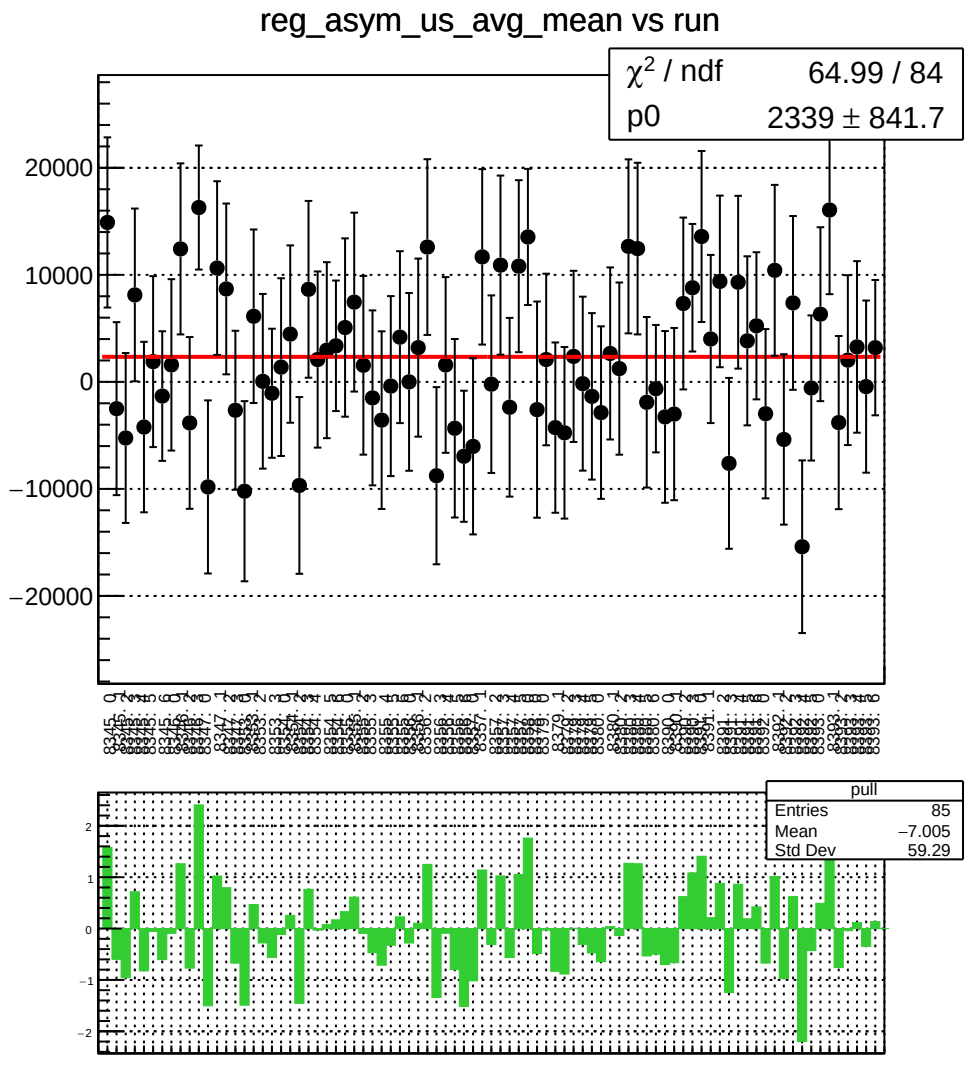
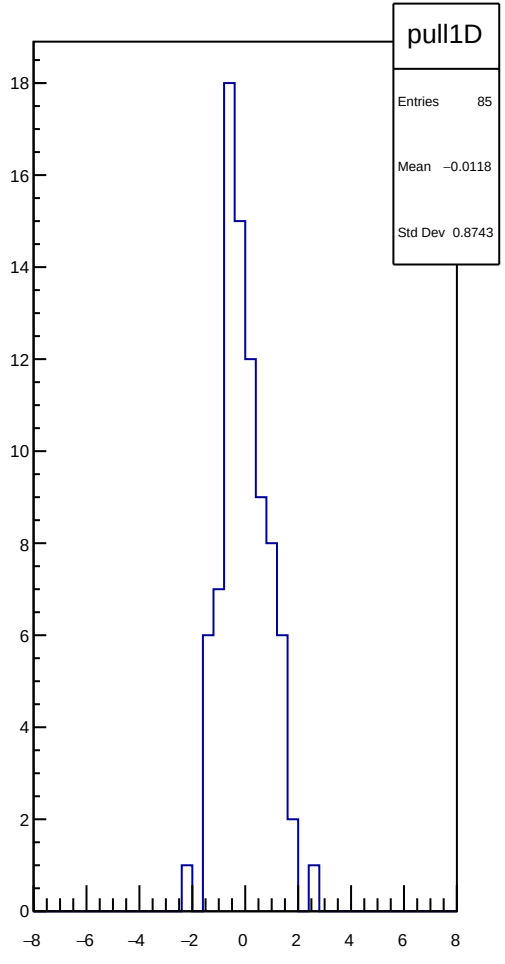
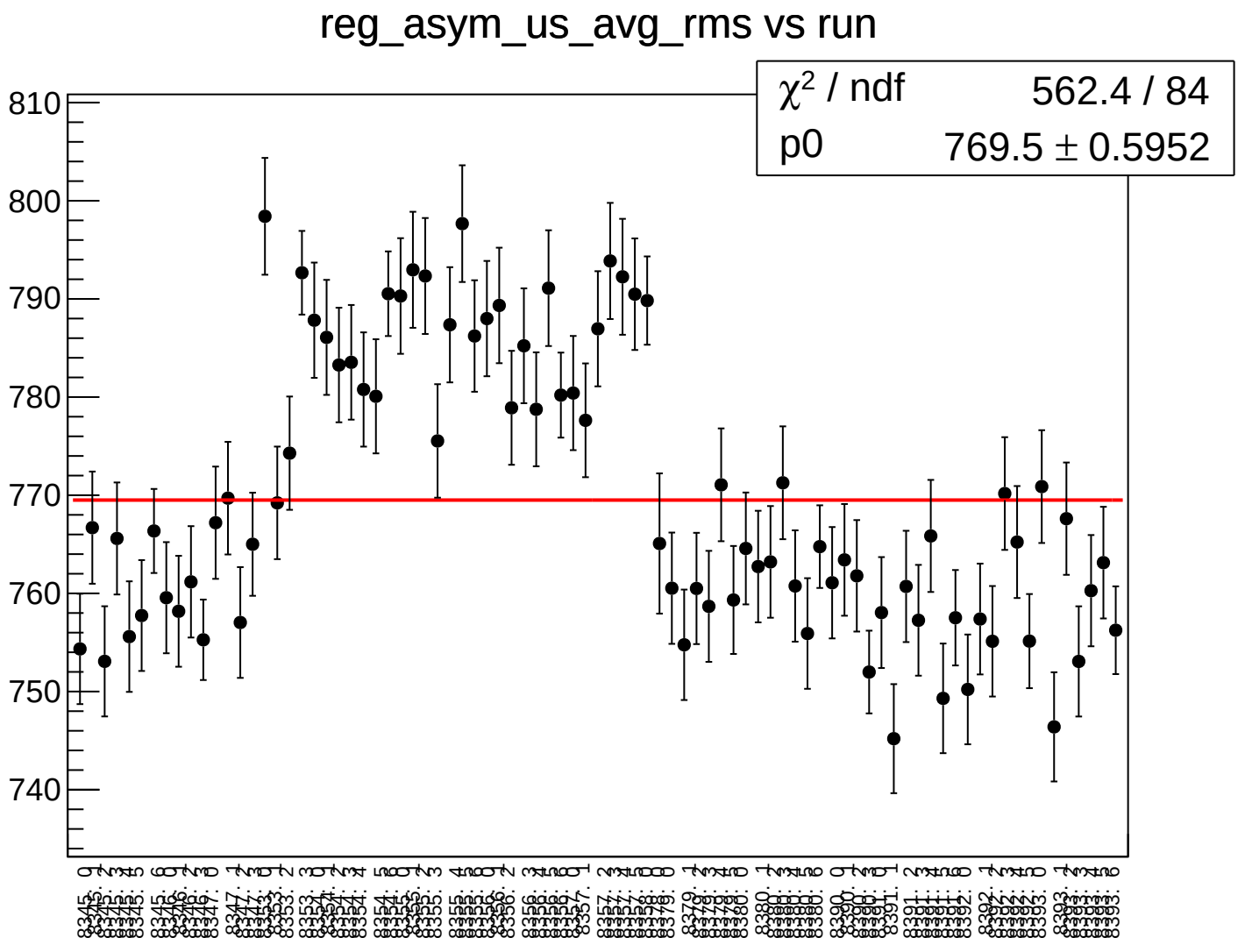
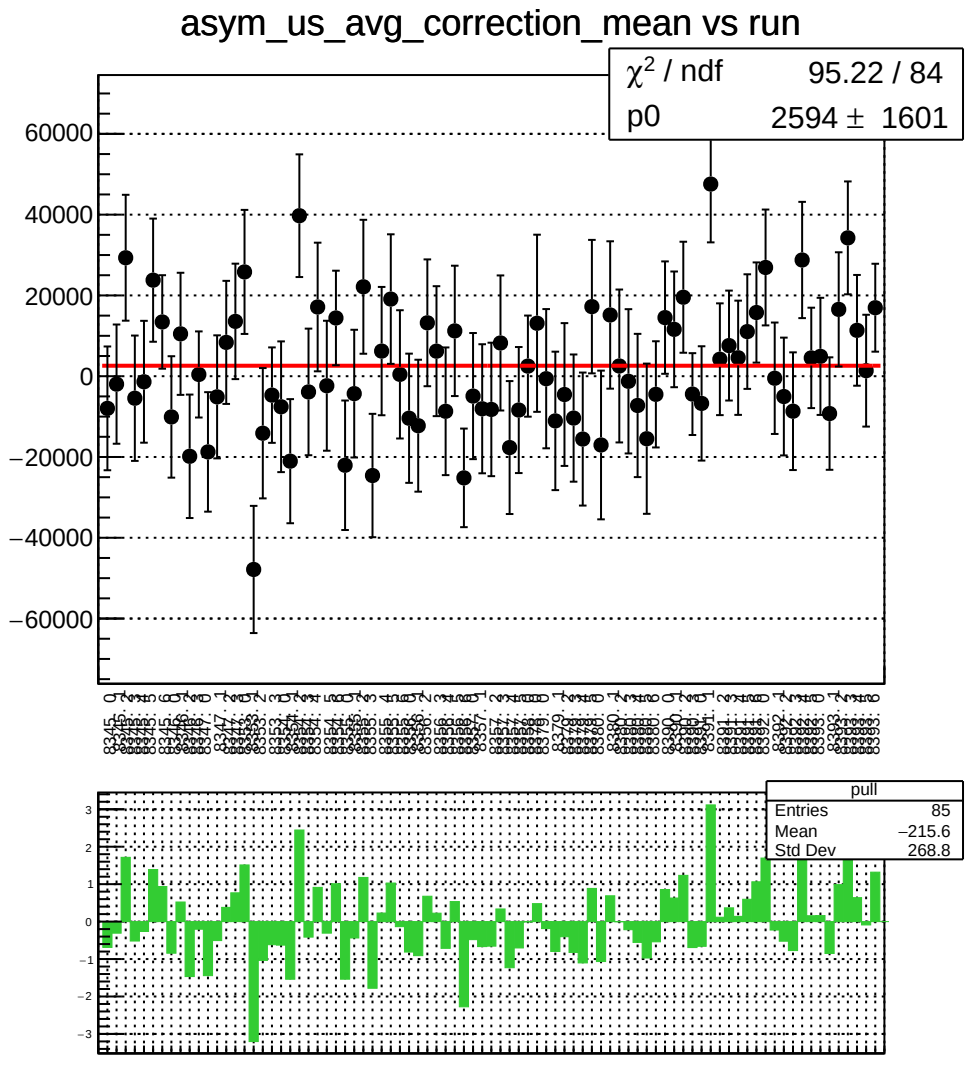
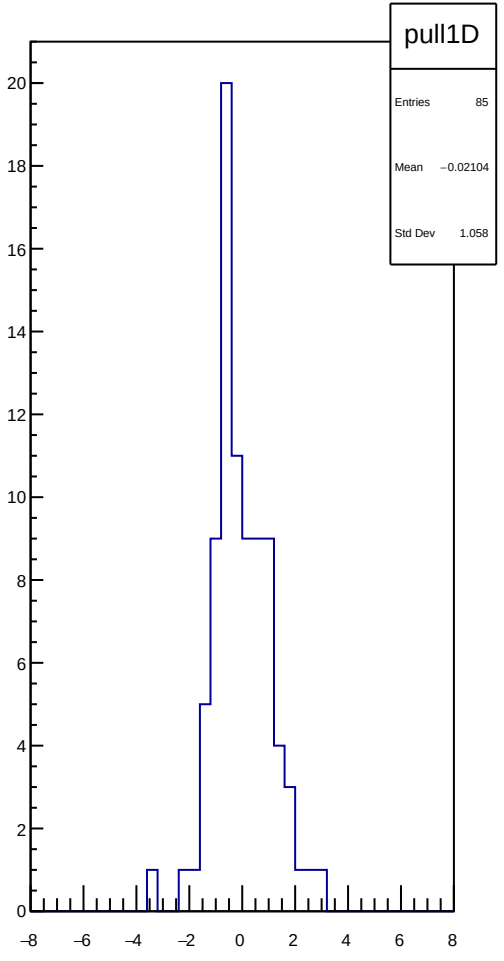
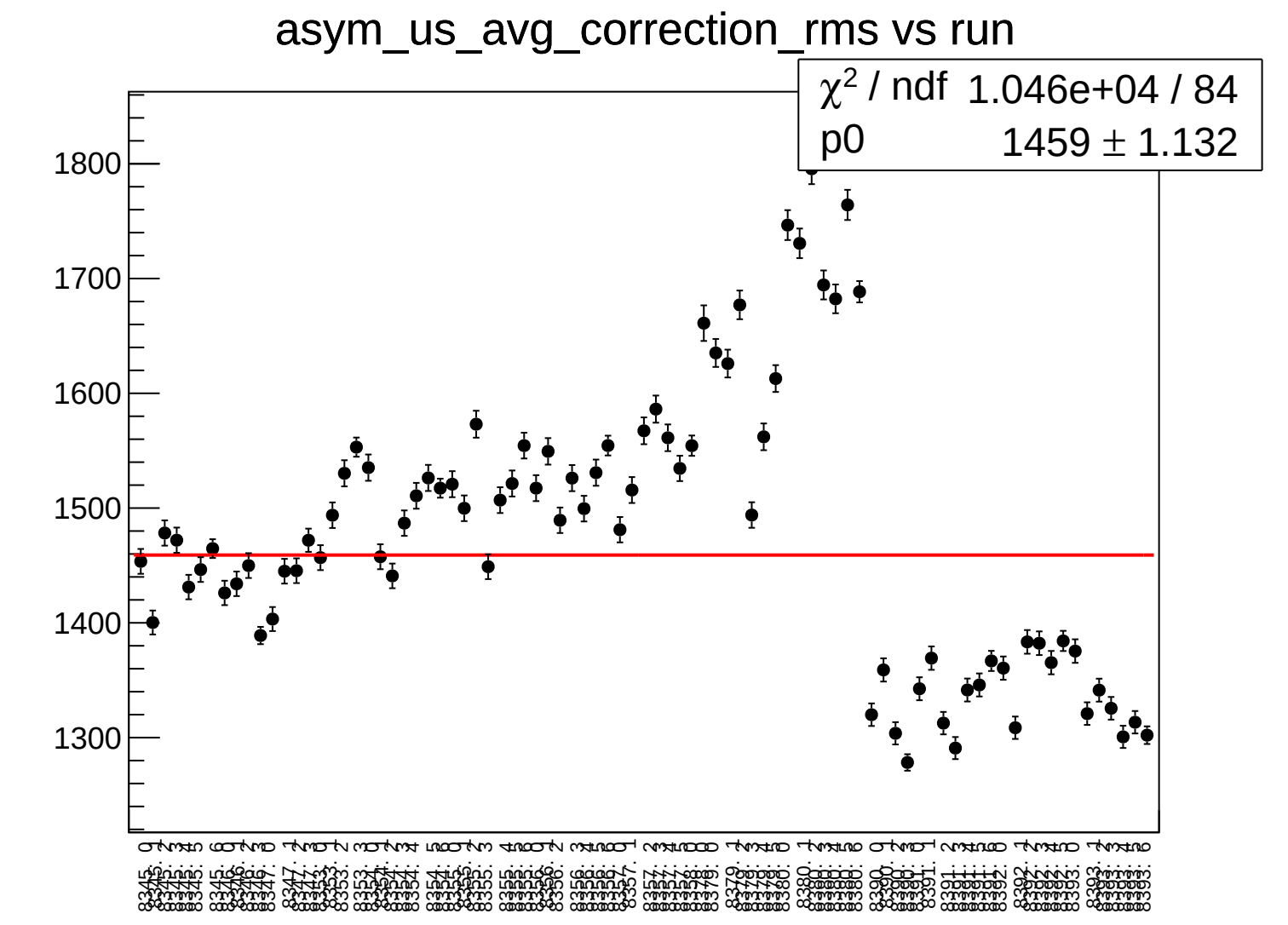

reg_asym_us_avg_mean vs run
χ² / ndf 64.99 / 84
p0 2339 ± 841.7
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −7.005
Std Dev 59.29
2
1
0
−1
−2

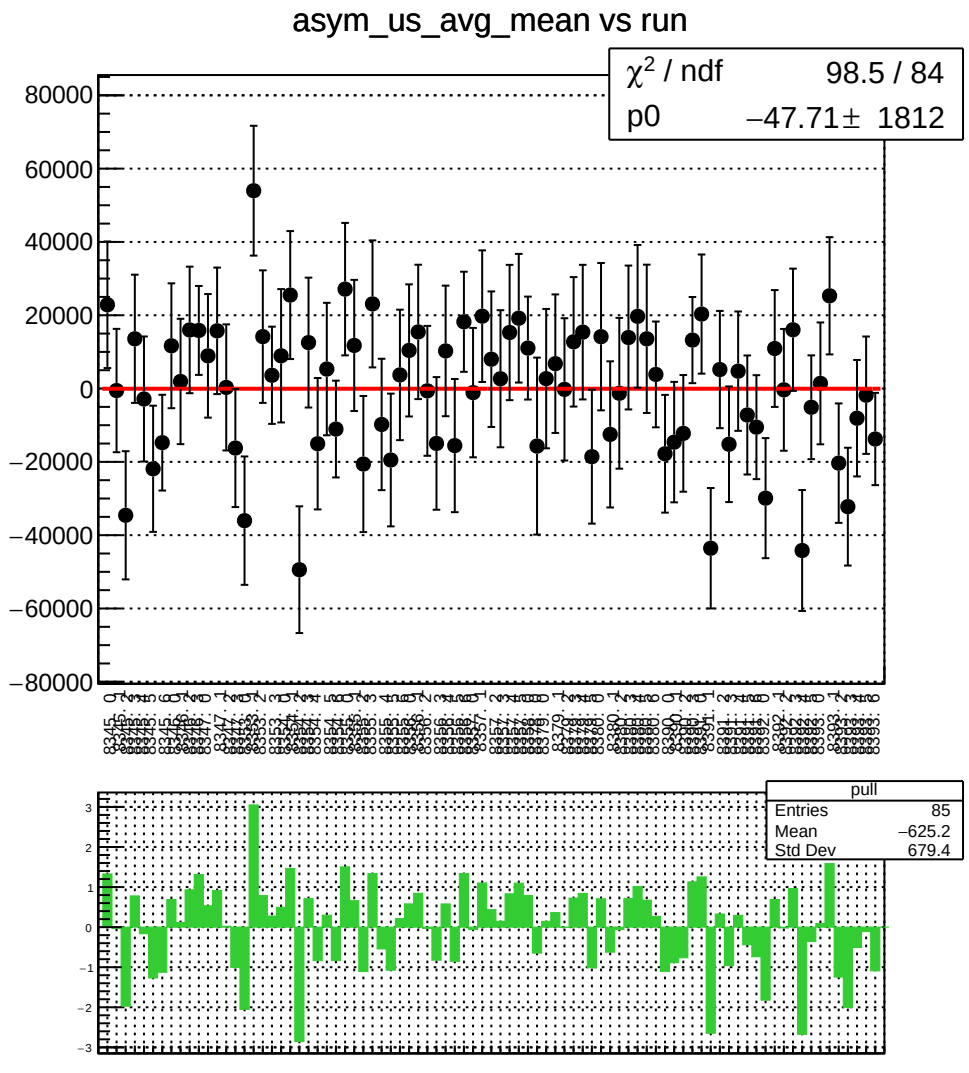

pull1D
Entries 85
Mean −0.0118
Std Dev 0.8743
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

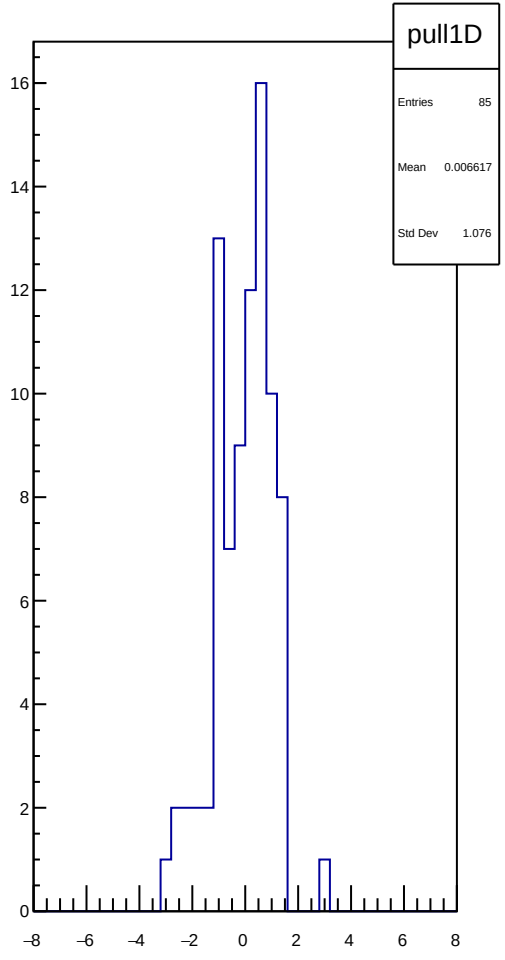

reg_asym_us_avg_rms vs run
χ^2 / ndf 562.4 / 84
p0 769.5 ± 0.5952
810
800
790
780
770
760
750
740

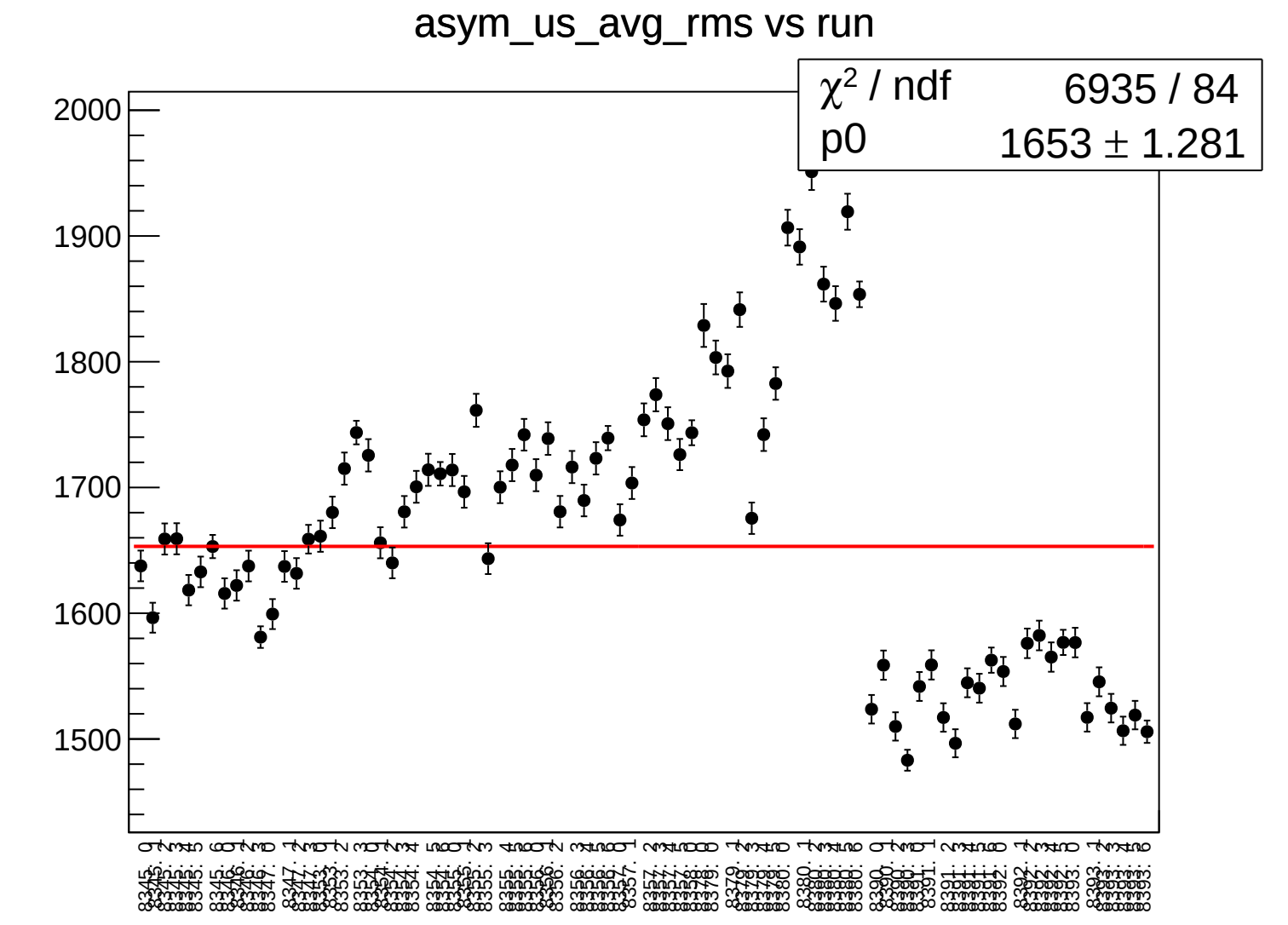

asym_us_avg_correction_mean vs run
χ² / ndf 95.22 / 84
p0 2594 ± 1601
pull
Entries 85
Mean −215.6
Std Dev 268.8

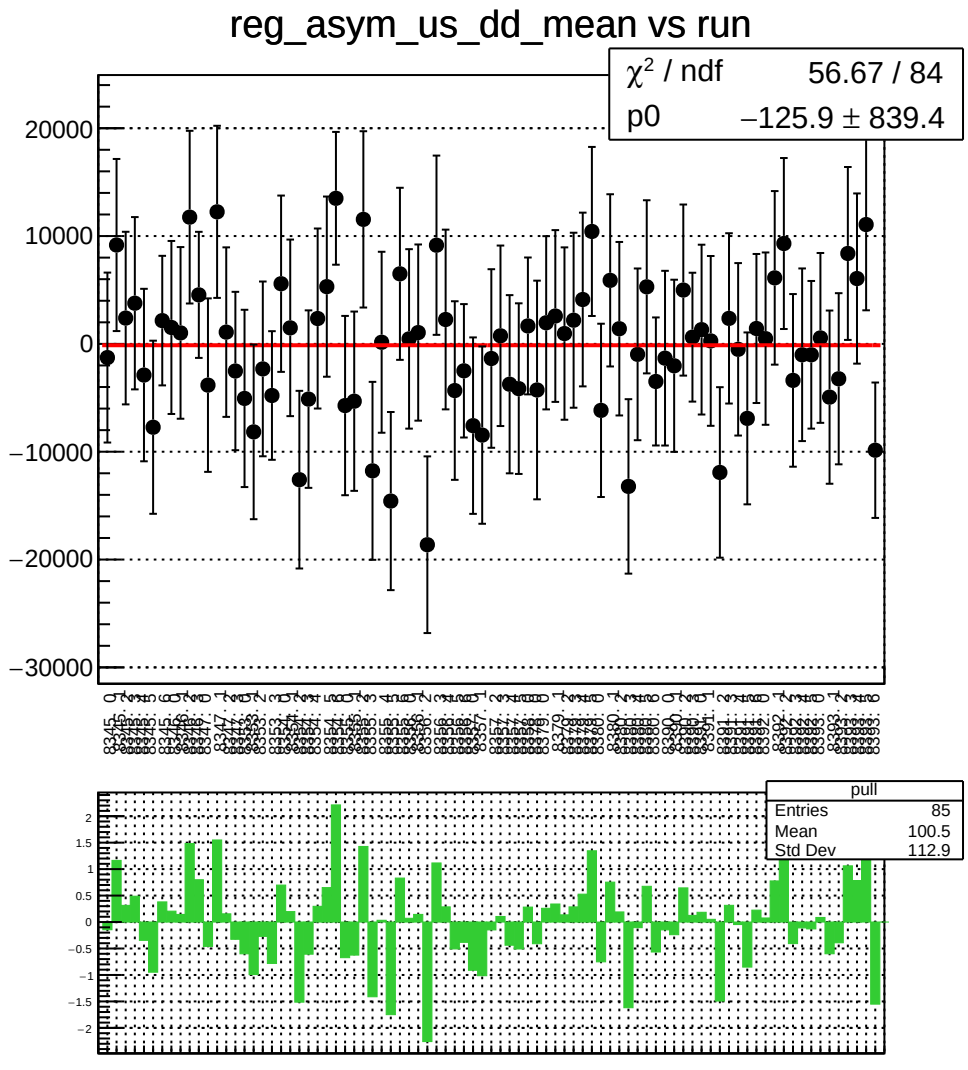

pull1D
Entries 85
Mean −0.02104
Std Dev 1.058

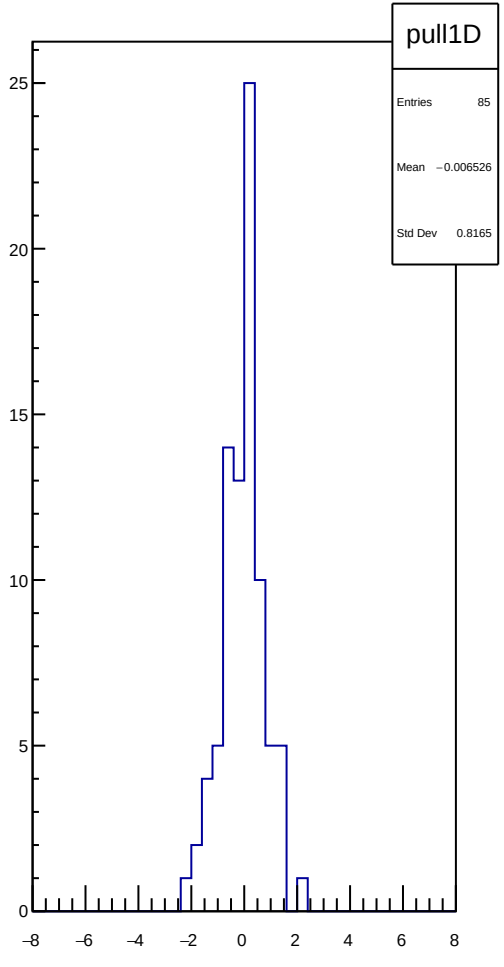

asym_us_avg_correction_rms vs run
χ² / ndf 1.046e+04 / 84
p0 1459 ± 1.132
1800
1700
1600
1500
1400
1300

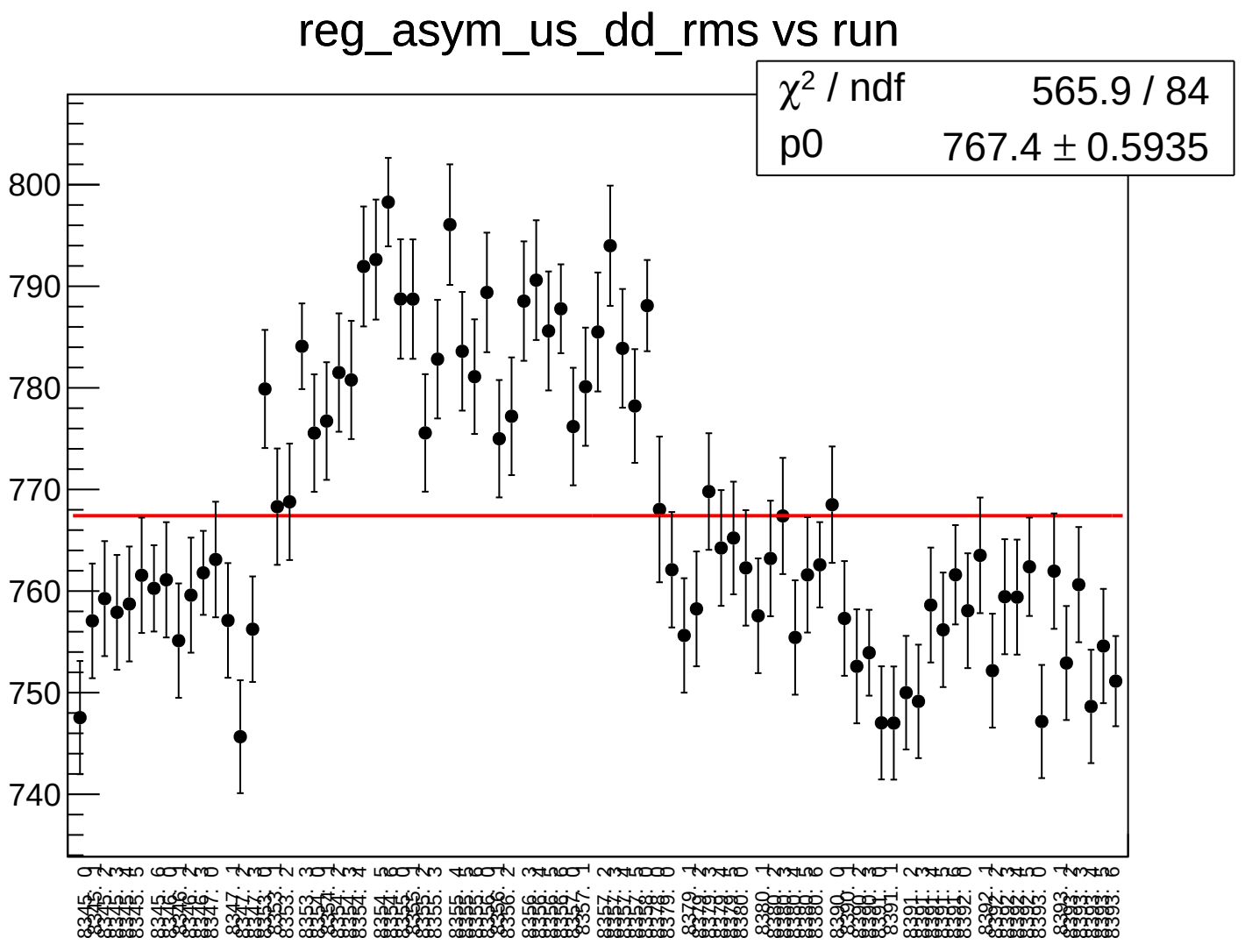

asym_us_avg_mean vs run
χ² / ndf 98.5 / 84
p0 −47.71± 1812
pull
Entries 85
Mean −625.2
Std Dev 679.4

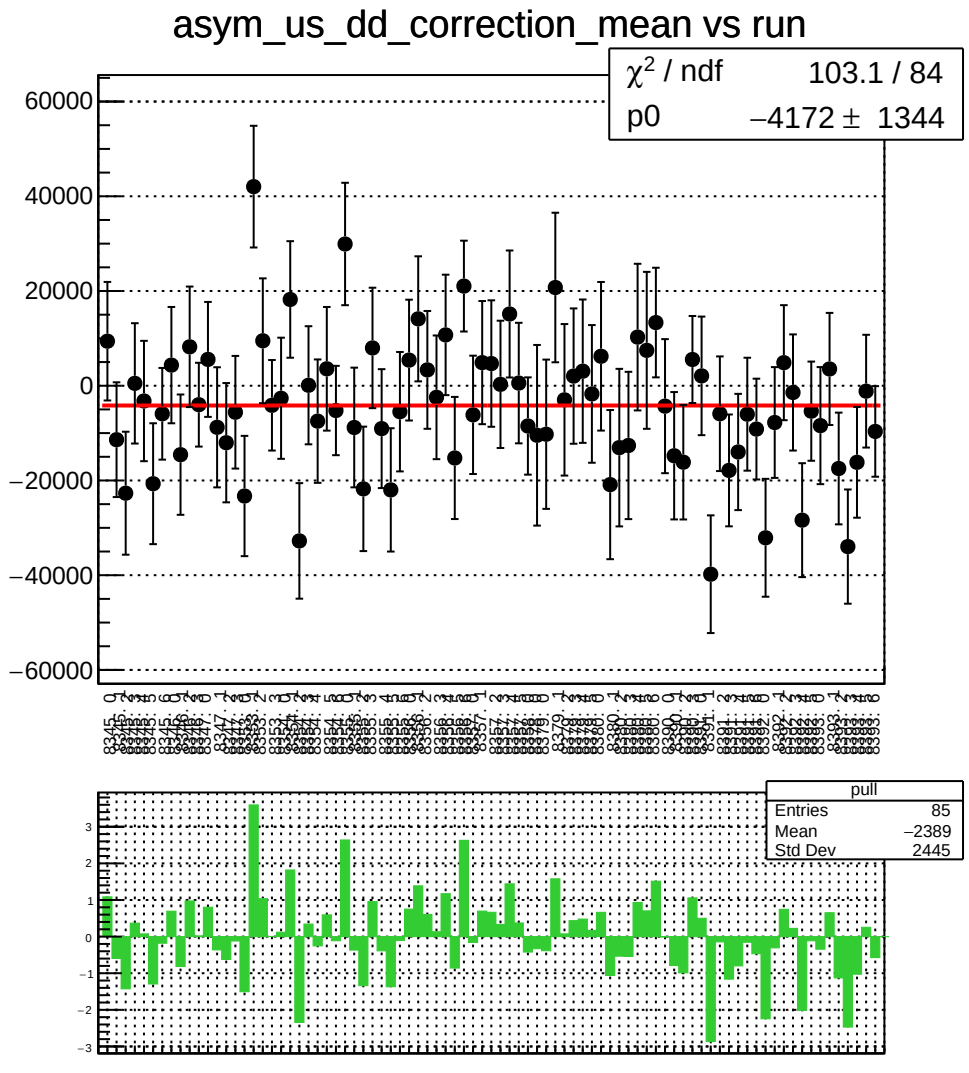

pull1D
Entries 85
Mean 0.006617
Std Dev 1.076

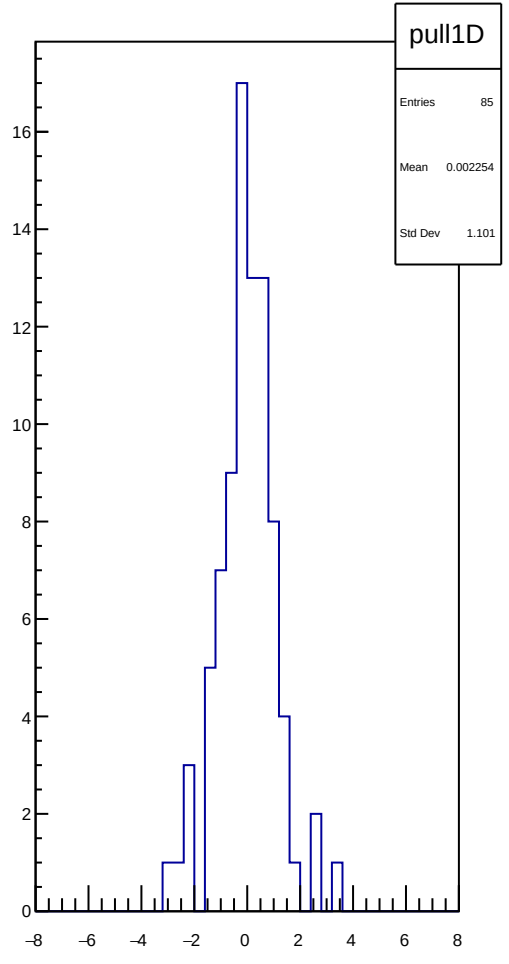

asym_us_avg_rms vs run
χ² / ndf 6935 / 84
p0 1653 ± 1.281
2000
1900
1800
1700
1600
1500

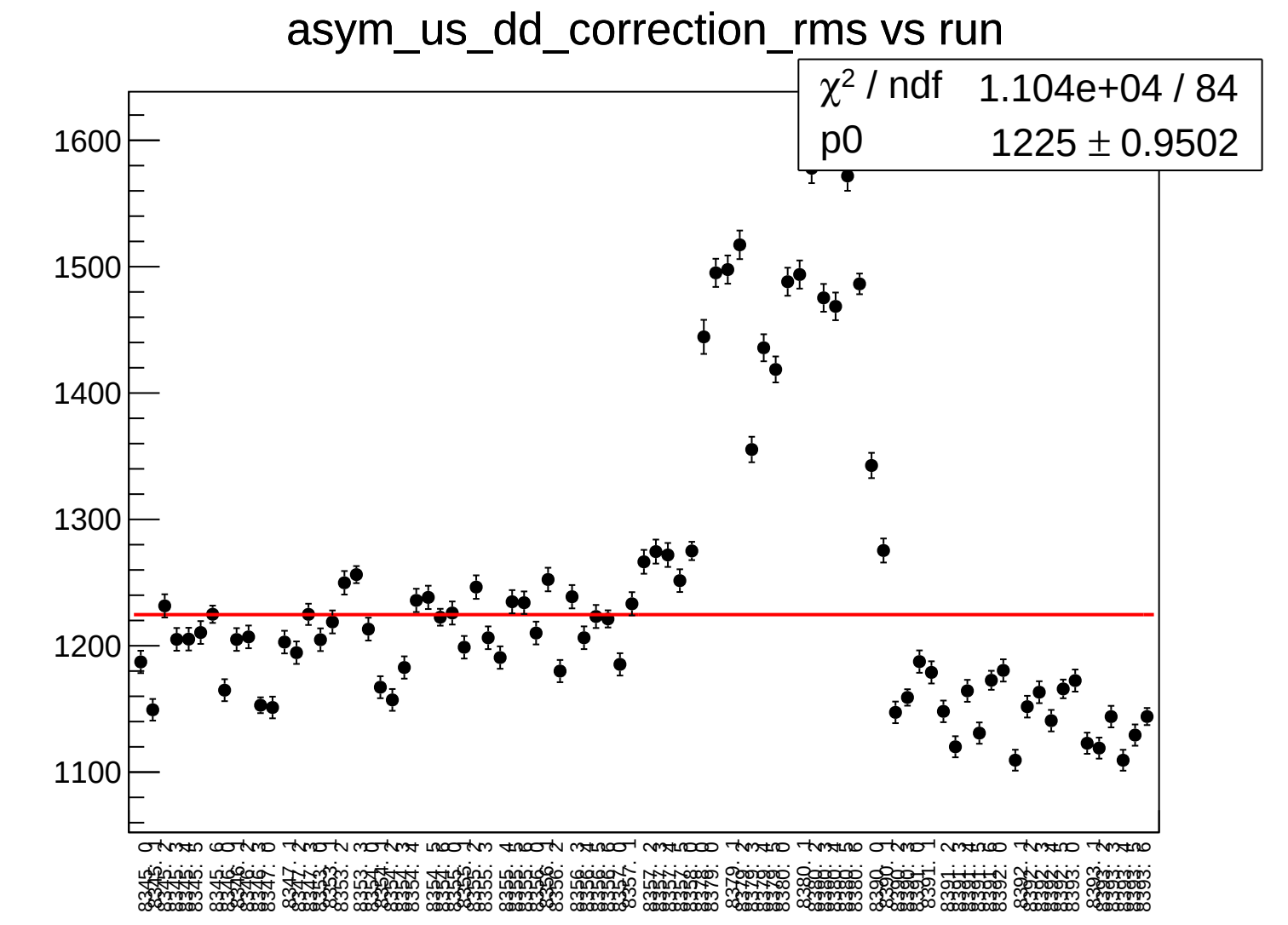

reg_asym_us_dd_mean vs run
χ² / ndf 56.67 / 84
p0 −125.9 ± 839.4
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean 100.5
Std Dev 112.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

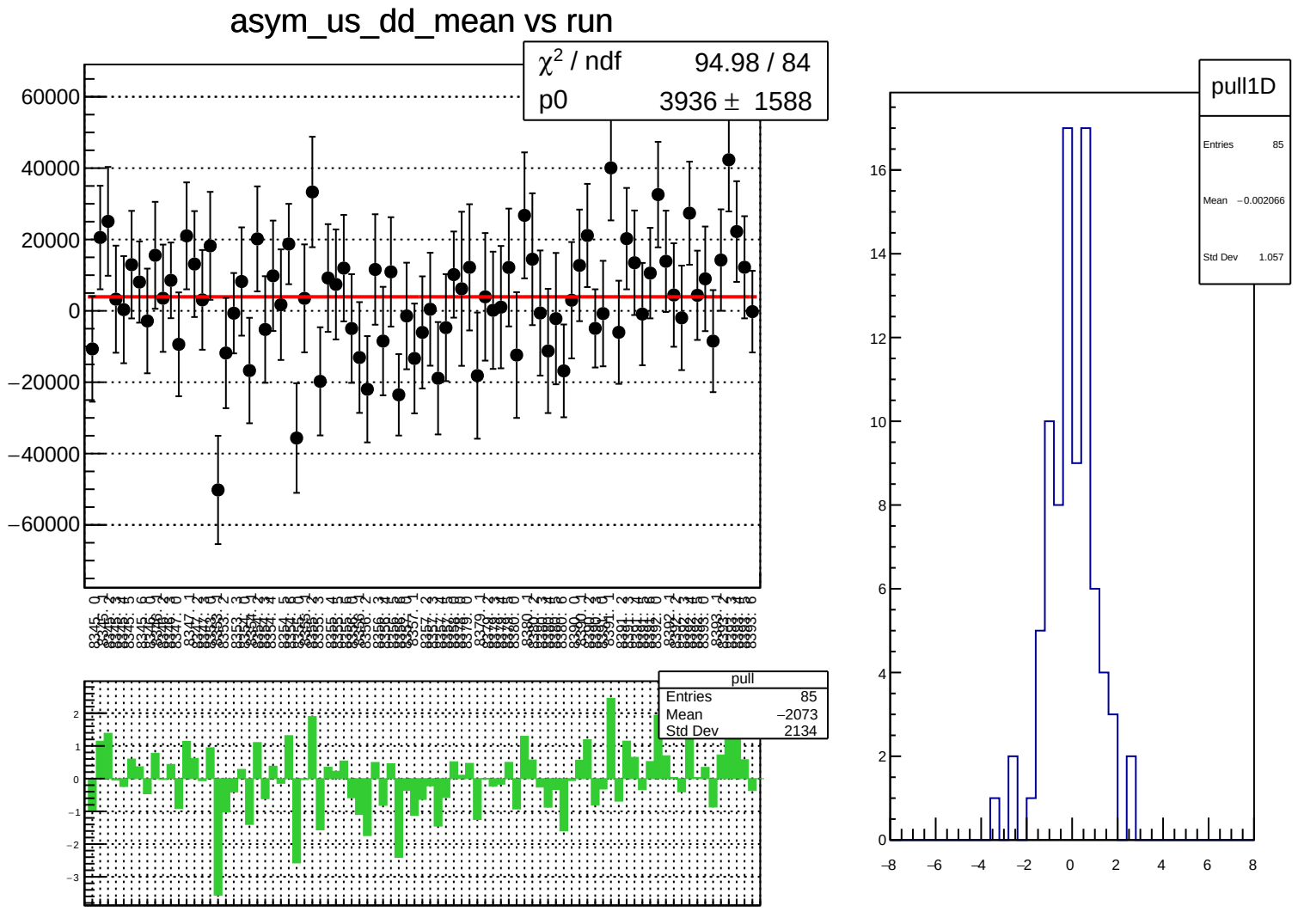

pull1D
Entries 85
Mean −0.006526
Std Dev 0.8165
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

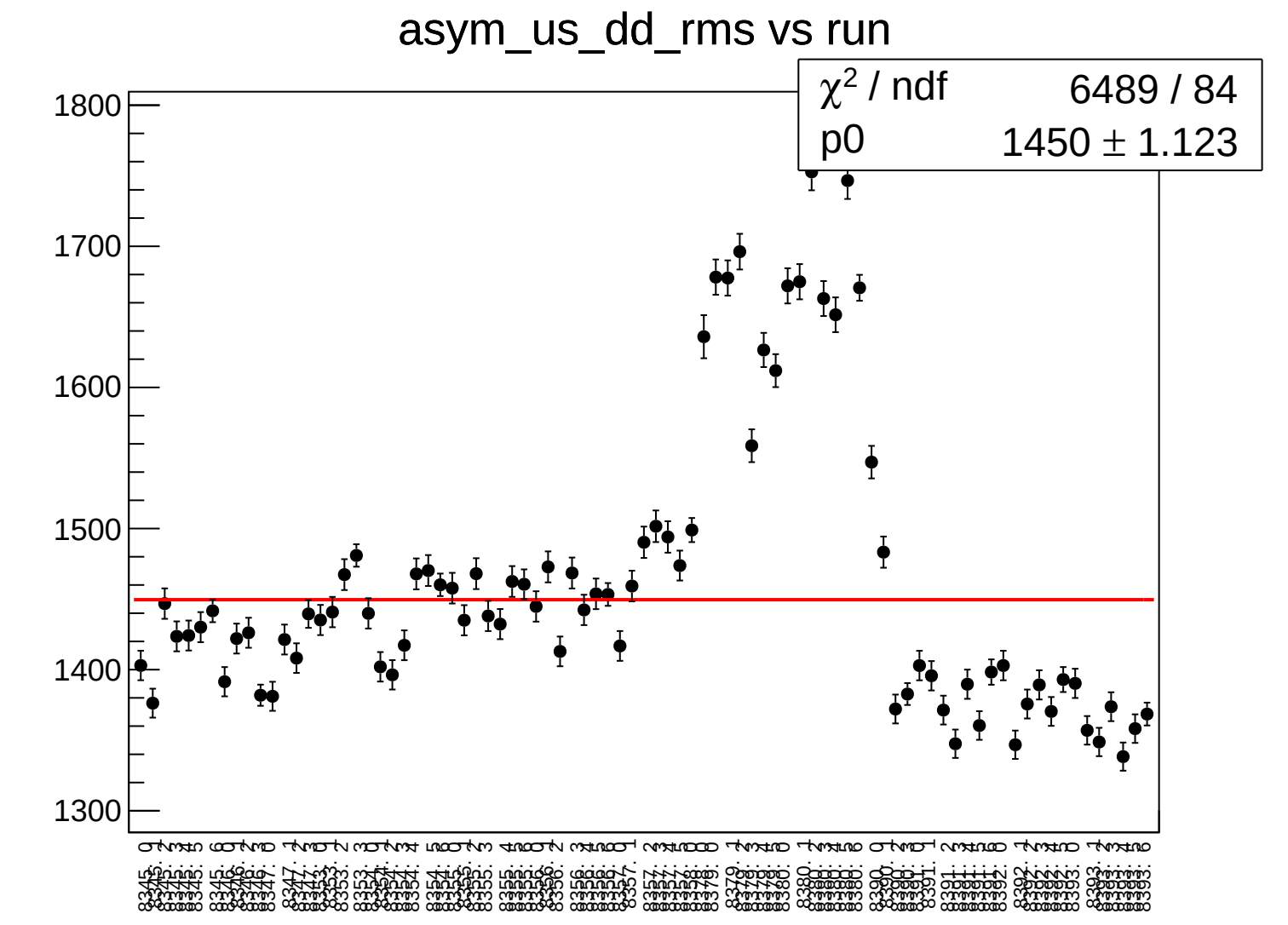

reg_asym_us_dd_rms vs run
χ^2 / ndf 565.9 / 84
p0 767.4 ± 0.5935
800
790
780
770
760
750
740

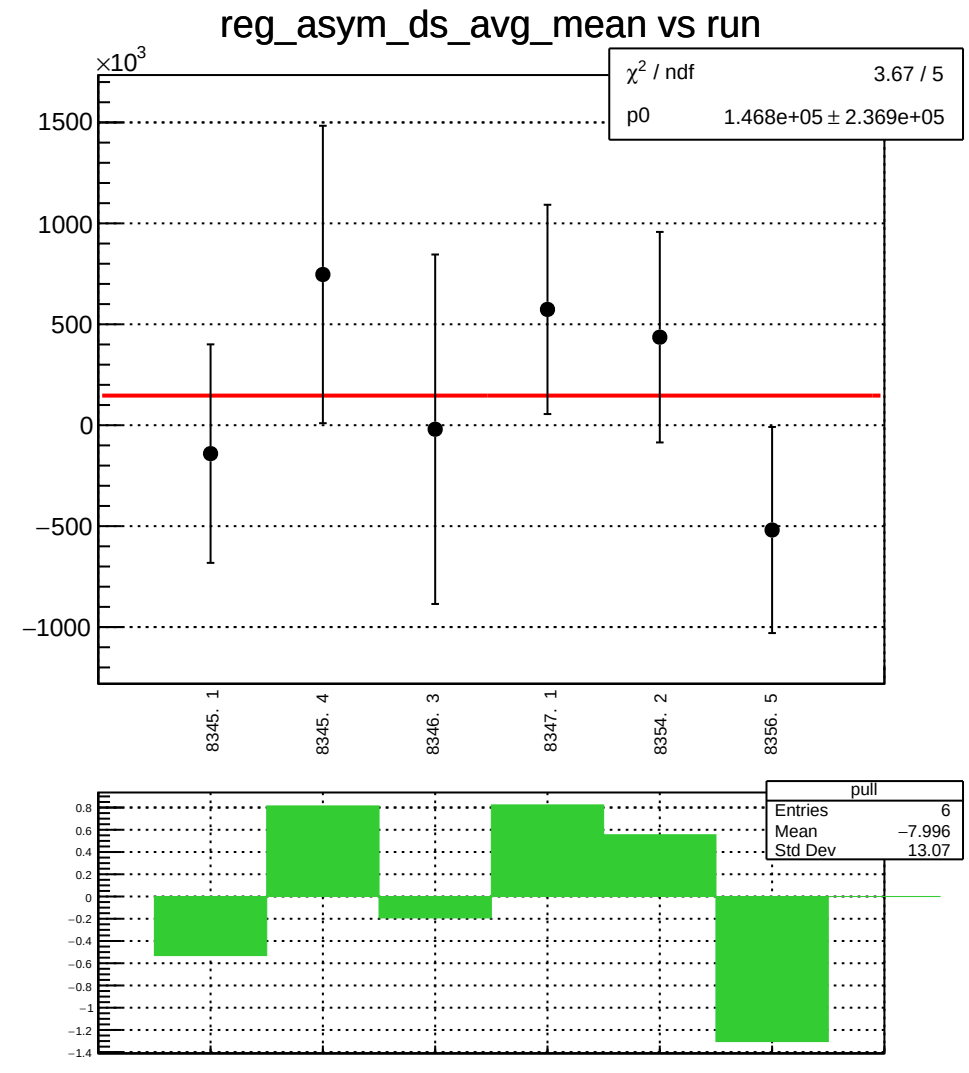

asym_us_dd_correction_mean vs run
χ² / ndf 103.1 / 84
p0 −4172 ± 1344
pull
Entries 85
Mean −2389
Std Dev 2445

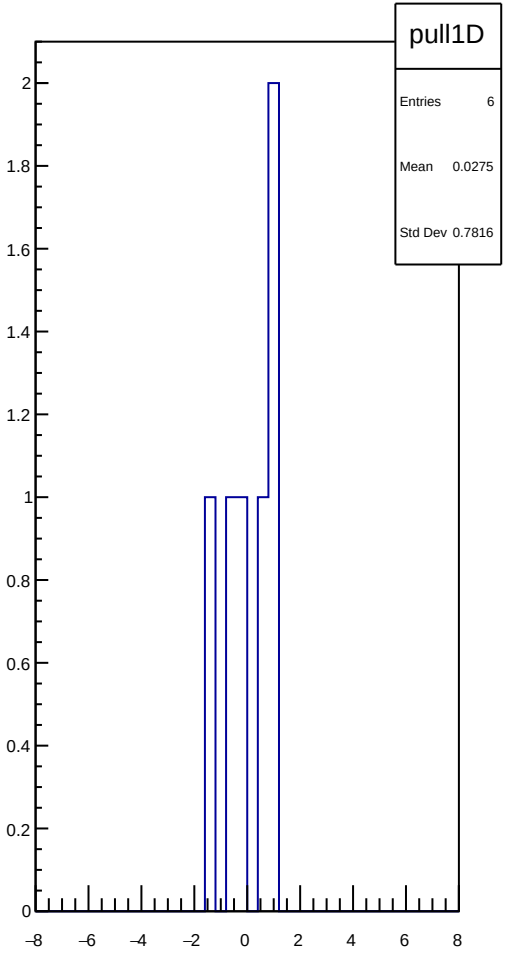

pull1D
Entries 85
Mean 0.002254
Std Dev 1.101

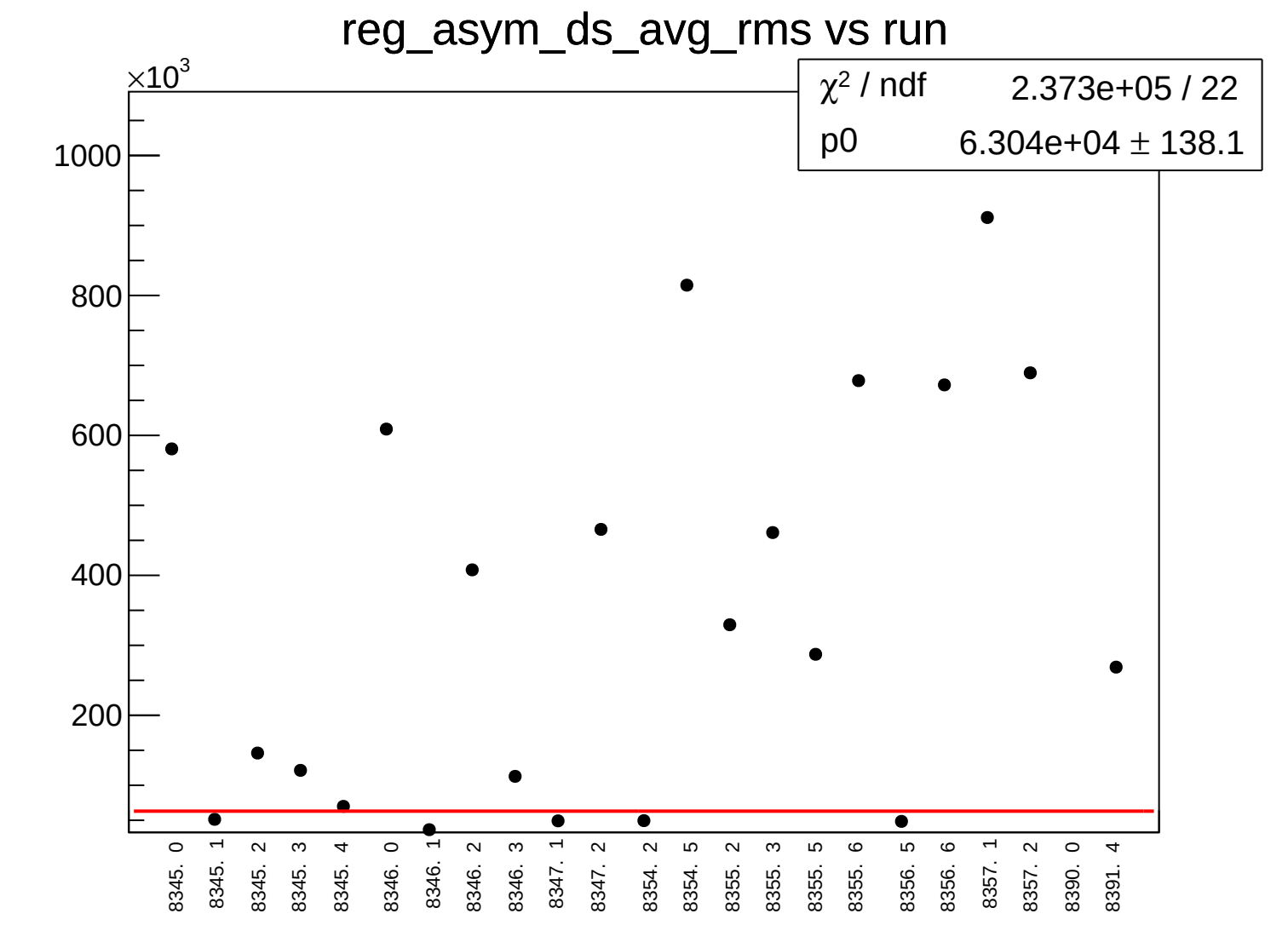

asym_us_dd_correction_rms vs run
χ² / ndf 1.104e+04 / 84
p0 1225 ± 0.9502
1600
1500
1400
1300
1200
1100

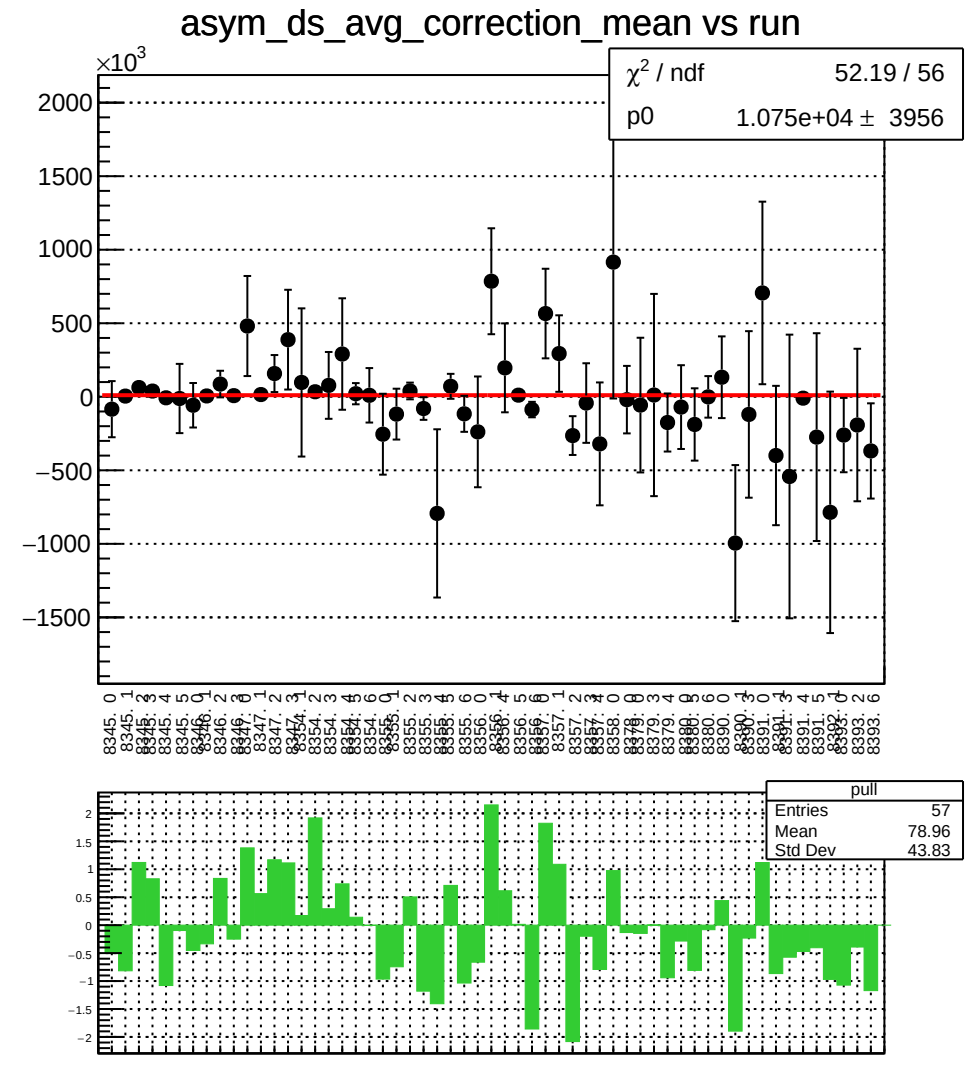

asym_us_dd_mean vs run
χ² / ndf 94.98 / 84
p0 3936 ± 1588
pull
Entries 85
Mean −2073
Std Dev 2134
pull1D
Entries 85
Mean −0.002066
Std Dev 1.057

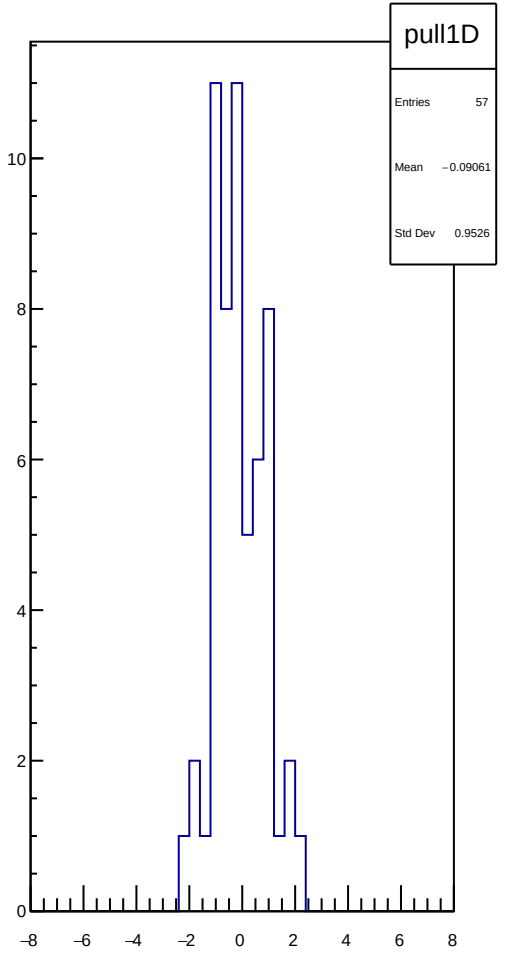

asym_us_dd_rms vs run
χ² / ndf 6489 / 84
p0 1450 ± 1.123
1800
1700
1600
1500
1400
1300

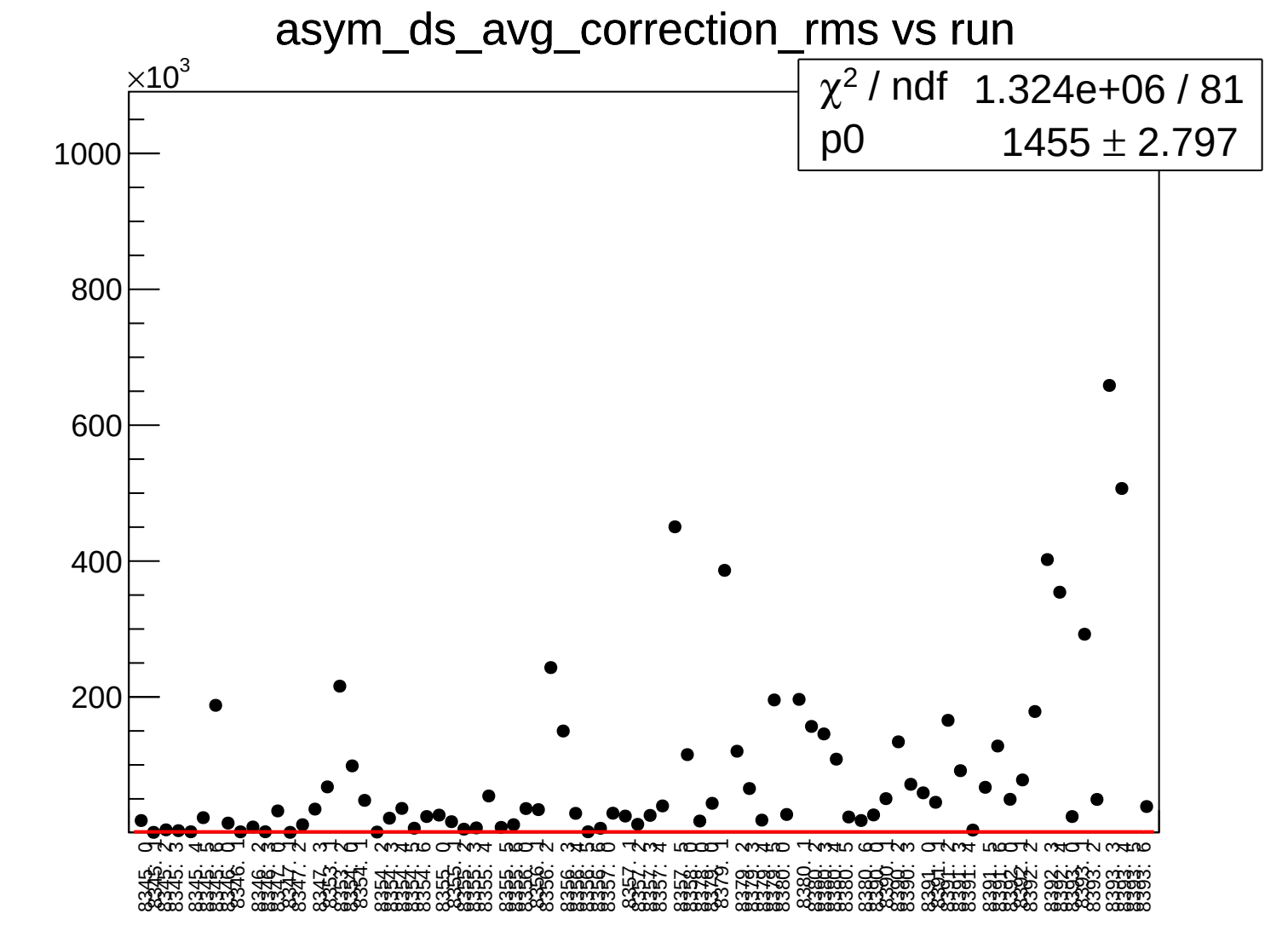

reg_asym_ds_avg_mean vs run
×10^3
χ² / ndf 3.67 / 5
p0 1.468e+05 ± 2.369e+05
1500
1000
500
0
−500
−1000
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −7.996
Std Dev 13.07
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

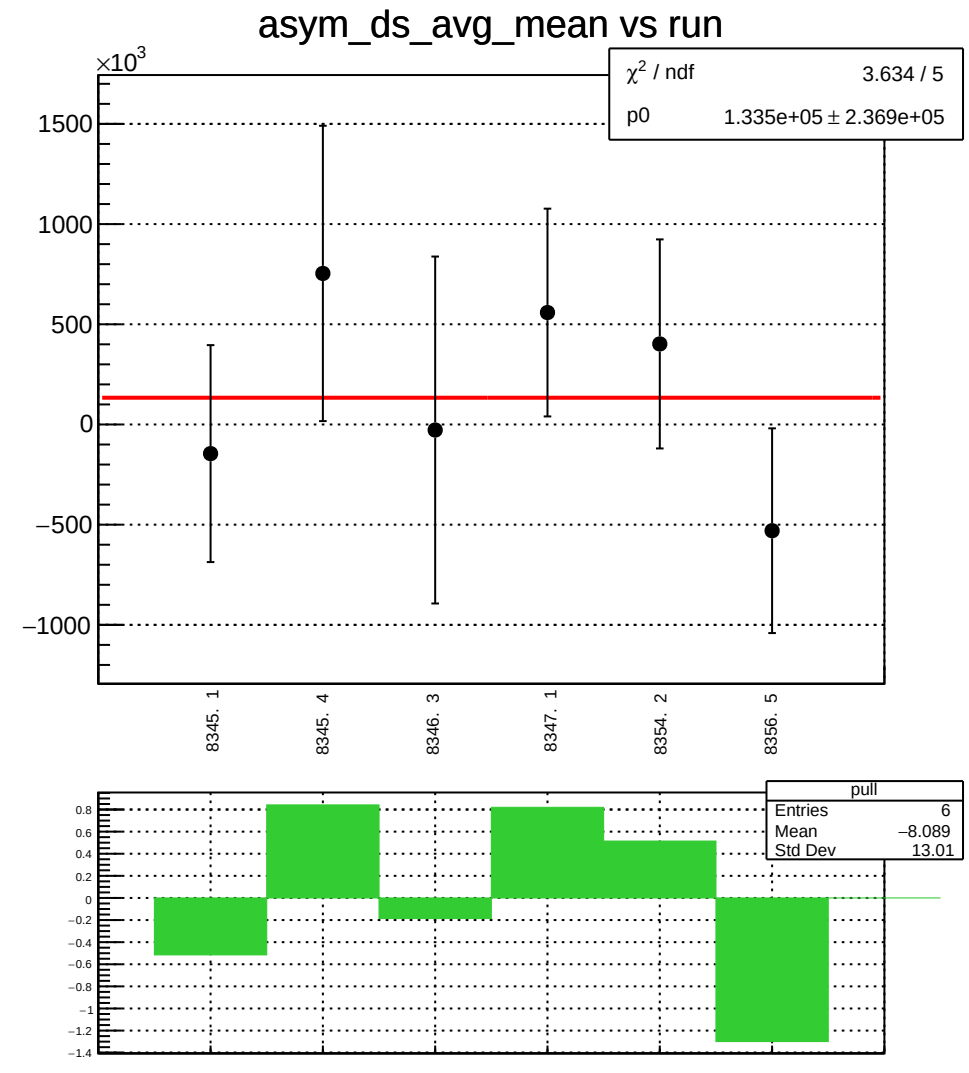

pull1D
Entries 6
Mean 0.0275
Std Dev 0.7816
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

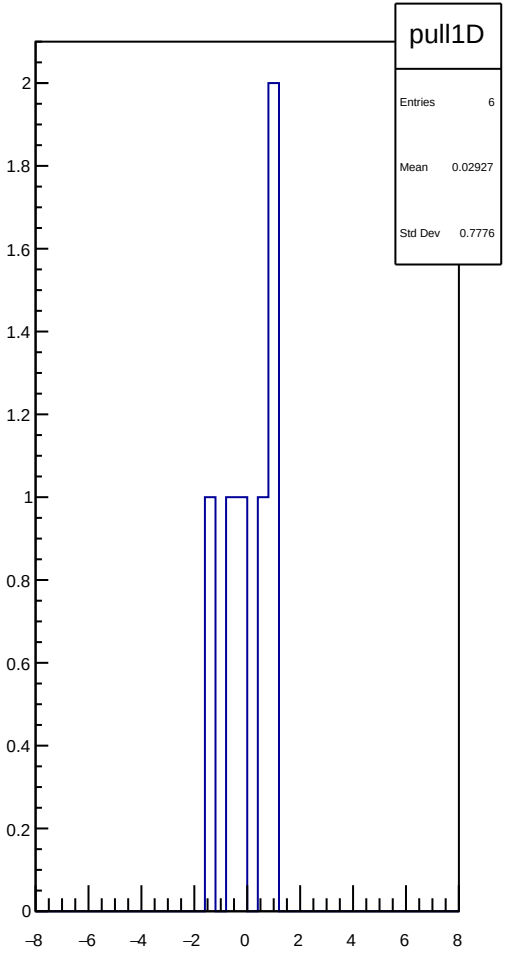

reg_asym_ds_avg_rms vs run
×10^3
χ² / ndf 2.373e+05 / 22
p0 6.304e+04 ± 138.1
1000
800
600
400
200
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

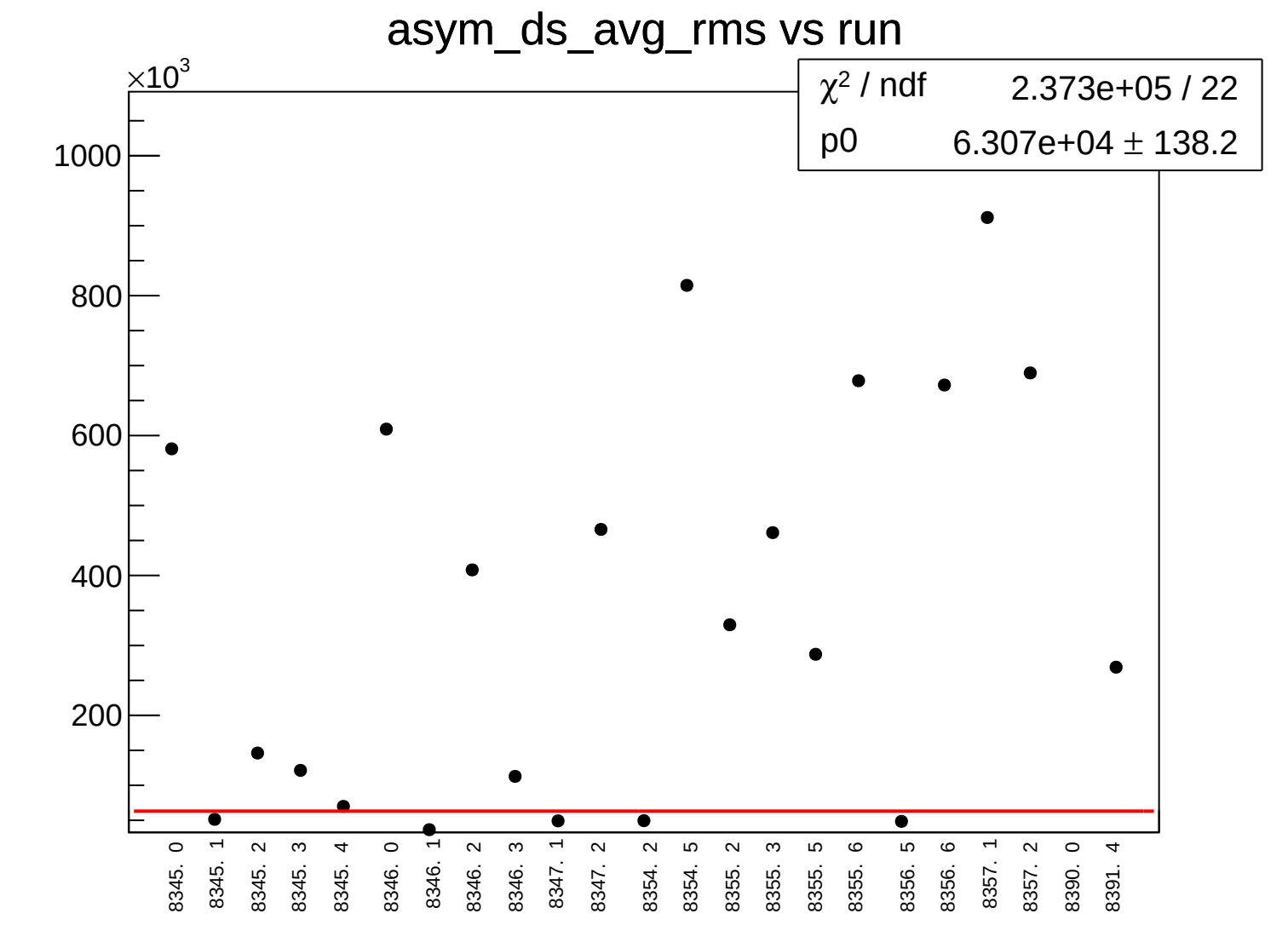

asym_ds_avg_correction_mean vs run
×10^3
χ² / ndf 52.19 / 56
p0 1.075e+04 ± 3956
pull
Entries 57
Mean 78.96
Std Dev 43.83

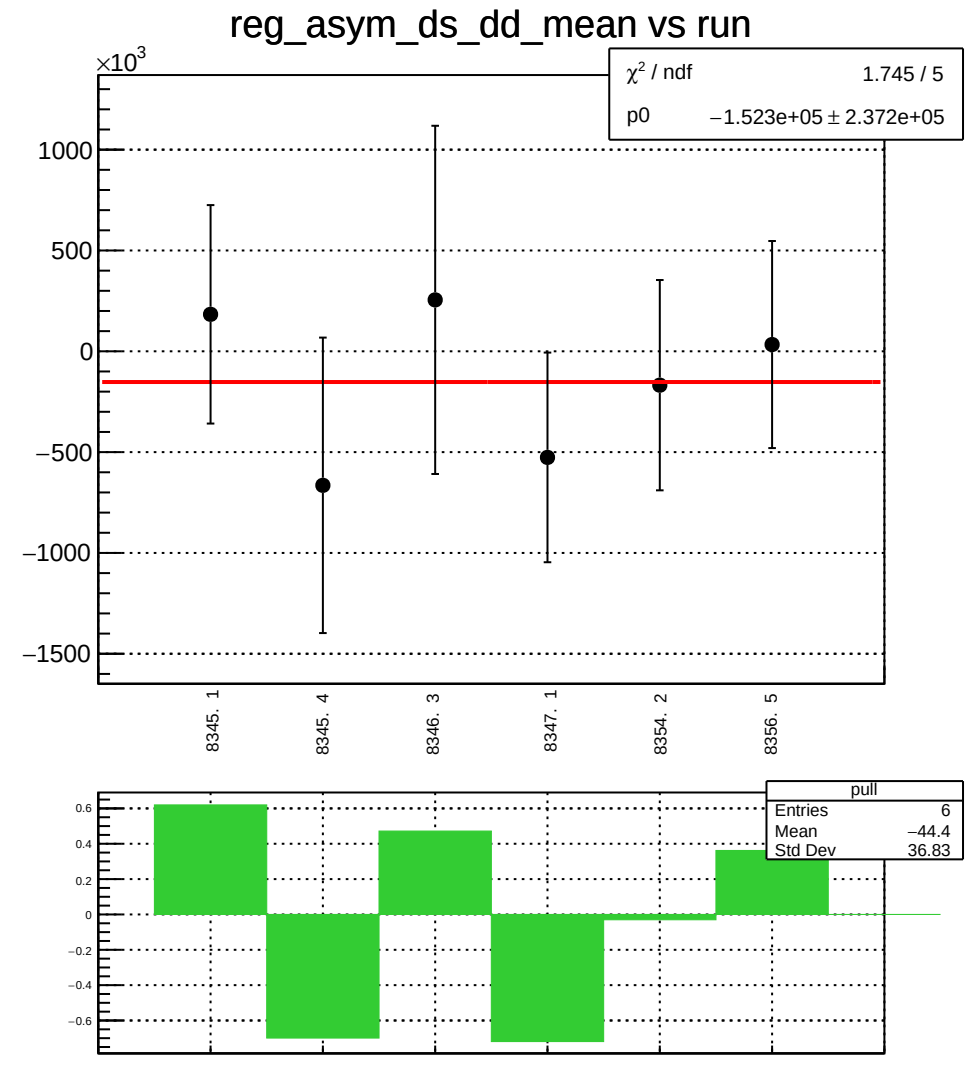

pull1D
Entries 57
Mean −0.09061
Std Dev 0.9526

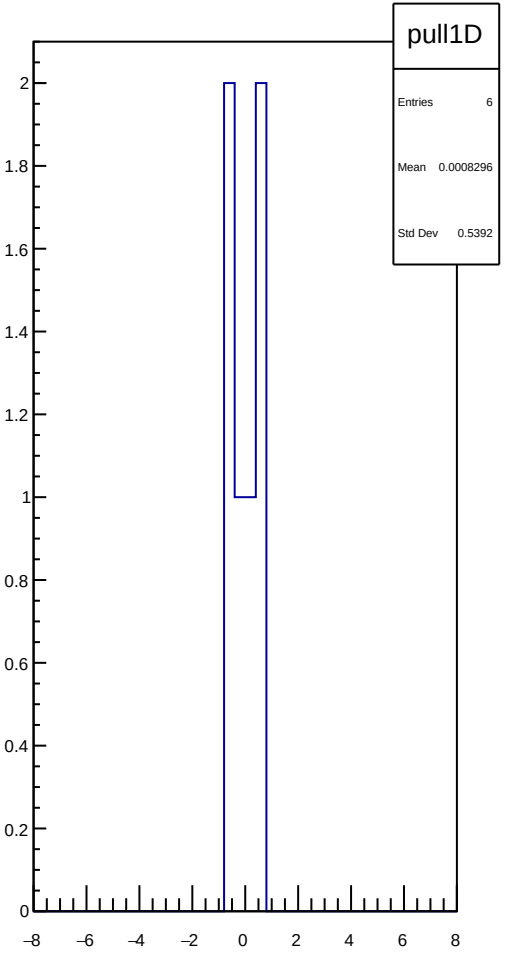

asym_ds_avg_correction_rms vs run
×10^3
χ^2 / ndf 1.324e+06 / 81
p0 1455 ± 2.797
1000
800
600
400
200

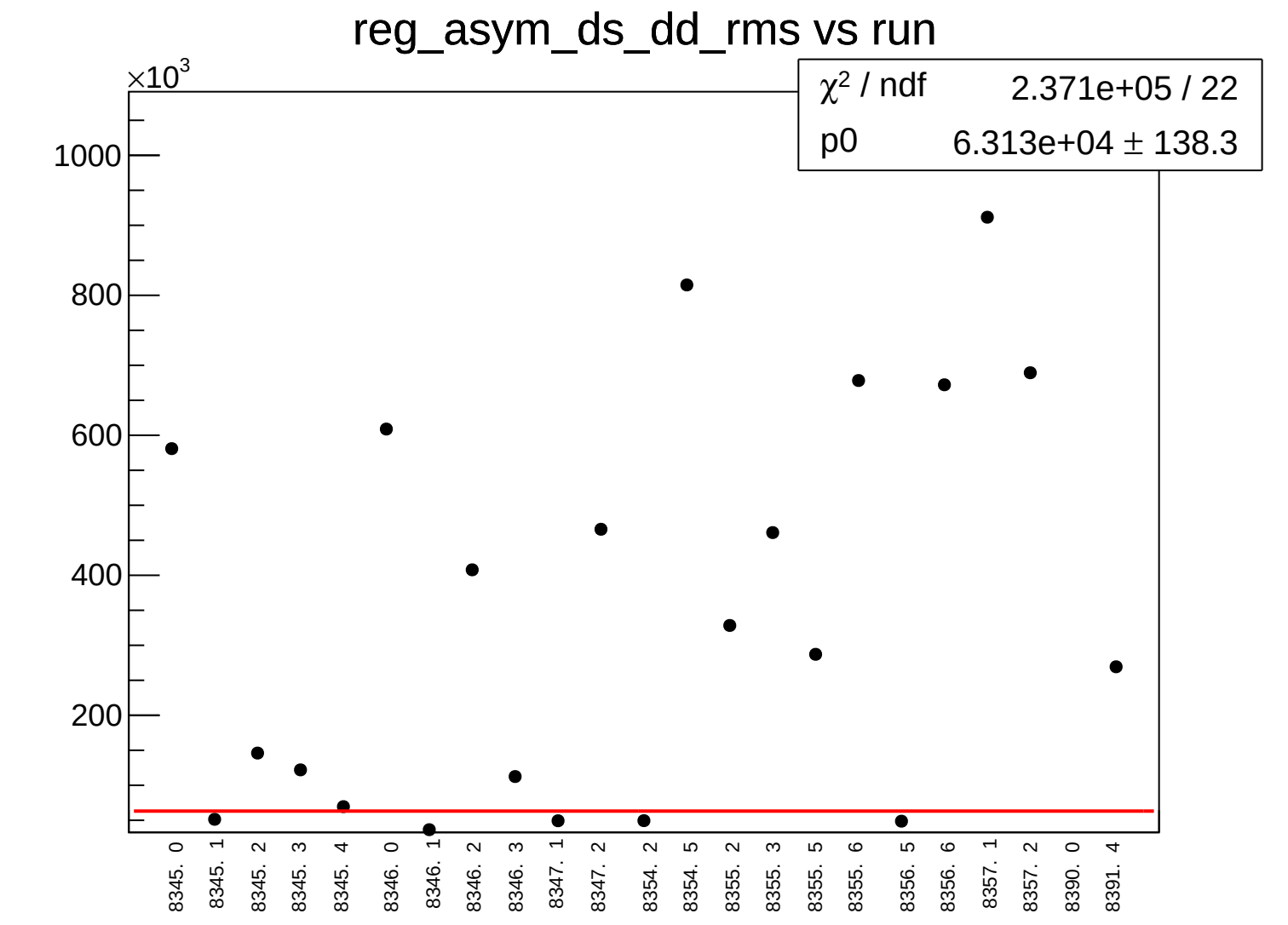

asym_ds_avg_mean vs run
×10^3
χ² / ndf 3.634 / 5
p0 1.335e+05 ± 2.369e+05
1500
1000
500
0
−500
−1000
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −8.089
Std Dev 13.01
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

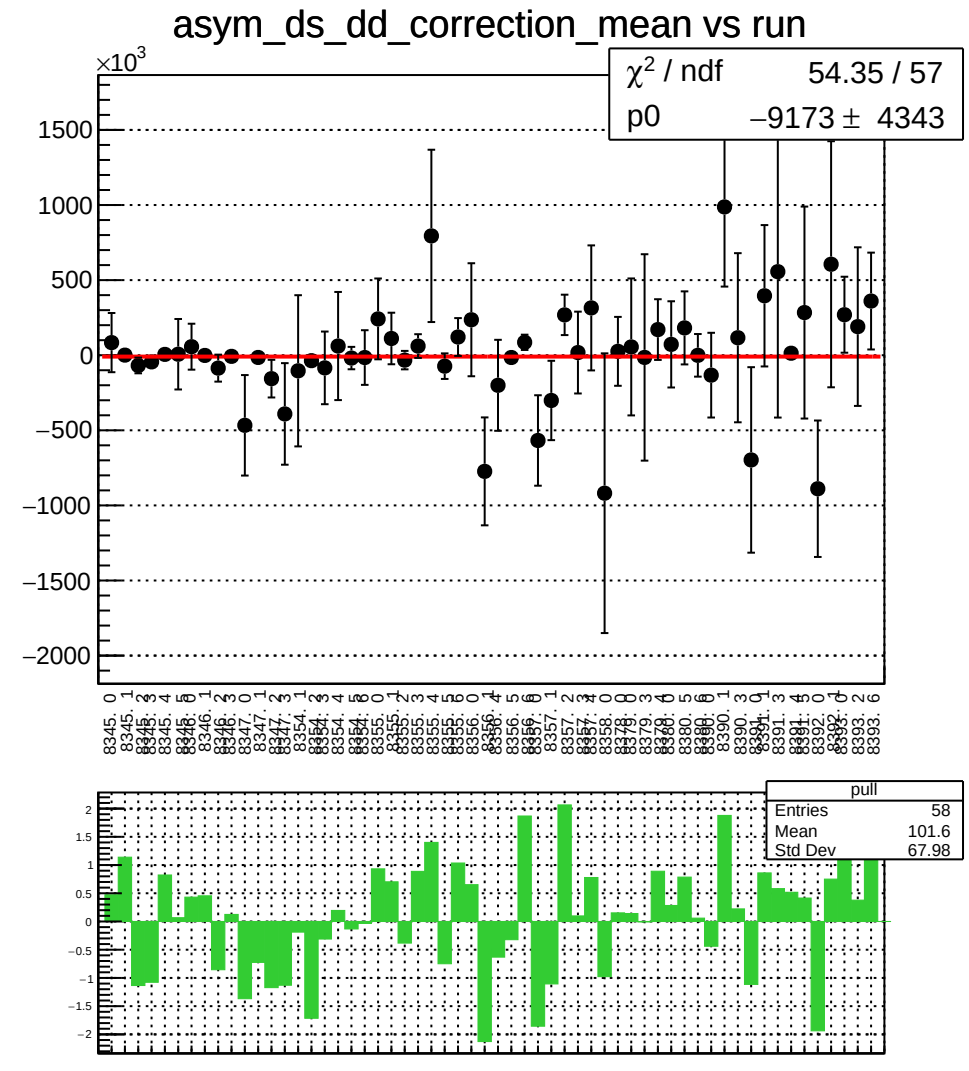

pull1D
Entries 6
Mean 0.02927
Std Dev 0.7776
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

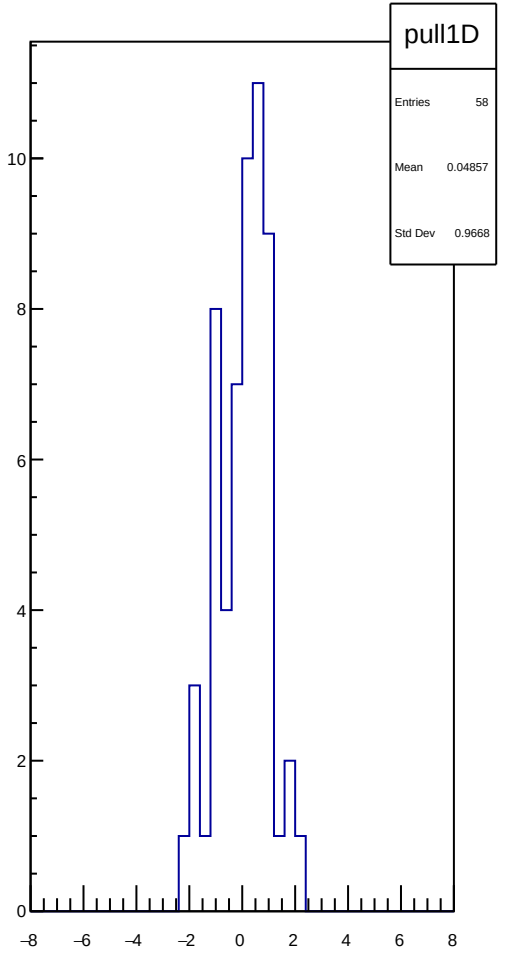

asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.373e+05 / 22
p0 6.307e+04 ± 138.2
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

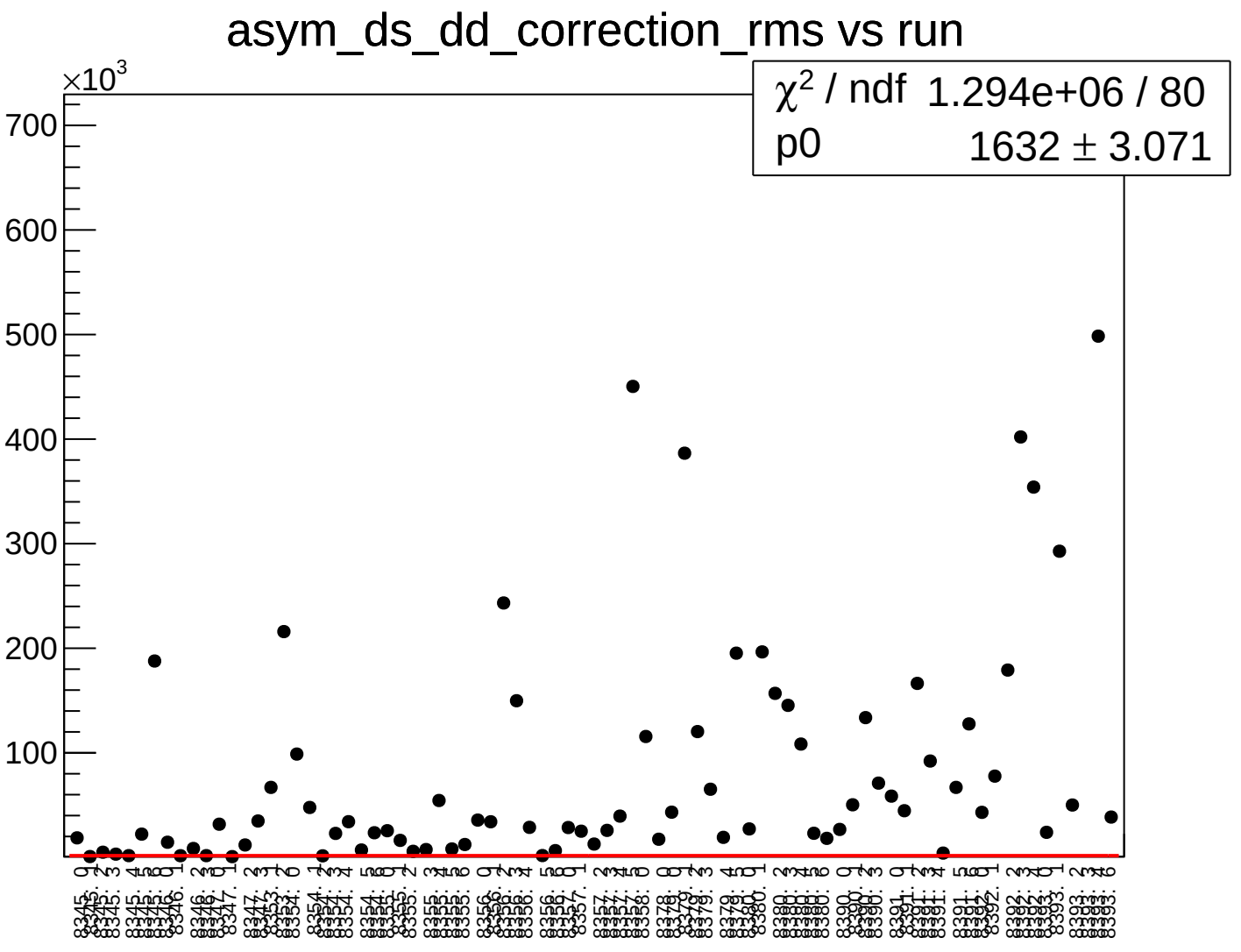

reg_asym_ds_dd_mean vs run
×10^3
χ² / ndf 1.745 / 5
p0 −1.523e+05 ± 2.372e+05
1000
500
0
−500
−1000
−1500
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −44.4
Std Dev 36.83
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

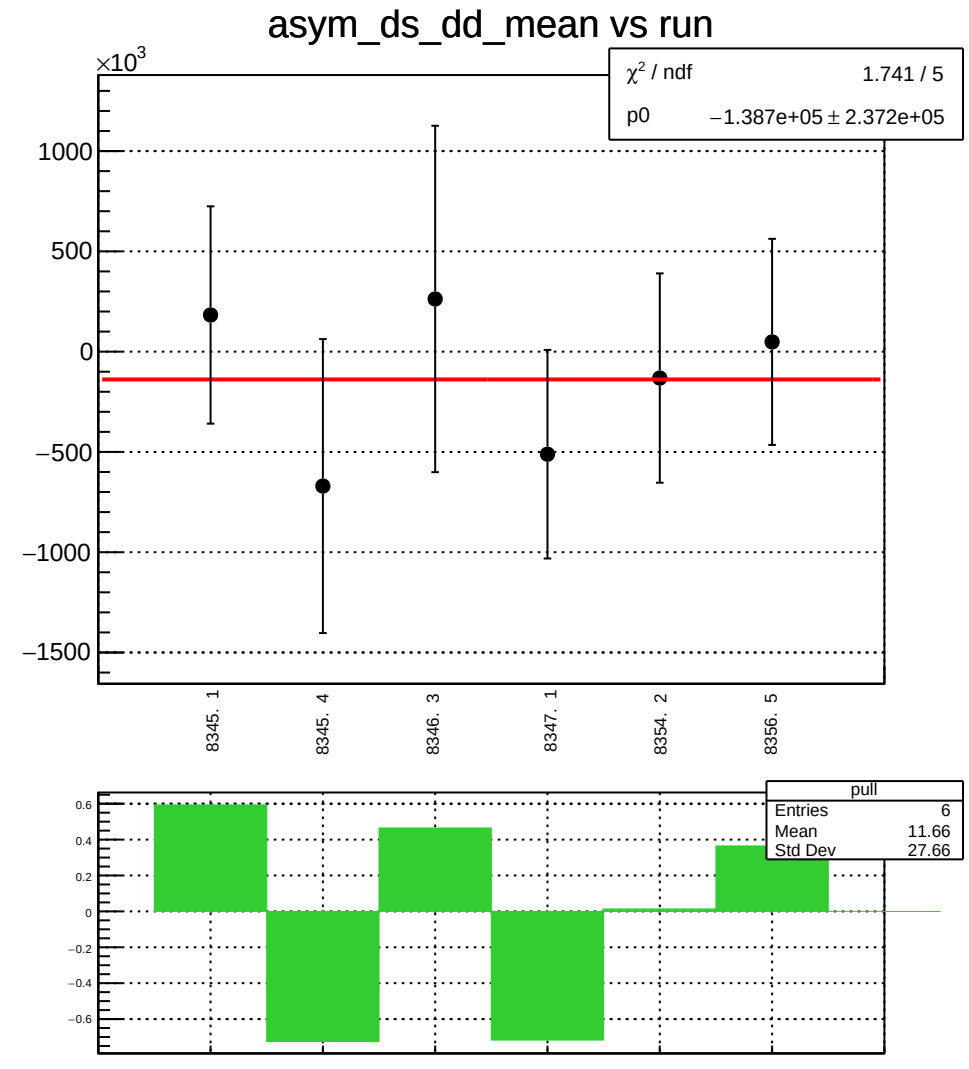

pull1D
Entries 6
Mean 0.0008296
Std Dev 0.5392
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

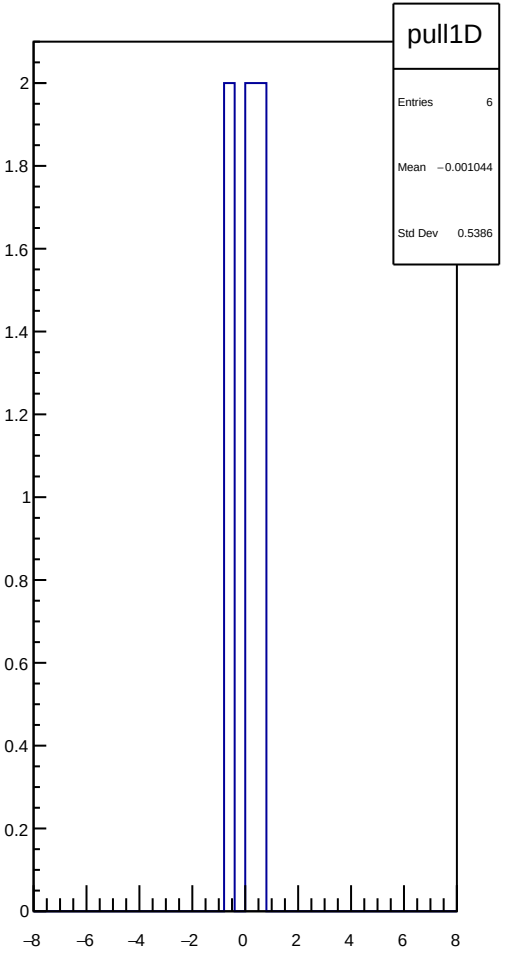

reg_asym_ds_dd_rms vs run
×10^3
χ^2 / ndf 2.371e+05 / 22
p0 6.313e+04 ± 138.3
1000
800
600
400
200
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

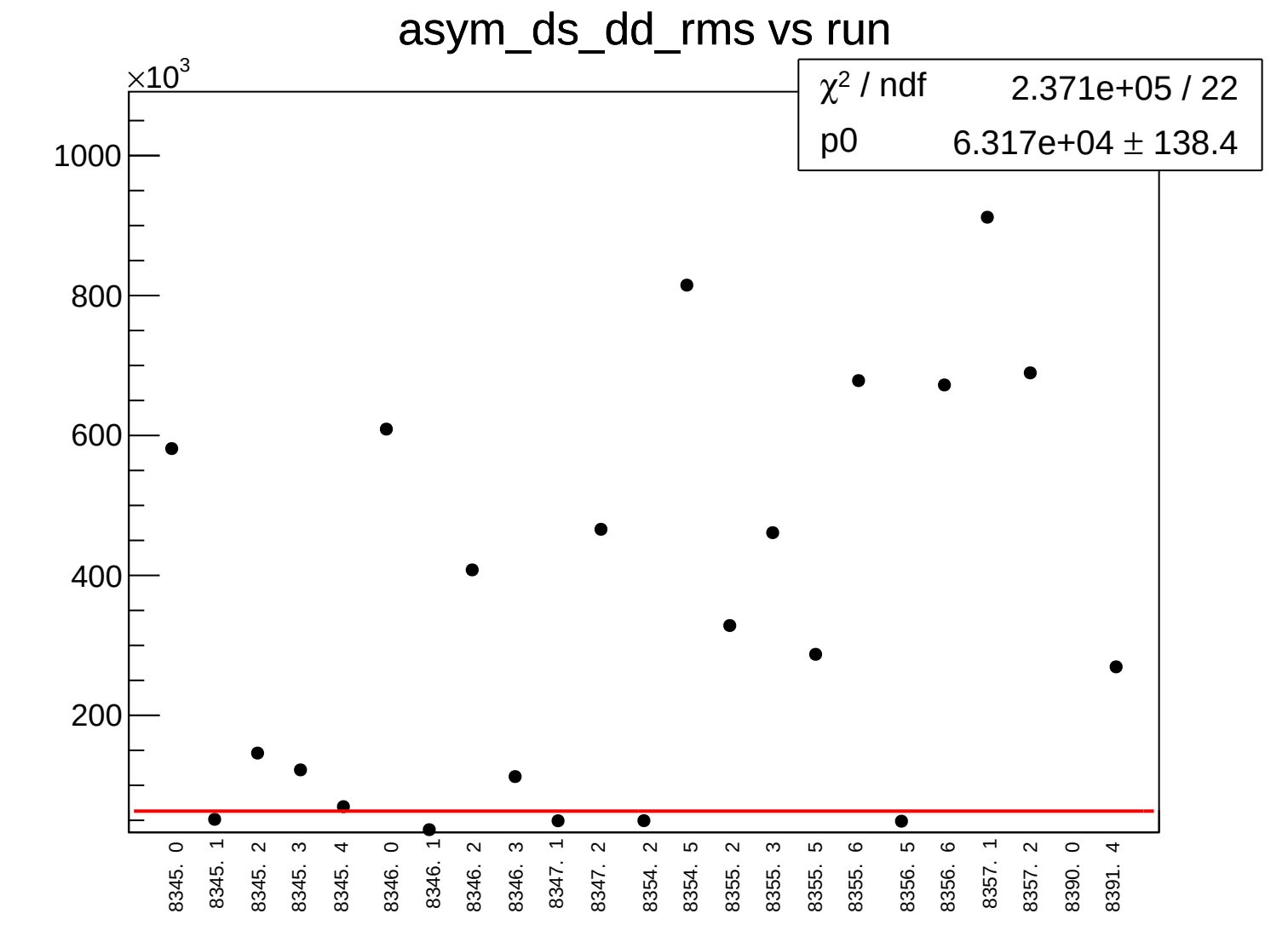

asym_ds_dd_correction_mean vs run
×10^3
χ² / ndf 54.35 / 57
p0 −9173 ± 4343
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 58
Mean 101.6
Std Dev 67.98
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

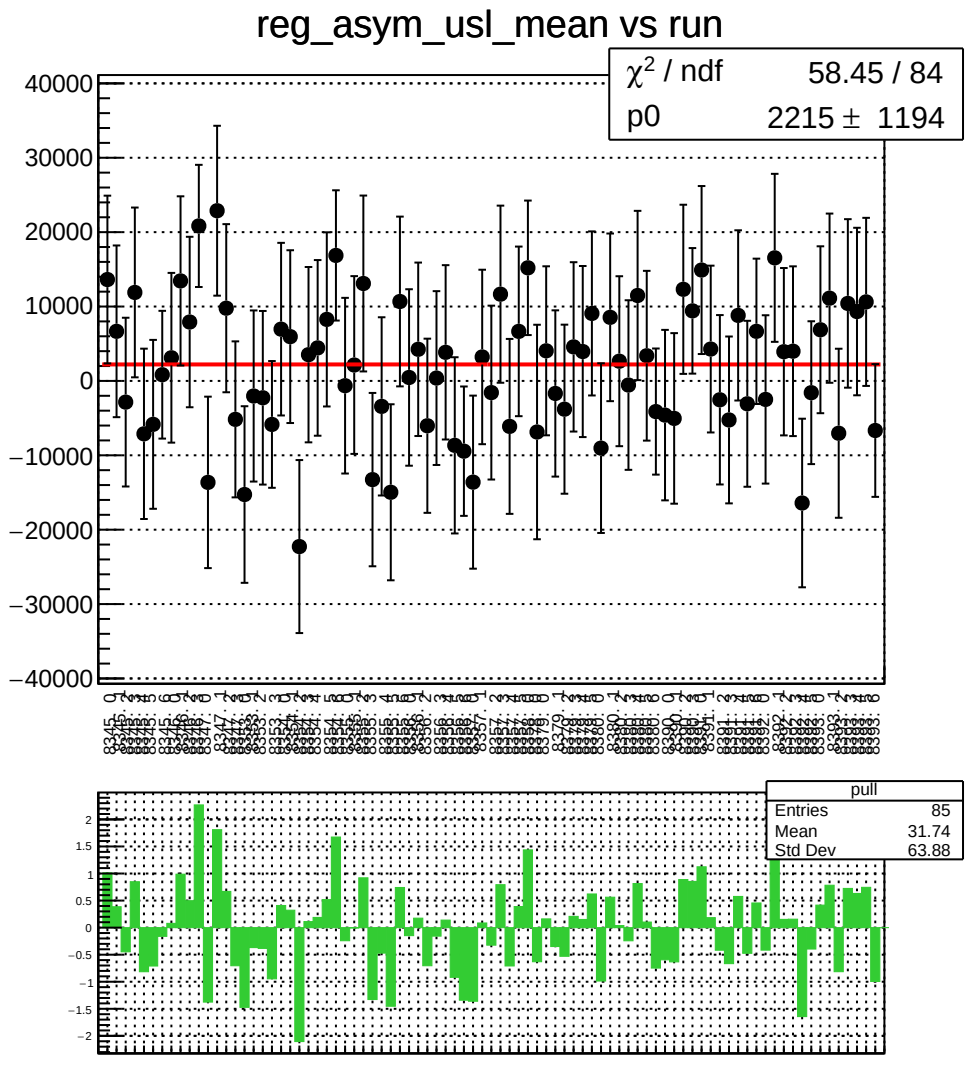

pull1D
Entries 58
Mean 0.04857
Std Dev 0.9668
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

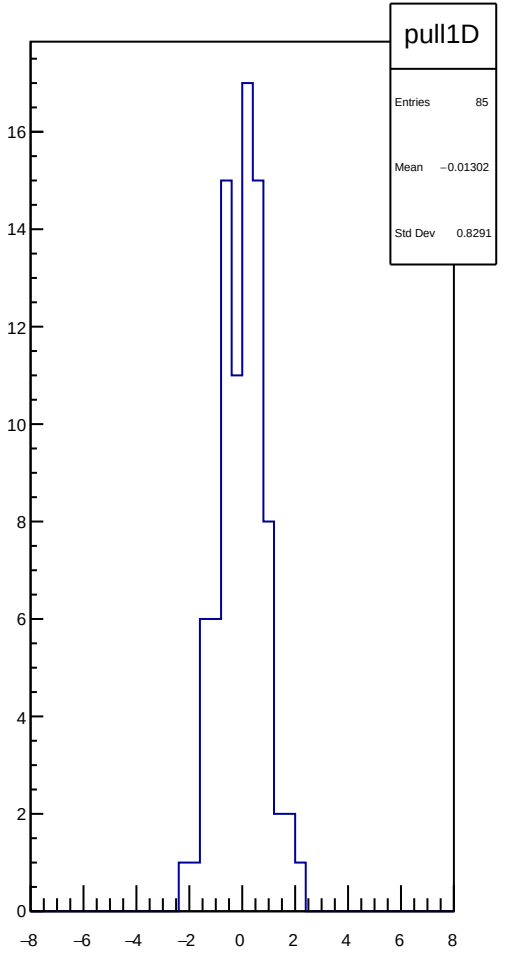

asym_ds_dd_correction_rms vs run
×10^3
700
600
500
400
300
200
100
χ² / ndf 1.294e+06 / 80
p0 1632 ± 3.071

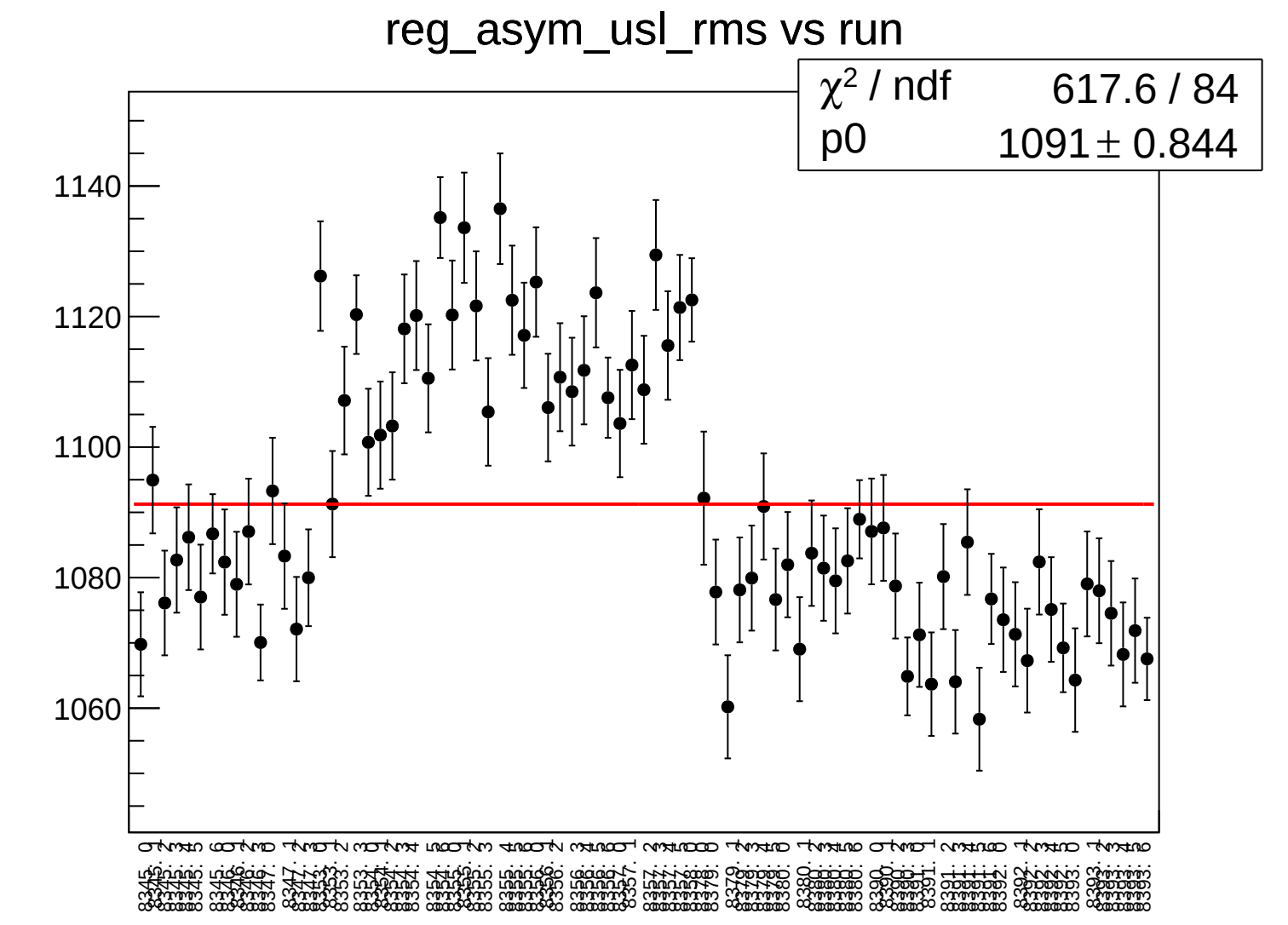

asym_ds_dd_mean vs run
×10^3
χ² / ndf 1.741 / 5
p0 −1.387e+05 ± 2.372e+05
1000
500
0
−500
−1000
−1500
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean 11.66
Std Dev 27.66
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

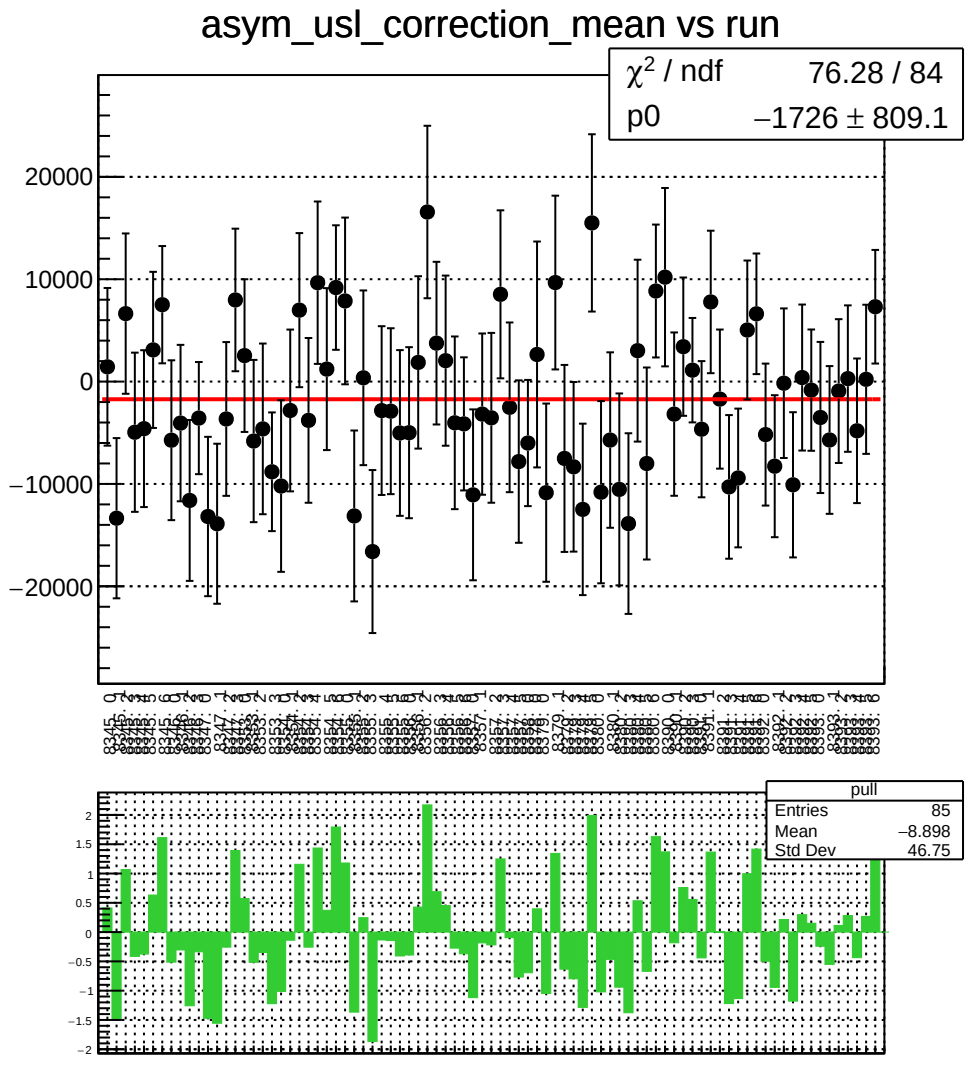

pull1D
Entries 6
Mean −0.001044
Std Dev 0.5386
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

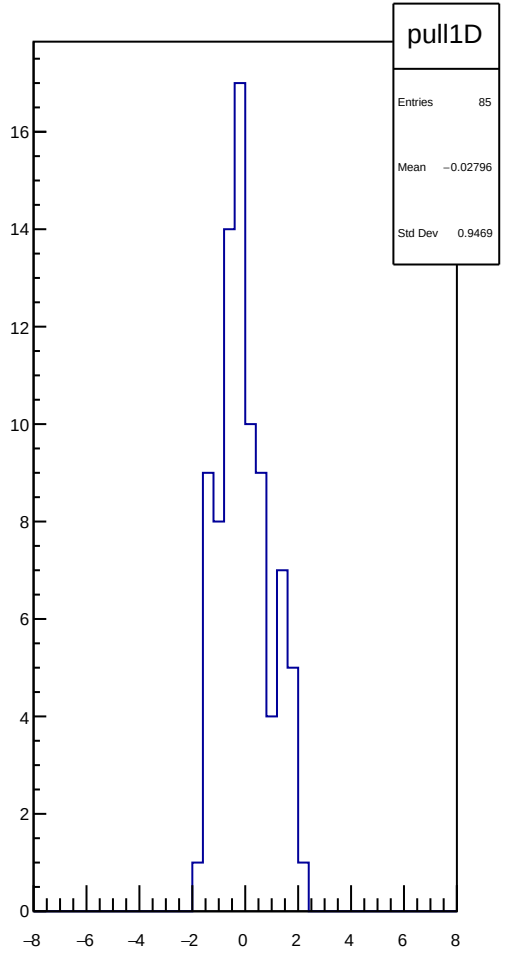

asym_ds_dd_rms vs run
×10^3
χ² / ndf 2.371e+05 / 22
p0 6.317e+04 ± 138.4
1000
800
600
400
200
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

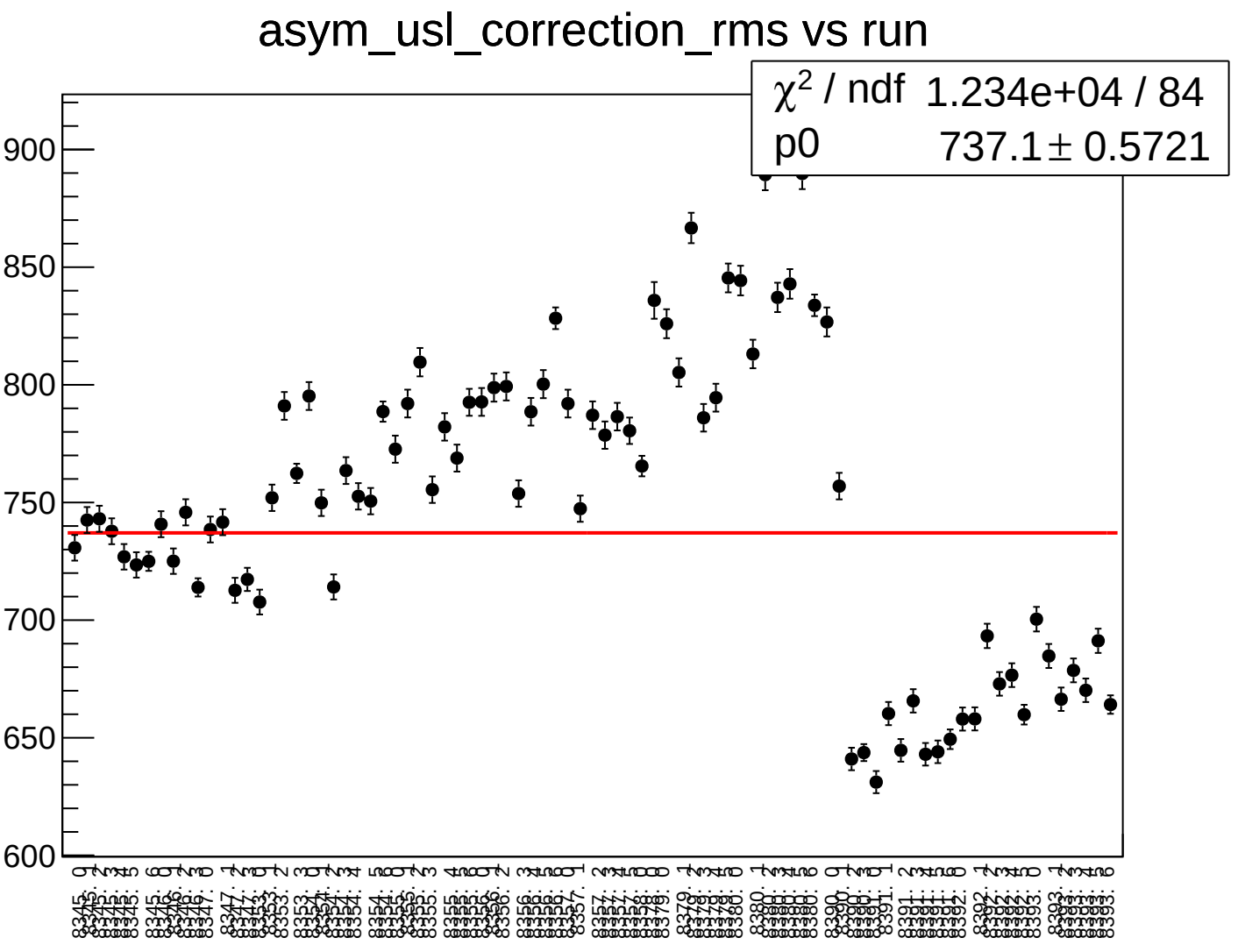

reg_asym_usl_mean vs run
χ² / ndf 58.45 / 84
p0 2215 ± 1194
pull
Entries 85
Mean 31.74
Std Dev 63.88

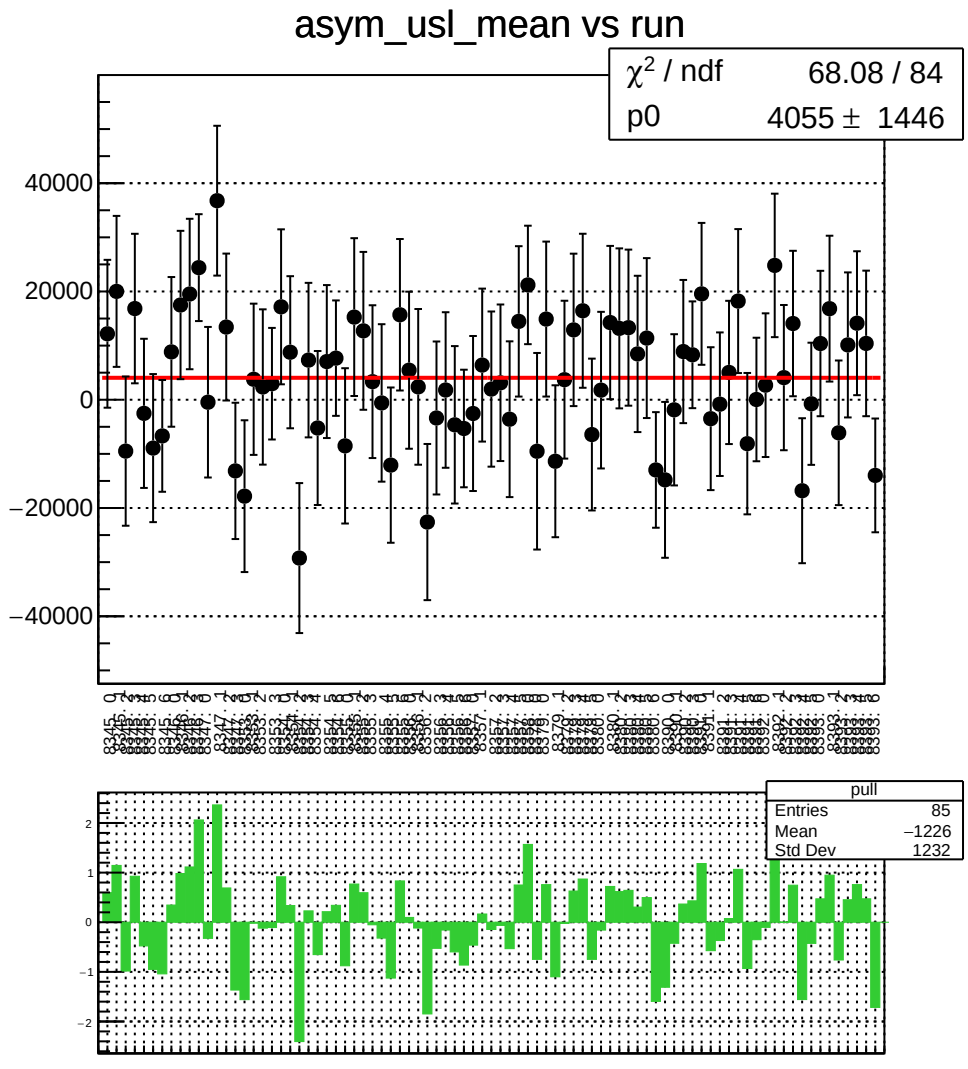

pull1D
Entries 85
Mean −0.01302
Std Dev 0.8291

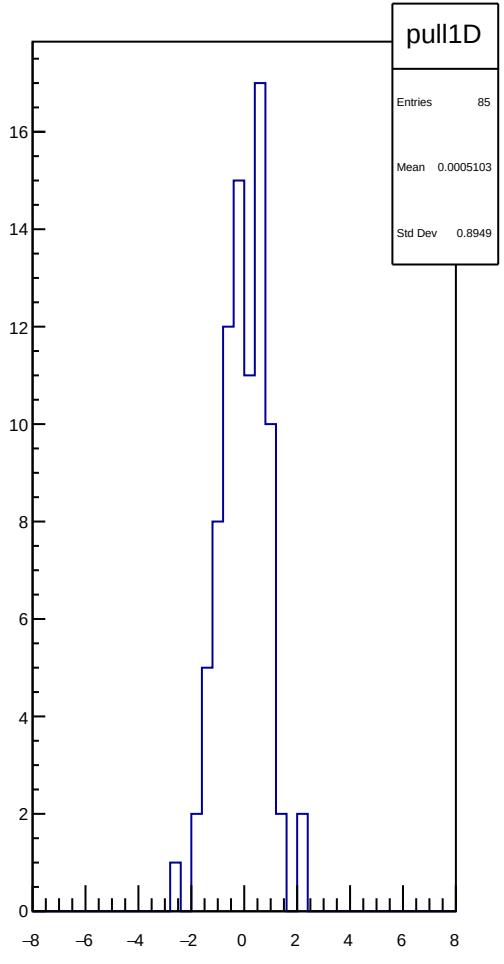

reg_asym_usl_rms vs run
χ^2 / ndf 617.6 / 84
p0 1091 ± 0.844
1140
1120
1100
1080
1060

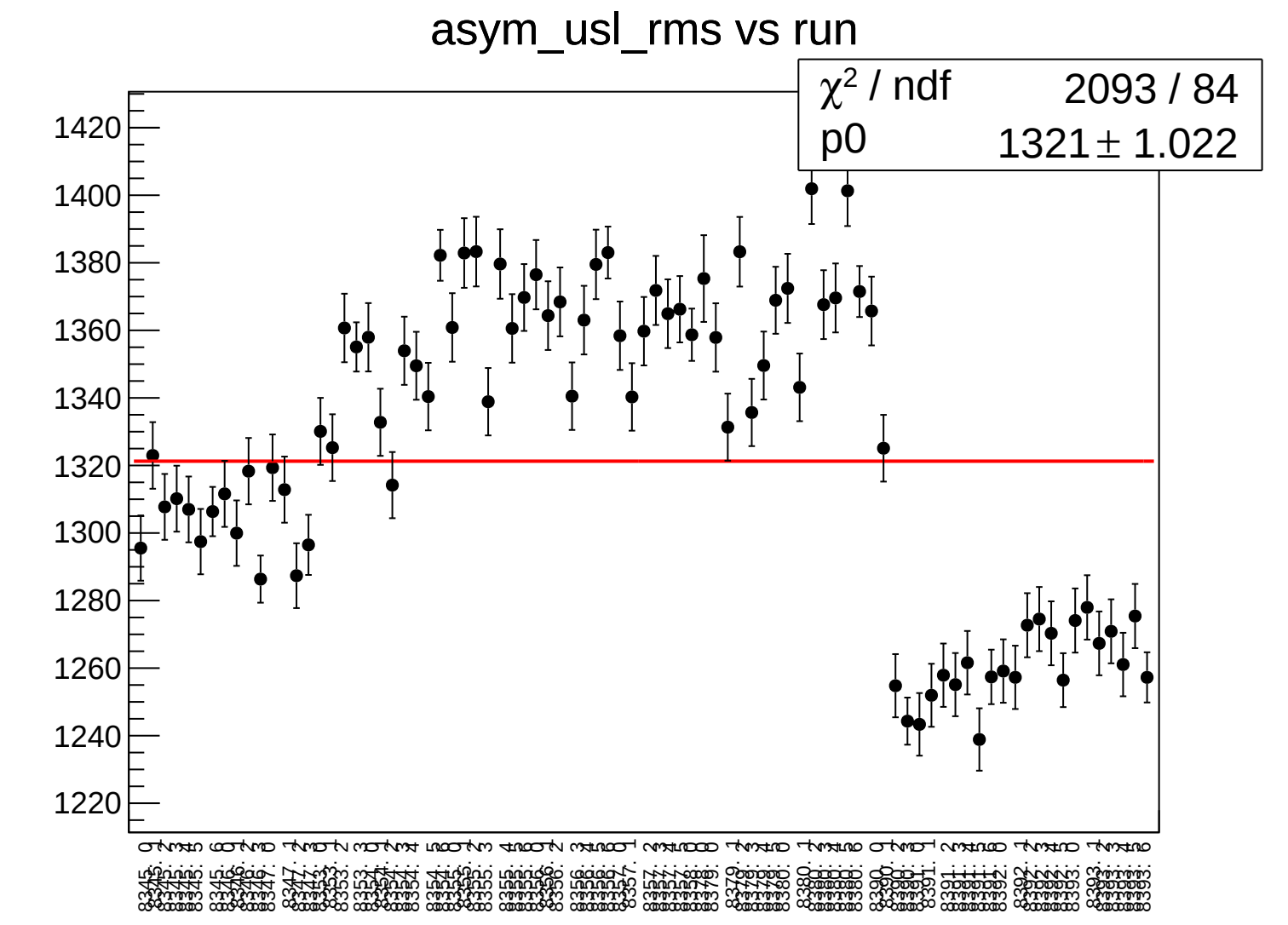

asym_usl_correction_mean vs run
χ² / ndf 76.28 / 84
p0 −1726 ± 809.1
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −8.898
Std Dev 46.75
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

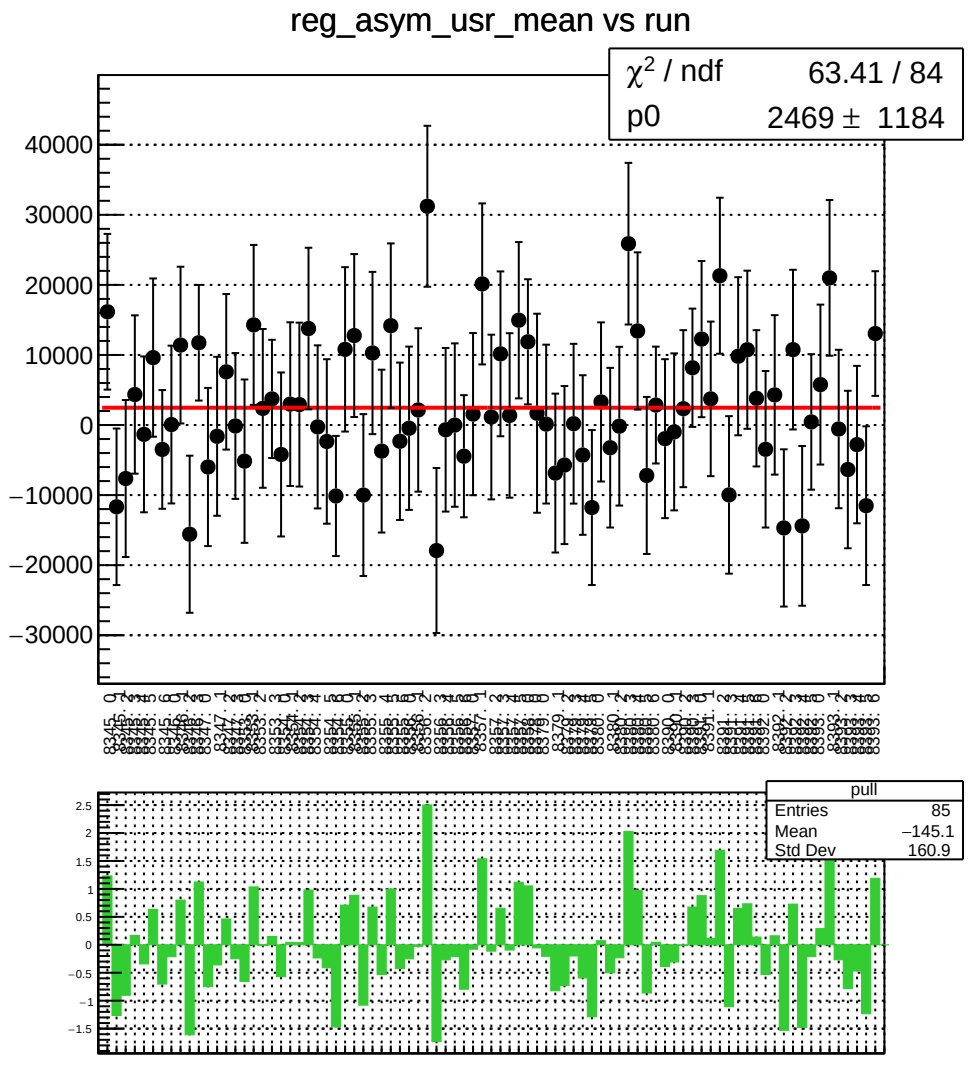

pull1D
Entries 85
Mean −0.02796
Std Dev 0.9469
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

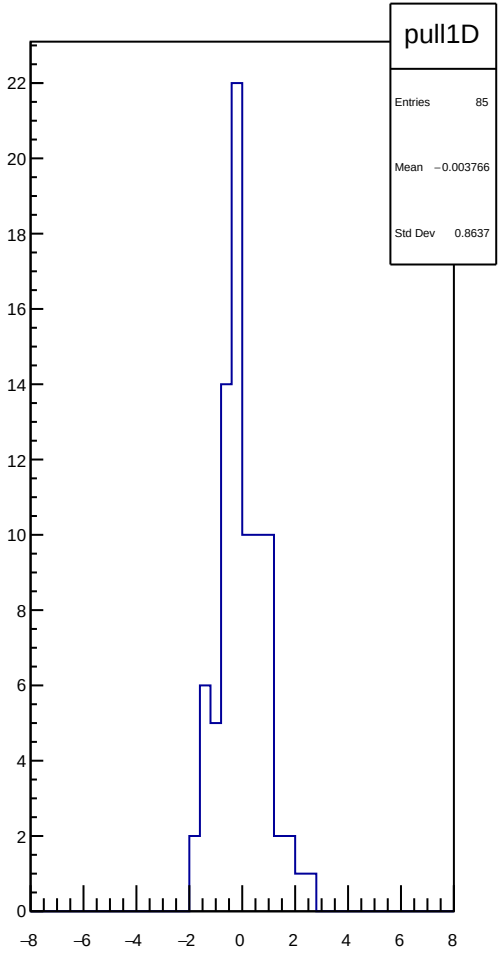

asym_usl_correction_rms vs run
χ² / ndf 1.234e+04 / 84
p0 737.1 ± 0.5721
900
850
800
750
700
650
600

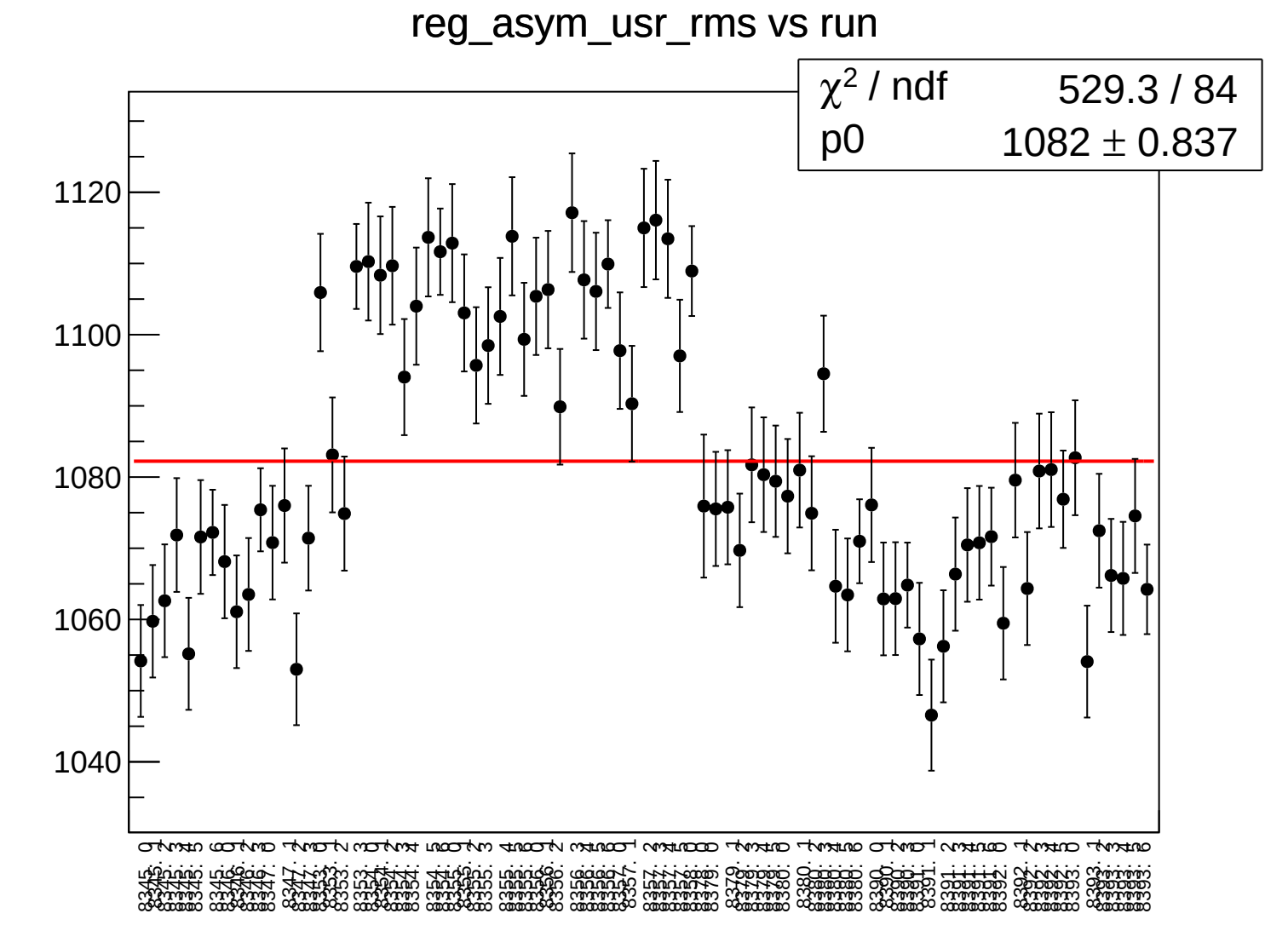

asym_usl_mean vs run
χ² / ndf 68.08 / 84
p0 4055 ± 1446
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −1226
Std Dev 1232
2
1
0
−1
−2

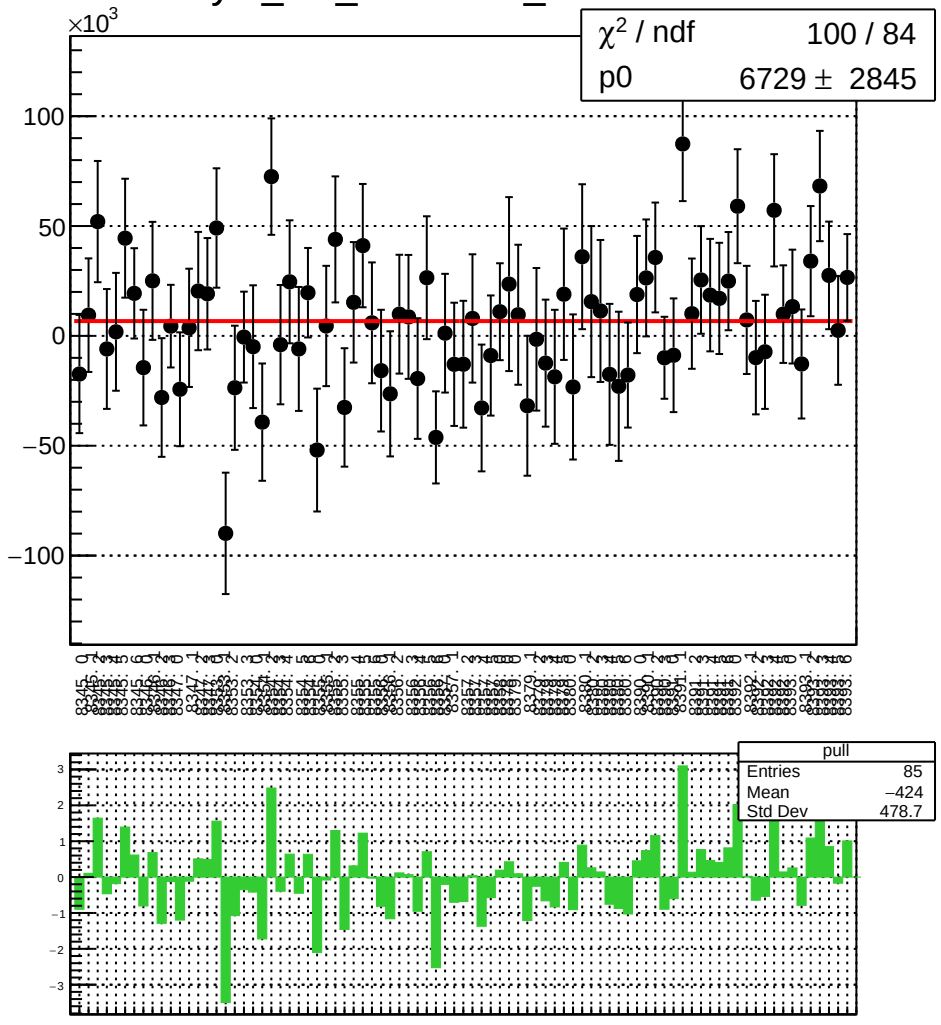

pull1D
Entries 85
Mean 0.0005103
Std Dev 0.8949
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

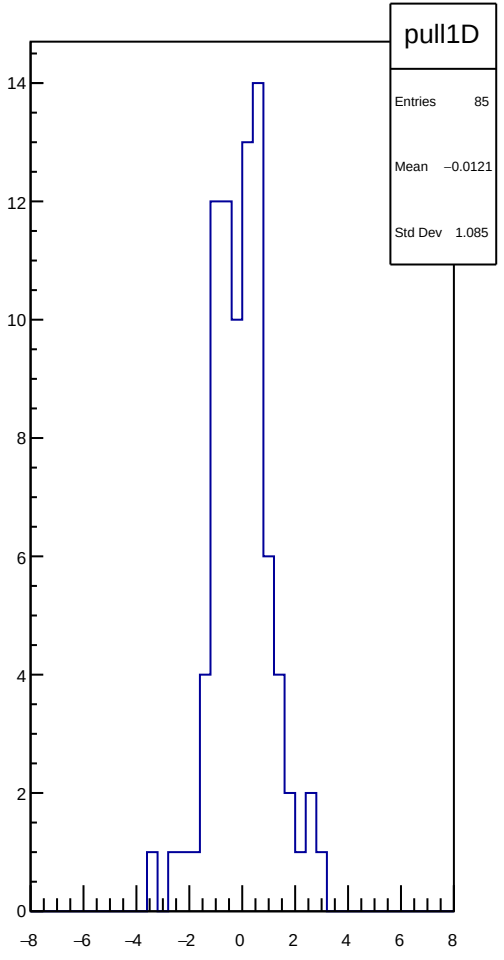

asym_usl_rms vs run
χ² / ndf 2093 / 84
p0 1321 ± 1.022
1420
1400
1380
1360
1340
1320
1300
1280
1260
1240
1220

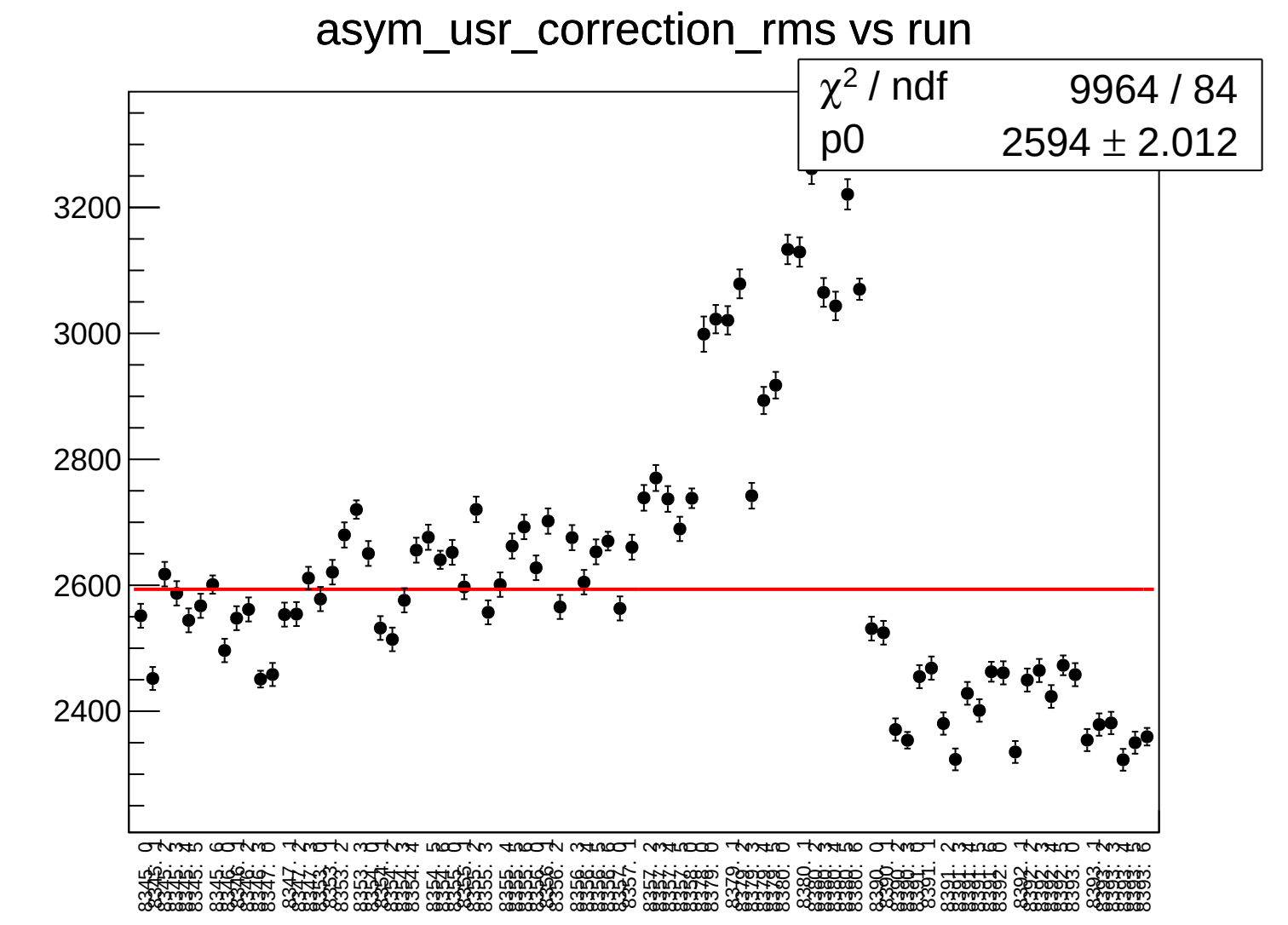

reg_asym_usr_mean vs run
χ² / ndf 63.41 / 84
p0 2469 ± 1184
pull
Entries 85
Mean −145.1
Std Dev 160.9

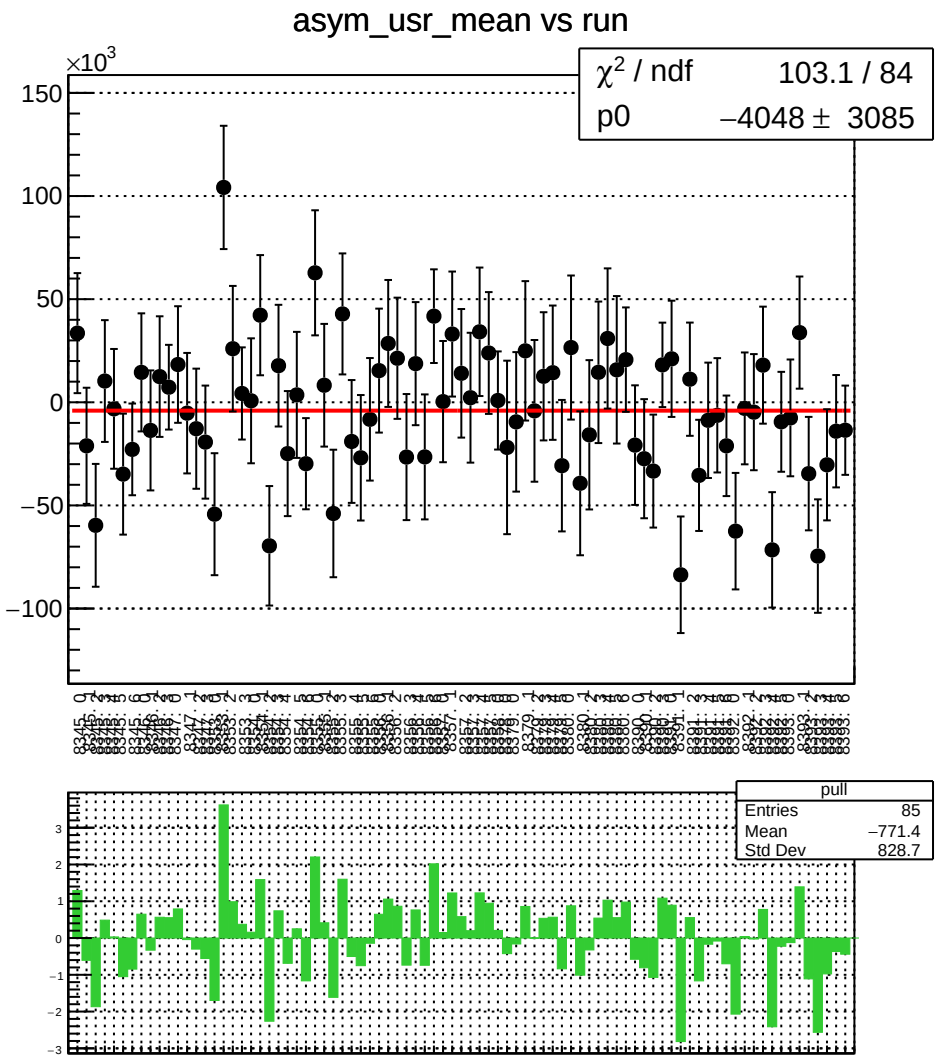

pull1D
Entries 85
Mean −0.003766
Std Dev 0.8637

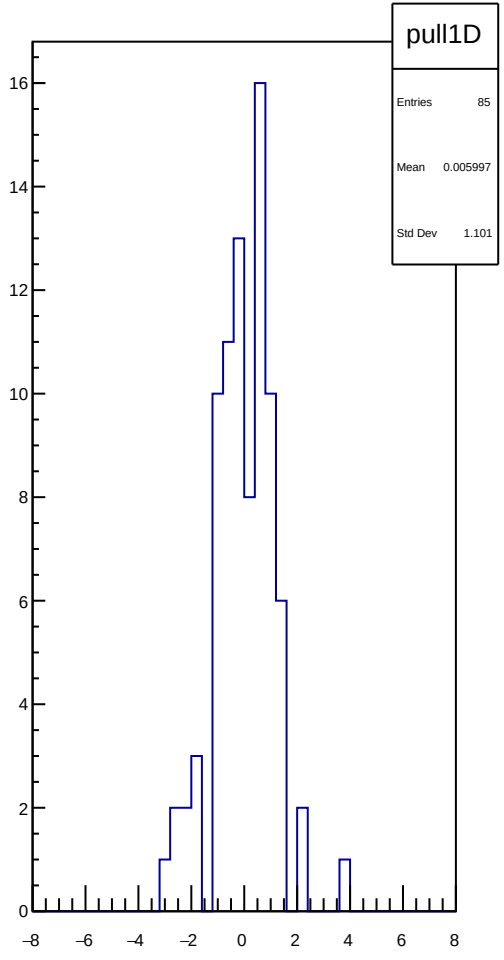

reg_asym_usr_rms vs run
χ^2 / ndf 529.3 / 84
p0 1082 ± 0.837
1120
1100
1080
1060
1040

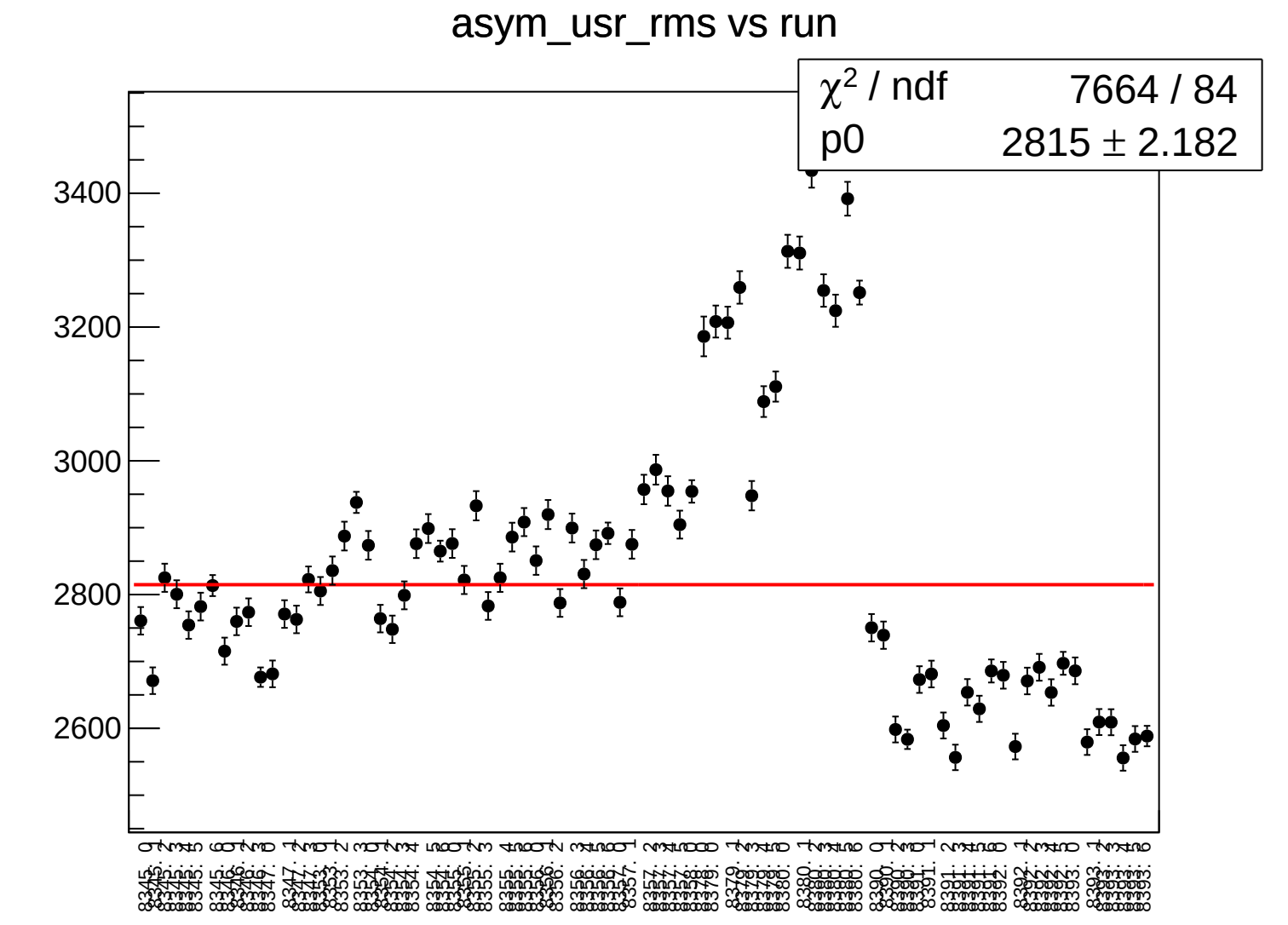

asym_usr_correction_mean vs run
×10^3
χ² / ndf 100 / 84
p0 6729 ± 2845
100
50
0
−50
−100
pull
Entries 85
Mean −424
Std Dev 478.7
3
2
1
0
−1
−2
−3

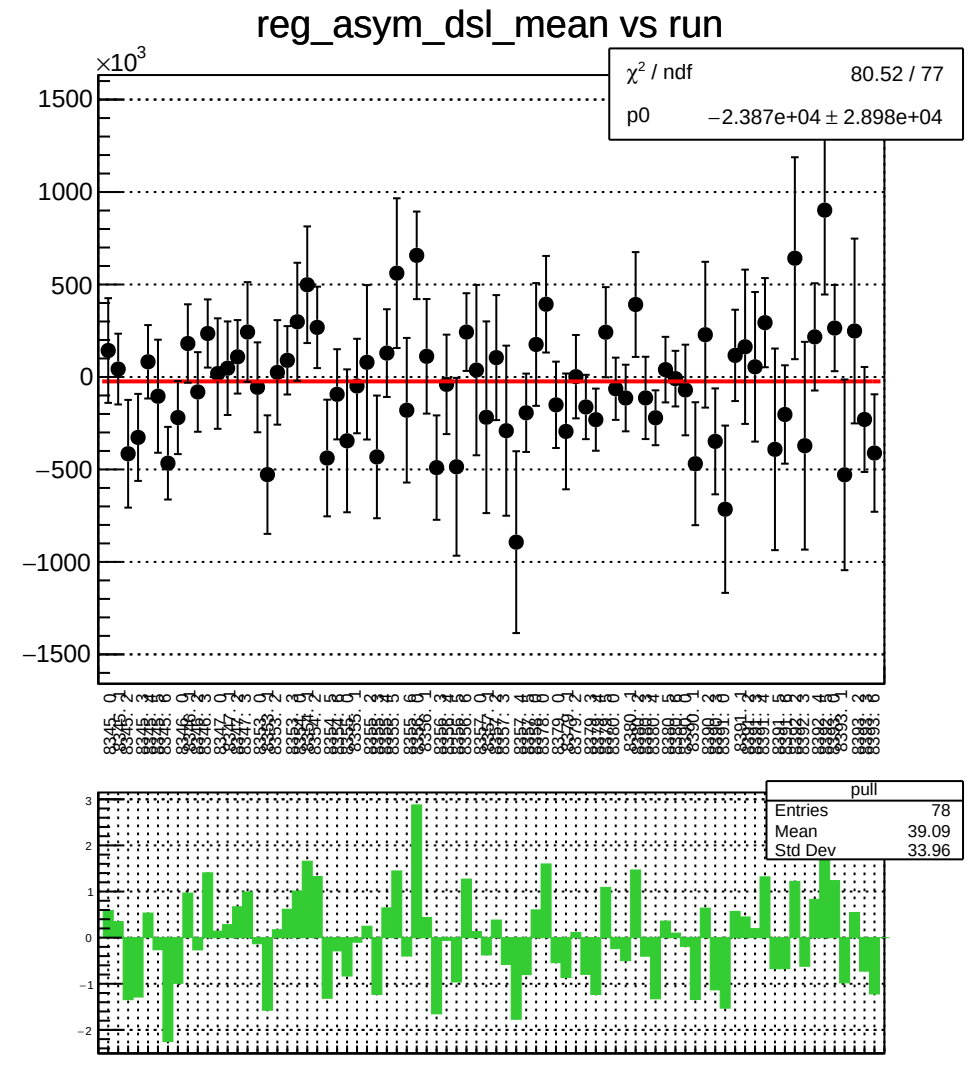

pull1D
Entries 85
Mean −0.0121
Std Dev 1.085
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

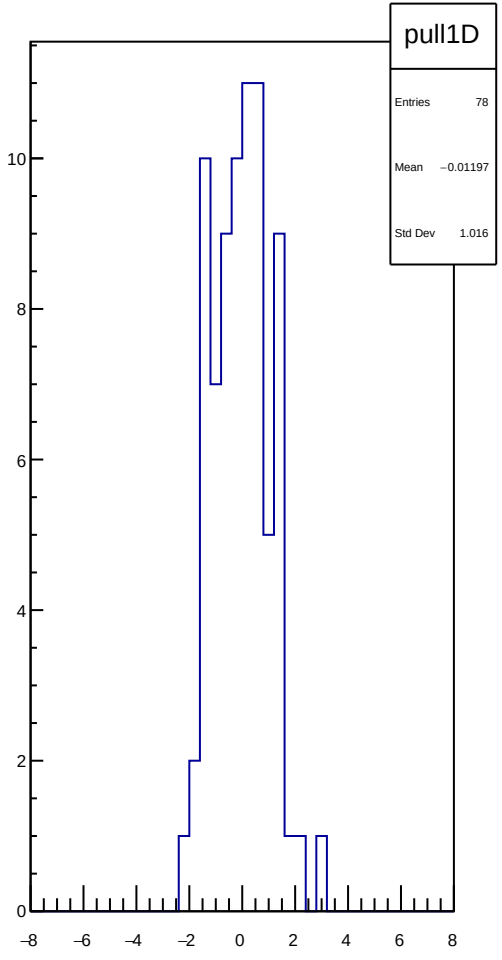

asym_usr_correction_rms vs run
χ² / ndf 9964 / 84
p0 2594 ± 2.012
3200
3000
2800
2600
2400

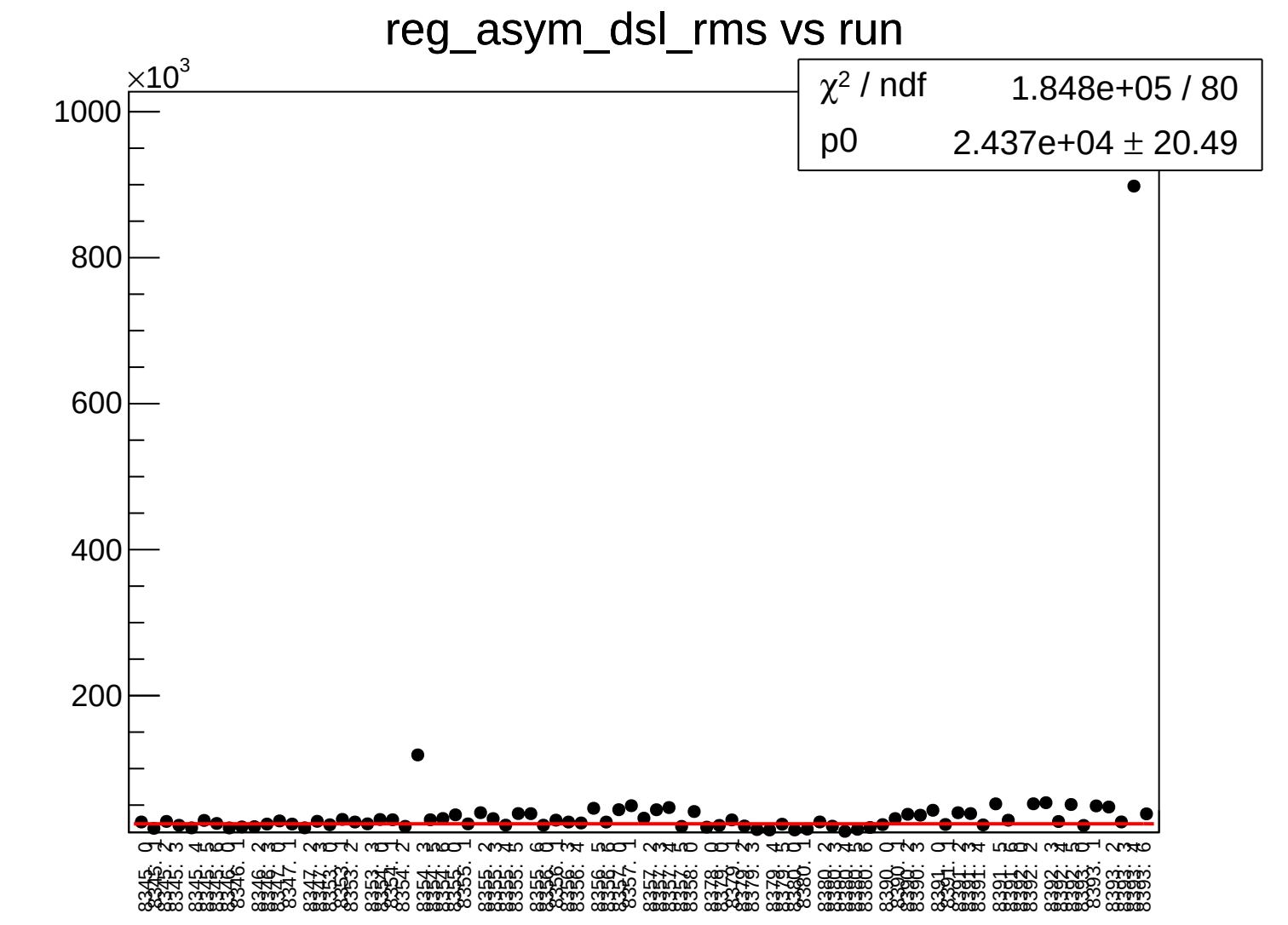

asym_usr_mean vs run
×10^3
χ² / ndf 103.1 / 84
p0 −4048 ± 3085
150
100
50
0
−50
−100
pull
Entries 85
Mean −771.4
Std Dev 828.7
3
2
1
0
−1
−2
−3

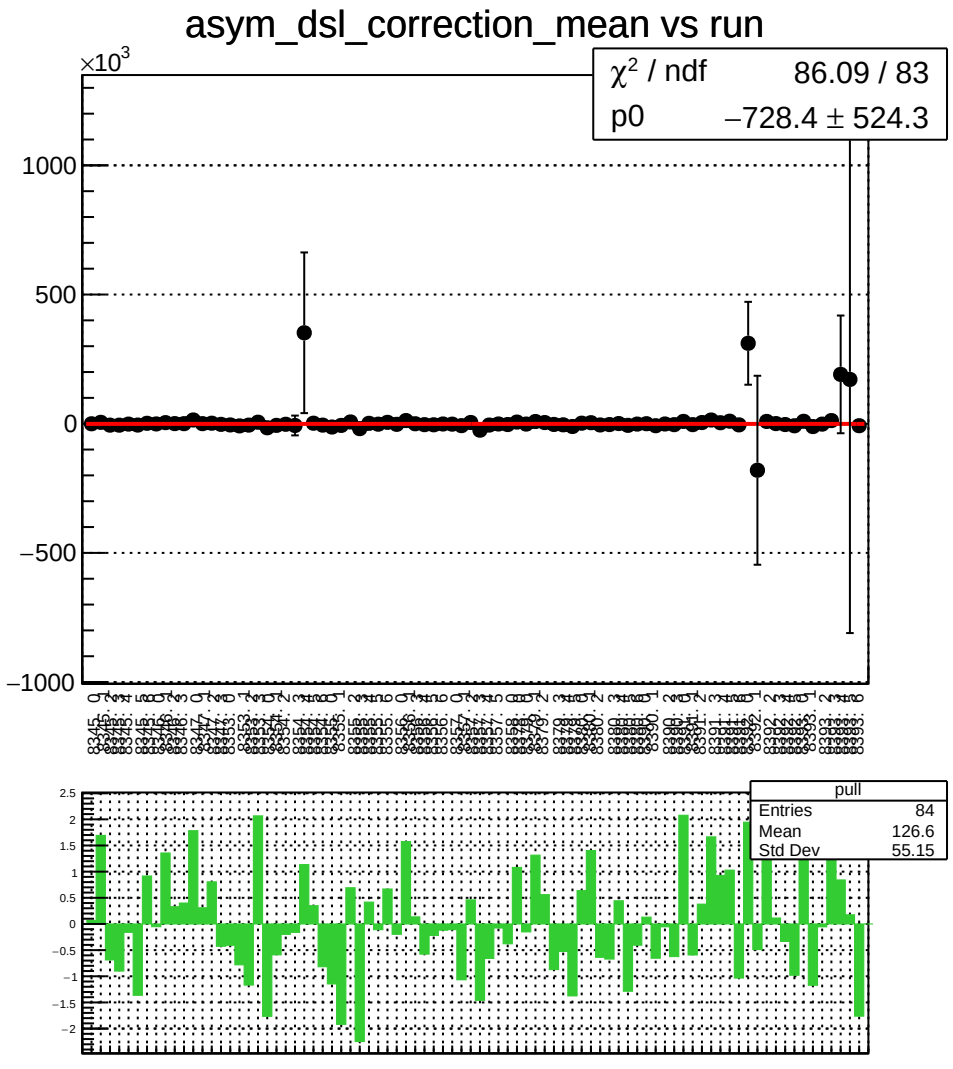

pull1D
Entries 85
Mean 0.005997
Std Dev 1.101
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

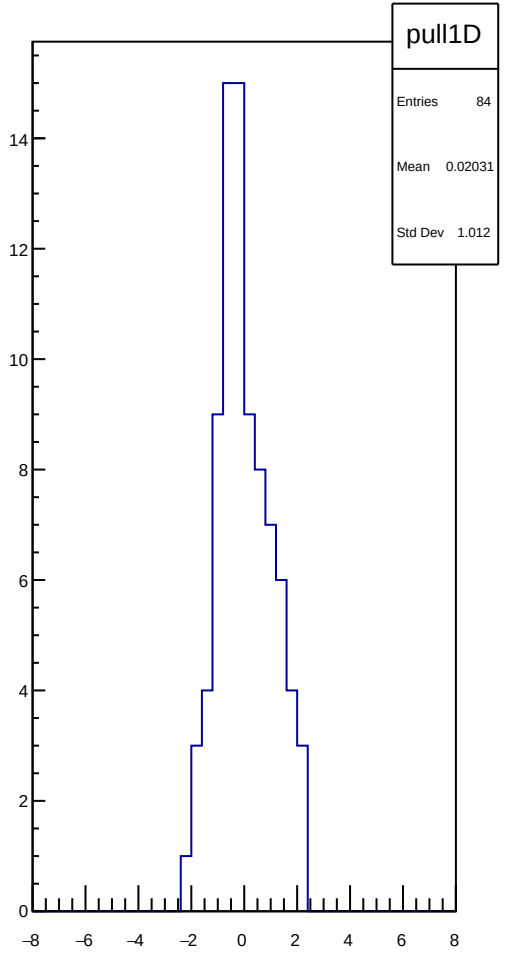

asym_usr_rms vs run
χ^2 / ndf 7664 / 84
p0 2815 ± 2.182
3400
3200
3000
2800
2600

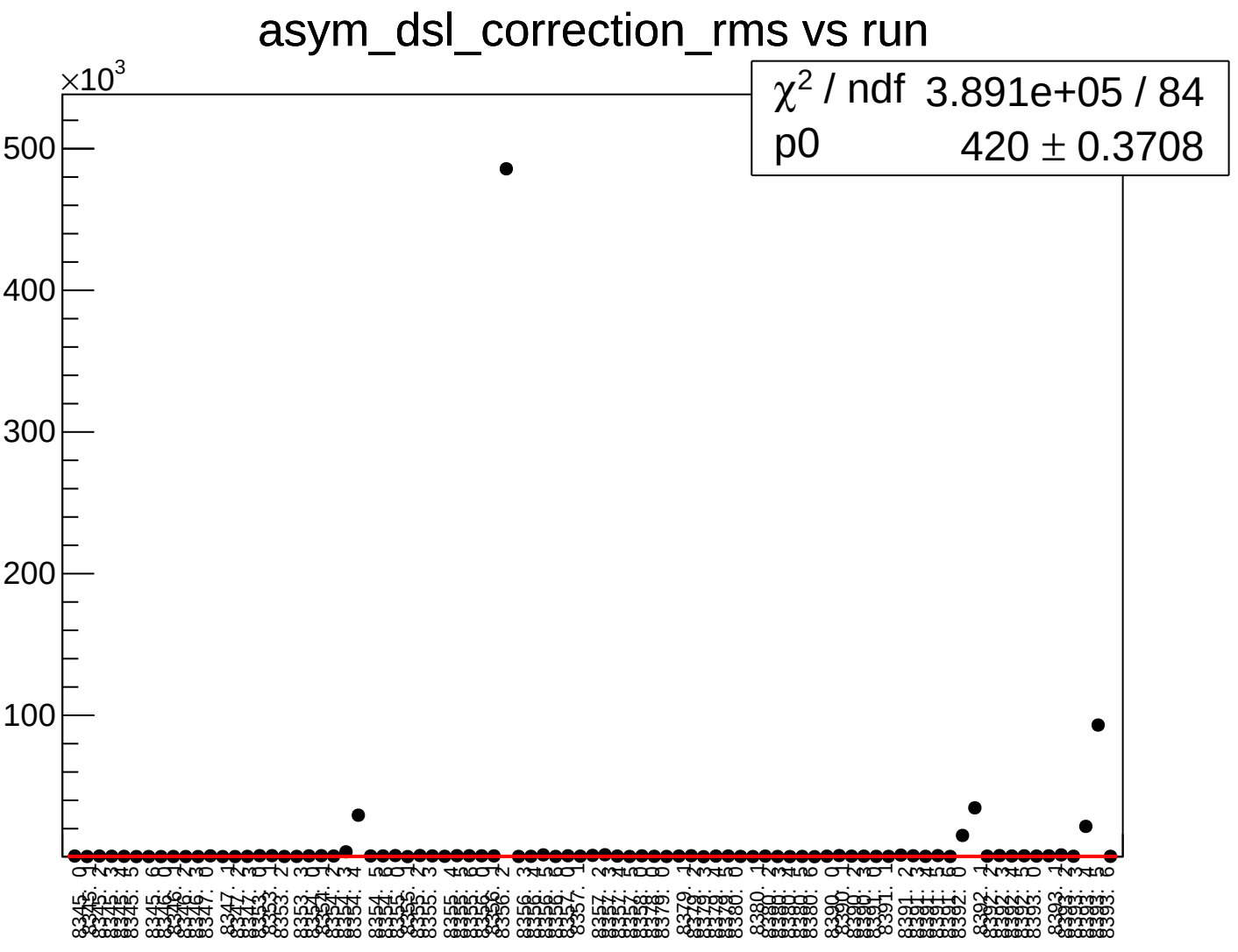

reg_asym_dsl_mean vs run
×10^3
χ² / ndf 80.52 / 77
p0 −2.387e+04 ± 2.898e+04
1500
1000
500
0
−500
−1000
−1500
pull
Entries 78
Mean 39.09
Std Dev 33.96
3
2
1
0
−1
−2

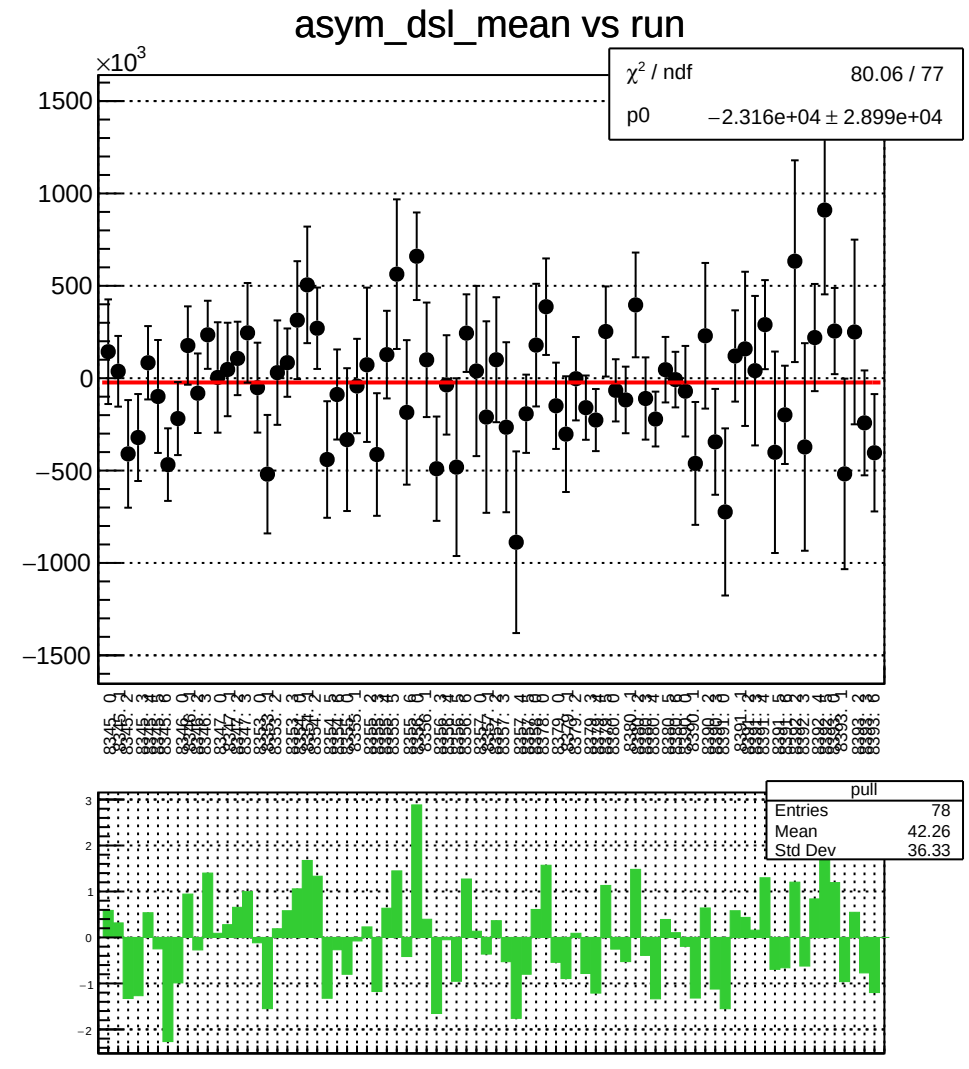

pull1D
Entries 78
Mean −0.01197
Std Dev 1.016
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

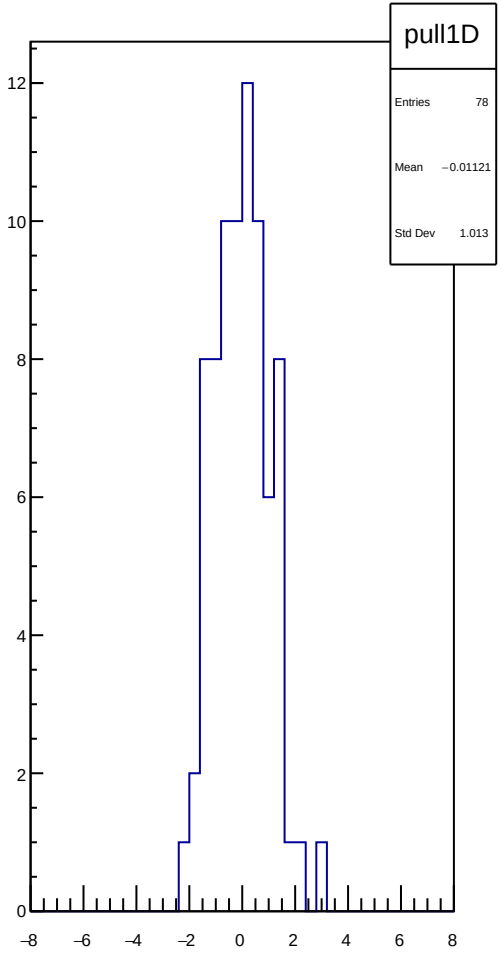

reg_asym_dsl_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.848e+05 / 80
p0 2.437e+04 ± 20.49

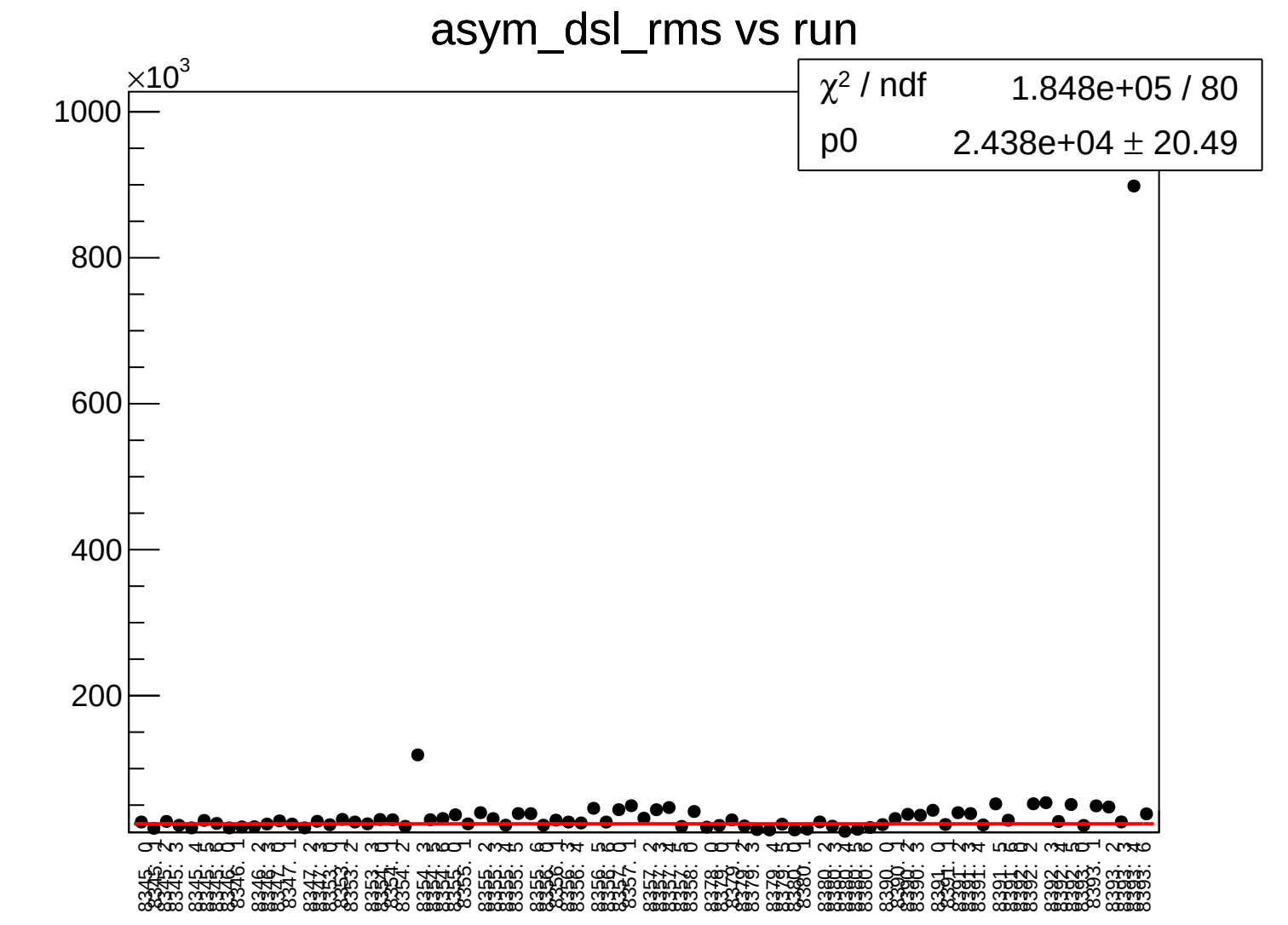

asym_dsl_correction_mean vs run
×10^3
χ² / ndf 86.09 / 83
p0 −728.4 ± 524.3
1000
500
0
−500
−1000
pull
Entries 84
Mean 126.6
Std Dev 55.15
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

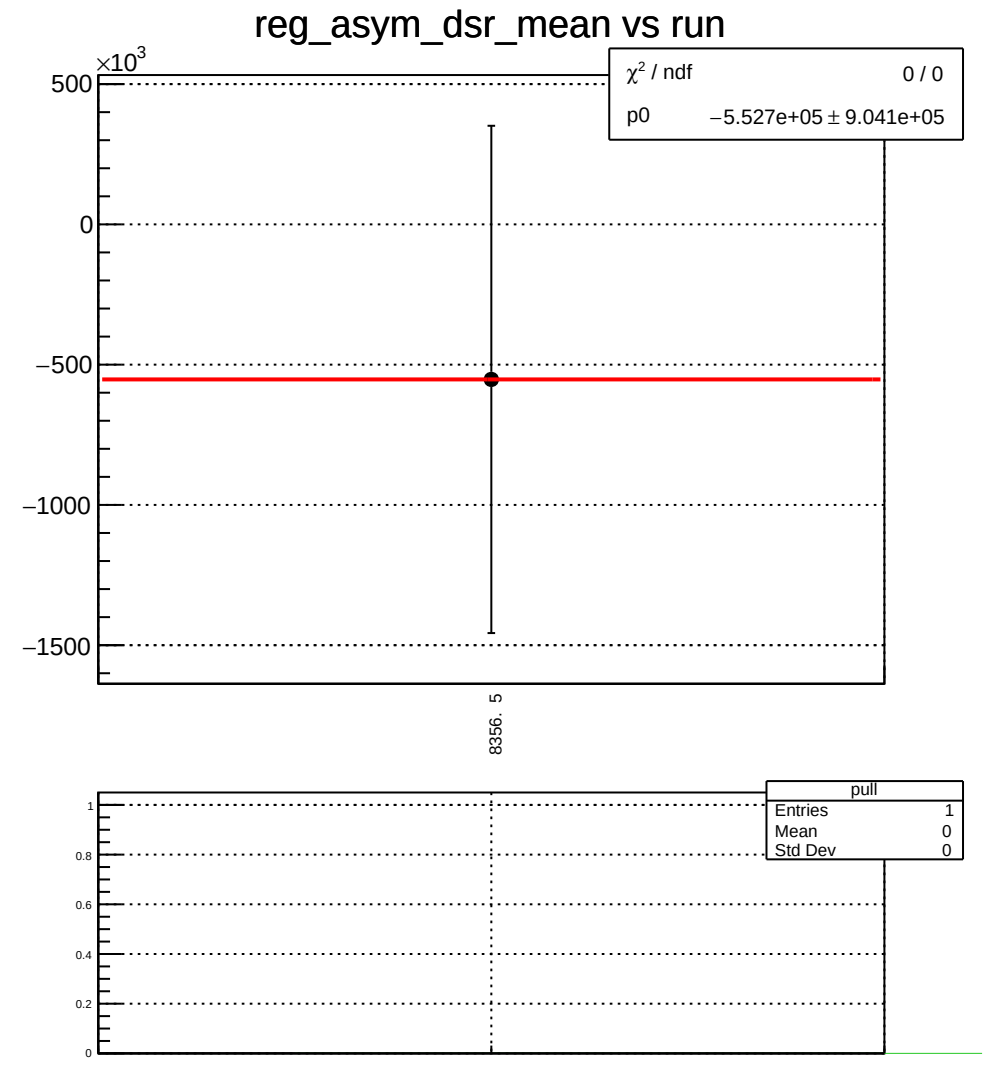

pull1D
Entries 84
Mean 0.02031
Std Dev 1.012
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

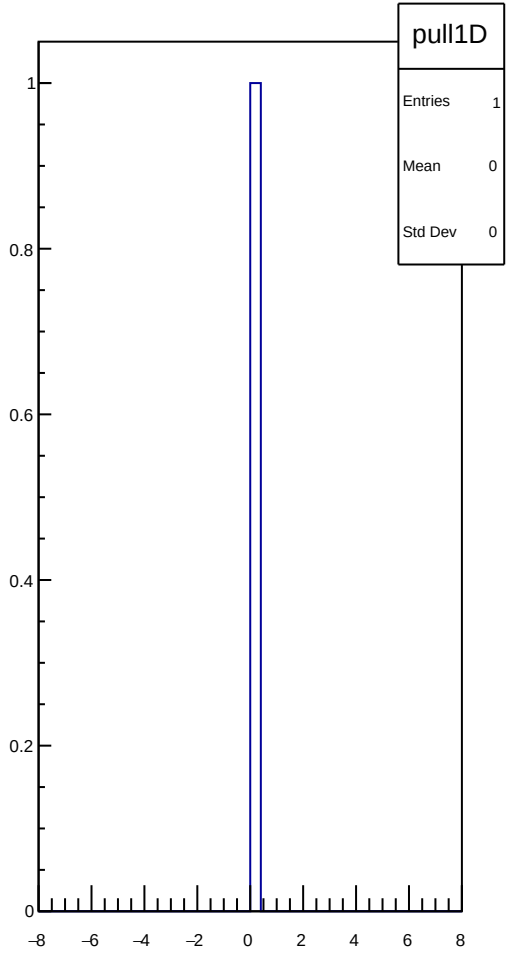

asym_dsl_correction_rms vs run
×10^3
χ^2 / ndf 3.891e+05 / 84
p0 420 ± 0.3708
500
400
300
200
100

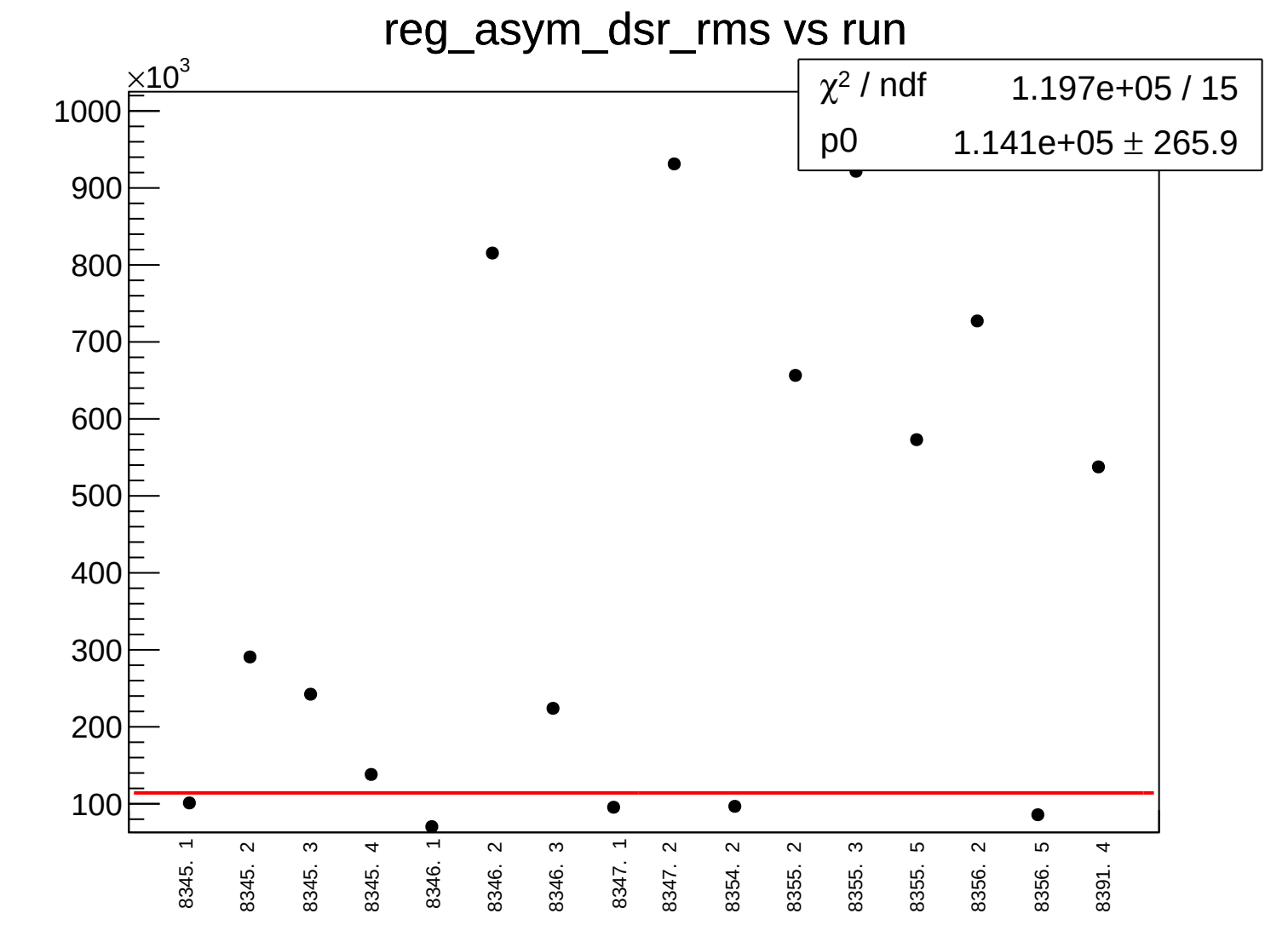

asym_dsl_mean vs run
×10^3
χ² / ndf 80.06 / 77
p0 −2.316e+04 ± 2.899e+04
pull
Entries 78
Mean 42.26
Std Dev 36.33

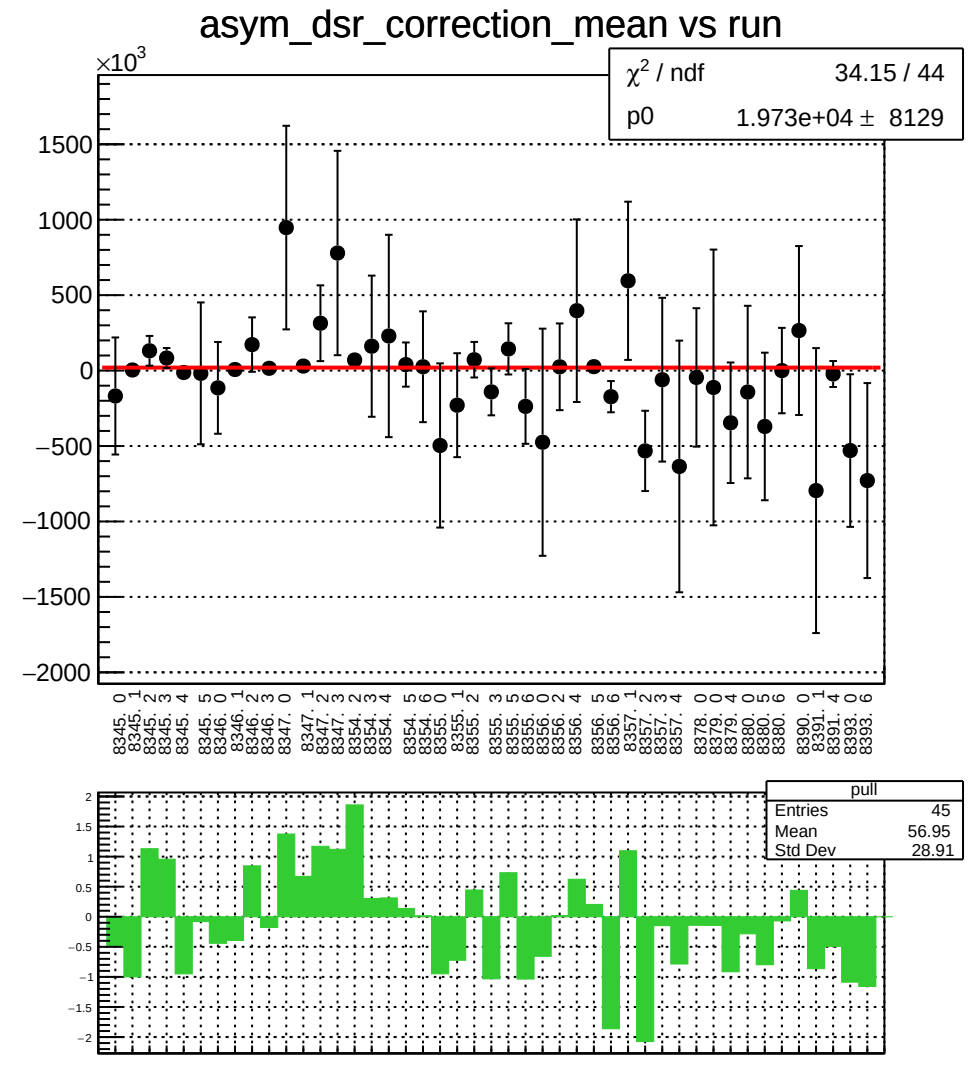

pull1D
Entries 78
Mean −0.01121
Std Dev 1.013

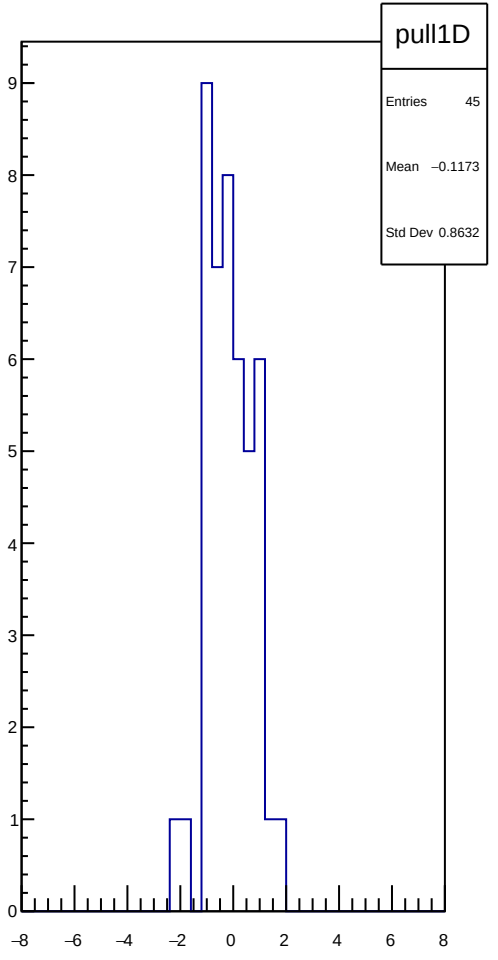

asym_dsl_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.848e+05 / 80
p0 2.438e+04 ± 20.49

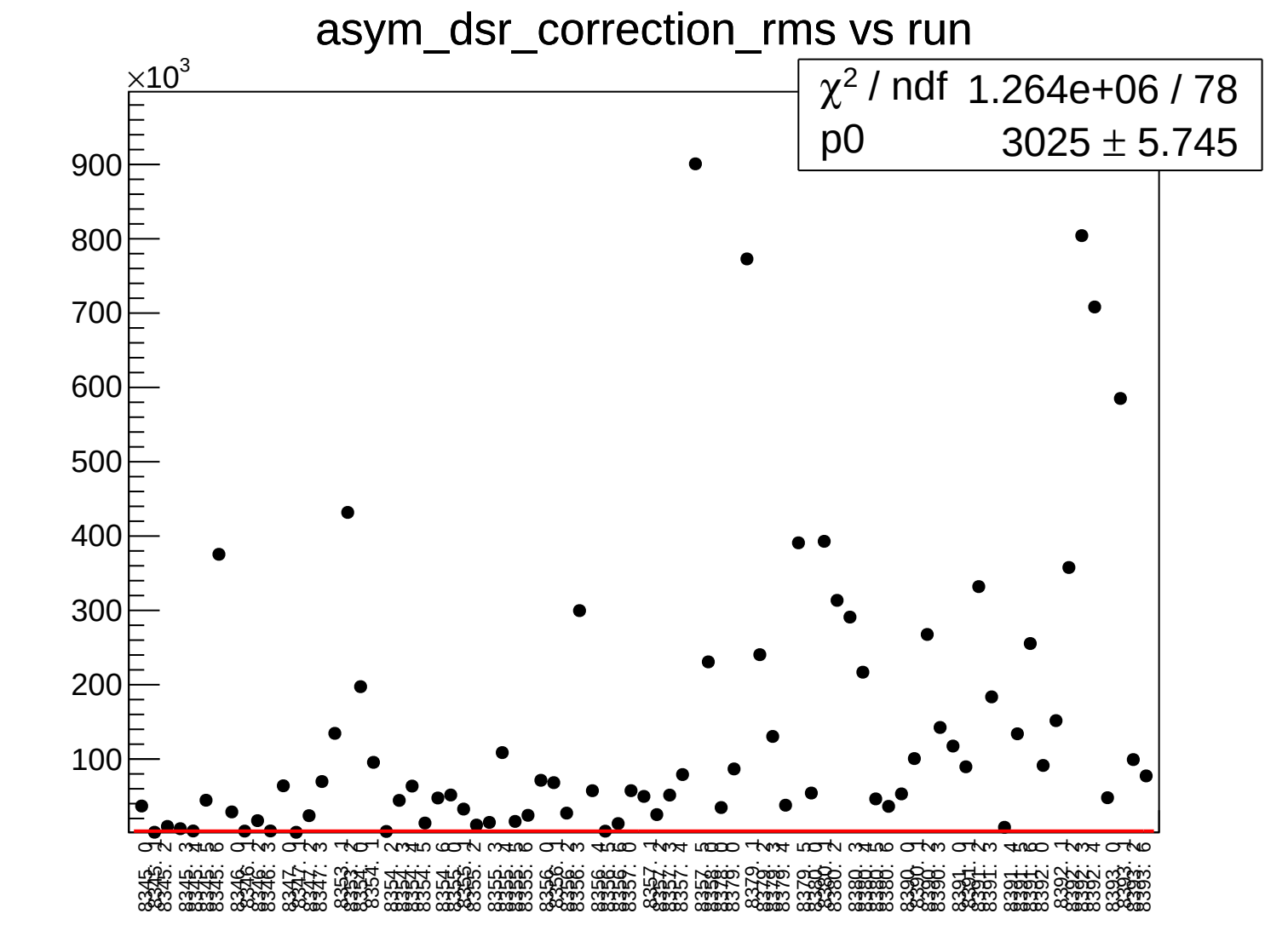

reg_asym_dsr_mean vs run
×10^3
500
0
−500
−1000
−1500
χ² / ndf 0 / 0
p0 −5.527e+05 ± 9.041e+05
8356. 5
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

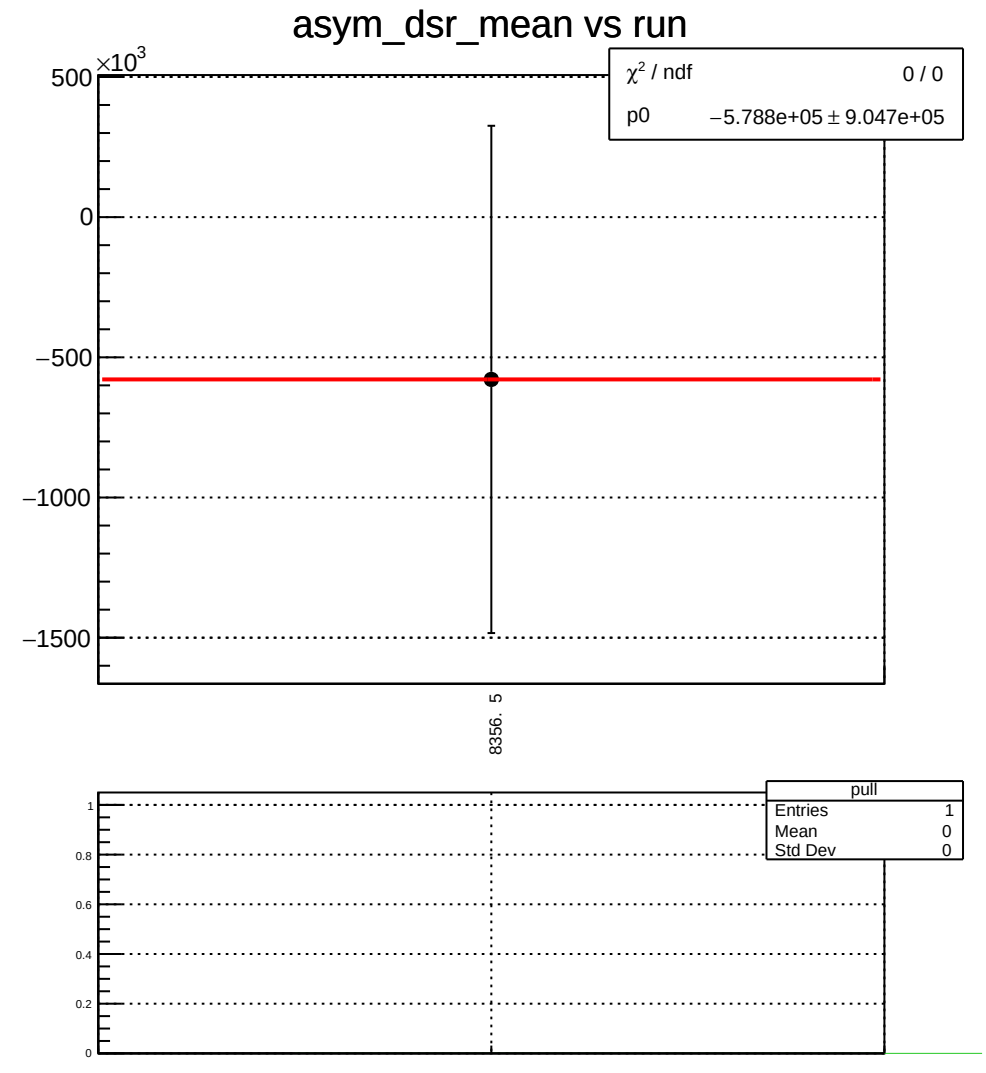

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

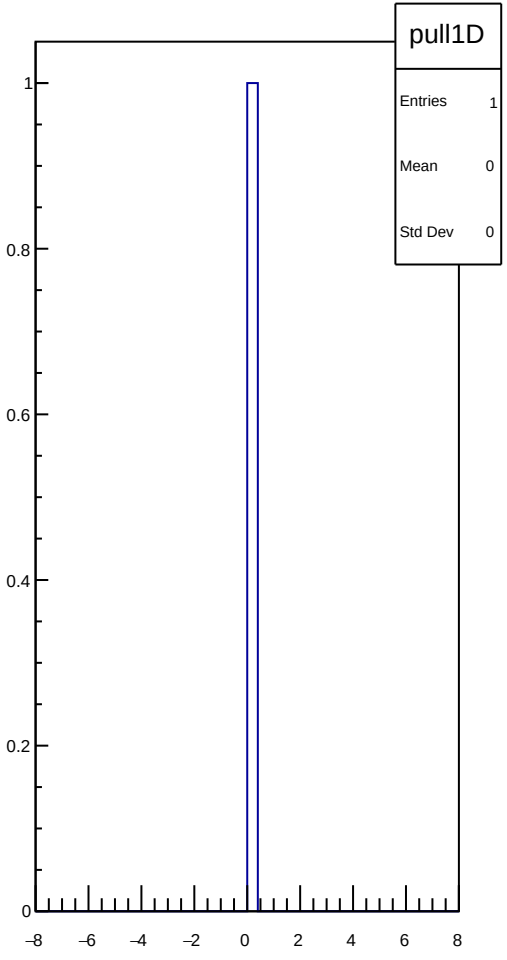

reg_asym_dsr_rms vs run
×10^3
χ² / ndf 1.197e+05 / 15
p0 1.141e+05 ± 265.9
1000
900
800
700
600
500
400
300
200
100
8345. 1
8345. 2
8345. 3
8345. 4
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8355. 2
8355. 3
8355. 5
8356. 2
8356. 5
8391. 4

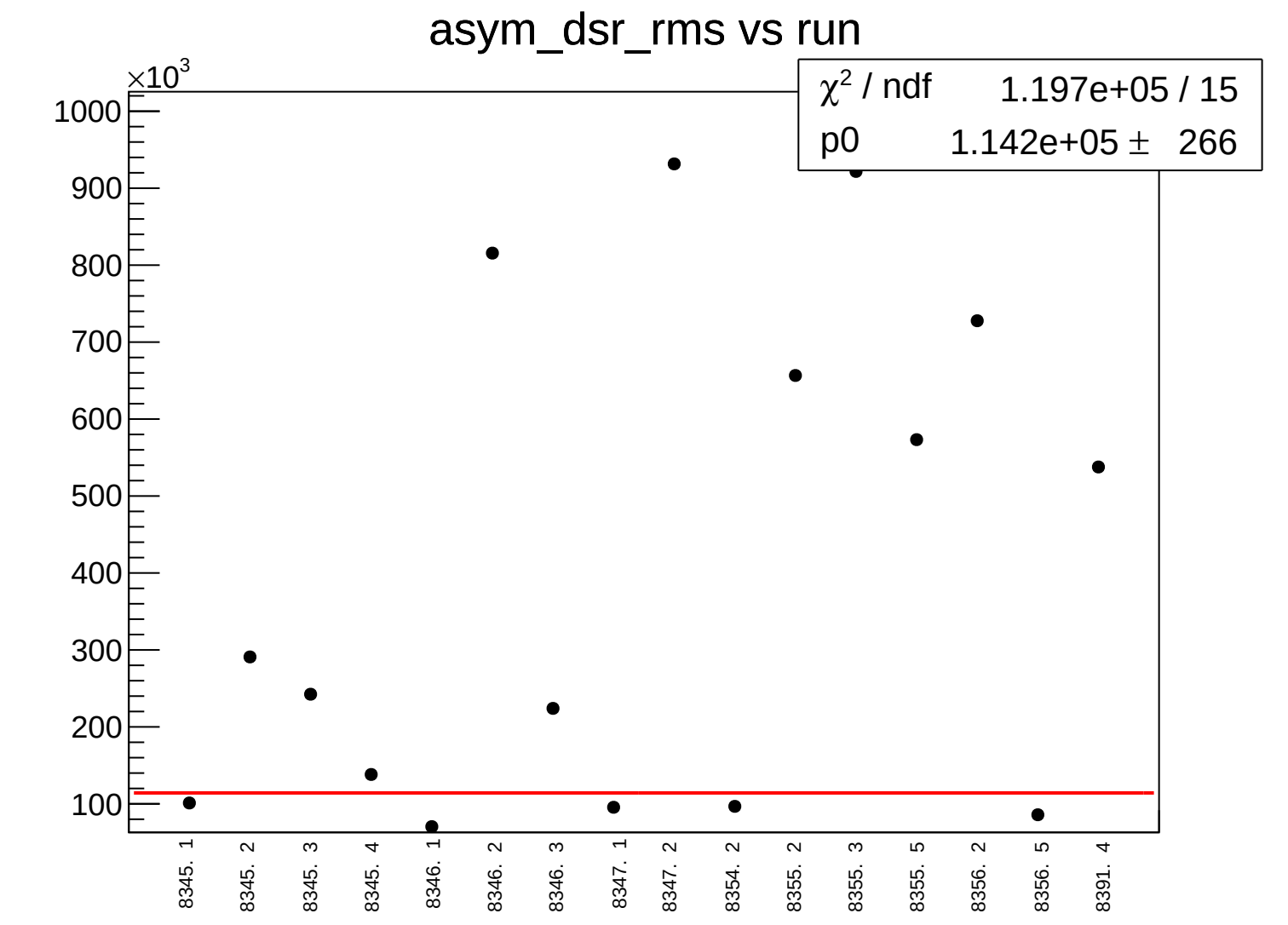

asym_dsr_correction_mean vs run
×10^3
χ² / ndf 34.15 / 44
p0 1.973e+04 ± 8129
1500
1000
500
0
−500
−1000
−1500
−2000
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8345. 5
8346. 0
8346. 1
8346. 2
8346. 3
8347. 0
8347. 1
8347. 2
8347. 3
8354. 2
8354. 3
8354. 4
8354. 5
8354. 6
8355. 0
8355. 2
8355. 3
8355. 5
8355. 6
8356. 0
8356. 2
8356. 4
8356. 5
8356. 6
8357. 1
8357. 2
8357. 3
8357. 4
8378. 0
8379. 4
8380. 0
8380. 5
8380. 6
8390. 0
8391. 1
8391. 4
8393. 0
8393. 6
pull
Entries 45
Mean 56.95
Std Dev 28.91
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

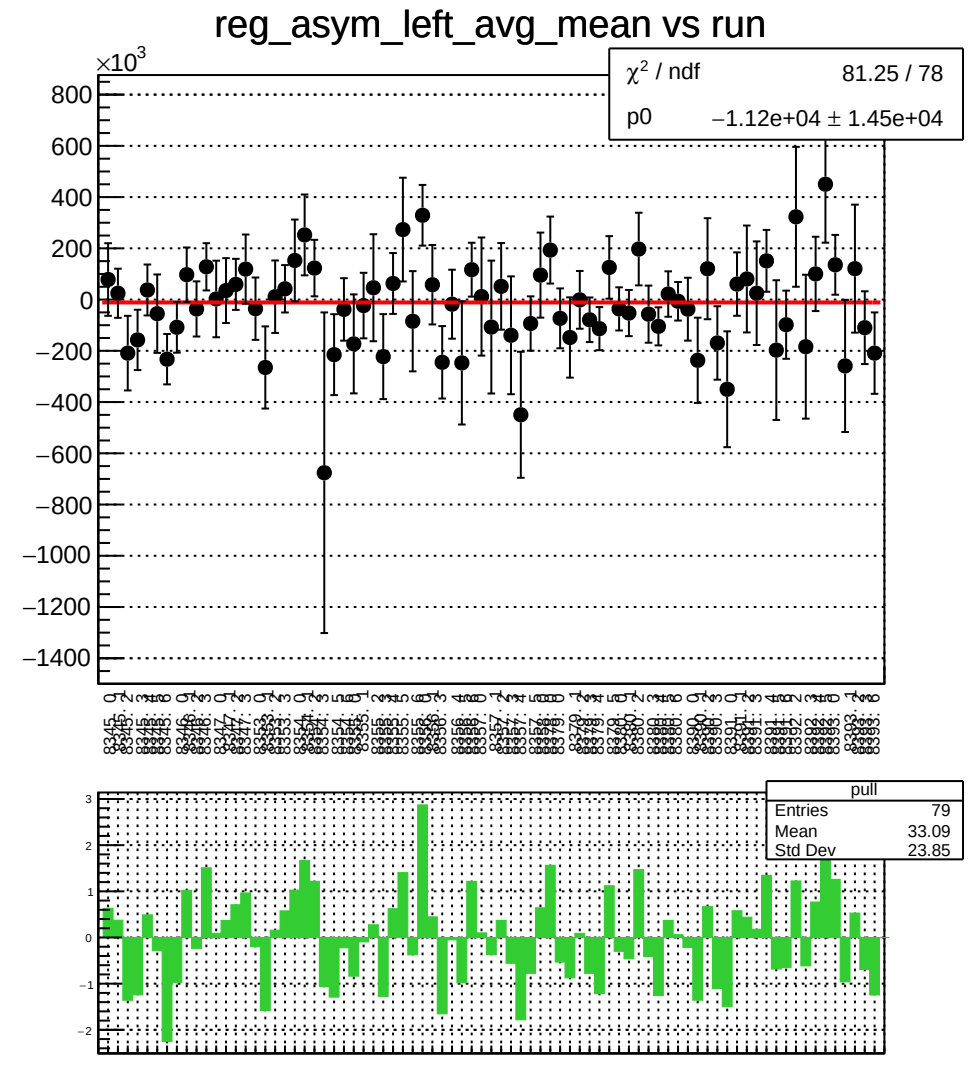

pull1D
Entries 45
Mean −0.1173
Std Dev 0.8632
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

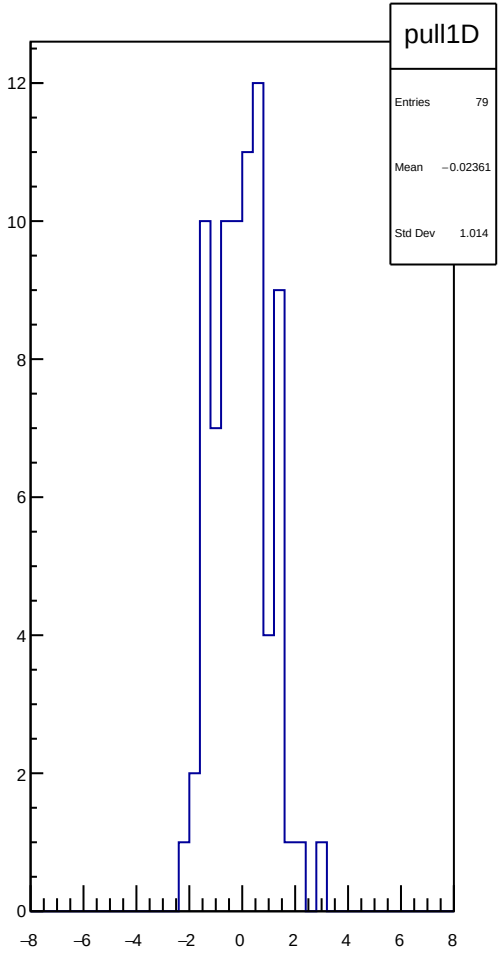

asym_dsr_correction_rms vs run
×10^3
χ^2 / ndf 1.264e+06 / 78
p0 3025 ± 5.745
900
800
700
600
500
400
300
200
100

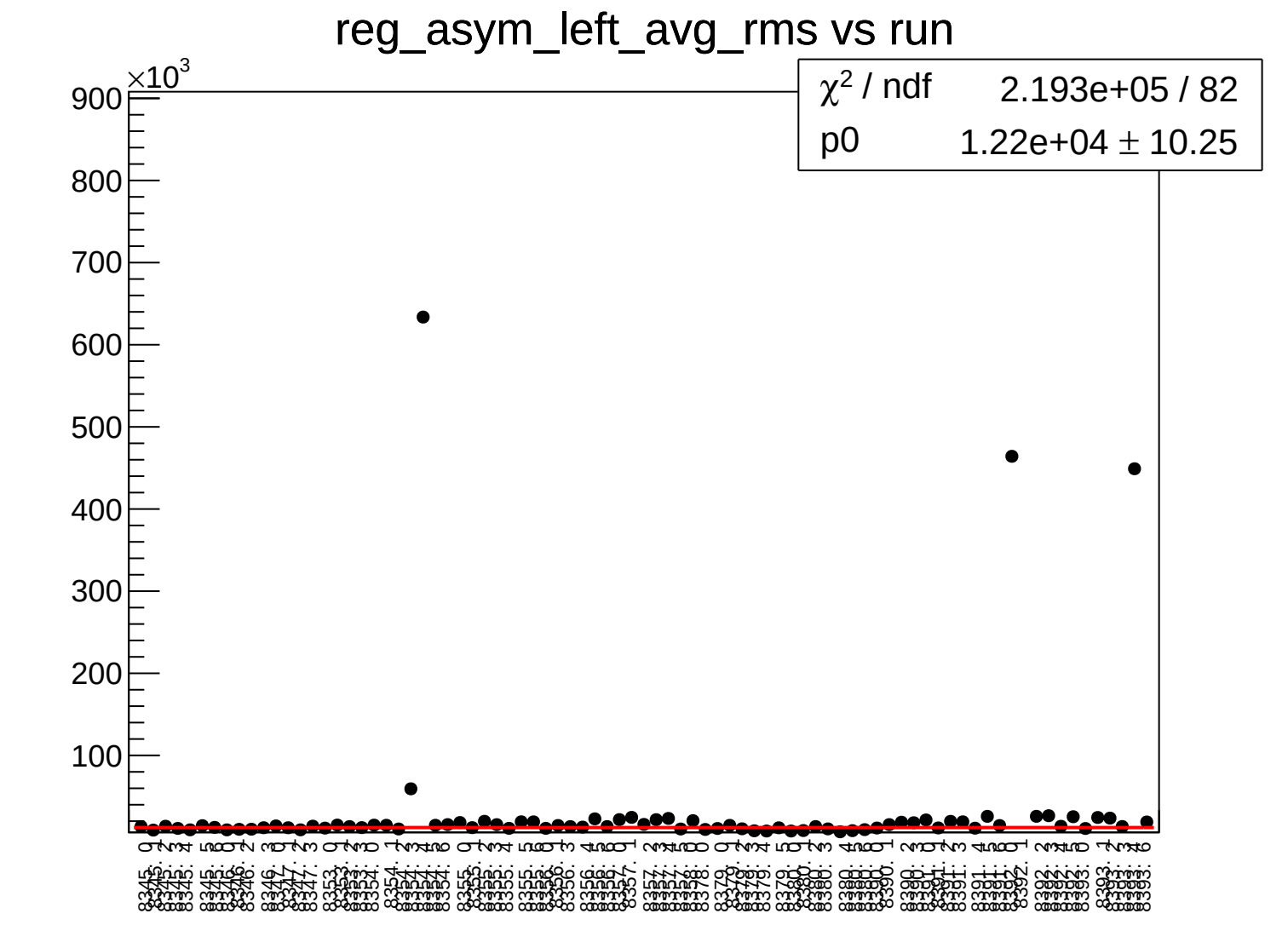

asym_dsr_mean vs run
×10^3
500
0
−500
−1000
−1500
χ² / ndf 0 / 0
p0 −5.788e+05 ± 9.047e+05
8356. 5
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

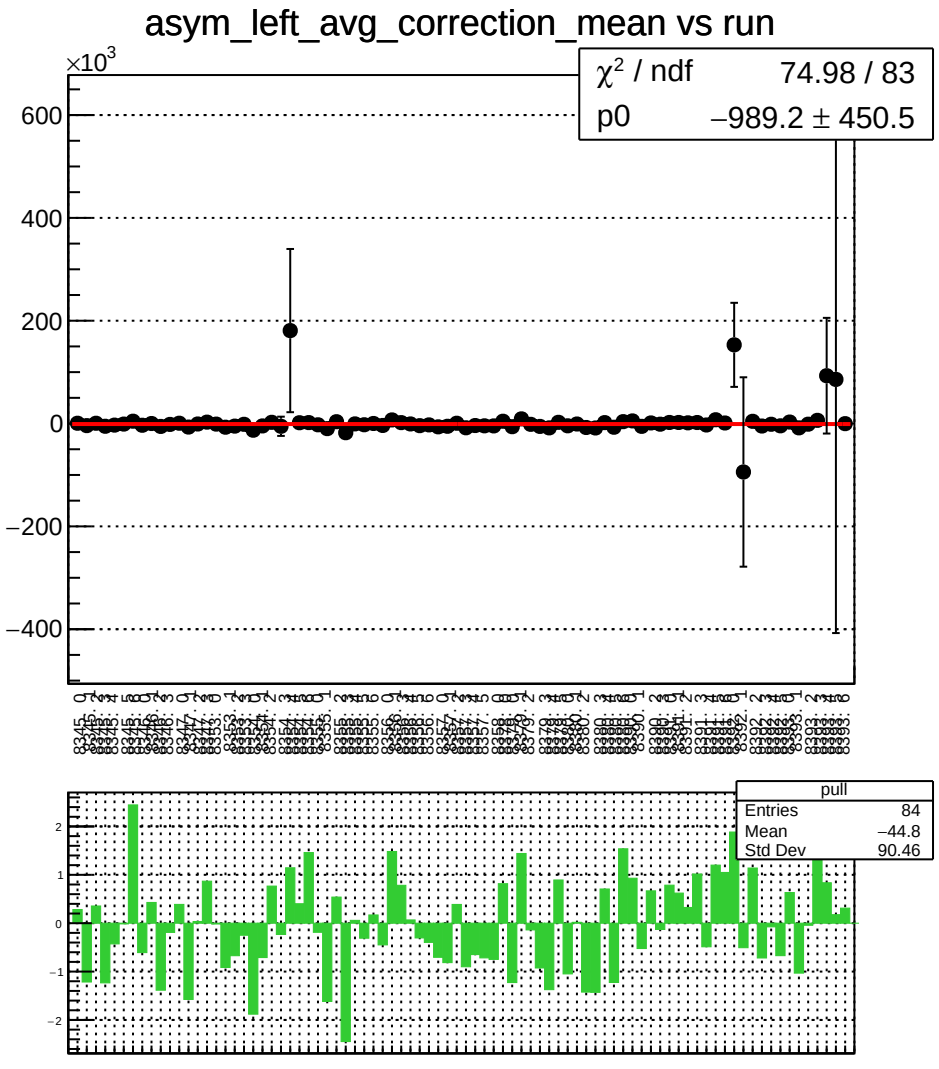

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

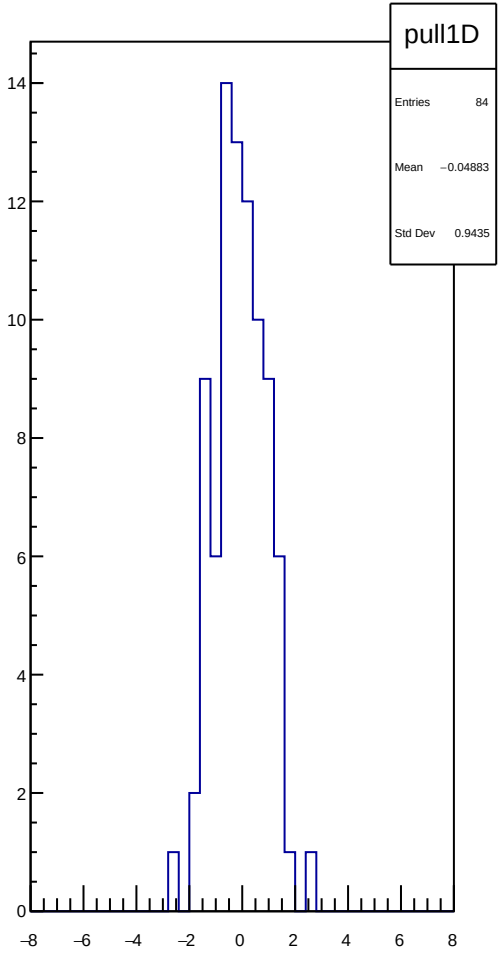

asym_dsr_rms vs run
×10^3
1000
900
800
700
600
500
400
300
200
100
χ² / ndf 1.197e+05 / 15
p0 1.142e+05 ± 266
8345. 1
8345. 2
8345. 3
8345. 4
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8355. 2
8355. 3
8355. 5
8356. 2
8356. 5
8391. 4

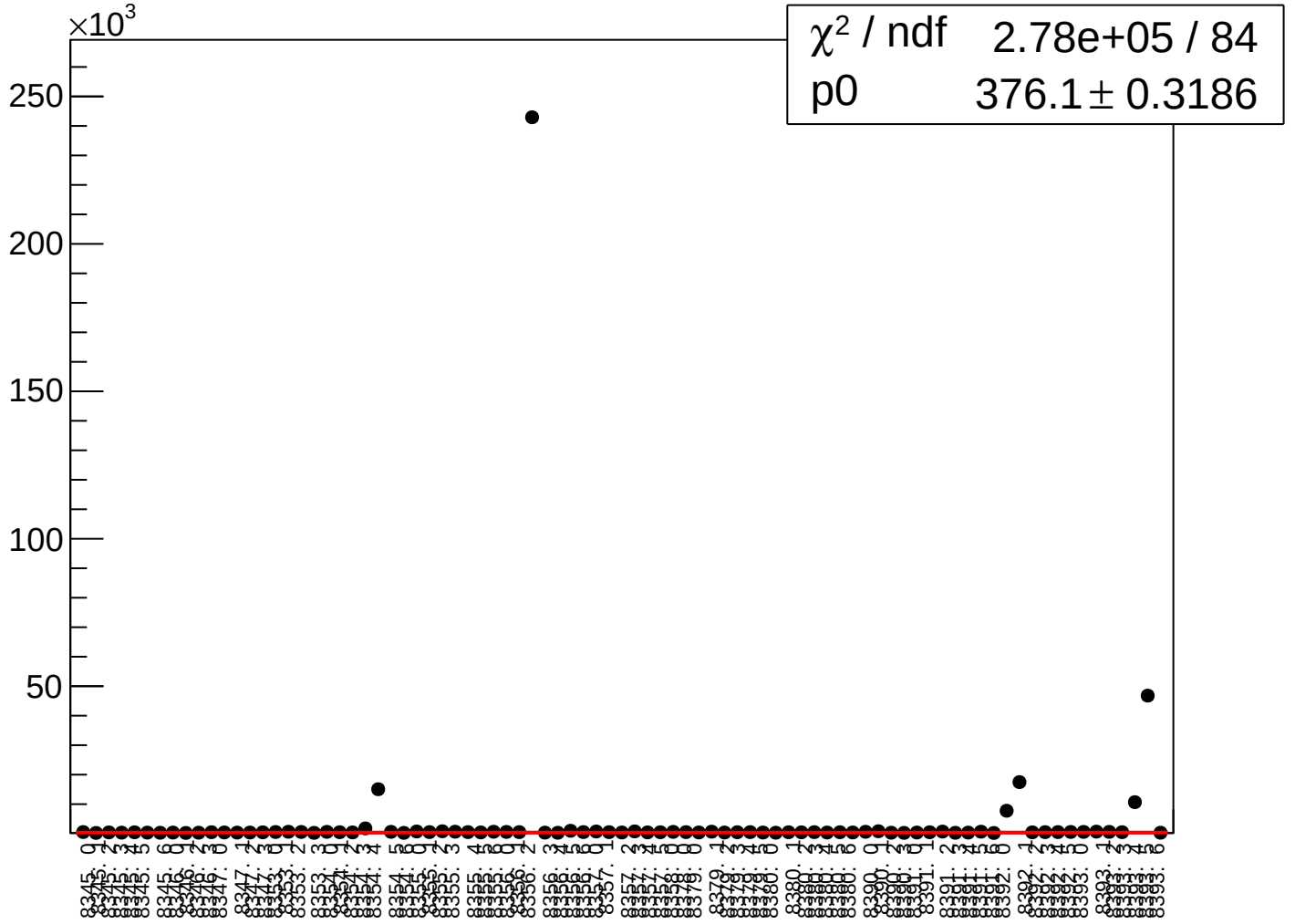

reg_asym_left_avg_mean vs run
×10^3
χ² / ndf 81.25 / 78
p0 −1.12e+04 ± 1.45e+04
pull
Entries 79
Mean 33.09
Std Dev 23.85

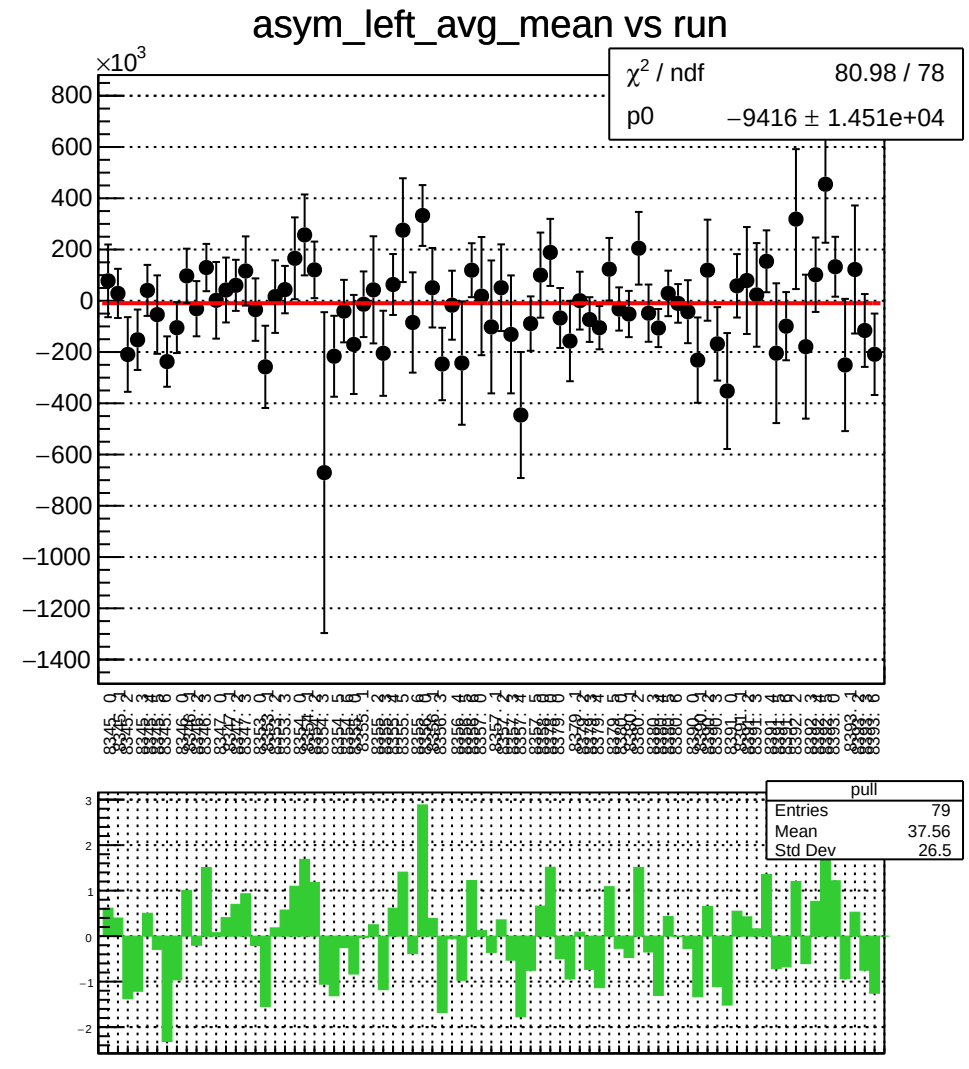

pull1D
Entries 79
Mean −0.02361
Std Dev 1.014

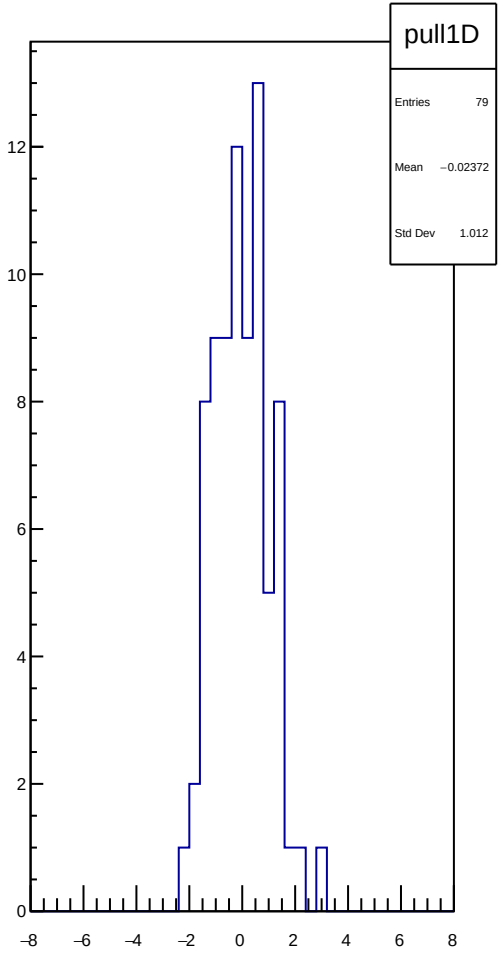

reg_asym_left_avg_rms vs run
×10^3
900
800
700
600
500
400
300
200
100
χ² / ndf 2.193e+05 / 82
p0 1.22e+04 ± 10.25


asym_left_avg_correction_mean vs run
×10^3
χ² / ndf 74.98 / 83
p0 −989.2 ± 450.5
600
400
200
0
−200
−400
pull
Entries 84
Mean −44.8
Std Dev 90.46
2
1
0
−1
−2

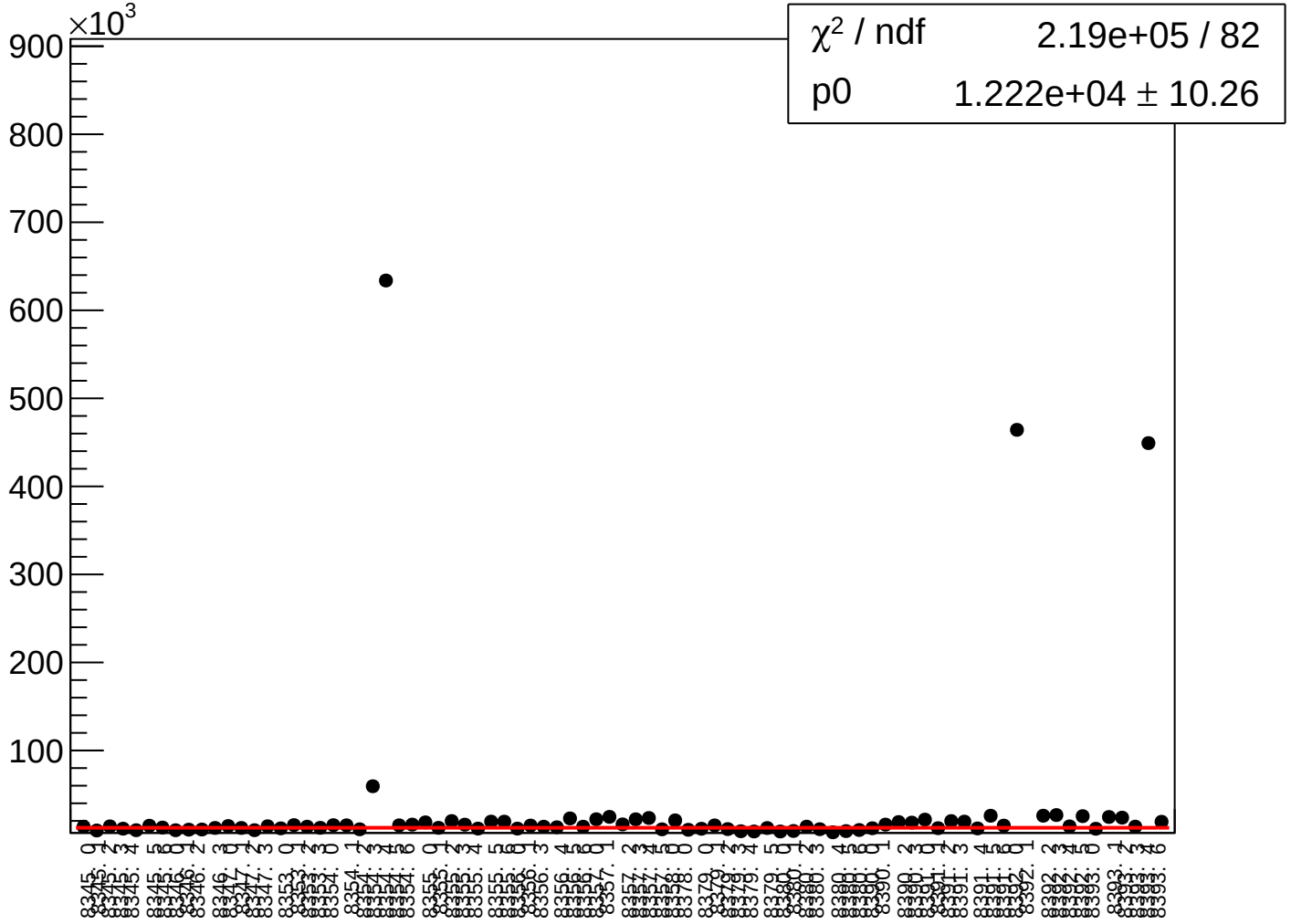

pull1D
Entries 84
Mean −0.04883
Std Dev 0.9435
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

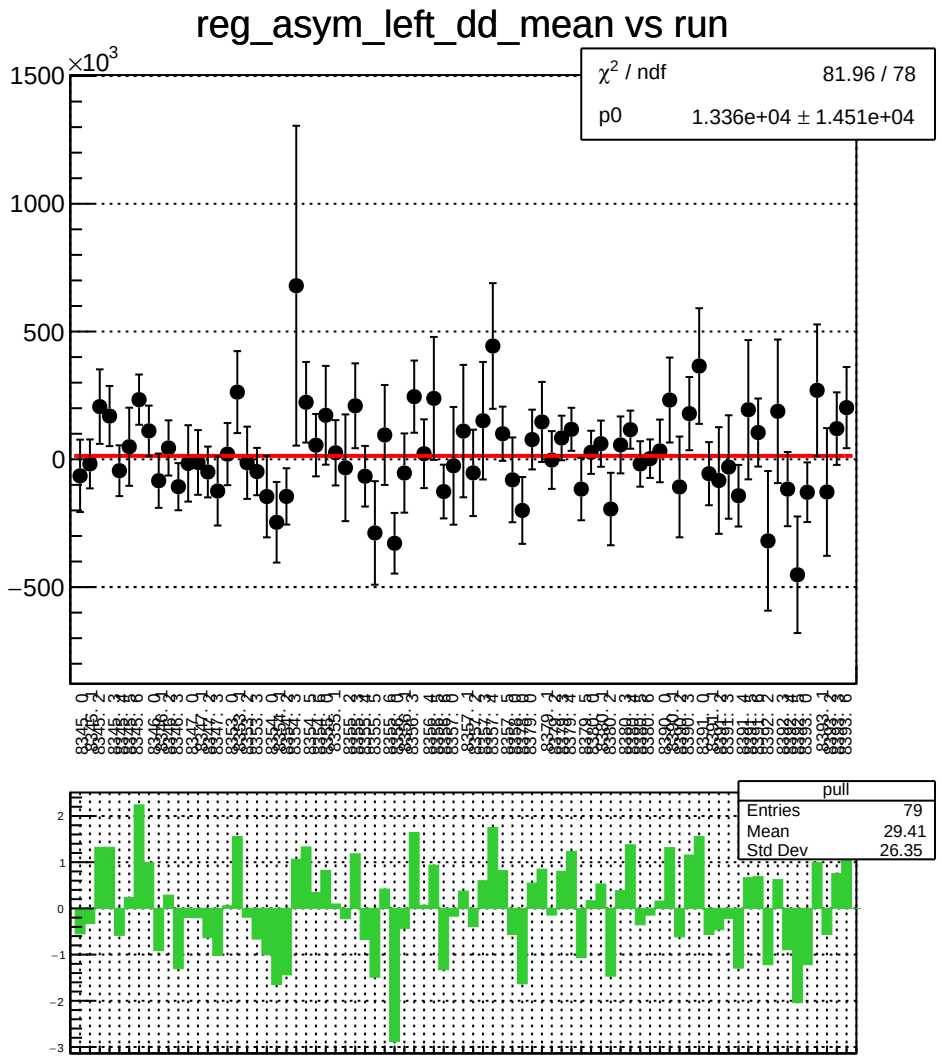

asym_left_avg_correction_rms vs run
×10^3
250
200
150
100
50
χ² / ndf 2.78e+05 / 84
p0 376.1 ± 0.3186

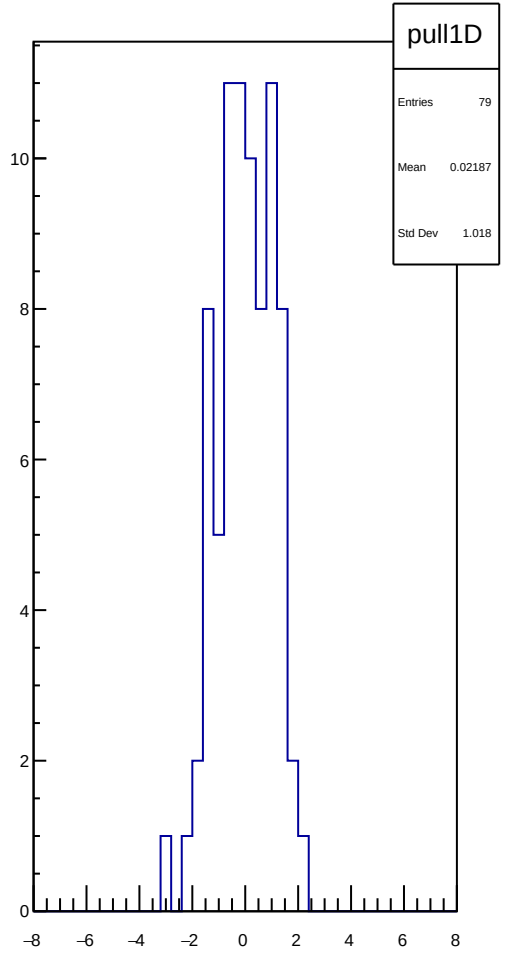

asym_left_avg_mean vs run
×10^3
χ² / ndf 80.98 / 78
p0 −9416 ± 1.451e+04
pull
Entries 79
Mean 37.56
Std Dev 26.5

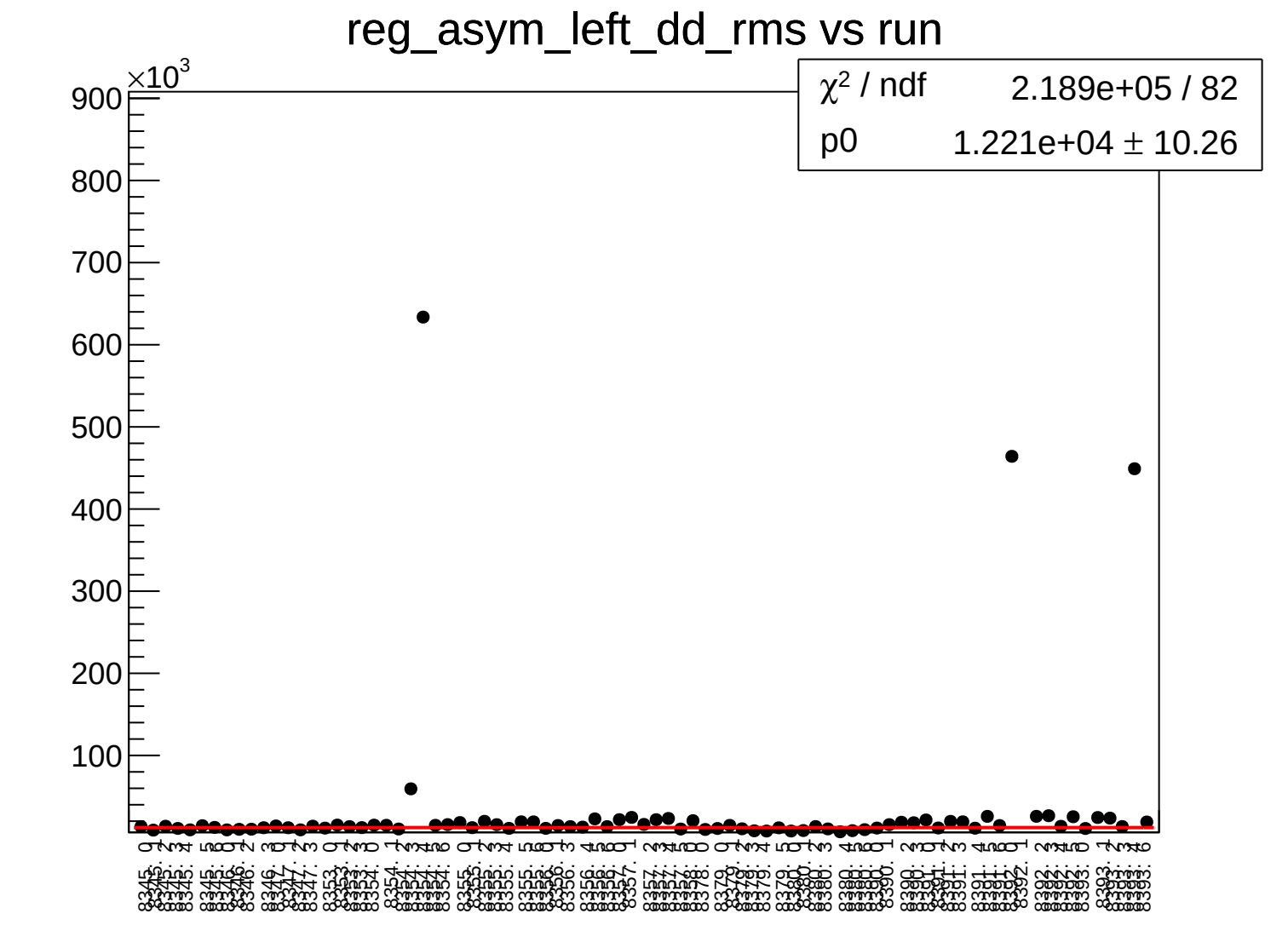

pull1D
Entries 79
Mean −0.02372
Std Dev 1.012

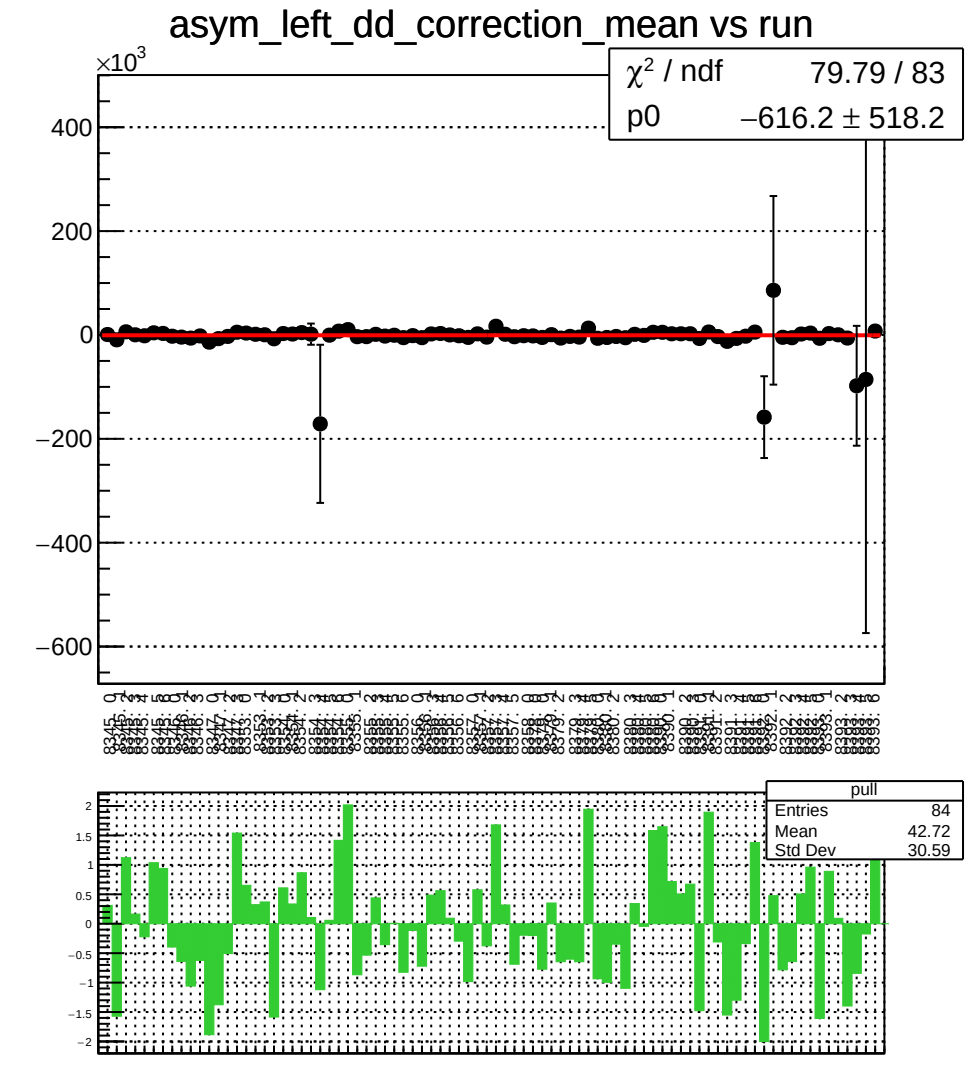
asym_left_avg_rms vs run

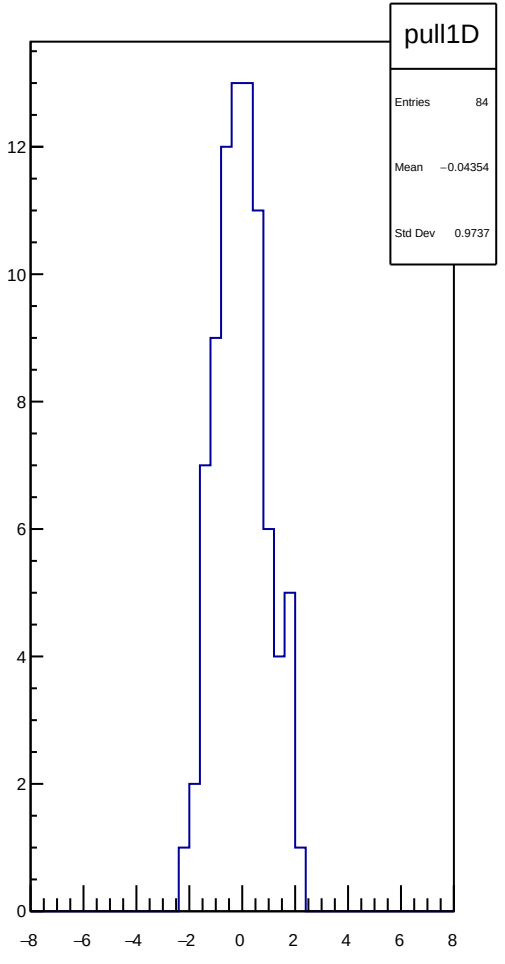


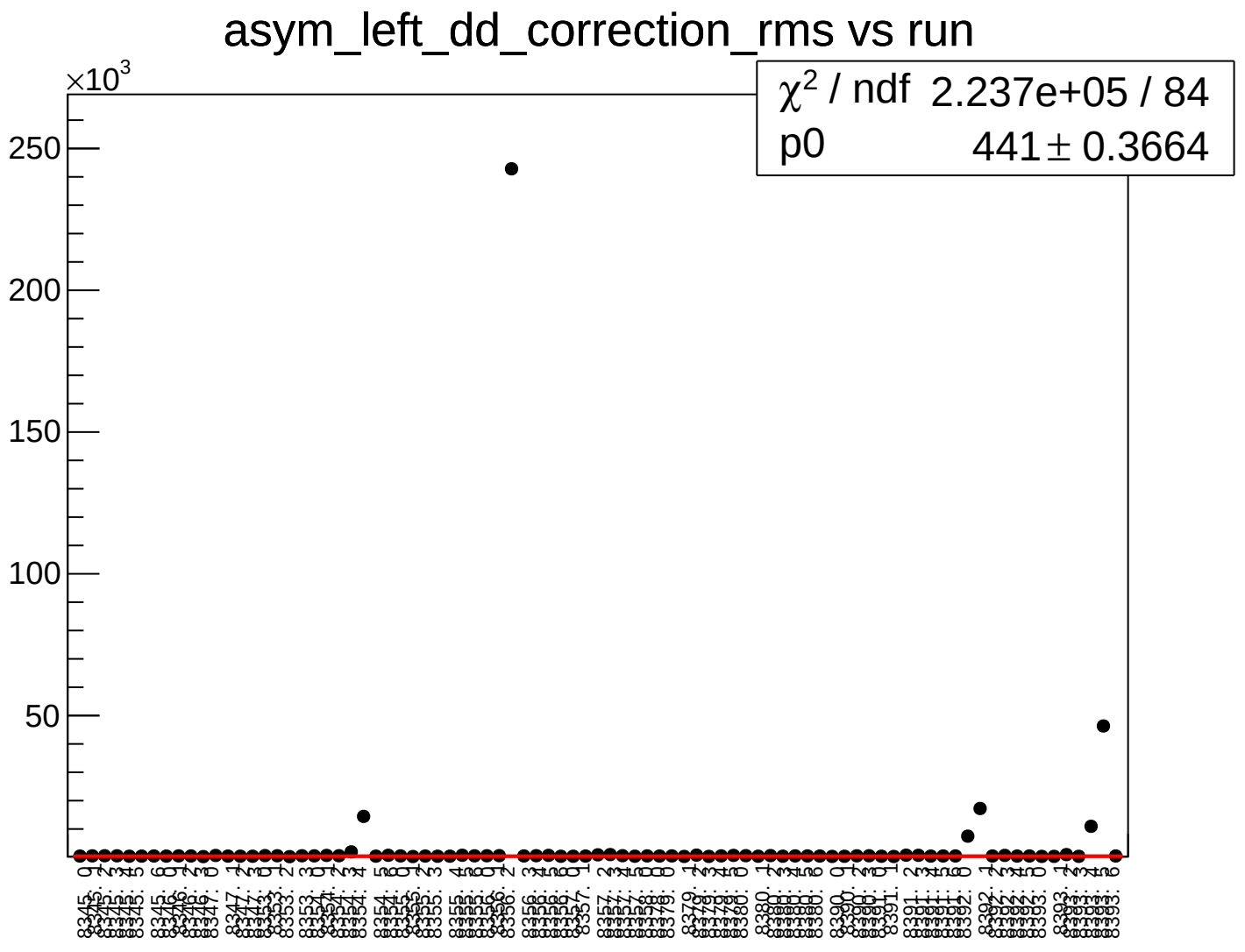

reg_asym_left_dd_mean vs run
×10^3
1500
1000
500
0
−500
χ² / ndf 81.96 / 78
p0 1.336e+04 ± 1.451e+04
pull
Entries 79
Mean 29.41
Std Dev 26.35
2
1
0
−1
−2
−3

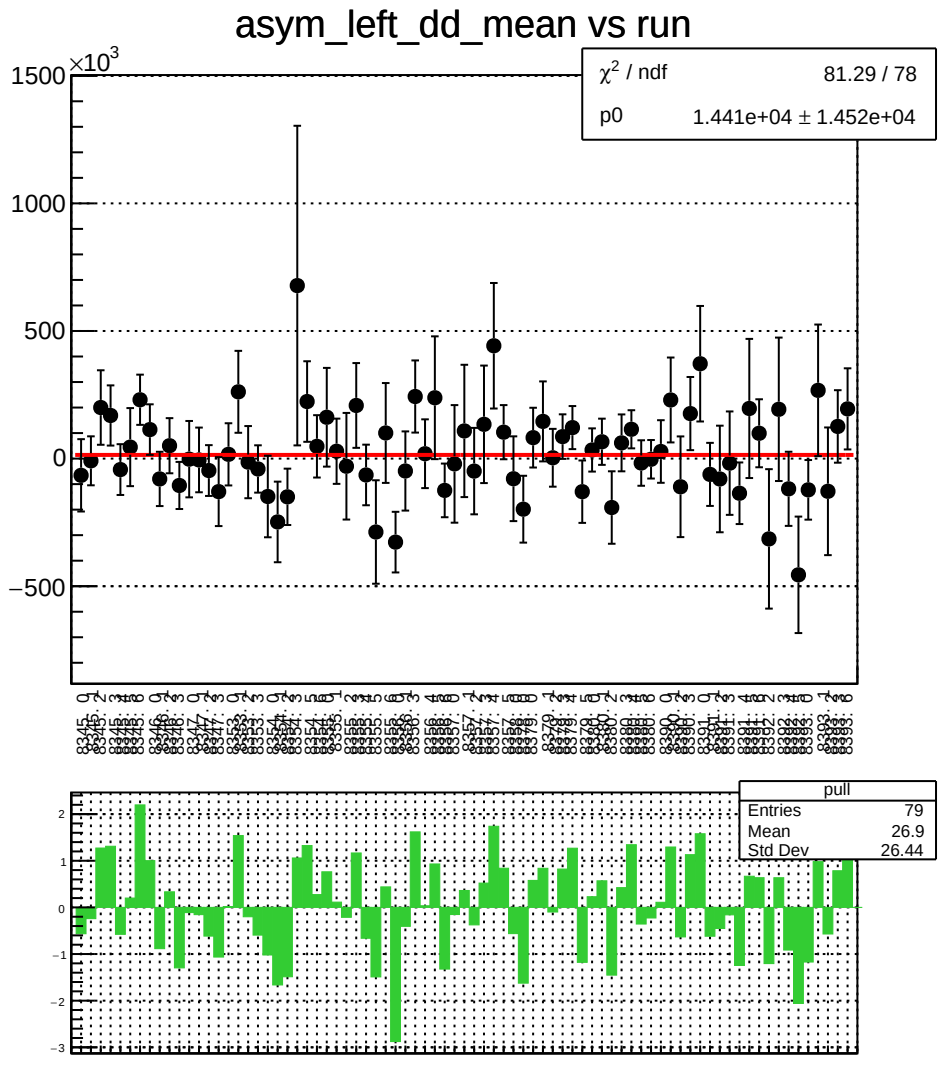

pull1D
Entries 79
Mean 0.02187
Std Dev 1.018
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

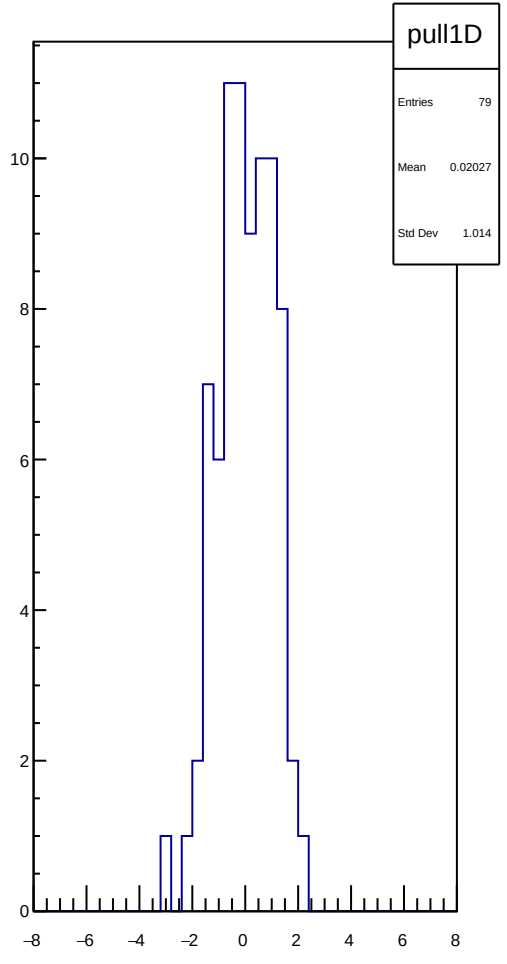

reg_asym_left_dd_rms vs run
χ^2 / ndf 2.189e+05 / 82
p0 1.221e+04 ± 10.26
×10^3
900
800
700
600
500
400
300
200
100

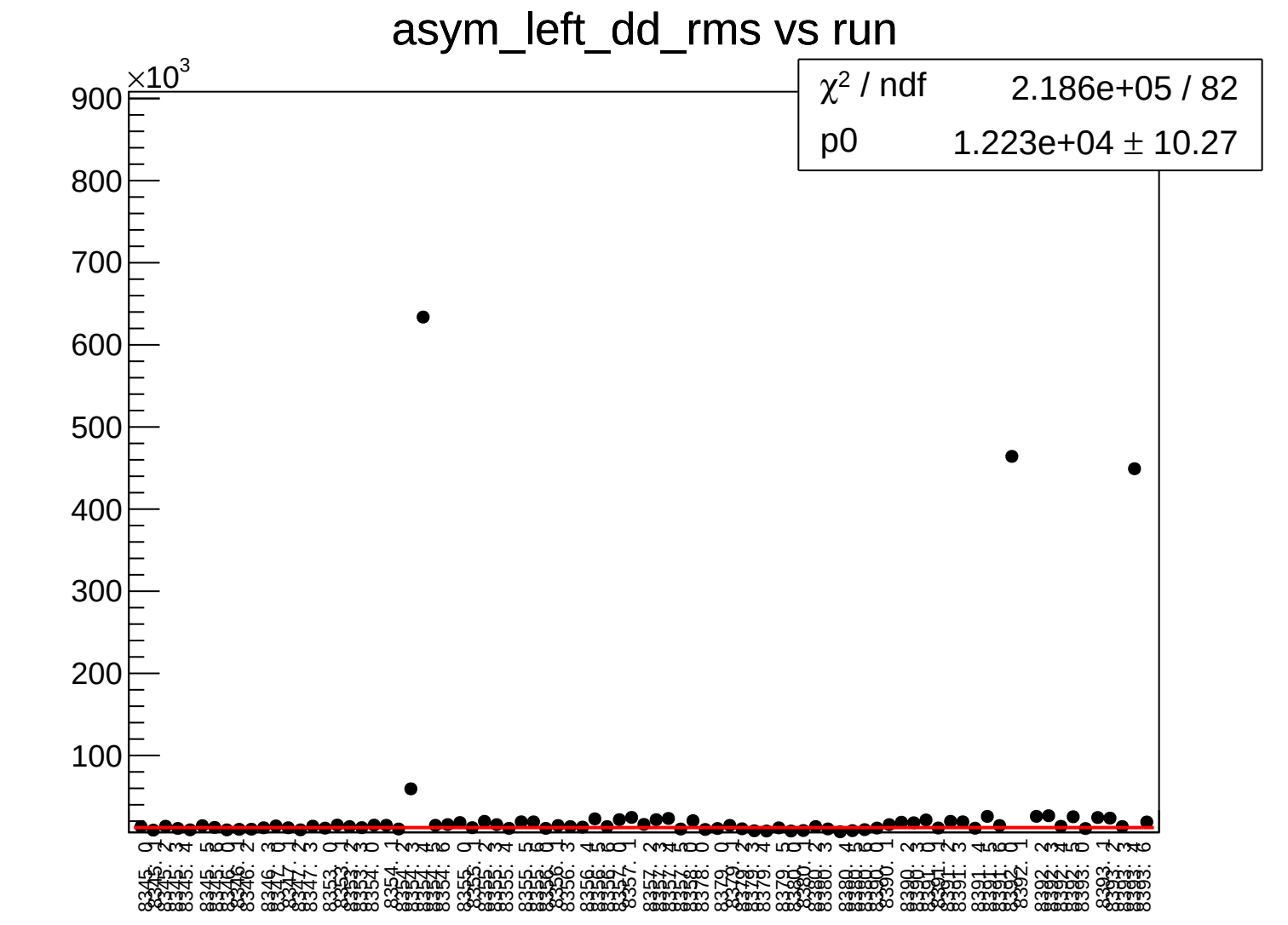

asym_left_dd_correction_mean vs run
×10^3
χ² / ndf 79.79 / 83
p0 −616.2 ± 518.2
400
200
0
−200
−400
−600
pull
Entries 84
Mean 42.72
Std Dev 30.59
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

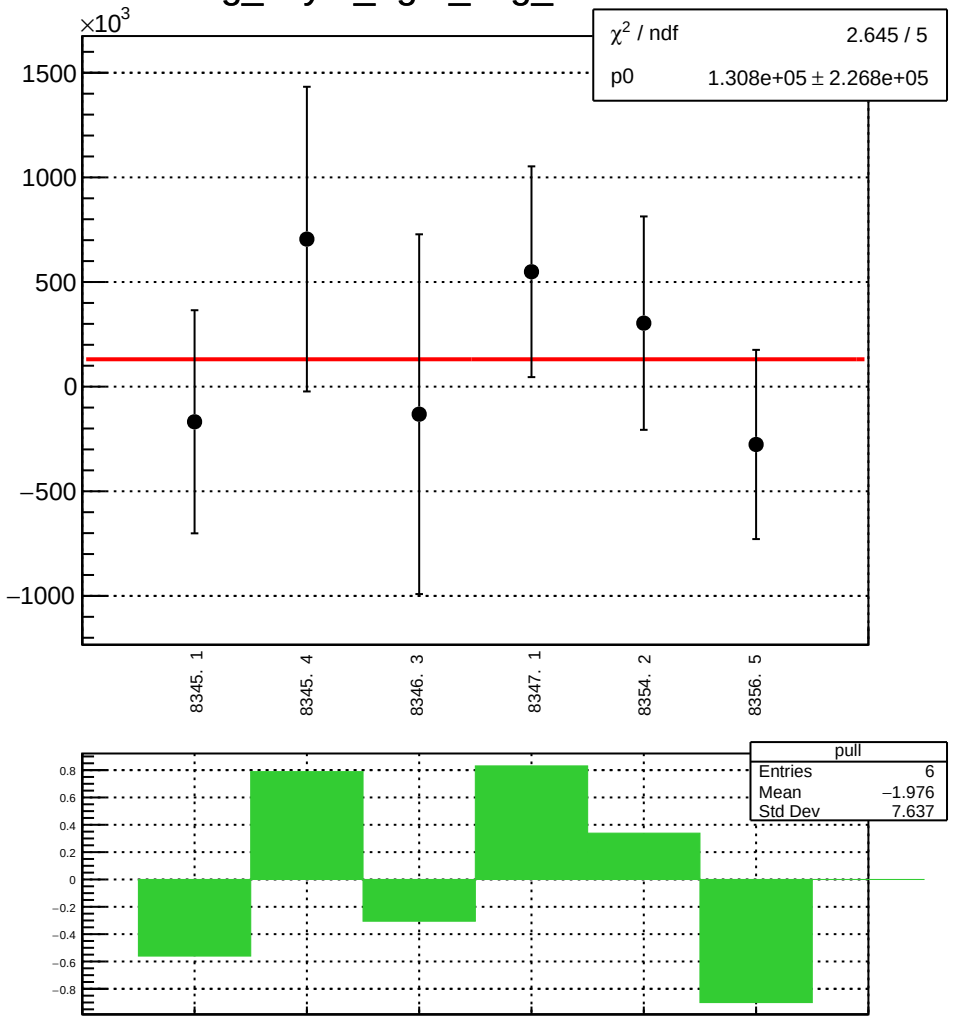

pull1D
Entries 84
Mean −0.04354
Std Dev 0.9737
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

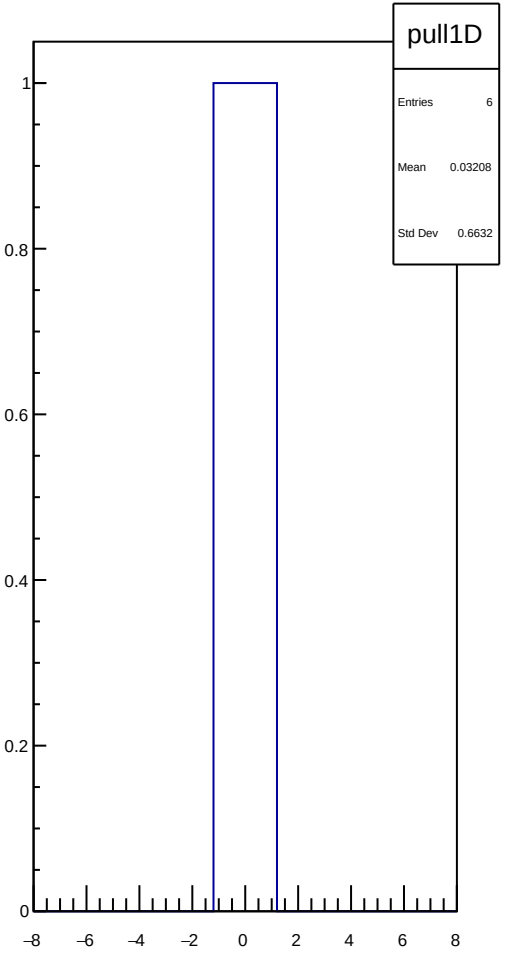

asym_left_dd_correction_rms vs run
×10^3
250
200
150
100
50
χ² / ndf 2.237e+05 / 84
p0 441 ± 0.3664

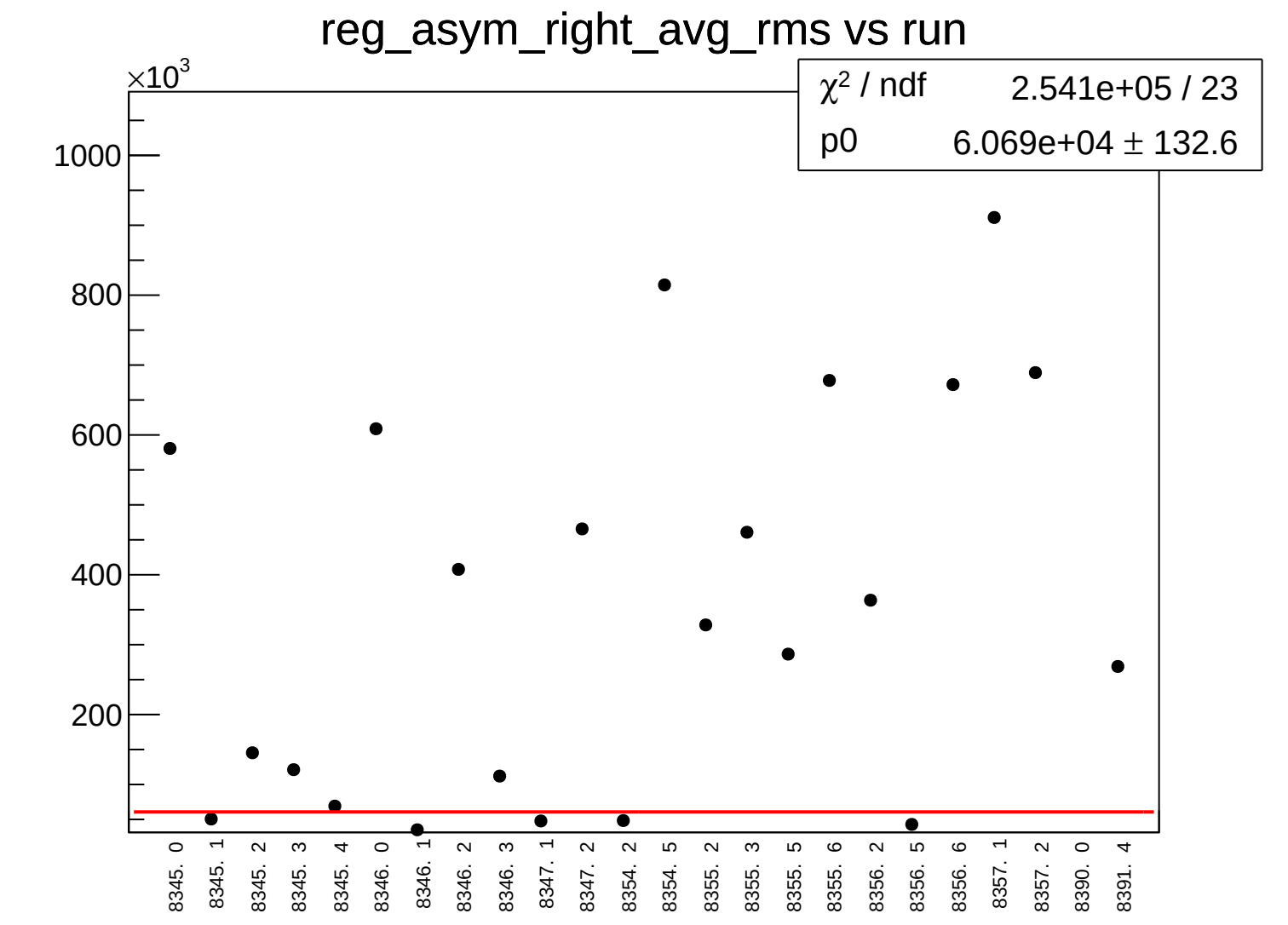

asym_left_dd_mean vs run
×10^3
1500
1000
500
0
−500
χ² / ndf 81.29 / 78
p0 1.441e+04 ± 1.452e+04
pull
Entries 79
Mean 26.9
Std Dev 26.44
2
1
0
−1
−2
−3

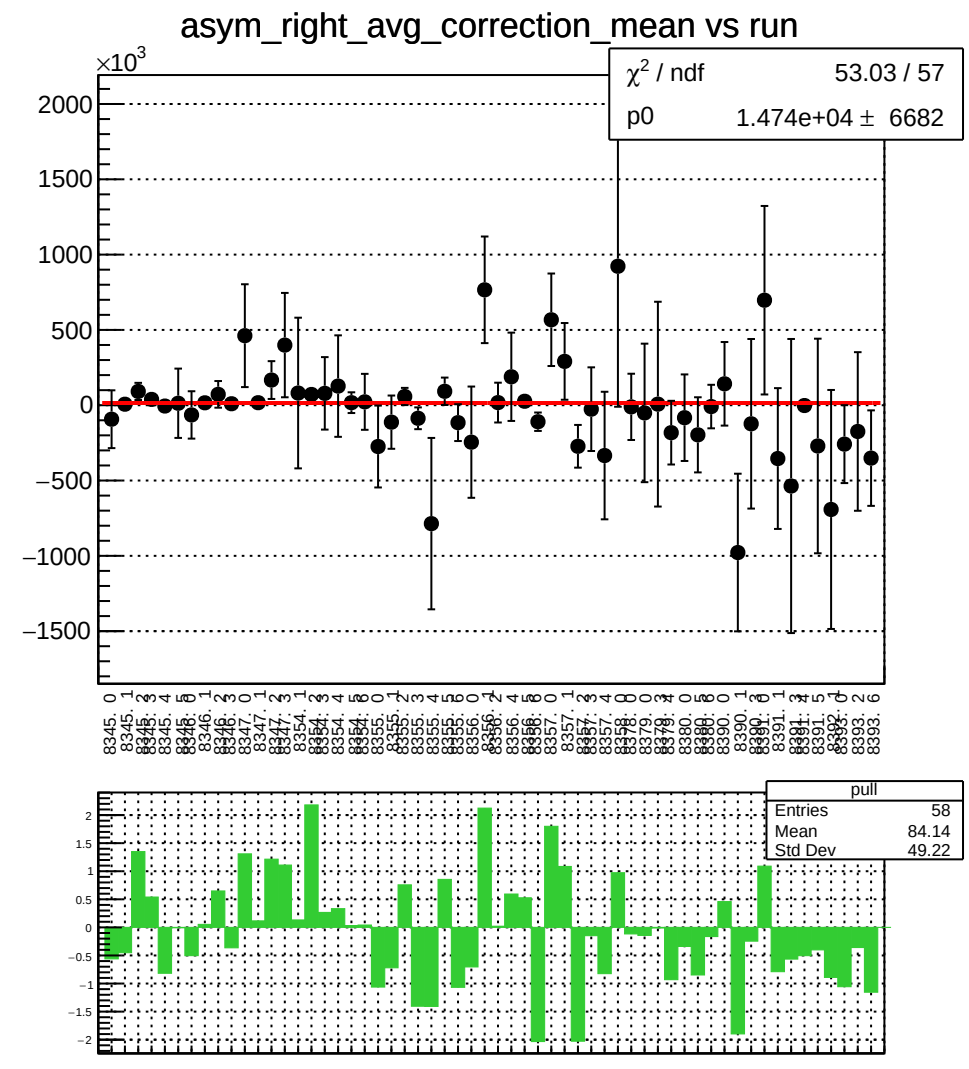

pull1D
Entries 79
Mean 0.02027
Std Dev 1.014
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

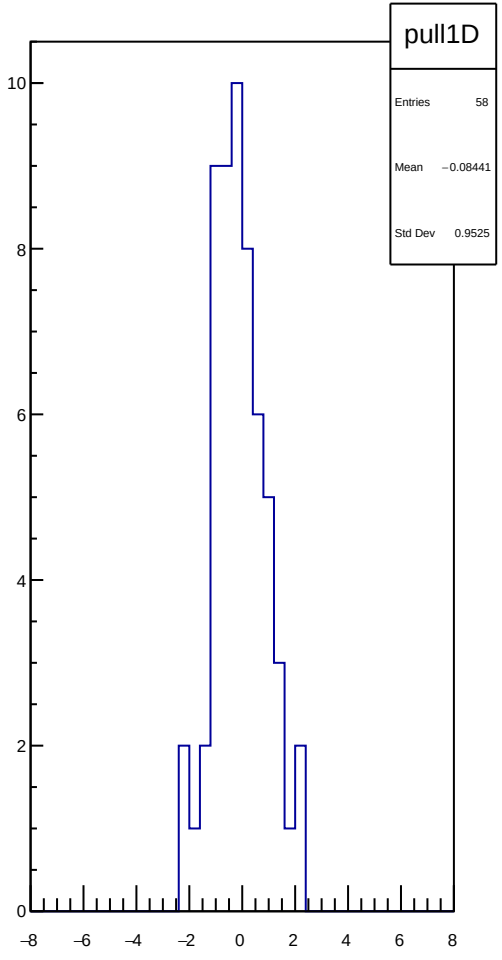

asym_left_dd_rms vs run
×10^3
900
800
700
600
500
400
300
200
100
χ² / ndf 2.186e+05 / 82
p0 1.223e+04 ± 10.27

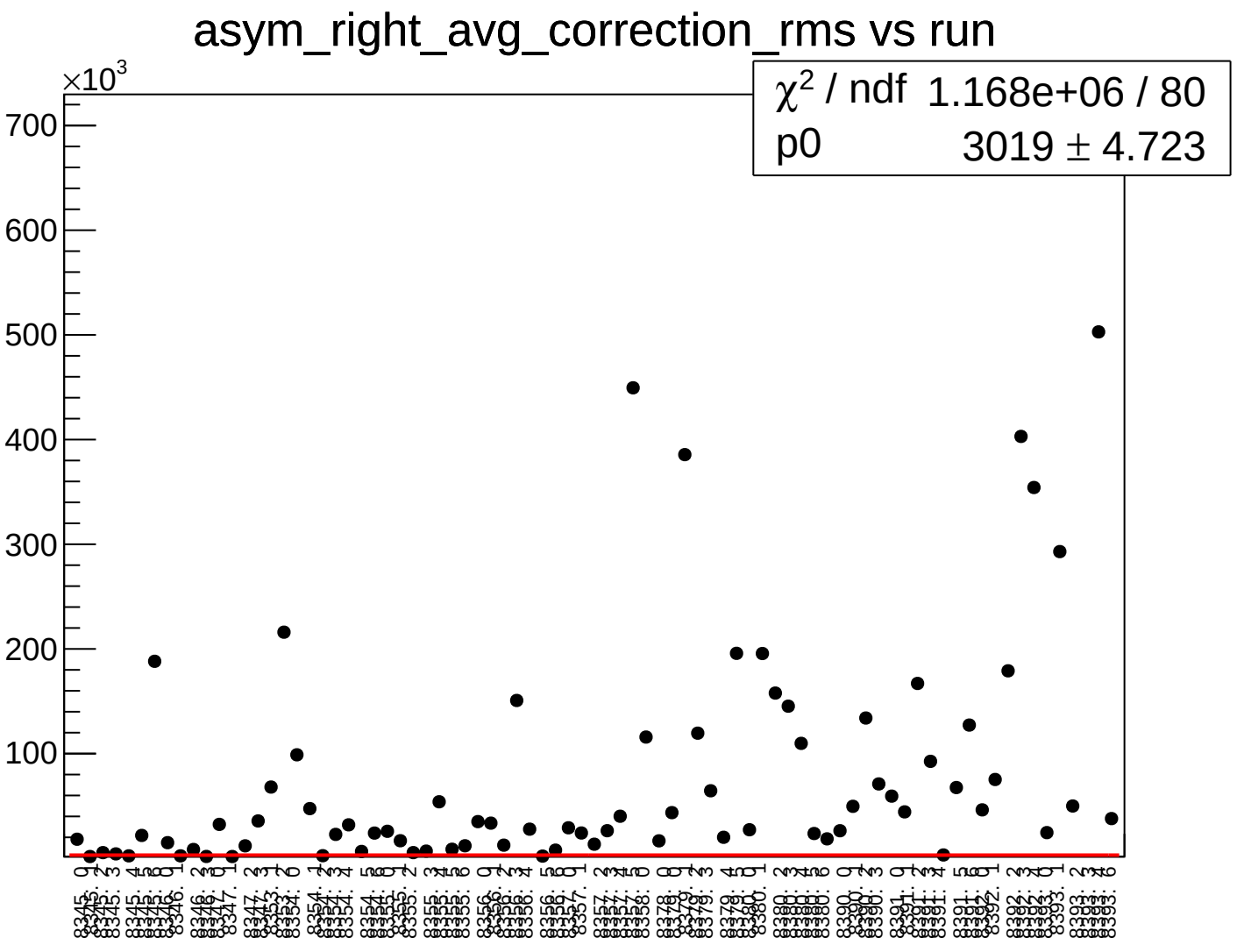

reg_asym_right_avg_mean vs run
×10^3
χ² / ndf 2.645 / 5
p0 1.308e+05 ± 2.268e+05
1500
1000
500
0
−500
−1000
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −1.976
Std Dev 7.637
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

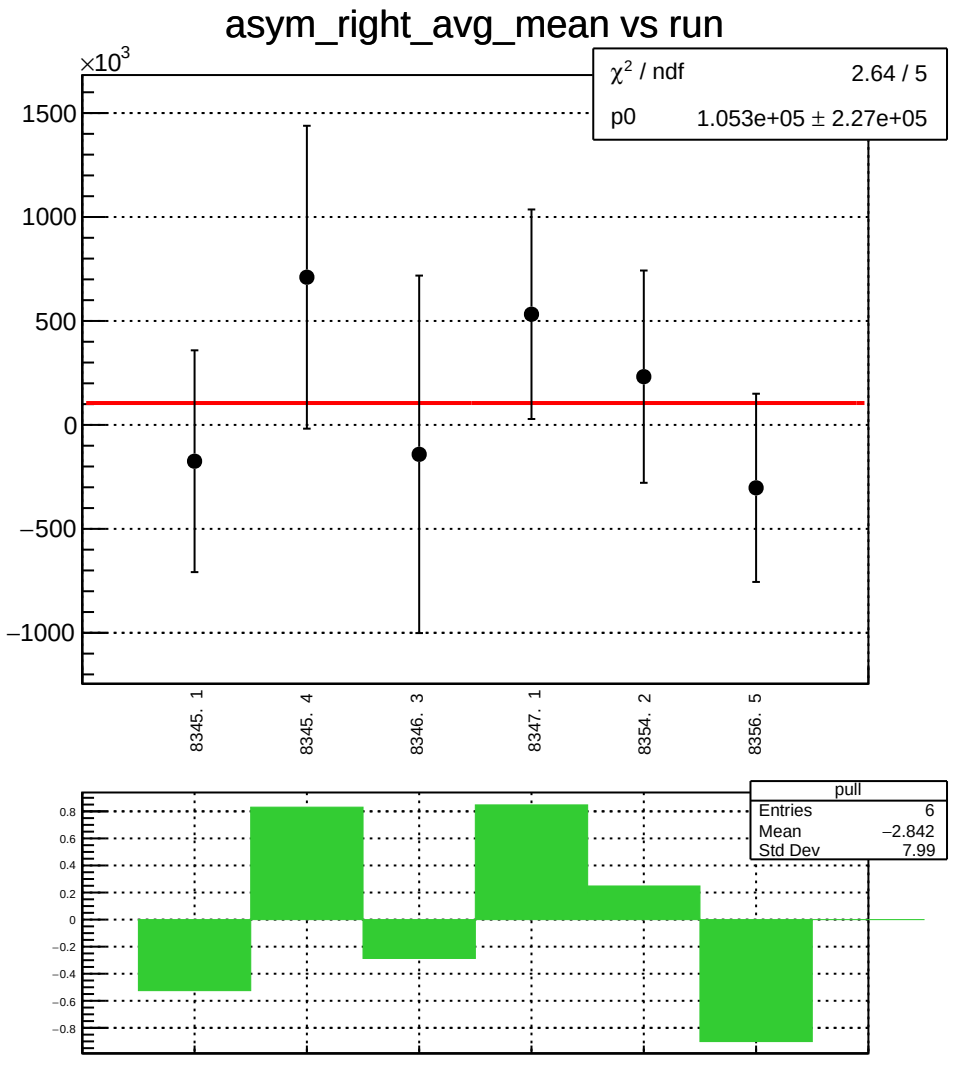

pull1D
Entries 6
Mean 0.03208
Std Dev 0.6632
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

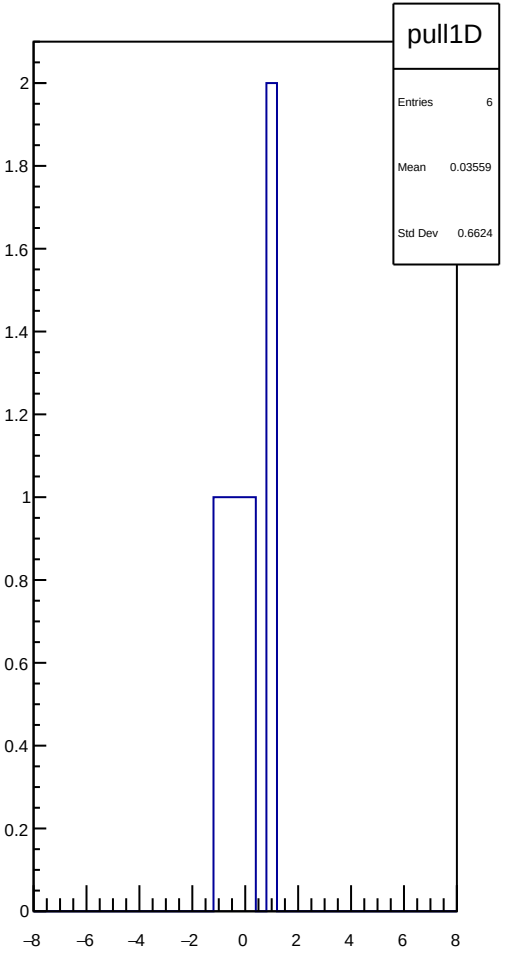

reg_asym_right_avg_rms vs run
×10^3
χ² / ndf 2.541e+05 / 23
p0 6.069e+04 ± 132.6
1000
800
600
400
200
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 2
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

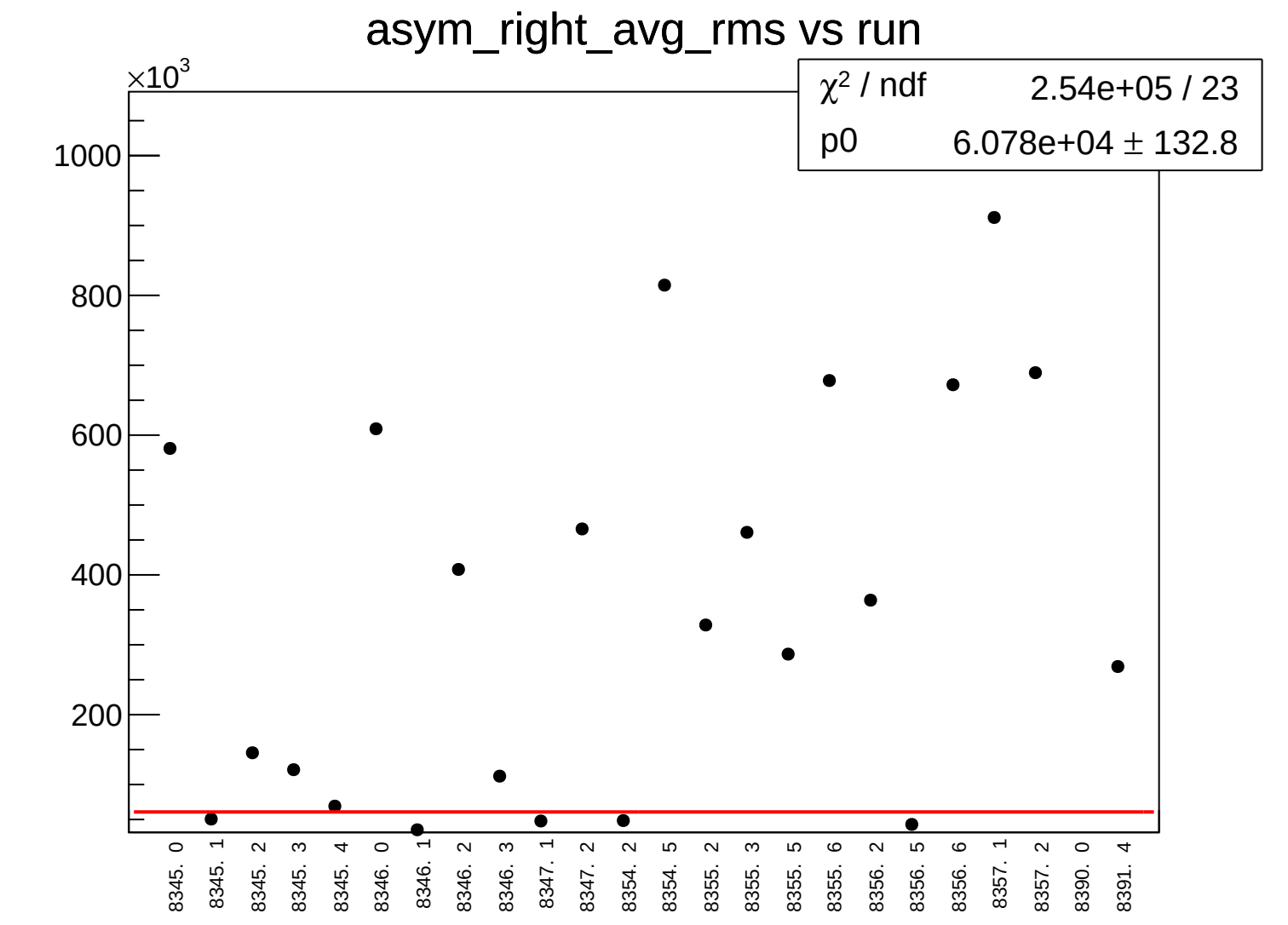

asym_right_avg_correction_mean vs run
×10^3
χ² / ndf 53.03 / 57
p0 1.474e+04 ± 6682
pull
Entries 58
Mean 84.14
Std Dev 49.22

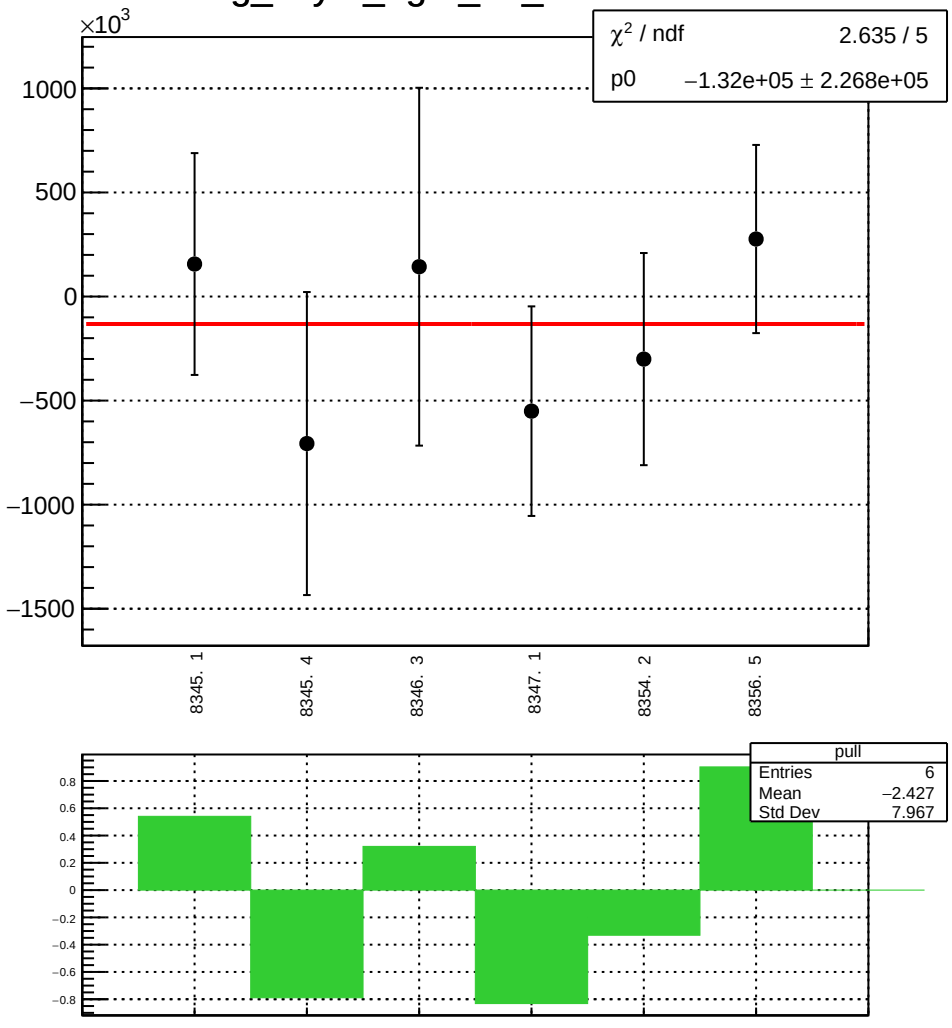

pull1D
Entries 58
Mean −0.08441
Std Dev 0.9525

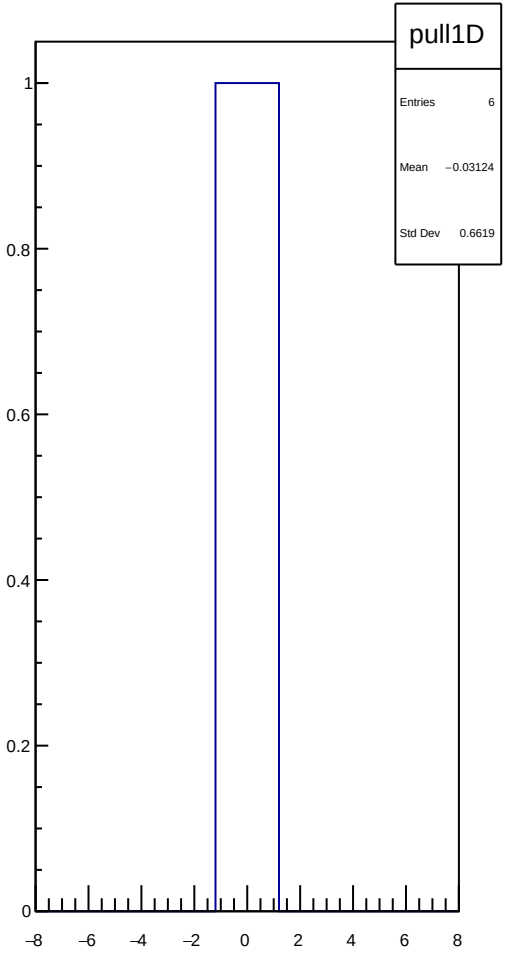

asym_right_avg_correction_rms vs run
×10^3
700
600
500
400
300
200
100
χ² / ndf 1.168e+06 / 80
p0 3019 ± 4.723

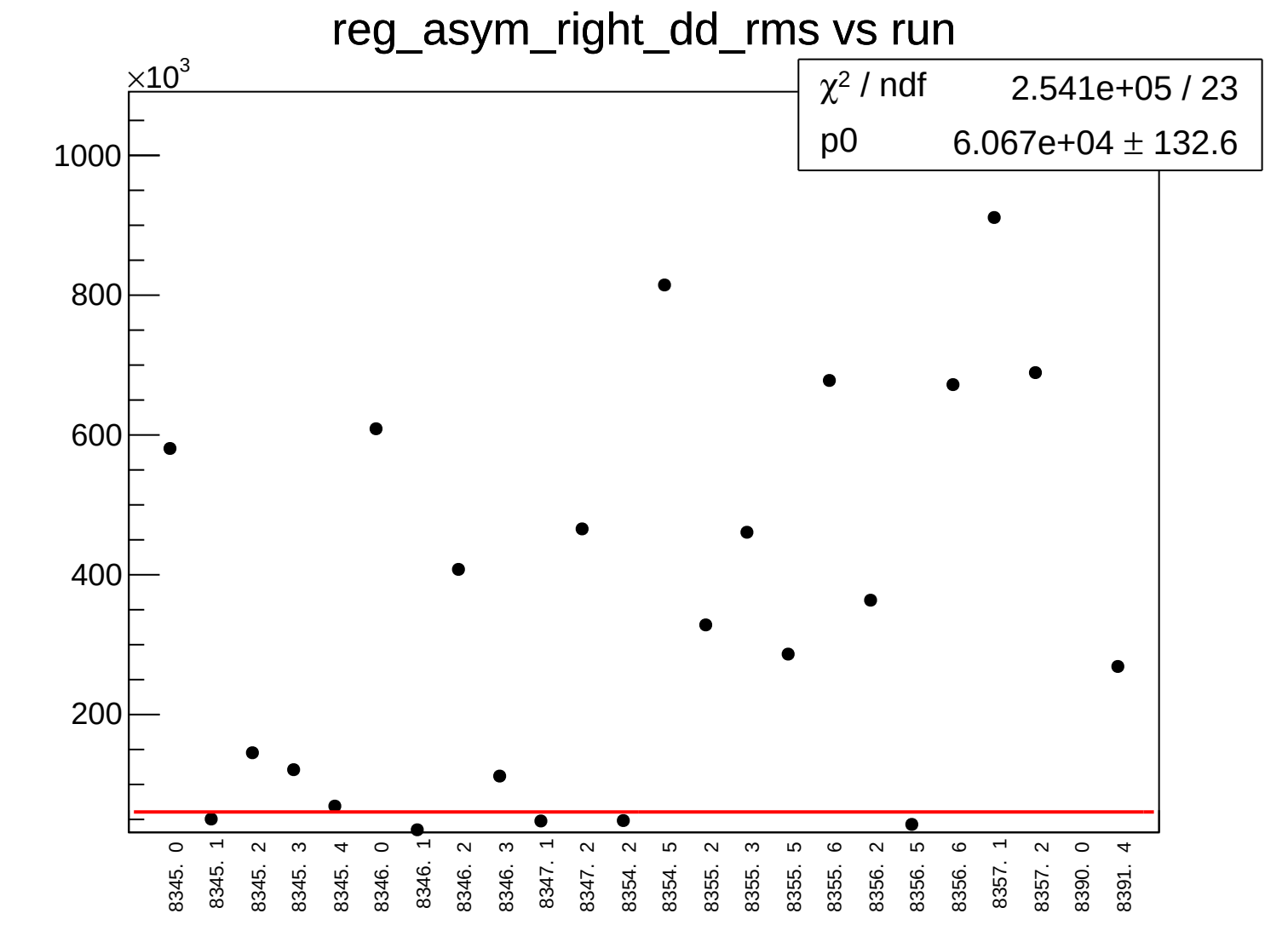

asym_right_avg_mean vs run
×10^3
χ² / ndf 2.64 / 5
p0 1.053e+05 ± 2.27e+05
1500
1000
500
0
−500
−1000
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −2.842
Std Dev 7.99
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

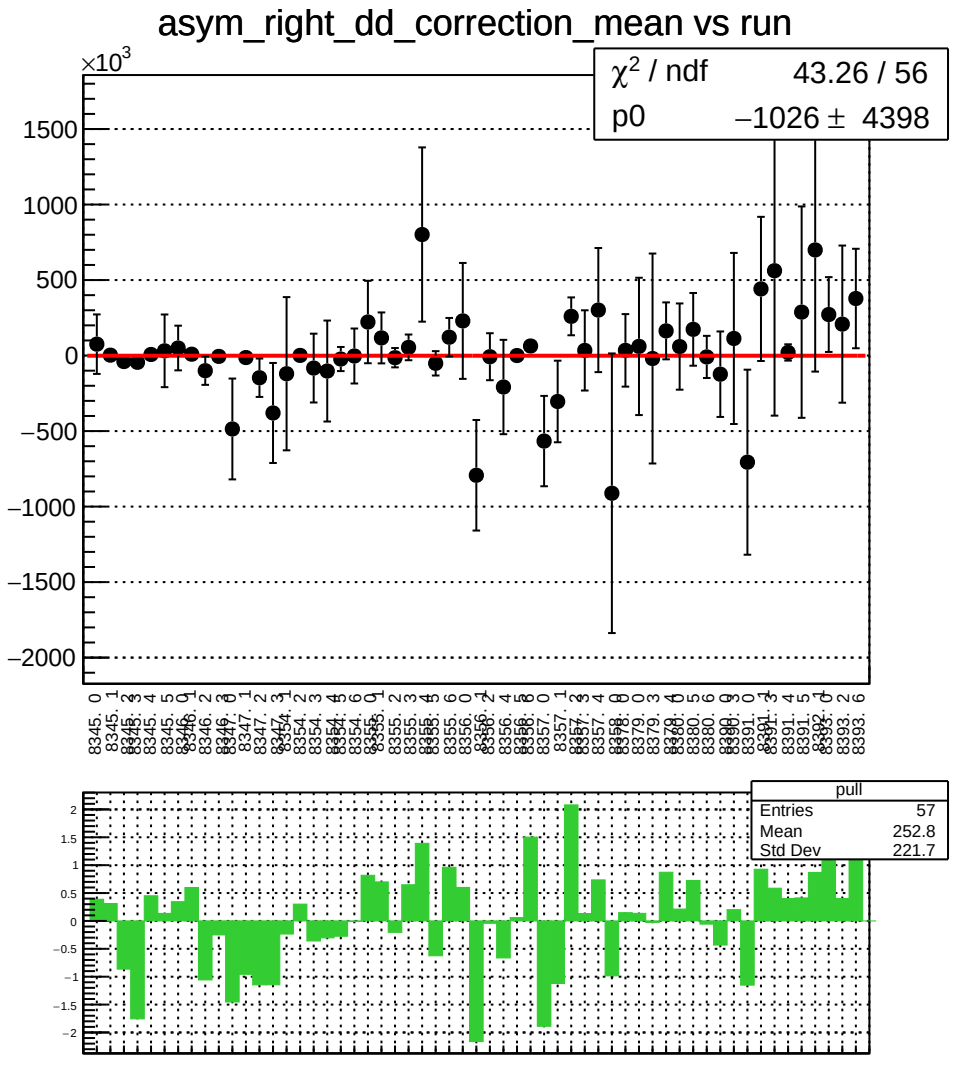

pull1D
Entries 6
Mean 0.03559
Std Dev 0.6624
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

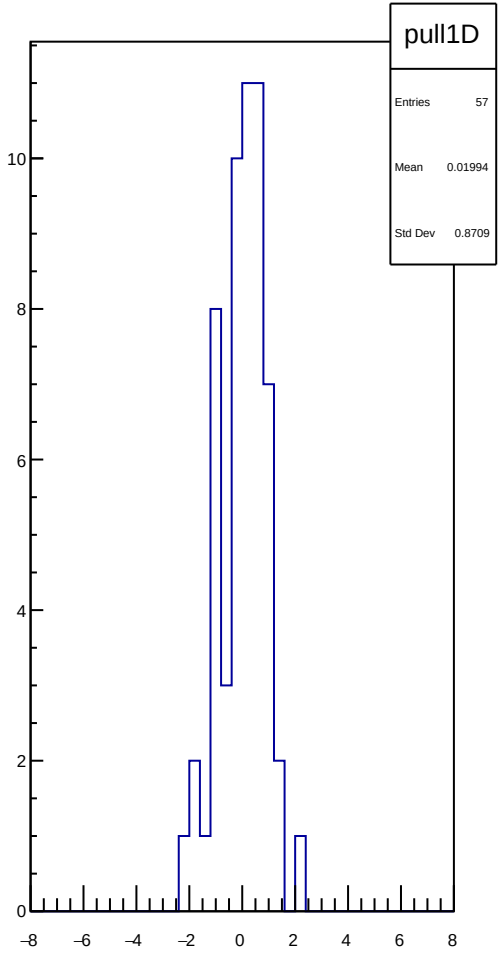

asym_right_avg_rms vs run
×10^3
χ² / ndf 2.54e+05 / 23
p0 6.078e+04 ± 132.8
1000
800
600
400
200
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 2
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

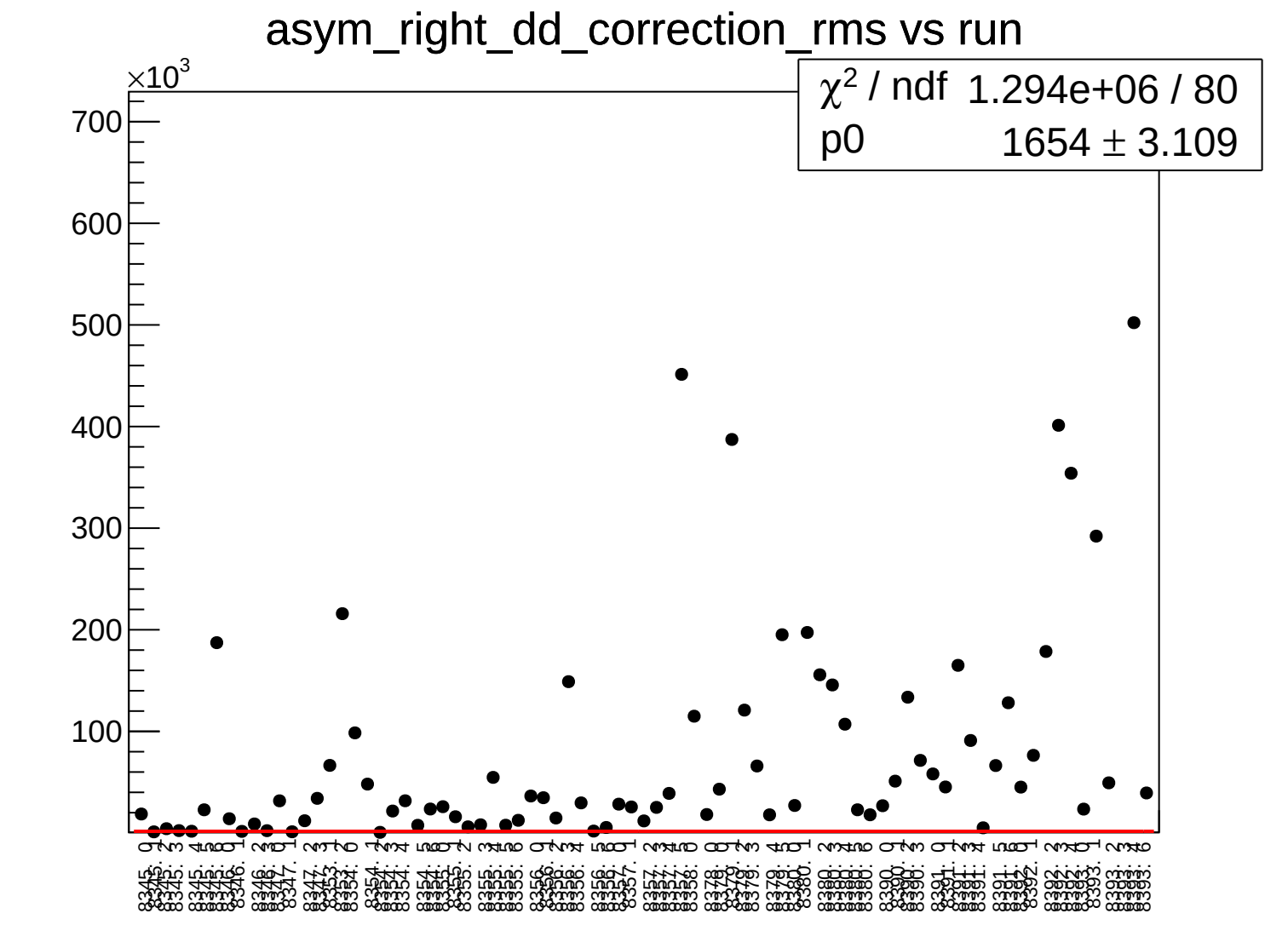

reg_asym_right_dd_mean vs run
×10^3
χ² / ndf 2.635 / 5
p0 −1.32e+05 ± 2.268e+05
1000
500
0
−500
−1000
−1500
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −2.427
Std Dev 7.967
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

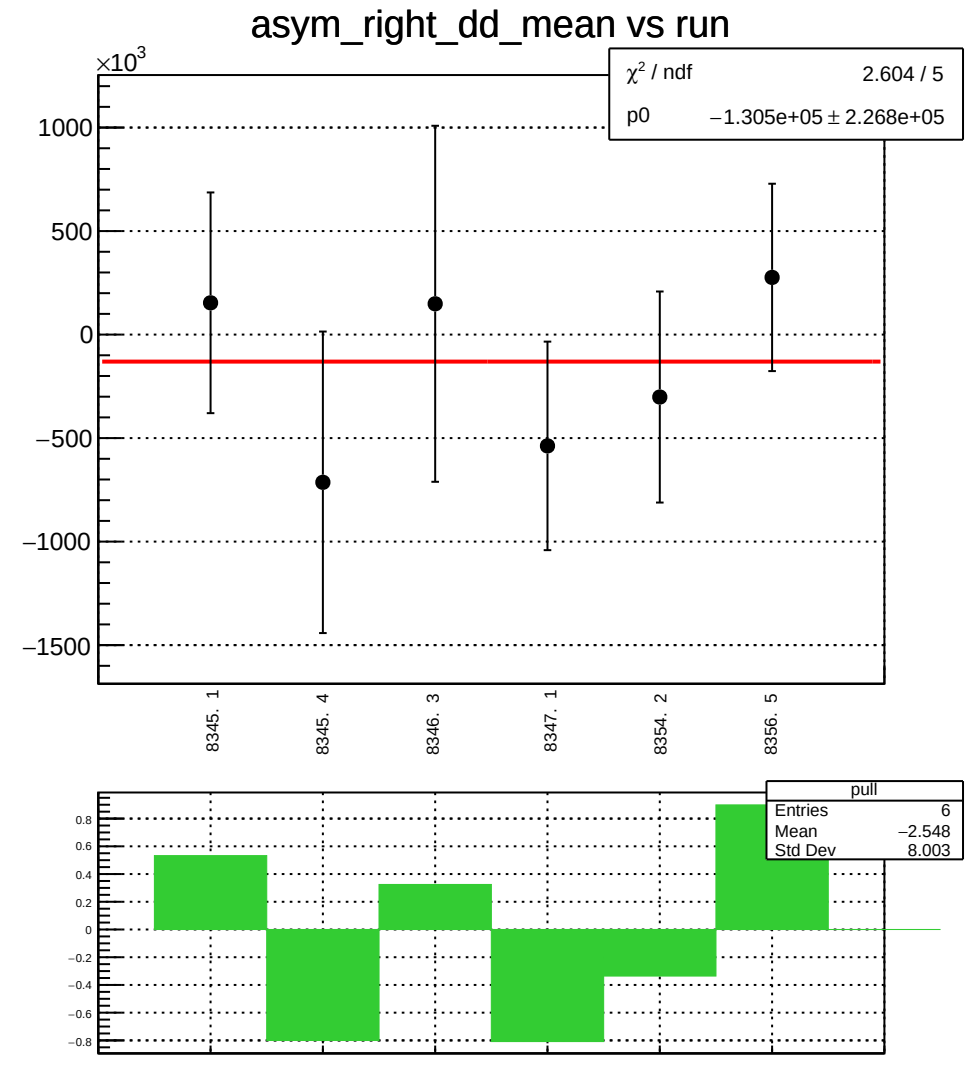

pull1D
Entries 6
Mean −0.03124
Std Dev 0.6619
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

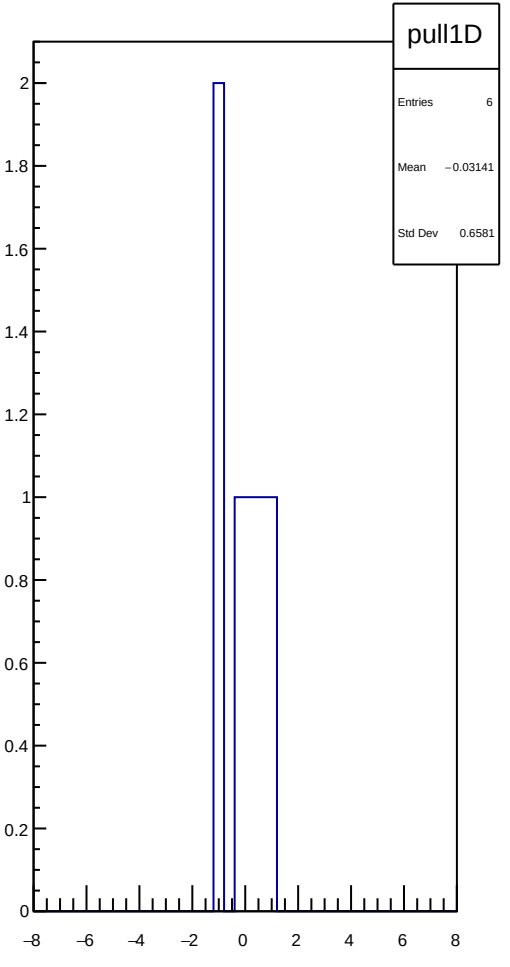

reg_asym_right_dd_rms vs run
×10^3
χ^2 / ndf 2.541e+05 / 23
p0 6.067e+04 ± 132.6
1000
800
600
400
200
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 2
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

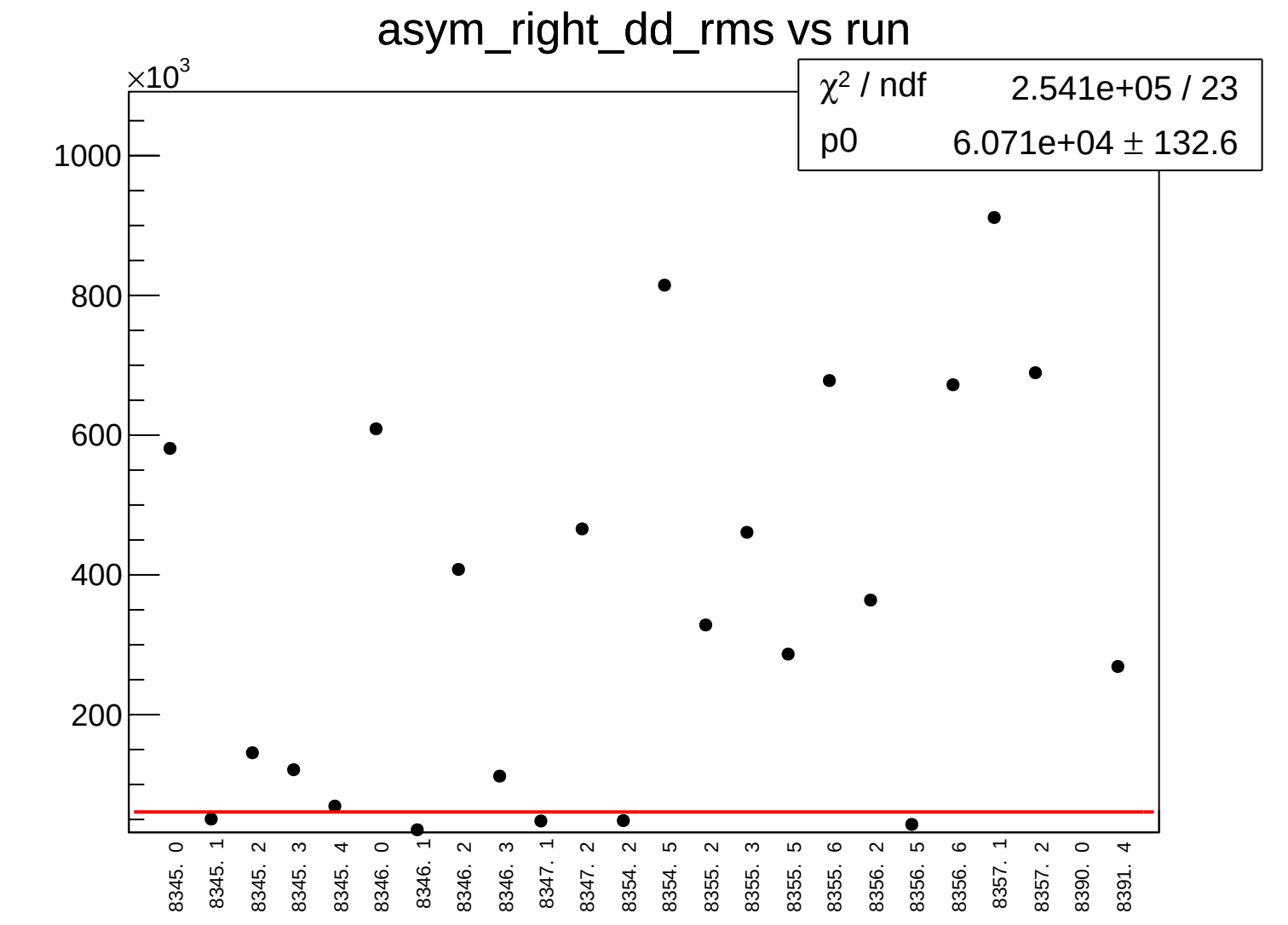

asym_right_dd_correction_mean vs run
×10^3
χ² / ndf 43.26 / 56
p0 −1026 ± 4398
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 57
Mean 252.8
Std Dev 221.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

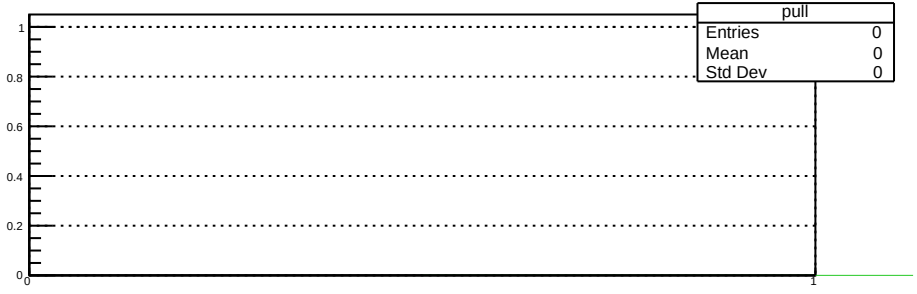

pull1D
Entries 57
Mean 0.01994
Std Dev 0.8709
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

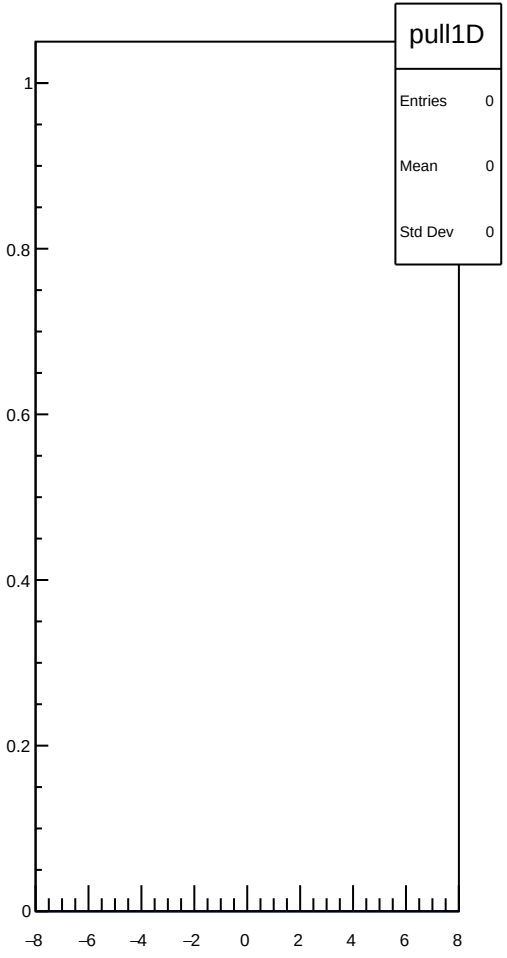

asym_right_dd_correction_rms vs run
×10^3
700
600
500
400
300
200
100
χ² / ndf 1.294e+06 / 80
p0 1654 ± 3.109

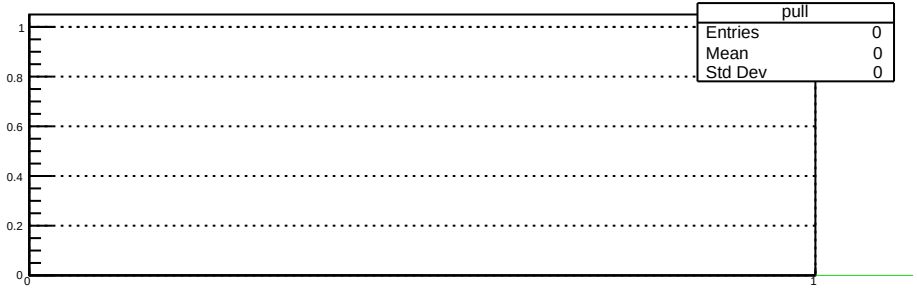

asym_right_dd_mean vs run
×10^3
χ² / ndf 2.604 / 5
p0 −1.305e+05 ± 2.268e+05
1000
500
0
−500
−1000
−1500
8345. 1
8345. 4
8346. 3
8347. 1
8354. 2
8356. 5
pull
Entries 6
Mean −2.548
Std Dev 8.003
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

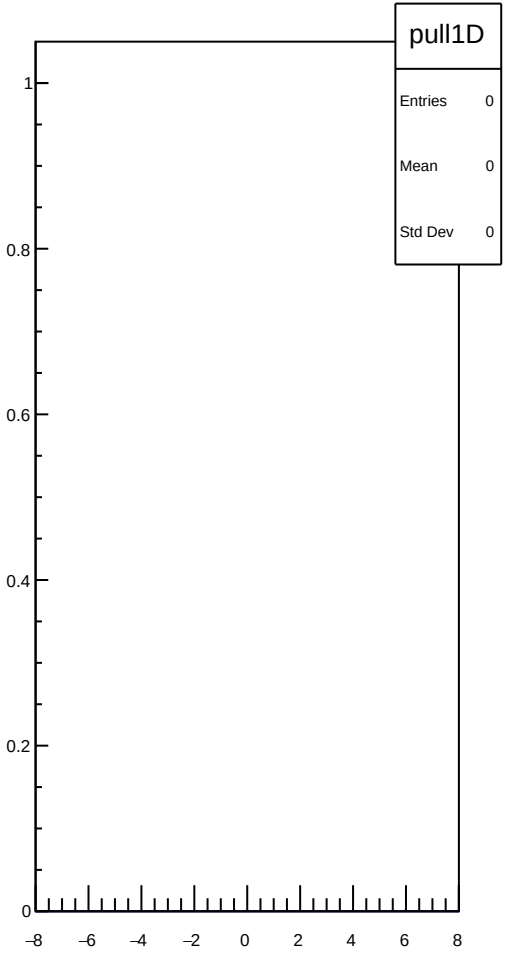

pull1D
Entries 6
Mean −0.03141
Std Dev 0.6581
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

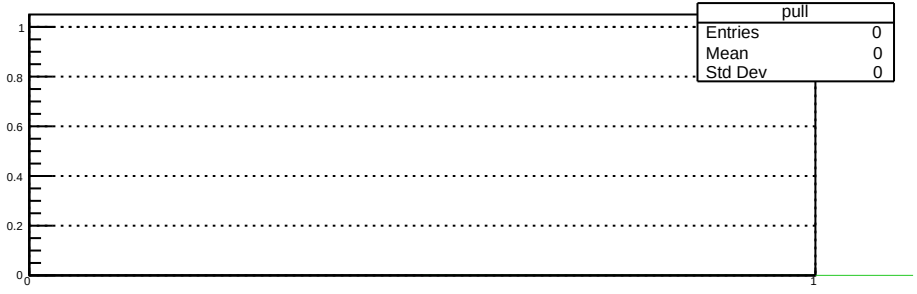

asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.541e+05 / 23
p0 6.071e+04 ± 132.6
8345. 0
8345. 1
8345. 2
8345. 3
8345. 4
8346. 0
8346. 1
8346. 2
8346. 3
8347. 1
8347. 2
8354. 2
8354. 5
8355. 2
8355. 3
8355. 5
8355. 6
8356. 2
8356. 5
8356. 6
8357. 1
8357. 2
8390. 0
8391. 4

