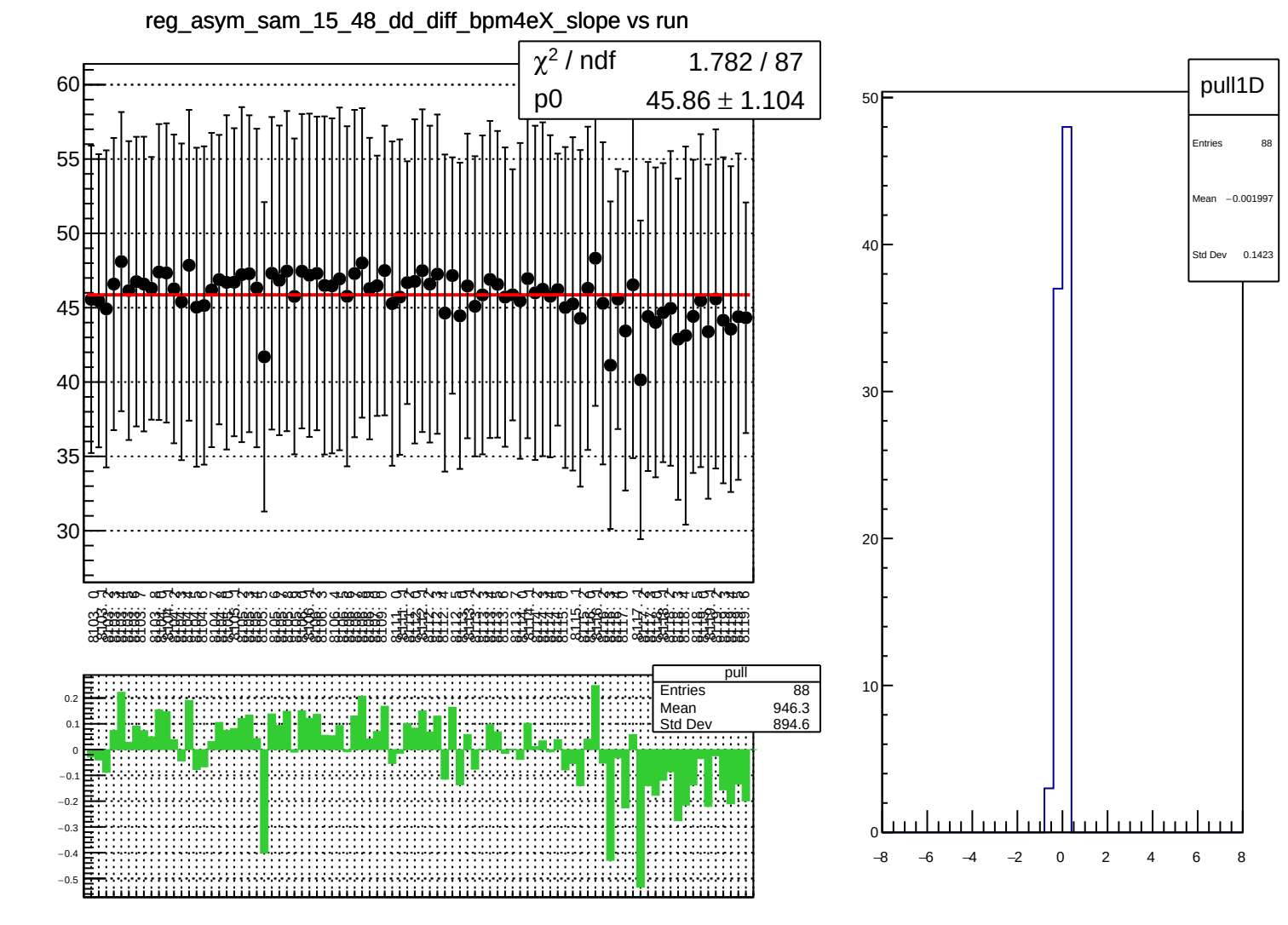

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.278 / 87
p0 −3.005 ± 2.863
pull
Entries 88
Mean 754.7
Std Dev 704.4
pull1D
Entries 88
Mean −0.004595
Std Dev 0.2204

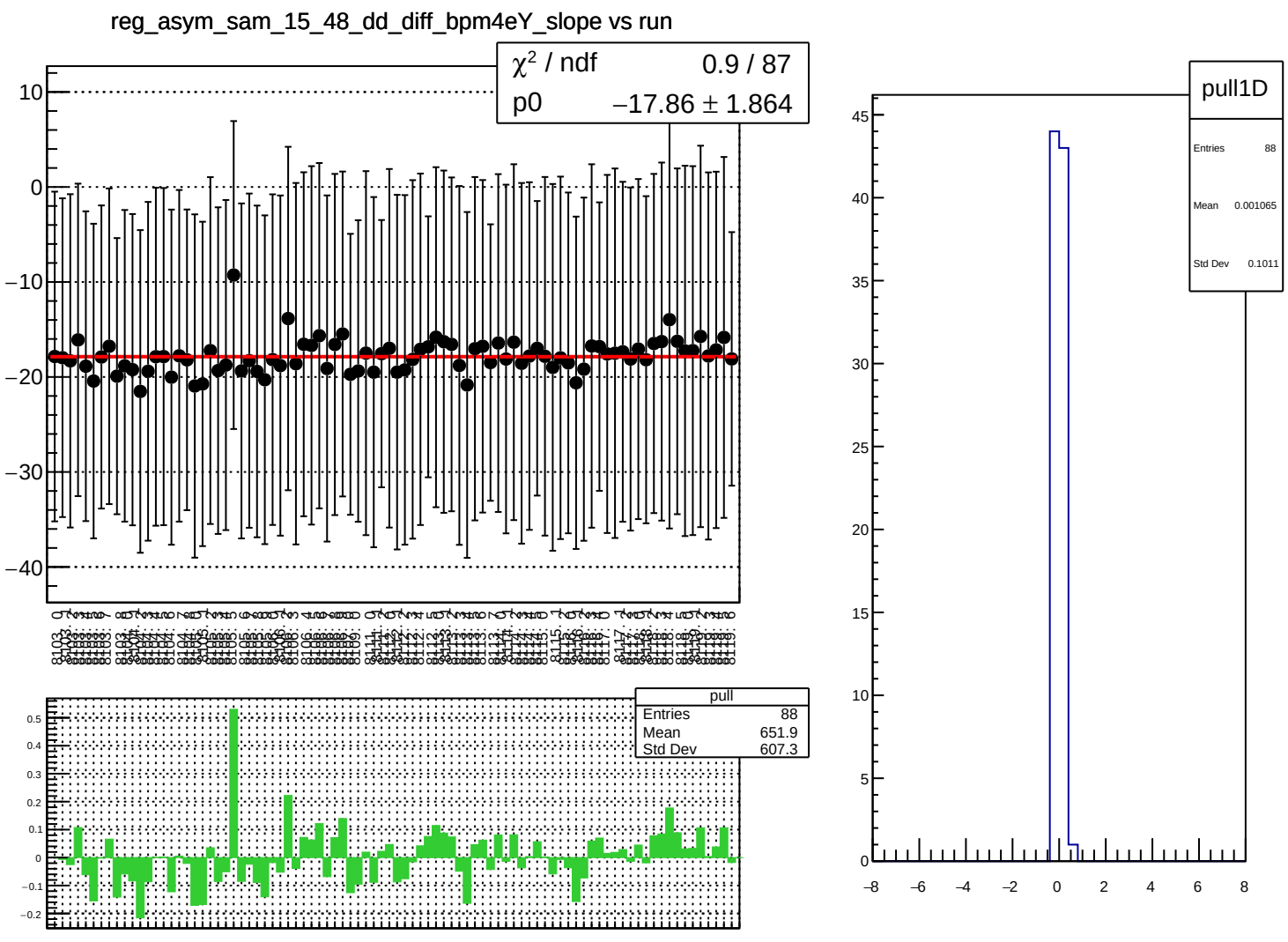

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 4.16 / 87
p0 0.6829 ± 0.1076
pull
Entries 88
Mean −768.6
Std Dev 821
pull1D
Entries 88
Mean 0.003069
Std Dev 0.2174

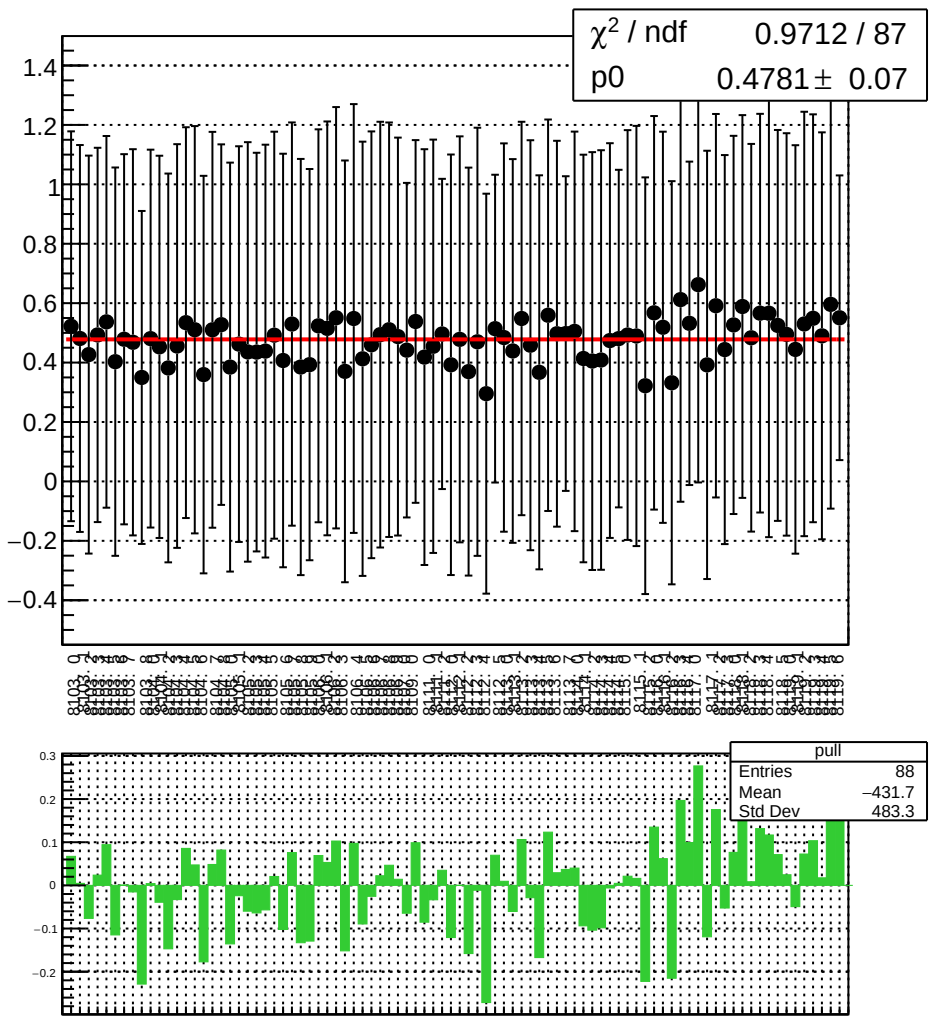

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.564 / 87
p0 10.02 ± 1.161
pull
Entries 88
Mean 946
Std Dev 893.8

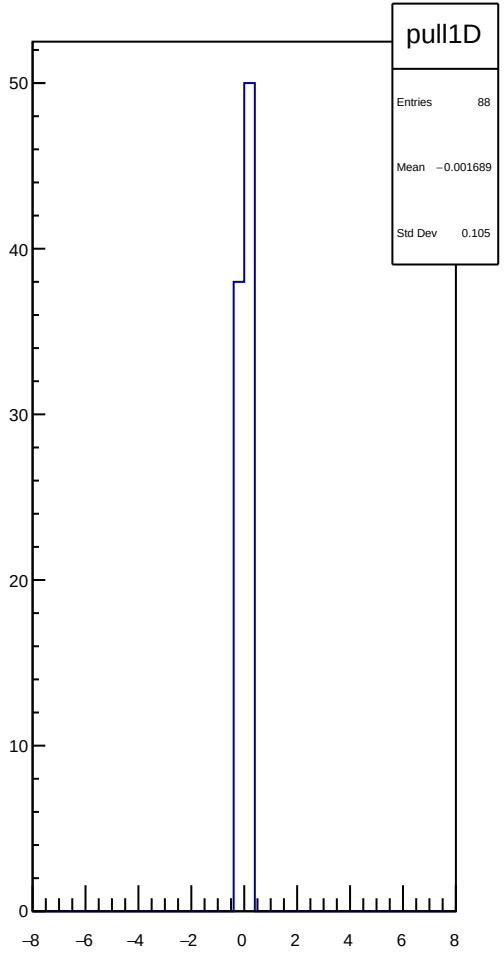

pull1D
Entries 88
Mean 0.001947
Std Dev 0.1333

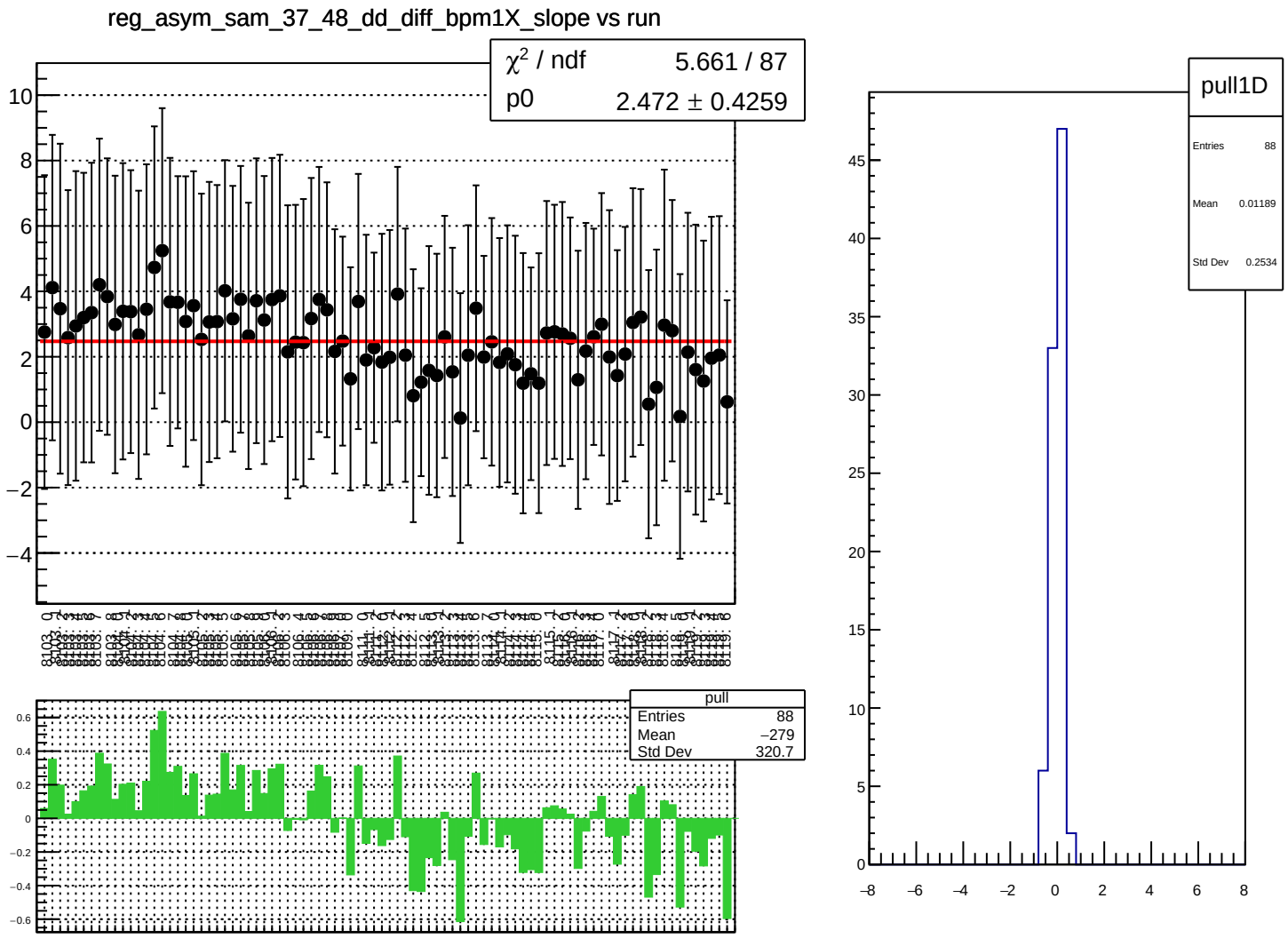

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.8245 / 87
p0 −14.08 ± 1.743
pull
Entries 88
Mean 597.7
Std Dev 562.7
pull1D
Entries 88
Mean −0.000443
Std Dev 0.09679

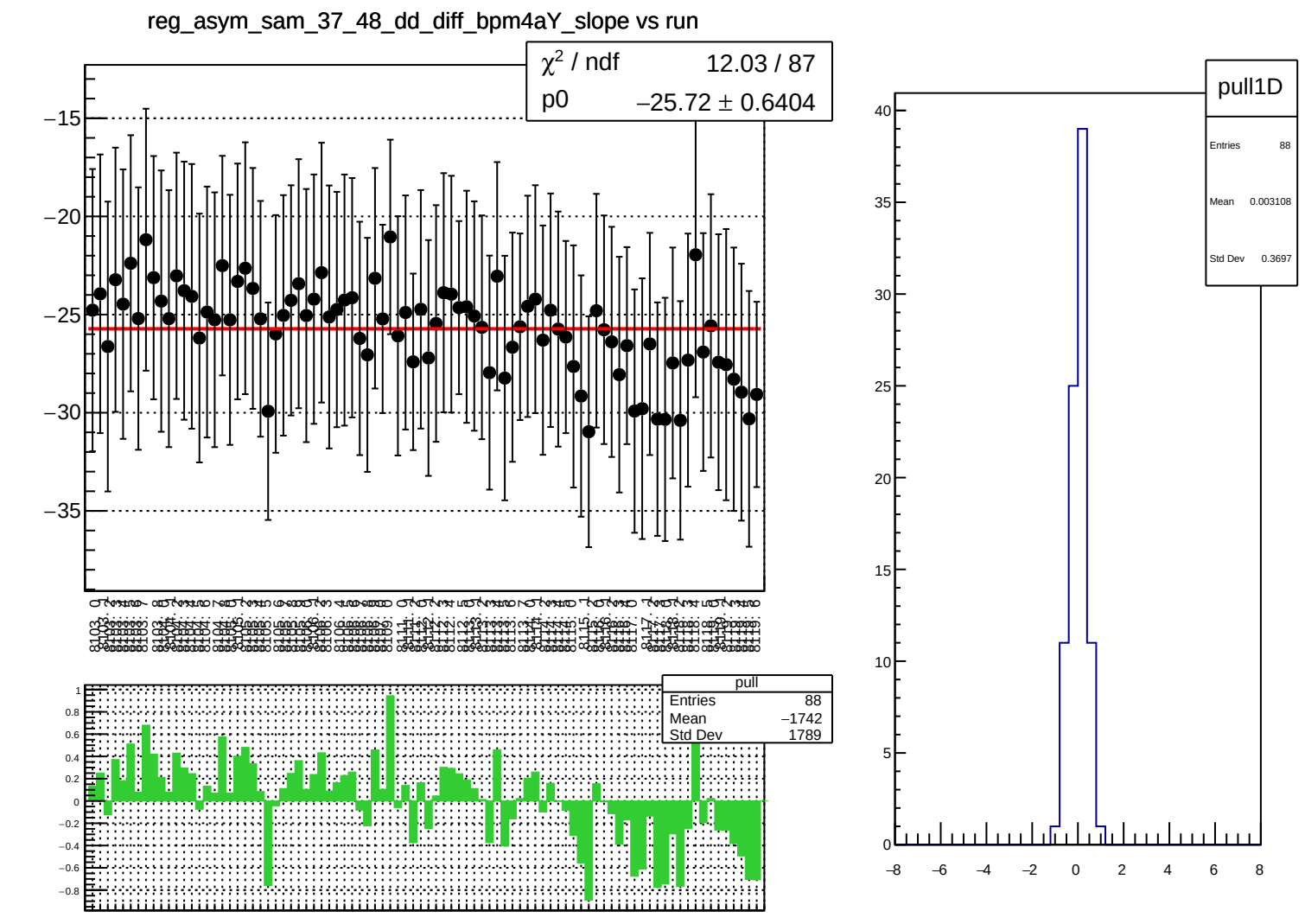

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.782 / 87
p0 45.86 ± 1.104
pull
Entries 88
Mean 946.3
Std Dev 894.6
pull1D
Entries 88
Mean −0.001997
Std Dev 0.1423

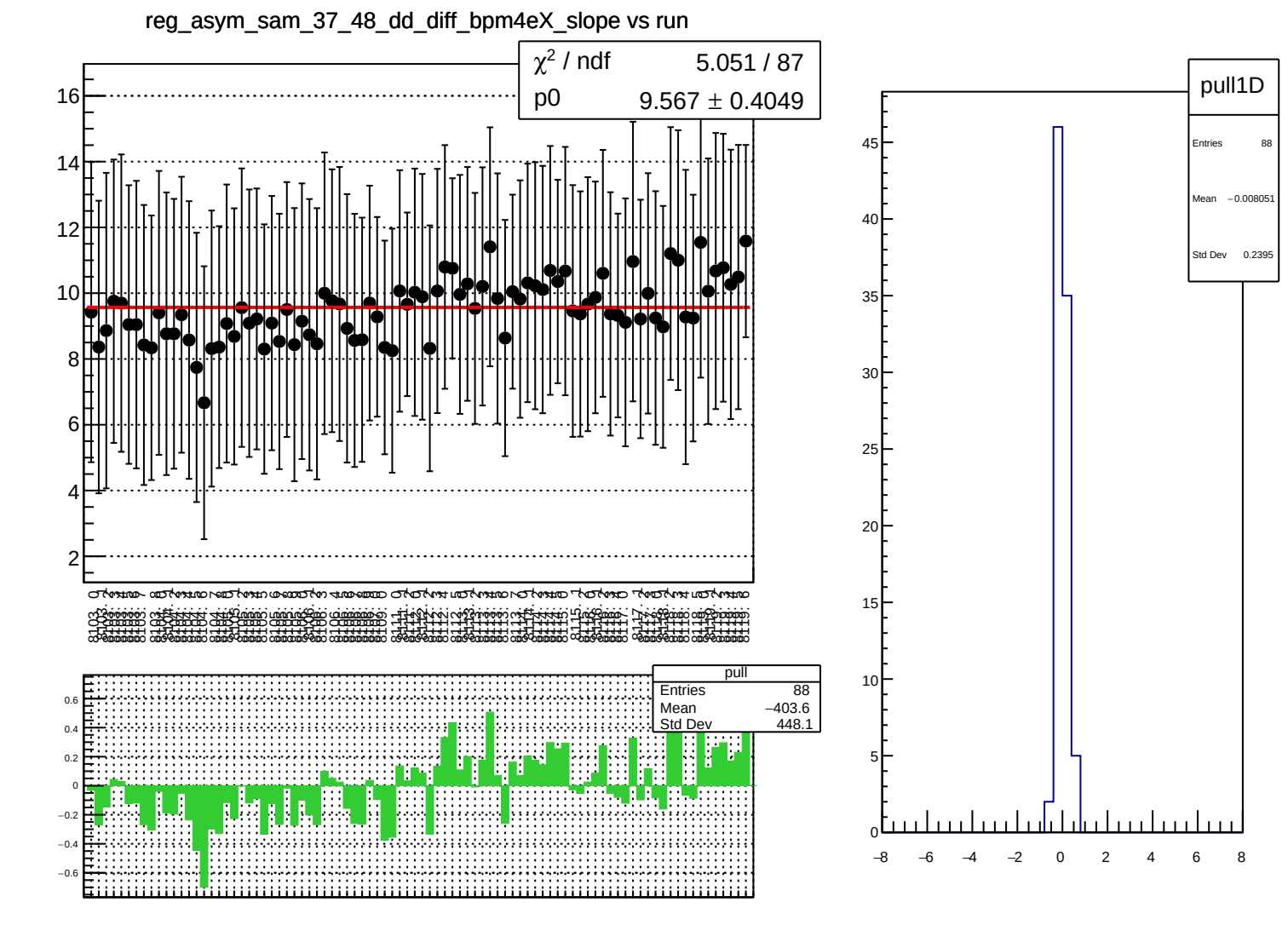

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.9 / 87
p0 −17.86 ± 1.864
pull
Entries 88
Mean 651.9
Std Dev 607.3
pull1D
Entries 88
Mean 0.001065
Std Dev 0.1011

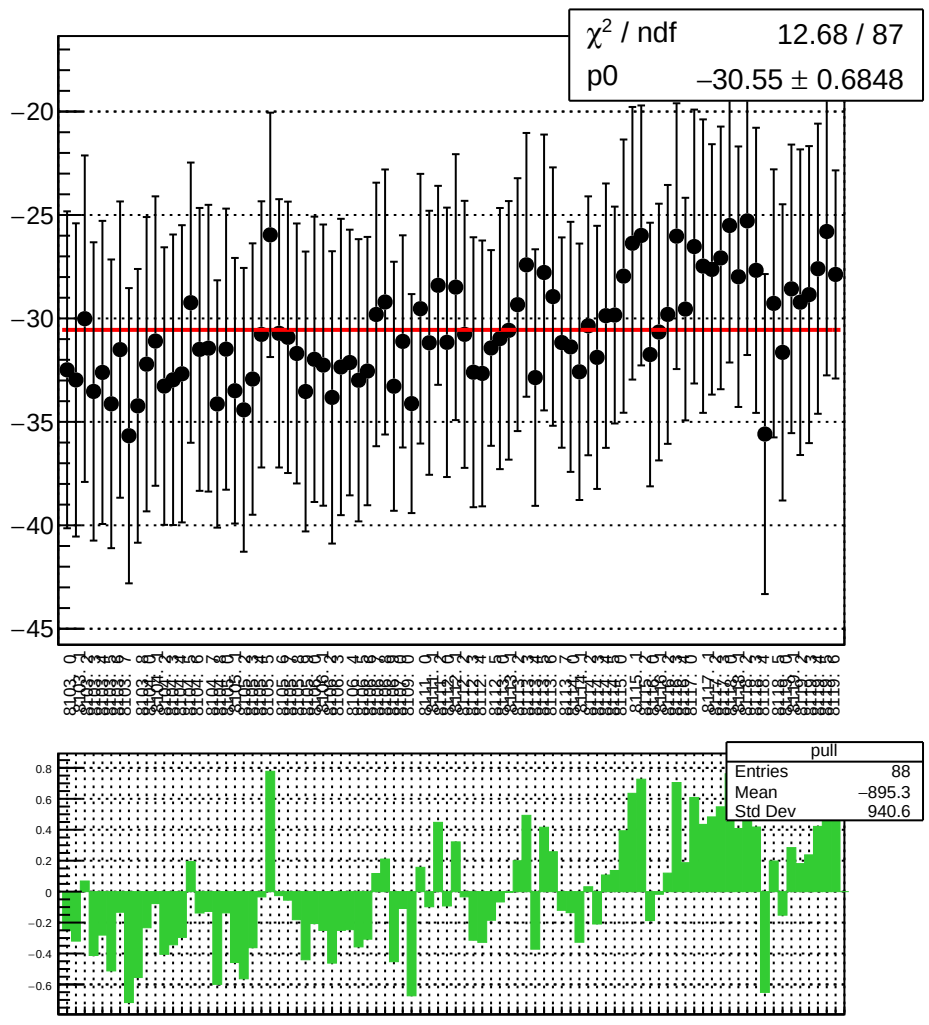

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 0.9712 / 87
p0 0.4781 ± 0.07
pull
Entries 88
Mean −431.7
Std Dev 483.3

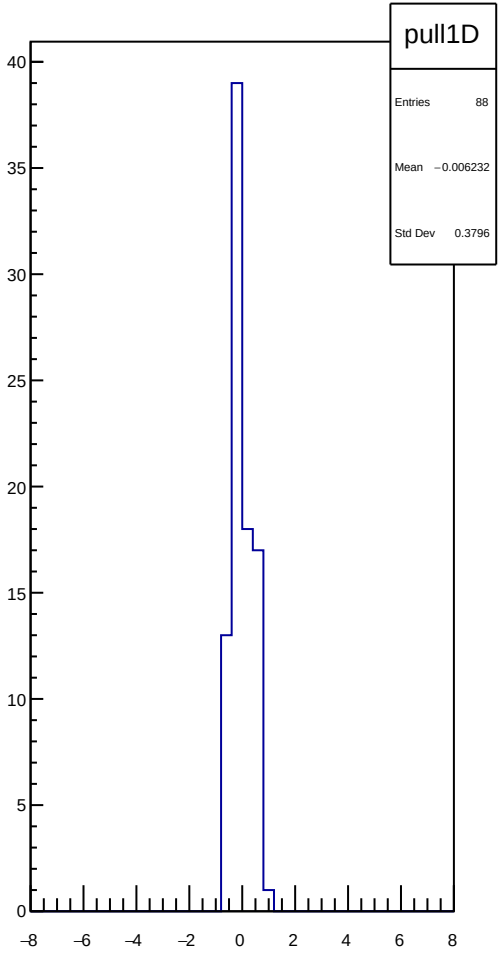

pull1D
Entries 88
Mean −0.001689
Std Dev 0.105

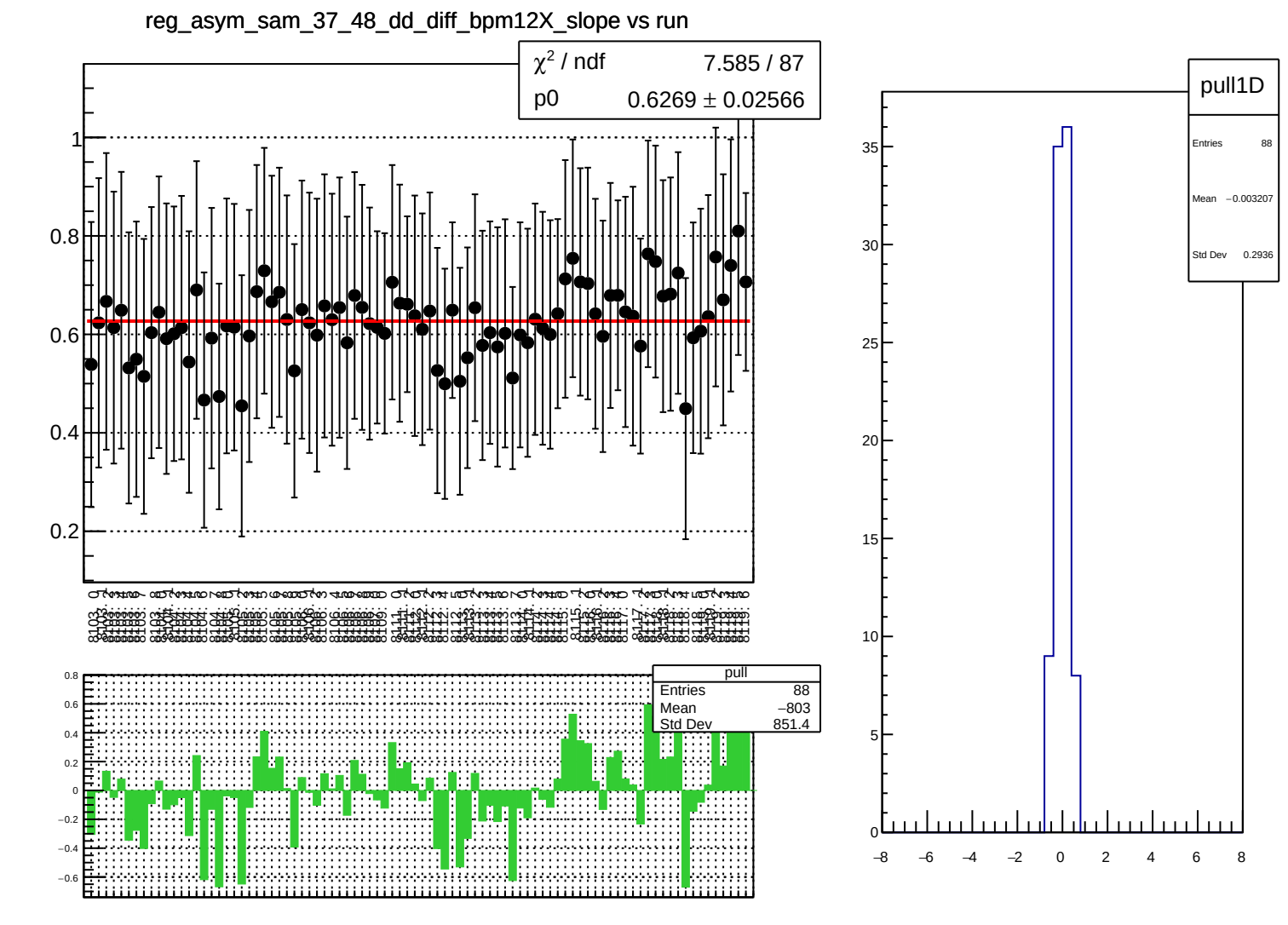

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 5.661 / 87
p0 2.472 ± 0.4259
pull
Entries 88
Mean −279
Std Dev 320.7
pull1D
Entries 88
Mean 0.01189
Std Dev 0.2534

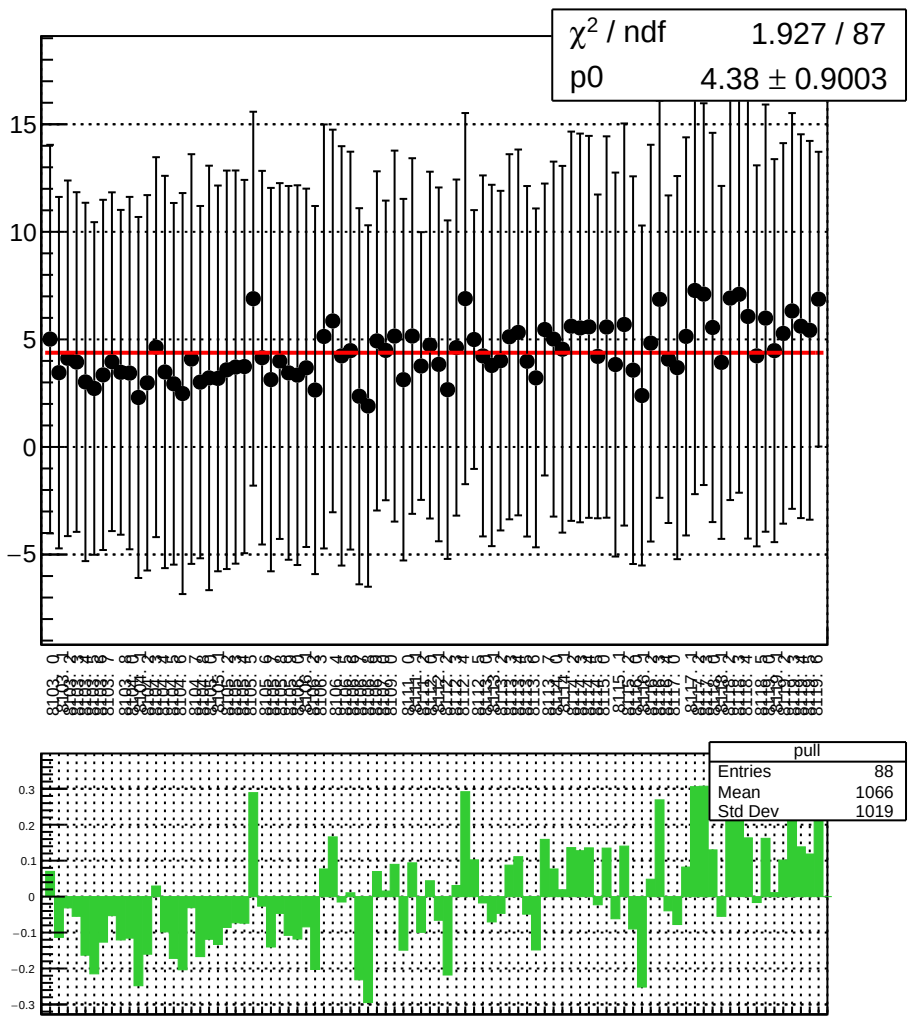

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 12.03 / 87
p0 −25.72 ± 0.6404
pull
Entries 88
Mean −1742
Std Dev 1789
pull1D
Entries 88
Mean 0.003108
Std Dev 0.3697

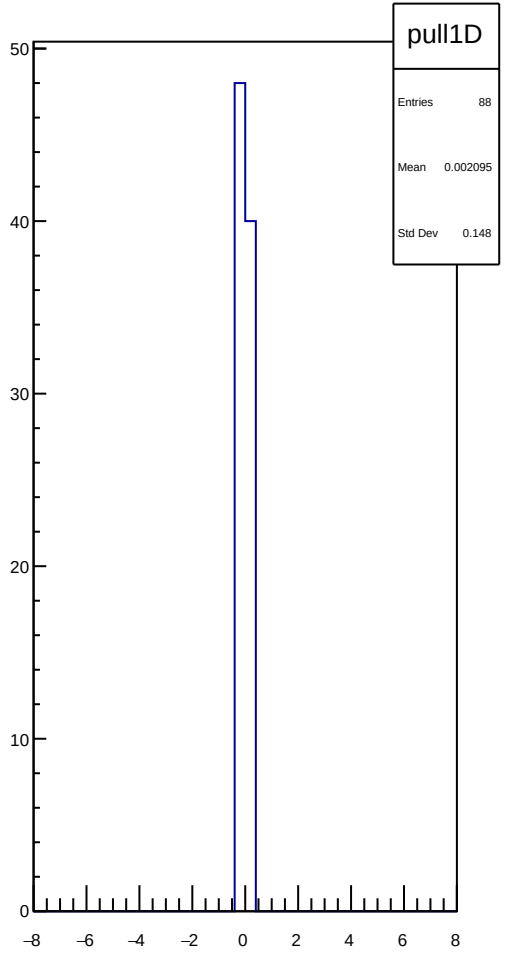

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.051 / 87
p0 9.567 ± 0.4049
pull
Entries 88
Mean −403.6
Std Dev 448.1
pull1D
Entries 88
Mean −0.008051
Std Dev 0.2395

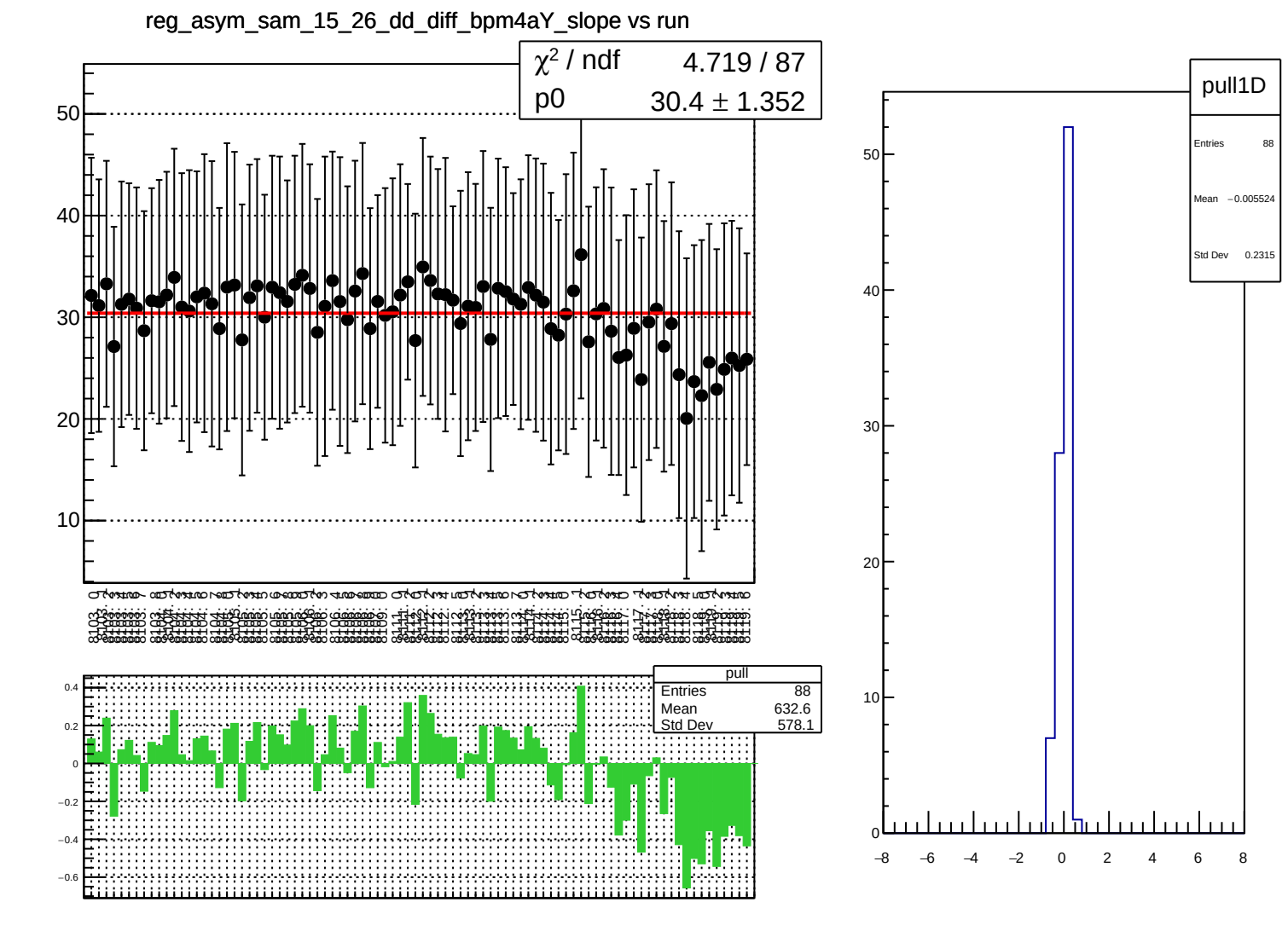

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 12.68 / 87
p0 −30.55 ± 0.6848
pull
Entries 88
Mean −895.3
Std Dev 940.6

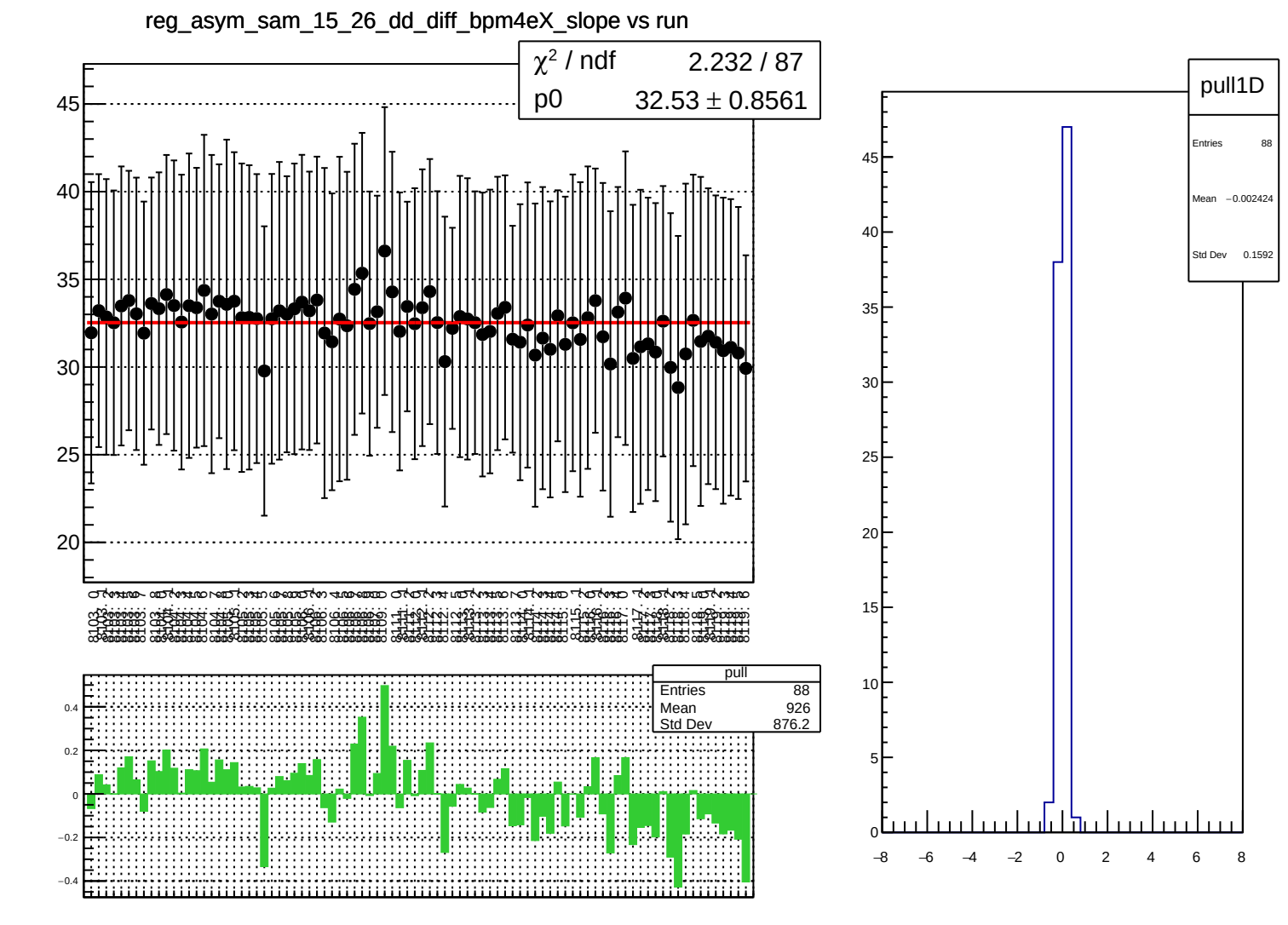

pull1D
Entries 88
Mean −0.006232
Std Dev 0.3796

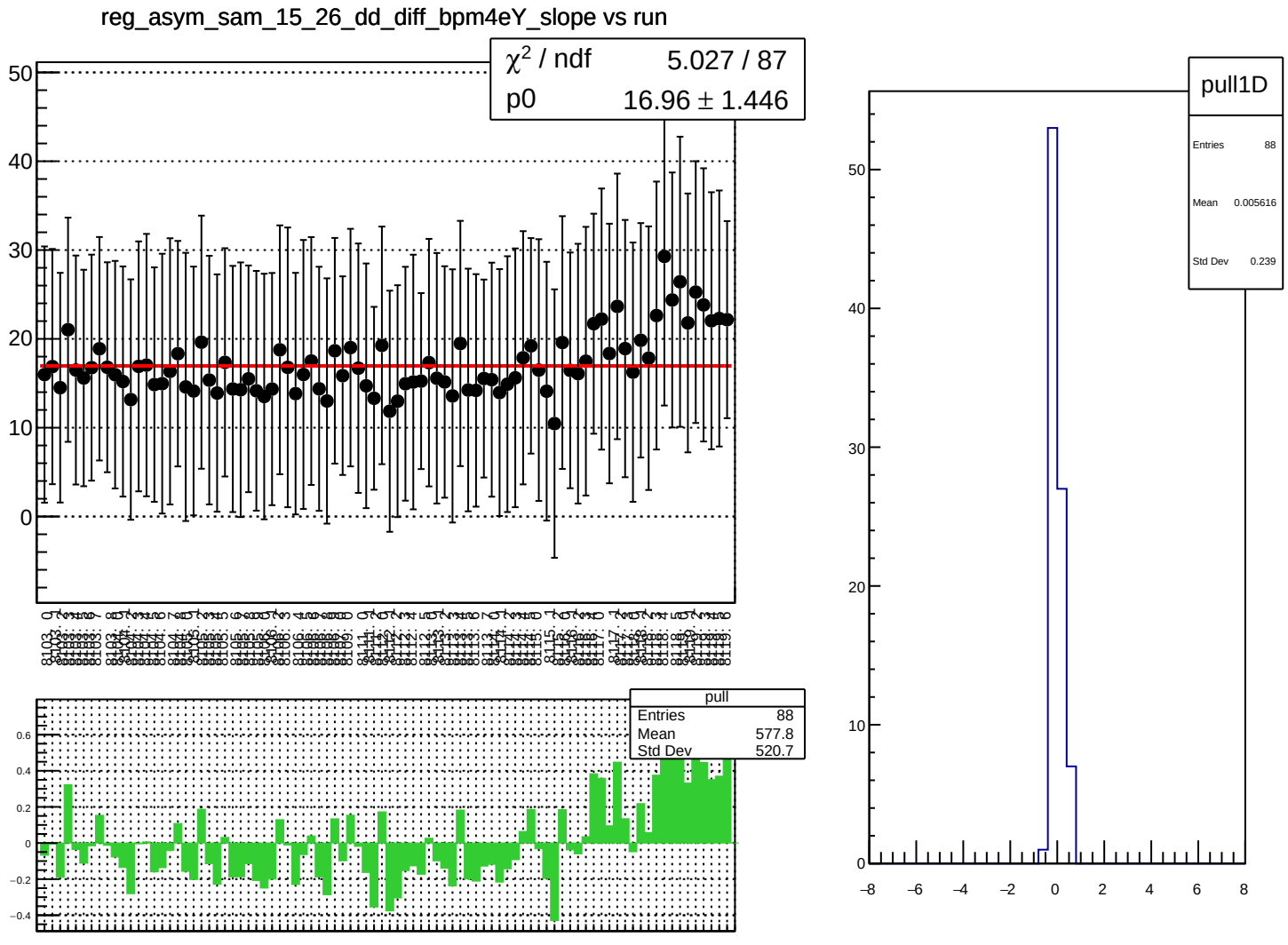

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 7.585 / 87
p0 0.6269 ± 0.02566
pull
Entries 88
Mean −803
Std Dev 851.4
pull1D
Entries 88
Mean −0.003207
Std Dev 0.2936

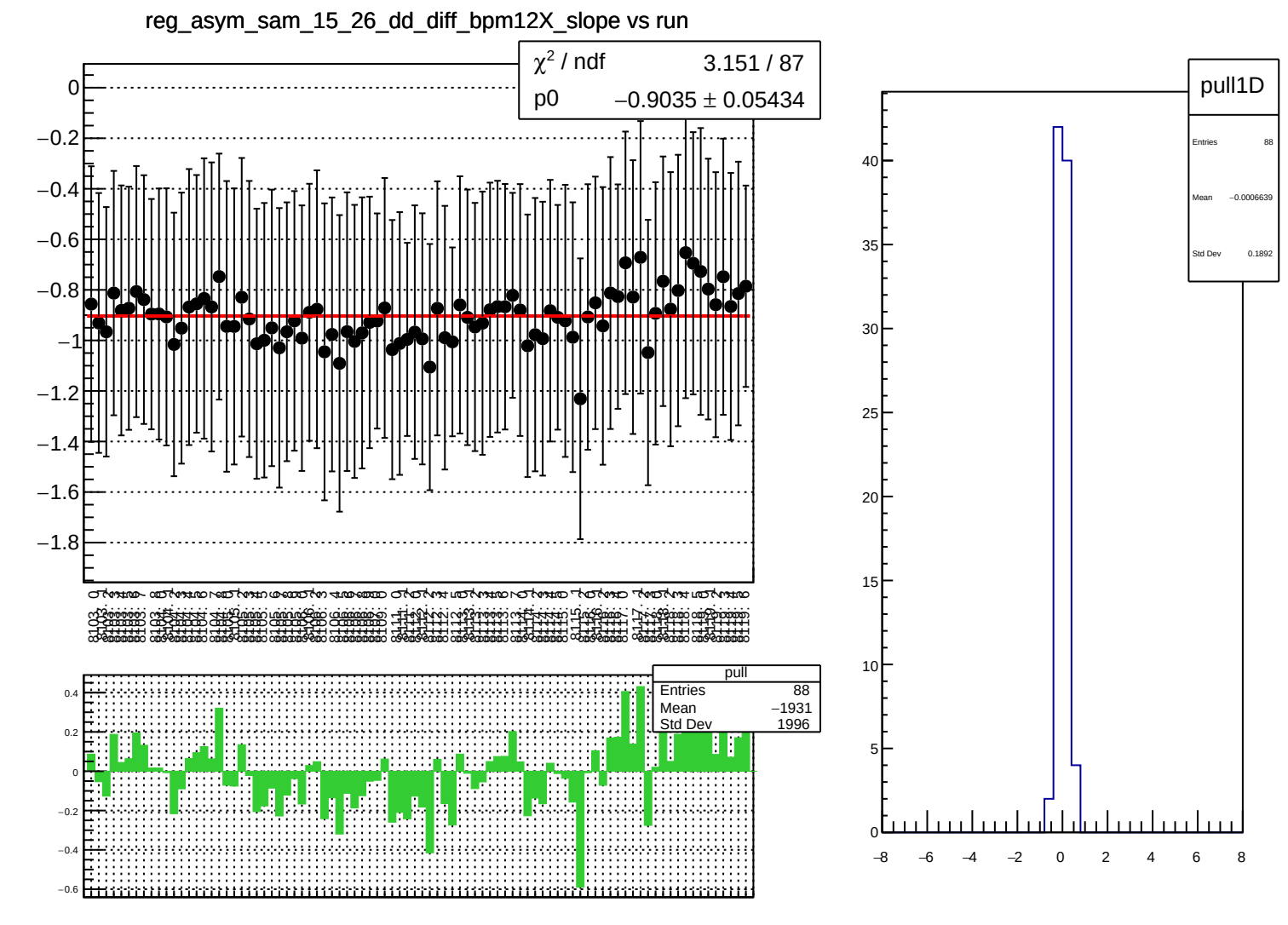

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 1.927 / 87
p0 4.38 ± 0.9003
pull
Entries 88
Mean 1066
Std Dev 1019

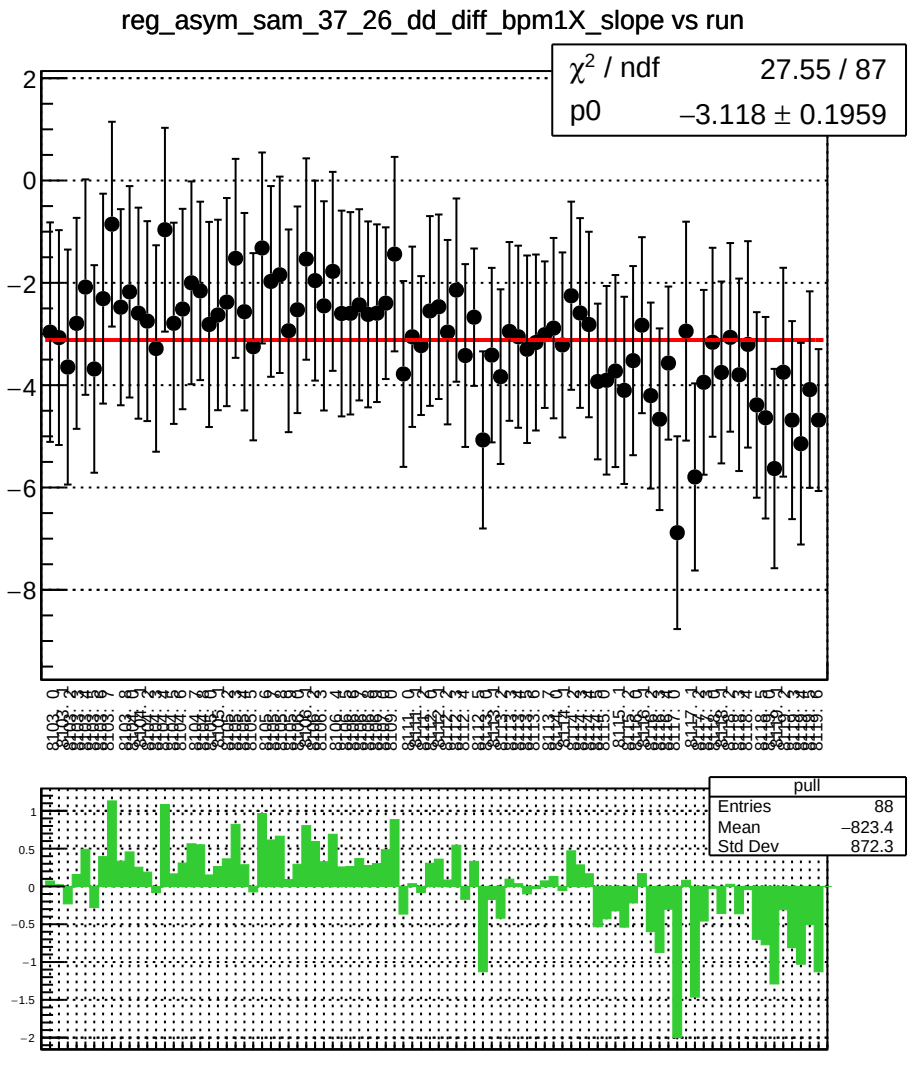

pull1D
Entries 88
Mean 0.002095
Std Dev 0.148

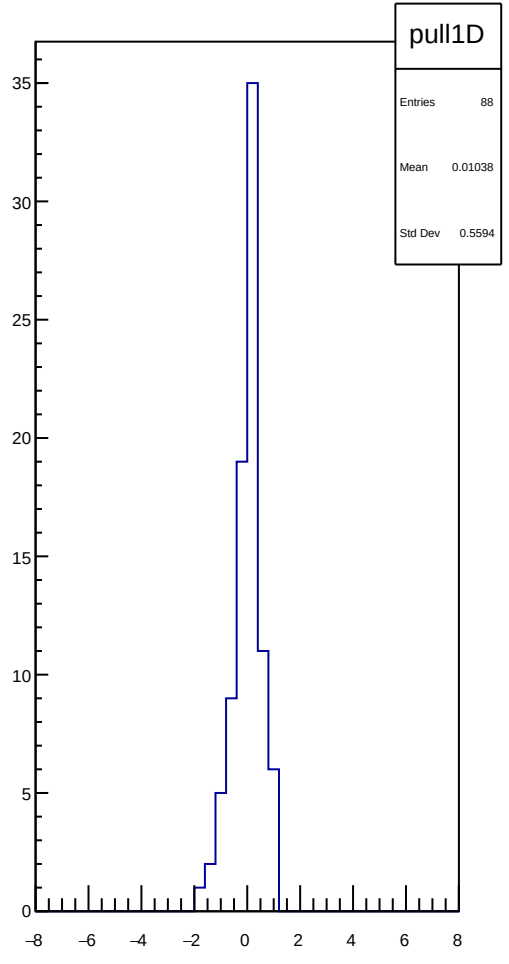

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.719 / 87
p0 30.4 ± 1.352
pull
Entries 88
Mean 632.6
Std Dev 578.1
pull1D
Entries 88
Mean −0.005524
Std Dev 0.2315

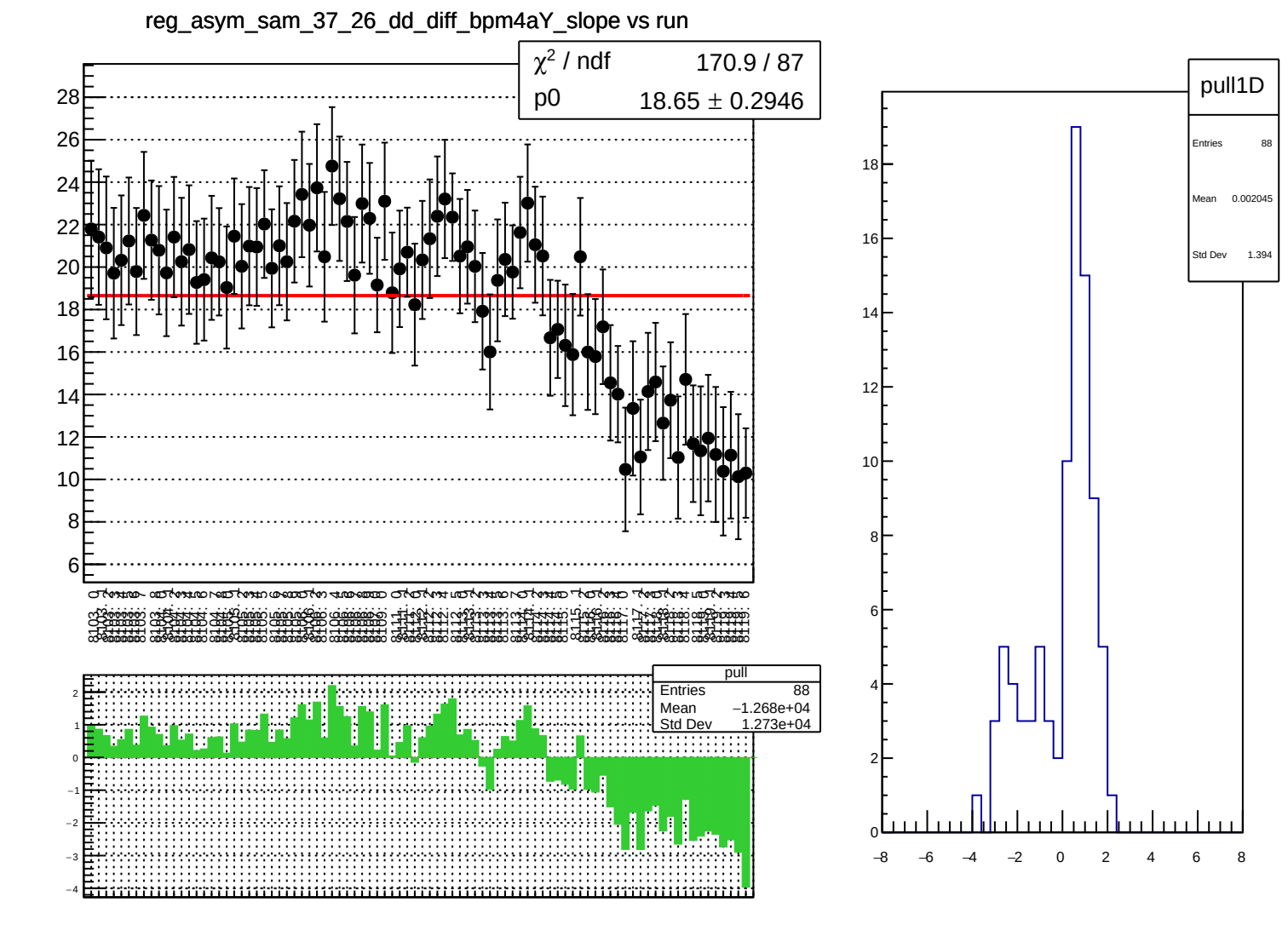

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.232 / 87
p0 32.53 ± 0.8561
pull
Entries 88
Mean 926
Std Dev 876.2
pull1D
Entries 88
Mean −0.002424
Std Dev 0.1592

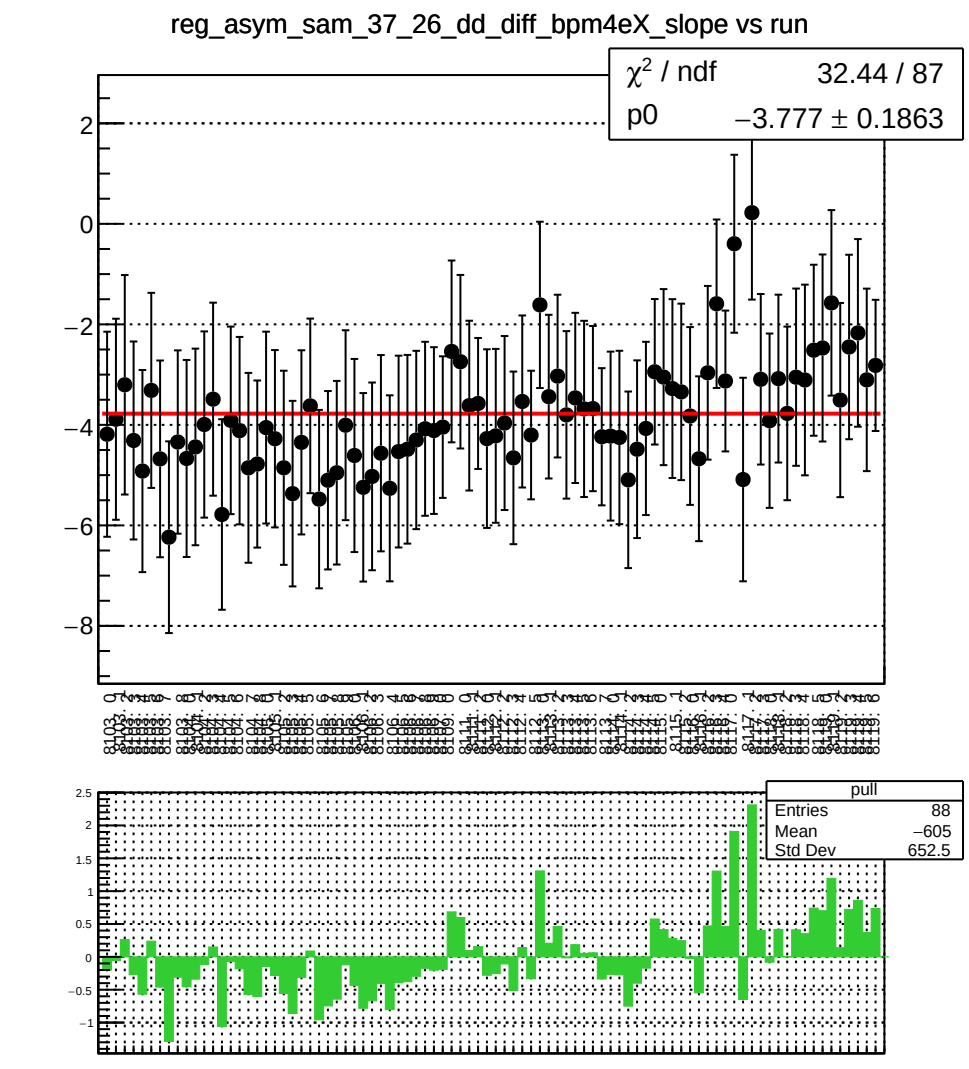

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.027 / 87
p0 16.96 ± 1.446
pull
Entries 88
Mean 577.8
Std Dev 520.7
pull1D
Entries 88
Mean 0.005616
Std Dev 0.239

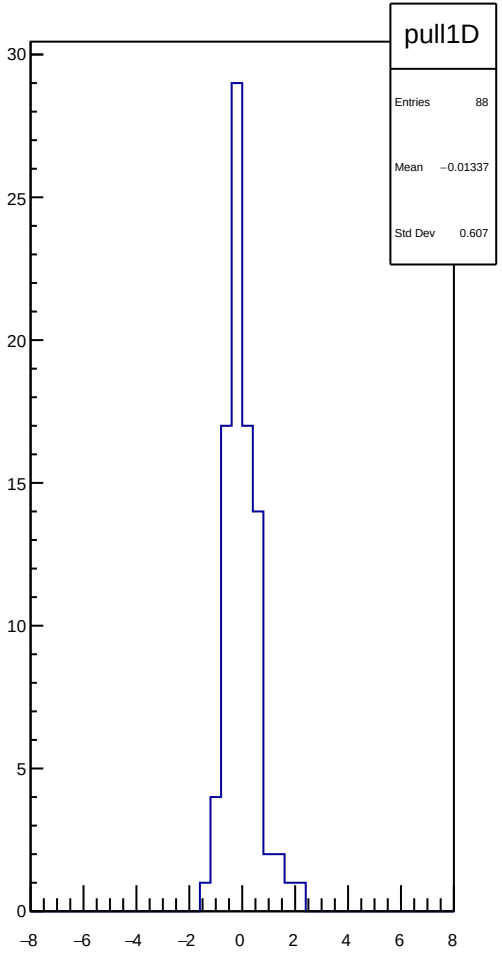

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 3.151 / 87
p0 −0.9035 ± 0.05434
pull
Entries 88
Mean −1931
Std Dev 1996
pull1D
Entries 88
Mean −0.0006639
Std Dev 0.1892

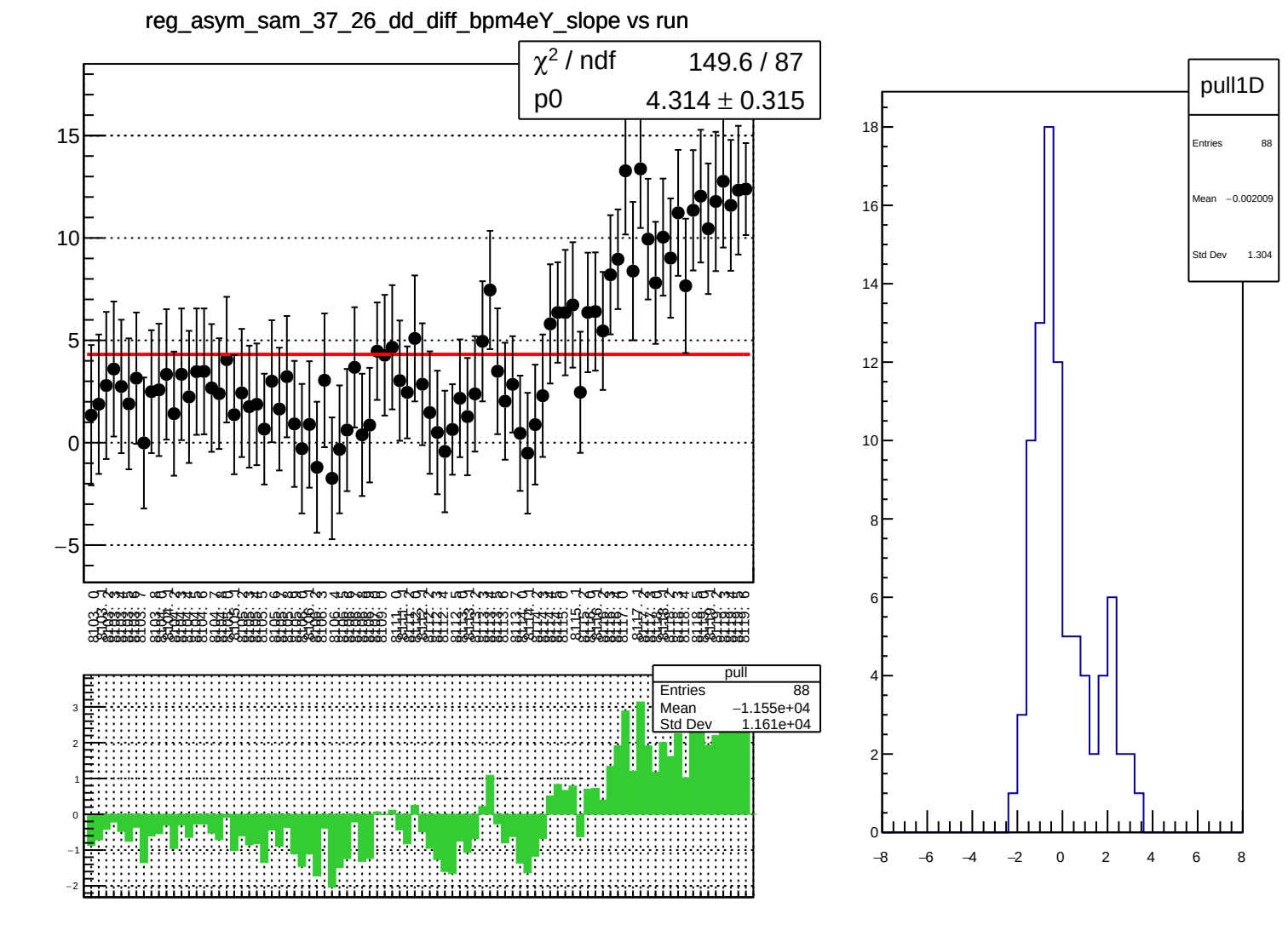

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 27.55 / 87
p0 −3.118 ± 0.1959
pull
Entries 88
Mean −823.4
Std Dev 872.3

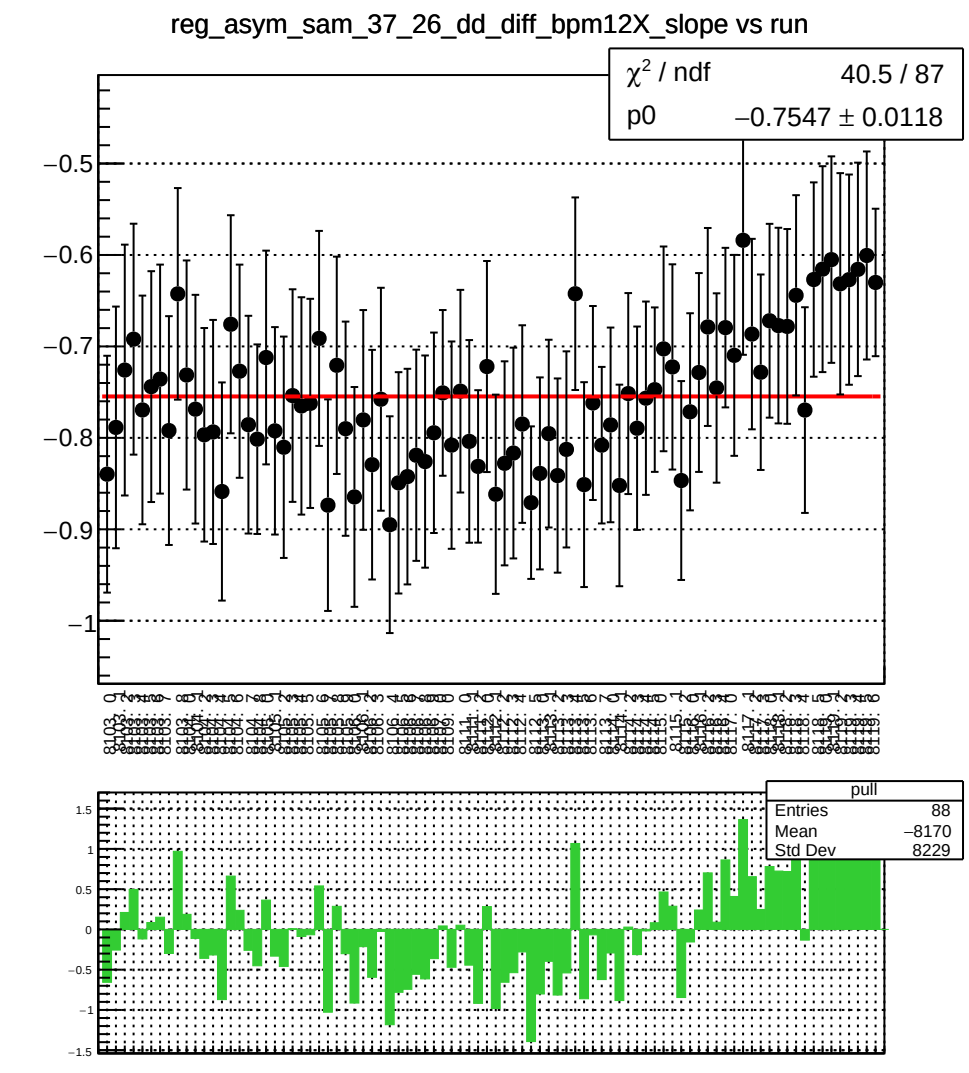

pull1D
Entries 88
Mean 0.01038
Std Dev 0.5594

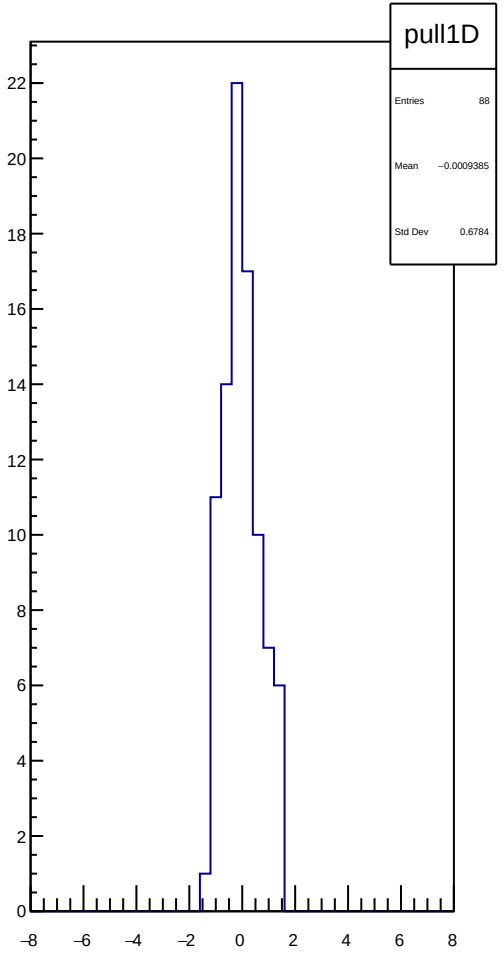

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 170.9 / 87
p0 18.65 ± 0.2946
pull
Entries 88
Mean −1.268e+04
Std Dev 1.273e+04
pull1D
Entries 88
Mean 0.002045
Std Dev 1.394

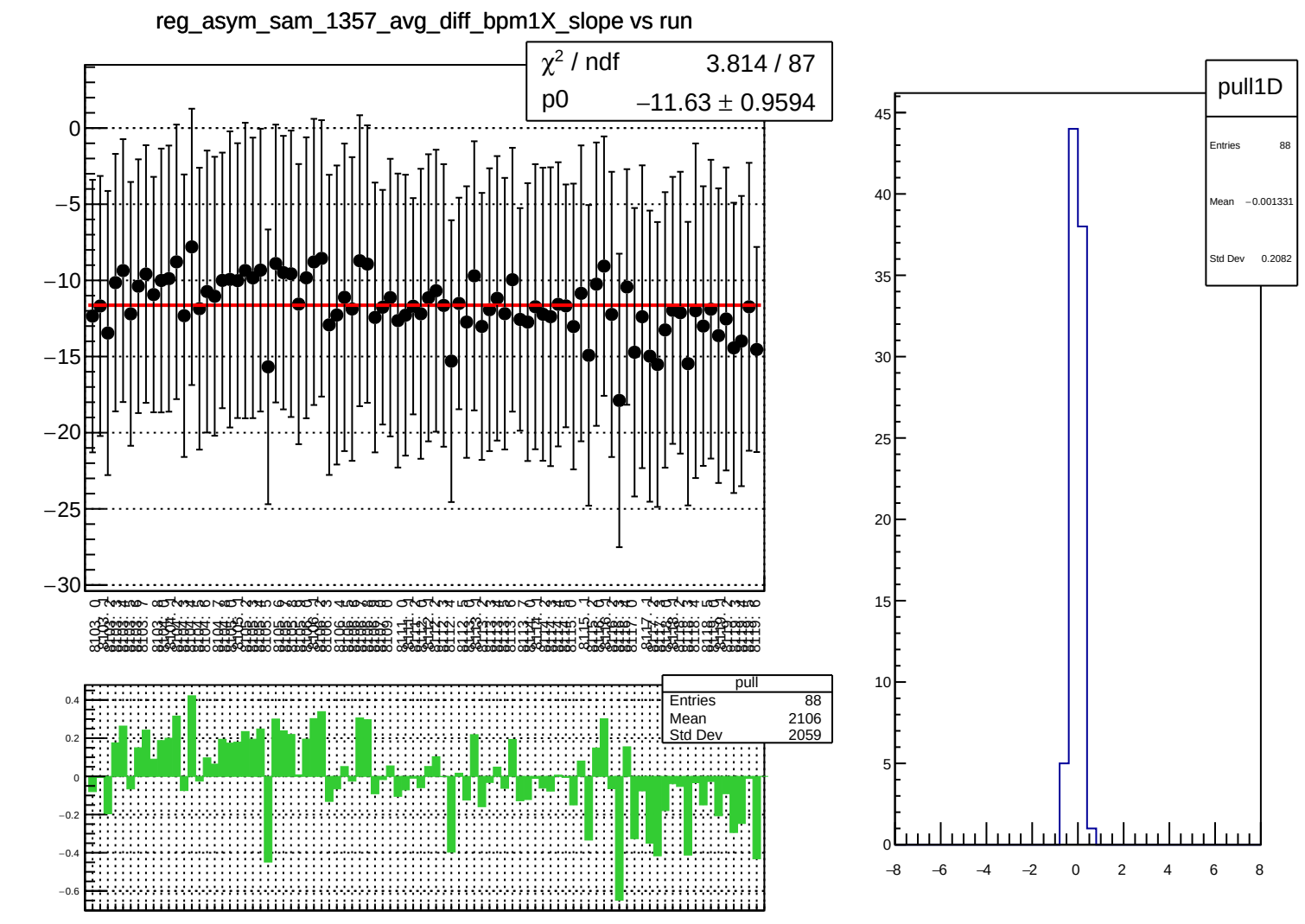

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 32.44 / 87
p0 −3.777 ± 0.1863
pull
Entries 88
Mean −605
Std Dev 652.5

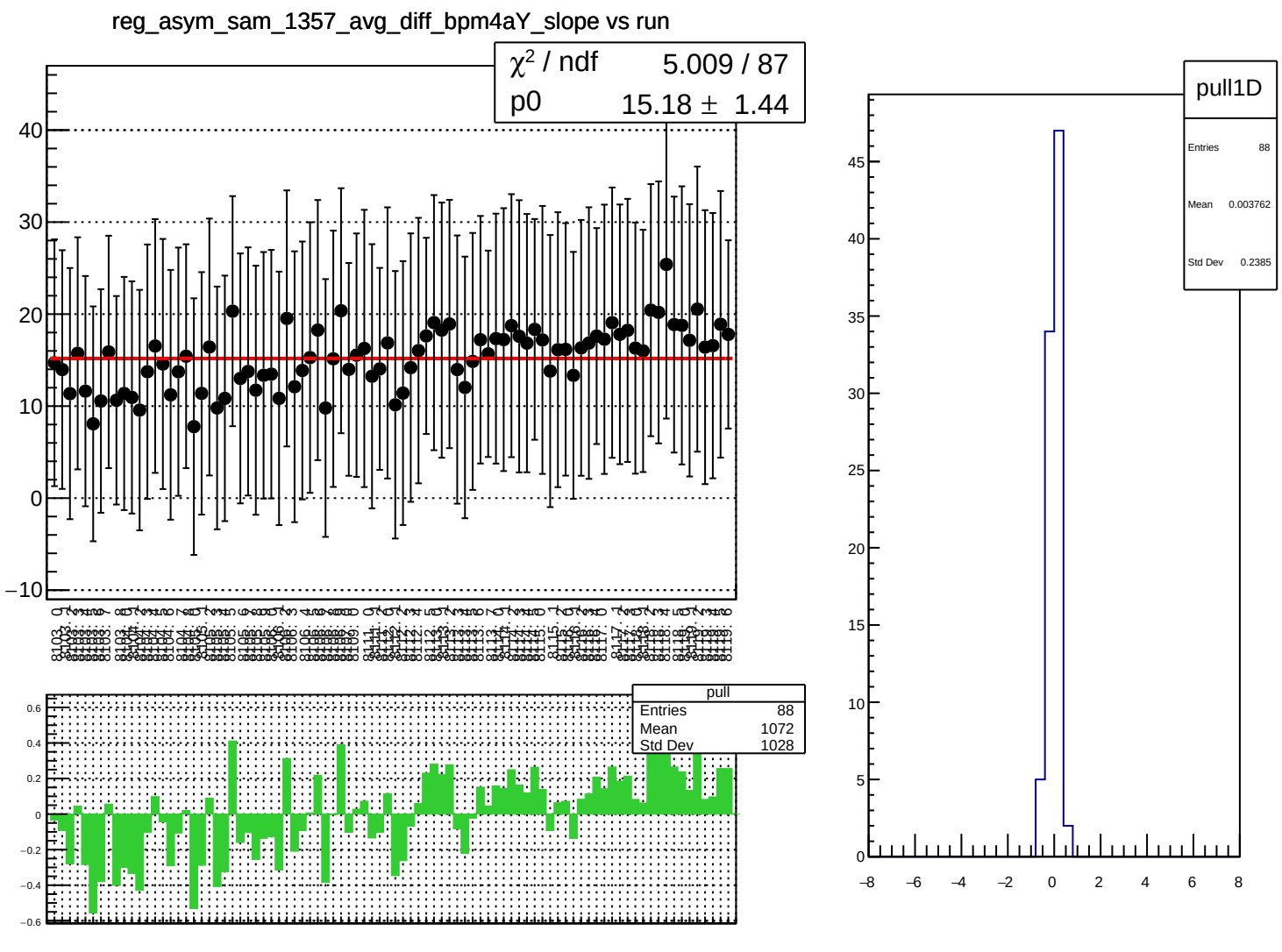

pull1D
Entries 88
Mean −0.01337
Std Dev 0.607

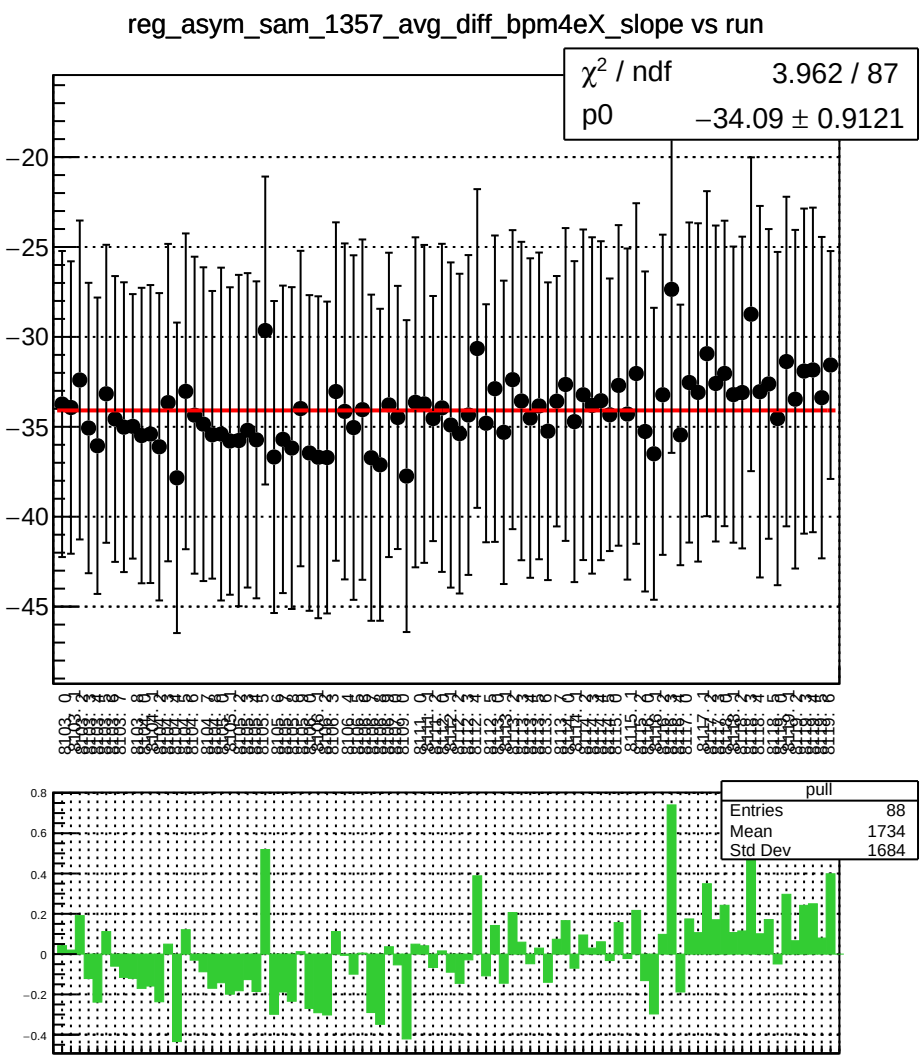

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 149.6 / 87
p0 4.314 ± 0.315
pull
Entries 88
Mean −1.155e+04
Std Dev 1.161e+04
pull1D
Entries 88
Mean −0.002009
Std Dev 1.304

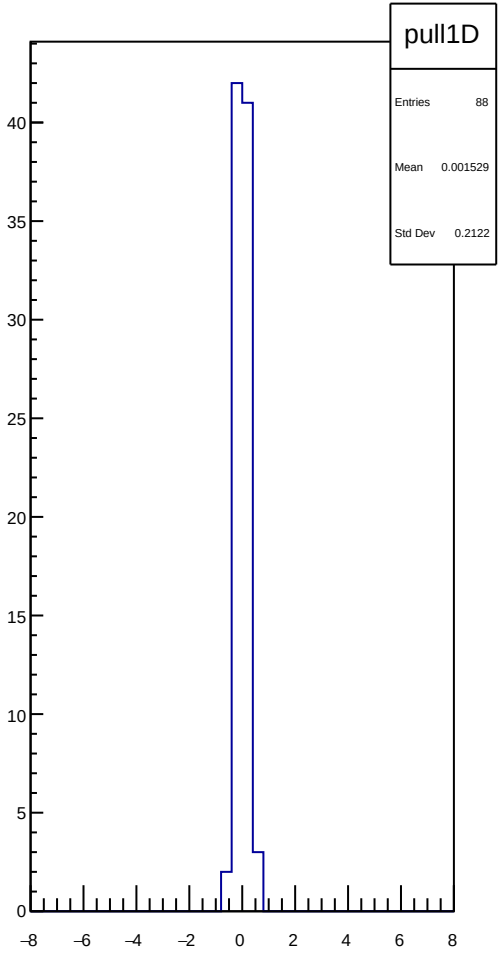

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 40.5 / 87
p0 −0.7547 ± 0.0118
pull
Entries 88
Mean −8170
Std Dev 8229

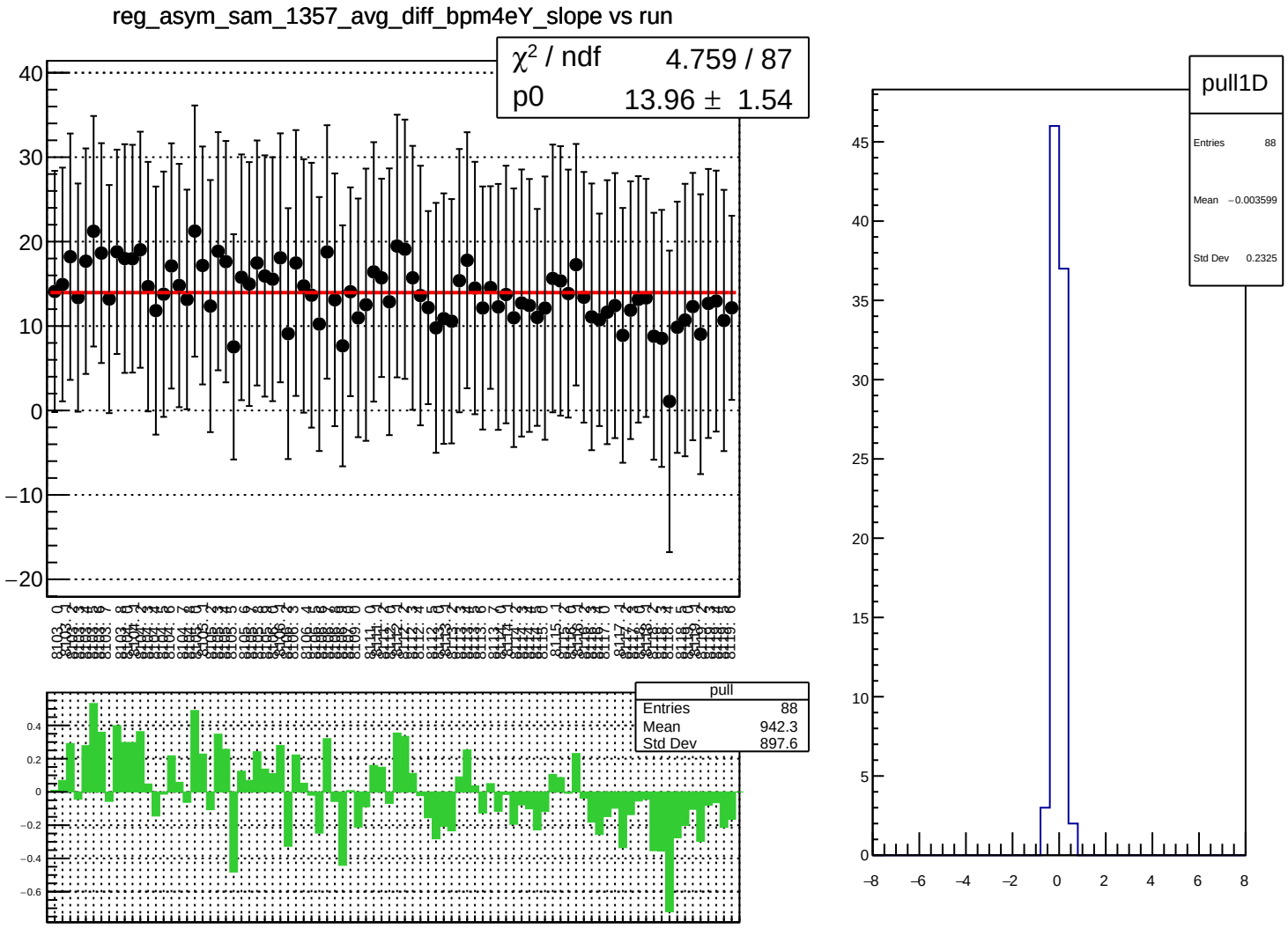

pull1D
Entries 88
Mean −0.0009385
Std Dev 0.6784

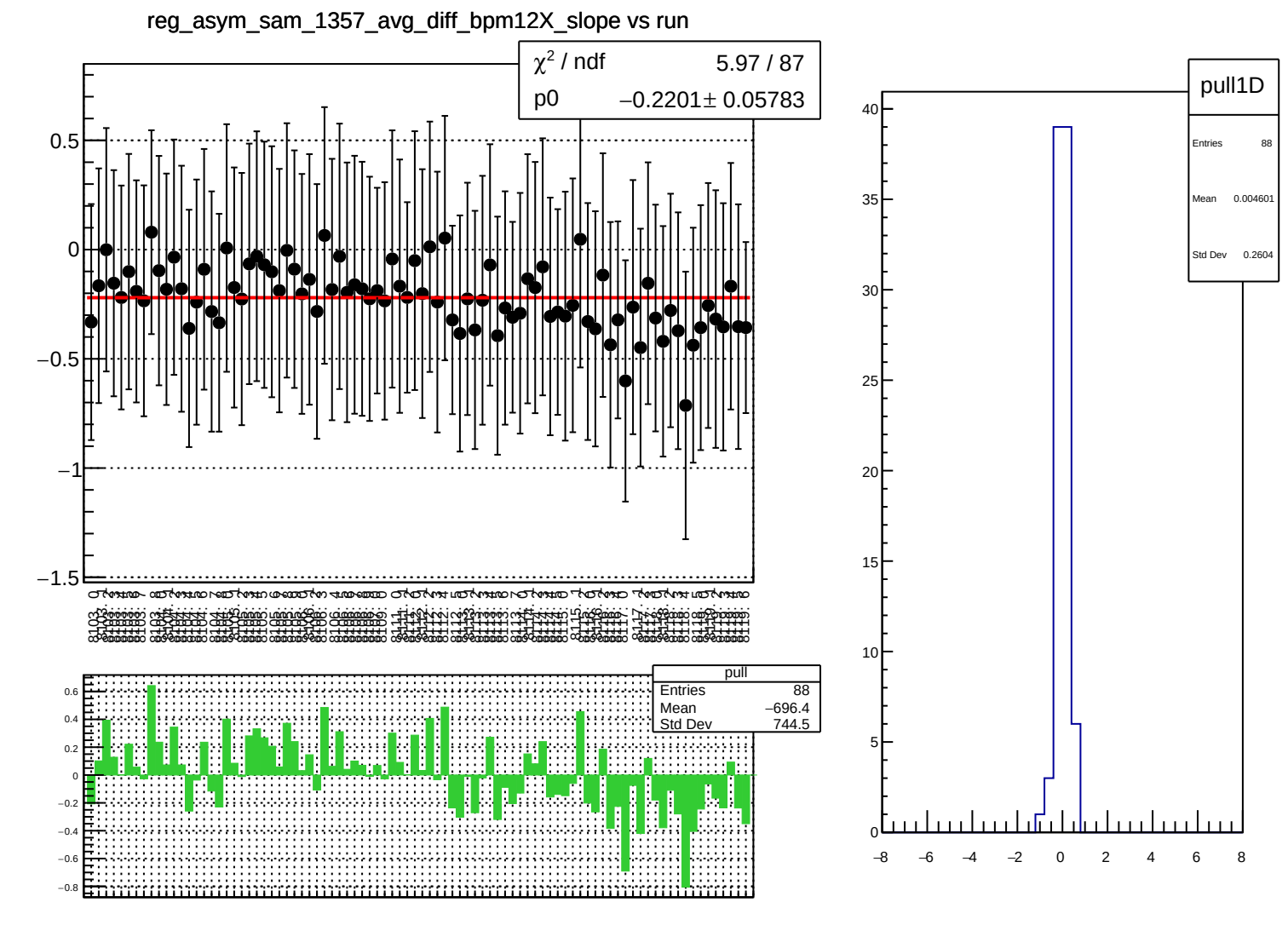

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 3.814 / 87
p0 −11.63 ± 0.9594
pull
Entries 88
Mean 2106
Std Dev 2059
pull1D
Entries 88
Mean −0.001331
Std Dev 0.2082

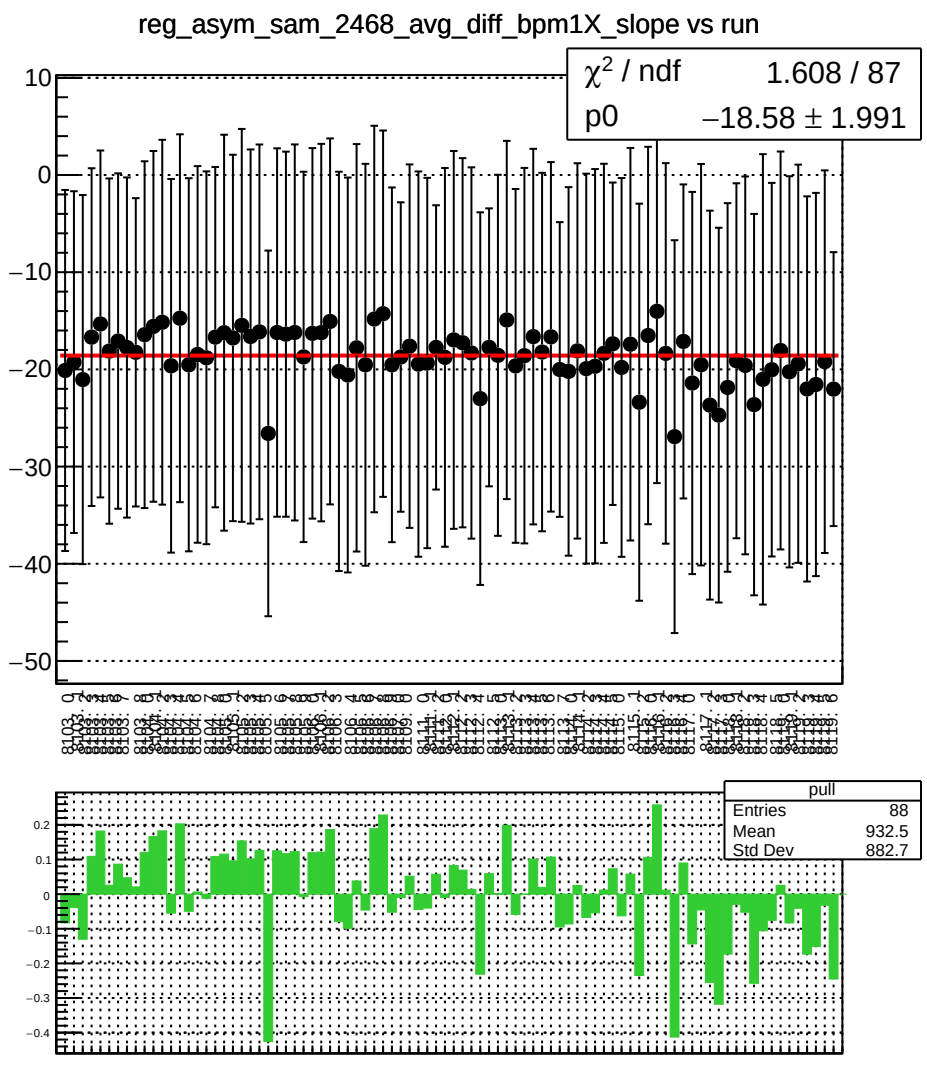

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.009 / 87
p0 15.18 ± 1.44
pull
Entries 88
Mean 1072
Std Dev 1028
pull1D
Entries 88
Mean 0.003762
Std Dev 0.2385