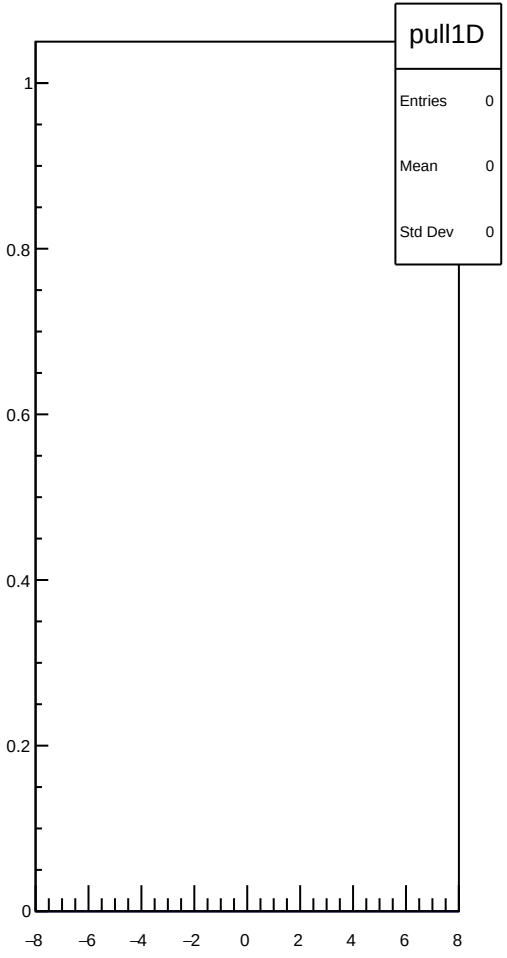

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

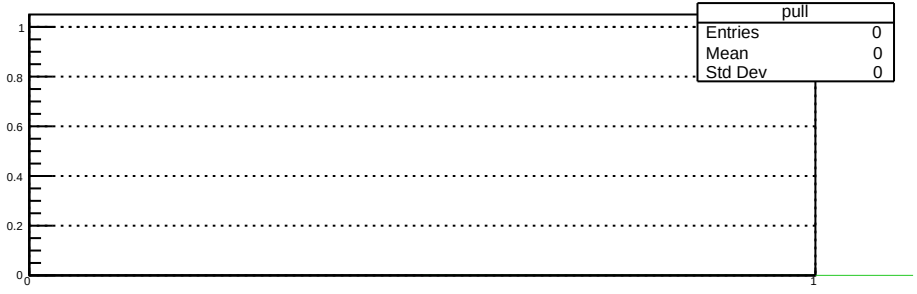

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

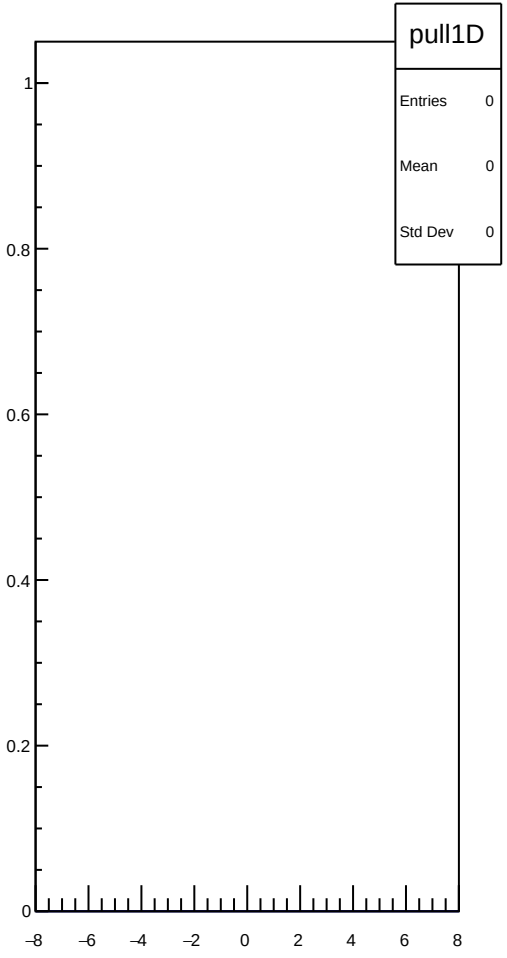

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

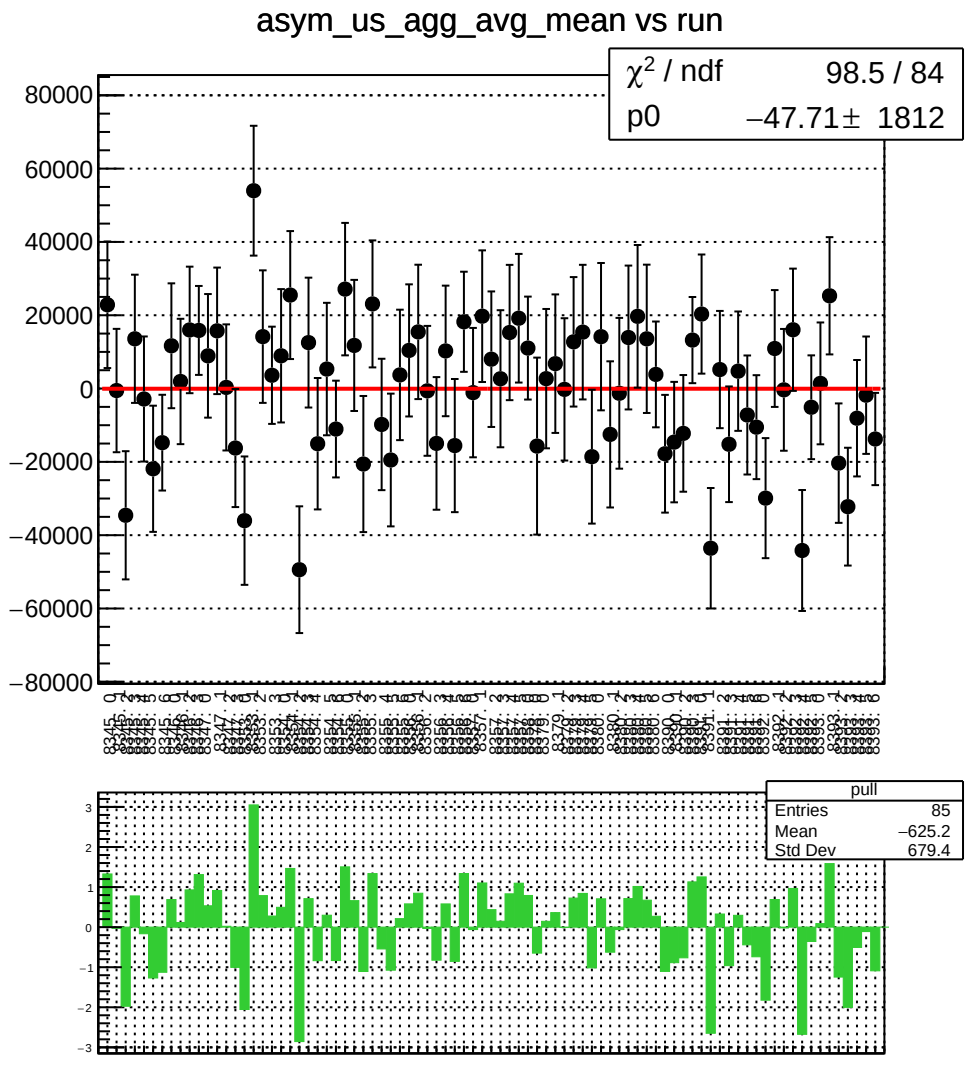

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

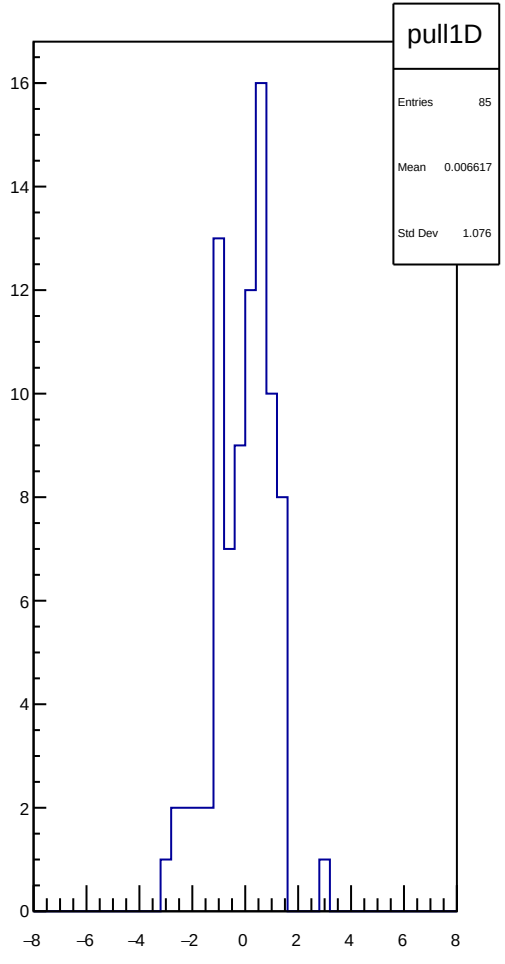

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

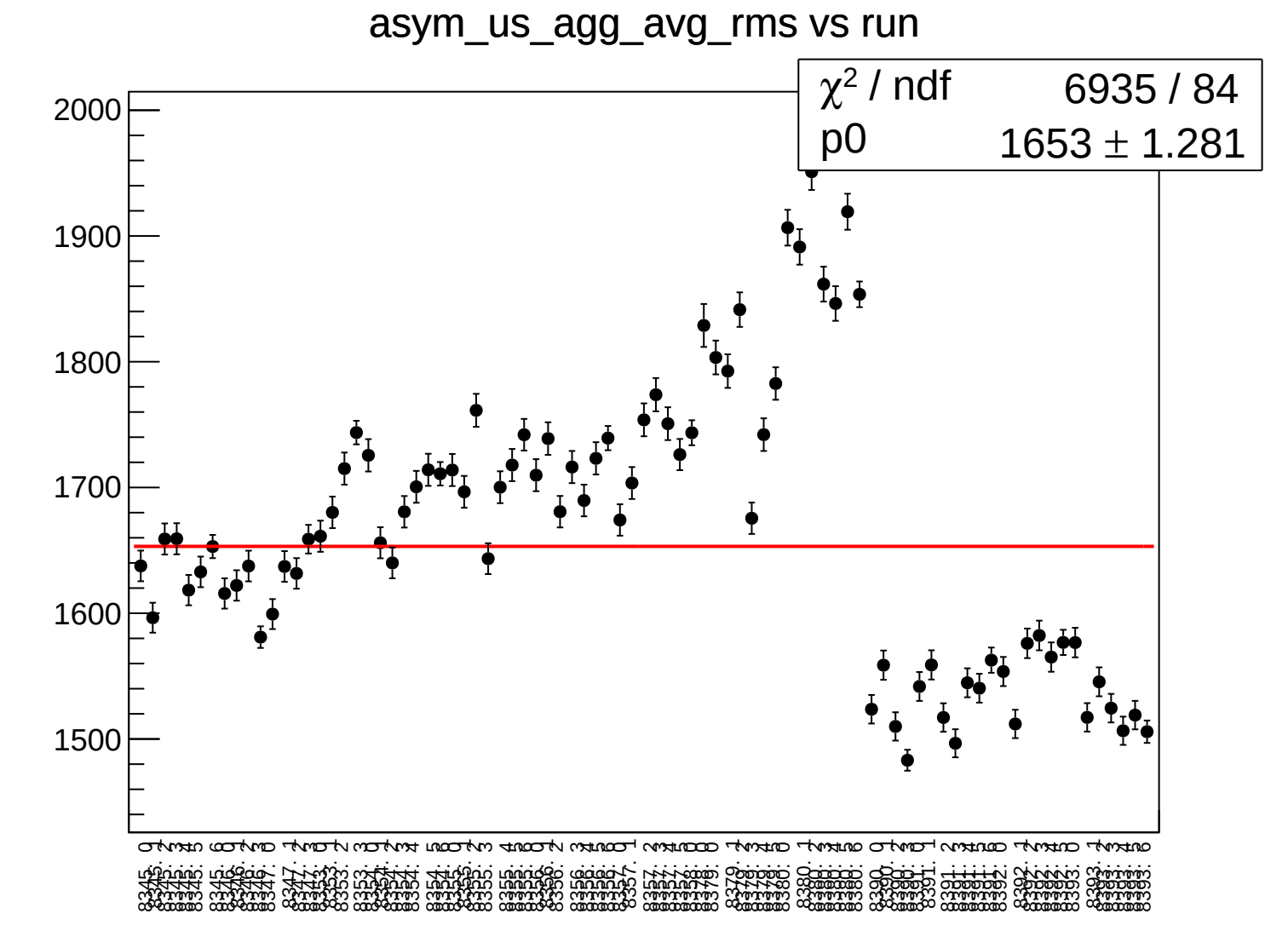

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

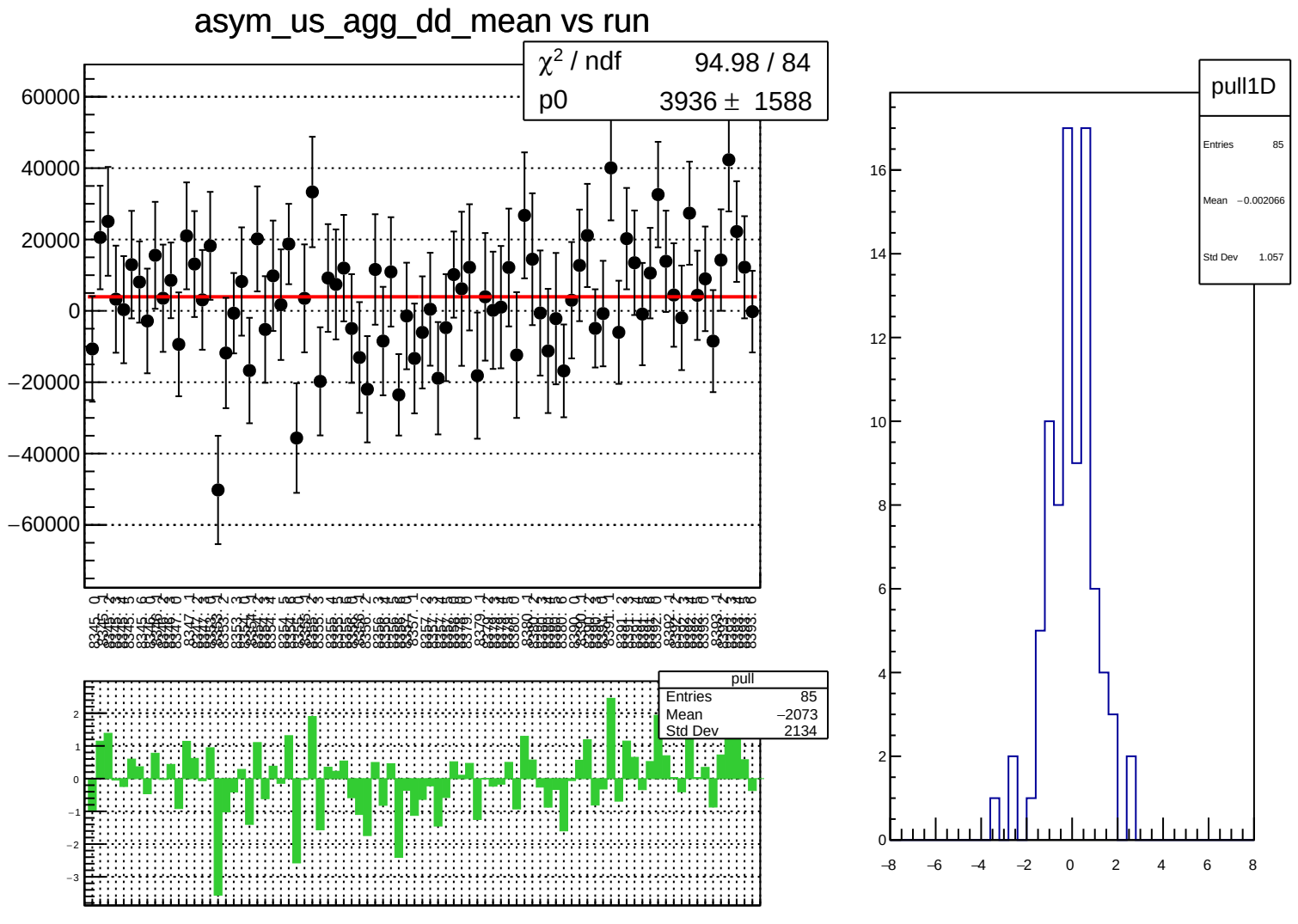

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

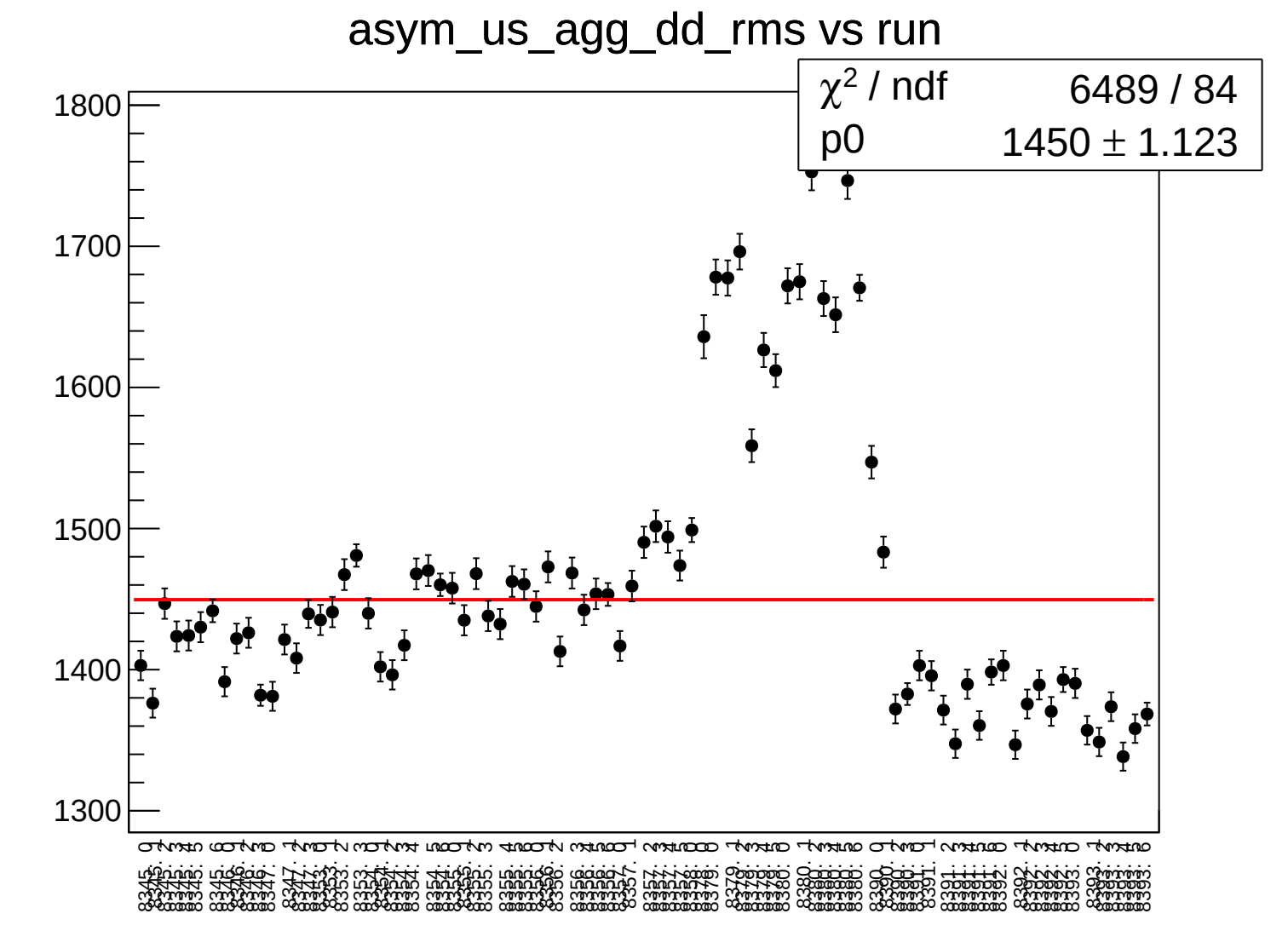

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

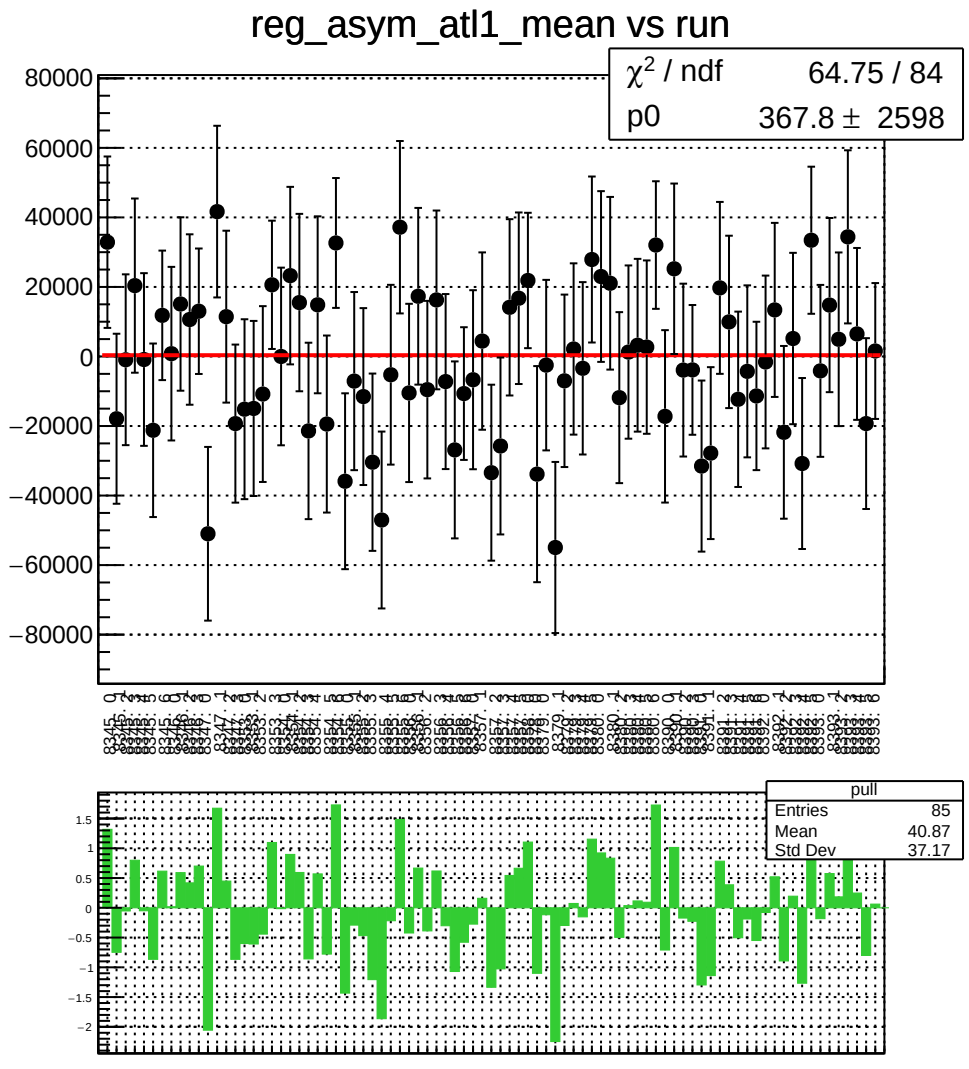

asym_us_agg_avg_mean vs run
χ² / ndf 98.5 / 84
p0 −47.71± 1812
pull
Entries 85
Mean −625.2
Std Dev 679.4

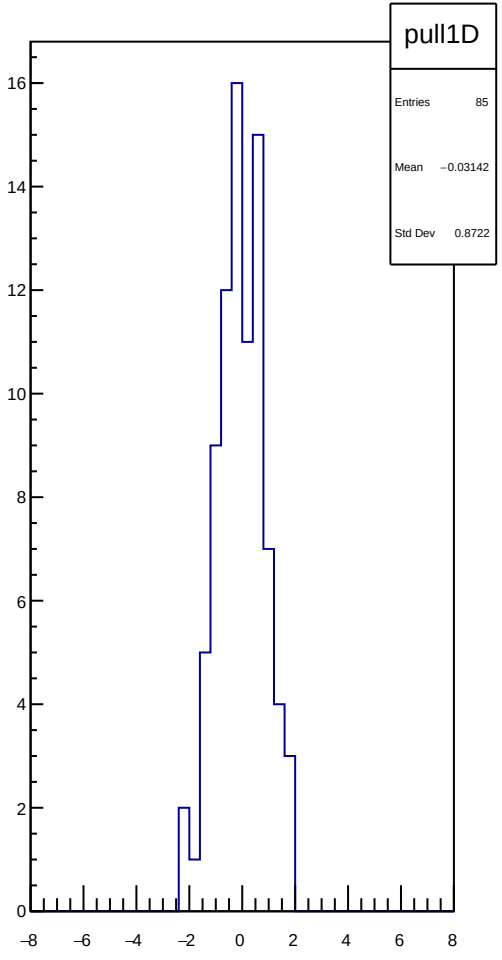

pull1D
Entries 85
Mean 0.006617
Std Dev 1.076

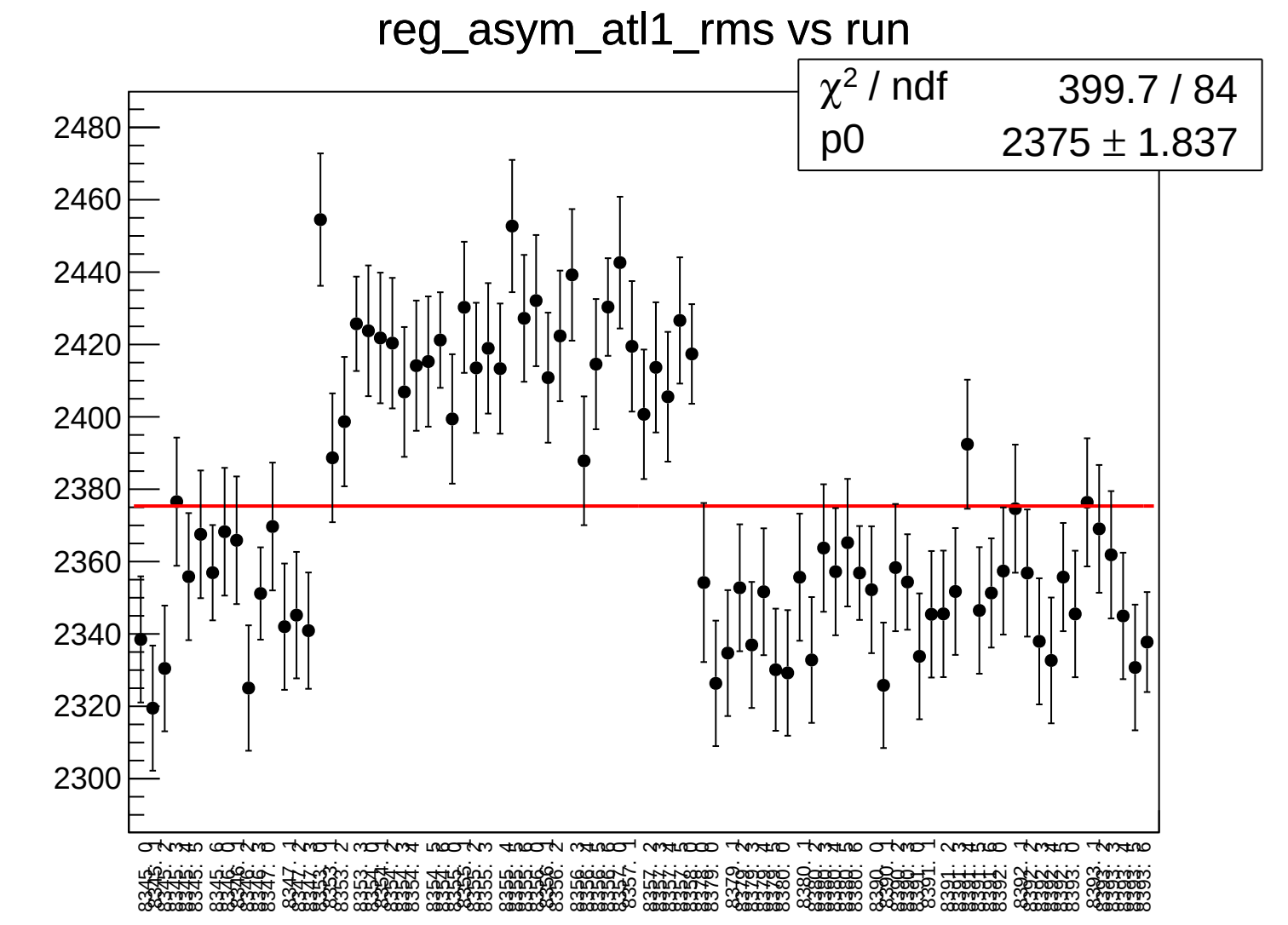

asym_us_agg_avg_rms vs run
χ² / ndf 6935 / 84
p0 1653 ± 1.281
2000
1900
1800
1700
1600
1500

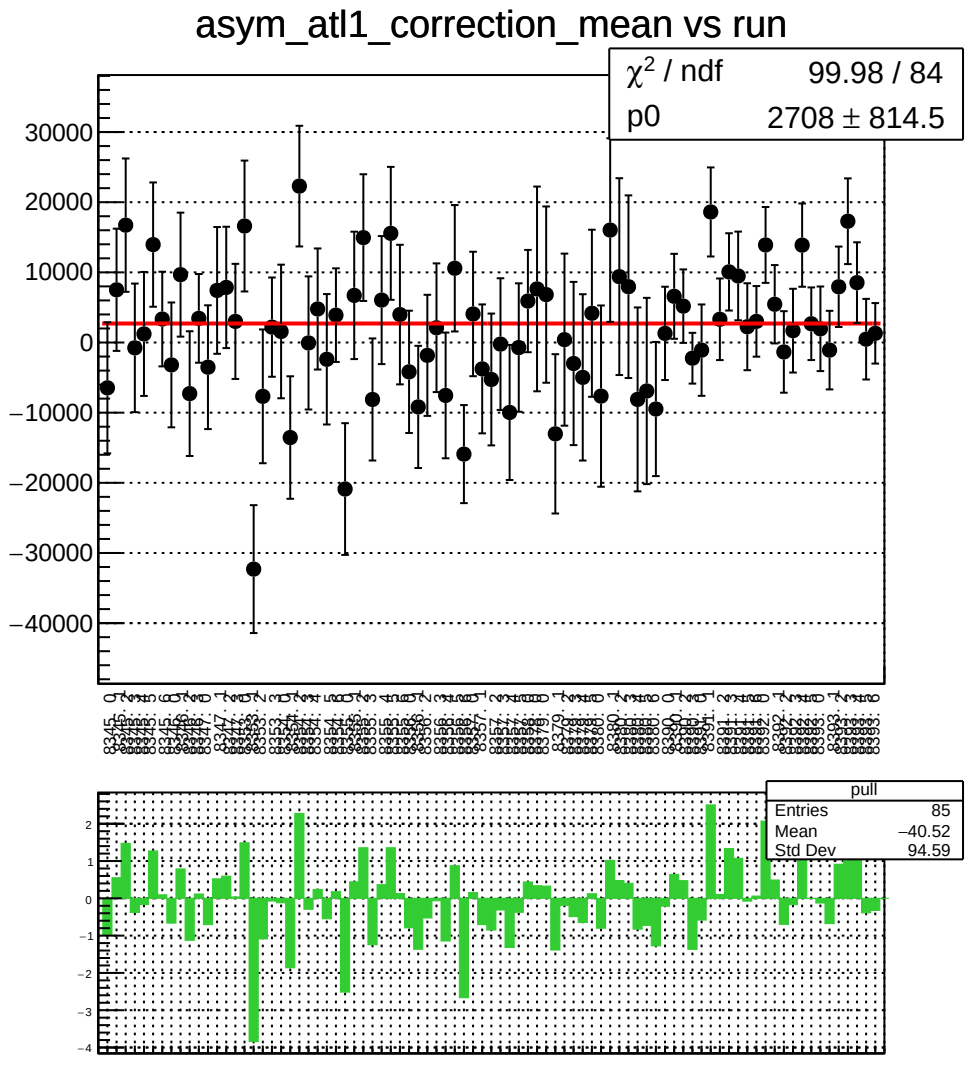

asym_us_agg_dd_mean vs run
χ² / ndf 94.98 / 84
p0 3936 ± 1588
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −2073
Std Dev 2134
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.002066
Std Dev 1.057
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

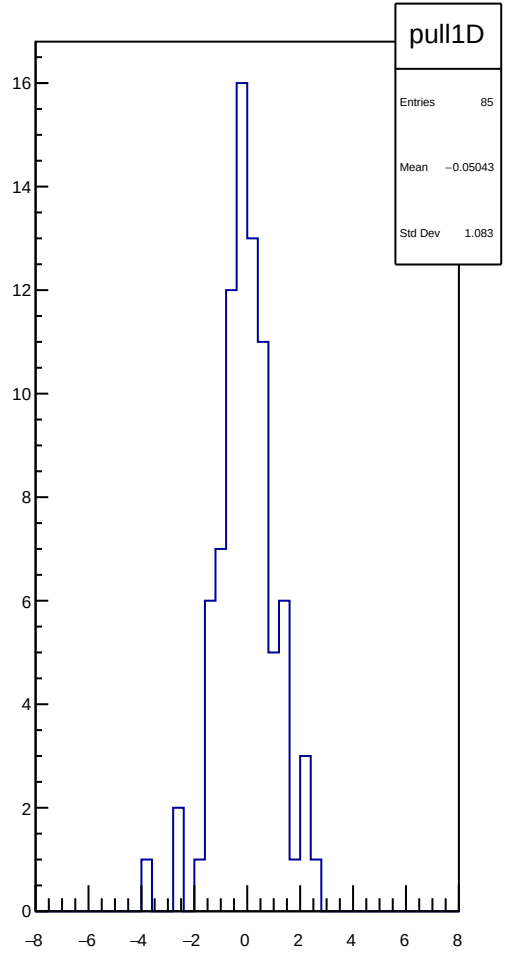

asym_us_agg_dd_rms vs run
χ² / ndf 6489 / 84
p0 1450 ± 1.123
1800
1700
1600
1500
1400
1300

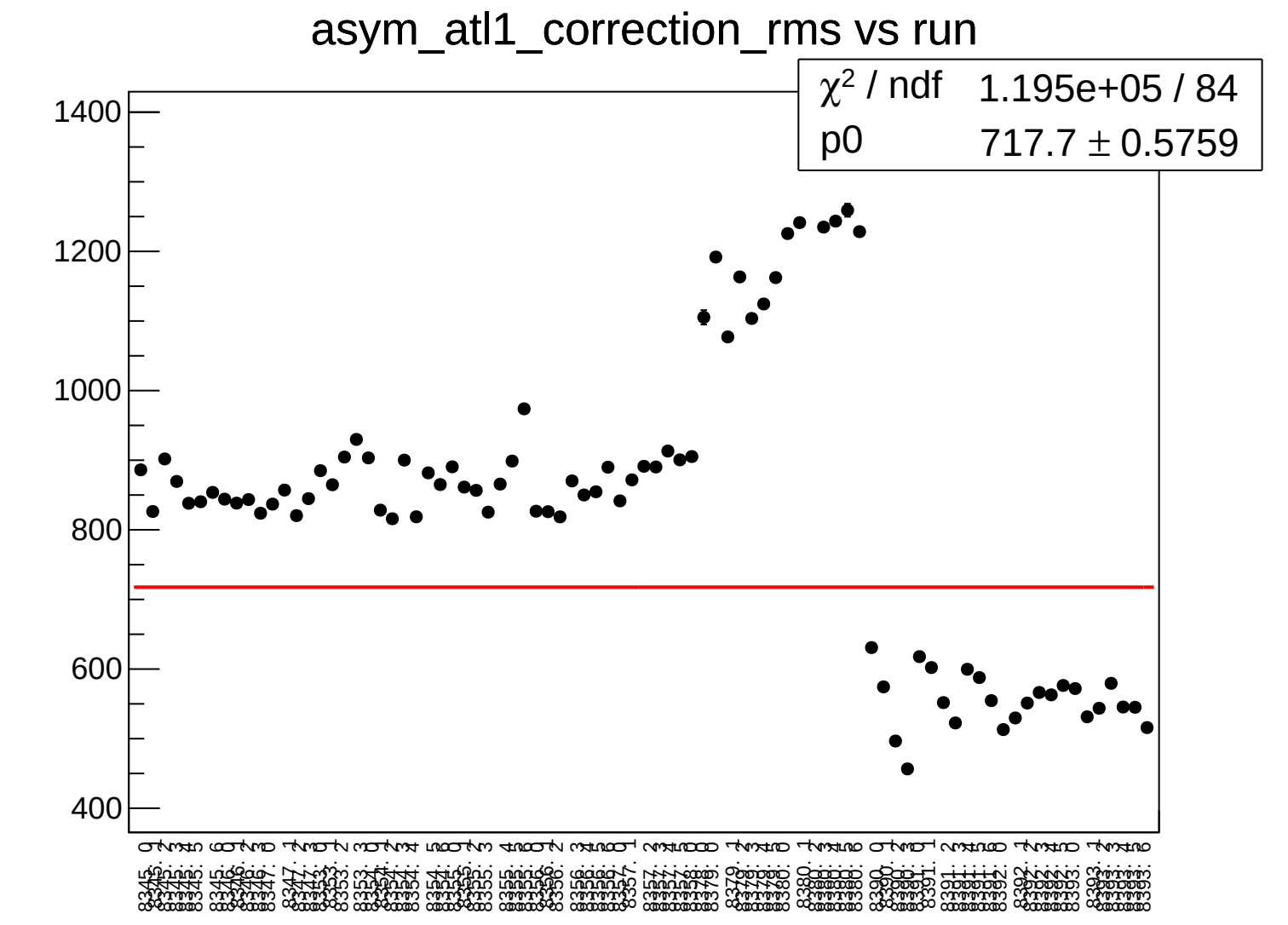

reg_asym_atl1_mean vs run
χ² / ndf 64.75 / 84
p0 367.8 ± 2598
pull
Entries 85
Mean 40.87
Std Dev 37.17

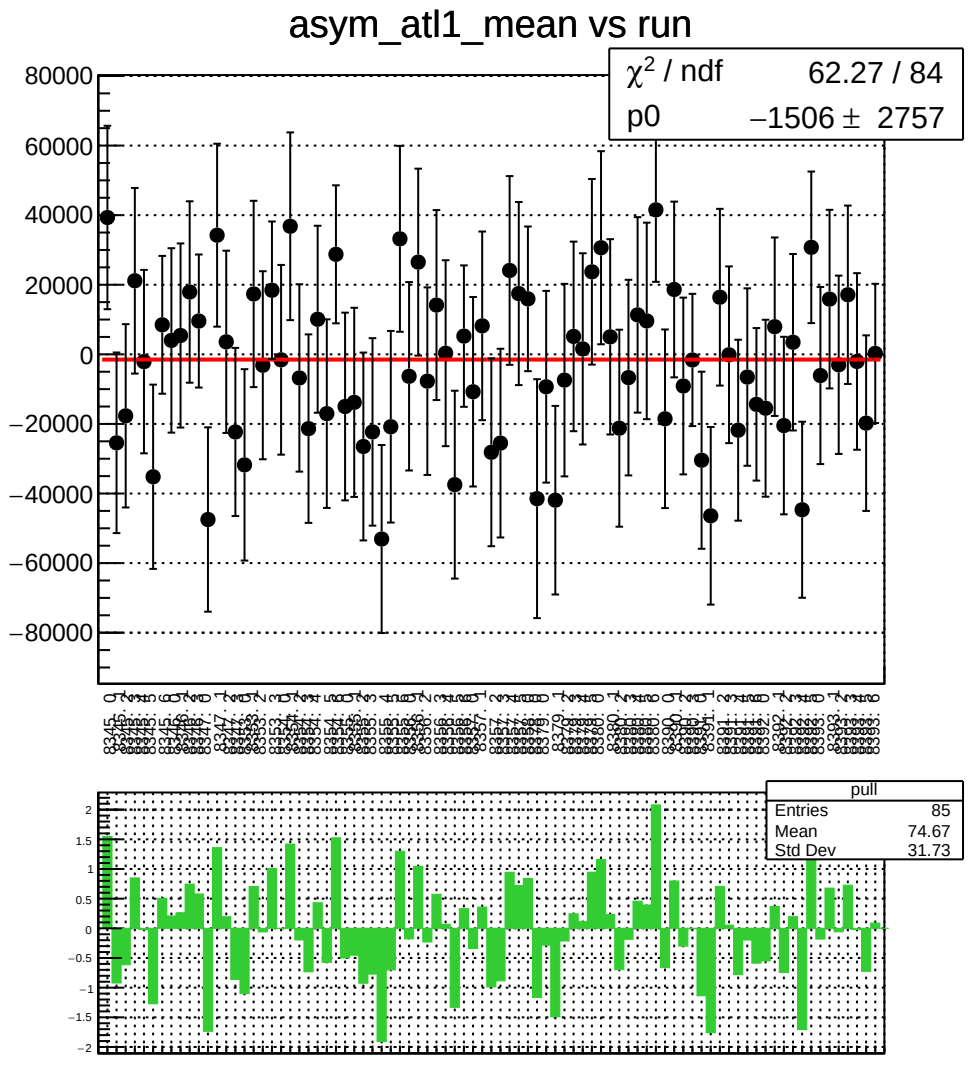

pull1D
Entries 85
Mean −0.03142
Std Dev 0.8722

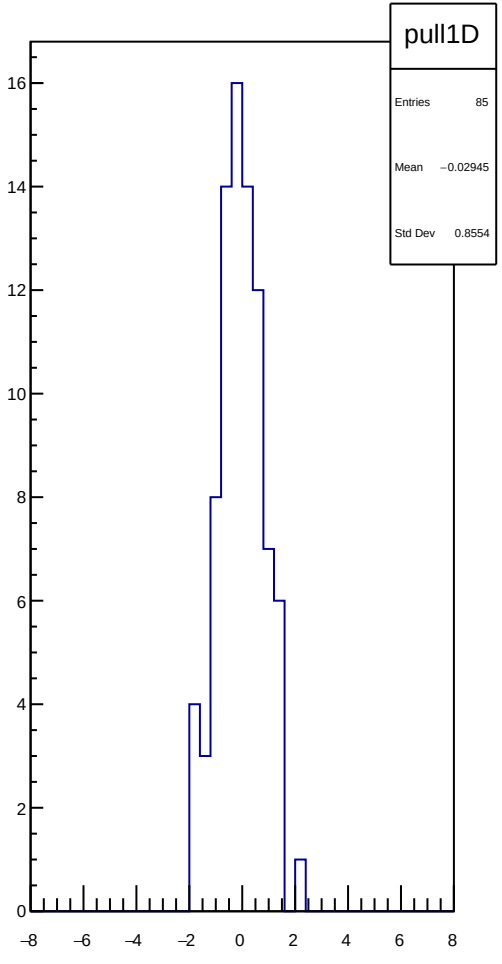

reg_asym_atl1_rms vs run
χ² / ndf 399.7 / 84
p0 2375 ± 1.837
2480
2460
2440
2420
2400
2380
2360
2340
2320
2300

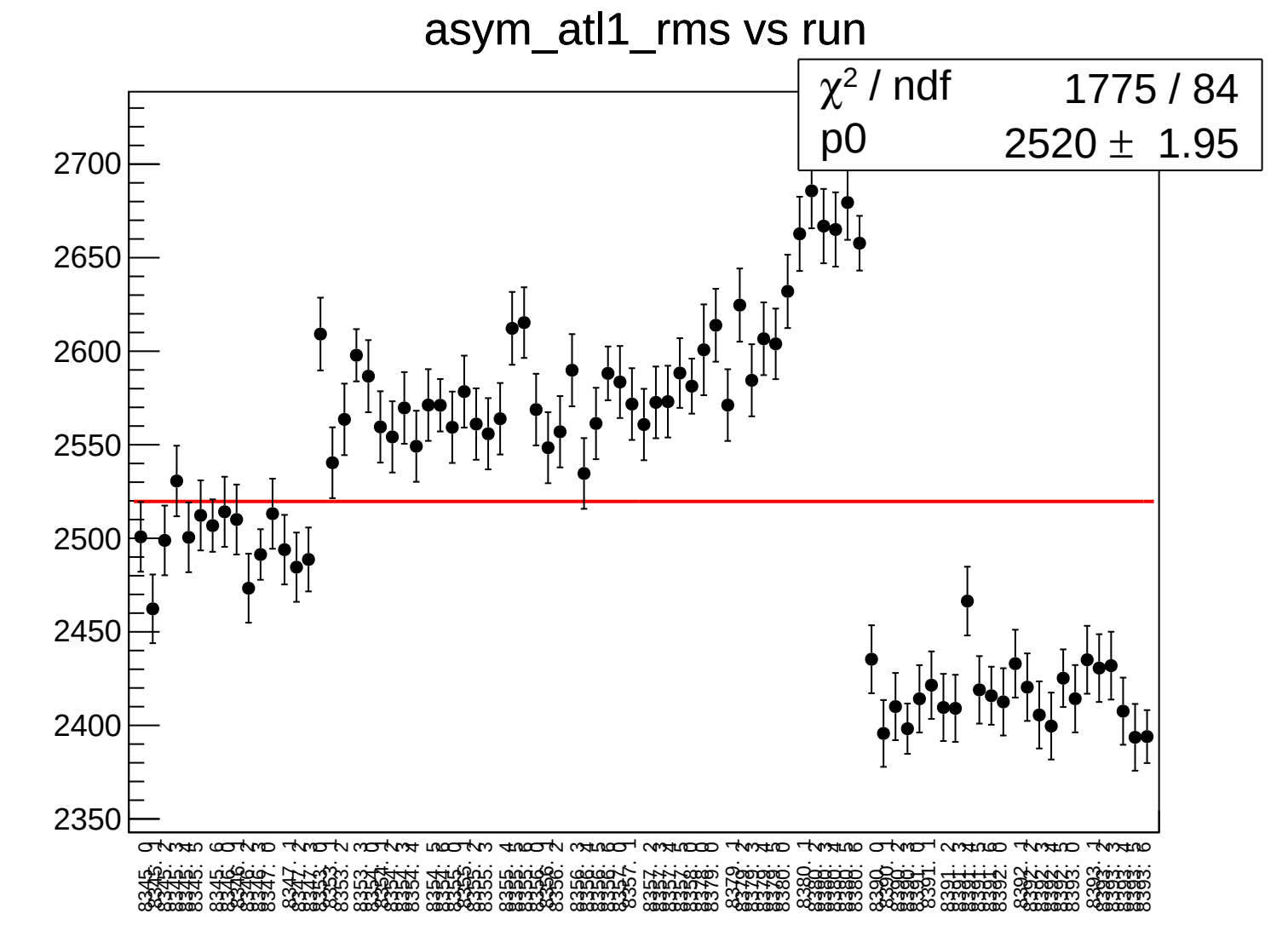

asym_atl1_correction_mean vs run
χ² / ndf 99.98 / 84
p0 2708 ± 814.5
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −40.52
Std Dev 94.59
2
1
0
−1
−2
−3
−4

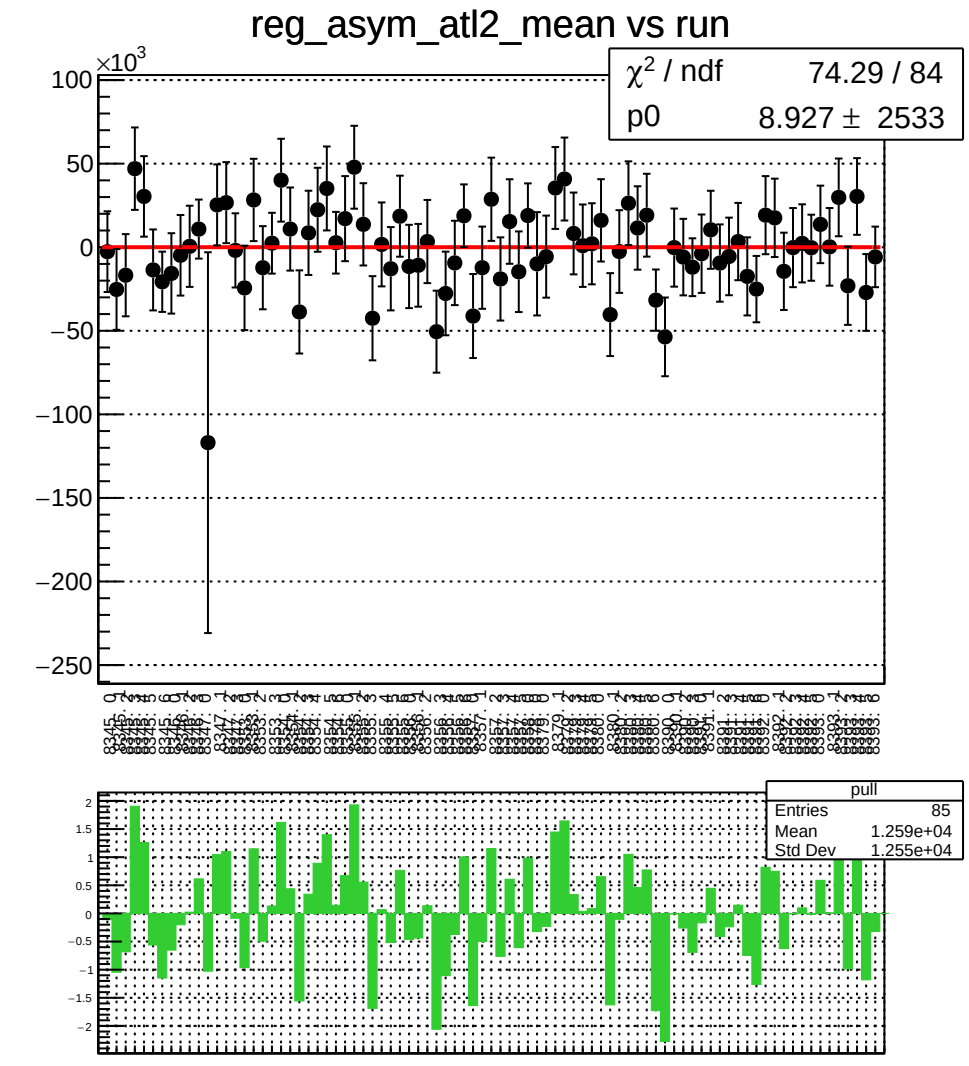

pull1D
Entries 85
Mean −0.05043
Std Dev 1.083
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

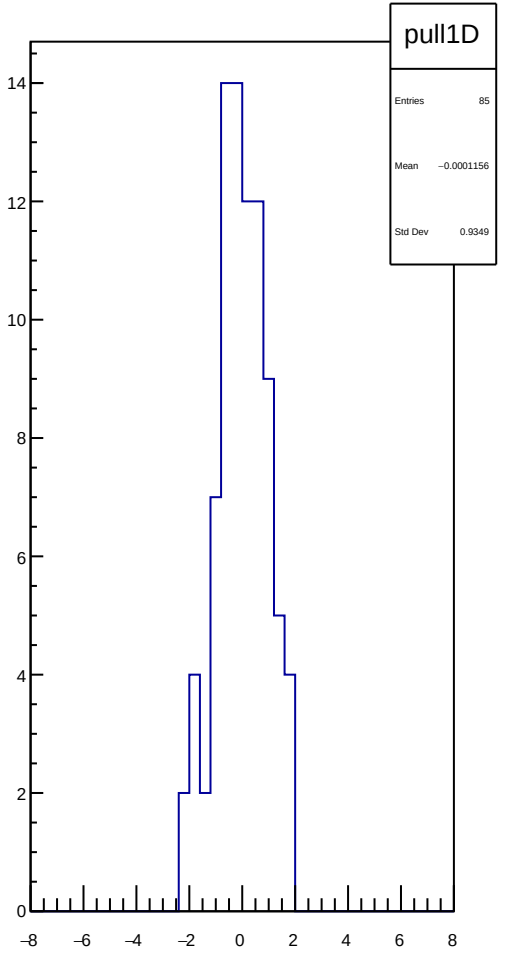

asym_atl1_correction_rms vs run
χ² / ndf 1.195e+05 / 84
p0 717.7 ± 0.5759
1400
1200
1000
800
600
400

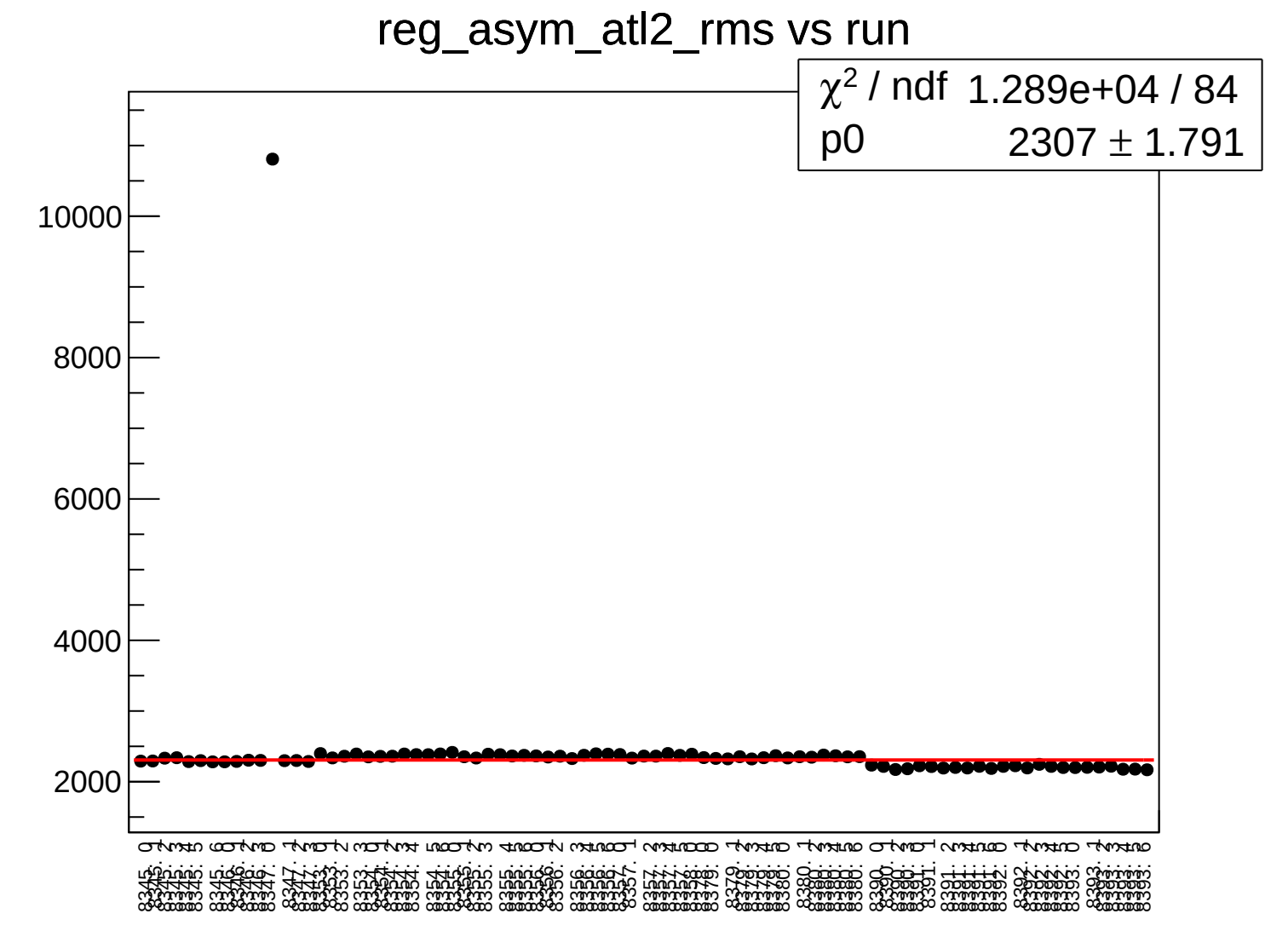

asym_atl1_mean vs run
χ^2 / ndf 62.27 / 84
p0 −1506 ± 2757
pull
Entries 85
Mean 74.67
Std Dev 31.73

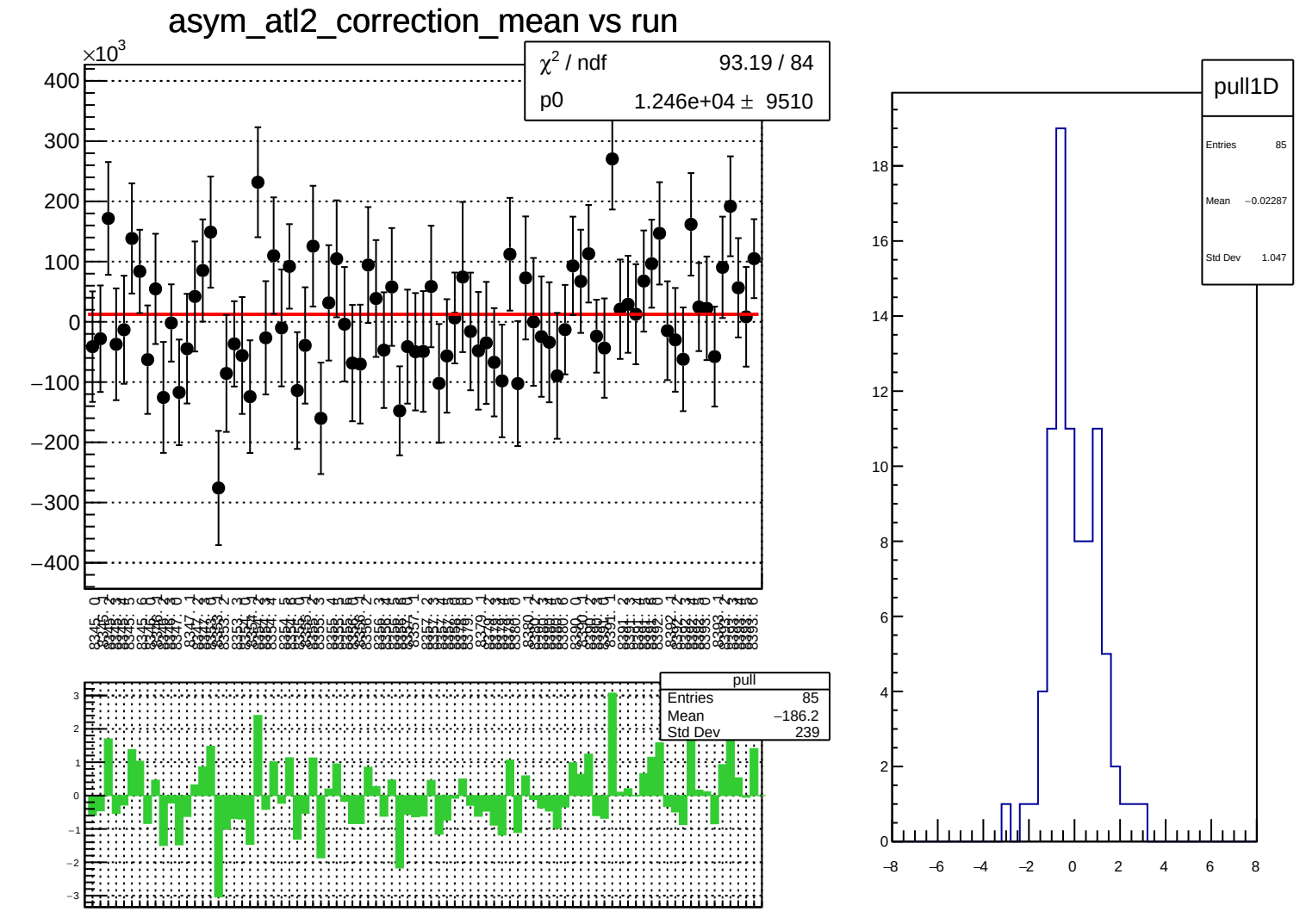

pull1D
Entries 85
Mean −0.02945
Std Dev 0.8554

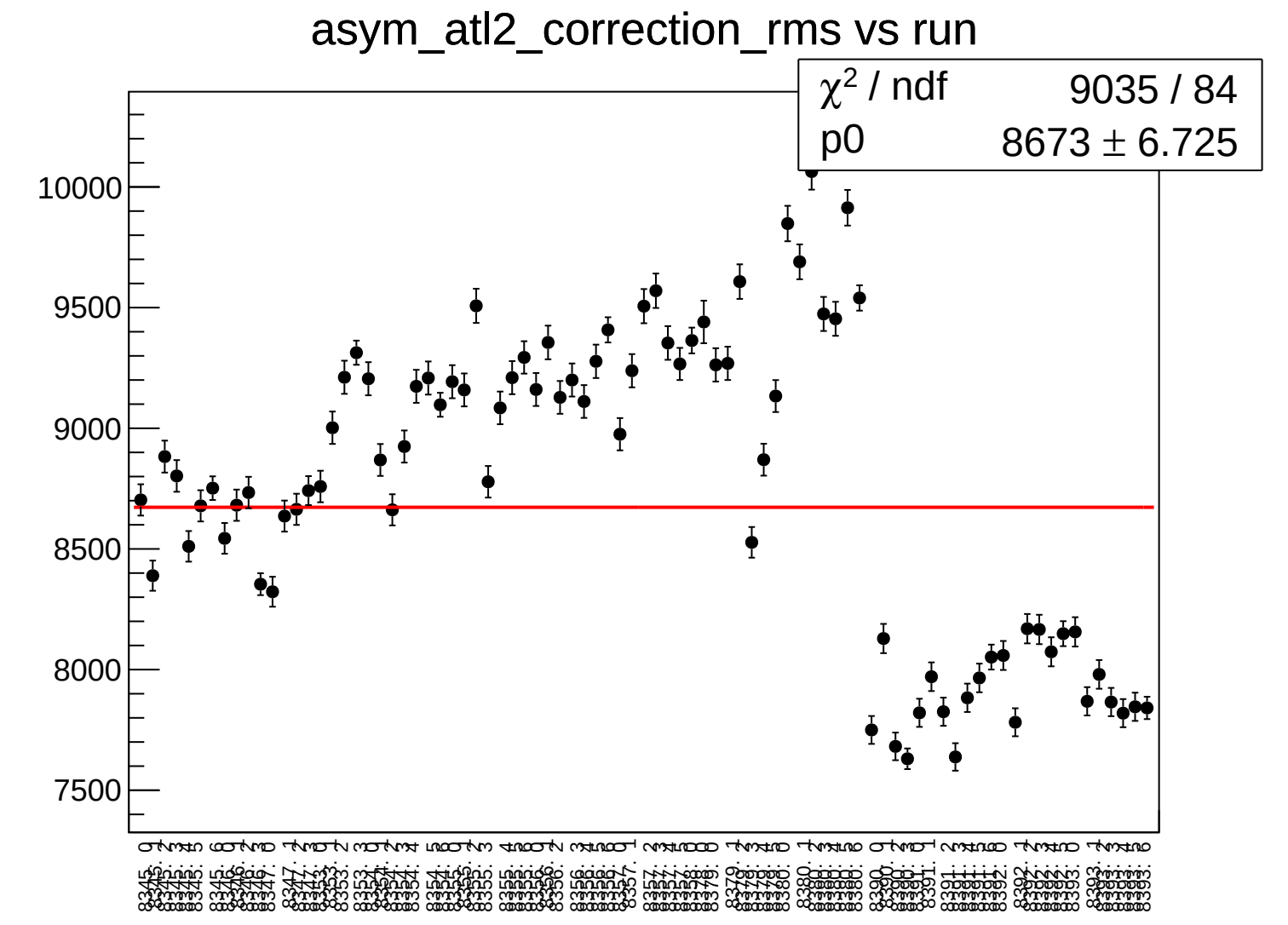

asym_atl1_rms vs run
χ² / ndf 1775 / 84
p0 2520 ± 1.95
2700
2650
2600
2550
2500
2450
2400
2350

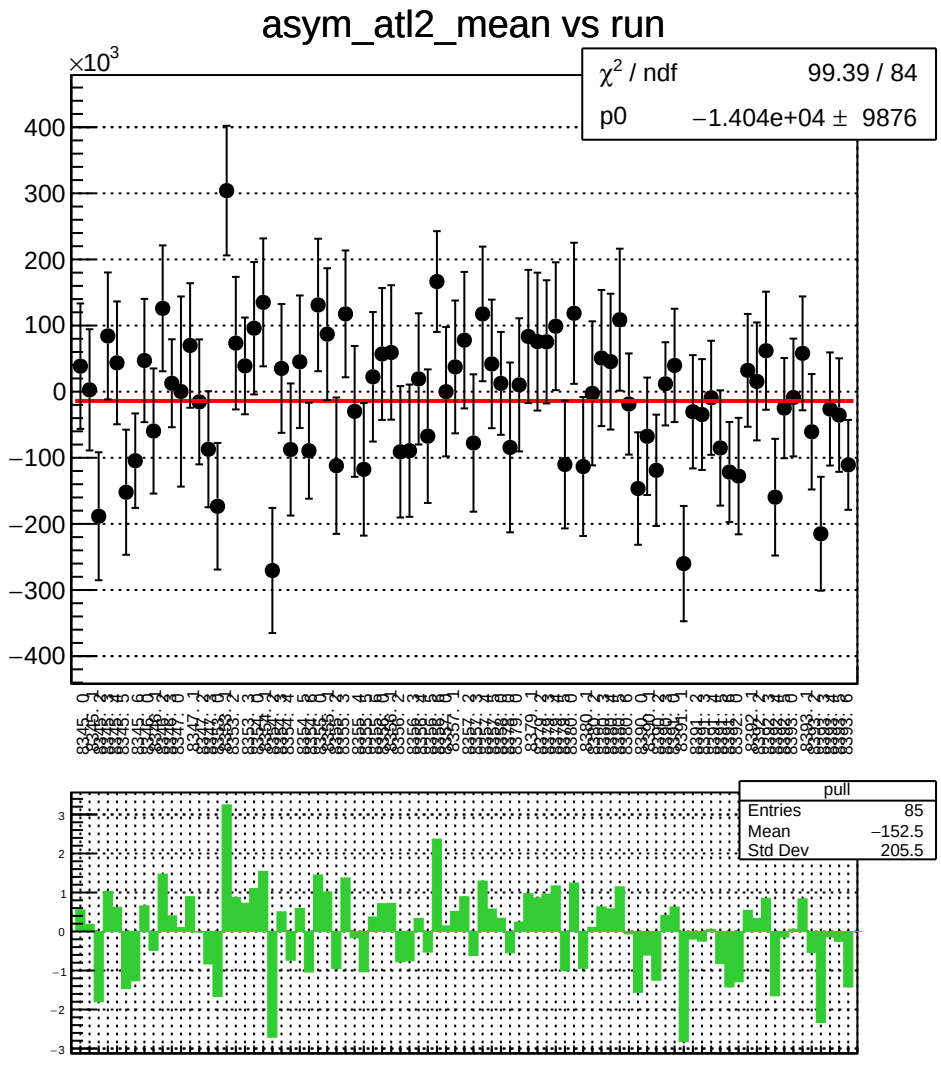

reg_asym_atl2_mean vs run
×10^3
χ^2 / ndf 74.29 / 84
p0 8.927 ± 2533
pull
Entries 85
Mean 1.259e+04
Std Dev 1.255e+04

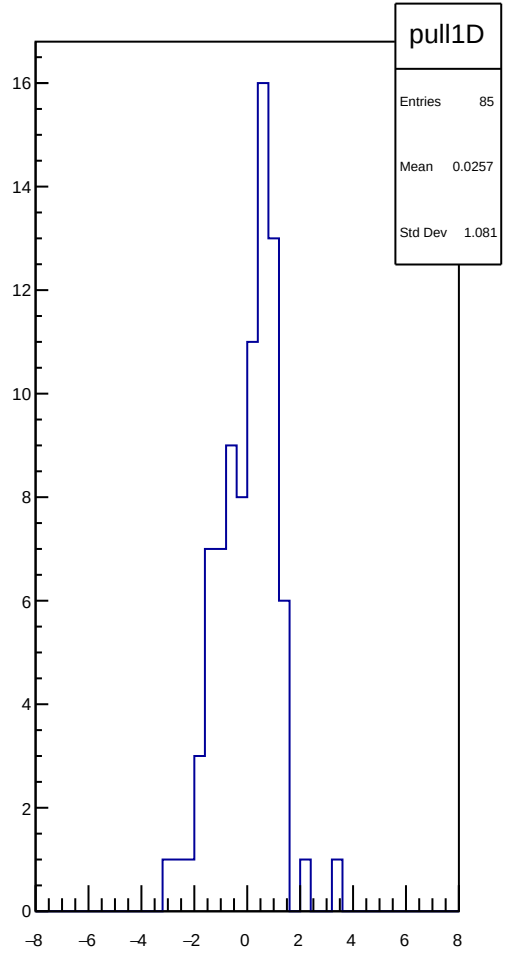

pull1D
Entries 85
Mean −0.0001156
Std Dev 0.9349

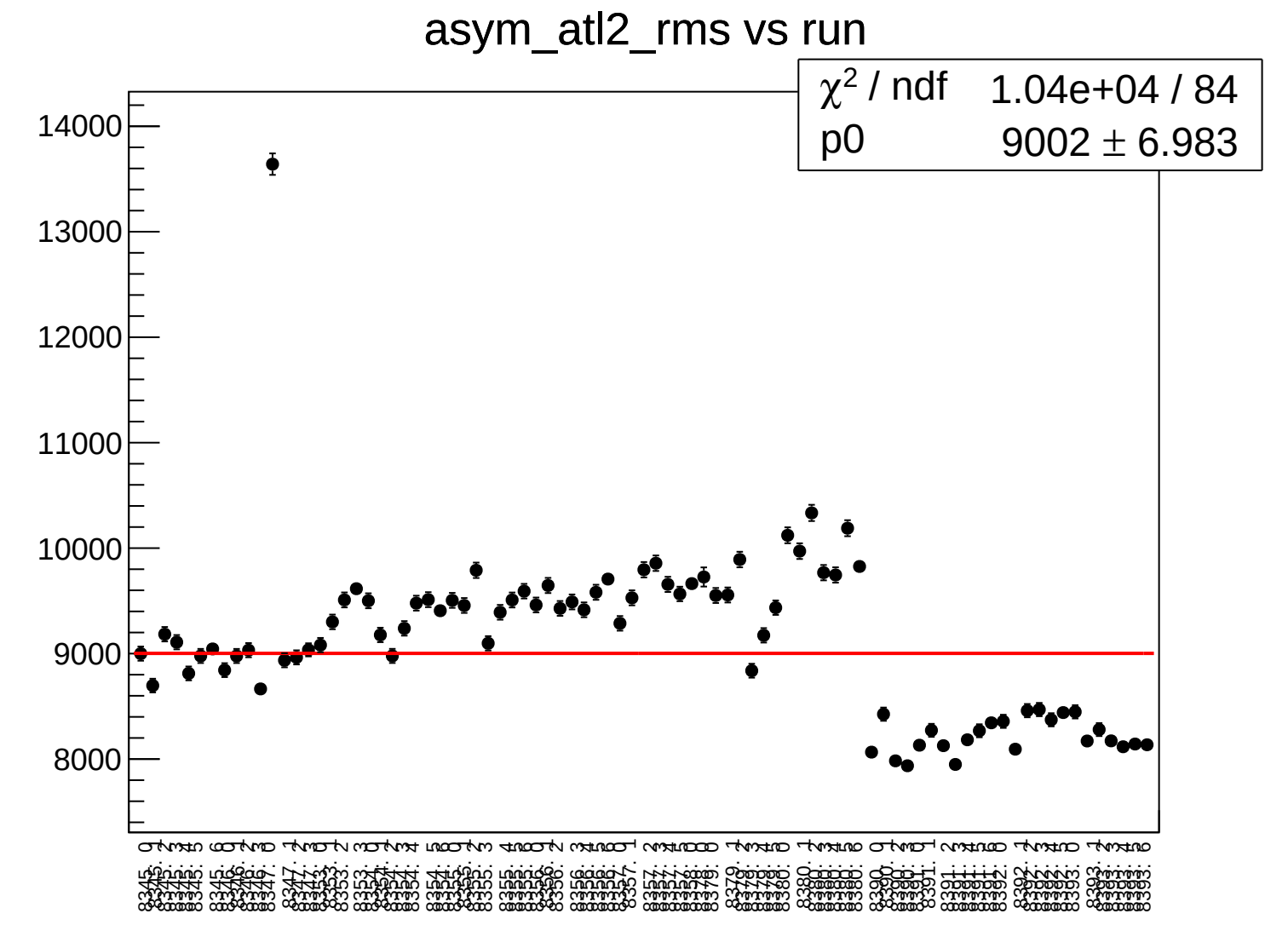

reg_asym_atl2_rms vs run
χ² / ndf 1.289e+04 / 84
p0 2307 ± 1.791
10000
8000
6000
4000
2000

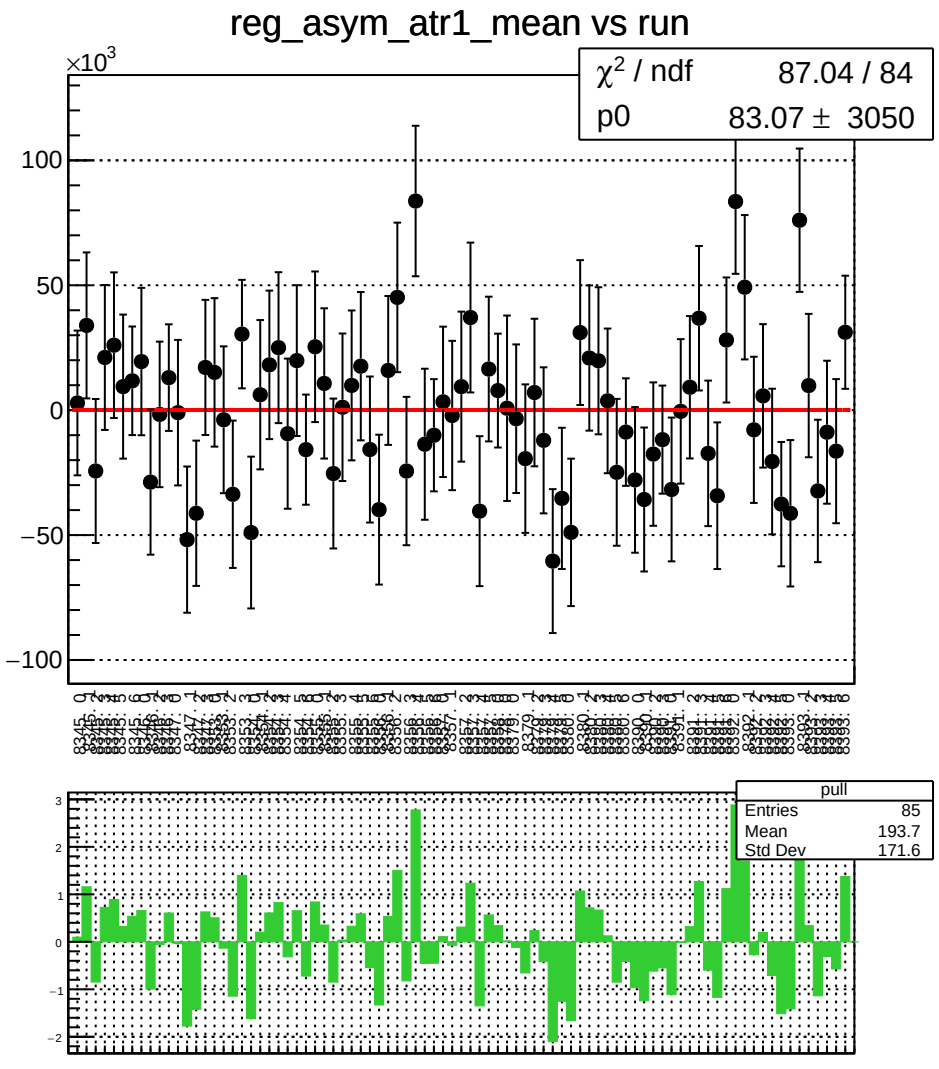

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 93.19 / 84
p0 1.246e+04 ± 9510
pull
Entries 85
Mean −186.2
Std Dev 239
pull1D
Entries 85
Mean −0.02287
Std Dev 1.047

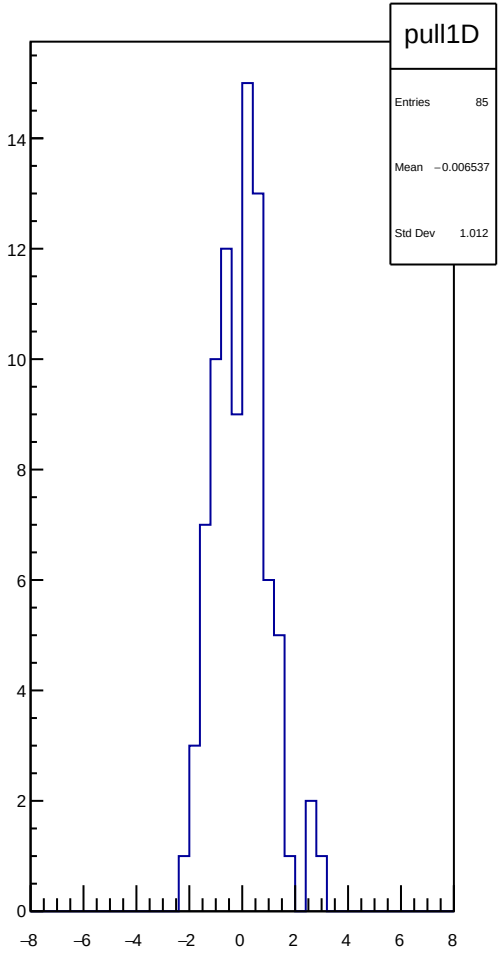

asym_atl2_correction_rms vs run
χ² / ndf 9035 / 84
p0 8673 ± 6.725
10000
9500
9000
8500
8000
7500

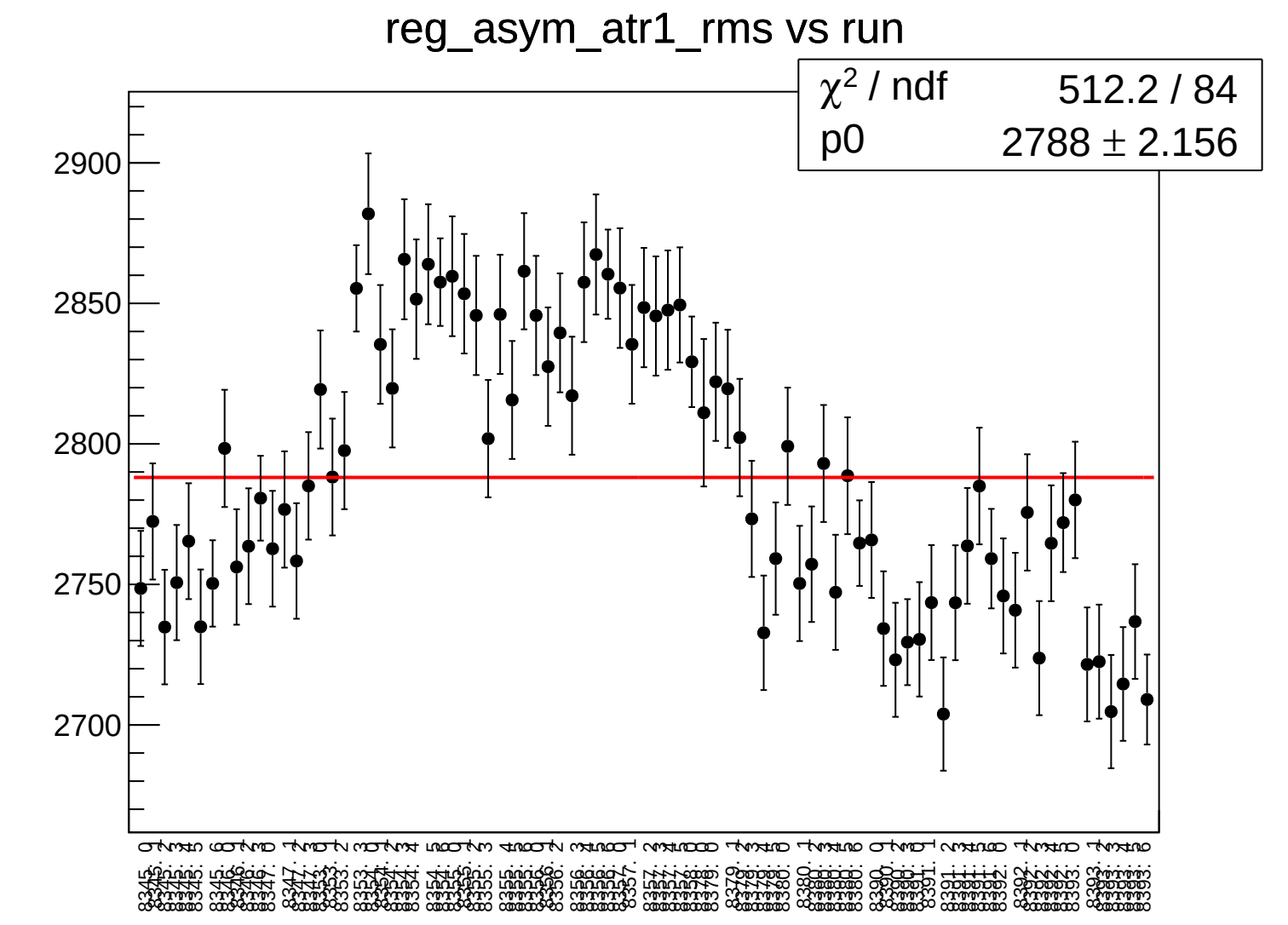

asym_atl2_mean vs run
×10^3
χ² / ndf 99.39 / 84
p0 −1.404e+04 ± 9876
pull
Entries 85
Mean −152.5
Std Dev 205.5

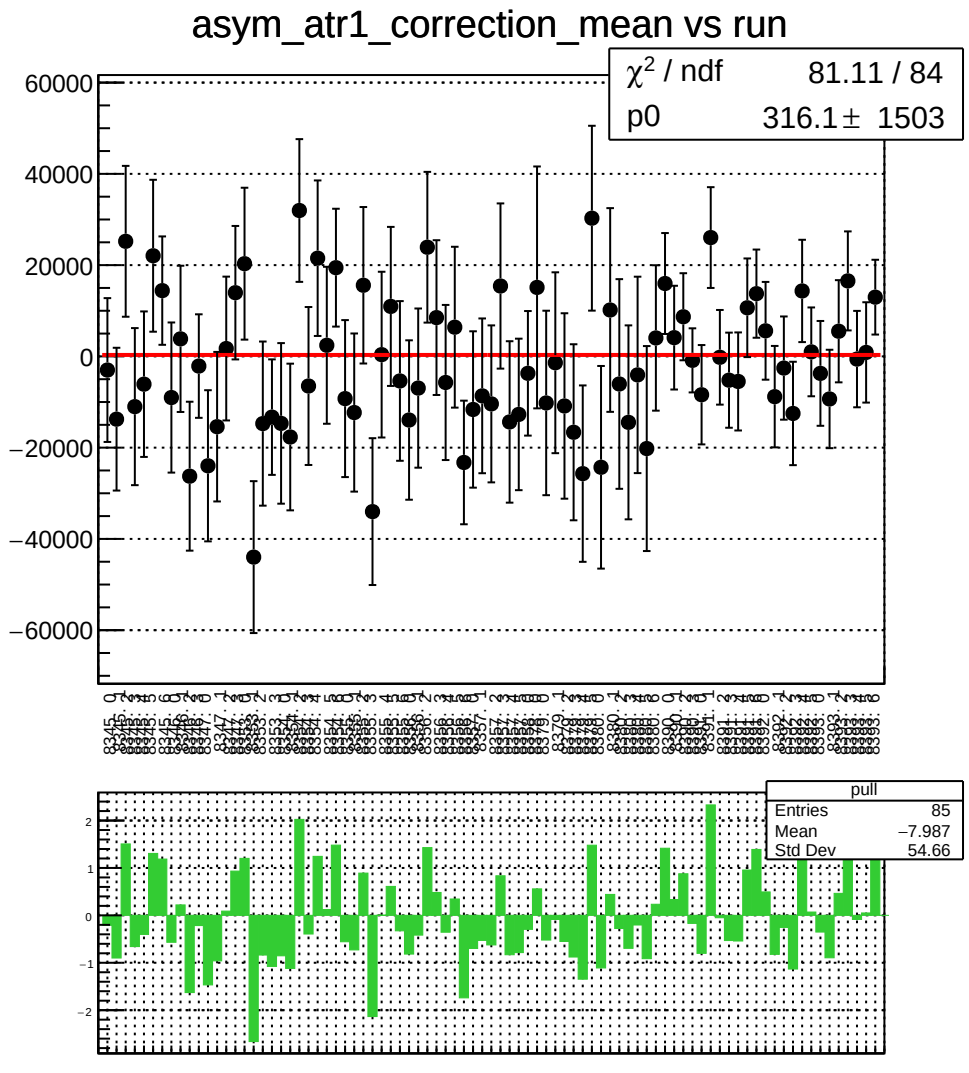

pull1D
Entries 85
Mean 0.0257
Std Dev 1.081

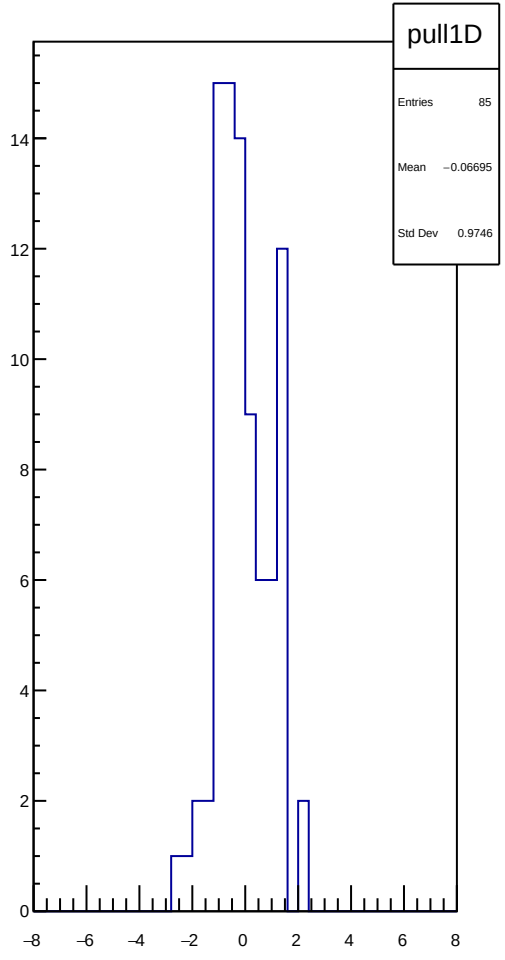

asym_atl2_rms vs run
χ² / ndf 1.04e+04 / 84
p0 9002 ± 6.983
14000
13000
12000
11000
10000
9000
8000

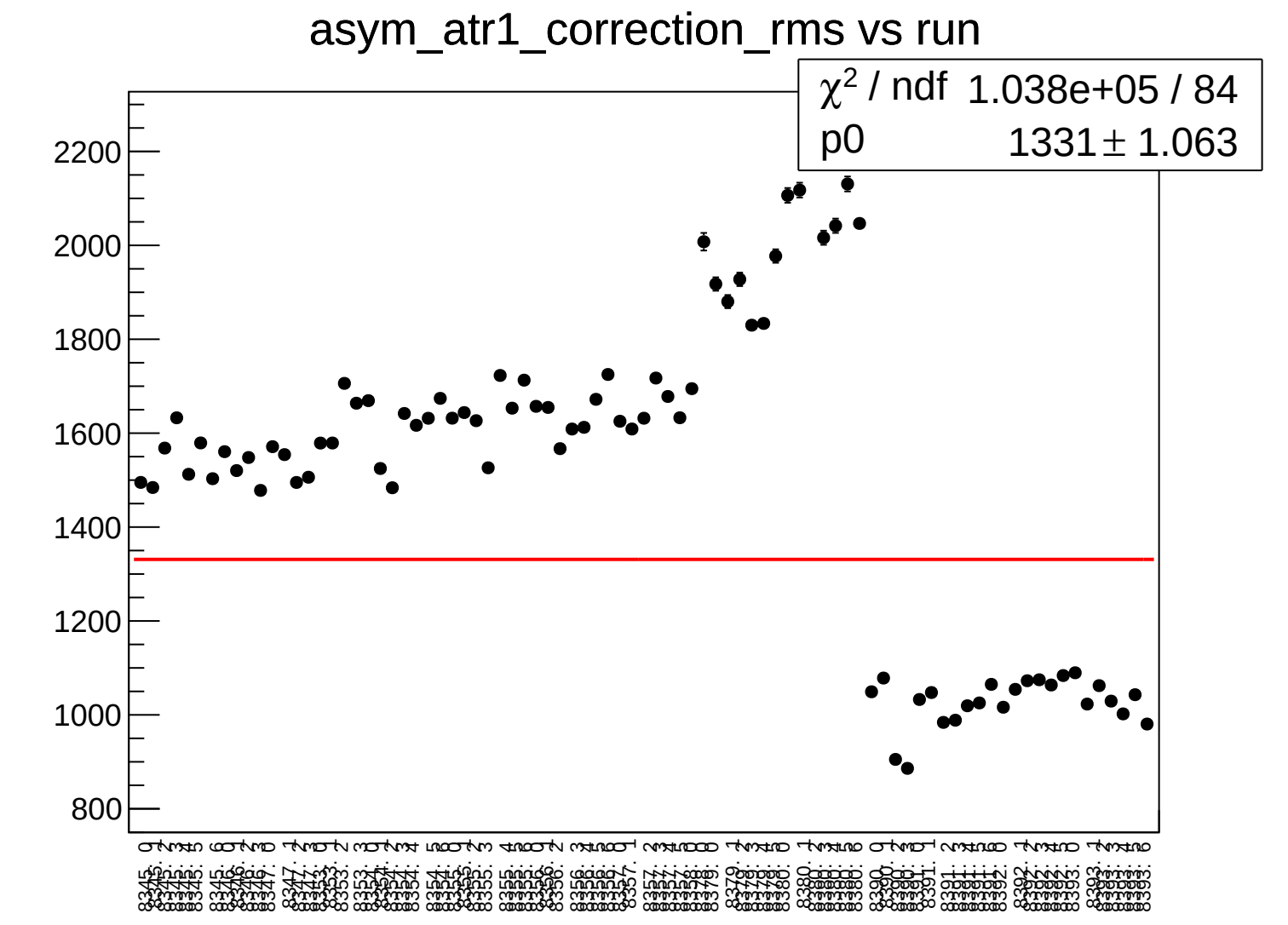

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 87.04 / 84
p0 83.07 ± 3050
100
50
0
−50
−100
pull
Entries 85
Mean 193.7
Std Dev 171.6
3
2
1
0
−1
−2

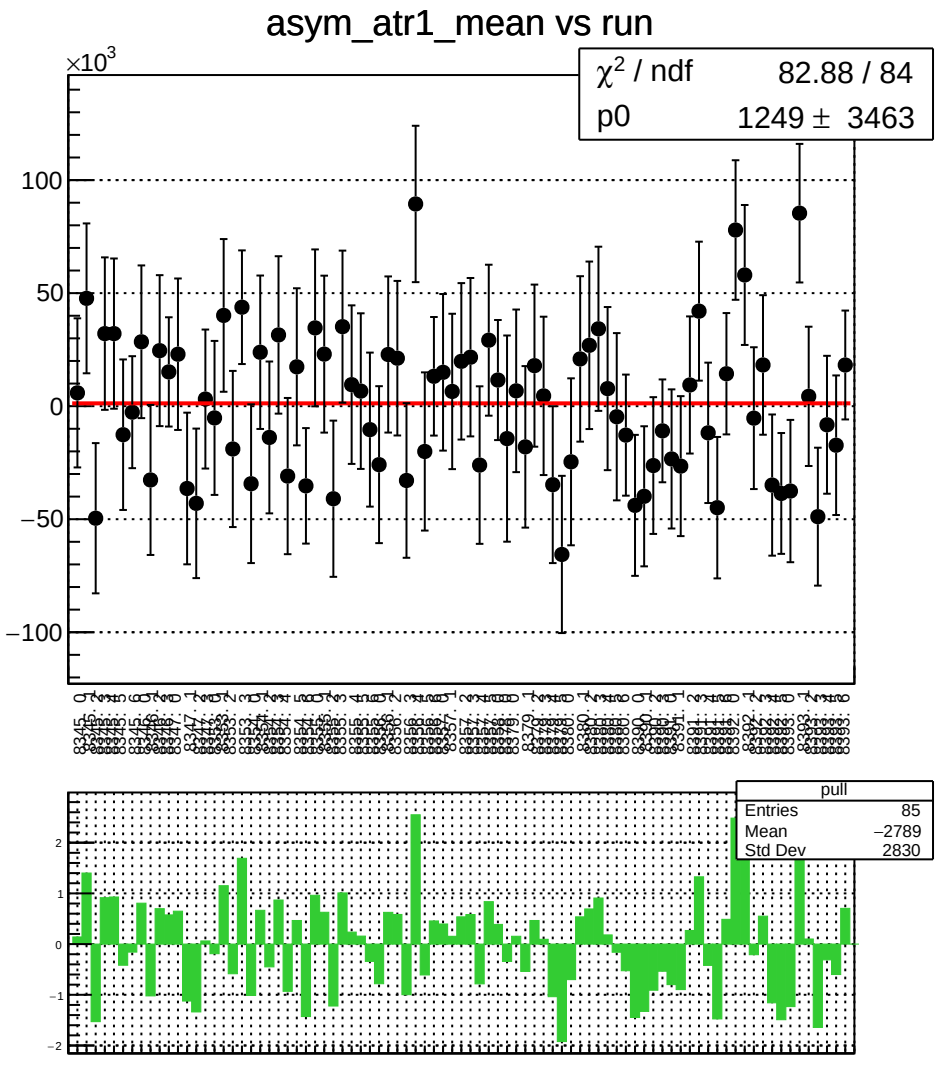

pull1D
Entries 85
Mean −0.006537
Std Dev 1.012
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

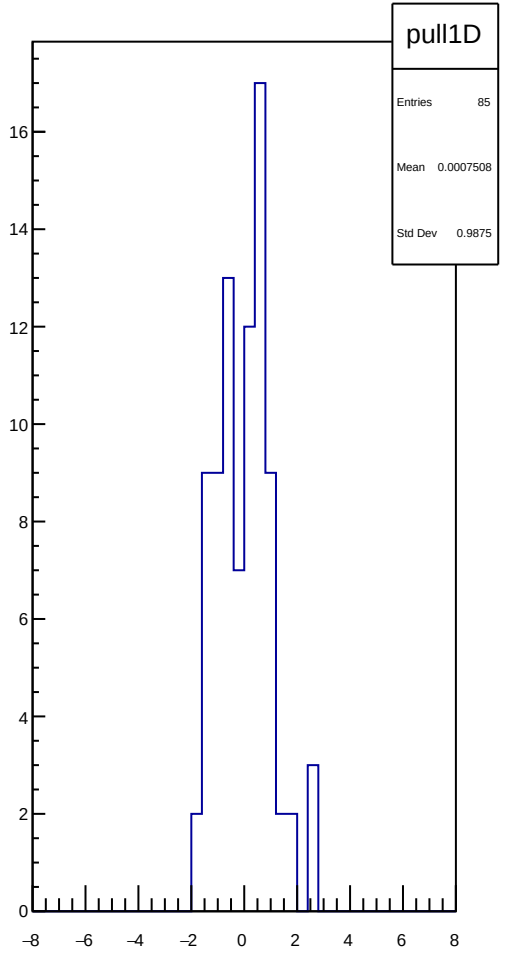

reg_asym_atr1_rms vs run
χ² / ndf 512.2 / 84
p0 2788 ± 2.156
2900
2850
2800
2750
2700

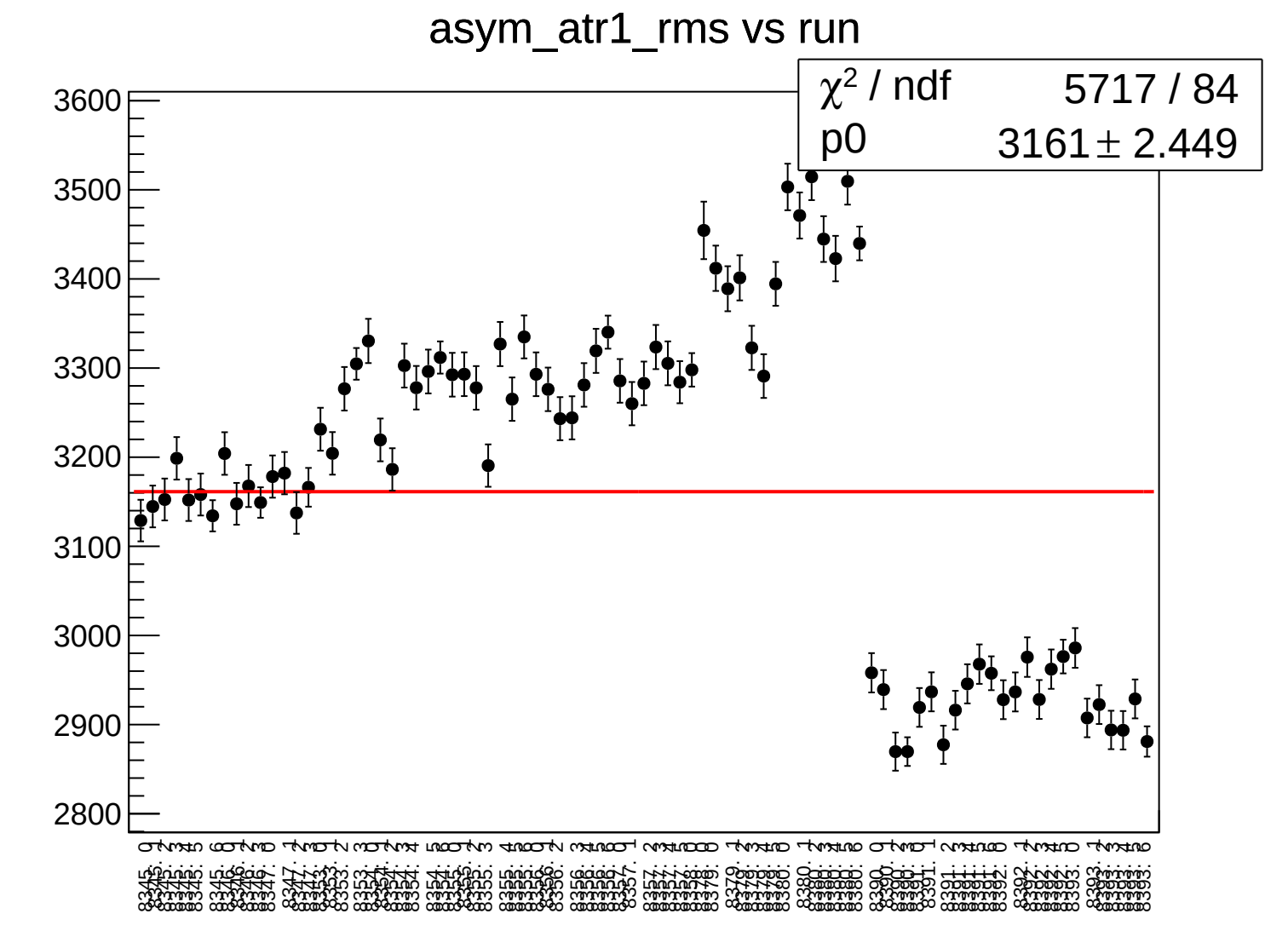

asym_atr1_correction_mean vs run
χ² / ndf 81.11 / 84
p0 316.1± 1503
pull
Entries 85
Mean −7.987
Std Dev 54.66

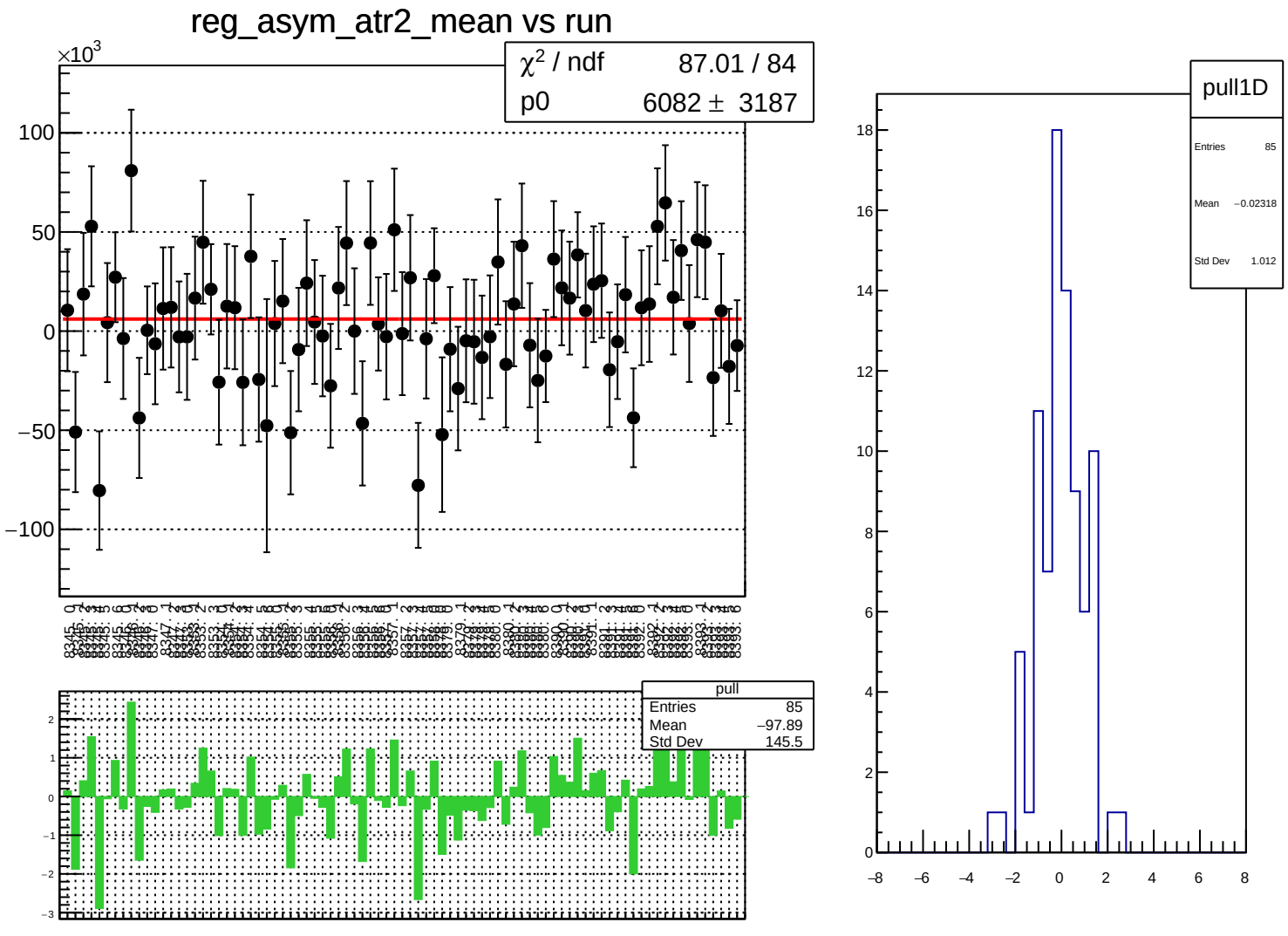

pull1D
Entries 85
Mean −0.06695
Std Dev 0.9746

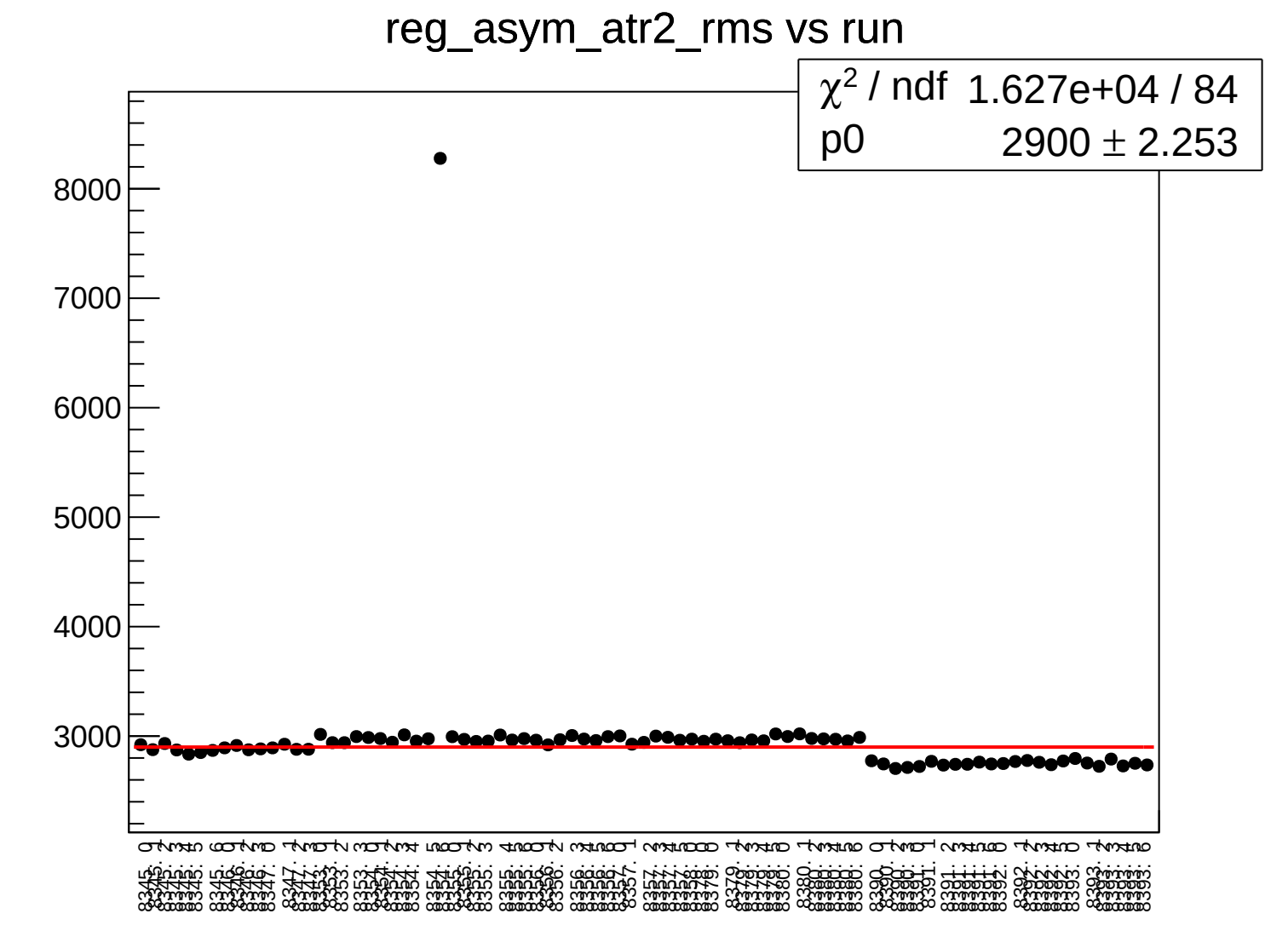

asym_atr1_correction_rms vs run
χ² / ndf 1.038e+05 / 84
p0 1331 ± 1.063
2200
2000
1800
1600
1400
1200
1000
800

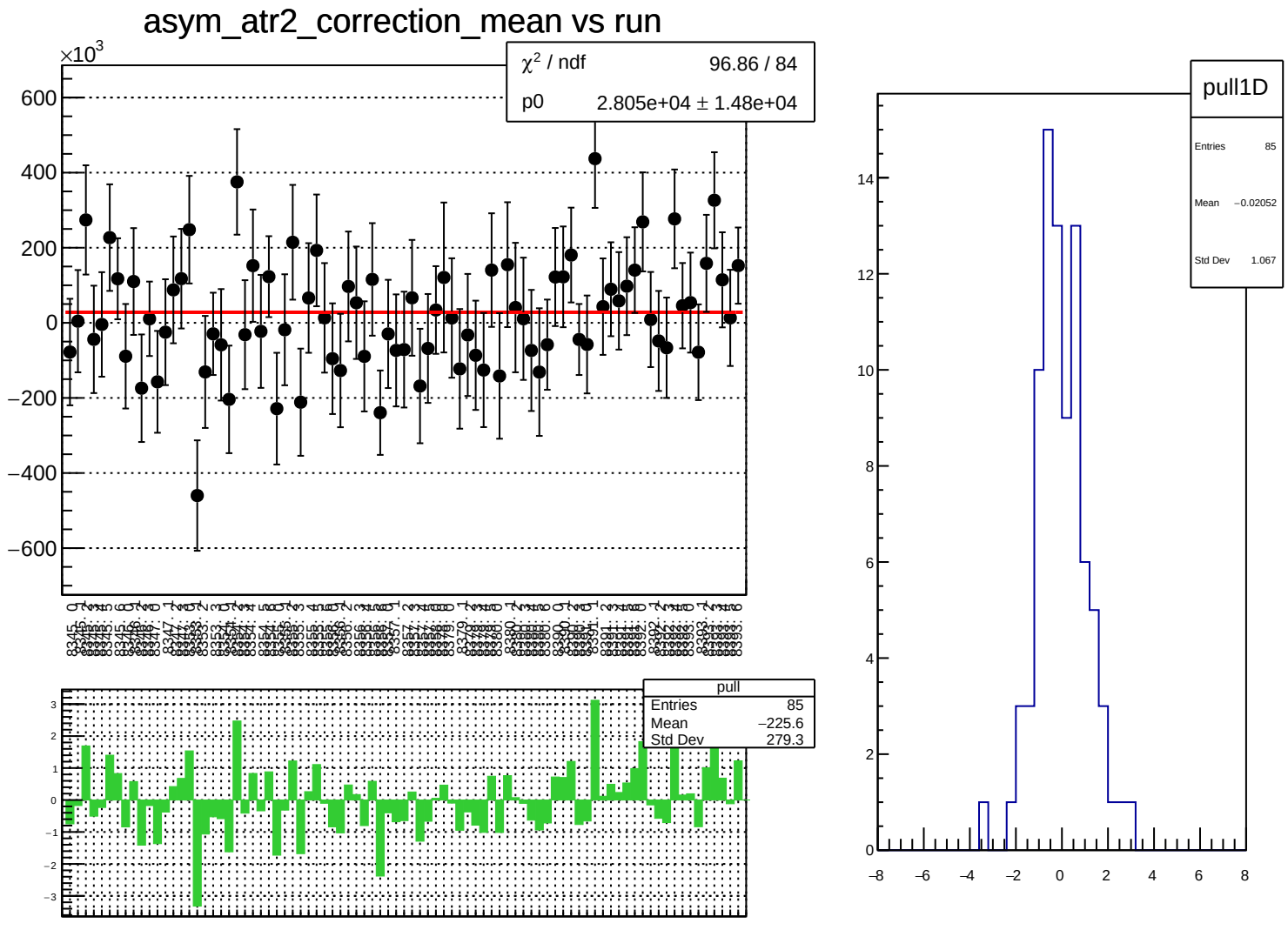

asym_atr1_mean vs run
×10^3
χ² / ndf 82.88 / 84
p0 1249 ± 3463
100
50
0
−50
−100
pull
Entries 85
Mean −2789
Std Dev 2830
2
1
0
−1
−2

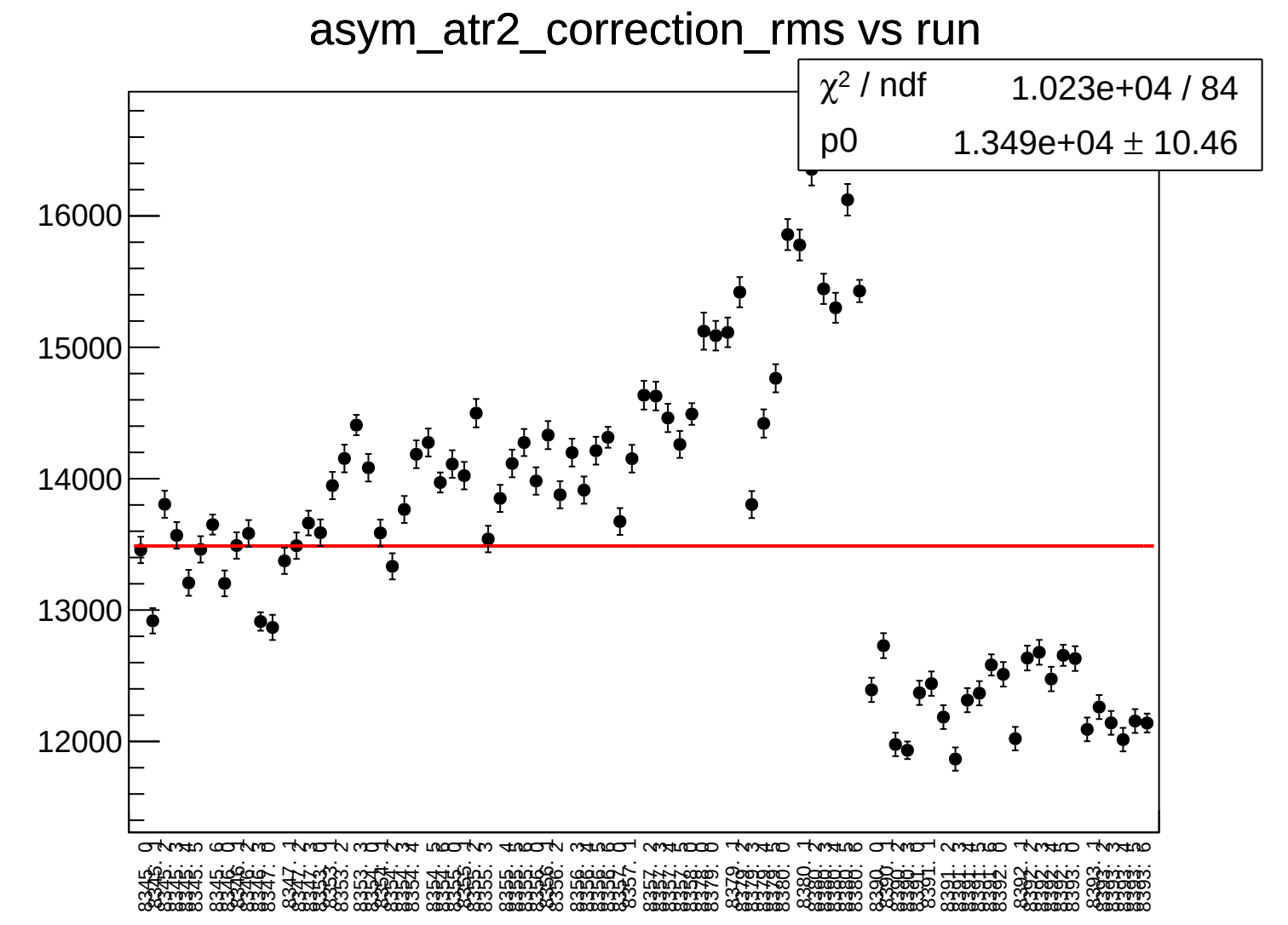

pull1D
Entries 85
Mean 0.0007508
Std Dev 0.9875
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

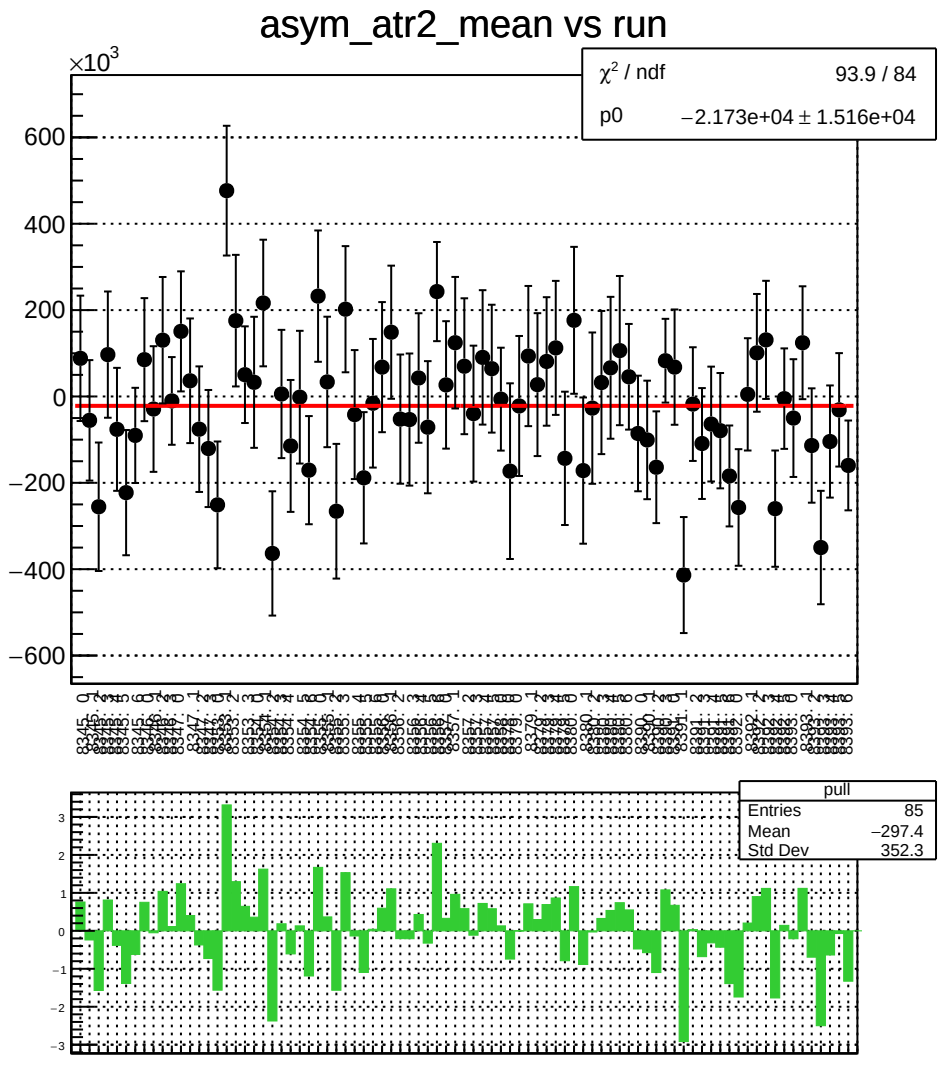

asym_atr1_rms vs run
χ² / ndf 5717 / 84
p0 3161 ± 2.449
3600
3500
3400
3300
3200
3100
3000
2900
2800

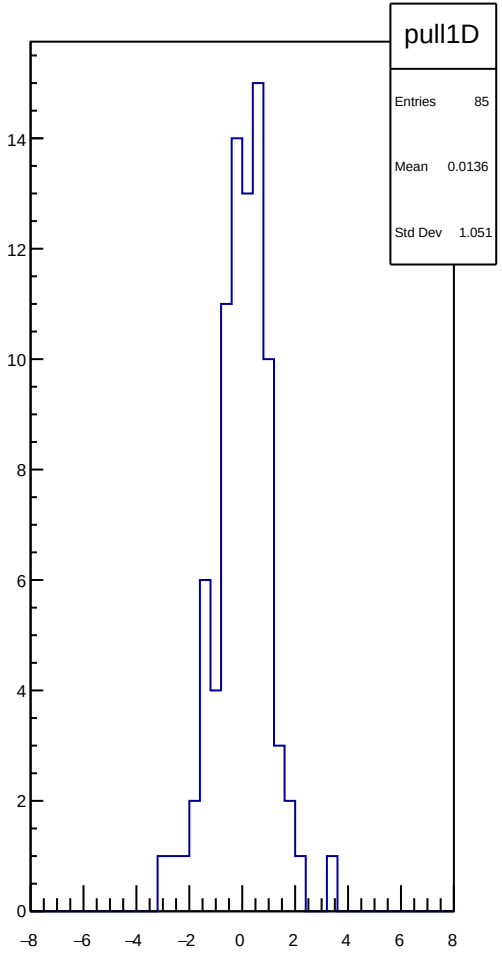

reg_asym_atr2_mean vs run
×10^3
χ^2 / ndf 87.01 / 84
p0 6082 ± 3187
100
50
0
−50
−100
pull
Entries 85
Mean −97.89
Std Dev 145.5
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.02318
Std Dev 1.012
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

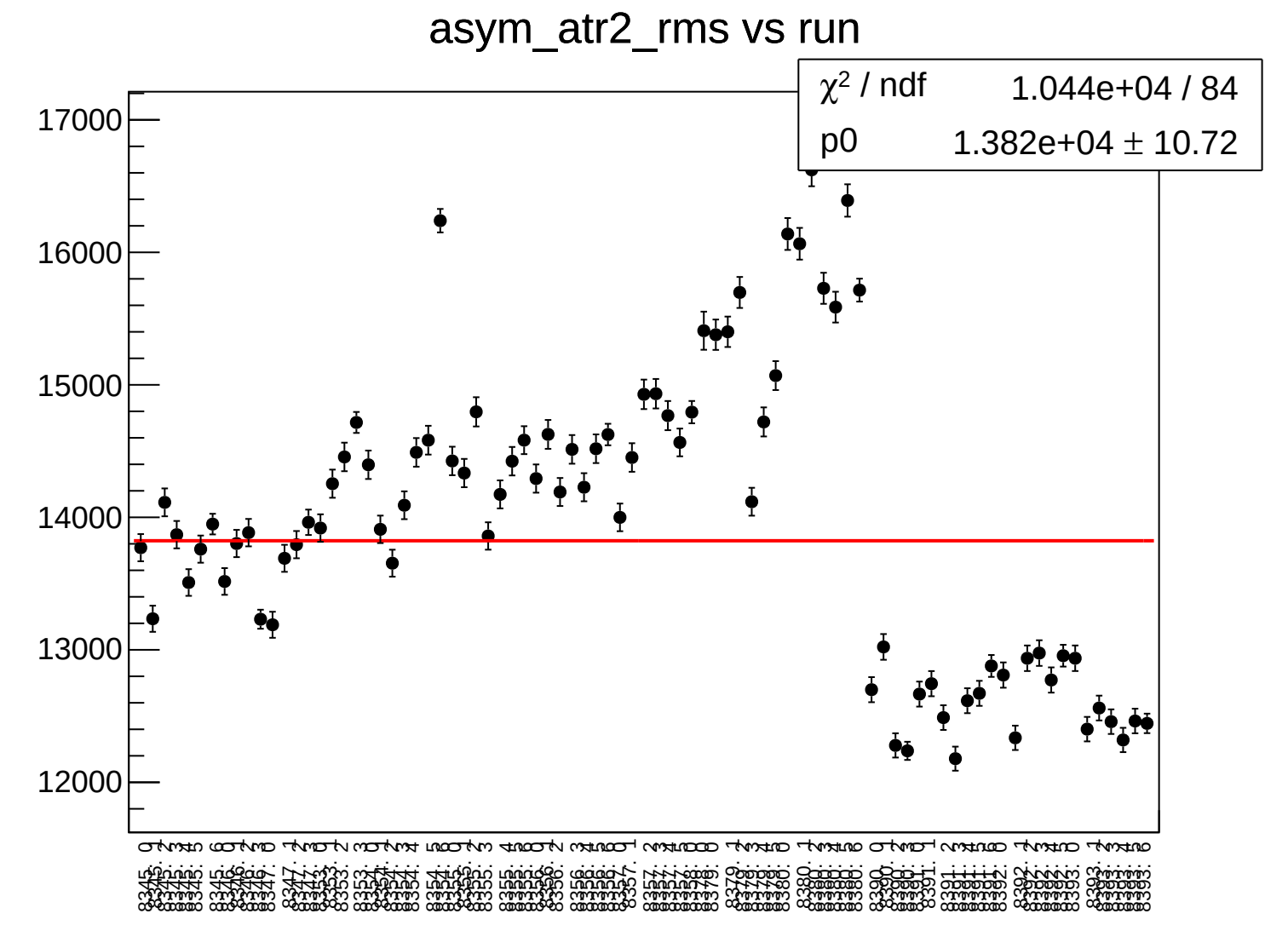

reg_asym_atr2_rms vs run
χ² / ndf 1.627e+04 / 84
p0 2900 ± 2.253
8000
7000
6000
5000
4000
3000

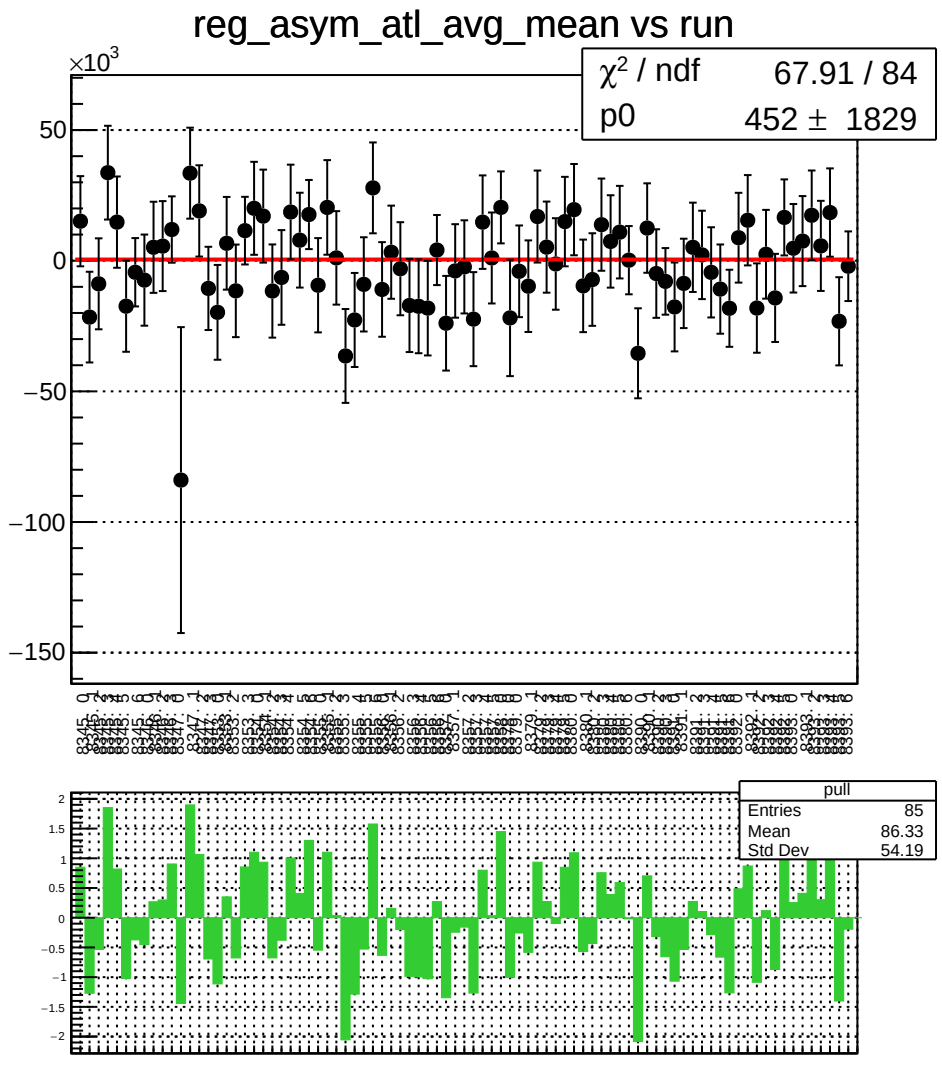

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 96.86 / 84
p0 2.805e+04 ± 1.48e+04
pull
Entries 85
Mean −225.6
Std Dev 279.3
pull1D
Entries 85
Mean −0.02052
Std Dev 1.067

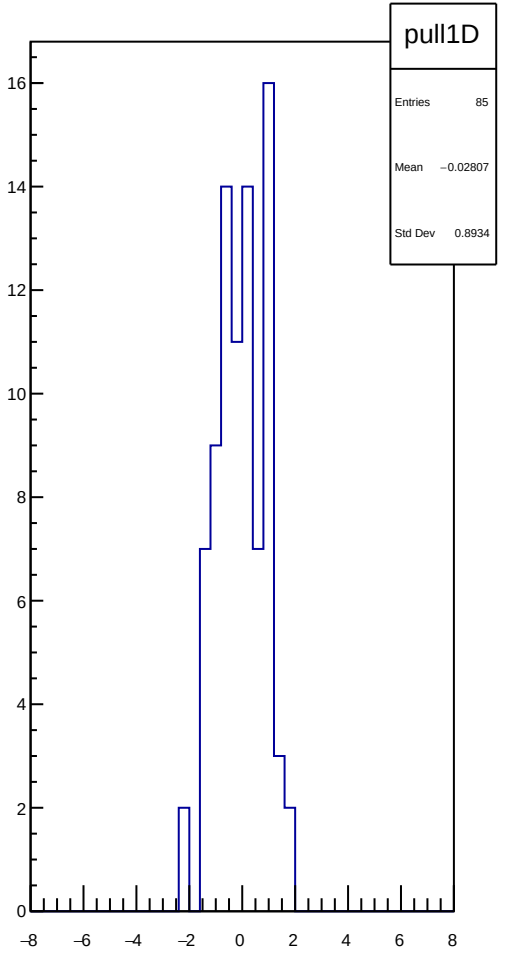

asym_atr2_correction_rms vs run
χ² / ndf 1.023e+04 / 84
p0 1.349e+04 ± 10.46
16000
15000
14000
13000
12000

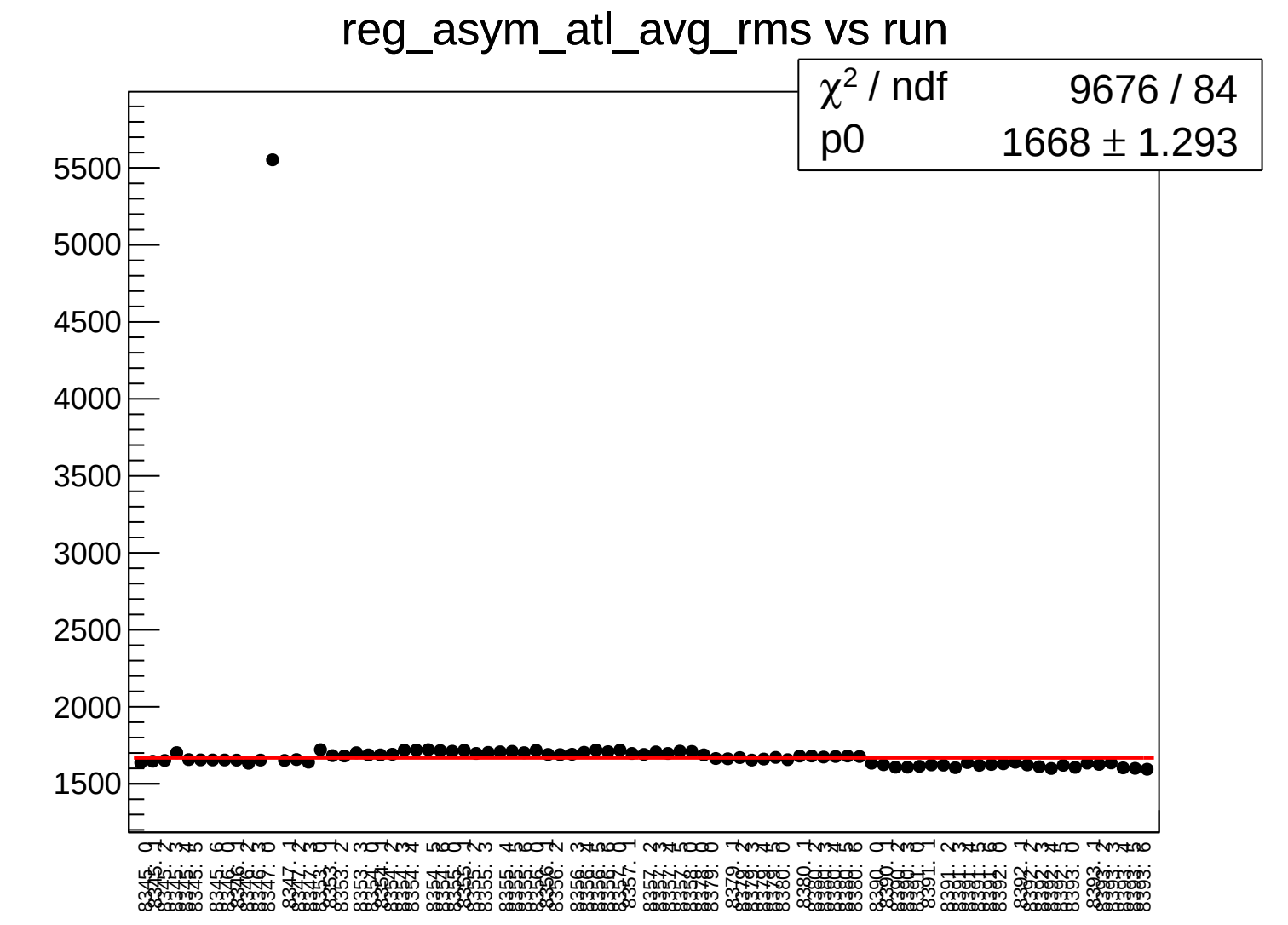

asym_atr2_mean vs run
×10^3
χ² / ndf 93.9 / 84
p0 −2.173e+04 ± 1.516e+04
pull
Entries 85
Mean −297.4
Std Dev 352.3

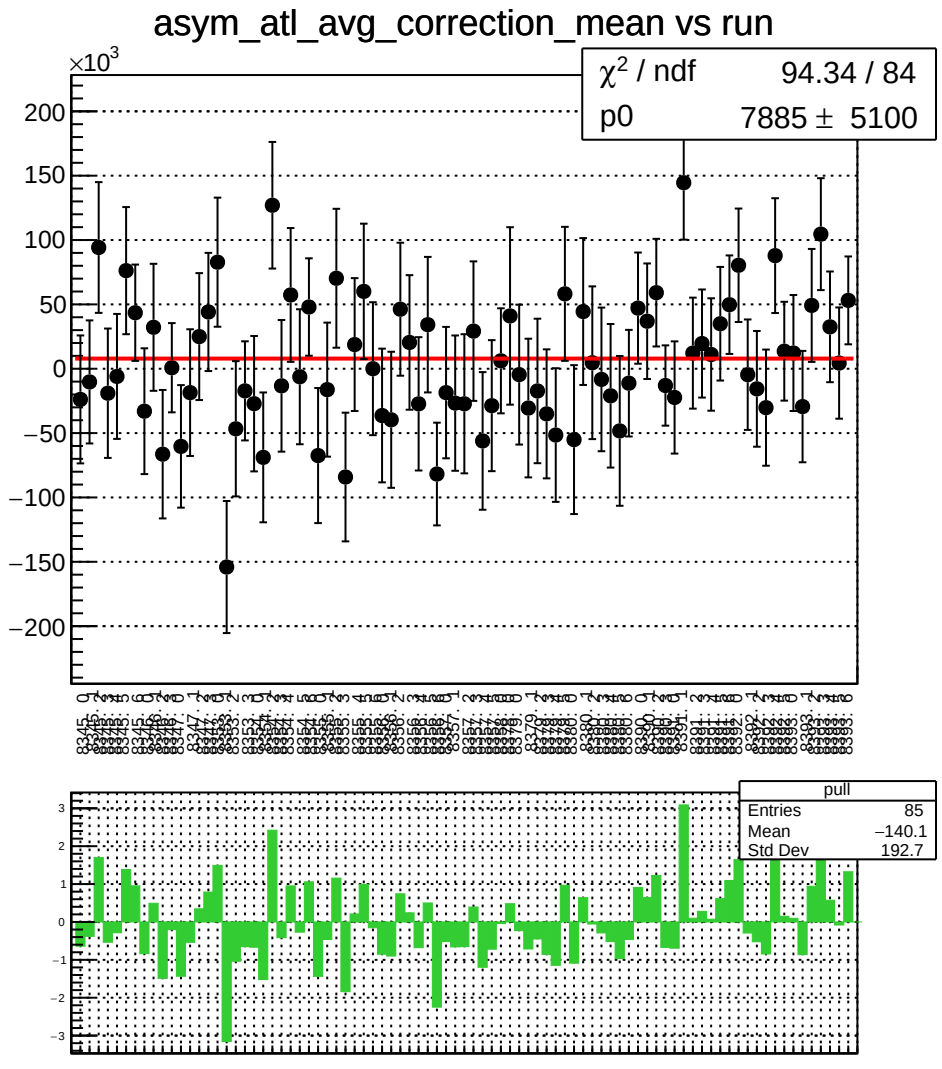

pull1D
Entries 85
Mean 0.0136
Std Dev 1.051

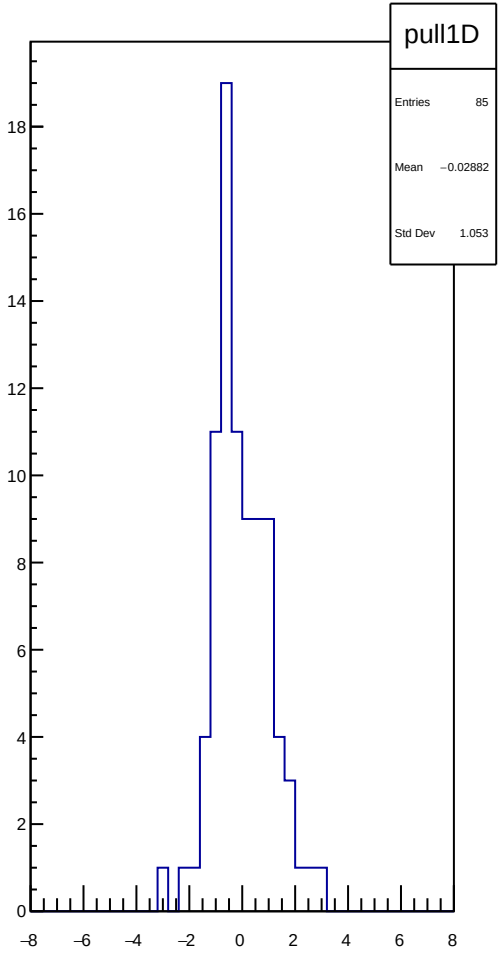

asym_atr2_rms vs run
χ² / ndf 1.044e+04 / 84
p0 1.382e+04 ± 10.72
17000
16000
15000
14000
13000
12000

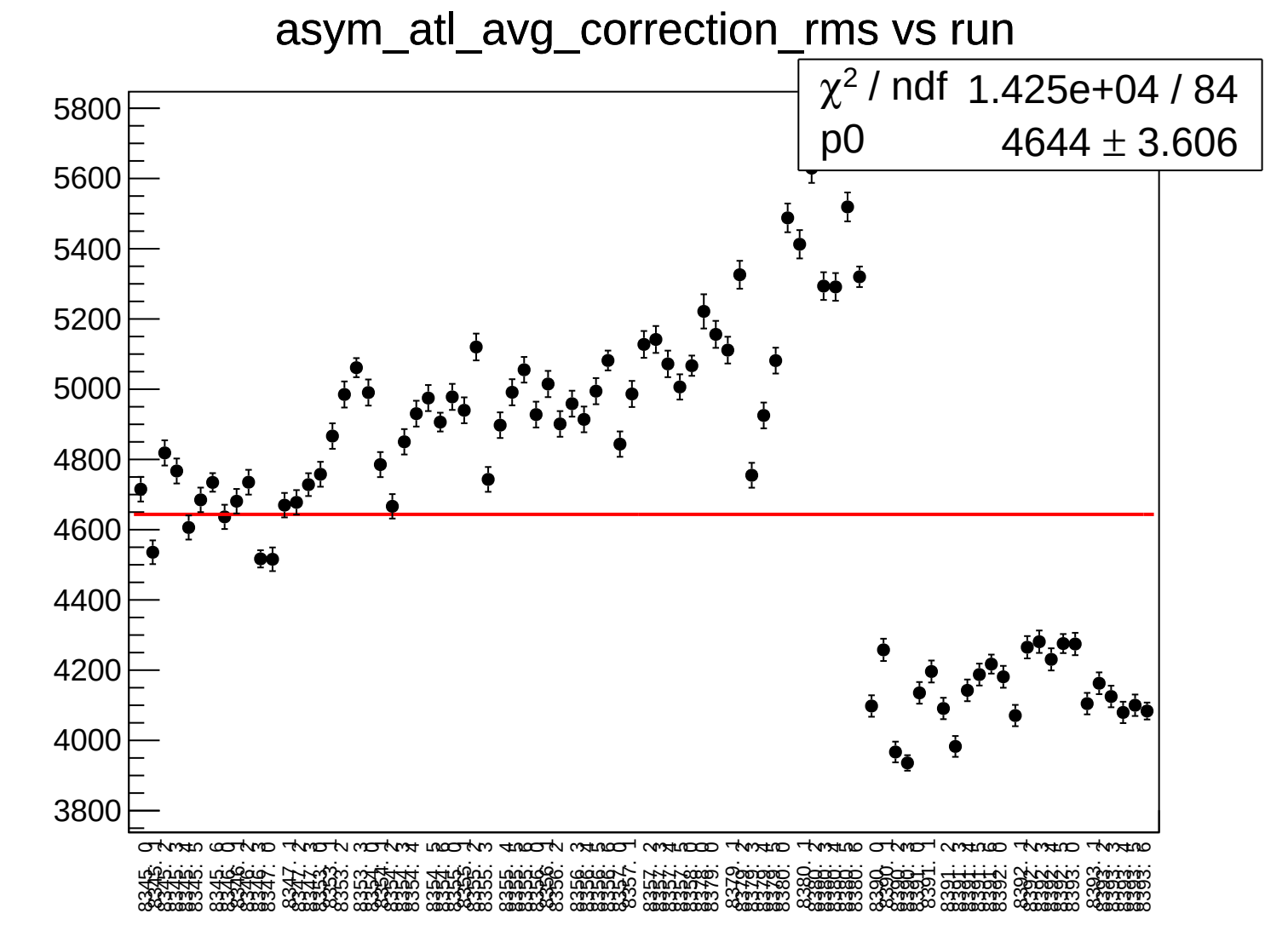

reg_asym_atl_avg_mean vs run
×10^3
χ² / ndf 67.91 / 84
p0 452 ± 1829
50
0
−50
−100
−150
pull
Entries 85
Mean 86.33
Std Dev 54.19
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

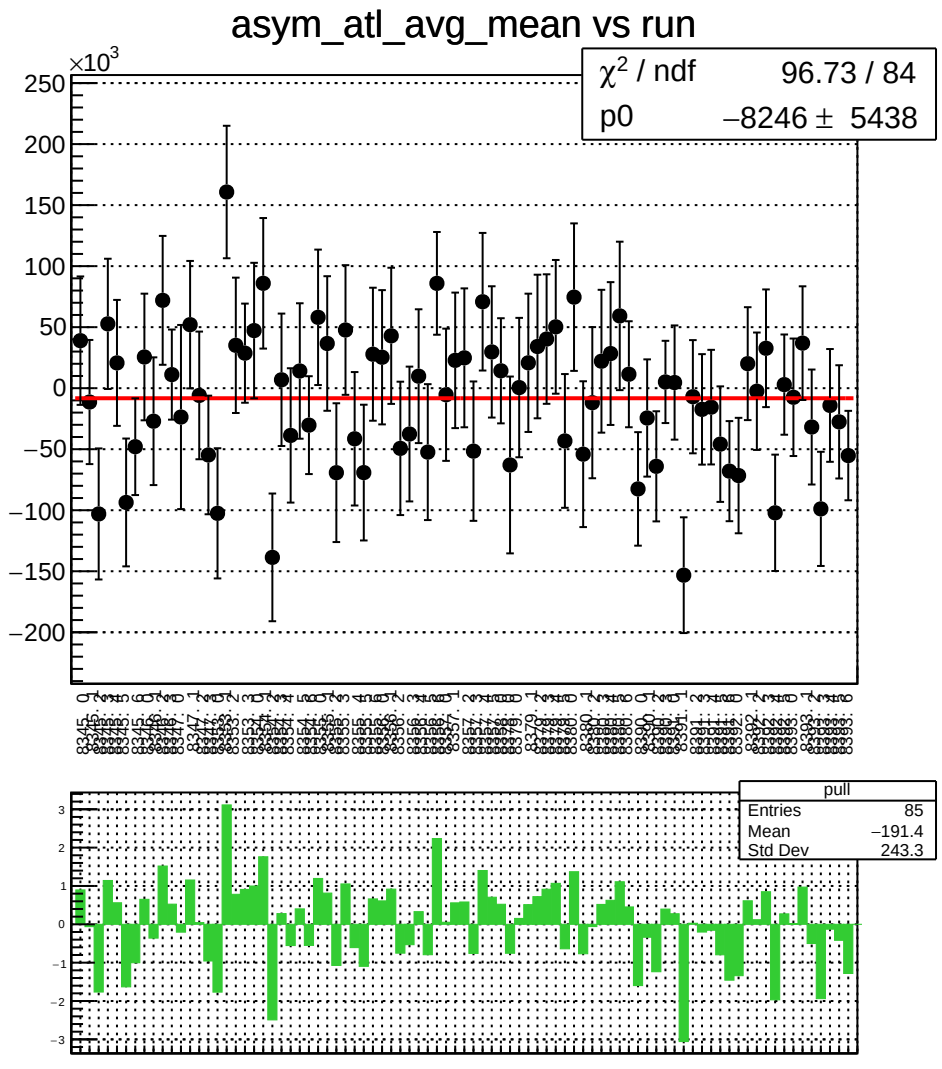

pull1D
Entries 85
Mean −0.02807
Std Dev 0.8934
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

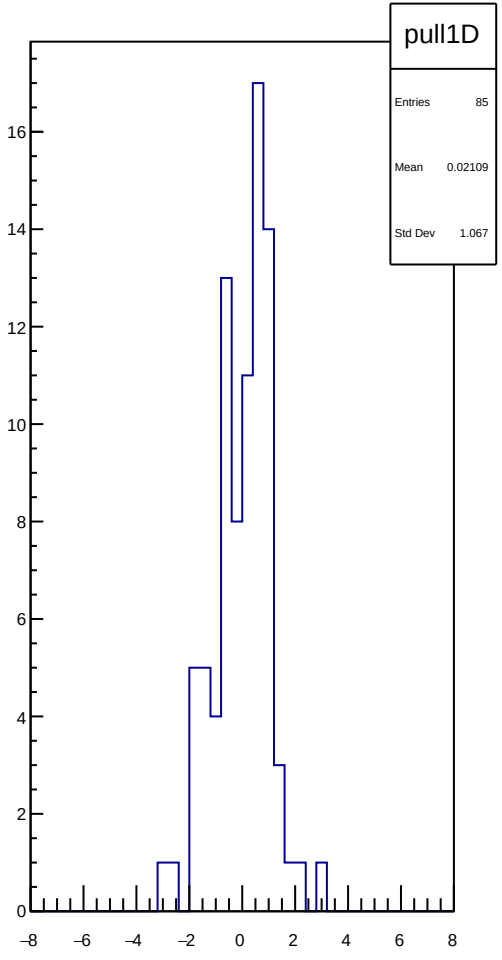

reg_asym_atl_avg_rms vs run
χ^2 / ndf 9676 / 84
p0 1668 ± 1.293
5500
5000
4500
4000
3500
3000
2500
2000
1500

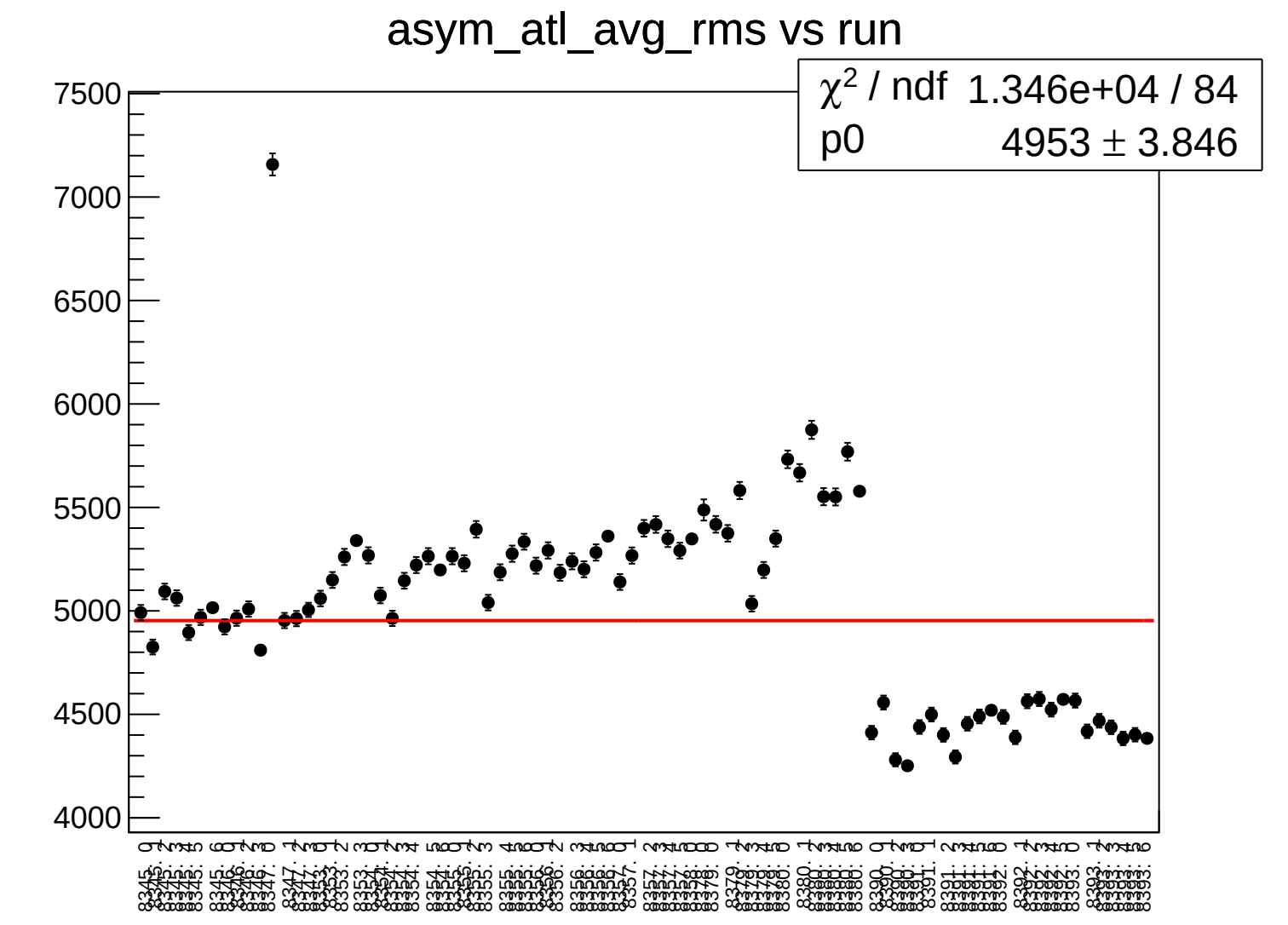

asym_atl_avg_correction_mean vs run
×10^3
χ^2 / ndf 94.34 / 84
p0 7885 ± 5100
pull
Entries 85
Mean −140.1
Std Dev 192.7

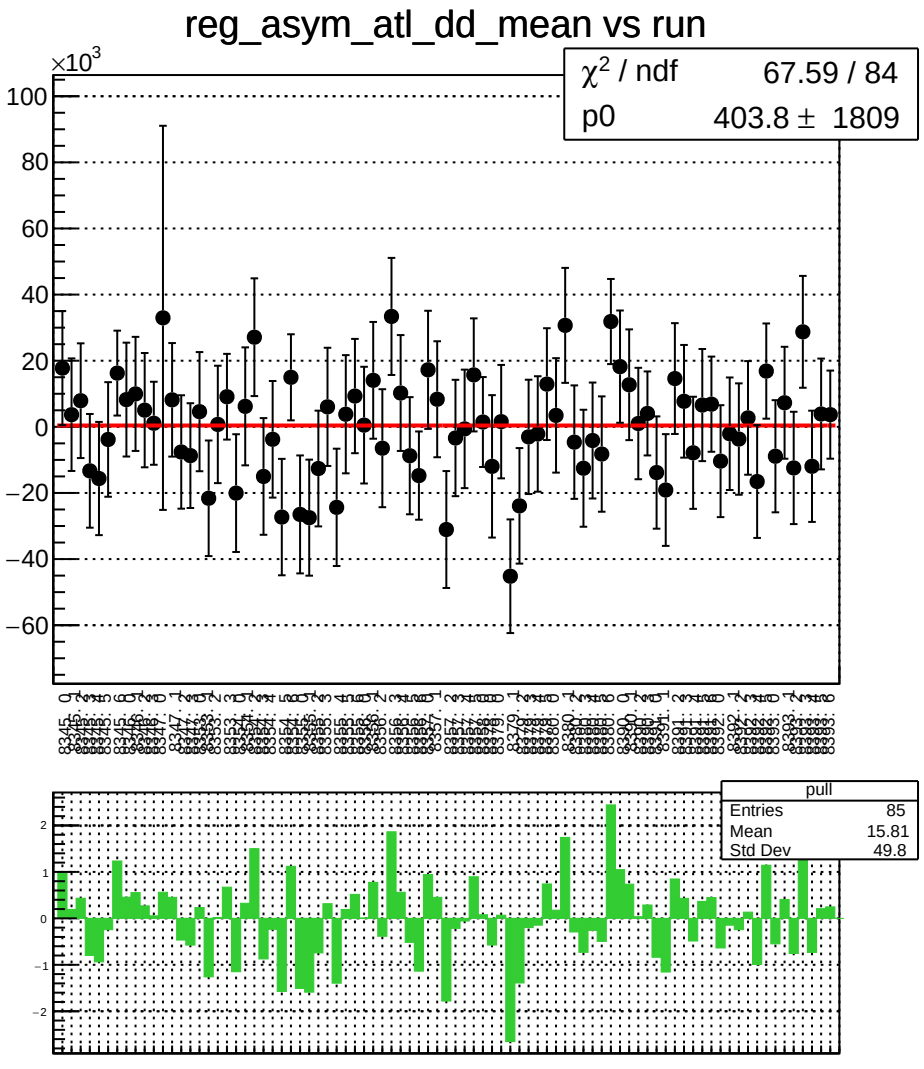

pull1D
Entries 85
Mean −0.02882
Std Dev 1.053

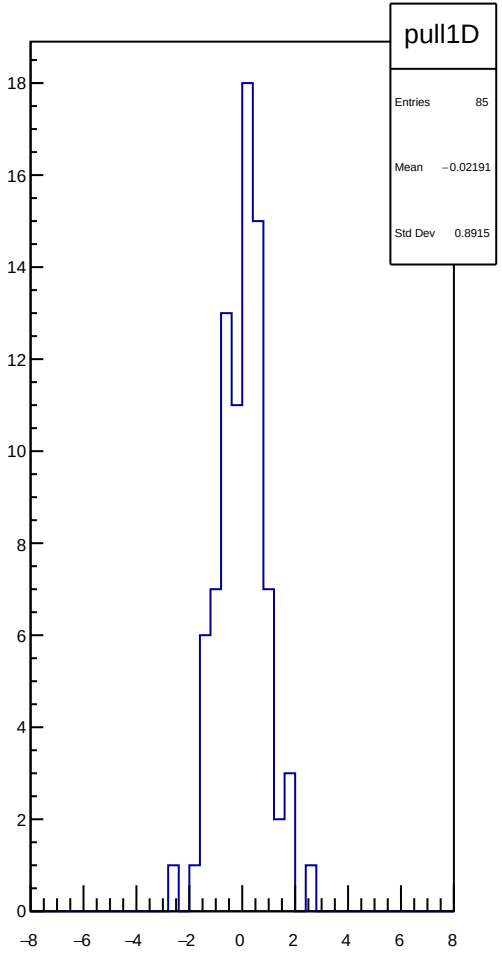

asym_atl_avg_correction_rms vs run
χ² / ndf 1.425e+04 / 84
p0 4644 ± 3.606
5800
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800

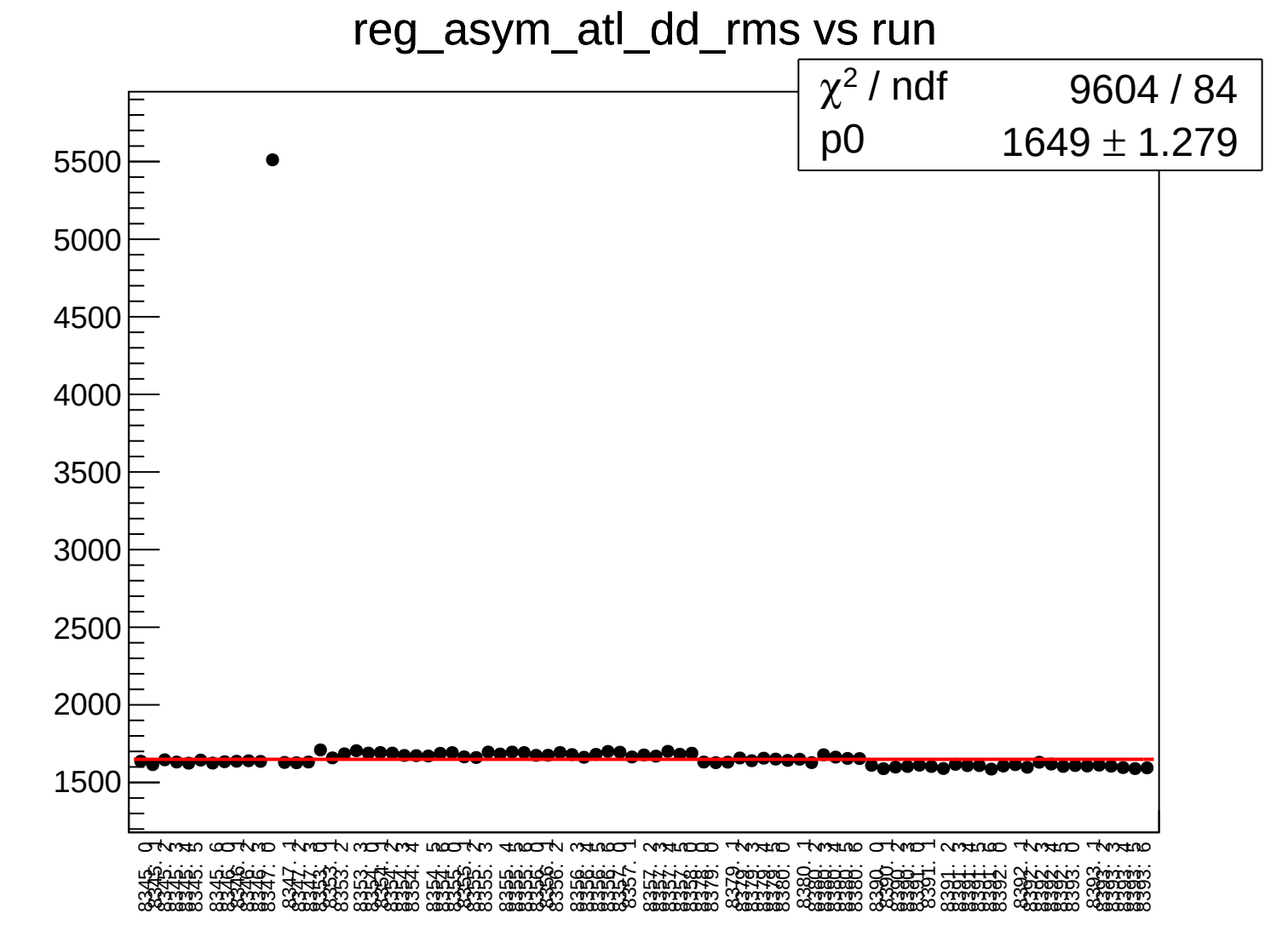

asym_atl_avg_mean vs run
×10^3
χ² / ndf 96.73 / 84
p0 −8246 ± 5438
pull
Entries 85
Mean −191.4
Std Dev 243.3

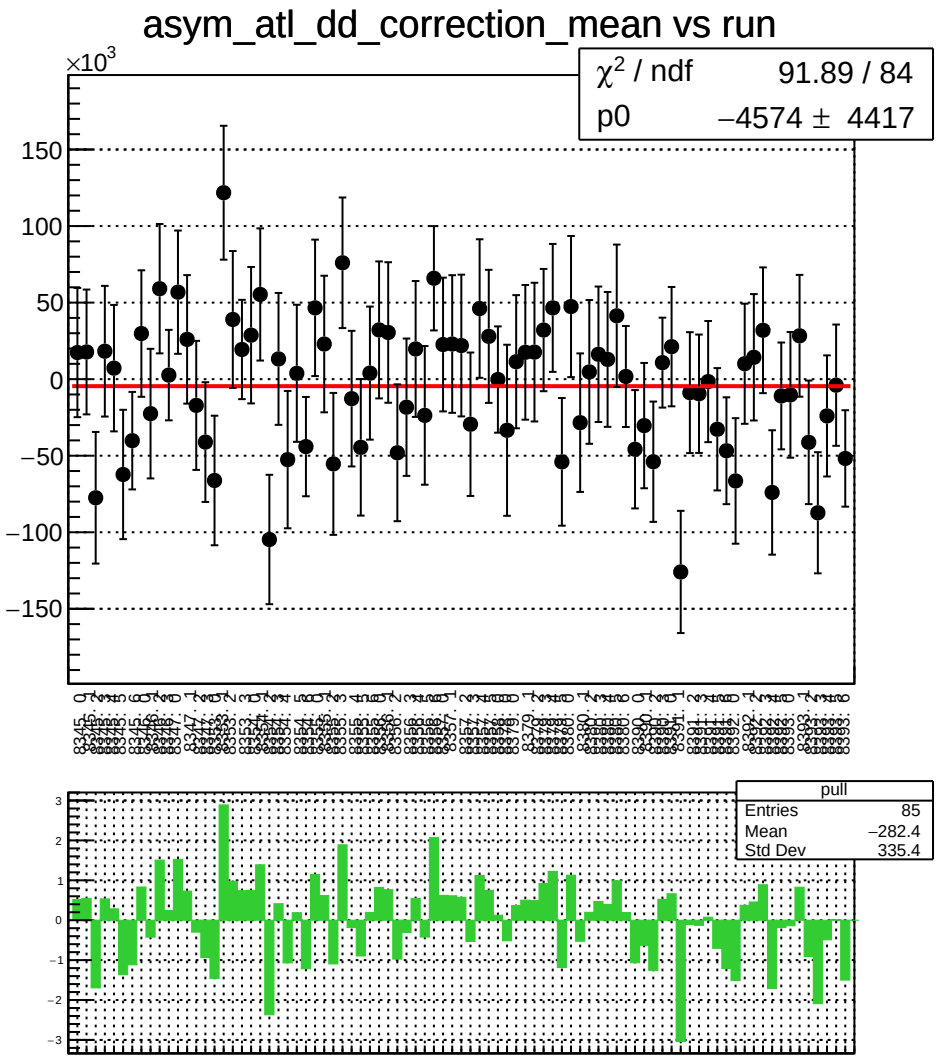

pull1D
Entries 85
Mean 0.02109
Std Dev 1.067

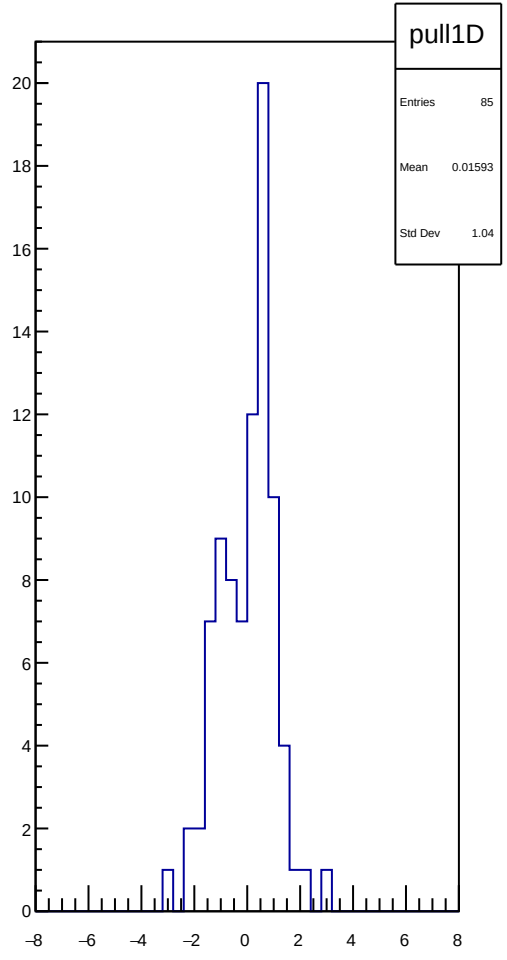

asym_atl_avg_rms vs run
χ² / ndf 1.346e+04 / 84
p0 4953 ± 3.846
7500
7000
6500
6000
5500
5000
4500
4000

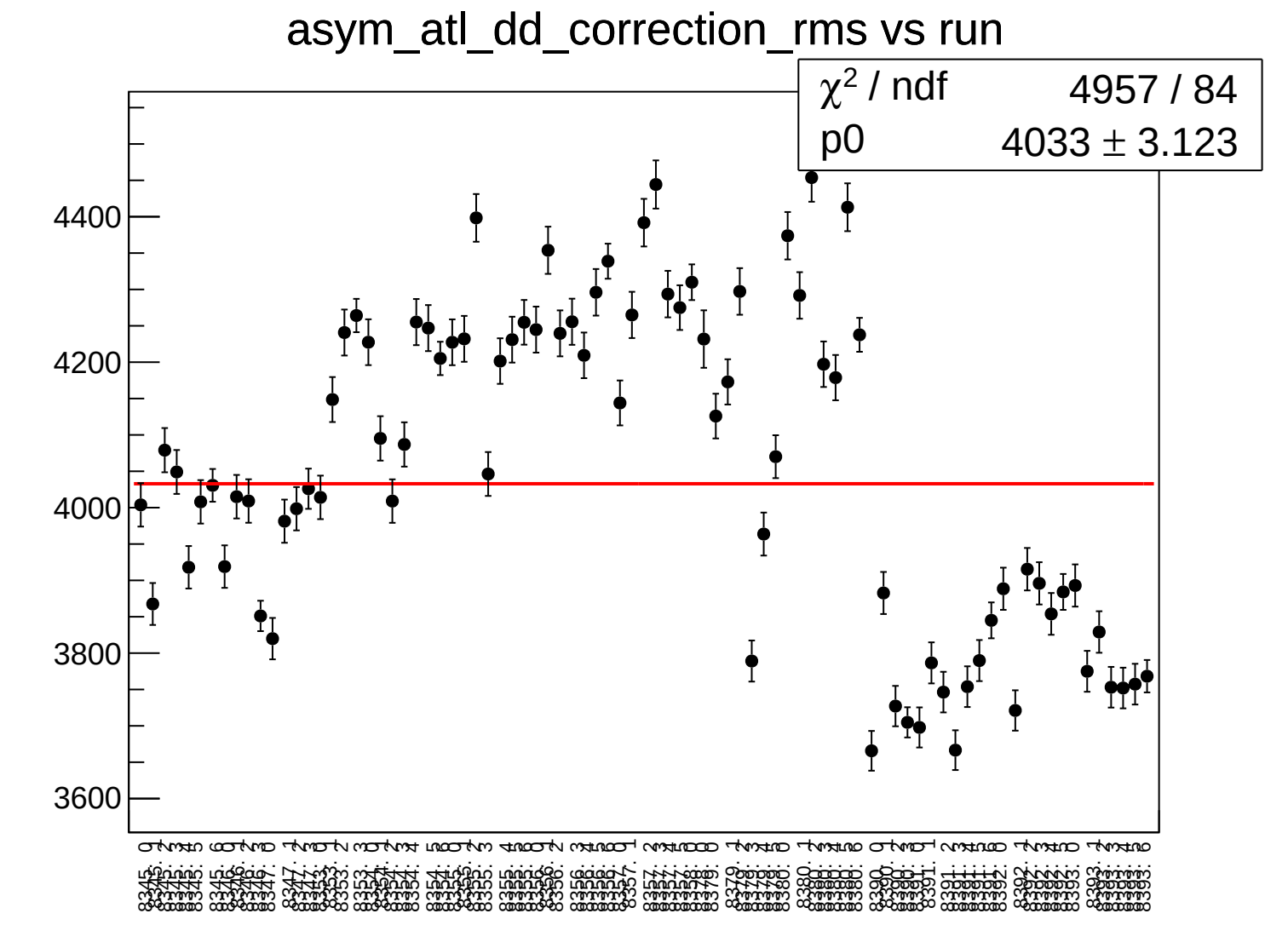

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 67.59 / 84
p0 403.8 ± 1809
pull
Entries 85
Mean 15.81
Std Dev 49.8

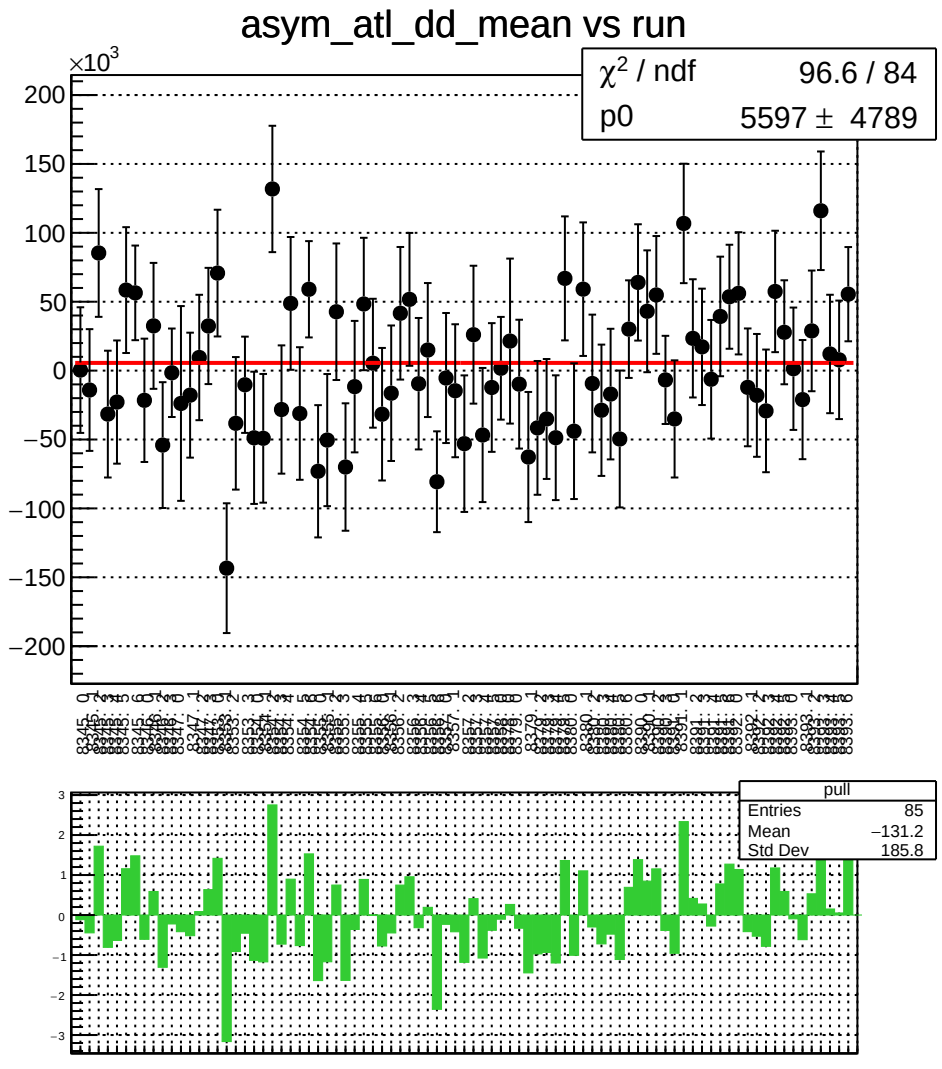

pull1D
Entries 85
Mean −0.02191
Std Dev 0.8915

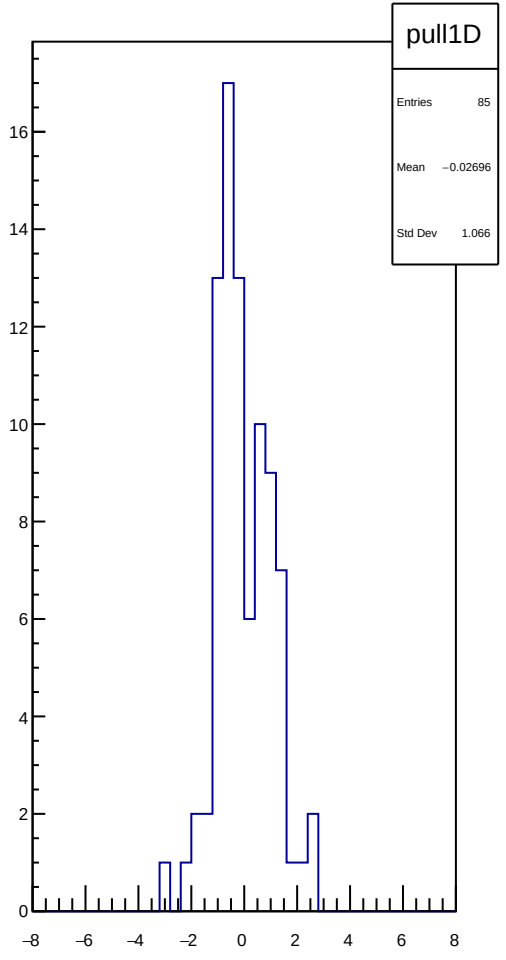

reg_asym_atl_dd_rms vs run
χ^2 / ndf 9604 / 84
p0 1649 ± 1.279
5500
5000
4500
4000
3500
3000
2500
2000
1500

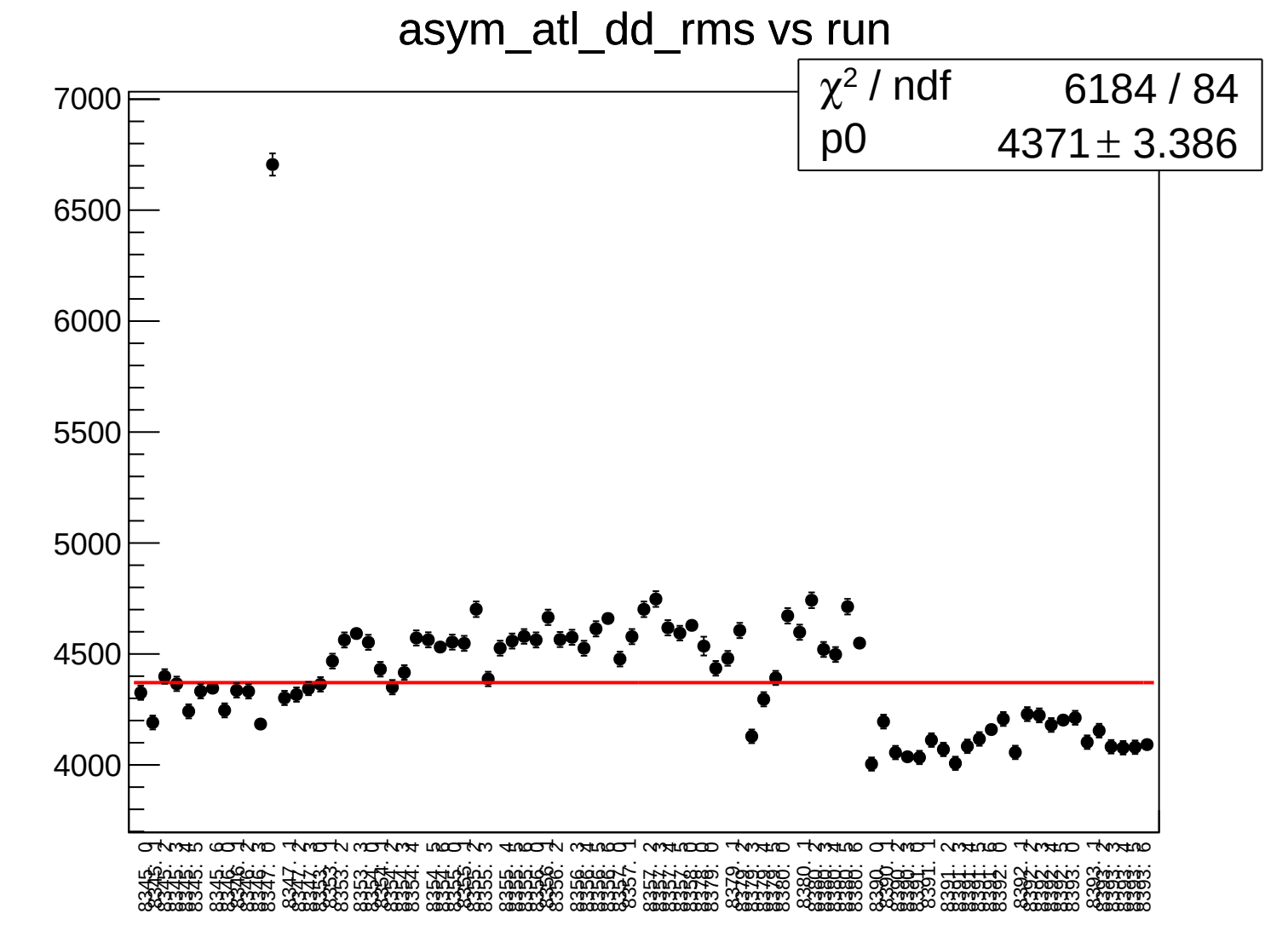

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 91.89 / 84
p0 −4574 ± 4417
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −282.4
Std Dev 335.4
3
2
1
0
−1
−2
−3

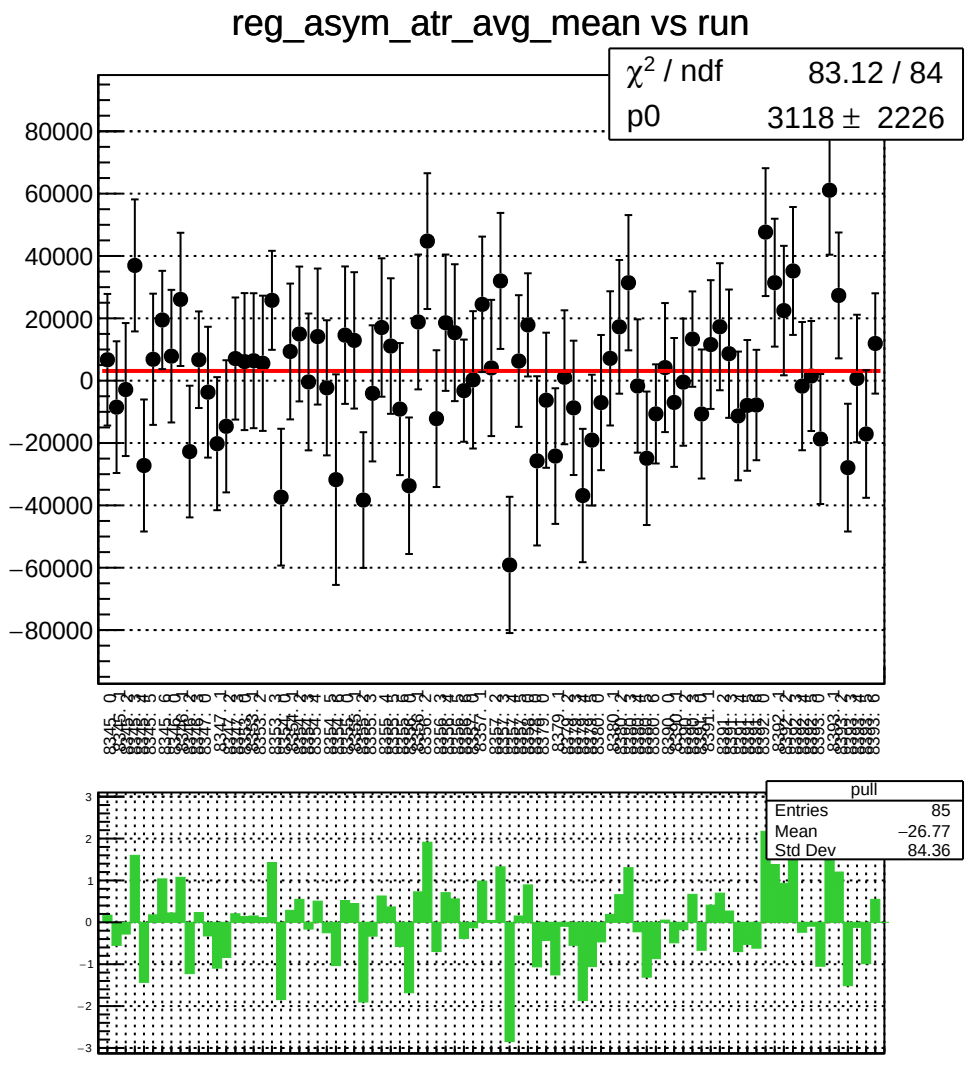

pull1D
Entries 85
Mean 0.01593
Std Dev 1.04
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

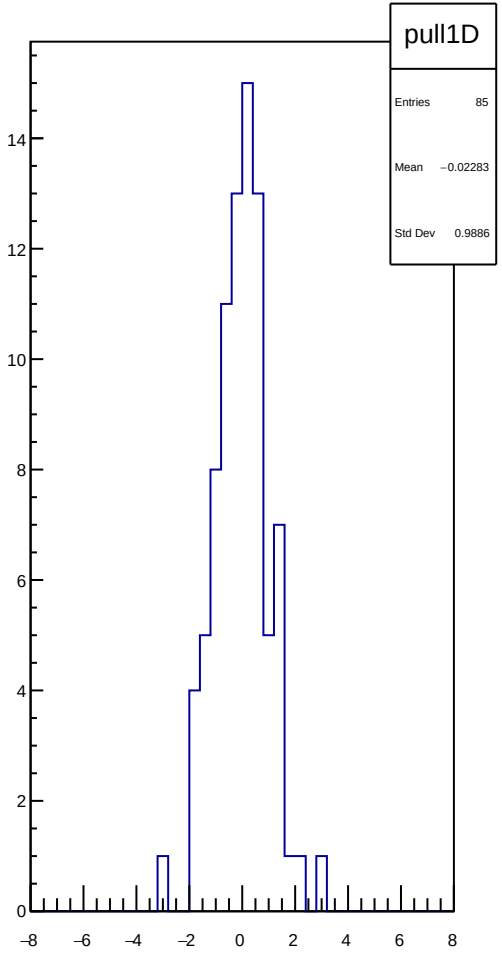

asym_atl_dd_correction_rms vs run
χ² / ndf 4957 / 84
p0 4033 ± 3.123
4400
4200
4000
3800
3600

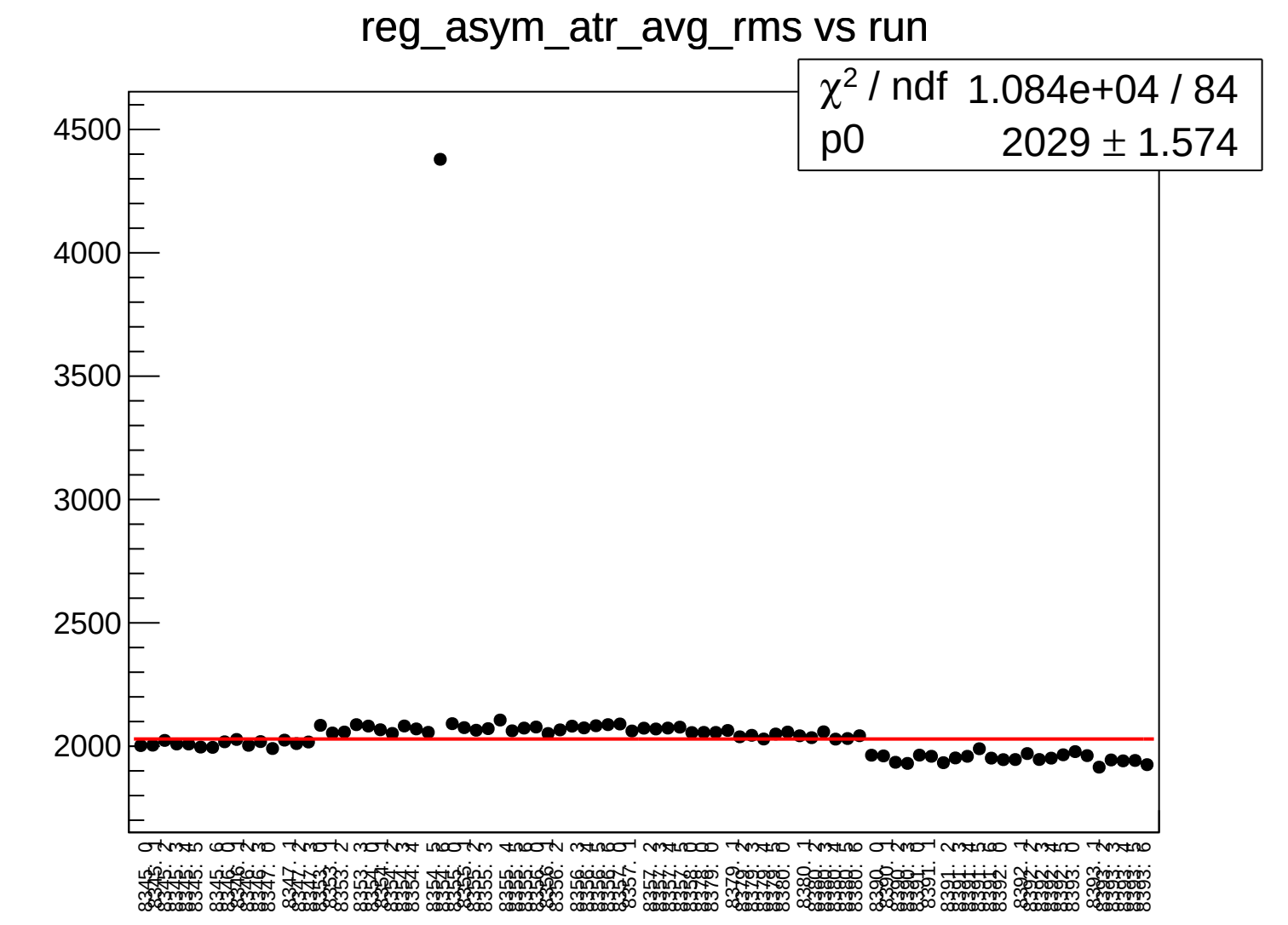

asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 96.6 / 84
p0 5597 ± 4789
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −131.2
Std Dev 185.8
3
2
1
0
−1
−2
−3

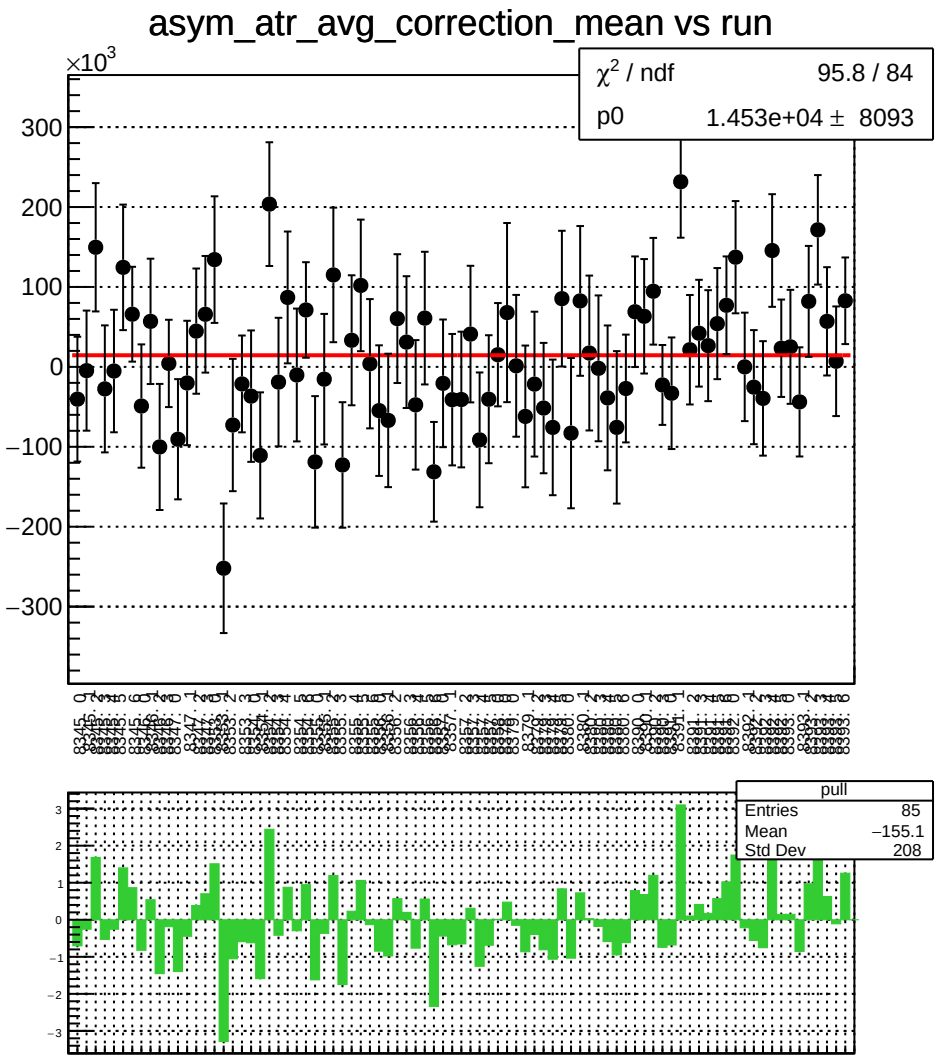

pull1D
Entries 85
Mean −0.02696
Std Dev 1.066
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

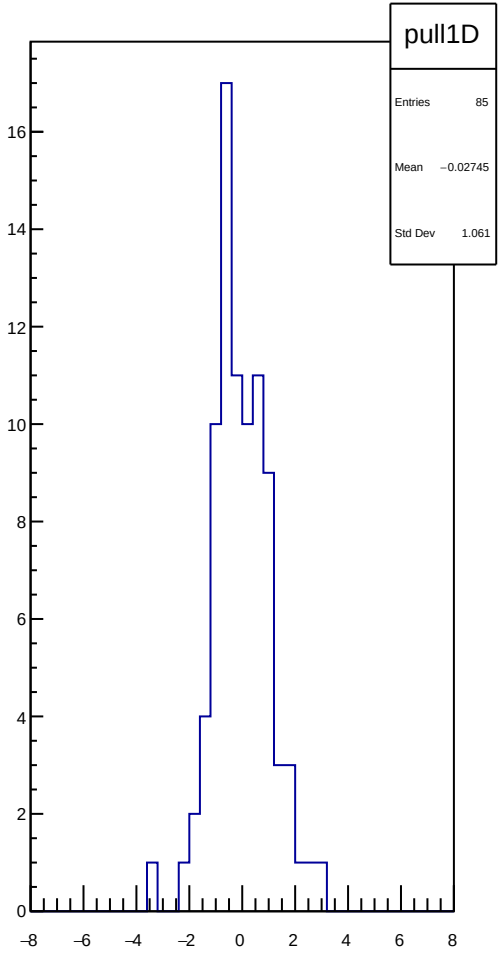

asym_atl_dd_rms vs run
χ^2 / ndf 6184 / 84
p0 4371 ± 3.386
7000
6500
6000
5500
5000
4500
4000

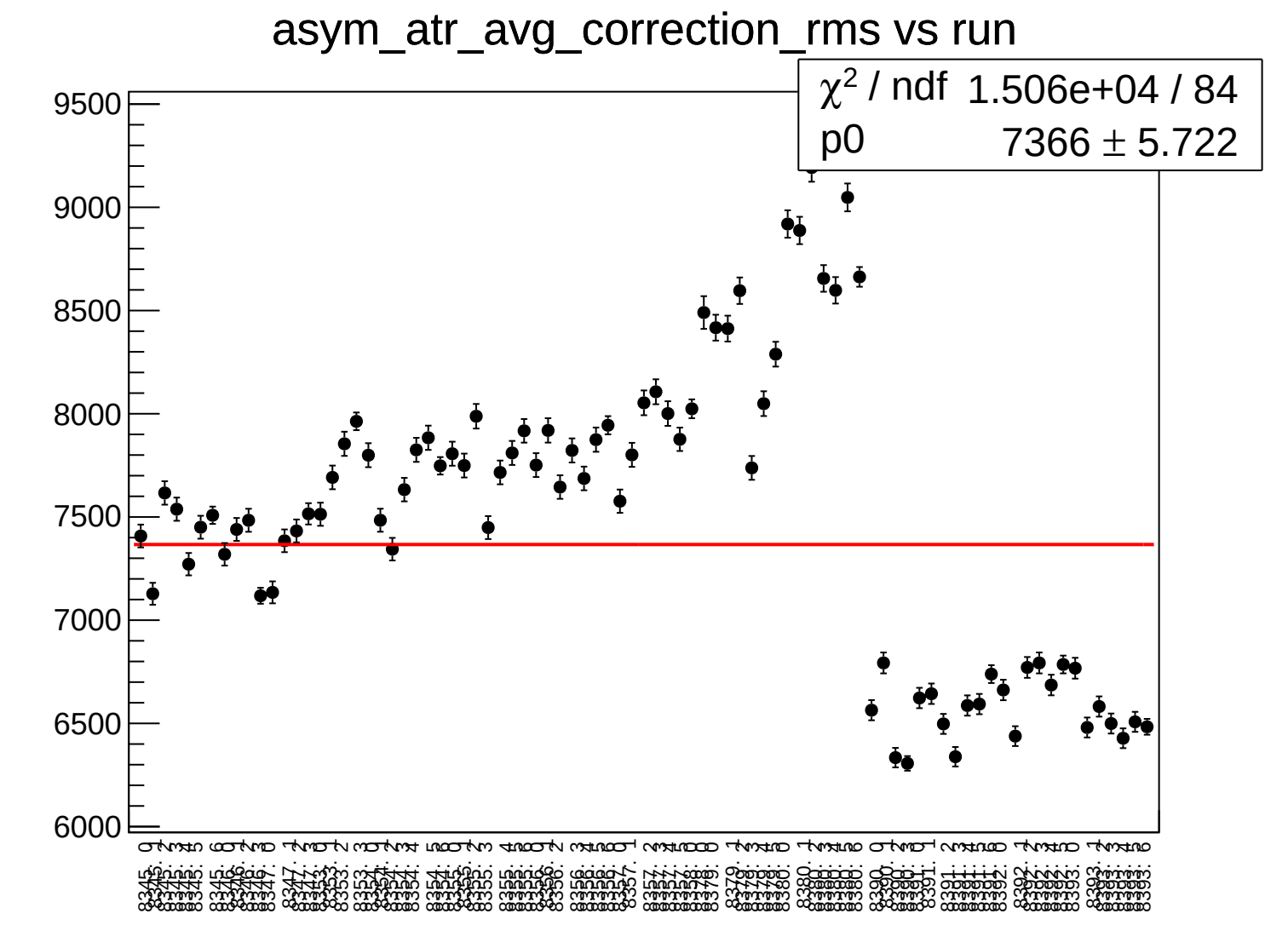

reg_asym_atr_avg_mean vs run
χ² / ndf 83.12 / 84
p0 3118 ± 2226
pull
Entries 85
Mean −26.77
Std Dev 84.36

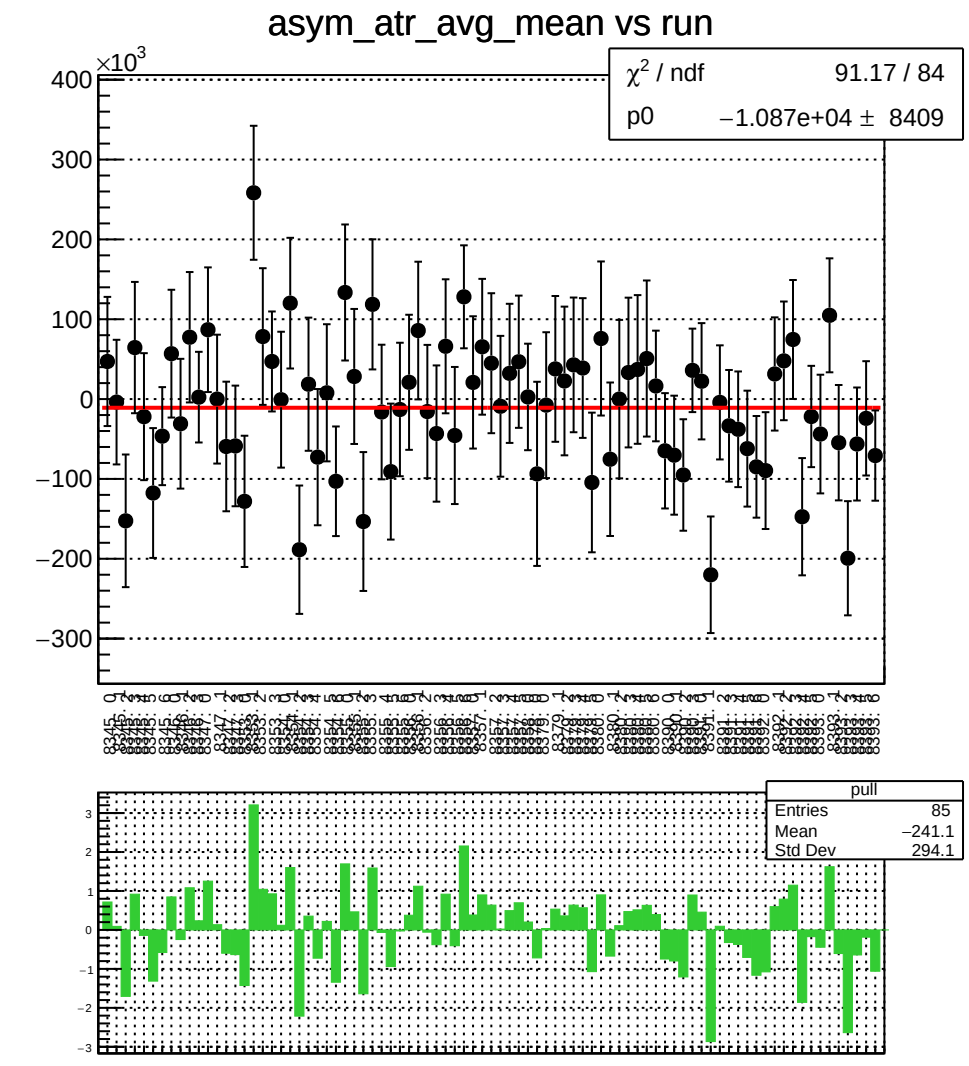

pull1D
Entries 85
Mean −0.02283
Std Dev 0.9886

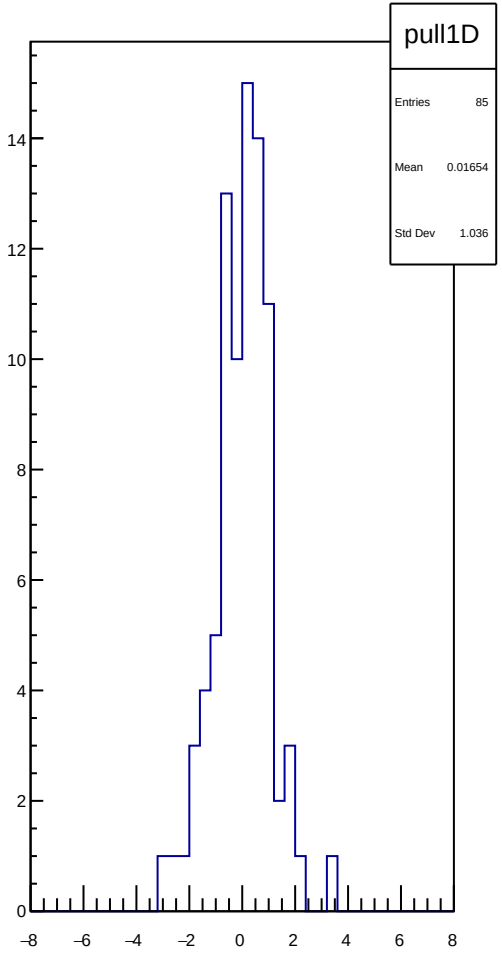

reg_asym_atr_avg_rms vs run
χ² / ndf 1.084e+04 / 84
p0 2029 ± 1.574
4500
4000
3500
3000
2500
2000

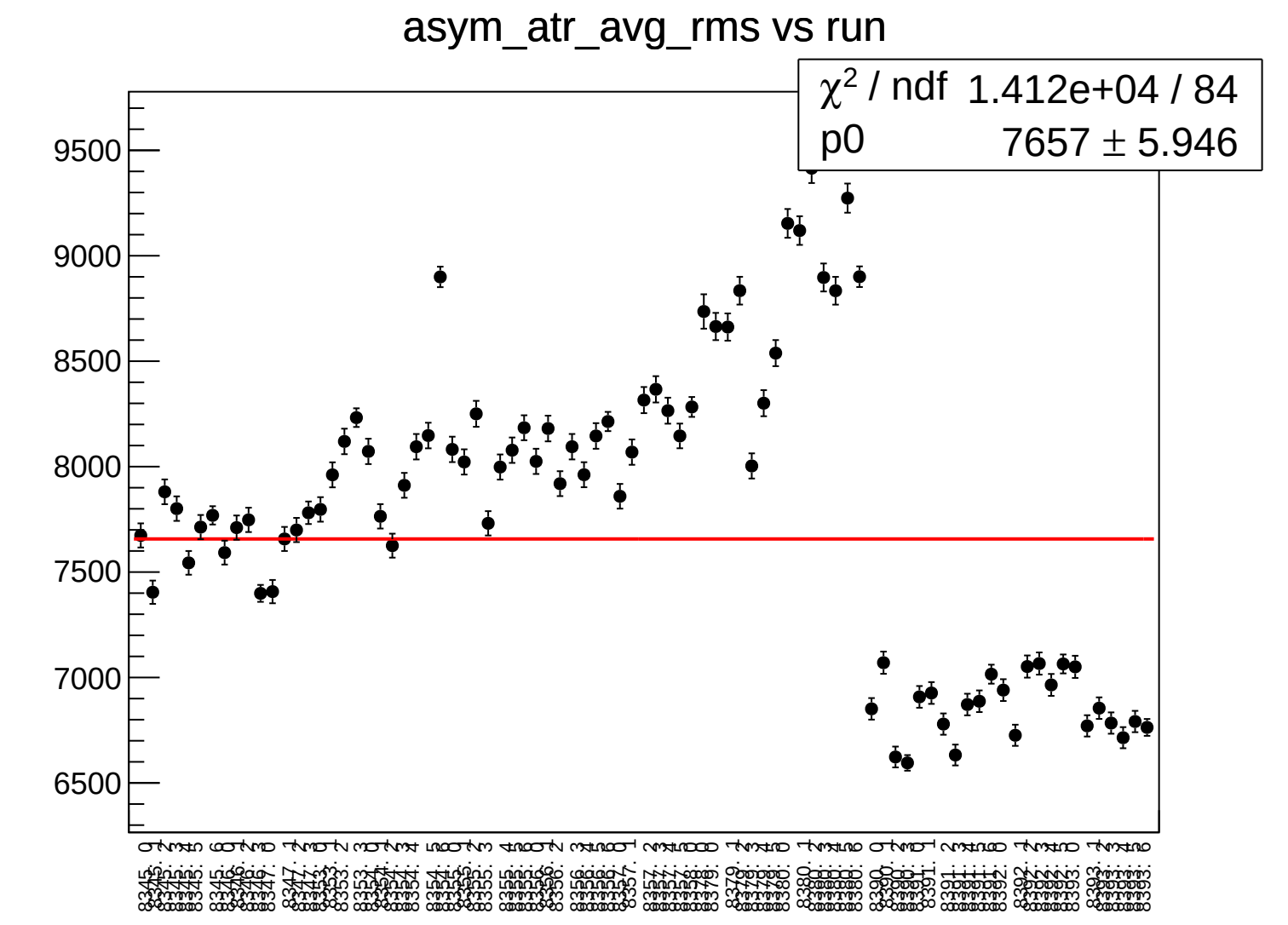

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 95.8 / 84
p0 1.453e+04 ± 8093
pull
Entries 85
Mean −155.1
Std Dev 208

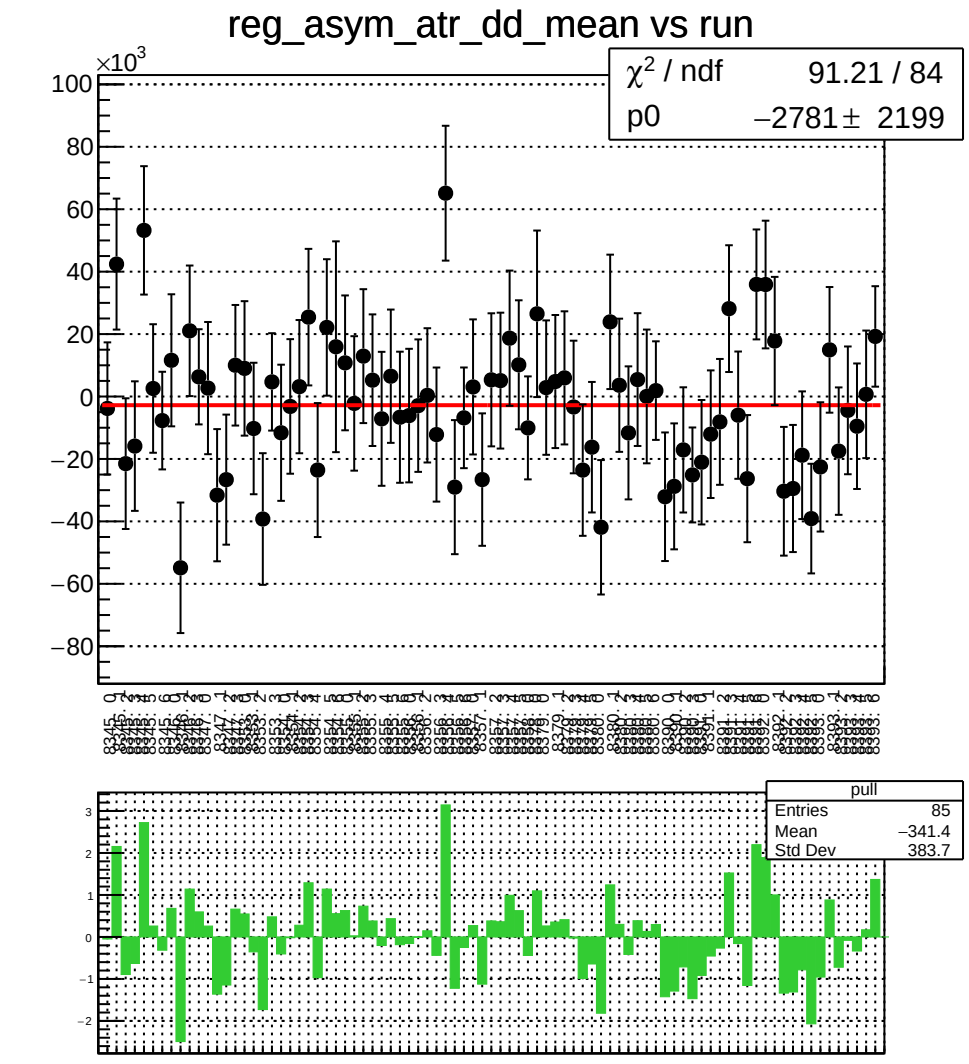

pull1D
Entries 85
Mean −0.02745
Std Dev 1.061

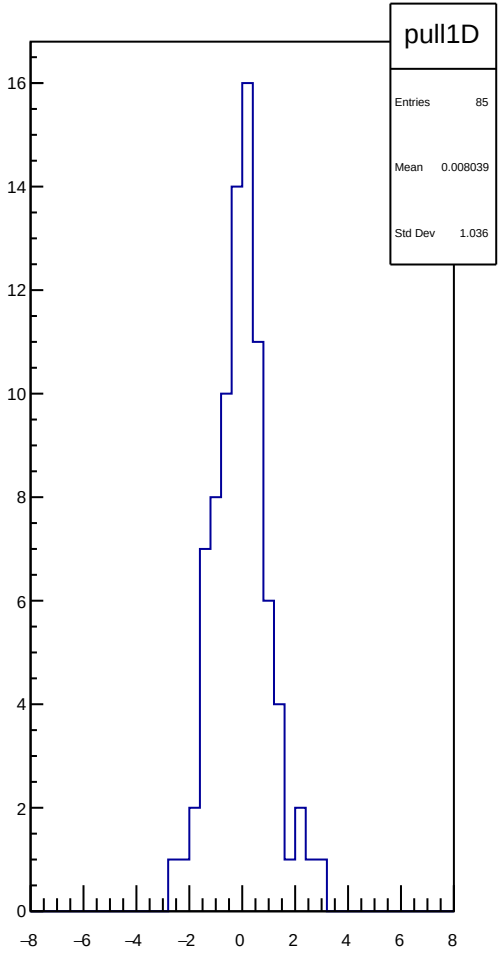

asym_atr_avg_correction_rms vs run
χ² / ndf 1.506e+04 / 84
p0 7366 ± 5.722
9500
9000
8500
8000
7500
7000
6500
6000

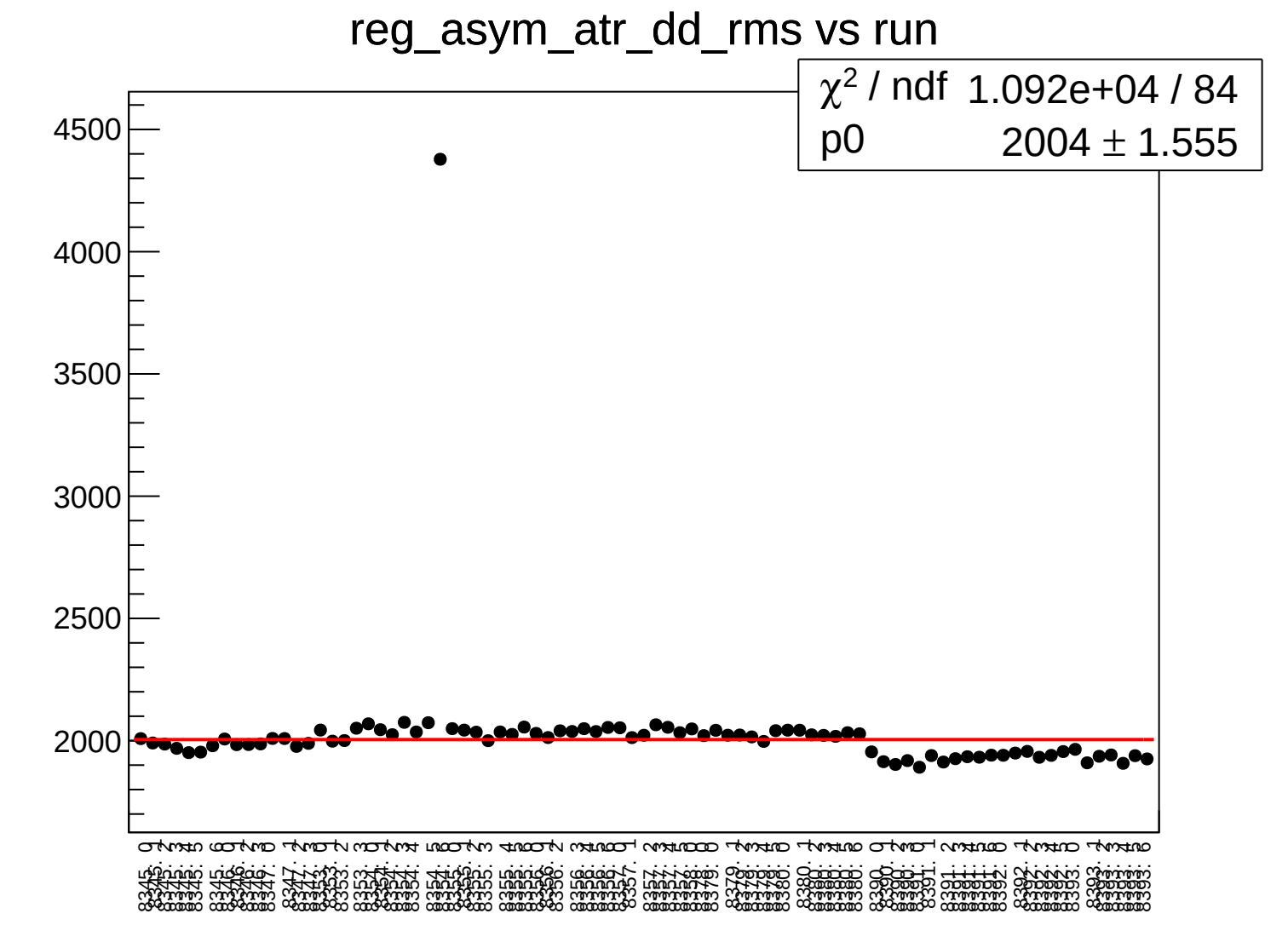

asym_atr_avg_mean vs run
×10^3
χ² / ndf 91.17 / 84
p0 −1.087e+04 ± 8409
pull
Entries 85
Mean −241.1
Std Dev 294.1

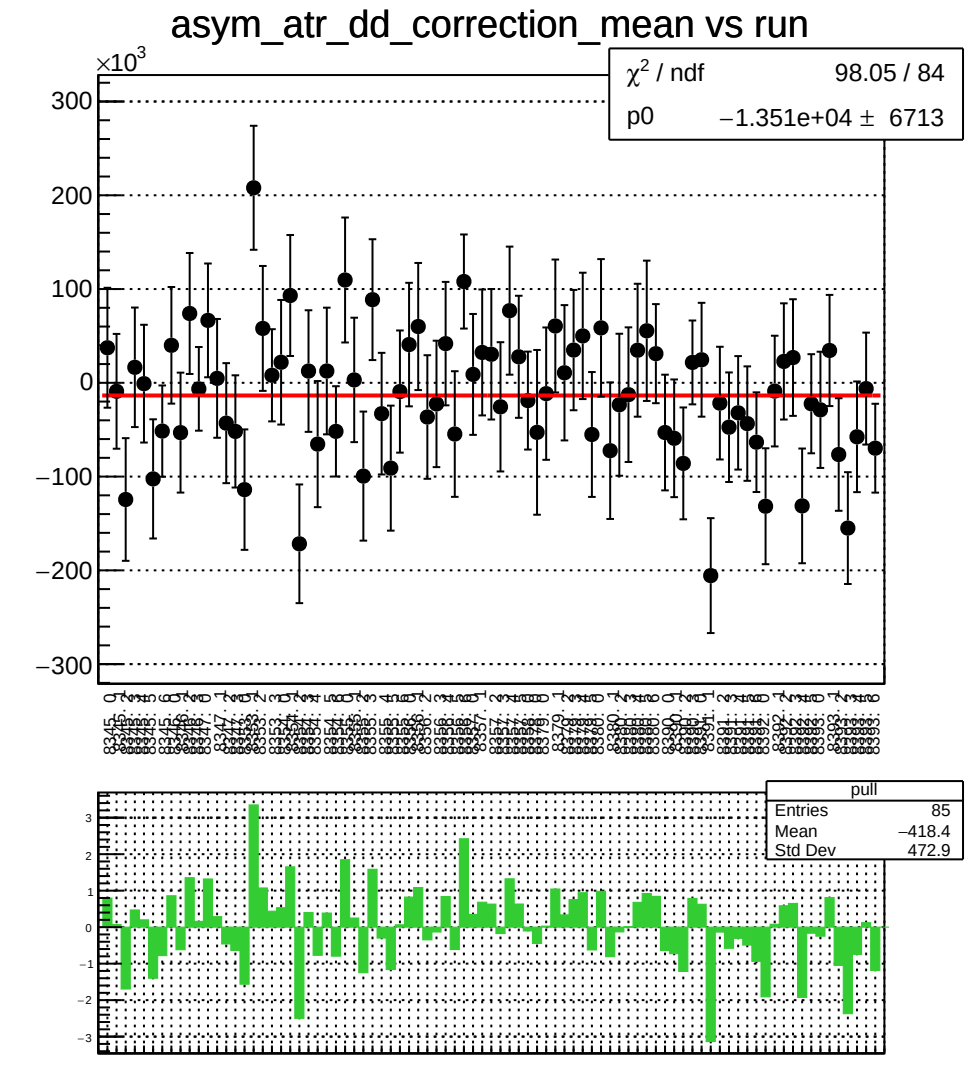

pull1D
Entries 85
Mean 0.01654
Std Dev 1.036

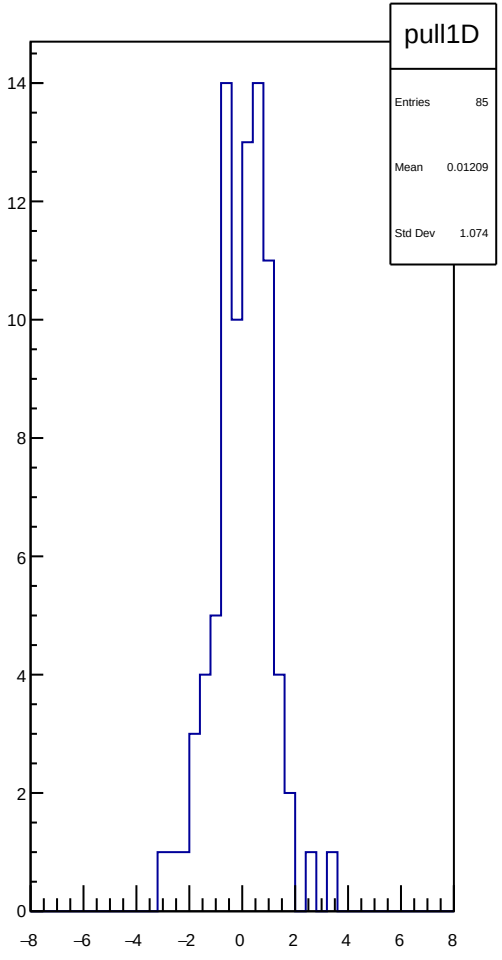

asym_atr_avg_rms vs run
χ^2 / ndf 1.412e+04 / 84
p0 7657 ± 5.946
9500
9000
8500
8000
7500
7000
6500

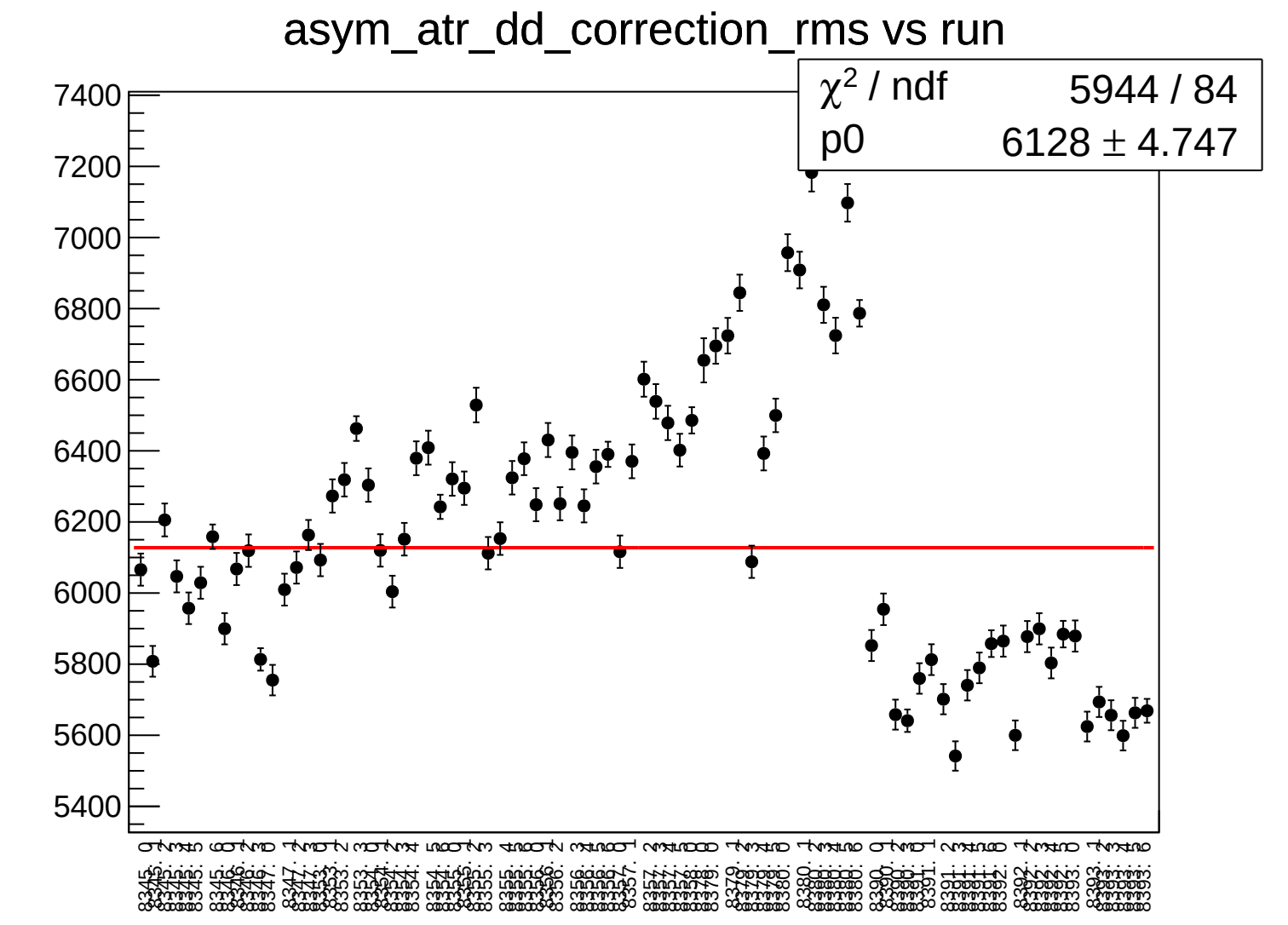

reg_asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 91.21 / 84
p0 −2781 ± 2199
pull
Entries 85
Mean −341.4
Std Dev 383.7

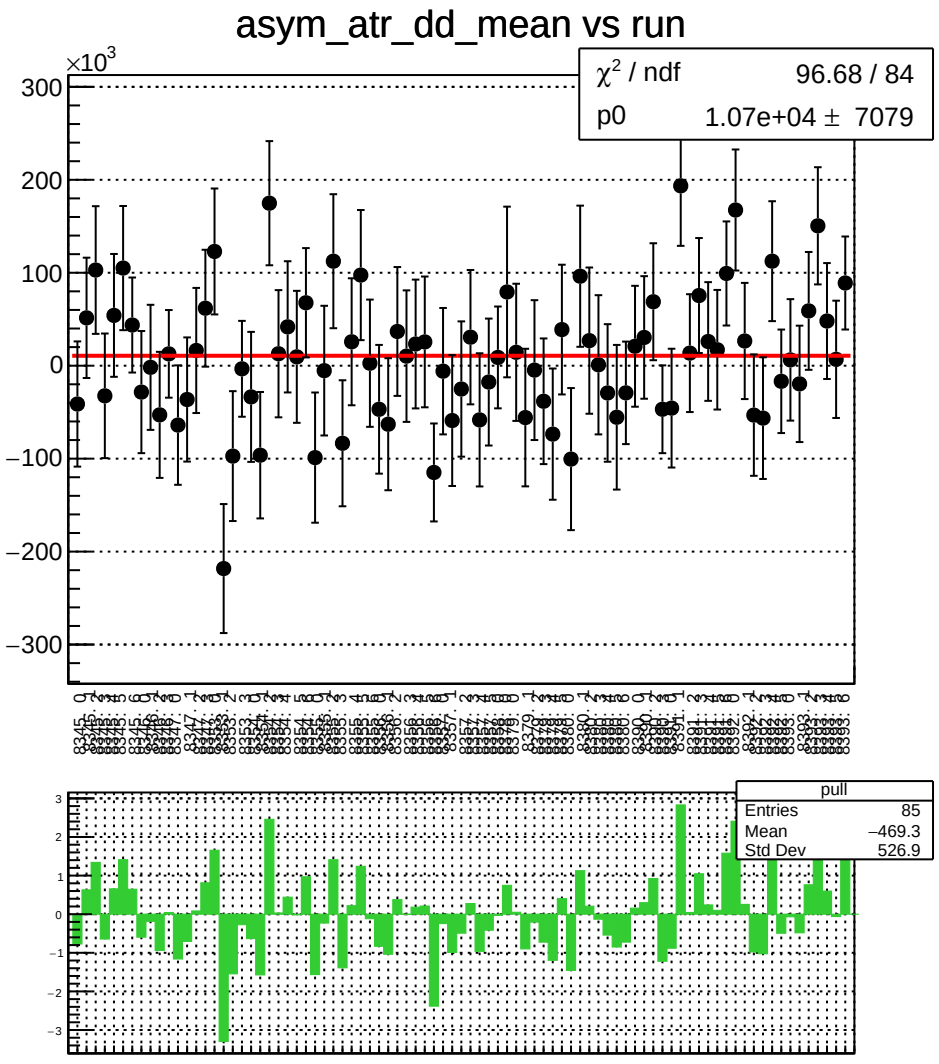

pull1D
Entries 85
Mean 0.008039
Std Dev 1.036

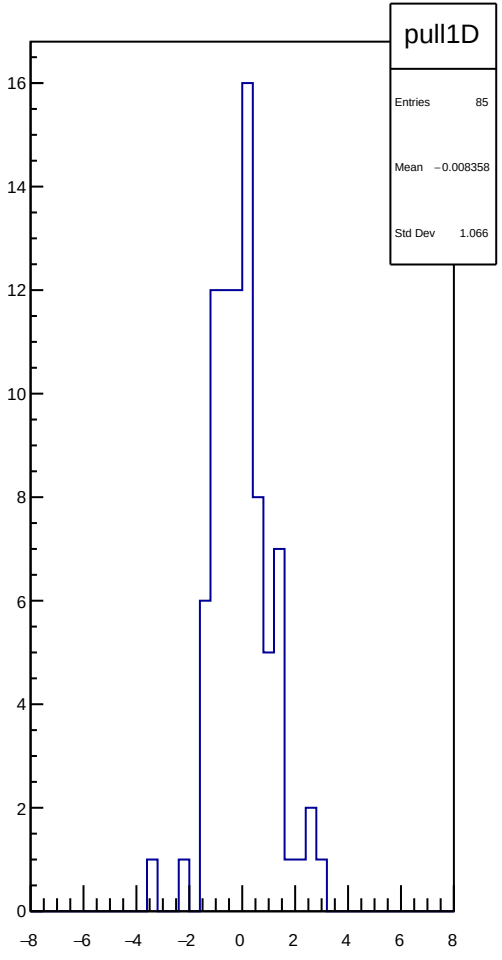

reg_asym_atr_dd_rms vs run
χ² / ndf 1.092e+04 / 84
p0 2004 ± 1.555
4500
4000
3500
3000
2500
2000

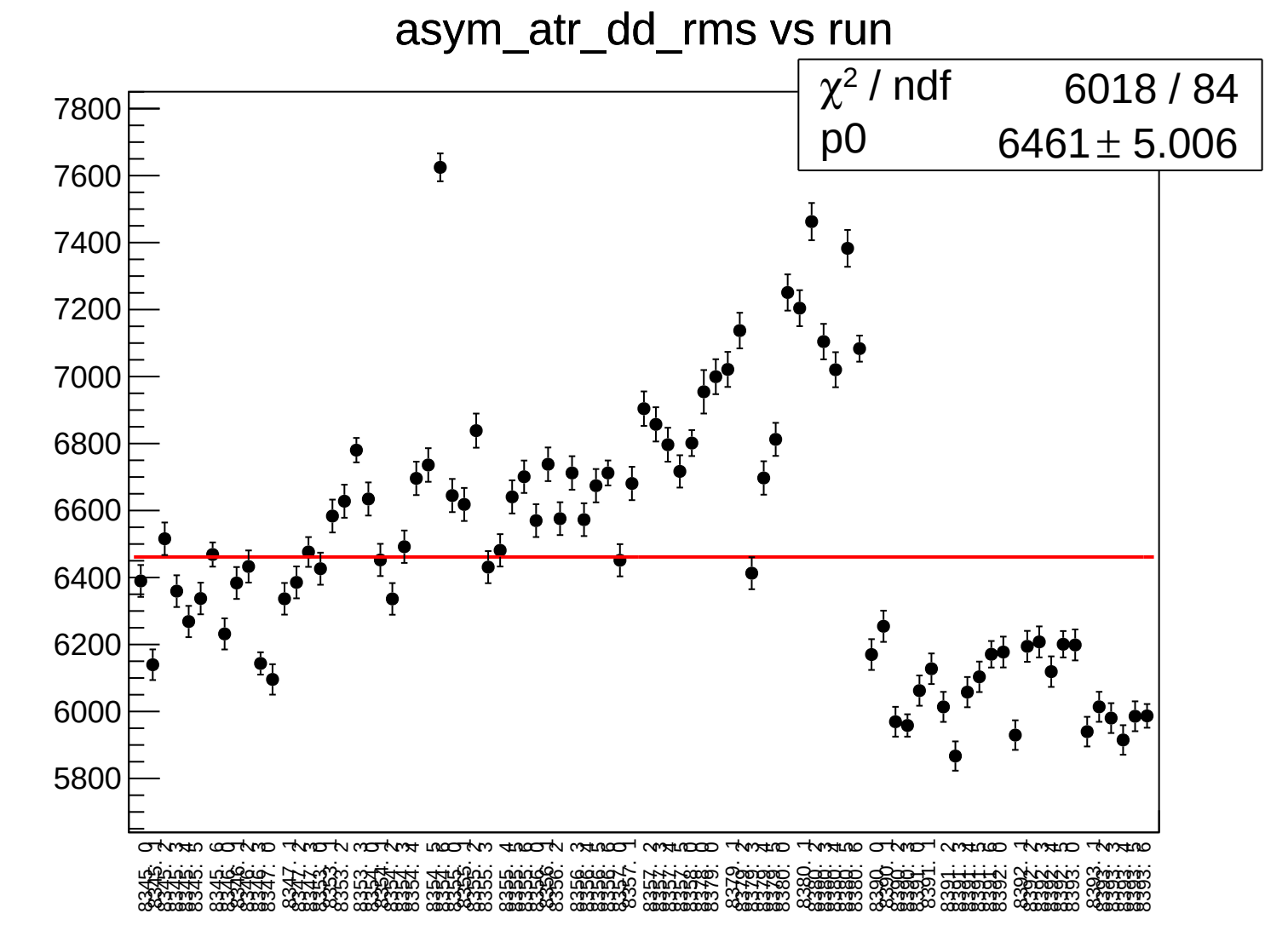

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 98.05 / 84
p0 −1.351e+04 ± 6713
pull
Entries 85
Mean −418.4
Std Dev 472.9

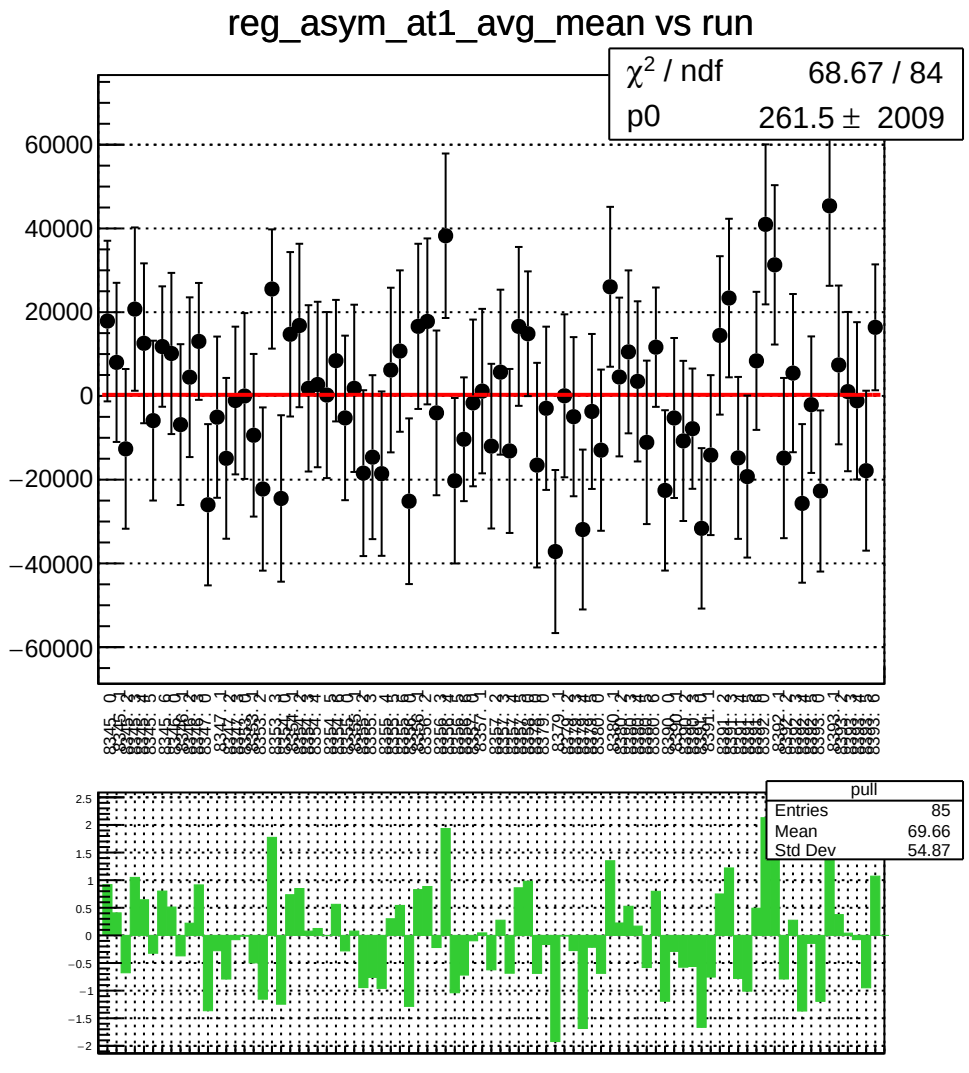

pull1D
Entries 85
Mean 0.01209
Std Dev 1.074

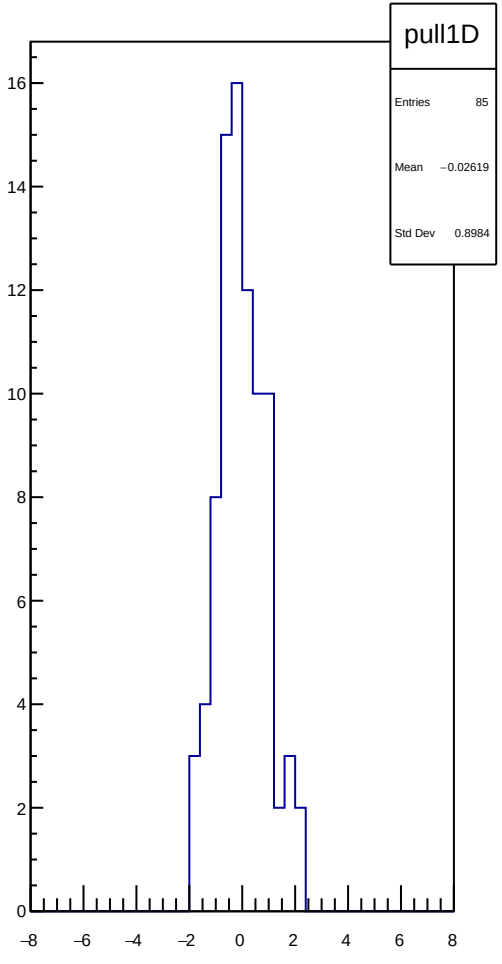

asym_atr_dd_correction_rms vs run
χ² / ndf 5944 / 84
p0 6128 ± 4.747
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600
5400

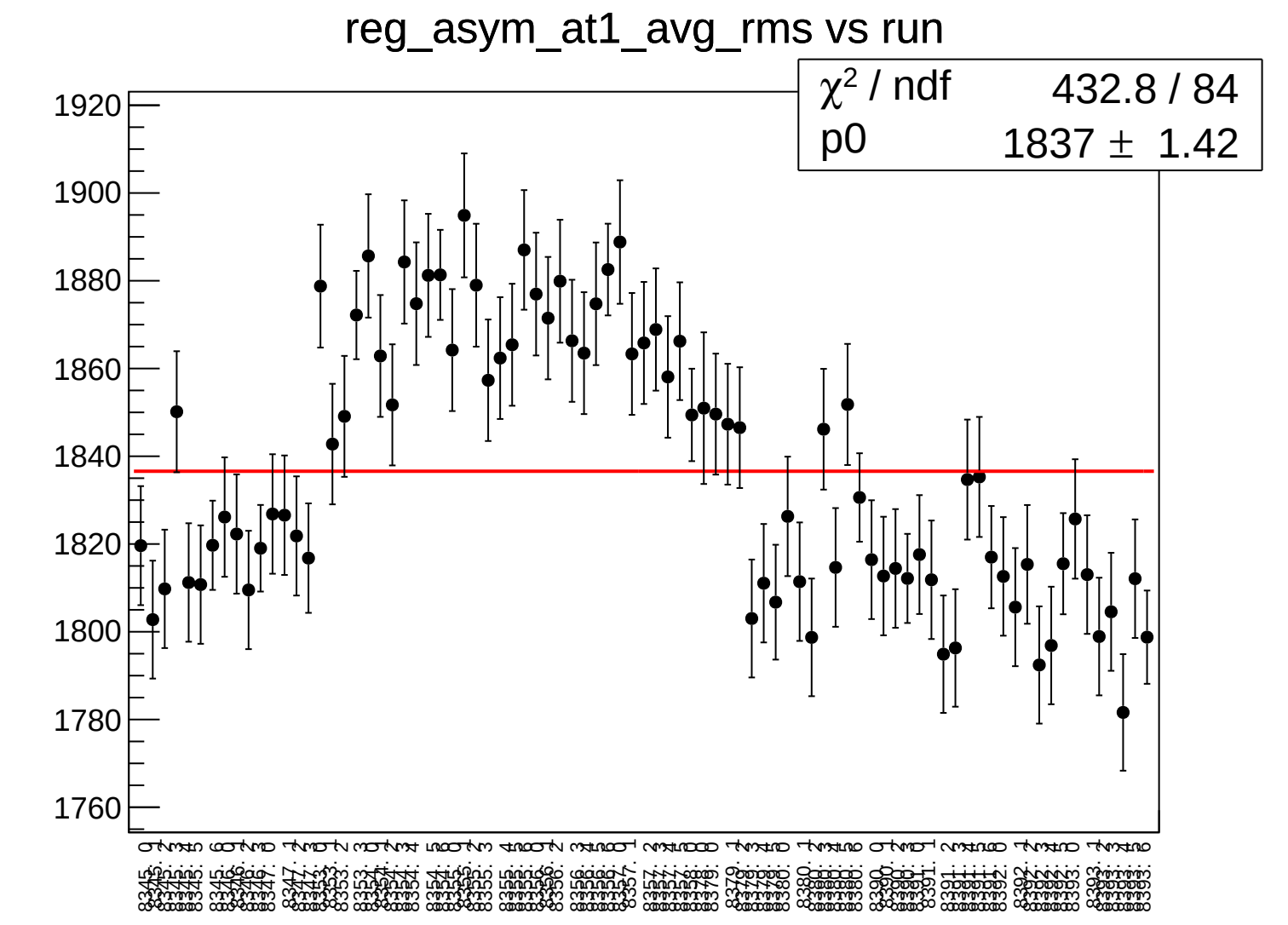

asym_atr_dd_mean vs run
×10^3
χ² / ndf 96.68 / 84
p0 1.07e+04 ± 7079
pull
Entries 85
Mean −469.3
Std Dev 526.9

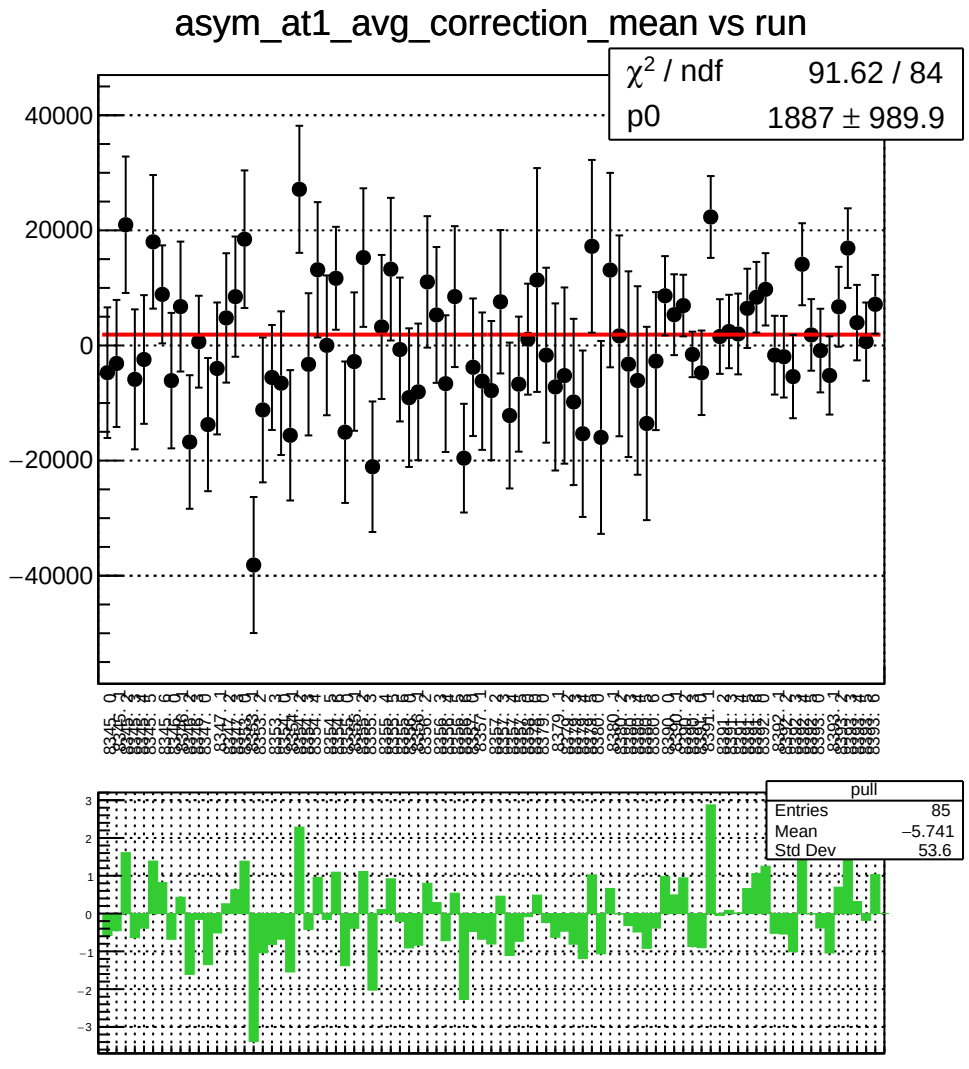

pull1D
Entries 85
Mean −0.008358
Std Dev 1.066

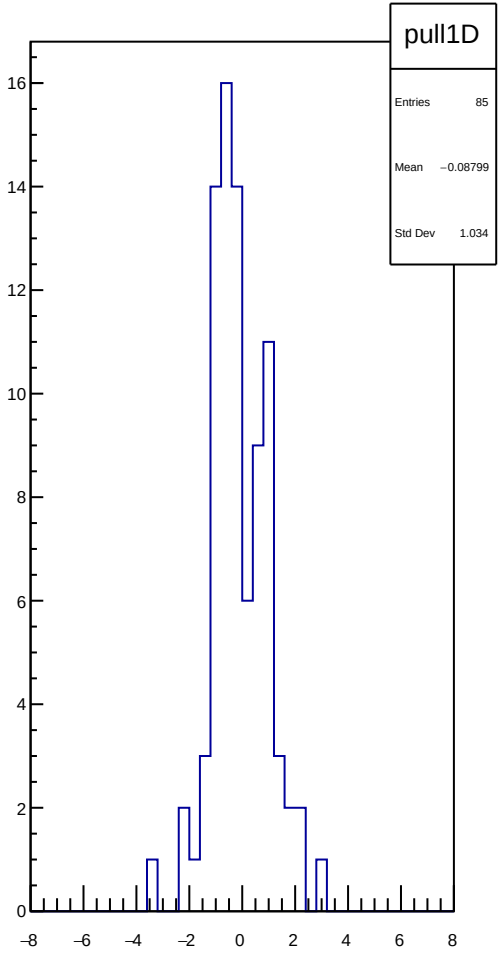

asym_atr_dd_rms vs run
χ^2 / ndf 6018 / 84
p0 6461 ± 5.006
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800

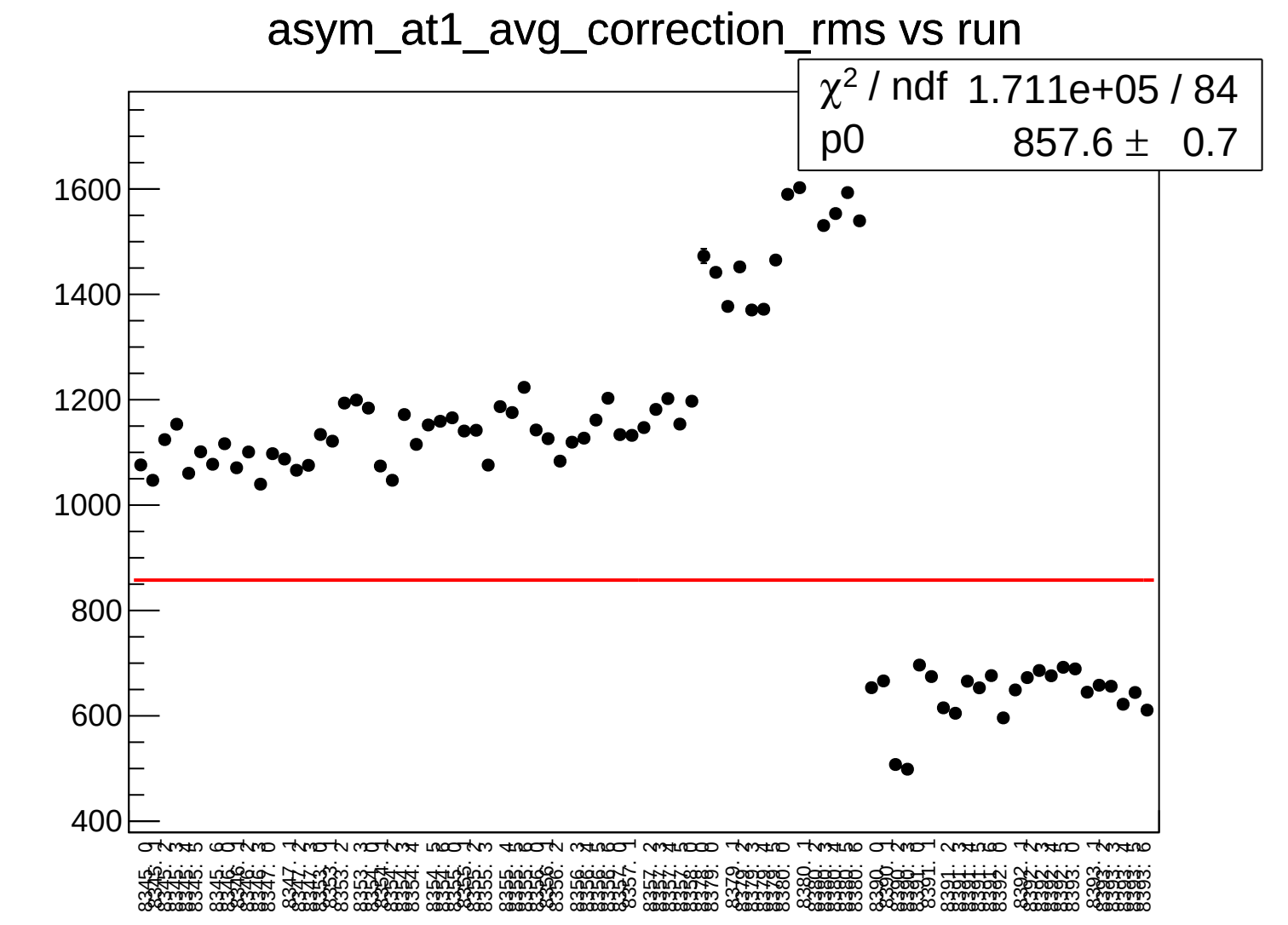

reg_asym_at1_avg_mean vs run
χ² / ndf 68.67 / 84
p0 261.5 ± 2009
pull
Entries 85
Mean 69.66
Std Dev 54.87

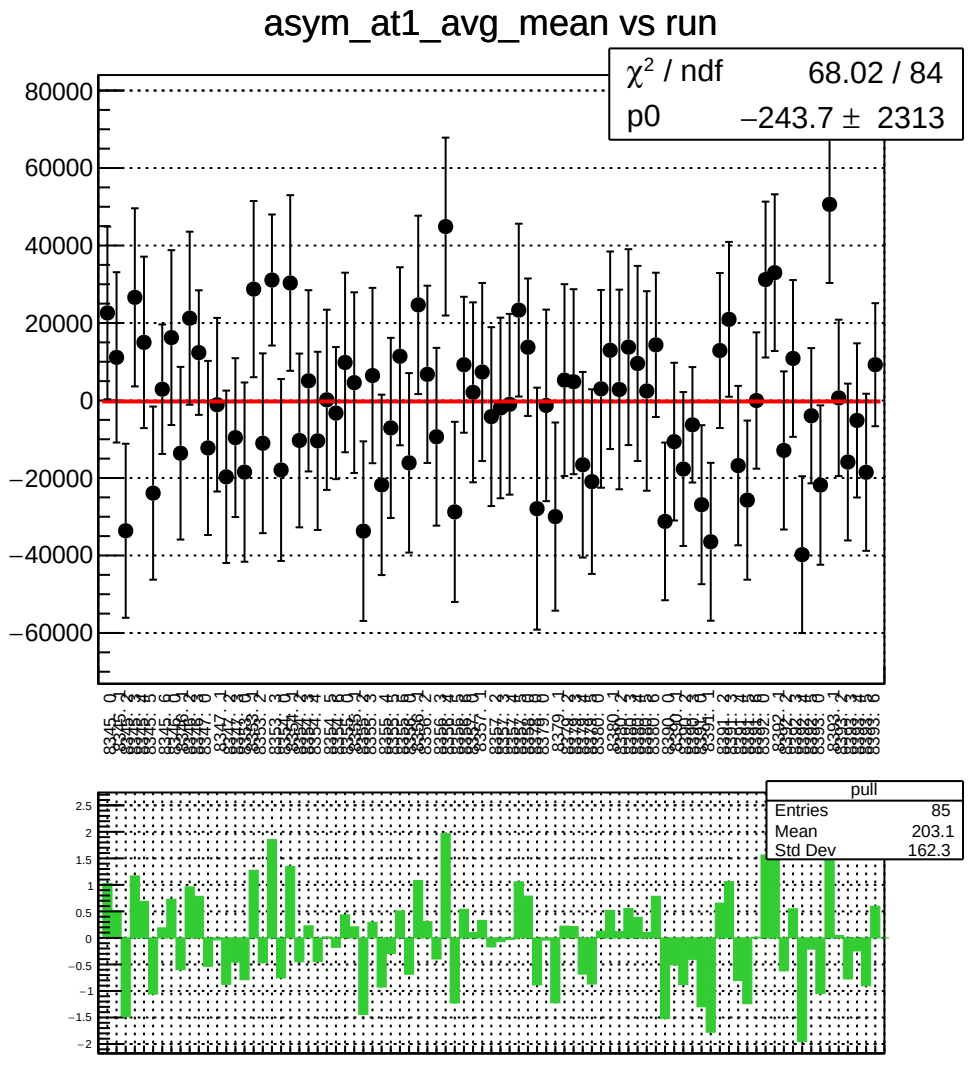

pull1D
Entries 85
Mean −0.02619
Std Dev 0.8984

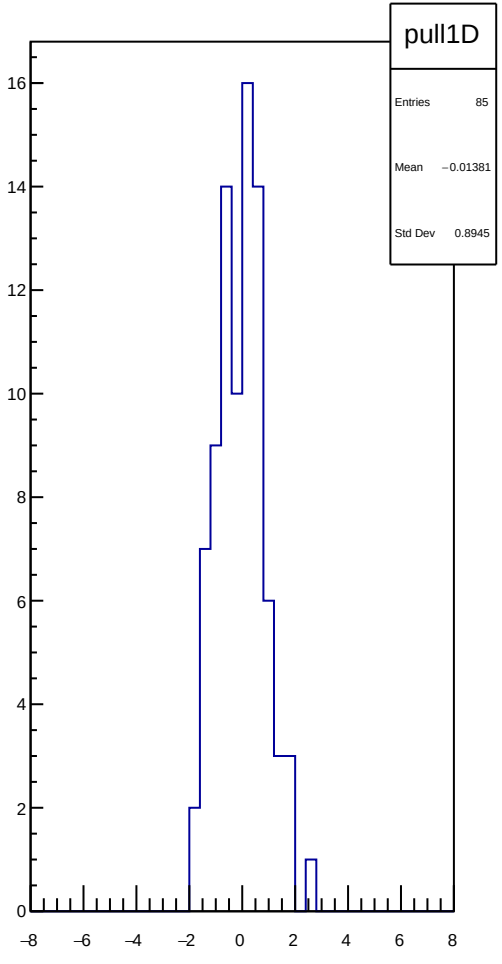

reg_asym_at1_avg_rms vs run
χ^2 / ndf 432.8 / 84
p0 1837 ± 1.42
1920
1900
1880
1860
1840
1820
1800
1780
1760

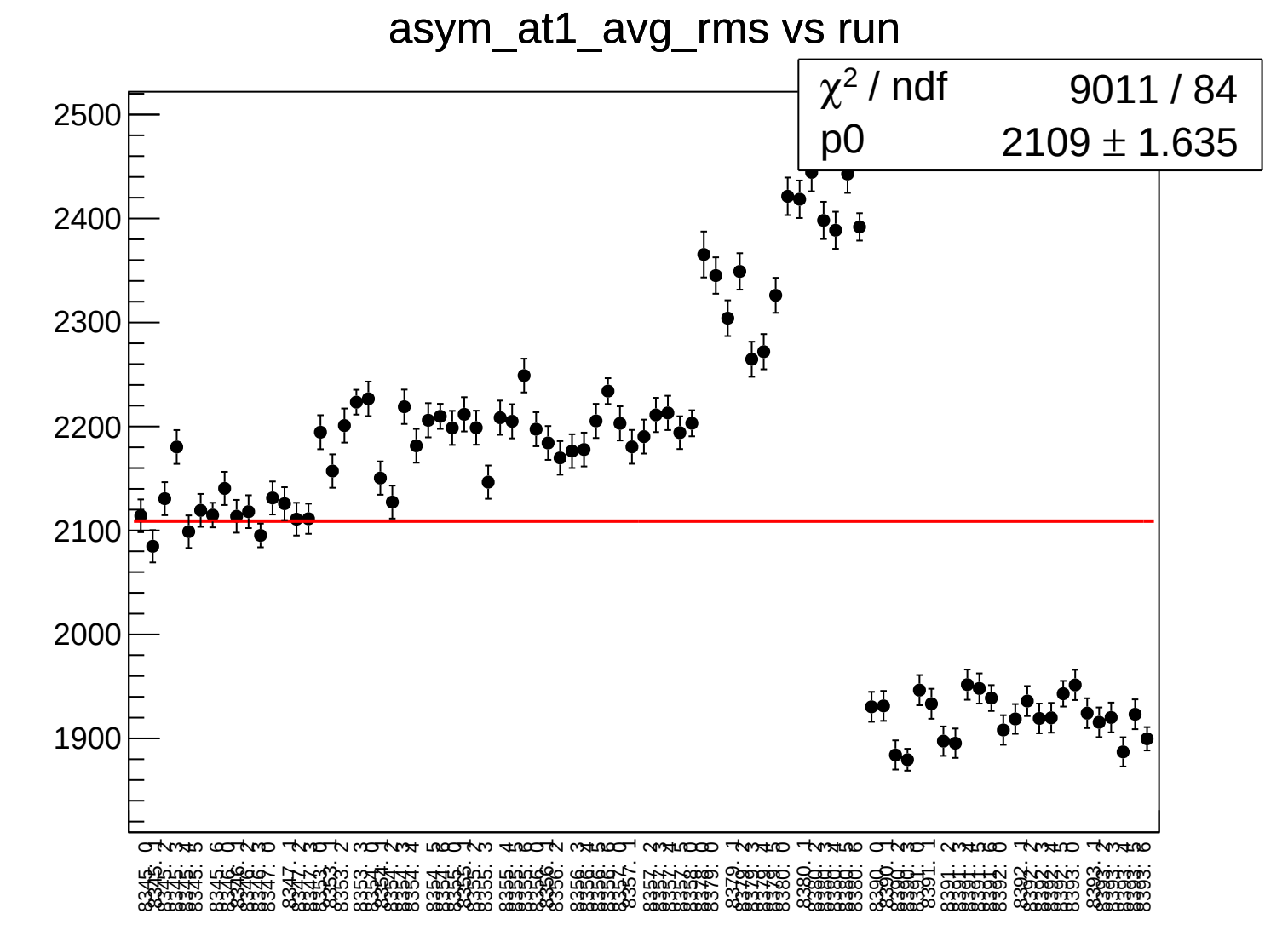

asym_at1_avg_correction_mean vs run
χ² / ndf 91.62 / 84
p0 1887 ± 989.9
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −5.741
Std Dev 53.6
3
2
1
0
−1
−2
−3

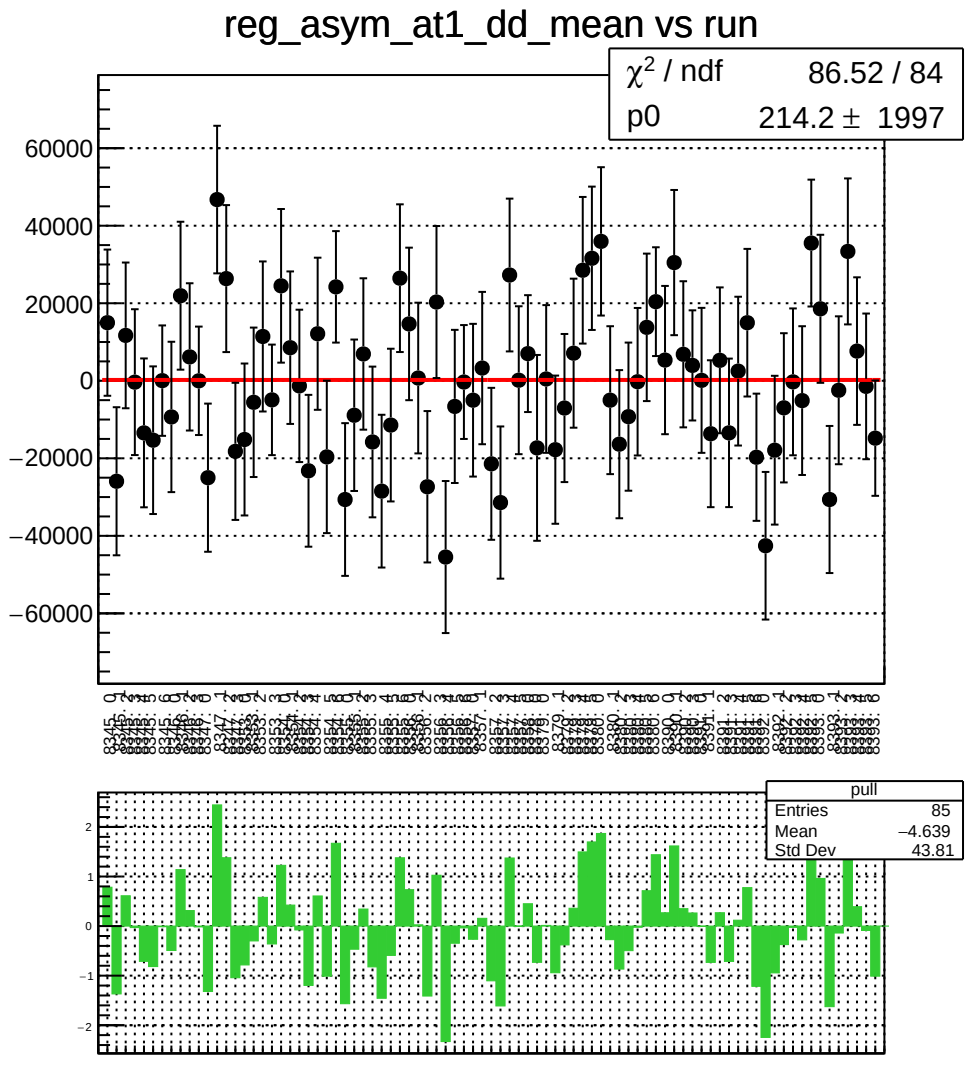

pull1D
Entries 85
Mean −0.08799
Std Dev 1.034
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

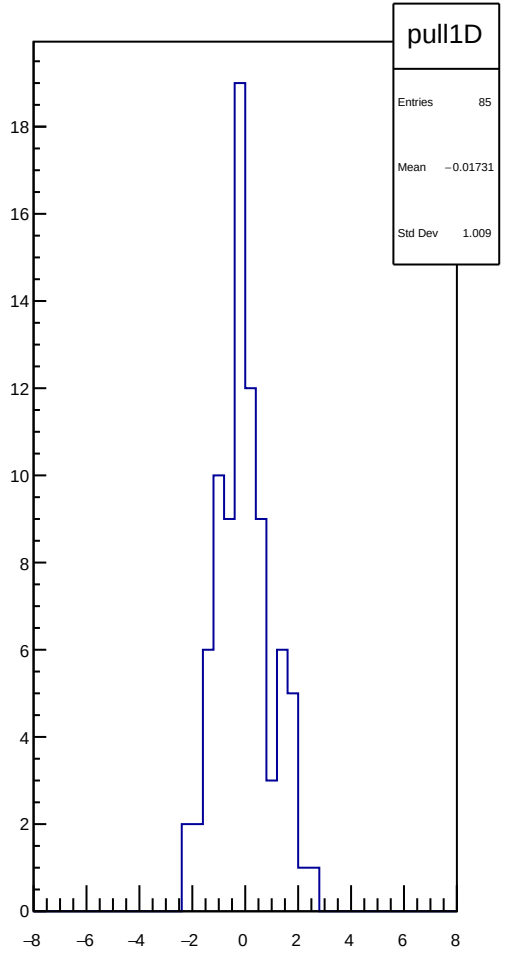

asym_at1_avg_correction_rms vs run
χ² / ndf 1.711e+05 / 84
p0 857.6 ± 0.7
1600
1400
1200
1000
800
600
400

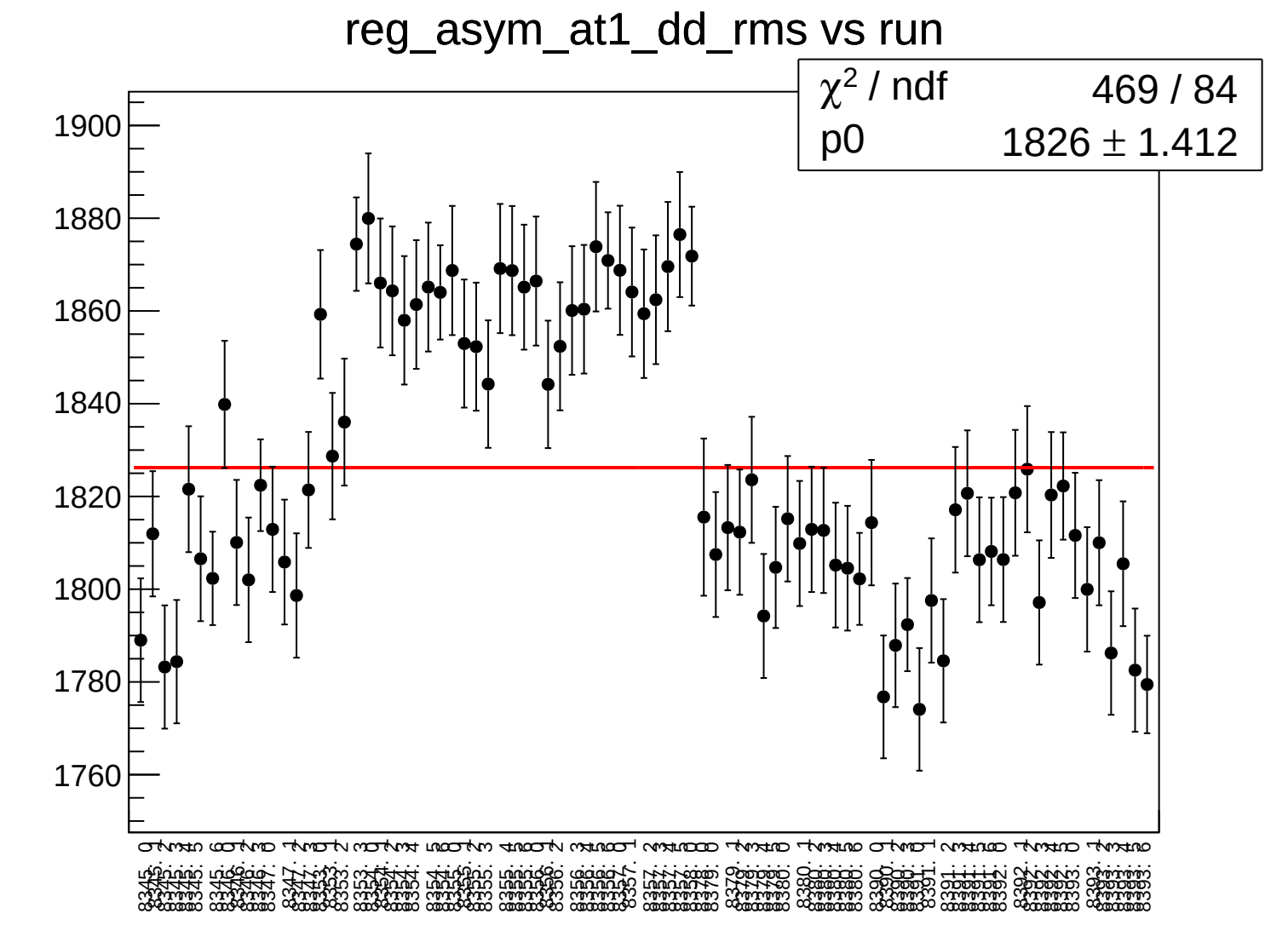

asym_at1_avg_mean vs run
χ² / ndf 68.02 / 84
p0 −243.7 ± 2313
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 203.1
Std Dev 162.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

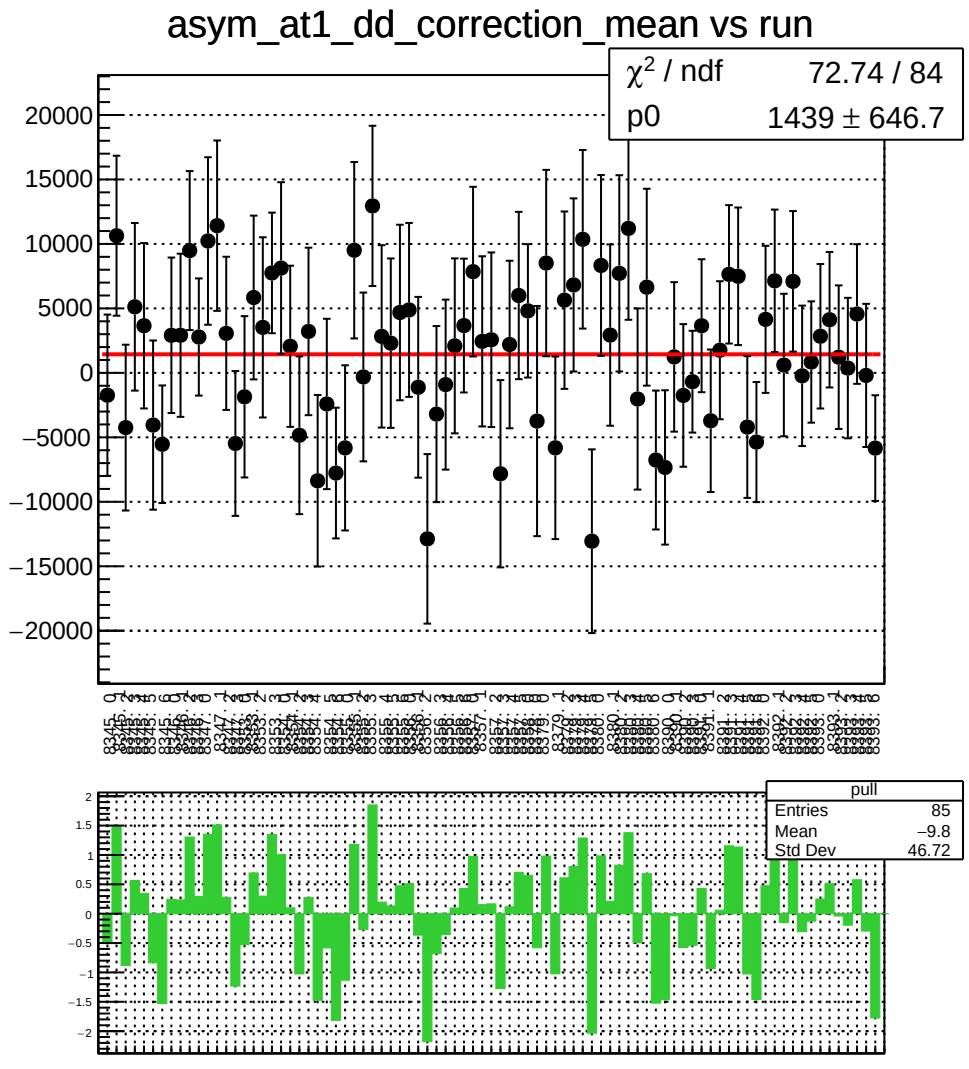

pull1D
Entries 85
Mean −0.01381
Std Dev 0.8945
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

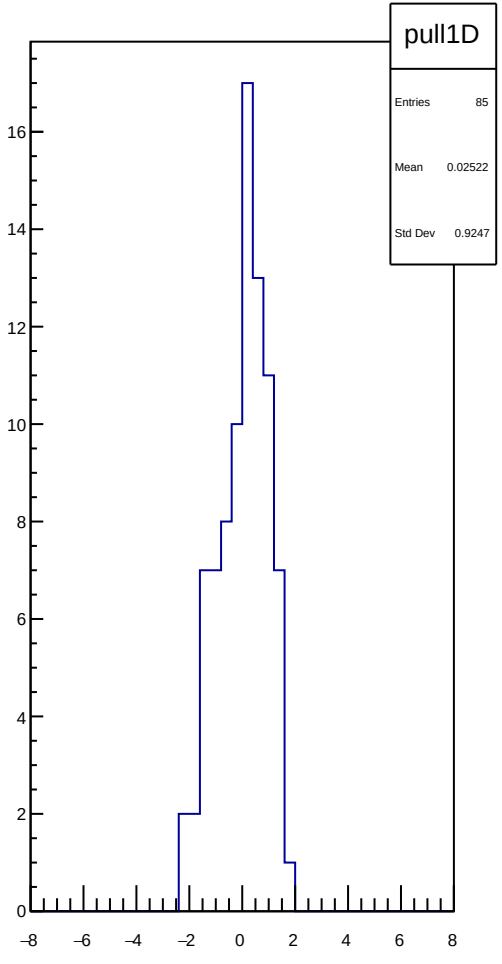

asym_at1_avg_rms vs run
χ² / ndf 9011 / 84
p0 2109 ± 1.635
2500
2400
2300
2200
2100
2000
1900

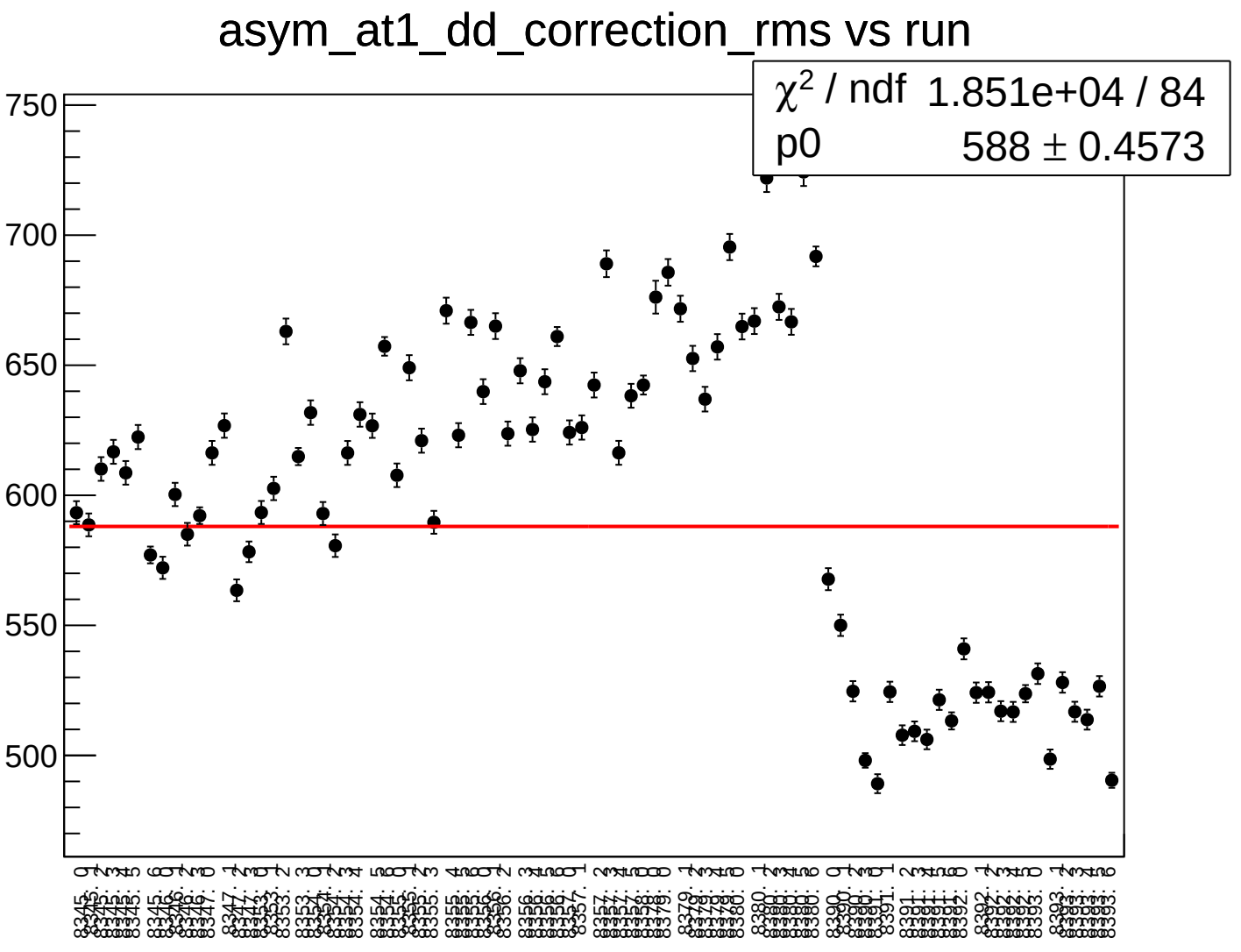

reg_asym_at1_dd_mean vs run
χ² / ndf 86.52 / 84
p0 214.2 ± 1997
pull
Entries 85
Mean −4.639
Std Dev 43.81

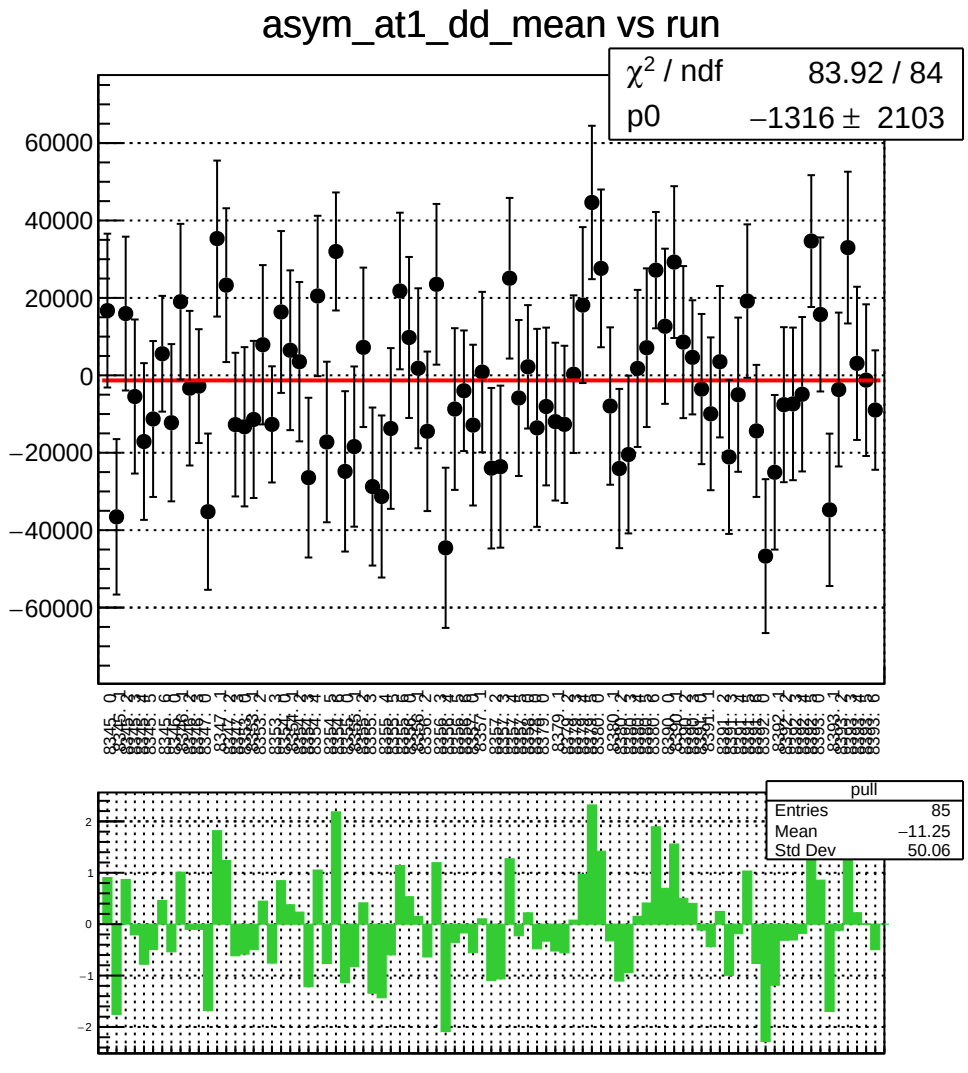

pull1D
Entries 85
Mean −0.01731
Std Dev 1.009

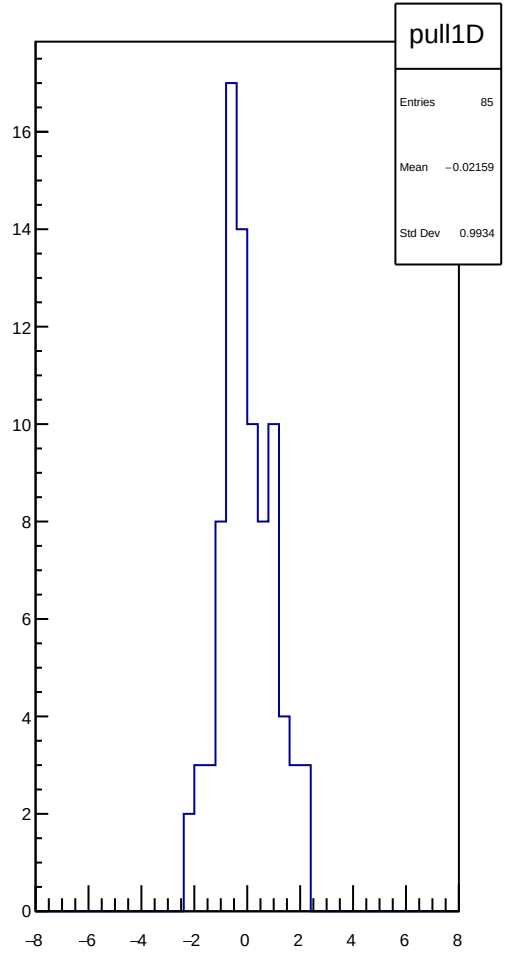

reg_asym_at1_dd_rms vs run
χ² / ndf 469 / 84
p0 1826 ± 1.412
1900
1880
1860
1840
1820
1800
1780
1760

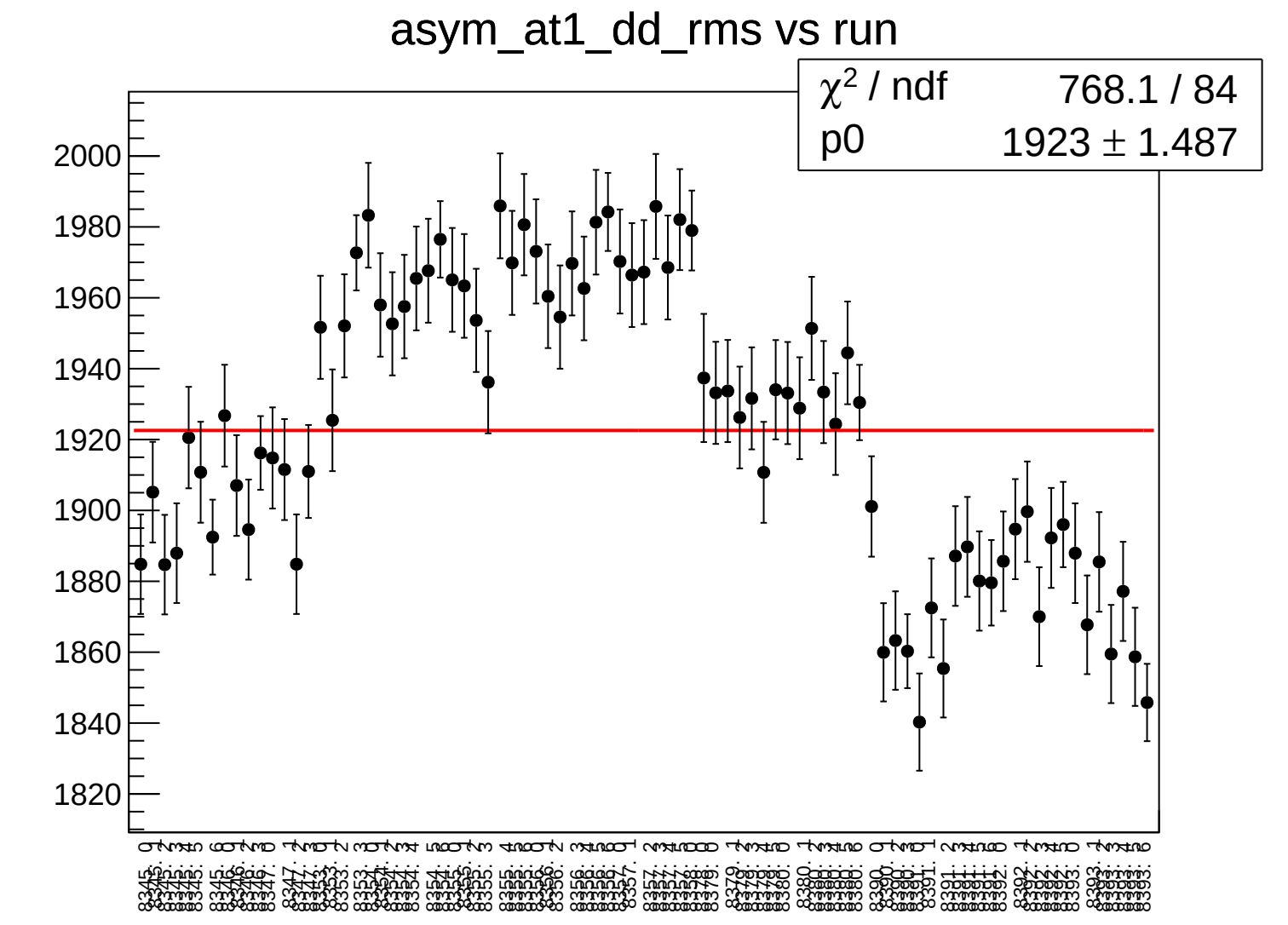

asym_at1_dd_correction_mean vs run
χ² / ndf 72.74 / 84
p0 1439 ± 646.7
pull
Entries 85
Mean −9.8
Std Dev 46.72

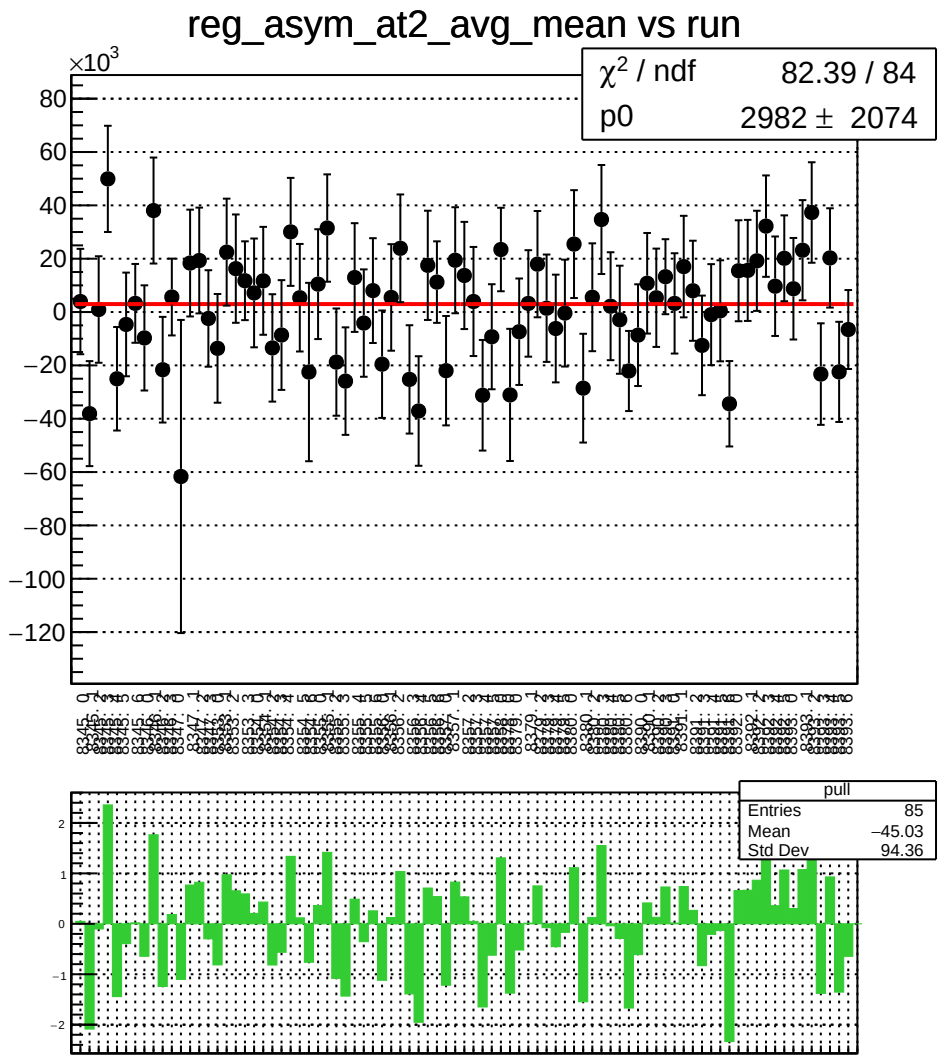

pull1D
Entries 85
Mean 0.02522
Std Dev 0.9247

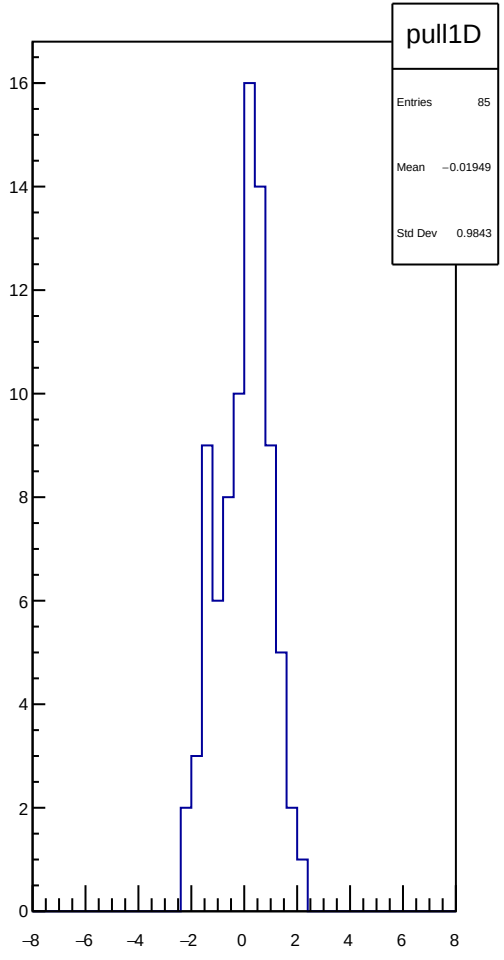

asym_at1_dd_correction_rms vs run
χ² / ndf 1.851e+04 / 84
p0 588 ± 0.4573
750
700
650
600
550
500

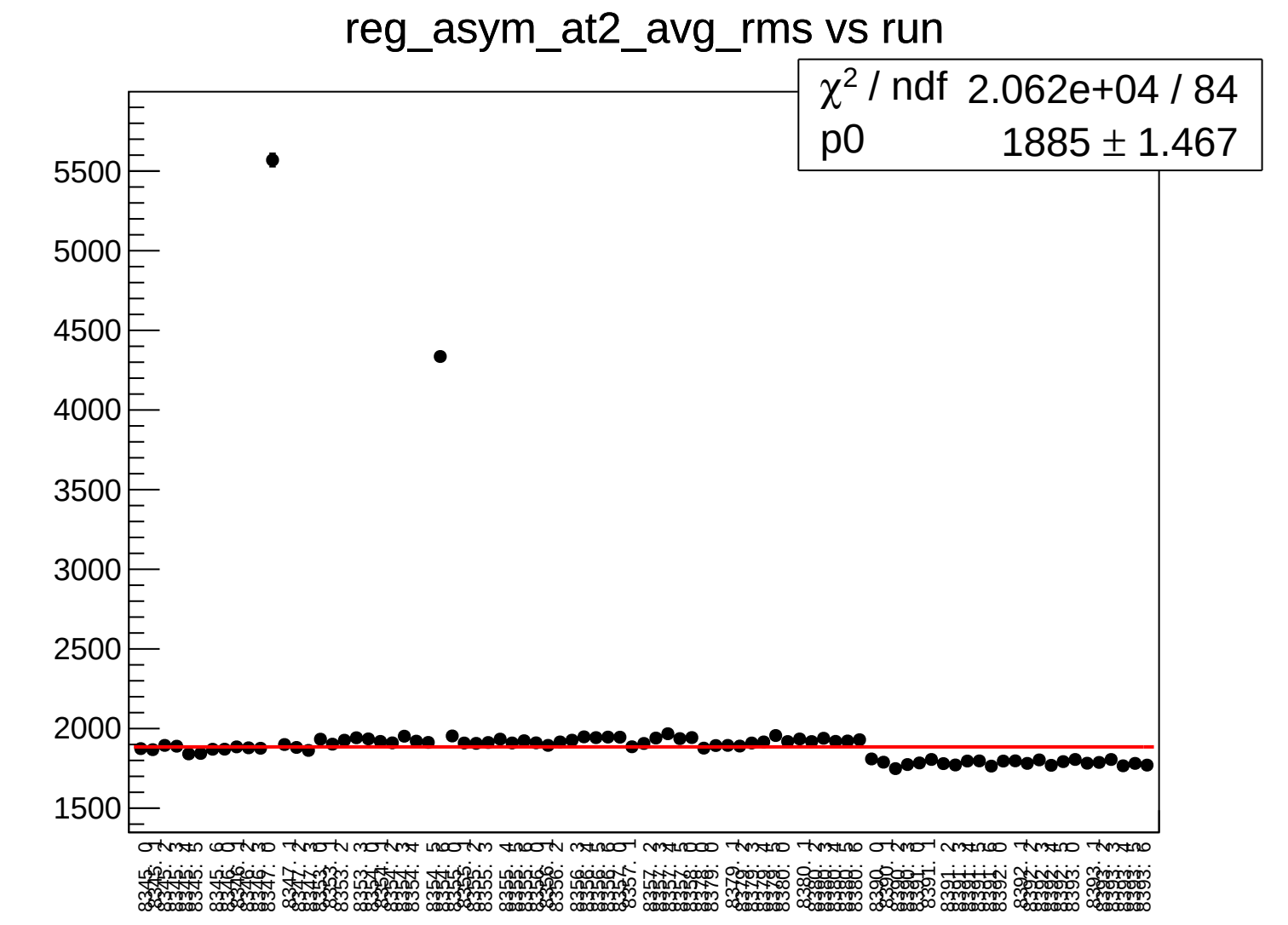

asym_at1_dd_mean vs run
χ² / ndf 83.92 / 84
p0 −1316 ± 2103
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −11.25
Std Dev 50.06
2
1
0
−1
−2

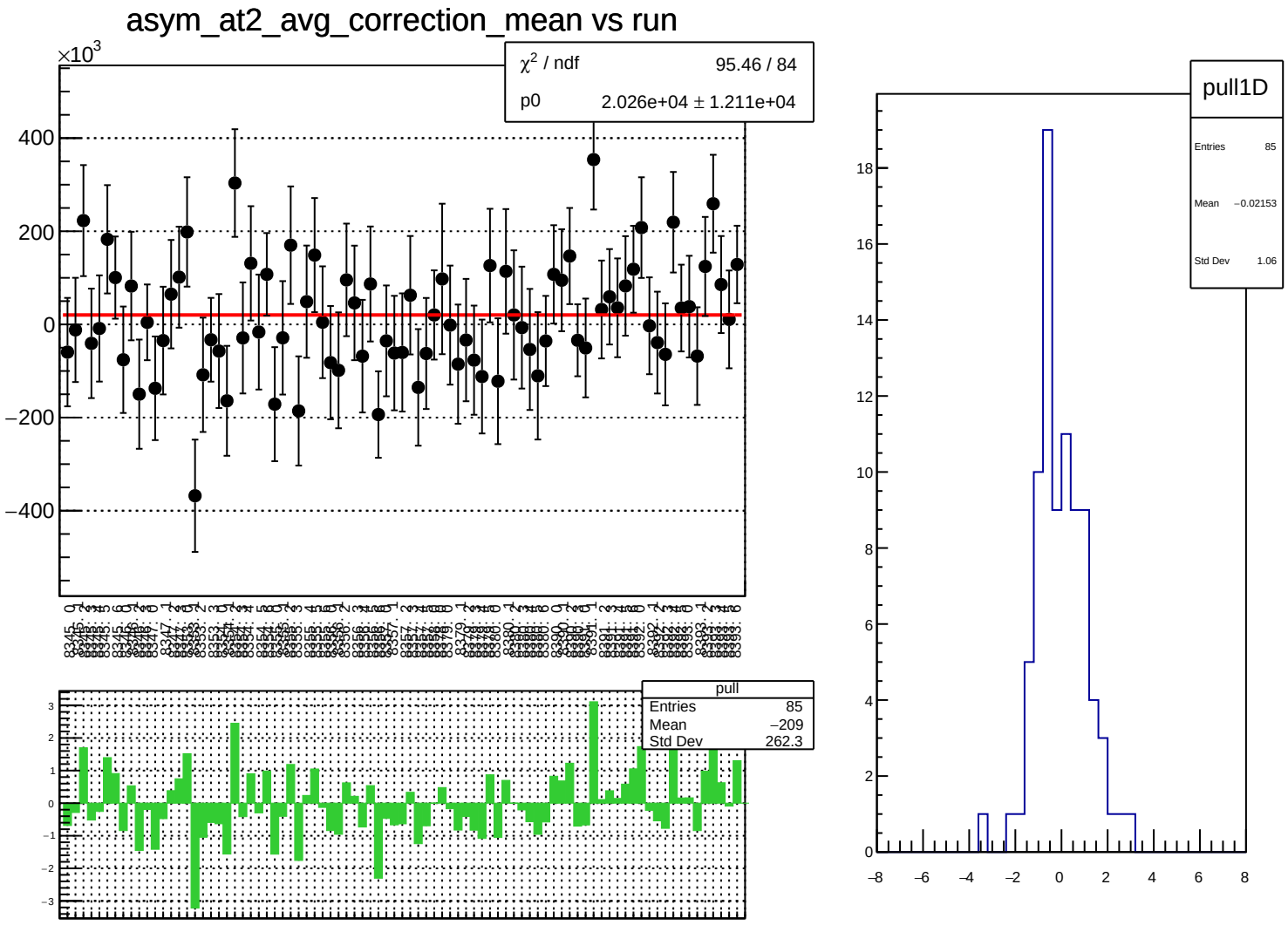

pull1D
Entries 85
Mean −0.02159
Std Dev 0.9934
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

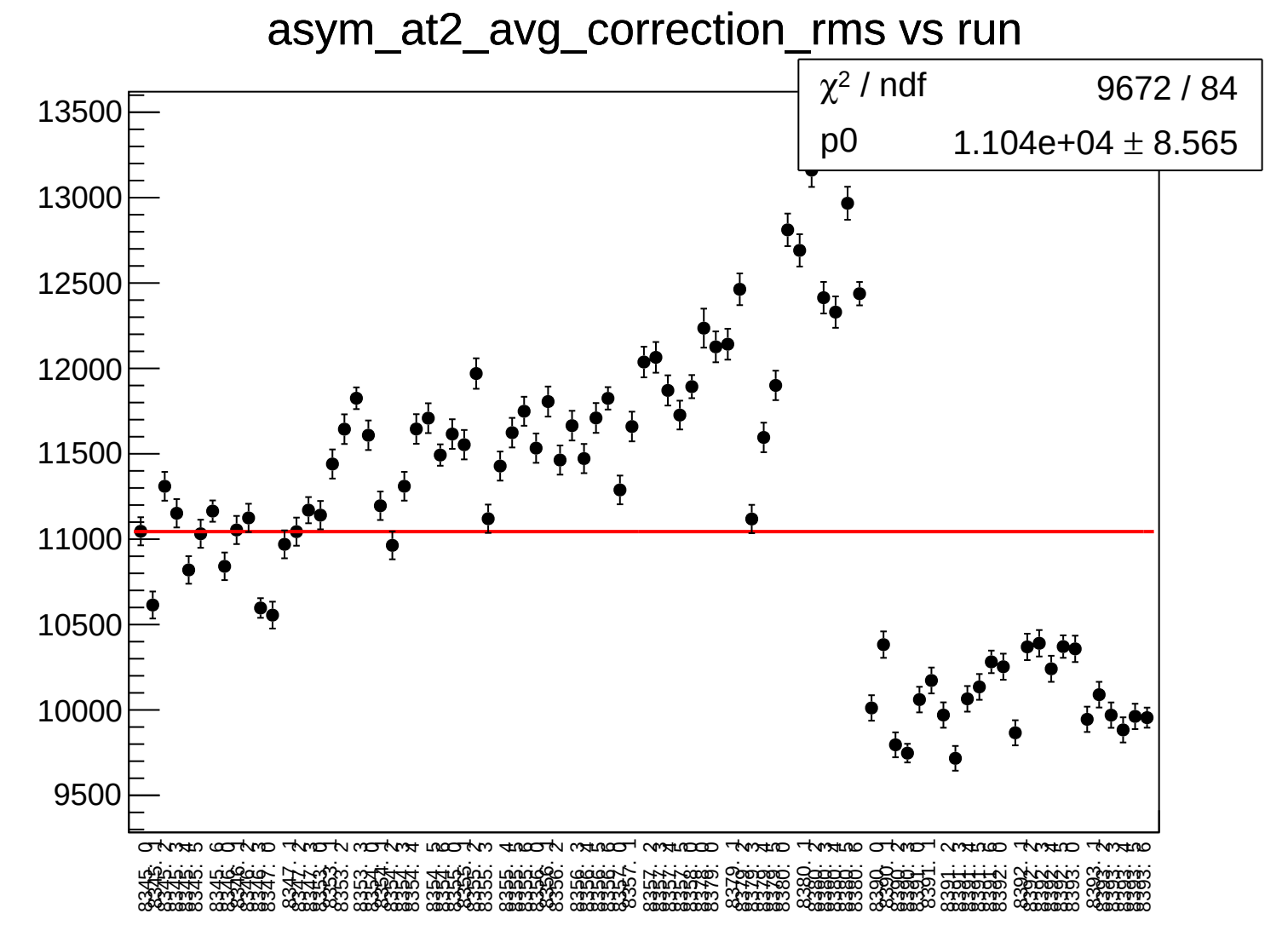

asym_at1_dd_rms vs run
χ² / ndf 768.1 / 84
p0 1923 ± 1.487
2000
1980
1960
1940
1920
1900
1880
1860
1840
1820

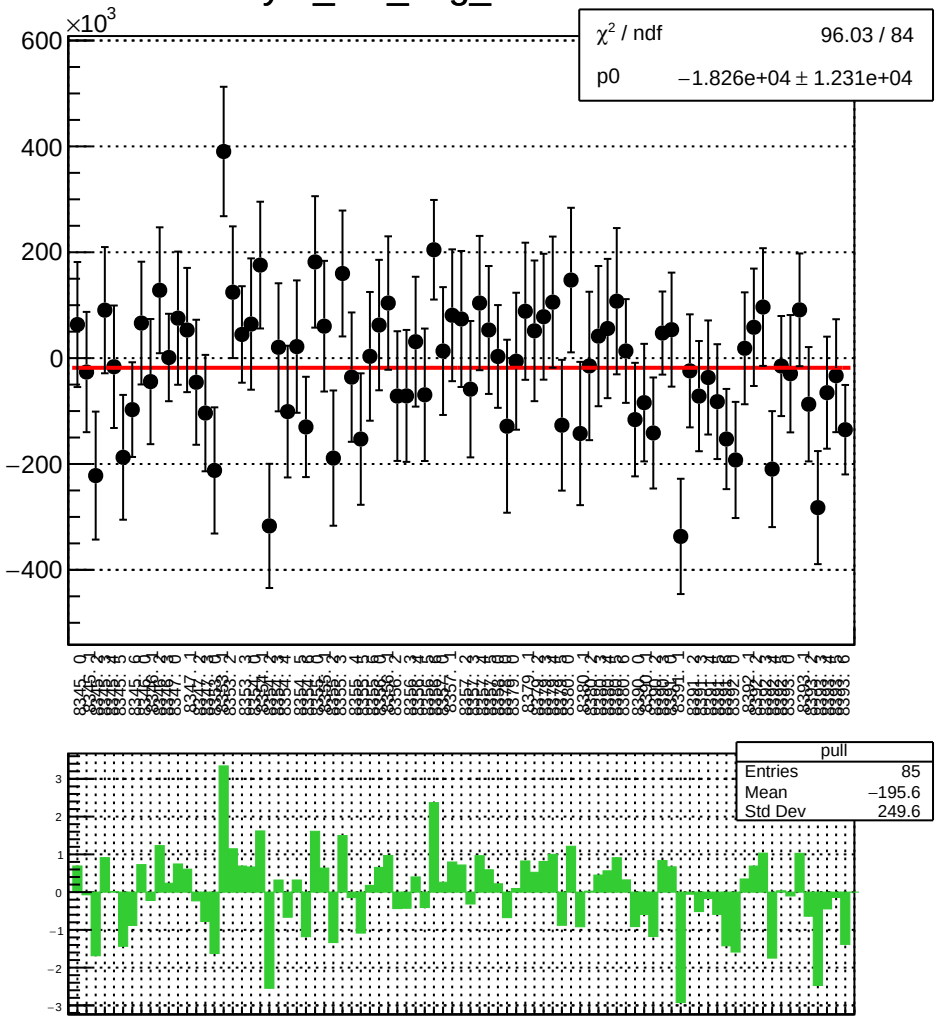

reg_asym_at2_avg_mean vs run
×10^3
χ² / ndf 82.39 / 84
p0 2982 ± 2074
pull
Entries 85
Mean −45.03
Std Dev 94.36

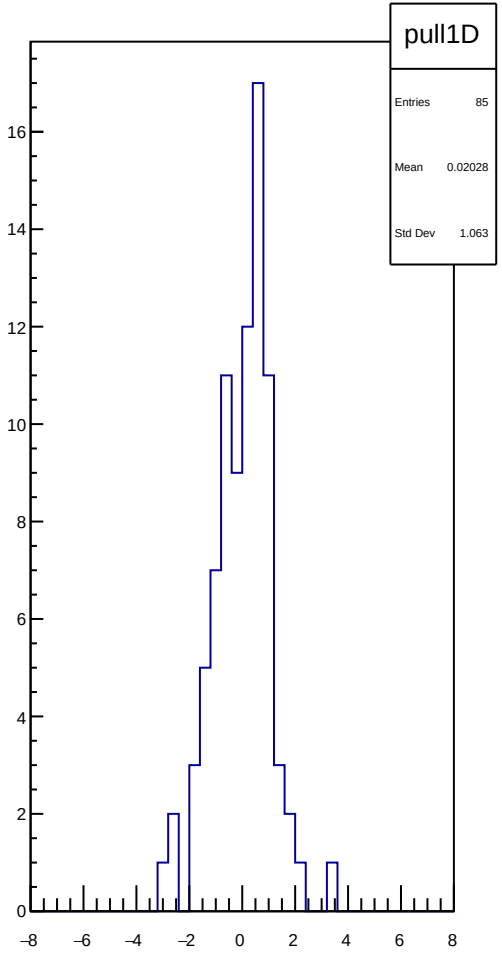

pull1D
Entries 85
Mean −0.01949
Std Dev 0.9843

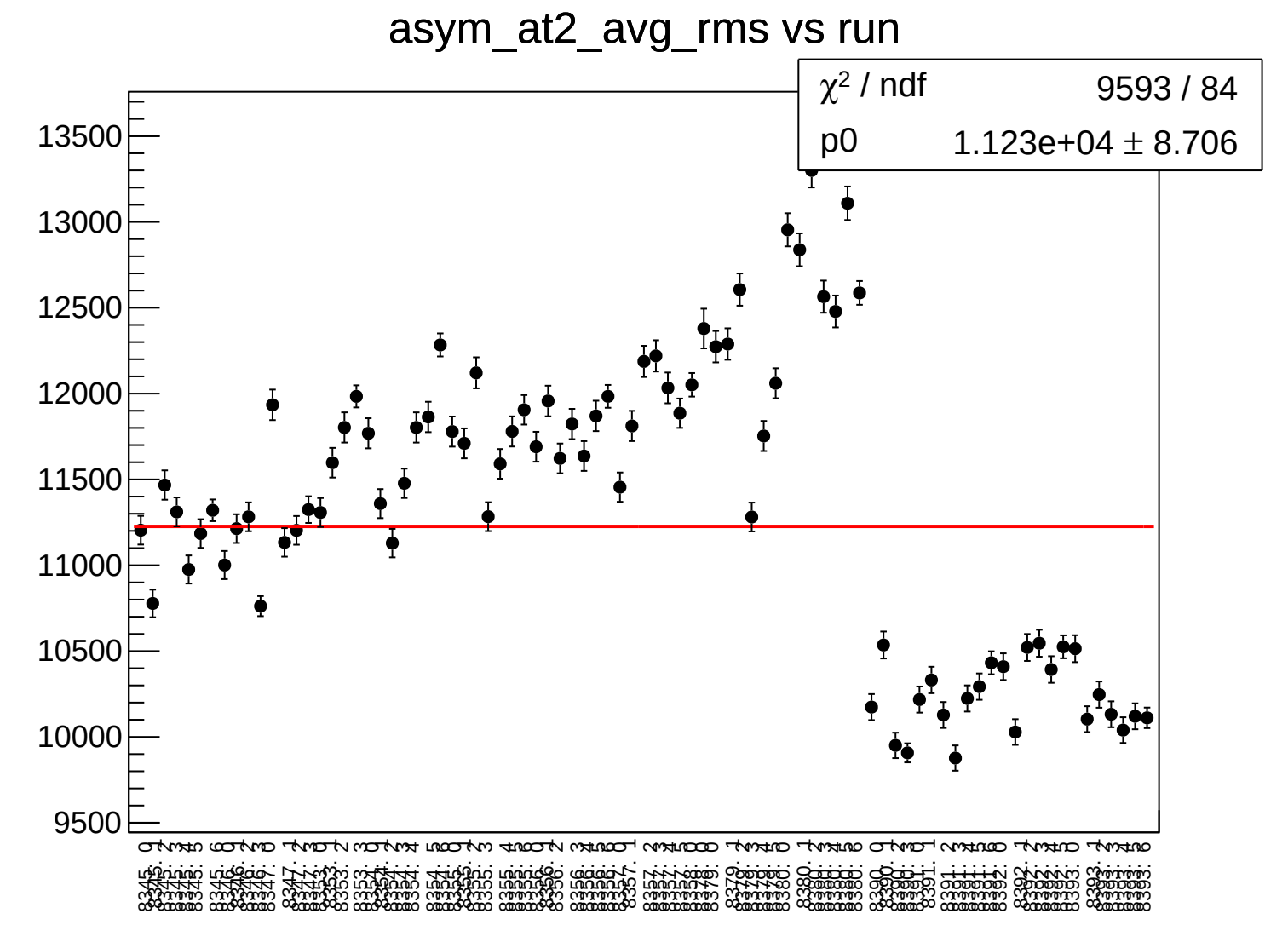

reg_asym_at2_avg_rms vs run
χ² / ndf 2.062e+04 / 84
p0 1885 ± 1.467
5500
5000
4500
4000
3500
3000
2500
2000
1500

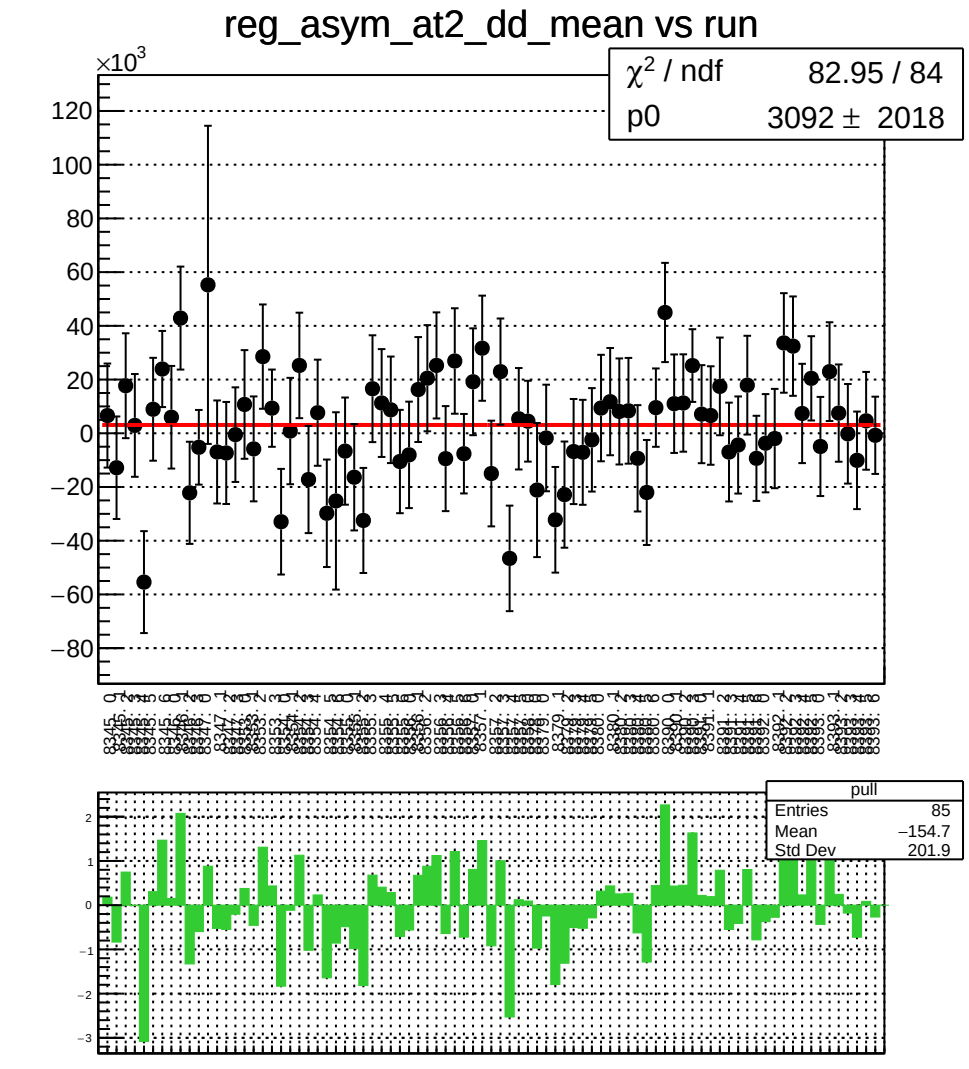

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 95.46 / 84
p0 2.026e+04 ± 1.211e+04
400
200
0
−200
−400
pull
Entries 85
Mean −209
Std Dev 262.3
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.02153
Std Dev 1.06
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

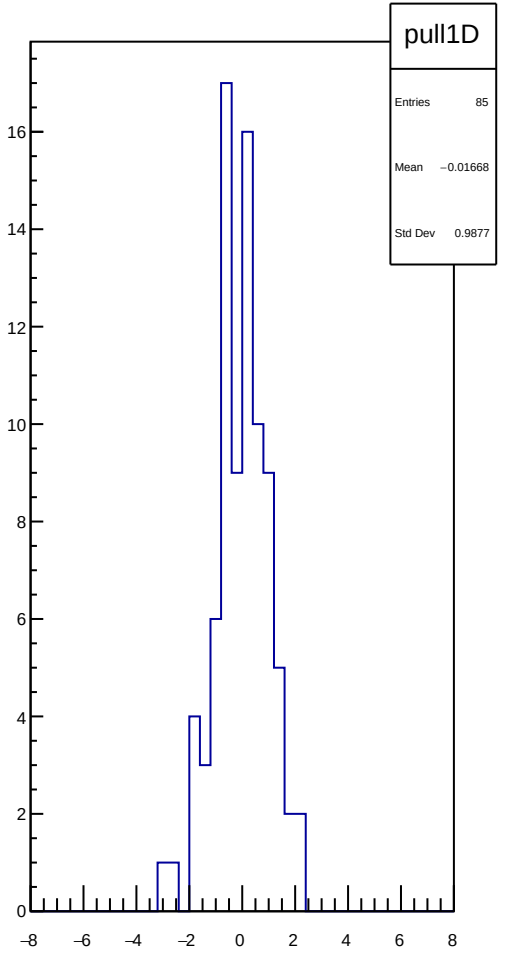

asym_at2_avg_correction_rms vs run
χ² / ndf 9672 / 84
p0 1.104e+04 ± 8.565
13500
13000
12500
12000
11500
11000
10500
10000
9500

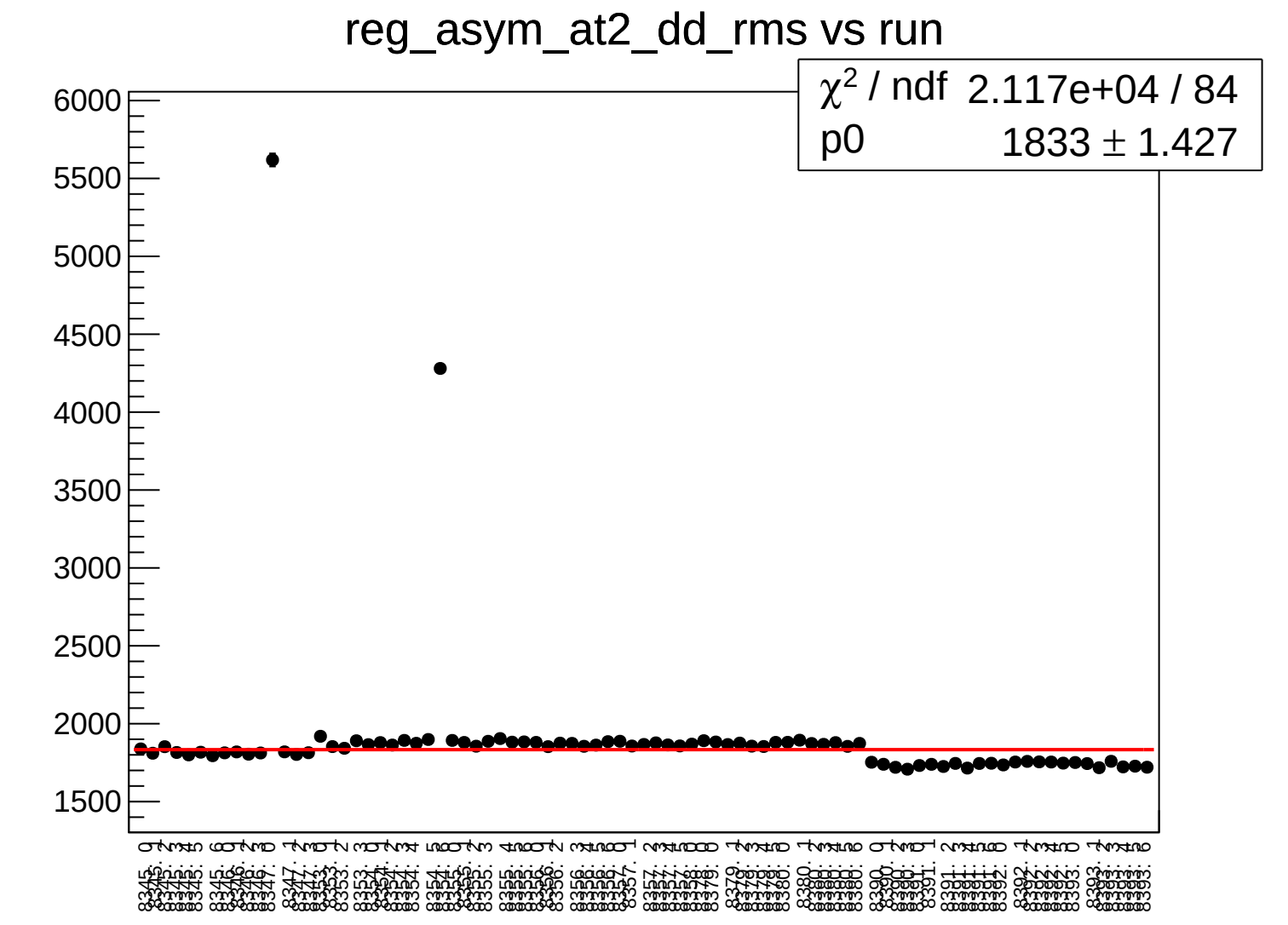

asym_at2_avg_mean vs run
×10^3
600
400
200
0
−200
−400
χ² / ndf 96.03 / 84
p0 −1.826e+04 ± 1.231e+04
pull
Entries 85
Mean −195.6
Std Dev 249.6
3
2
1
0
−1
−2
−3

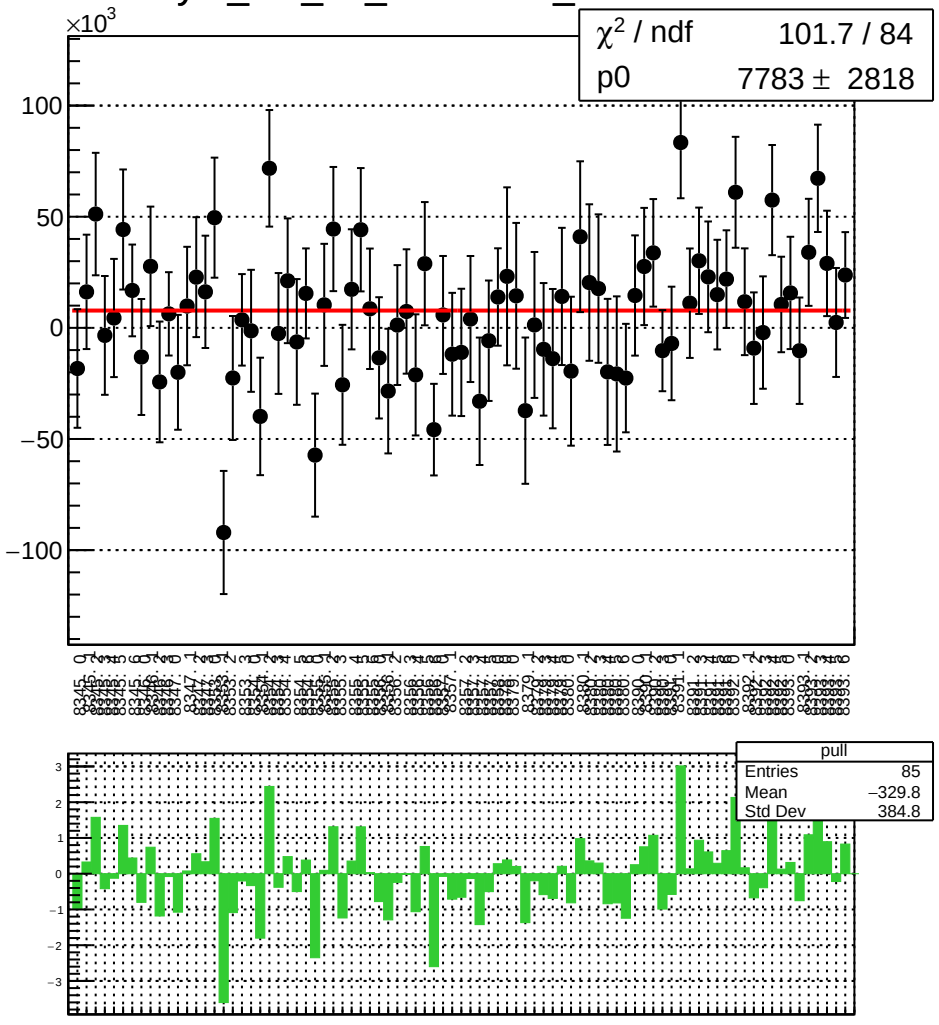

pull1D
Entries 85
Mean 0.02028
Std Dev 1.063
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

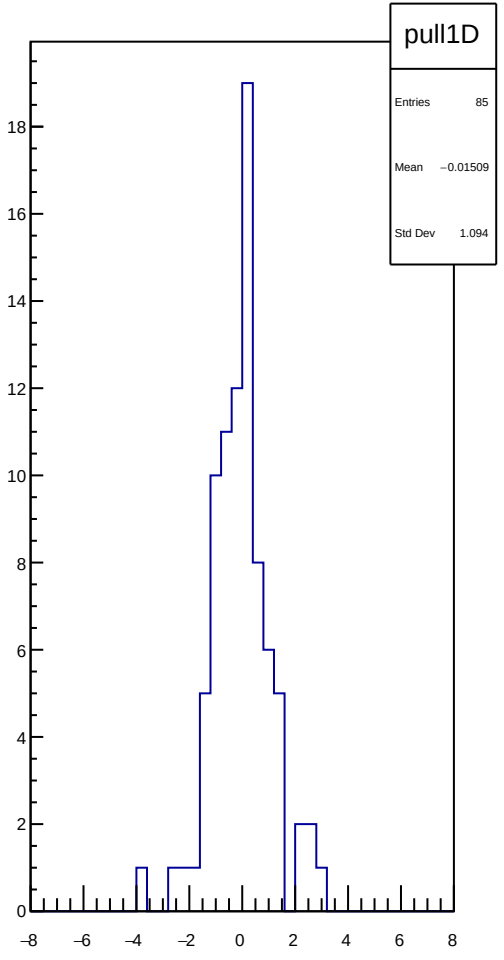

asym_at2_avg_rms vs run
χ² / ndf 9593 / 84
p0 1.123e+04 ± 8.706
13500
13000
12500
12000
11500
11000
10500
10000
9500

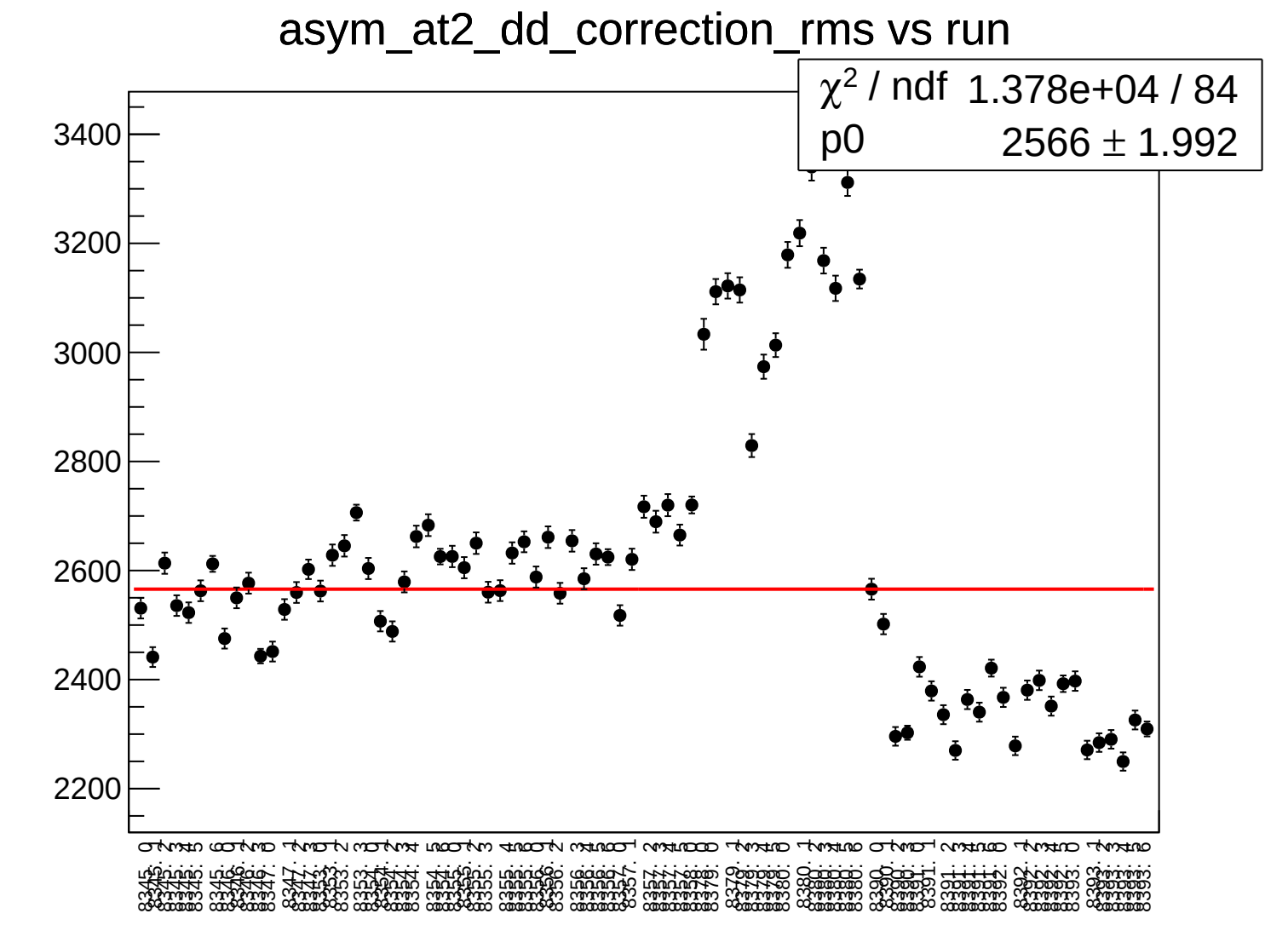

reg_asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 82.95 / 84
p0 3092 ± 2018
pull
Entries 85
Mean −154.7
Std Dev 201.9

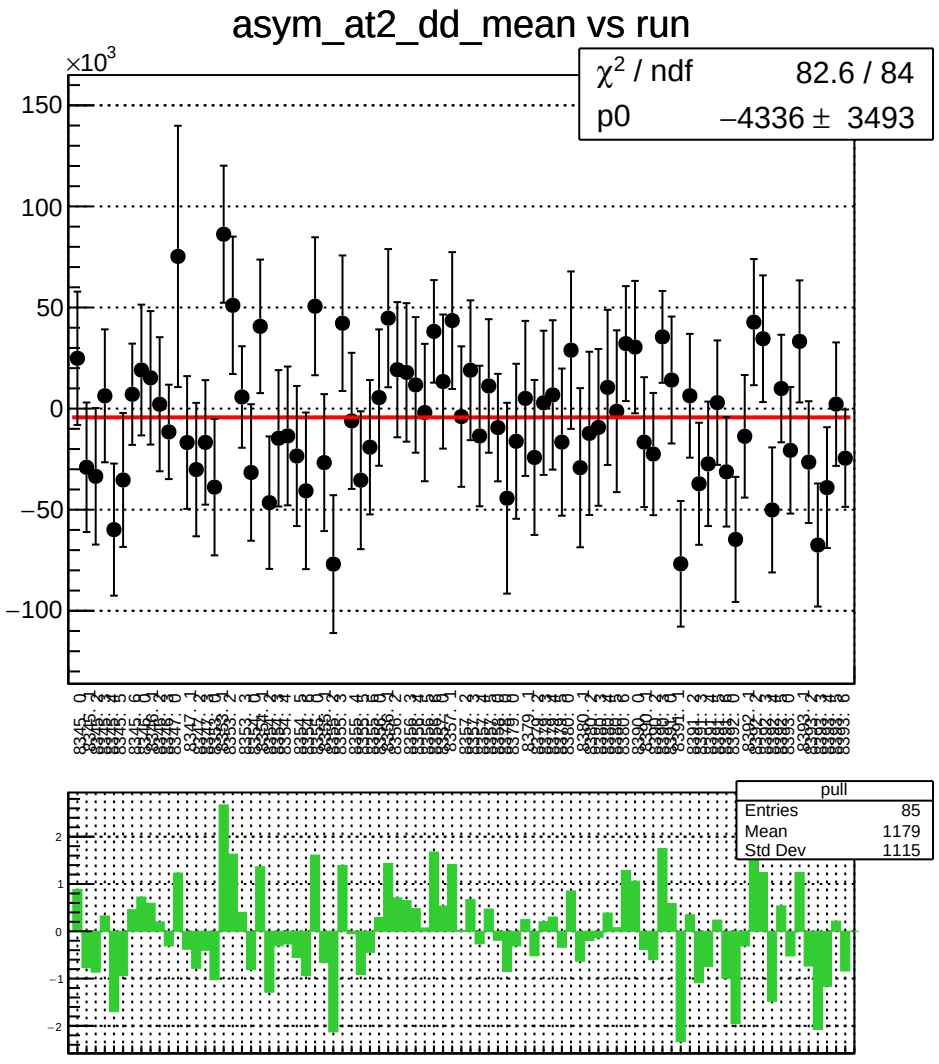

pull1D
Entries 85
Mean −0.01668
Std Dev 0.9877

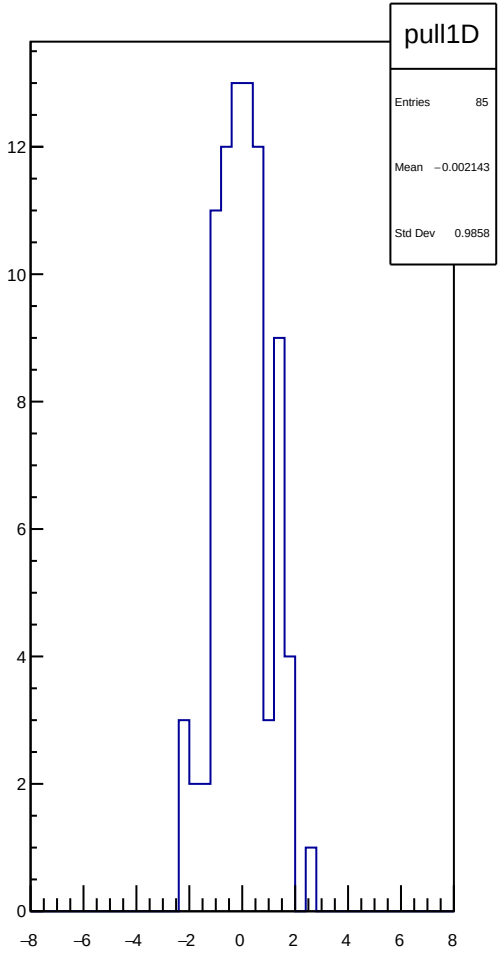

reg_asym_at2_dd_rms vs run
χ² / ndf 2.117e+04 / 84
p0 1833 ± 1.427
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

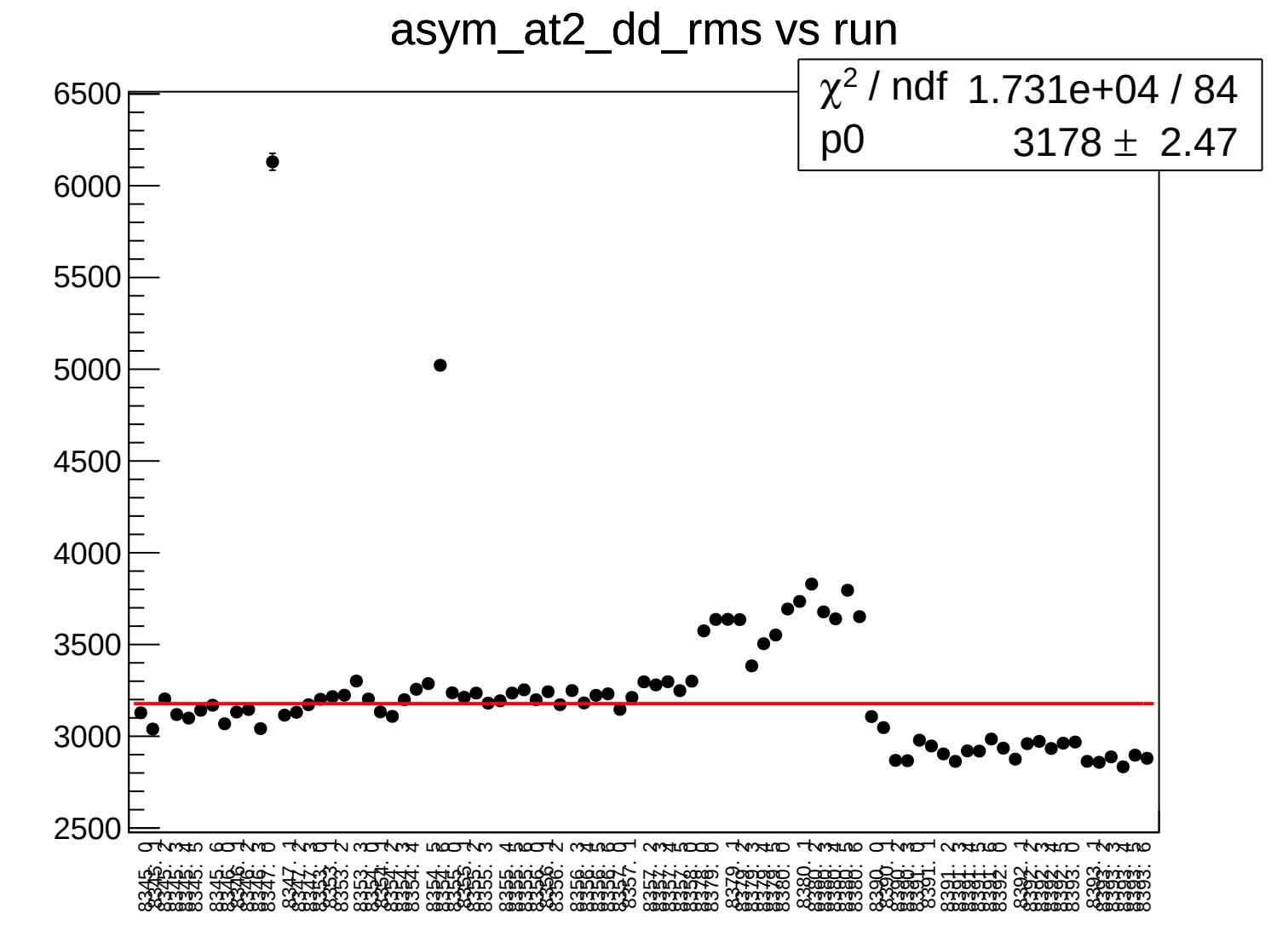

asym_at2_dd_correction_mean vs run
χ² / ndf 101.7 / 84
p0 7783 ± 2818
pull
Entries 85
Mean −329.8
Std Dev 384.8

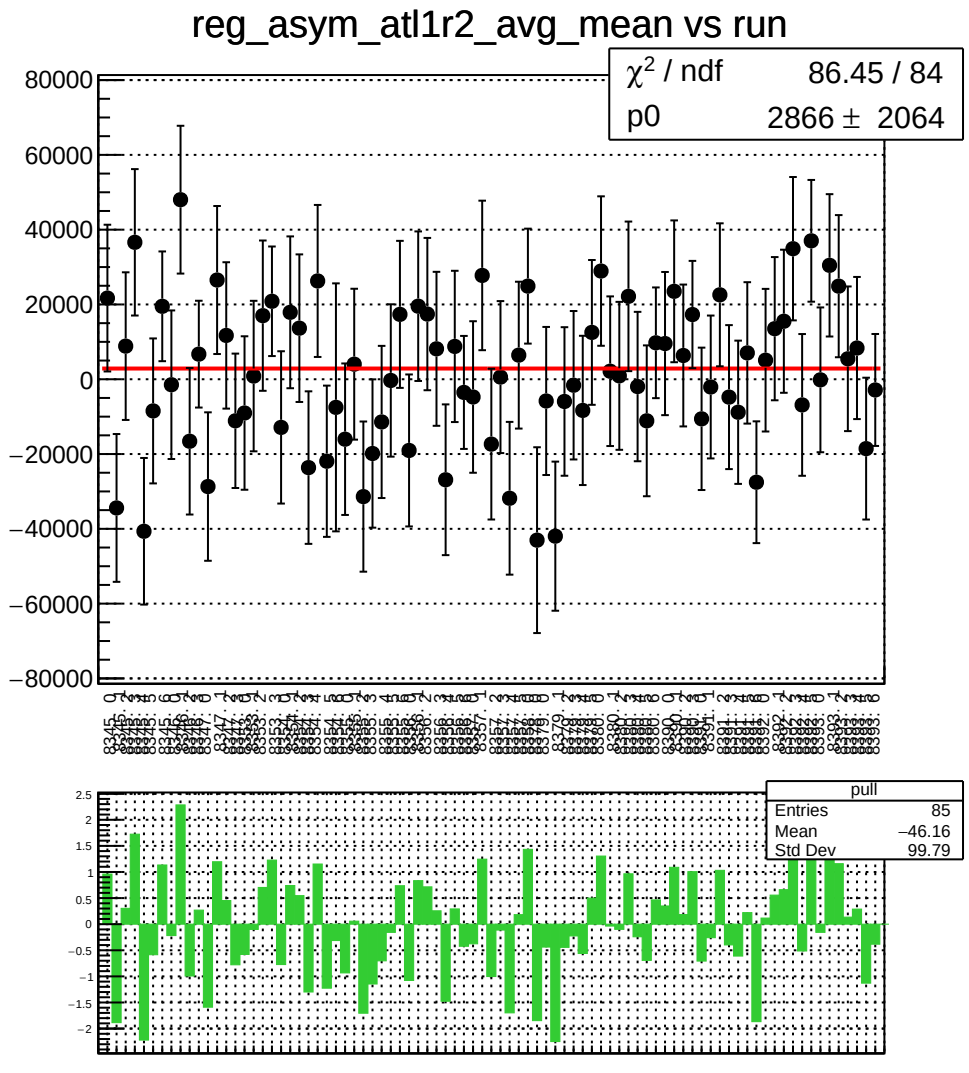

pull1D
Entries 85
Mean −0.01509
Std Dev 1.094

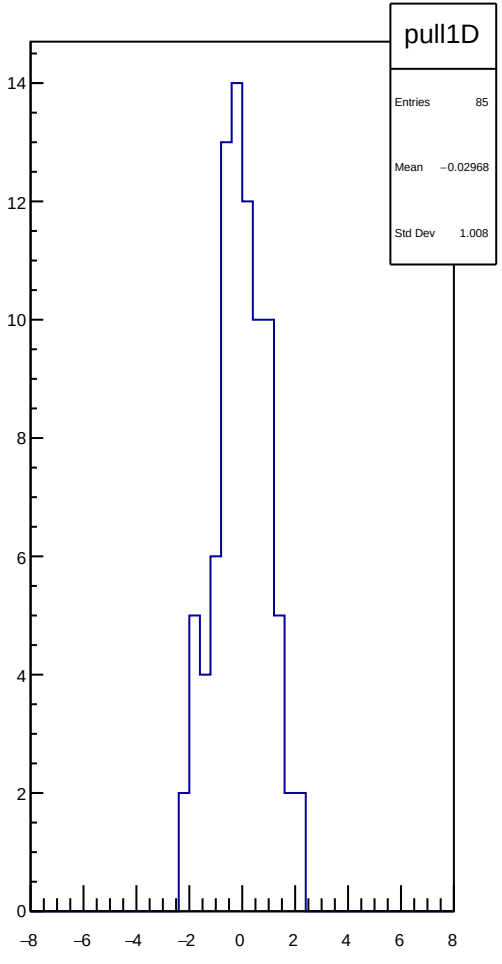

asym_at2_dd_correction_rms vs run
χ² / ndf 1.378e+04 / 84
p0 2566 ± 1.992
3400
3200
3000
2800
2600
2400
2200

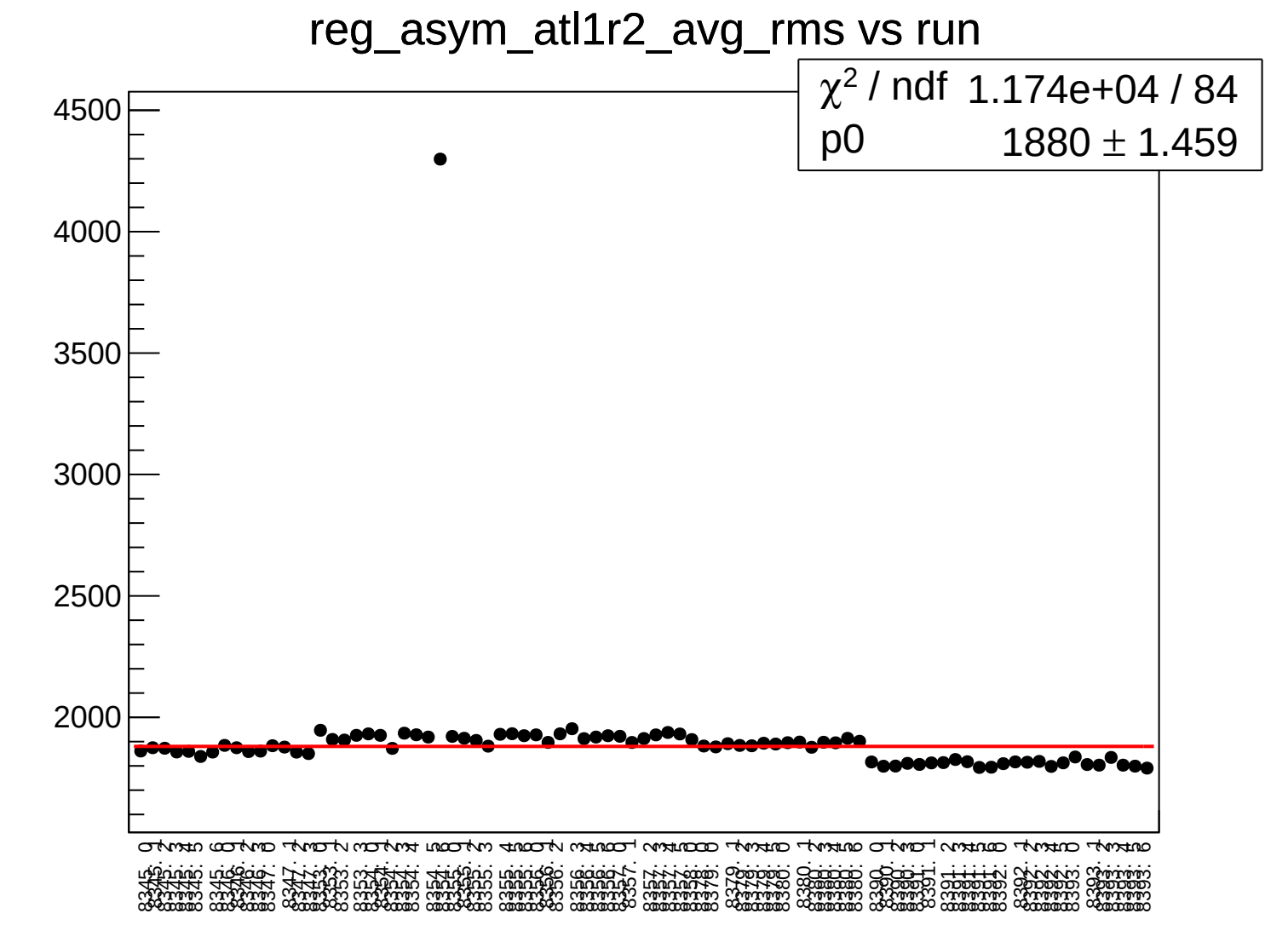

asym_at2_dd_mean vs run
×10^3
χ² / ndf 82.6 / 84
p0 −4336 ± 3493
150
100
50
0
−50
−100
pull
Entries 85
Mean 1179
Std Dev 1115
2
1
0
−1
−2

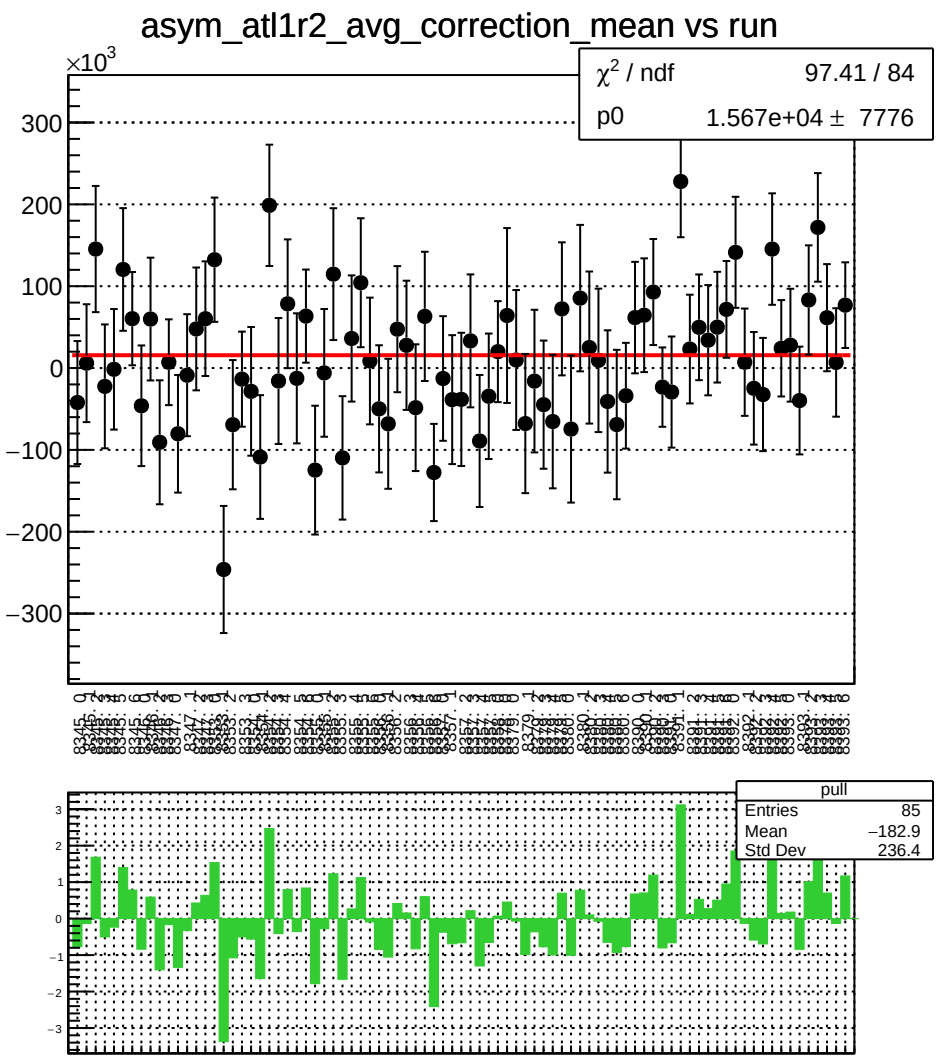

pull1D
Entries 85
Mean −0.002143
Std Dev 0.9858
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

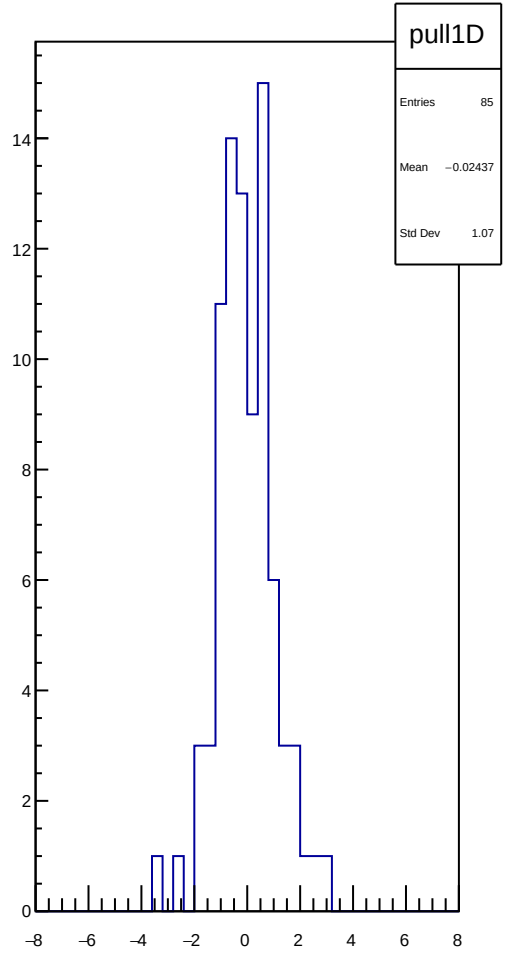

asym_at2_dd_rms vs run
χ^2 / ndf 1.731e+04 / 84
p0 3178 ± 2.47
6500
6000
5500
5000
4500
4000
3500
3000
2500

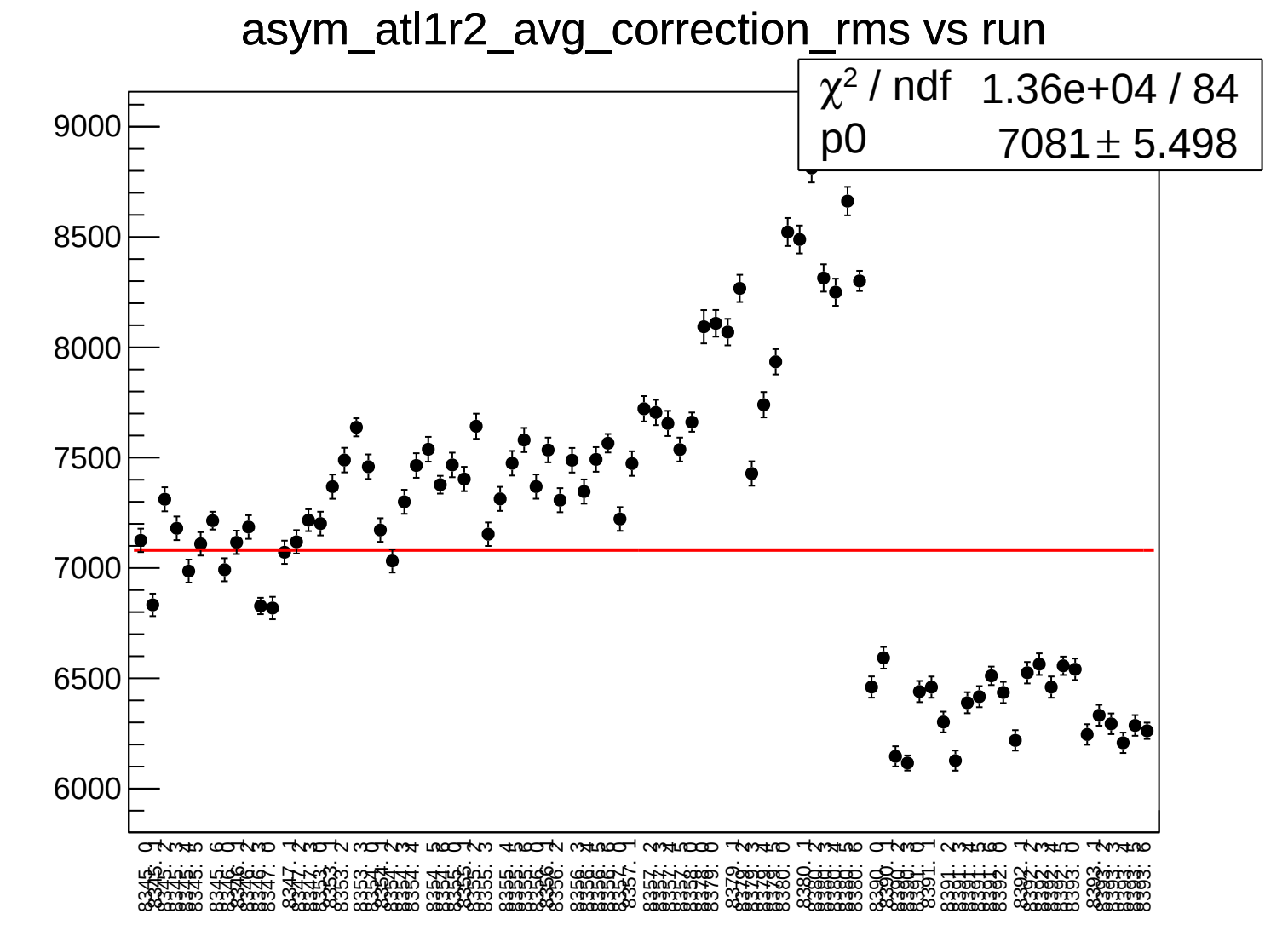

reg_asym_atl1r2_avg_mean vs run
χ² / ndf 86.45 / 84
p0 2866 ± 2064
pull
Entries 85
Mean −46.16
Std Dev 99.79

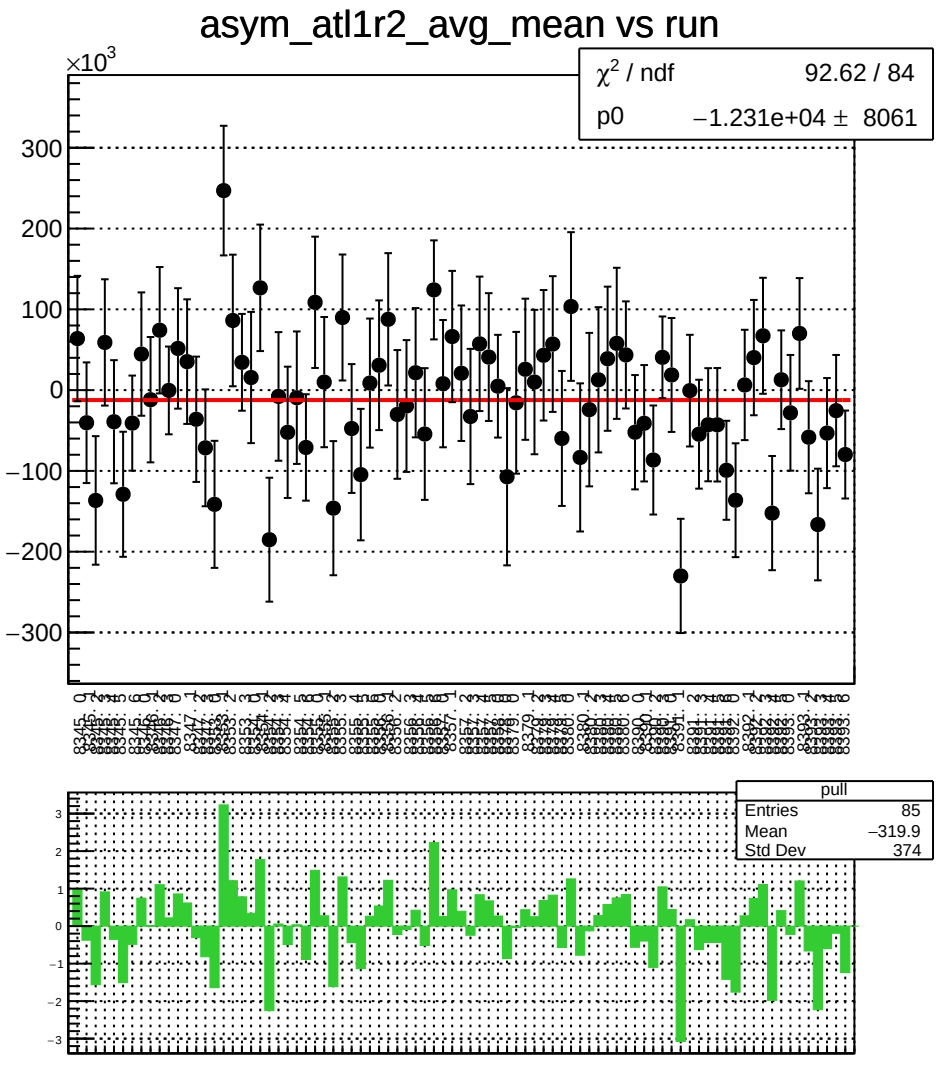

pull1D
Entries 85
Mean −0.02968
Std Dev 1.008

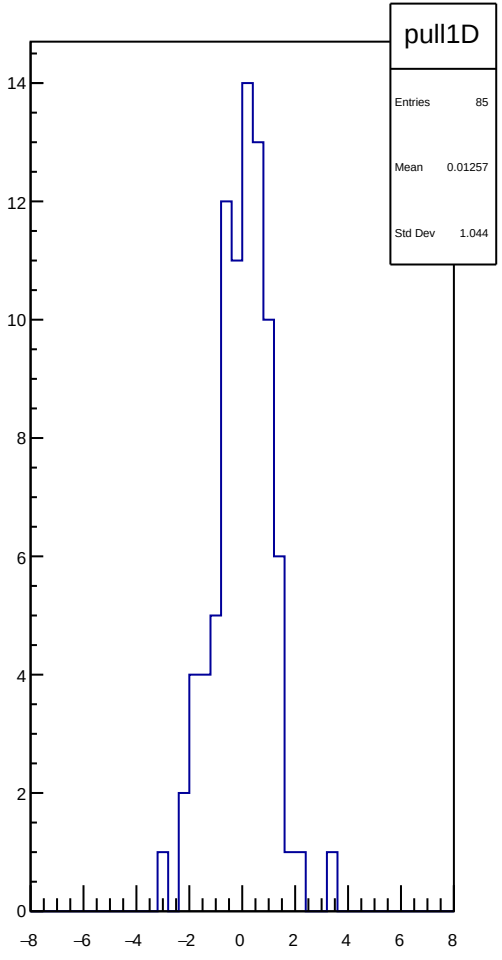

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 1.174e+04 / 84
p0 1880 ± 1.459
4500
4000
3500
3000
2500
2000

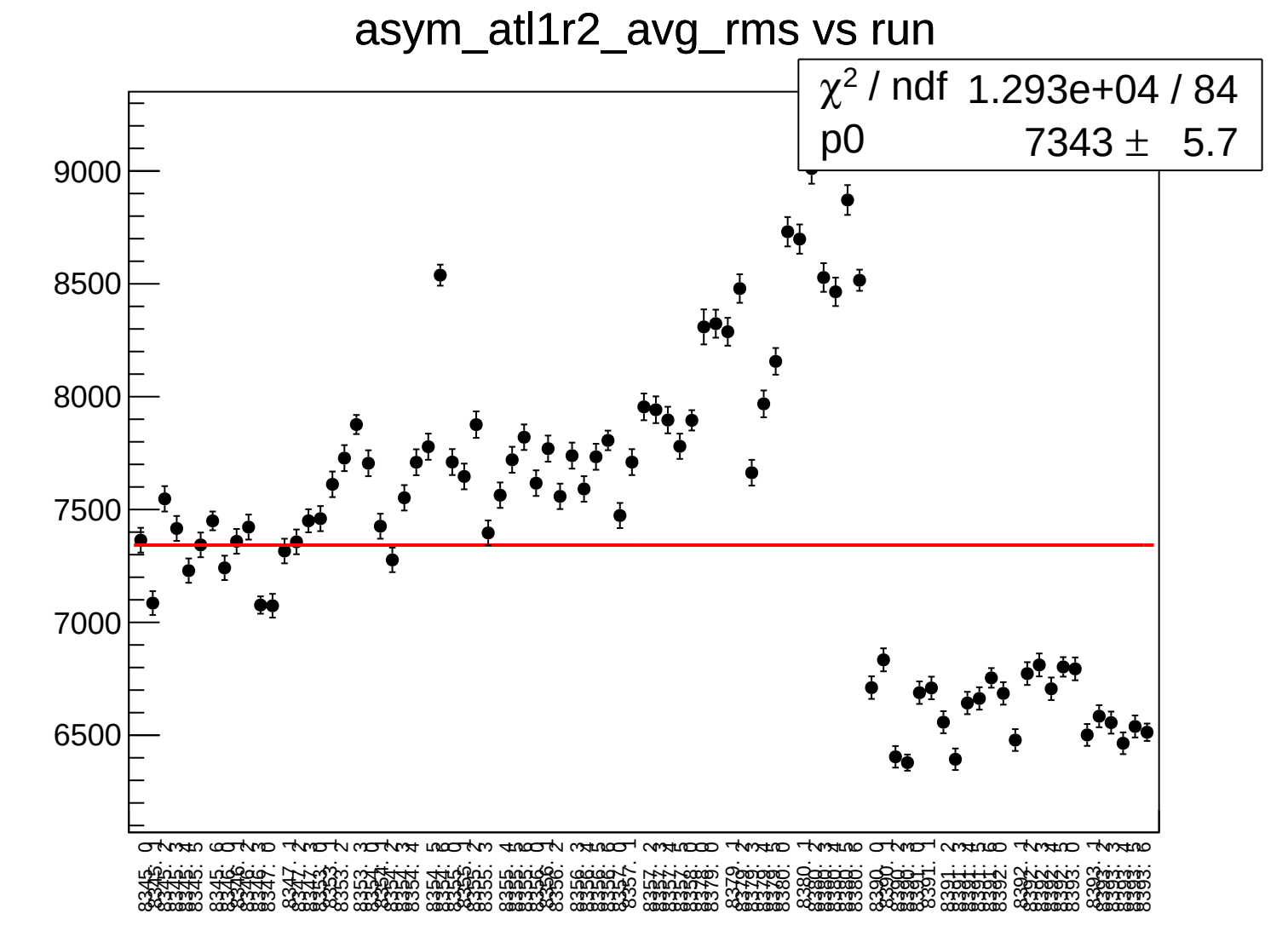

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 97.41 / 84
p0 1.567e+04 ± 7776
300
200
100
0
−100
−200
−300
pull
Entries 85
Mean −182.9
Std Dev 236.4
3
2
1
0
−1
−2
−3

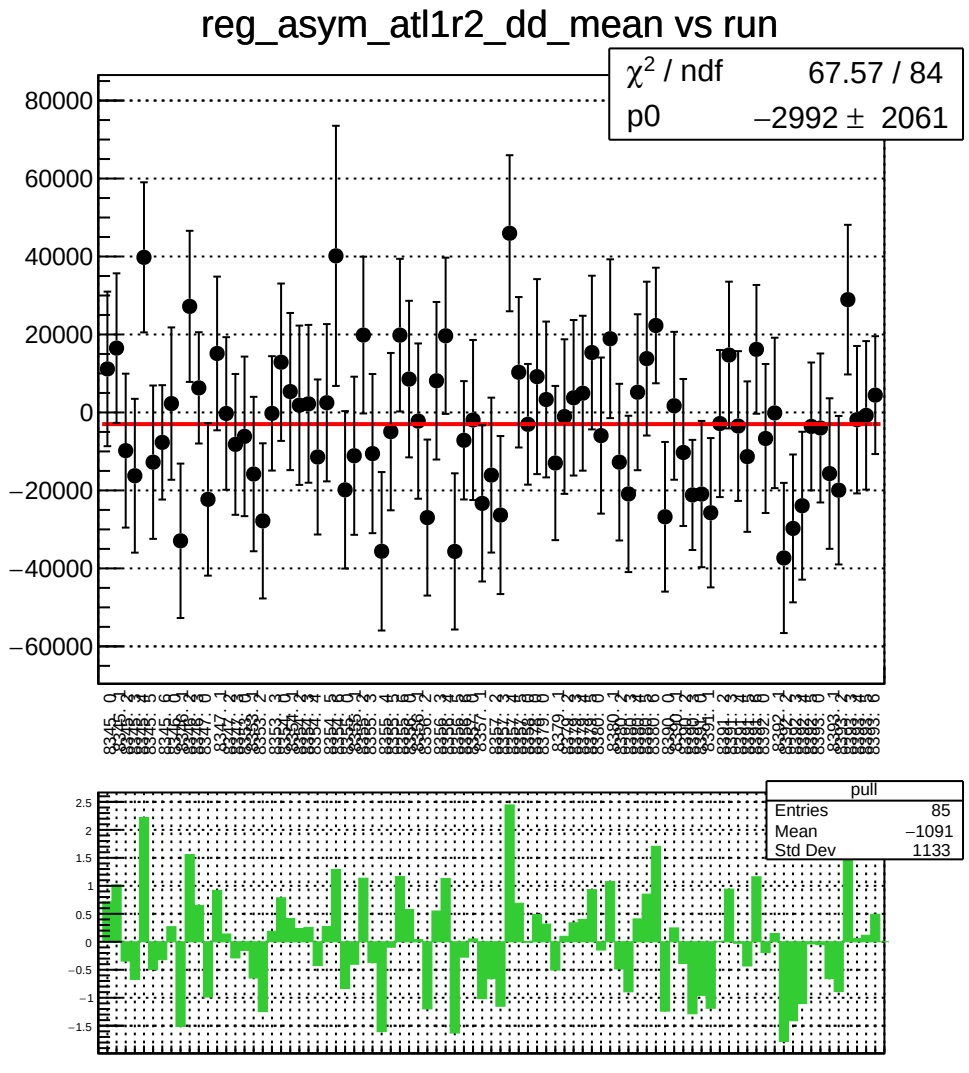

pull1D
Entries 85
Mean −0.02437
Std Dev 1.07
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

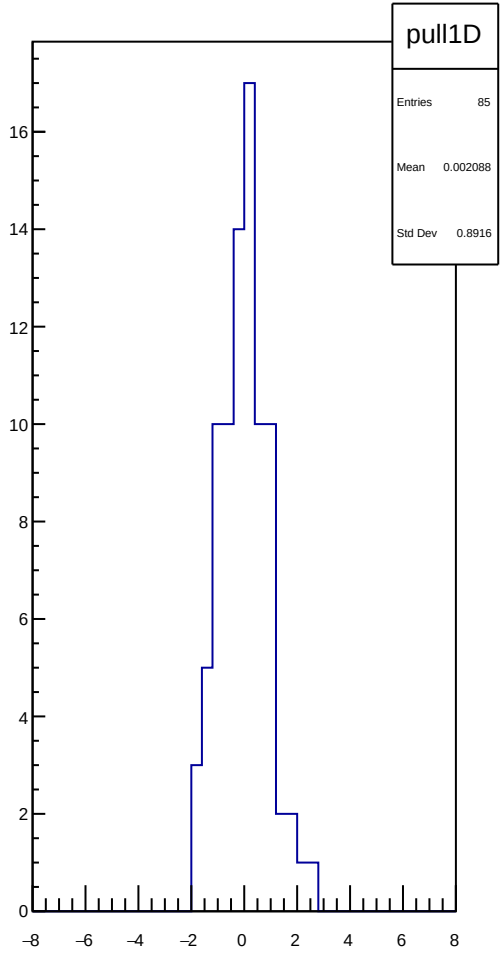

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 1.36e+04 / 84
p0 7081 ± 5.498
9000
8500
8000
7500
7000
6500
6000

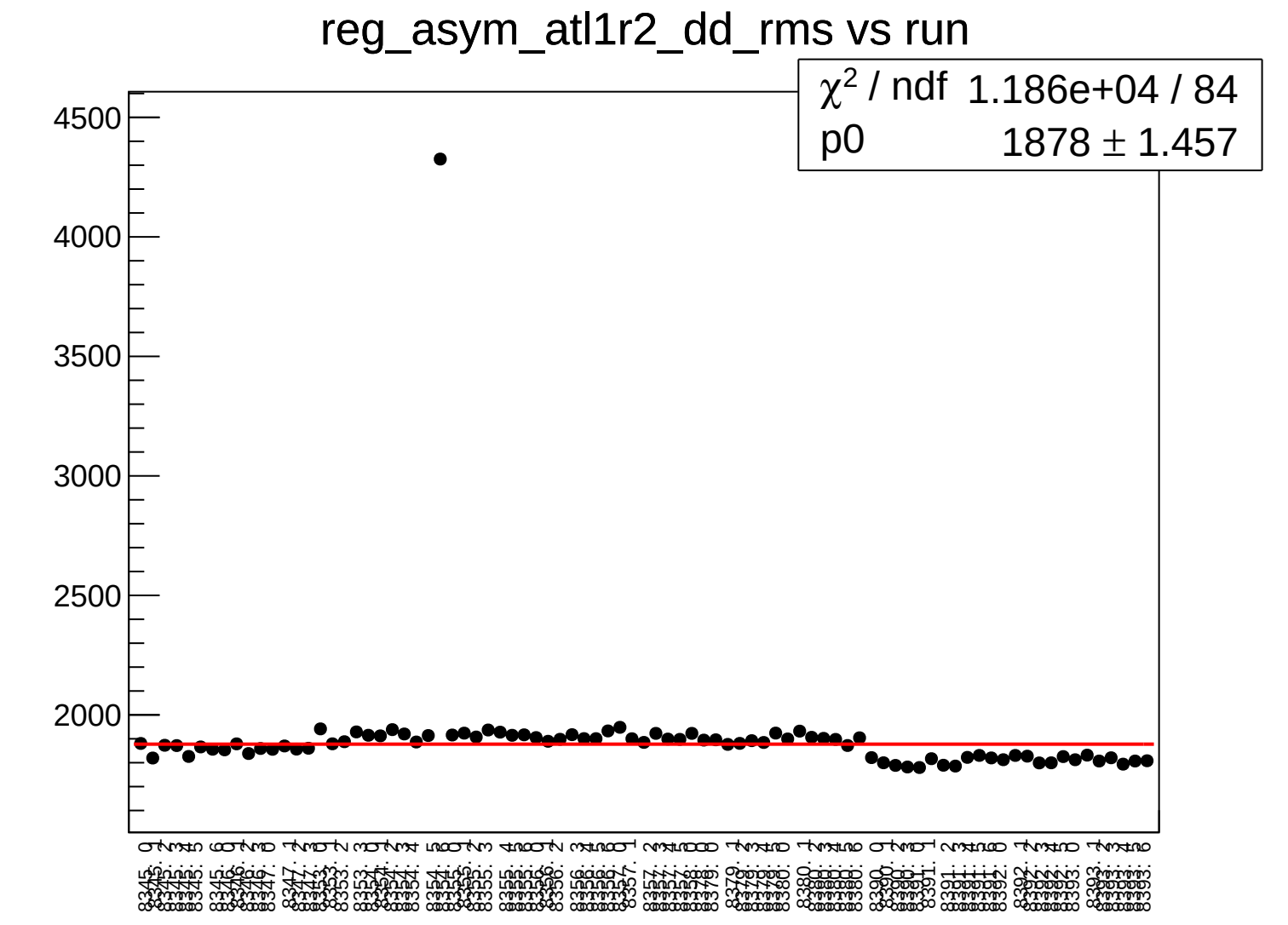

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 92.62 / 84
p0 −1.231e+04 ± 8061
300
200
100
0
−100
−200
−300
pull
Entries 85
Mean −319.9
Std Dev 374
3
2
1
0
−1
−2
−3

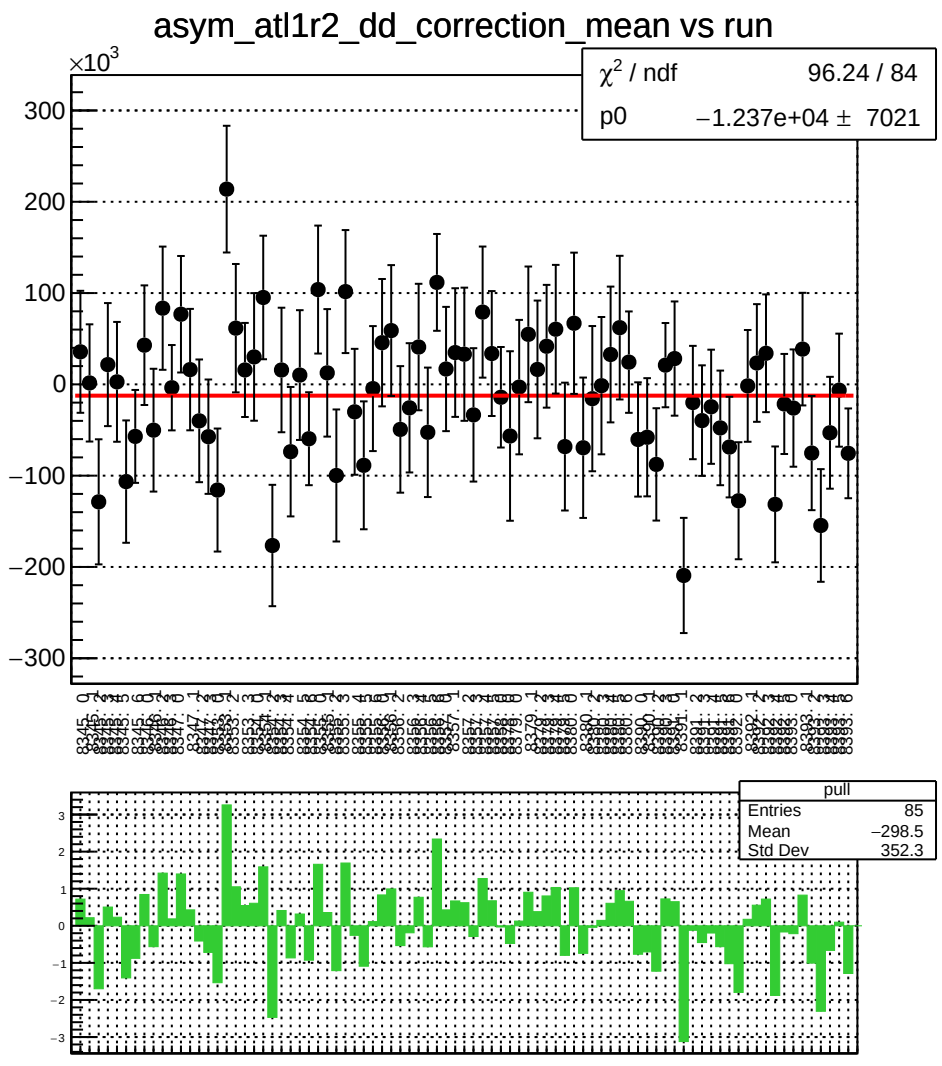

pull1D
Entries 85
Mean 0.01257
Std Dev 1.044
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

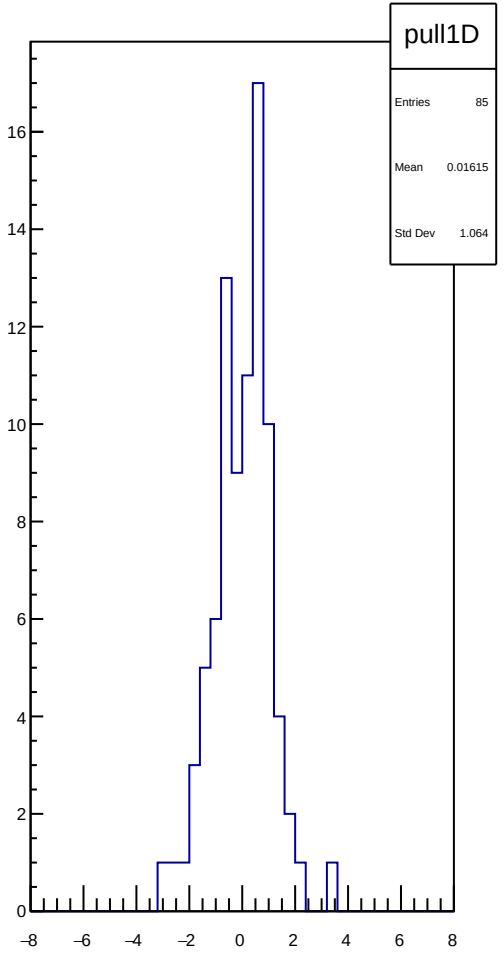

asym_atl1r2_avg_rms vs run
χ² / ndf 1.293e+04 / 84
p0 7343 ± 5.7
9000
8500
8000
7500
7000
6500

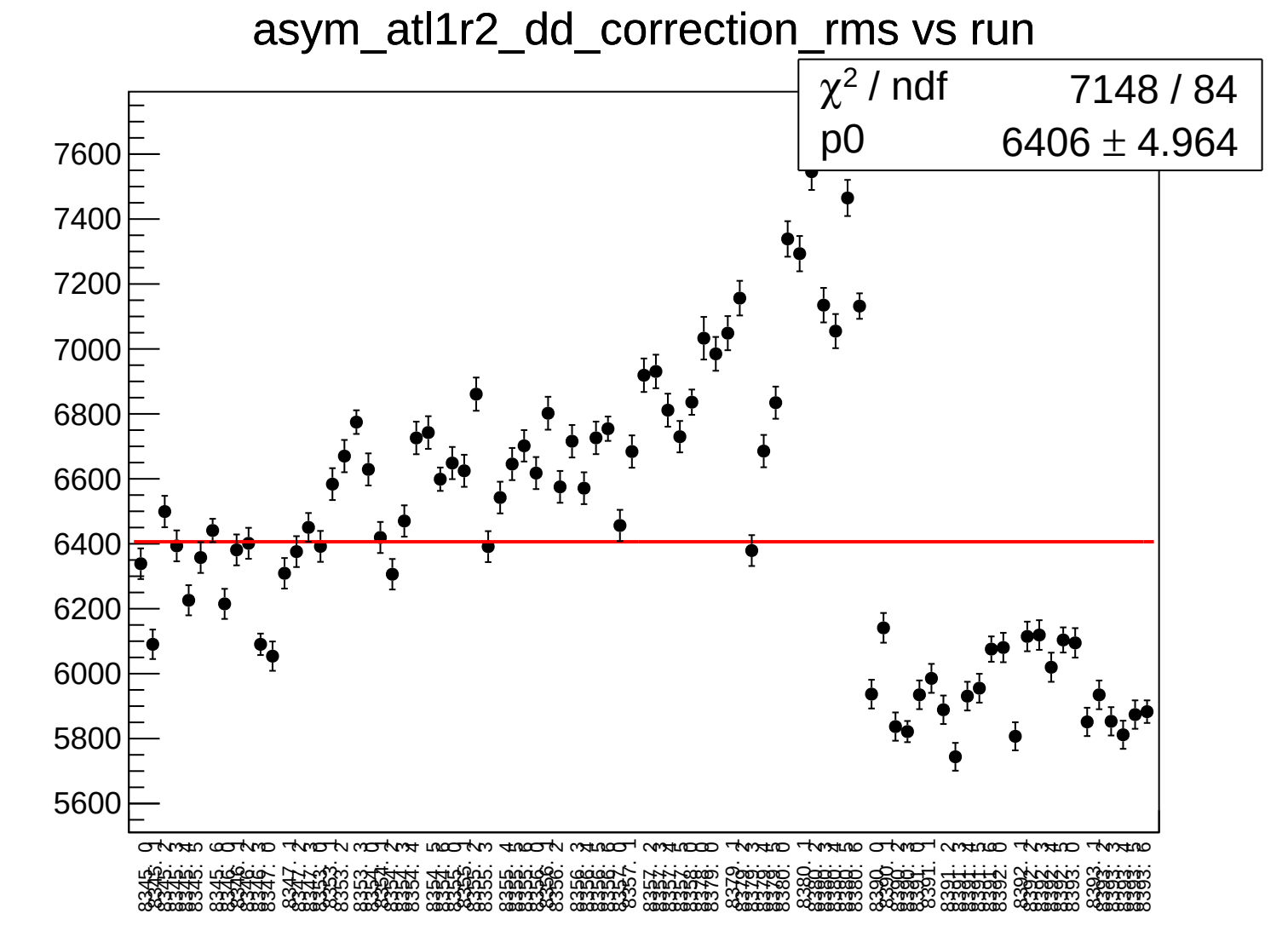

reg_asym_atl1r2_dd_mean vs run
χ² / ndf 67.57 / 84
p0 −2992 ± 2061
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −1091
Std Dev 1133
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

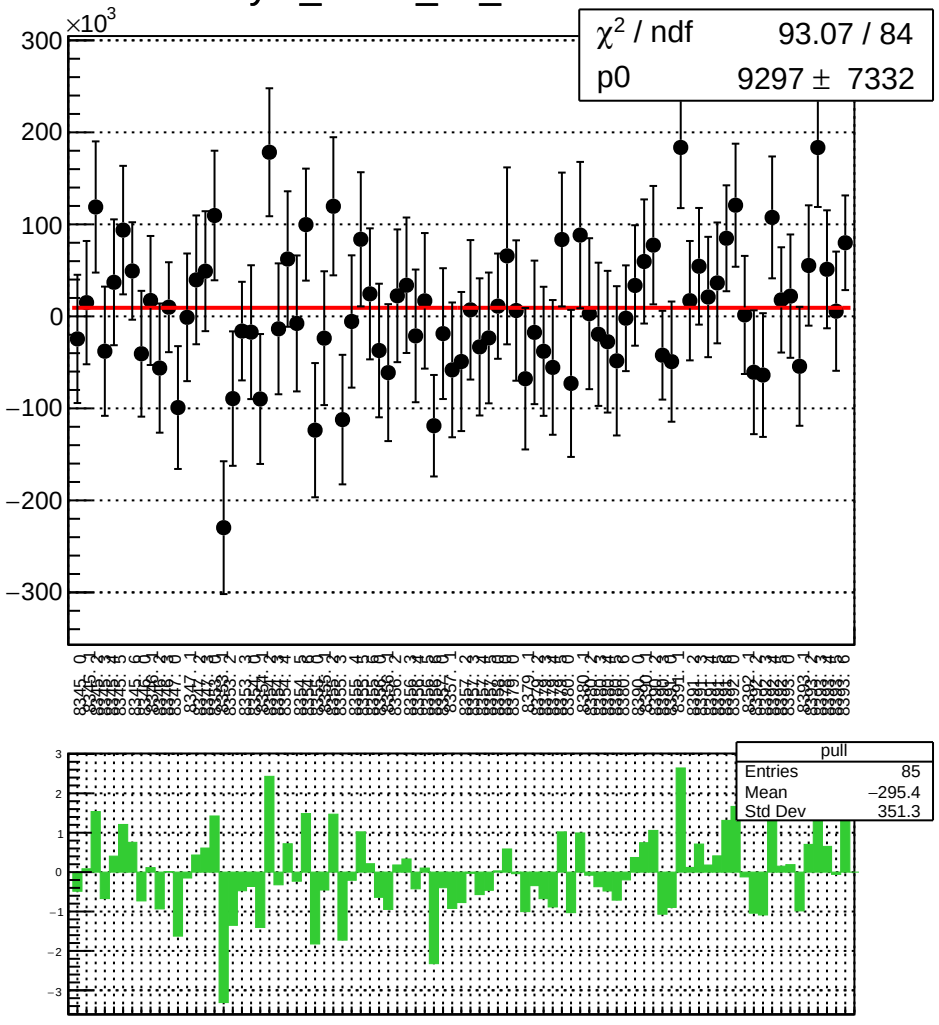

pull1D
Entries 85
Mean 0.002088
Std Dev 0.8916
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

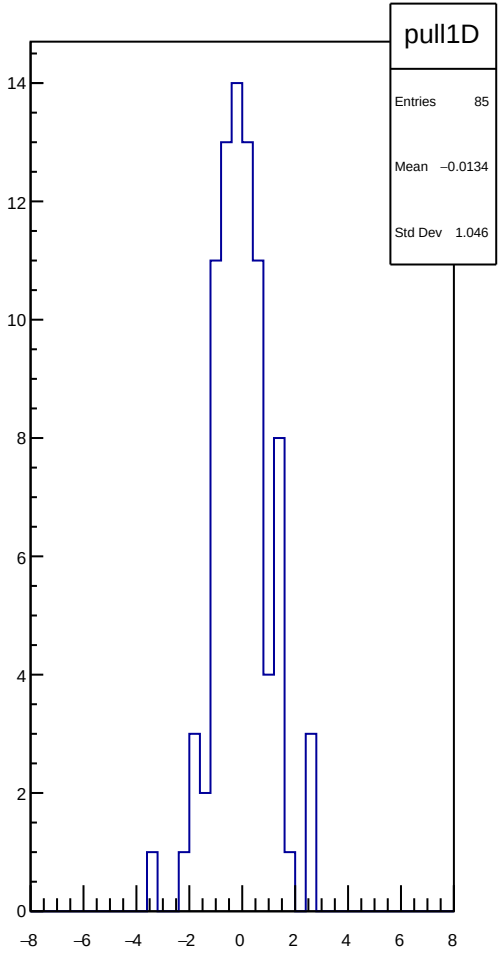

reg_asym_atl1r2_dd_rms vs run
χ^2 / ndf 1.186e+04 / 84
p0 1878 ± 1.457
4500
4000
3500
3000
2500
2000

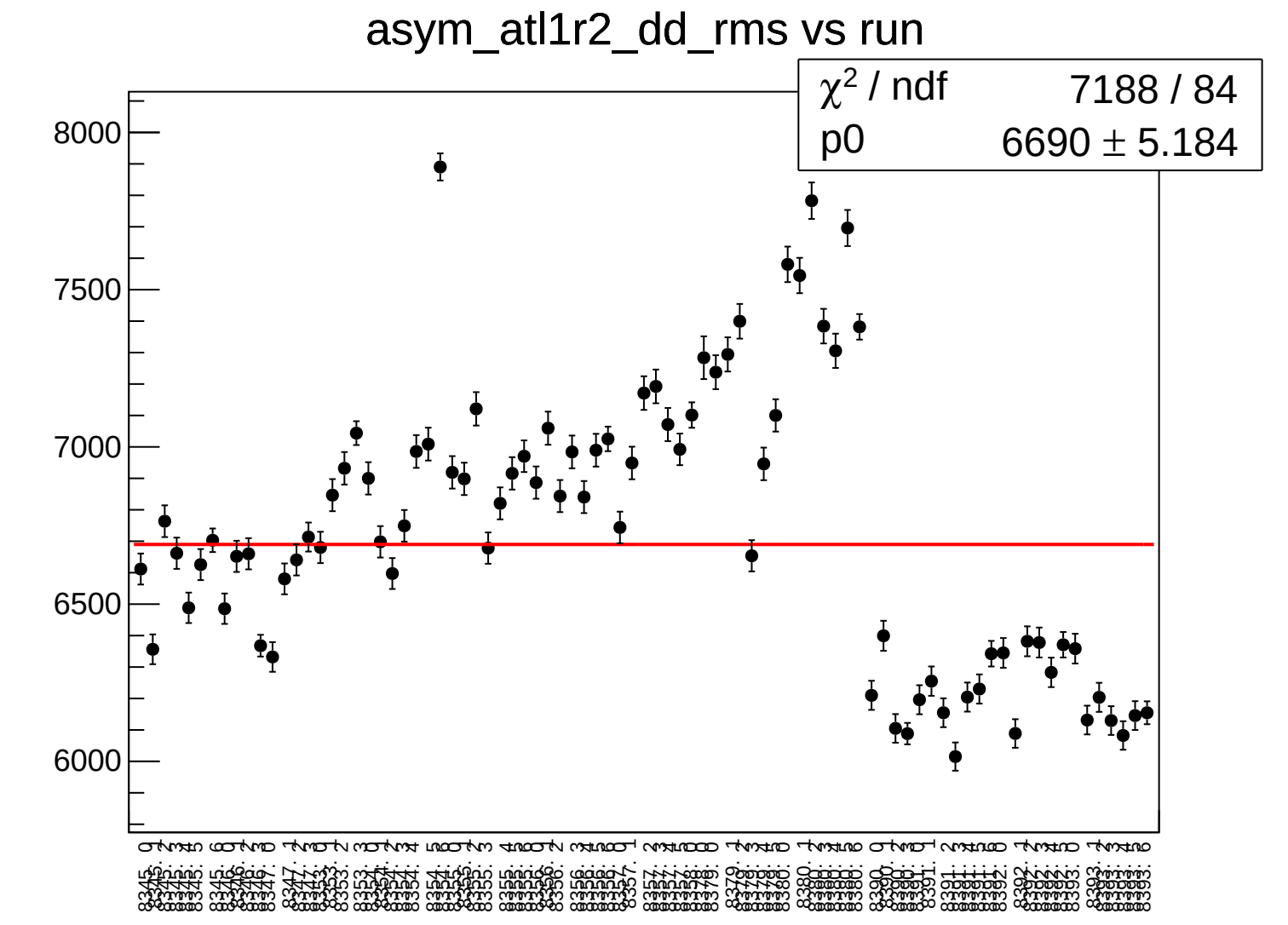

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 96.24 / 84
p0 −1.237e+04 ± 7021
pull
Entries 85
Mean −298.5
Std Dev 352.3

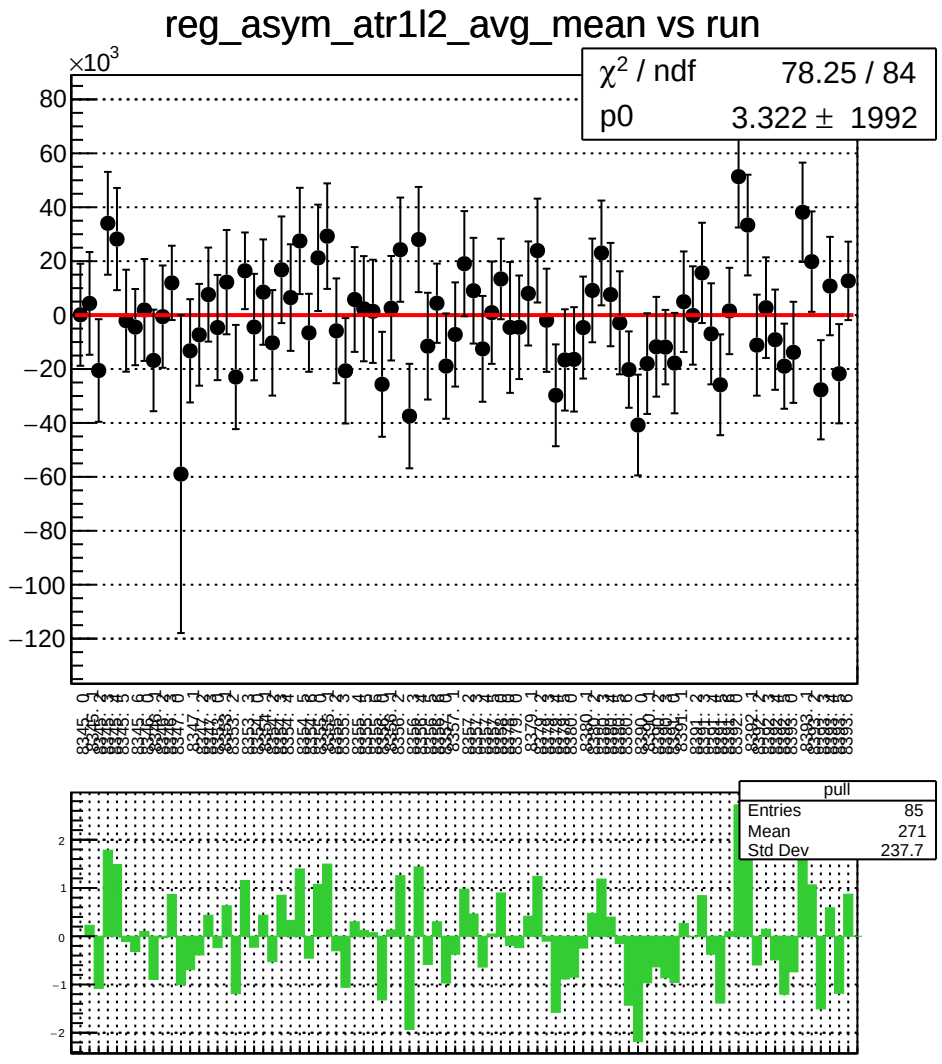

pull1D
Entries 85
Mean 0.01615
Std Dev 1.064

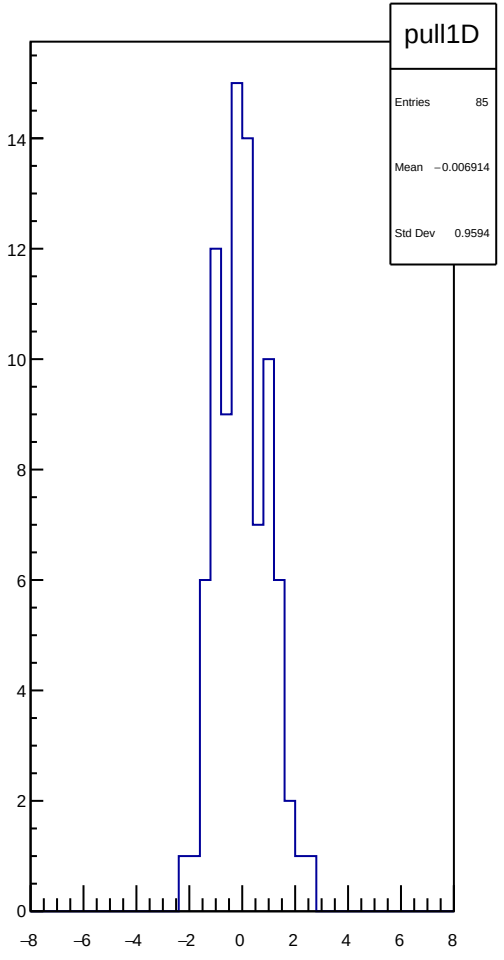

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 7148 / 84
p0 6406 ± 4.964
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600

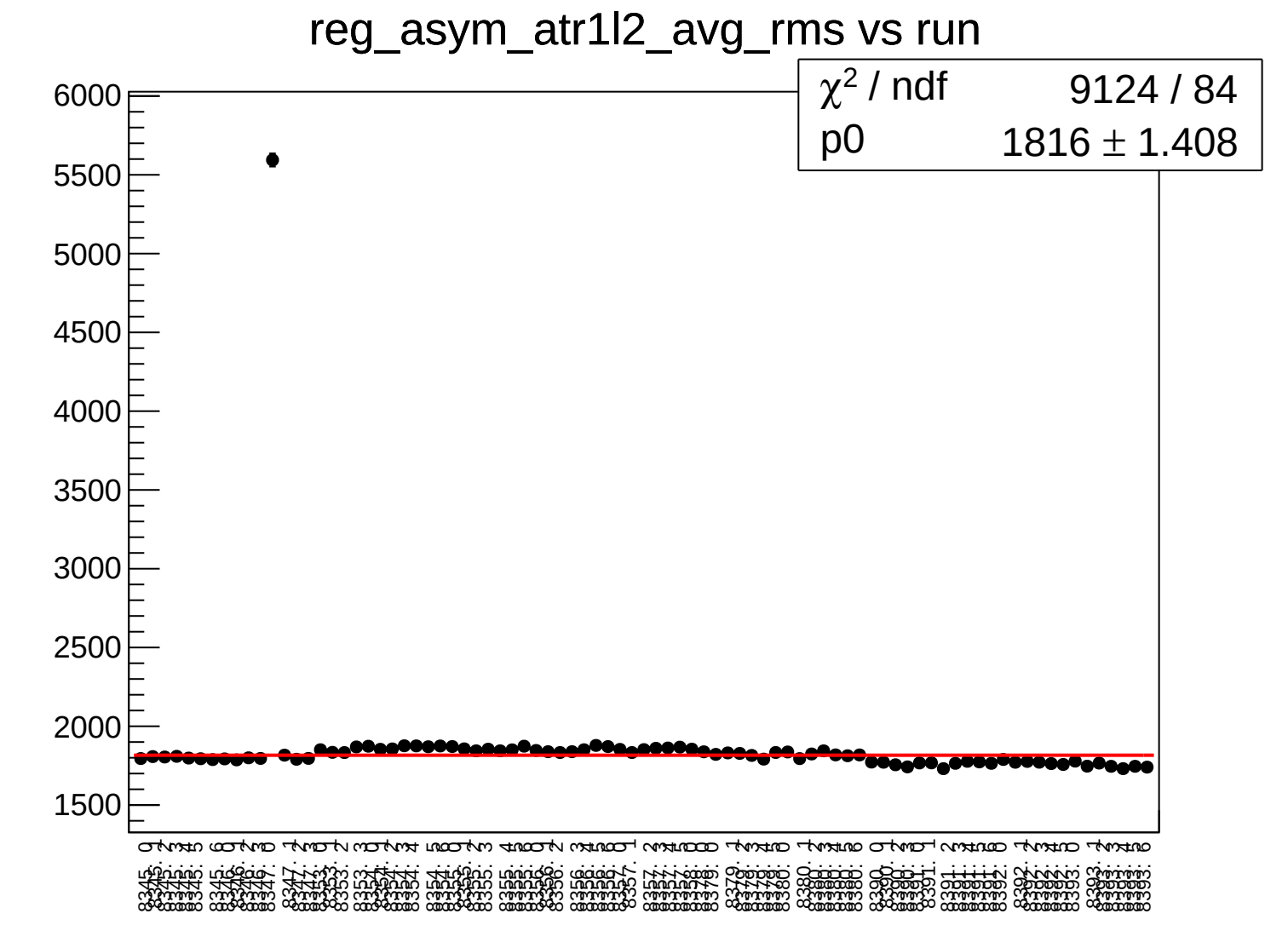

asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 93.07 / 84
p0 9297 ± 7332
pull
Entries 85
Mean −295.4
Std Dev 351.3

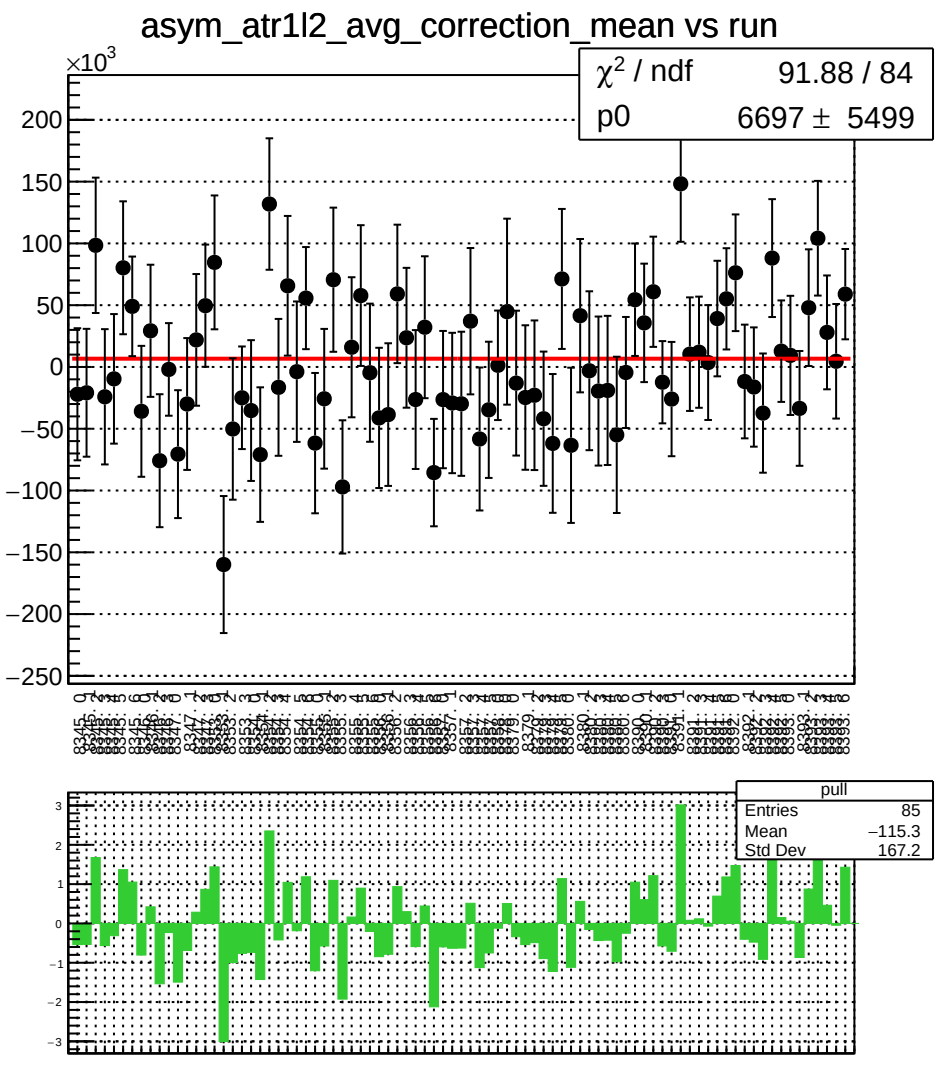

pull1D
Entries 85
Mean −0.0134
Std Dev 1.046

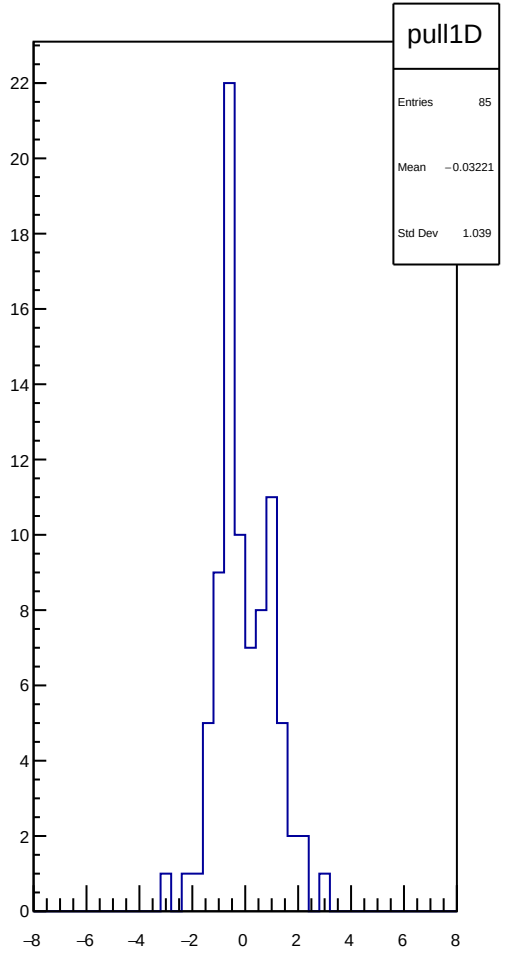

asym_atl1r2_dd_rms vs run
χ² / ndf 7188 / 84
p0 6690 ± 5.184
8000
7500
7000
6500
6000

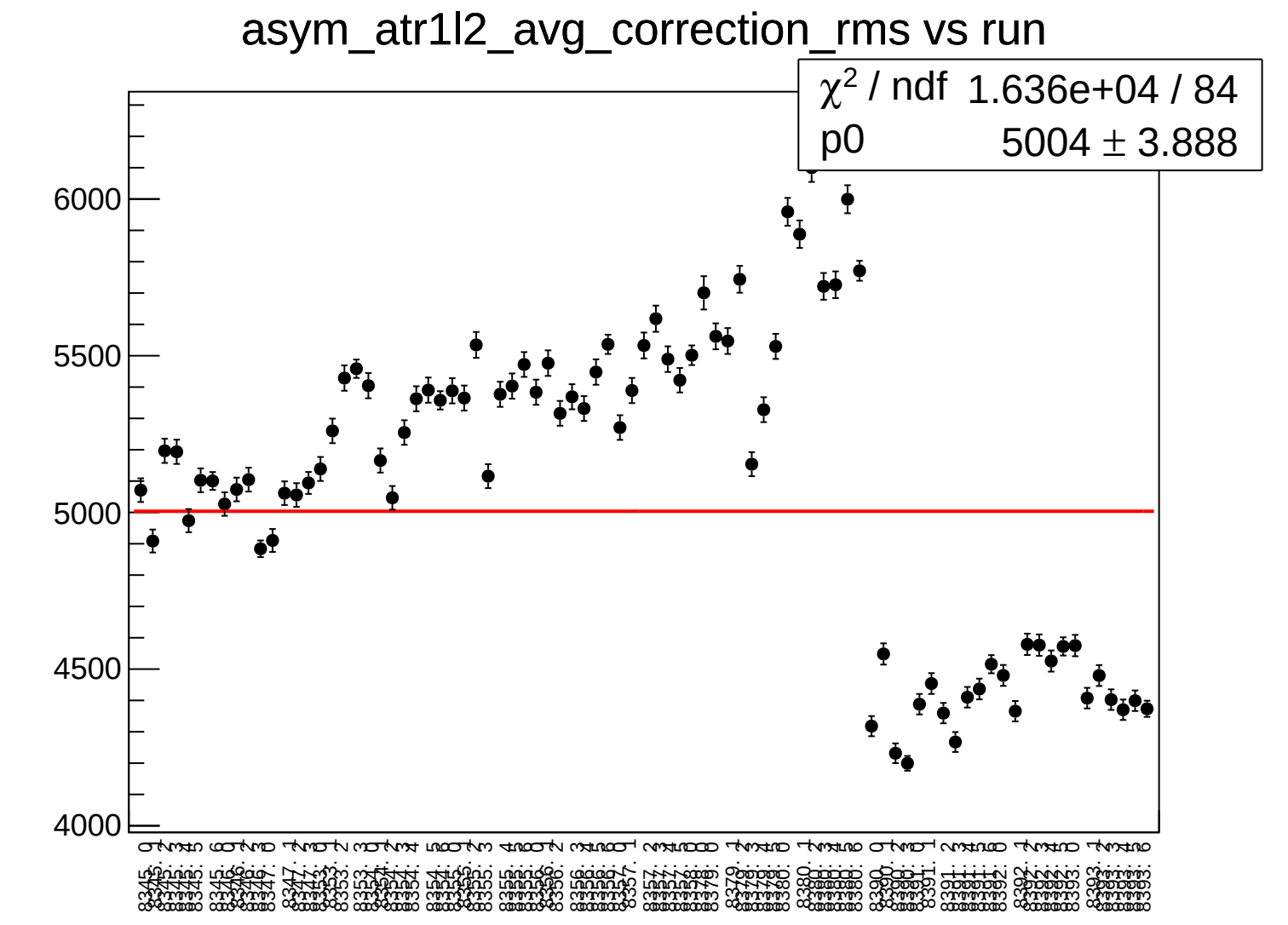

reg_asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 78.25 / 84
p0 3.322 ± 1992
pull
Entries 85
Mean 271
Std Dev 237.7

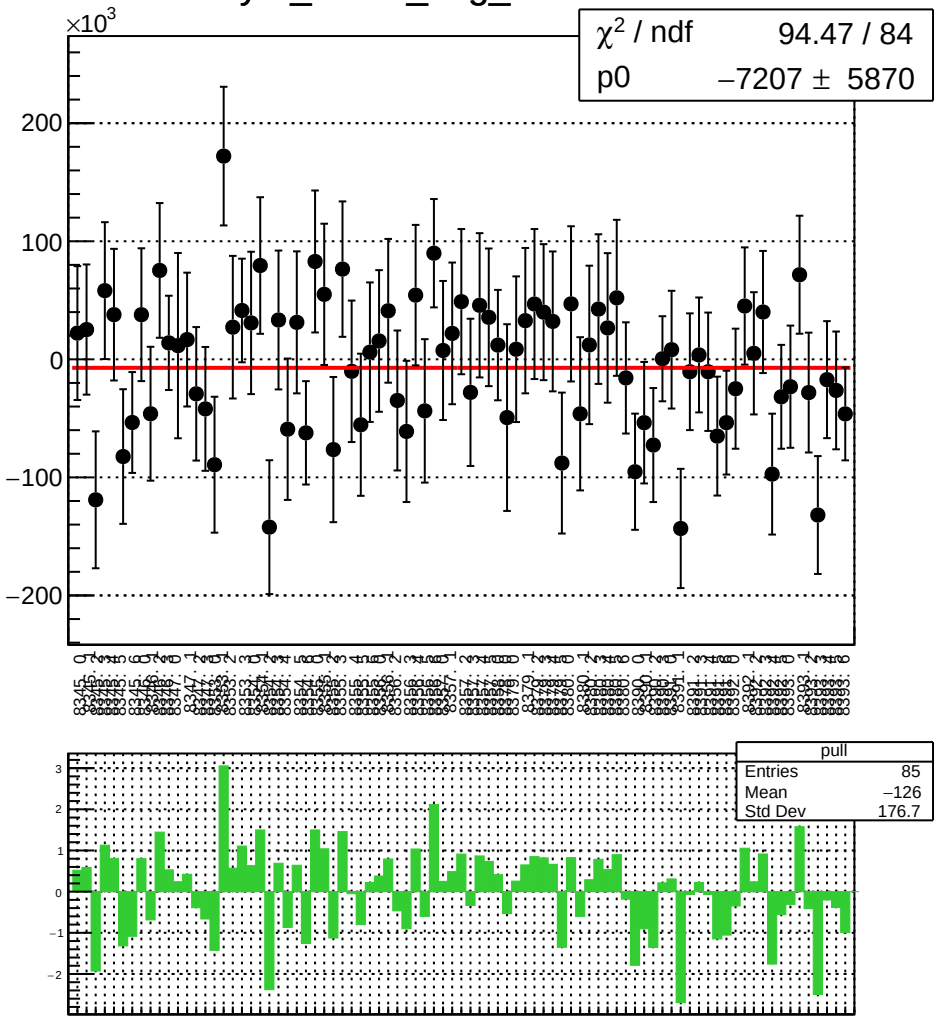

pull1D
Entries 85
Mean −0.006914
Std Dev 0.9594

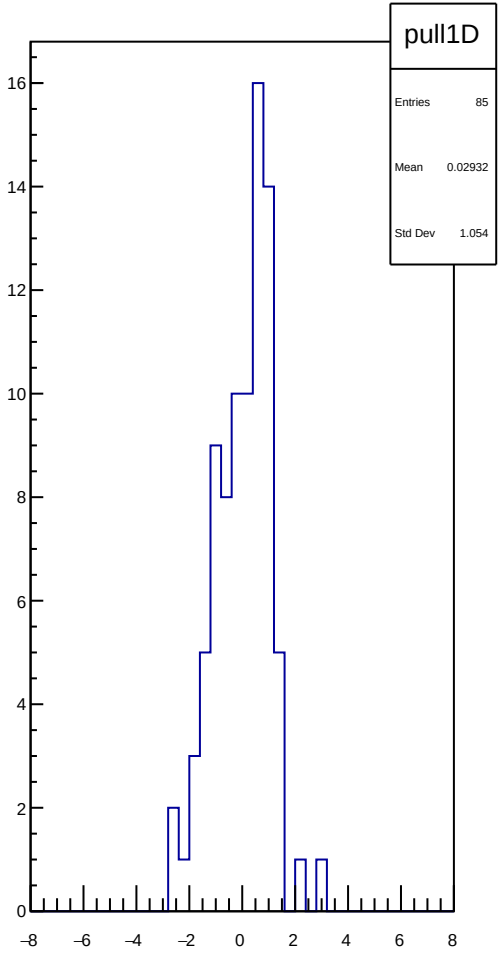

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 9124 / 84
p0 1816 ± 1.408
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

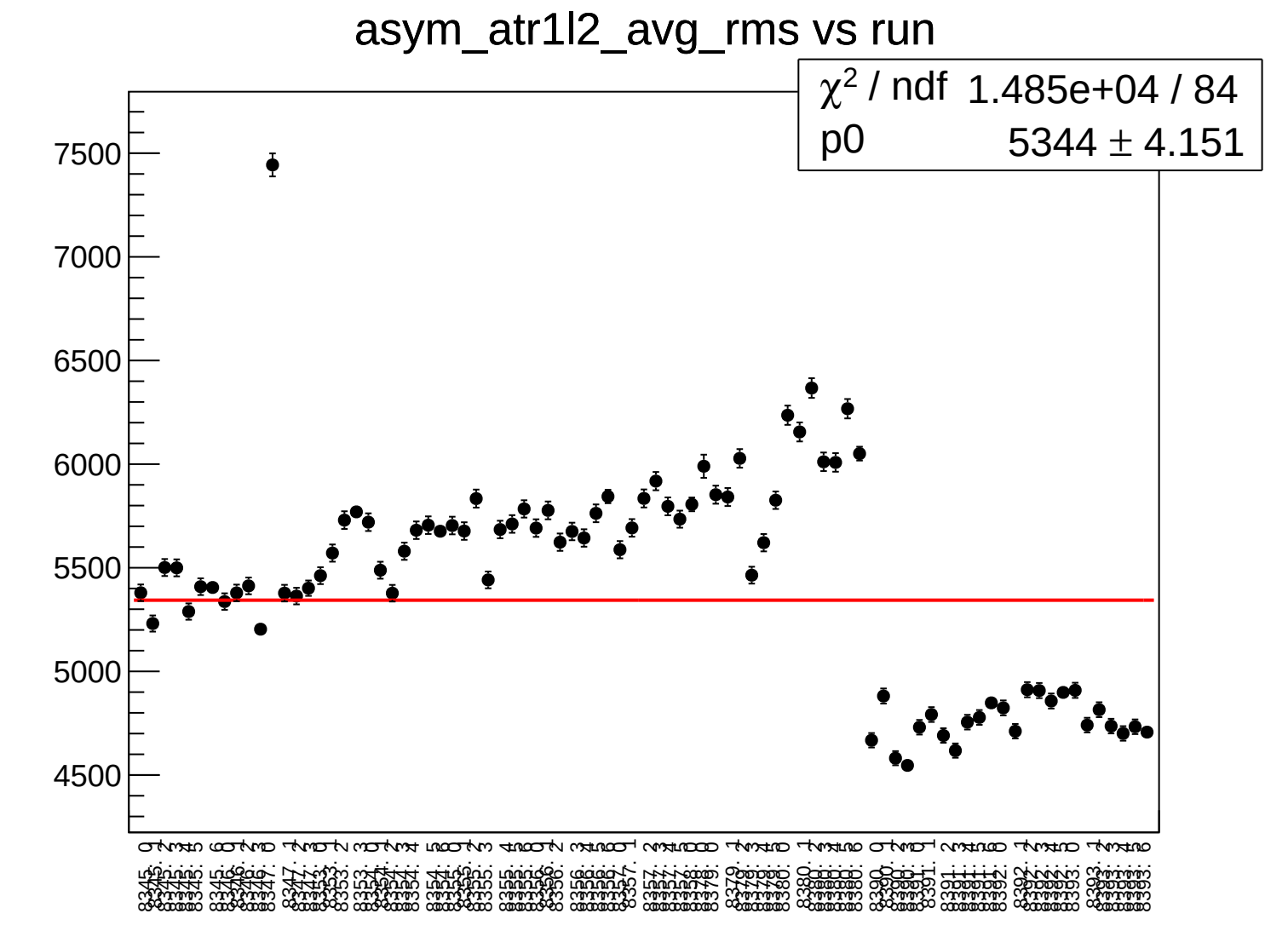

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 91.88 / 84
p0 6697 ± 5499
pull
Entries 85
Mean −115.3
Std Dev 167.2

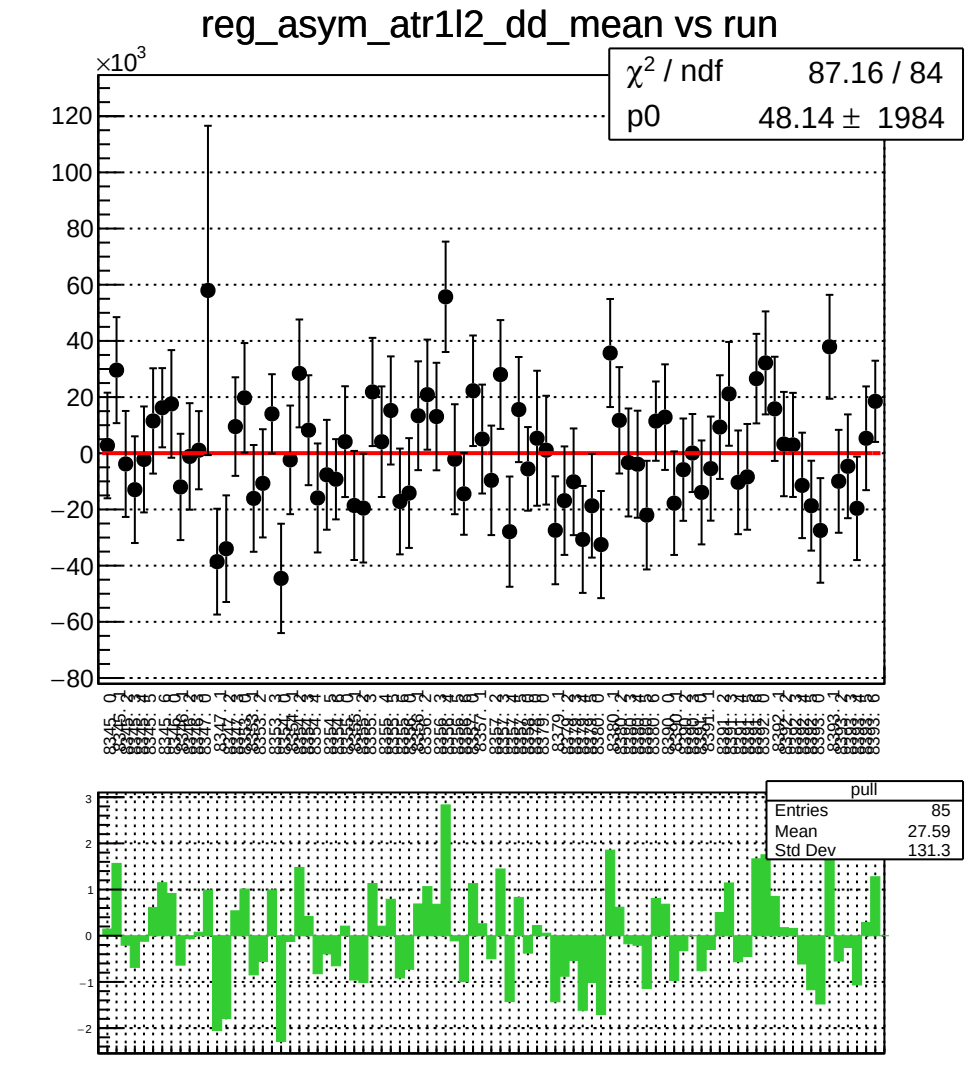

pull1D
Entries 85
Mean −0.03221
Std Dev 1.039

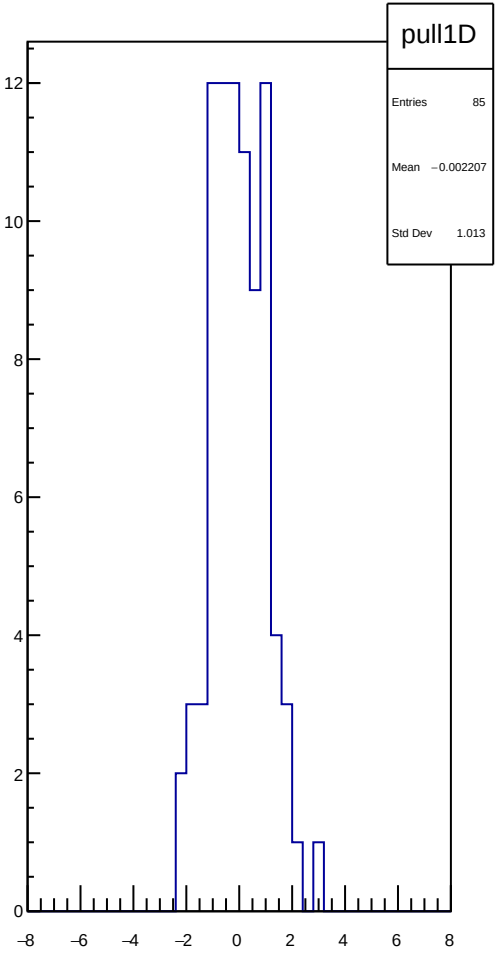

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 1.636e+04 / 84
p0 5004 ± 3.888
6000
5500
5000
4500
4000

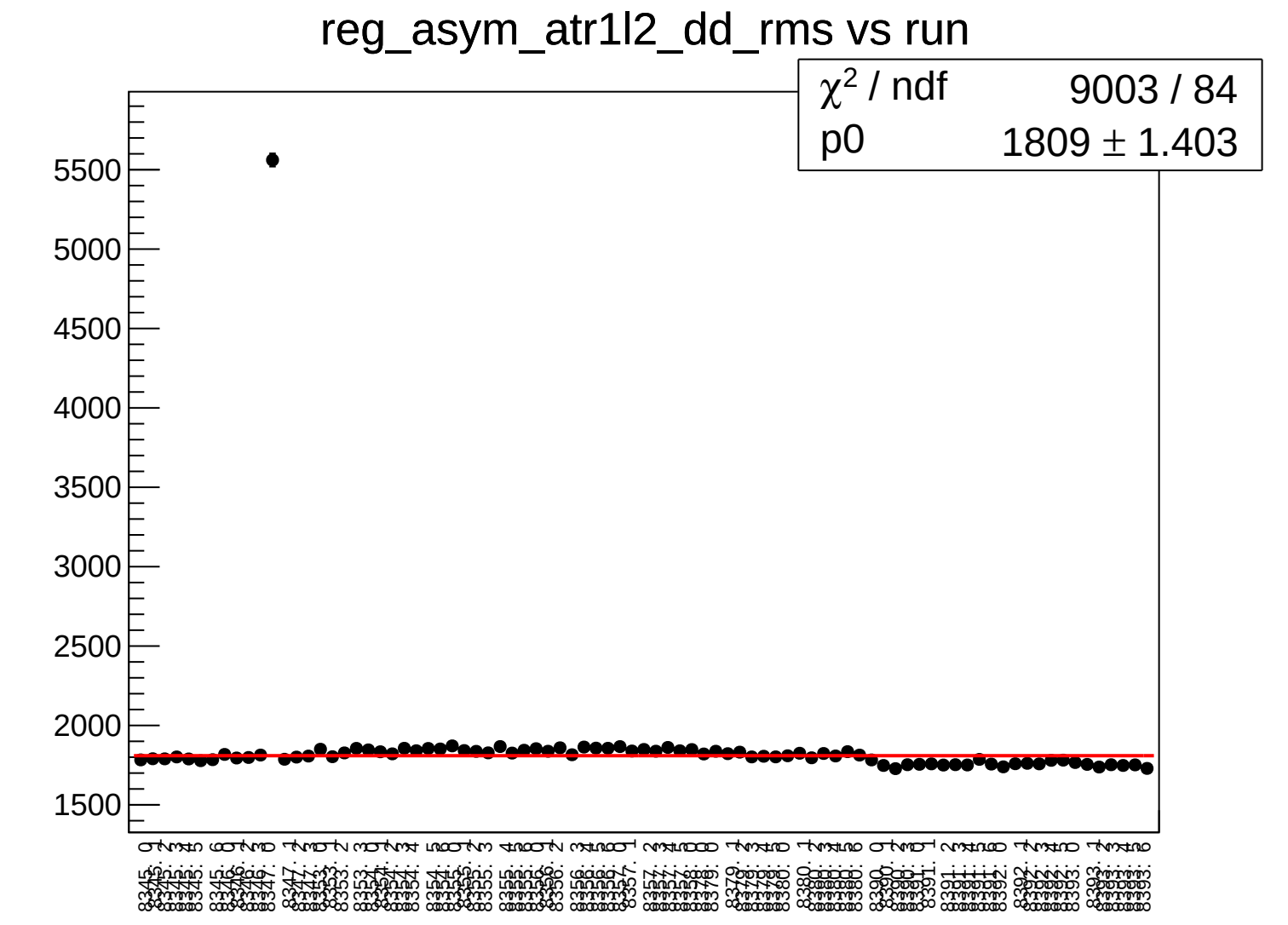

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 94.47 / 84
p0 −7207 ± 5870
200
100
0
−100
−200
pull
Entries 85
Mean −126
Std Dev 176.7
3
2
1
0
−1
−2

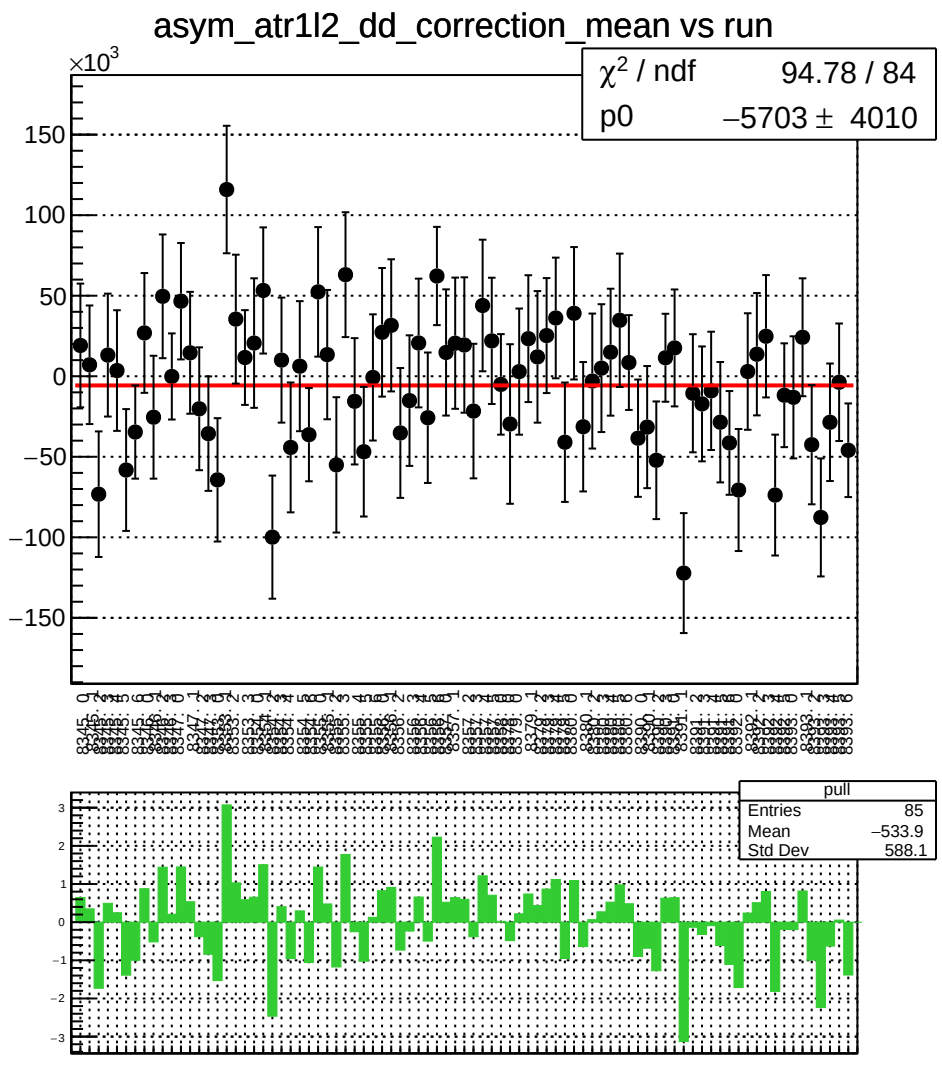

pull1D
Entries 85
Mean 0.02932
Std Dev 1.054
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

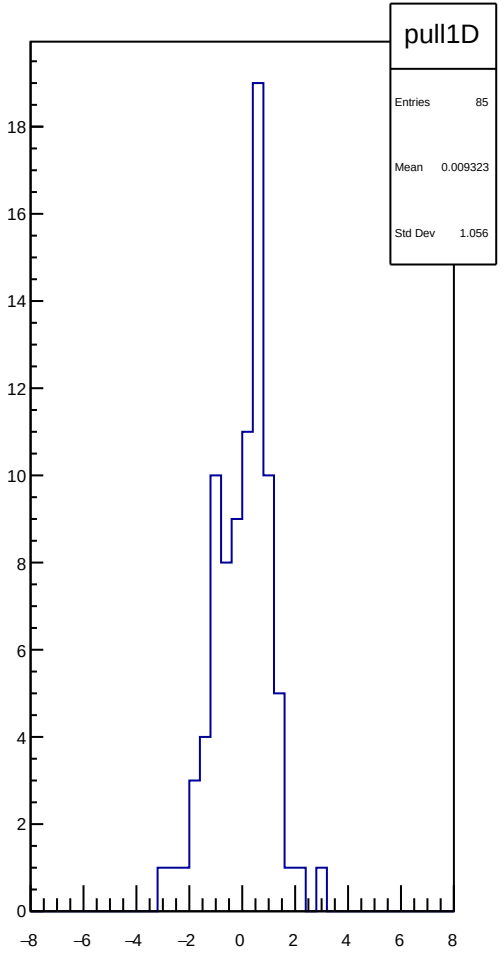

asym_atr1l2_avg_rms vs run
χ² / ndf 1.485e+04 / 84
p0 5344 ± 4.151
7500
7000
6500
6000
5500
5000
4500

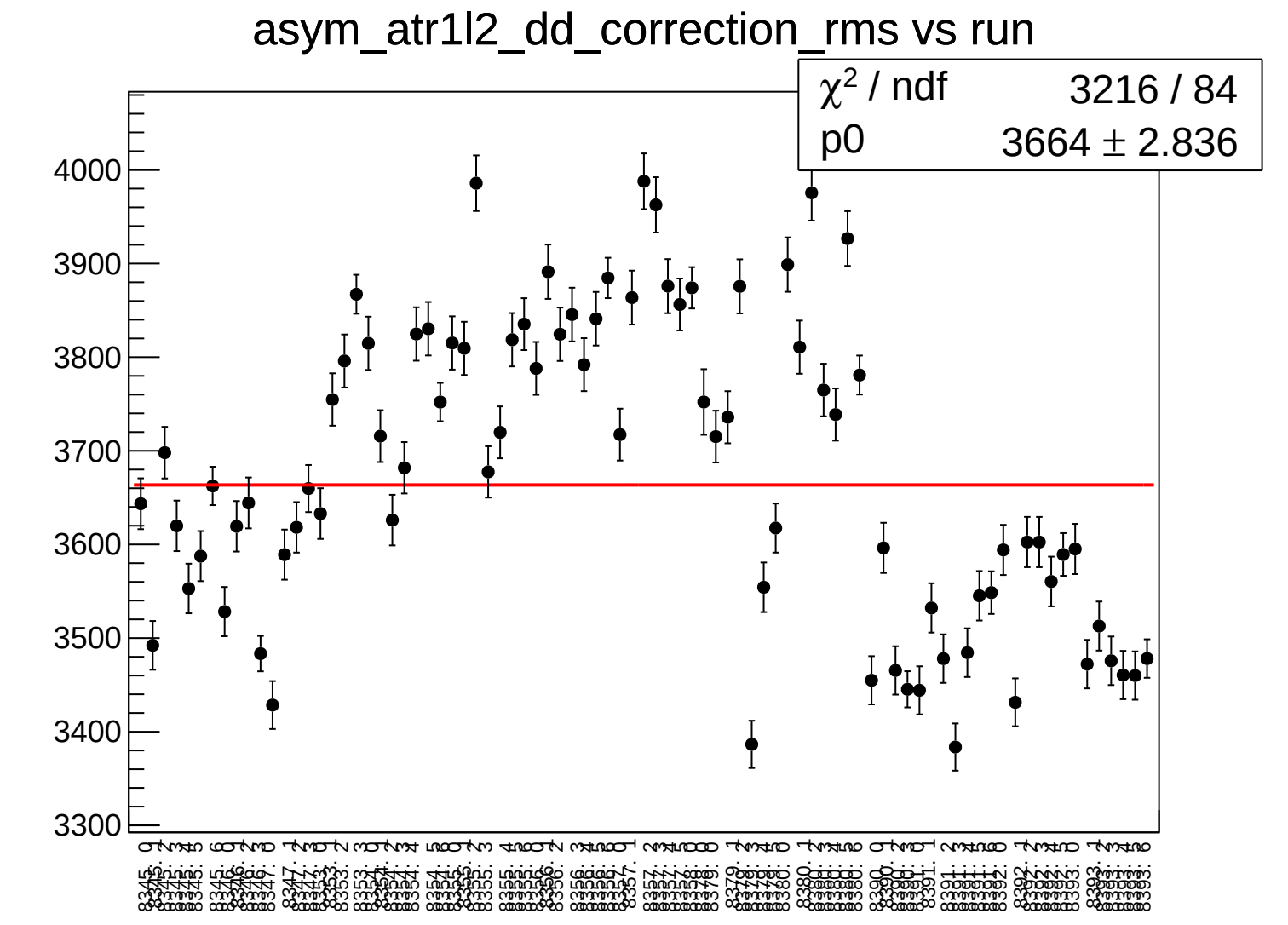

reg_asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 87.16 / 84
p0 48.14 ± 1984
pull
Entries 85
Mean 27.59
Std Dev 131.3

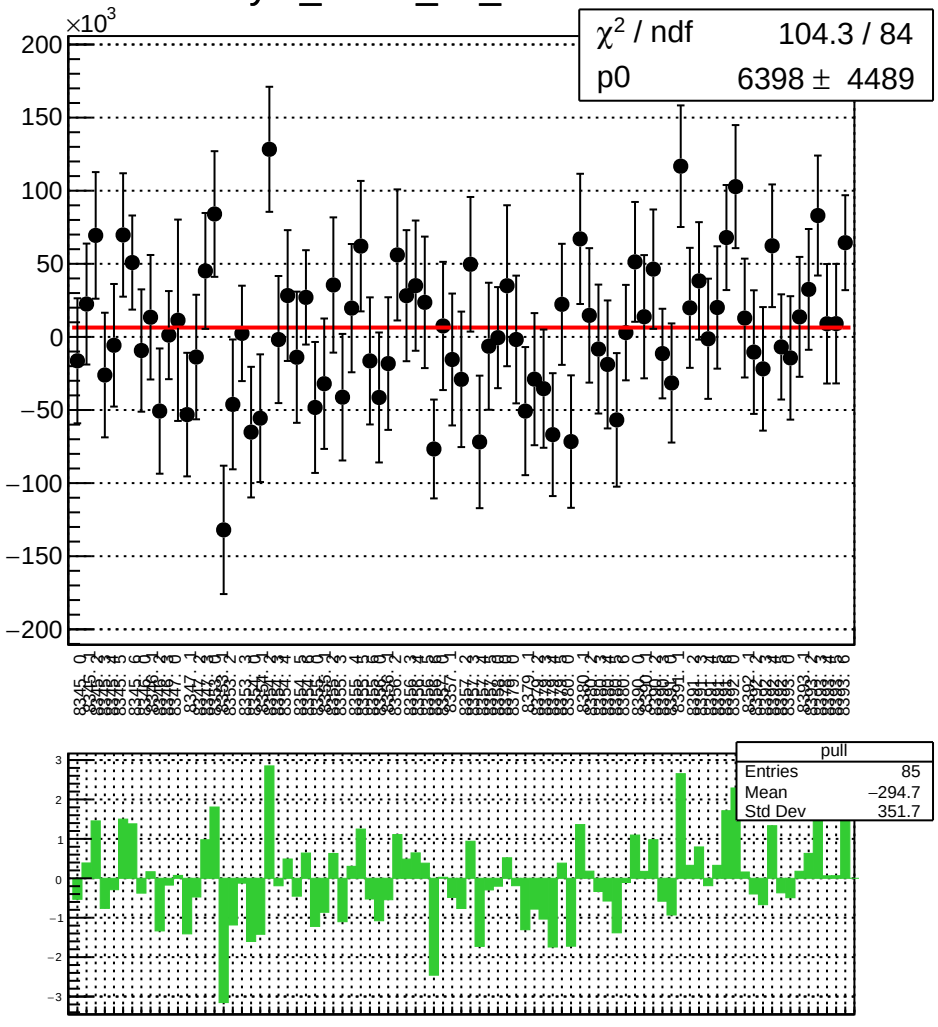

pull1D
Entries 85
Mean −0.002207
Std Dev 1.013

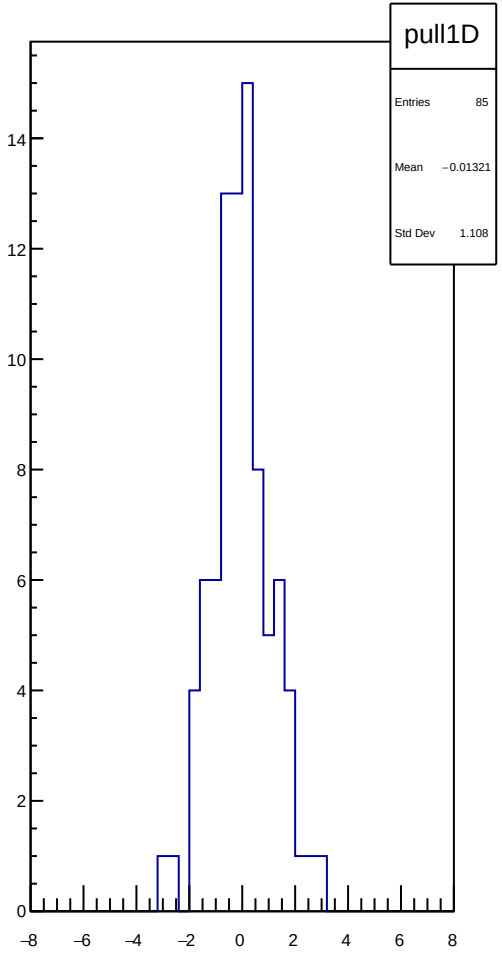

reg_asym_atr1l2_dd_rms vs run
χ^2 / ndf 9003 / 84
p0 1809 ± 1.403
5500
5000
4500
4000
3500
3000
2500
2000
1500

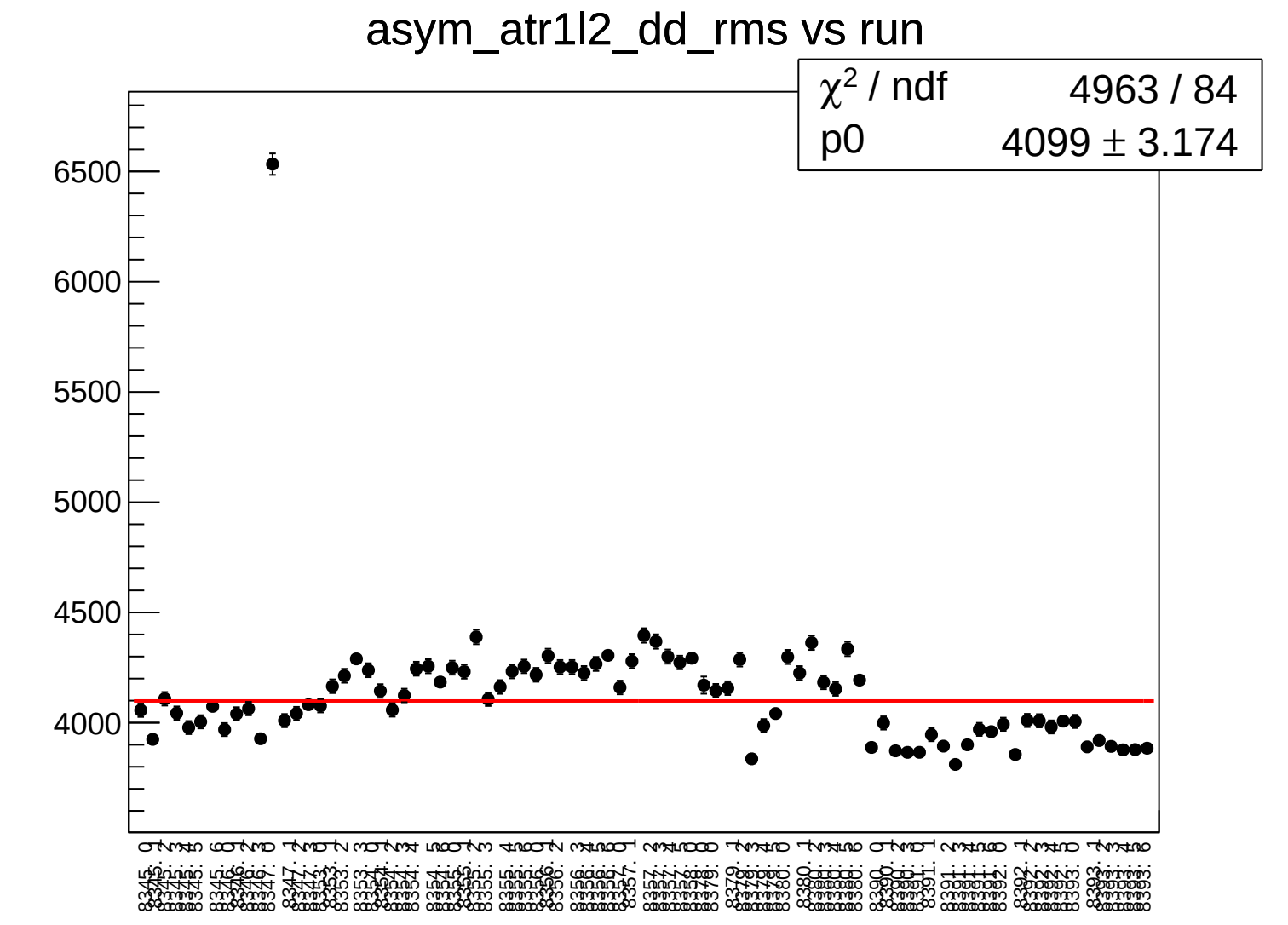

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 94.78 / 84
p0 −5703 ± 4010
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −533.9
Std Dev 588.1
3
2
1
0
−1
−2
−3

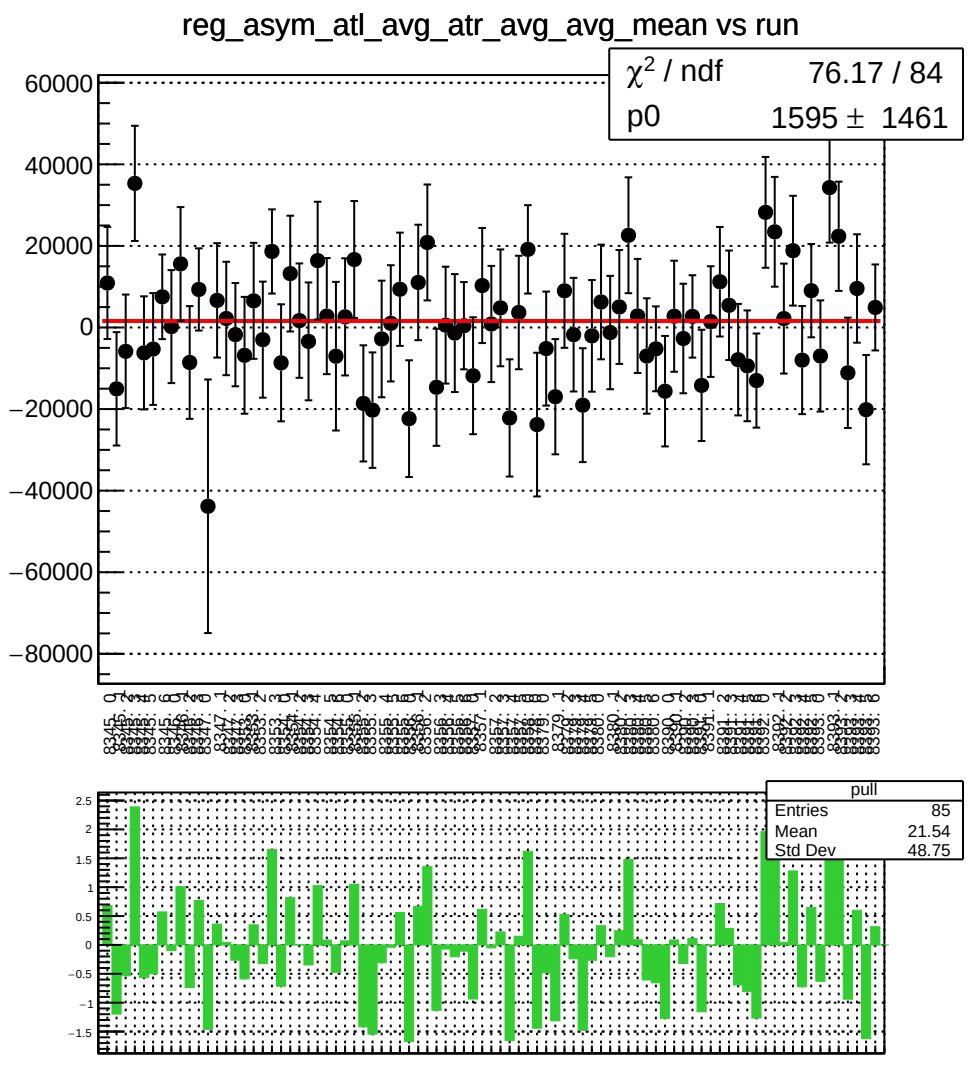

pull1D
Entries 85
Mean 0.009323
Std Dev 1.056
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

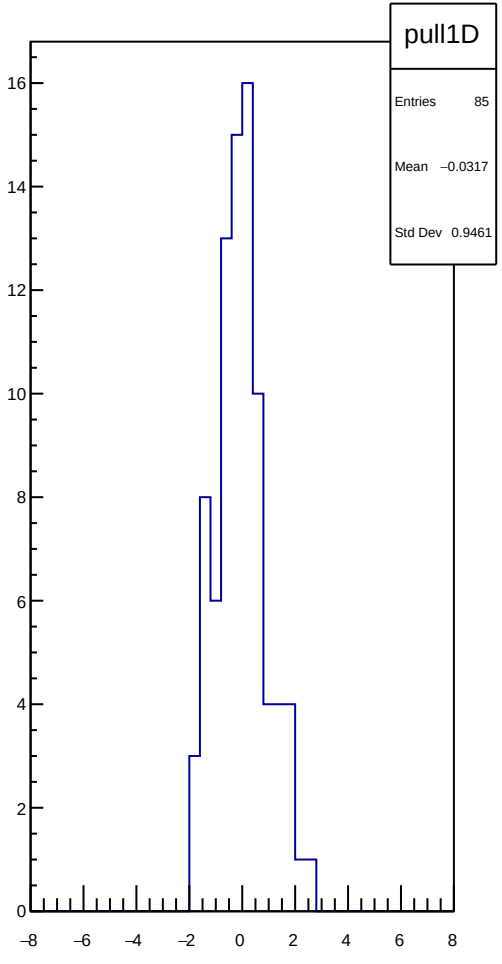

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 3216 / 84
p0 3664 ± 2.836
4000
3900
3800
3700
3600
3500
3400
3300

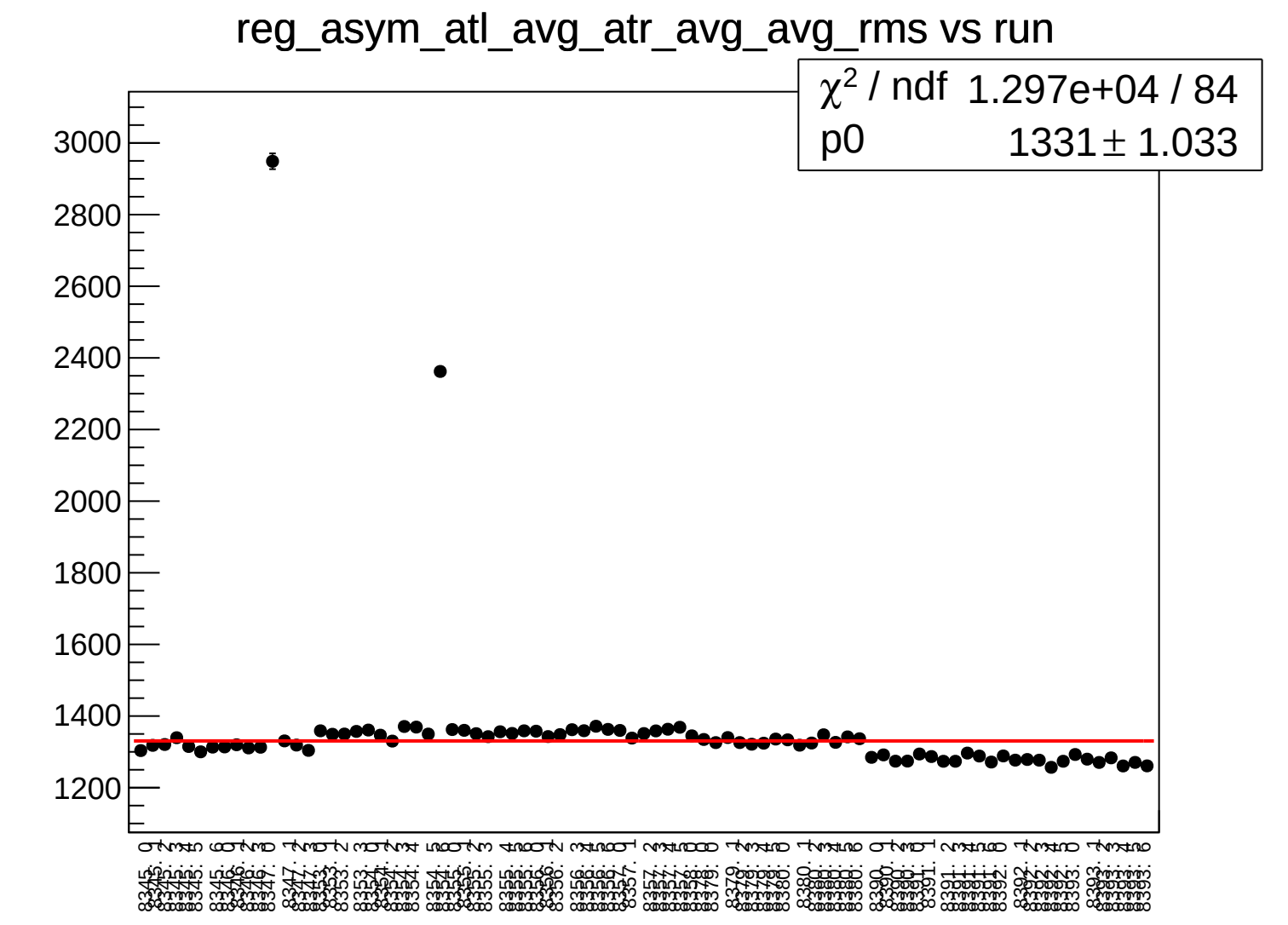

asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 104.3 / 84
p0 6398 ± 4489
pull
Entries 85
Mean −294.7
Std Dev 351.7

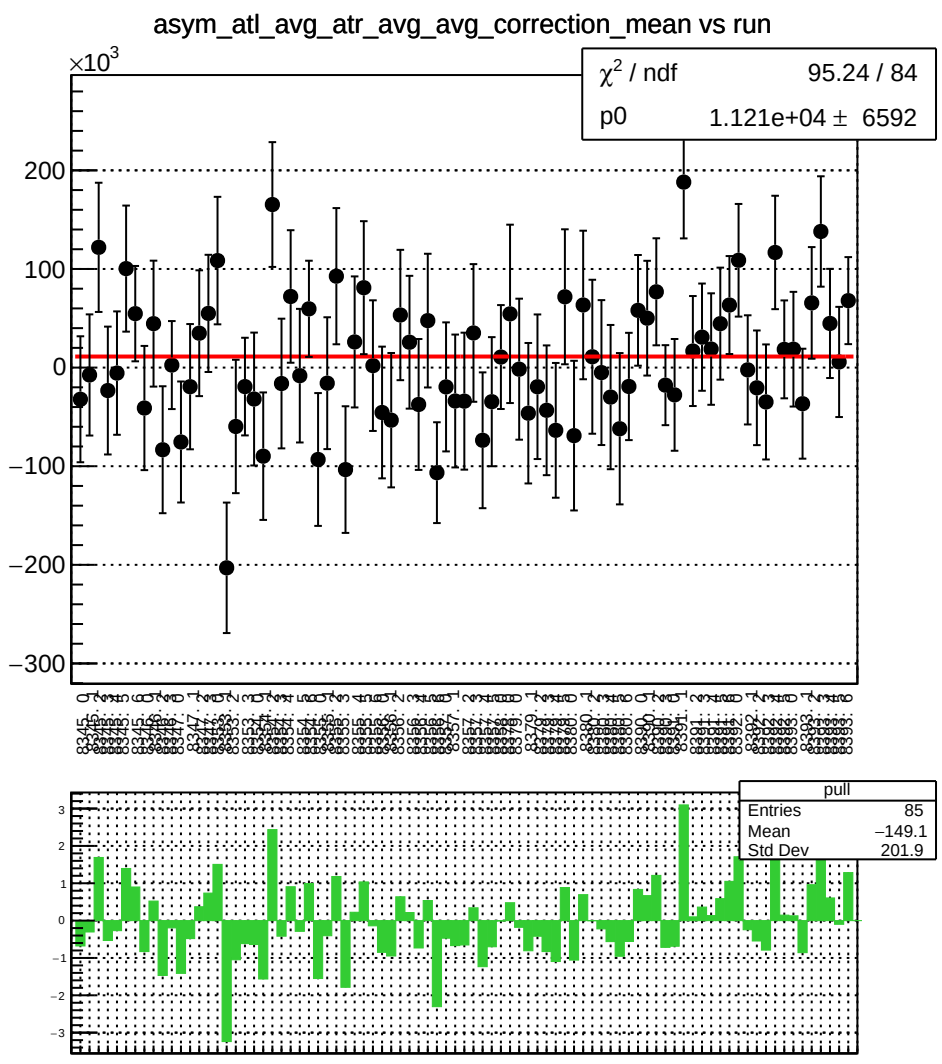

pull1D
Entries 85
Mean −0.01321
Std Dev 1.108

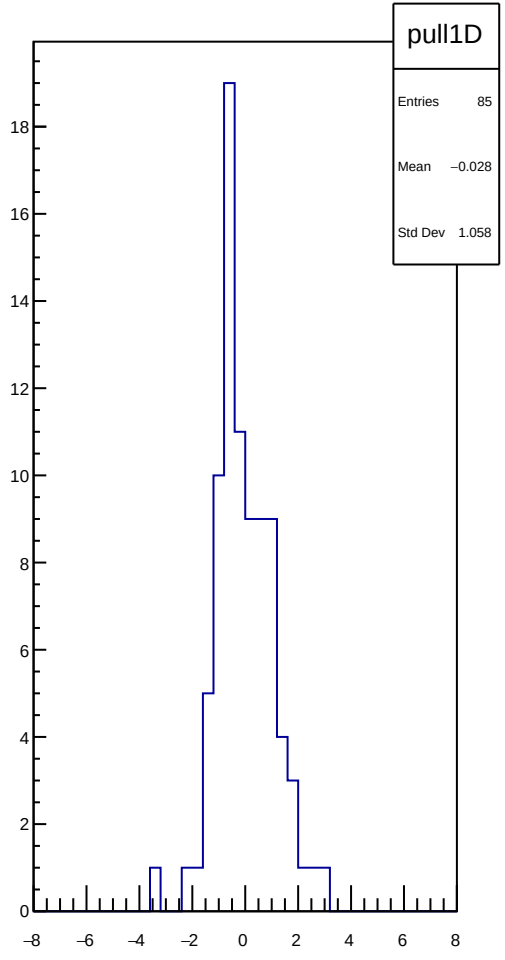

asym_atr1l2_dd_rms vs run
χ² / ndf 4963 / 84
p0 4099 ± 3.174
6500
6000
5500
5000
4500
4000

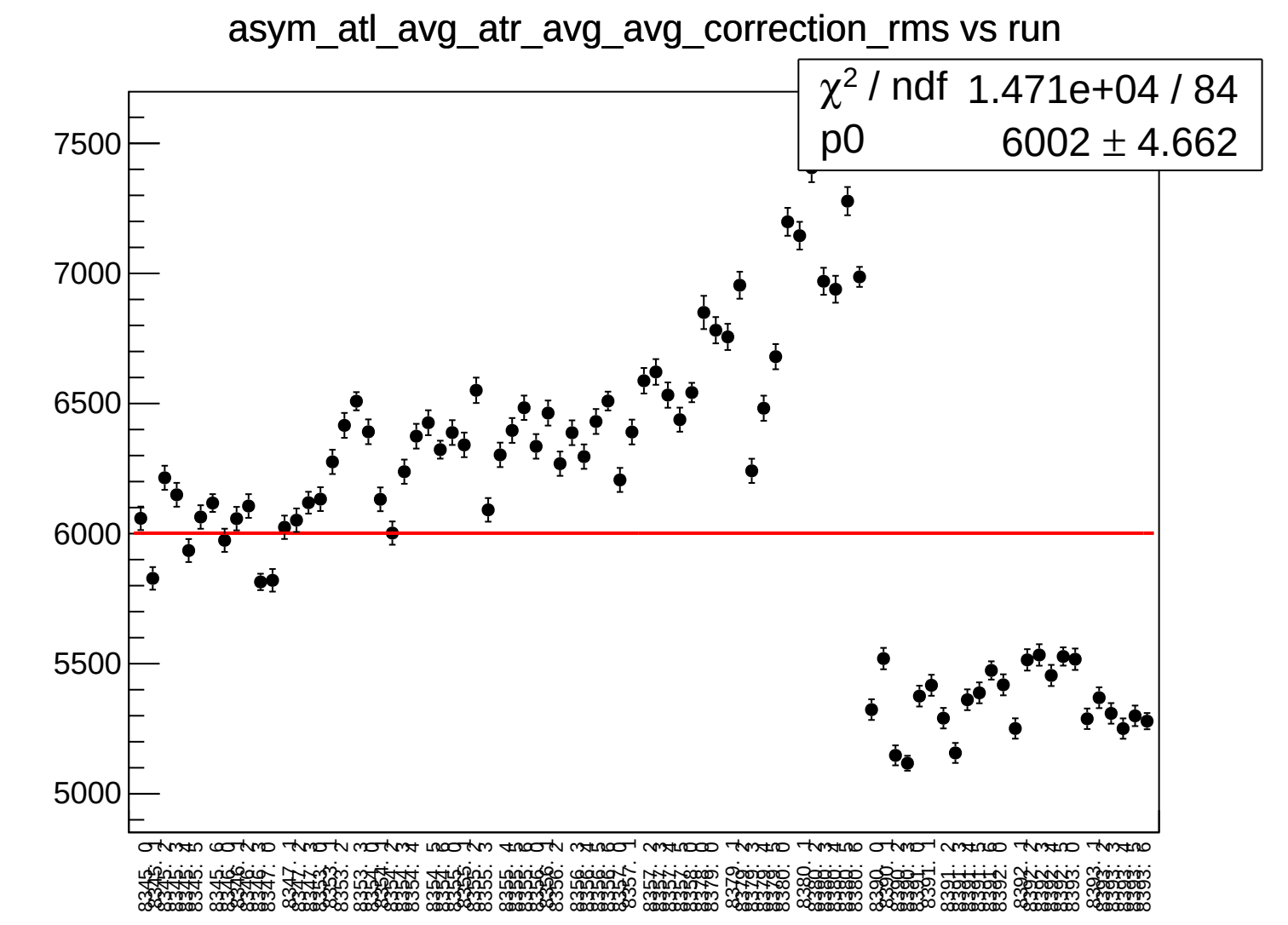

reg_asym_atl_avg_atr_avg_avg_mean vs run
χ² / ndf 76.17 / 84
p0 1595 ± 1461
pull
Entries 85
Mean 21.54
Std Dev 48.75

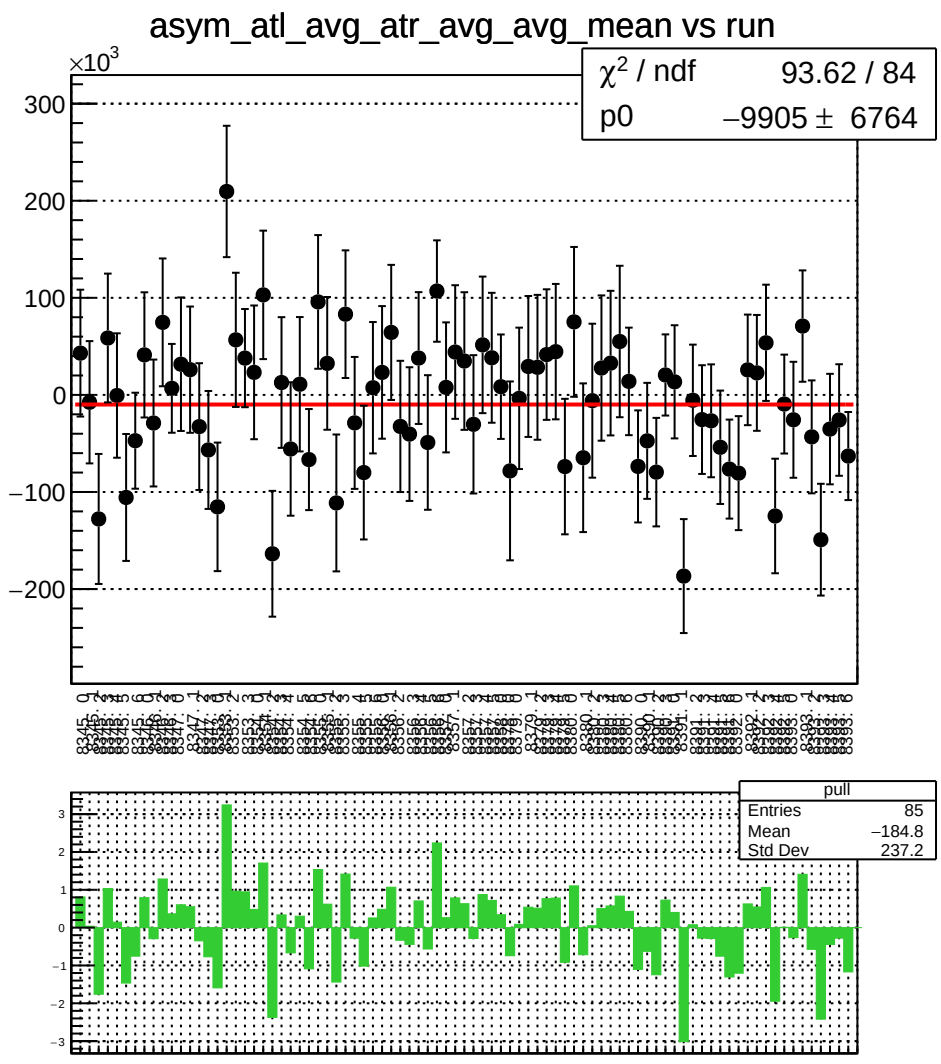

pull1D
Entries 85
Mean −0.0317
Std Dev 0.9461

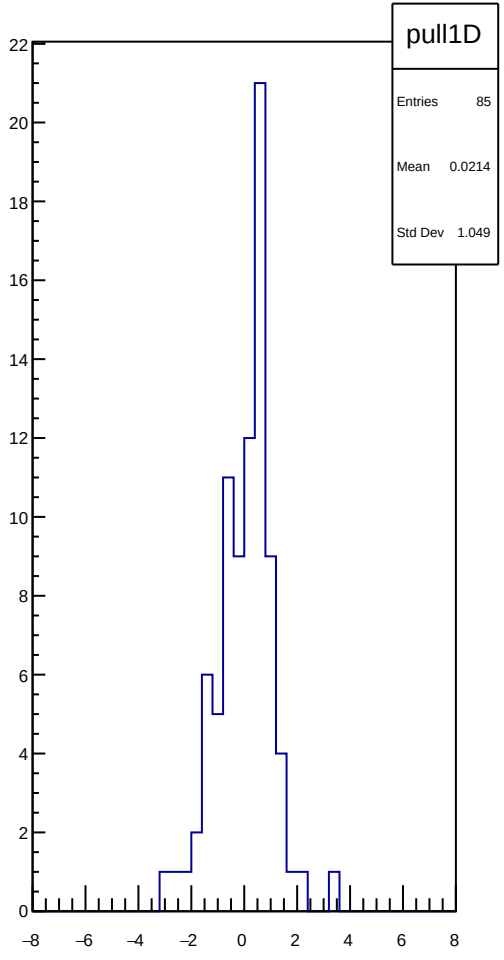

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.297e+04 / 84
p0 1331 ± 1.033
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

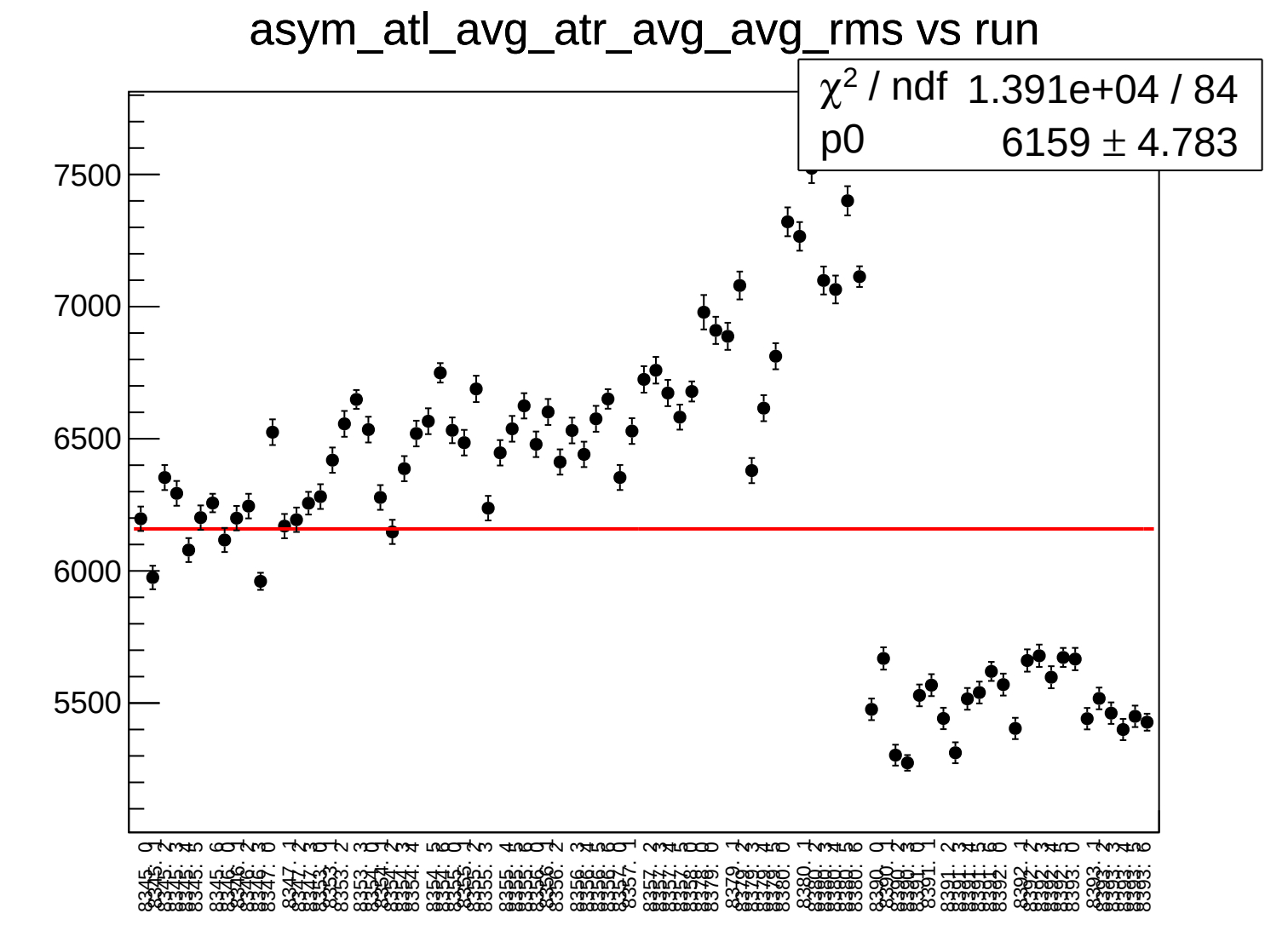

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 95.24 / 84
p0 1.121e+04 ± 6592
×10³
200
100
0
−100
−200
−300
pull
Entries 85
Mean −149.1
Std Dev 201.9
3
2
1
0
−1
−2
−3

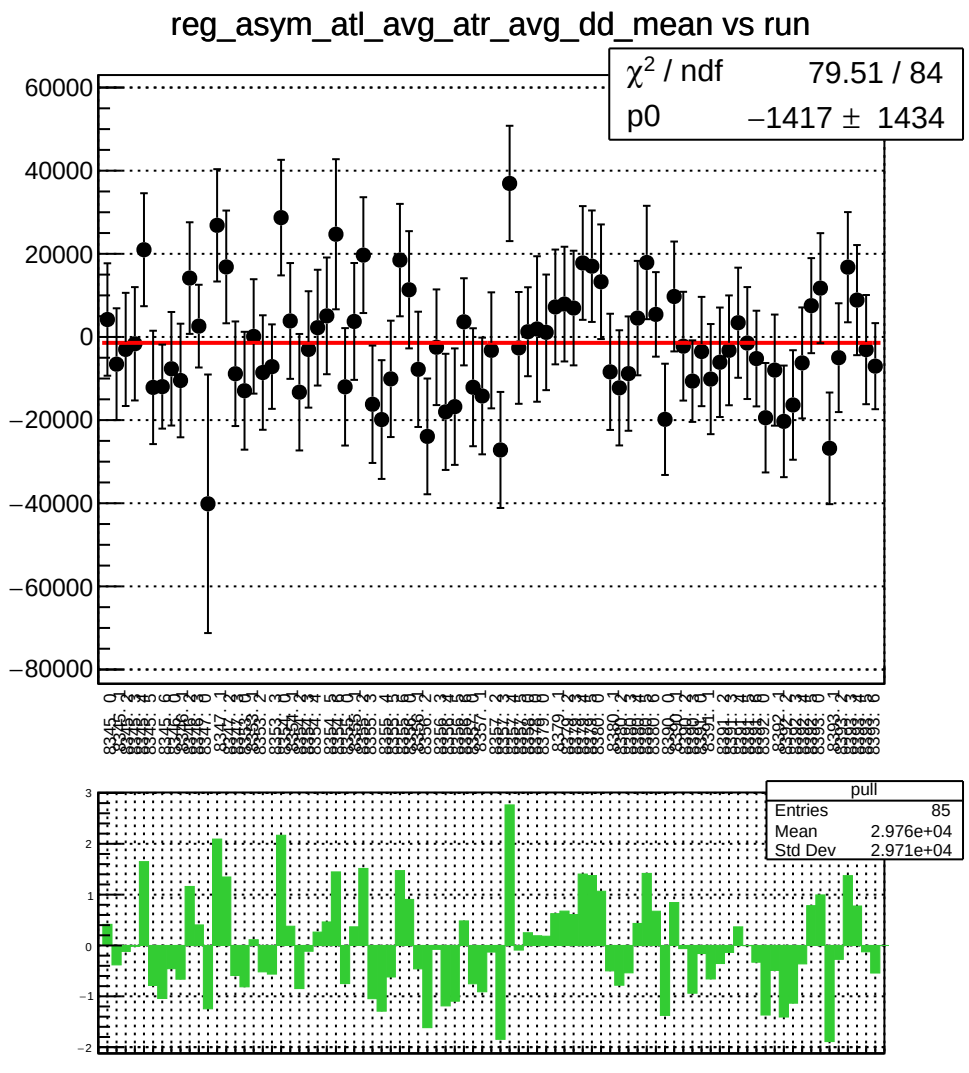

pull1D
Entries 85
Mean −0.028
Std Dev 1.058
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

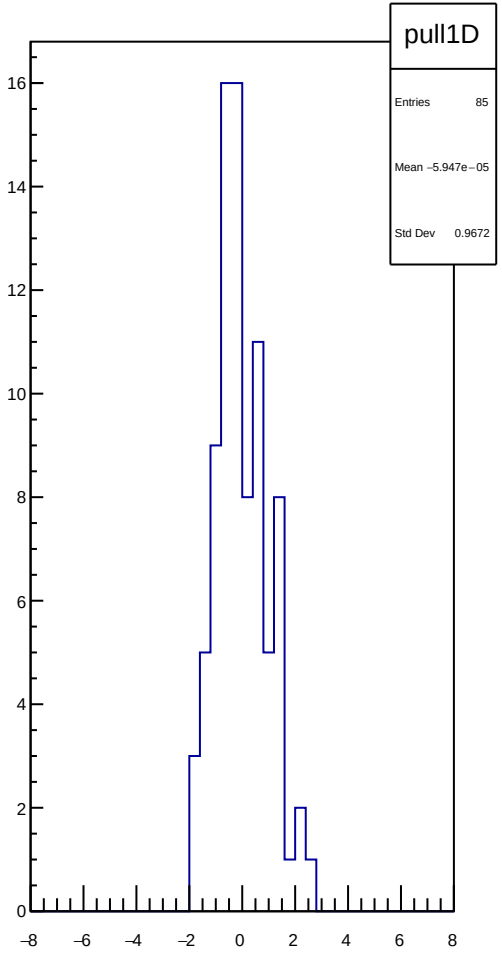

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 1.471e+04 / 84
p0 6002 ± 4.662
7500
7000
6500
6000
5500
5000

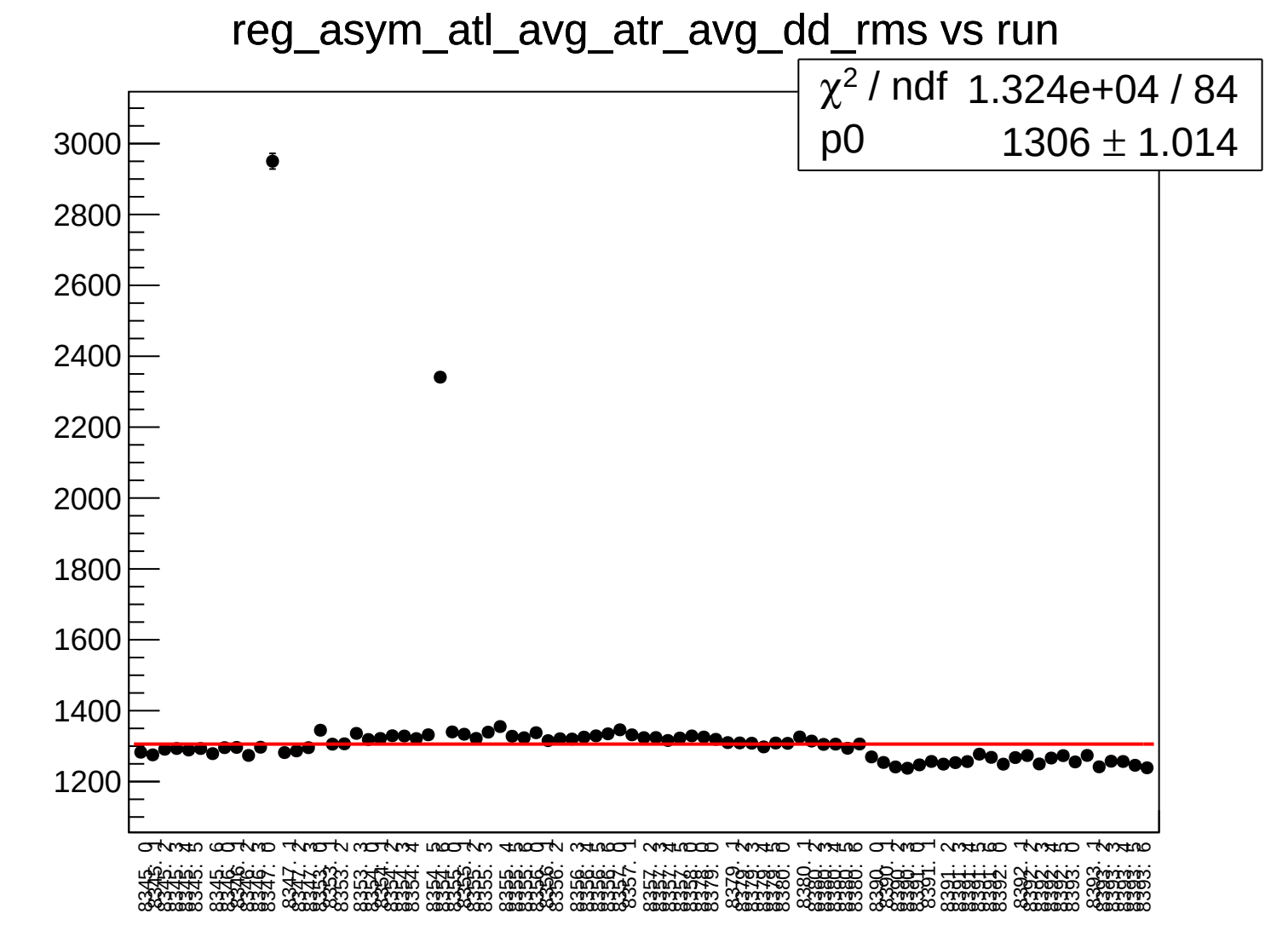

asym_atl_avg_atr_avg_avg_mean vs run
χ² / ndf 93.62 / 84
p0 −9905 ± 6764
×10³
300
200
100
0
−100
−200
pull
Entries 85
Mean −184.8
Std Dev 237.2
3
2
1
0
−1
−2
−3

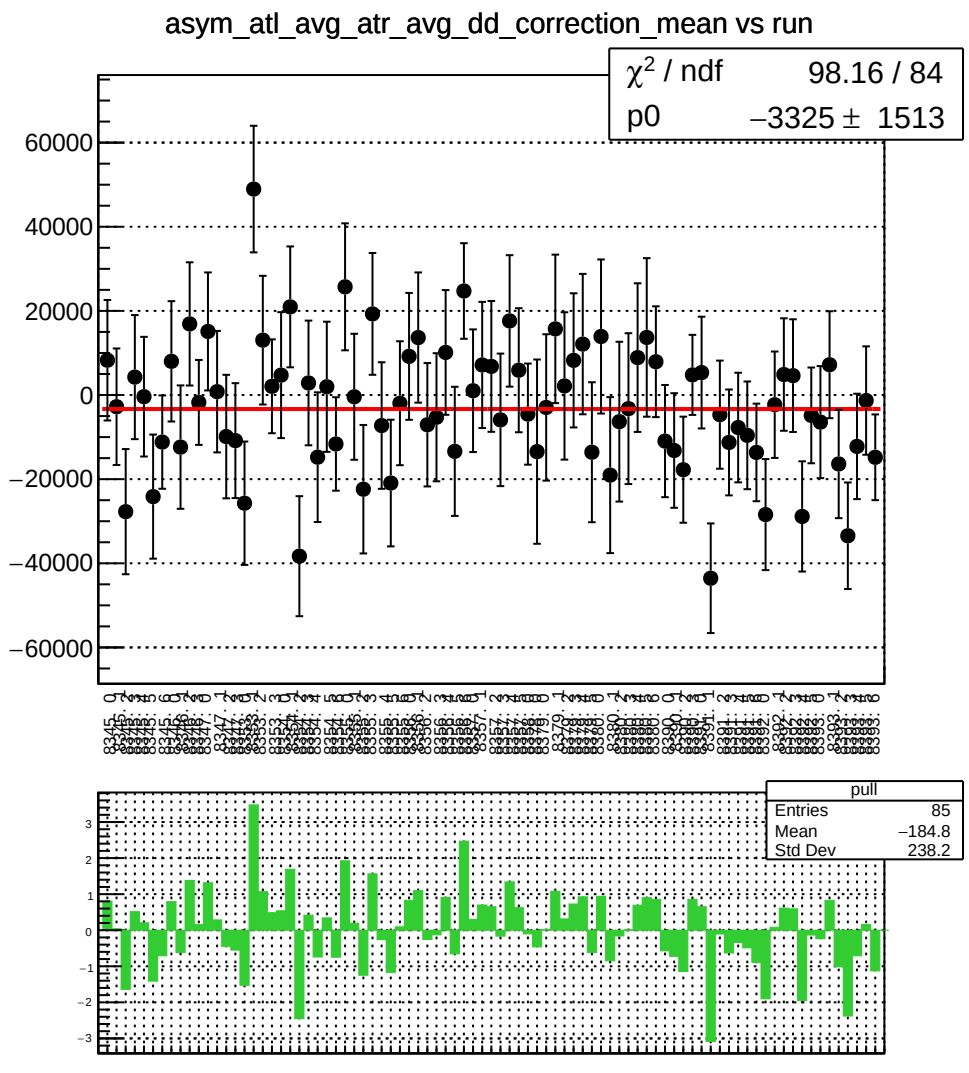

pull1D
Entries 85
Mean 0.0214
Std Dev 1.049
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

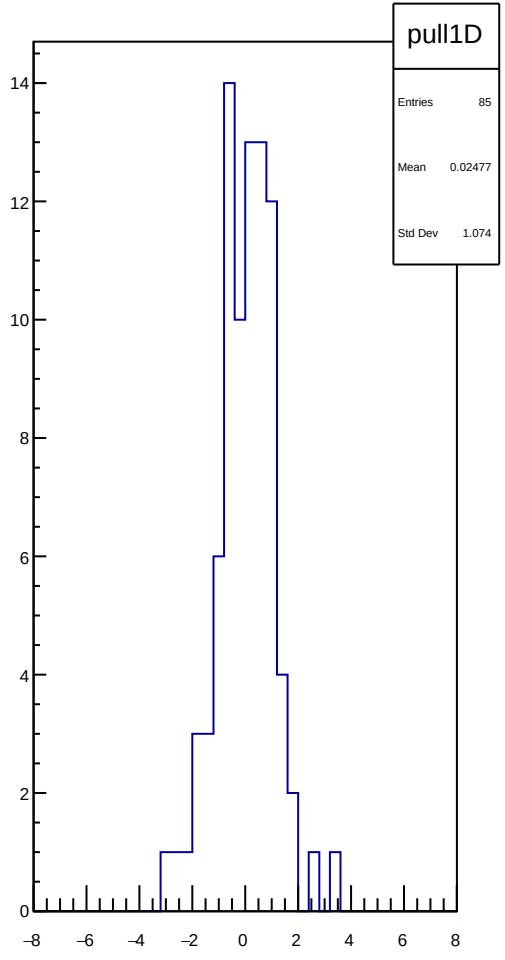

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.391e+04 / 84
p0 6159 ± 4.783
7500
7000
6500
6000
5500

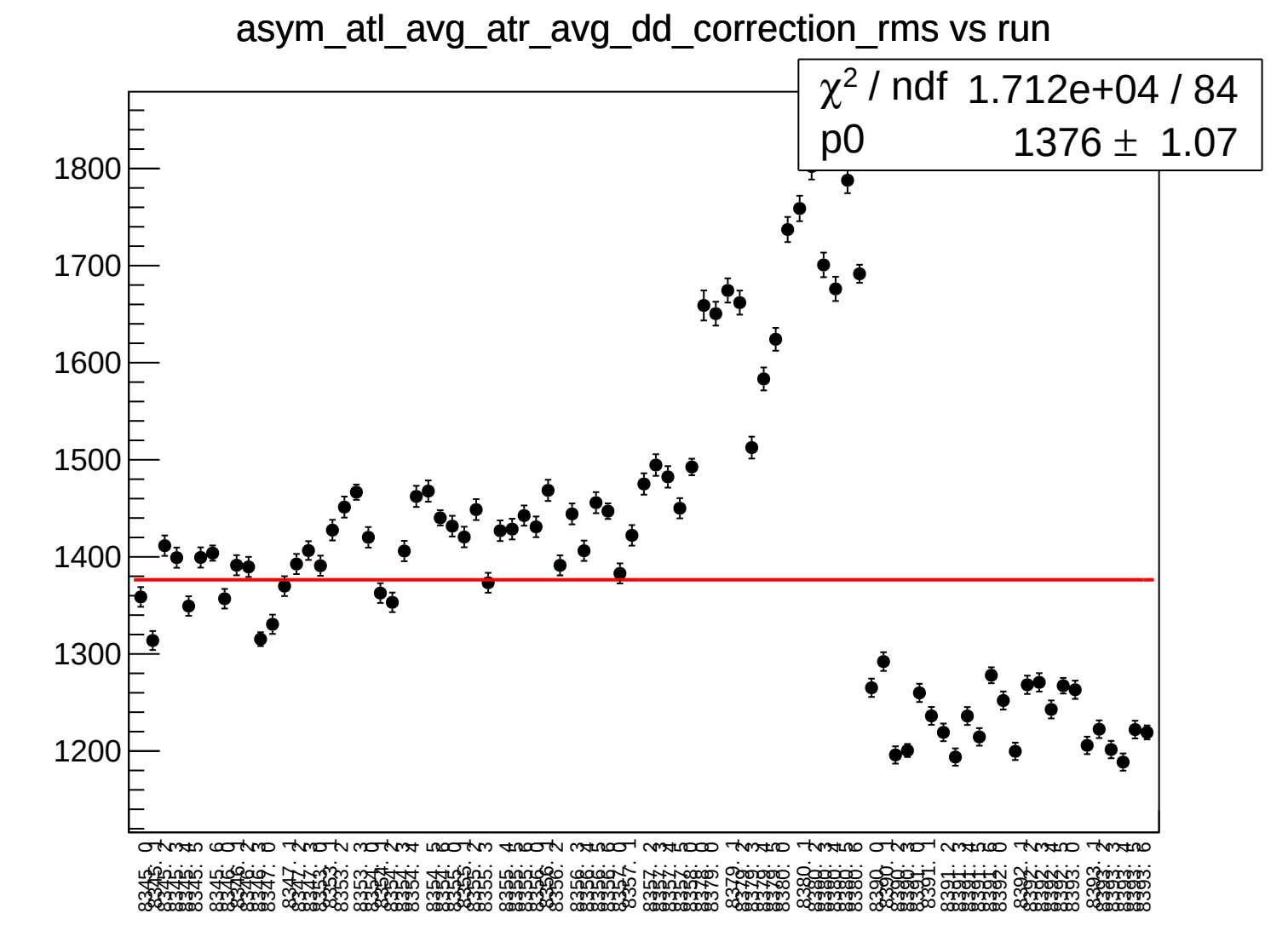

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 79.51 / 84
p0 −1417 ± 1434
pull
Entries 85
Mean 2.976e+04
Std Dev 2.971e+04

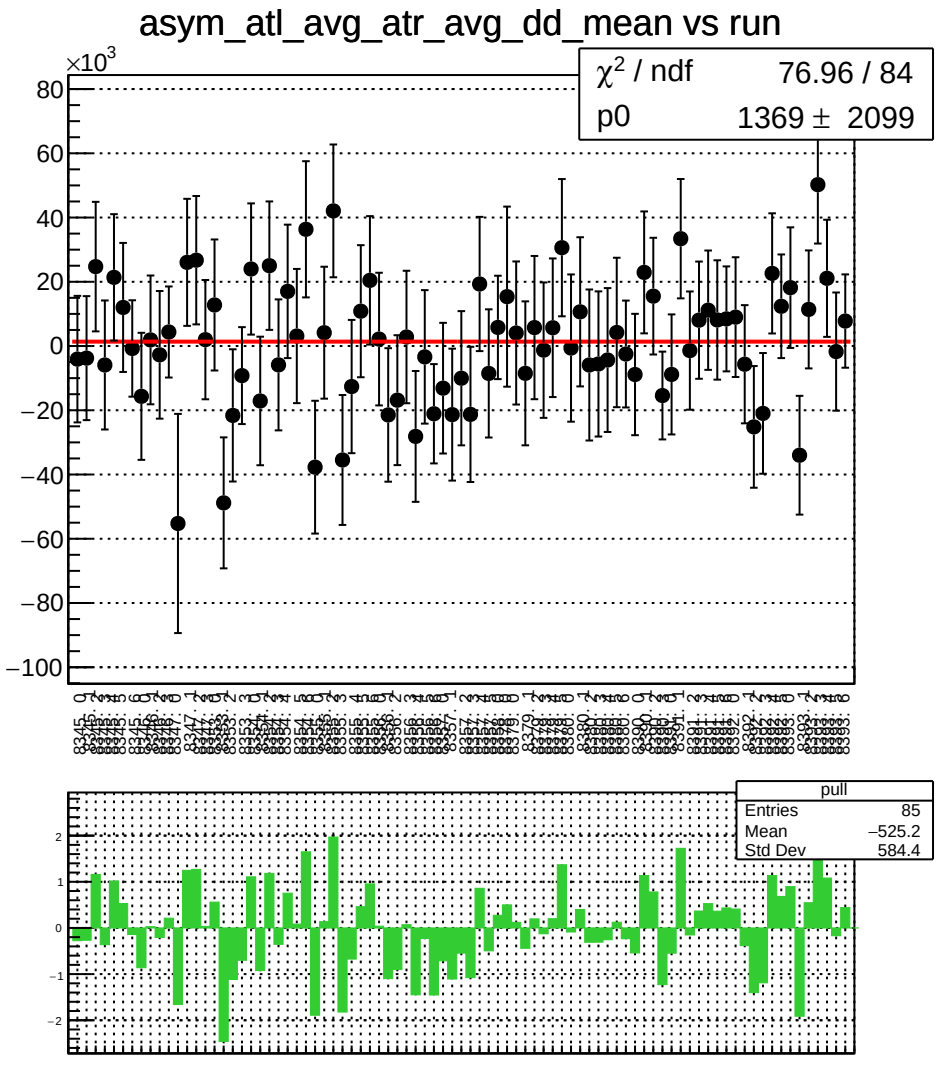

pull1D
Entries 85
Mean −5.947e−05
Std Dev 0.9672

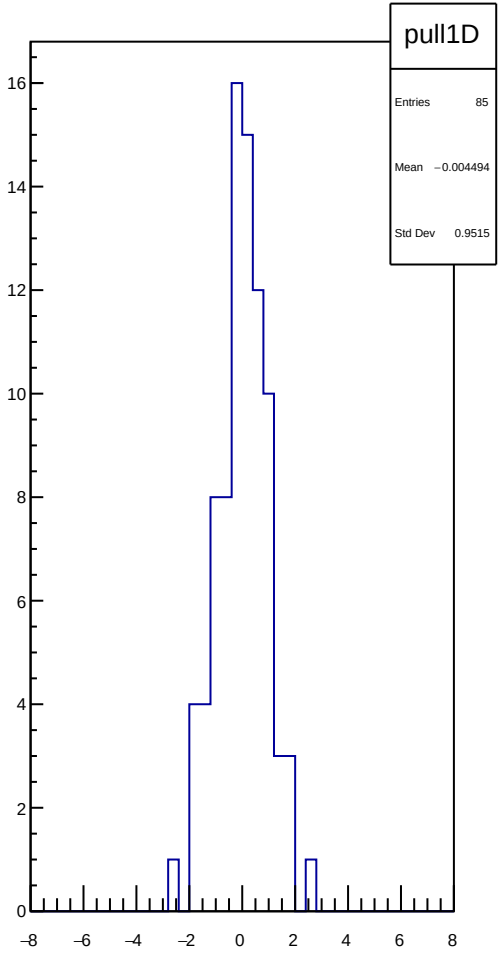

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.324e+04 / 84
p0 1306 ± 1.014
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

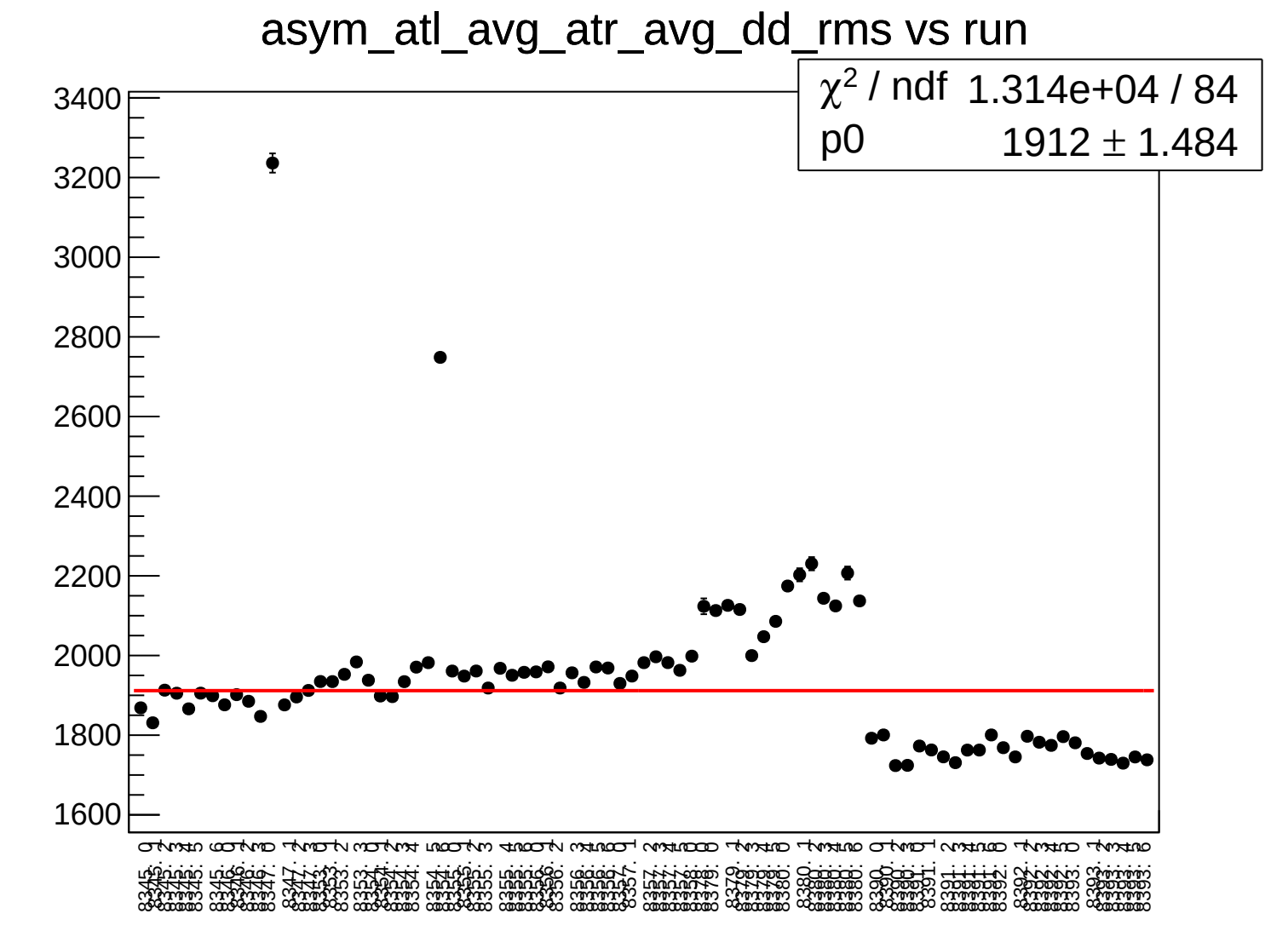

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 98.16 / 84
p0 −3325 ± 1513
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −184.8
Std Dev 238.2
3
2
1
0
−1
−2
−3

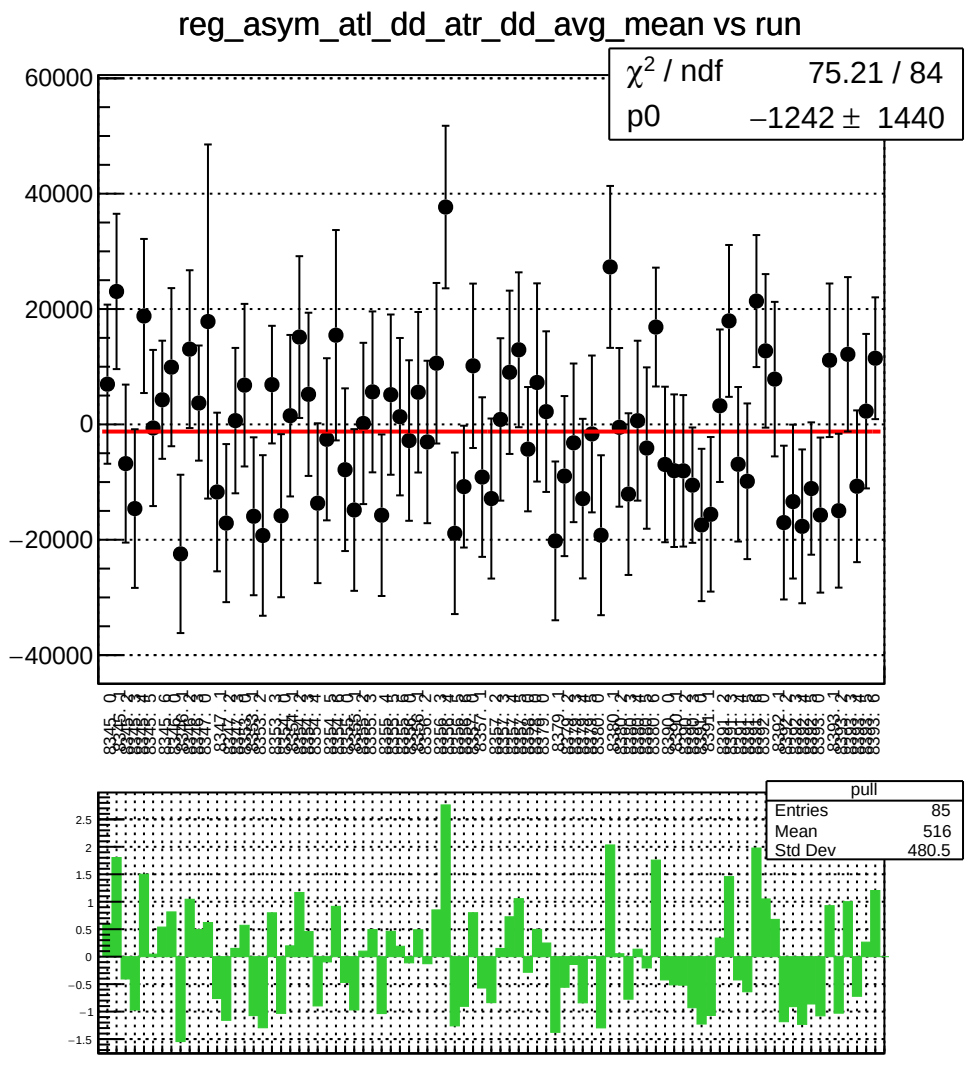

pull1D
Entries 85
Mean 0.02477
Std Dev 1.074
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

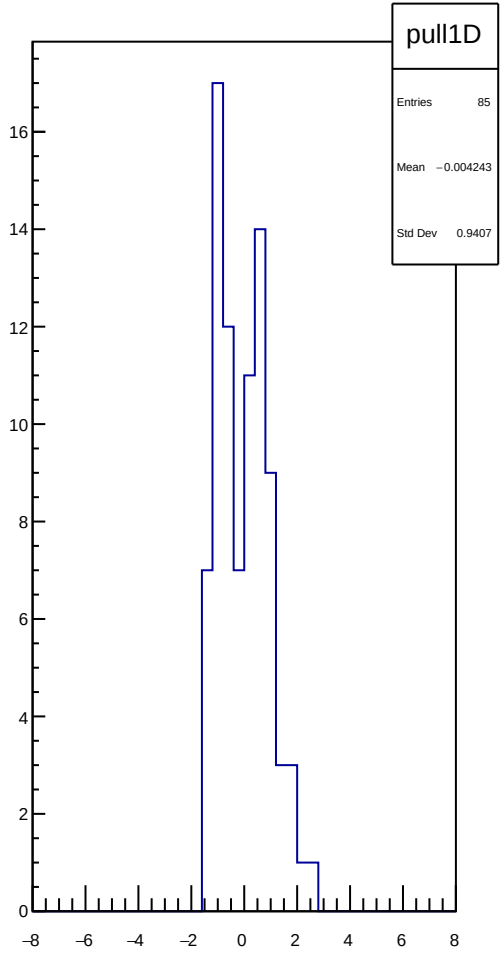

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 1.712e+04 / 84
p0 1376 ± 1.07
1800
1700
1600
1500
1400
1300
1200

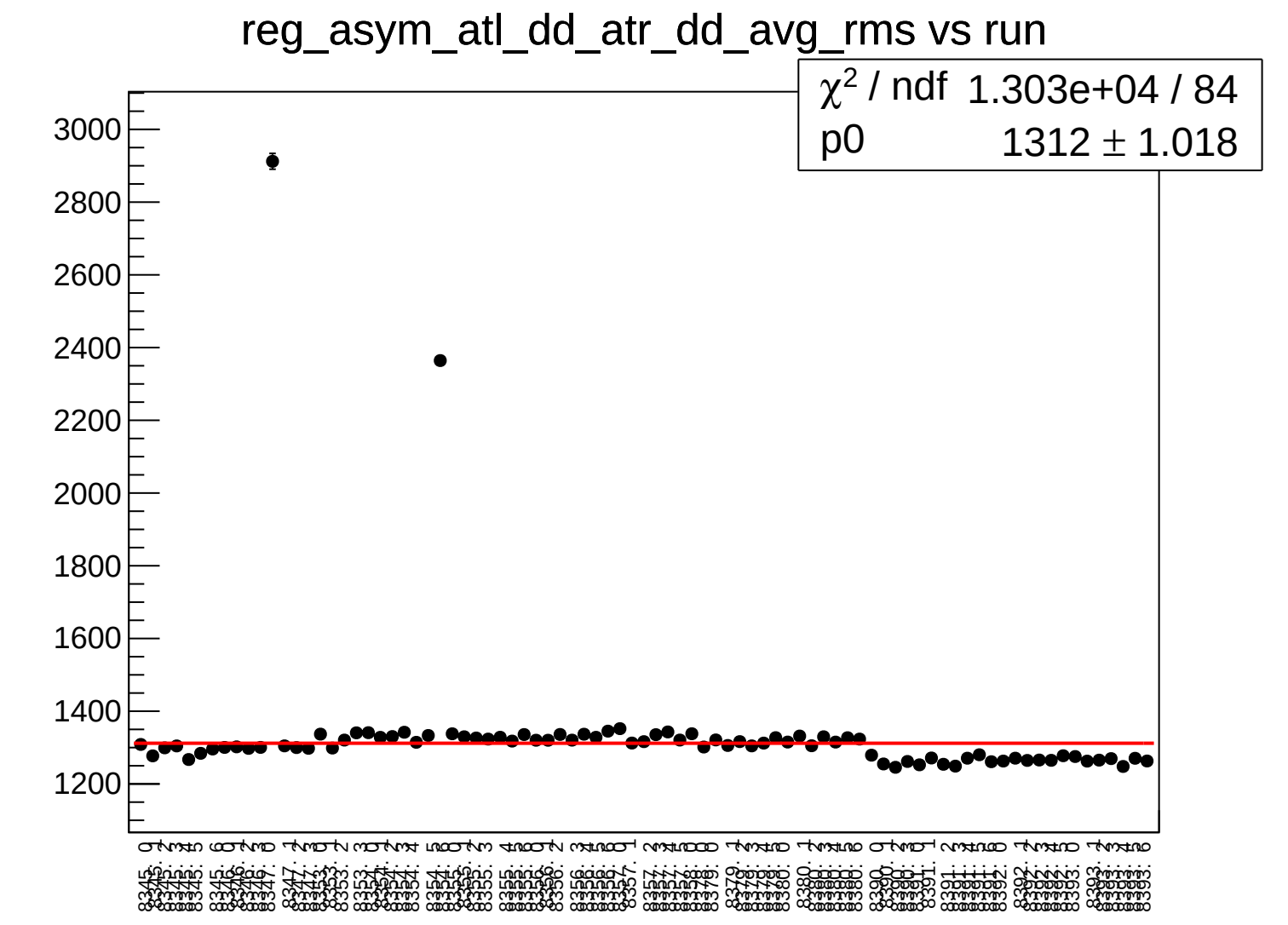

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 76.96 / 84
p0 1369 ± 2099
×10³
pull
Entries 85
Mean −525.2
Std Dev 584.4

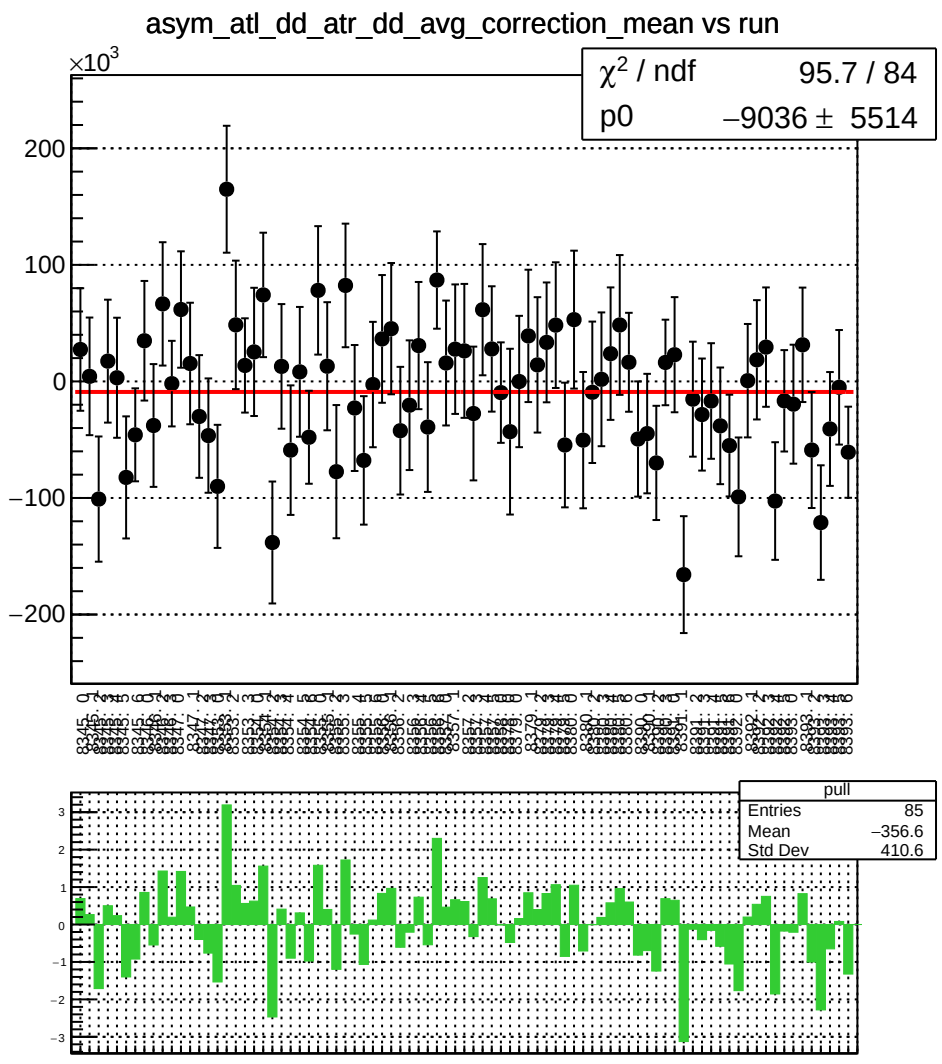

pull1D
Entries 85
Mean −0.004494
Std Dev 0.9515

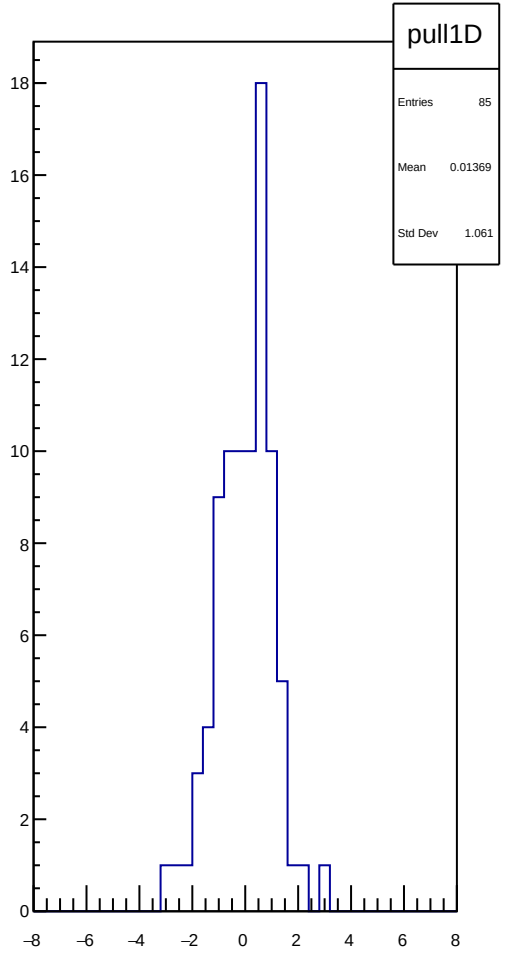

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.314e+04 / 84
p0 1912 ± 1.484
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600

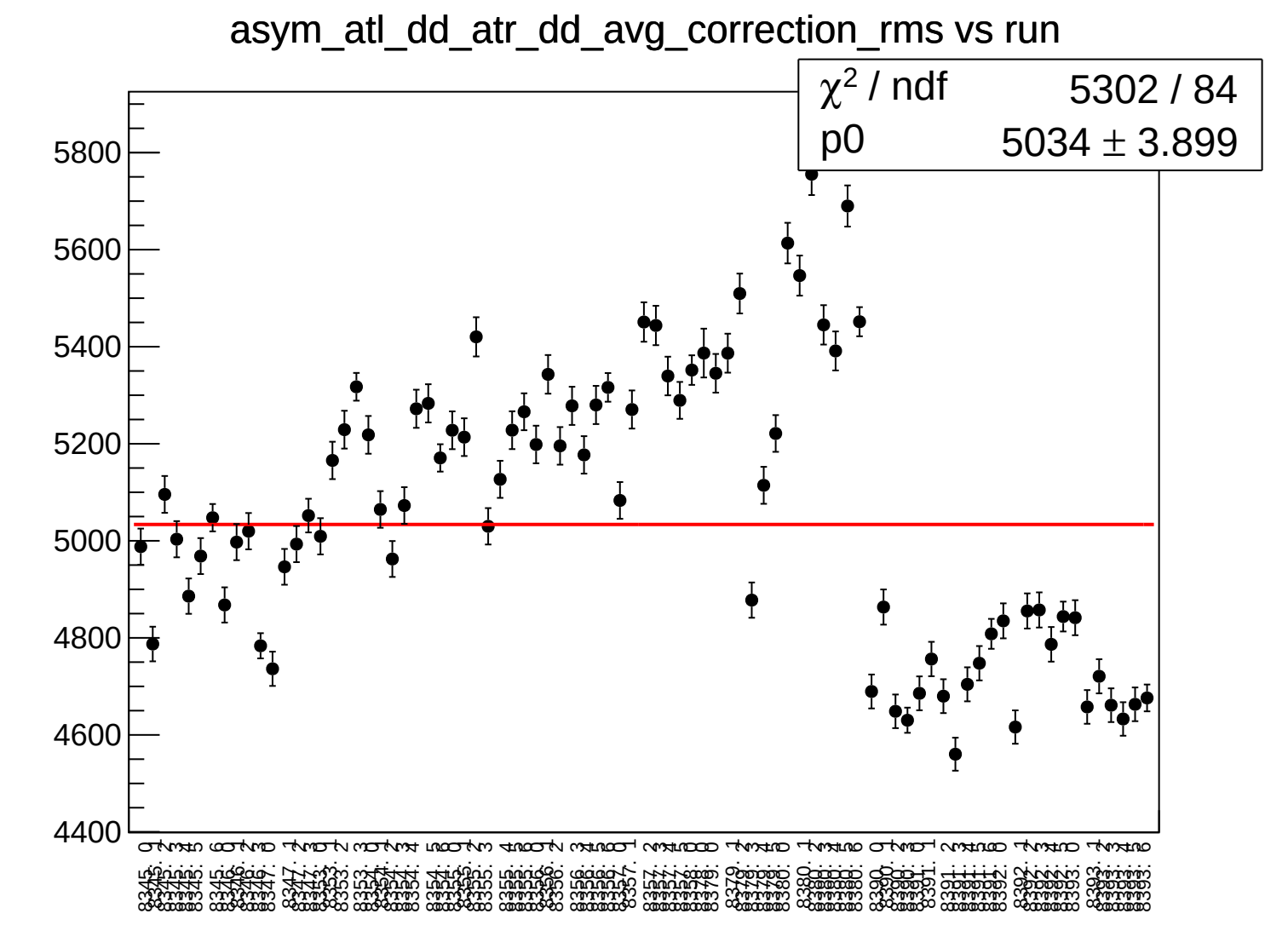

reg_asym_atl_dd_atr_dd_avg_mean vs run
χ² / ndf 75.21 / 84
p0 −1242 ± 1440
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean 516
Std Dev 480.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

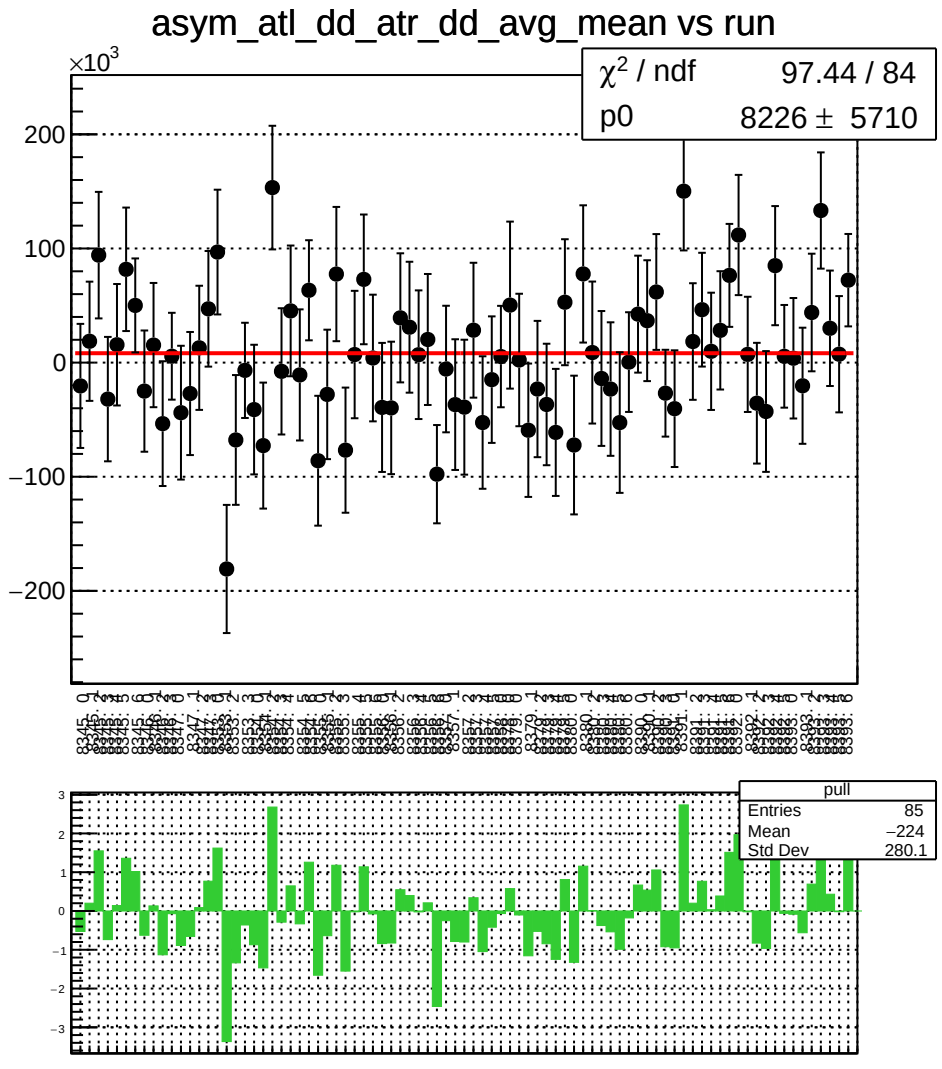

pull1D
Entries 85
Mean −0.004243
Std Dev 0.9407
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

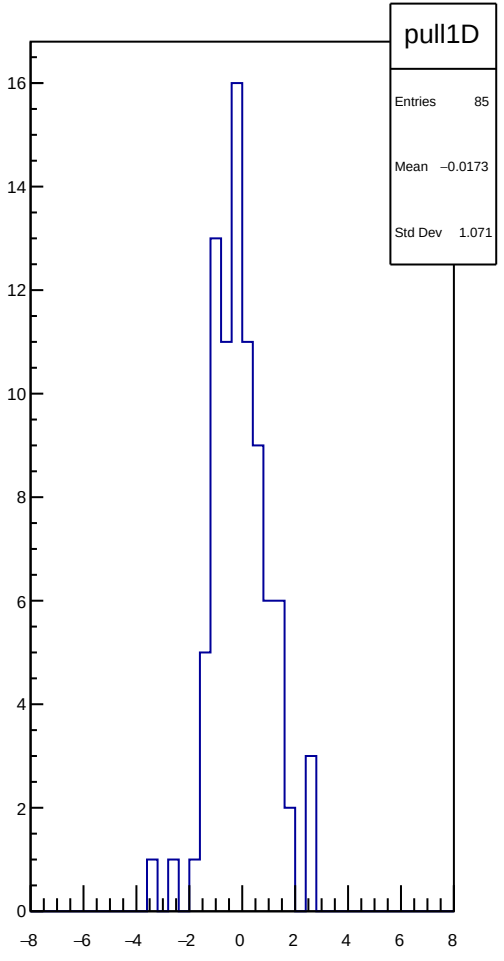

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 1.303e+04 / 84
p0 1312 ± 1.018
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

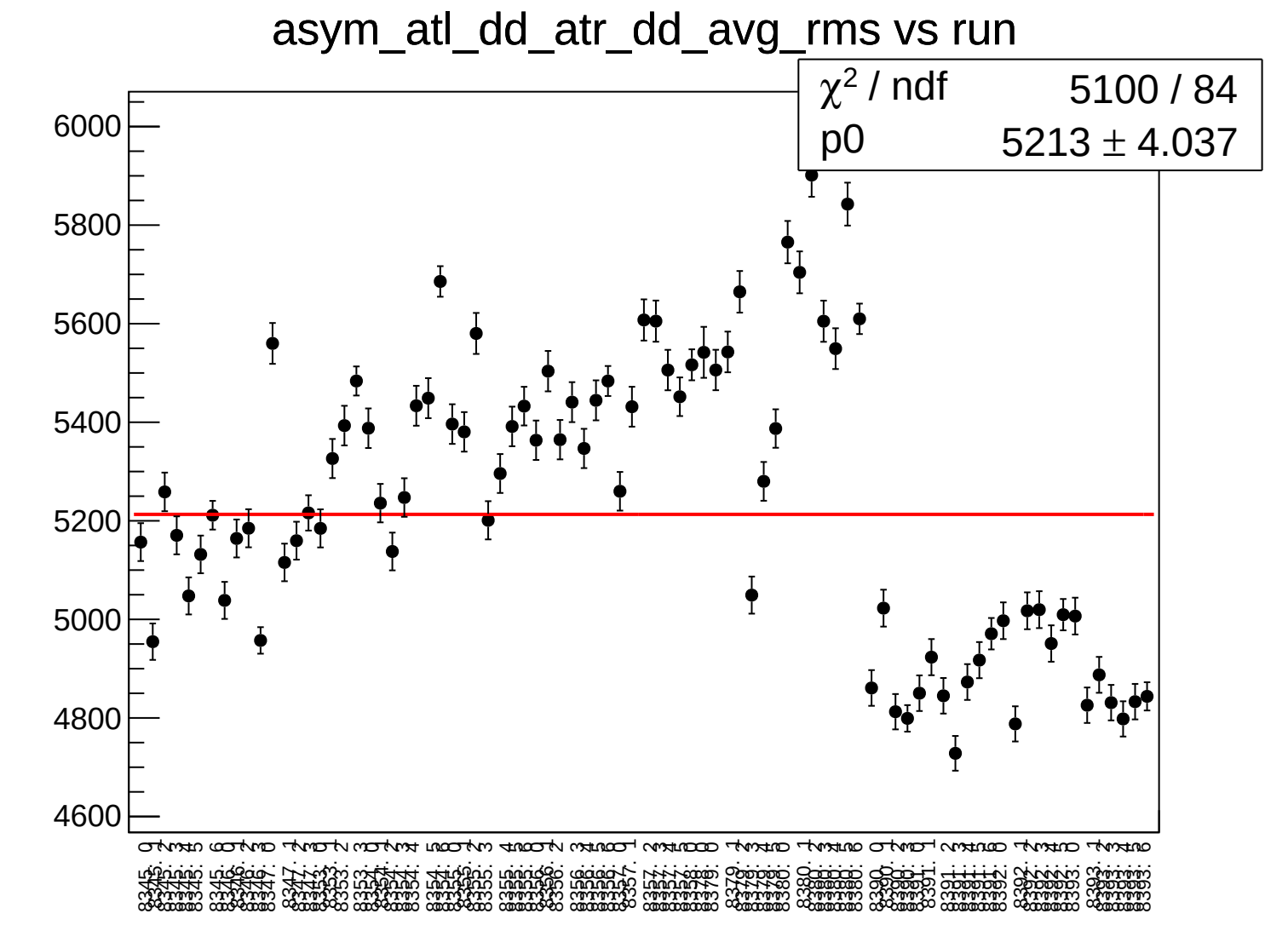

asym_atl_dd_atr_dd_avg_correction_mean vs run
×10^3
χ² / ndf 95.7 / 84
p0 −9036 ± 5514
200
100
0
−100
−200
pull
Entries 85
Mean −356.6
Std Dev 410.6
3
2
1
0
−1
−2
−3

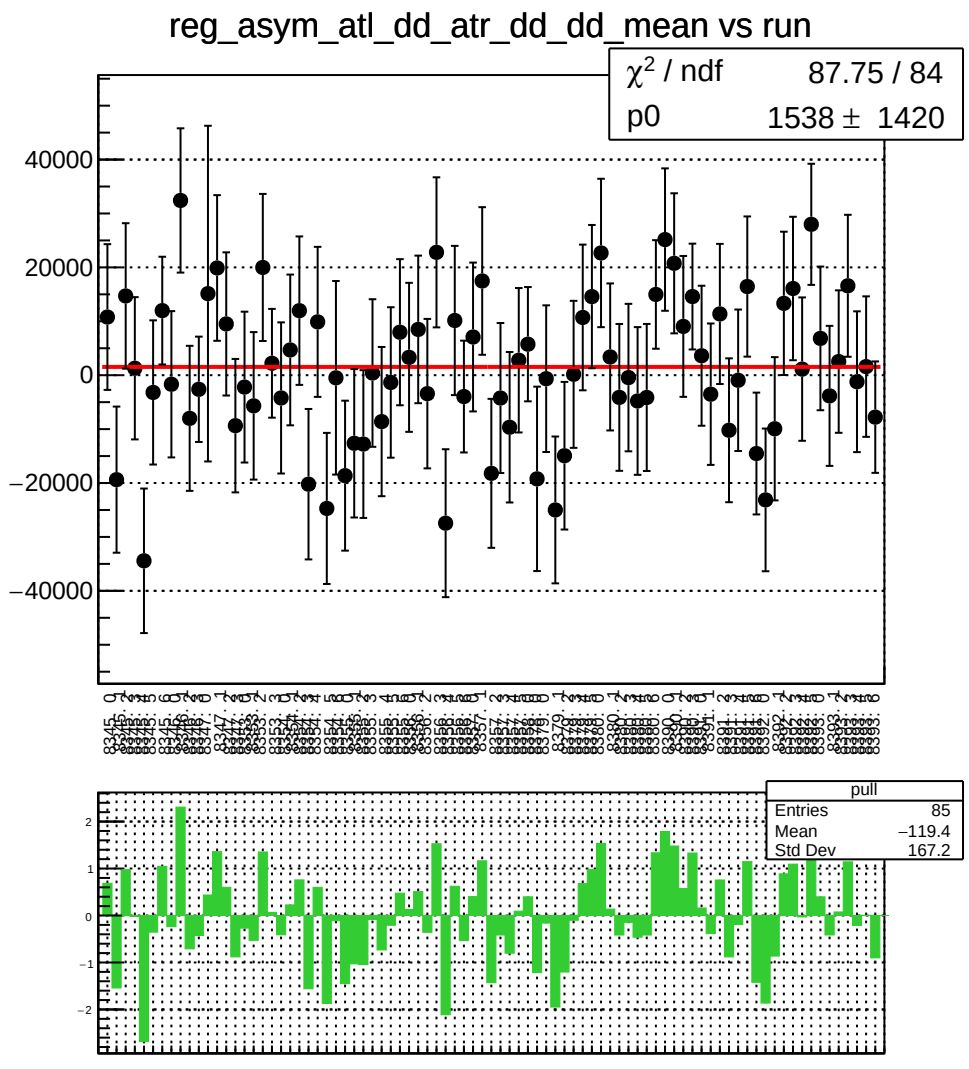

pull1D
Entries 85
Mean 0.01369
Std Dev 1.061
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

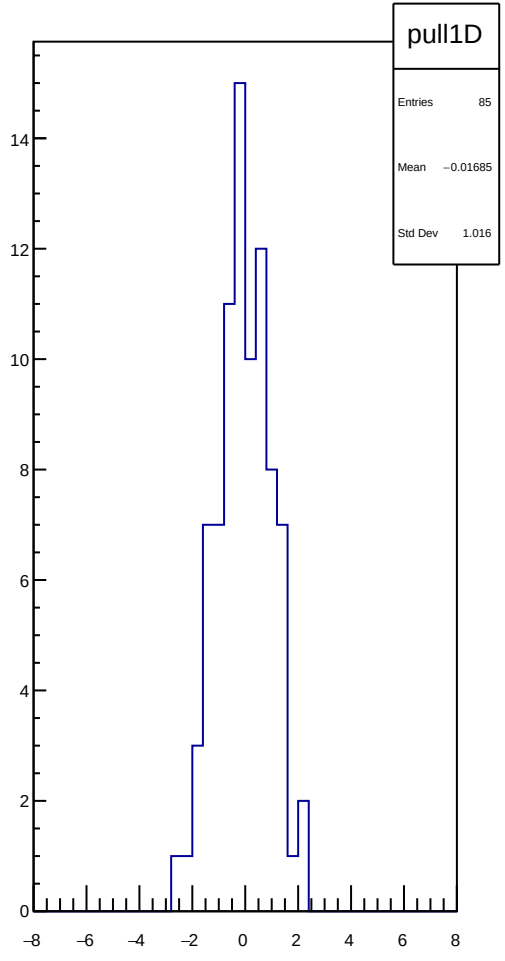

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 5302 / 84
p0 5034 ± 3.899
5800
5600
5400
5200
5000
4800
4600
4400

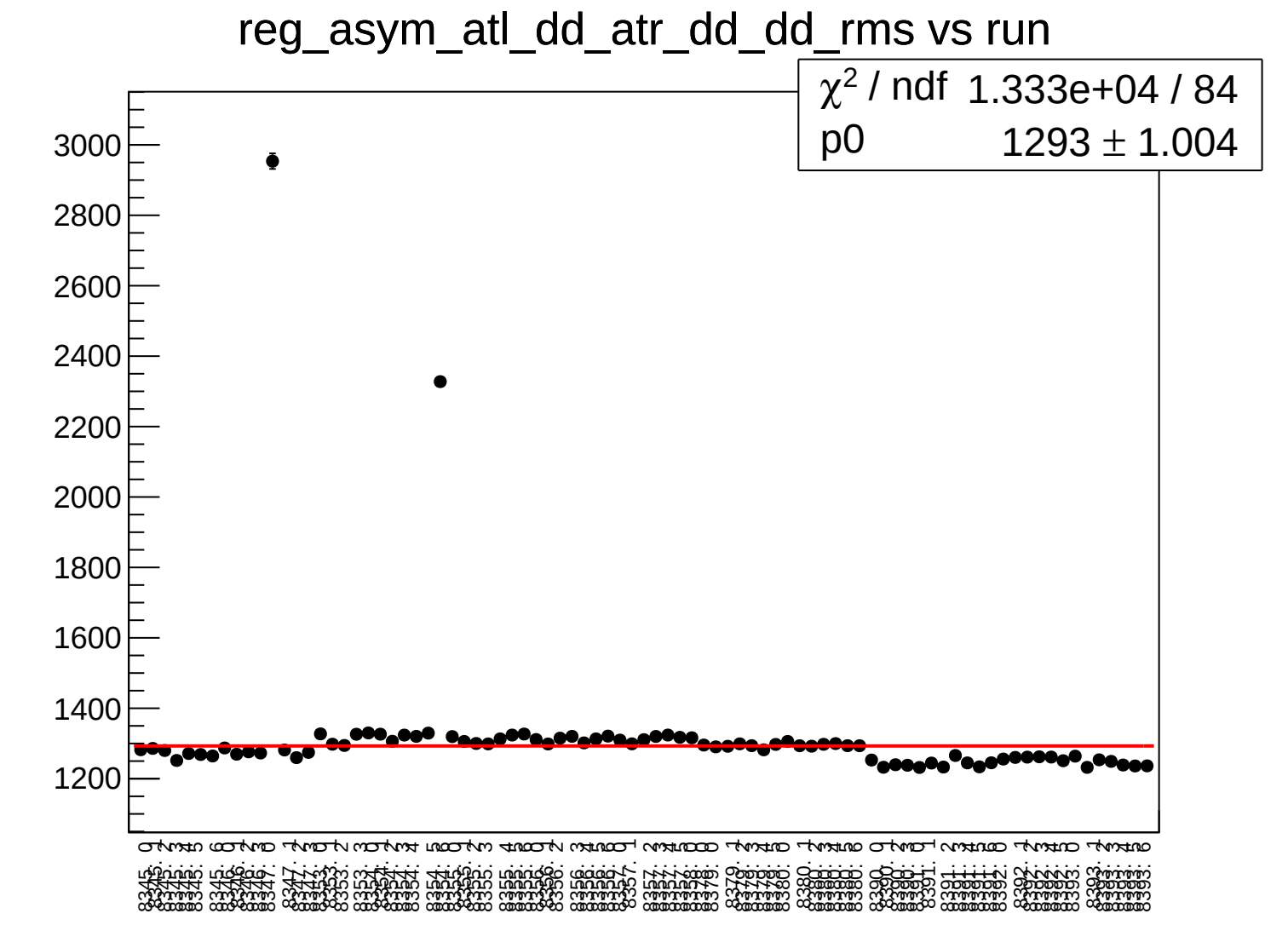

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 97.44 / 84
p0 8226 ± 5710
200
100
0
−100
−200
pull
Entries 85
Mean −224
Std Dev 280.1
3
2
1
0
−1
−2
−3

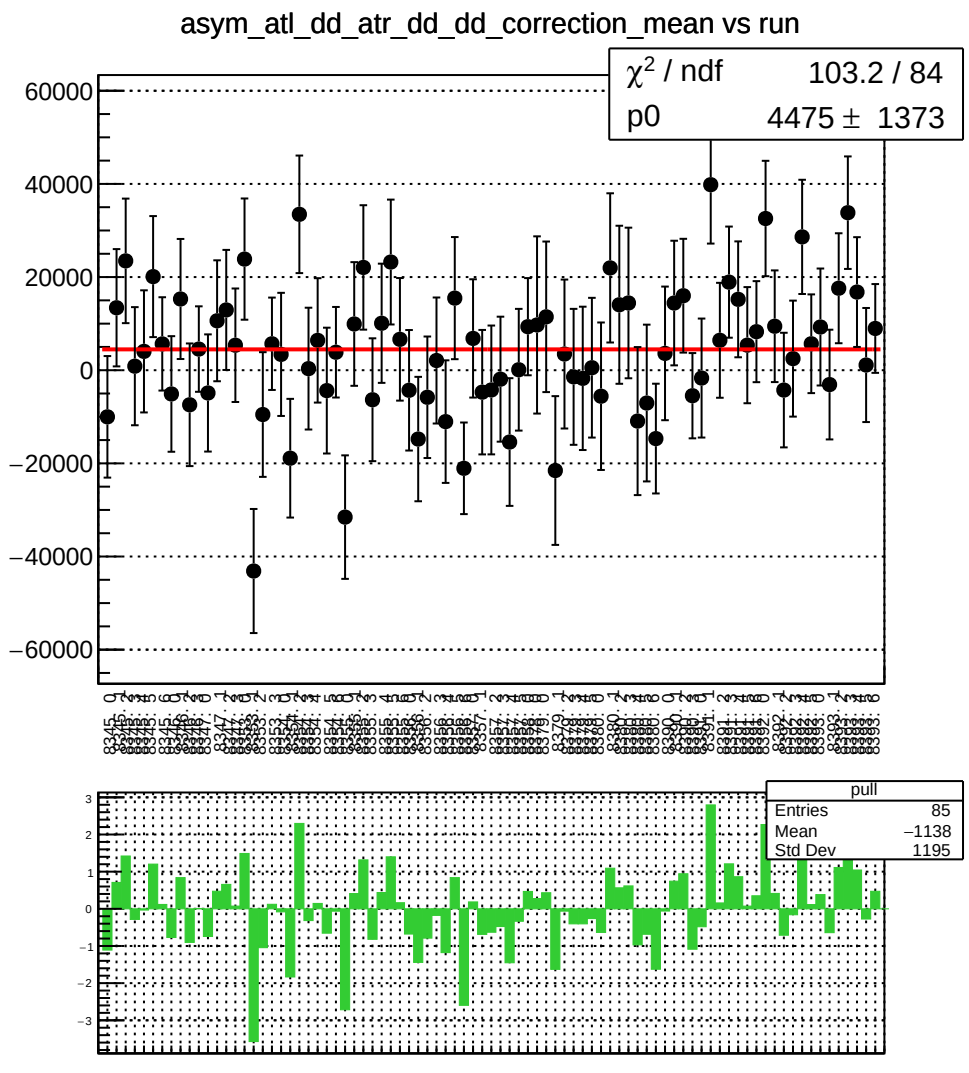

pull1D
Entries 85
Mean −0.0173
Std Dev 1.071
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

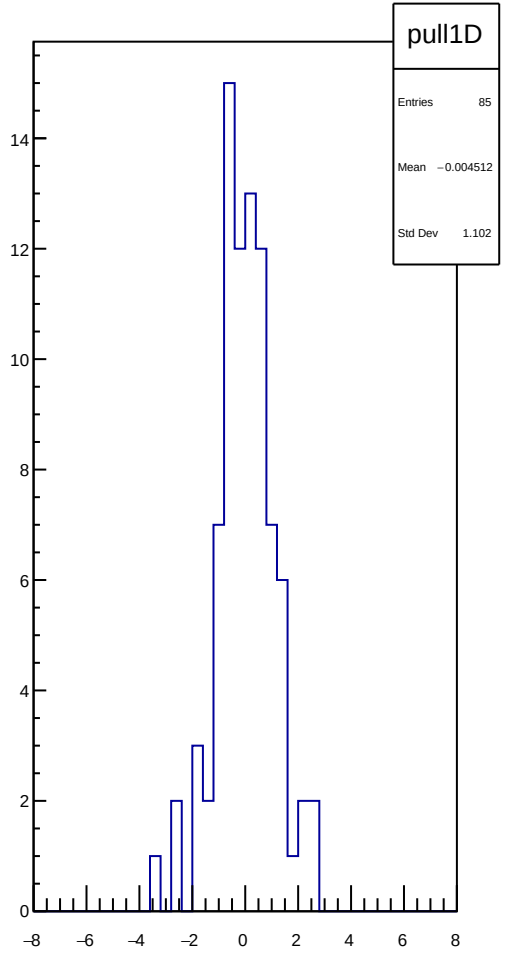

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 5100 / 84
p0 5213 ± 4.037
6000
5800
5600
5400
5200
5000
4800
4600

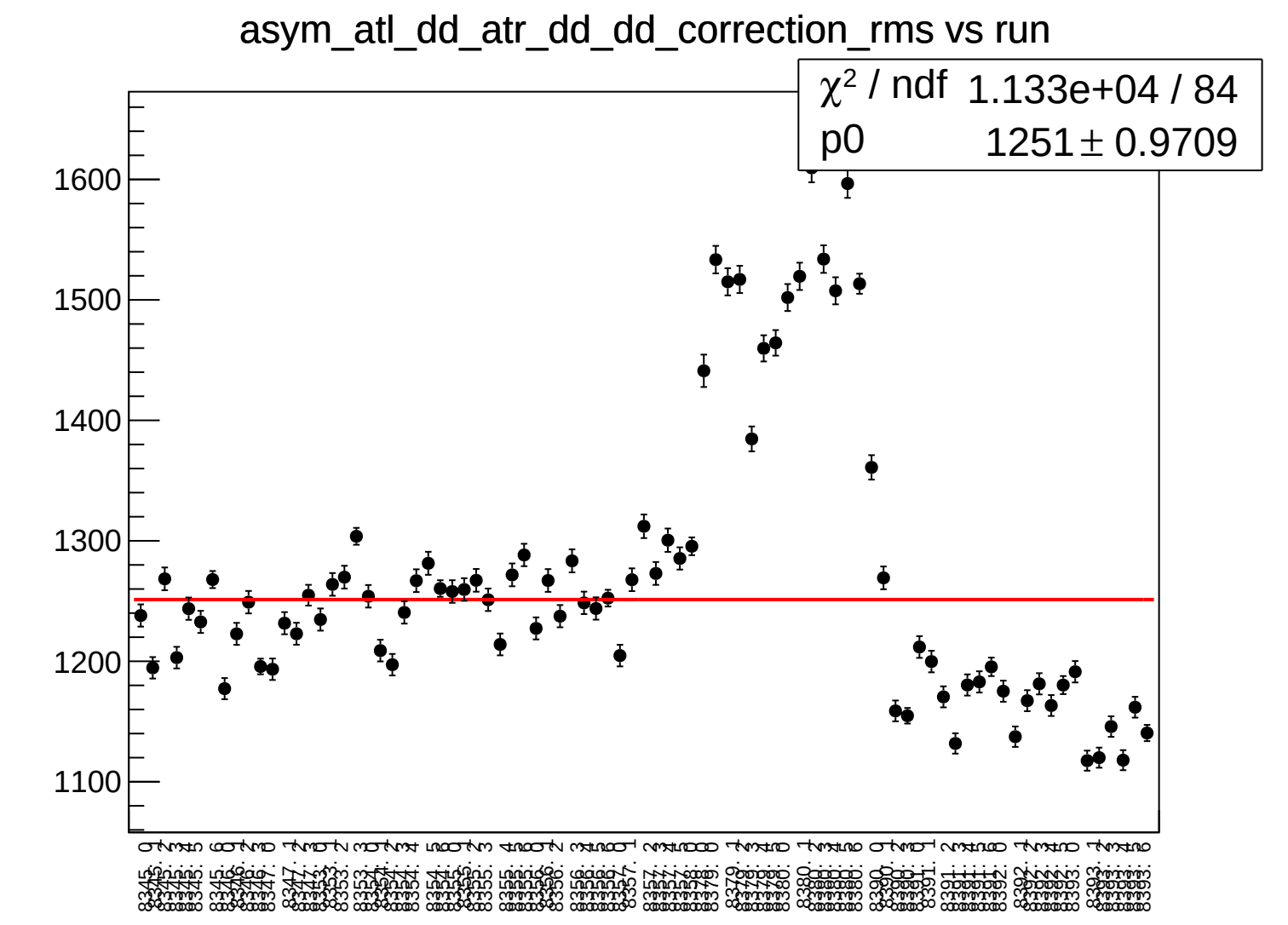

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 87.75 / 84
p0 1538 ± 1420
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −119.4
Std Dev 167.2
2
1
0
−1
−2

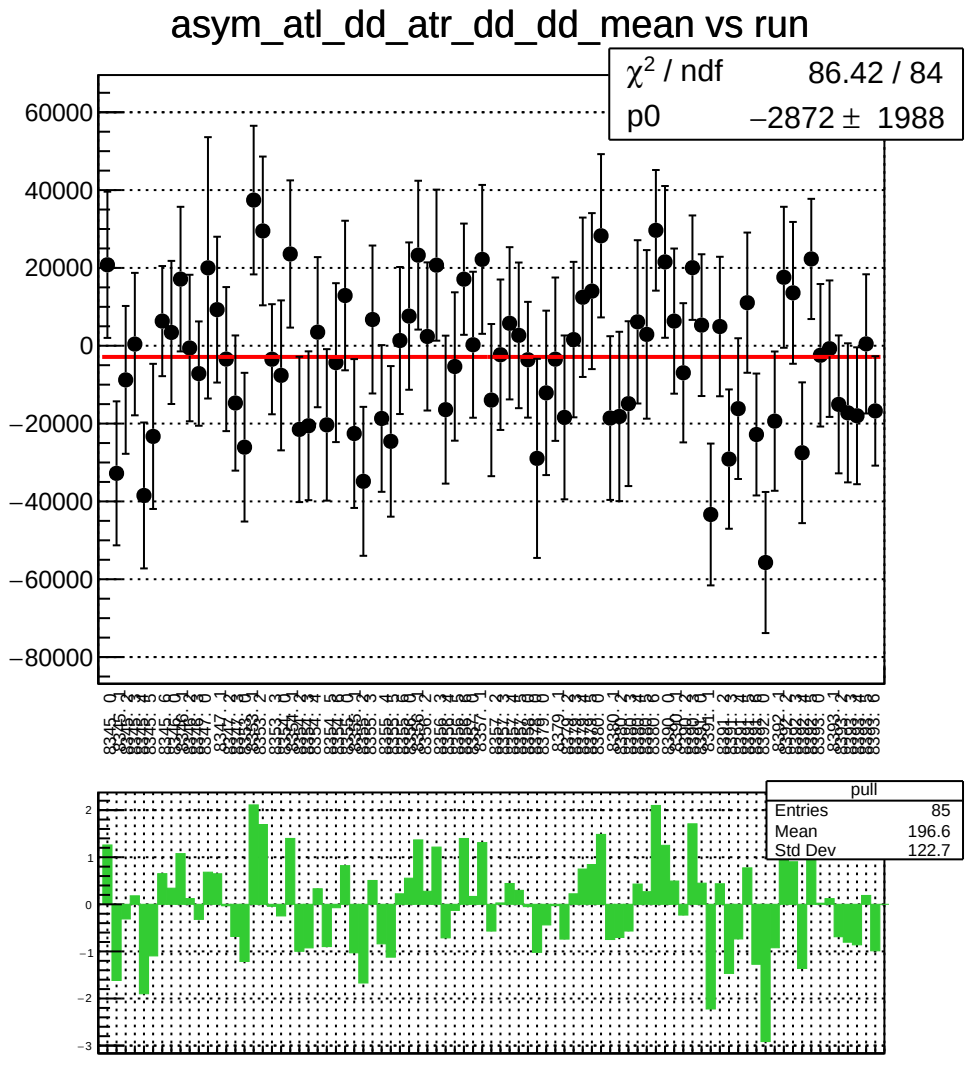

pull1D
Entries 85
Mean −0.01685
Std Dev 1.016
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

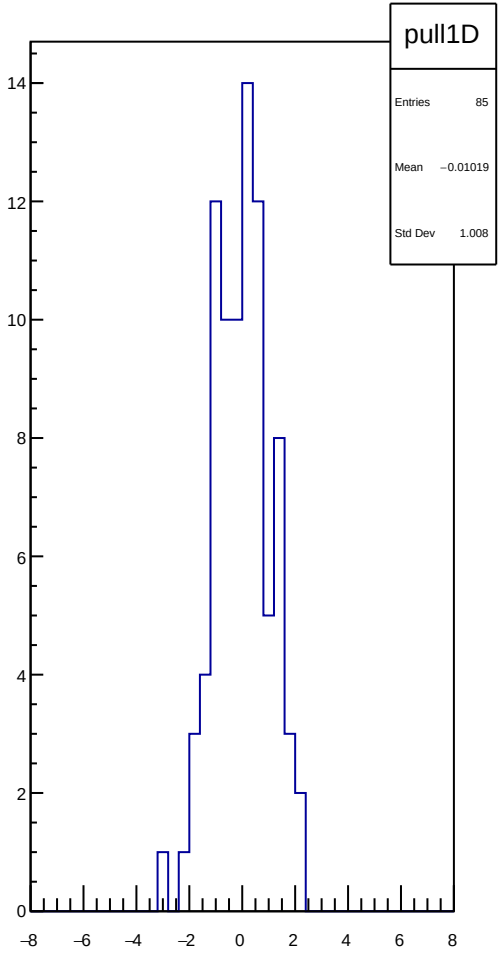

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.333e+04 / 84
p0 1293 ± 1.004
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

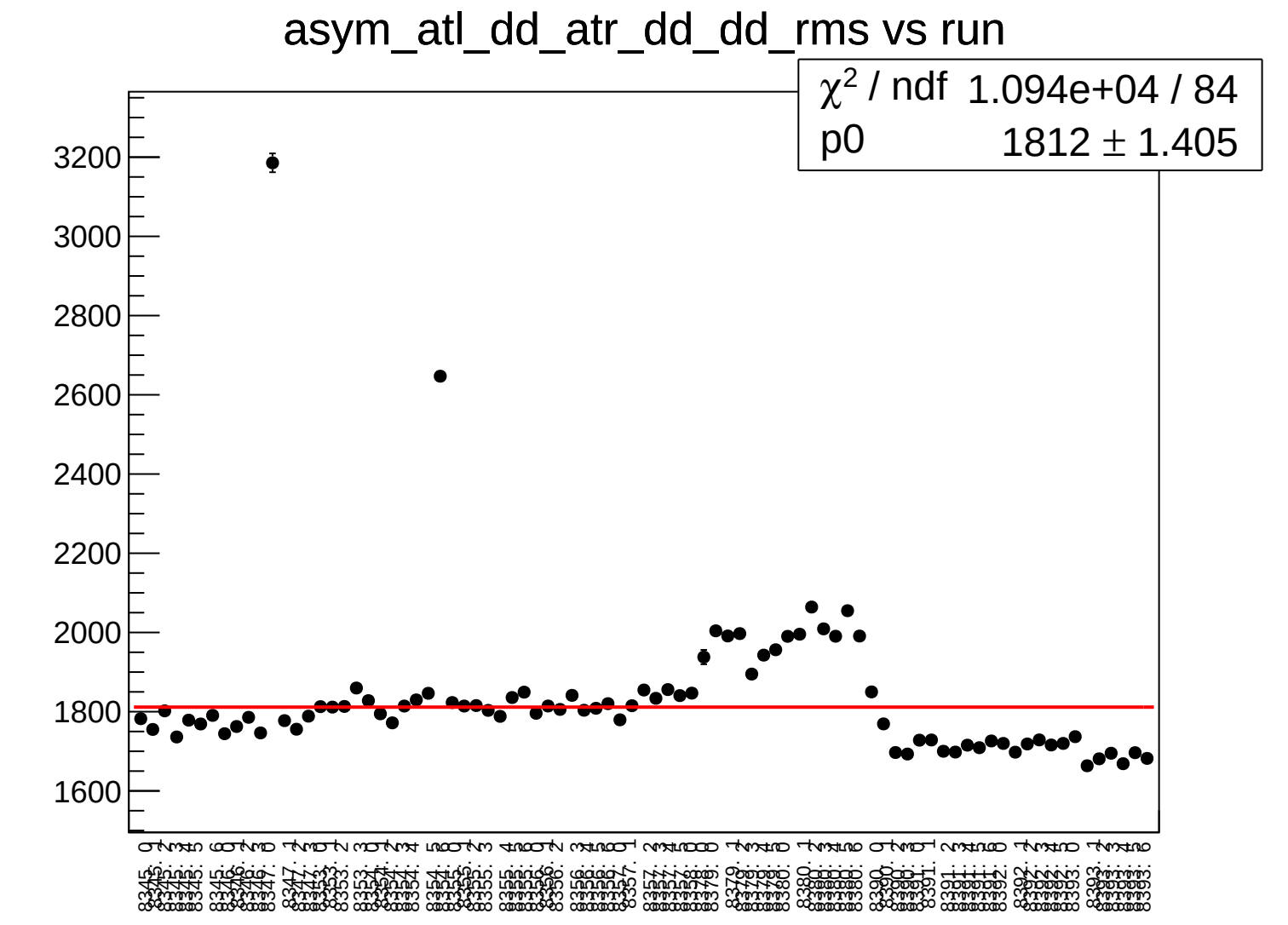

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 103.2 / 84
p0 4475 ± 1373
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −1138
Std Dev 1195
3
2
1
0
−1
−2
−3

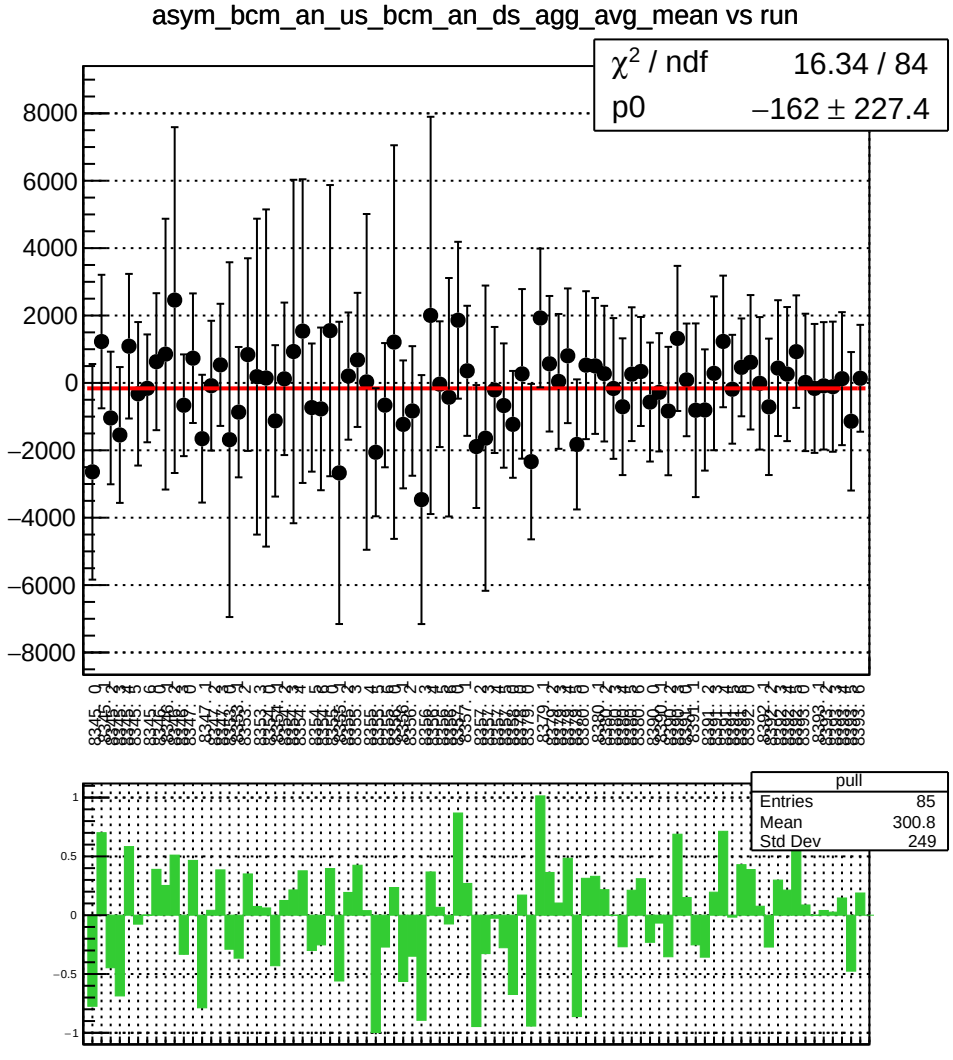

pull1D
Entries 85
Mean −0.004512
Std Dev 1.102
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

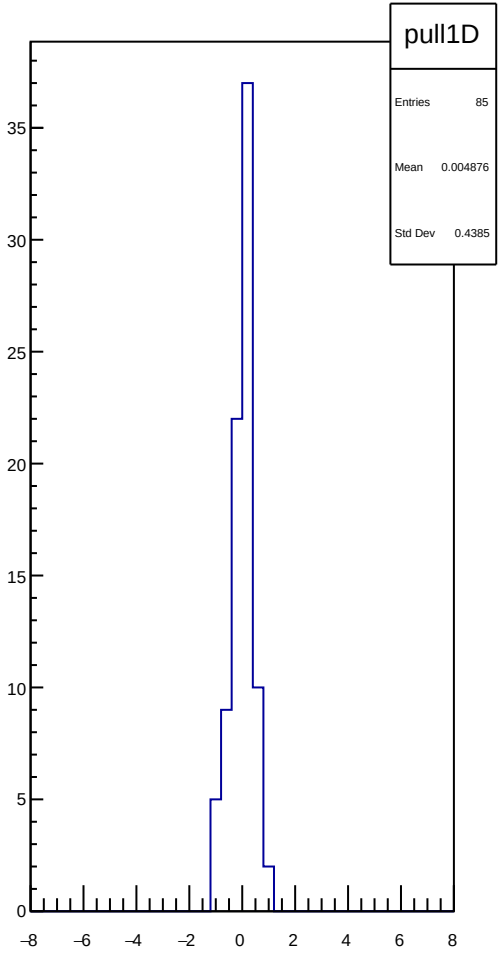

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 1.133e+04 / 84
p0 1251 ± 0.9709
1600
1500
1400
1300
1200
1100

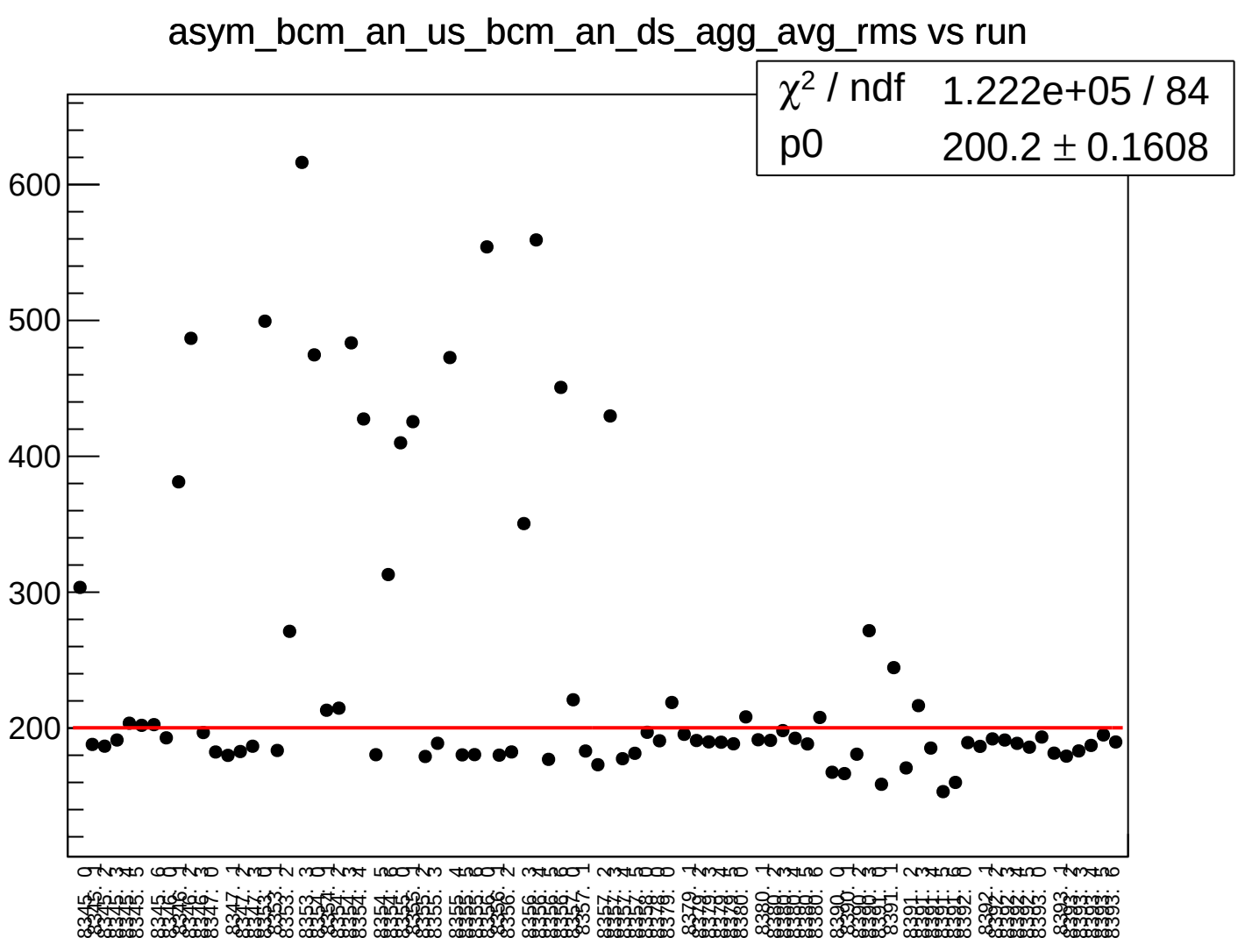

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 86.42 / 84
p0 −2872 ± 1988
pull
Entries 85
Mean 196.6
Std Dev 122.7

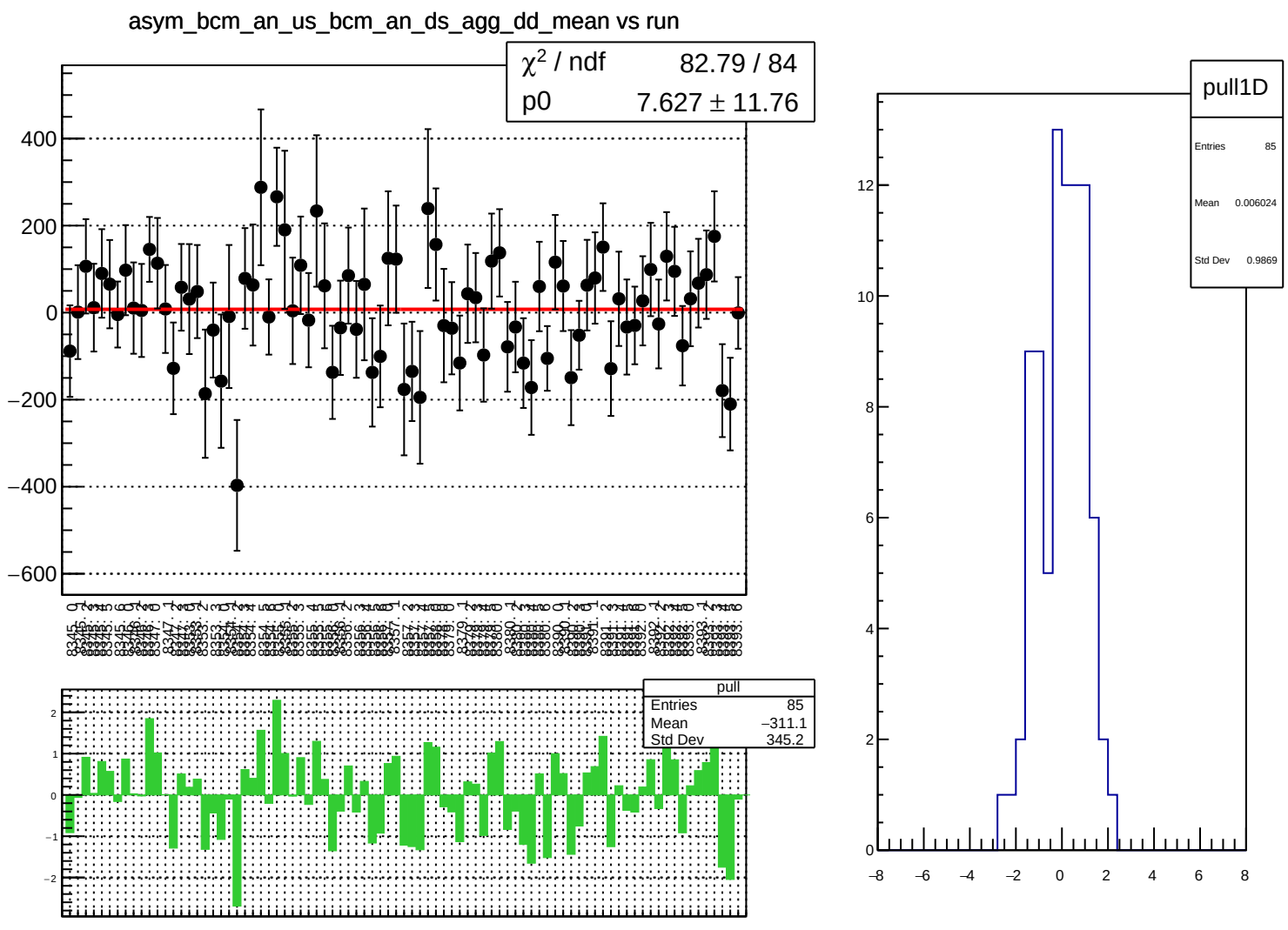

pull1D
Entries 85
Mean −0.01019
Std Dev 1.008

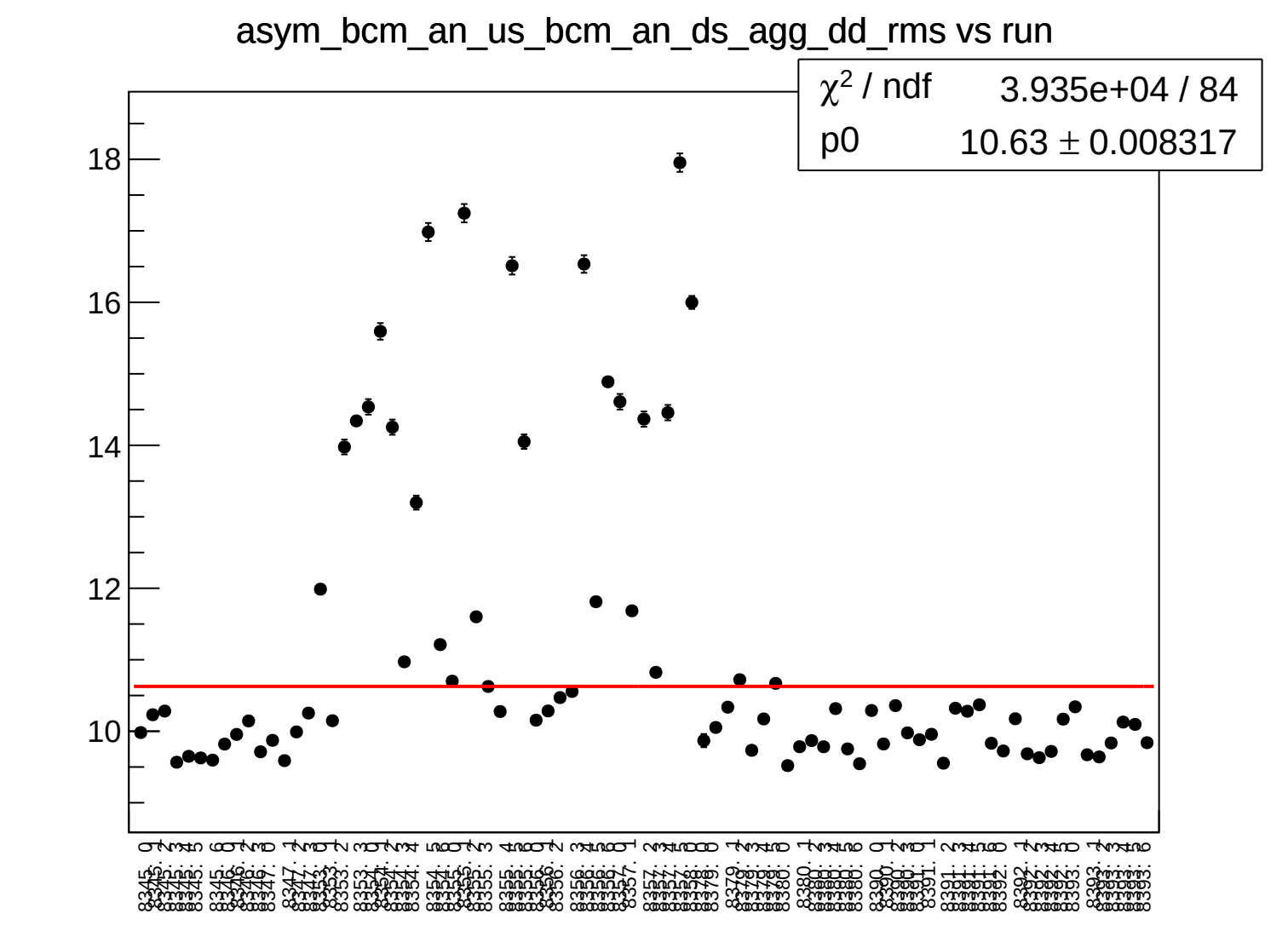

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.094e+04 / 84
p0 1812 ± 1.405
3200
3000
2800
2600
2400
2200
2000
1800
1600

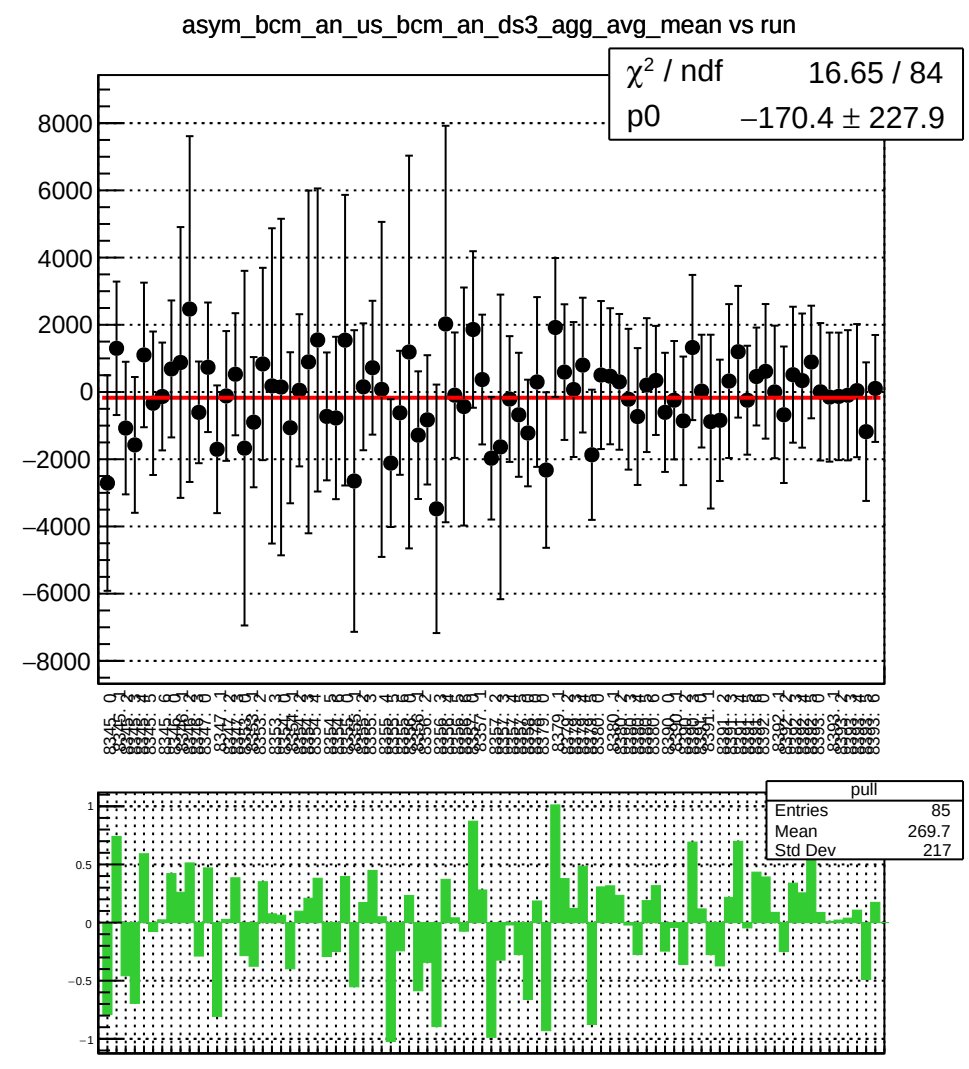

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.34 / 84
p0 −162 ± 227.4
pull
Entries 85
Mean 300.8
Std Dev 249

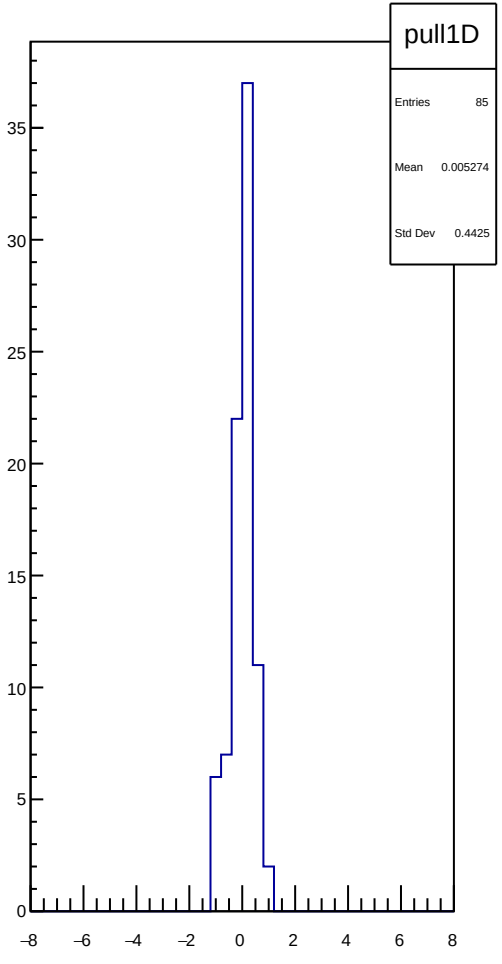

pull1D
Entries 85
Mean 0.004876
Std Dev 0.4385

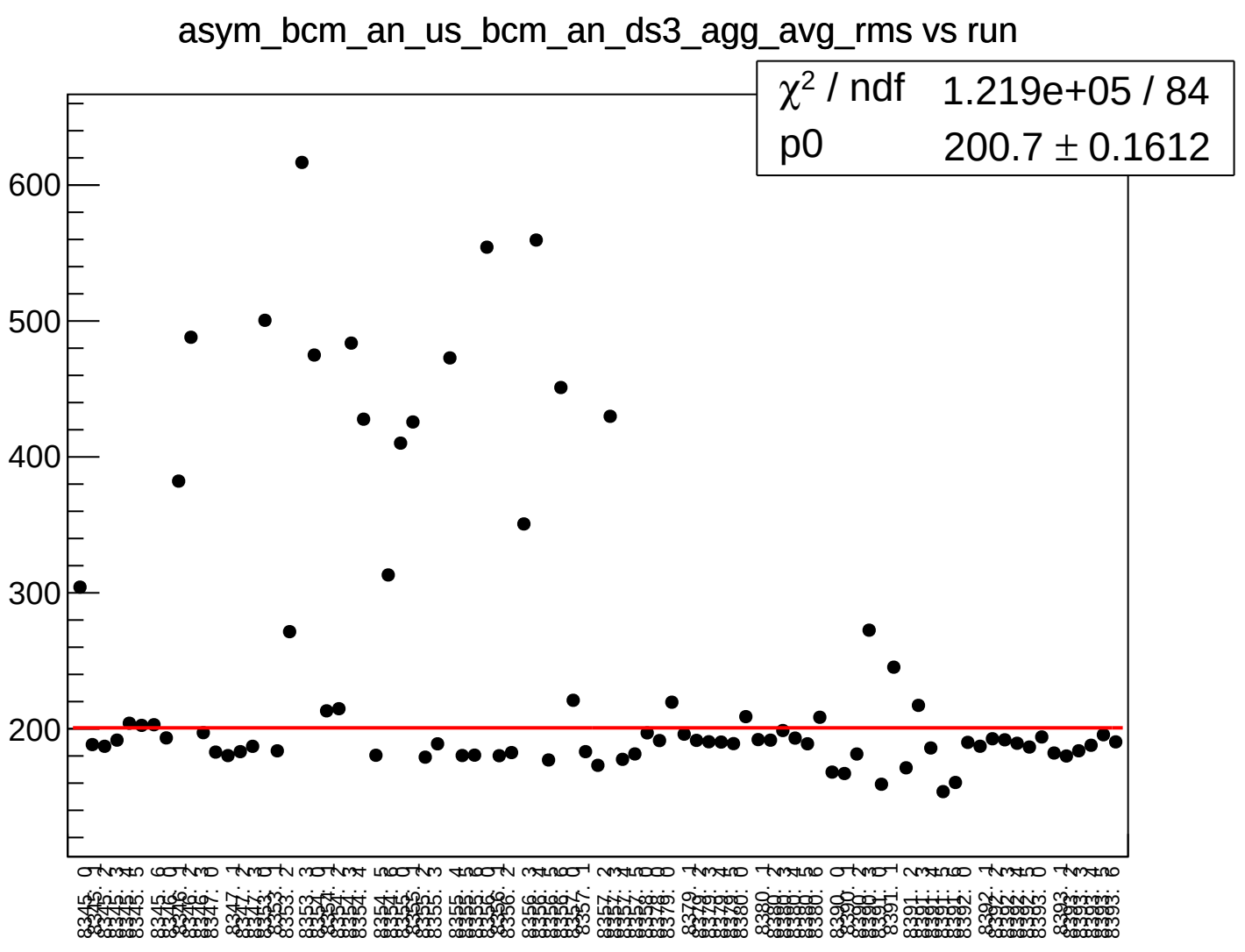

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.222e+05 / 84
p0 200.2 ± 0.1608
600
500
400
300
200

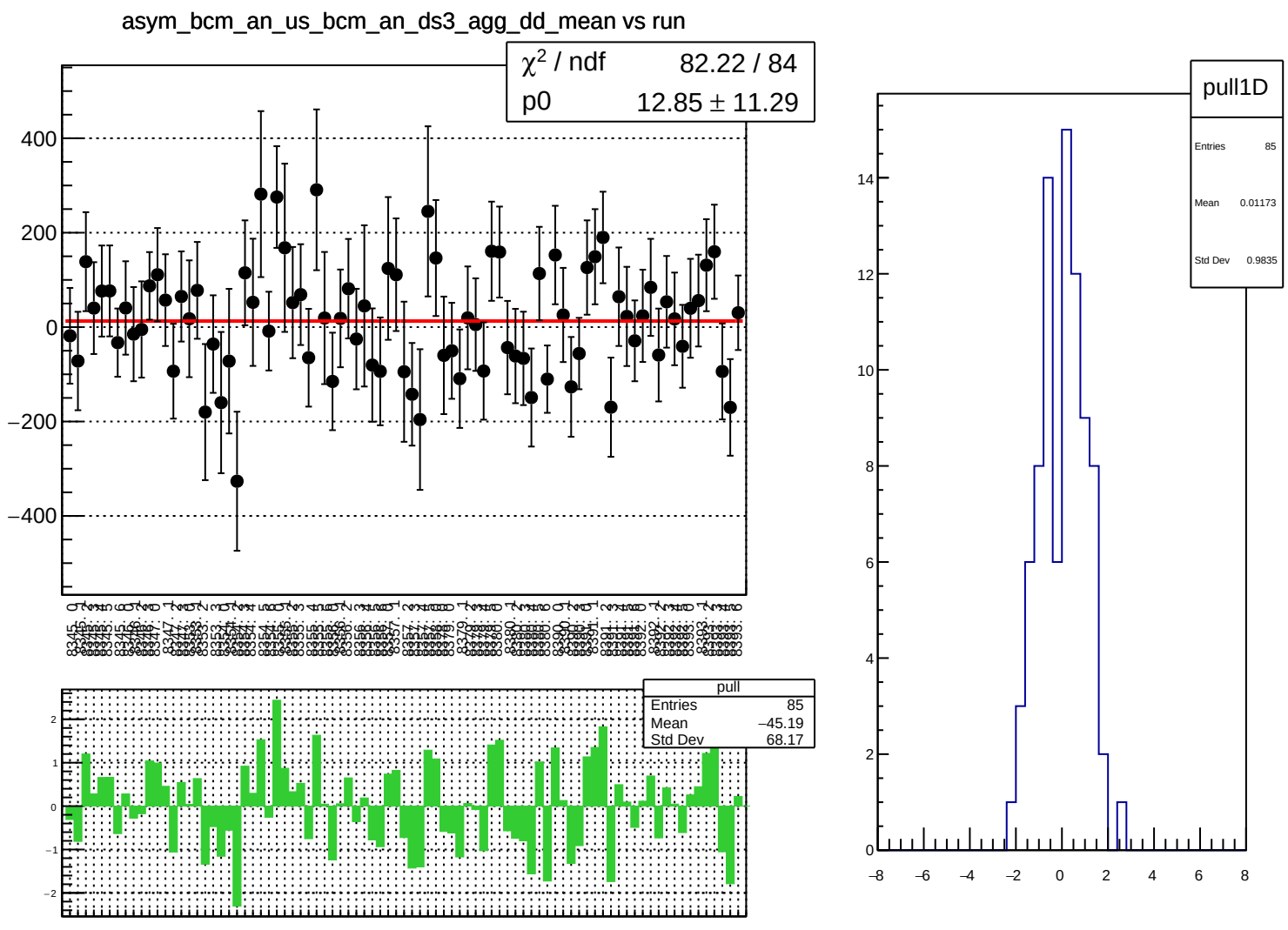

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.79 / 84
p0 7.627 ± 11.76
400
200
0
−200
−400
−600
pull
Entries 85
Mean −311.1
Std Dev 345.2
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.006024
Std Dev 0.9869
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

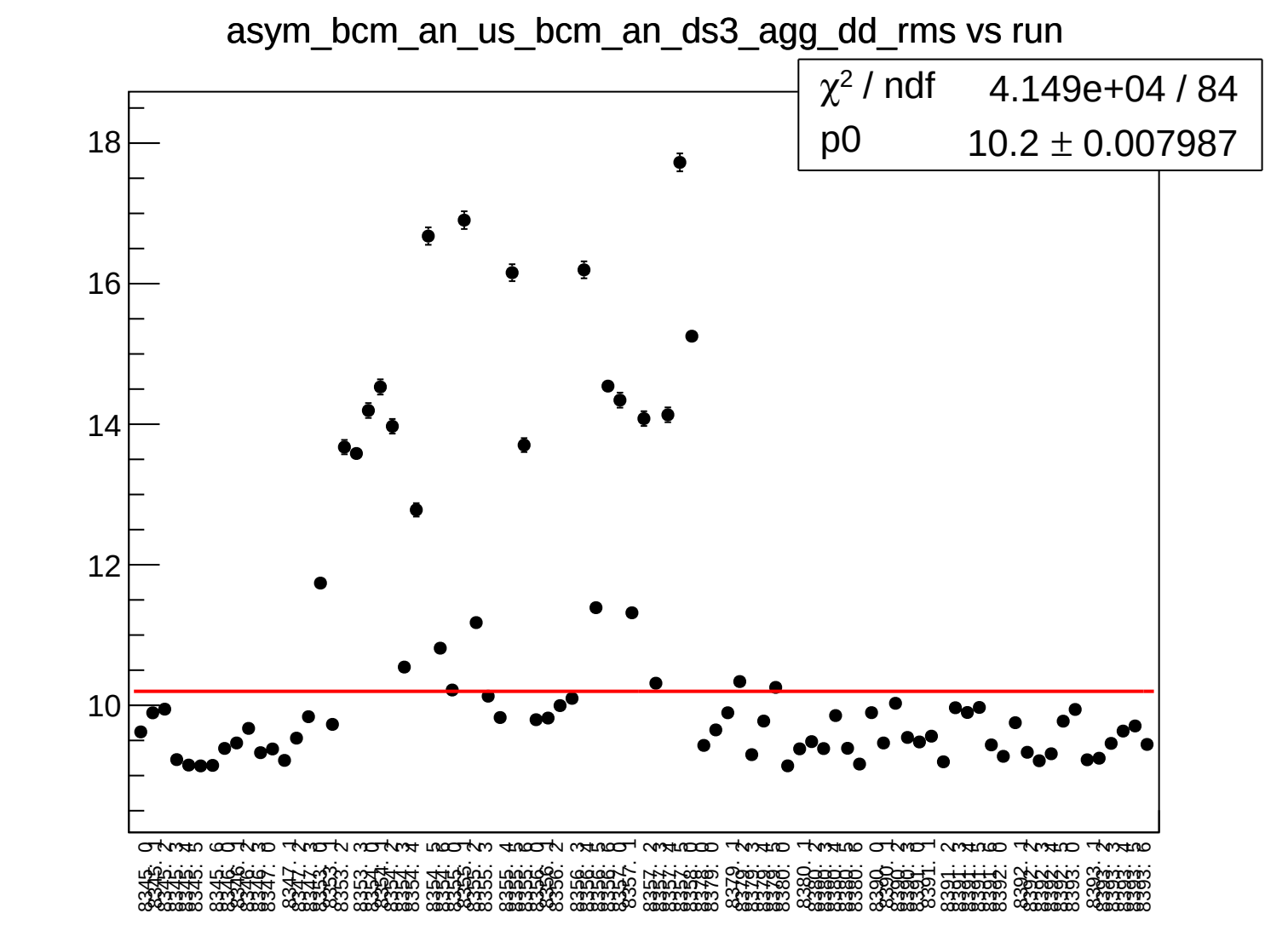

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3.935e+04 / 84
p0 10.63 ± 0.008317
18
16
14
12
10

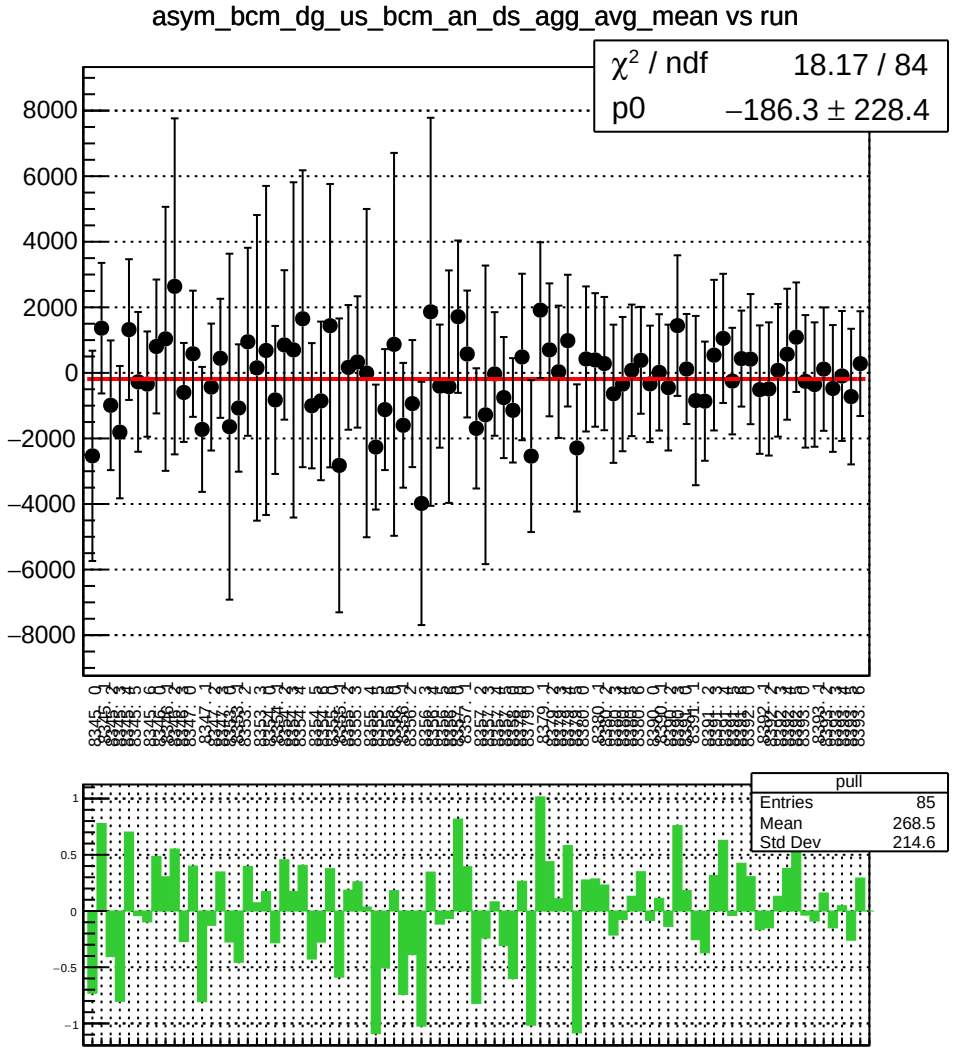

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 16.65 / 84
p0 −170.4 ± 227.9
pull
Entries 85
Mean 269.7
Std Dev 217

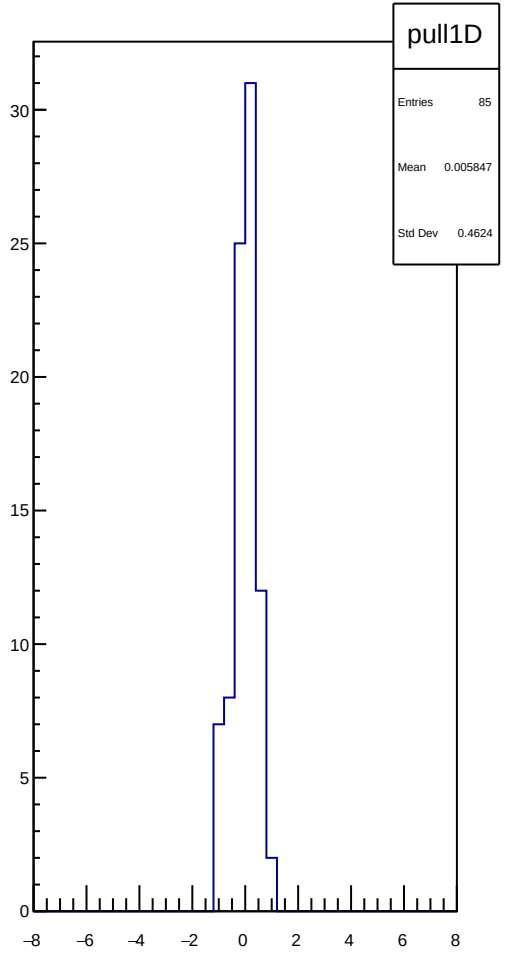

pull1D
Entries 85
Mean 0.005274
Std Dev 0.4425

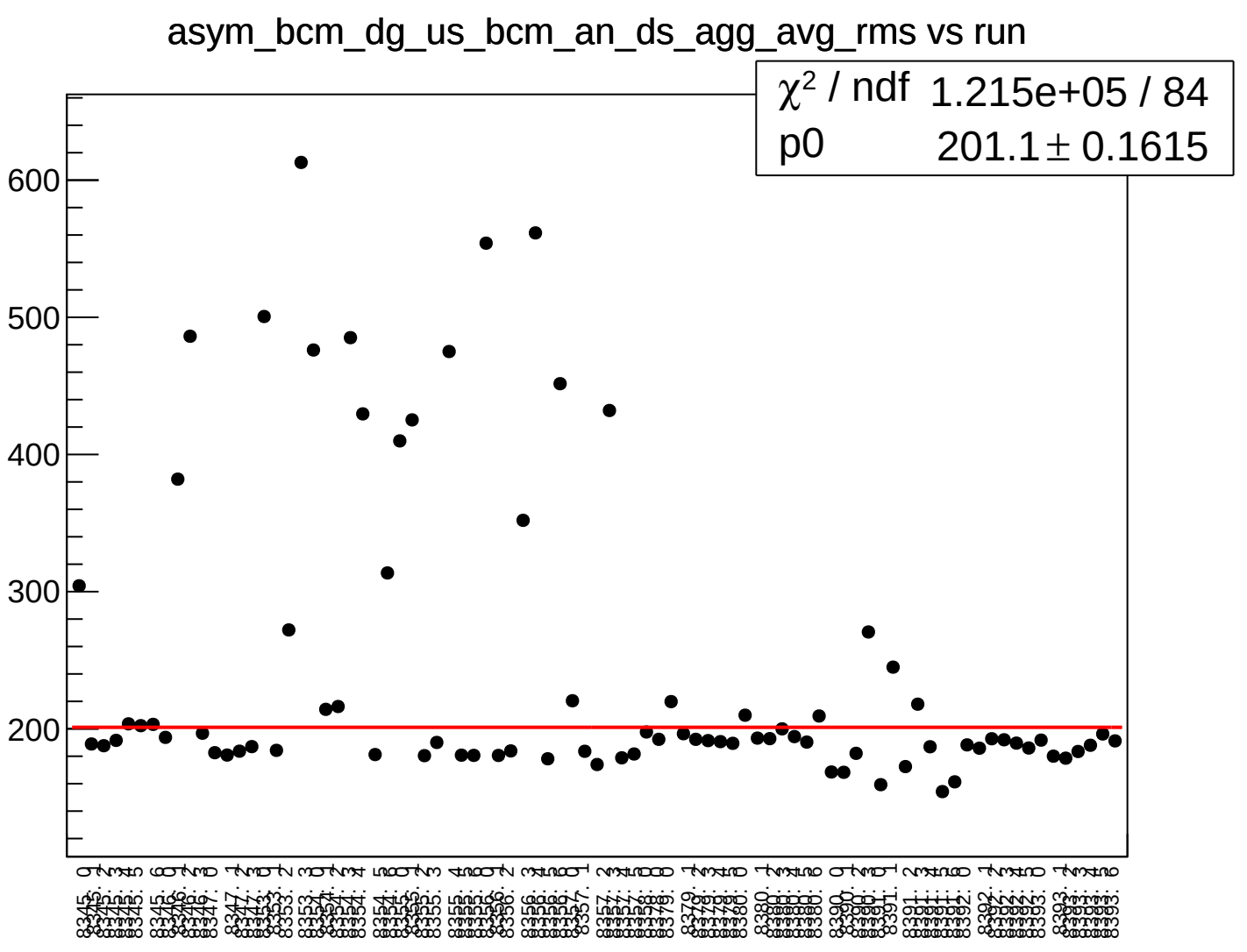

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.219e+05 / 84
p0 200.7 ± 0.1612
600
500
400
300
200

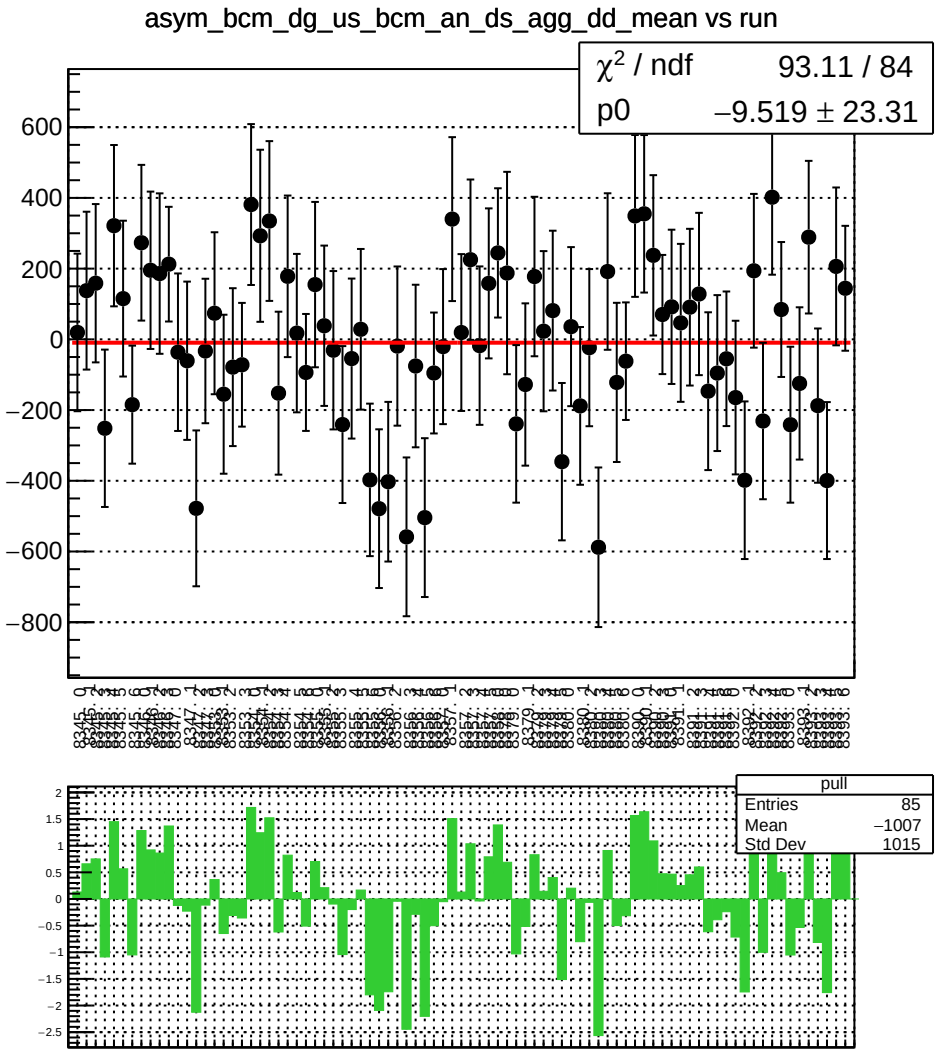

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 82.22 / 84
p0 12.85 ± 11.29
400
200
0
−200
−400
pull
Entries 85
Mean −45.19
Std Dev 68.17
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.01173
Std Dev 0.9835
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

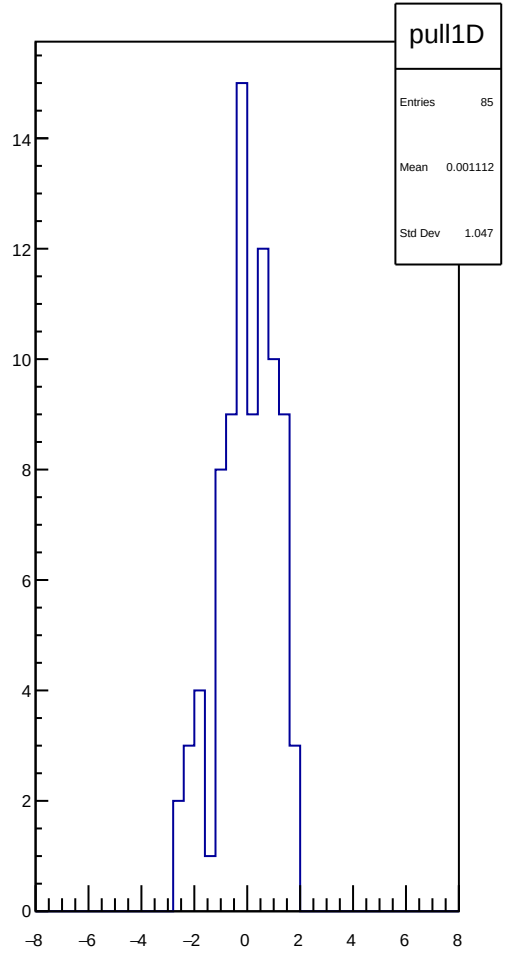

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 4.149e+04 / 84
p0 10.2 ± 0.007987
18
16
14
12
10

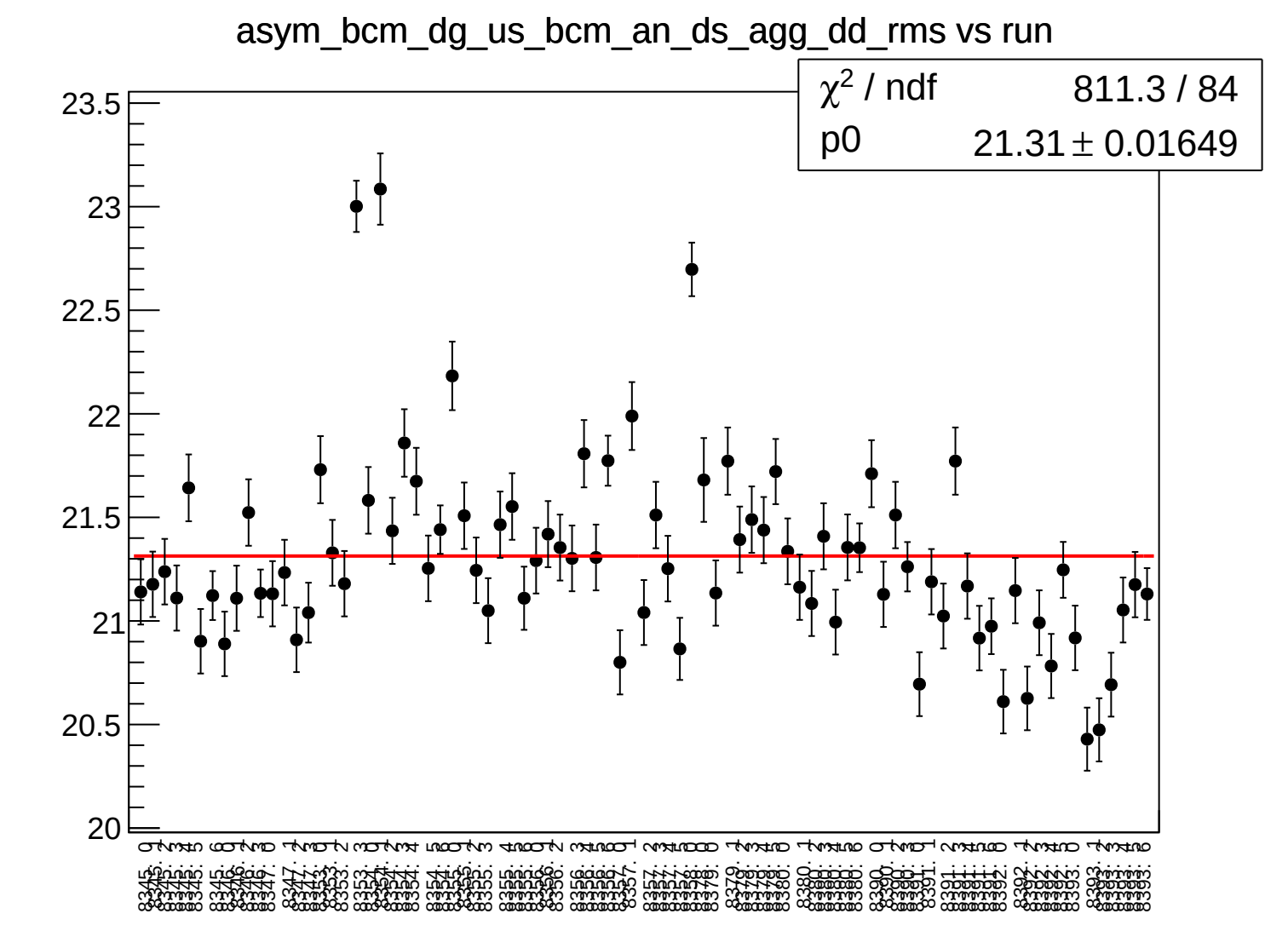

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.17 / 84
p0 −186.3 ± 228.4
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 268.5
Std Dev 214.6
1
0.5
0
−0.5
−1

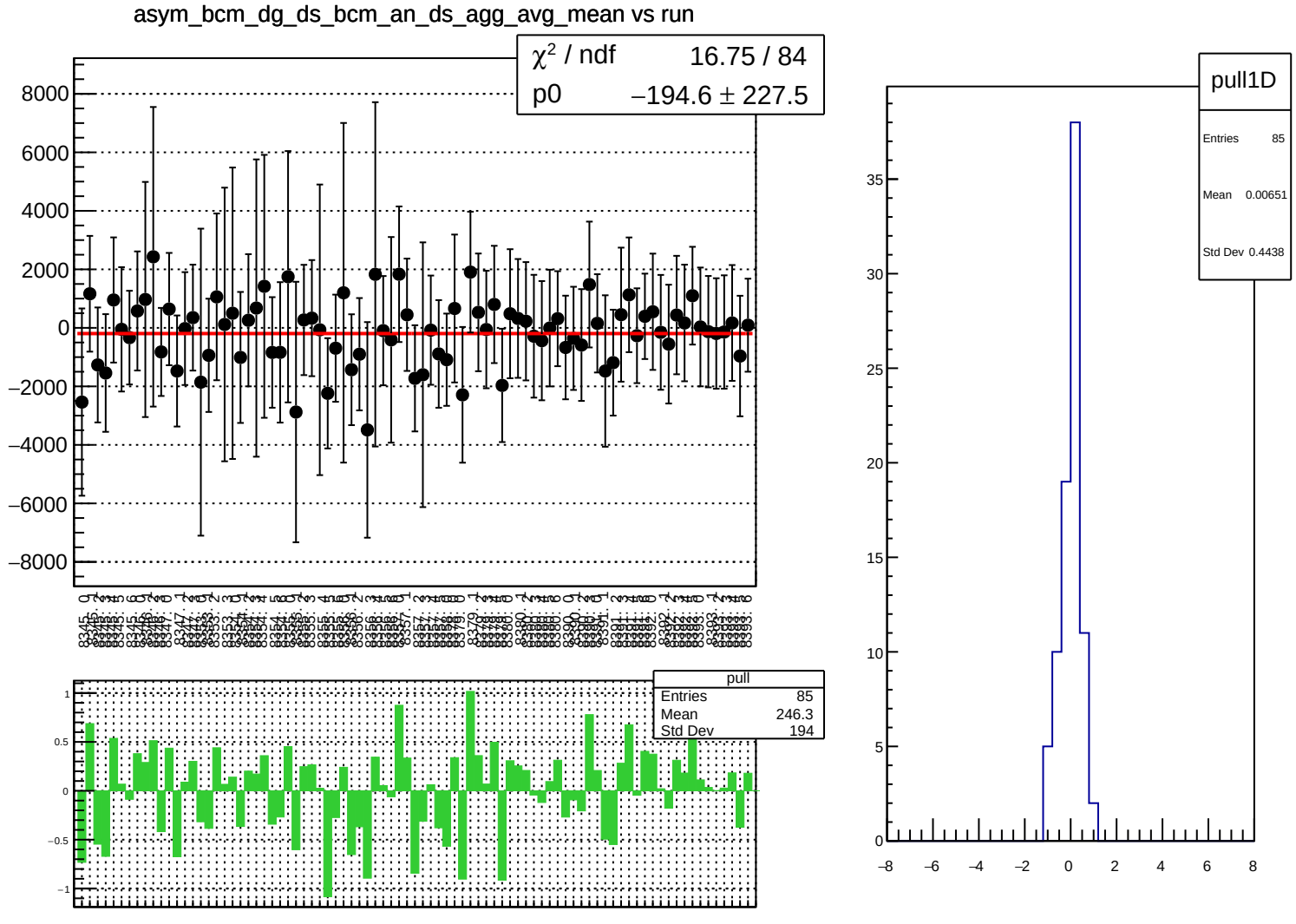

pull1D
Entries 85
Mean 0.005847
Std Dev 0.4624
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

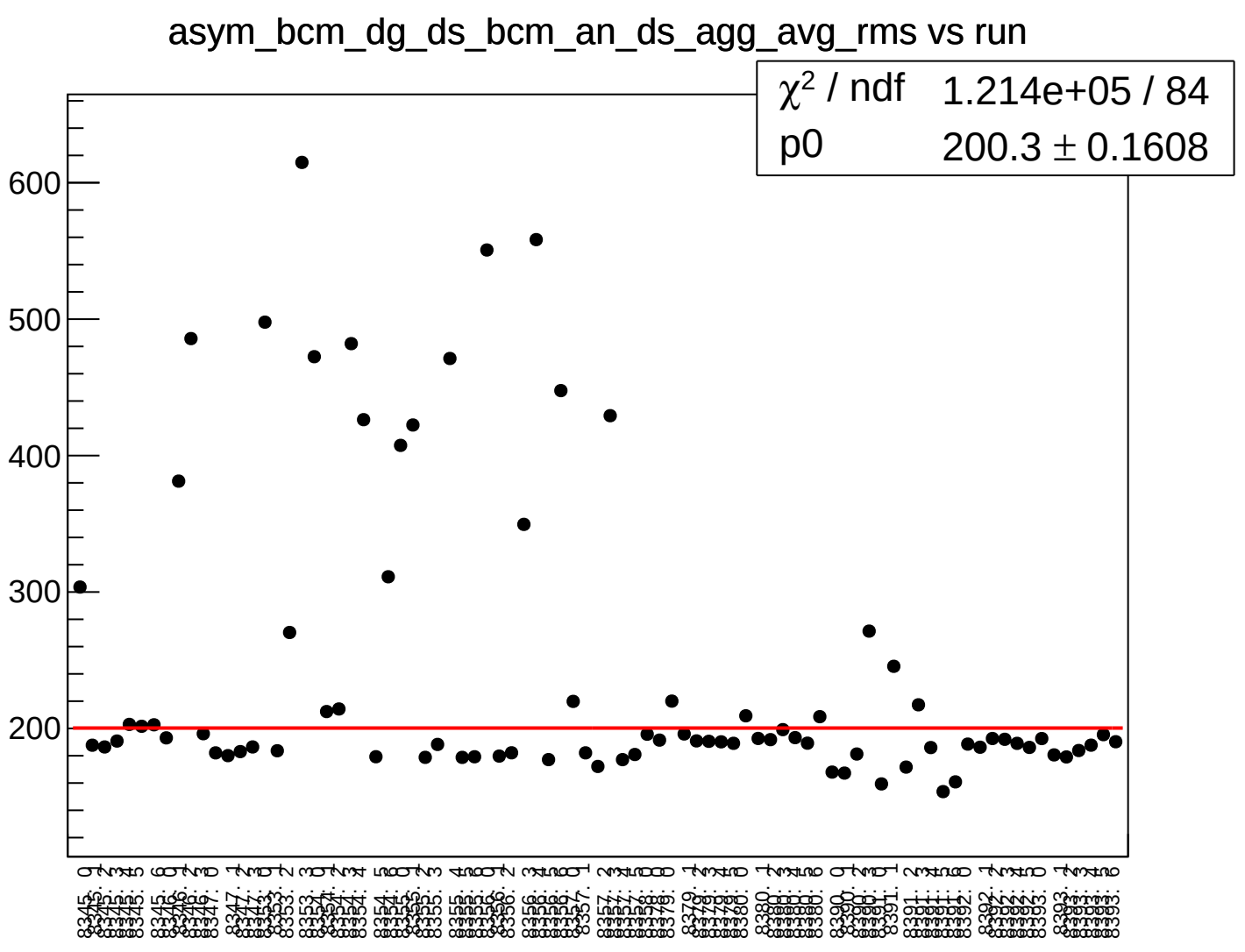

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.215e+05 / 84
p0 201.1 ± 0.1615
600
500
400
300
200

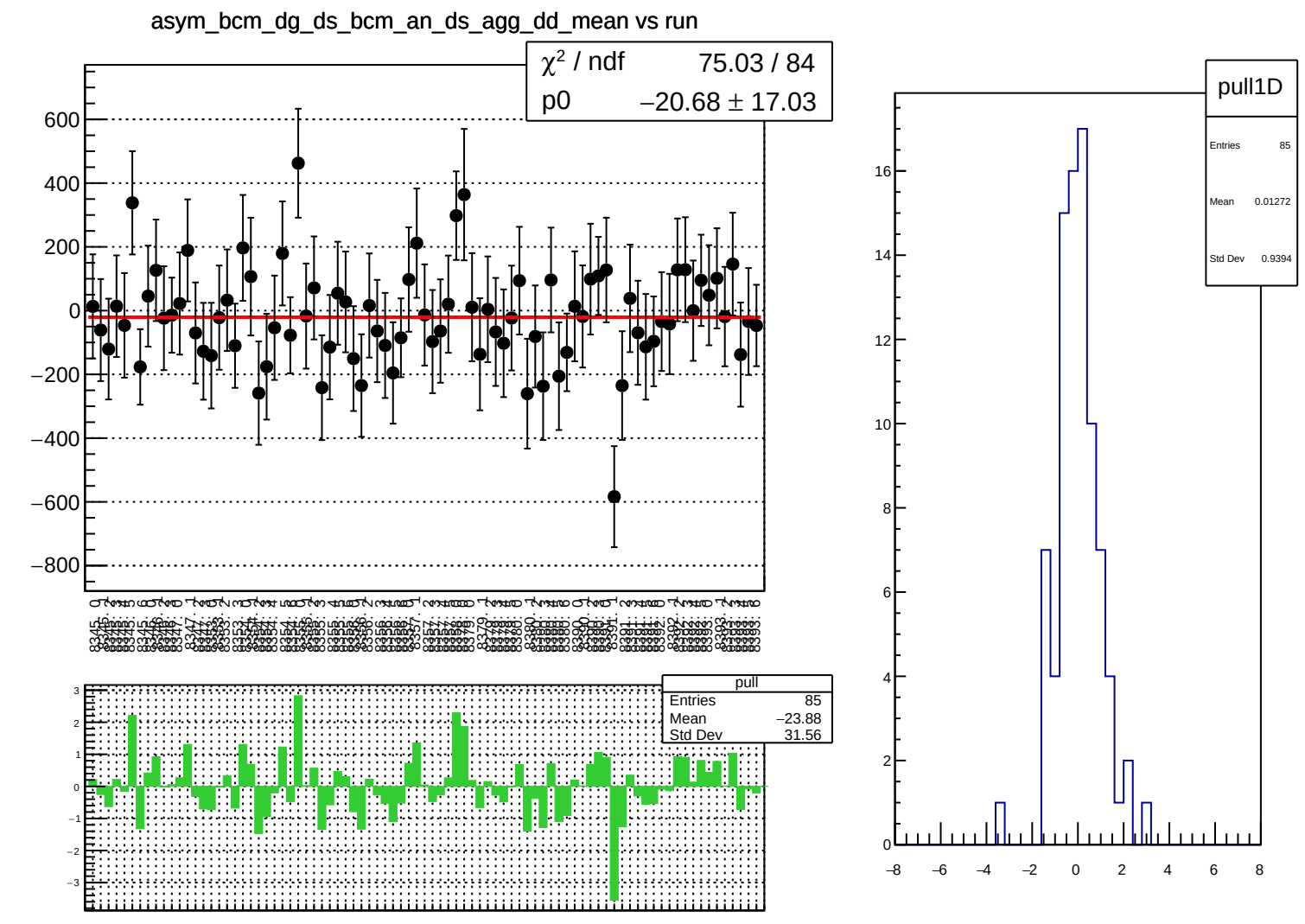

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 93.11 / 84
p0 −9.519 ± 23.31
pull
Entries 85
Mean −1007
Std Dev 1015

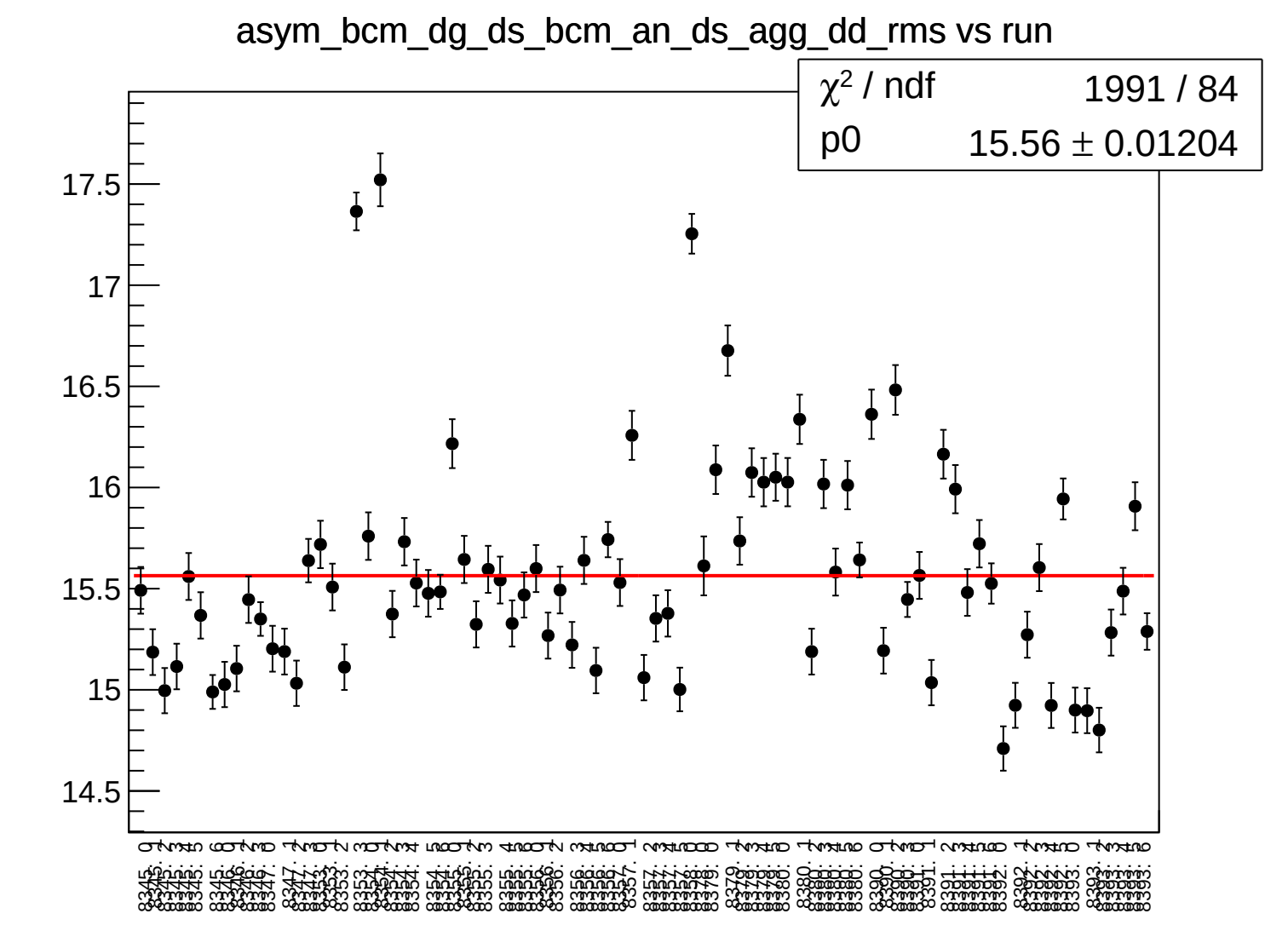

pull1D
Entries 85
Mean 0.001112
Std Dev 1.047

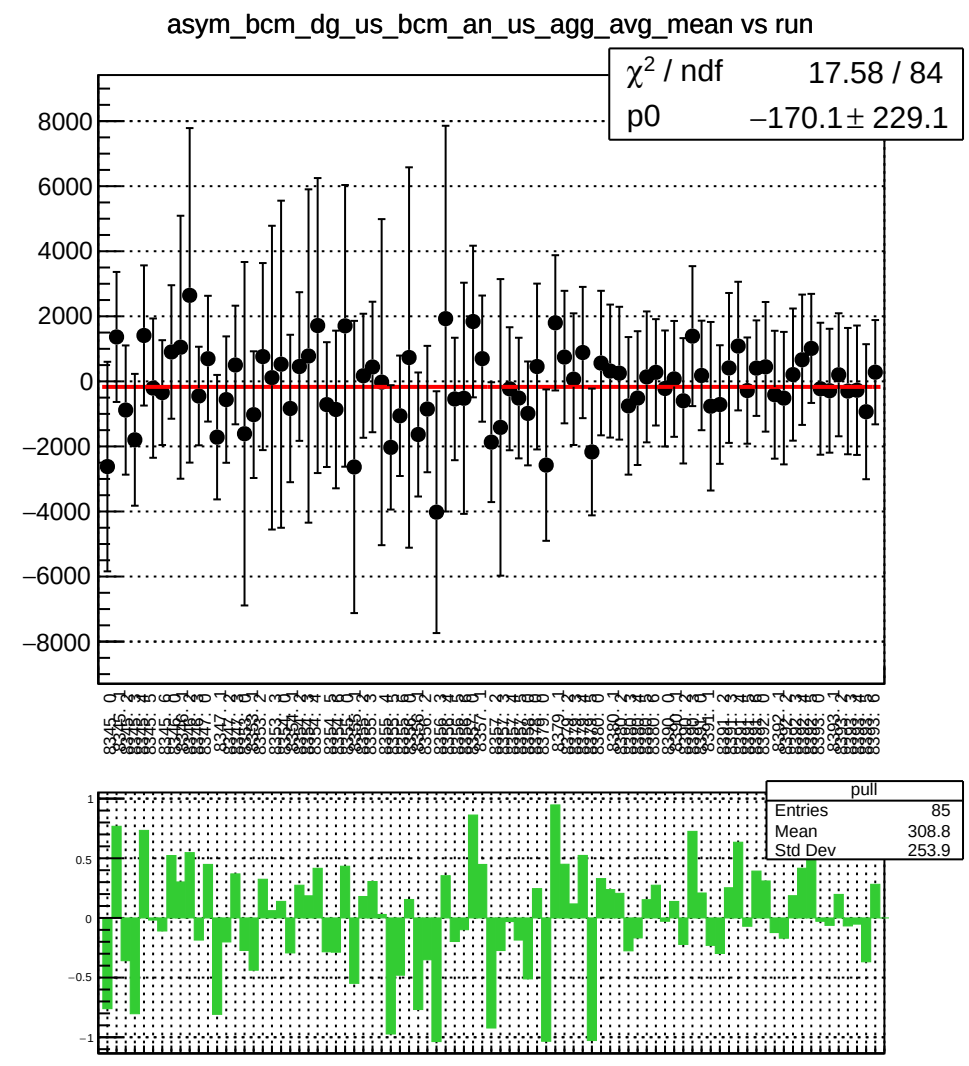

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 811.3 / 84
p0 21.31 ± 0.01649
23.5
23
22.5
22
21.5
21
20.5
20

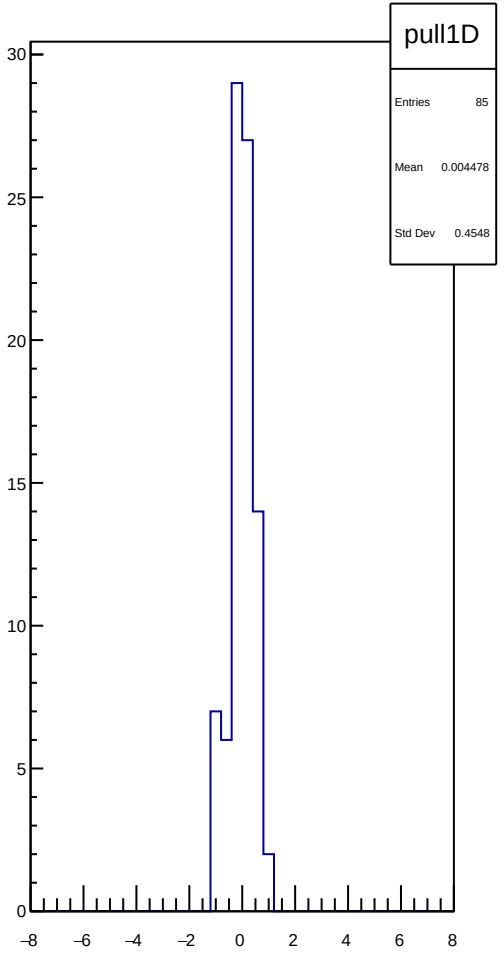

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.75 / 84
p0 −194.6 ± 227.5
pull
Entries 85
Mean 246.3
Std Dev 194
pull1D
Entries 85
Mean 0.00651
Std Dev 0.4438

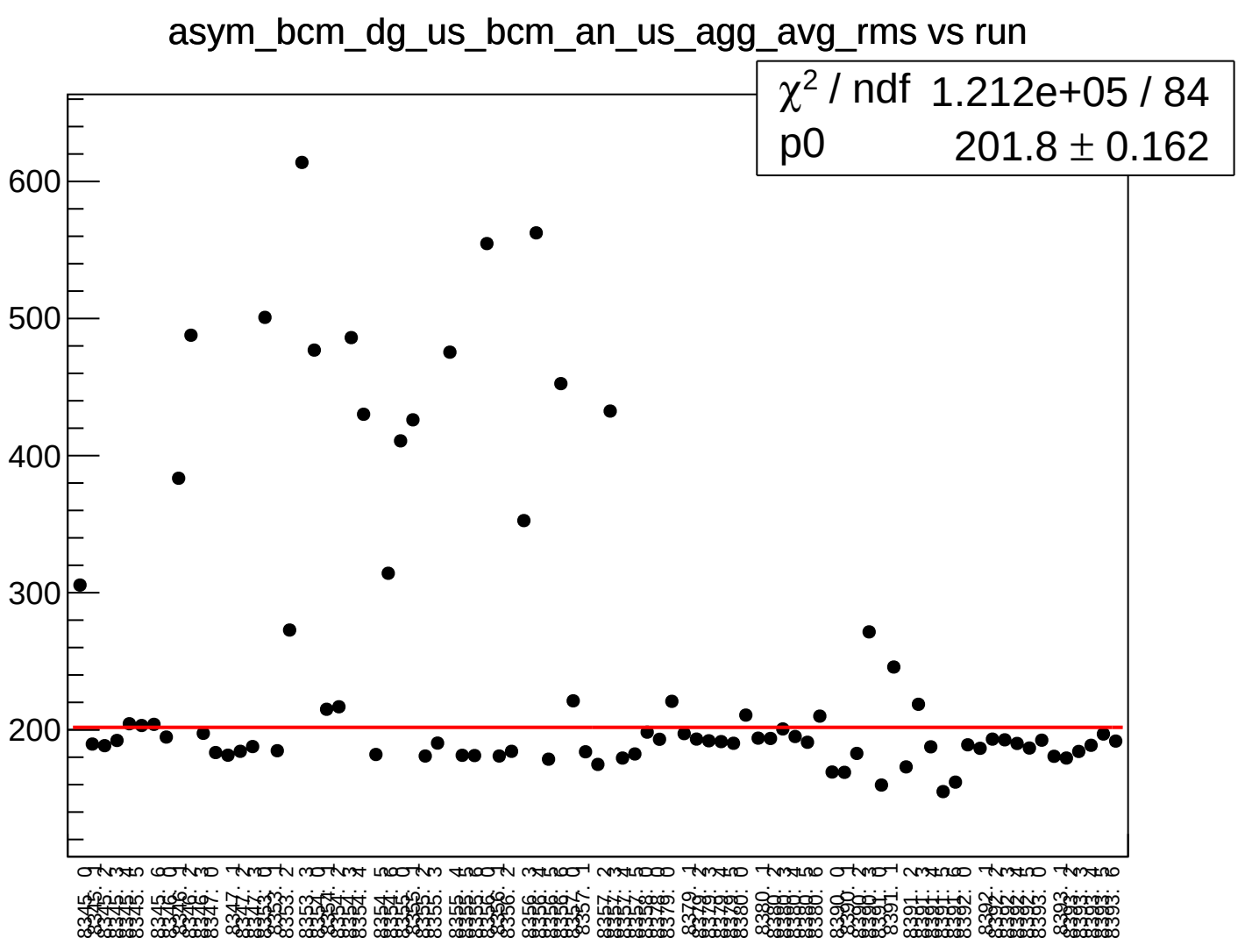

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.214e+05 / 84
p0 200.3 ± 0.1608
600
500
400
300
200

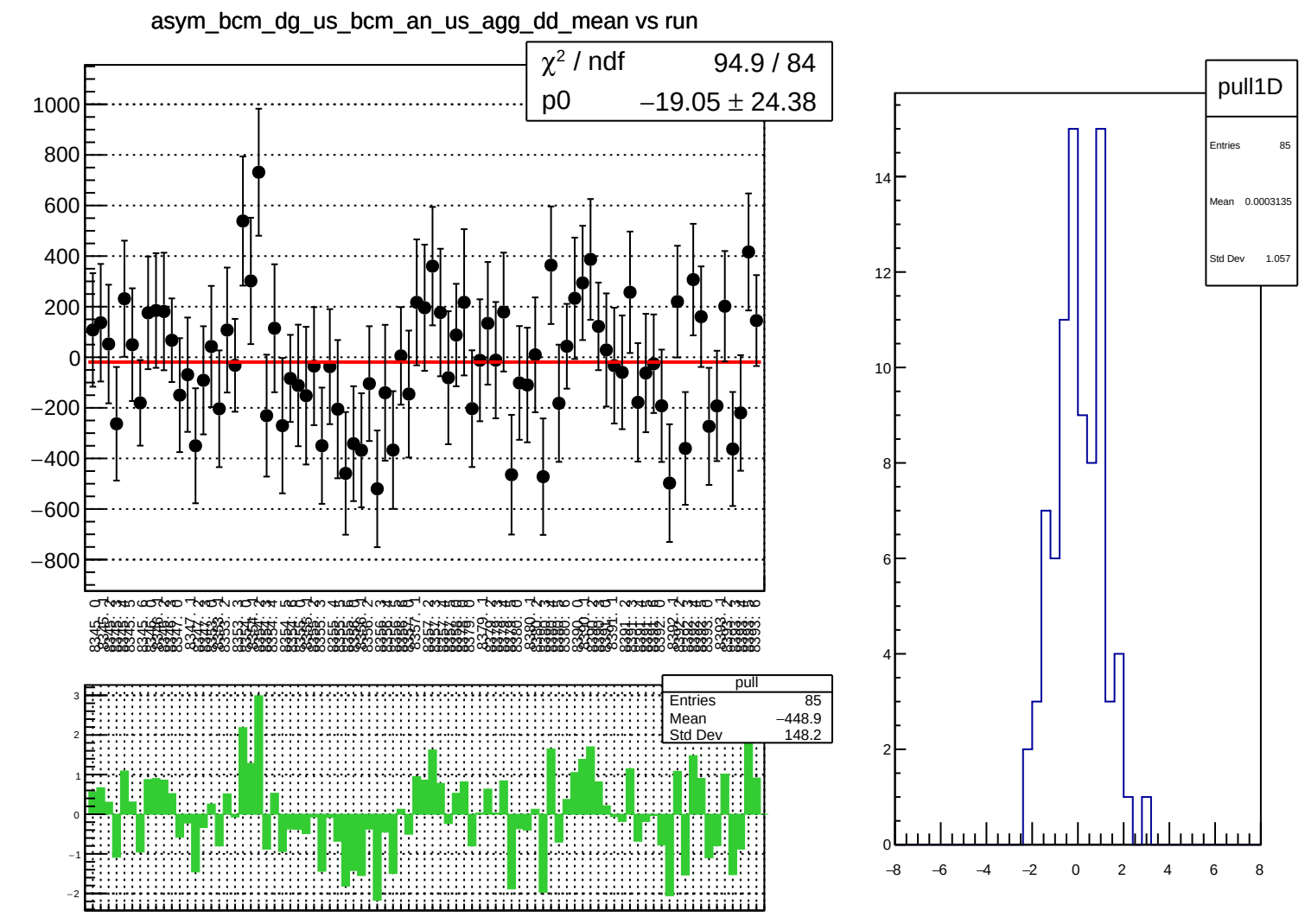

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.03 / 84
p0 −20.68 ± 17.03
pull
Entries 85
Mean −23.88
Std Dev 31.56
pull1D
Entries 85
Mean 0.01272
Std Dev 0.9394

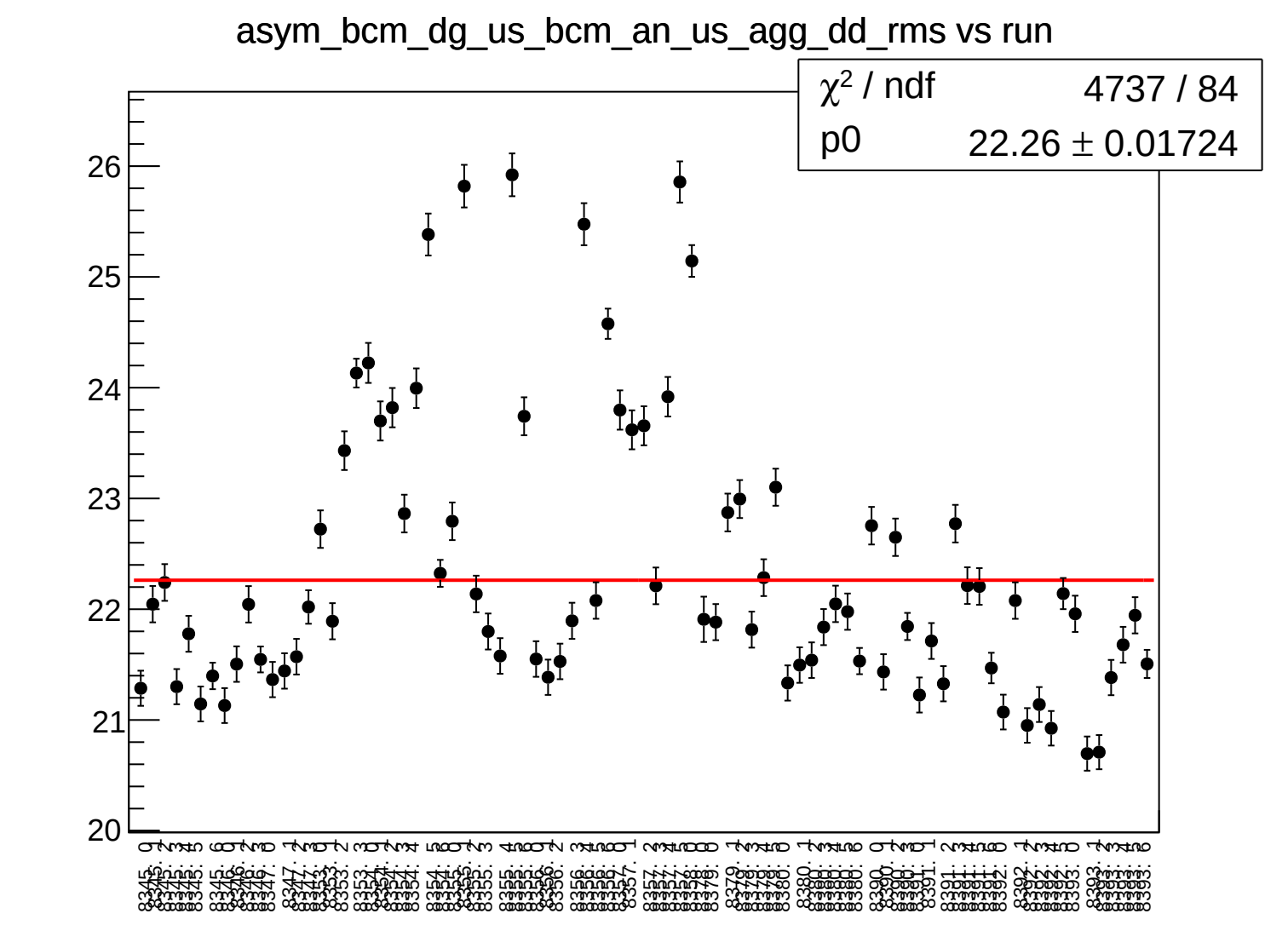

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1991 / 84
p0 15.56 ± 0.01204
17.5
17
16.5
16
15.5
15
14.5

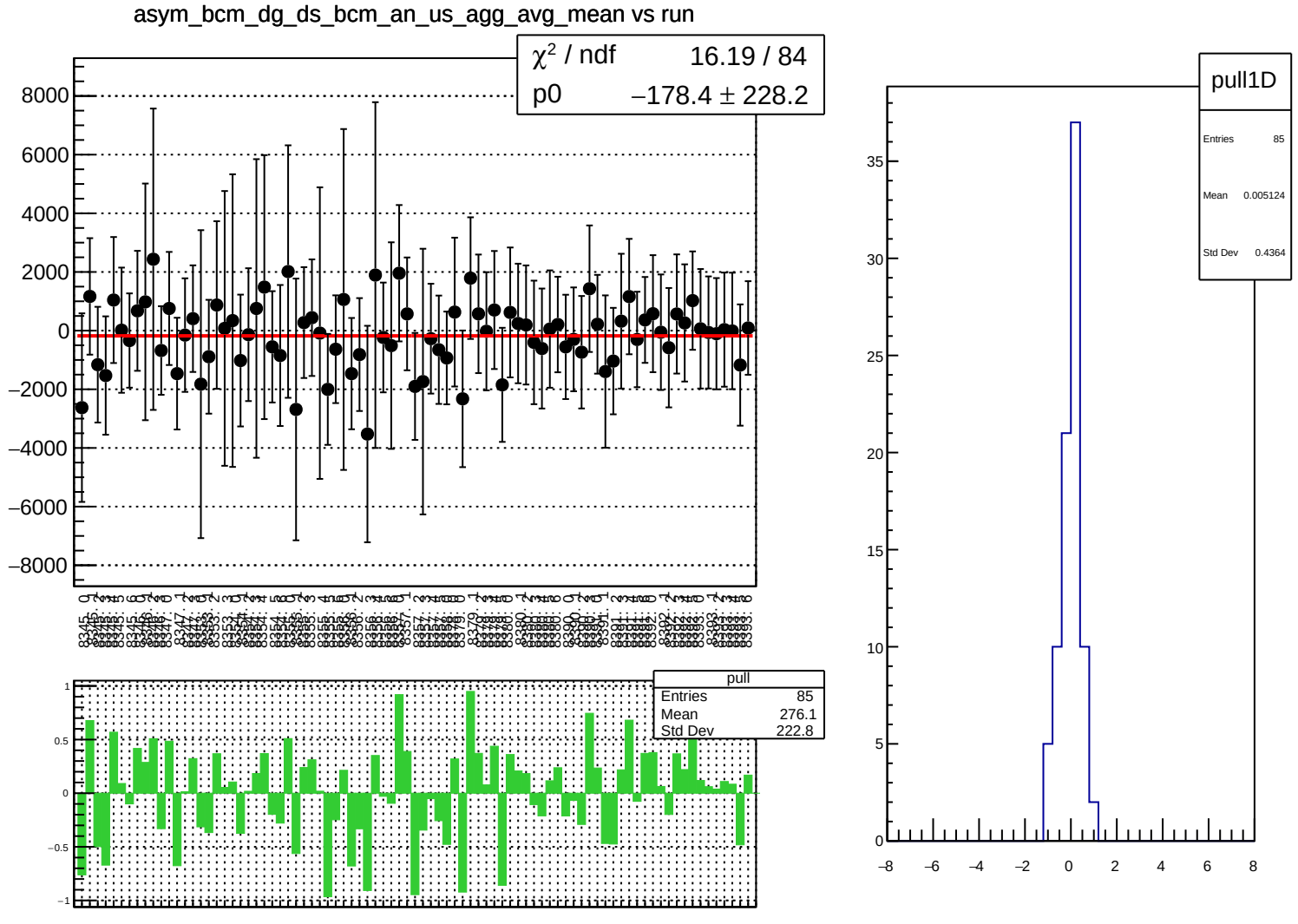

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.58 / 84
p0 −170.1 ± 229.1
pull
Entries 85
Mean 308.8
Std Dev 253.9

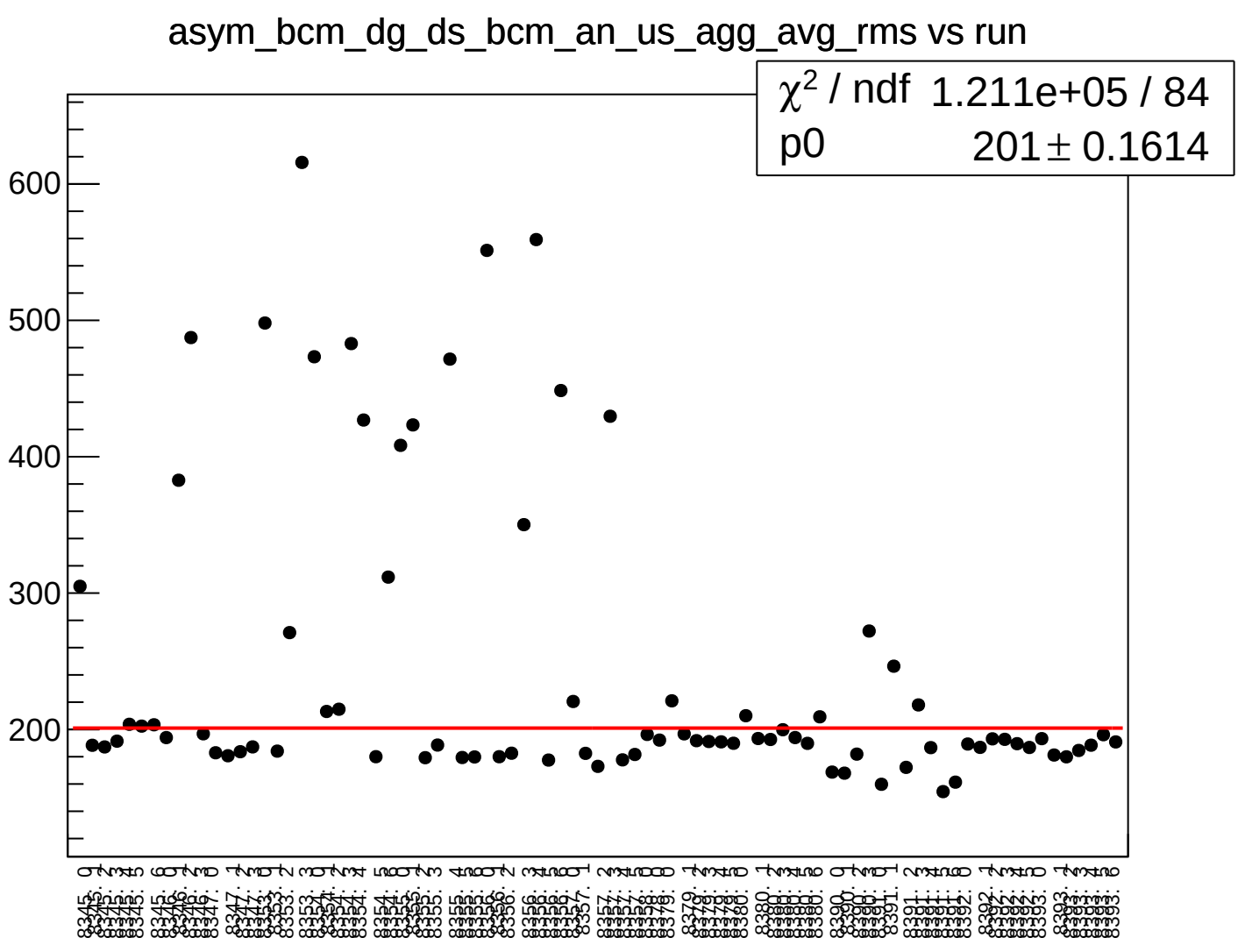

pull1D
Entries 85
Mean 0.004478
Std Dev 0.4548

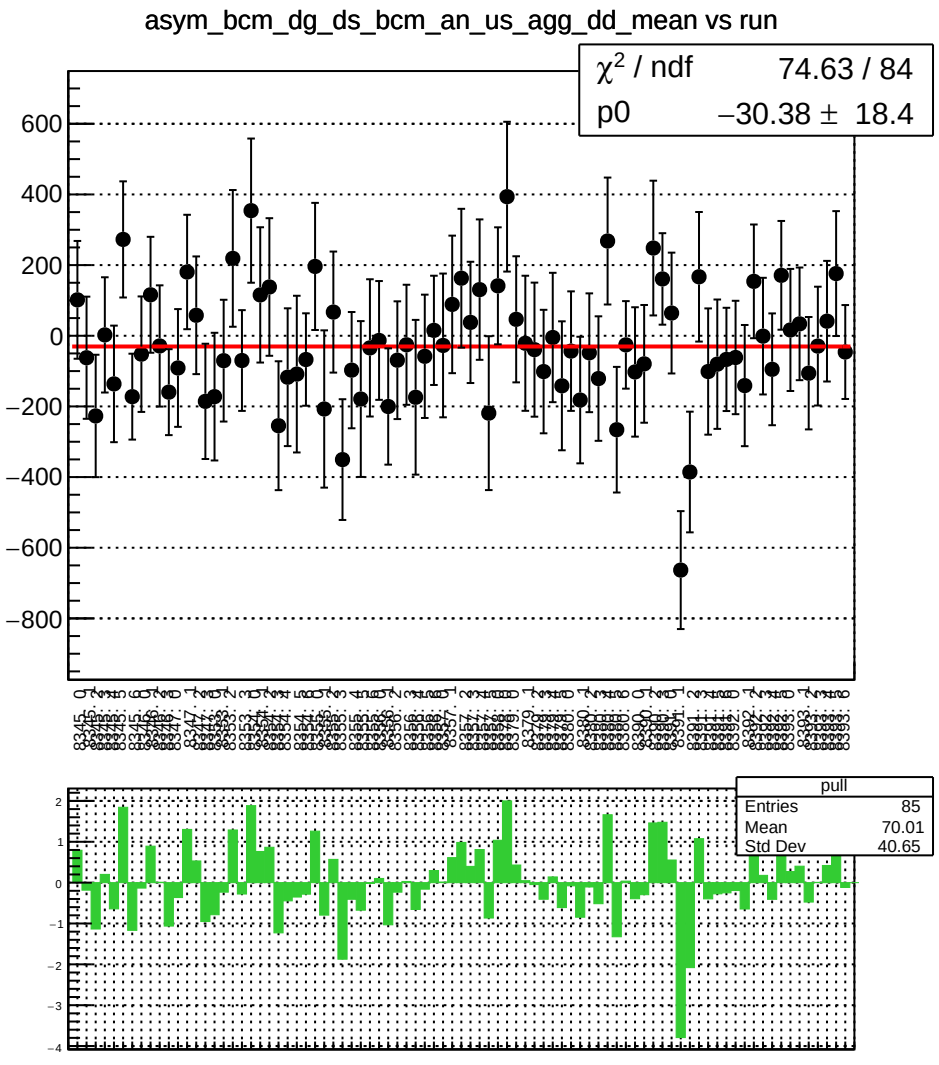

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.212e+05 / 84
p0 201.8 ± 0.162
600
500
400
300
200

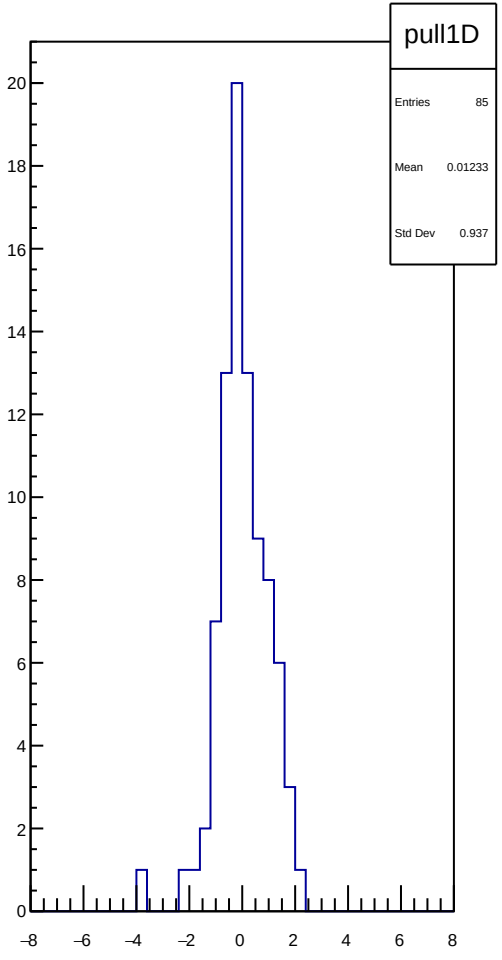

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 94.9 / 84
p0 −19.05 ± 24.38
pull
Entries 85
Mean −448.9
Std Dev 148.2
pull1D
Entries 85
Mean 0.0003135
Std Dev 1.057

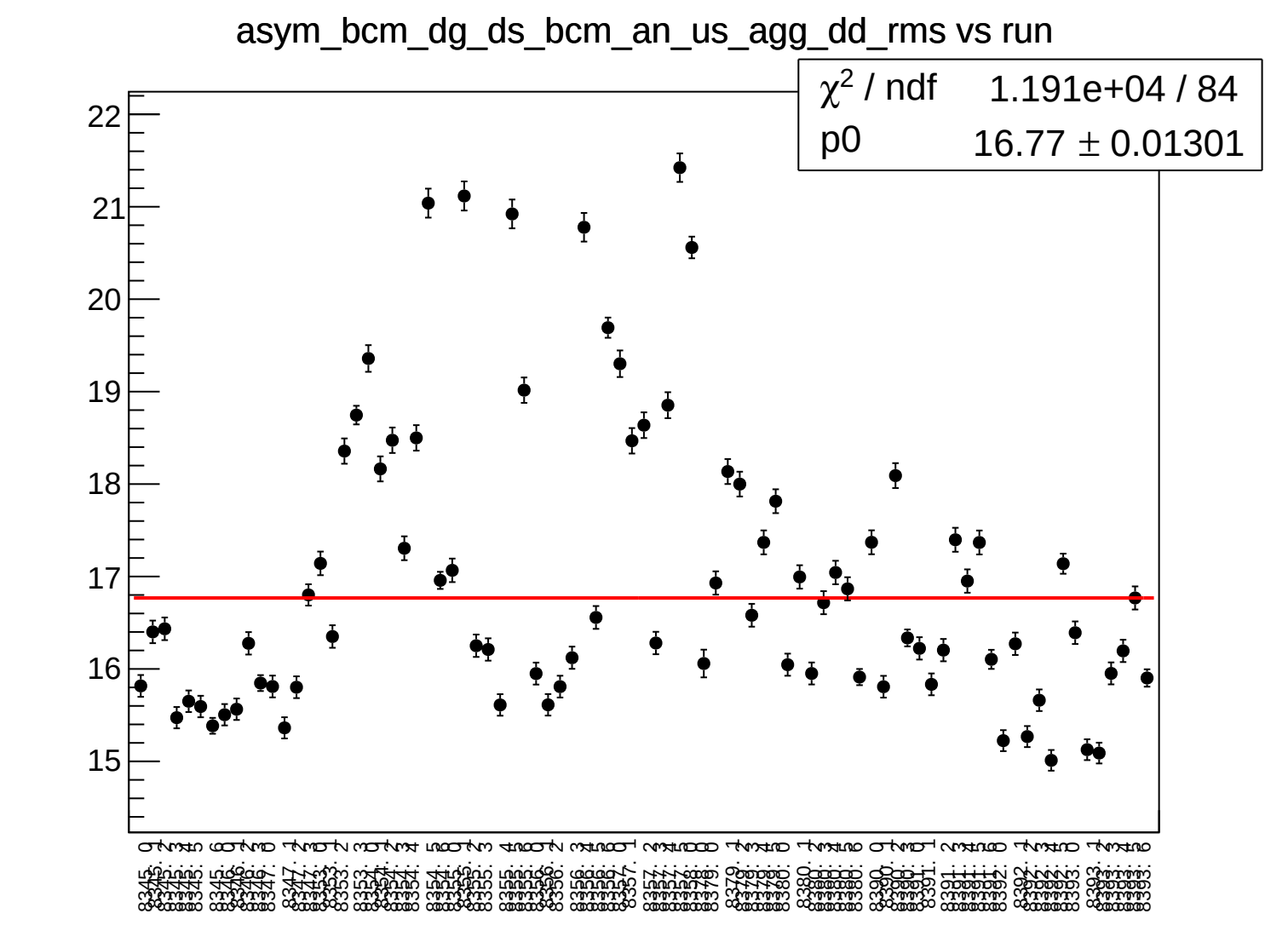

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4737 / 84
p0 22.26 ± 0.01724
26
25
24
23
22
21
20

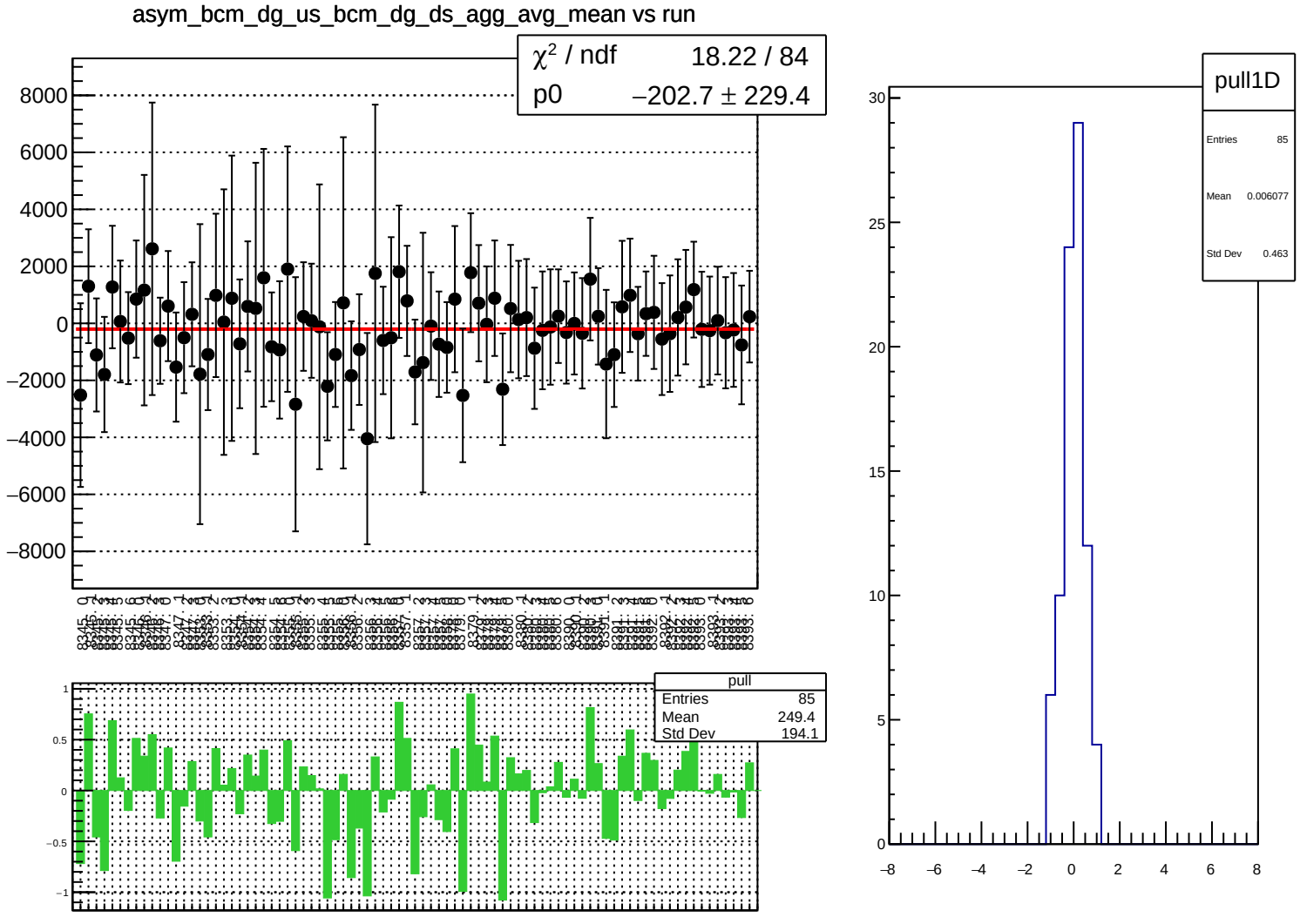

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.19 / 84
p0 −178.4 ± 228.2
pull
Entries 85
Mean 276.1
Std Dev 222.8
pull1D
Entries 85
Mean 0.005124
Std Dev 0.4364

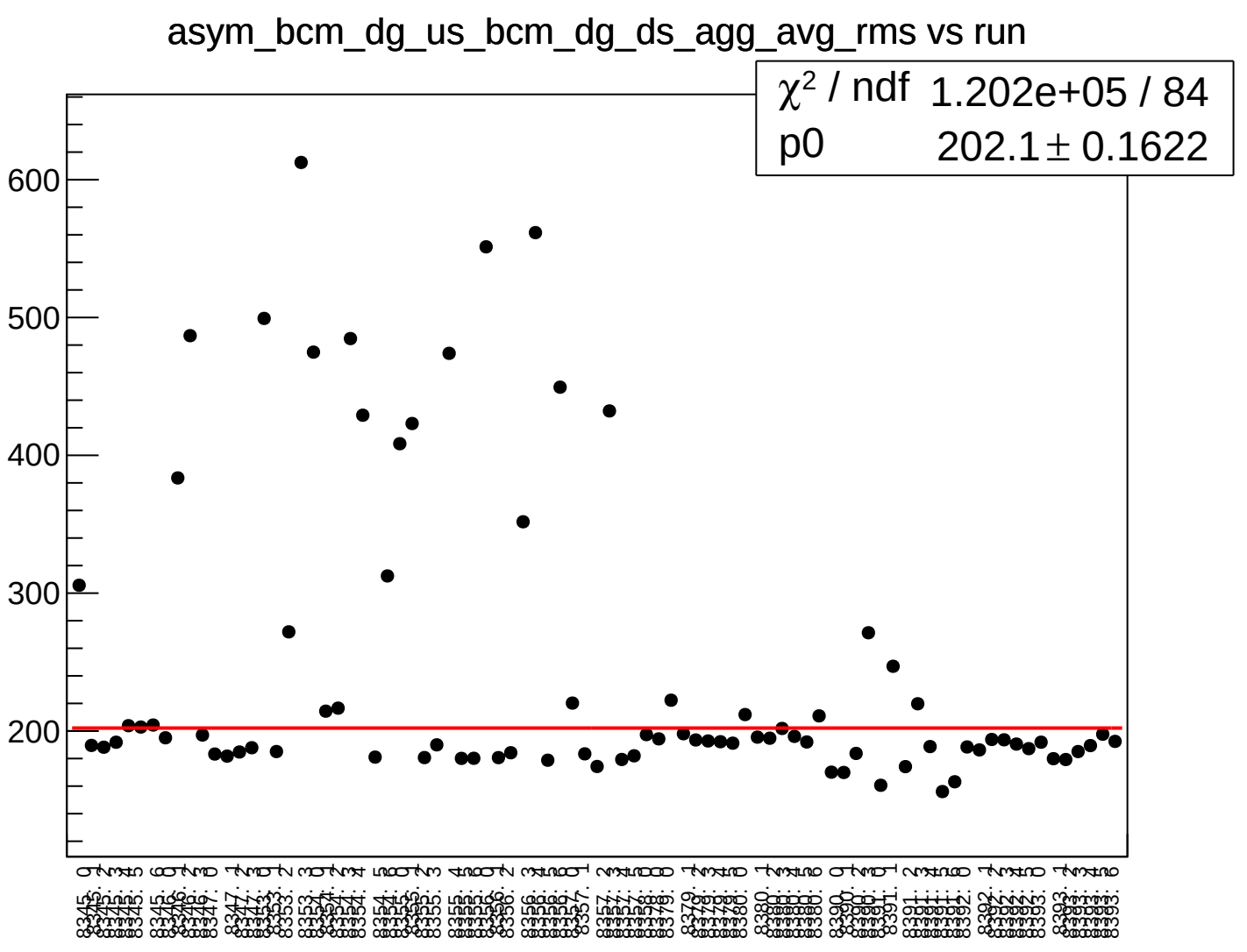

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ^2 / ndf 1.211e+05 / 84
p0 201 ± 0.1614
600
500
400
300
200

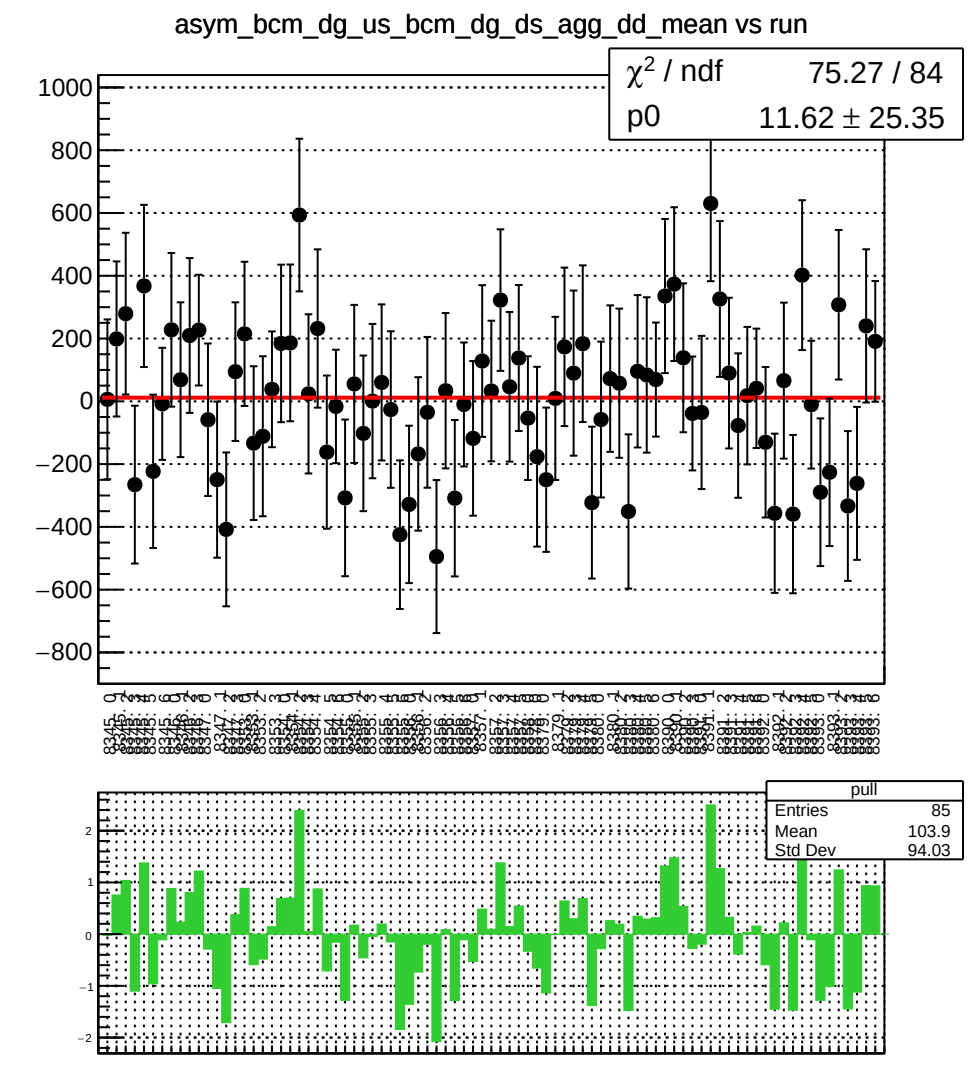

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 74.63 / 84
p0 −30.38 ± 18.4
pull
Entries 85
Mean 70.01
Std Dev 40.65

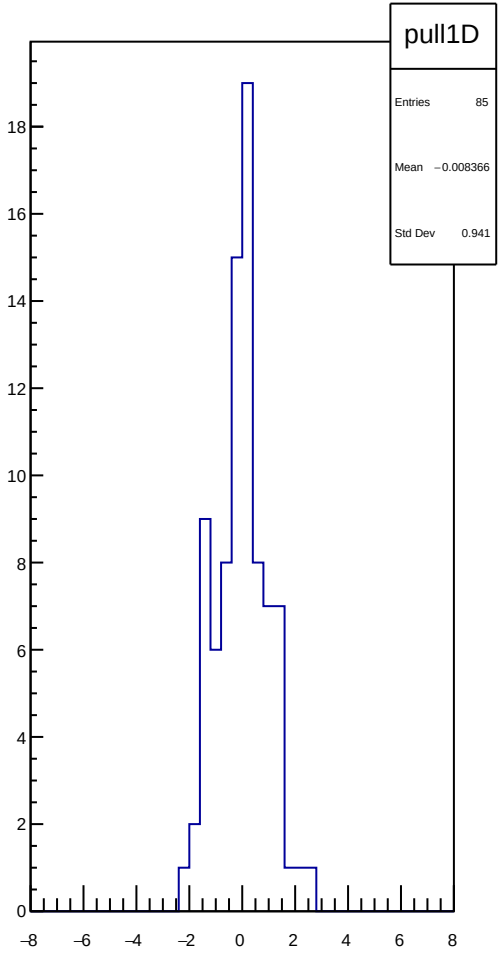

pull1D
Entries 85
Mean 0.01233
Std Dev 0.937

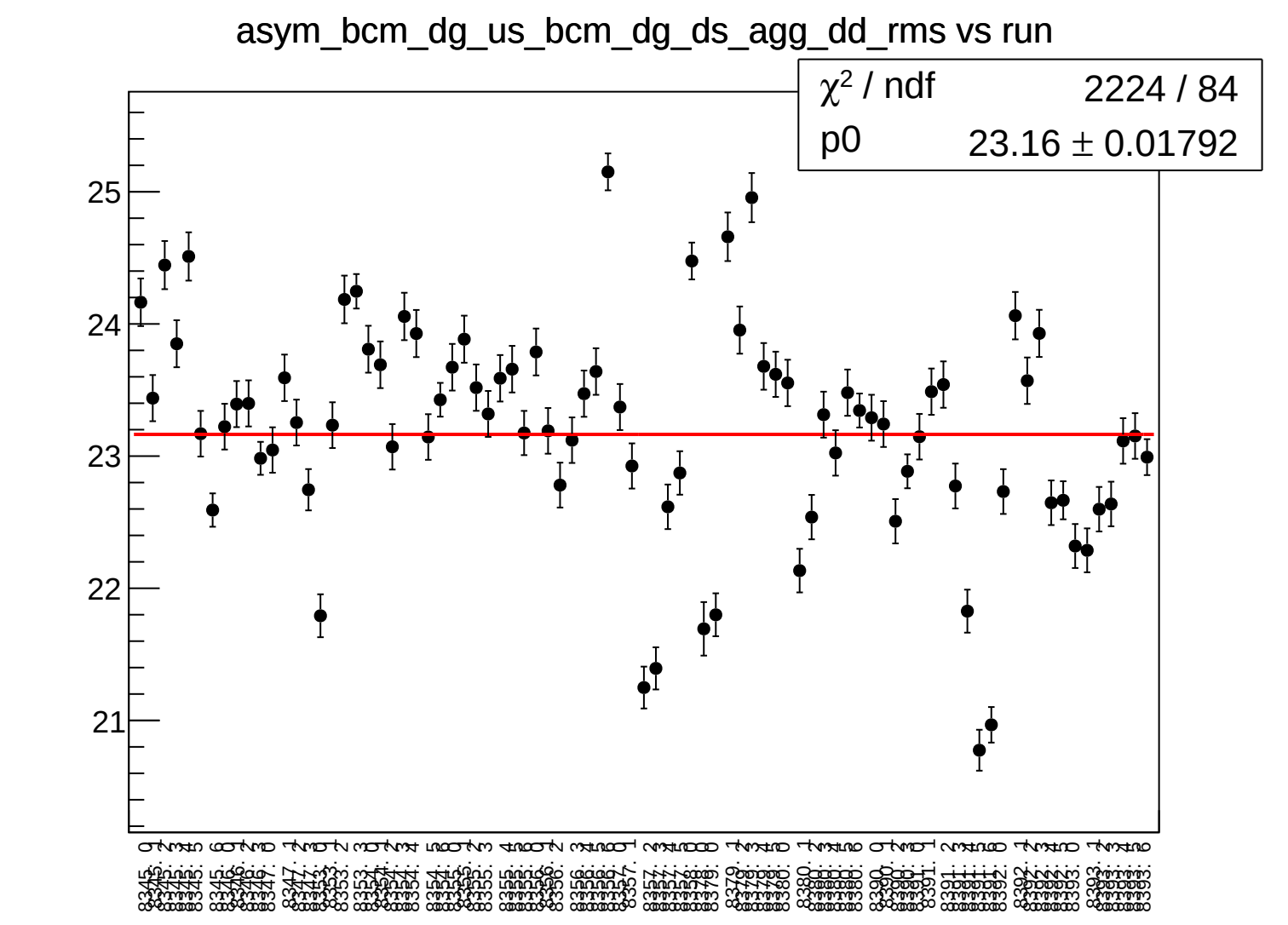

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1.191e+04 / 84
p0 16.77 ± 0.01301
22
21
20
19
18
17
16
15