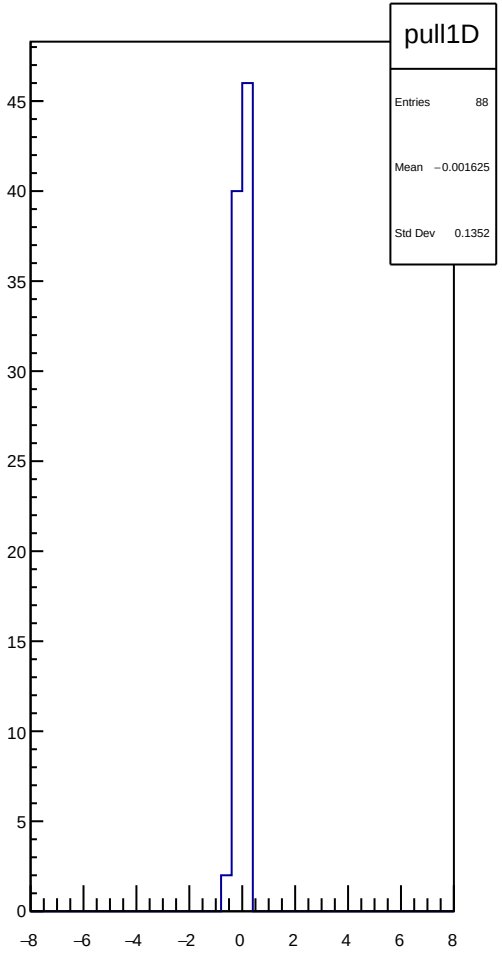

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.962 / 87
p0 −34.09 ± 0.9121
pull
Entries 88
Mean 1734
Std Dev 1684

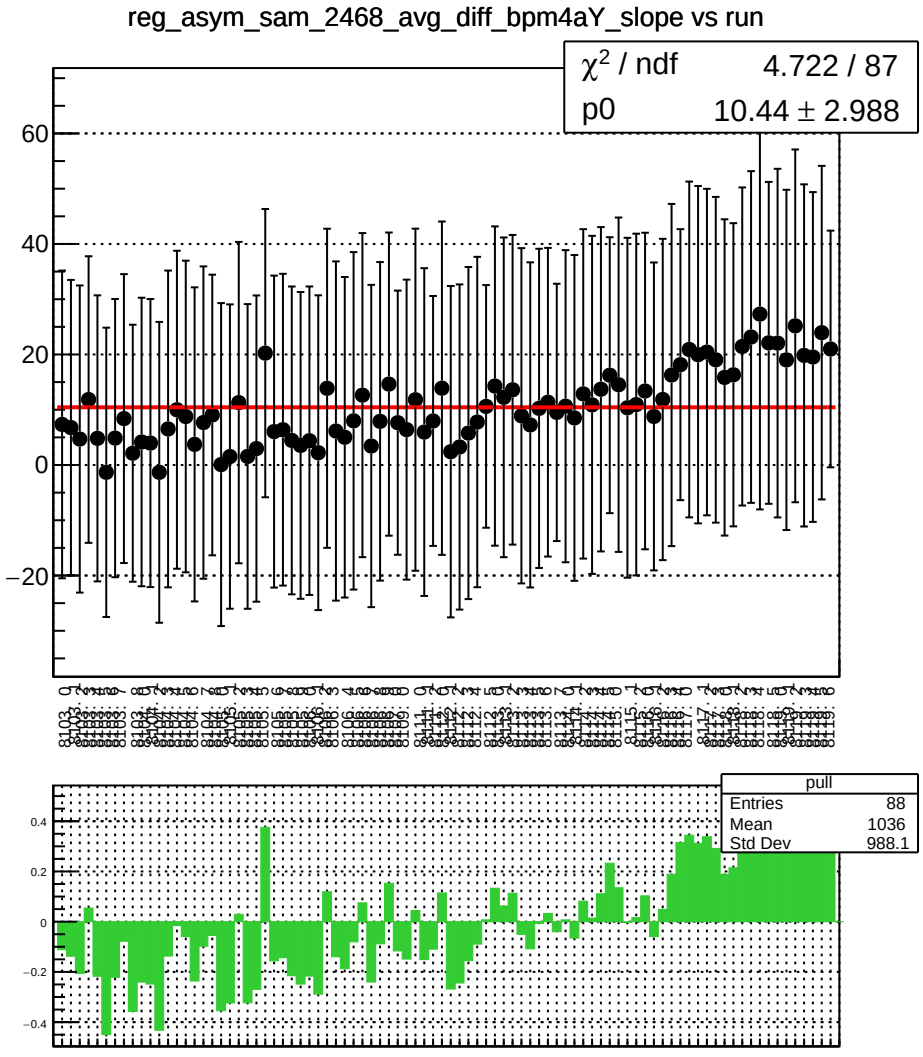

pull1D
Entries 88
Mean 0.001529
Std Dev 0.2122

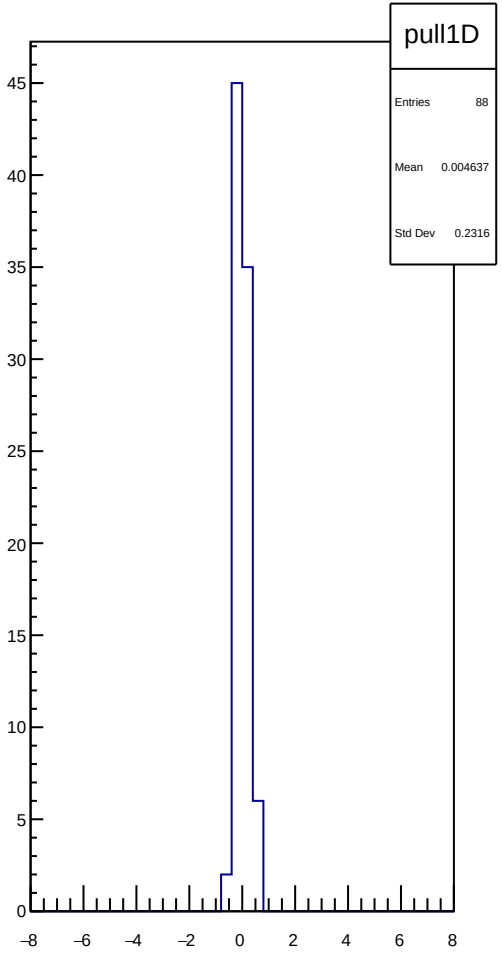

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.759 / 87
p0 13.96 ± 1.54
pull
Entries 88
Mean 942.3
Std Dev 897.6
pull1D
Entries 88
Mean −0.003599
Std Dev 0.2325

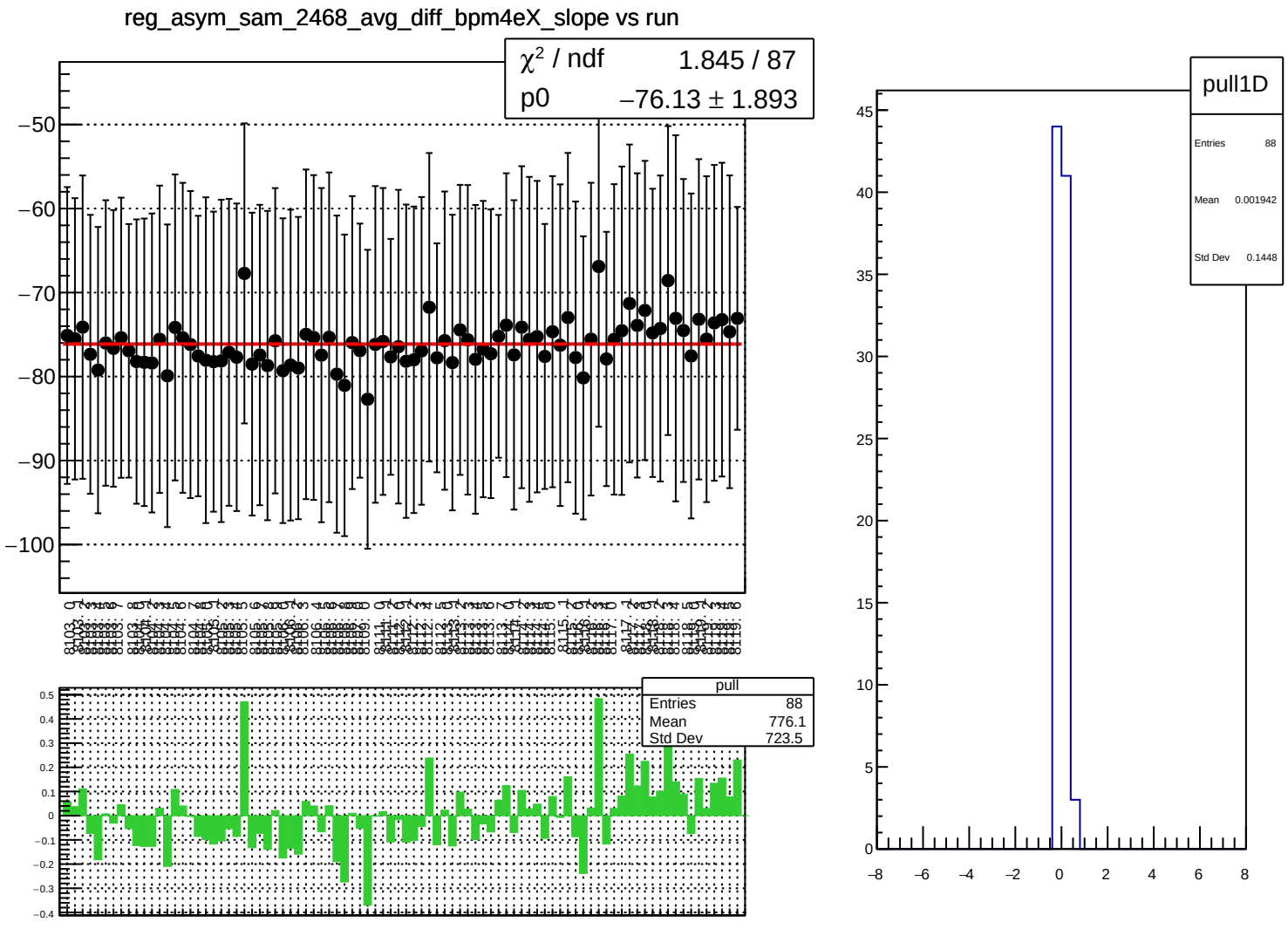

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 5.97 / 87
p0 −0.2201± 0.05783
pull
Entries 88
Mean −696.4
Std Dev 744.5
pull1D
Entries 88
Mean 0.004601
Std Dev 0.2604

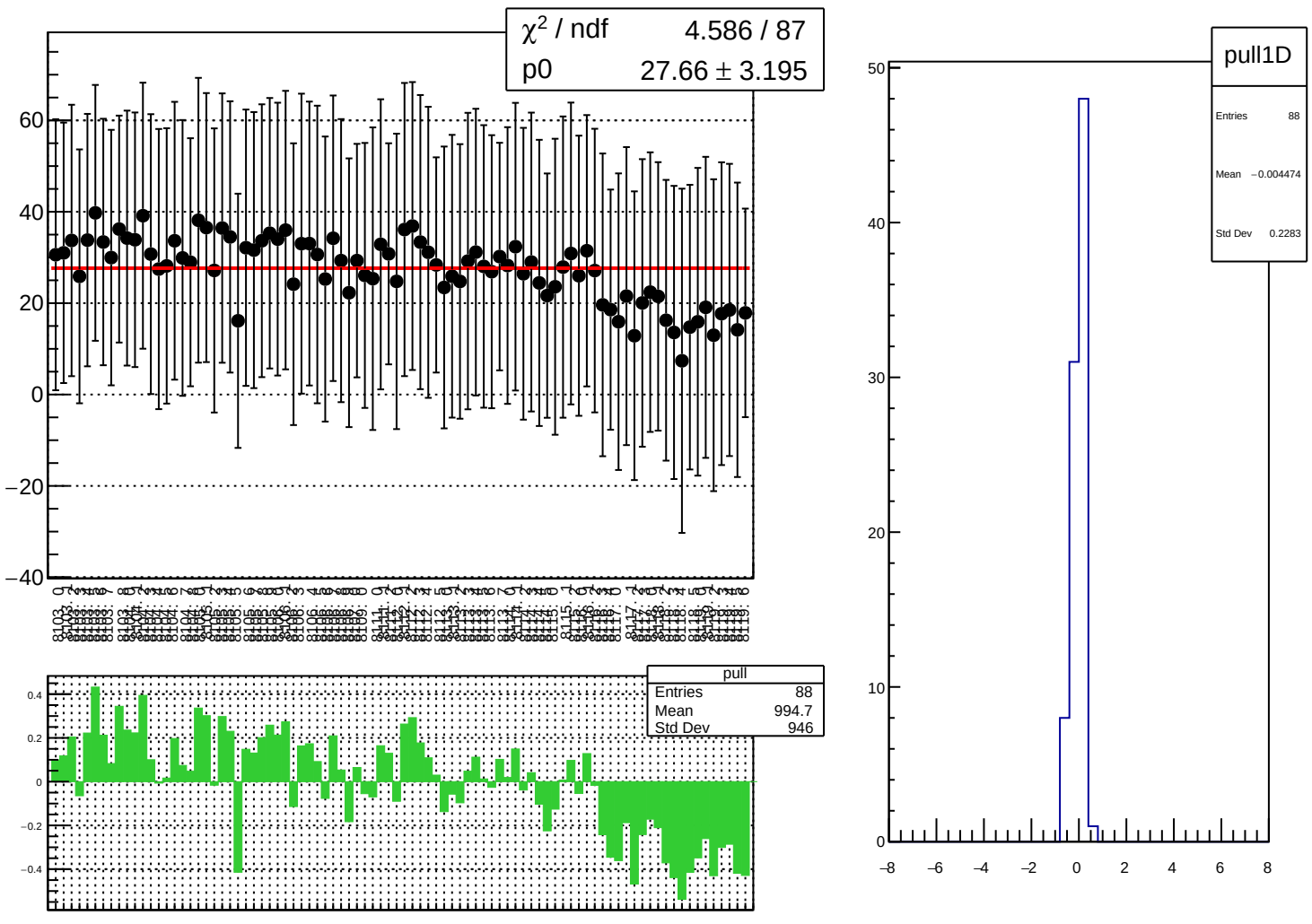

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 1.608 / 87
p0 −18.58 ± 1.991
pull
Entries 88
Mean 932.5
Std Dev 882.7

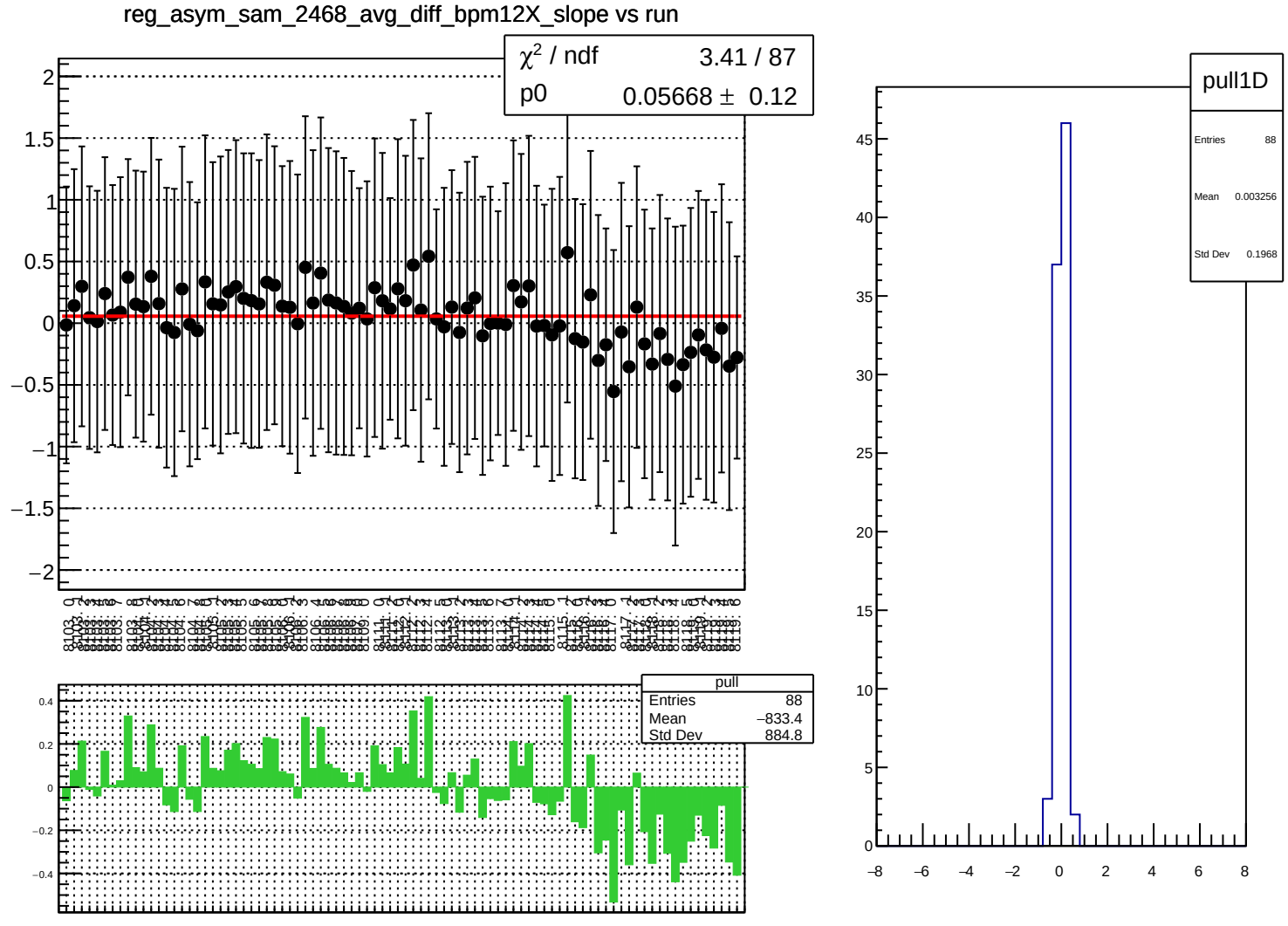

pull1D
Entries 88
Mean −0.001625
Std Dev 0.1352

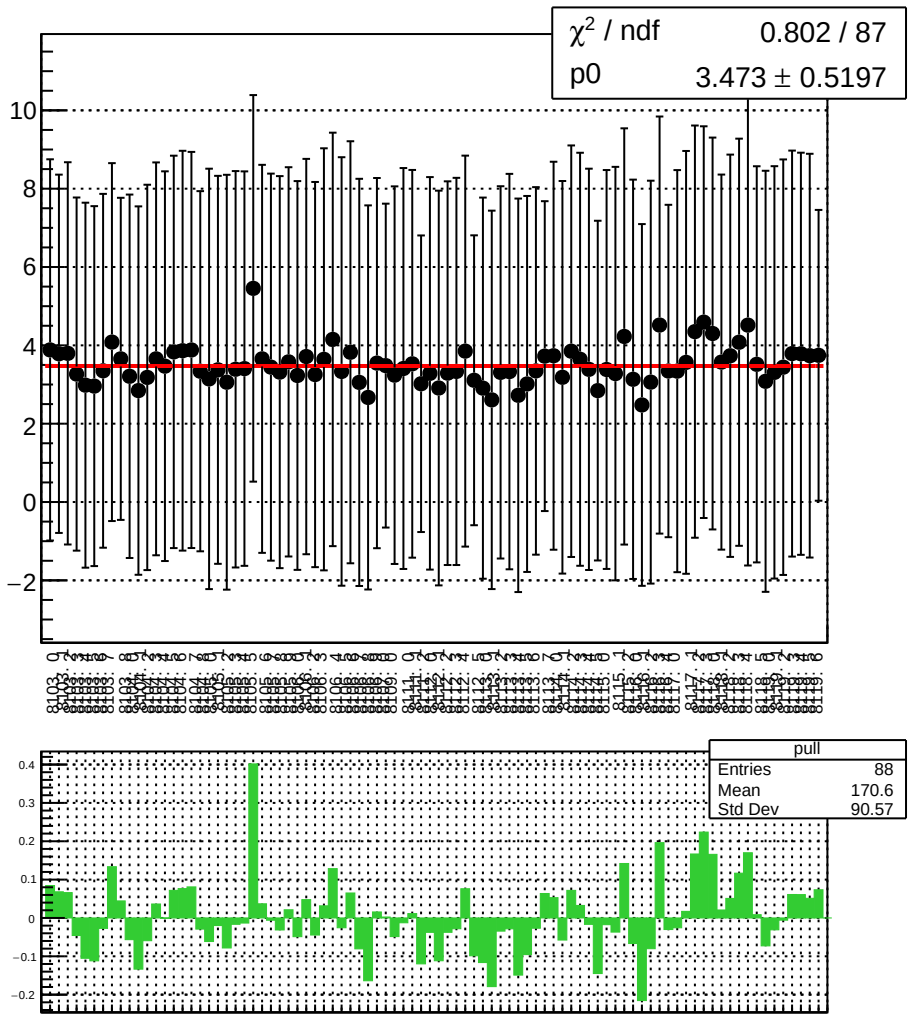

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.722 / 87
p0 10.44 ± 2.988
pull
Entries 88
Mean 1036
Std Dev 988.1

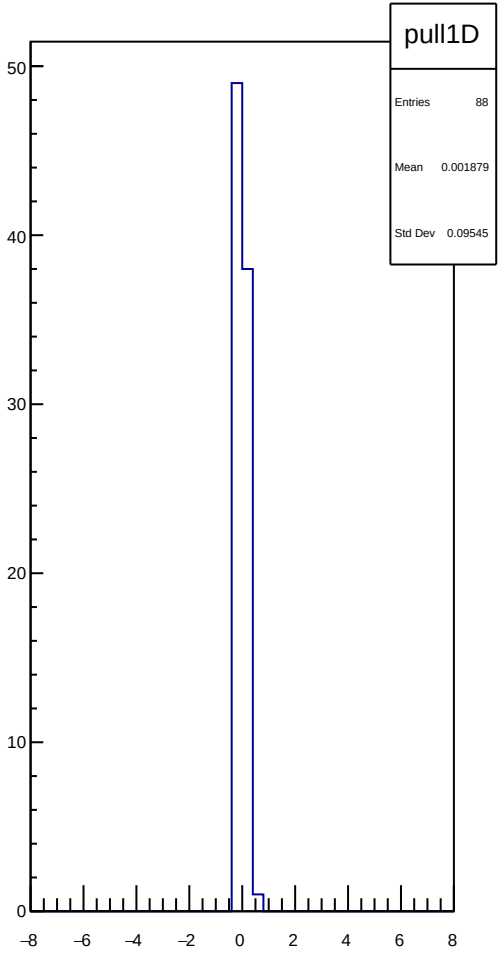

pull1D
Entries 88
Mean 0.004637
Std Dev 0.2316

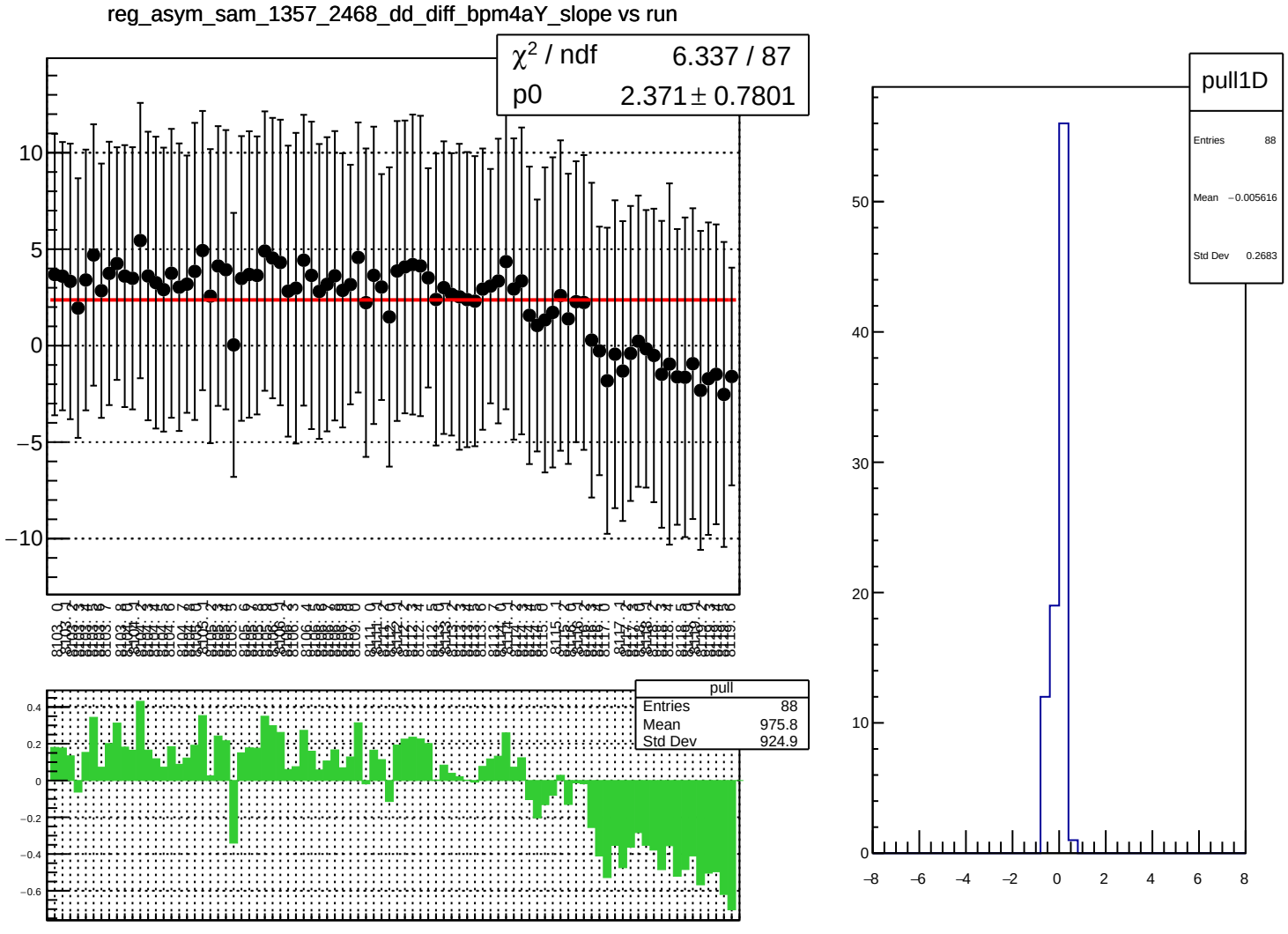

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.845 / 87
p0 −76.13 ± 1.893
pull
Entries 88
Mean 776.1
Std Dev 723.5
pull1D
Entries 88
Mean 0.001942
Std Dev 0.1448

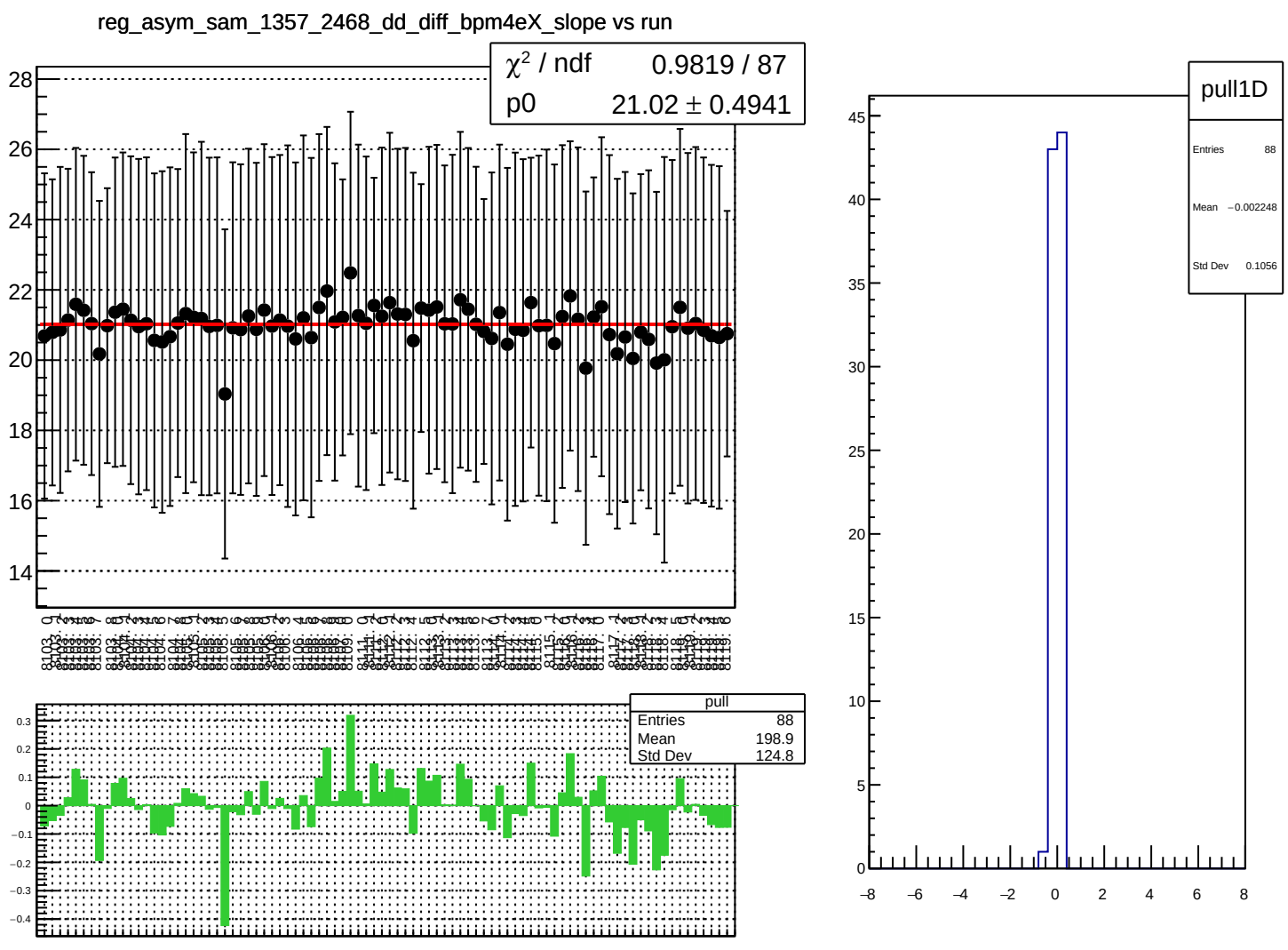

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.586 / 87
p0 27.66 ± 3.195
pull
Entries 88
Mean 994.7
Std Dev 946
pull1D
Entries 88
Mean −0.004474
Std Dev 0.2283

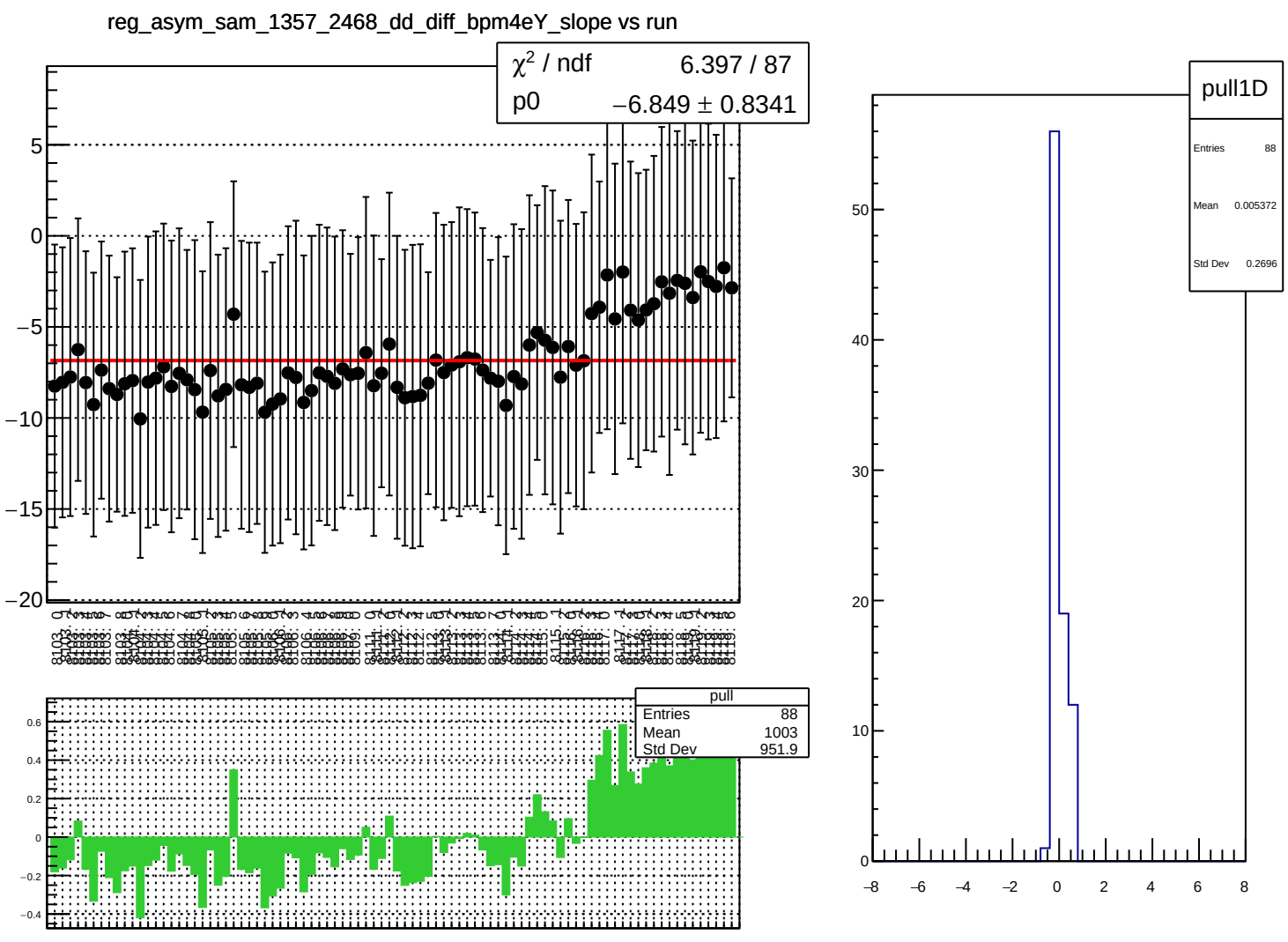

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 3.41 / 87
p0 0.05668 ± 0.12
pull
Entries 88
Mean −833.4
Std Dev 884.8
pull1D
Entries 88
Mean 0.003256
Std Dev 0.1968

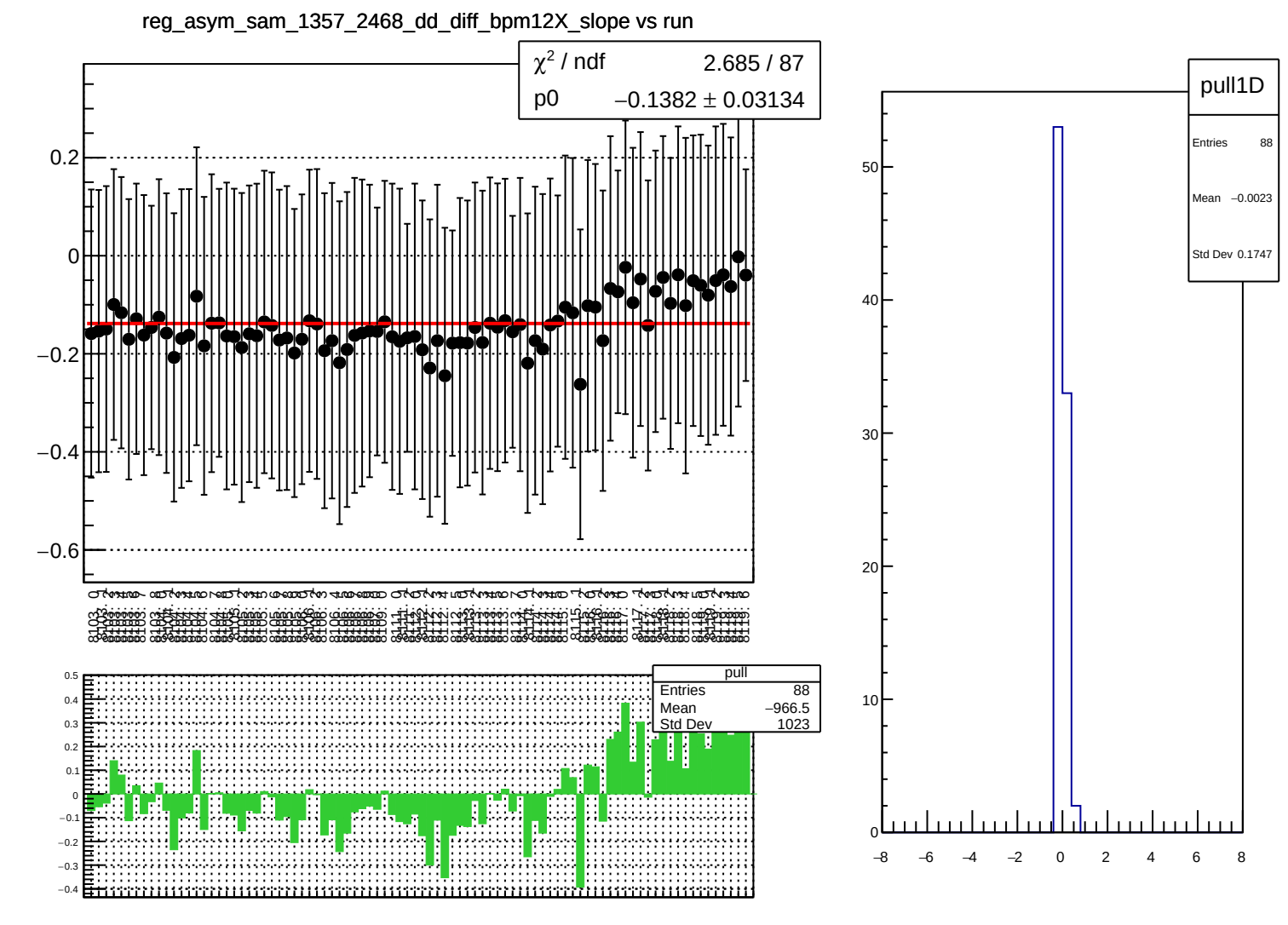

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 0.802 / 87
p0 3.473 ± 0.5197
pull
Entries 88
Mean 170.6
Std Dev 90.57

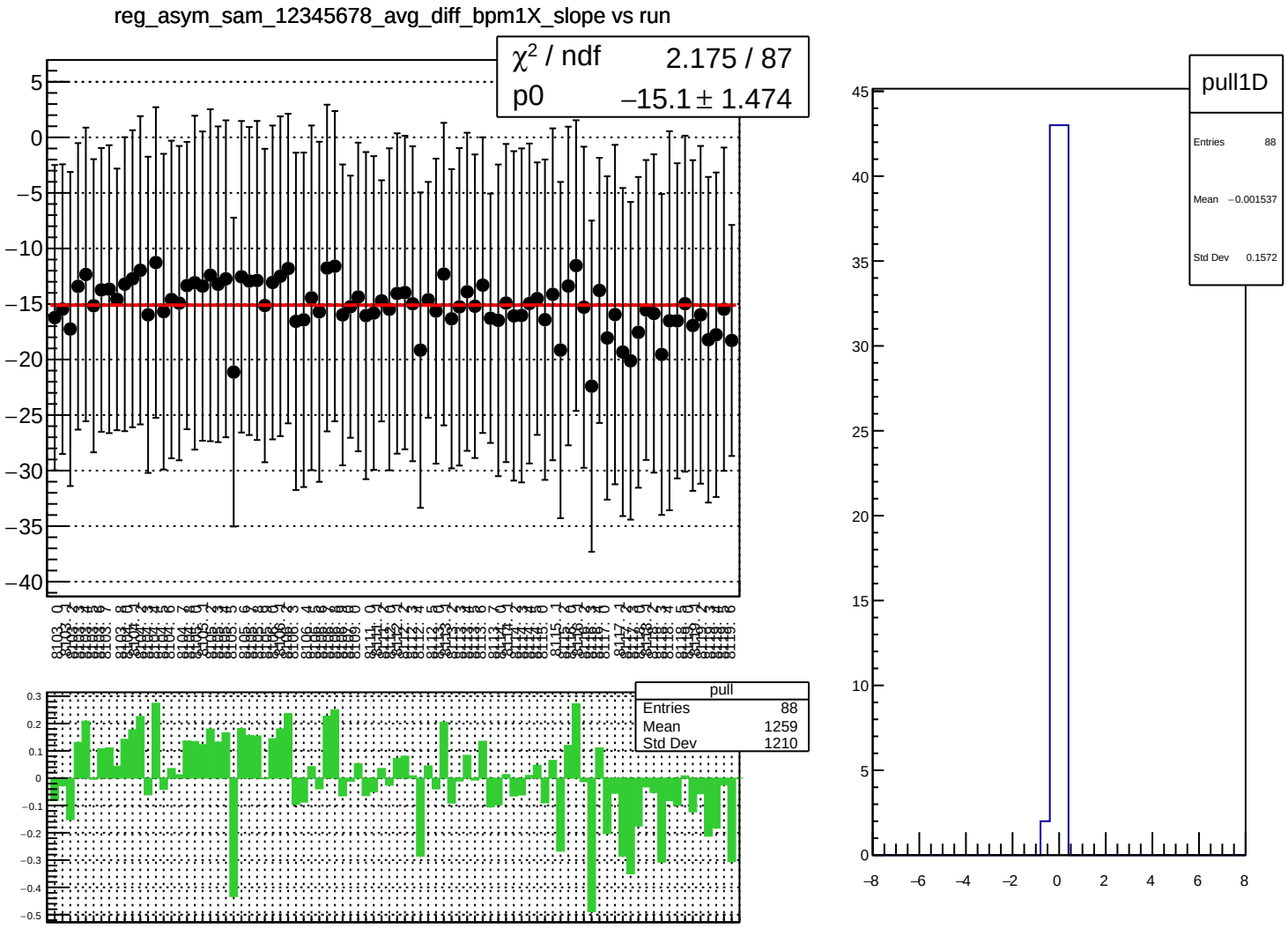

pull1D
Entries 88
Mean 0.001879
Std Dev 0.09545

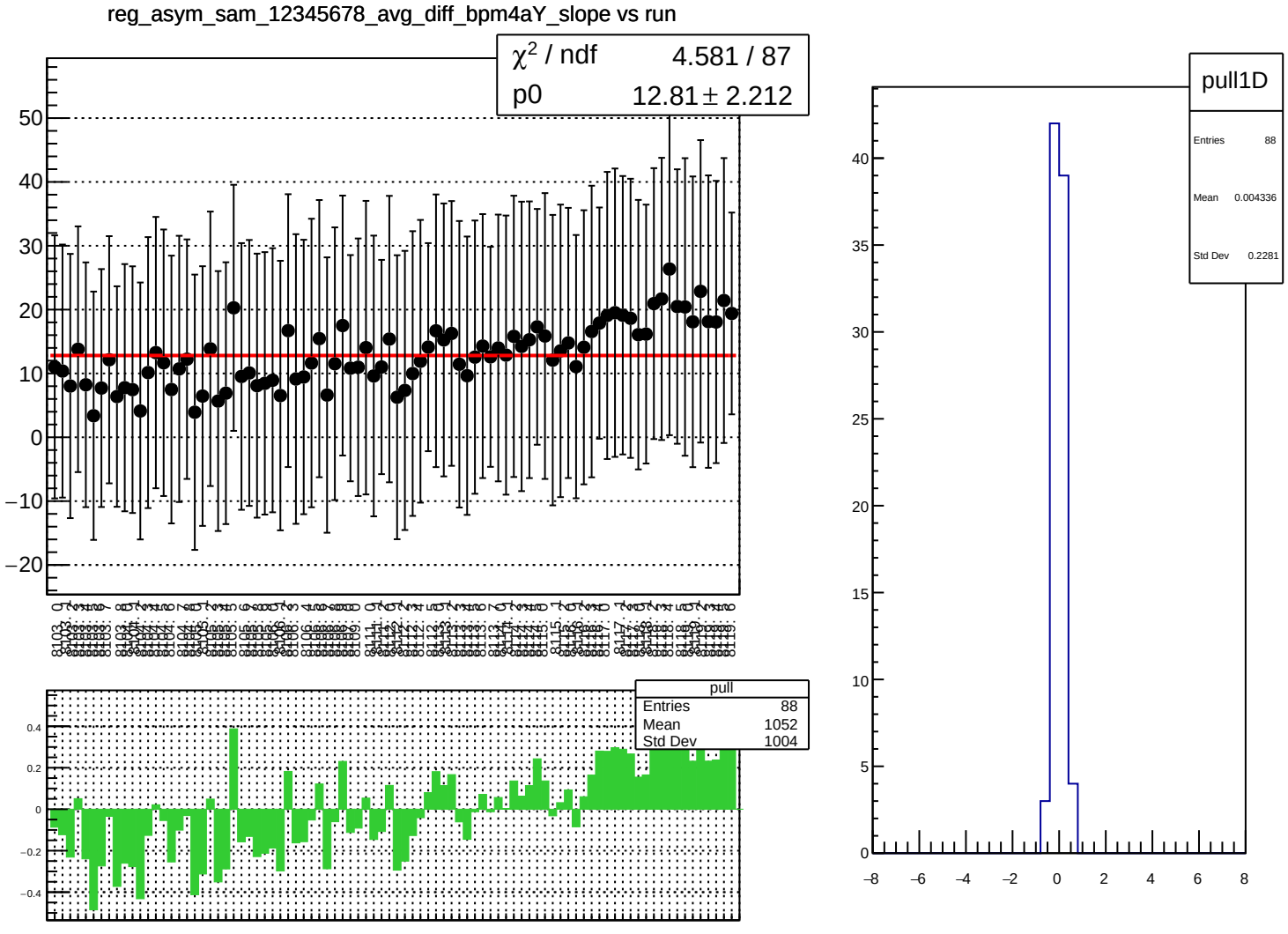

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.337 / 87
p0 2.371 ± 0.7801
10
5
0
−5
−10
pull
Entries 88
Mean 975.8
Std Dev 924.9
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 88
Mean −0.005616
Std Dev 0.2683
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

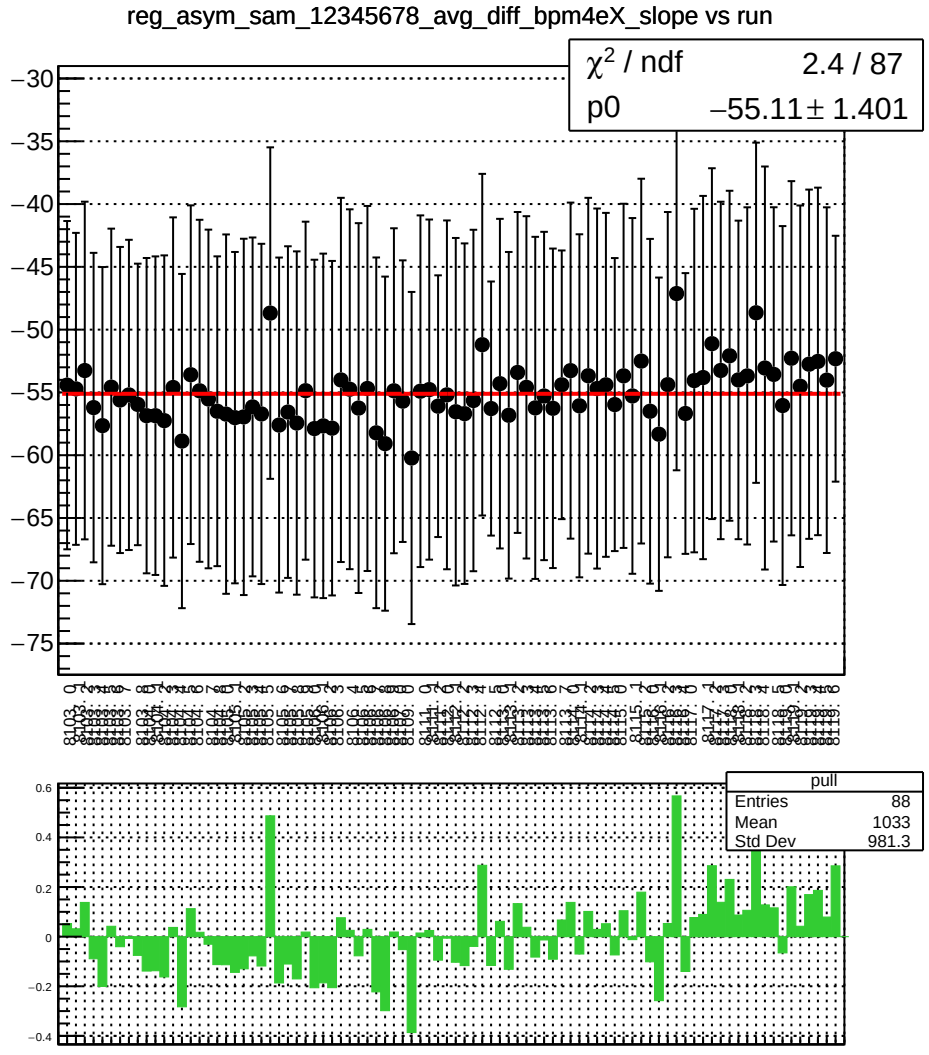

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.9819 / 87
p0 21.02 ± 0.4941
pull
Entries 88
Mean 198.9
Std Dev 124.8
pull1D
Entries 88
Mean −0.002248
Std Dev 0.1056

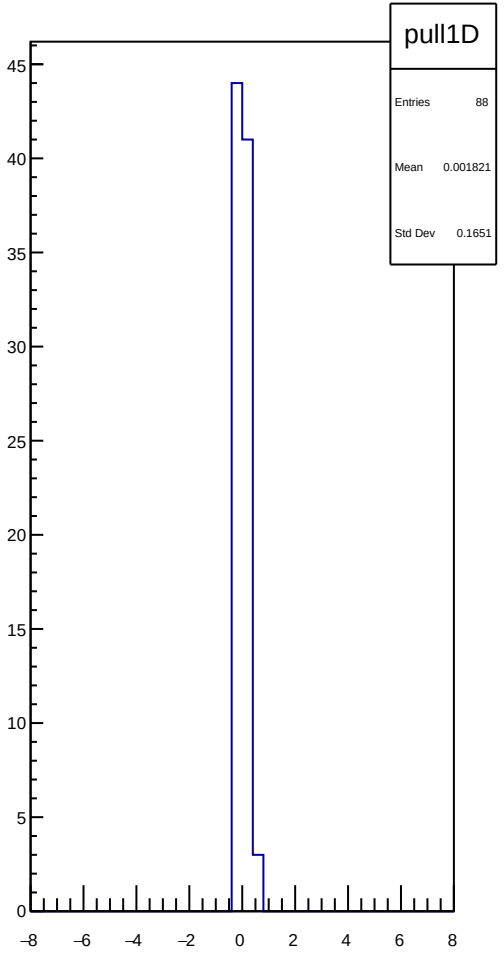

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.397 / 87
p0 −6.849 ± 0.8341
pull
Entries 88
Mean 1003
Std Dev 951.9
pull1D
Entries 88
Mean 0.005372
Std Dev 0.2696

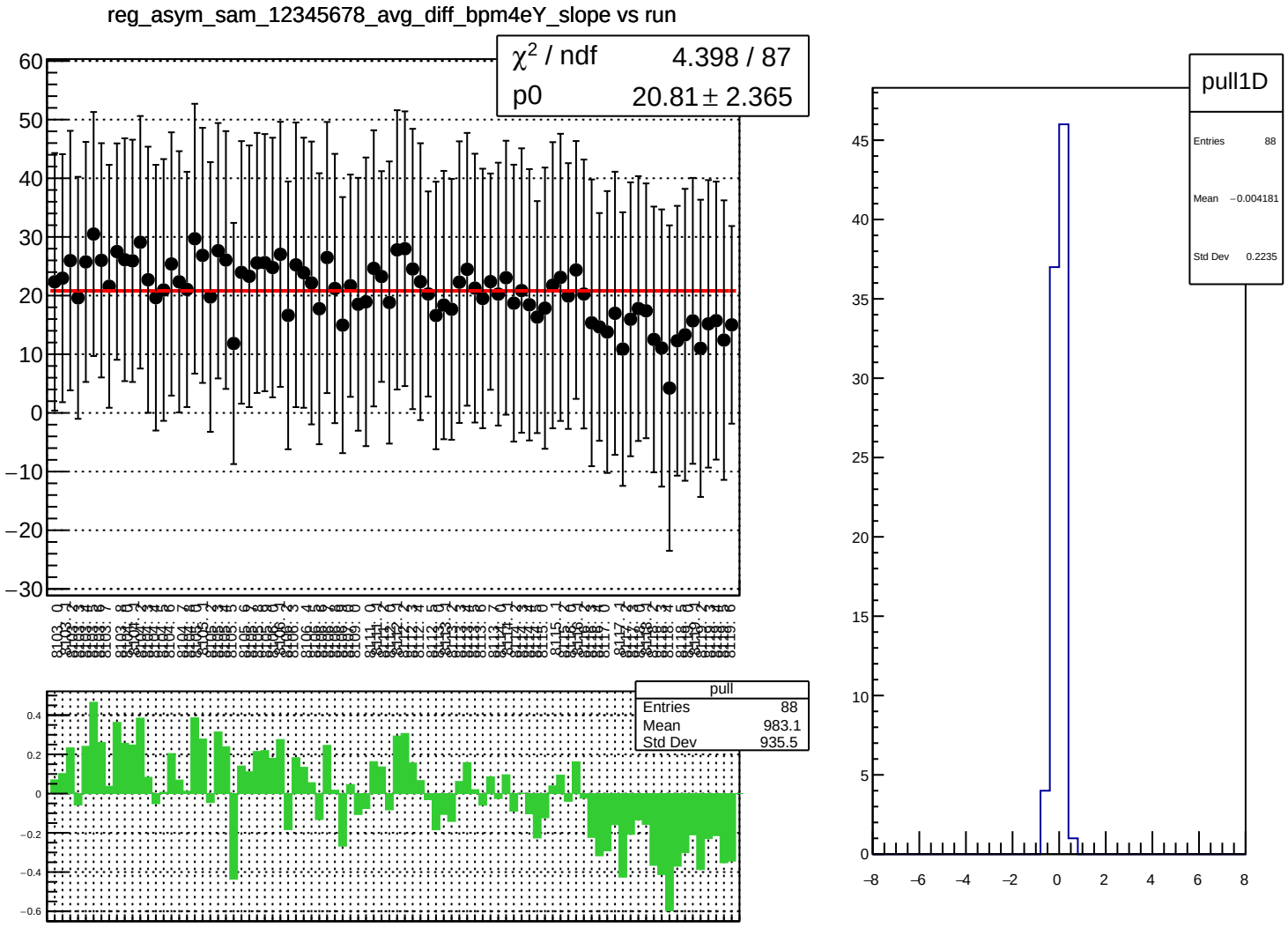

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 2.685 / 87
p0 −0.1382 ± 0.03134
pull
Entries 88
Mean −966.5
Std Dev 1023
pull1D
Entries 88
Mean −0.0023
Std Dev 0.1747

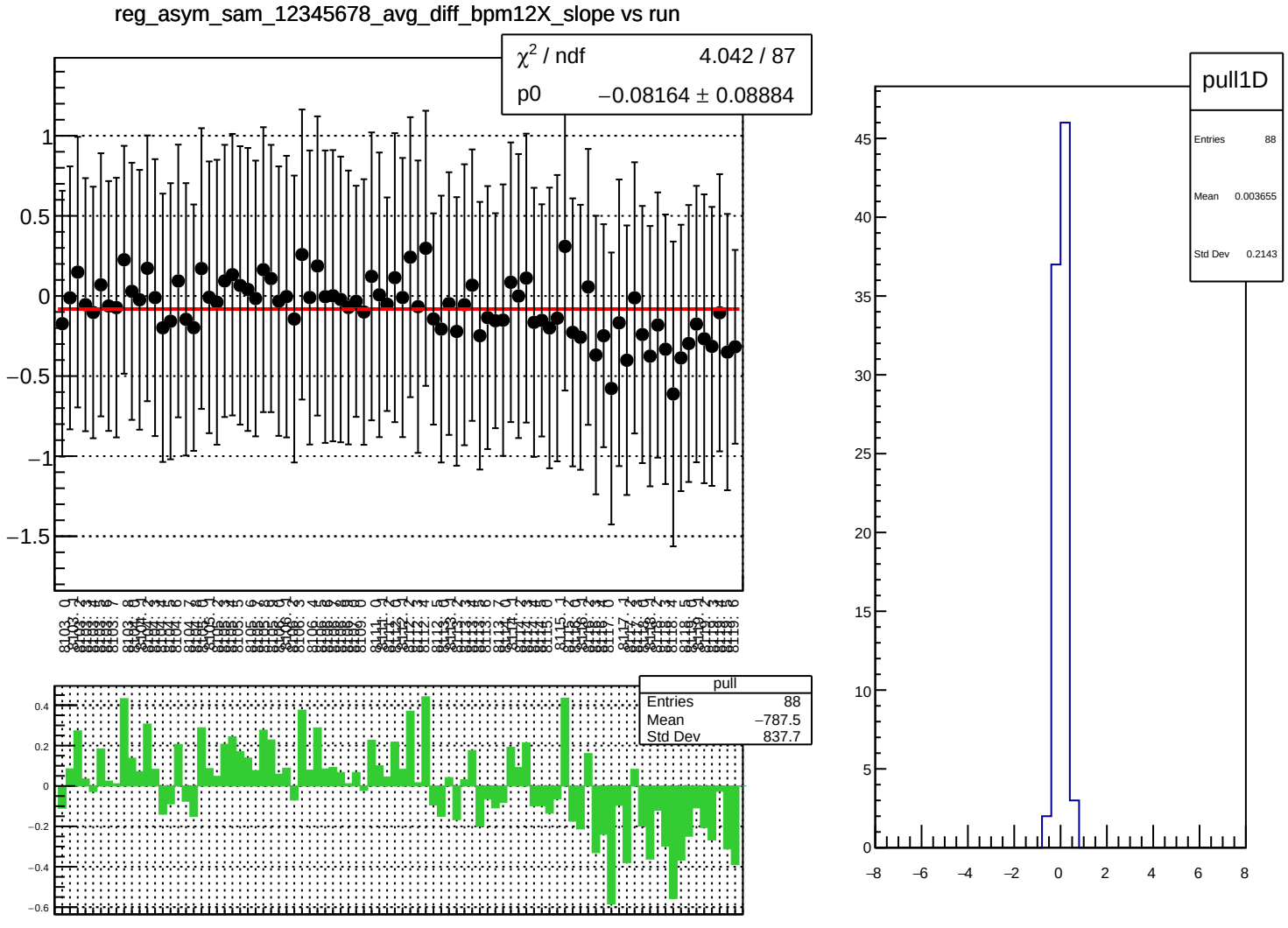

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 2.175 / 87
p0 −15.1 ± 1.474
pull
Entries 88
Mean 1259
Std Dev 1210
pull1D
Entries 88
Mean −0.001537
Std Dev 0.1572

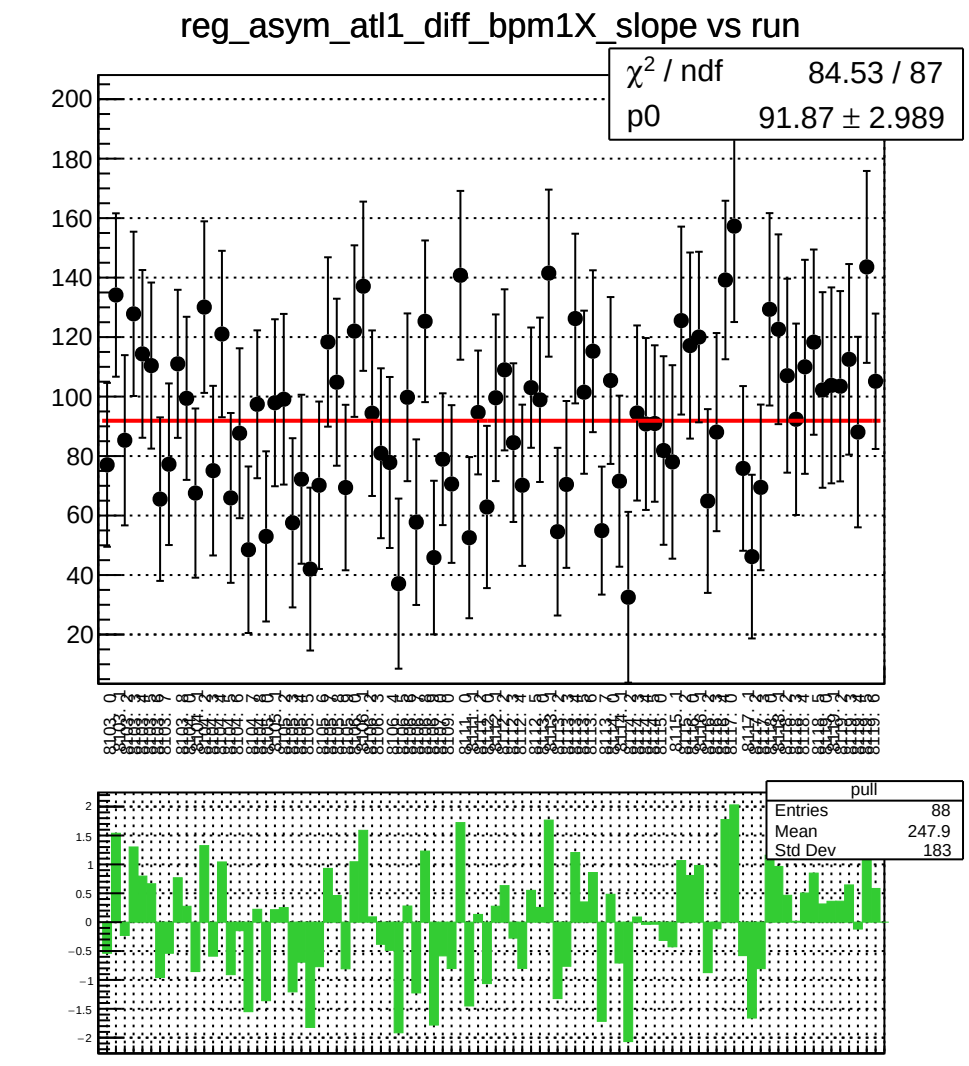

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.581 / 87
p0 12.81 ± 2.212
pull
Entries 88
Mean 1052
Std Dev 1004
pull1D
Entries 88
Mean 0.004336
Std Dev 0.2281

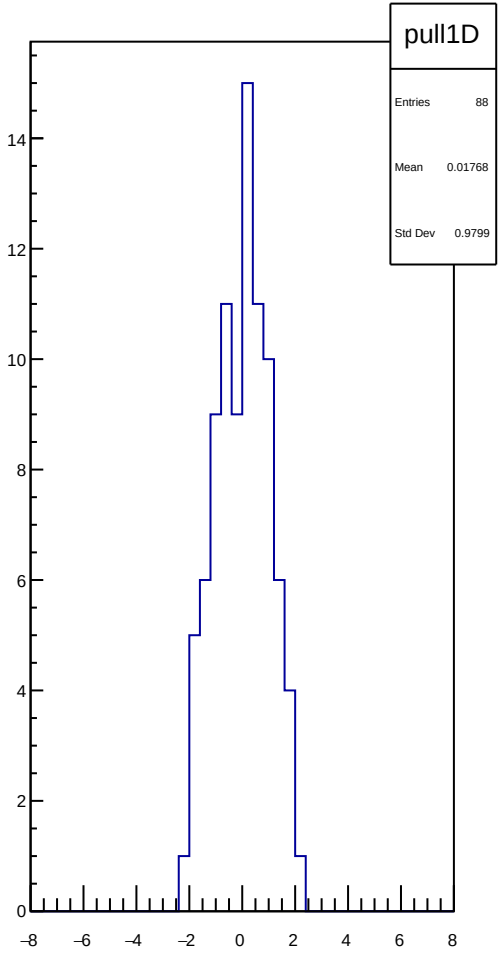

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.4 / 87
p0 −55.11 ± 1.401
pull
Entries 88
Mean 1033
Std Dev 981.3

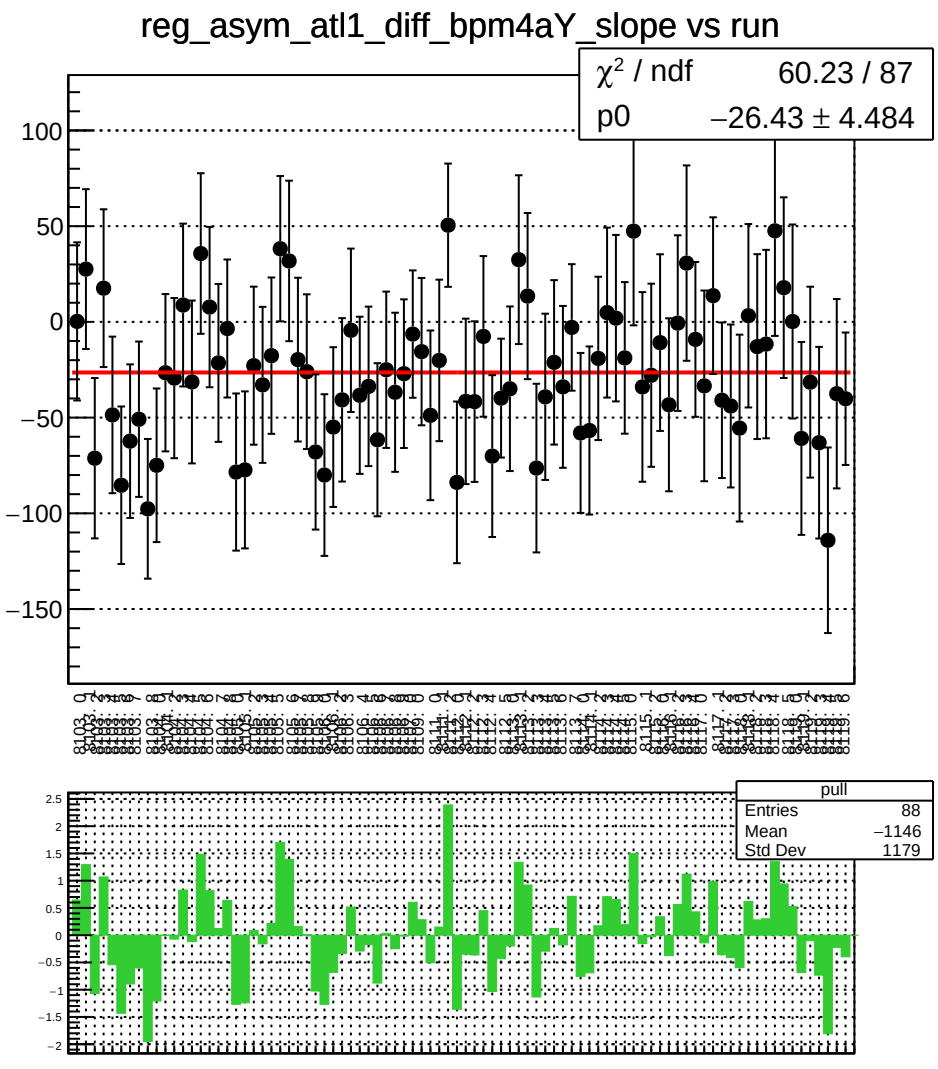

pull1D
Entries 88
Mean 0.001821
Std Dev 0.1651

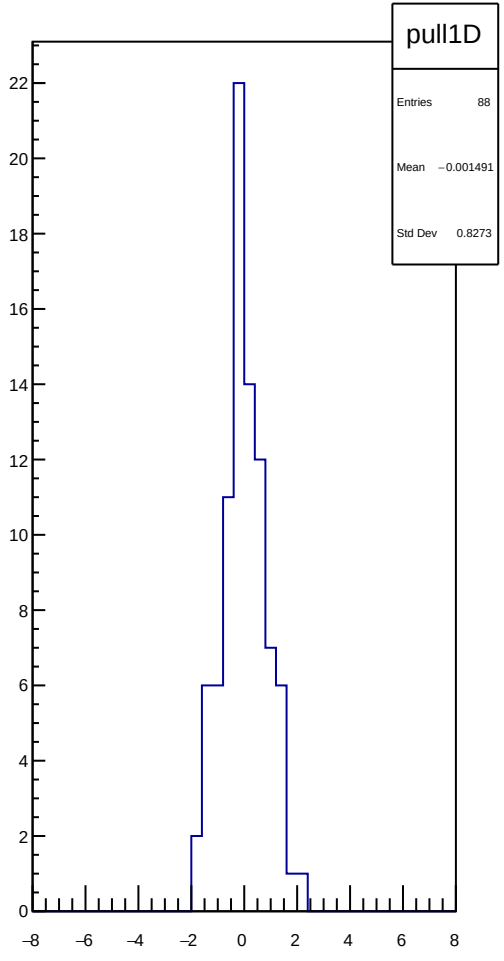

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.398 / 87
p0 20.81 ± 2.365
pull
Entries 88
Mean 983.1
Std Dev 935.5
pull1D
Entries 88
Mean −0.004181
Std Dev 0.2235

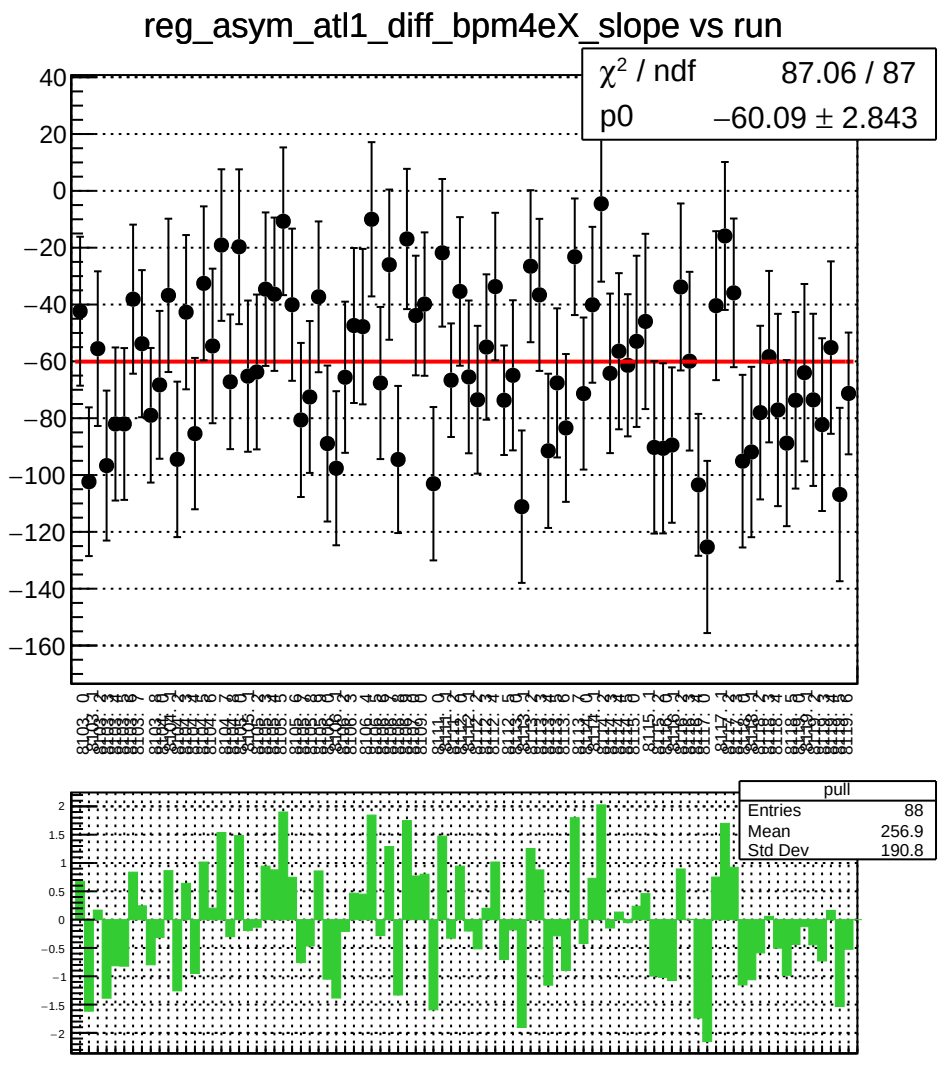

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 4.042 / 87
p0 −0.08164 ± 0.08884
pull
Entries 88
Mean −787.5
Std Dev 837.7
pull1D
Entries 88
Mean 0.003655
Std Dev 0.2143

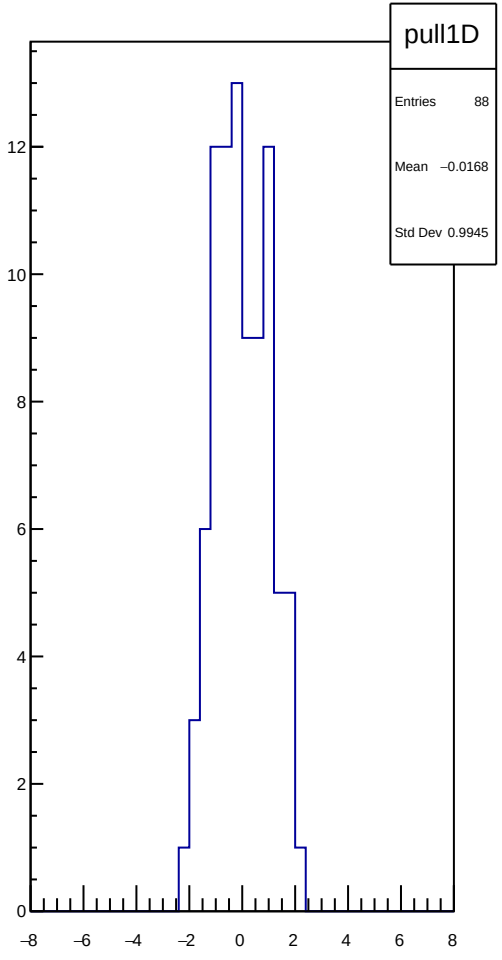

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 84.53 / 87
p0 91.87 ± 2.989
pull
Entries 88
Mean 247.9
Std Dev 183

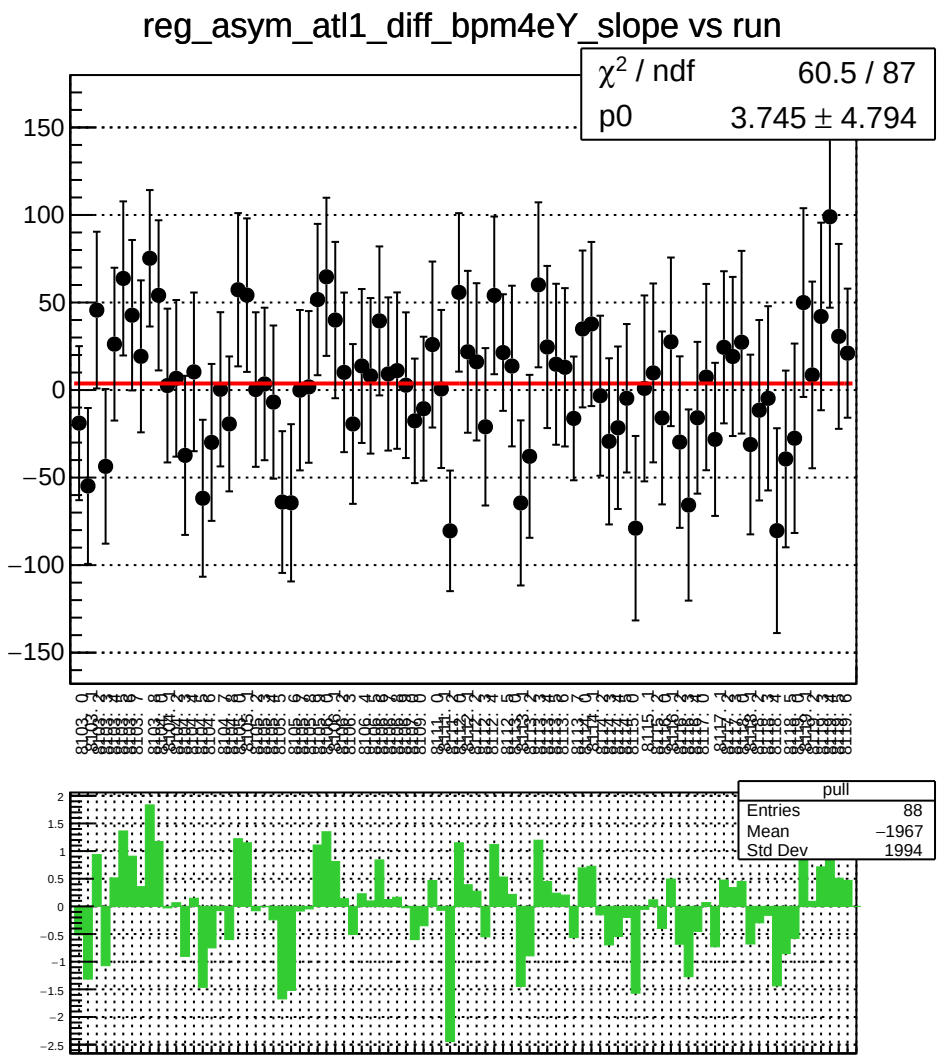

pull1D
Entries 88
Mean 0.01768
Std Dev 0.9799

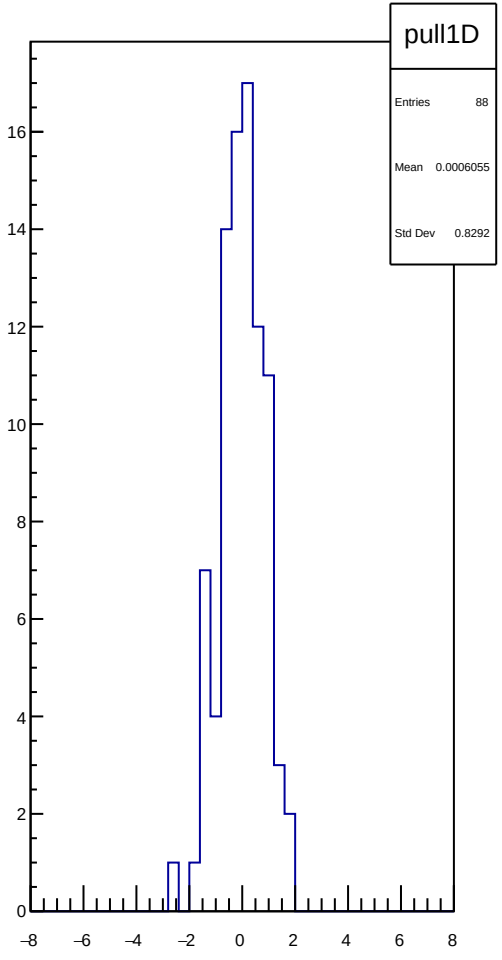

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 60.23 / 87
p0 −26.43 ± 4.484
100
50
0
−50
−100
−150
pull
Entries 88
Mean −1146
Std Dev 1179
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

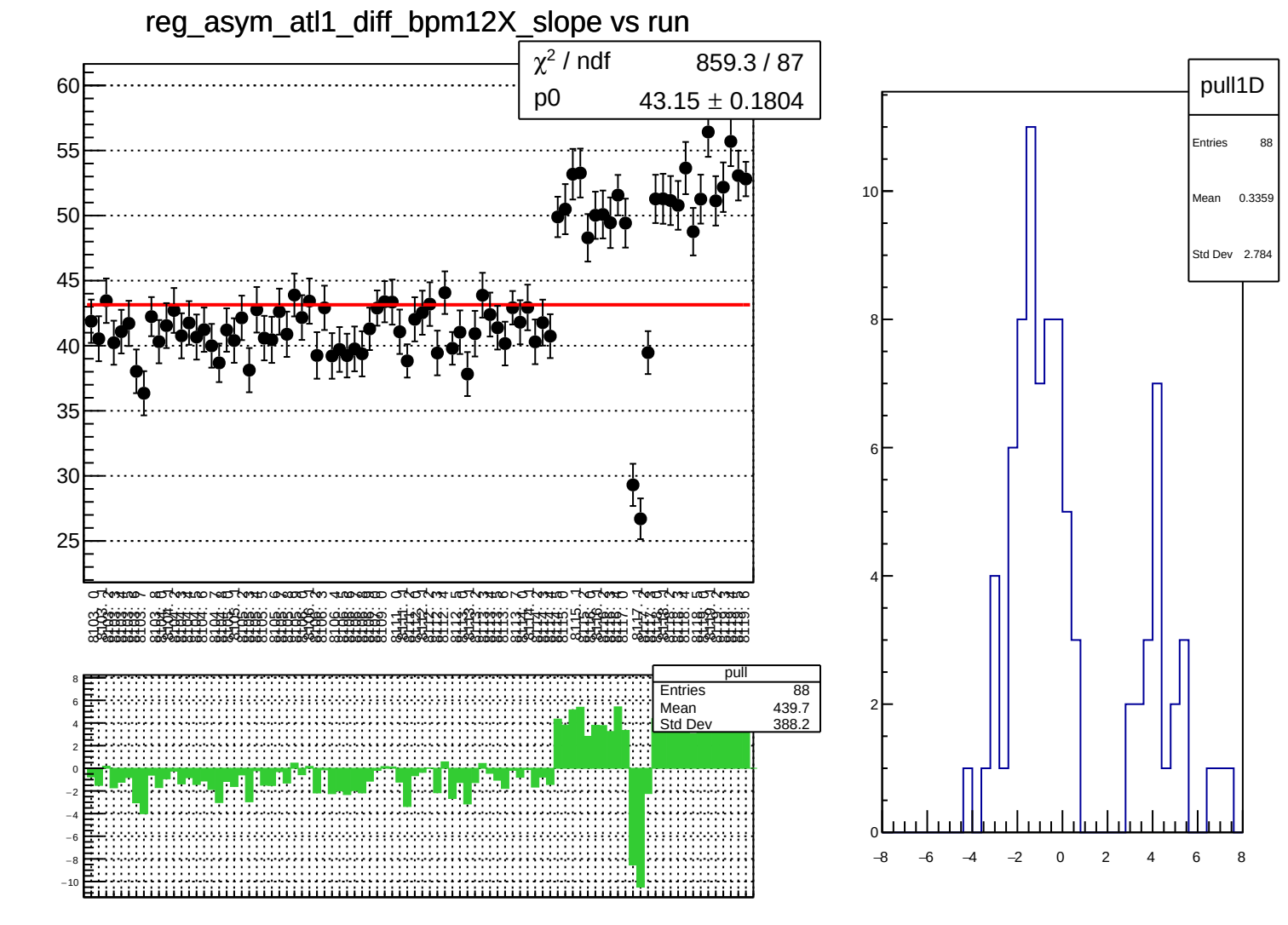

pull1D
Entries 88
Mean −0.001491
Std Dev 0.8273
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

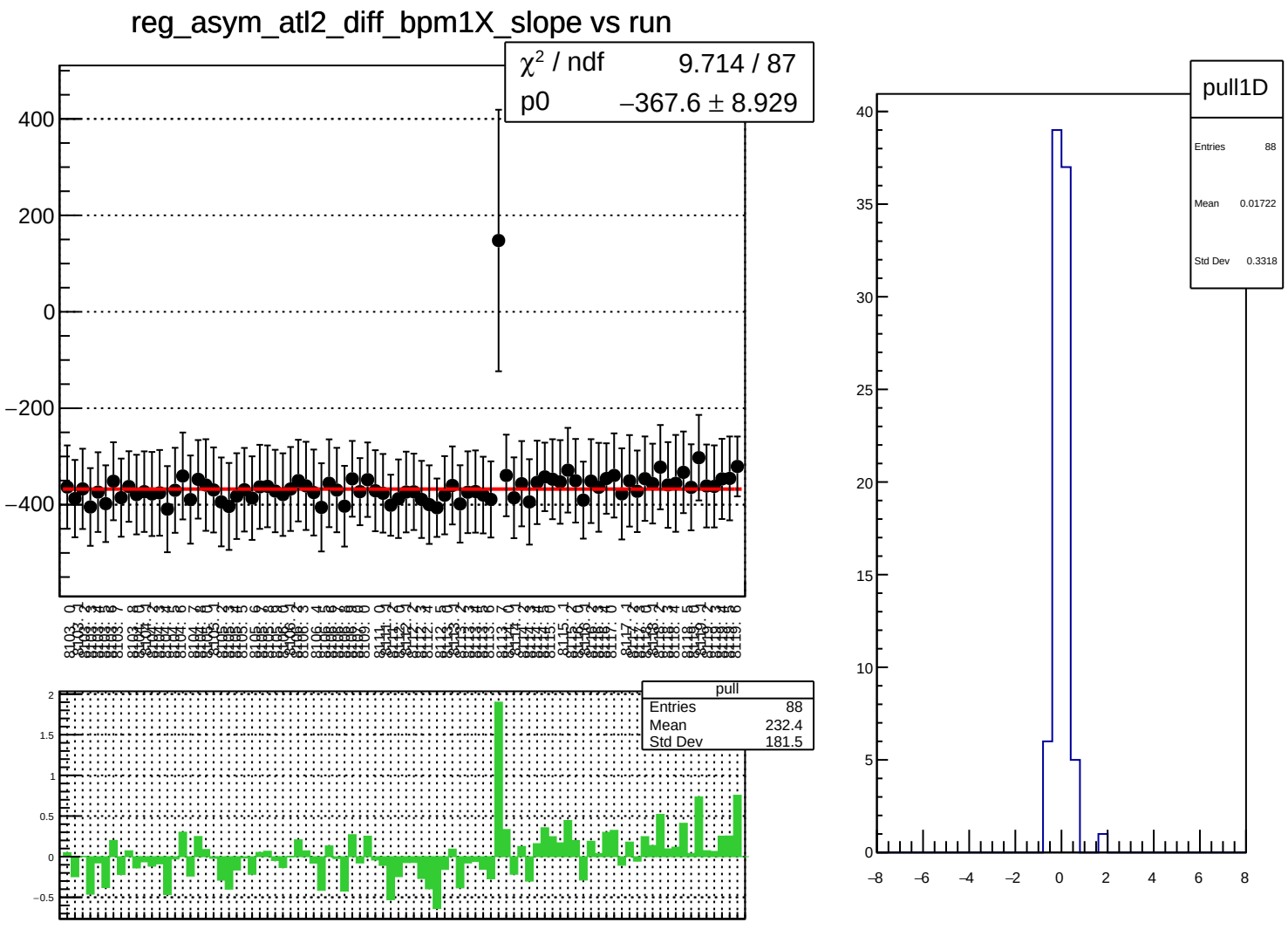

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 87.06 / 87
p0 −60.09 ± 2.843
pull
Entries 88
Mean 256.9
Std Dev 190.8

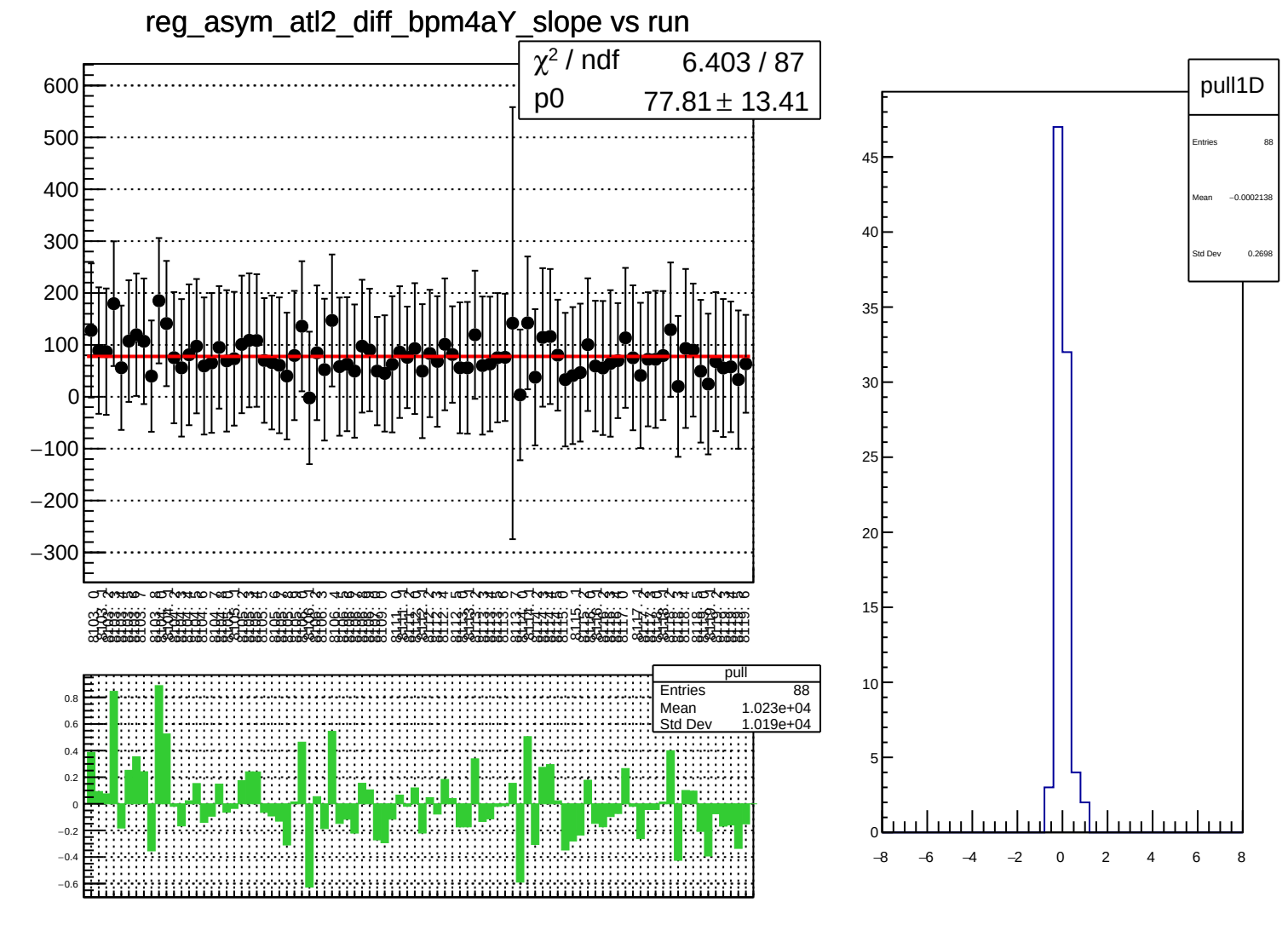

pull1D
Entries 88
Mean −0.0168
Std Dev 0.9945

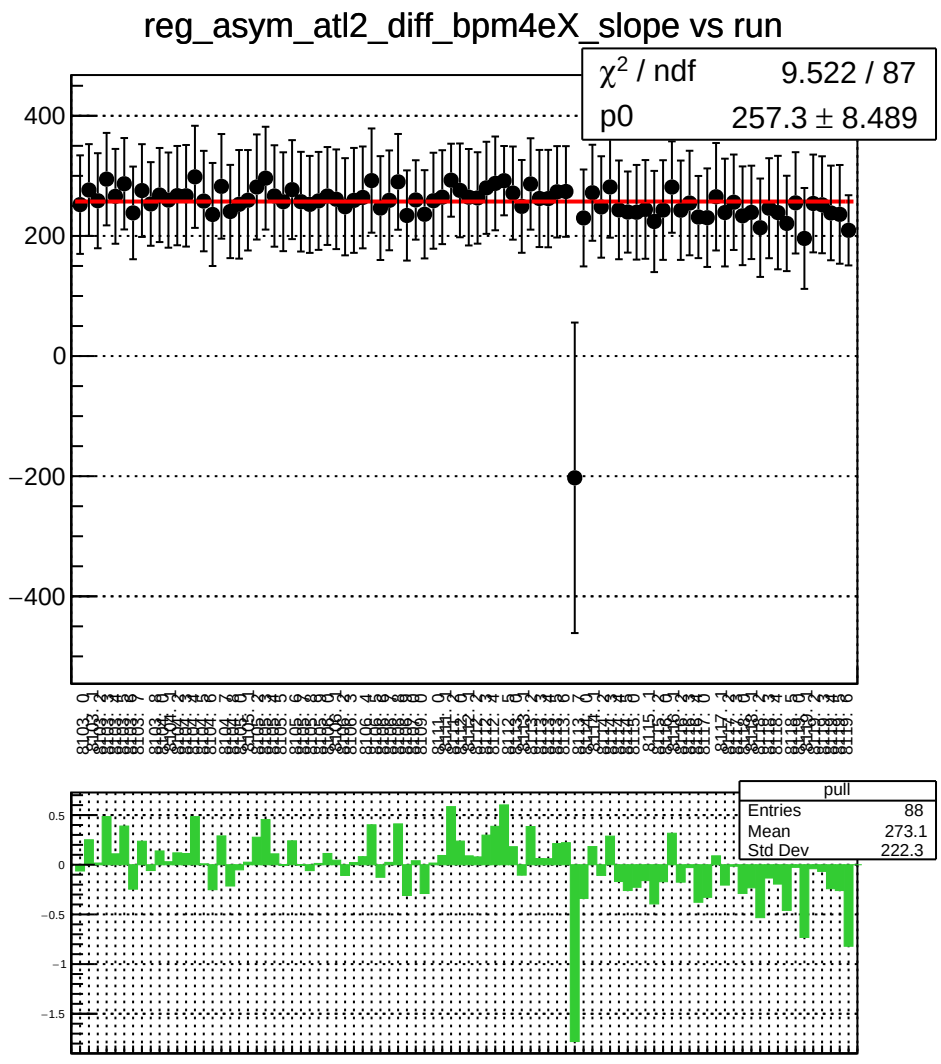

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 60.5 / 87
p0 3.745 ± 4.794
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean −1967
Std Dev 1994
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

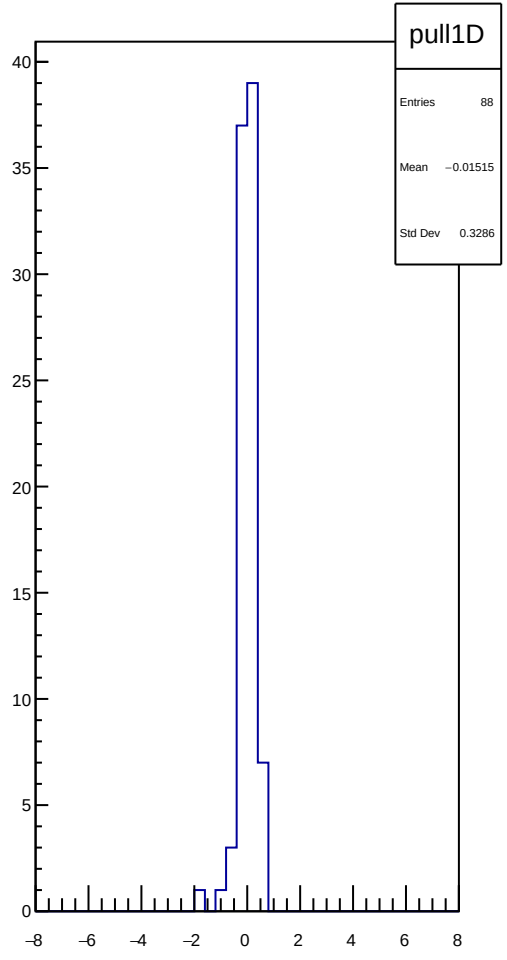

pull1D
Entries 88
Mean 0.0006055
Std Dev 0.8292
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

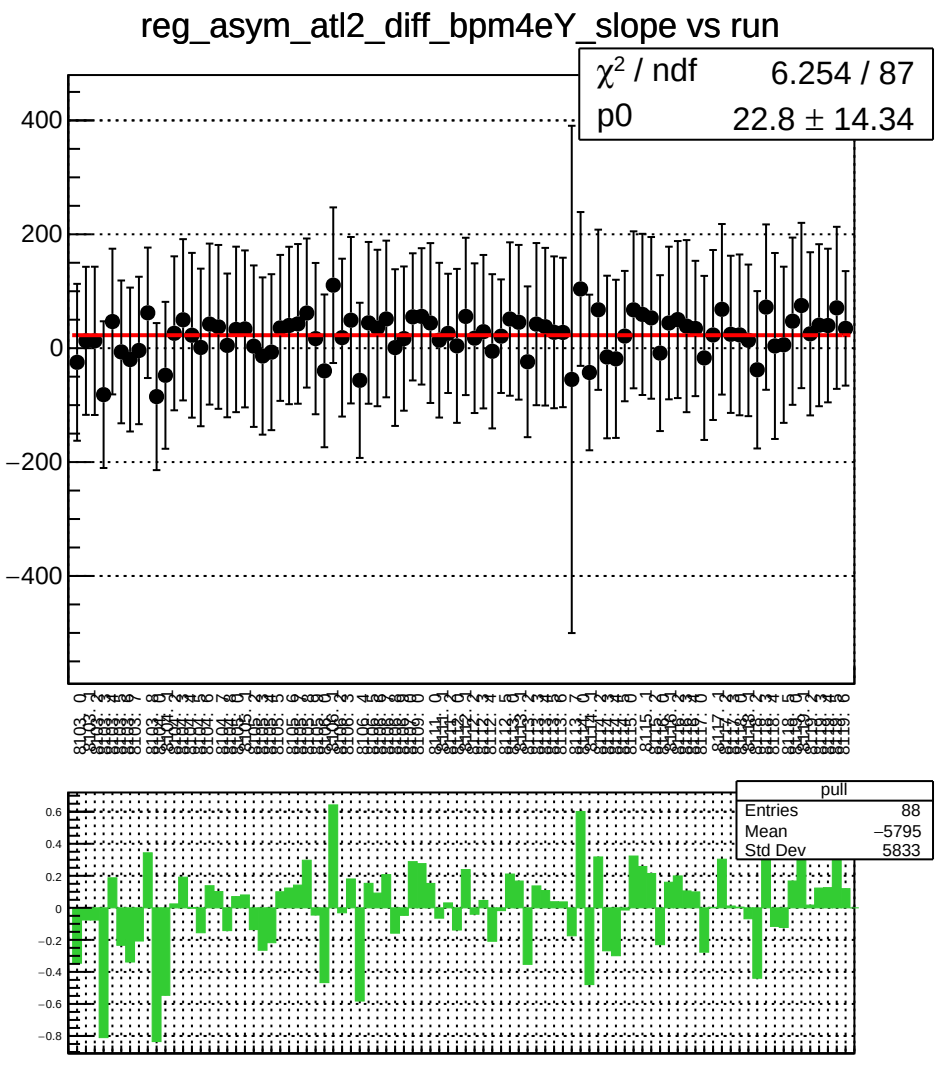

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 859.3 / 87
p0 43.15 ± 0.1804
pull
Entries 88
Mean 439.7
Std Dev 388.2
pull1D
Entries 88
Mean 0.3359
Std Dev 2.784

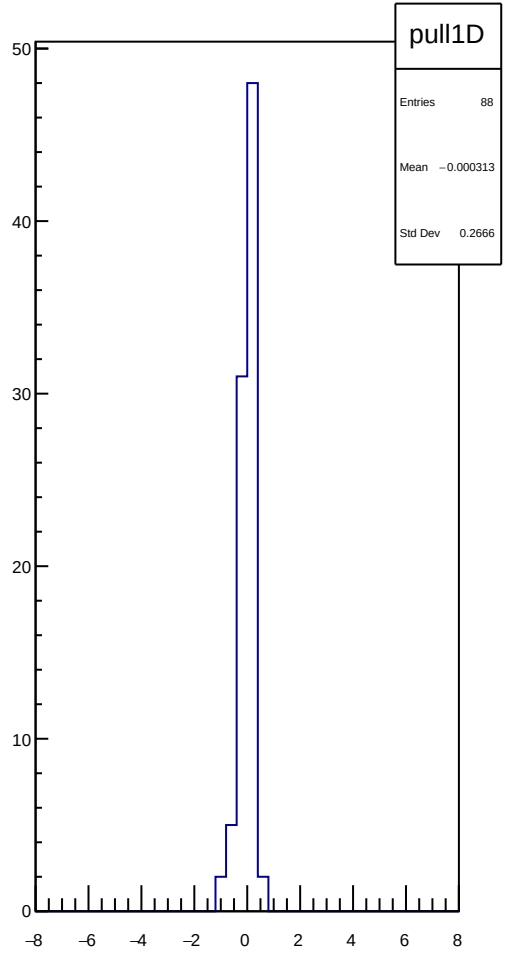

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 9.714 / 87
p0 −367.6 ± 8.929
400
200
0
−200
−400
pull
Entries 88
Mean 232.4
Std Dev 181.5
2
1.5
1
0.5
0
−0.5
pull1D
Entries 88
Mean 0.01722
Std Dev 0.3318
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