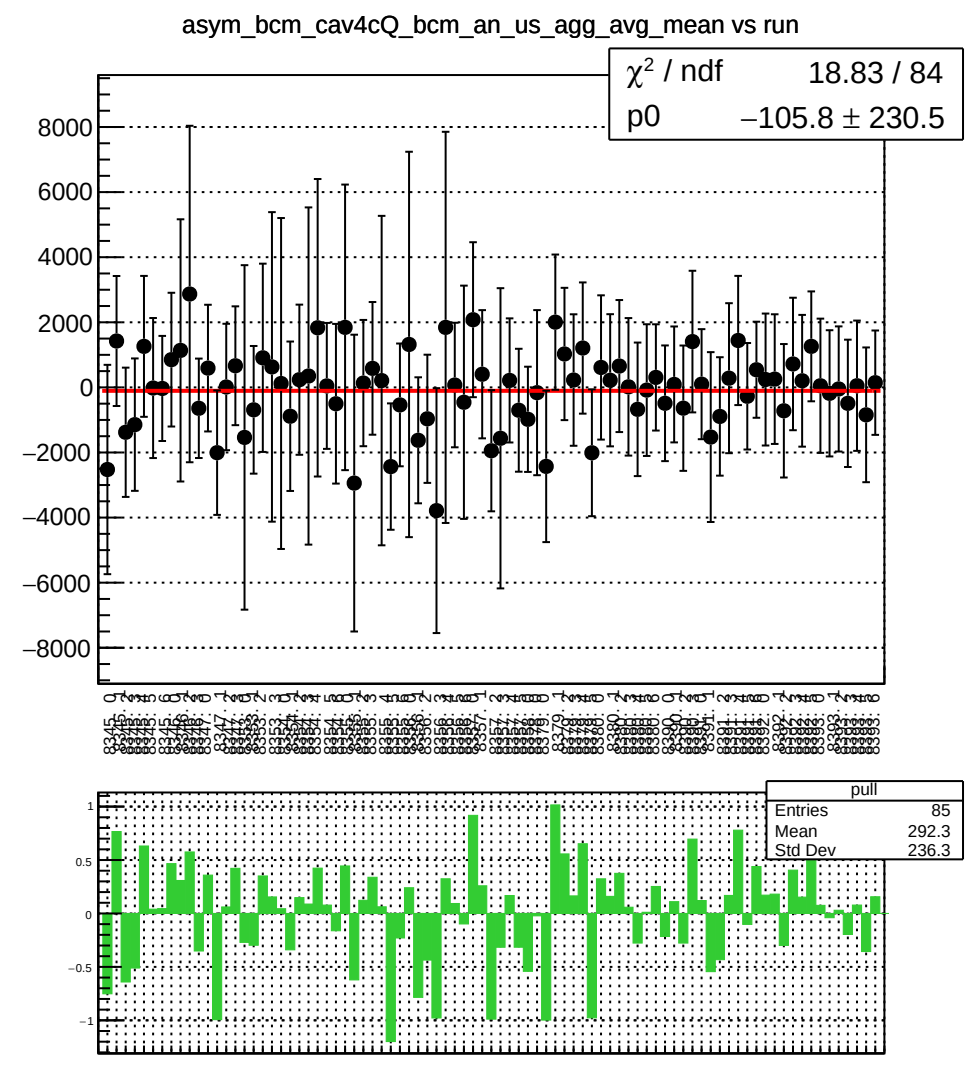

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.22 / 84
p0 −202.7 ± 229.4
pull
Entries 85
Mean 249.4
Std Dev 194.1
pull1D
Entries 85
Mean 0.006077
Std Dev 0.463

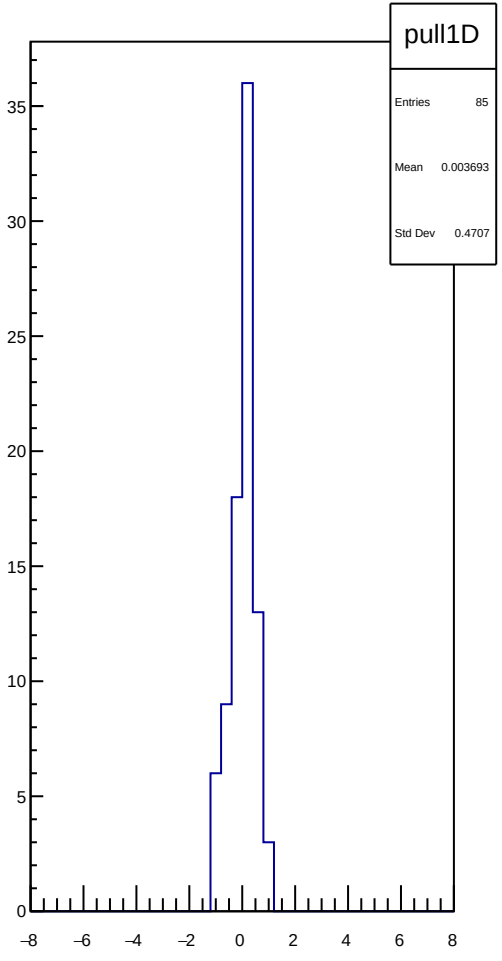

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.202e+05 / 84
p0 202.1 ± 0.1622
600
500
400
300
200

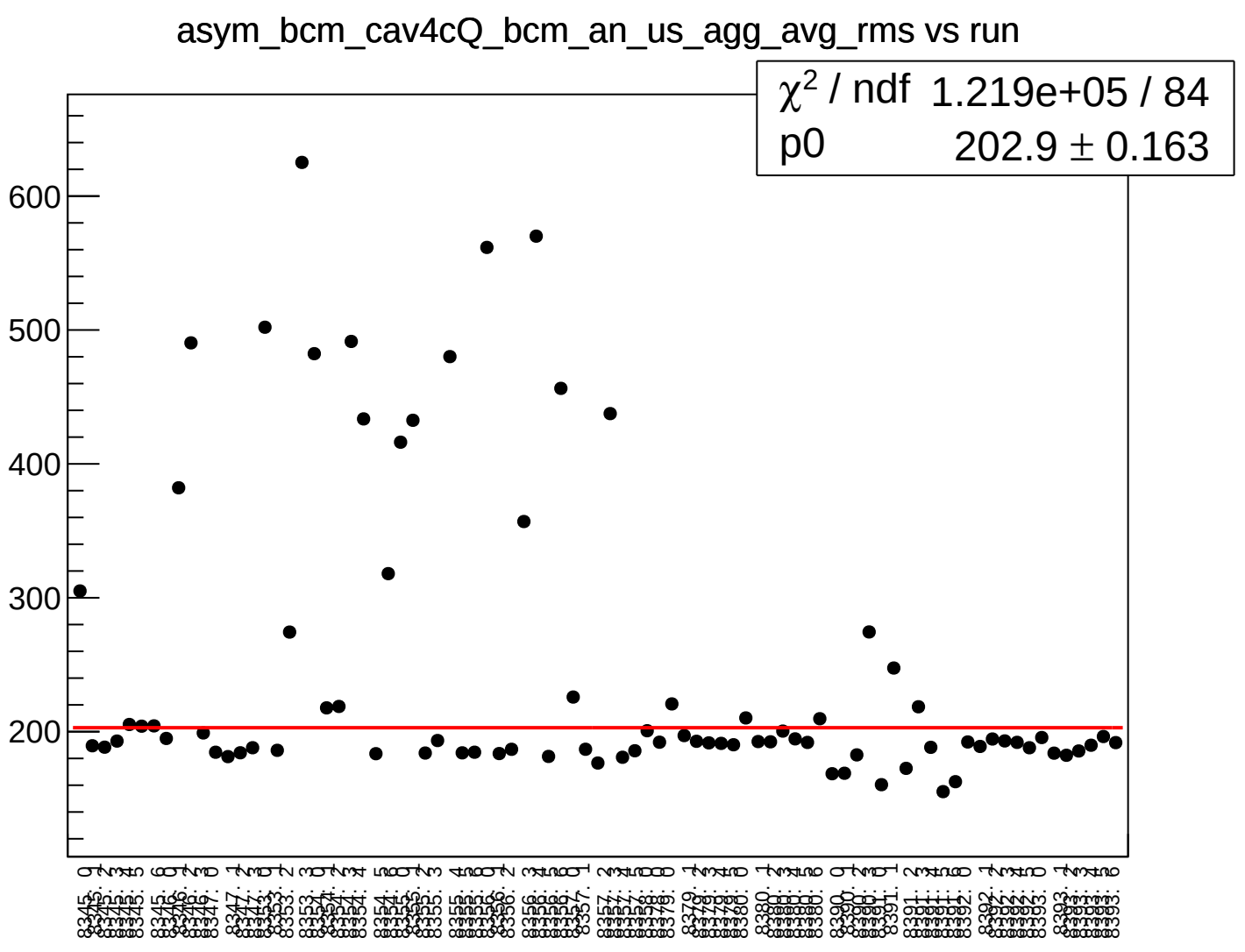

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 75.27 / 84
p0 11.62 ± 25.35
pull
Entries 85
Mean 103.9
Std Dev 94.03

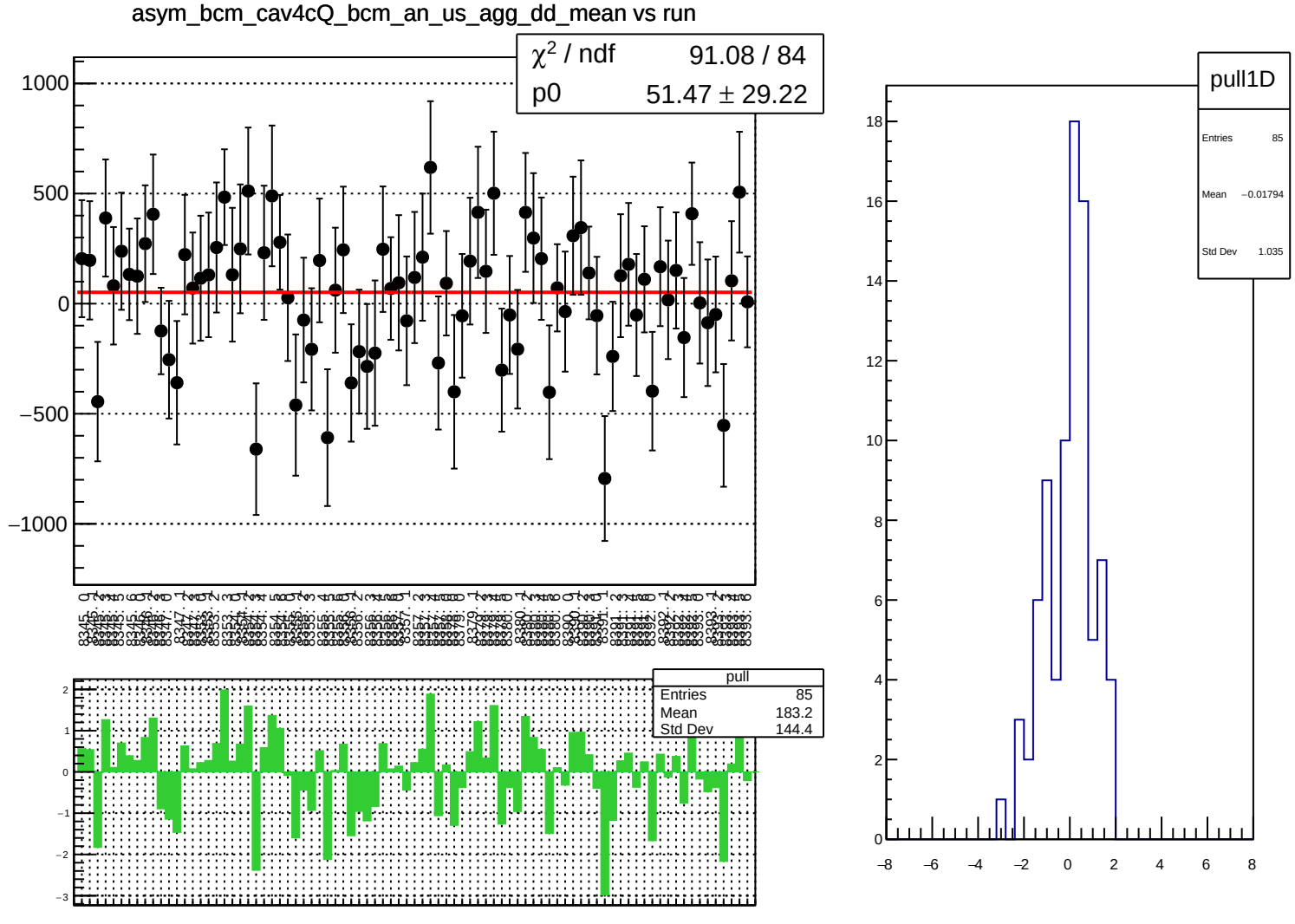

pull1D
Entries 85
Mean −0.008366
Std Dev 0.941

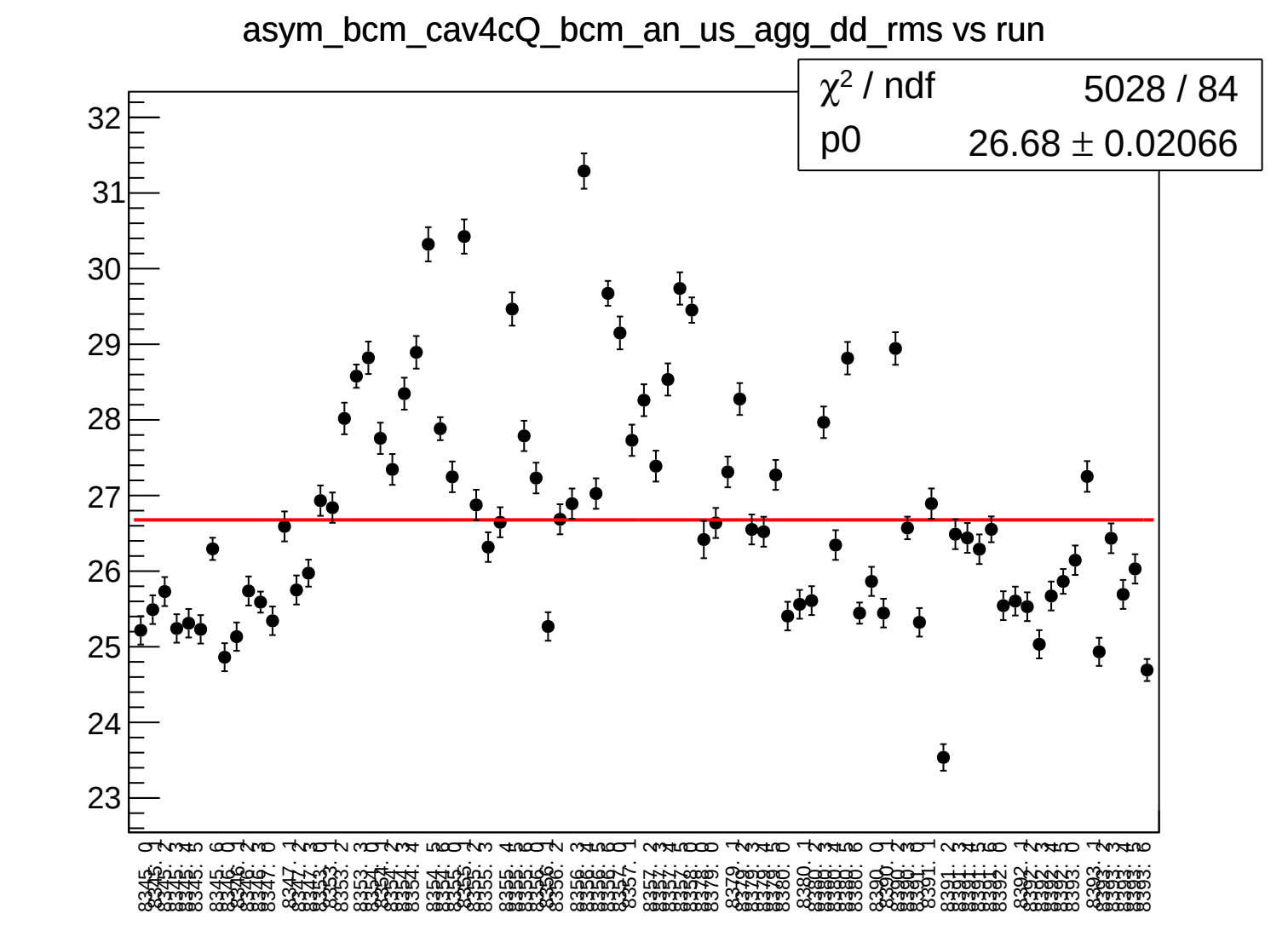

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2224 / 84
p0 23.16 ± 0.01792
25
24
23
22
21

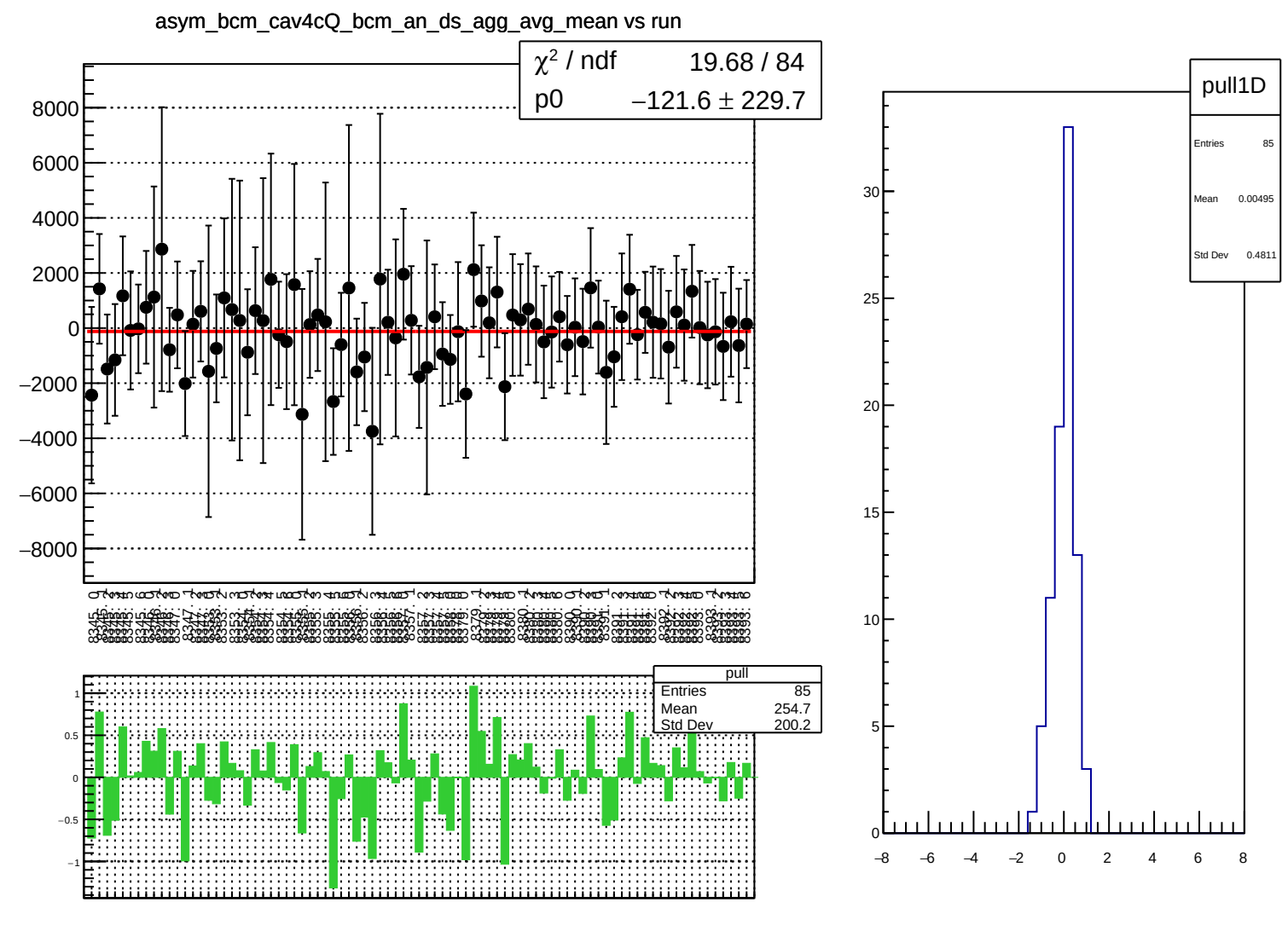

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.83 / 84
p0 −105.8 ± 230.5
pull
Entries 85
Mean 292.3
Std Dev 236.3

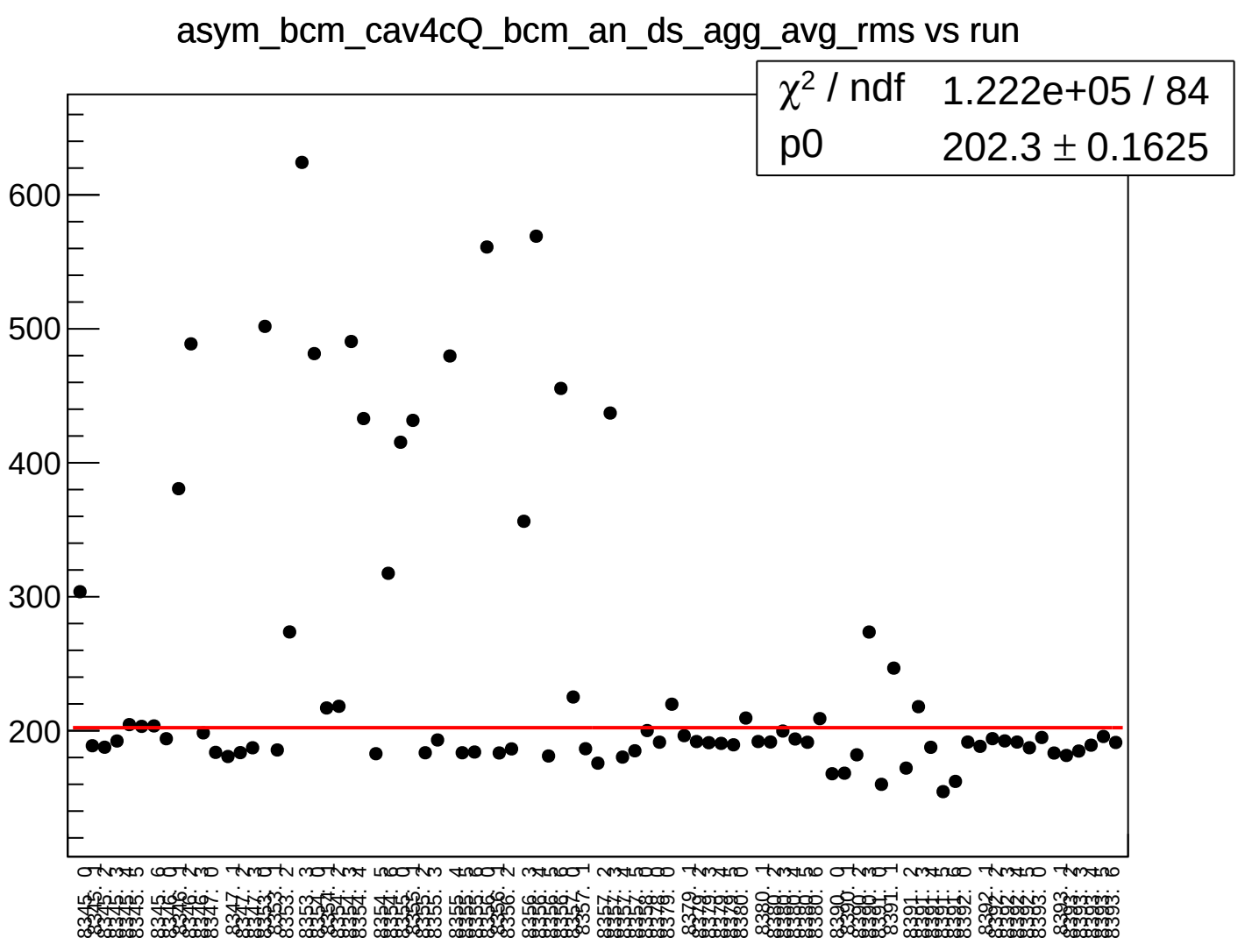

pull1D
Entries 85
Mean 0.003693
Std Dev 0.4707

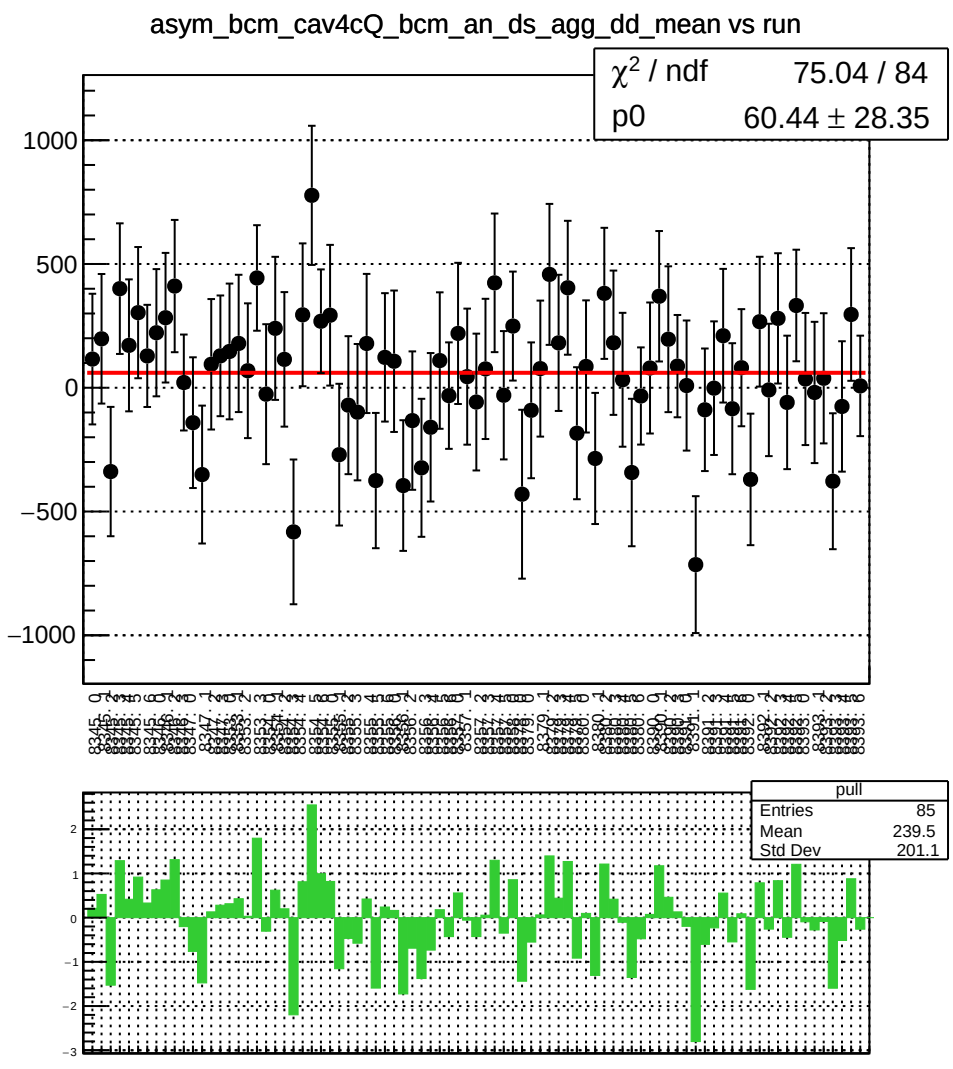

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.219e+05 / 84
p0 202.9 ± 0.163
600
500
400
300
200

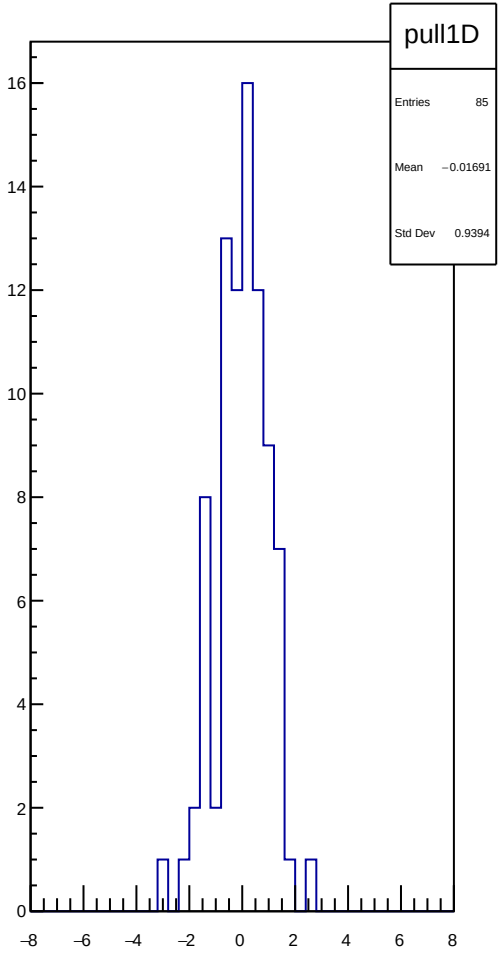

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 91.08 / 84
p0 51.47 ± 29.22
1000
500
0
−500
−1000
pull
Entries 85
Mean 183.2
Std Dev 144.4
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.01794
Std Dev 1.035
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

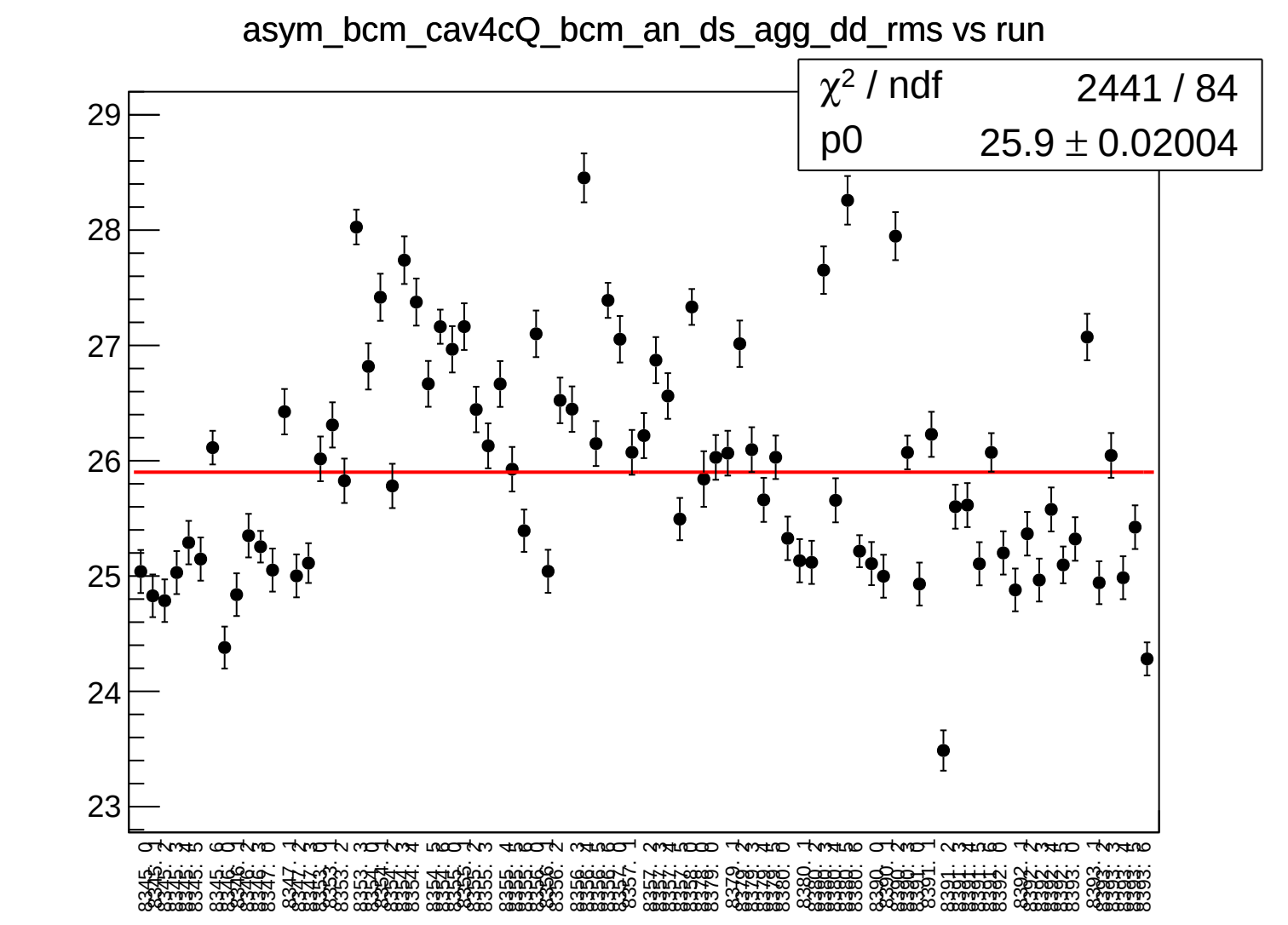

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5028 / 84
p0 26.68 ± 0.02066
32
31
30
29
28
27
26
25
24
23

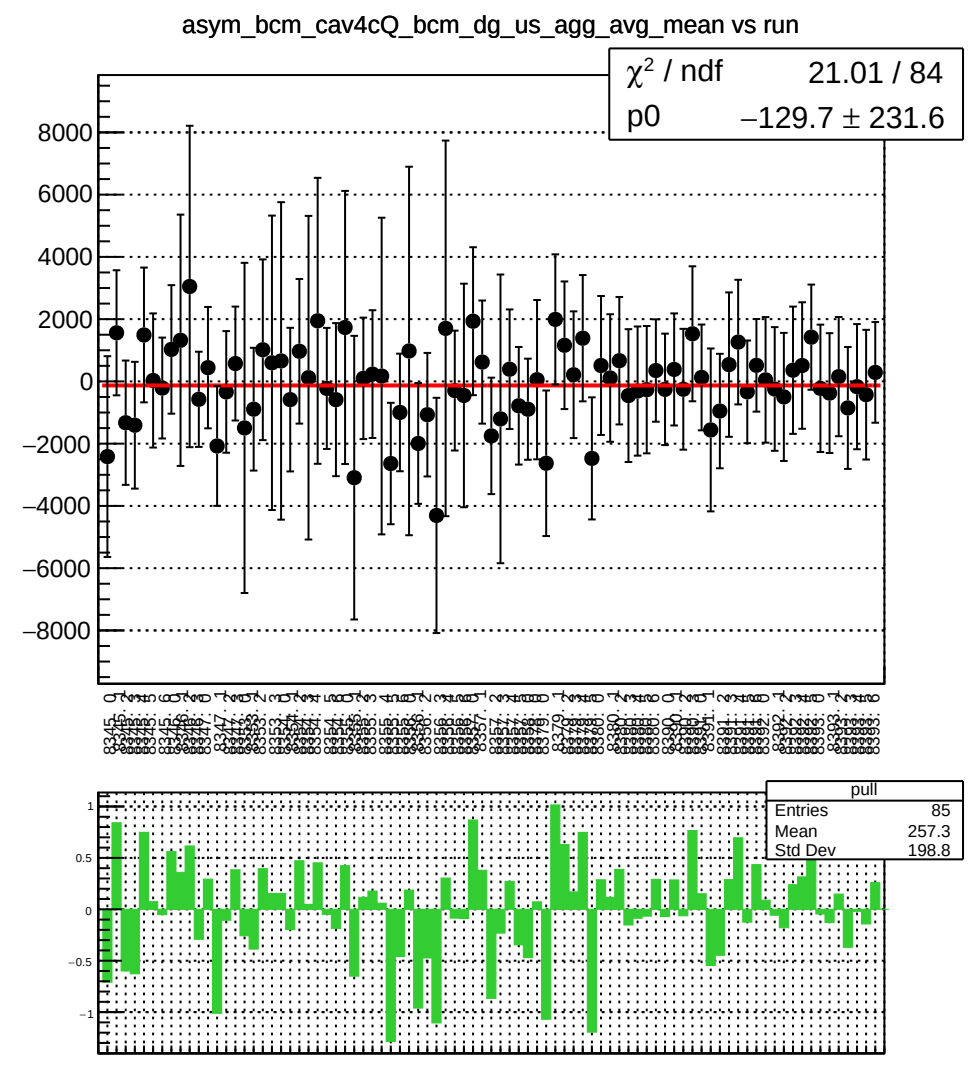

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.68 / 84
p0 −121.6 ± 229.7
pull
Entries 85
Mean 254.7
Std Dev 200.2
pull1D
Entries 85
Mean 0.00495
Std Dev 0.4811

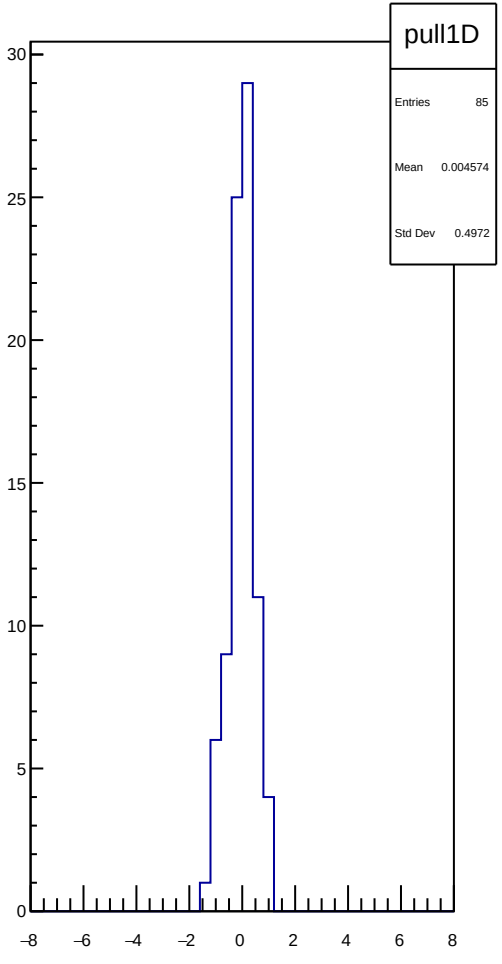

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.222e+05 / 84
p0 202.3 ± 0.1625
600
500
400
300
200

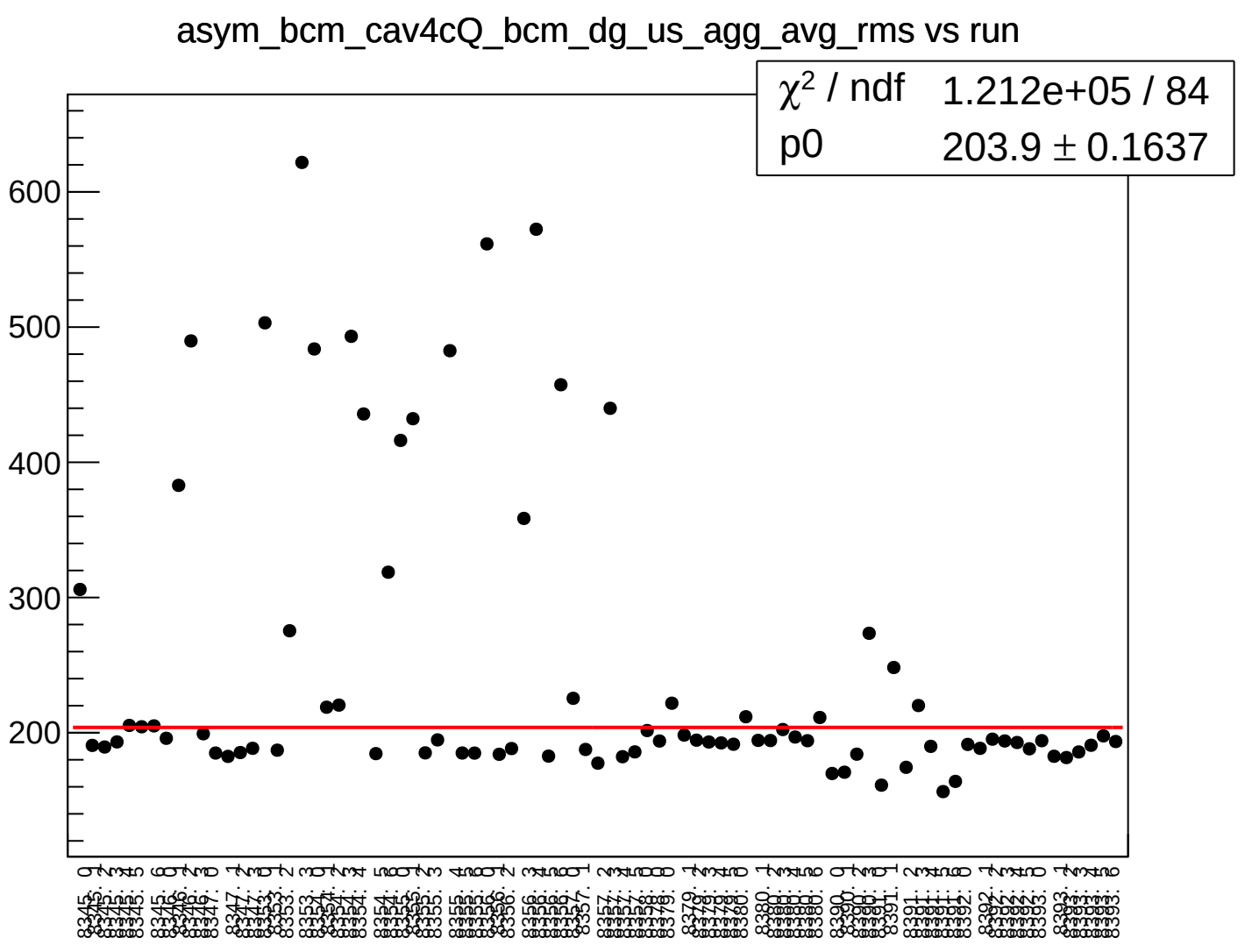

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.04 / 84
p0 60.44 ± 28.35
1000
500
0
−500
−1000
pull
Entries 85
Mean 239.5
Std Dev 201.1
2
1
0
−1
−2
−3

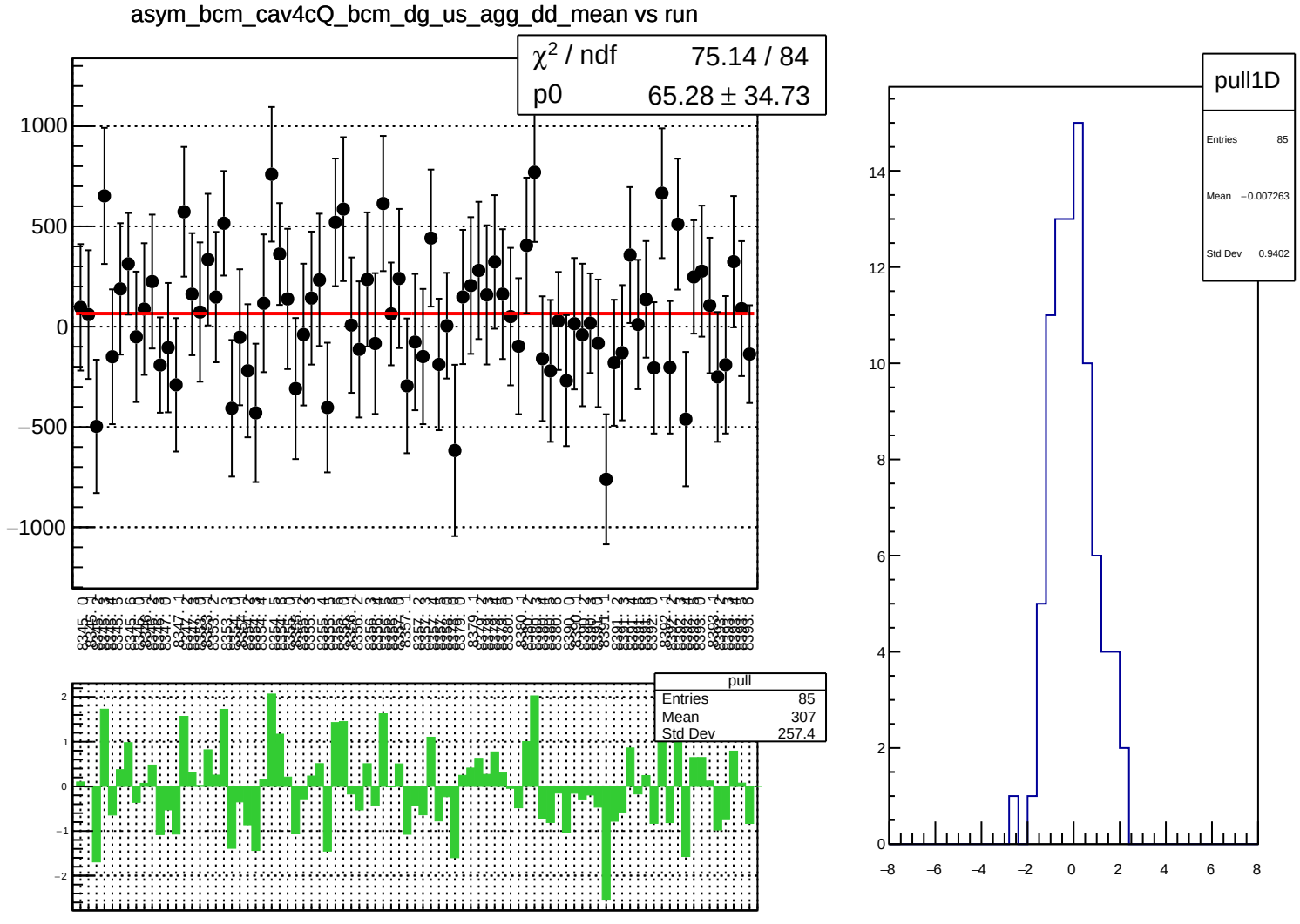

pull1D
Entries 85
Mean −0.01691
Std Dev 0.9394
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

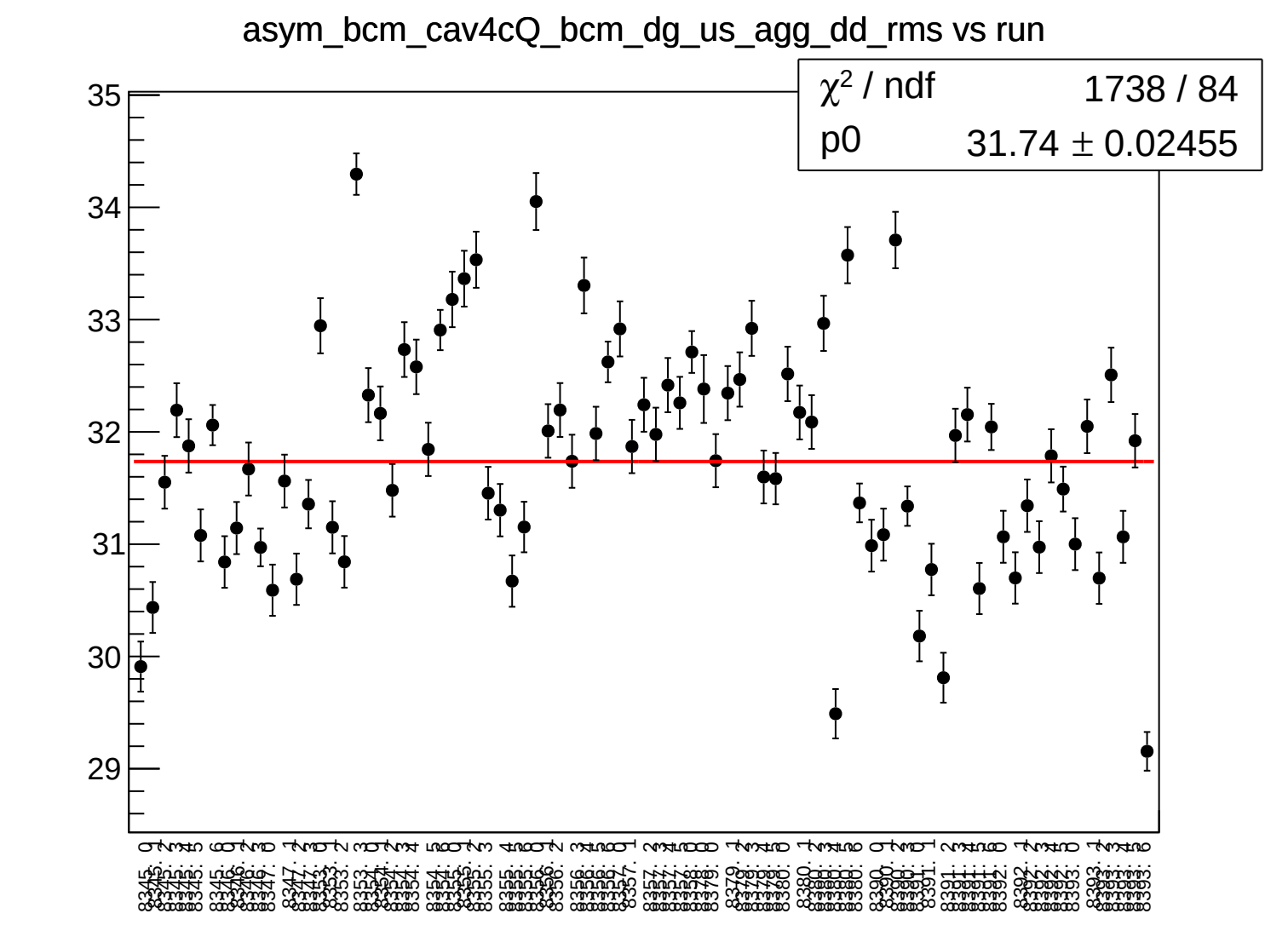

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2441 / 84
p0 25.9 ± 0.02004
29
28
27
26
25
24
23

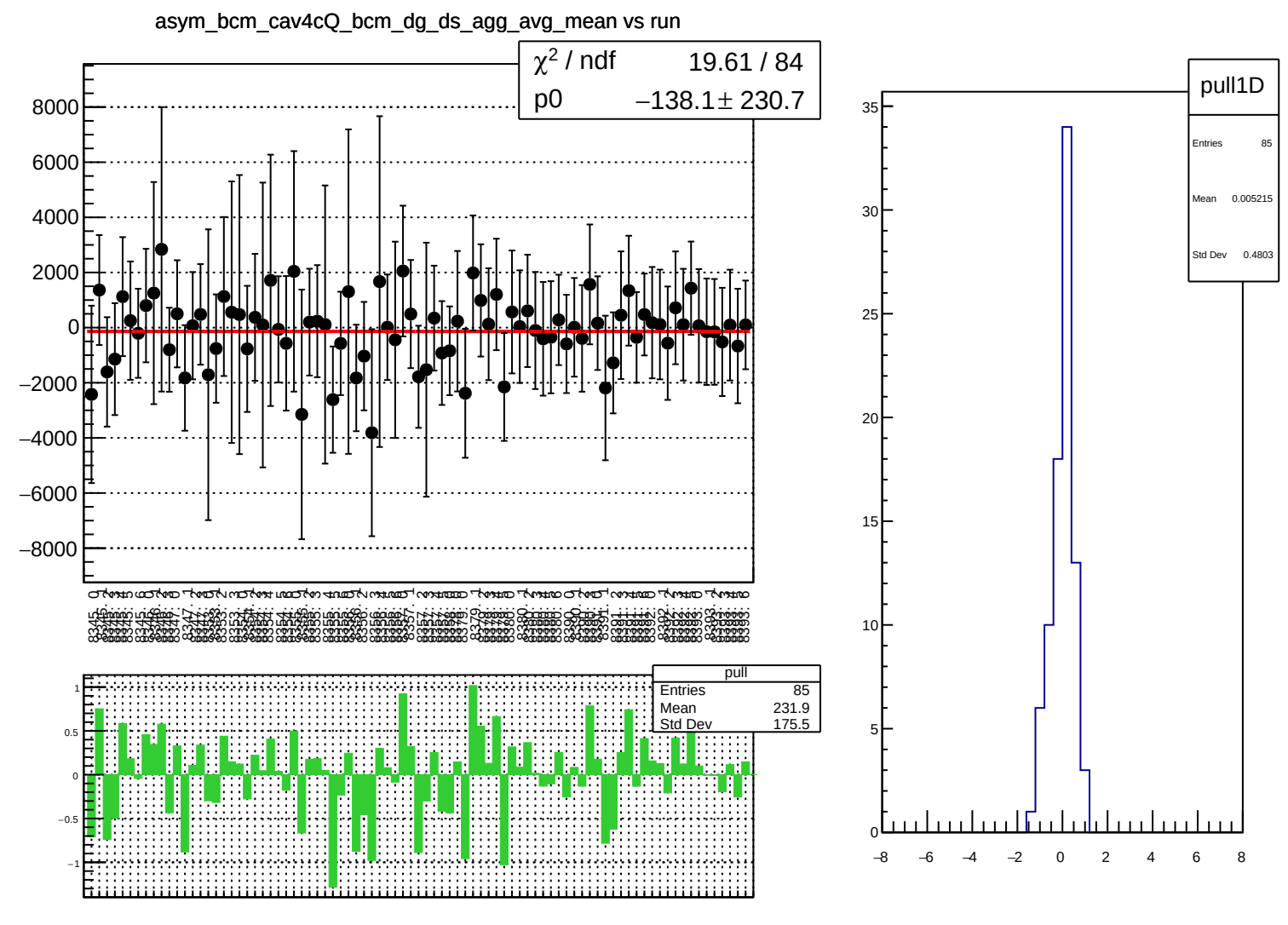

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 21.01 / 84
p0 −129.7 ± 231.6
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 257.3
Std Dev 198.8
1
0.5
0
−0.5
−1

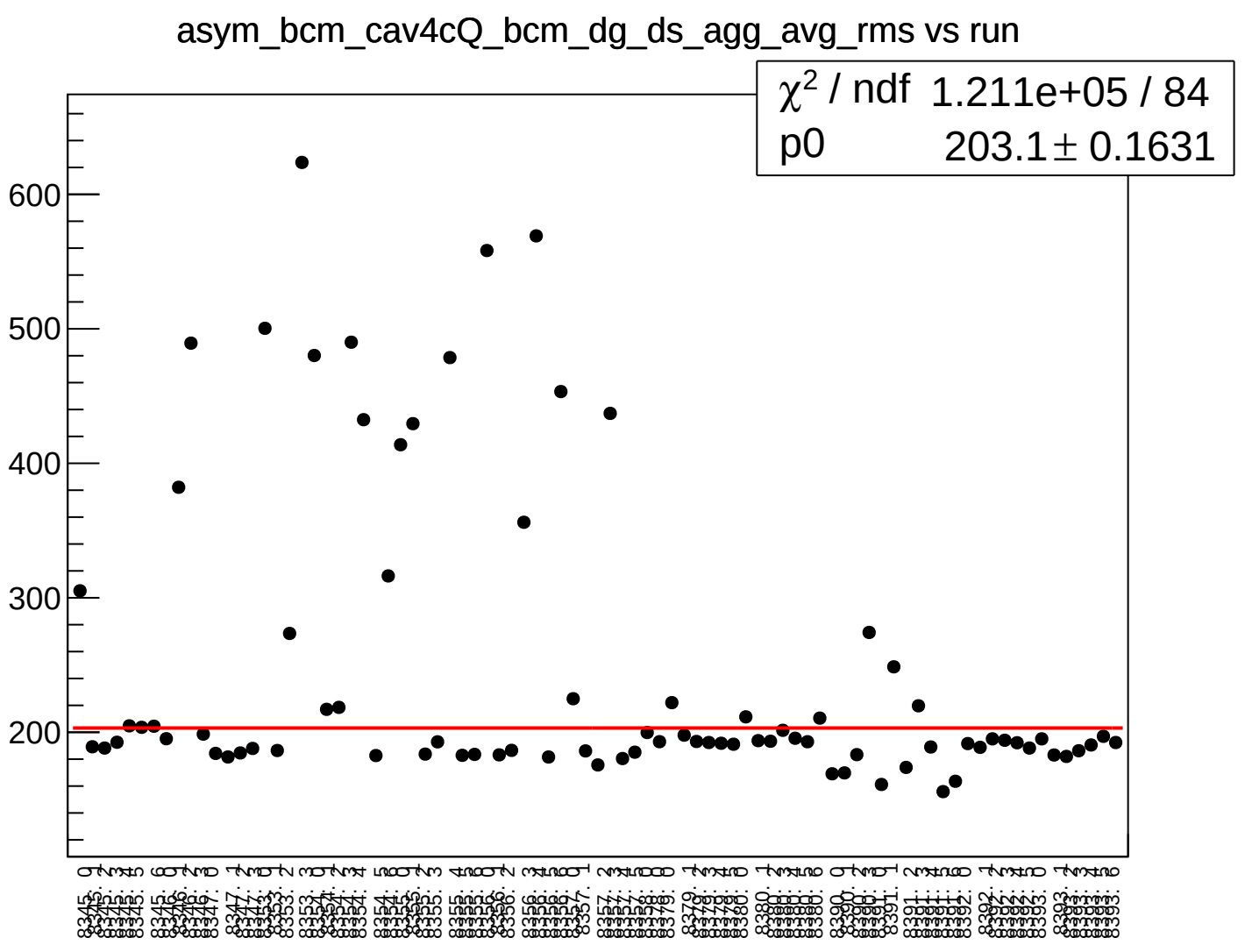

pull1D
Entries 85
Mean 0.004574
Std Dev 0.4972
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

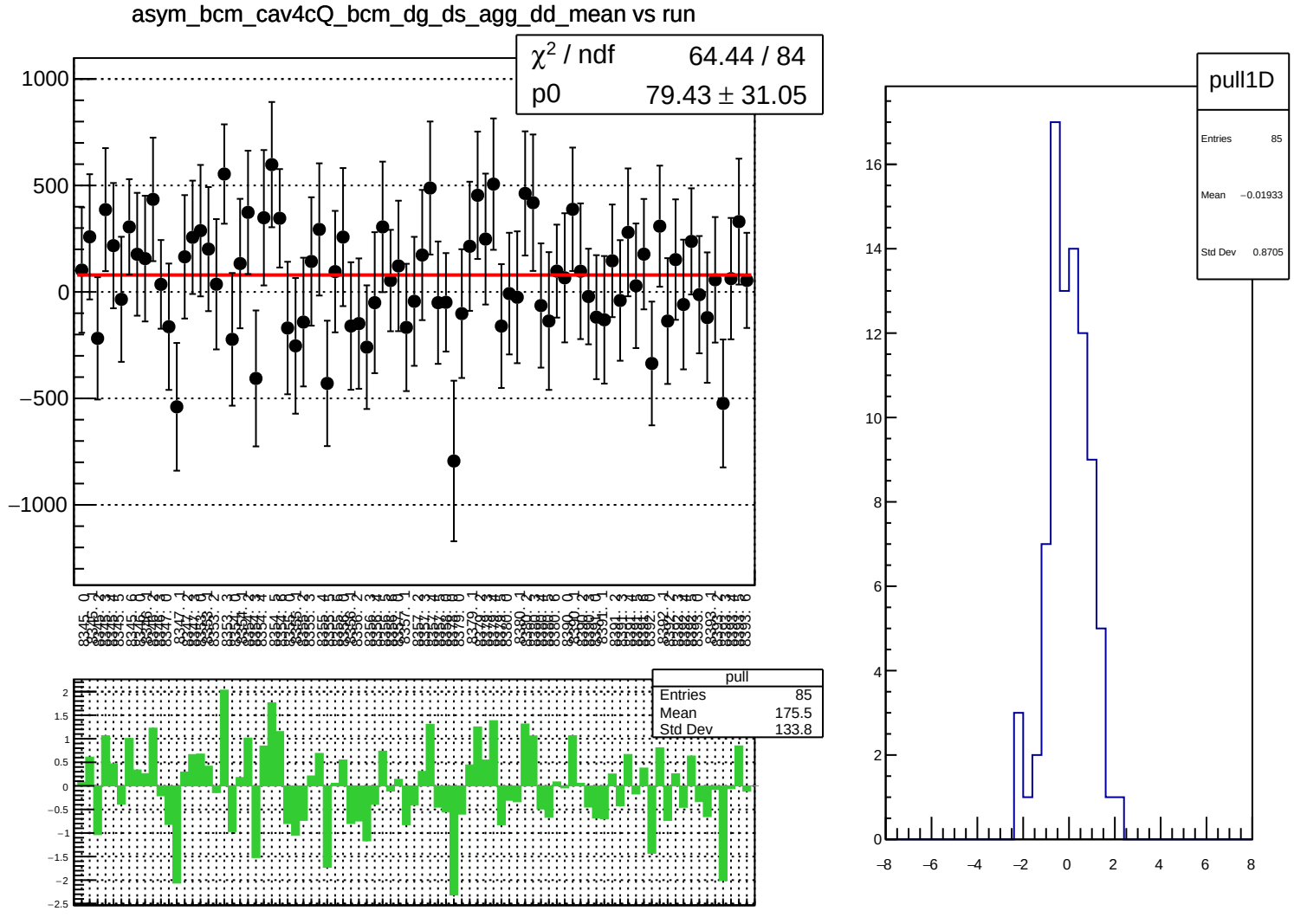

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.212e+05 / 84
p0 203.9 ± 0.1637
600
500
400
300
200

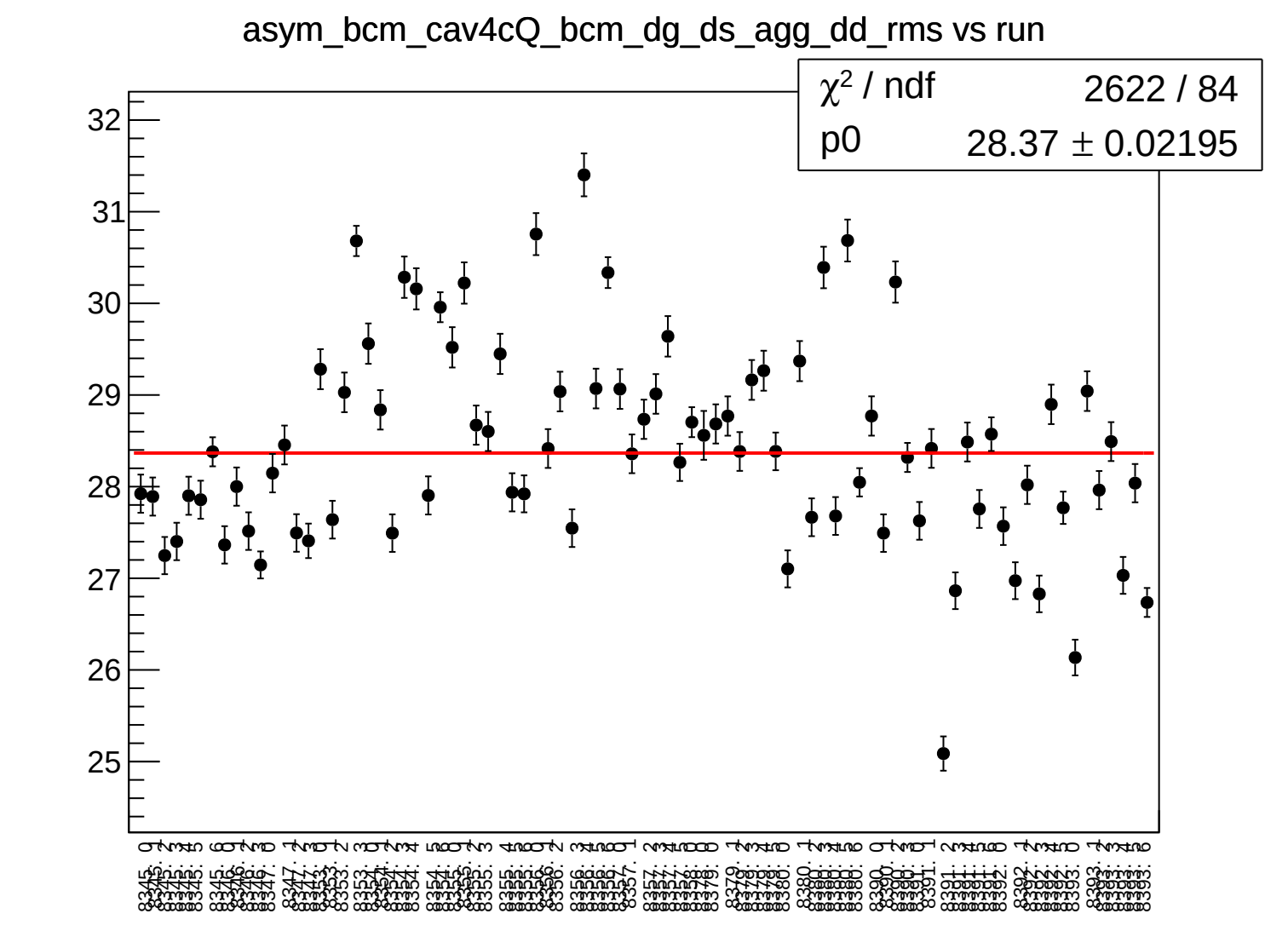

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 75.14 / 84
p0 65.28 ± 34.73
1000
500
0
−500
−1000
pull
Entries 85
Mean 307
Std Dev 257.4
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.007263
Std Dev 0.9402
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

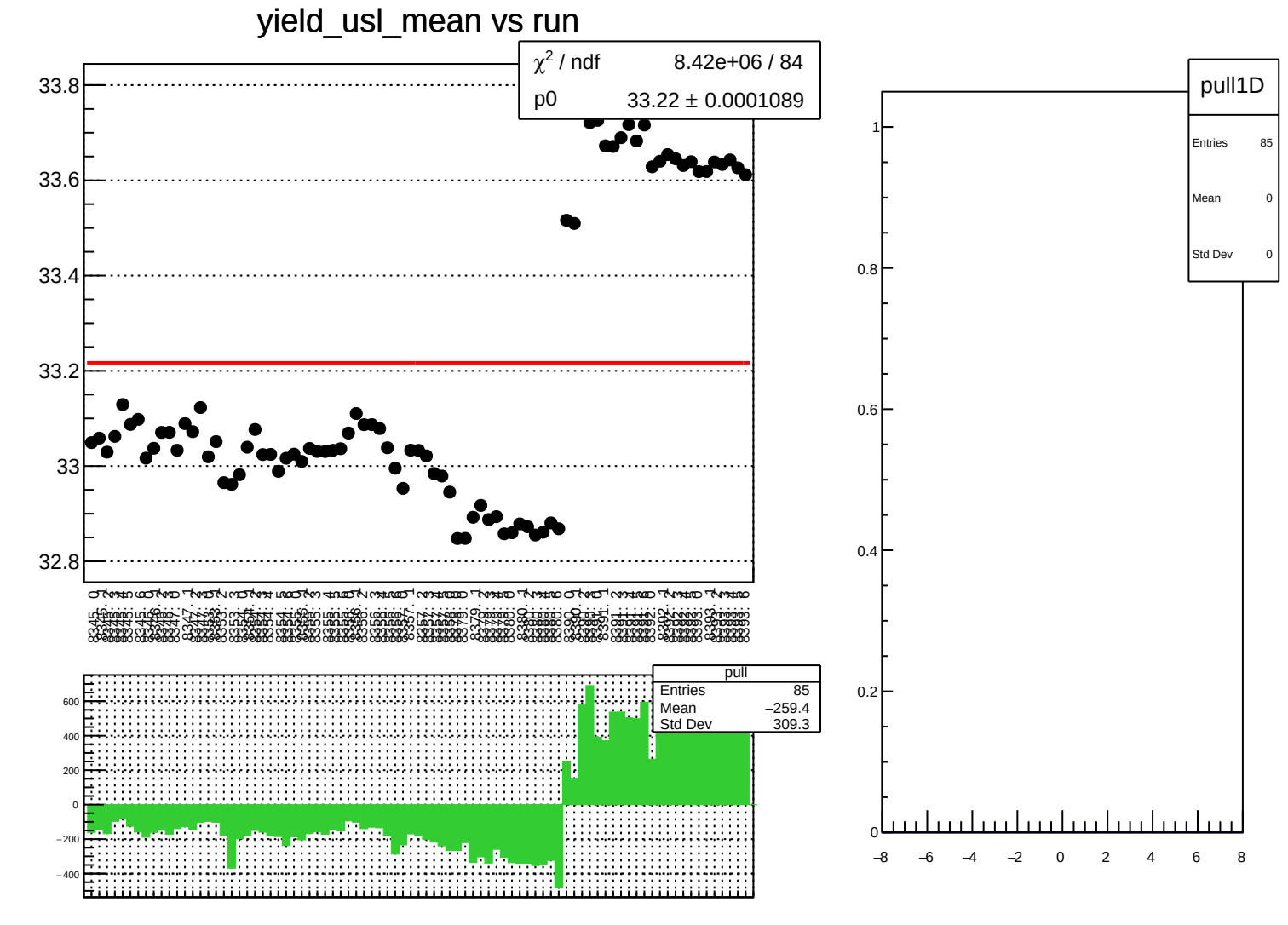

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1738 / 84
p0 31.74 ± 0.02455
35
34
33
32
31
30
29

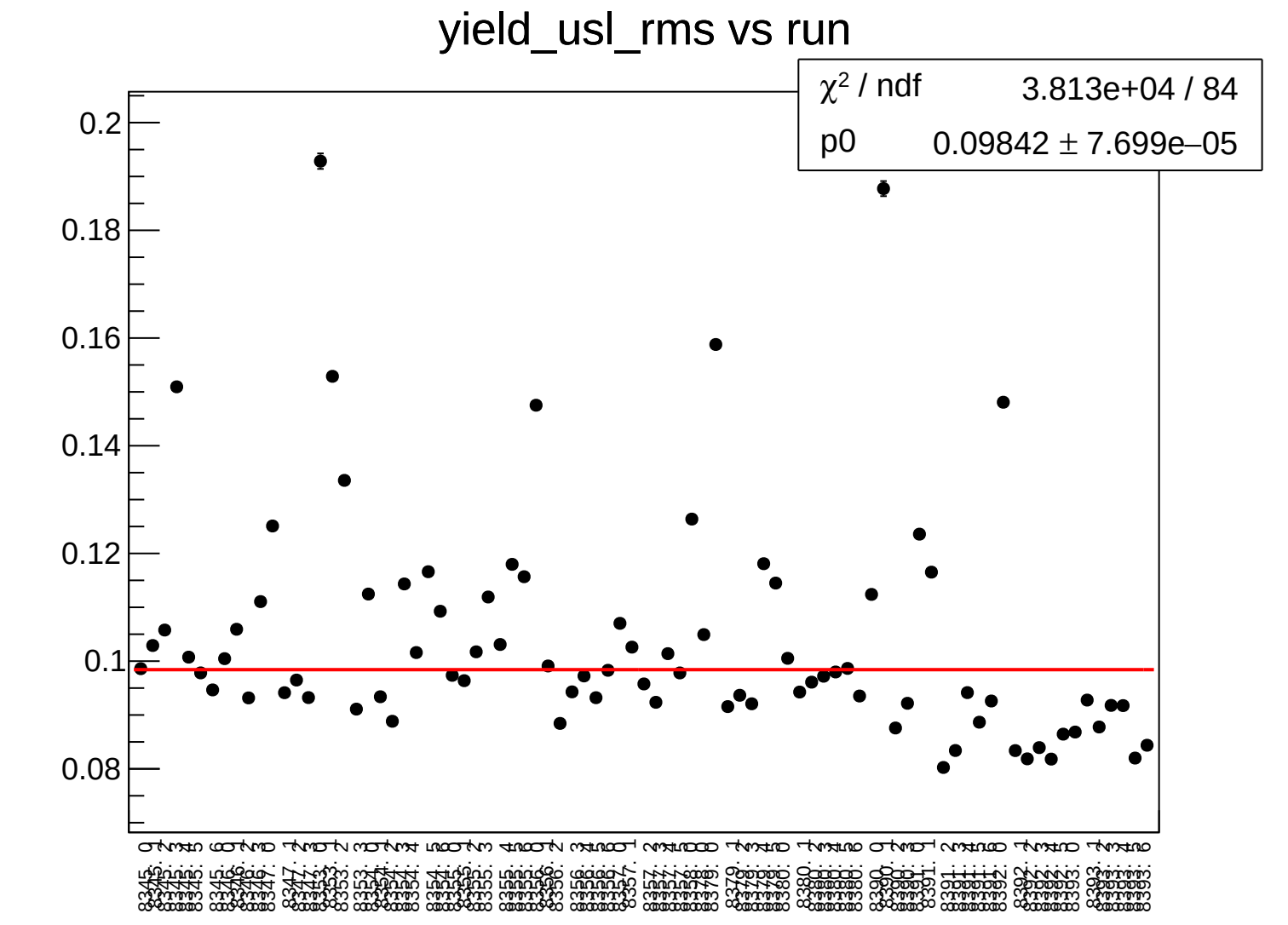

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 19.61 / 84
p0 −138.1± 230.7
pull
Entries 85
Mean 231.9
Std Dev 175.5
pull1D
Entries 85
Mean 0.005215
Std Dev 0.4803

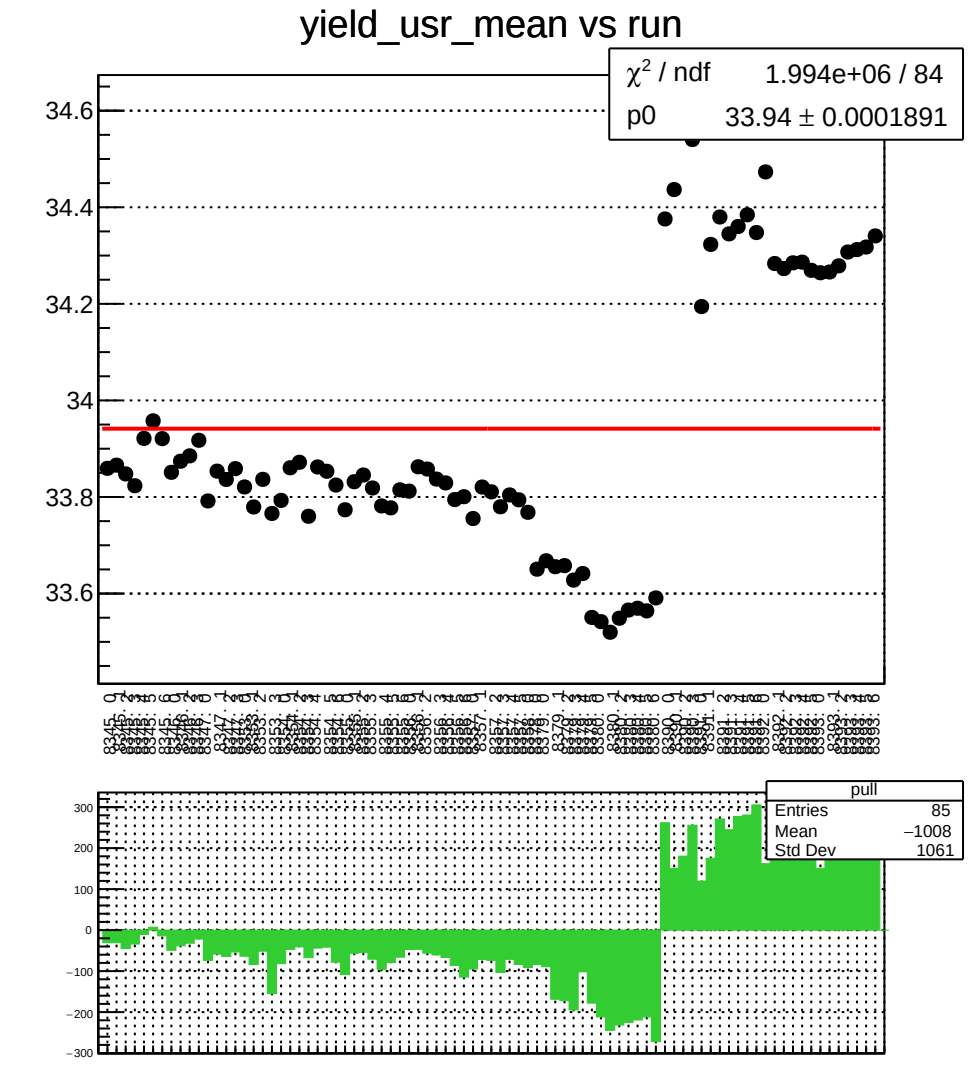

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.211e+05 / 84
p0 203.1 ± 0.1631
600
500
400
300
200

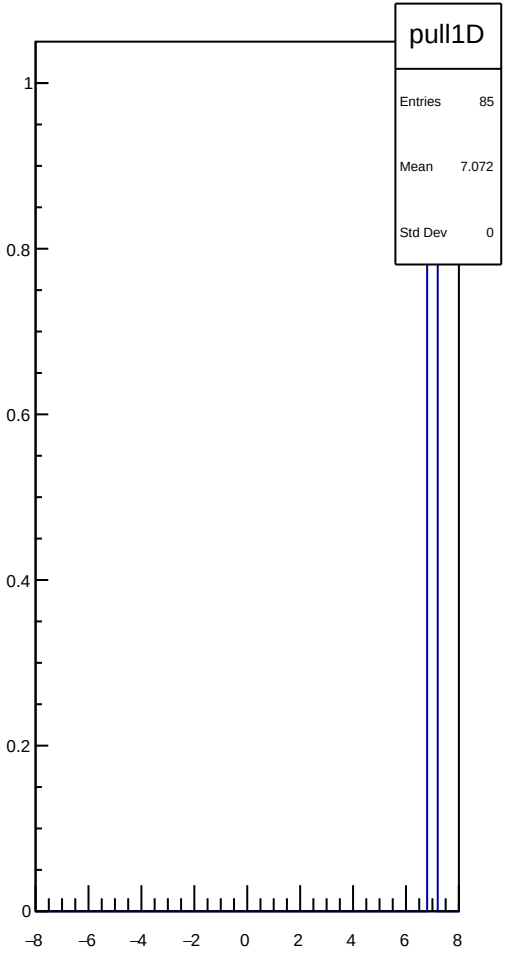

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 64.44 / 84
p0 79.43 ± 31.05
pull
Entries 85
Mean 175.5
Std Dev 133.8
pull1D
Entries 85
Mean −0.01933
Std Dev 0.8705

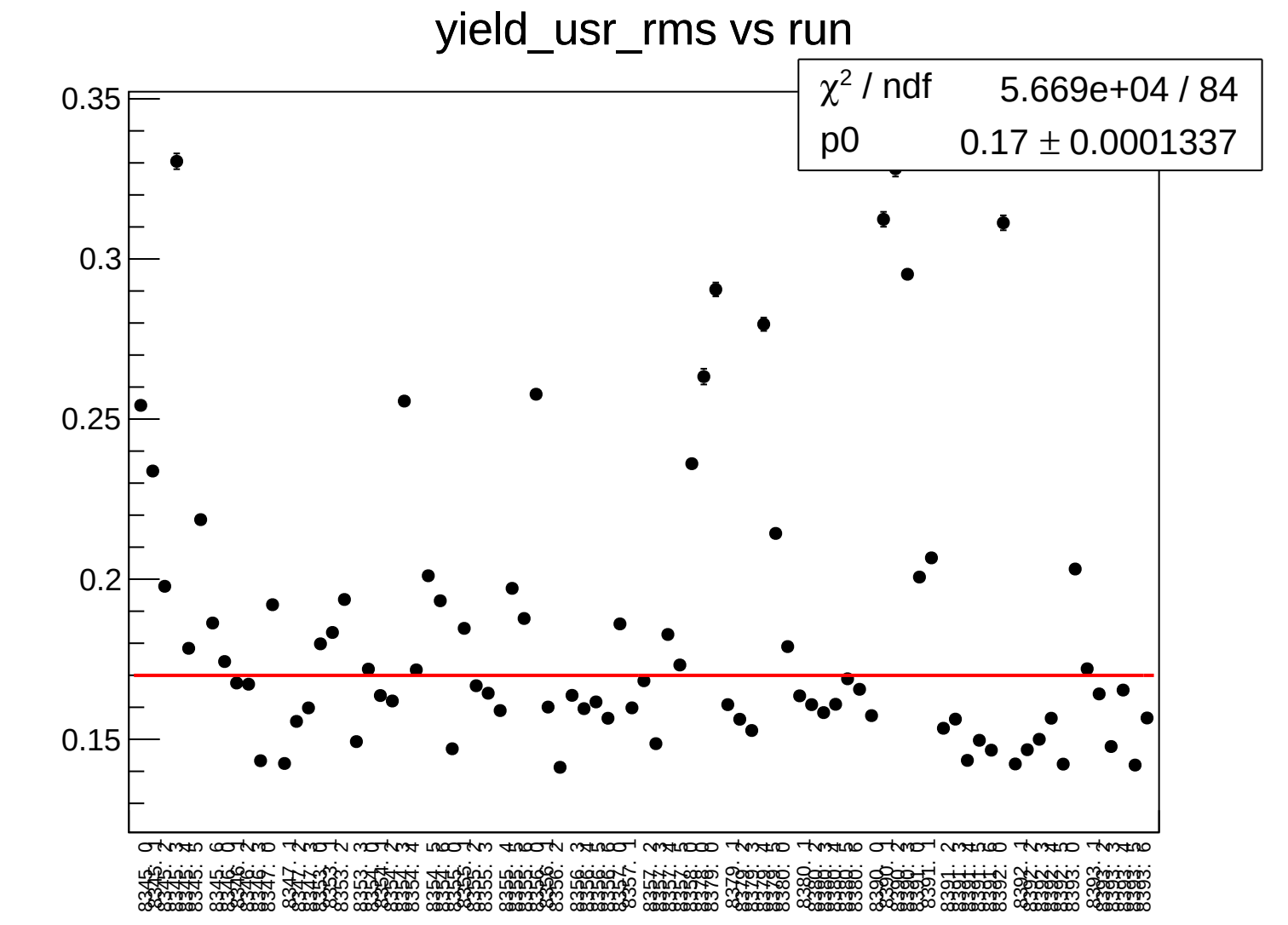

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2622 / 84
p0 28.37 ± 0.02195
32
31
30
29
28
27
26
25

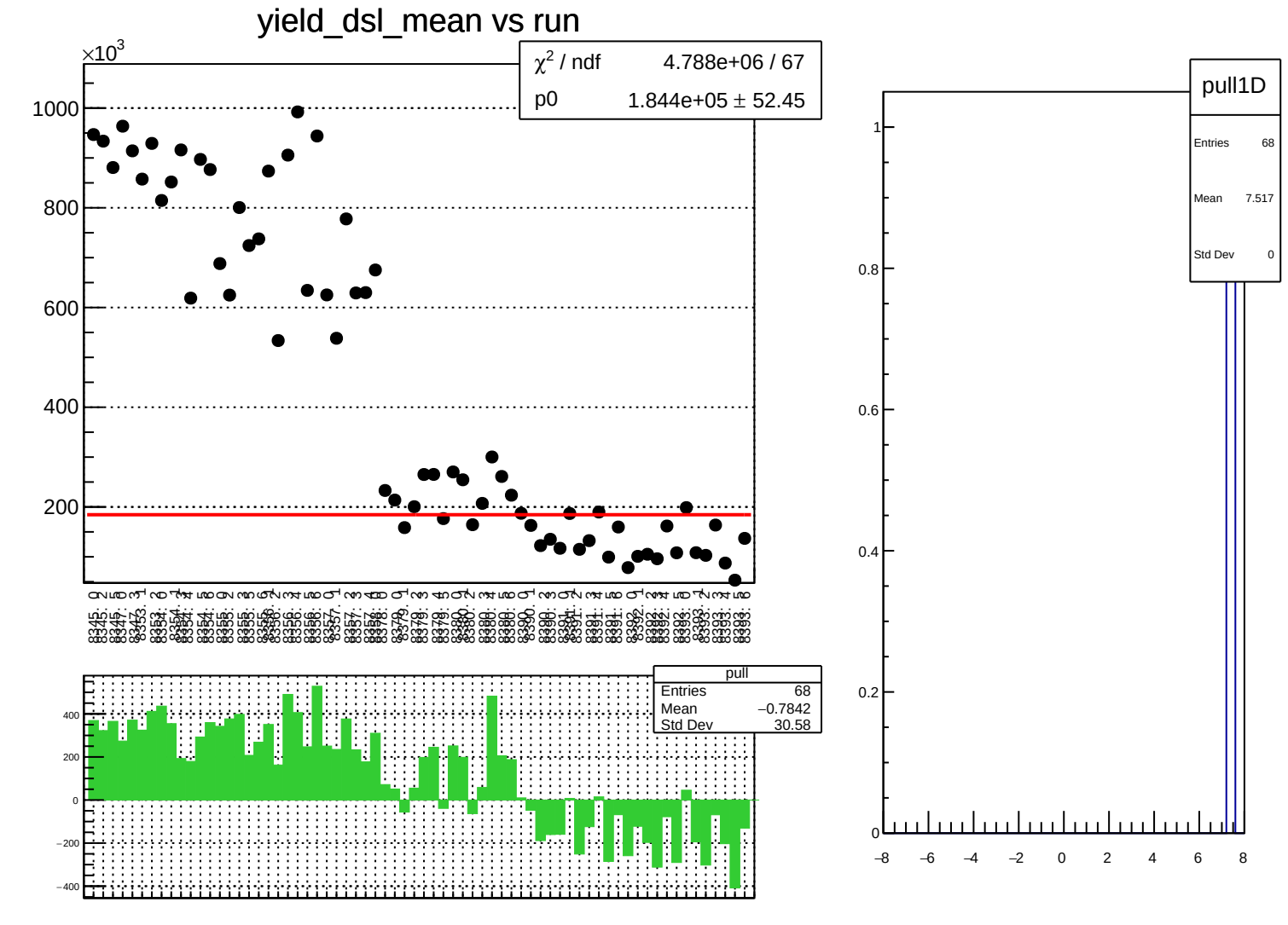

yield_usl_mean vs run
χ² / ndf 8.42e+06 / 84
p0 33.22 ± 0.0001089
33.8
33.6
33.4
33.2
33
32.8
pull
Entries 85
Mean −259.4
Std Dev 309.3
600
400
200
0
−200
−400
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

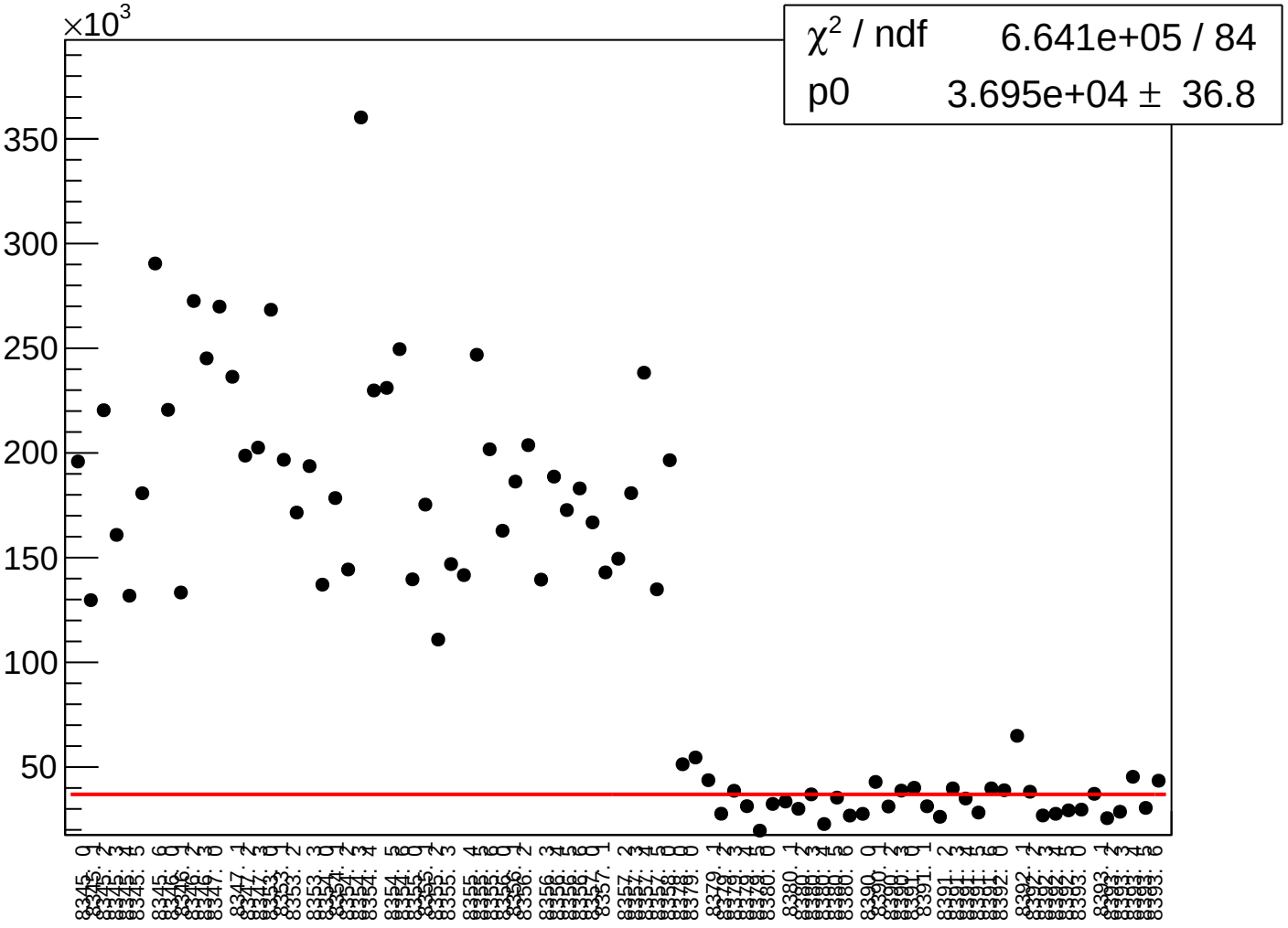

yield_usl_rms vs run
χ² / ndf 3.813e+04 / 84
p0 0.09842 ± 7.699e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08

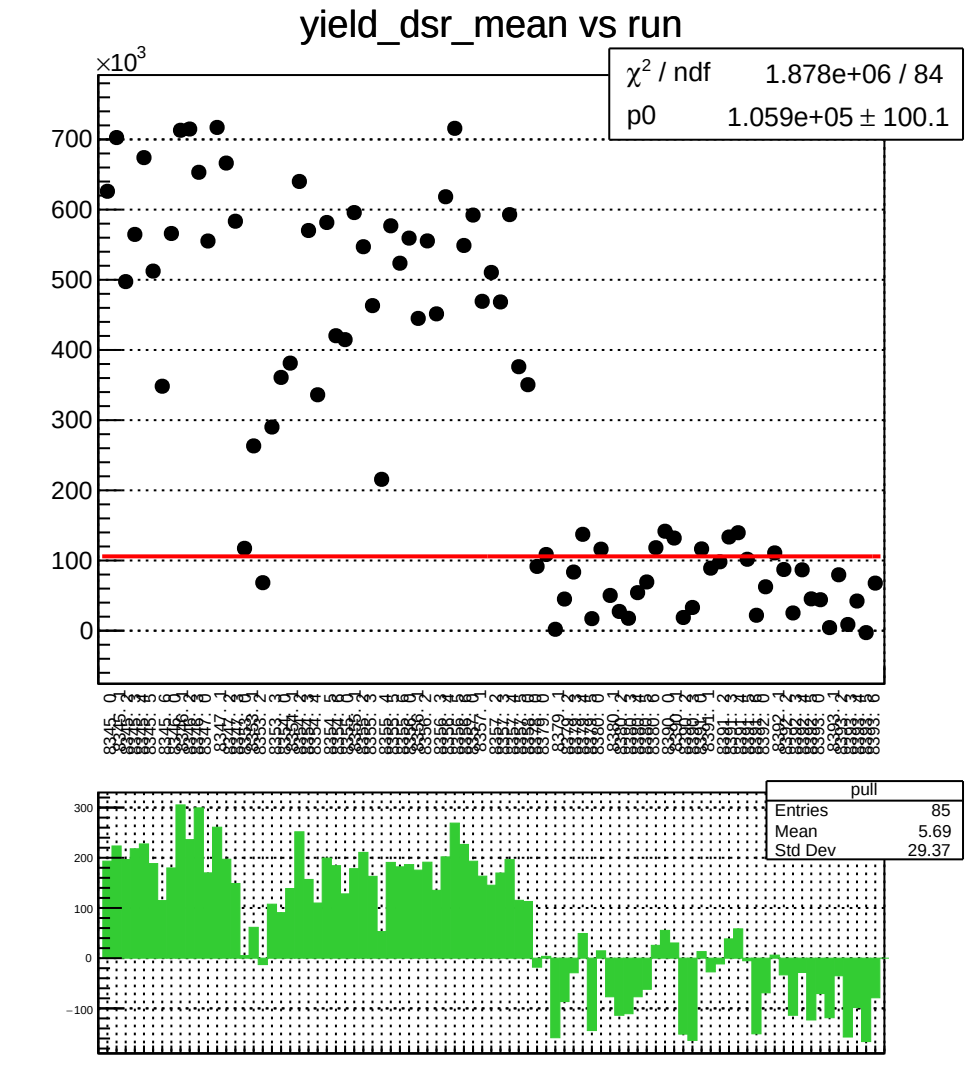

yield_usr_mean vs run
χ² / ndf 1.994e+06 / 84
p0 33.94 ± 0.0001891
34.6
34.4
34.2
34
33.8
33.6
pull
Entries 85
Mean −1008
Std Dev 1061
300
200
100
0
−100
−200
−300

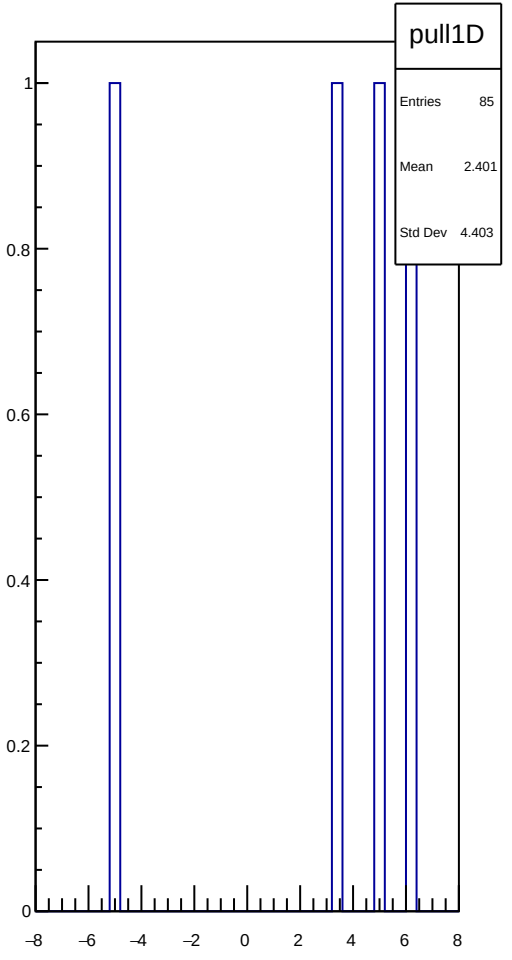

pull1D
Entries 85
Mean 7.072
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

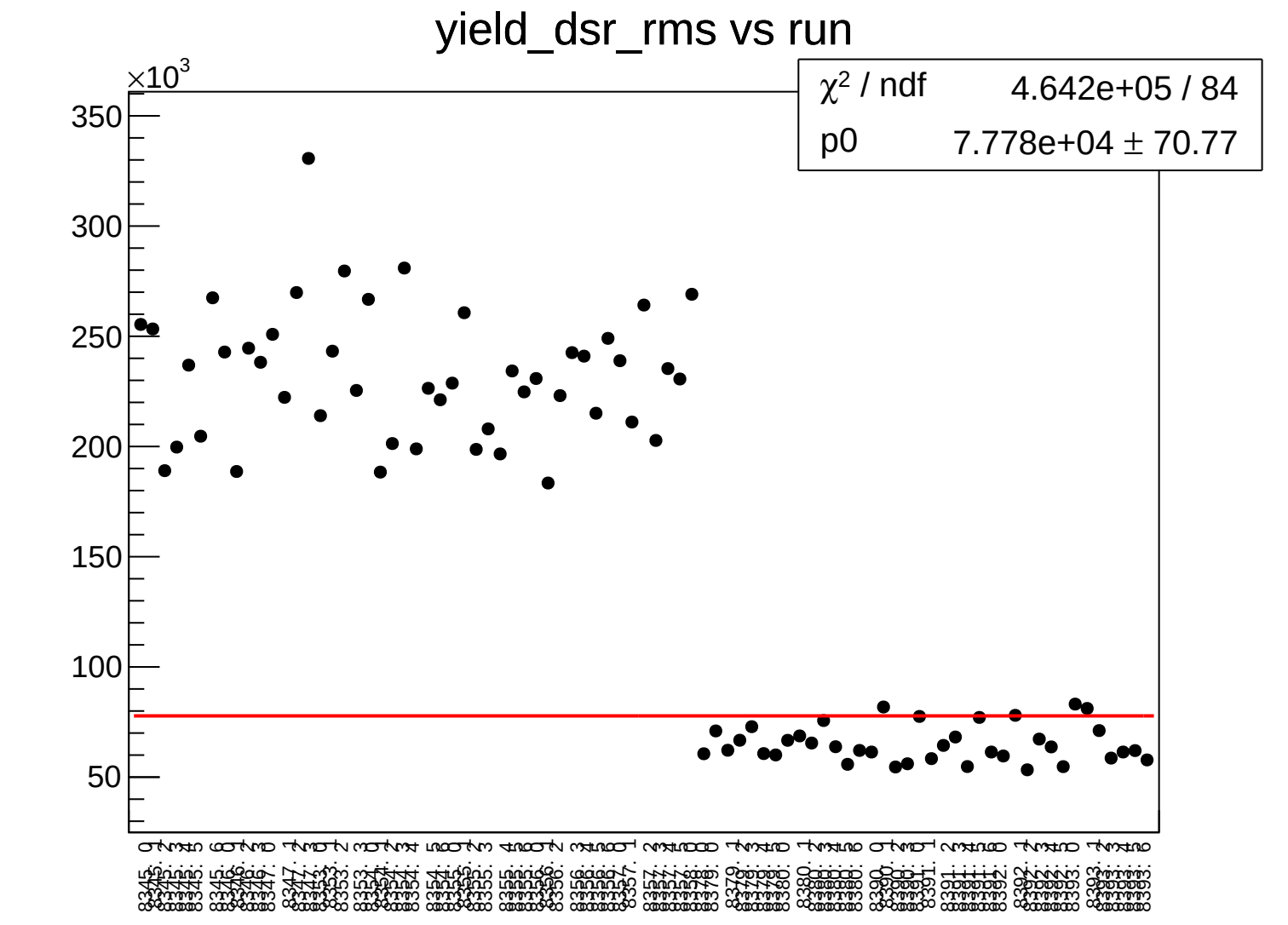

yield_usr_rms vs run
χ² / ndf 5.669e+04 / 84
p0 0.17 ± 0.0001337
0.35
0.3
0.25
0.2
0.15

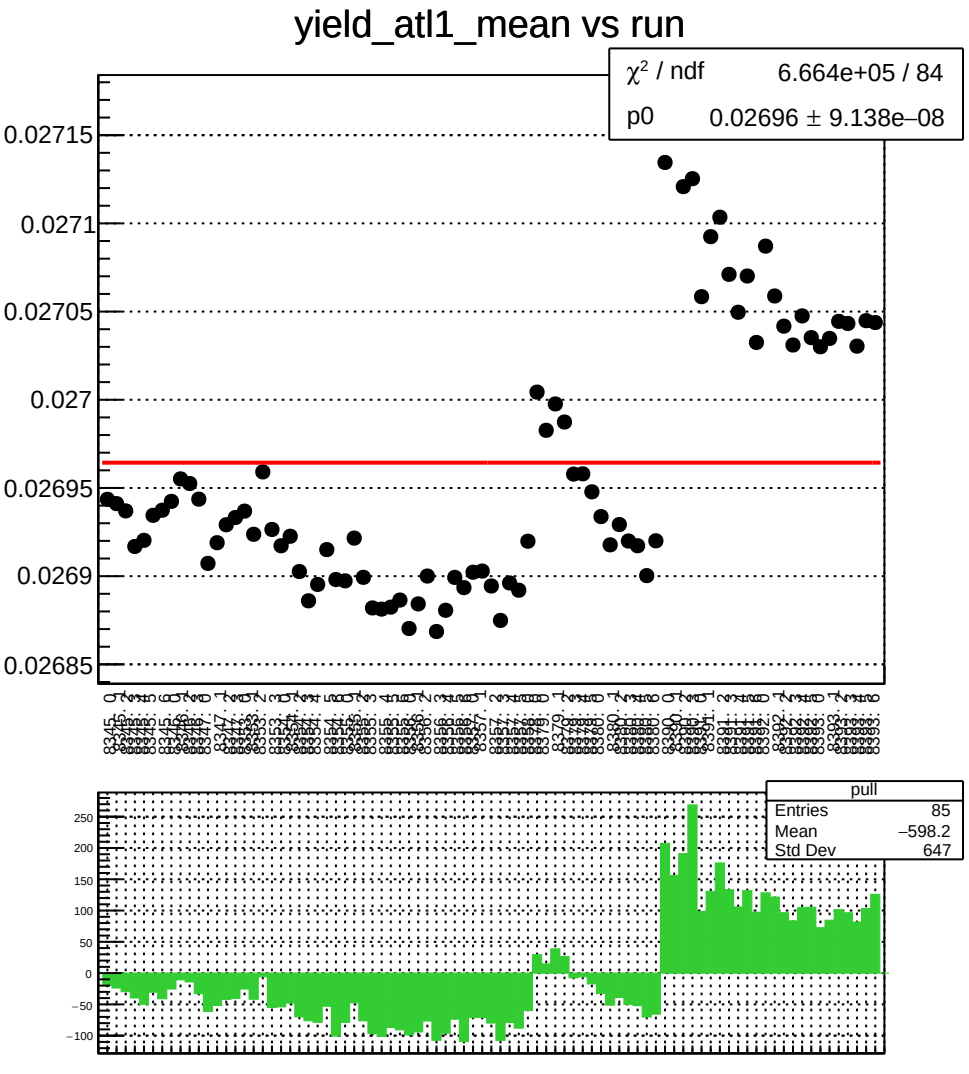

yield_dsl_mean vs run
×10^3
χ² / ndf 4.788e+06 / 67
p0 1.844e+05 ± 52.45
1000
800
600
400
200
pull
Entries 68
Mean −0.7842
Std Dev 30.58
400
200
0
−200
−400
pull1D
Entries 68
Mean 7.517
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

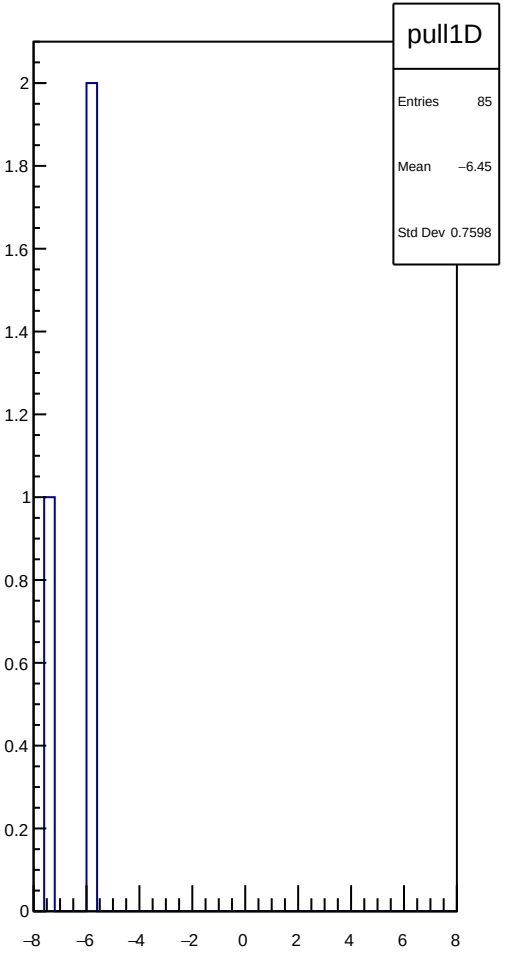

yield_dsl_rms vs run
×10^3
χ^2 / ndf 6.641e+05 / 84
p0 3.695e+04 ± 36.8
350
300
250
200
150
100
50

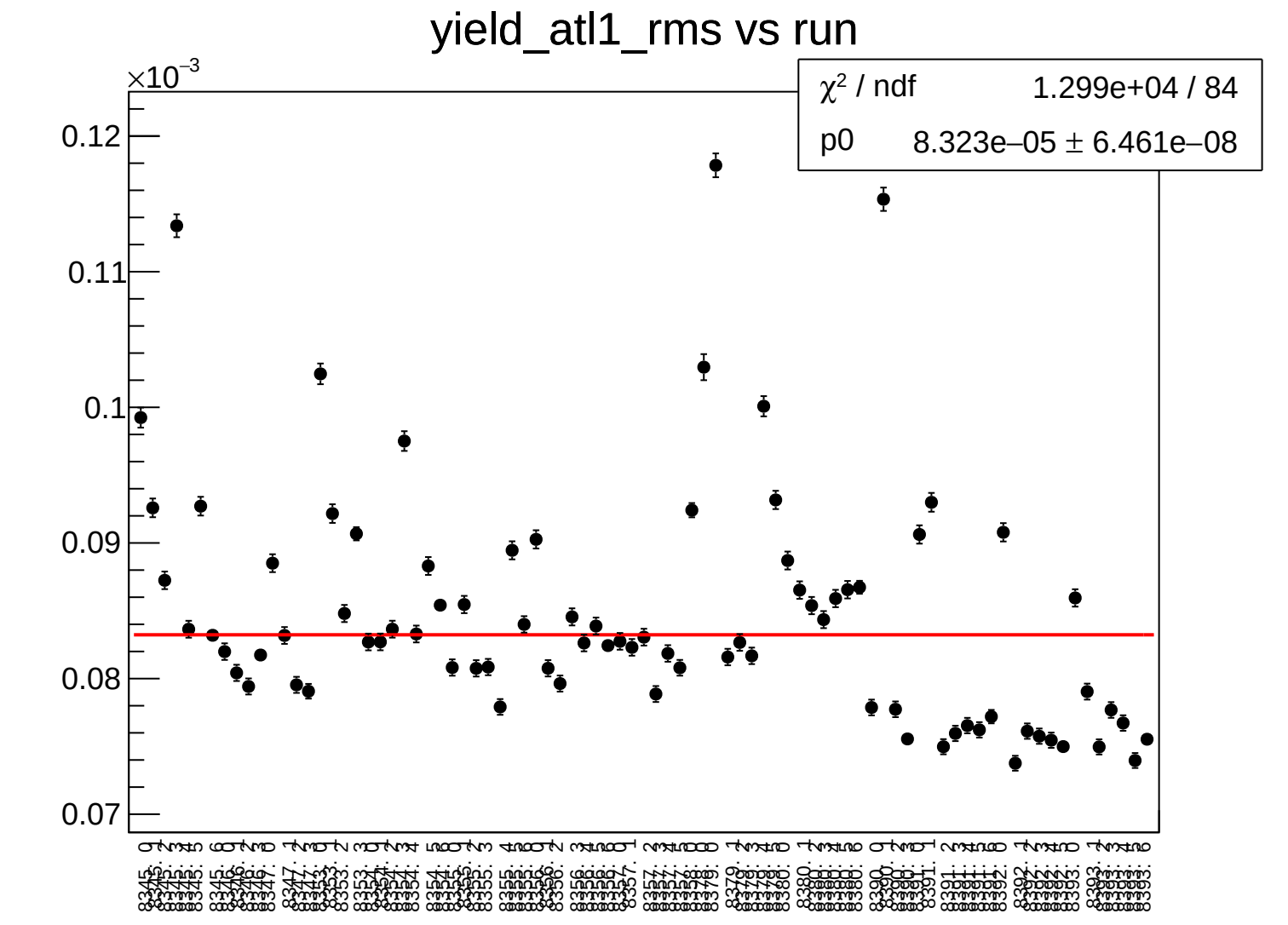

yield_dsr_mean vs run
×10^3
χ² / ndf 1.878e+06 / 84
p0 1.059e+05 ± 100.1
700
600
500
400
300
200
100
0
pull
Entries 85
Mean 5.69
Std Dev 29.37
300
200
100
0
−100

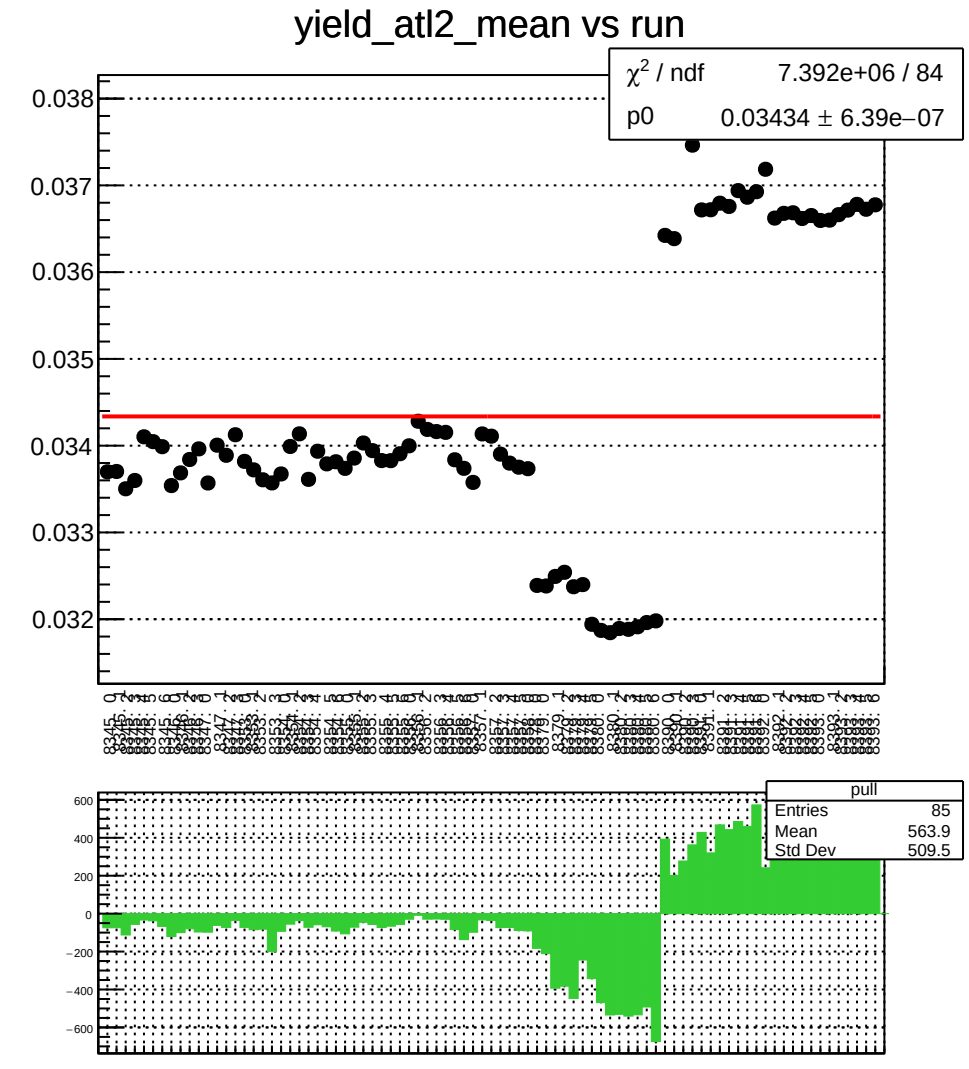

pull1D
Entries 85
Mean 2.401
Std Dev 4.403
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

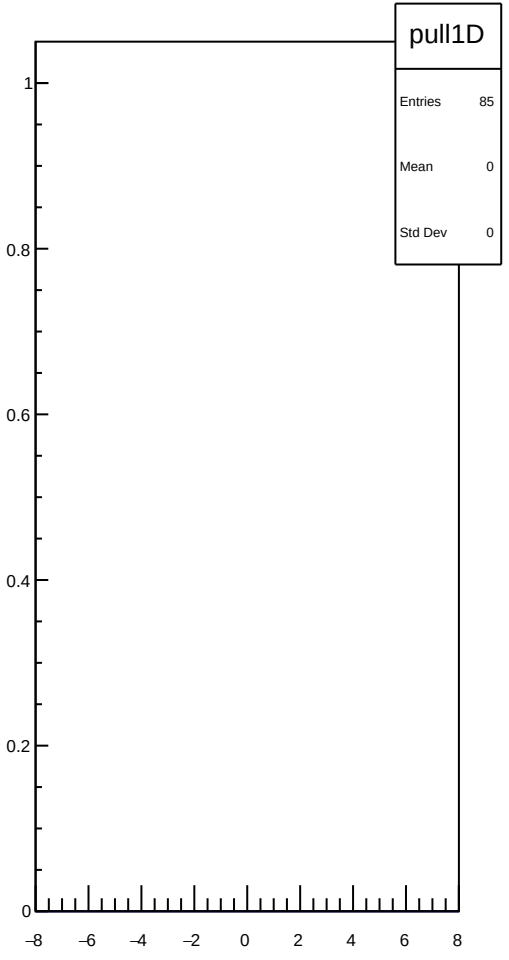

yield_dsr_rms vs run
×10^3
350
300
250
200
150
100
50
χ² / ndf 4.642e+05 / 84
p0 7.778e+04 ± 70.77

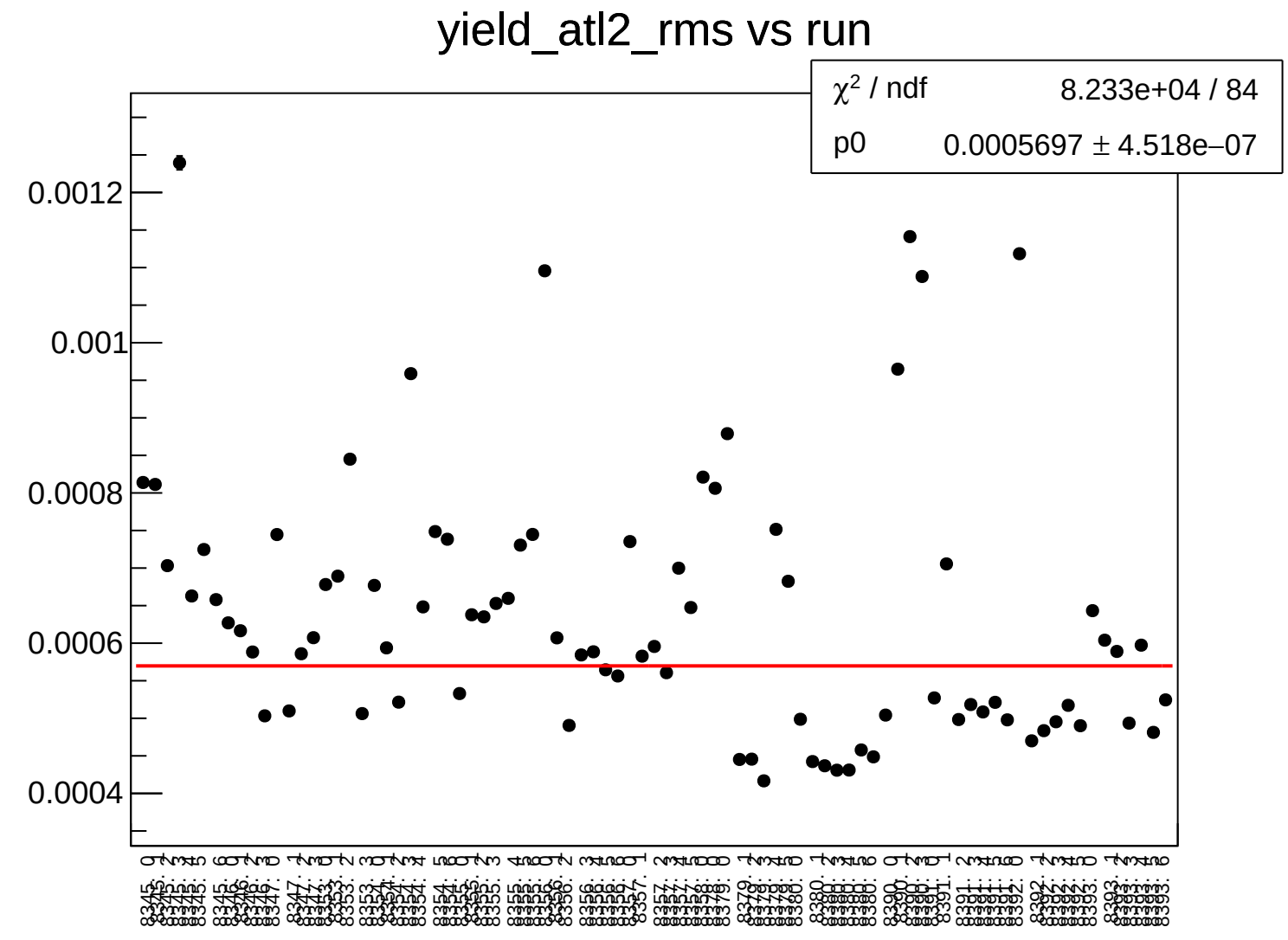

yield_atl1_mean vs run
χ² / ndf 6.664e+05 / 84
p0 0.02696 ± 9.138e−08
0.02715
0.0271
0.02705
0.027
0.02695
0.0269
0.02685
pull
Entries 85
Mean −598.2
Std Dev 647
250
200
150
100
50
0
−50
−100

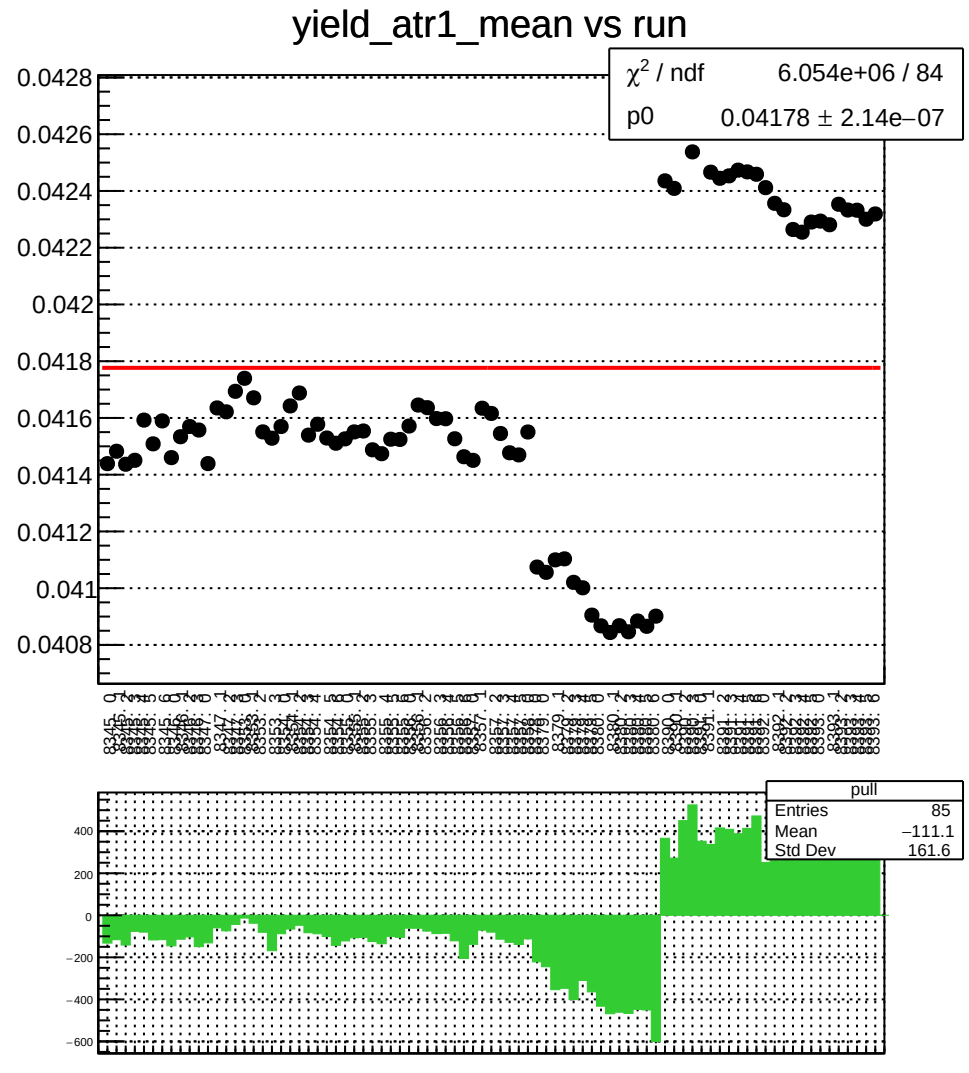

pull1D
Entries 85
Mean −6.45
Std Dev 0.7598
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

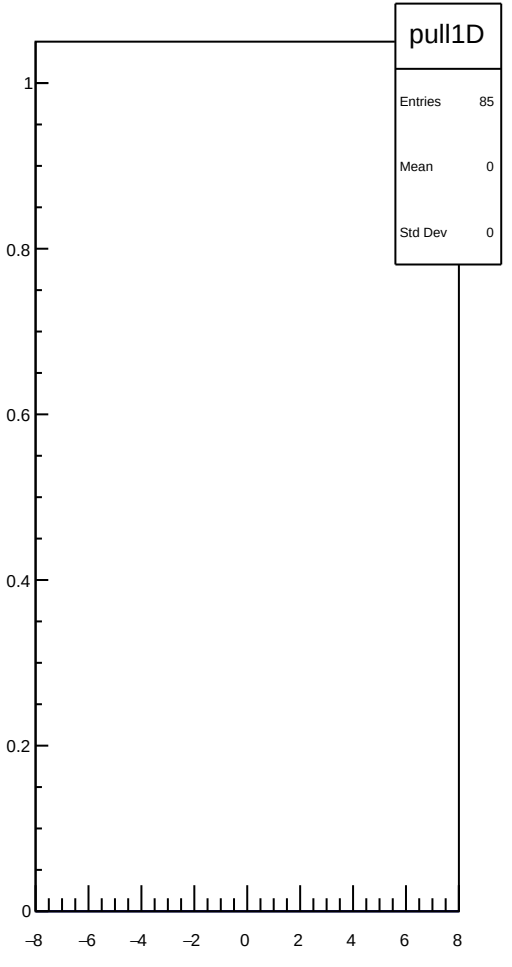

yield_atl1_rms vs run
×10⁻³
χ² / ndf 1.299e+04 / 84
p0 8.323e−05 ± 6.461e−08
0.12
0.11
0.1
0.09
0.08
0.07

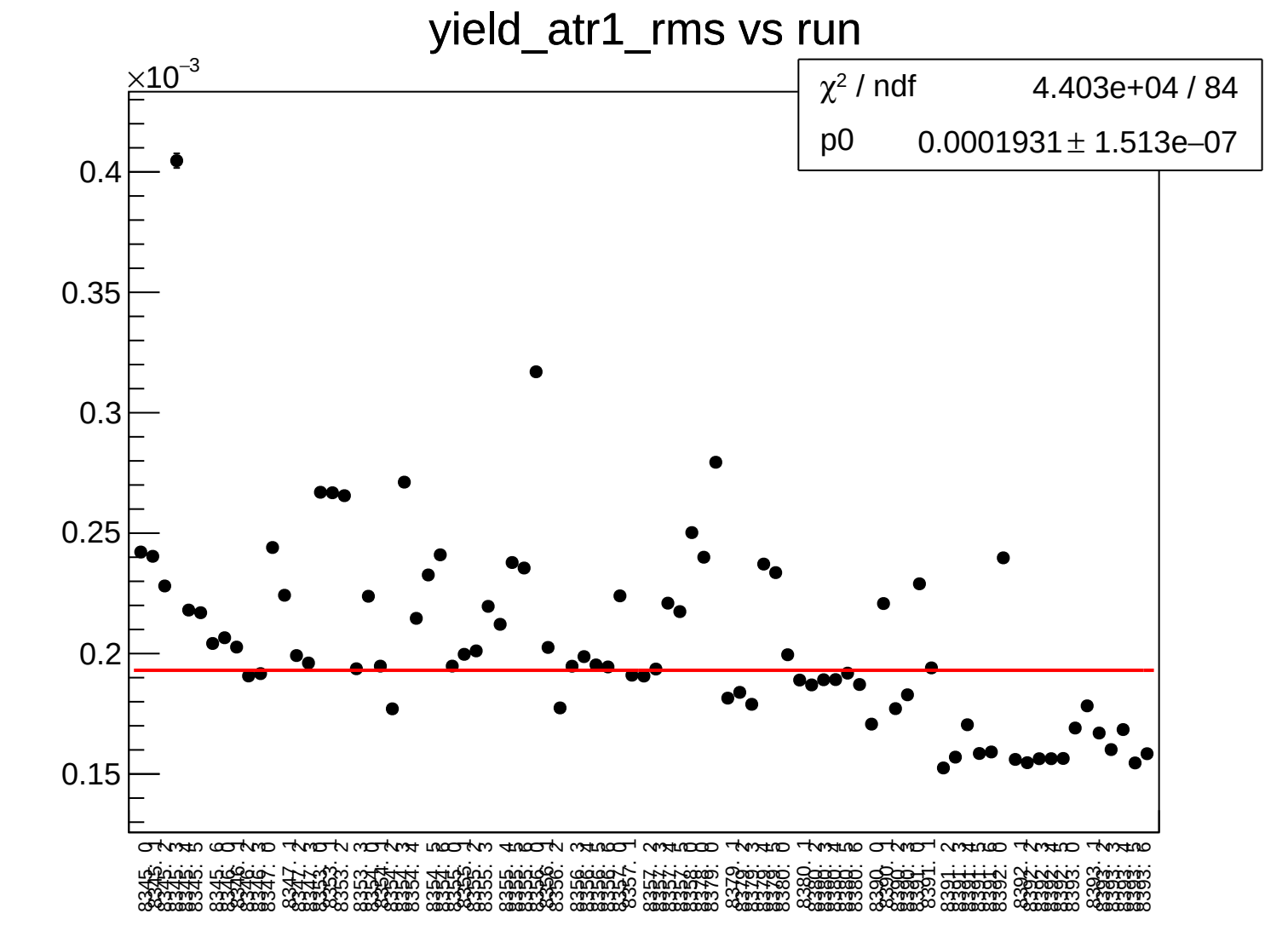

yield_atl2_mean vs run
χ² / ndf 7.392e+06 / 84
p0 0.03434 ± 6.39e−07
0.038
0.037
0.036
0.035
0.034
0.033
0.032
pull
Entries 85
Mean 563.9
Std Dev 509.5
600
400
200
0
−200
−400
−600

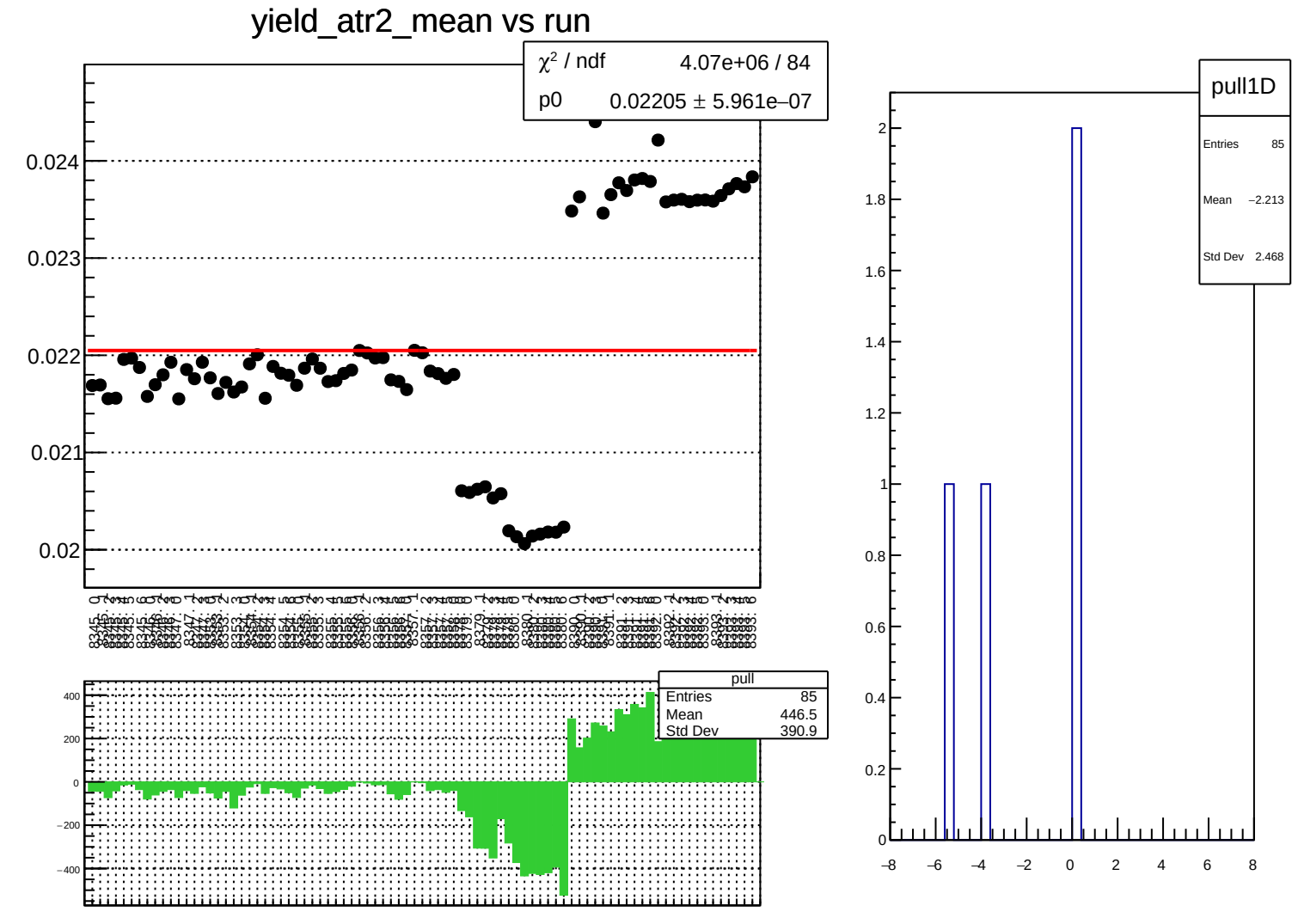

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

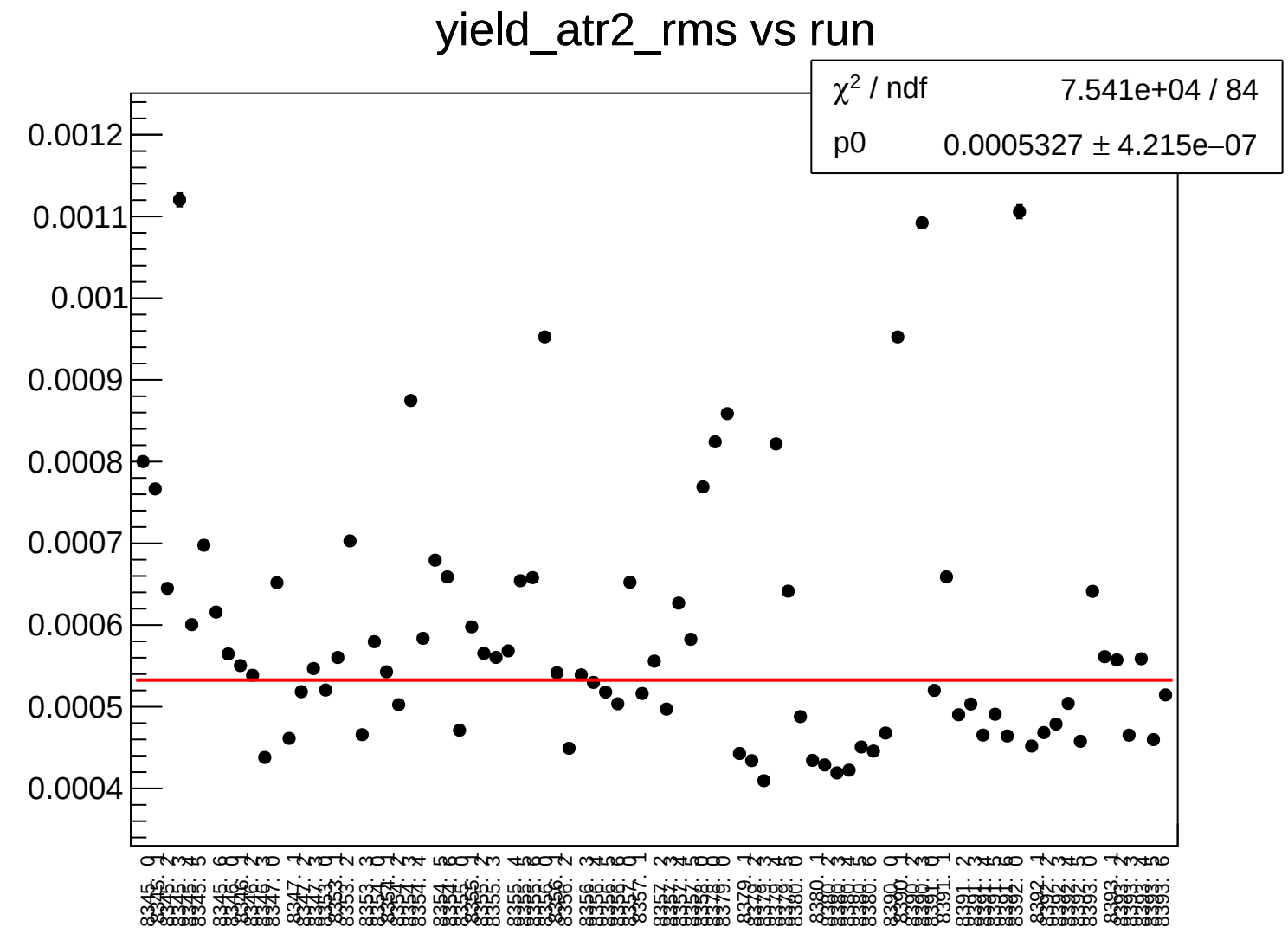

yield_atl2_rms vs run
χ² / ndf 8.233e+04 / 84
p0 0.0005697 ± 4.518e−07
0.0012
0.001
0.0008
0.0006
0.0004

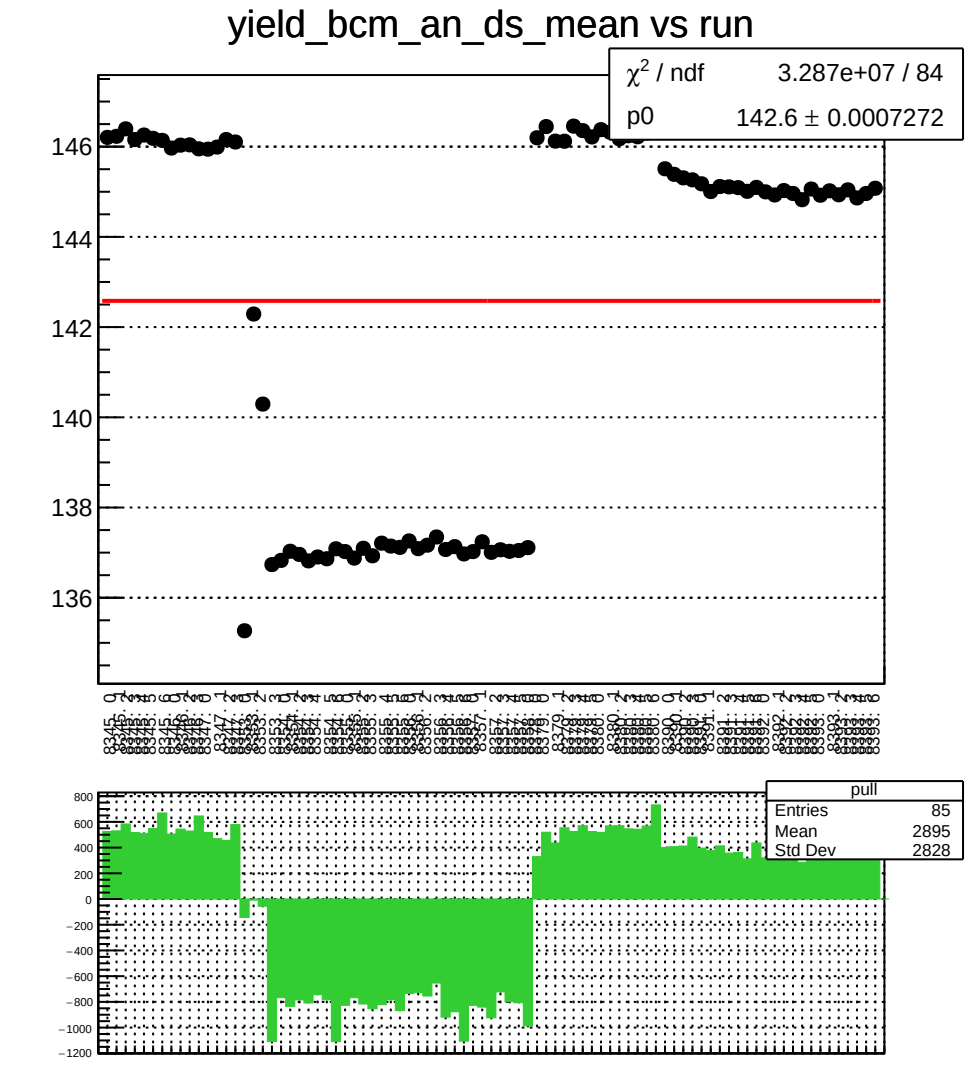

yield_atr1_mean vs run
χ² / ndf 6.054e+06 / 84
p0 0.04178 ± 2.14e−07
0.0428
0.0426
0.0424
0.0422
0.042
0.0418
0.0416
0.0414
0.0412
0.041
0.0408
pull
Entries 85
Mean −111.1
Std Dev 161.6
400
200
0
−200
−400
−600

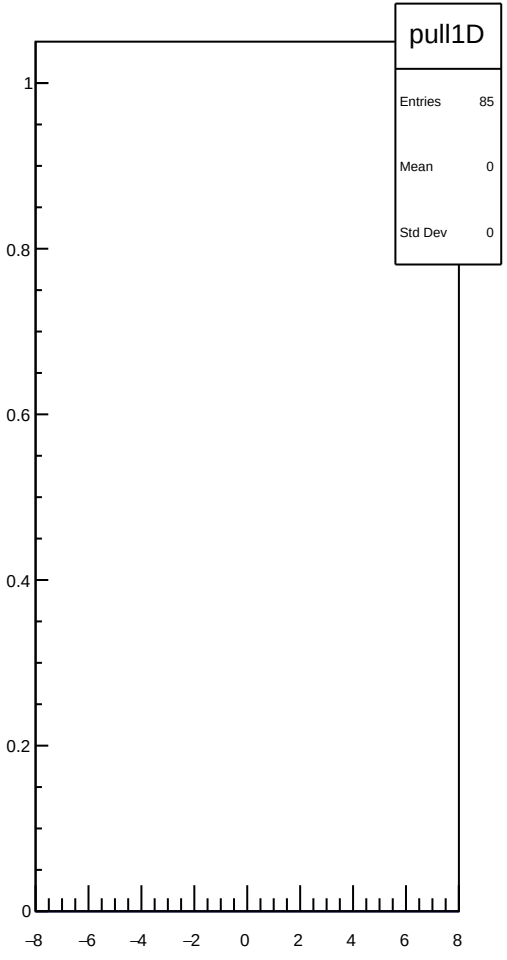

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

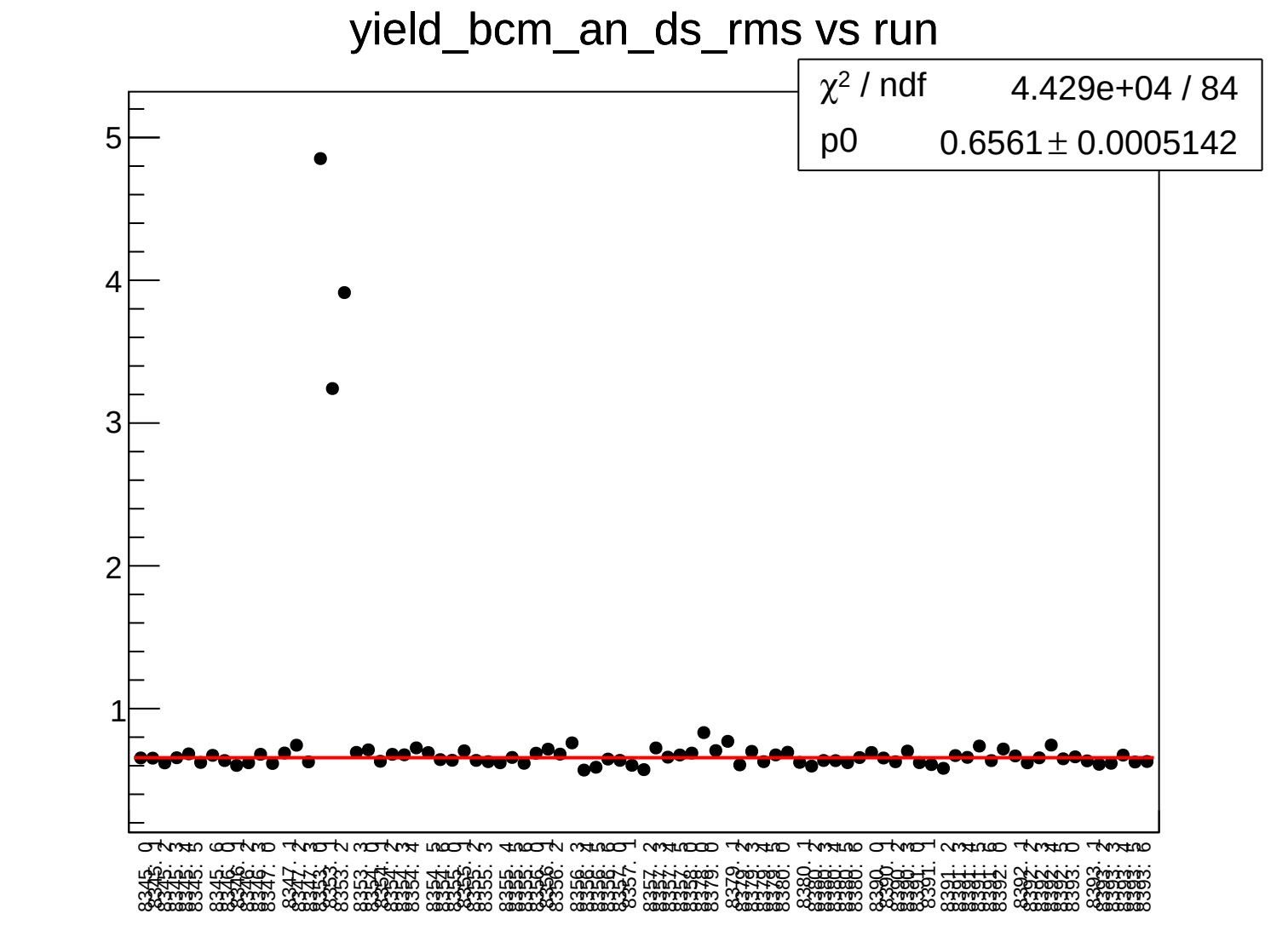

yield_atr1_rms vs run
×10⁻³
χ² / ndf 4.403e+04 / 84
p0 0.0001931 ± 1.513e−07
0.4
0.35
0.3
0.25
0.2
0.15

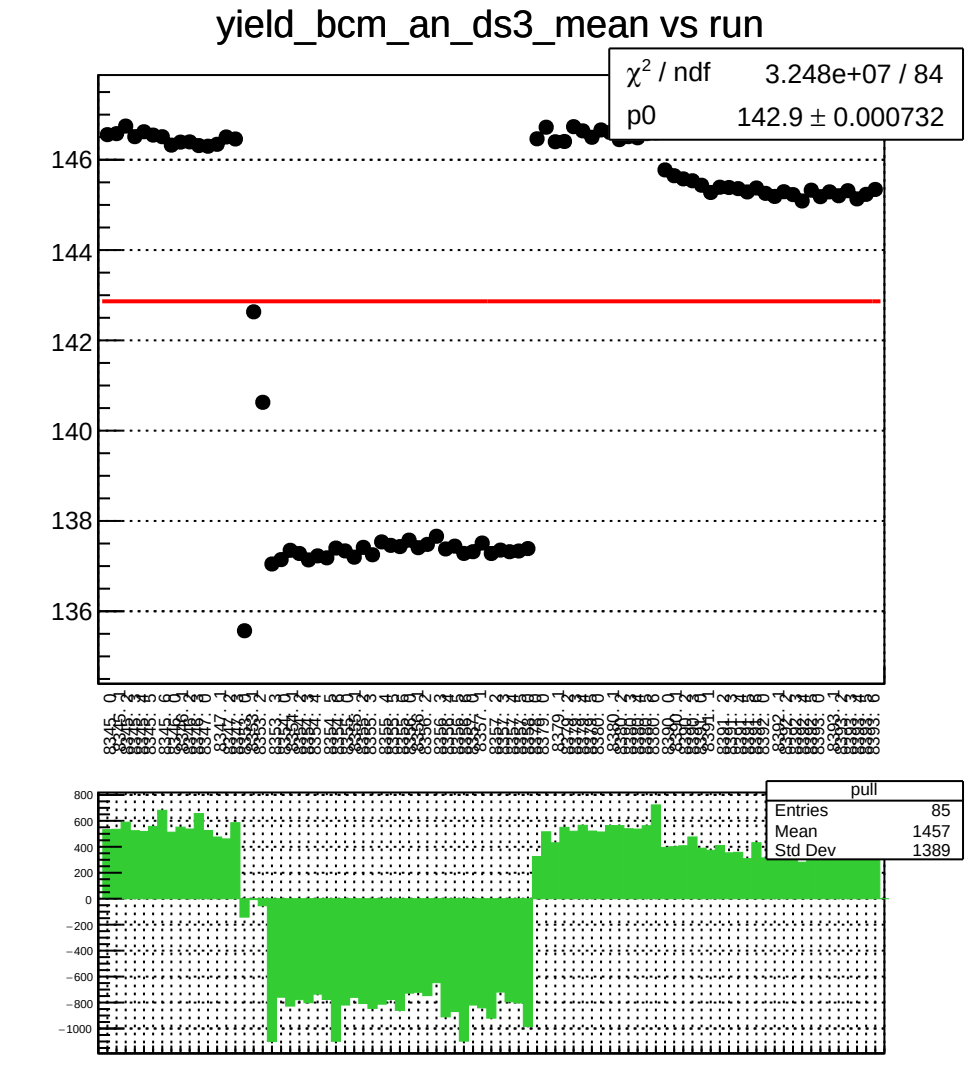

yield_atr2_mean vs run
χ² / ndf 4.07e+06 / 84
p0 0.02205 ± 5.961e−07
0.024
0.023
0.022
0.021
0.02
pull
Entries 85
Mean 446.5
Std Dev 390.9
400
200
0
−200
−400
pull1D
Entries 85
Mean −2.213
Std Dev 2.468
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

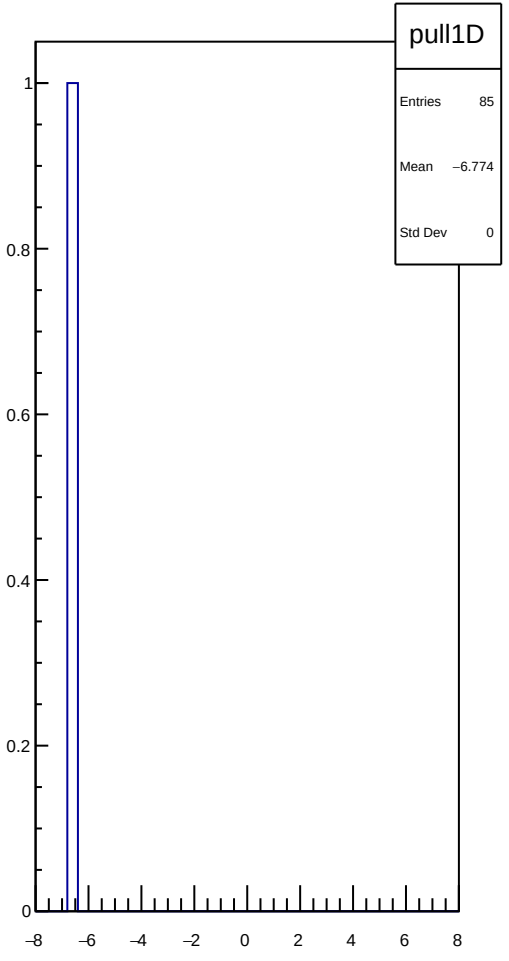

yield_atr2_rms vs run
χ² / ndf 7.541e+04 / 84
p0 0.0005327 ± 4.215e−07
0.0012
0.0011
0.001
0.0009
0.0008
0.0007
0.0006
0.0005
0.0004

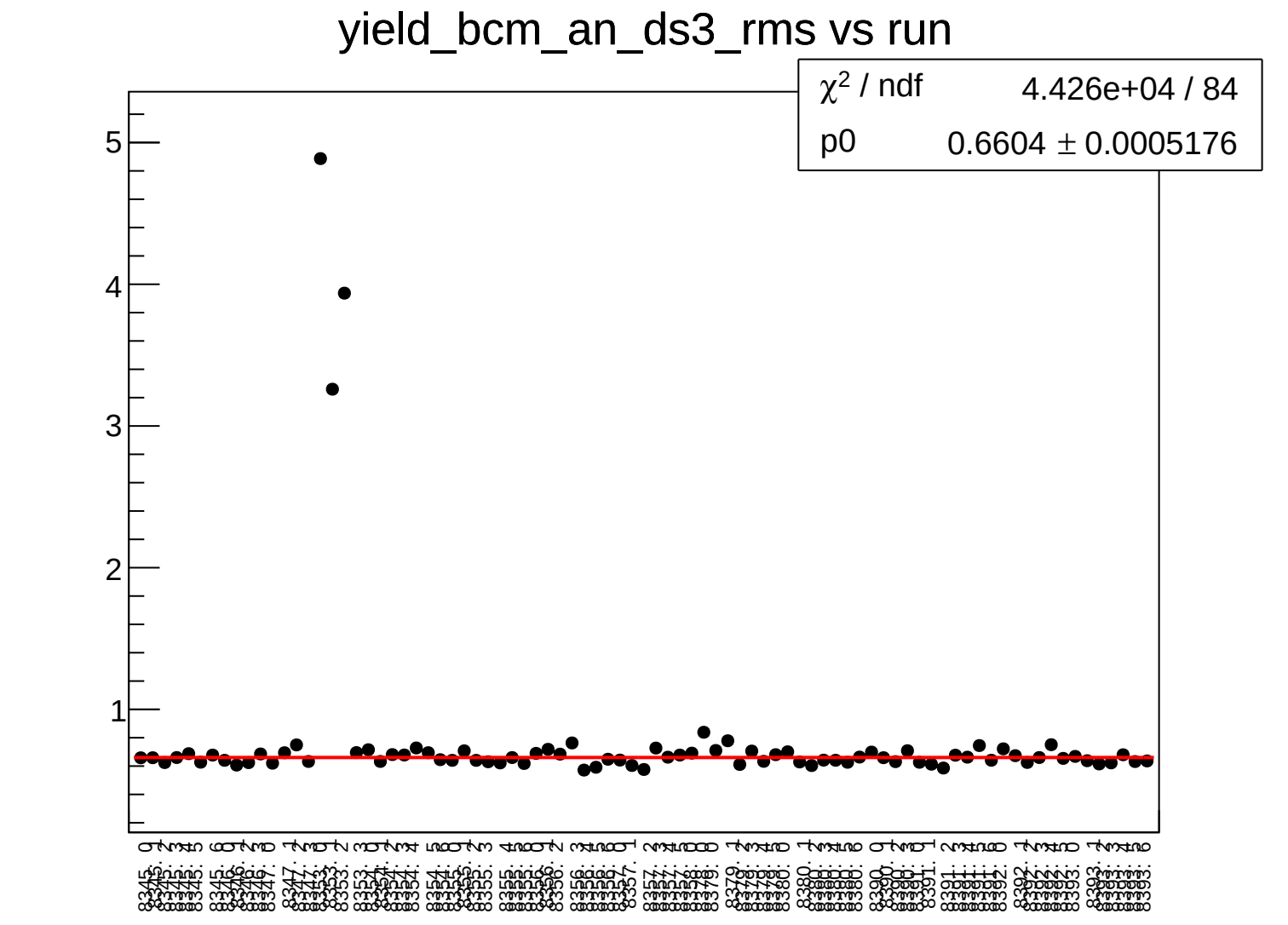

yield_bcm_an_ds_mean vs run
χ² / ndf 3.287e+07 / 84
p0 142.6 ± 0.0007272
146
144
142
140
138
136
pull
Entries 85
Mean 2895
Std Dev 2828
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

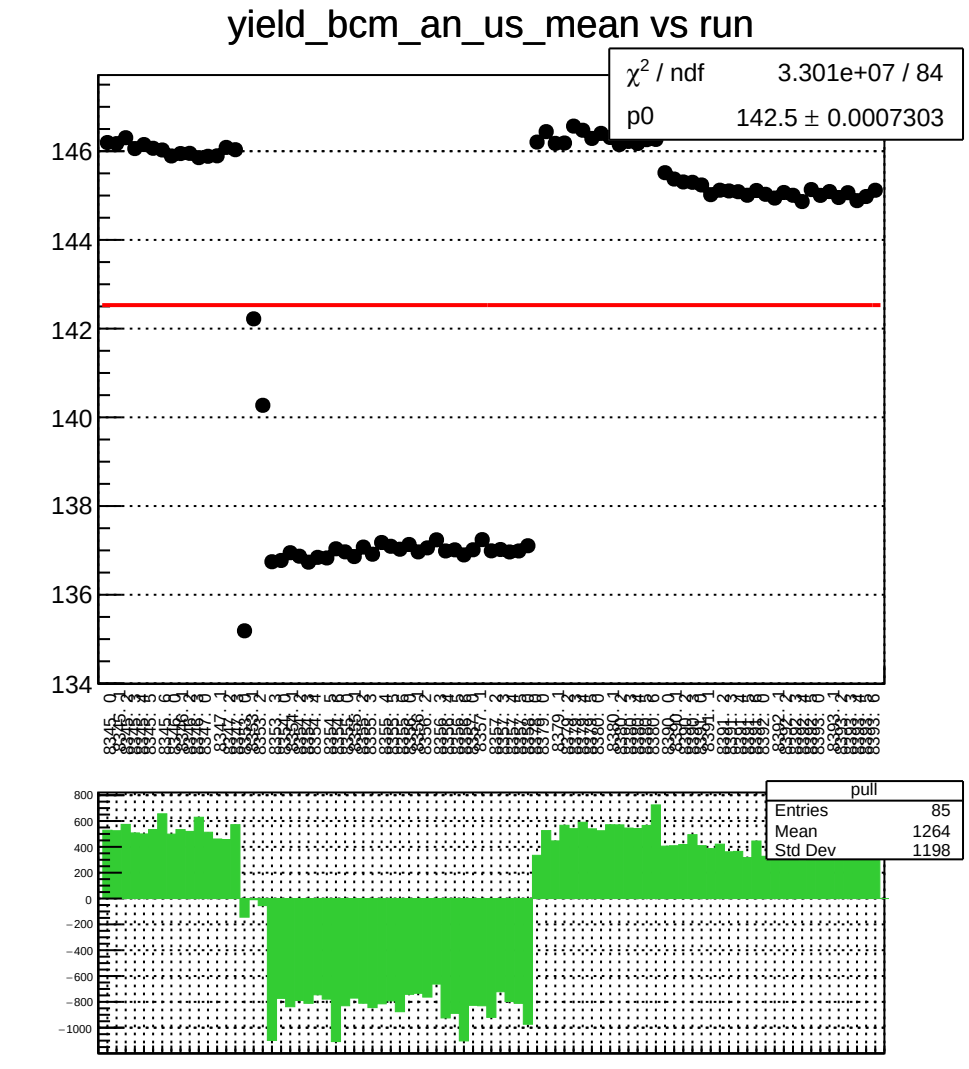

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

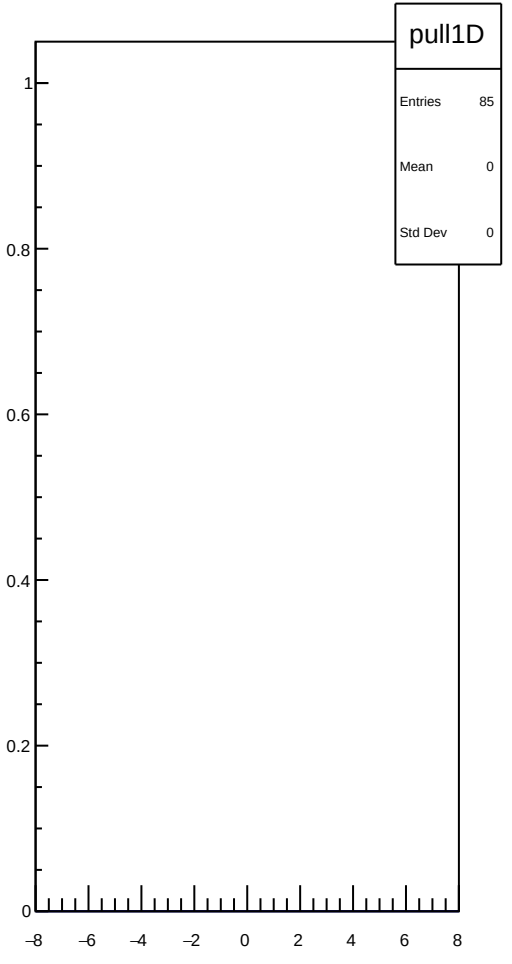

yield_bcm_an_ds_rms vs run
χ² / ndf 4.429e+04 / 84
p0 0.6561 ± 0.0005142
5
4
3
2
1

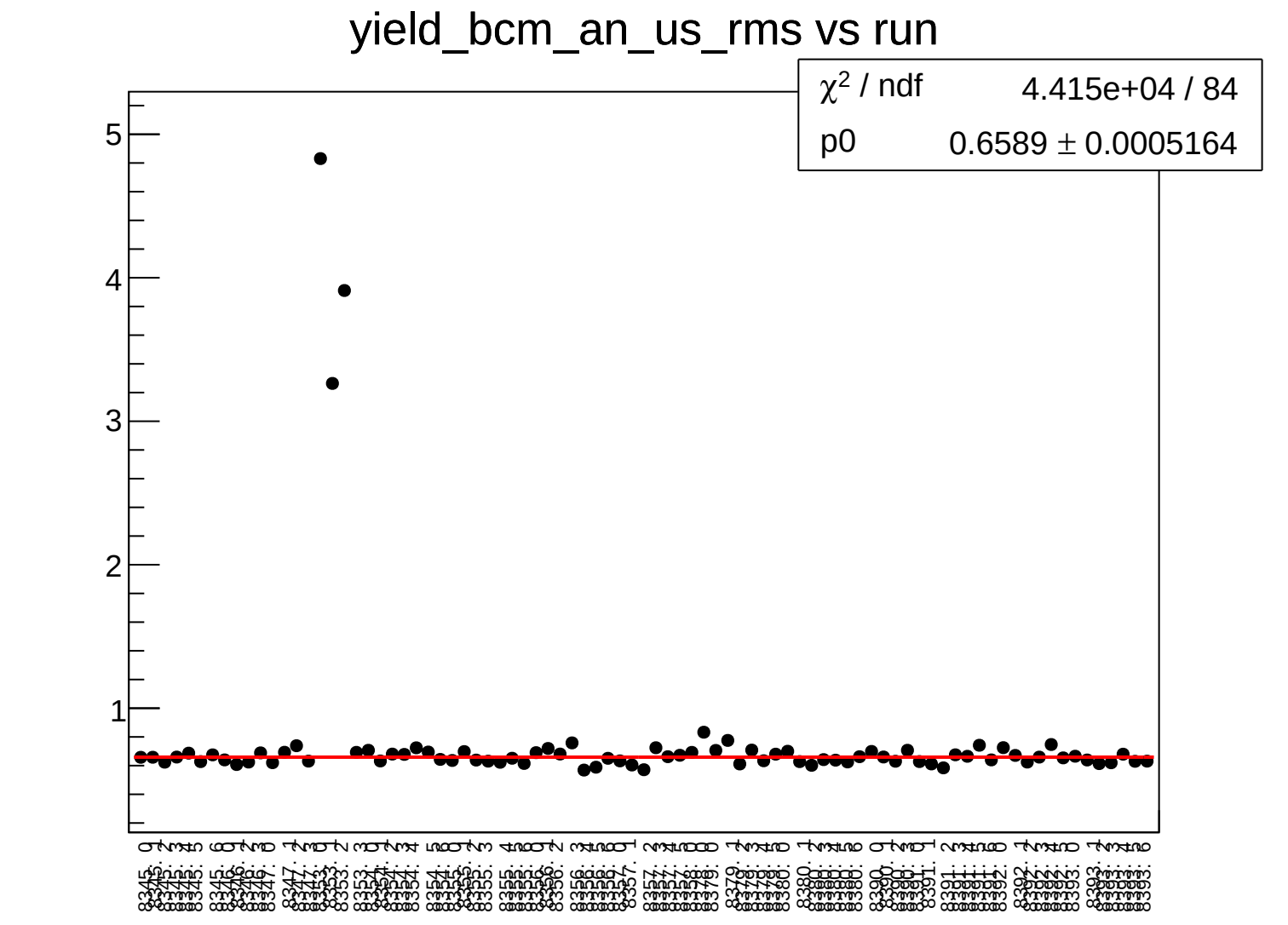

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.248e+07 / 84
p0 142.9 ± 0.000732
146
144
142
140
138
136
pull
Entries 85
Mean 1457
Std Dev 1389
800
600
400
200
0
−200
−400
−600
−800
−1000

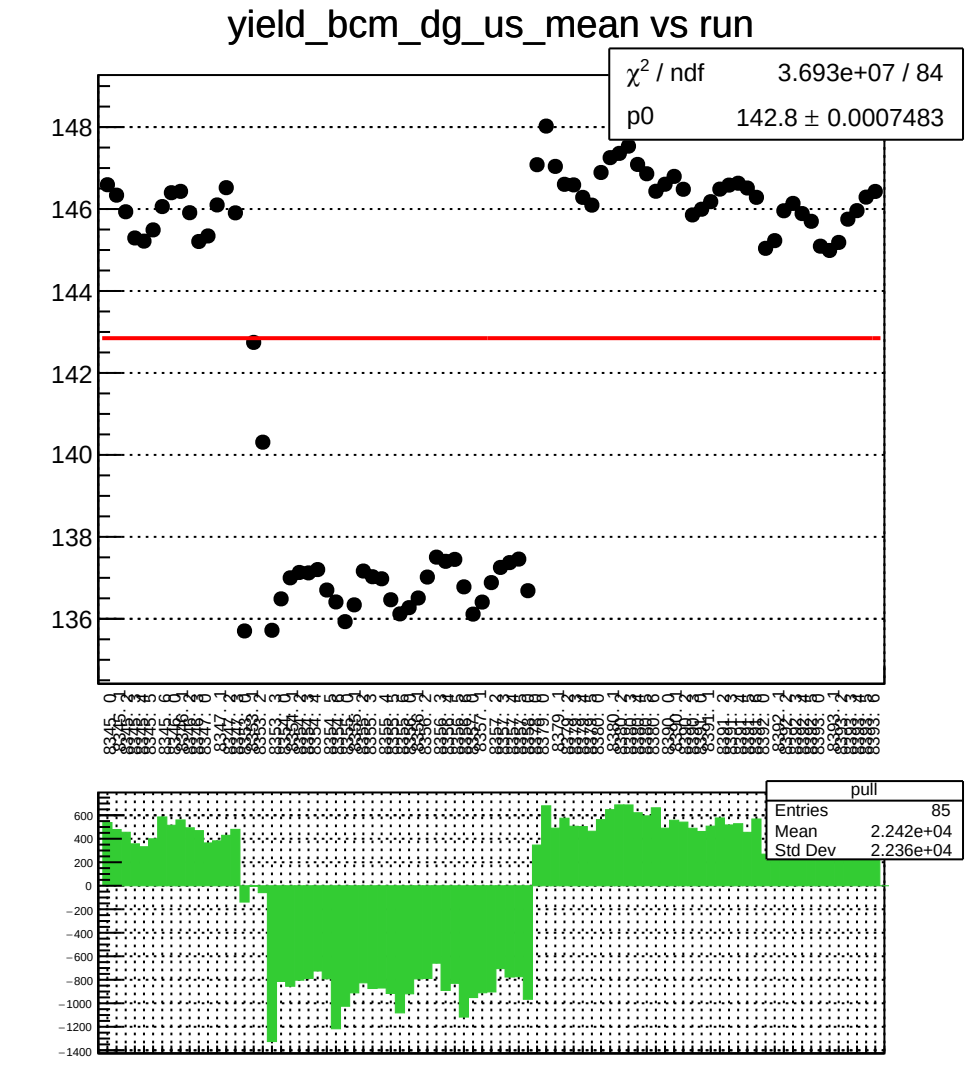

pull1D
Entries 85
Mean −6.774
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

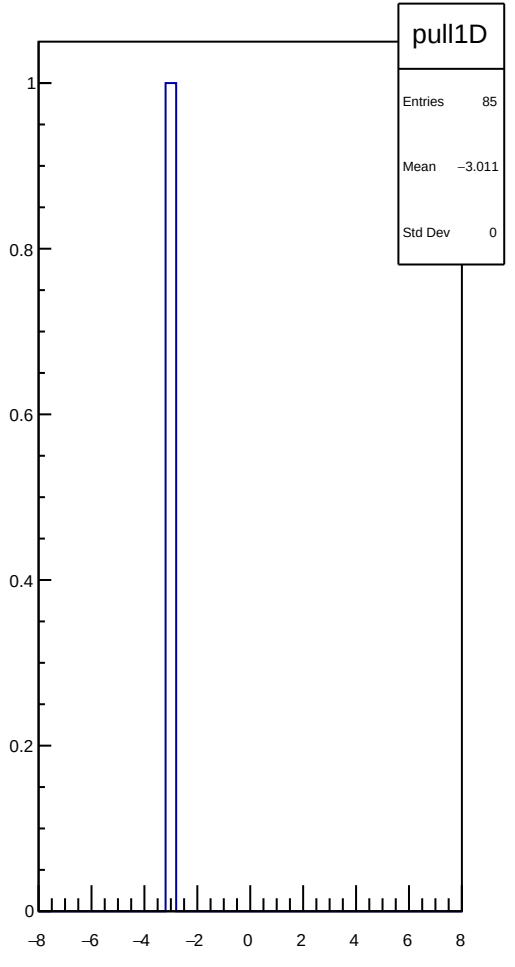

yield_bcm_an_ds3_rms vs run
χ² / ndf 4.426e+04 / 84
p0 0.6604 ± 0.0005176
5
4
3
2
1

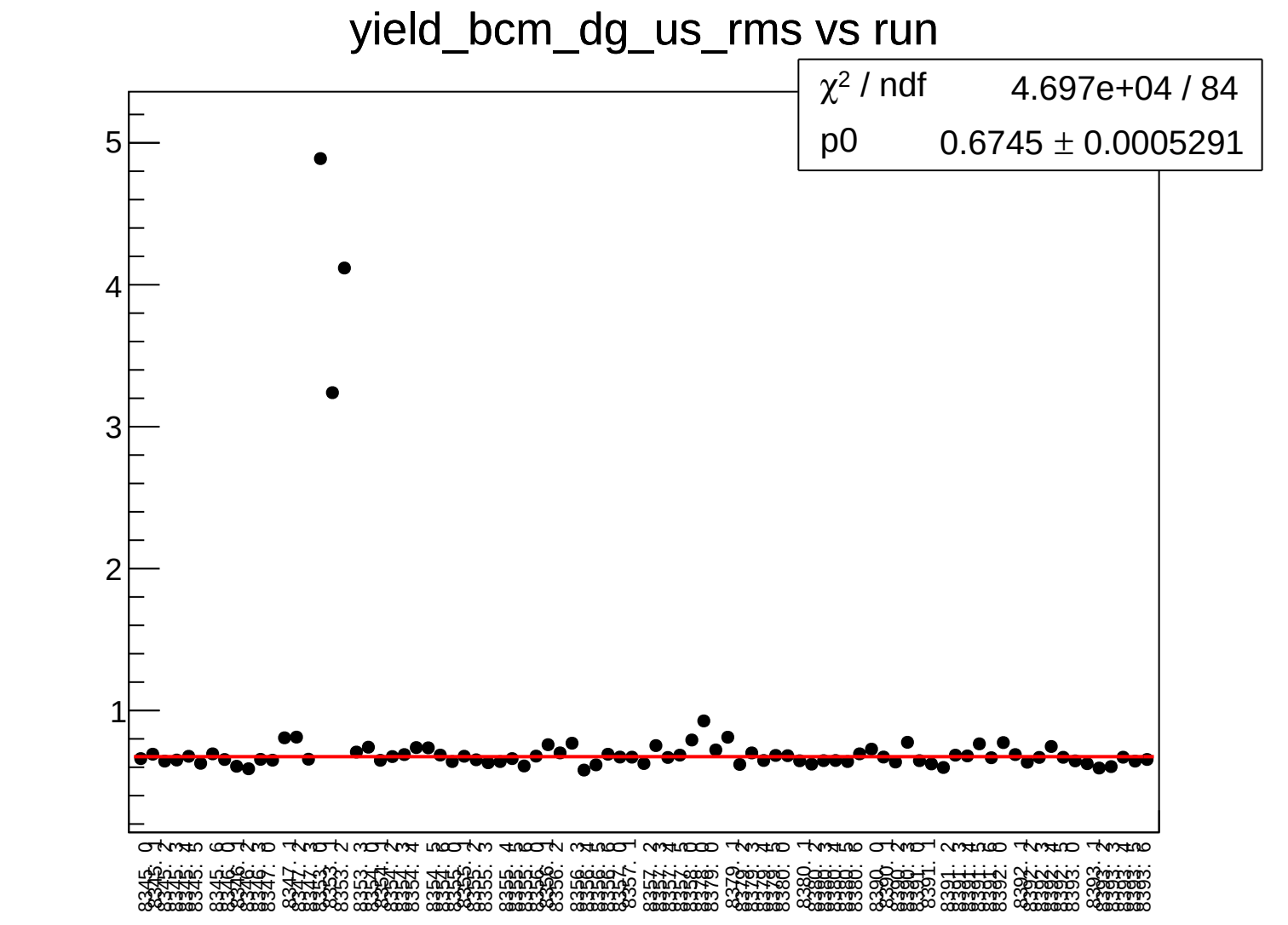

yield_bcm_an_us_mean vs run
χ² / ndf 3.301e+07 / 84
p0 142.5 ± 0.0007303
146
144
142
140
138
136
134
pull
Entries 85
Mean 1264
Std Dev 1198
800
600
400
200
0
−200
−400
−600
−800
−1000

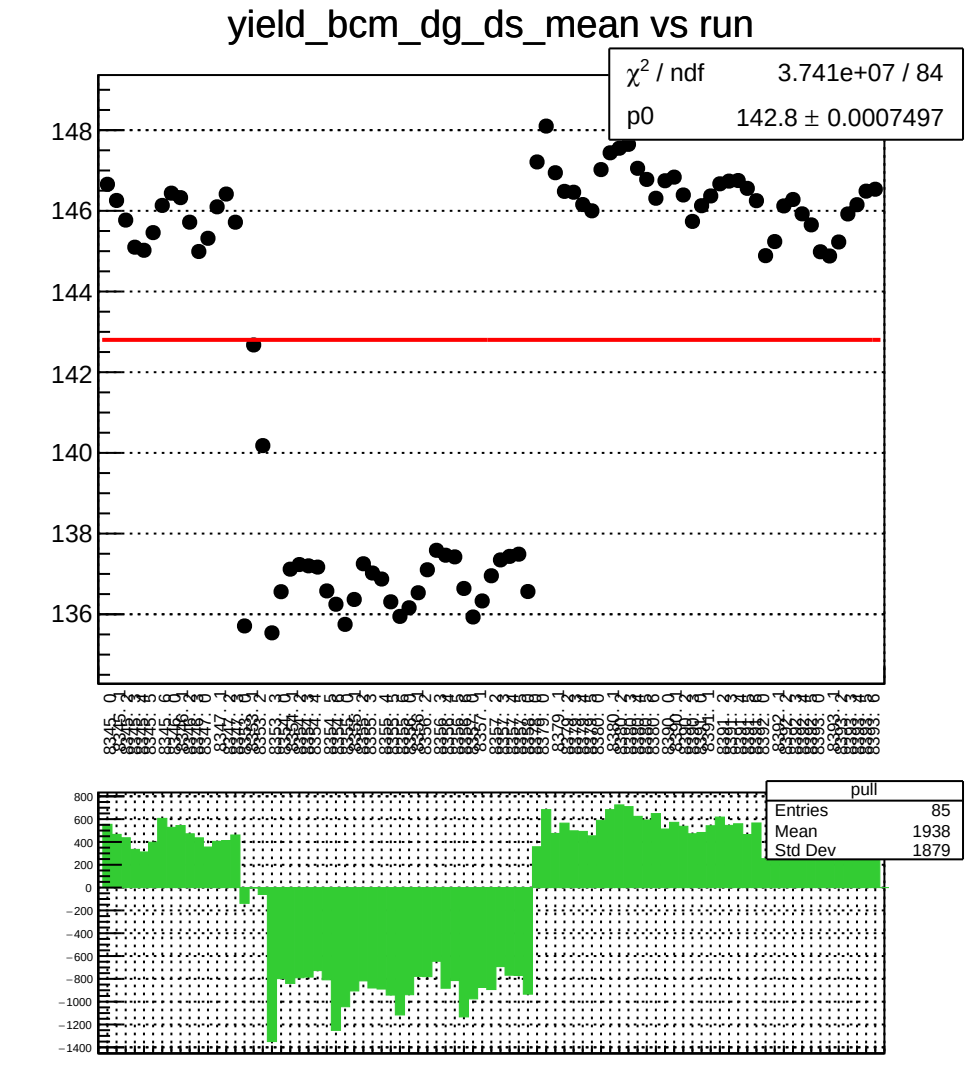

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

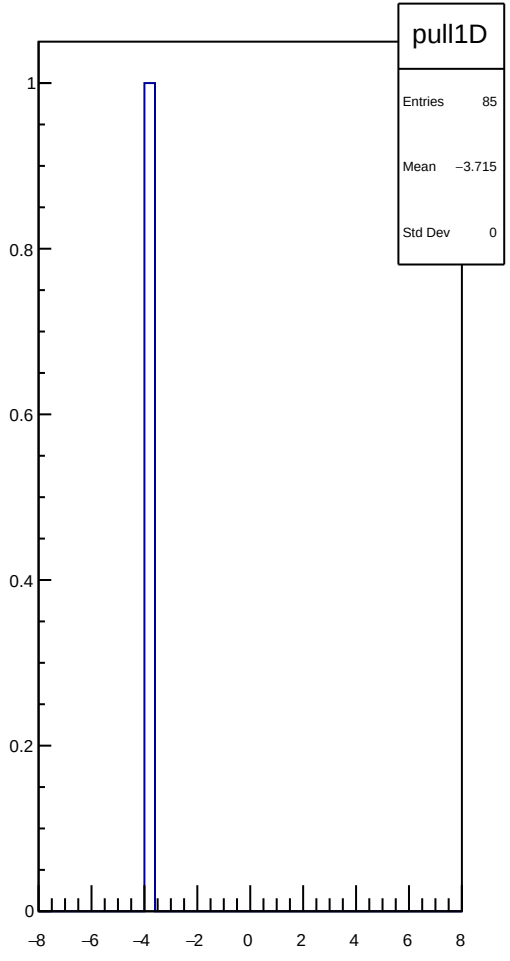

yield_bcm_an_us_rms vs run
χ² / ndf 4.415e+04 / 84
p0 0.6589 ± 0.0005164
5
4
3
2
1

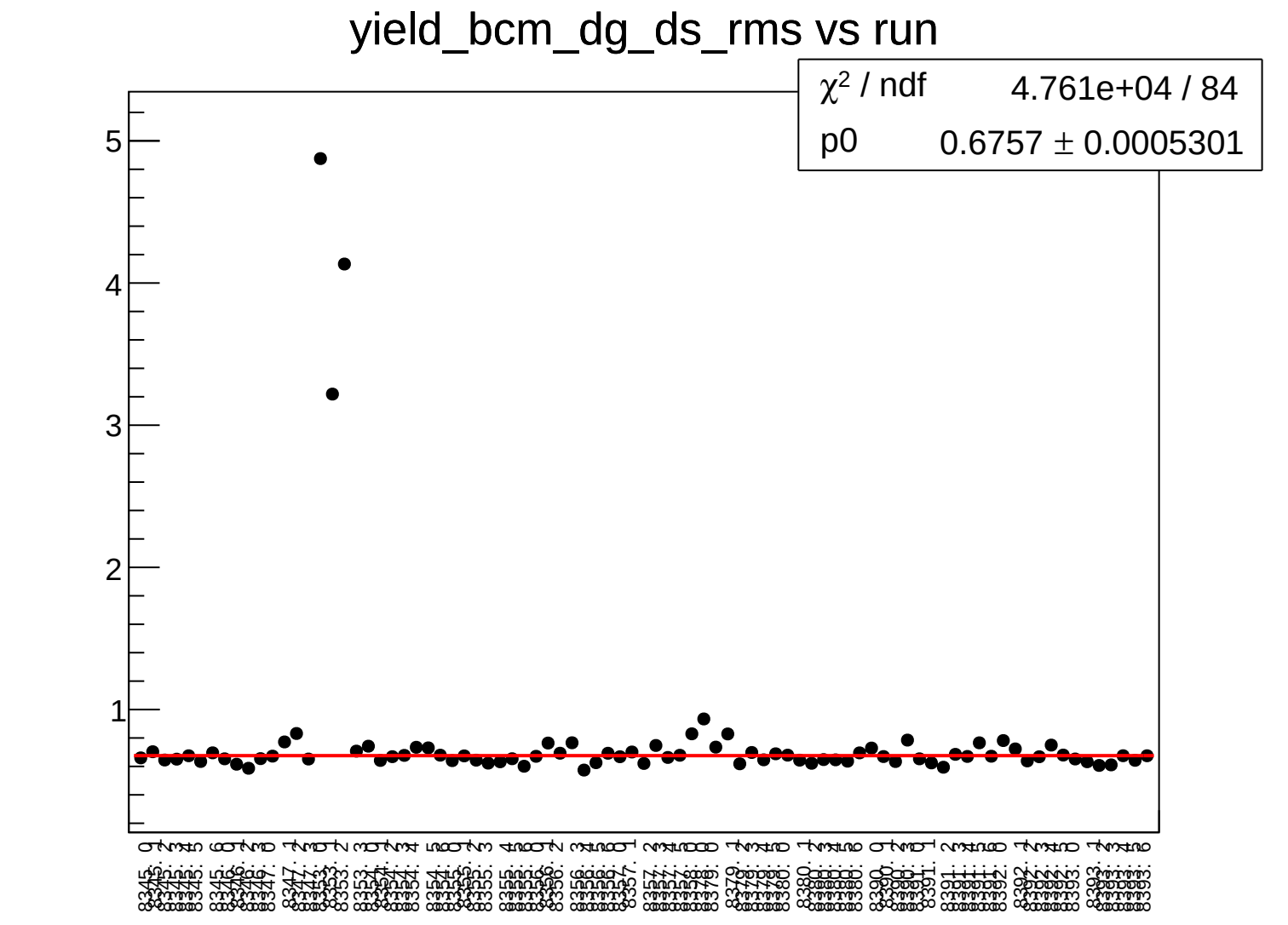

yield_bcm_dg_us_mean vs run
χ² / ndf 3.693e+07 / 84
p0 142.8 ± 0.0007483
148
146
144
142
140
138
136
pull
Entries 85
Mean 2.242e+04
Std Dev 2.236e+04
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

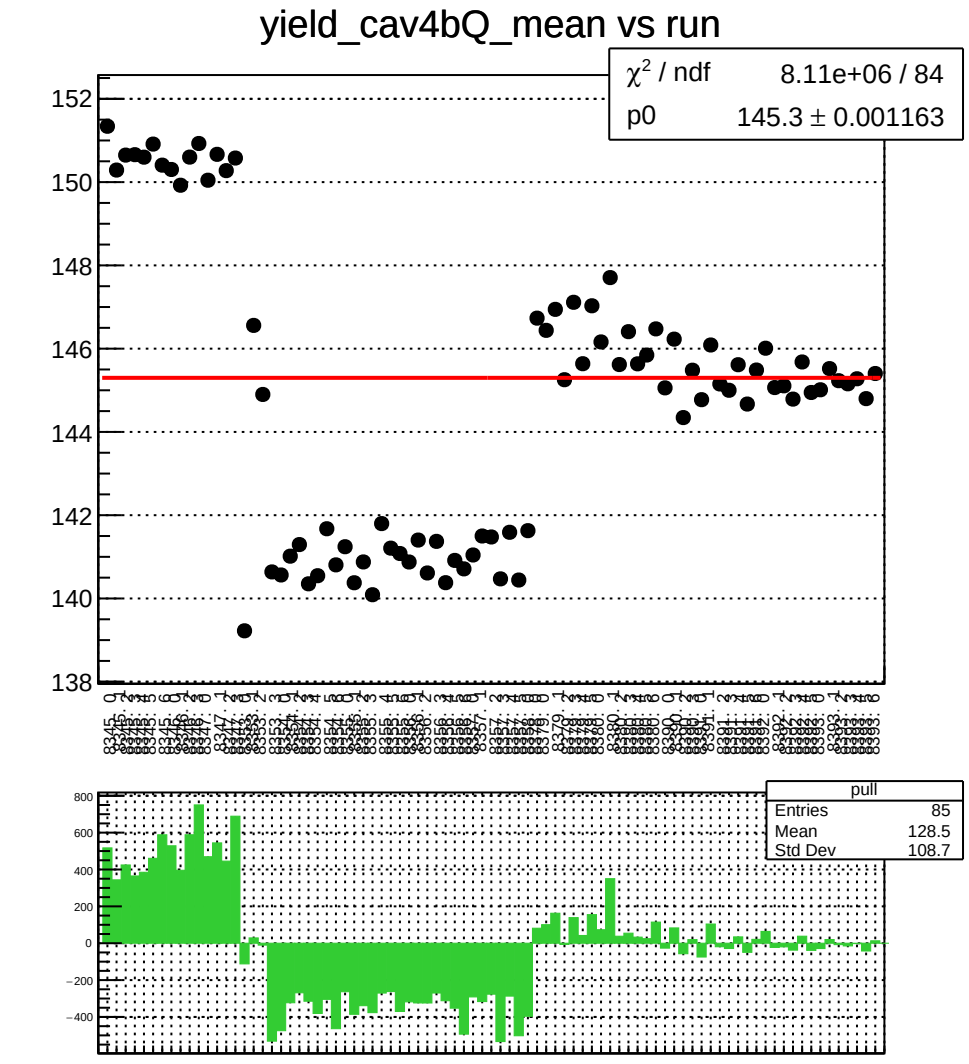

pull1D
Entries 85
Mean −3.011
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

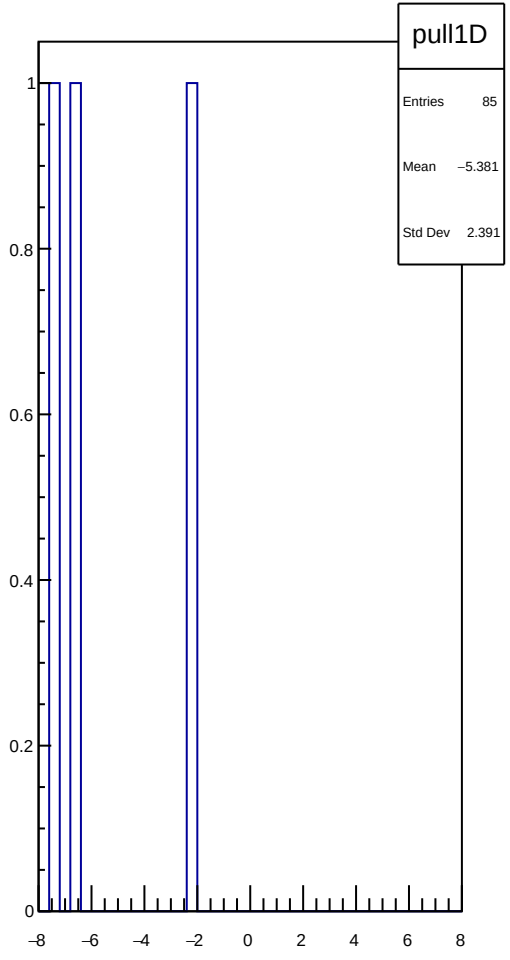

yield_bcm_dg_us_rms vs run
χ² / ndf 4.697e+04 / 84
p0 0.6745 ± 0.0005291
5
4
3
2
1

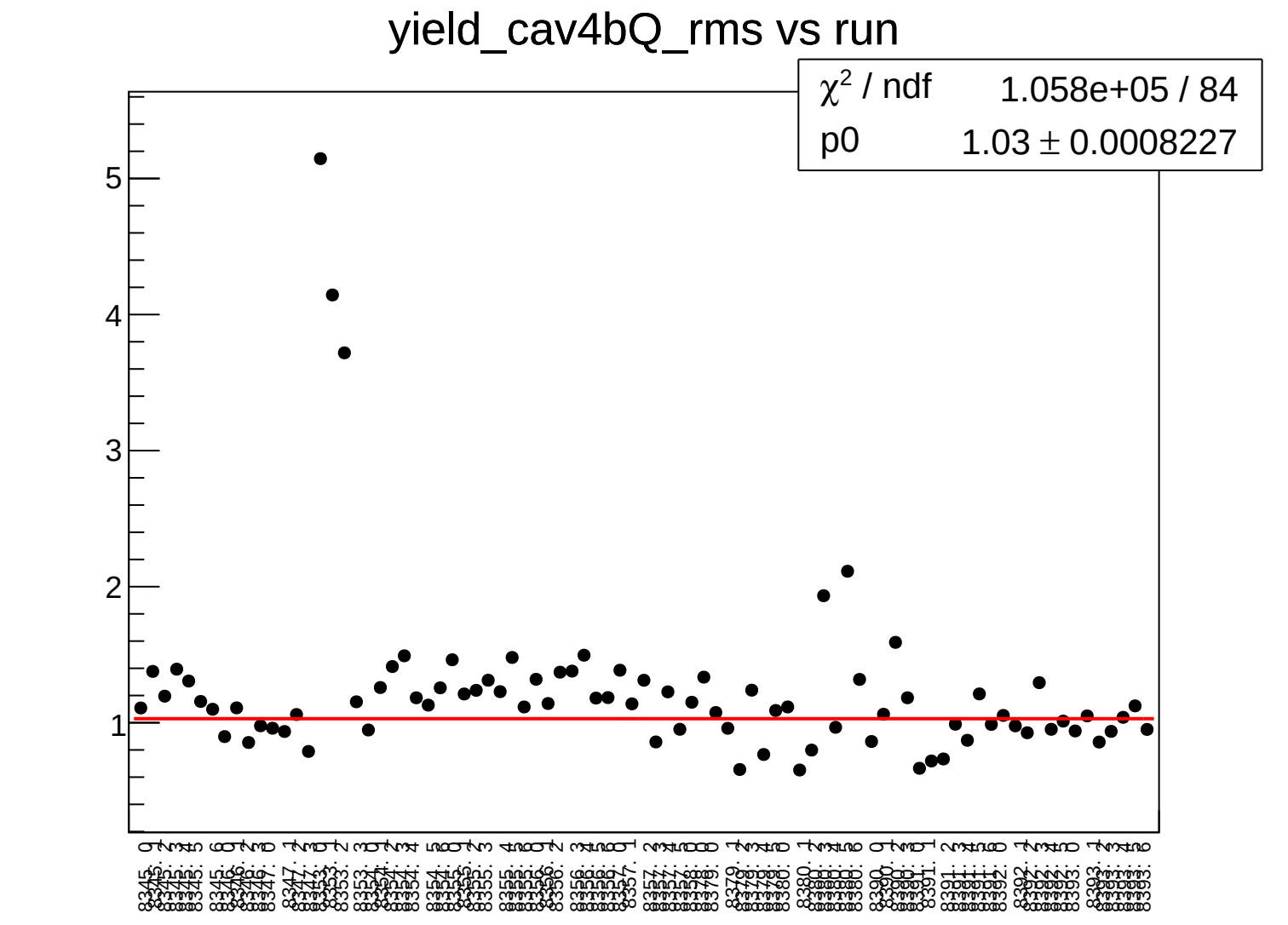

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.741e+07 / 84
p0 142.8 ± 0.0007497
148
146
144
142
140
138
136
pull
Entries 85
Mean 1938
Std Dev 1879
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

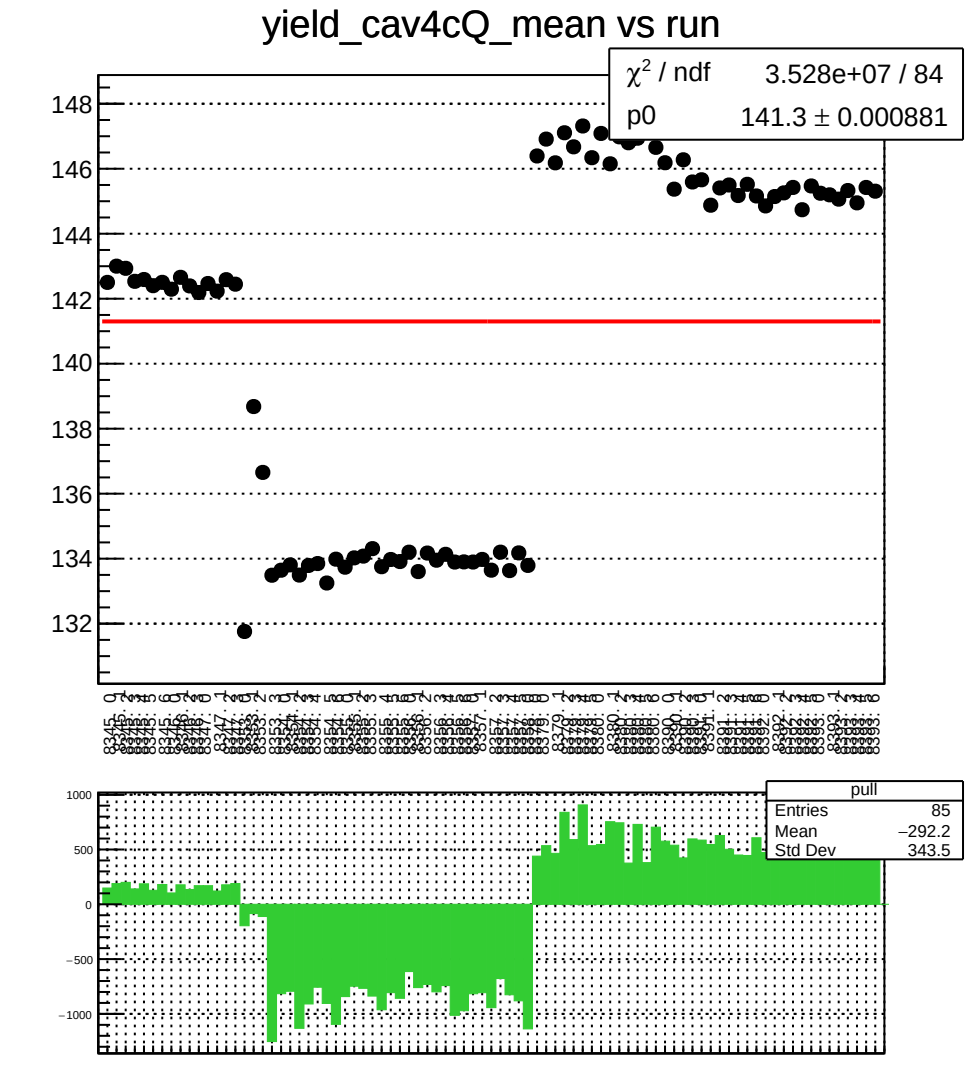

pull1D
Entries 85
Mean −3.715
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

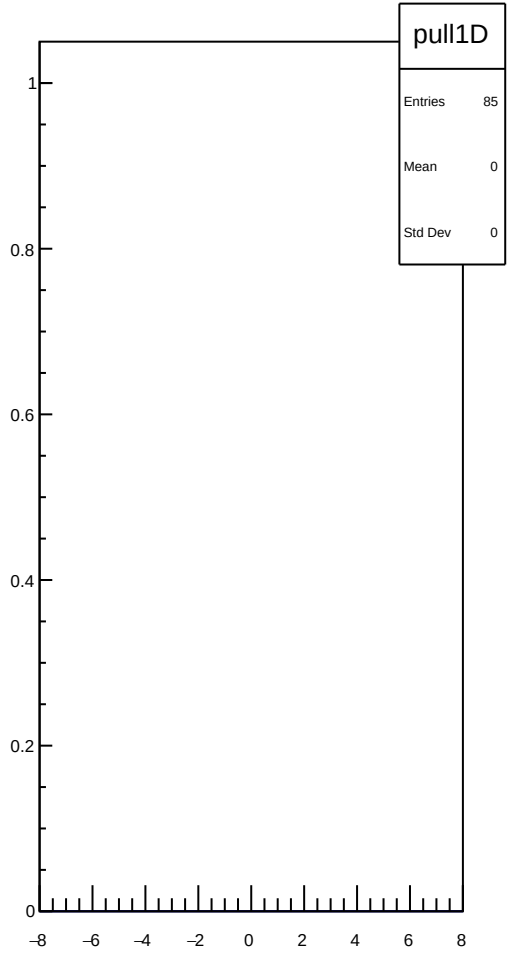

yield_bcm_dg_ds_rms vs run
χ² / ndf 4.761e+04 / 84
p0 0.6757 ± 0.0005301
5
4
3
2
1

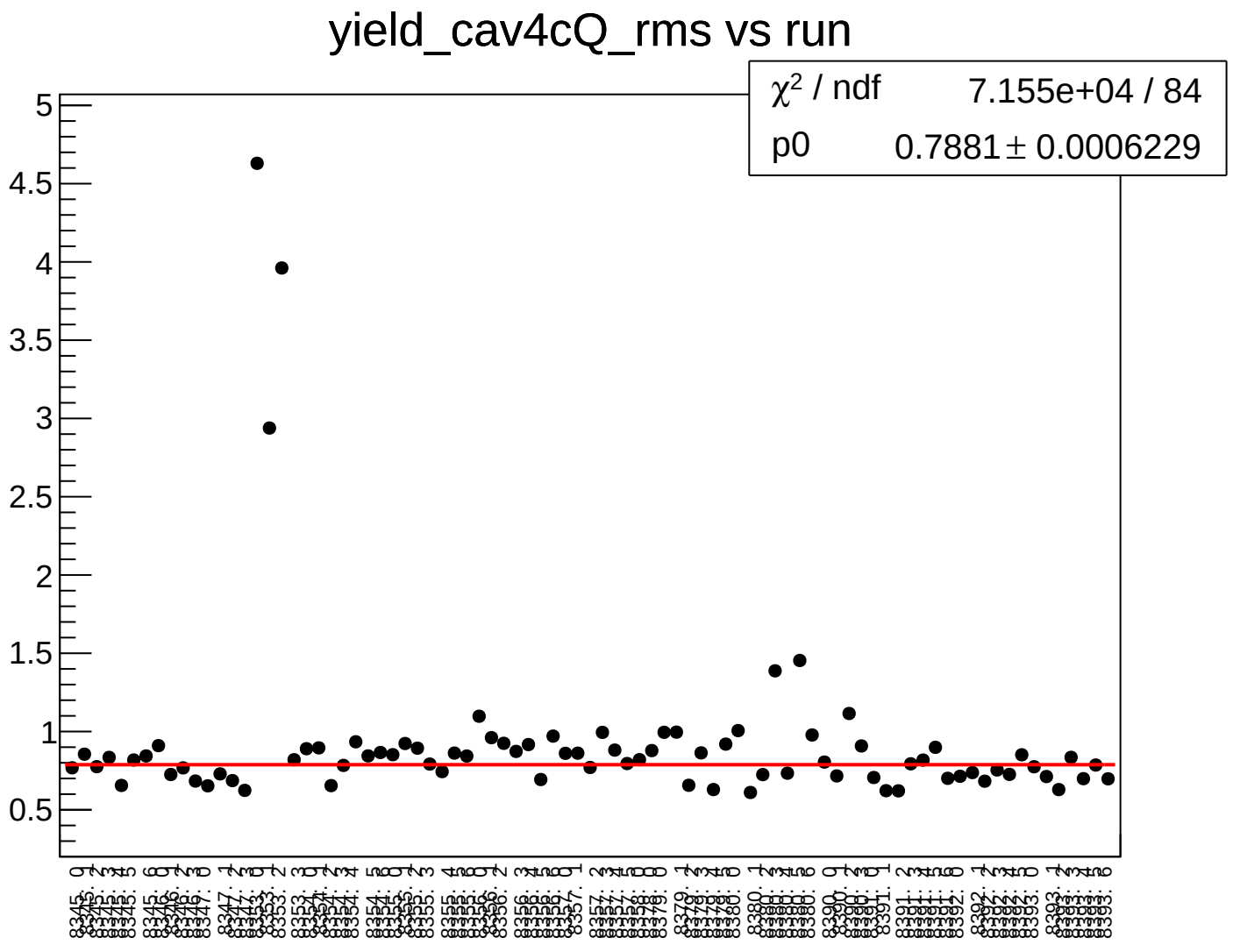

yield_cav4bQ_mean vs run
χ² / ndf 8.11e+06 / 84
p0 145.3 ± 0.001163
152
150
148
146
144
142
140
138
pull
Entries 85
Mean 128.5
Std Dev 108.7
800
600
400
200
0
−200
−400

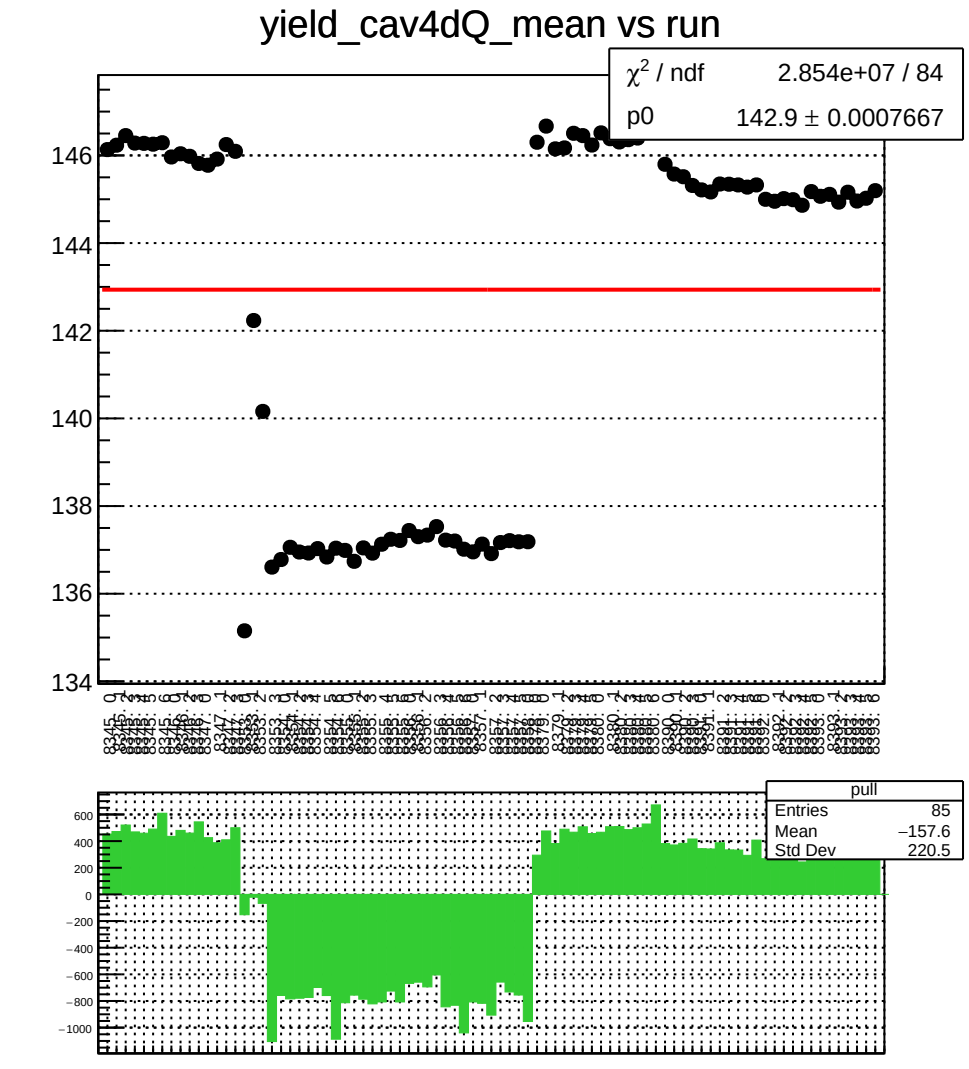

pull1D
Entries 85
Mean −5.381
Std Dev 2.391
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

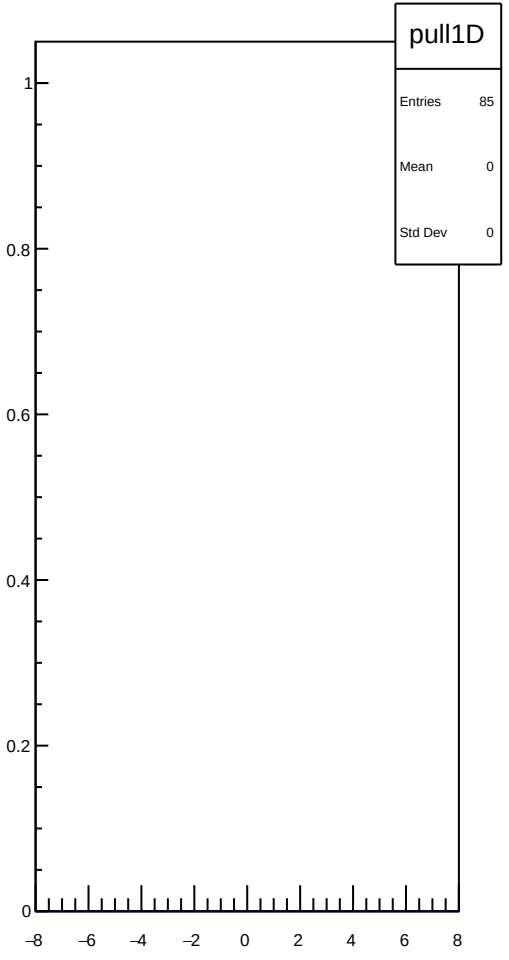

yield_cav4bQ_rms vs run
χ^2 / ndf 1.058e+05 / 84
p0 1.03 ± 0.0008227
5
4
3
2
1

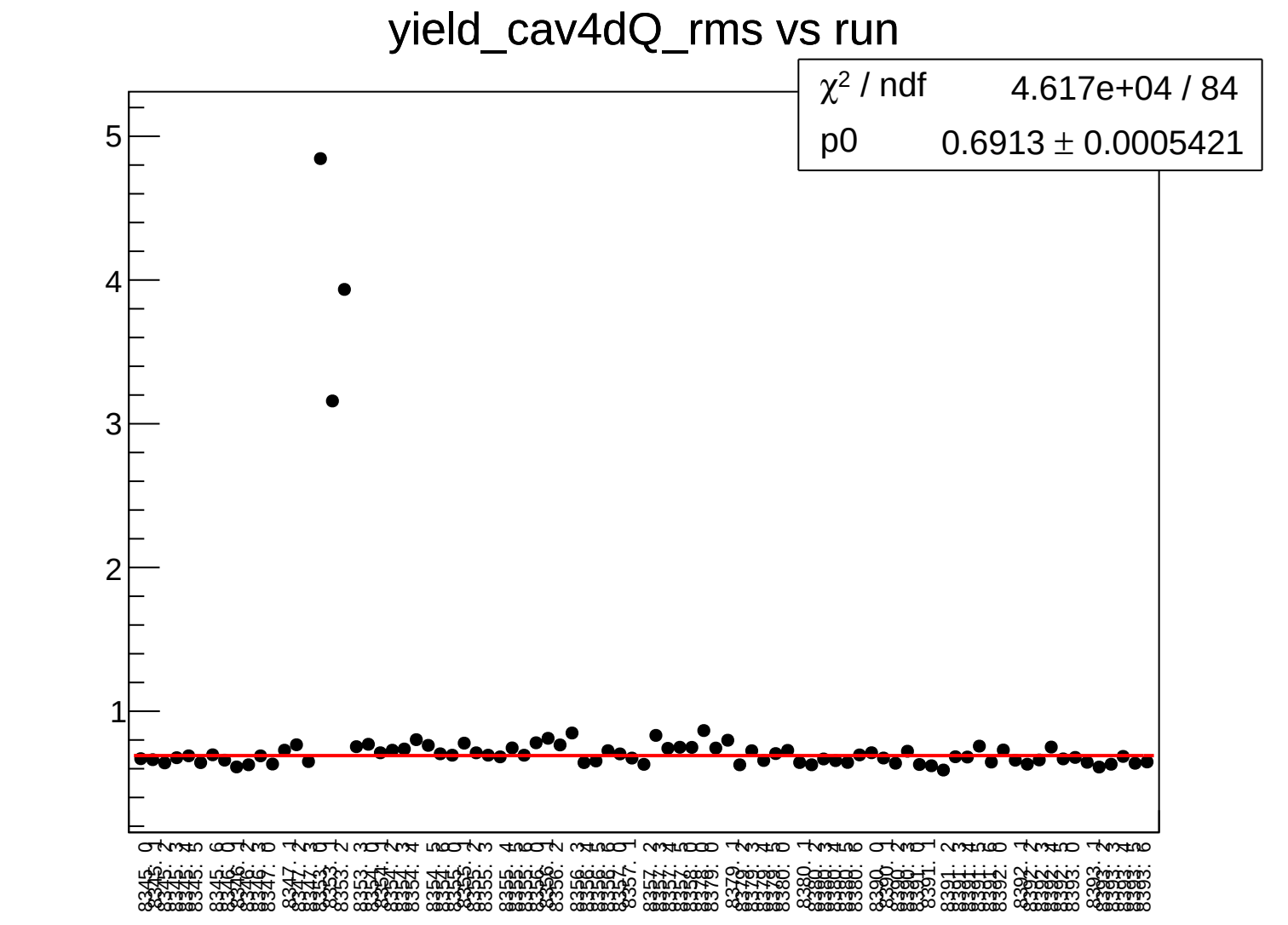

yield_cav4cQ_mean vs run
χ² / ndf 3.528e+07 / 84
p0 141.3 ± 0.000881
148
146
144
142
140
138
136
134
132
pull
Entries 85
Mean −292.2
Std Dev 343.5
1000
500
0
−500
−1000

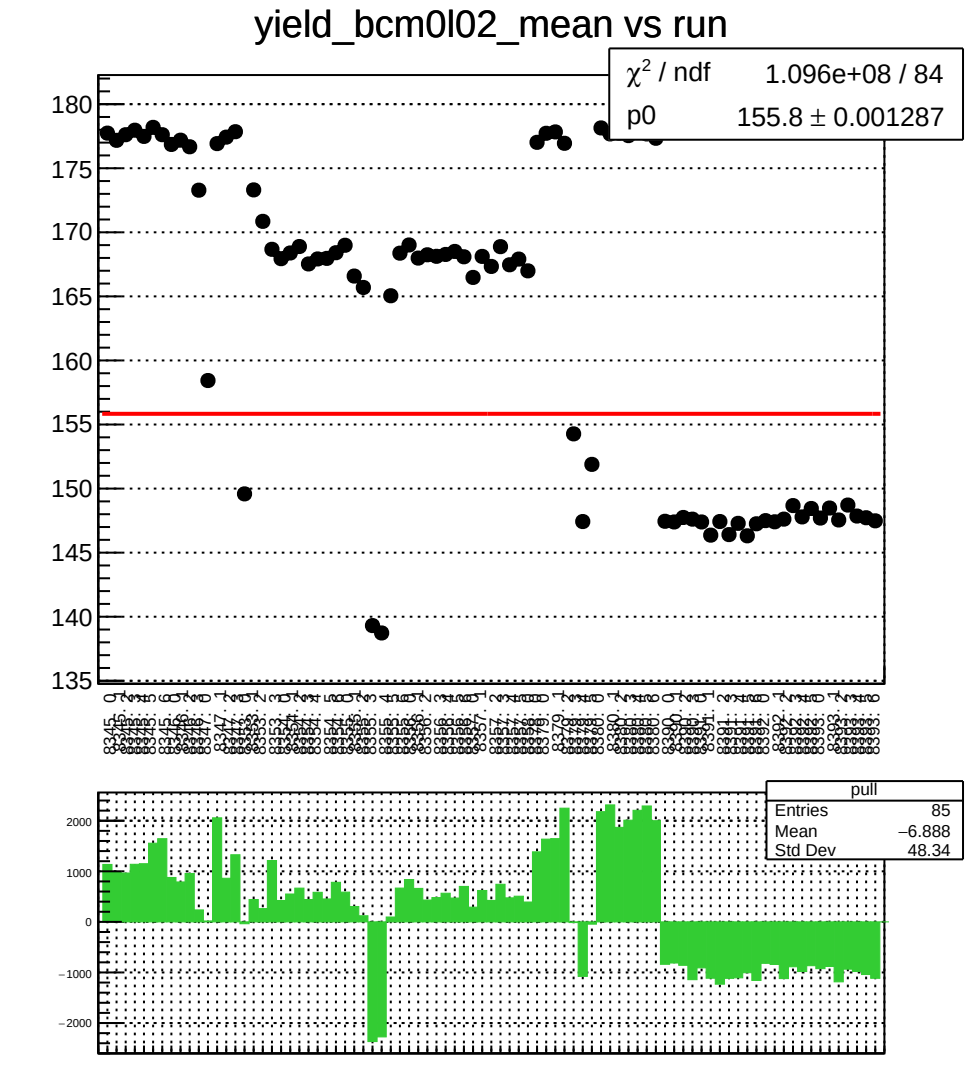

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

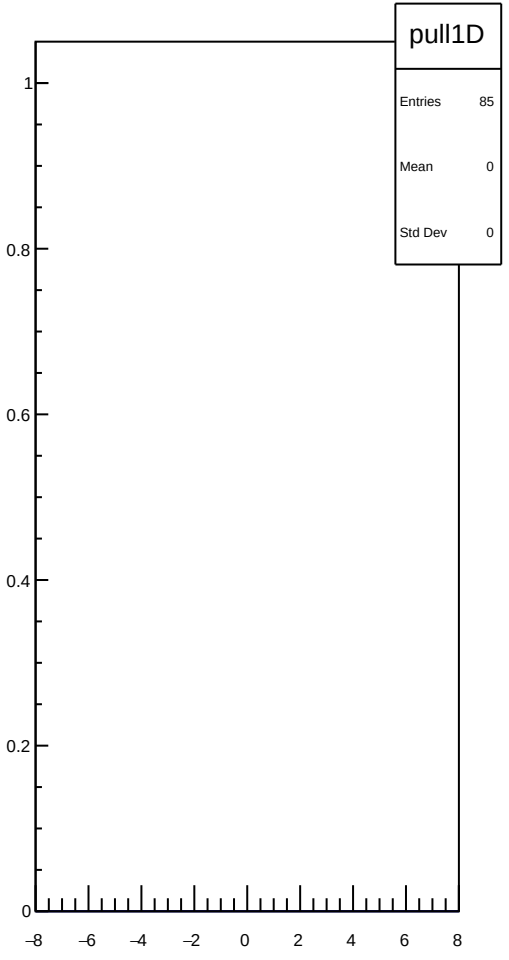

yield_cav4cQ_rms vs run
χ² / ndf 7.155e+04 / 84
p0 0.7881 ± 0.0006229
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

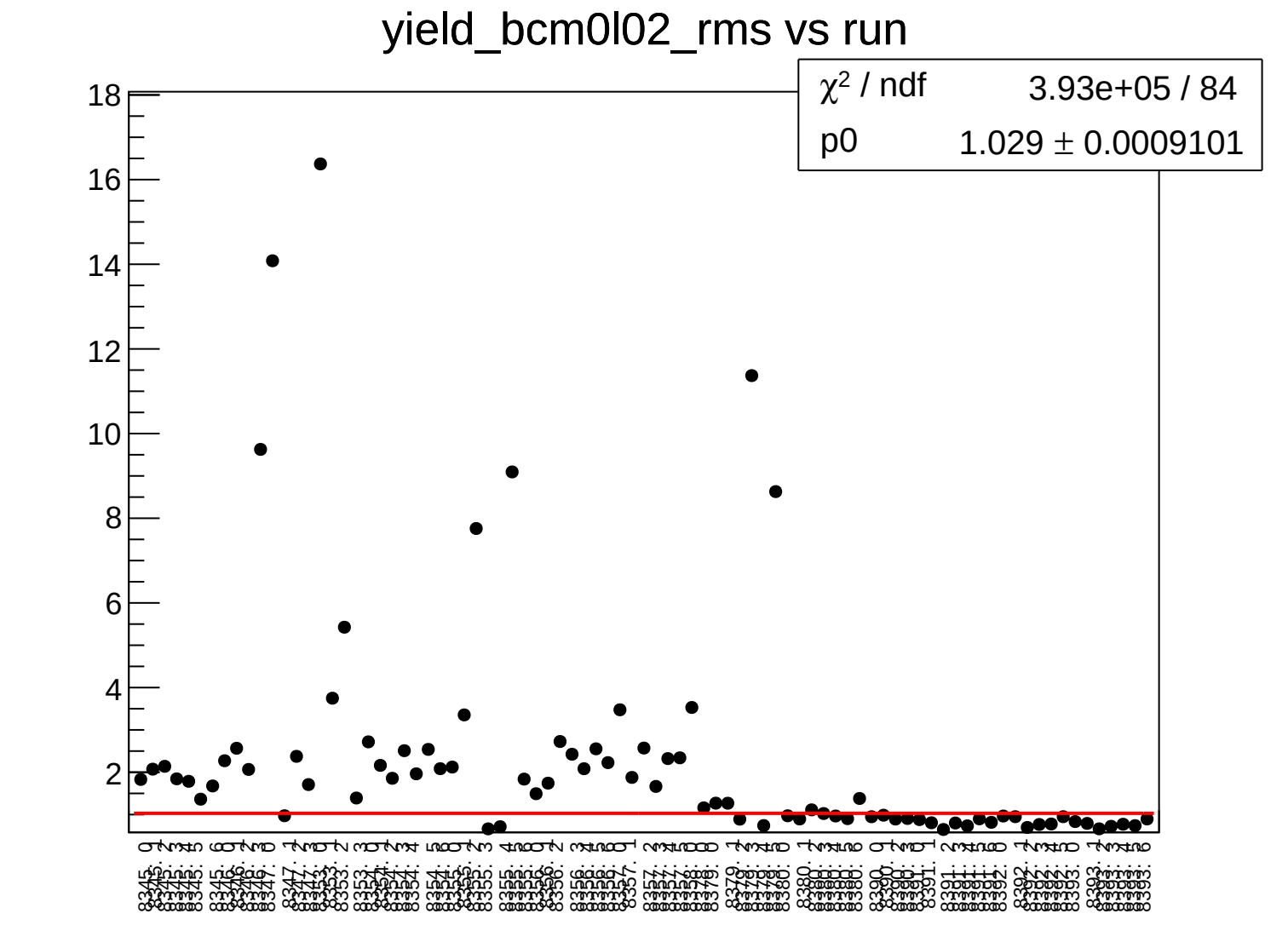

yield_cav4dQ_mean vs run
χ² / ndf 2.854e+07 / 84
p0 142.9 ± 0.0007667
146
144
142
140
138
136
134
pull
Entries 85
Mean −157.6
Std Dev 220.5
600
400
200
0
−200
−400
−600
−800
−1000

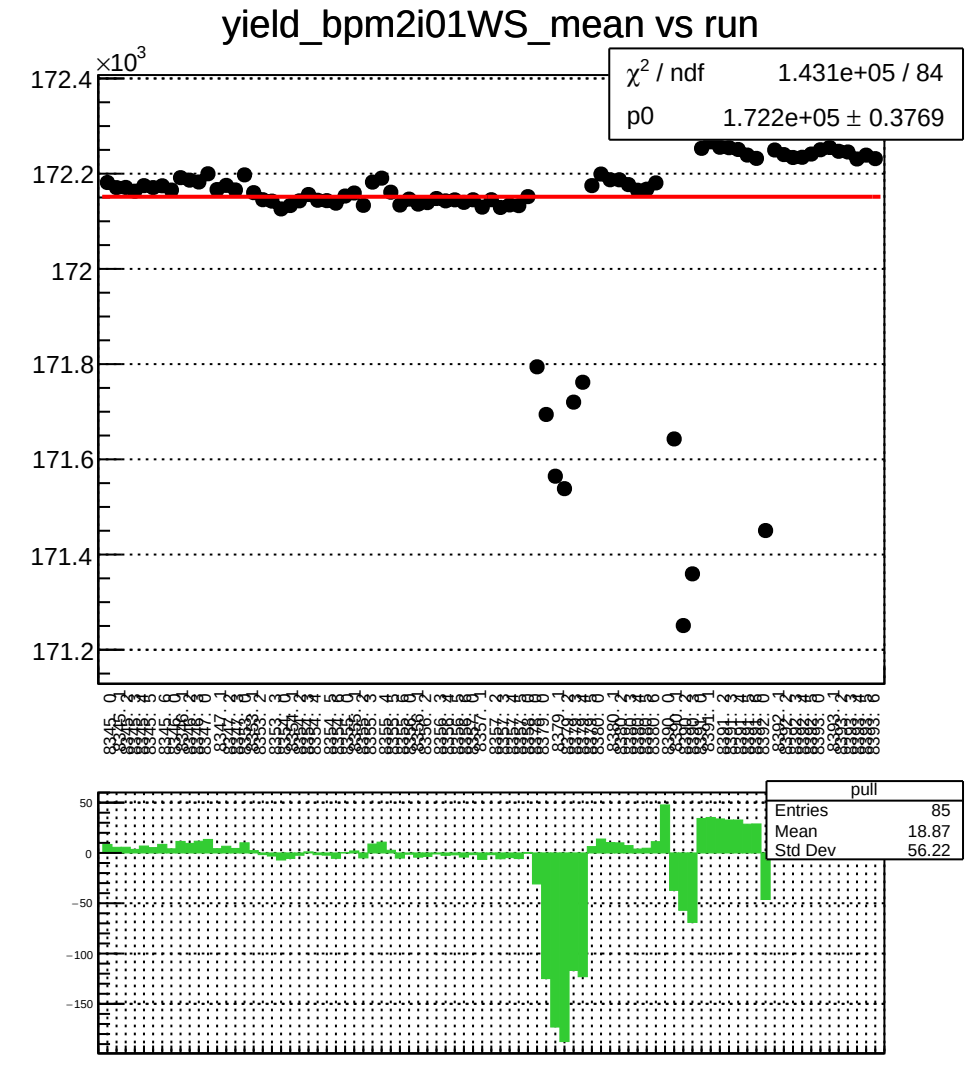

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

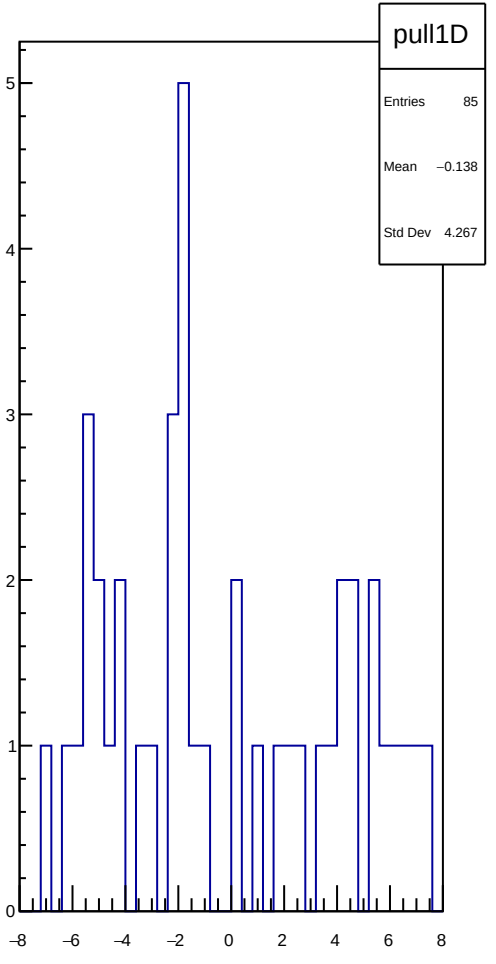

yield_cav4dQ_rms vs run
χ² / ndf 4.617e+04 / 84
p0 0.6913 ± 0.0005421
5
4
3
2
1

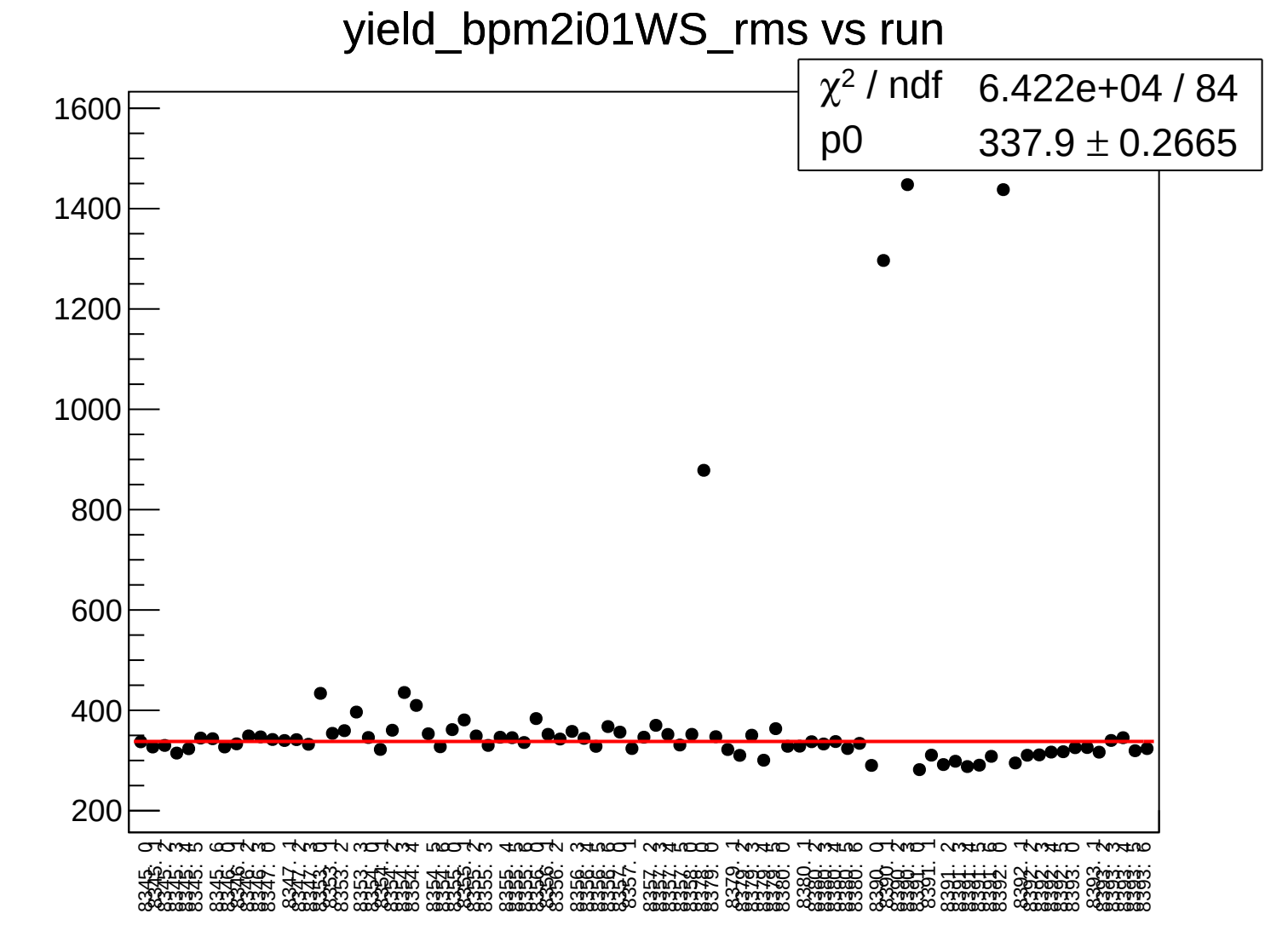

yield_bcm0l02_mean vs run
χ² / ndf 1.096e+08 / 84
p0 155.8 ± 0.001287
pull
Entries 85
Mean −6.888
Std Dev 48.34

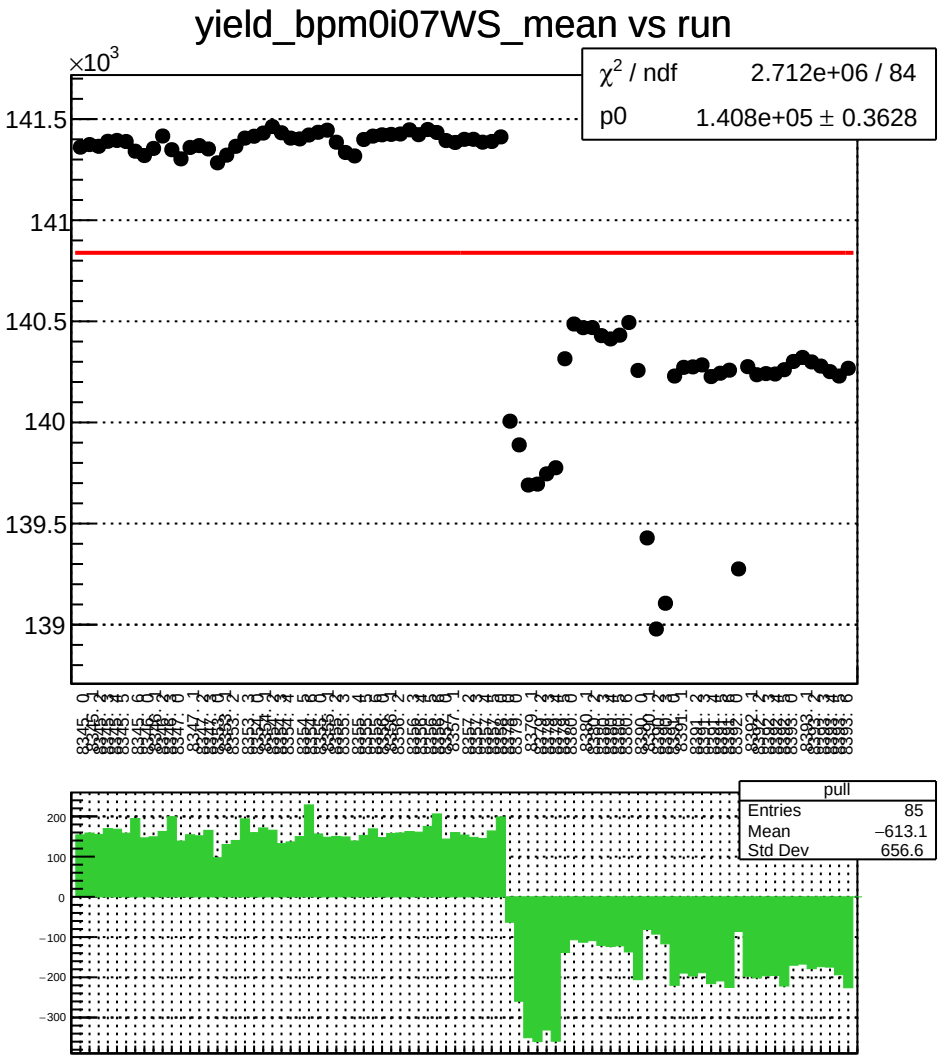

pull1D
Entries 85
Mean 0
Std Dev 0

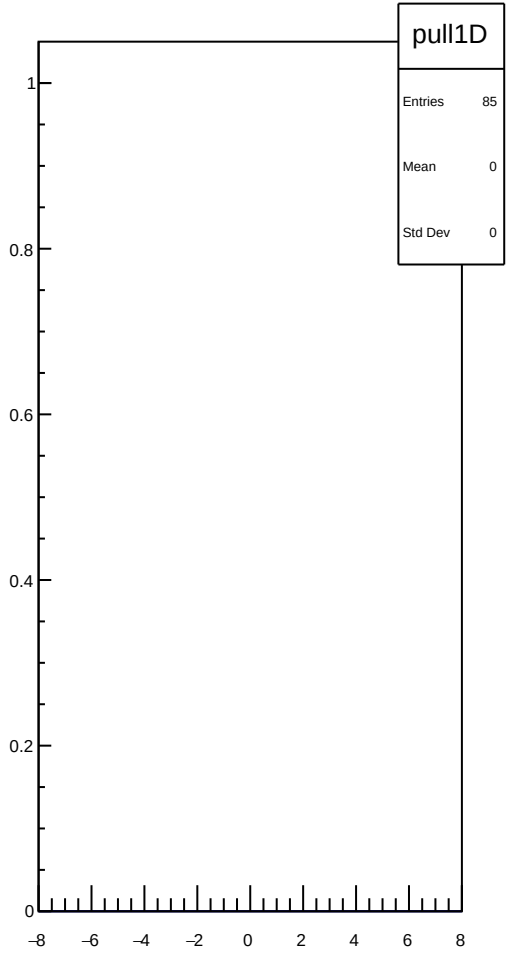

yield_bcm0l02_rms vs run
χ² / ndf 3.93e+05 / 84
p0 1.029 ± 0.0009101
18
16
14
12
10
8
6
4
2

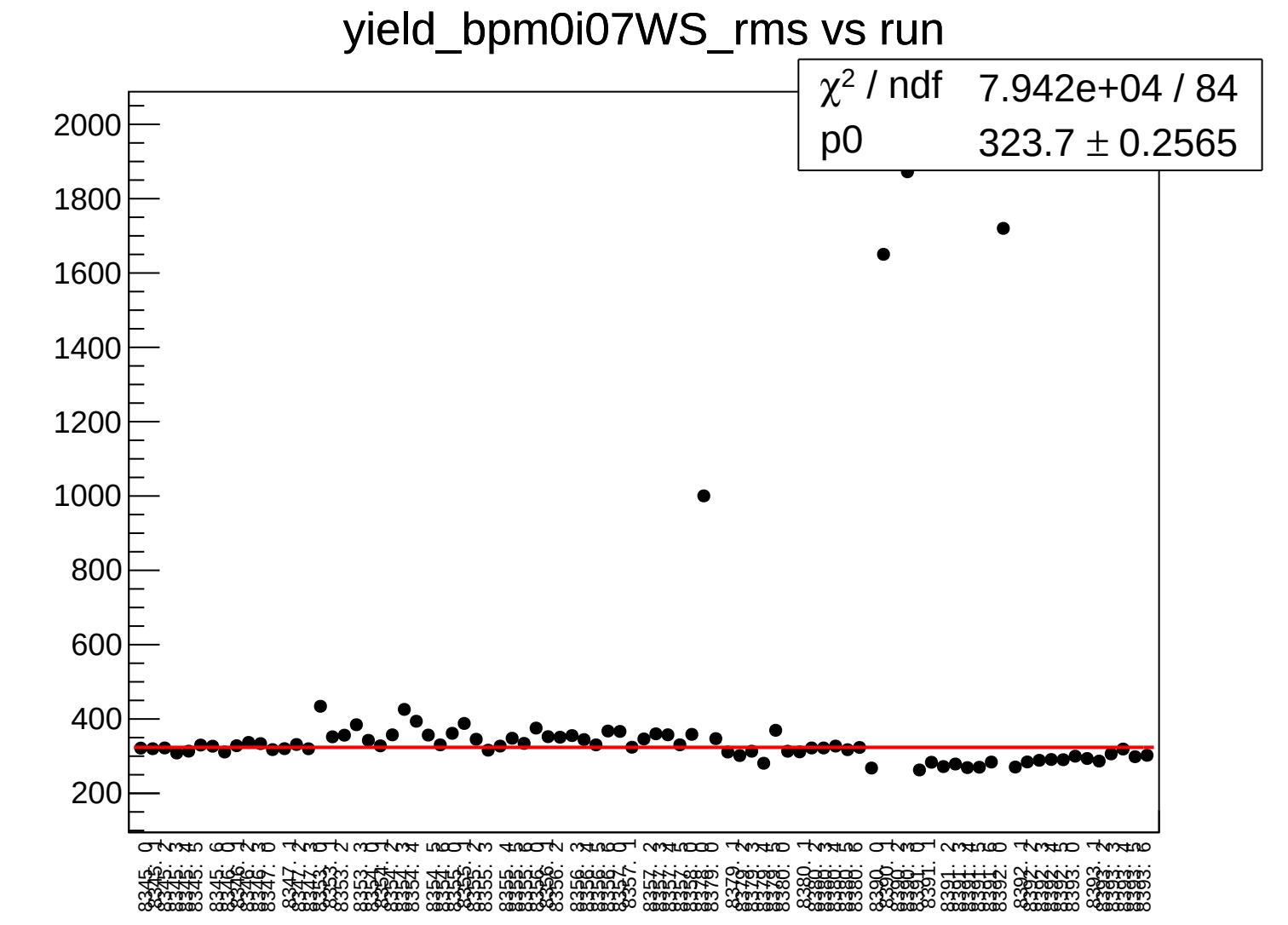

yield_bpm2i01WS_mean vs run
×10^3
172.4
172.2
172
171.8
171.6
171.4
171.2
χ² / ndf 1.431e+05 / 84
p0 1.722e+05 ± 0.3769
50
0
−50
−100
−150
pull
Entries 85
Mean 18.87
Std Dev 56.22

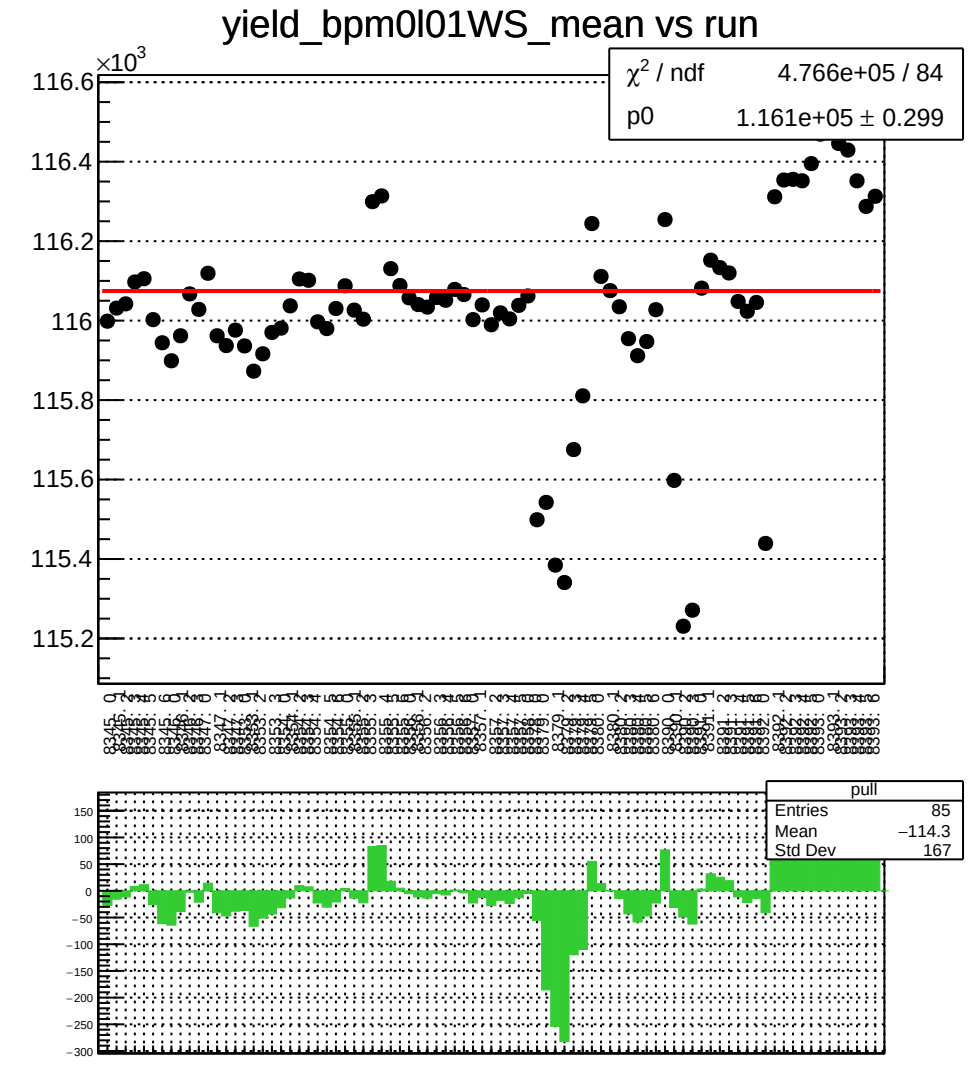

pull1D
Entries 85
Mean −0.138
Std Dev 4.267
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

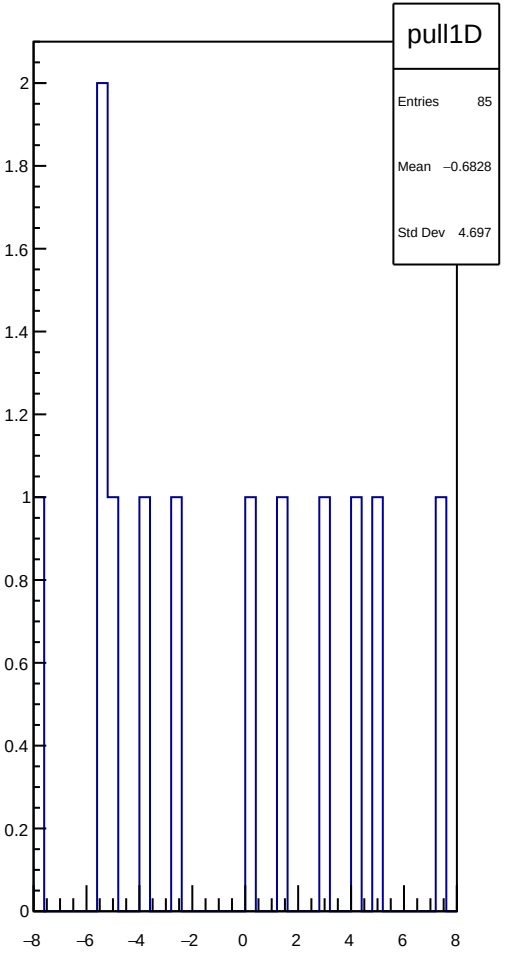

yield_bpm2i01WS_rms vs run
χ² / ndf 6.422e+04 / 84
p0 337.9 ± 0.2665
1600
1400
1200
1000
800
600
400
200

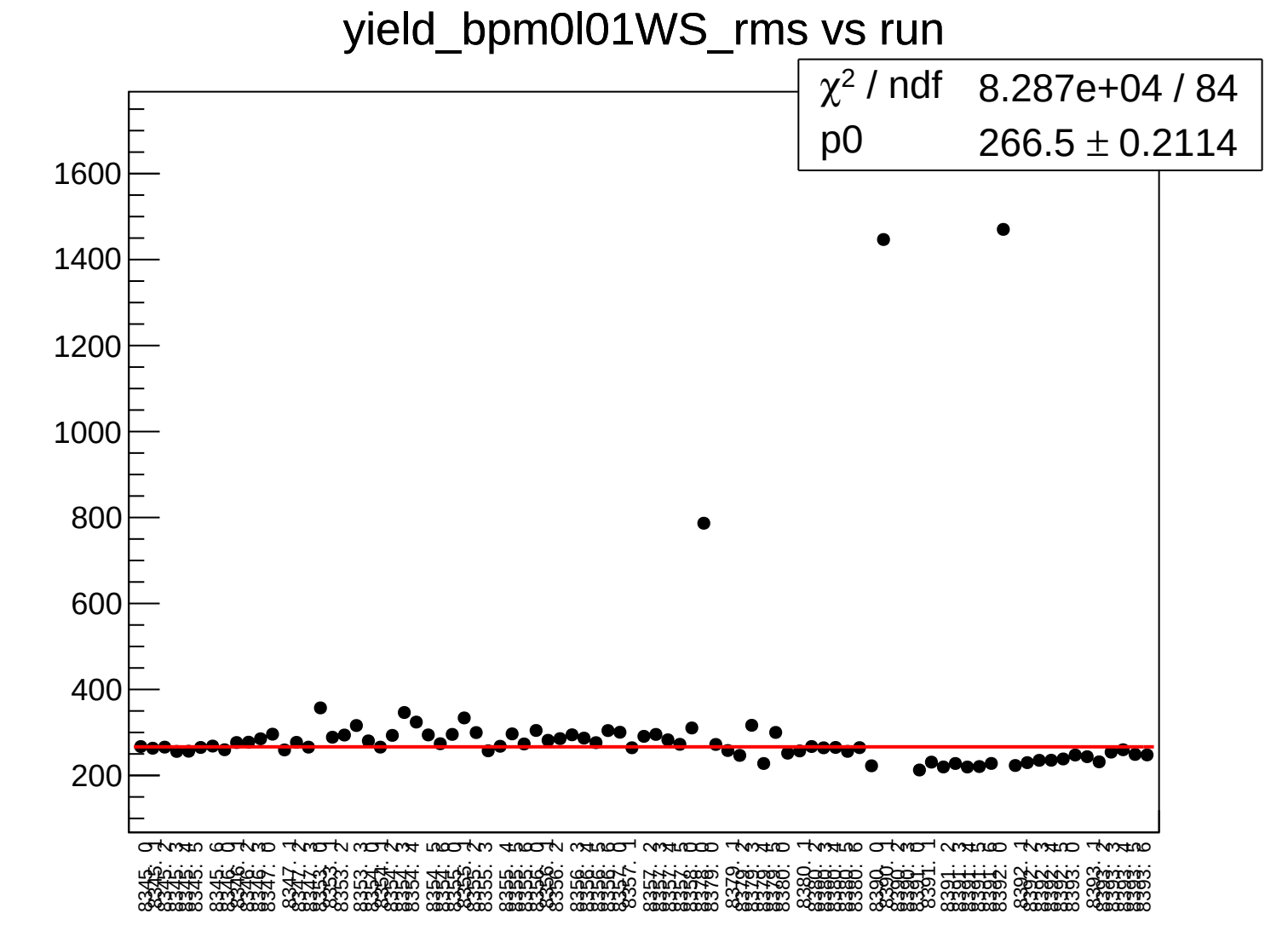

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 2.712e+06 / 84
p0 1.408e+05 ± 0.3628
141.5
141
140.5
140
139.5
139
pull
Entries 85
Mean −613.1
Std Dev 656.6
200
100
0
−100
−200
−300

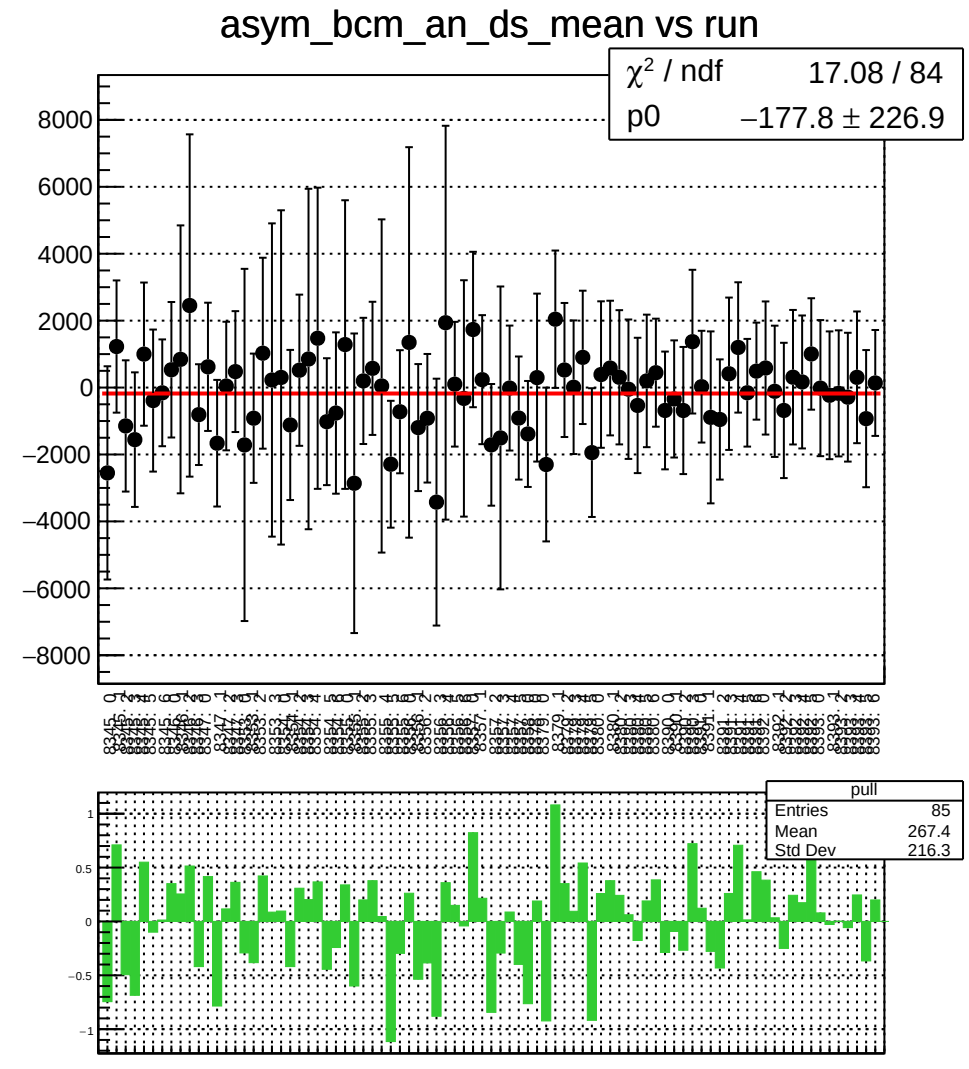

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

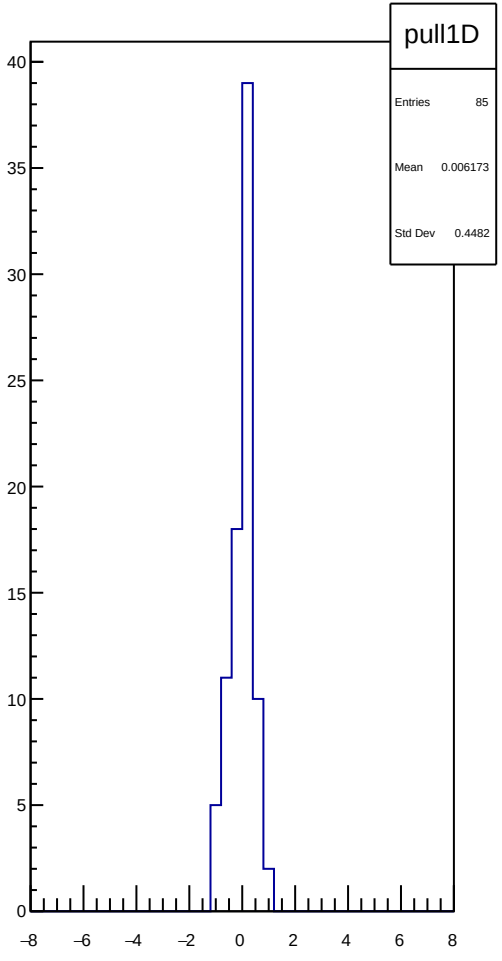

yield_bpm0i07WS_rms vs run
χ² / ndf 7.942e+04 / 84
p0 323.7 ± 0.2565
2000
1800
1600
1400
1200
1000
800
600
400
200

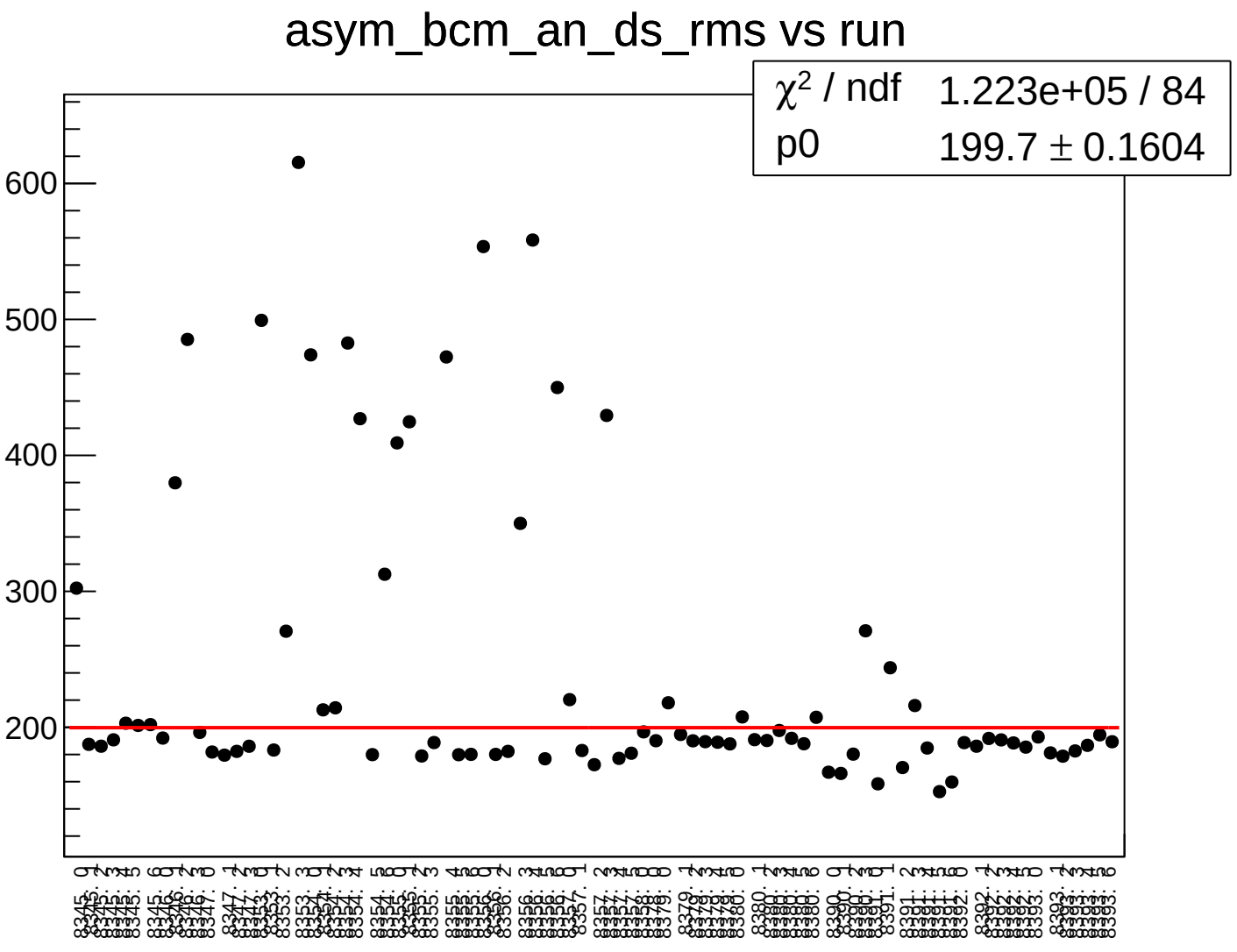

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 4.766e+05 / 84
p0 1.161e+05 ± 0.299
116.6
116.4
116.2
116
115.8
115.6
115.4
115.2
pull
Entries 85
Mean −114.3
Std Dev 167
150
100
50
0
−50
−100
−150
−200
−250
−300

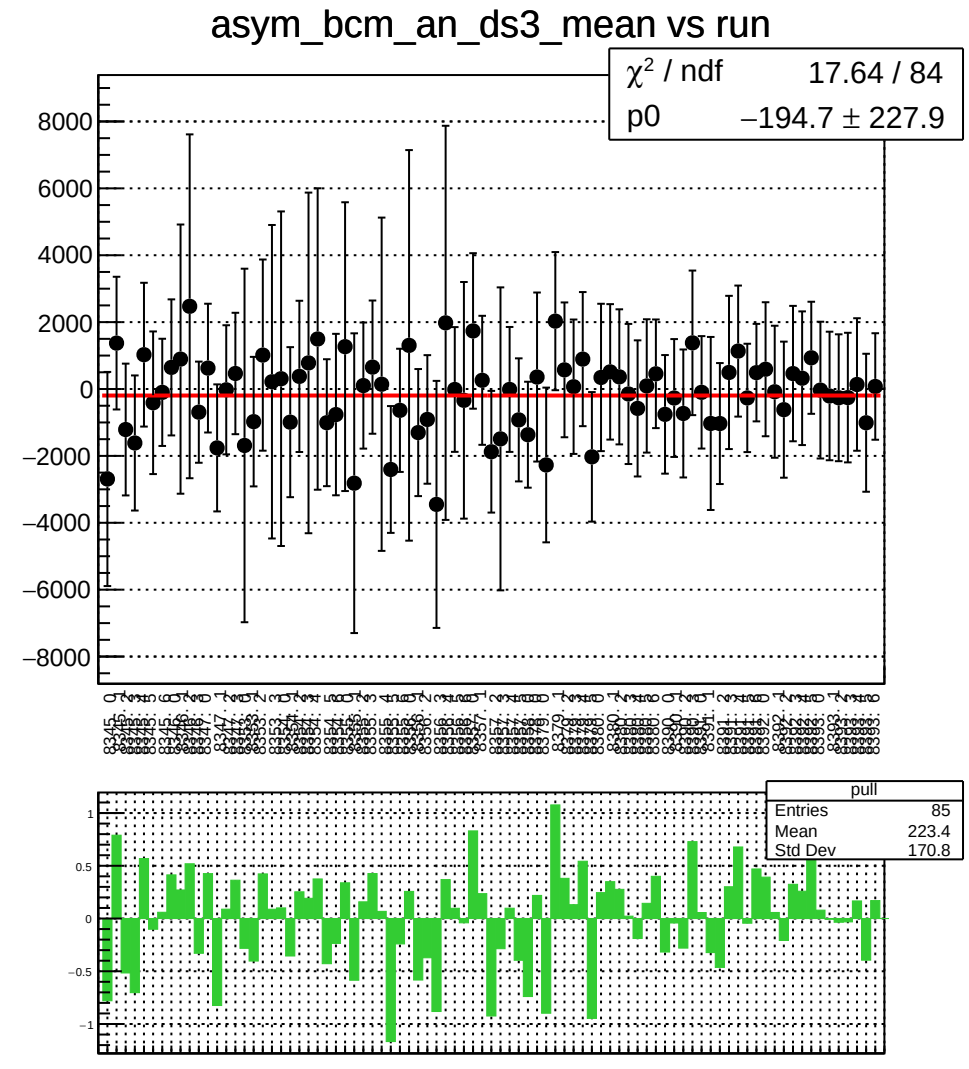

pull1D
Entries 85
Mean −0.6828
Std Dev 4.697
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

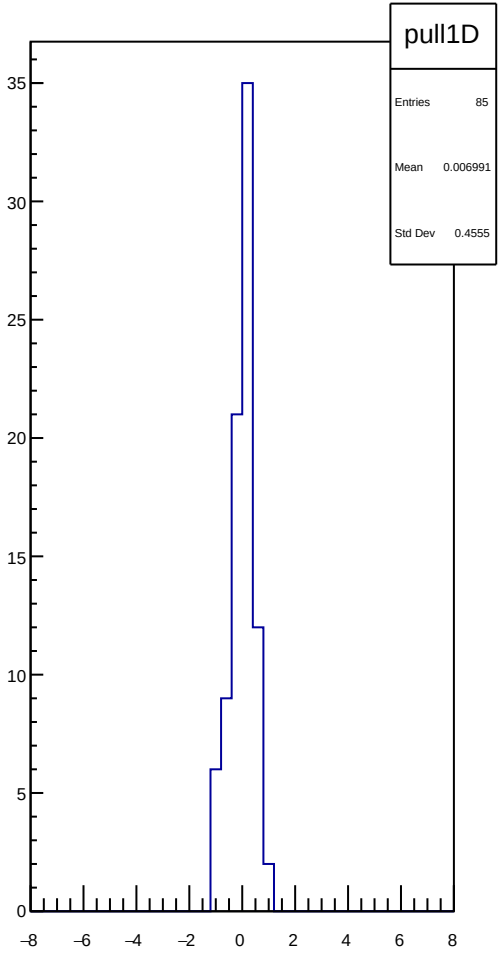

yield_bpm0l01WS_rms vs run
χ² / ndf 8.287e+04 / 84
p0 266.5 ± 0.2114
1600
1400
1200
1000
800
600
400
200

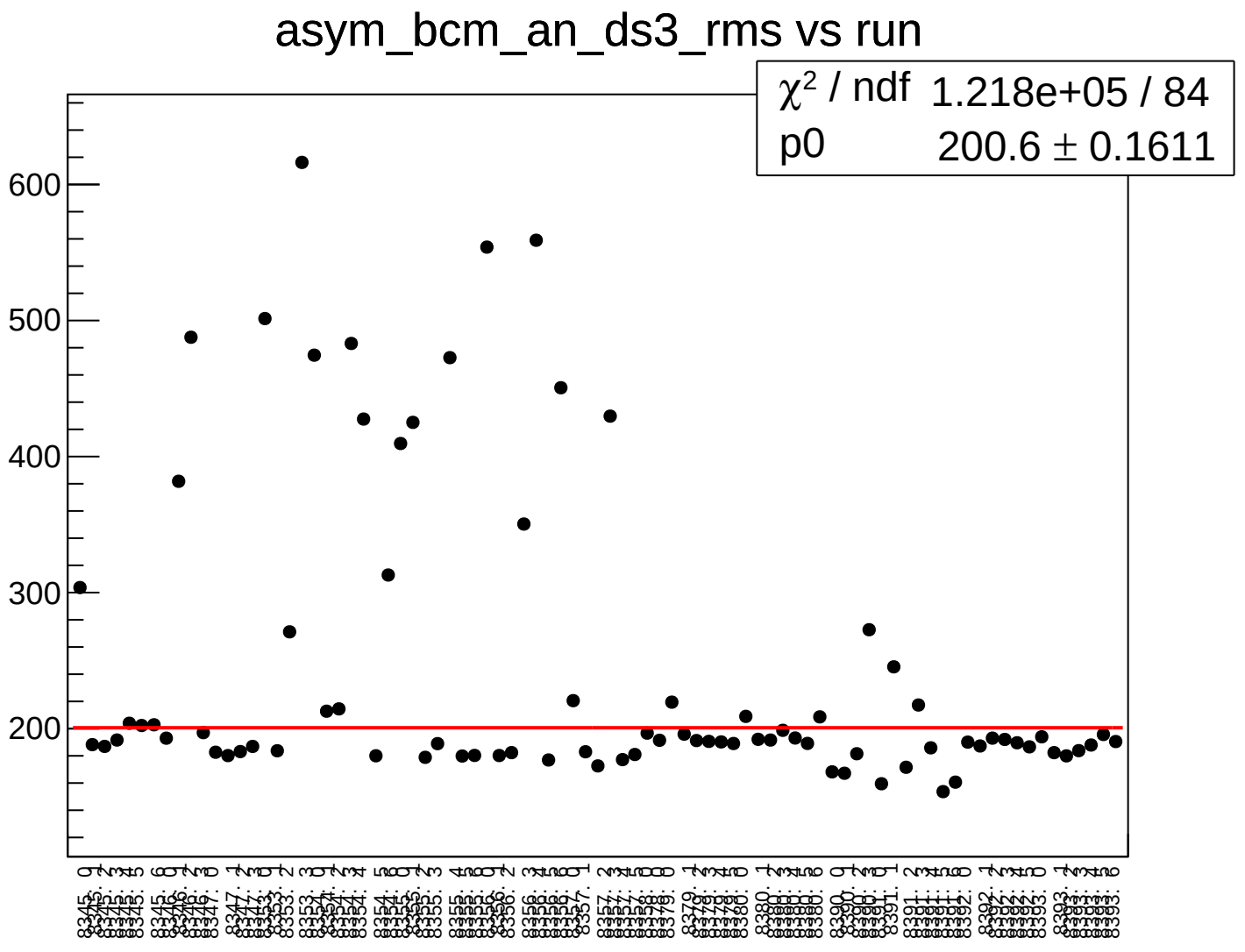

asym_bcm_an_ds_mean vs run
χ² / ndf 17.08 / 84
p0 −177.8 ± 226.9
pull
Entries 85
Mean 267.4
Std Dev 216.3

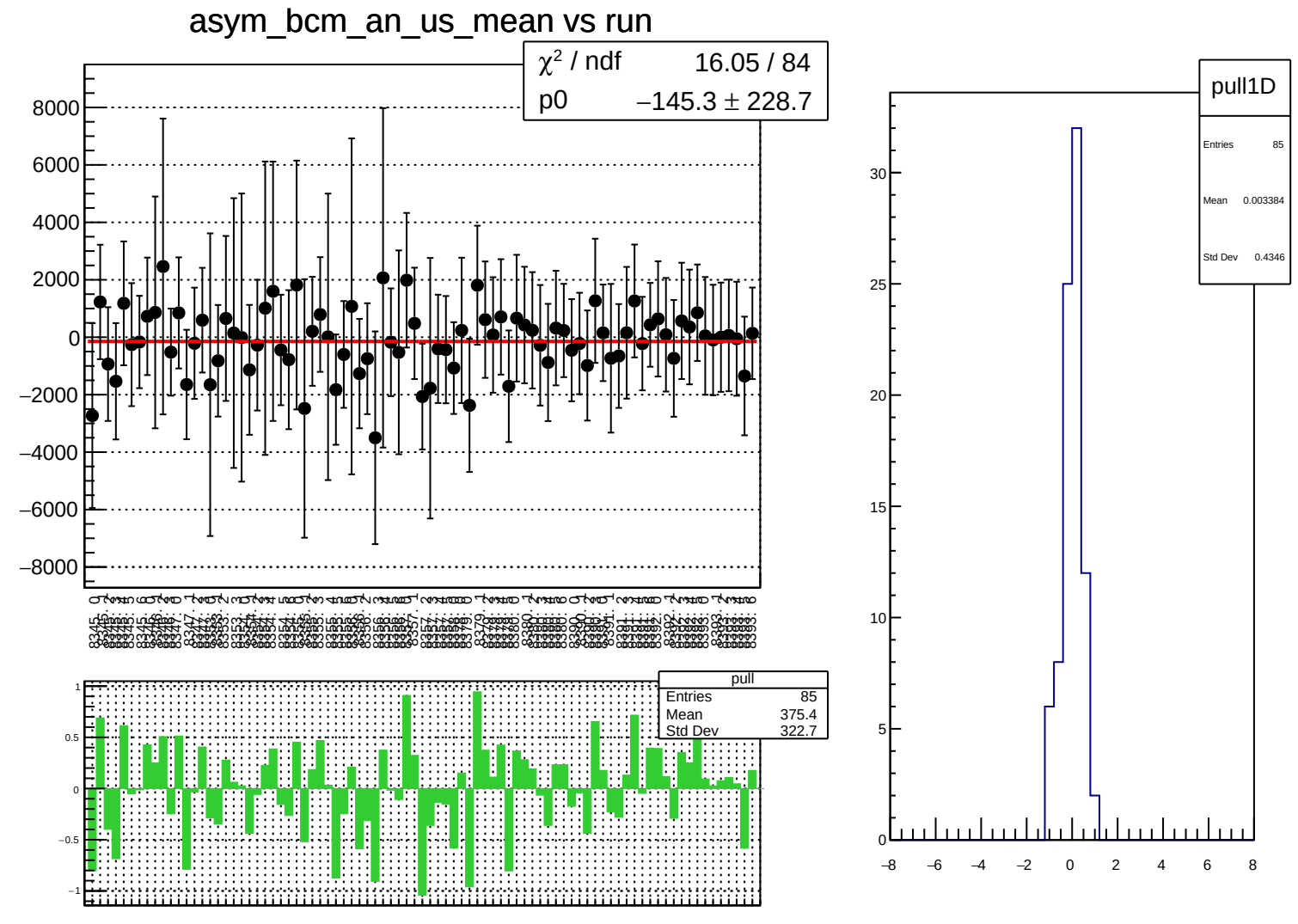

pull1D
Entries 85
Mean 0.006173
Std Dev 0.4482

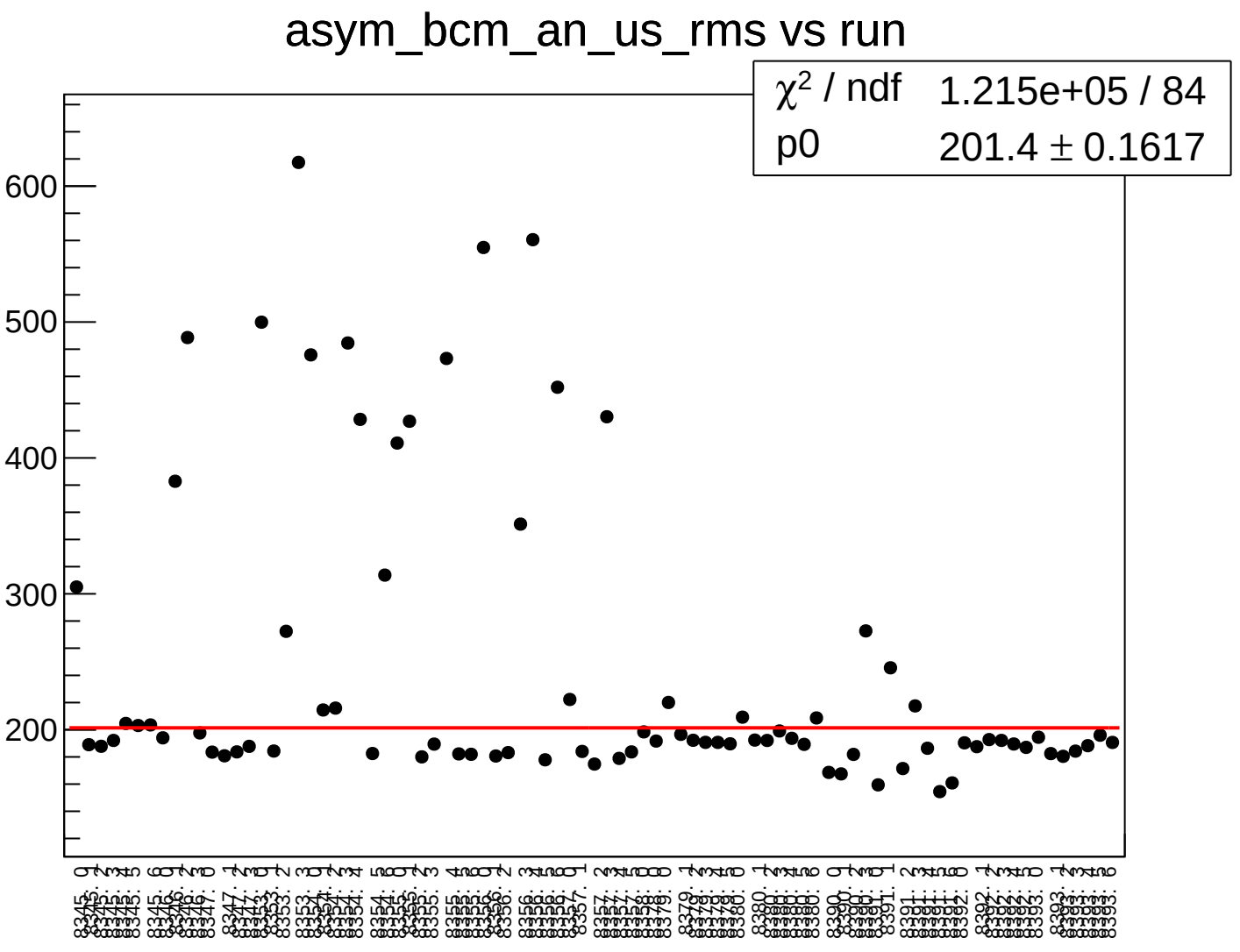

asym_bcm_an_ds_rms vs run
χ² / ndf 1.223e+05 / 84
p0 199.7 ± 0.1604
600
500
400
300
200

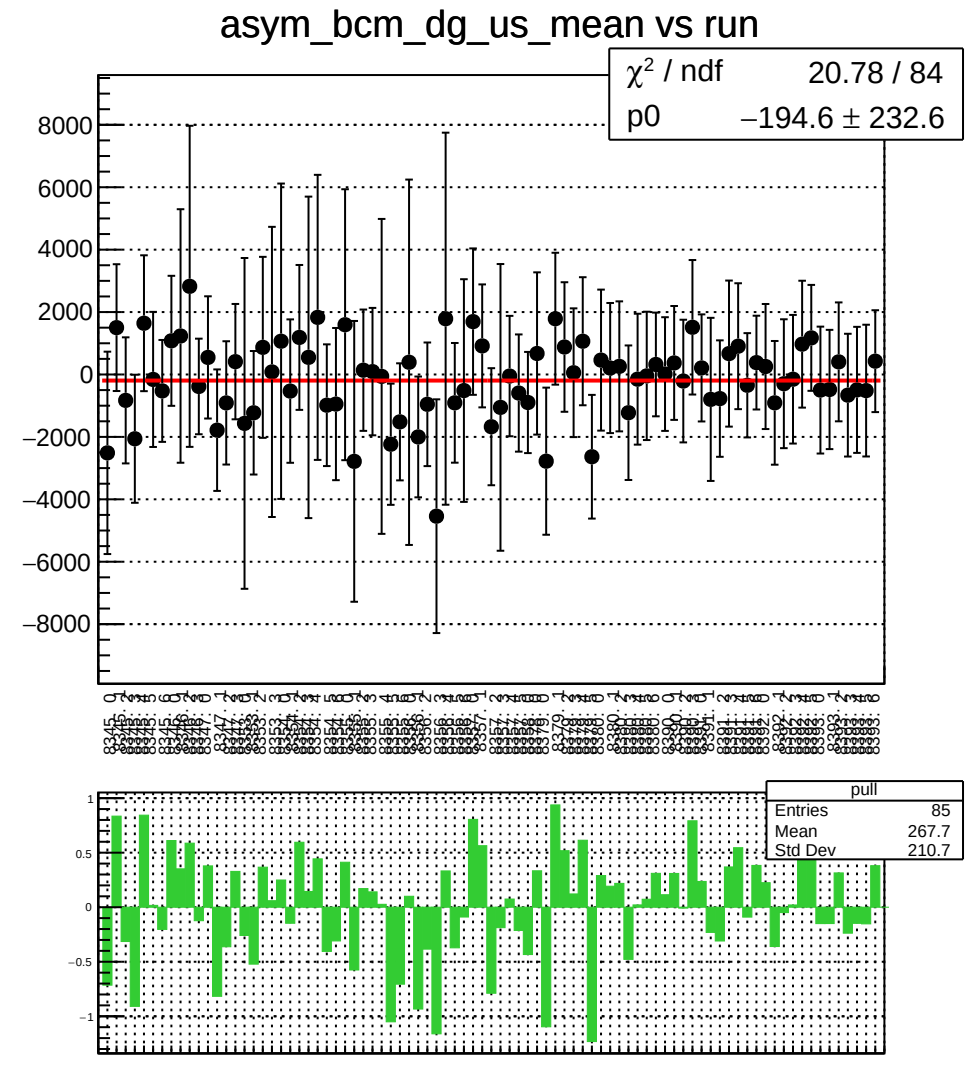

asym_bcm_an_ds3_mean vs run
χ² / ndf 17.64 / 84
p0 −194.7 ± 227.9
pull
Entries 85
Mean 223.4
Std Dev 170.8

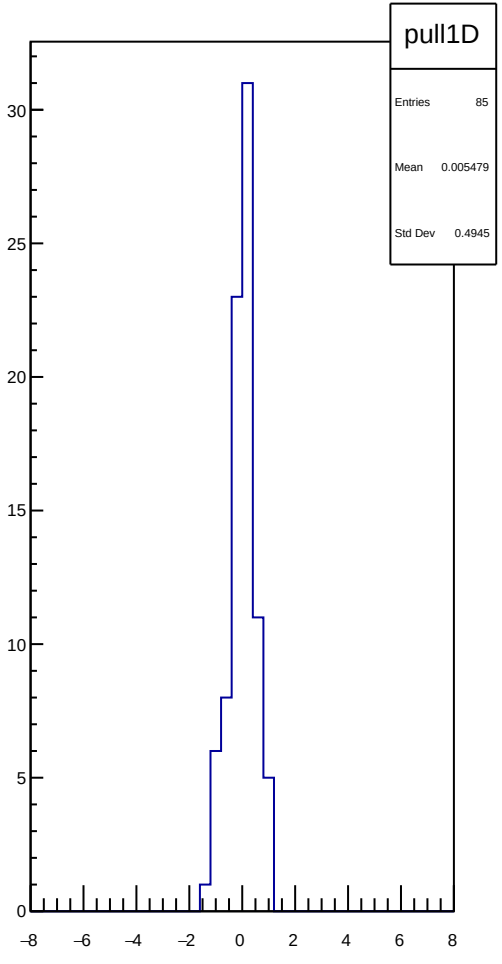

pull1D
Entries 85
Mean 0.006991
Std Dev 0.4555

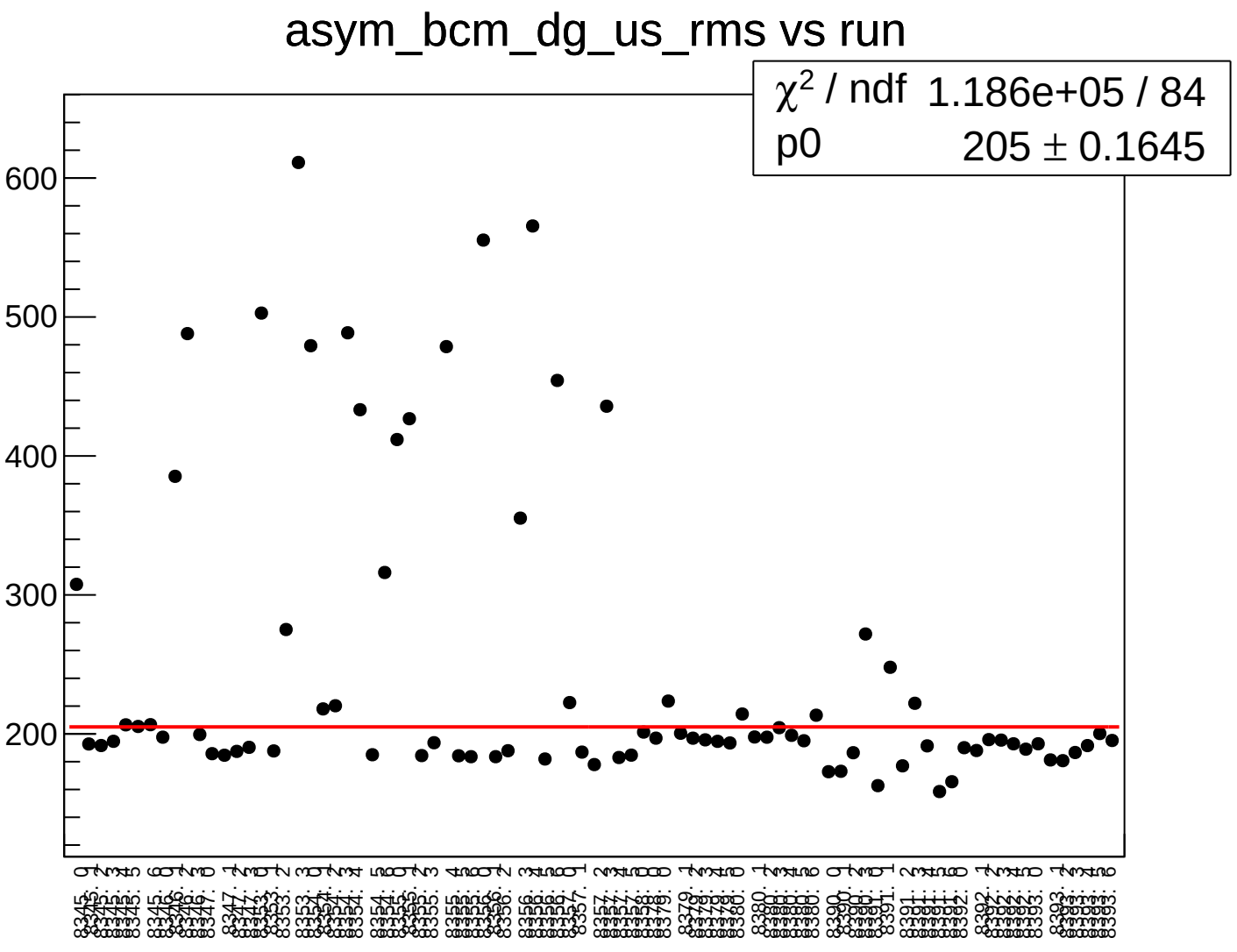

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.218e+05 / 84
p0 200.6 ± 0.1611
600
500
400
300
200

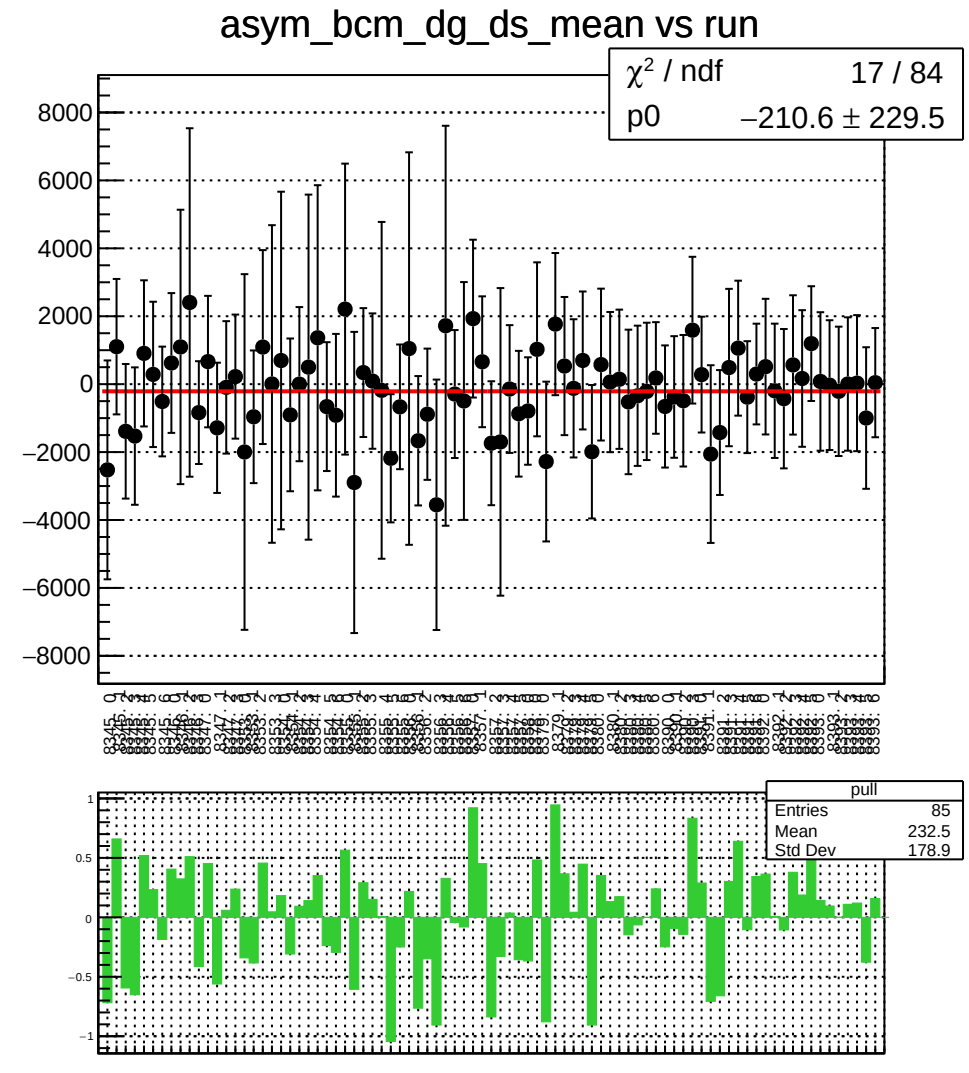

asym_bcm_an_us_mean vs run
χ² / ndf 16.05 / 84
p0 −145.3 ± 228.7
pull
Entries 85
Mean 375.4
Std Dev 322.7
pull1D
Entries 85
Mean 0.003384
Std Dev 0.4346

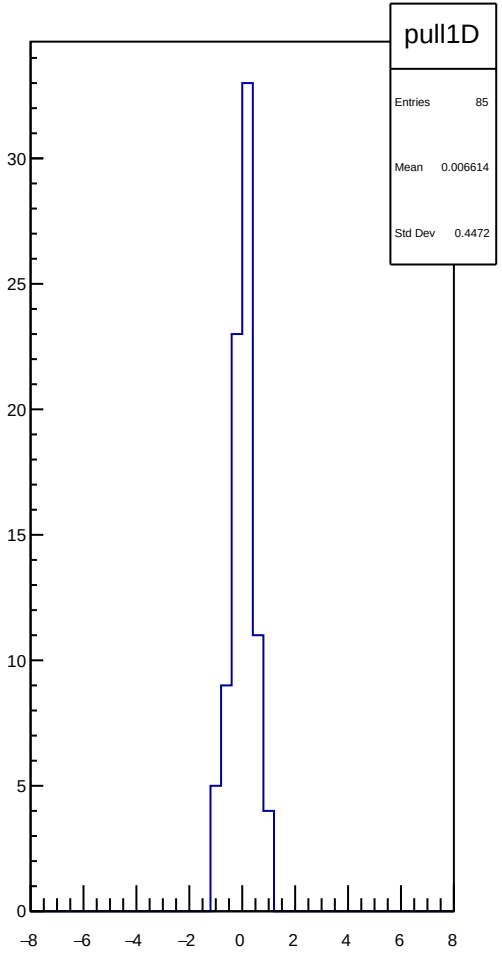

asym_bcm_an_us_rms vs run
χ² / ndf 1.215e+05 / 84
p0 201.4 ± 0.1617
600
500
400
300
200

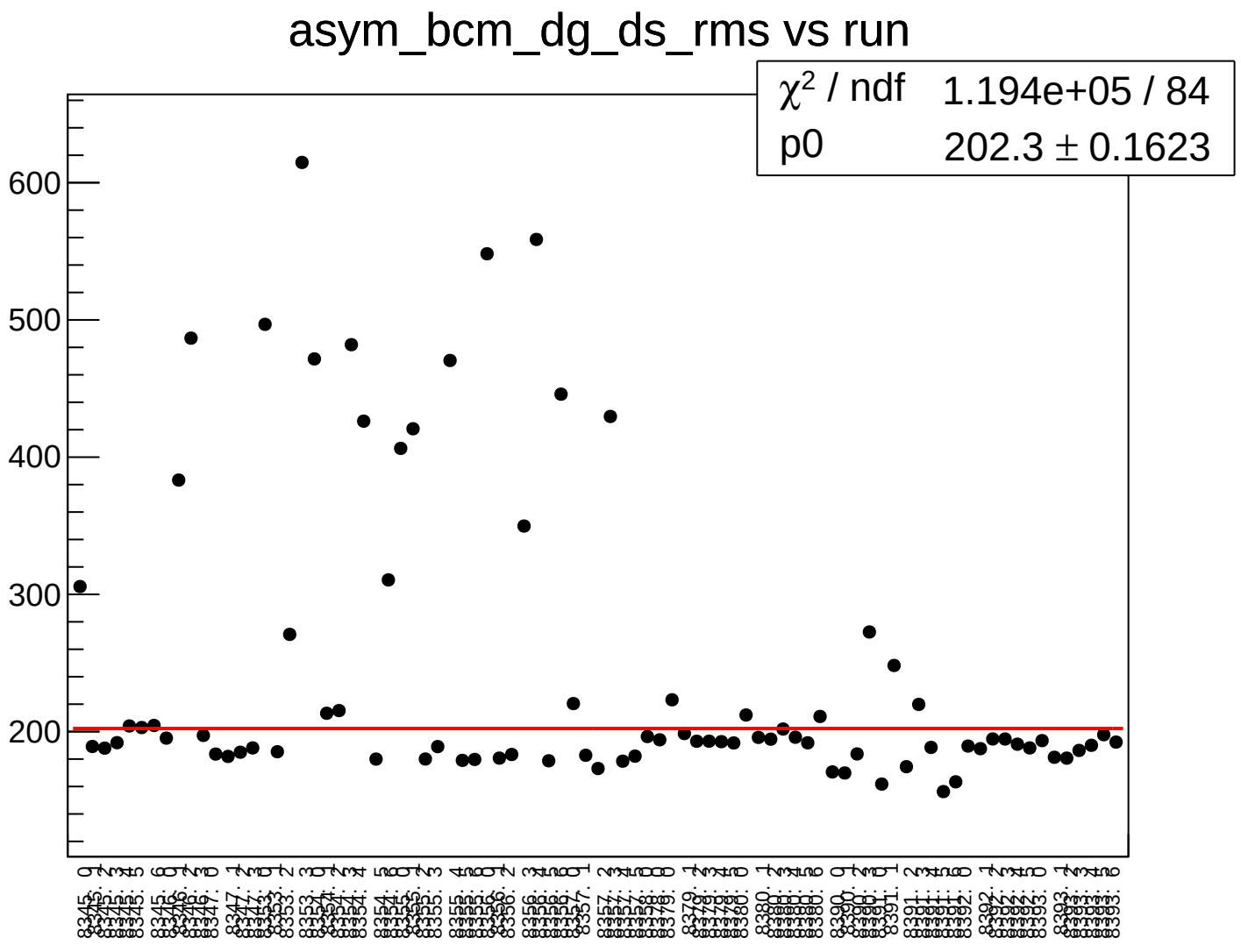

asym_bcm_dg_us_mean vs run
χ² / ndf 20.78 / 84
p0 −194.6 ± 232.6
pull
Entries 85
Mean 267.7
Std Dev 210.7

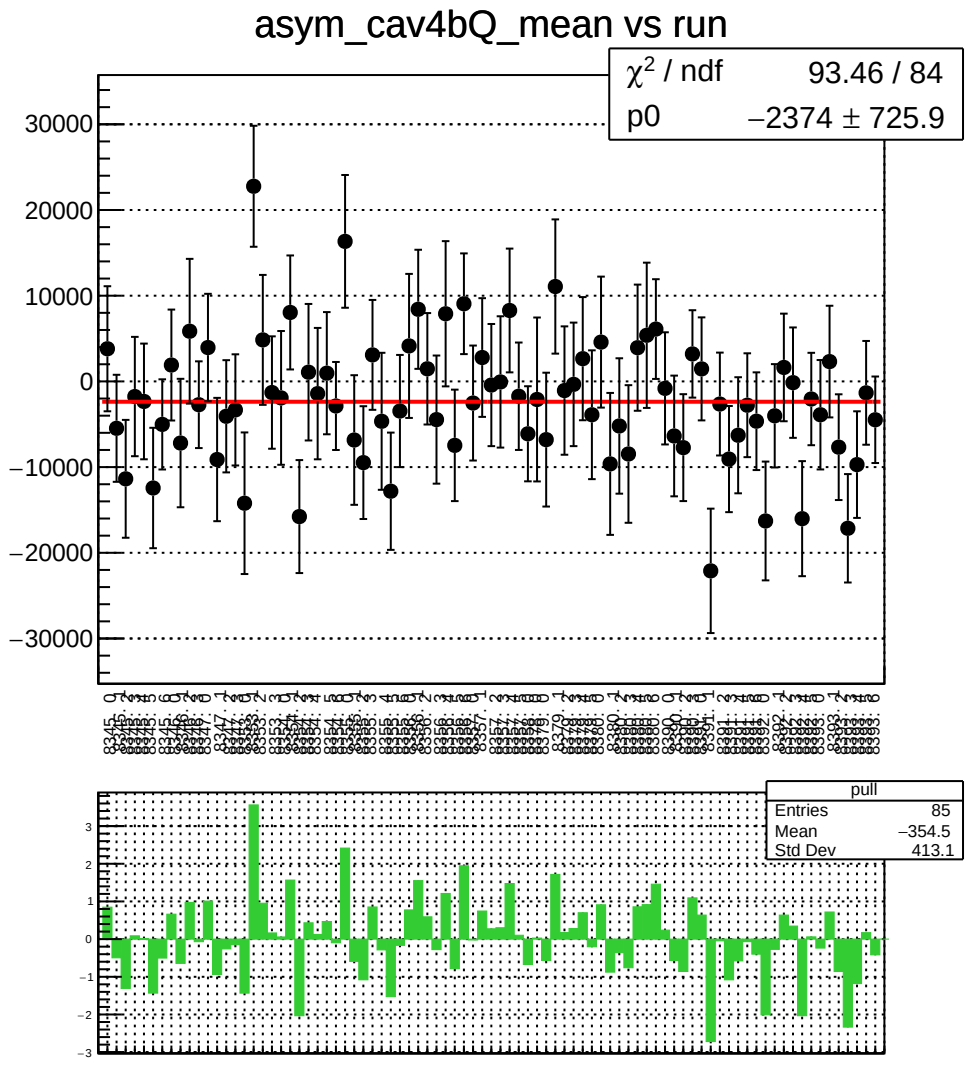

pull1D
Entries 85
Mean 0.005479
Std Dev 0.4945

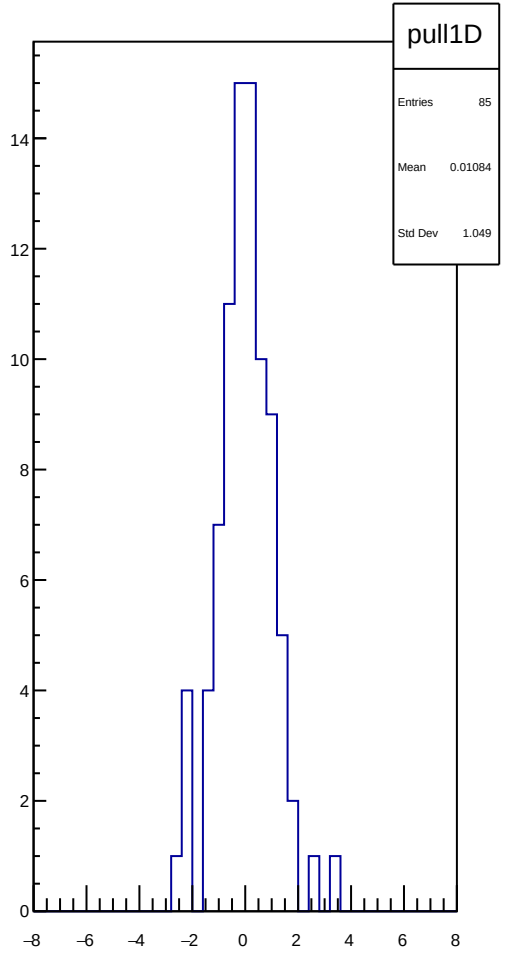

asym_bcm_dg_us_rms vs run
χ^2 / ndf 1.186e+05 / 84
p0 205 ± 0.1645
600
500
400
300
200

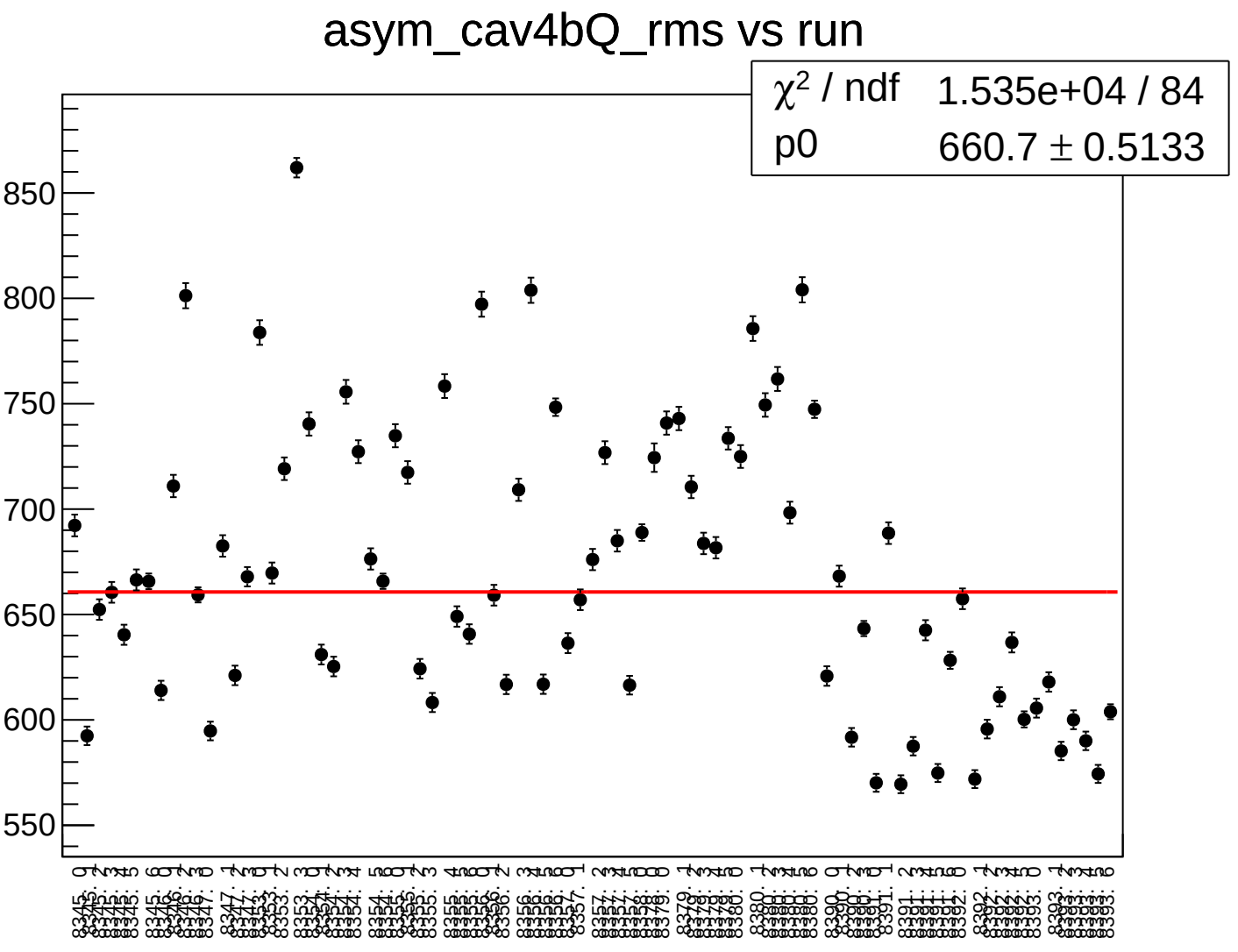

asym_bcm_dg_ds_mean vs run
χ² / ndf 17 / 84
p0 −210.6 ± 229.5
pull
Entries 85
Mean 232.5
Std Dev 178.9

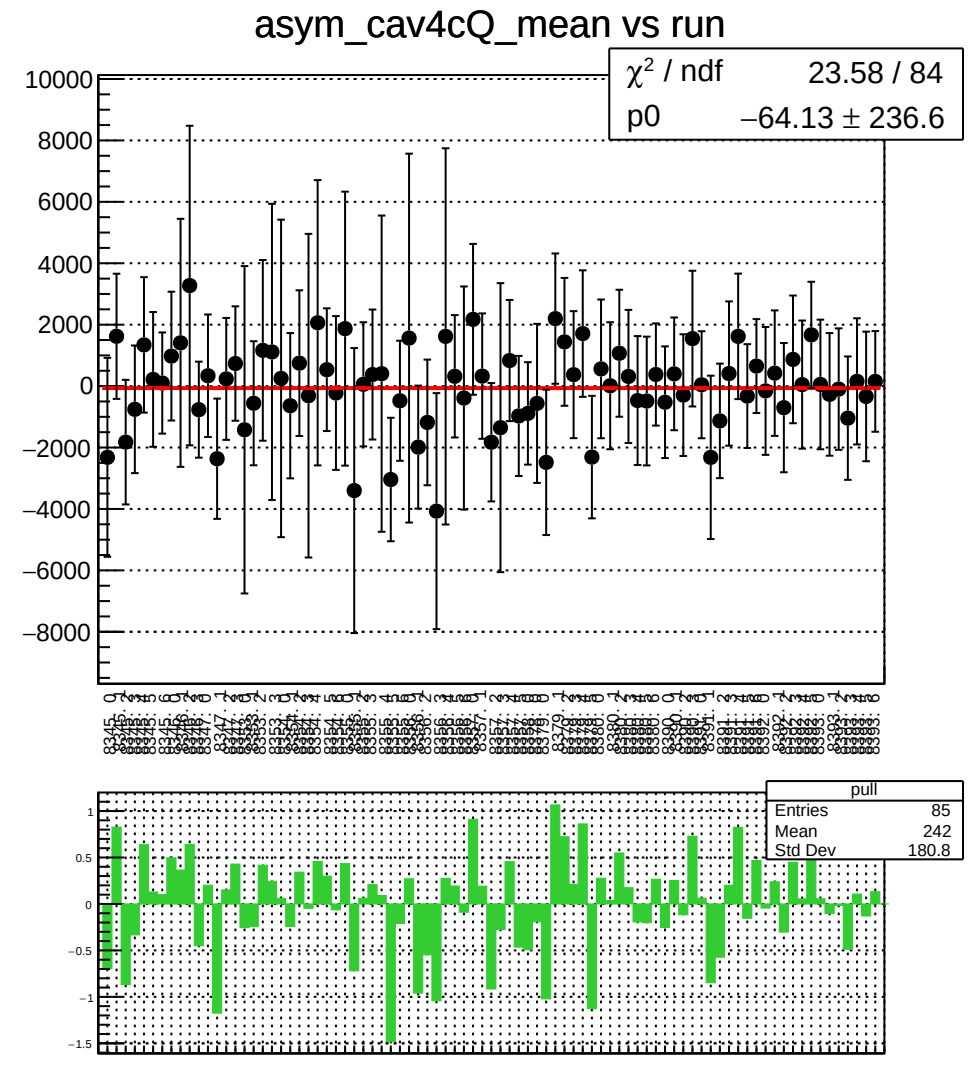

pull1D
Entries 85
Mean 0.006614
Std Dev 0.4472

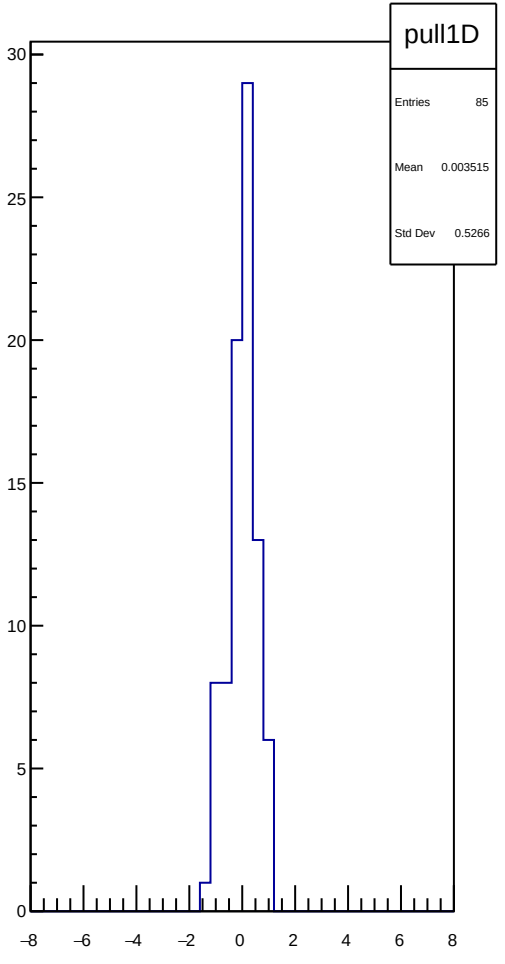

asym_bcm_dg_ds_rms vs run
χ^2 / ndf 1.194e+05 / 84
p0 202.3 ± 0.1623
600
500
400
300
200

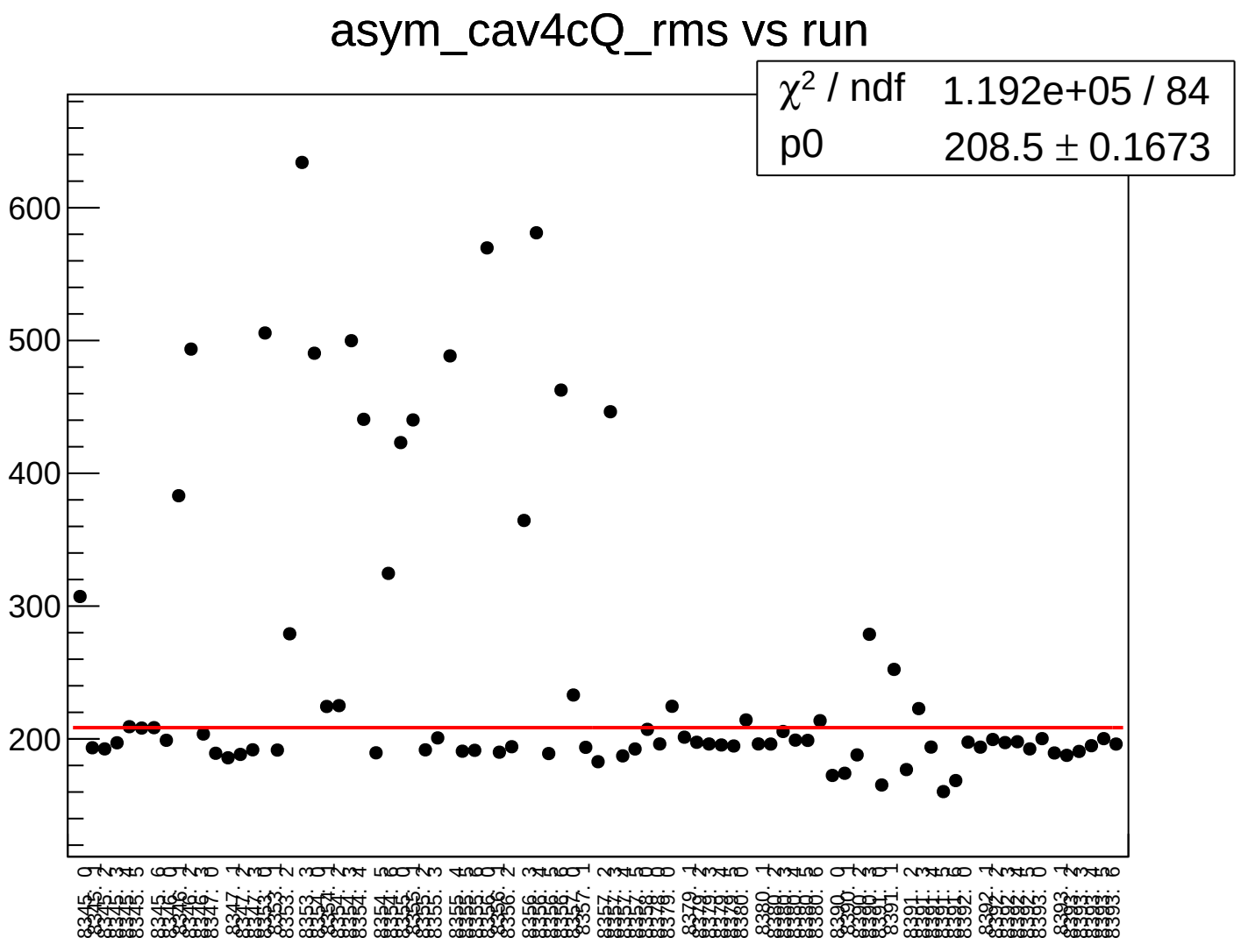

asym_cav4bQ_mean vs run
χ² / ndf 93.46 / 84
p0 −2374 ± 725.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −354.5
Std Dev 413.1
3
2
1
0
−1
−2
−3

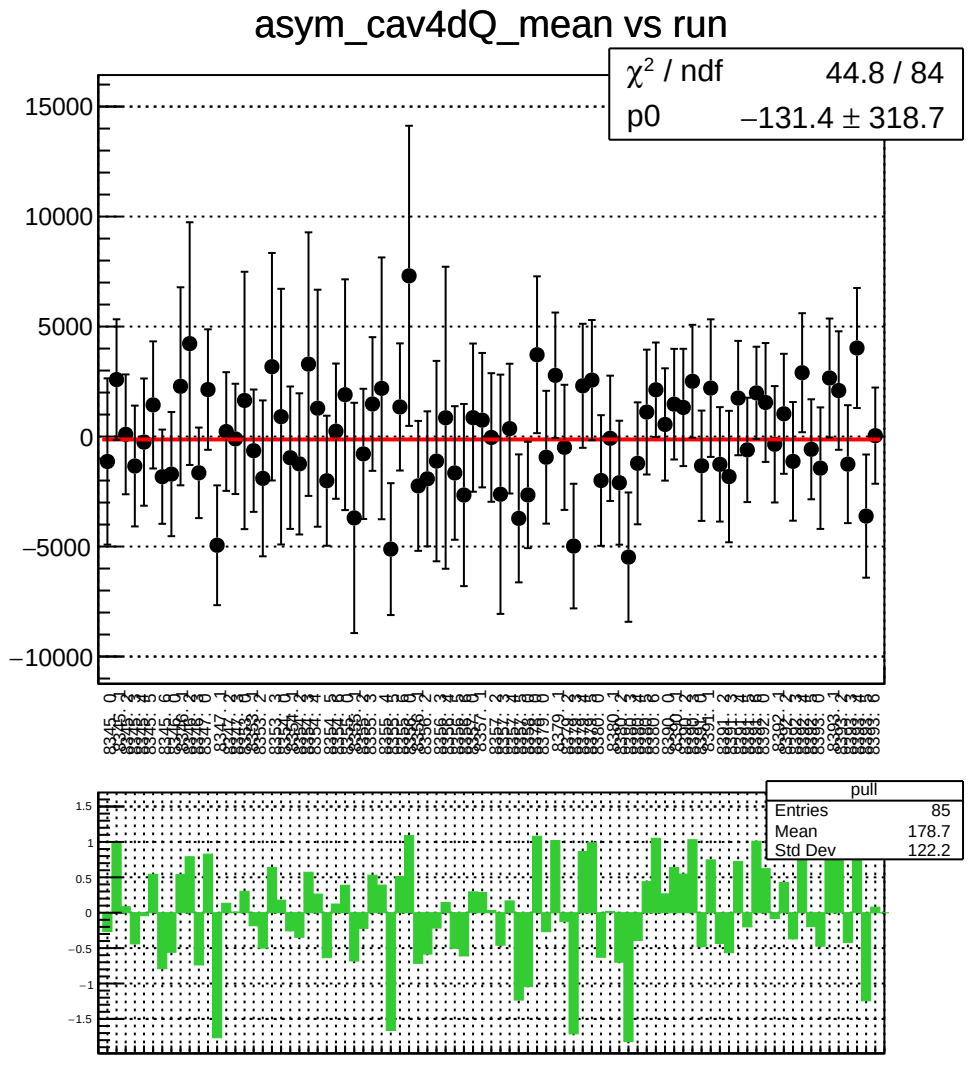

pull1D
Entries 85
Mean 0.01084
Std Dev 1.049
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

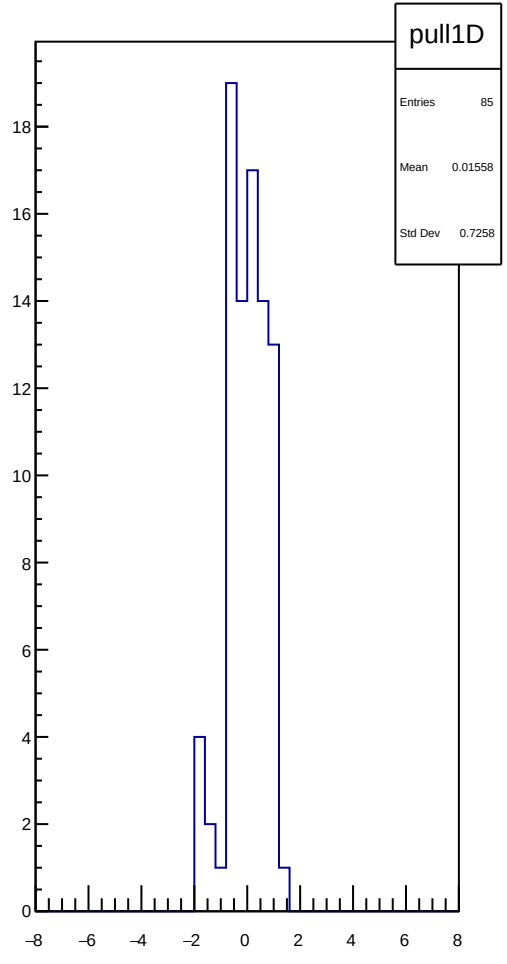

asym_cav4bQ_rms vs run
χ^2 / ndf 1.535e+04 / 84
p0 660.7 ± 0.5133
850
800
750
700
650
600
550

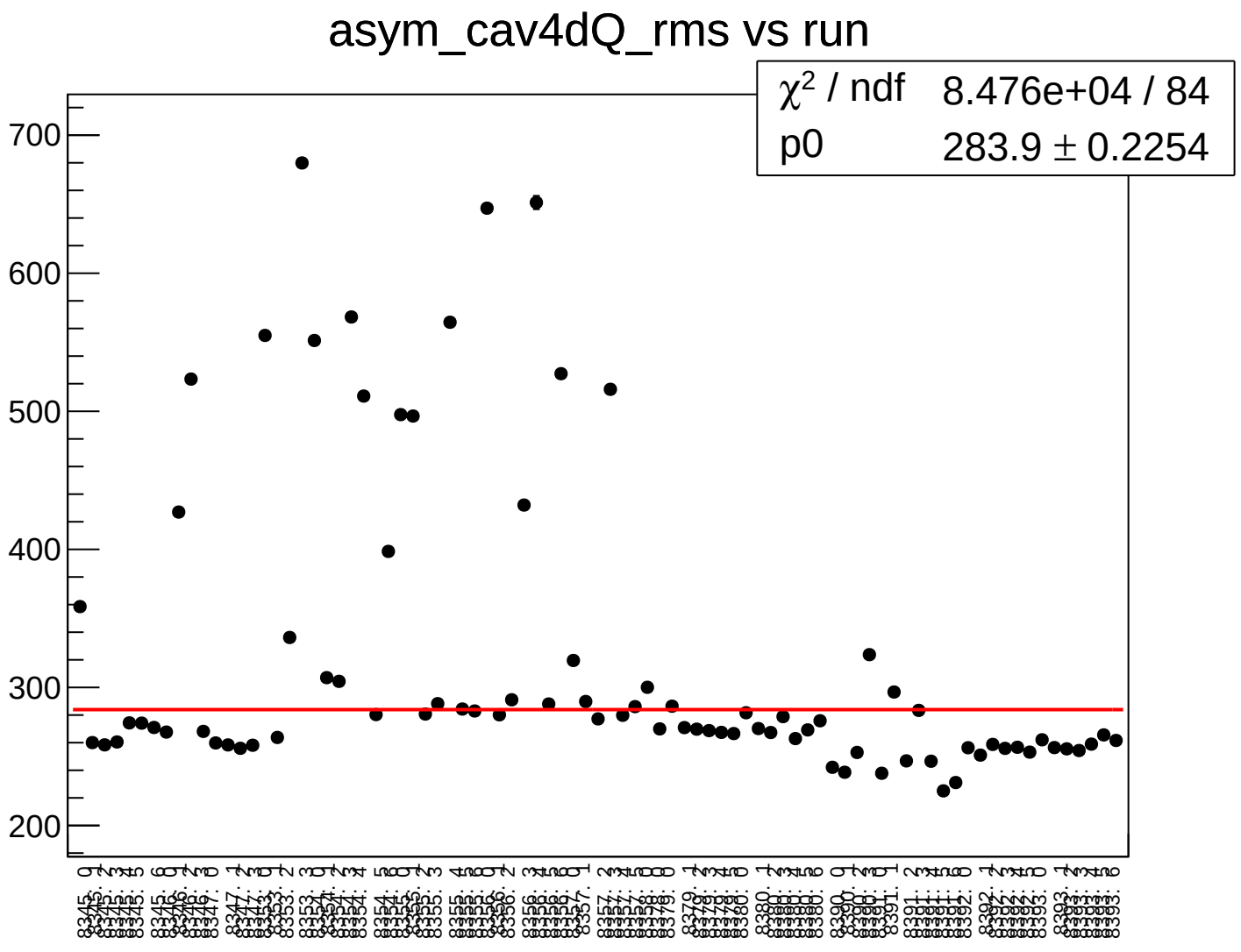

asym_cav4cQ_mean vs run
χ² / ndf 23.58 / 84
p0 −64.13 ± 236.6
pull
Entries 85
Mean 242
Std Dev 180.8

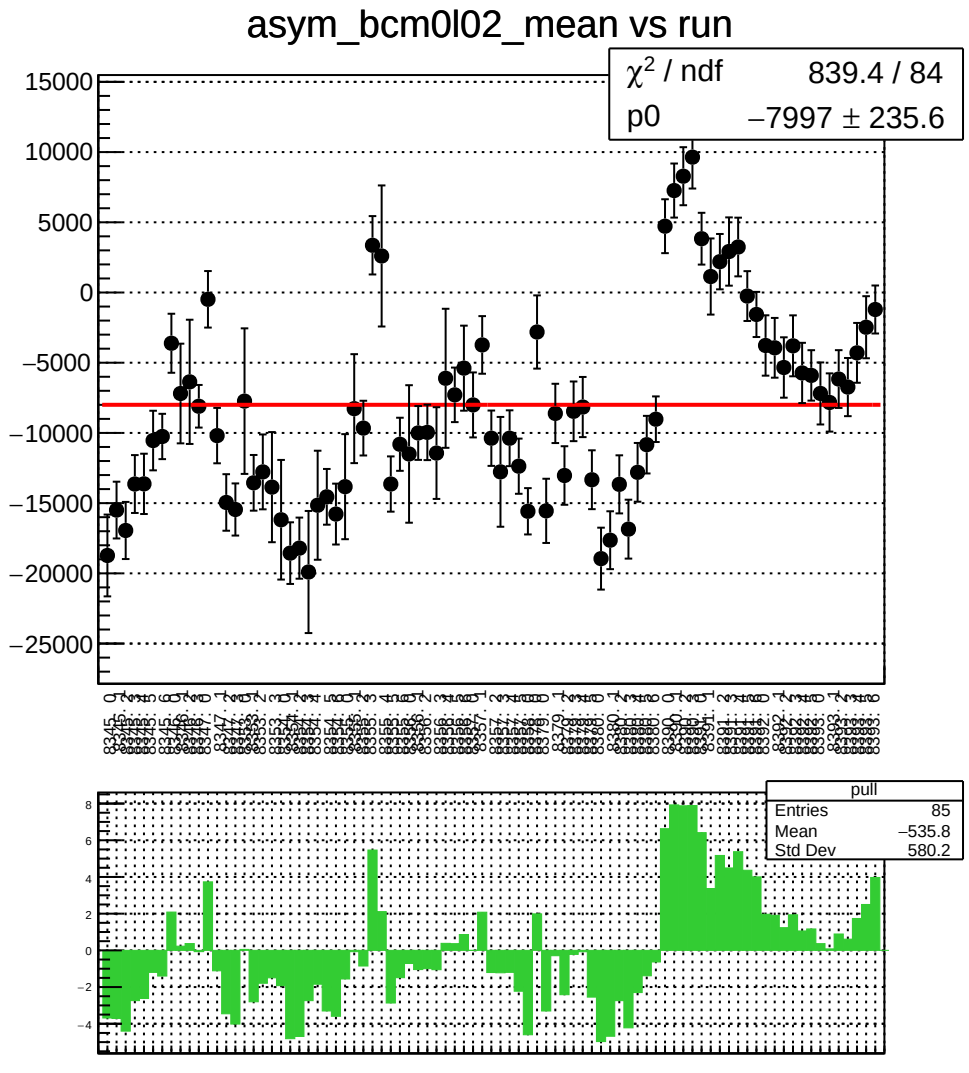

pull1D
Entries 85
Mean 0.003515
Std Dev 0.5266

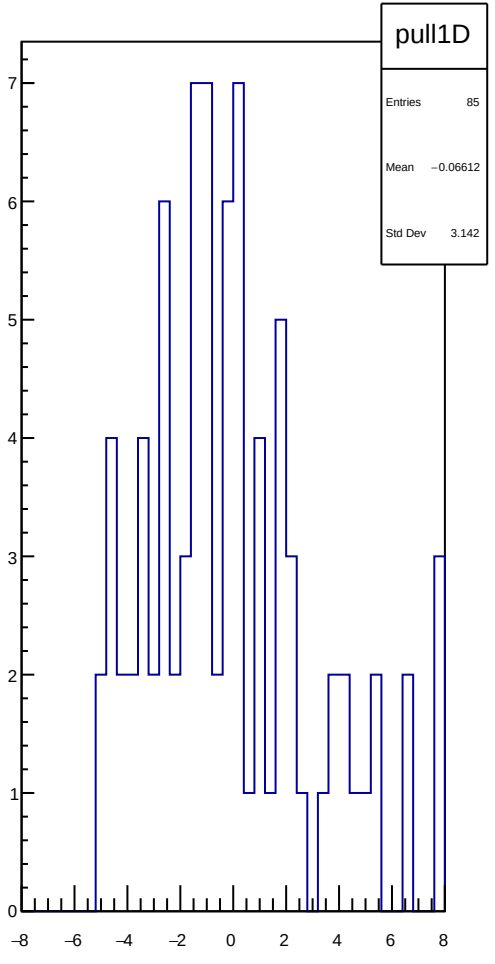

asym_cav4cQ_rms vs run
χ^2 / ndf 1.192e+05 / 84
p0 208.5 ± 0.1673
600
500
400
300
200

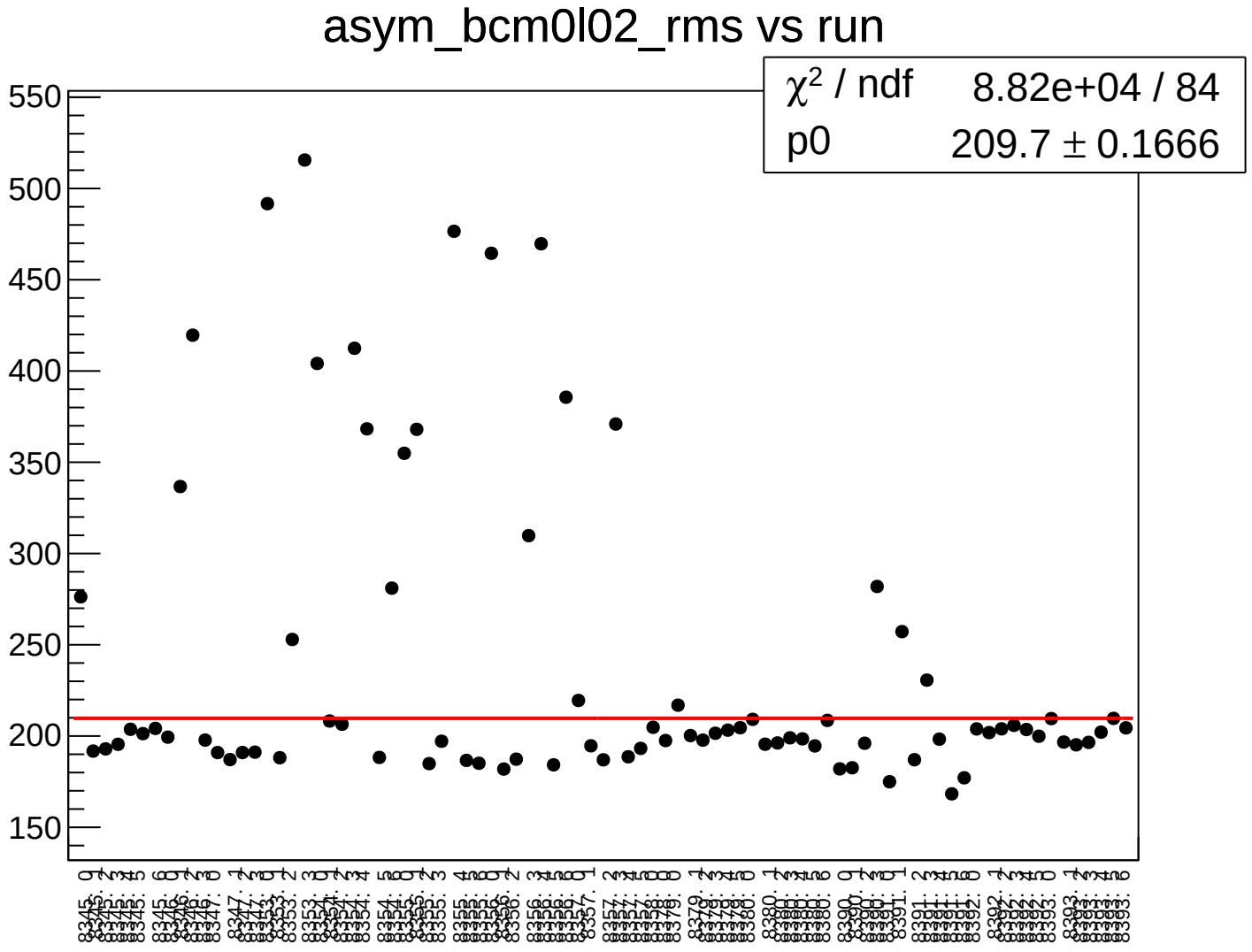

asym_cav4dQ_mean vs run
χ² / ndf 44.8 / 84
p0 −131.4 ± 318.7
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 178.7
Std Dev 122.2
1.5
1
0.5
0
−0.5
−1
−1.5

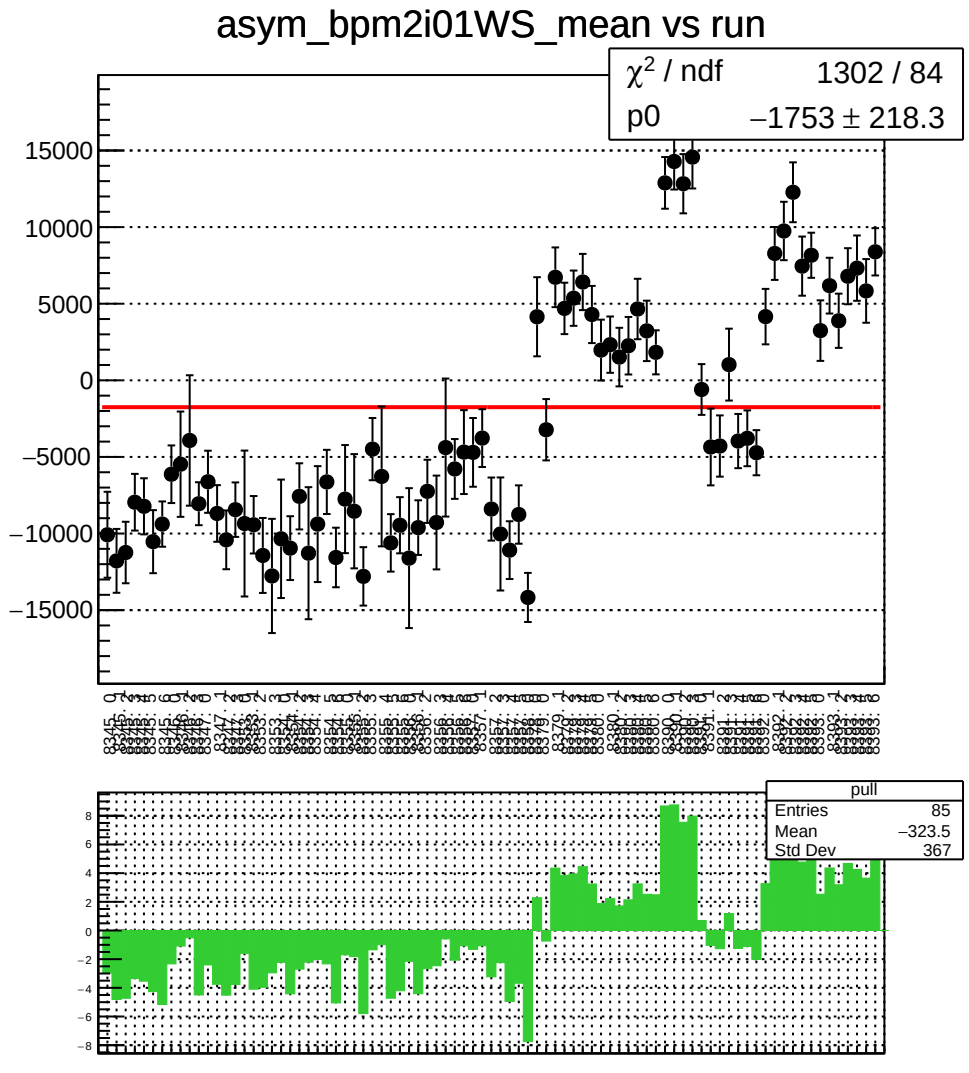

pull1D
Entries 85
Mean 0.01558
Std Dev 0.7258
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

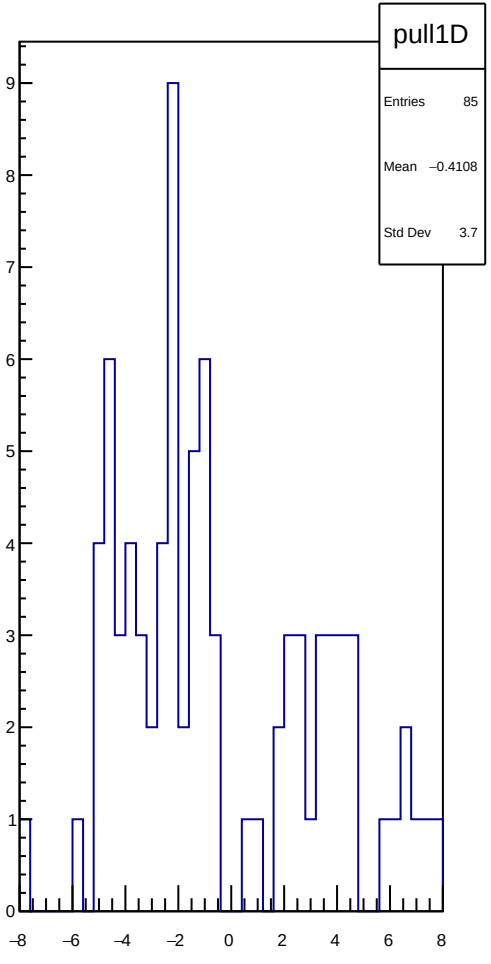

asym_cav4dQ_rms vs run
χ² / ndf 8.476e+04 / 84
p0 283.9 ± 0.2254
700
600
500
400
300
200

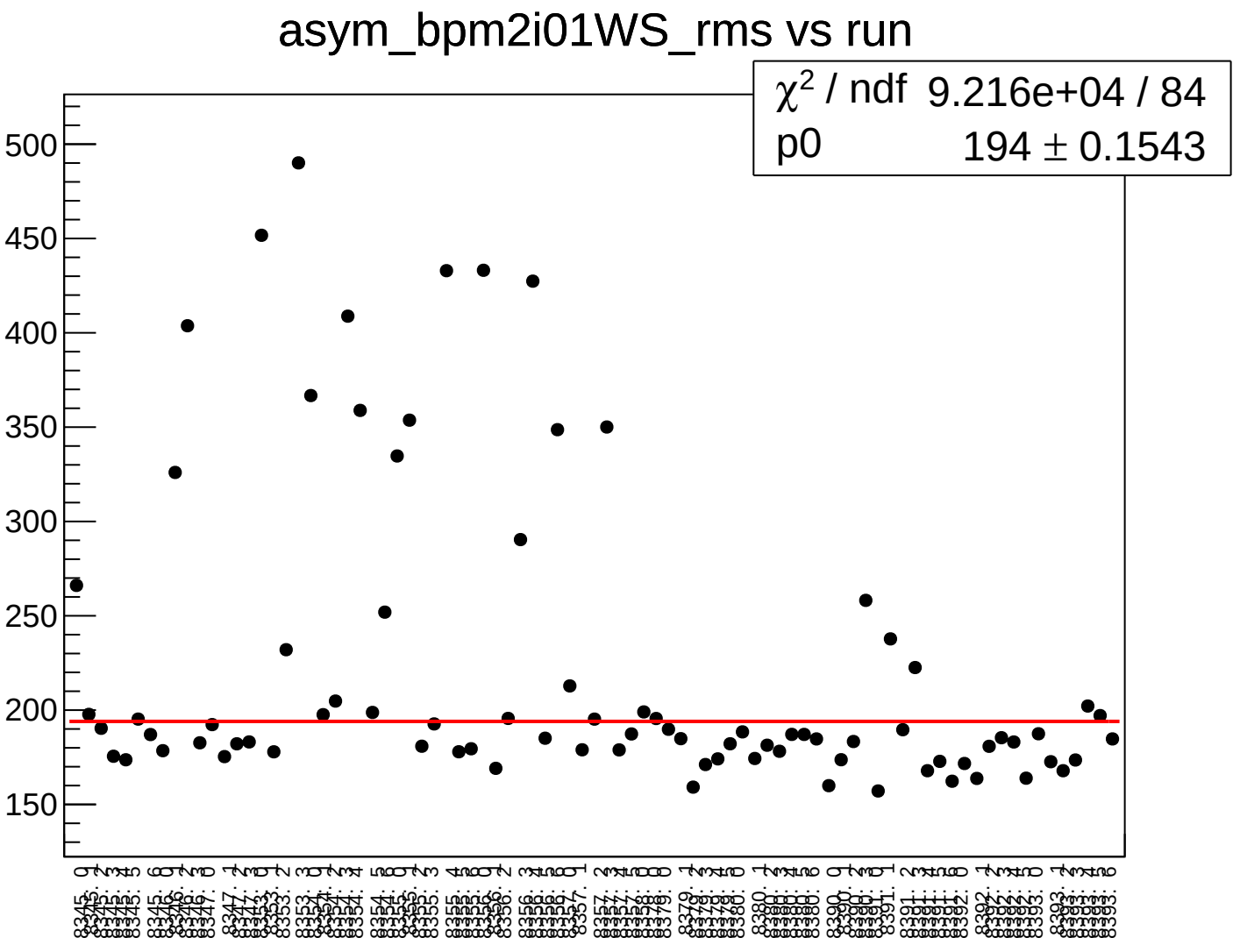

asym_bcm0l02_mean vs run
χ² / ndf 839.4 / 84
p0 −7997 ± 235.6
pull
Entries 85
Mean −535.8
Std Dev 580.2

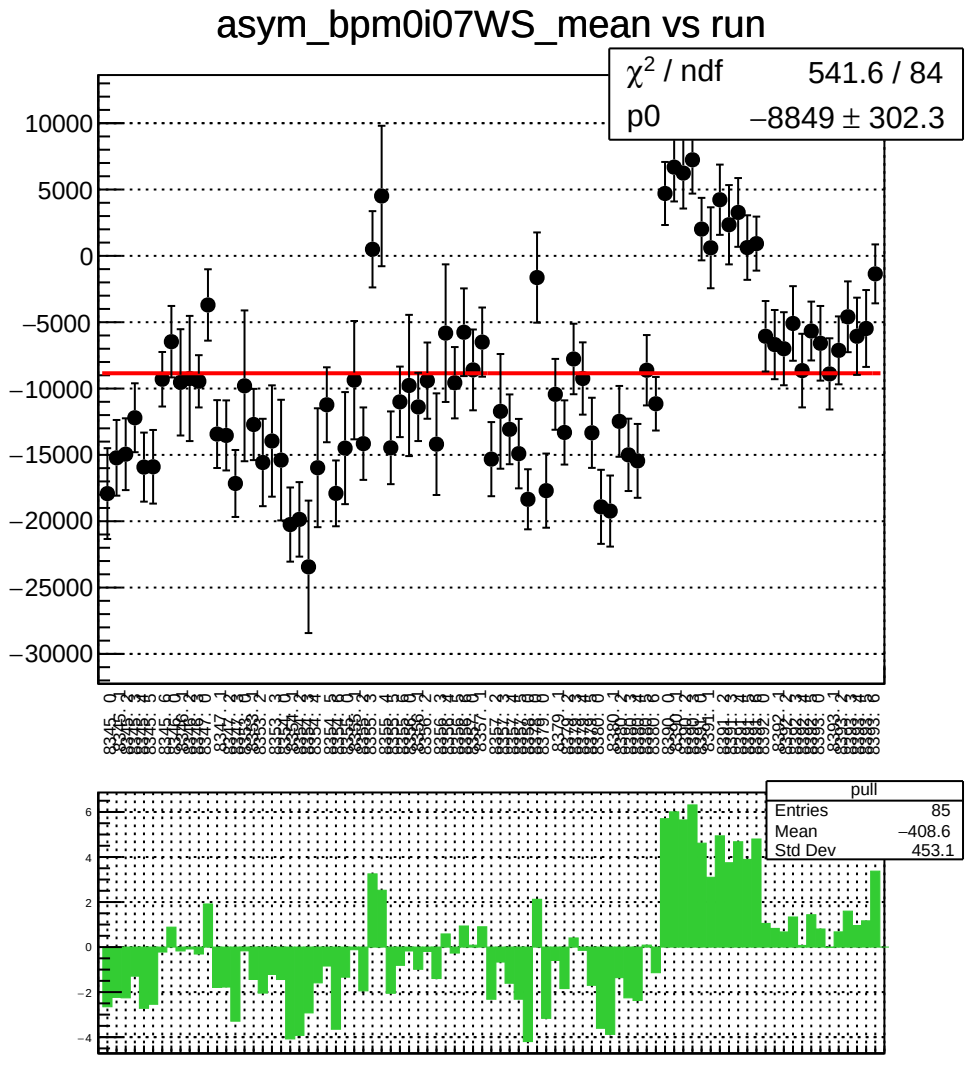

pull1D
Entries 85
Mean −0.06612
Std Dev 3.142

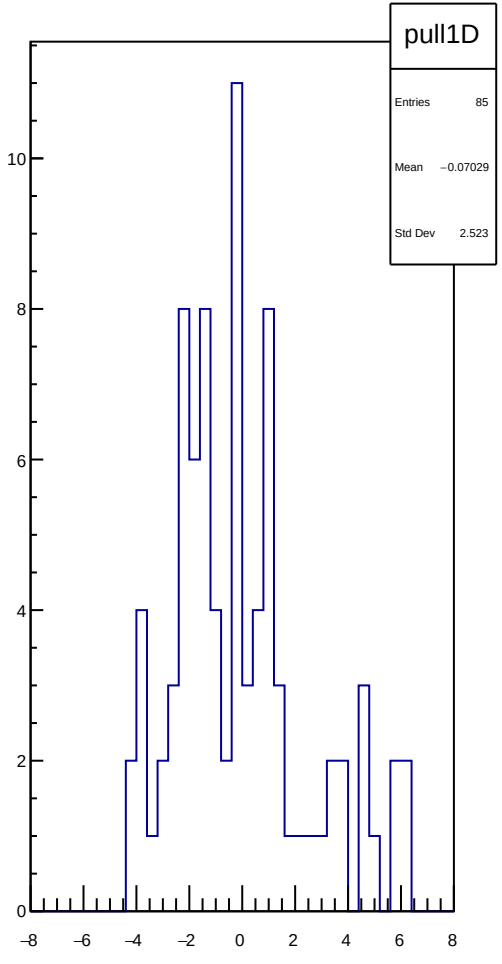

asym_bcm0l02_rms vs run
χ² / ndf 8.82e+04 / 84
p0 209.7 ± 0.1666
550
500
450
400
350
300
250
200
150

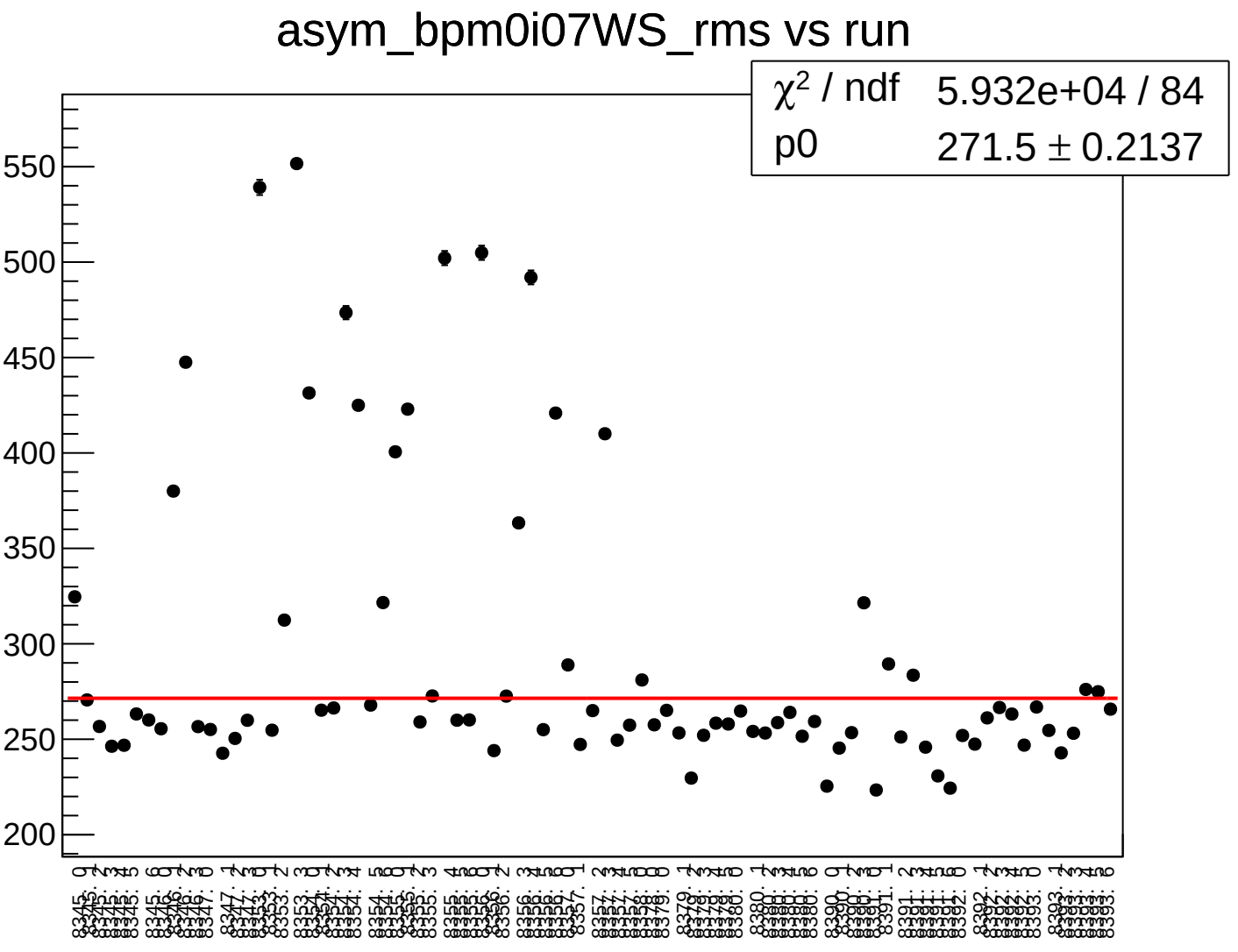

asym_bpm2i01WS_mean vs run
χ² / ndf 1302 / 84
p0 −1753 ± 218.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −323.5
Std Dev 367
8
6
4
2
0
−2
−4
−6
−8

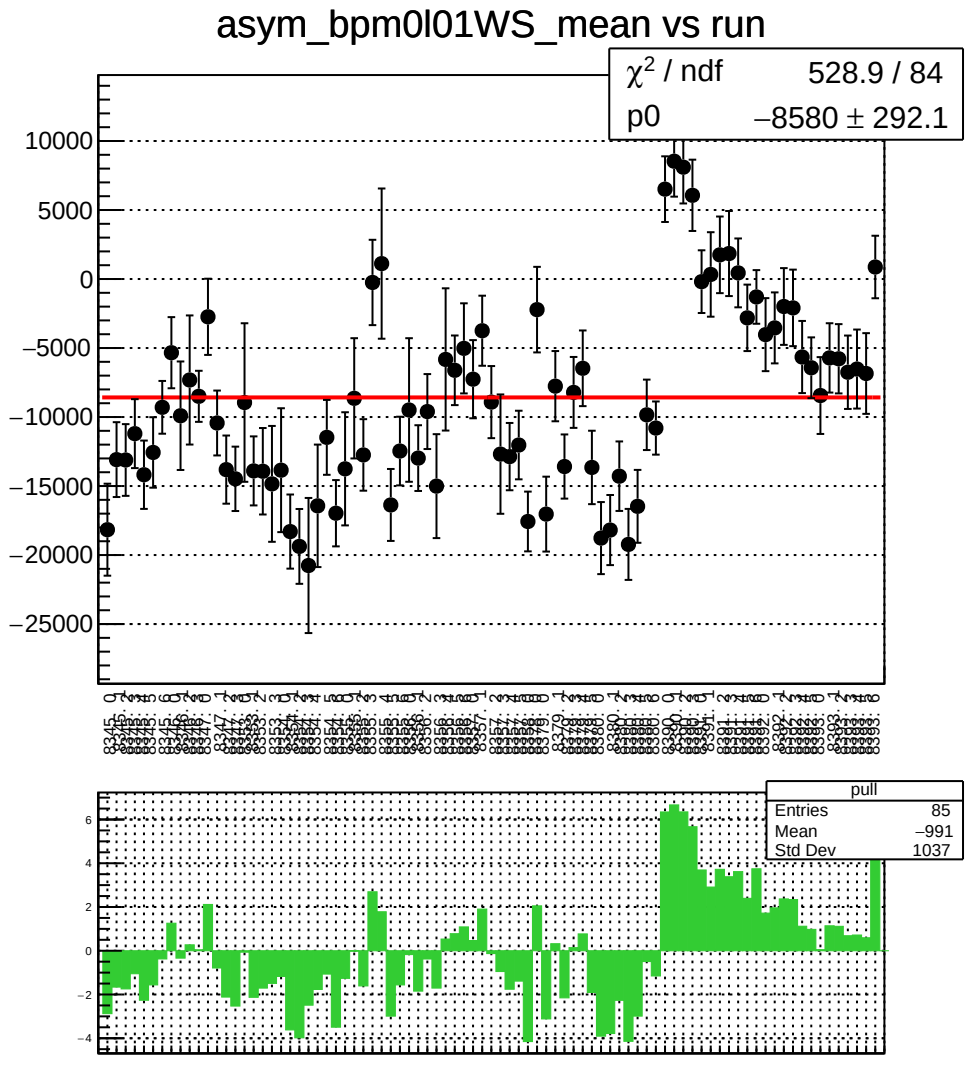

pull1D
Entries 85
Mean −0.4108
Std Dev 3.7
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

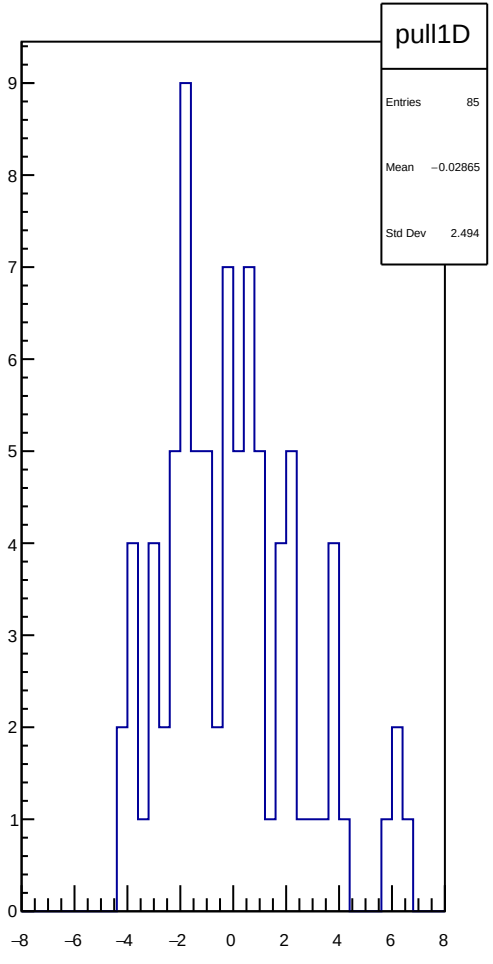

asym_bpm2i01WS_rms vs run
χ^2 / ndf 9.216e+04 / 84
p0 194 ± 0.1543
500
450
400
350
300
250
200
150

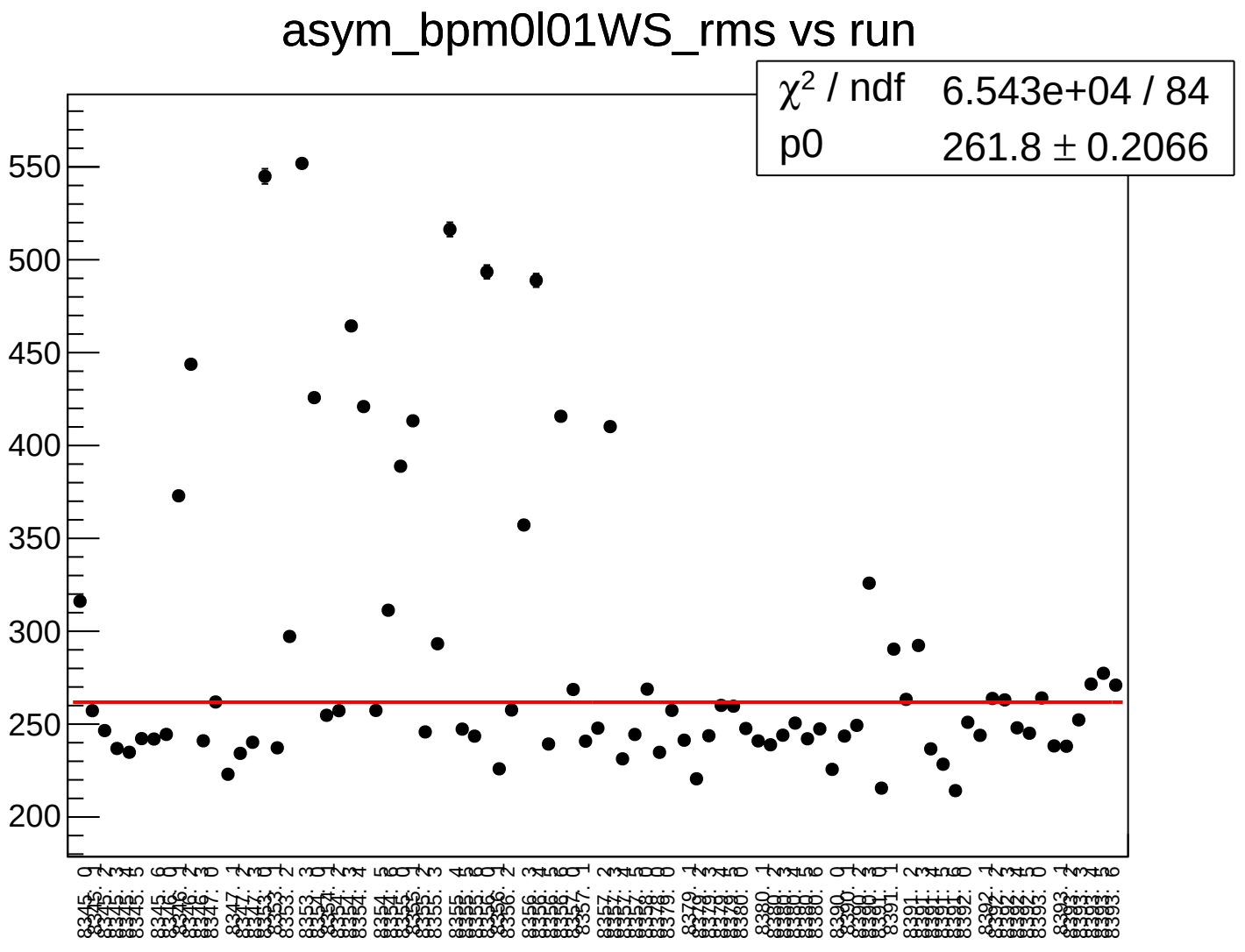

asym_bpm0i07WS_mean vs run
χ² / ndf 541.6 / 84
p0 −8849 ± 302.3
pull
Entries 85
Mean −408.6
Std Dev 453.1

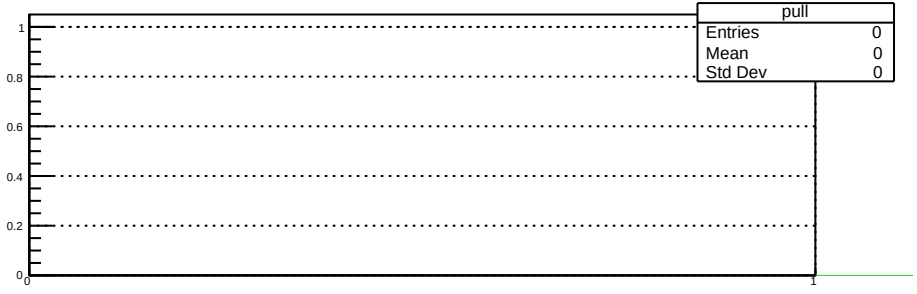

pull1D
Entries 85
Mean −0.07029
Std Dev 2.523

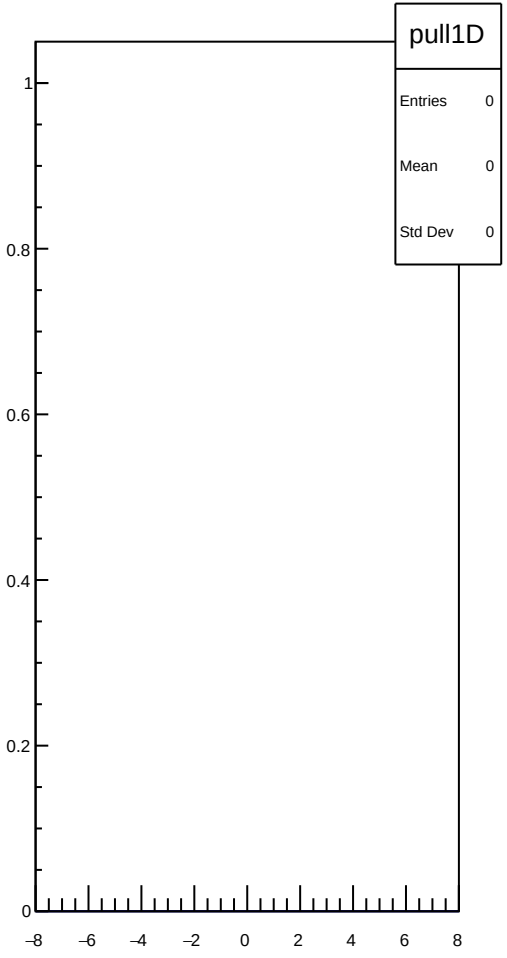

asym_bpm0i07WS_rms vs run
χ² / ndf 5.932e+04 / 84
p0 271.5 ± 0.2137
550
500
450
400
350
300
250
200

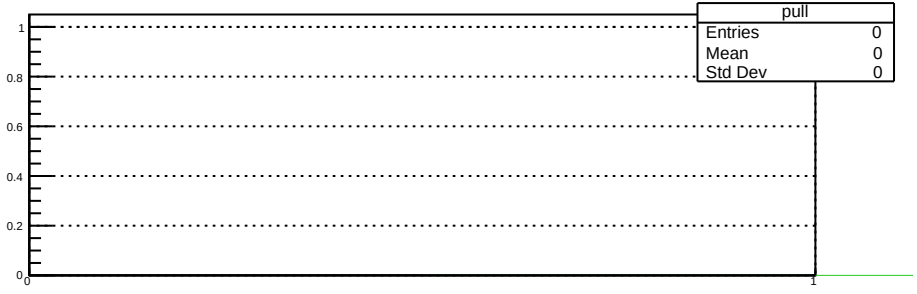

asym_bpm0l01WS_mean vs run
χ² / ndf 528.9 / 84
p0 −8580 ± 292.1
pull
Entries 85
Mean −991
Std Dev 1037

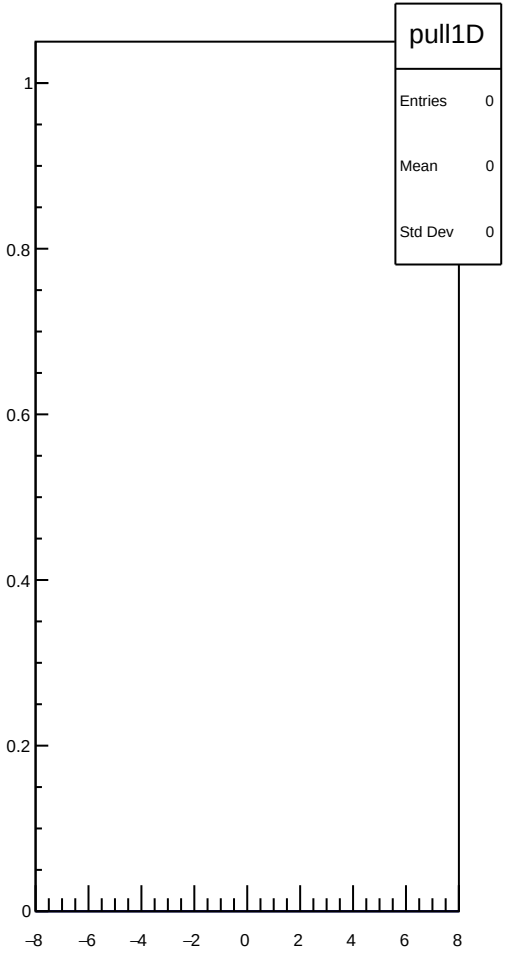

pull1D
Entries 85
Mean −0.02865
Std Dev 2.494

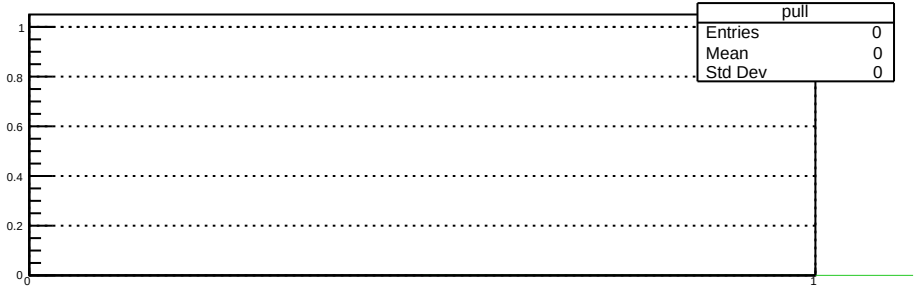

asym_bpm0l01WS_rms vs run
χ² / ndf 6.543e+04 / 84
p0 261.8 ± 0.2066
550
500
450
400
350
300
250
200

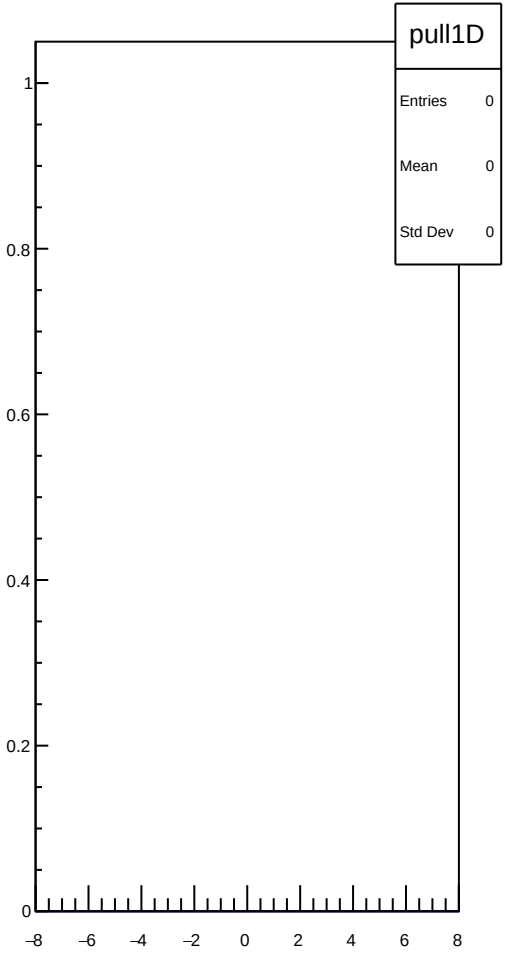

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

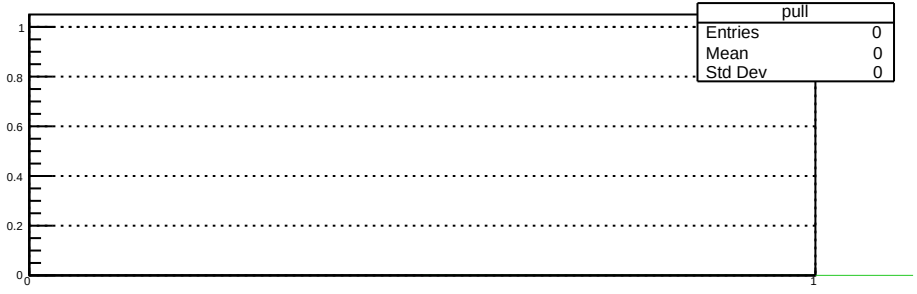

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

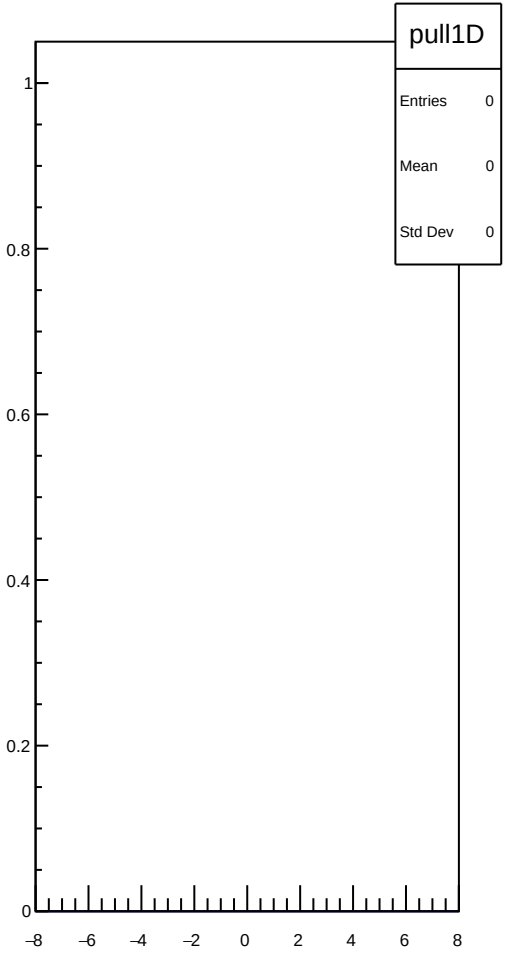

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

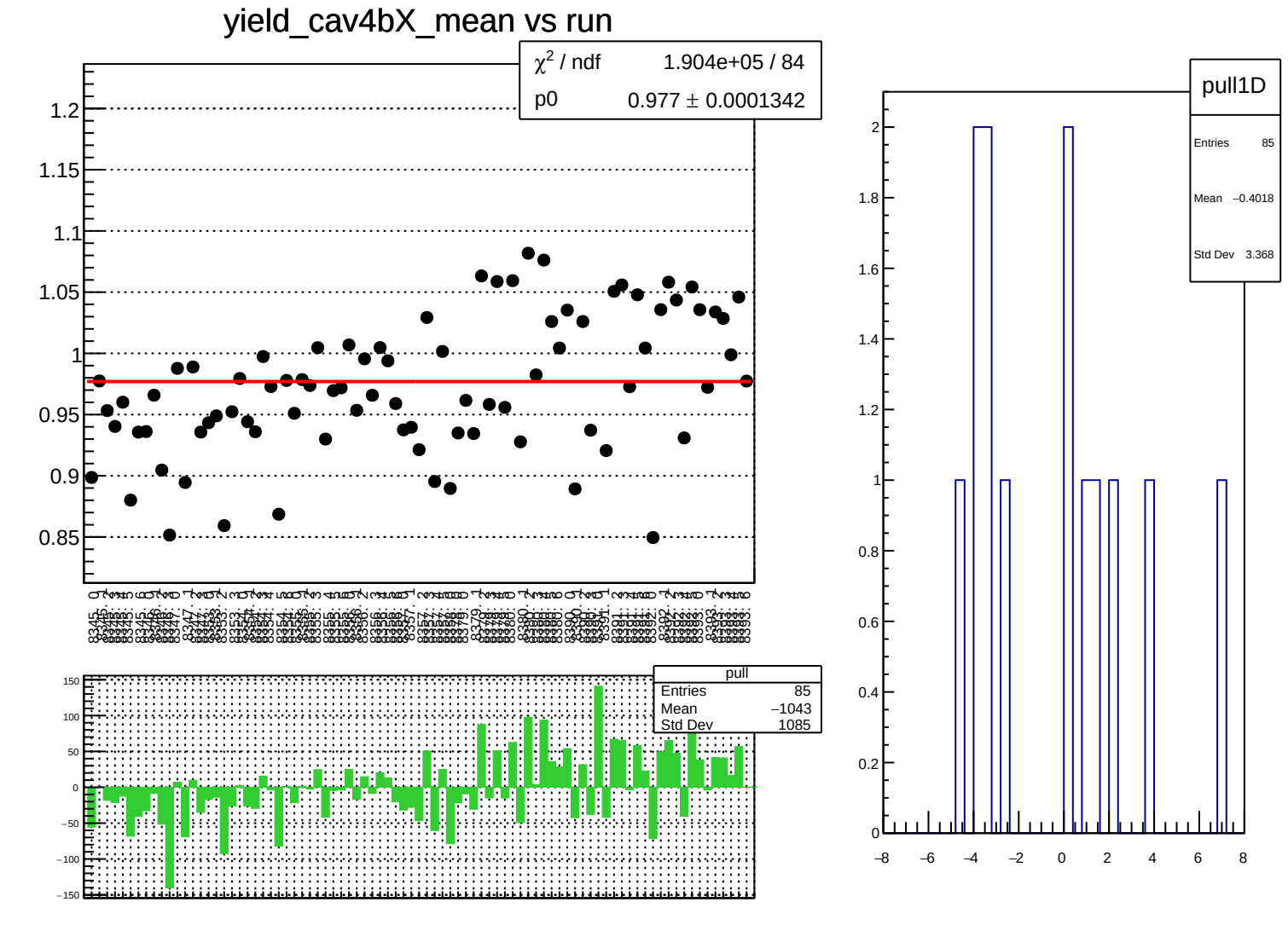

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

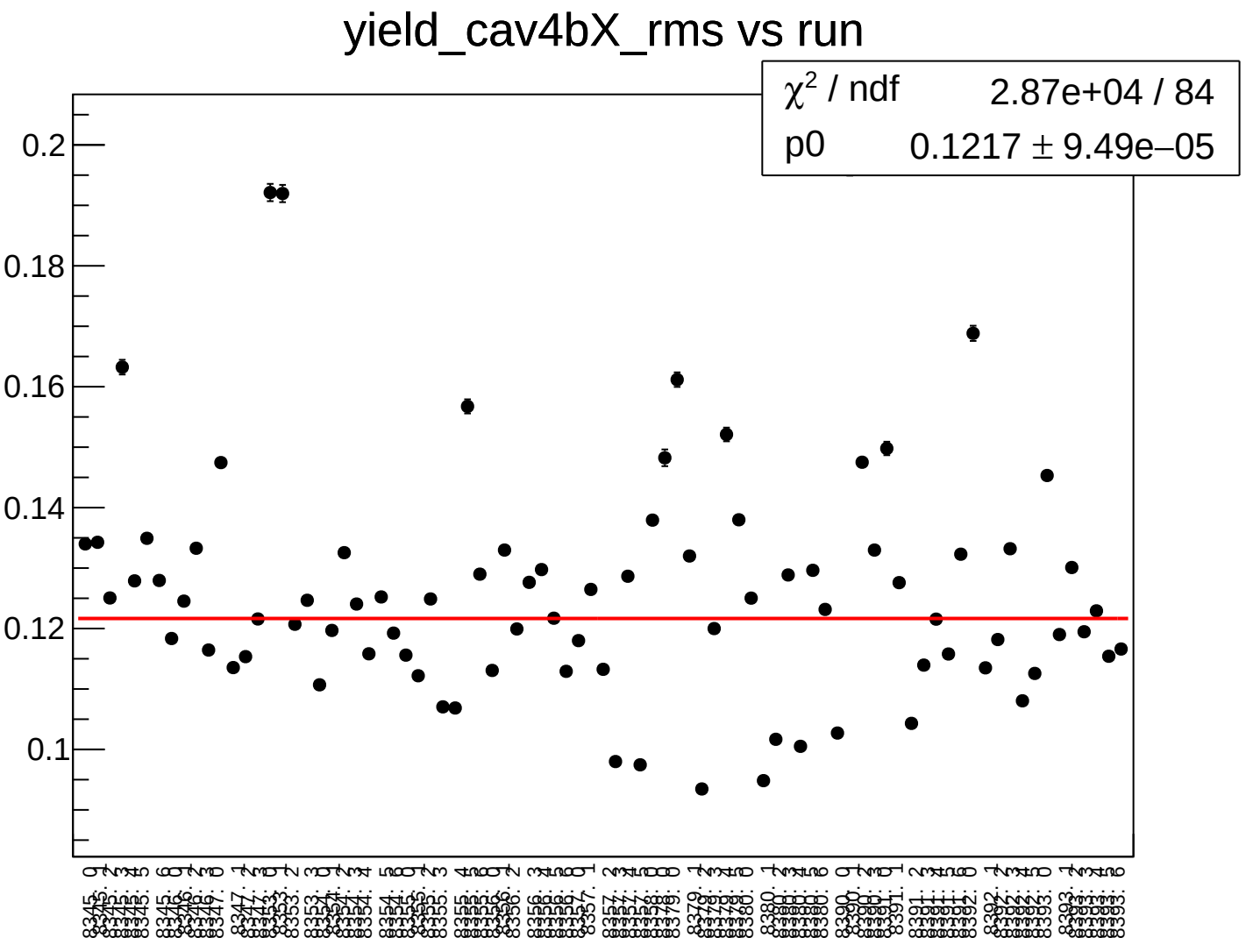

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

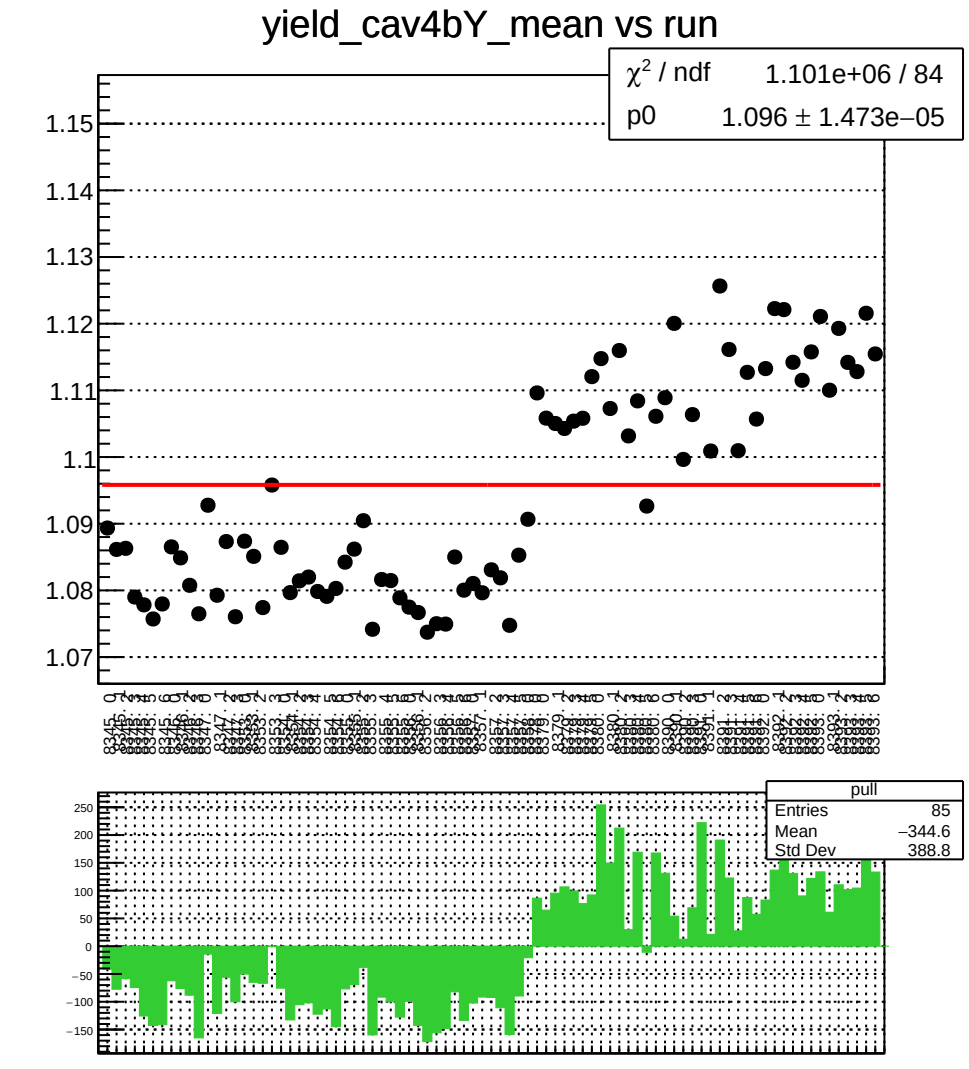

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

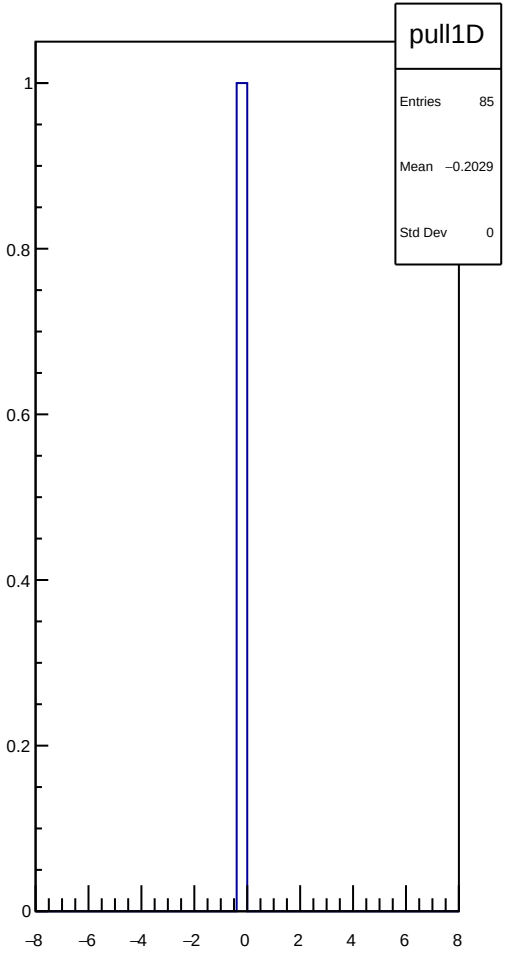

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

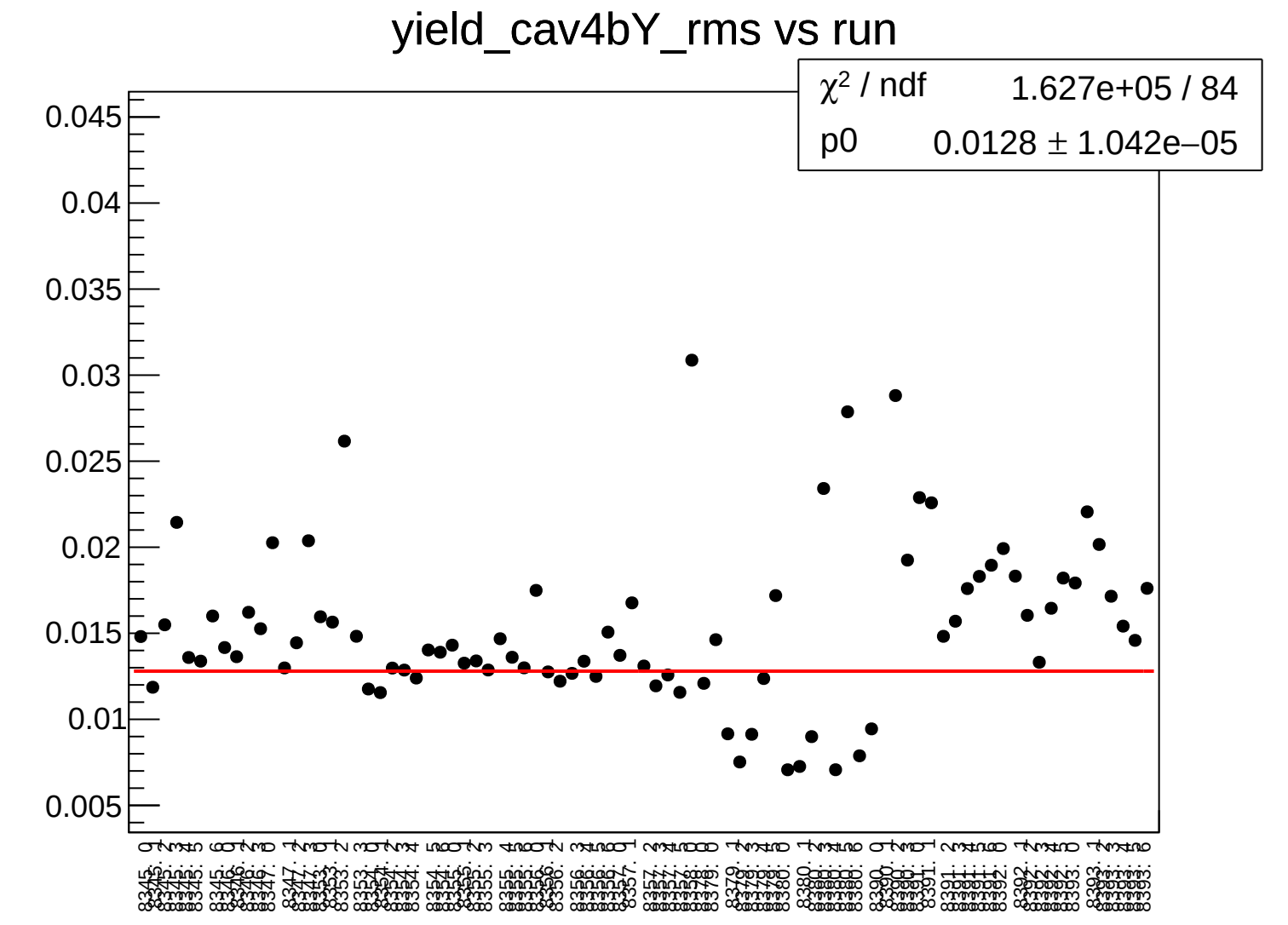

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

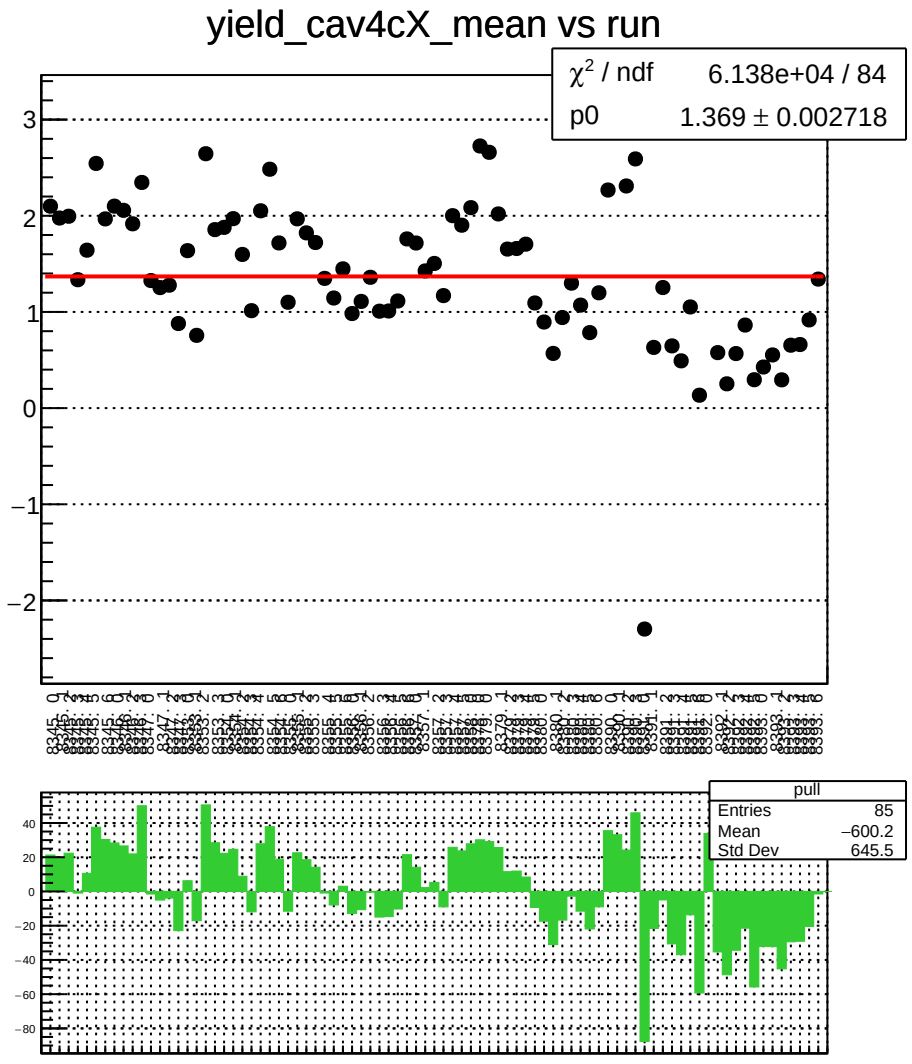

yield_cav4bX_mean vs run
χ² / ndf 1.904e+05 / 84
p0 0.977 ± 0.0001342
pull
Entries 85
Mean −1043
Std Dev 1085
pull1D
Entries 85
Mean −0.4018
Std Dev 3.368

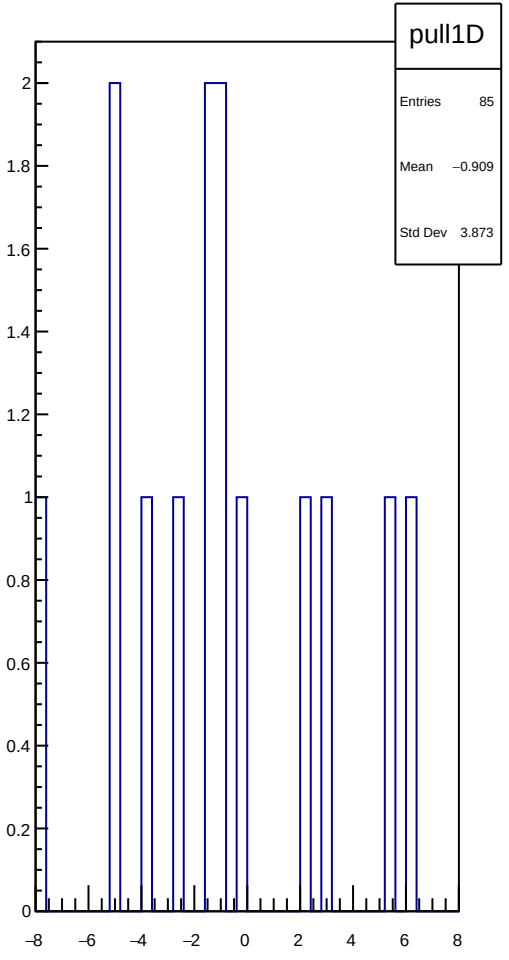

yield_cav4bX_rms vs run
χ² / ndf 2.87e+04 / 84
p0 0.1217 ± 9.49e−05
0.2
0.18
0.16
0.14
0.12
0.1

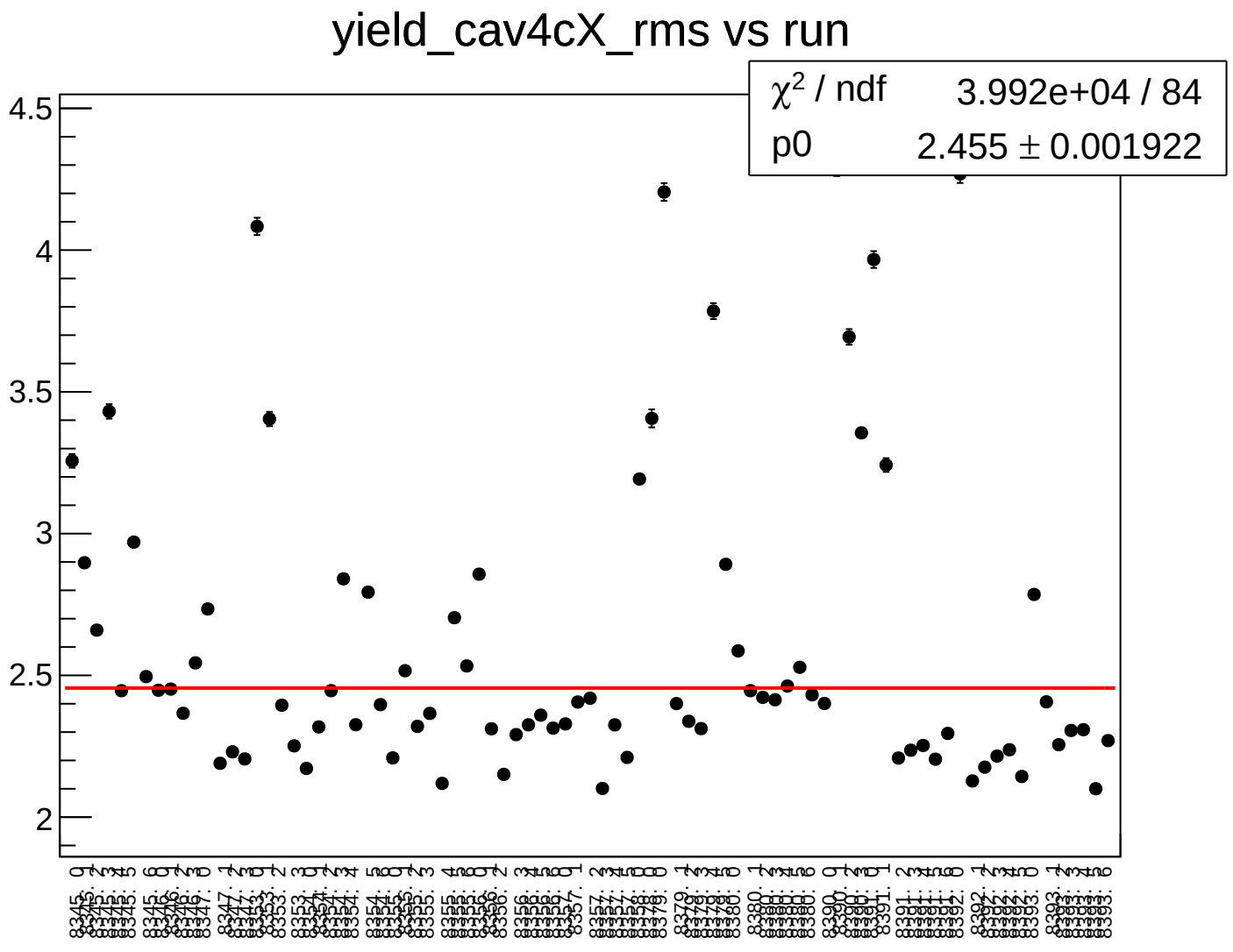

yield_cav4bY_mean vs run
χ² / ndf 1.101e+06 / 84
p0 1.096 ± 1.473e−05
pull
Entries 85
Mean −344.6
Std Dev 388.8

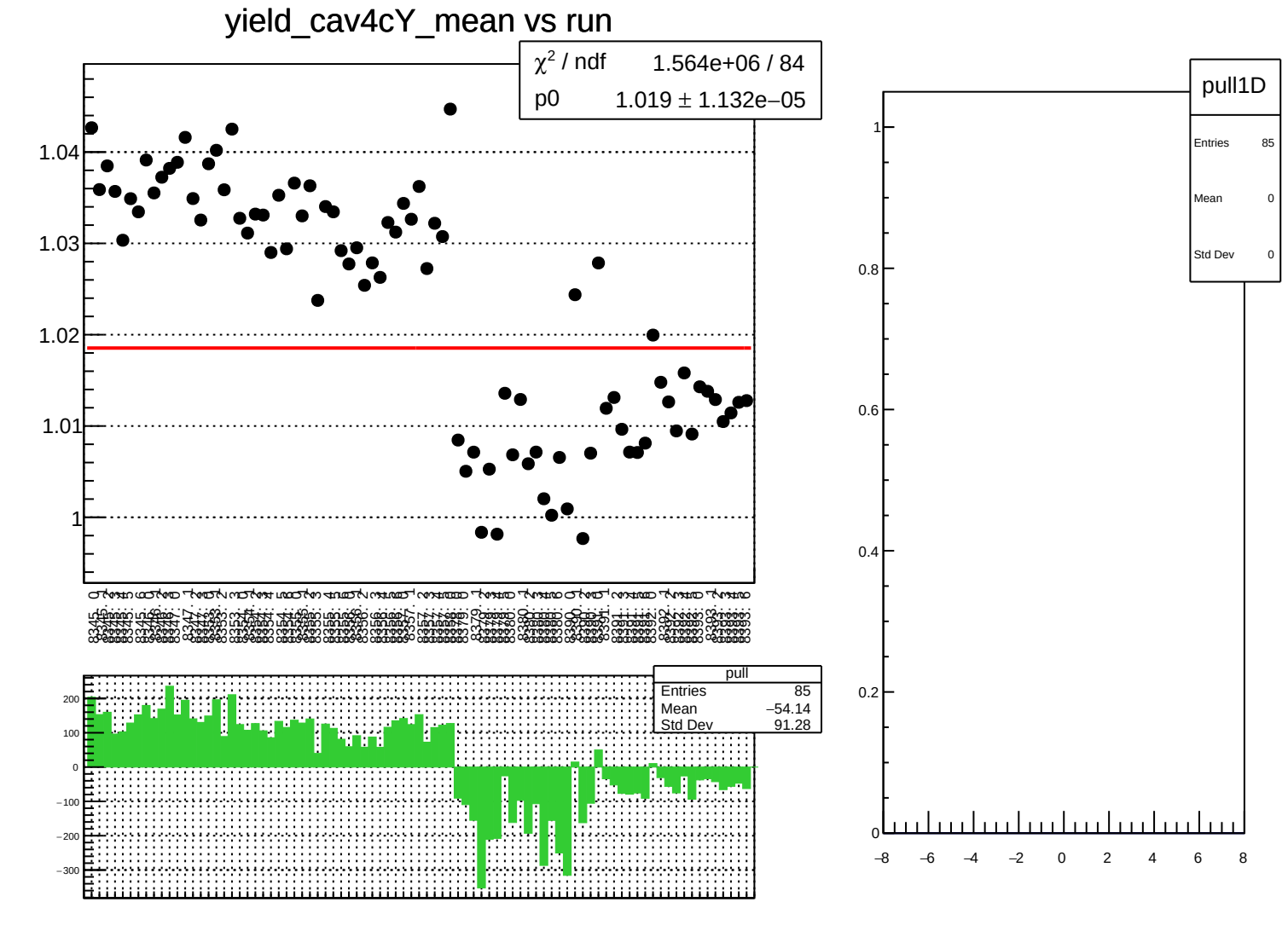

pull1D
Entries 85
Mean −0.2029
Std Dev 0

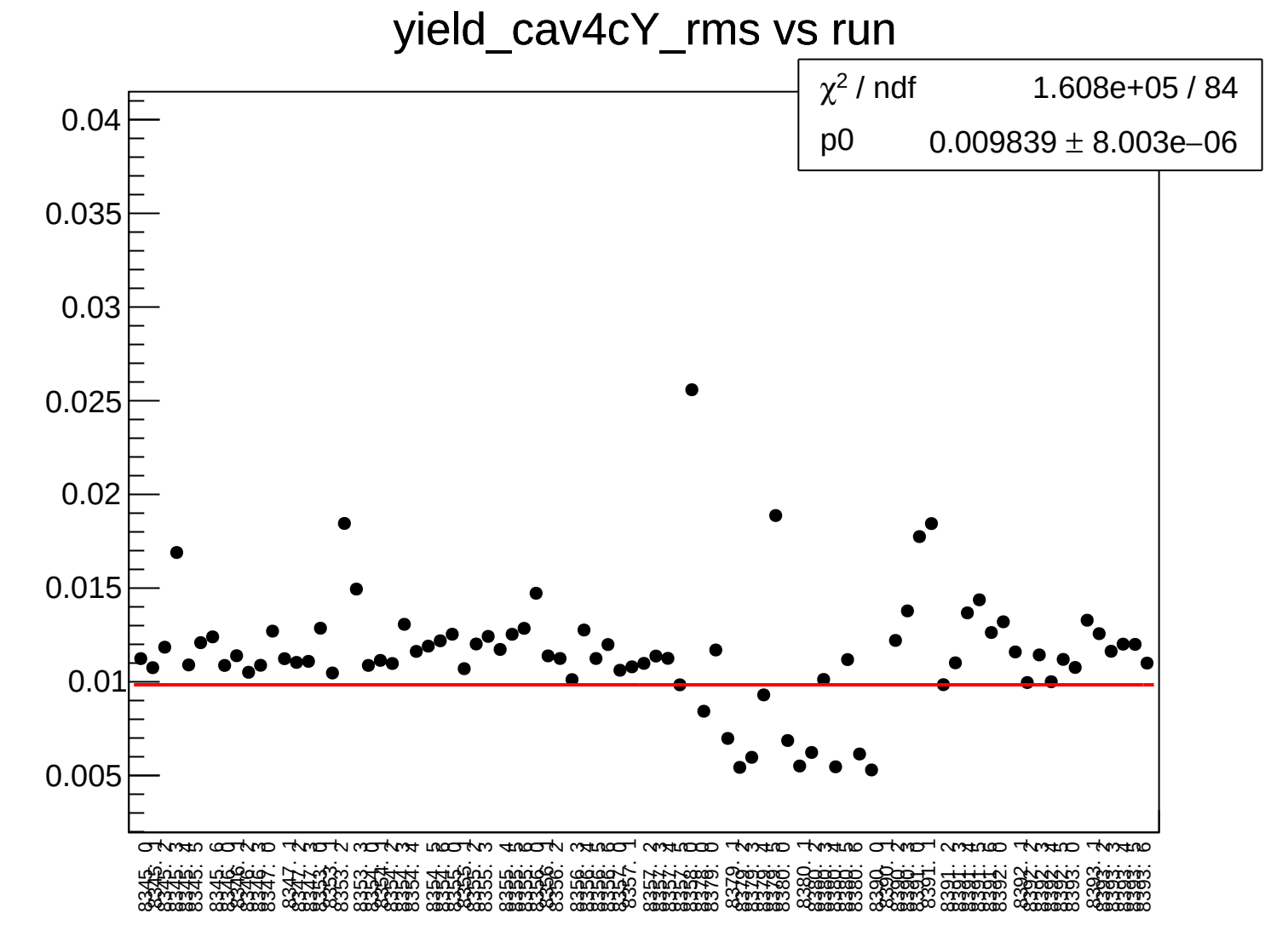

yield_cav4bY_rms vs run
χ² / ndf 1.627e+05 / 84
p0 0.0128 ± 1.042e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

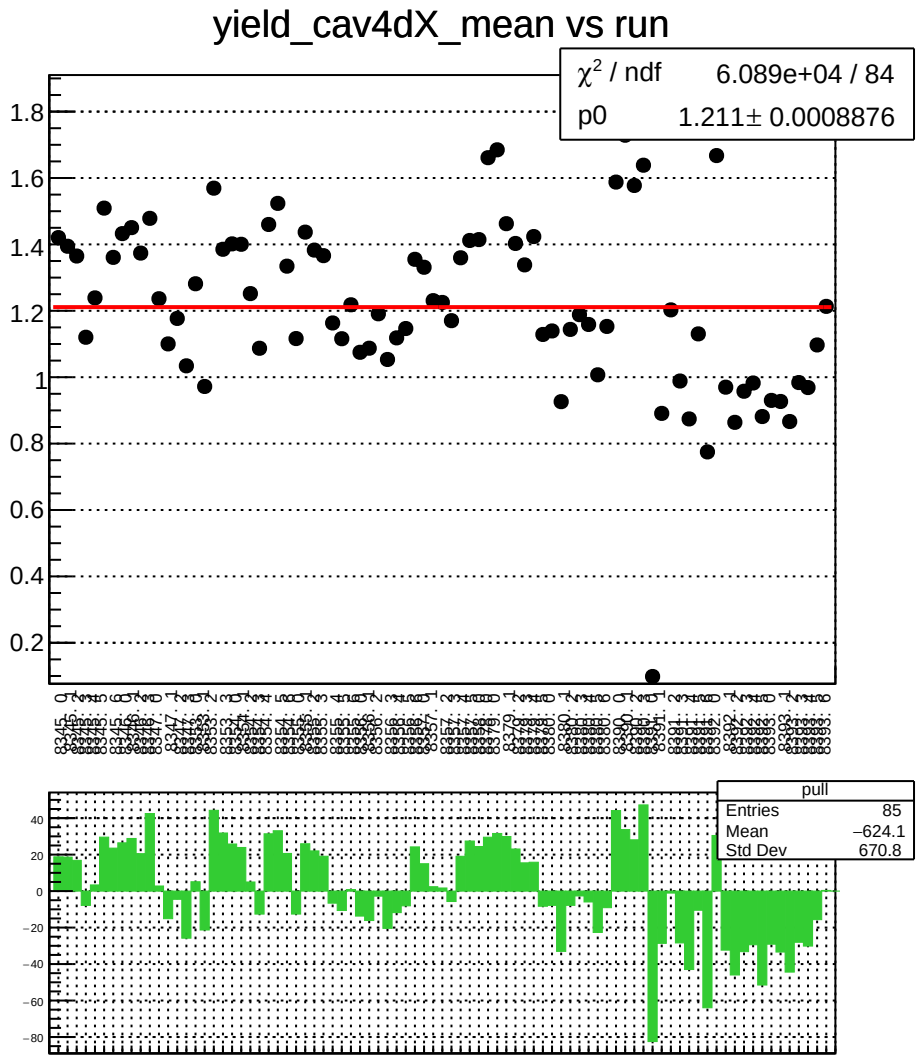

yield_cav4cX_mean vs run
χ² / ndf 6.138e+04 / 84
p0 1.369 ± 0.002718
pull
Entries 85
Mean −600.2
Std Dev 645.5

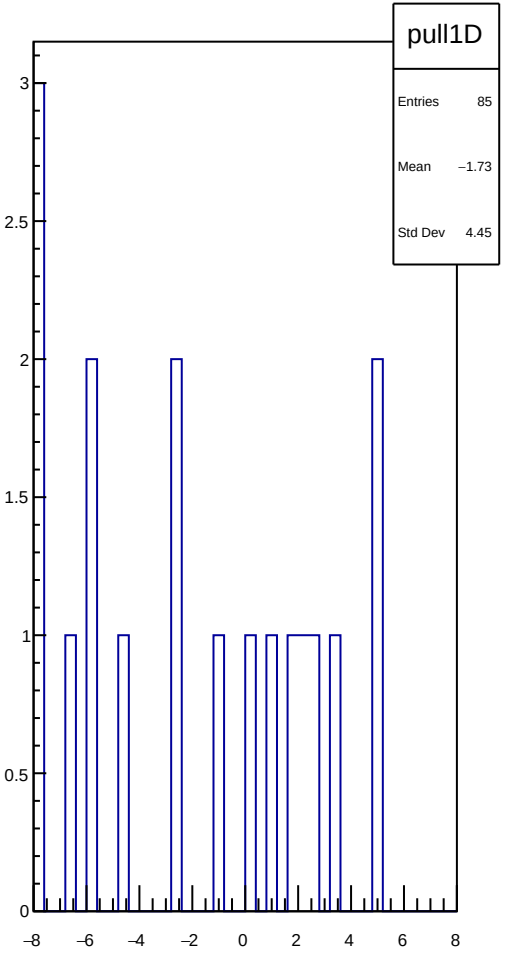

pull1D
Entries 85
Mean −0.909
Std Dev 3.873

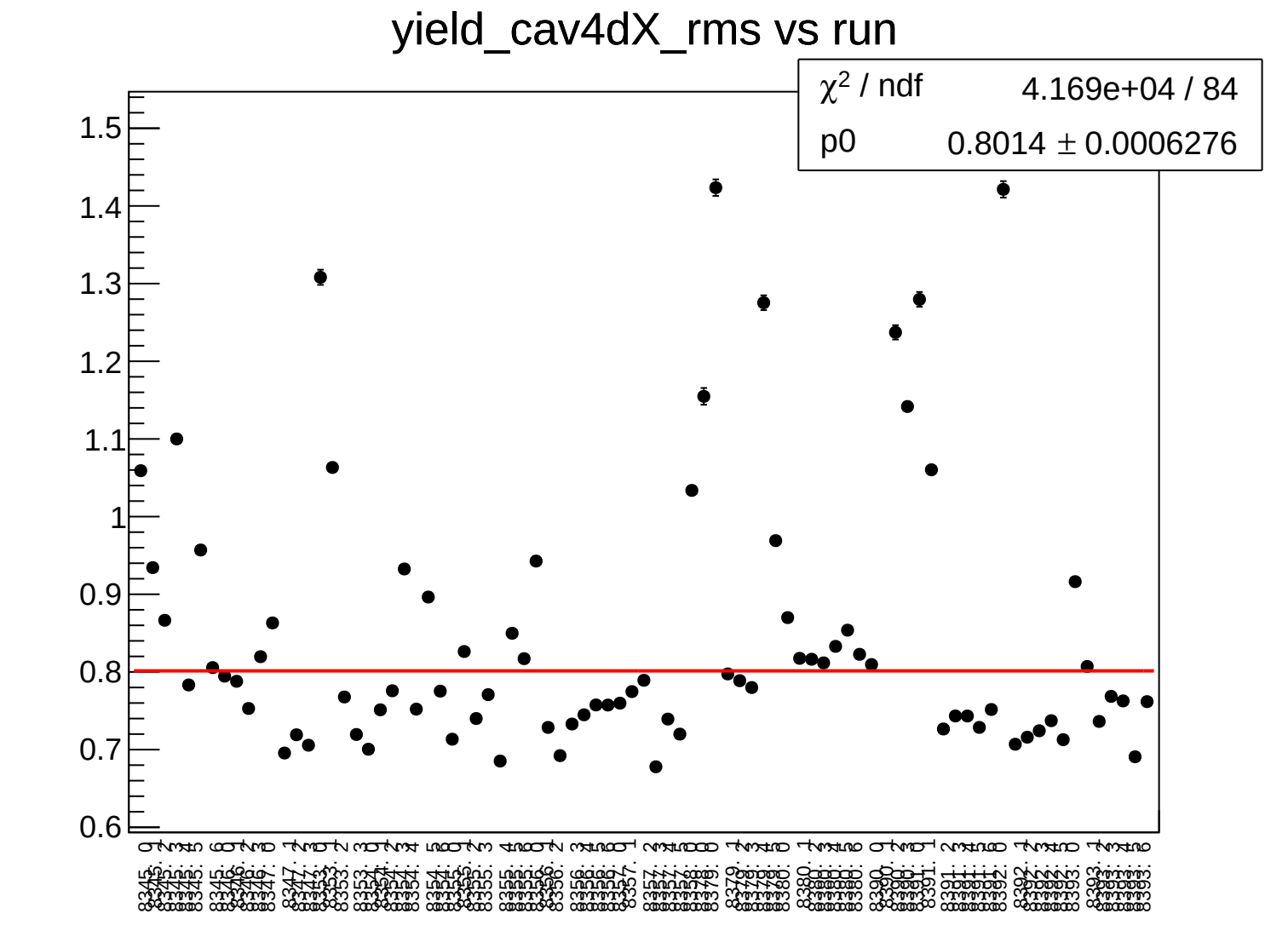

yield_cav4cX_rms vs run
χ^2 / ndf 3.992e+04 / 84
p0 2.455 ± 0.001922
4.5
4
3.5
3
2.5
2

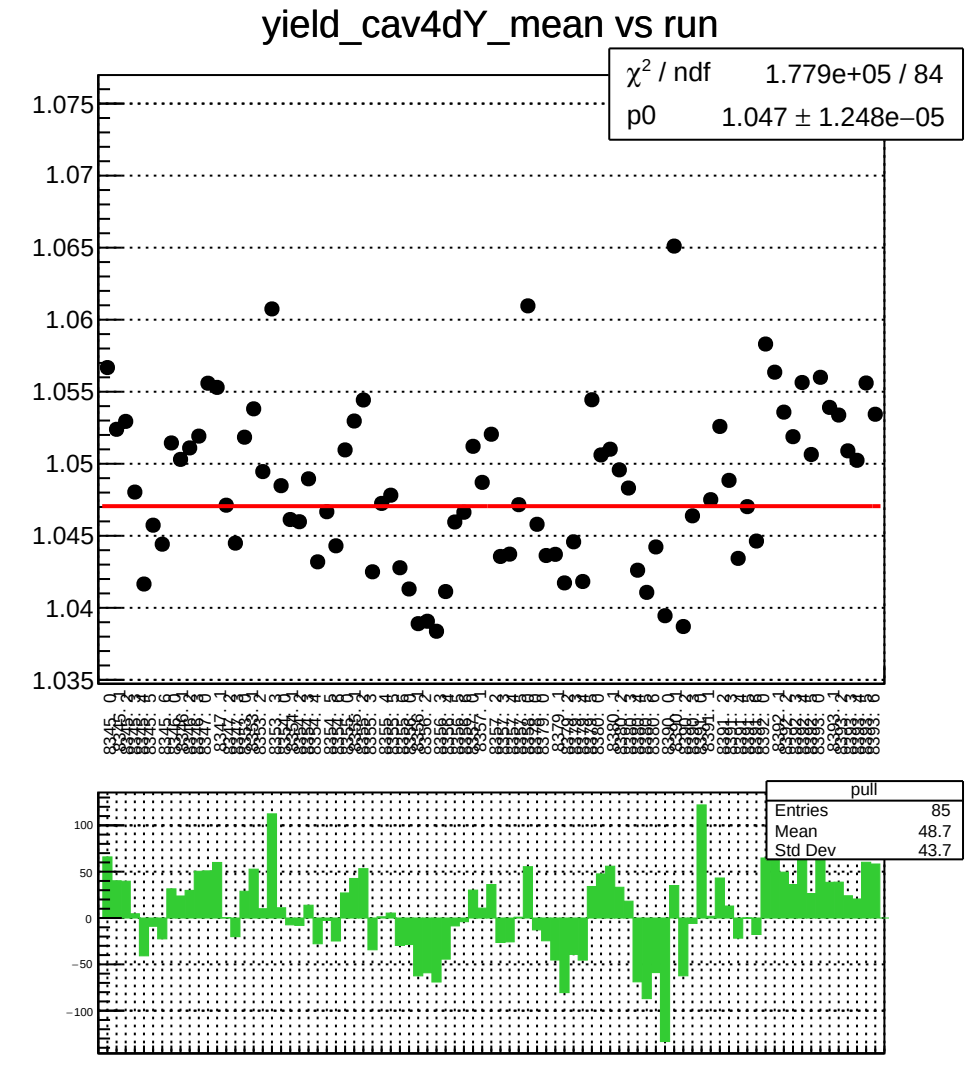

yield_cav4cY_mean vs run
χ² / ndf 1.564e+06 / 84
p0 1.019 ± 1.132e−05
1.04
1.03
1.02
1.01
1
pull
Entries 85
Mean −54.14
Std Dev 91.28
200
100
0
−100
−200
−300
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

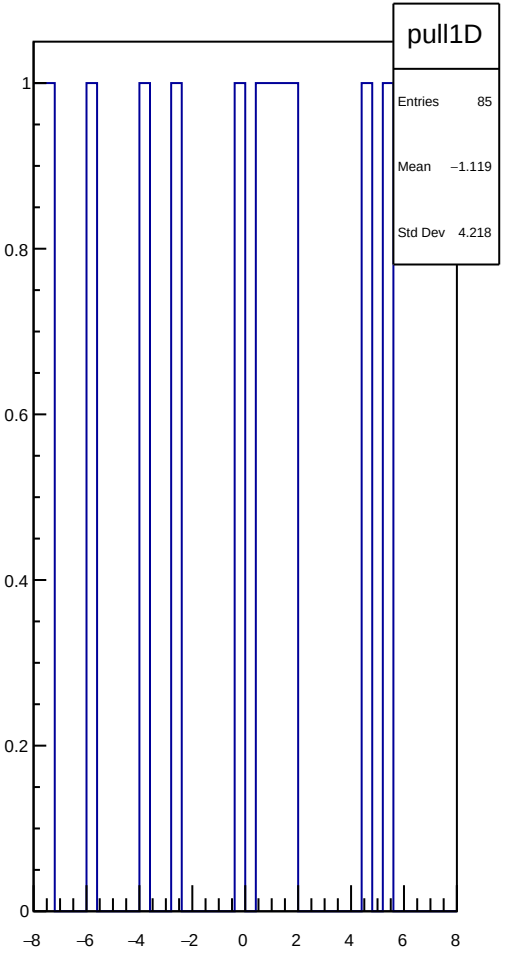

yield_cav4cY_rms vs run
χ² / ndf 1.608e+05 / 84
p0 0.009839 ± 8.003e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

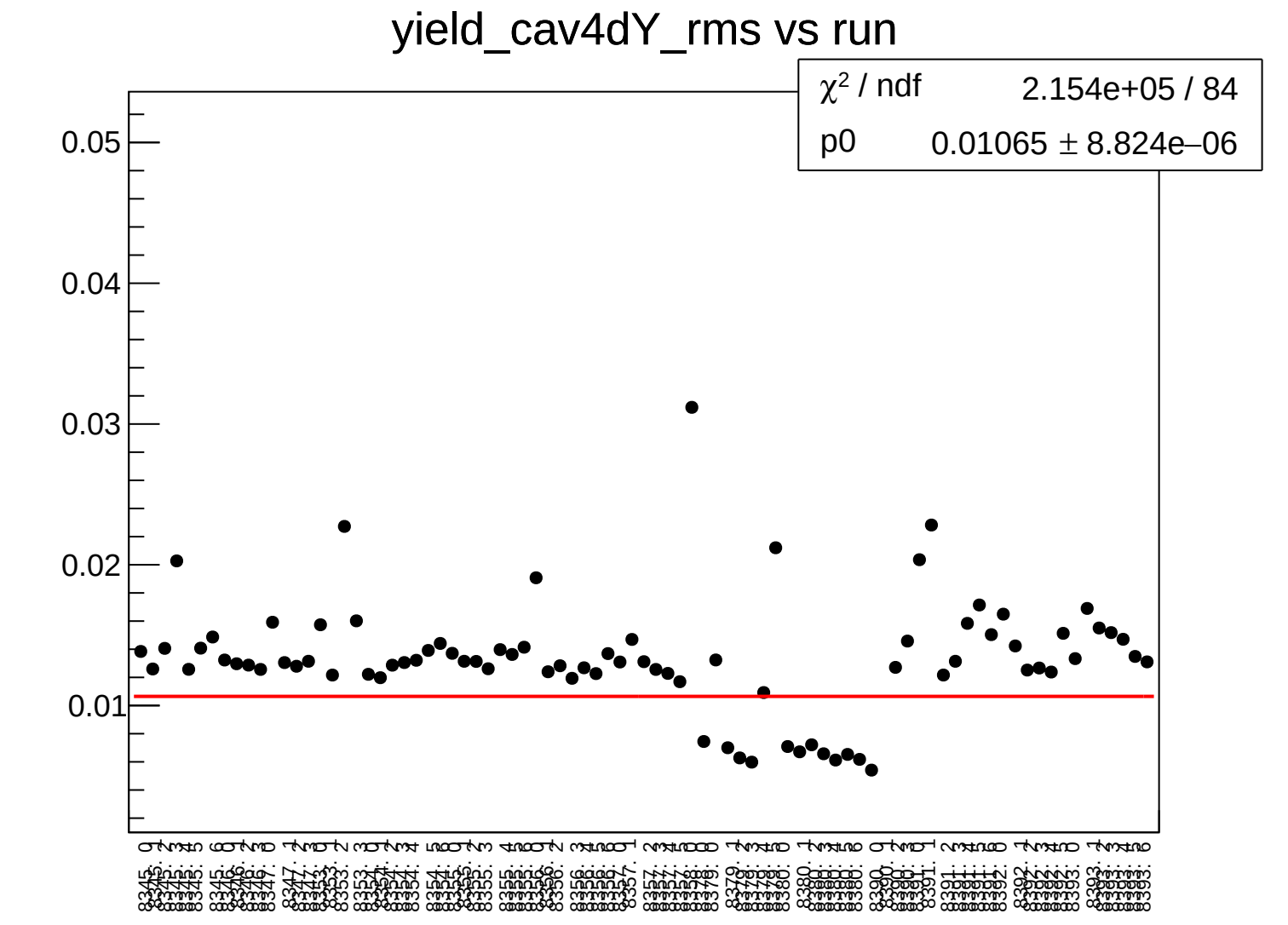

yield_cav4dX_mean vs run
χ² / ndf 6.089e+04 / 84
p0 1.211± 0.0008876
pull
Entries 85
Mean −624.1
Std Dev 670.8

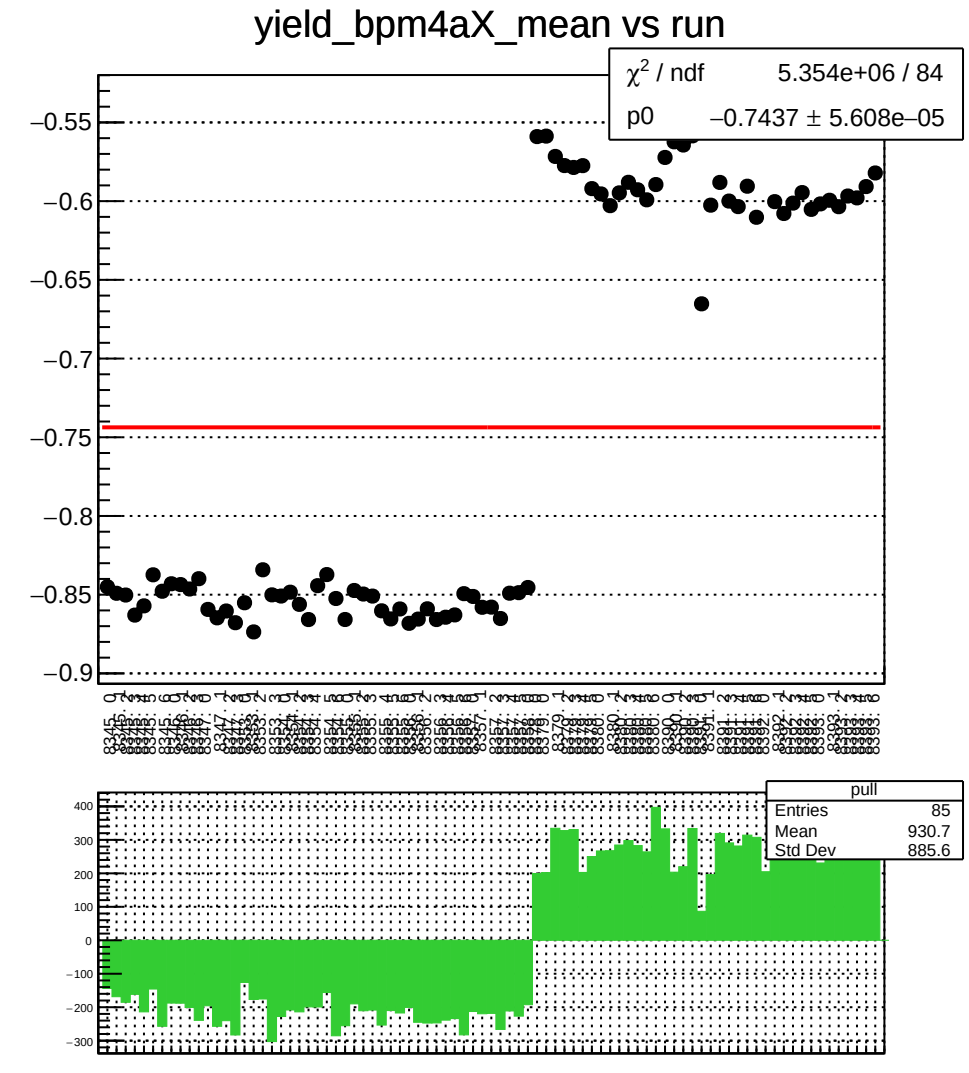

pull1D
Entries 85
Mean −1.73
Std Dev 4.45

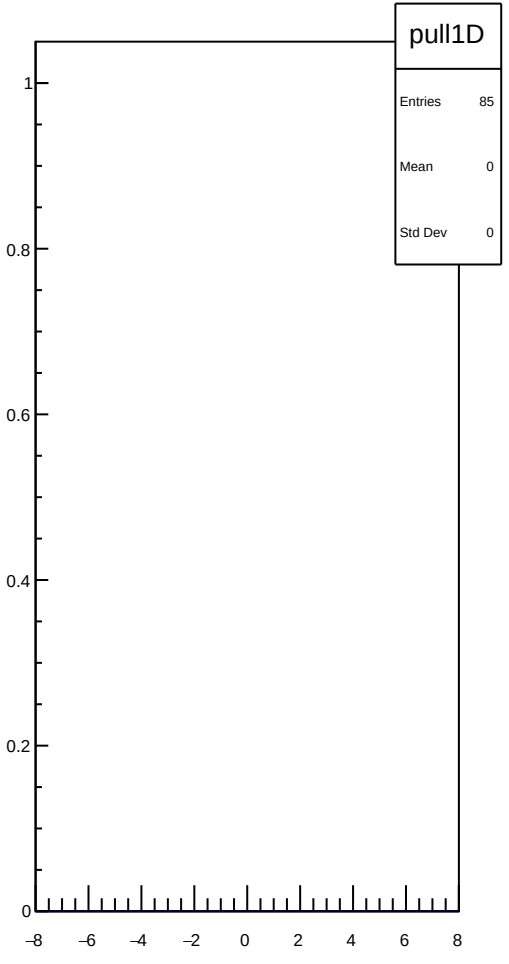

yield_cav4dX_rms vs run
χ² / ndf 4.169e+04 / 84
p0 0.8014 ± 0.0006276
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6

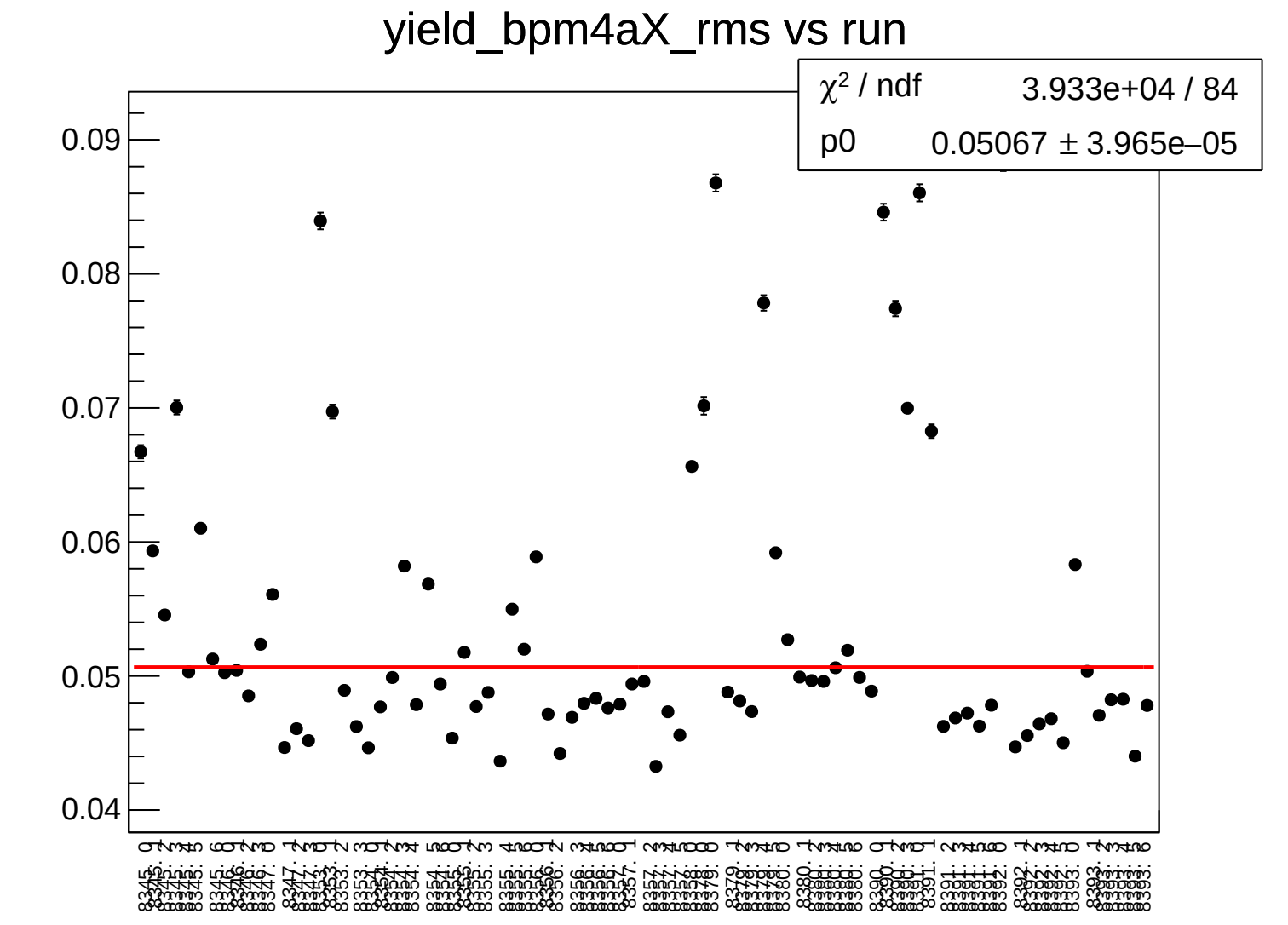

yield_cav4dY_mean vs run
χ² / ndf 1.779e+05 / 84
p0 1.047 ± 1.248e−05
1.075
1.07
1.065
1.06
1.055
1.05
1.045
1.04
1.035
pull
Entries 85
Mean 48.7
Std Dev 43.7
100
50
0
−50
−100

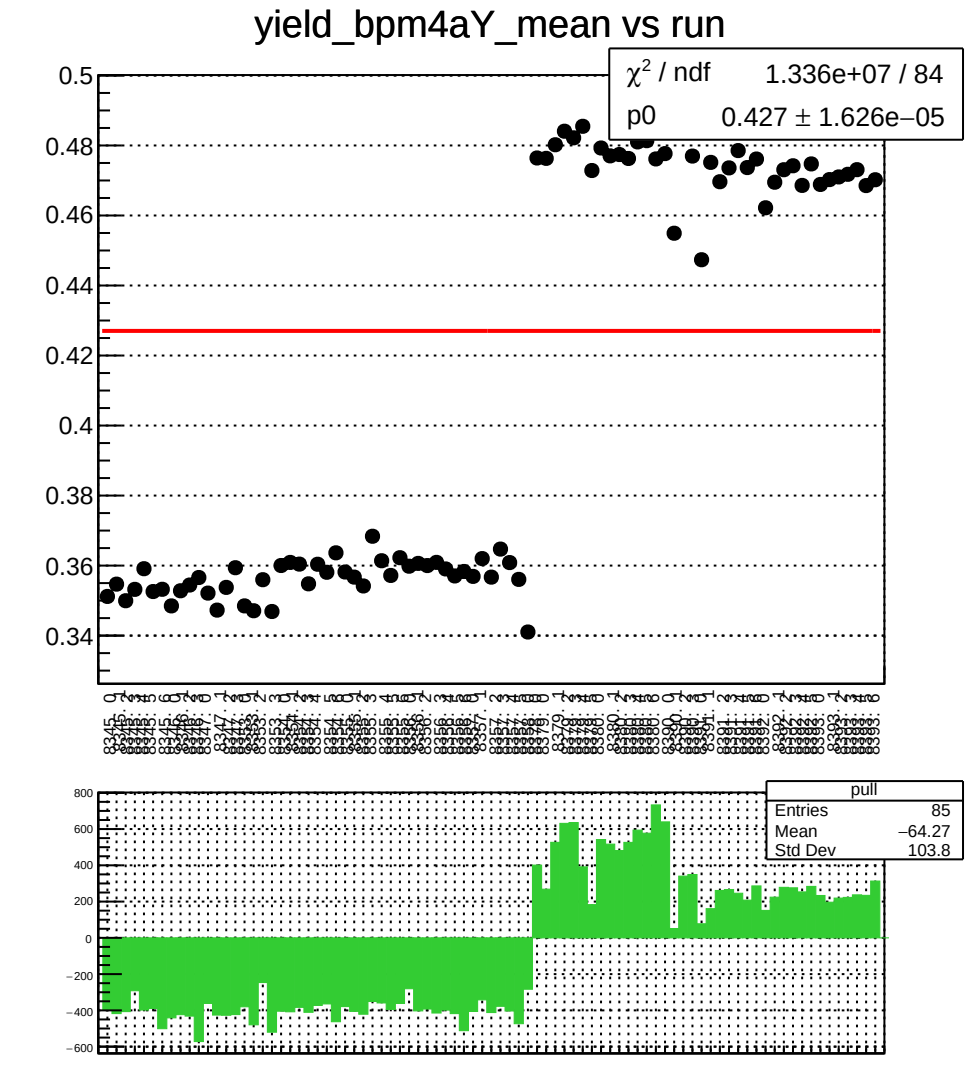

pull1D
Entries 85
Mean −1.119
Std Dev 4.218
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

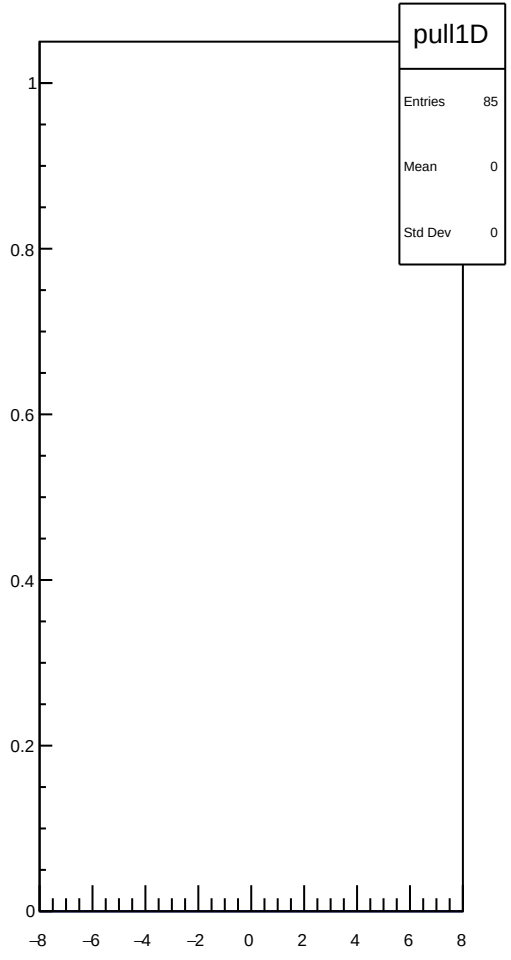

yield_cav4dY_rms vs run
χ² / ndf 2.154e+05 / 84
p0 0.01065 ± 8.824e−06
0.05
0.04
0.03
0.02
0.01

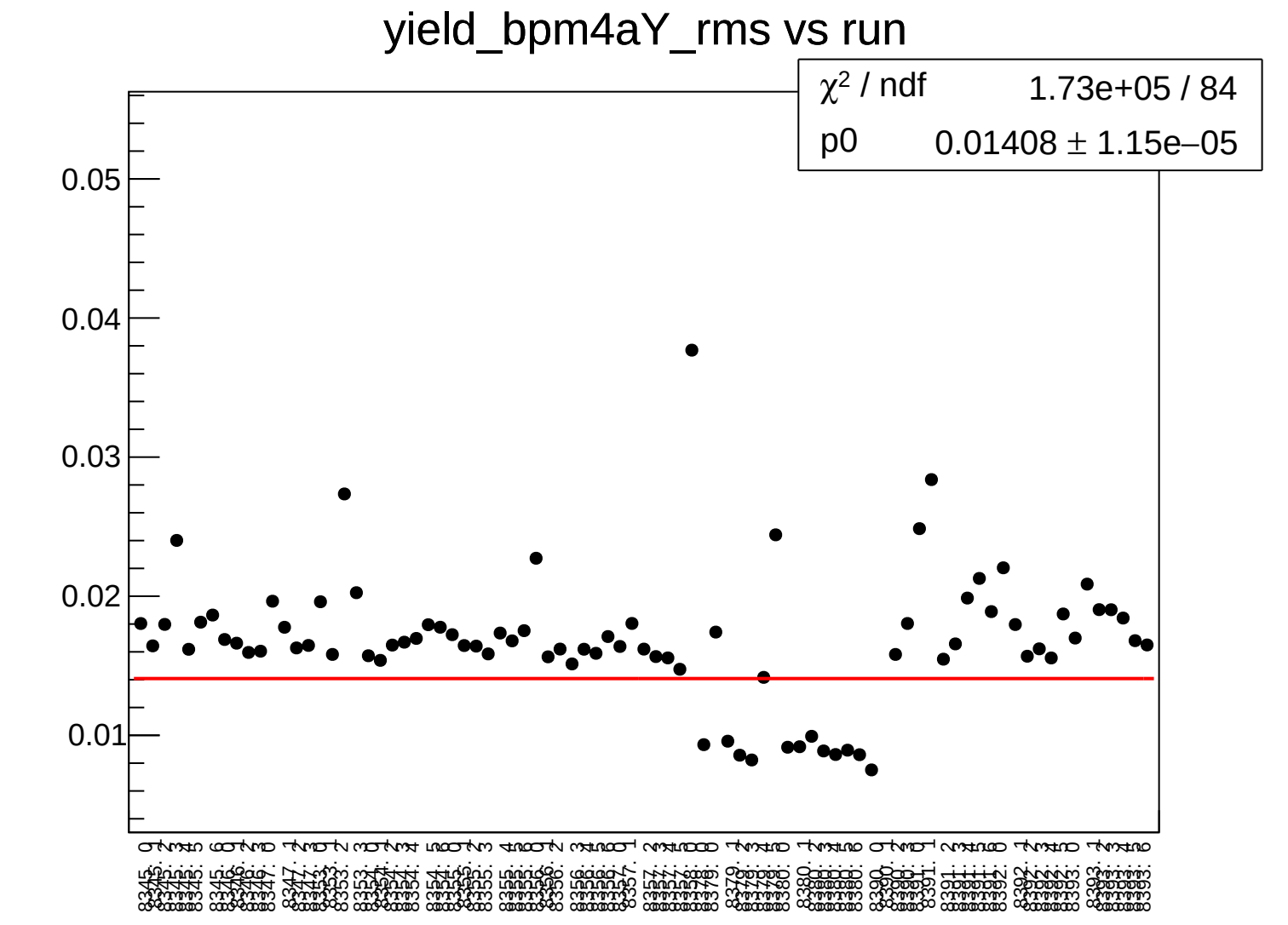

yield_bpm4aX_mean vs run
χ² / ndf 5.354e+06 / 84
p0 −0.7437 ± 5.608e−05
−0.55
−0.6
−0.65
−0.7
−0.75
−0.8
−0.85
−0.9
pull
Entries 85
Mean 930.7
Std Dev 885.6
400
300
200
100
0
−100
−200
−300

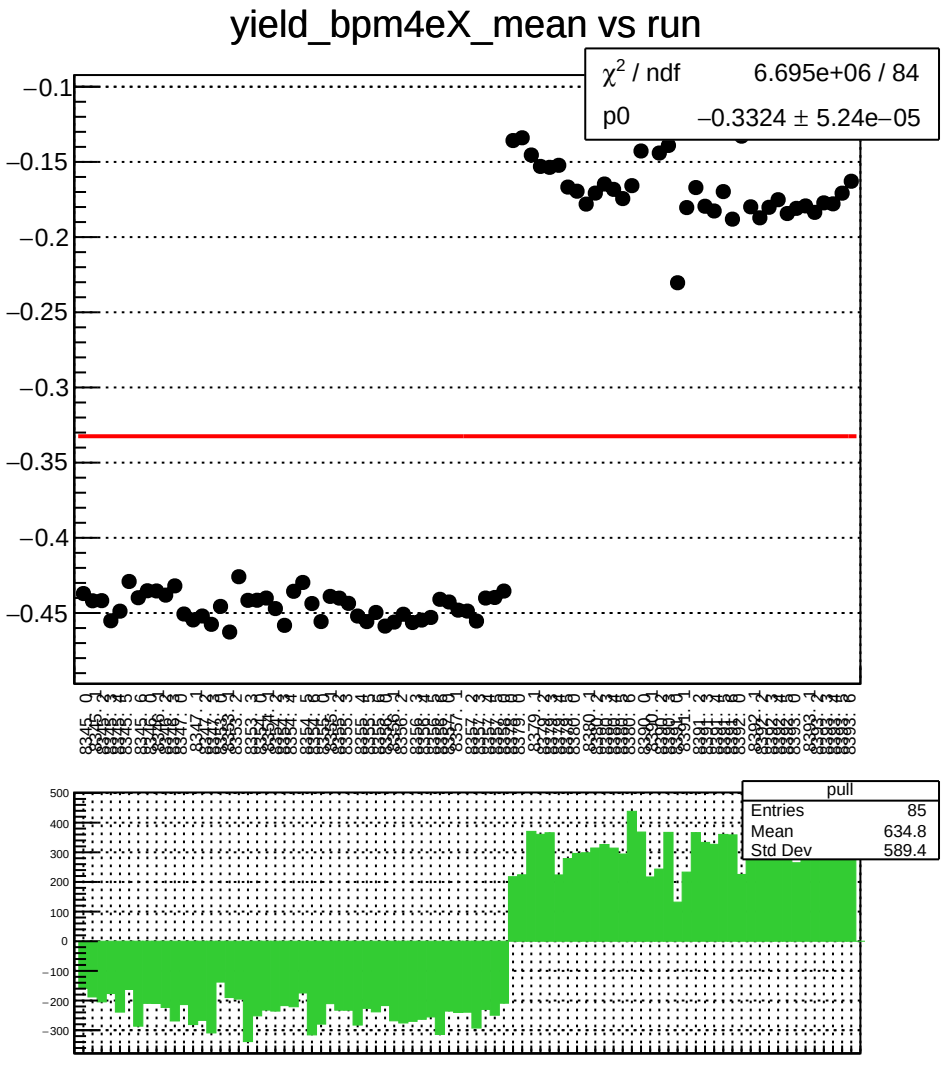

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

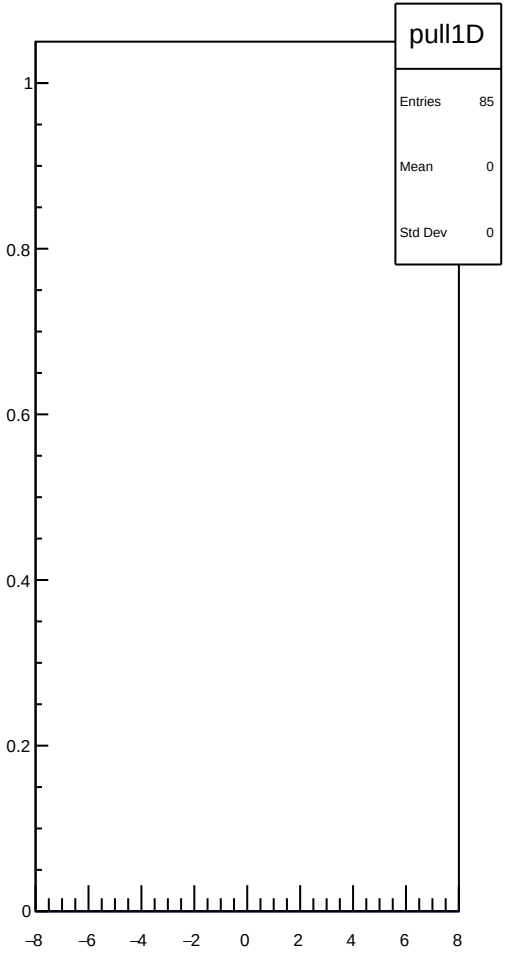

yield_bpm4aX_rms vs run
χ² / ndf 3.933e+04 / 84
p0 0.05067 ± 3.965e–05
0.09
0.08
0.07
0.06
0.05
0.04

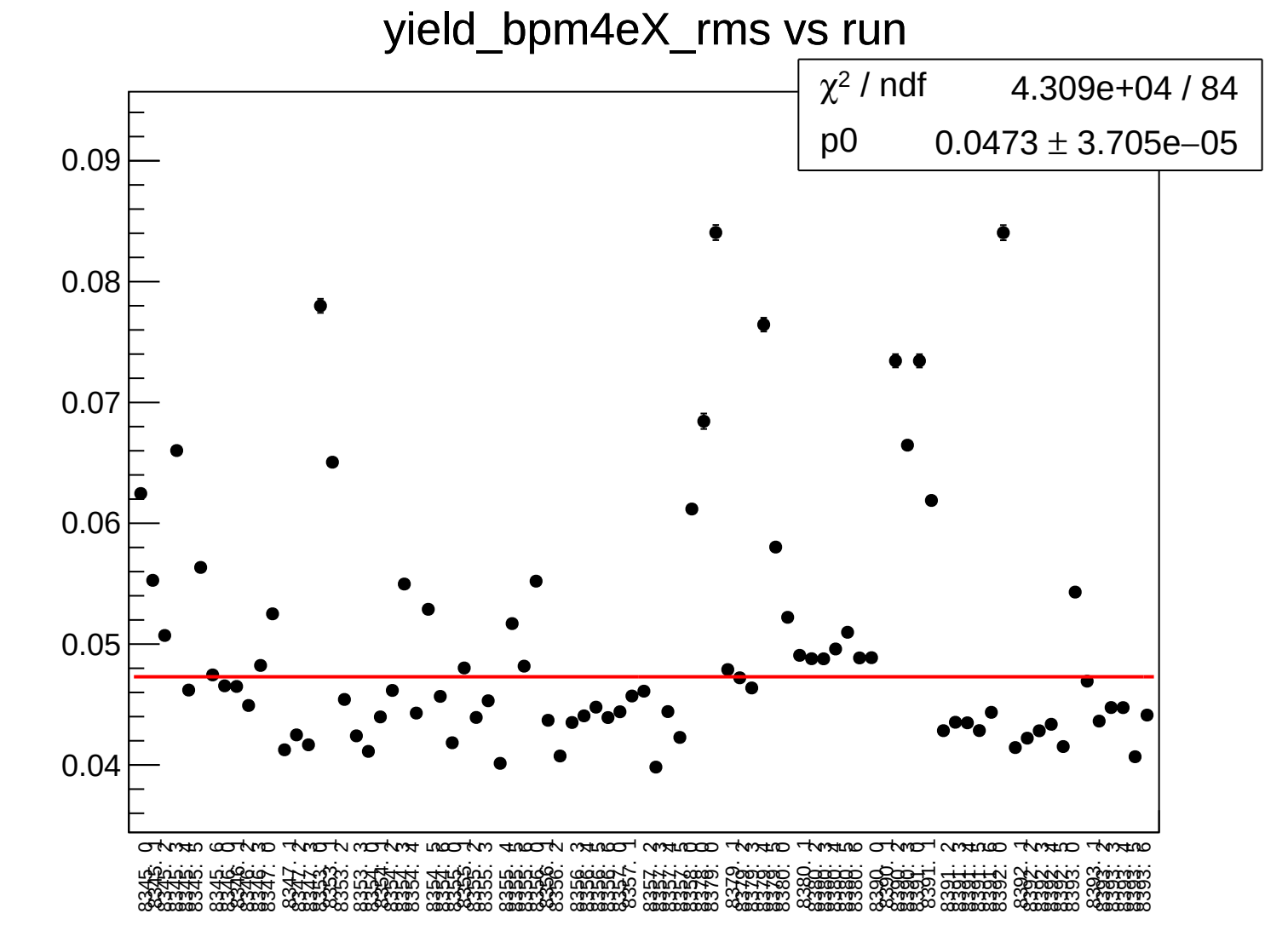

yield_bpm4aY_mean vs run
χ² / ndf 1.336e+07 / 84
p0 0.427 ± 1.626e−05
pull
Entries 85
Mean −64.27
Std Dev 103.8

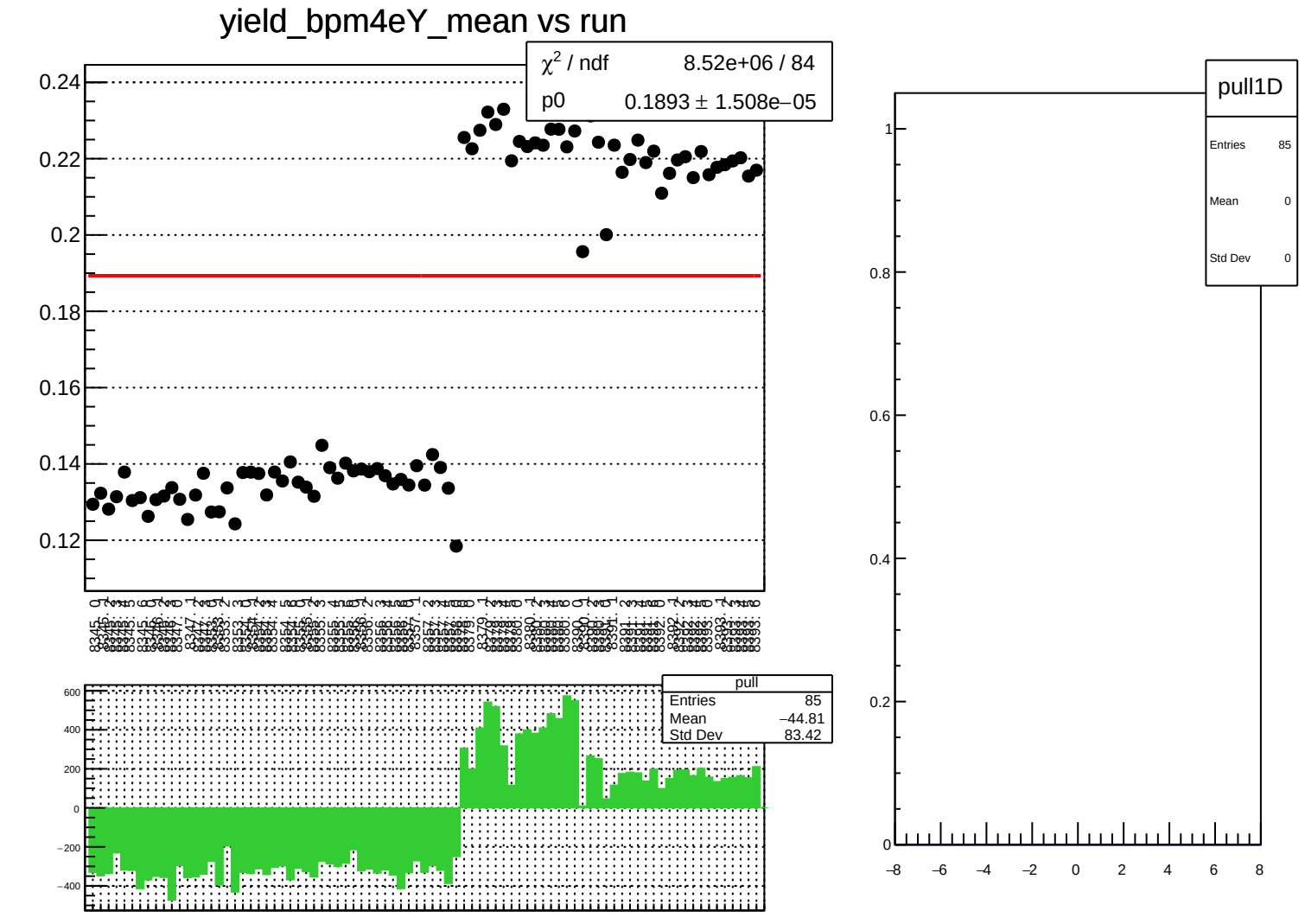

pull1D
Entries 85
Mean 0
Std Dev 0

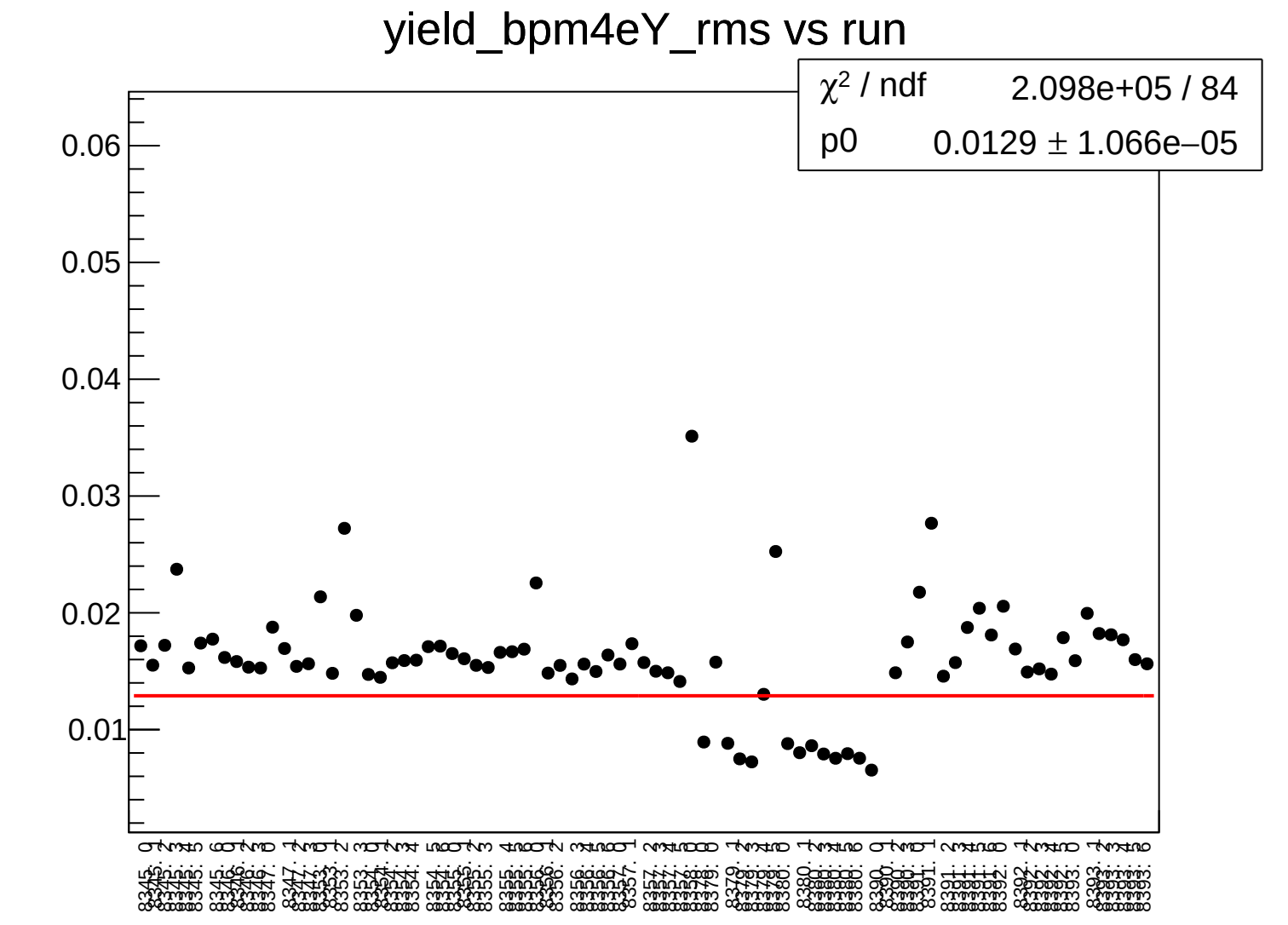

yield_bpm4aY_rms vs run
χ^2 / ndf 1.73e+05 / 84
p0 0.01408 ± 1.15e−05
0.05
0.04
0.03
0.02
0.01

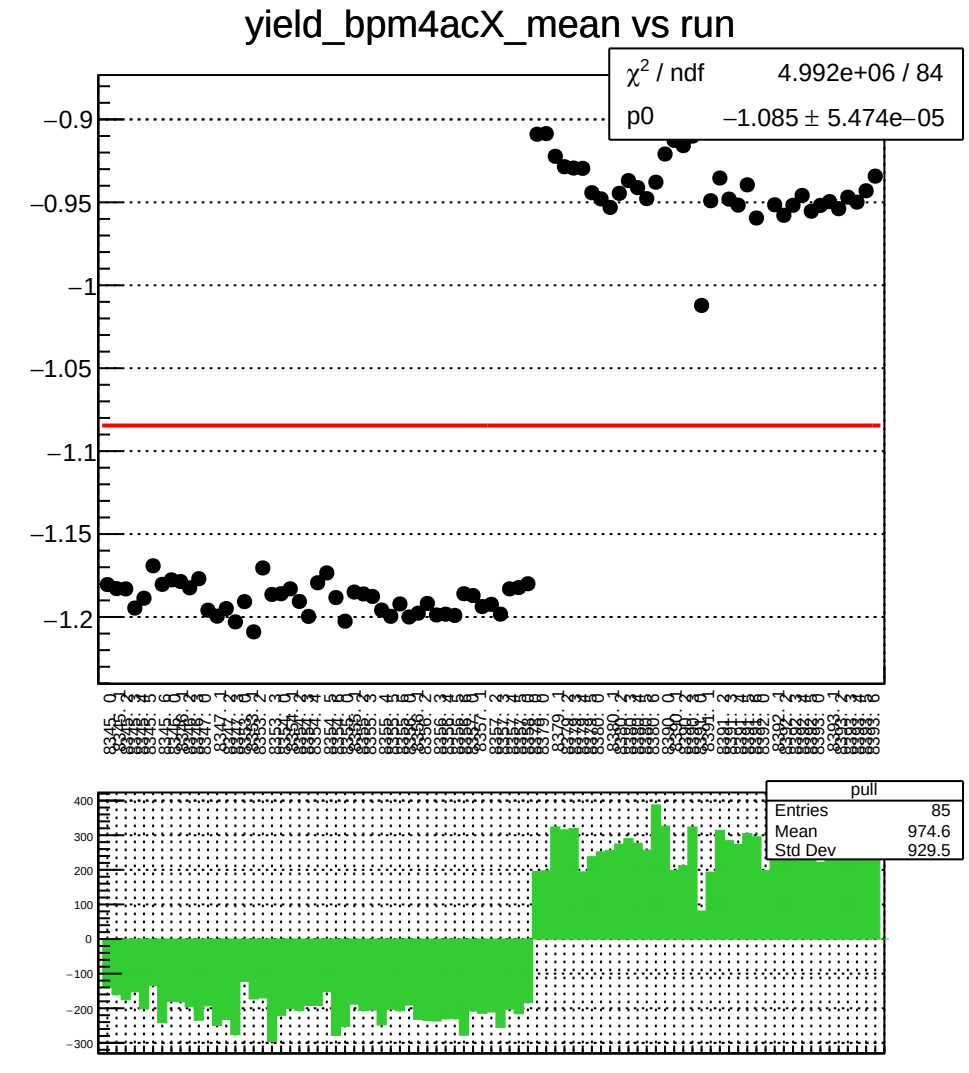

yield_bpm4eX_mean vs run
χ² / ndf 6.695e+06 / 84
p0 −0.3324 ± 5.24e−05
pull
Entries 85
Mean 634.8
Std Dev 589.4

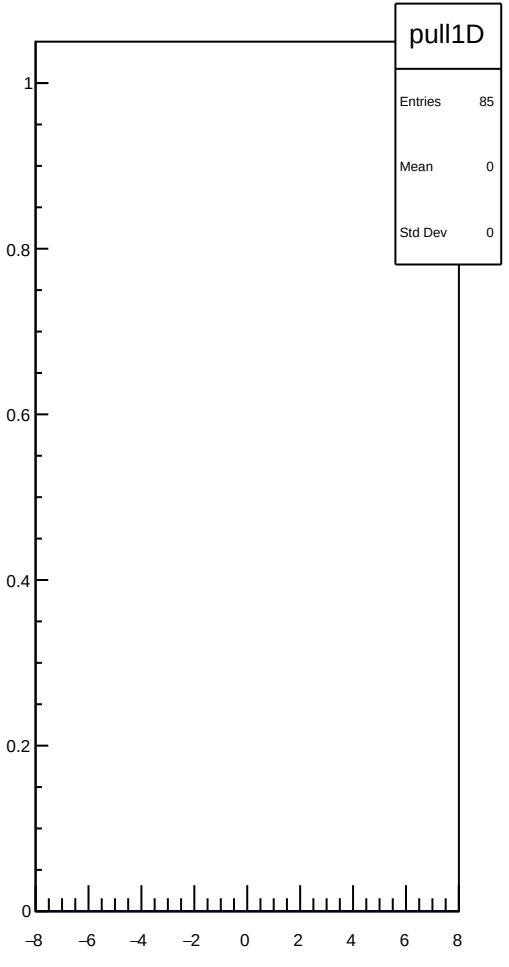

pull1D
Entries 85
Mean 0
Std Dev 0

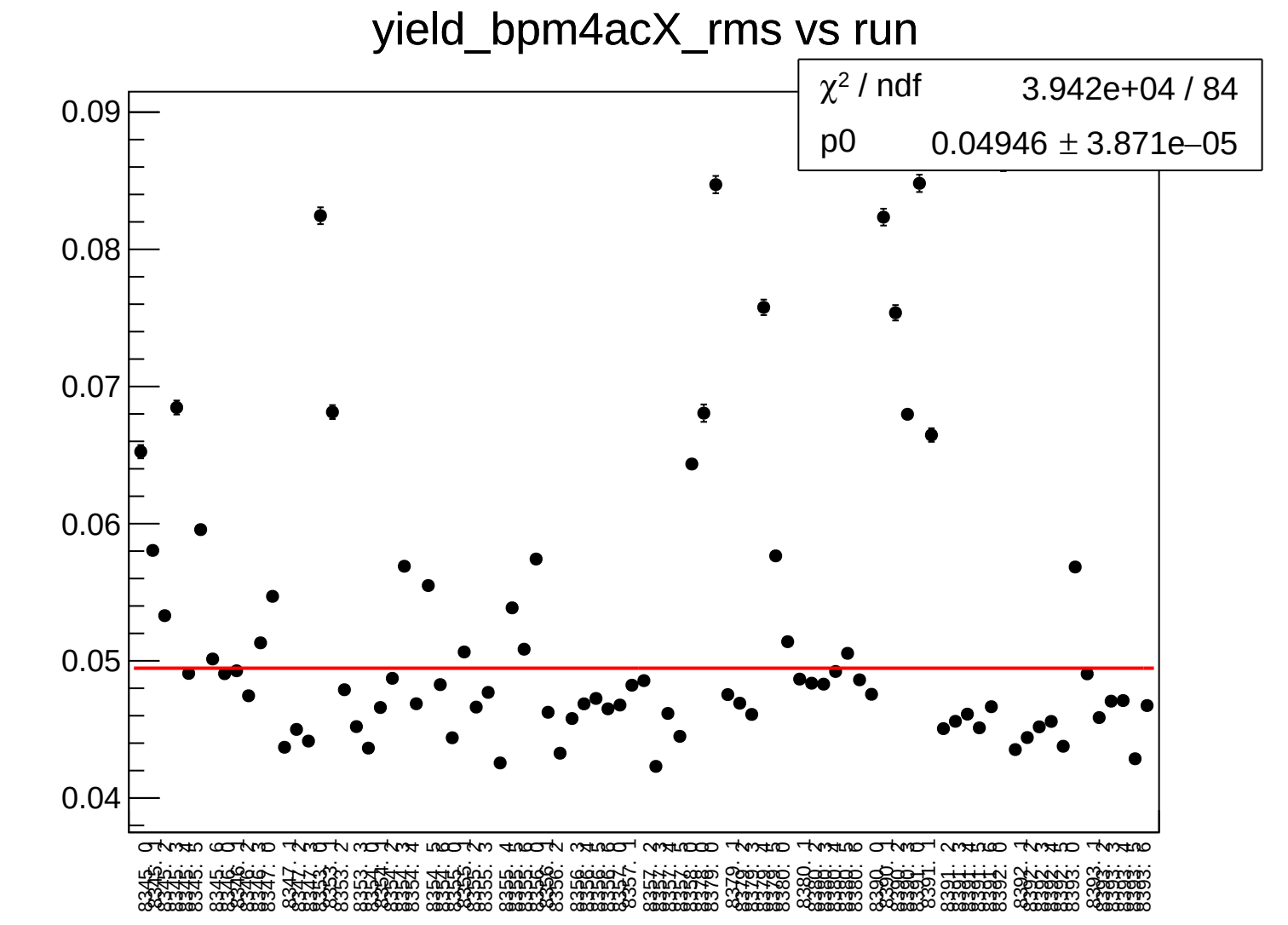

yield_bpm4eX_rms vs run
χ² / ndf 4.309e+04 / 84
p0 0.0473 ± 3.705e−05
0.09
0.08
0.07
0.06
0.05
0.04

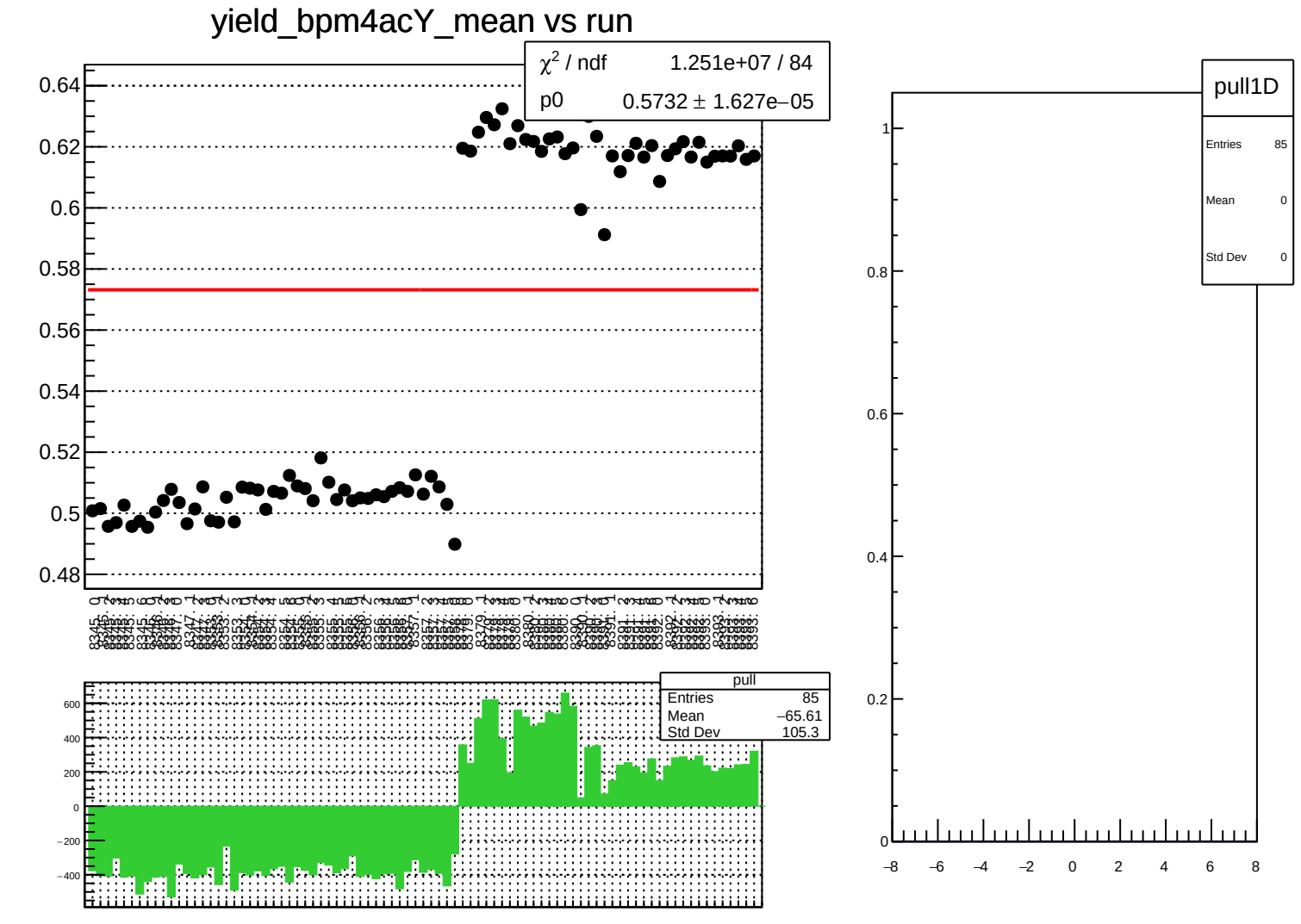

yield_bpm4eY_mean vs run
χ² / ndf 8.52e+06 / 84
p0 0.1893 ± 1.508e−05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
pull
Entries 85
Mean −44.81
Std Dev 83.42
600
400
200
0
−200
−400
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

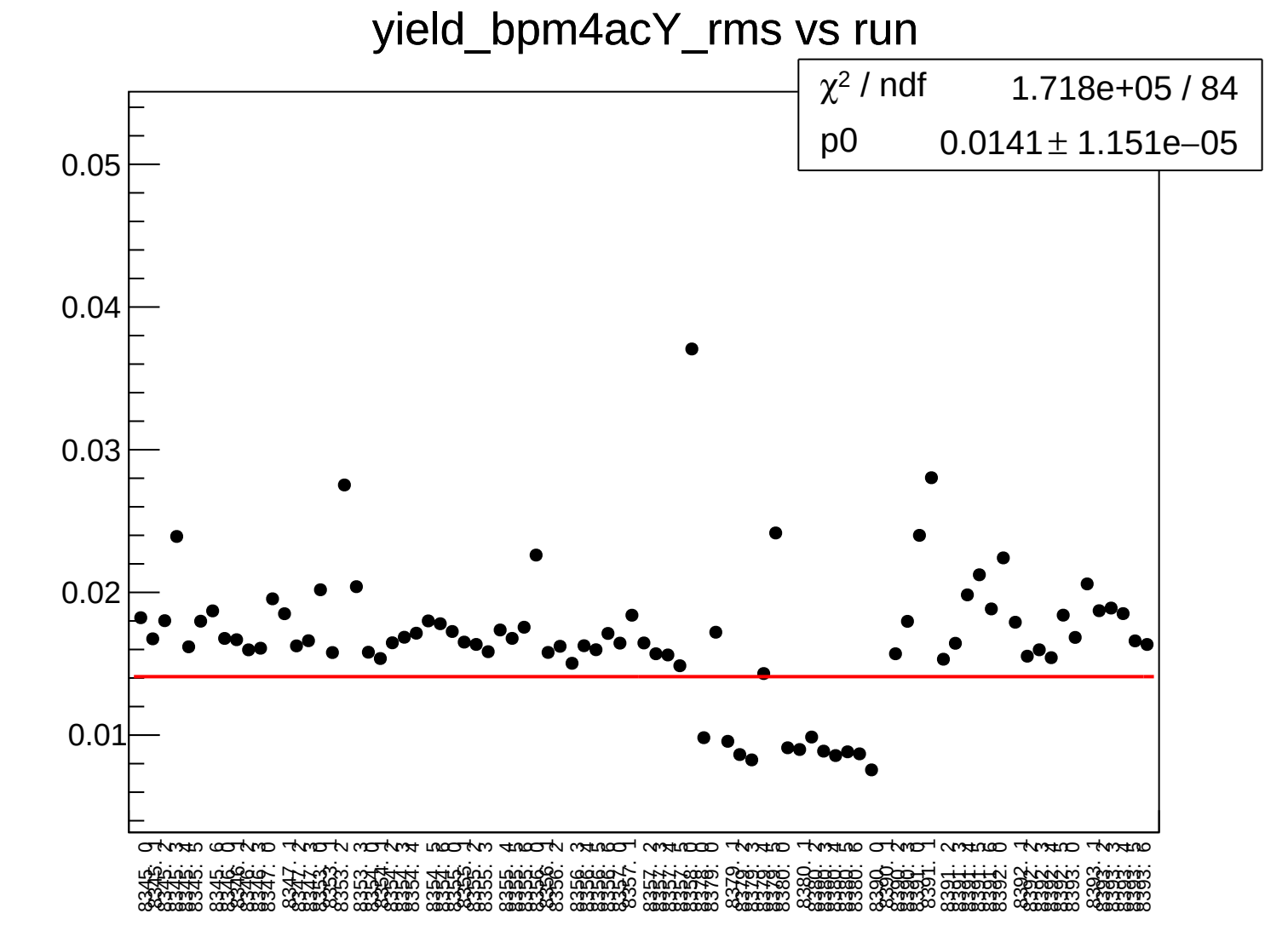

yield_bpm4eY_rms vs run
χ² / ndf 2.098e+05 / 84
p0 0.0129 ± 1.066e−05
0.06
0.05
0.04
0.03
0.02
0.01

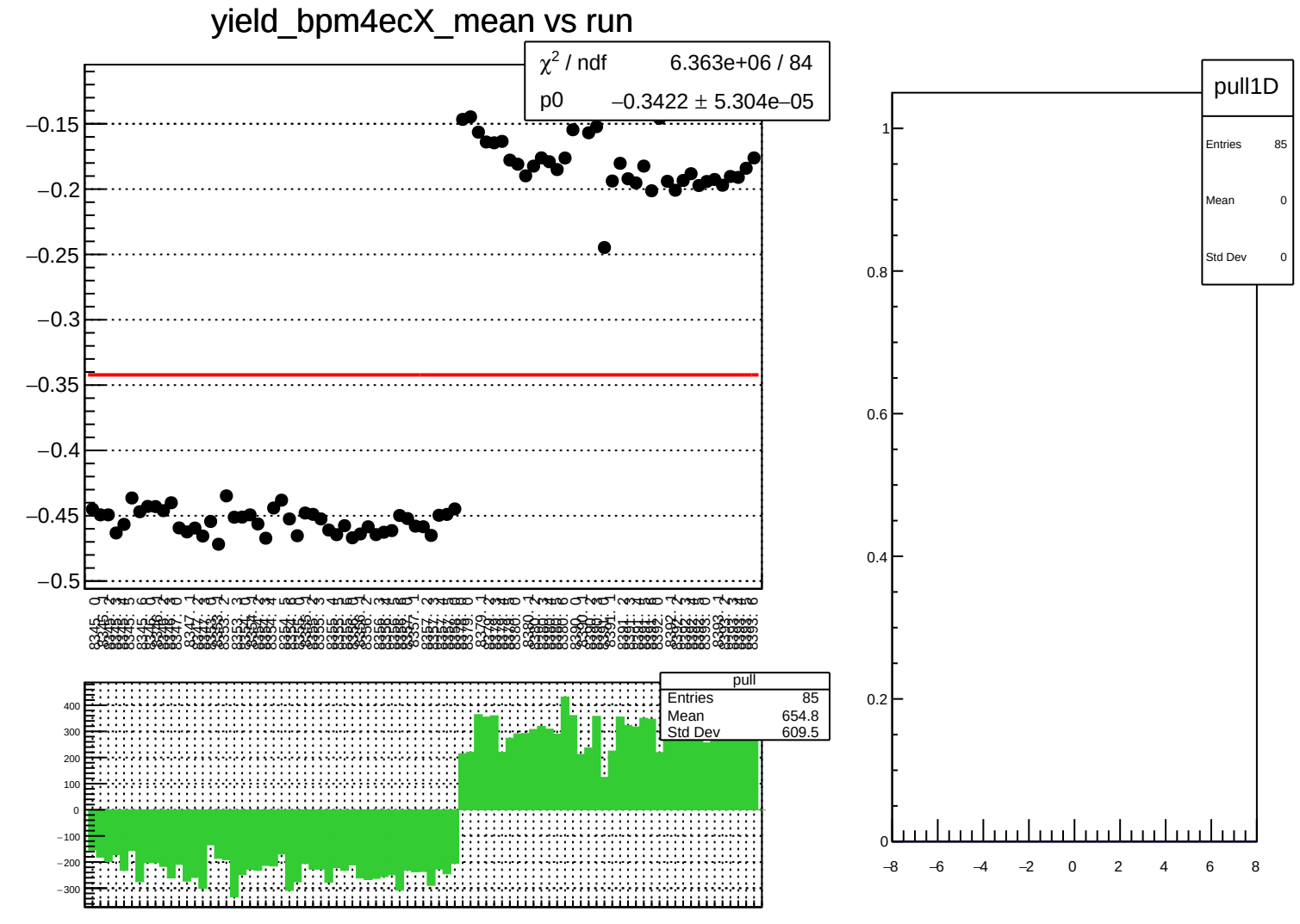

yield_bpm4acX_mean vs run
χ² / ndf 4.992e+06 / 84
p0 −1.085 ± 5.474e−05
−0.9
−0.95
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 85
Mean 974.6
Std Dev 929.5
400
300
200
100
0
−100
−200
−300

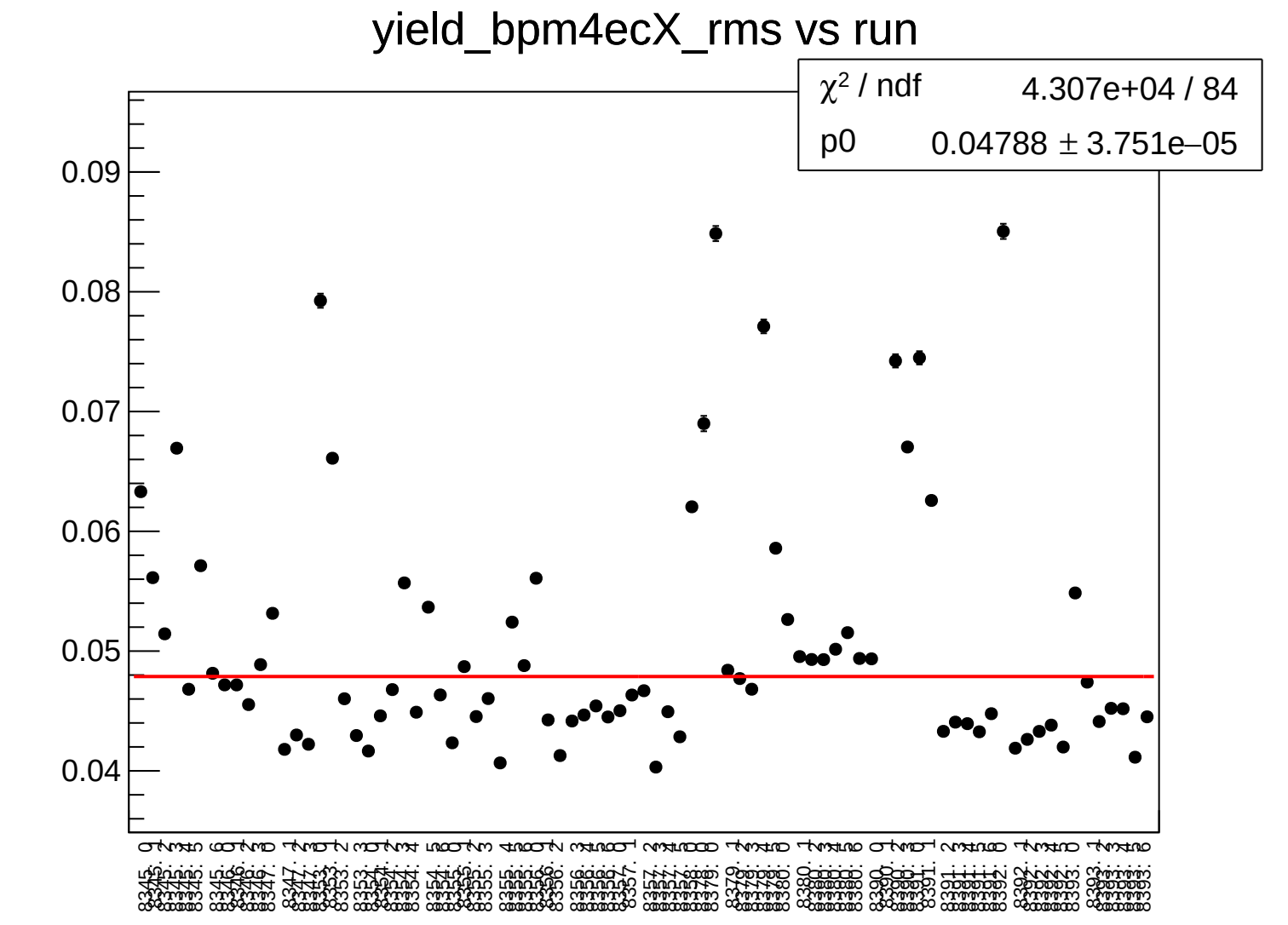

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

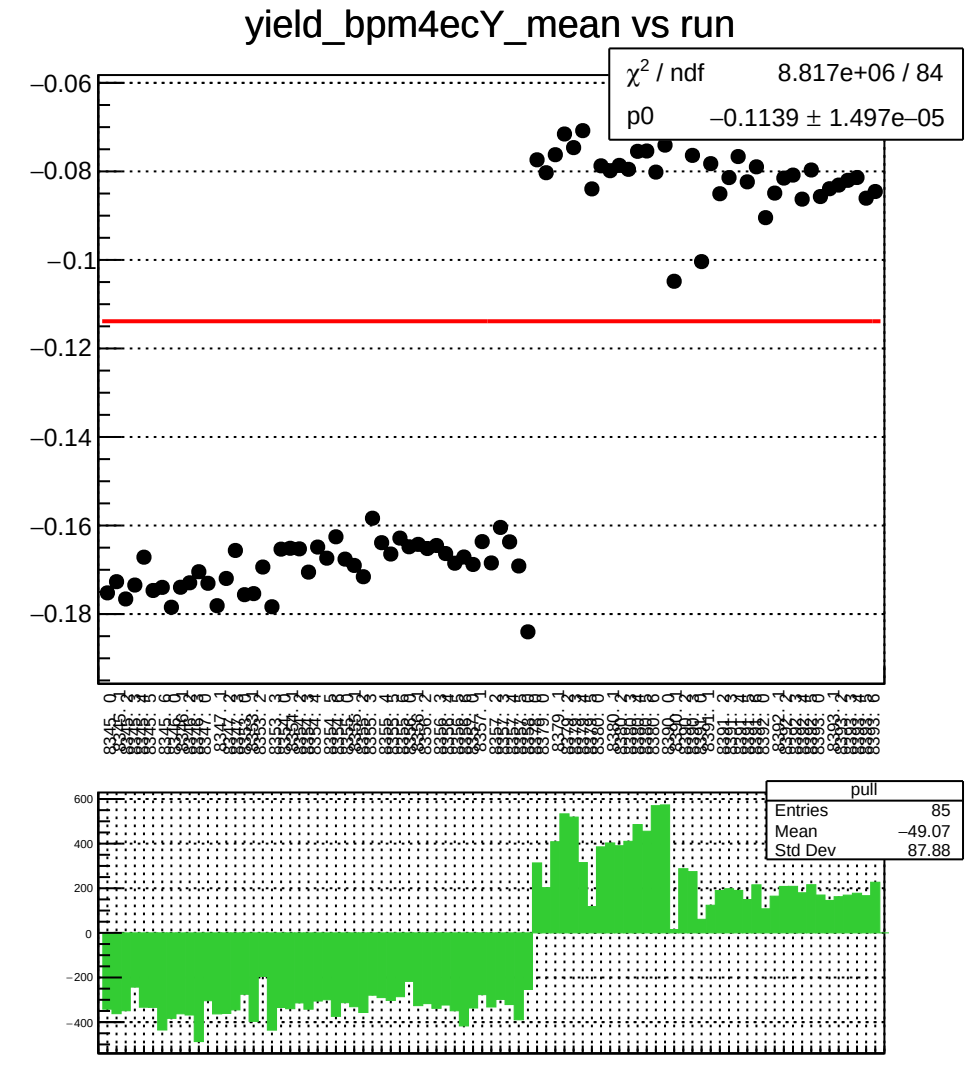

yield_bpm4acX_rms vs run
χ² / ndf 3.942e+04 / 84
p0 0.04946 ± 3.871e–05
0.09
0.08
0.07
0.06
0.05
0.04

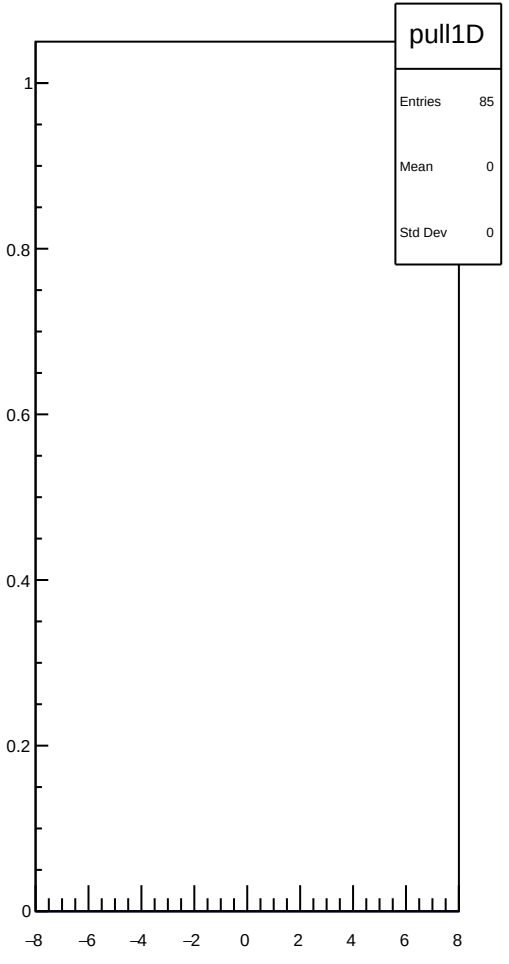

yield_bpm4acY_mean vs run
χ² / ndf 1.251e+07 / 84
p0 0.5732 ± 1.627e−05
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5
0.48
pull
Entries 85
Mean −65.61
Std Dev 105.3
600
400
200
0
−200
−400
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

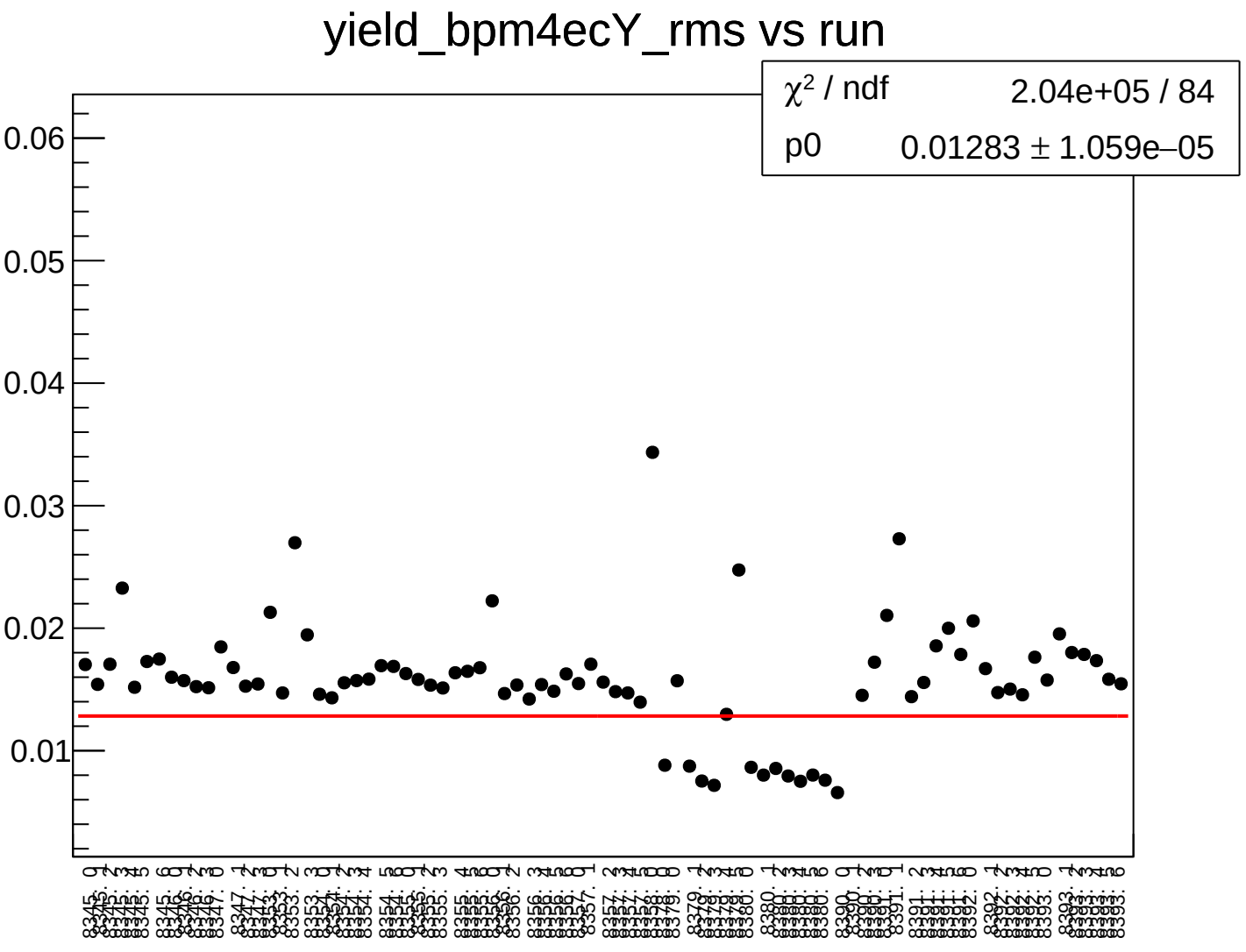

yield_bpm4acY_rms vs run
χ² / ndf 1.718e+05 / 84
p0 0.0141 ± 1.151e−05
0.05
0.04
0.03
0.02
0.01

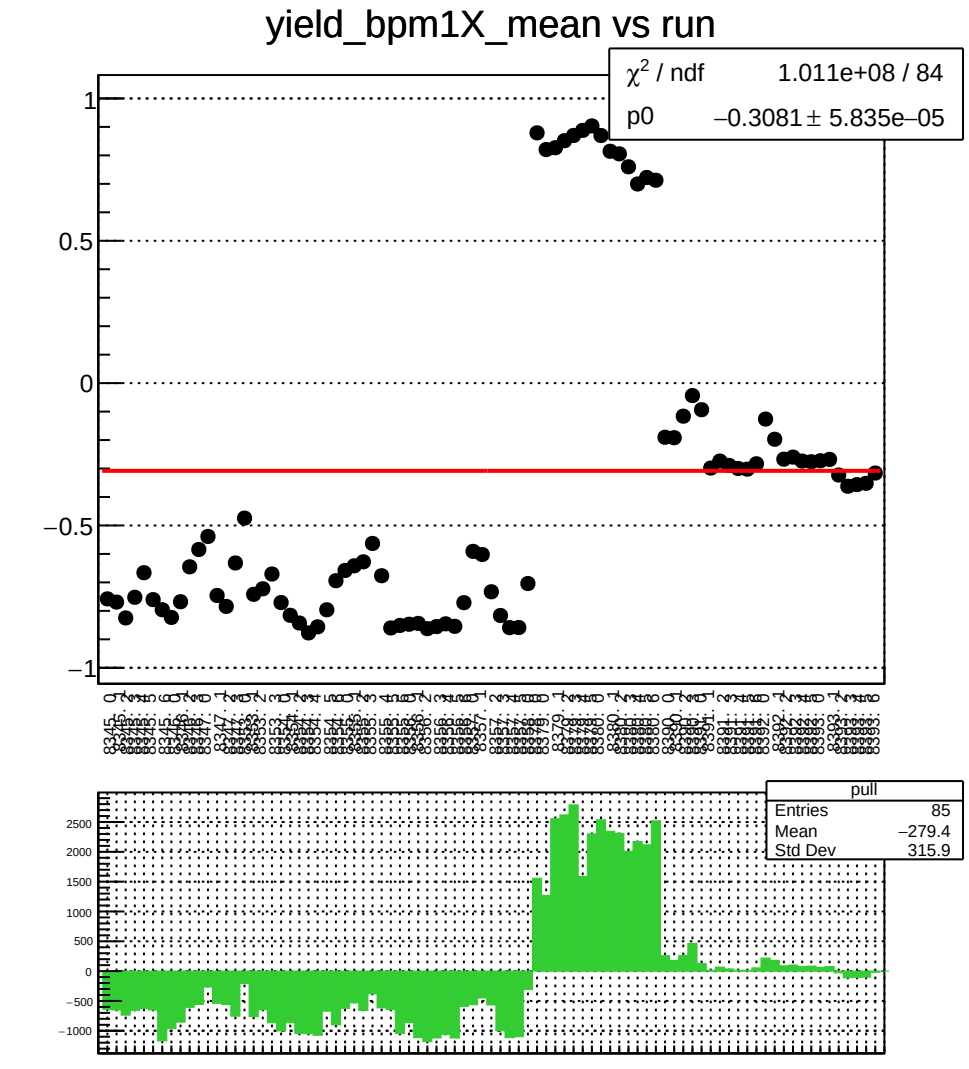

yield_bpm4ecX_mean vs run
χ² / ndf 6.363e+06 / 84
p0 −0.3422 ± 5.304e−05
pull
Entries 85
Mean 654.8
Std Dev 609.5
pull1D
Entries 85
Mean 0
Std Dev 0

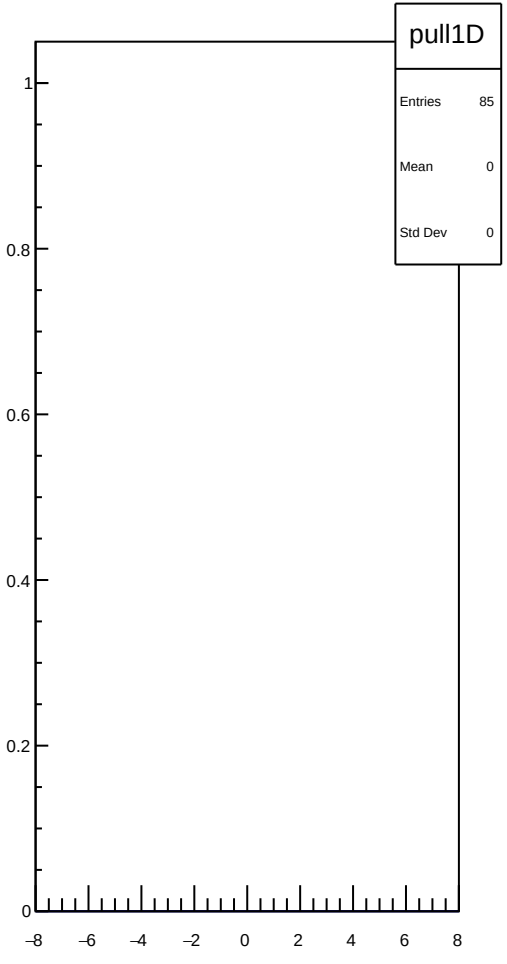

yield_bpm4ecX_rms vs run
χ² / ndf 4.307e+04 / 84
p0 0.04788 ± 3.751e–05
0.09
0.08
0.07
0.06
0.05
0.04

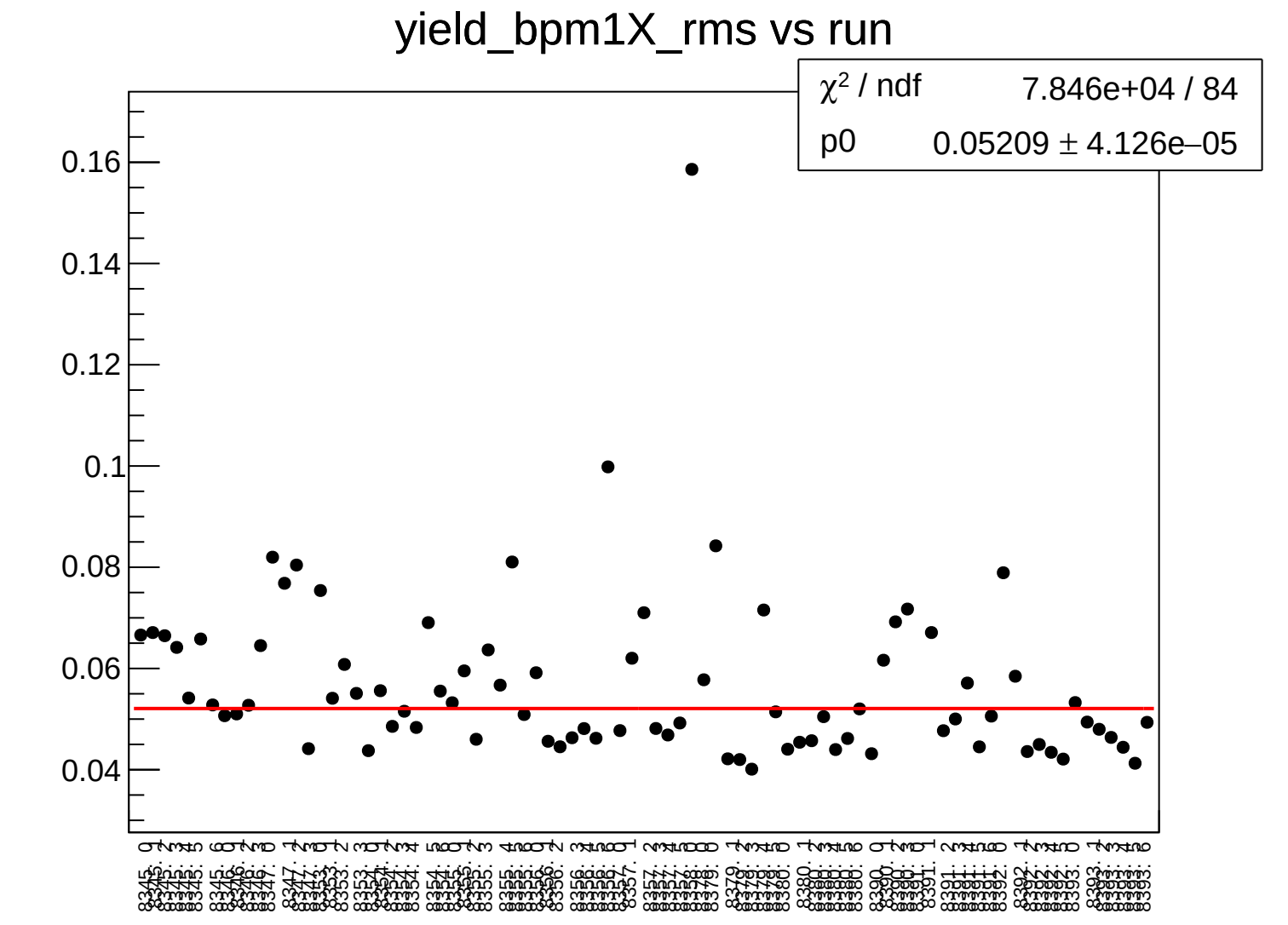

yield_bpm4ecY_mean vs run
χ² / ndf 8.817e+06 / 84
p0 −0.1139 ± 1.497e−05
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 85
Mean −49.07
Std Dev 87.88
600
400
200
0
−200
−400

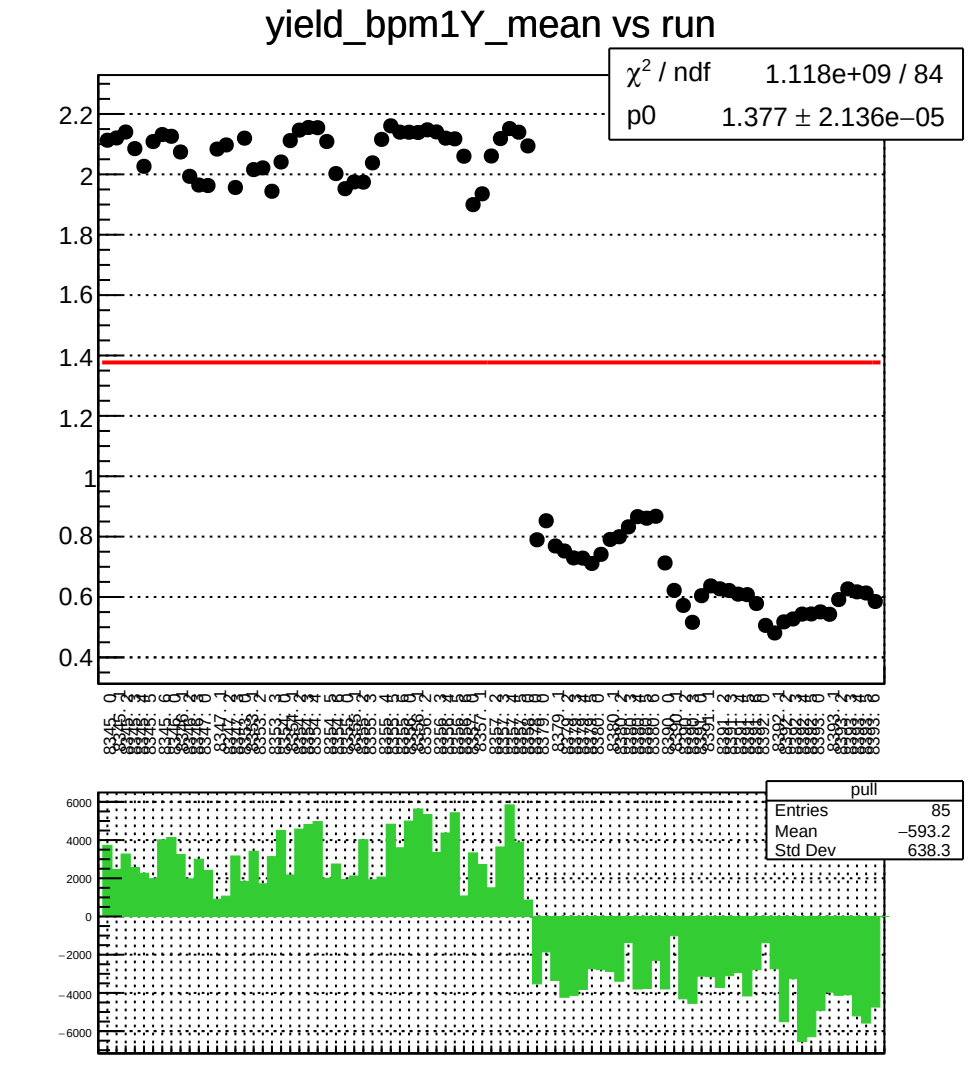

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

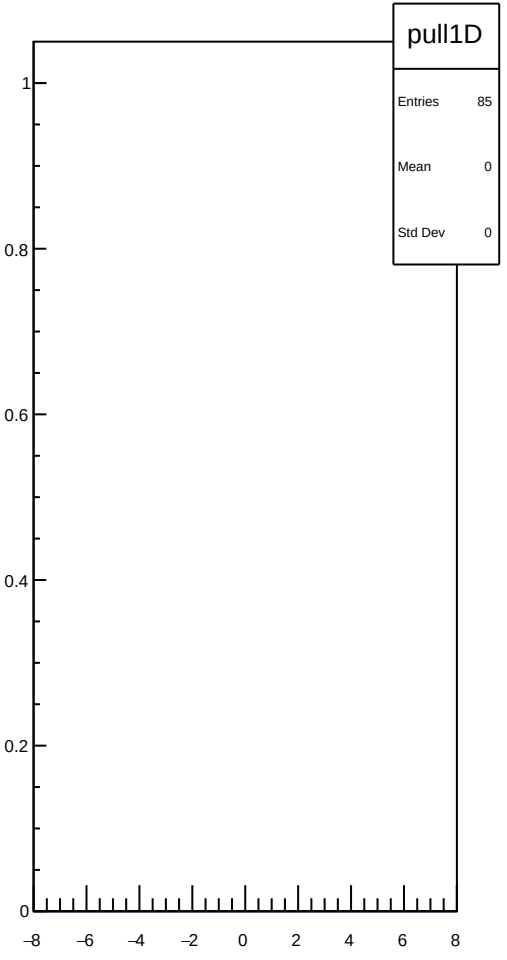

yield_bpm4ecY_rms vs run
χ² / ndf 2.04e+05 / 84
p0 0.01283 ± 1.059e−05
0.06
0.05
0.04
0.03
0.02
0.01

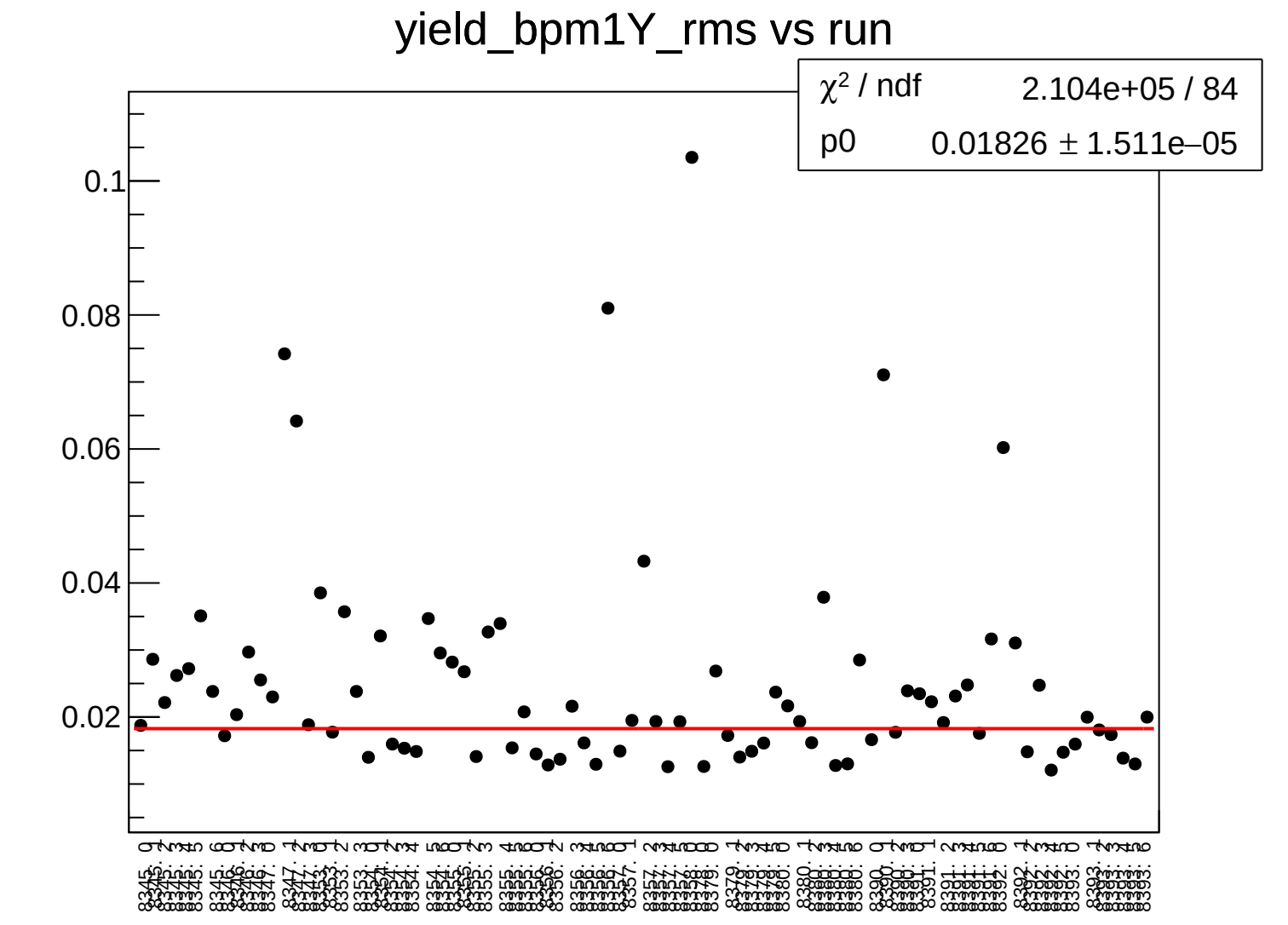

yield_bpm1X_mean vs run
χ² / ndf 1.011e+08 / 84
p0 −0.3081 ± 5.835e−05
pull
Entries 85
Mean −279.4
Std Dev 315.9

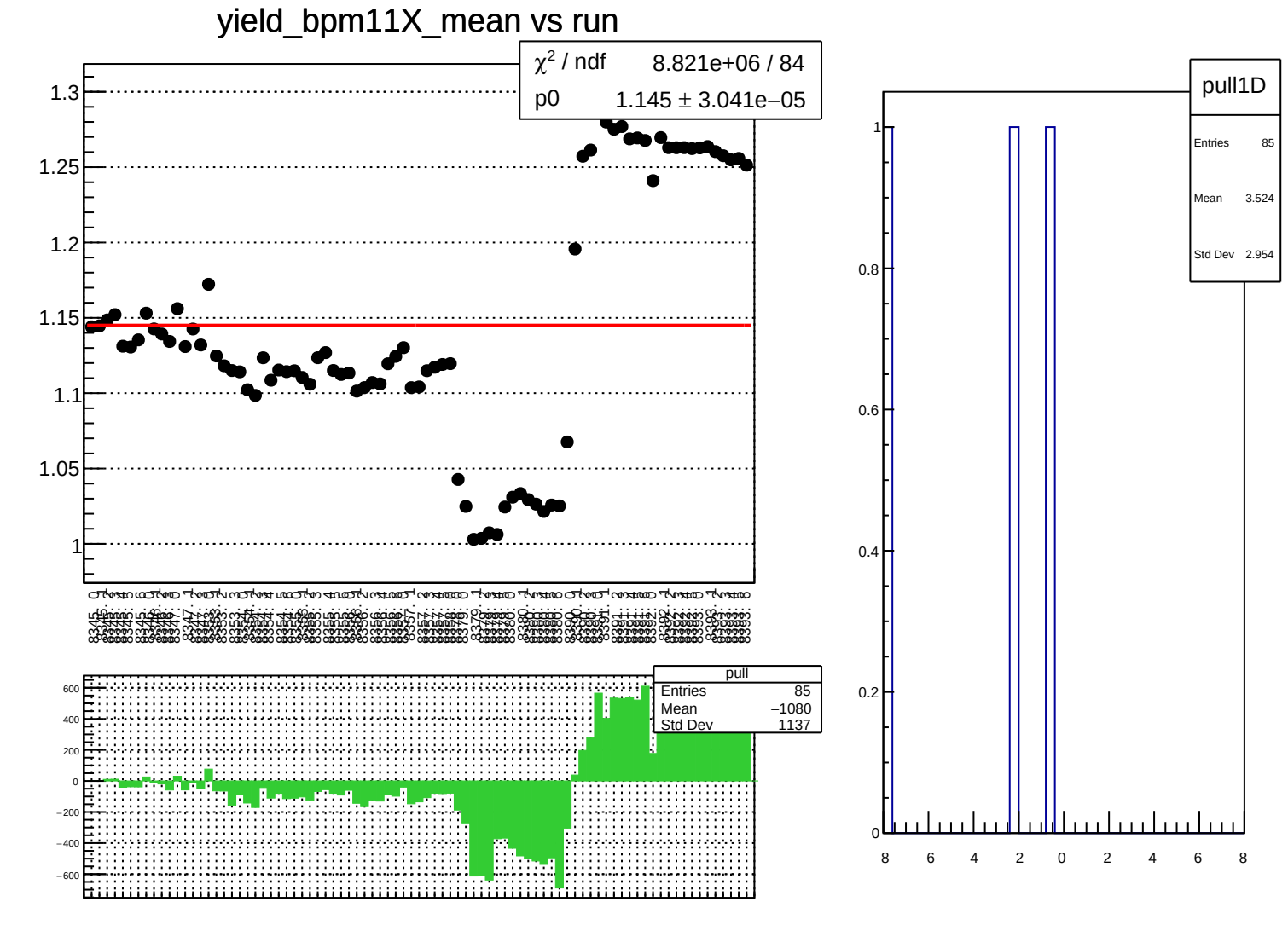

pull1D
Entries 85
Mean 0
Std Dev 0

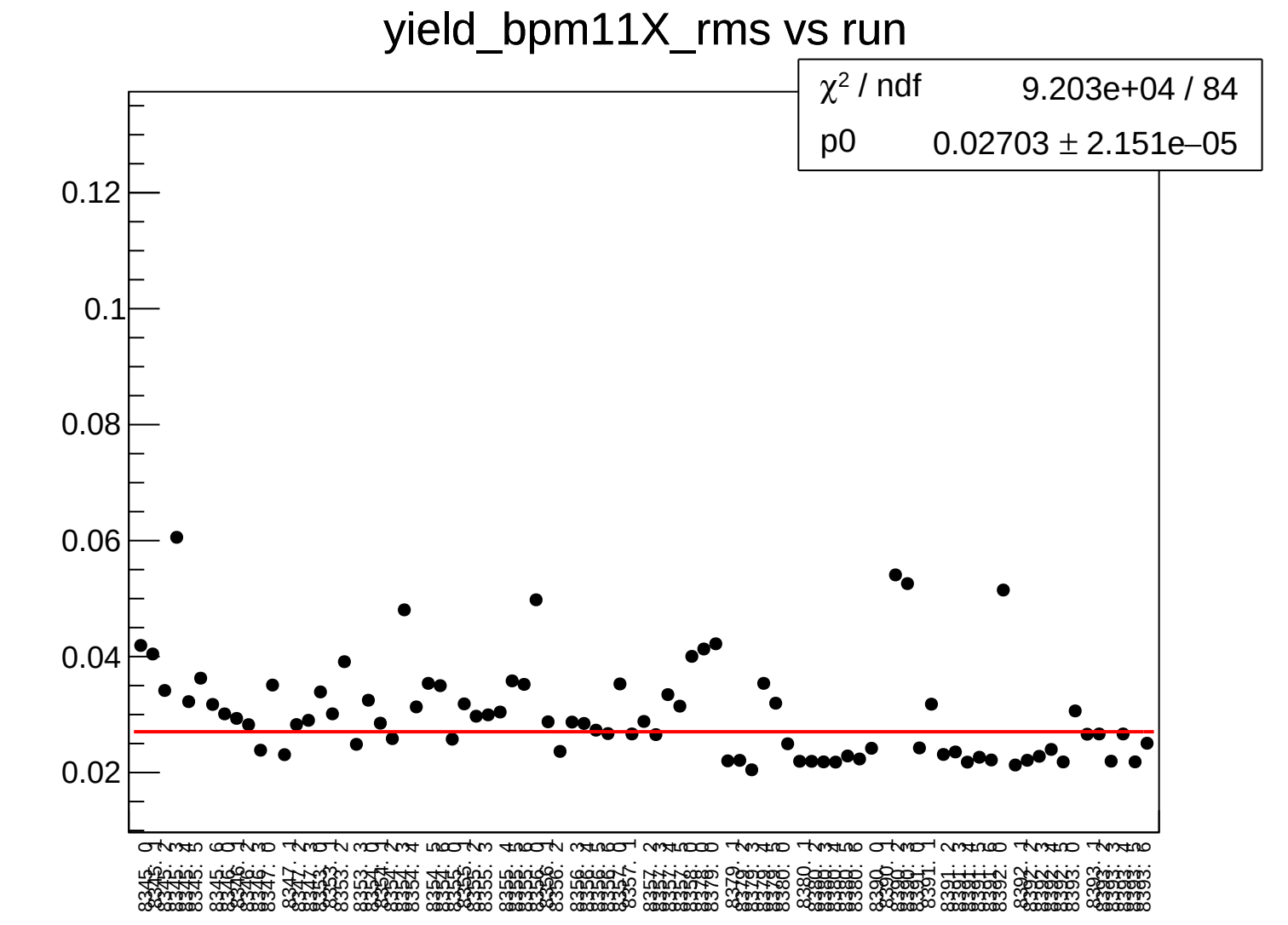

yield_bpm1X_rms vs run
χ² / ndf 7.846e+04 / 84
p0 0.05209 ± 4.126e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

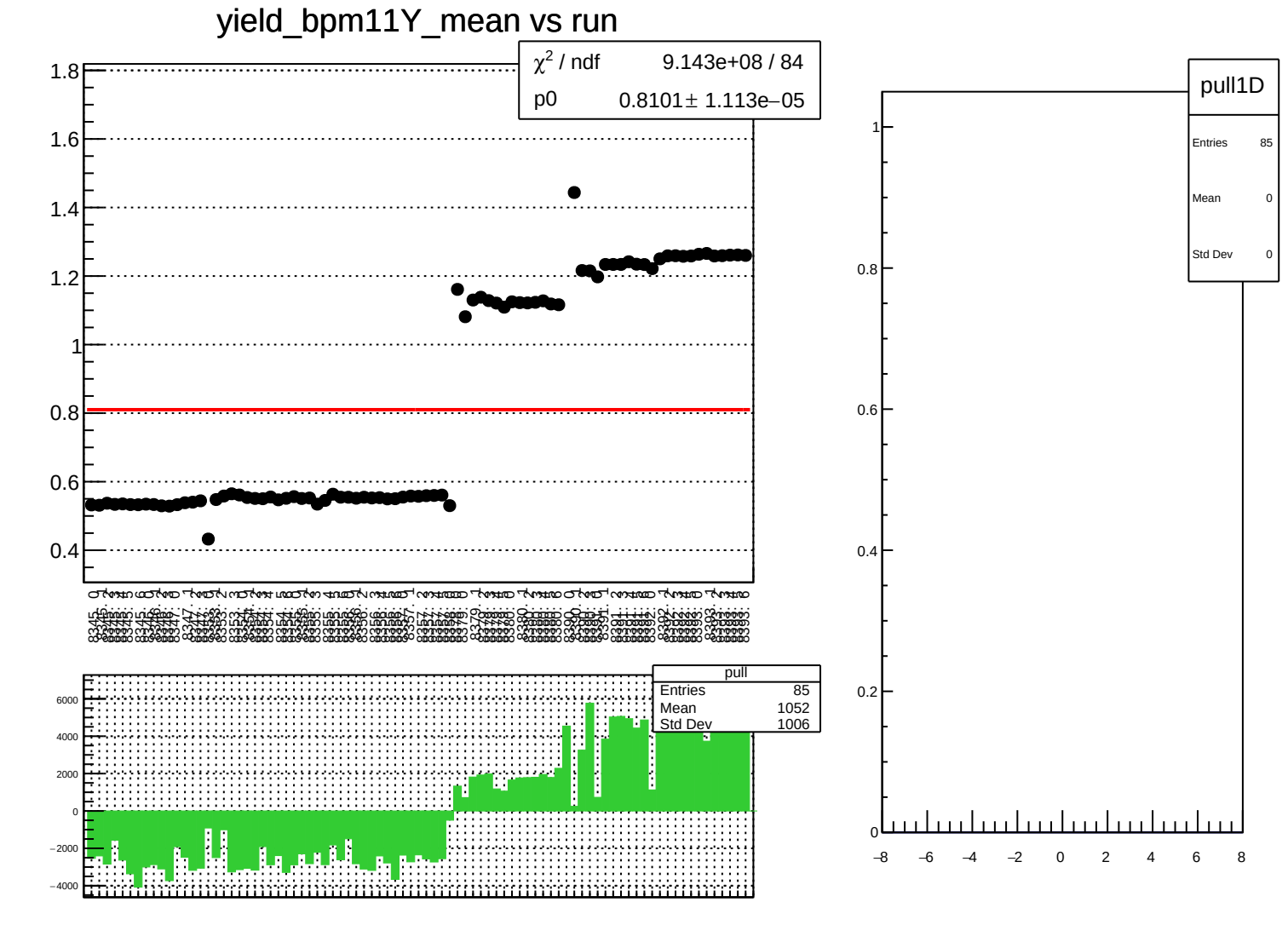

yield_bpm1Y_mean vs run
χ² / ndf 1.118e+09 / 84
p0 1.377 ± 2.136e−05
pull
Entries 85
Mean −593.2
Std Dev 638.3

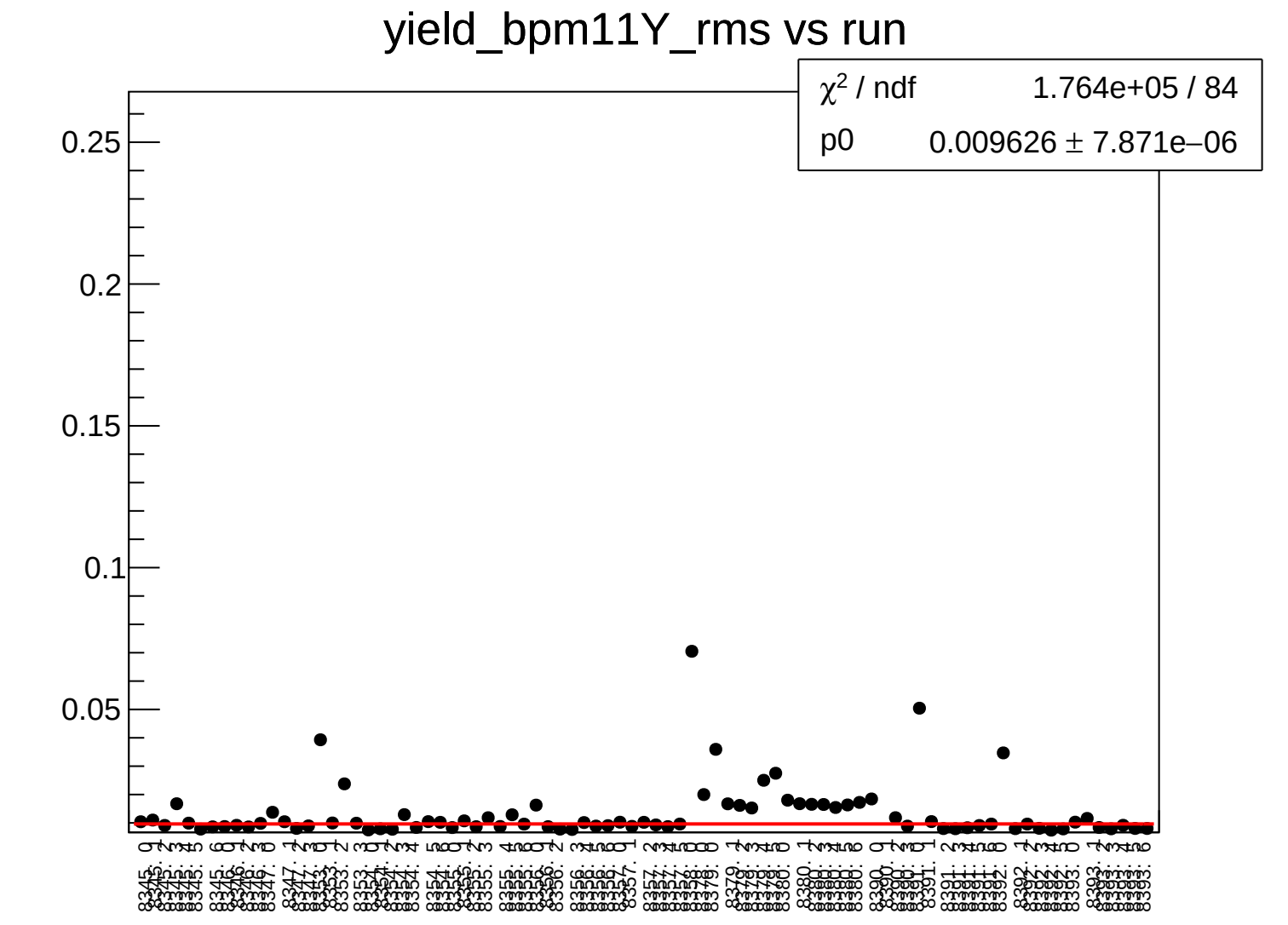

pull1D
Entries 85
Mean 0
Std Dev 0

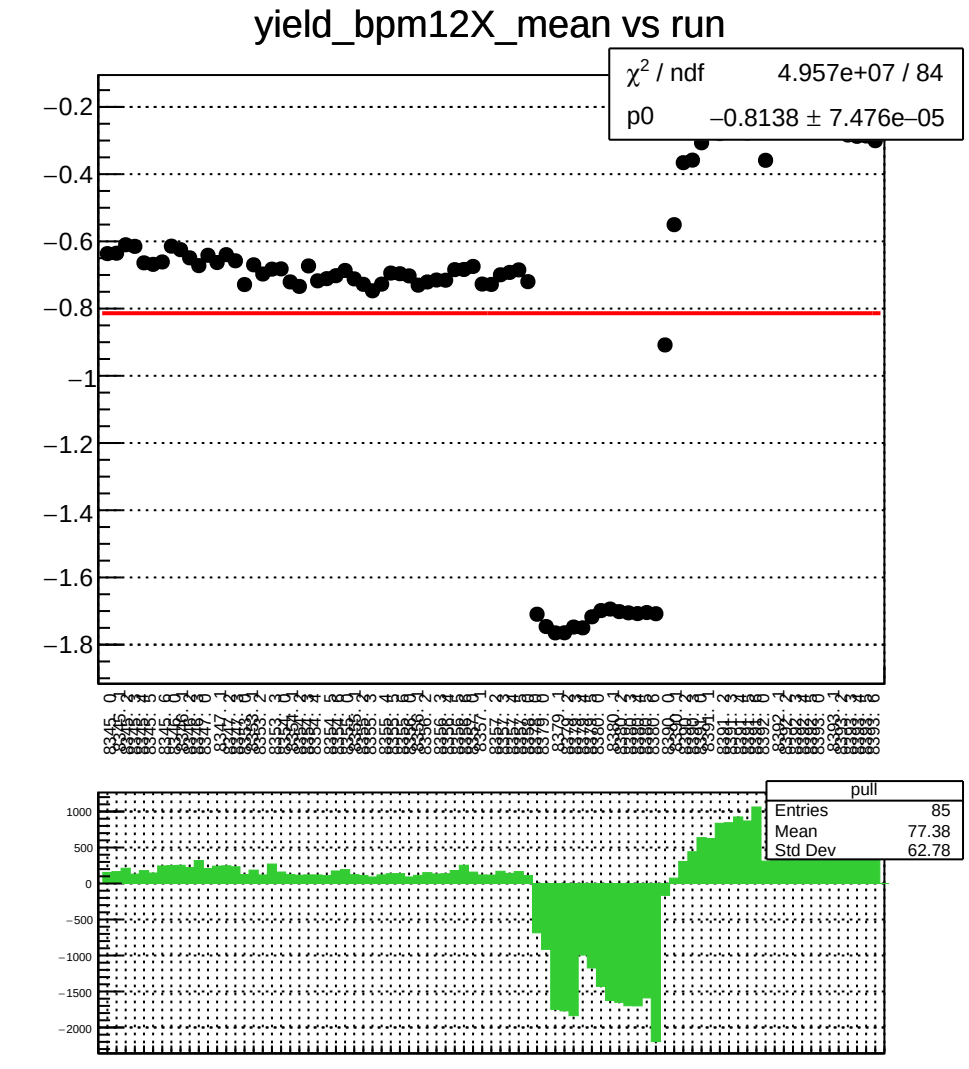

yield_bpm1Y_rms vs run
χ² / ndf 2.104e+05 / 84
p0 0.01826 ± 1.511e−05
0.1
0.08
0.06
0.04
0.02

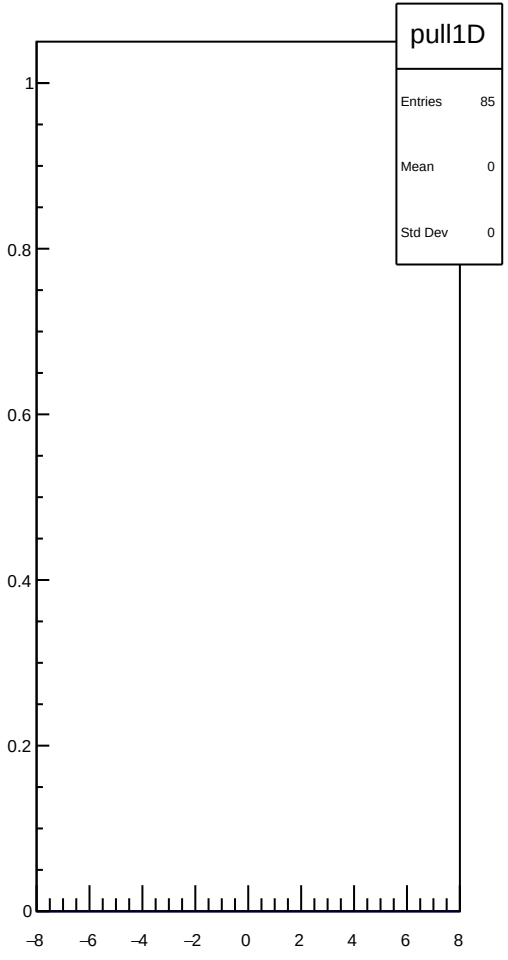

yield_bpm11X_mean vs run
χ² / ndf 8.821e+06 / 84
p0 1.145 ± 3.041e−05
1.3
1.25
1.2
1.15
1.1
1.05
1
pull
Entries 85
Mean −1080
Std Dev 1137
600
400
200
0
−200
−400
−600
pull1D
Entries 85
Mean −3.524
Std Dev 2.954
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

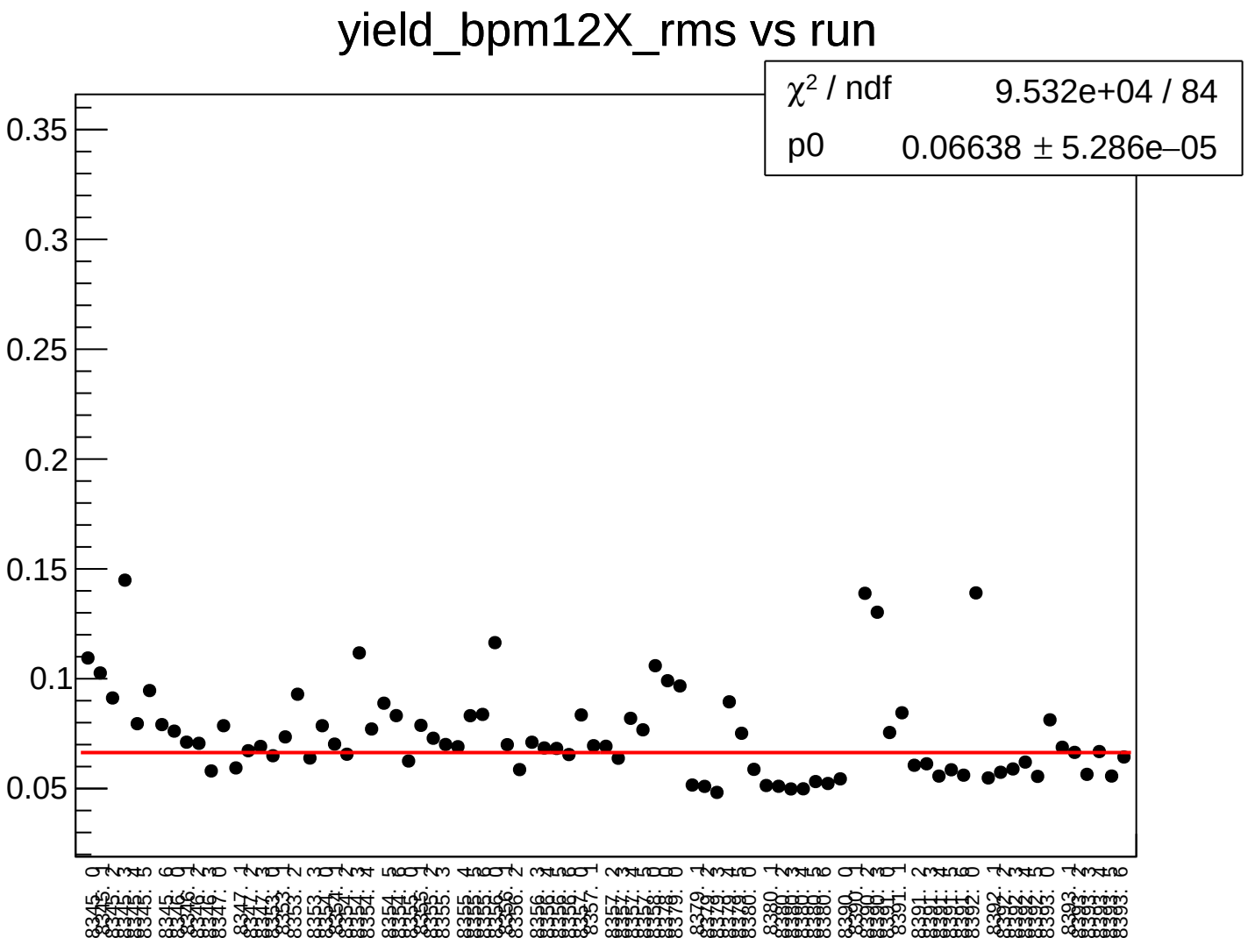

yield_bpm11X_rms vs run
χ² / ndf 9.203e+04 / 84
p0 0.02703 ± 2.151e–05
0.12
0.1
0.08
0.06
0.04
0.02

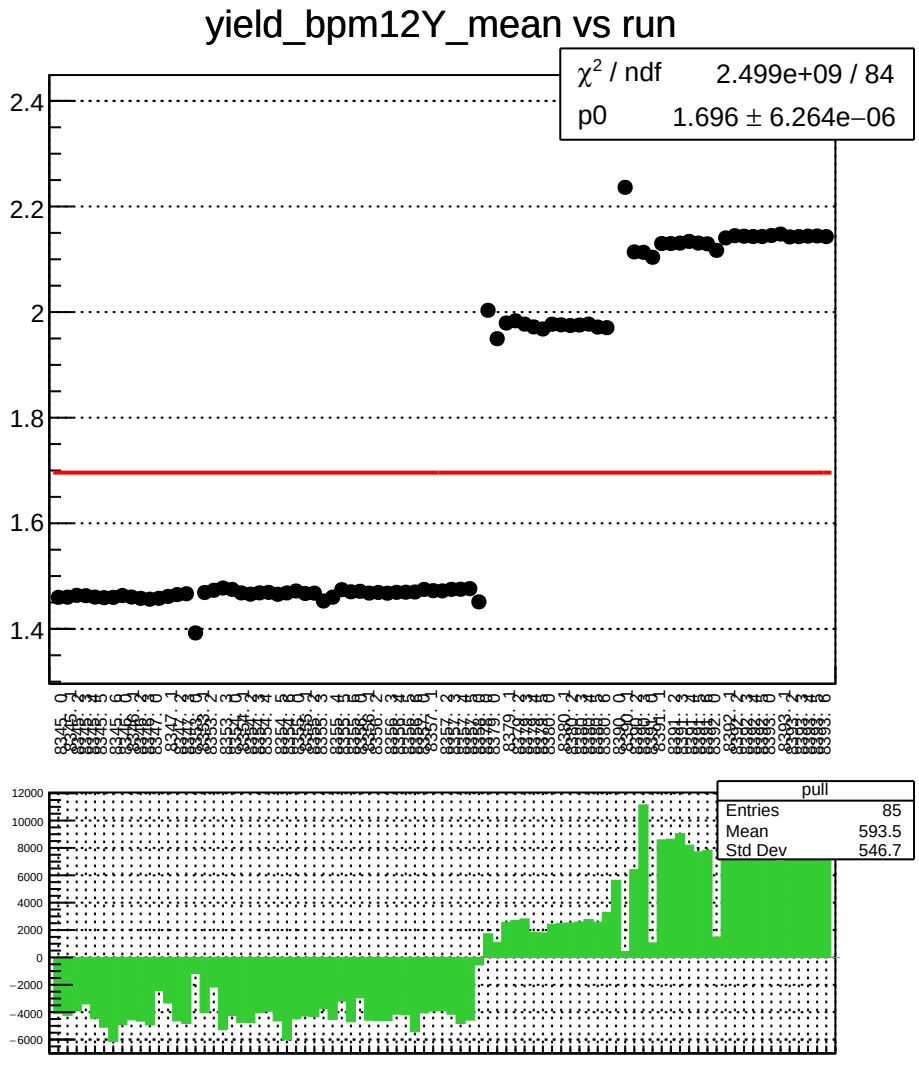

yield_bpm11Y_mean vs run
χ² / ndf 9.143e+08 / 84
p0 0.8101 ± 1.113e−05
pull
Entries 85
Mean 1052
Std Dev 1006
pull1D
Entries 85
Mean 0
Std Dev 0

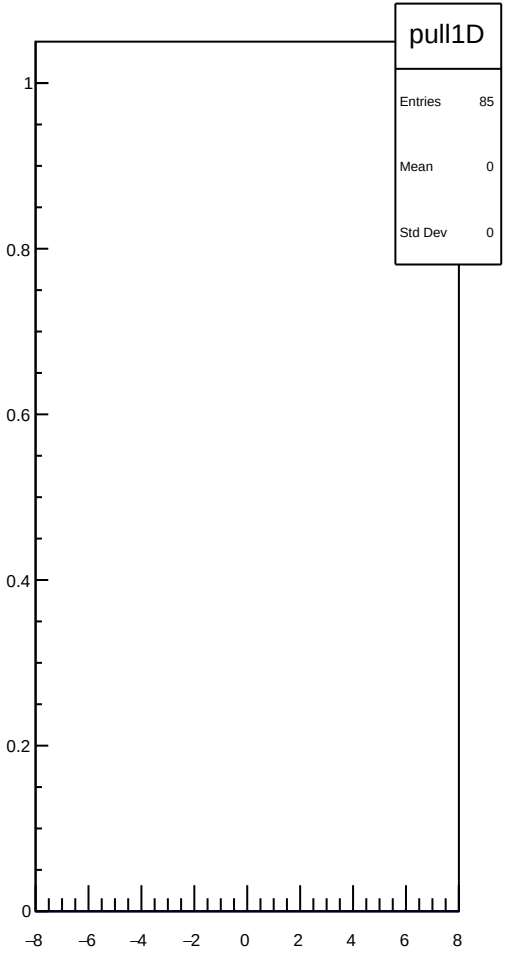

yield_bpm11Y_rms vs run
χ² / ndf 1.764e+05 / 84
p0 0.009626 ± 7.871e−06
0.25
0.2
0.15
0.1
0.05

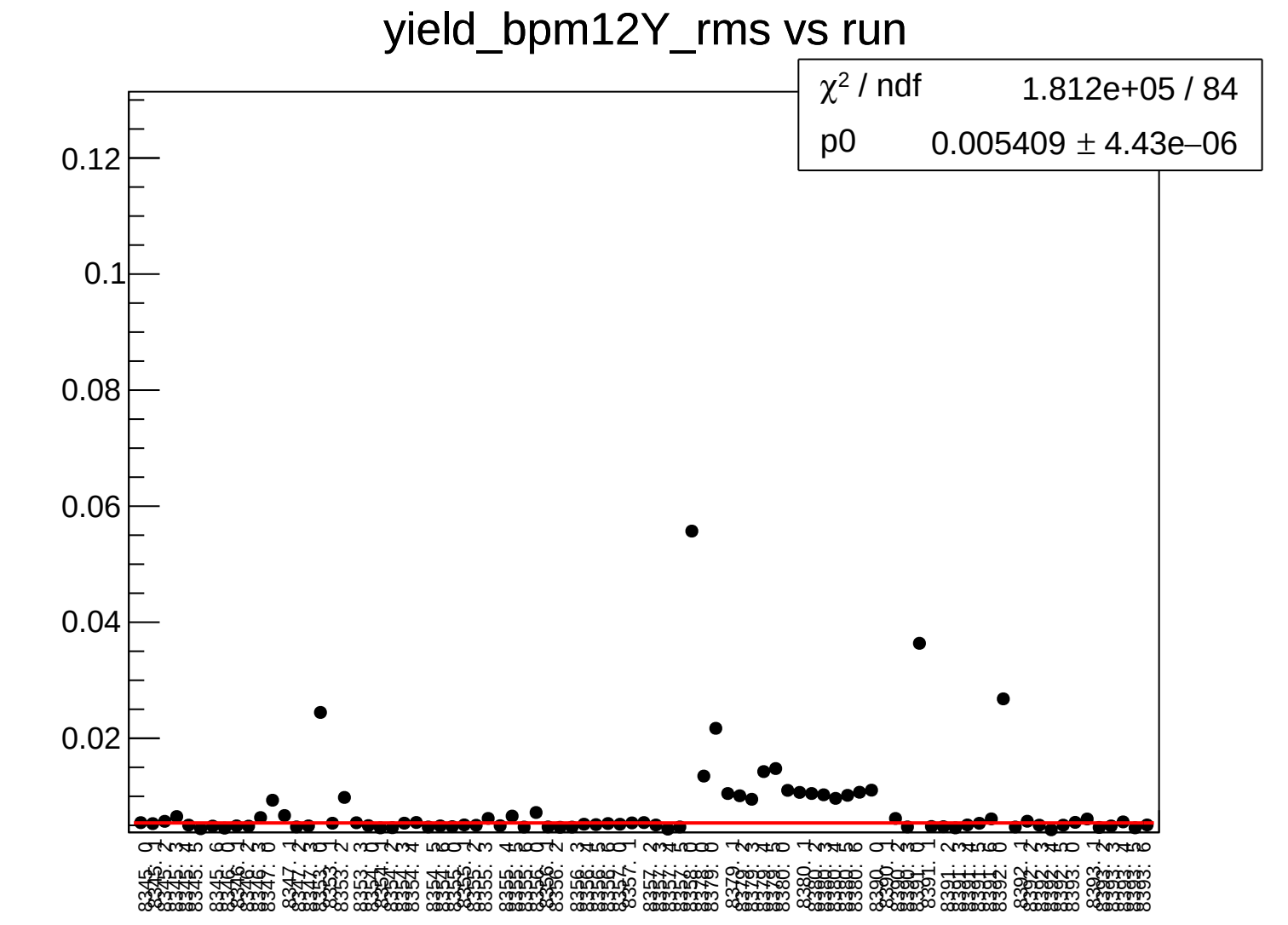

yield_bpm12X_mean vs run
χ² / ndf 4.957e+07 / 84
p0 −0.8138 ± 7.476e−05
pull
Entries 85
Mean 77.38
Std Dev 62.78

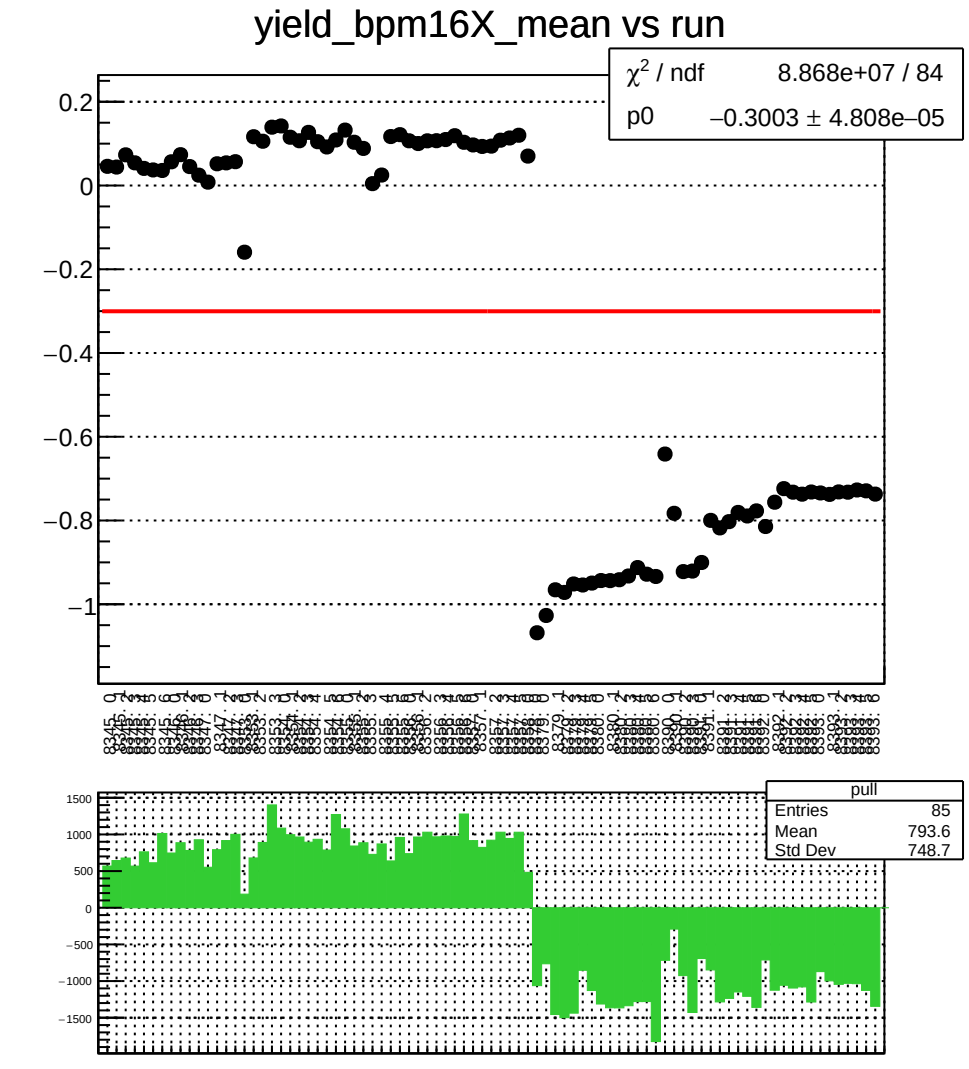

pull1D
Entries 85
Mean 0
Std Dev 0

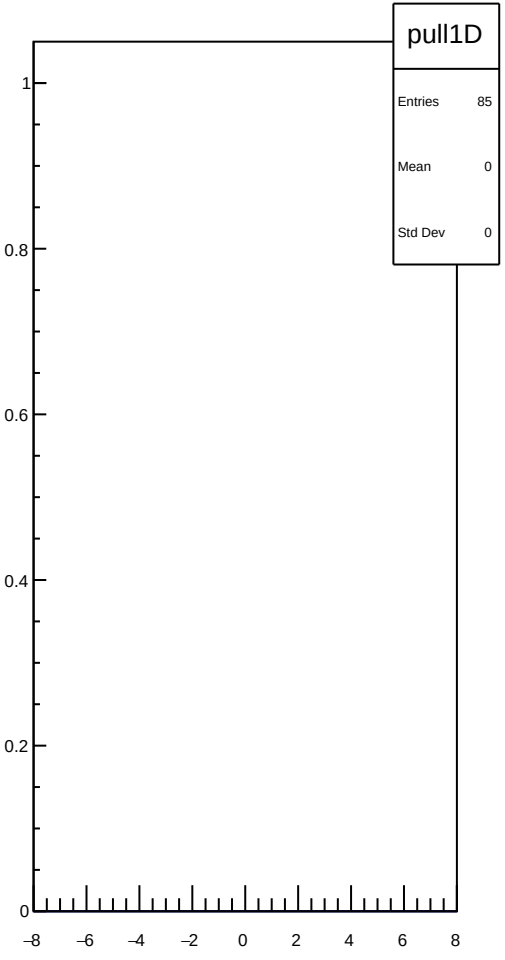

yield_bpm12X_rms vs run
χ² / ndf 9.532e+04 / 84
p0 0.06638 ± 5.286e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

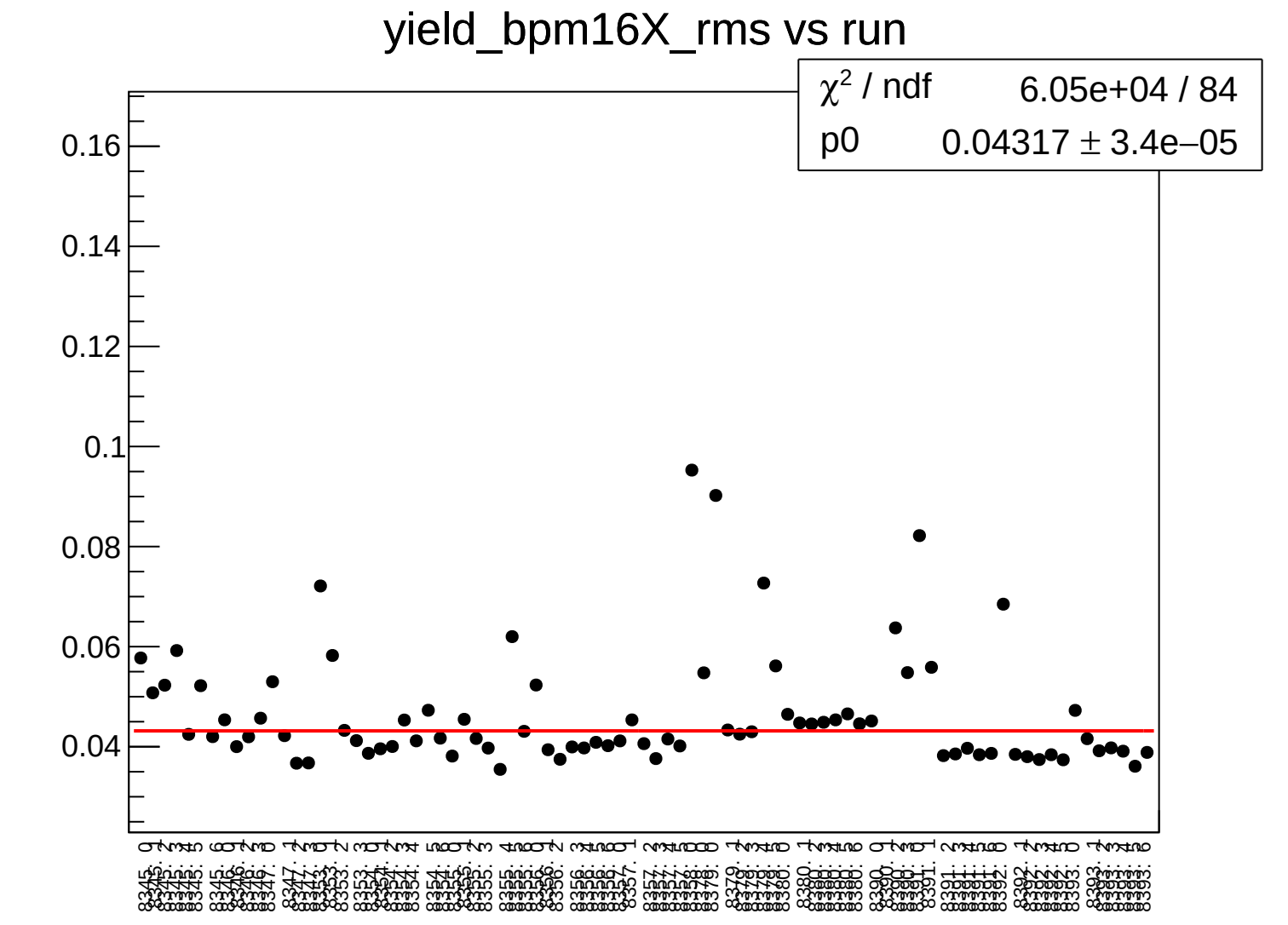

yield_bpm12Y_mean vs run
χ² / ndf 2.499e+09 / 84
p0 1.696 ± 6.264e−06
2.4
2.2
2
1.8
1.6
1.4
pull
Entries 85
Mean 593.5
Std Dev 546.7
12000
10000
8000
6000
4000
2000
0
−2000
−4000
−6000

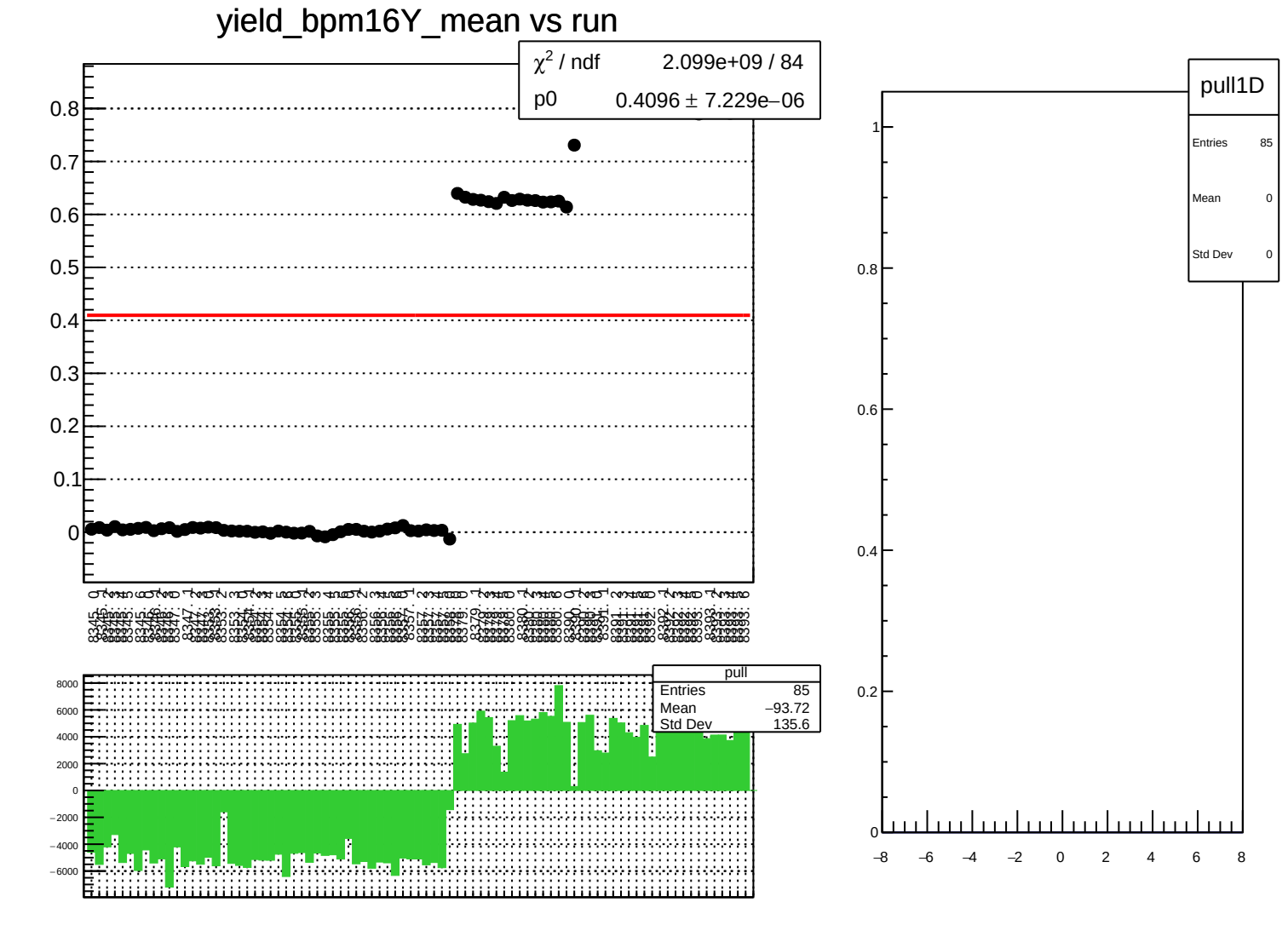

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

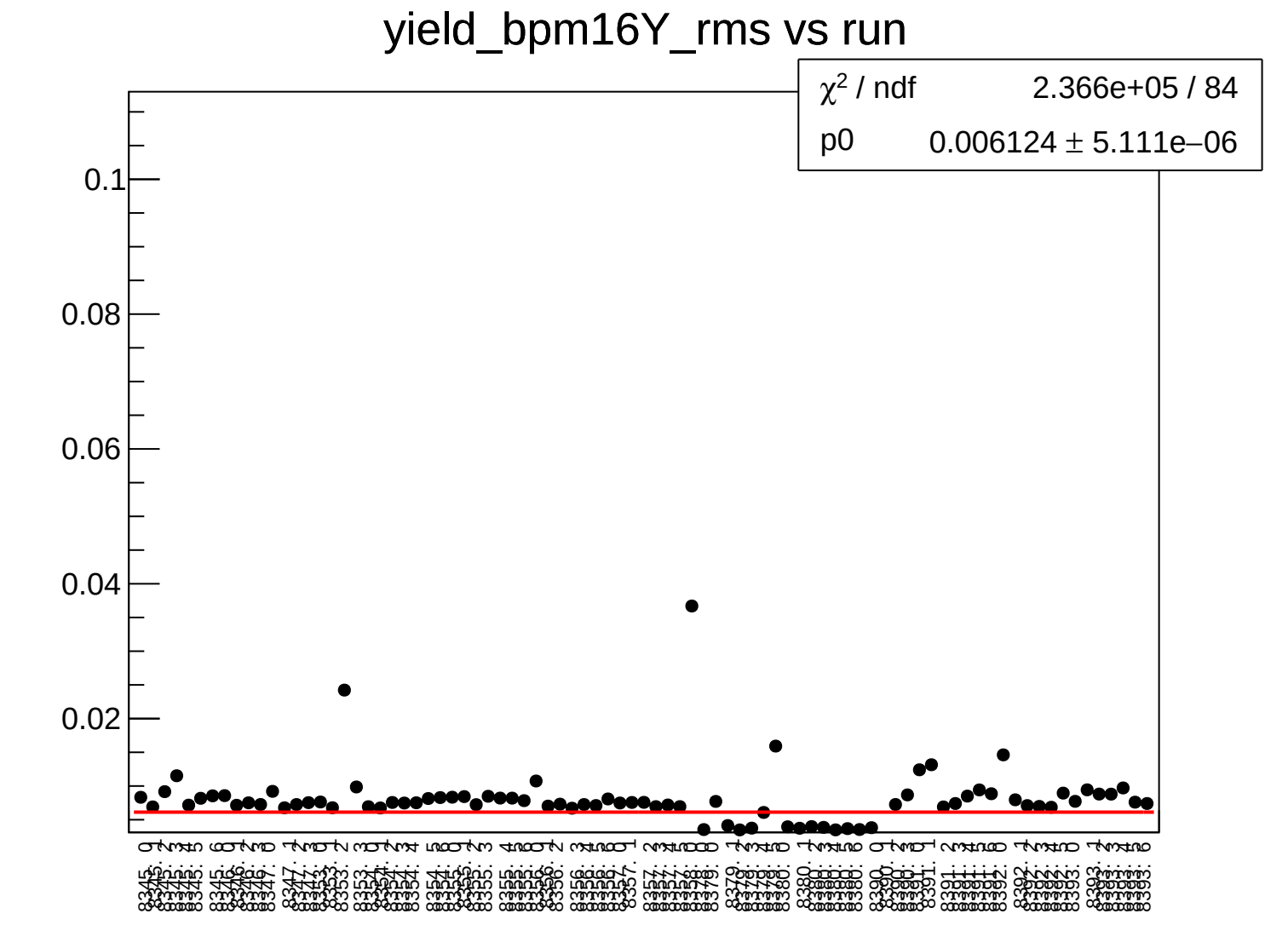

yield_bpm12Y_rms vs run
χ² / ndf 1.812e+05 / 84
p0 0.005409 ± 4.43e−06
0.12
0.1
0.08
0.06
0.04
0.02

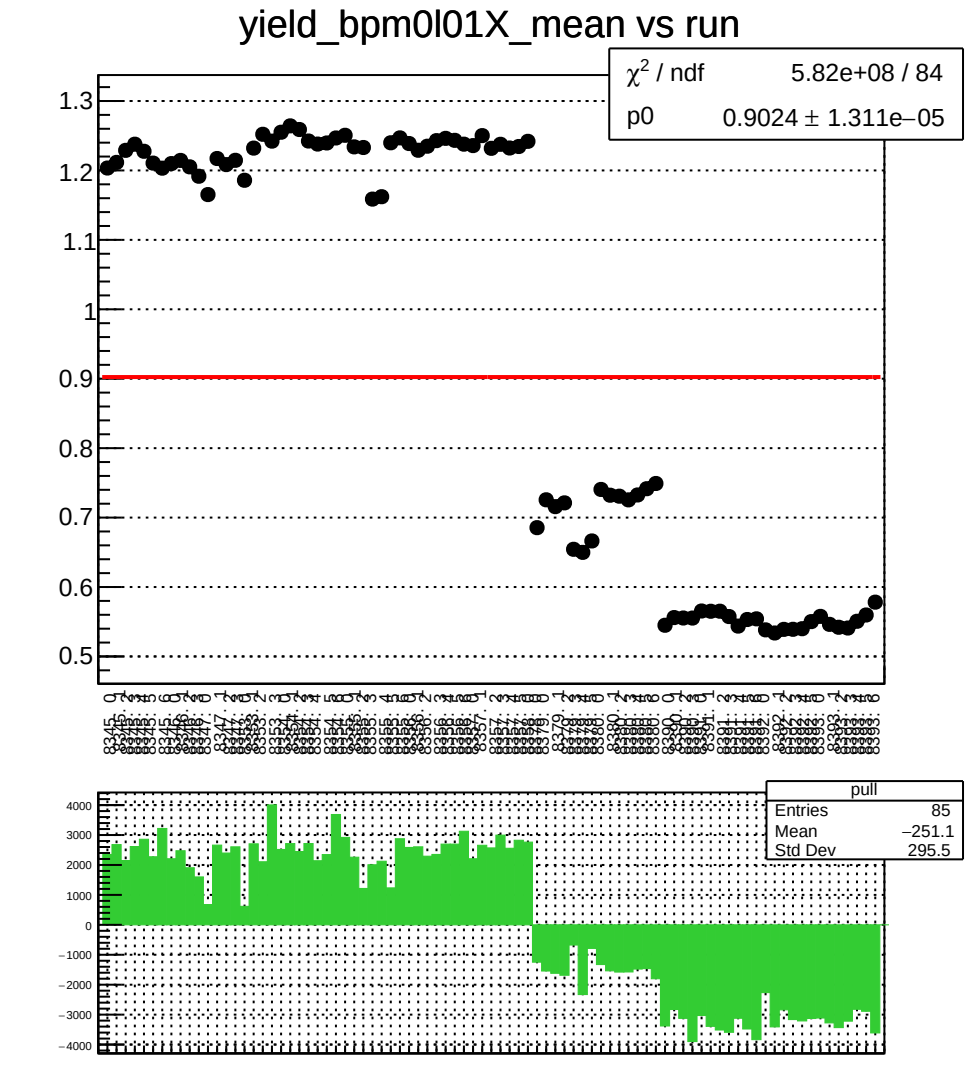

yield_bpm16X_mean vs run
χ² / ndf 8.868e+07 / 84
p0 −0.3003 ± 4.808e−05
pull
Entries 85
Mean 793.6
Std Dev 748.7

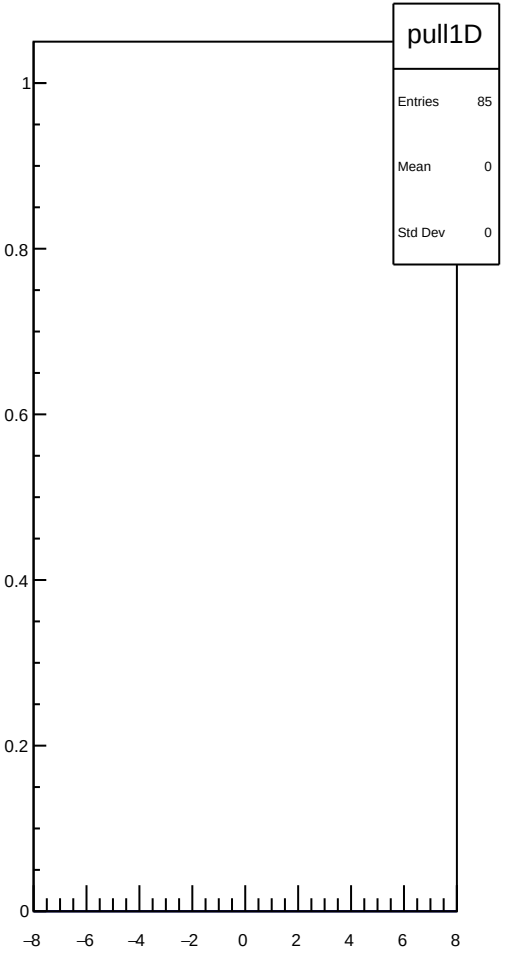

pull1D
Entries 85
Mean 0
Std Dev 0

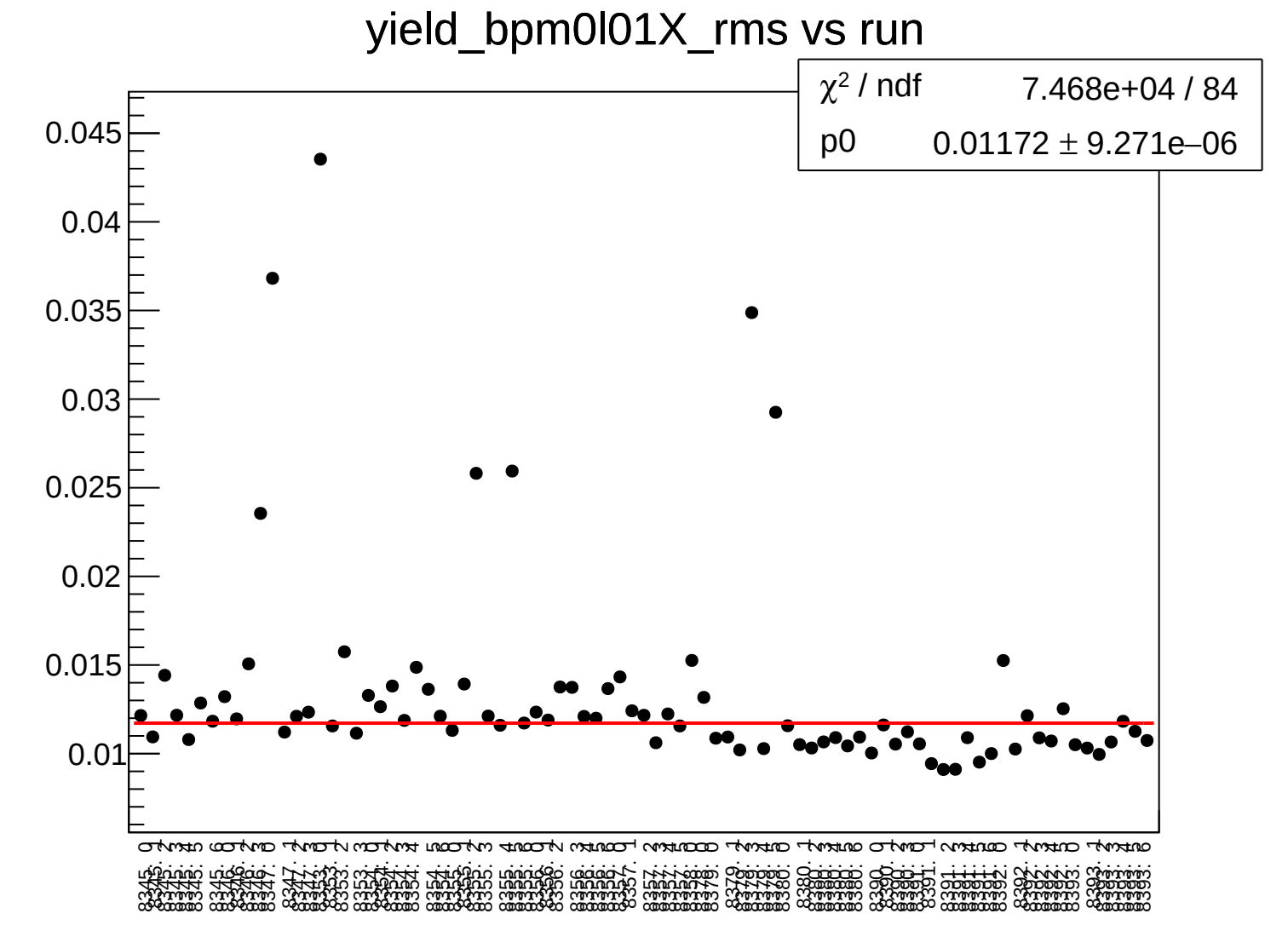

yield_bpm16X_rms vs run
χ^2 / ndf 6.05e+04 / 84
p0 0.04317 ± 3.4e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

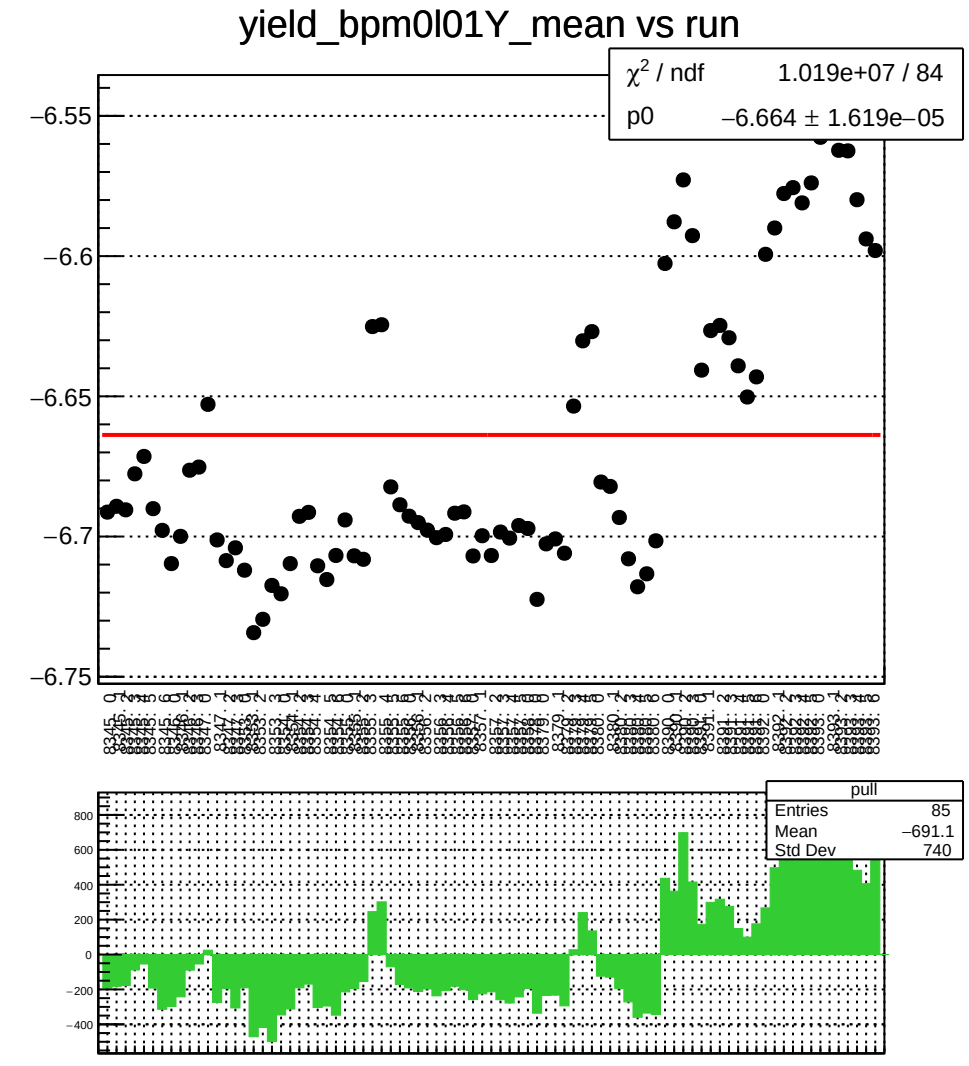

yield_bpm16Y_mean vs run
χ² / ndf 2.099e+09 / 84
p0 0.4096 ± 7.229e−06
pull
Entries 85
Mean −93.72
Std Dev 135.6
pull1D
Entries 85
Mean 0
Std Dev 0

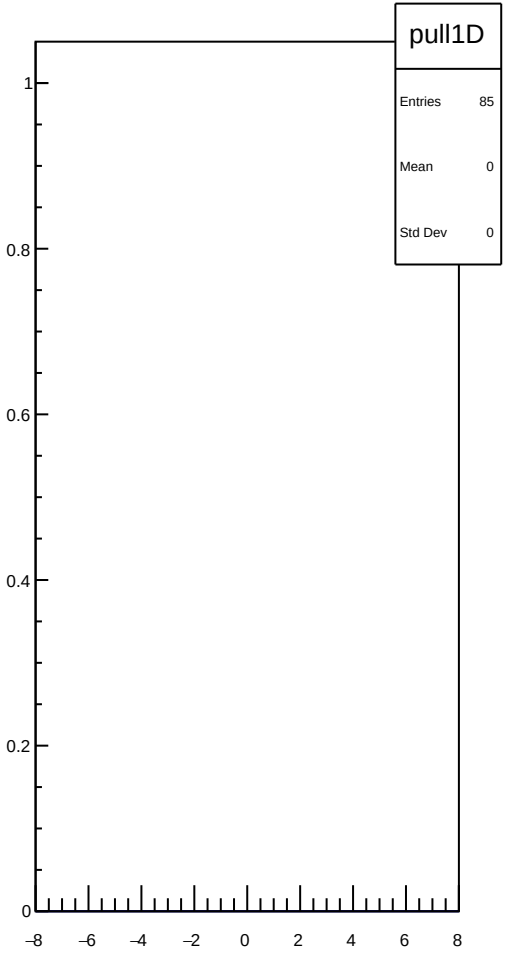

yield_bpm16Y_rms vs run
χ² / ndf 2.366e+05 / 84
p0 0.006124 ± 5.111e−06
0.1
0.08
0.06
0.04
0.02

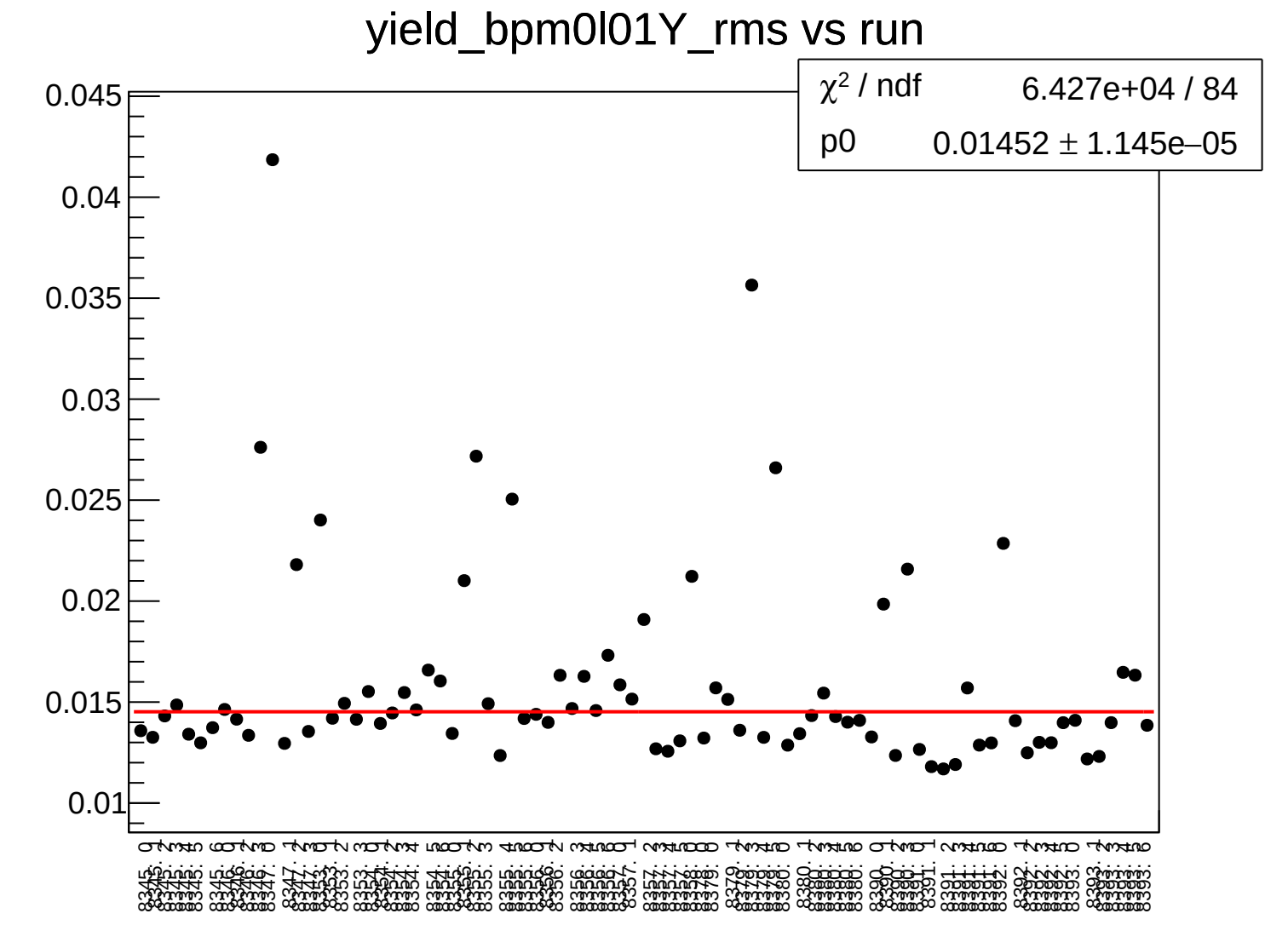

yield_bpm0l01X_mean vs run
χ² / ndf 5.82e+08 / 84
p0 0.9024 ± 1.311e−05
pull
Entries 85
Mean −251.1
Std Dev 295.5

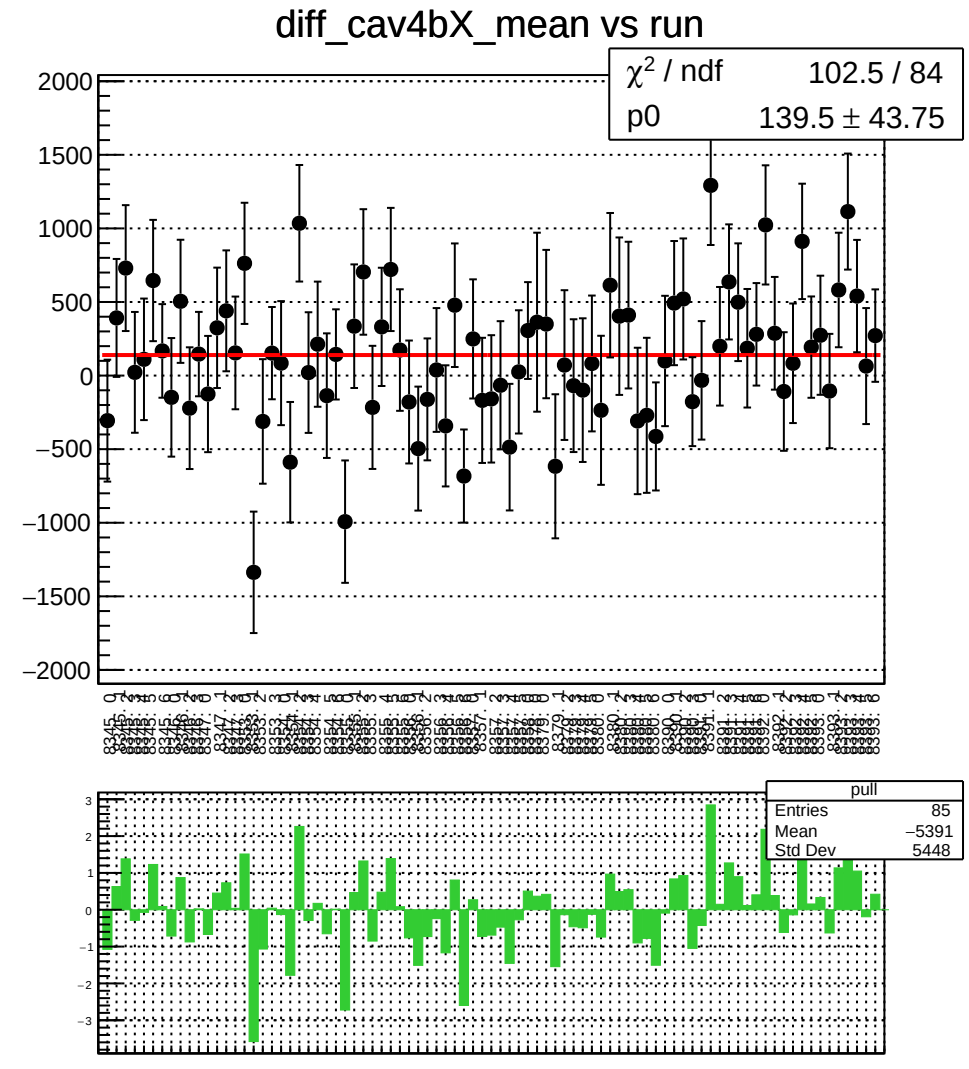

pull1D
Entries 85
Mean 0
Std Dev 0

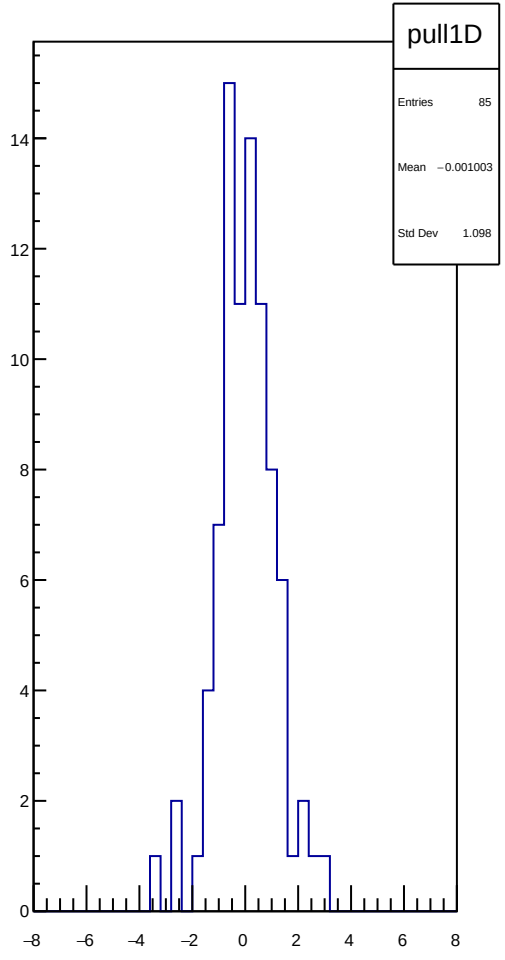

yield_bpm0l01X_rms vs run
χ² / ndf 7.468e+04 / 84
p0 0.01172 ± 9.271e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

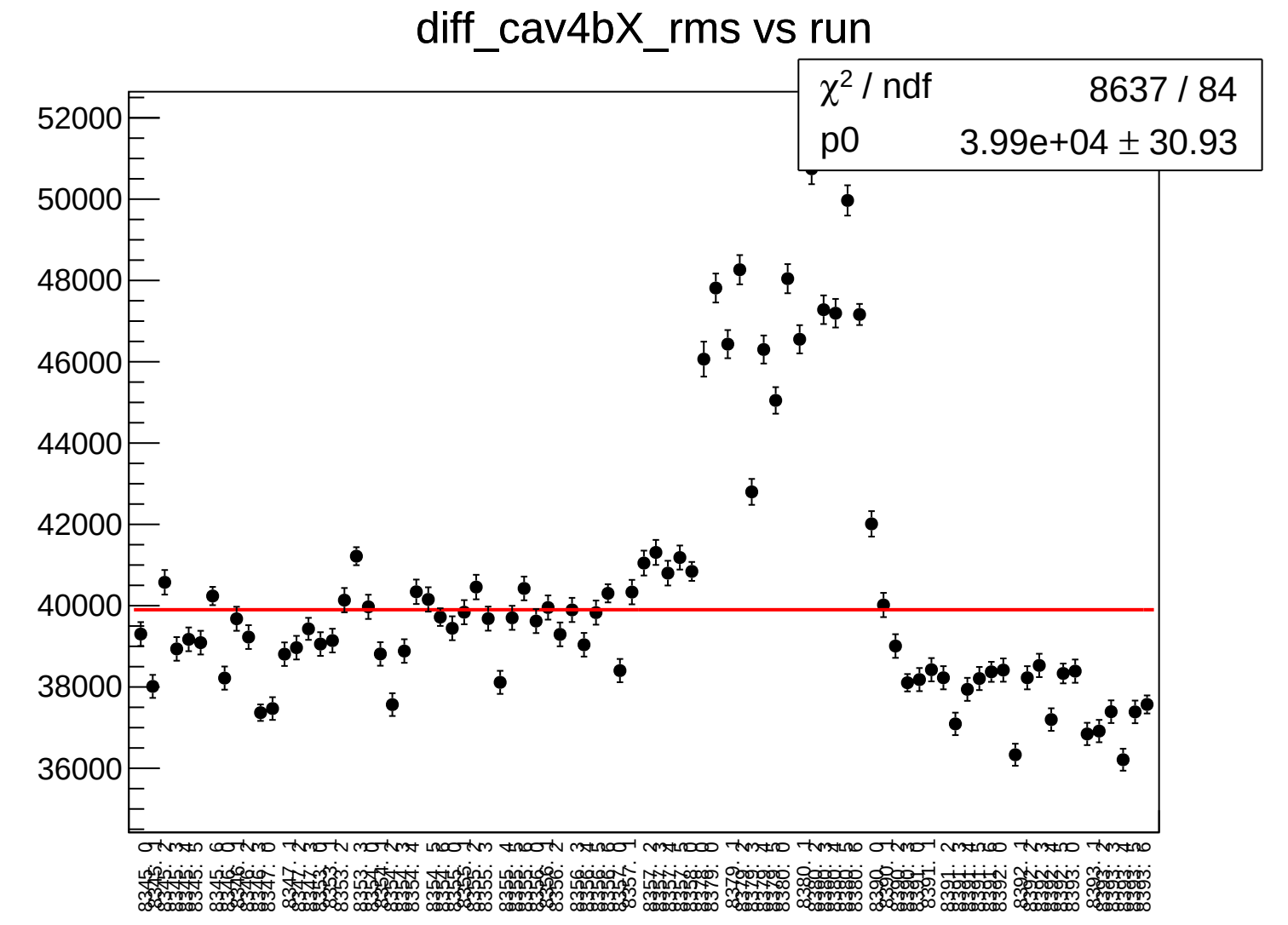

yield_bpm0l01Y_mean vs run
χ² / ndf 1.019e+07 / 84
p0 −6.664 ± 1.619e−05
−6.55
−6.6
−6.65
−6.7
−6.75
pull
Entries 85
Mean −691.1
Std Dev 740
800
600
400
200
0
−200
−400

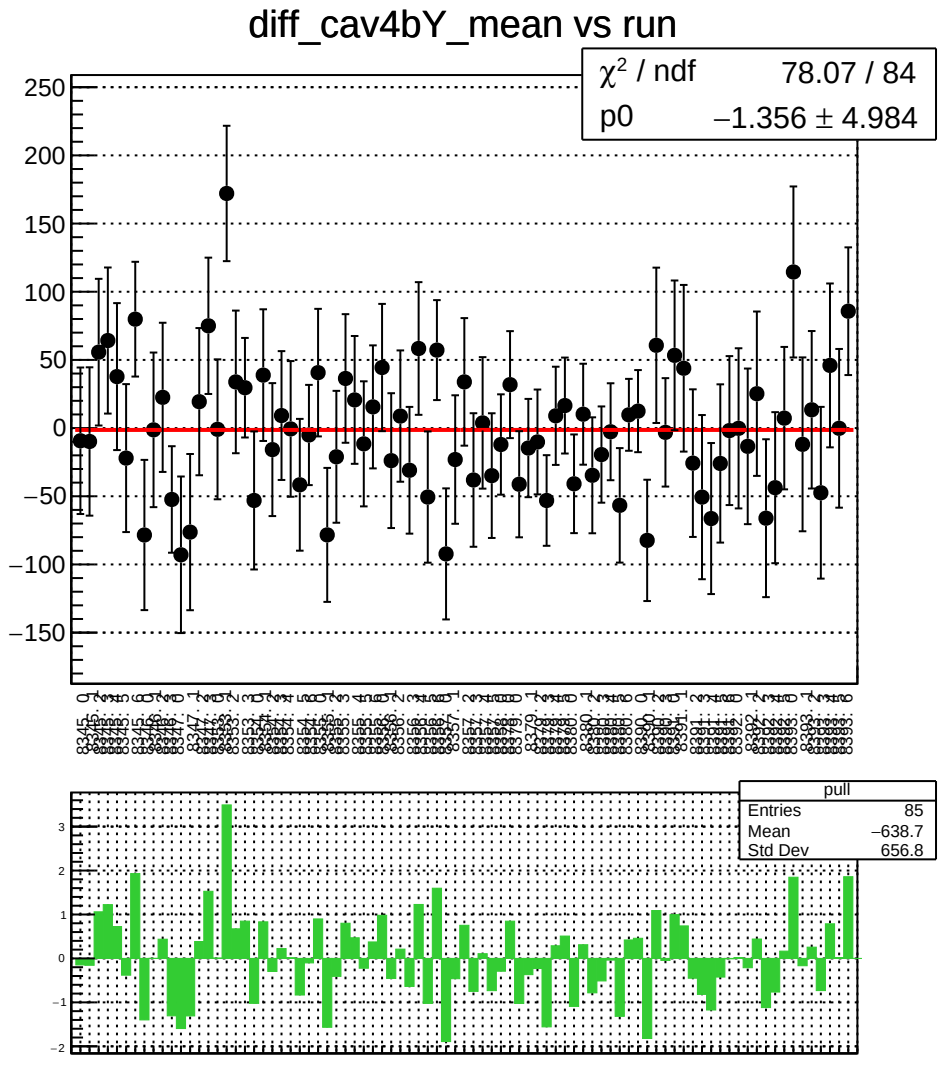

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

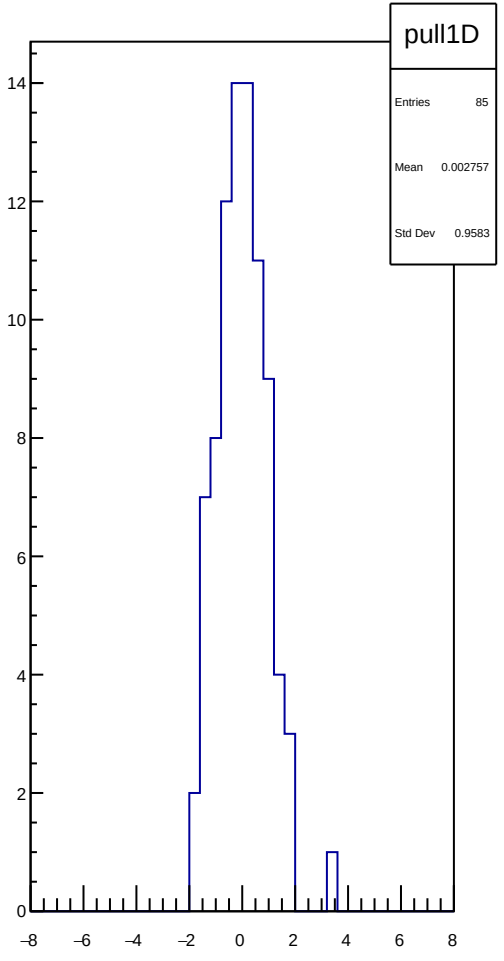

yield_bpm0l01Y_rms vs run
χ² / ndf 6.427e+04 / 84
p0 0.01452 ± 1.145e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

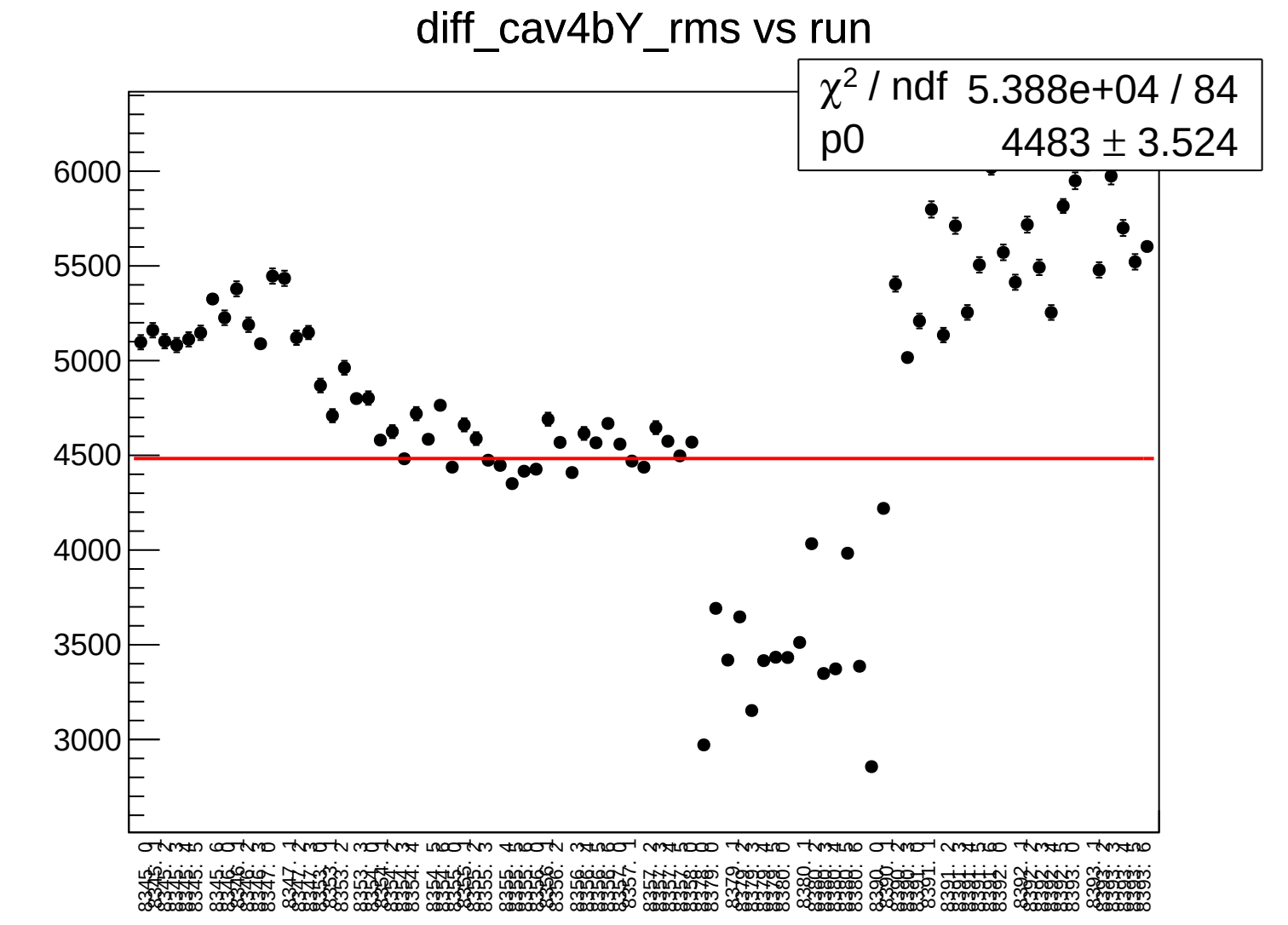

diff_cav4bX_mean vs run
χ² / ndf 102.5 / 84
p0 139.5 ± 43.75
pull
Entries 85
Mean −5391
Std Dev 5448

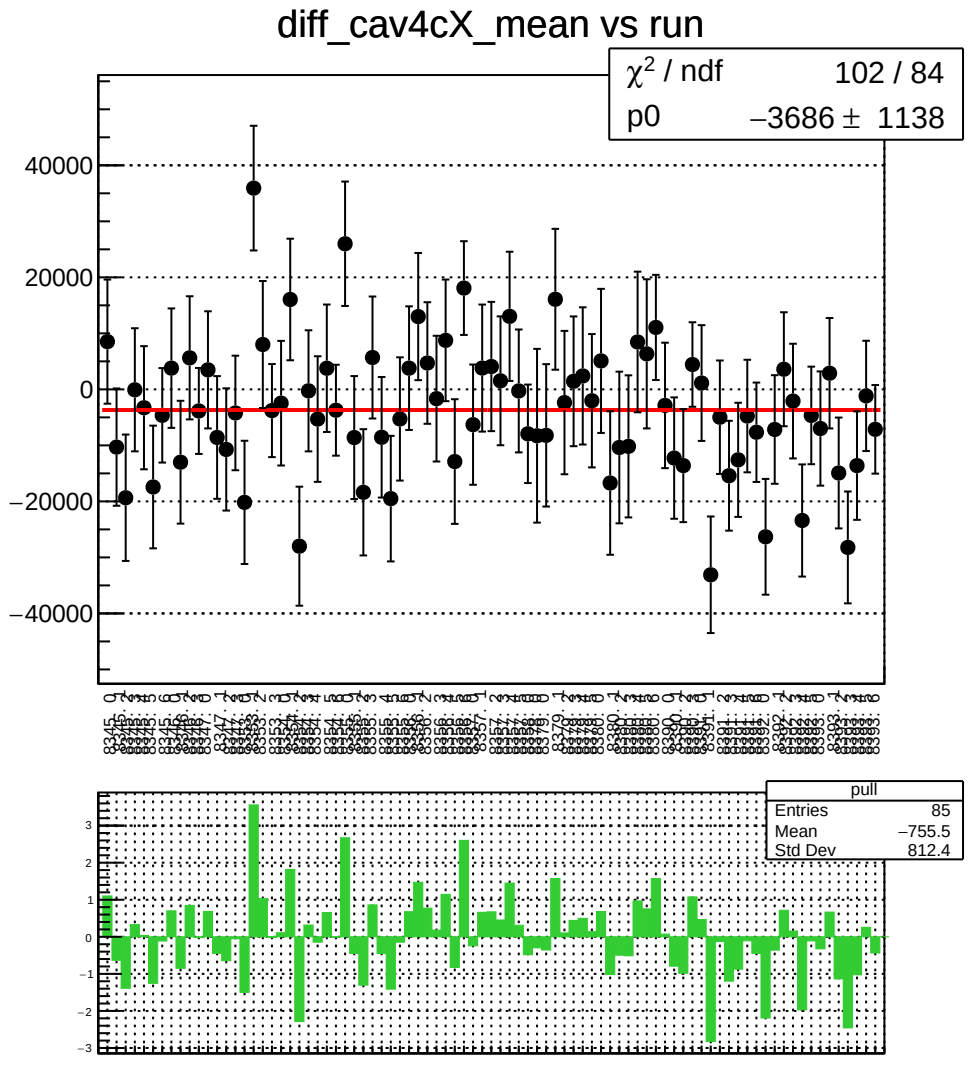

pull1D
Entries 85
Mean −0.001003
Std Dev 1.098

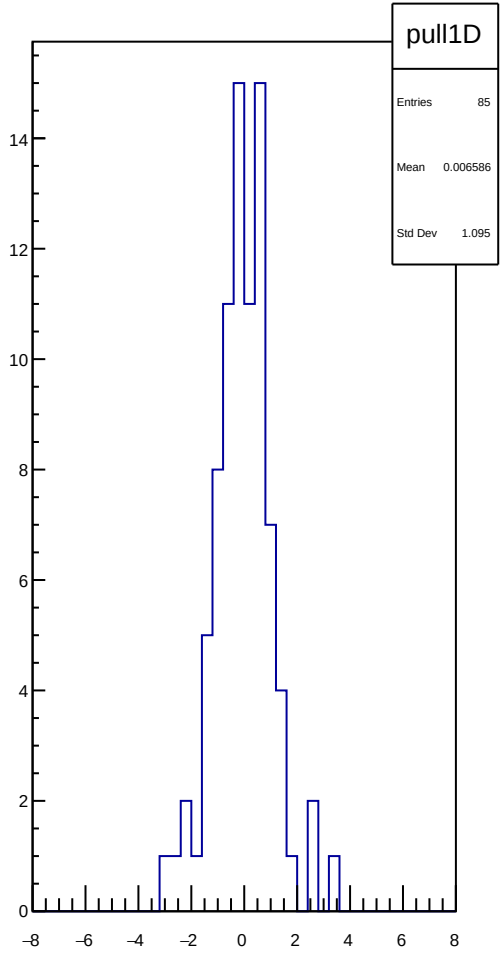

diff_cav4bX_rms vs run
χ^2 / ndf 8637 / 84
p0 3.99e+04 ± 30.93
52000
50000
48000
46000
44000
42000
40000
38000
36000

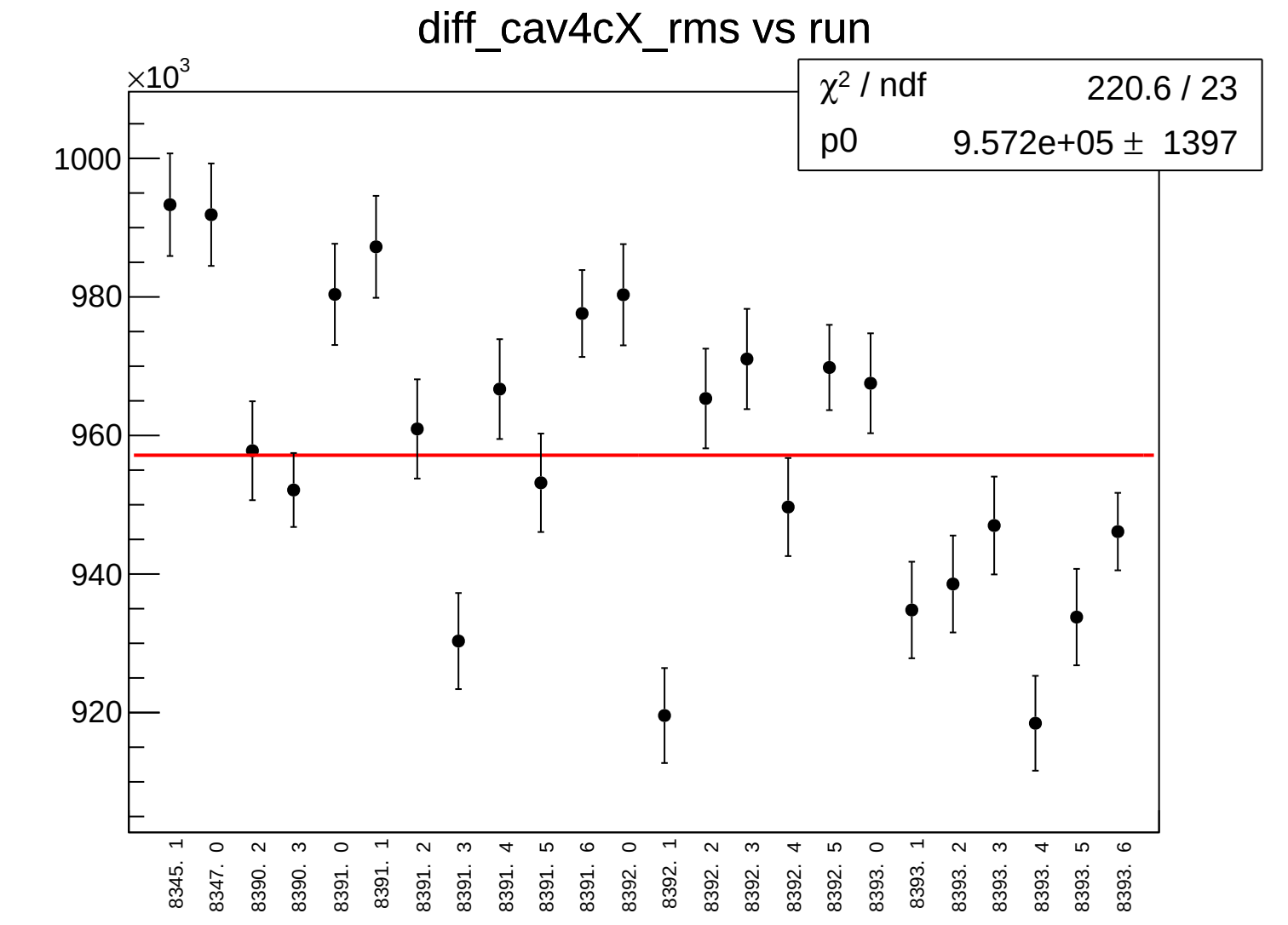

diff_cav4bY_mean vs run
χ² / ndf 78.07 / 84
p0 −1.356 ± 4.984
pull
Entries 85
Mean −638.7
Std Dev 656.8

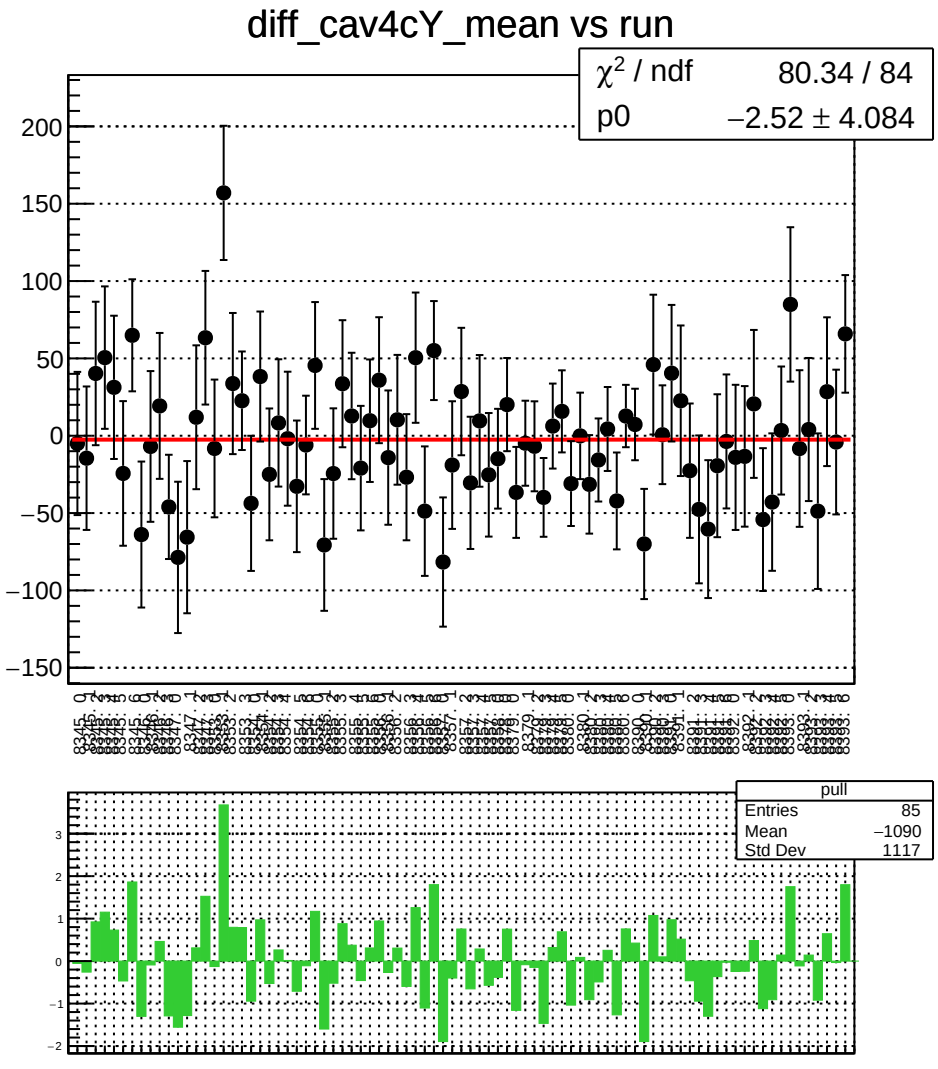

pull1D
Entries 85
Mean 0.002757
Std Dev 0.9583

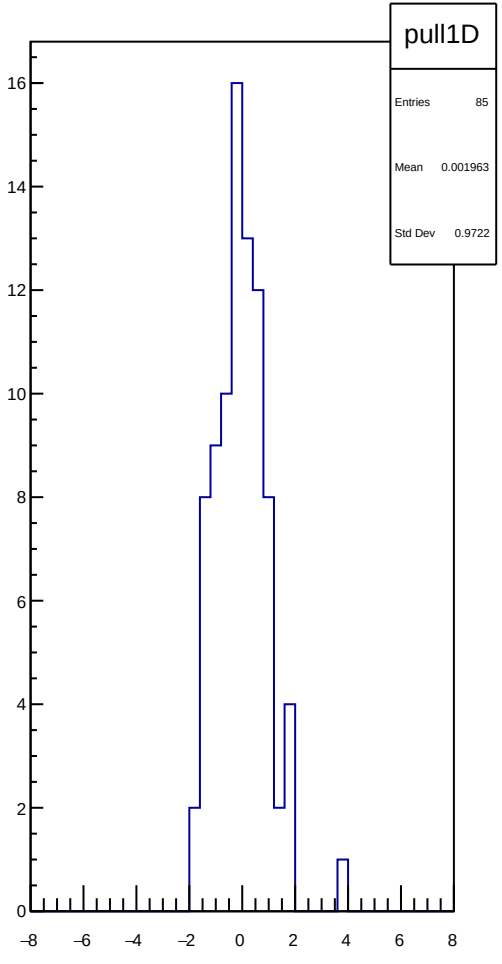

diff_cav4bY_rms vs run
χ² / ndf 5.388e+04 / 84
p0 4483 ± 3.524
6000
5500
5000
4500
4000
3500
3000

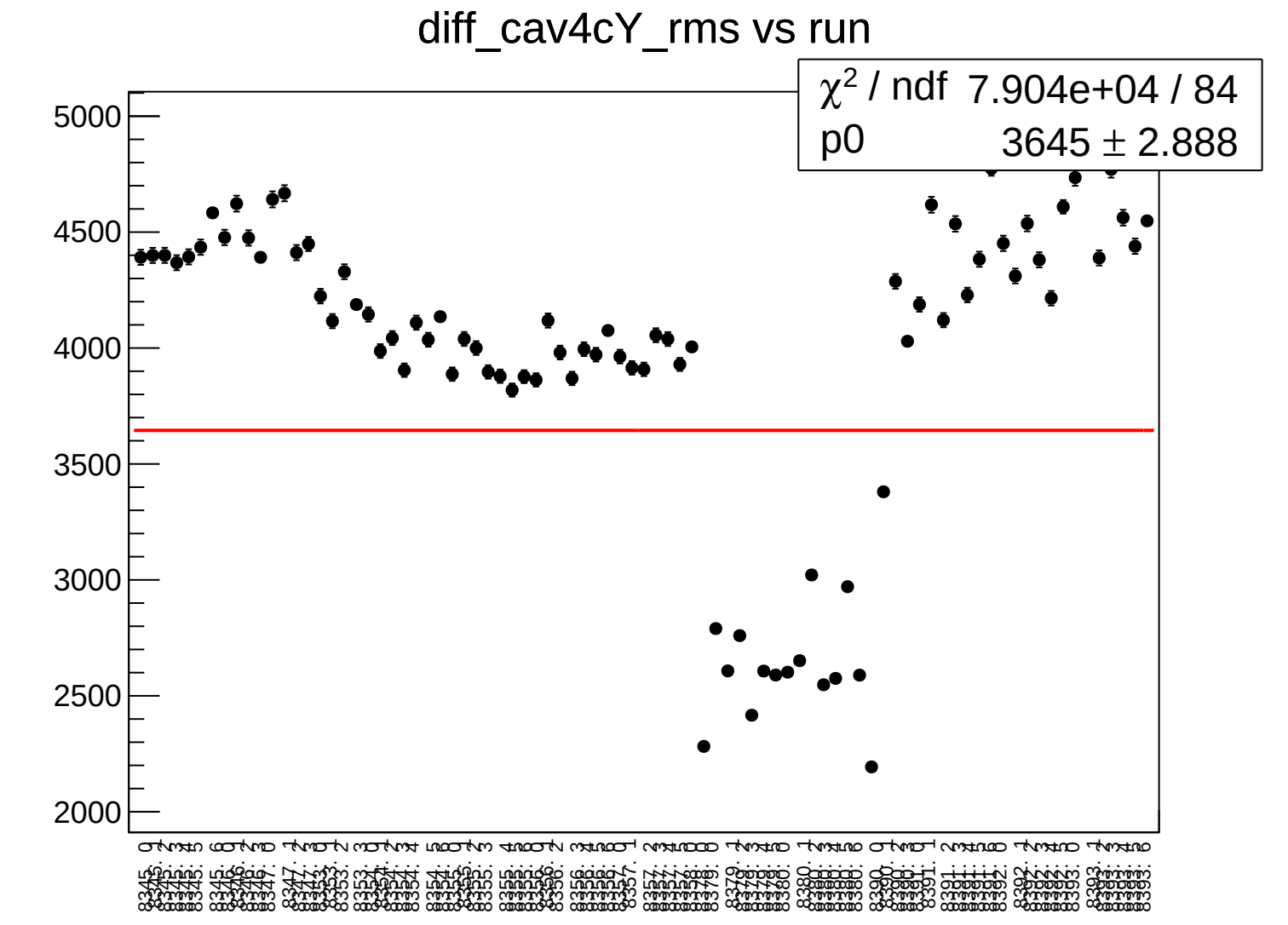

diff_cav4cX_mean vs run
χ² / ndf 102 / 84
p0 −3686 ± 1138
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −755.5
Std Dev 812.4
3
2
1
0
−1
−2
−3

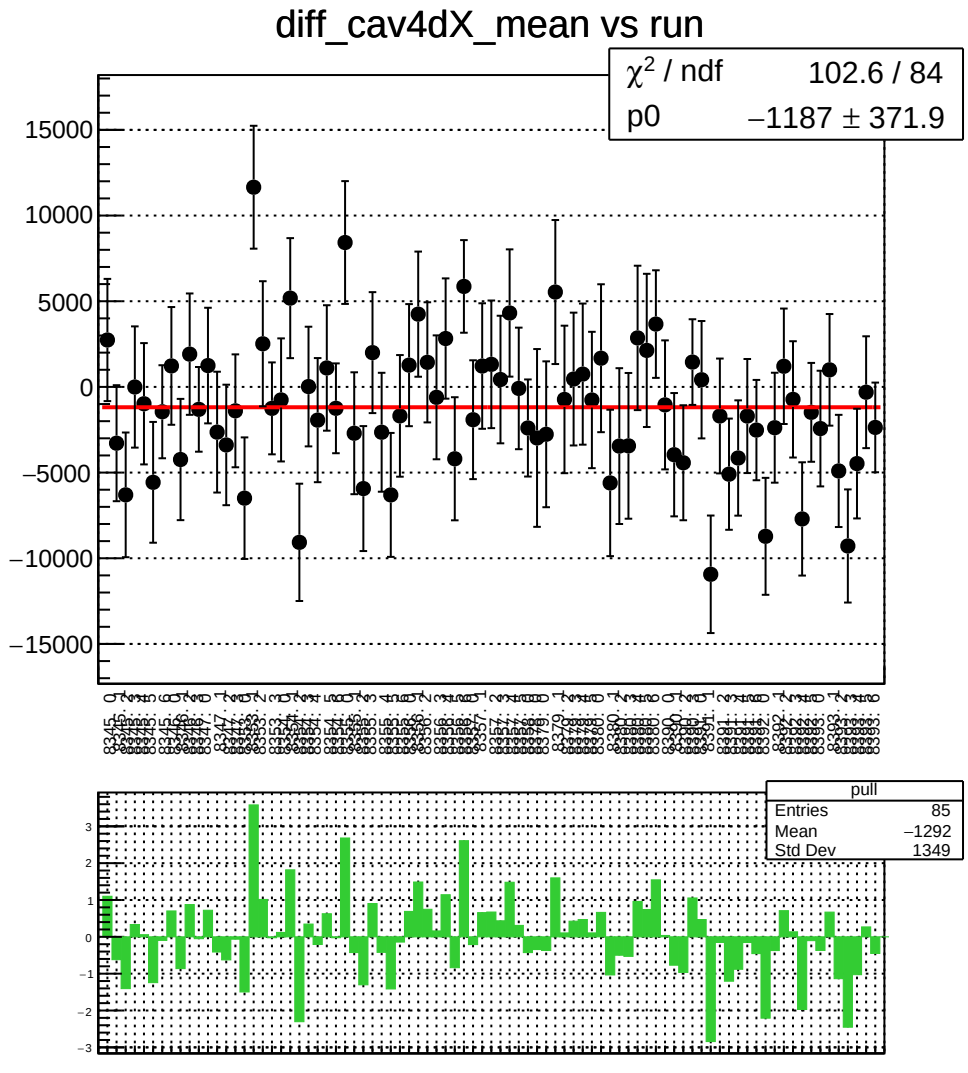

pull1D
Entries 85
Mean 0.006586
Std Dev 1.095
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

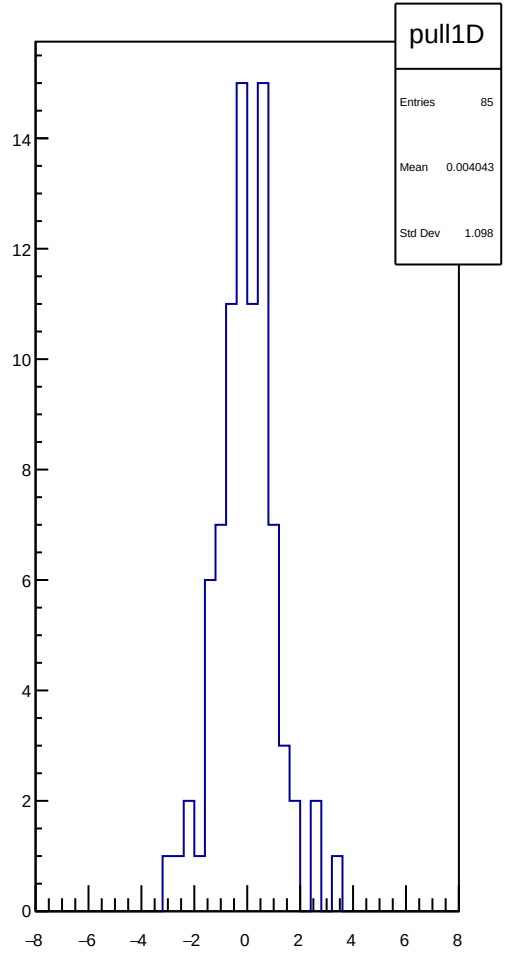

diff_cav4cX_rms vs run
×10^3
χ² / ndf 220.6 / 23
p0 9.572e+05 ± 1397
1000
980
960
940
920
8345. 1
8347. 0
8390. 2
8390. 3
8391. 0
8391. 1
8391. 2
8391. 3
8391. 4
8391. 5
8391. 6
8392. 0
8392. 1
8392. 2
8392. 3
8392. 4
8392. 5
8393. 0
8393. 1
8393. 2
8393. 3
8393. 4
8393. 5
8393. 6

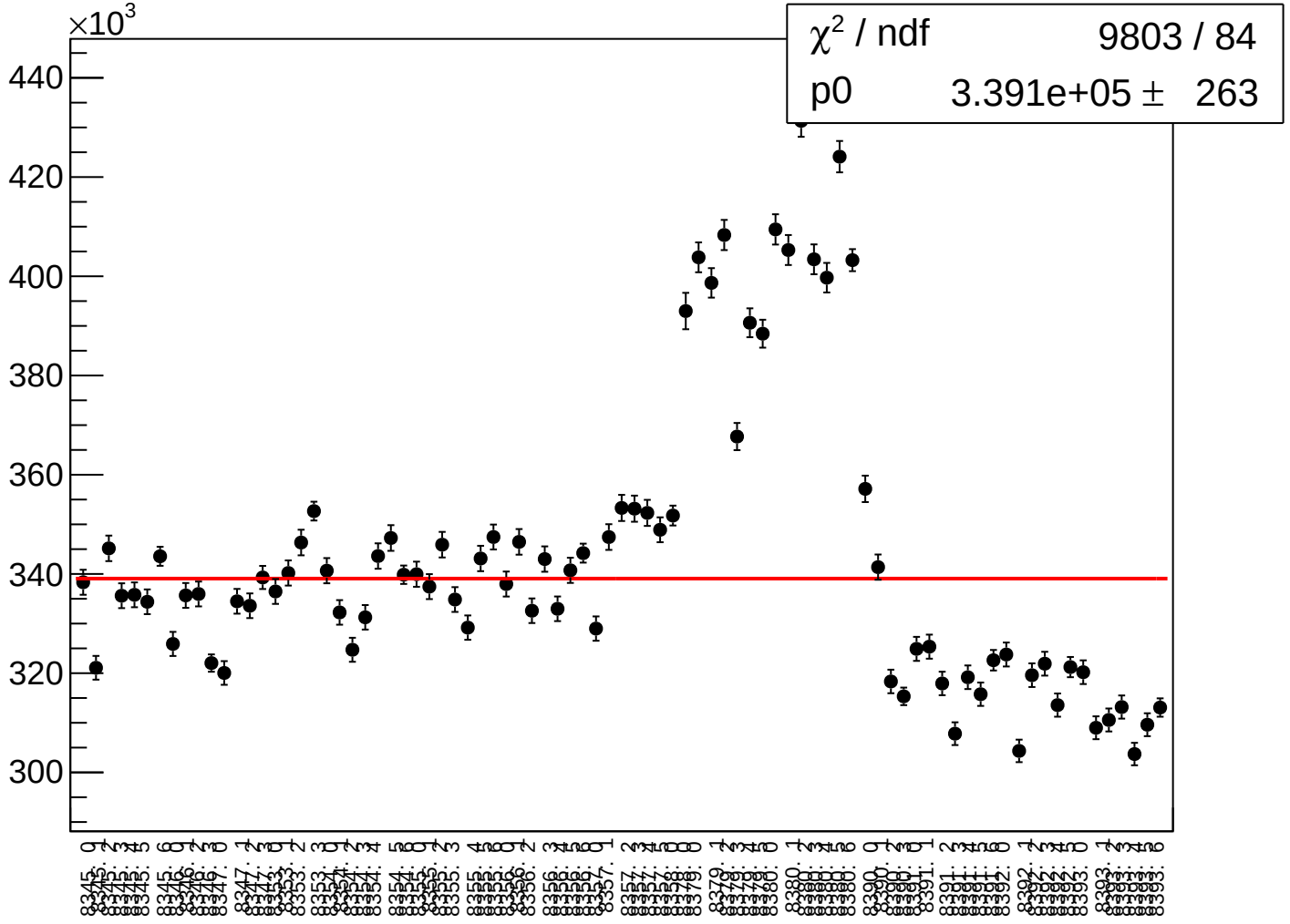

diff_cav4cY_mean vs run
χ^2 / ndf 80.34 / 84
p0 −2.52 ± 4.084
pull
Entries 85
Mean −1090
Std Dev 1117

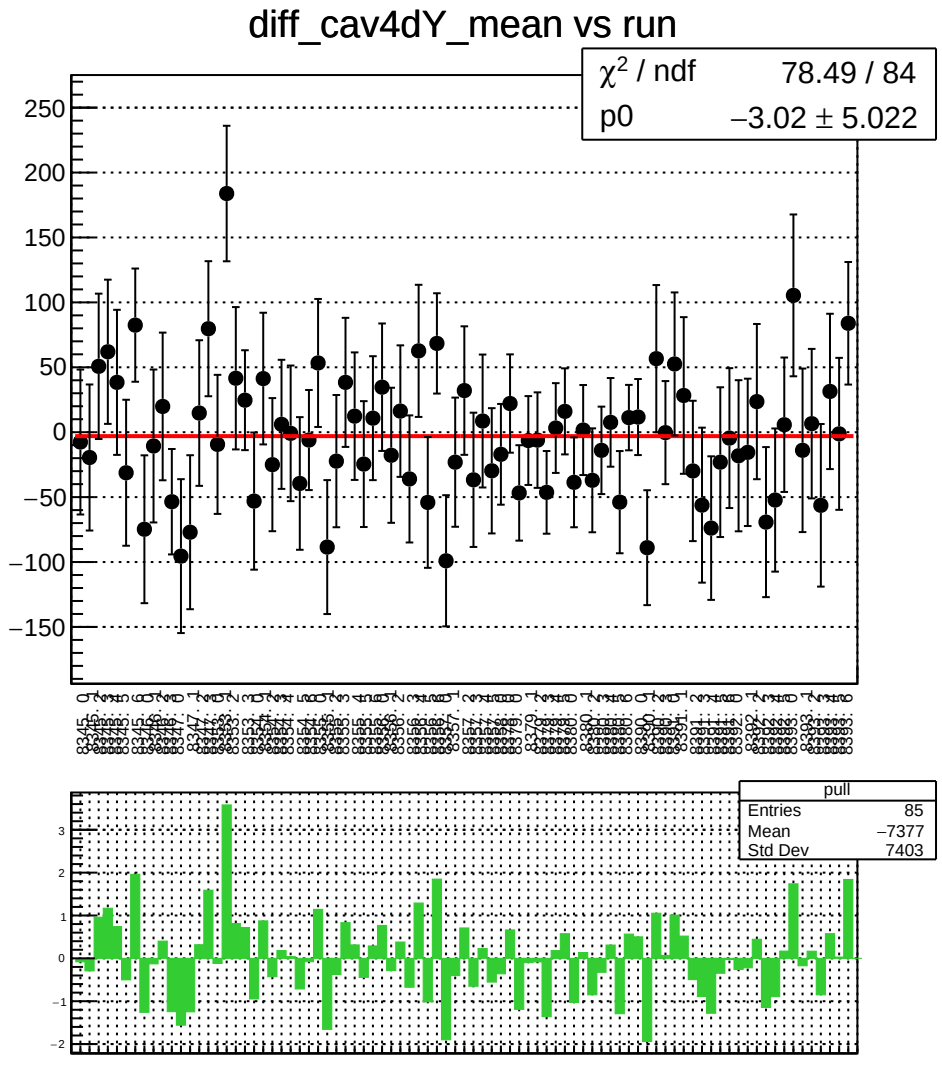

pull1D
Entries 85
Mean 0.001963
Std Dev 0.9722

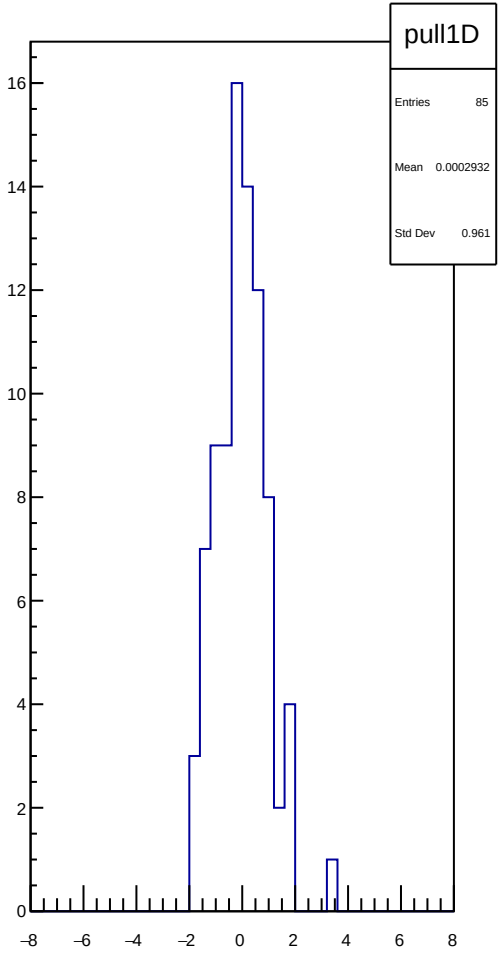

diff_cav4cY_rms vs run
χ² / ndf 7.904e+04 / 84
p0 3645 ± 2.888
5000
4500
4000
3500
3000
2500
2000

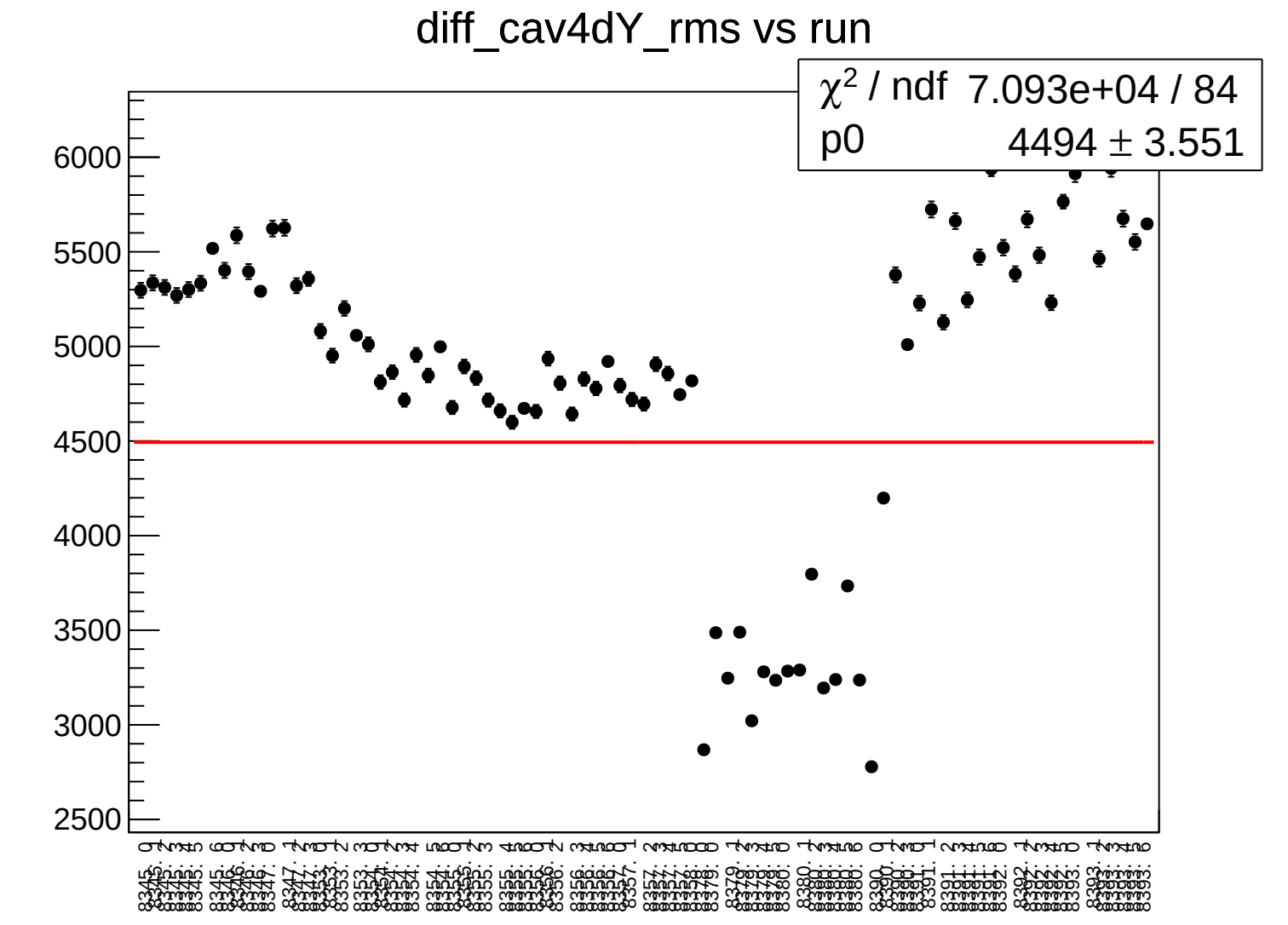

diff_cav4dX_mean vs run
χ² / ndf 102.6 / 84
p0 −1187 ± 371.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −1292
Std Dev 1349
3
2
1
0
−1
−2
−3

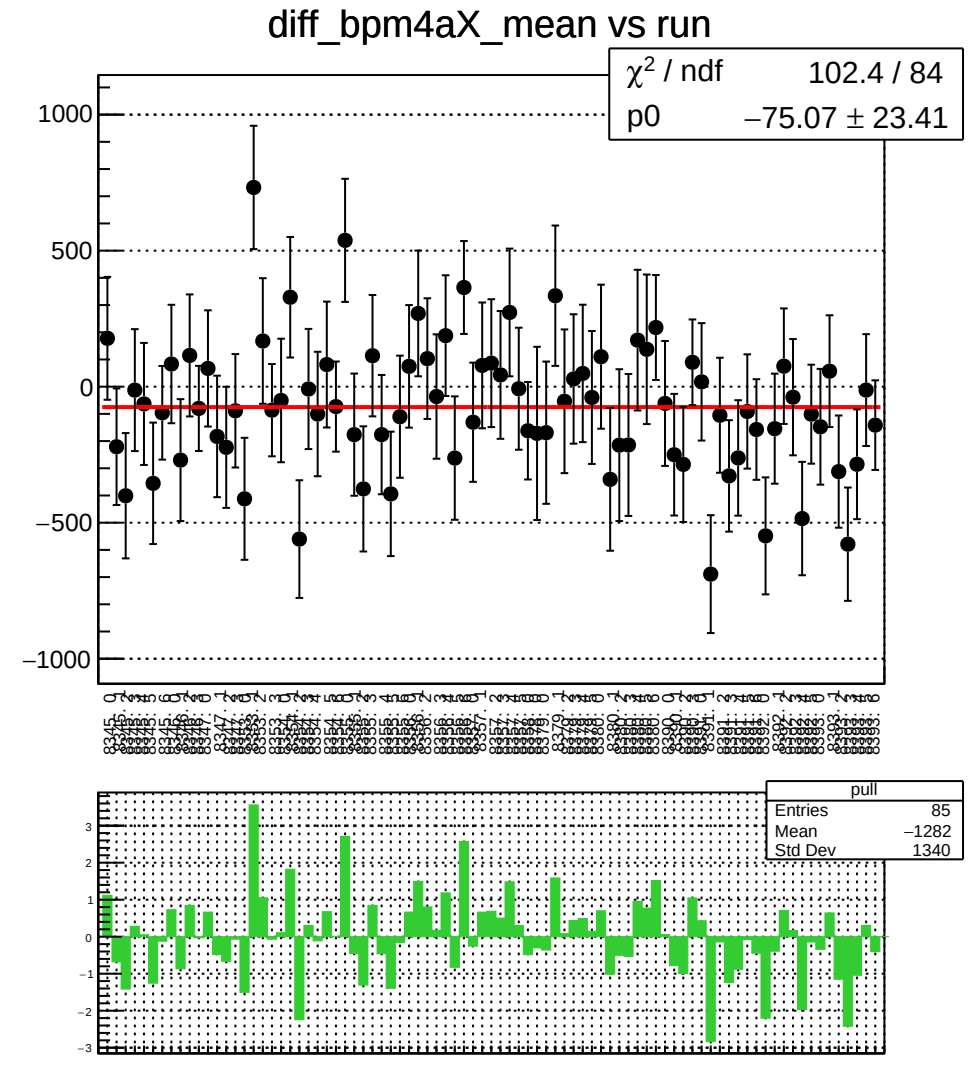

pull1D
Entries 85
Mean 0.004043
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

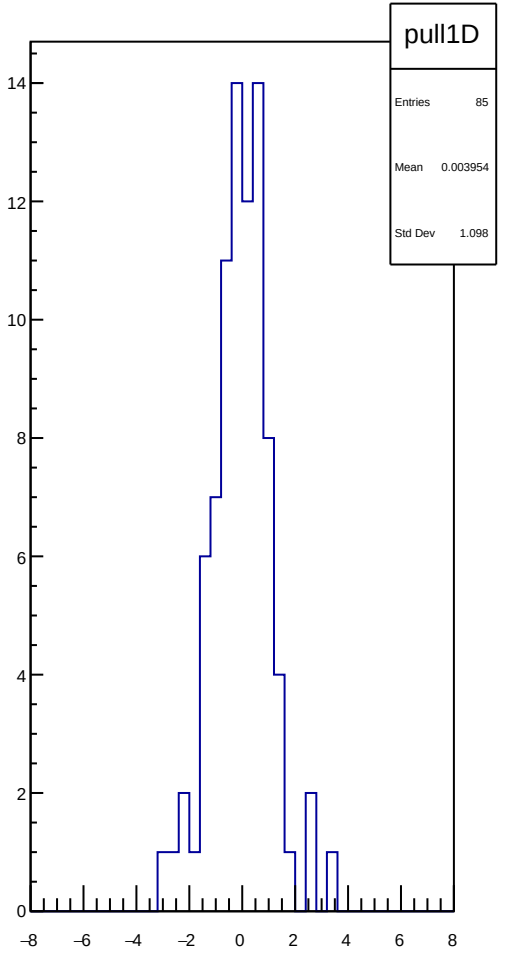

diff_cav4dX_rms vs run
×10^3
440
420
400
380
360
340
320
300
χ² / ndf 9803 / 84
p0 3.391e+05 ± 263

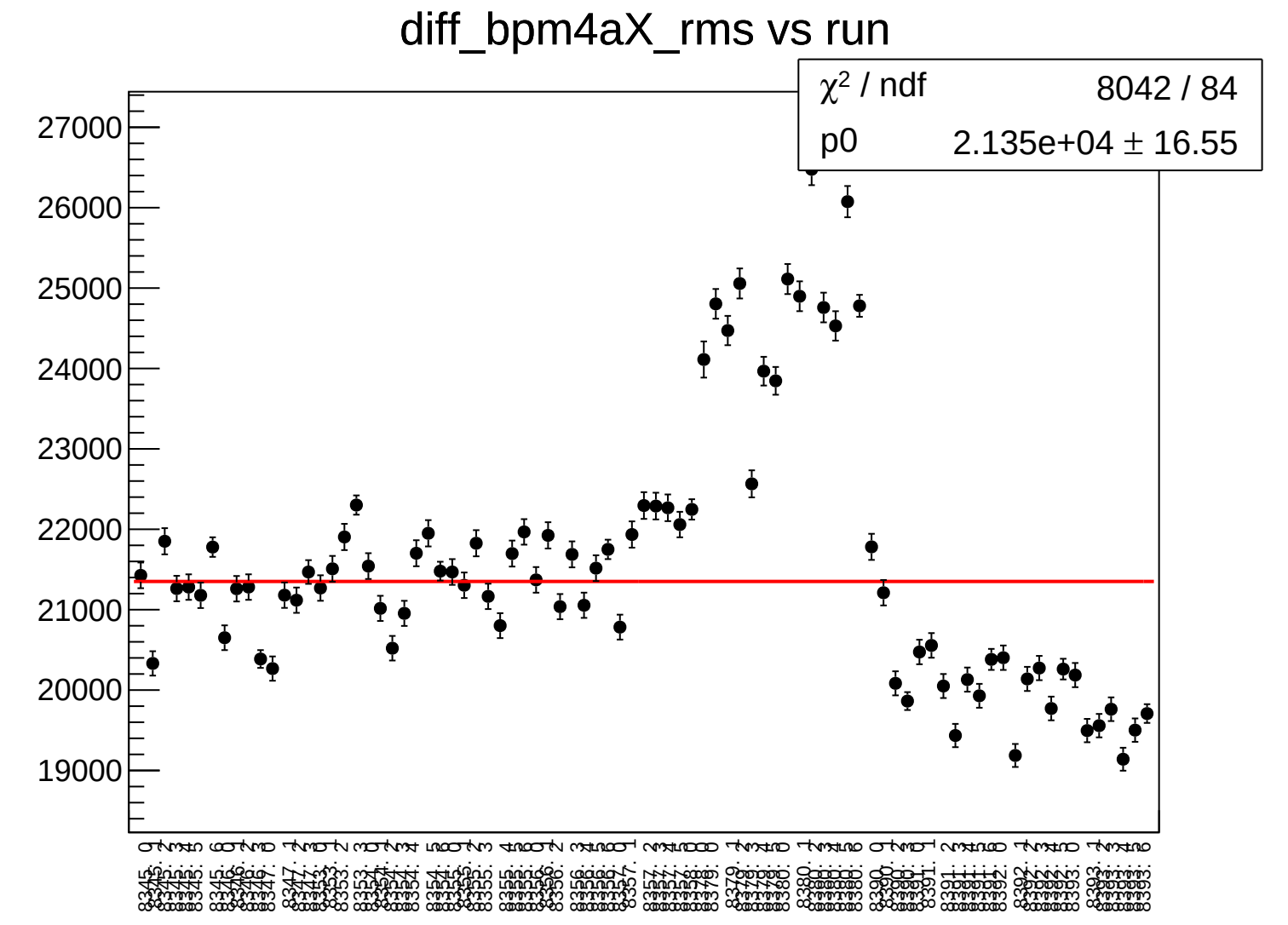

diff_cav4dY_mean vs run
χ² / ndf 78.49 / 84
p0 −3.02 ± 5.022
pull
Entries 85
Mean −7377
Std Dev 7403

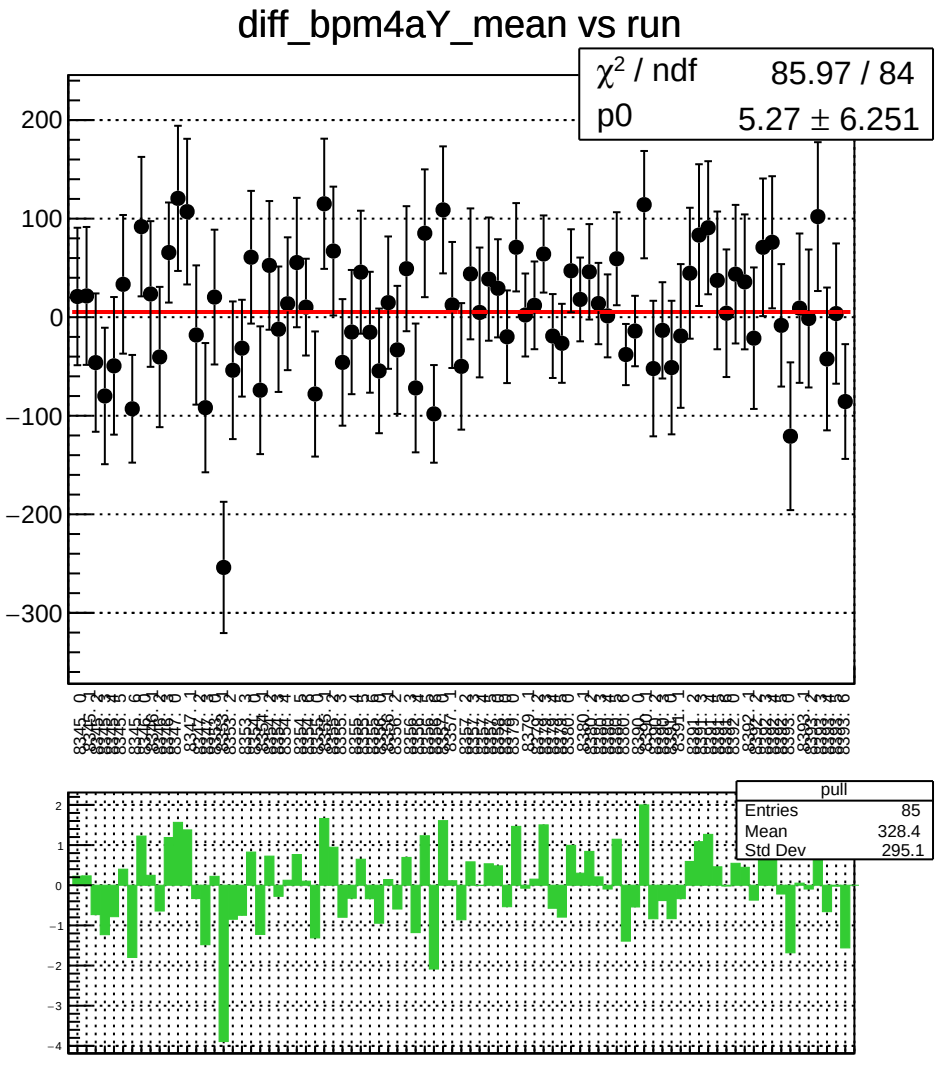

pull1D
Entries 85
Mean 0.0002932
Std Dev 0.961

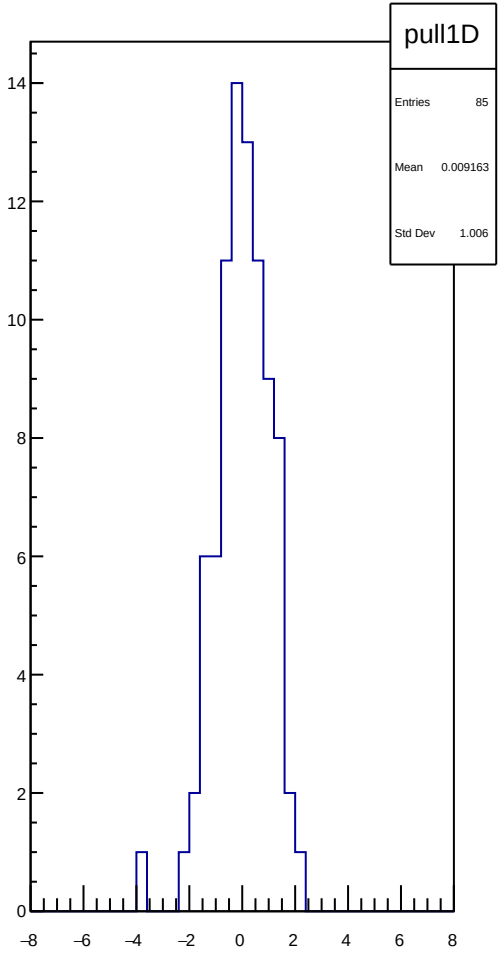

diff_cav4dY_rms vs run
χ² / ndf 7.093e+04 / 84
p0 4494 ± 3.551
6000
5500
5000
4500
4000
3500
3000
2500

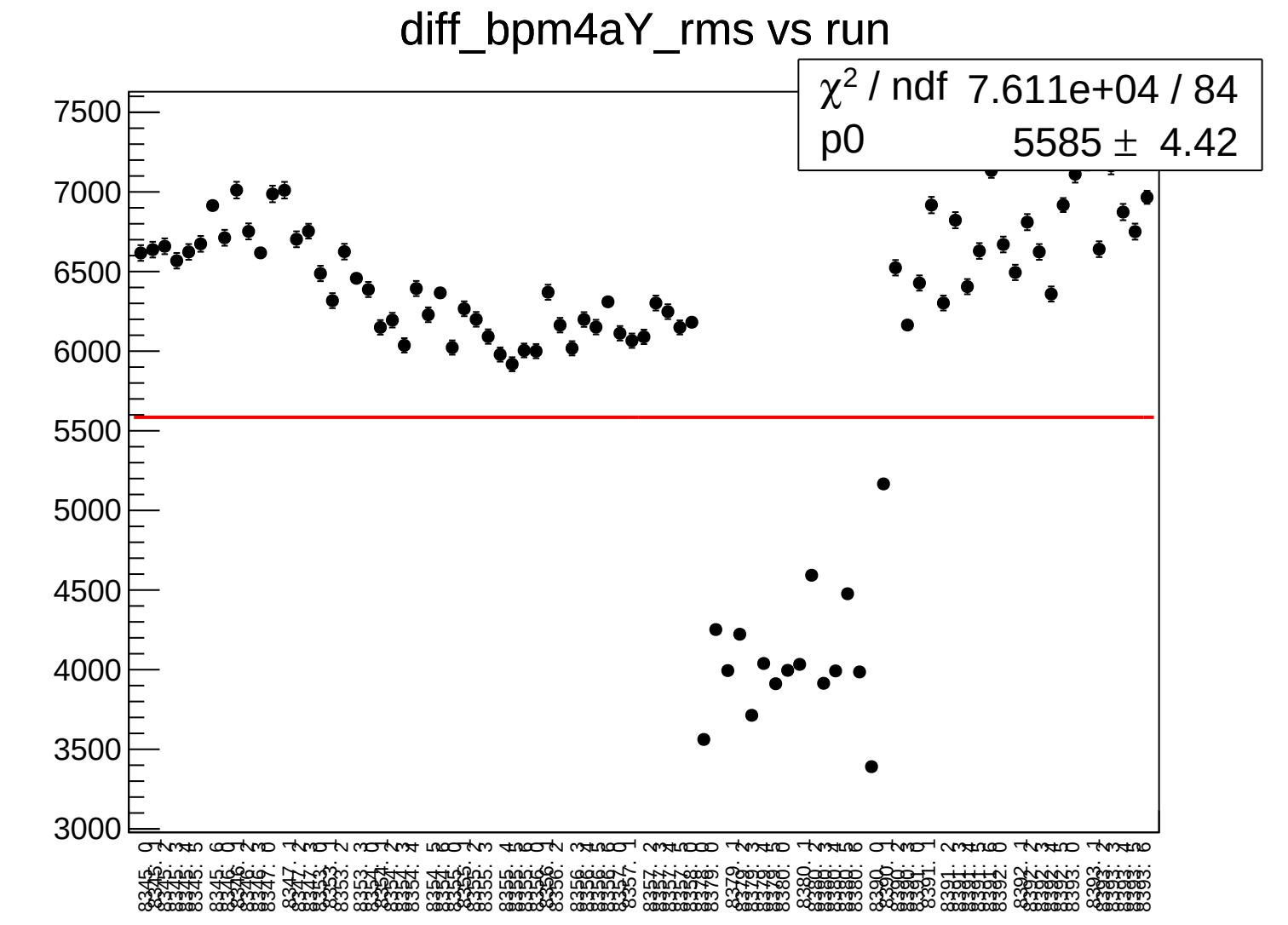

diff_bpm4aX_mean vs run
χ² / ndf 102.4 / 84
p0 −75.07 ± 23.41
1000
500
0
−500
−1000
pull
Entries 85
Mean −1282
Std Dev 1340
3
2
1
0
−1
−2
−3

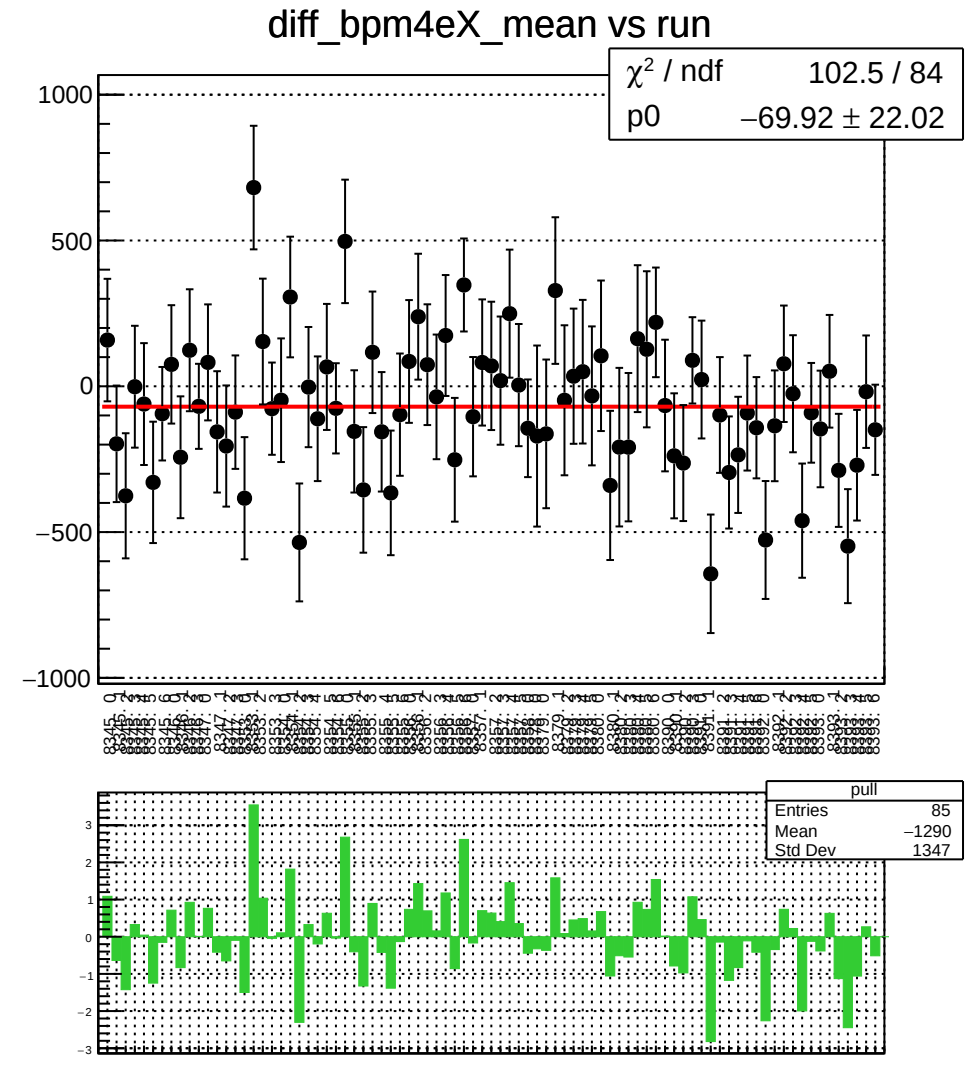

pull1D
Entries 85
Mean 0.003954
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

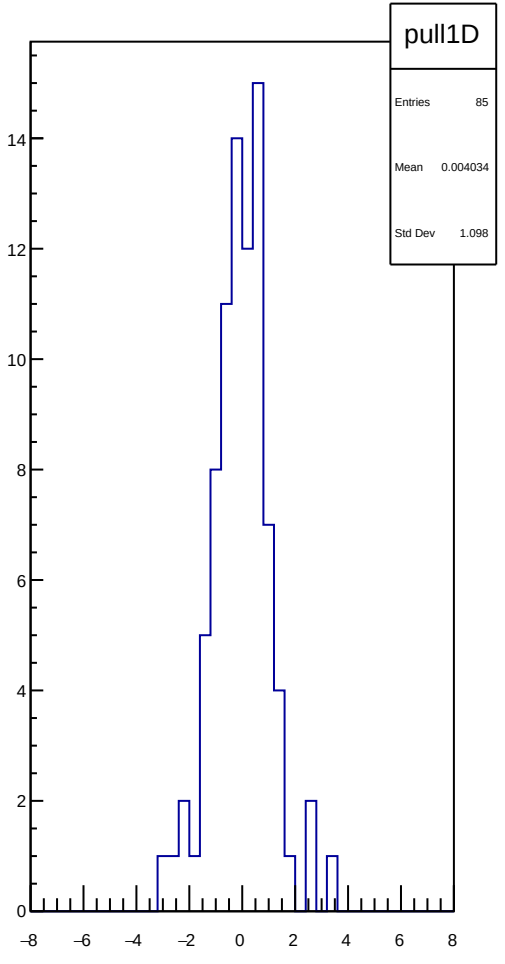

diff_bpm4aX_rms vs run
χ² / ndf 8042 / 84
p0 2.135e+04 ± 16.55
27000
26000
25000
24000
23000
22000
21000
20000
19000

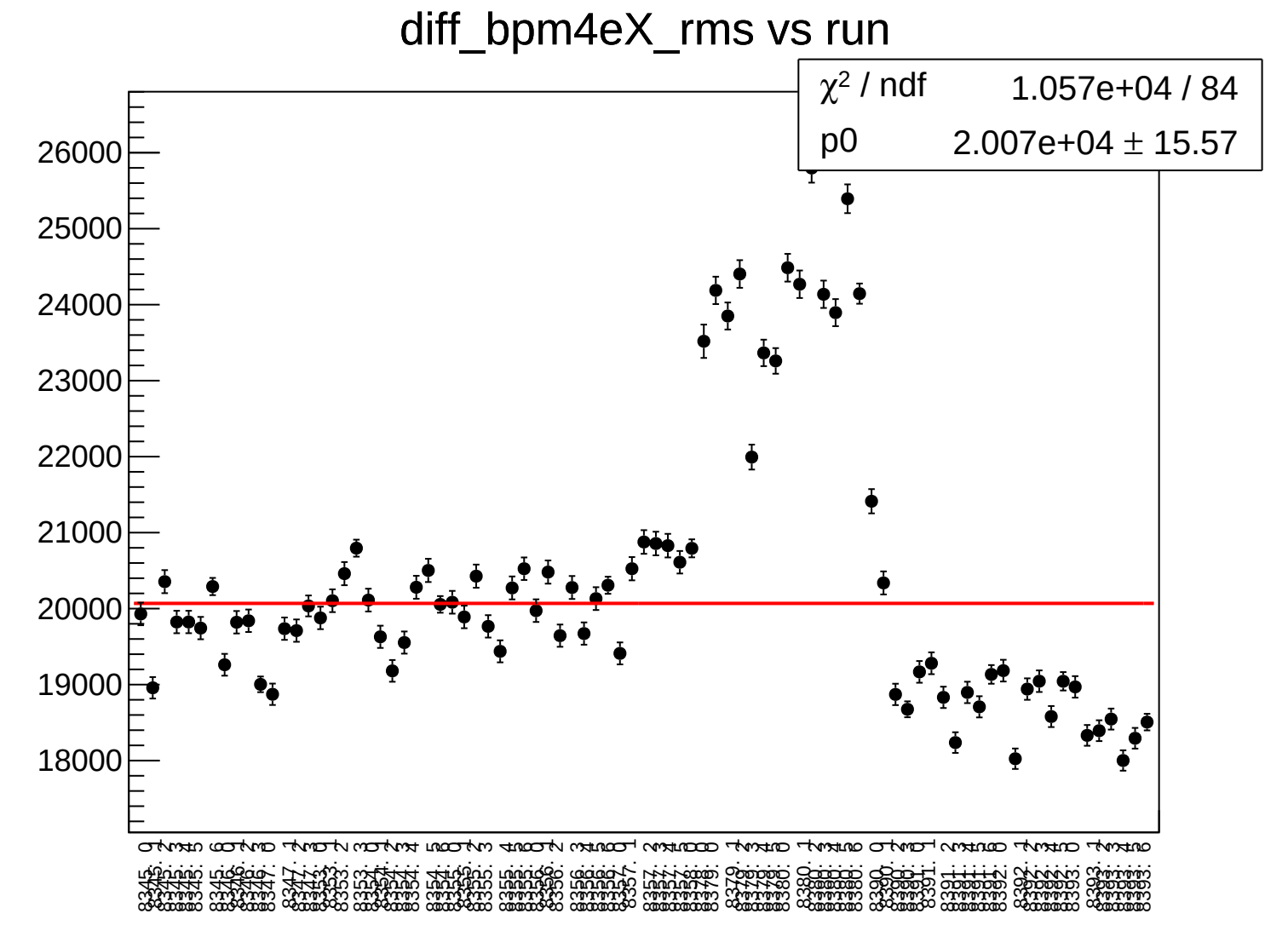

diff_bpm4aY_mean vs run
χ² / ndf 85.97 / 84
p0 5.27 ± 6.251
pull
Entries 85
Mean 328.4
Std Dev 295.1

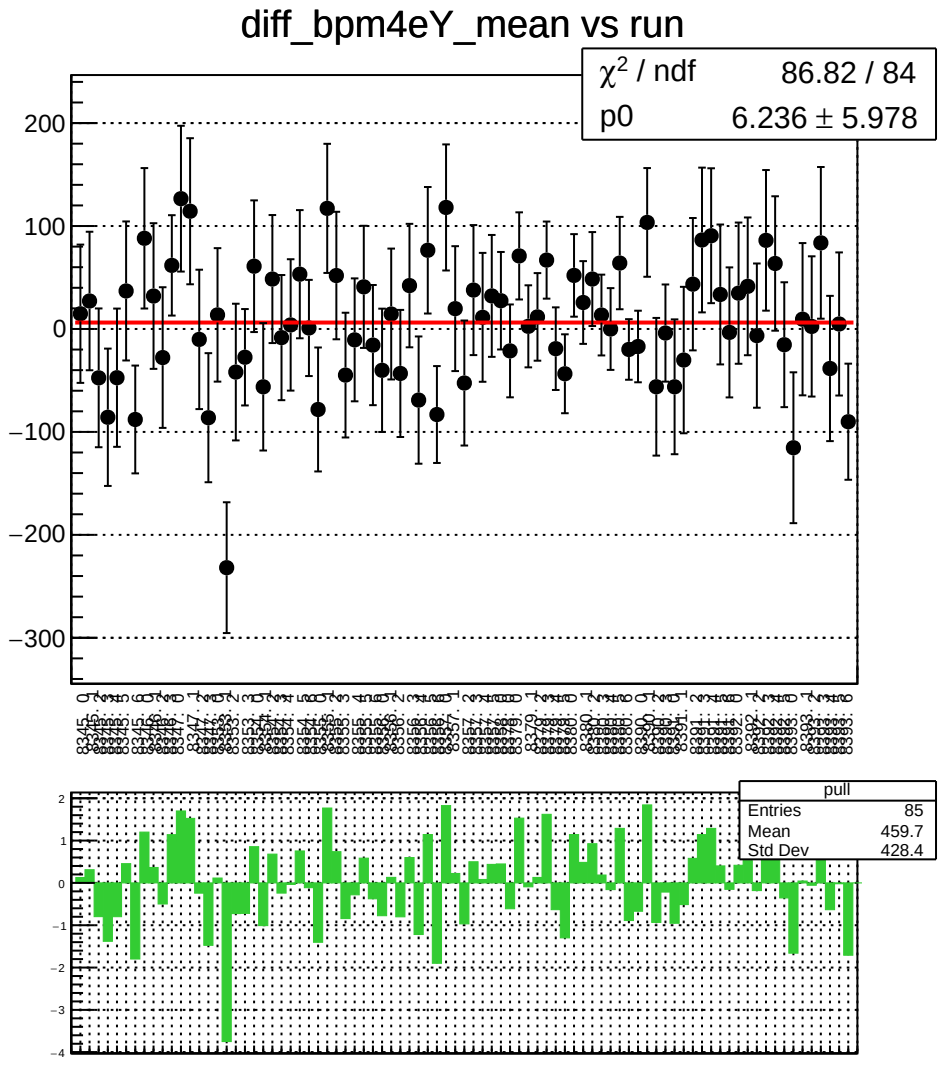

pull1D
Entries 85
Mean 0.009163
Std Dev 1.006

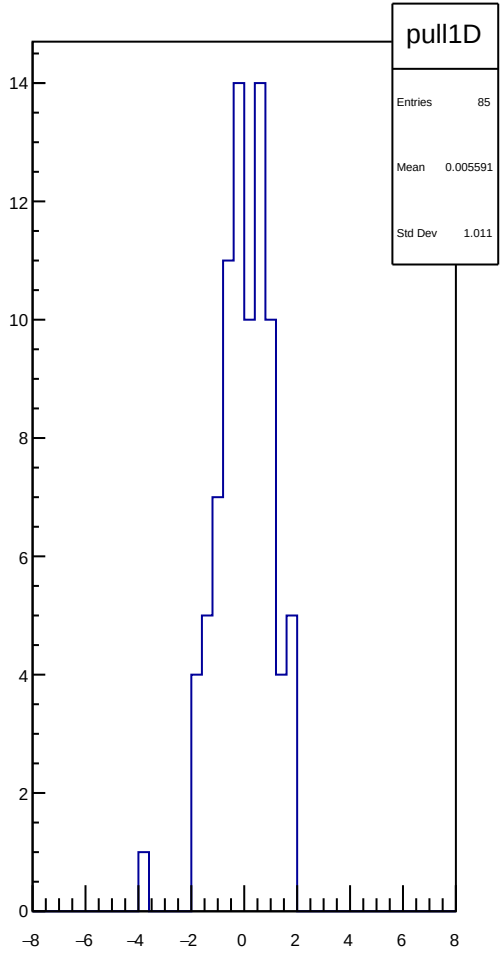

diff_bpm4aY_rms vs run
χ² / ndf 7.611e+04 / 84
p0 5585 ± 4.42
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000

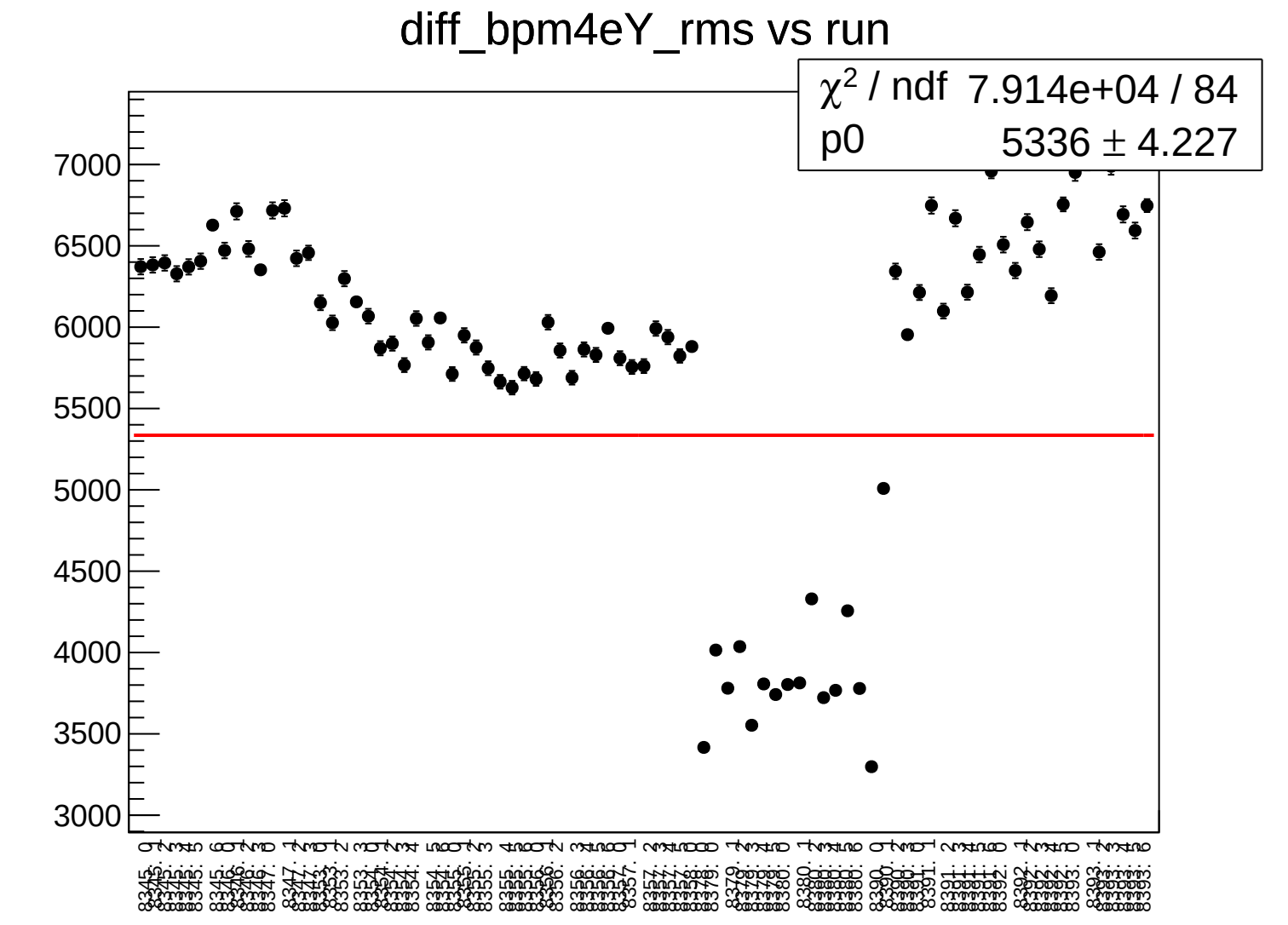

diff_bpm4eX_mean vs run
χ² / ndf 102.5 / 84
p0 −69.92 ± 22.02
1000
500
0
−500
−1000
pull
Entries 85
Mean −1290
Std Dev 1347
3
2
1
0
−1
−2
−3

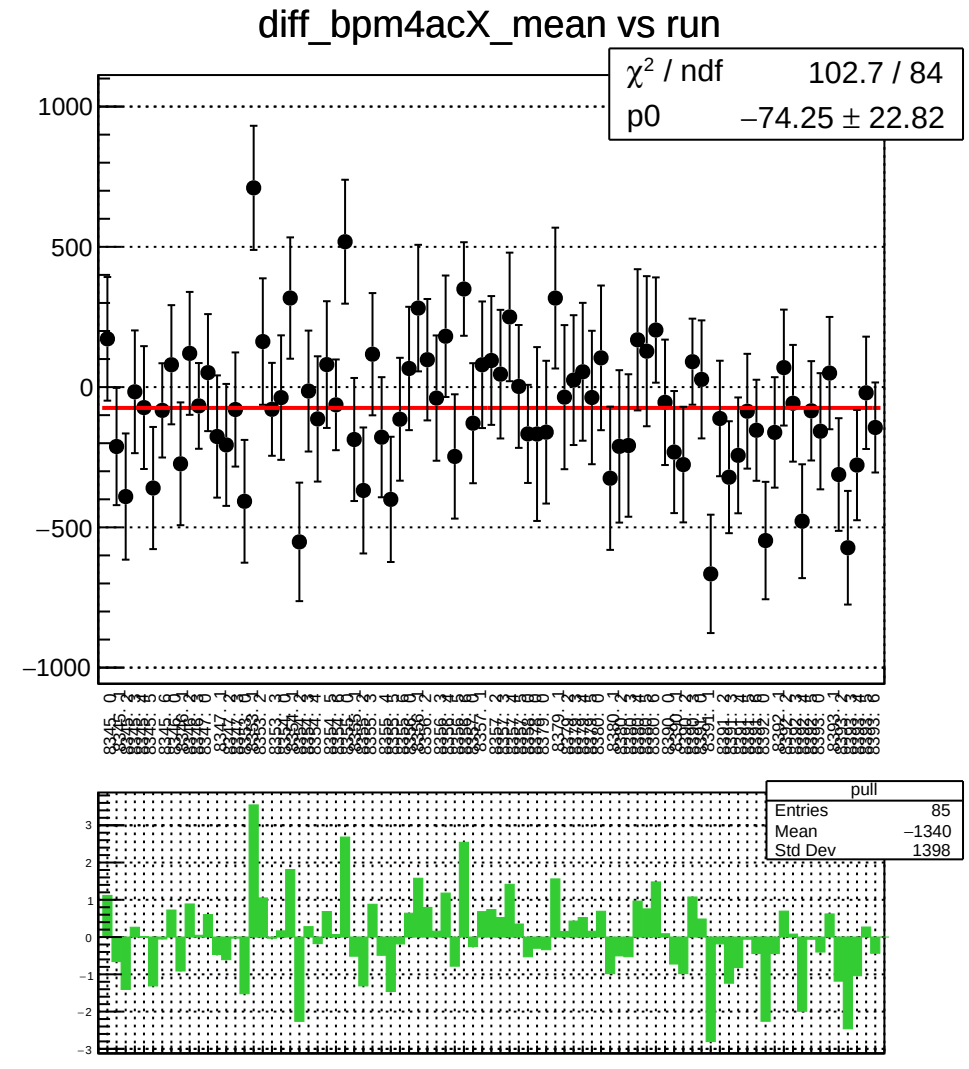

pull1D
Entries 85
Mean 0.004034
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