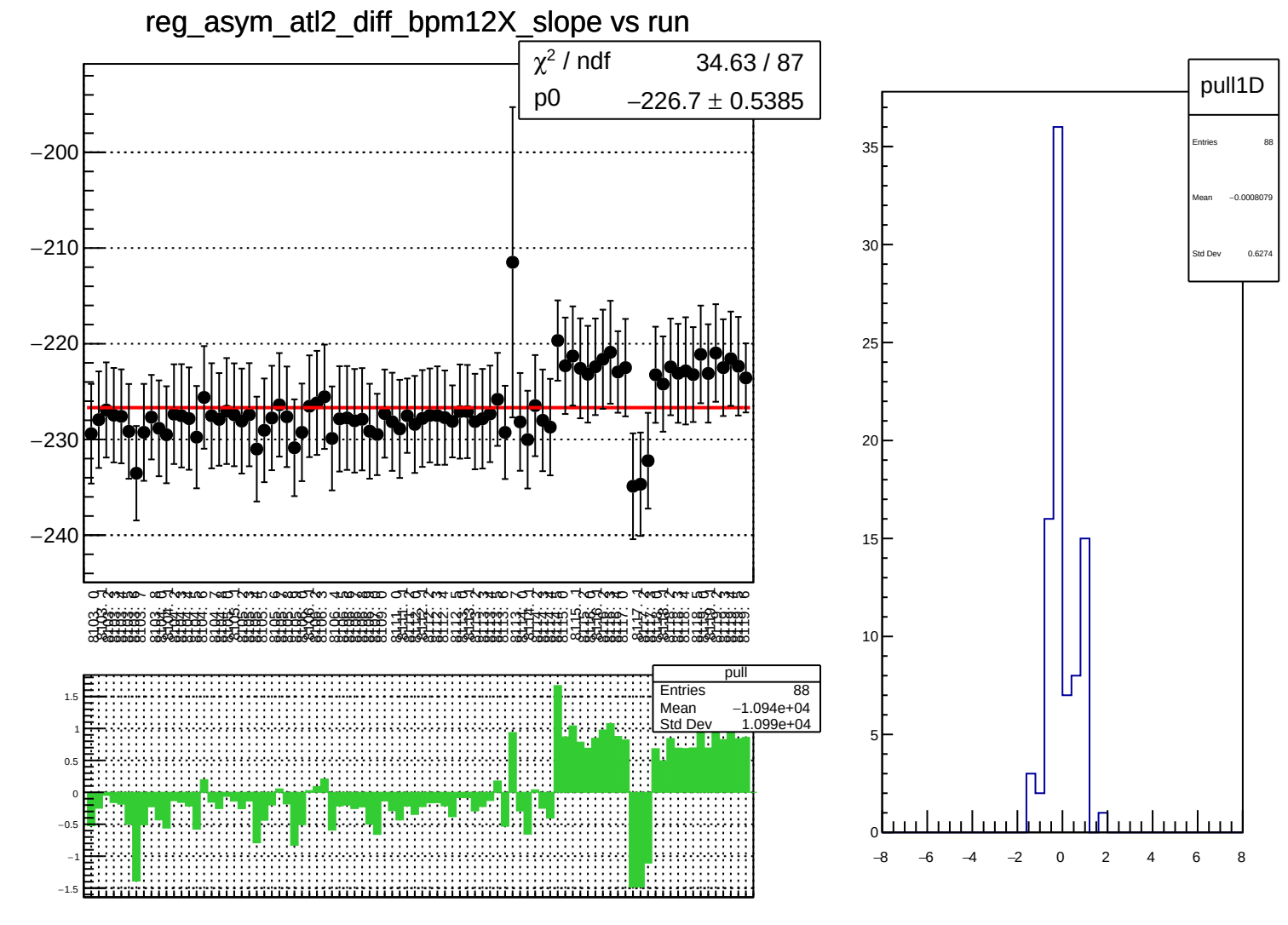

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 6.403 / 87
p0 77.81 ± 13.41
pull
Entries 88
Mean 1.023e+04
Std Dev 1.019e+04
pull1D
Entries 88
Mean −0.0002138
Std Dev 0.2698

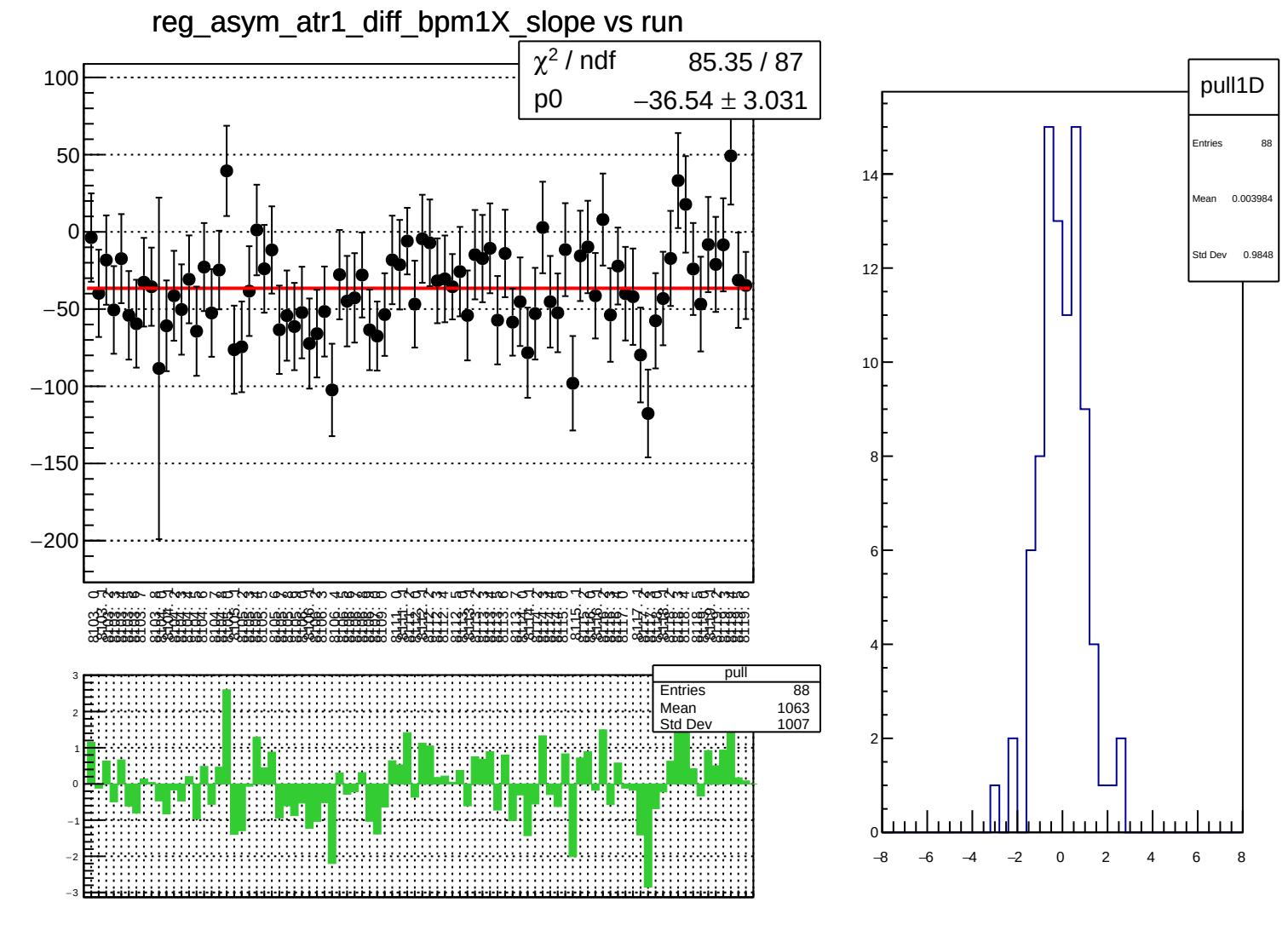

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 9.522 / 87
p0 257.3 ± 8.489
400
200
0
−200
−400
pull
Entries 88
Mean 273.1
Std Dev 222.3
0.5
0
−0.5
−1
−1.5

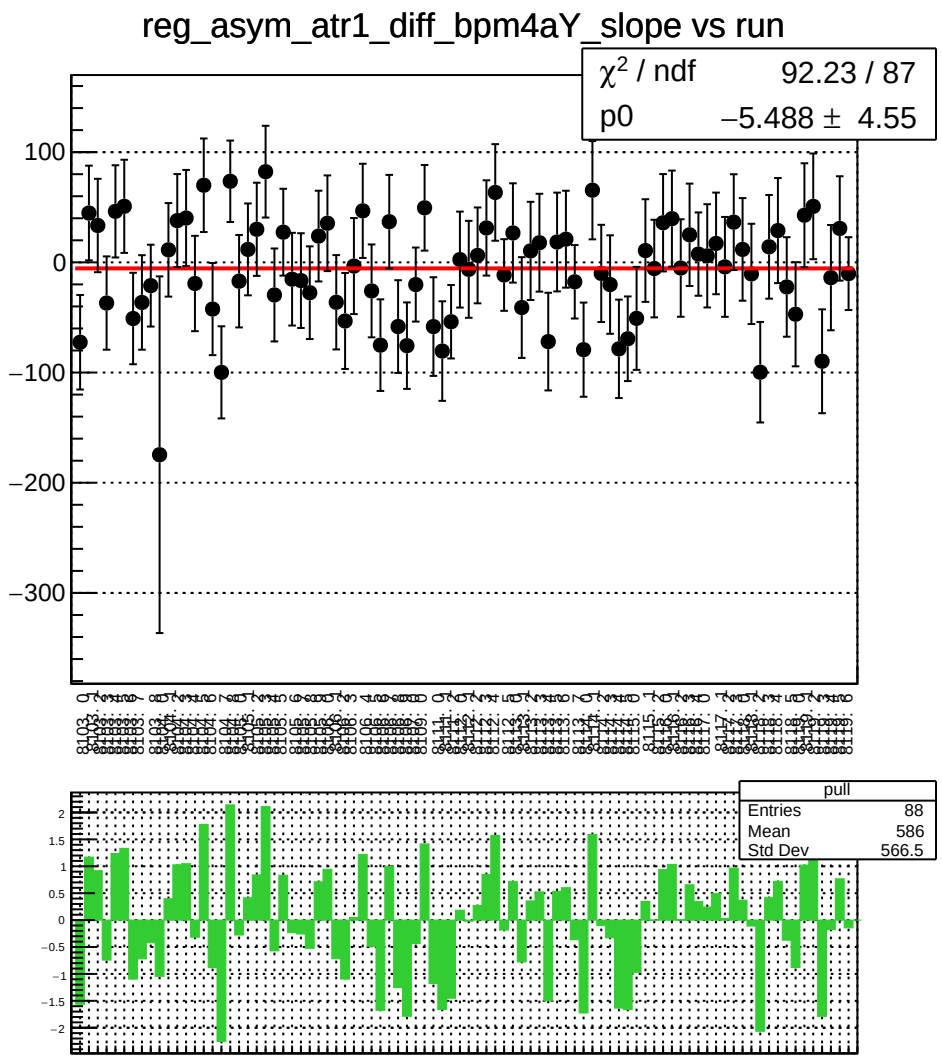

pull1D
Entries 88
Mean −0.01515
Std Dev 0.3286
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

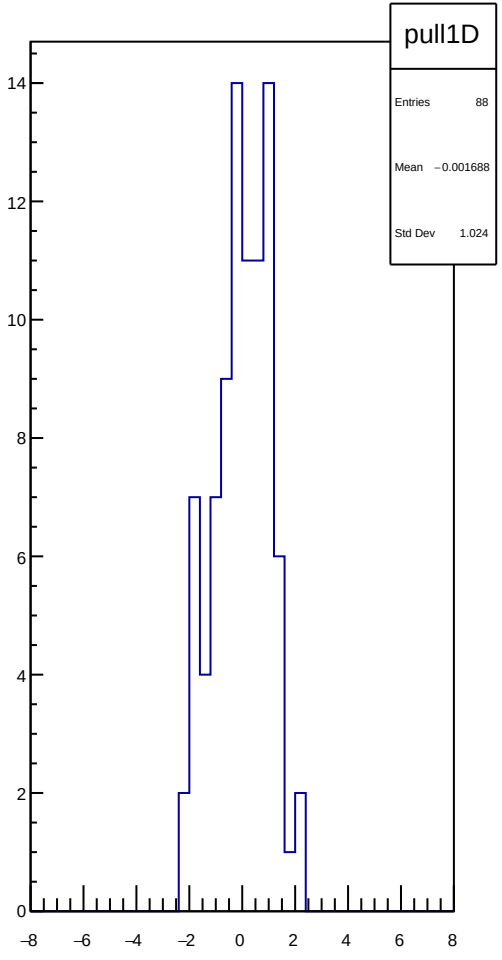

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 6.254 / 87
p0 22.8 ± 14.34
400
200
0
−200
−400
pull
Entries 88
Mean −5795
Std Dev 5833
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

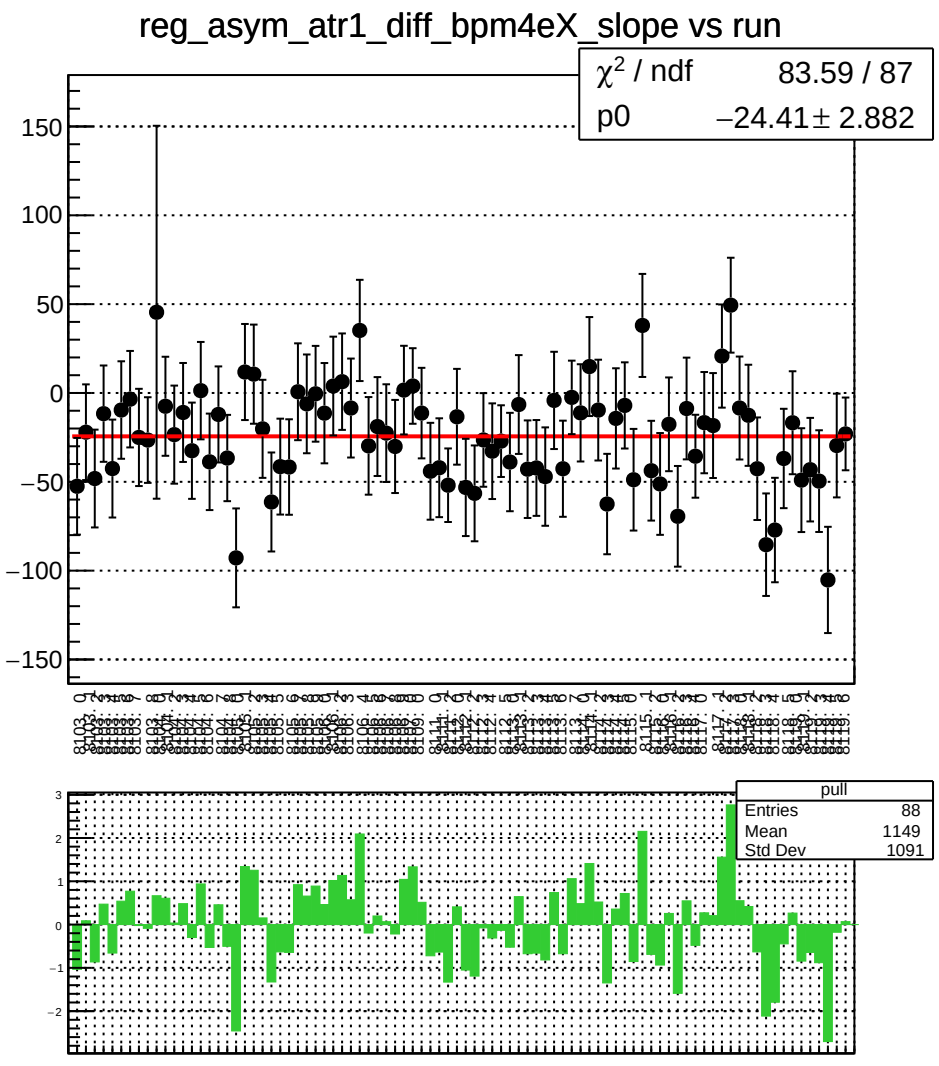

pull1D
Entries 88
Mean −0.000313
Std Dev 0.2666
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

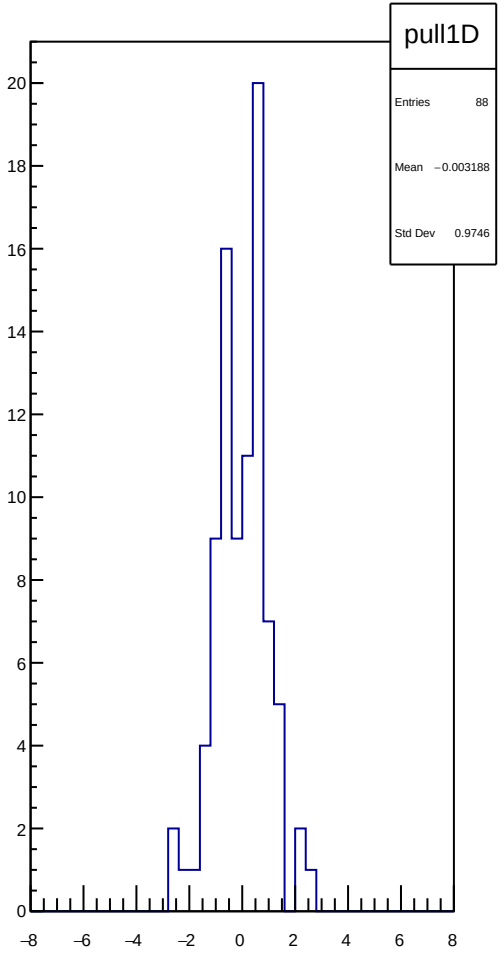

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 34.63 / 87
p0 −226.7 ± 0.5385
−200
−210
−220
−230
−240
pull
Entries 88
Mean −1.094e+04
Std Dev 1.099e+04
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.0008079
Std Dev 0.6274
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

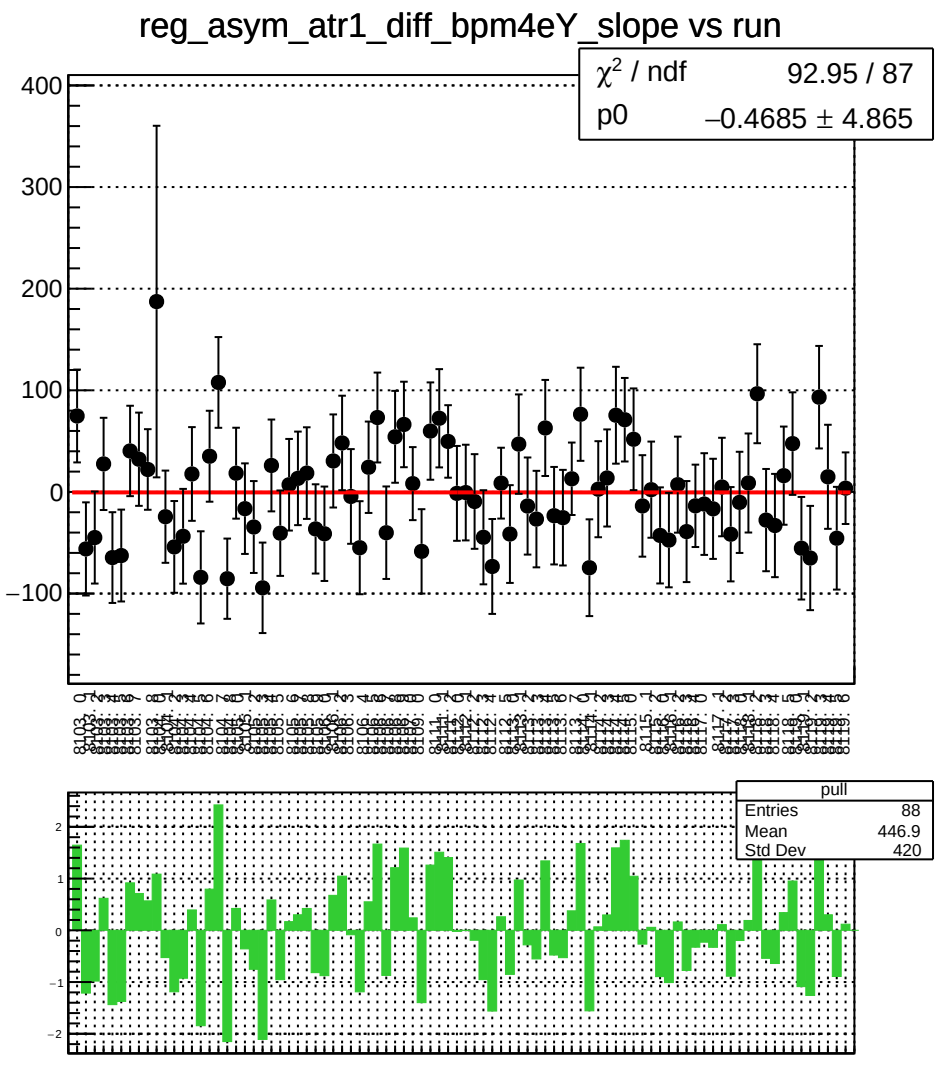

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 85.35 / 87
p0 −36.54 ± 3.031
pull
Entries 88
Mean 1063
Std Dev 1007
pull1D
Entries 88
Mean 0.003984
Std Dev 0.9848

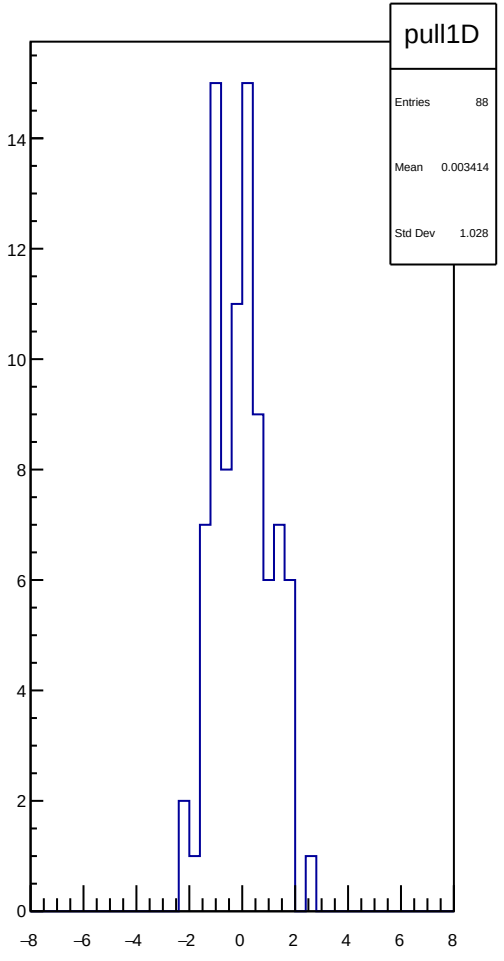

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 92.23 / 87
p0 −5.488 ± 4.55
pull
Entries 88
Mean 586
Std Dev 566.5

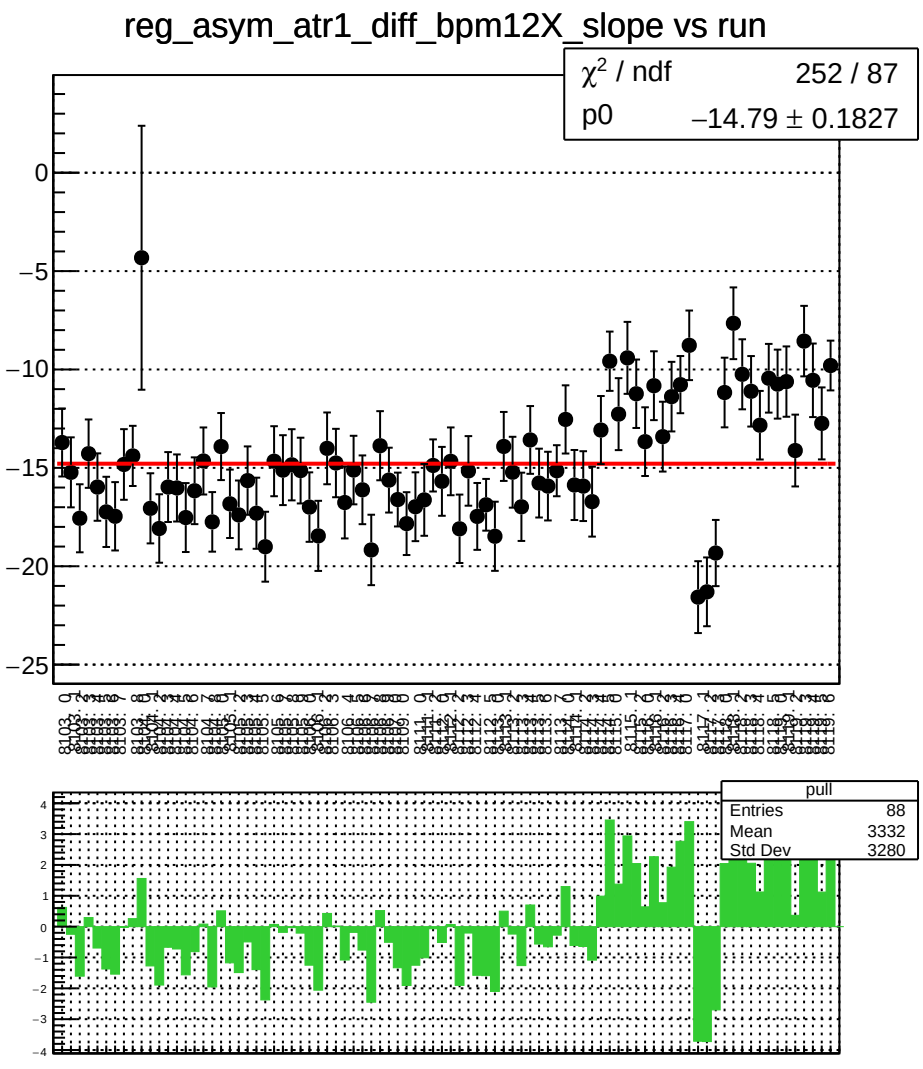

pull1D
Entries 88
Mean −0.001688
Std Dev 1.024

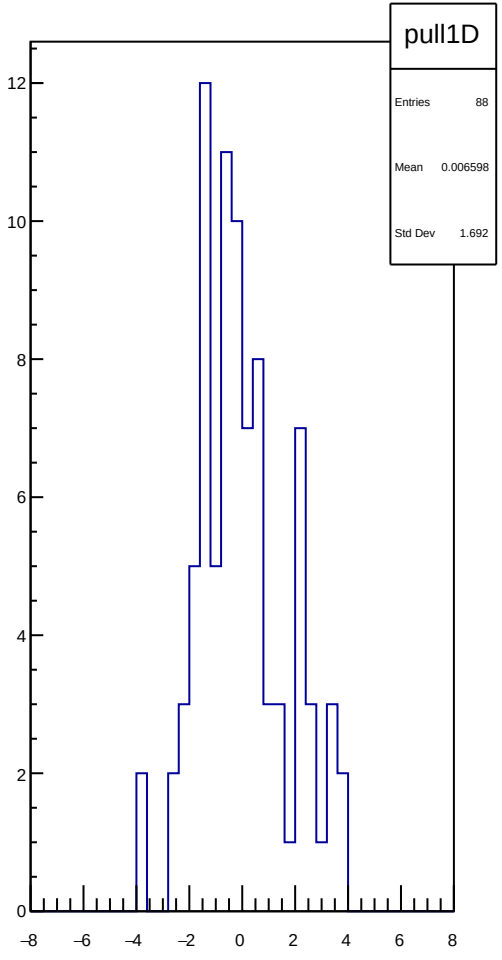

reg_asym_atr1_diff_bpm4eX_slope vs run
χ^2 / ndf 83.59 / 87
p0 −24.41± 2.882
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean 1149
Std Dev 1091
3
2
1
0
−1
−2

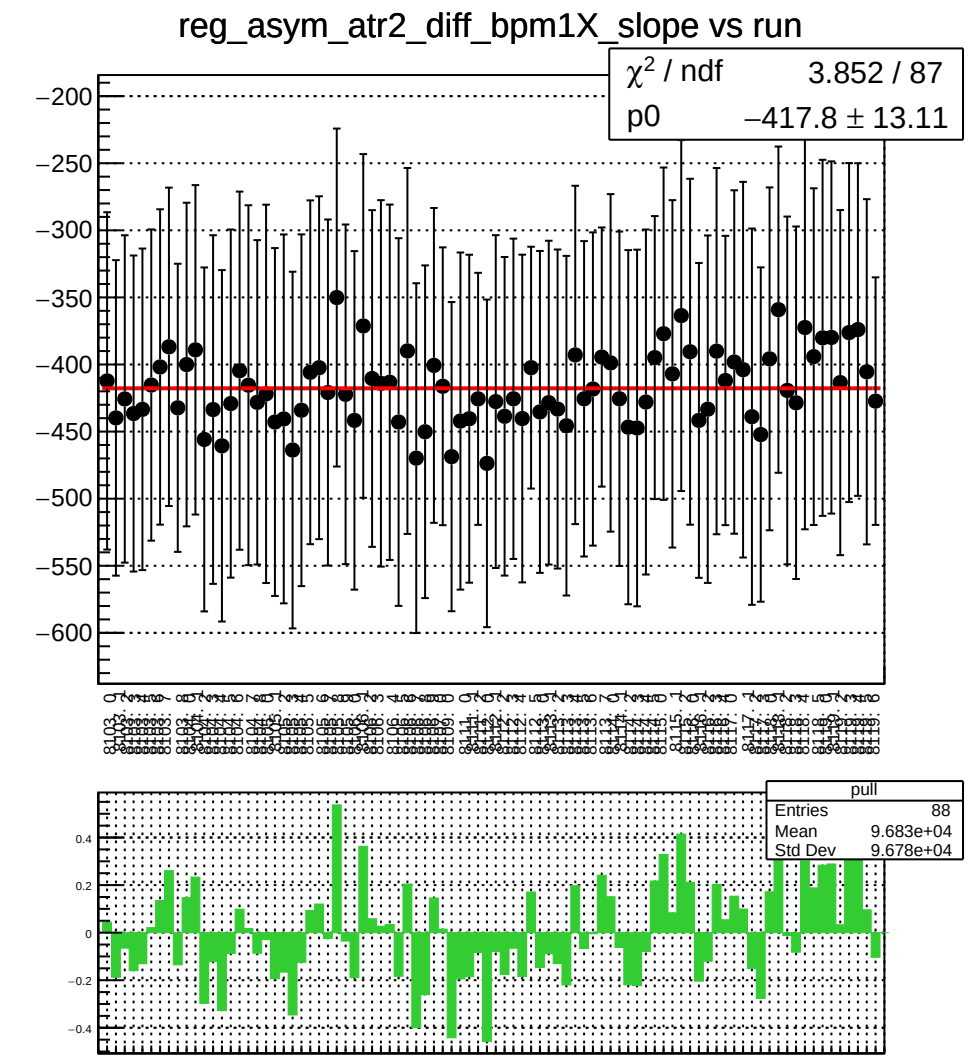

pull1D
Entries 88
Mean −0.003188
Std Dev 0.9746
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

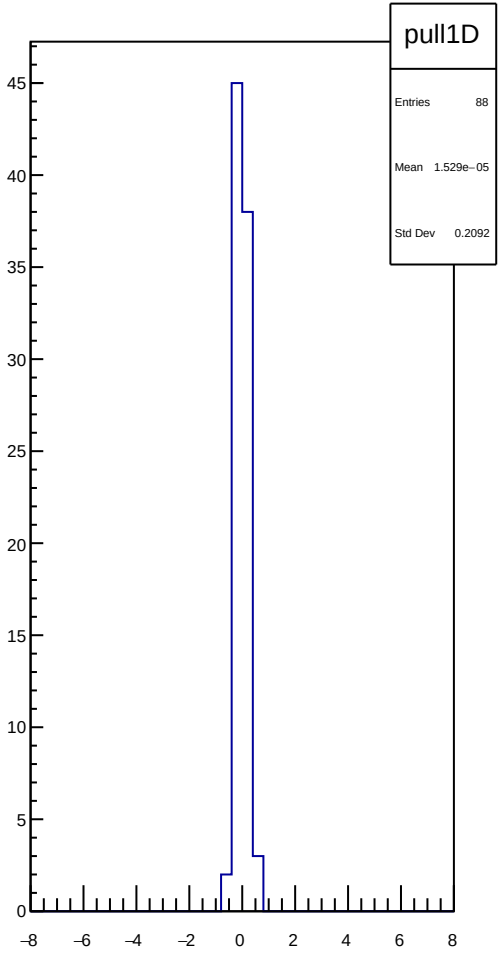

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 92.95 / 87
p0 −0.4685 ± 4.865
400
300
200
100
0
−100
pull
Entries 88
Mean 446.9
Std Dev 420
2
1
0
−1
−2

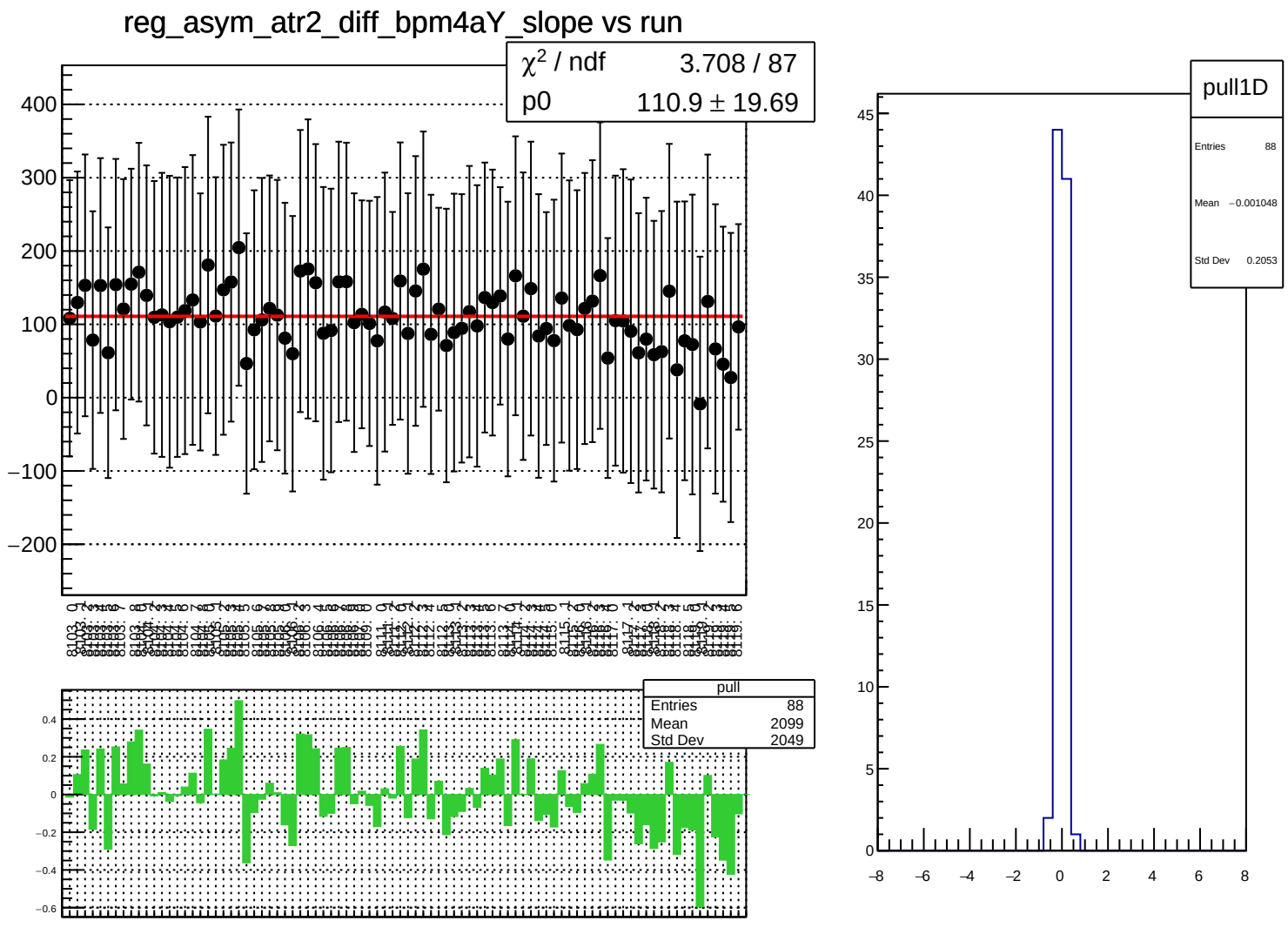

pull1D
Entries 88
Mean 0.003414
Std Dev 1.028
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

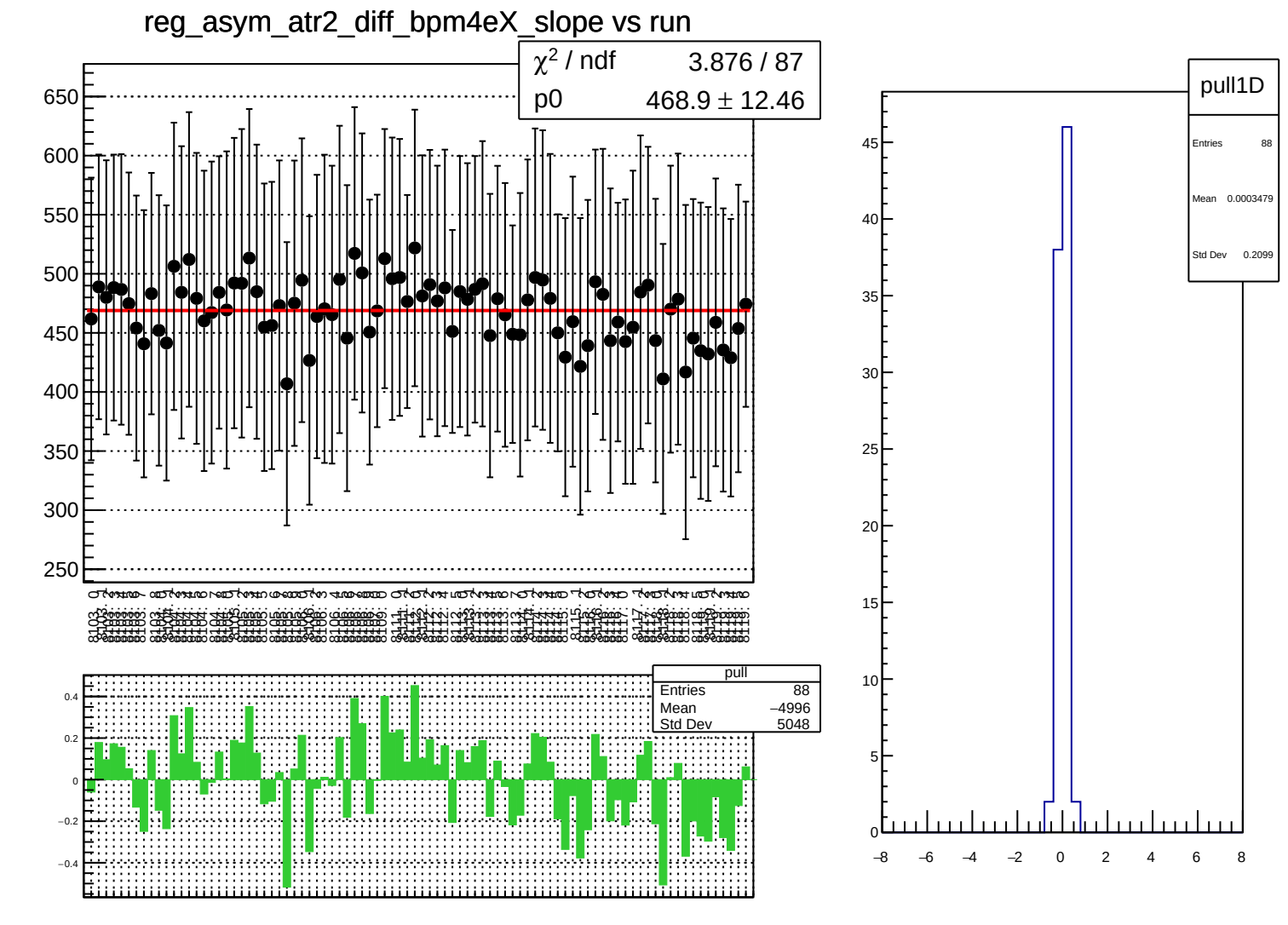

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 252 / 87
p0 −14.79 ± 0.1827
pull
Entries 88
Mean 3332
Std Dev 3280

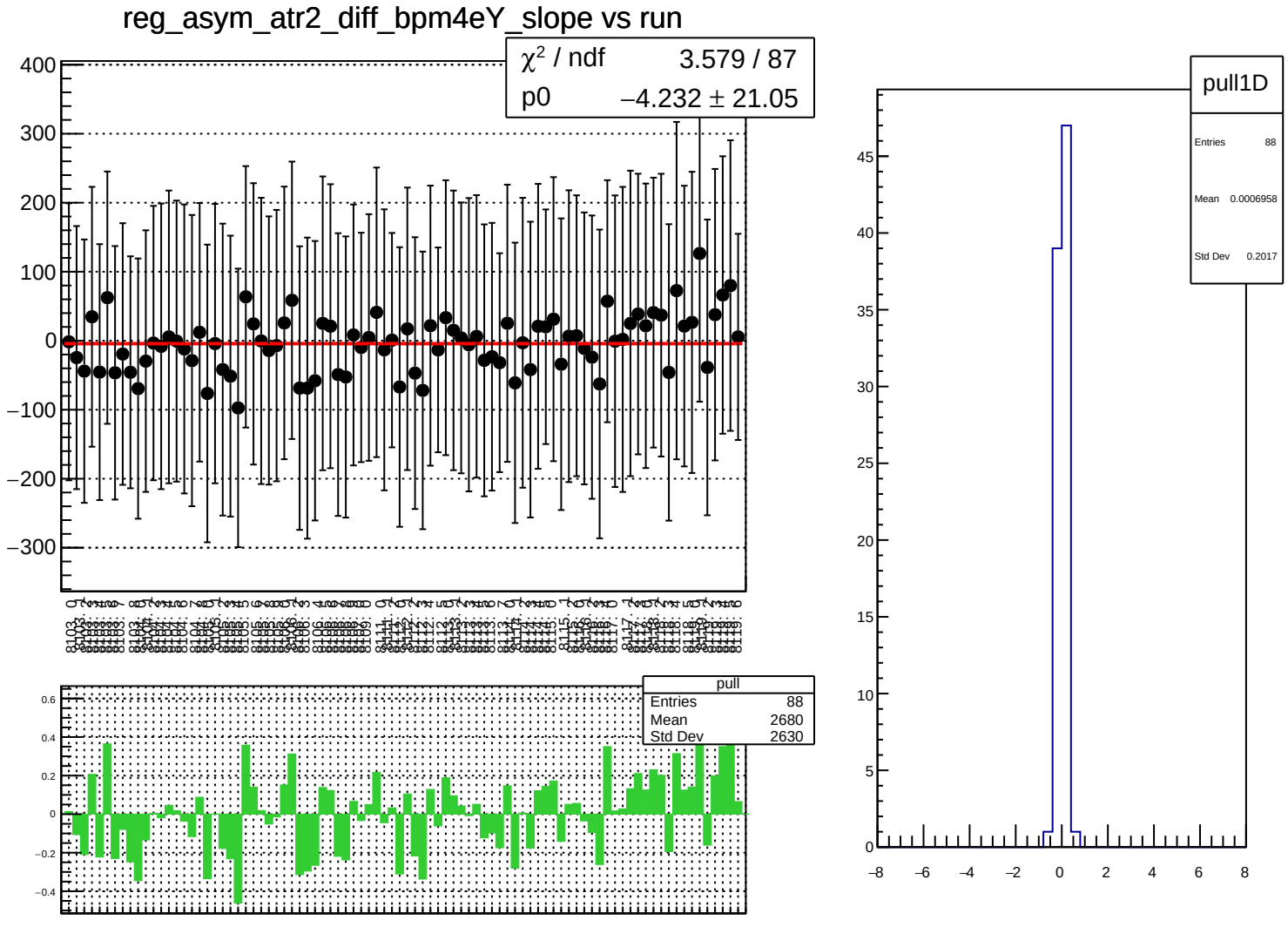

pull1D
Entries 88
Mean 0.006598
Std Dev 1.692

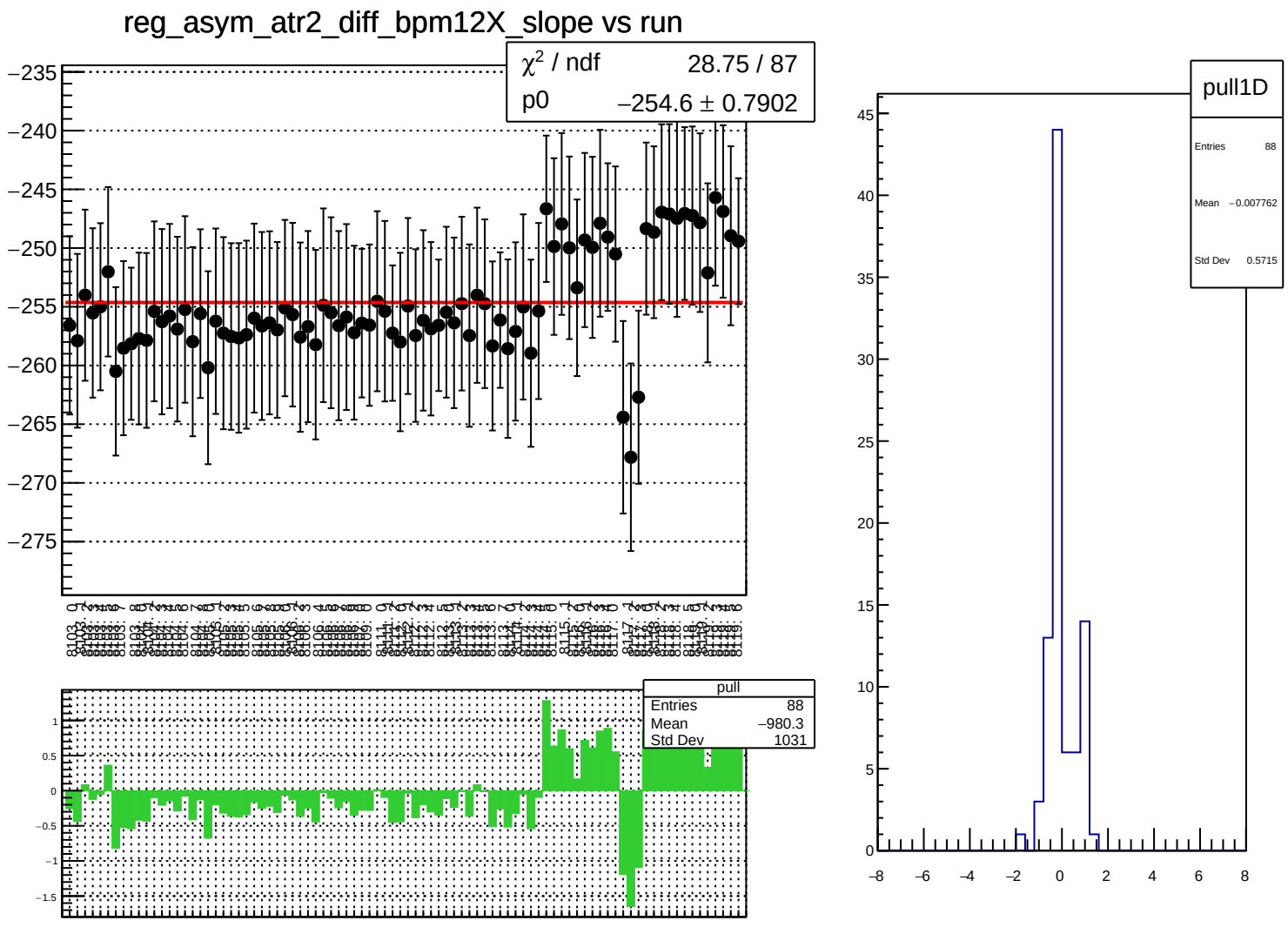

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 3.852 / 87
p0 −417.8 ± 13.11
pull
Entries 88
Mean 9.683e+04
Std Dev 9.678e+04

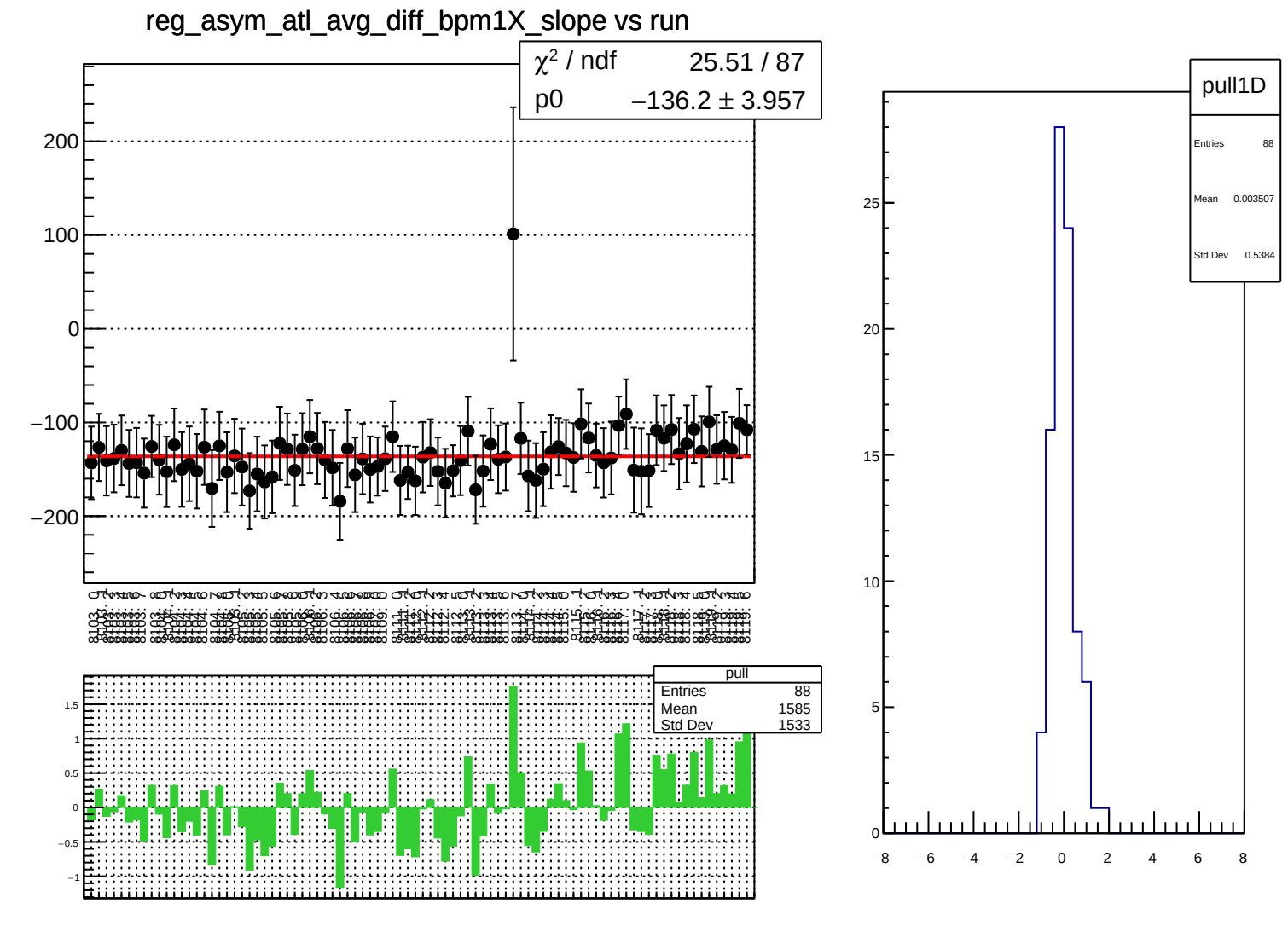

pull1D
Entries 88
Mean 1.529e−05
Std Dev 0.2092

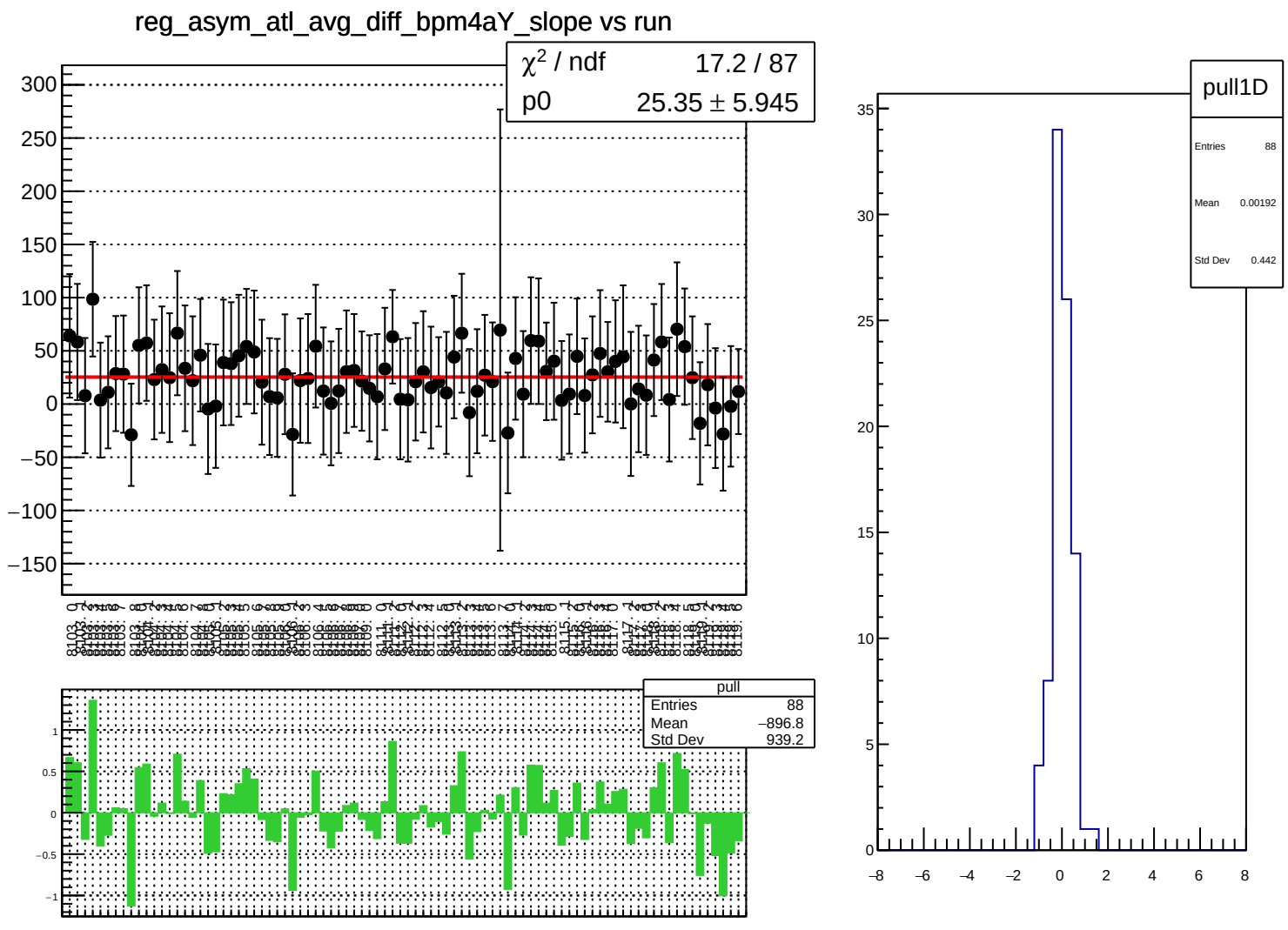

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 3.708 / 87
p0 110.9 ± 19.69
pull
Entries 88
Mean 2099
Std Dev 2049
pull1D
Entries 88
Mean −0.001048
Std Dev 0.2053

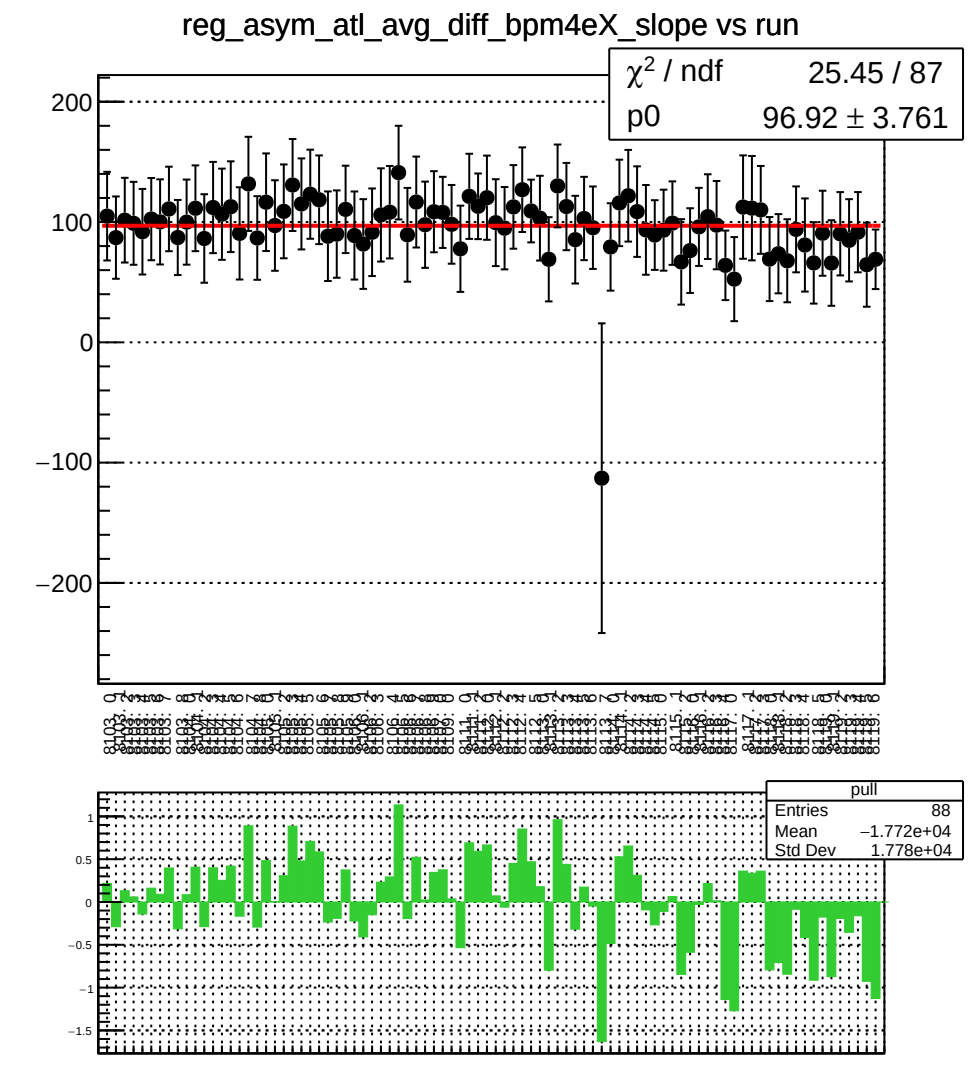

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 3.876 / 87
p0 468.9 ± 12.46
650
600
550
500
450
400
350
300
250
pull
Entries 88
Mean −4996
Std Dev 5048
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 88
Mean 0.0003479
Std Dev 0.2099
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

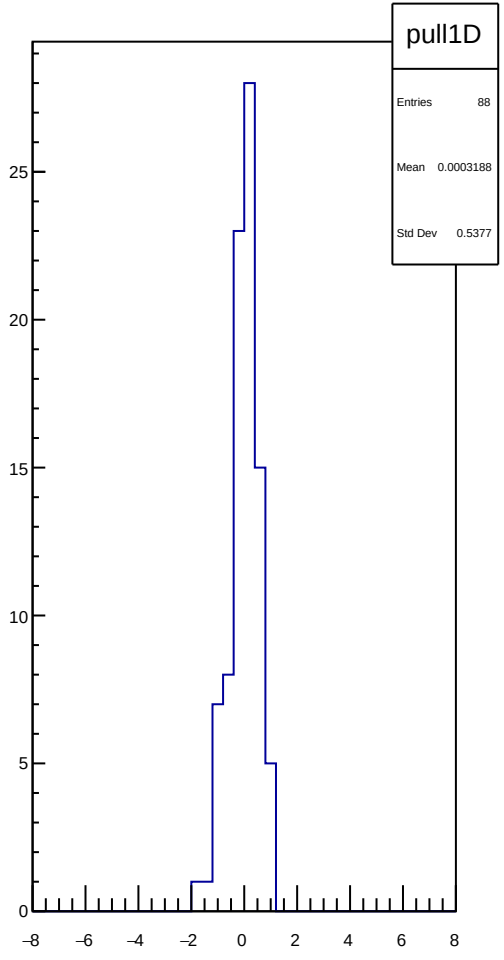

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 3.579 / 87
p0 −4.232 ± 21.05
pull
Entries 88
Mean 2680
Std Dev 2630
pull1D
Entries 88
Mean 0.0006958
Std Dev 0.2017

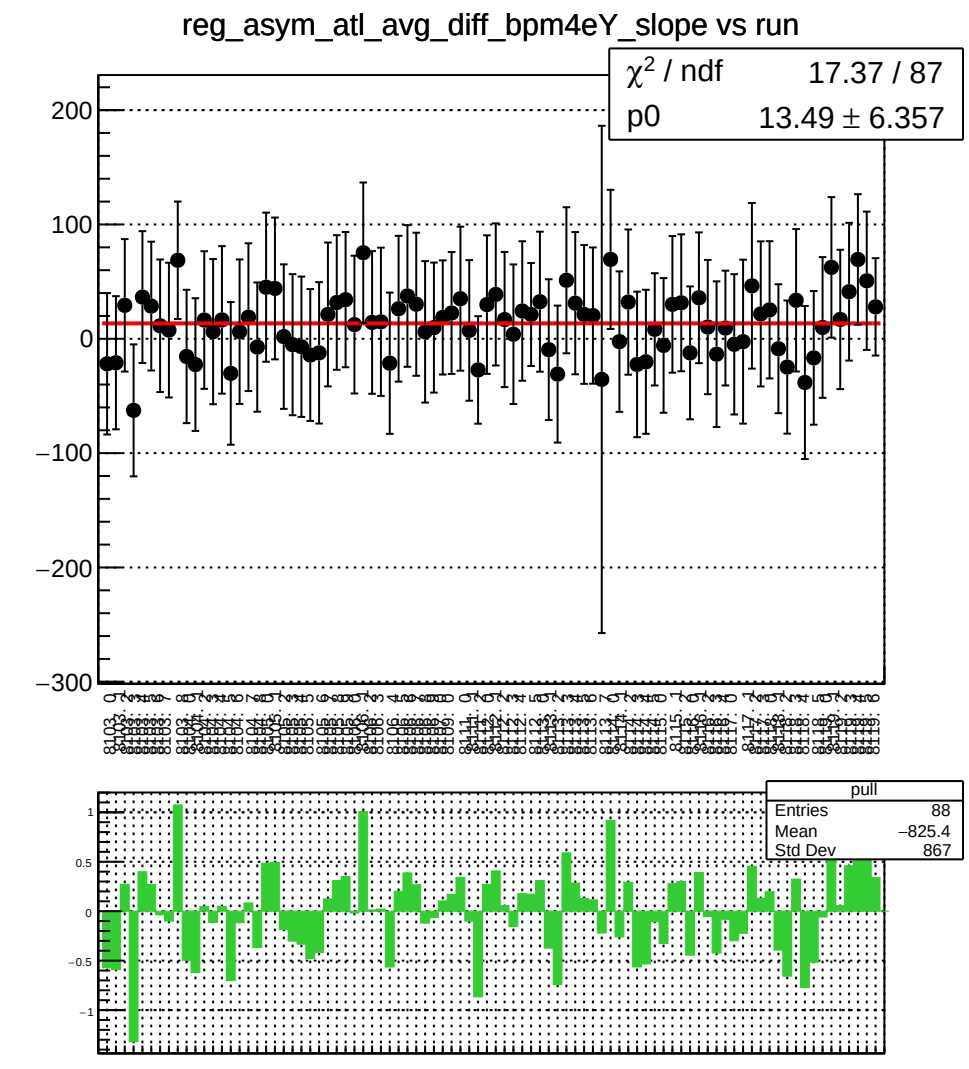

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 28.75 / 87
p0 −254.6 ± 0.7902
pull
Entries 88
Mean −980.3
Std Dev 1031
pull1D
Entries 88
Mean −0.007762
Std Dev 0.5715

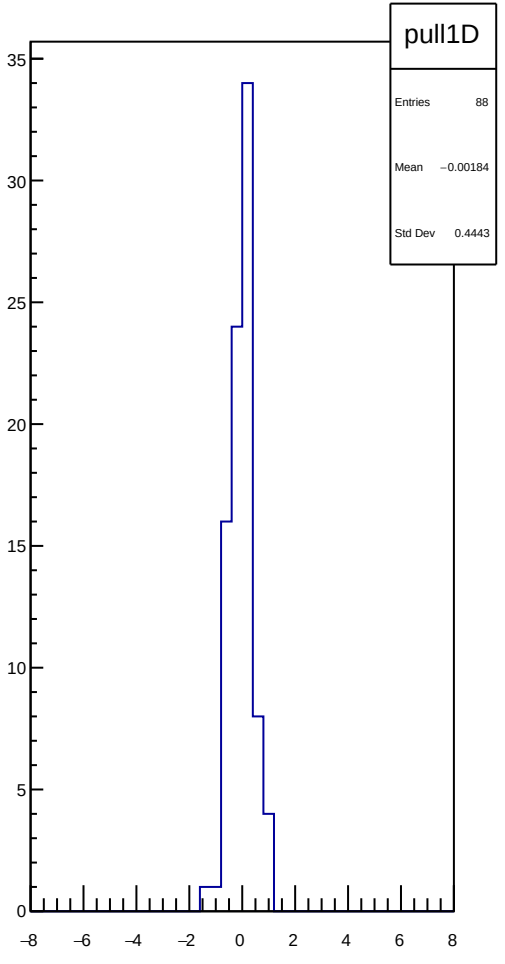

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 25.51 / 87
p0 −136.2 ± 3.957
200
100
0
−100
−200
pull
Entries 88
Mean 1585
Std Dev 1533
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 88
Mean 0.003507
Std Dev 0.5384
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

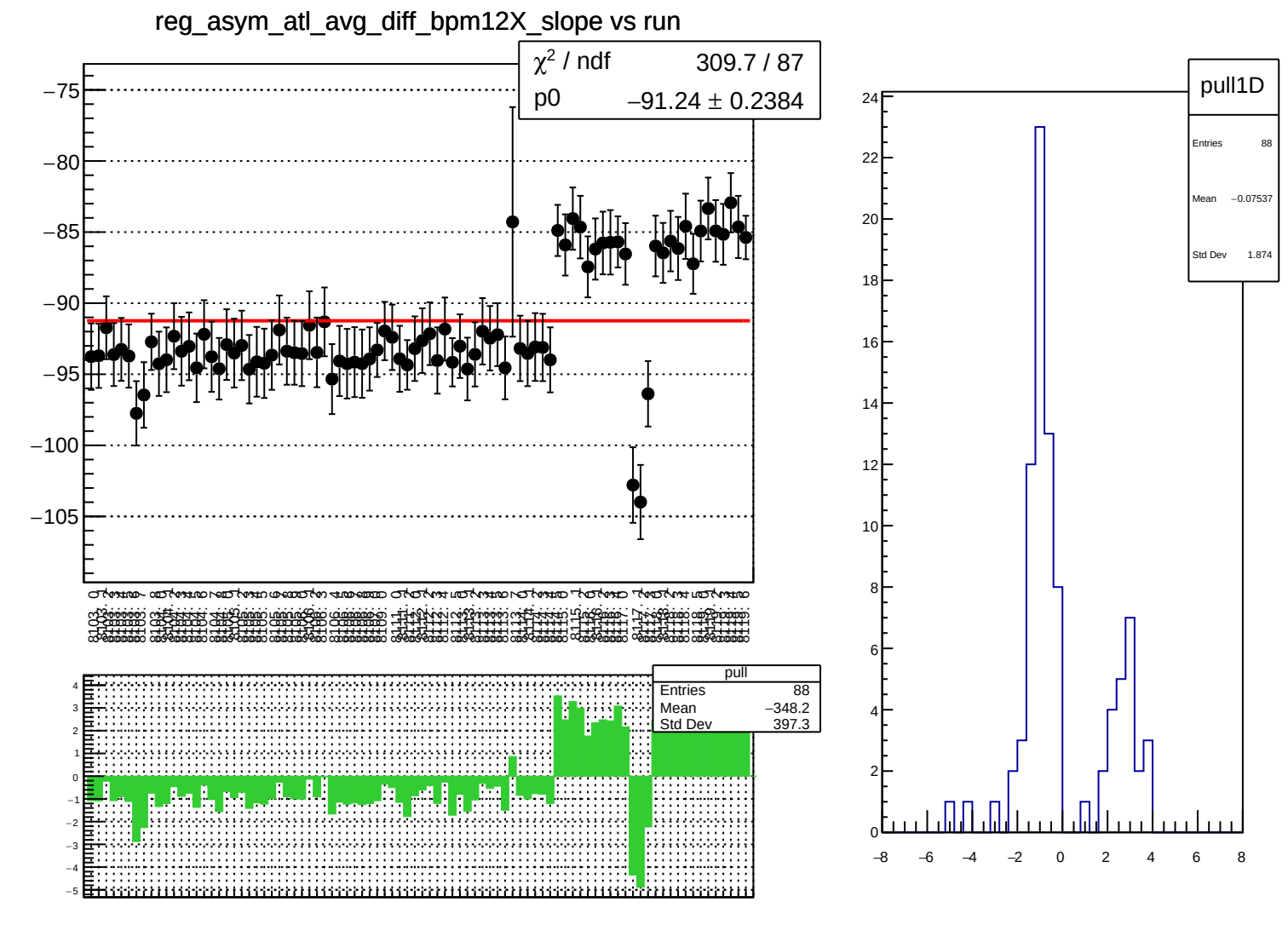

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 17.2 / 87
p0 25.35 ± 5.945
pull
Entries 88
Mean −896.8
Std Dev 939.2
pull1D
Entries 88
Mean 0.00192
Std Dev 0.442

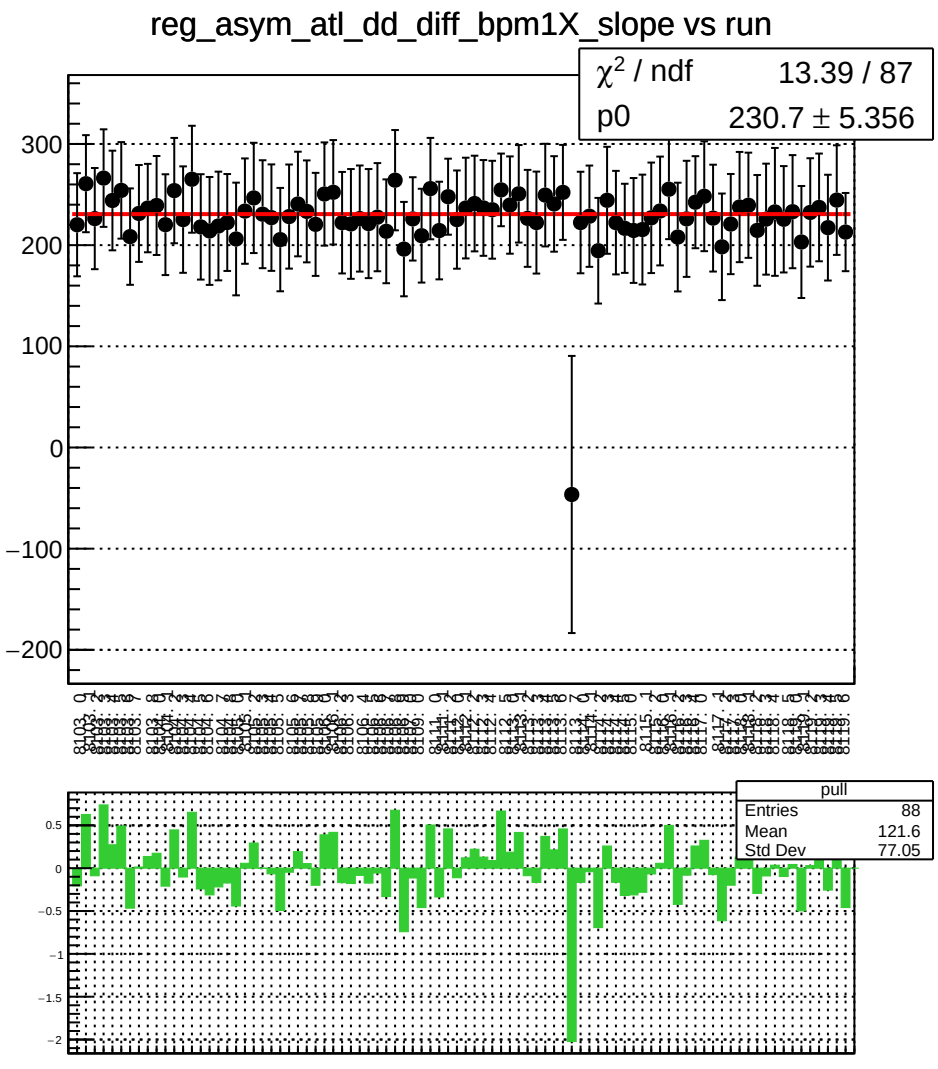

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 25.45 / 87
p0 96.92 ± 3.761
200
100
0
−100
−200
pull
Entries 88
Mean −1.772e+04
Std Dev 1.778e+04
1
0.5
0
−0.5
−1
−1.5

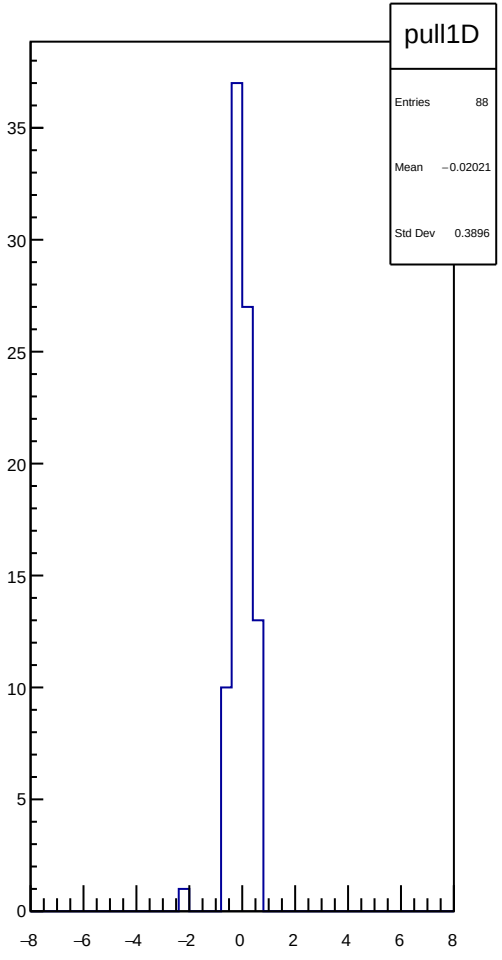

pull1D
Entries 88
Mean 0.0003188
Std Dev 0.5377
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

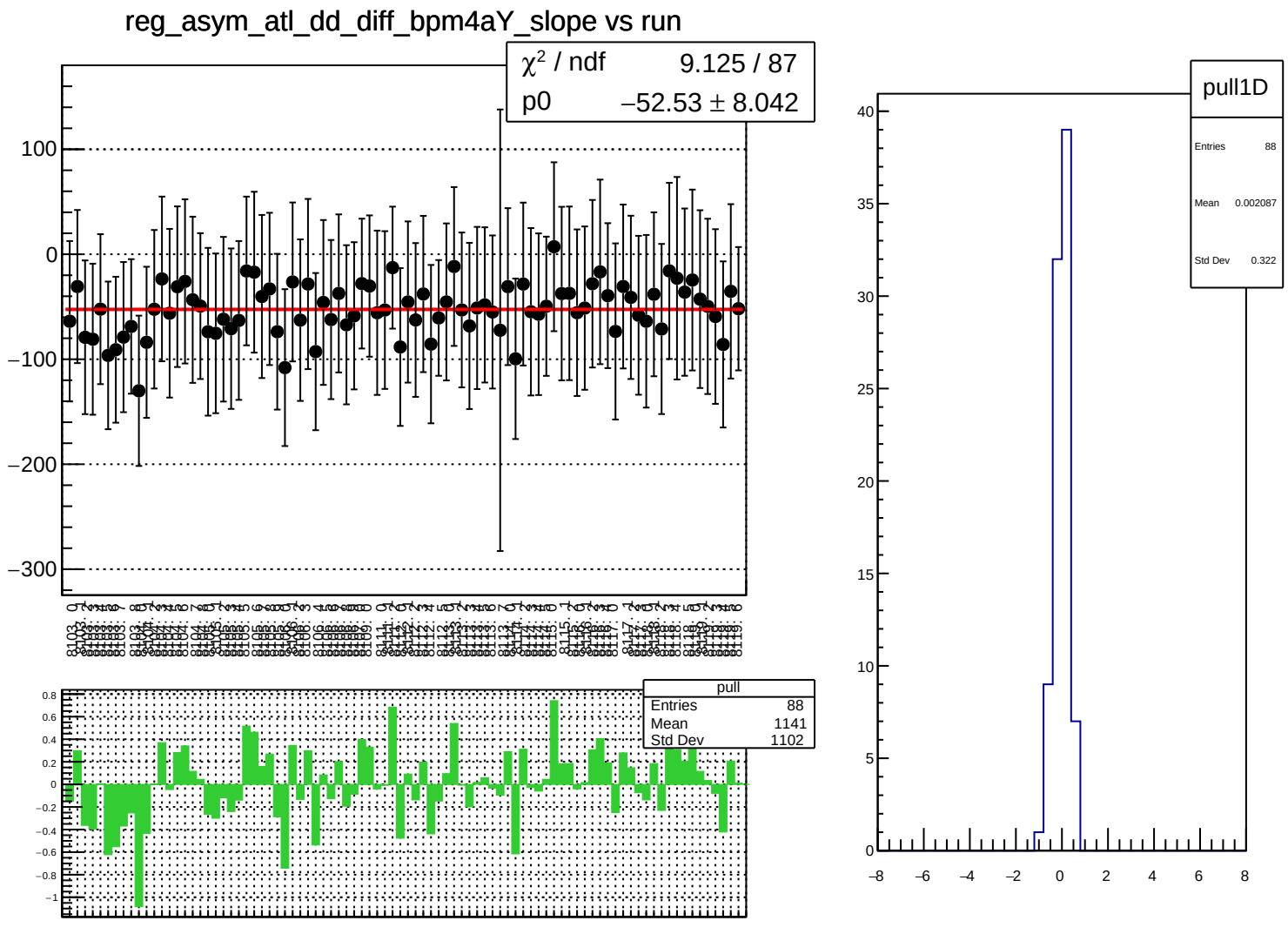

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 17.37 / 87
p0 13.49 ± 6.357
pull
Entries 88
Mean −825.4
Std Dev 867

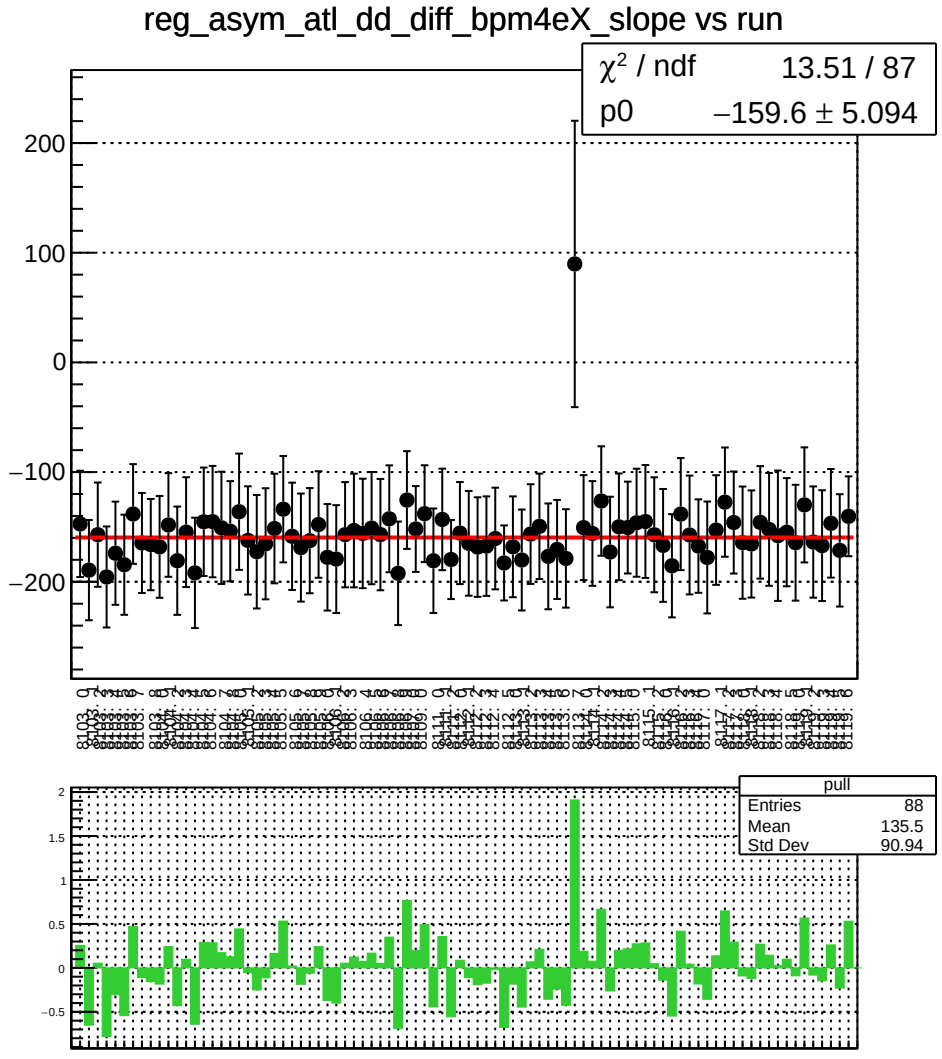

pull1D
Entries 88
Mean −0.00184
Std Dev 0.4443

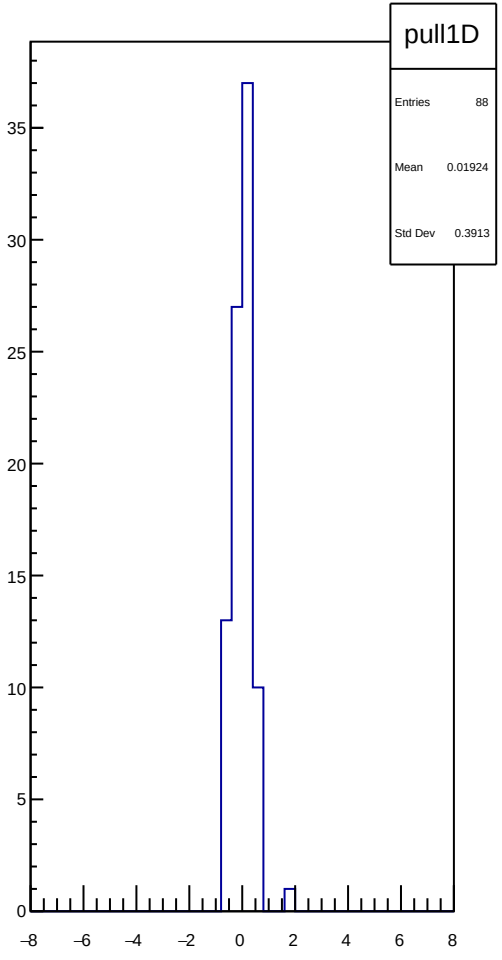

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 309.7 / 87
p0 −91.24 ± 0.2384
pull
Entries 88
Mean −348.2
Std Dev 397.3
pull1D
Entries 88
Mean −0.07537
Std Dev 1.874

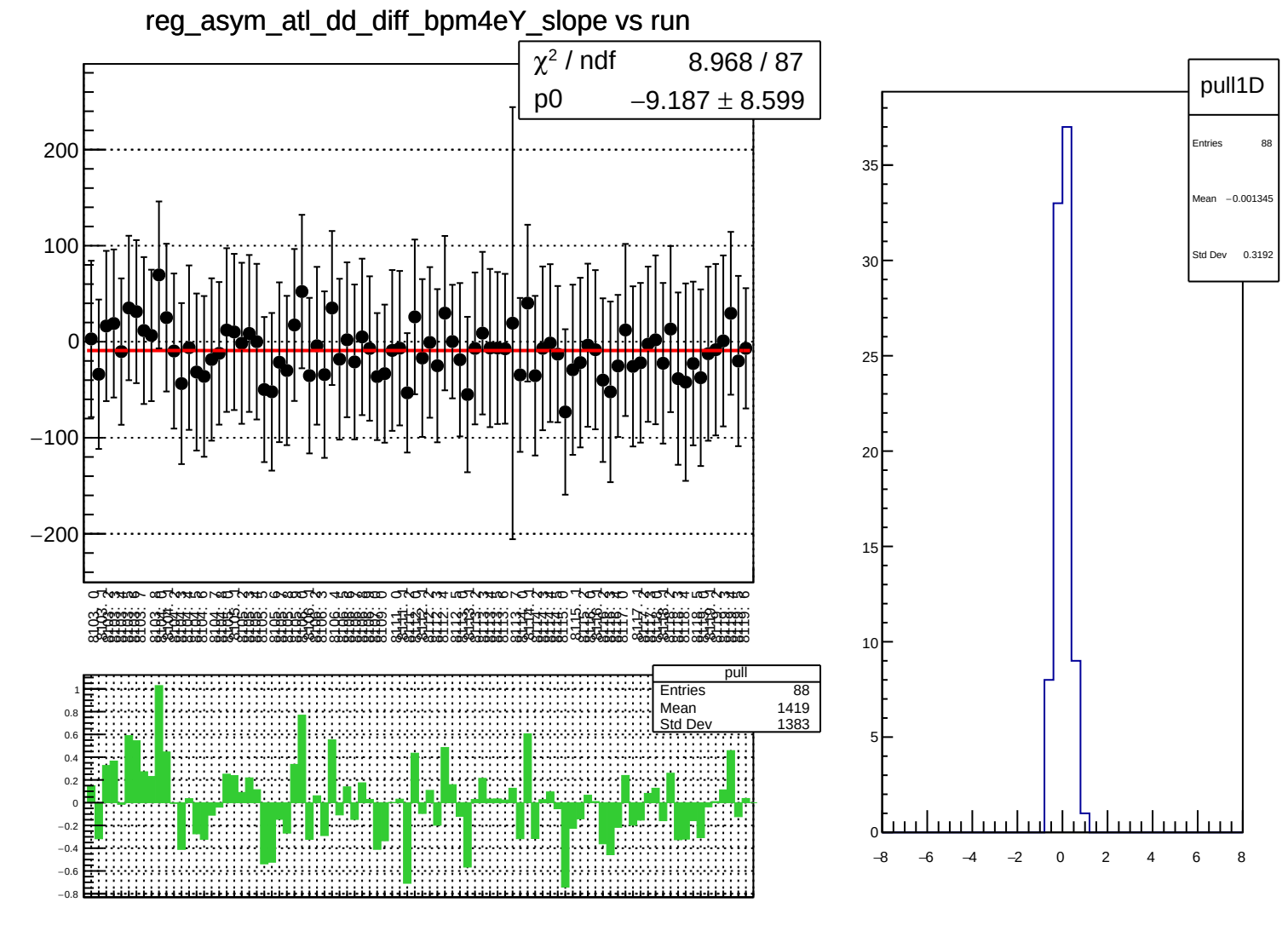

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 13.39 / 87
p0 230.7 ± 5.356
300
200
100
0
−100
−200
pull
Entries 88
Mean 121.6
Std Dev 77.05
0.5
0
−0.5
−1
−1.5
−2

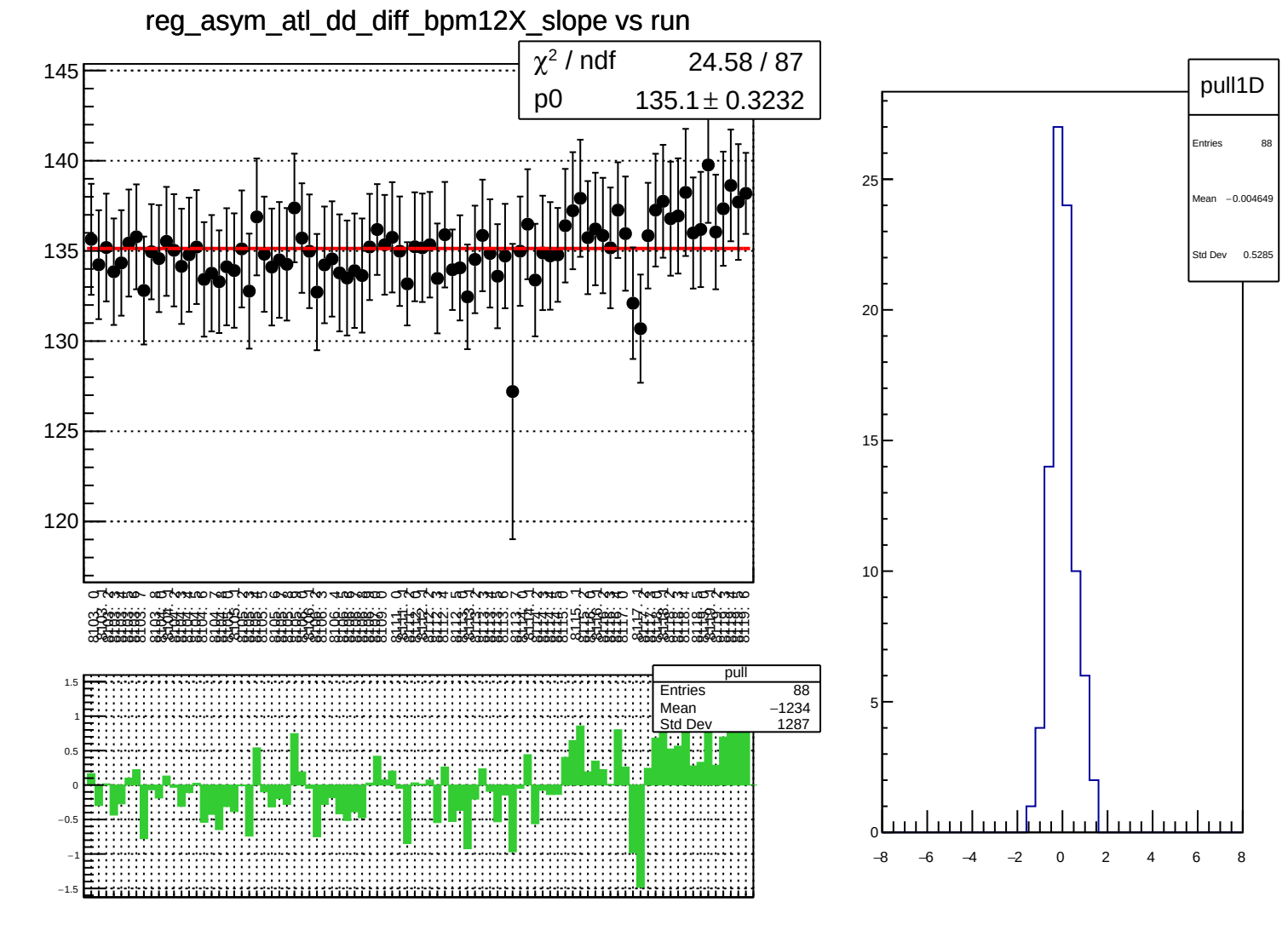

pull1D
Entries 88
Mean −0.02021
Std Dev 0.3896
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

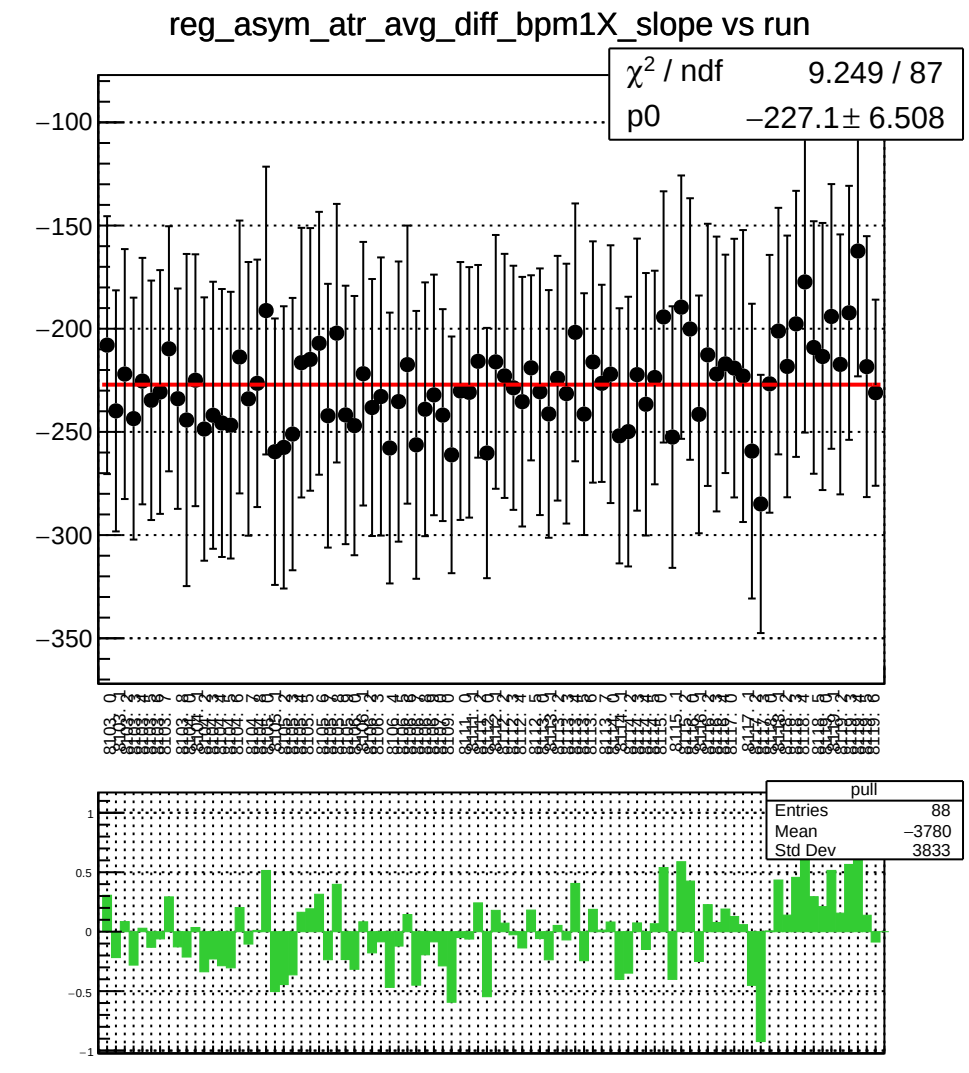

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 9.125 / 87
p0 −52.53 ± 8.042
100
0
−100
−200
−300
pull
Entries 88
Mean 1141
Std Dev 1102
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 88
Mean 0.002087
Std Dev 0.322
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

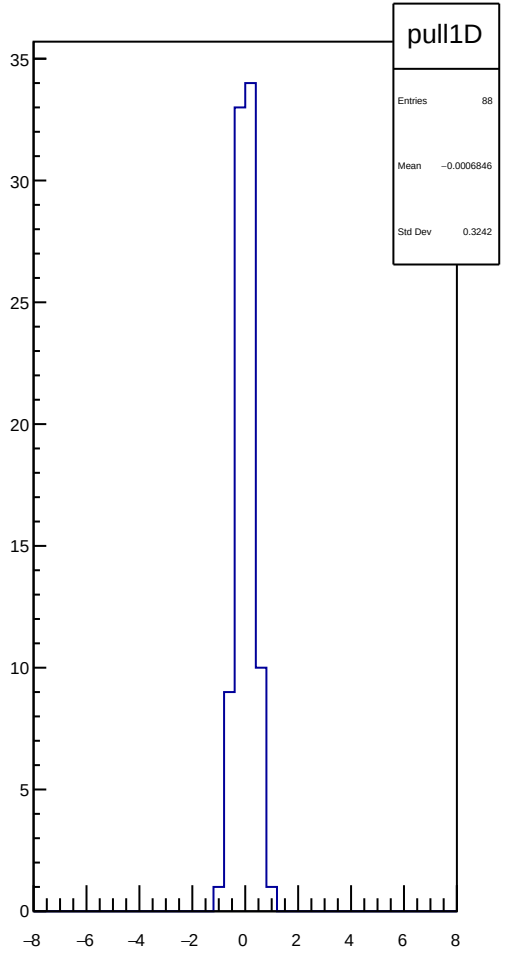

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 13.51 / 87
p0 −159.6 ± 5.094
200
100
0
−100
−200
pull
Entries 88
Mean 135.5
Std Dev 90.94
2
1.5
1
0.5
0
−0.5

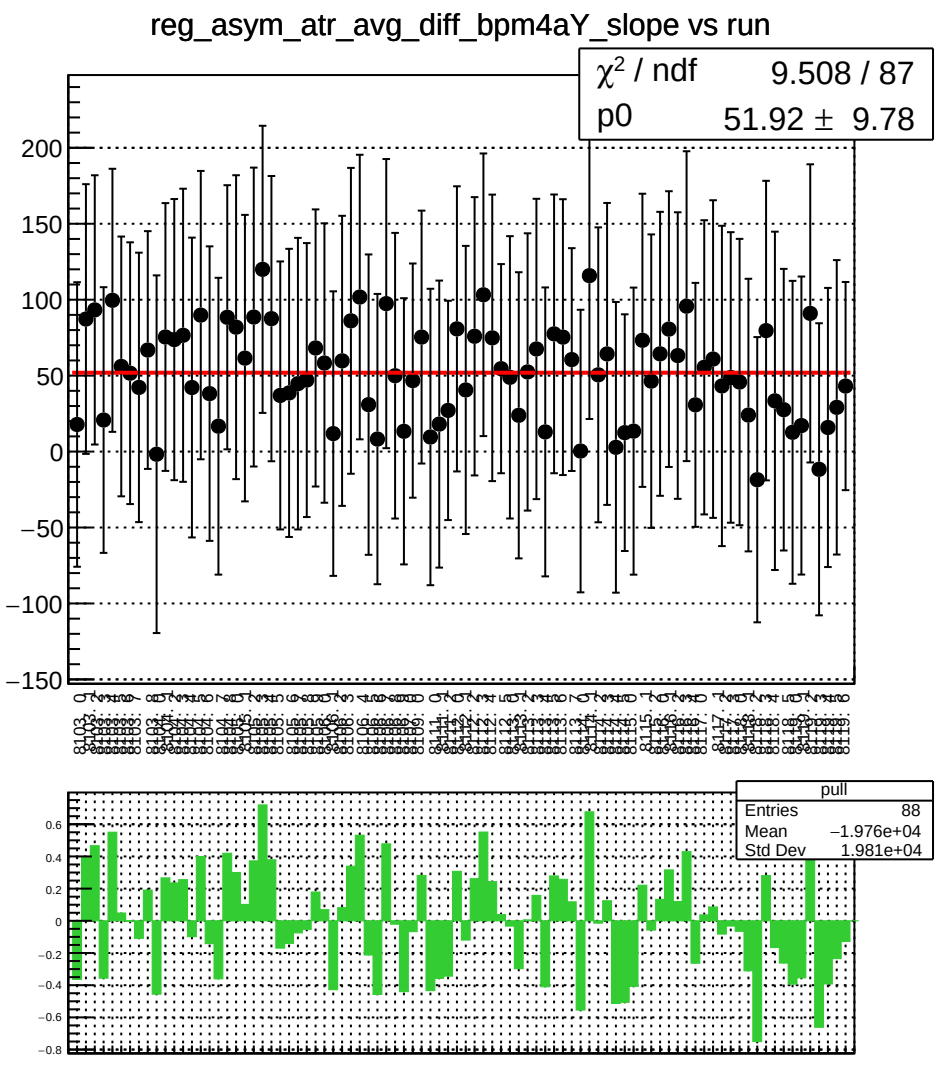

pull1D
Entries 88
Mean 0.01924
Std Dev 0.3913
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