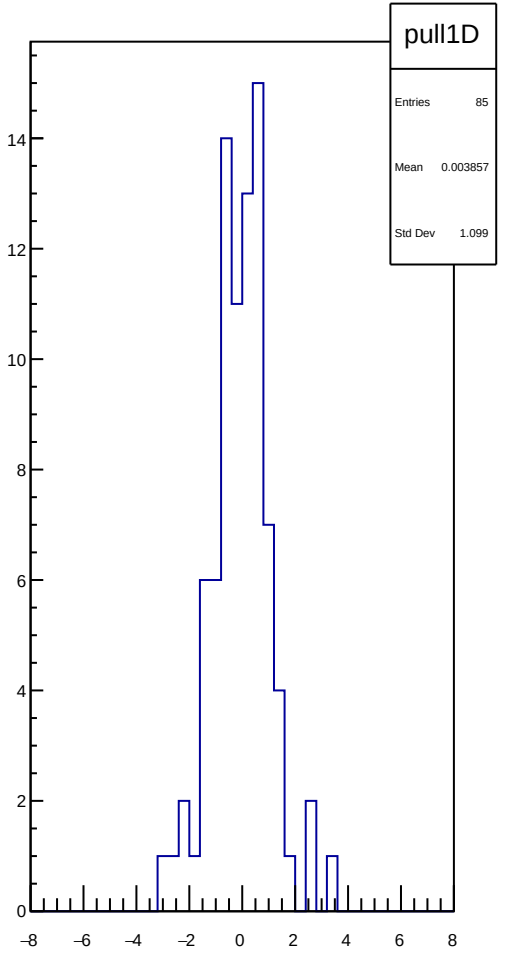

diff_bpm4eX_rms vs run
χ² / ndf 1.057e+04 / 84
p0 2.007e+04 ± 15.57
26000
25000
24000
23000
22000
21000
20000
19000
18000

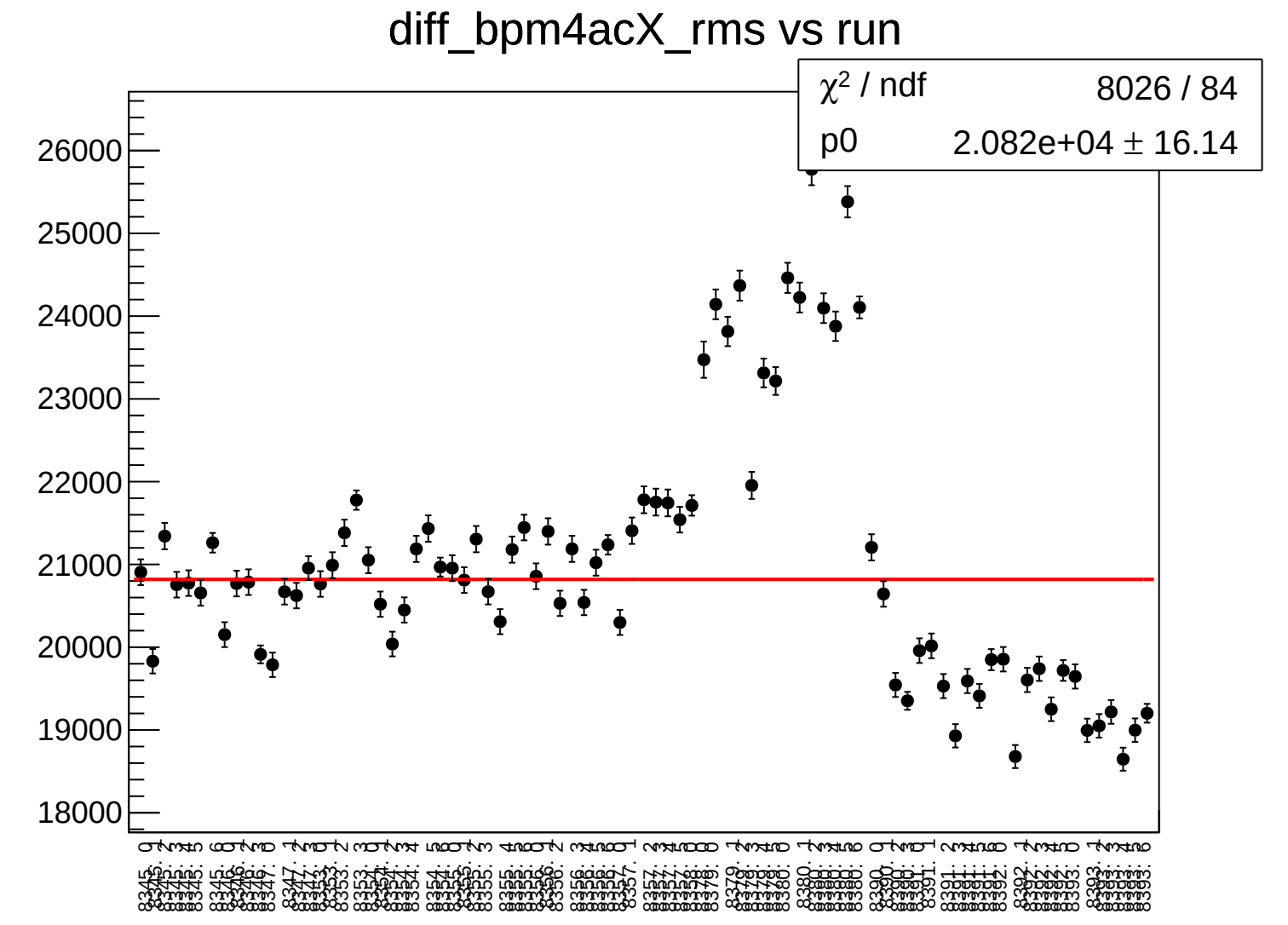

diff_bpm4eY_mean vs run
χ² / ndf 86.82 / 84
p0 6.236 ± 5.978
200
100
0
−100
−200
−300
pull
Entries 85
Mean 459.7
Std Dev 428.4
2
1
0
−1
−2
−3
−4

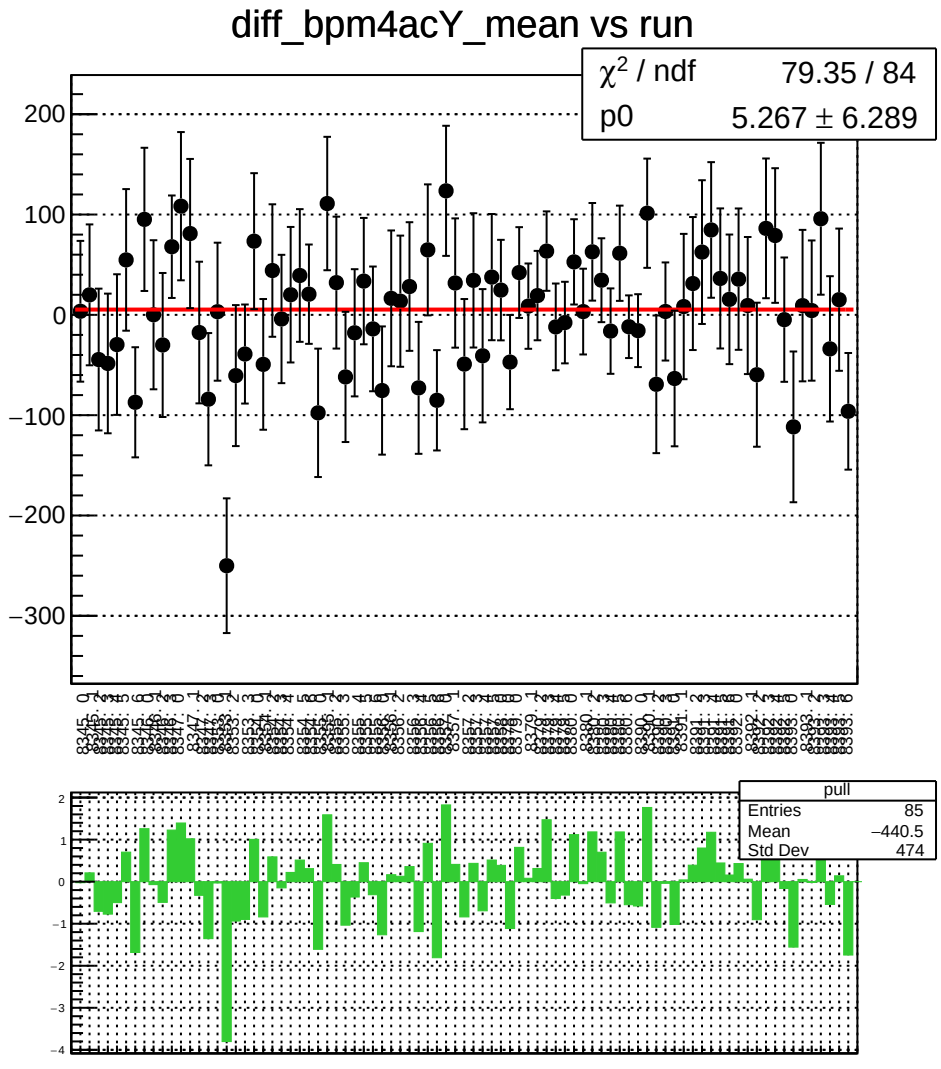

pull1D
Entries 85
Mean 0.005591
Std Dev 1.011
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

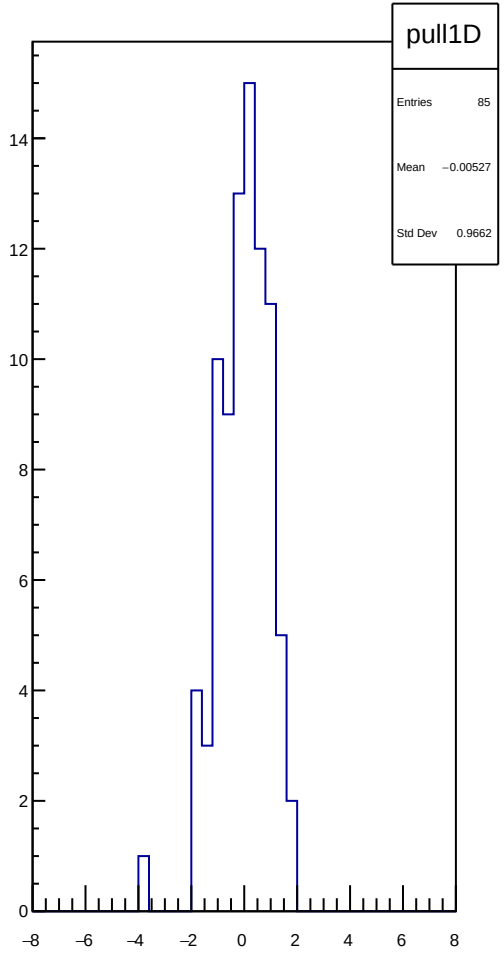

diff_bpm4eY_rms vs run
χ² / ndf 7.914e+04 / 84
p0 5336 ± 4.227
7000
6500
6000
5500
5000
4500
4000
3500
3000

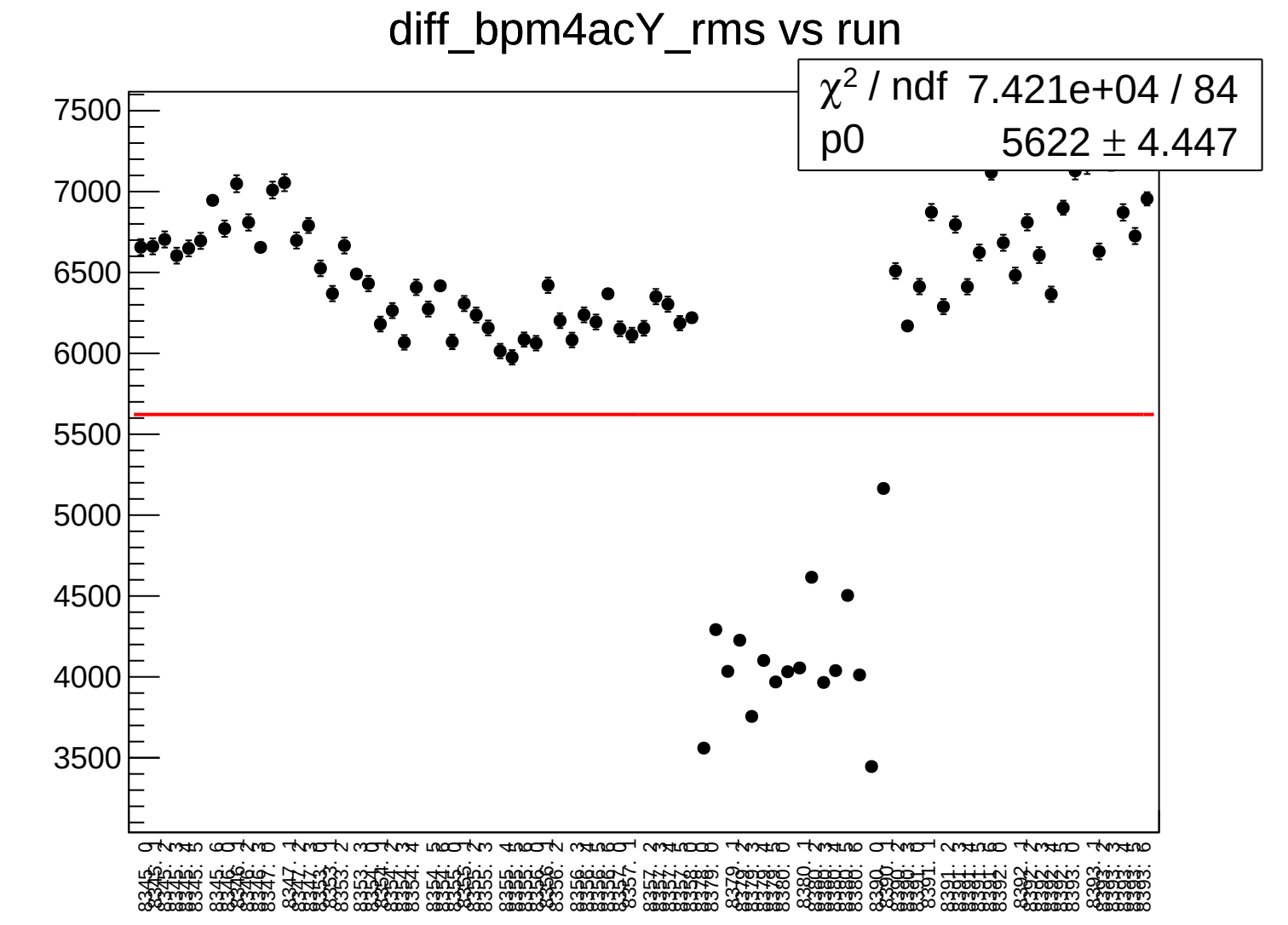

diff_bpm4acX_mean vs run
χ² / ndf 102.7 / 84
p0 −74.25 ± 22.82
1000
500
0
−500
−1000
pull
Entries 85
Mean −1340
Std Dev 1398
3
2
1
0
−1
−2
−3

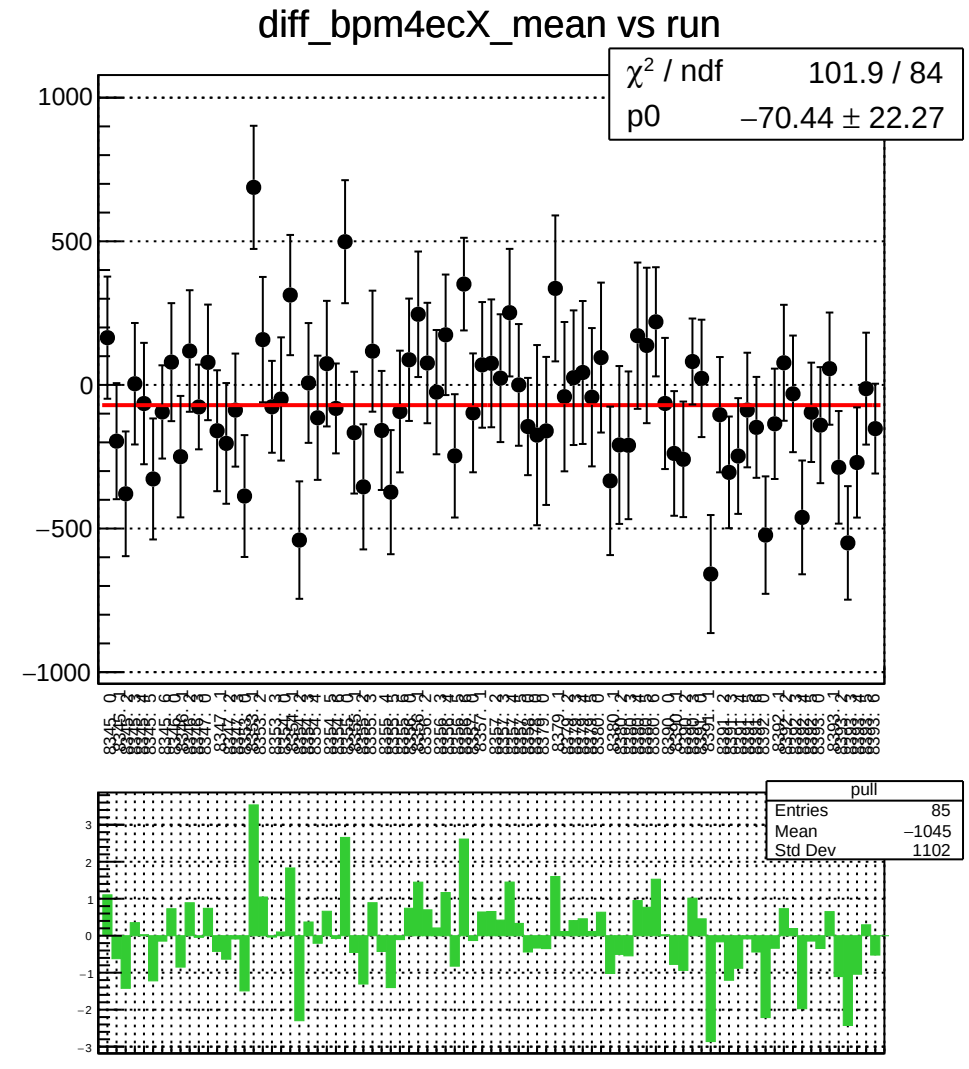

pull1D
Entries 85
Mean 0.003857
Std Dev 1.099
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

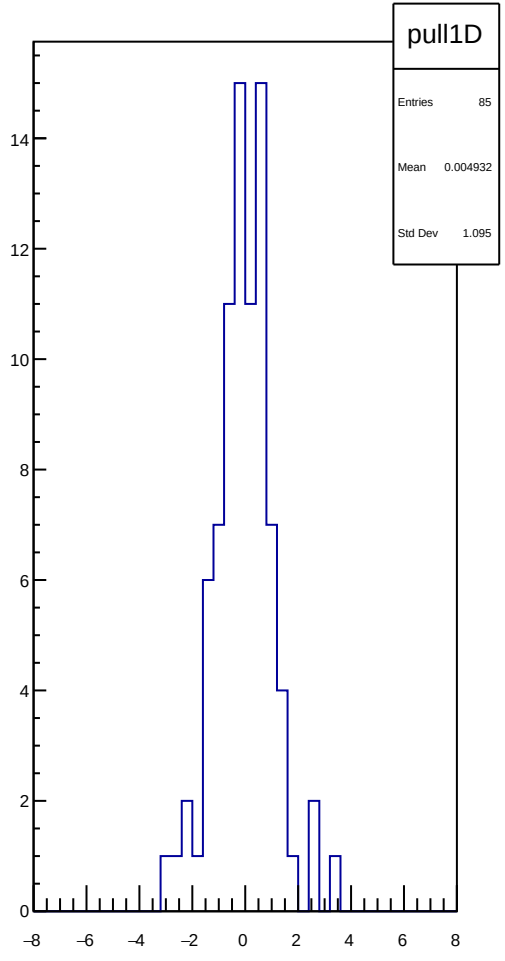

diff_bpm4acX_rms vs run
χ² / ndf 8026 / 84
p0 2.082e+04 ± 16.14
26000
25000
24000
23000
22000
21000
20000
19000
18000

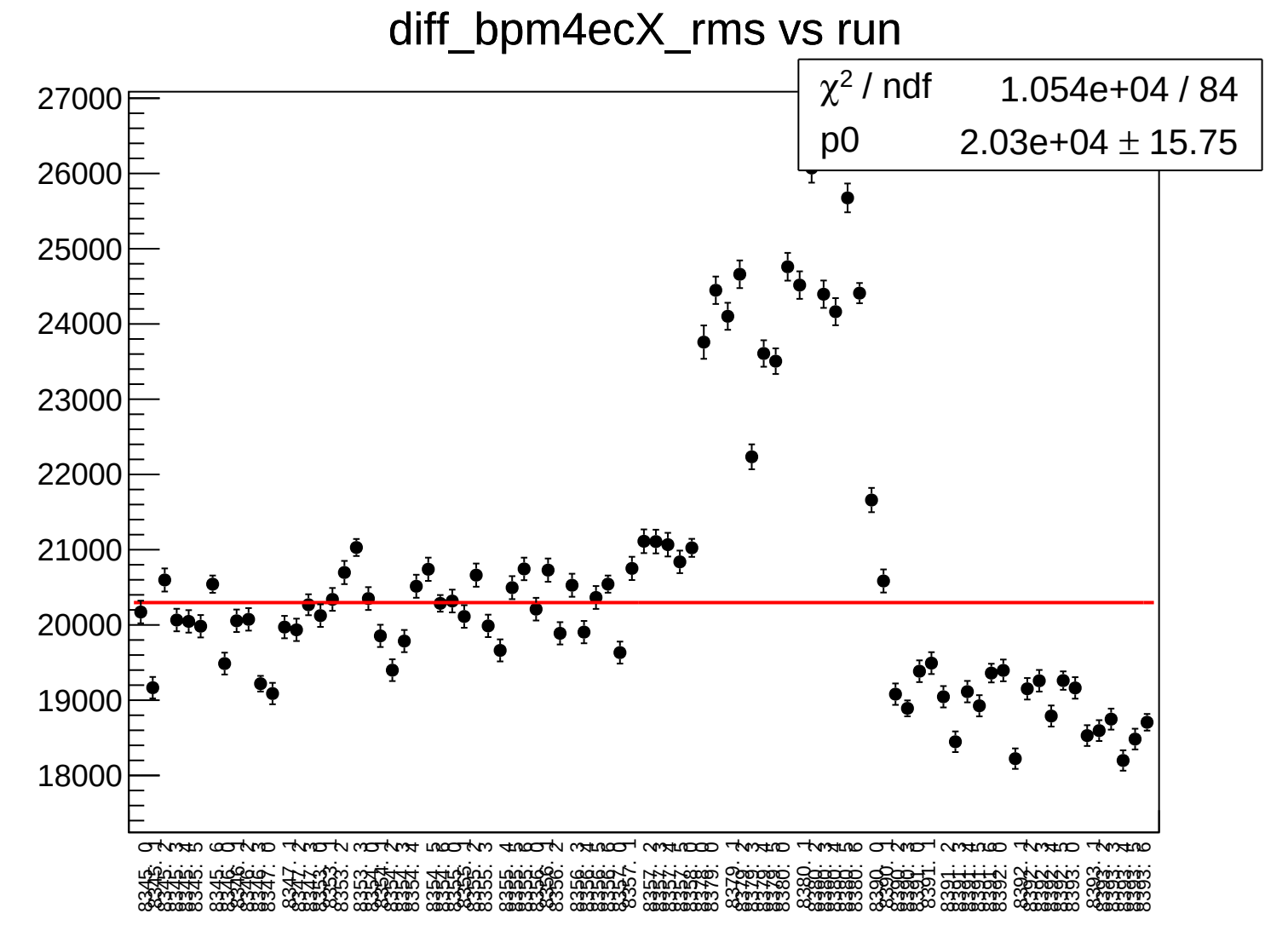

diff_bpm4acY_mean vs run
χ² / ndf 79.35 / 84
p0 5.267 ± 6.289
pull
Entries 85
Mean −440.5
Std Dev 474

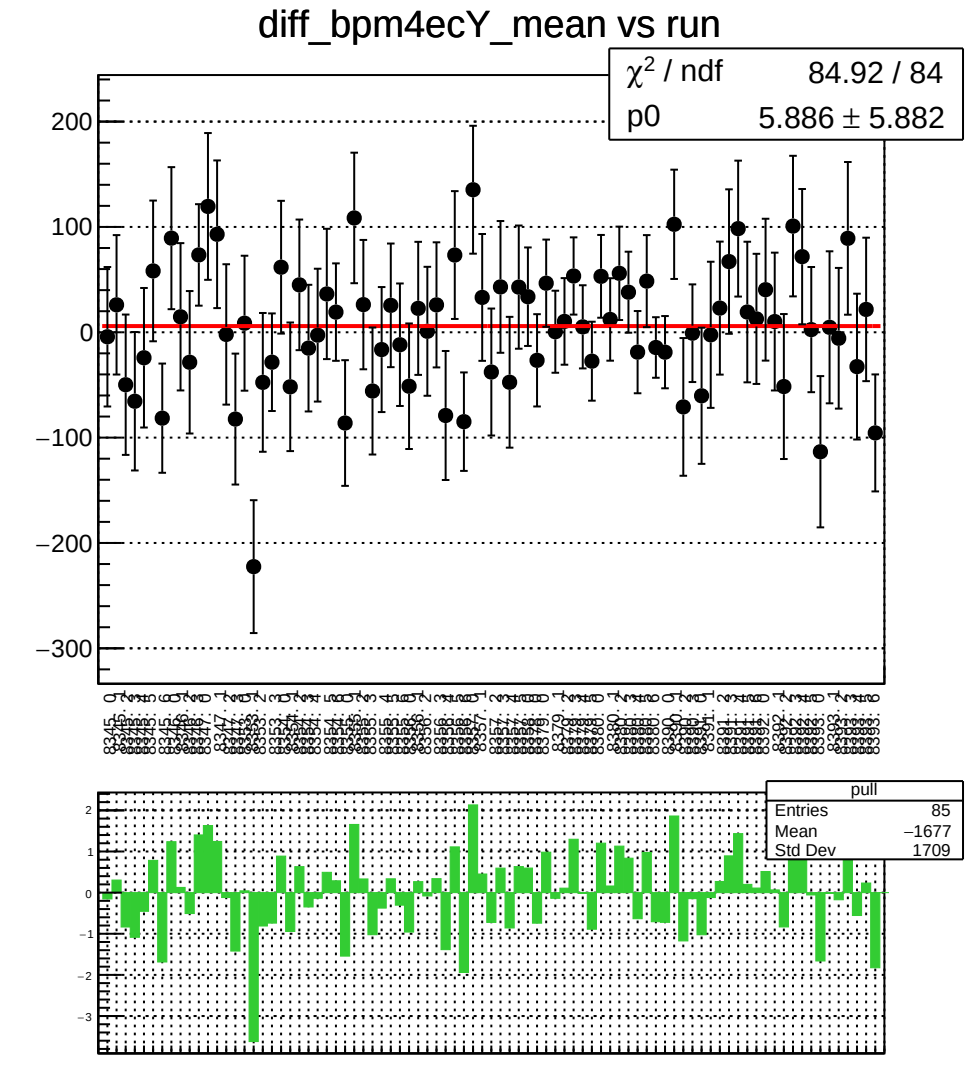

pull1D
Entries 85
Mean −0.00527
Std Dev 0.9662

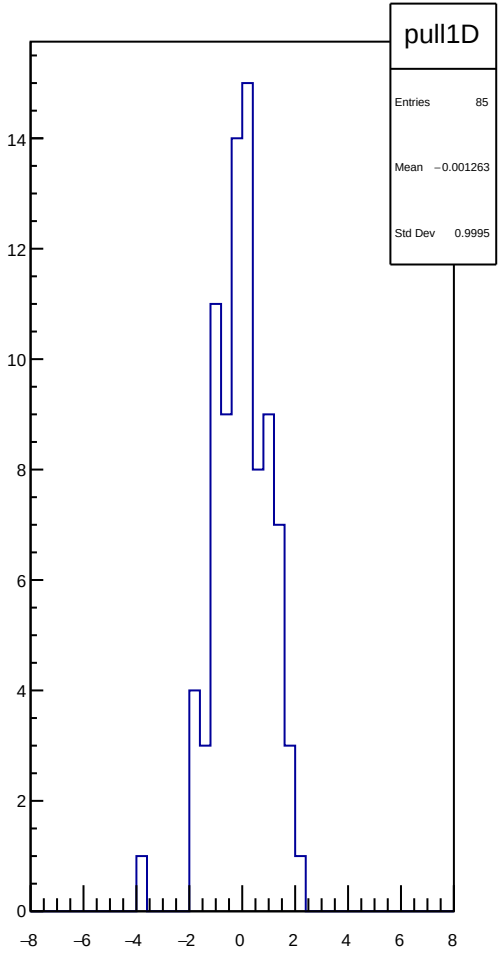

diff_bpm4acY_rms vs run
χ² / ndf 7.421e+04 / 84
p0 5622 ± 4.447
7500
7000
6500
6000
5500
5000
4500
4000
3500

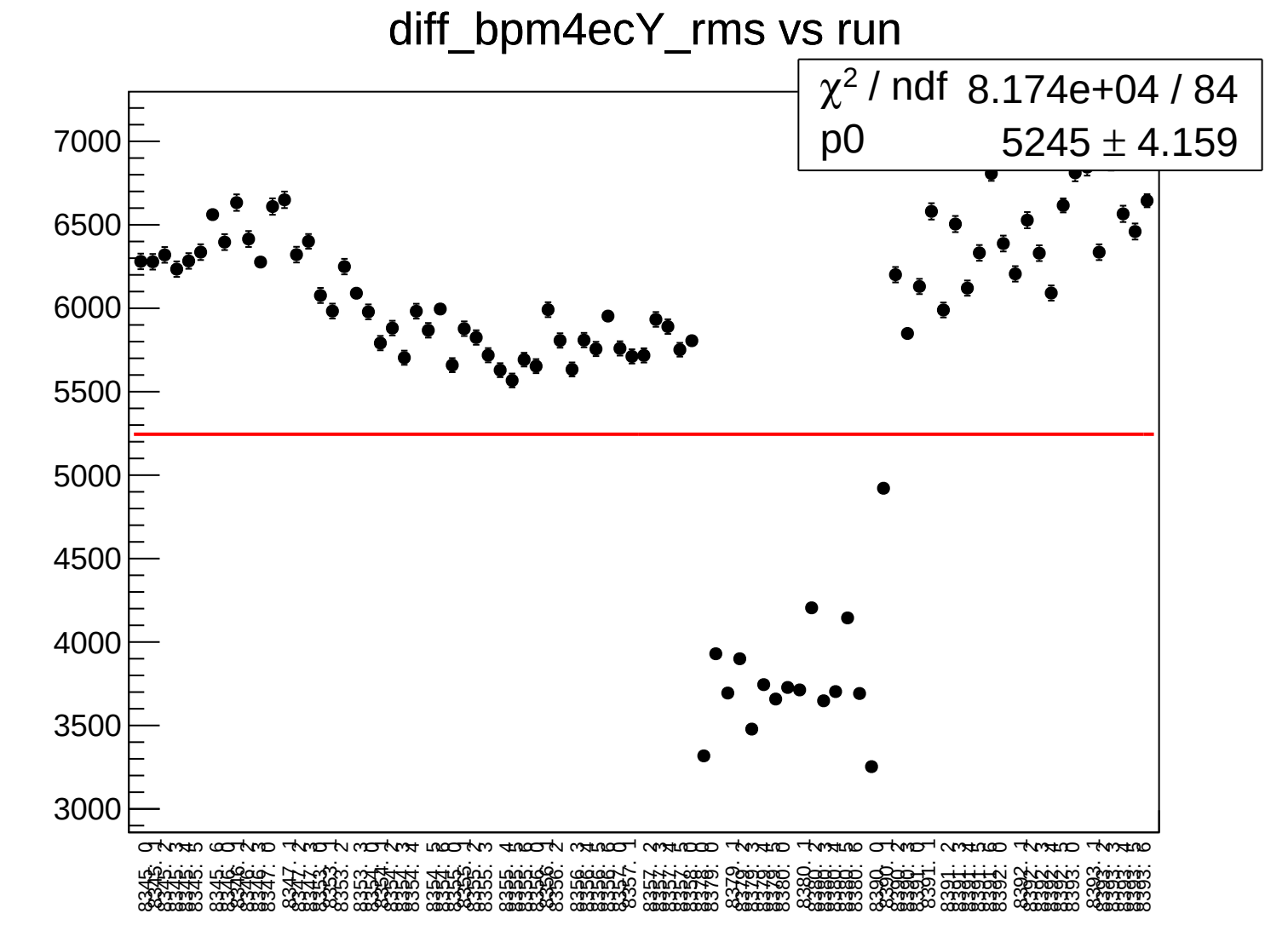

diff_bpm4ecX_mean vs run
χ² / ndf 101.9 / 84
p0 −70.44 ± 22.27
1000
500
0
−500
−1000
pull
Entries 85
Mean −1045
Std Dev 1102
3
2
1
0
−1
−2
−3

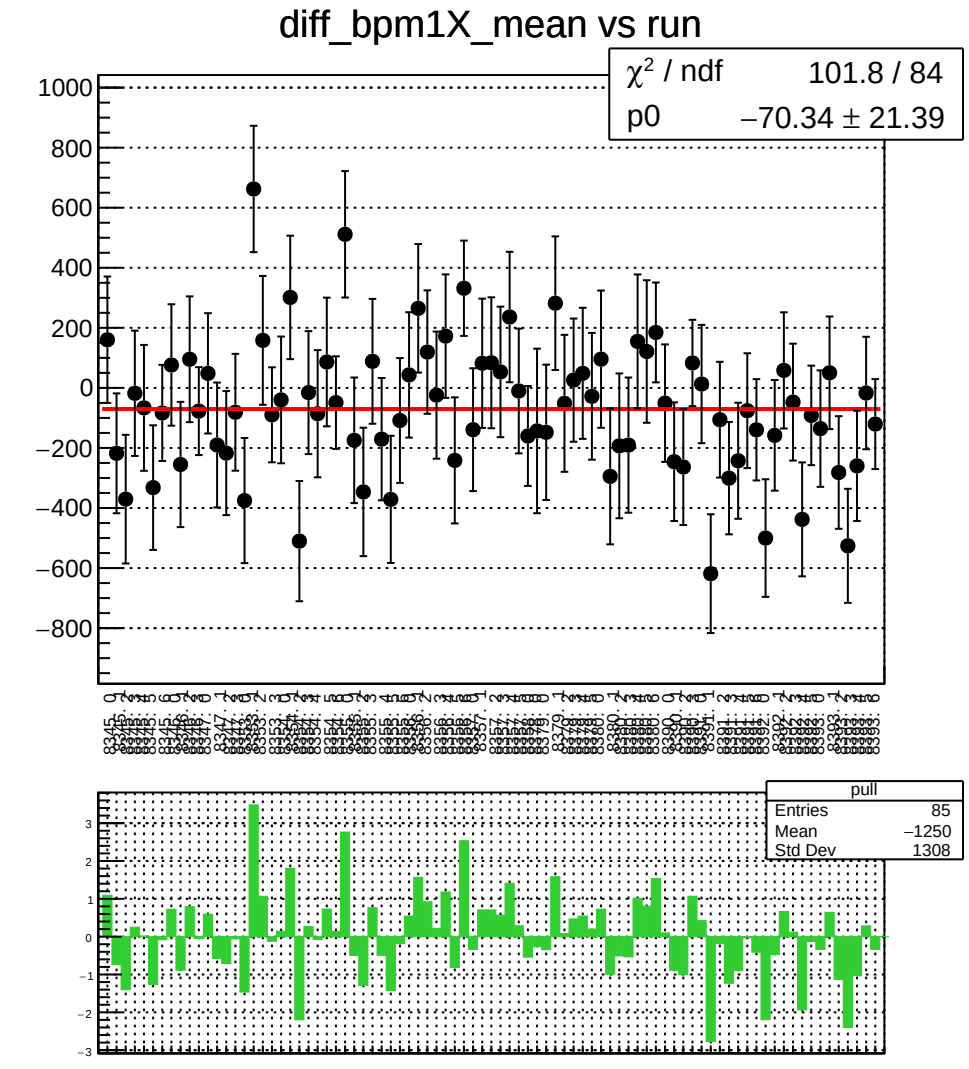

pull1D
Entries 85
Mean 0.004932
Std Dev 1.095
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

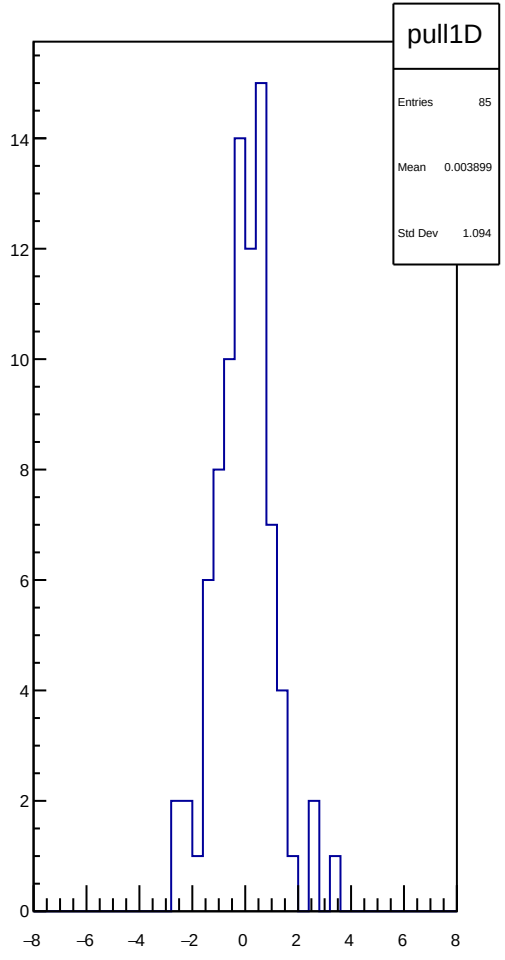

diff_bpm4ecX_rms vs run
χ² / ndf 1.054e+04 / 84
p0 2.03e+04 ± 15.75
27000
26000
25000
24000
23000
22000
21000
20000
19000
18000

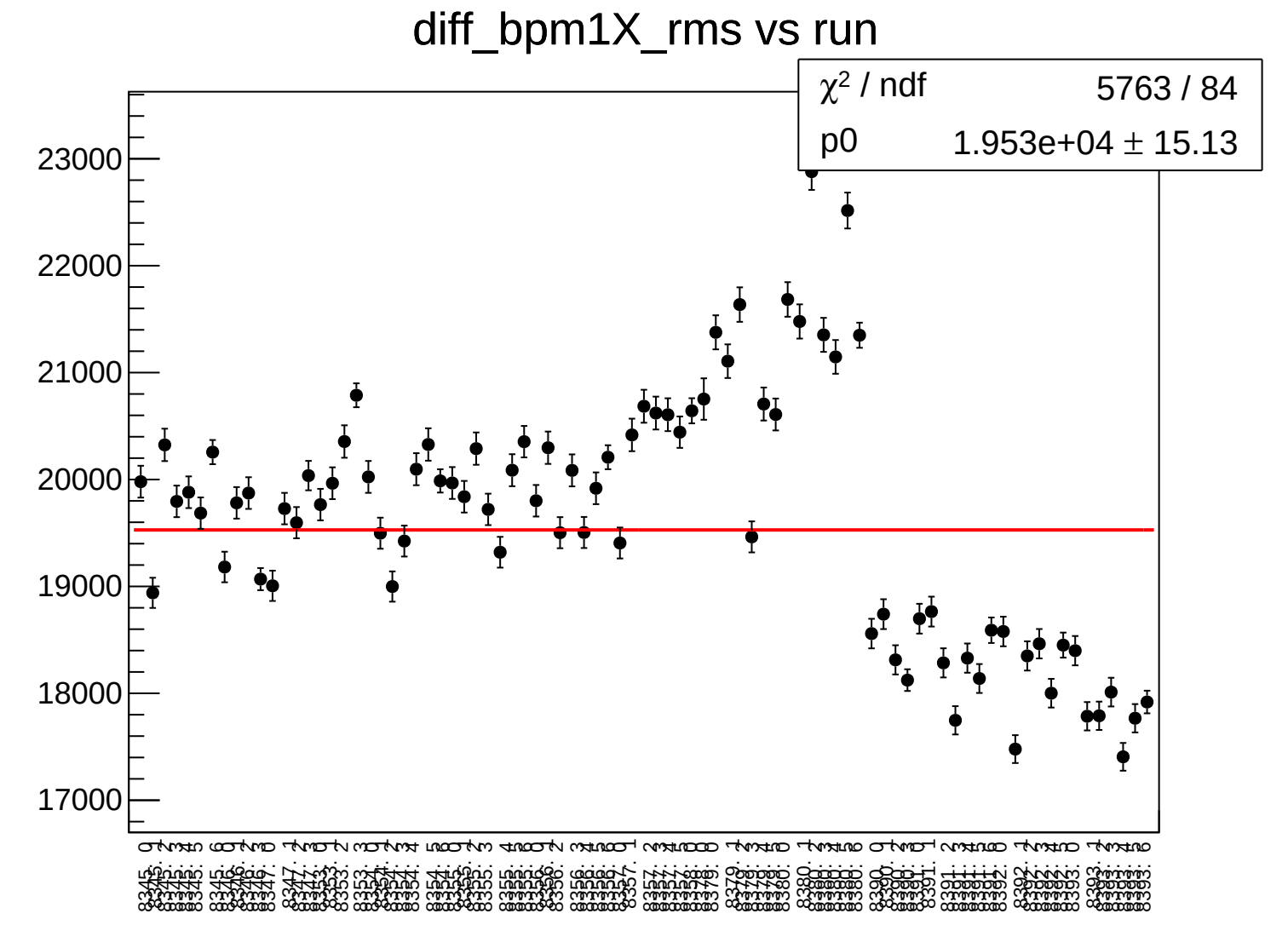

diff_bpm4ecY_mean vs run
χ² / ndf 84.92 / 84
p0 5.886 ± 5.882
pull
Entries 85
Mean −1677
Std Dev 1709

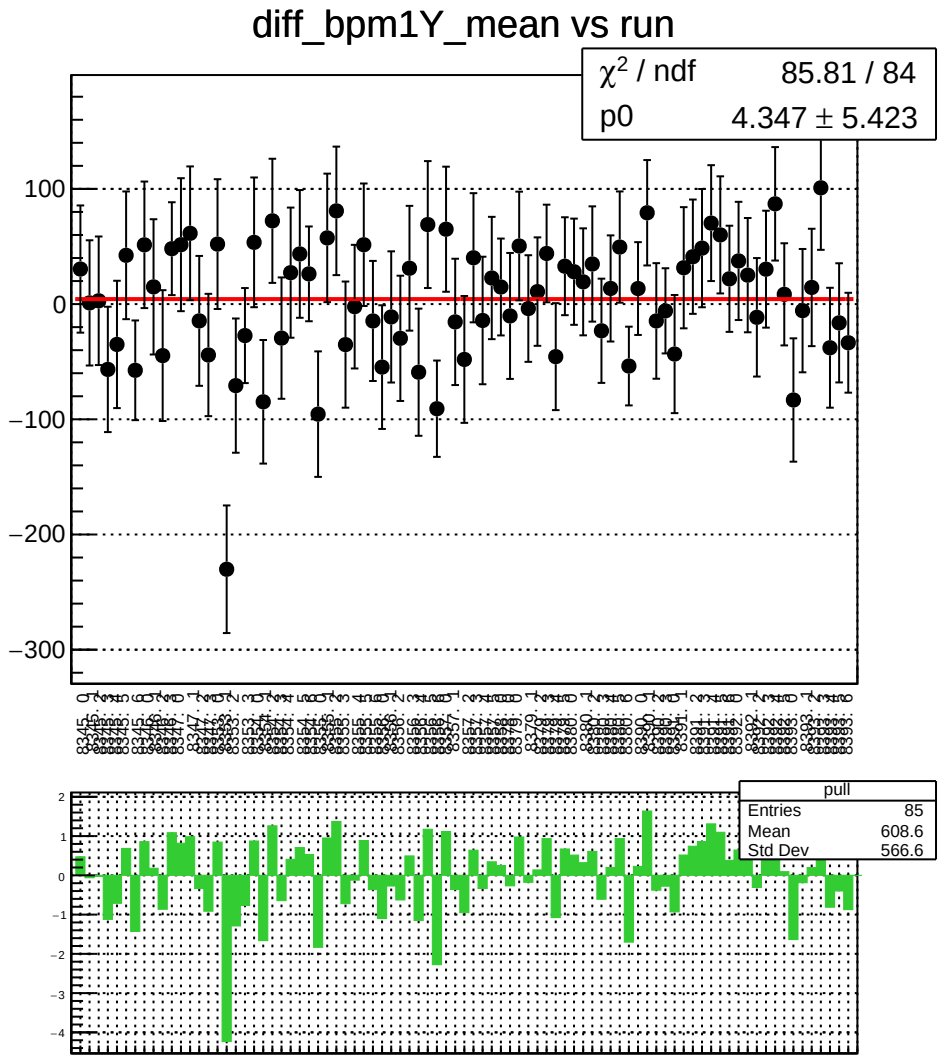

pull1D
Entries 85
Mean −0.001263
Std Dev 0.9995

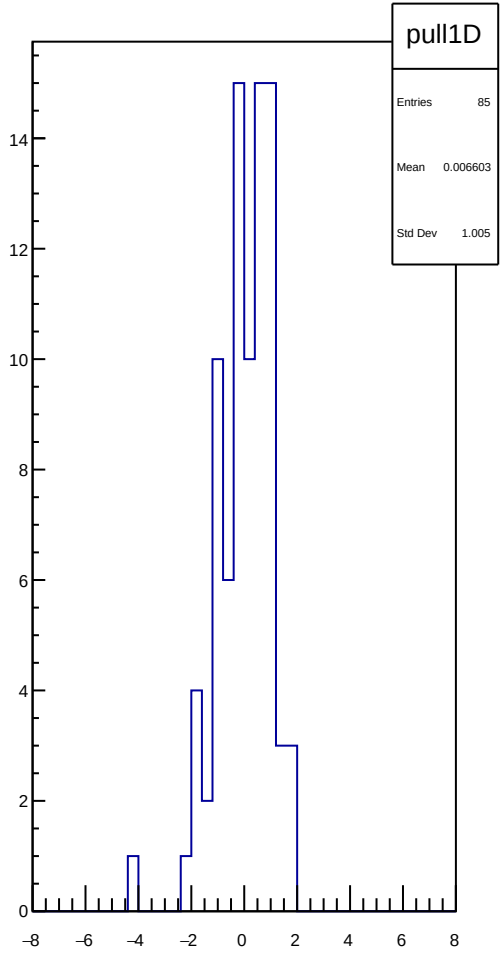

diff_bpm4ecY_rms vs run
χ² / ndf 8.174e+04 / 84
p0 5245 ± 4.159
7000
6500
6000
5500
5000
4500
4000
3500
3000

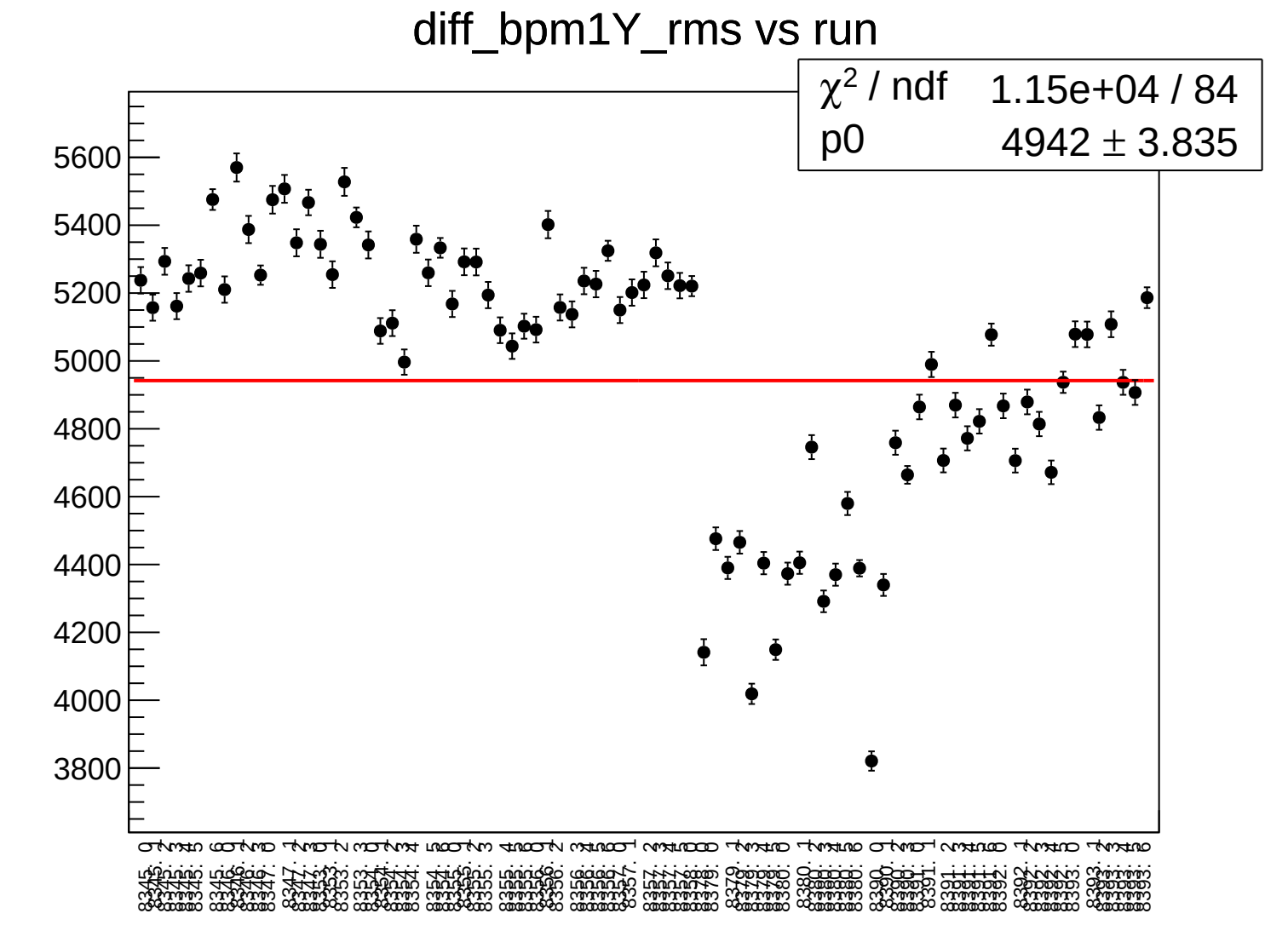

diff_bpm1X_mean vs run
χ² / ndf 101.8 / 84
p0 −70.34 ± 21.39
pull
Entries 85
Mean −1250
Std Dev 1308

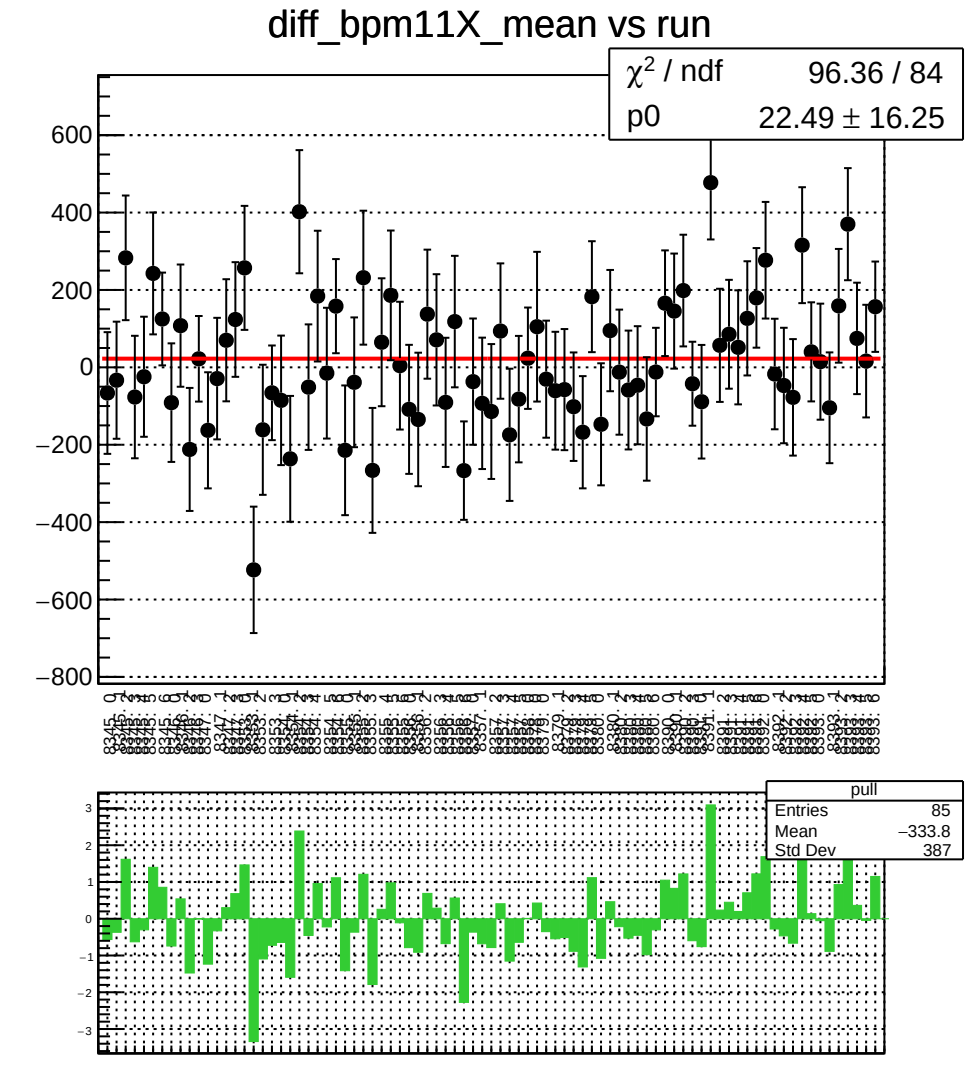

pull1D
Entries 85
Mean 0.003899
Std Dev 1.094

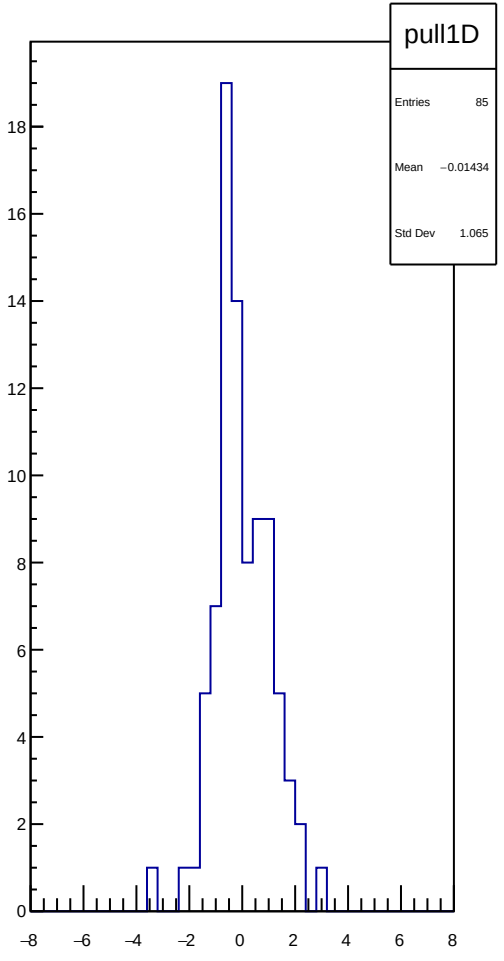

diff_bpm1X_rms vs run
χ² / ndf 5763 / 84
p0 1.953e+04 ± 15.13
23000
22000
21000
20000
19000
18000
17000

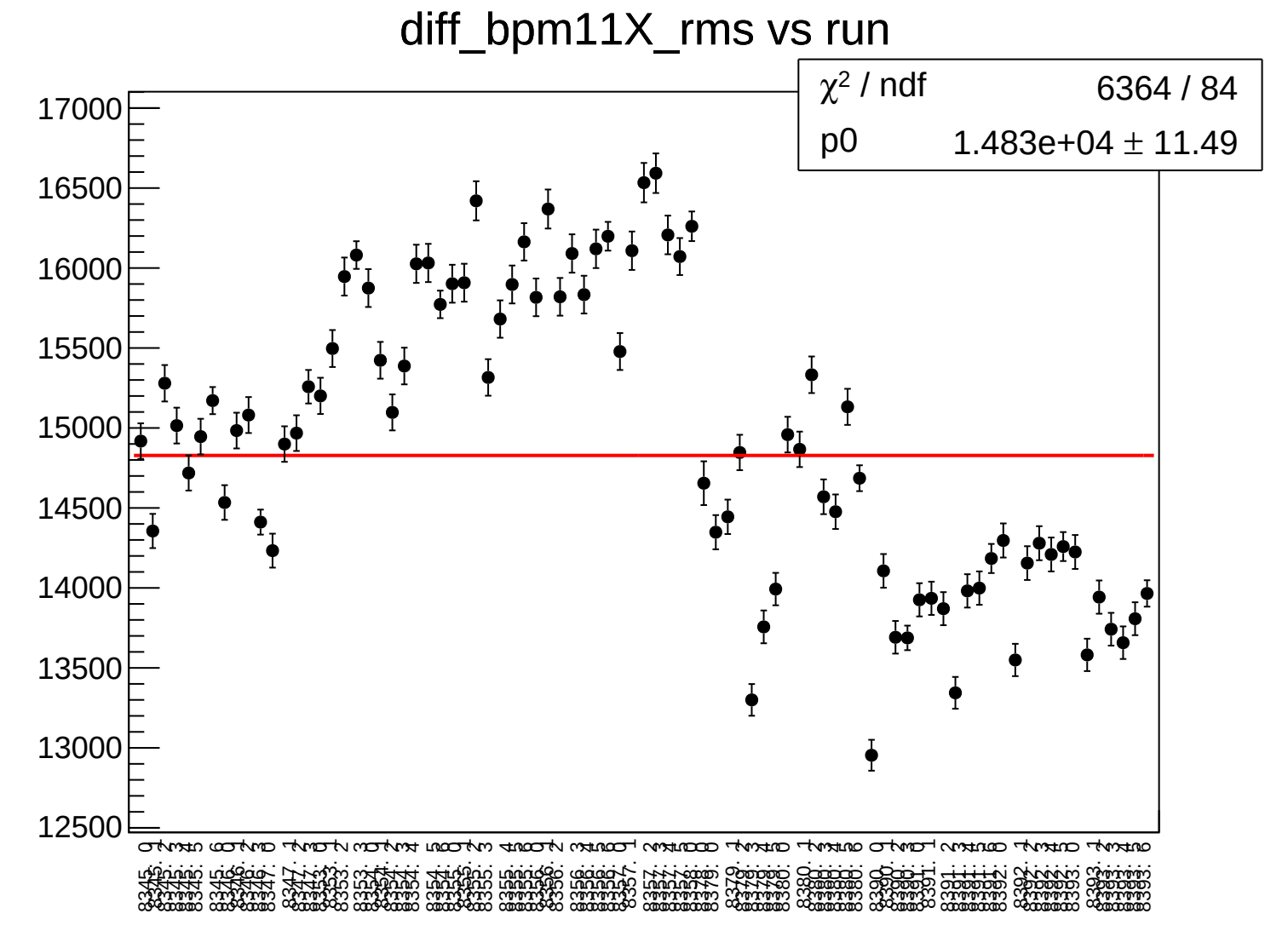

diff_bpm1Y_mean vs run
χ² / ndf 85.81 / 84
p0 4.347 ± 5.423
100
0
−100
−200
−300
pull
Entries 85
Mean 608.6
Std Dev 566.6
2
1
0
−1
−2
−3
−4

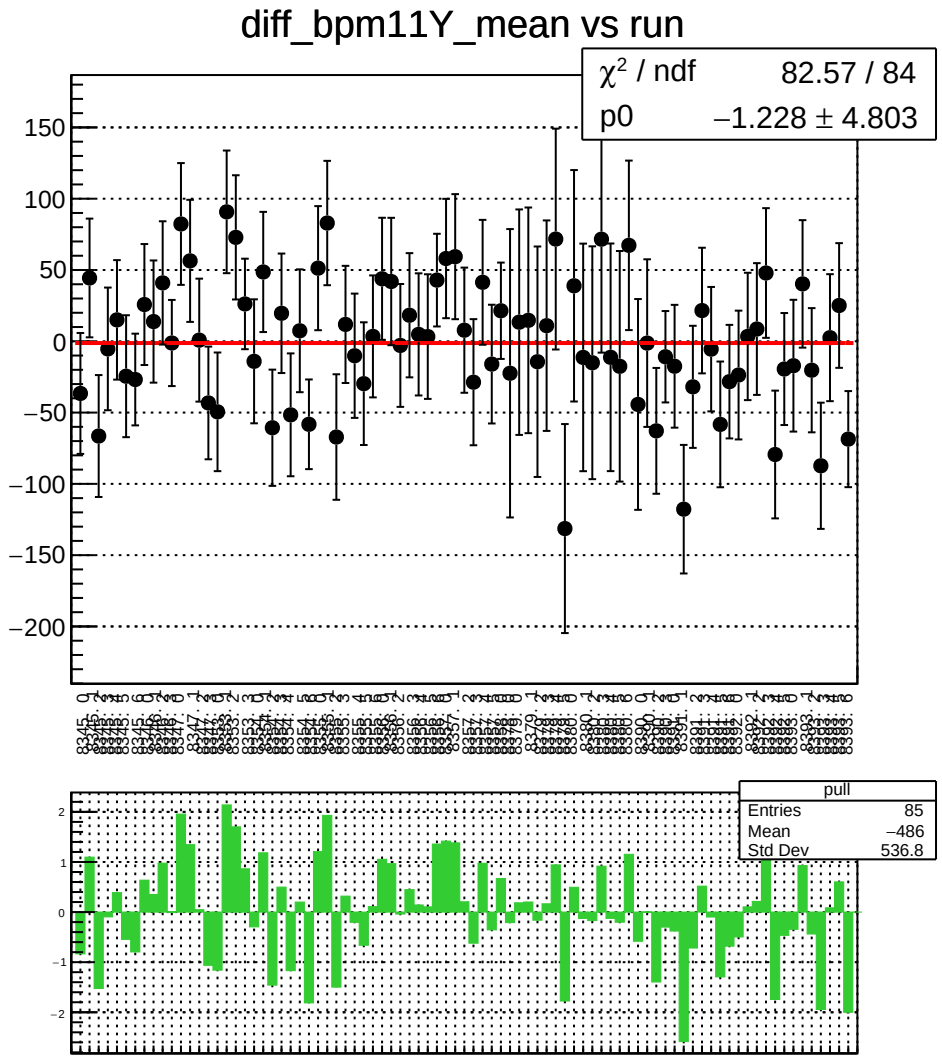

pull1D
Entries 85
Mean 0.006603
Std Dev 1.005
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

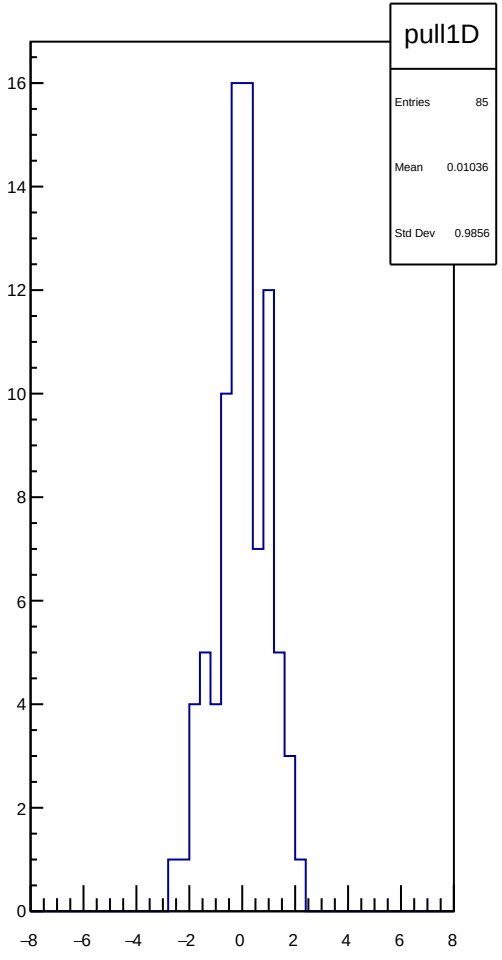

diff_bpm1Y_rms vs run
χ² / ndf 1.15e+04 / 84
p0 4942 ± 3.835
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800

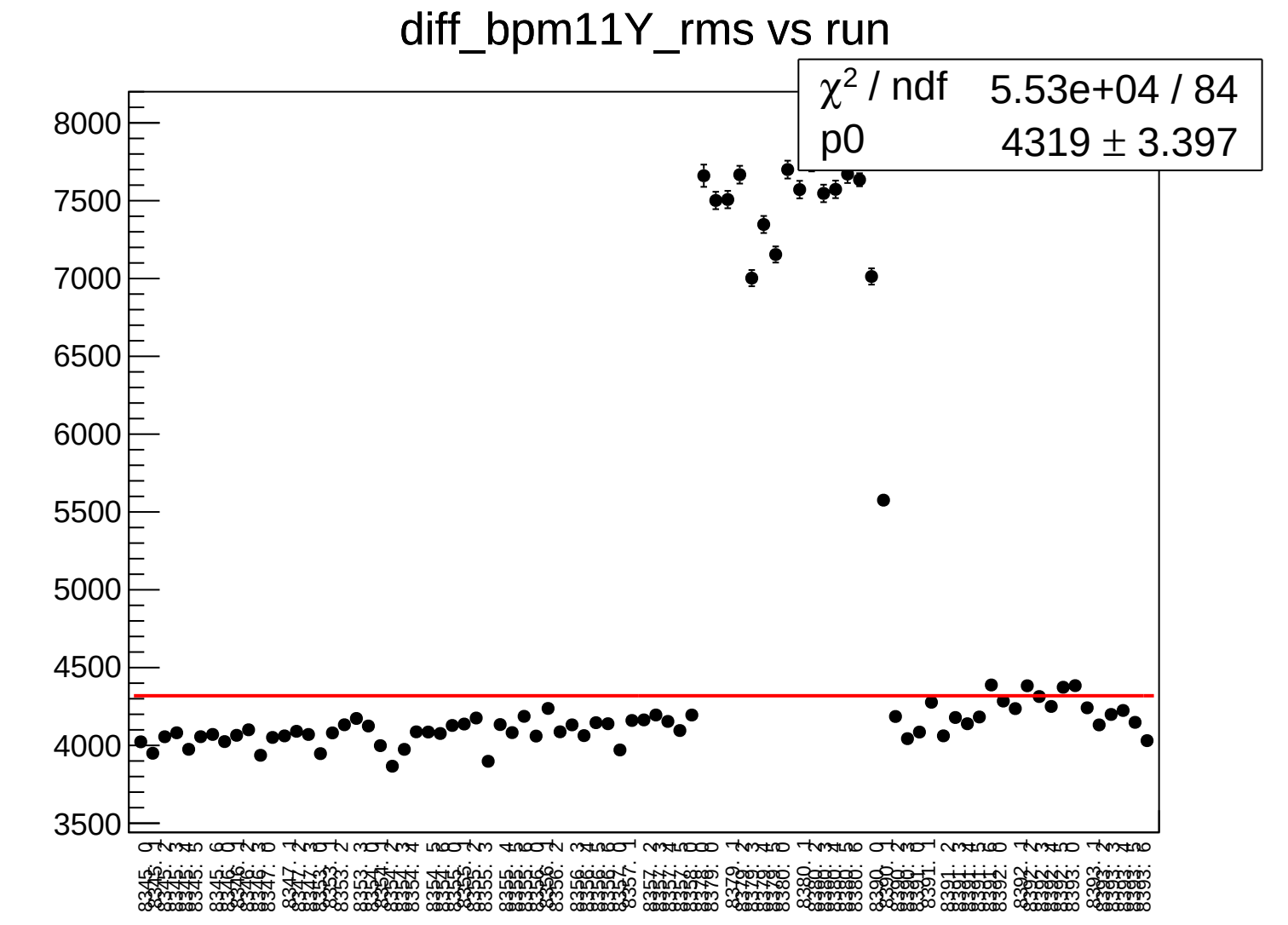

diff_bpm11X_mean vs run
χ^2 / ndf 96.36 / 84
p0 22.49 ± 16.25
pull
Entries 85
Mean −333.8
Std Dev 387

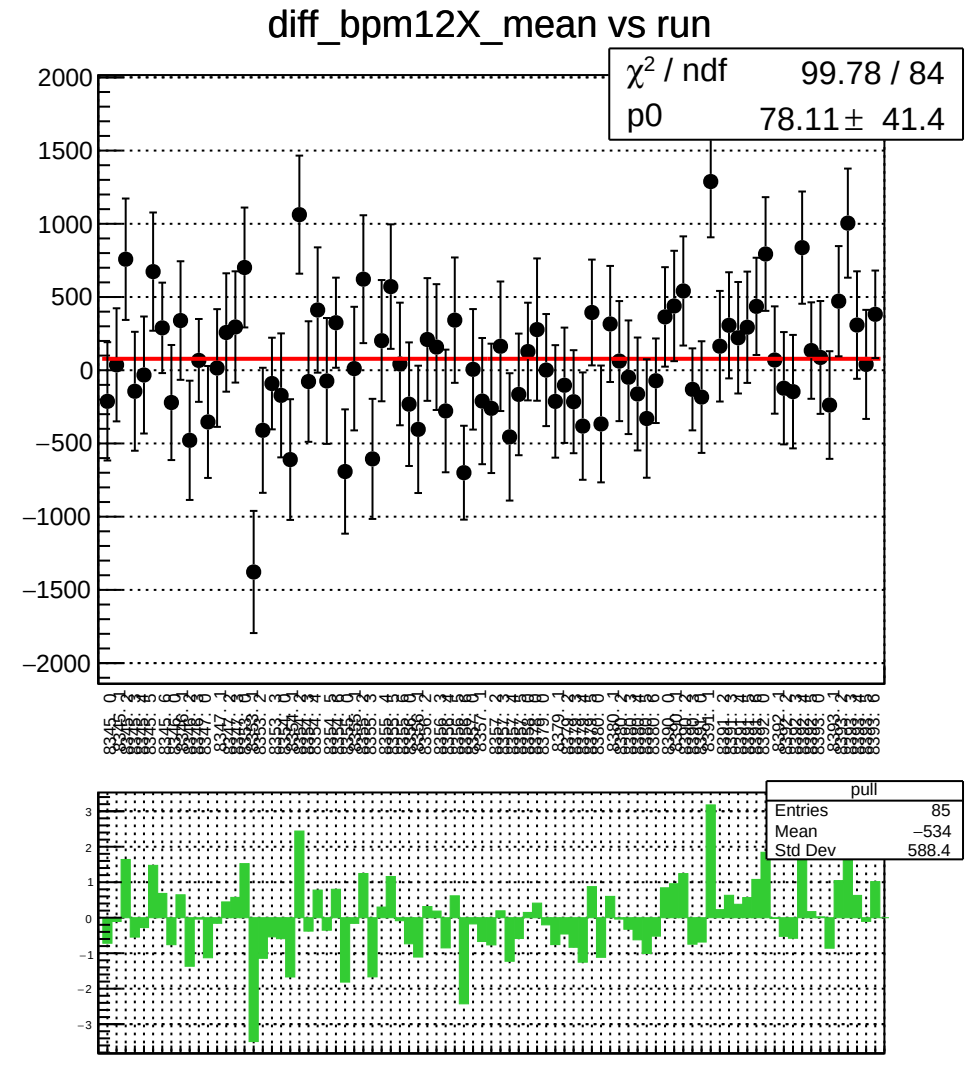

pull1D
Entries 85
Mean −0.01434
Std Dev 1.065

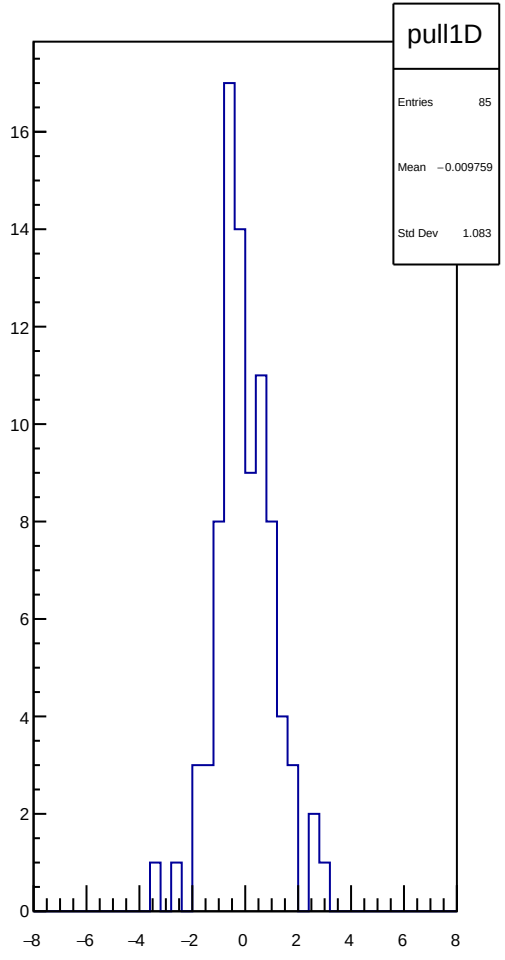

diff_bpm11X_rms vs run
χ² / ndf 6364 / 84
p0 1.483e+04 ± 11.49
17000
16500
16000
15500
15000
14500
14000
13500
13000
12500

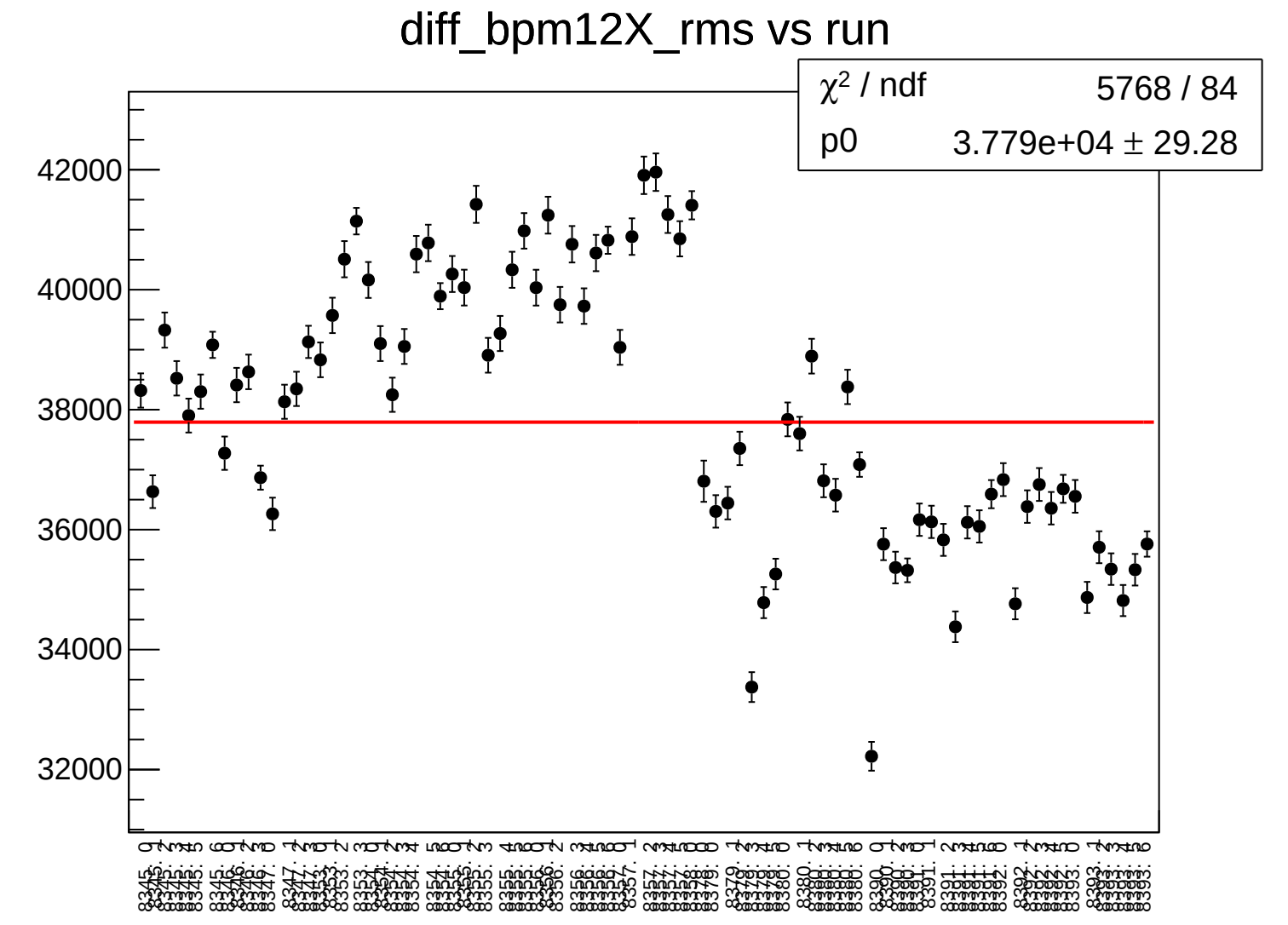

diff_bpm11Y_mean vs run
χ^2 / ndf 82.57 / 84
p0 −1.228 ± 4.803
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −486
Std Dev 536.8
2
1
0
−1
−2

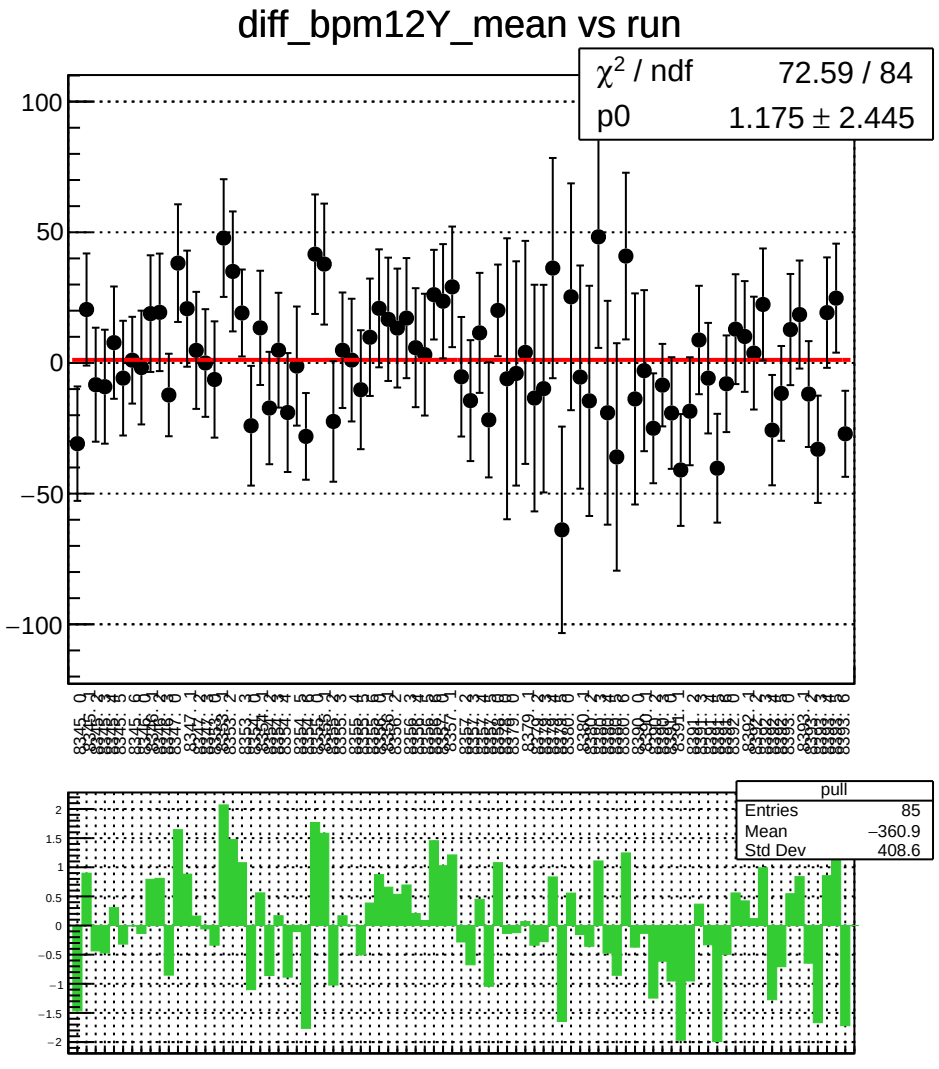

pull1D
Entries 85
Mean 0.01036
Std Dev 0.9856
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

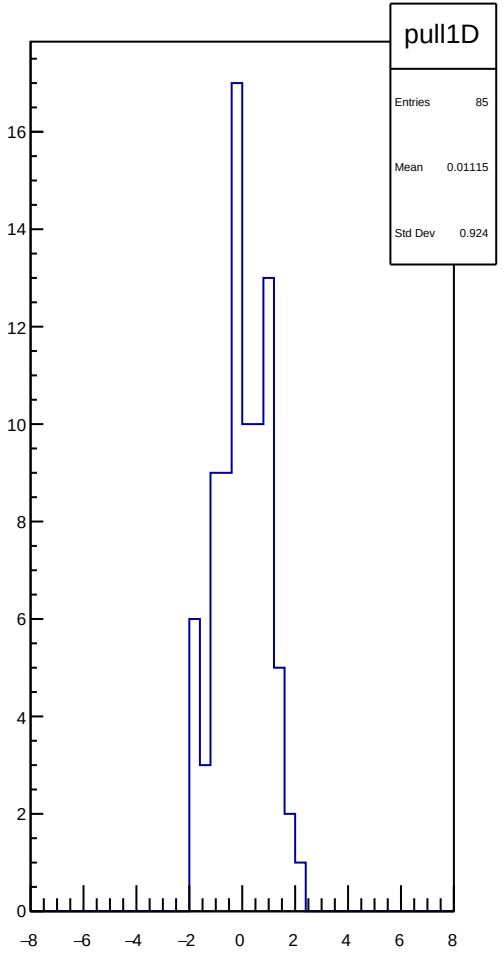

diff_bpm11Y_rms vs run
χ² / ndf 5.53e+04 / 84
p0 4319 ± 3.397
8000
7500
7000
6500
6000
5500
5000
4500
4000
3500

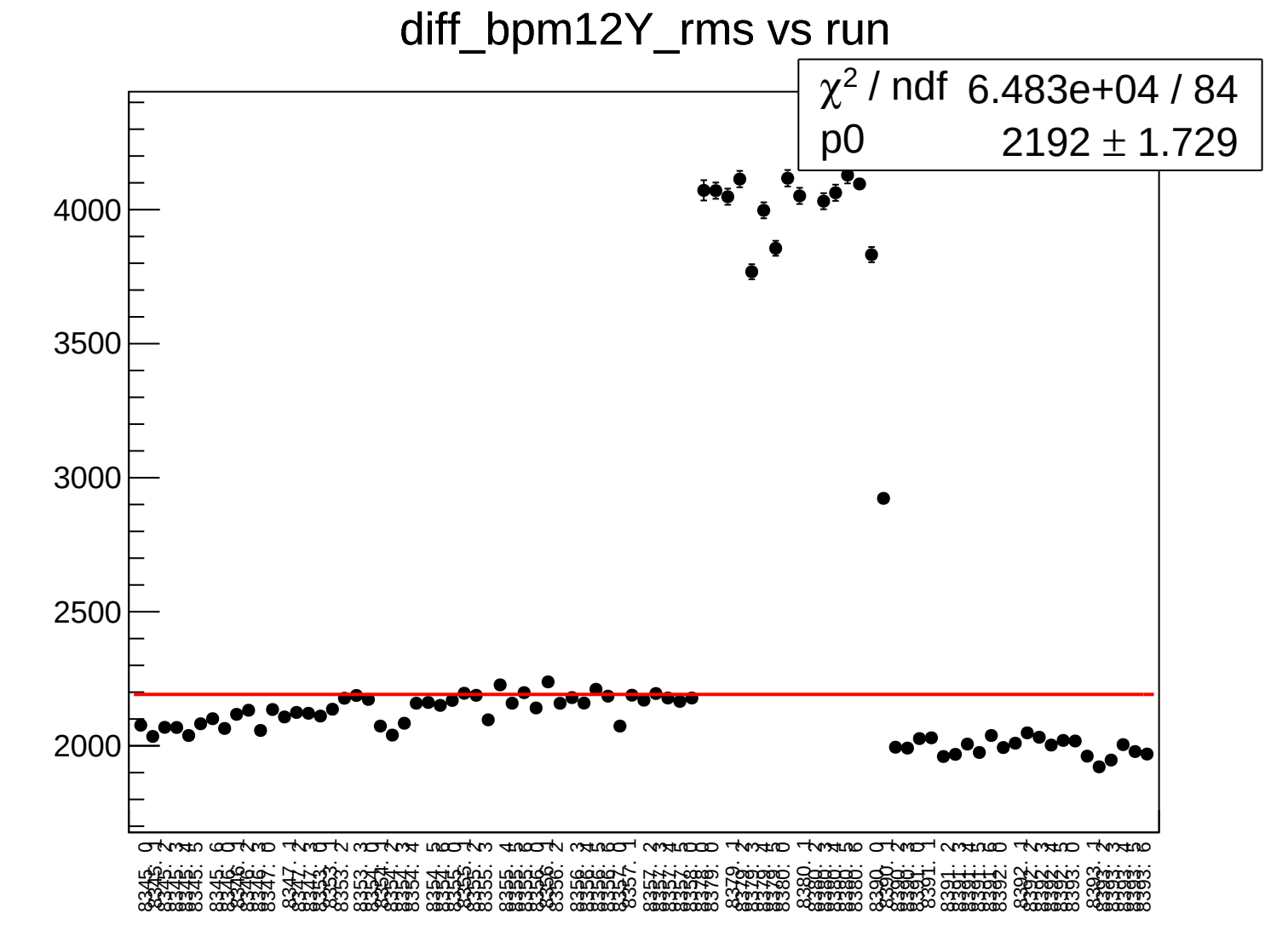

diff_bpm12X_mean vs run
χ² / ndf 99.78 / 84
p0 78.11 ± 41.4
pull
Entries 85
Mean −534
Std Dev 588.4

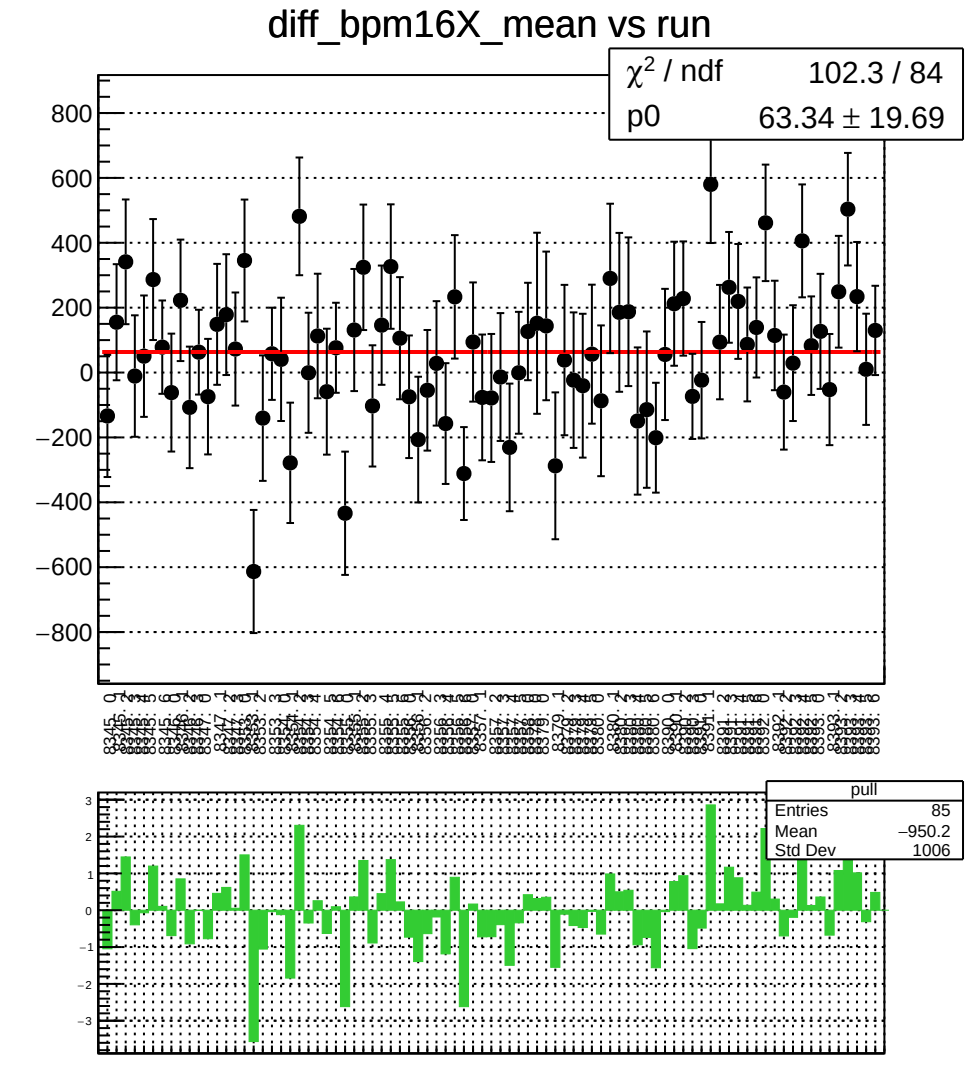

pull1D
Entries 85
Mean −0.009759
Std Dev 1.083

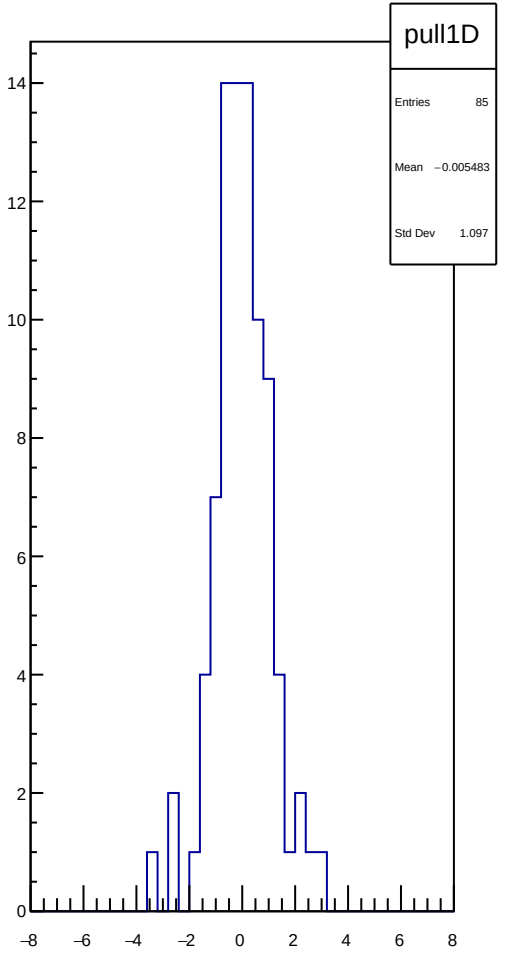

diff_bpm12X_rms vs run
χ² / ndf 5768 / 84
p0 3.779e+04 ± 29.28
42000
40000
38000
36000
34000
32000

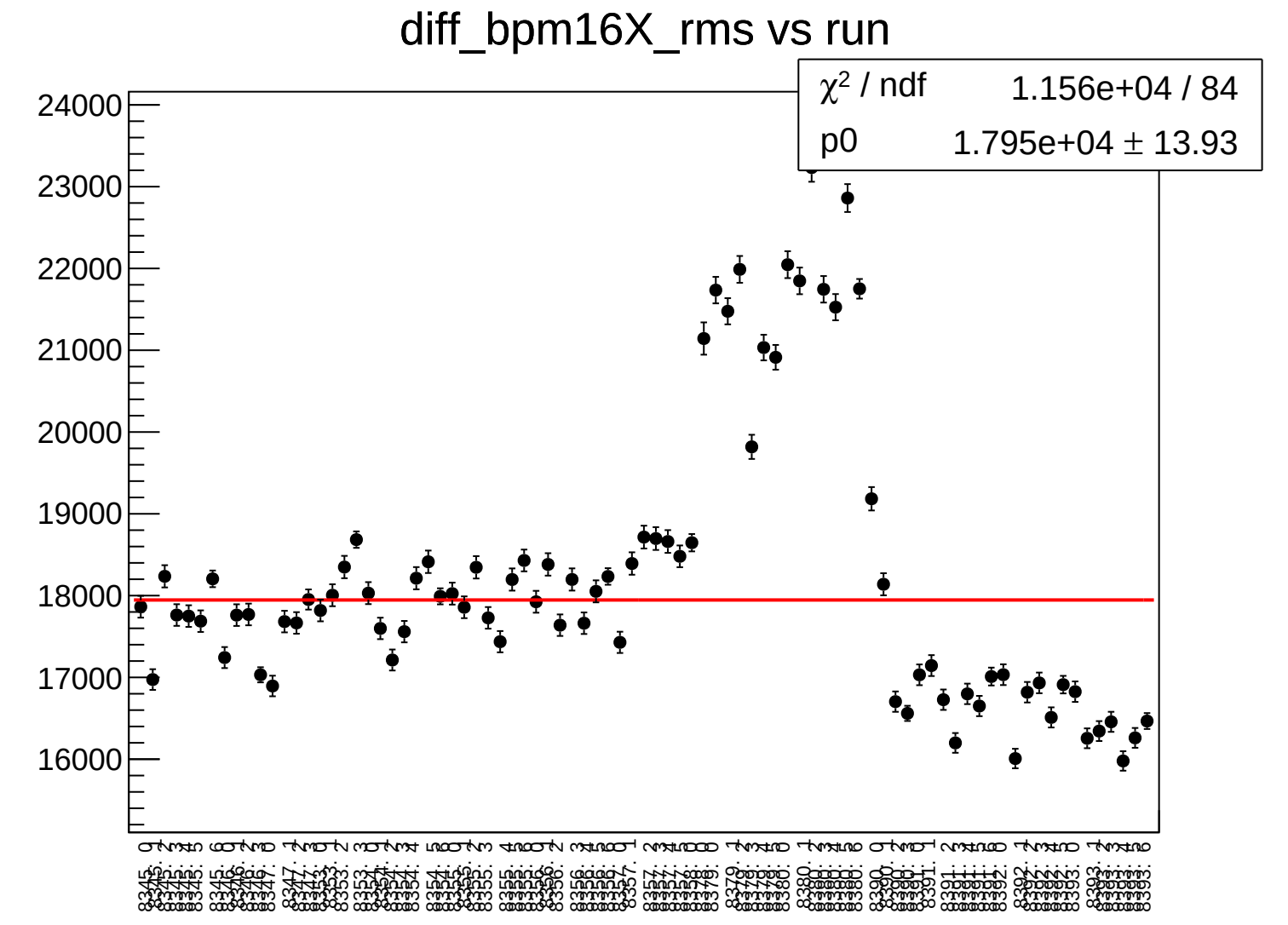

diff_bpm12Y_mean vs run
χ^2 / ndf 72.59 / 84
p0 1.175 ± 2.445
100
50
0
−50
−100
pull
Entries 85
Mean −360.9
Std Dev 408.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

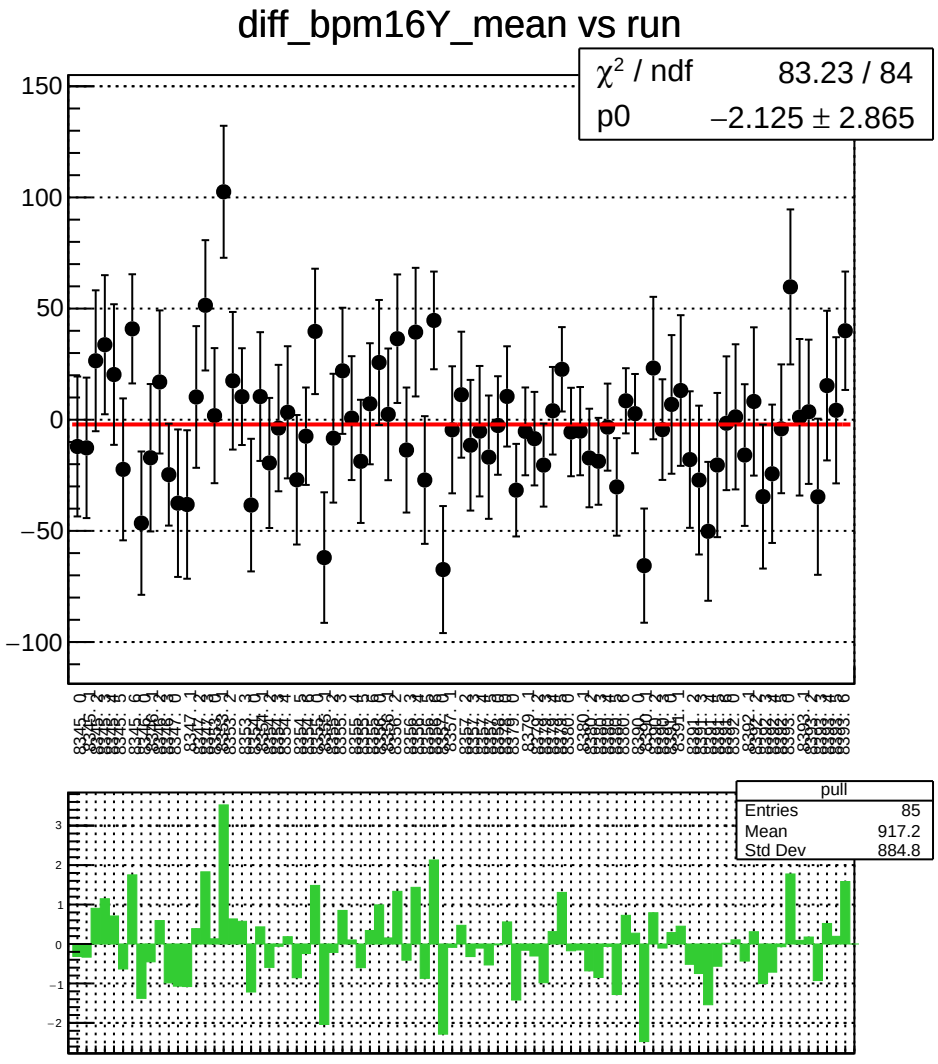

pull1D
Entries 85
Mean 0.01115
Std Dev 0.924
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

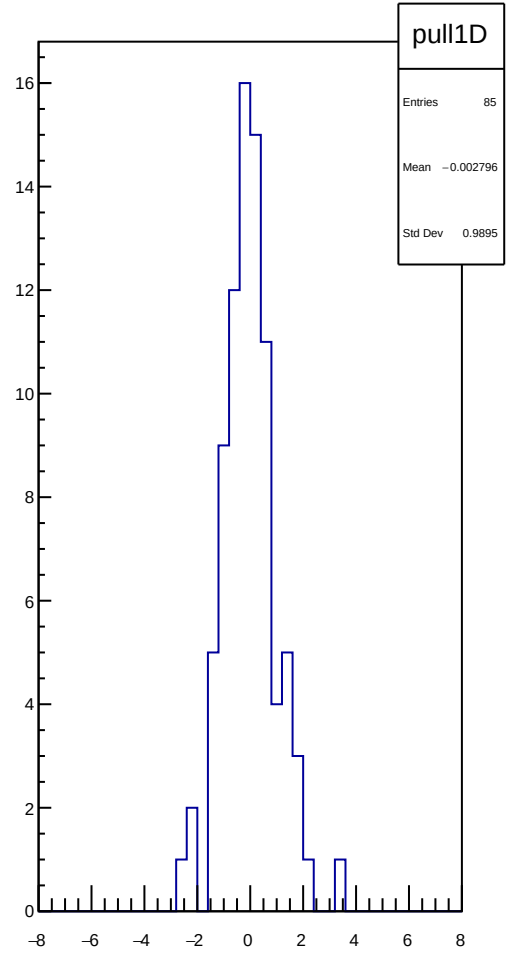

diff_bpm12Y_rms vs run
χ² / ndf 6.483e+04 / 84
p0 2192 ± 1.729
4000
3500
3000
2500
2000

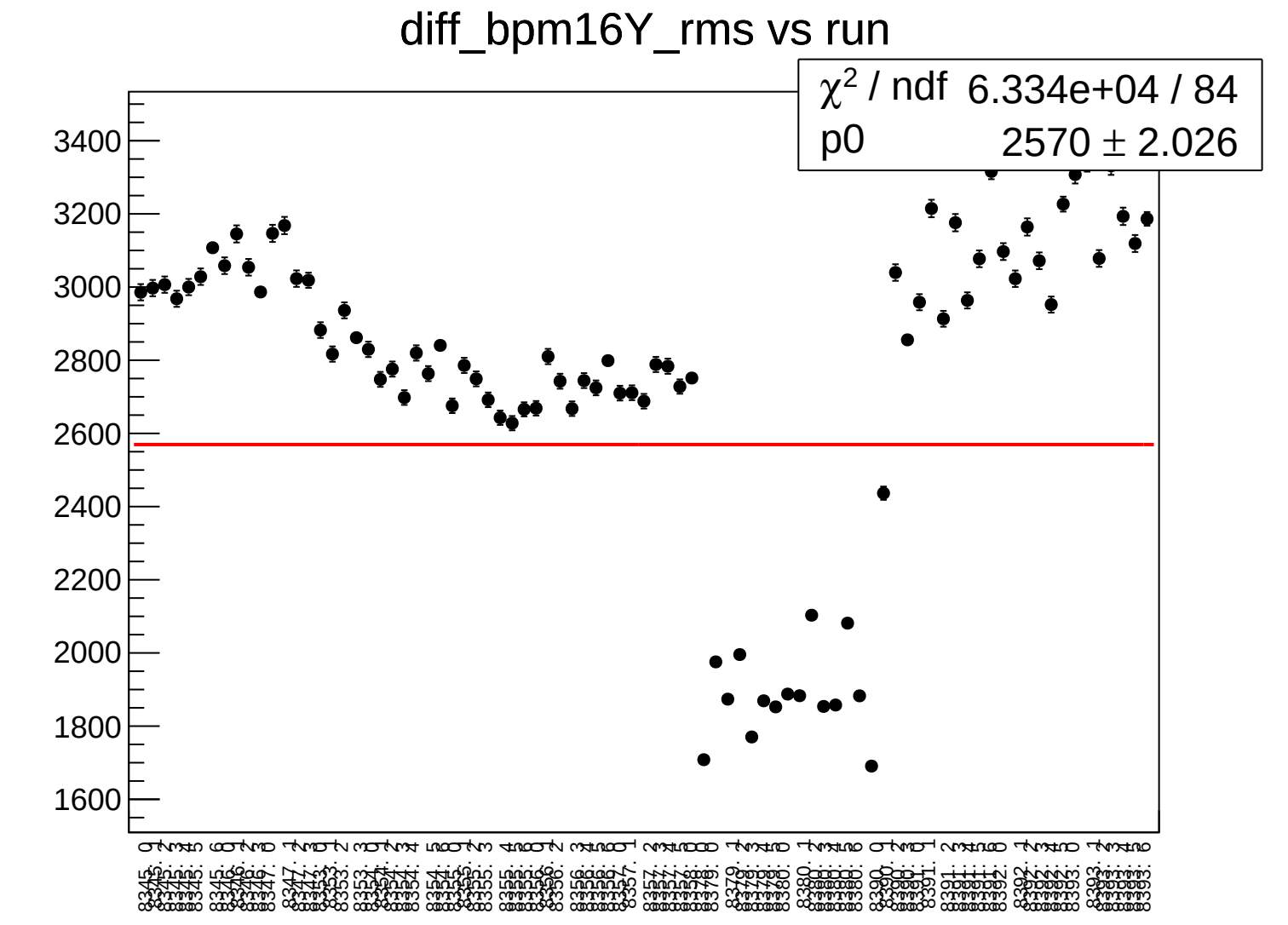

diff_bpm16X_mean vs run
χ² / ndf 102.3 / 84
p0 63.34 ± 19.69
pull
Entries 85
Mean −950.2
Std Dev 1006

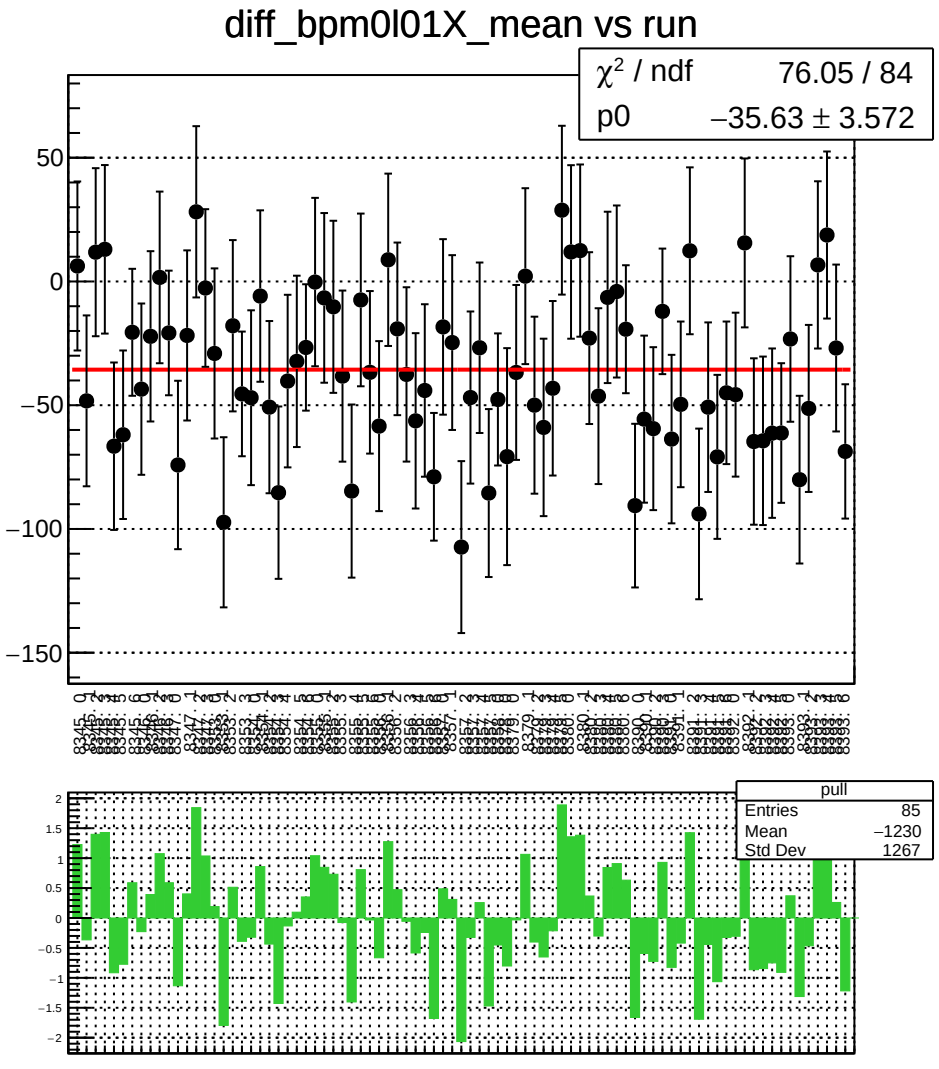

pull1D
Entries 85
Mean −0.005483
Std Dev 1.097

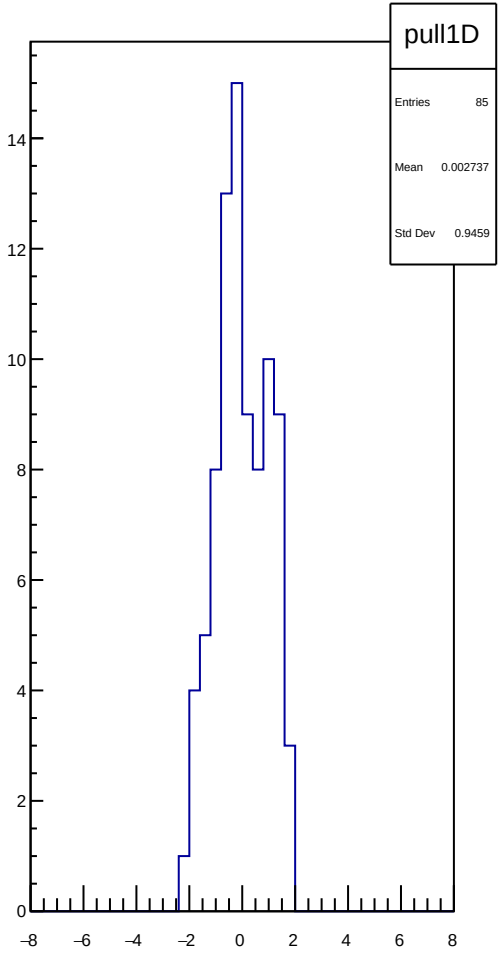

diff_bpm16X_rms vs run
χ² / ndf 1.156e+04 / 84
p0 1.795e+04 ± 13.93
24000
23000
22000
21000
20000
19000
18000
17000
16000

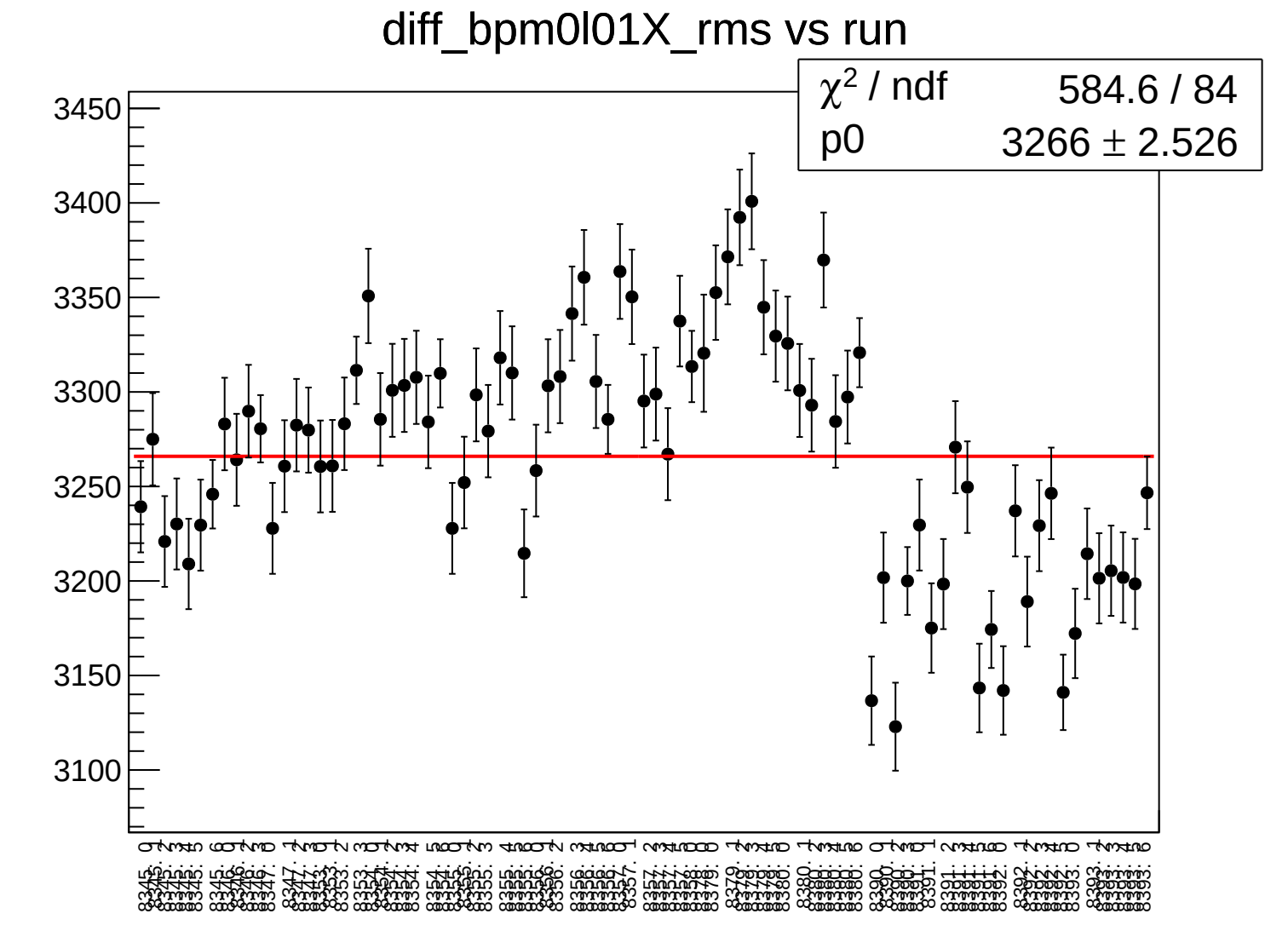

diff_bpm16Y_mean vs run
χ² / ndf 83.23 / 84
p0 −2.125 ± 2.865
150
100
50
0
−50
−100
pull
Entries 85
Mean 917.2
Std Dev 884.8
3
2
1
0
−1
−2

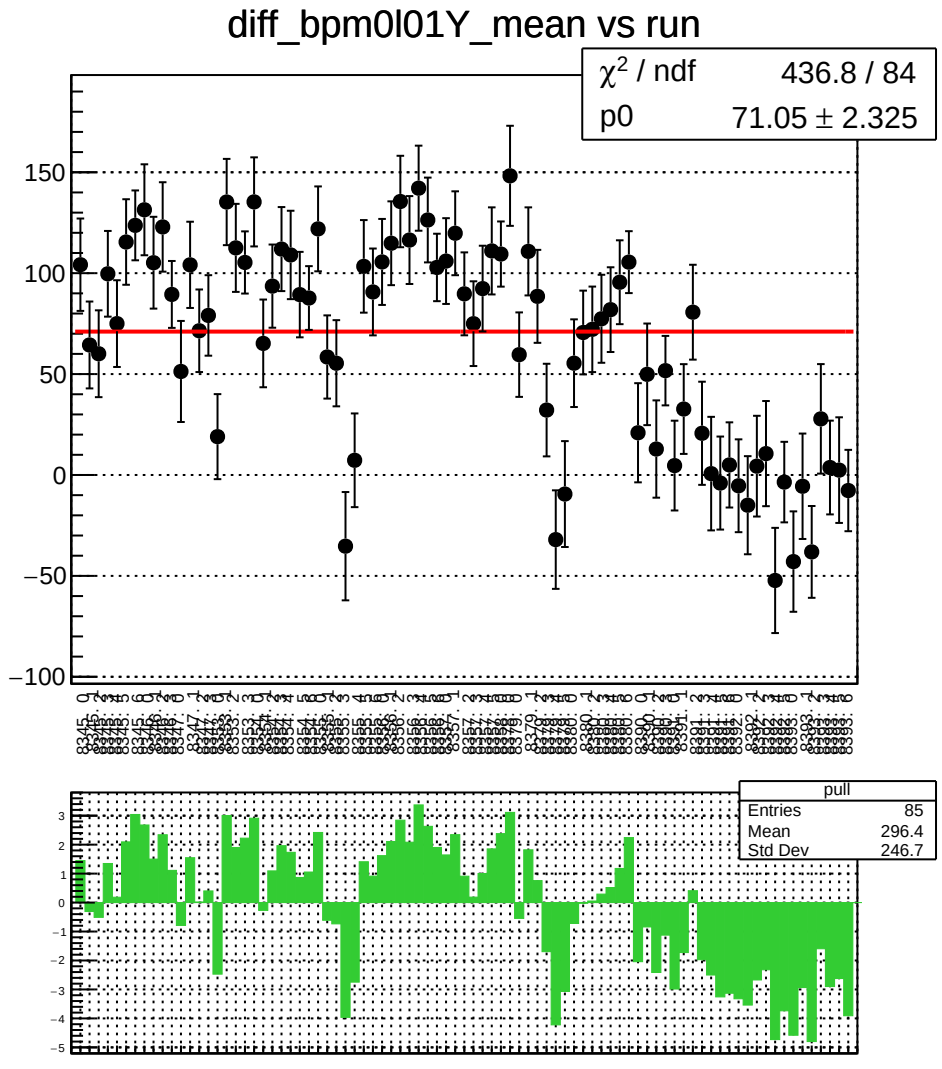

pull1D
Entries 85
Mean −0.002796
Std Dev 0.9895
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

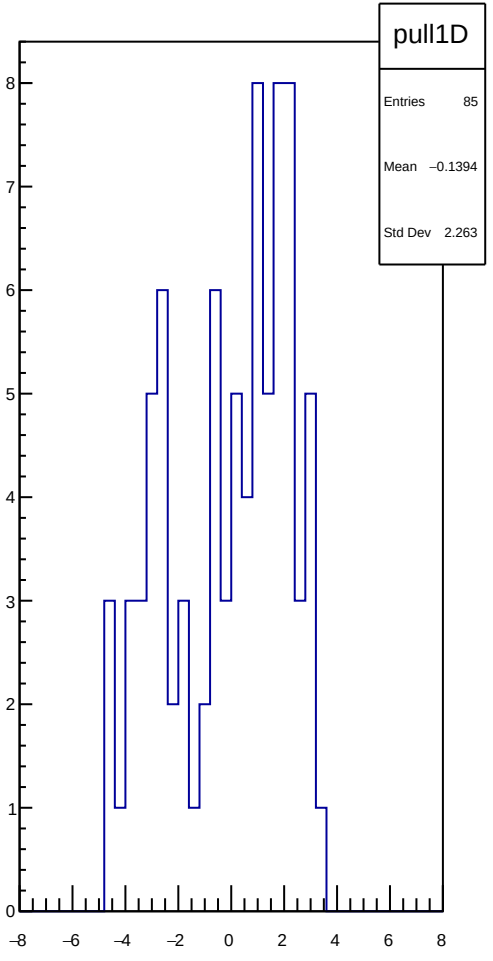

diff_bpm16Y_rms vs run
χ² / ndf 6.334e+04 / 84
p0 2570 ± 2.026
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600

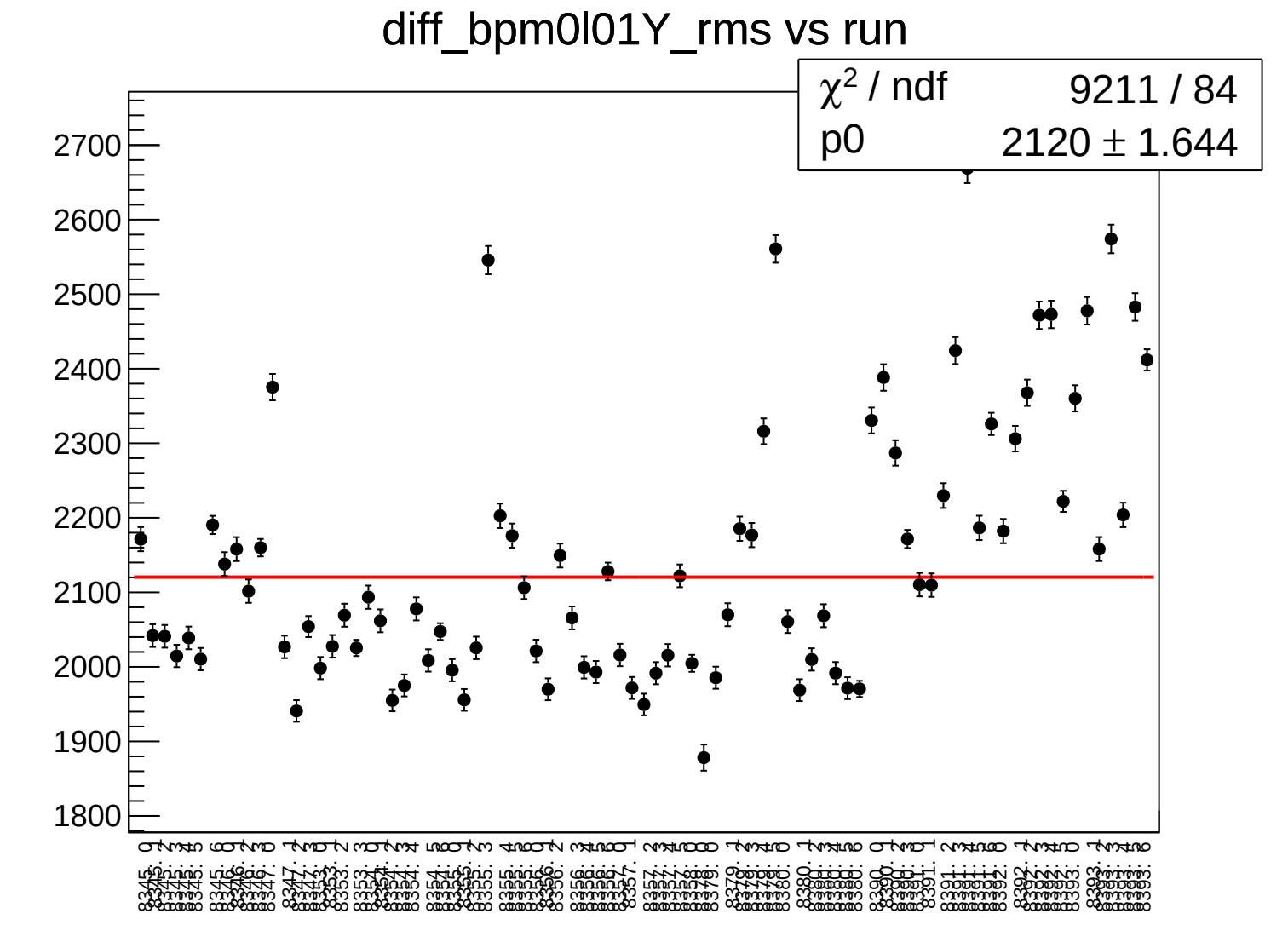

diff_bpm0l01X_mean vs run
χ² / ndf 76.05 / 84
p0 −35.63 ± 3.572
pull
Entries 85
Mean −1230
Std Dev 1267

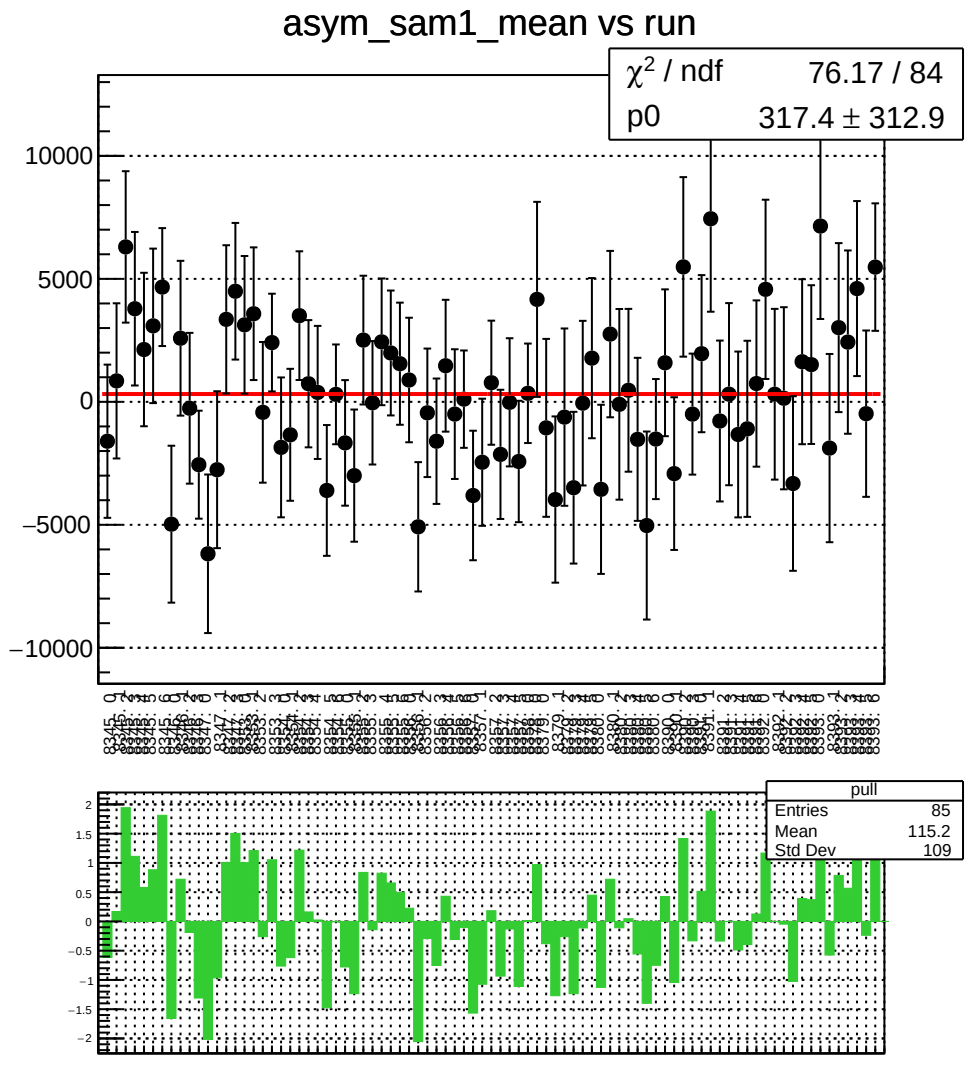

pull1D
Entries 85
Mean 0.002737
Std Dev 0.9459

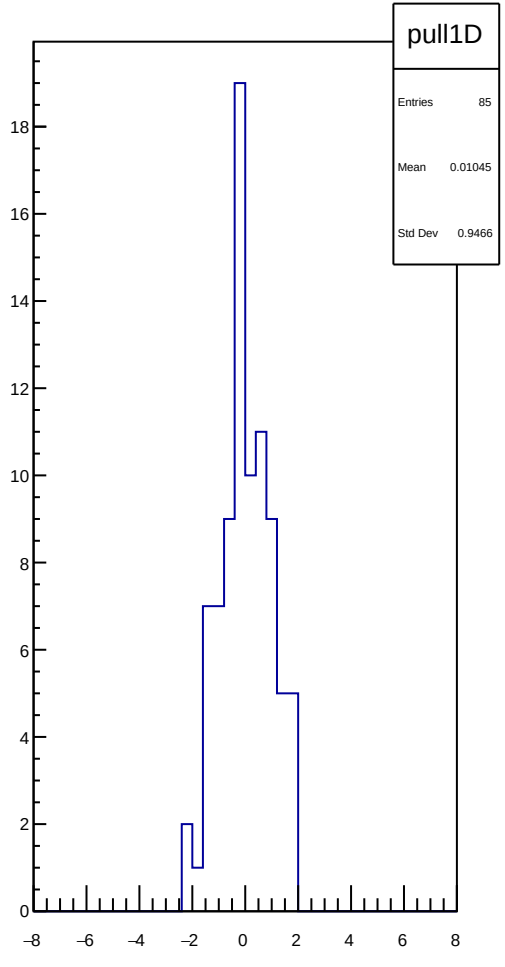

diff_bpm0l01X_rms vs run
χ² / ndf 584.6 / 84
p0 3266 ± 2.526
3450
3400
3350
3300
3250
3200
3150
3100

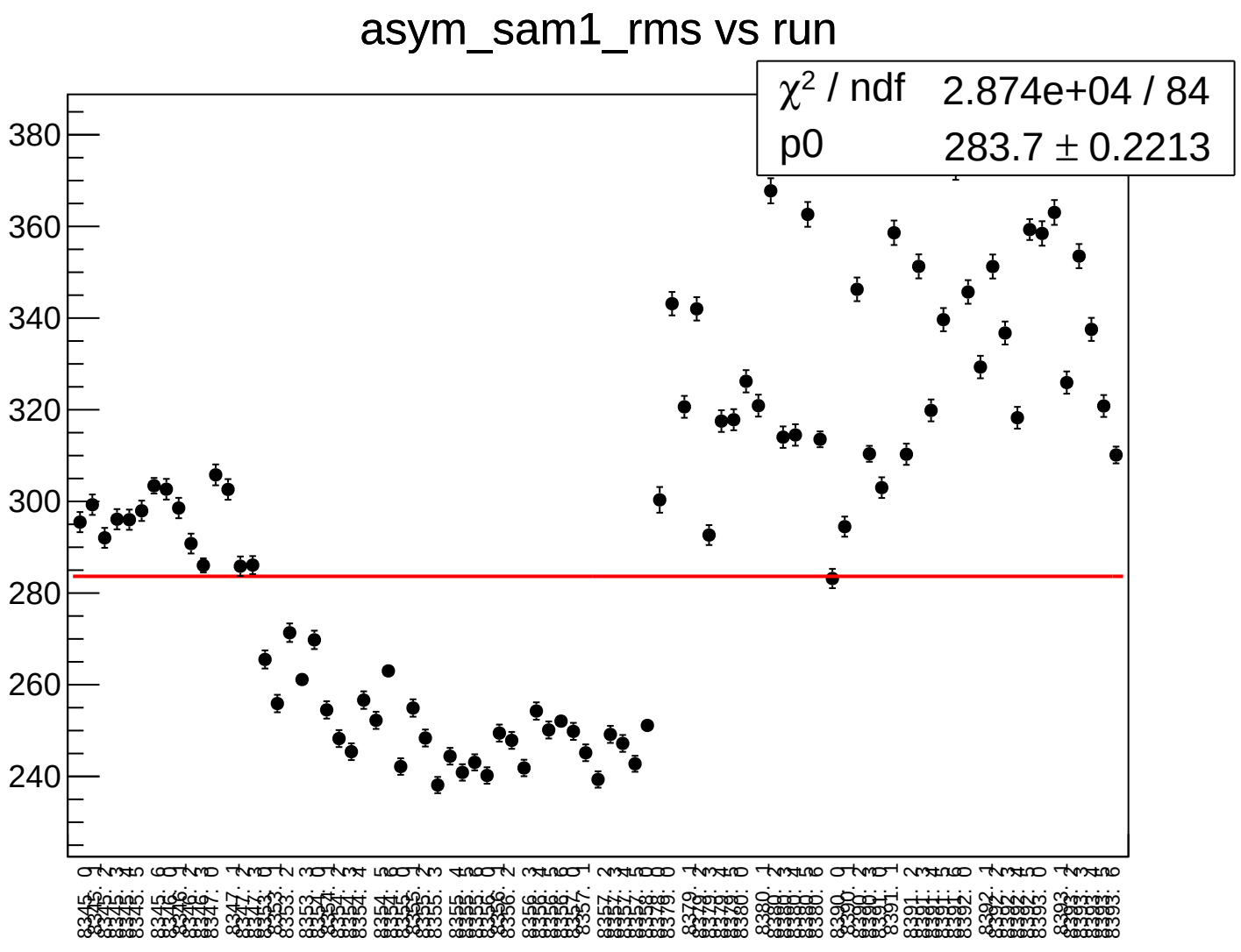

diff_bpm0l01Y_mean vs run
χ^2 / ndf 436.8 / 84
p0 71.05 ± 2.325
150
100
50
0
−50
−100
pull
Entries 85
Mean 296.4
Std Dev 246.7
3
2
1
0
−1
−2
−3
−4
−5

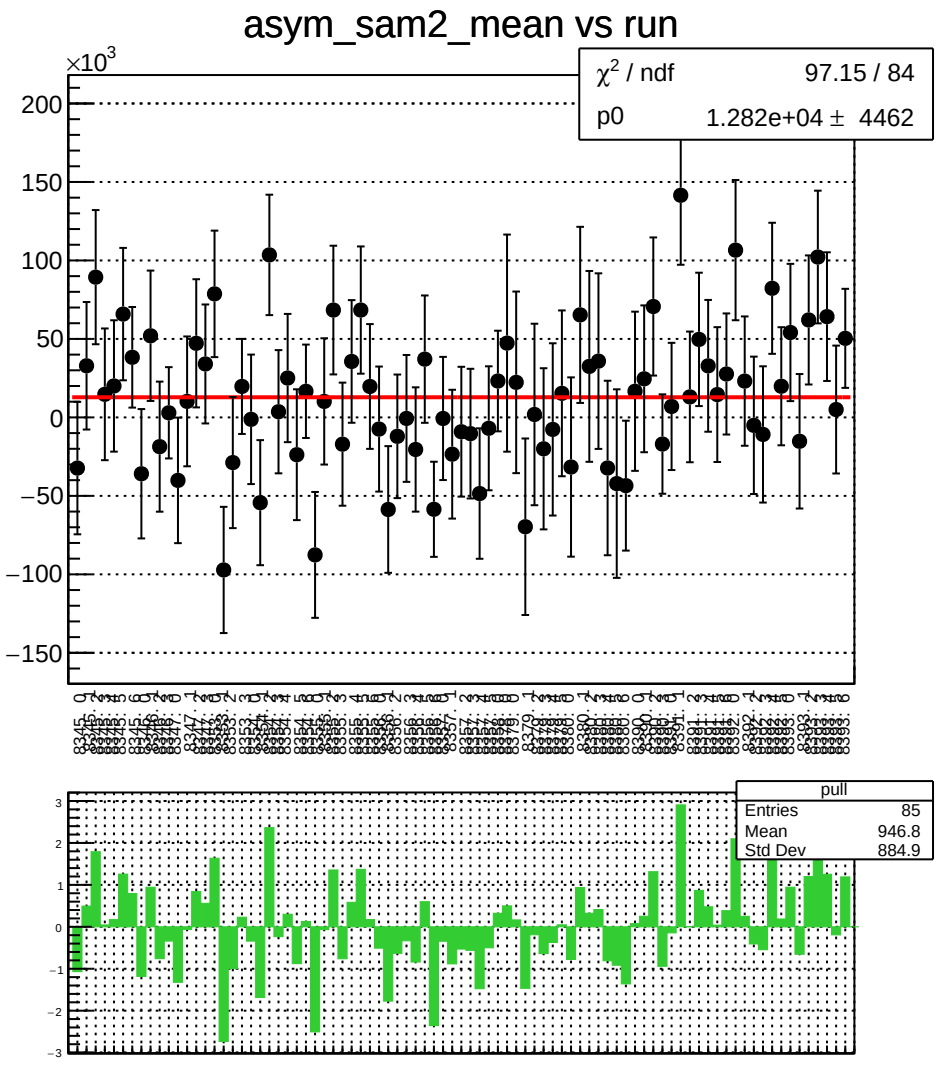

pull1D
Entries 85
Mean −0.1394
Std Dev 2.263
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

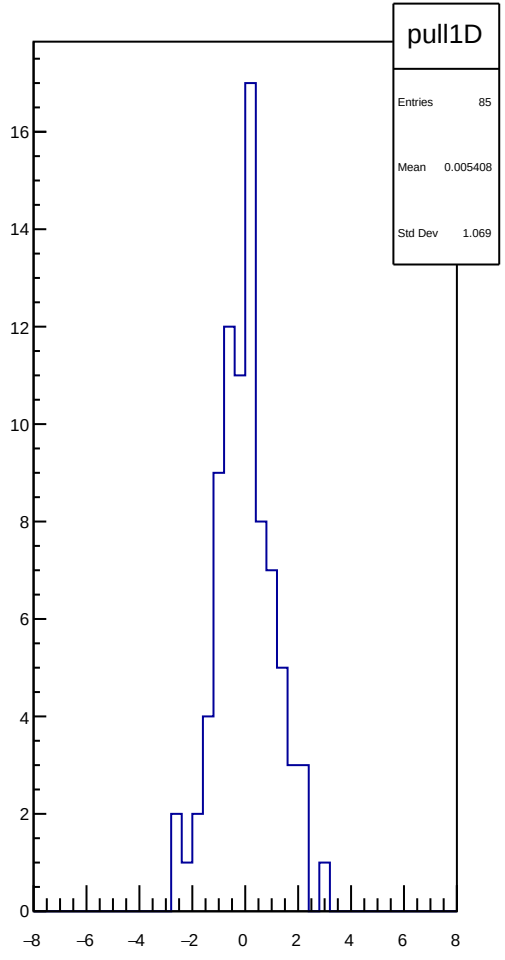

diff_bpm0l01Y_rms vs run
χ² / ndf 9211 / 84
p0 2120 ± 1.644
2700
2600
2500
2400
2300
2200
2100
2000
1900
1800

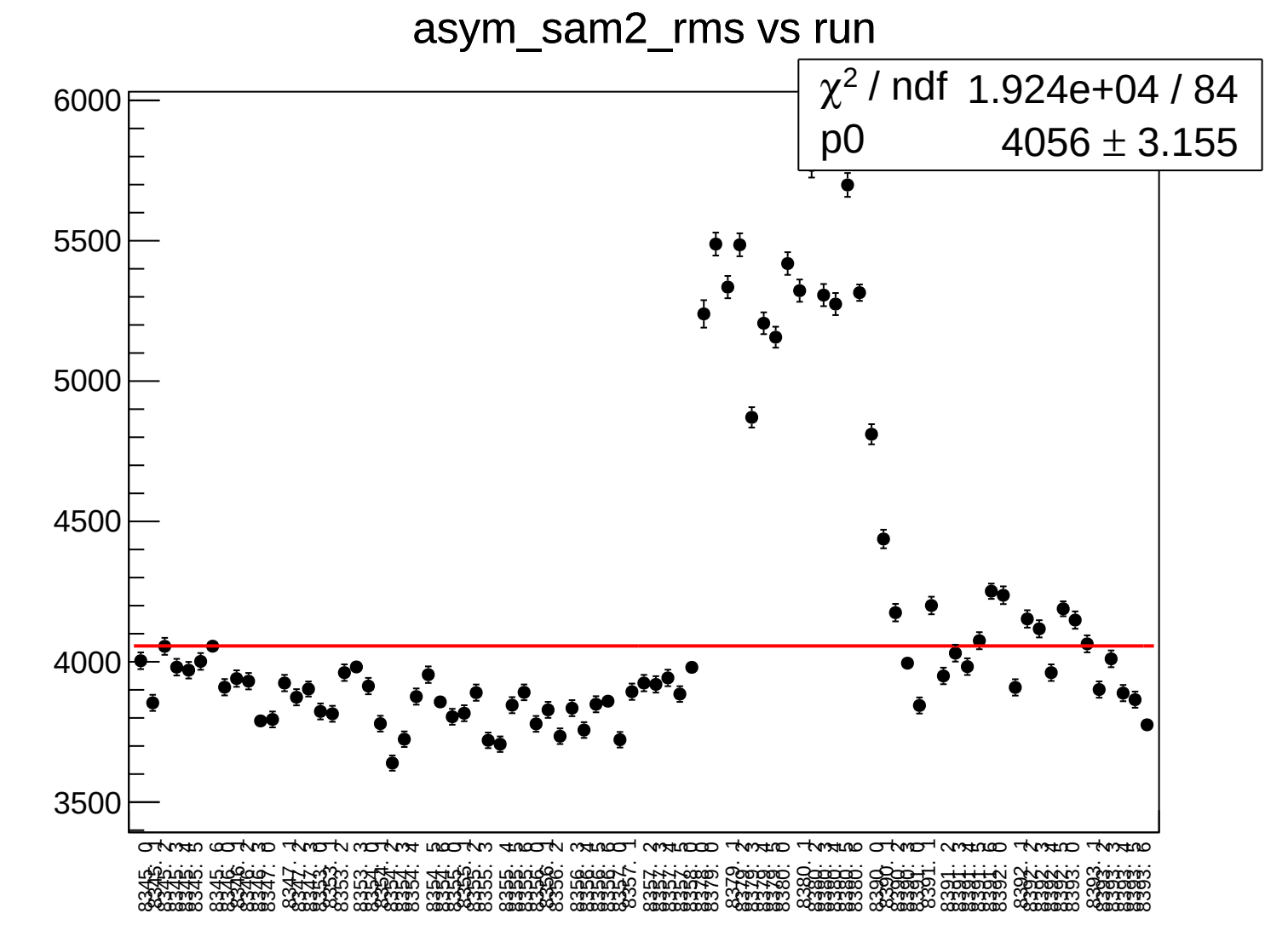

asym_sam1_mean vs run
χ² / ndf 76.17 / 84
p0 317.4 ± 312.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 115.2
Std Dev 109
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

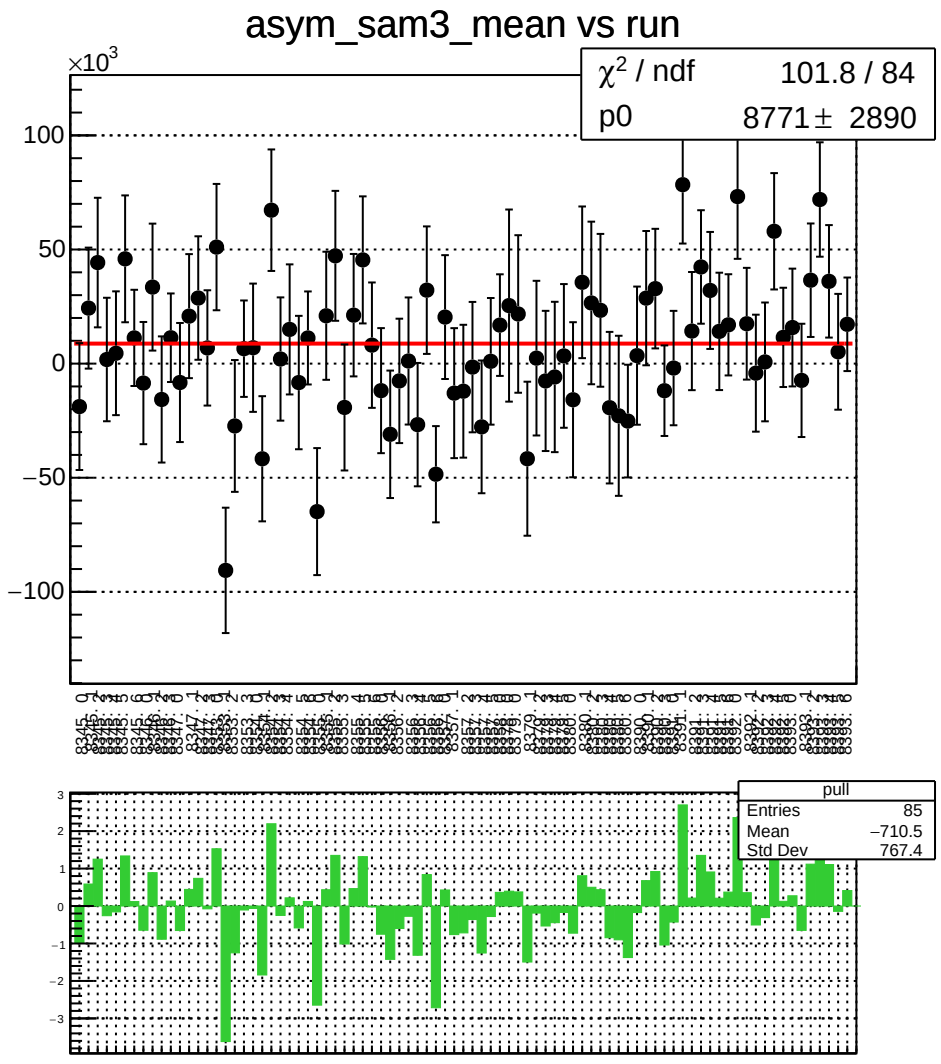

pull1D
Entries 85
Mean 0.01045
Std Dev 0.9466
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

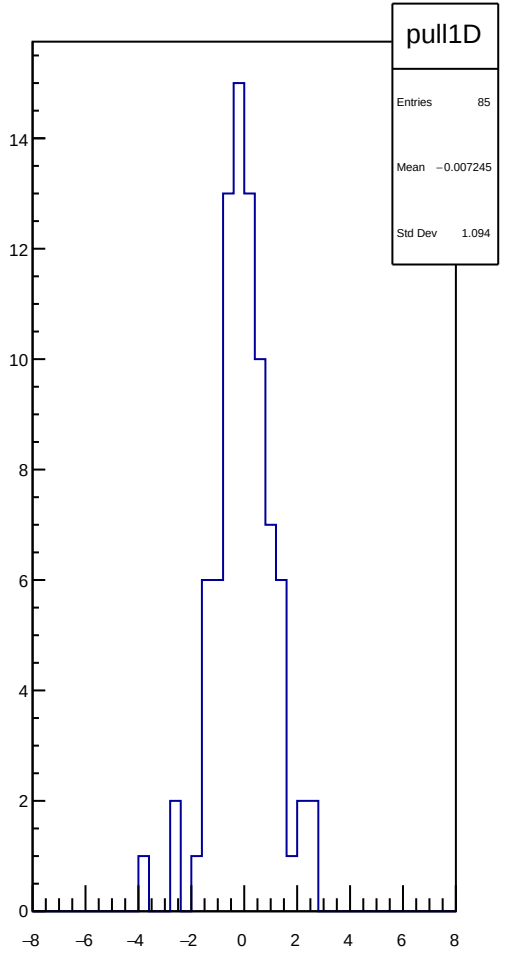

asym_sam1_rms vs run
χ² / ndf 2.874e+04 / 84
p0 283.7 ± 0.2213
380
360
340
320
300
280
260
240

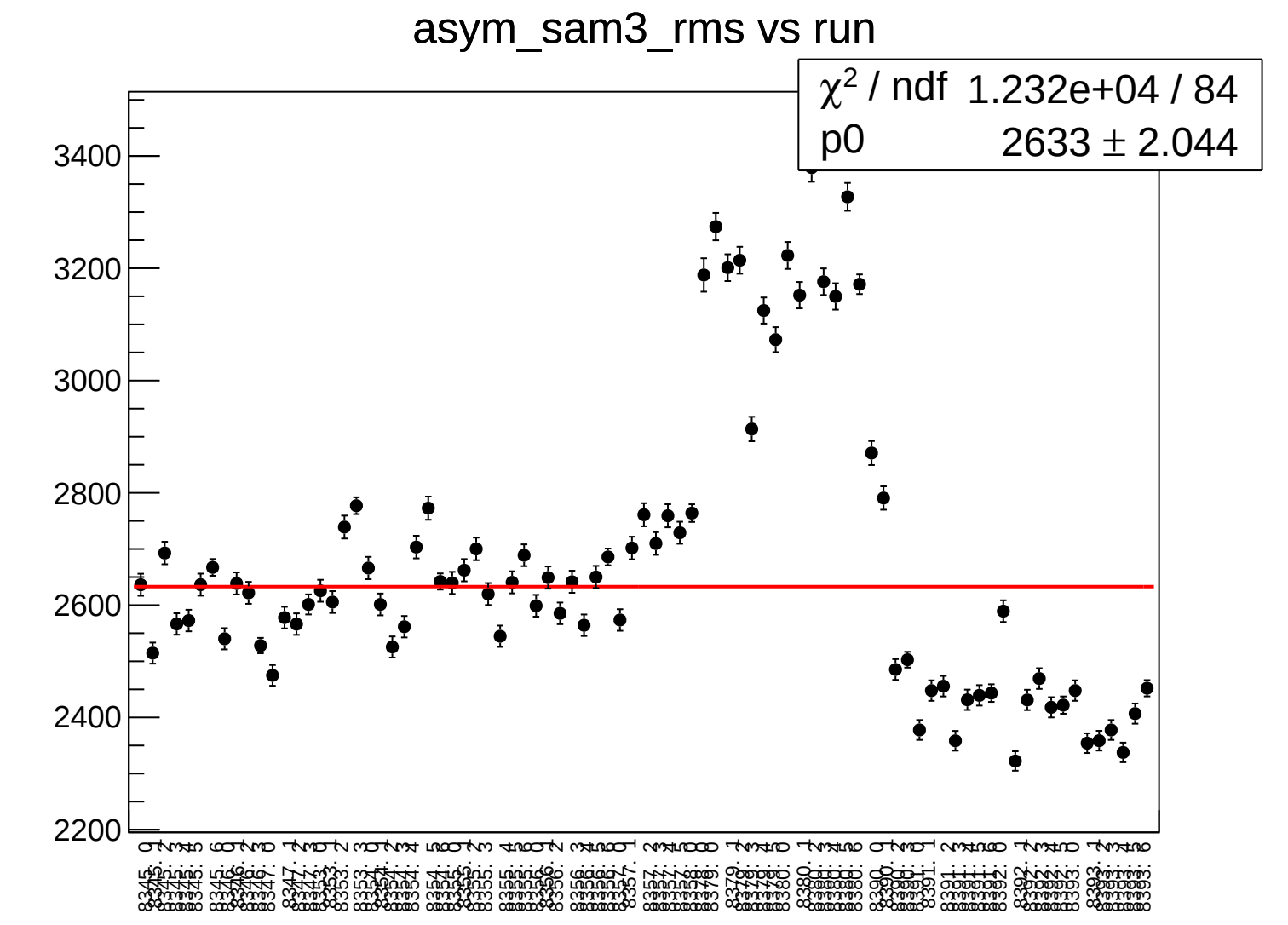

asym_sam2_mean vs run
×10^3
χ² / ndf 97.15 / 84
p0 1.282e+04 ± 4462
pull
Entries 85
Mean 946.8
Std Dev 884.9

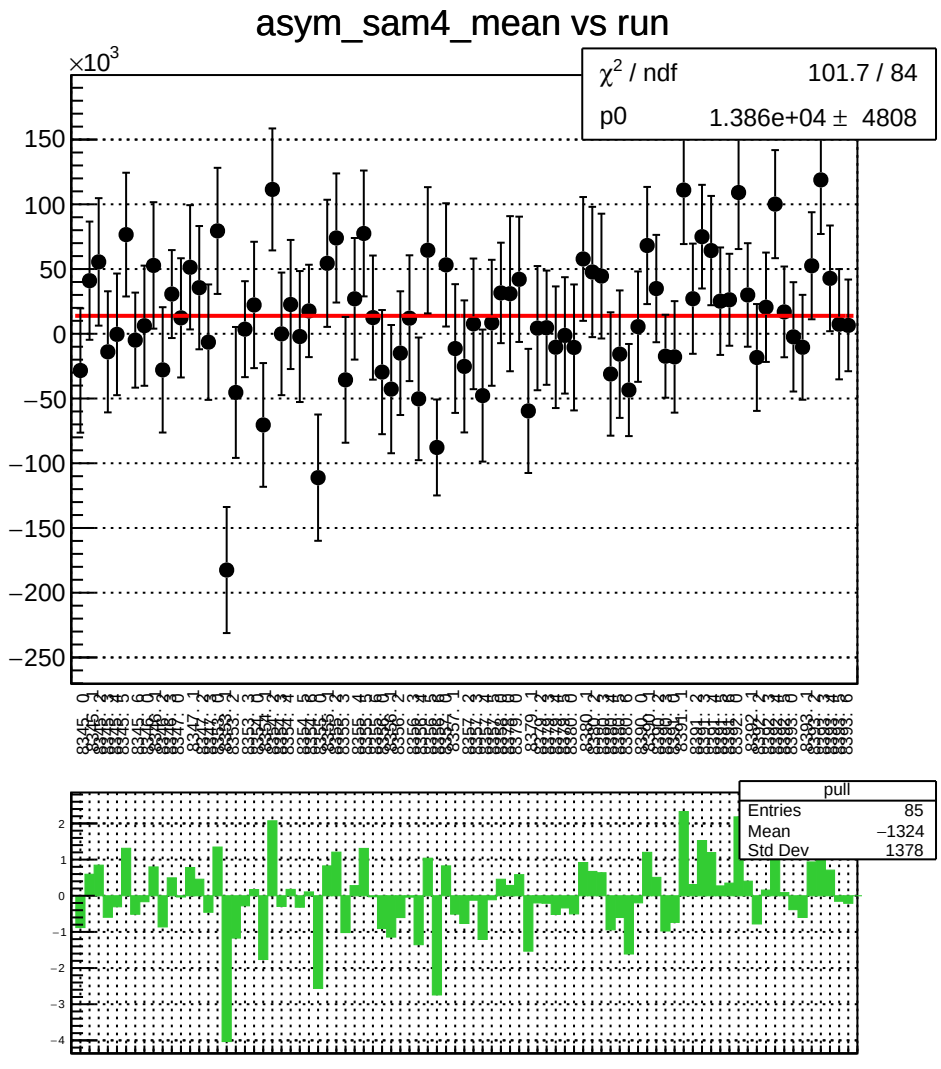

pull1D
Entries 85
Mean 0.005408
Std Dev 1.069

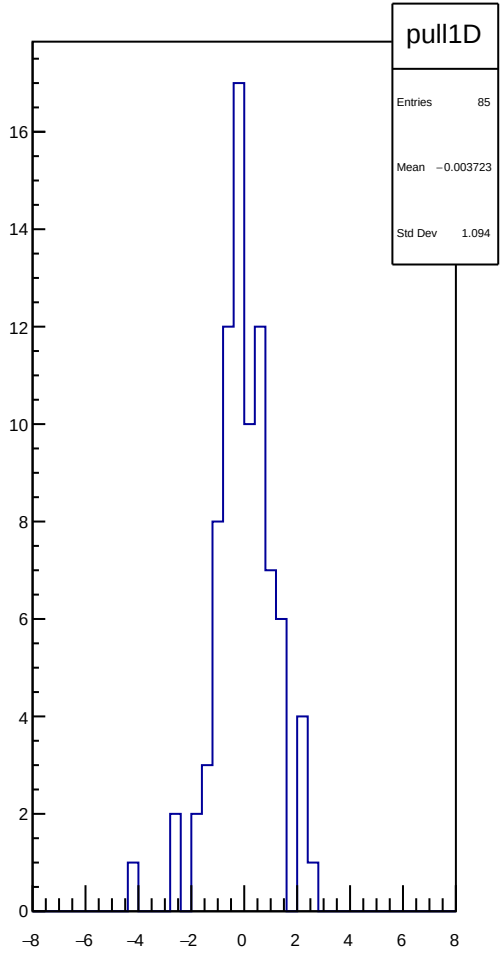

asym_sam2_rms vs run
χ² / ndf 1.924e+04 / 84
p0 4056 ± 3.155
6000
5500
5000
4500
4000
3500

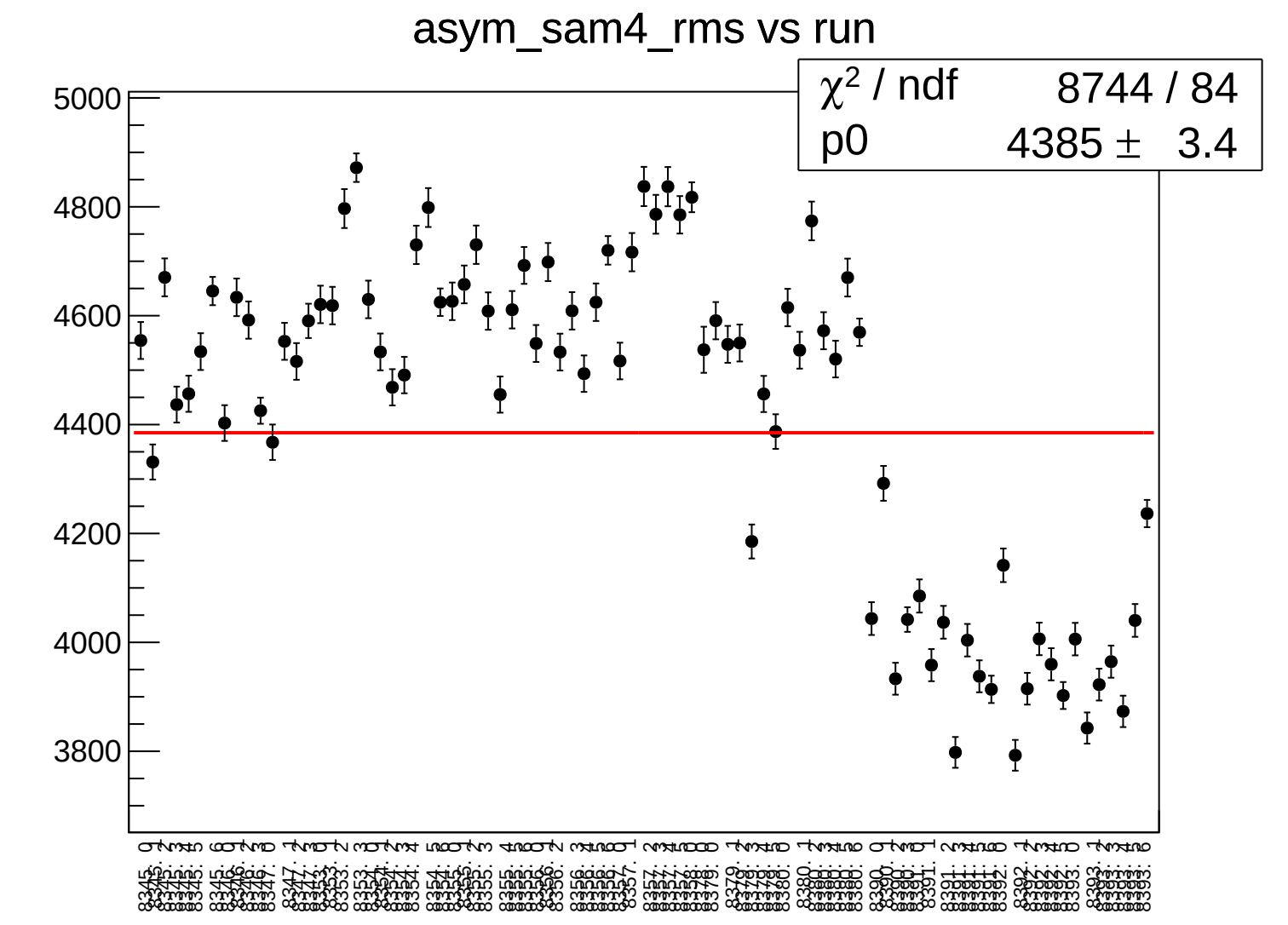

asym_sam3_mean vs run
×10^3
χ^2 / ndf 101.8 / 84
p0 8771 ± 2890
100
50
0
−50
−100
pull
Entries 85
Mean −710.5
Std Dev 767.4
3
2
1
0
−1
−2
−3

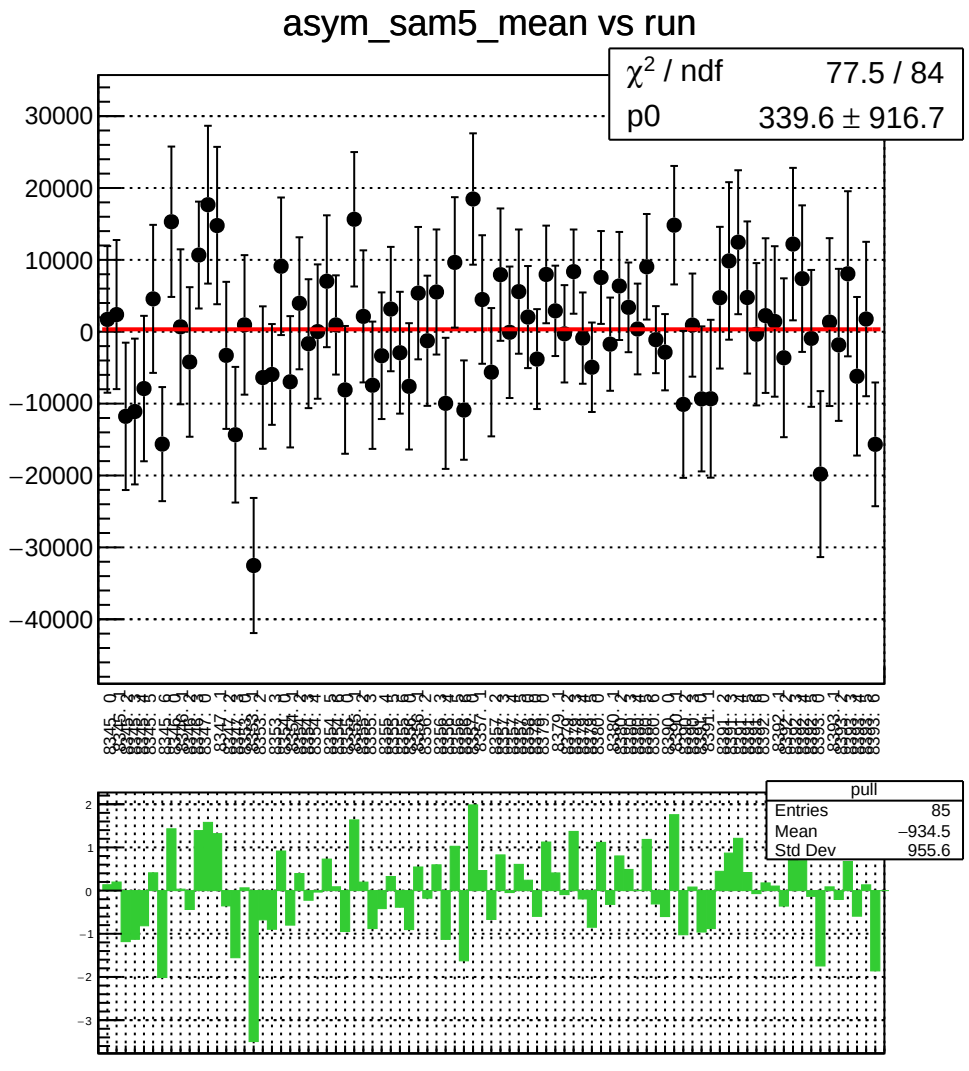

pull1D
Entries 85
Mean −0.007245
Std Dev 1.094
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

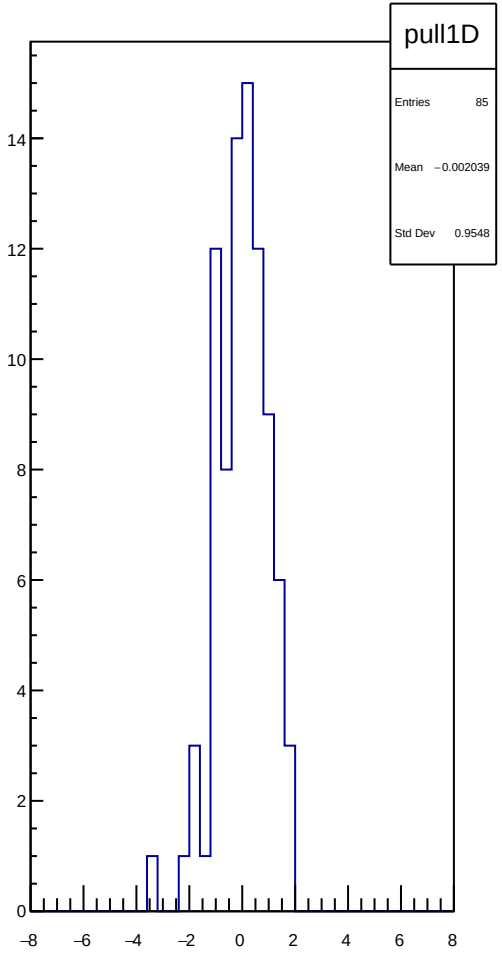

asym_sam3_rms vs run
χ² / ndf 1.232e+04 / 84
p0 2633 ± 2.044
3400
3200
3000
2800
2600
2400
2200

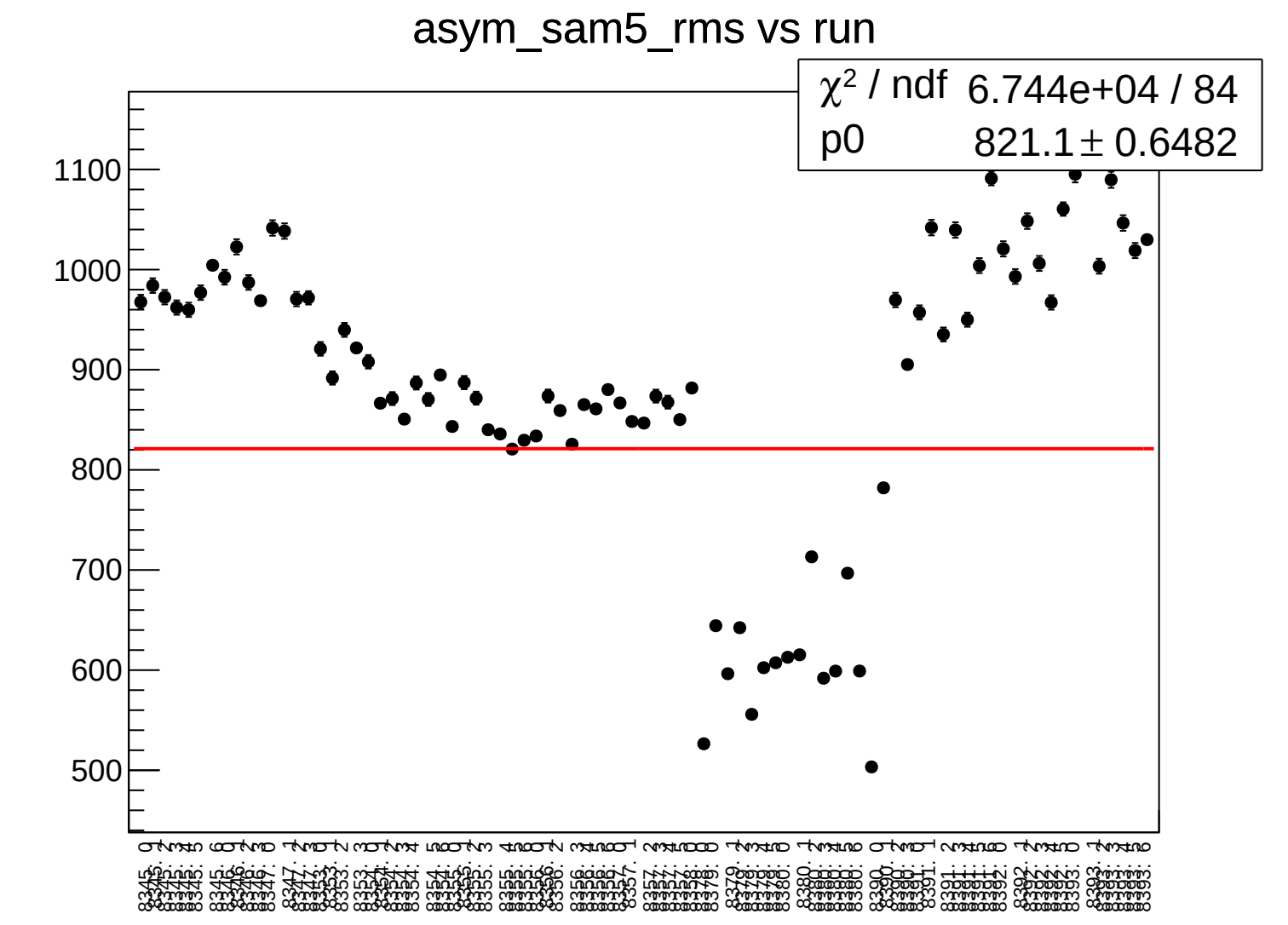

asym_sam4_mean vs run
×10^3
χ² / ndf 101.7 / 84
p0 1.386e+04 ± 4808
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 85
Mean −1324
Std Dev 1378
2
1
0
−1
−2
−3
−4

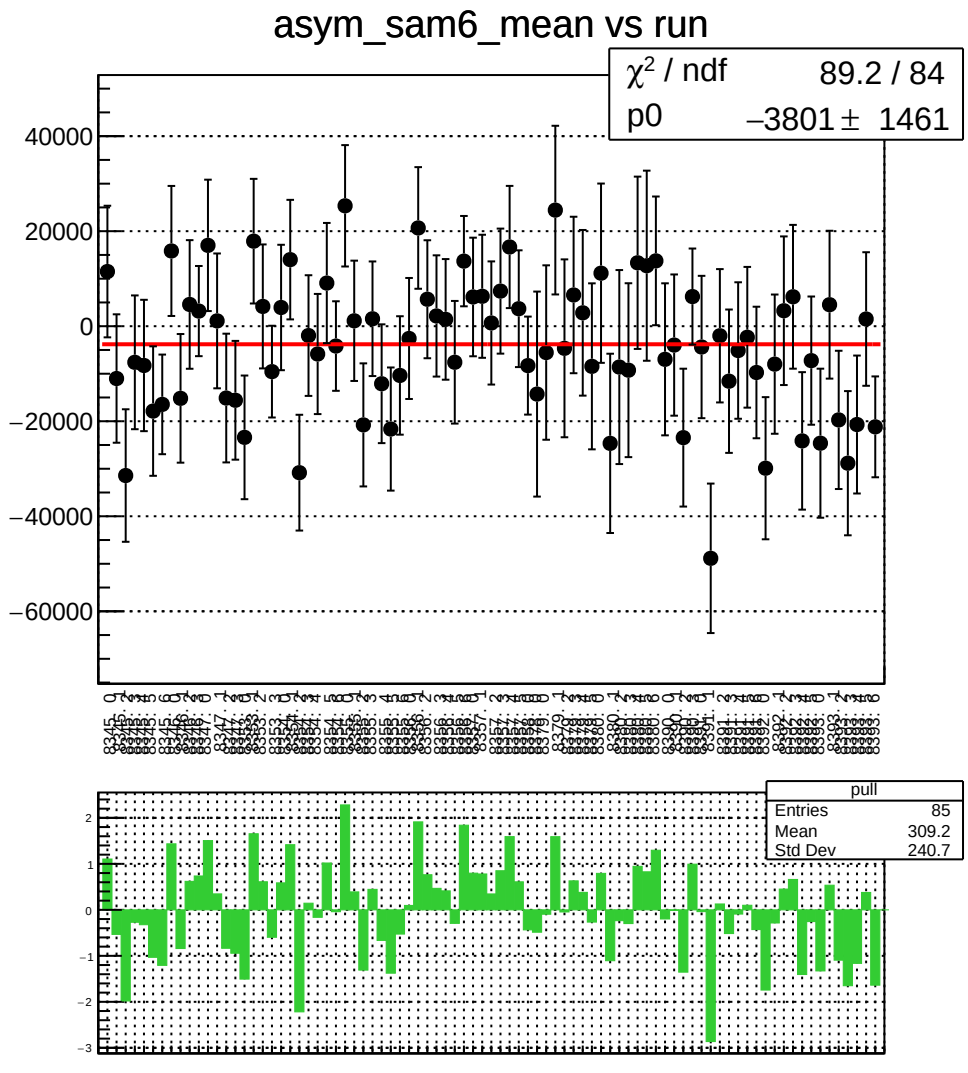

pull1D
Entries 85
Mean −0.003723
Std Dev 1.094
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

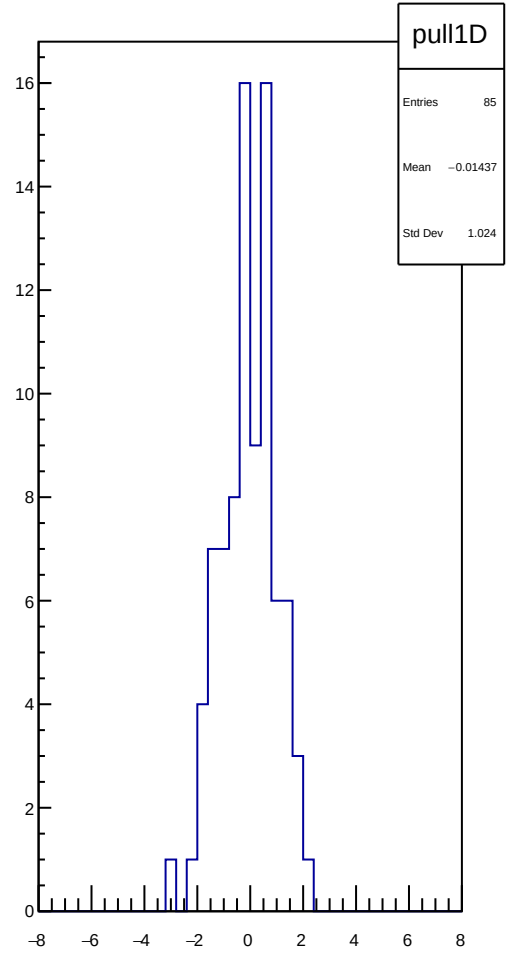

asym_sam4_rms vs run
χ² / ndf 8744 / 84
p0 4385 ± 3.4
5000
4800
4600
4400
4200
4000
3800

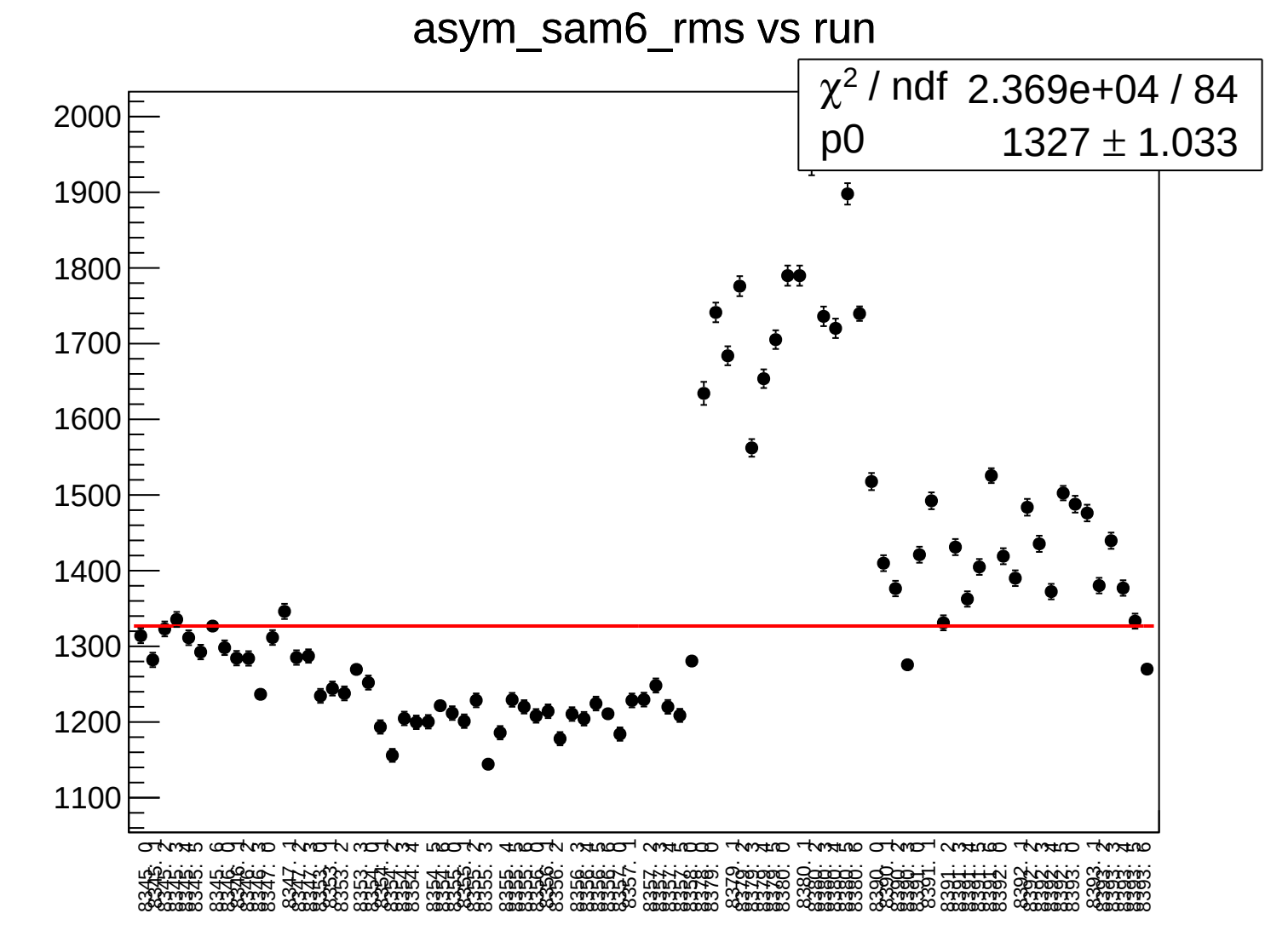

asym_sam5_mean vs run
χ² / ndf 77.5 / 84
p0 339.6 ± 916.7
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −934.5
Std Dev 955.6
2
1
0
−1
−2
−3

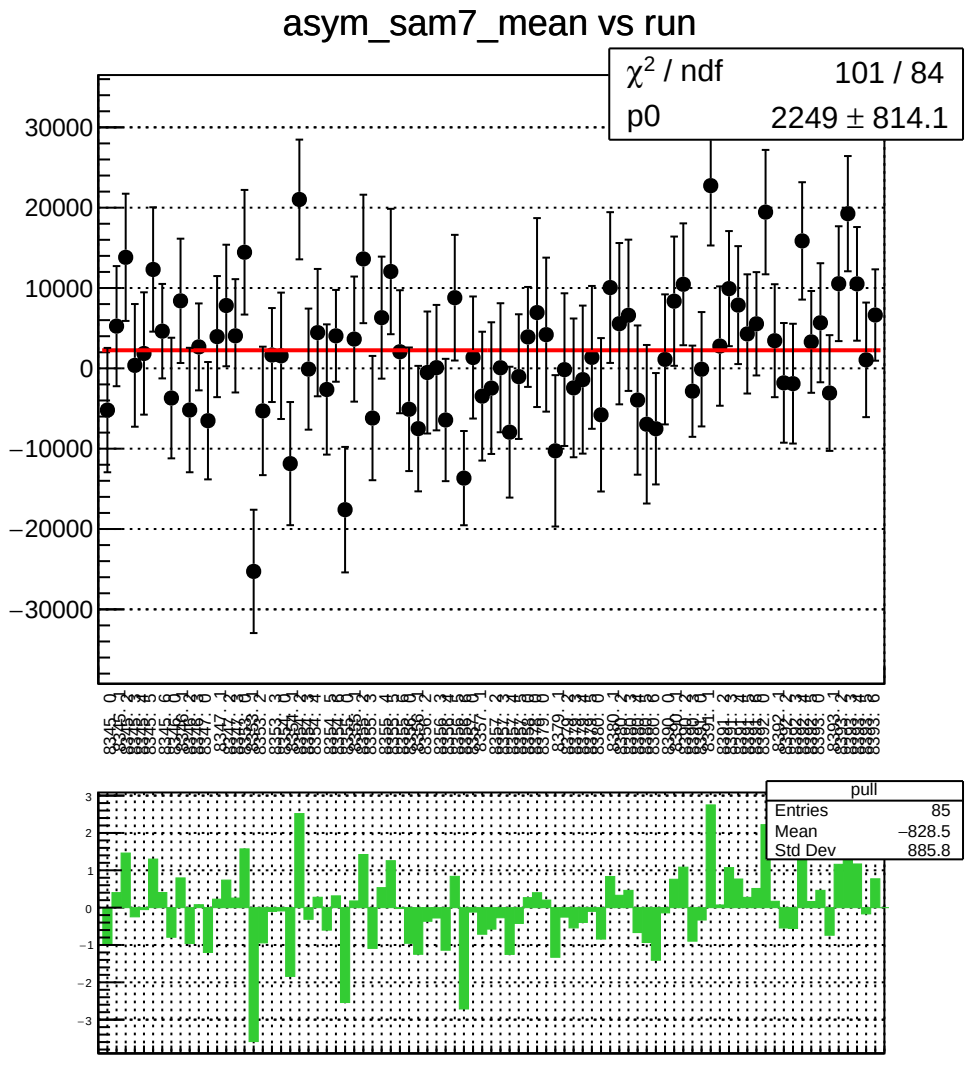

pull1D
Entries 85
Mean −0.002039
Std Dev 0.9548
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

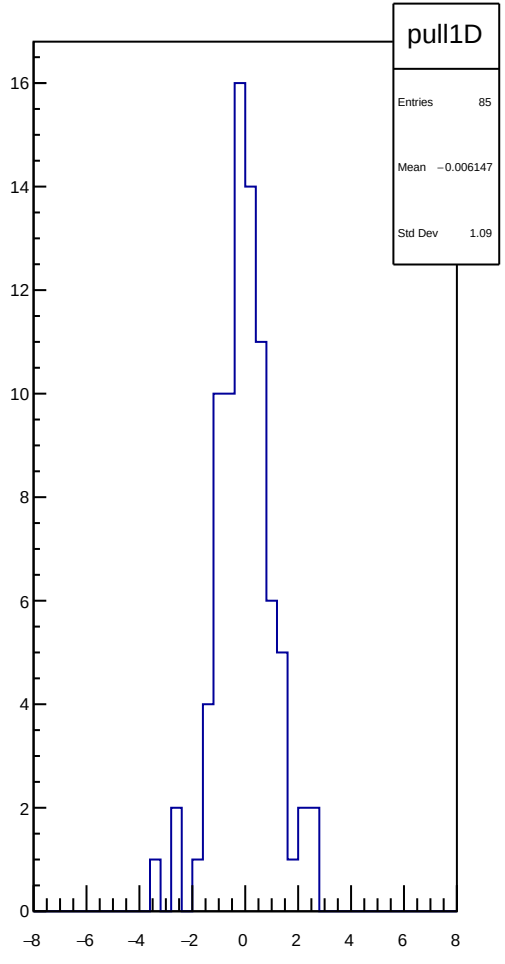

asym_sam5_rms vs run
χ² / ndf 6.744e+04 / 84
p0 821.1 ± 0.6482
1100
1000
900
800
700
600
500

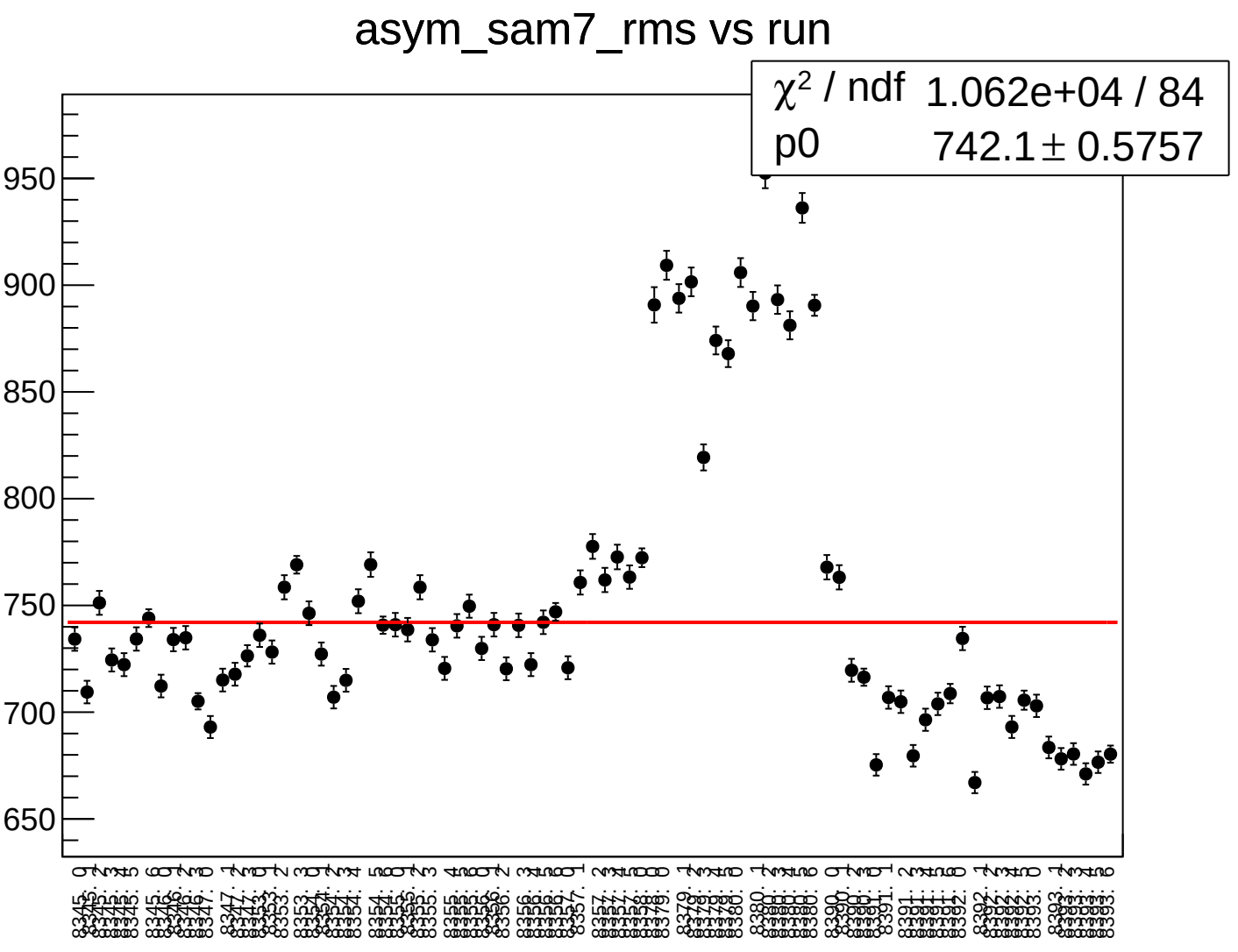

asym_sam6_mean vs run
χ² / ndf 89.2 / 84
p0 −3801 ± 1461
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 309.2
Std Dev 240.7
2
1
0
−1
−2
−3

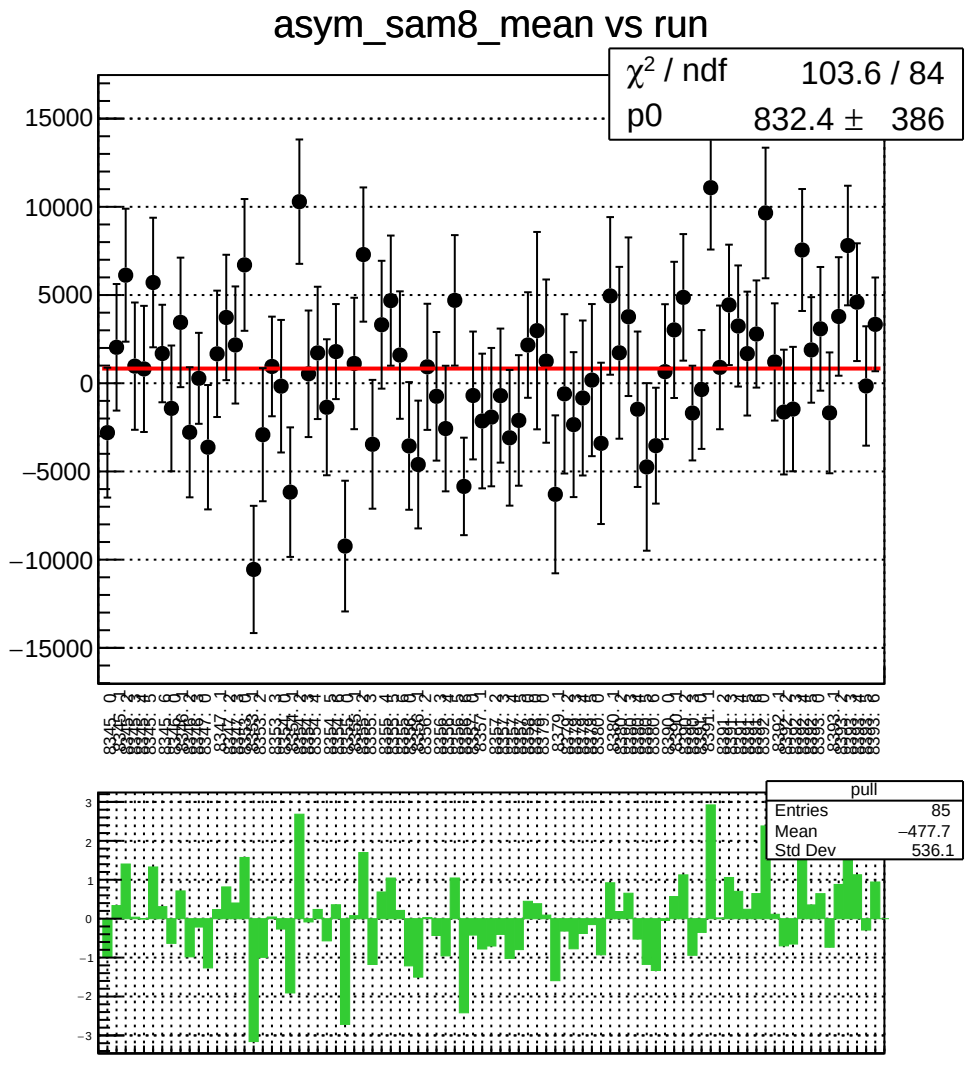

pull1D
Entries 85
Mean −0.01437
Std Dev 1.024
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

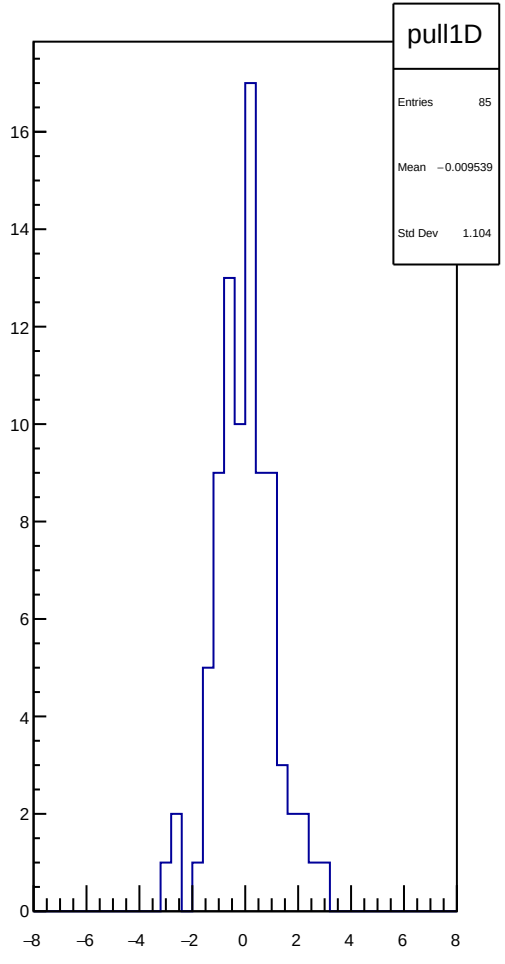

asym_sam6_rms vs run
χ² / ndf 2.369e+04 / 84
p0 1327 ± 1.033
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100

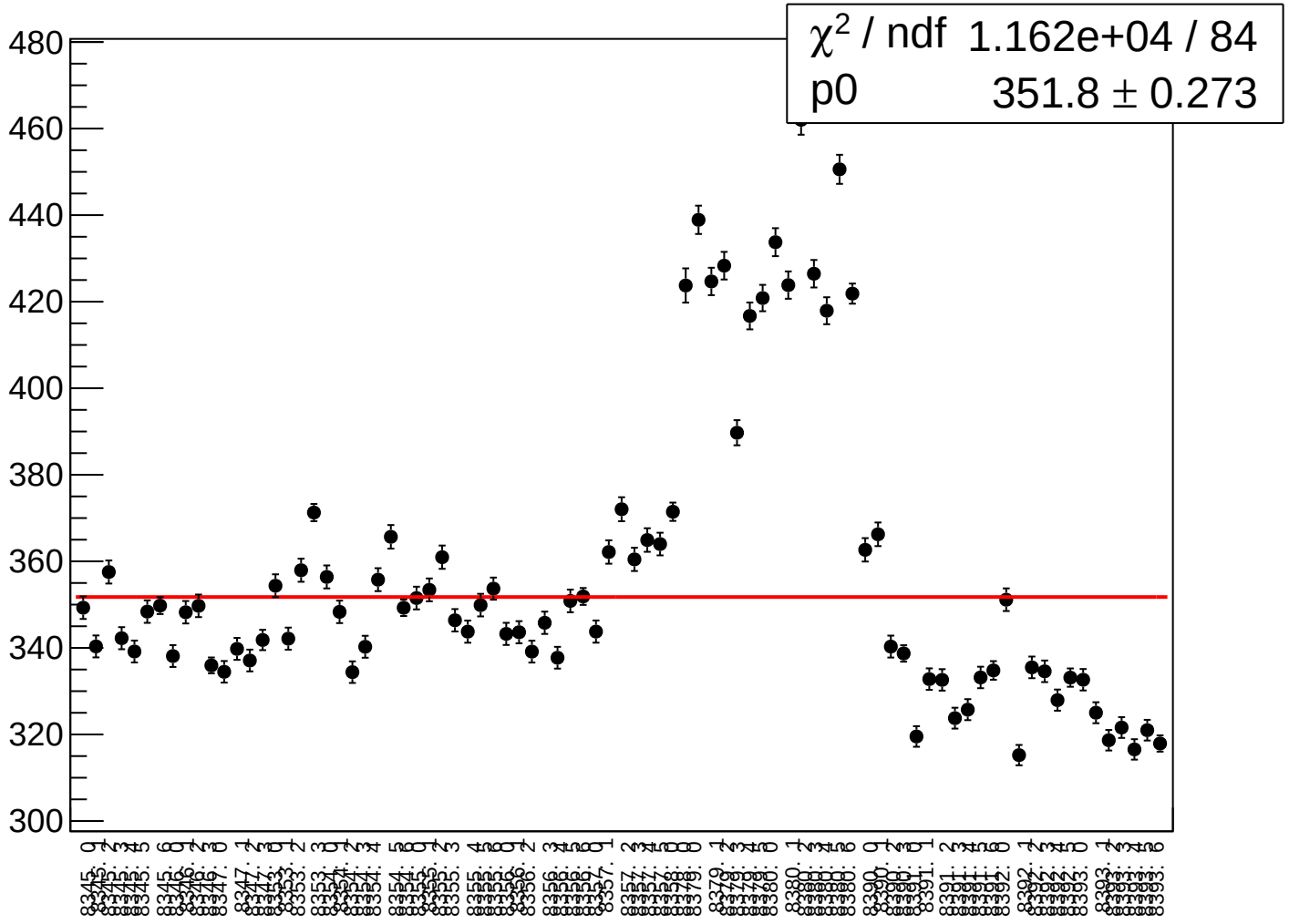

asym_sam7_mean vs run
χ² / ndf 101 / 84
p0 2249 ± 814.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −828.5
Std Dev 885.8
3
2
1
0
−1
−2
−3

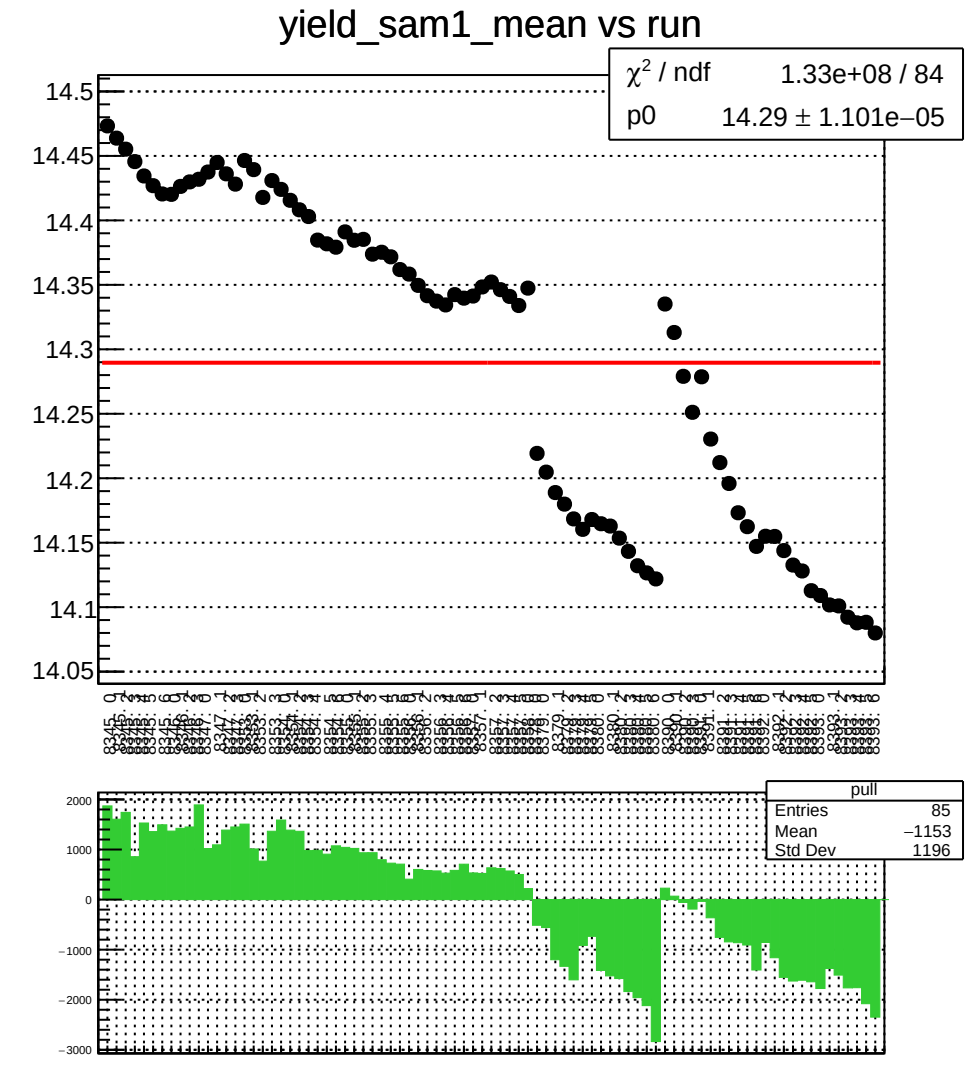

pull1D
Entries 85
Mean −0.006147
Std Dev 1.09
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

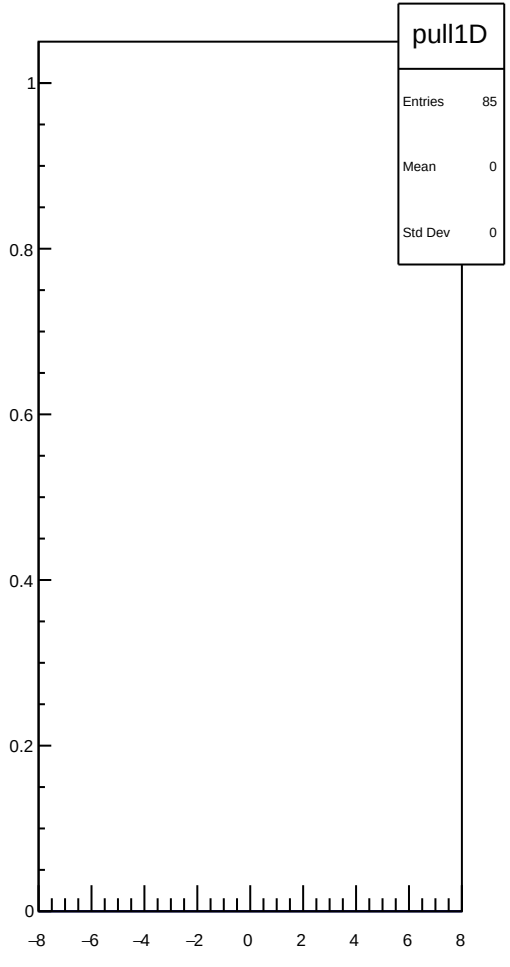

asym_sam7_rms vs run
χ² / ndf 1.062e+04 / 84
p0 742.1 ± 0.5757
950
900
850
800
750
700
650

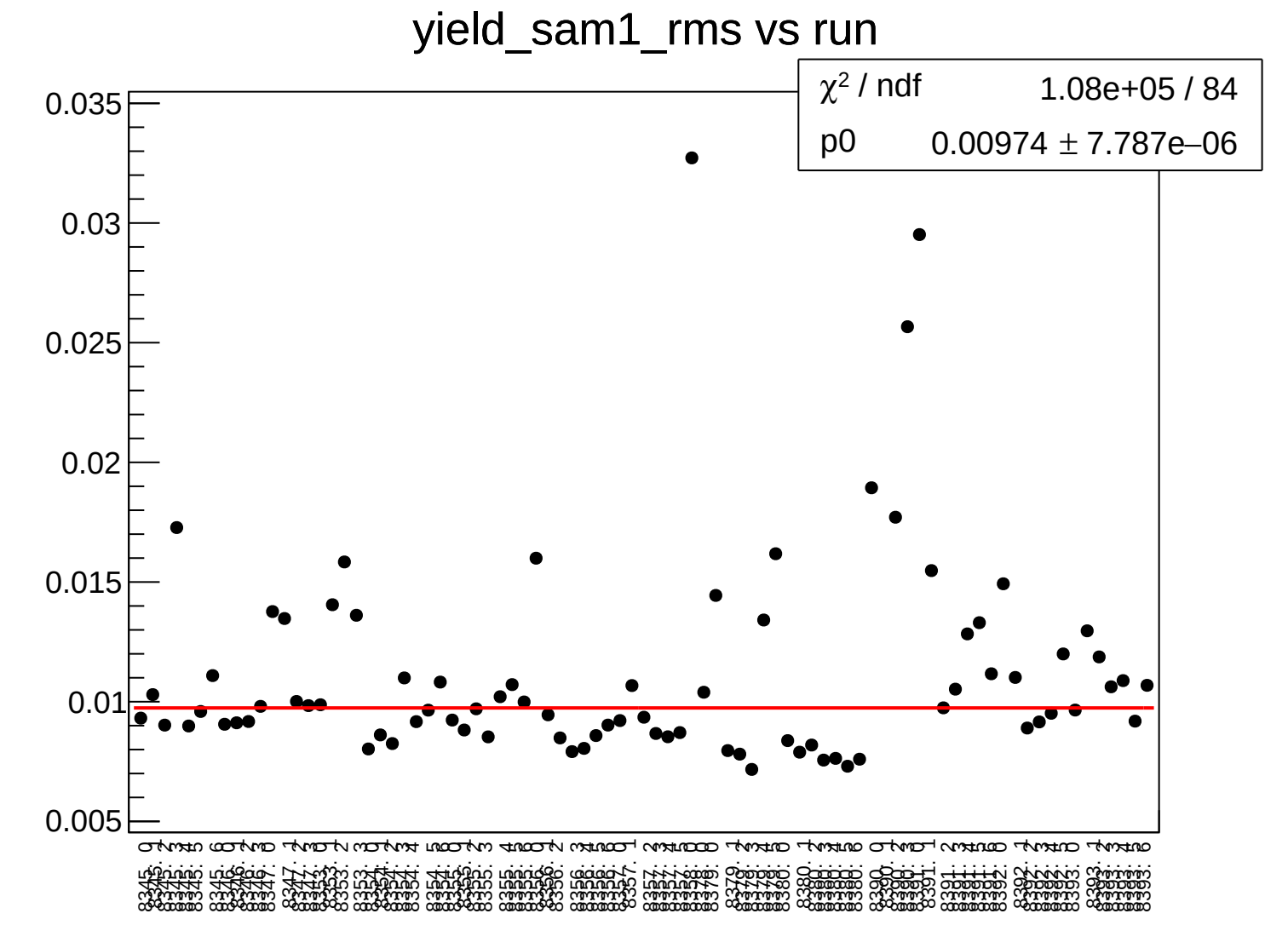

asym_sam8_mean vs run
χ² / ndf 103.6 / 84
p0 832.4 ± 386
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −477.7
Std Dev 536.1
3
2
1
0
−1
−2
−3

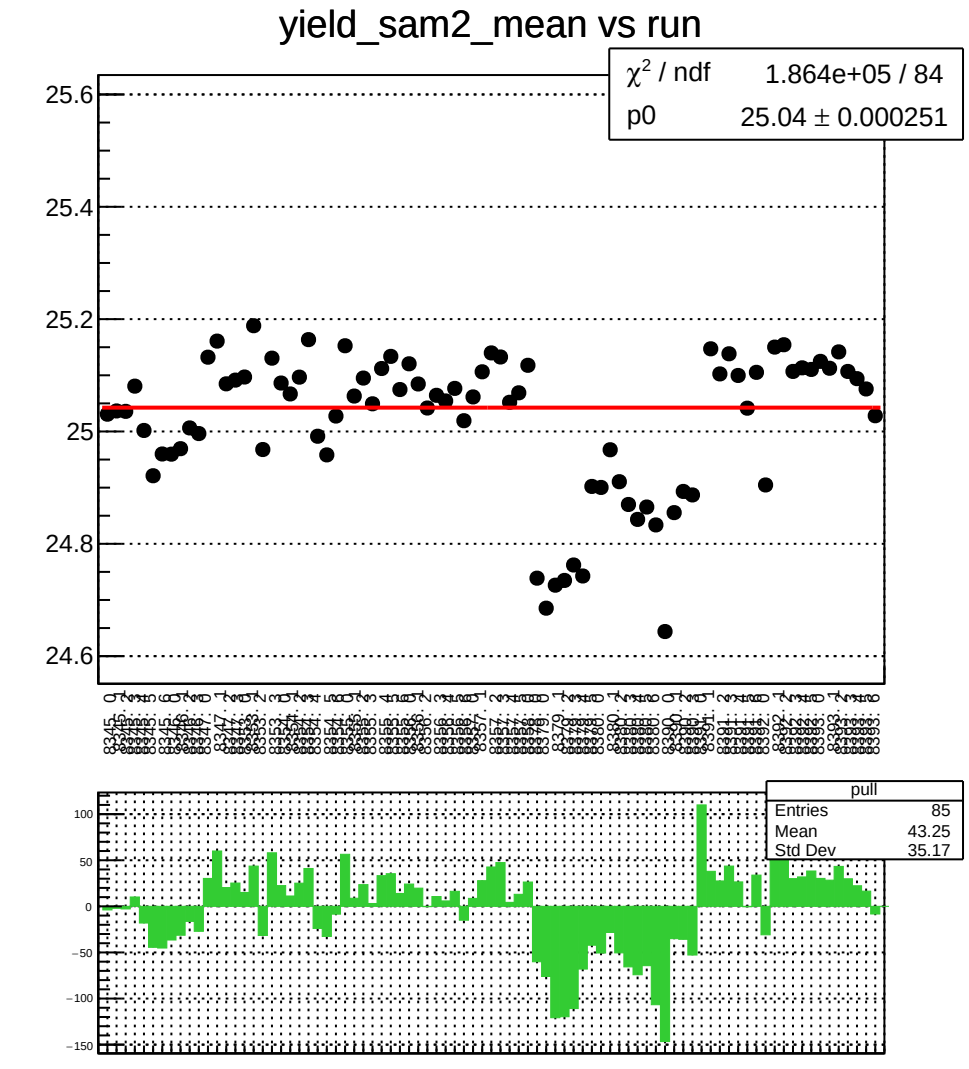

pull1D
Entries 85
Mean −0.009539
Std Dev 1.104
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

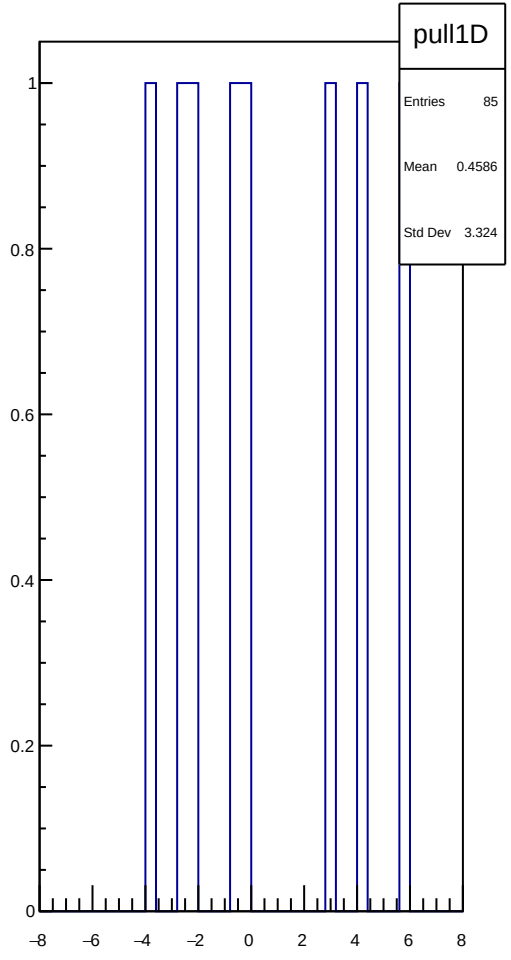

asym_sam8_rms vs run
χ² / ndf 1.162e+04 / 84
p0 351.8 ± 0.273
480
460
440
420
400
380
360
340
320
300

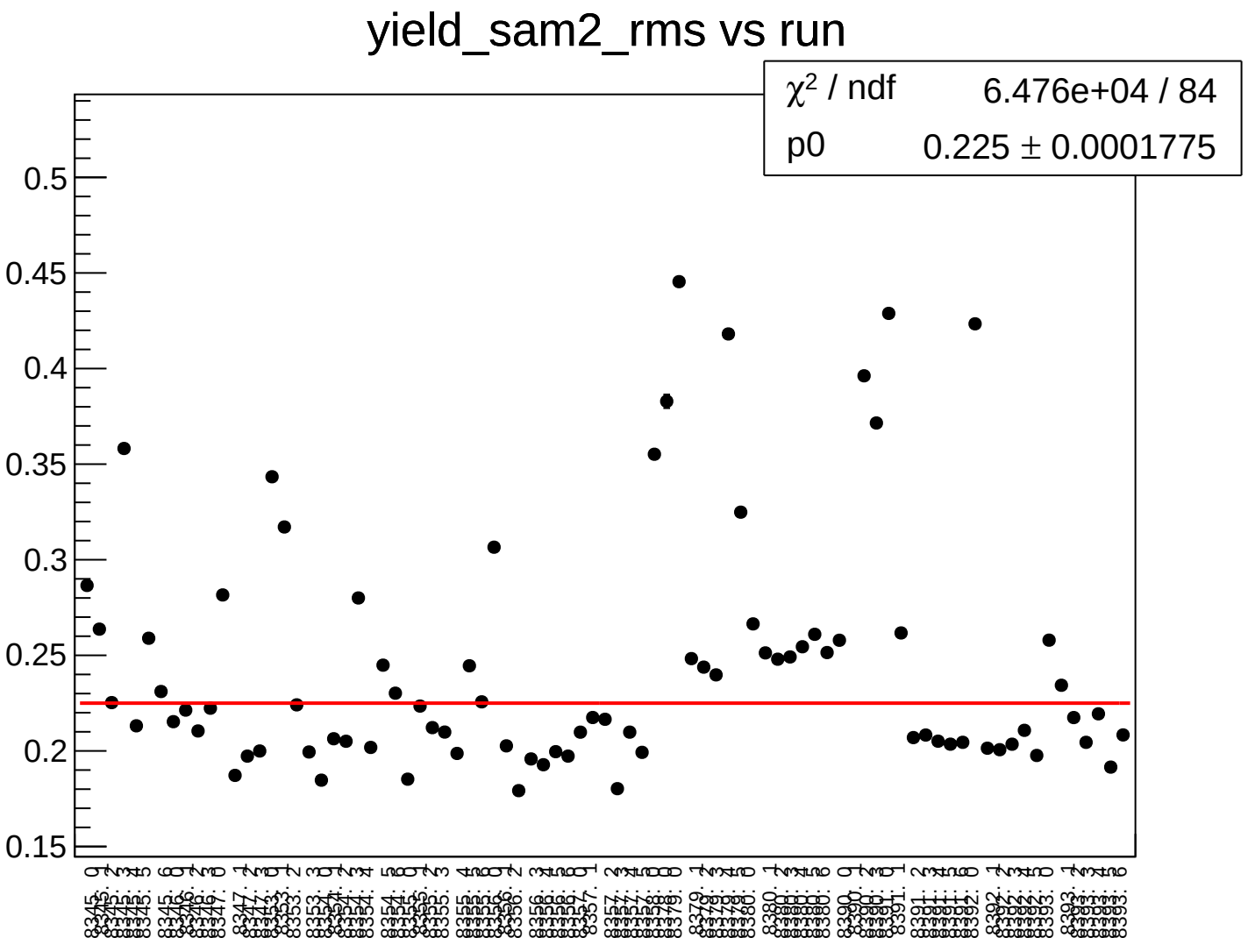

yield_sam1_mean vs run
χ² / ndf 1.33e+08 / 84
p0 14.29 ± 1.101e−05
14.5
14.45
14.4
14.35
14.3
14.25
14.2
14.15
14.1
14.05
pull
Entries 85
Mean −1153
Std Dev 1196
2000
1000
0
−1000
−2000
−3000

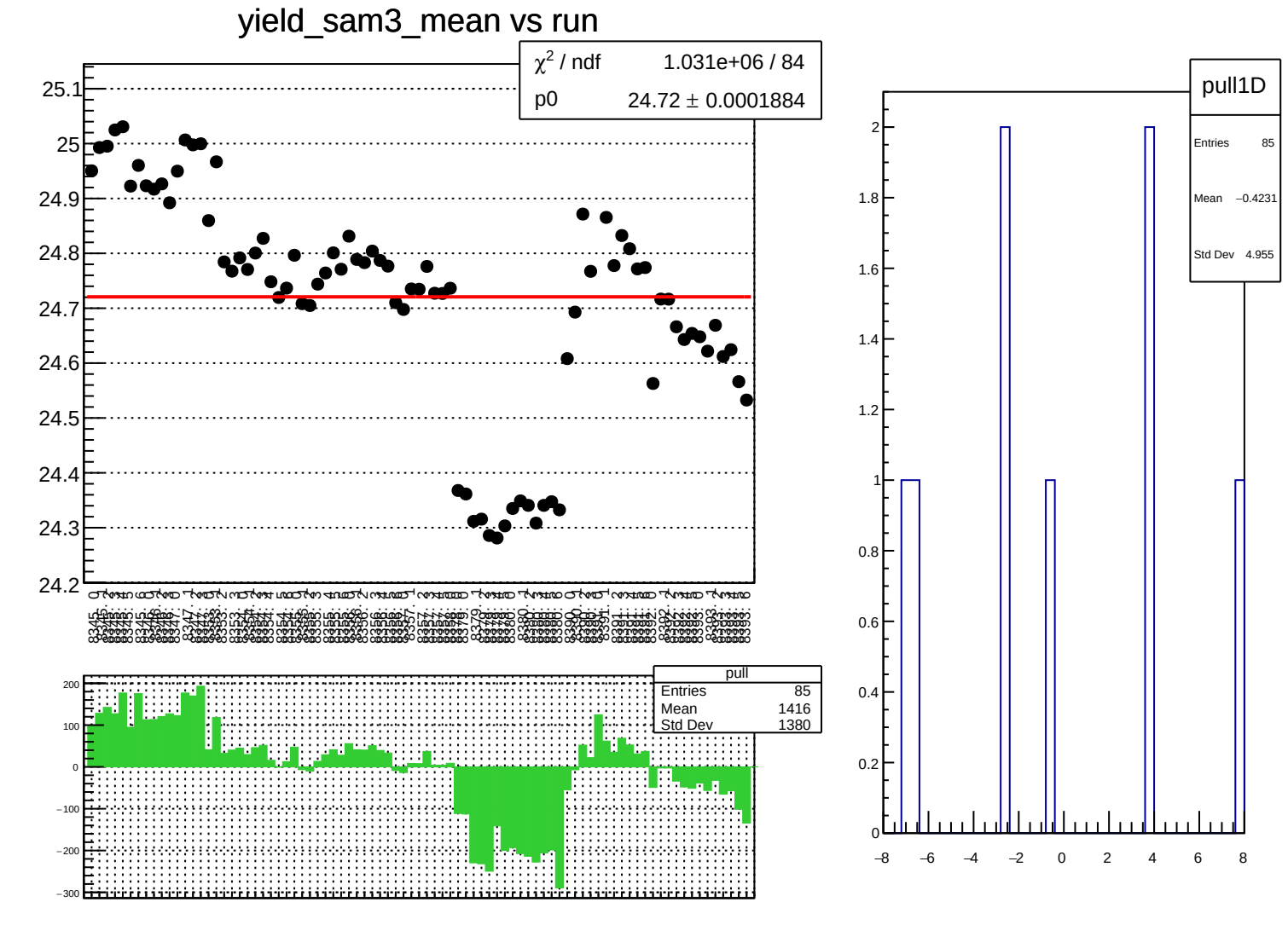

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

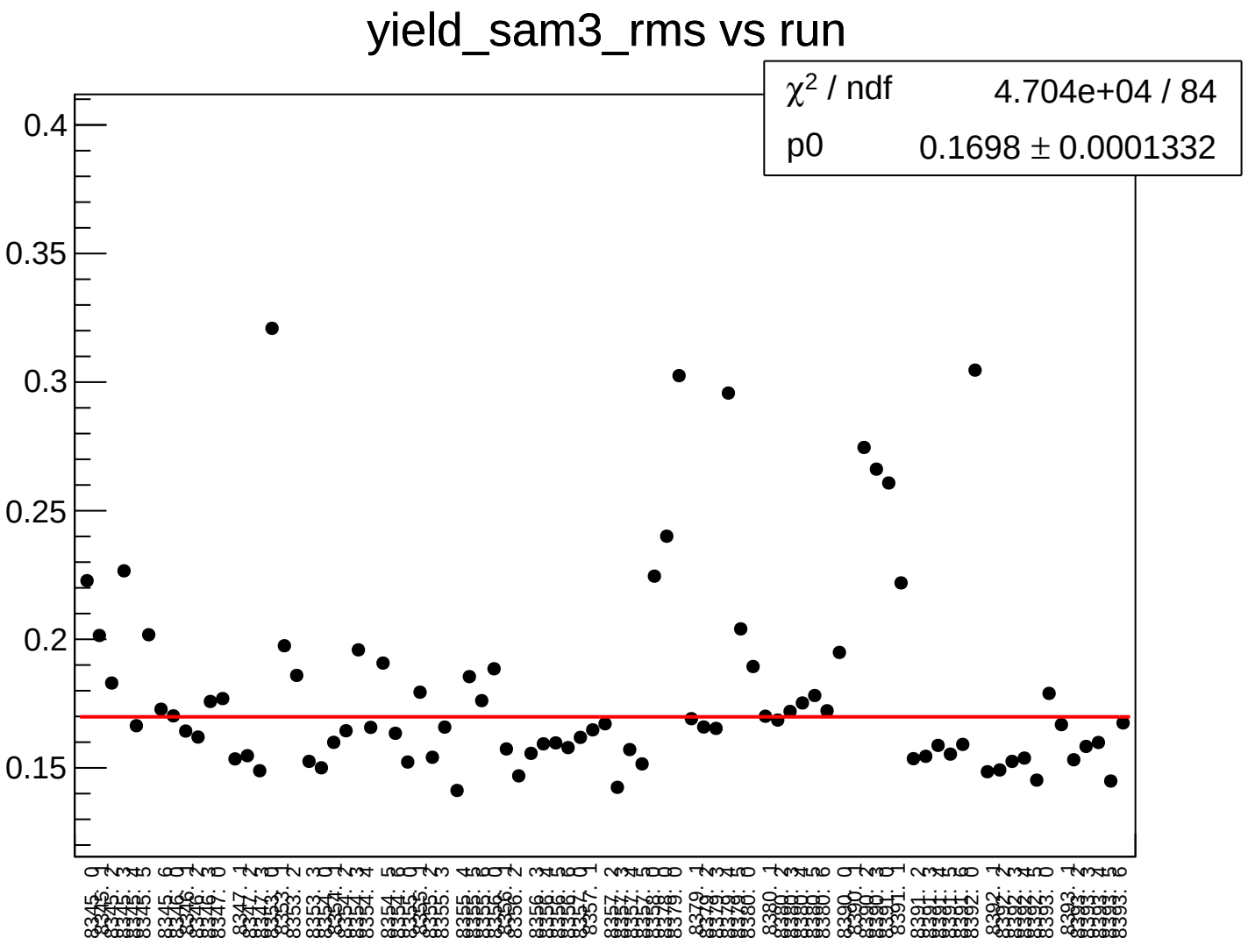

yield_sam1_rms vs run
χ² / ndf 1.08e+05 / 84
p0 0.00974 ± 7.787e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

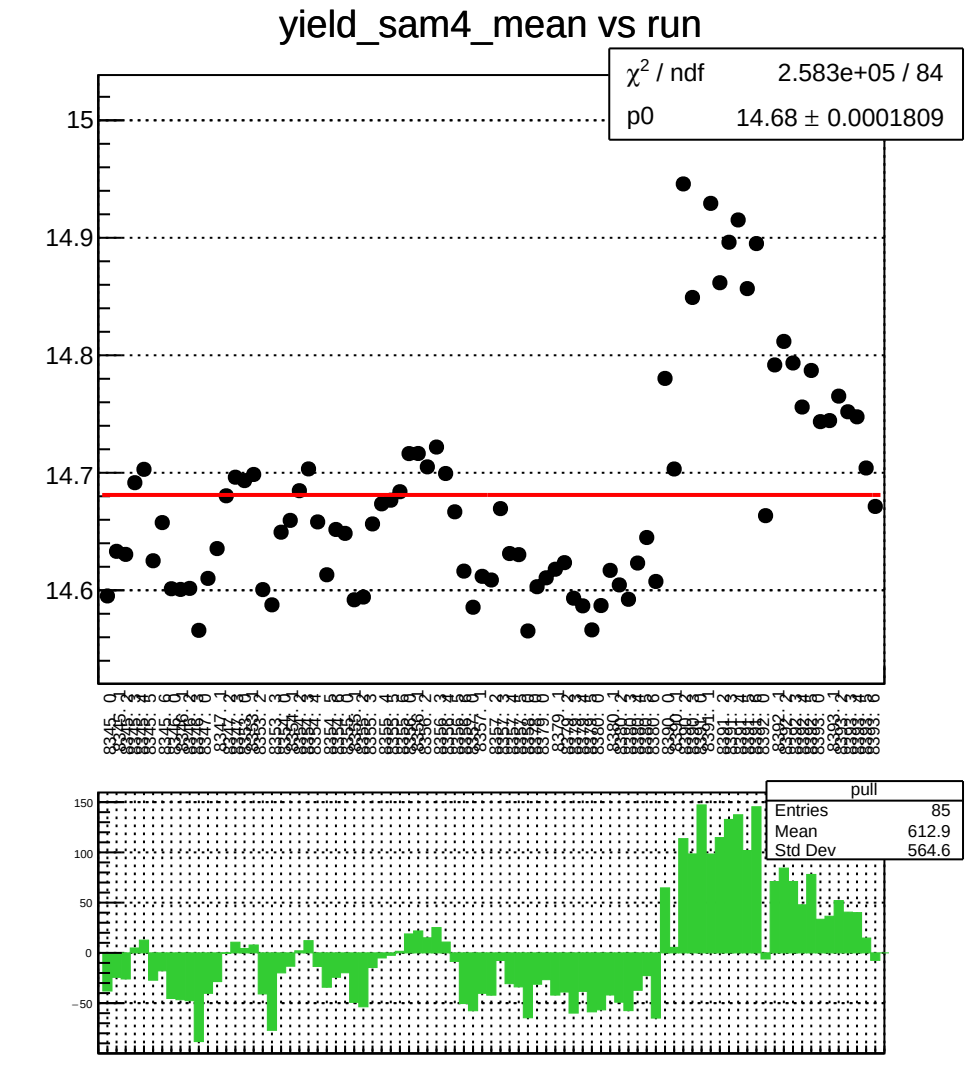

yield_sam2_mean vs run
χ² / ndf 1.864e+05 / 84
p0 25.04 ± 0.000251
25.6
25.4
25.2
25
24.8
24.6
pull
Entries 85
Mean 43.25
Std Dev 35.17
100
50
0
−50
−100
−150

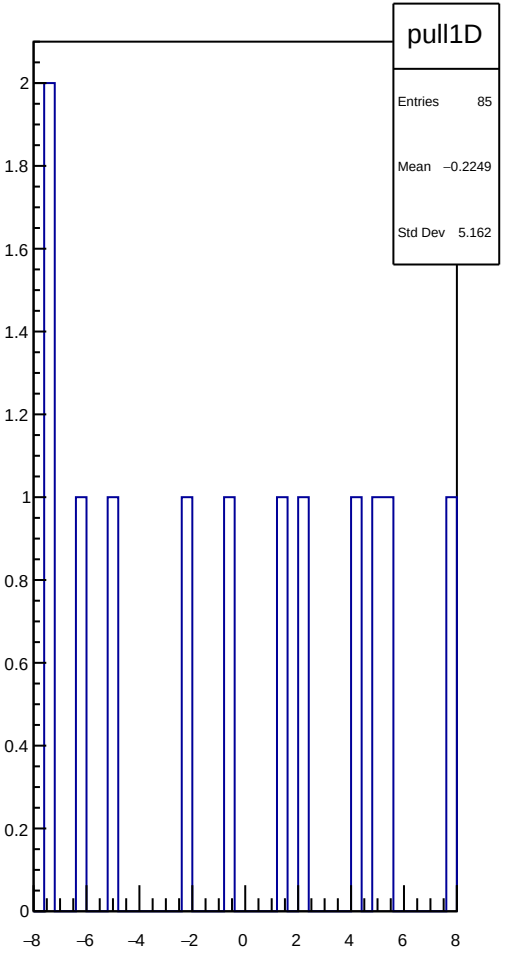

pull1D
Entries 85
Mean 0.4586
Std Dev 3.324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

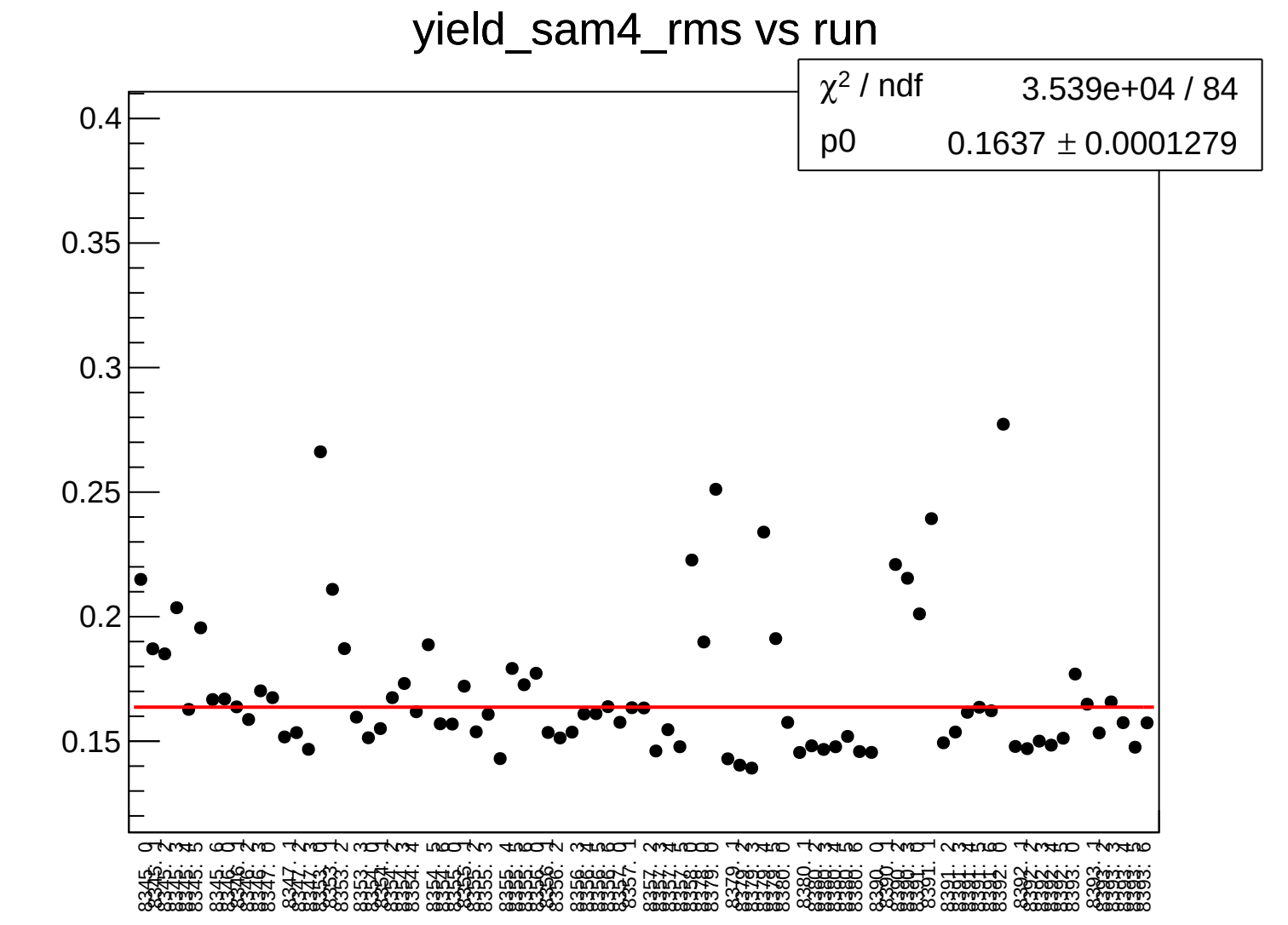

yield_sam2_rms vs run
χ² / ndf 6.476e+04 / 84
p0 0.225 ± 0.0001775
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15

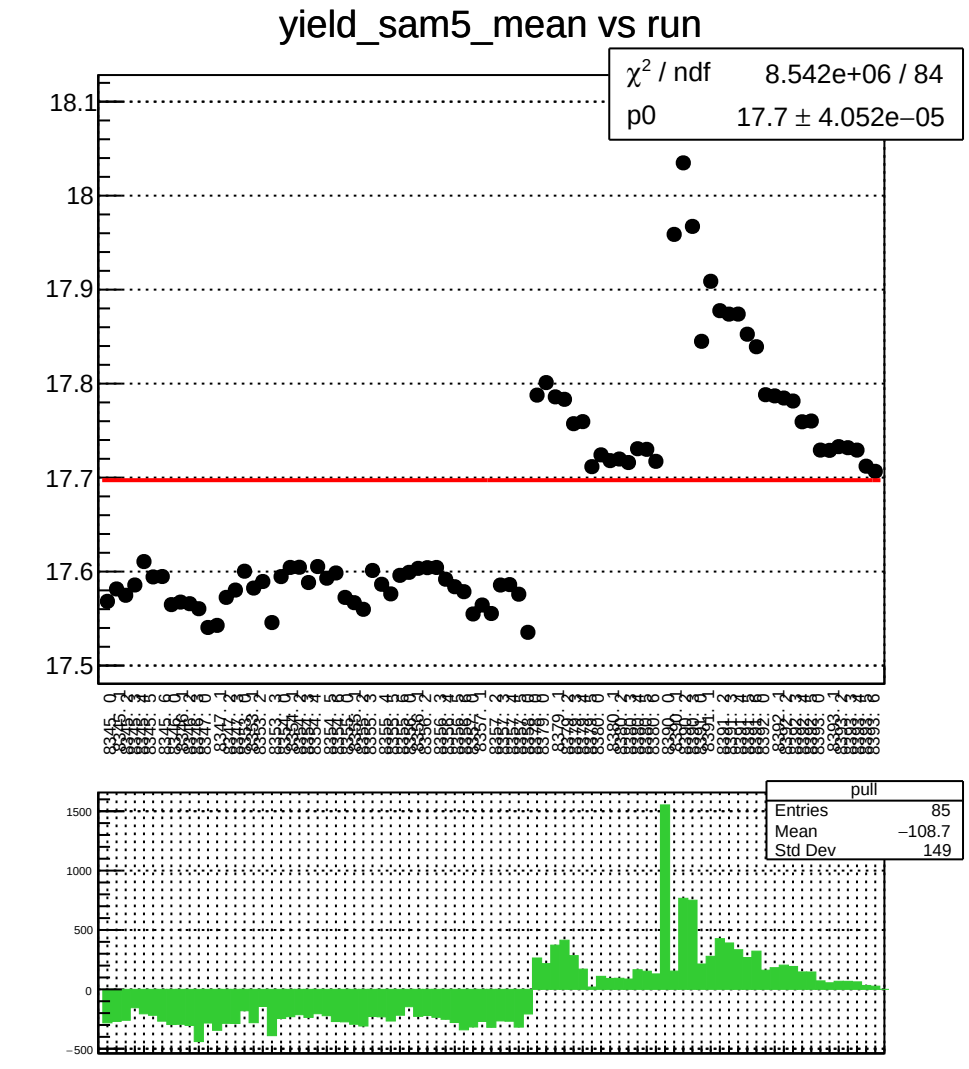

yield_sam3_mean vs run
χ² / ndf 1.031e+06 / 84
p0 24.72 ± 0.0001884
pull
Entries 85
Mean 1416
Std Dev 1380
pull1D
Entries 85
Mean −0.4231
Std Dev 4.955

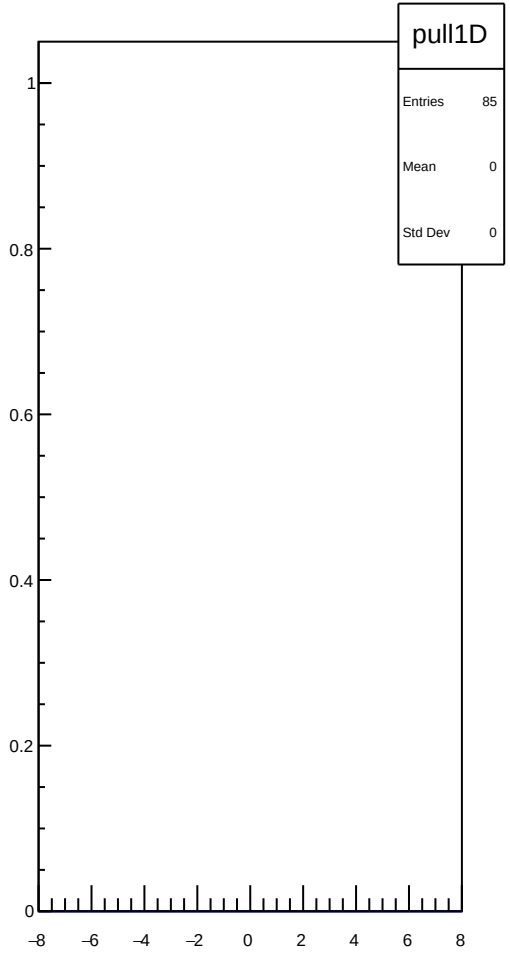

yield_sam3_rms vs run
χ² / ndf 4.704e+04 / 84
p0 0.1698 ± 0.0001332
0.4
0.35
0.3
0.25
0.2
0.15

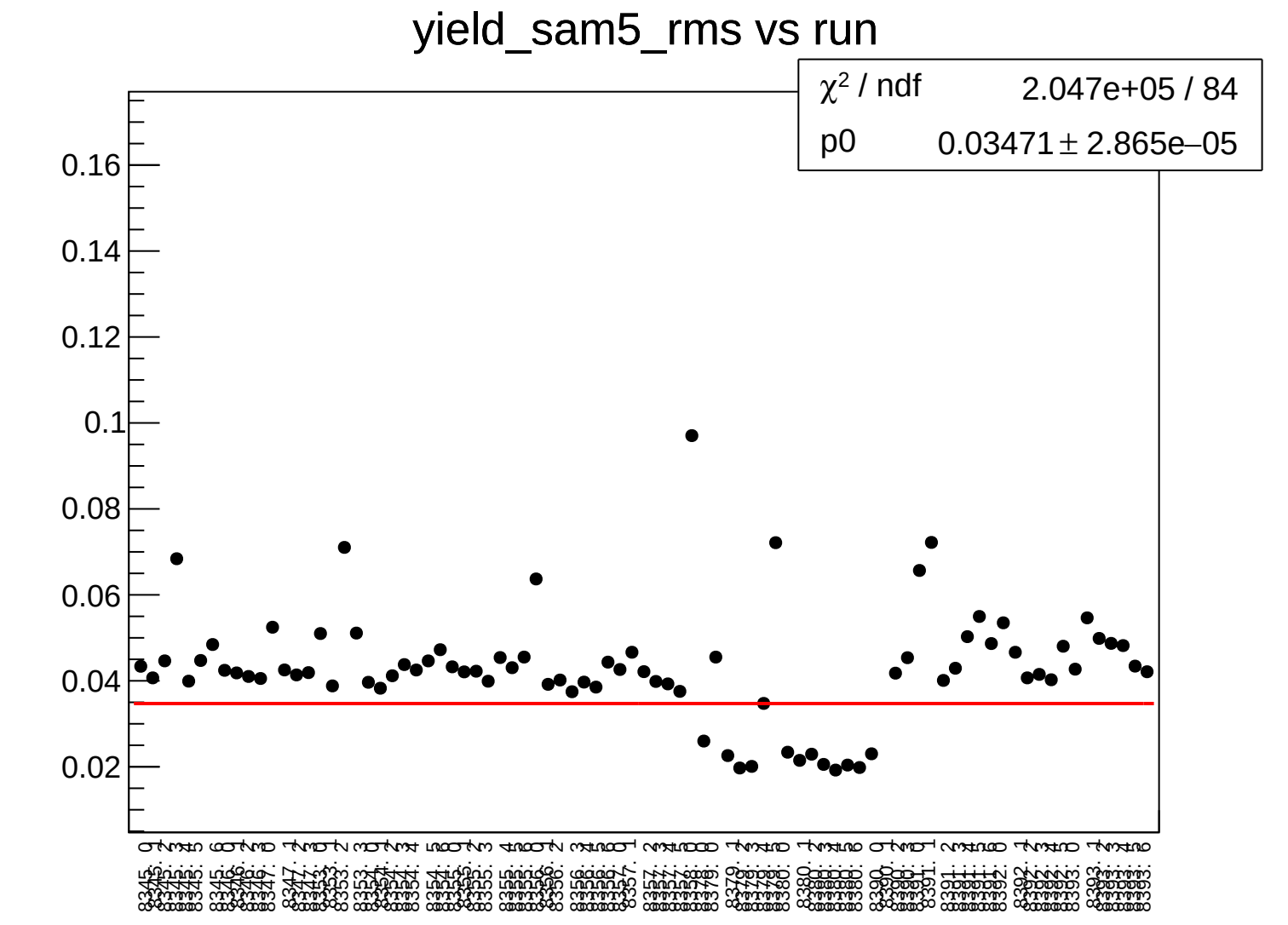

yield_sam4_mean vs run
χ² / ndf 2.583e+05 / 84
p0 14.68 ± 0.0001809
15
14.9
14.8
14.7
14.6
pull
Entries 85
Mean 612.9
Std Dev 564.6
150
100
50
0
−50

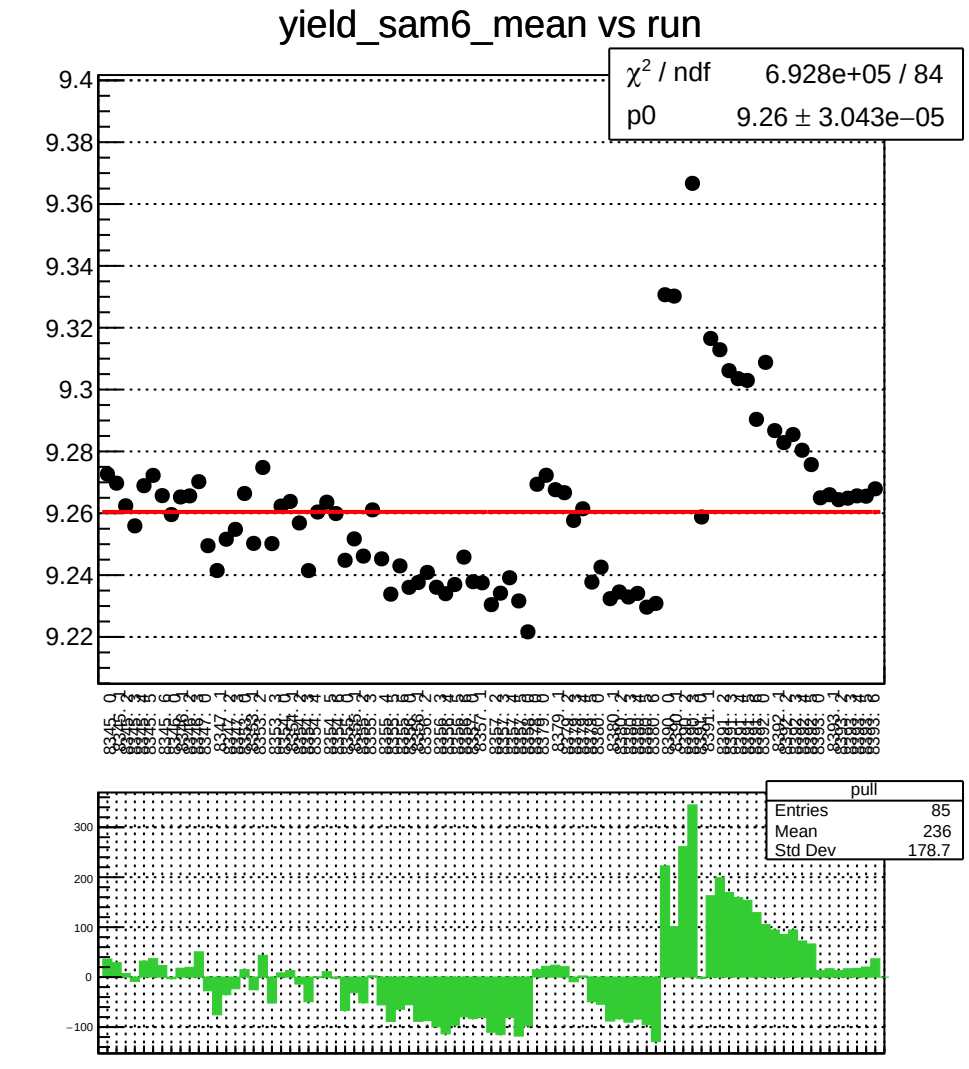

pull1D
Entries 85
Mean −0.2249
Std Dev 5.162
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

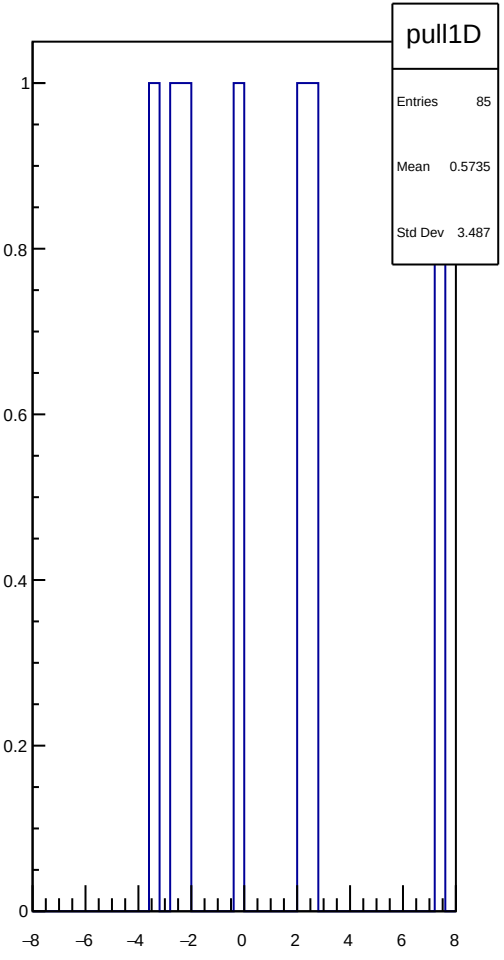

yield_sam4_rms vs run
χ² / ndf 3.539e+04 / 84
p0 0.1637 ± 0.0001279
0.4
0.35
0.3
0.25
0.2
0.15

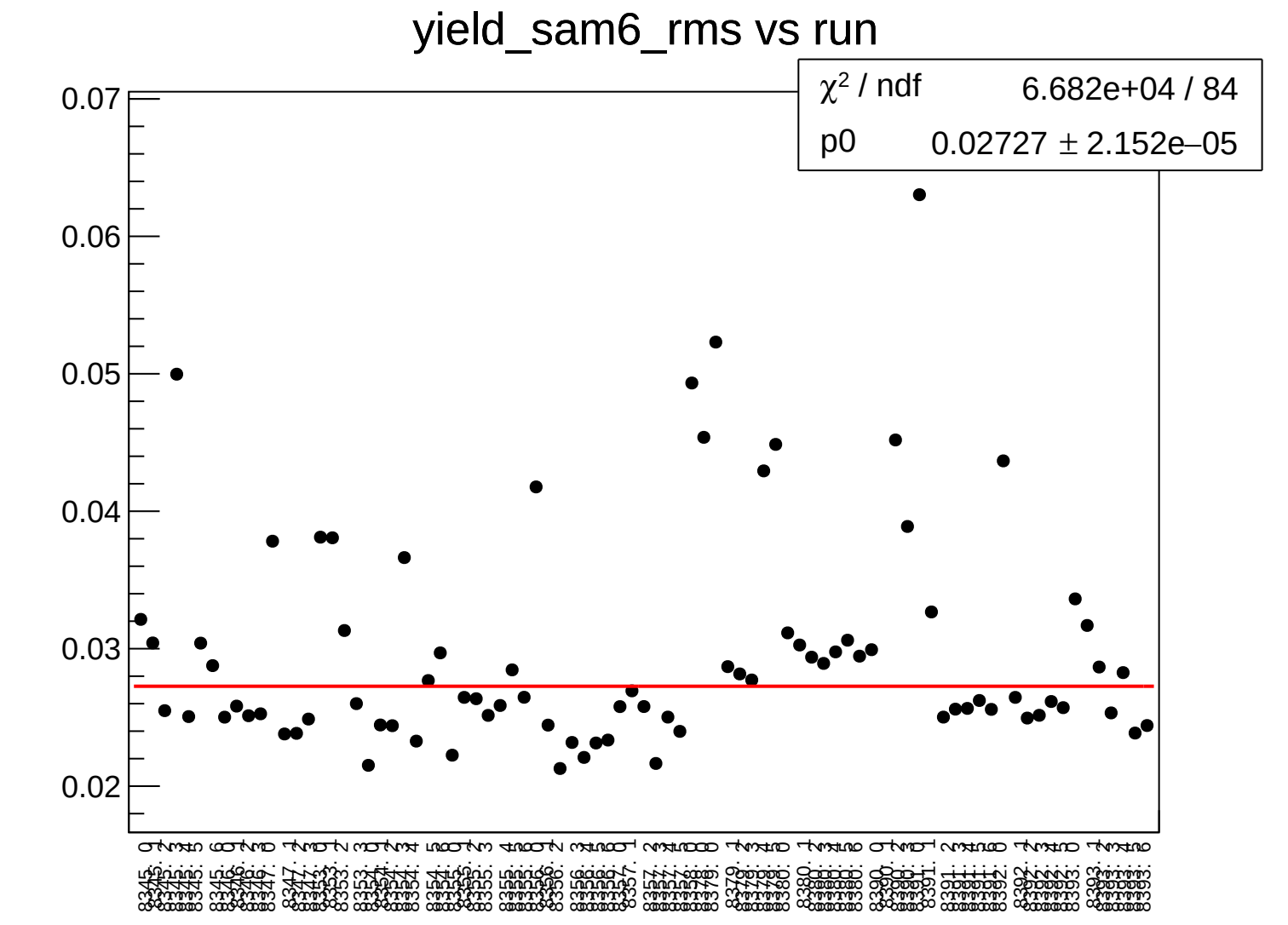

yield_sam5_mean vs run
χ² / ndf 8.542e+06 / 84
p0 17.7 ± 4.052e−05
18.1
18
17.9
17.8
17.7
17.6
17.5
pull
Entries 85
Mean −108.7
Std Dev 149
1500
1000
500
0
−500

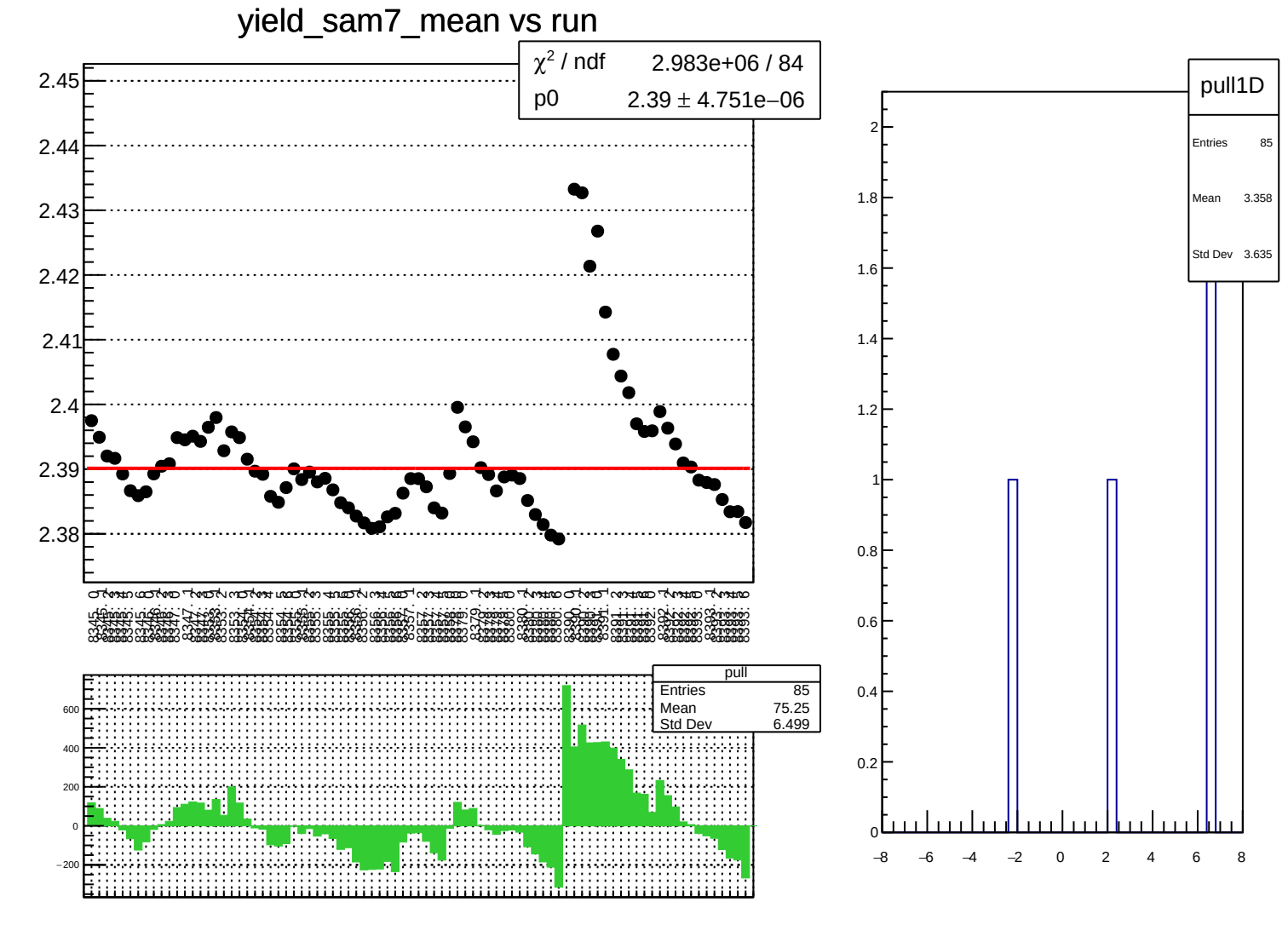

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

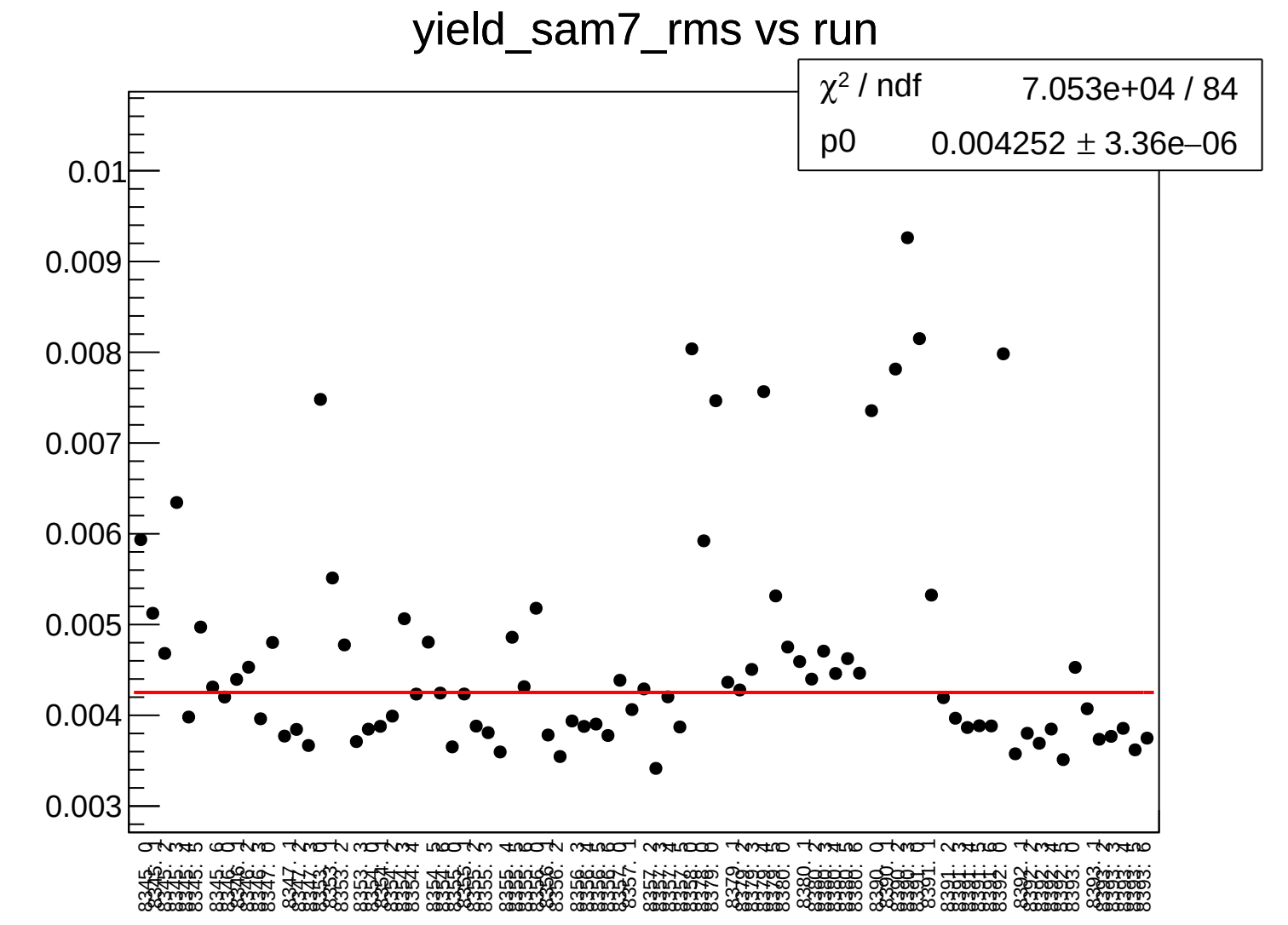

yield_sam5_rms vs run
χ² / ndf 2.047e+05 / 84
p0 0.03471 ± 2.865e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

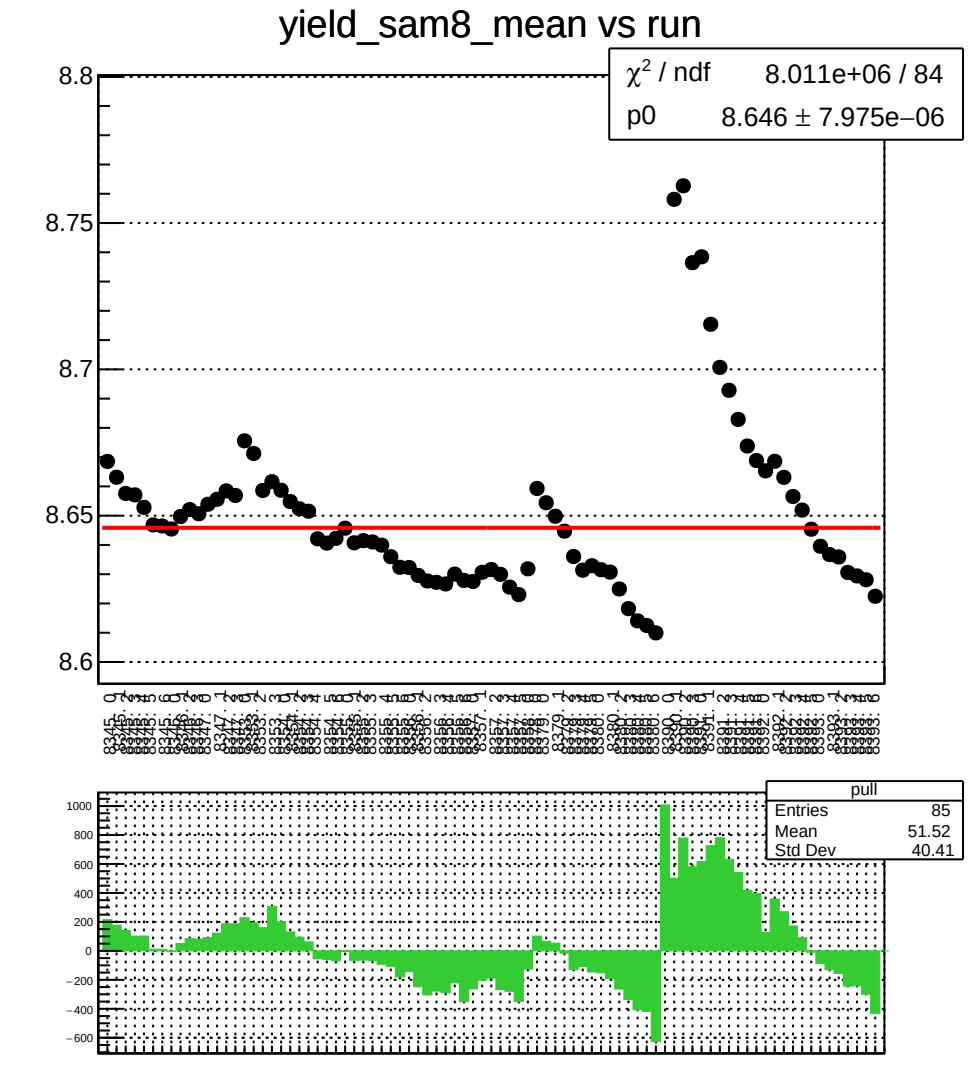

yield_sam6_mean vs run
χ² / ndf 6.928e+05 / 84
p0 9.26 ± 3.043e−05
9.4
9.38
9.36
9.34
9.32
9.3
9.28
9.26
9.24
9.22
pull
Entries 85
Mean 236
Std Dev 178.7
300
200
100
0
−100

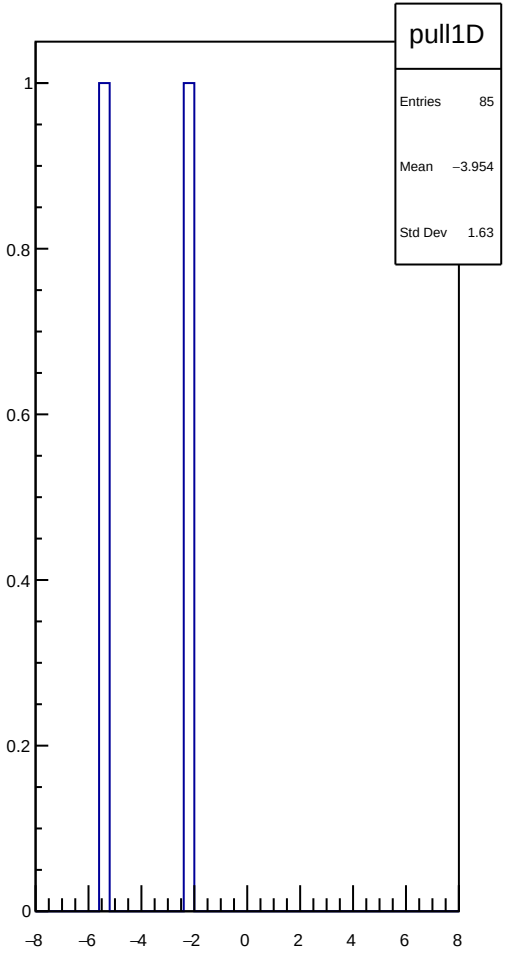

pull1D
Entries 85
Mean 0.5735
Std Dev 3.487
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

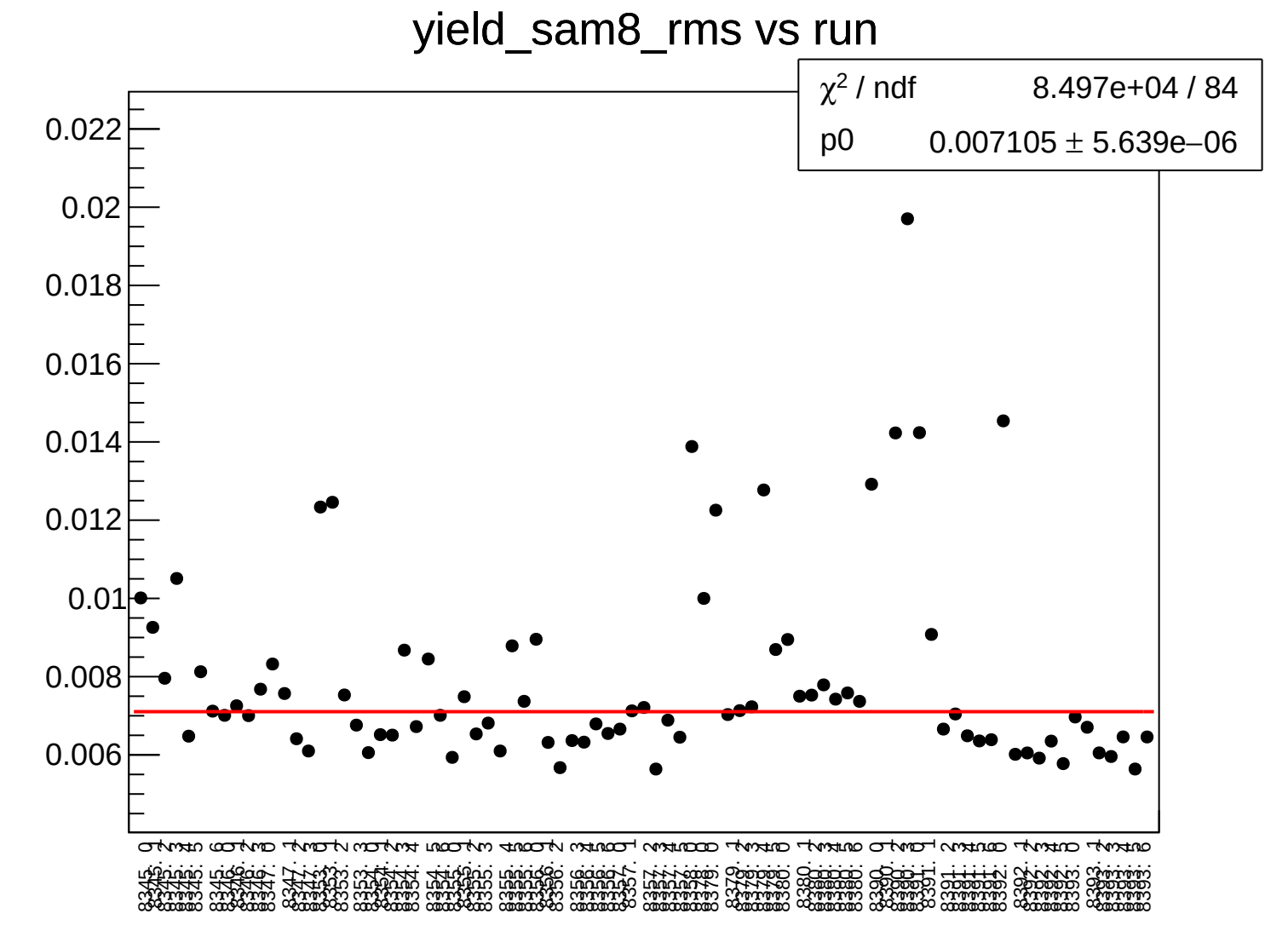

yield_sam6_rms vs run
χ² / ndf 6.682e+04 / 84
p0 0.02727 ± 2.152e−05
0.07
0.06
0.05
0.04
0.03
0.02

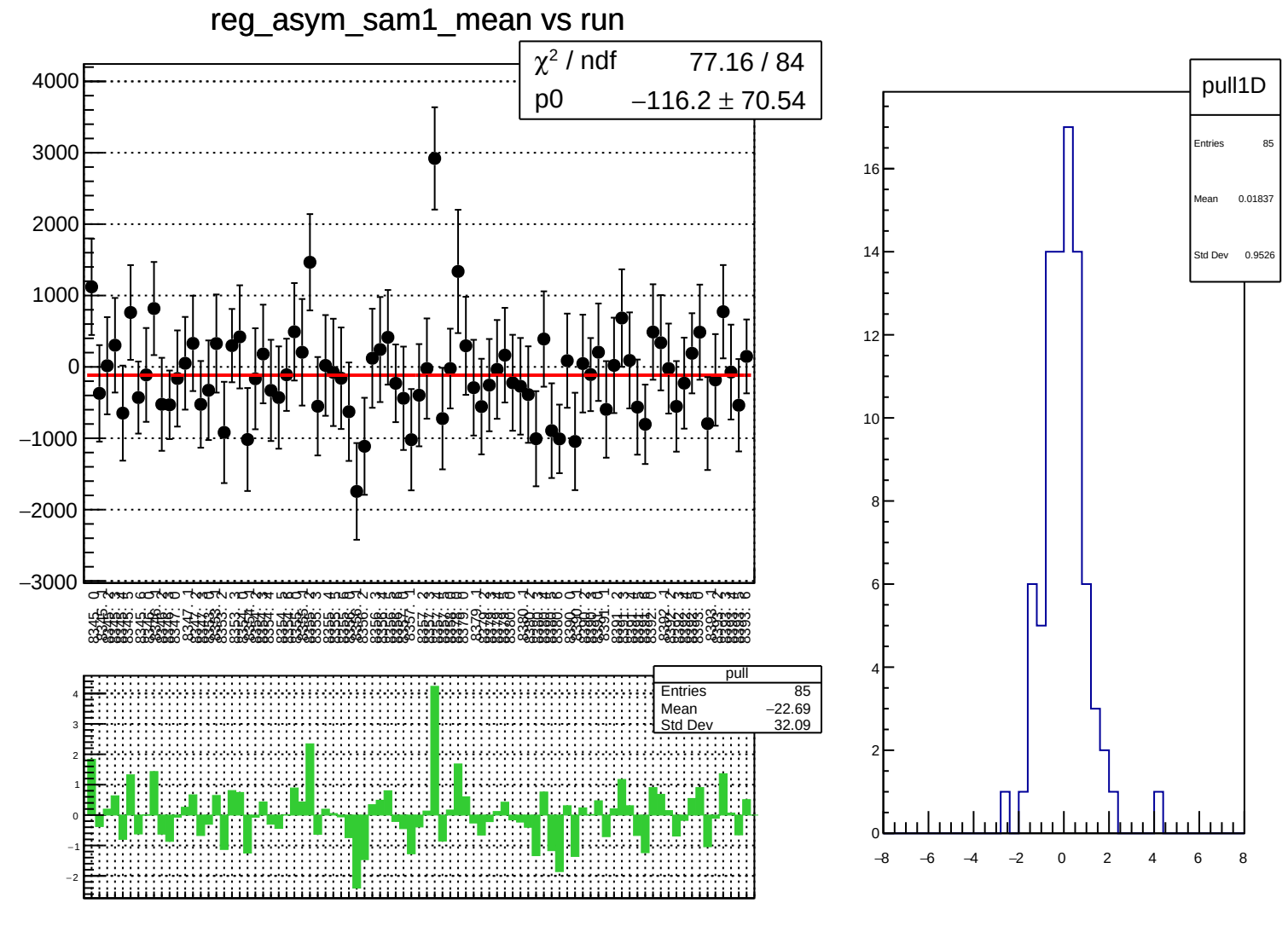

yield_sam7_mean vs run
χ² / ndf 2.983e+06 / 84
p0 2.39 ± 4.751e−06
pull
Entries 85
Mean 75.25
Std Dev 6.499
pull1D
Entries 85
Mean 3.358
Std Dev 3.635

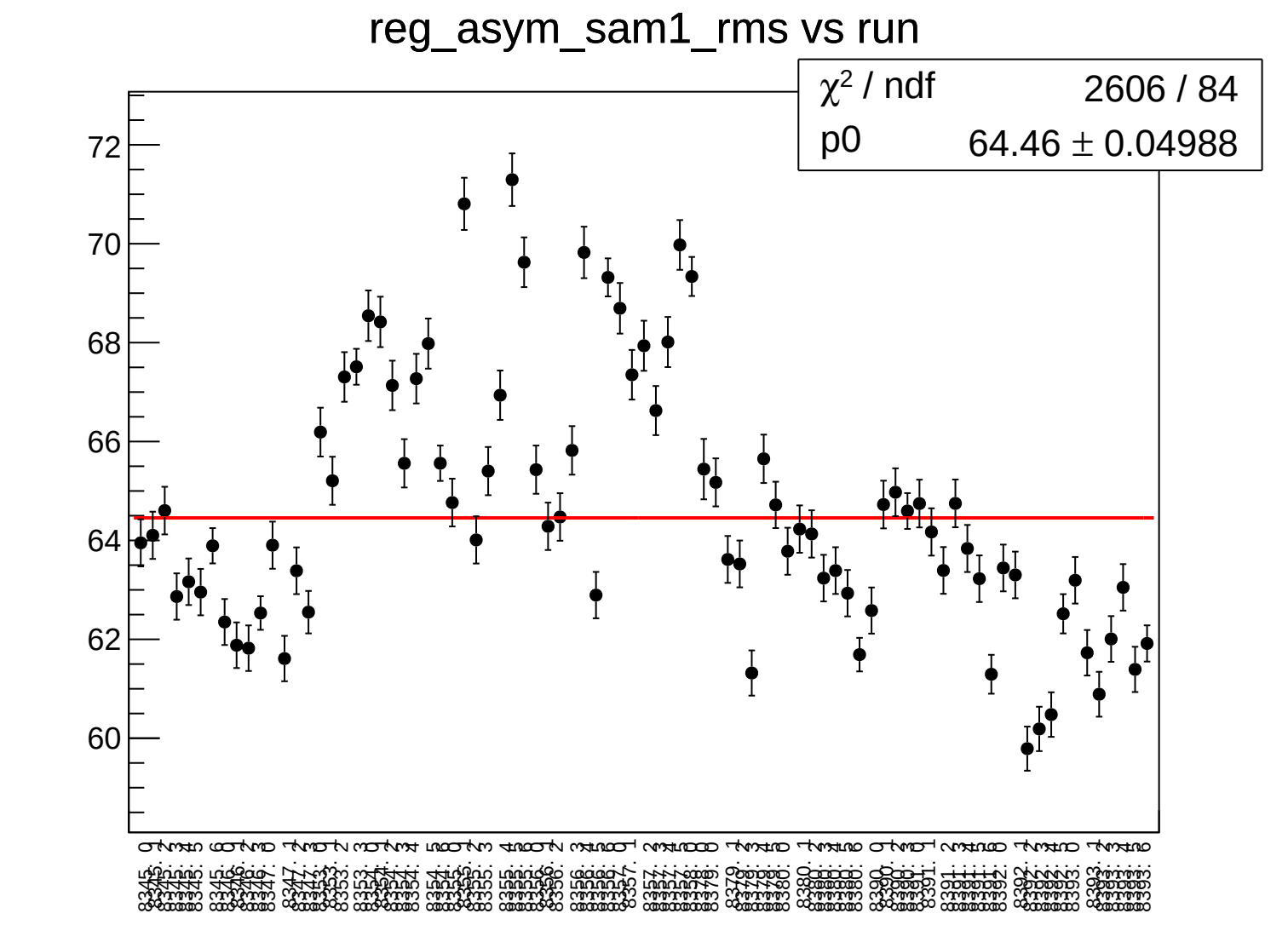

yield_sam7_rms vs run
χ² / ndf 7.053e+04 / 84
p0 0.004252 ± 3.36e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

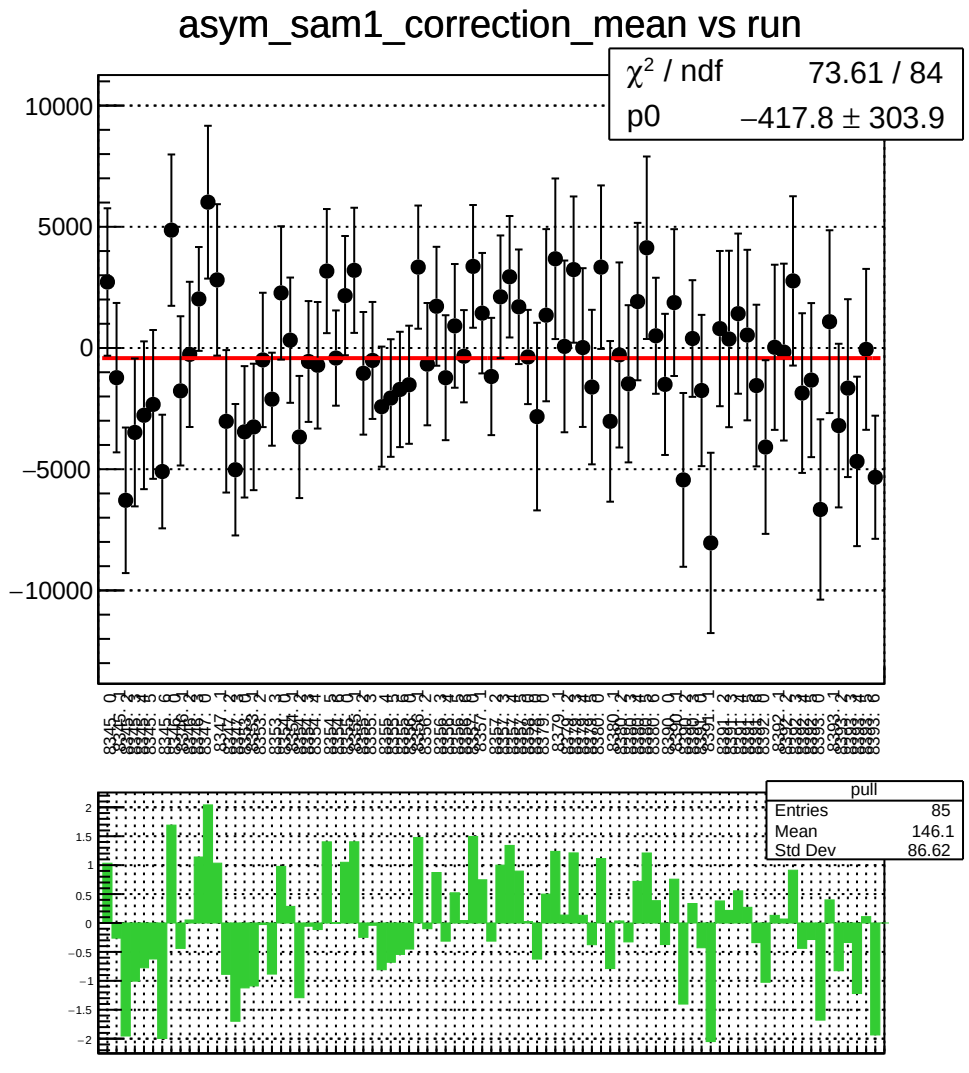

yield_sam8_mean vs run
χ² / ndf 8.011e+06 / 84
p0 8.646 ± 7.975e−06
8.8
8.75
8.7
8.65
8.6
pull
Entries 85
Mean 51.52
Std Dev 40.41
1000
800
600
400
200
0
−200
−400
−600

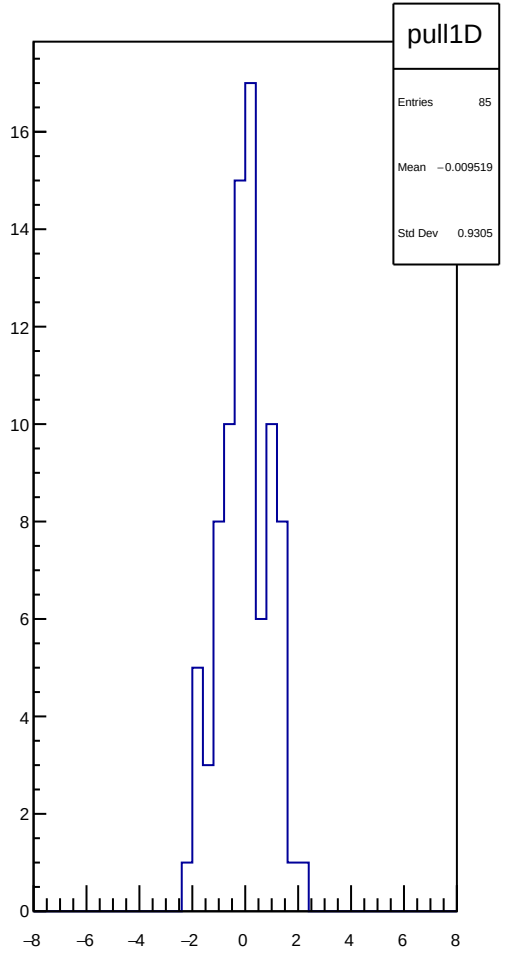

pull1D
Entries 85
Mean −3.954
Std Dev 1.63
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

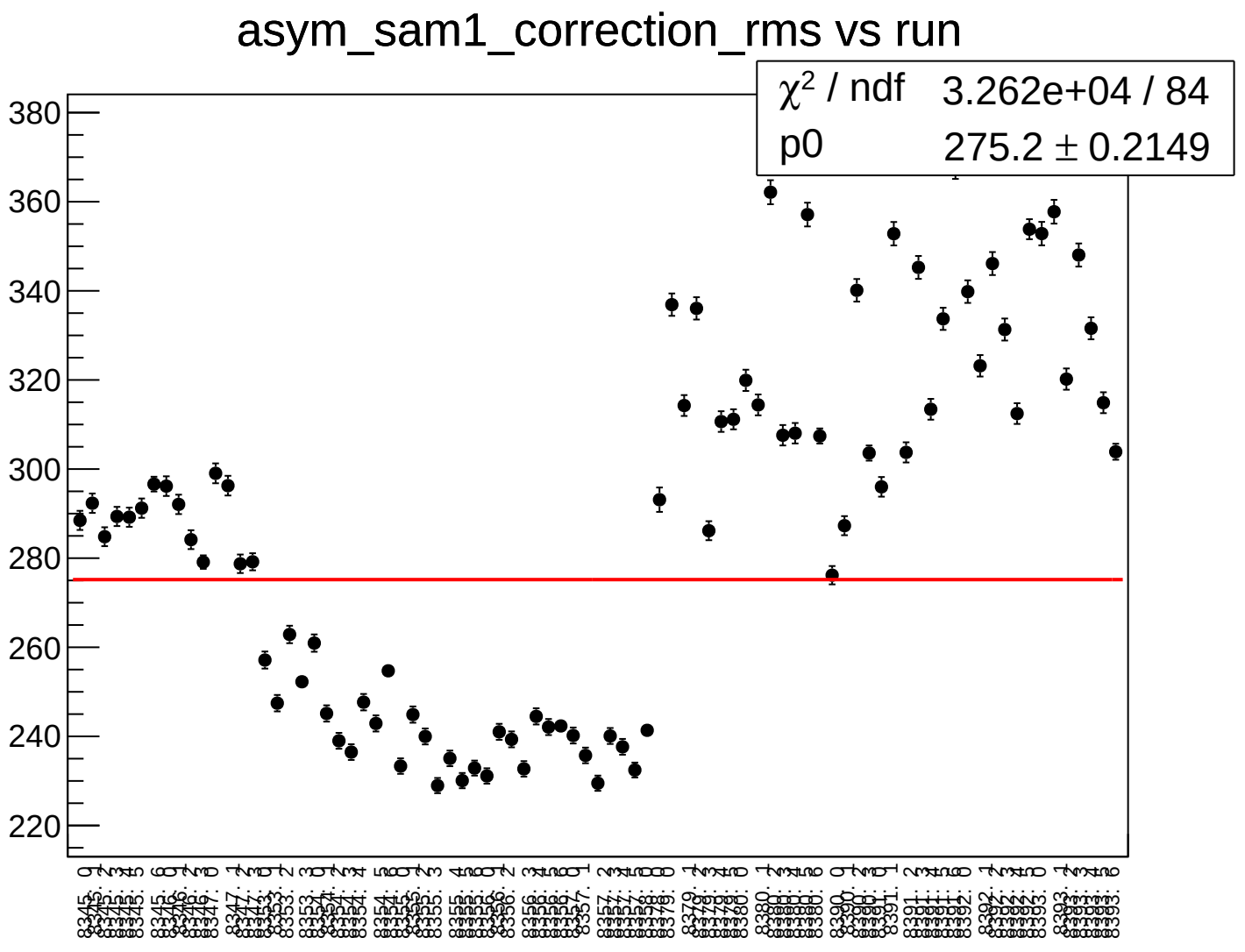

yield_sam8_rms vs run
χ² / ndf 8.497e+04 / 84
p0 0.007105 ± 5.639e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

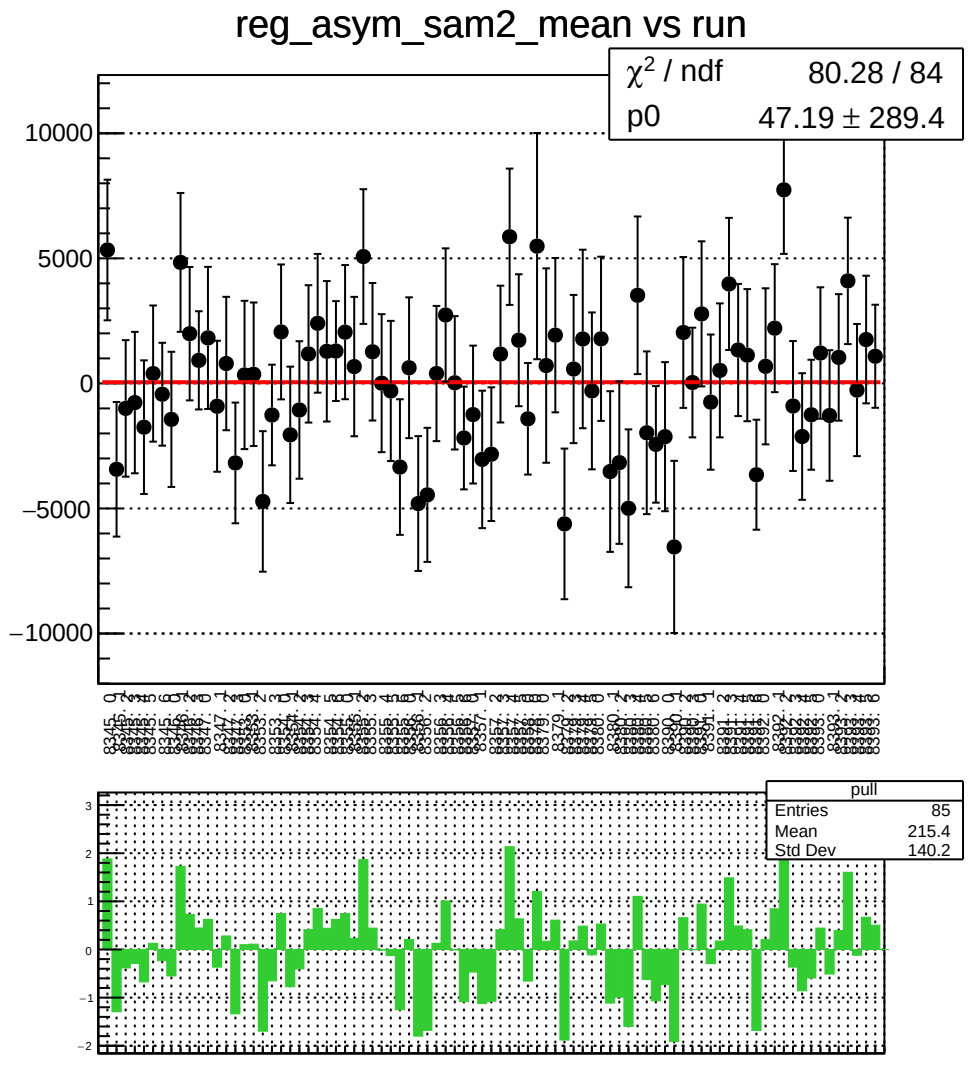

reg_asym_sam1_mean vs run
χ² / ndf 77.16 / 84
p0 −116.2 ± 70.54
pull
Entries 85
Mean −22.69
Std Dev 32.09
pull1D
Entries 85
Mean 0.01837
Std Dev 0.9526

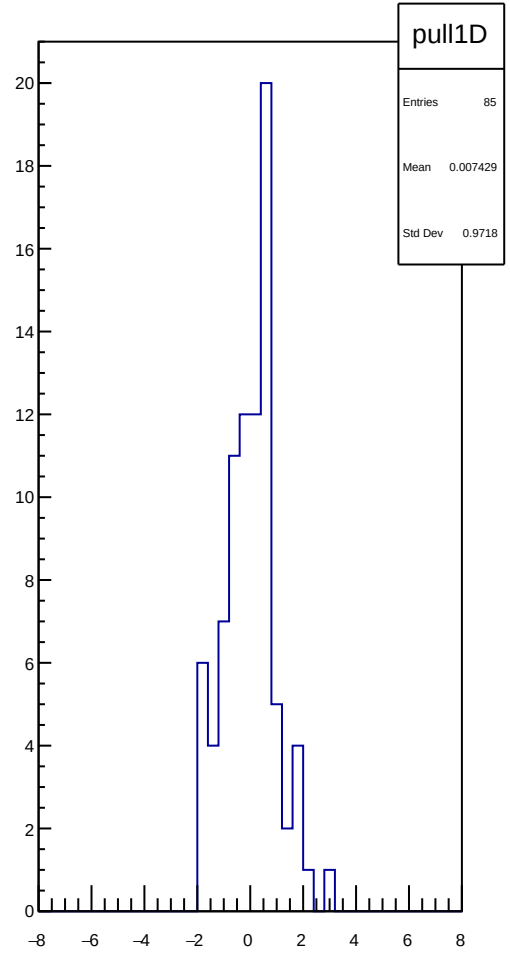

reg_asym_sam1_rms vs run
χ² / ndf 2606 / 84
p0 64.46 ± 0.04988
72
70
68
66
64
62
60

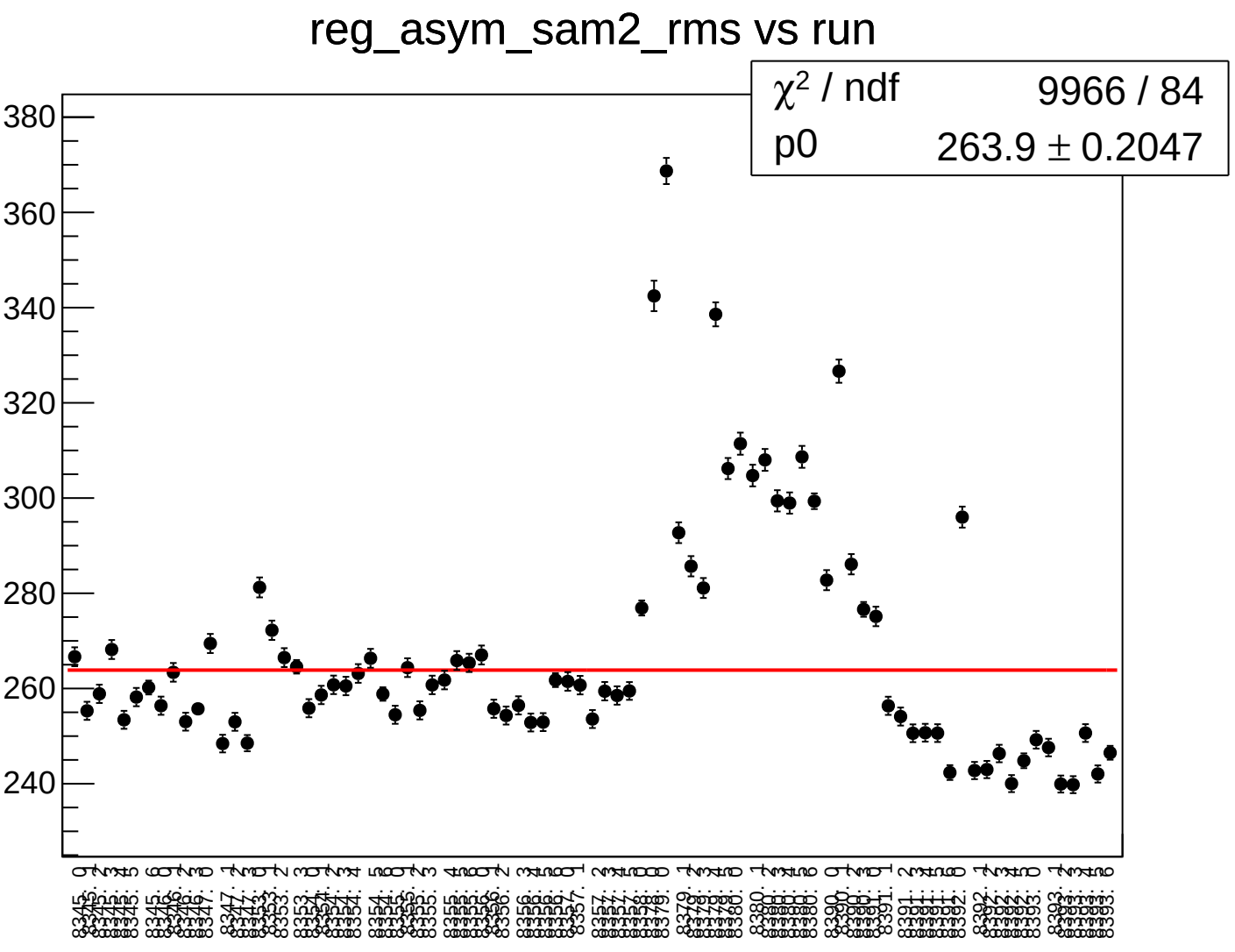

asym_sam1_correction_mean vs run
χ² / ndf 73.61 / 84
p0 −417.8 ± 303.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 146.1
Std Dev 86.62
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

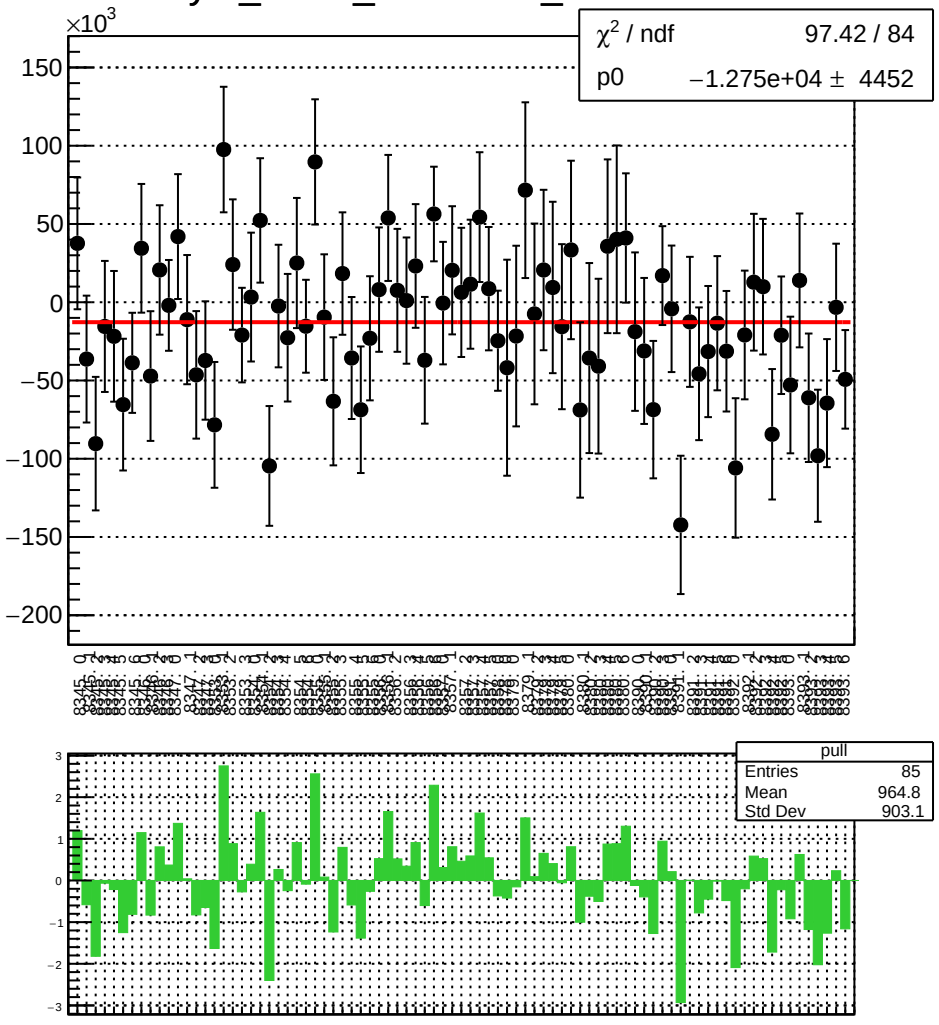

pull1D
Entries 85
Mean −0.009519
Std Dev 0.9305
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

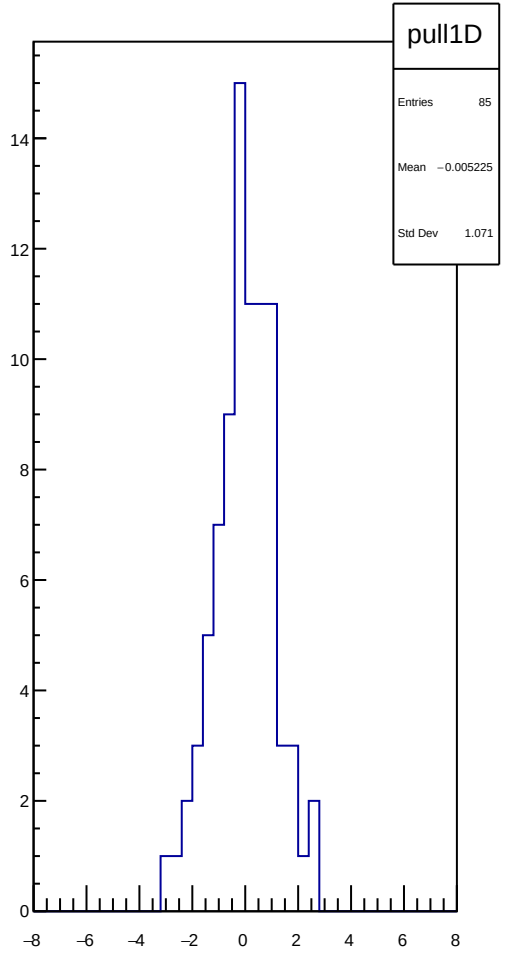

asym_sam1_correction_rms vs run
χ² / ndf 3.262e+04 / 84
p0 275.2 ± 0.2149
380
360
340
320
300
280
260
240
220

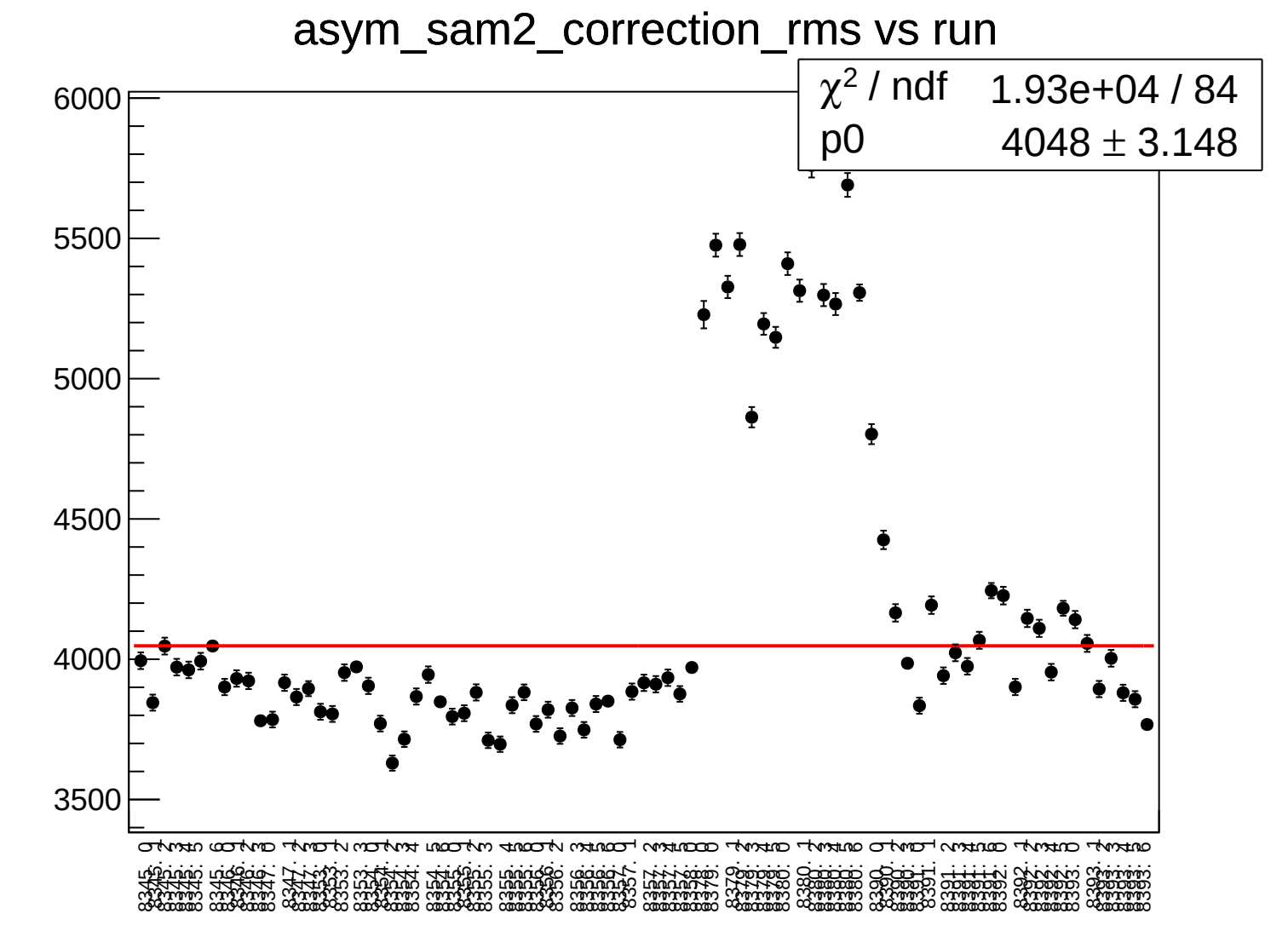

reg_asym_sam2_mean vs run
χ² / ndf 80.28 / 84
p0 47.19 ± 289.4
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 215.4
Std Dev 140.2
3
2
1
0
−1
−2

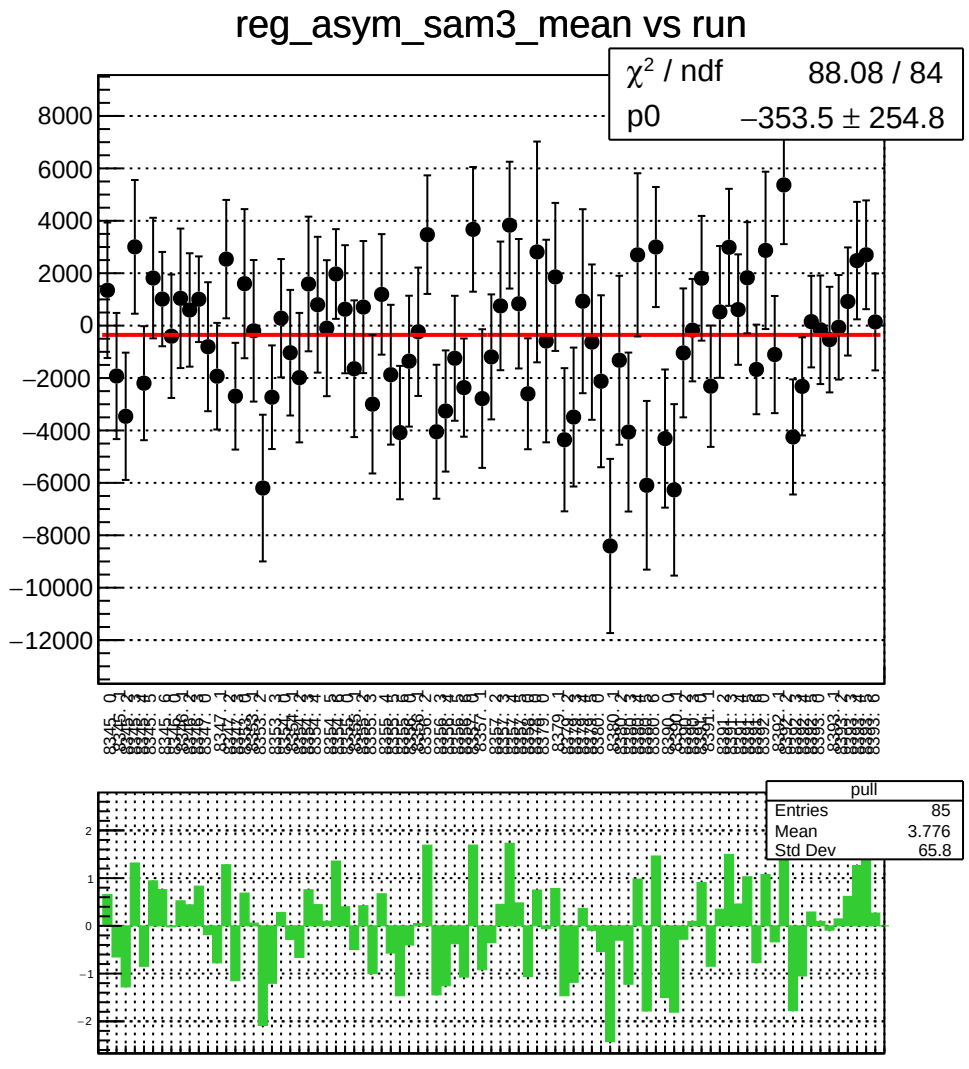

pull1D
Entries 85
Mean 0.007429
Std Dev 0.9718
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

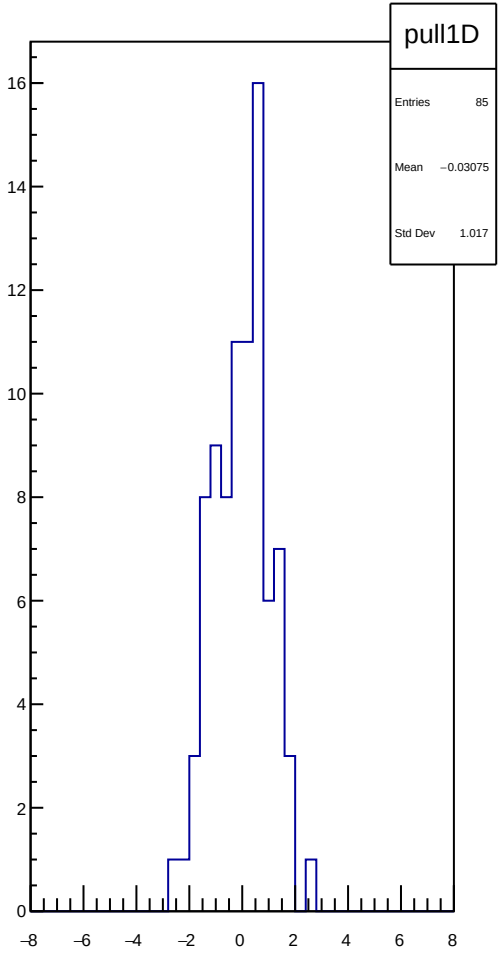

reg_asym_sam2_rms vs run
χ² / ndf 9966 / 84
p0 263.9 ± 0.2047
380
360
340
320
300
280
260
240

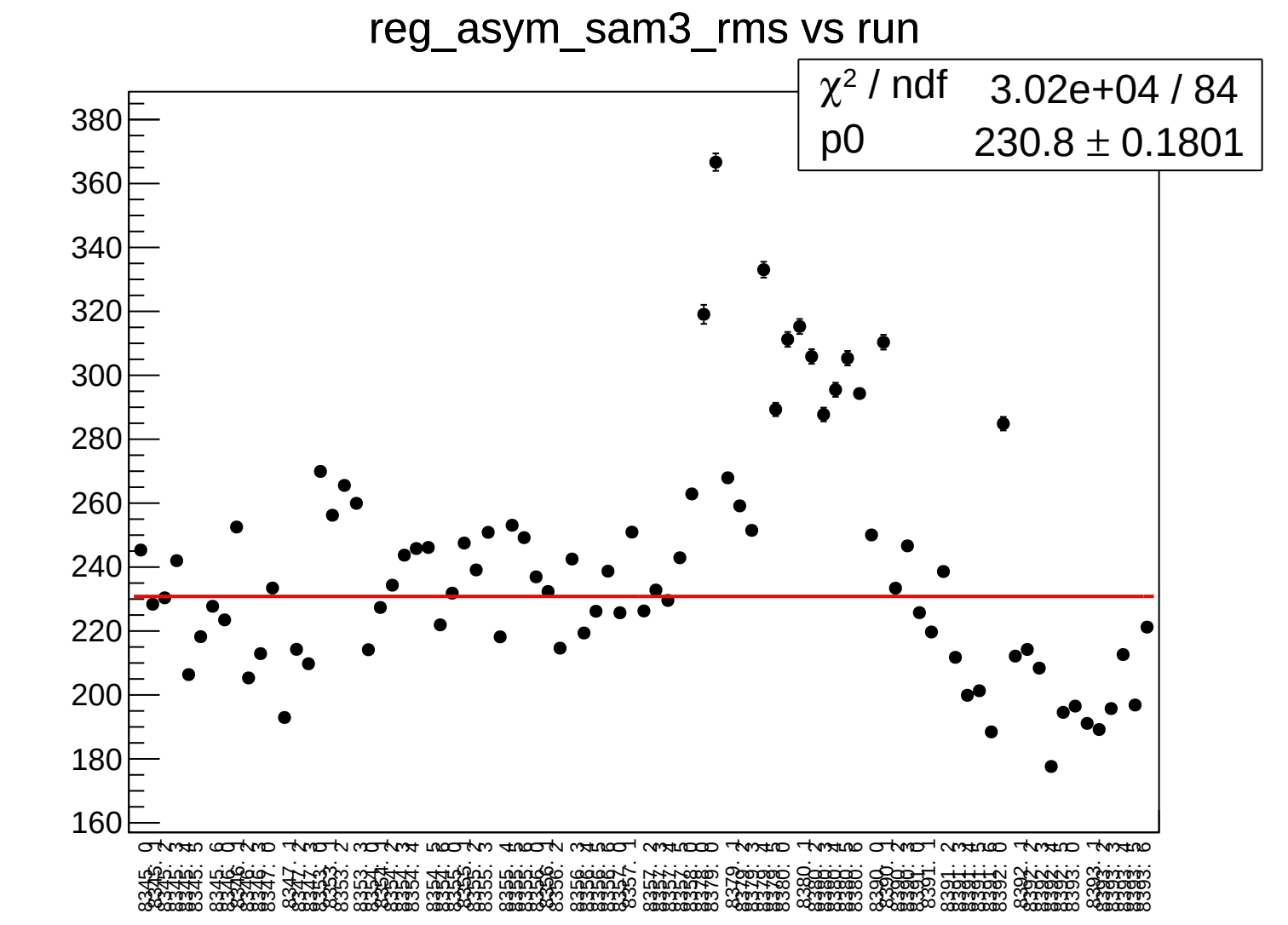

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 97.42 / 84
p0 −1.275e+04 ± 4452
pull
Entries 85
Mean 964.8
Std Dev 903.1

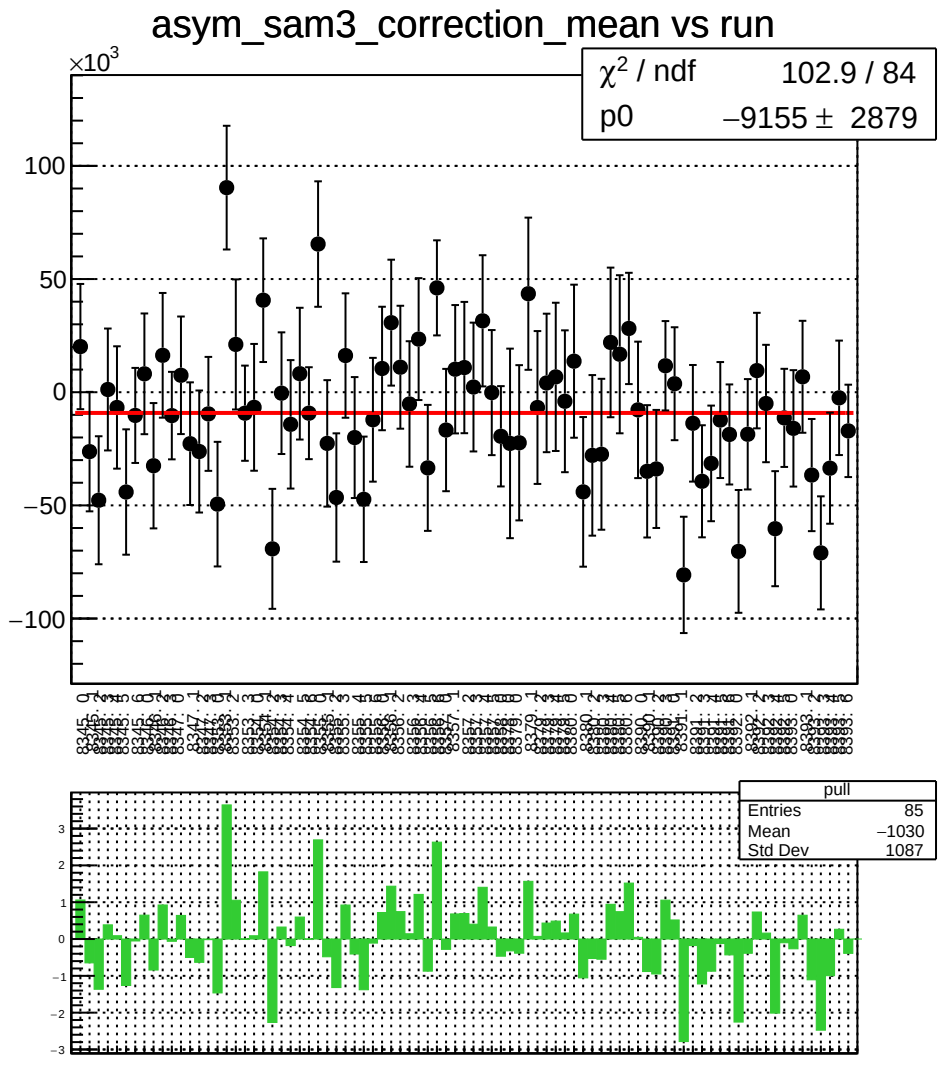

pull1D
Entries 85
Mean −0.005225
Std Dev 1.071

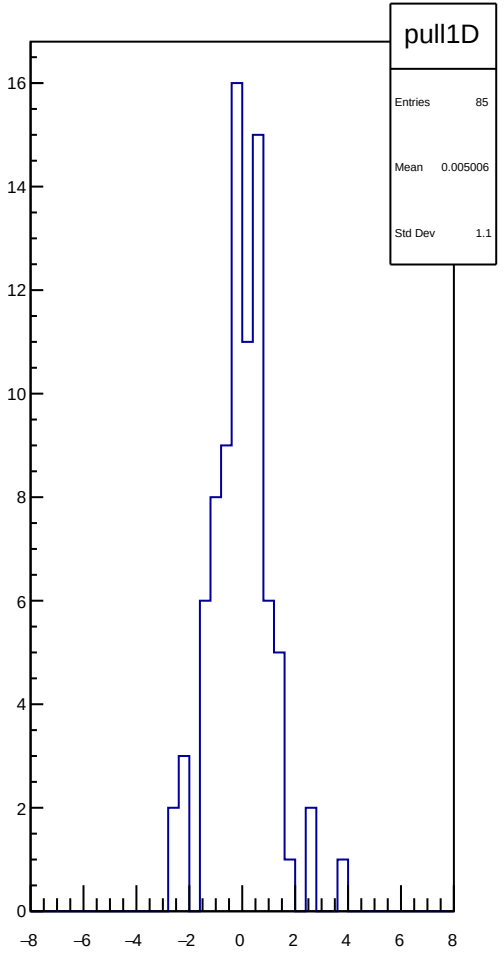

asym_sam2_correction_rms vs run
χ² / ndf 1.93e+04 / 84
p0 4048 ± 3.148
6000
5500
5000
4500
4000
3500

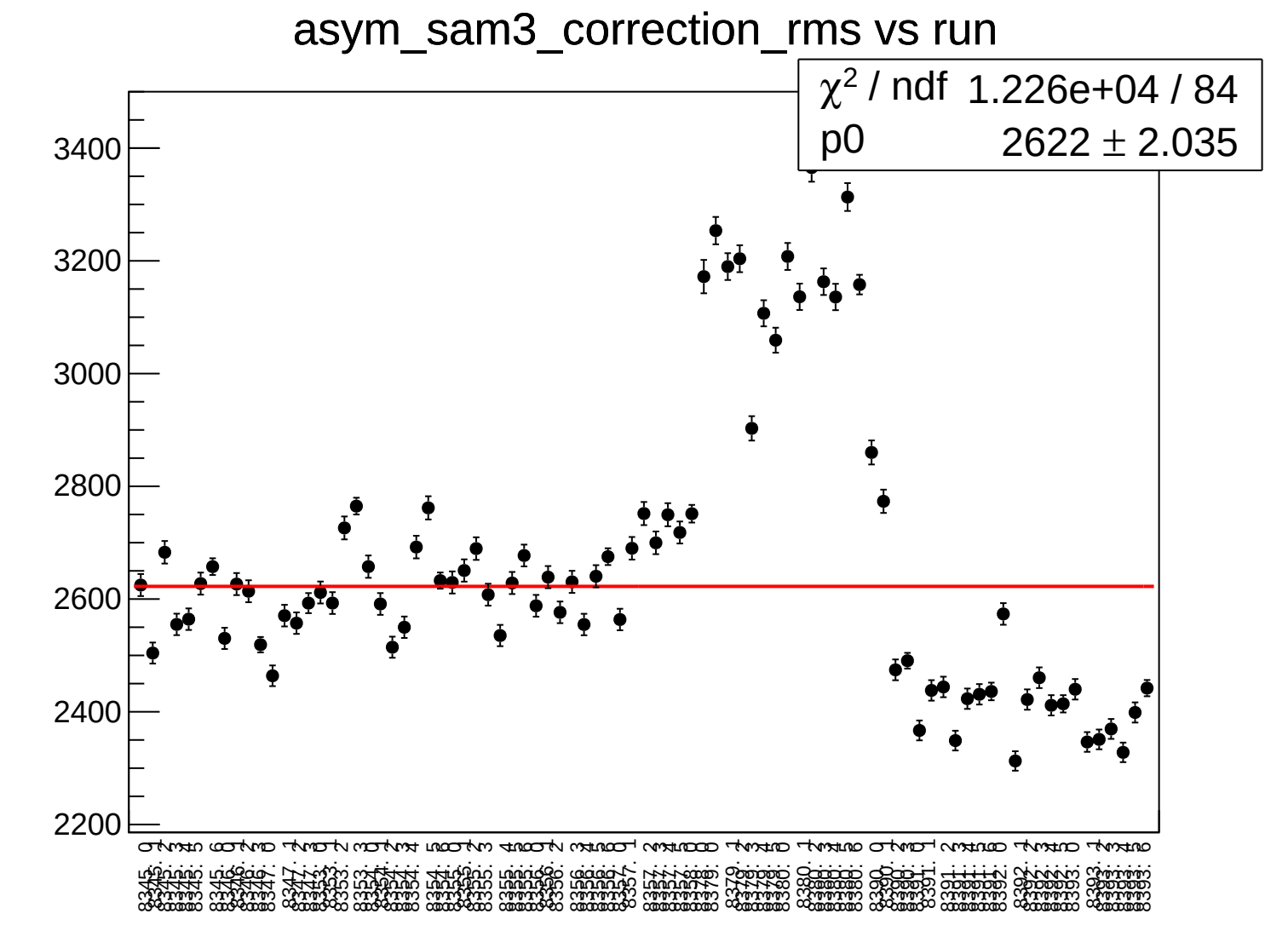

reg_asym_sam3_mean vs run
χ² / ndf 88.08 / 84
p0 −353.5 ± 254.8
pull
Entries 85
Mean 3.776
Std Dev 65.8

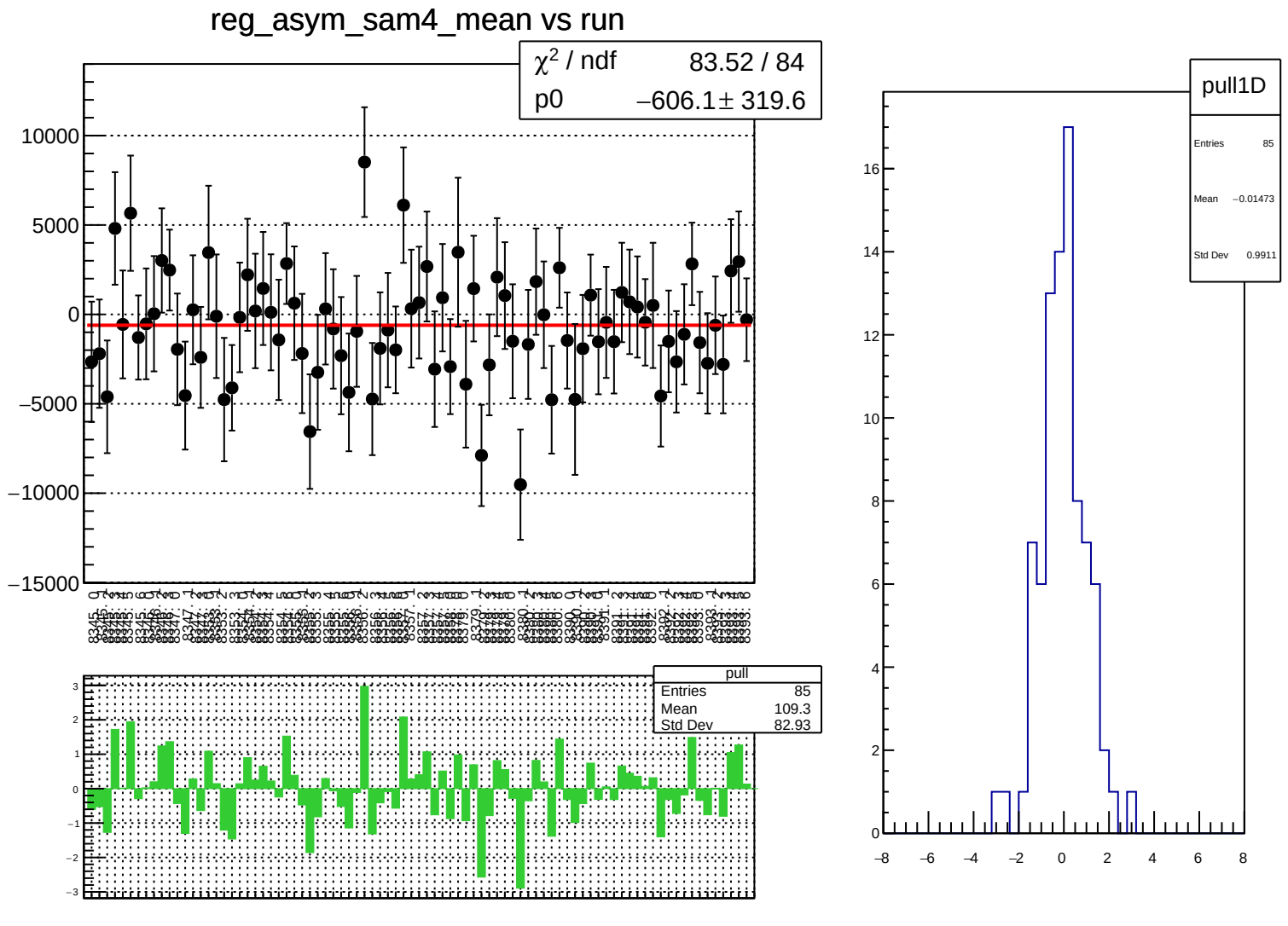

pull1D
Entries 85
Mean −0.03075
Std Dev 1.017

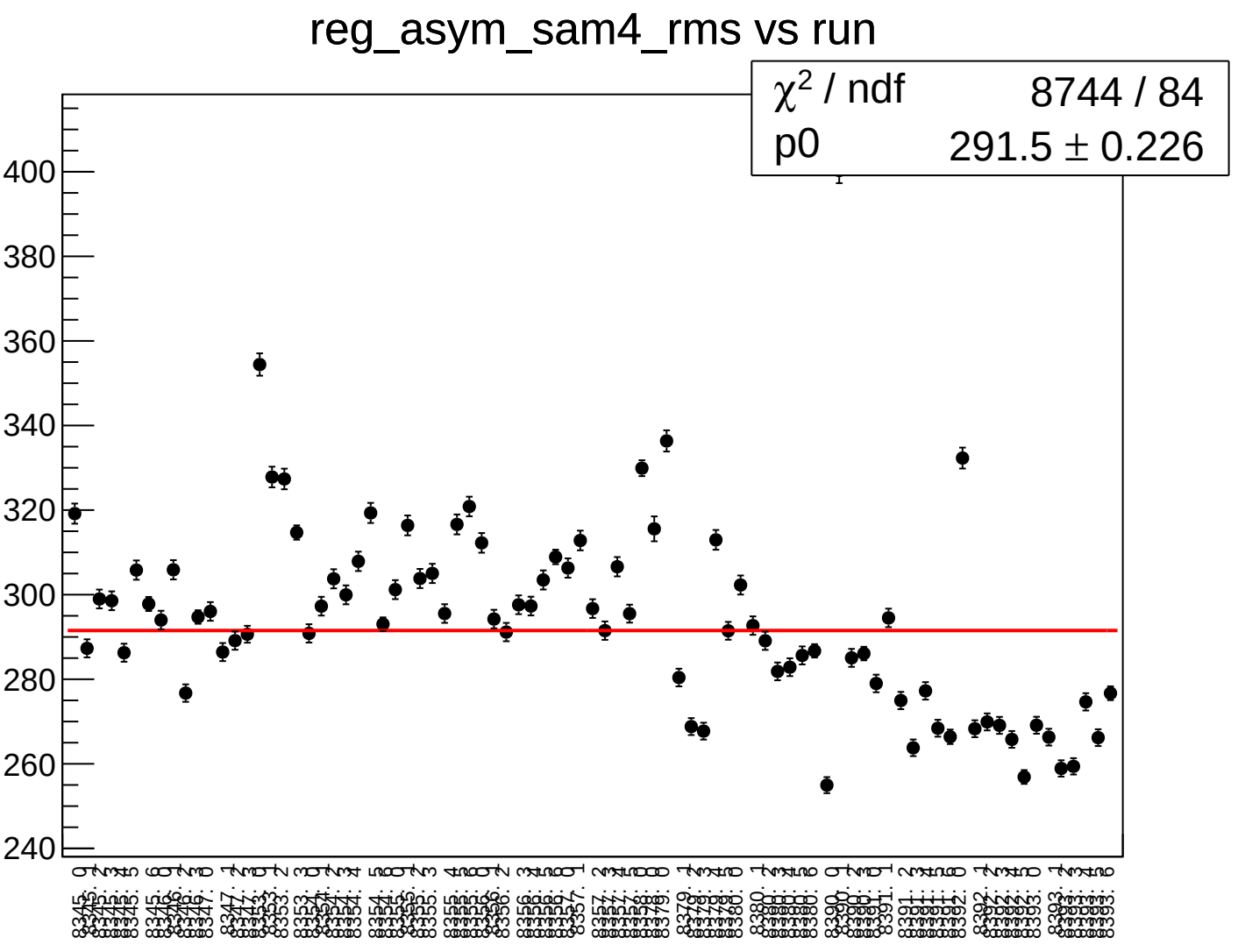

reg_asym_sam3_rms vs run
χ² / ndf 3.02e+04 / 84
p0 230.8 ± 0.1801
380
360
340
320
300
280
260
240
220
200
180
160

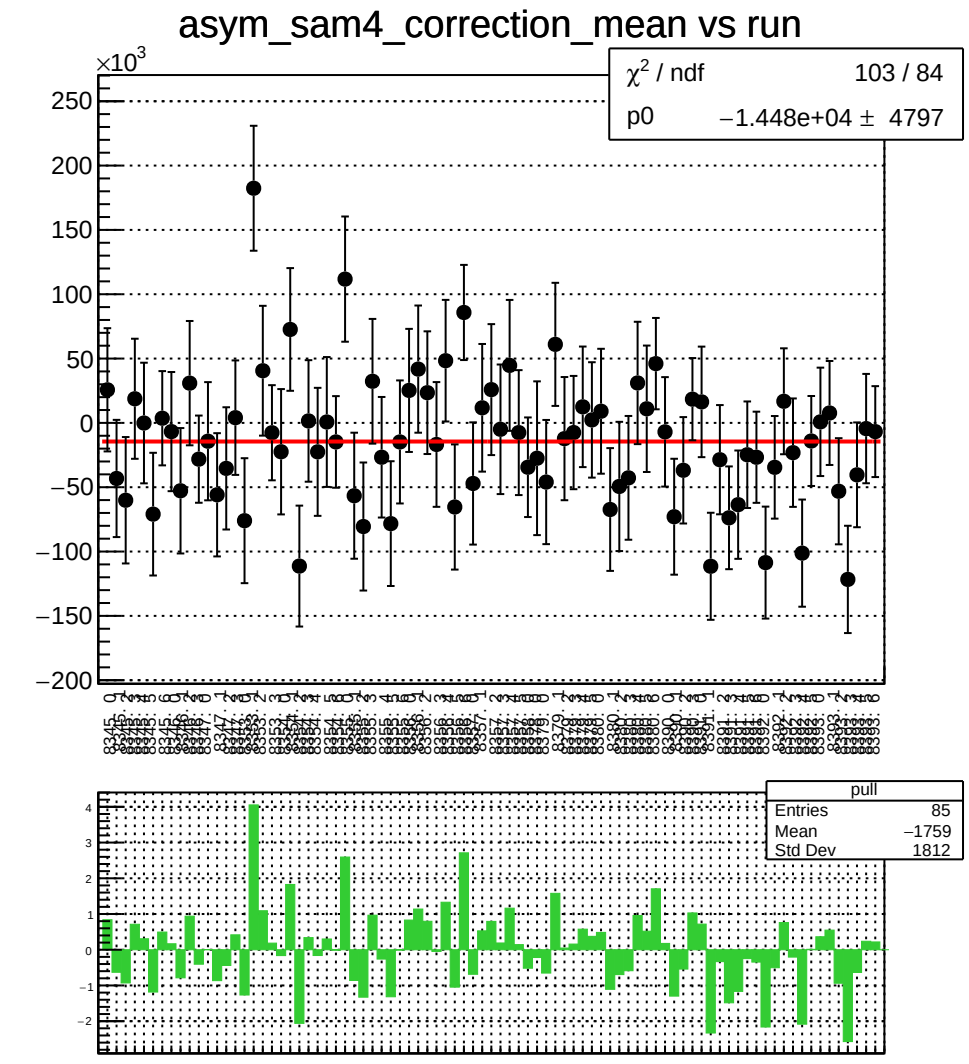

asym_sam3_correction_mean vs run
×10^3
χ² / ndf 102.9 / 84
p0 −9155 ± 2879
100
50
0
−50
−100
pull
Entries 85
Mean −1030
Std Dev 1087
3
2
1
0
−1
−2
−3

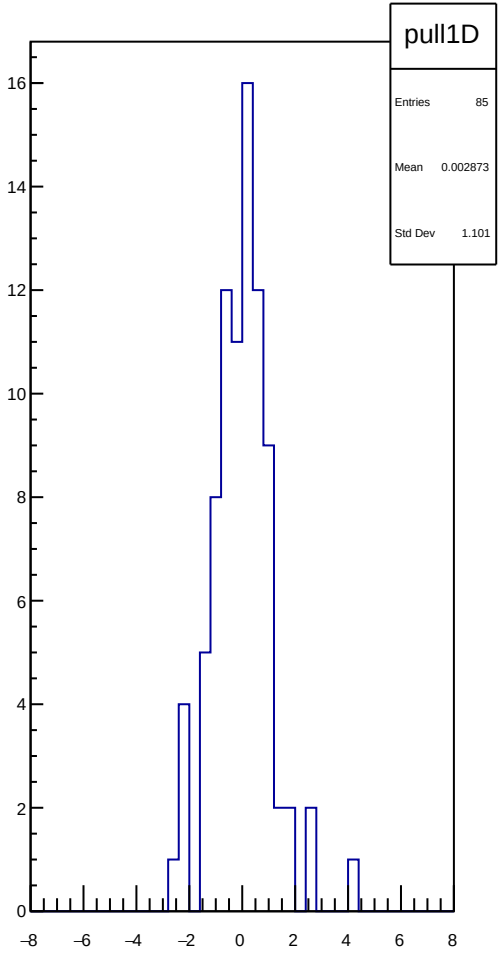

pull1D
Entries 85
Mean 0.005006
Std Dev 1.1
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