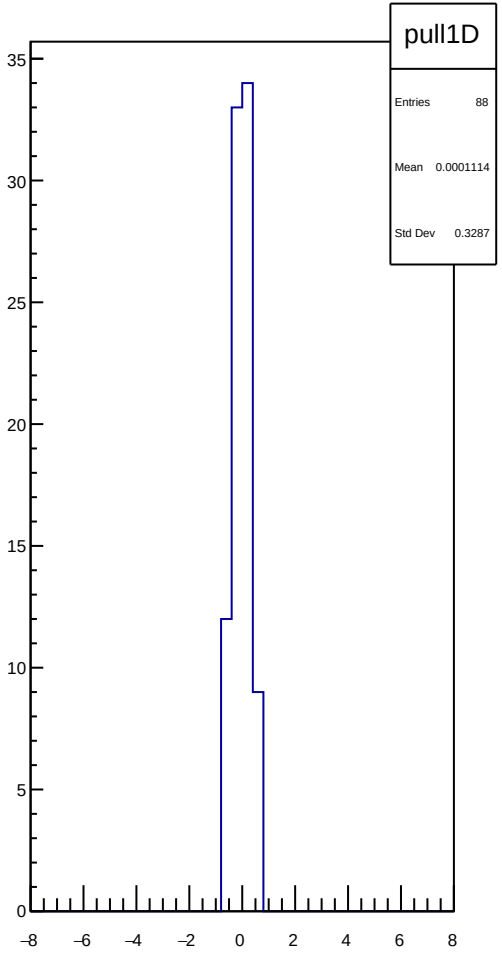

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 8.968 / 87
p0 −9.187 ± 8.599
200
100
0
−100
−200
pull
Entries 88
Mean 1419
Std Dev 1383
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 88
Mean −0.001345
Std Dev 0.3192
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

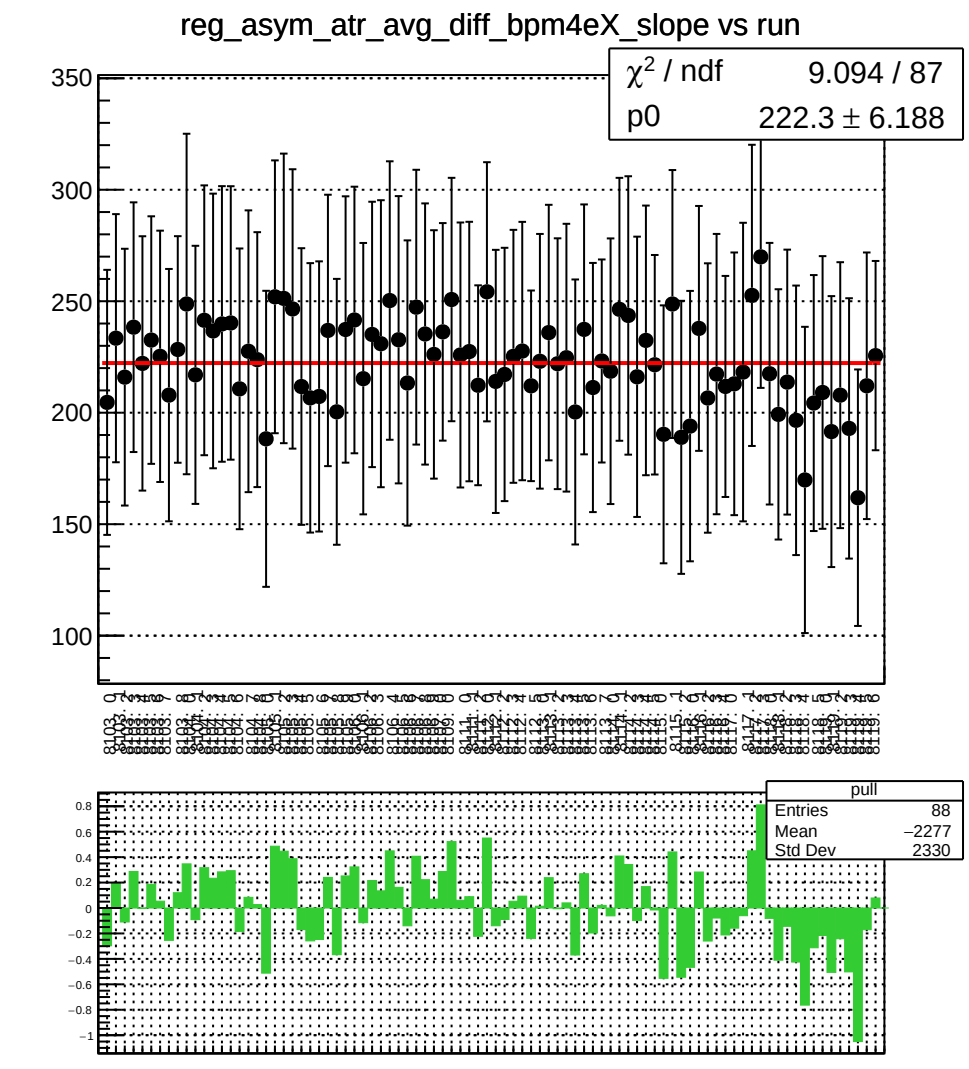

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 24.58 / 87
p0 135.1 ± 0.3232
145
140
135
130
125
120
pull
Entries 88
Mean −1234
Std Dev 1287
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.004649
Std Dev 0.5285
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

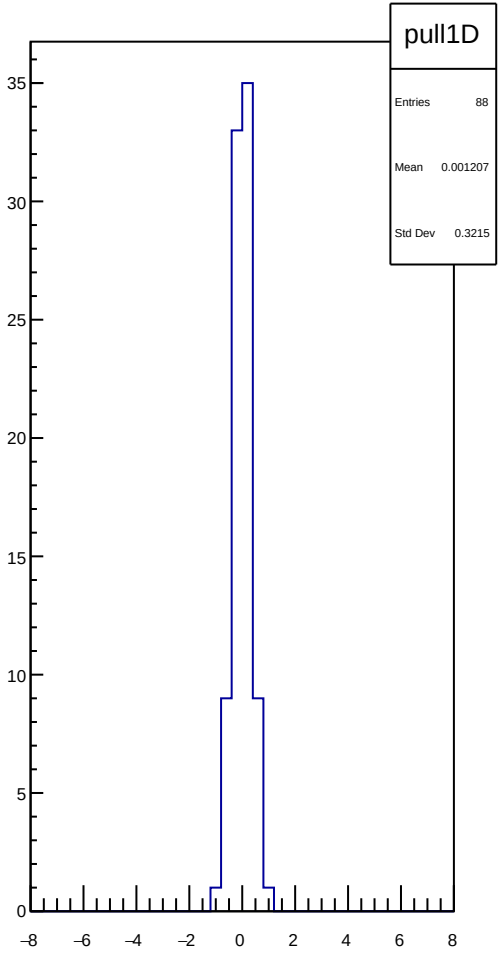

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 9.249 / 87
p0 −227.1± 6.508
−100
−150
−200
−250
−300
−350
pull
Entries 88
Mean −3780
Std Dev 3833
1
0.5
0
−0.5
−1

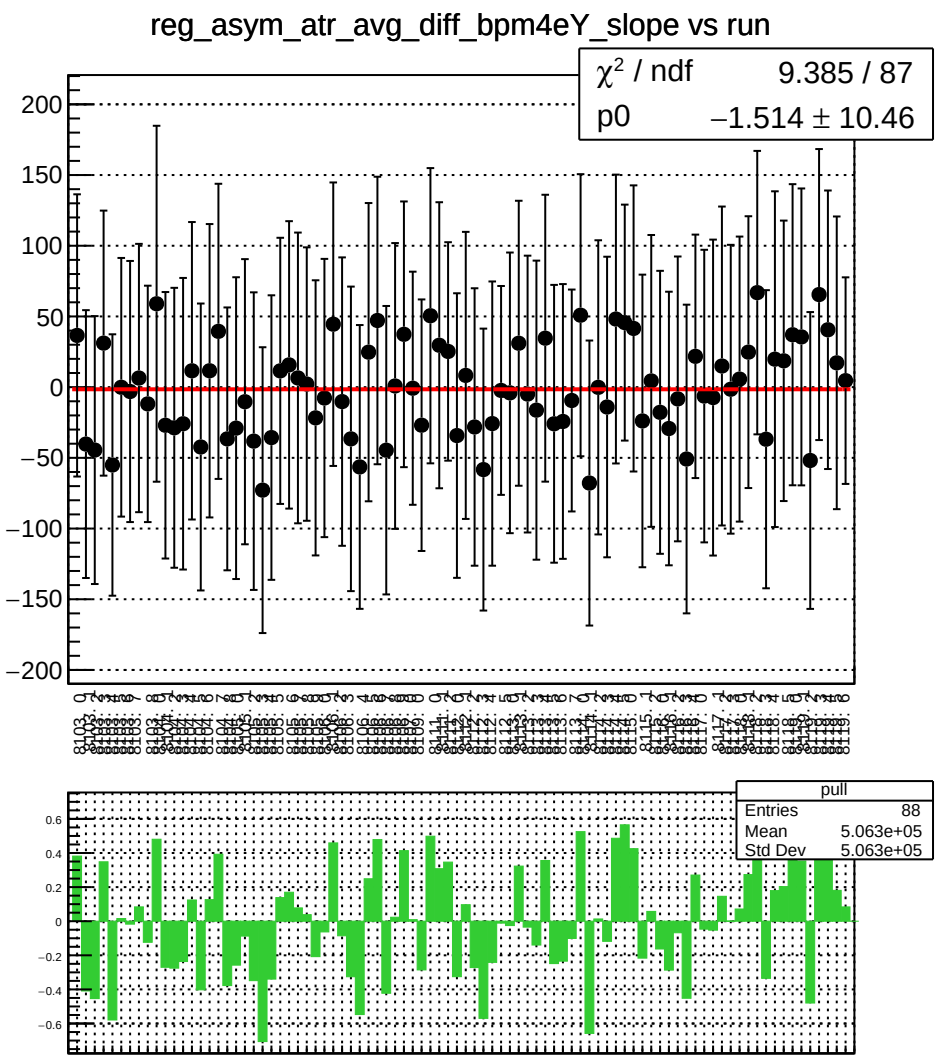

pull1D
Entries 88
Mean −0.0006846
Std Dev 0.3242
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

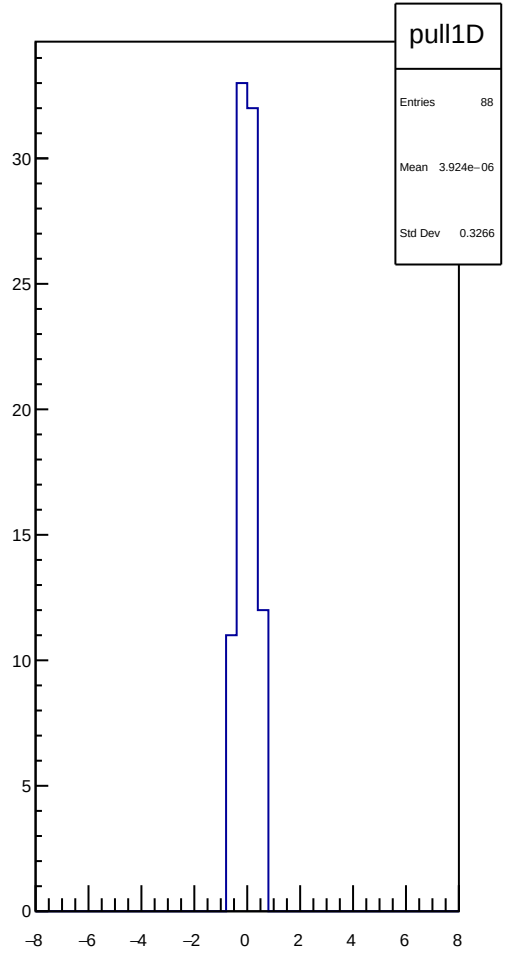

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.508 / 87
p0 51.92 ± 9.78
pull
Entries 88
Mean −1.976e+04
Std Dev 1.981e+04

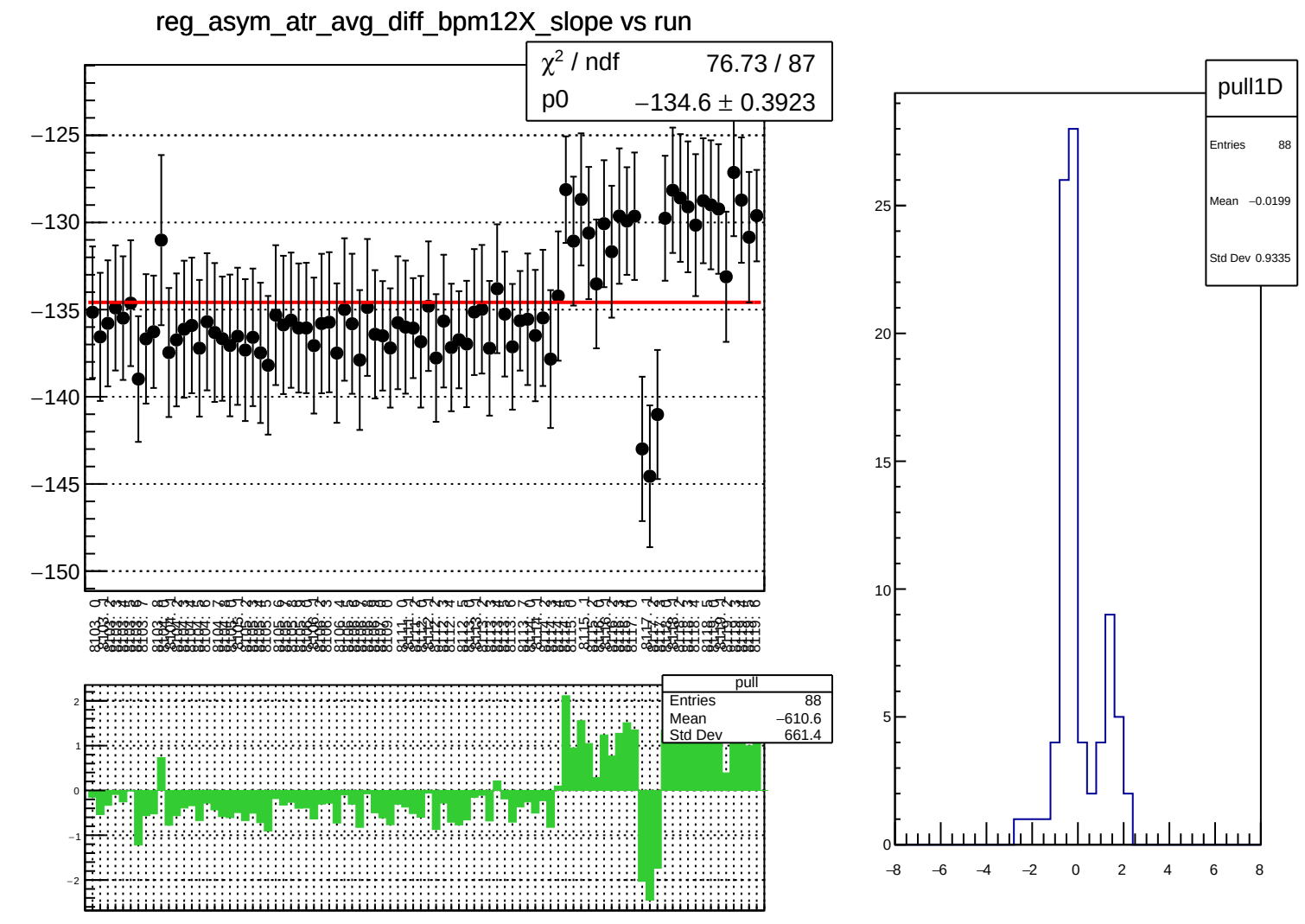

pull1D
Entries 88
Mean 0.0001114
Std Dev 0.3287

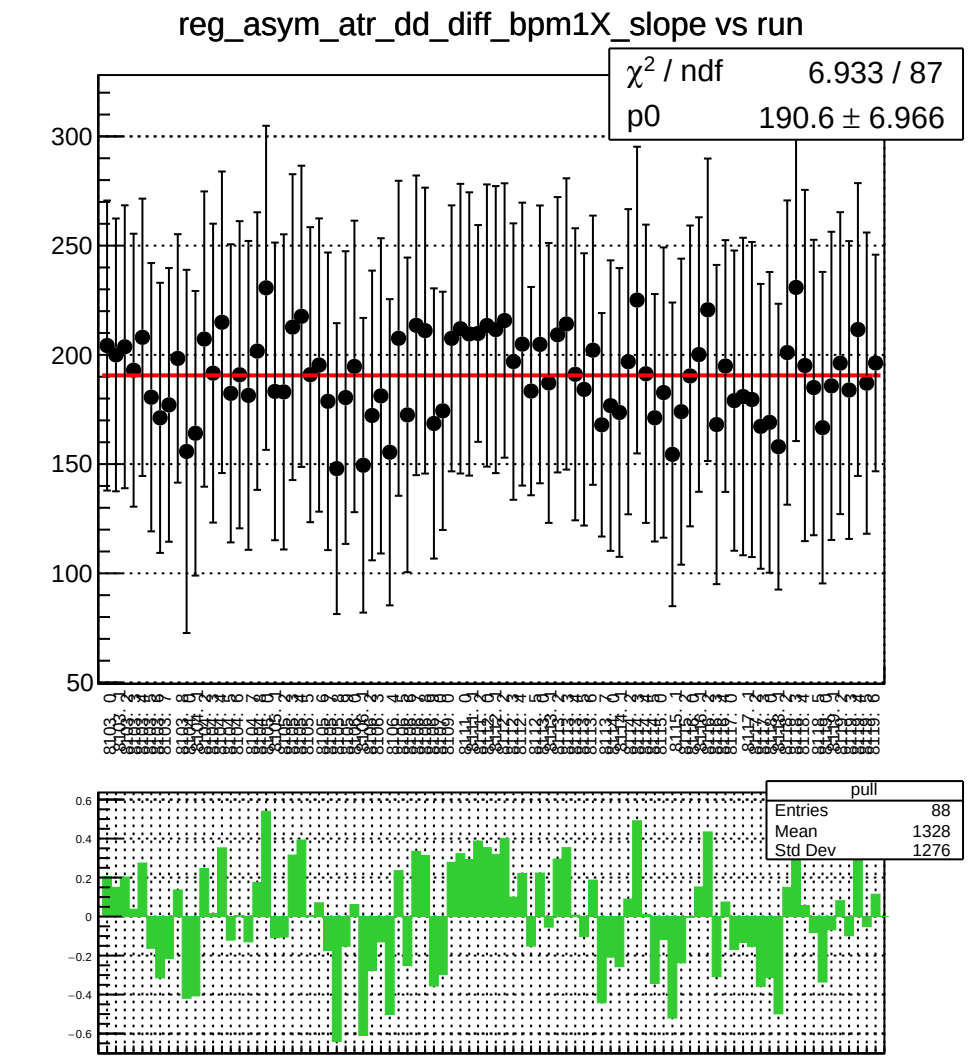

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.094 / 87
p0 222.3 ± 6.188
pull
Entries 88
Mean −2277
Std Dev 2330

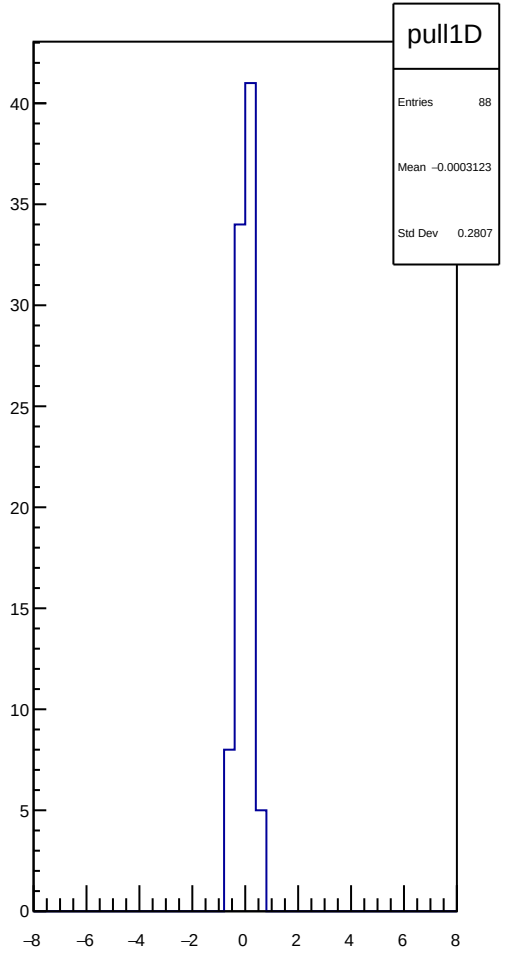

pull1D
Entries 88
Mean 0.001207
Std Dev 0.3215

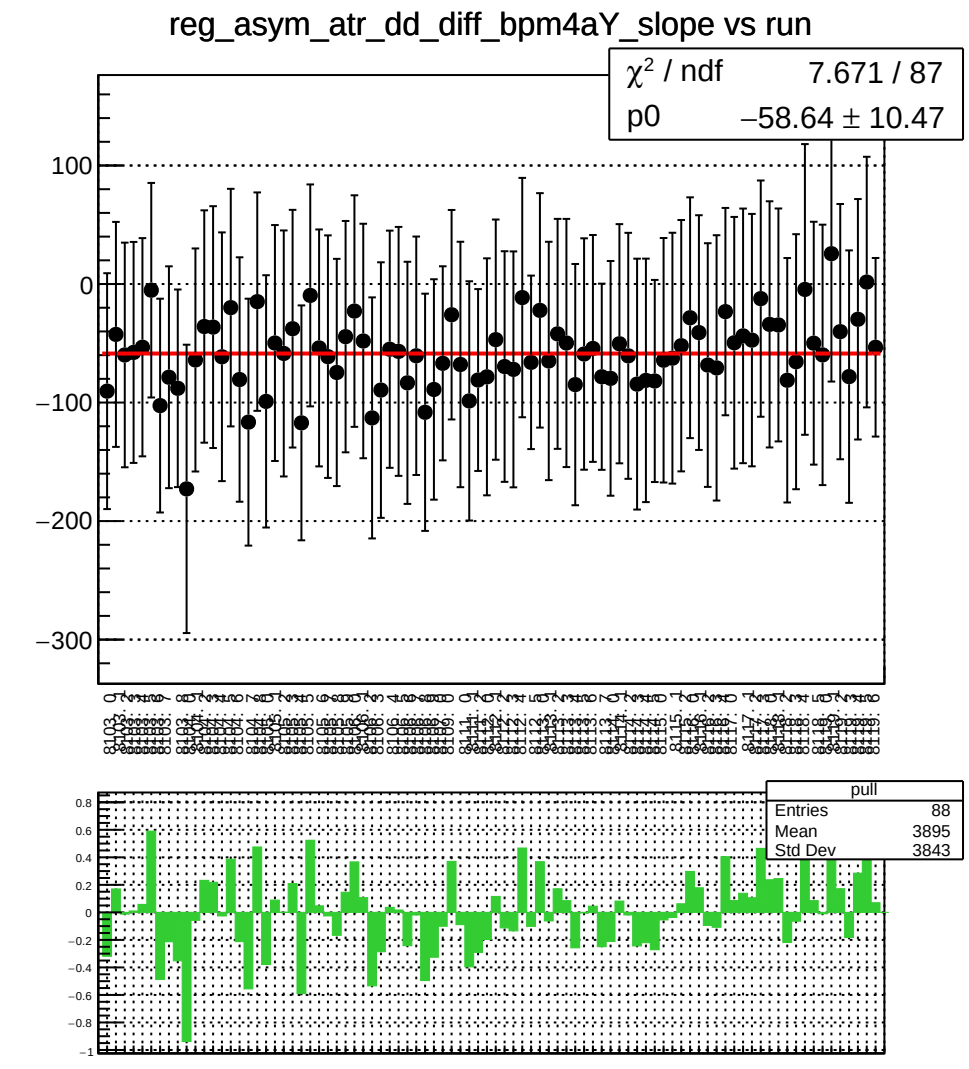

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.385 / 87
p0 −1.514 ± 10.46
pull
Entries 88
Mean 5.063e+05
Std Dev 5.063e+05

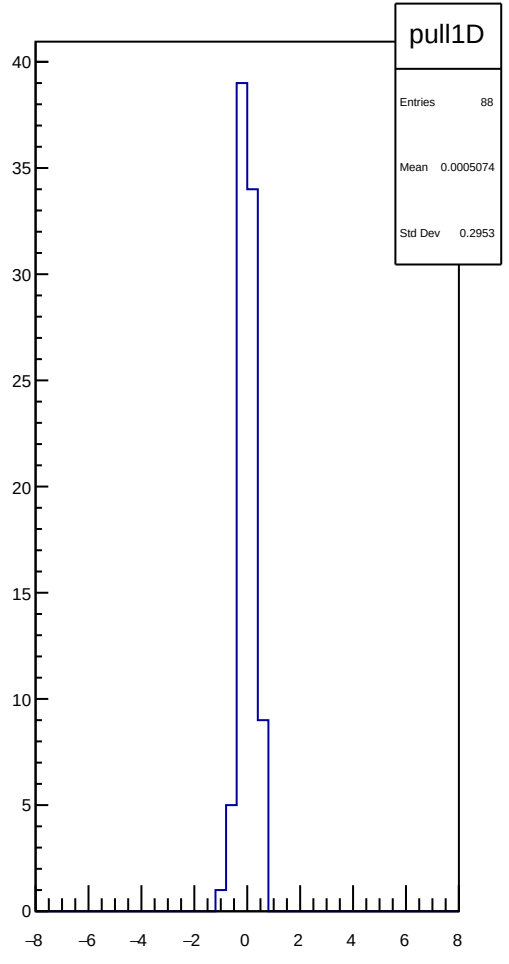

pull1D
Entries 88
Mean 3.924e−06
Std Dev 0.3266

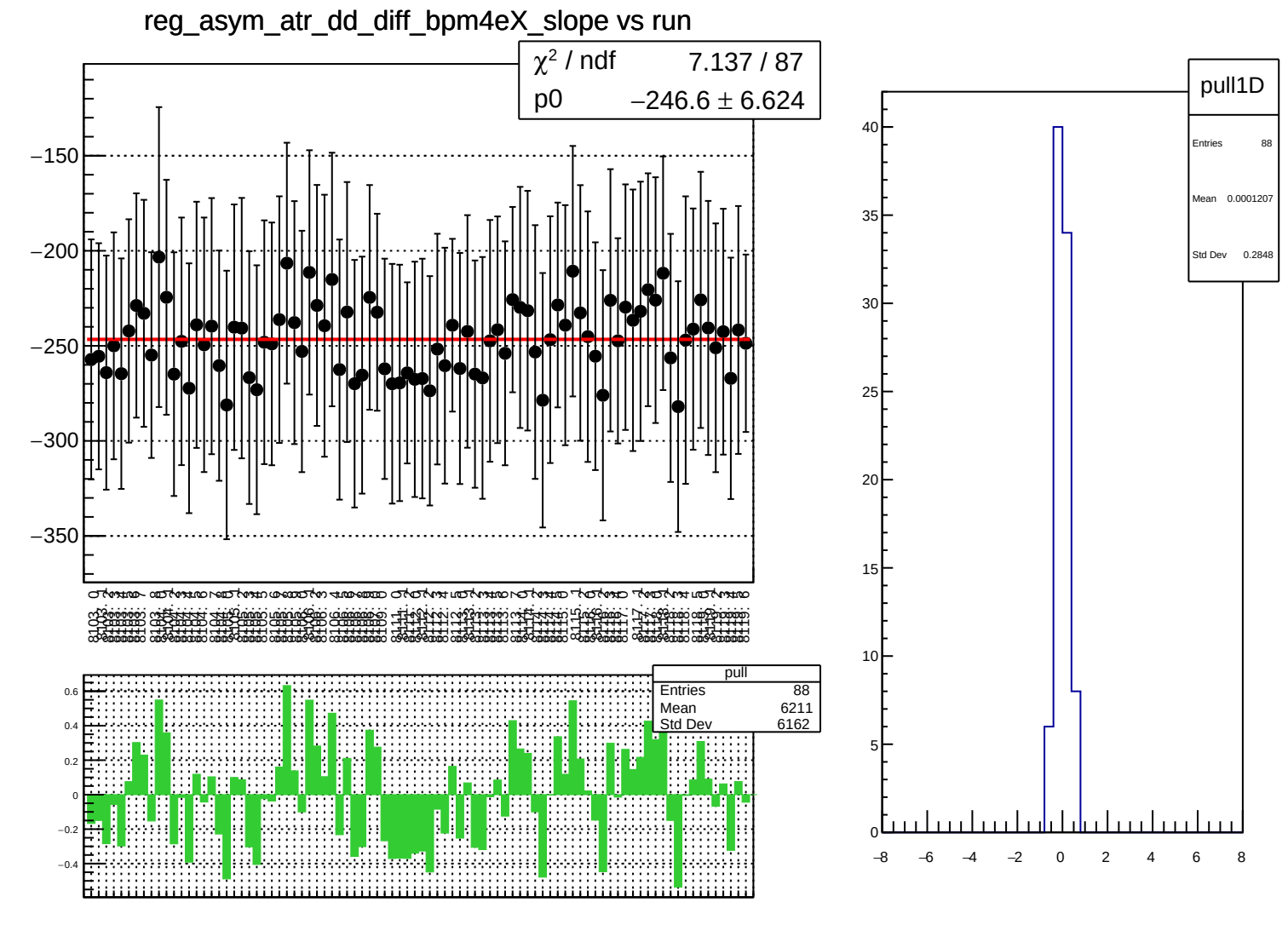

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 76.73 / 87
p0 −134.6 ± 0.3923
−125
−130
−135
−140
−145
−150
pull
Entries 88
Mean −610.6
Std Dev 661.4
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.0199
Std Dev 0.9335
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

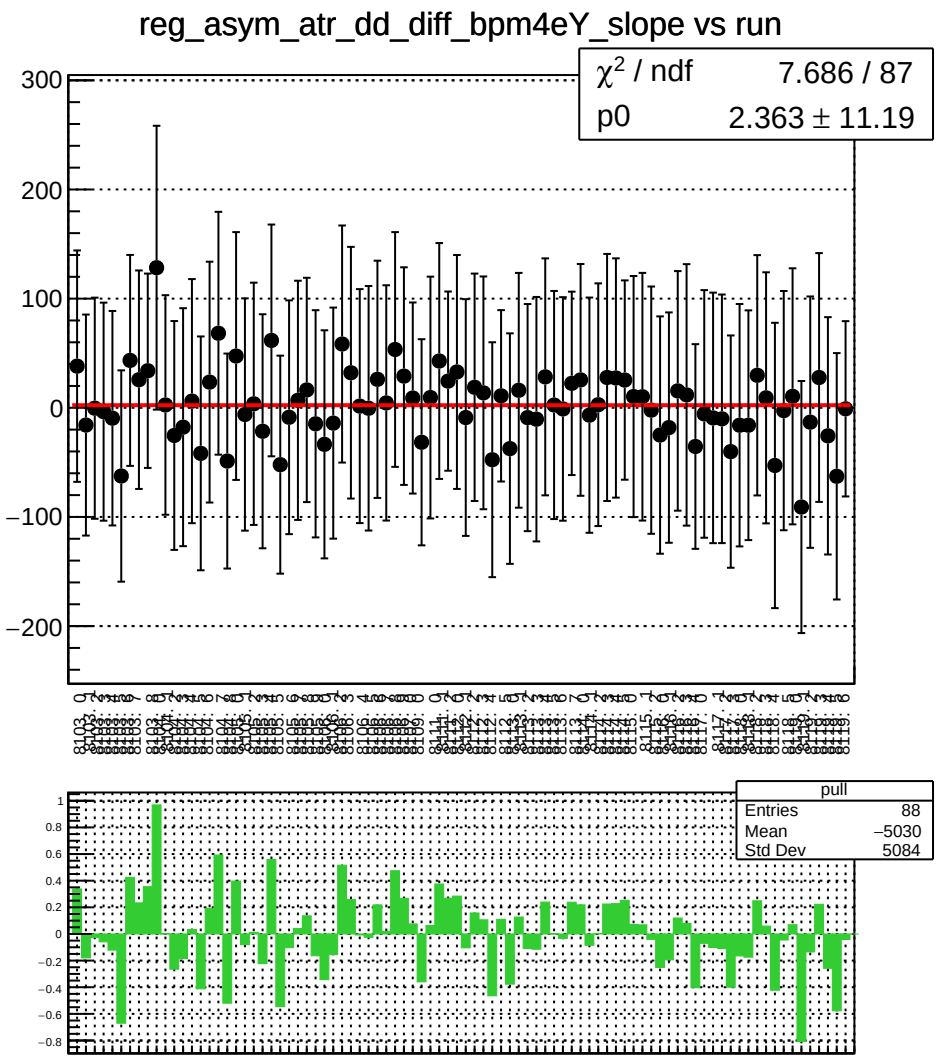

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 6.933 / 87
p0 190.6 ± 6.966
300
250
200
150
100
50
pull
Entries 88
Mean 1328
Std Dev 1276
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

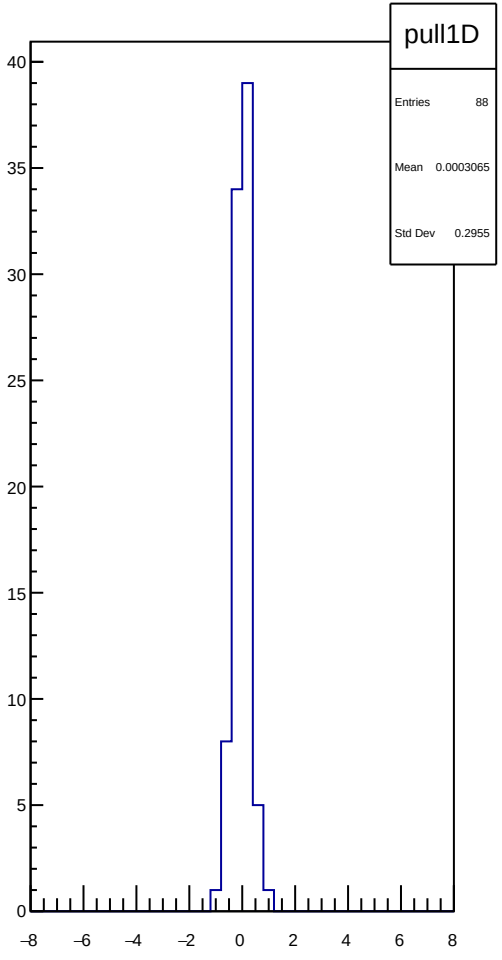

pull1D
Entries 88
Mean −0.0003123
Std Dev 0.2807
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

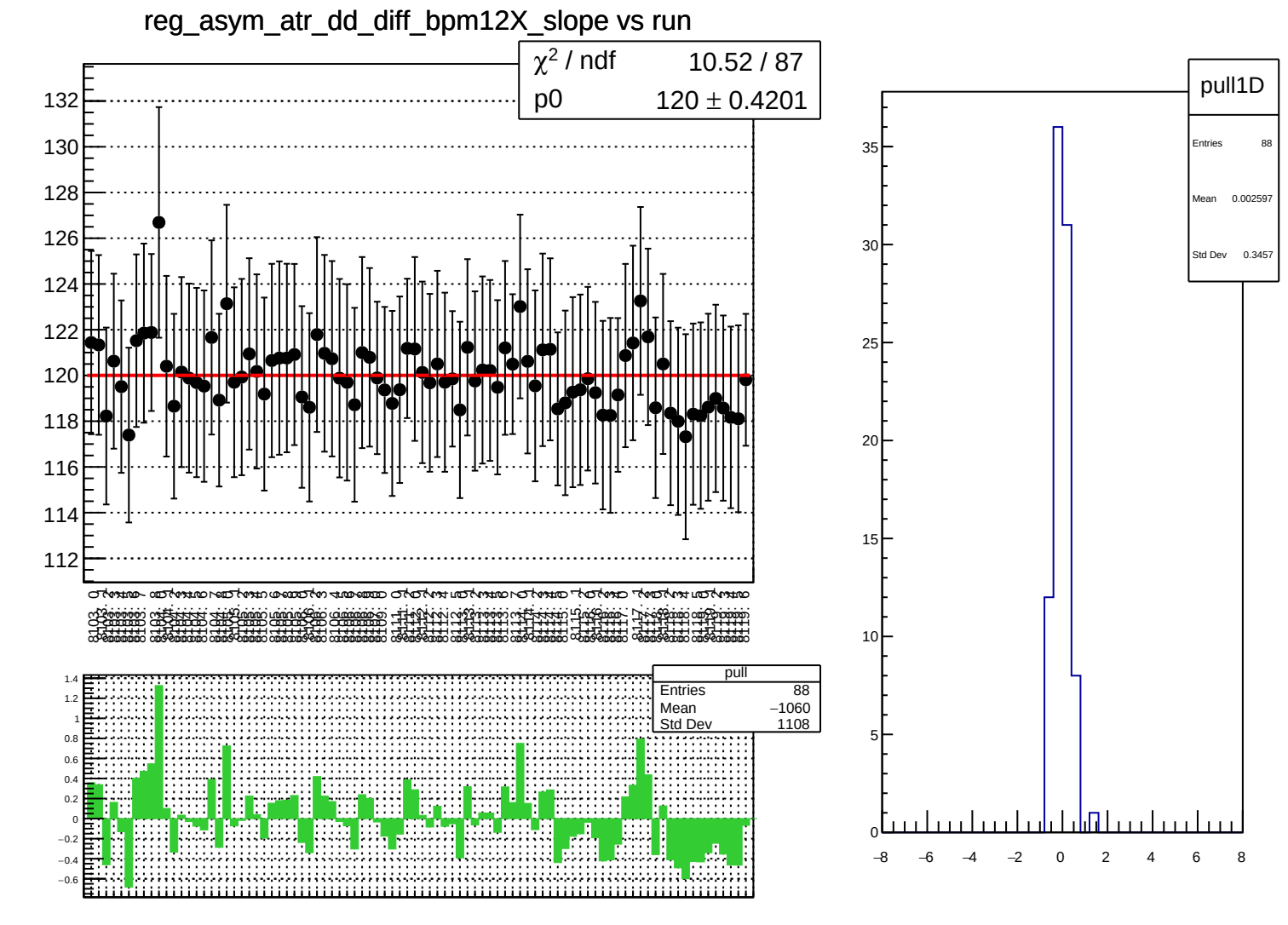

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.671 / 87
p0 −58.64 ± 10.47
100
0
−100
−200
−300
pull
Entries 88
Mean 3895
Std Dev 3843
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

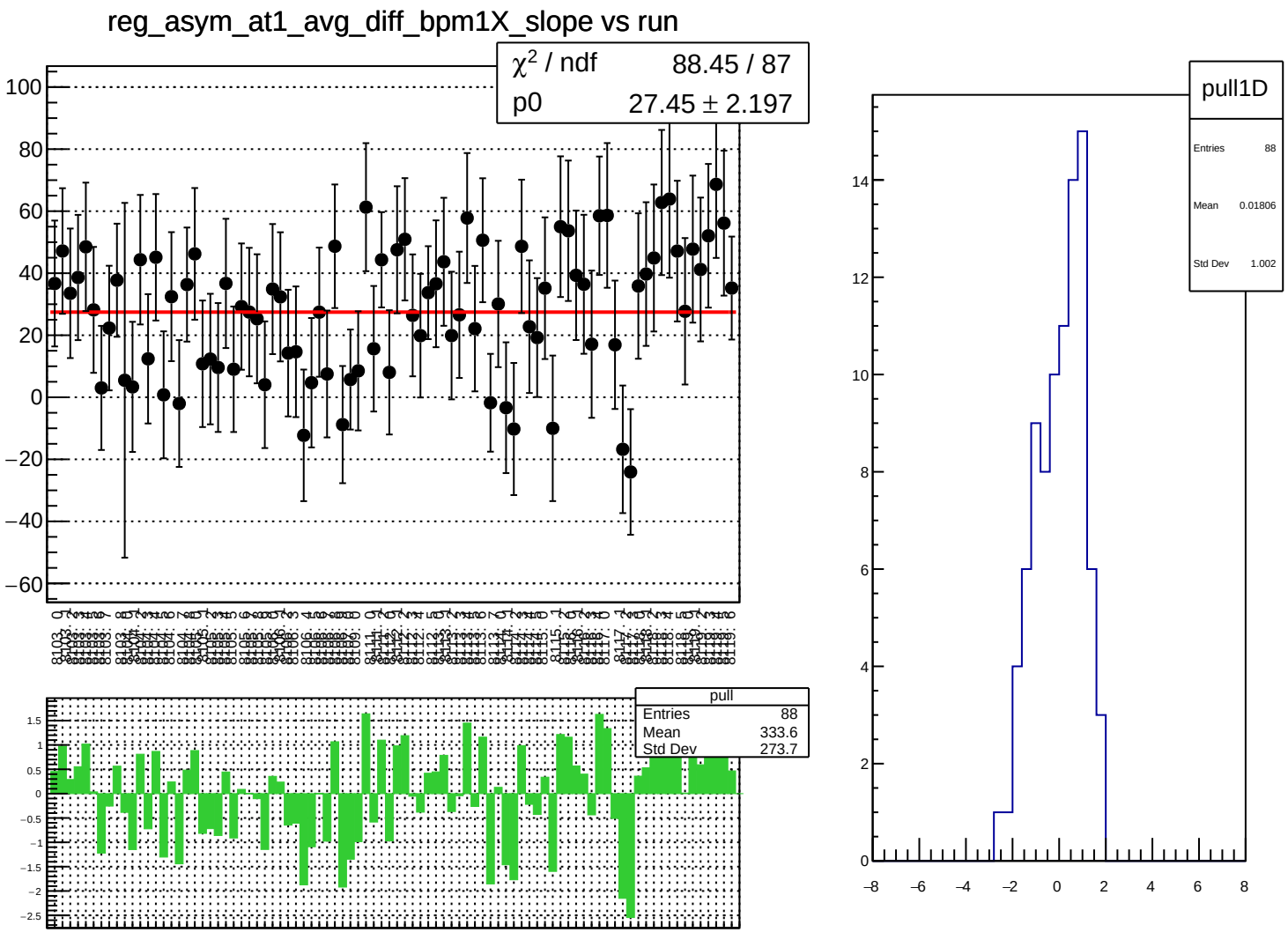

pull1D
Entries 88
Mean 0.0005074
Std Dev 0.2953
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

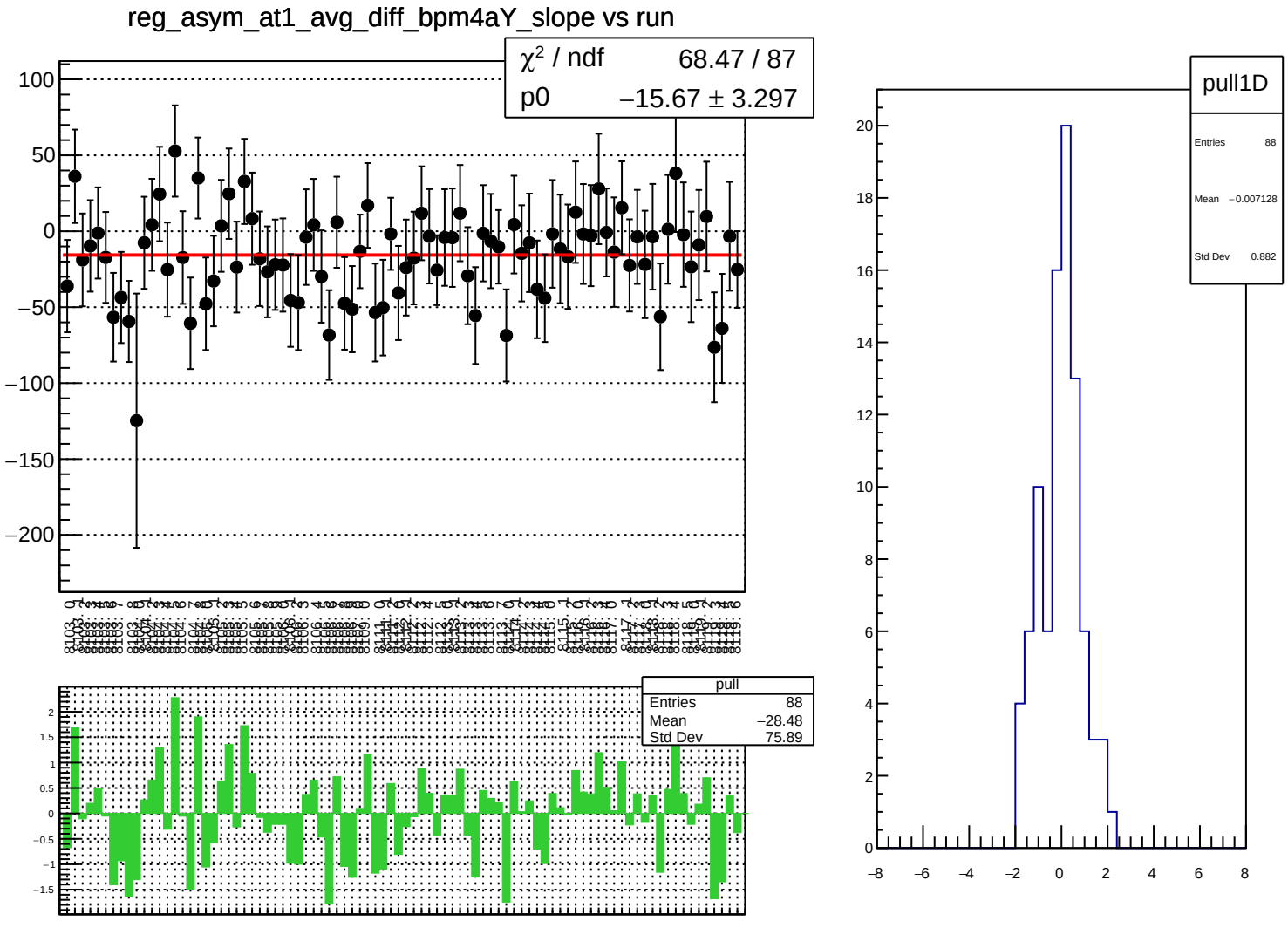

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 7.137 / 87
p0 −246.6 ± 6.624
−150
−200
−250
−300
−350
pull
Entries 88
Mean 6211
Std Dev 6162
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 88
Mean 0.0001207
Std Dev 0.2848
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

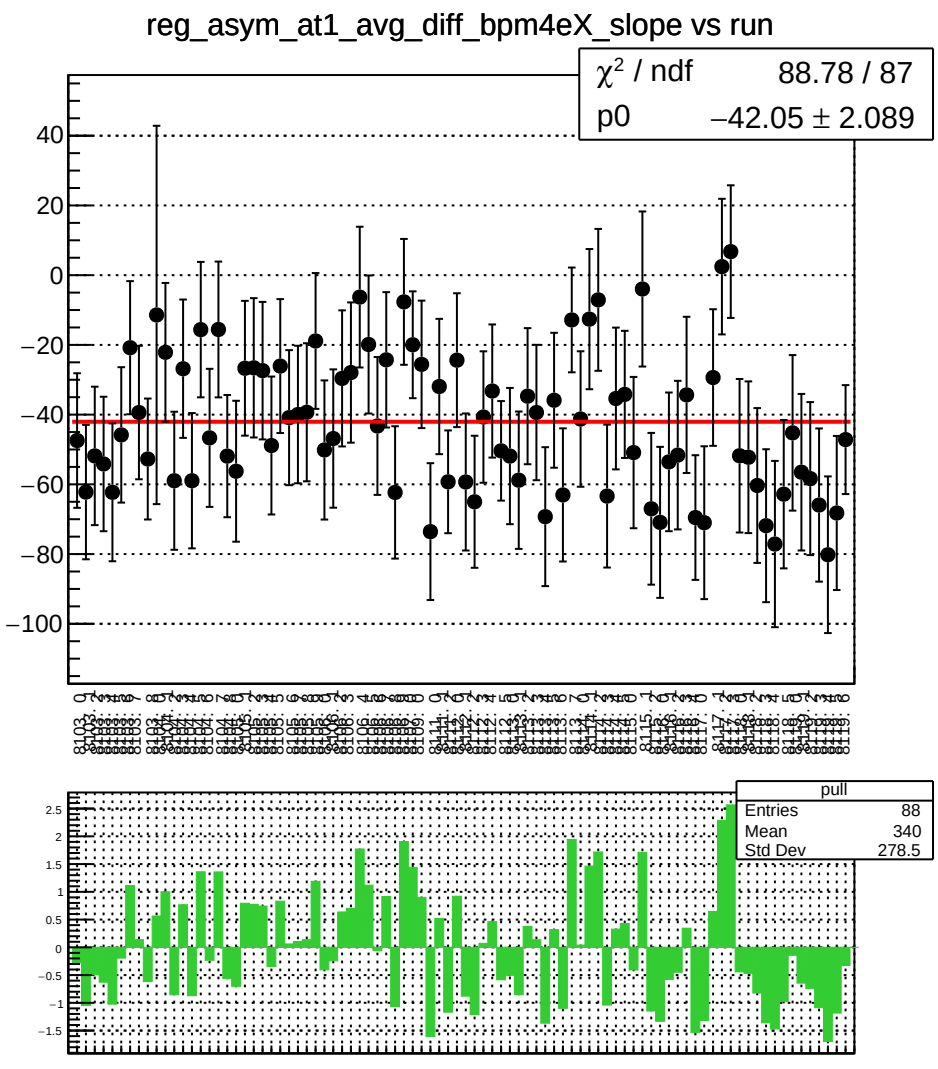

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.686 / 87
p0 2.363 ± 11.19
pull
Entries 88
Mean −5030
Std Dev 5084

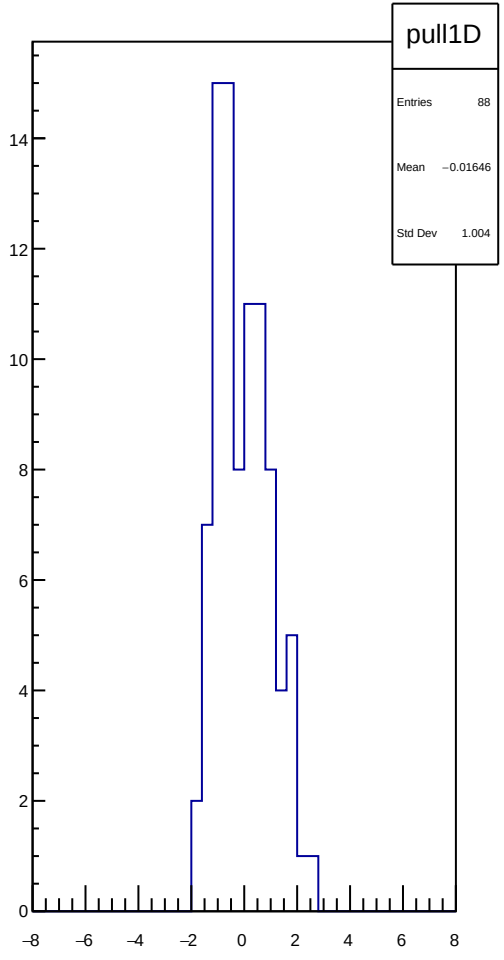

pull1D
Entries 88
Mean 0.0003065
Std Dev 0.2955

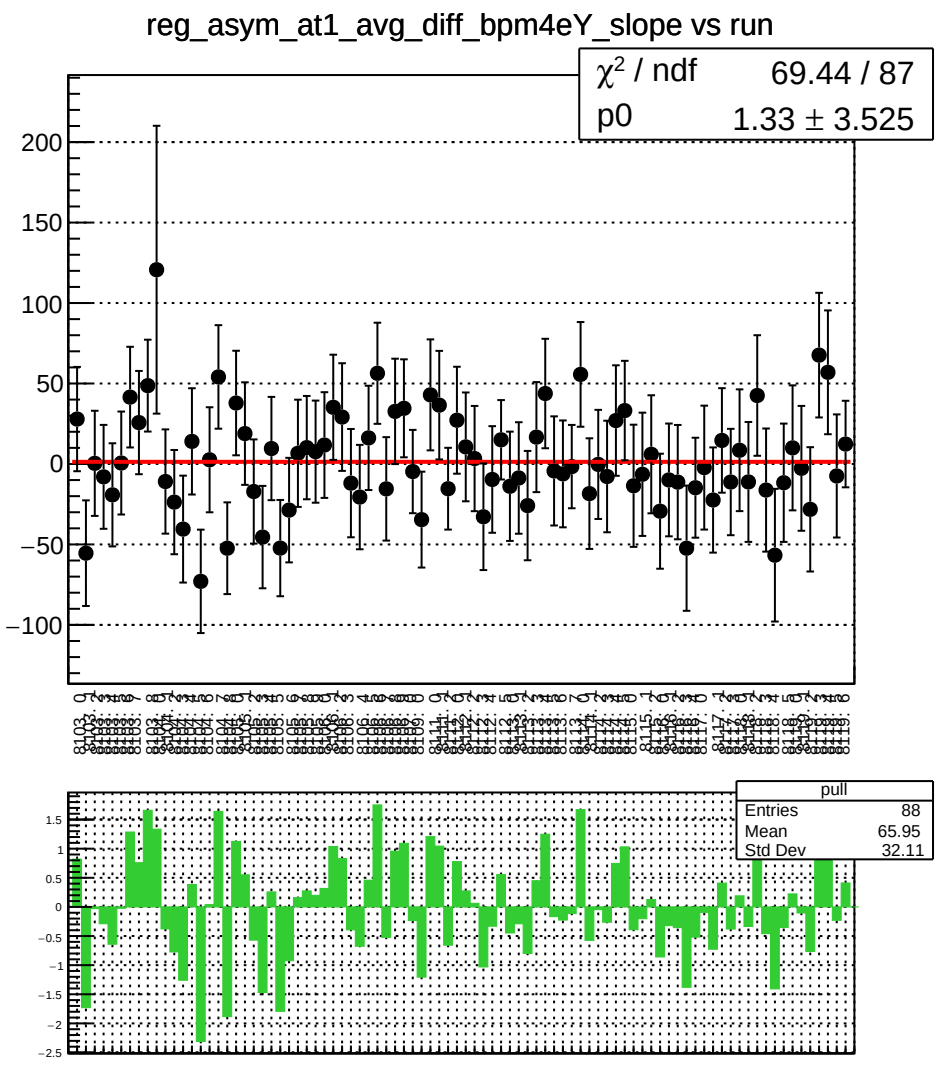

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 10.52 / 87
p0 120 ± 0.4201
pull
Entries 88
Mean −1060
Std Dev 1108
pull1D
Entries 88
Mean 0.002597
Std Dev 0.3457

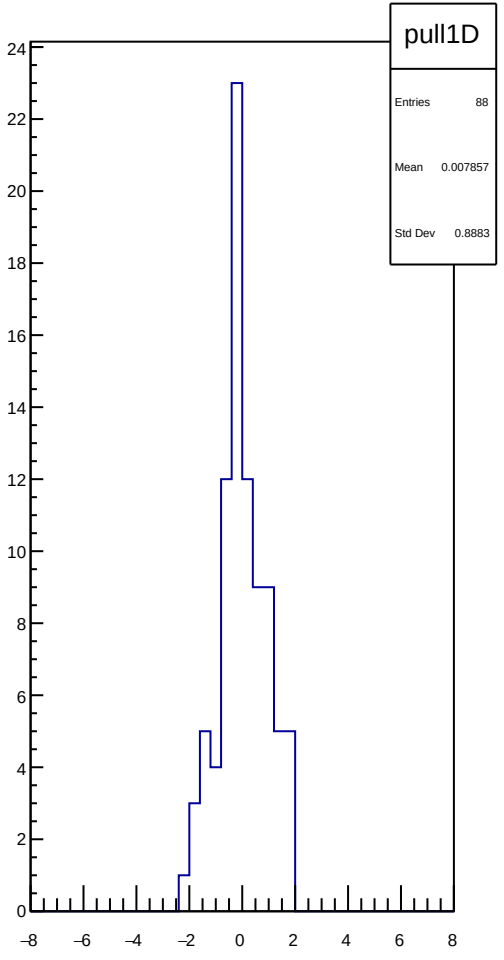

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 88.45 / 87
p0 27.45 ± 2.197
pull
Entries 88
Mean 333.6
Std Dev 273.7
pull1D
Entries 88
Mean 0.01806
Std Dev 1.002

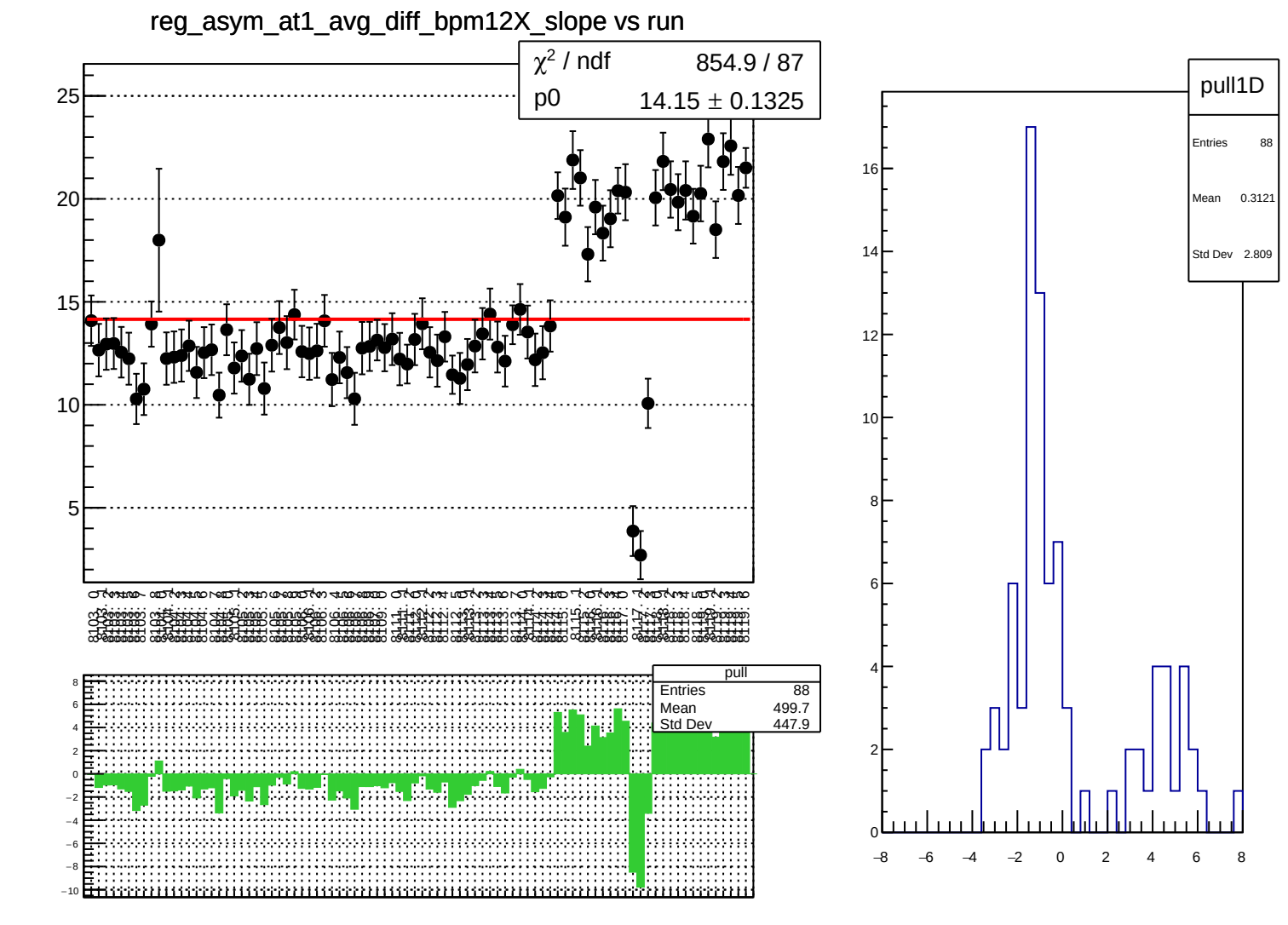

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 68.47 / 87
p0 −15.67 ± 3.297
pull
Entries 88
Mean −28.48
Std Dev 75.89
pull1D
Entries 88
Mean −0.007128
Std Dev 0.882

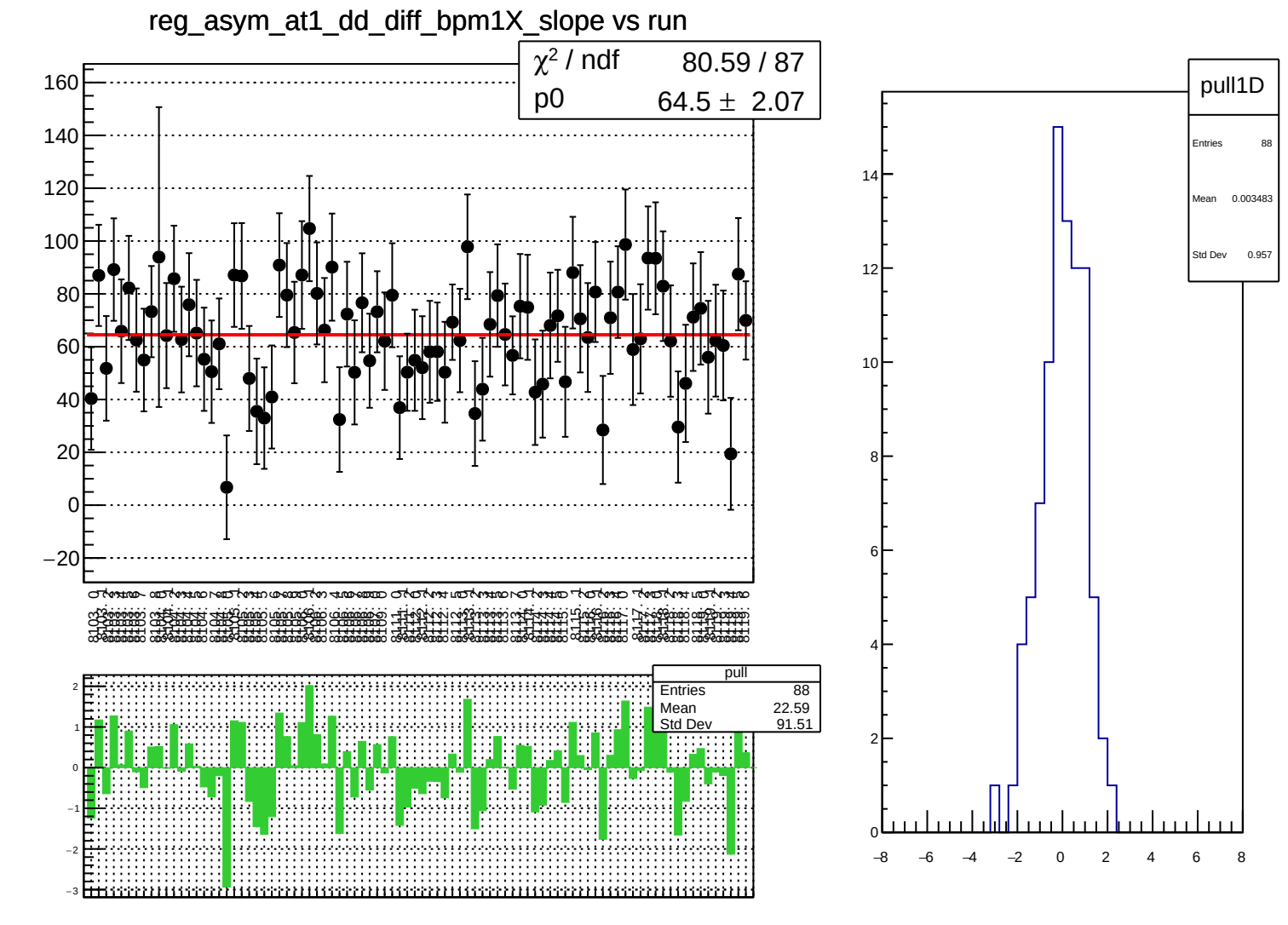

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 88.78 / 87
p0 −42.05 ± 2.089
pull
Entries 88
Mean 340
Std Dev 278.5

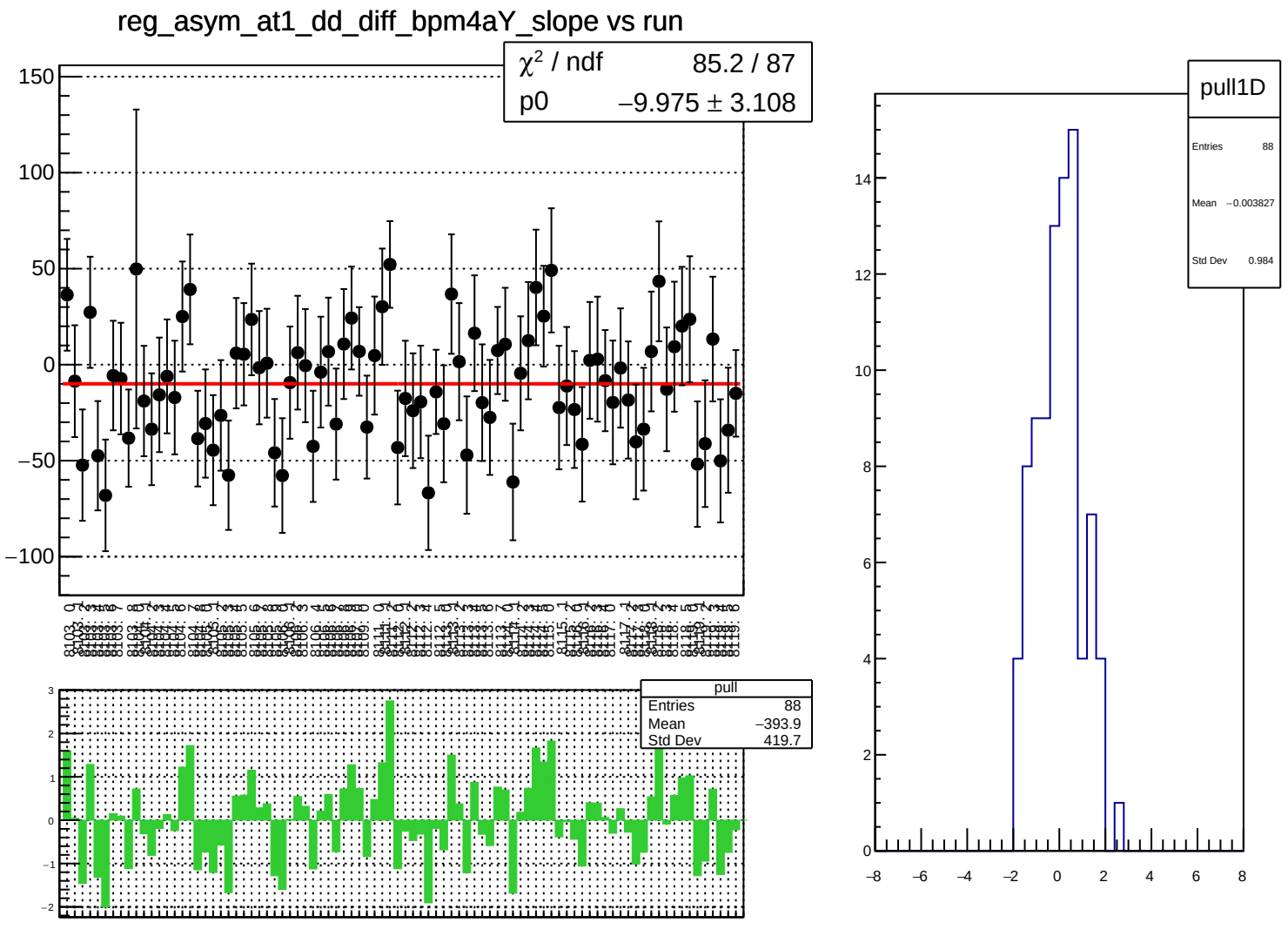

pull1D
Entries 88
Mean −0.01646
Std Dev 1.004

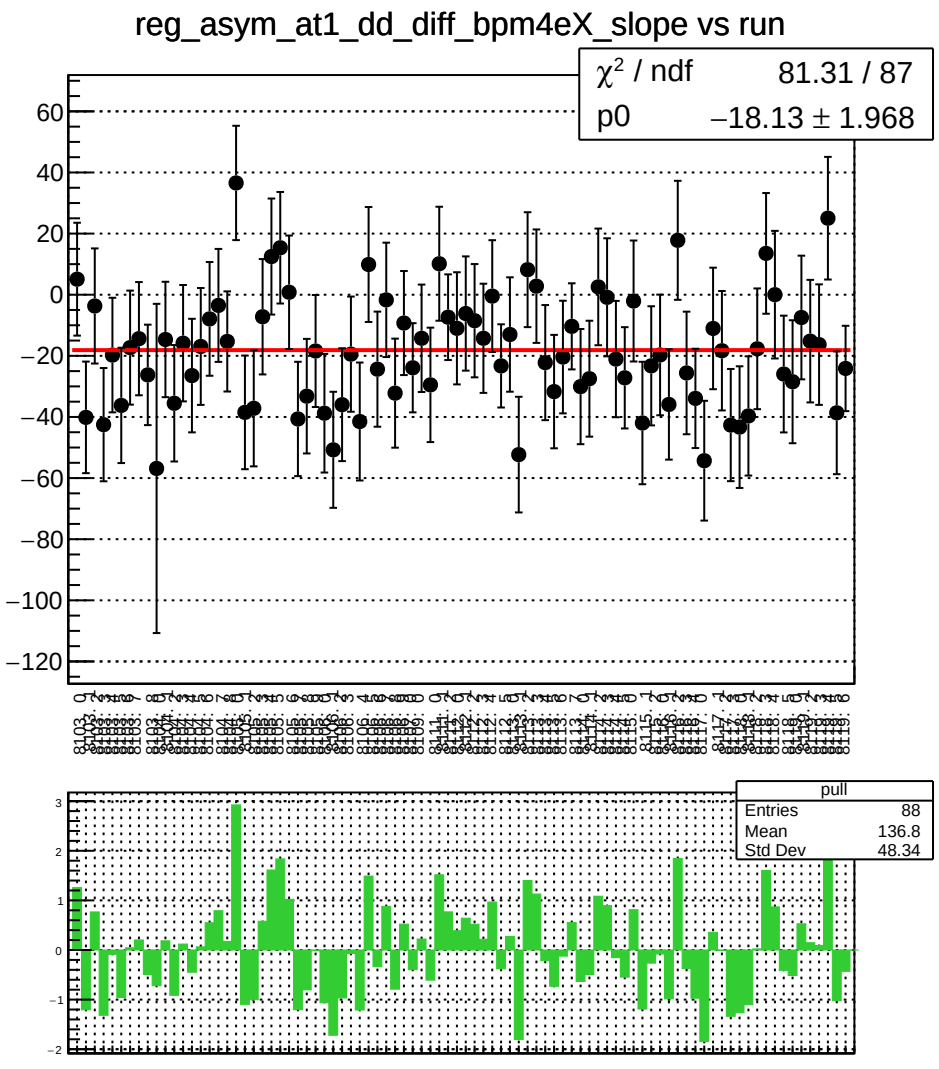

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 69.44 / 87
p0 1.33 ± 3.525
pull
Entries 88
Mean 65.95
Std Dev 32.11

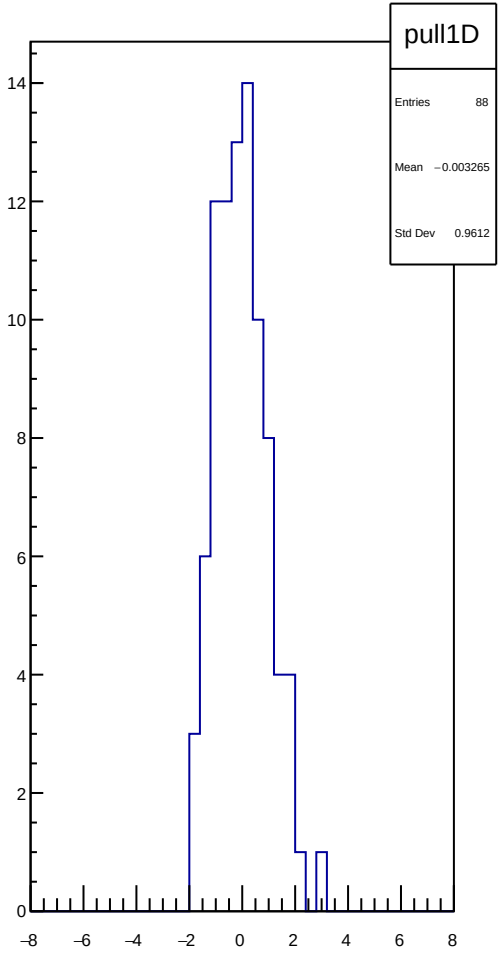

pull1D
Entries 88
Mean 0.007857
Std Dev 0.8883

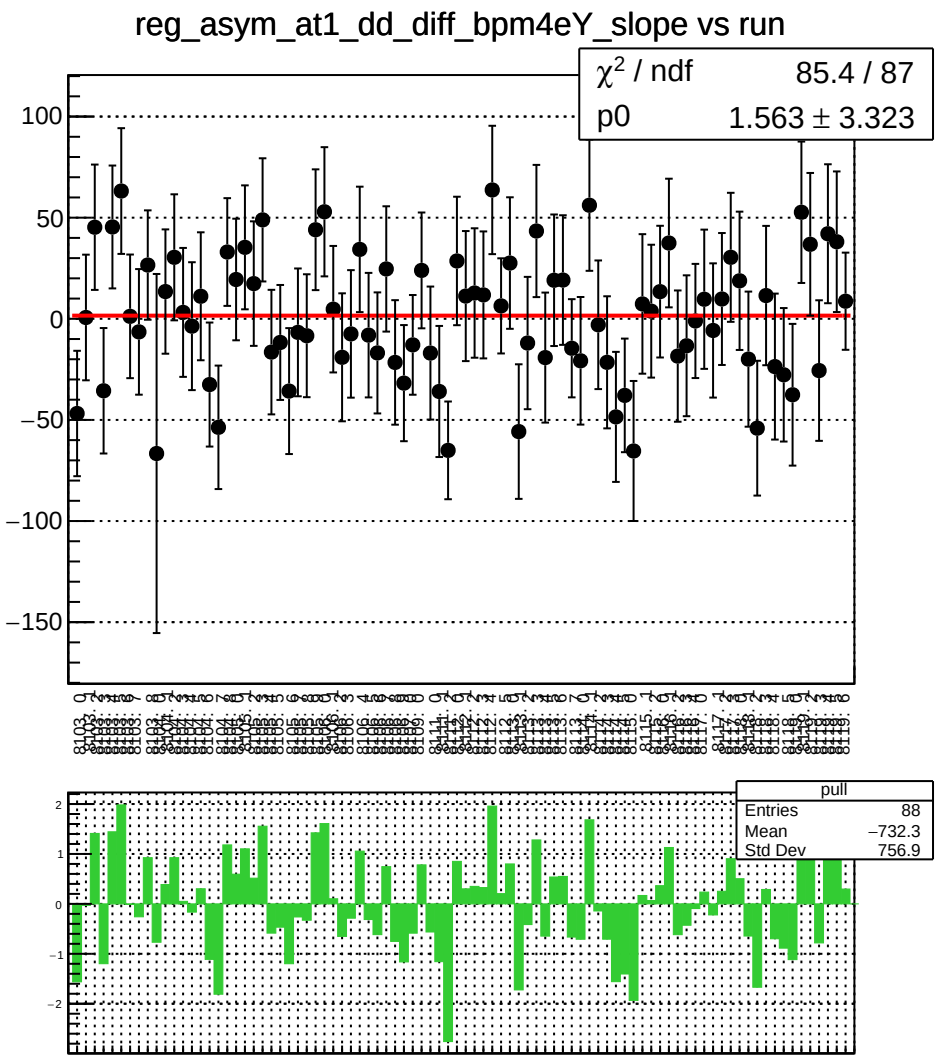

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 854.9 / 87
p0 14.15 ± 0.1325
pull
Entries 88
Mean 499.7
Std Dev 447.9
pull1D
Entries 88
Mean 0.3121
Std Dev 2.809

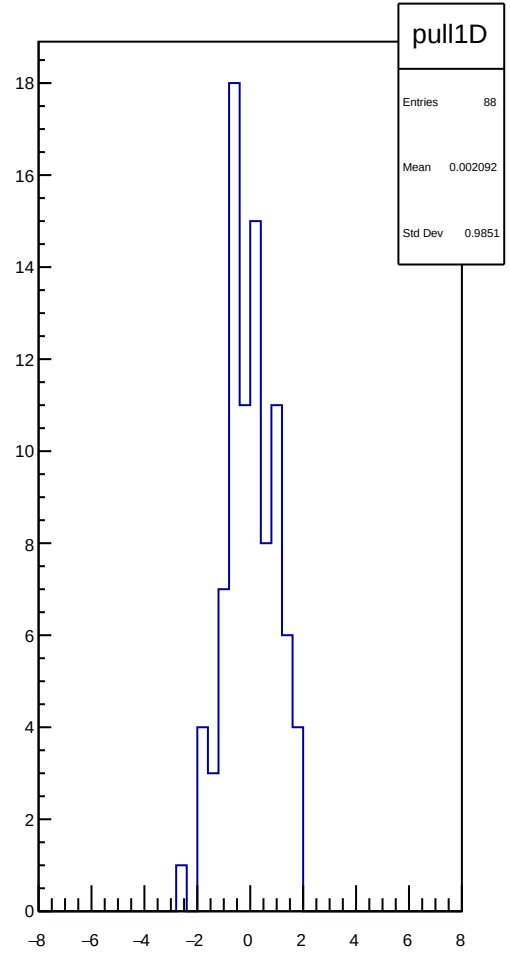

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 80.59 / 87
p0 64.5 ± 2.07
pull
Entries 88
Mean 22.59
Std Dev 91.51
pull1D
Entries 88
Mean 0.003483
Std Dev 0.957

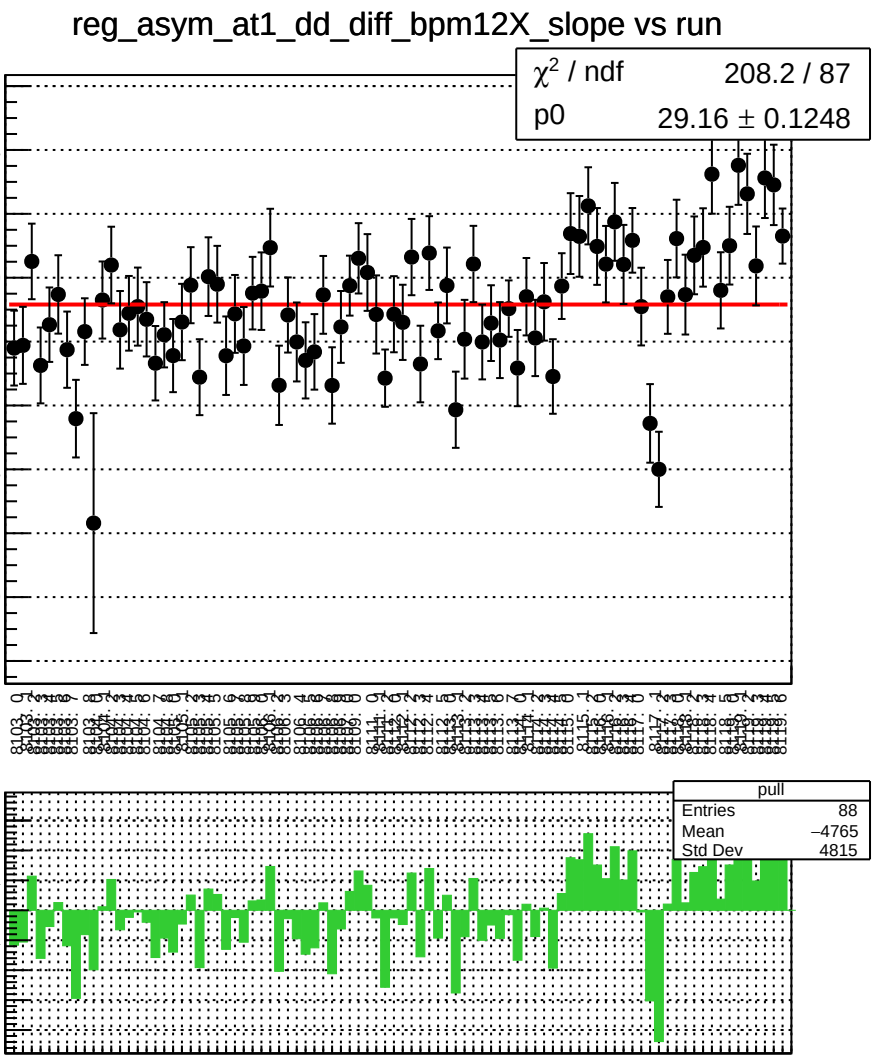

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 85.2 / 87
p0 −9.975 ± 3.108
150
100
50
0
−50
−100
pull
Entries 88
Mean −393.9
Std Dev 419.7
3
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.003827
Std Dev 0.984
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

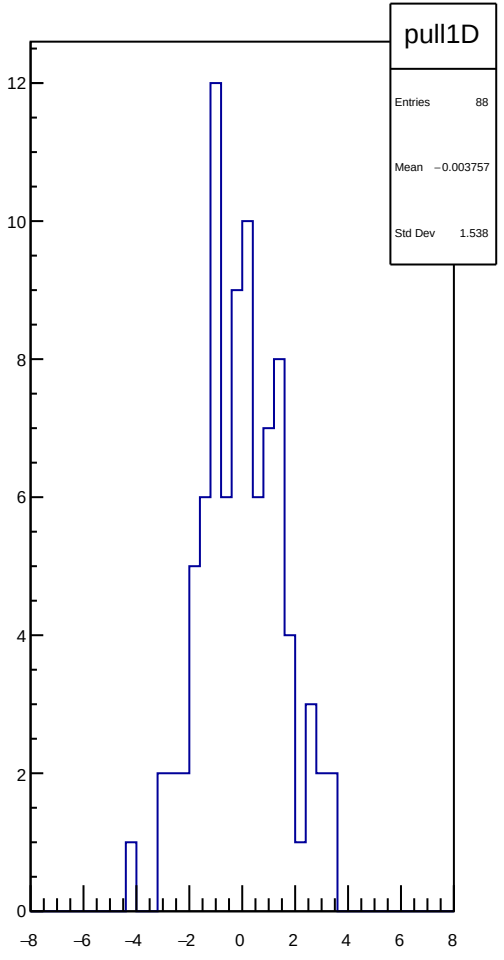

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 81.31 / 87
p0 −18.13 ± 1.968
pull
Entries 88
Mean 136.8
Std Dev 48.34

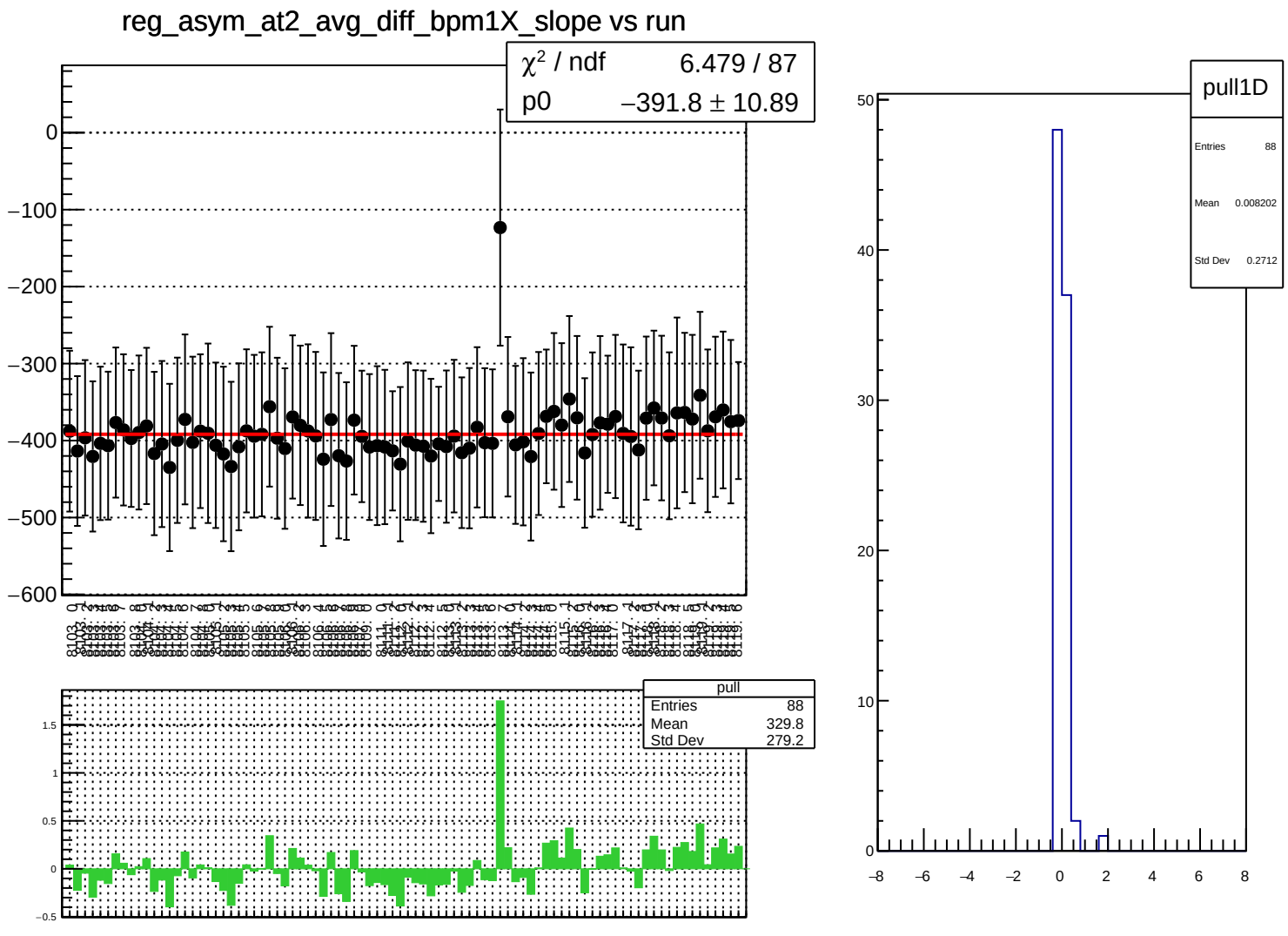

pull1D
Entries 88
Mean −0.003265
Std Dev 0.9612

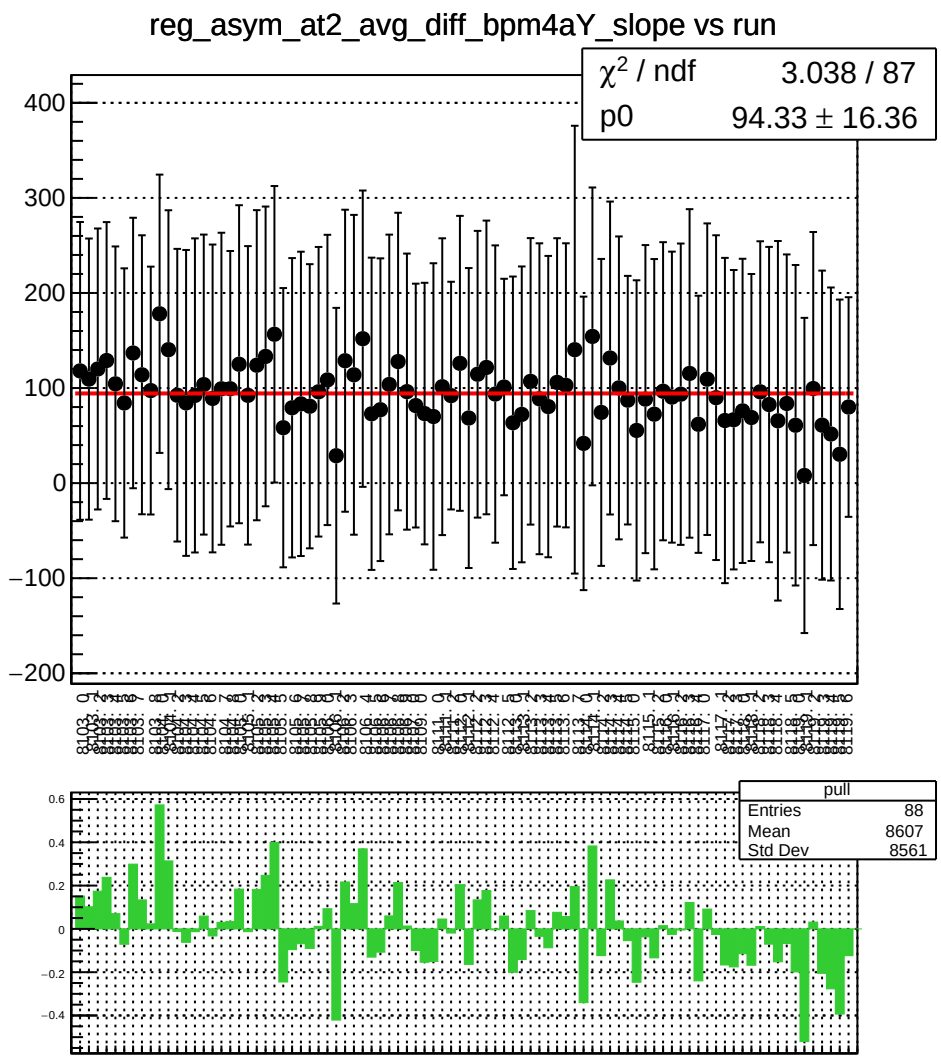

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 85.4 / 87
p0 1.563 ± 3.323
100
50
0
−50
−100
−150
pull
Entries 88
Mean −732.3
Std Dev 756.9
2
1
0
−1
−2

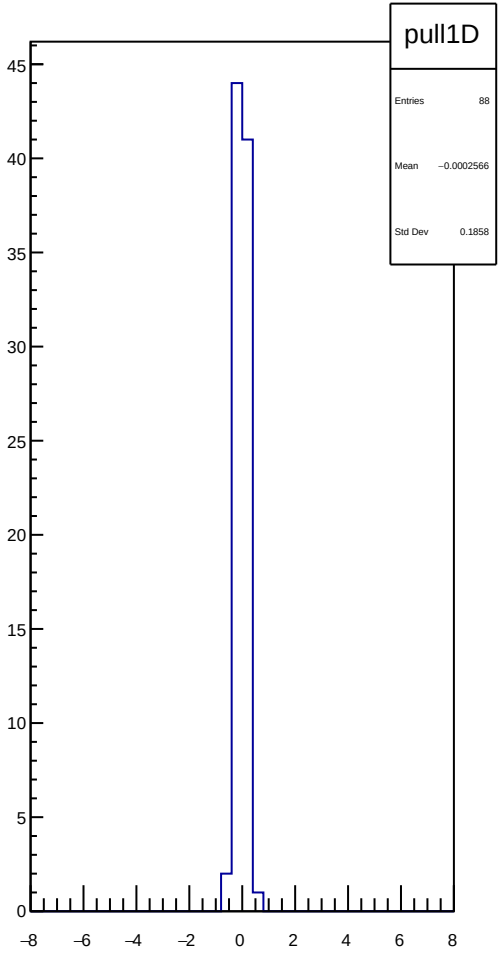

pull1D
Entries 88
Mean 0.002092
Std Dev 0.9851
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

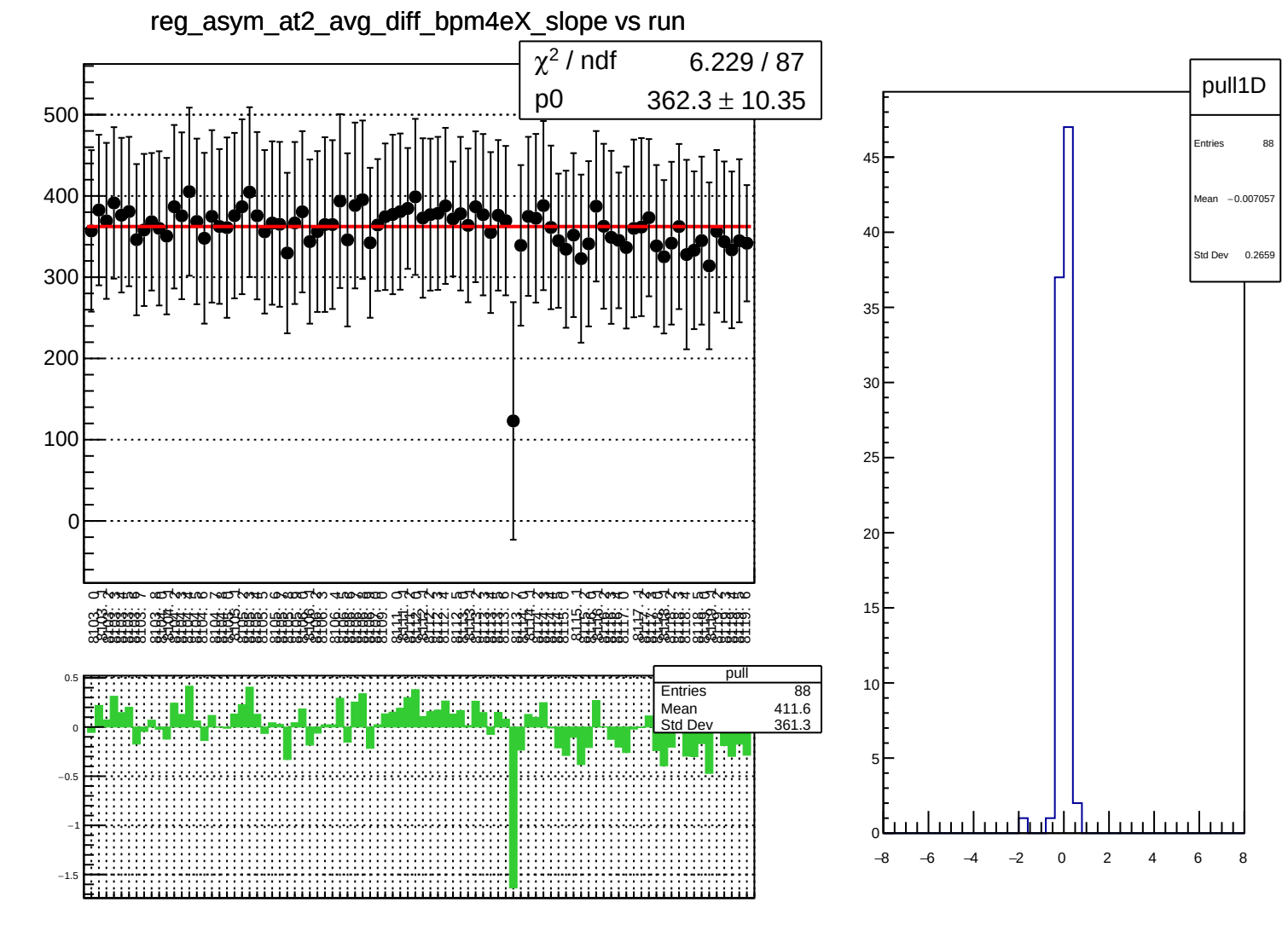

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 208.2 / 87
p0 29.16 ± 0.1248
pull
Entries 88
Mean −4765
Std Dev 4815

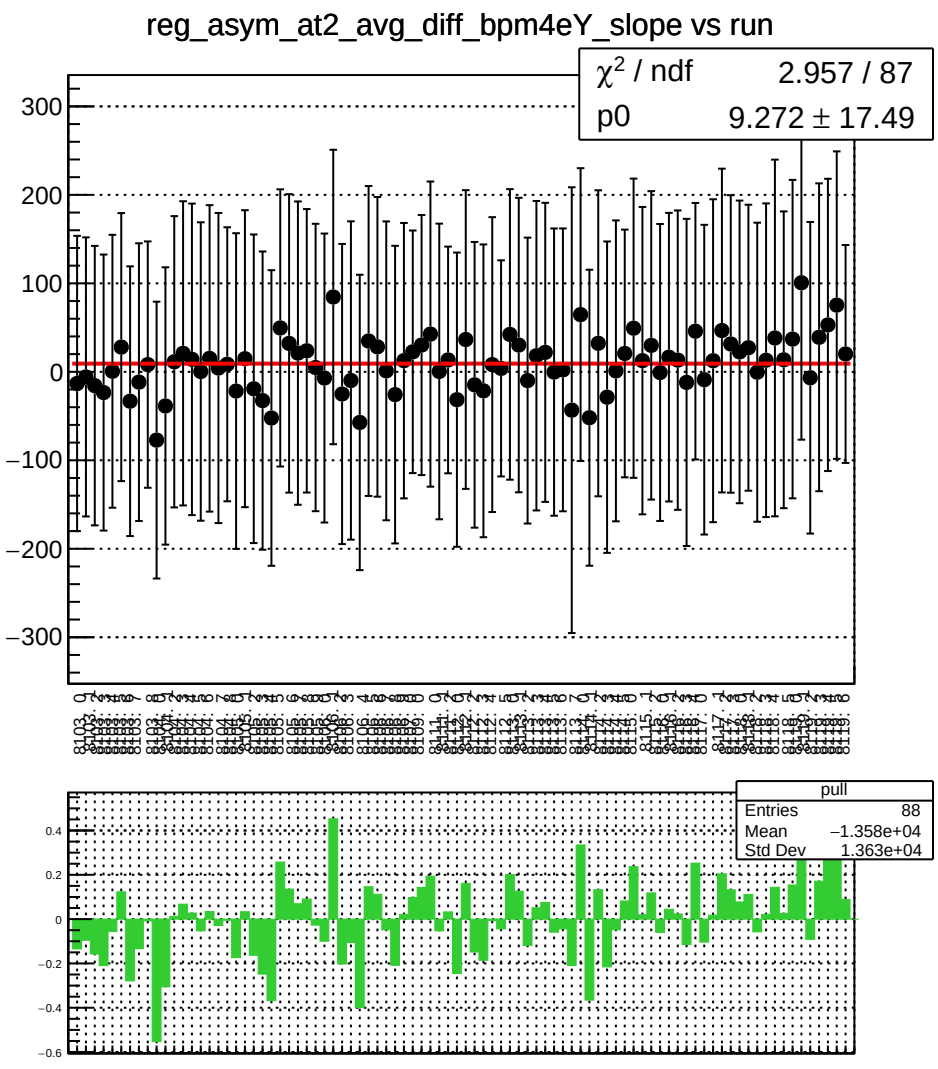

pull1D
Entries 88
Mean −0.003757
Std Dev 1.538

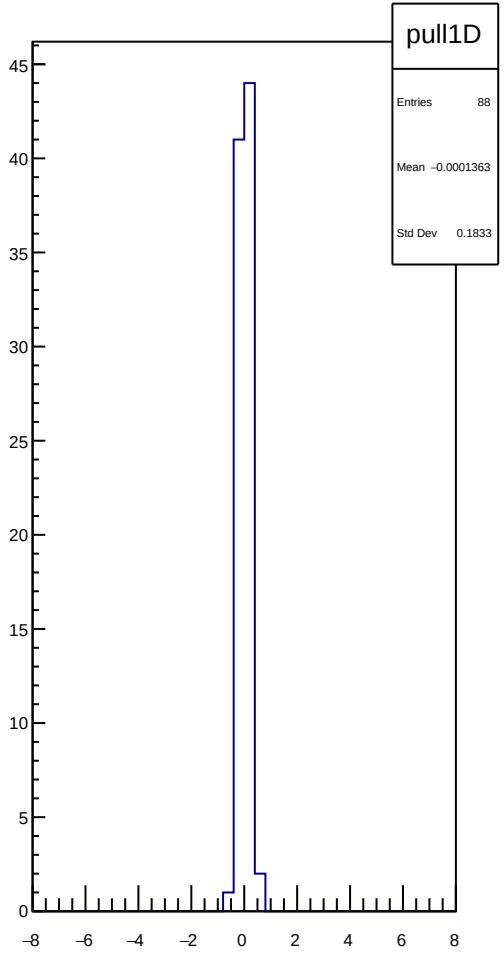

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 6.479 / 87
p0 −391.8 ± 10.89
pull
Entries 88
Mean 329.8
Std Dev 279.2
pull1D
Entries 88
Mean 0.008202
Std Dev 0.2712

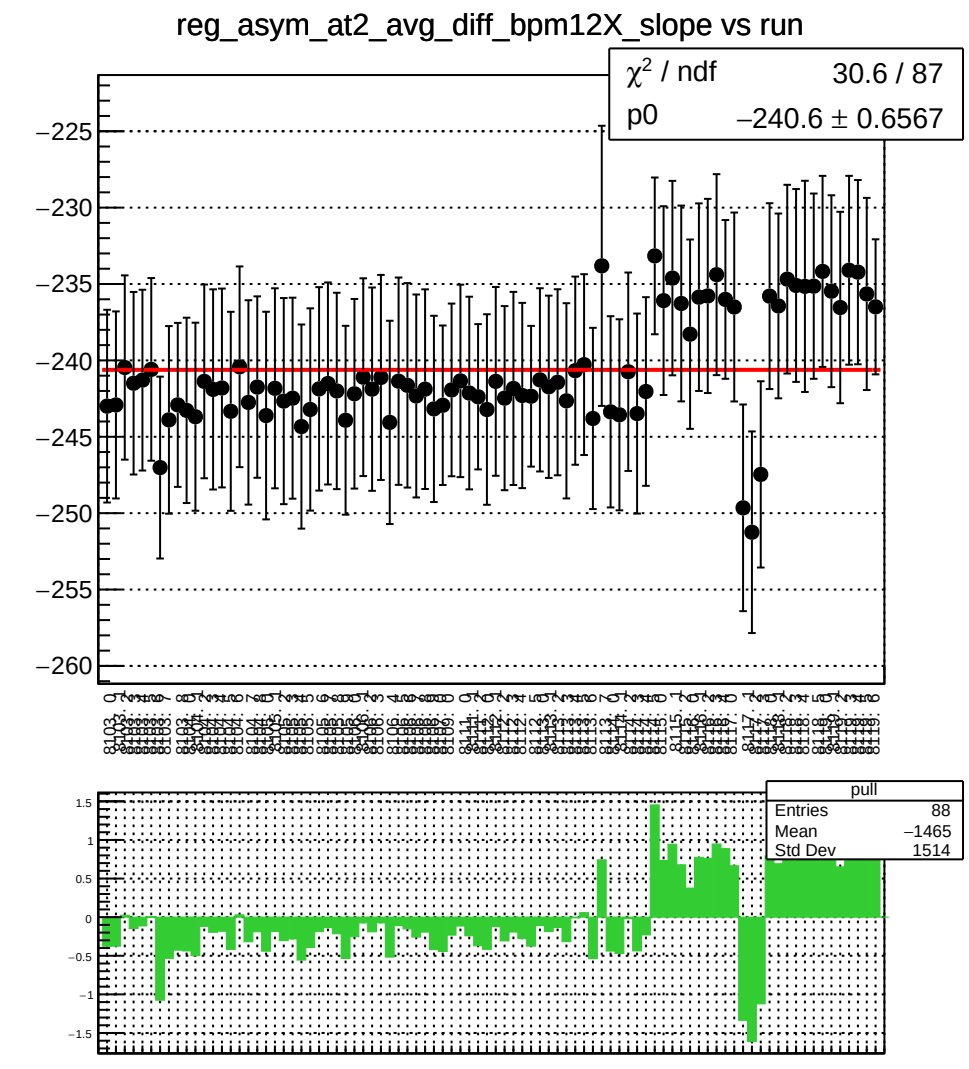

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.038 / 87
p0 94.33 ± 16.36
pull
Entries 88
Mean 8607
Std Dev 8561

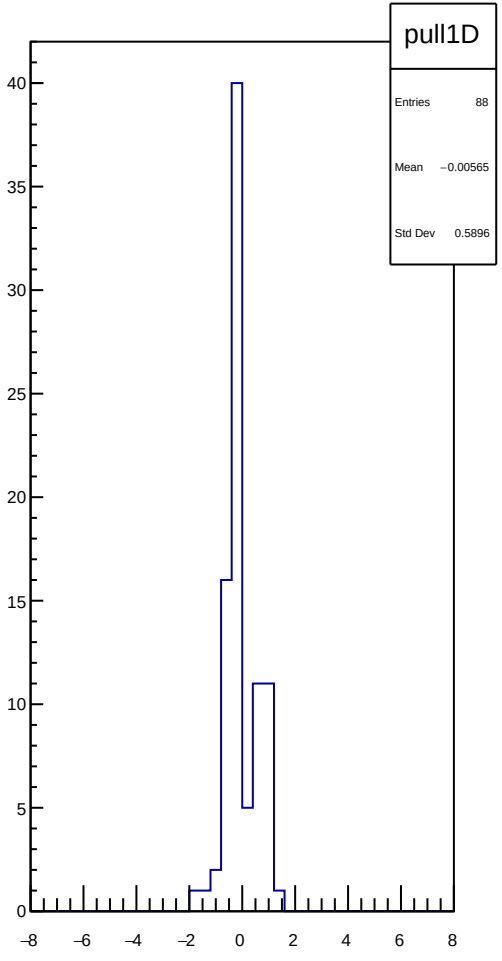

pull1D
Entries 88
Mean −0.0002566
Std Dev 0.1858

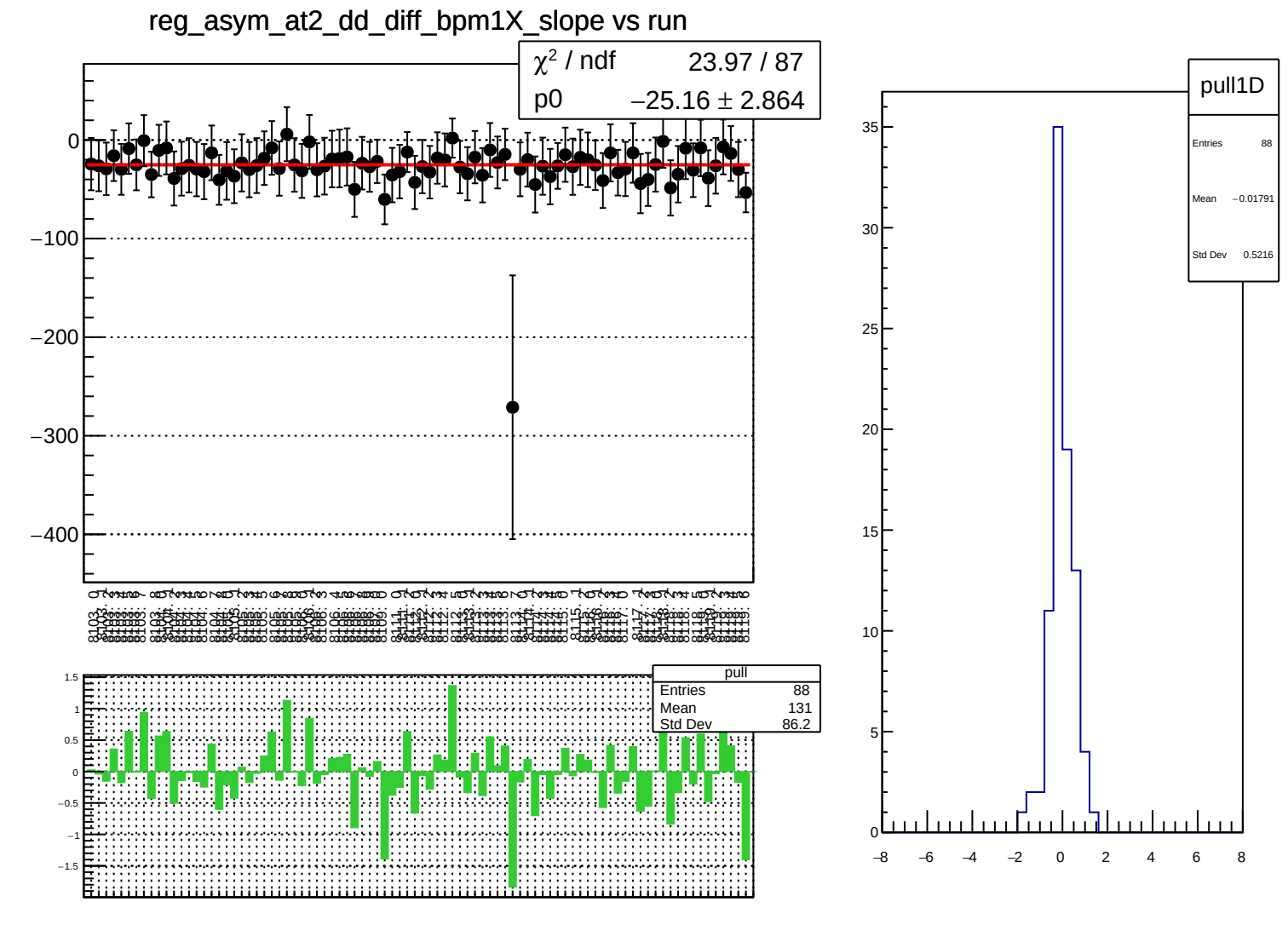

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.229 / 87
p0 362.3 ± 10.35
500
400
300
200
100
0
pull
Entries 88
Mean 411.6
Std Dev 361.3
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.007057
Std Dev 0.2659
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

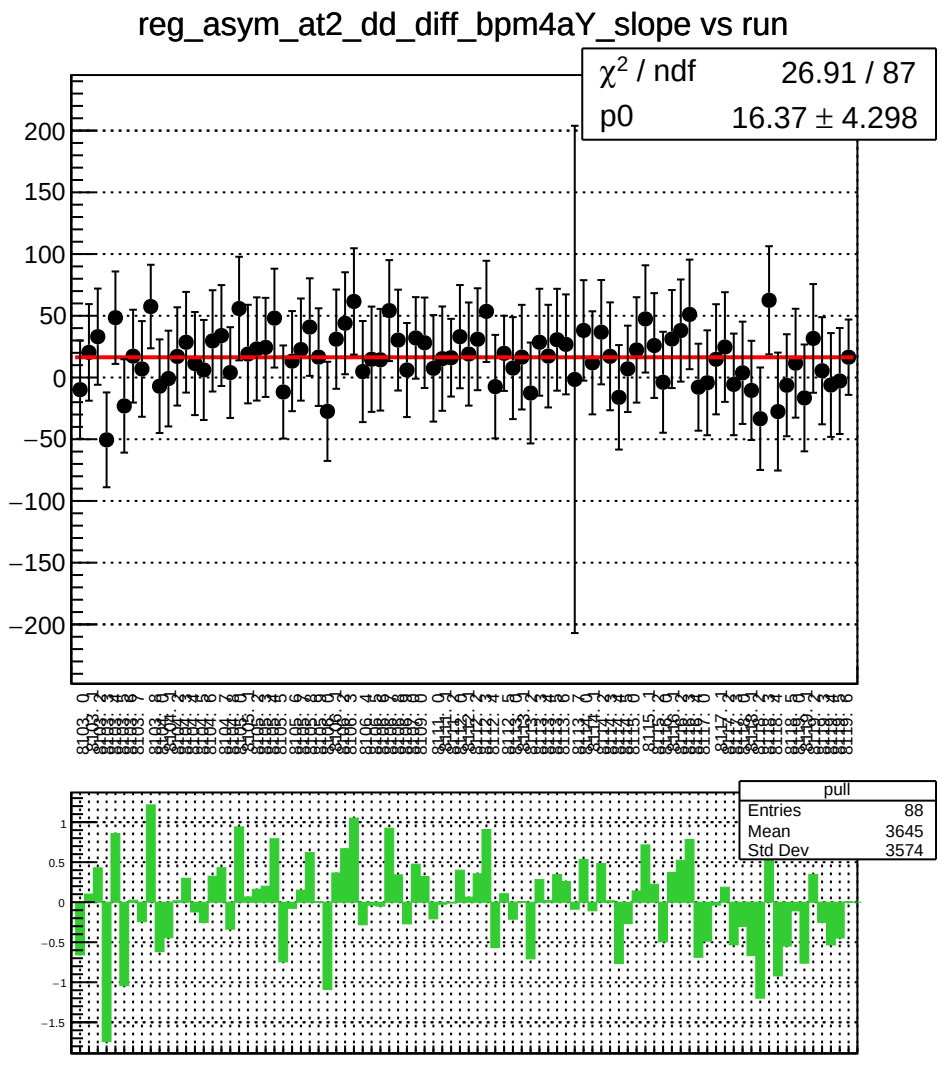

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.957 / 87
p0 9.272 ± 17.49
300
200
100
0
−100
−200
−300
pull
Entries 88
Mean −1.358e+04
Std Dev 1.363e+04
0.4
0.2
0
−0.2
−0.4
−0.6

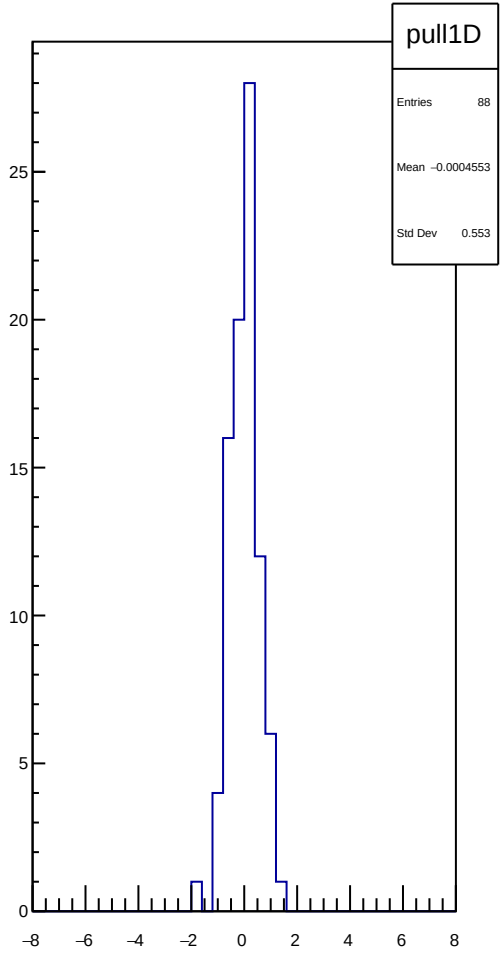

pull1D
Entries 88
Mean −0.0001363
Std Dev 0.1833
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

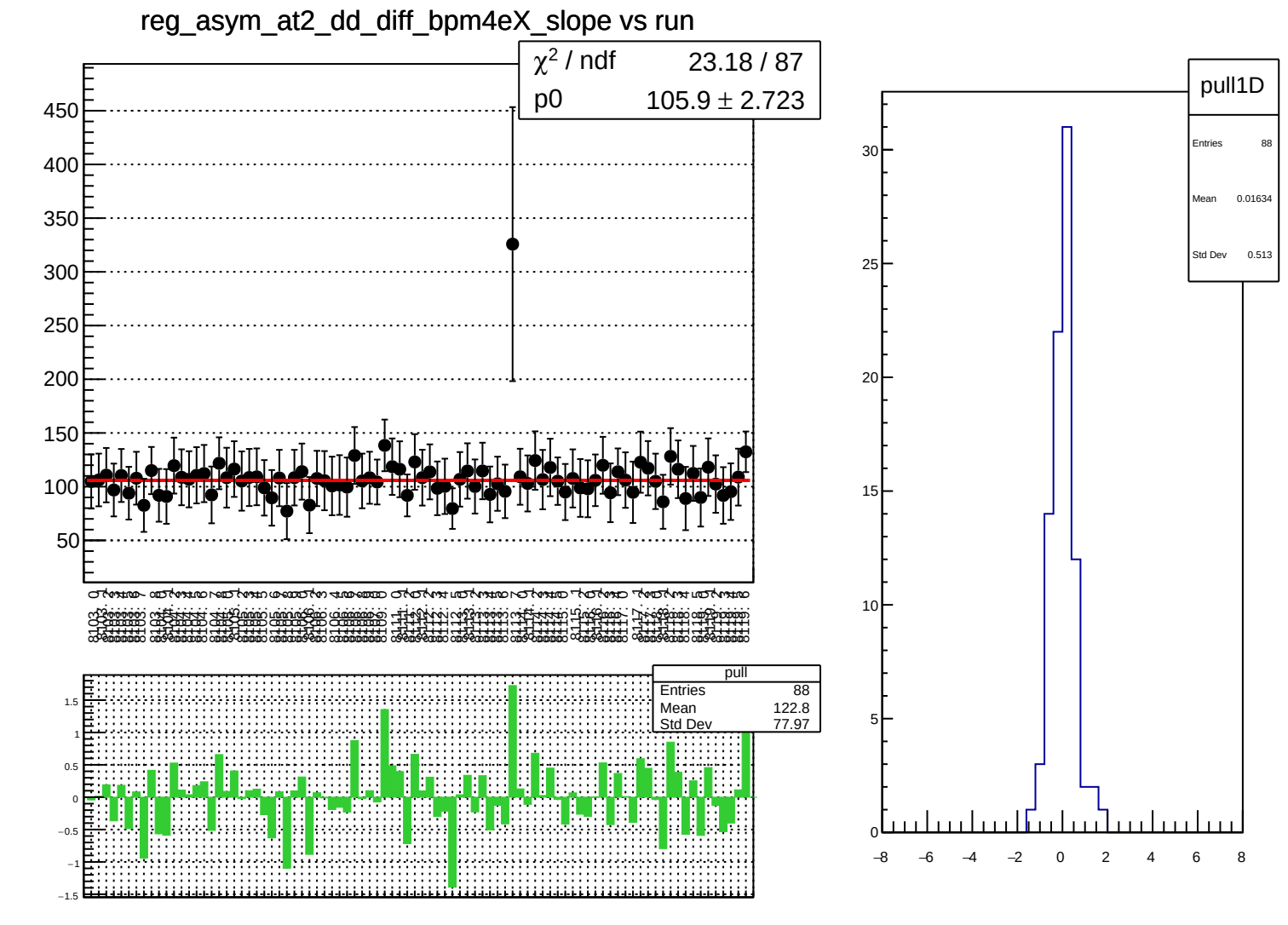

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 30.6 / 87
p0 −240.6 ± 0.6567
pull
Entries 88
Mean −1465
Std Dev 1514

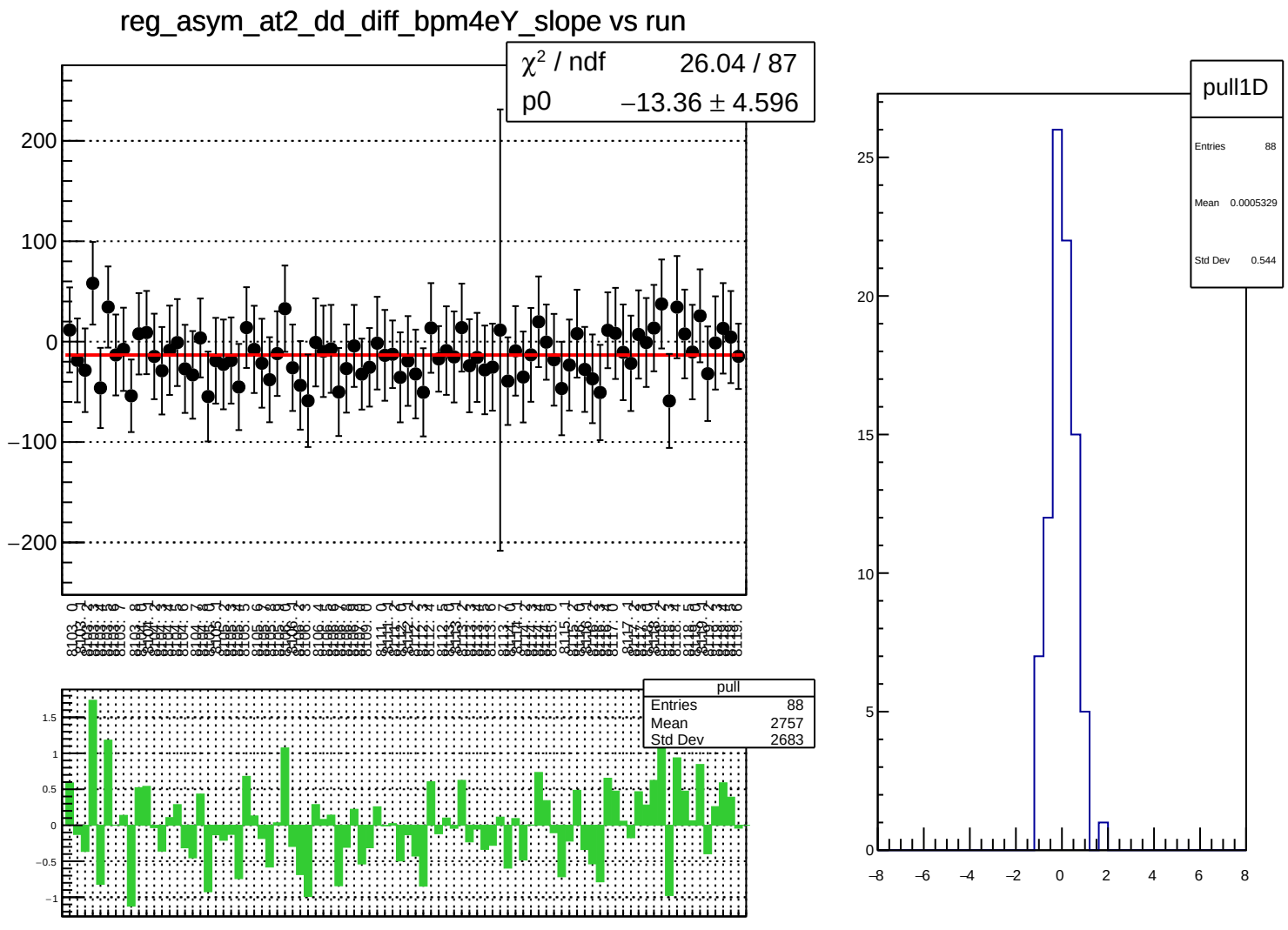

pull1D
Entries 88
Mean −0.00565
Std Dev 0.5896

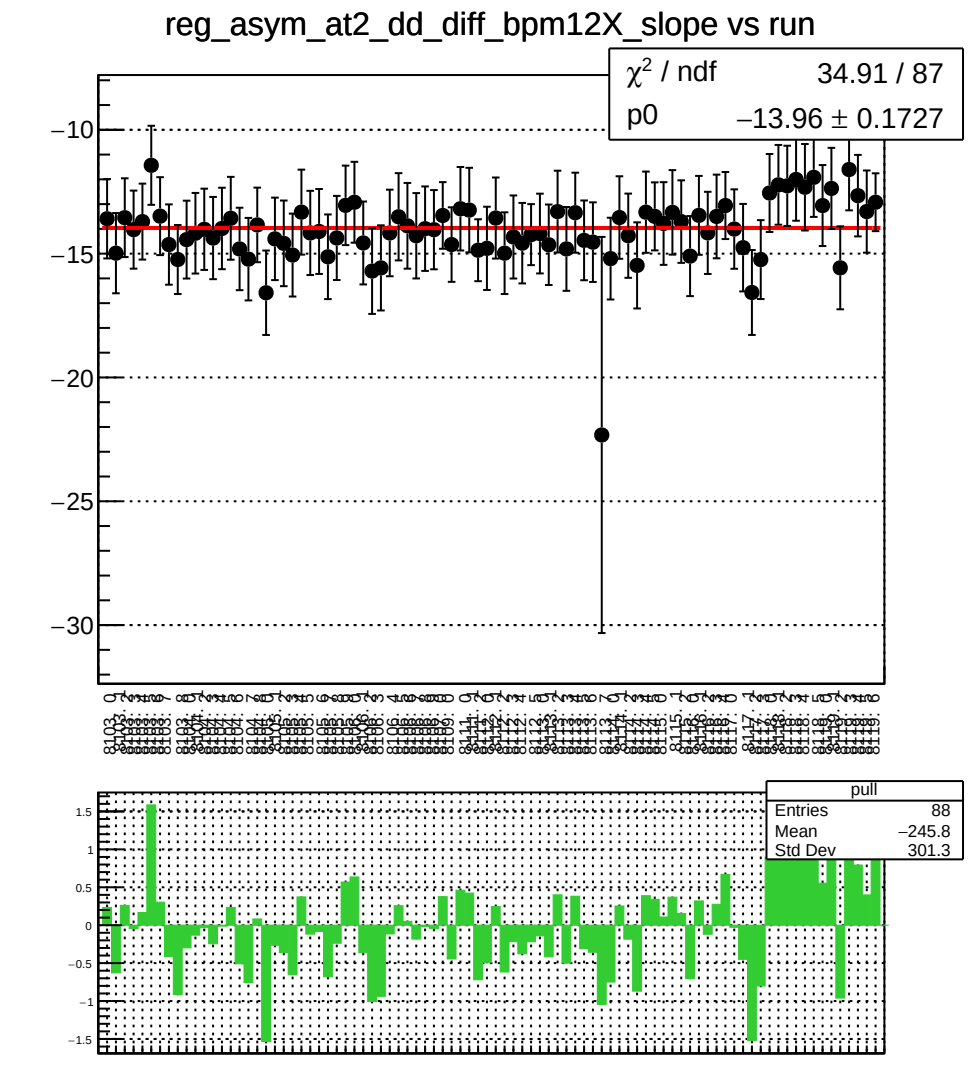

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 23.97 / 87
p0 −25.16 ± 2.864
0
−100
−200
−300
−400
pull
Entries 88
Mean 131
Std Dev 86.2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.01791
Std Dev 0.5216
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

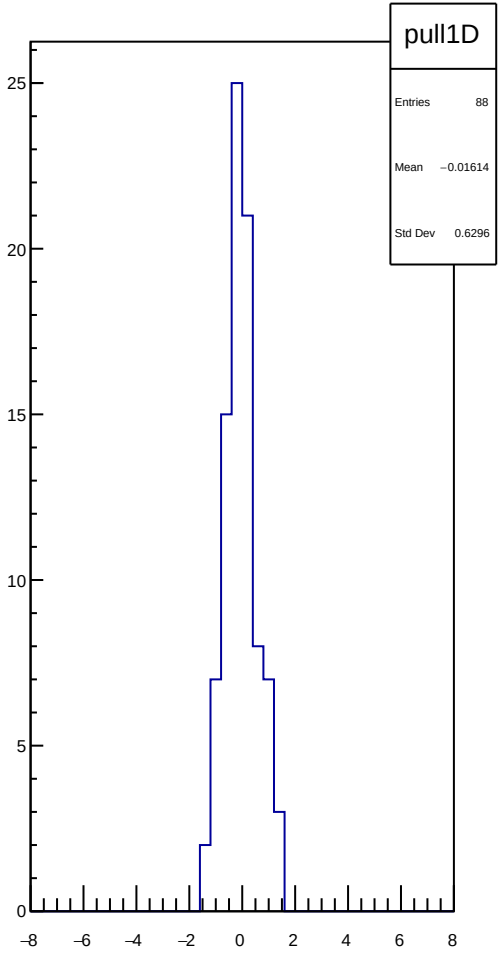

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 26.91 / 87
p0 16.37 ± 4.298
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 88
Mean 3645
Std Dev 3574
1
0.5
0
−0.5
−1
−1.5

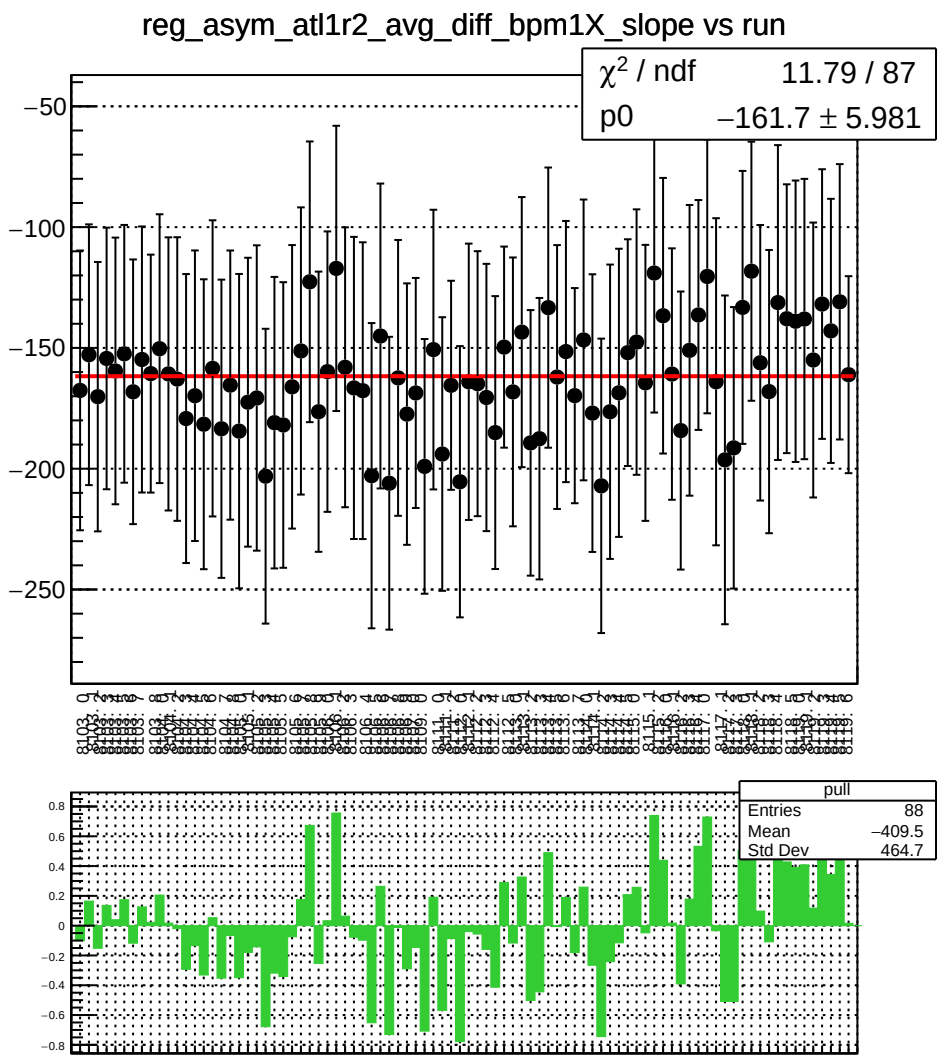

pull1D
Entries 88
Mean −0.0004553
Std Dev 0.553
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

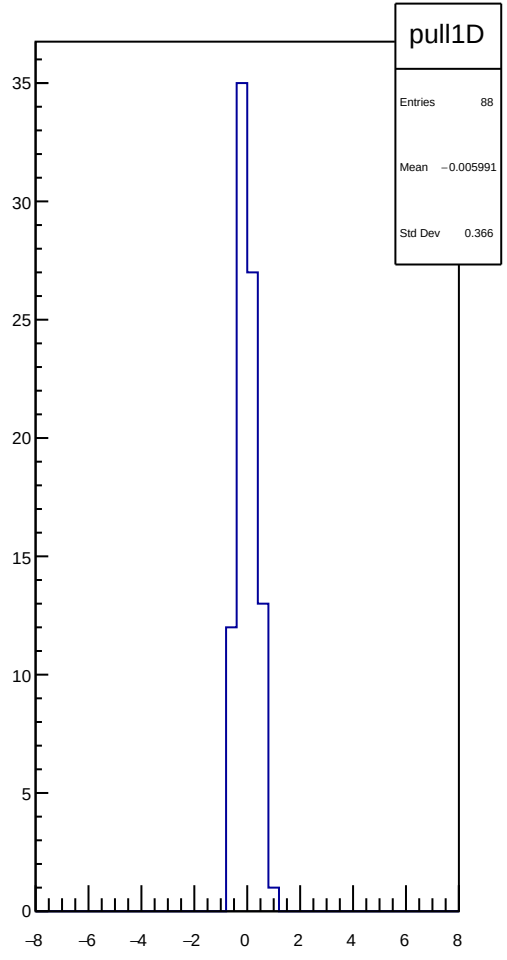

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.18 / 87
p0 105.9 ± 2.723
pull
Entries 88
Mean 122.8
Std Dev 77.97
pull1D
Entries 88
Mean 0.01634
Std Dev 0.513

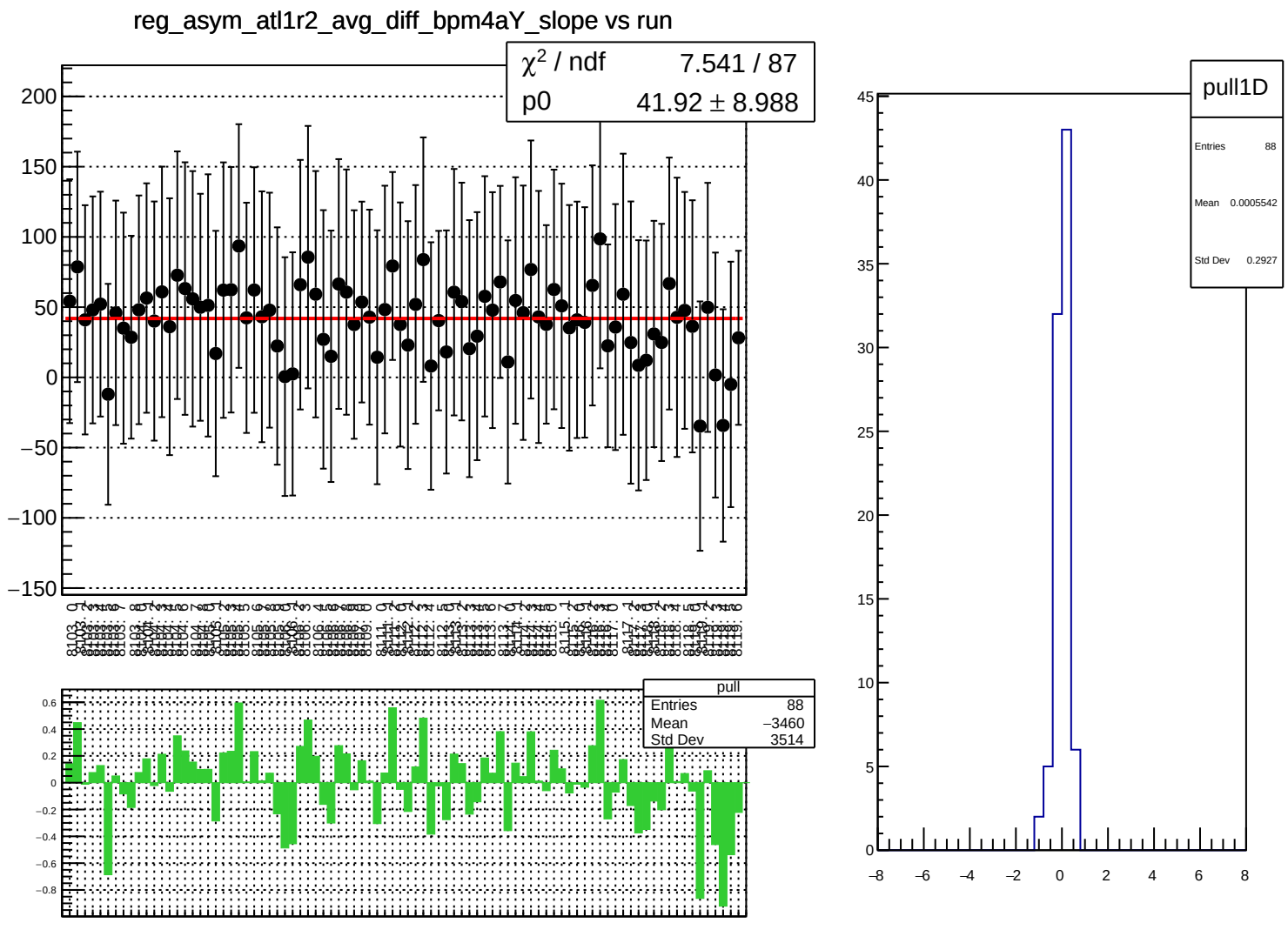

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 26.04 / 87
p0 −13.36 ± 4.596
200
100
0
−100
−200
pull
Entries 88
Mean 2757
Std Dev 2683
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 88
Mean 0.0005329
Std Dev 0.544
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

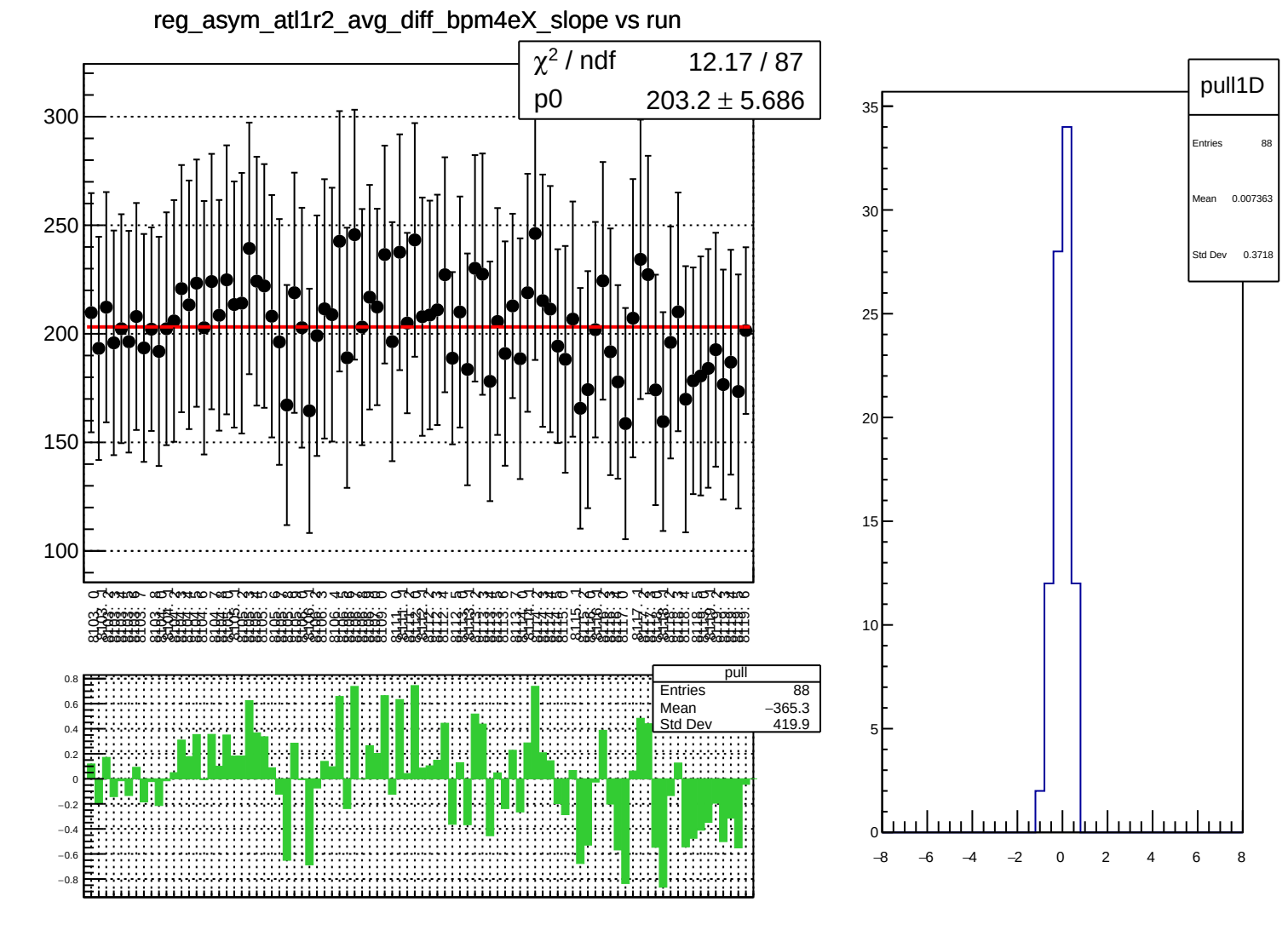

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 34.91 / 87
p0 −13.96 ± 0.1727
pull
Entries 88
Mean −245.8
Std Dev 301.3

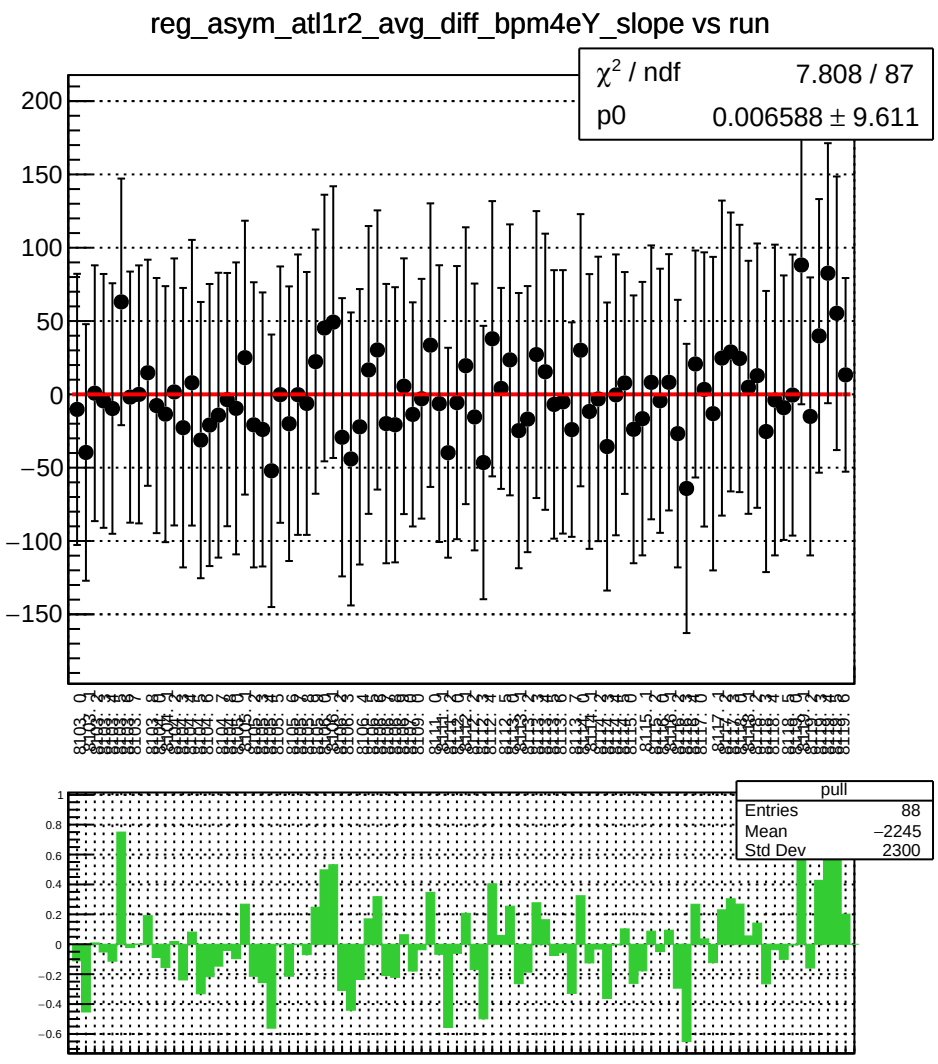

pull1D
Entries 88
Mean −0.01614
Std Dev 0.6296

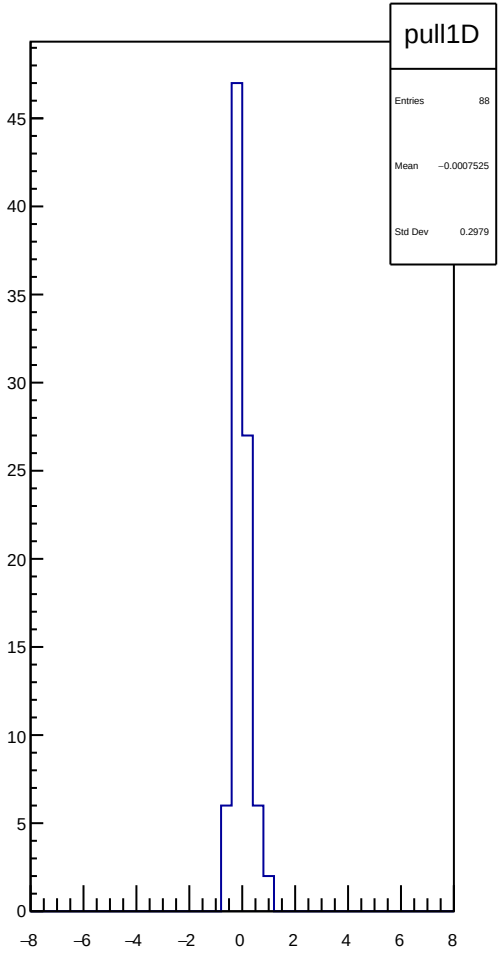

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 11.79 / 87
p0 −161.7 ± 5.981
−50
−100
−150
−200
−250
pull
Entries 88
Mean −409.5
Std Dev 464.7
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

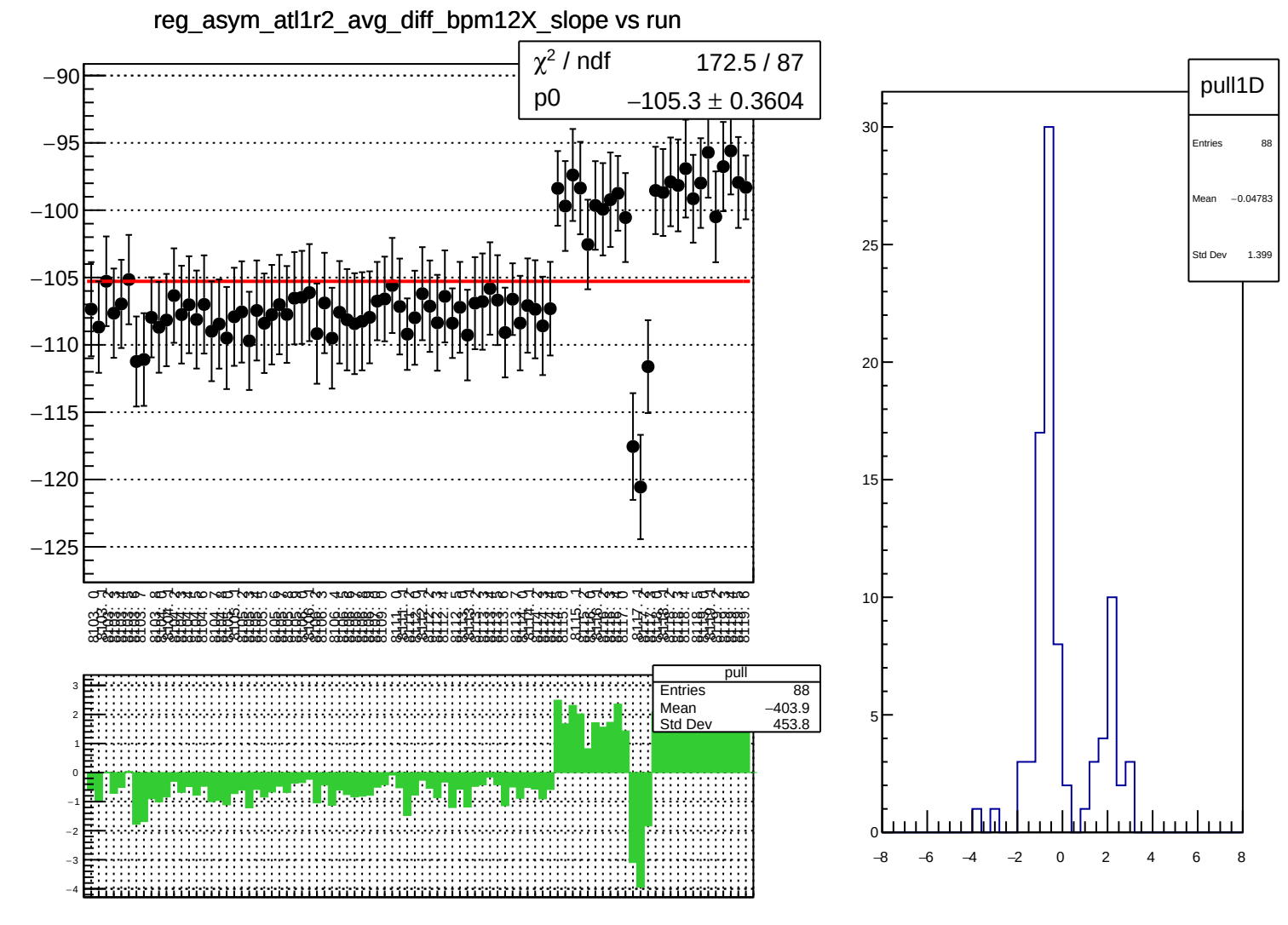

pull1D
Entries 88
Mean −0.005991
Std Dev 0.366
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

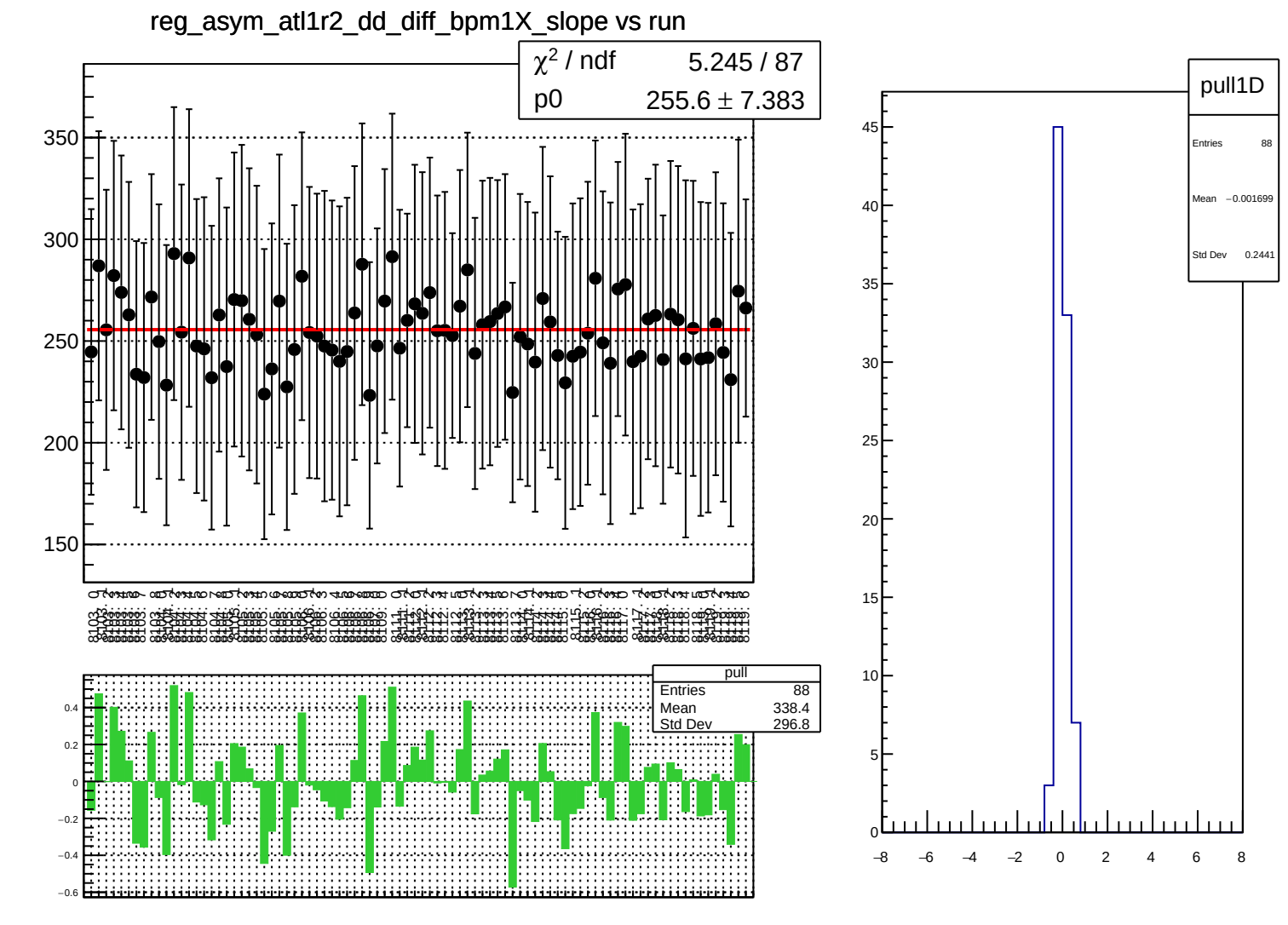

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.541 / 87
p0 41.92 ± 8.988
pull
Entries 88
Mean −3460
Std Dev 3514
pull1D
Entries 88
Mean 0.0005542
Std Dev 0.2927

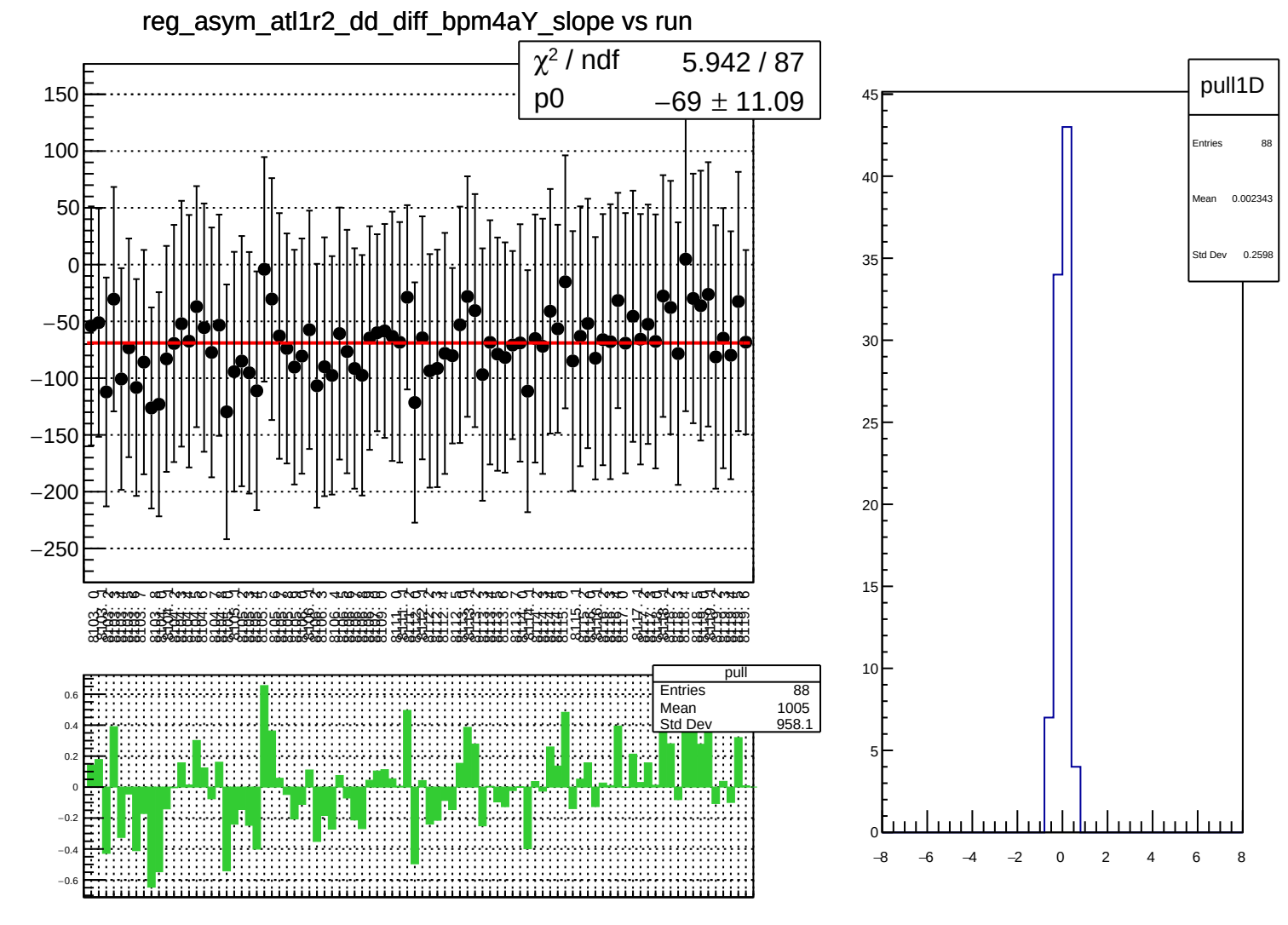

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.17 / 87
p0 203.2 ± 5.686
300
250
200
150
100
pull
Entries 88
Mean −365.3
Std Dev 419.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 88
Mean 0.007363
Std Dev 0.3718
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

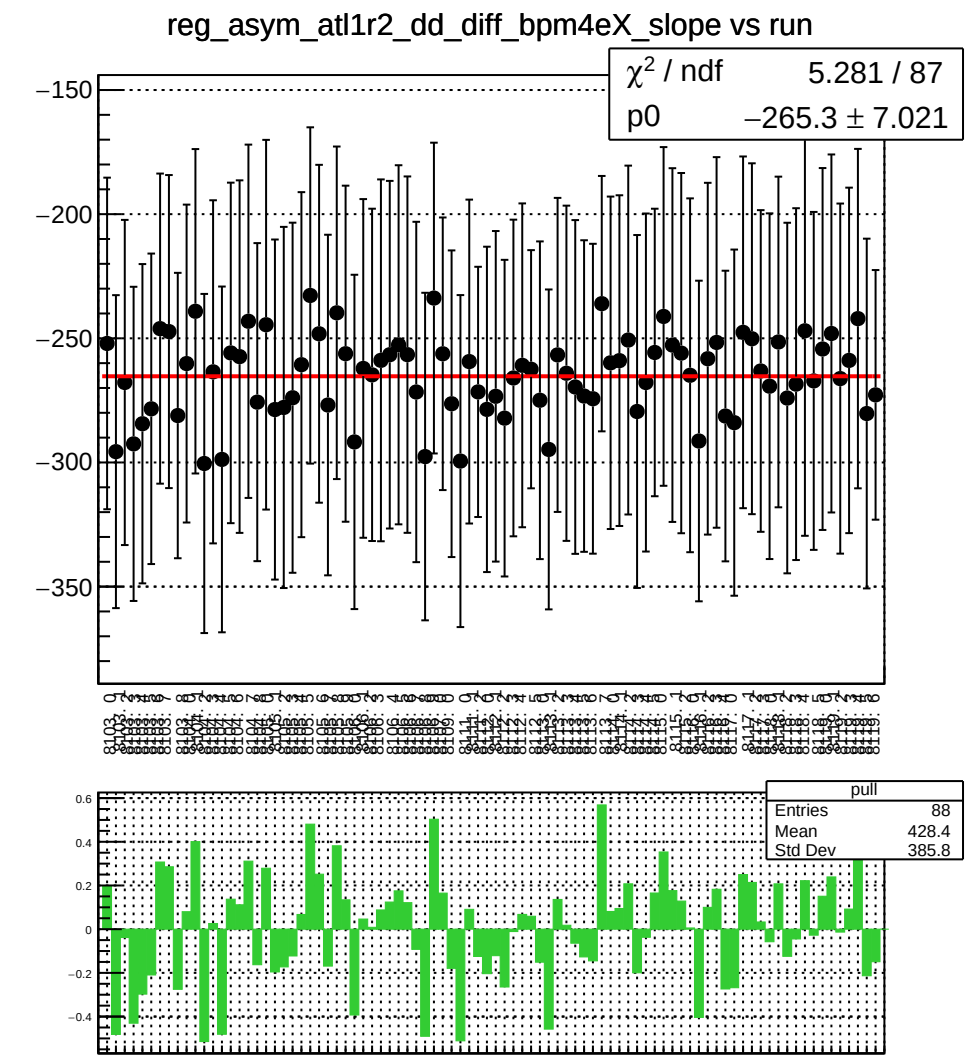

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.808 / 87
p0 0.006588 ± 9.611
pull
Entries 88
Mean −2245
Std Dev 2300

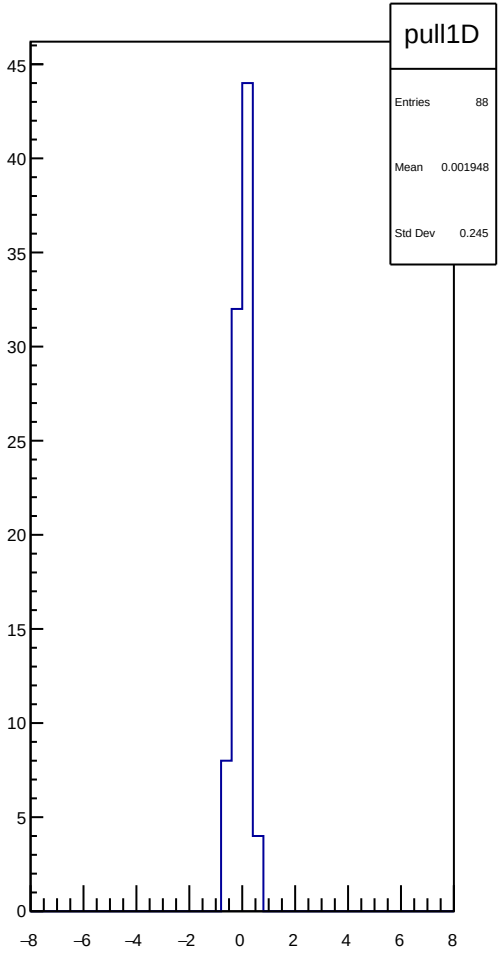

pull1D
Entries 88
Mean −0.0007525
Std Dev 0.2979

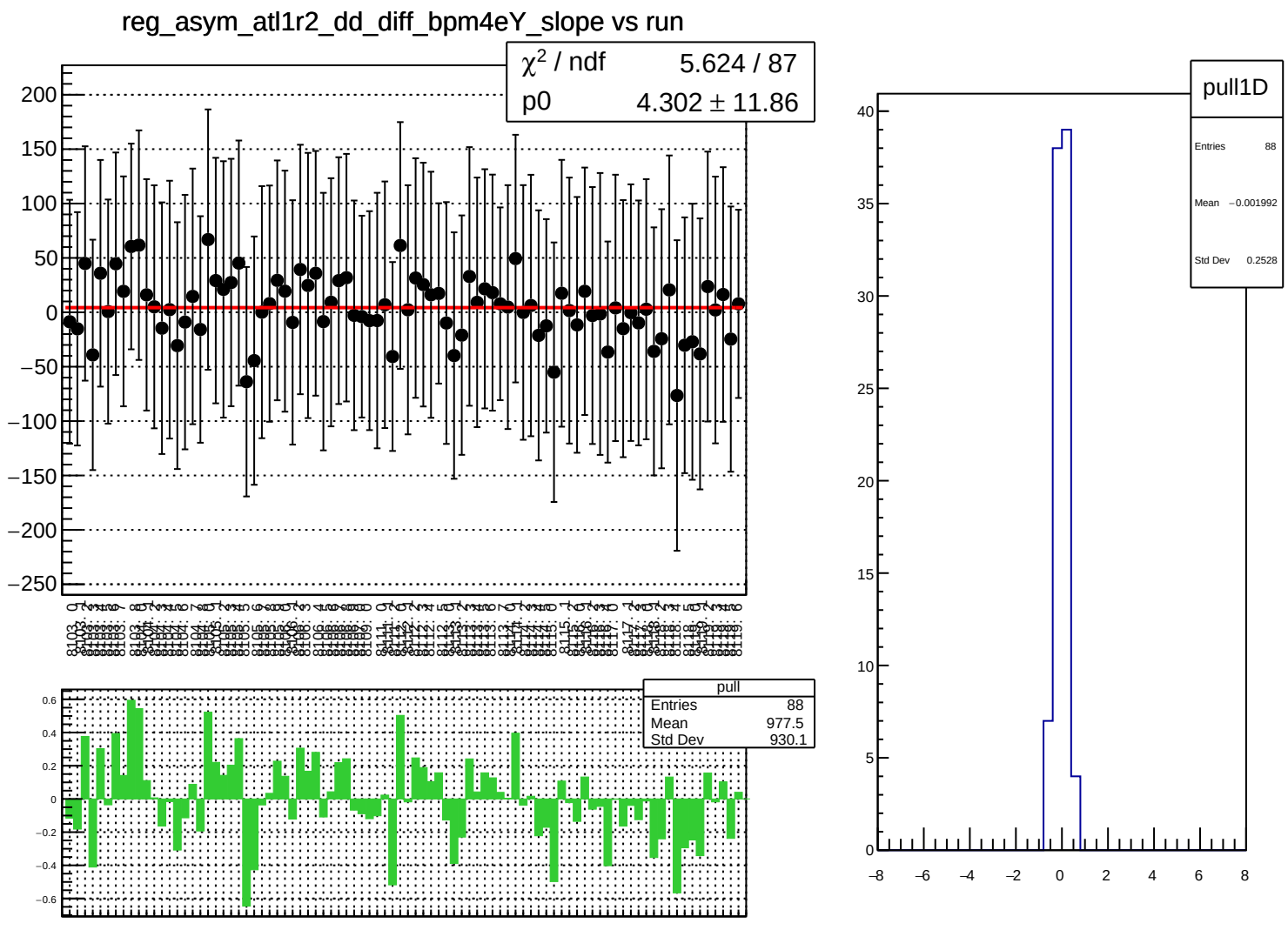

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 172.5 / 87
p0 −105.3 ± 0.3604
pull
Entries 88
Mean −403.9
Std Dev 453.8
pull1D
Entries 88
Mean −0.04783
Std Dev 1.399

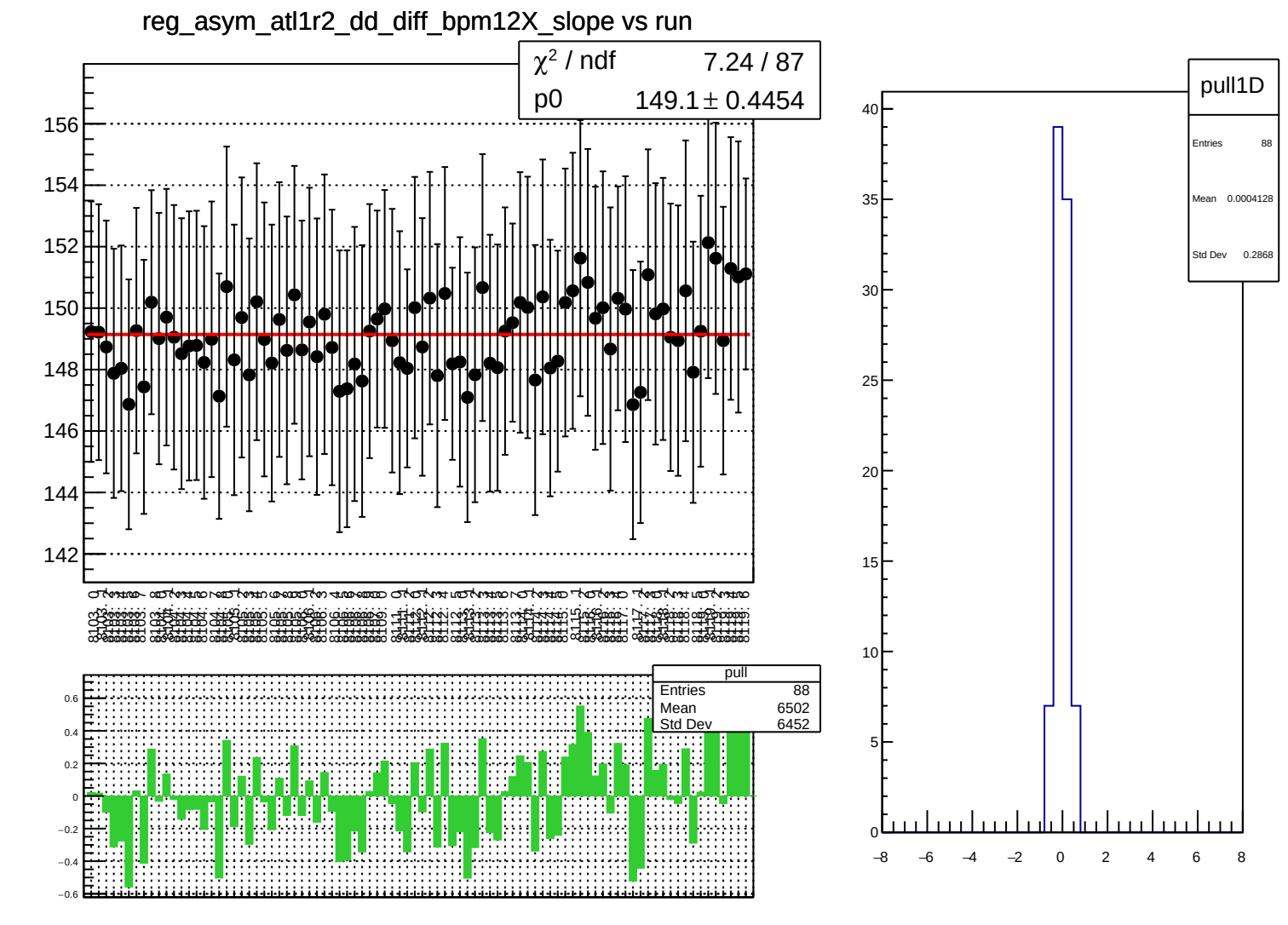

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 5.245 / 87
p0 255.6 ± 7.383
350
300
250
200
150
pull
Entries 88
Mean 338.4
Std Dev 296.8
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 88
Mean −0.001699
Std Dev 0.2441
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

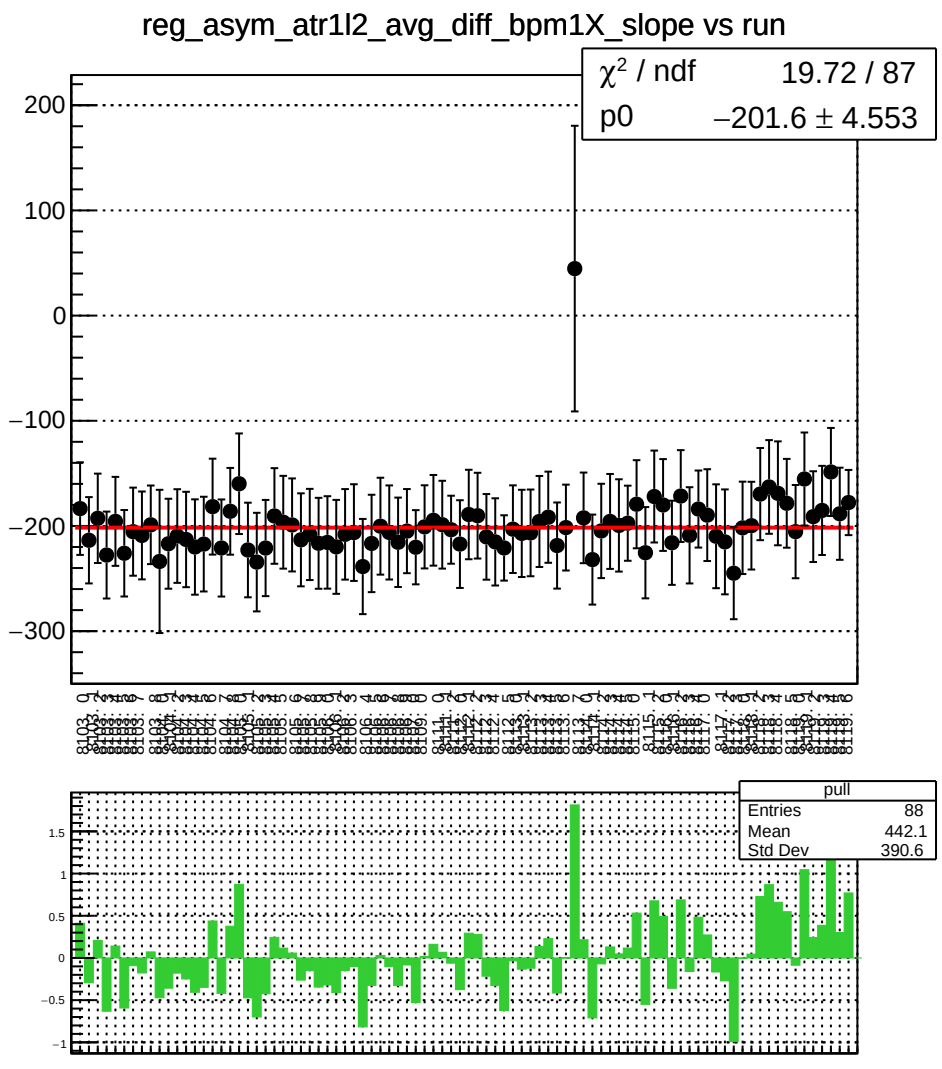

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.942 / 87
p0 −69 ± 11.09
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 88
Mean 1005
Std Dev 958.1
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 88
Mean 0.002343
Std Dev 0.2598
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

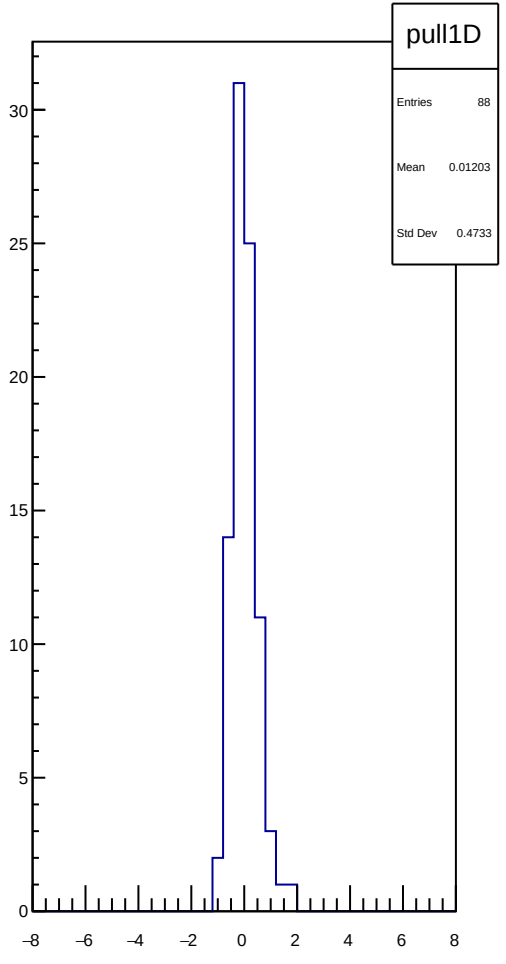

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.281 / 87
p0 −265.3 ± 7.021
pull
Entries 88
Mean 428.4
Std Dev 385.8


pull1D
Entries 88
Mean 0.001948
Std Dev 0.245


reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.624 / 87
p0 4.302 ± 11.86
pull
Entries 88
Mean 977.5
Std Dev 930.1
pull1D
Entries 88
Mean −0.001992
Std Dev 0.2528


reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 7.24 / 87
p0 149.1 ± 0.4454
156
154
152
150
148
146
144
142
pull
Entries 88
Mean 6502
Std Dev 6452
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 88
Mean 0.0004128
Std Dev 0.2868
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 19.72 / 87
p0 −201.6 ± 4.553
200
100
0
−100
−200
−300
pull
Entries 88
Mean 442.1
Std Dev 390.6
1.5
1
0.5
0
−0.5
−1


pull1D
Entries 88
Mean 0.01203
Std Dev 0.4733
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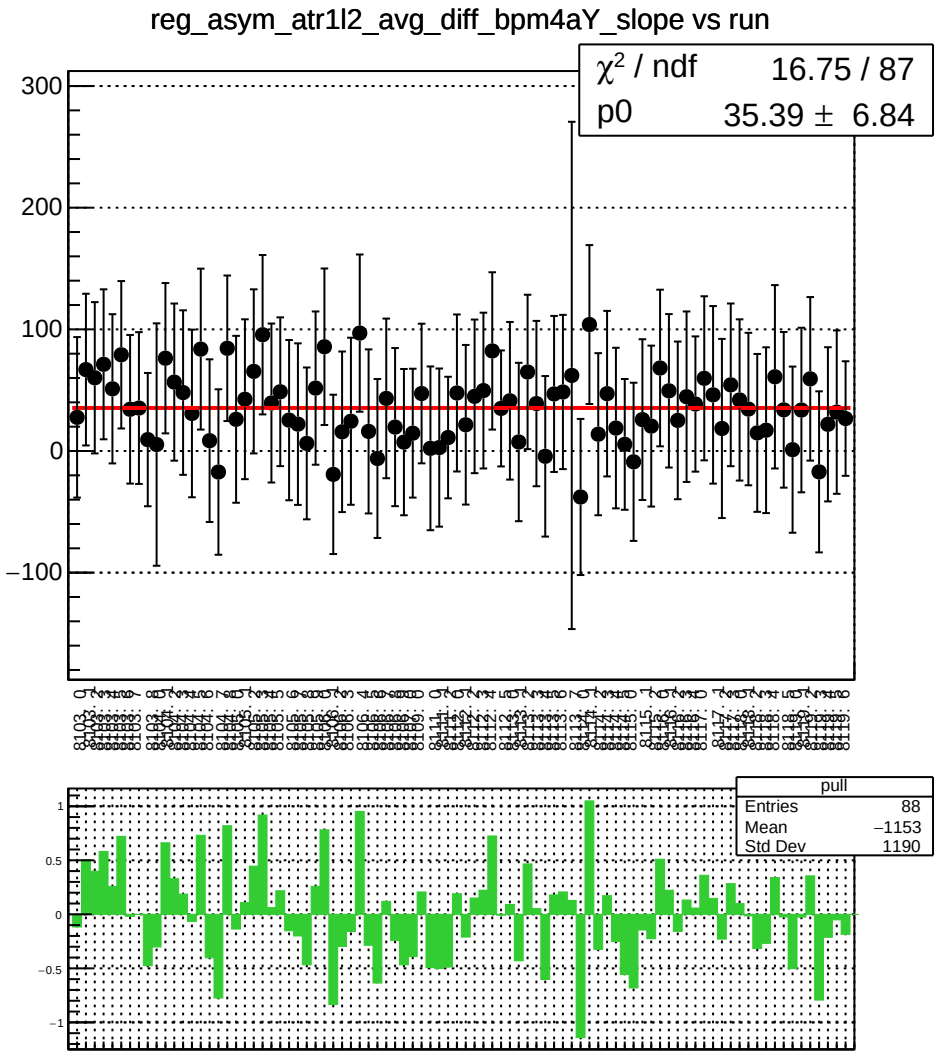
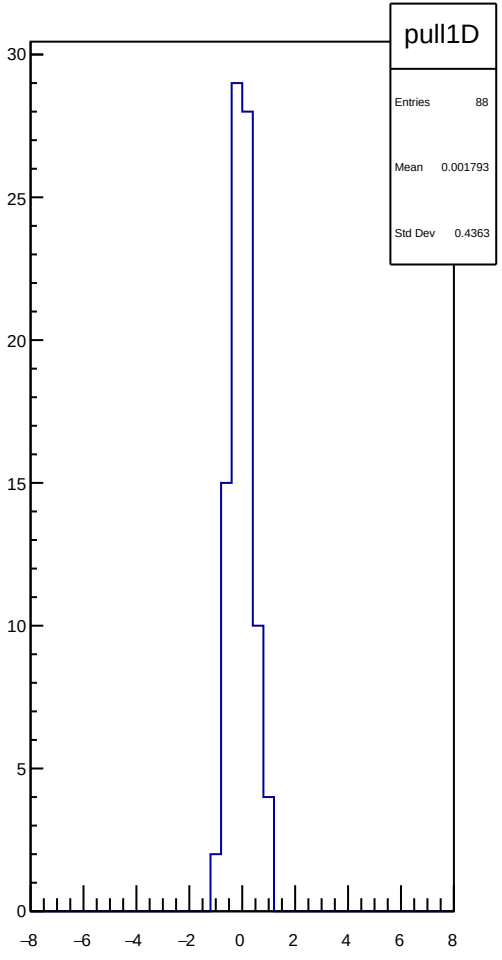
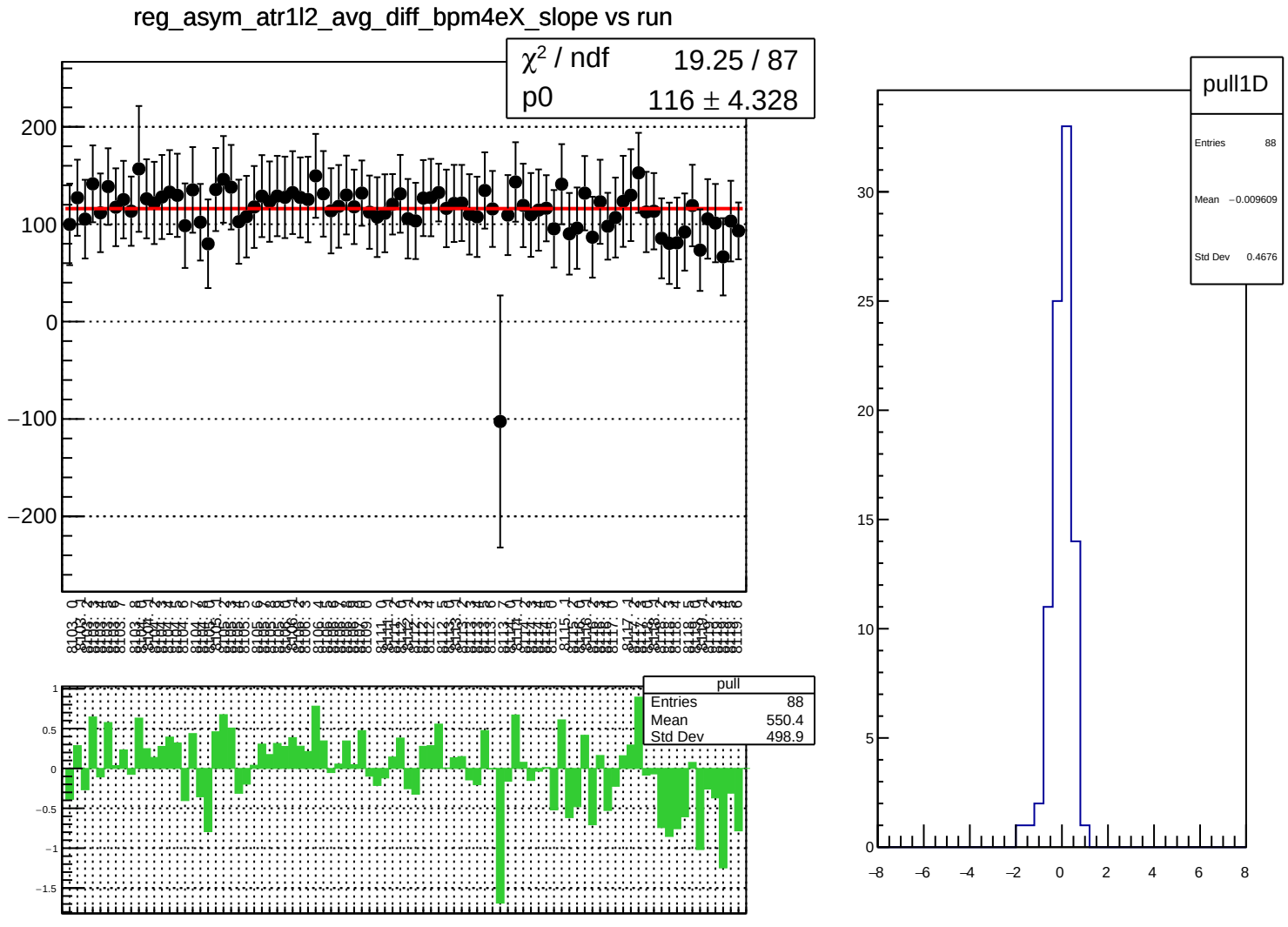
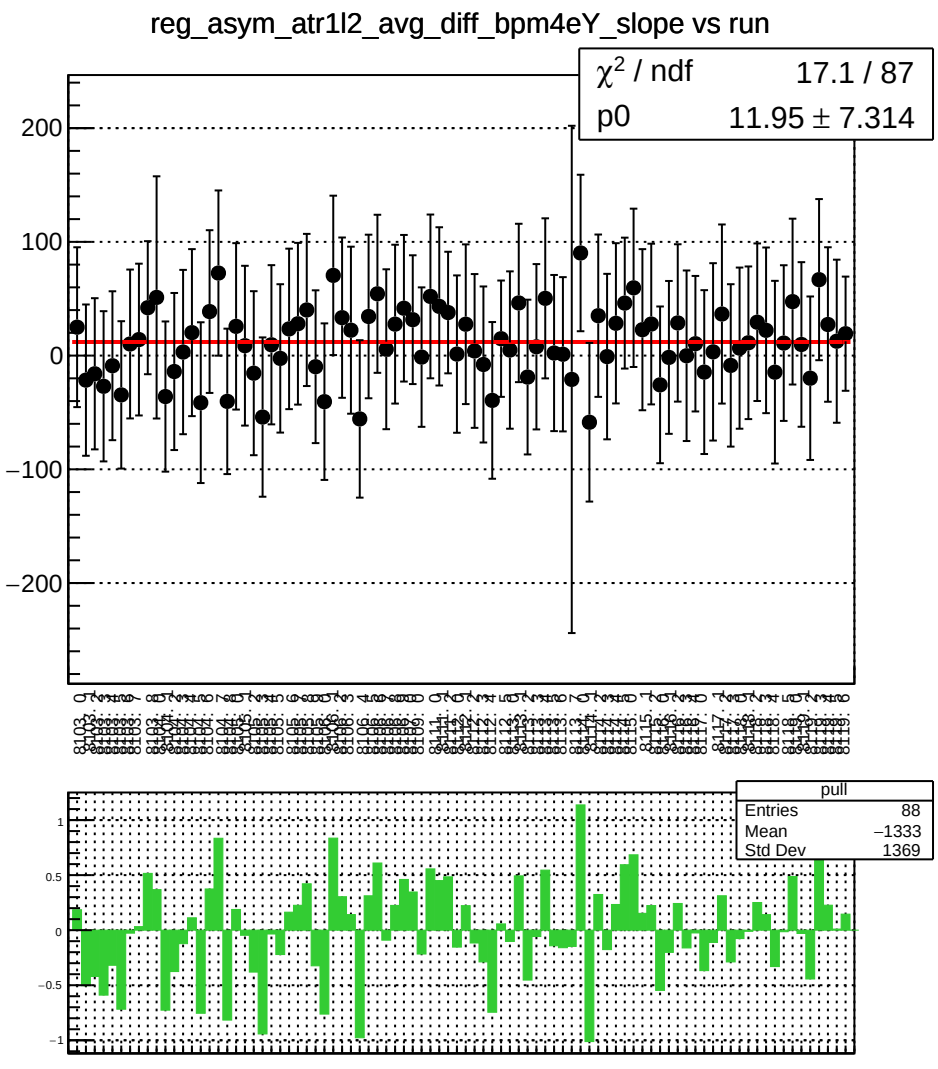
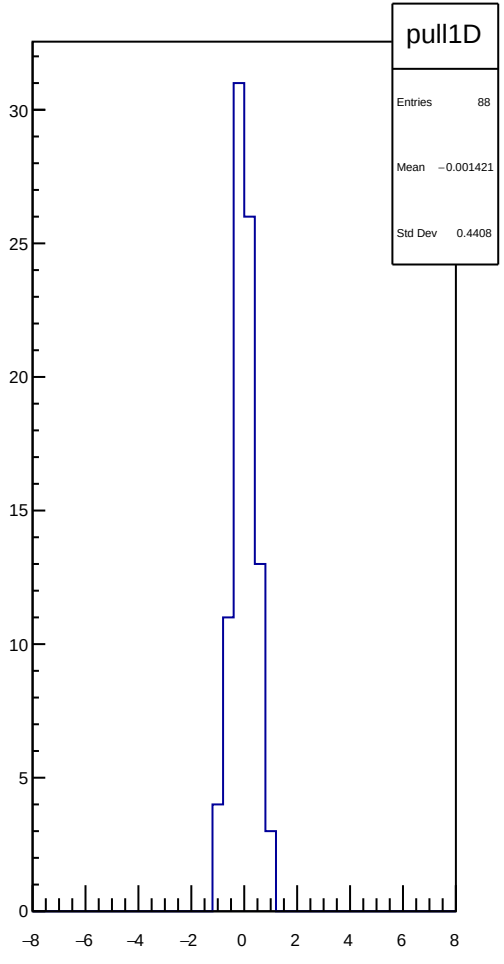
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 16.75 / 87
p0 35.39 ± 6.84
300
200
100
0
−100
pull
Entries 88
Mean −1153
Std Dev 1190
1
0.5
0
−0.5
−1


pull1D
Entries 88
Mean 0.001793
Std Dev 0.4363
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 19.25 / 87
p0 116 ± 4.328
200
100
0
−100
−200
pull
Entries 88
Mean 550.4
Std Dev 498.9
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.009609
Std Dev 0.4676
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 17.1 / 87
p0 11.95 ± 7.314
200
100
0
−100
−200
pull
Entries 88
Mean −1333
Std Dev 1369
1
0.5
0
−0.5
−1


pull1D
Entries 88
Mean −0.001421
Std Dev 0.4408
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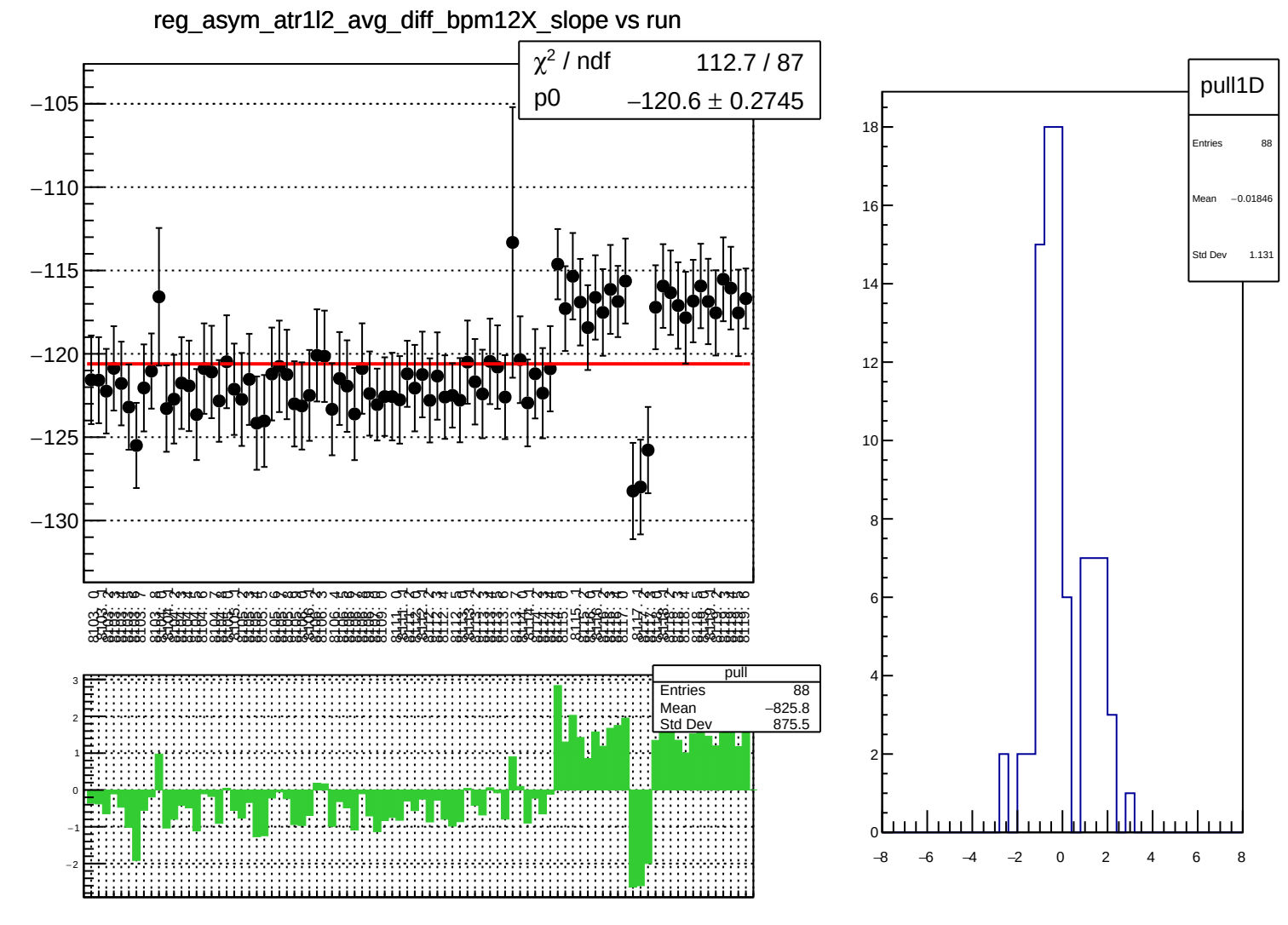
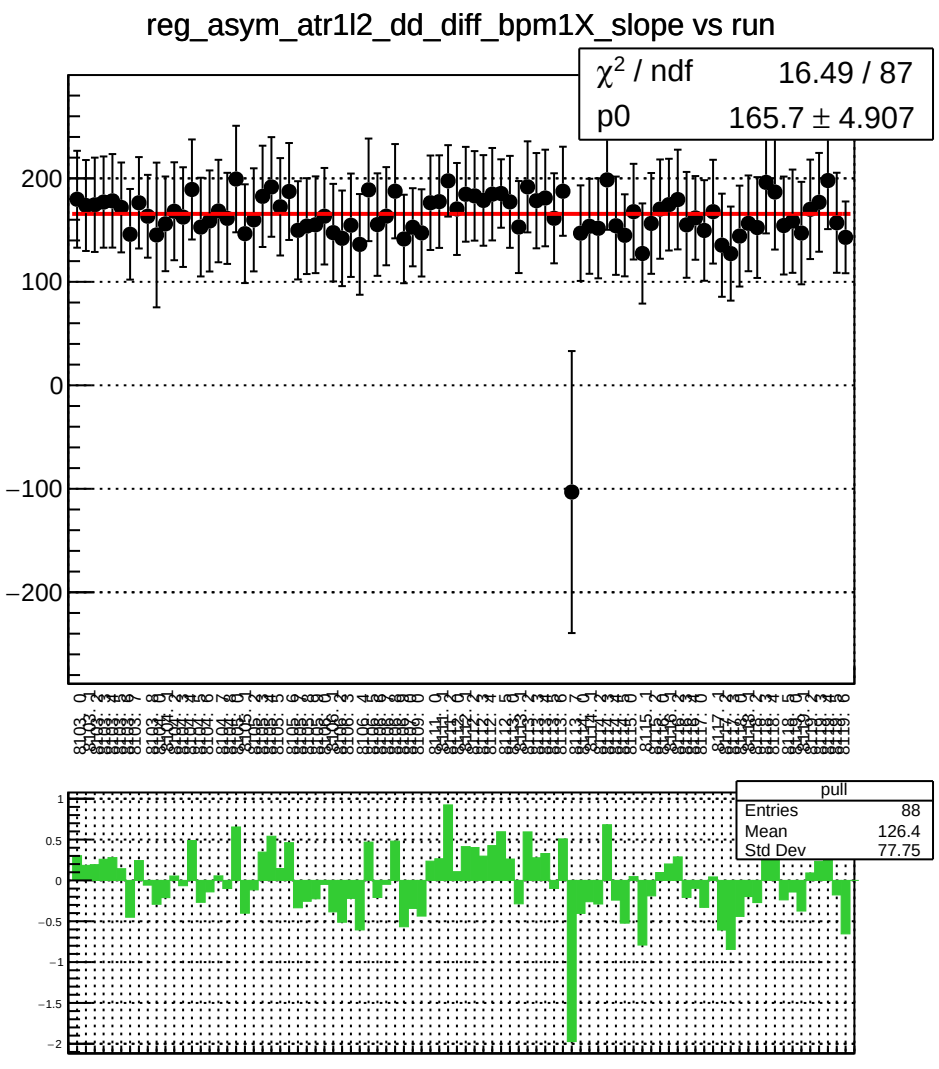
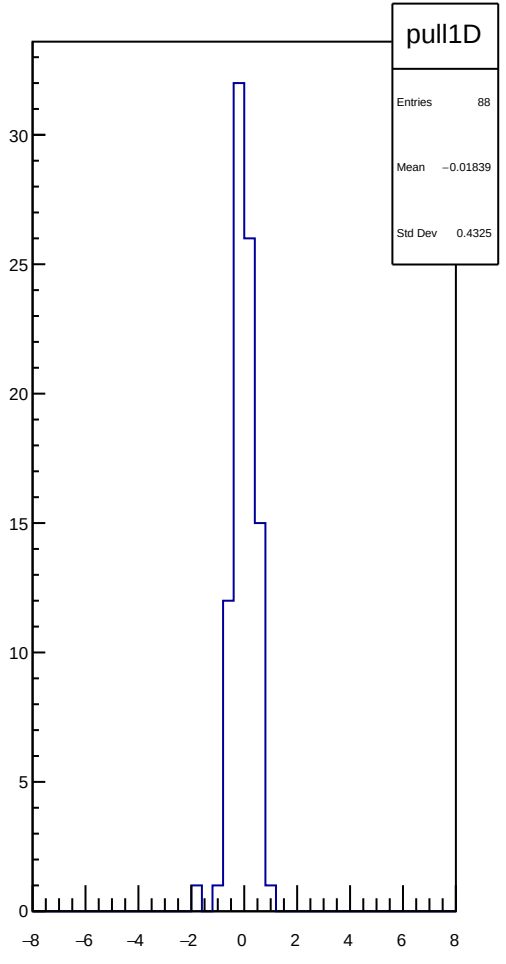
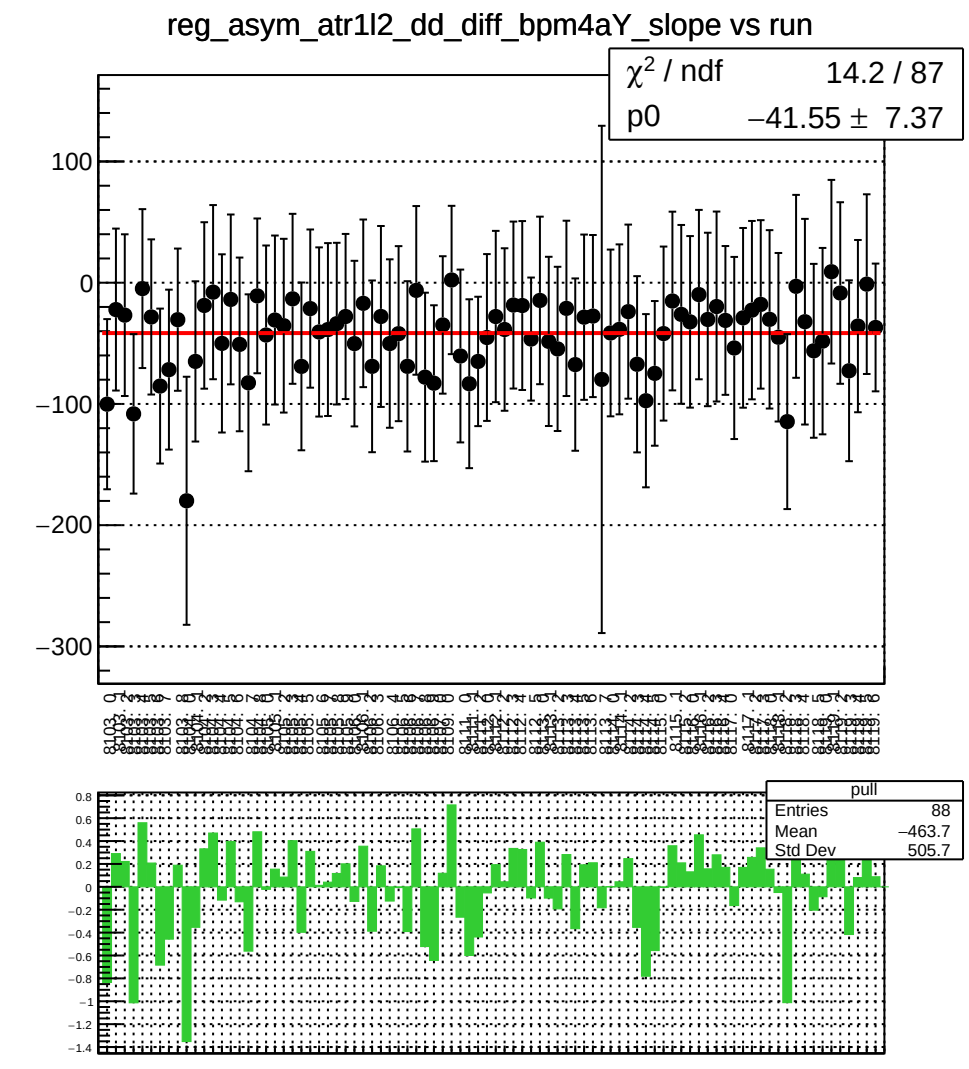
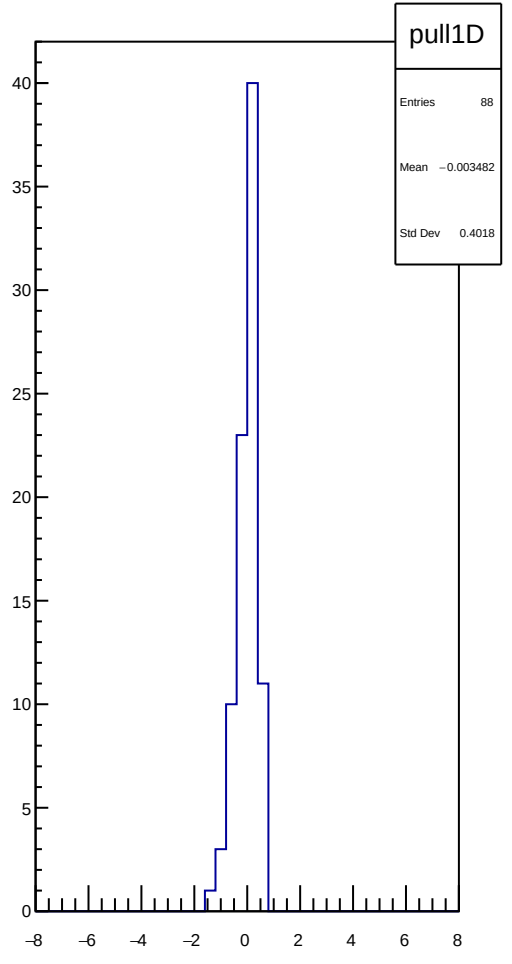
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