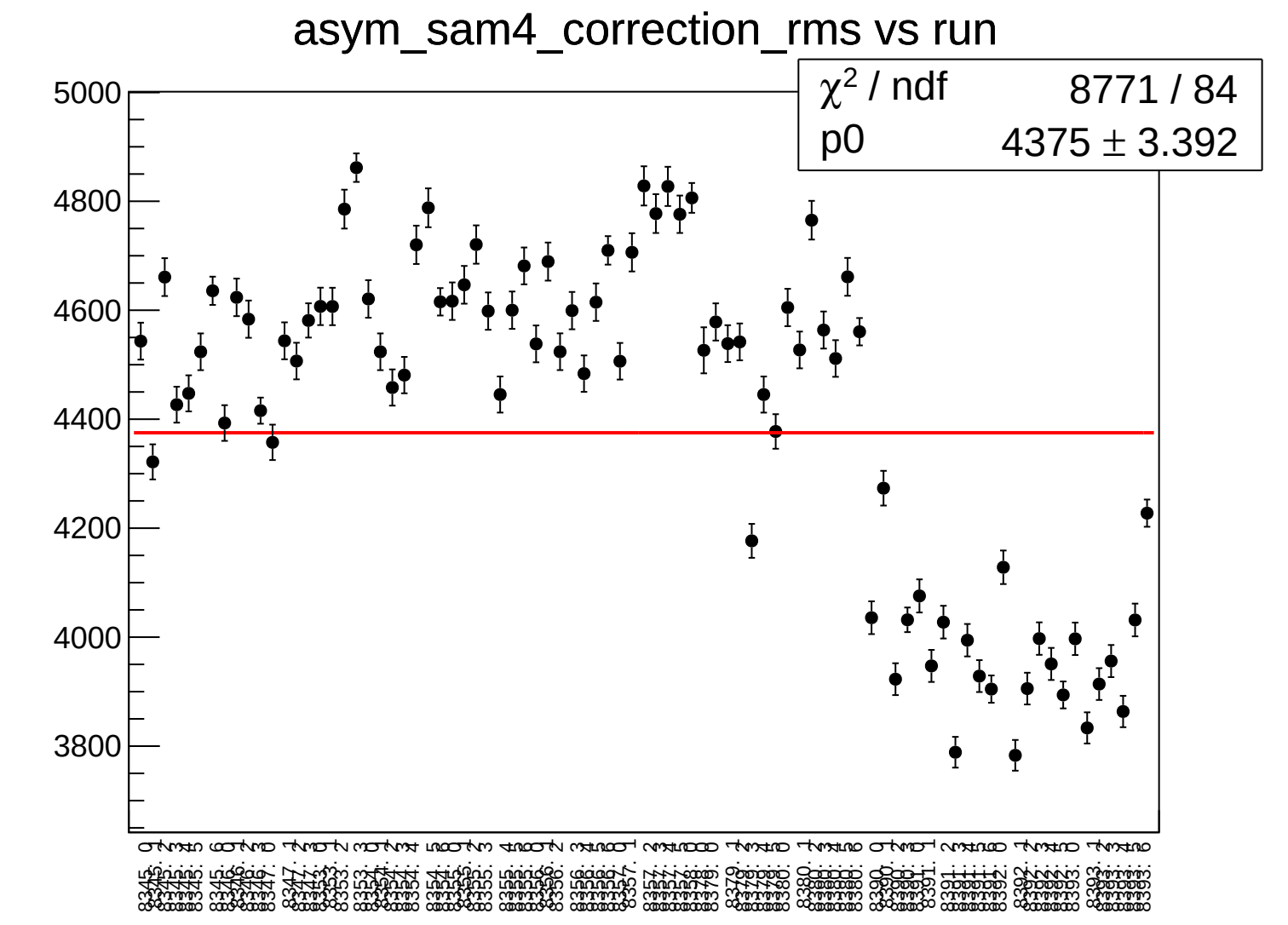

asym_sam3_correction_rms vs run
χ² / ndf 1.226e+04 / 84
p0 2622 ± 2.035
3400
3200
3000
2800
2600
2400
2200

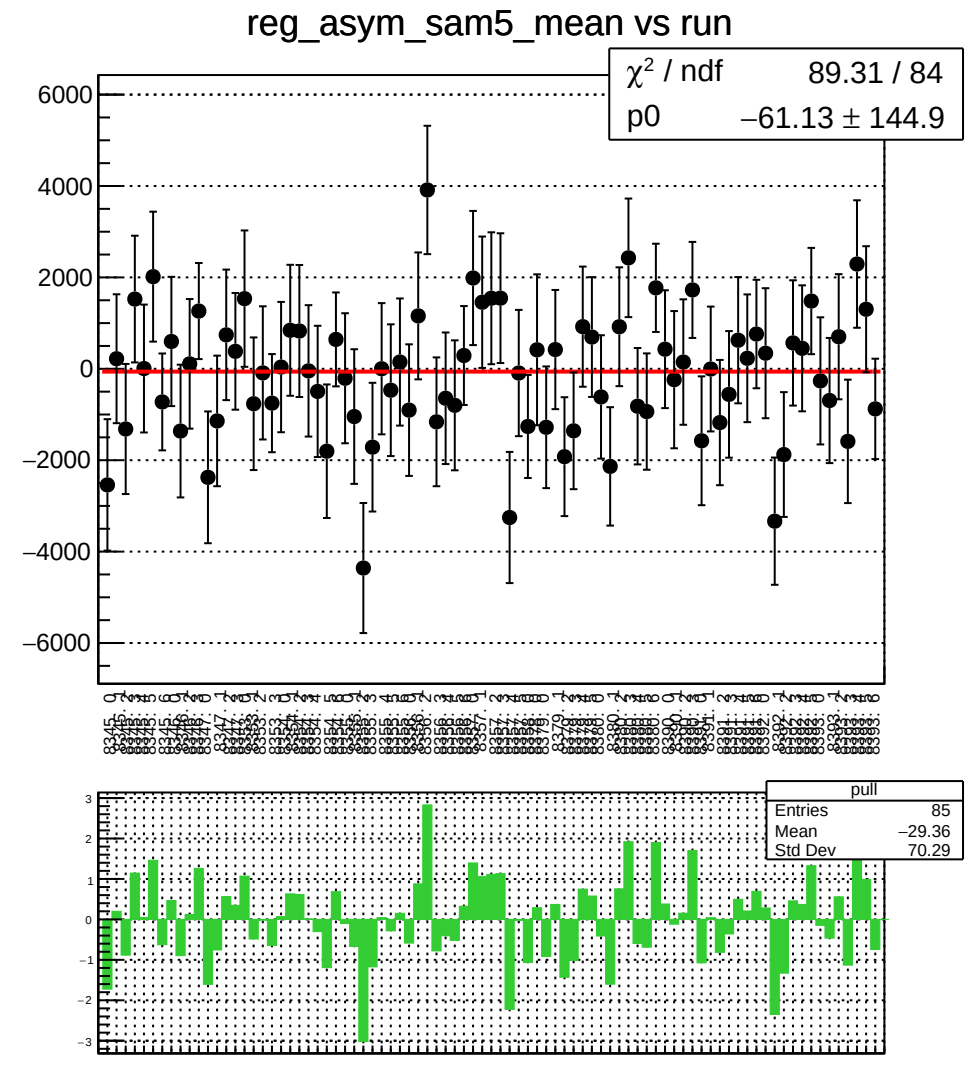

reg_asym_sam4_mean vs run
χ² / ndf 83.52 / 84
p0 −606.1 ± 319.6
pull
Entries 85
Mean 109.3
Std Dev 82.93
pull1D
Entries 85
Mean −0.01473
Std Dev 0.9911

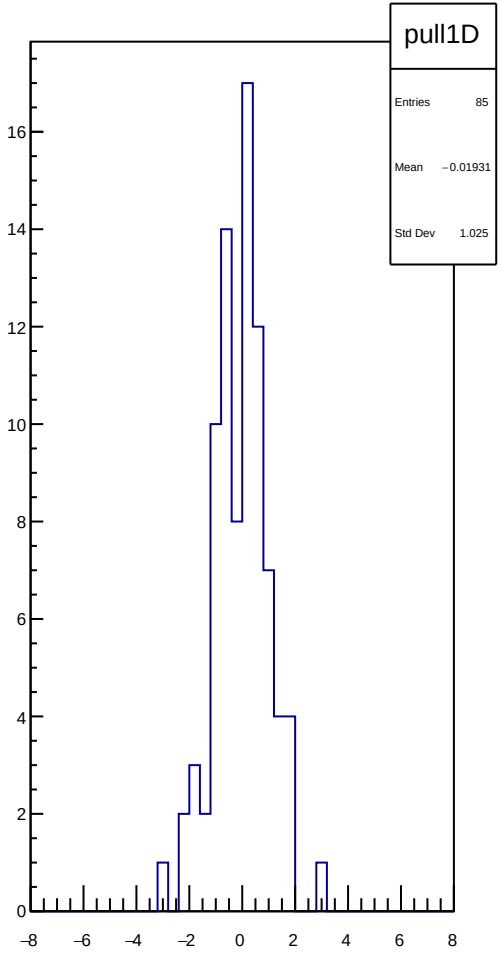

reg_asym_sam4_rms vs run
χ² / ndf 8744 / 84
p0 291.5 ± 0.226
400
380
360
340
320
300
280
260
240

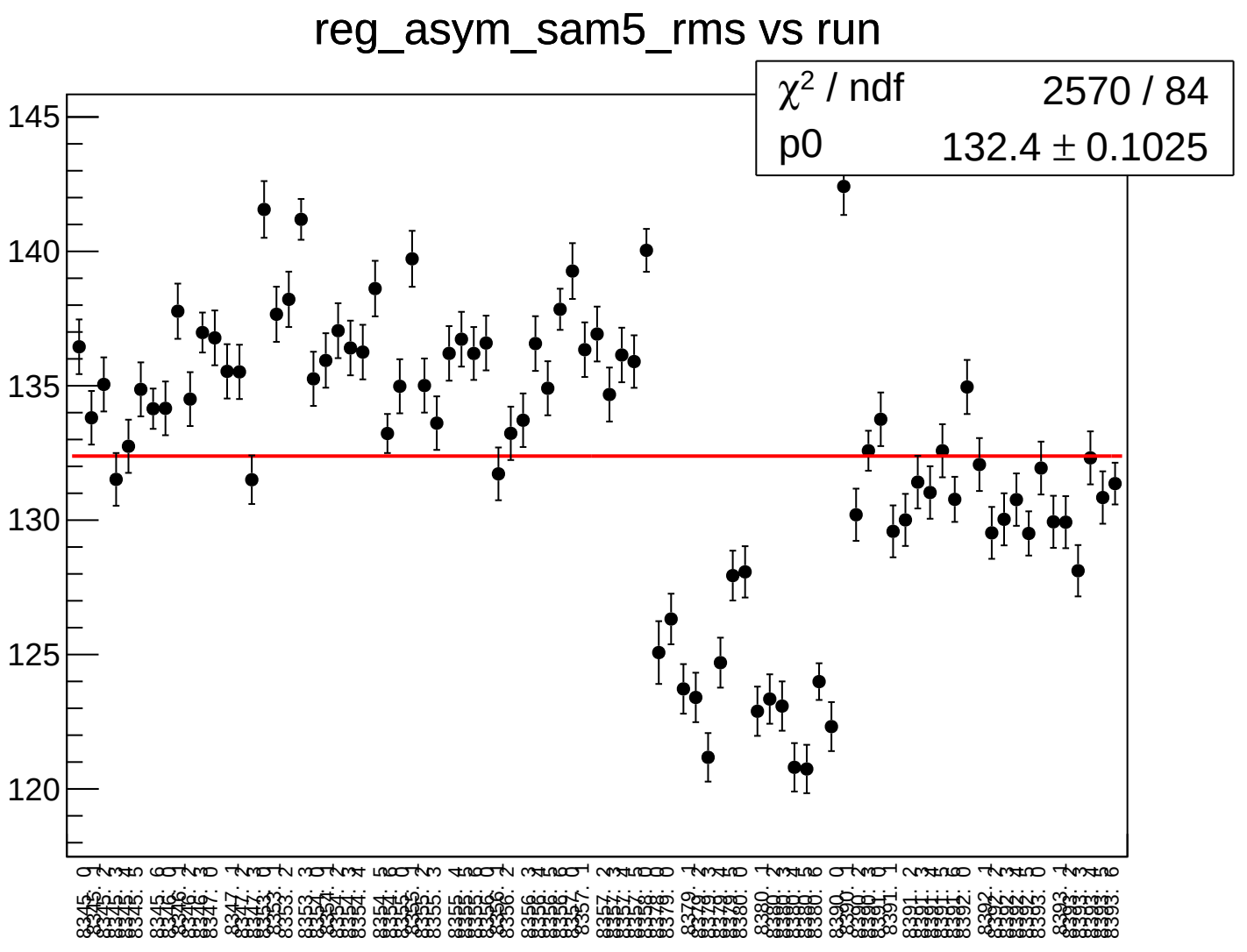

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 103 / 84
p0 −1.448e+04 ± 4797
pull
Entries 85
Mean −1759
Std Dev 1812

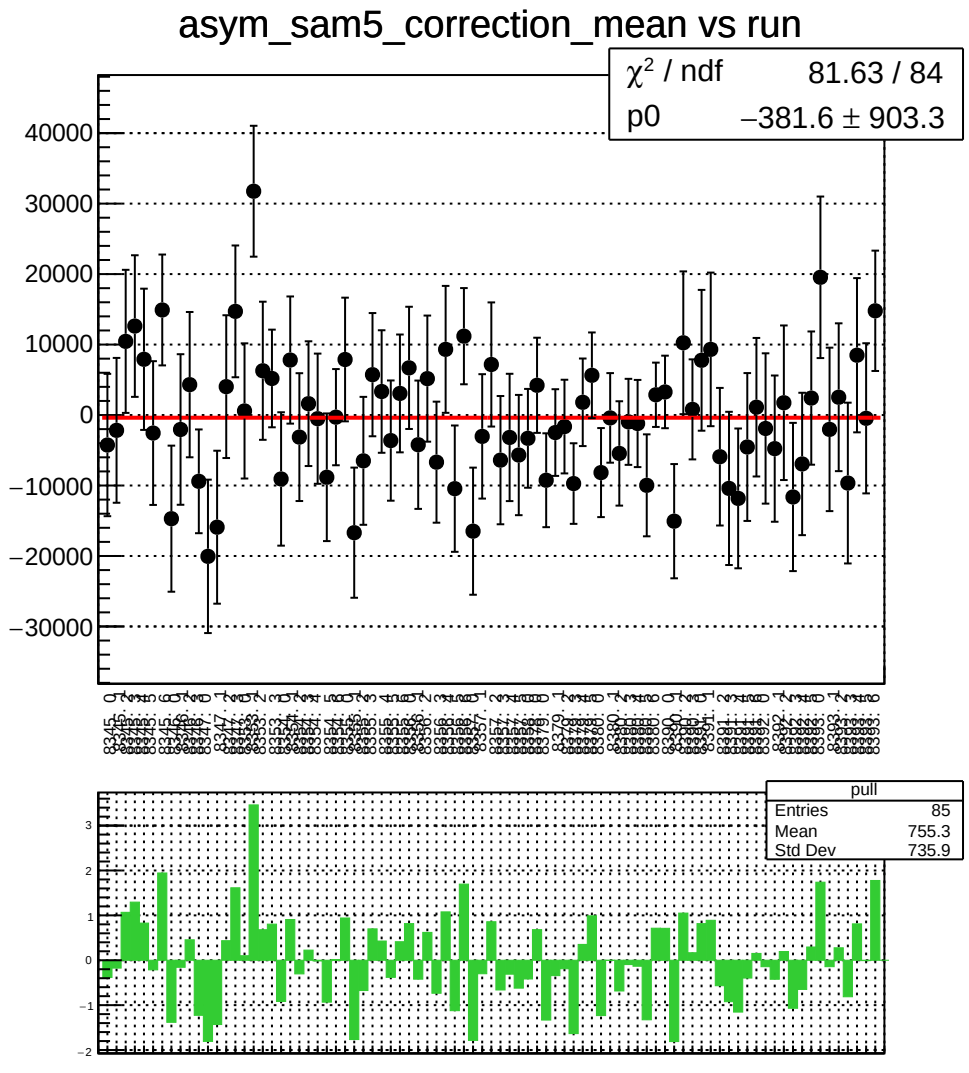

pull1D
Entries 85
Mean 0.002873
Std Dev 1.101

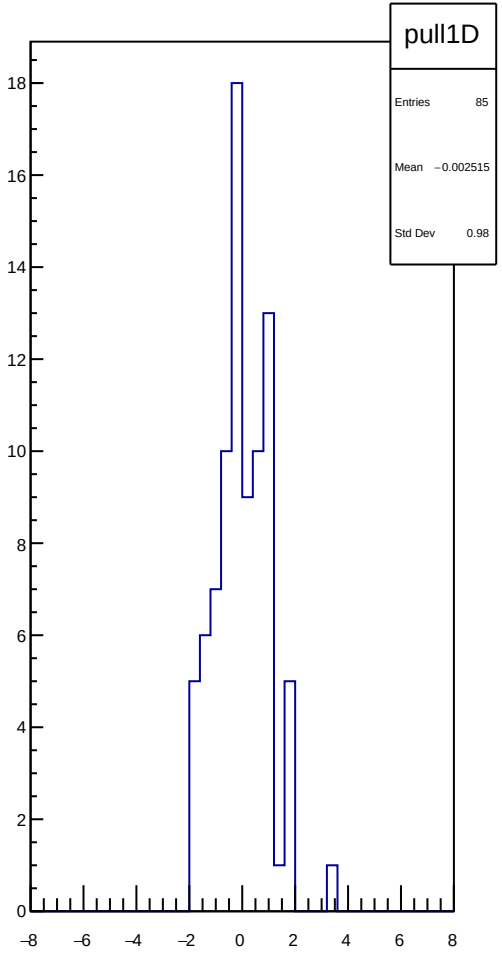

asym_sam4_correction_rms vs run
χ^2 / ndf 8771 / 84
p0 4375 ± 3.392
5000
4800
4600
4400
4200
4000
3800

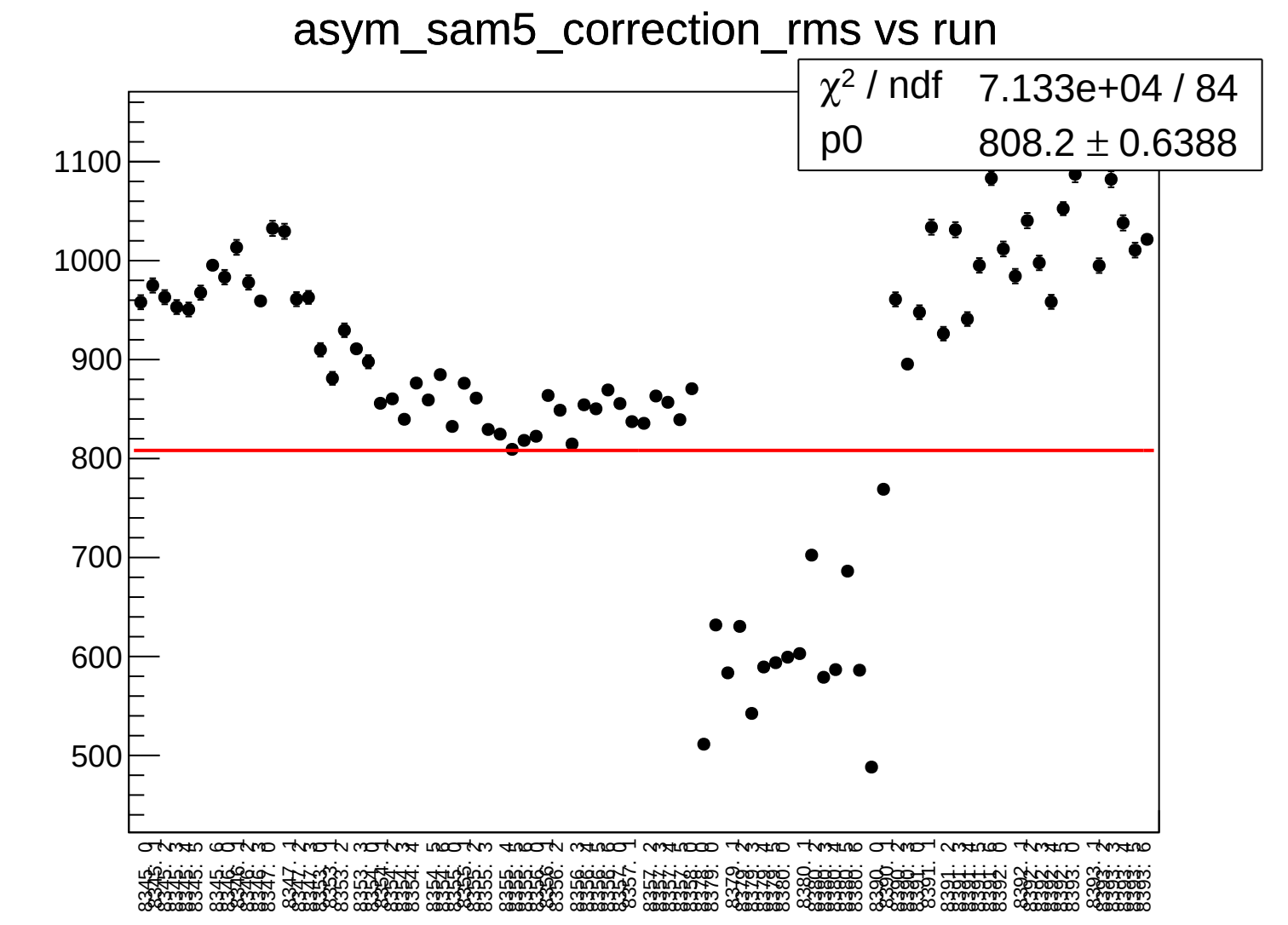

reg_asym_sam5_mean vs run
χ² / ndf 89.31 / 84
p0 −61.13 ± 144.9
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −29.36
Std Dev 70.29
3
2
1
0
−1
−2
−3

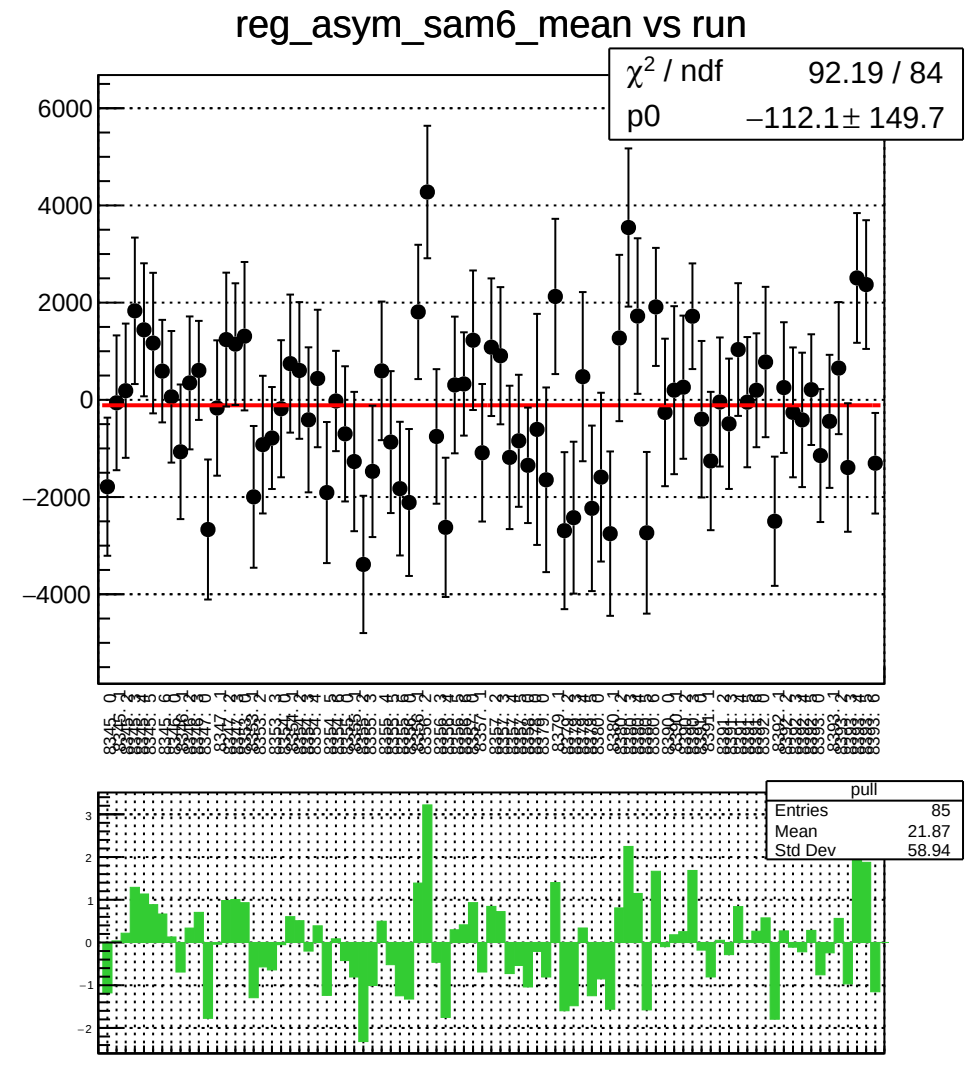

pull1D
Entries 85
Mean −0.01931
Std Dev 1.025
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

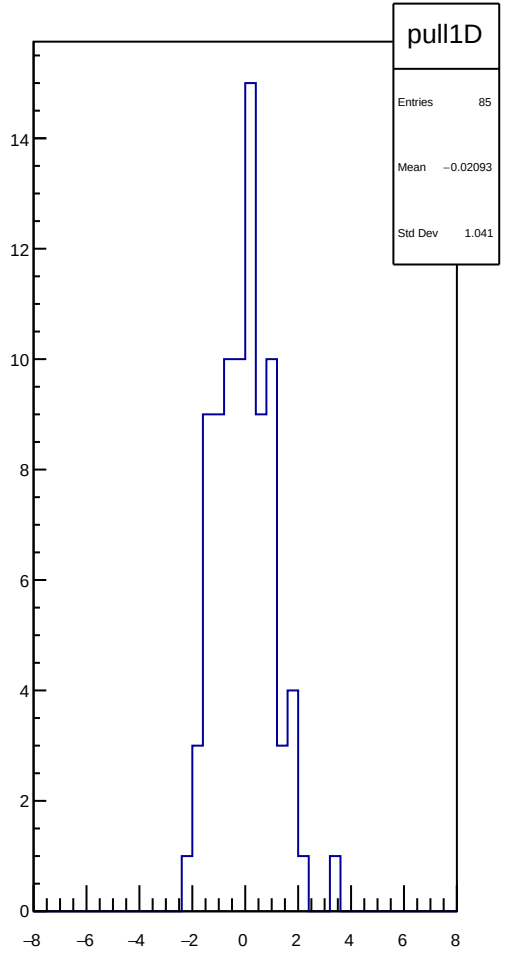

reg_asym_sam5_rms vs run
χ² / ndf 2570 / 84
p0 132.4 ± 0.1025
145
140
135
130
125
120

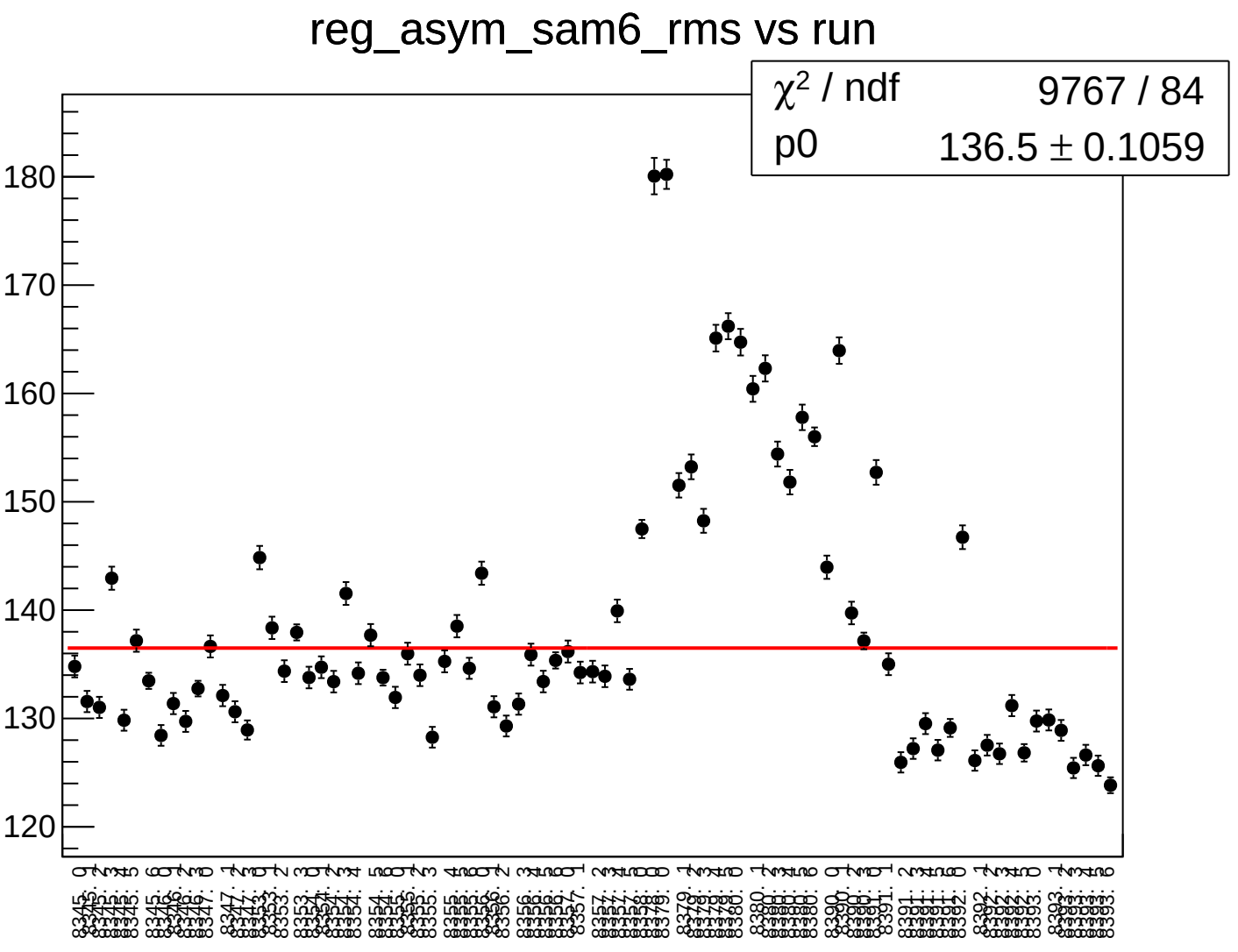

asym_sam5_correction_mean vs run
χ² / ndf 81.63 / 84
p0 −381.6 ± 903.3
pull
Entries 85
Mean 755.3
Std Dev 735.9

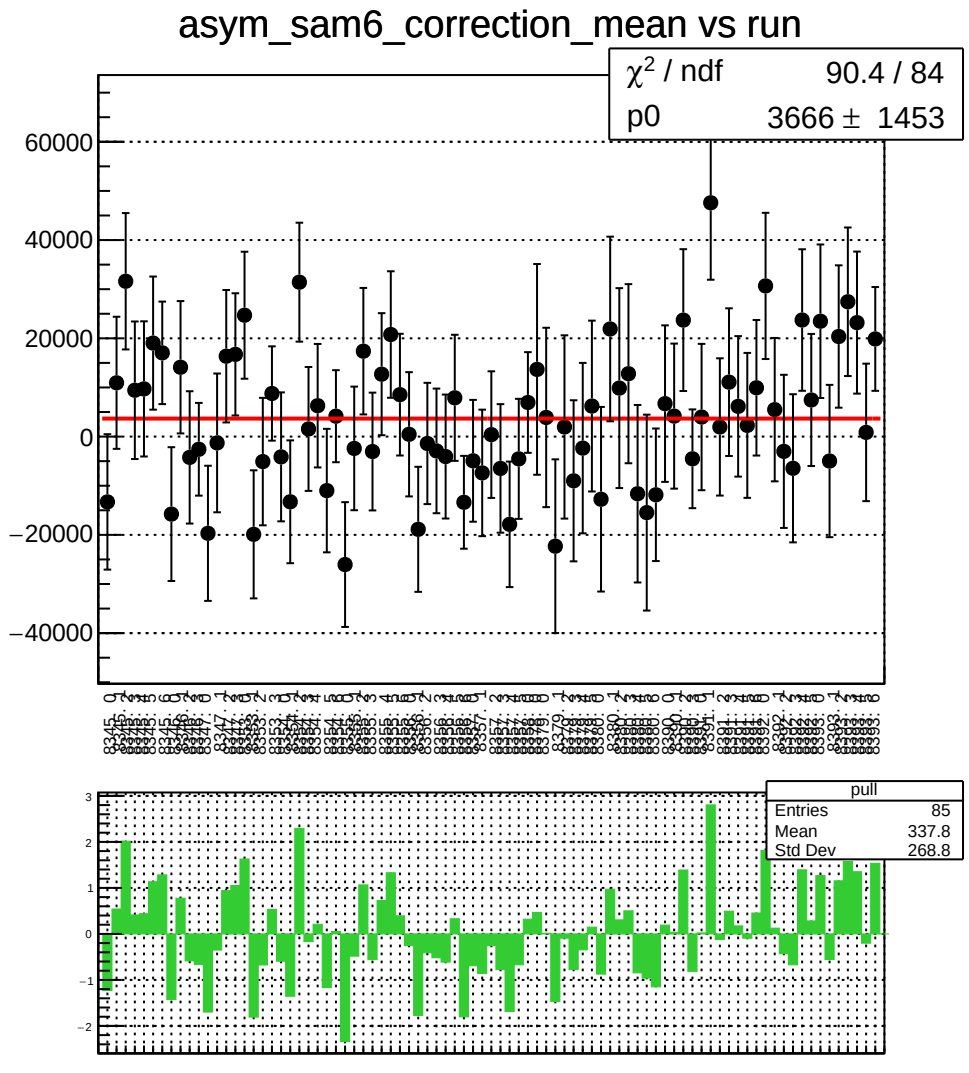

pull1D
Entries 85
Mean −0.002515
Std Dev 0.98

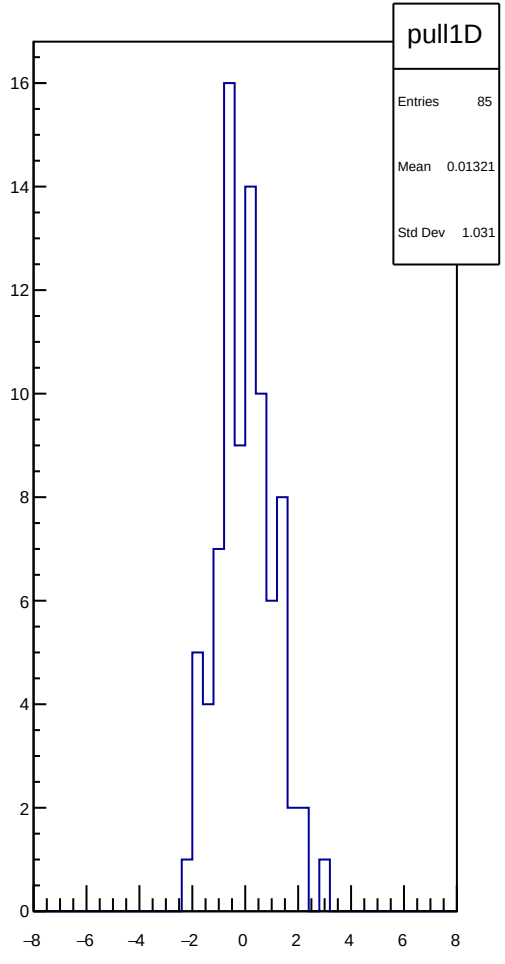

asym_sam5_correction_rms vs run
χ² / ndf 7.133e+04 / 84
p0 808.2 ± 0.6388
1100
1000
900
800
700
600
500

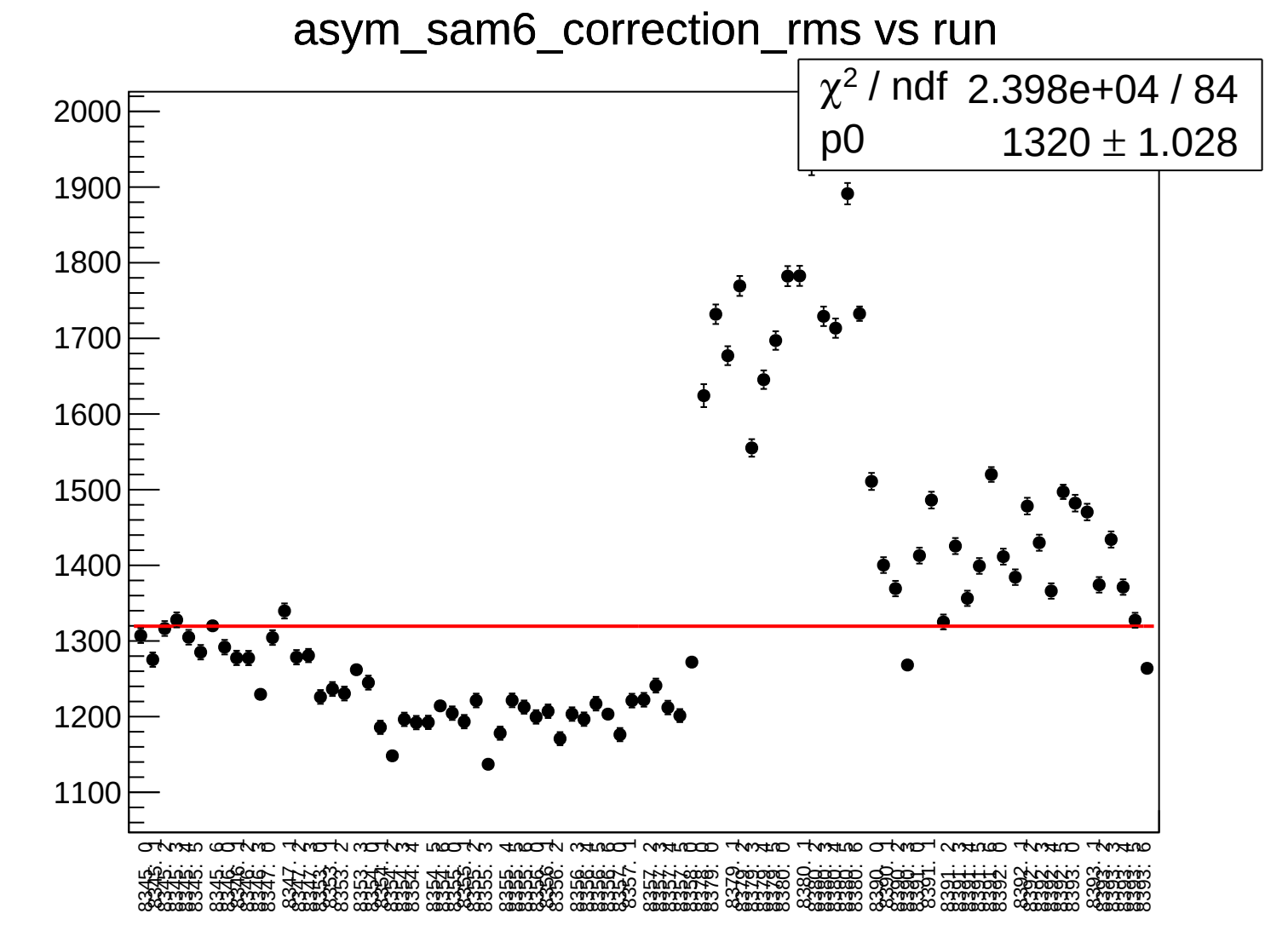

reg_asym_sam6_mean vs run
χ² / ndf 92.19 / 84
p0 −112.1± 149.7
pull
Entries 85
Mean 21.87
Std Dev 58.94

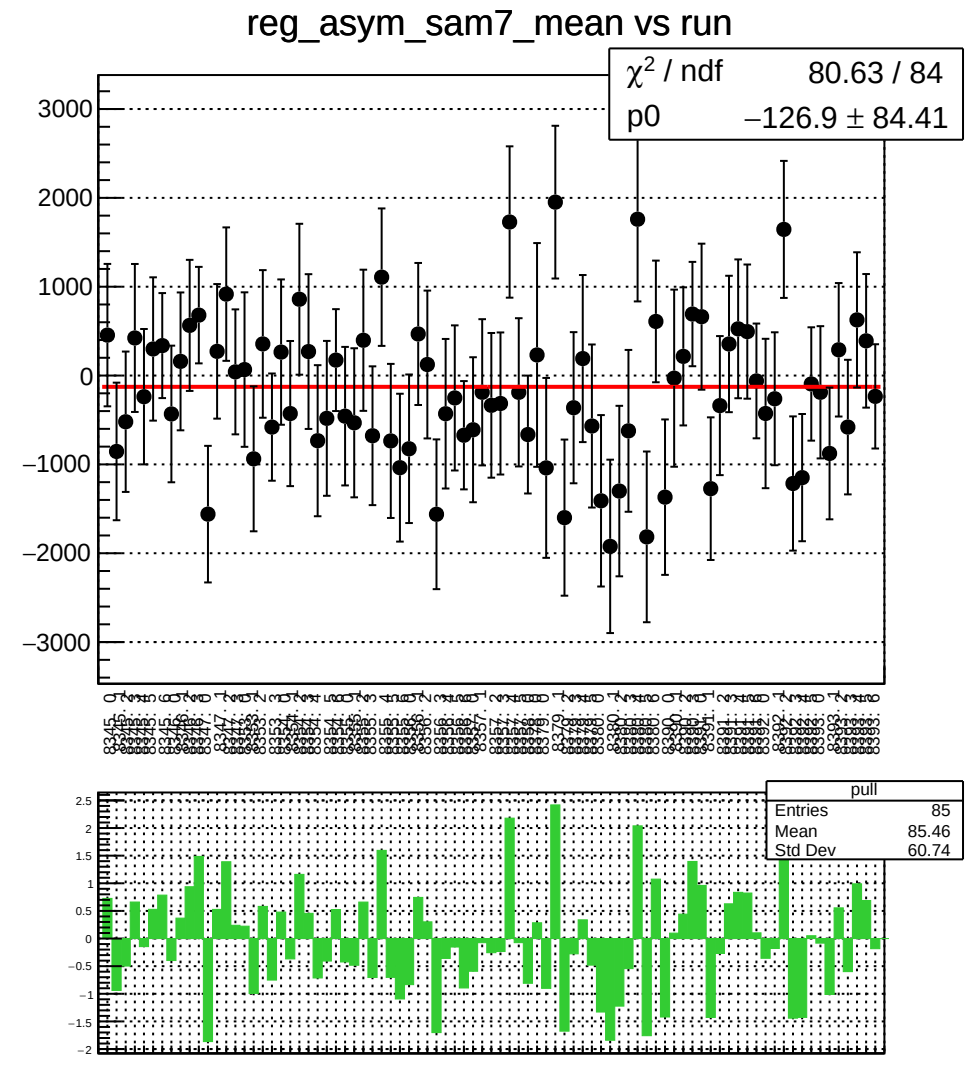

pull1D
Entries 85
Mean −0.02093
Std Dev 1.041

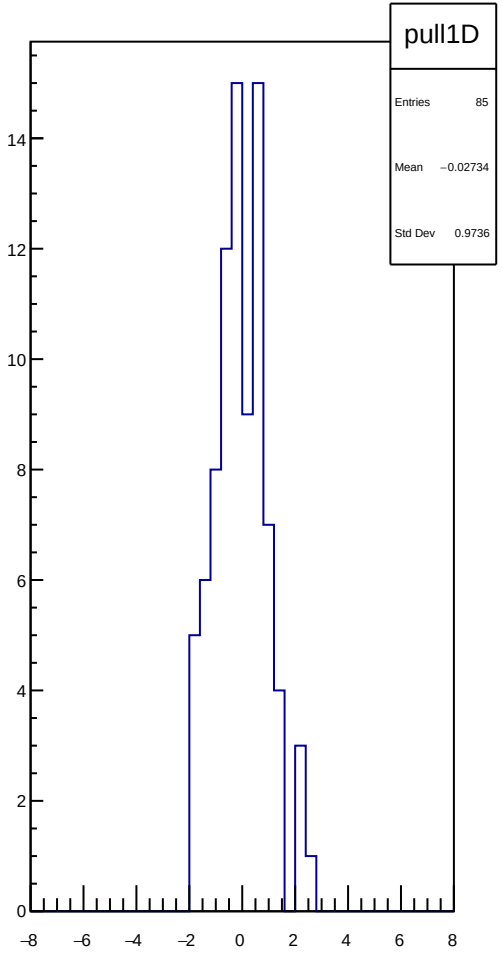

reg_asym_sam6_rms vs run
χ² / ndf 9767 / 84
p0 136.5 ± 0.1059
180
170
160
150
140
130
120

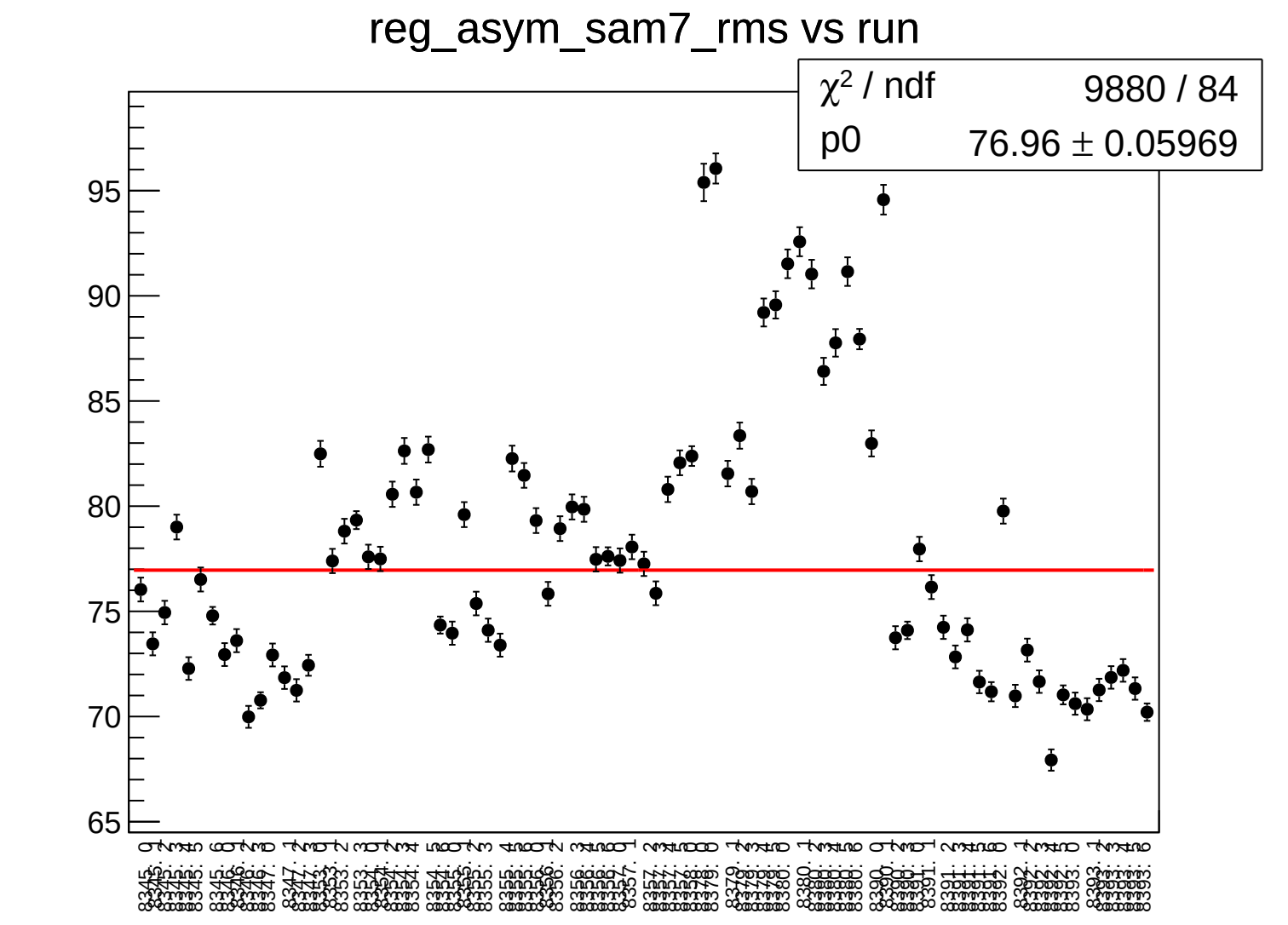

asym_sam6_correction_mean vs run
χ² / ndf 90.4 / 84
p0 3666 ± 1453
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean 337.8
Std Dev 268.8
3
2
1
0
−1
−2

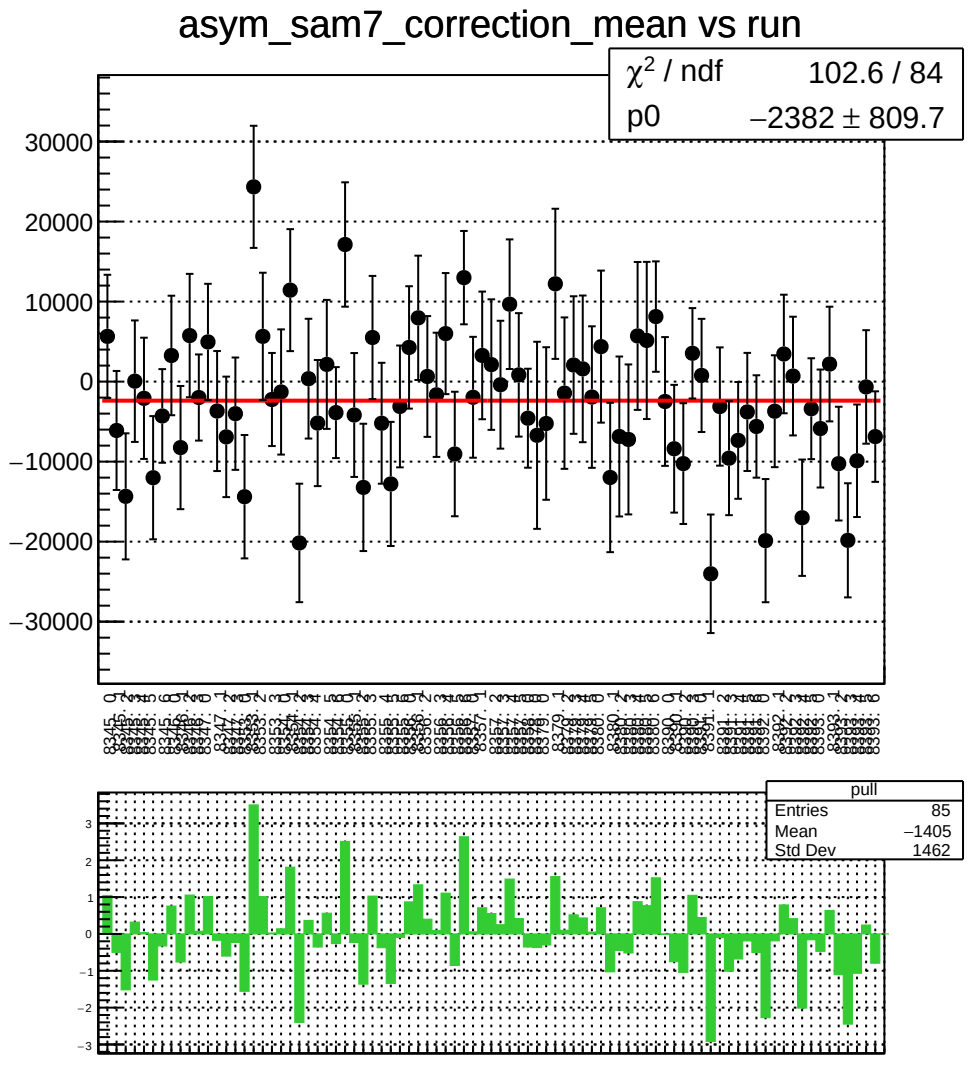

pull1D
Entries 85
Mean 0.01321
Std Dev 1.031
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

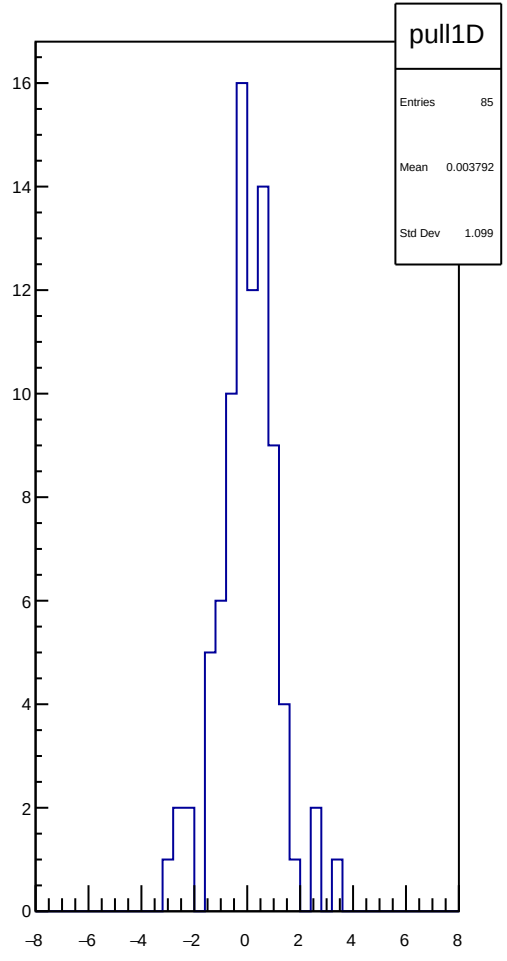

asym_sam6_correction_rms vs run
χ² / ndf 2.398e+04 / 84
p0 1320 ± 1.028
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100

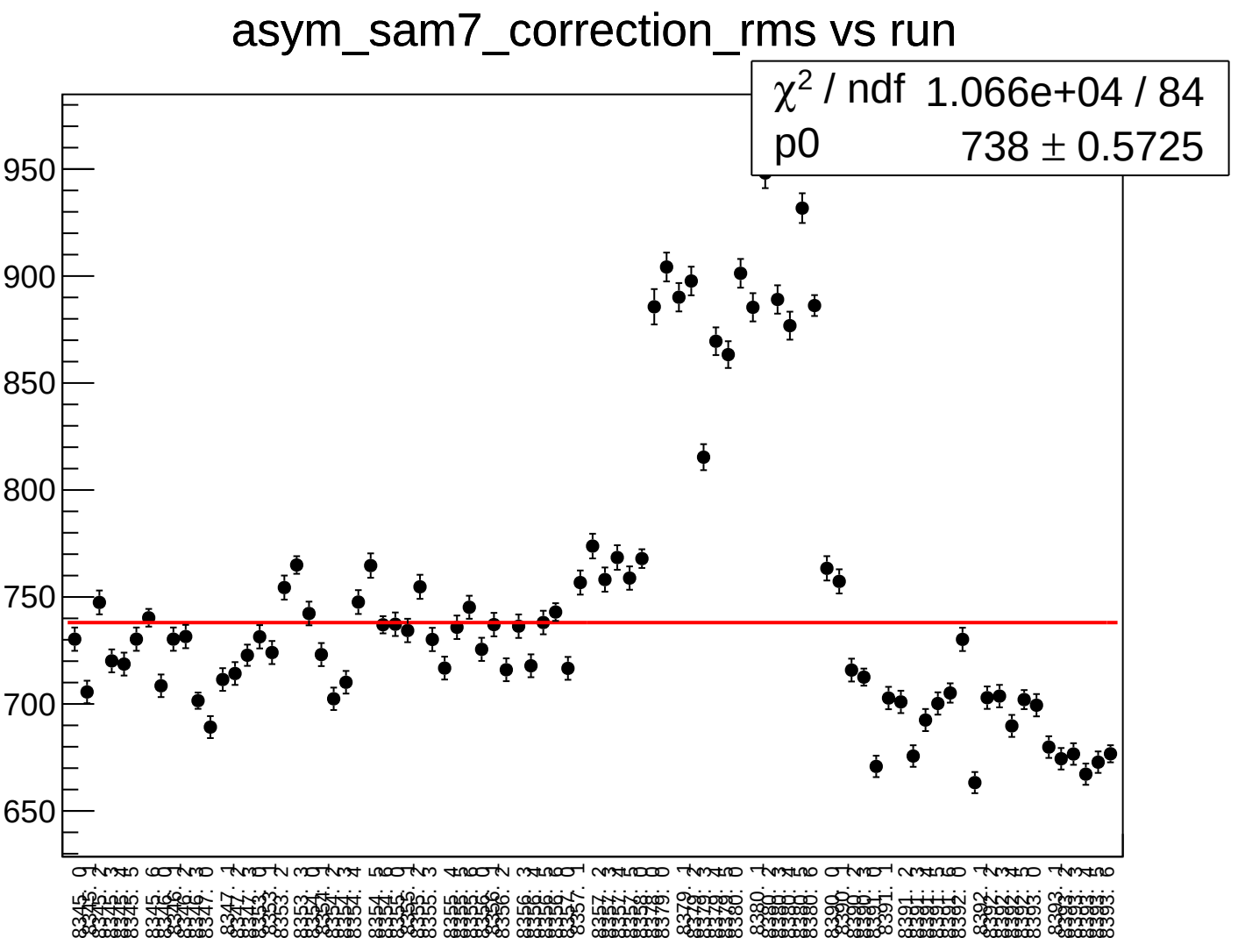

reg_asym_sam7_mean vs run
χ² / ndf 80.63 / 84
p0 −126.9 ± 84.41
pull
Entries 85
Mean 85.46
Std Dev 60.74

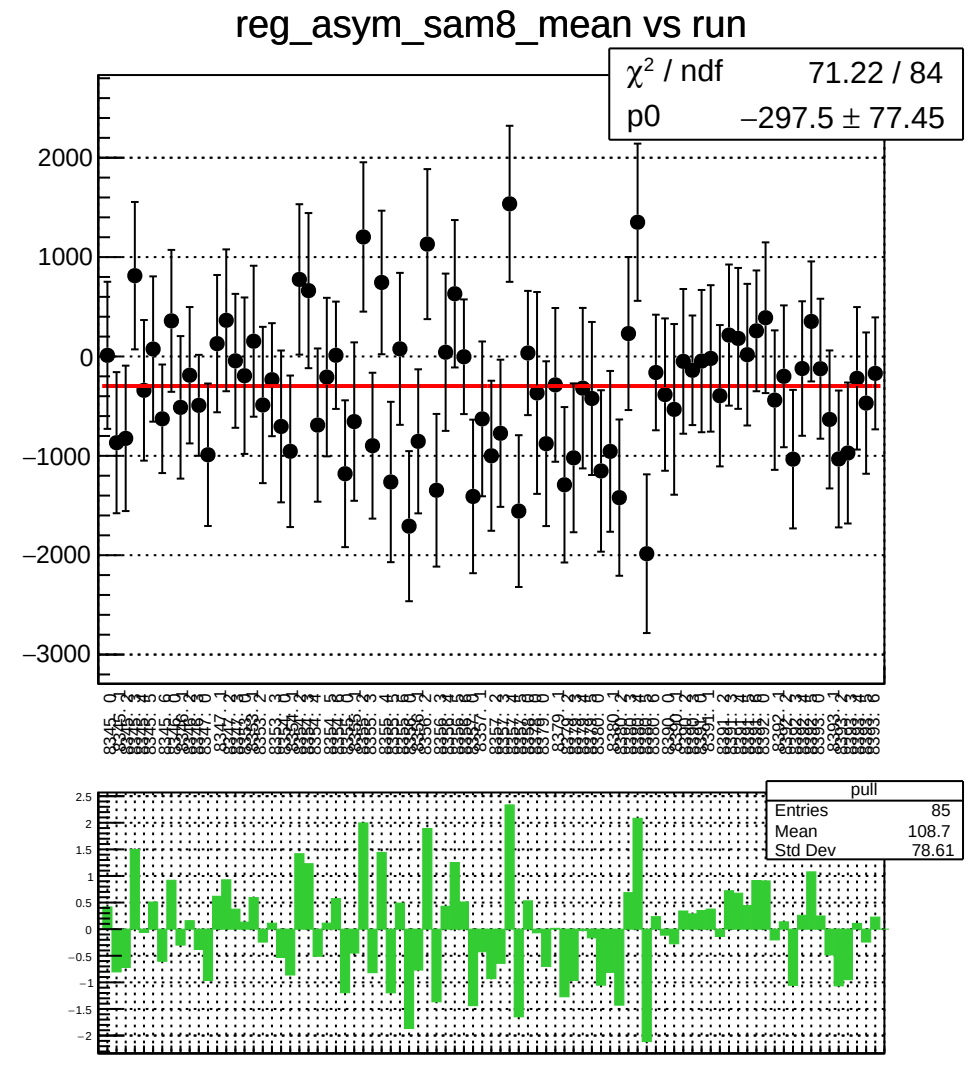

pull1D
Entries 85
Mean −0.02734
Std Dev 0.9736

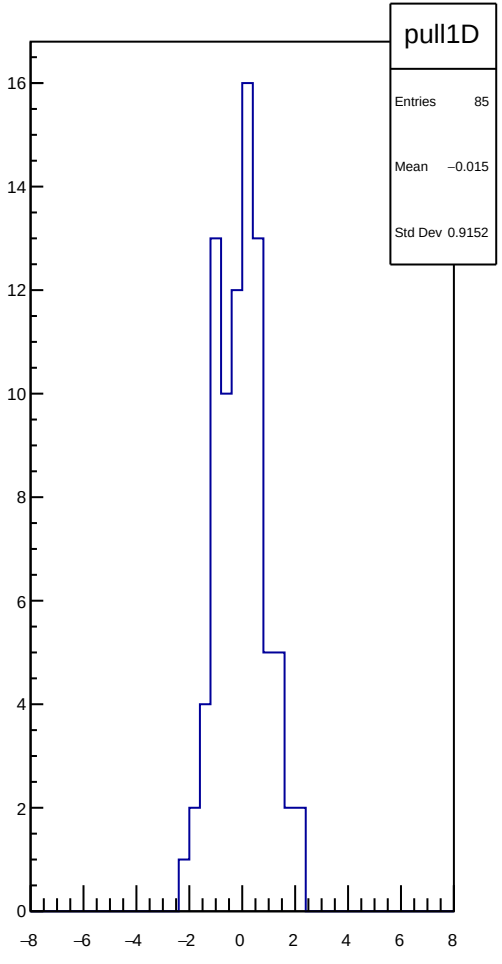

reg_asym_sam7_rms vs run
χ^2 / ndf 9880 / 84
p0 76.96 ± 0.05969
95
90
85
80
75
70
65

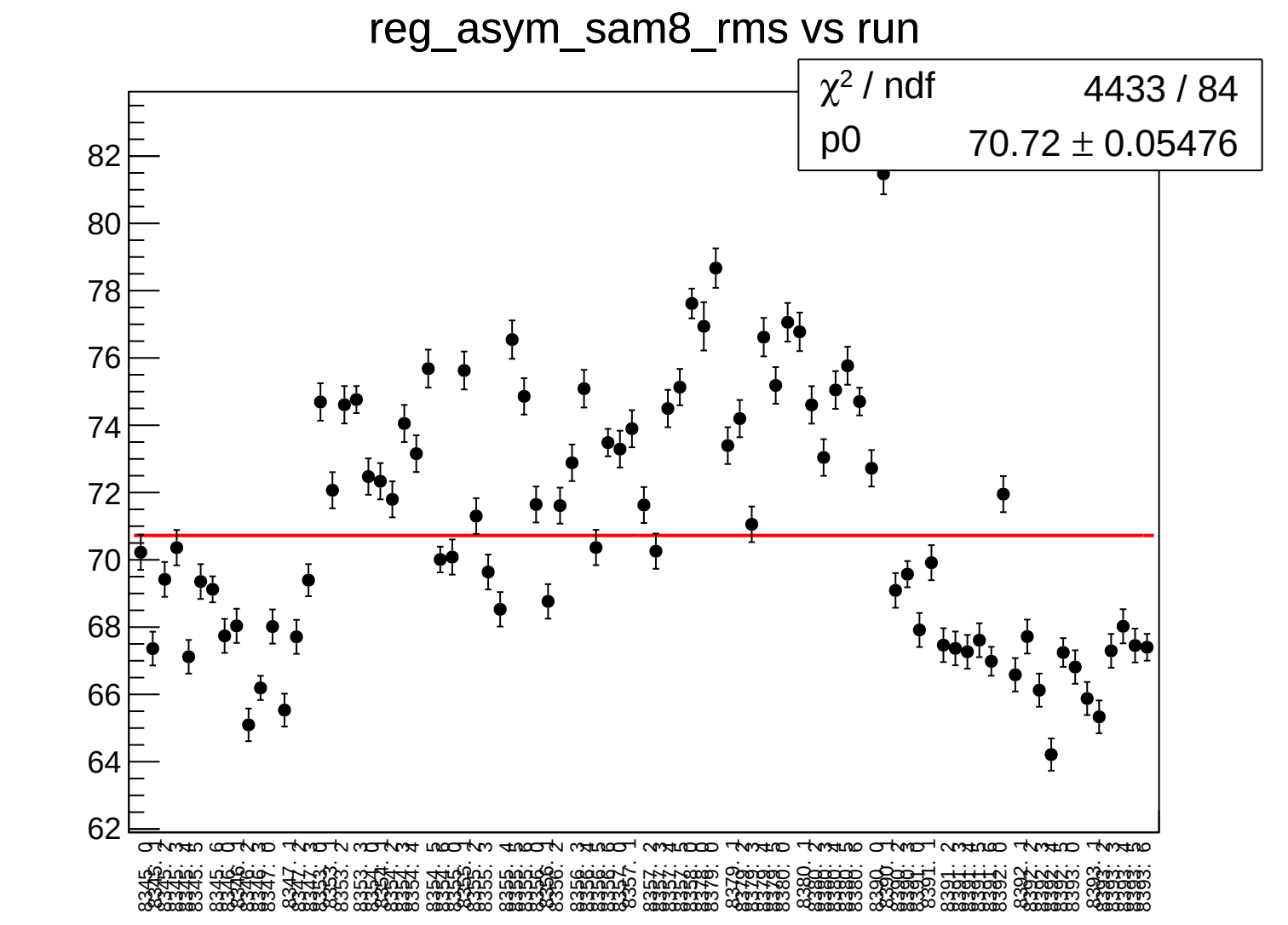

asym_sam7_correction_mean vs run
χ^2 / ndf 102.6 / 84
p0 −2382 ± 809.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −1405
Std Dev 1462
3
2
1
0
−1
−2
−3

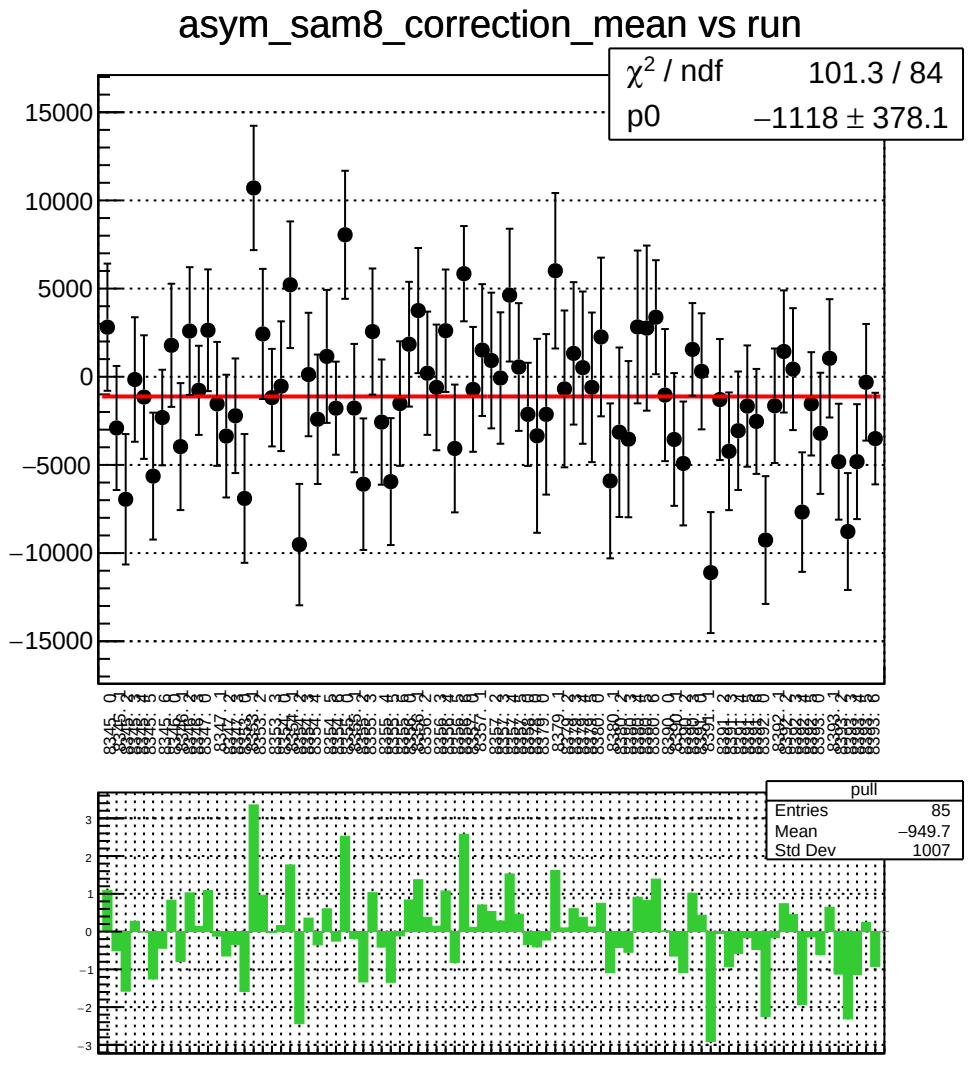

pull1D
Entries 85
Mean 0.003792
Std Dev 1.099
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

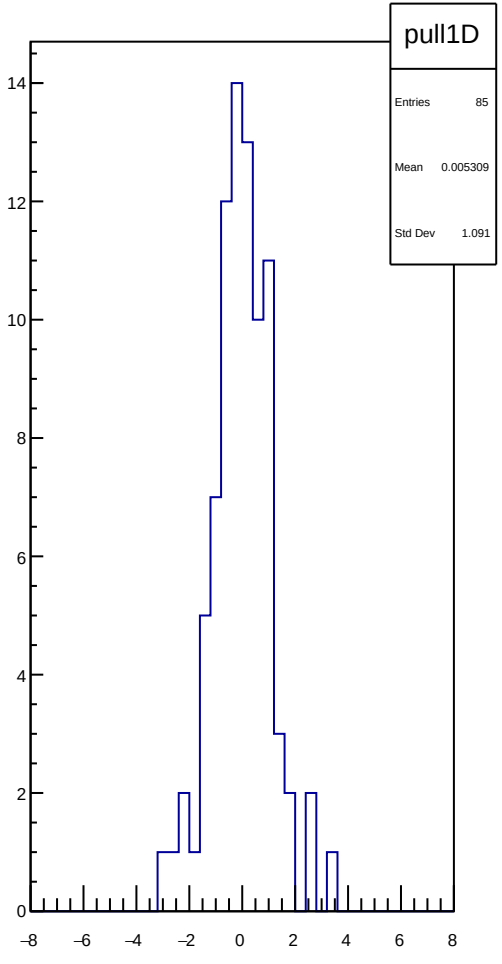

asym_sam7_correction_rms vs run
χ^2 / ndf 1.066e+04 / 84
p0 738 ± 0.5725
950
900
850
800
750
700
650

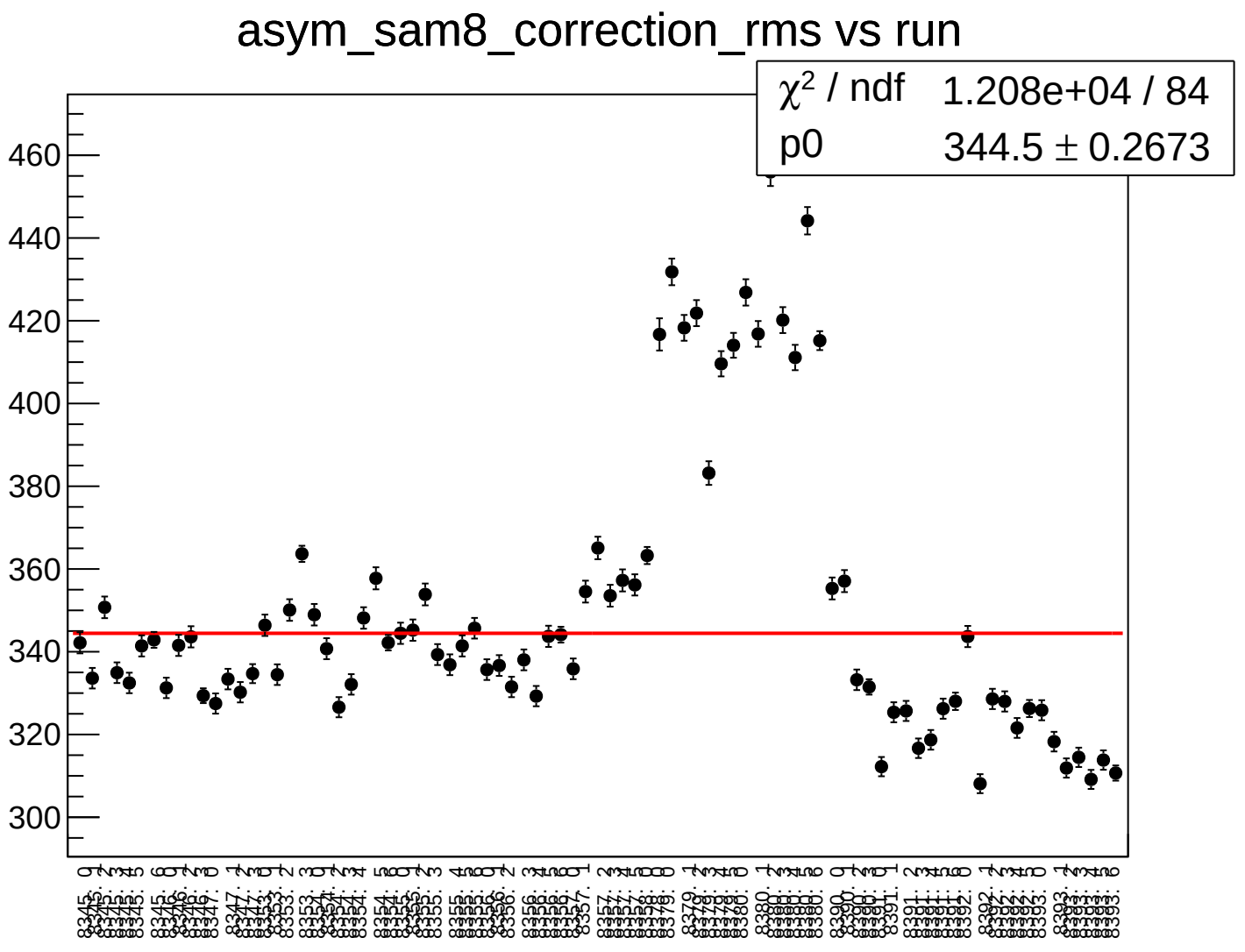

reg_asym_sam8_mean vs run
χ² / ndf 71.22 / 84
p0 −297.5 ± 77.45
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean 108.7
Std Dev 78.61
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

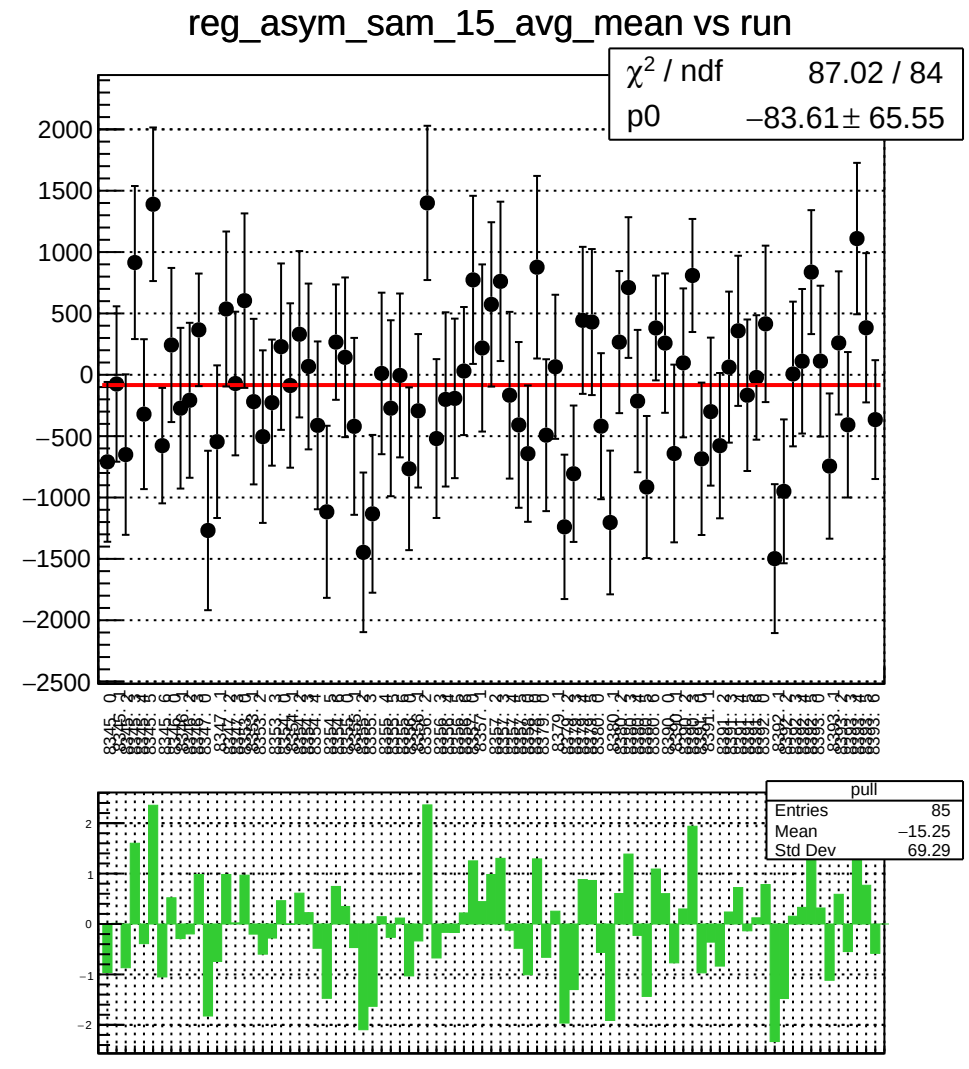

pull1D
Entries 85
Mean −0.015
Std Dev 0.9152
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

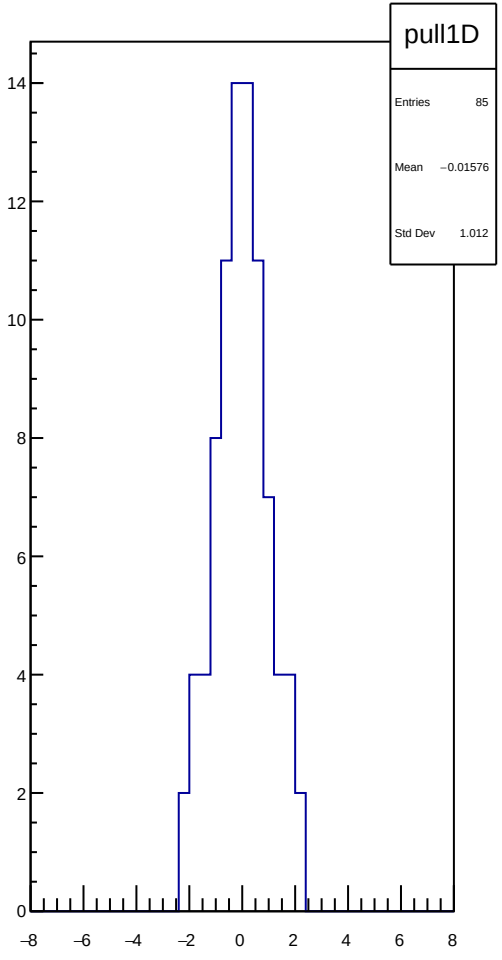

reg_asym_sam8_rms vs run
χ² / ndf 4433 / 84
p0 70.72 ± 0.05476
82
80
78
76
74
72
70
68
66
64
62

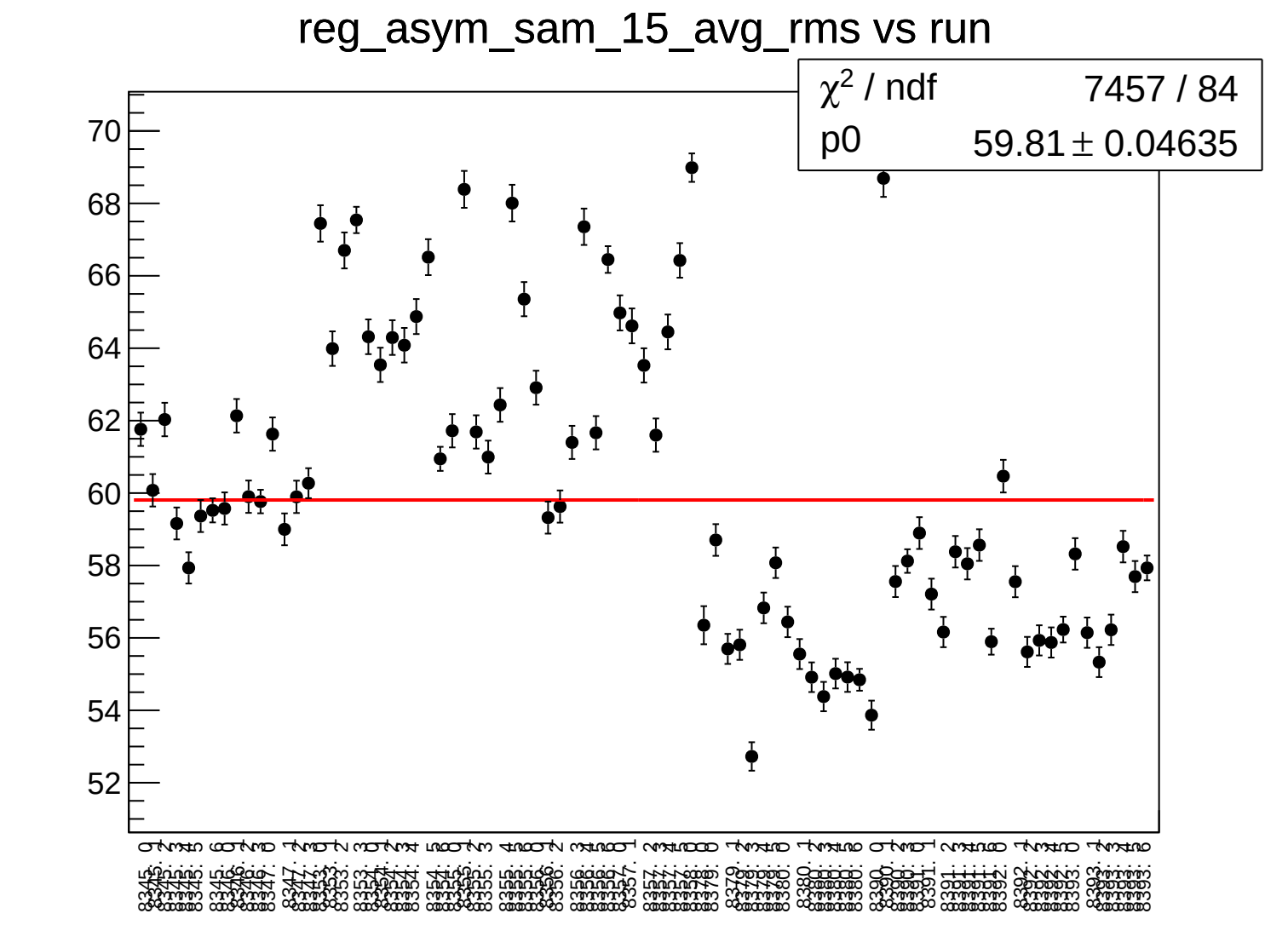

asym_sam8_correction_mean vs run
χ² / ndf 101.3 / 84
p0 −1118 ± 378.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −949.7
Std Dev 1007
3
2
1
0
−1
−2
−3

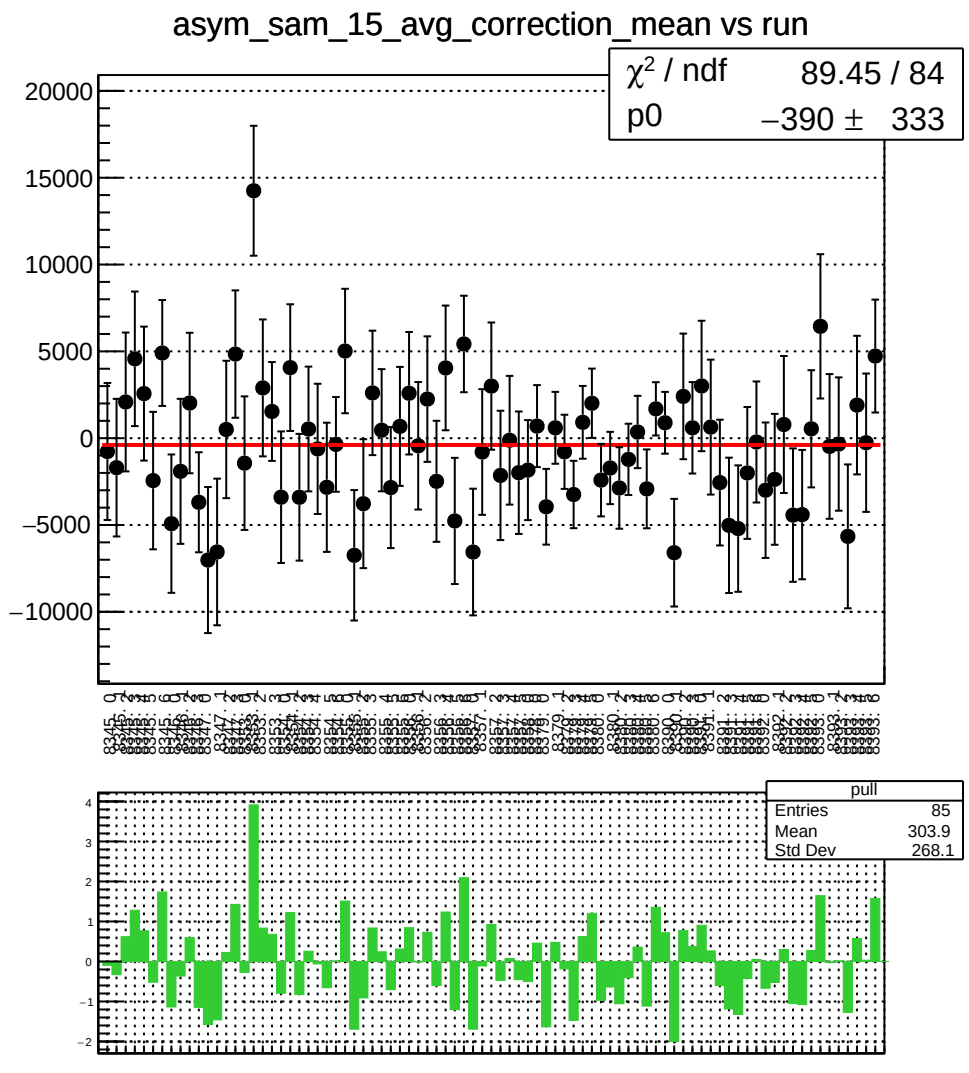

pull1D
Entries 85
Mean 0.005309
Std Dev 1.091
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

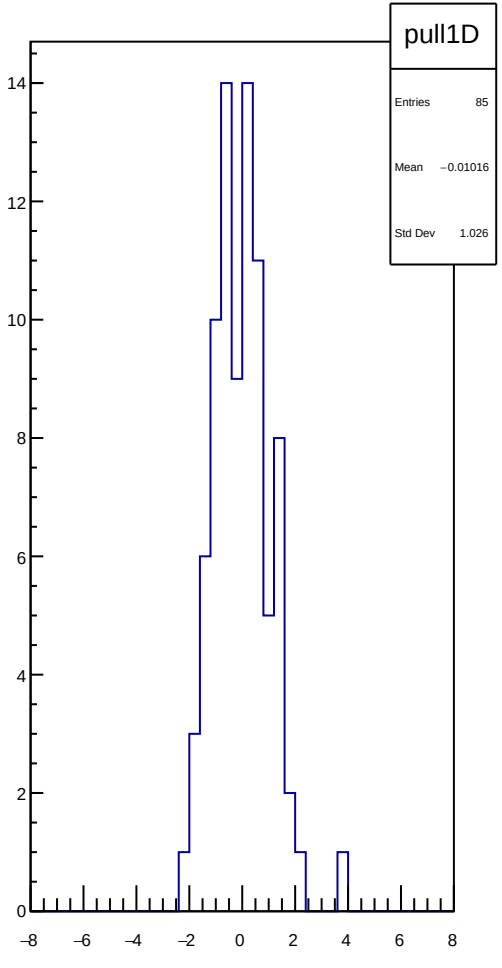

asym_sam8_correction_rms vs run
χ² / ndf 1.208e+04 / 84
p0 344.5 ± 0.2673
460
440
420
400
380
360
340
320
300

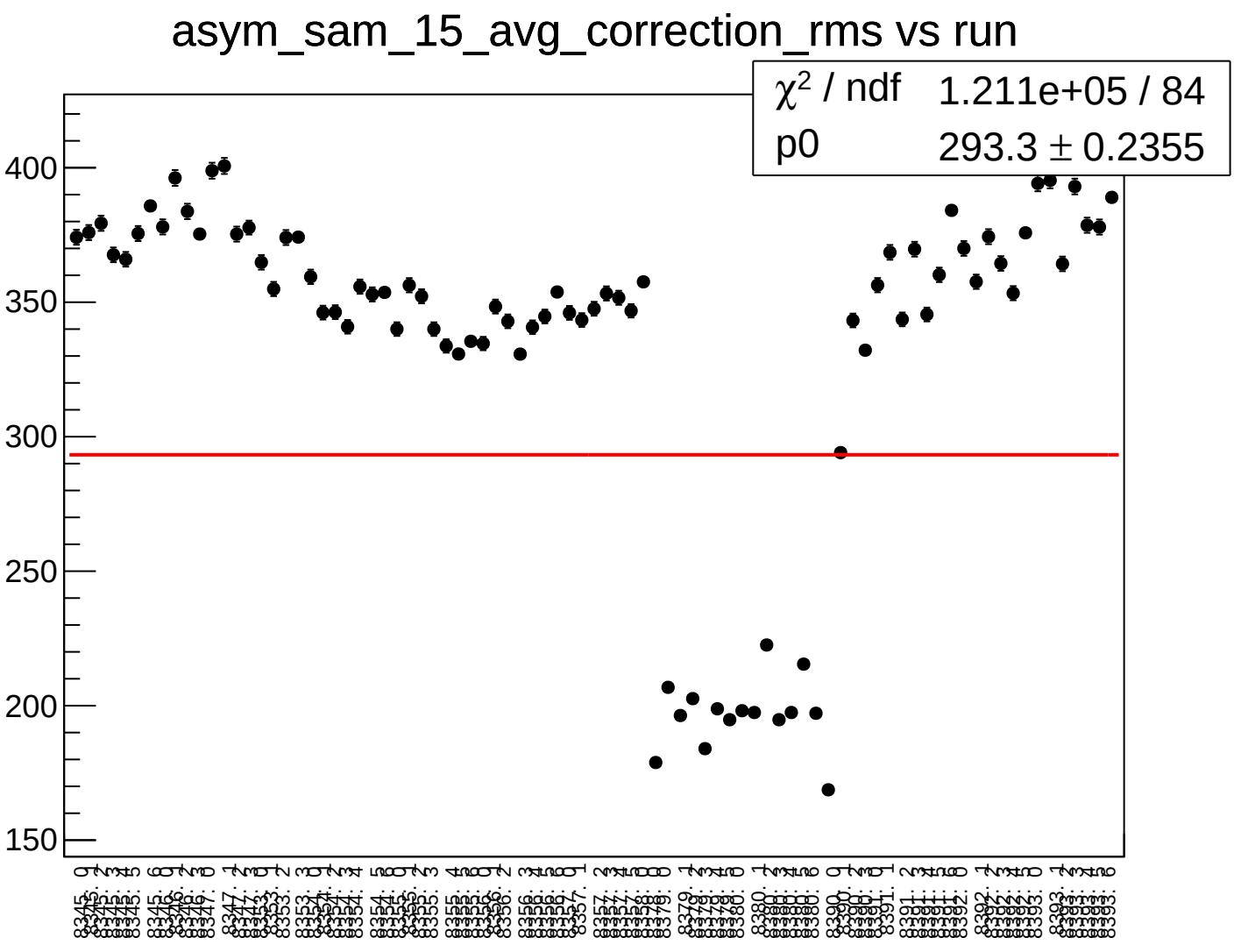

reg_asym_sam_15_avg_mean vs run
χ² / ndf 87.02 / 84
p0 −83.61 ± 65.55
pull
Entries 85
Mean −15.25
Std Dev 69.29

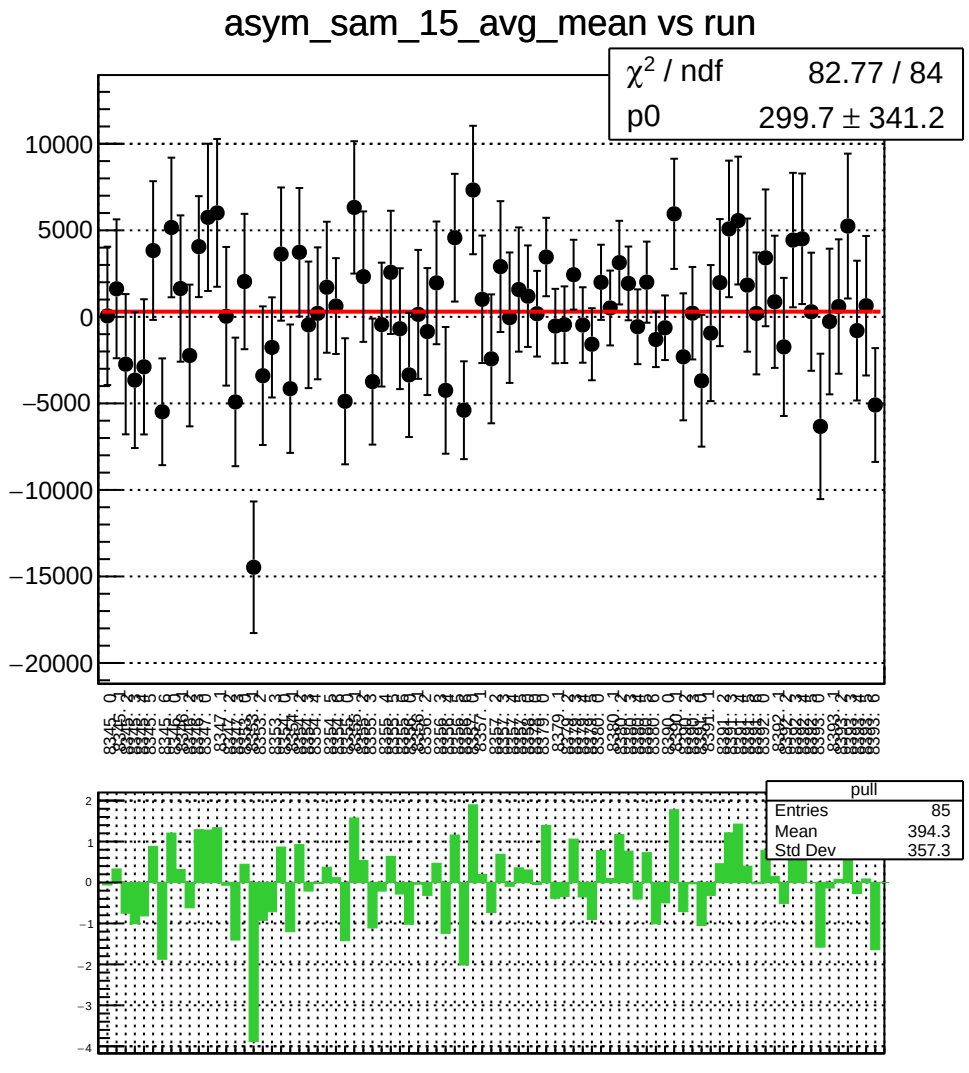

pull1D
Entries 85
Mean −0.01576
Std Dev 1.012

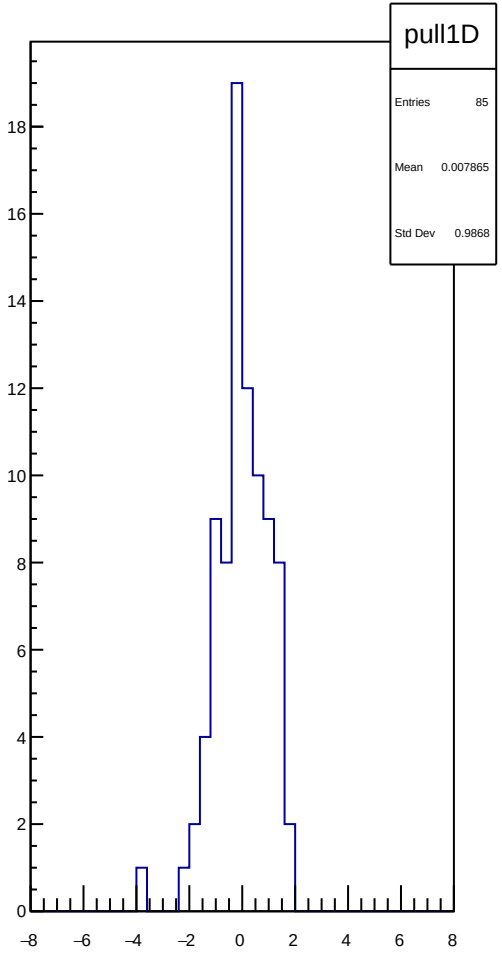

reg_asym_sam_15_avg_rms vs run
χ^2 / ndf 7457 / 84
p0 59.81 ± 0.04635
70
68
66
64
62
60
58
56
54
52

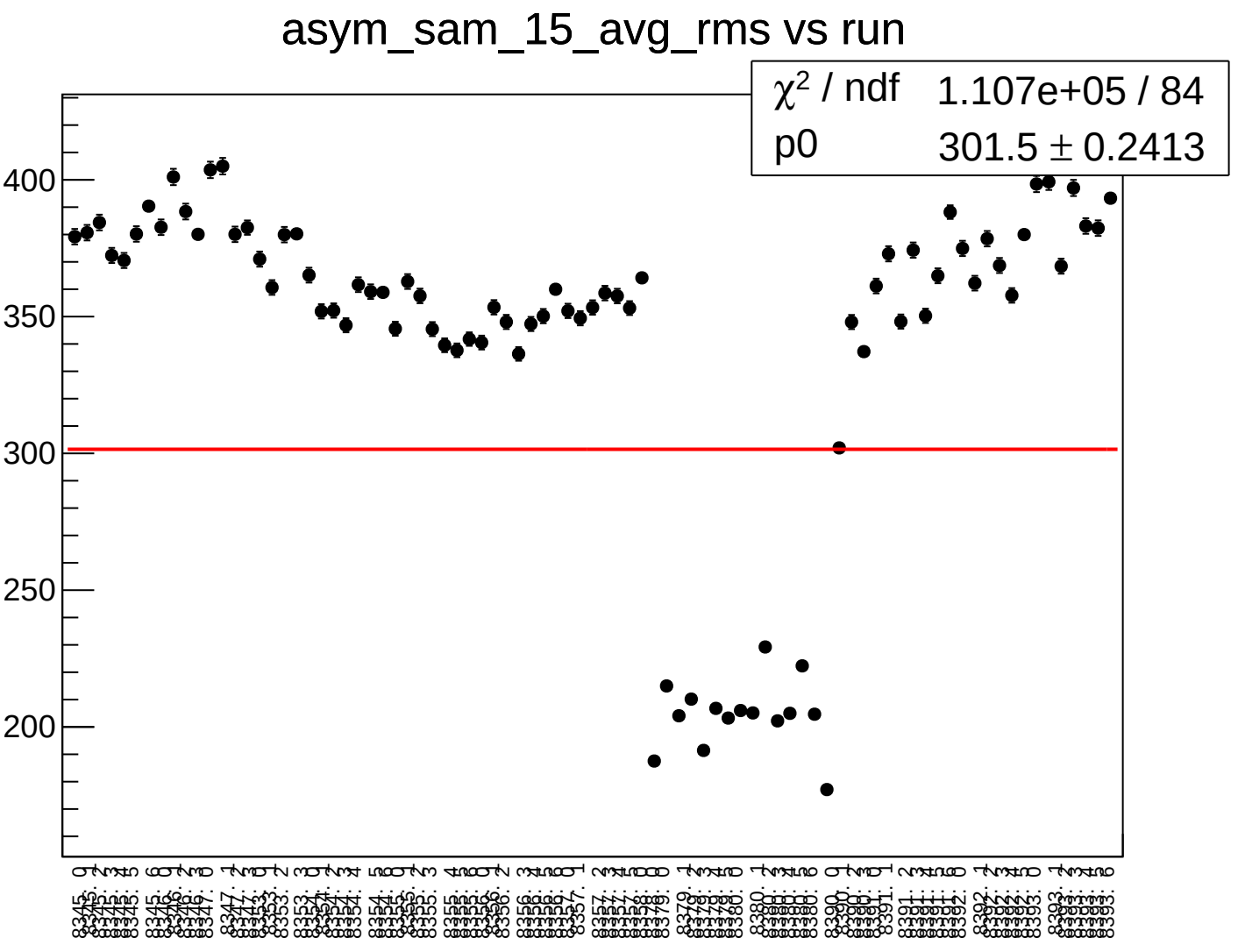

asym_sam_15_avg_correction_mean vs run
χ² / ndf 89.45 / 84
p0 −390 ± 333
pull
Entries 85
Mean 303.9
Std Dev 268.1

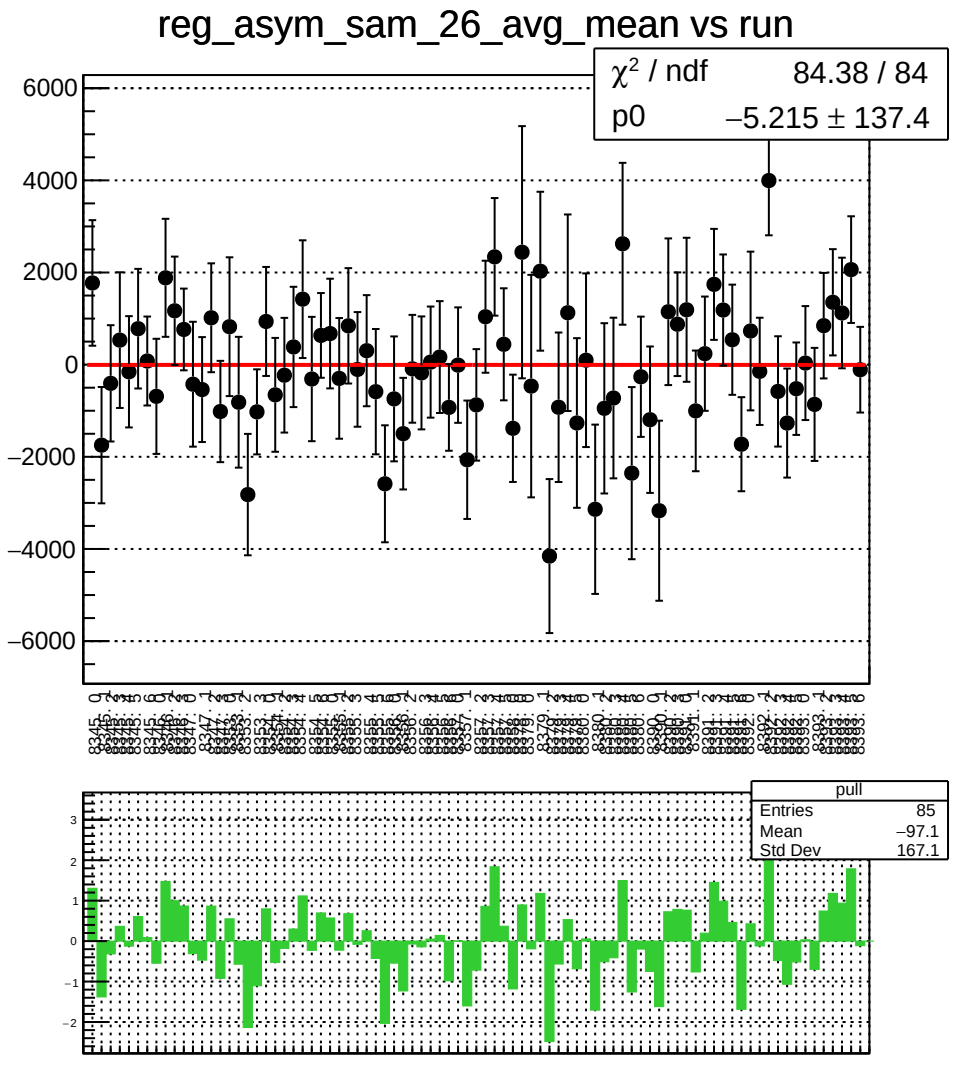

pull1D
Entries 85
Mean −0.01016
Std Dev 1.026

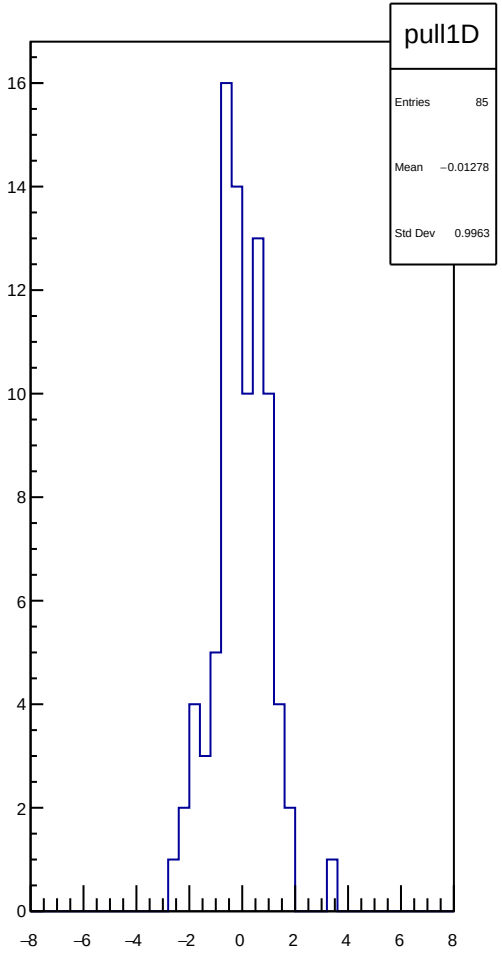

asym_sam_15_avg_correction_rms vs run
χ² / ndf 1.211e+05 / 84
p0 293.3 ± 0.2355
400
350
300
250
200
150

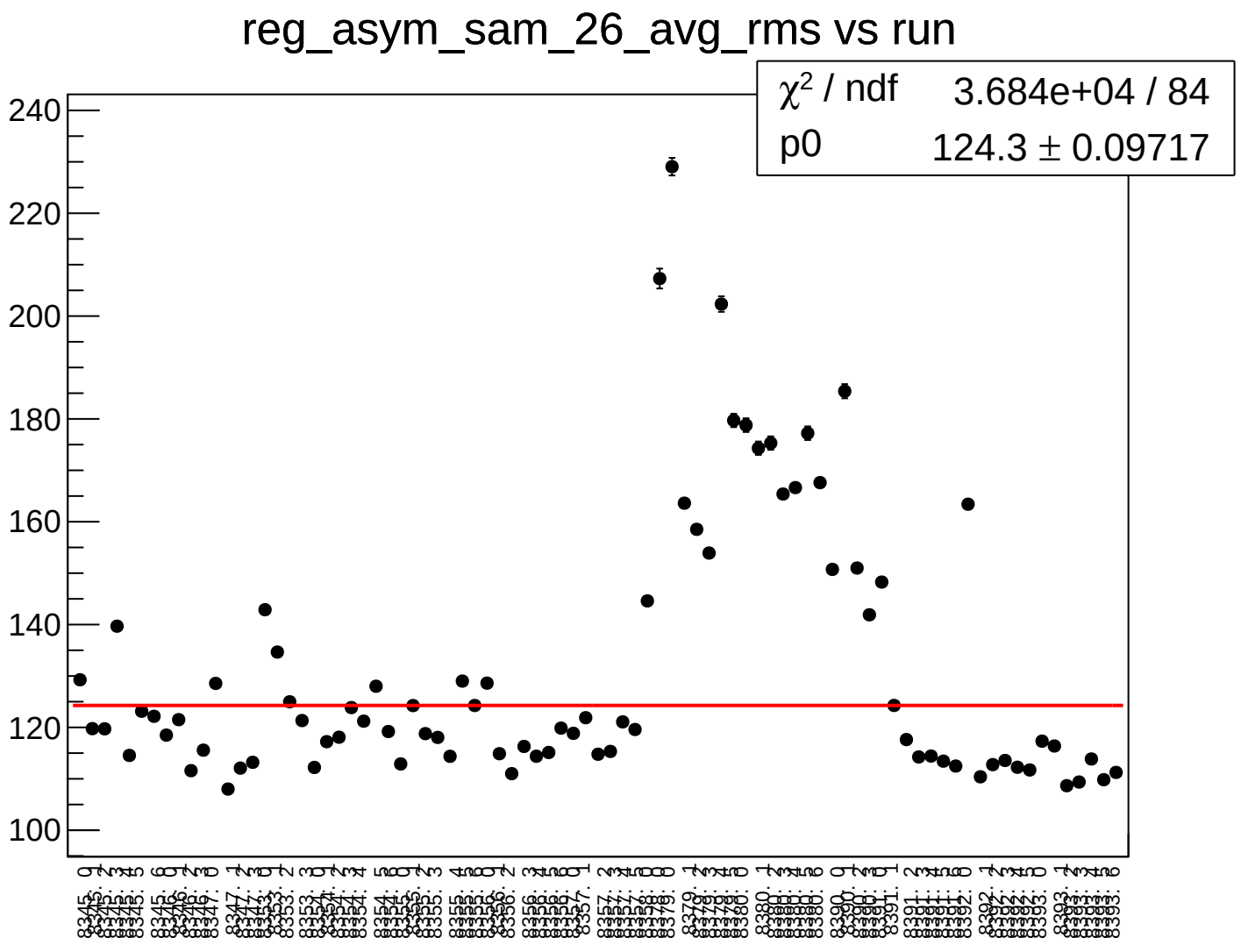

asym_sam_15_avg_mean vs run
χ² / ndf 82.77 / 84
p0 299.7 ± 341.2
pull
Entries 85
Mean 394.3
Std Dev 357.3

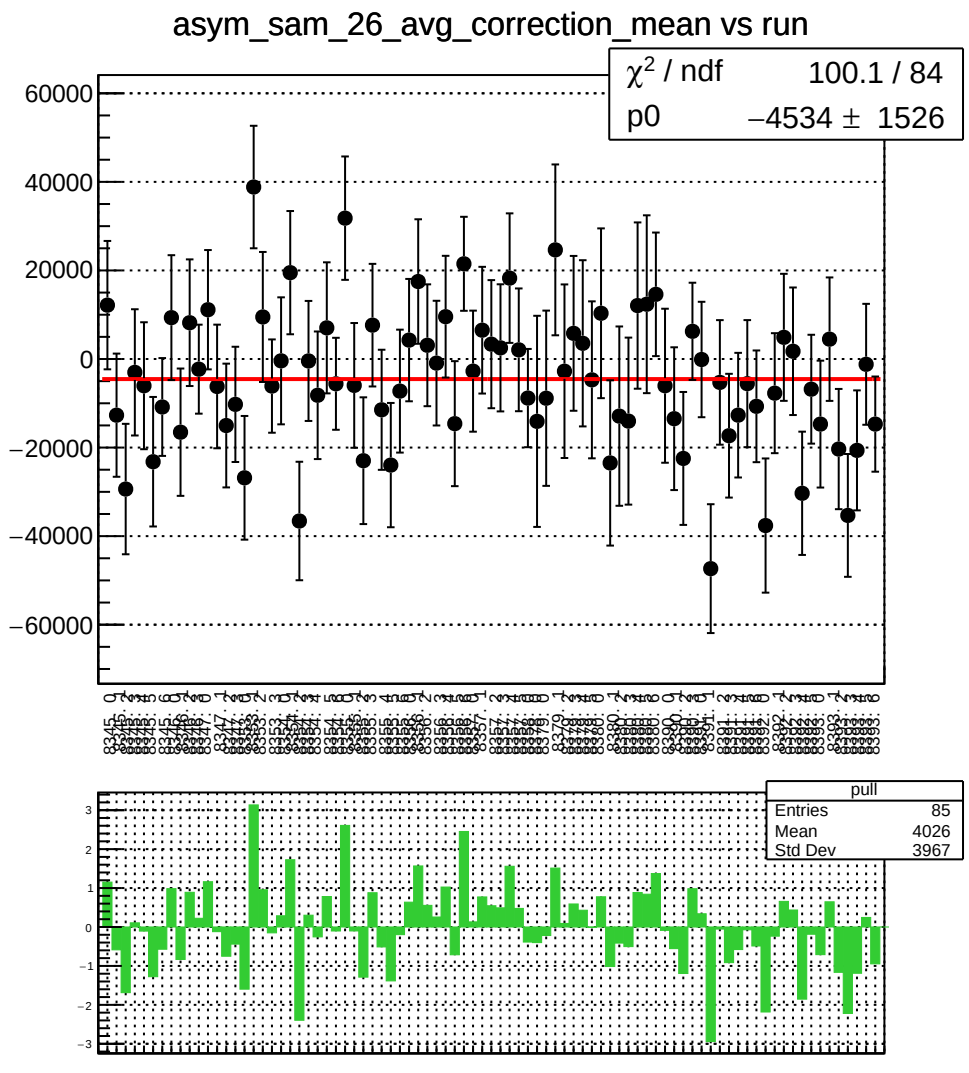

pull1D
Entries 85
Mean 0.007865
Std Dev 0.9868

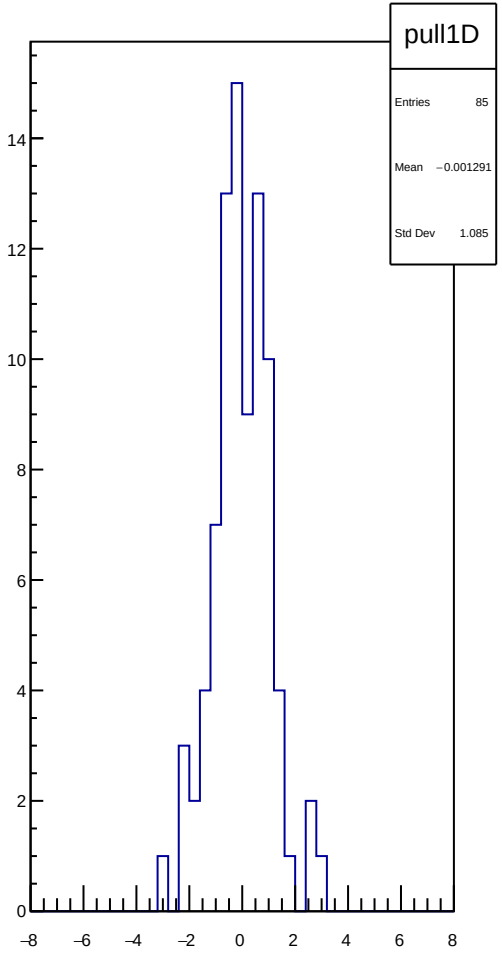

asym_sam_15_avg_rms vs run
χ² / ndf 1.107e+05 / 84
p0 301.5 ± 0.2413
400
350
300
250
200

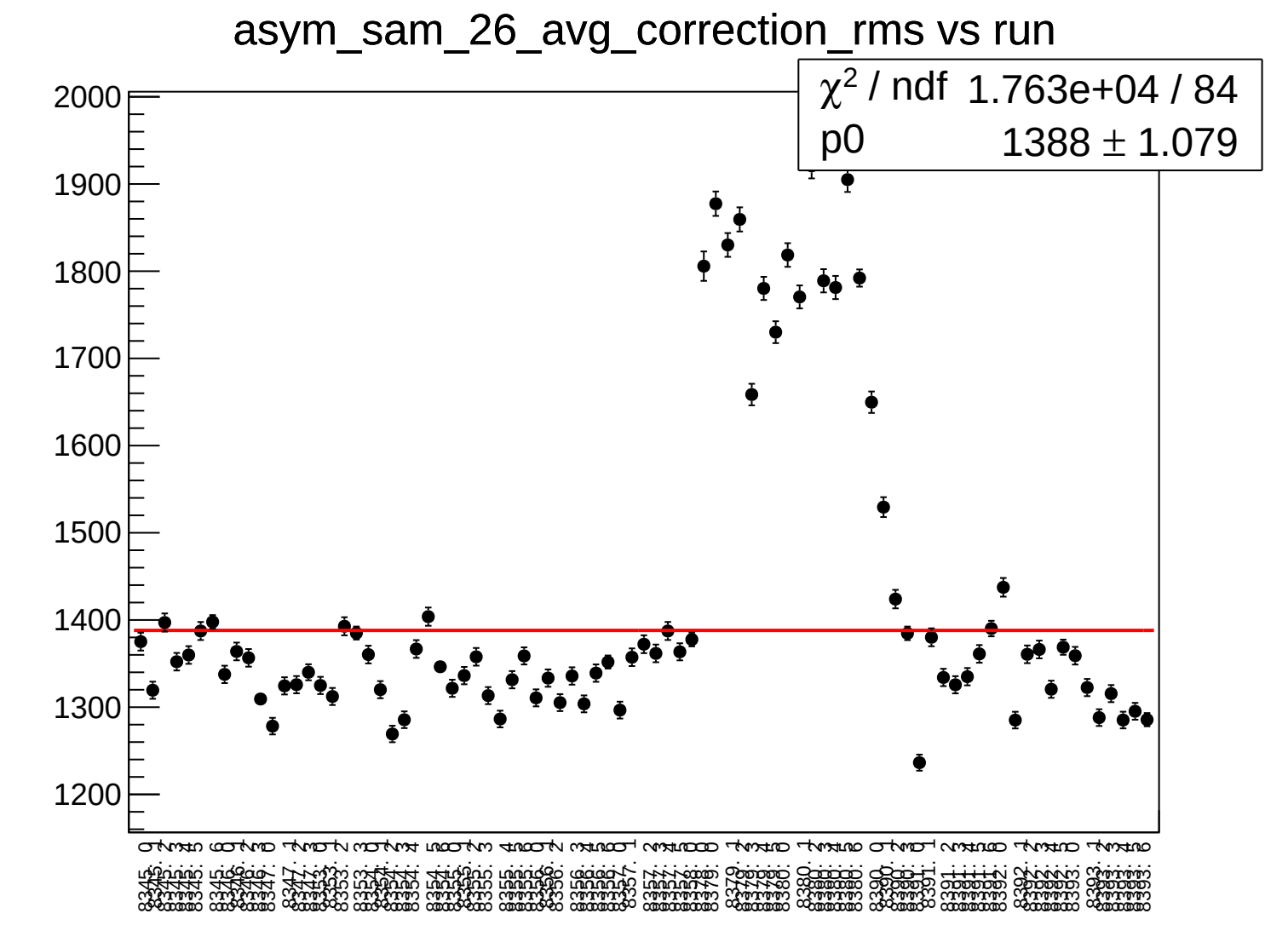

reg_asym_sam_26_avg_mean vs run
χ² / ndf 84.38 / 84
p0 −5.215 ± 137.4
pull
Entries 85
Mean −97.1
Std Dev 167.1

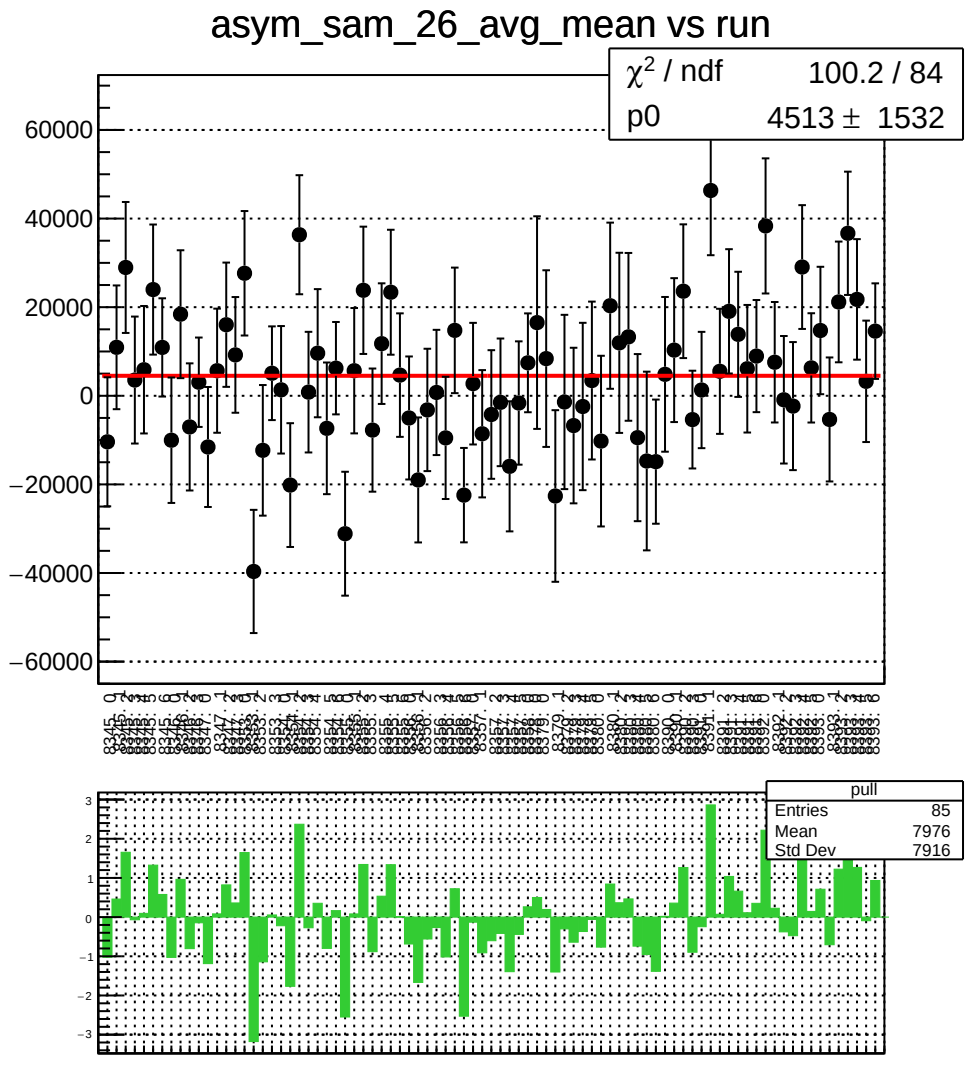

pull1D
Entries 85
Mean −0.01278
Std Dev 0.9963

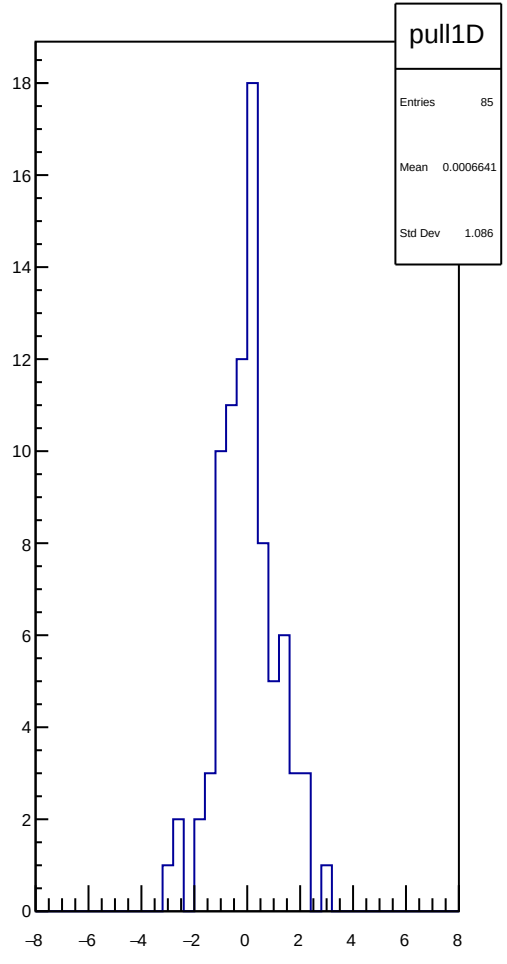

reg_asym_sam_26_avg_rms vs run
χ^2 / ndf 3.684e+04 / 84
p0 124.3 ± 0.09717
240
220
200
180
160
140
120
100

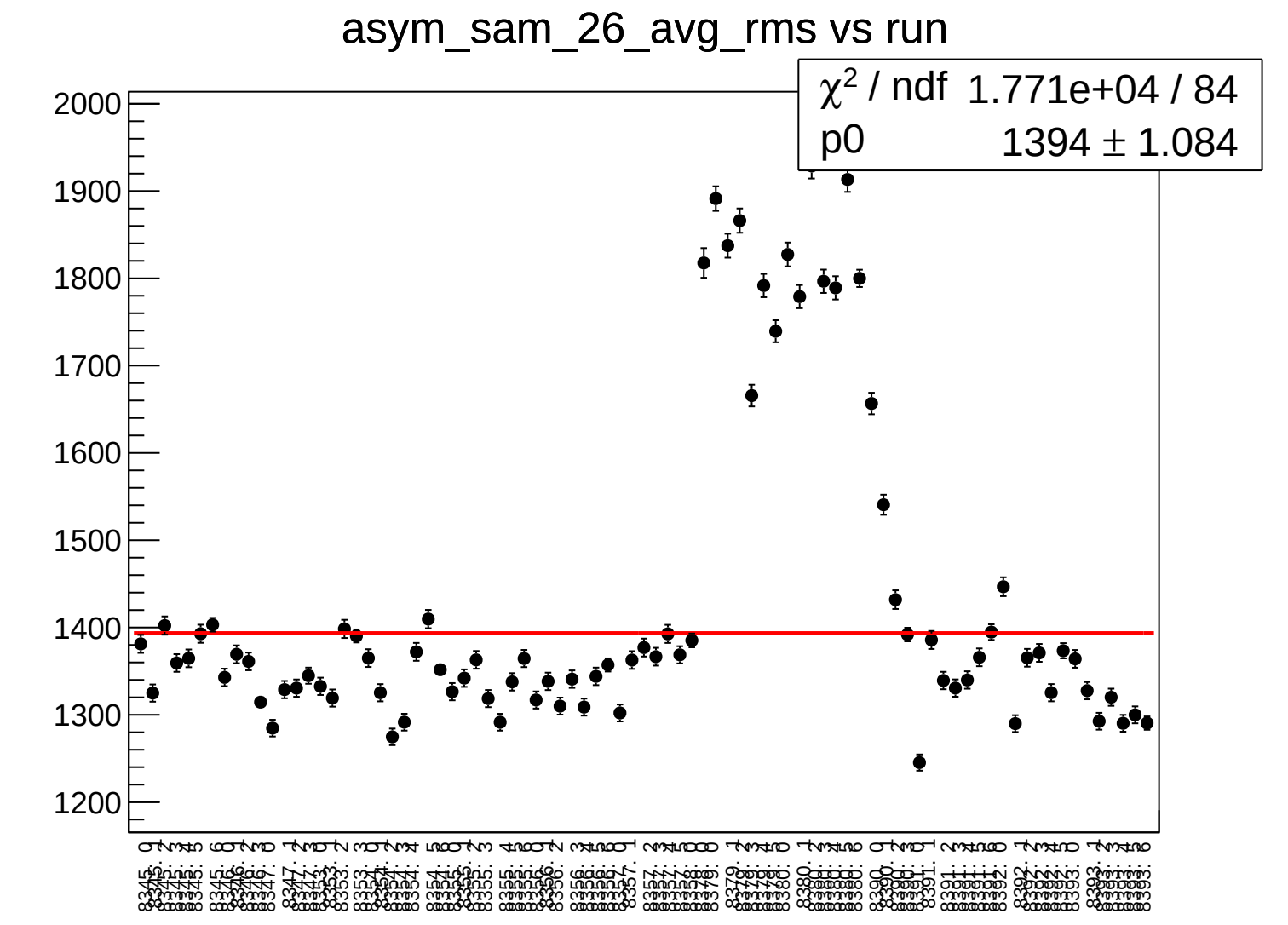

asym_sam_26_avg_correction_mean vs run
χ² / ndf 100.1 / 84
p0 −4534 ± 1526
pull
Entries 85
Mean 4026
Std Dev 3967

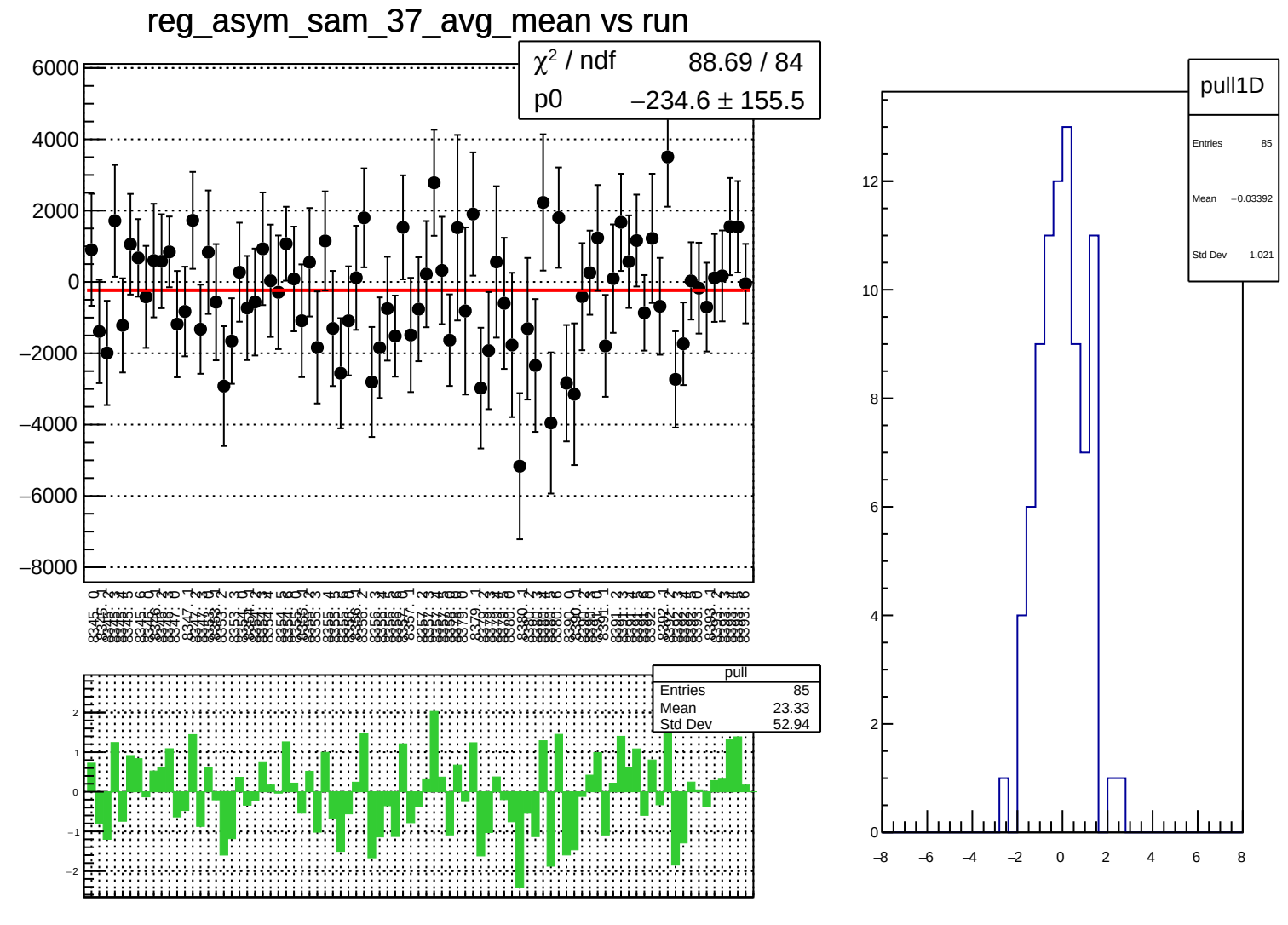

pull1D
Entries 85
Mean −0.001291
Std Dev 1.085

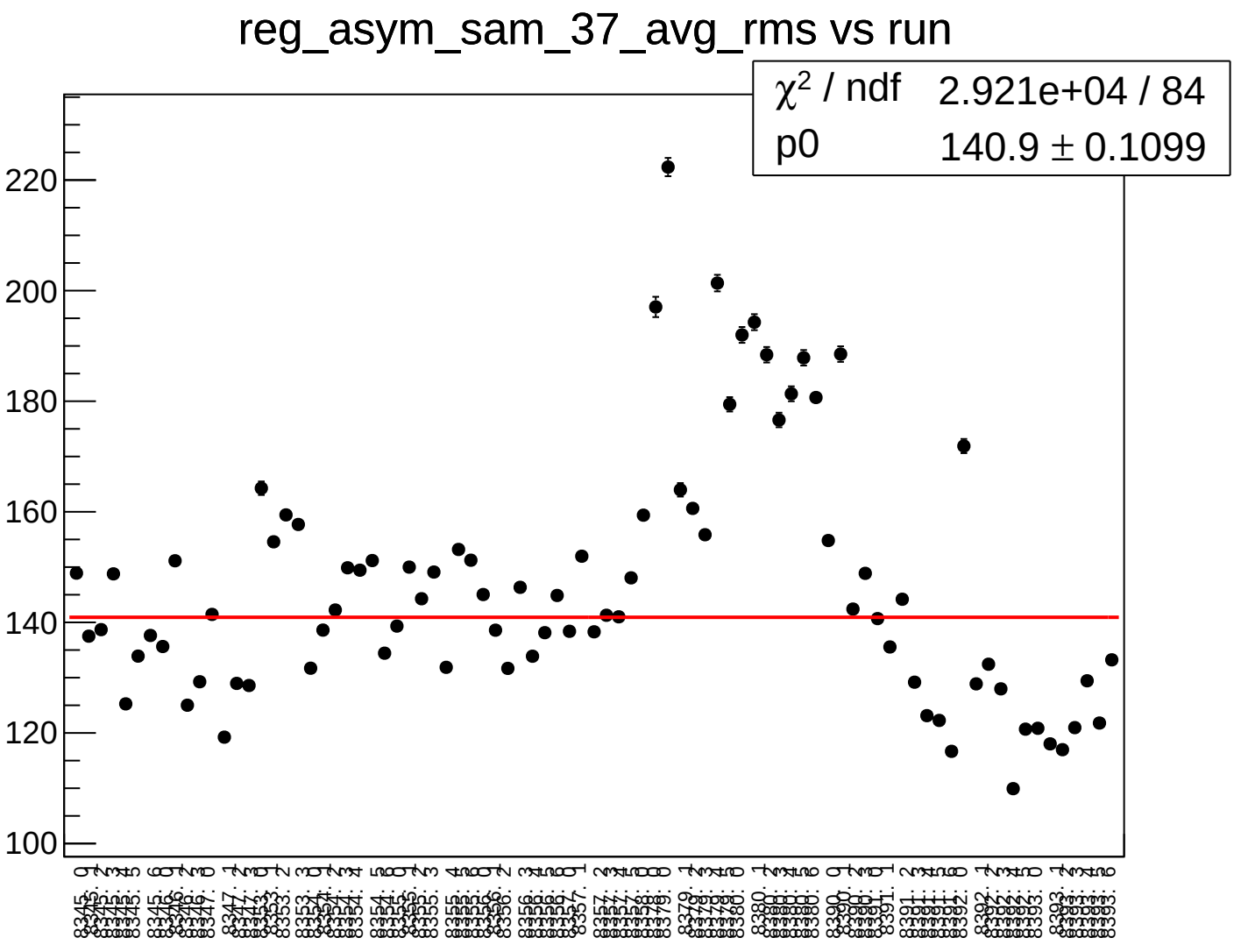

asym_sam_26_avg_correction_rms vs run
χ² / ndf 1.763e+04 / 84
p0 1388 ± 1.079
2000
1900
1800
1700
1600
1500
1400
1300
1200

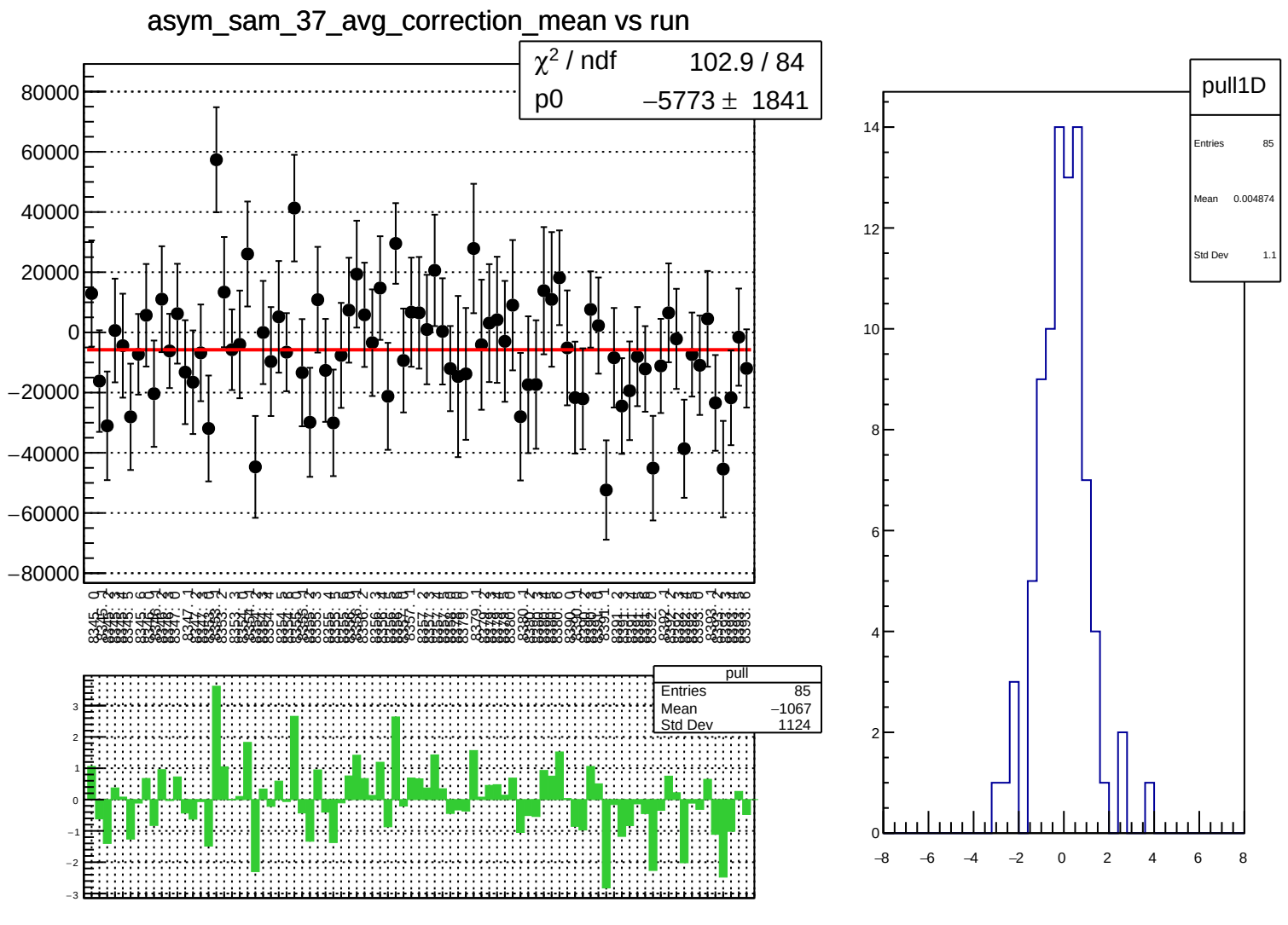

asym_sam_26_avg_mean vs run
χ² / ndf 100.2 / 84
p0 4513 ± 1532
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 7976
Std Dev 7916
3
2
1
0
−1
−2
−3

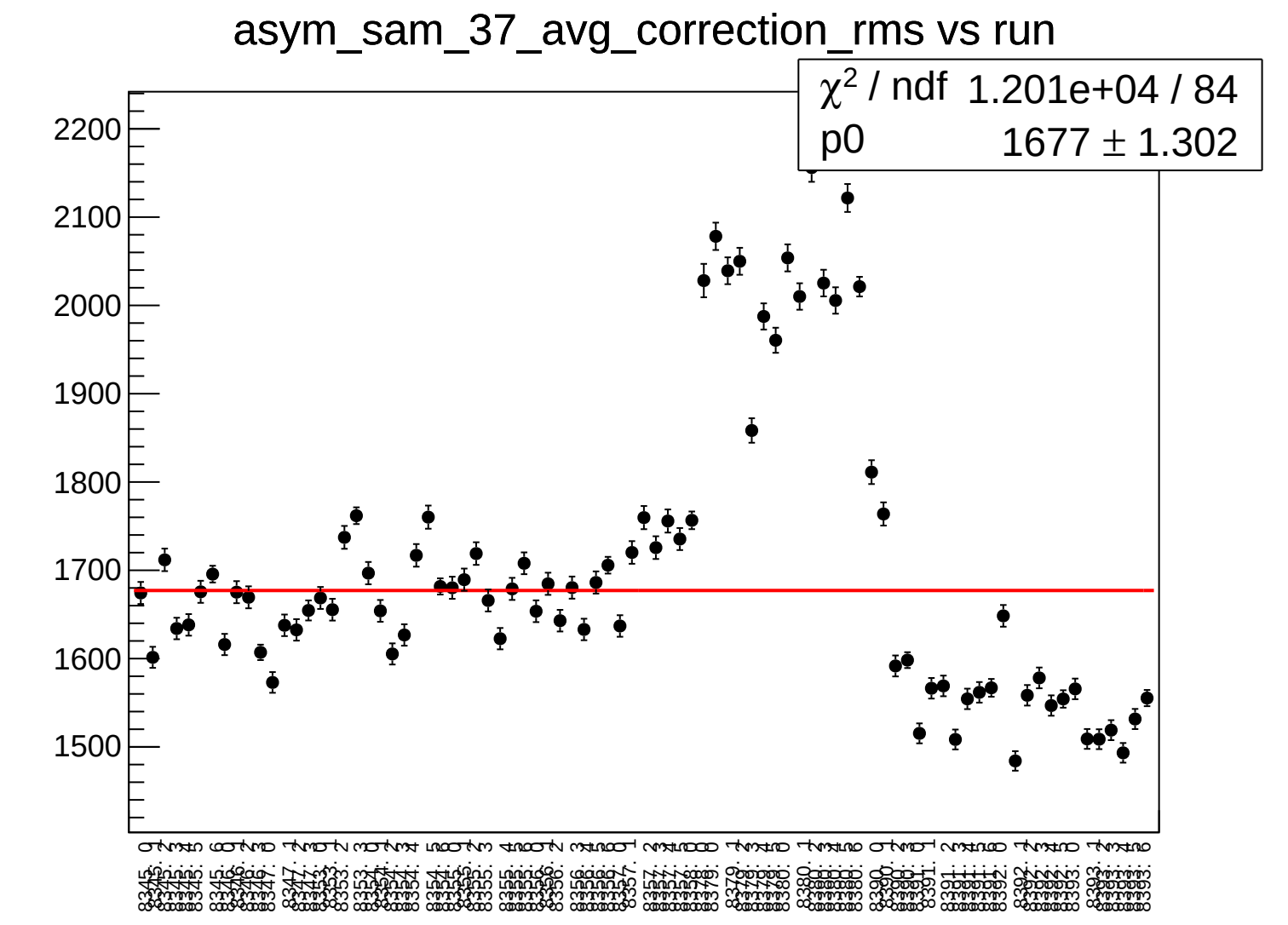

pull1D
Entries 85
Mean 0.0006641
Std Dev 1.086
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

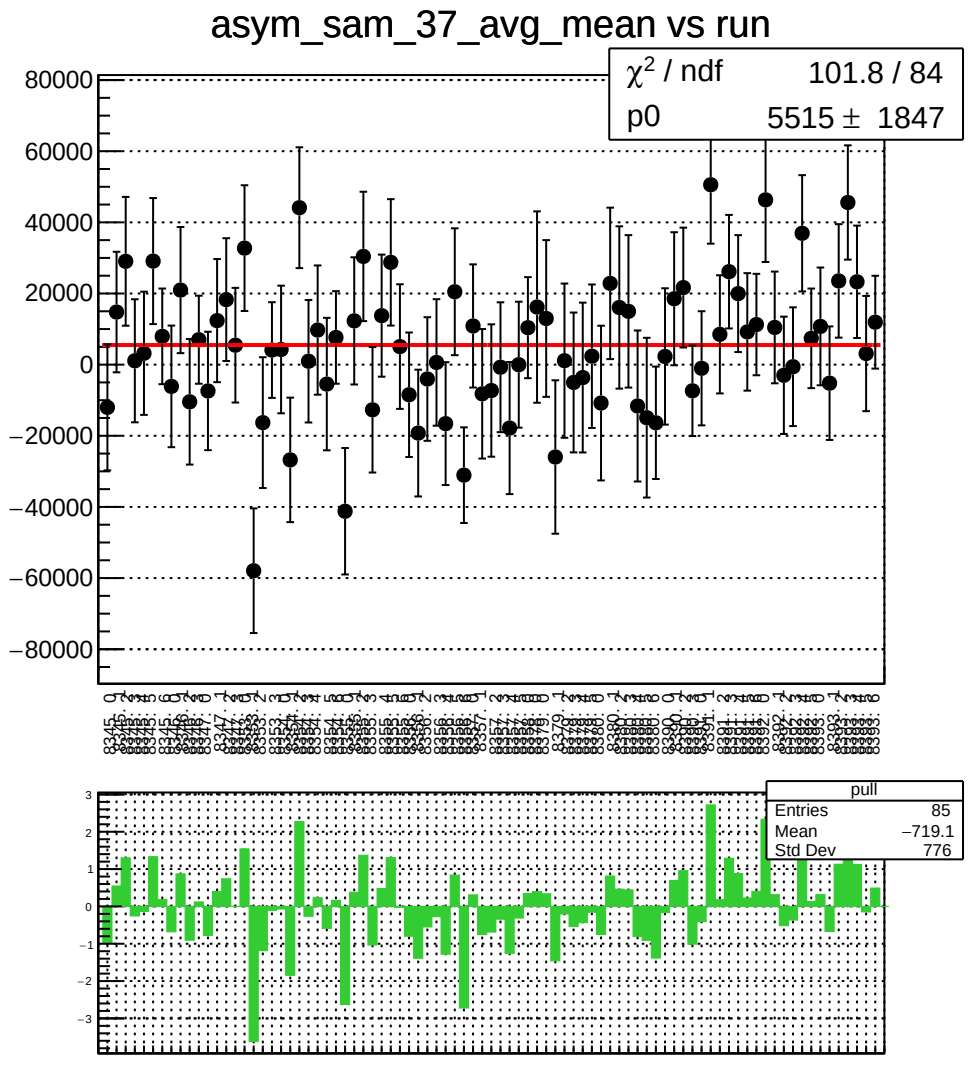

asym_sam_26_avg_rms vs run
χ² / ndf 1.771e+04 / 84
p0 1394 ± 1.084
2000
1900
1800
1700
1600
1500
1400
1300
1200

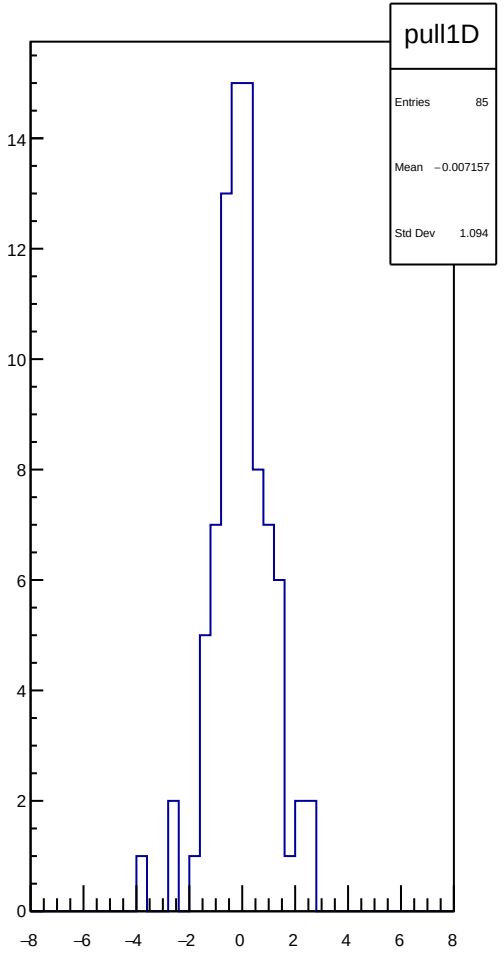

reg_asym_sam_37_avg_mean vs run
χ² / ndf 88.69 / 84
p0 −234.6 ± 155.5
pull
Entries 85
Mean 23.33
Std Dev 52.94
pull1D
Entries 85
Mean −0.03392
Std Dev 1.021

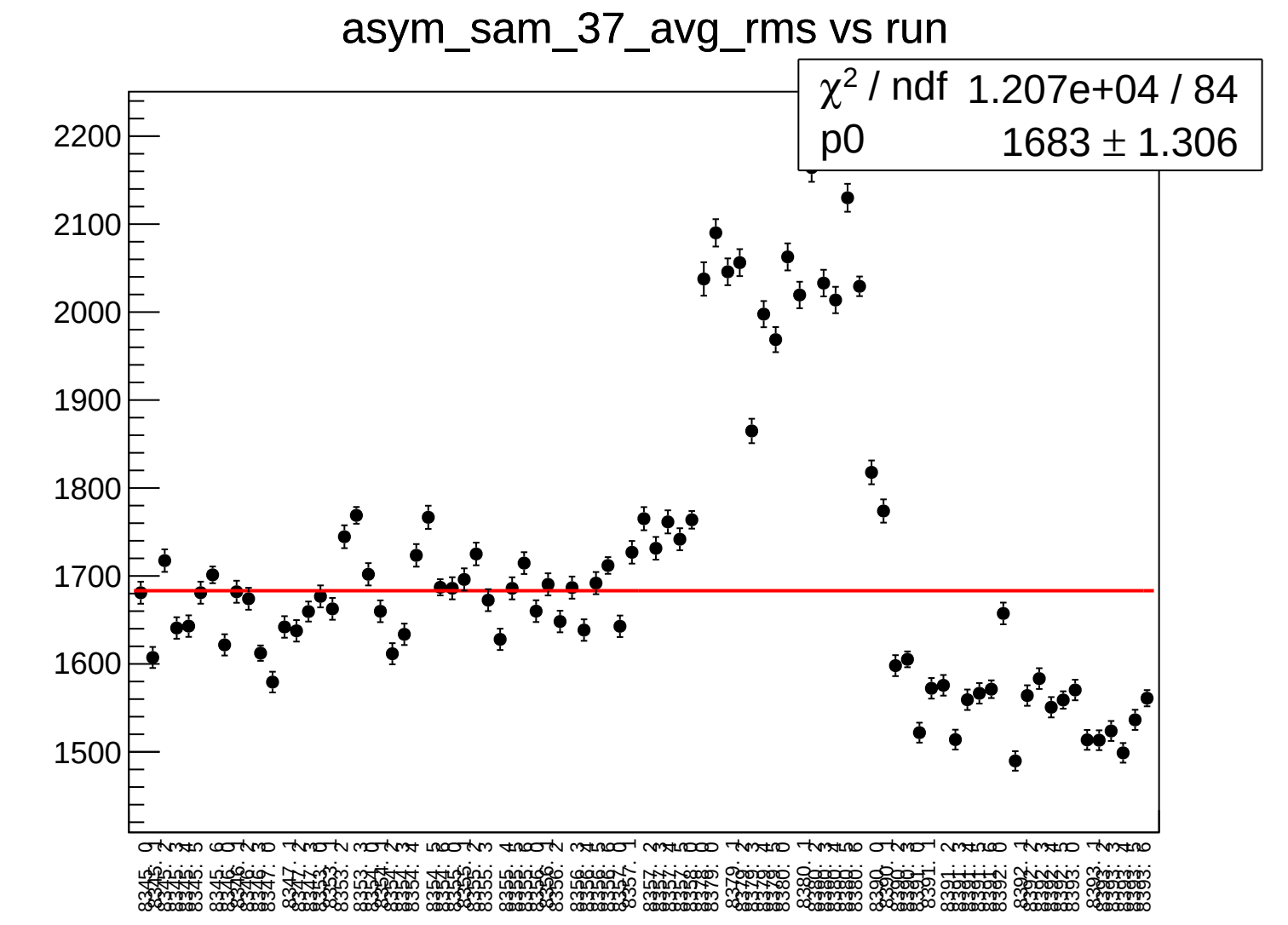

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 2.921e+04 / 84
p0 140.9 ± 0.1099
220
200
180
160
140
120
100

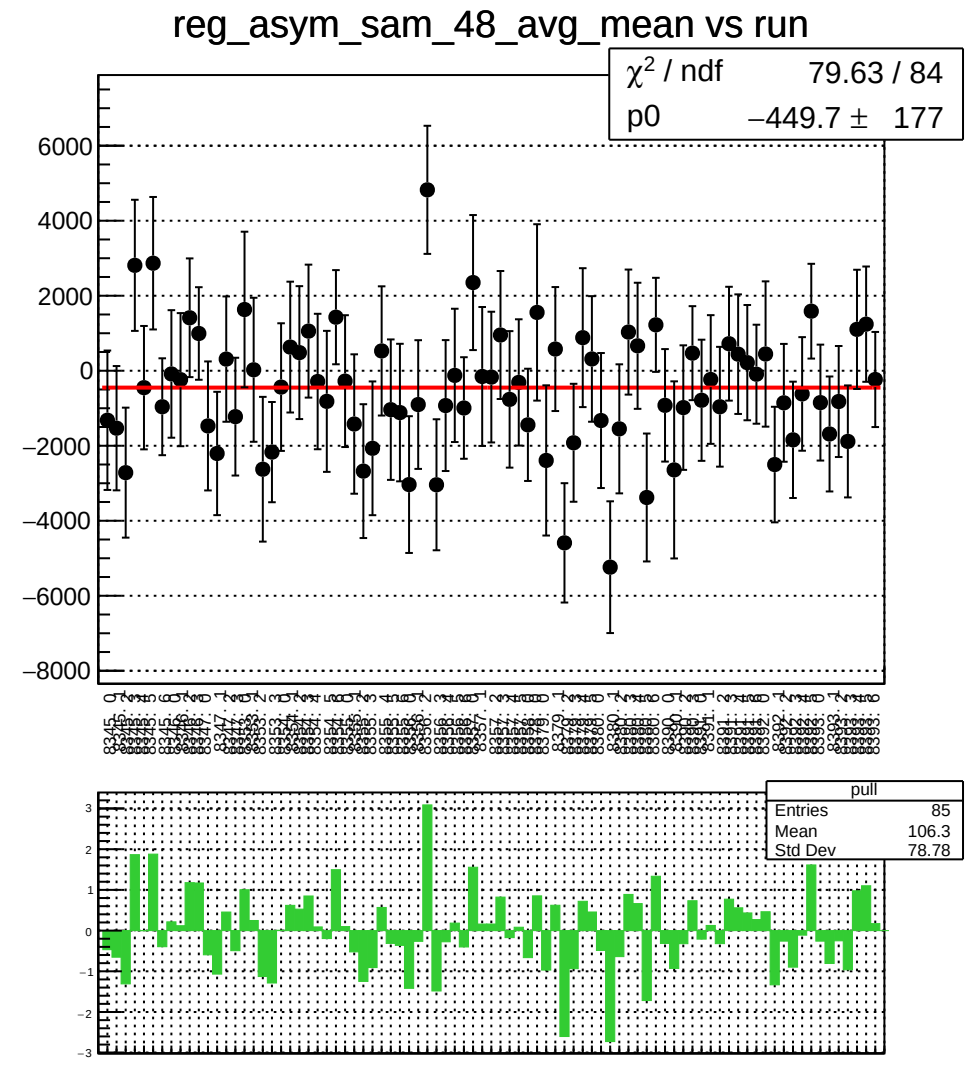

asym_sam_37_avg_correction_mean vs run
χ² / ndf 102.9 / 84
p0 −5773 ± 1841
pull
Entries 85
Mean −1067
Std Dev 1124
pull1D
Entries 85
Mean 0.004874
Std Dev 1.1

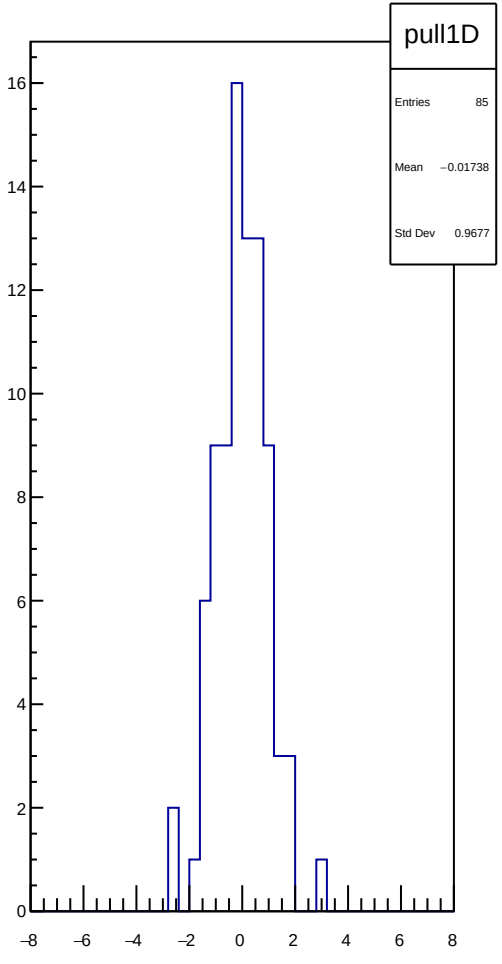

asym_sam_37_avg_correction_rms vs run
χ² / ndf 1.201e+04 / 84
p0 1677 ± 1.302
2200
2100
2000
1900
1800
1700
1600
1500

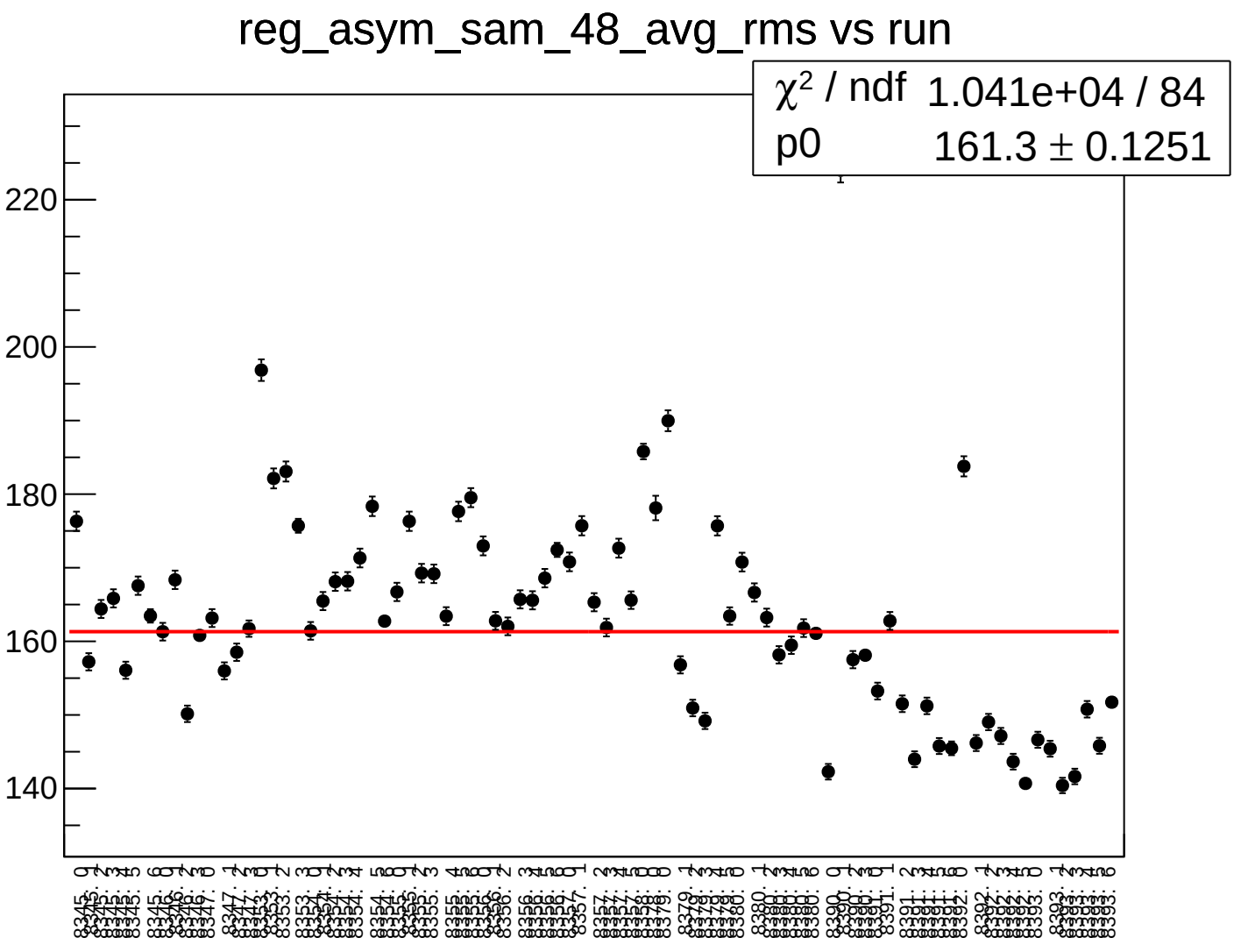

asym_sam_37_avg_mean vs run
χ² / ndf 101.8 / 84
p0 5515 ± 1847
pull
Entries 85
Mean −719.1
Std Dev 776

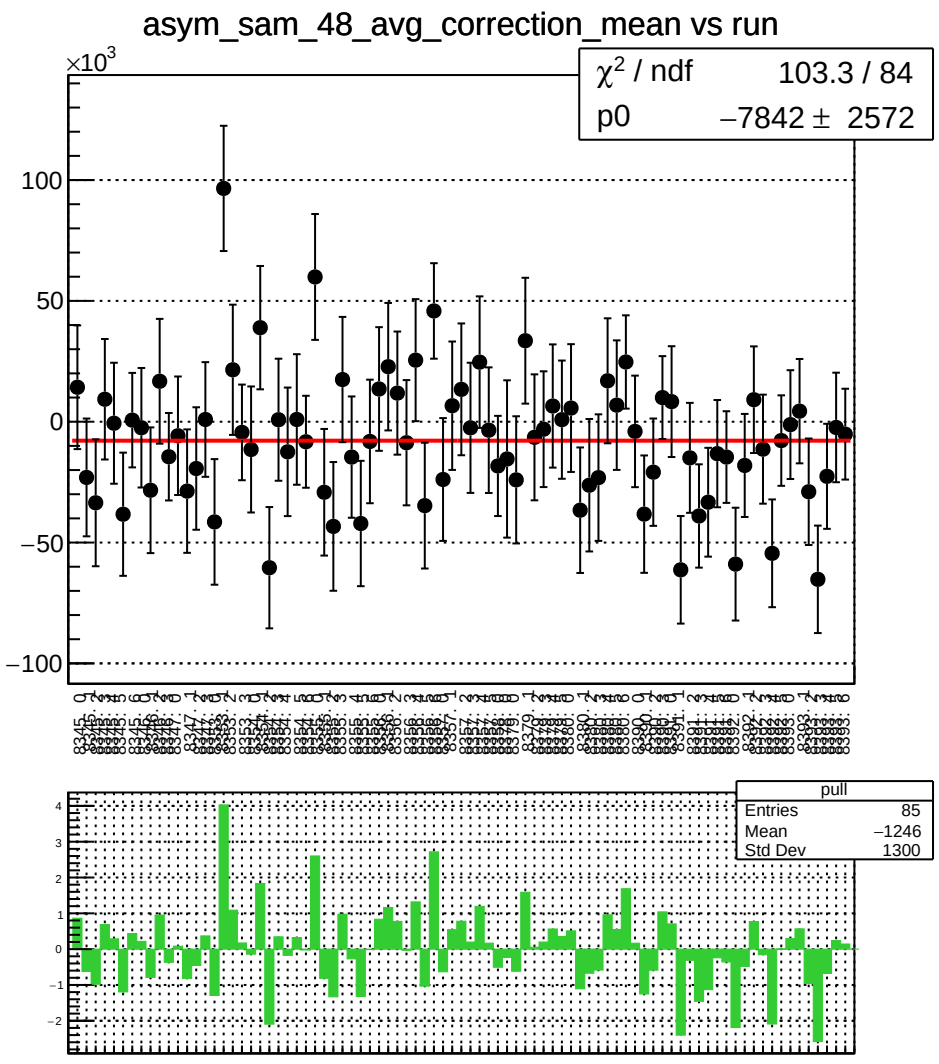

pull1D
Entries 85
Mean −0.007157
Std Dev 1.094

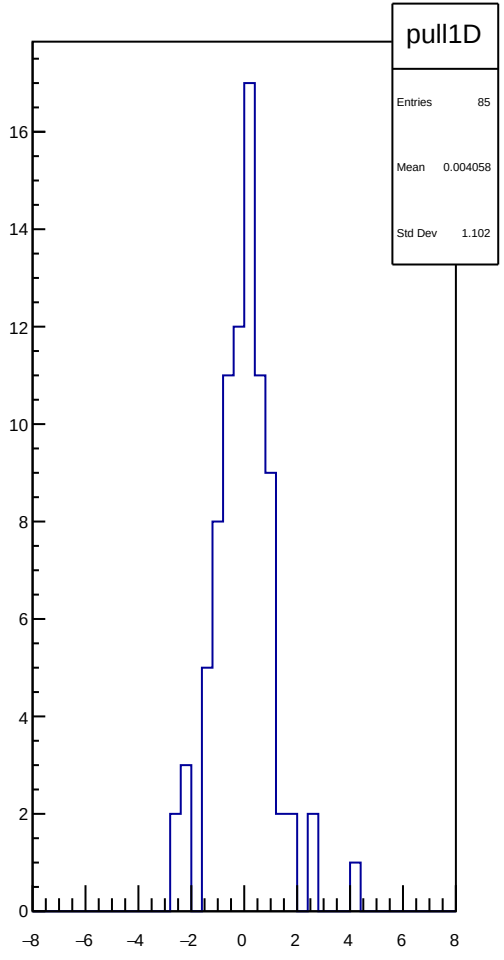

asym_sam_37_avg_rms vs run
χ² / ndf 1.207e+04 / 84
p0 1683 ± 1.306
2200
2100
2000
1900
1800
1700
1600
1500

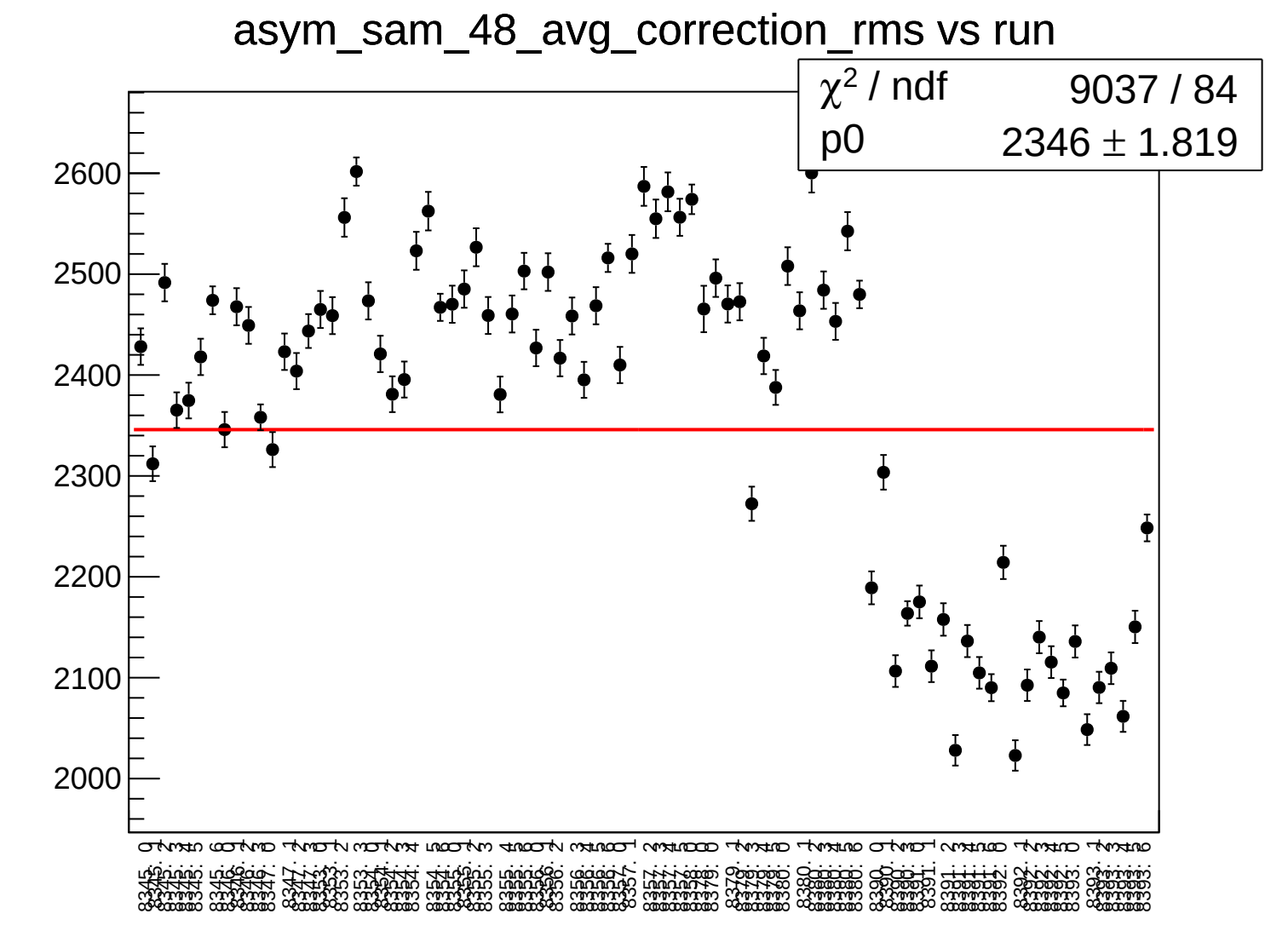

reg_asym_sam_48_avg_mean vs run
χ² / ndf 79.63 / 84
p0 −449.7 ± 177
pull
Entries 85
Mean 106.3
Std Dev 78.78

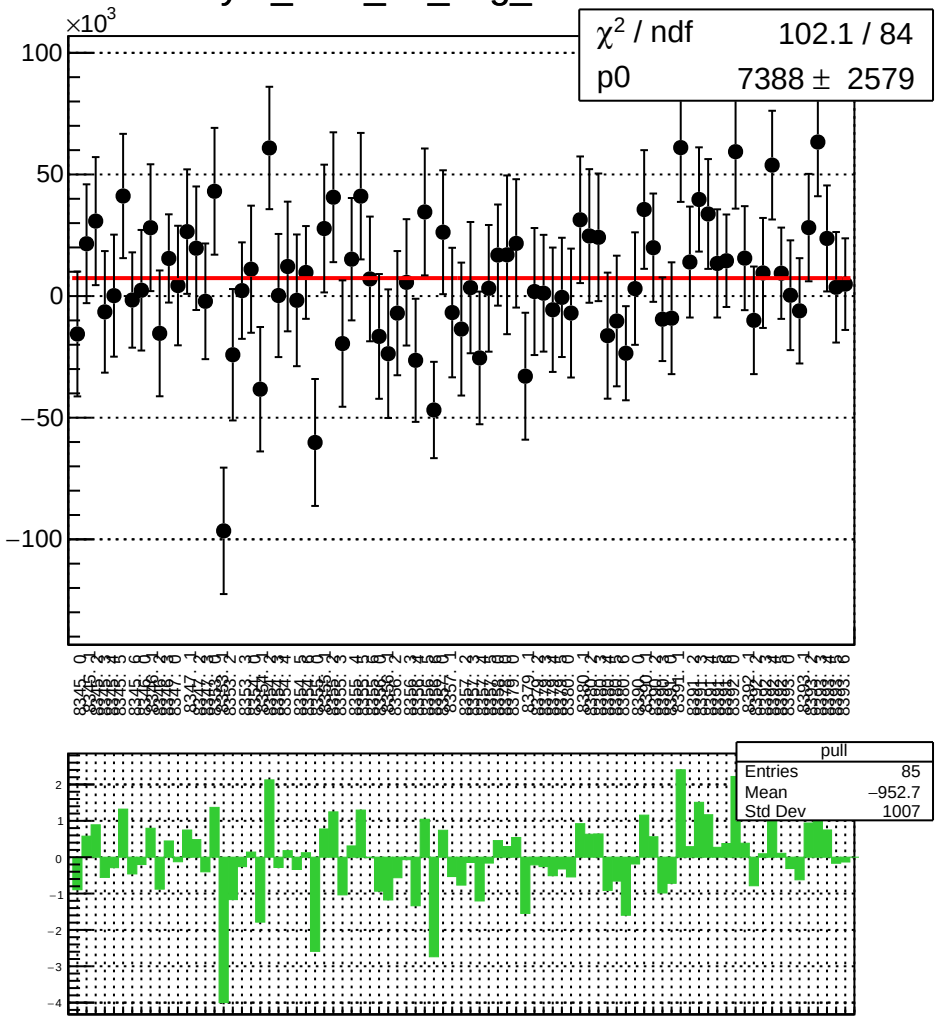

pull1D
Entries 85
Mean −0.01738
Std Dev 0.9677

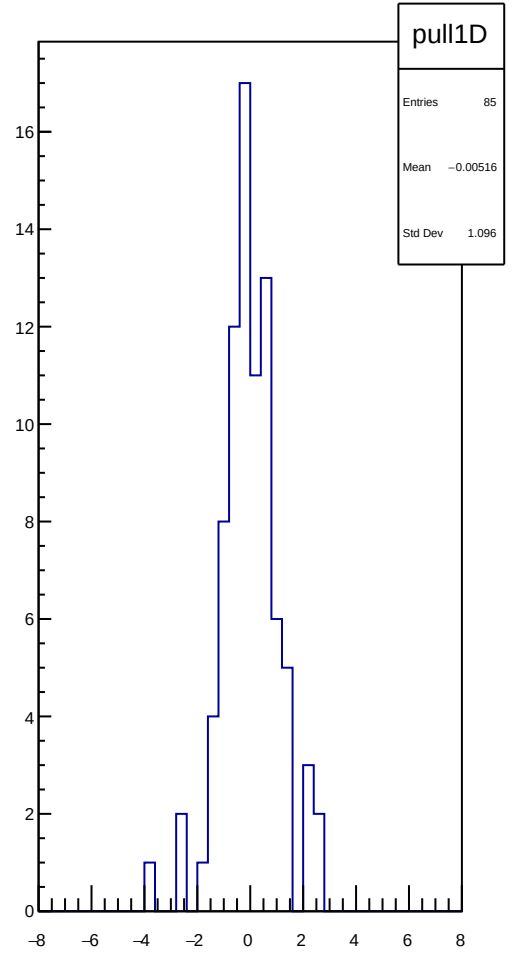

reg_asym_sam_48_avg_rms vs run
χ² / ndf 1.041e+04 / 84
p0 161.3 ± 0.1251
220
200
180
160
140

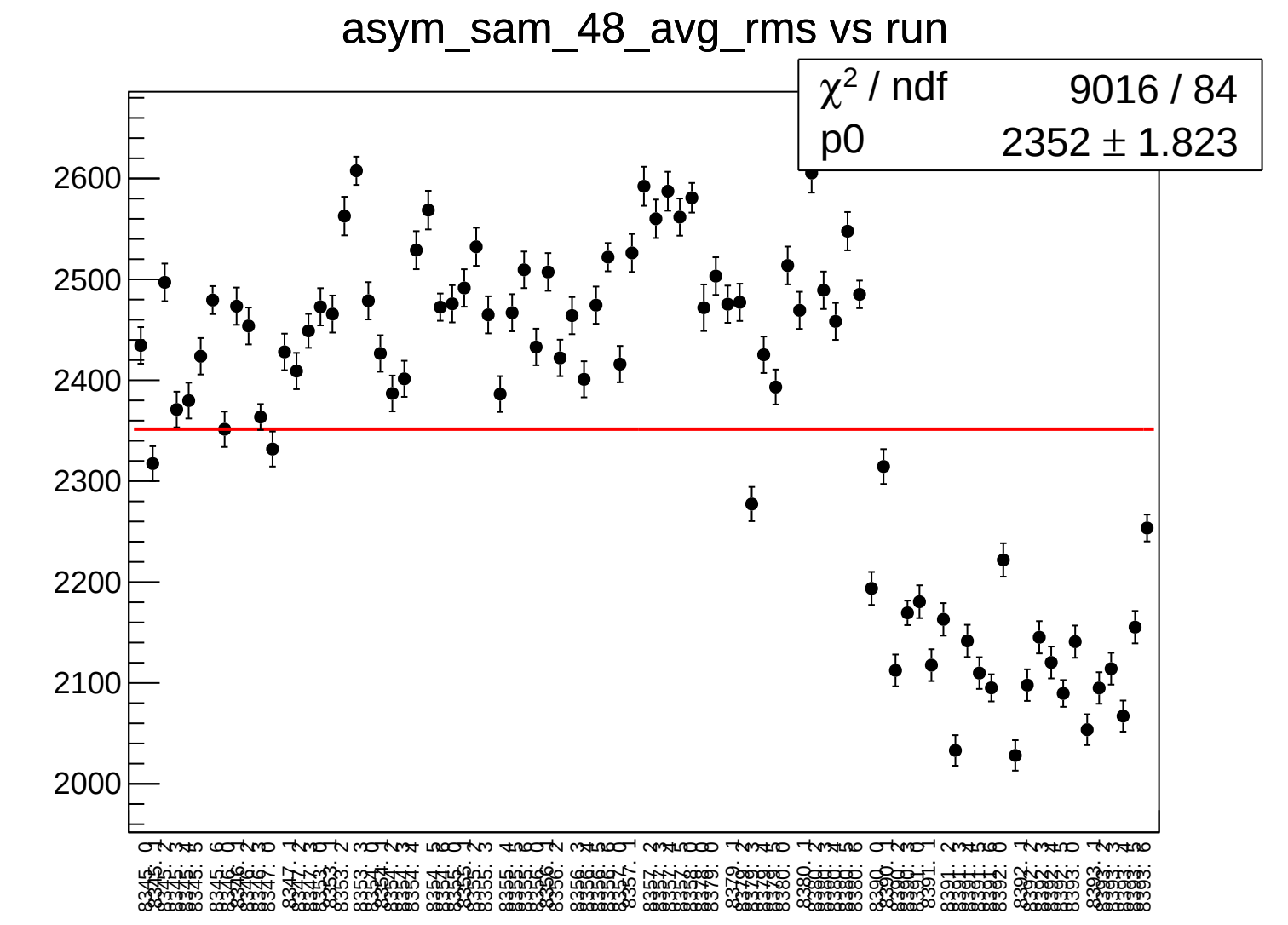

asym_sam_48_avg_correction_mean vs run
×10^3
χ² / ndf 103.3 / 84
p0 −7842 ± 2572
100
50
0
−50
−100
pull
Entries 85
Mean −1246
Std Dev 1300
4
3
2
1
0
−1
−2

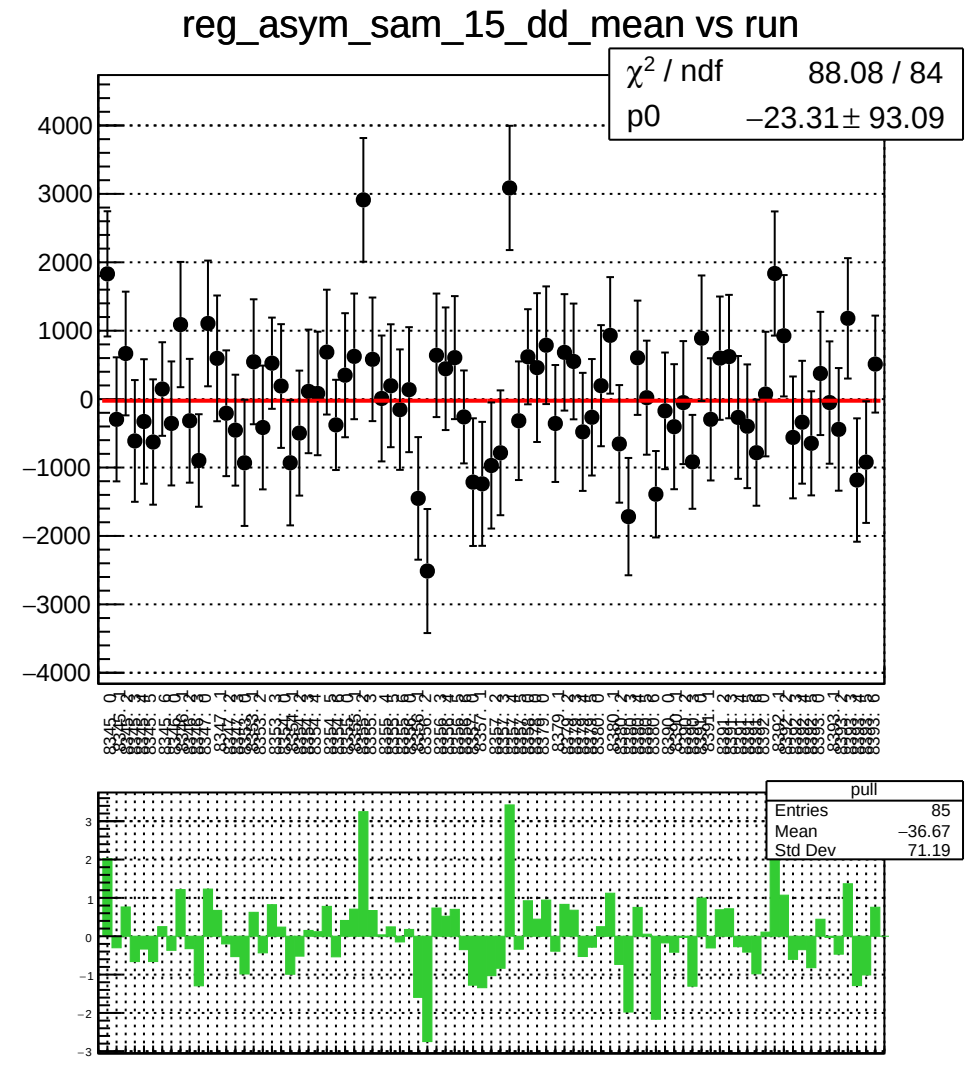

pull1D
Entries 85
Mean 0.004058
Std Dev 1.102
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

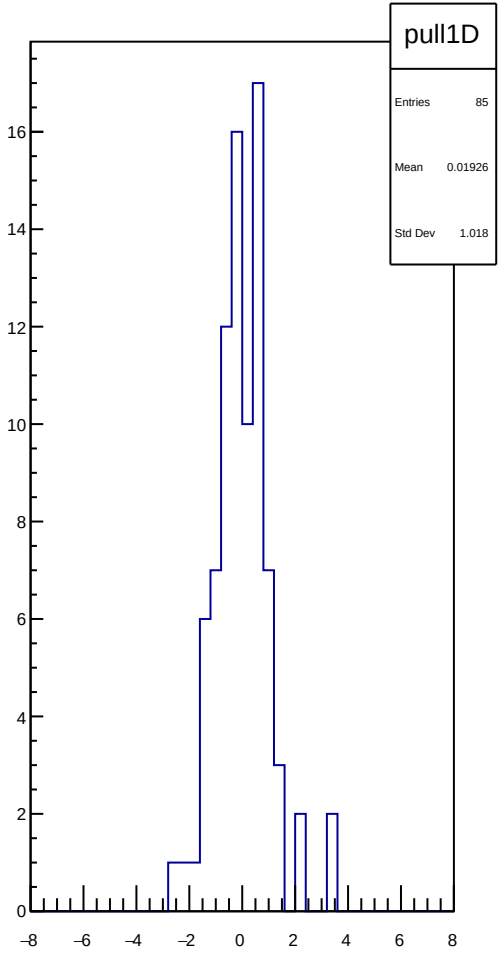

asym_sam_48_avg_correction_rms vs run
χ² / ndf 9037 / 84
p0 2346 ± 1.819
2600
2500
2400
2300
2200
2100
2000

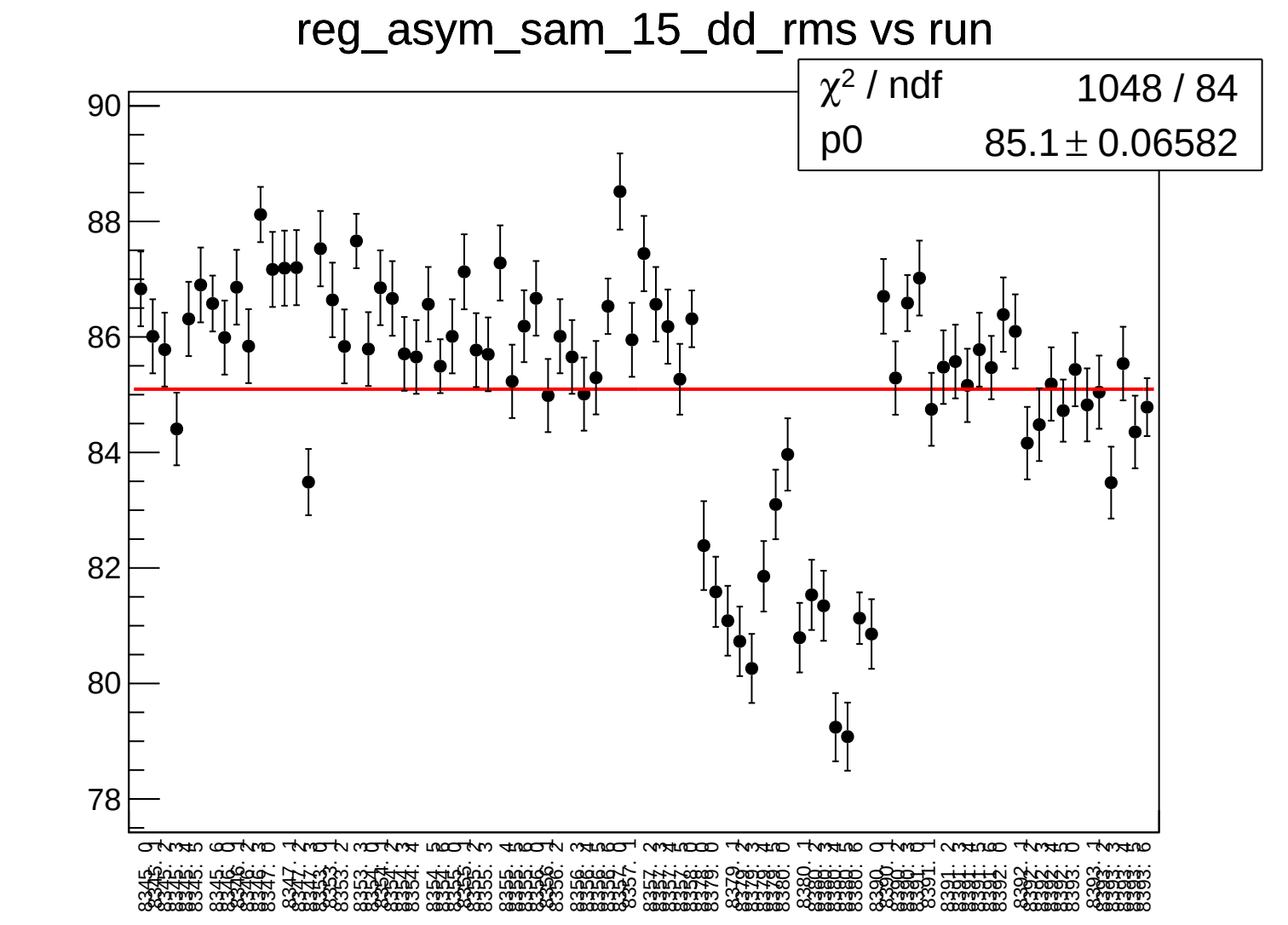

asym_sam_48_avg_mean vs run
×10^3
χ^2 / ndf 102.1 / 84
p0 7388 ± 2579
pull
Entries 85
Mean −952.7
Std Dev 1007

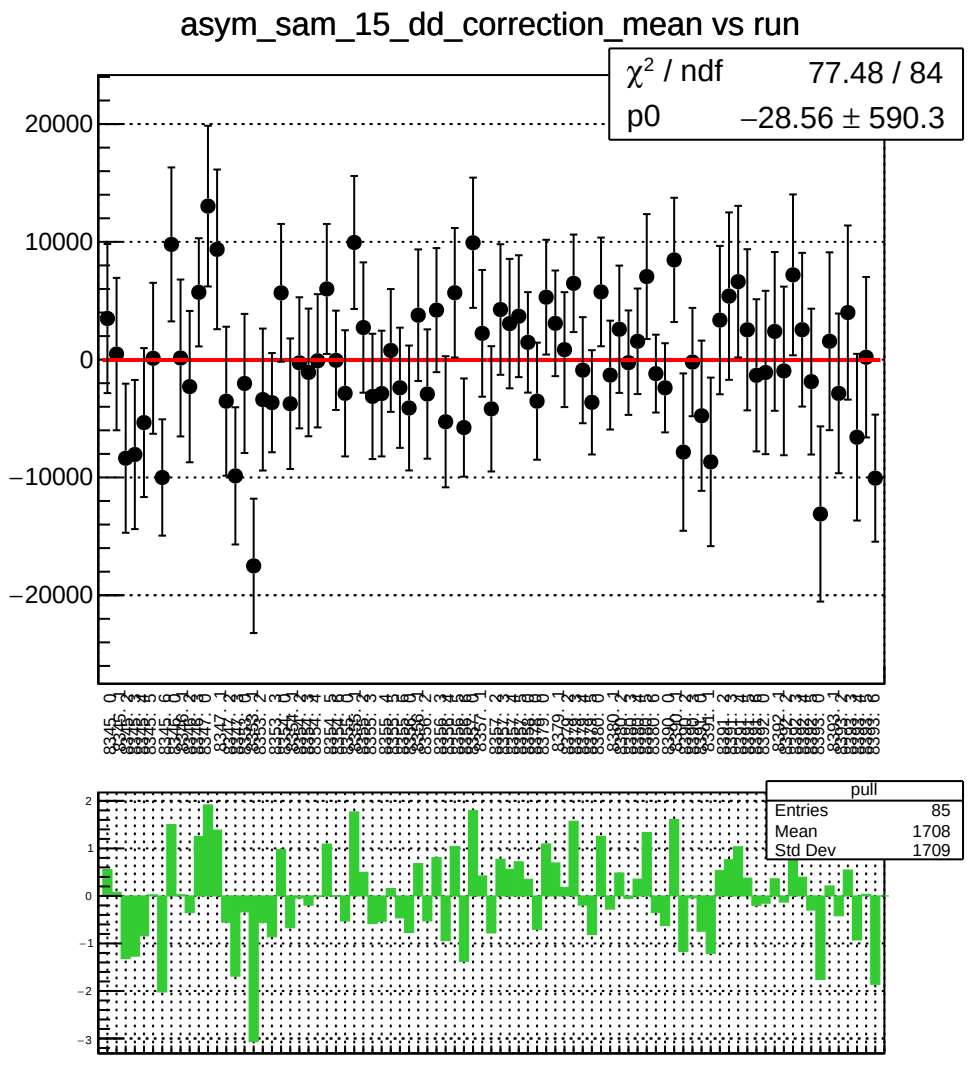

pull1D
Entries 85
Mean −0.00516
Std Dev 1.096

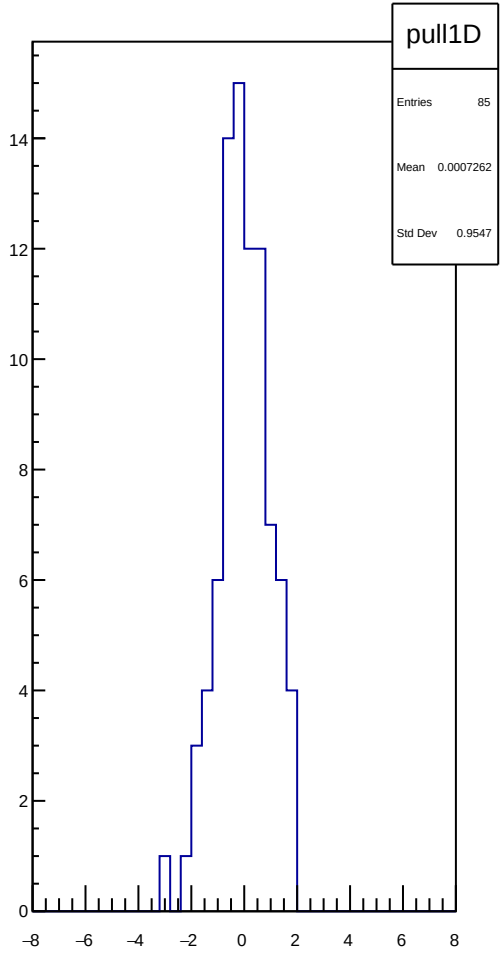

asym_sam_48_avg_rms vs run
χ^2 / ndf 9016 / 84
p0 2352 ± 1.823
2600
2500
2400
2300
2200
2100
2000

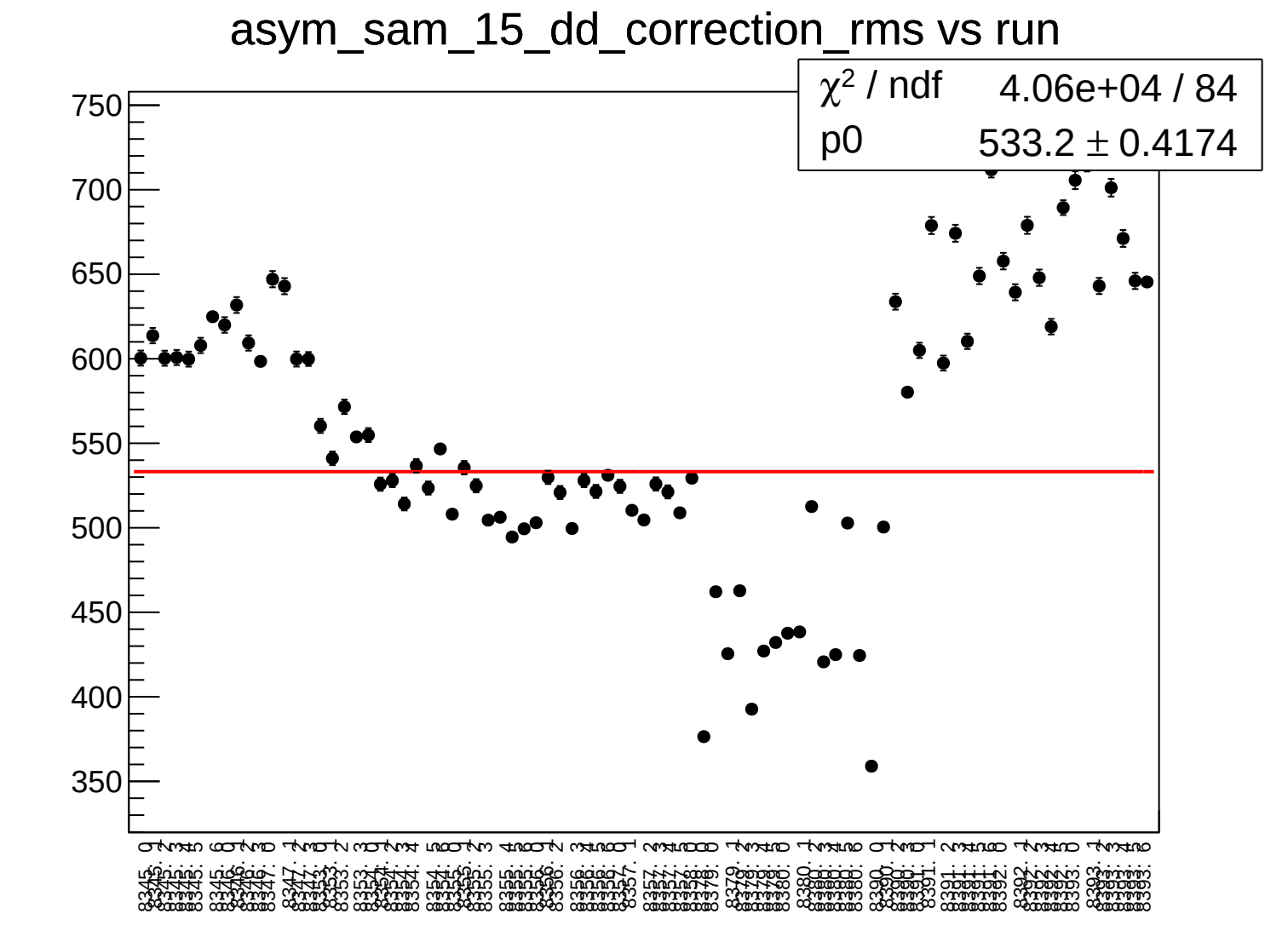

reg_asym_sam_15_dd_mean vs run
χ² / ndf 88.08 / 84
p0 −23.31 ± 93.09
pull
Entries 85
Mean −36.67
Std Dev 71.19

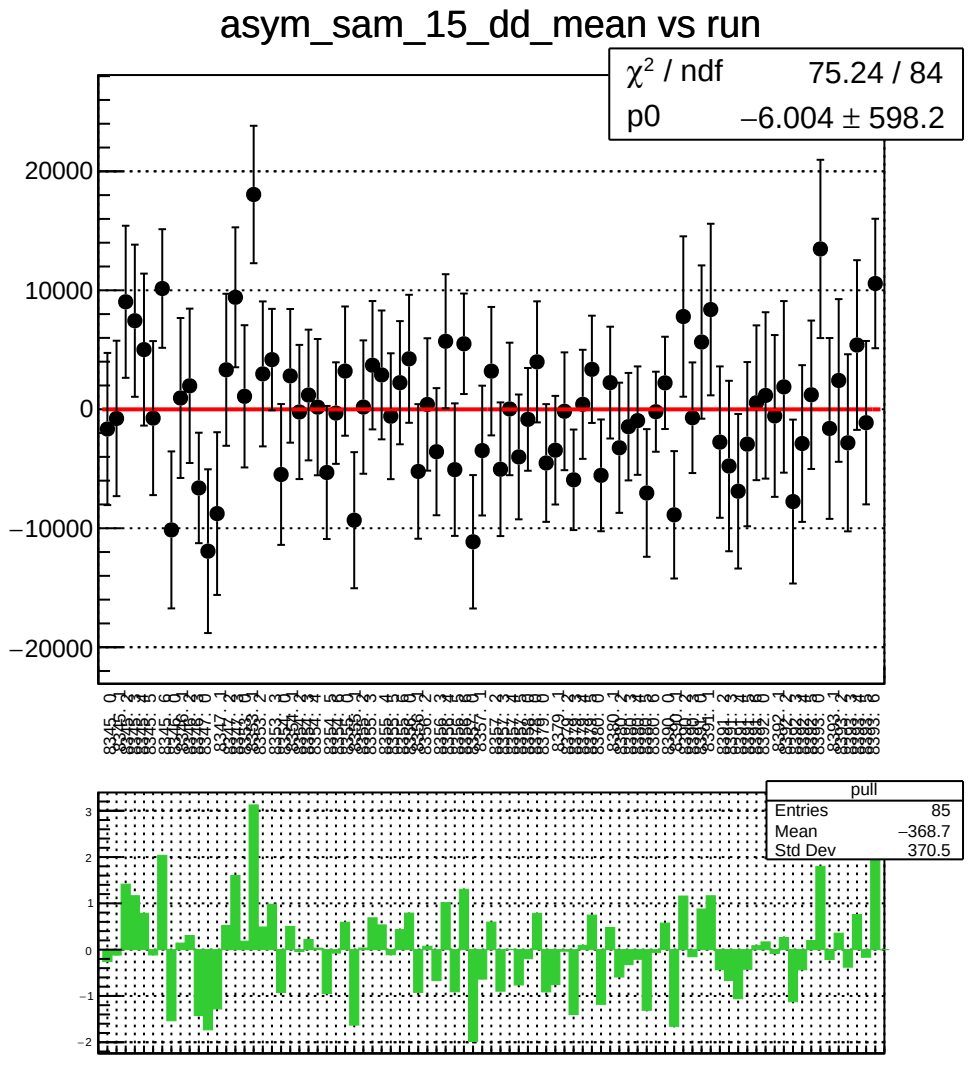

pull1D
Entries 85
Mean 0.01926
Std Dev 1.018

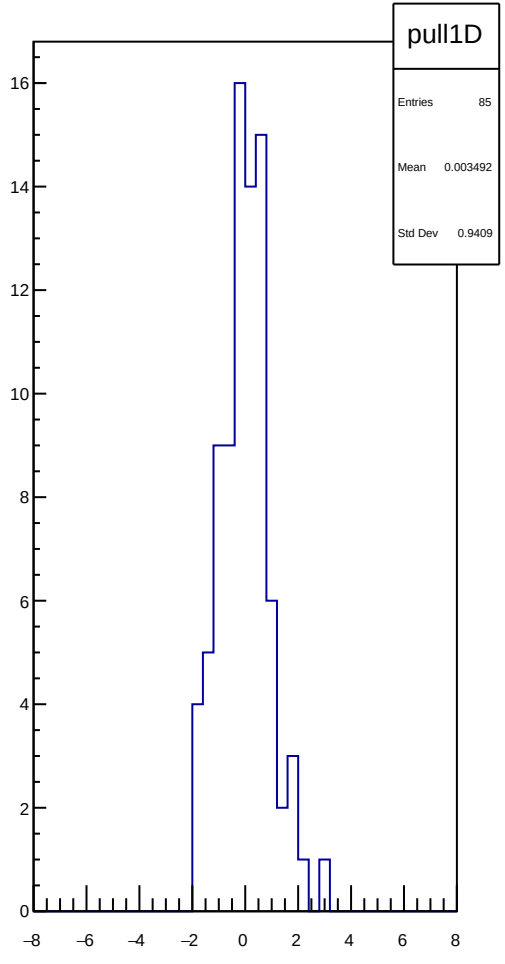

reg_asym_sam_15_dd_rms vs run
χ² / ndf 1048 / 84
p0 85.1 ± 0.06582
90
88
86
84
82
80
78

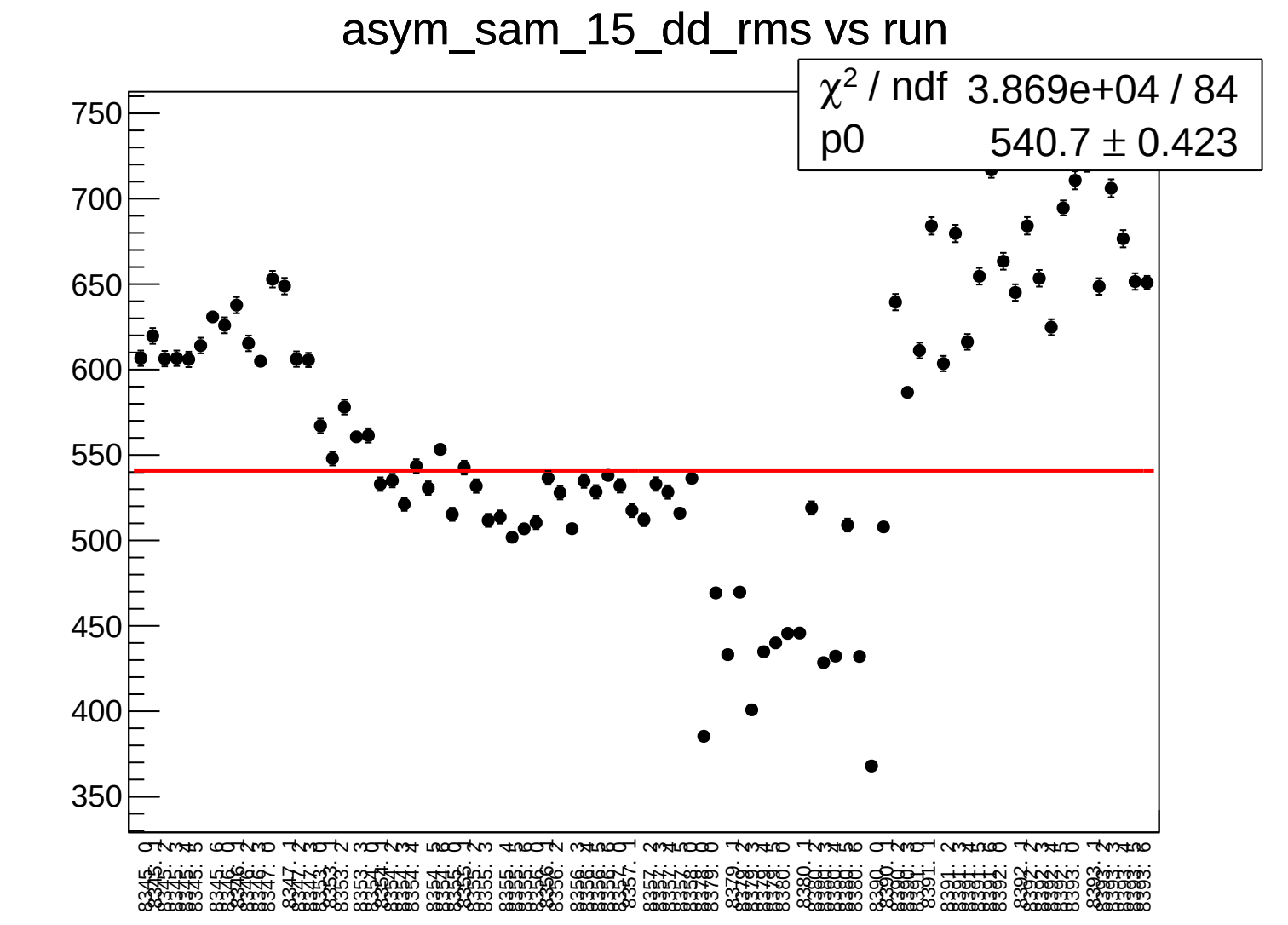

asym_sam_15_dd_correction_mean vs run
χ² / ndf 77.48 / 84
p0 −28.56 ± 590.3
20000
10000
0
−10000
−20000
pull
Entries 85
Mean 1708
Std Dev 1709
2
1
0
−1
−2
−3

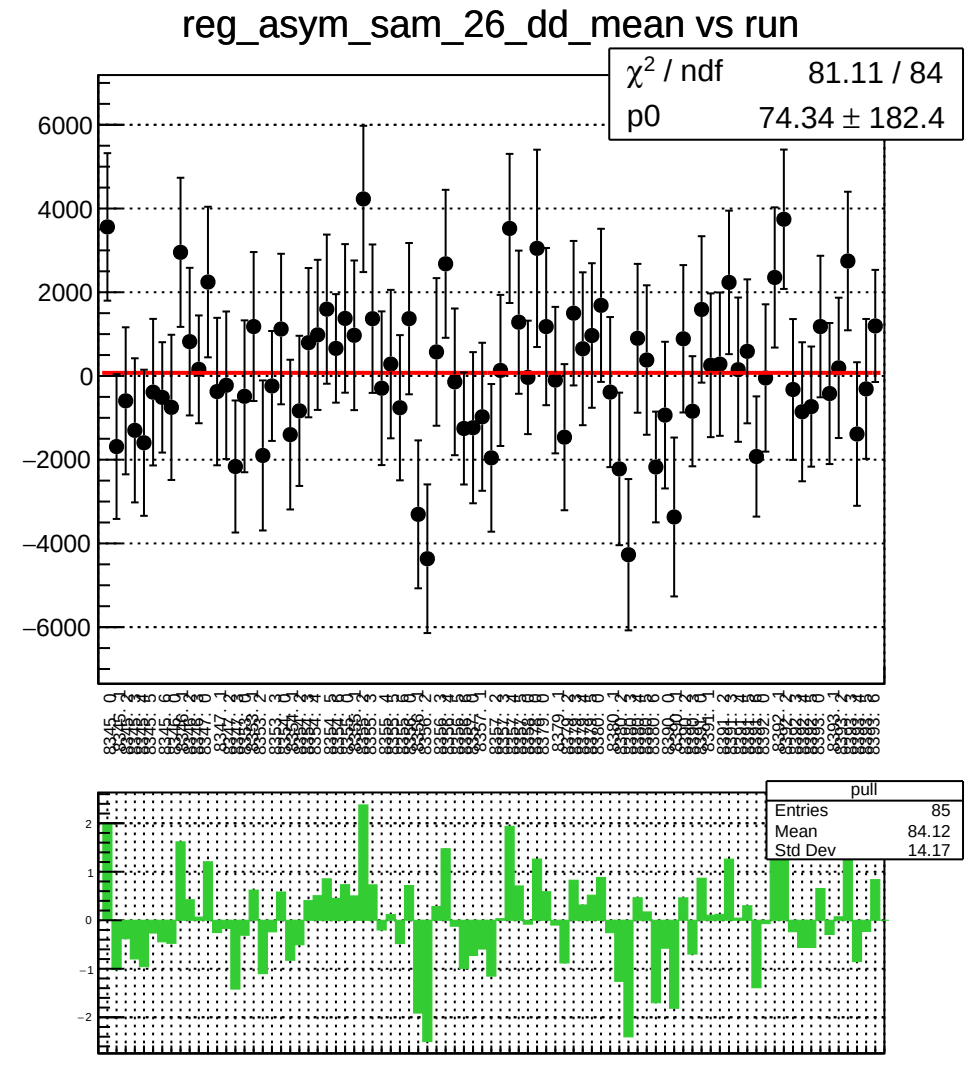

pull1D
Entries 85
Mean 0.0007262
Std Dev 0.9547
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

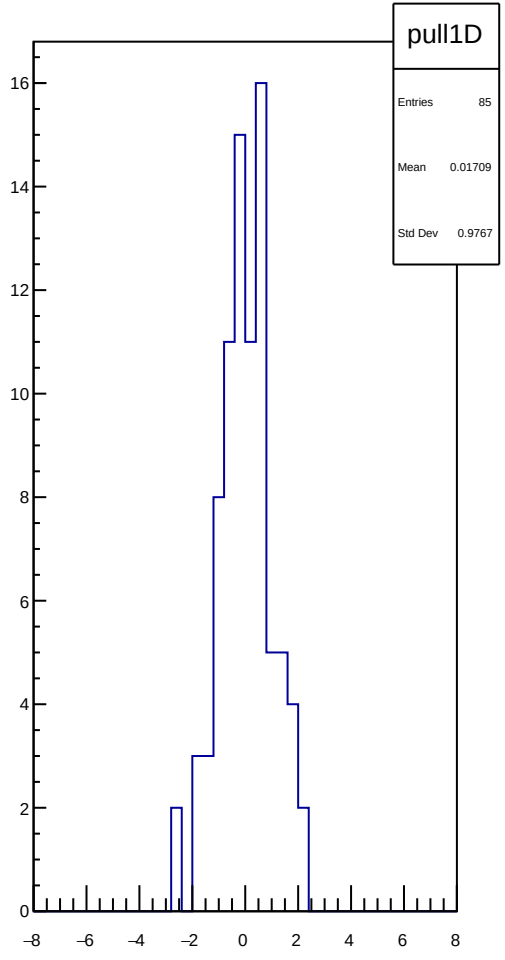

asym_sam_15_dd_correction_rms vs run
χ² / ndf 4.06e+04 / 84
p0 533.2 ± 0.4174
750
700
650
600
550
500
450
400
350

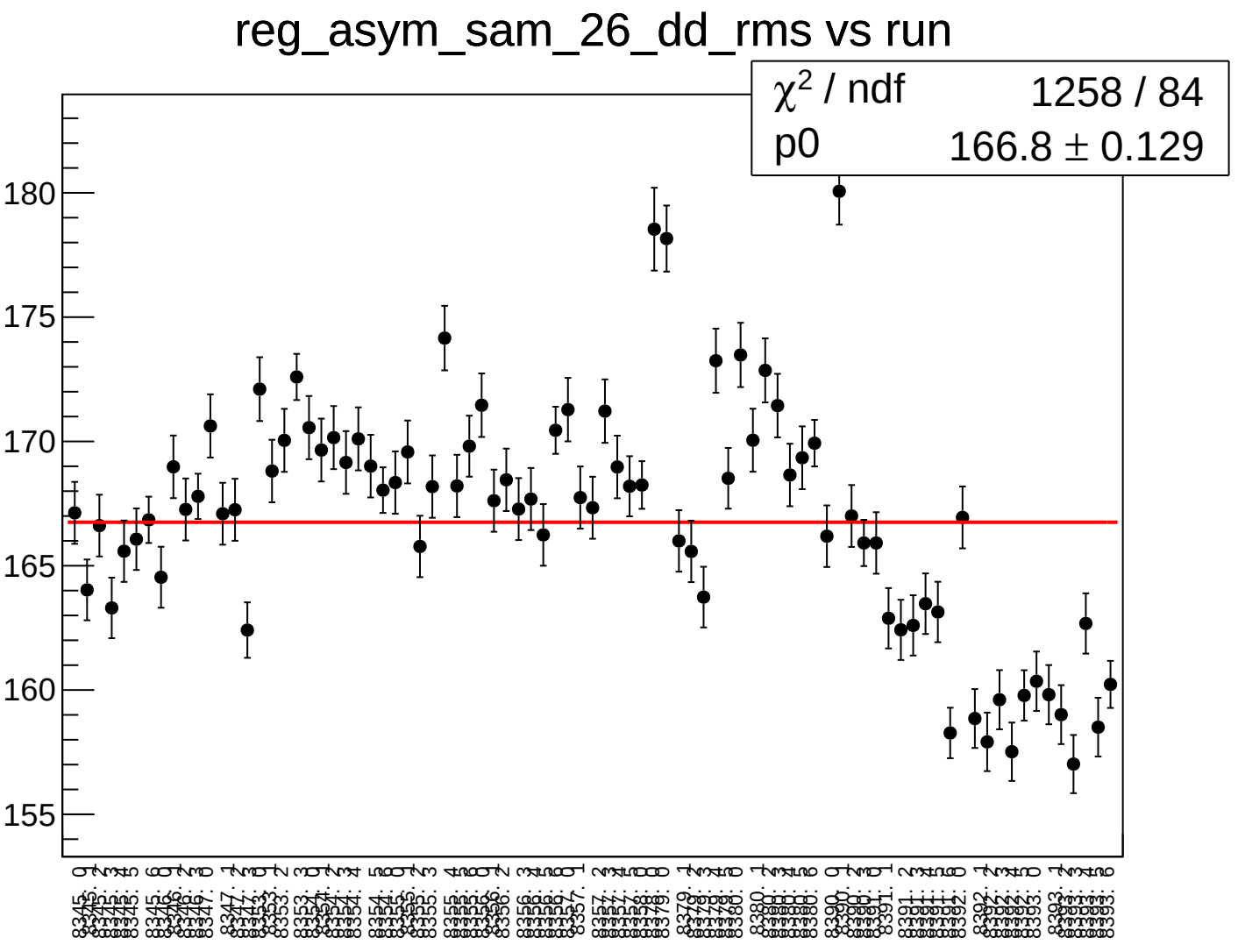

asym_sam_15_dd_mean vs run
χ² / ndf 75.24 / 84
p0 −6.004 ± 598.2
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −368.7
Std Dev 370.5
3
2
1
0
−1
−2

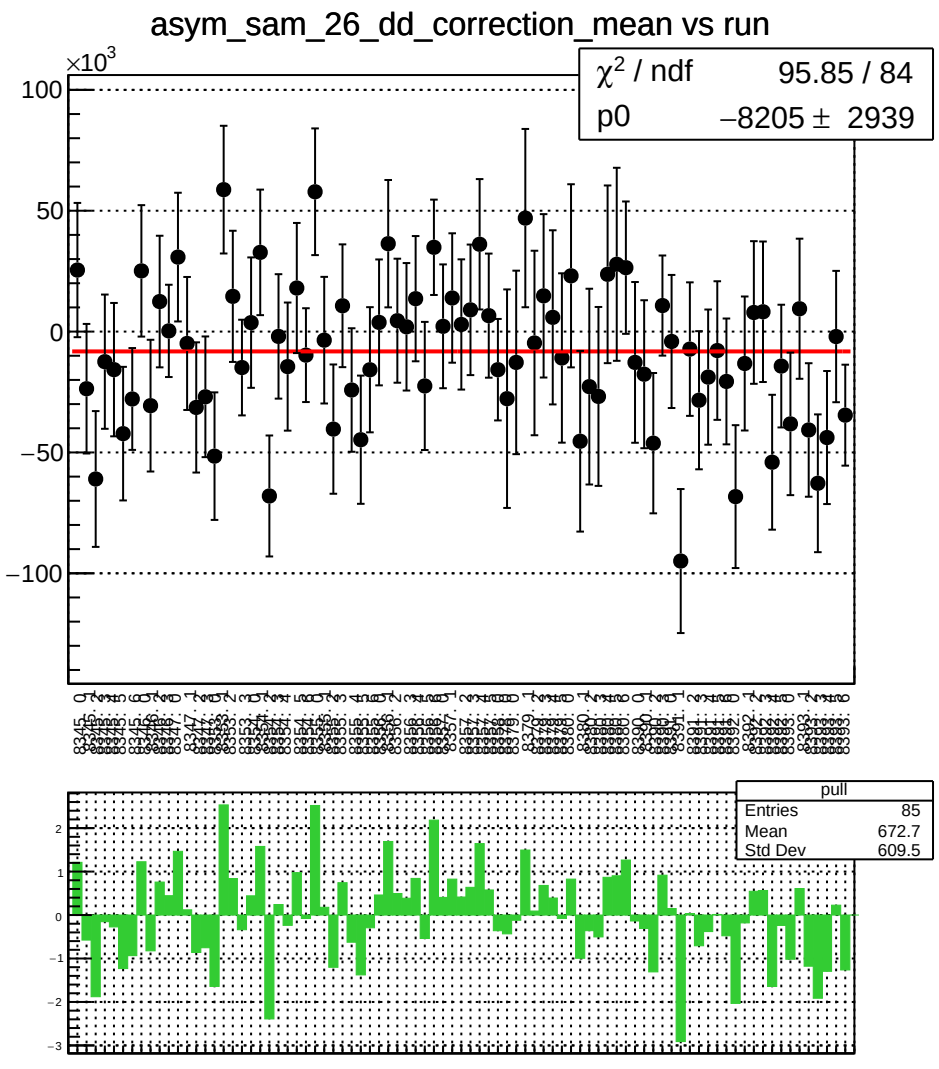

pull1D
Entries 85
Mean 0.003492
Std Dev 0.9409
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

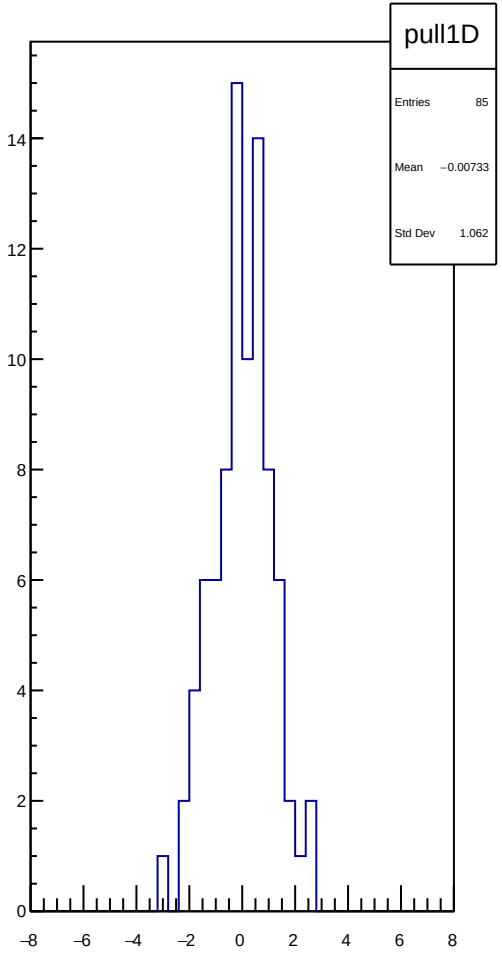

asym_sam_15_dd_rms vs run
χ² / ndf 3.869e+04 / 84
p0 540.7 ± 0.423
750
700
650
600
550
500
450
400
350

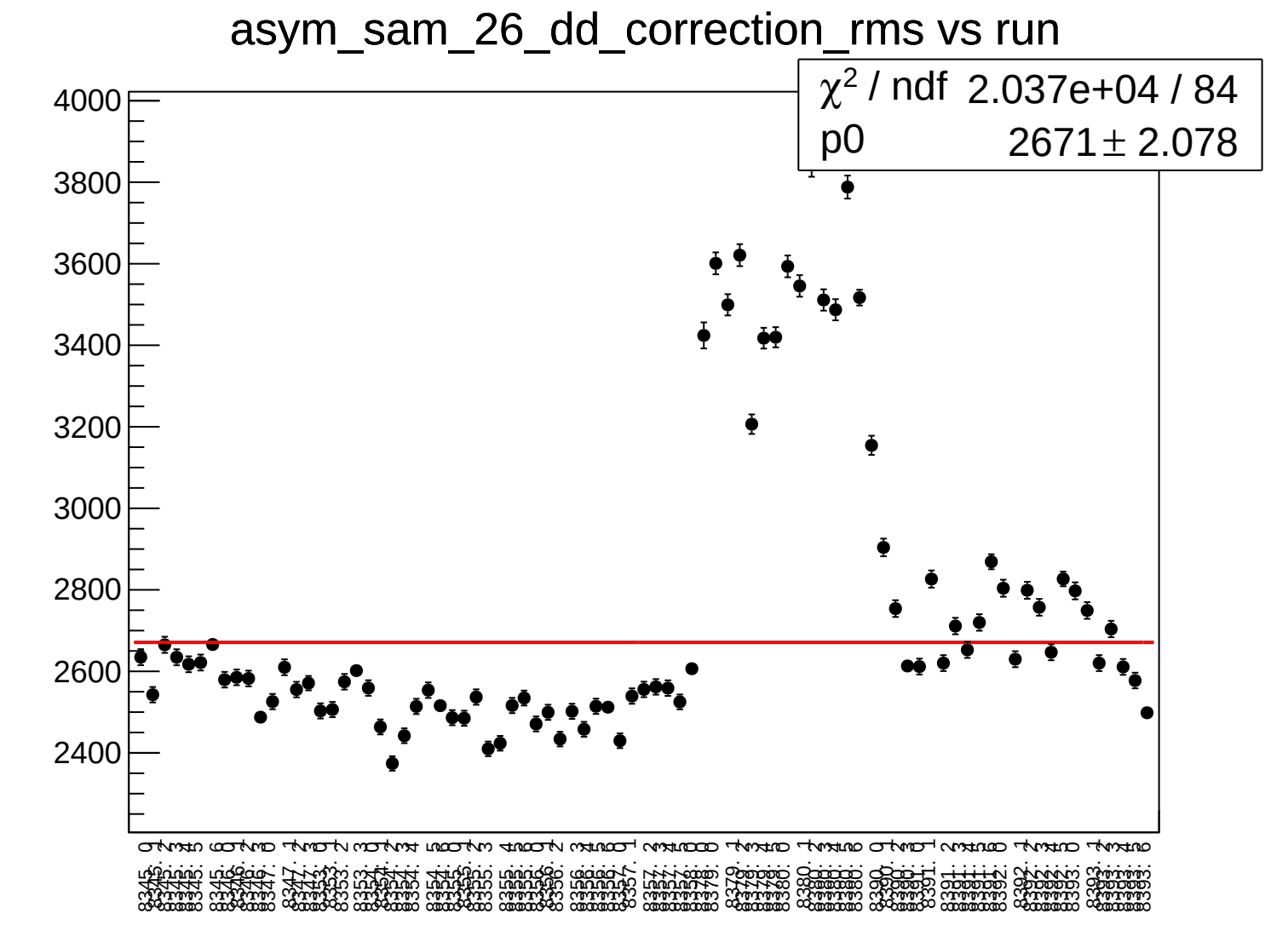

reg_asym_sam_26_dd_mean vs run
χ² / ndf 81.11 / 84
p0 74.34 ± 182.4
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 84.12
Std Dev 14.17
2
1
0
−1
−2

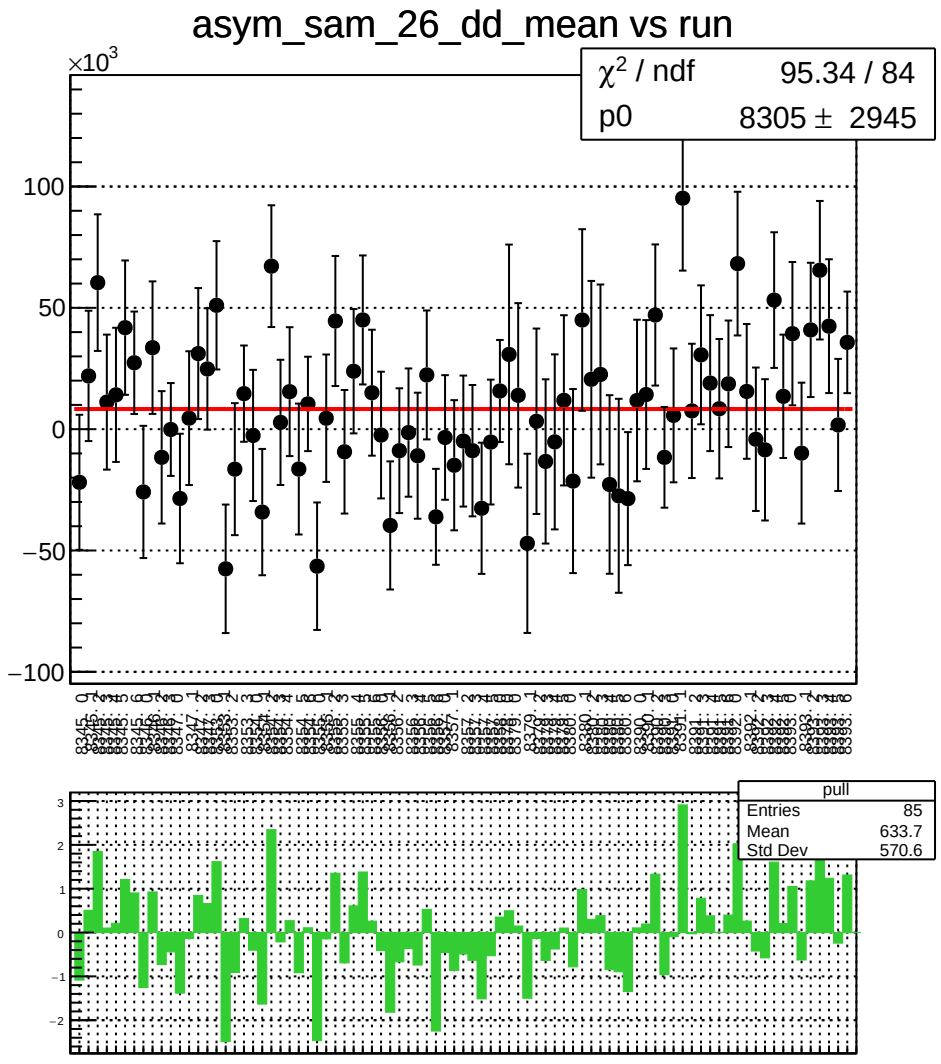

pull1D
Entries 85
Mean 0.01709
Std Dev 0.9767
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

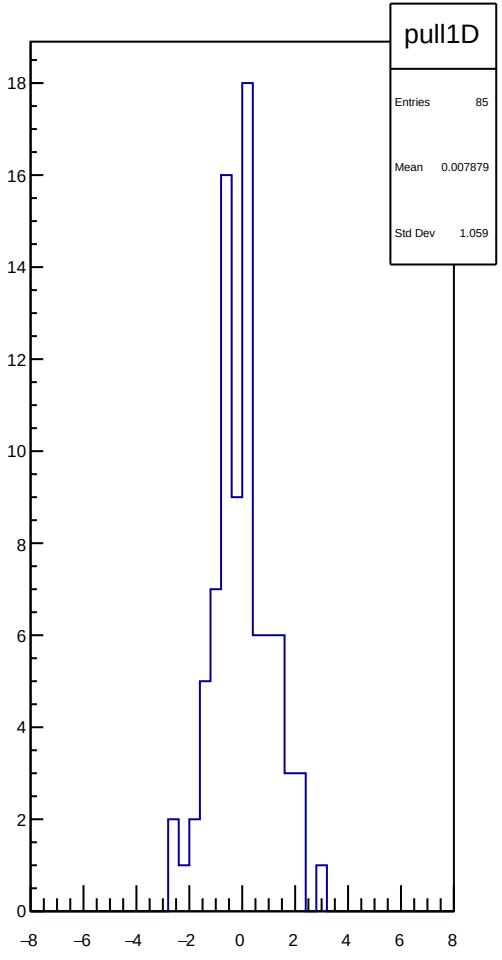

reg_asym_sam_26_dd_rms vs run
χ² / ndf 1258 / 84
p0 166.8 ± 0.129
180
175
170
165
160
155

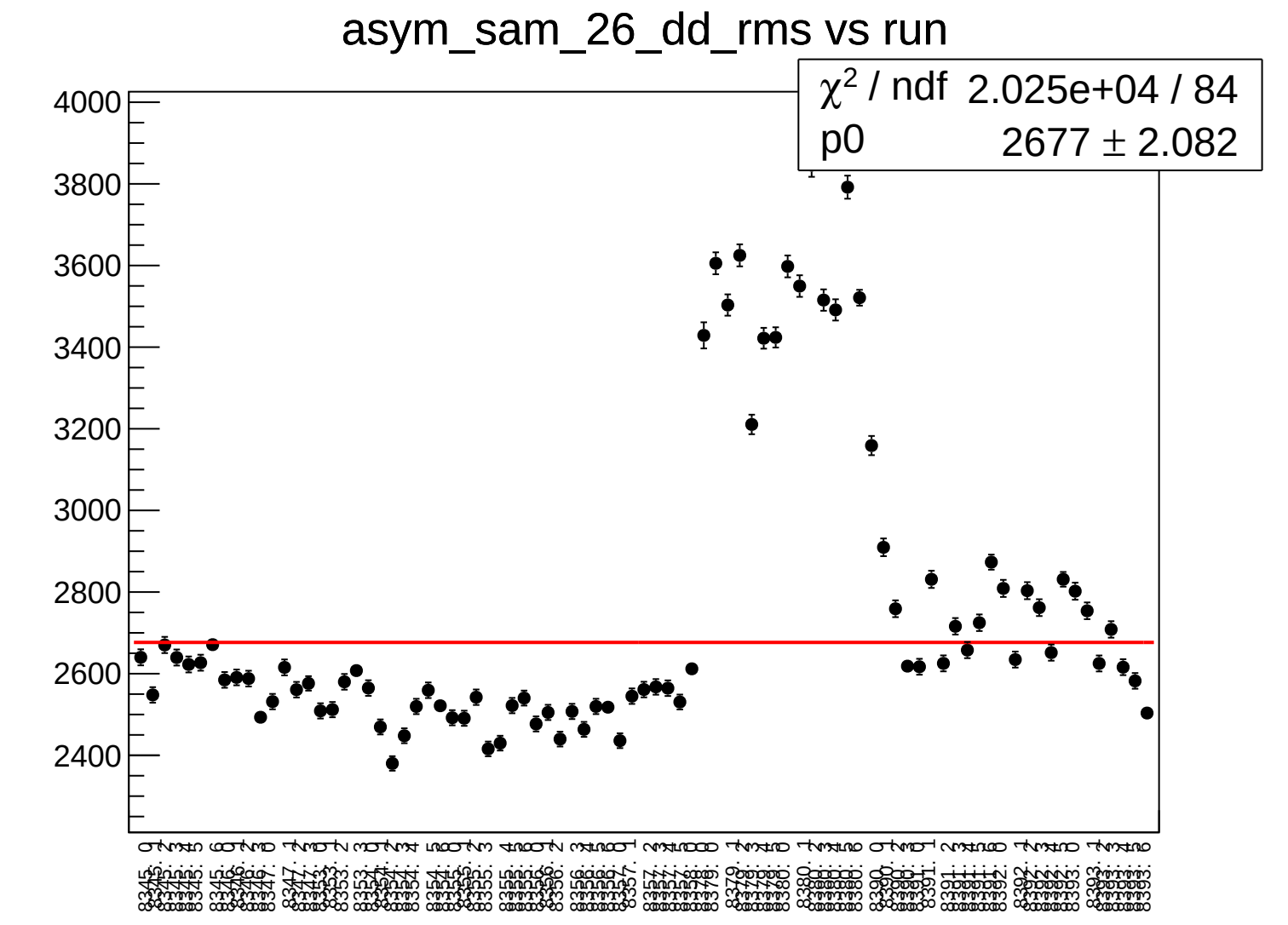

asym_sam_26_dd_correction_mean vs run
×10^3
χ^2 / ndf 95.85 / 84
p0 −8205 ± 2939
pull
Entries 85
Mean 672.7
Std Dev 609.5

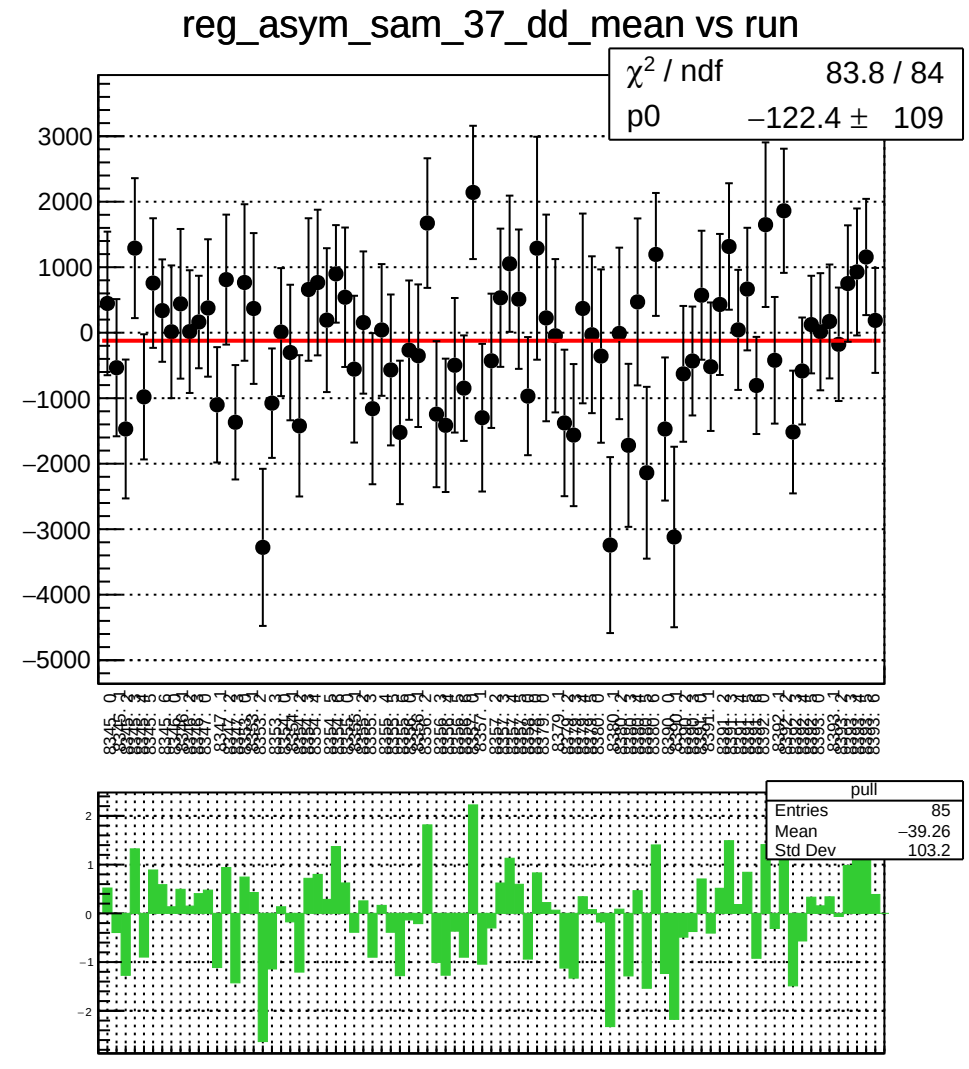

pull1D
Entries 85
Mean −0.00733
Std Dev 1.062

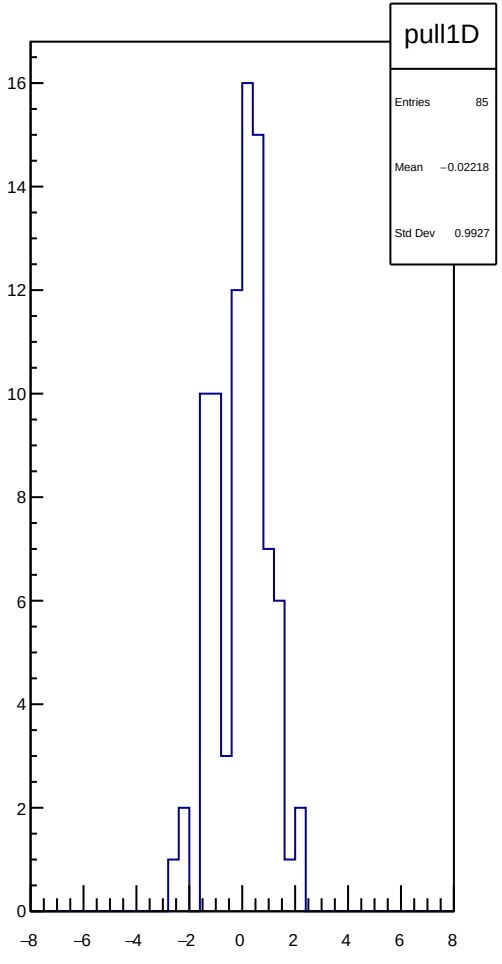

asym_sam_26_dd_correction_rms vs run
χ² / ndf 2.037e+04 / 84
p0 2671 ± 2.078
4000
3800
3600
3400
3200
3000
2800
2600
2400

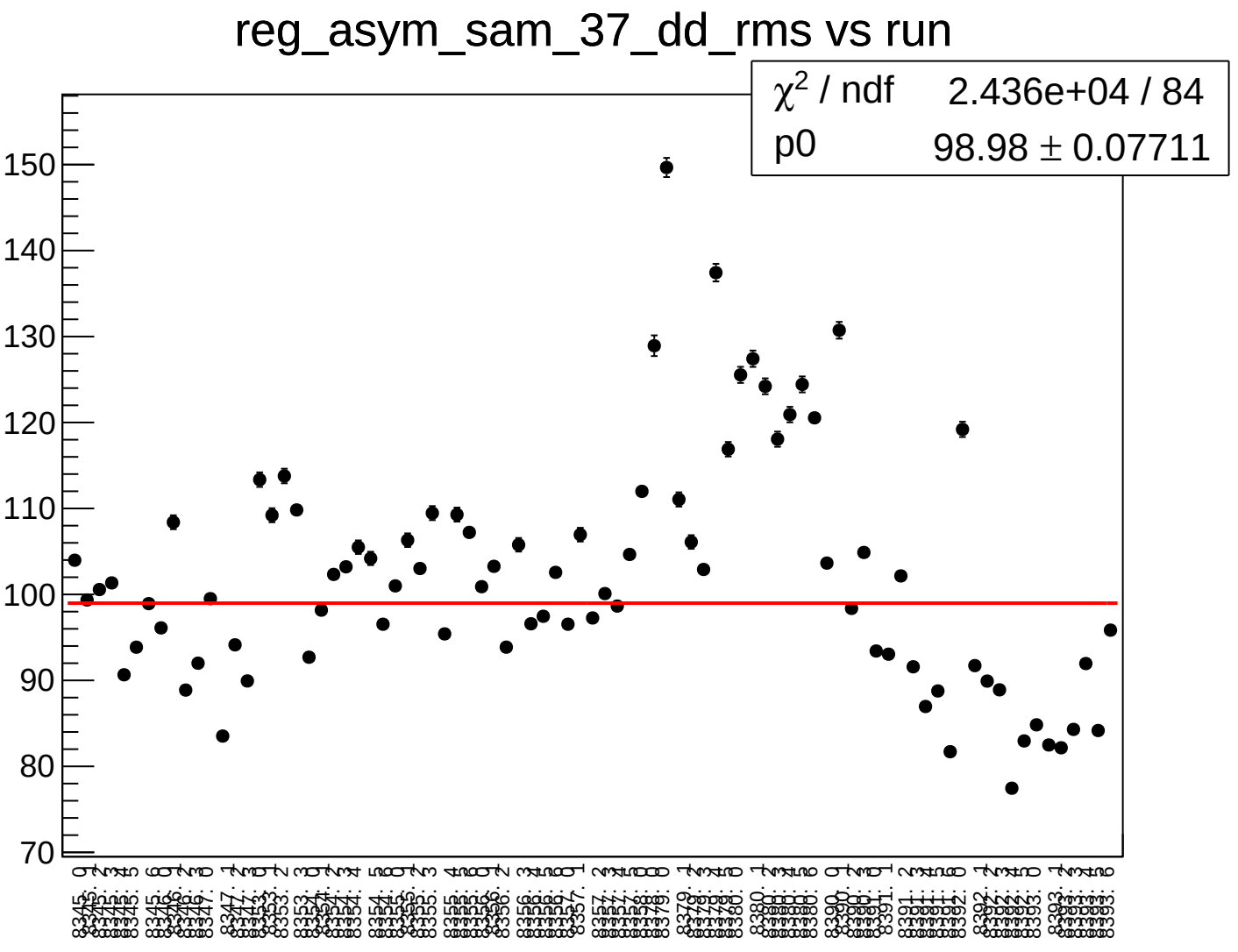

asym_sam_26_dd_mean vs run
×10^3
χ^2 / ndf 95.34 / 84
p0 8305 ± 2945
100
50
0
−50
−100
pull
Entries 85
Mean 633.7
Std Dev 570.6
3
2
1
0
−1
−2

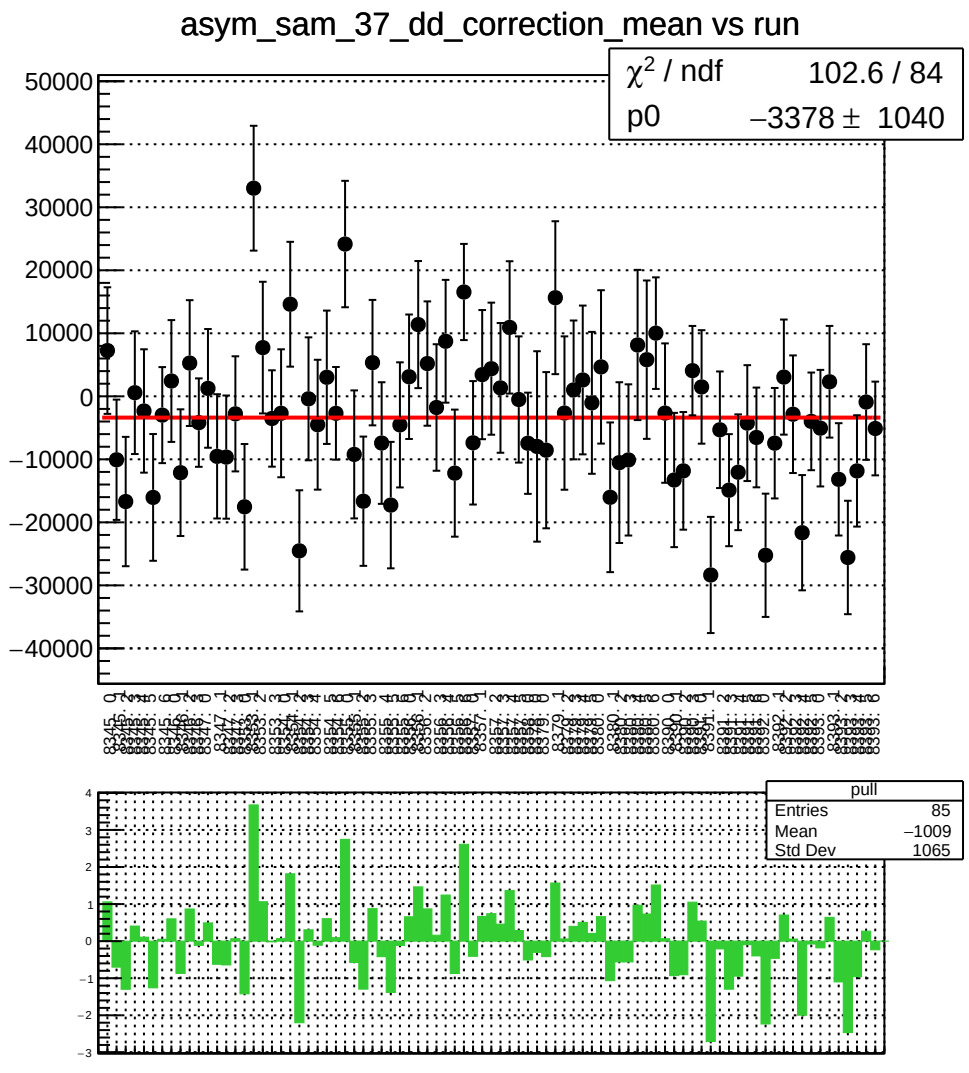

pull1D
Entries 85
Mean 0.007879
Std Dev 1.059
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

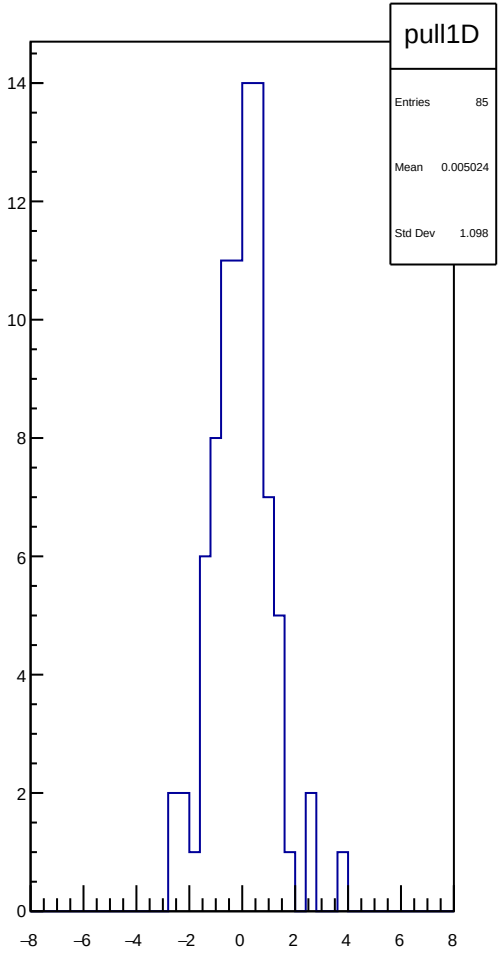

asym_sam_26_dd_rms vs run
χ² / ndf 2.025e+04 / 84
p0 2677 ± 2.082
4000
3800
3600
3400
3200
3000
2800
2600
2400

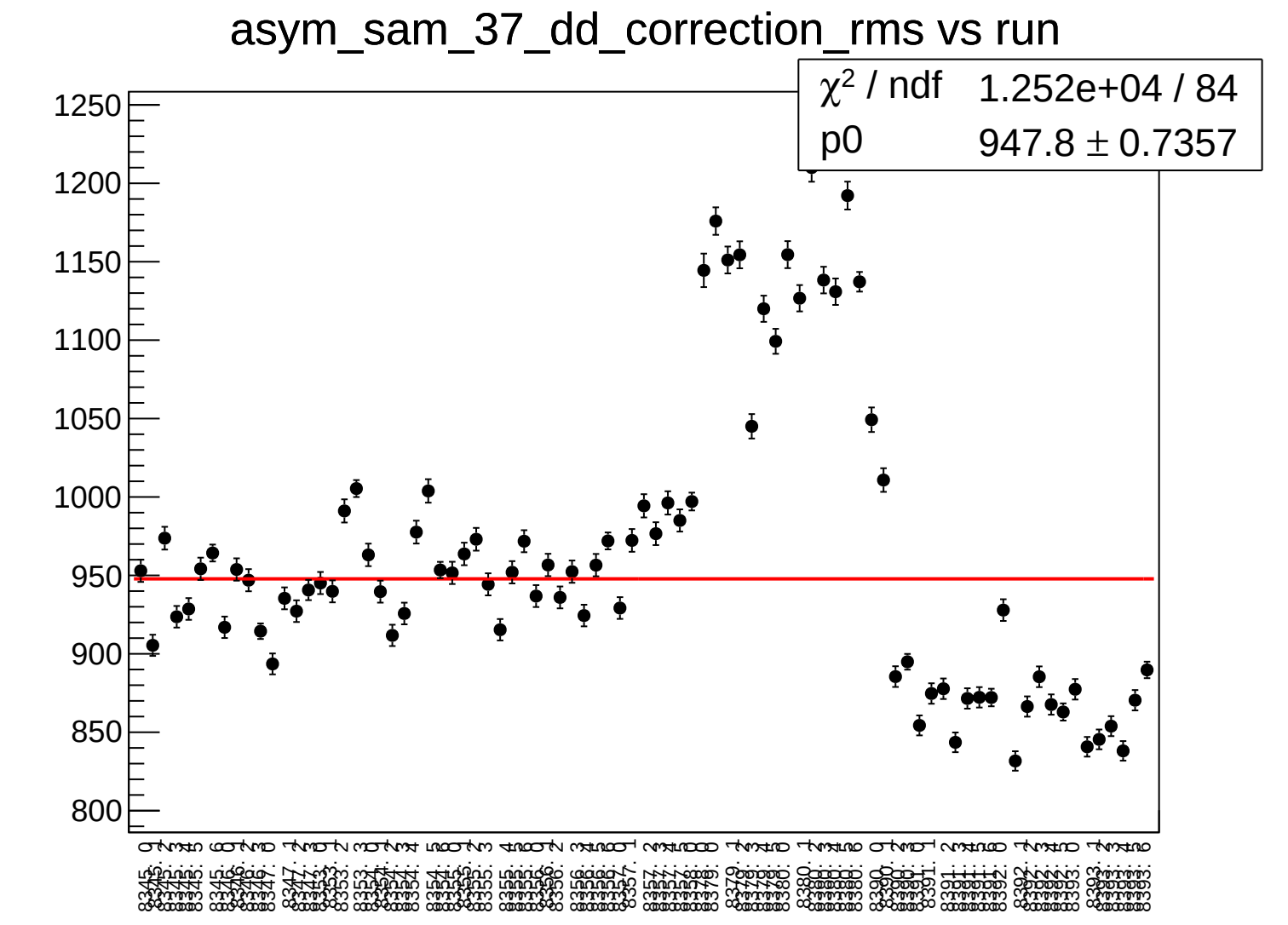

reg_asym_sam_37_dd_mean vs run
χ² / ndf 83.8 / 84
p0 −122.4 ± 109
pull
Entries 85
Mean −39.26
Std Dev 103.2

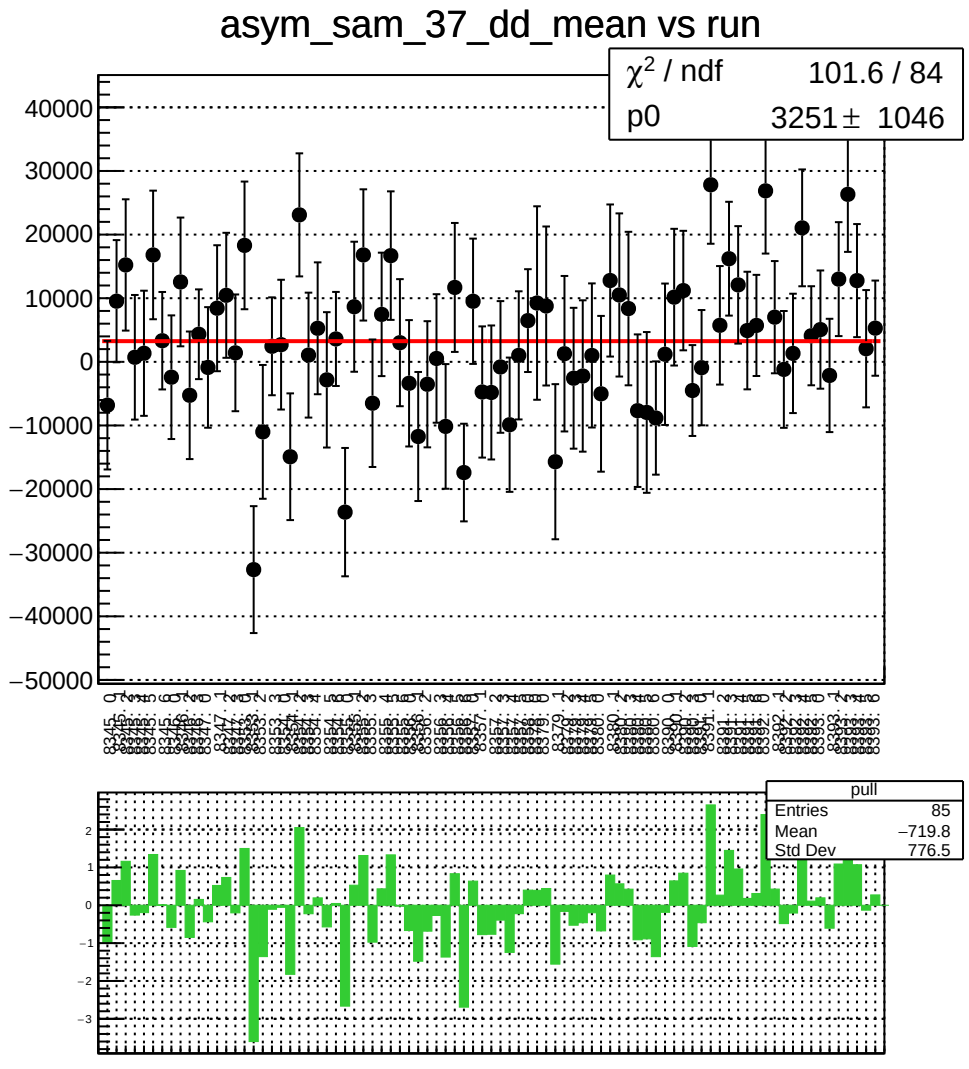

pull1D
Entries 85
Mean −0.02218
Std Dev 0.9927

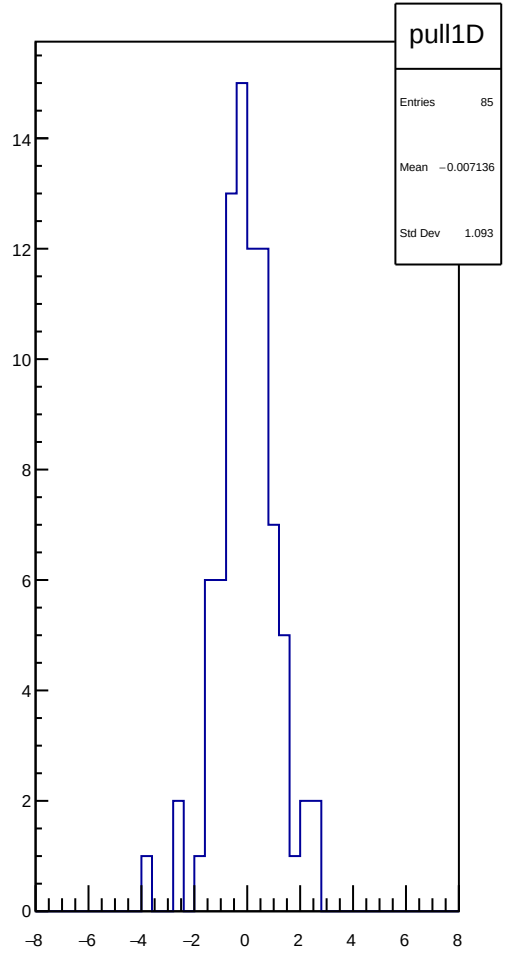

reg_asym_sam_37_dd_rms vs run
χ² / ndf 2.436e+04 / 84
p0 98.98 ± 0.07711
150
140
130
120
110
100
90
80
70

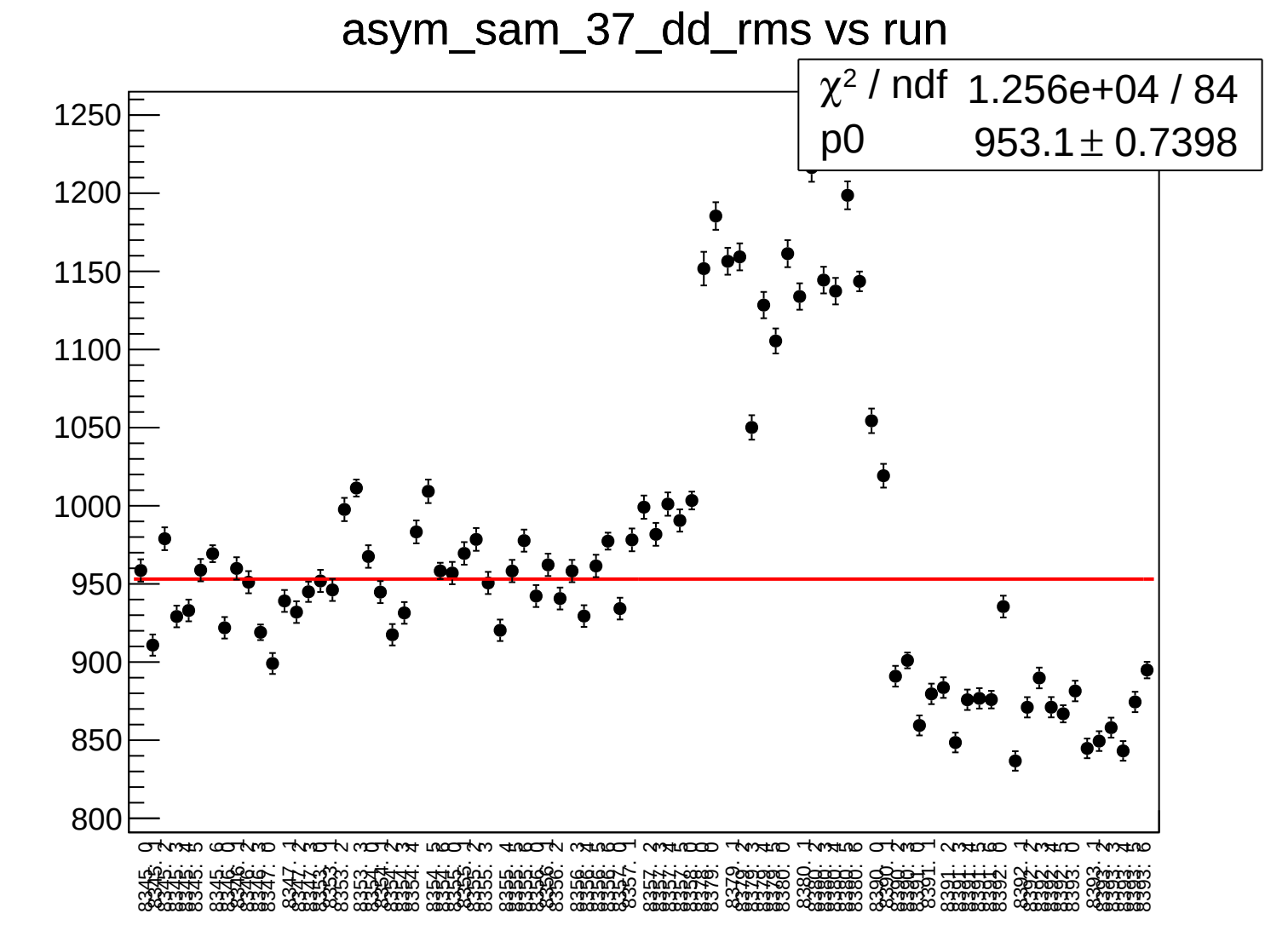

asym_sam_37_dd_correction_mean vs run
χ² / ndf 102.6 / 84
p0 −3378 ± 1040
pull
Entries 85
Mean −1009
Std Dev 1065

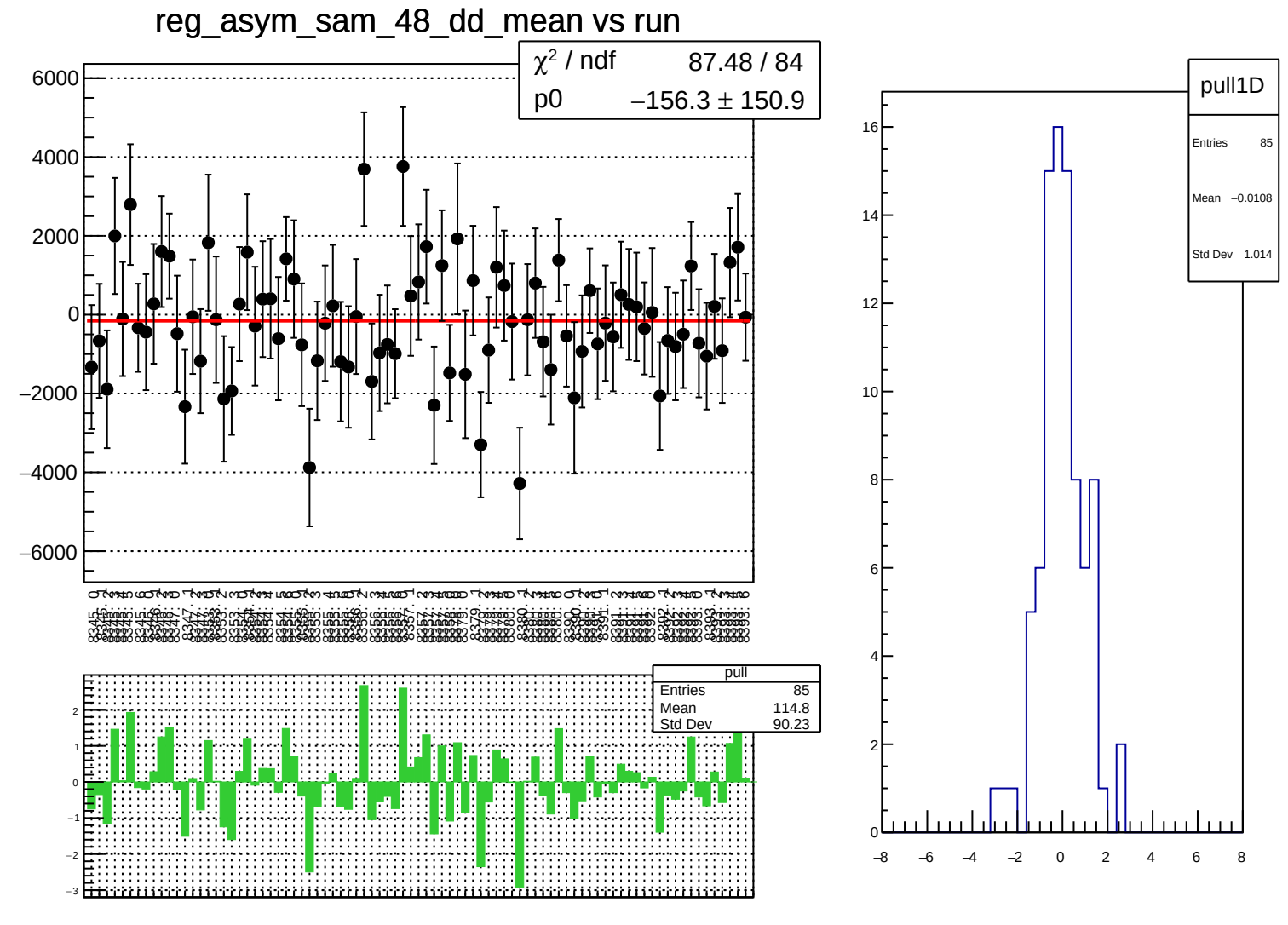

pull1D
Entries 85
Mean 0.005024
Std Dev 1.098

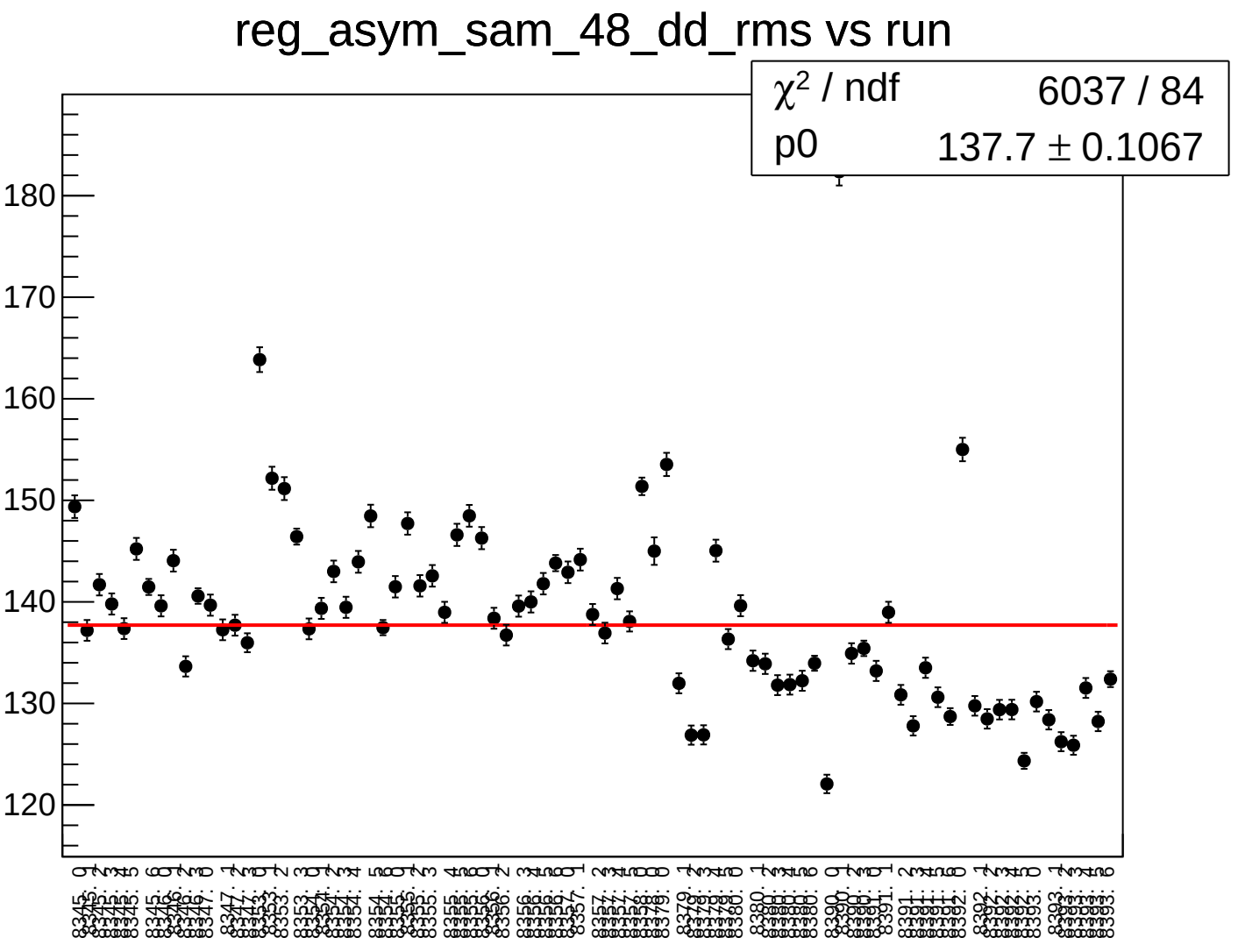

asym_sam_37_dd_correction_rms vs run
χ² / ndf 1.252e+04 / 84
p0 947.8 ± 0.7357
1250
1200
1150
1100
1050
1000
950
900
850
800

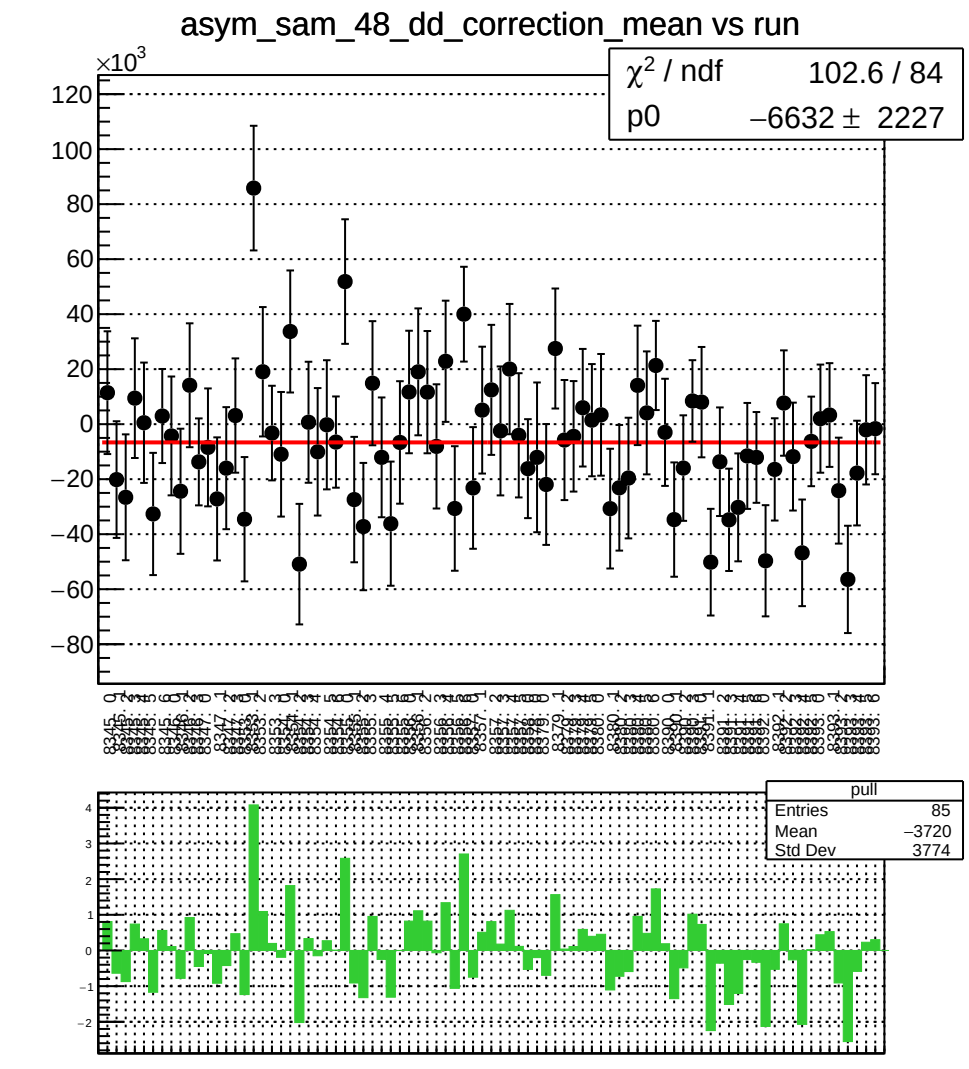

asym_sam_37_dd_mean vs run
χ² / ndf 101.6 / 84
p0 3251 ± 1046
pull
Entries 85
Mean −719.8
Std Dev 776.5

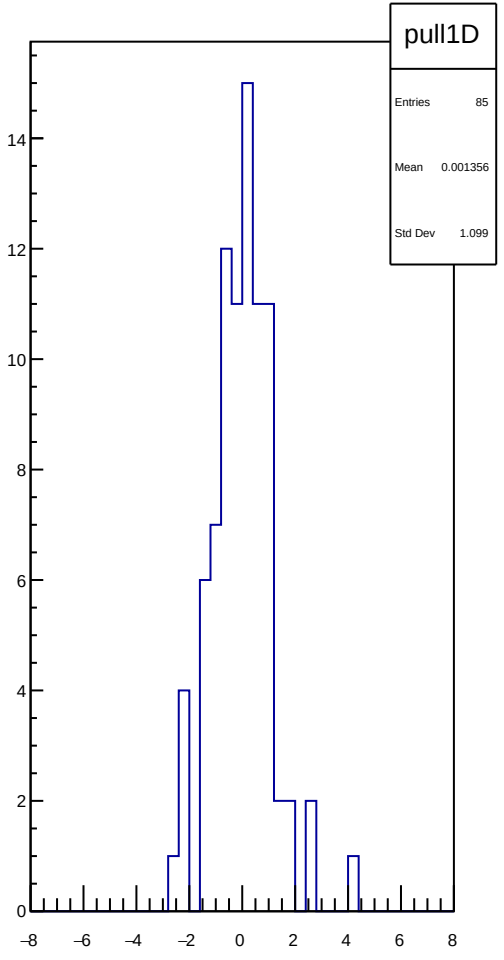

pull1D
Entries 85
Mean −0.007136
Std Dev 1.093

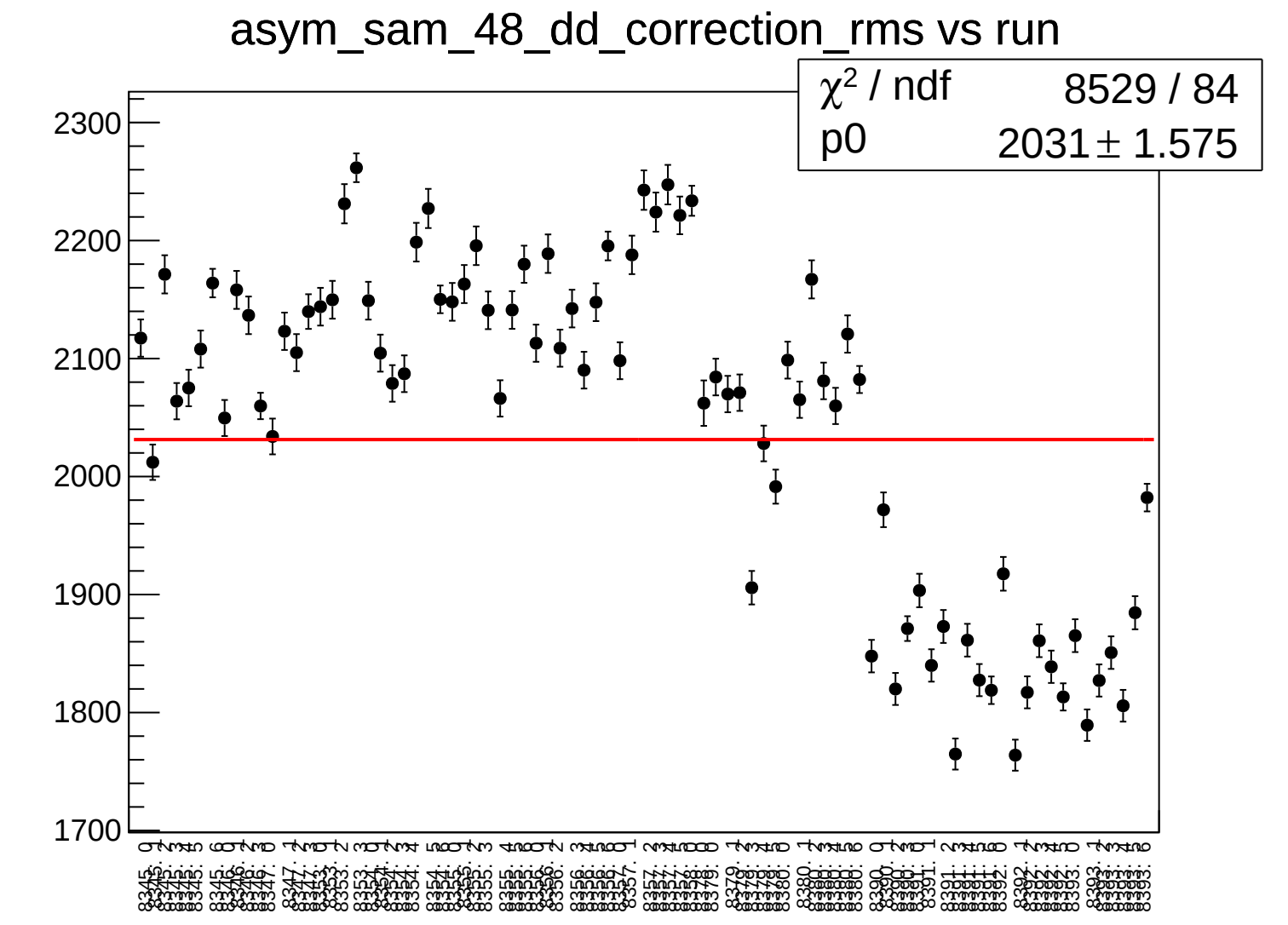

asym_sam_37_dd_rms vs run
χ² / ndf 1.256e+04 / 84
p0 953.1 ± 0.7398
1250
1200
1150
1100
1050
1000
950
900
850
800

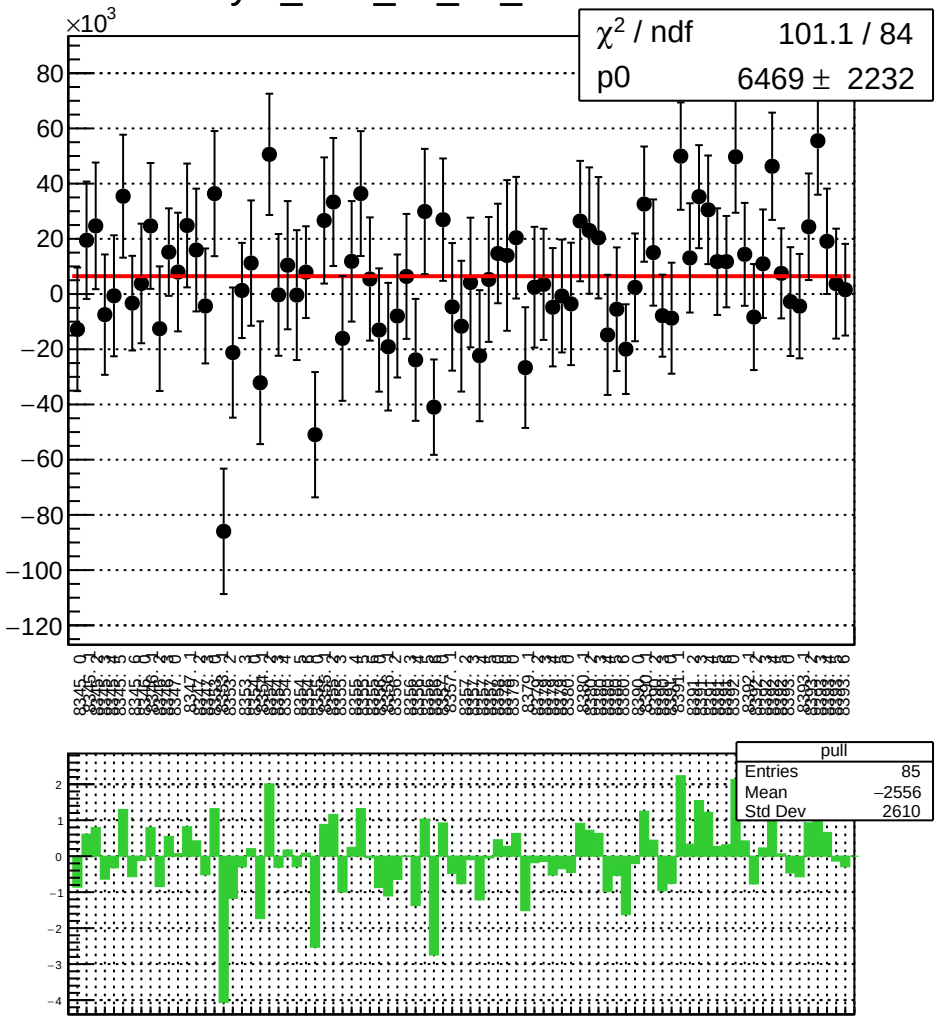

reg_asym_sam_48_dd_mean vs run
χ² / ndf 87.48 / 84
p0 −156.3 ± 150.9
pull
Entries 85
Mean 114.8
Std Dev 90.23
pull1D
Entries 85
Mean −0.0108
Std Dev 1.014

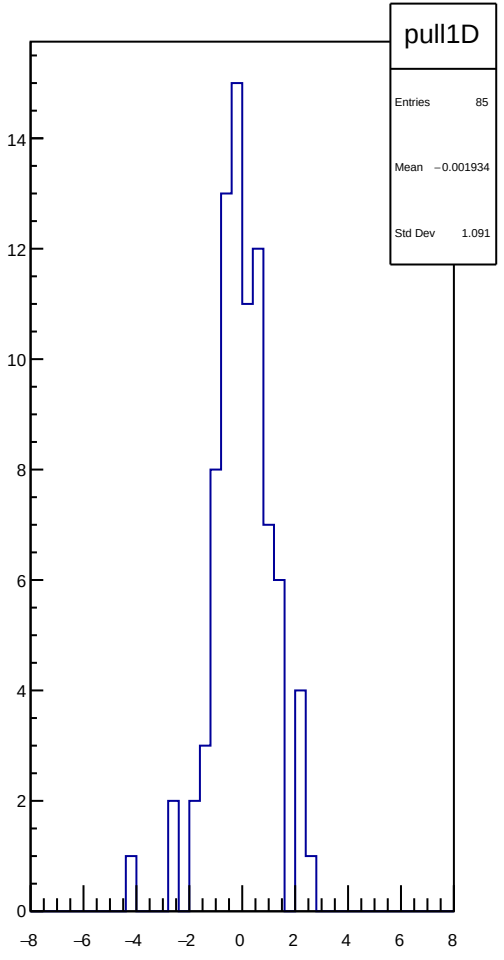

reg_asym_sam_48_dd_rms vs run
χ² / ndf 6037 / 84
p0 137.7 ± 0.1067
180
170
160
150
140
130
120

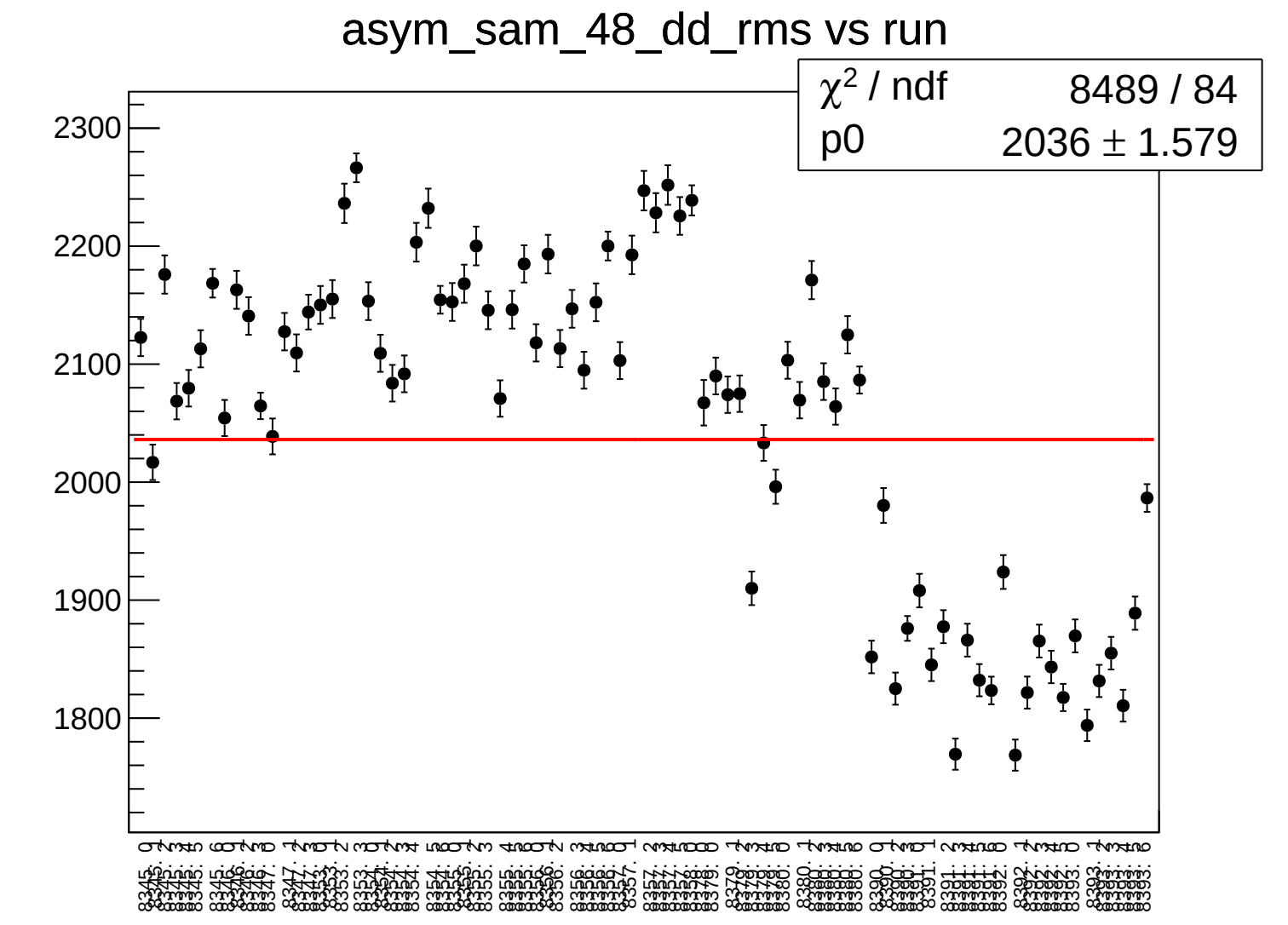

asym_sam_48_dd_correction_mean vs run
×10^3
χ² / ndf 102.6 / 84
p0 −6632 ± 2227
pull
Entries 85
Mean −3720
Std Dev 3774

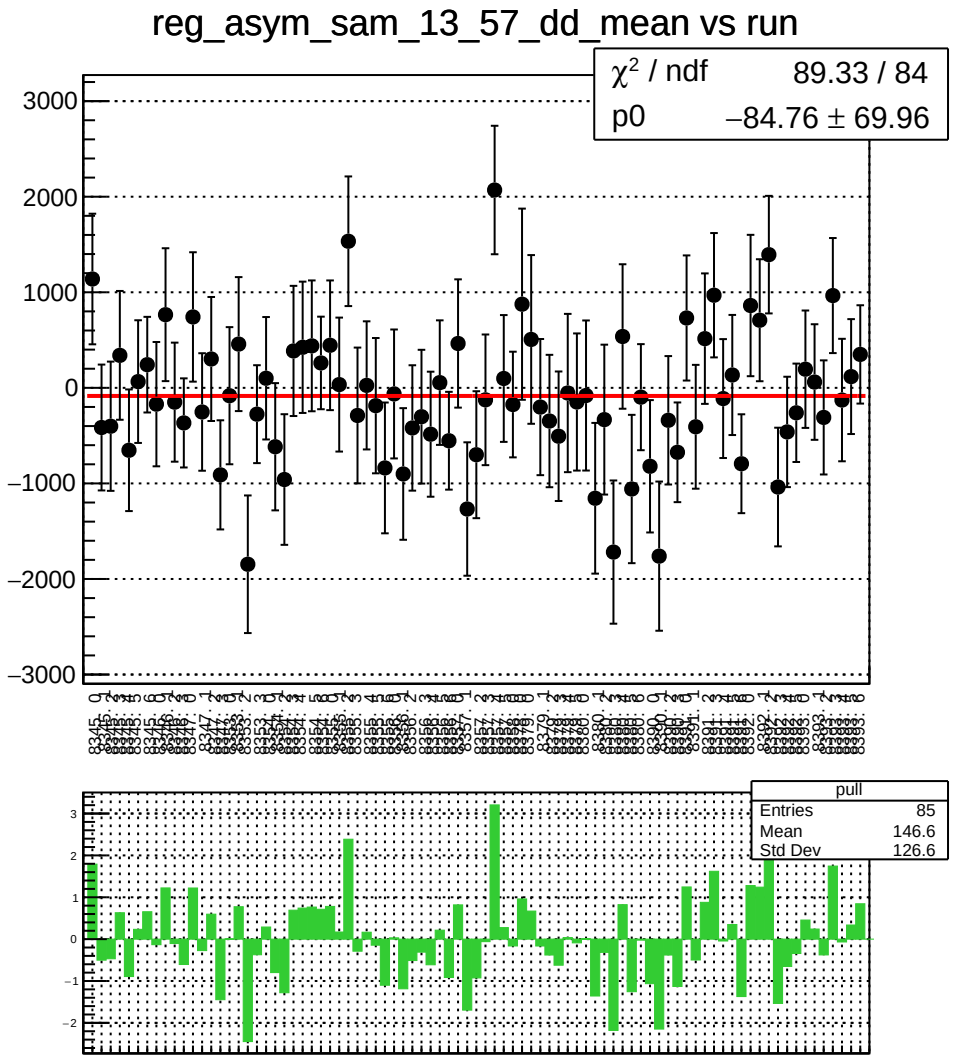

pull1D
Entries 85
Mean 0.001356
Std Dev 1.099

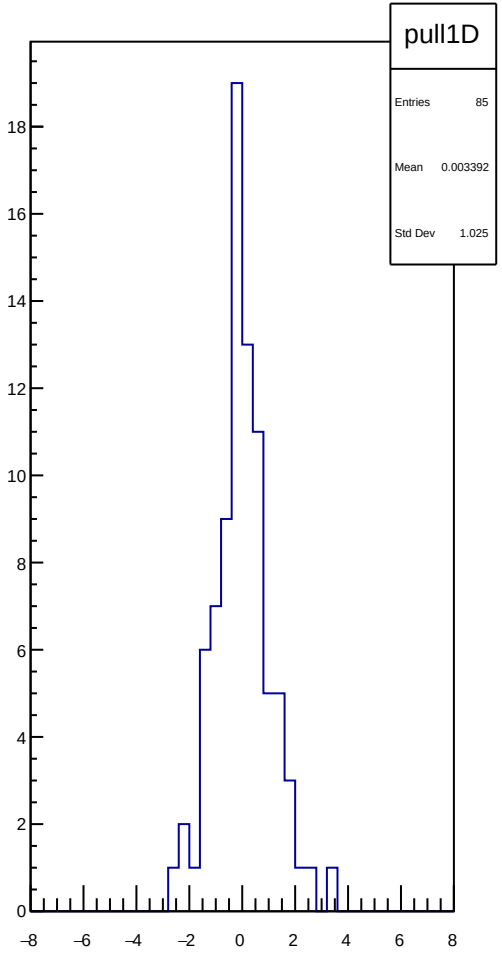

asym_sam_48_dd_correction_rms vs run
χ² / ndf 8529 / 84
p0 2031 ± 1.575
2300
2200
2100
2000
1900
1800
1700

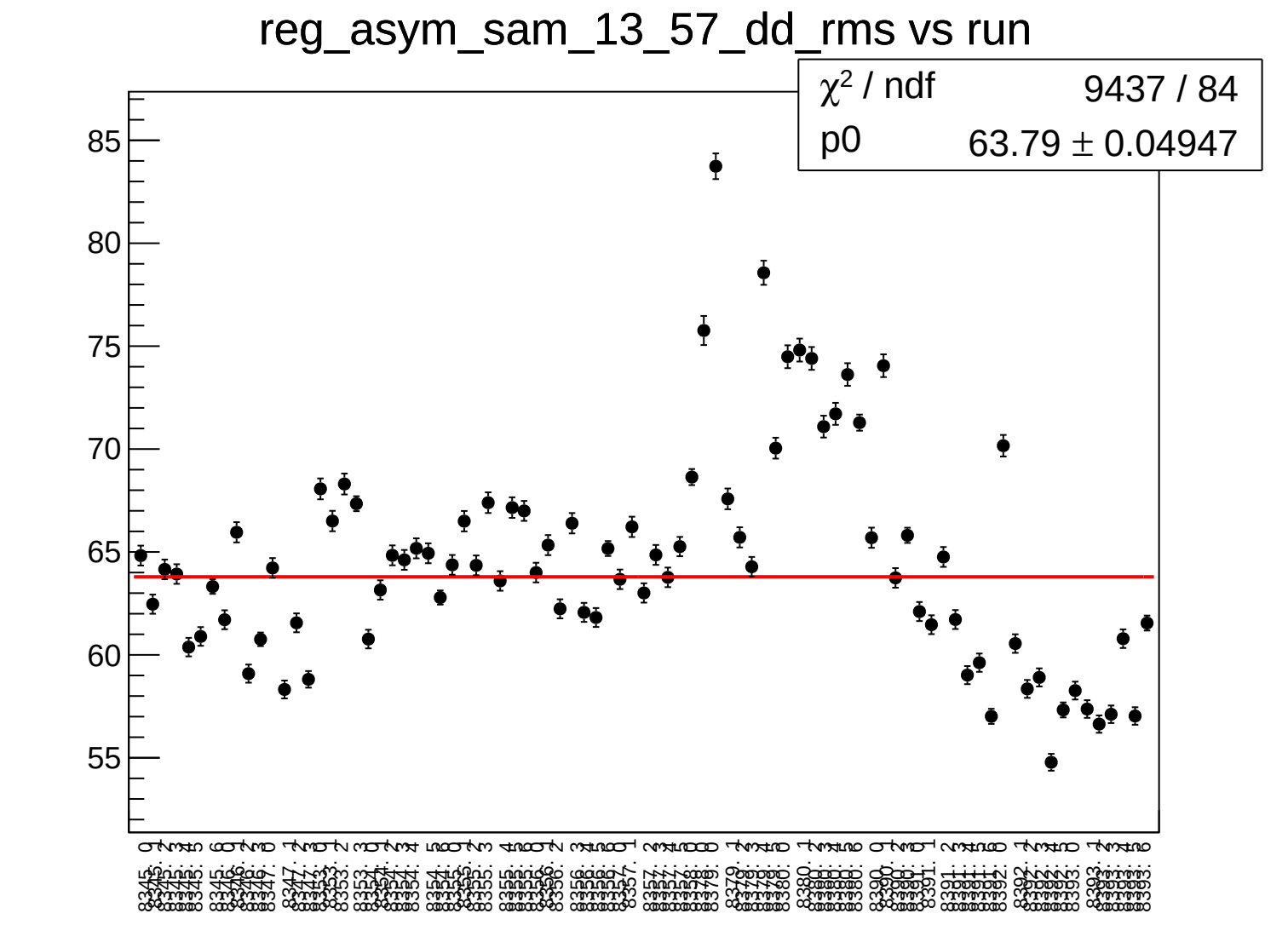

asym_sam_48_dd_mean vs run
×10^3
χ^2 / ndf 101.1 / 84
p0 6469 ± 2232
pull
Entries 85
Mean −2556
Std Dev 2610

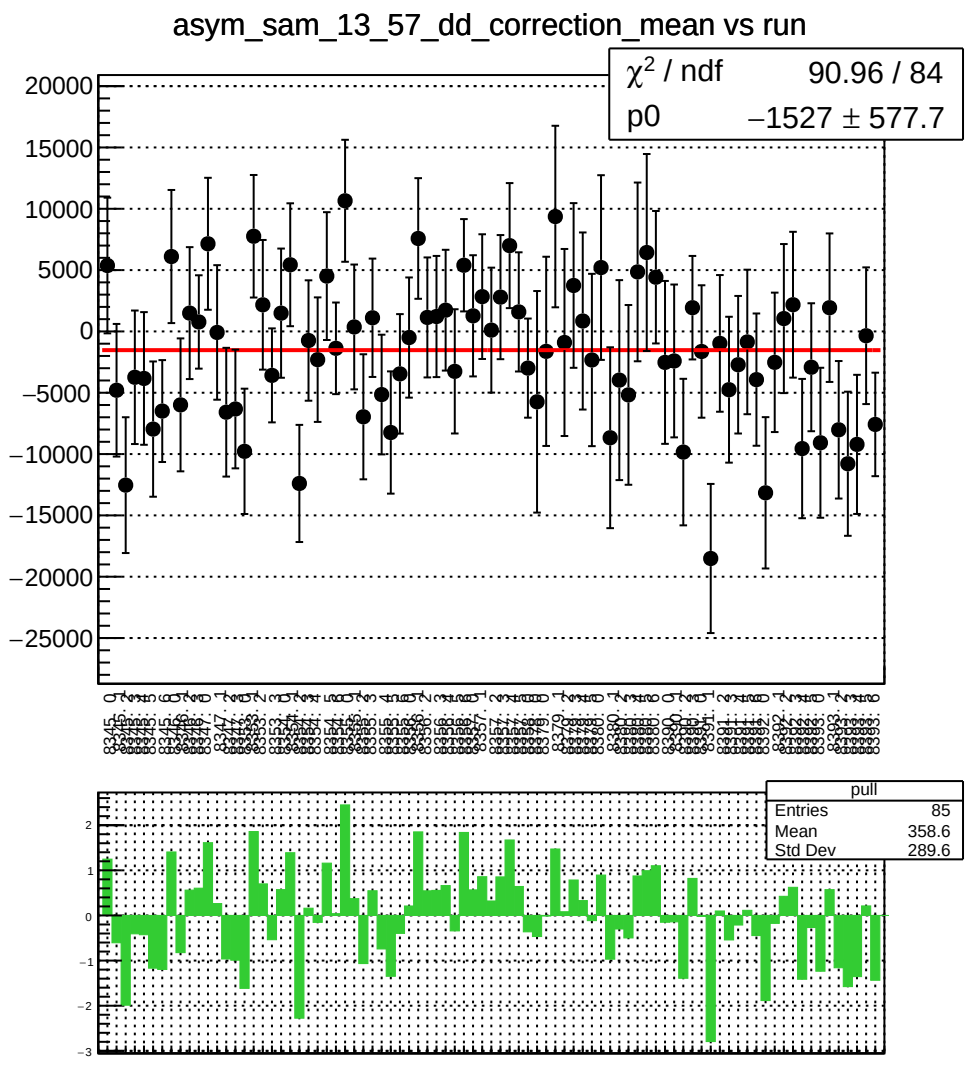

pull1D
Entries 85
Mean −0.001934
Std Dev 1.091

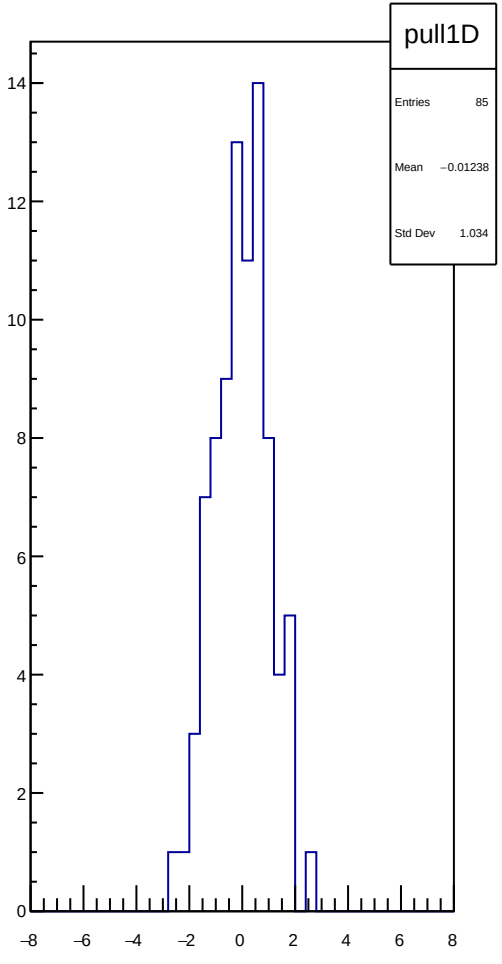

asym_sam_48_dd_rms vs run
χ² / ndf 8489 / 84
p0 2036 ± 1.579
2300
2200
2100
2000
1900
1800

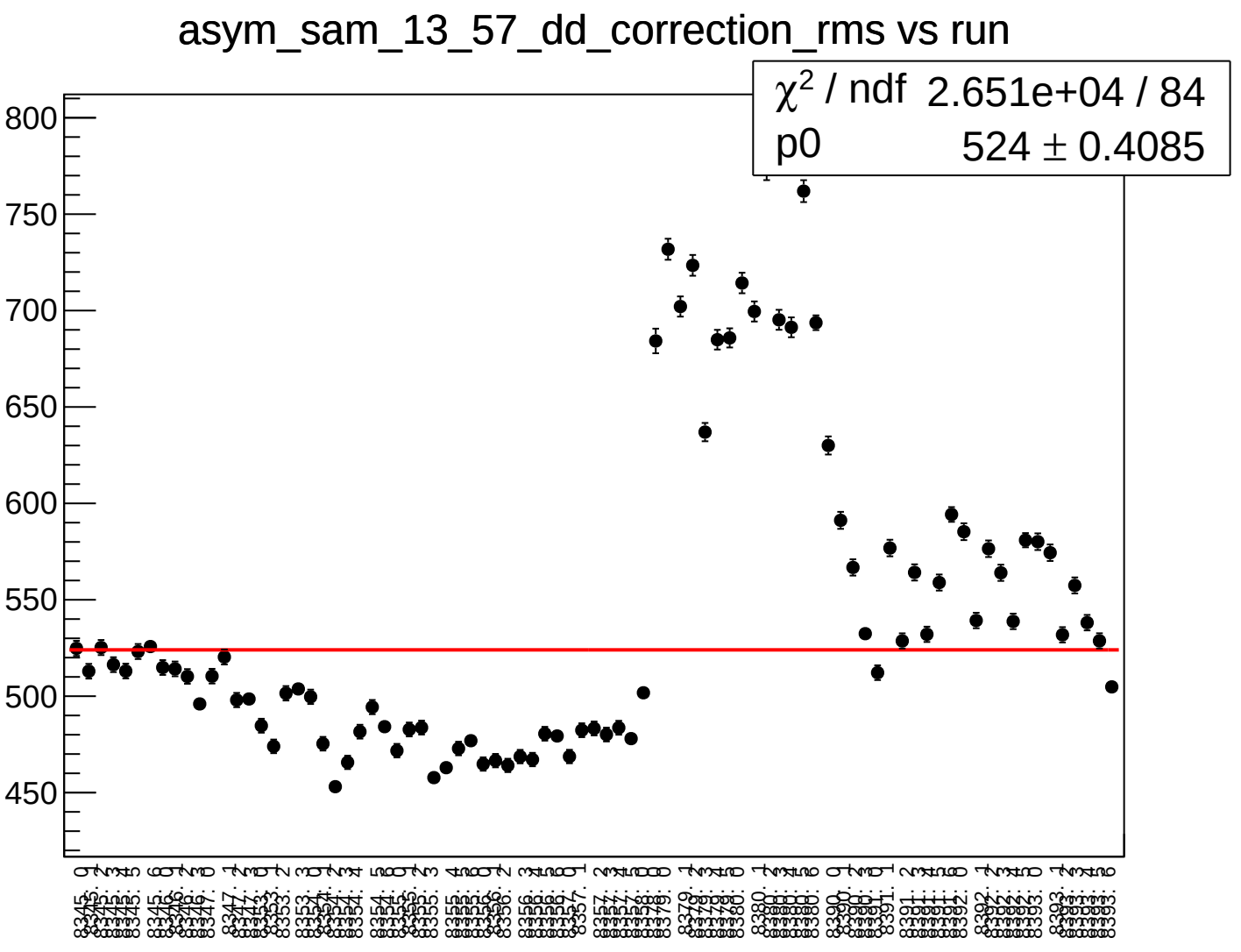

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 89.33 / 84
p0 −84.76 ± 69.96
pull
Entries 85
Mean 146.6
Std Dev 126.6

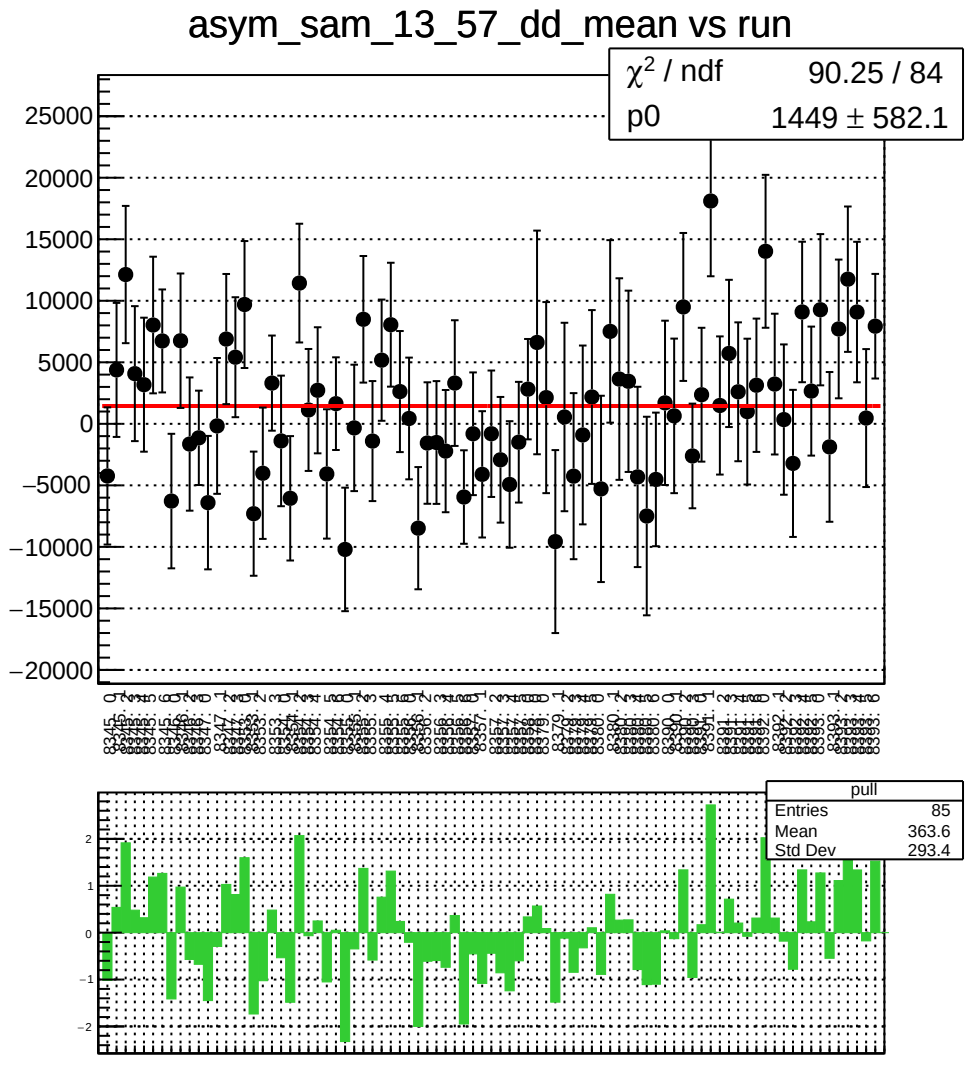

pull1D
Entries 85
Mean 0.003392
Std Dev 1.025

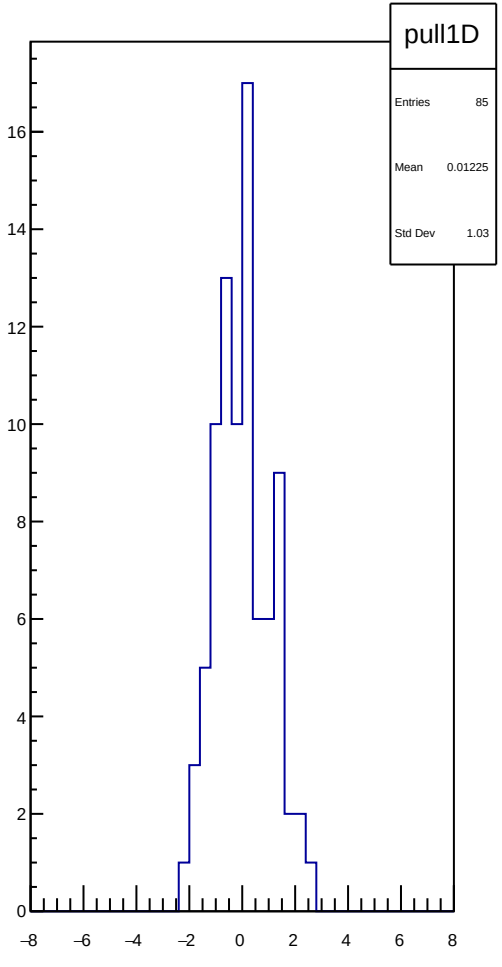

reg_asym_sam_13_57_dd_rms vs run
χ^2 / ndf 9437 / 84
p0 63.79 ± 0.04947
85
80
75
70
65
60
55

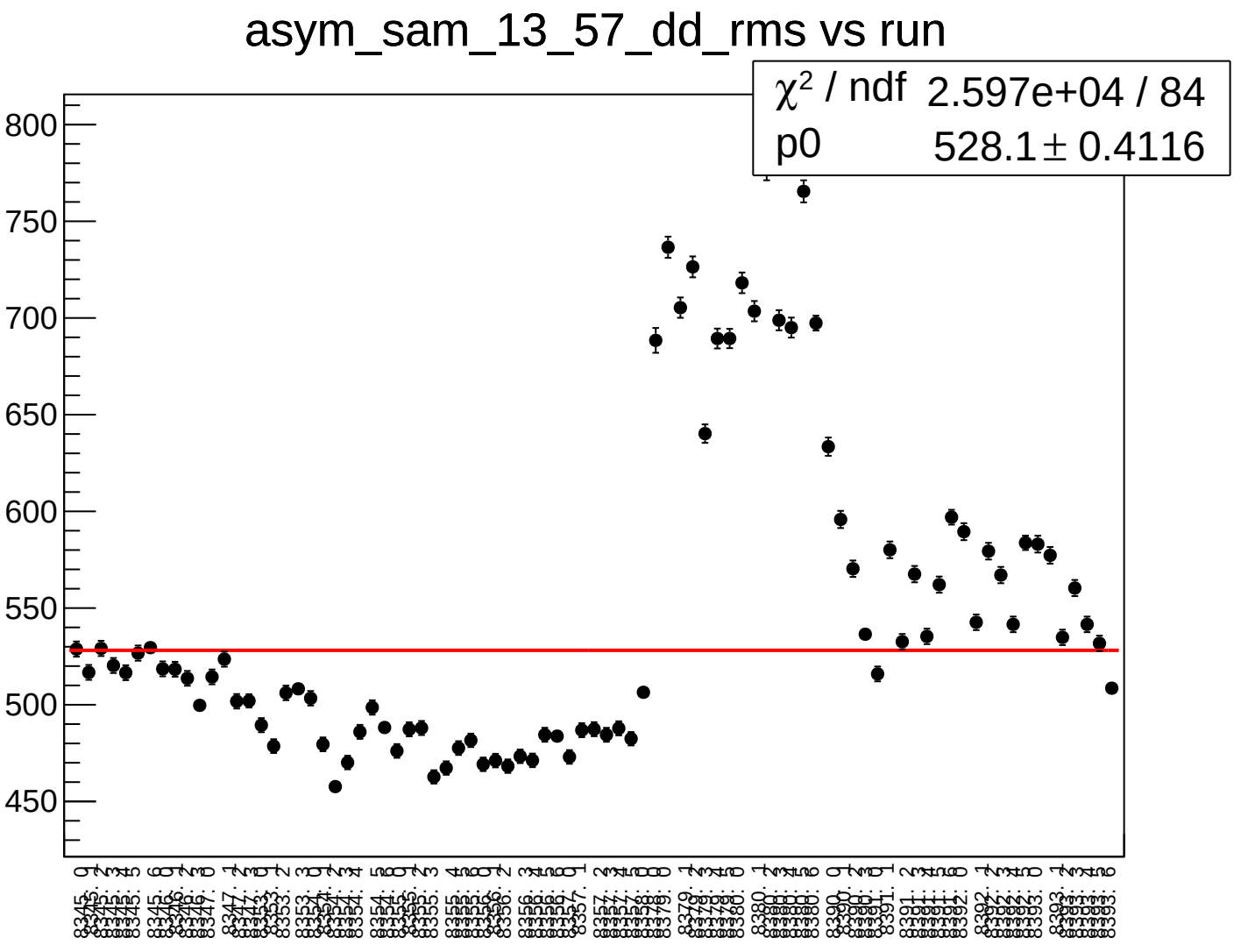

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 90.96 / 84
p0 −1527 ± 577.7
pull
Entries 85
Mean 358.6
Std Dev 289.6

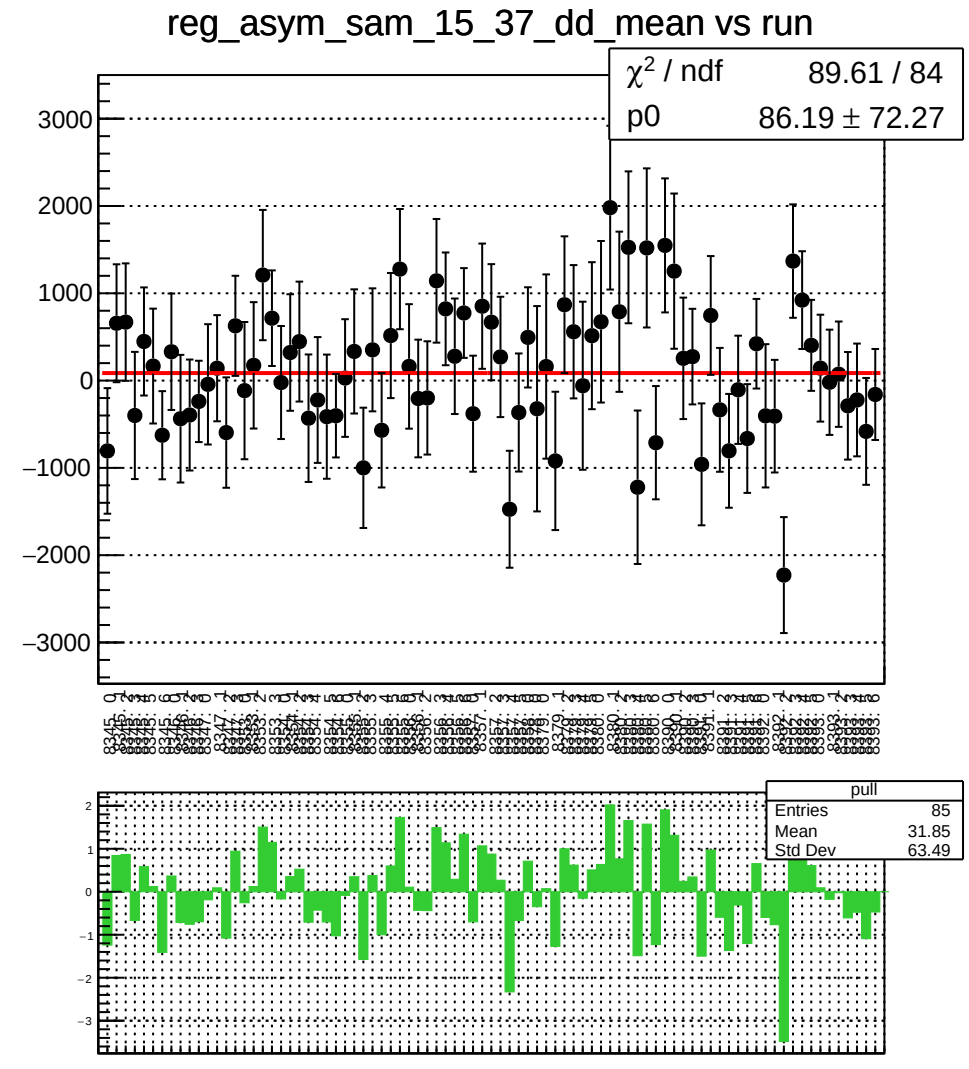

pull1D
Entries 85
Mean −0.01238
Std Dev 1.034

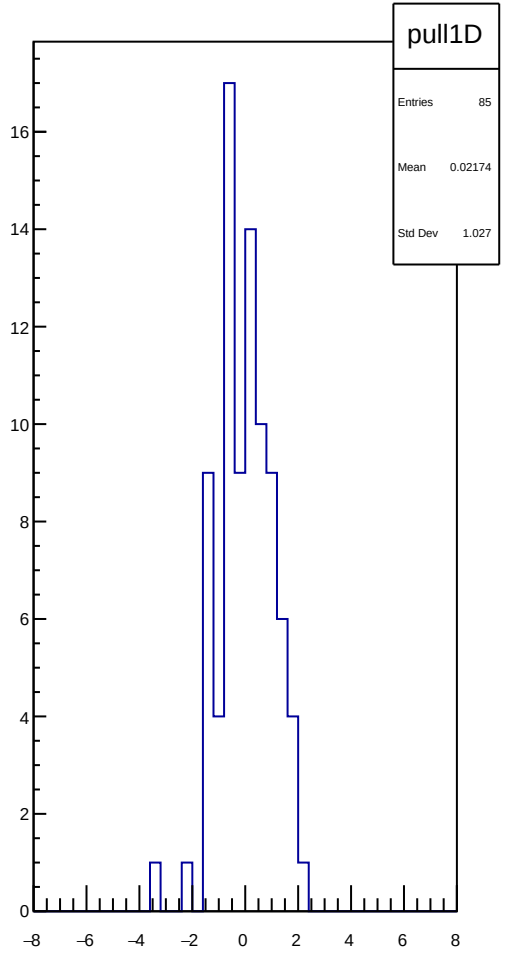

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 2.651e+04 / 84
p0 524 ± 0.4085
800
750
700
650
600
550
500
450

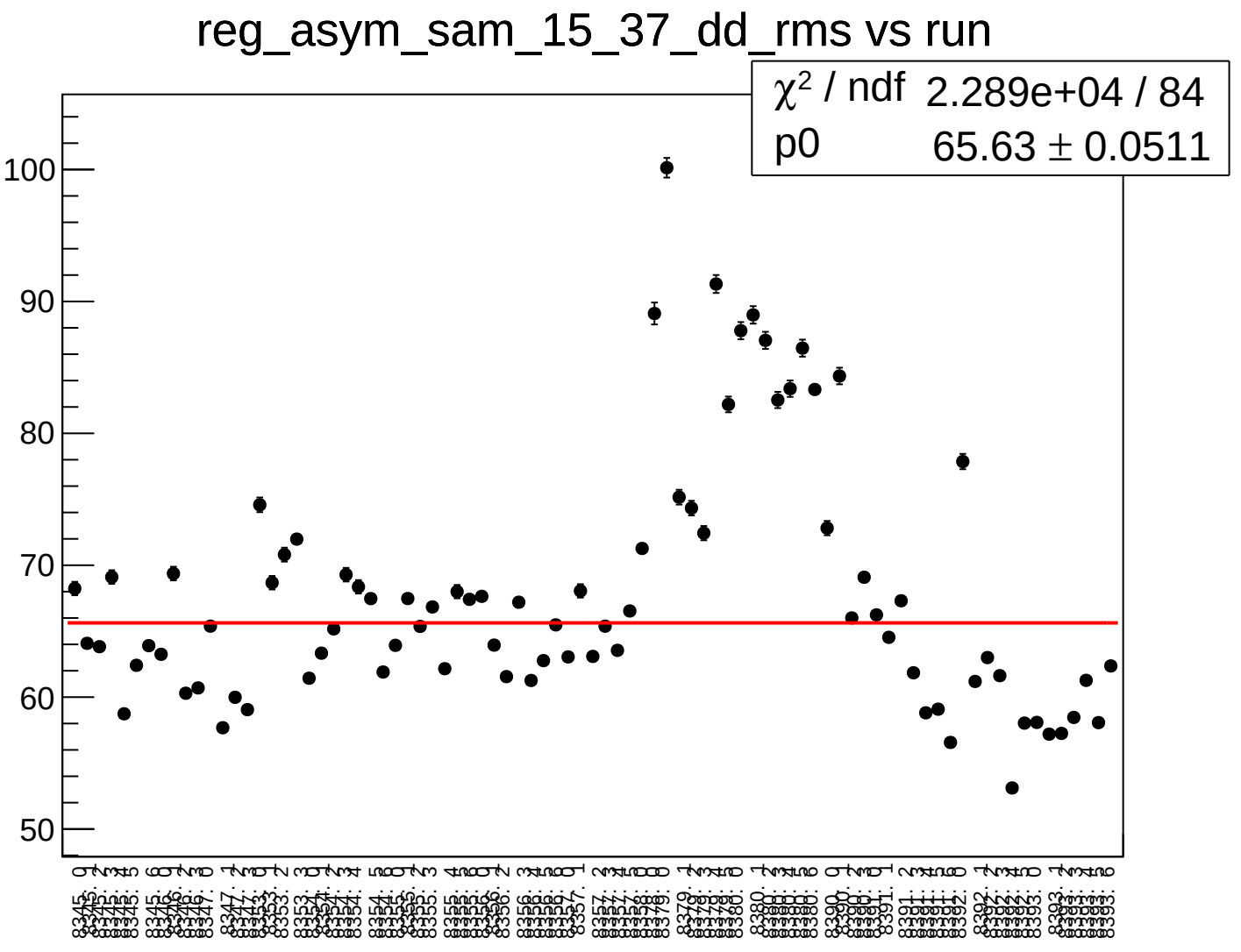

asym_sam_13_57_dd_mean vs run
χ² / ndf 90.25 / 84
p0 1449 ± 582.1
pull
Entries 85
Mean 363.6
Std Dev 293.4

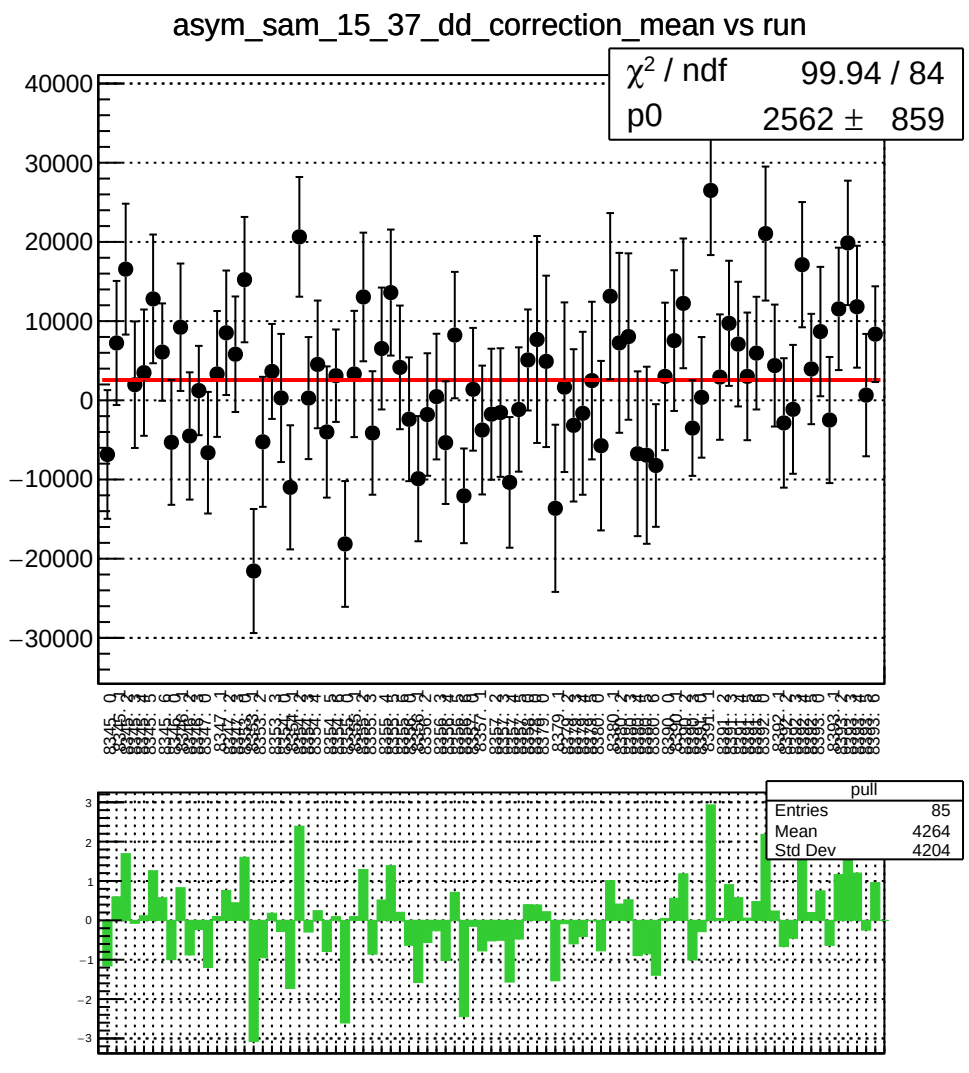

pull1D
Entries 85
Mean 0.01225
Std Dev 1.03

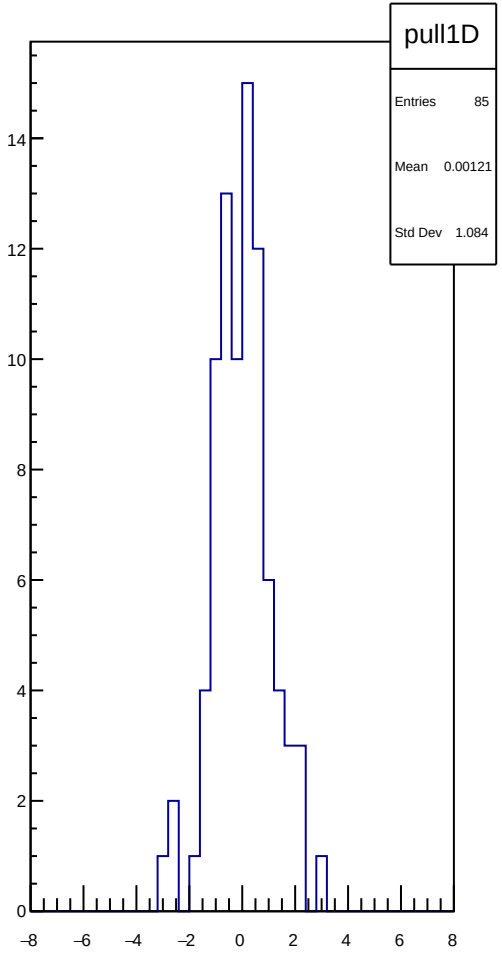

asym_sam_13_57_dd_rms vs run
χ² / ndf 2.597e+04 / 84
p0 528.1 ± 0.4116
800
750
700
650
600
550
500
450

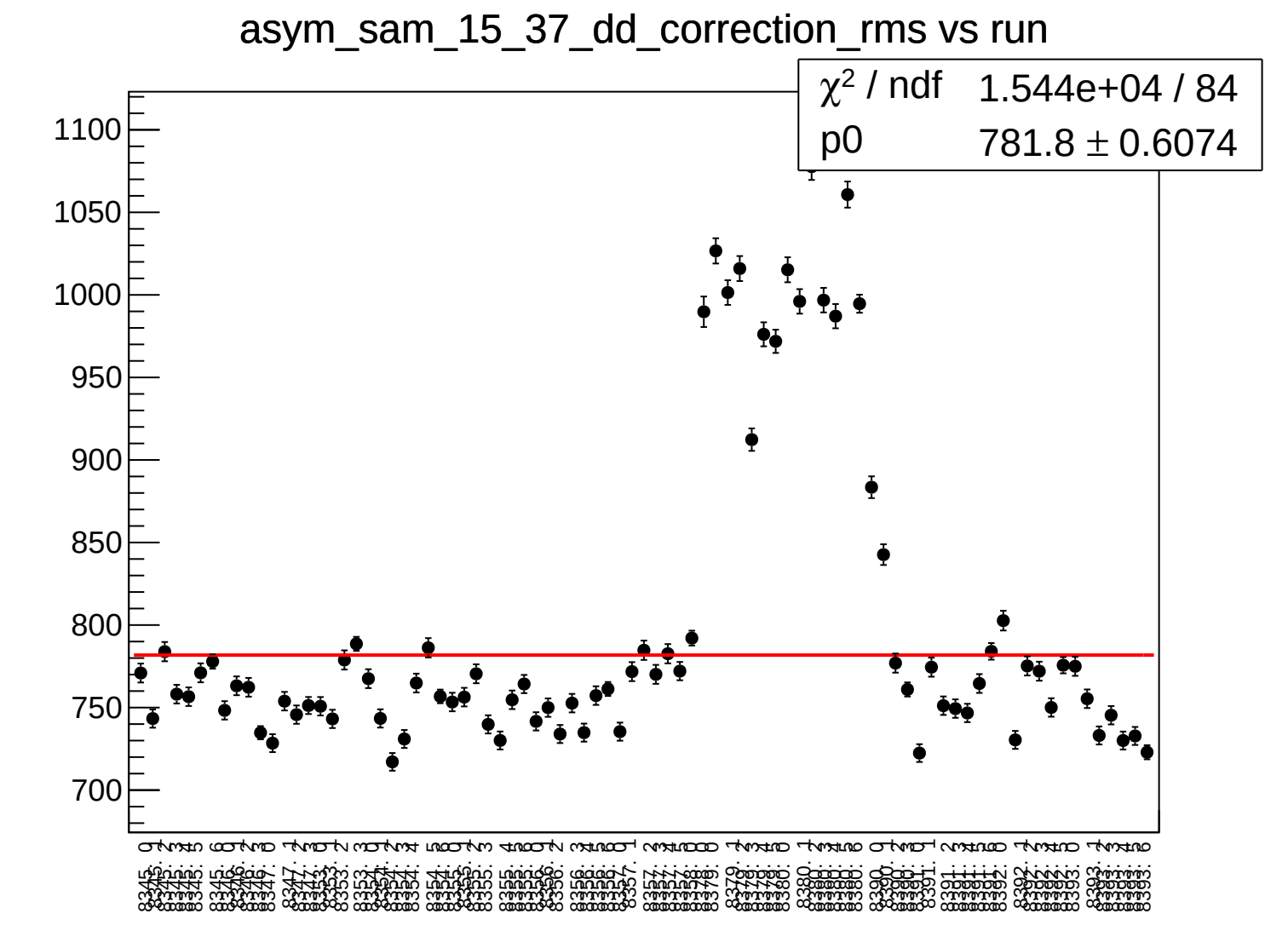

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 89.61 / 84
p0 86.19 ± 72.27
pull
Entries 85
Mean 31.85
Std Dev 63.49