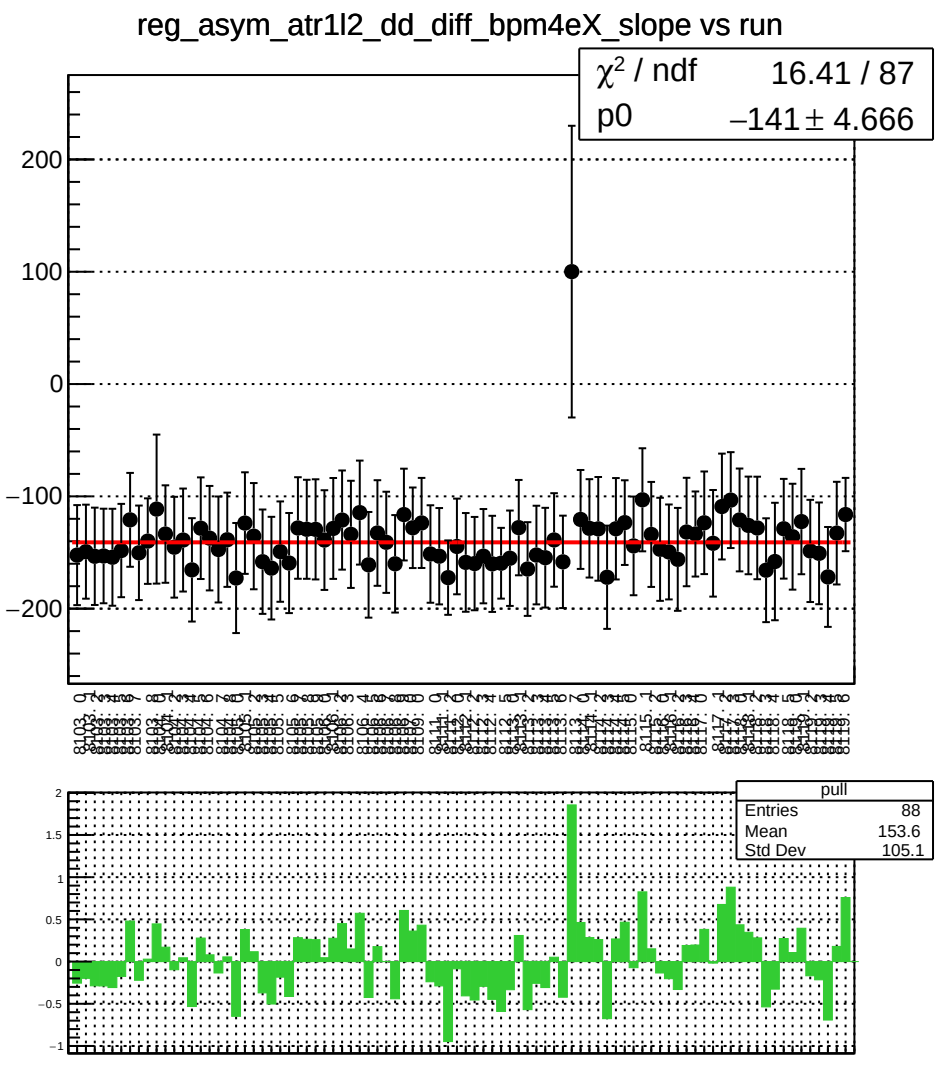

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 112.7 / 87
p0 −120.6 ± 0.2745
−105
−110
−115
−120
−125
−130
pull
Entries 88
Mean −825.8
Std Dev 875.5
3
2
1
0
−1
−2
pull1D
Entries 88
Mean −0.01846
Std Dev 1.131
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

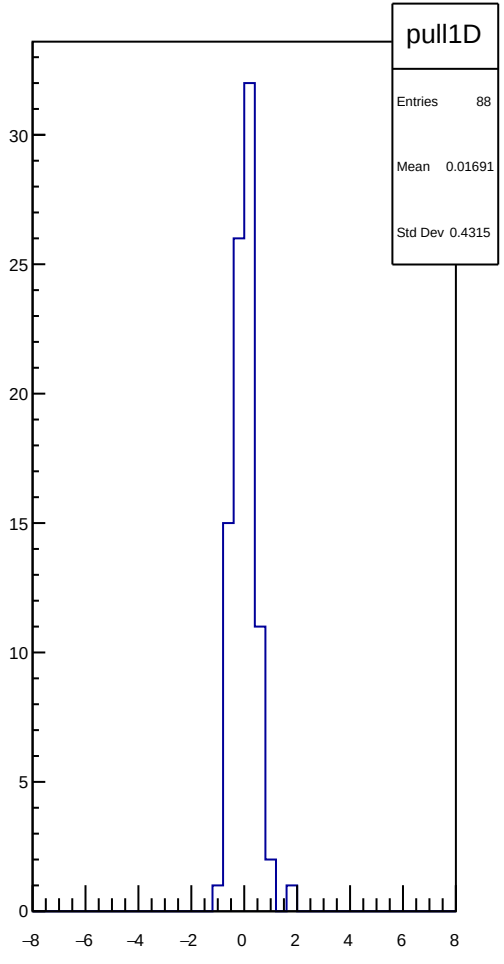

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 16.49 / 87
p0 165.7 ± 4.907
200
100
0
−100
−200
pull
Entries 88
Mean 126.4
Std Dev 77.75
1
0.5
0
−0.5
−1
−1.5
−2

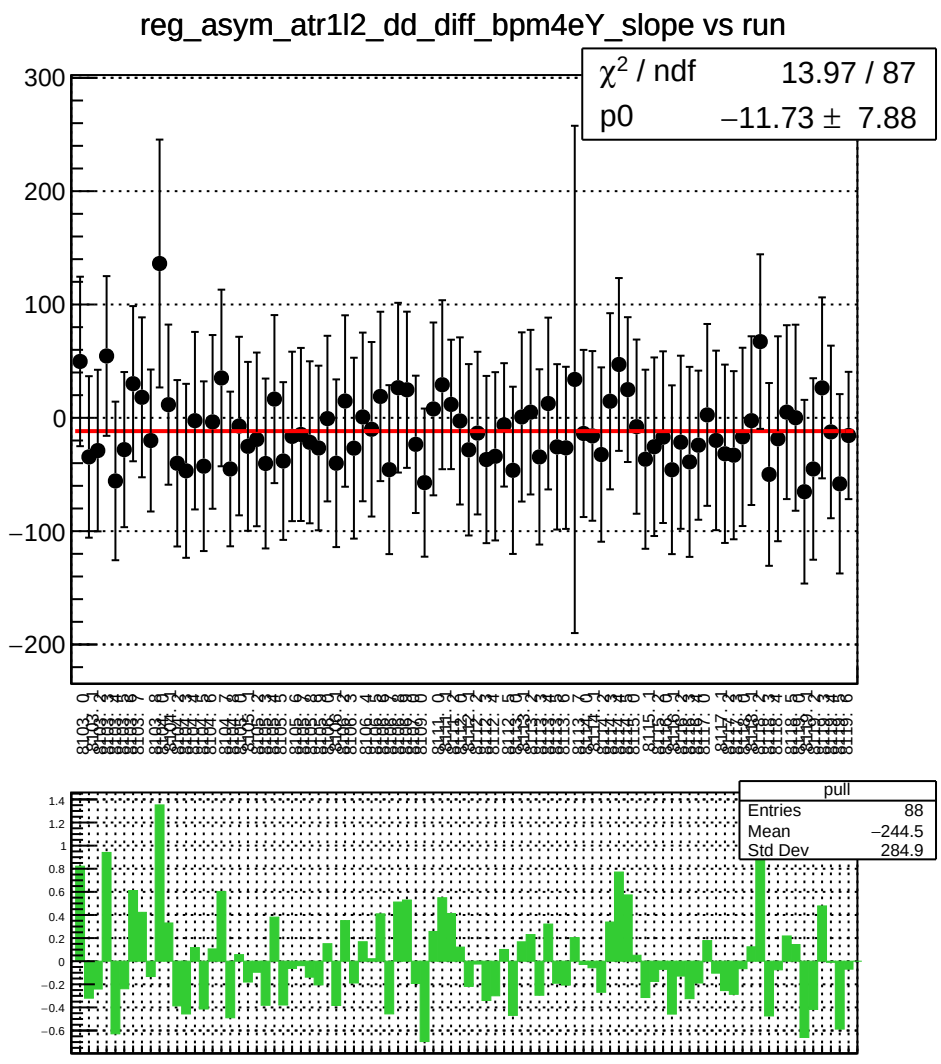

pull1D
Entries 88
Mean −0.01839
Std Dev 0.4325
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

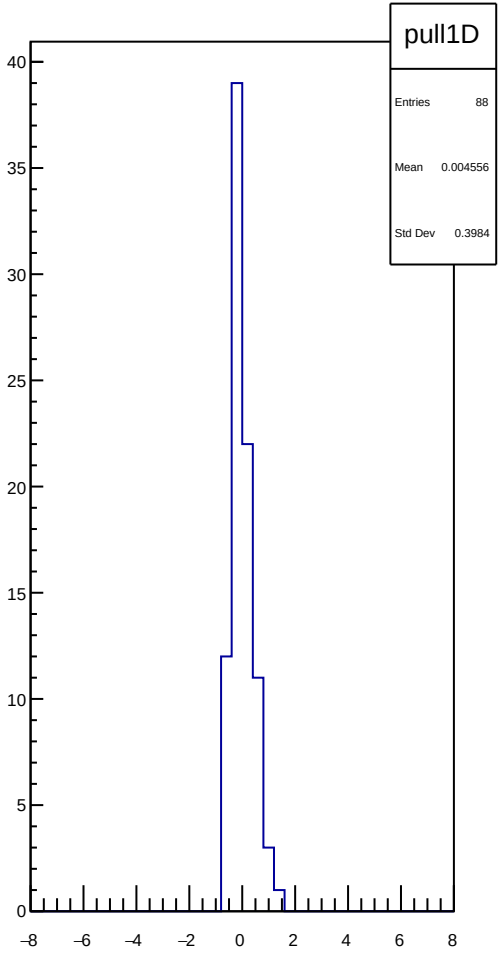

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 14.2 / 87
p0 −41.55 ± 7.37
100
0
−100
−200
−300
pull
Entries 88
Mean −463.7
Std Dev 505.7
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

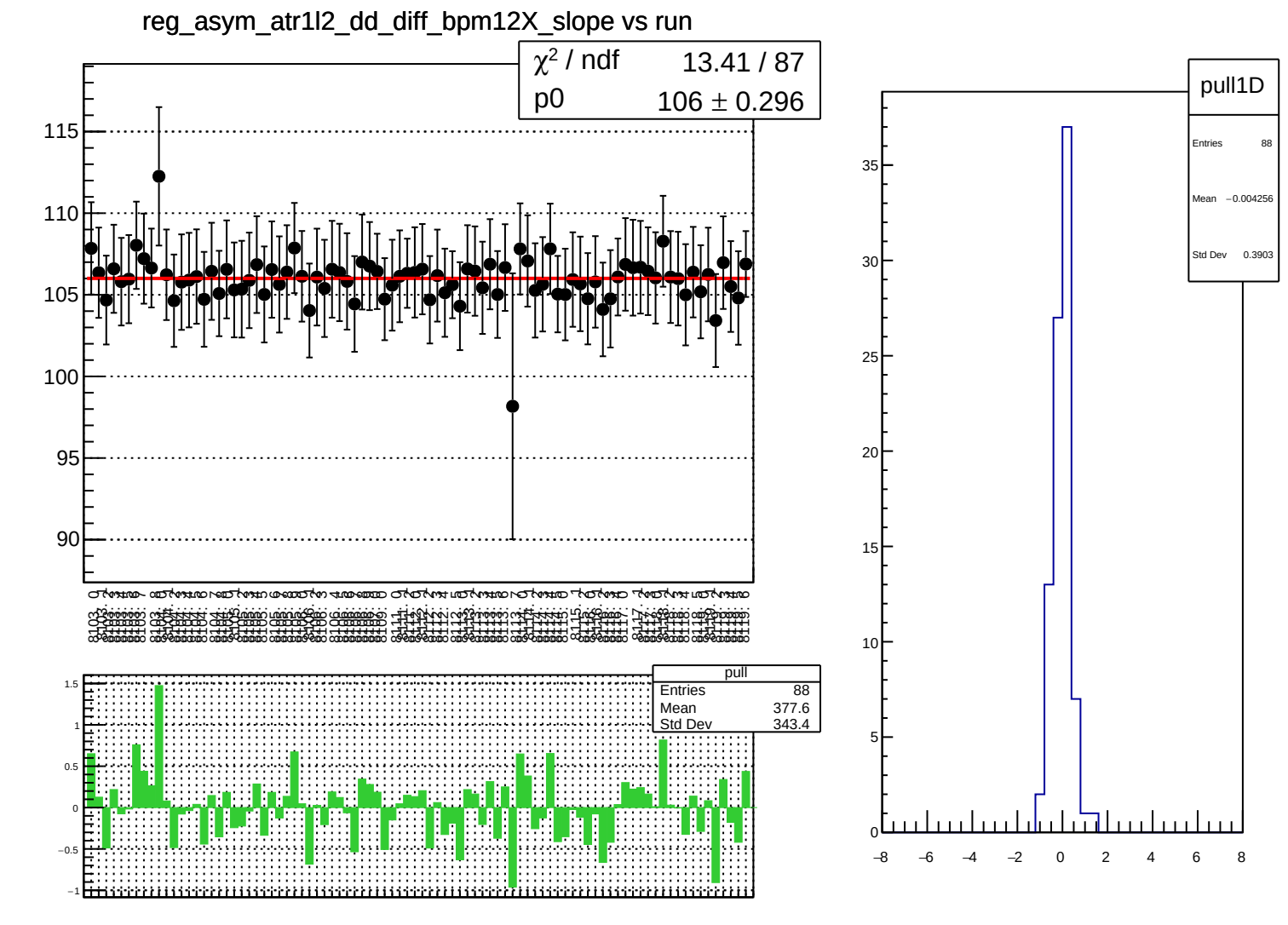

pull1D
Entries 88
Mean −0.003482
Std Dev 0.4018
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

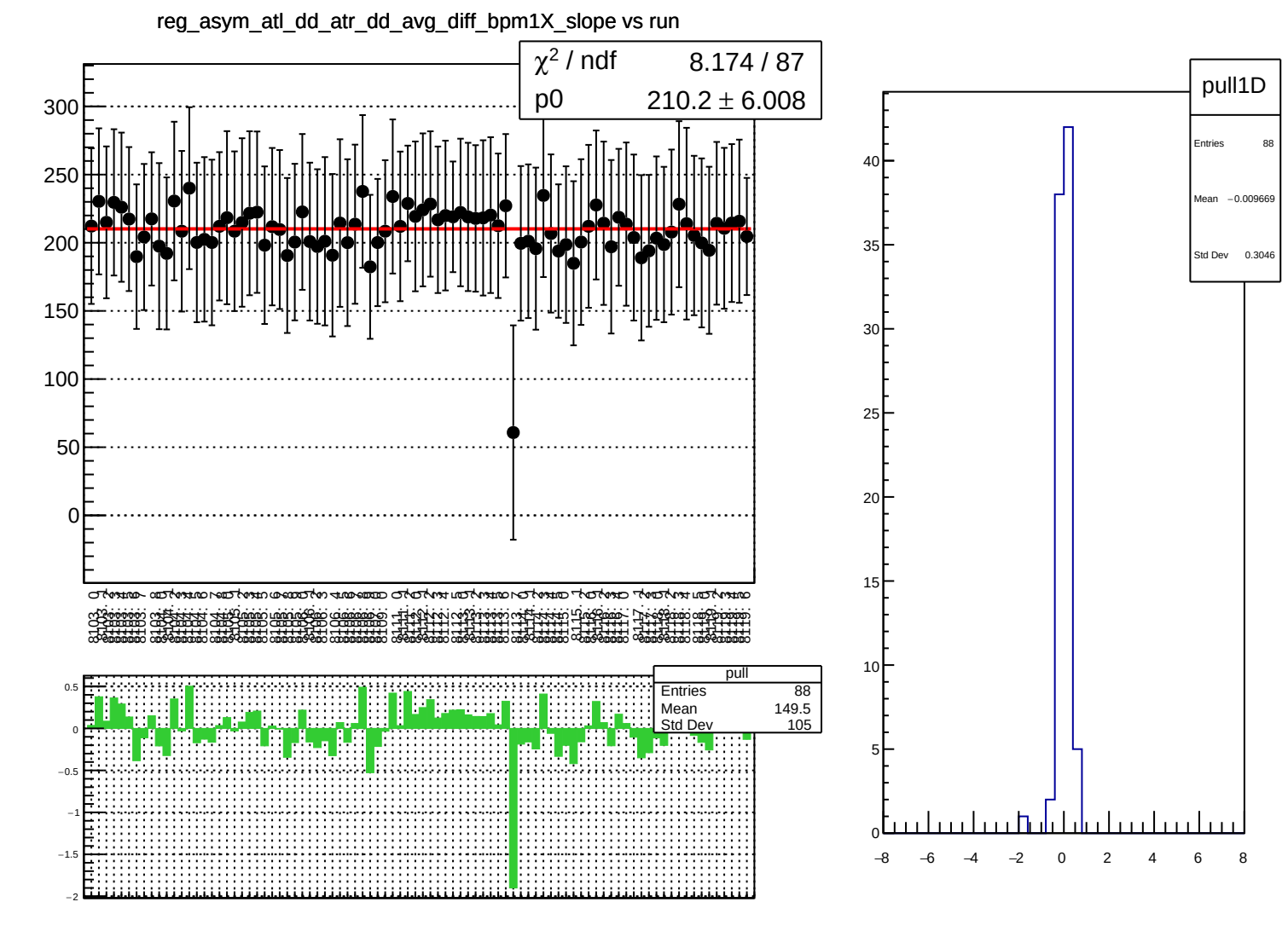

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 16.41 / 87
p0 −141 ± 4.666
200
100
0
−100
−200
pull
Entries 88
Mean 153.6
Std Dev 105.1
2
1.5
1
0.5
0
−0.5
−1

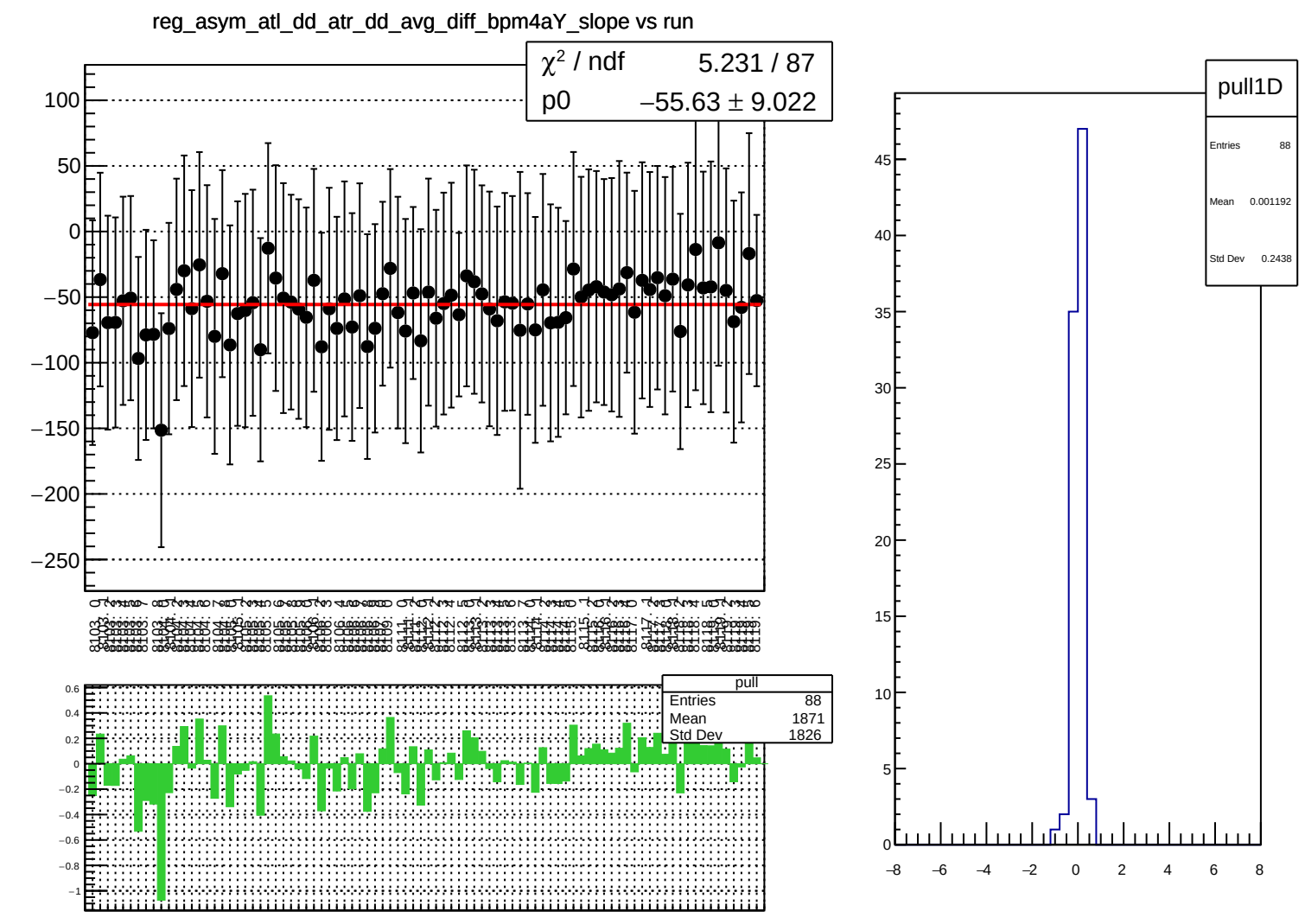

pull1D
Entries 88
Mean 0.01691
Std Dev 0.4315
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

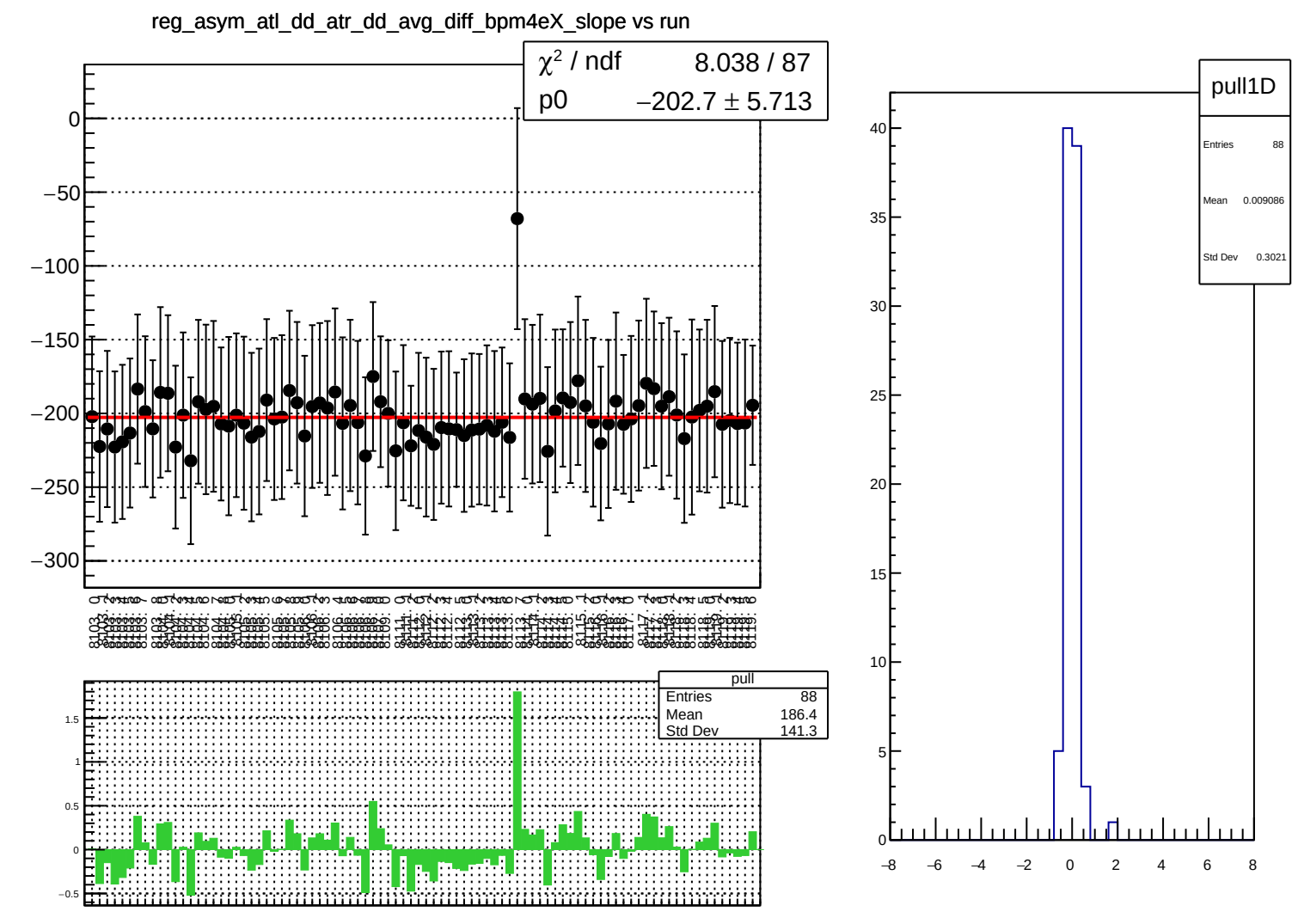

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 13.97 / 87
p0 −11.73 ± 7.88
pull
Entries 88
Mean −244.5
Std Dev 284.9

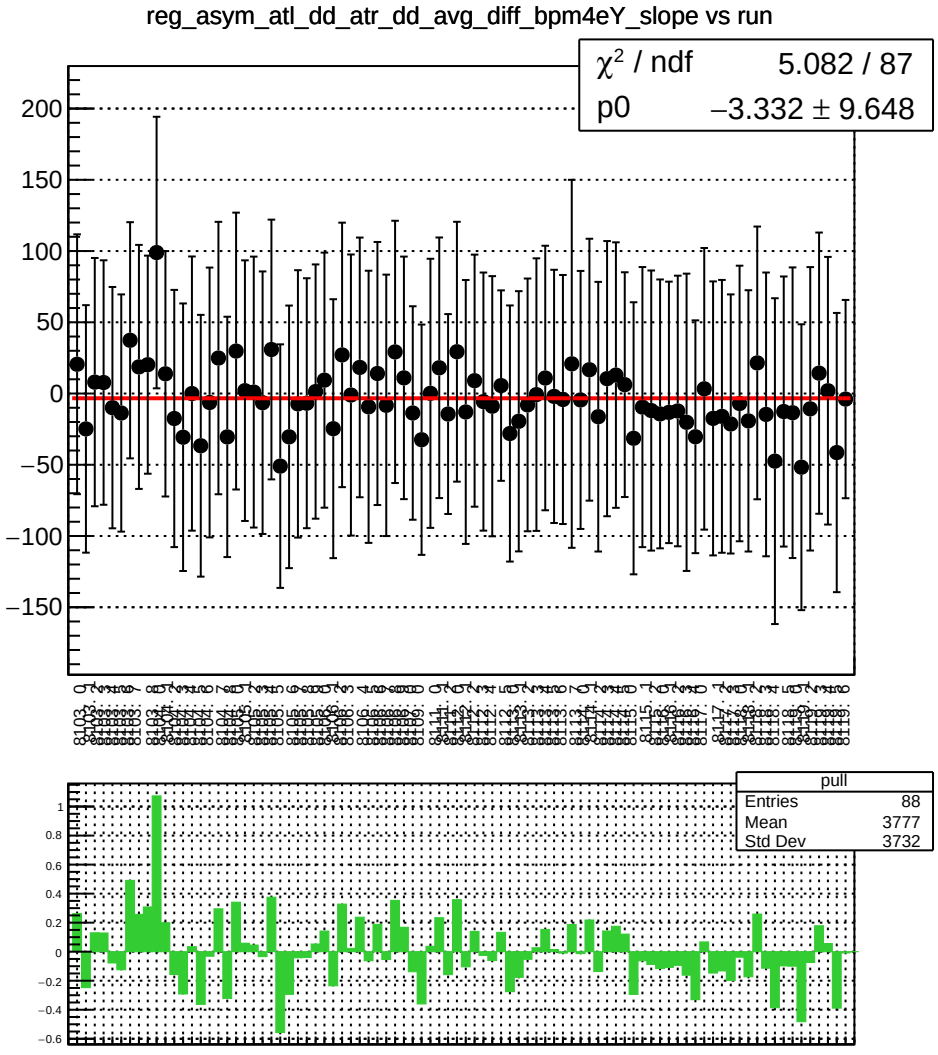

pull1D
Entries 88
Mean 0.004556
Std Dev 0.3984

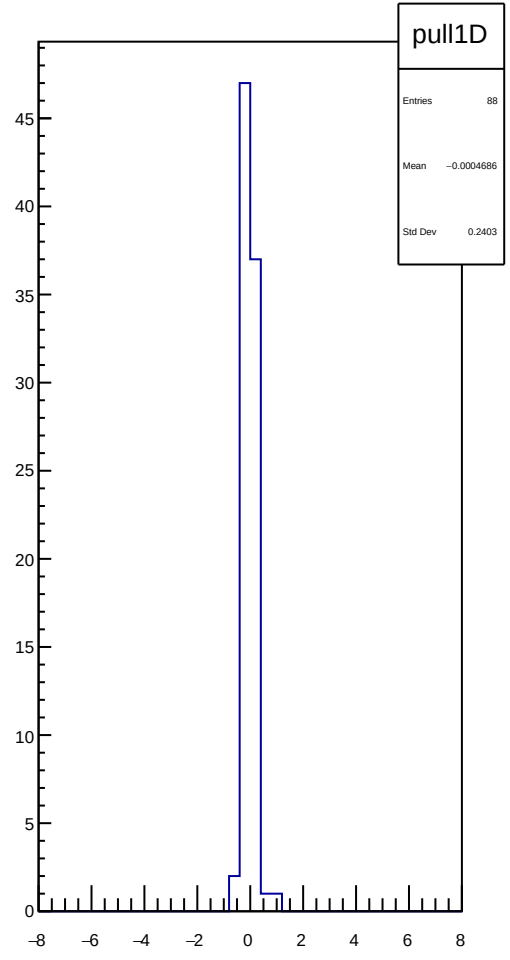

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 13.41 / 87
p0 106 ± 0.296
pull
Entries 88
Mean 377.6
Std Dev 343.4
pull1D
Entries 88
Mean −0.004256
Std Dev 0.3903

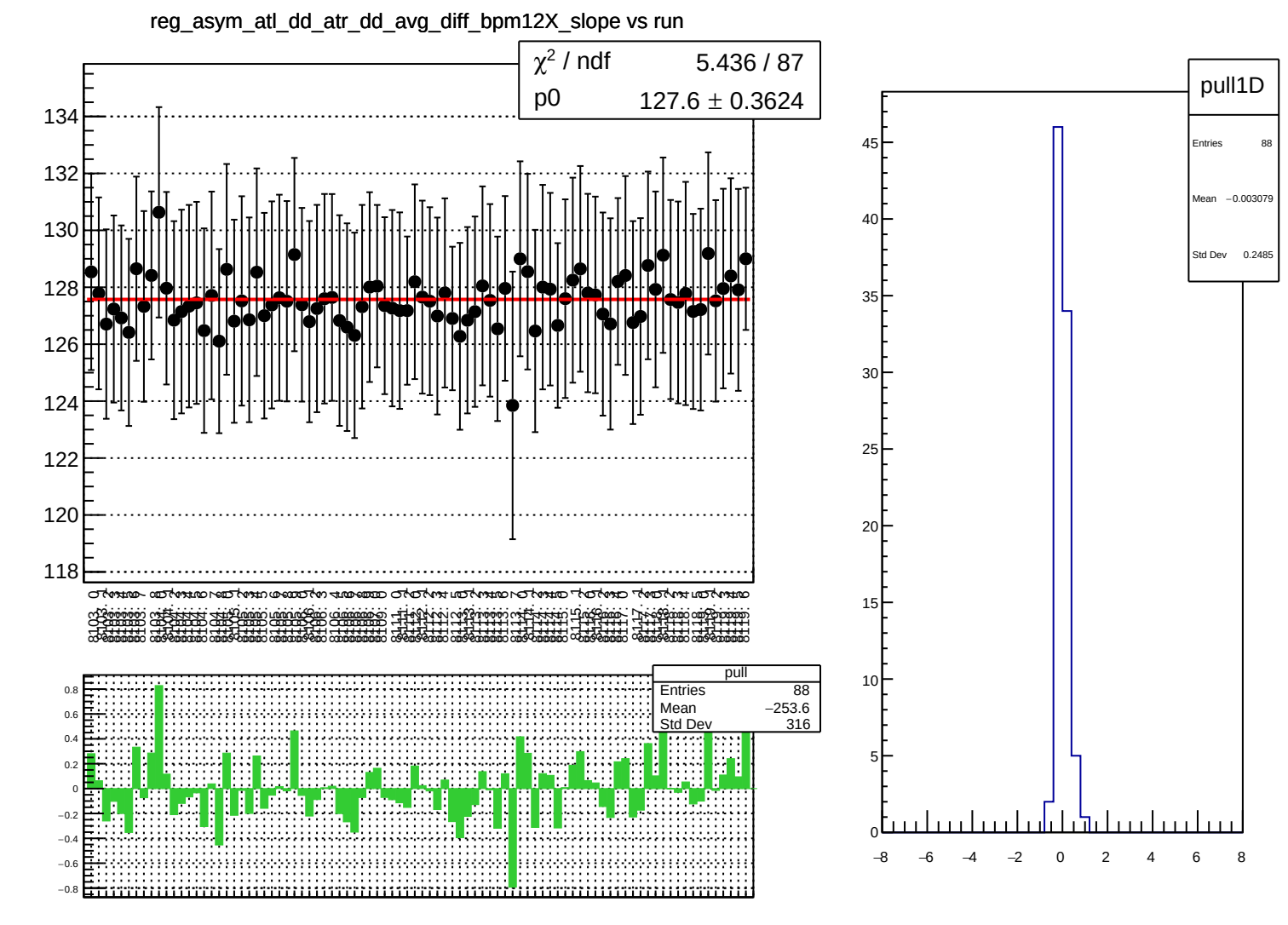

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 8.174 / 87
p0 210.2 ± 6.008
300
250
200
150
100
50
0
pull
Entries 88
Mean 149.5
Std Dev 105
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 88
Mean −0.009669
Std Dev 0.3046
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

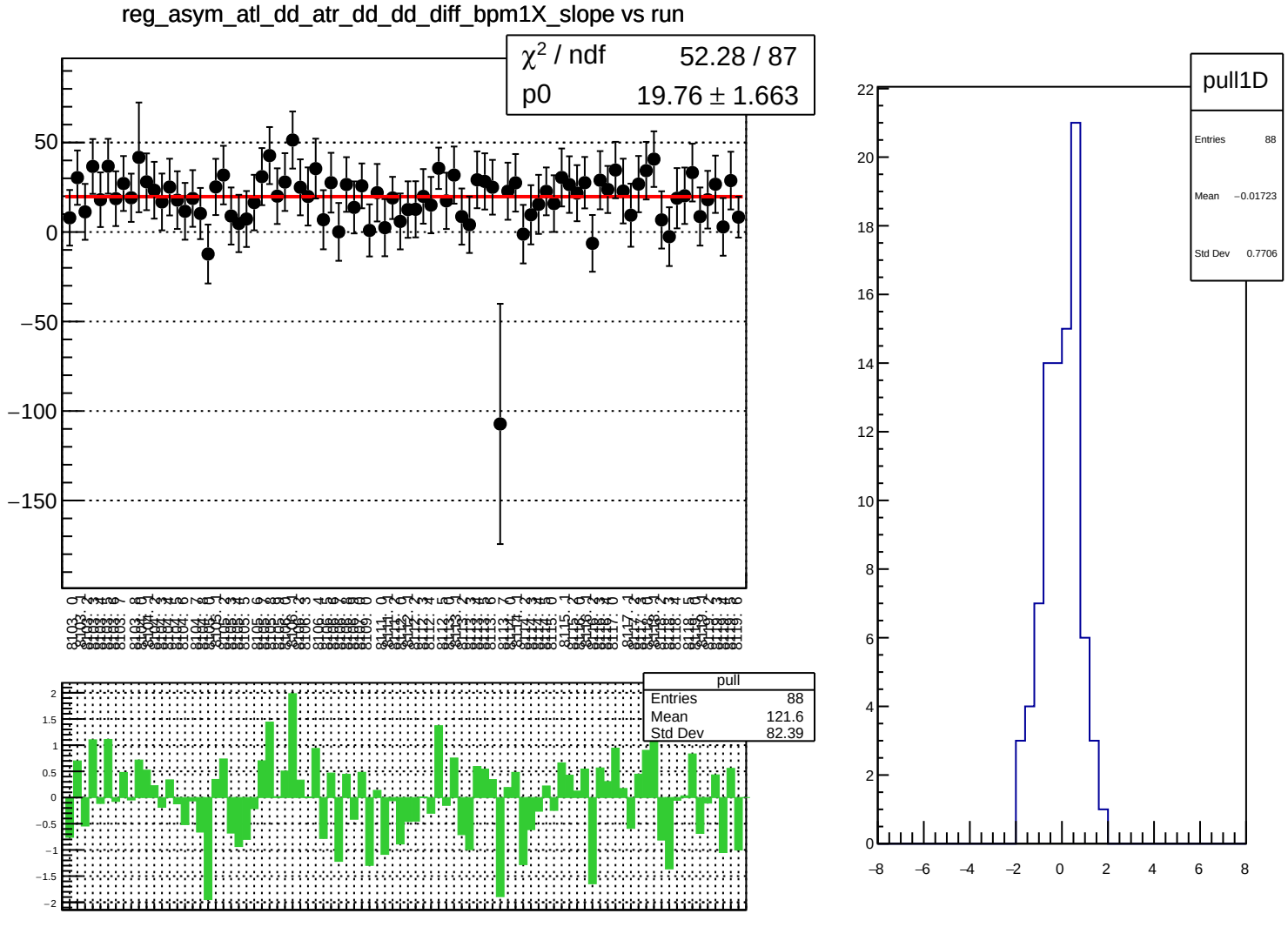

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.231 / 87
p0 −55.63 ± 9.022
pull
Entries 88
Mean 1871
Std Dev 1826
pull1D
Entries 88
Mean 0.001192
Std Dev 0.2438

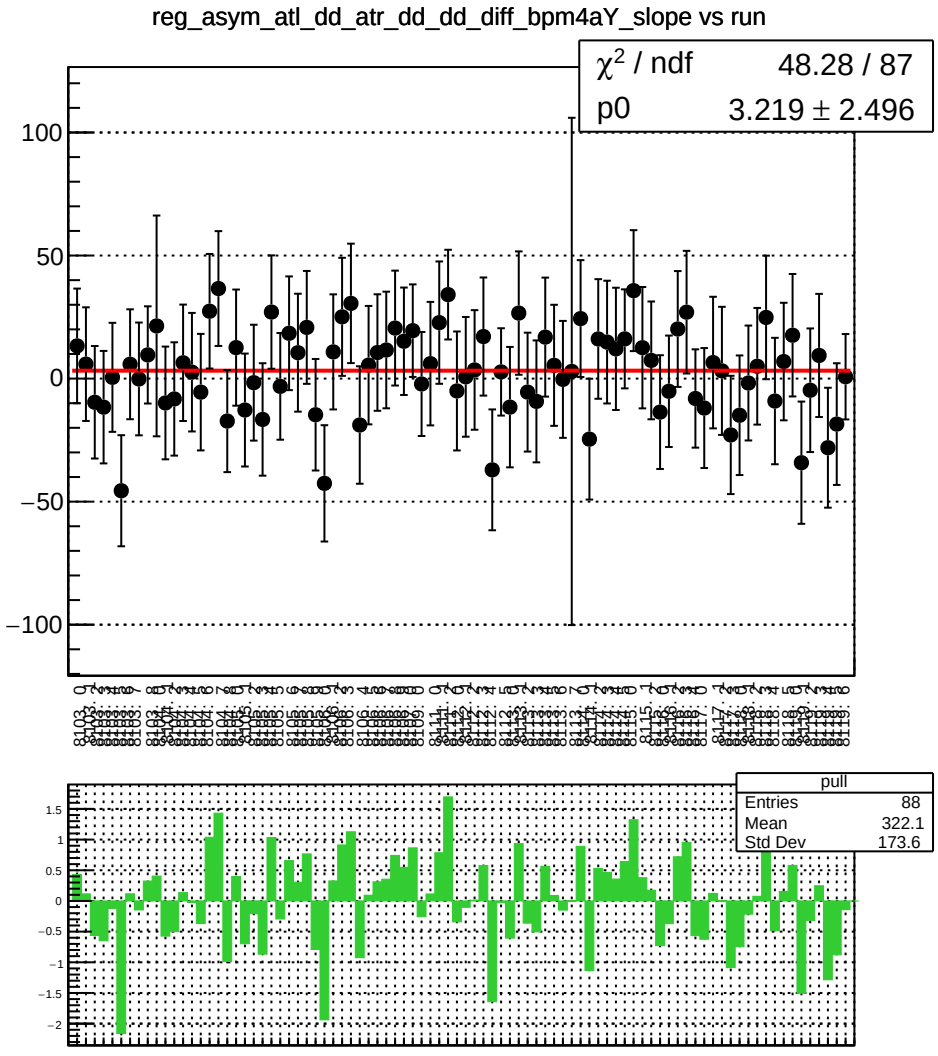

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.038 / 87
p0 −202.7 ± 5.713
pull
Entries 88
Mean 186.4
Std Dev 141.3
pull1D
Entries 88
Mean 0.009086
Std Dev 0.3021

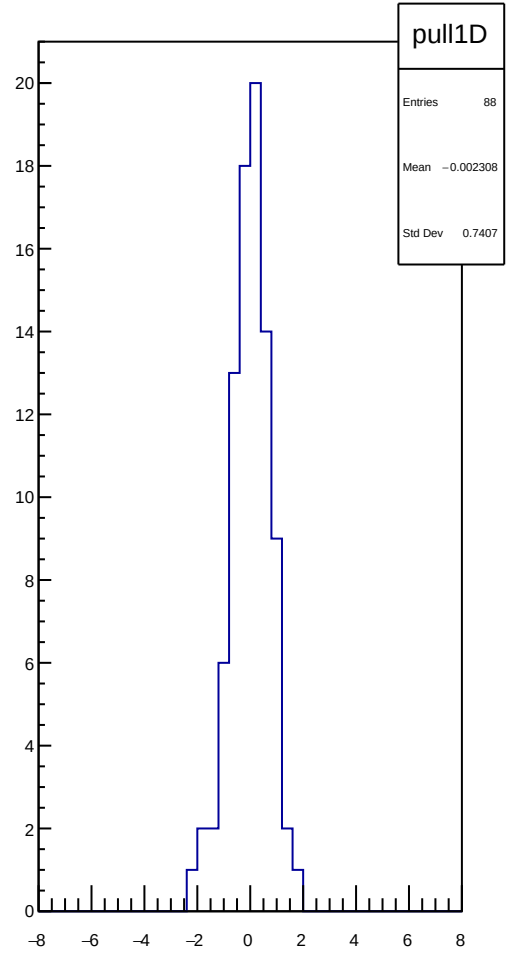

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.082 / 87
p0 −3.332 ± 9.648
pull
Entries 88
Mean 3777
Std Dev 3732

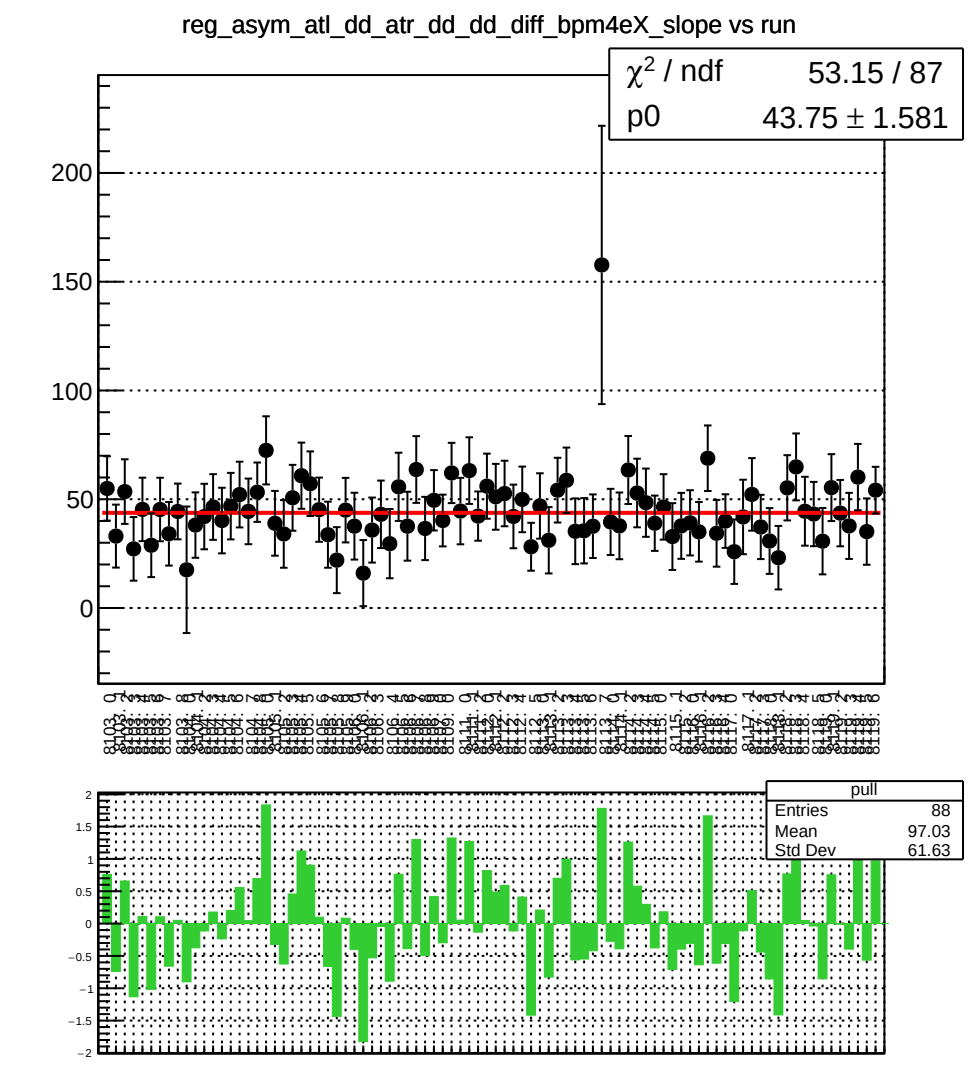

pull1D
Entries 88
Mean −0.0004686
Std Dev 0.2403

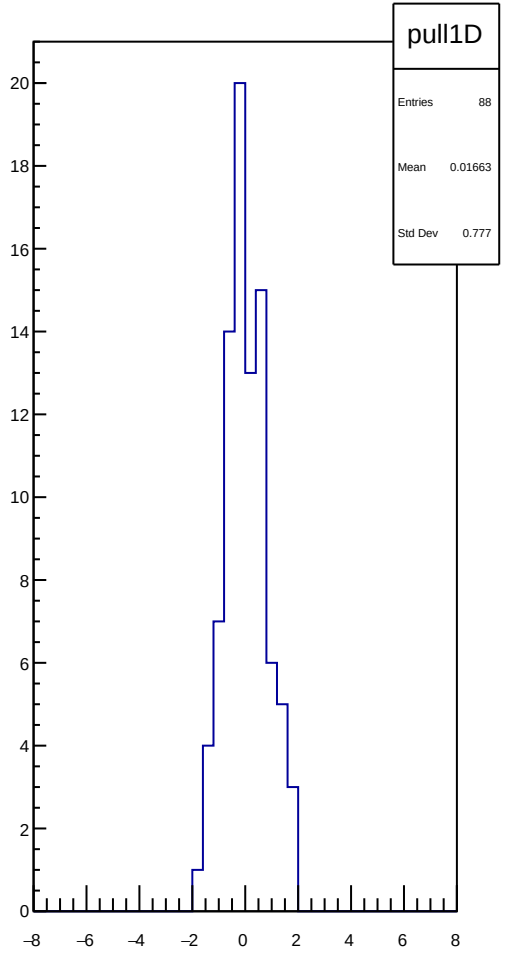

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 5.436 / 87
p0 127.6 ± 0.3624
134
132
130
128
126
124
122
120
118
pull
Entries 88
Mean −253.6
Std Dev 316
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 88
Mean −0.003079
Std Dev 0.2485
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 52.28 / 87
p0 19.76 ± 1.663
50
0
−50
−100
−150
pull
Entries 88
Mean 121.6
Std Dev 82.39
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 88
Mean −0.01723
Std Dev 0.7706
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 48.28 / 87
p0 3.219 ± 2.496
pull
Entries 88
Mean 322.1
Std Dev 173.6


pull1D
Entries 88
Mean −0.002308
Std Dev 0.7407


reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 53.15 / 87
p0 43.75 ± 1.581
200
150
100
50
0
pull
Entries 88
Mean 97.03
Std Dev 61.63
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2


pull1D
Entries 88
Mean 0.01663
Std Dev 0.777
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
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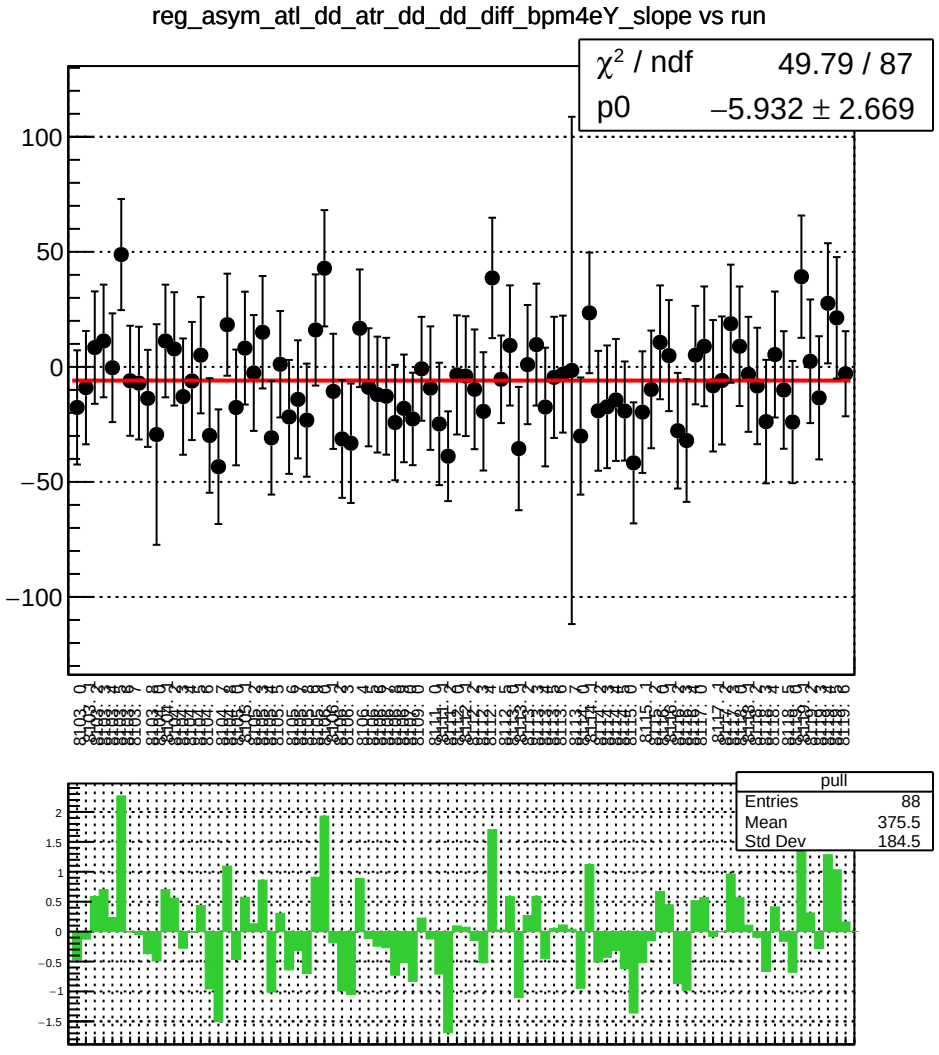
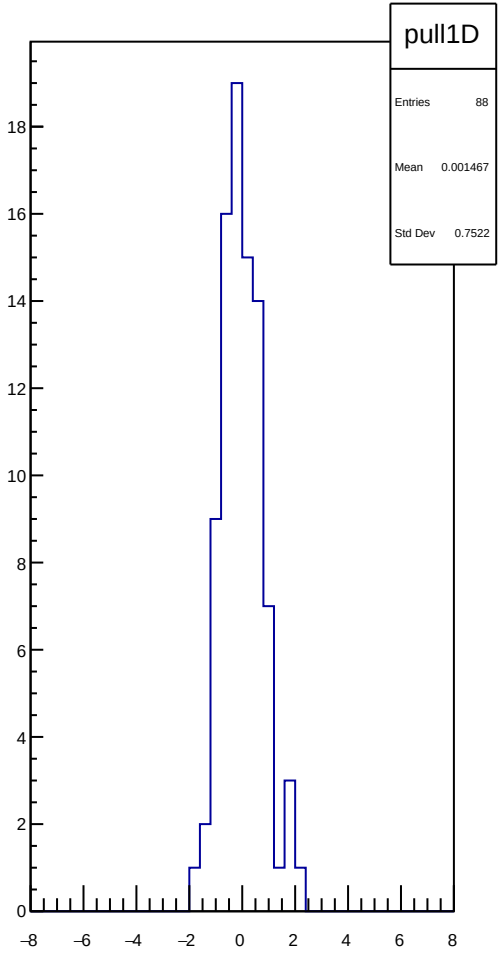
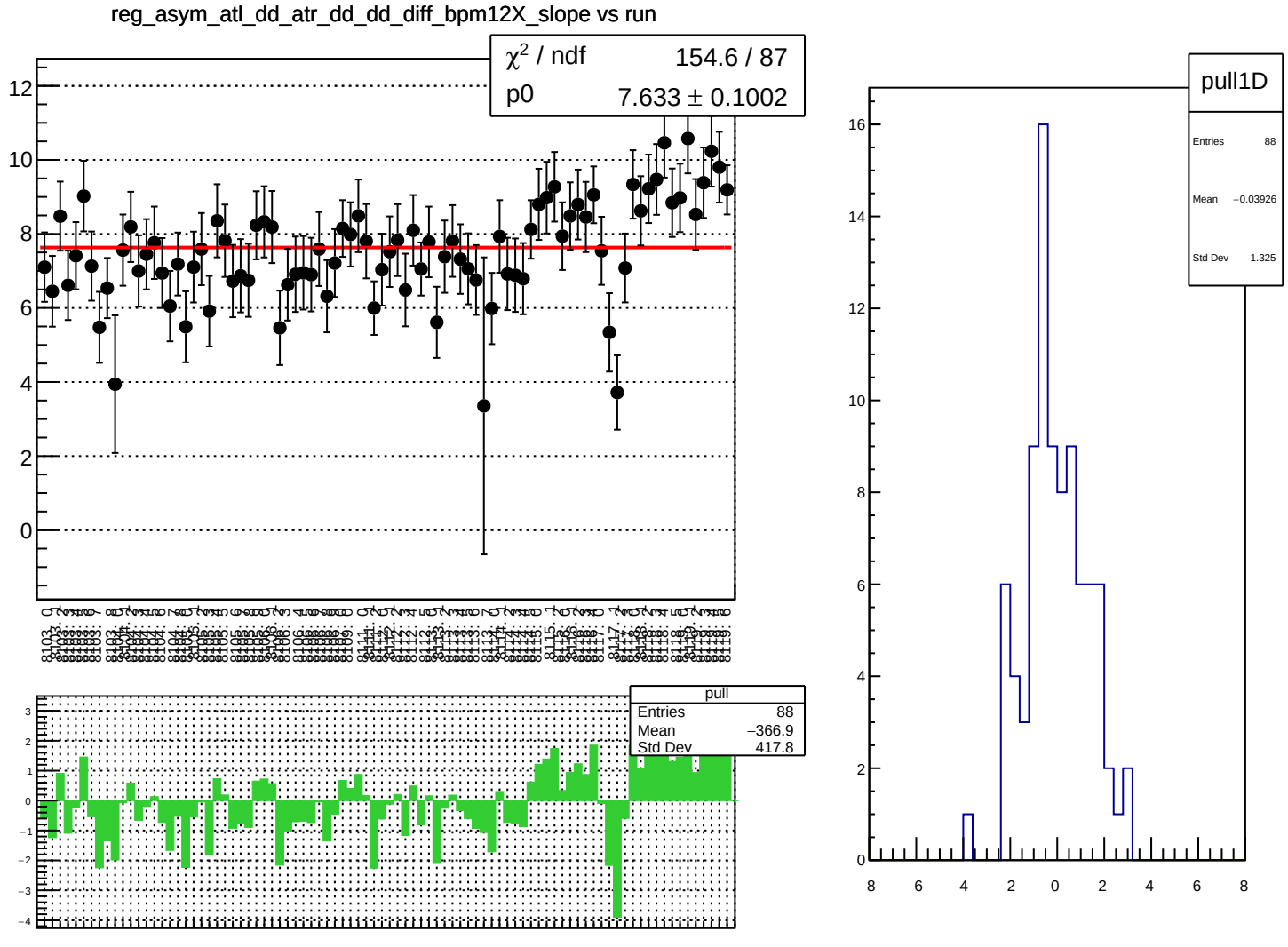
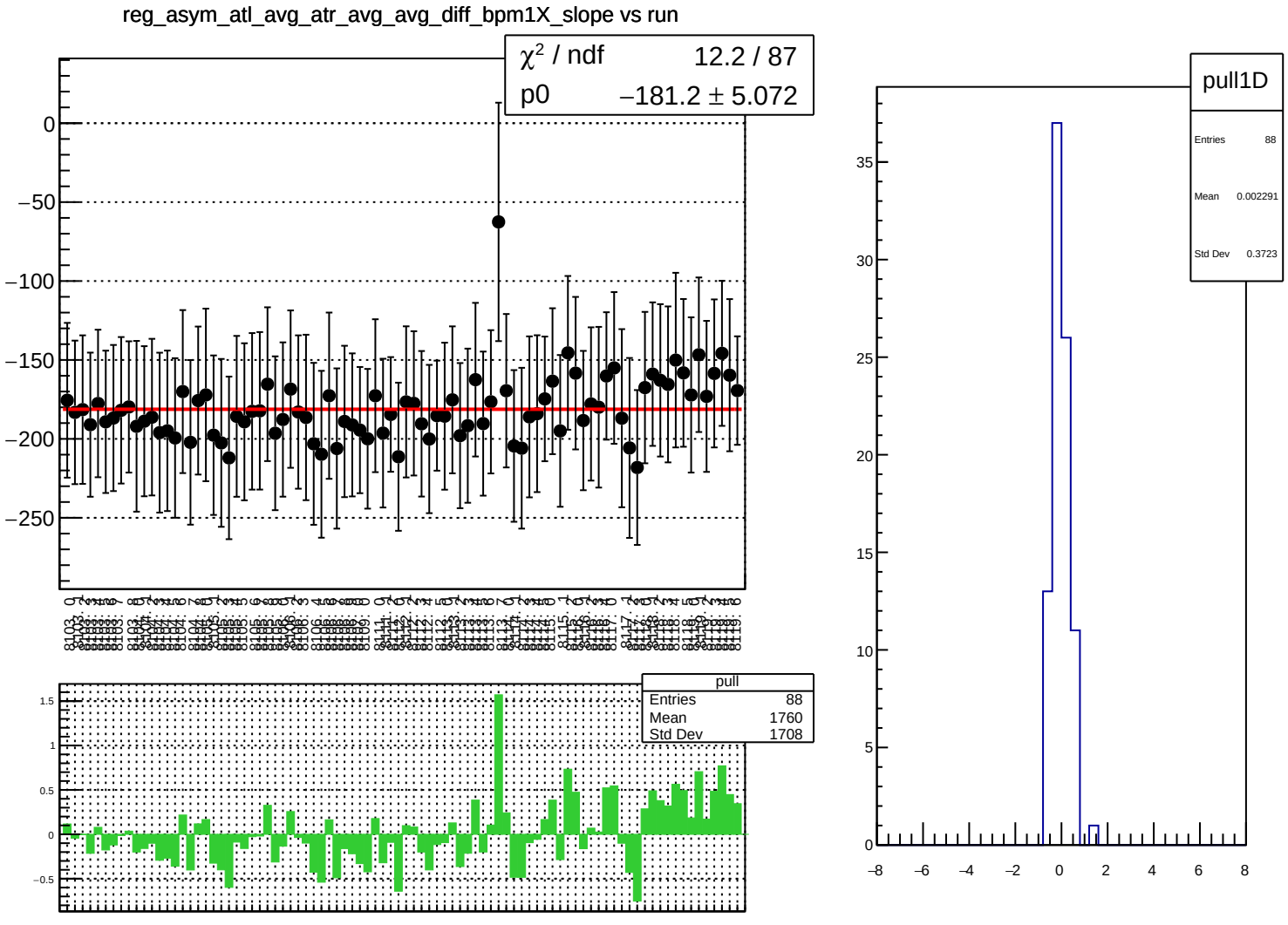
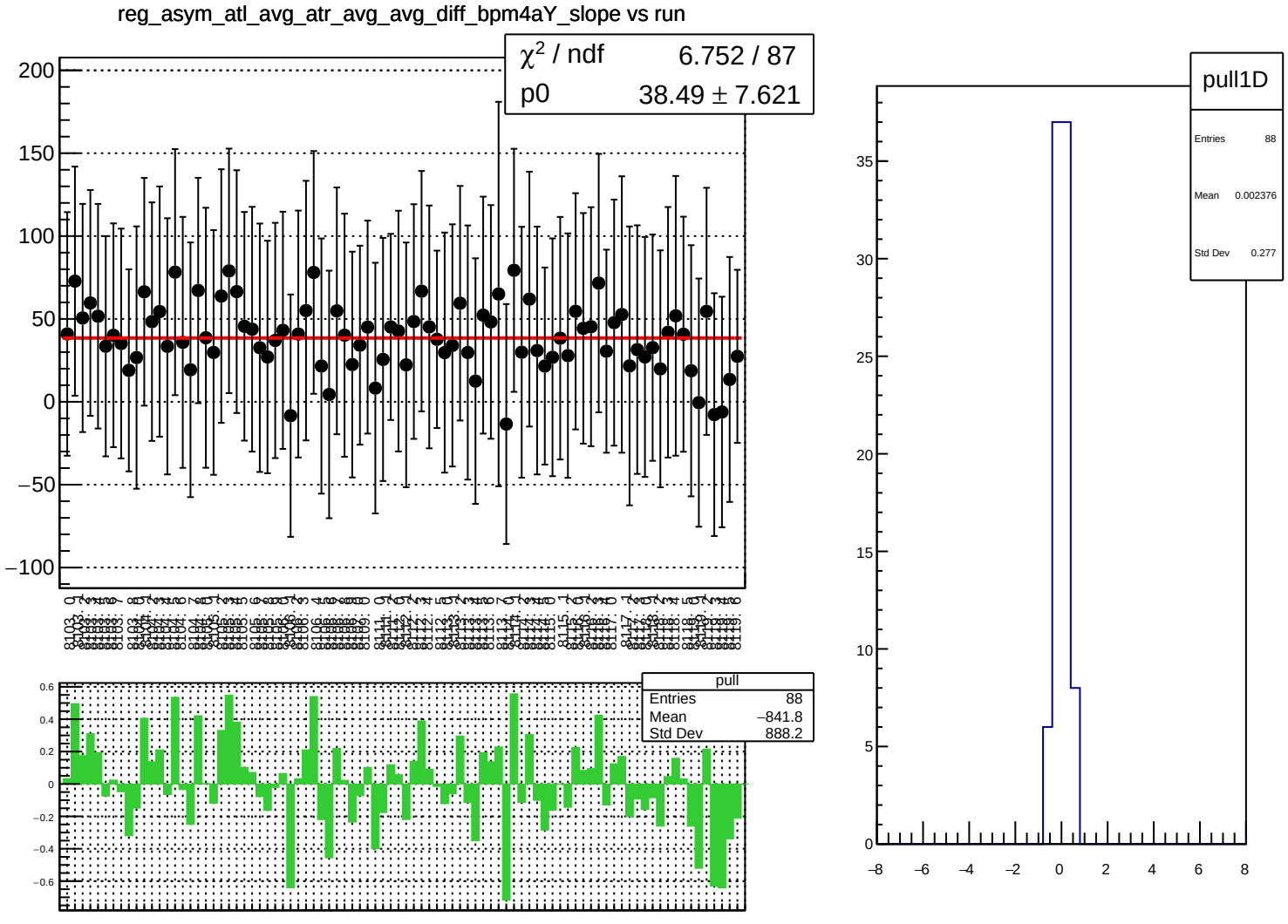
0
2
4
6
8

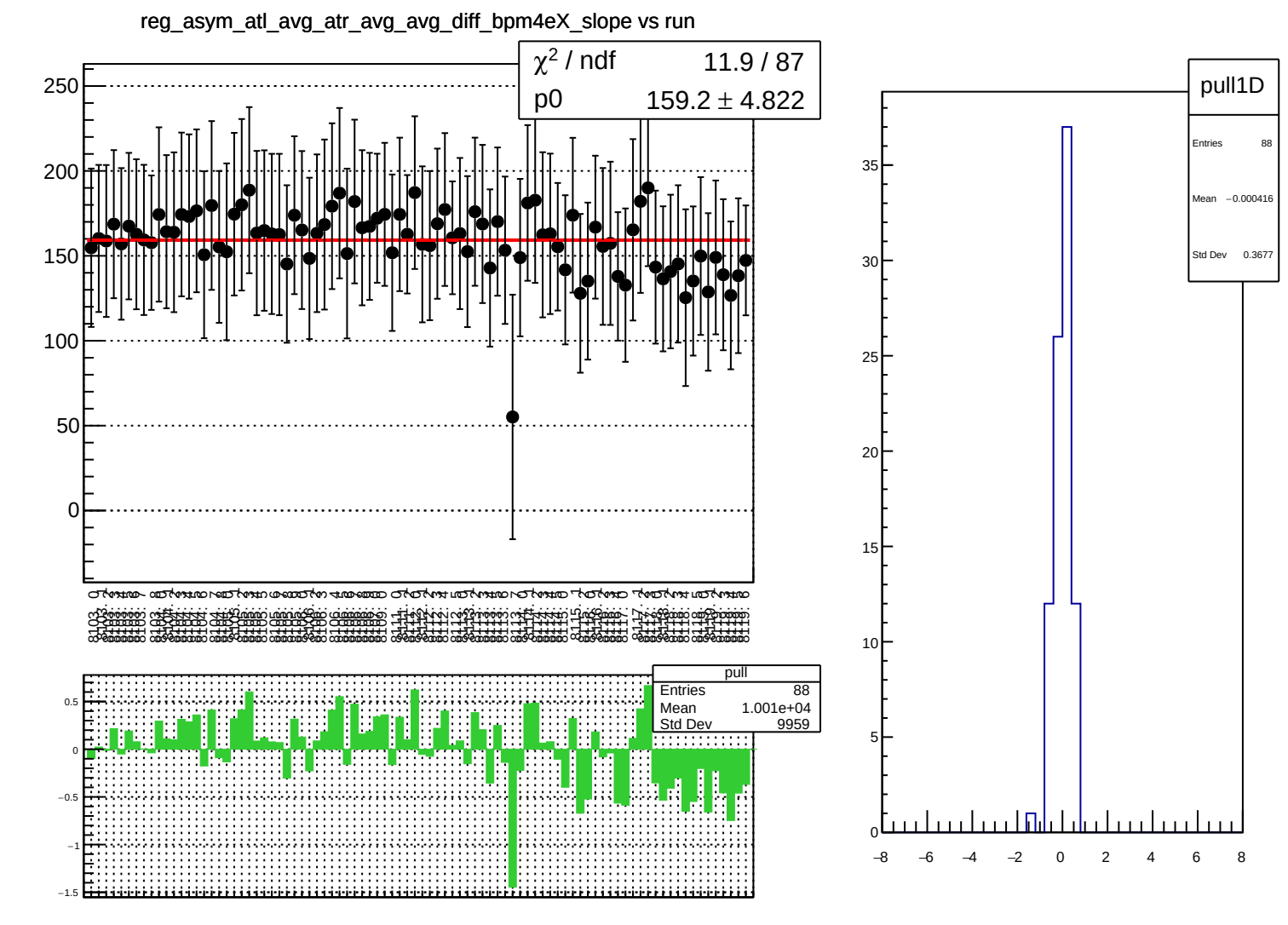

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 49.79 / 87
p0 −5.932 ± 2.669
pull
Entries 88
Mean 375.5
Std Dev 184.5

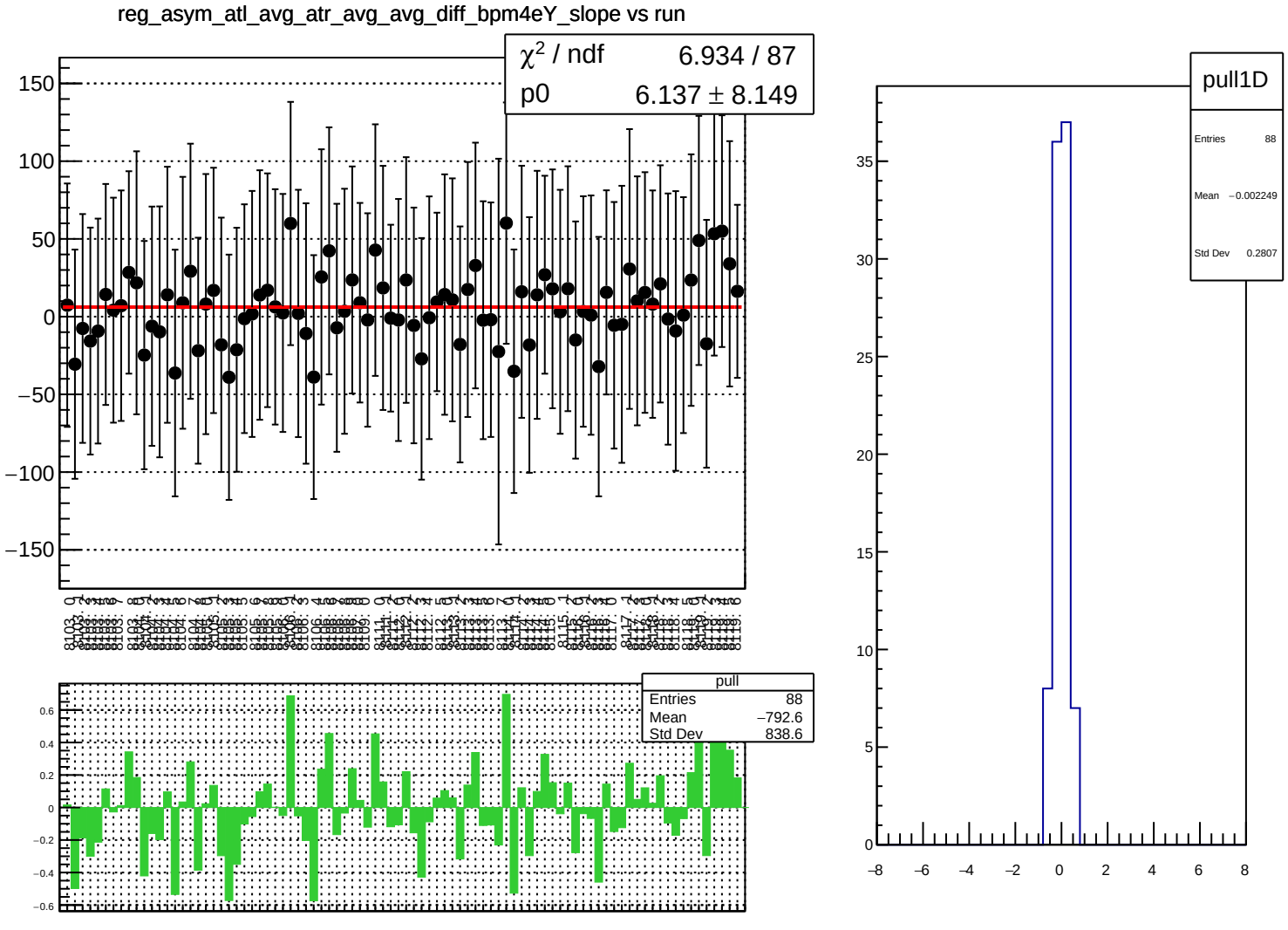

pull1D
Entries 88
Mean 0.001467
Std Dev 0.7522

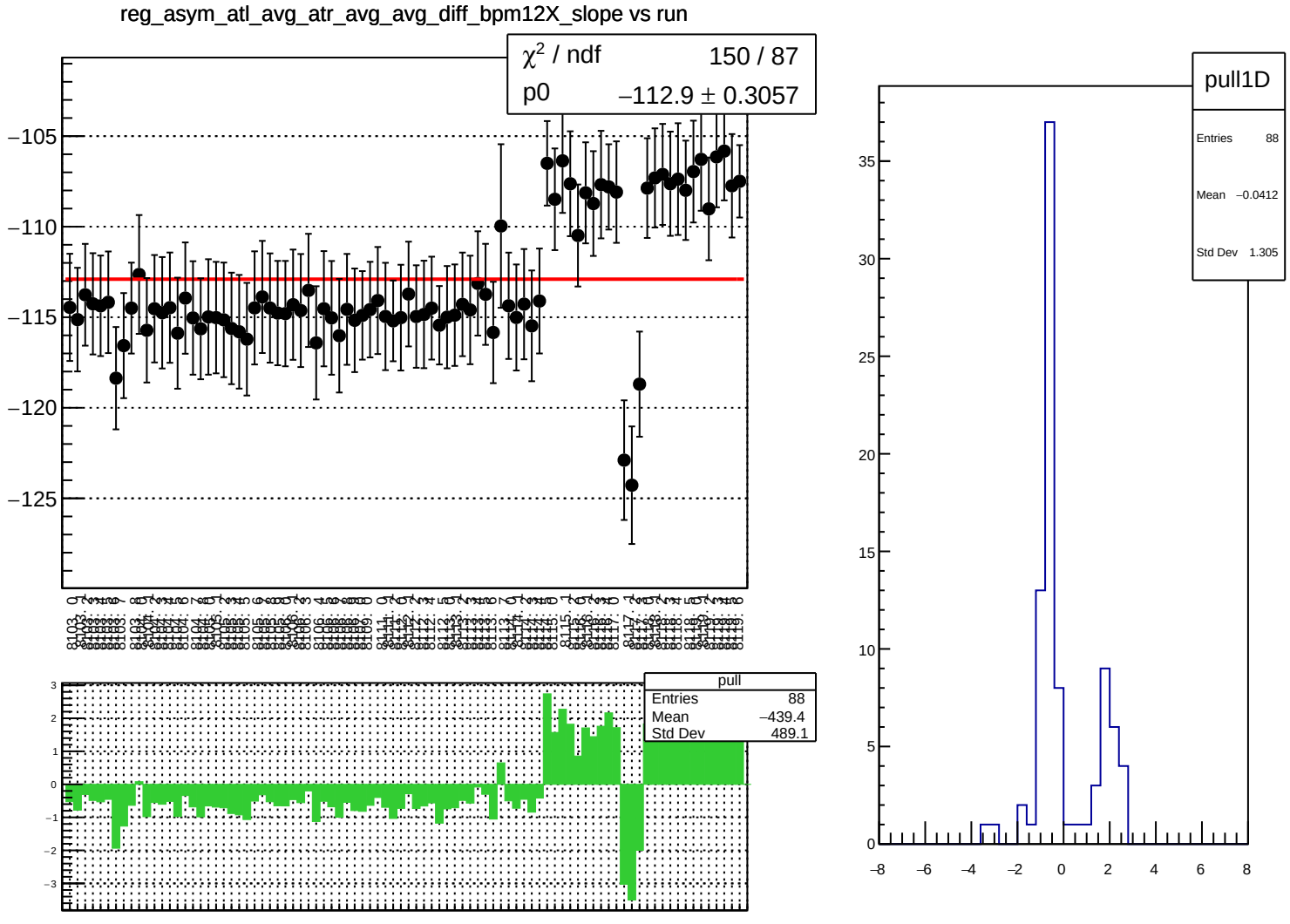

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 154.6 / 87
p0 7.633 ± 0.1002
pull
Entries 88
Mean −366.9
Std Dev 417.8
pull1D
Entries 88
Mean −0.03926
Std Dev 1.325

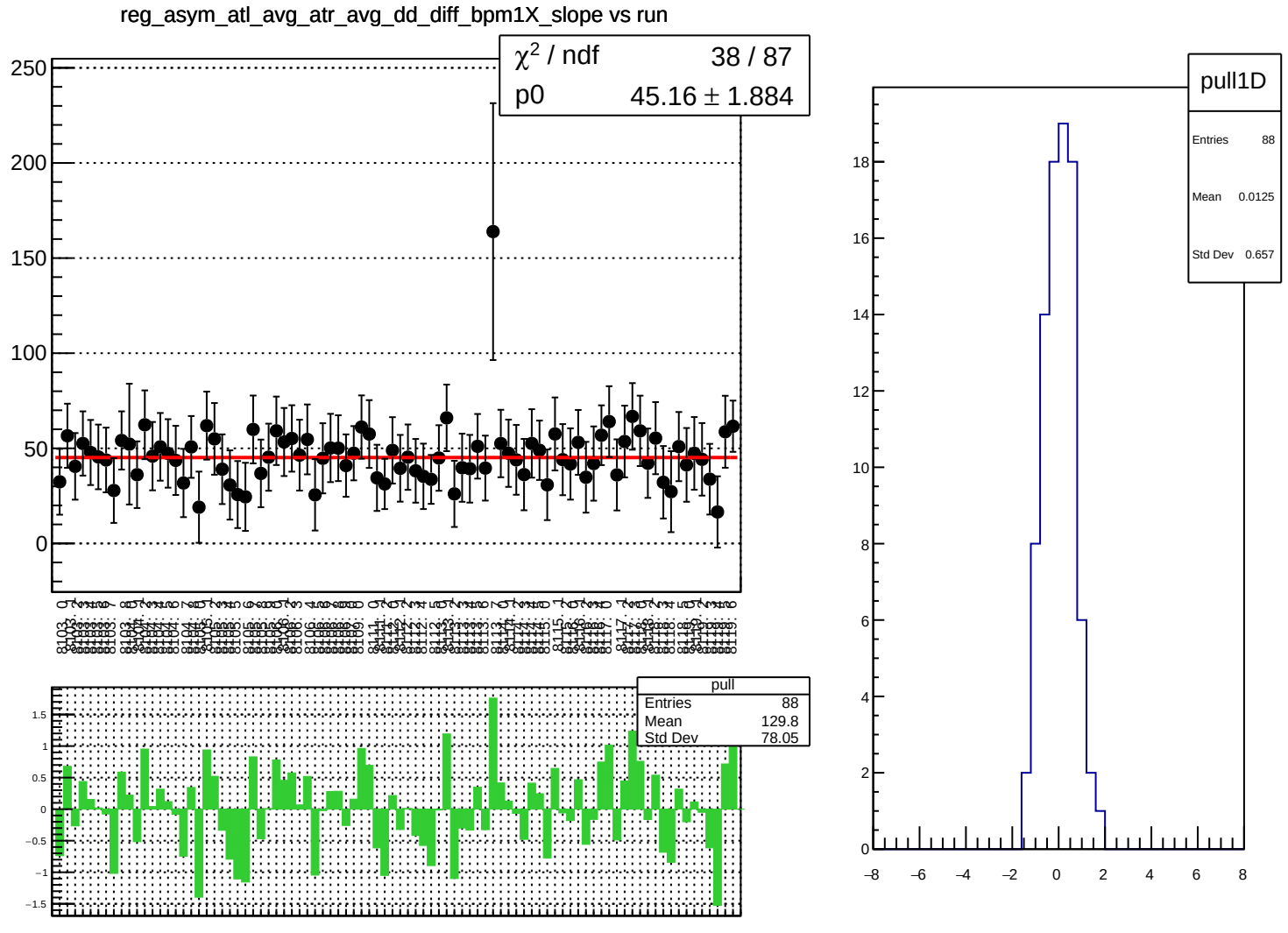

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 12.2 / 87
p0 −181.2 ± 5.072
pull
Entries 88
Mean 1760
Std Dev 1708
pull1D
Entries 88
Mean 0.002291
Std Dev 0.3723

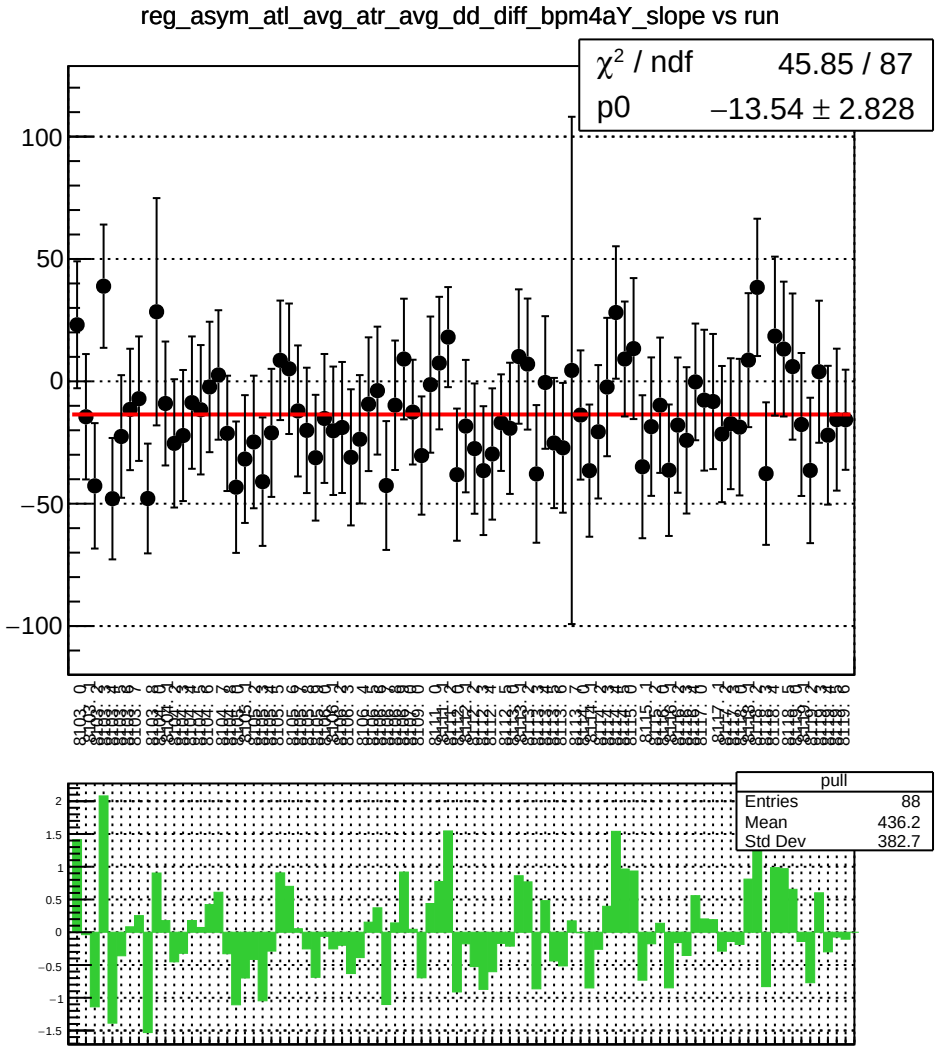

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.752 / 87
p0 38.49 ± 7.621
pull
Entries 88
Mean −841.8
Std Dev 888.2
pull1D
Entries 88
Mean 0.002376
Std Dev 0.277

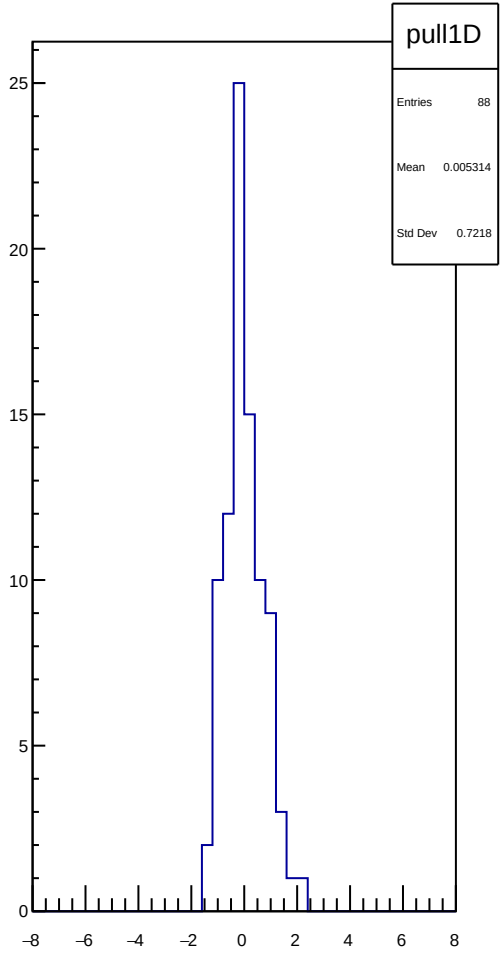

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 11.9 / 87
p0 159.2 ± 4.822
250
200
150
100
50
0
pull
Entries 88
Mean 1.001e+04
Std Dev 9959
0.5
0
−0.5
−1
−1.5
pull1D
Entries 88
Mean −0.000416
Std Dev 0.3677
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

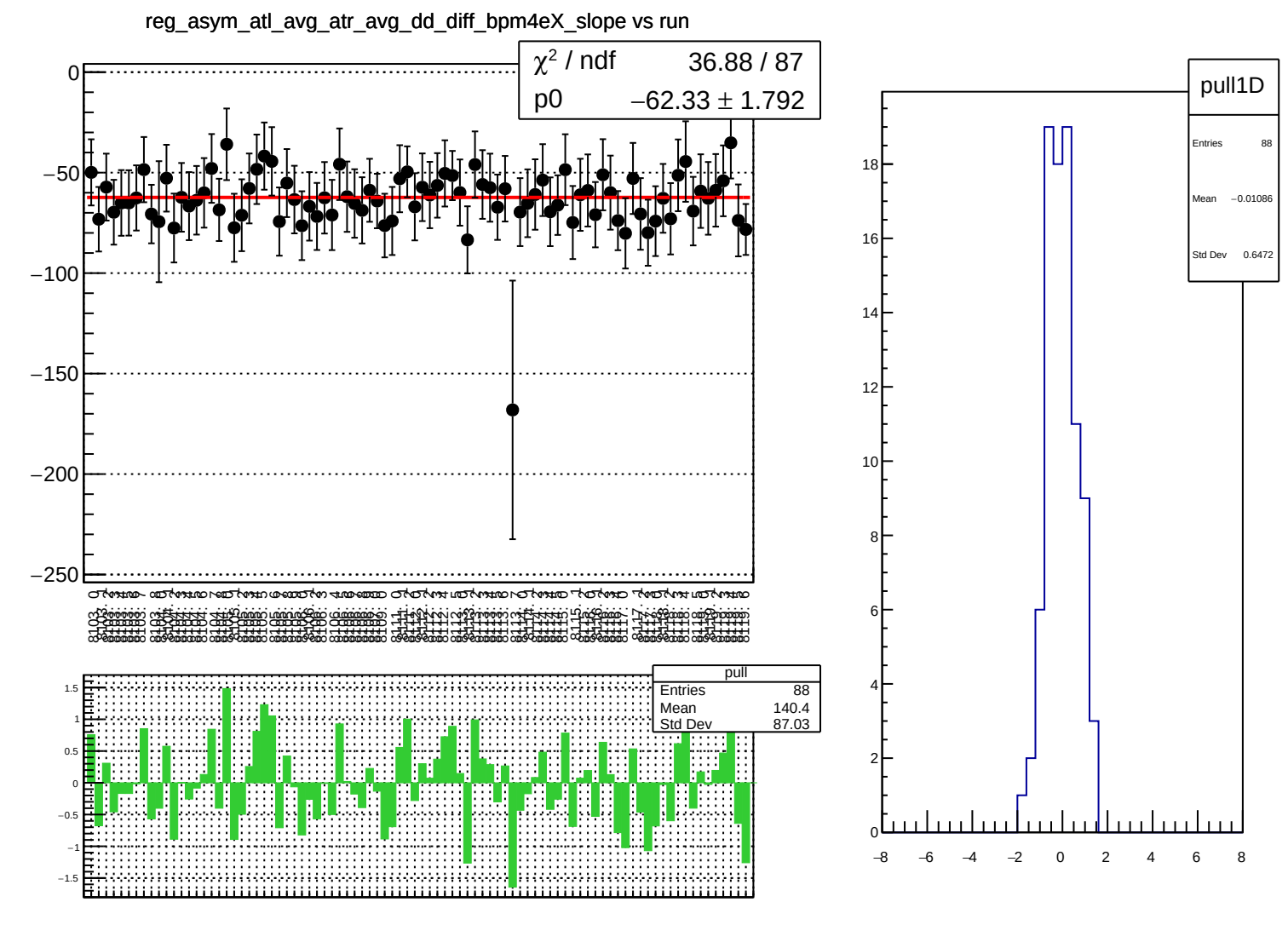

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.934 / 87
p0 6.137 ± 8.149
150
100
50
0
−50
−100
−150
pull
Entries 88
Mean −792.6
Std Dev 838.6
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 88
Mean −0.002249
Std Dev 0.2807
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

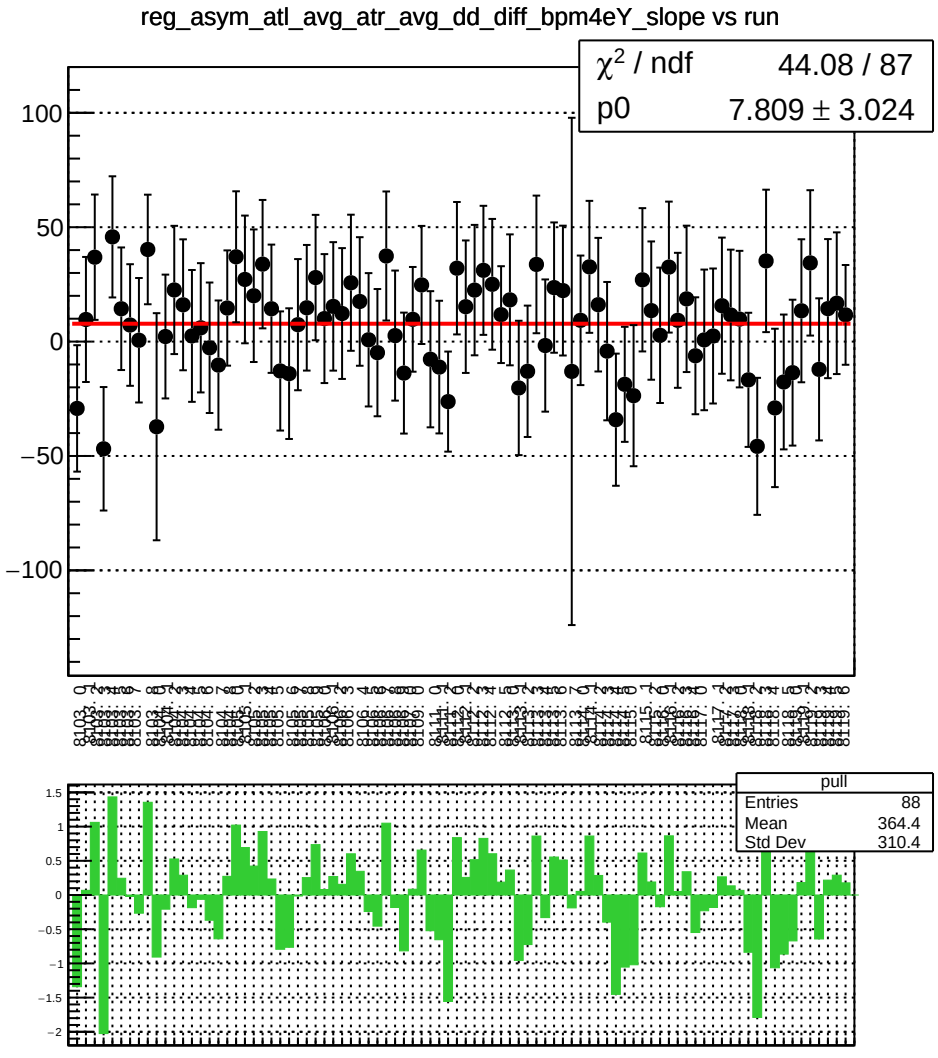

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 150 / 87
p0 −112.9 ± 0.3057
−105
−110
−115
−120
−125
pull
Entries 88
Mean −439.4
Std Dev 489.1
3
2
1
0
−1
−2
−3
pull1D
Entries 88
Mean −0.0412
Std Dev 1.305
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

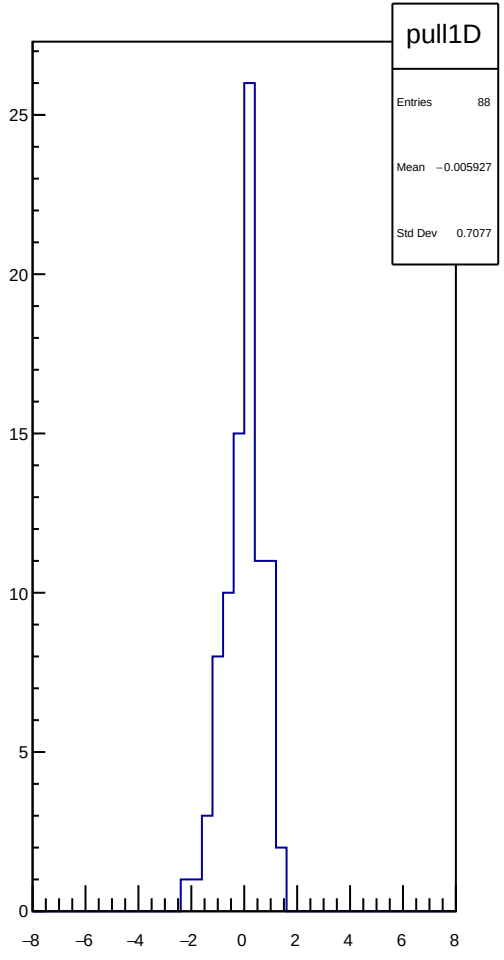

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 38 / 87
p0 45.16 ± 1.884
pull
Entries 88
Mean 129.8
Std Dev 78.05
pull1D
Entries 88
Mean 0.0125
Std Dev 0.657

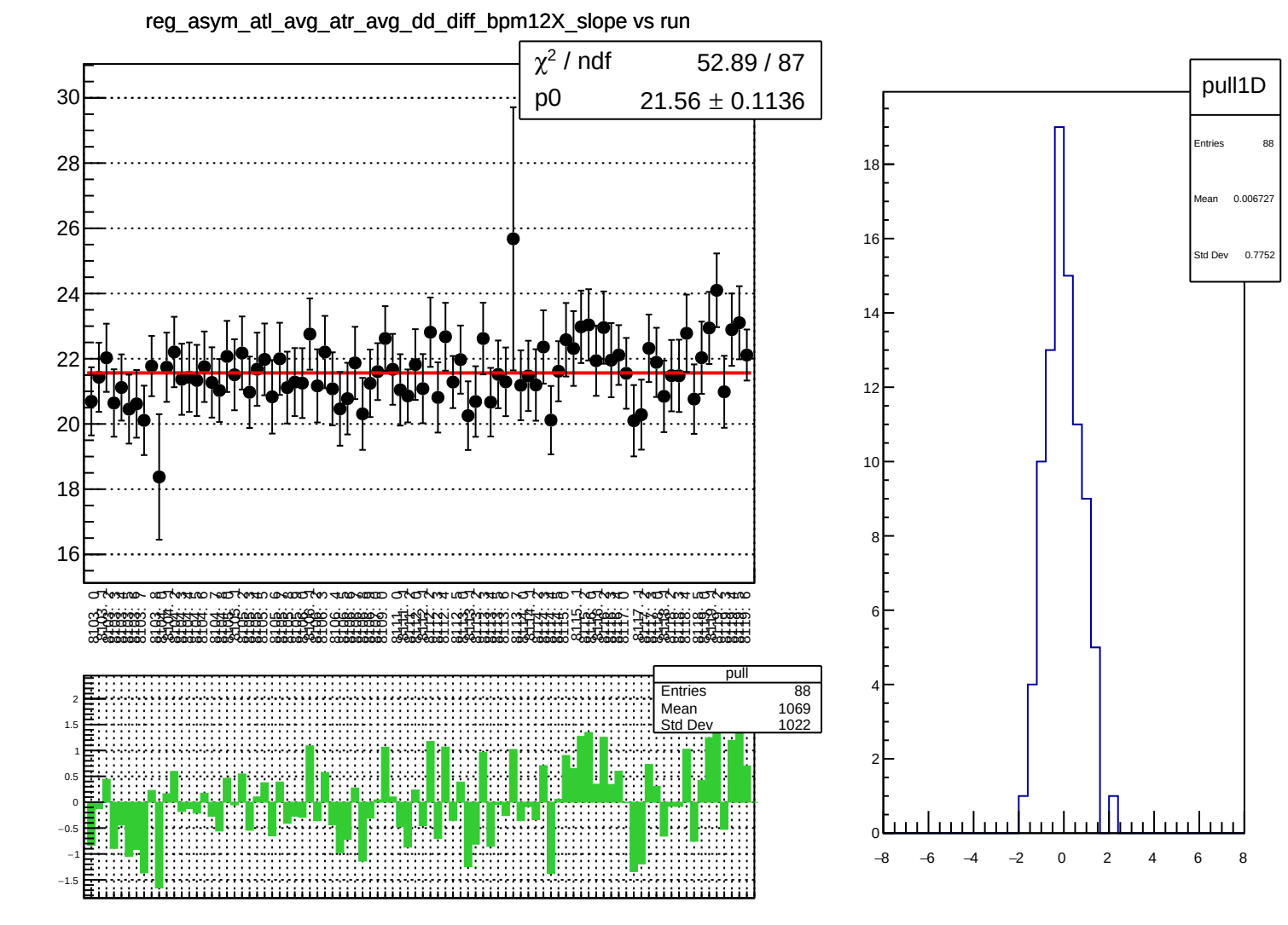

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 45.85 / 87
p0 −13.54 ± 2.828
100
50
0
−50
−100
pull
Entries 88
Mean 436.2
Std Dev 382.7
2
1.5
1
0.5
0
−0.5
−1
−1.5

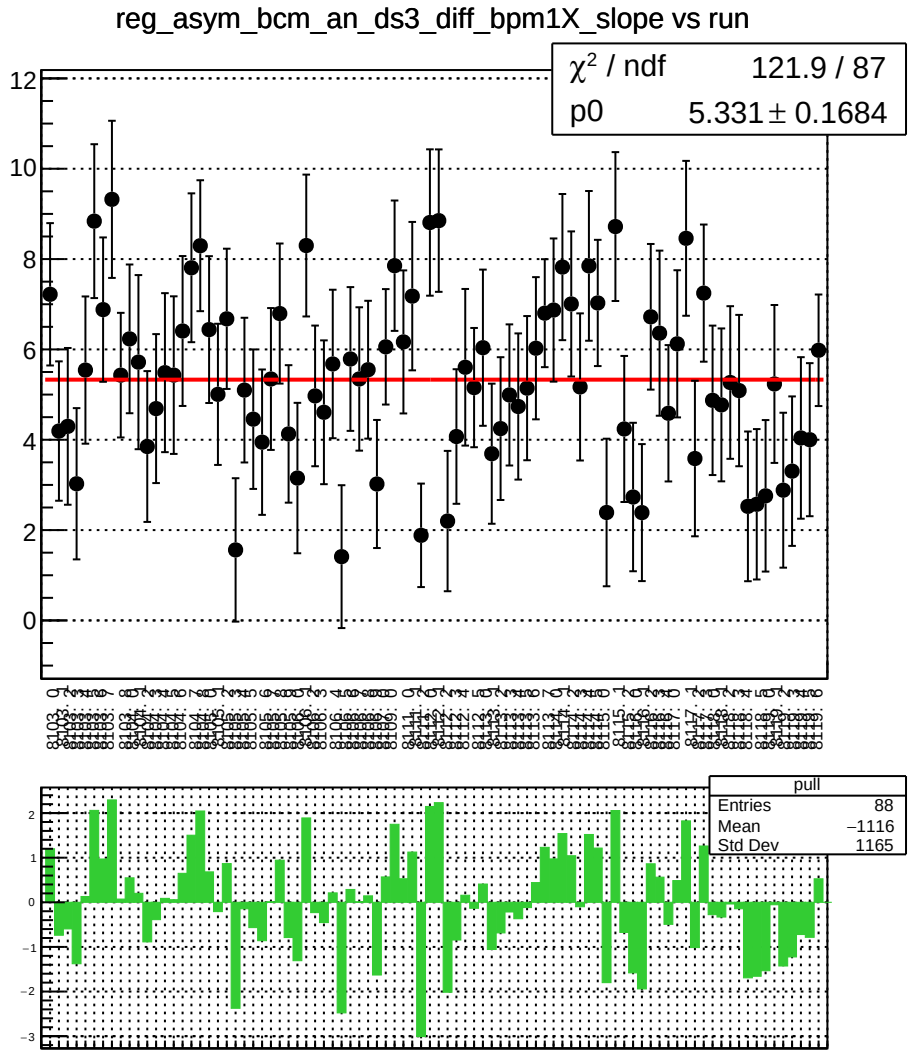

pull1D
Entries 88
Mean 0.005314
Std Dev 0.7218
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

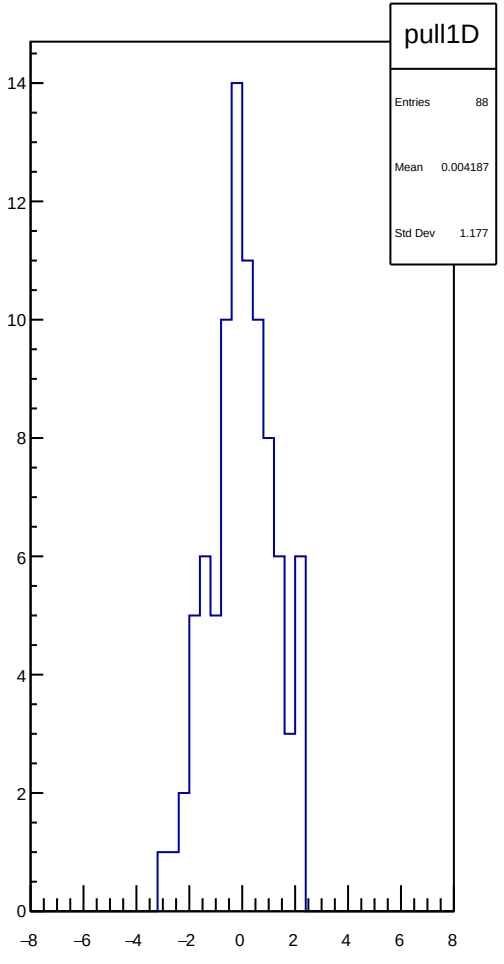

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 36.88 / 87
p0 −62.33 ± 1.792
pull
Entries 88
Mean 140.4
Std Dev 87.03
pull1D
Entries 88
Mean −0.01086
Std Dev 0.6472

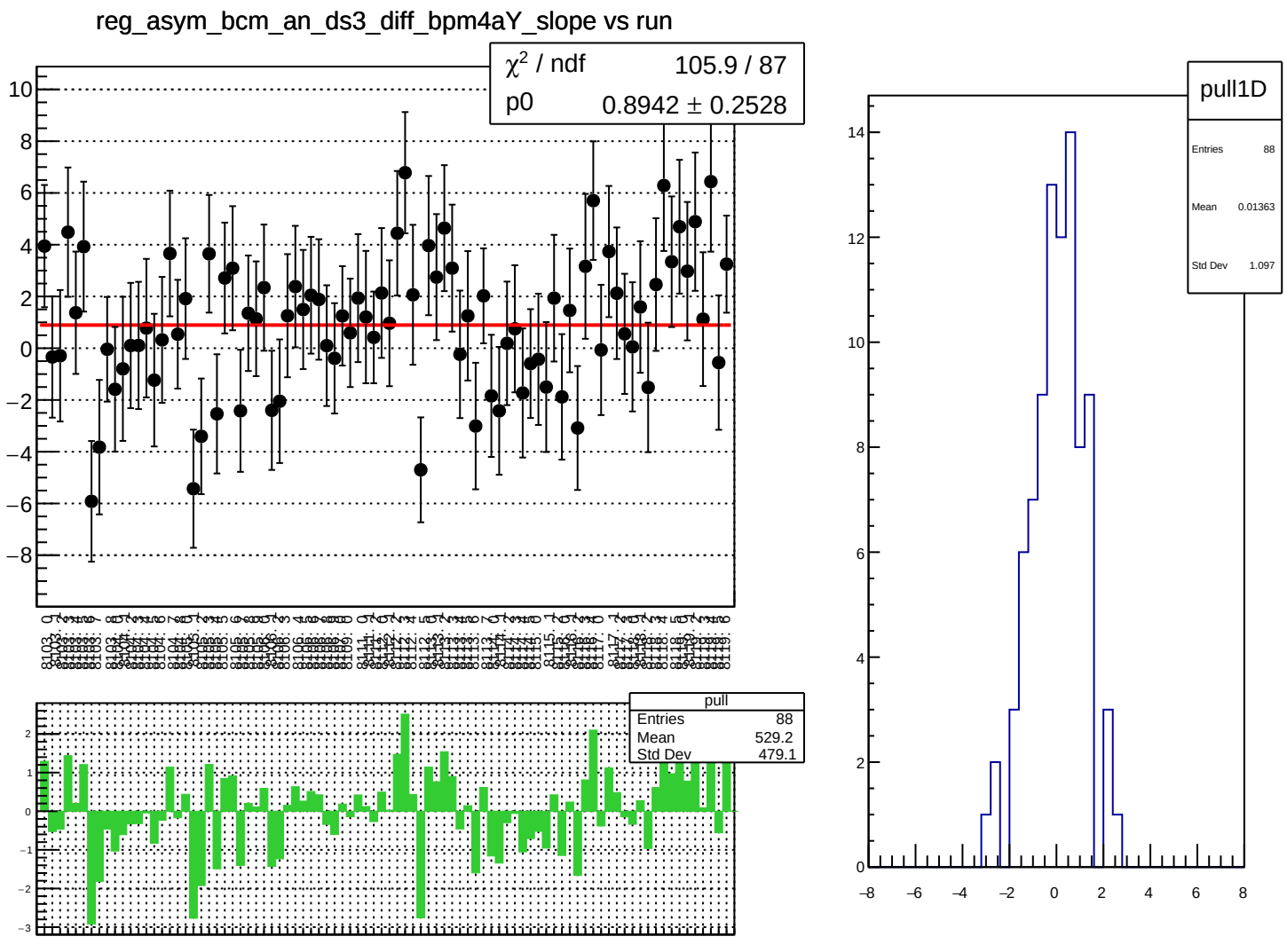

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 44.08 / 87
p0 7.809 ± 3.024
100
50
0
−50
−100
pull
Entries 88
Mean 364.4
Std Dev 310.4
1.5
1
0.5
0
−0.5
−1
−1.5
−2

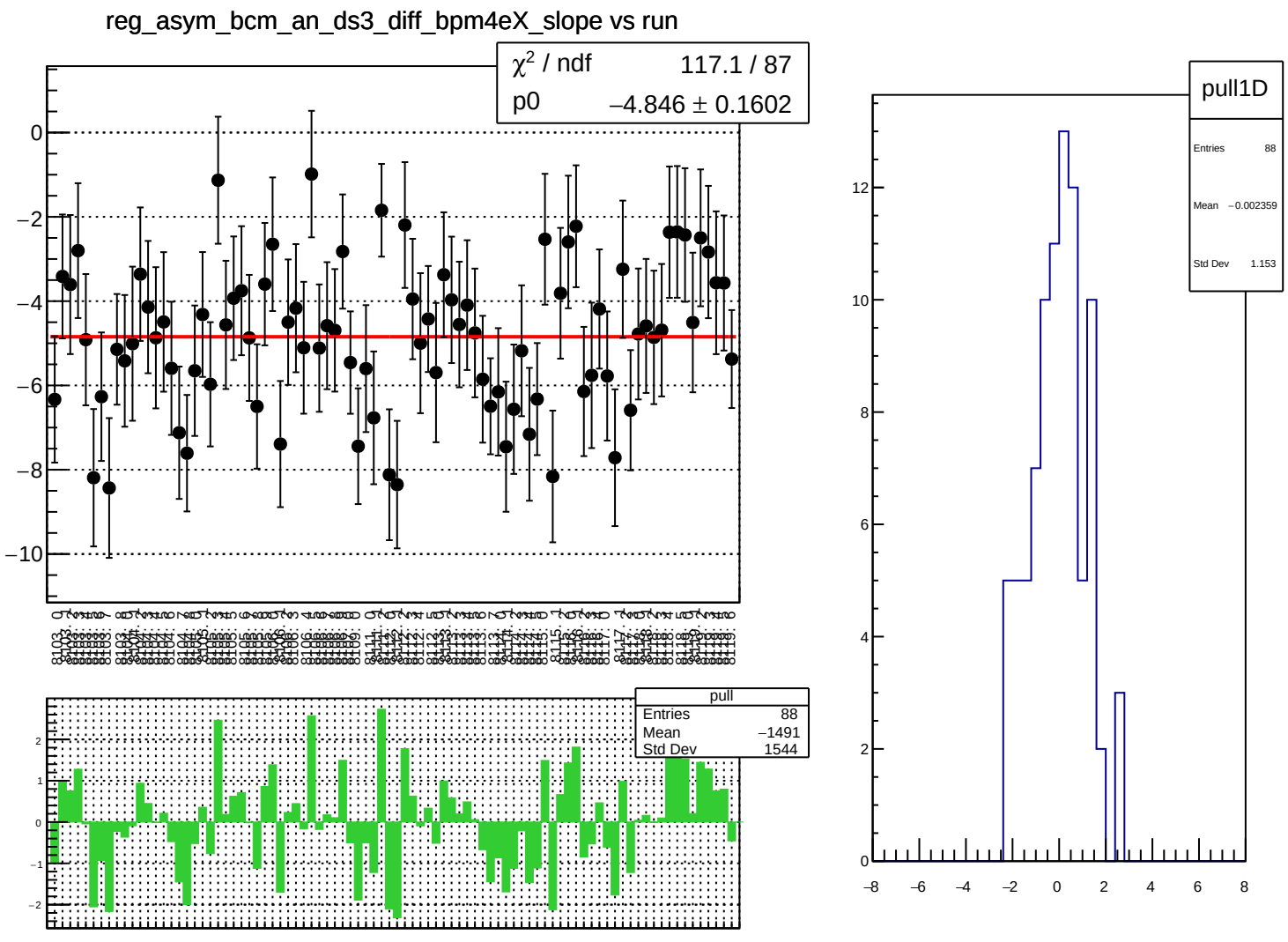

pull1D
Entries 88
Mean −0.005927
Std Dev 0.7077
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

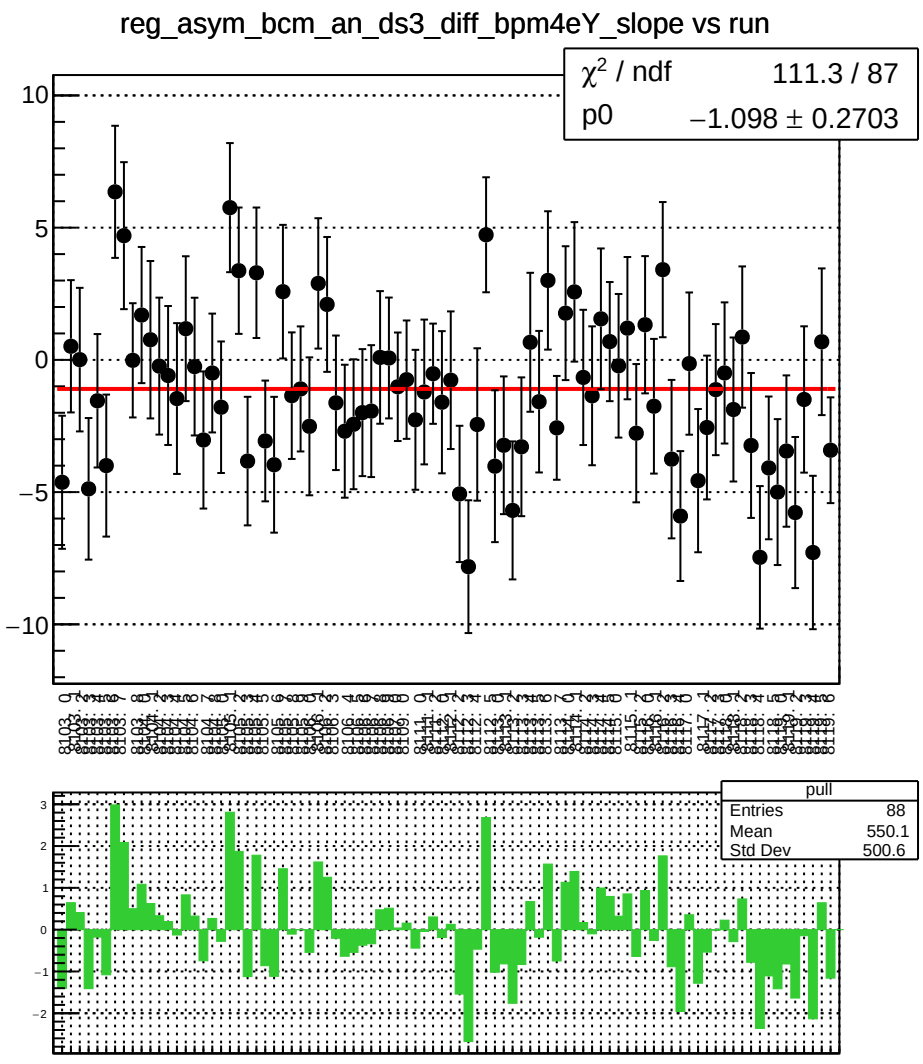

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 52.89 / 87
p0 21.56 ± 0.1136
pull
Entries 88
Mean 1069
Std Dev 1022
pull1D
Entries 88
Mean 0.006727
Std Dev 0.7752

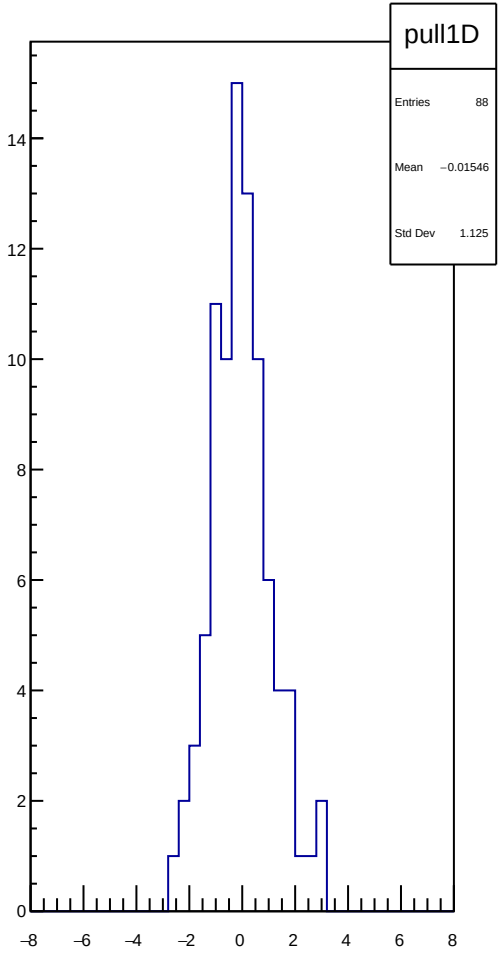

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 121.9 / 87
p0 5.331 ± 0.1684
pull
Entries 88
Mean −1116
Std Dev 1165

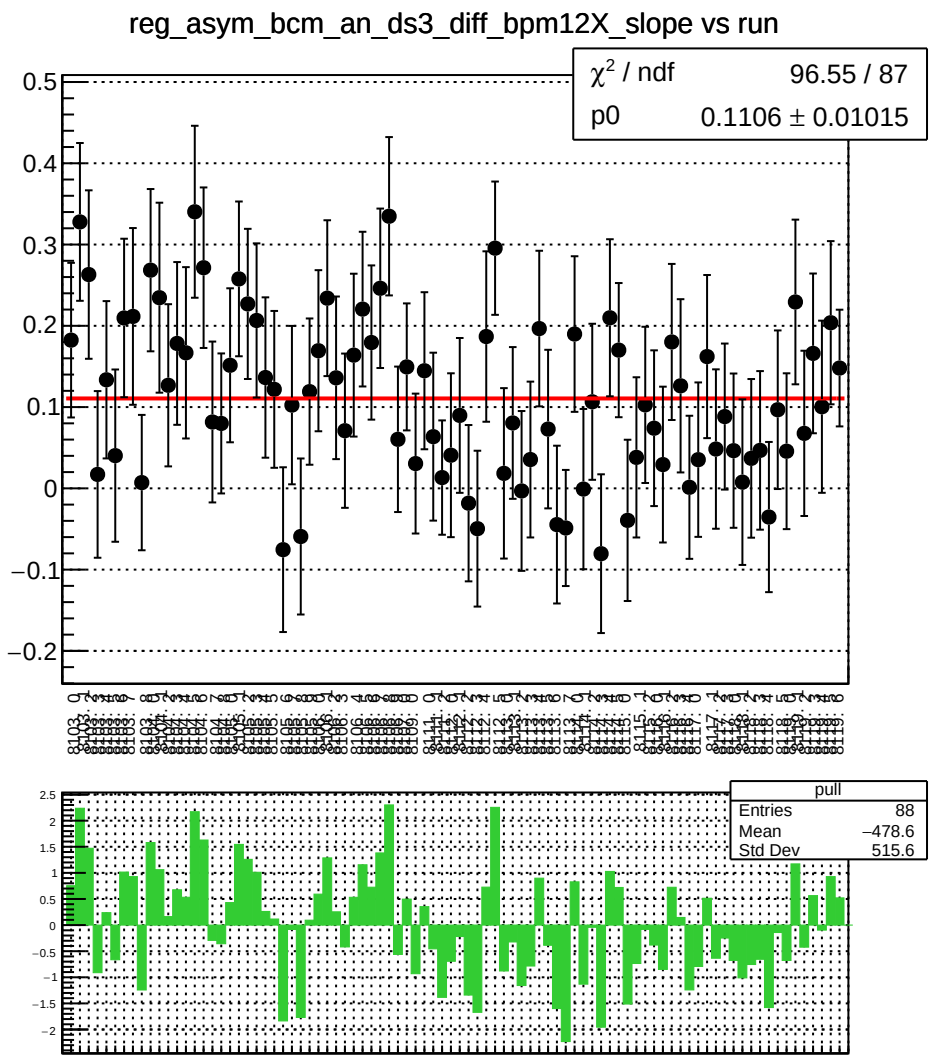

pull1D
Entries 88
Mean 0.004187
Std Dev 1.177

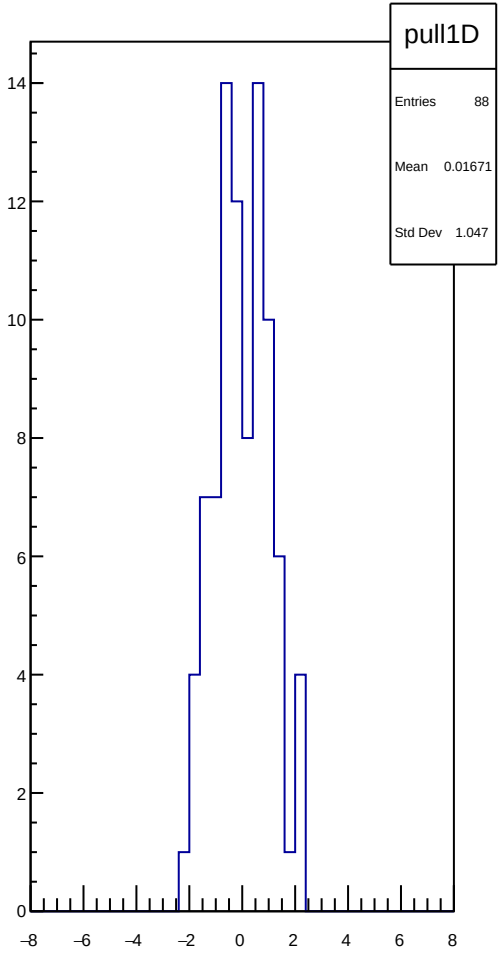

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 105.9 / 87
p0 0.8942 ± 0.2528
pull
Entries 88
Mean 529.2
Std Dev 479.1
pull1D
Entries 88
Mean 0.01363
Std Dev 1.097

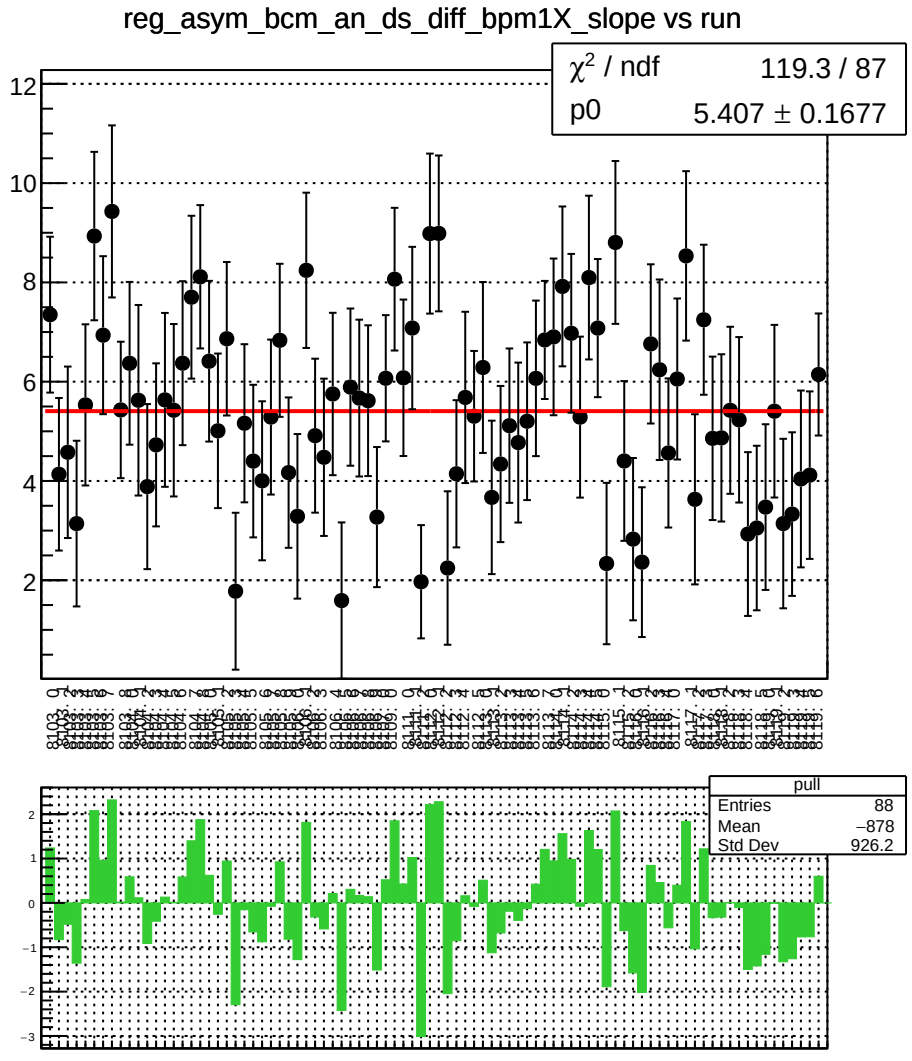

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 117.1 / 87
p0 −4.846 ± 0.1602
pull
Entries 88
Mean −1491
Std Dev 1544
pull1D
Entries 88
Mean −0.002359
Std Dev 1.153

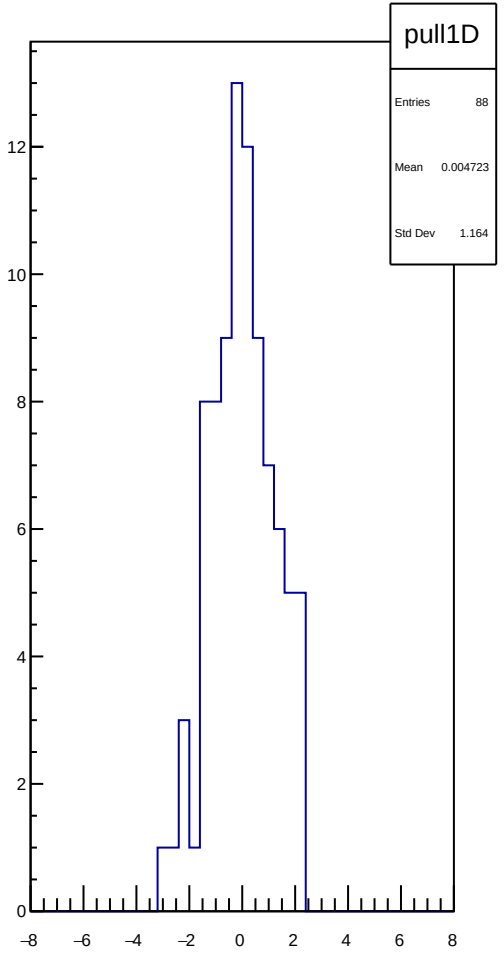

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 111.3 / 87
p0 −1.098 ± 0.2703
pull
Entries 88
Mean 550.1
Std Dev 500.6

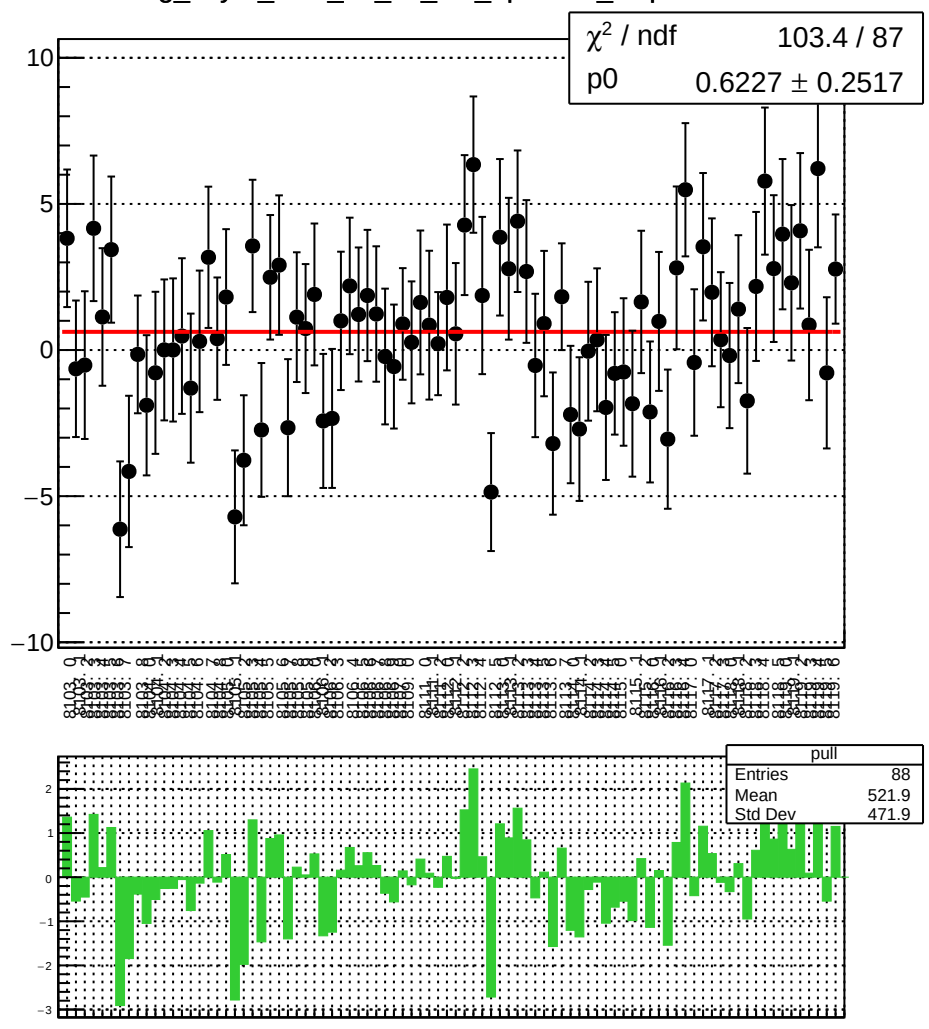

pull1D
Entries 88
Mean −0.01546
Std Dev 1.125

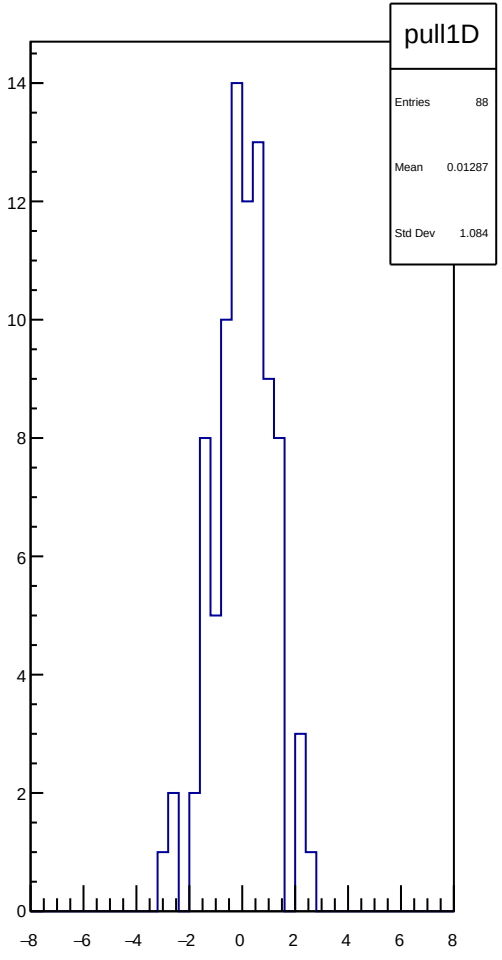

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 96.55 / 87
p0 0.1106 ± 0.01015
pull
Entries 88
Mean −478.6
Std Dev 515.6

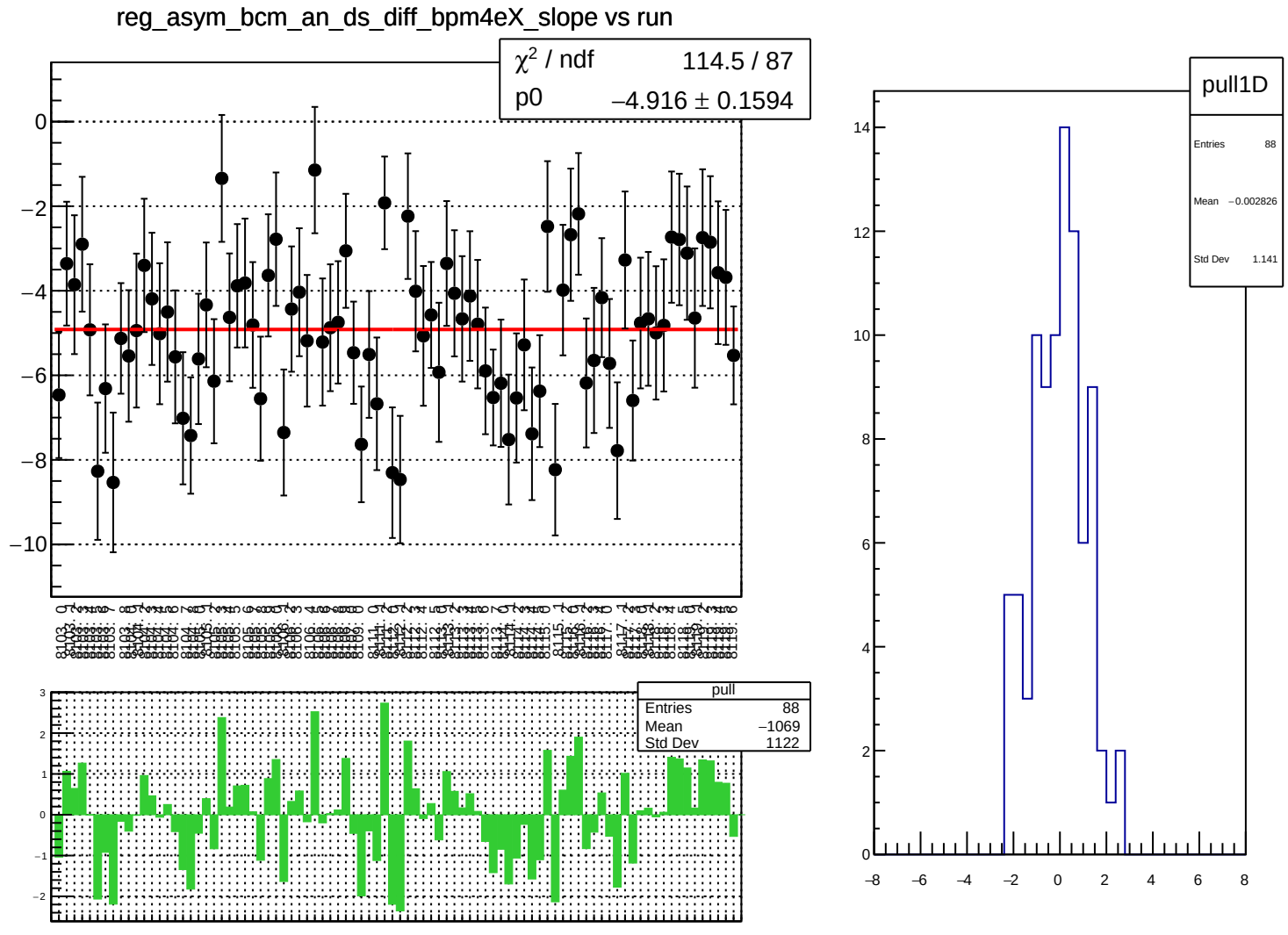

pull1D
Entries 88
Mean 0.01671
Std Dev 1.047

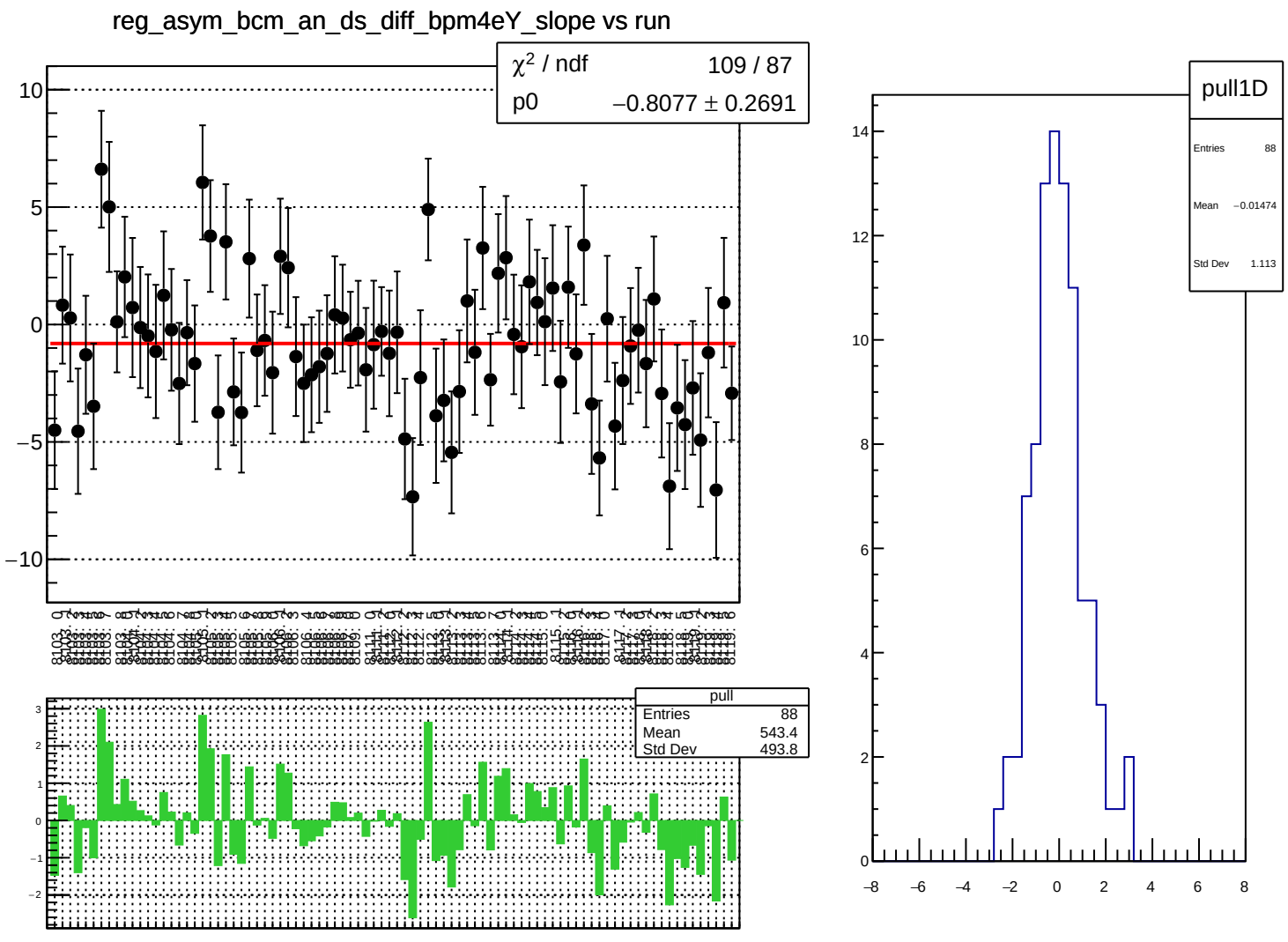

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 119.3 / 87
p0 5.407 ± 0.1677
pull
Entries 88
Mean −878
Std Dev 926.2

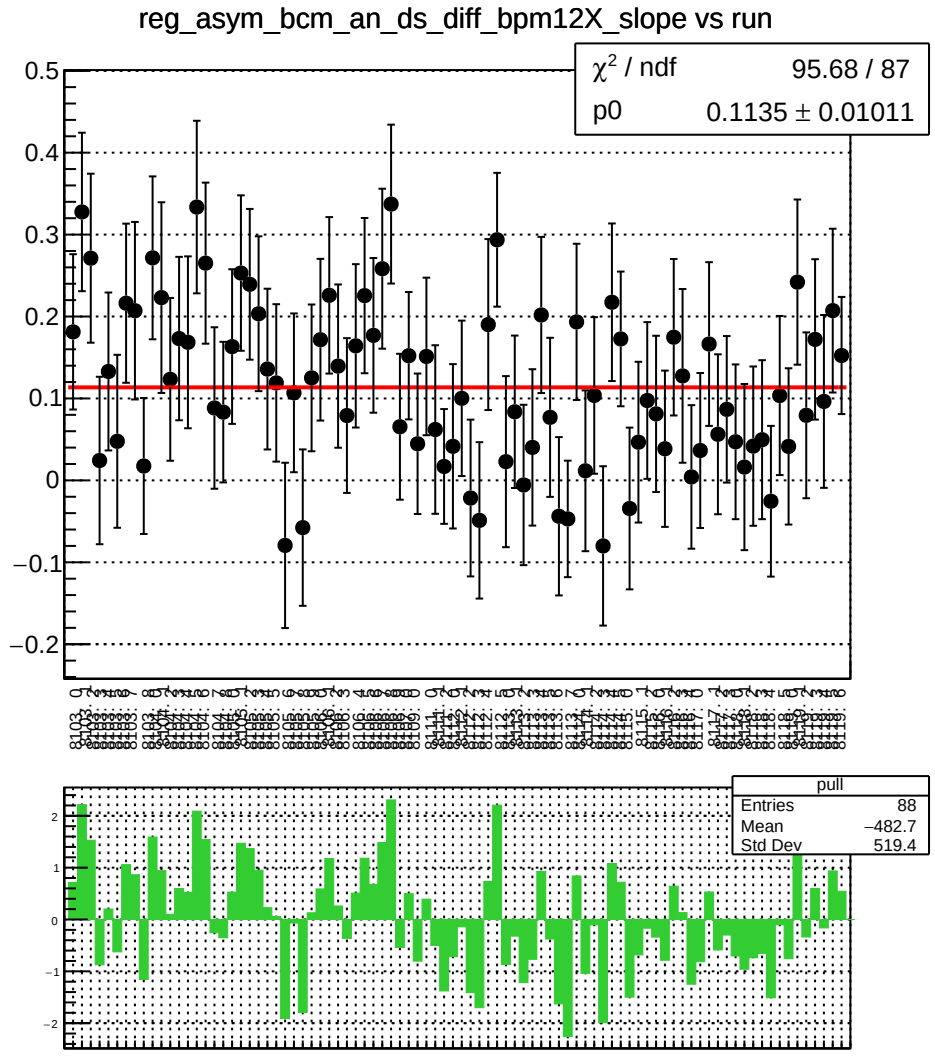

pull1D
Entries 88
Mean 0.004723
Std Dev 1.164

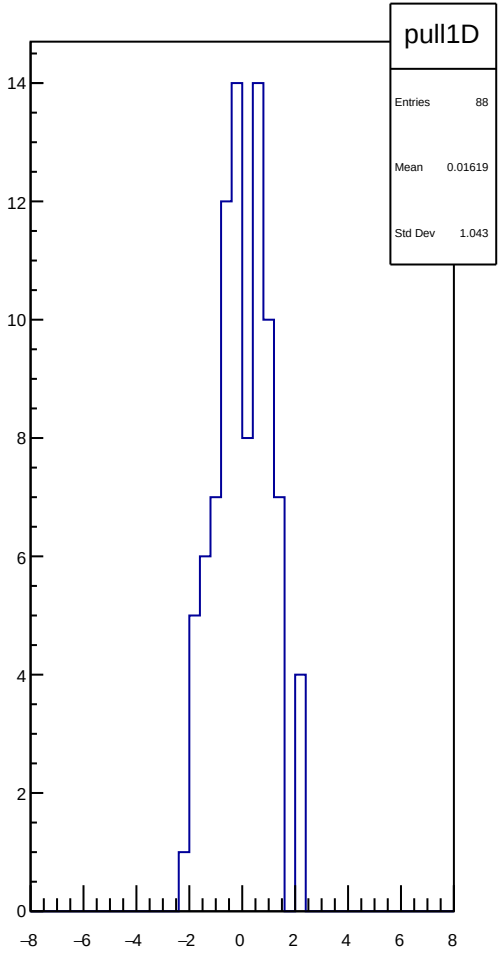

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 103.4 / 87
p0 0.6227 ± 0.2517
pull
Entries 88
Mean 521.9
Std Dev 471.9

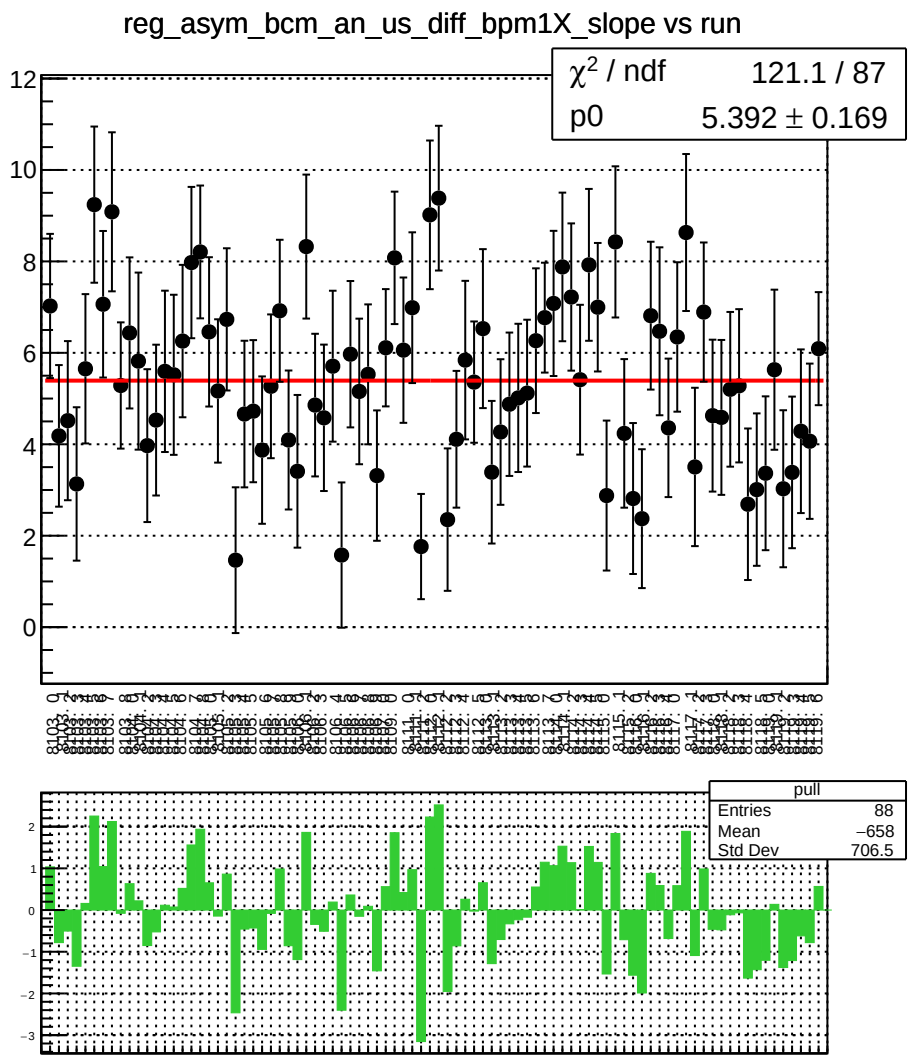

pull1D
Entries 88
Mean 0.01287
Std Dev 1.084

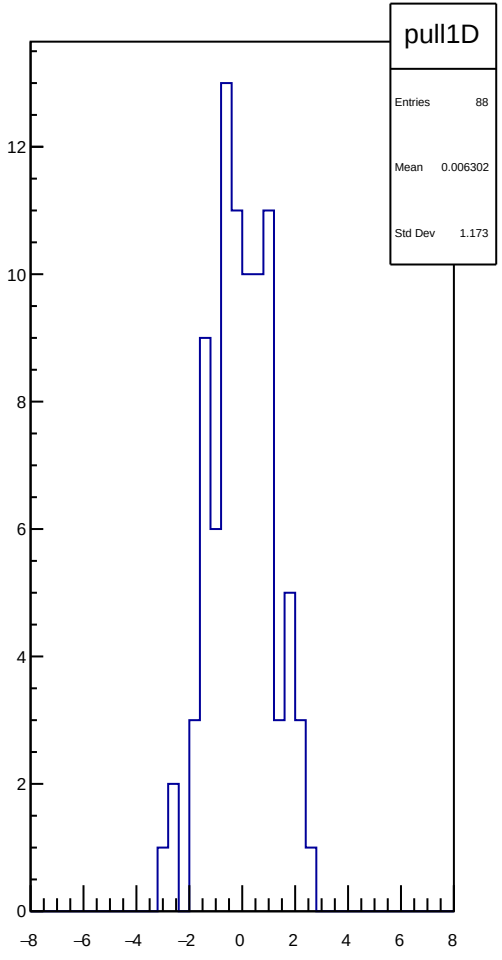

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 114.5 / 87
p0 −4.916 ± 0.1594
pull
Entries 88
Mean −1069
Std Dev 1122
pull1D
Entries 88
Mean −0.002826
Std Dev 1.141

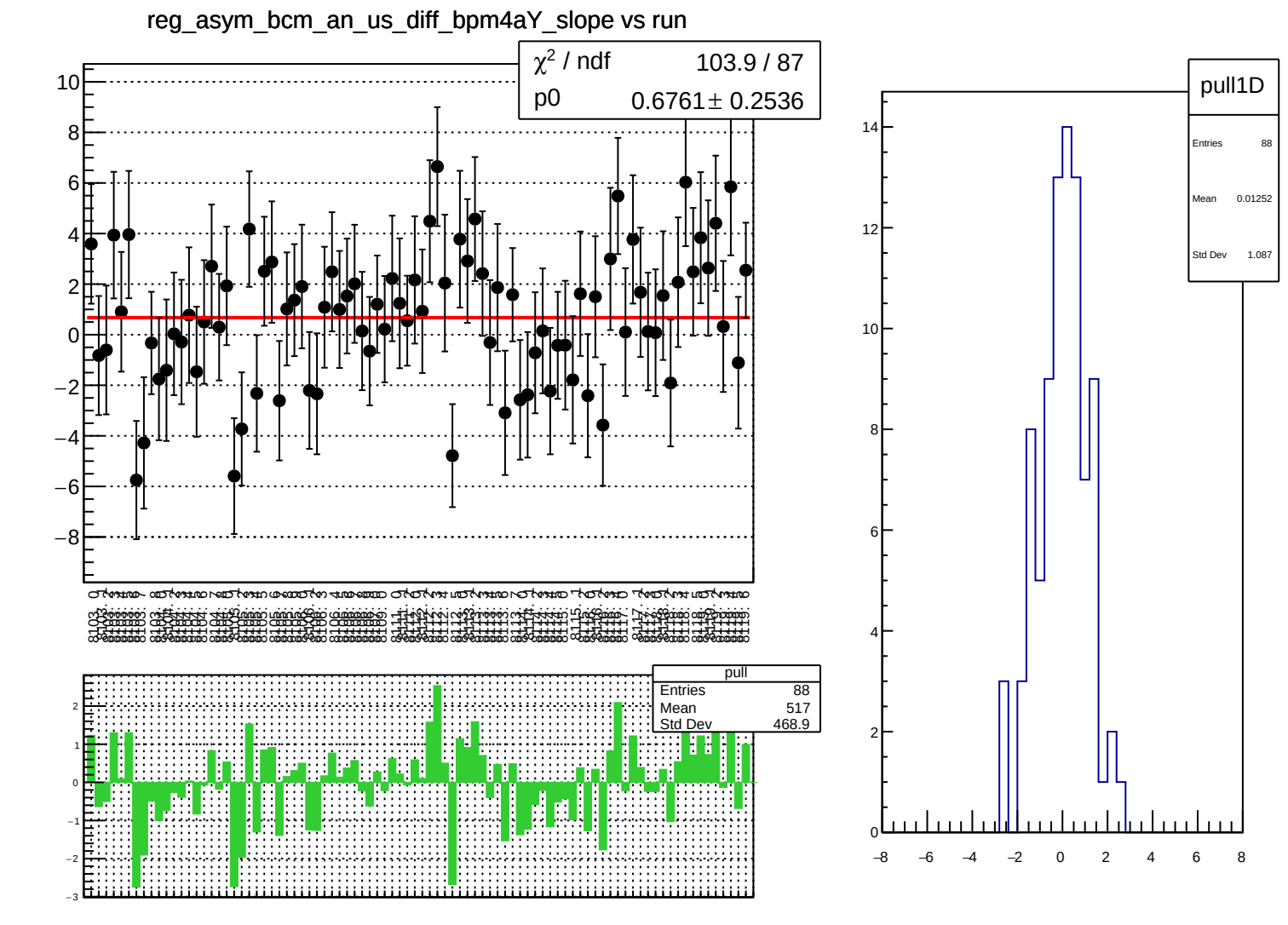

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 109 / 87
p0 −0.8077 ± 0.2691
pull
Entries 88
Mean 543.4
Std Dev 493.8
pull1D
Entries 88
Mean −0.01474
Std Dev 1.113

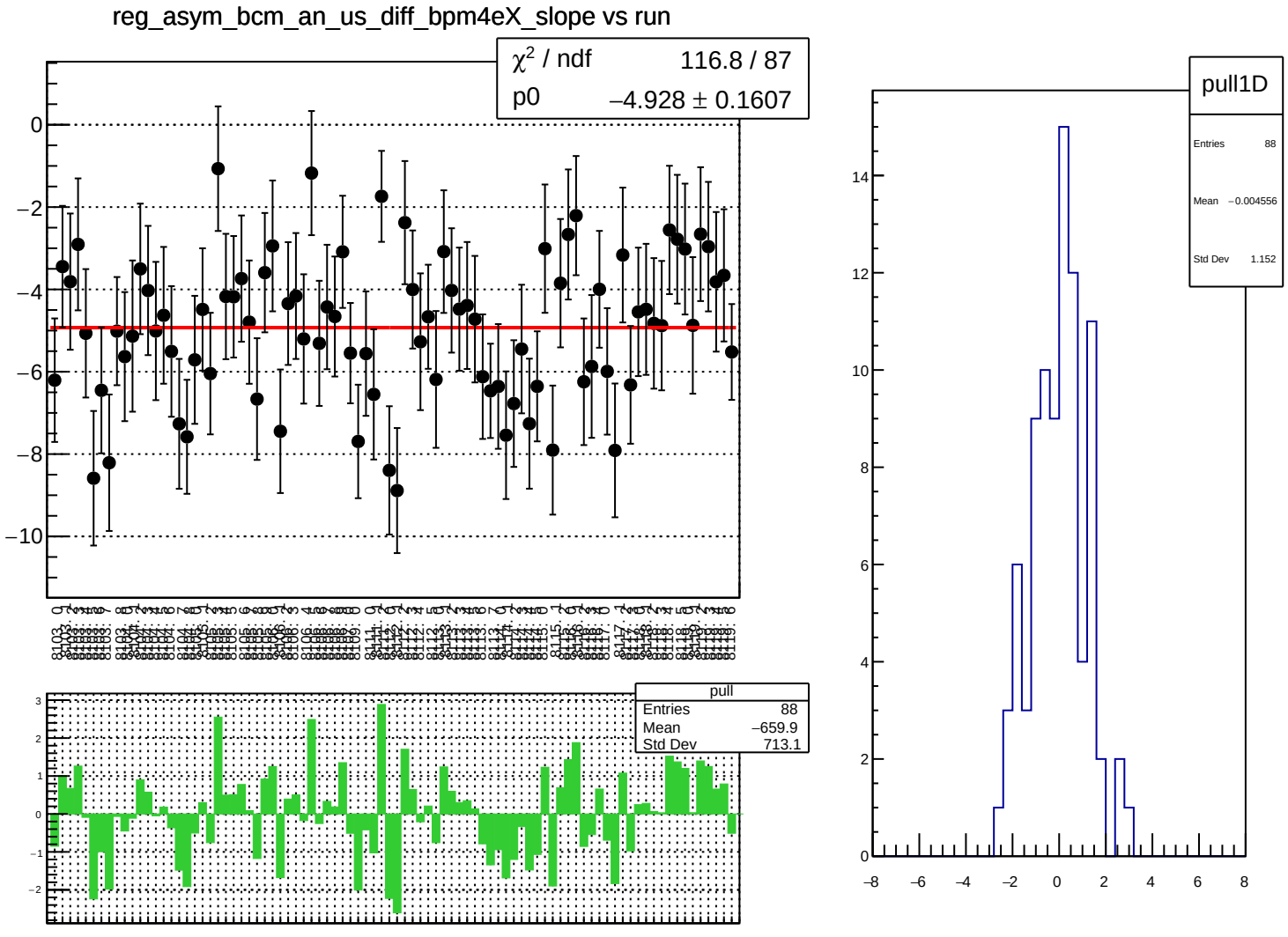

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 95.68 / 87
p0 0.1135 ± 0.01011
pull
Entries 88
Mean −482.7
Std Dev 519.4

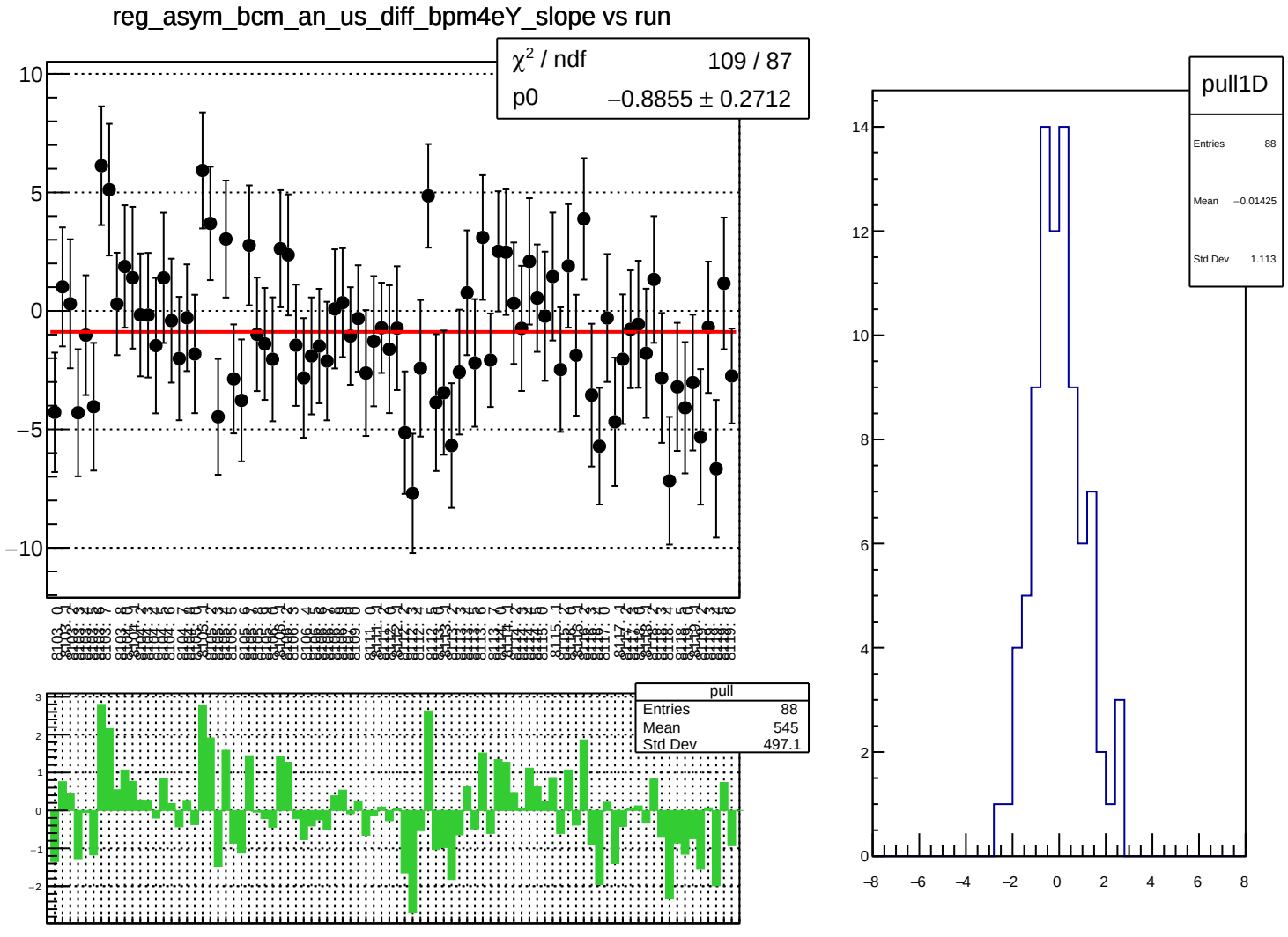

pull1D
Entries 88
Mean 0.01619
Std Dev 1.043

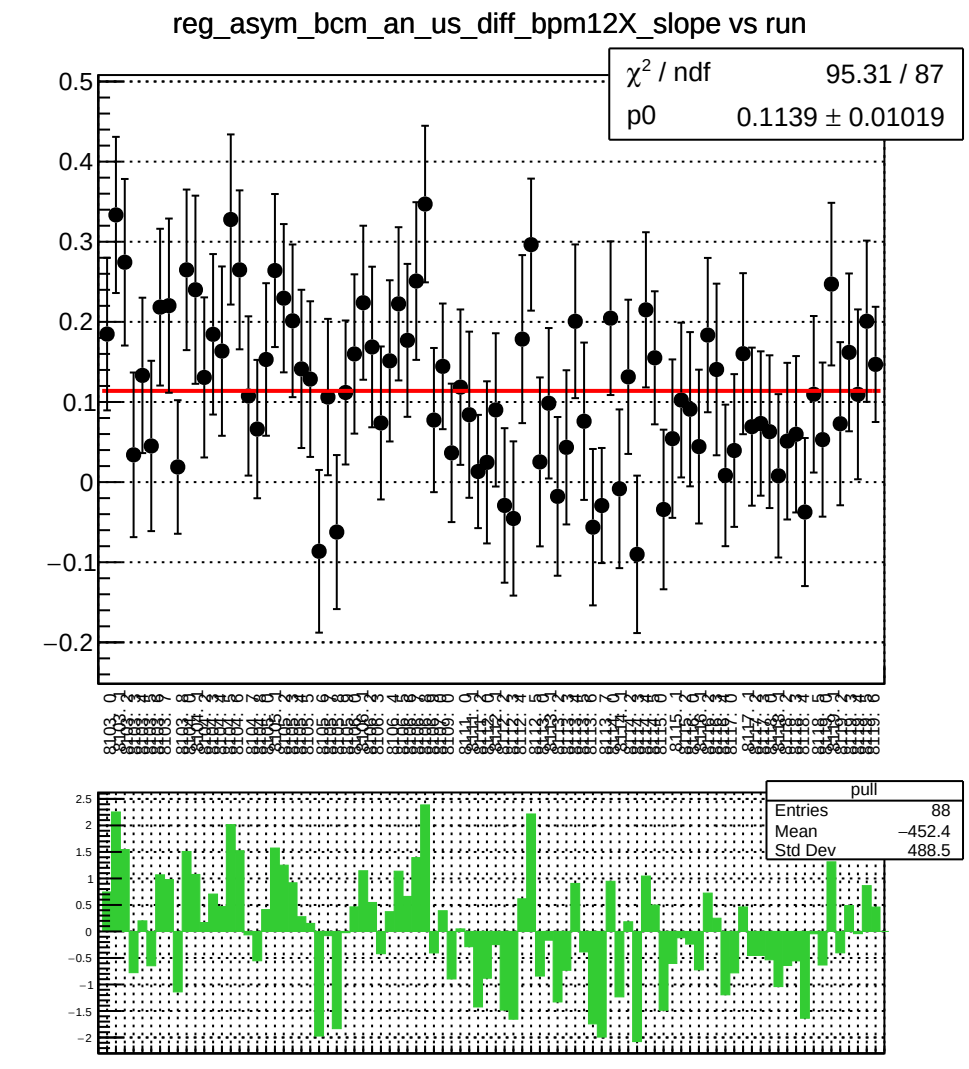

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 121.1 / 87
p0 5.392 ± 0.169
pull
Entries 88
Mean −658
Std Dev 706.5

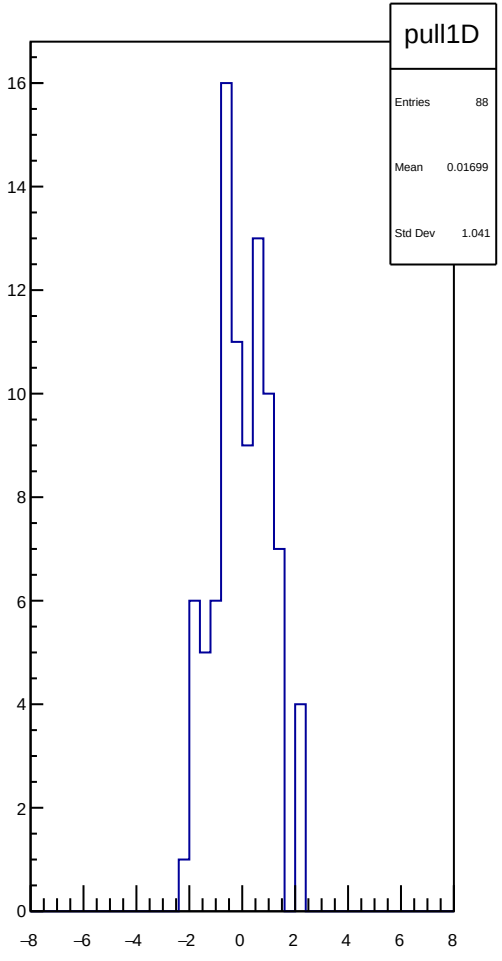

pull1D
Entries 88
Mean 0.006302
Std Dev 1.173

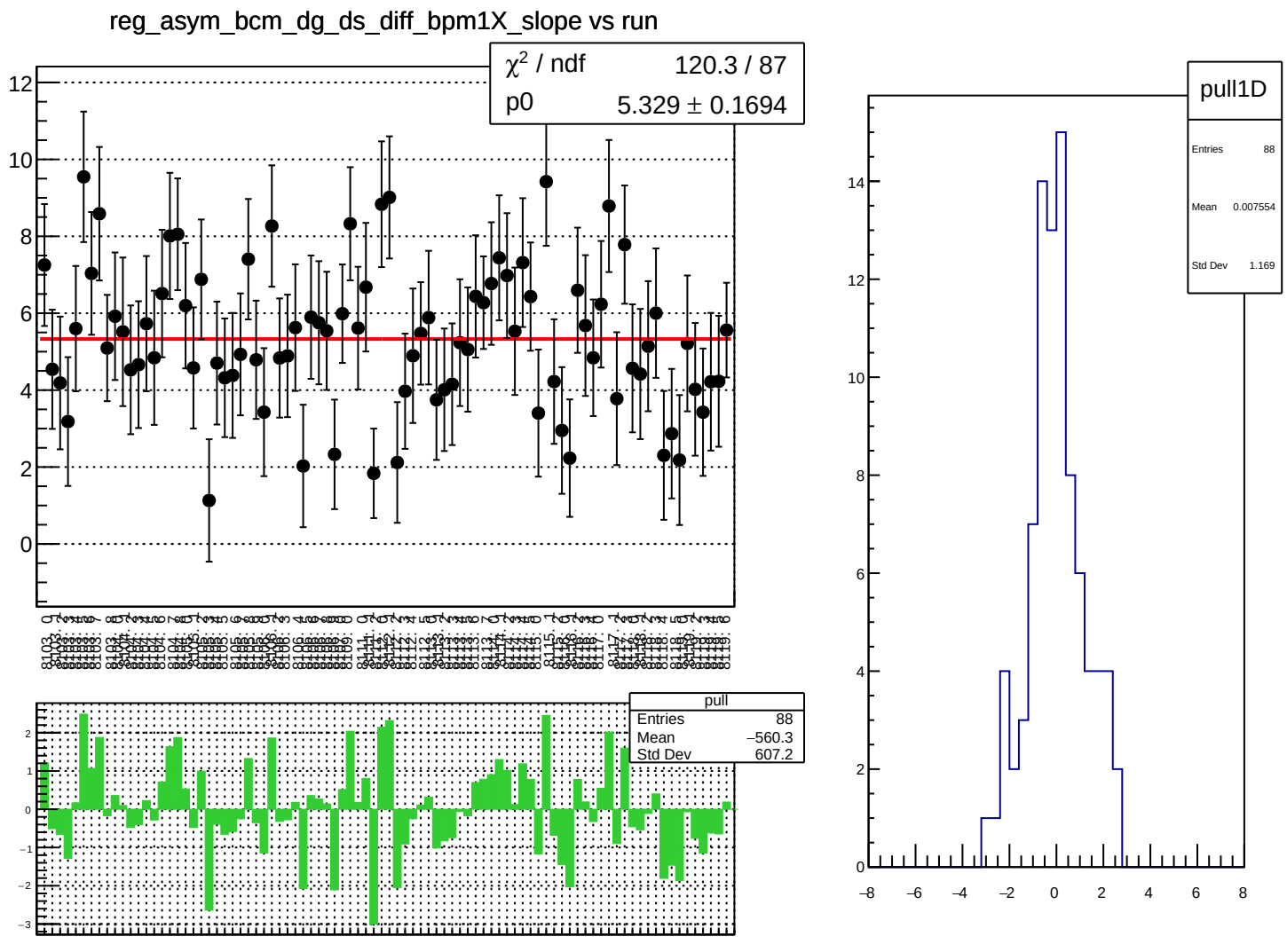

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 103.9 / 87
p0 0.6761 ± 0.2536
pull
Entries 88
Mean 517
Std Dev 468.9
pull1D
Entries 88
Mean 0.01252
Std Dev 1.087

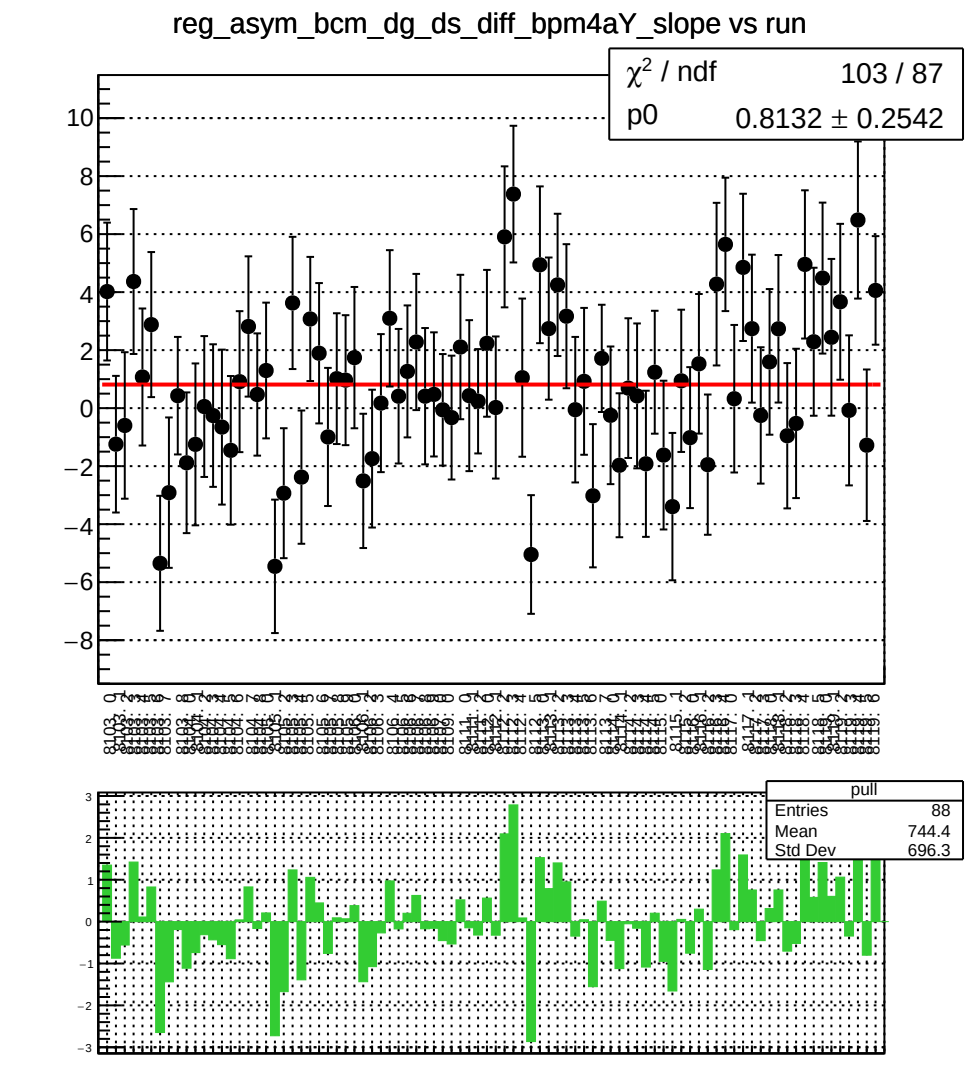

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 116.8 / 87
p0 −4.928 ± 0.1607
pull
Entries 88
Mean −659.9
Std Dev 713.1
pull1D
Entries 88
Mean −0.004556
Std Dev 1.152

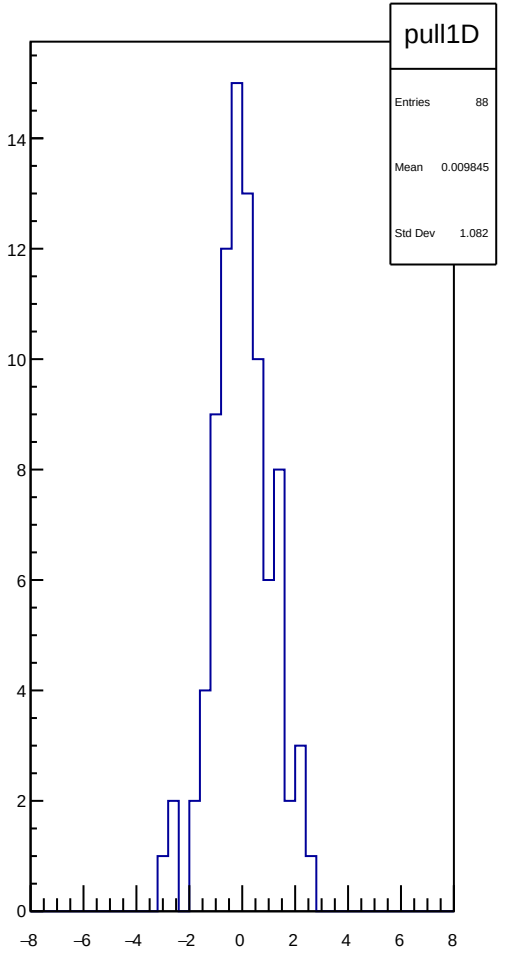

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 109 / 87
p0 −0.8855 ± 0.2712
pull
Entries 88
Mean 545
Std Dev 497.1
pull1D
Entries 88
Mean −0.01425
Std Dev 1.113

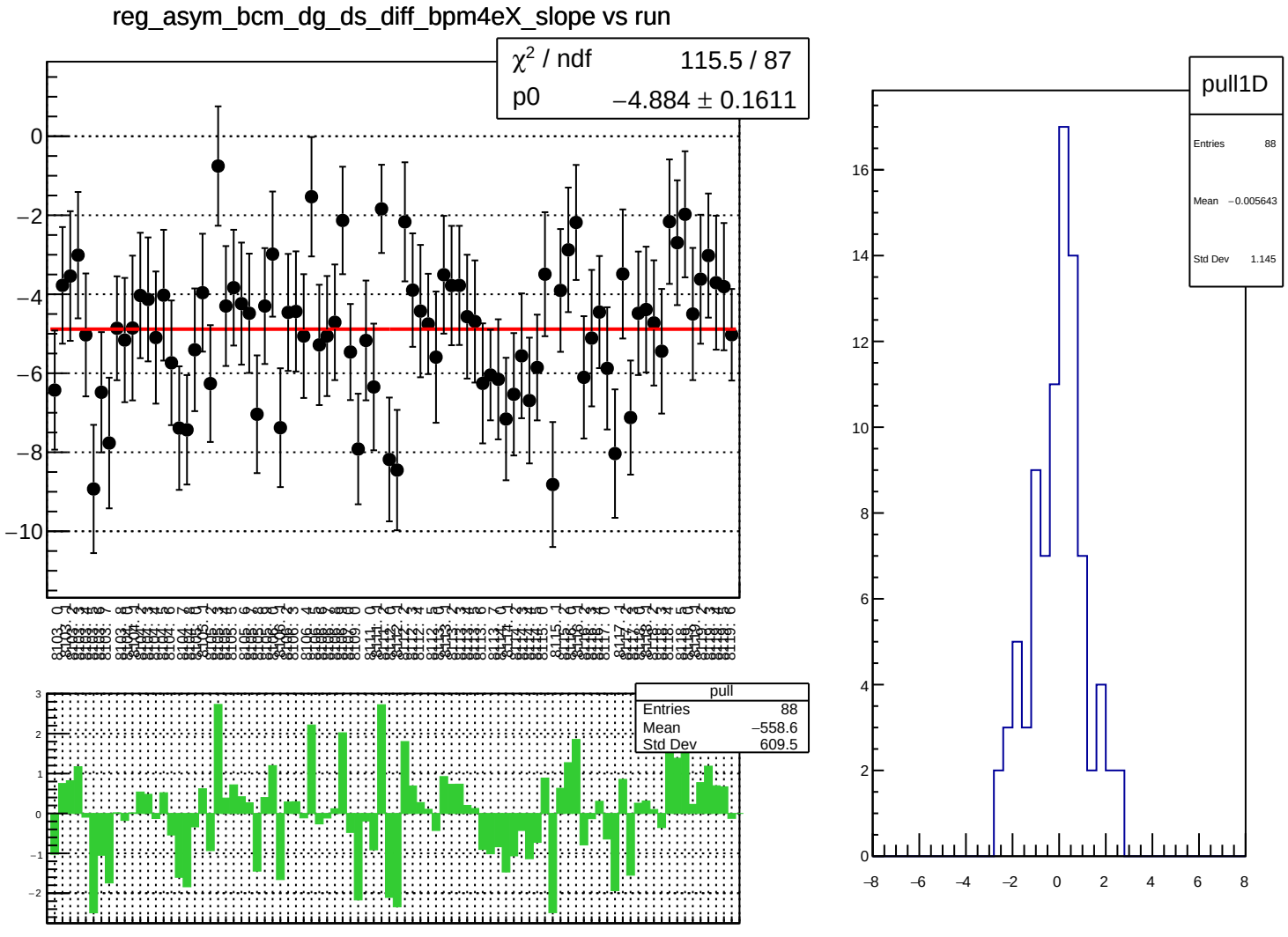

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 95.31 / 87
p0 0.1139 ± 0.01019
pull
Entries 88
Mean −452.4
Std Dev 488.5

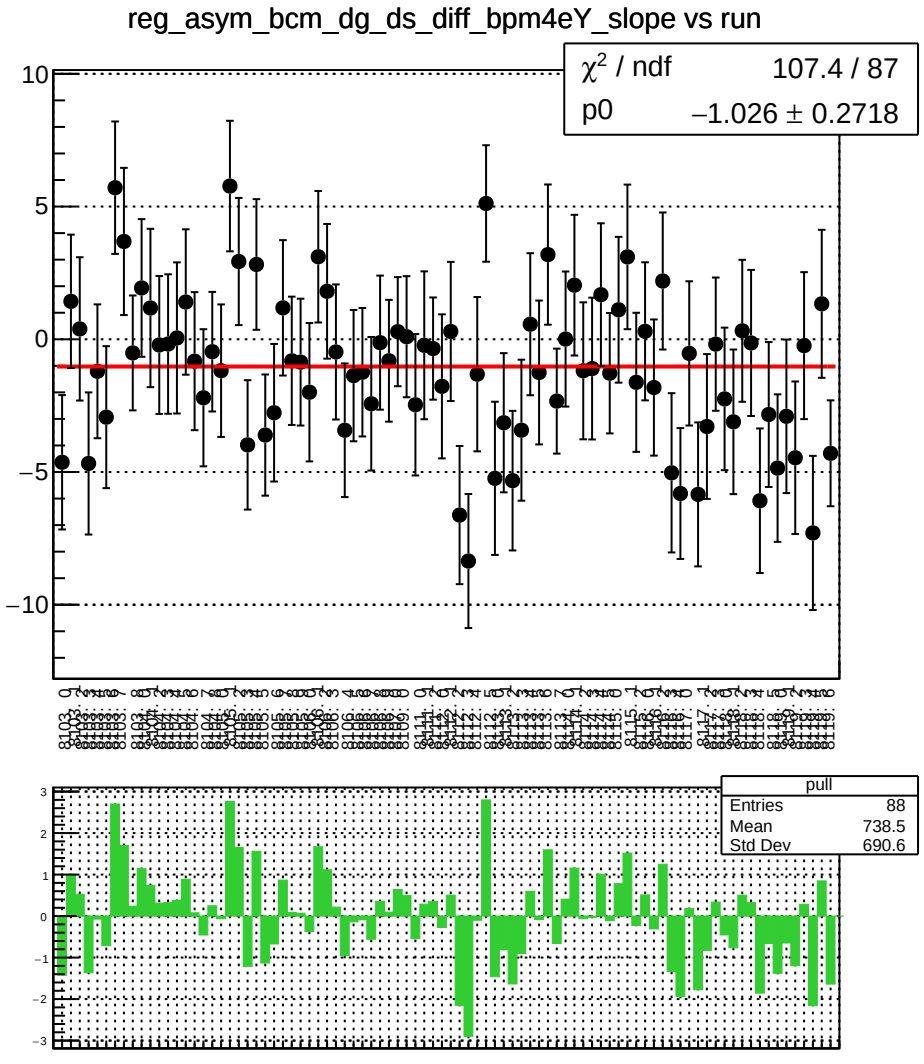

pull1D
Entries 88
Mean 0.01699
Std Dev 1.041

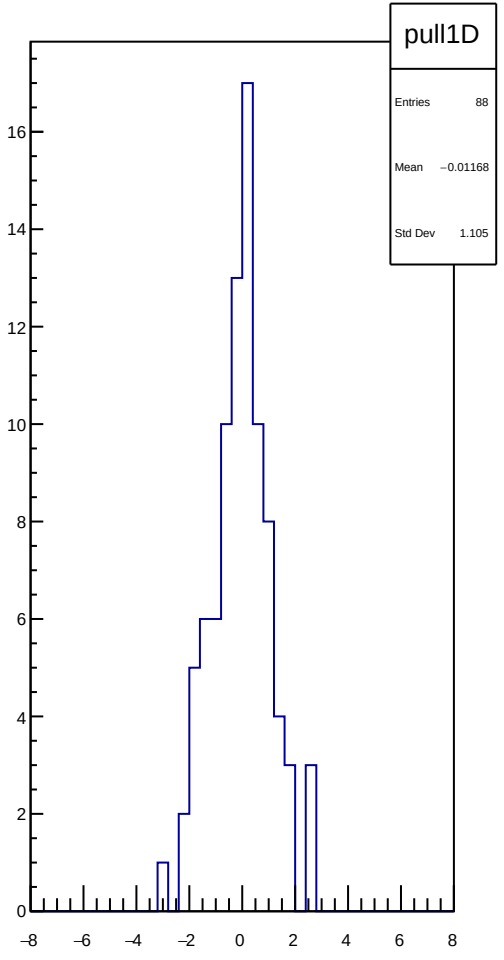

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 120.3 / 87
p0 5.329 ± 0.1694
pull
Entries 88
Mean −560.3
Std Dev 607.2
pull1D
Entries 88
Mean 0.007554
Std Dev 1.169

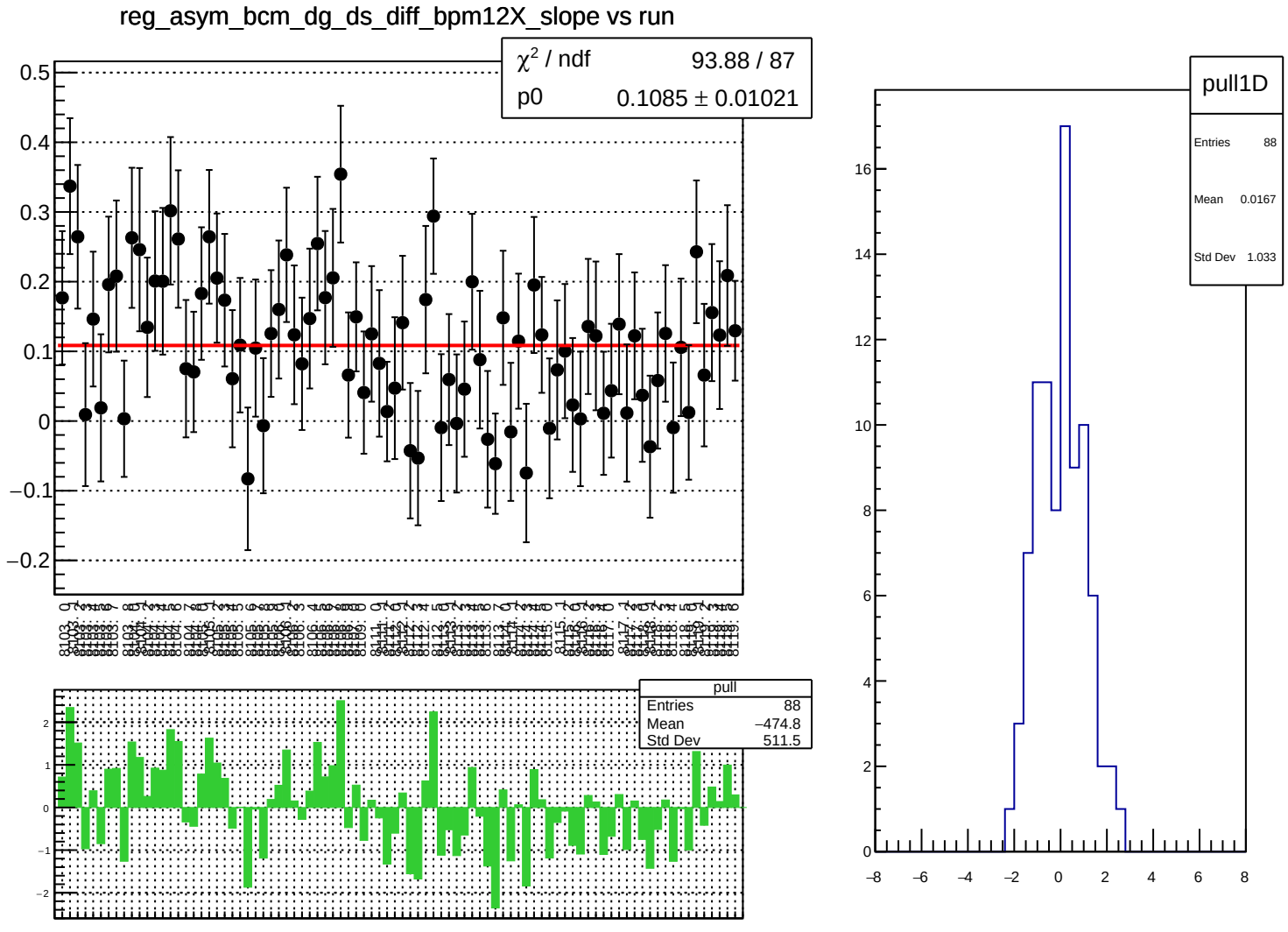

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 103 / 87
p0 0.8132 ± 0.2542
pull
Entries 88
Mean 744.4
Std Dev 696.3

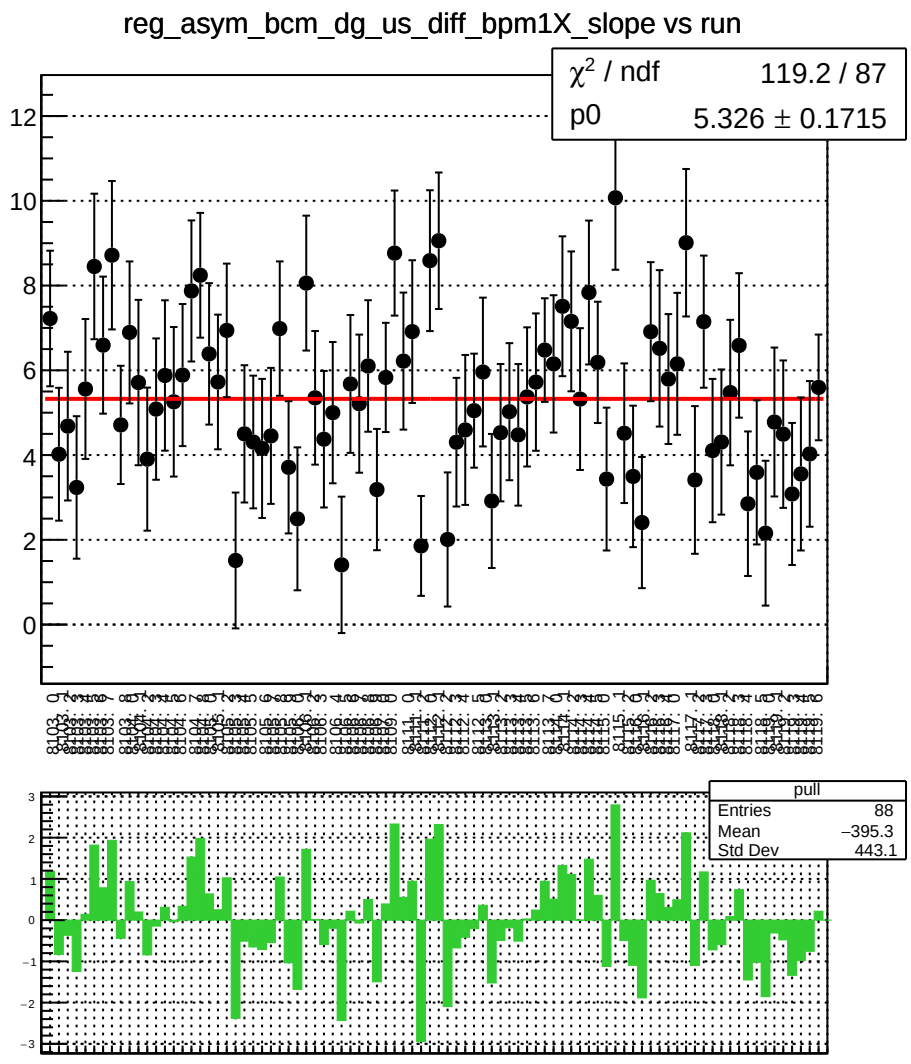

pull1D
Entries 88
Mean 0.009845
Std Dev 1.082

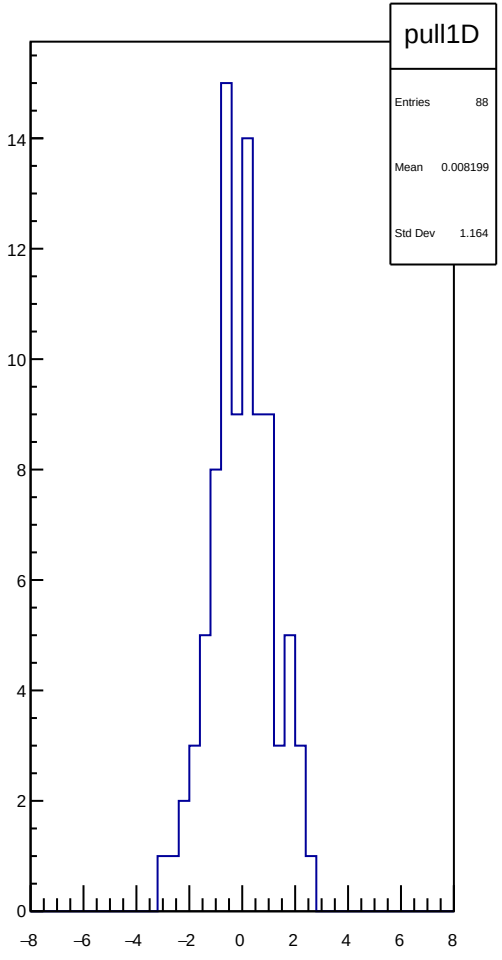

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 115.5 / 87
p0 −4.884 ± 0.1611
pull
Entries 88
Mean −558.6
Std Dev 609.5
pull1D
Entries 88
Mean −0.005643
Std Dev 1.145

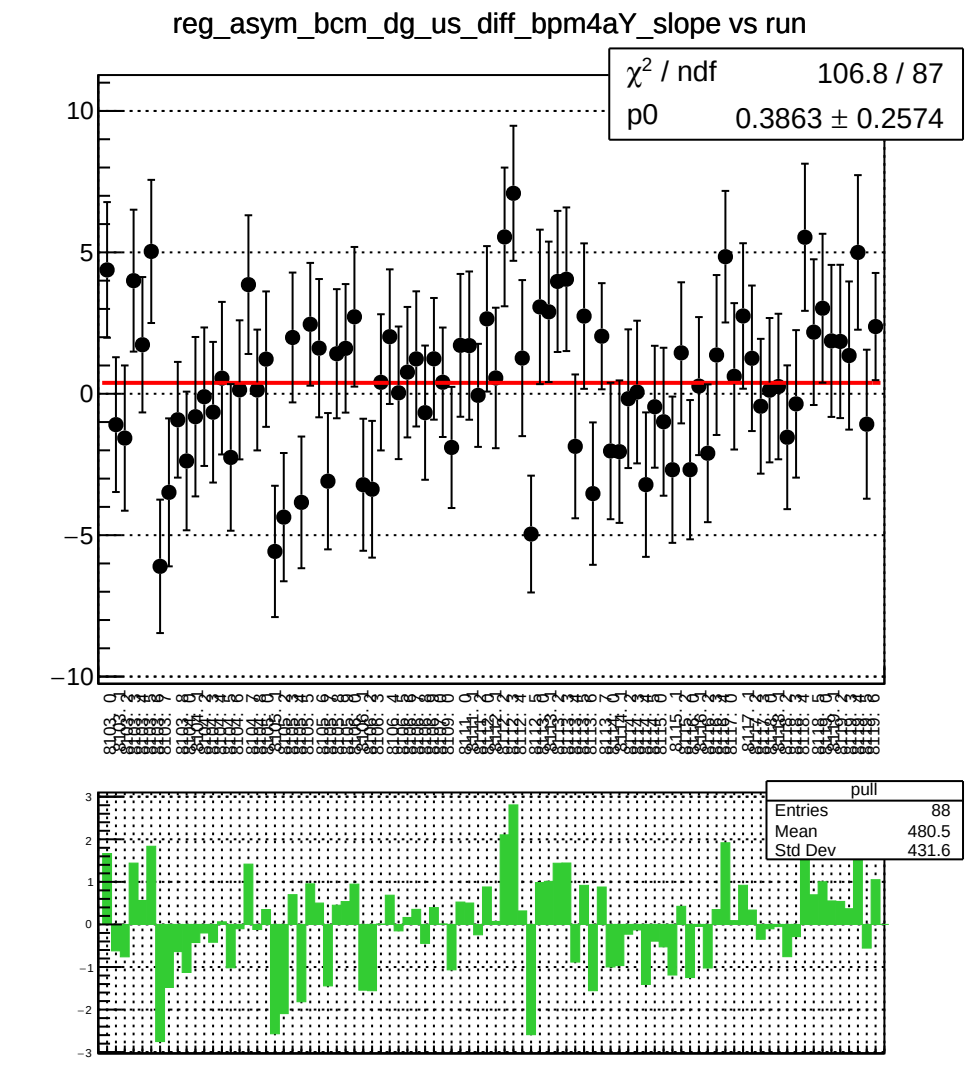

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 107.4 / 87
p0 −1.026 ± 0.2718
pull
Entries 88
Mean 738.5
Std Dev 690.6

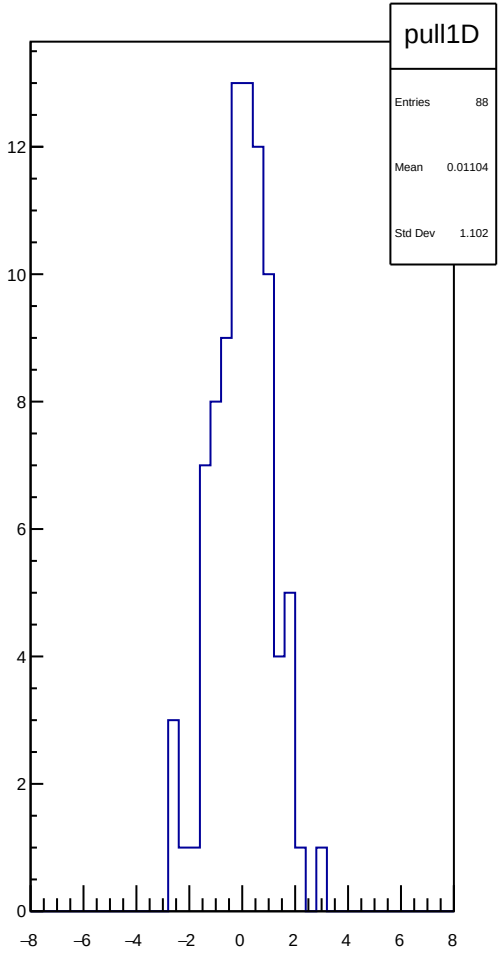

pull1D
Entries 88
Mean −0.01168
Std Dev 1.105

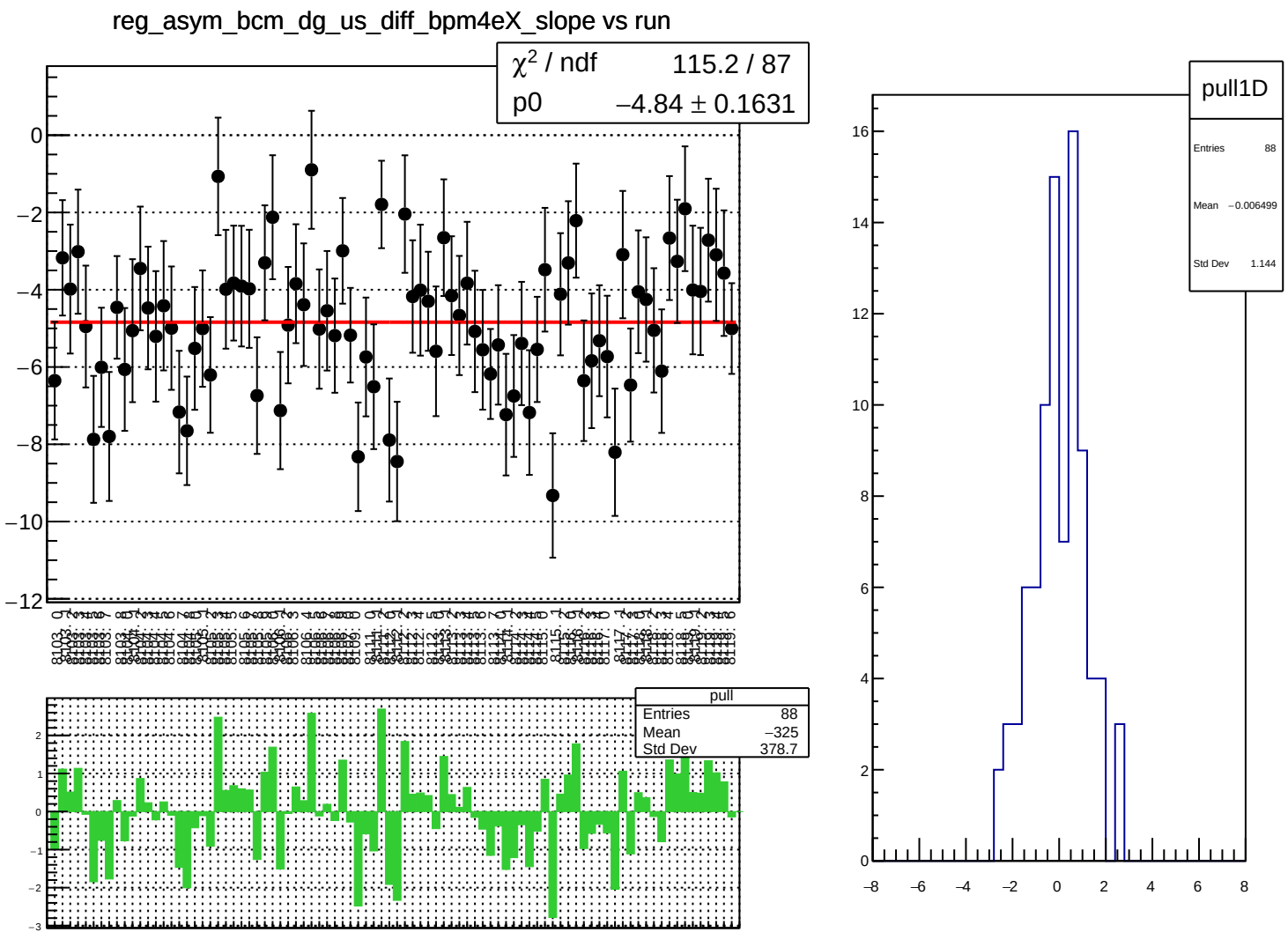

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 93.88 / 87
p0 0.1085 ± 0.01021
pull
Entries 88
Mean −474.8
Std Dev 511.5
pull1D
Entries 88
Mean 0.0167
Std Dev 1.033

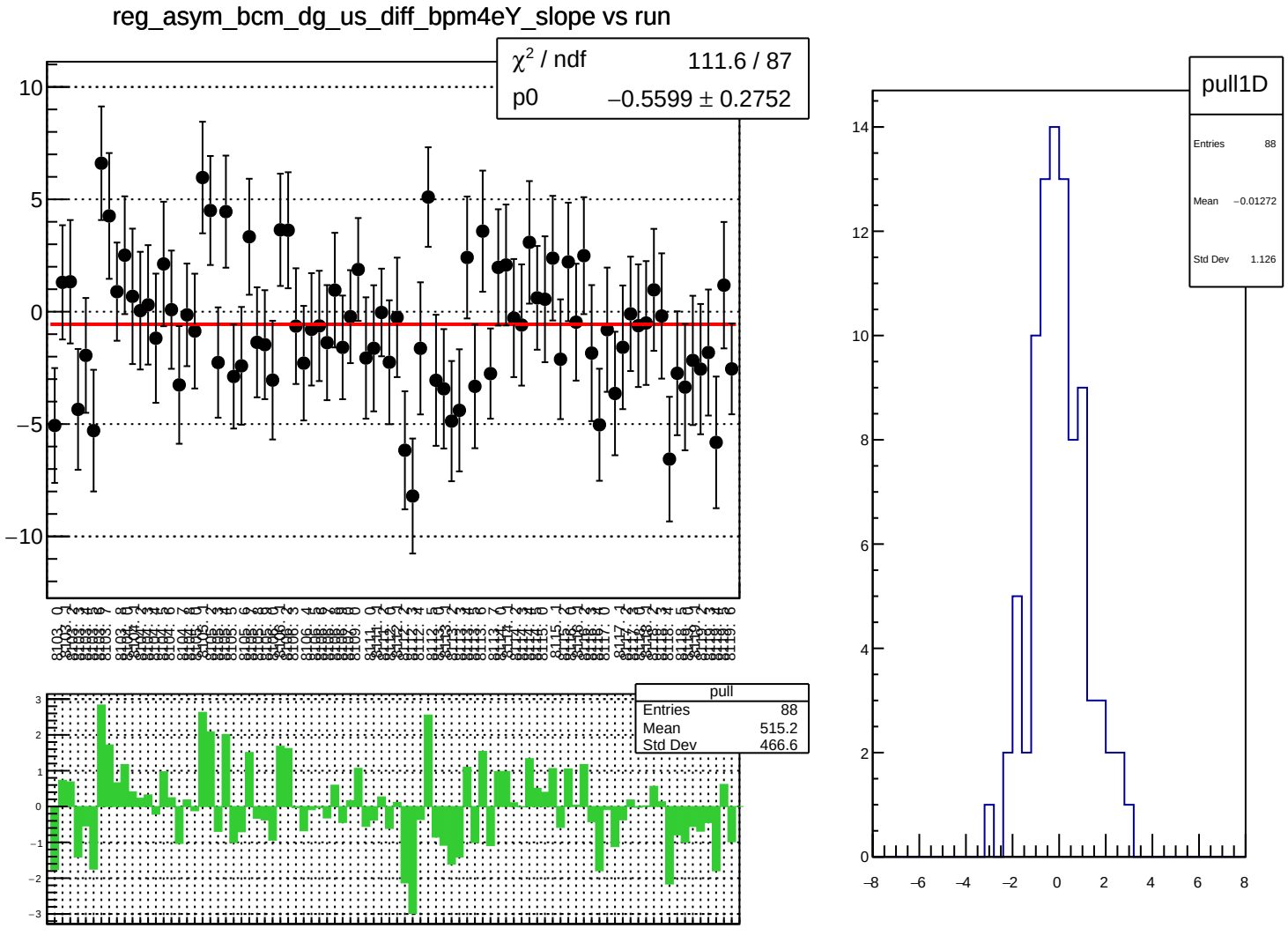

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 119.2 / 87
p0 5.326 ± 0.1715
pull
Entries 88
Mean −395.3
Std Dev 443.1

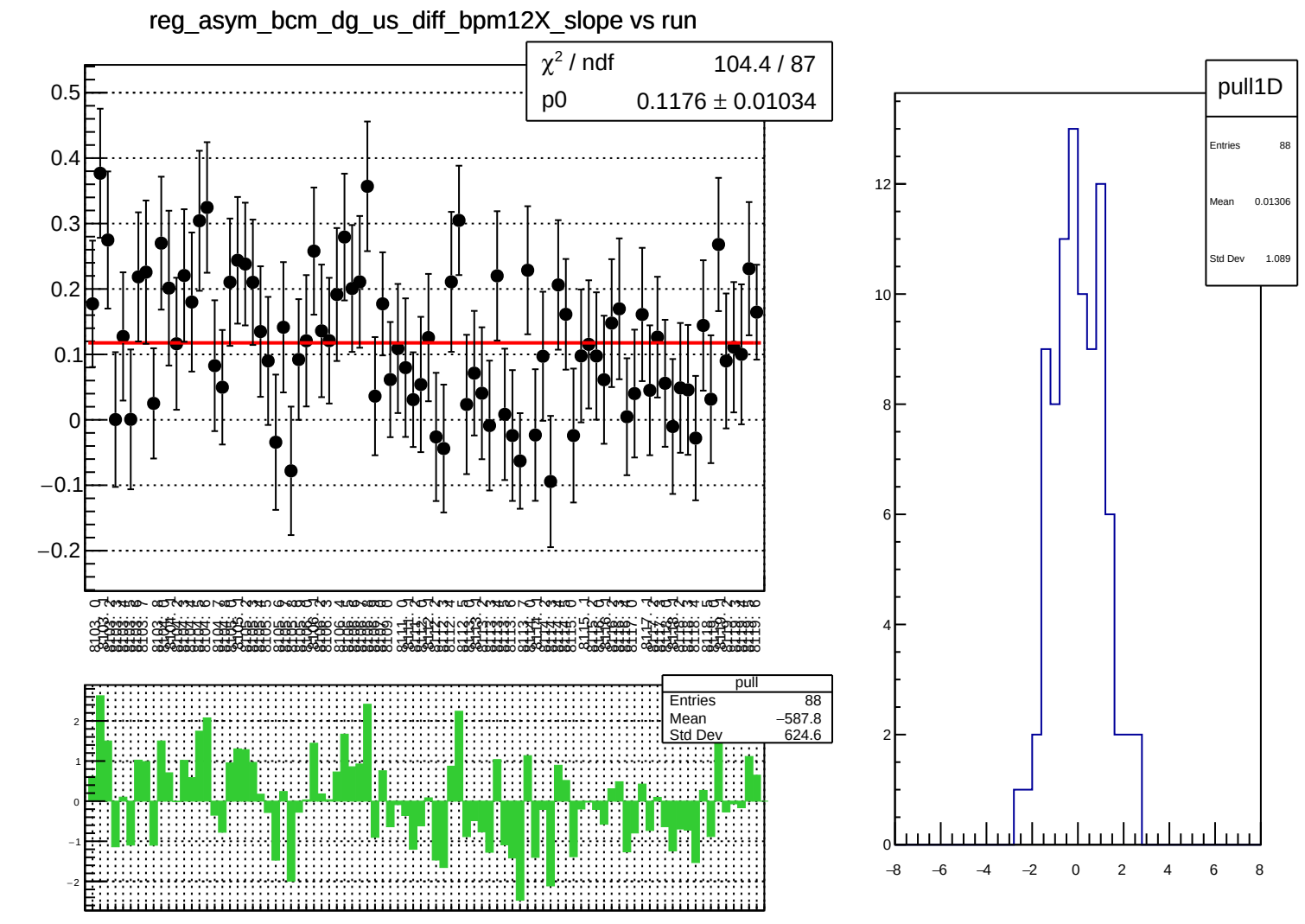

pull1D
Entries 88
Mean 0.008199
Std Dev 1.164

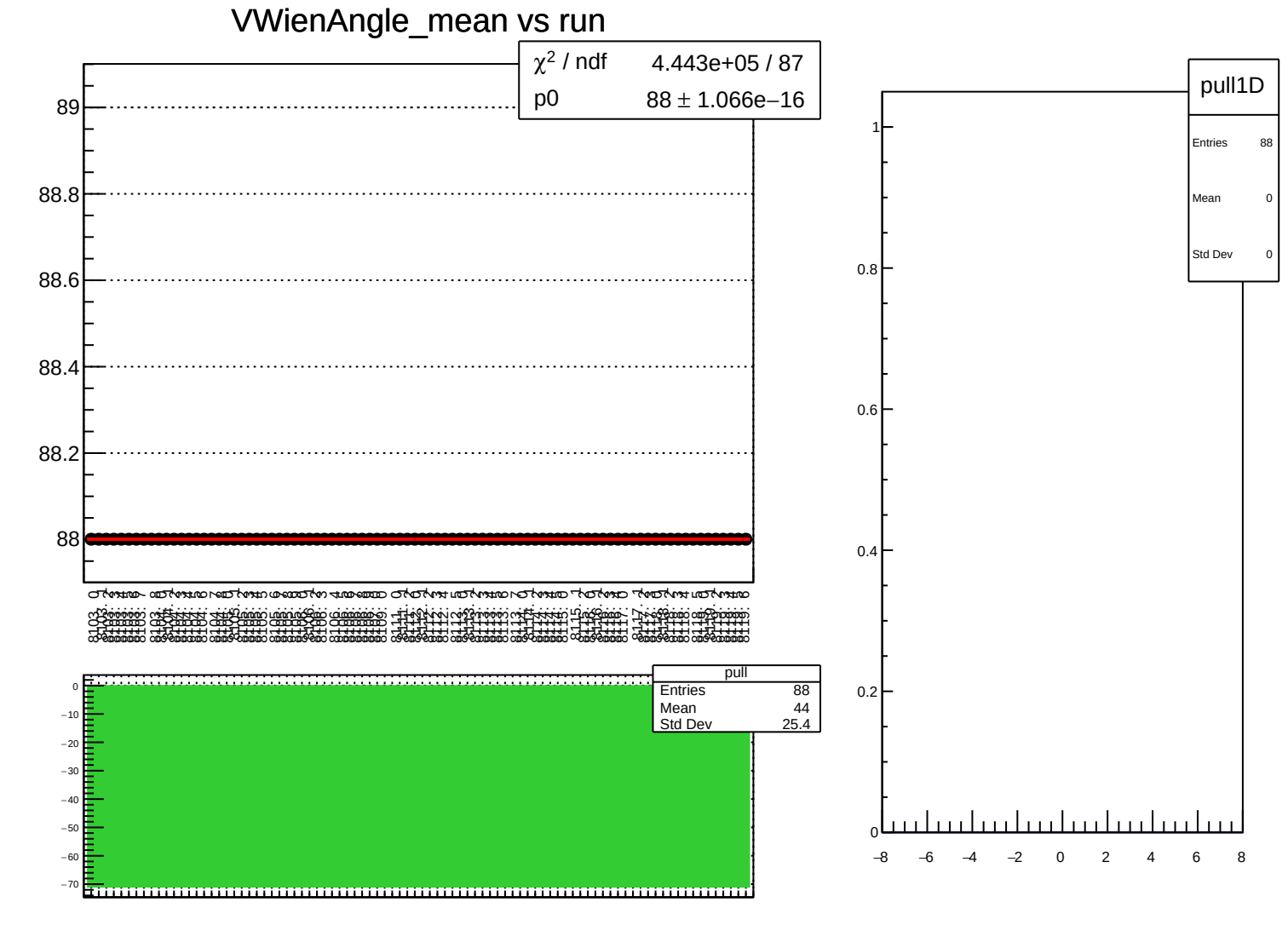

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 106.8 / 87
p0 0.3863 ± 0.2574
pull
Entries 88
Mean 480.5
Std Dev 431.6

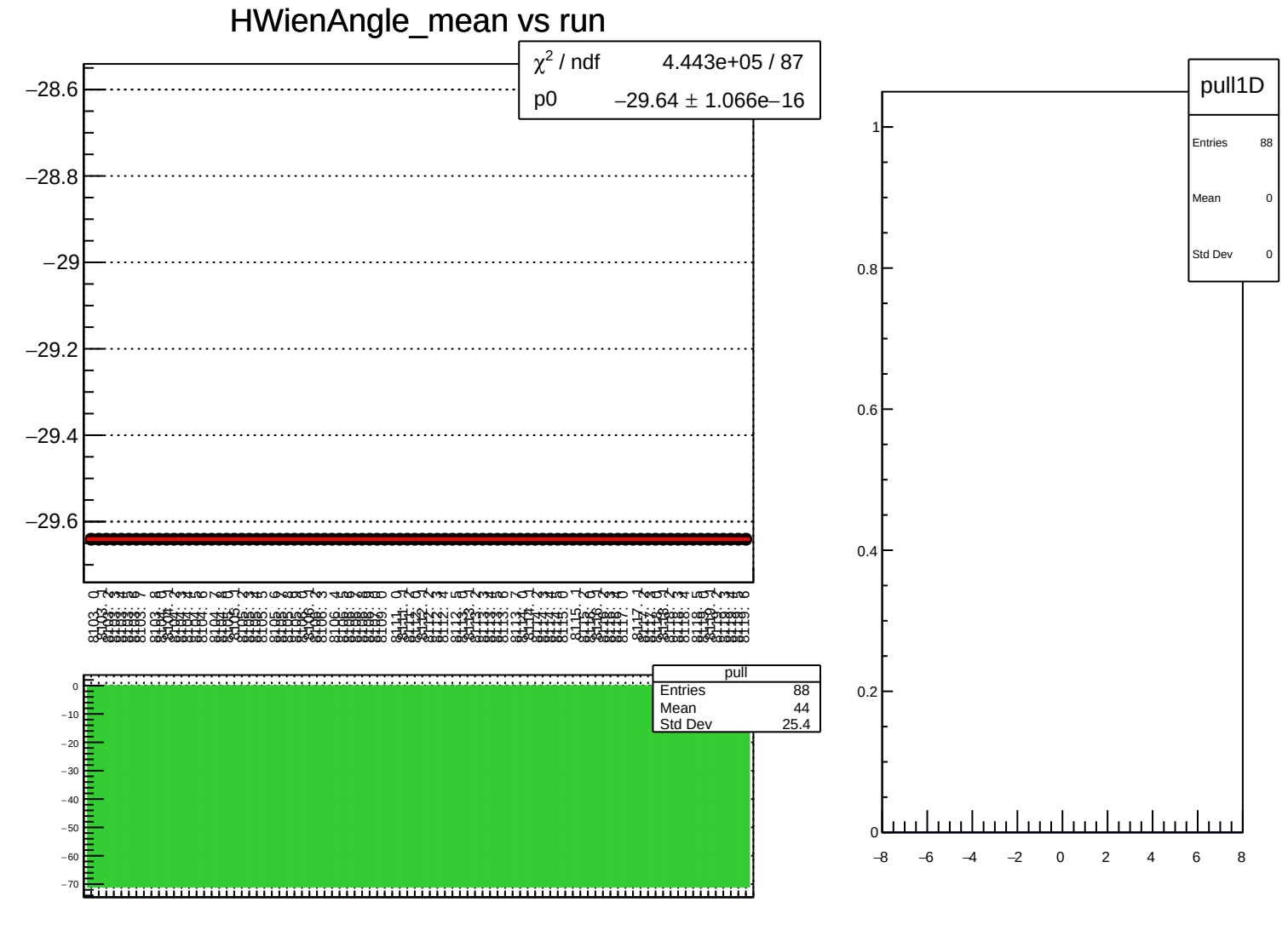

pull1D
Entries 88
Mean 0.01104
Std Dev 1.102

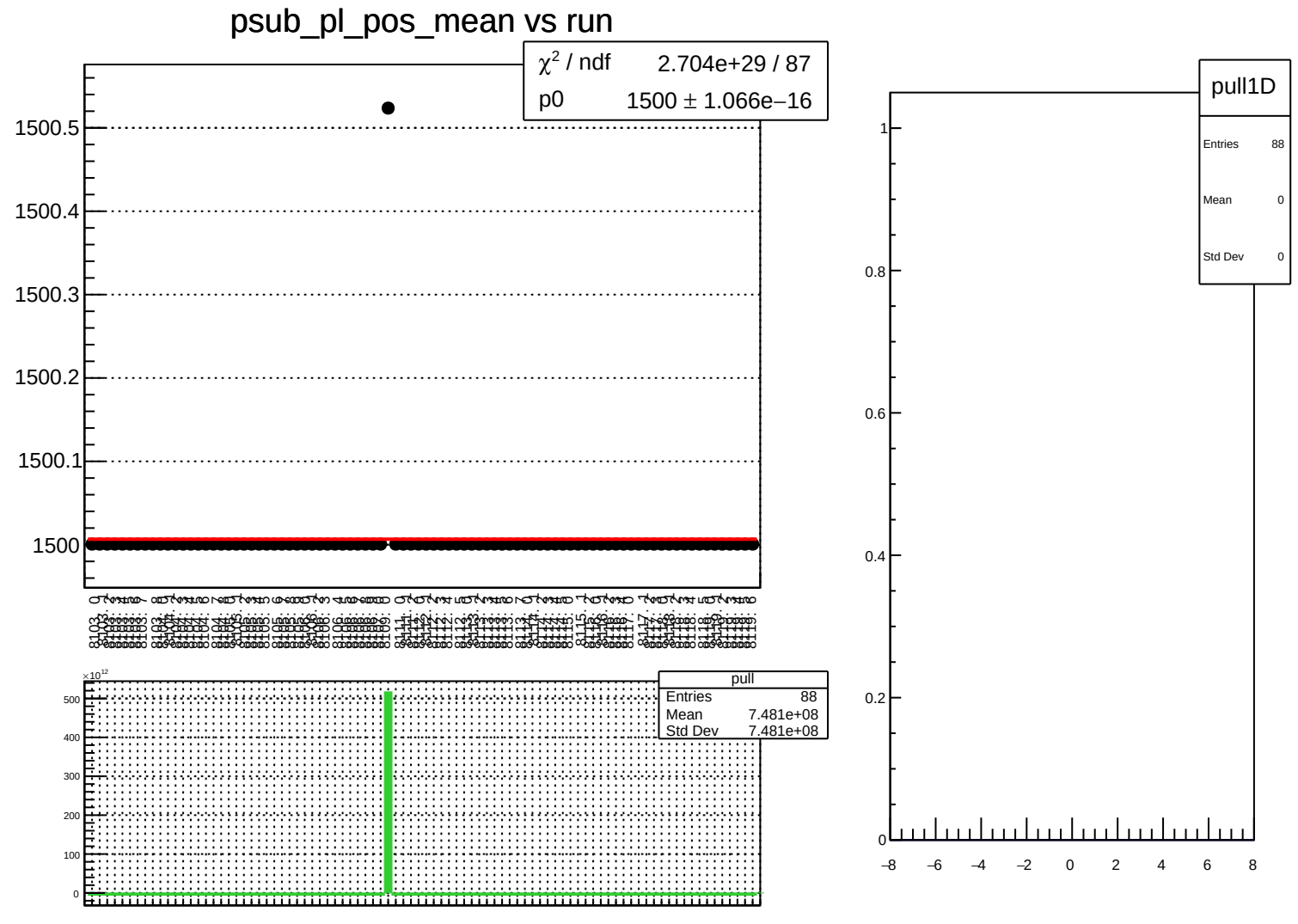

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 115.2 / 87
p0 −4.84 ± 0.1631
pull
Entries 88
Mean −325
Std Dev 378.7
pull1D
Entries 88
Mean −0.006499
Std Dev 1.144

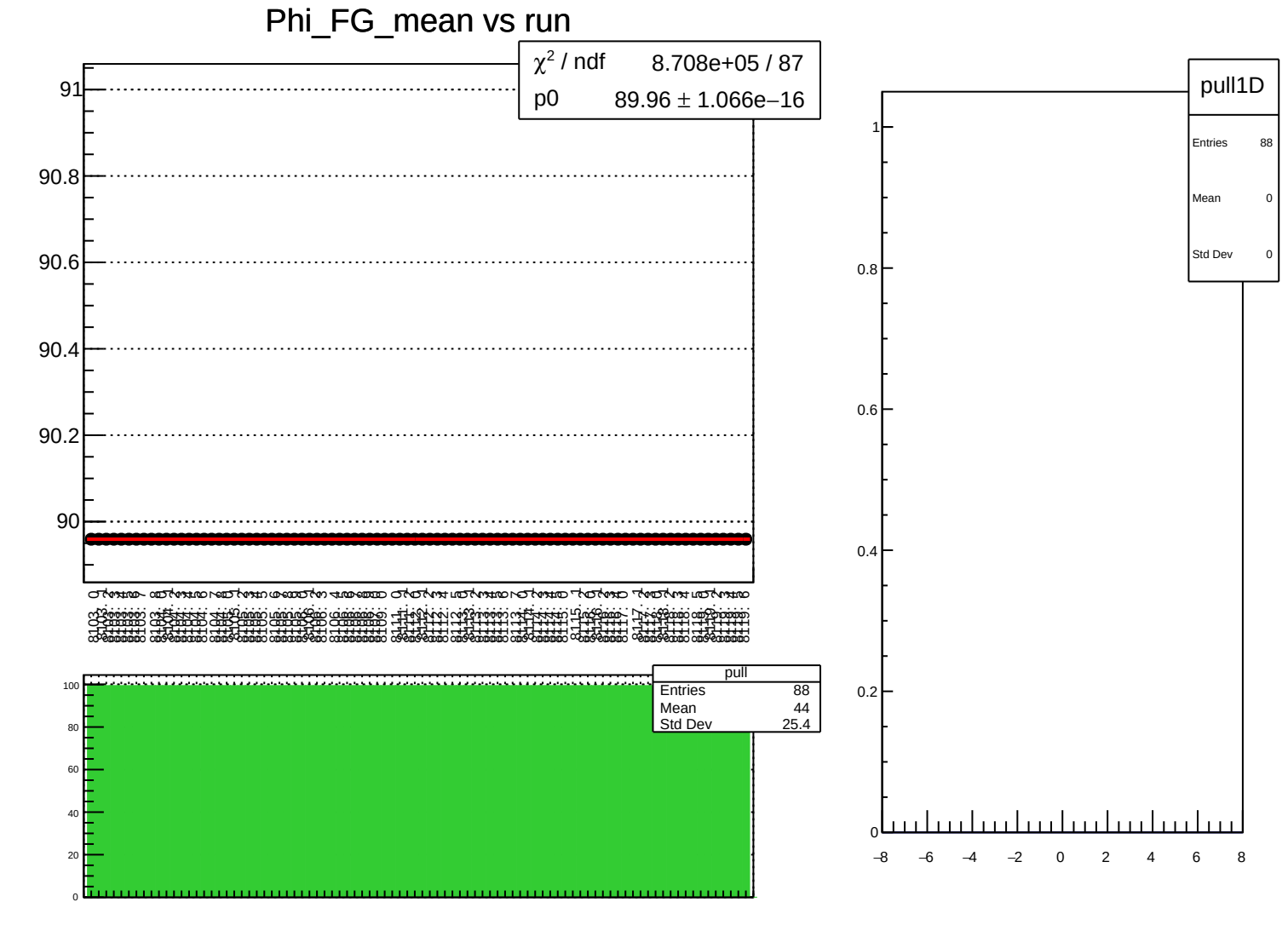

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 111.6 / 87
p0 −0.5599 ± 0.2752
pull
Entries 88
Mean 515.2
Std Dev 466.6
pull1D
Entries 88
Mean −0.01272
Std Dev 1.126

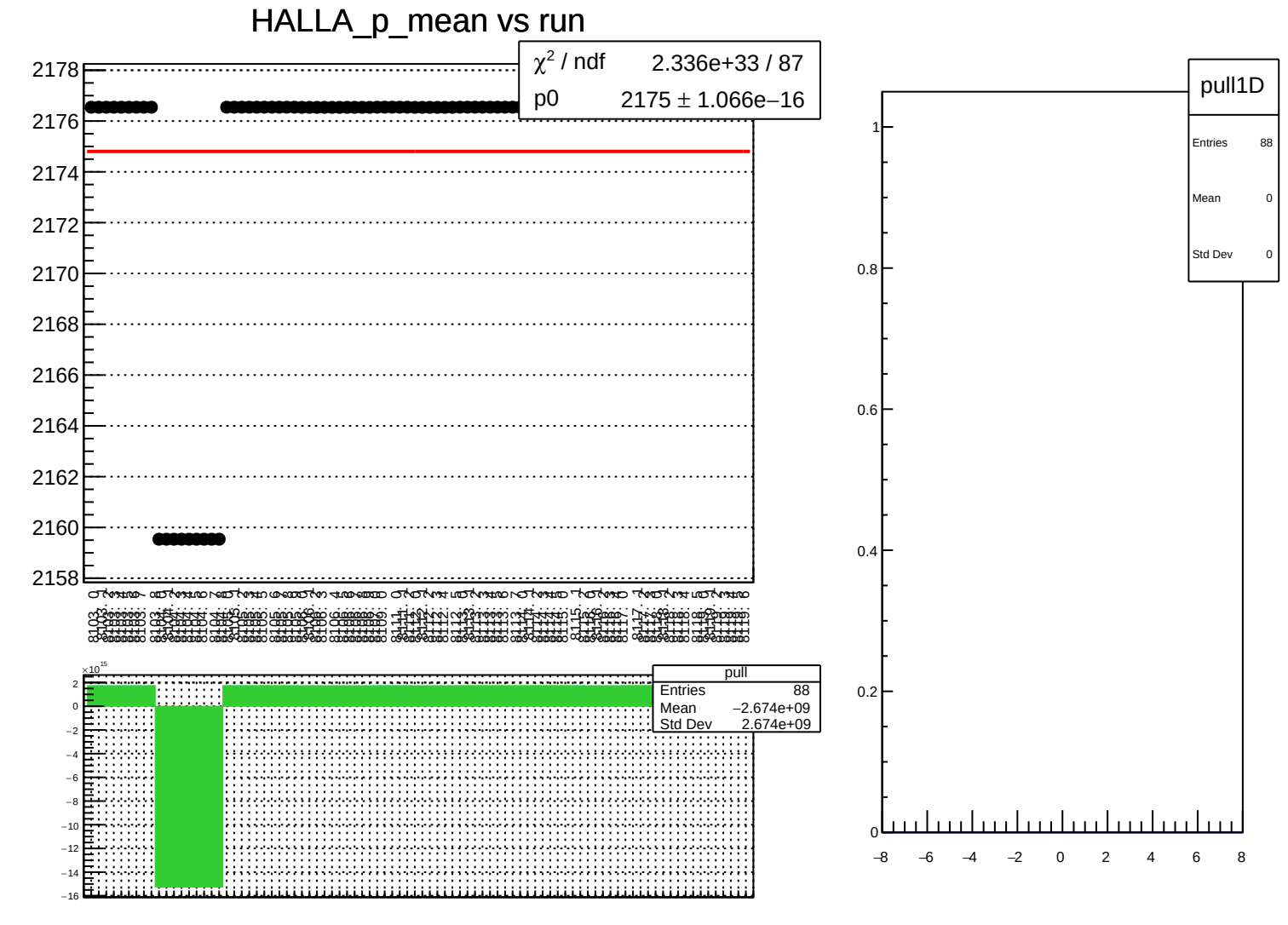

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 104.4 / 87
p0 0.1176 ± 0.01034
pull
Entries 88
Mean −587.8
Std Dev 624.6
pull1D
Entries 88
Mean 0.01306
Std Dev 1.089

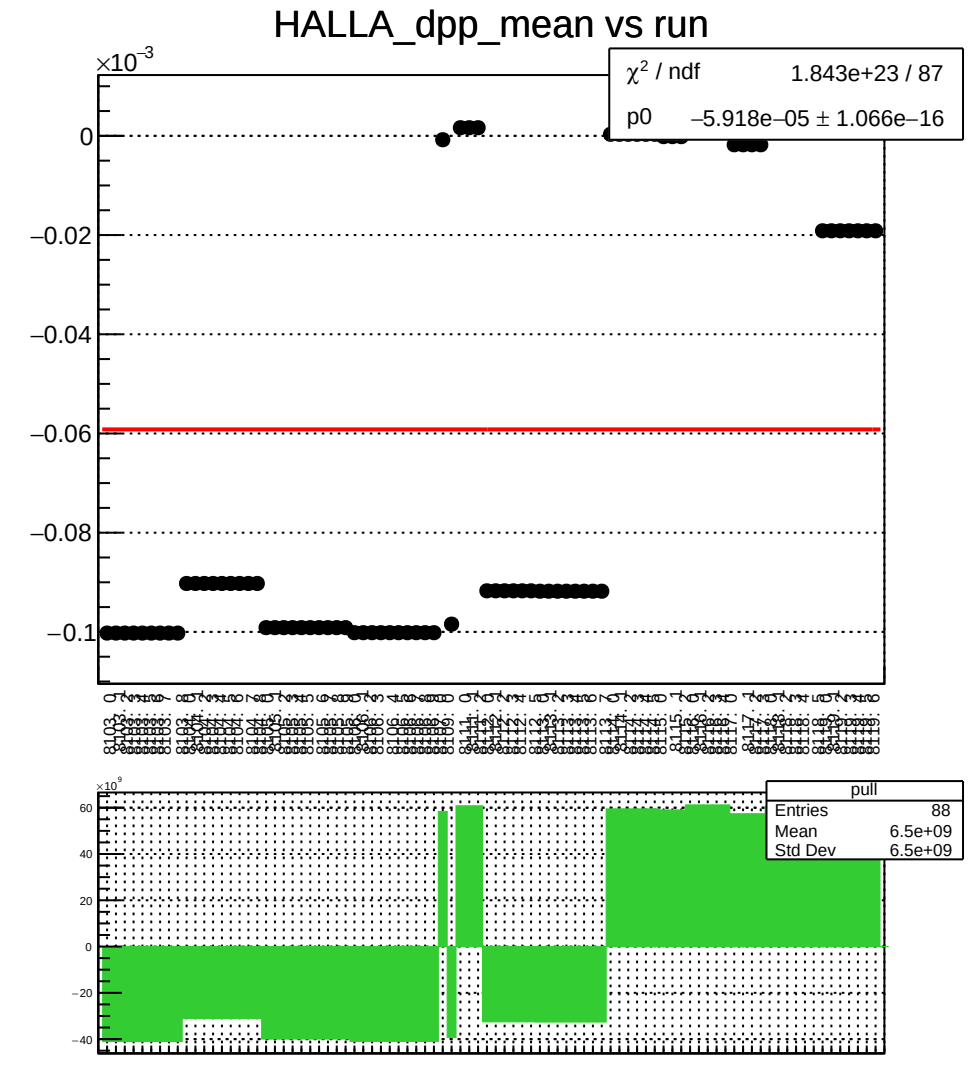

VWienAngle_mean vs run
χ² / ndf 4.443e+05 / 87
p0 88 ± 1.066e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 88
Mean 44
Std Dev 25.4
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

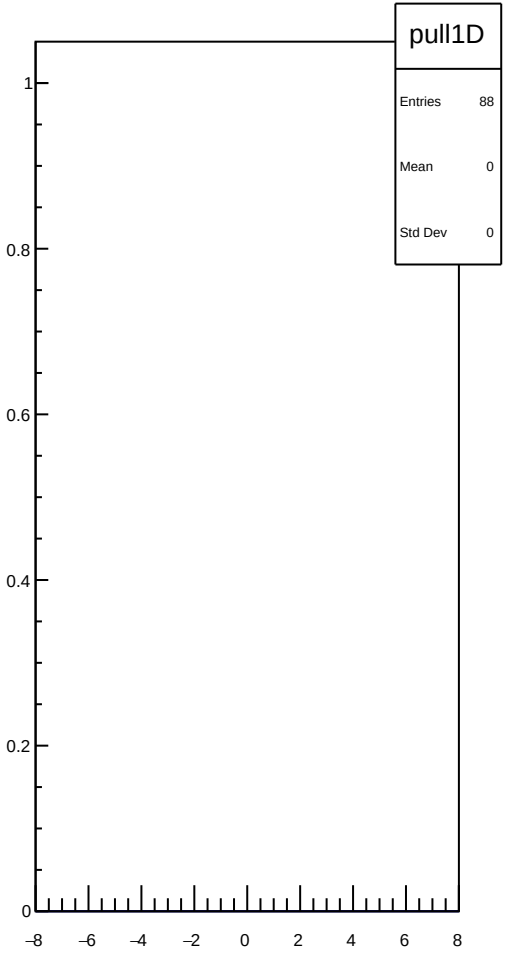

HWienAngle_mean vs run
χ² / ndf 4.443e+05 / 87
p0 −29.64 ± 1.066e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 88
Mean 44
Std Dev 25.4
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

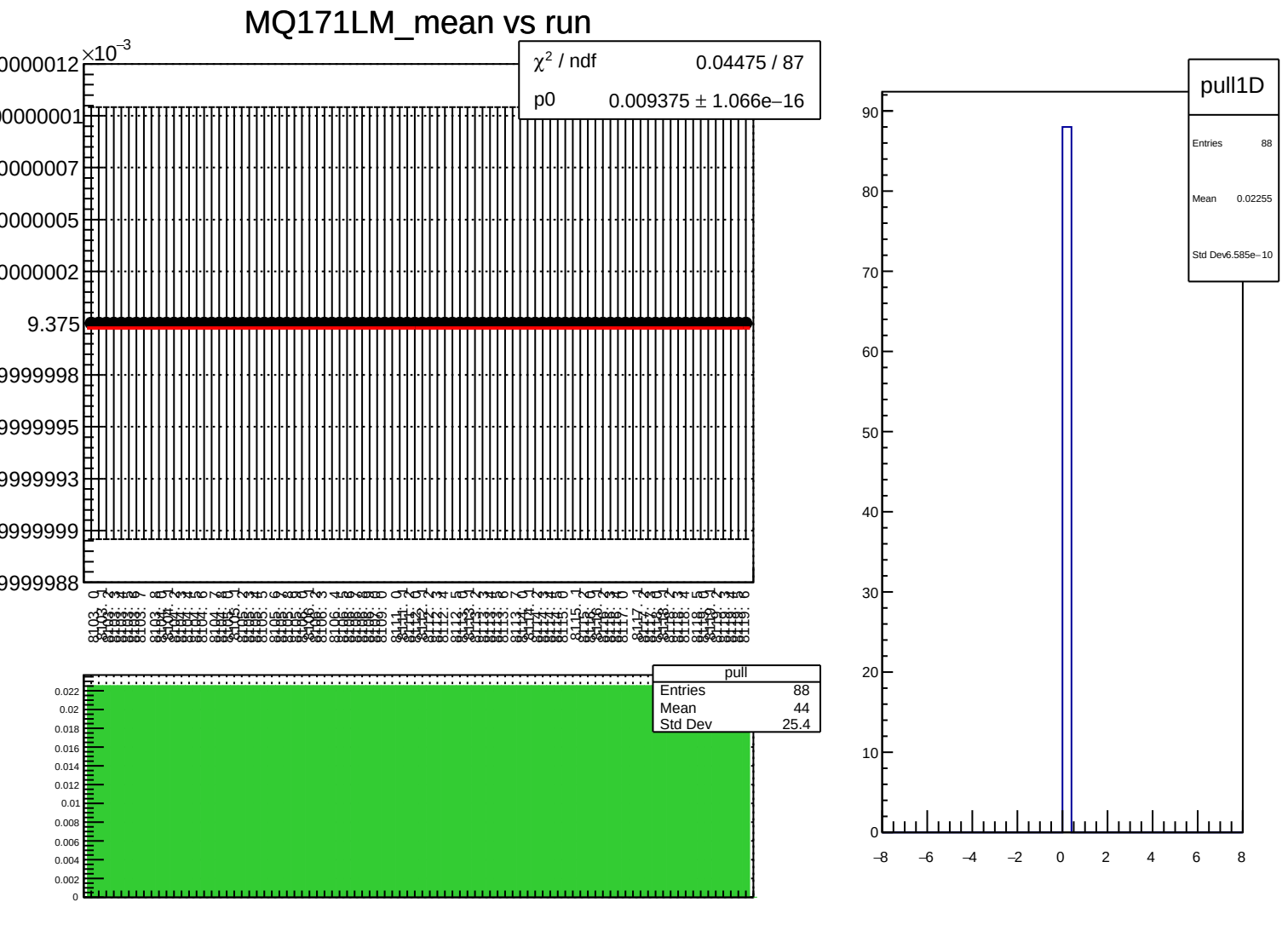

psub_pl_pos_mean vs run
χ² / ndf 2.704e+29 / 87
p0 1500 ± 1.066e−16
1500.5
1500.4
1500.3
1500.2
1500.1
1500
pull
Entries 88
Mean 7.481e+08
Std Dev 7.481e+08
×10¹²
500
400
300
200
100
0
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

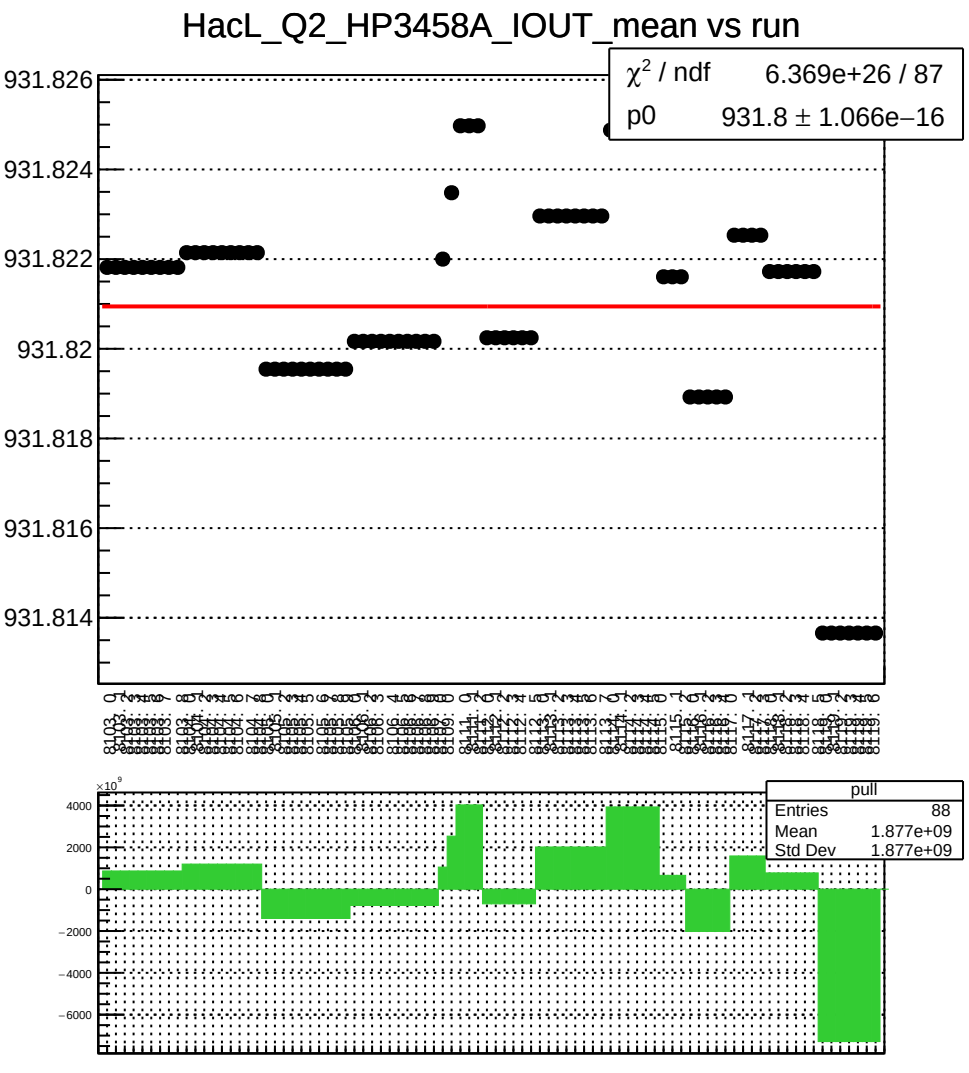

Phi_FG_mean vs run
χ² / ndf 8.708e+05 / 87
p0 89.96 ± 1.066e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 88
Mean 44
Std Dev 25.4
100
80
60
40
20
0
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

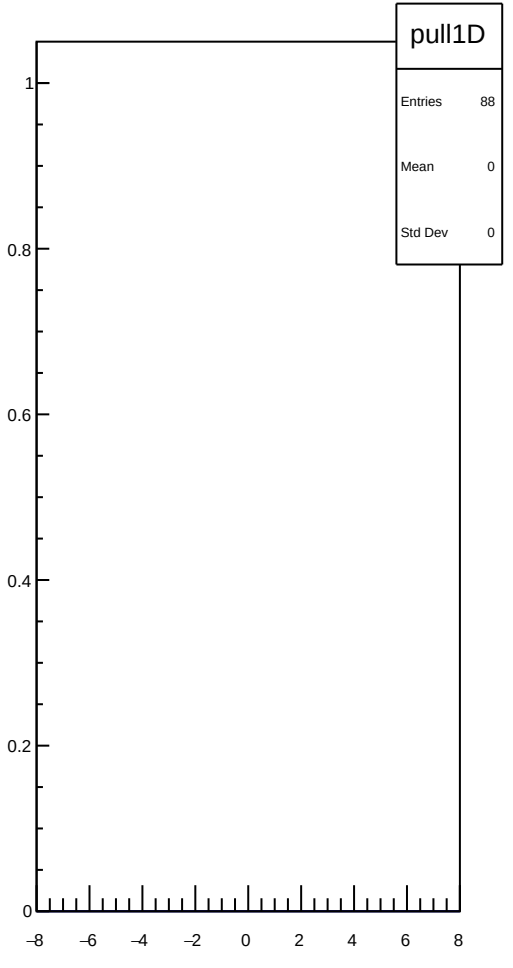

HALLA_p_mean vs run
χ² / ndf 2.336e+33 / 87
p0 2175 ± 1.066e−16
2178
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 88
Mean −2.674e+09
Std Dev 2.674e+09
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14
−16
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

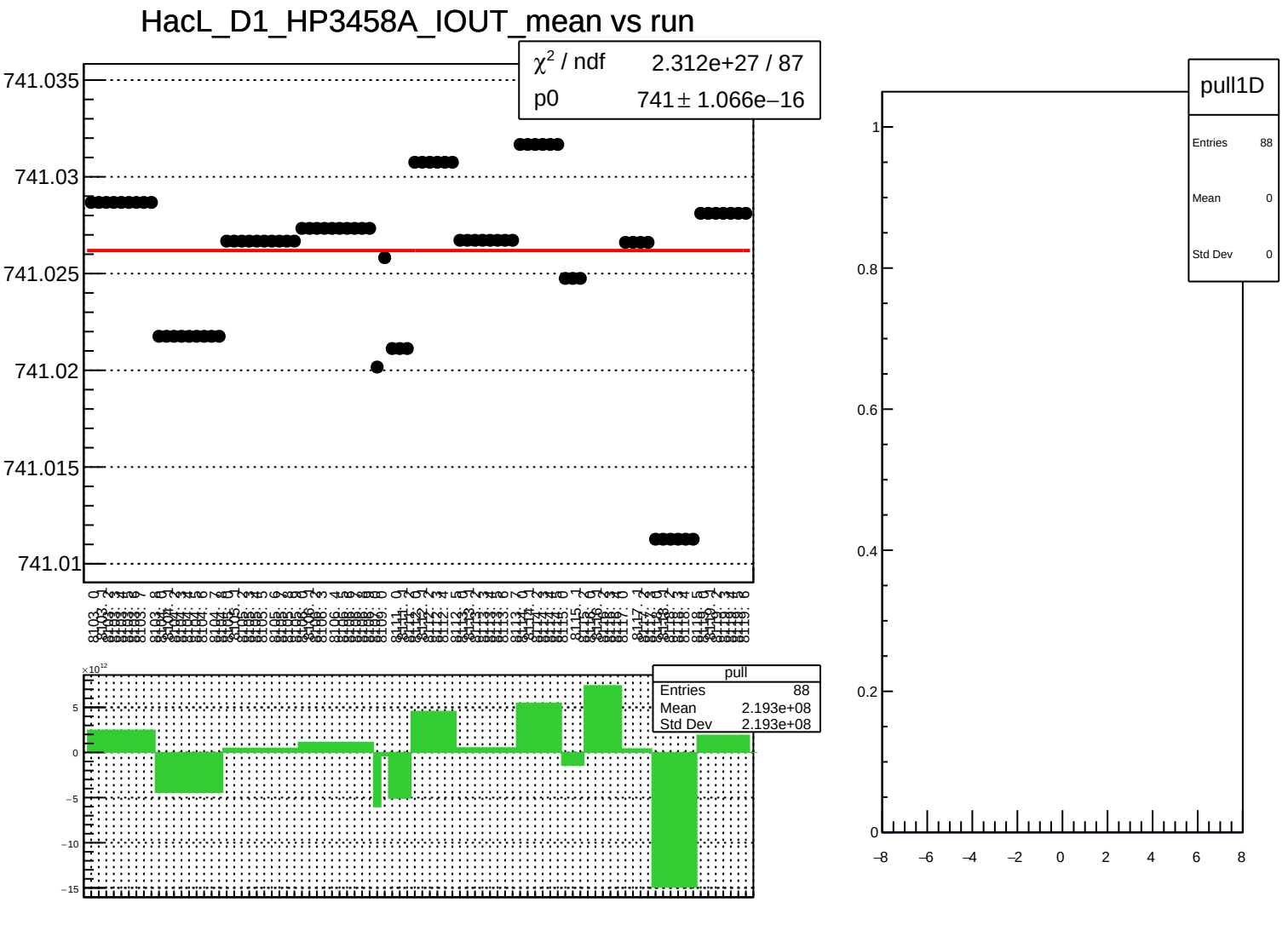

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 1.843e+23 / 87
p0 −5.918e−05 ± 1.066e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
×10⁹
60
40
20
0
−20
−40
pull
Entries 88
Mean 6.5e+09
Std Dev 6.5e+09

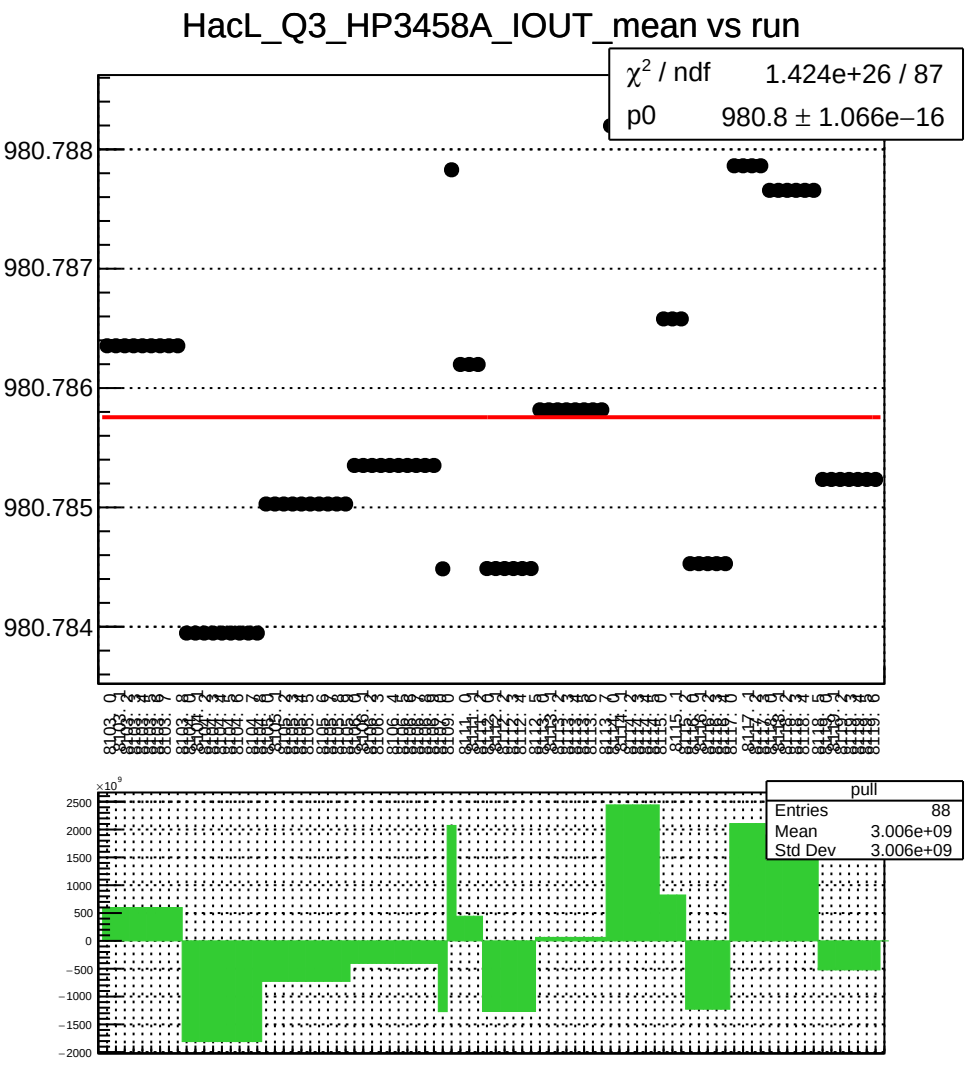

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

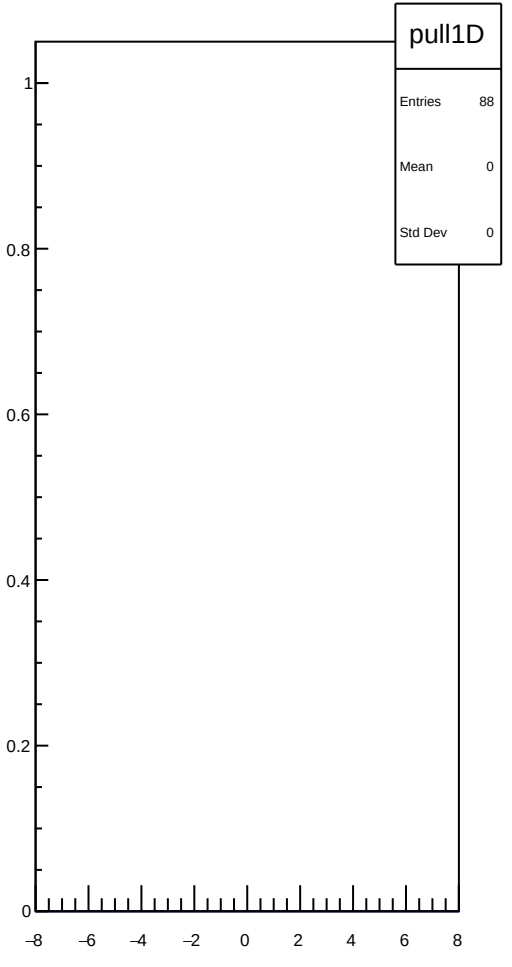

MQ171LM_mean vs run
×10⁻³
χ² / ndf 0.04475 / 87
p0 0.009375 ± 1.066e−16
9.375
pull
Entries 88
Mean 44
Std Dev 25.4
pull1D
Entries 88
Mean 0.02255
Std Dev 6.585e−10

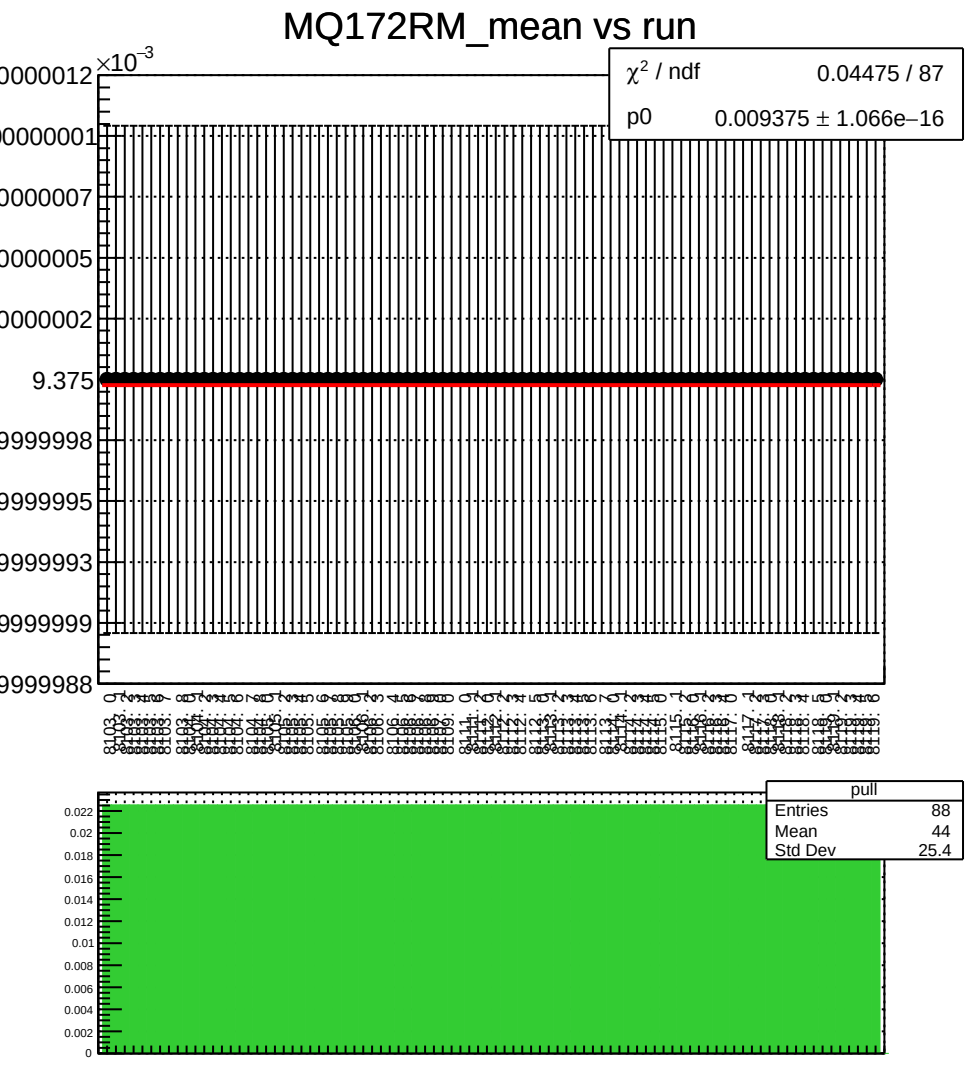

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 6.369e+26 / 87
p0 931.8 ± 1.066e−16
931.826
931.824
931.822
931.82
931.818
931.816
931.814
×10⁹
4000
2000
0
−2000
−4000
−6000
pull
Entries 88
Mean 1.877e+09
Std Dev 1.877e+09

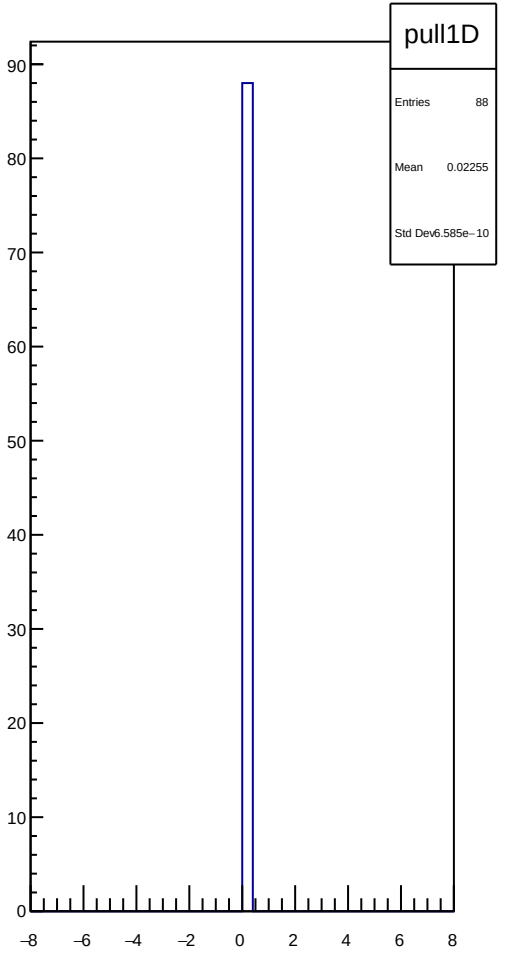

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

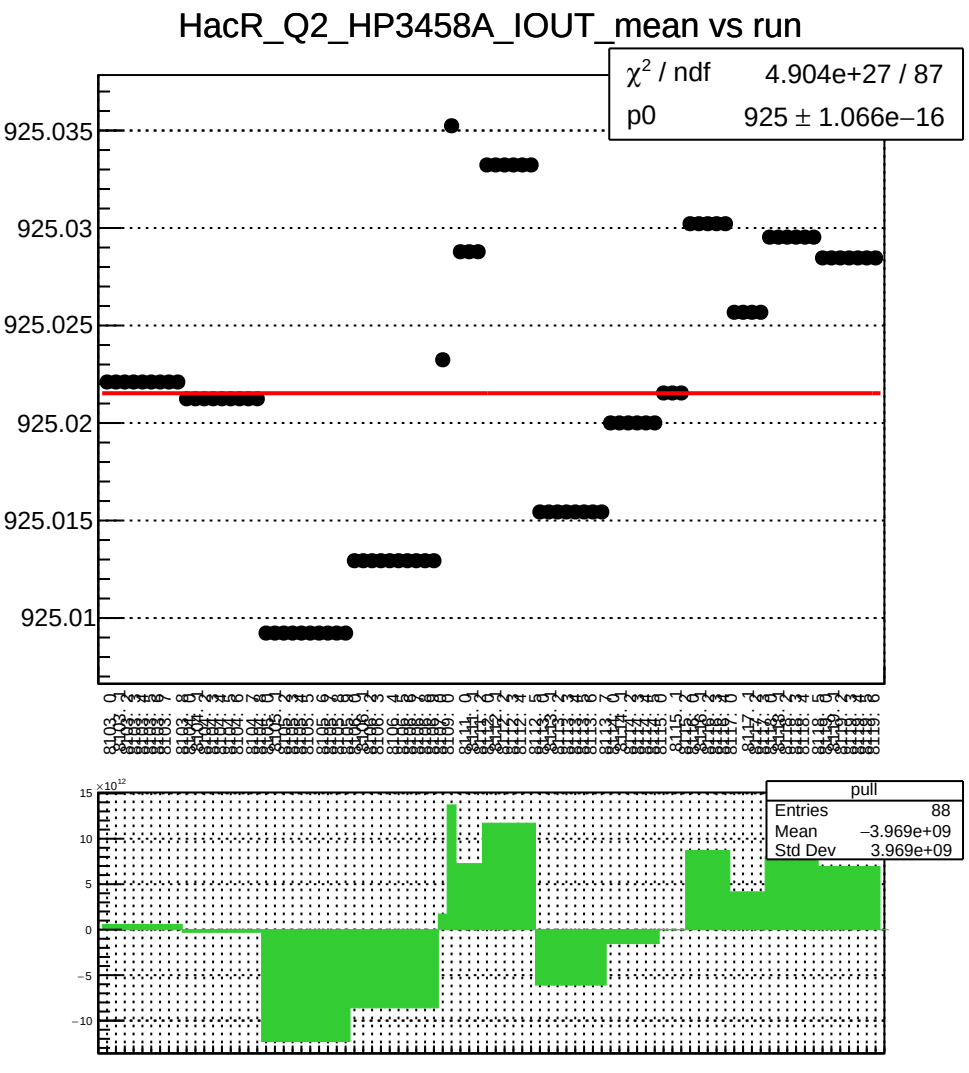

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 2.312e+27 / 87
p0 741 ± 1.066e−16
741.035
741.03
741.025
741.02
741.015
741.01
pull
Entries 88
Mean 2.193e+08
Std Dev 2.193e+08
pull1D
Entries 88
Mean 0
Std Dev 0

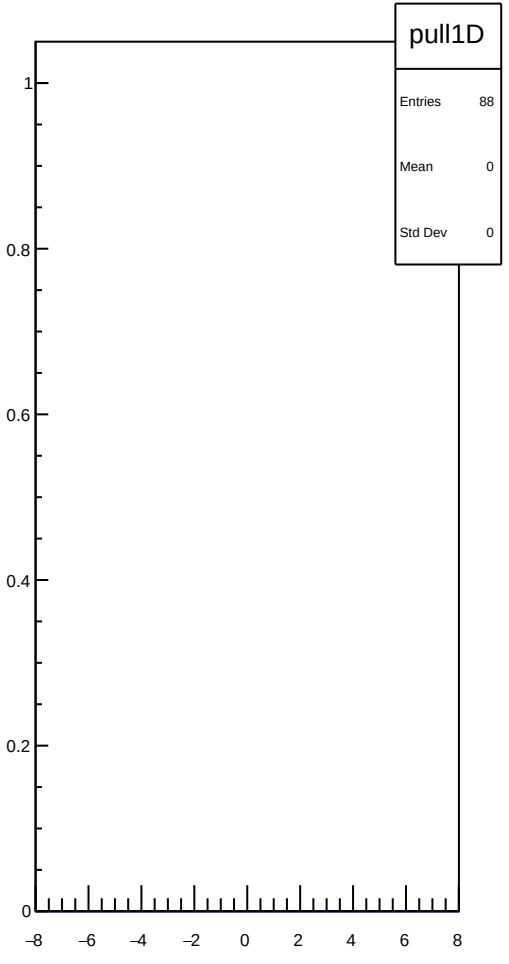

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.424e+26 / 87
p0 980.8 ± 1.066e−16
980.788
980.787
980.786
980.785
980.784
pull
Entries 88
Mean 3.006e+09
Std Dev 3.006e+09
×10⁹
2500
2000
1500
1000
500
0
−500
−1000
−1500
−2000

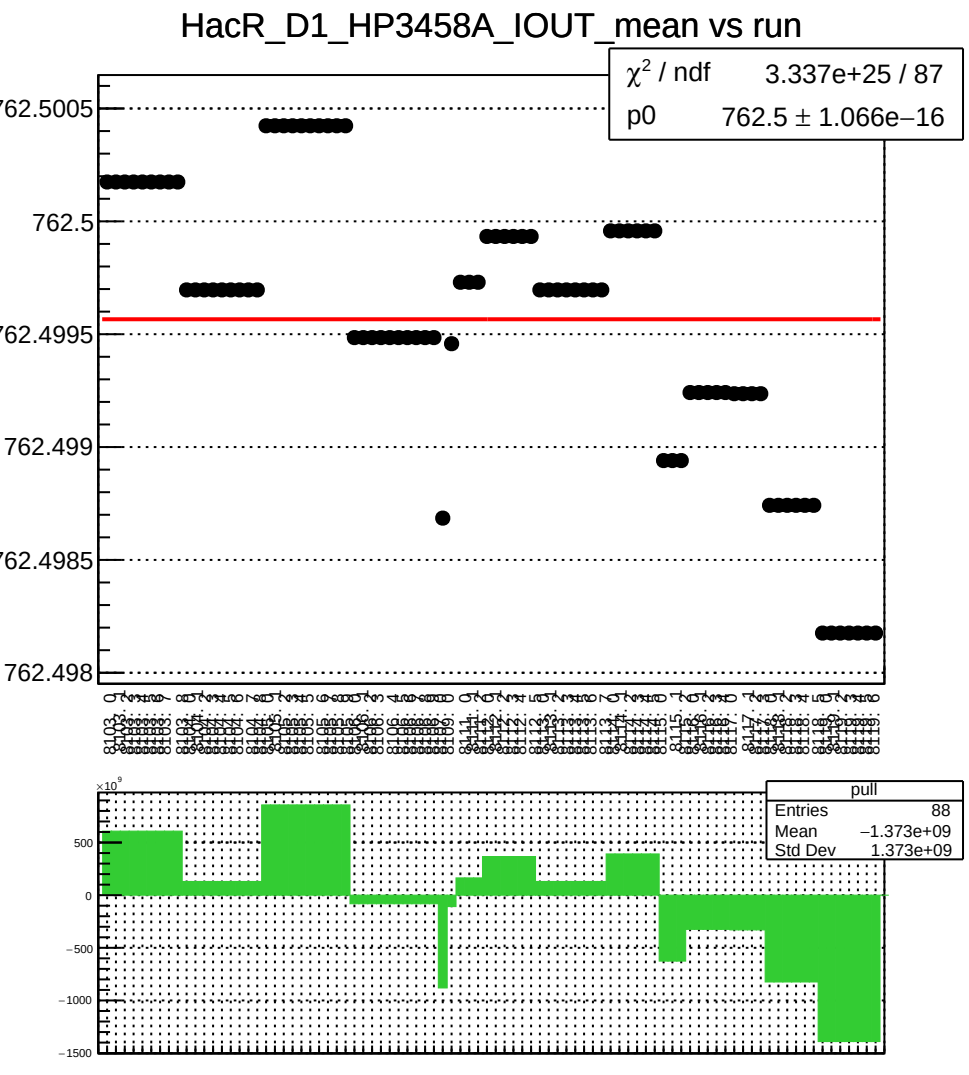

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

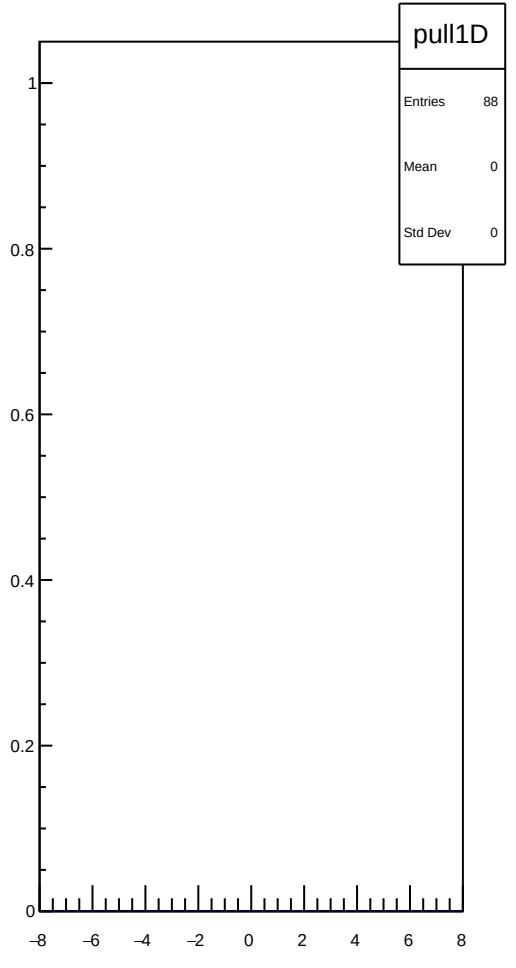

MQ172RM_mean vs run
χ² / ndf 0.04475 / 87
p0 0.009375 ± 1.066e−16
×10⁻³
9.375
pull
Entries 88
Mean 44
Std Dev 25.4

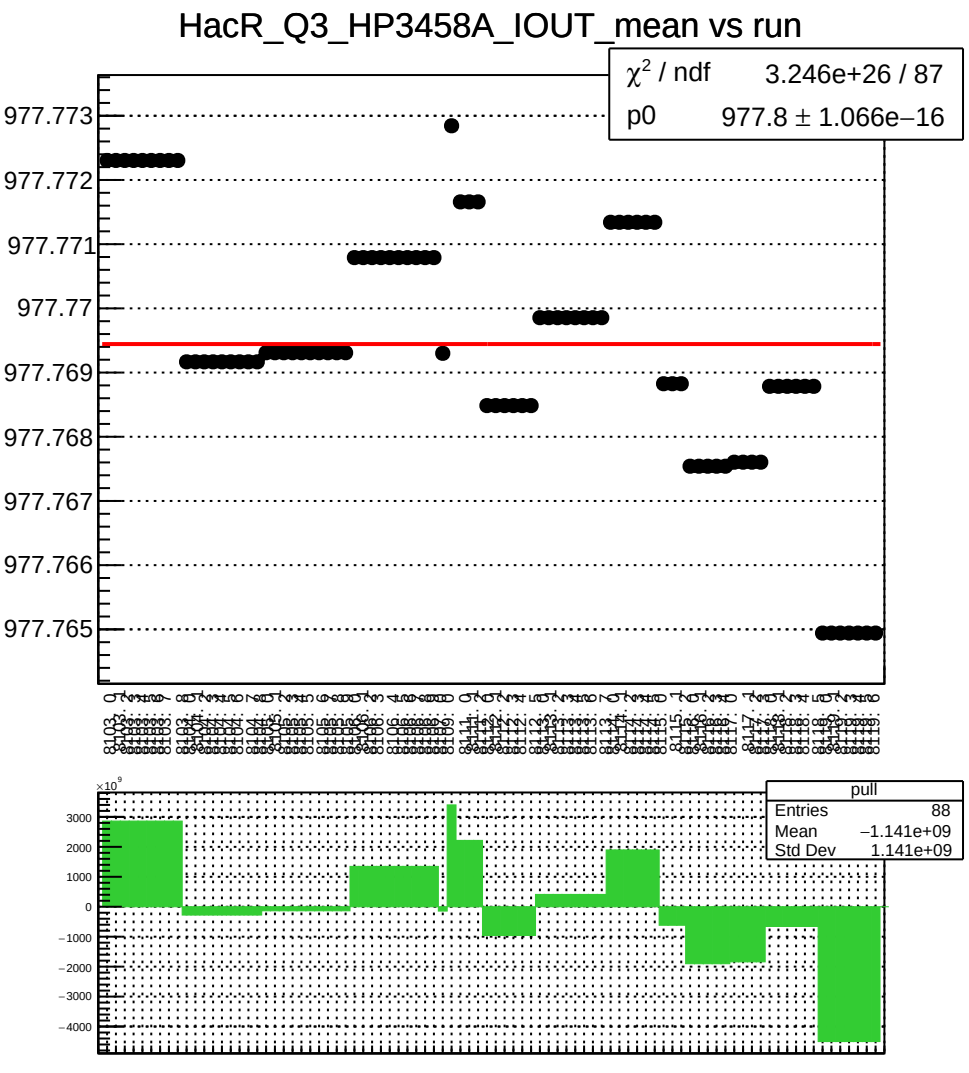

pull1D
Entries 88
Mean 0.02255
Std Dev 6.585e−10

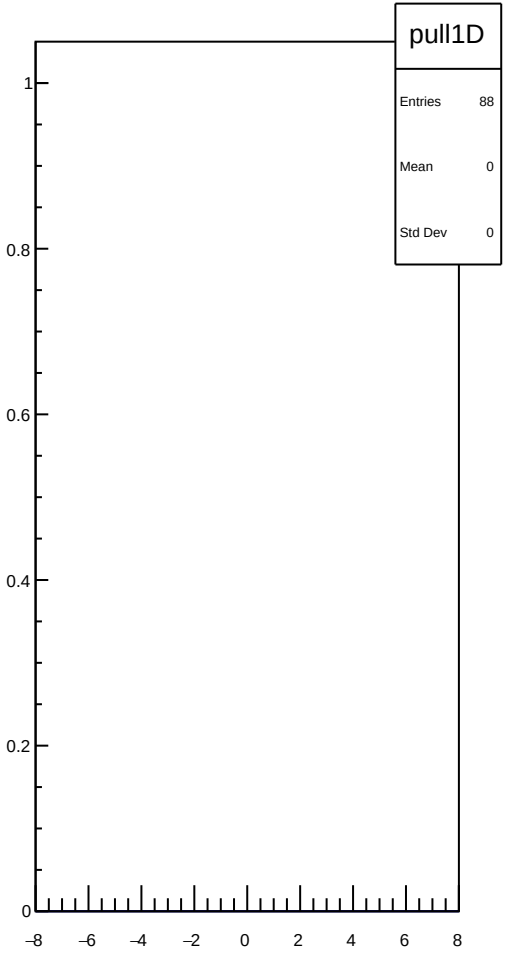

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 4.904e+27 / 87
p0 925 ± 1.066e−16
925.035
925.03
925.025
925.02
925.015
925.01
pull
Entries 88
Mean −3.969e+09
Std Dev 3.969e+09
×10¹²
15
10
5
0
−5
−10

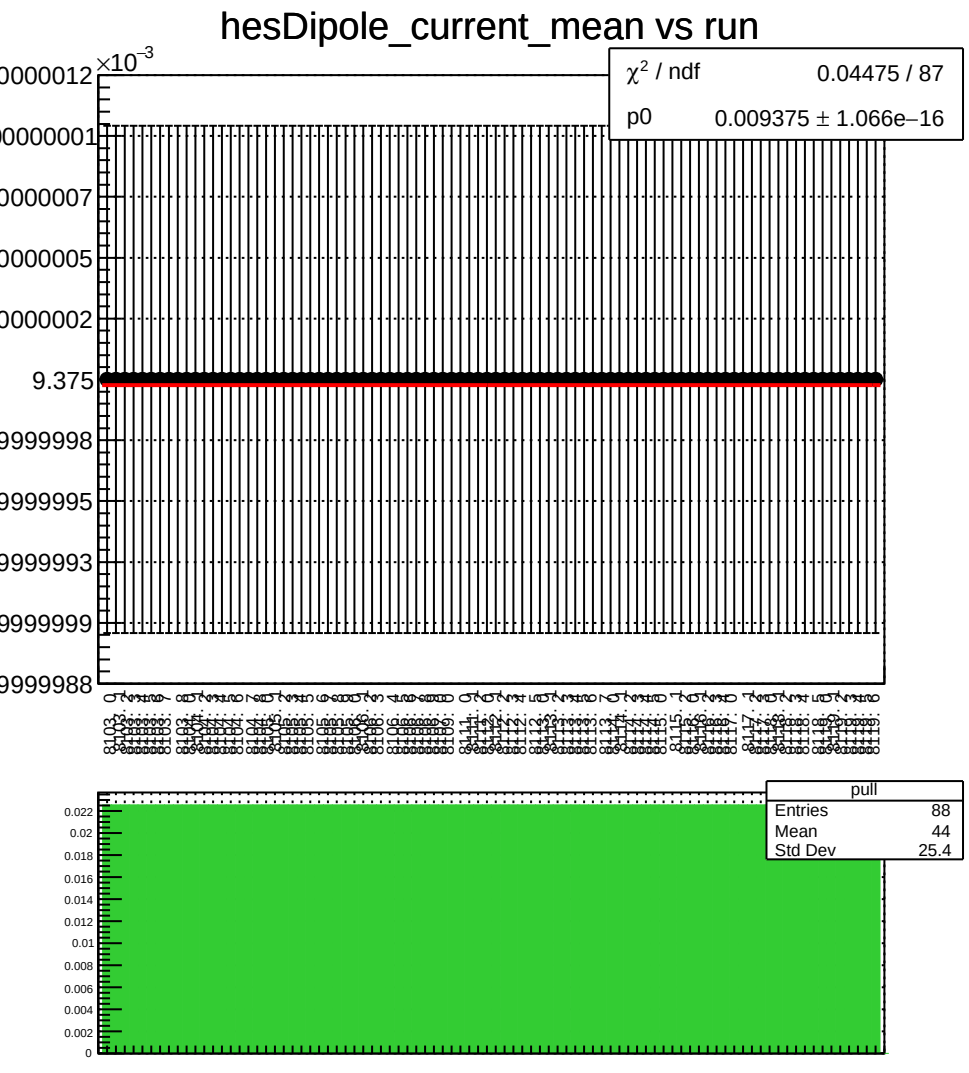

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

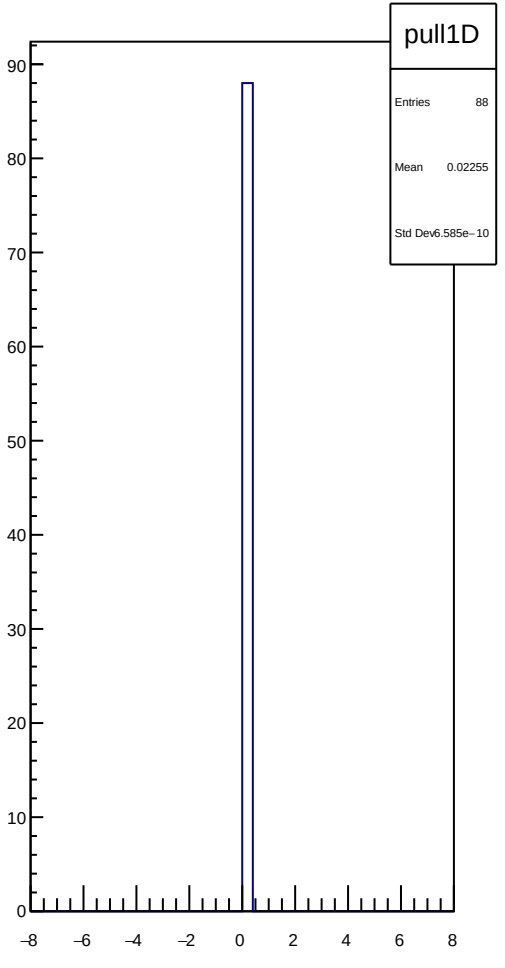

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 3.337e+25 / 87
p0 762.5 ± 1.066e−16
762.5005
762.5
762.4995
762.499
762.4985
762.498
pull
Entries 88
Mean −1.373e+09
Std Dev 1.373e+09
×10⁹
500
0
−500
−1000
−1500

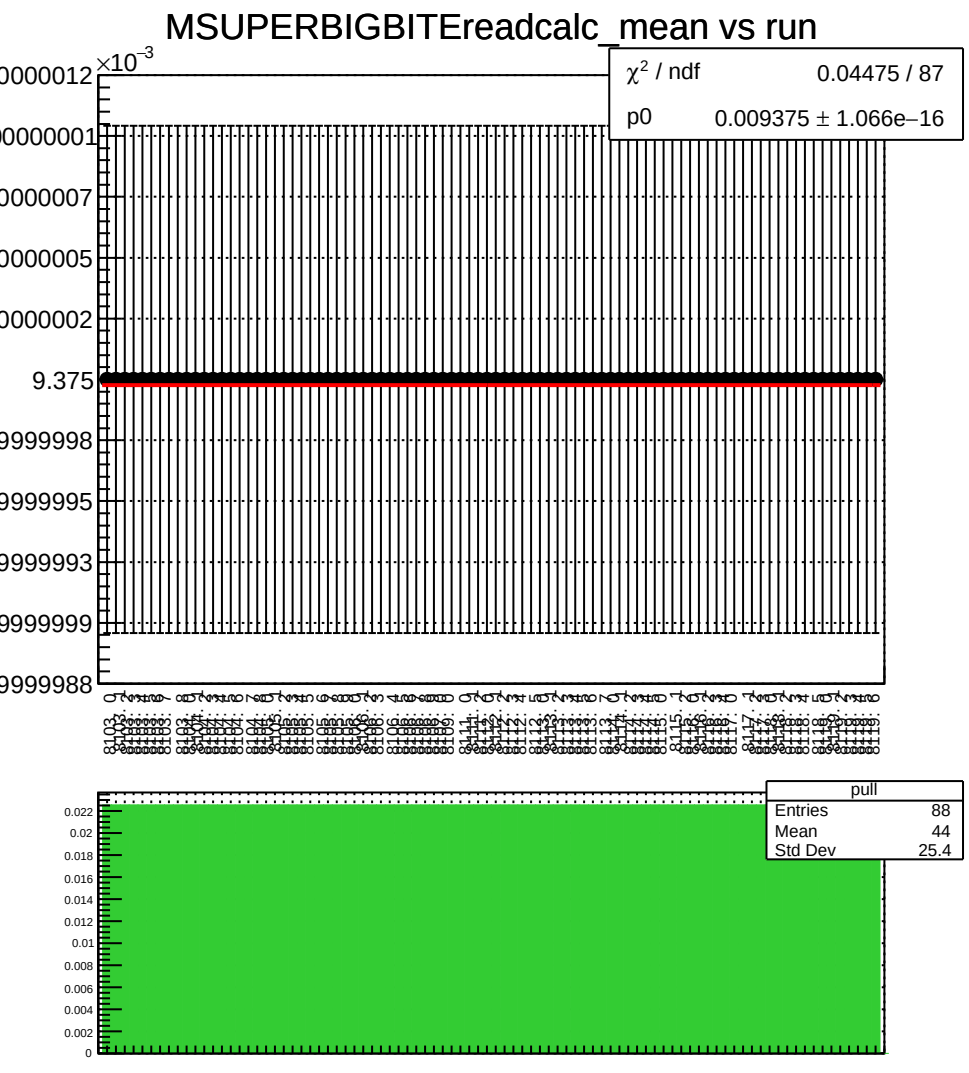

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

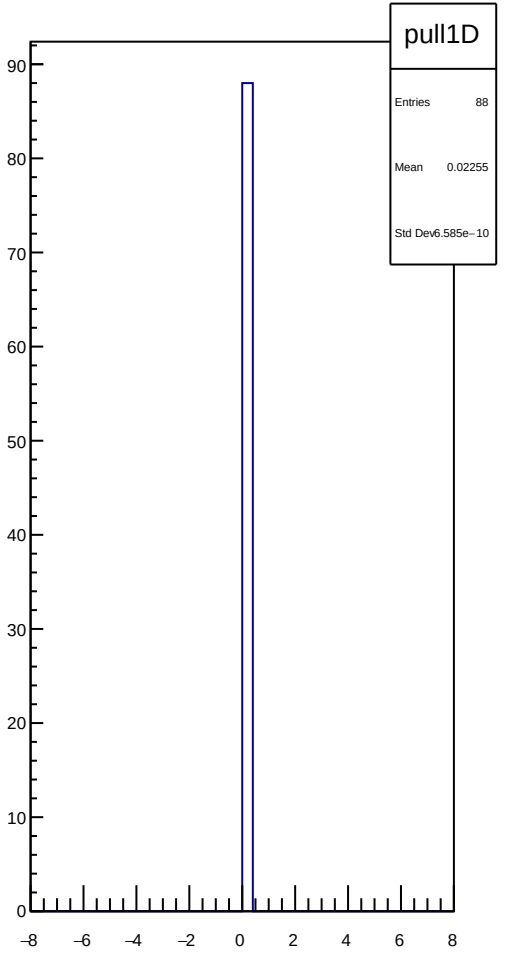

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 3.246e+26 / 87
p0 977.8 ± 1.066e−16
977.773
977.772
977.771
977.77
977.769
977.768
977.767
977.766
977.765
pull
Entries 88
Mean −1.141e+09
Std Dev 1.141e+09
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
−4000

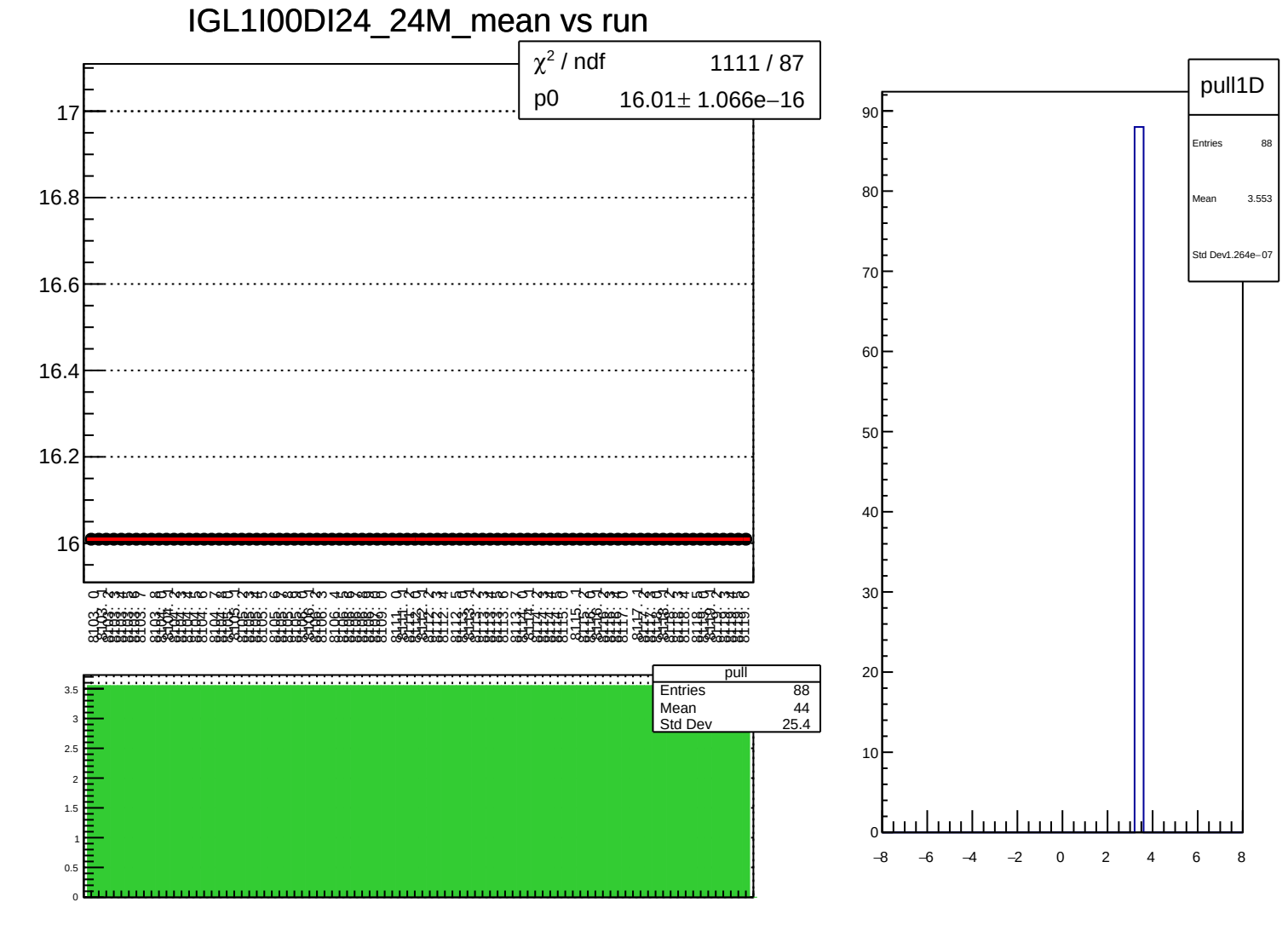

pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

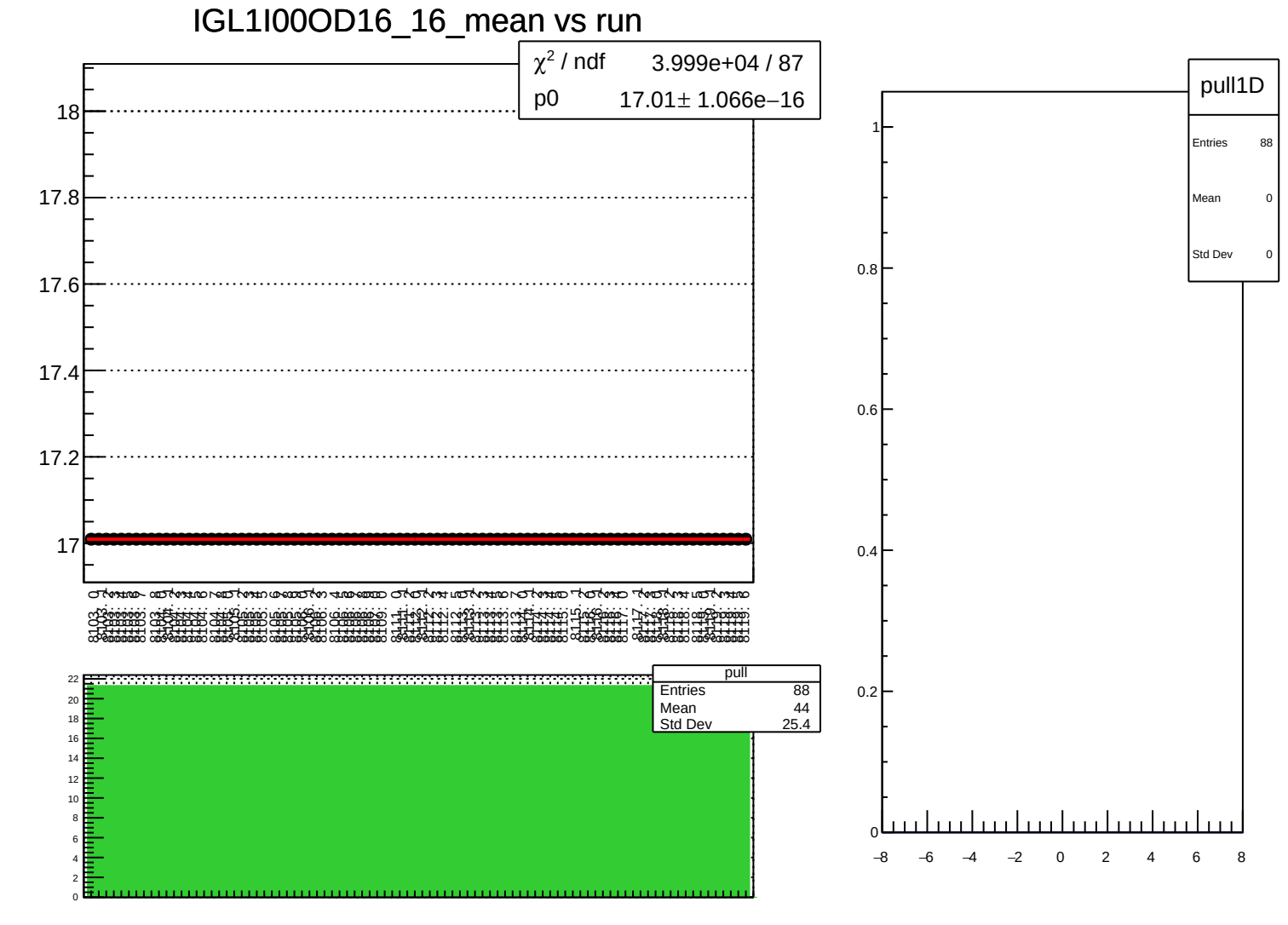

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0.04475 / 87
p0 0.009375 ± 1.066e−16
9.375
pull
Entries 88
Mean 44
Std Dev 25.4

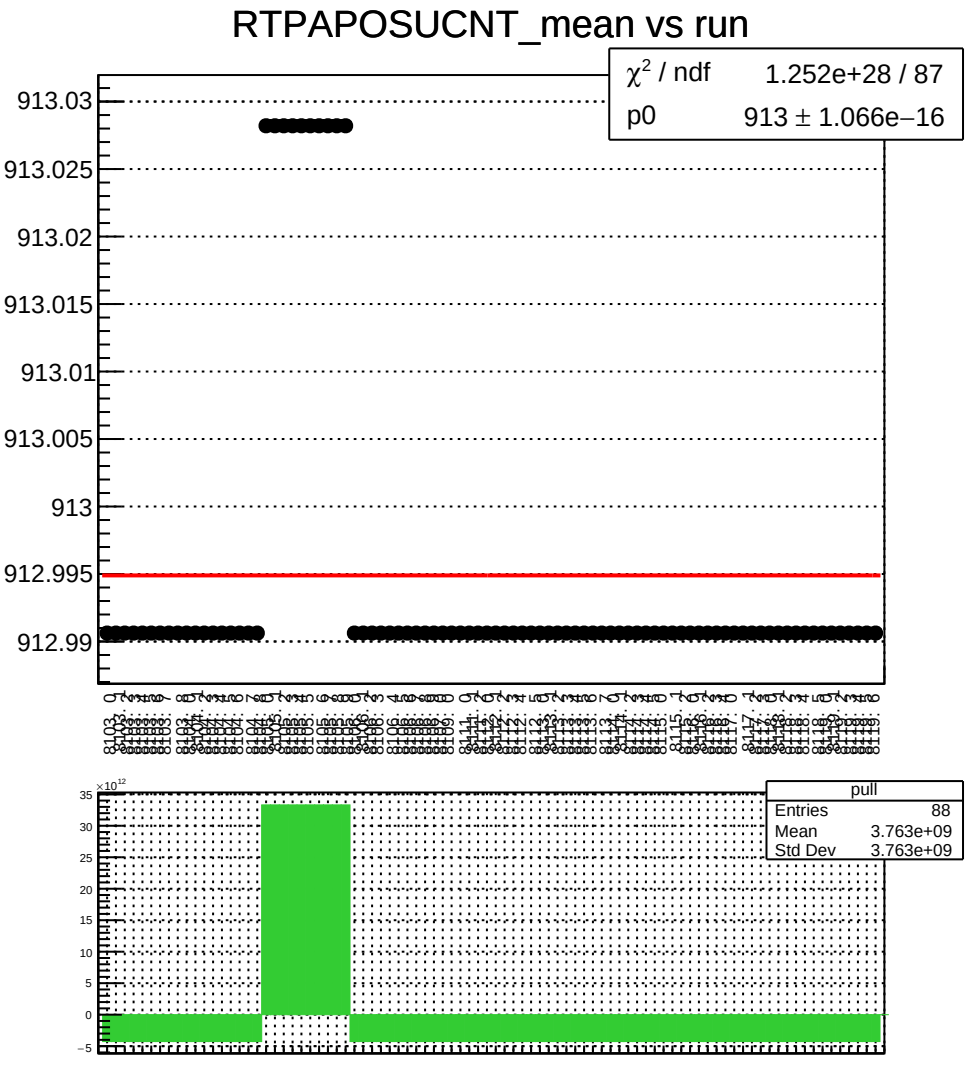

pull1D
Entries 88
Mean 0.02255
Std Dev 6.585e−10

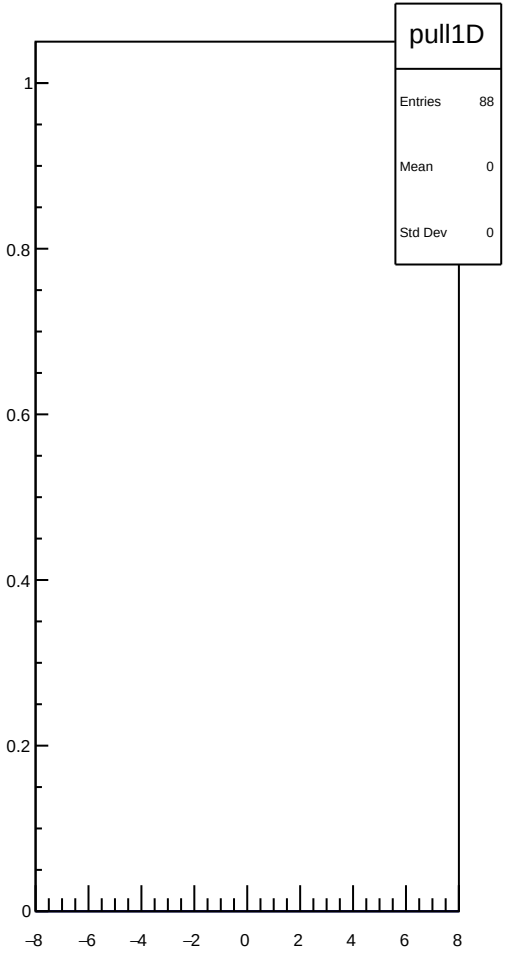

MSUPERBIGBITEreadcalc_mean vs run
×10⁻³
χ² / ndf 0.04475 / 87
p0 0.009375 ± 1.066e−16
9.375
pull
Entries 88
Mean 44
Std Dev 25.4

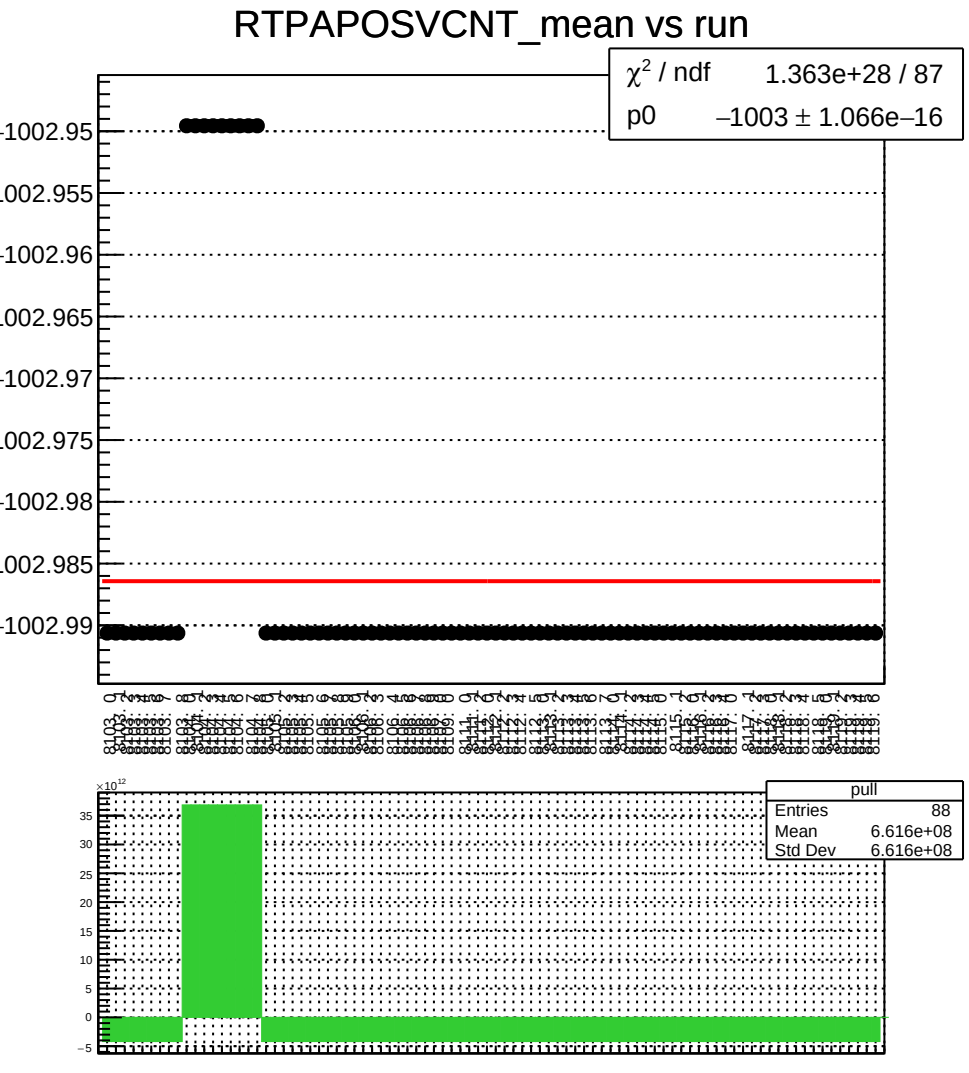

pull1D
Entries 88
Mean 0.02255
Std Dev 6.585e−10

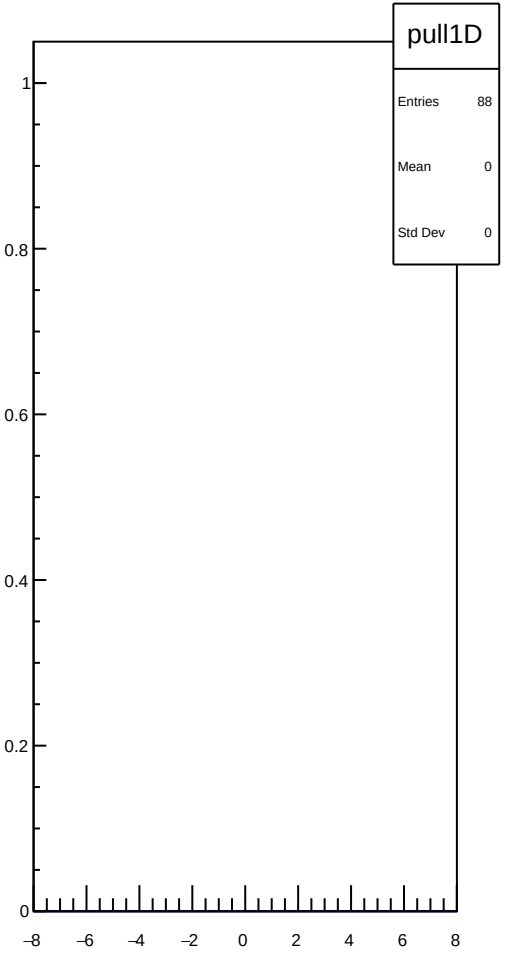

IGL1I00DI24_24M_mean vs run
χ² / ndf 1111 / 87
p0 16.01± 1.066e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 88
Mean 44
Std Dev 25.4
3.5
3
2.5
2
1.5
1
0.5
0
pull1D
Entries 88
Mean 3.553
Std Dev1.264e−07
90
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 3.999e+04 / 87
p0 17.01± 1.066e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 88
Mean 44
Std Dev 25.4
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 1.252e+28 / 87
p0 913 ± 1.066e−16
913.03
913.025
913.02
913.015
913.01
913.005
913
912.995
912.99
pull
Entries 88
Mean 3.763e+09
Std Dev 3.763e+09
×10¹²
35
30
25
20
15
10
5
0
−5


pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 1.363e+28 / 87
p0 −1003 ± 1.066e−16
−1002.95
−1002.955
−1002.96
−1002.965
−1002.97
−1002.975
−1002.98
−1002.985
−1002.99
pull
Entries 88
Mean 6.616e+08
Std Dev 6.616e+08
×10¹²
35
30
25
20
15
10
5
0
−5


pull1D
Entries 88
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8