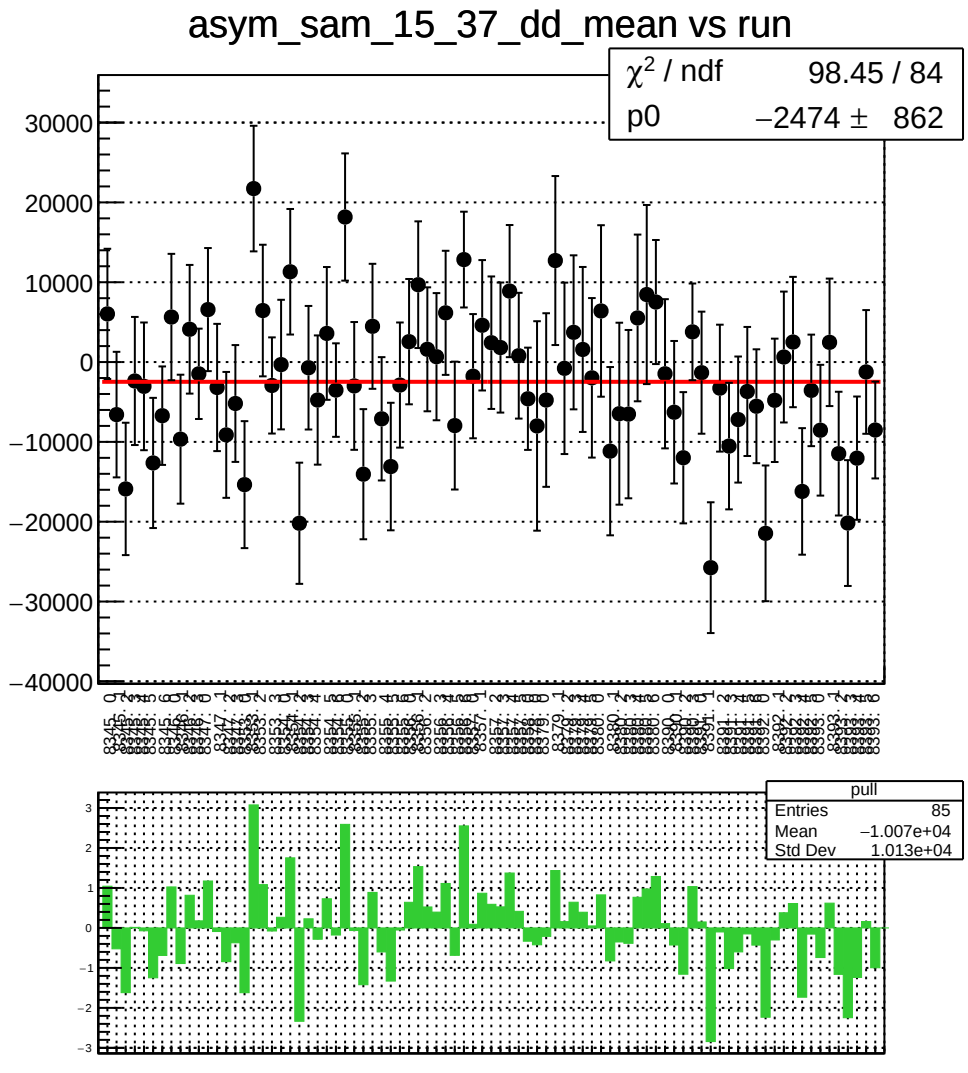

pull1D
Entries 85
Mean 0.02174
Std Dev 1.027

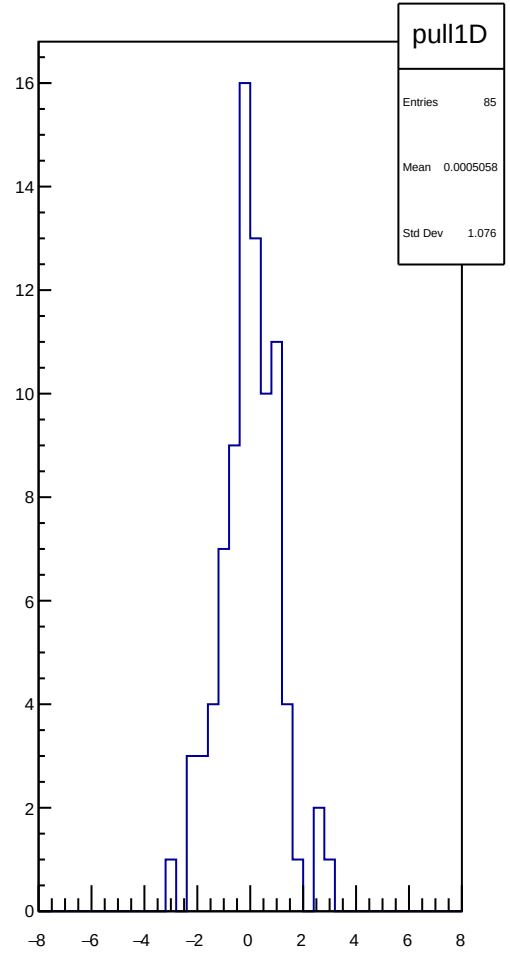

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 2.289e+04 / 84
p0 65.63 ± 0.0511
100
90
80
70
60
50

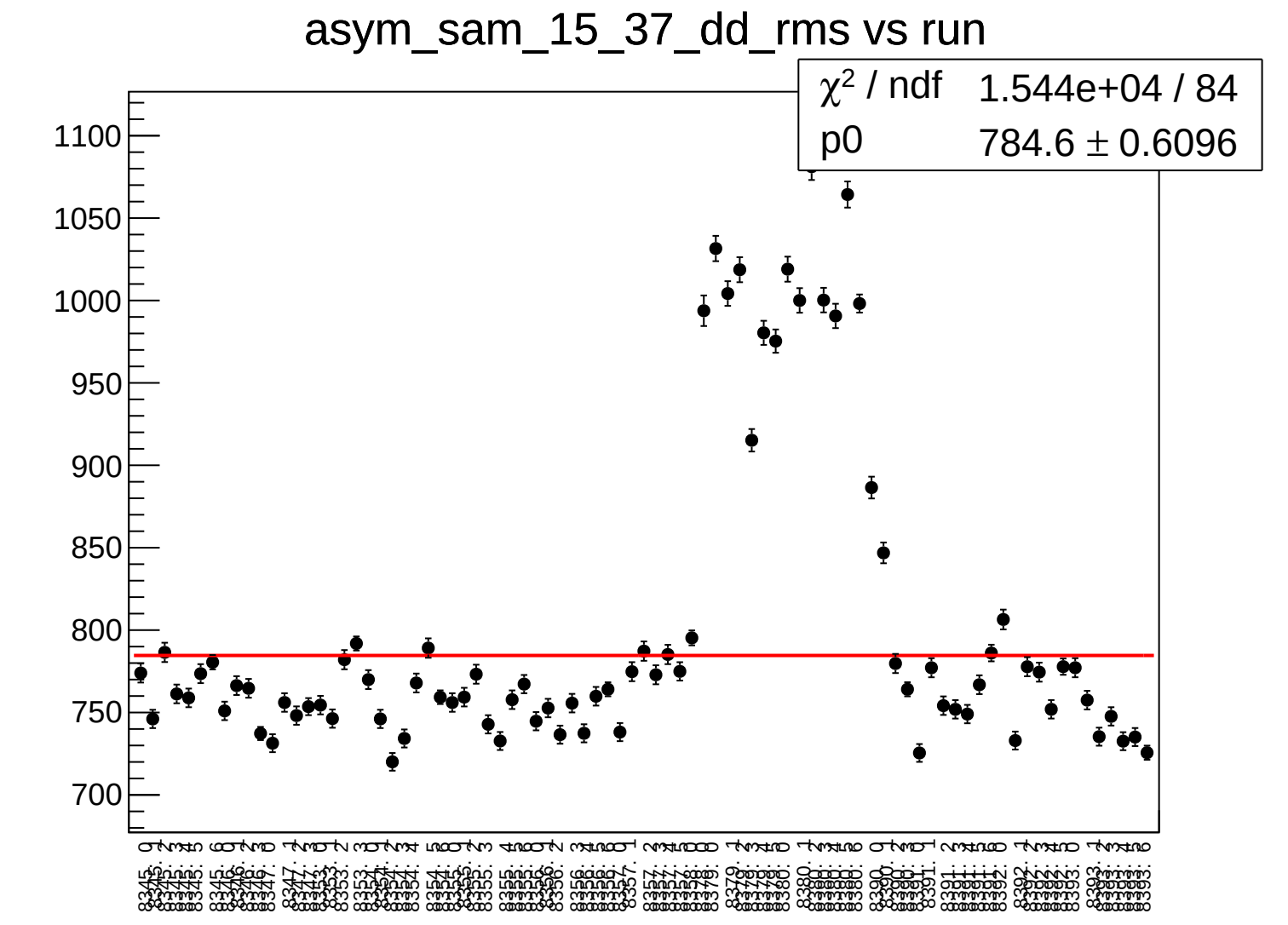

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 99.94 / 84
p0 2562 ± 859
pull
Entries 85
Mean 4264
Std Dev 4204

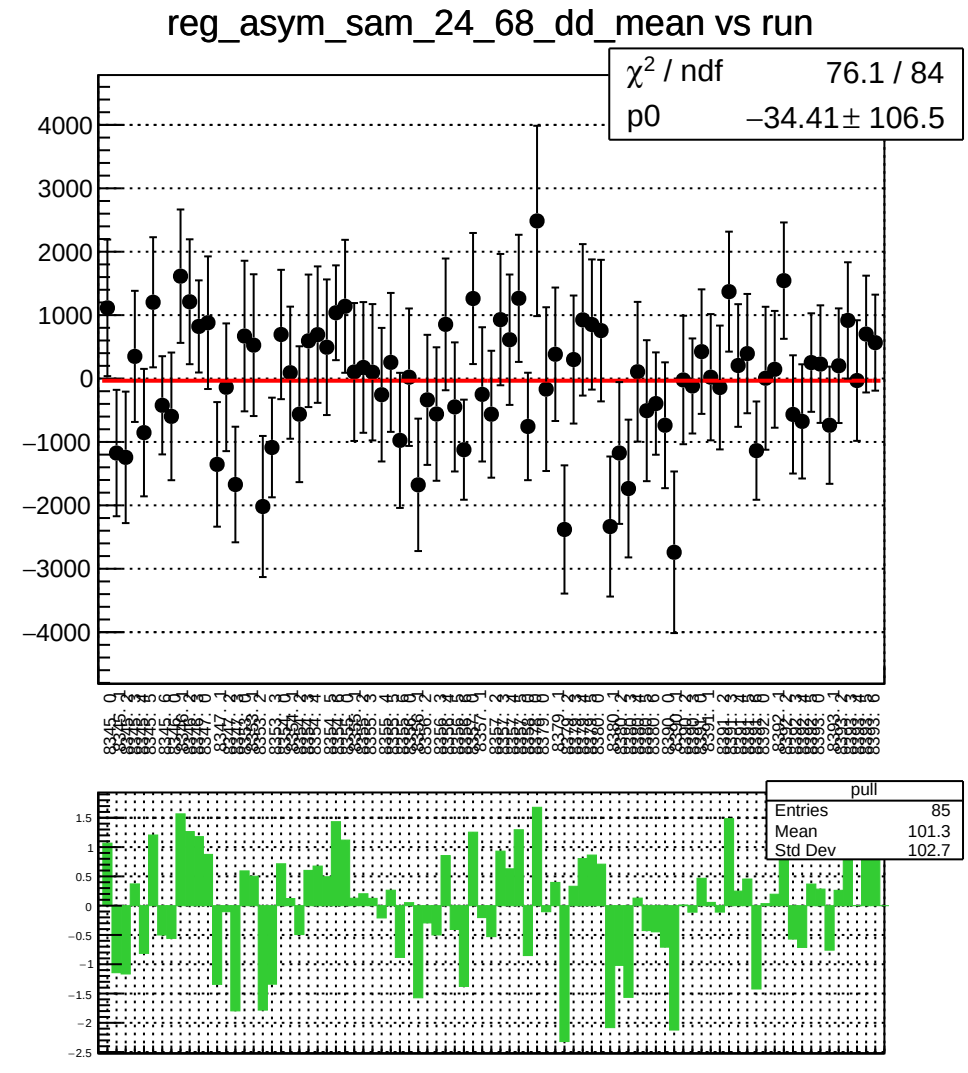

pull1D
Entries 85
Mean 0.00121
Std Dev 1.084

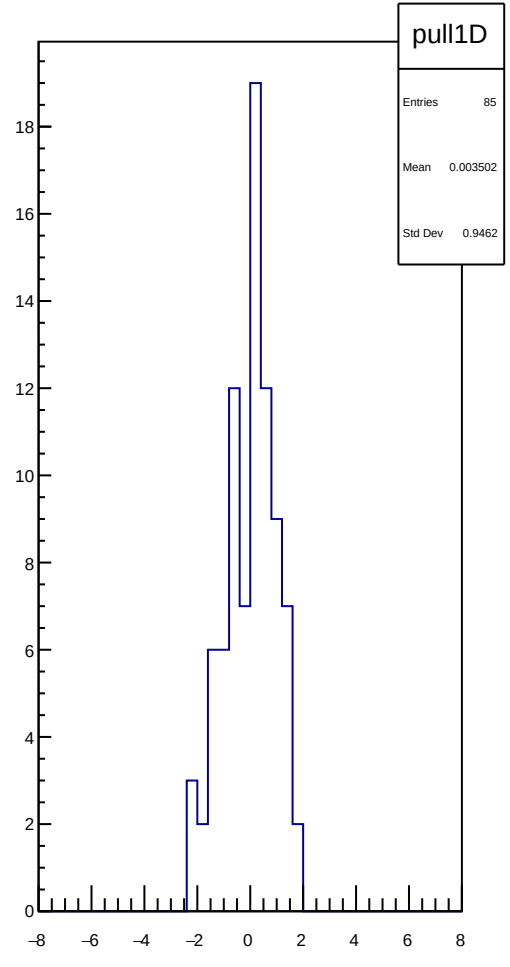

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 1.544e+04 / 84
p0 781.8 ± 0.6074
1100
1050
1000
950
900
850
800
750
700

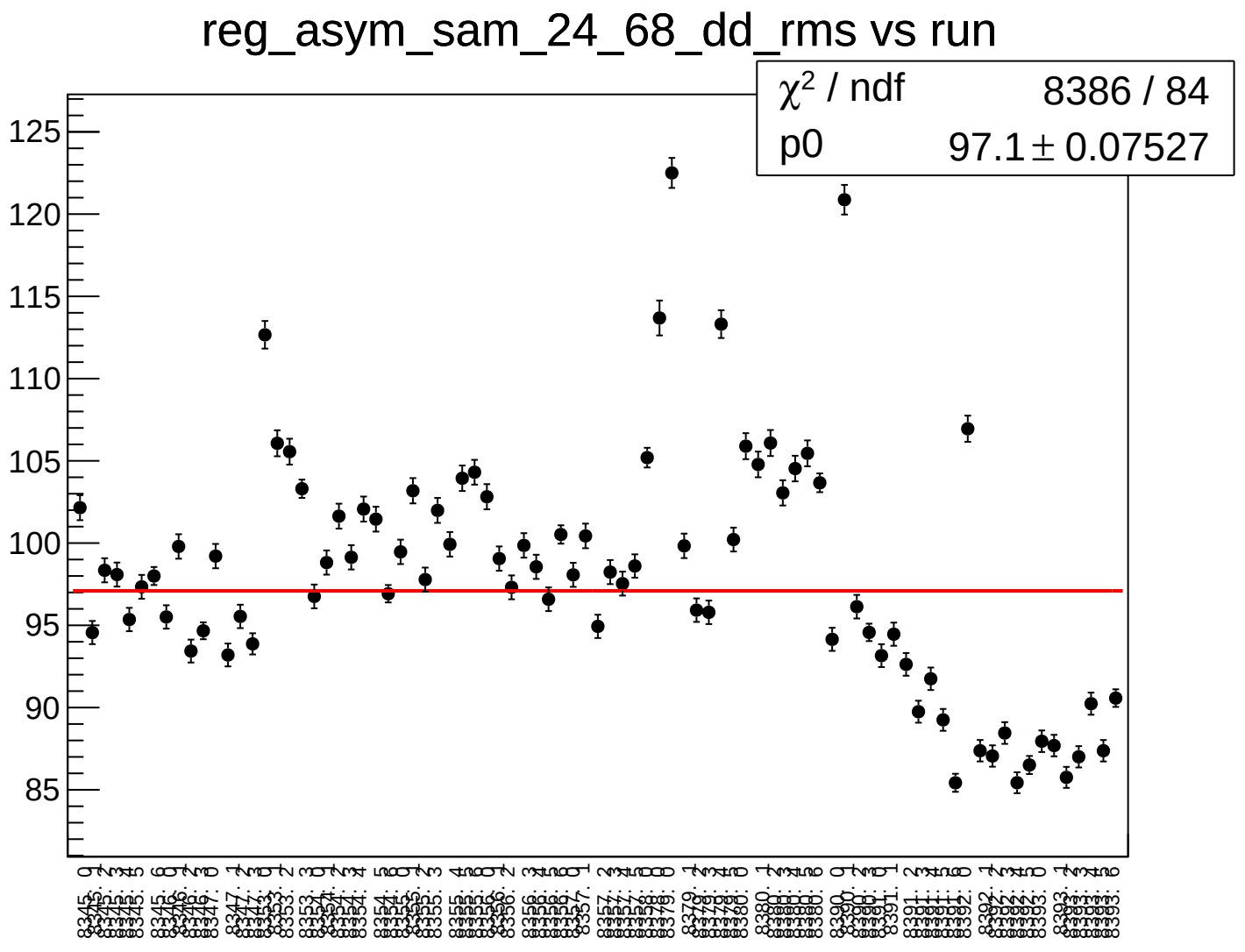

asym_sam_15_37_dd_mean vs run
χ² / ndf 98.45 / 84
p0 −2474 ± 862
pull
Entries 85
Mean −1.007e+04
Std Dev 1.013e+04

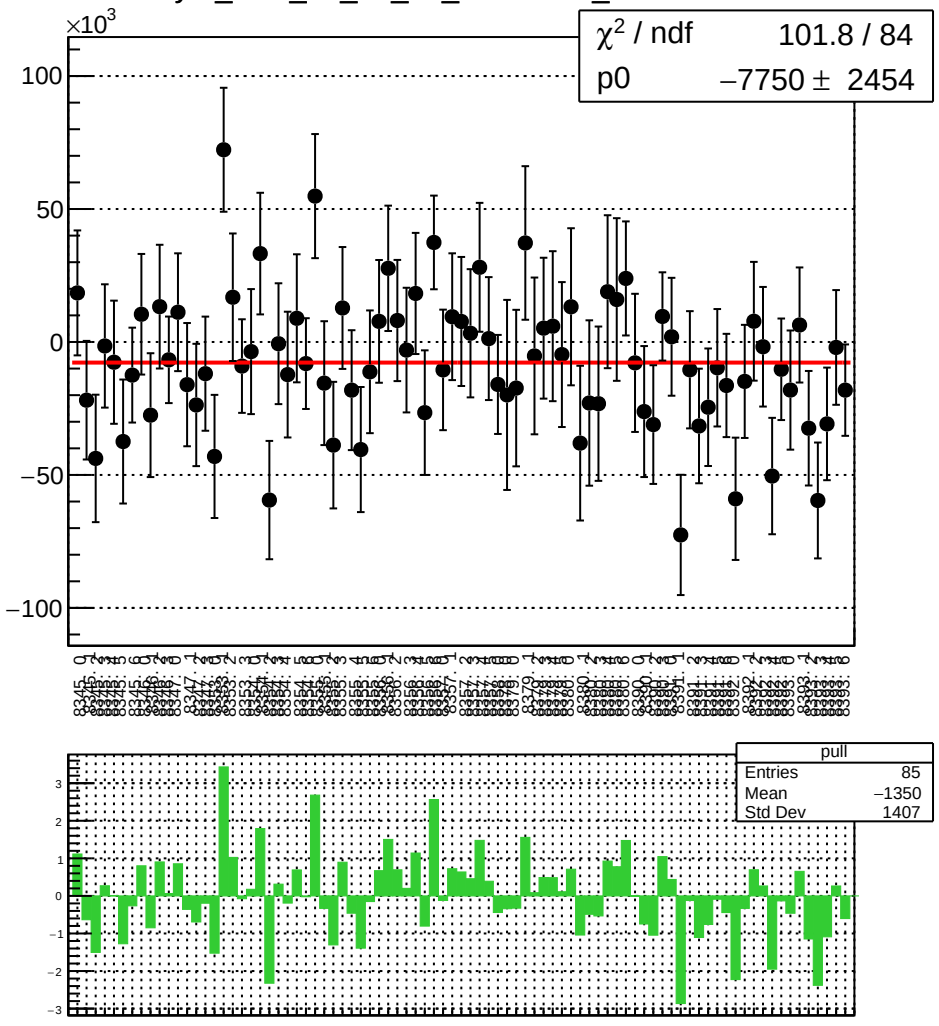

pull1D
Entries 85
Mean 0.0005058
Std Dev 1.076

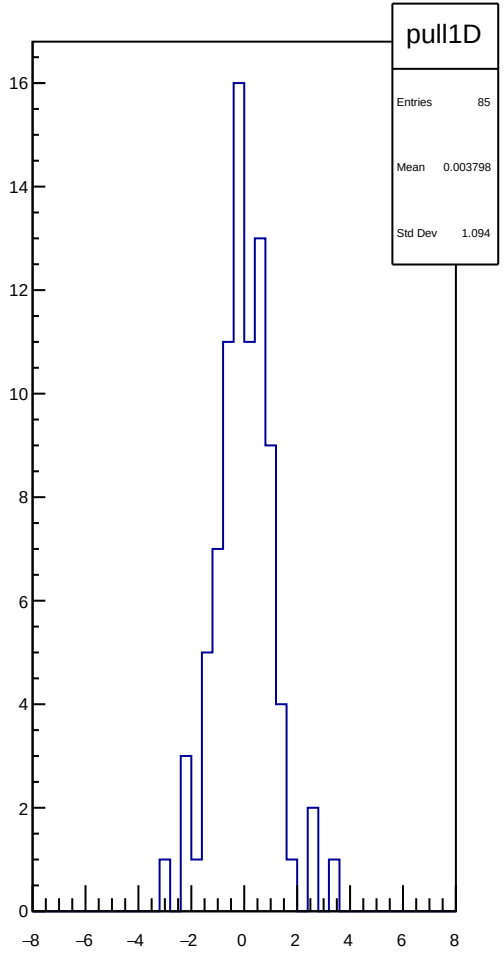

asym_sam_15_37_dd_rms vs run
χ² / ndf 1.544e+04 / 84
p0 784.6 ± 0.6096
1100
1050
1000
950
900
850
800
750
700

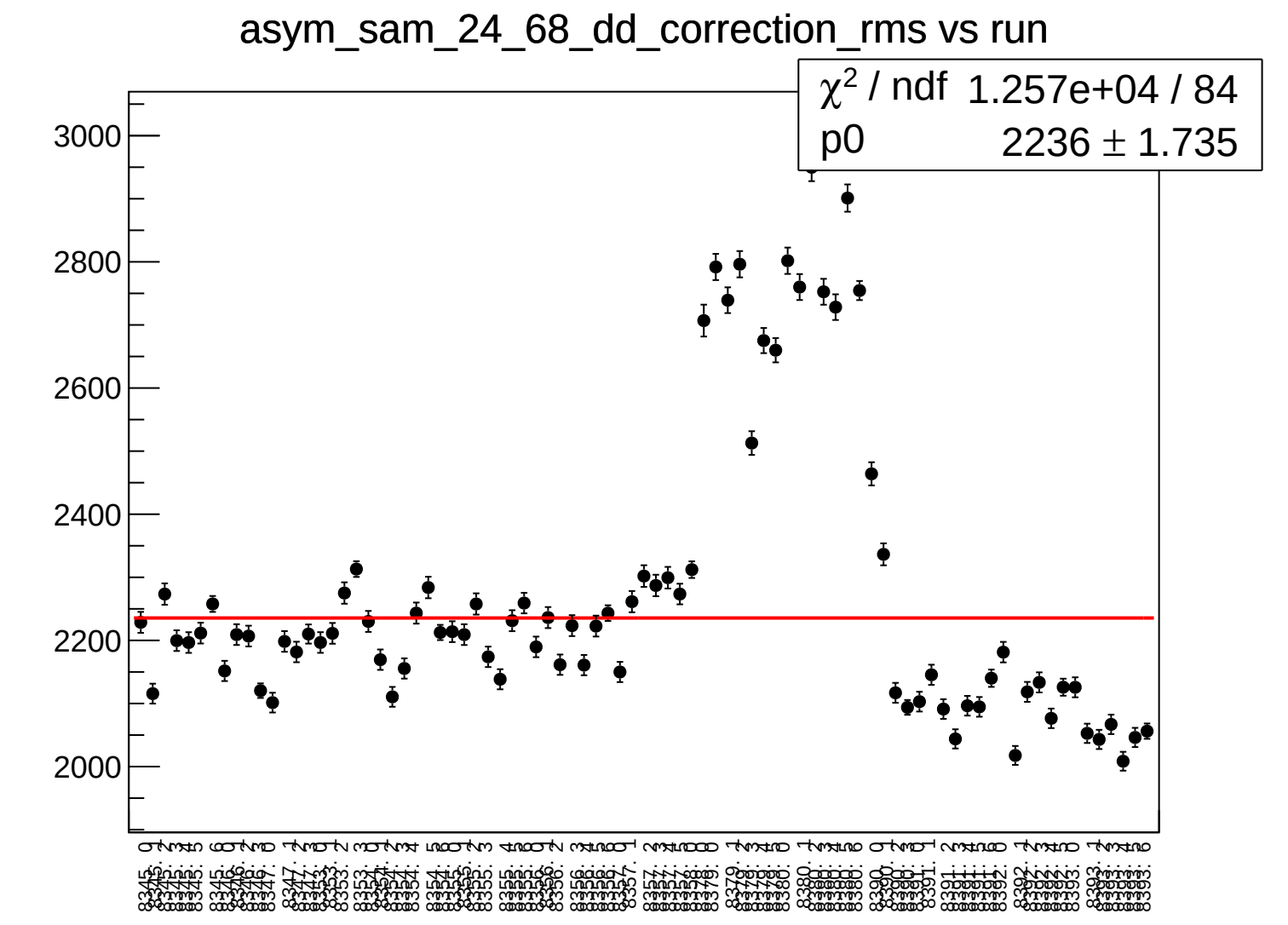

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 76.1 / 84
p0 −34.41 ± 106.5
pull
Entries 85
Mean 101.3
Std Dev 102.7

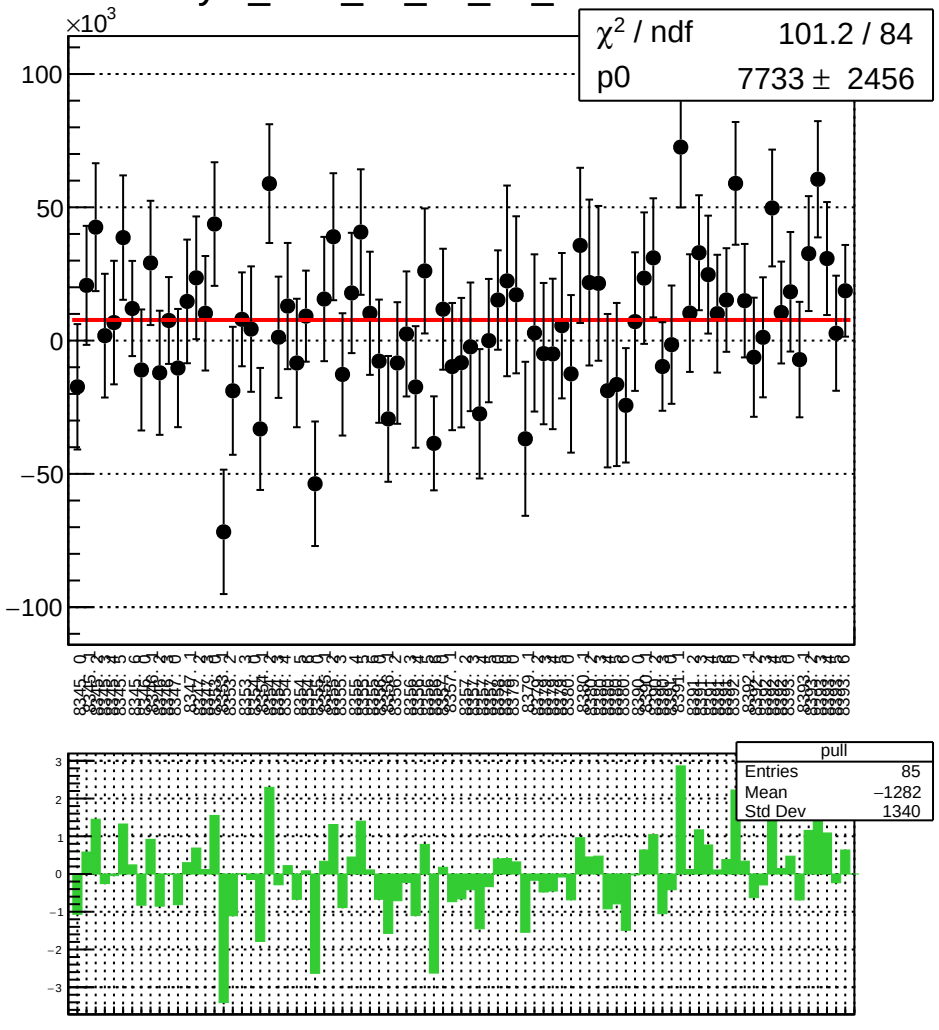

pull1D
Entries 85
Mean 0.003502
Std Dev 0.9462

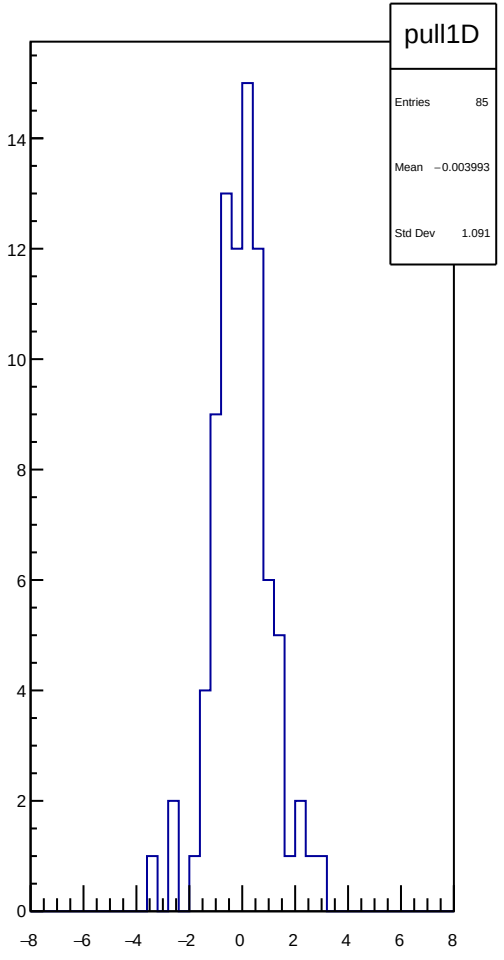

reg_asym_sam_24_68_dd_rms vs run
χ^2 / ndf 8386 / 84
p0 97.1 ± 0.07527
125
120
115
110
105
100
95
90
85

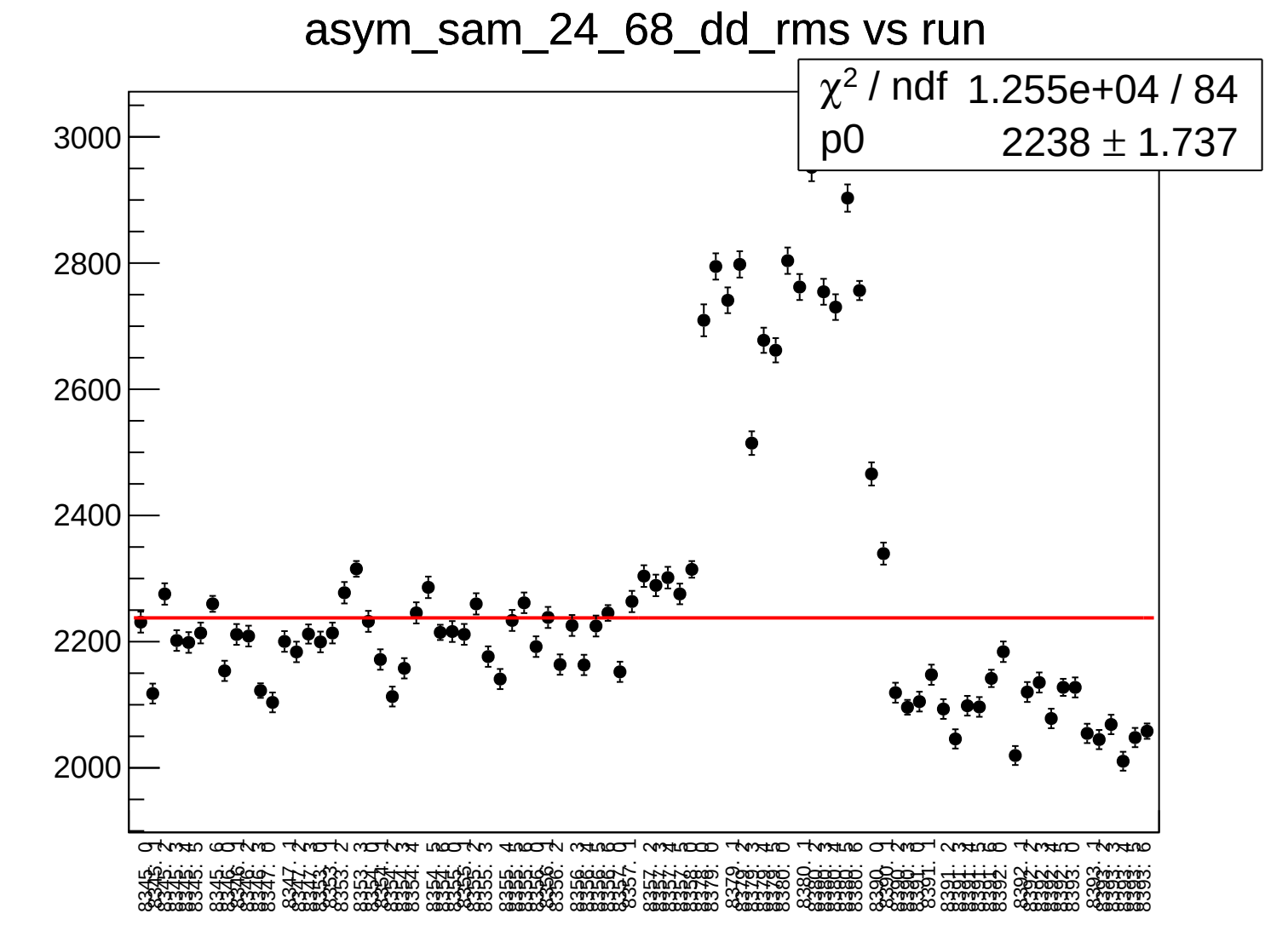

asym_sam_24_68_dd_correction_mean vs run
×10^3
χ² / ndf 101.8 / 84
p0 −7750 ± 2454
100
50
0
−50
−100
pull
Entries 85
Mean −1350
Std Dev 1407
3
2
1
0
−1
−2
−3

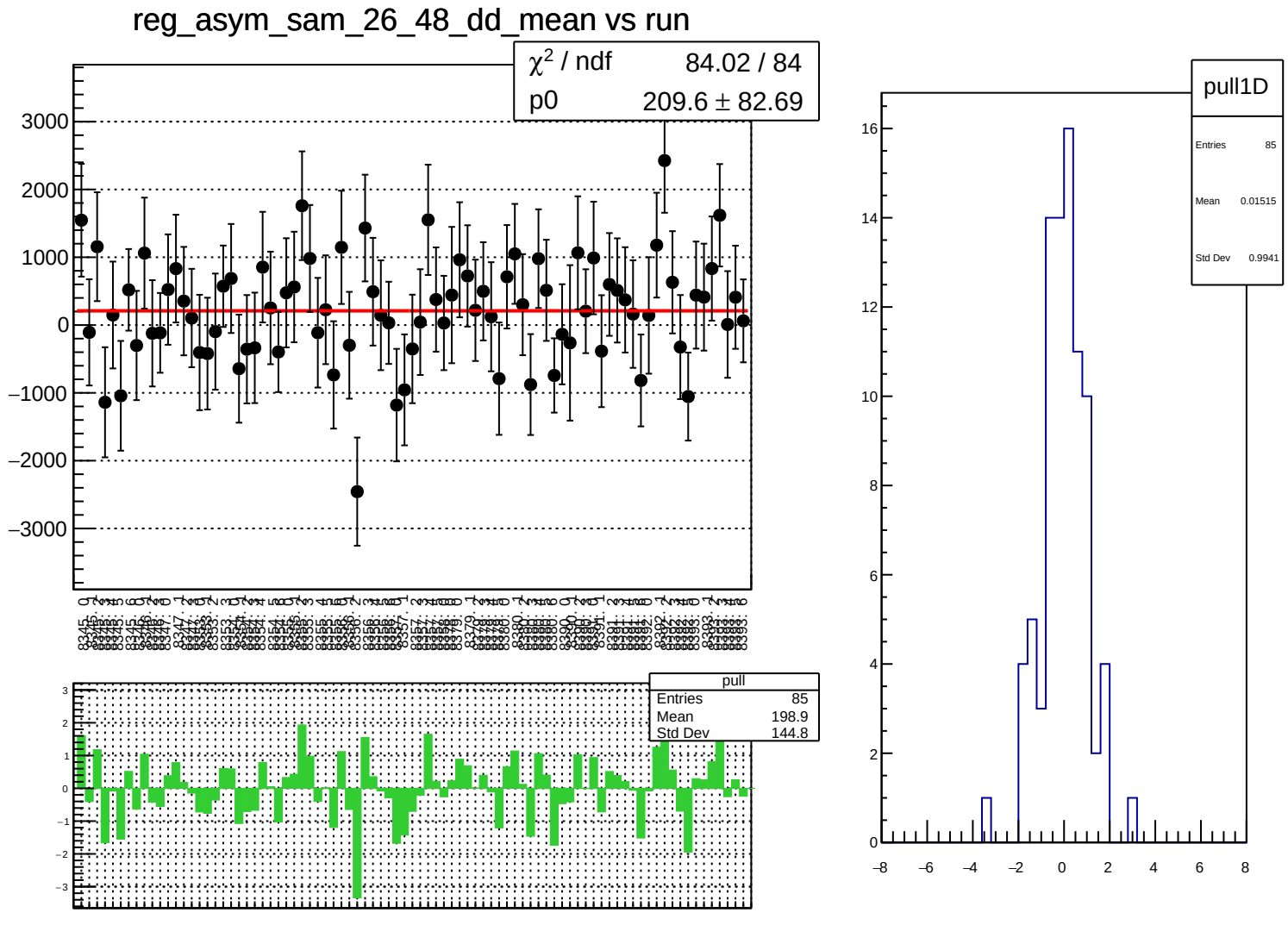

pull1D
Entries 85
Mean 0.003798
Std Dev 1.094
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

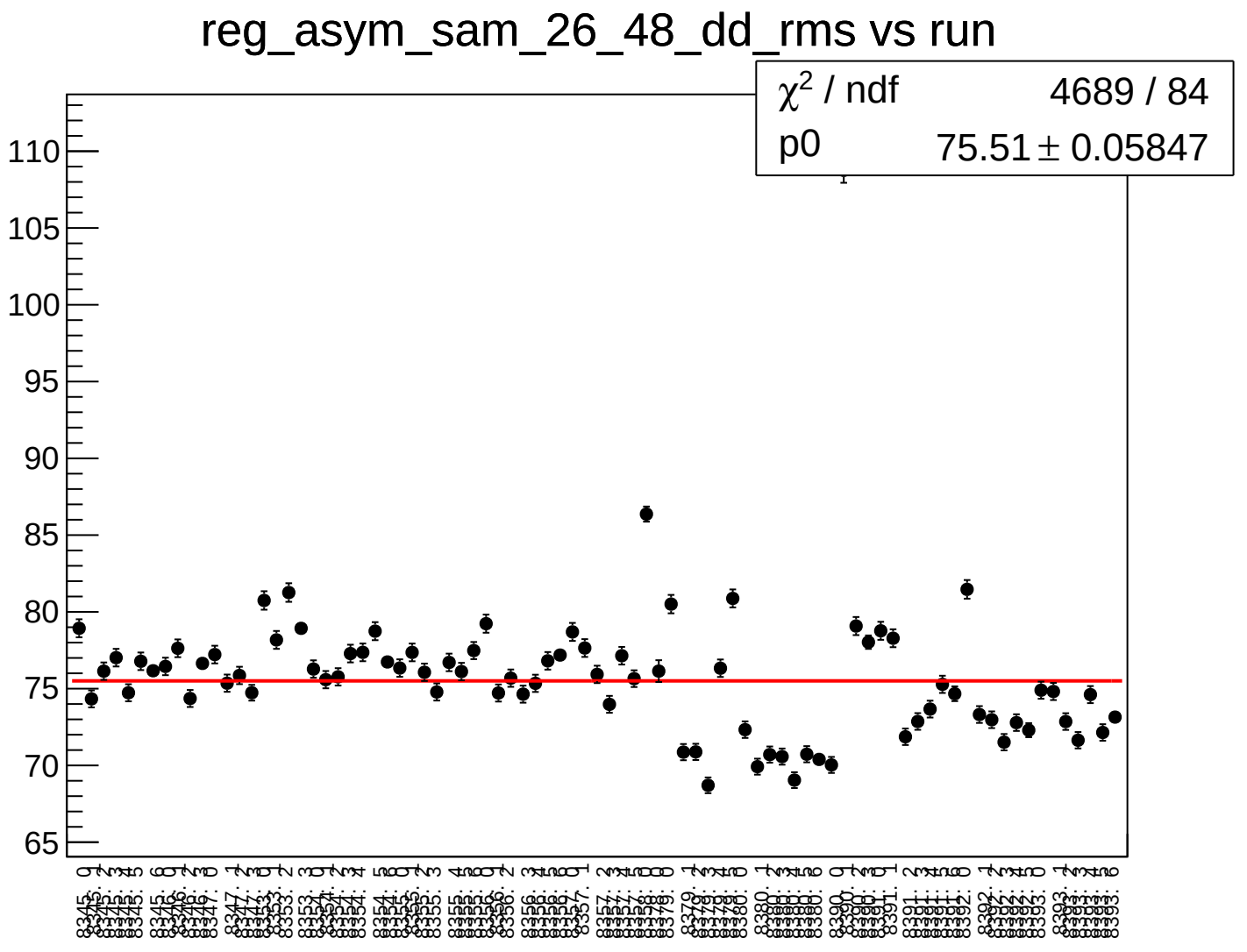

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 1.257e+04 / 84
p0 2236 ± 1.735
3000
2800
2600
2400
2200
2000

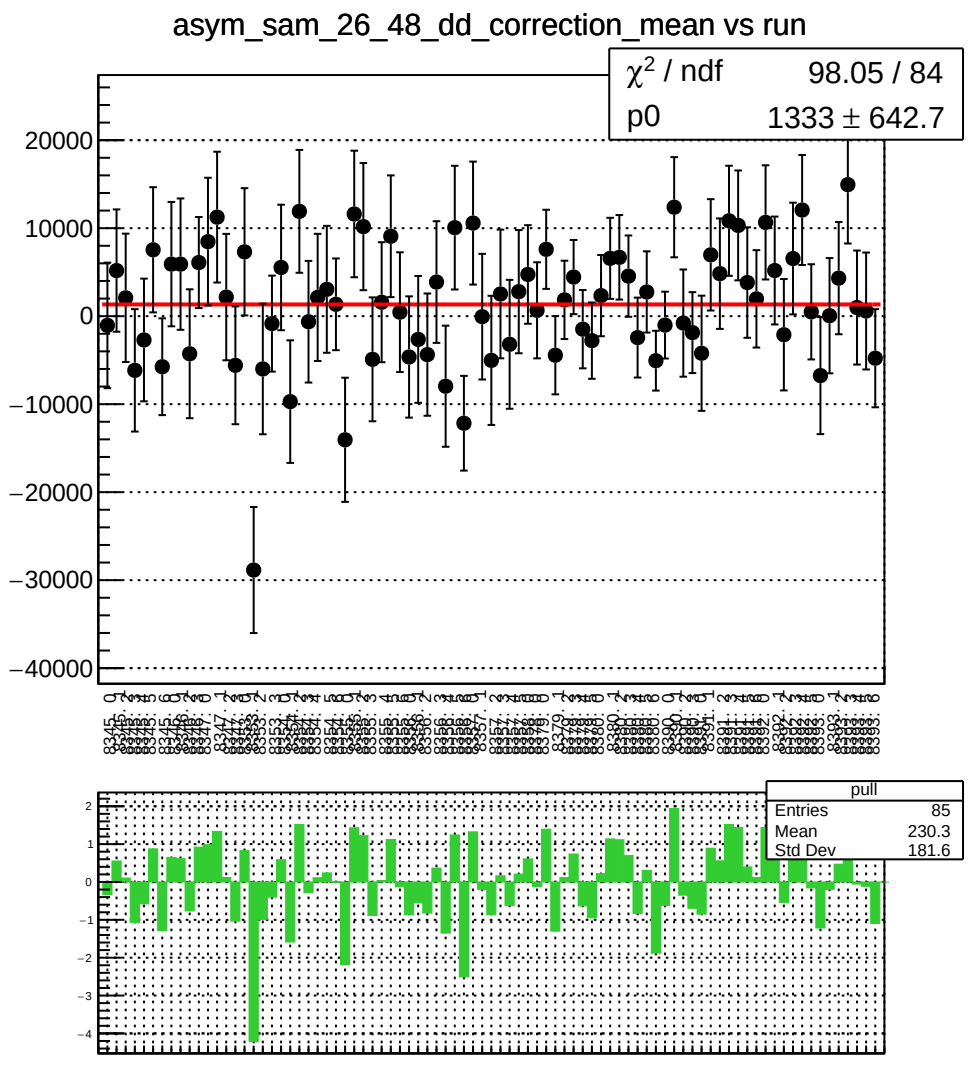

asym_sam_24_68_dd_mean vs run
×10^3
χ² / ndf 101.2 / 84
p0 7733 ± 2456
100
50
0
−50
−100
pull
Entries 85
Mean −1282
Std Dev 1340
3
2
1
0
−1
−2
−3

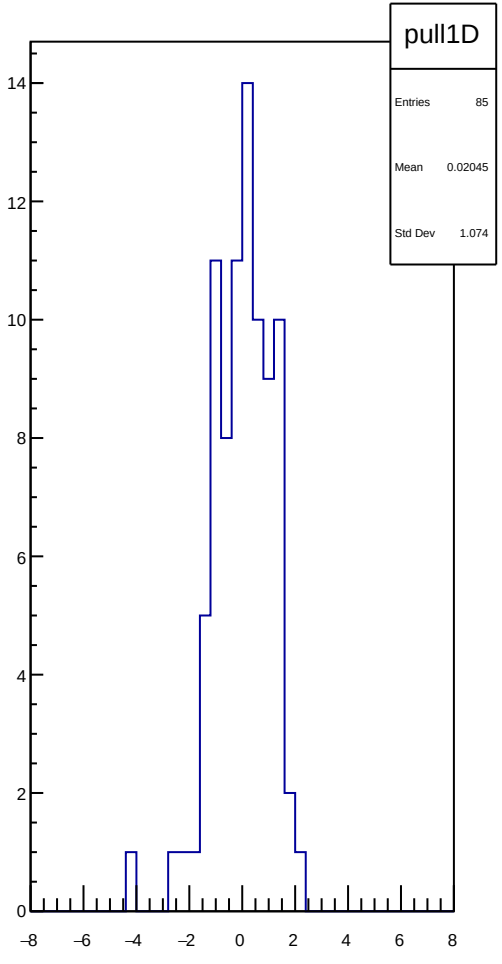

pull1D
Entries 85
Mean −0.003993
Std Dev 1.091
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

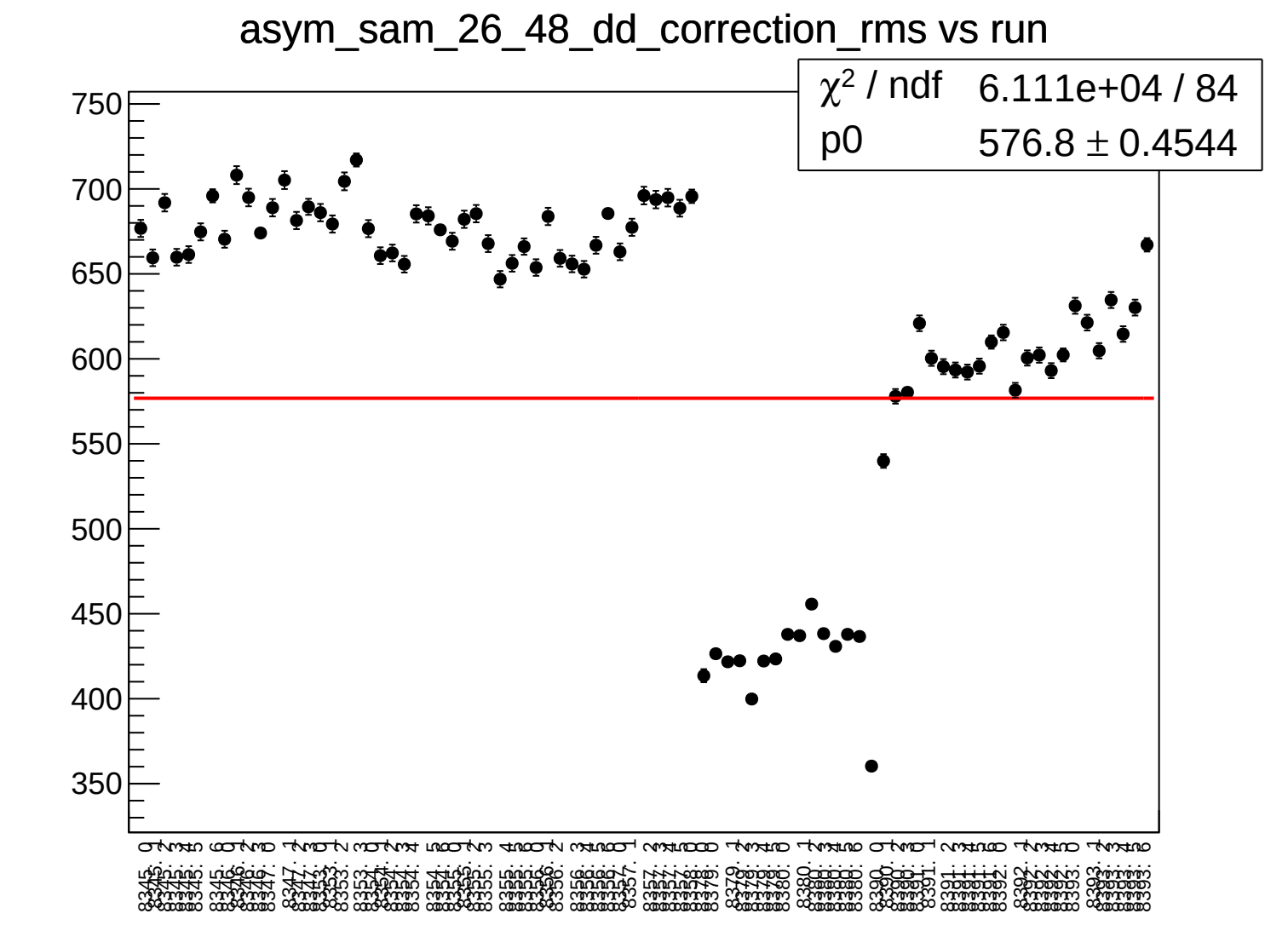

asym_sam_24_68_dd_rms vs run
χ² / ndf 1.255e+04 / 84
p0 2238 ± 1.737
3000
2800
2600
2400
2200
2000

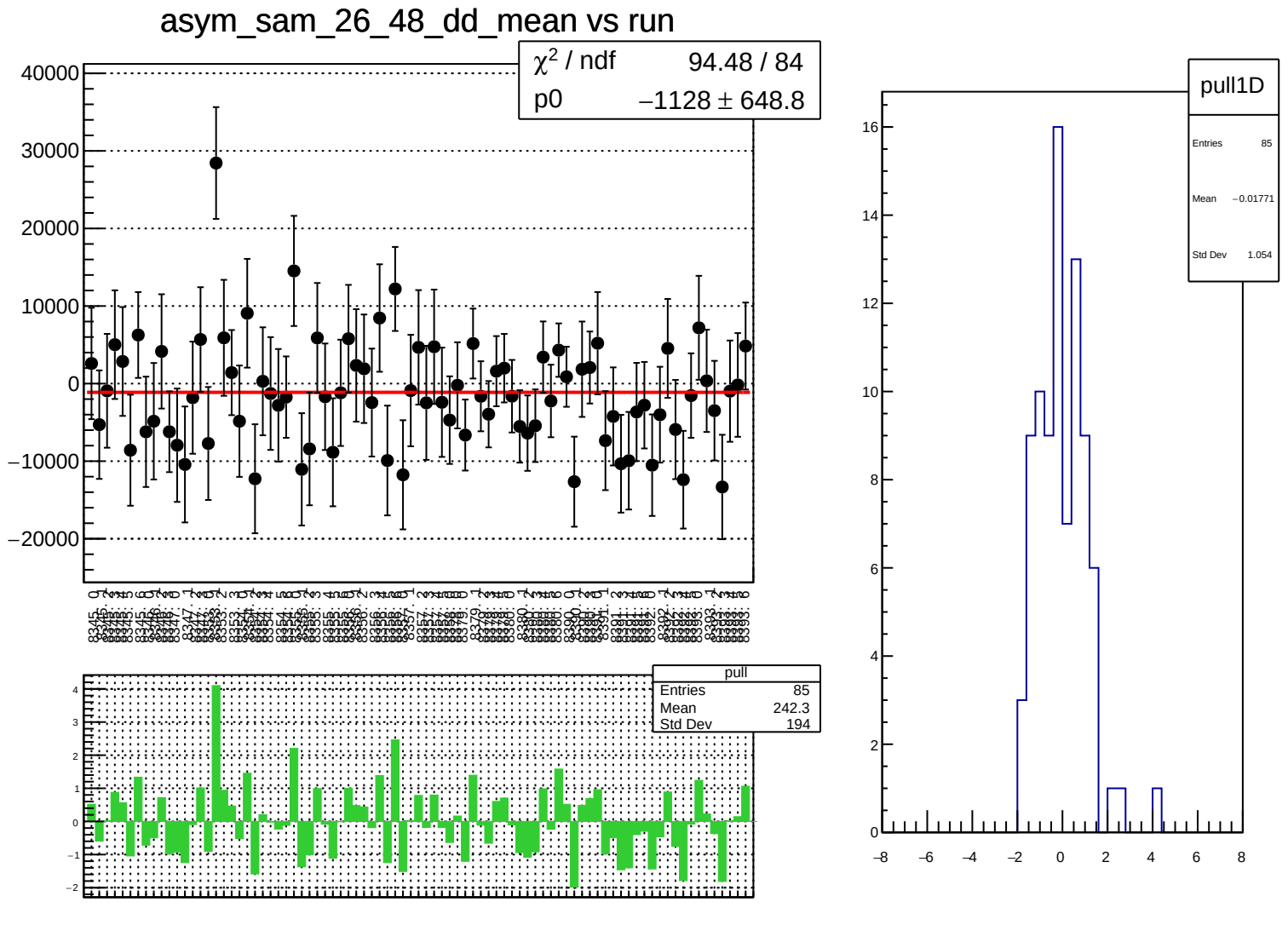

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 84.02 / 84
p0 209.6 ± 82.69
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean 198.9
Std Dev 144.8
pull1D
Entries 85
Mean 0.01515
Std Dev 0.9941
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

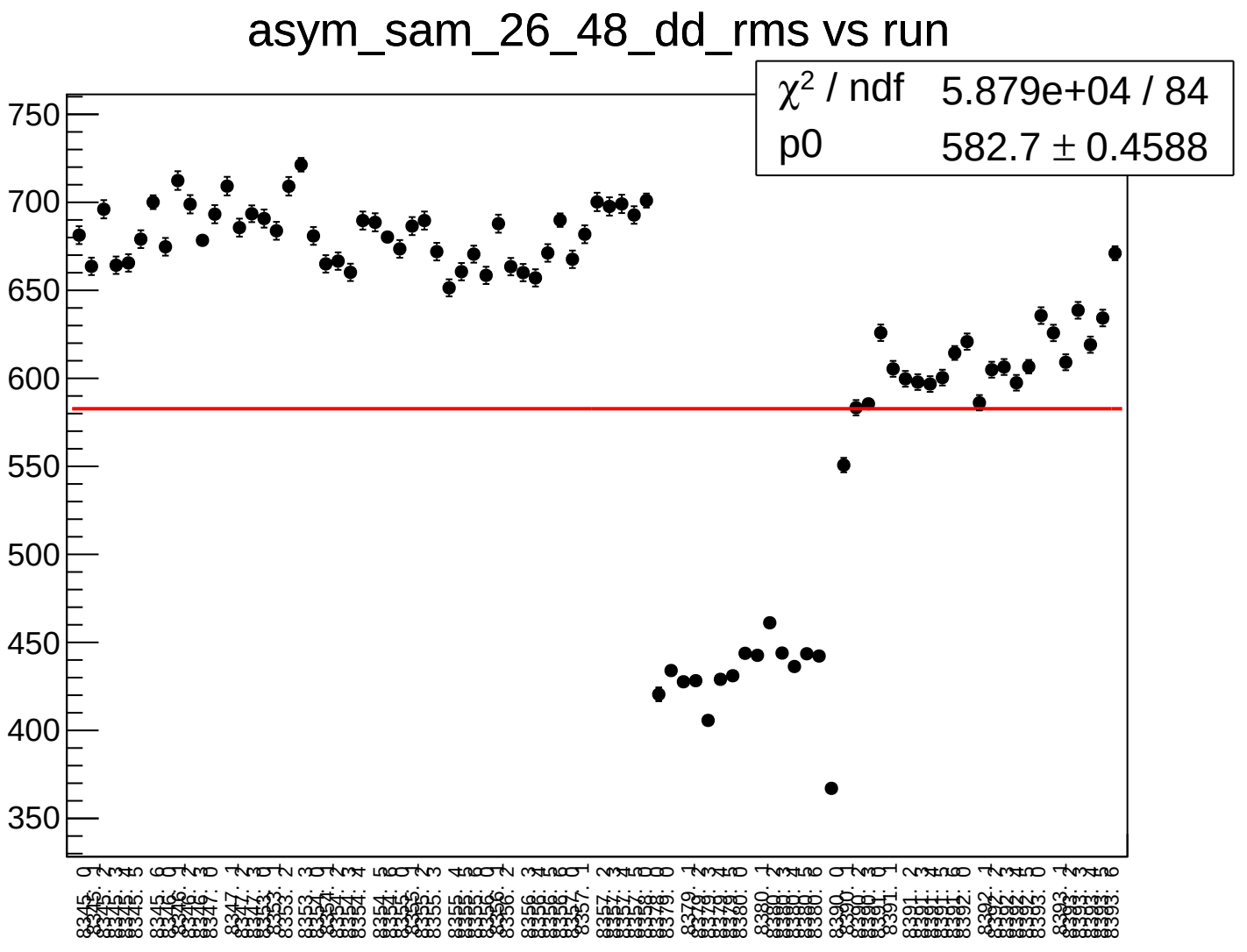

reg_asym_sam_26_48_dd_rms vs run
χ^2 / ndf 4689 / 84
p0 75.51 ± 0.05847
110
105
100
95
90
85
80
75
70
65

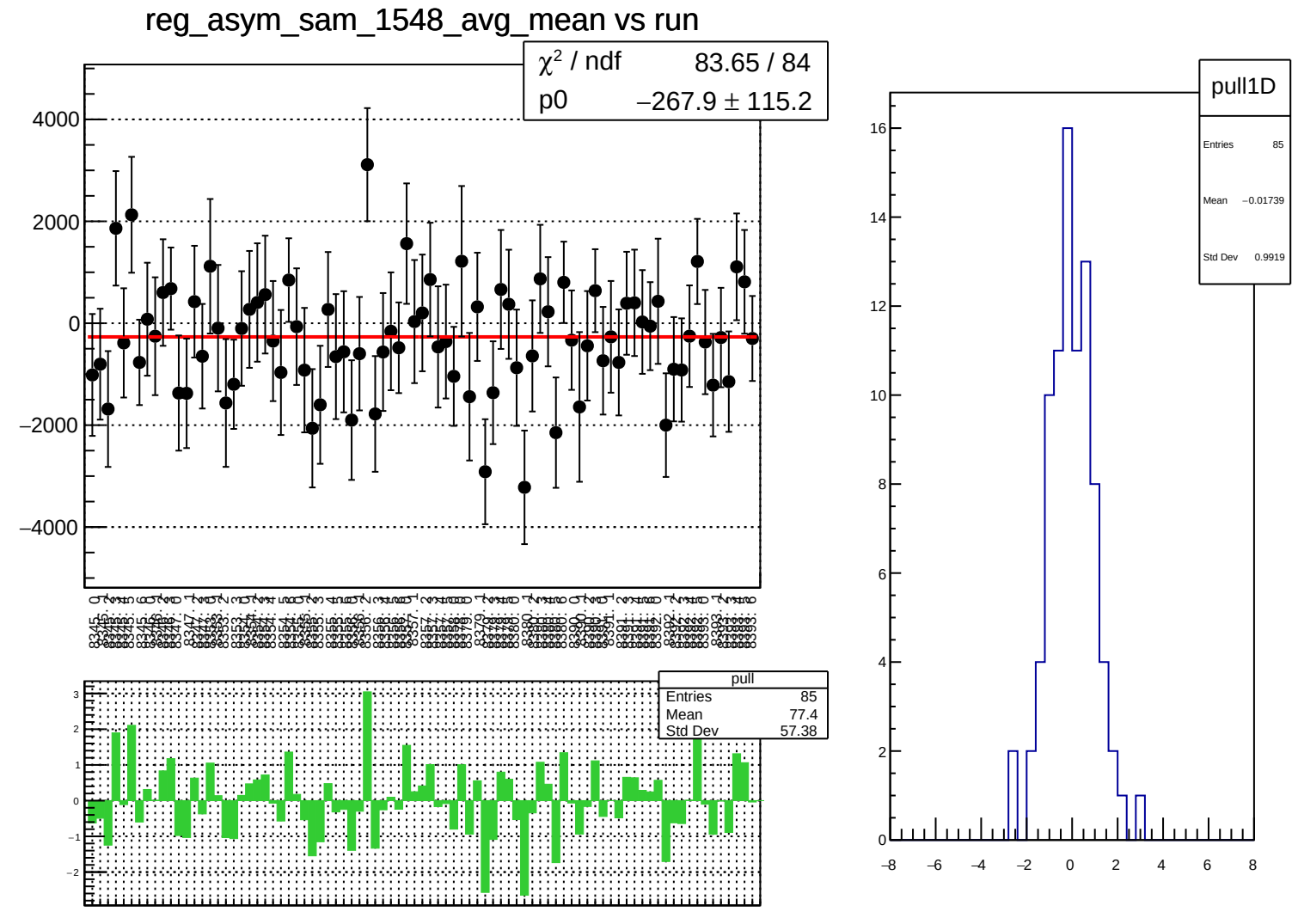

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 98.05 / 84
p0 1333 ± 642.7
pull
Entries 85
Mean 230.3
Std Dev 181.6

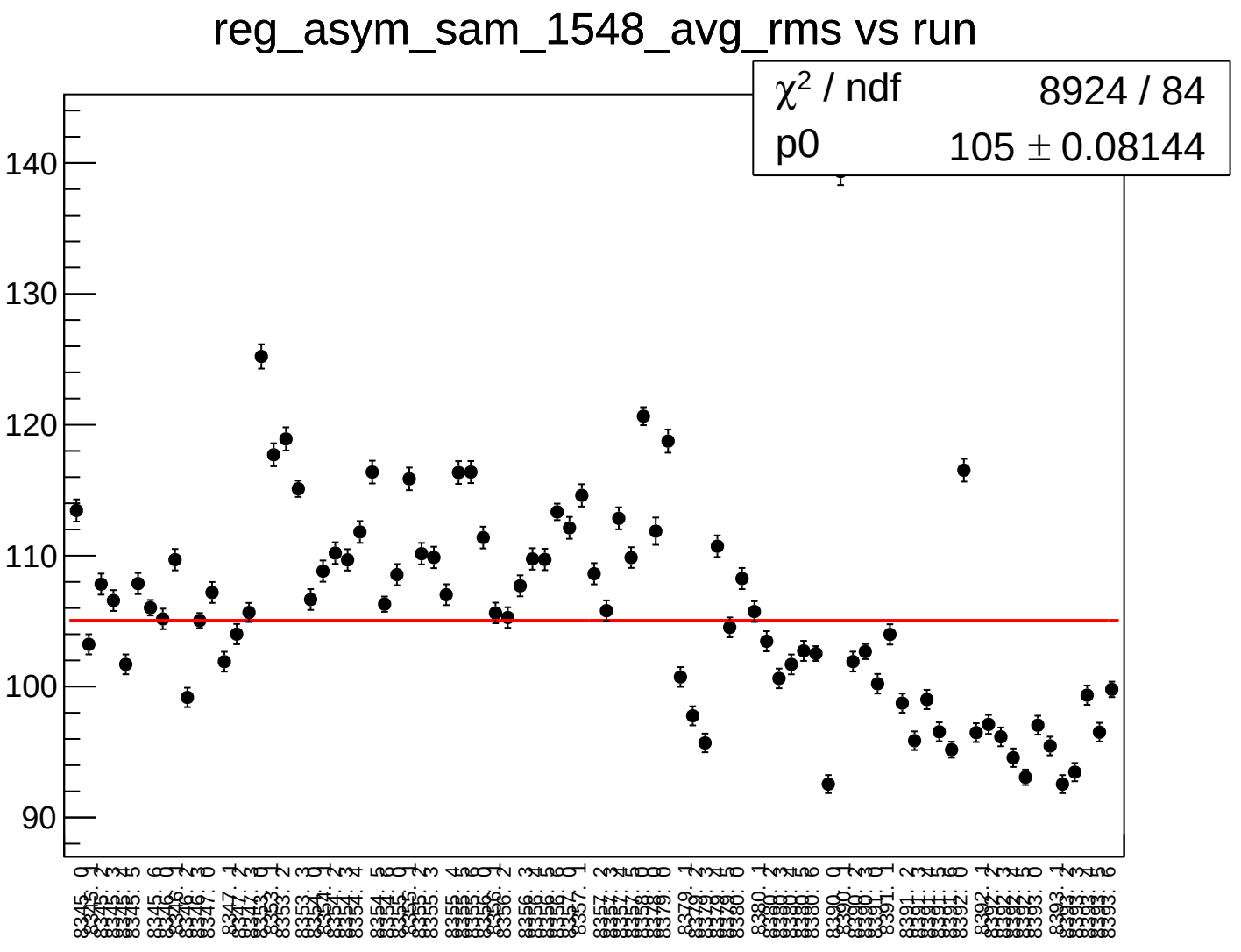

pull1D
Entries 85
Mean 0.02045
Std Dev 1.074

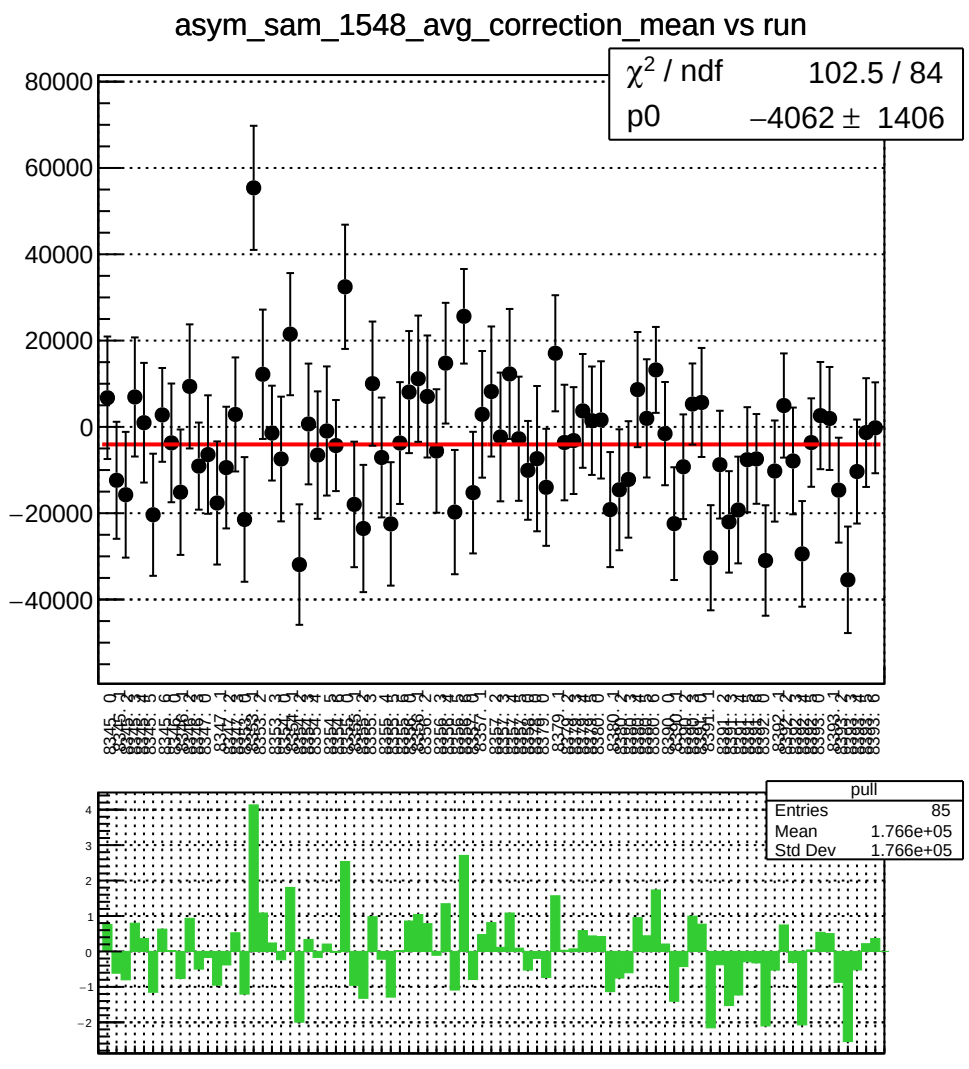

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 6.111e+04 / 84
p0 576.8 ± 0.4544
750
700
650
600
550
500
450
400
350

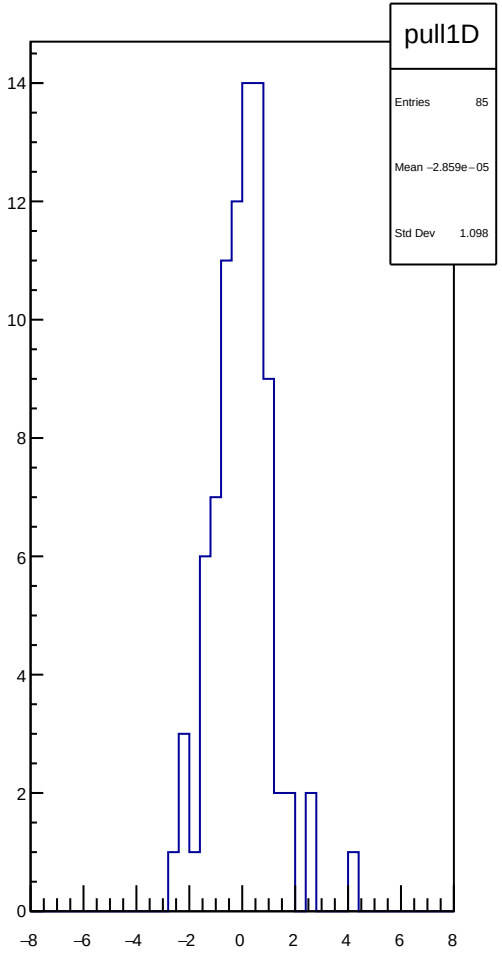

asym_sam_26_48_dd_mean vs run
χ² / ndf 94.48 / 84
p0 −1128 ± 648.8
pull
Entries 85
Mean 242.3
Std Dev 194
pull1D
Entries 85
Mean −0.01771
Std Dev 1.054

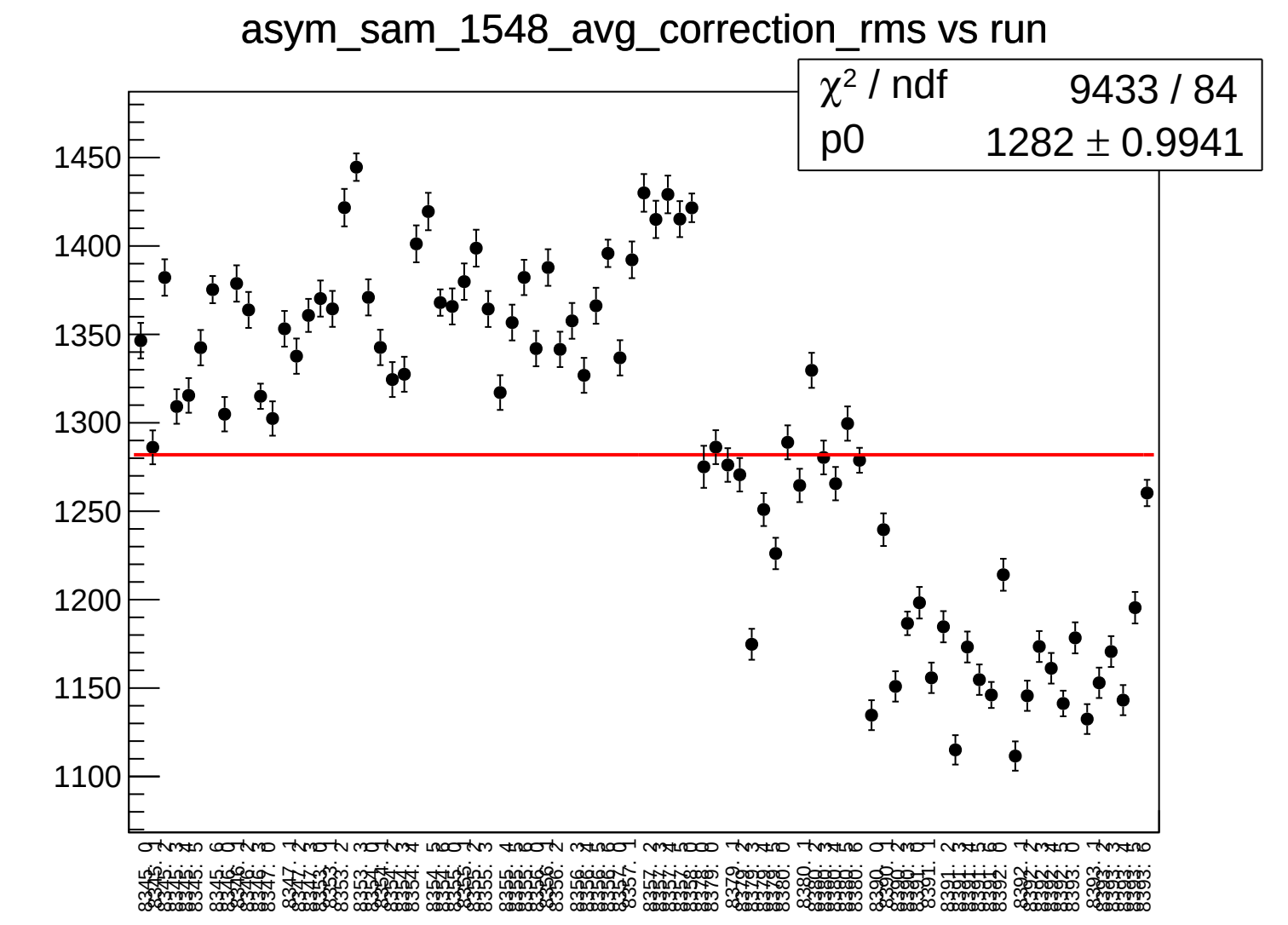

asym_sam_26_48_dd_rms vs run
χ² / ndf 5.879e+04 / 84
p0 582.7 ± 0.4588
750
700
650
600
550
500
450
400
350

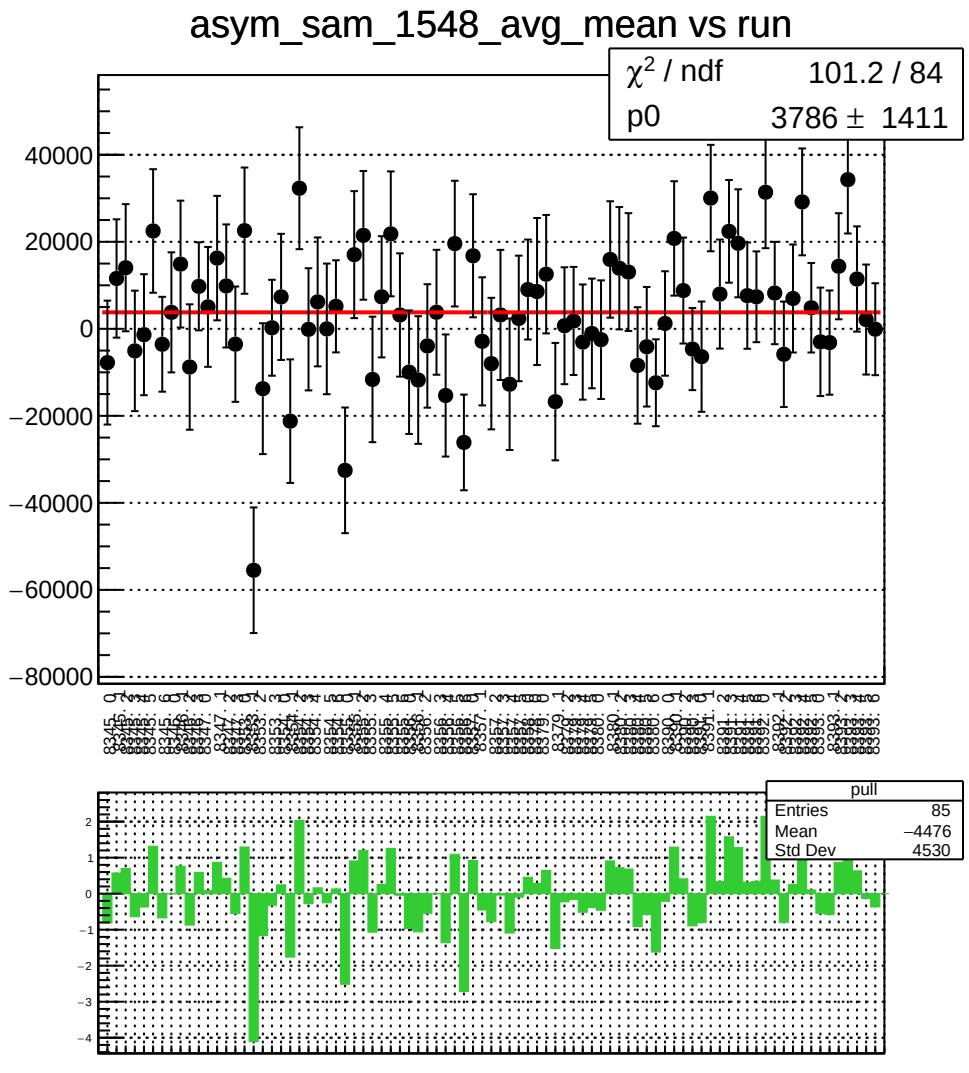

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 83.65 / 84
p0 −267.9 ± 115.2
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 77.4
Std Dev 57.38
3
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.01739
Std Dev 0.9919
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

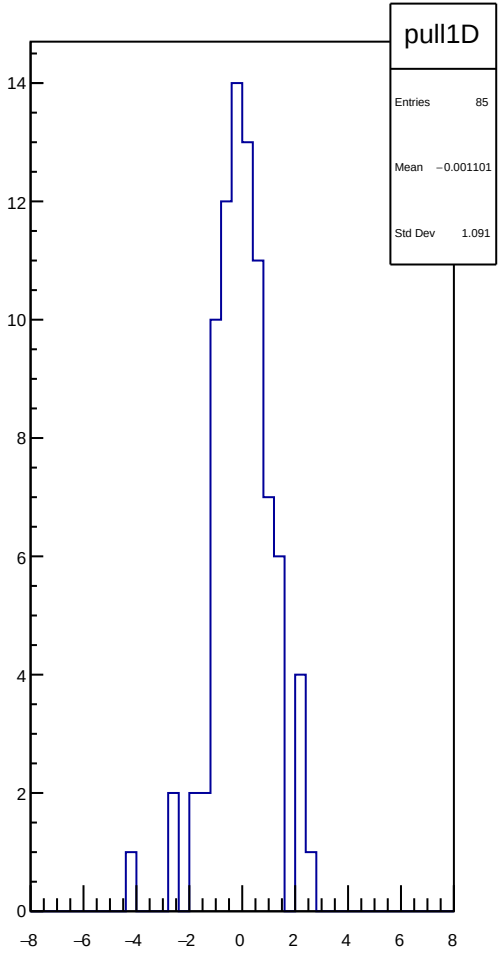

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 8924 / 84
p0 105 ± 0.08144
140
130
120
110
100
90

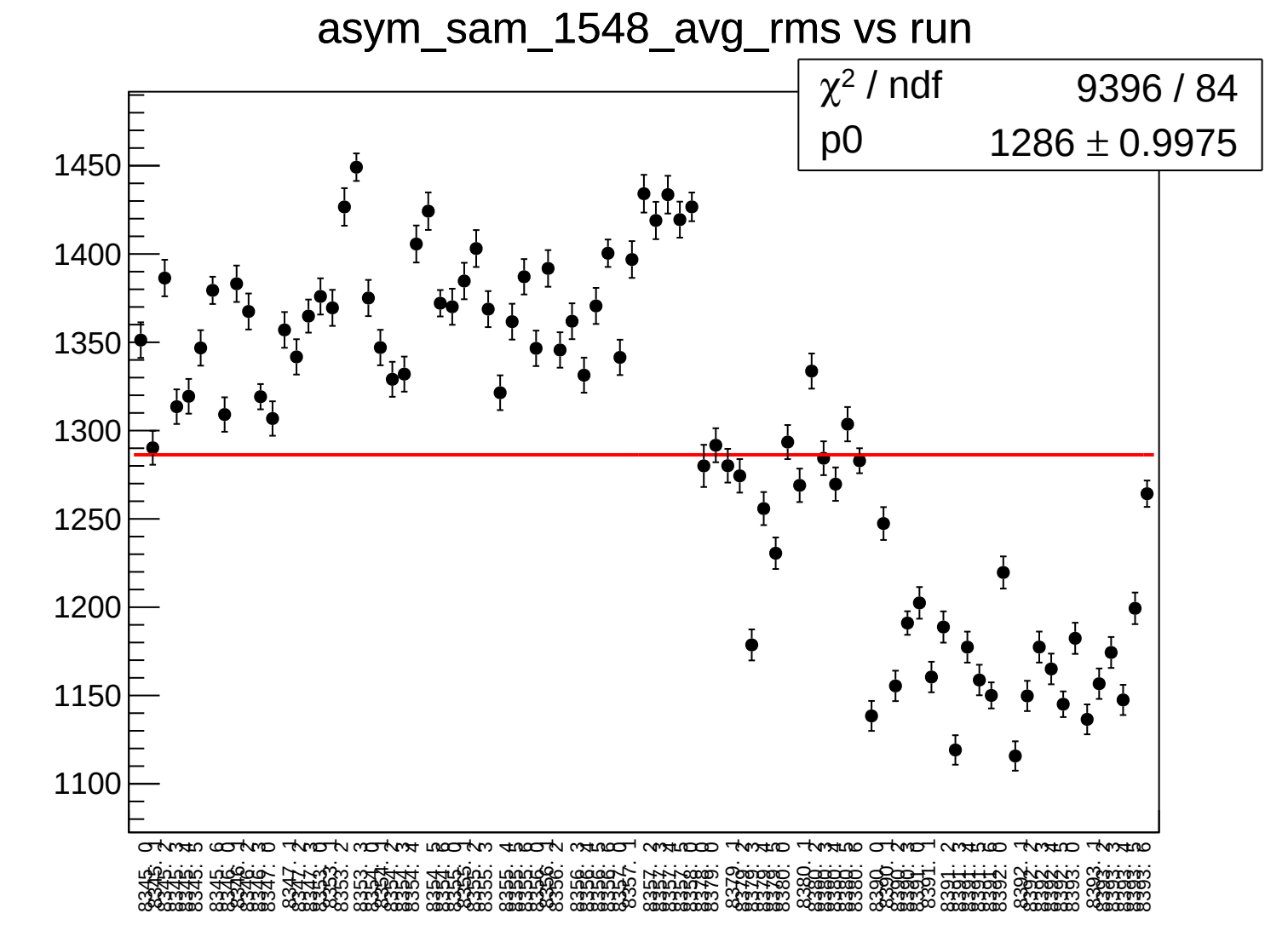

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 102.5 / 84
p0 −4062 ± 1406
pull
Entries 85
Mean 1.766e+05
Std Dev 1.766e+05

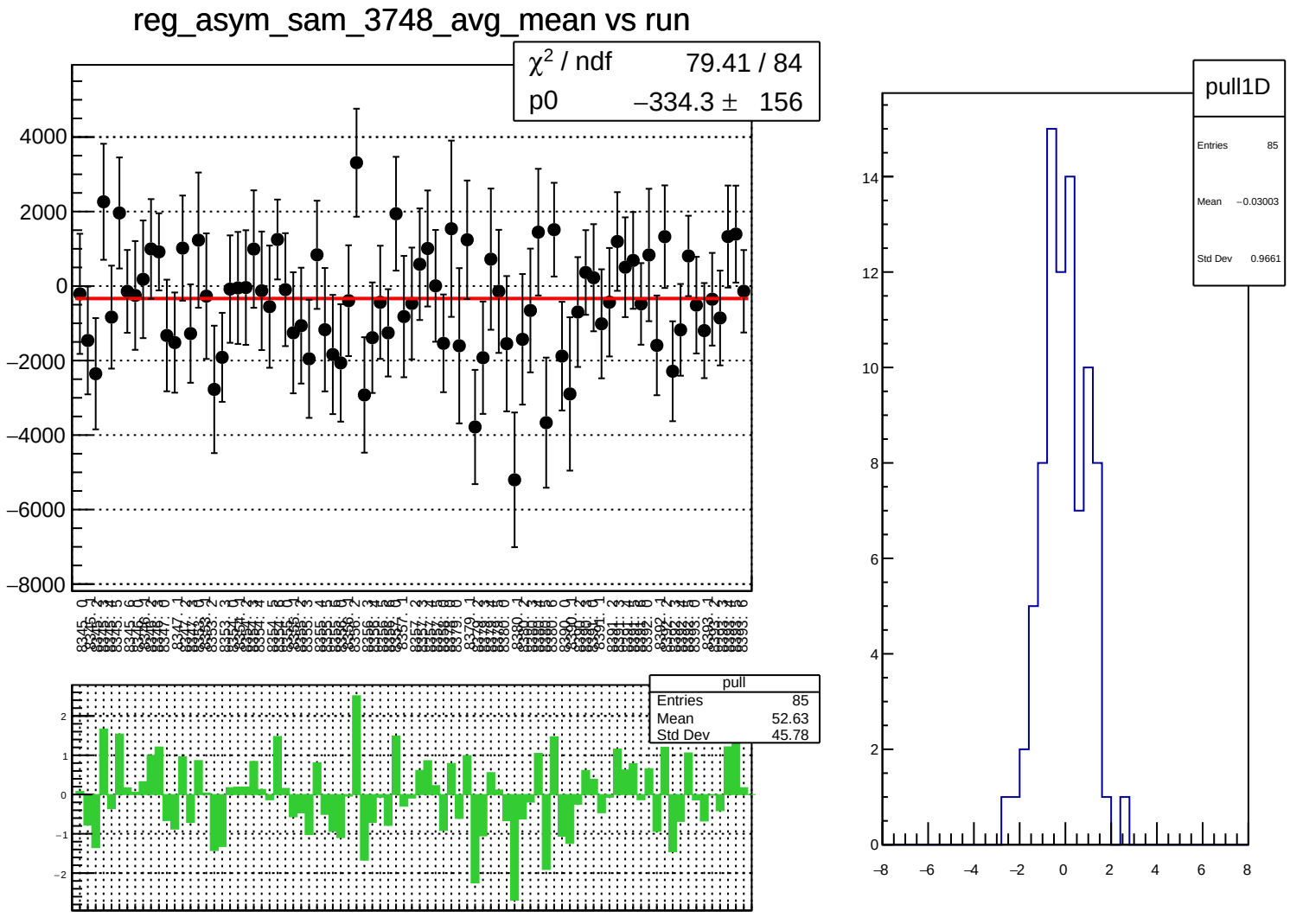

pull1D
Entries 85
Mean −2.859e−05
Std Dev 1.098

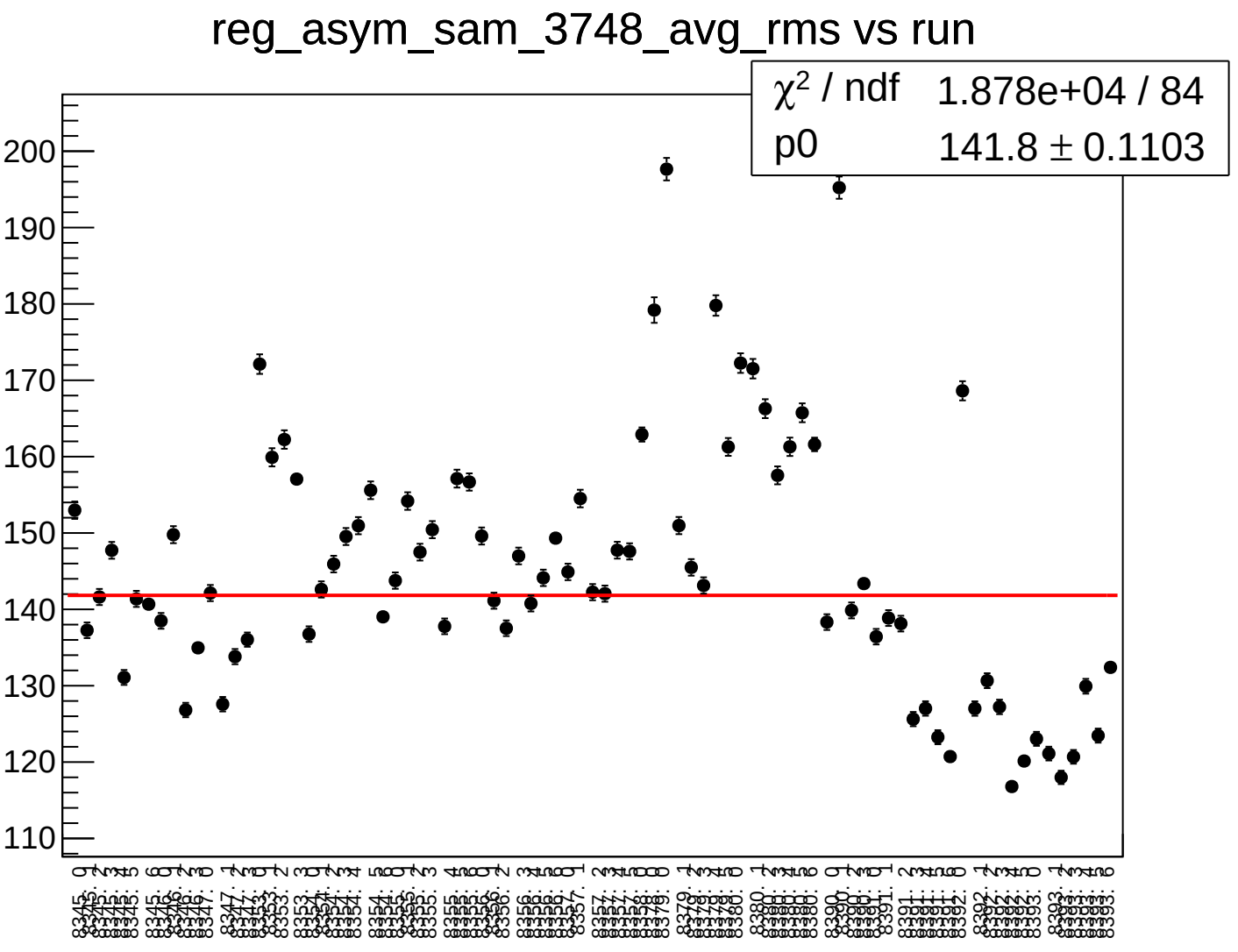

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 9433 / 84
p0 1282 ± 0.9941
1450
1400
1350
1300
1250
1200
1150
1100

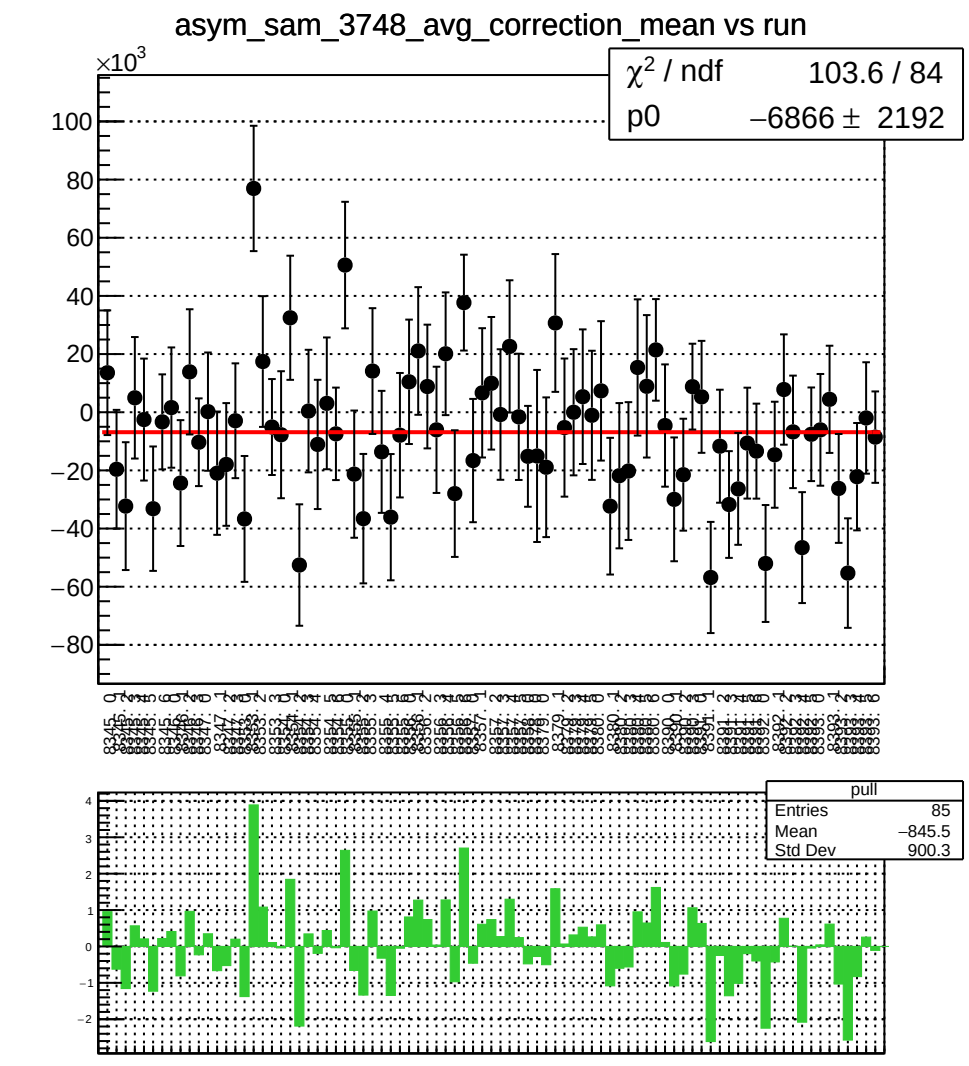

asym_sam_1548_avg_mean vs run
χ² / ndf 101.2 / 84
p0 3786 ± 1411
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −4476
Std Dev 4530
2
1
0
−1
−2
−3
−4

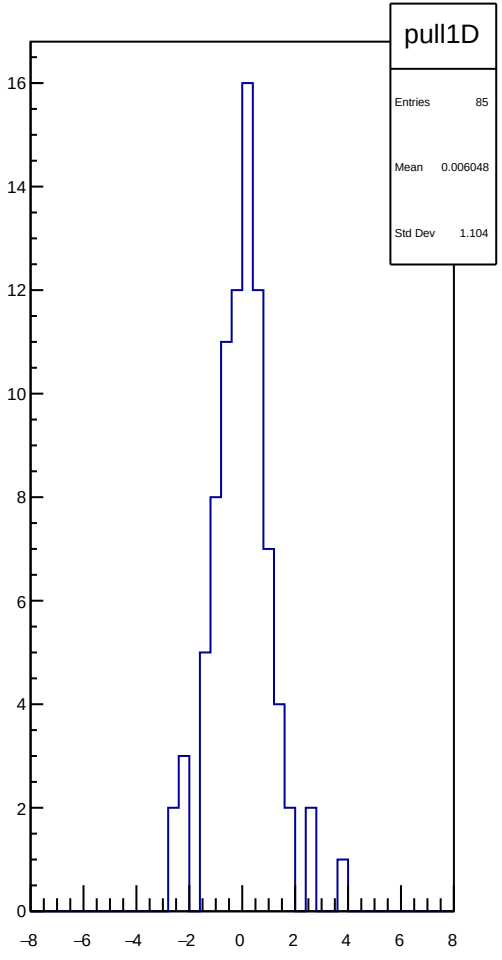

pull1D
Entries 85
Mean −0.001101
Std Dev 1.091
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

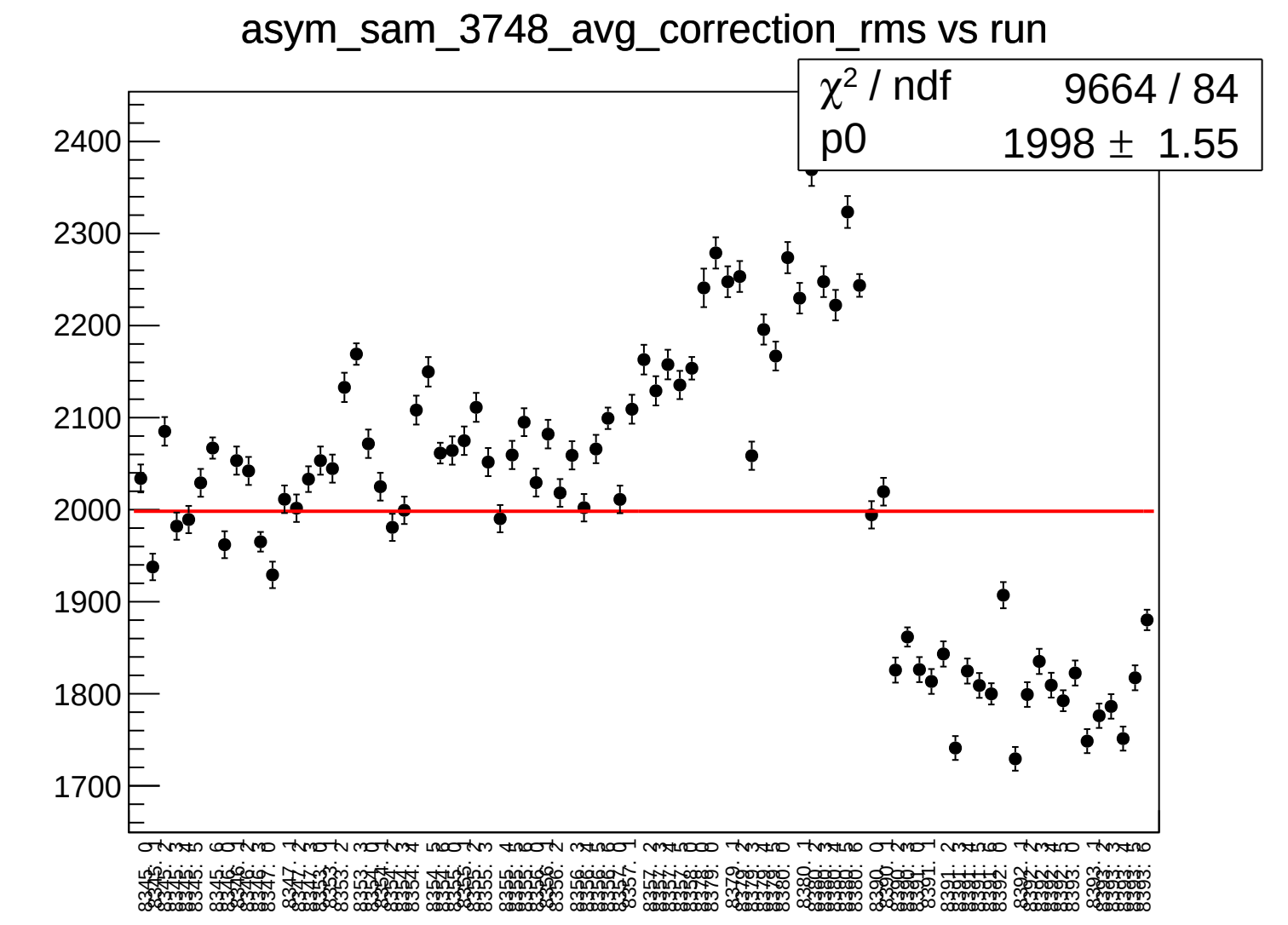

asym_sam_1548_avg_rms vs run
χ² / ndf 9396 / 84
p0 1286 ± 0.9975
1450
1400
1350
1300
1250
1200
1150
1100

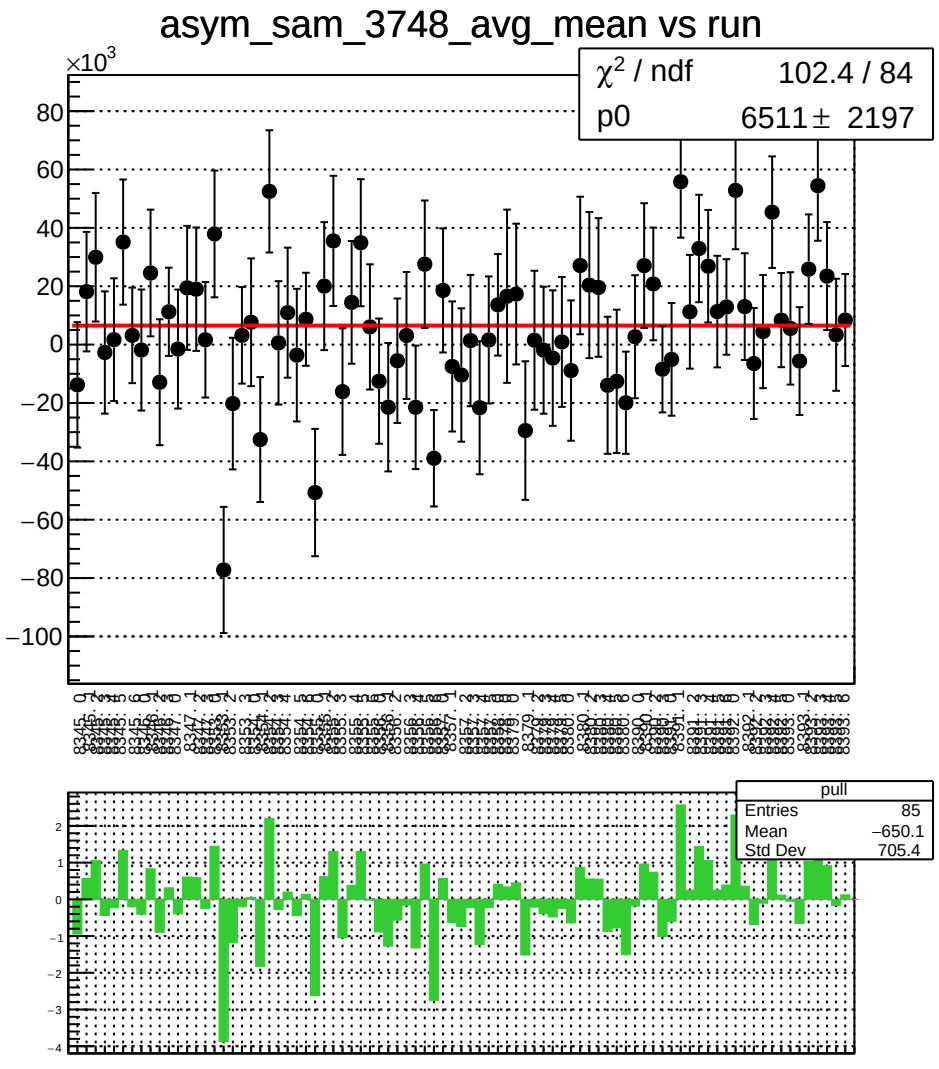

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 79.41 / 84
p0 −334.3 ± 156
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 52.63
Std Dev 45.78
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.03003
Std Dev 0.9661
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

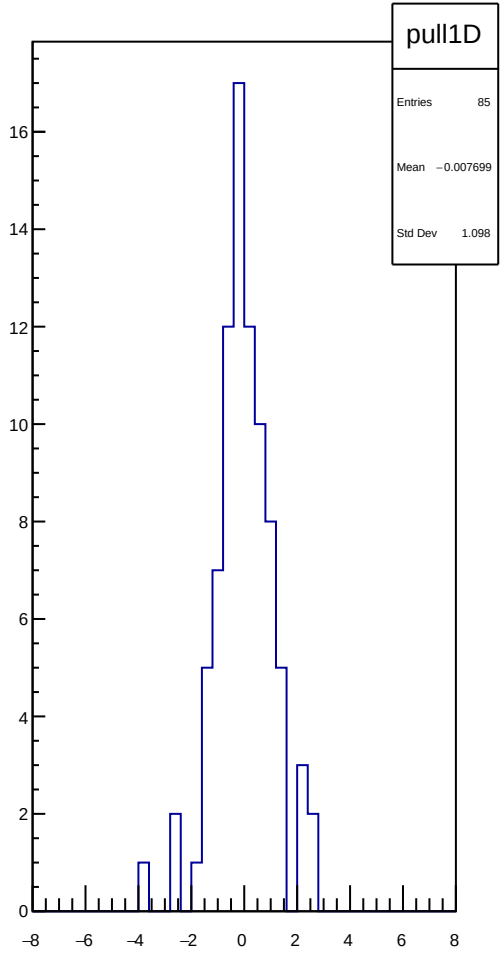

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 1.878e+04 / 84
p0 141.8 ± 0.1103
200
190
180
170
160
150
140
130
120
110

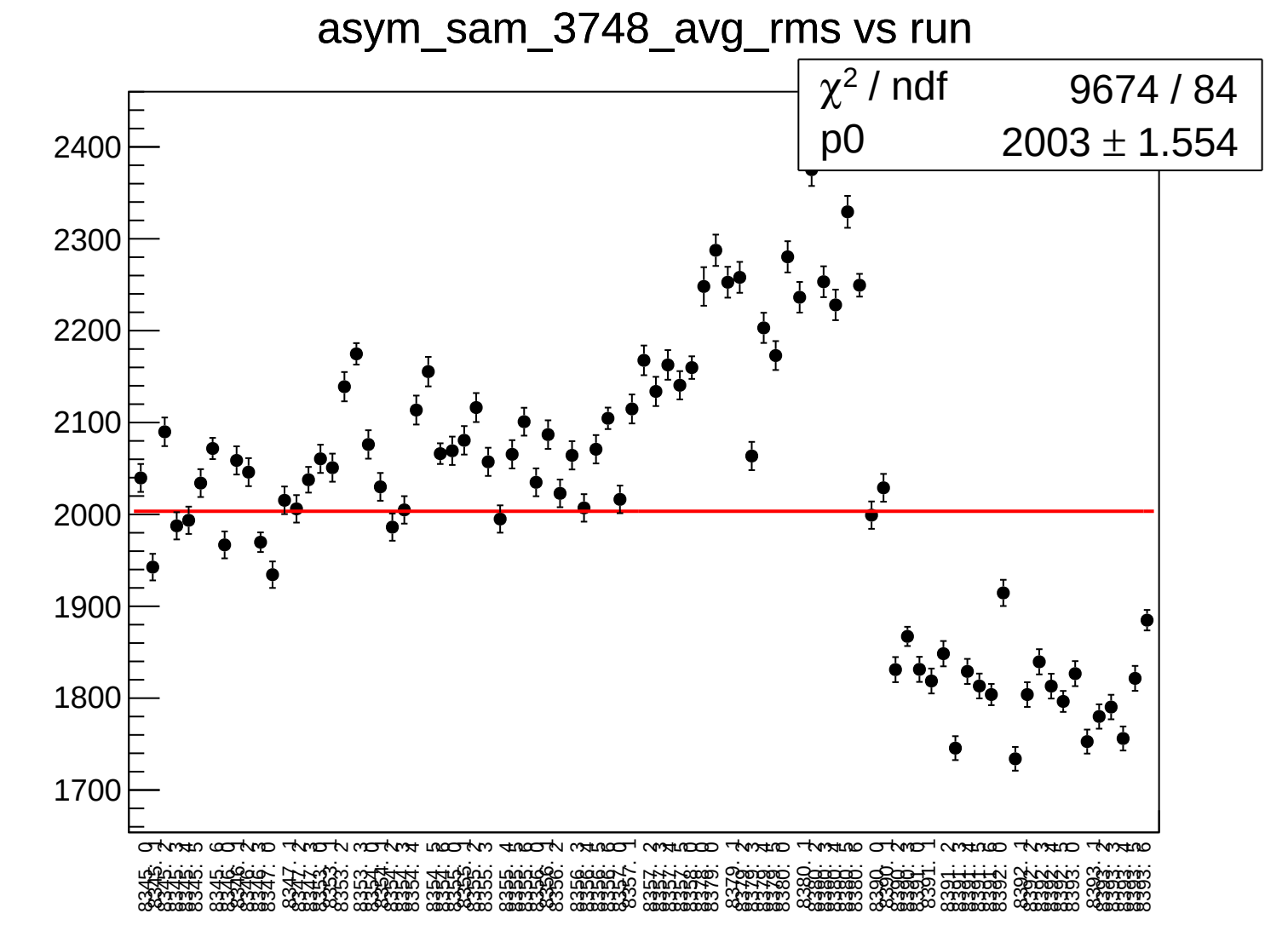

asym_sam_3748_avg_correction_mean vs run
×10^3
χ^2 / ndf 103.6 / 84
p0 −6866 ± 2192
pull
Entries 85
Mean −845.5
Std Dev 900.3

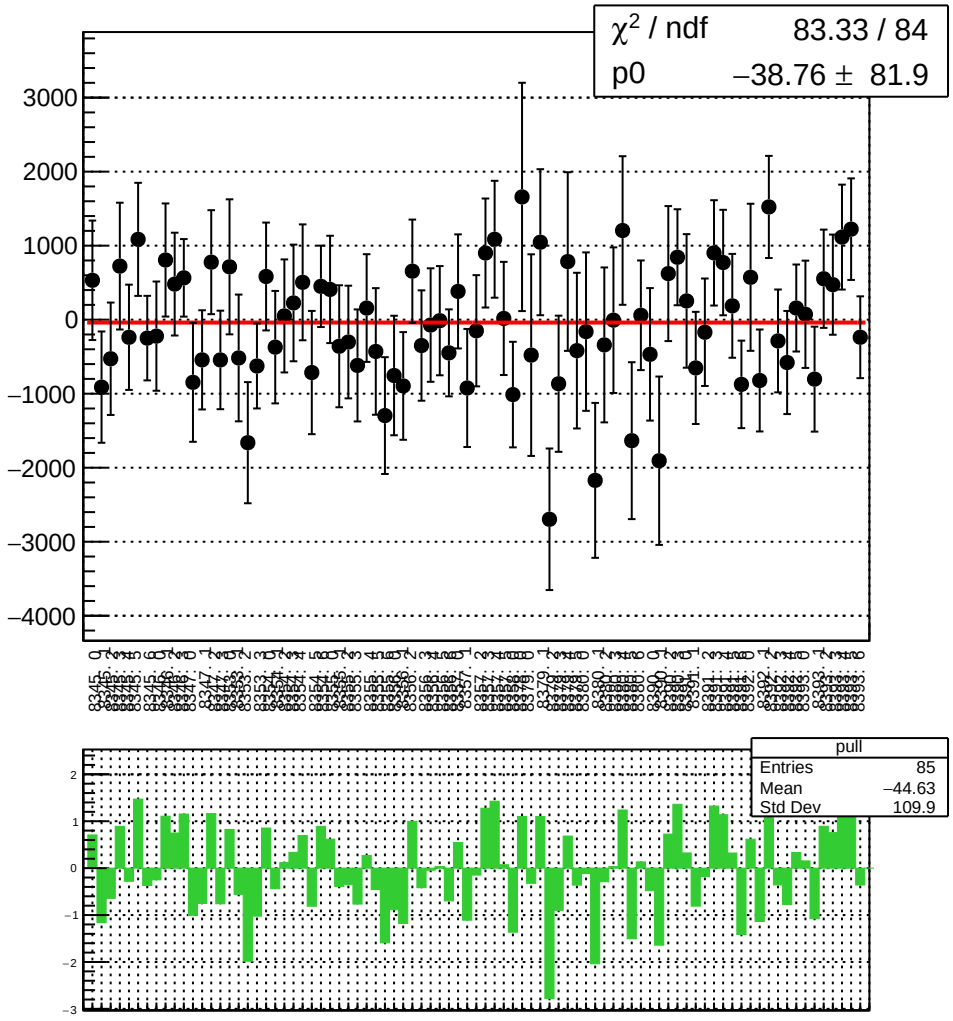

pull1D
Entries 85
Mean 0.006048
Std Dev 1.104

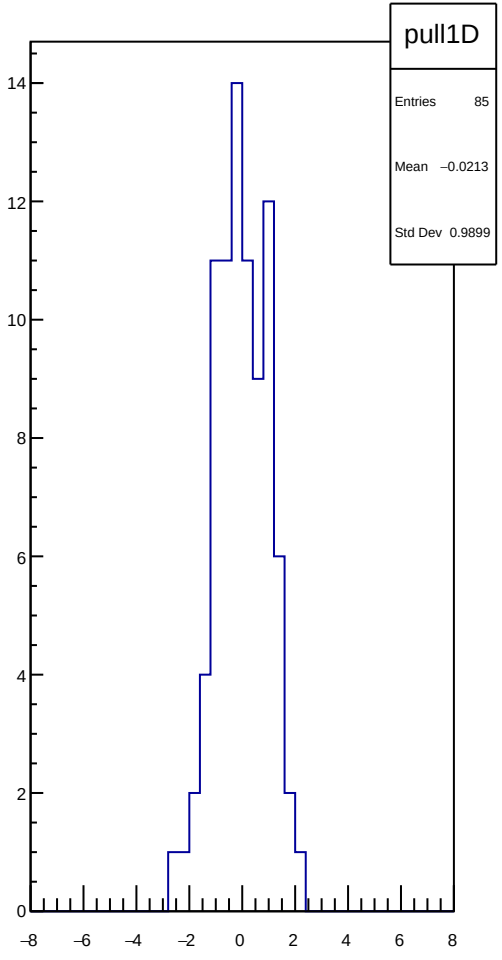

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 9664 / 84
p0 1998 ± 1.55
2400
2300
2200
2100
2000
1900
1800
1700

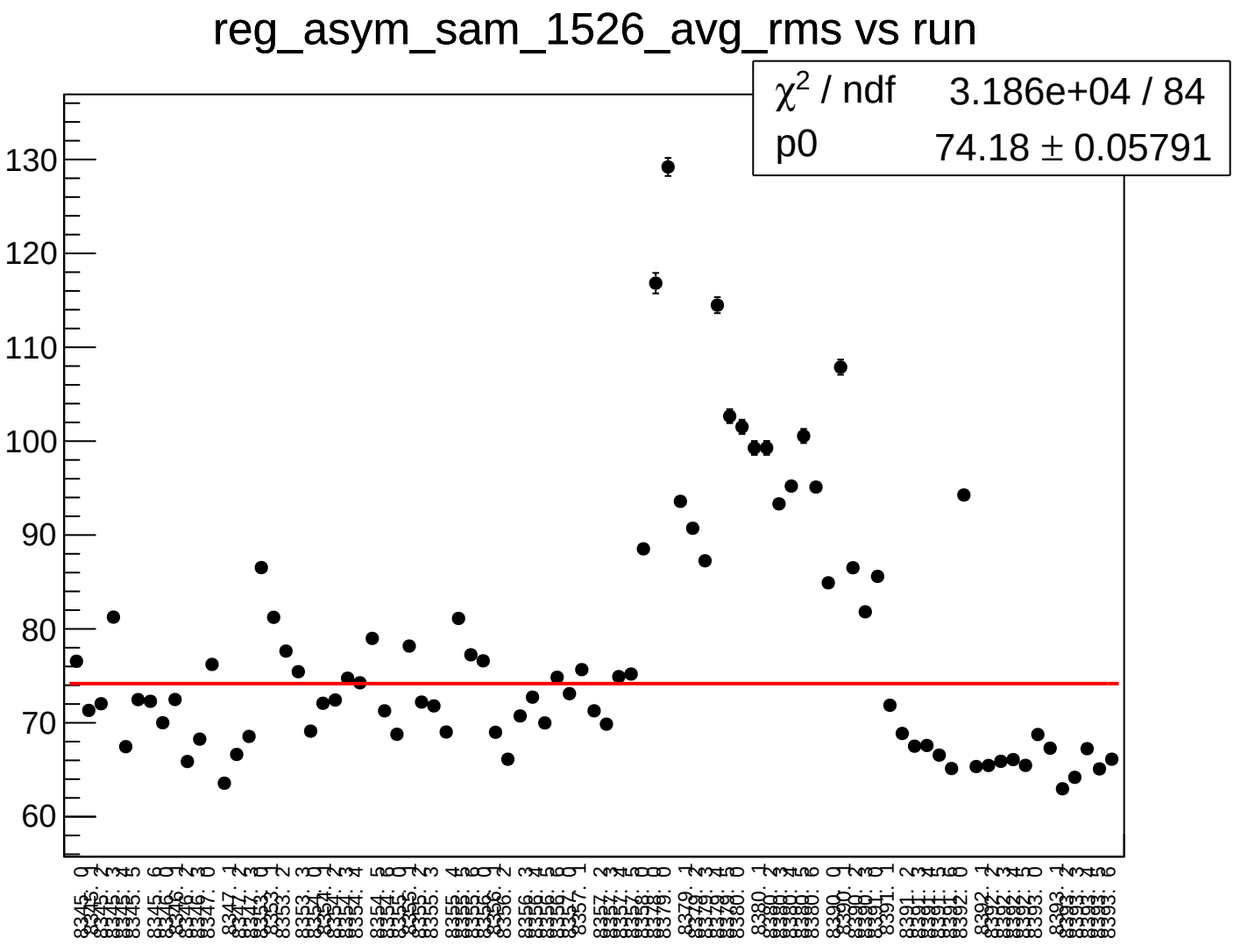

asym_sam_3748_avg_mean vs run
χ^2 / ndf 102.4 / 84
p0 6511 ± 2197
×10^3
pull
Entries 85
Mean −650.1
Std Dev 705.4

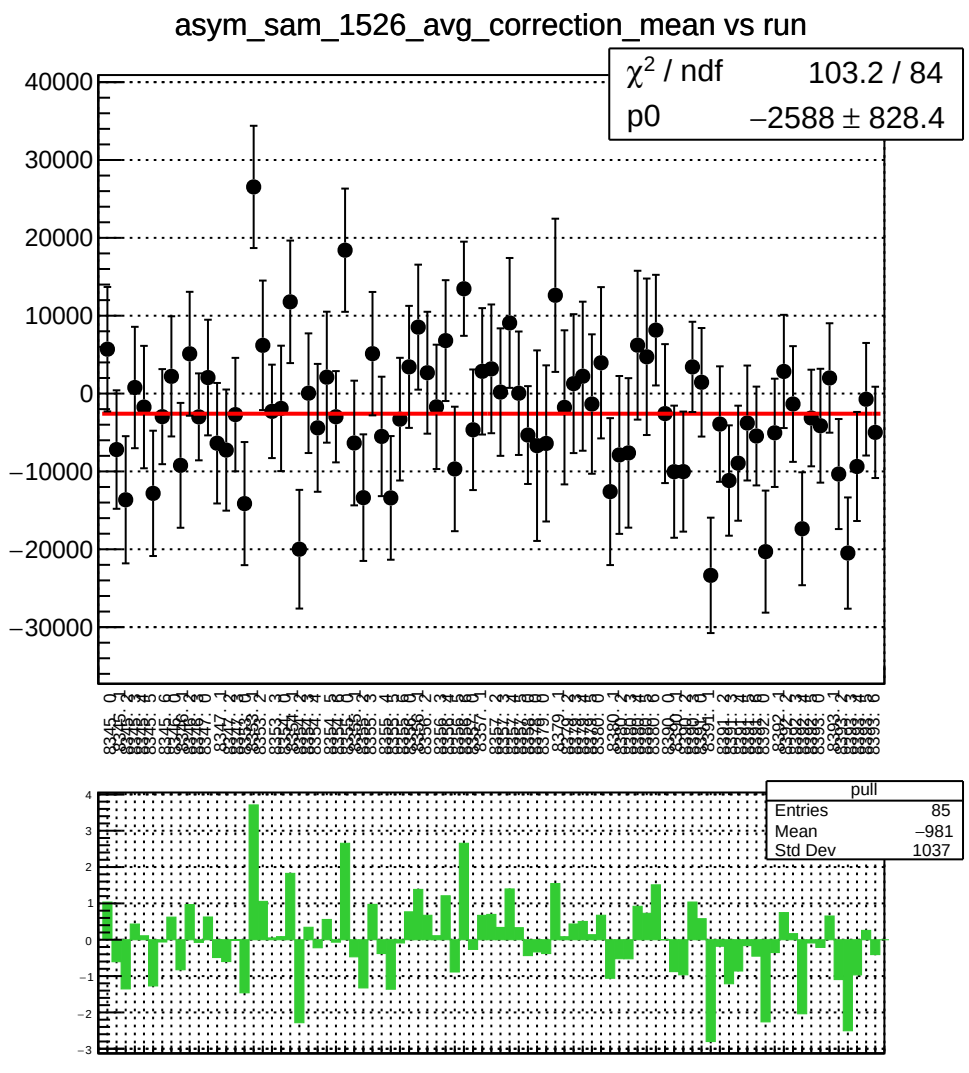

pull1D
Entries 85
Mean −0.007699
Std Dev 1.098

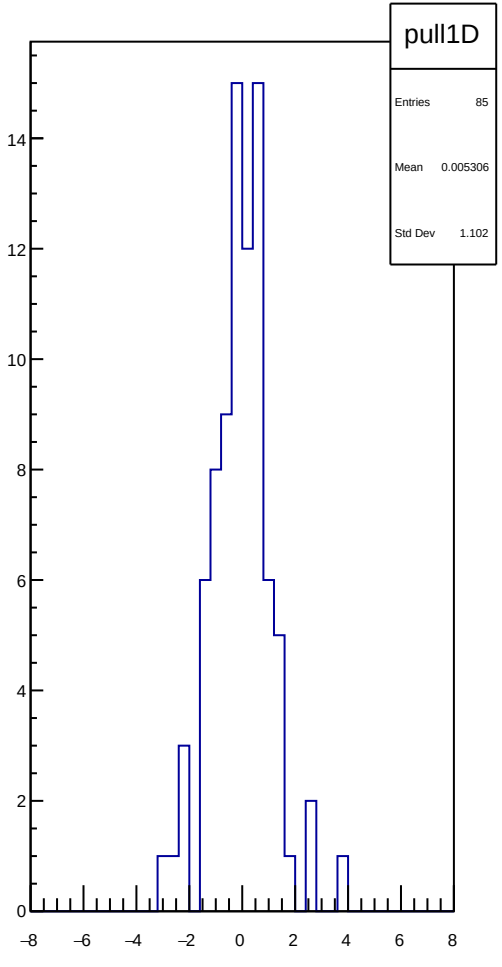

asym_sam_3748_avg_rms vs run
χ² / ndf 9674 / 84
p0 2003 ± 1.554
2400
2300
2200
2100
2000
1900
1800
1700

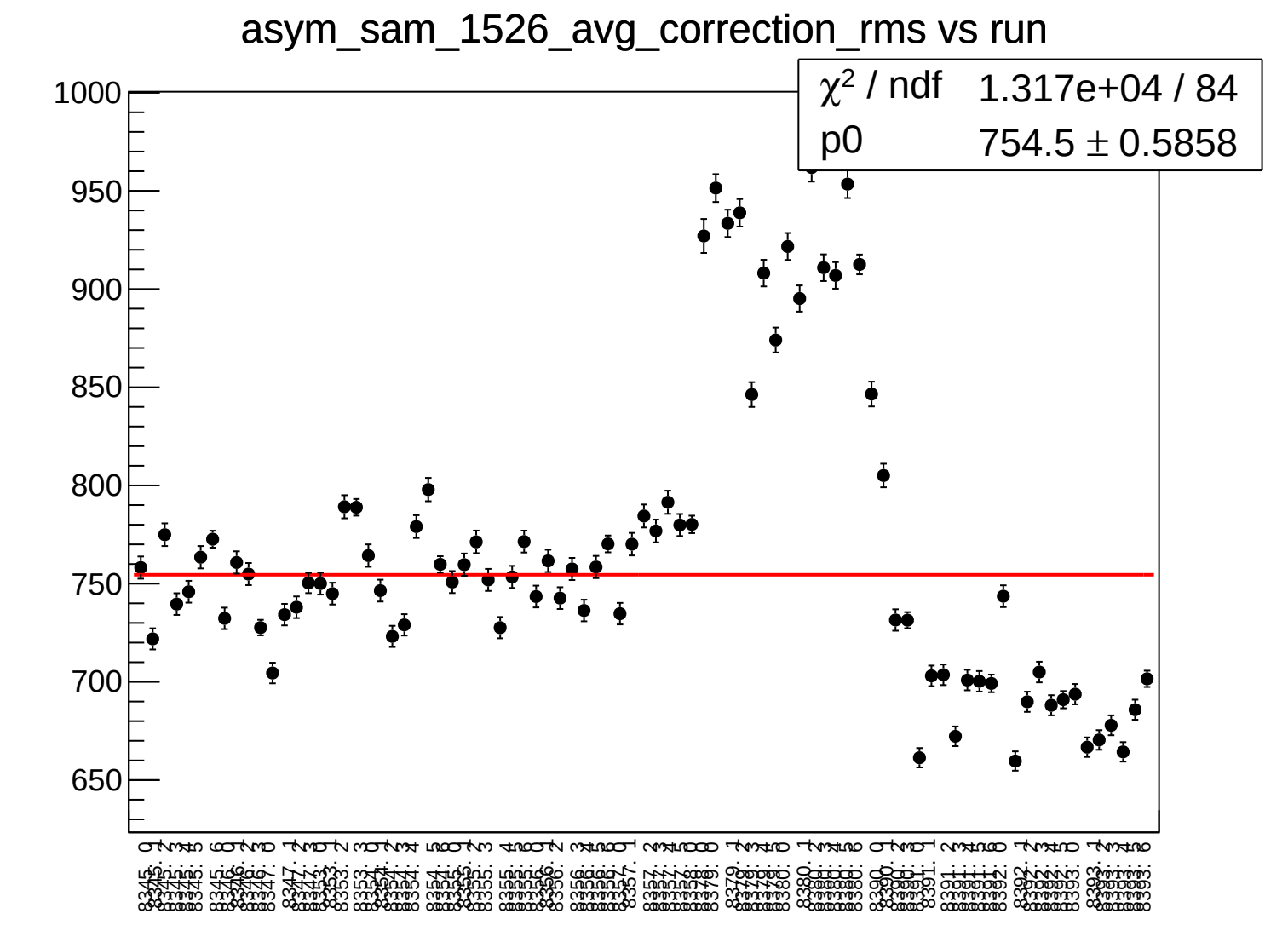

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 83.33 / 84
p0 −38.76 ± 81.9
pull
Entries 85
Mean −44.63
Std Dev 109.9

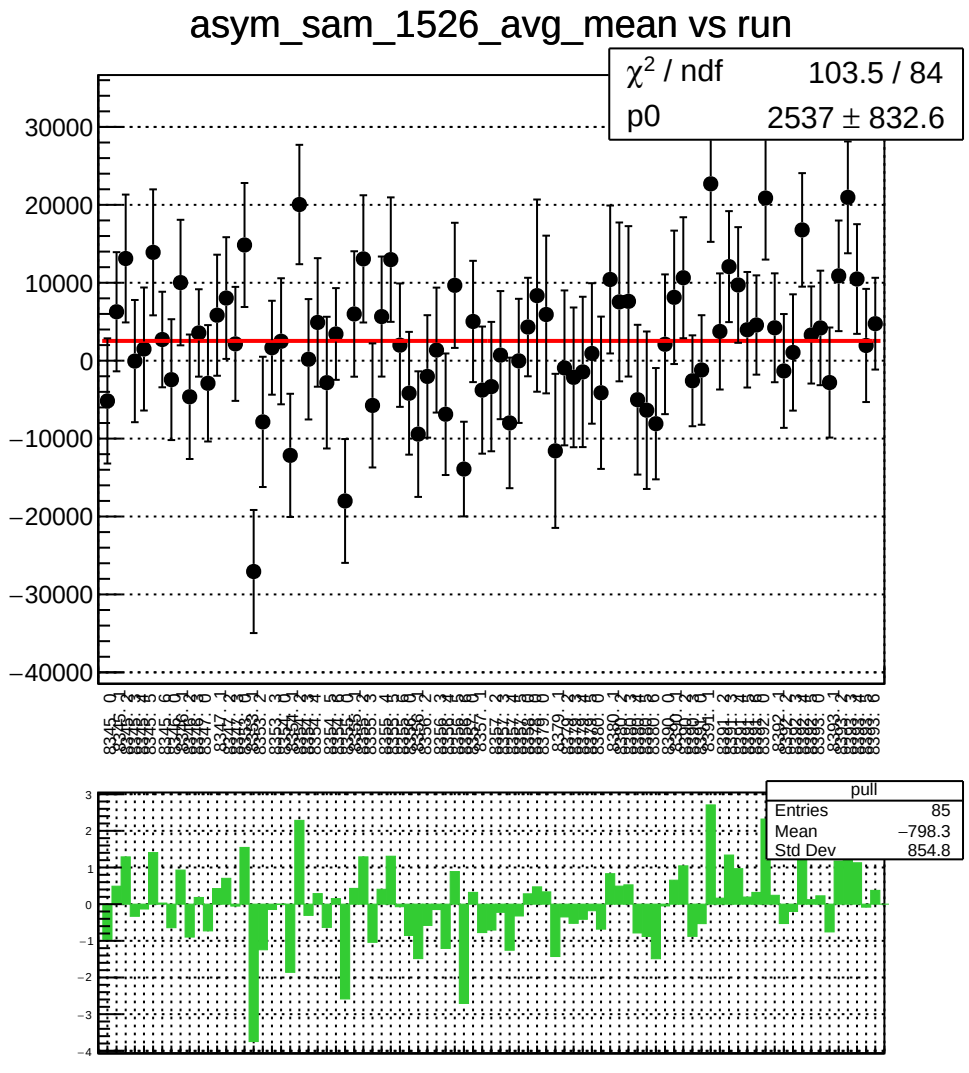

pull1D
Entries 85
Mean −0.0213
Std Dev 0.9899

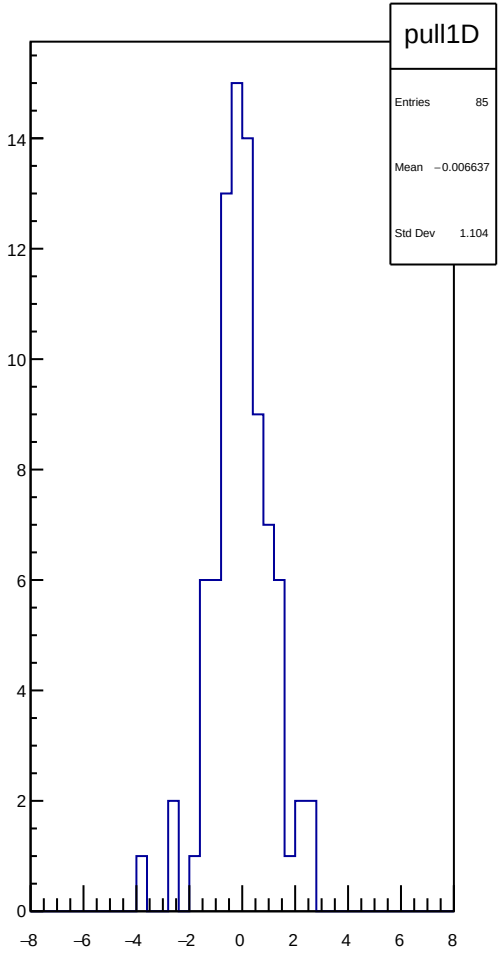

reg_asym_sam_1526_avg_rms vs run
χ^2 / ndf 3.186e+04 / 84
p0 74.18 ± 0.05791
130
120
110
100
90
80
70
60

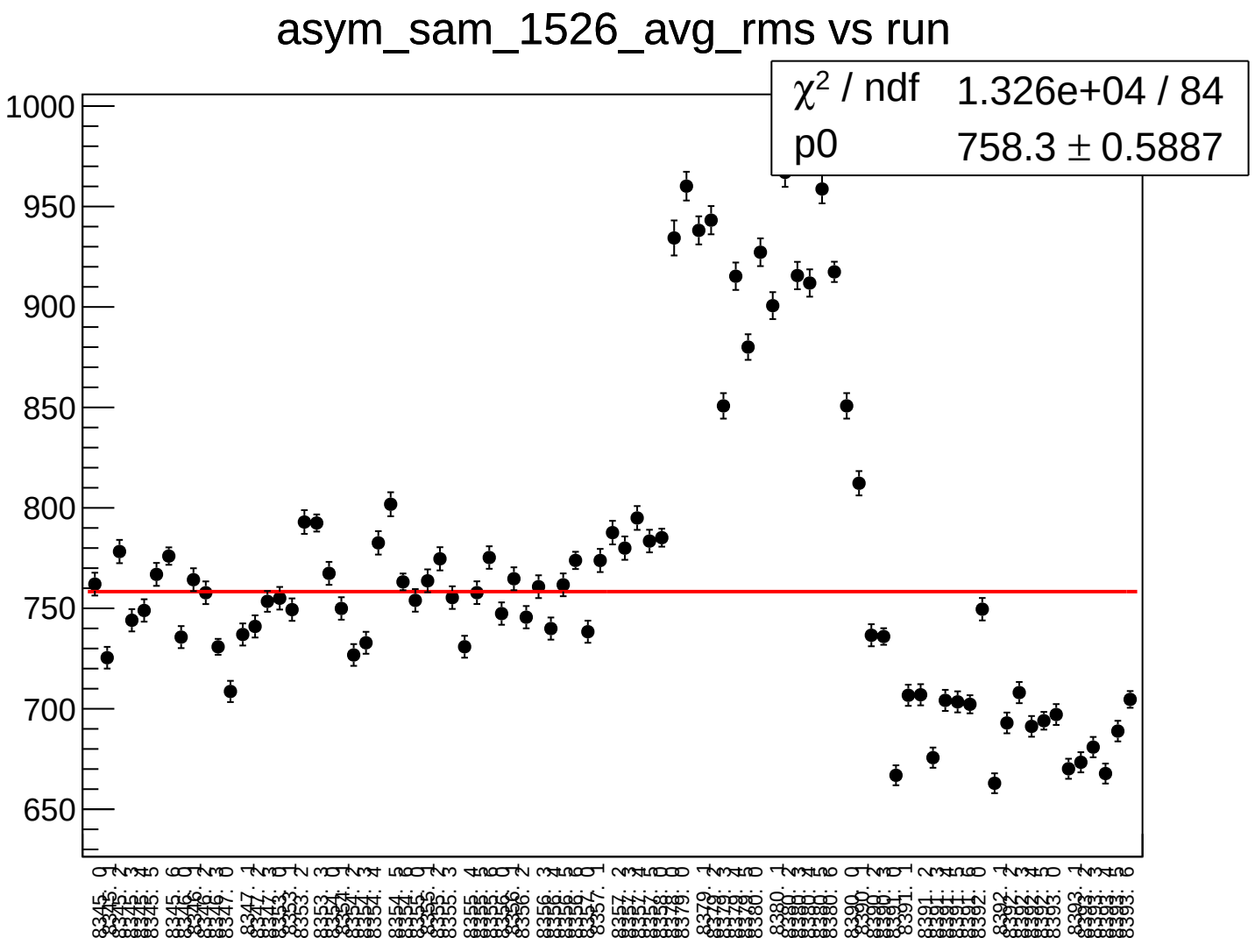

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 103.2 / 84
p0 −2588 ± 828.4
pull
Entries 85
Mean −981
Std Dev 1037

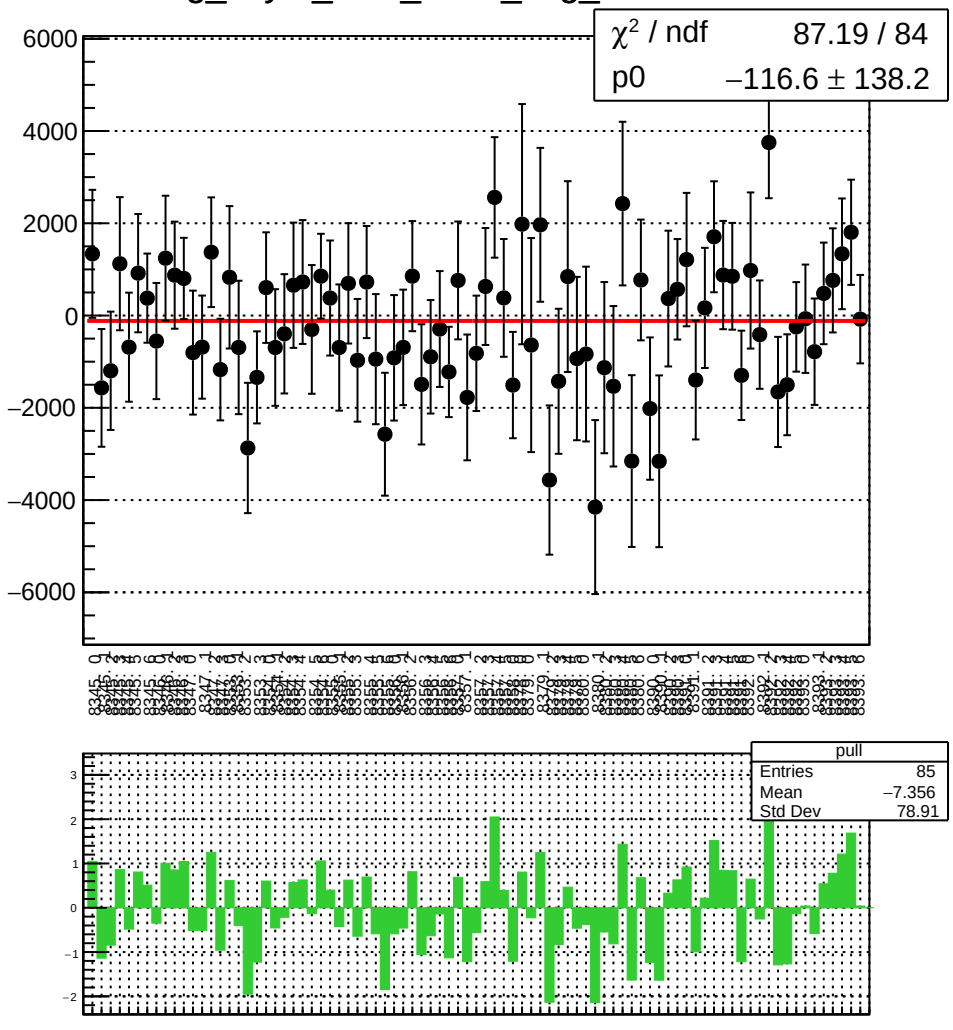

pull1D
Entries 85
Mean 0.005306
Std Dev 1.102

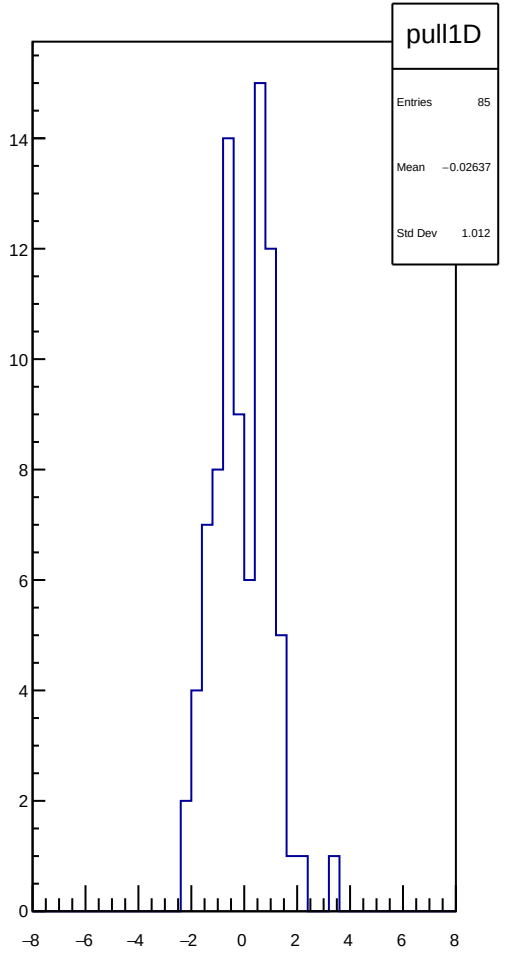

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 1.317e+04 / 84
p0 754.5 ± 0.5858
1000
950
900
850
800
750
700
650

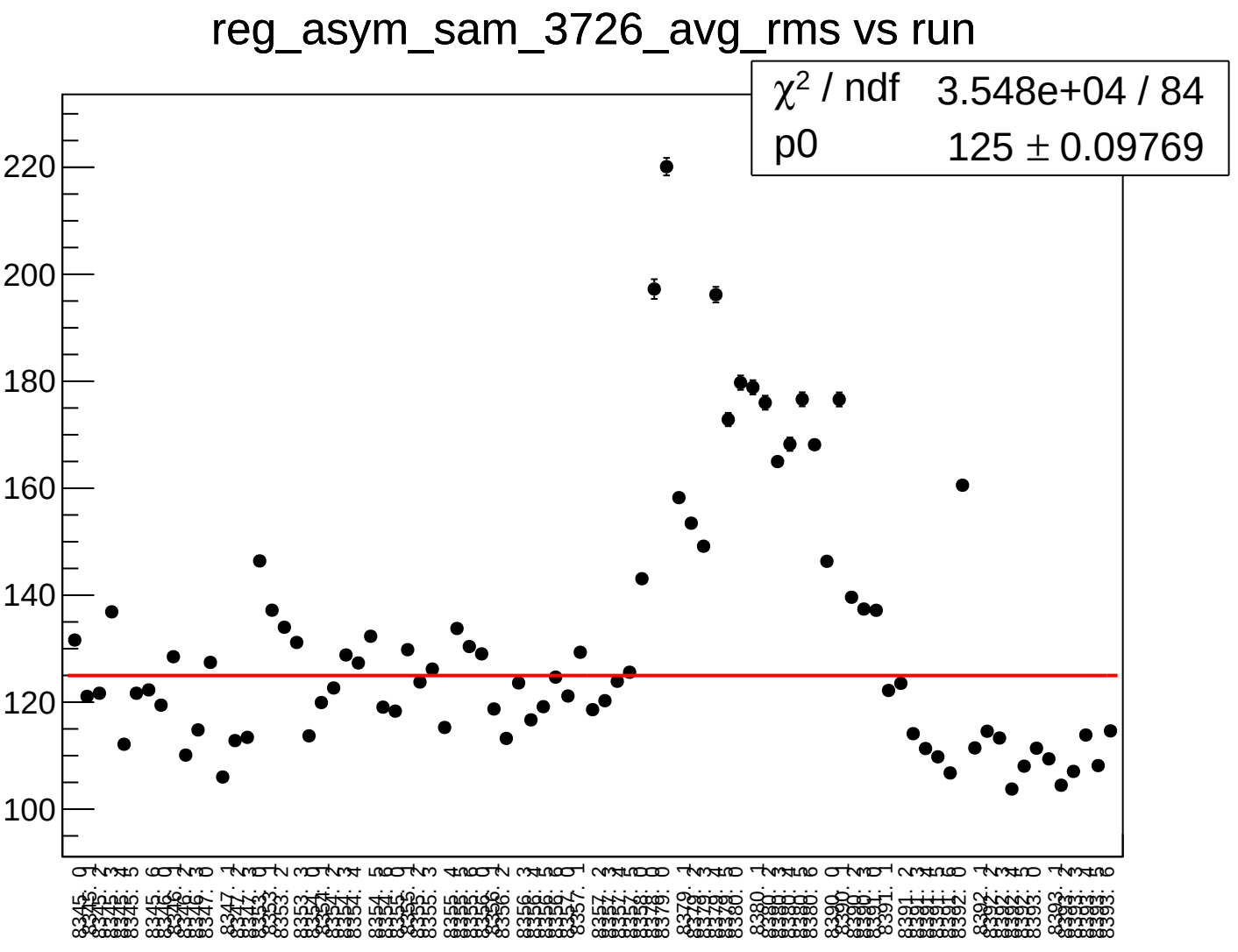

asym_sam_1526_avg_mean vs run
χ^2 / ndf 103.5 / 84
p0 2537 ± 832.6
pull
Entries 85
Mean −798.3
Std Dev 854.8

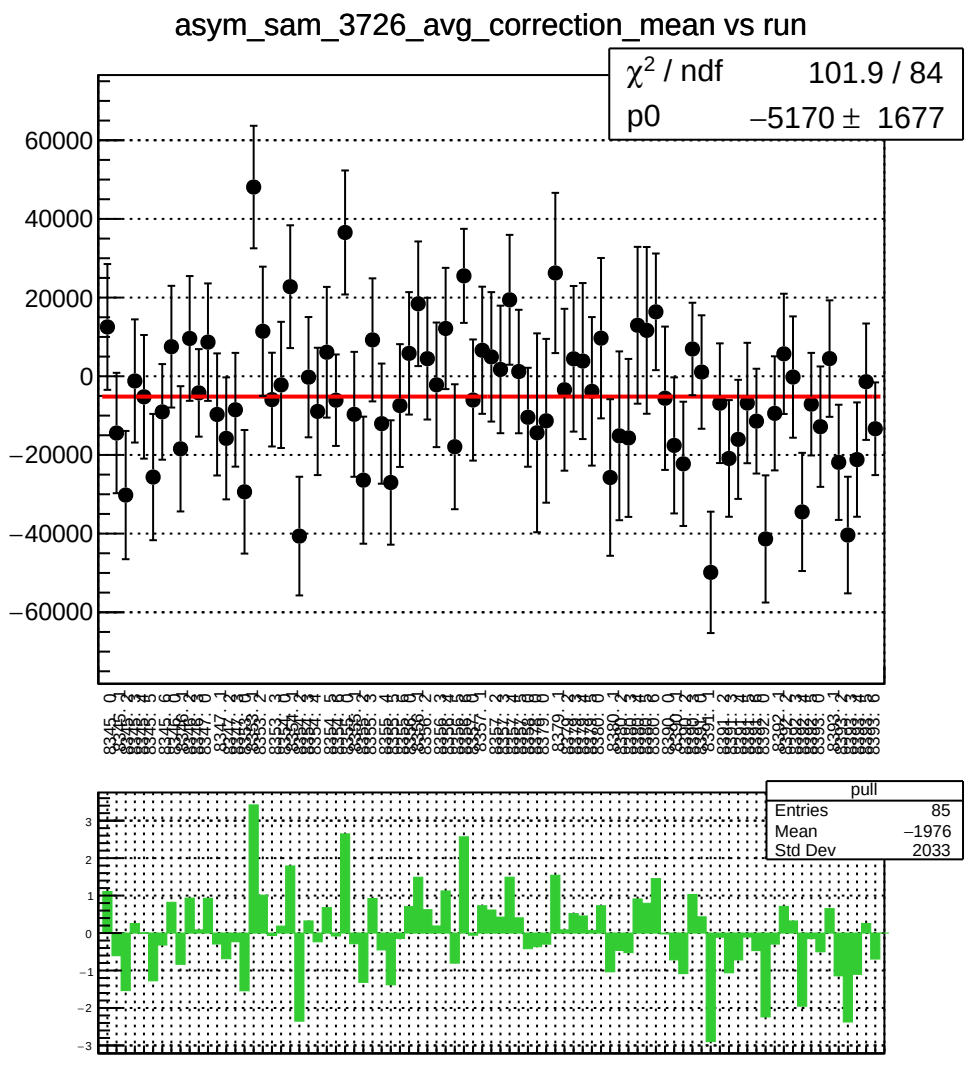

pull1D
Entries 85
Mean −0.006637
Std Dev 1.104

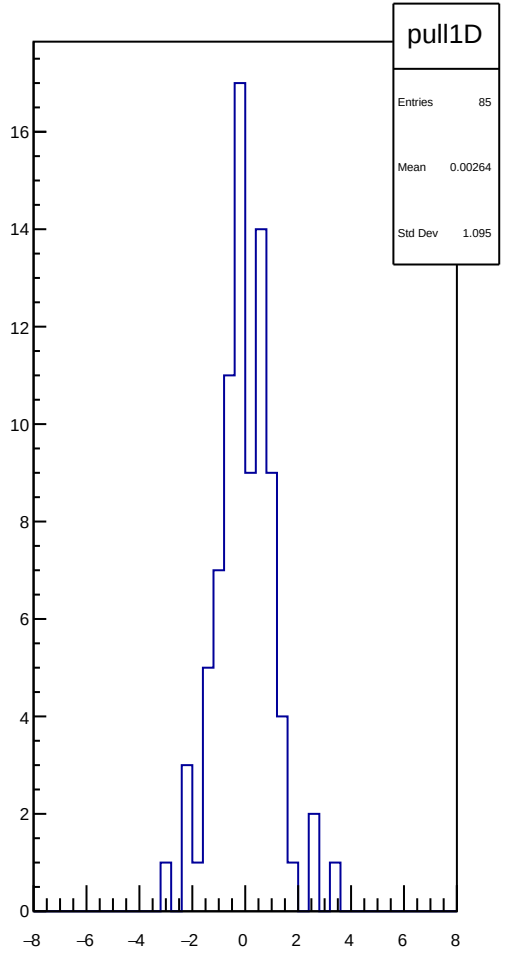

asym_sam_1526_avg_rms vs run
χ² / ndf 1.326e+04 / 84
p0 758.3 ± 0.5887
1000
950
900
850
800
750
700
650

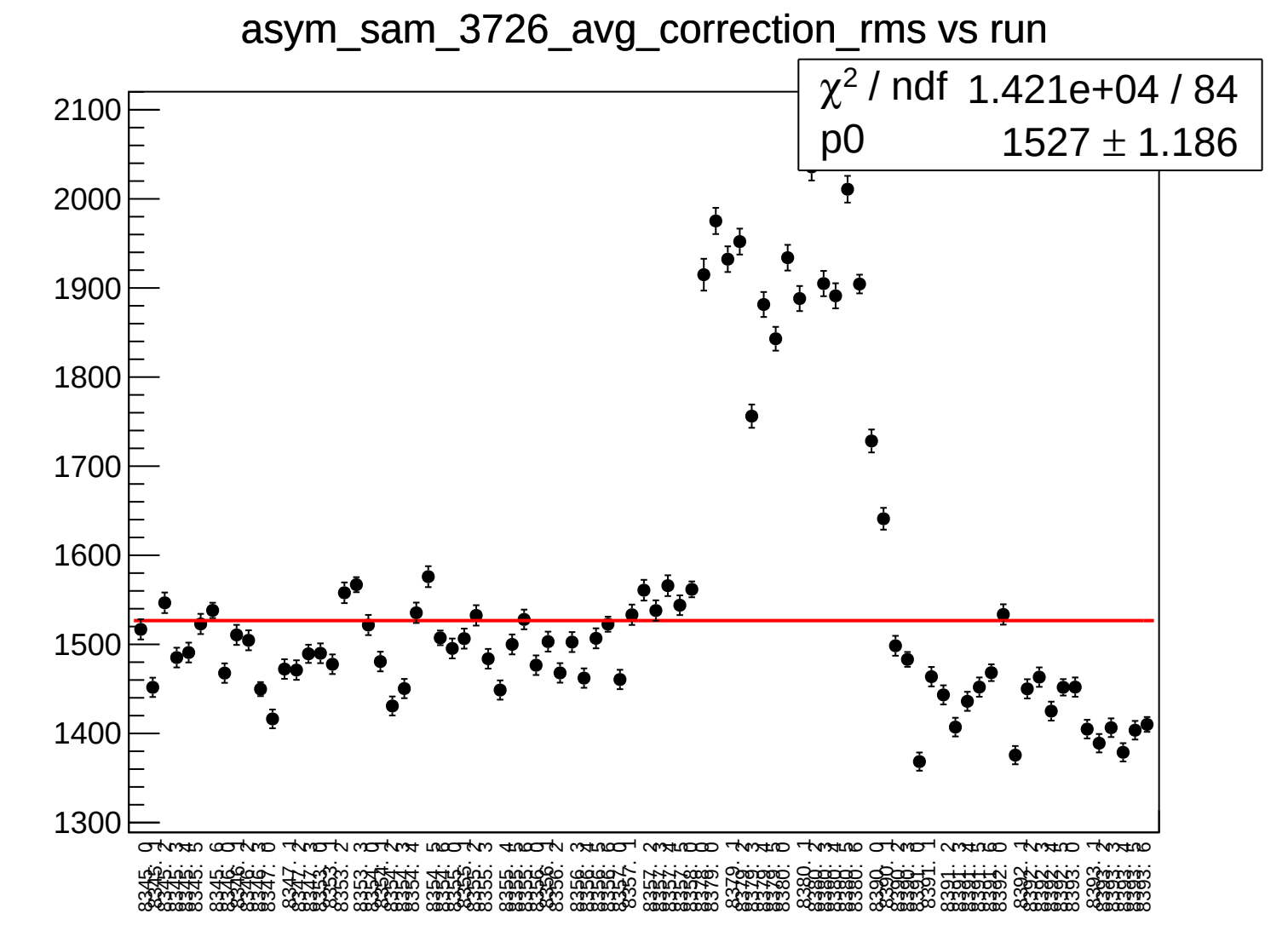

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 87.19 / 84
p0 −116.6 ± 138.2
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −7.356
Std Dev 78.91
3
2
1
0
−1
−2

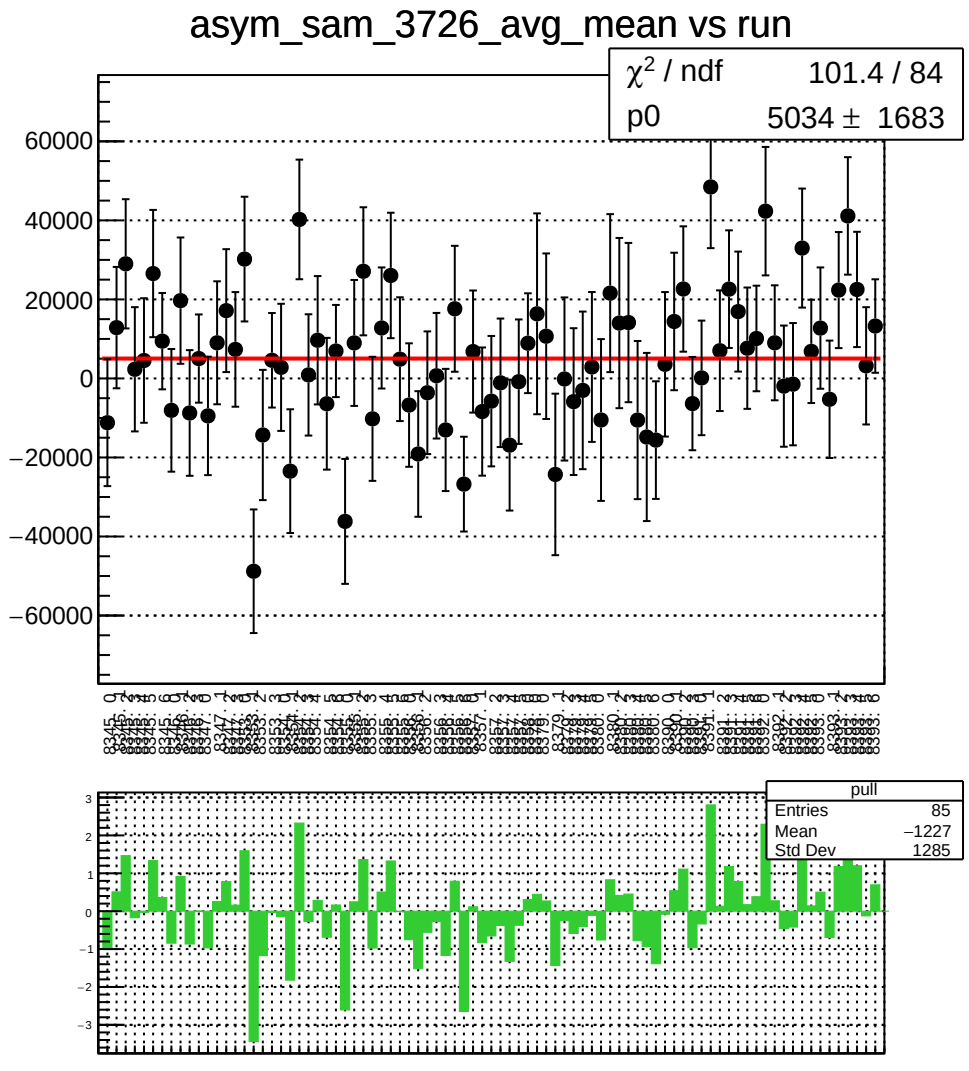

pull1D
Entries 85
Mean −0.02637
Std Dev 1.012
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

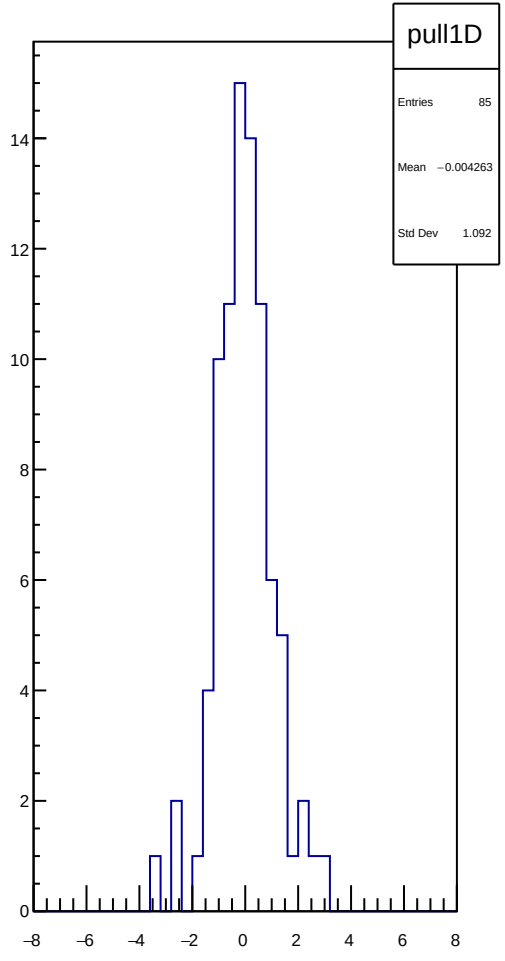

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 3.548e+04 / 84
p0 125 ± 0.09769
220
200
180
160
140
120
100

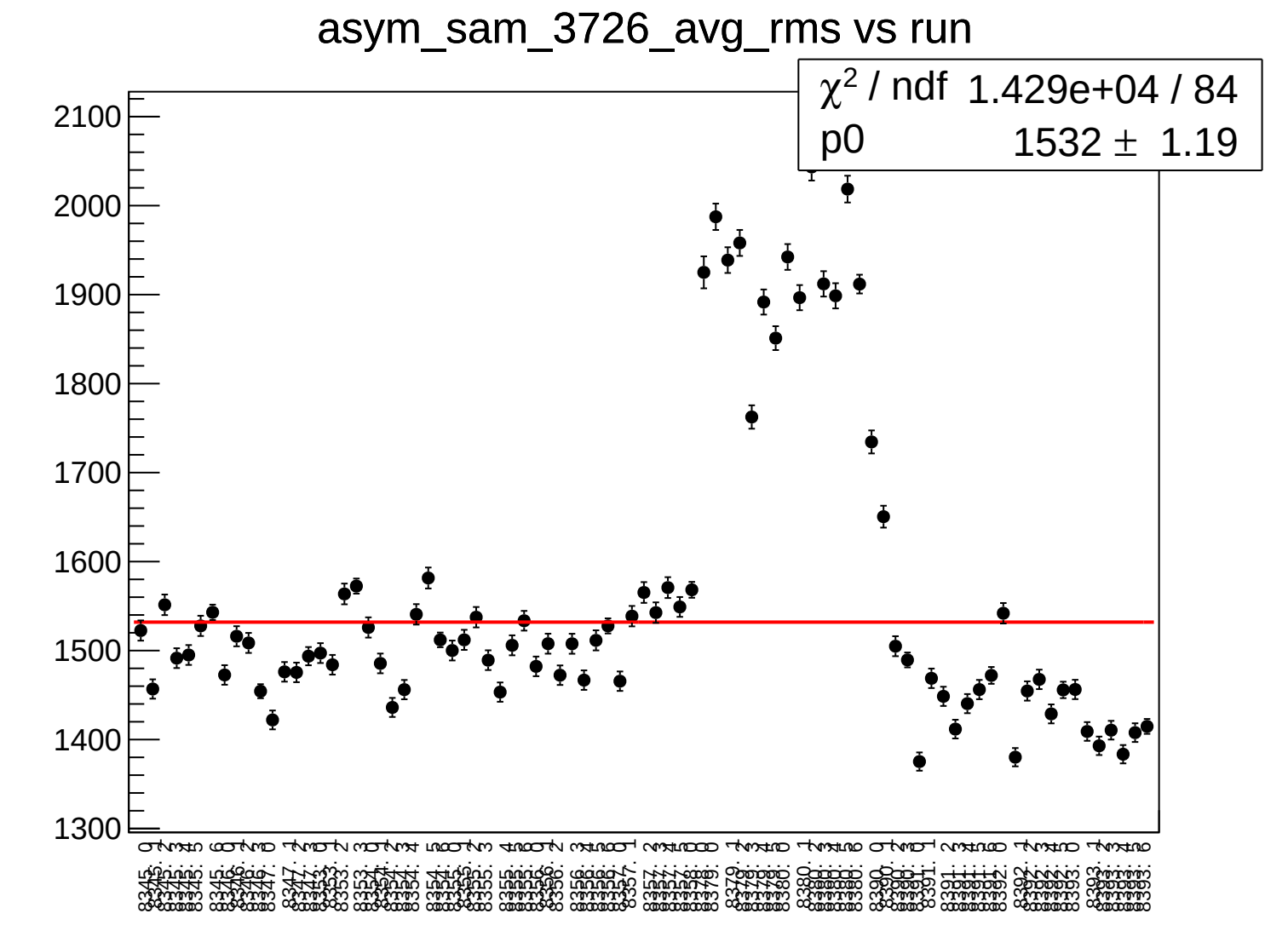

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 101.9 / 84
p0 −5170 ± 1677
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −1976
Std Dev 2033
3
2
1
0
−1
−2
−3

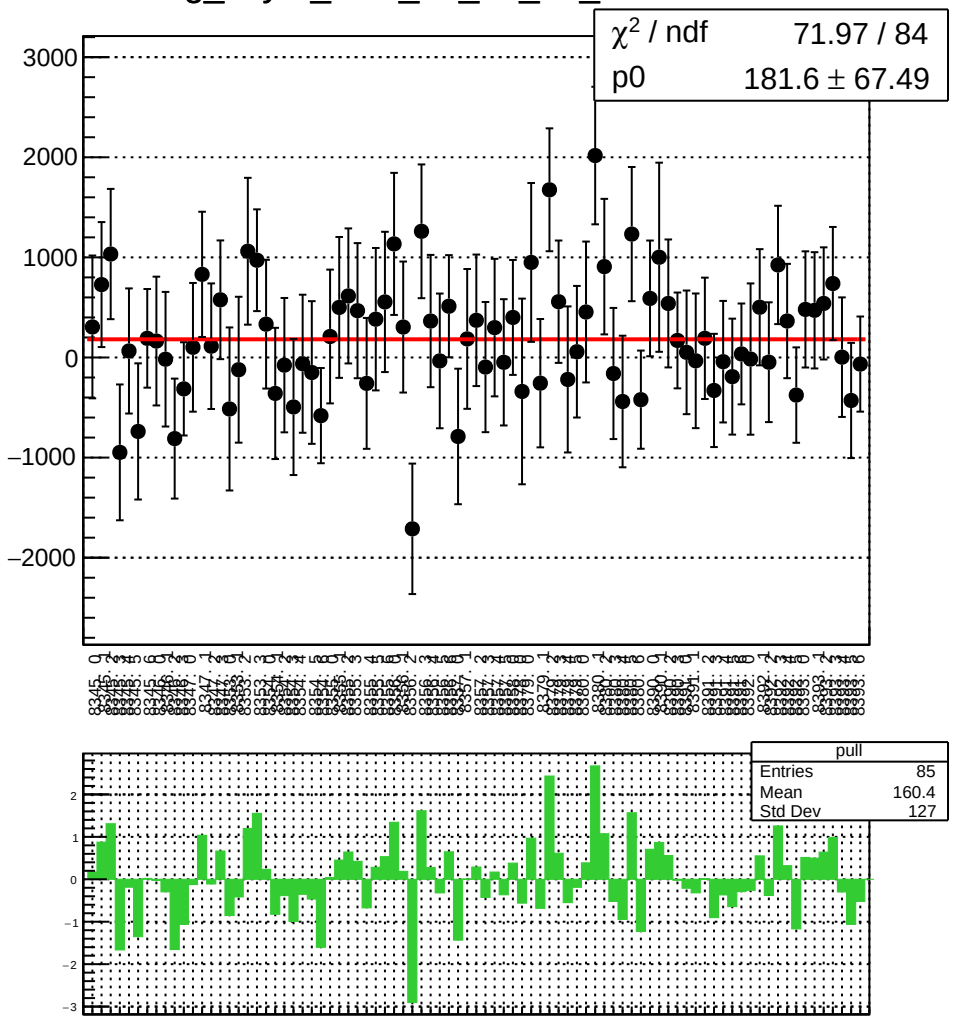

pull1D
Entries 85
Mean 0.00264
Std Dev 1.095
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

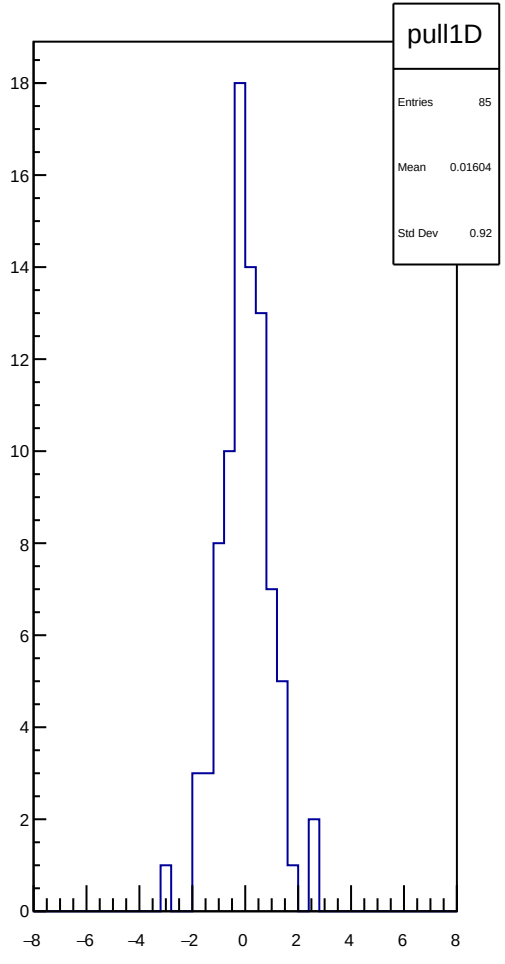

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 1.421e+04 / 84
p0 1527 ± 1.186
2100
2000
1900
1800
1700
1600
1500
1400
1300

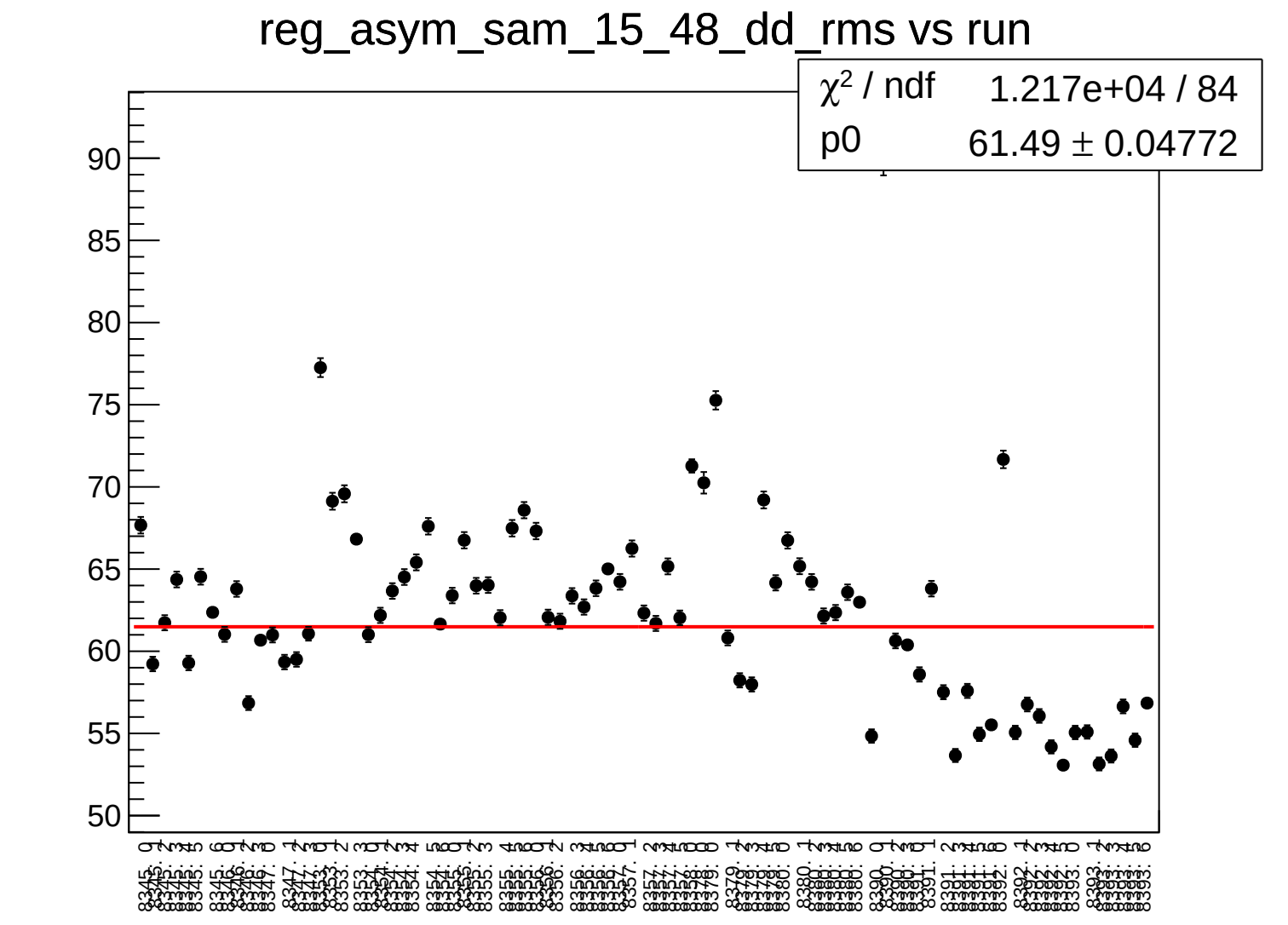

asym_sam_3726_avg_mean vs run
χ² / ndf 101.4 / 84
p0 5034 ± 1683
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −1227
Std Dev 1285
3
2
1
0
−1
−2
−3

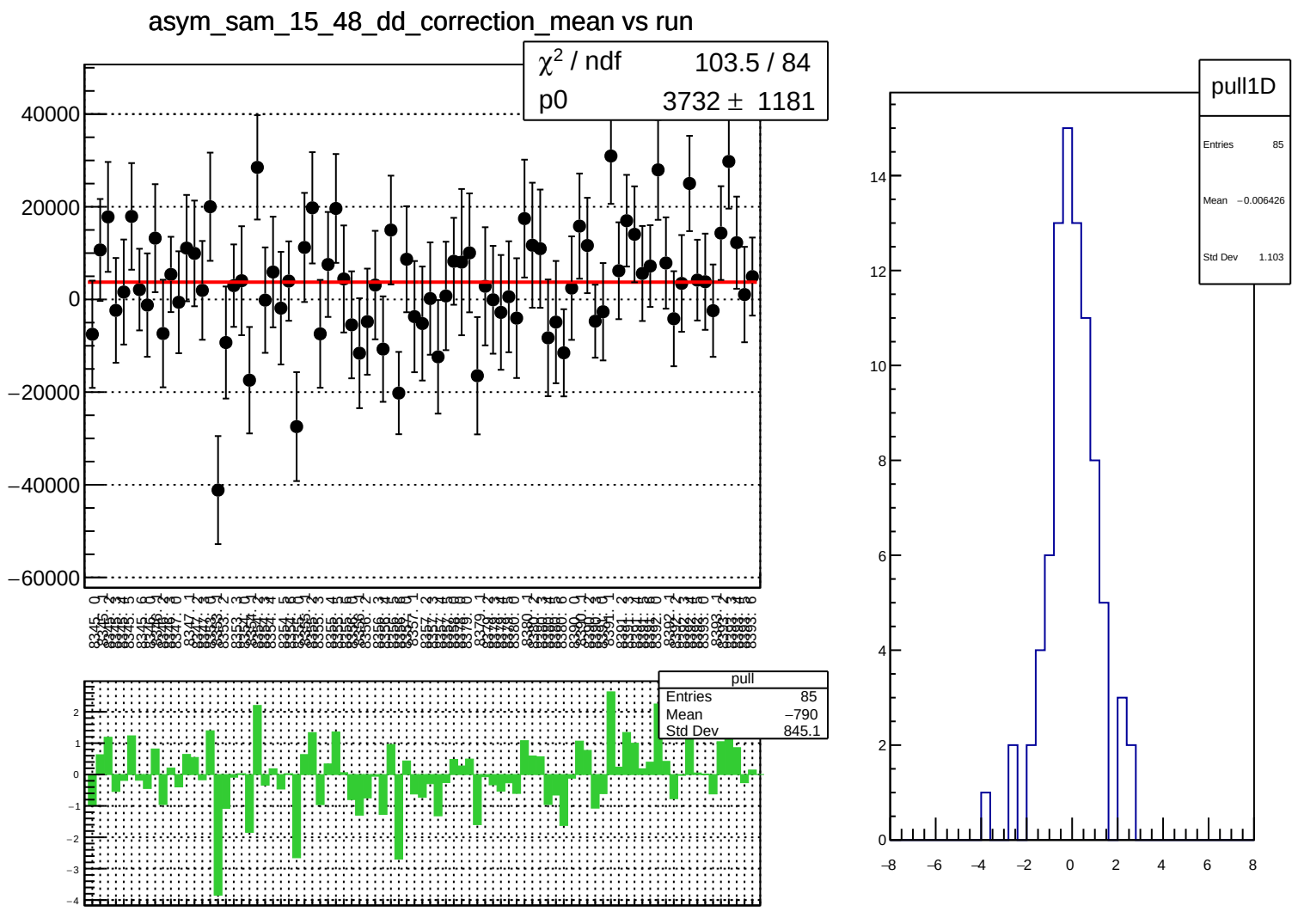

pull1D
Entries 85
Mean −0.004263
Std Dev 1.092
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

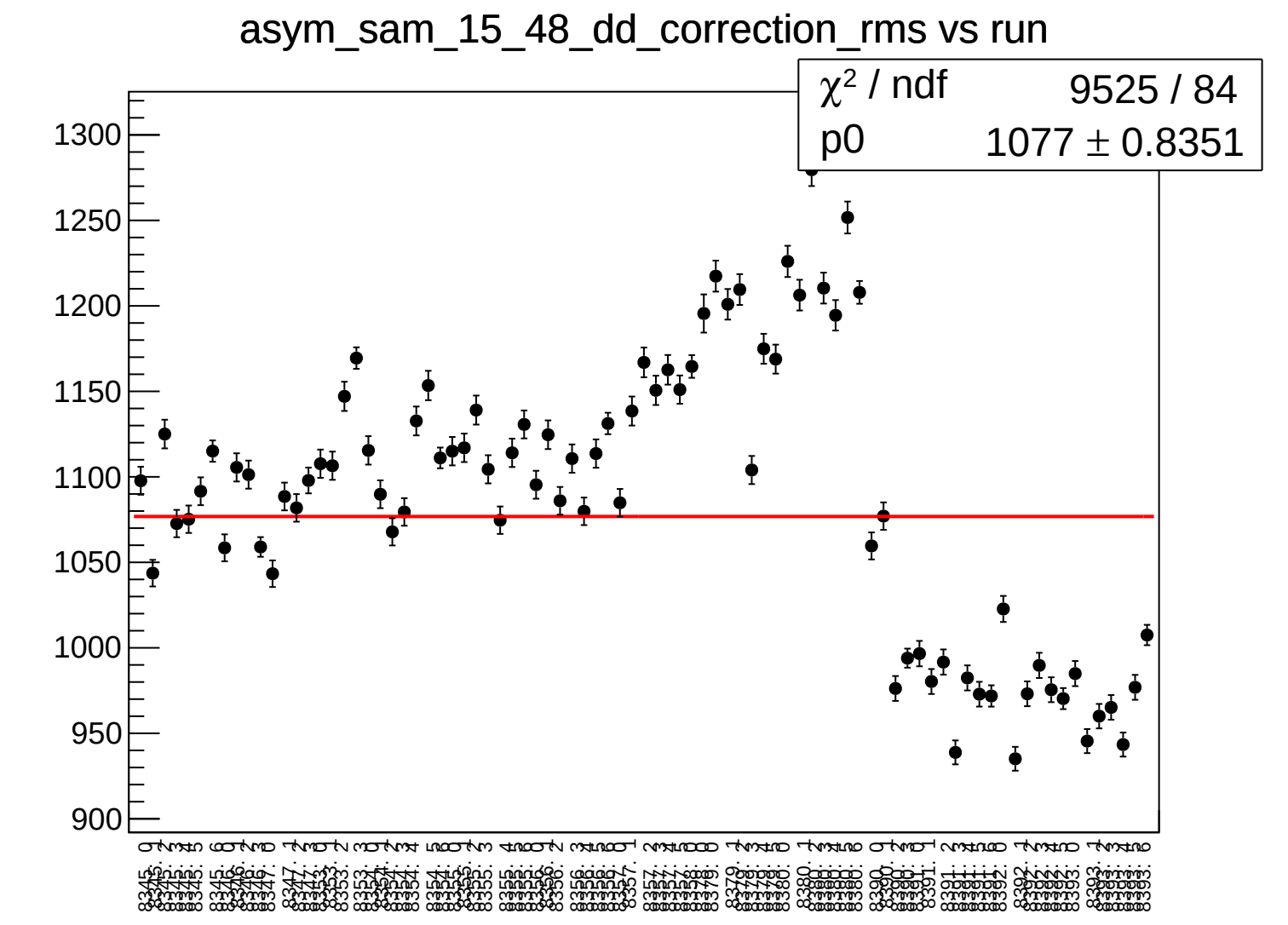

asym_sam_3726_avg_rms vs run
χ^2 / ndf 1.429e+04 / 84
p0 1532 ± 1.19
2100
2000
1900
1800
1700
1600
1500
1400
1300

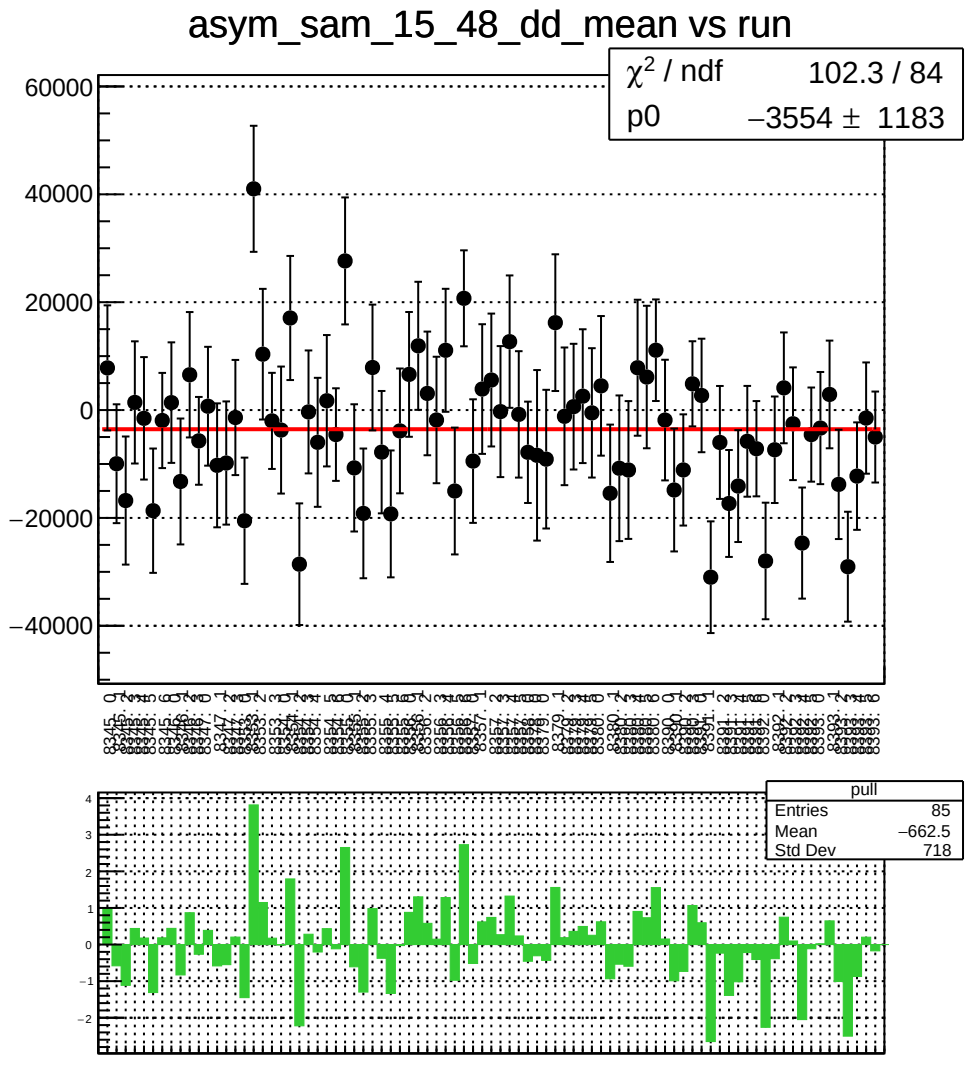

reg_asym_sam_15_48_dd_mean vs run
χ^2 / ndf 71.97 / 84
p0 181.6 ± 67.49
3000
2000
1000
0
−1000
−2000
pull
Entries 85
Mean 160.4
Std Dev 127
2
1
0
−1
−2
−3

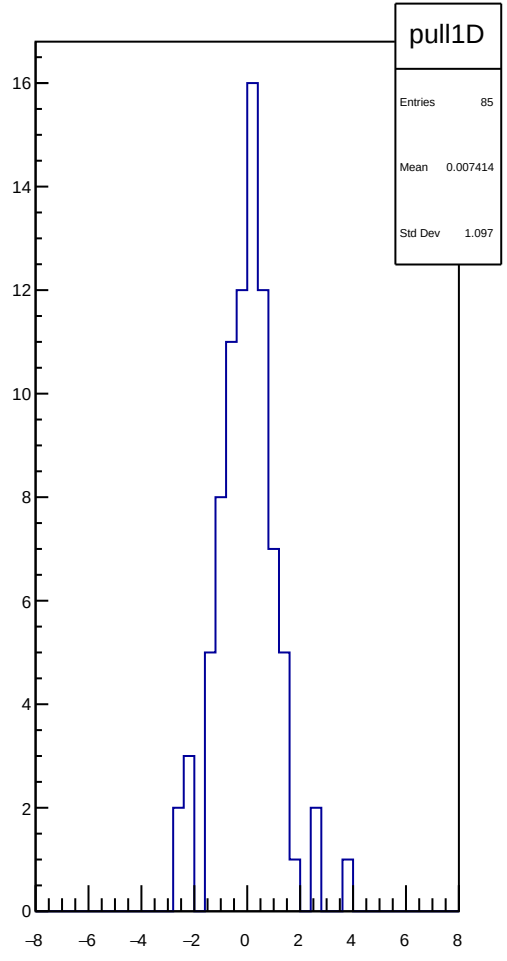

pull1D
Entries 85
Mean 0.01604
Std Dev 0.92
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

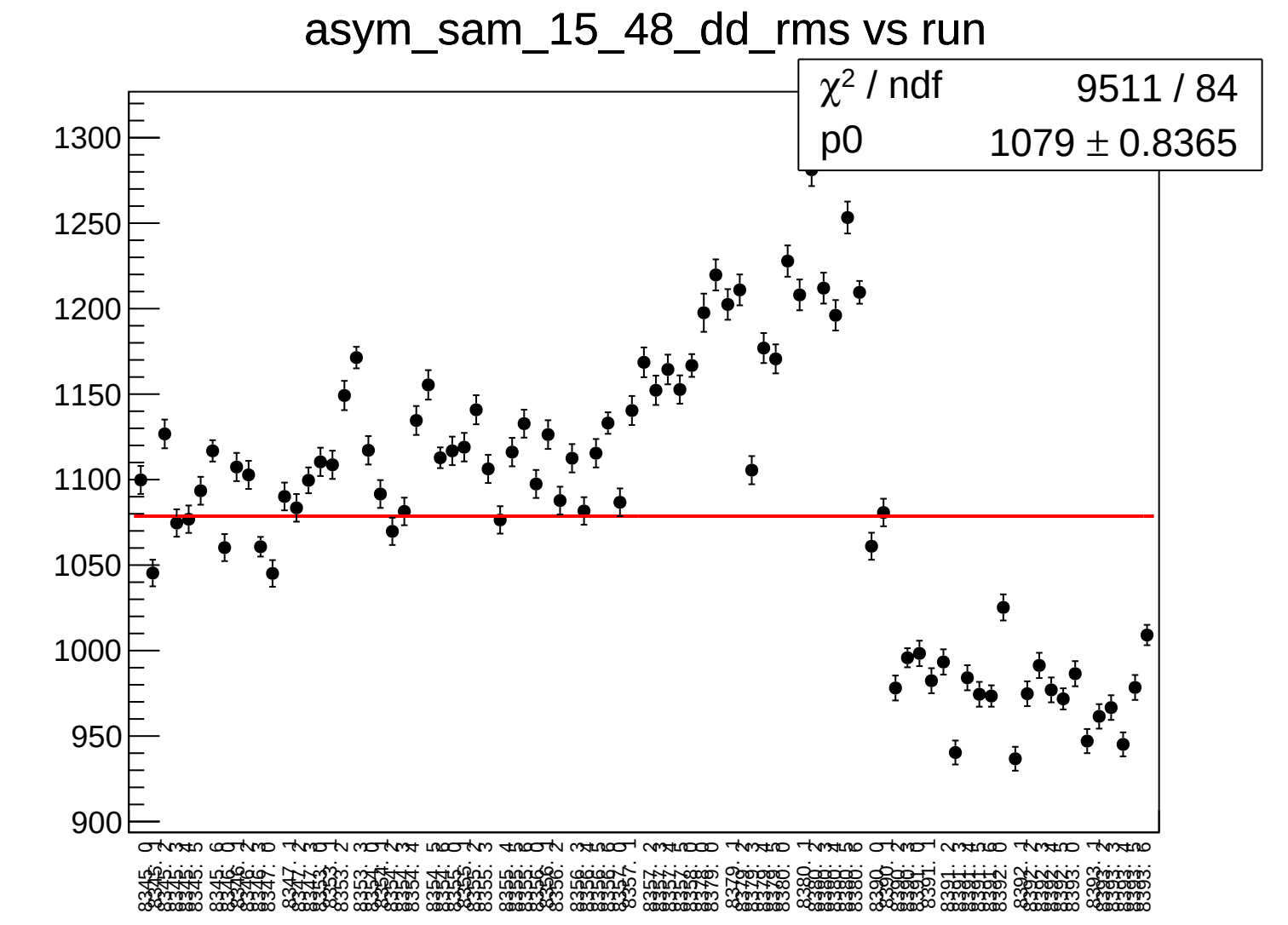

reg_asym_sam_15_48_dd_rms vs run
χ^2 / ndf 1.217e+04 / 84
p0 61.49 ± 0.04772
90
85
80
75
70
65
60
55
50

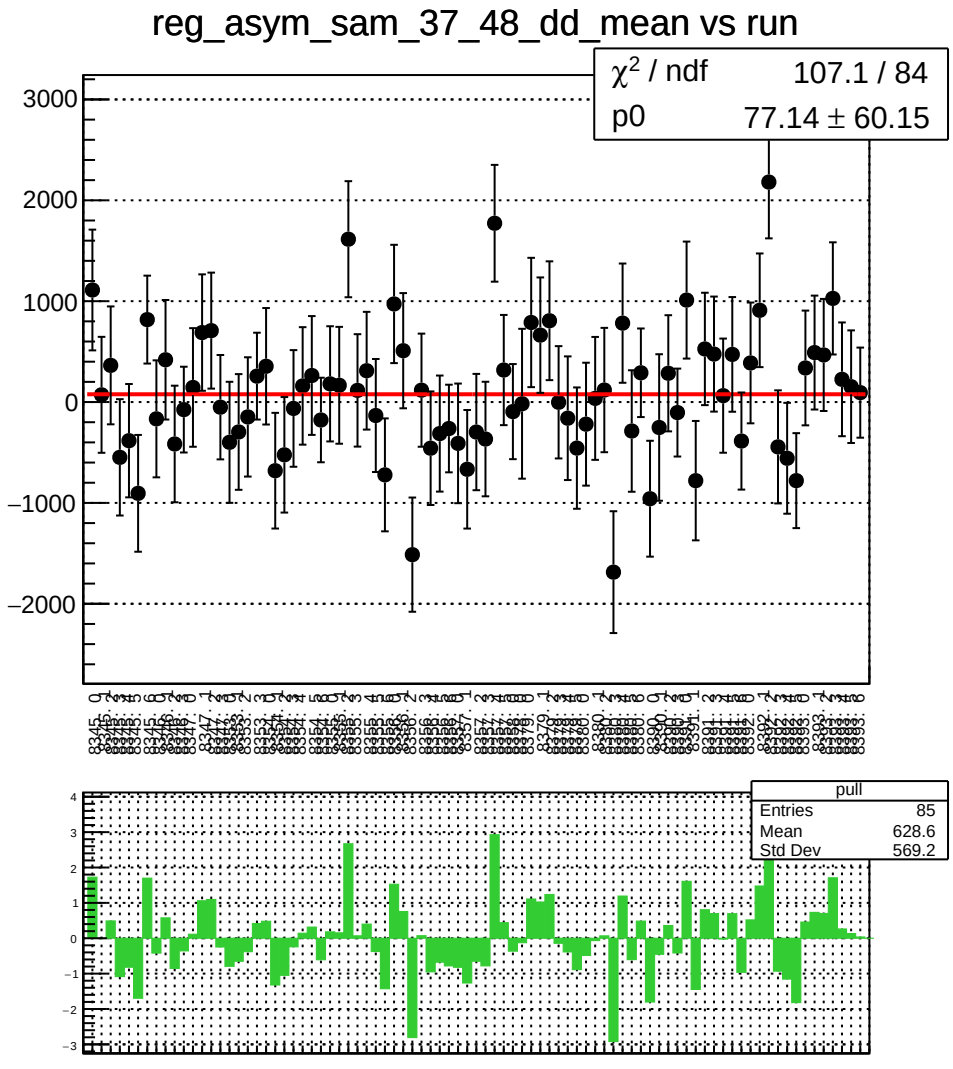

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 103.5 / 84
p0 3732 ± 1181
pull
Entries 85
Mean −790
Std Dev 845.1
pull1D
Entries 85
Mean −0.006426
Std Dev 1.103

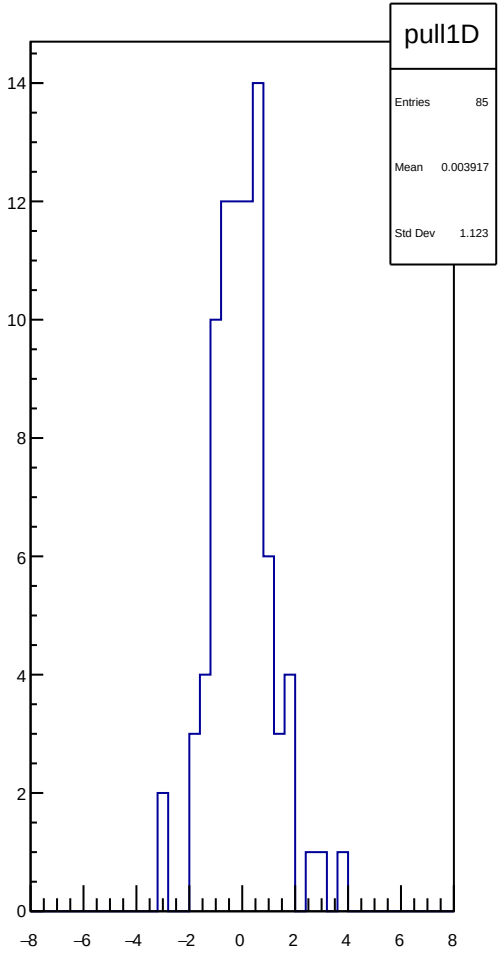

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 9525 / 84
p0 1077 ± 0.8351
1300
1250
1200
1150
1100
1050
1000
950
900

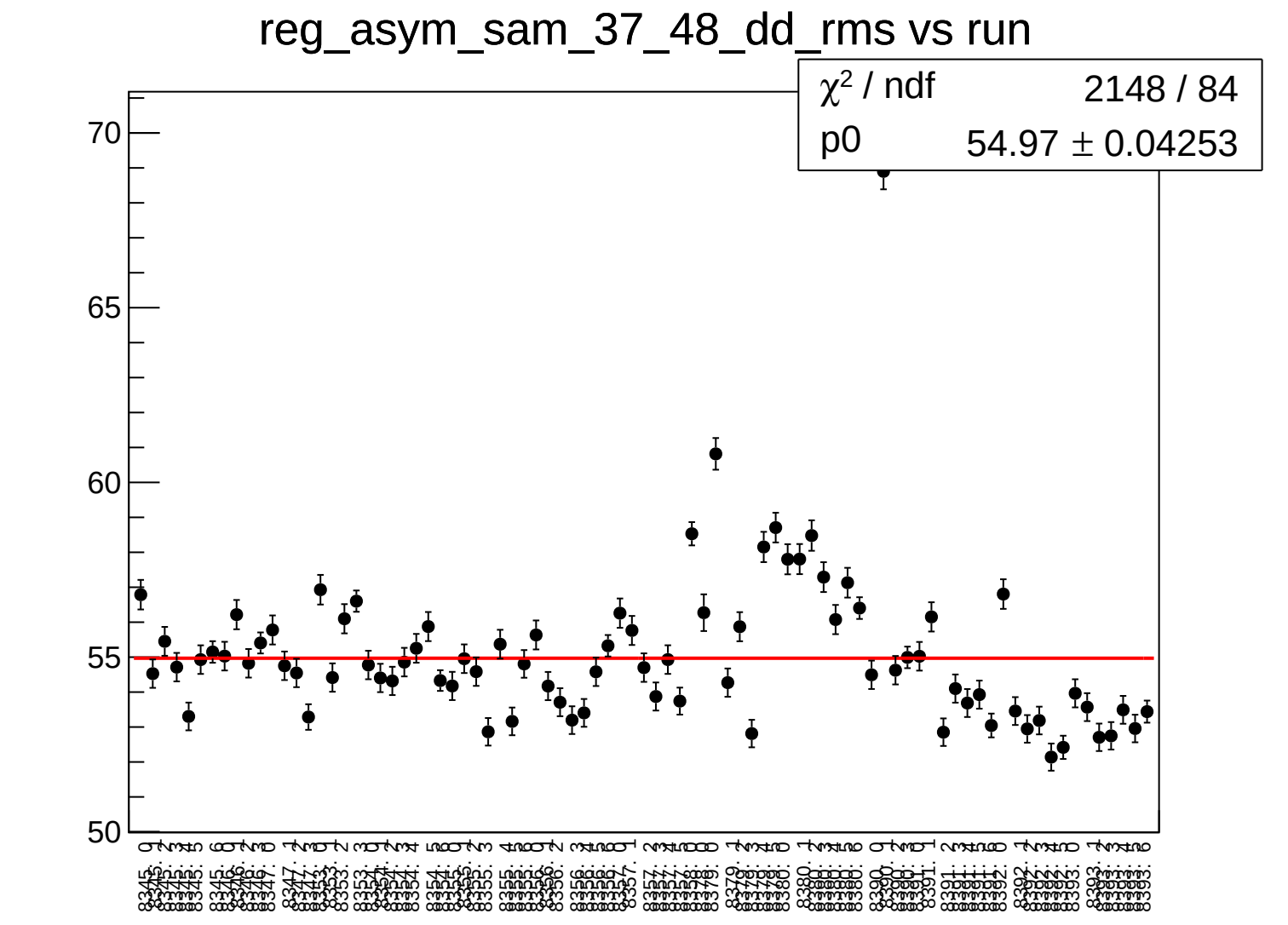

asym_sam_15_48_dd_mean vs run
χ² / ndf 102.3 / 84
p0 −3554 ± 1183
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −662.5
Std Dev 718
4
3
2
1
0
−1
−2

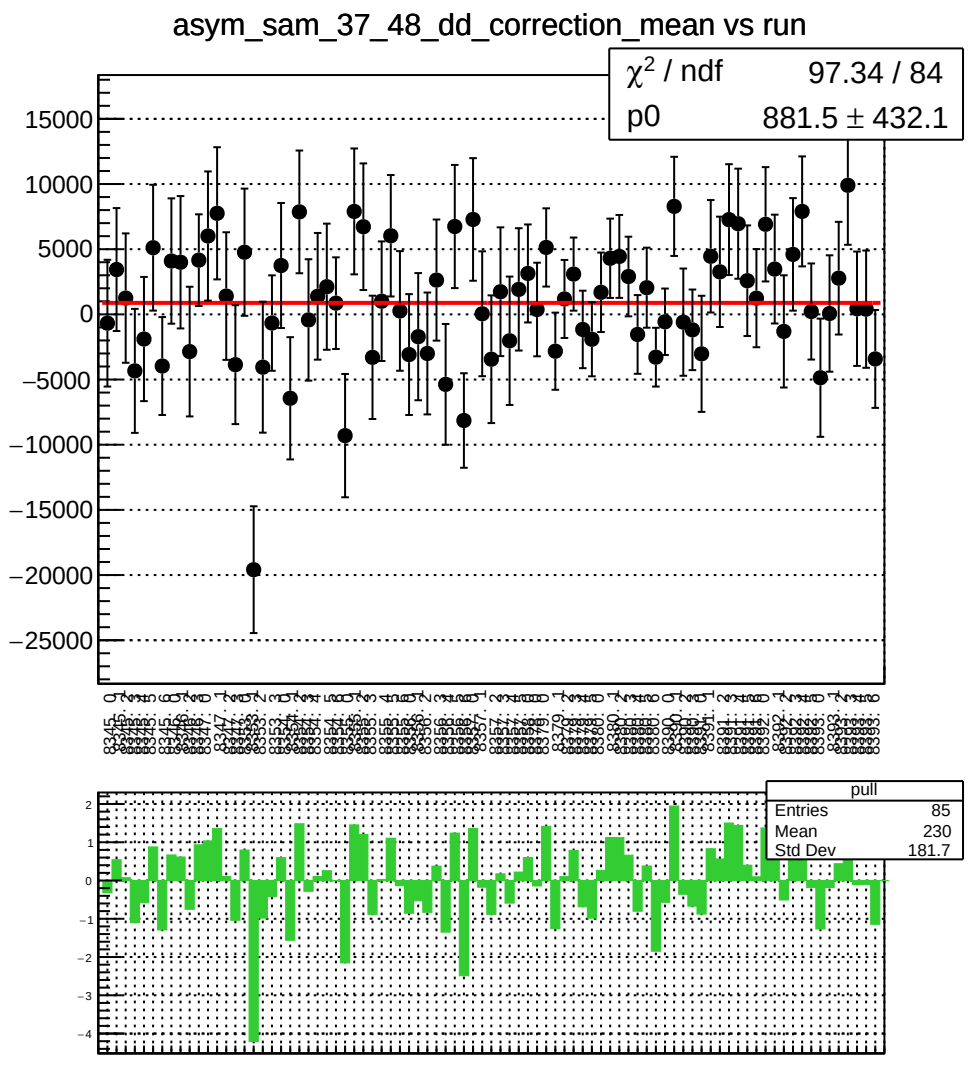

pull1D
Entries 85
Mean 0.007414
Std Dev 1.097
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

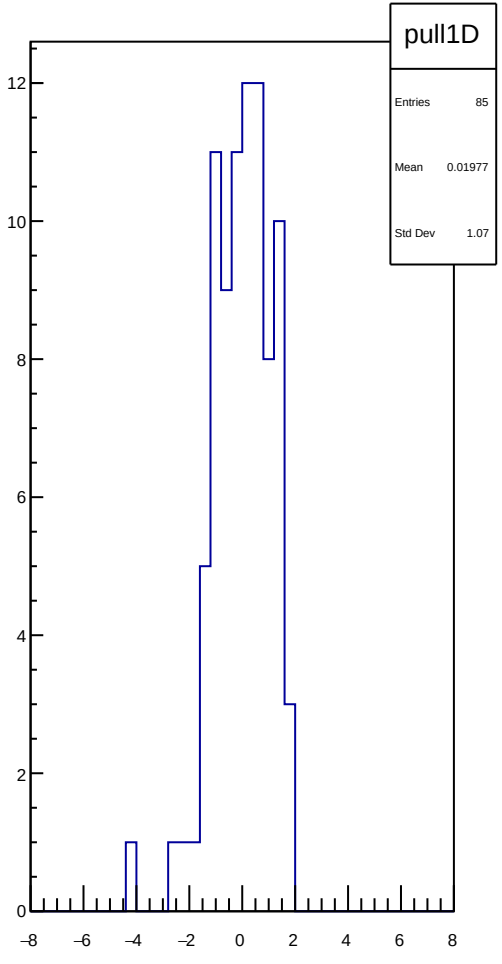

asym_sam_15_48_dd_rms vs run
χ² / ndf 9511 / 84
p0 1079 ± 0.8365
1300
1250
1200
1150
1100
1050
1000
950
900

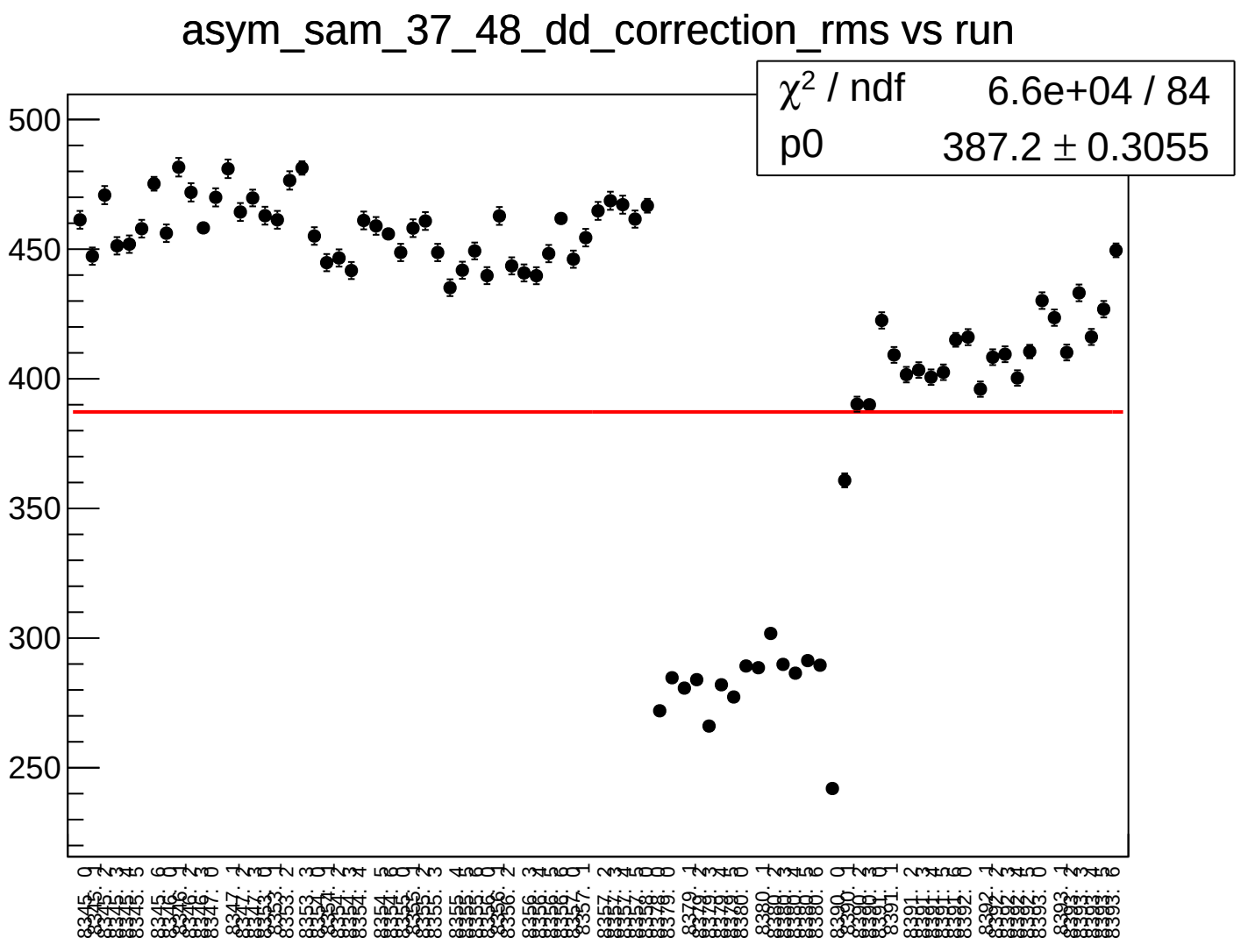

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 107.1 / 84
p0 77.14 ± 60.15
3000
2000
1000
0
−1000
−2000
pull
Entries 85
Mean 628.6
Std Dev 569.2
4
3
2
1
0
−1
−2
−3

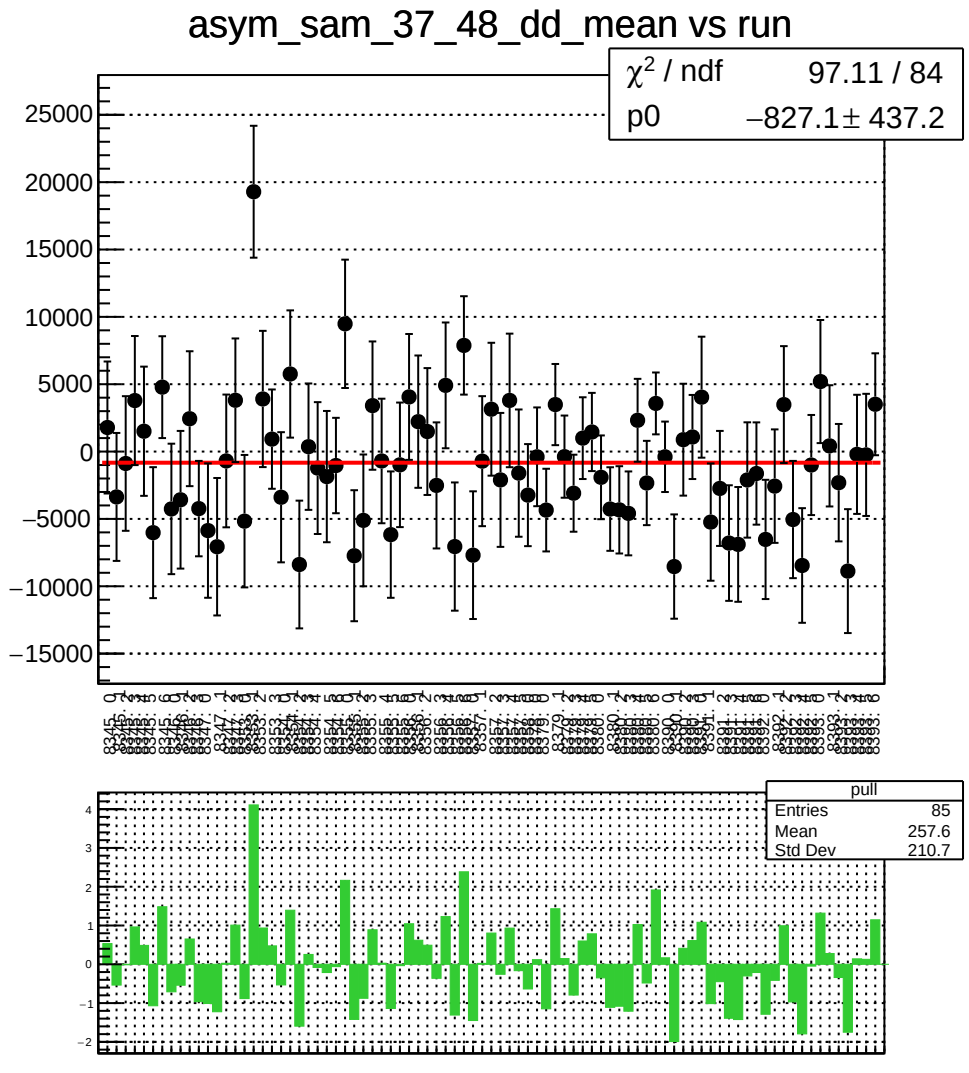

pull1D
Entries 85
Mean 0.003917
Std Dev 1.123
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

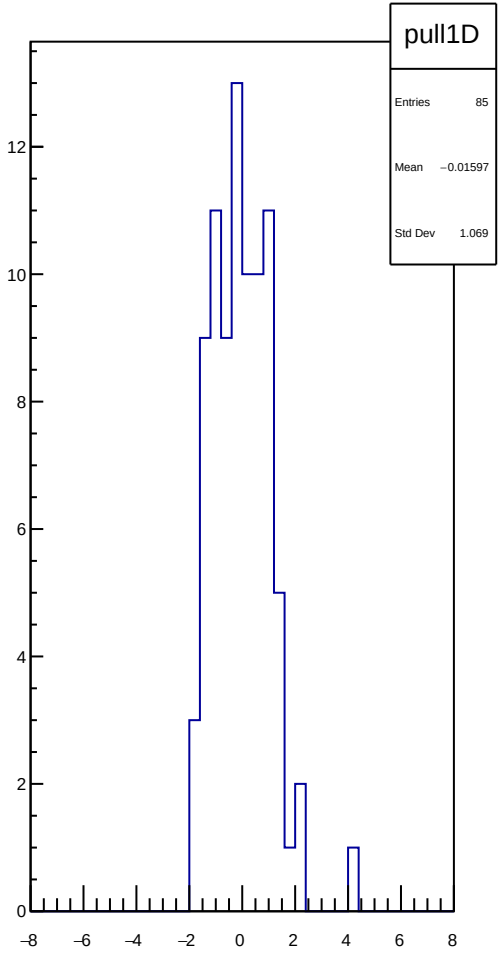

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 2148 / 84
p0 54.97 ± 0.04253
70
65
60
55
50

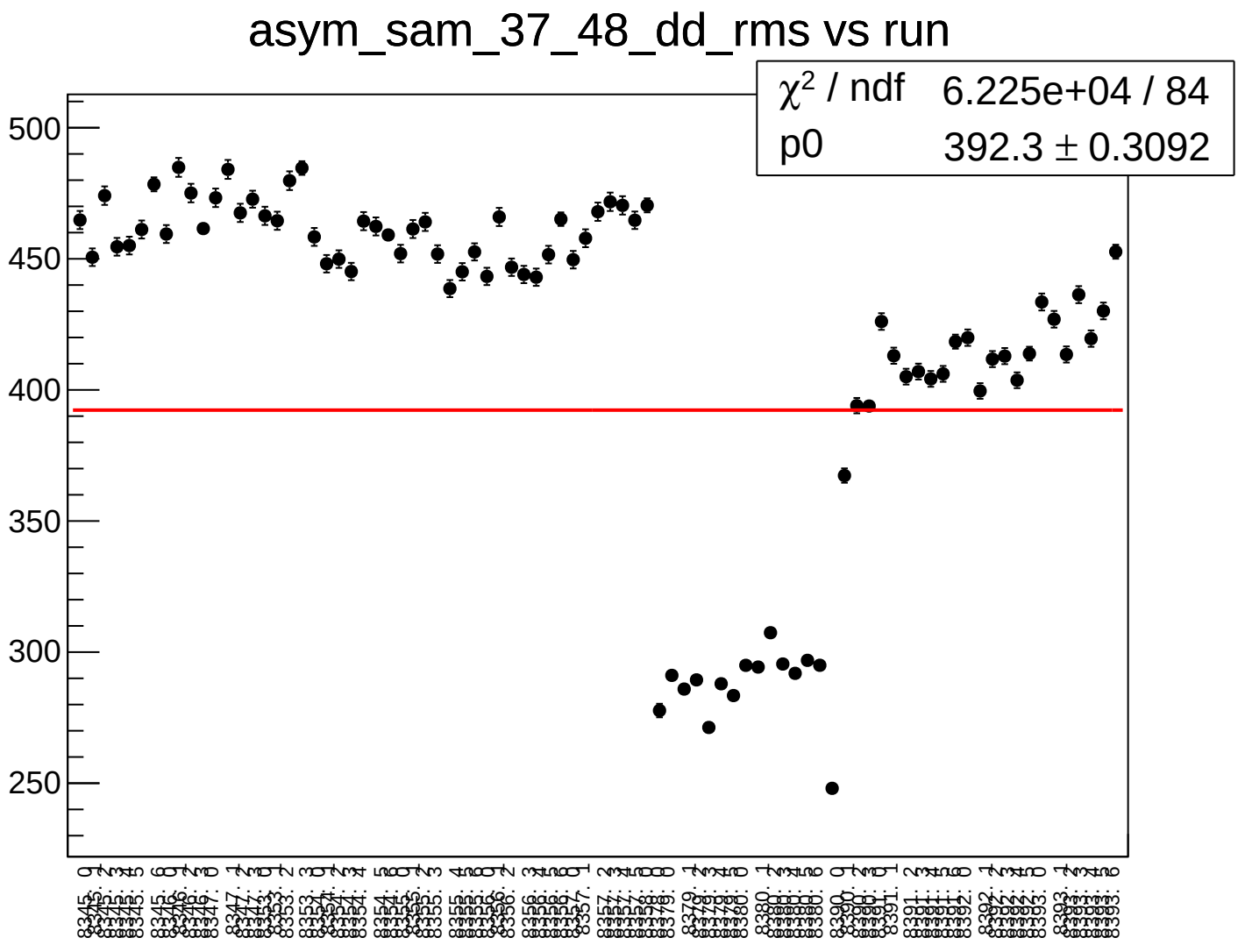

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 97.34 / 84
p0 881.5 ± 432.1
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean 230
Std Dev 181.7
2
1
0
−1
−2
−3
−4

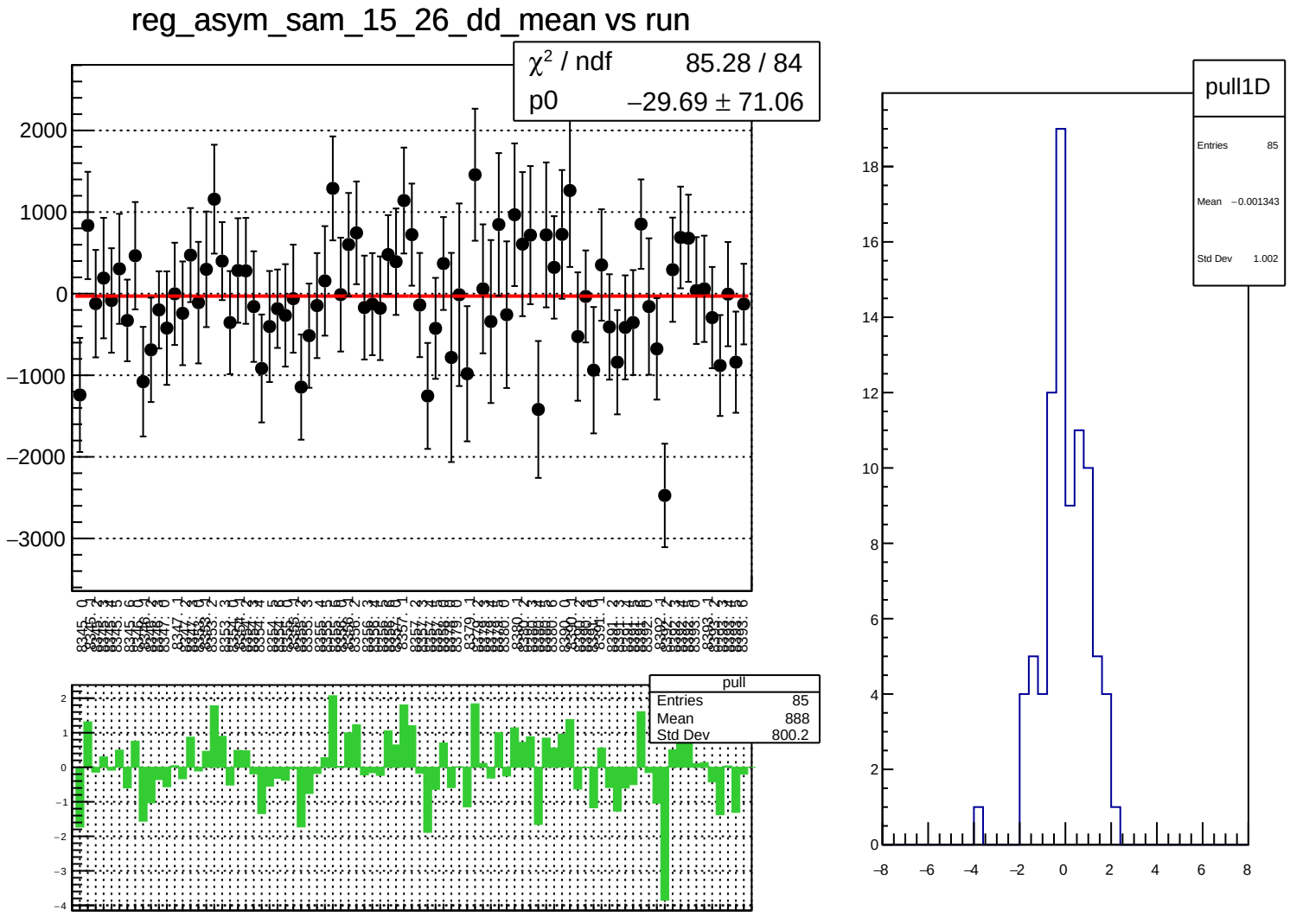

pull1D
Entries 85
Mean 0.01977
Std Dev 1.07
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

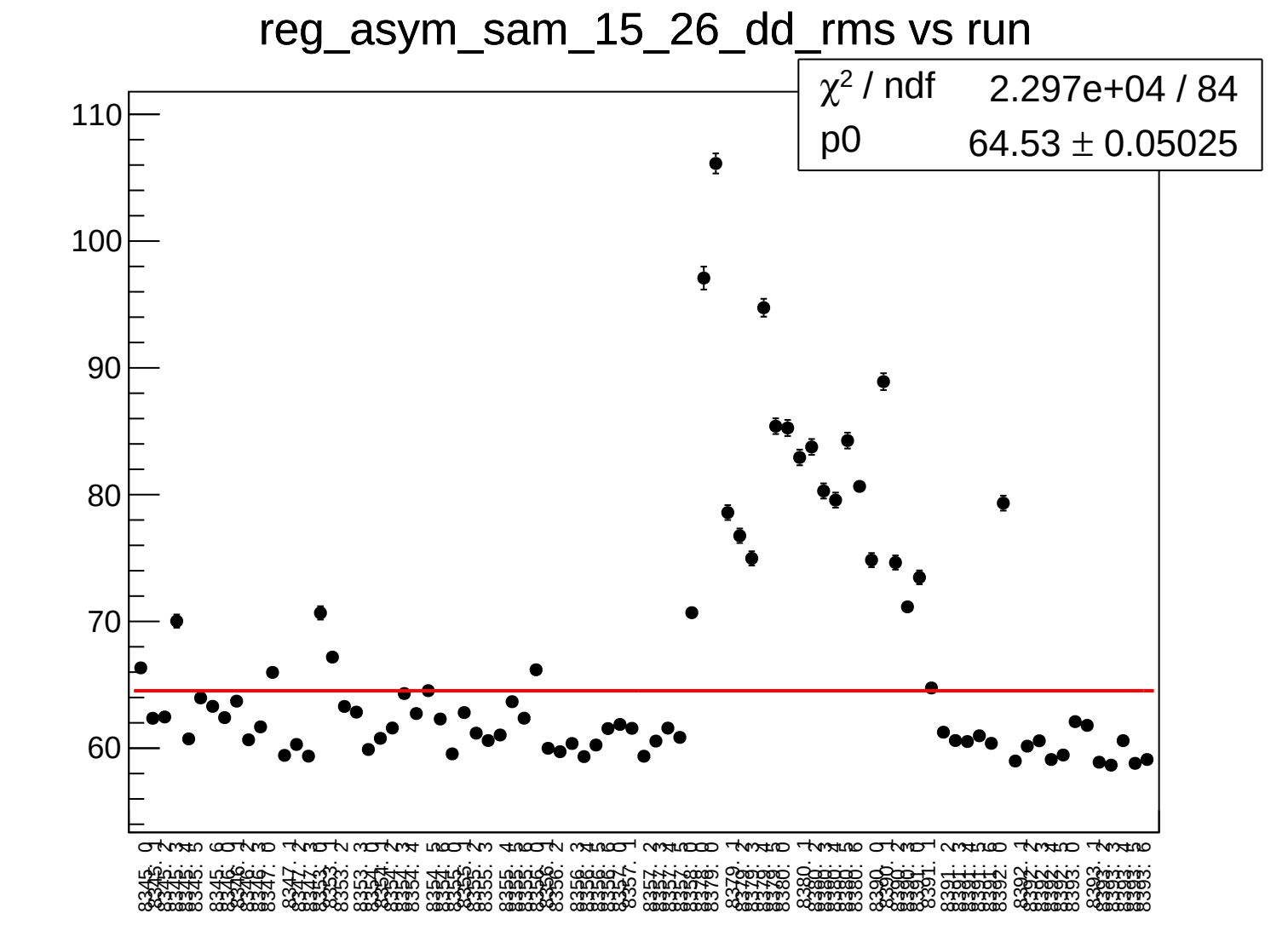

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 6.6e+04 / 84
p0 387.2 ± 0.3055
500
450
400
350
300
250

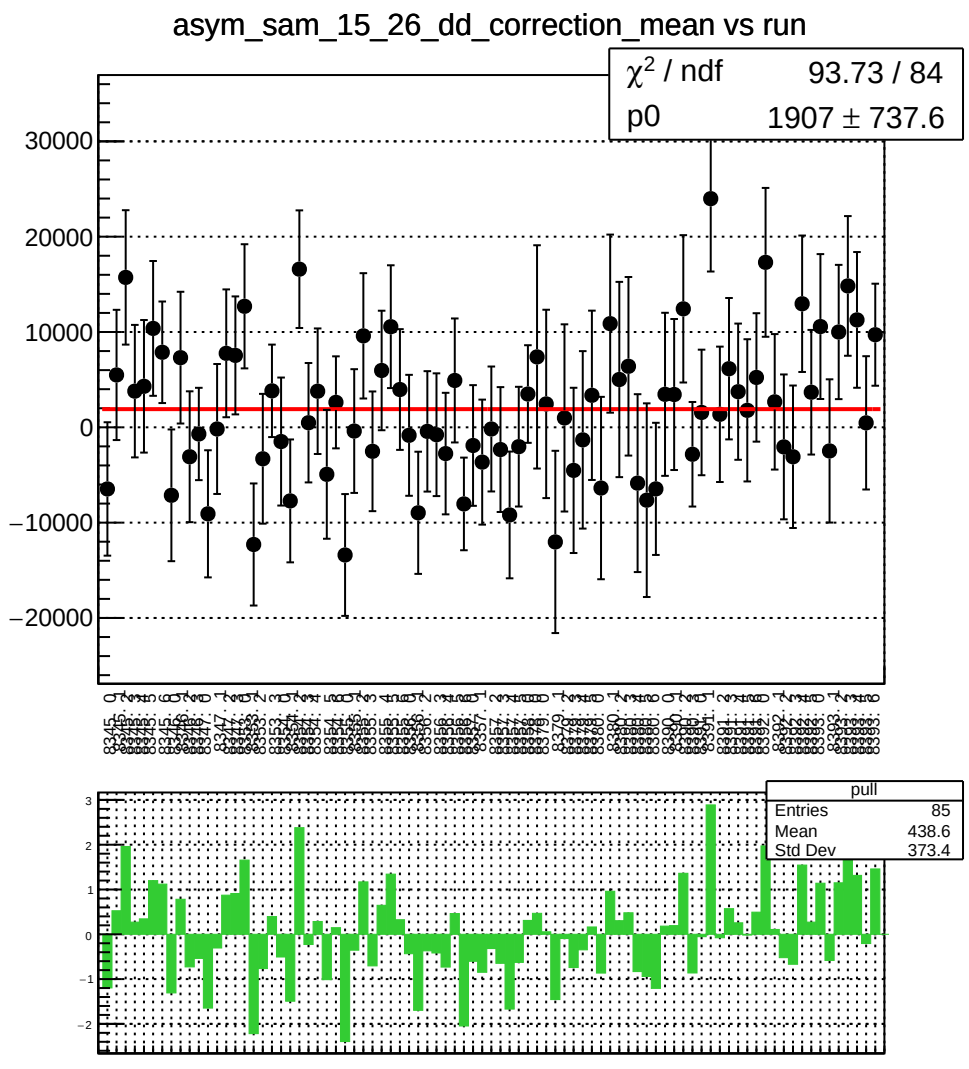

asym_sam_37_48_dd_mean vs run
χ² / ndf 97.11 / 84
p0 −827.1± 437.2
pull
Entries 85
Mean 257.6
Std Dev 210.7

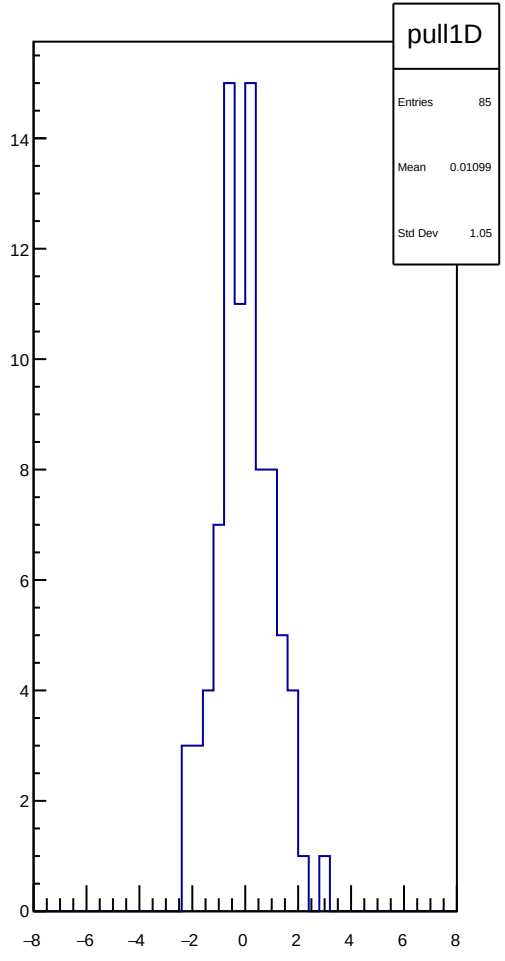

pull1D
Entries 85
Mean −0.01597
Std Dev 1.069

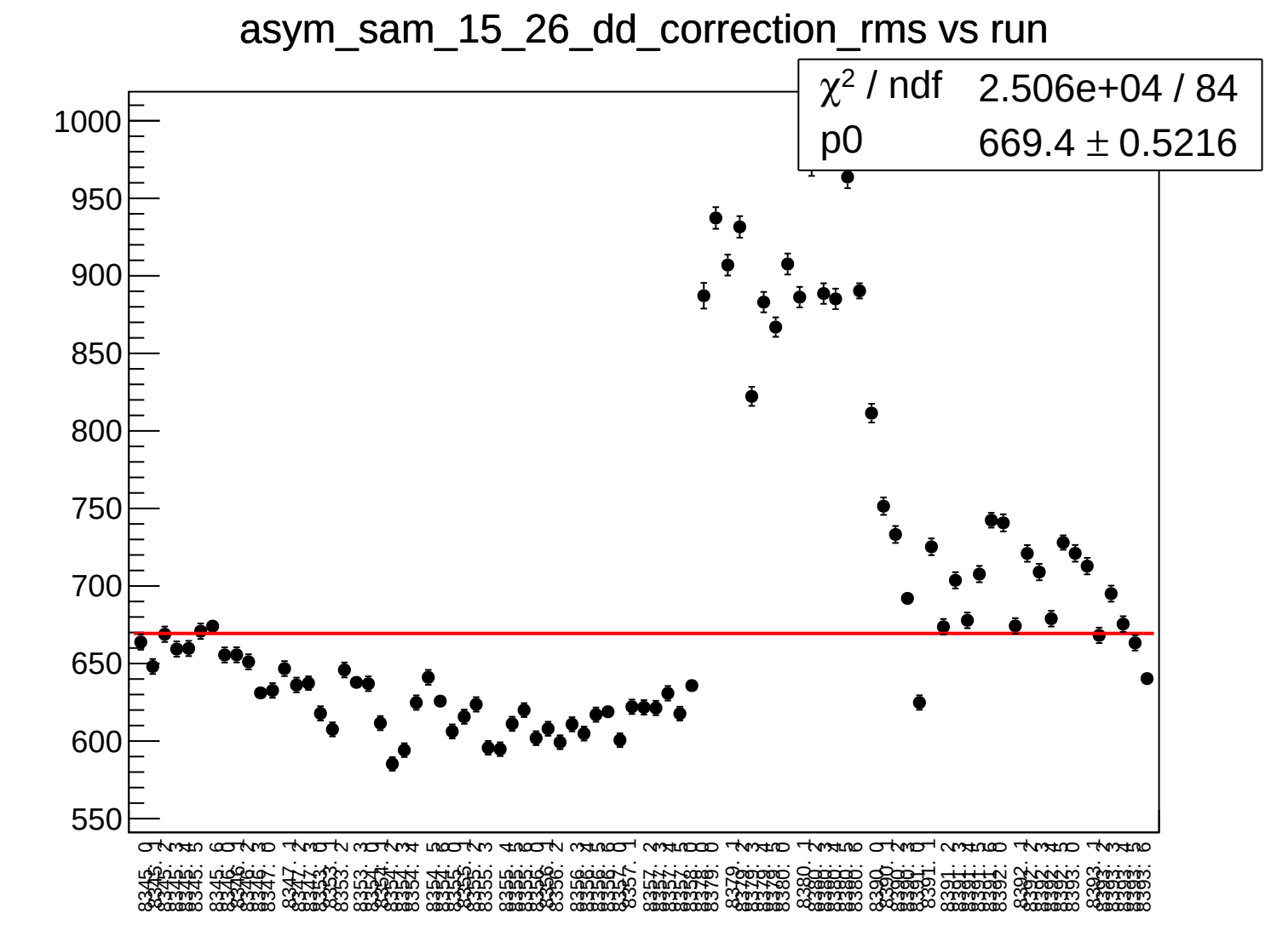

asym_sam_37_48_dd_rms vs run
χ² / ndf 6.225e+04 / 84
p0 392.3 ± 0.3092
500
450
400
350
300
250

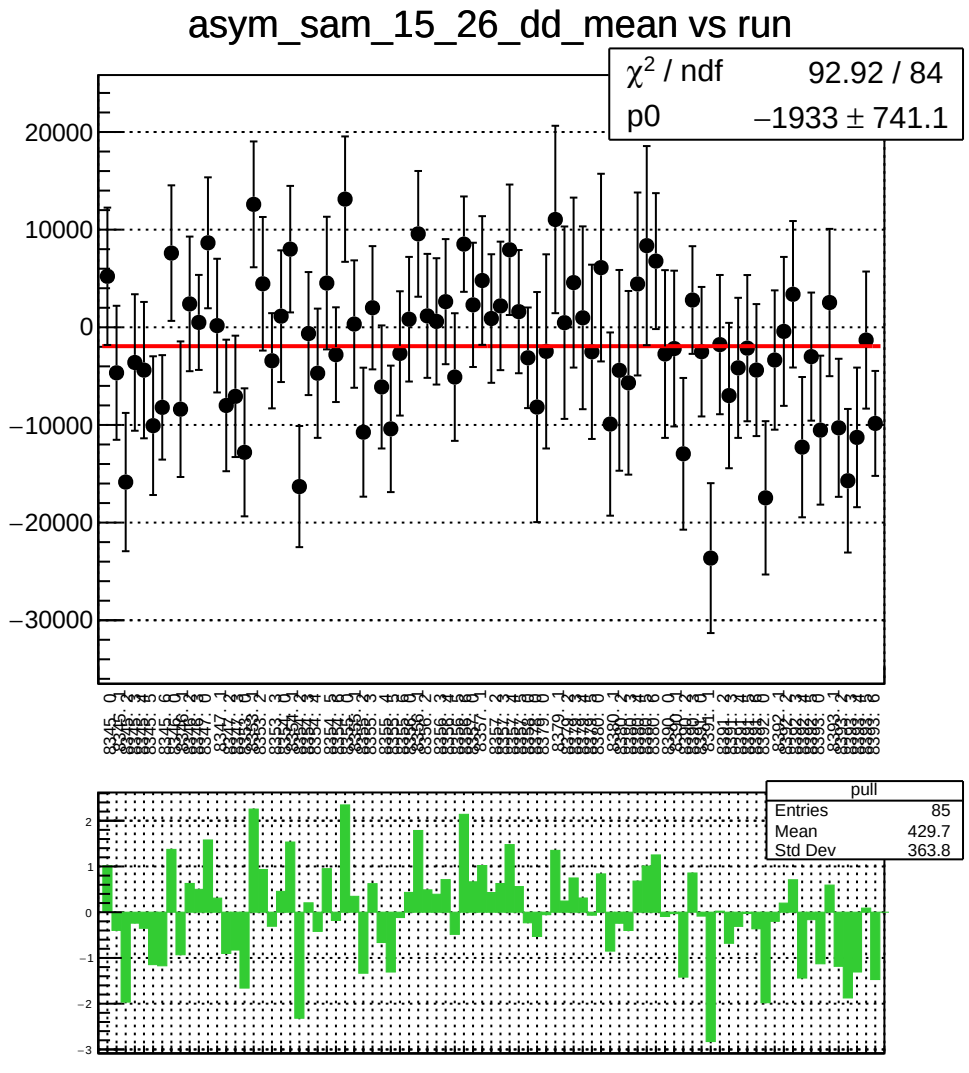

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 85.28 / 84
p0 −29.69 ± 71.06
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean 888
Std Dev 800.2
2
1
0
−1
−2
−3
−4
pull1D
Entries 85
Mean −0.001343
Std Dev 1.002
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

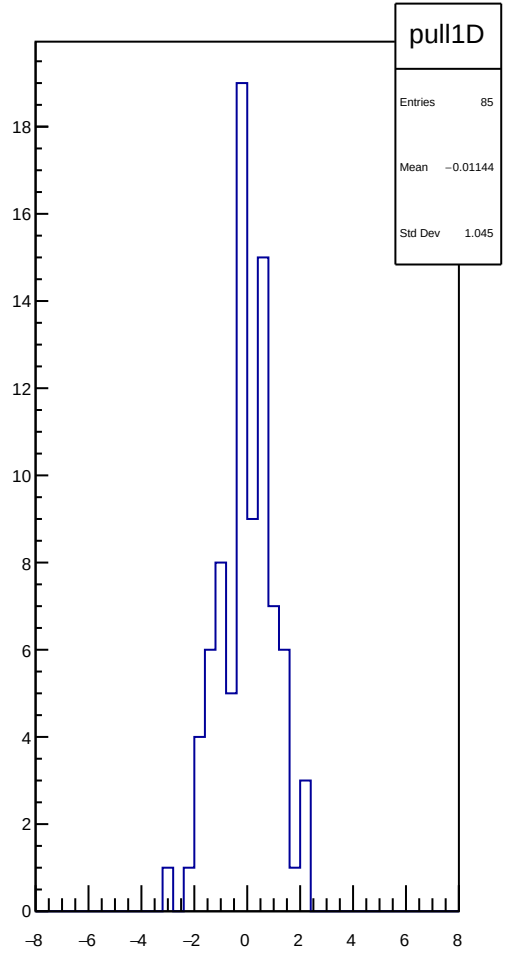

reg_asym_sam_15_26_dd_rms vs run
χ^2 / ndf 2.297e+04 / 84
p0 64.53 ± 0.05025
110
100
90
80
70
60

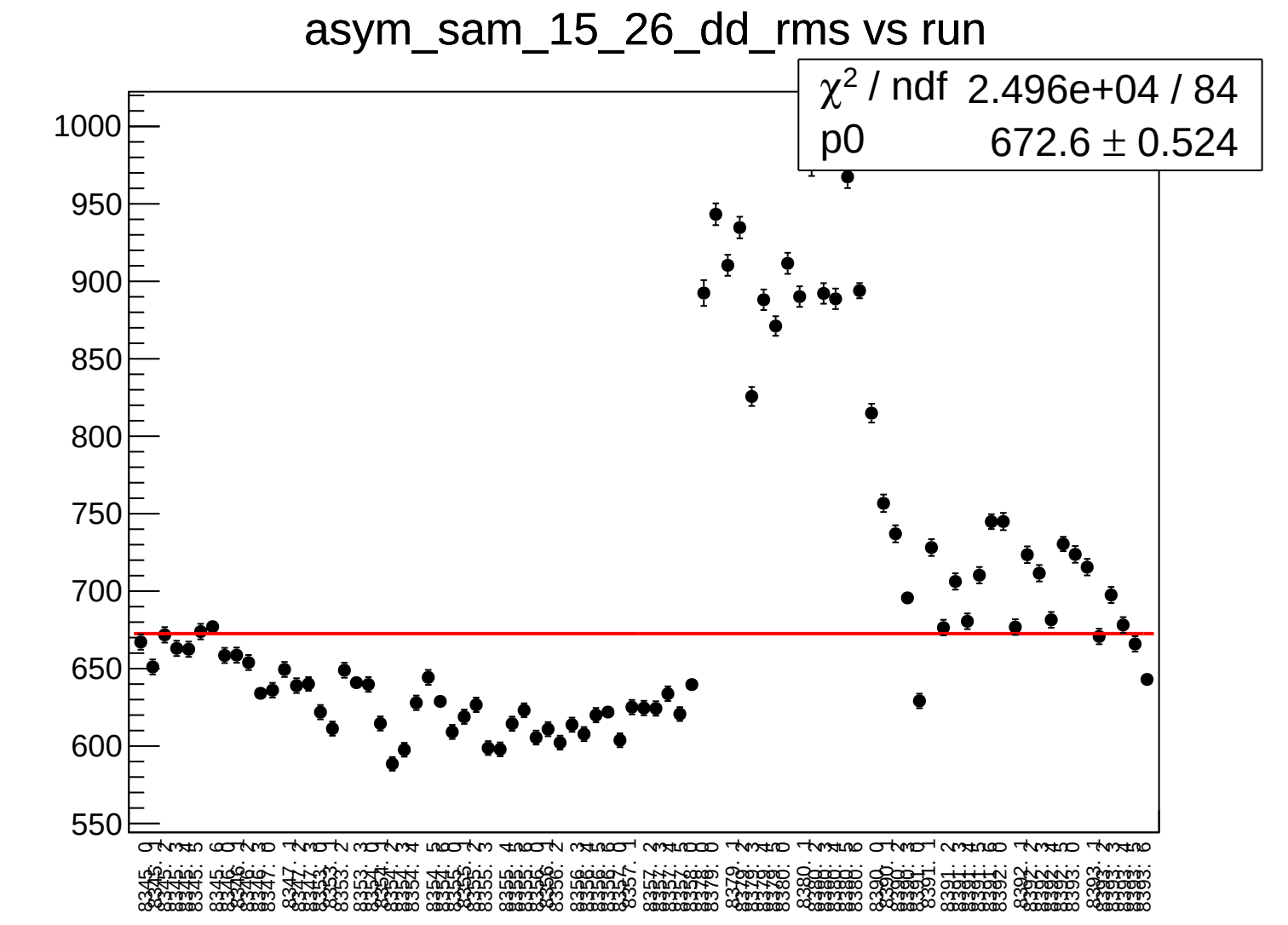

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 93.73 / 84
p0 1907 ± 737.6
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean 438.6
Std Dev 373.4
3
2
1
0
−1
−2

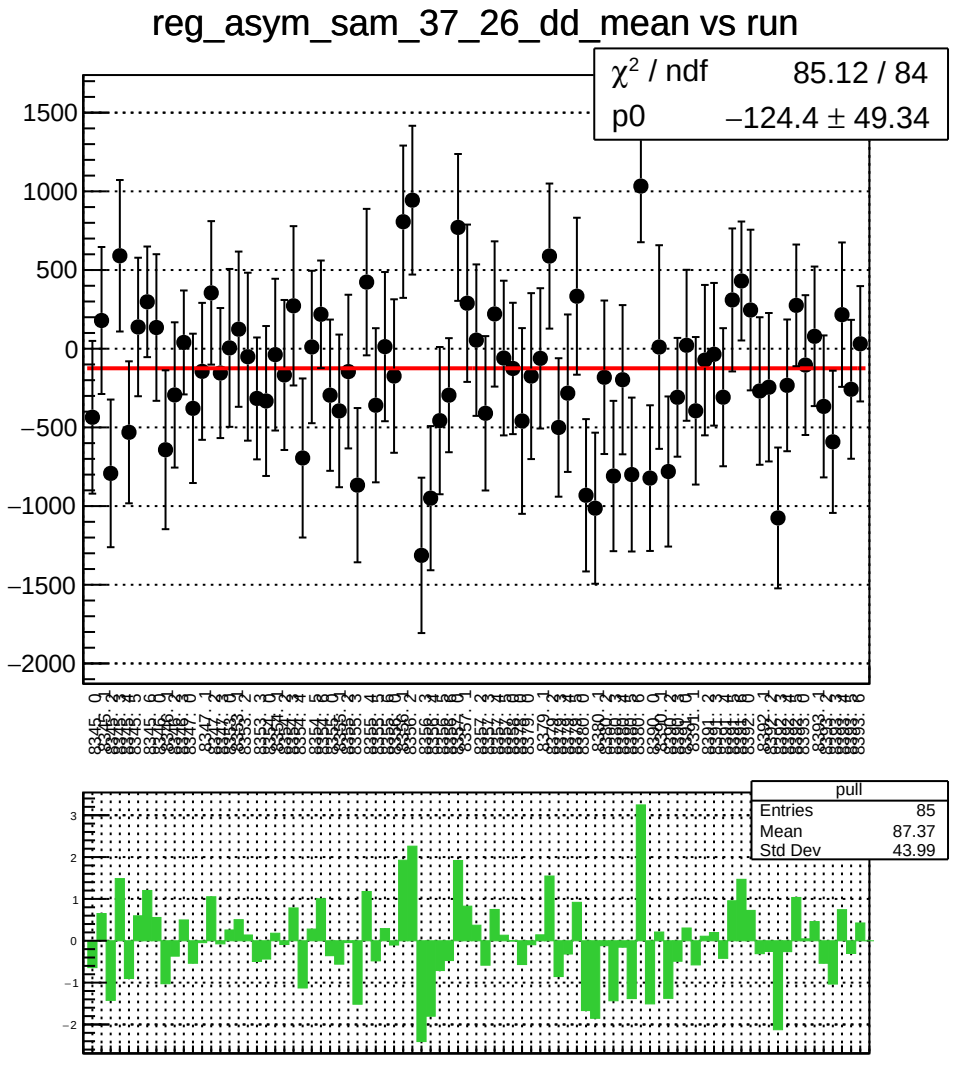

pull1D
Entries 85
Mean 0.01099
Std Dev 1.05
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

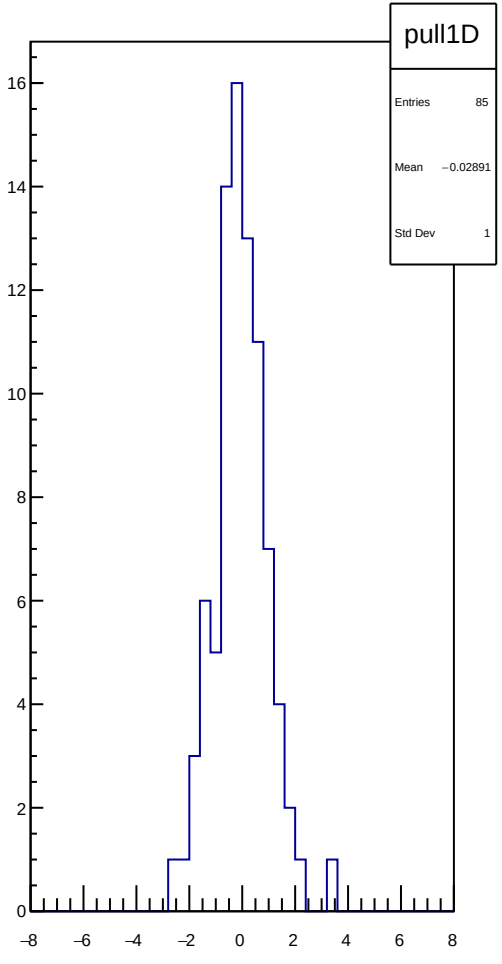

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 2.506e+04 / 84
p0 669.4 ± 0.5216
1000
950
900
850
800
750
700
650
600
550

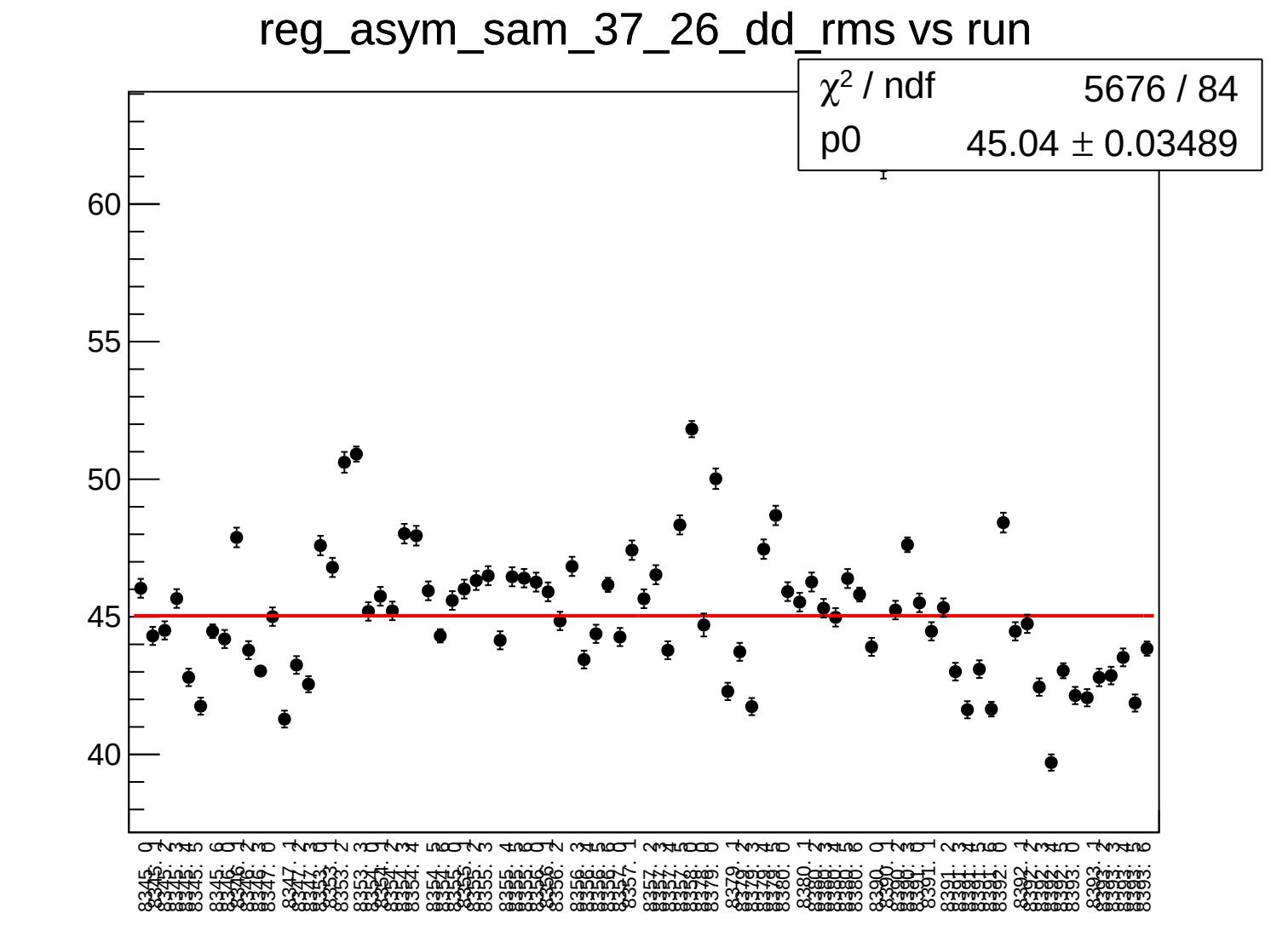

asym_sam_15_26_dd_mean vs run
χ² / ndf 92.92 / 84
p0 −1933 ± 741.1
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean 429.7
Std Dev 363.8
2
1
0
−1
−2
−3

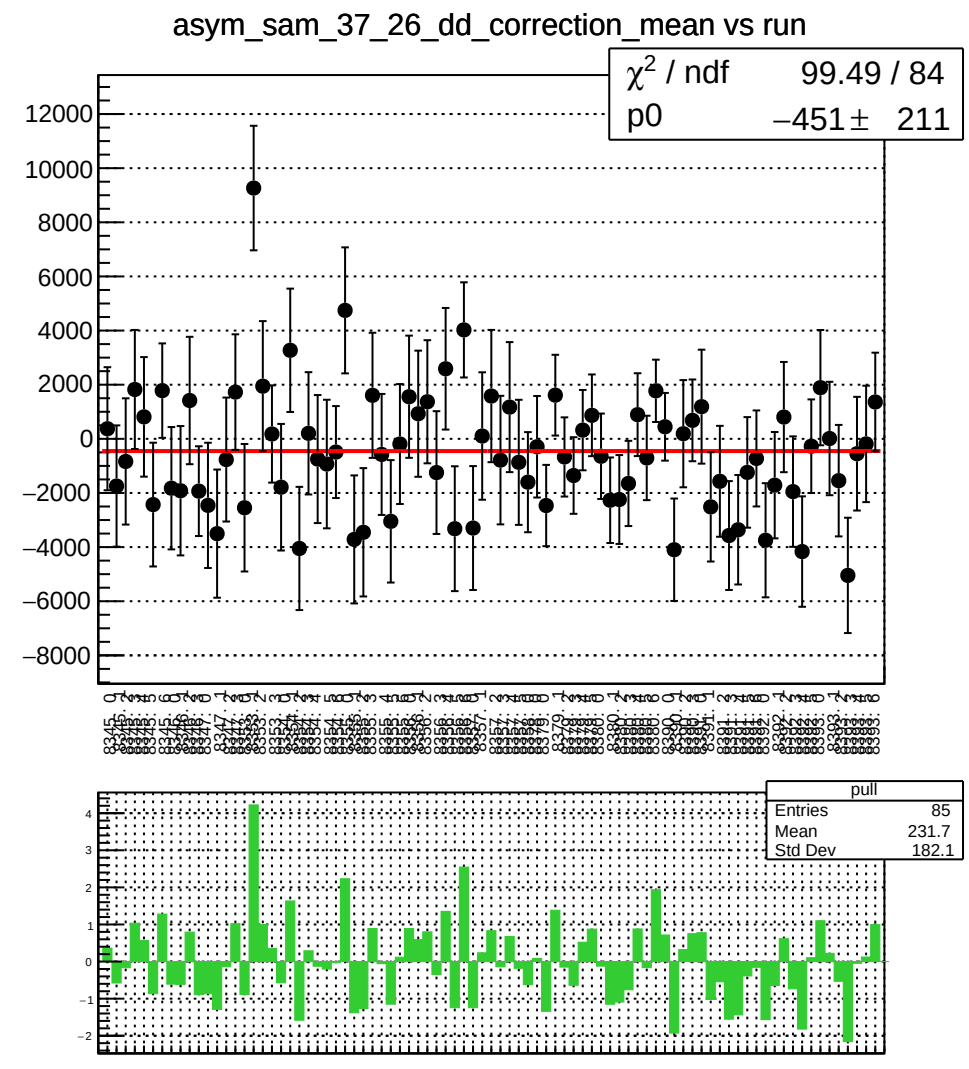

pull1D
Entries 85
Mean −0.01144
Std Dev 1.045
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

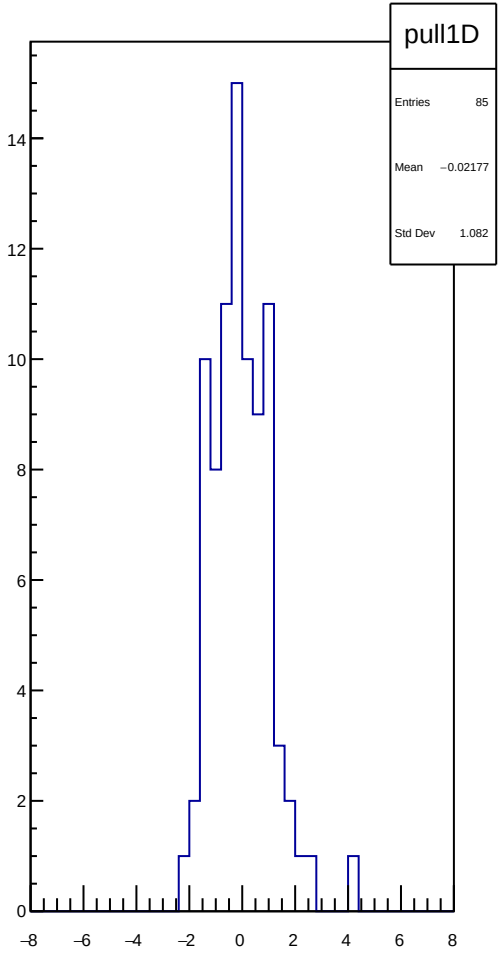

asym_sam_15_26_dd_rms vs run
χ² / ndf 2.496e+04 / 84
p0 672.6 ± 0.524
1000
950
900
850
800
750
700
650
600
550

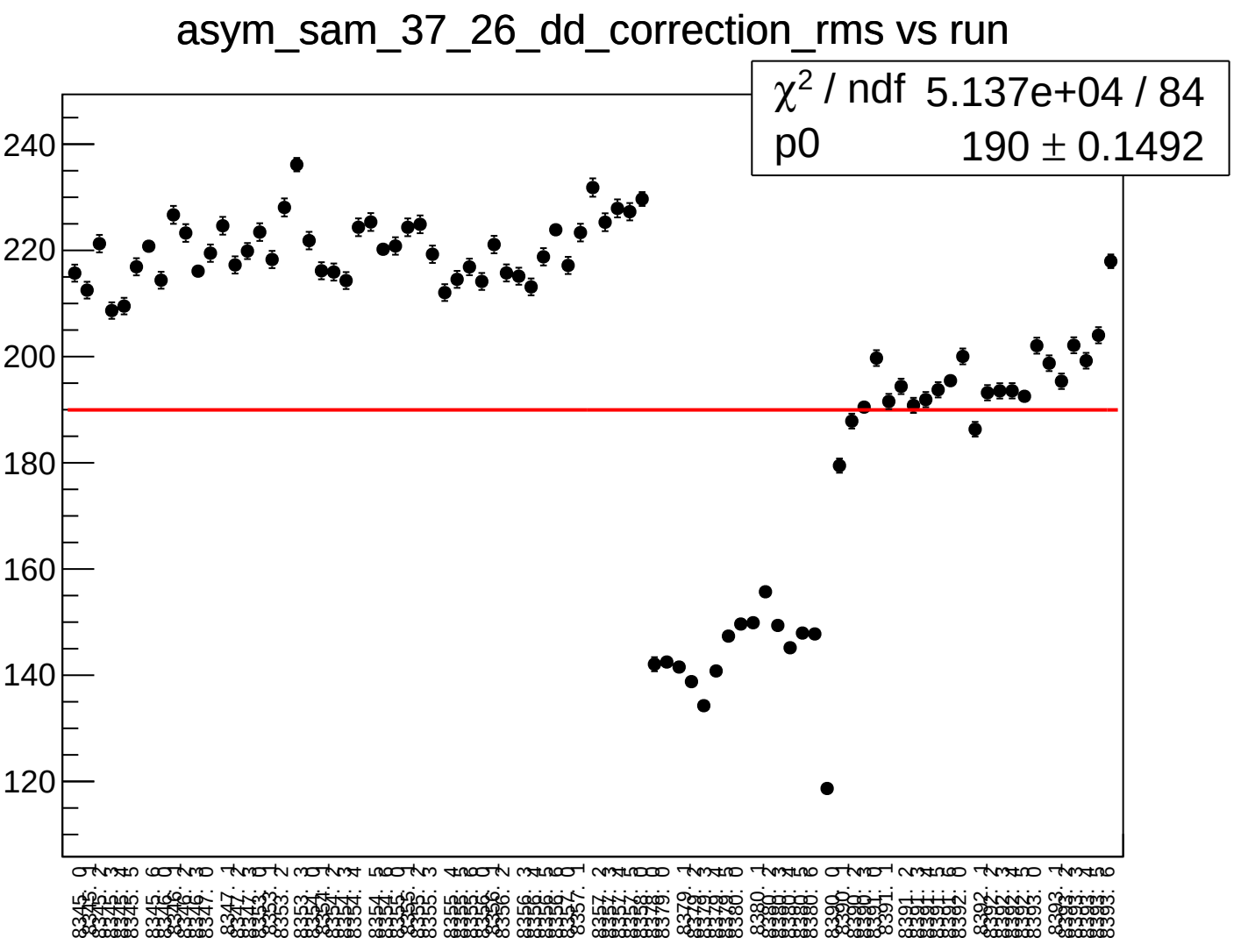

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 85.12 / 84
p0 −124.4 ± 49.34
pull
Entries 85
Mean 87.37
Std Dev 43.99

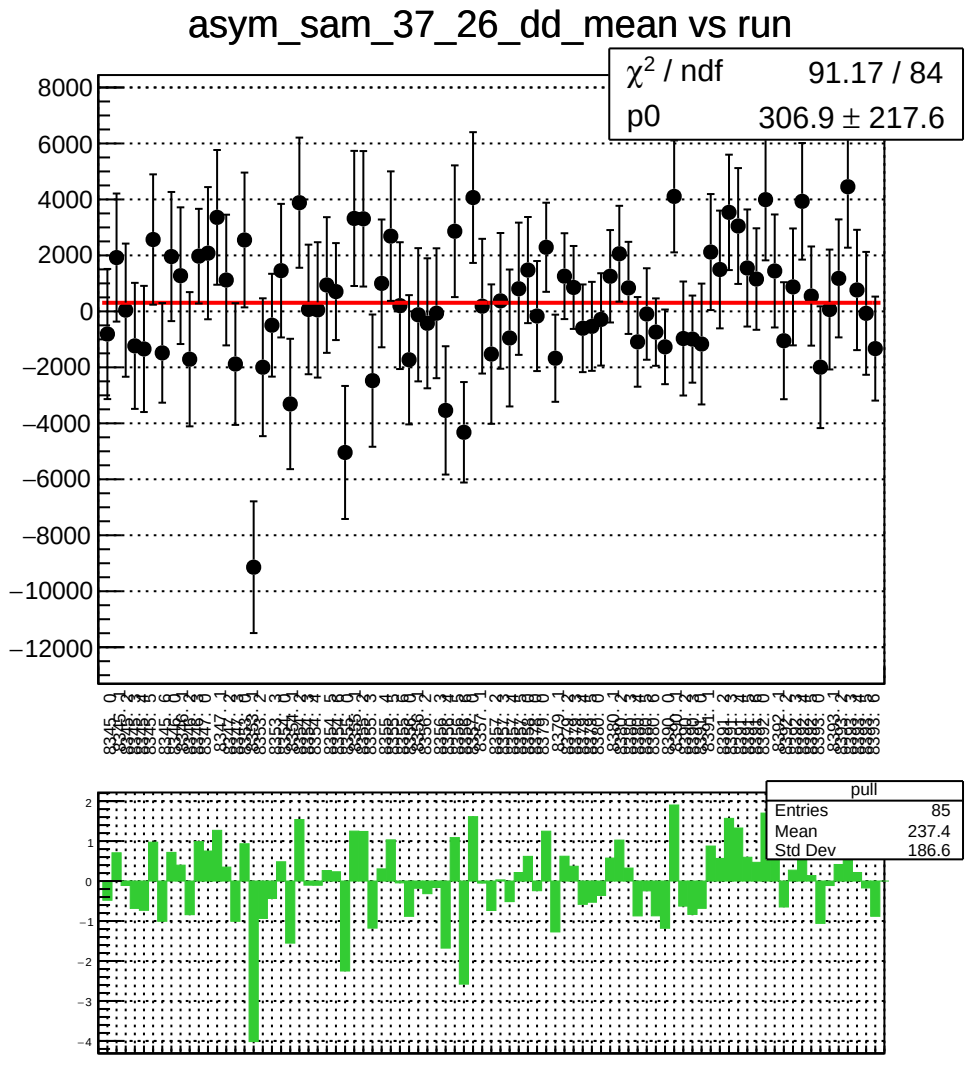

pull1D
Entries 85
Mean −0.02891
Std Dev 1

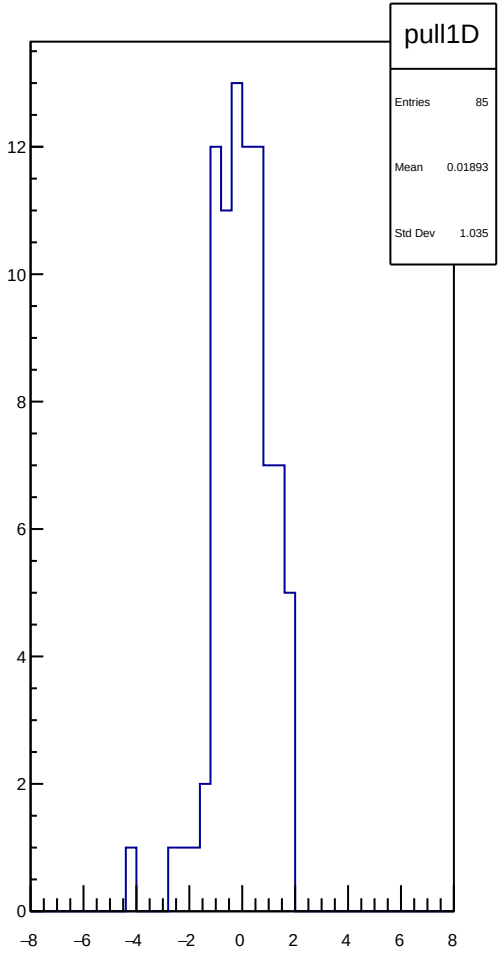

reg_asym_sam_37_26_dd_rms vs run
χ^2 / ndf 5676 / 84
p0 45.04 ± 0.03489
60
55
50
45
40

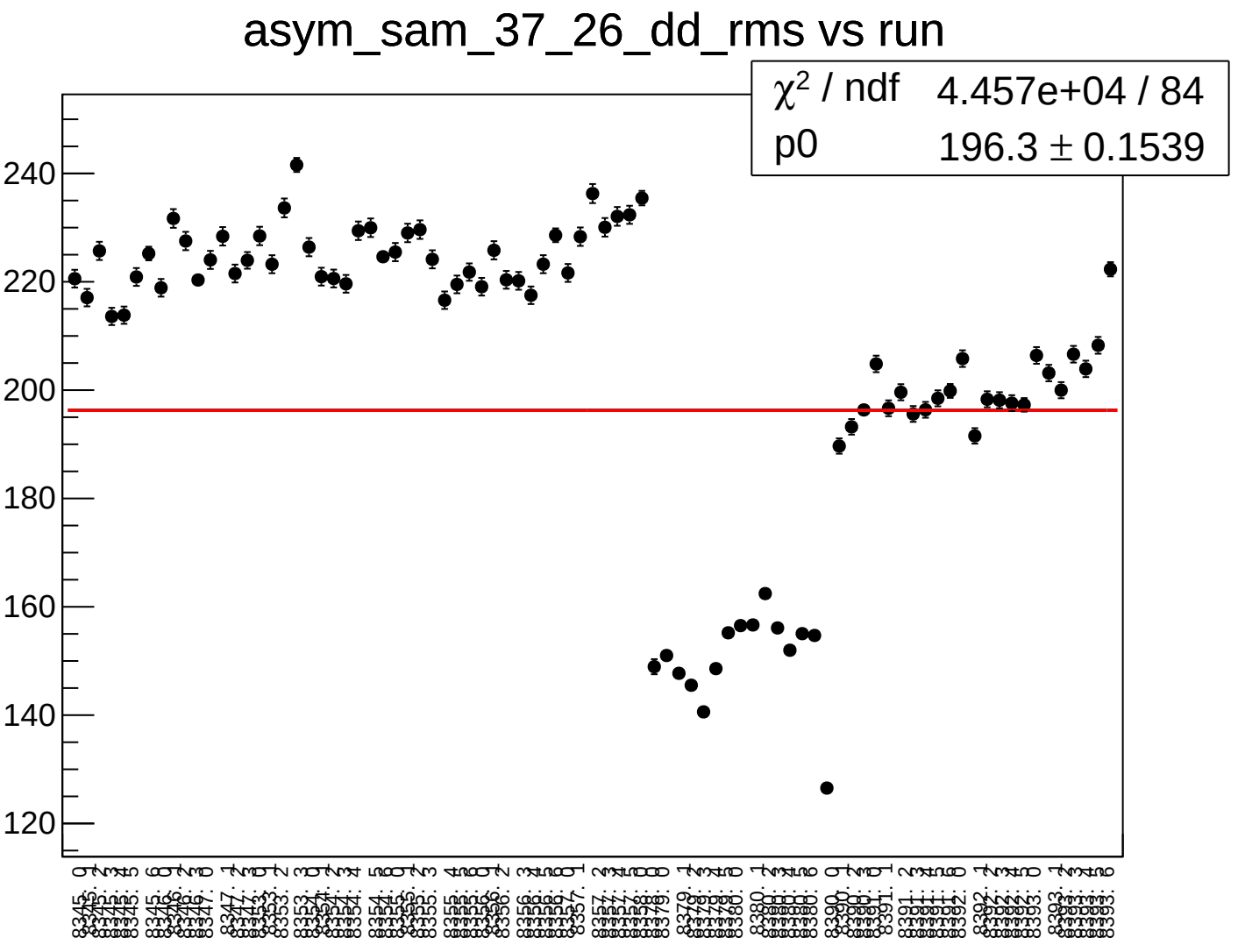

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 99.49 / 84
p0 −451 ± 211
pull
Entries 85
Mean 231.7
Std Dev 182.1

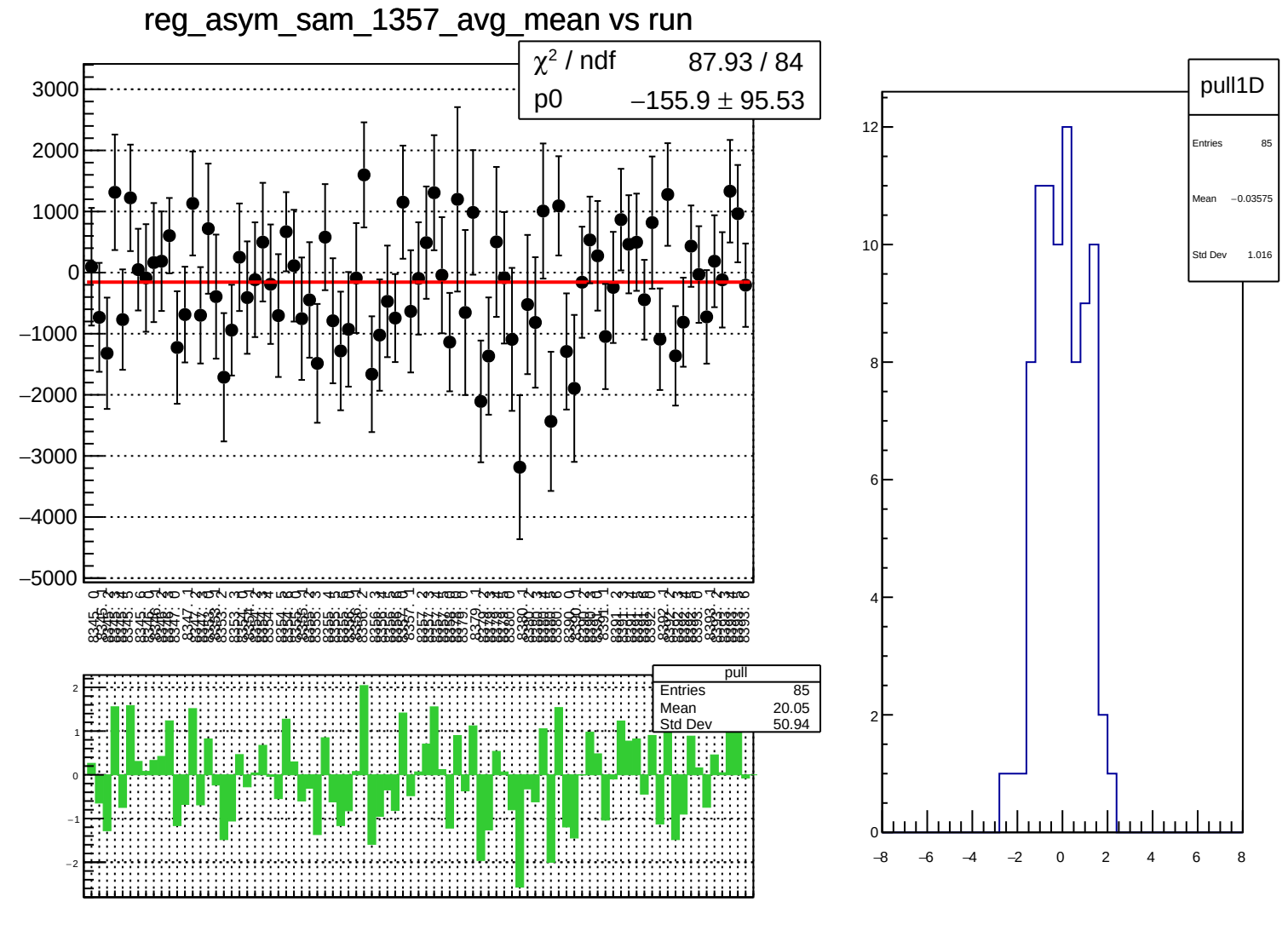

pull1D
Entries 85
Mean −0.02177
Std Dev 1.082

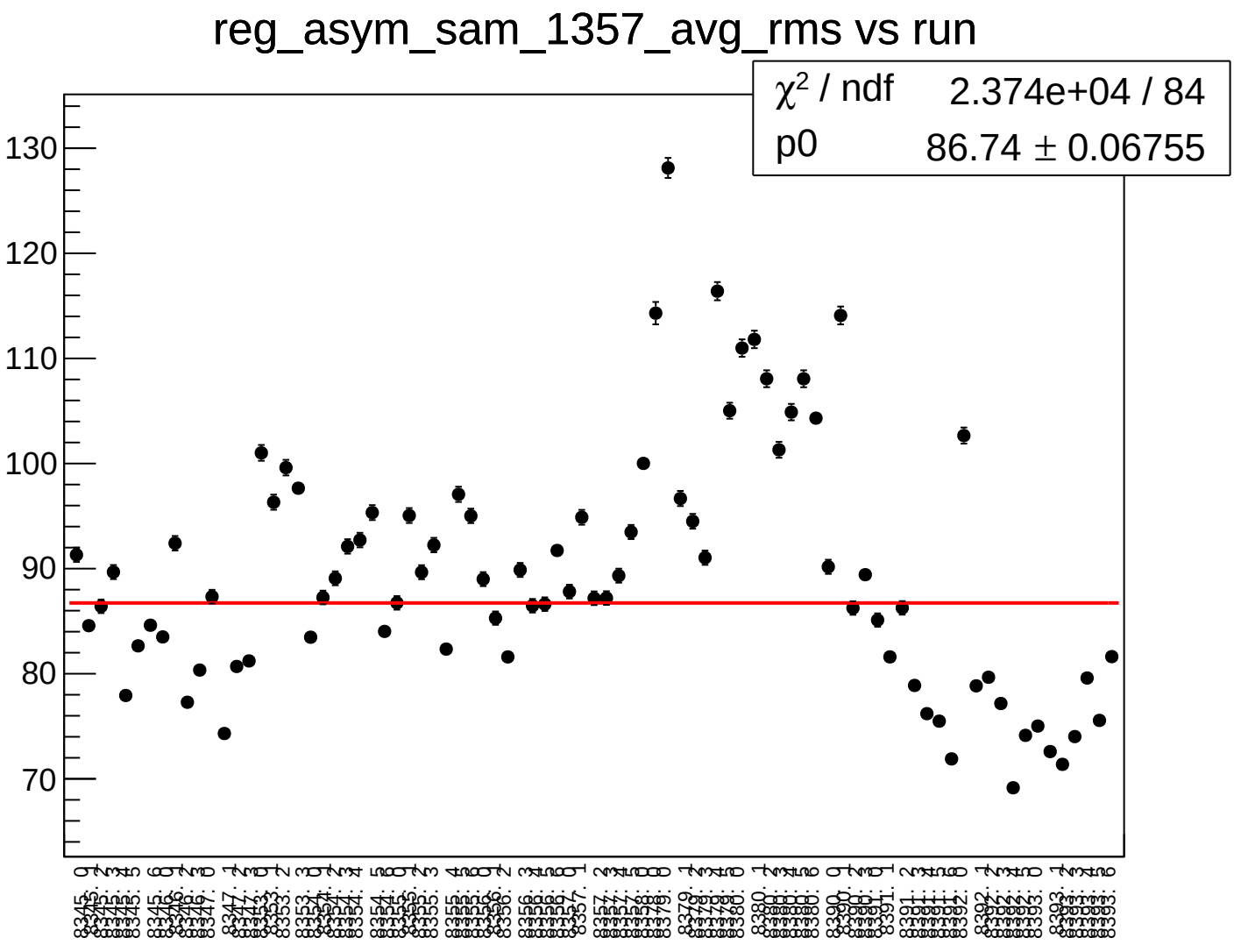

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 5.137e+04 / 84
p0 190 ± 0.1492
240
220
200
180
160
140
120

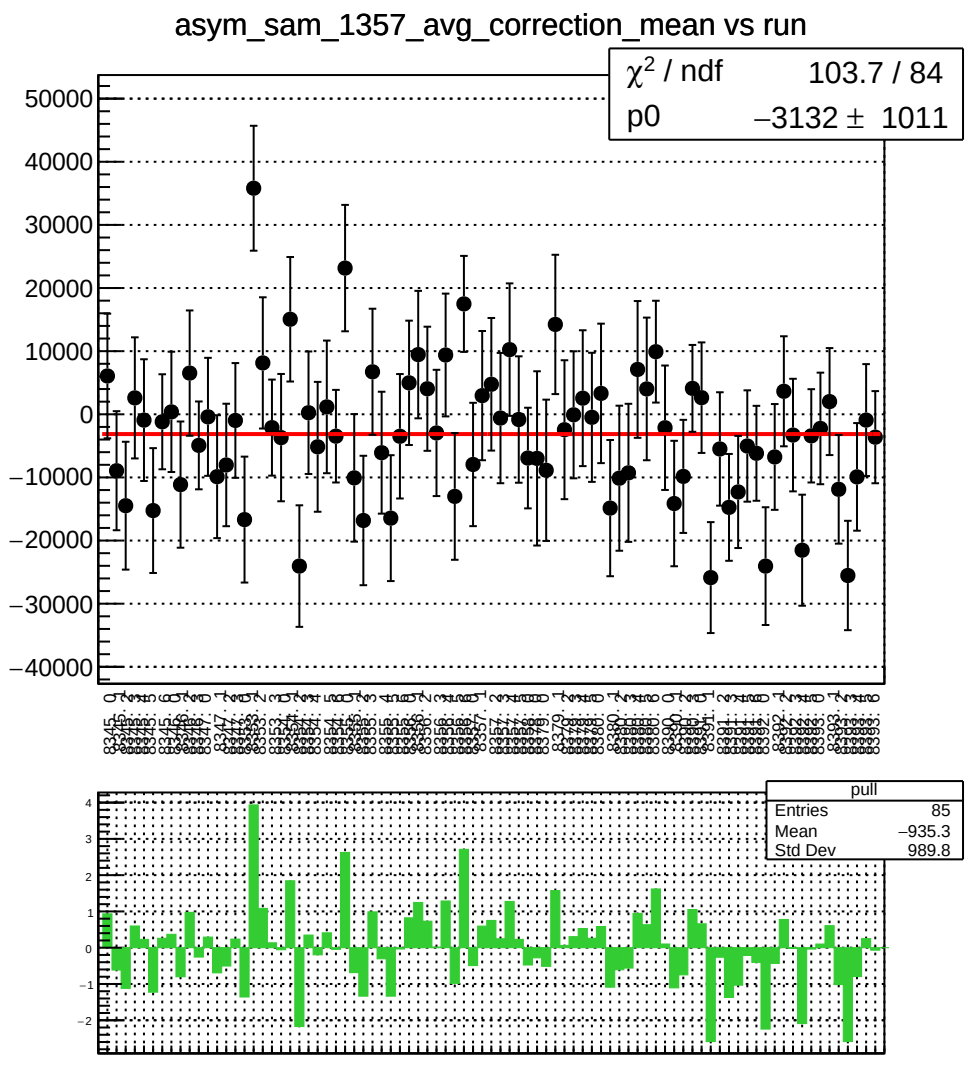

asym_sam_37_26_dd_mean vs run
χ² / ndf 91.17 / 84
p0 306.9 ± 217.6
pull
Entries 85
Mean 237.4
Std Dev 186.6

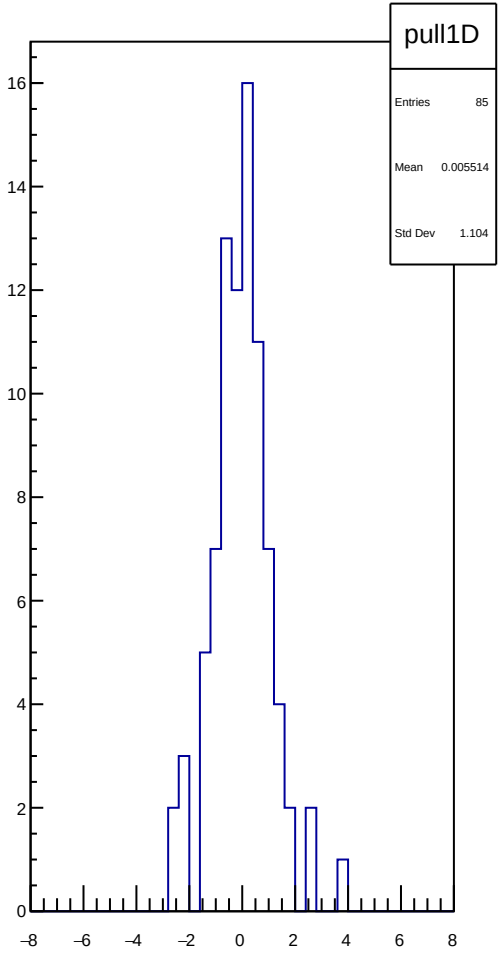

pull1D
Entries 85
Mean 0.01893
Std Dev 1.035

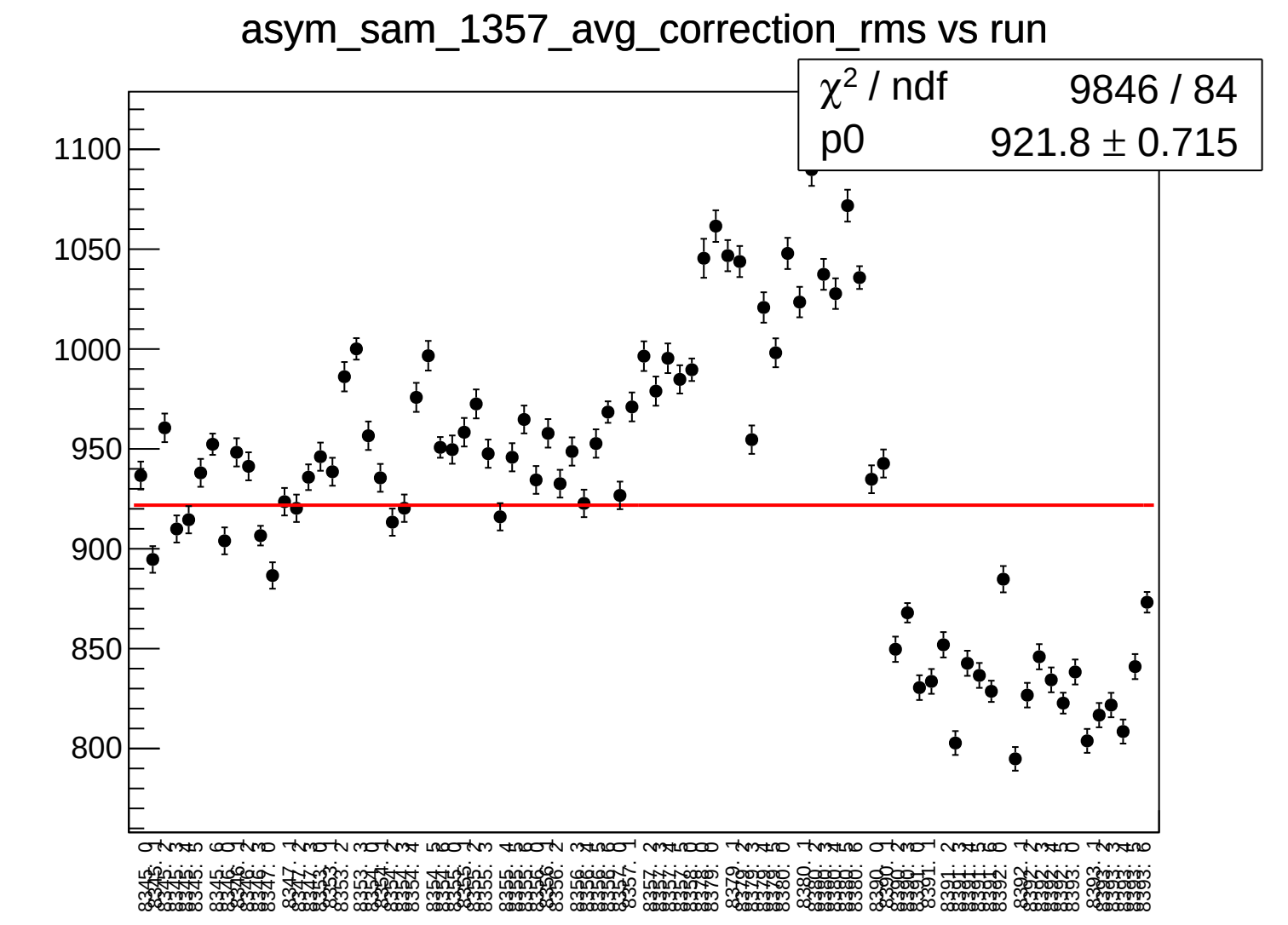

asym_sam_37_26_dd_rms vs run
χ^2 / ndf 4.457e+04 / 84
p0 196.3 ± 0.1539
240
220
200
180
160
140
120

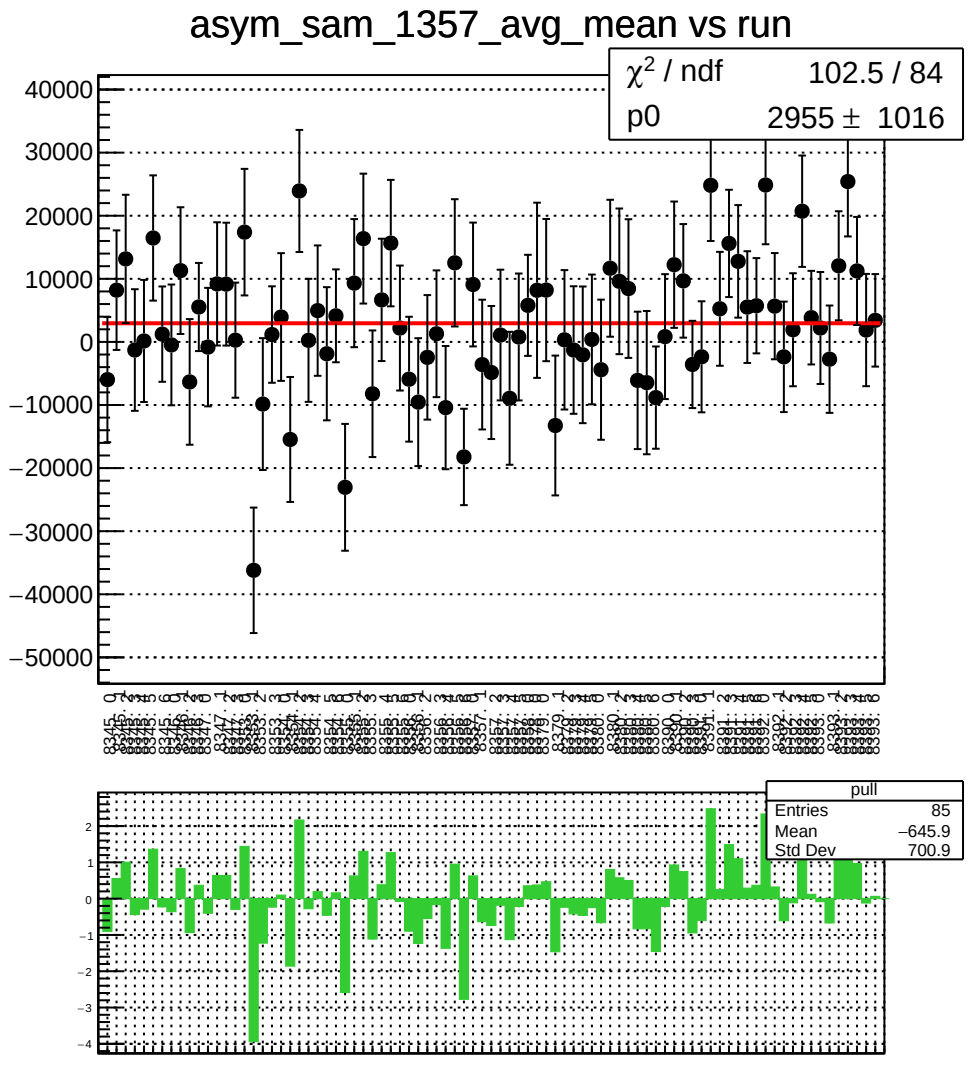

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 87.93 / 84
p0 −155.9 ± 95.53
pull
Entries 85
Mean 20.05
Std Dev 50.94
pull1D
Entries 85
Mean −0.03575
Std Dev 1.016

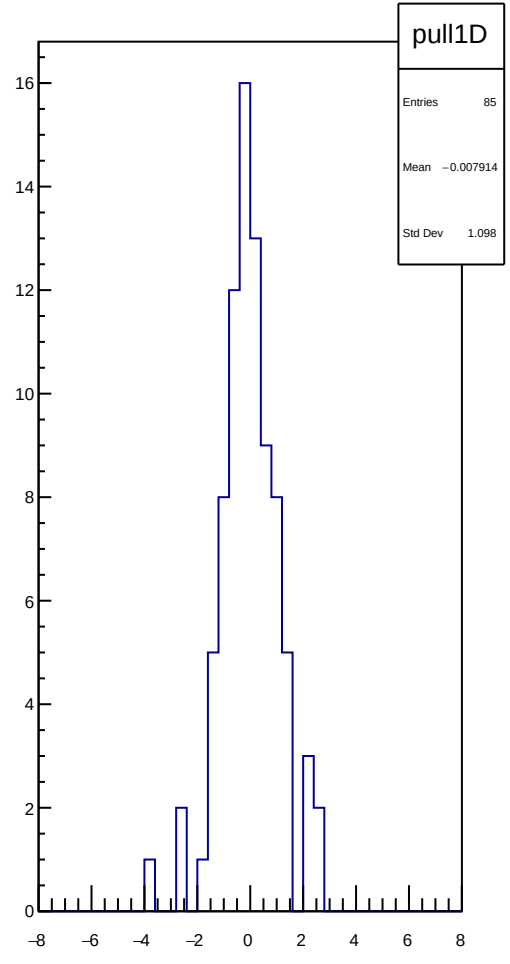

reg_asym_sam_1357_avg_rms vs run
χ^2 / ndf 2.374e+04 / 84
p0 86.74 ± 0.06755
130
120
110
100
90
80
70

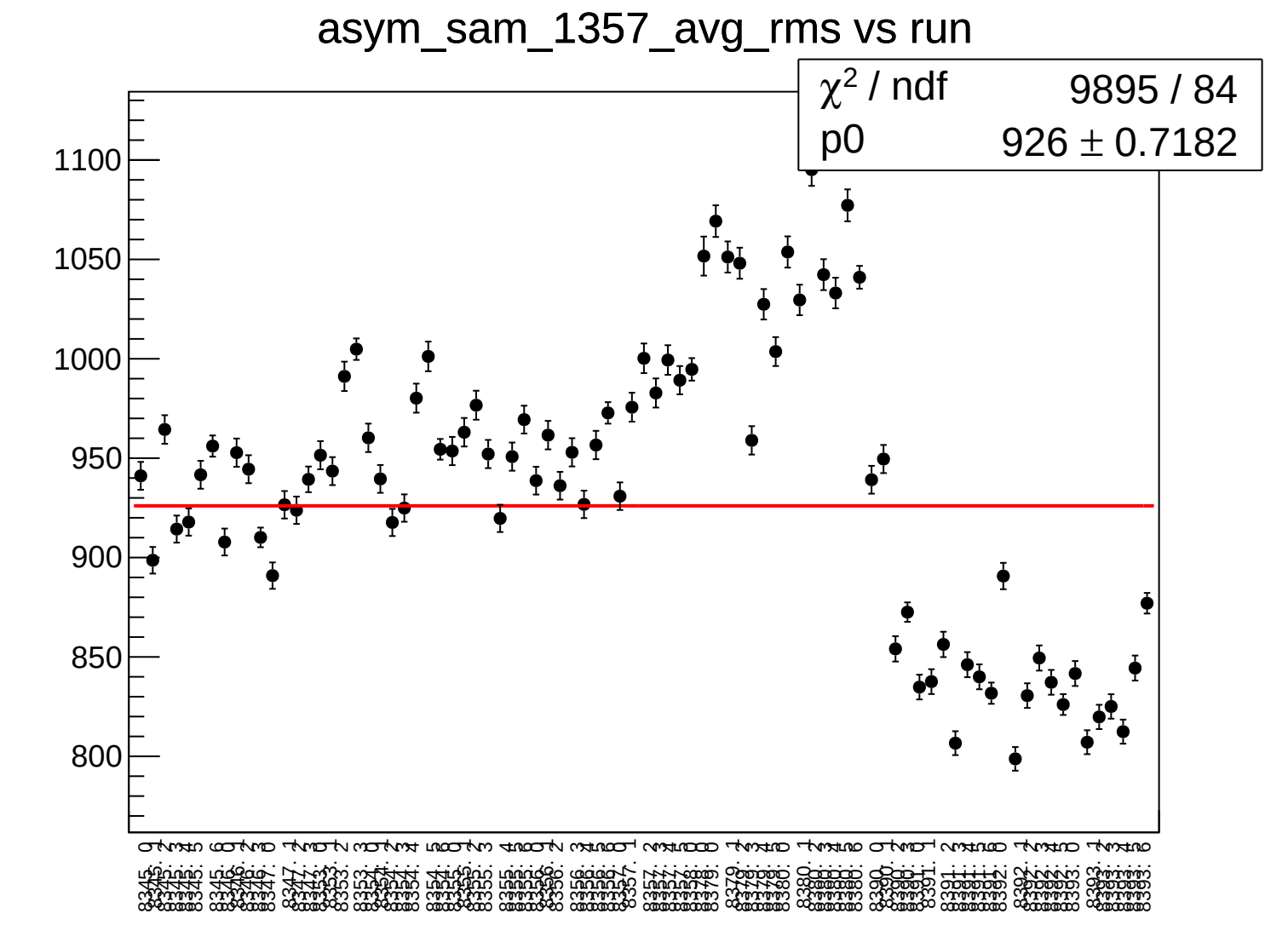

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 103.7 / 84
p0 −3132 ± 1011
pull
Entries 85
Mean −935.3
Std Dev 989.8

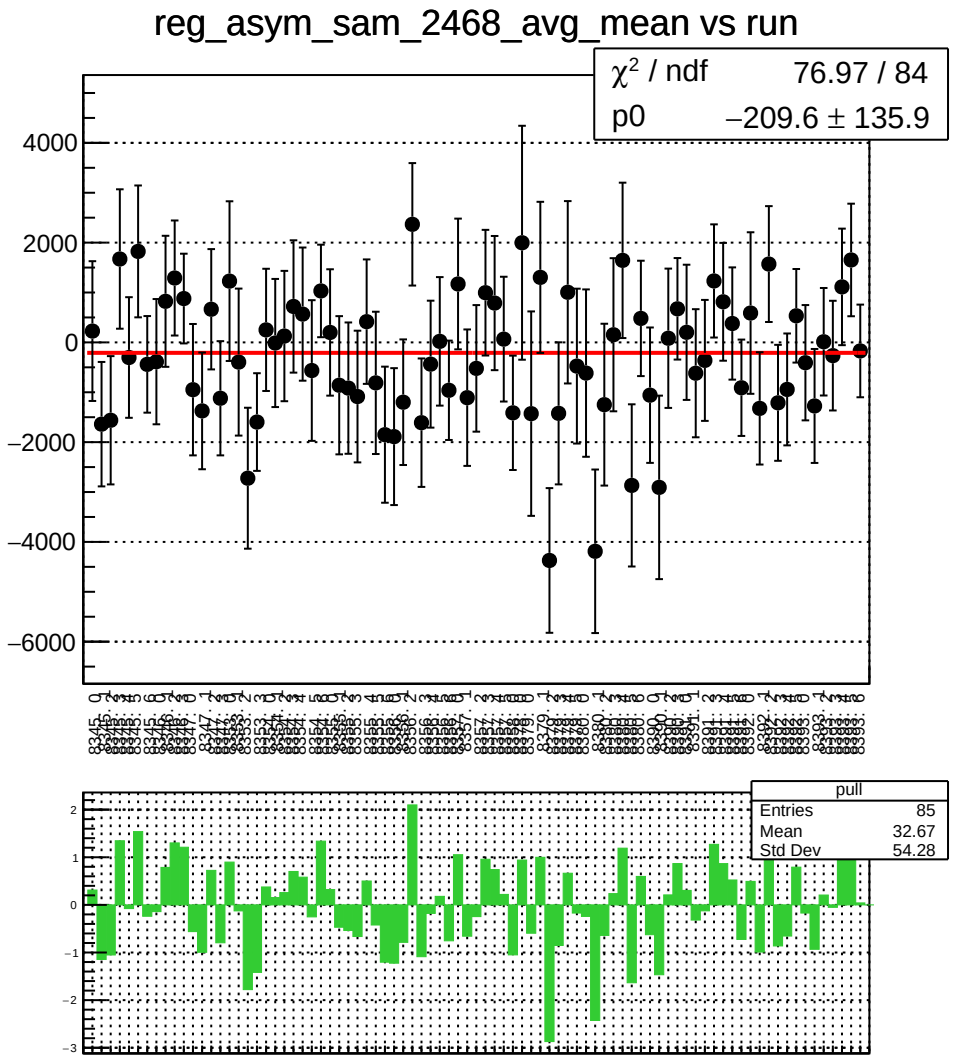

pull1D
Entries 85
Mean 0.005514
Std Dev 1.104

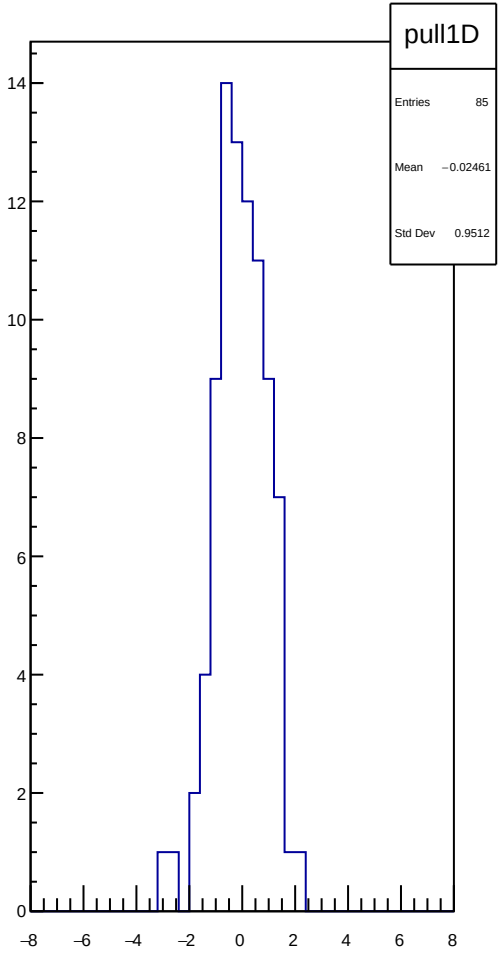

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 9846 / 84
p0 921.8 ± 0.715
1100
1050
1000
950
900
850
800

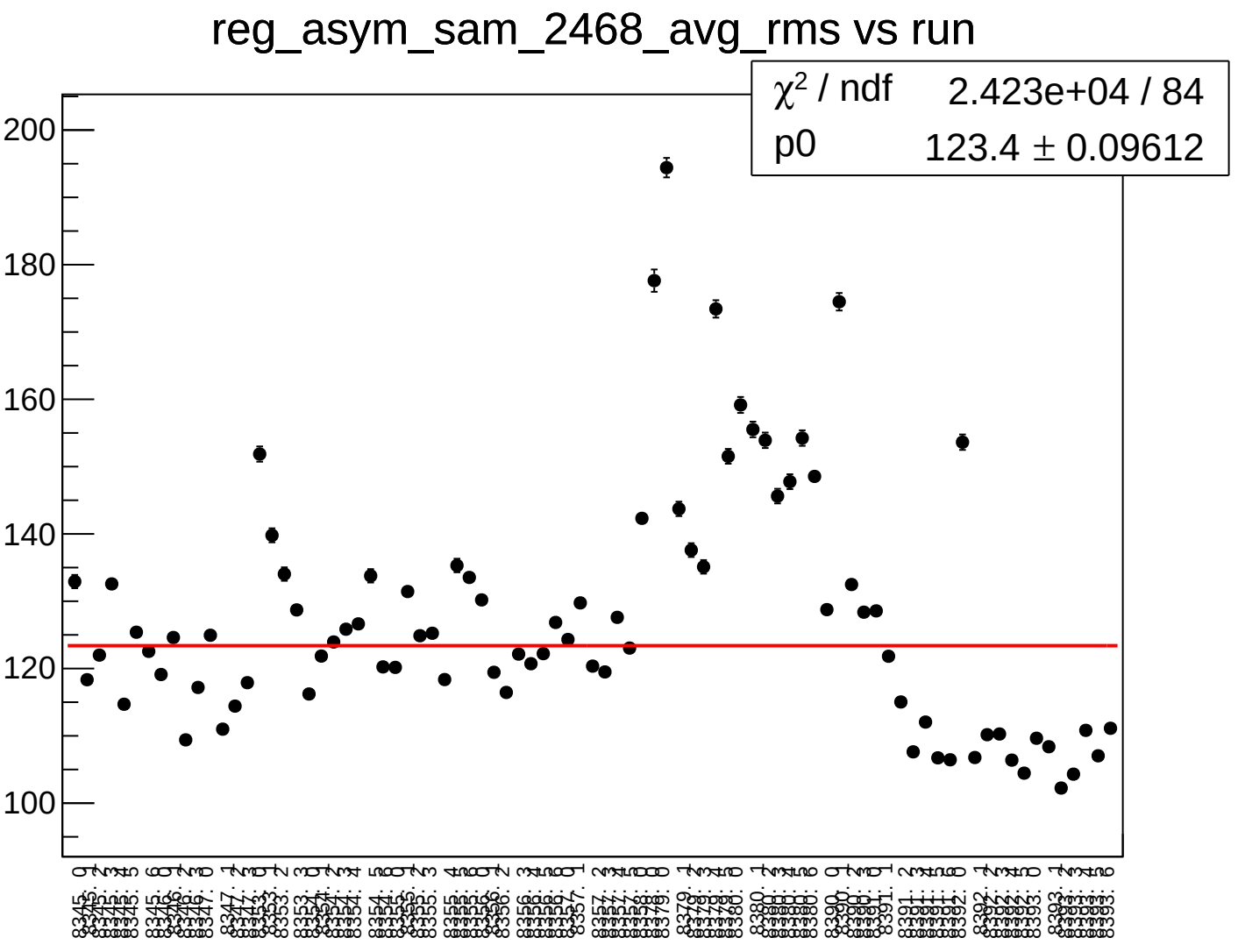

asym_sam_1357_avg_mean vs run
χ² / ndf 102.5 / 84
p0 2955 ± 1016
pull
Entries 85
Mean −645.9
Std Dev 700.9

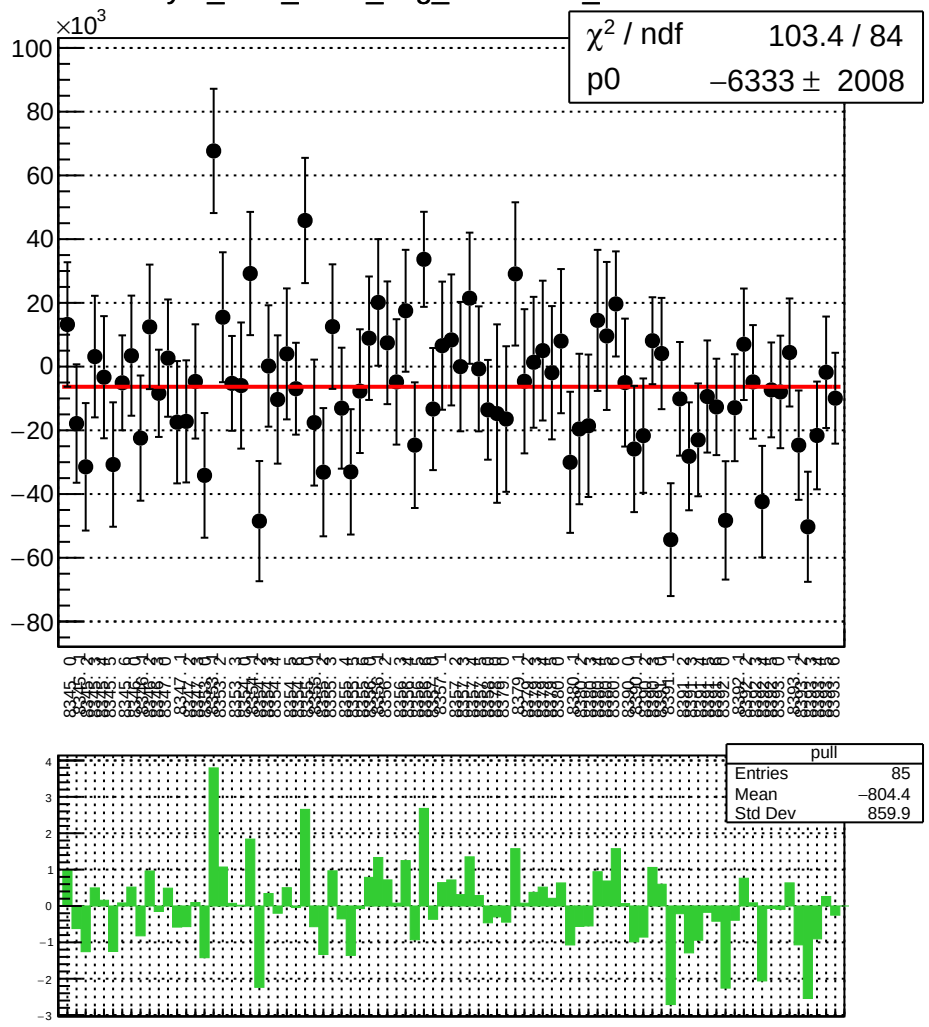

pull1D
Entries 85
Mean −0.007914
Std Dev 1.098

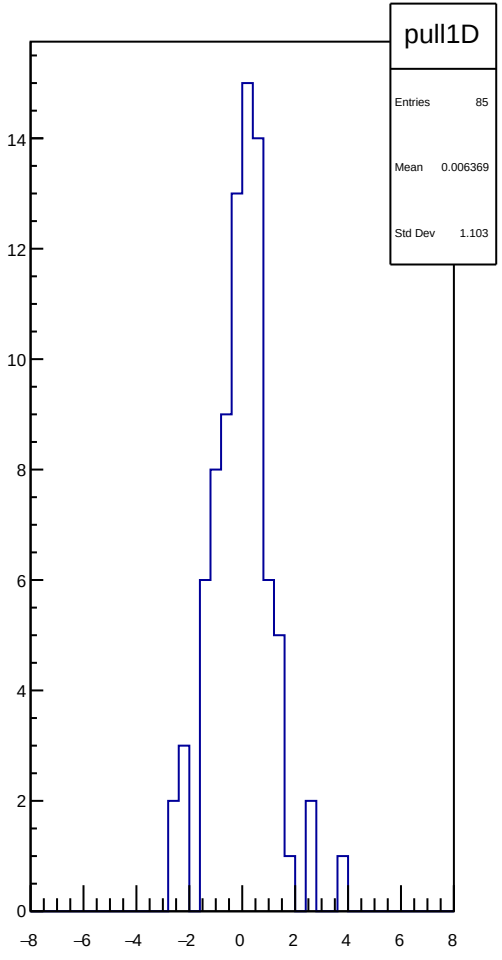

asym_sam_1357_avg_rms vs run
χ² / ndf 9895 / 84
p0 926 ± 0.7182
1100
1050
1000
950
900
850
800

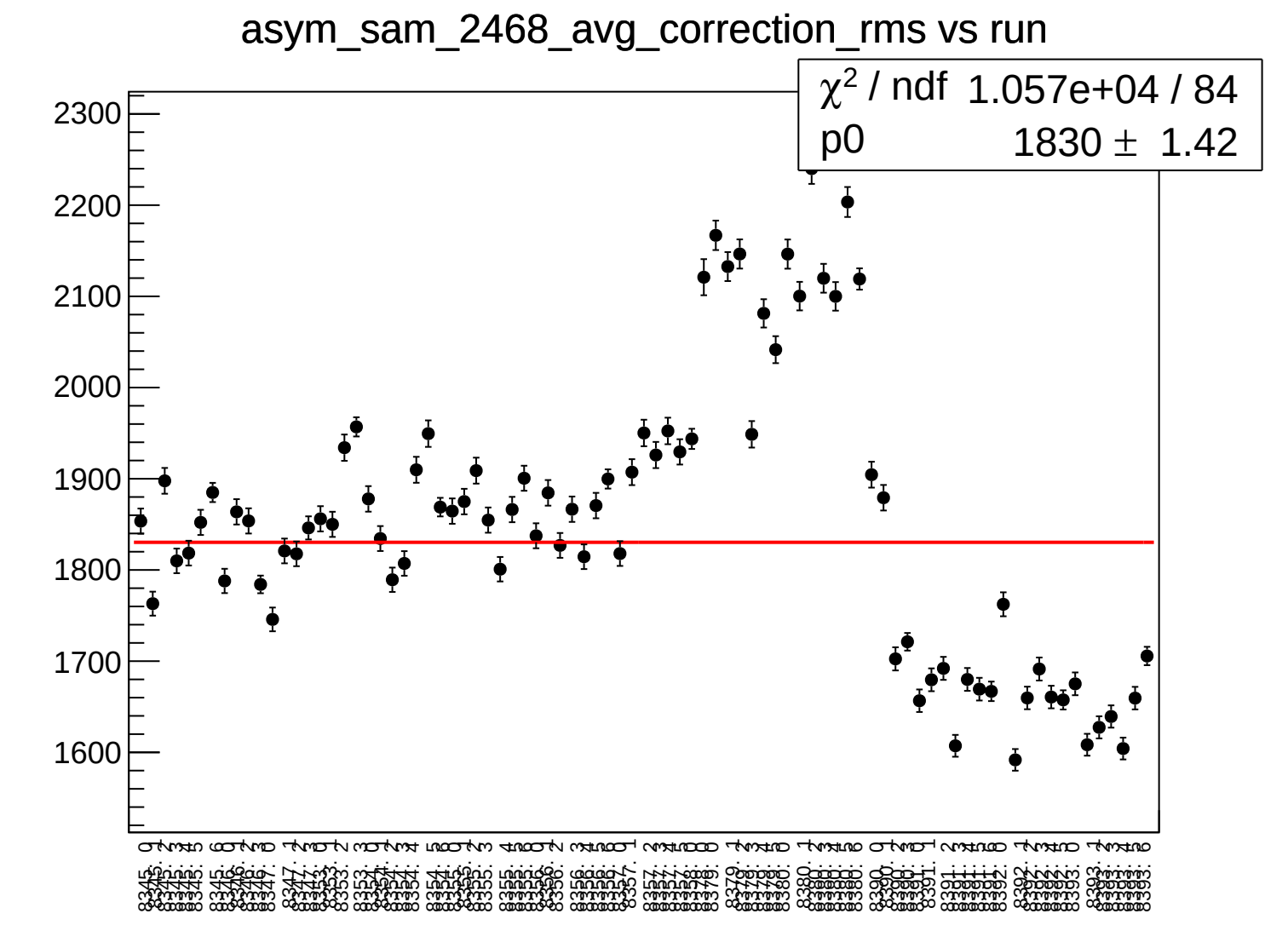

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 76.97 / 84
p0 −209.6 ± 135.9
pull
Entries 85
Mean 32.67
Std Dev 54.28

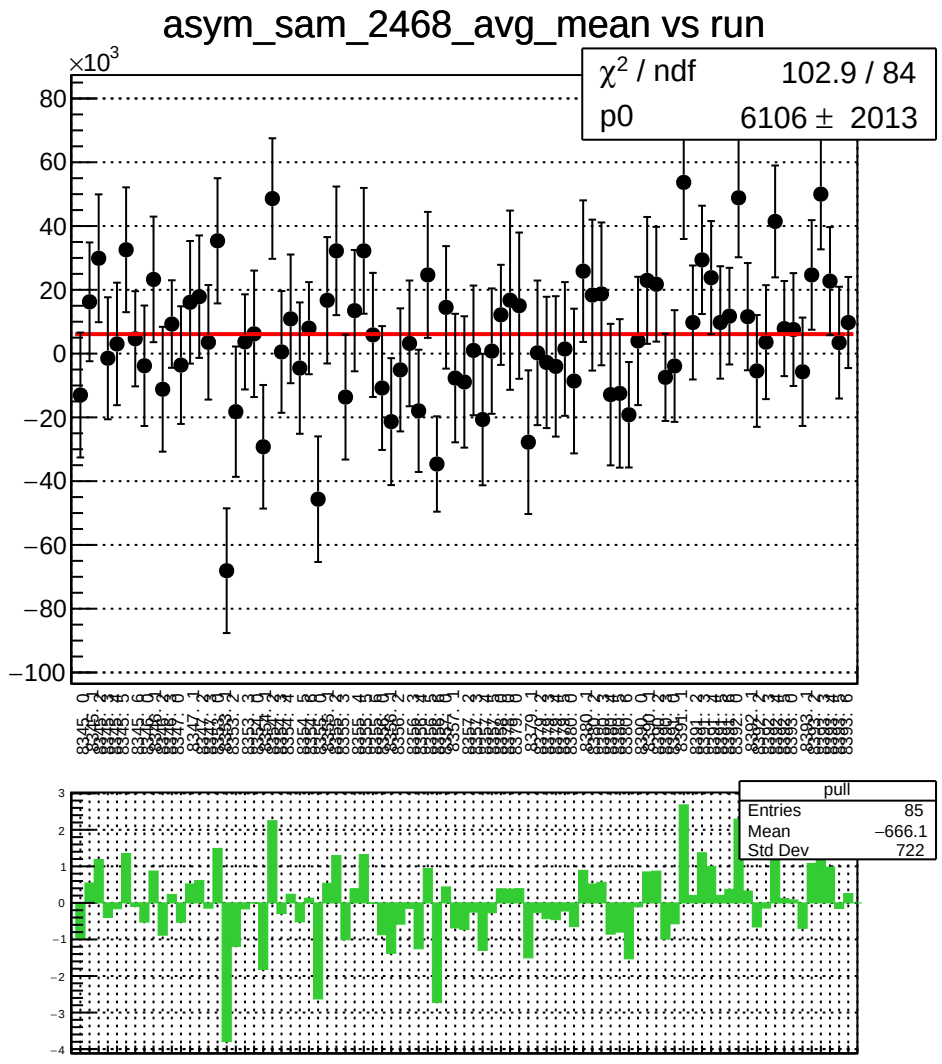

pull1D
Entries 85
Mean −0.02461
Std Dev 0.9512

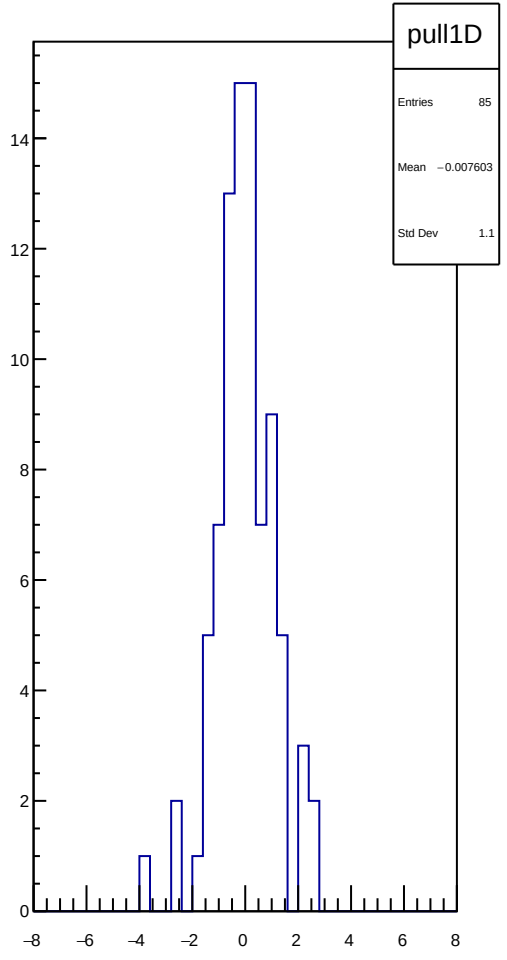

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 2.423e+04 / 84
p0 123.4 ± 0.09612
200
180
160
140
120
100

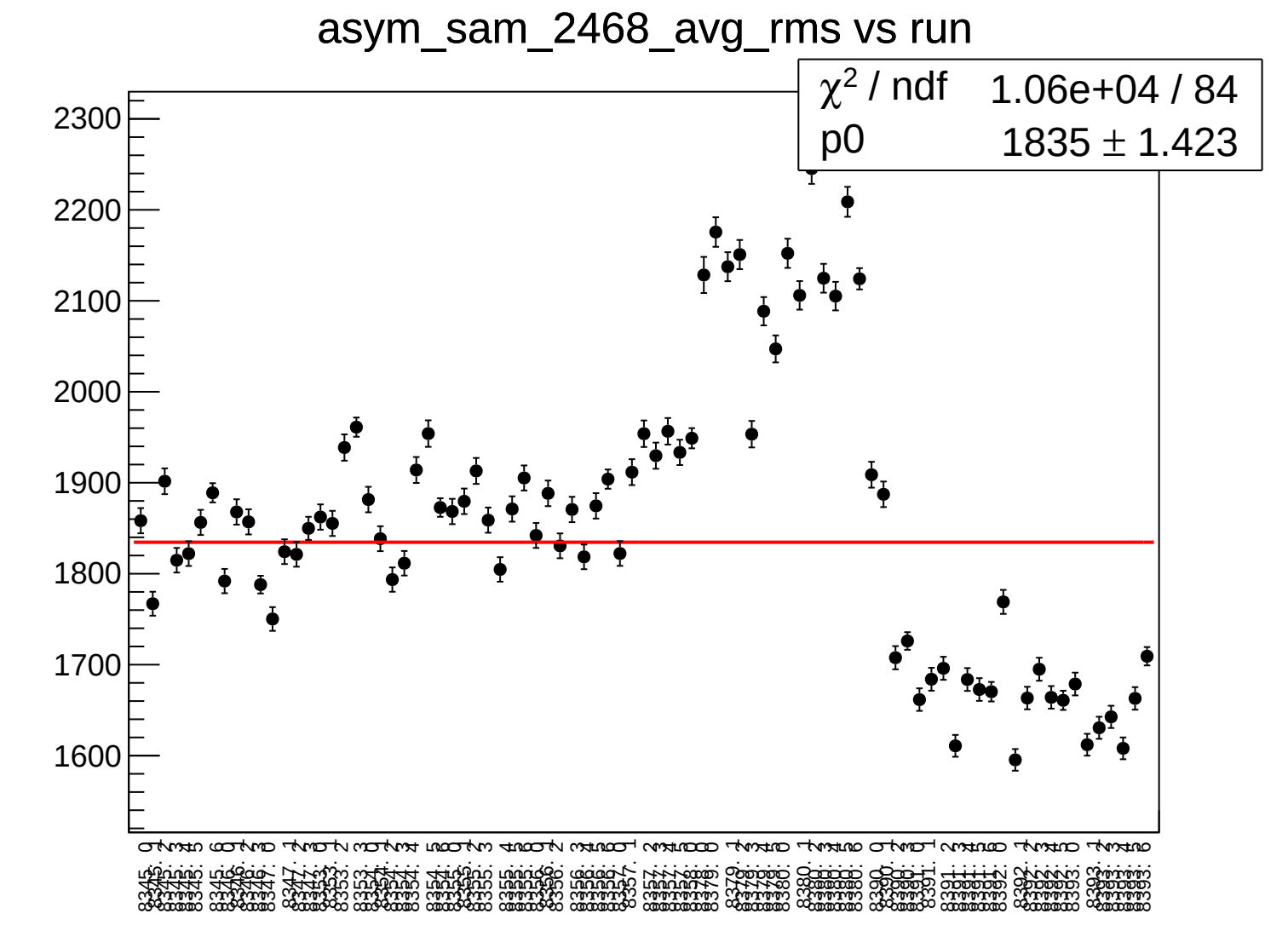

asym_sam_2468_avg_correction_mean vs run
×10^3
χ² / ndf 103.4 / 84
p0 −6333 ± 2008
pull
Entries 85
Mean −804.4
Std Dev 859.9

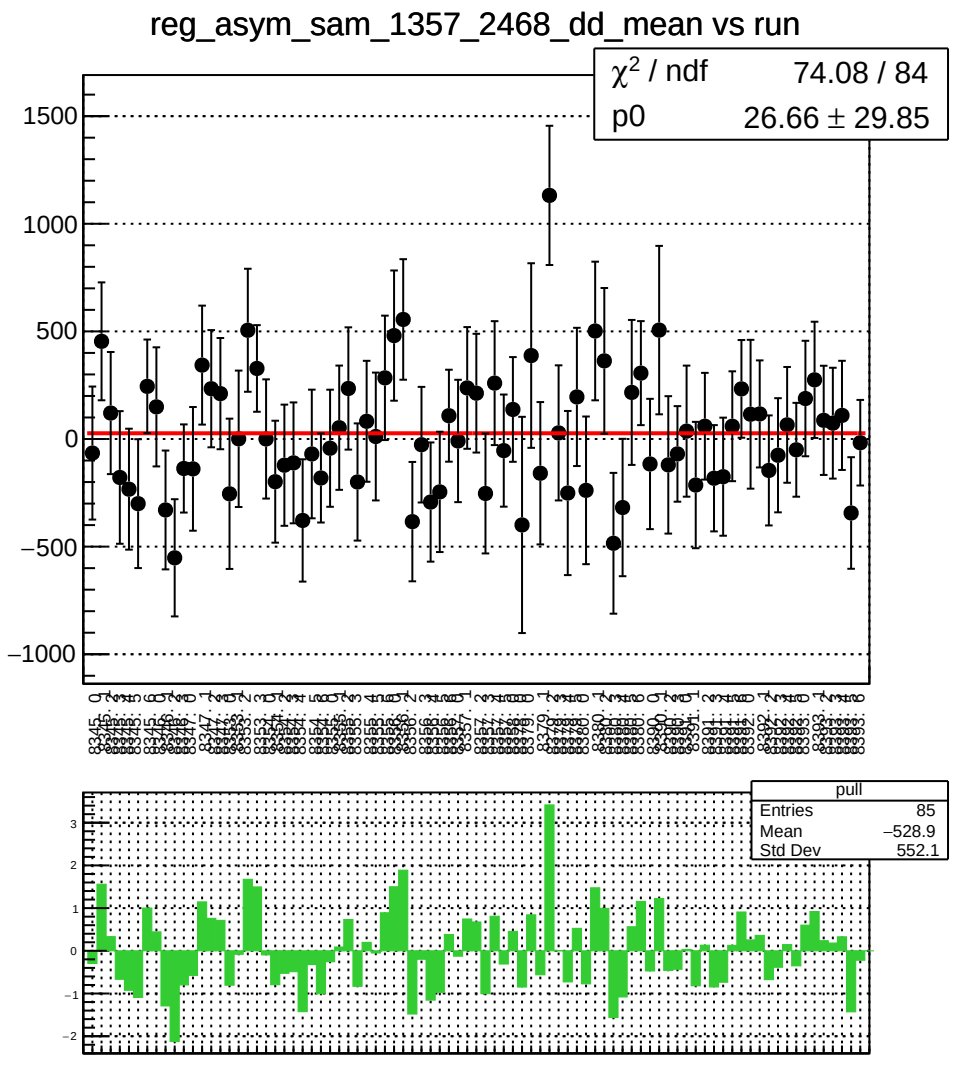

pull1D
Entries 85
Mean 0.006369
Std Dev 1.103

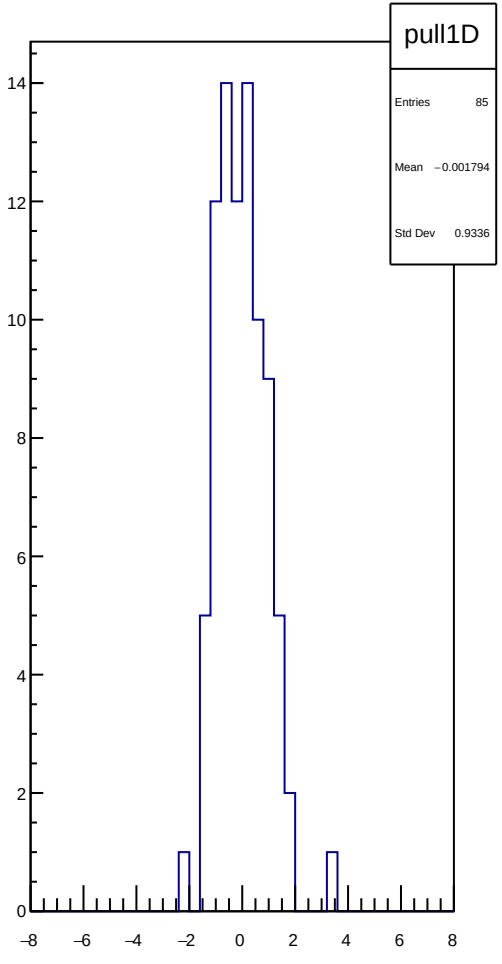

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 1.057e+04 / 84
p0 1830 ± 1.42
2300
2200
2100
2000
1900
1800
1700
1600

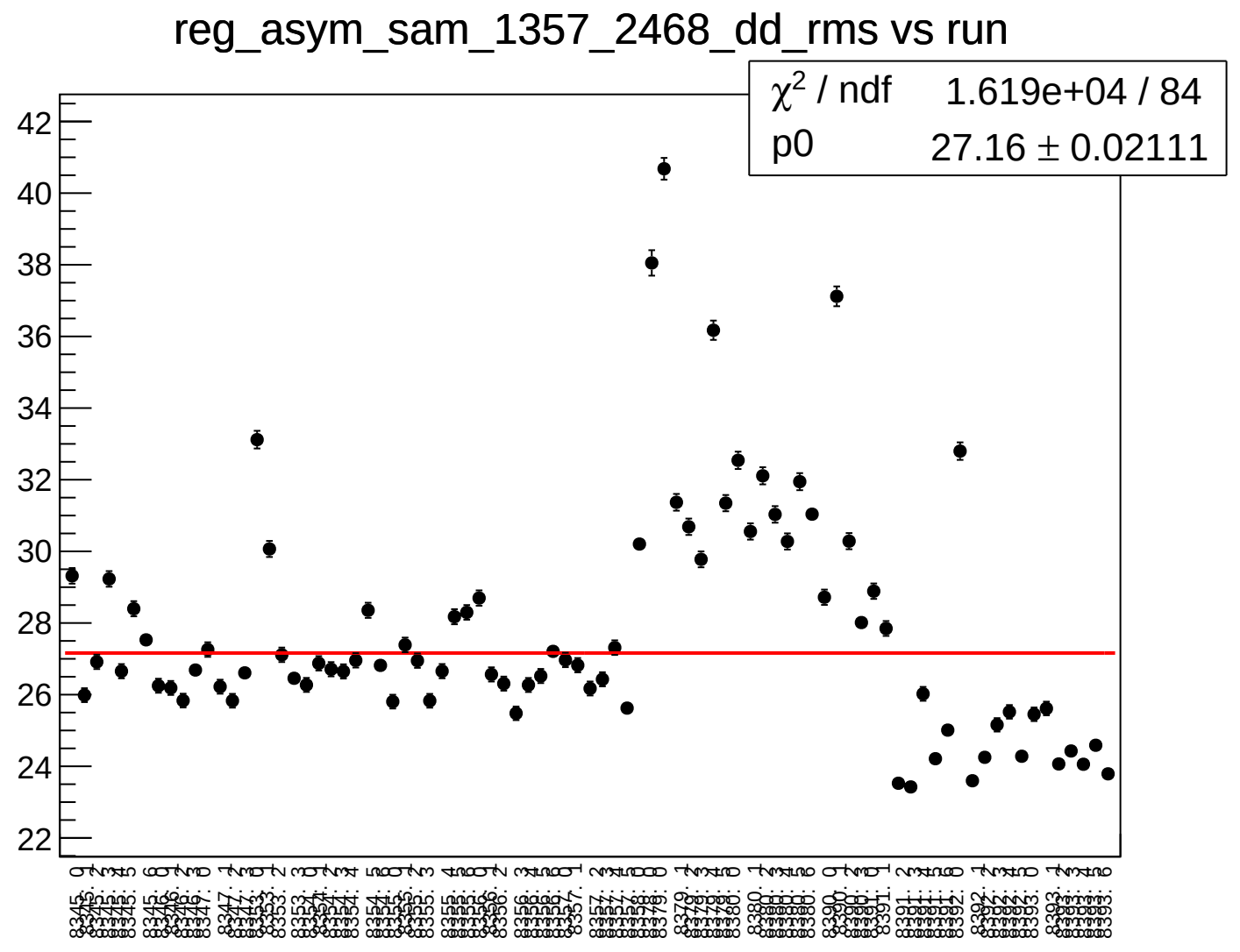

asym_sam_2468_avg_mean vs run
×10^3
χ^2 / ndf 102.9 / 84
p0 6106 ± 2013
pull
Entries 85
Mean −666.1
Std Dev 722

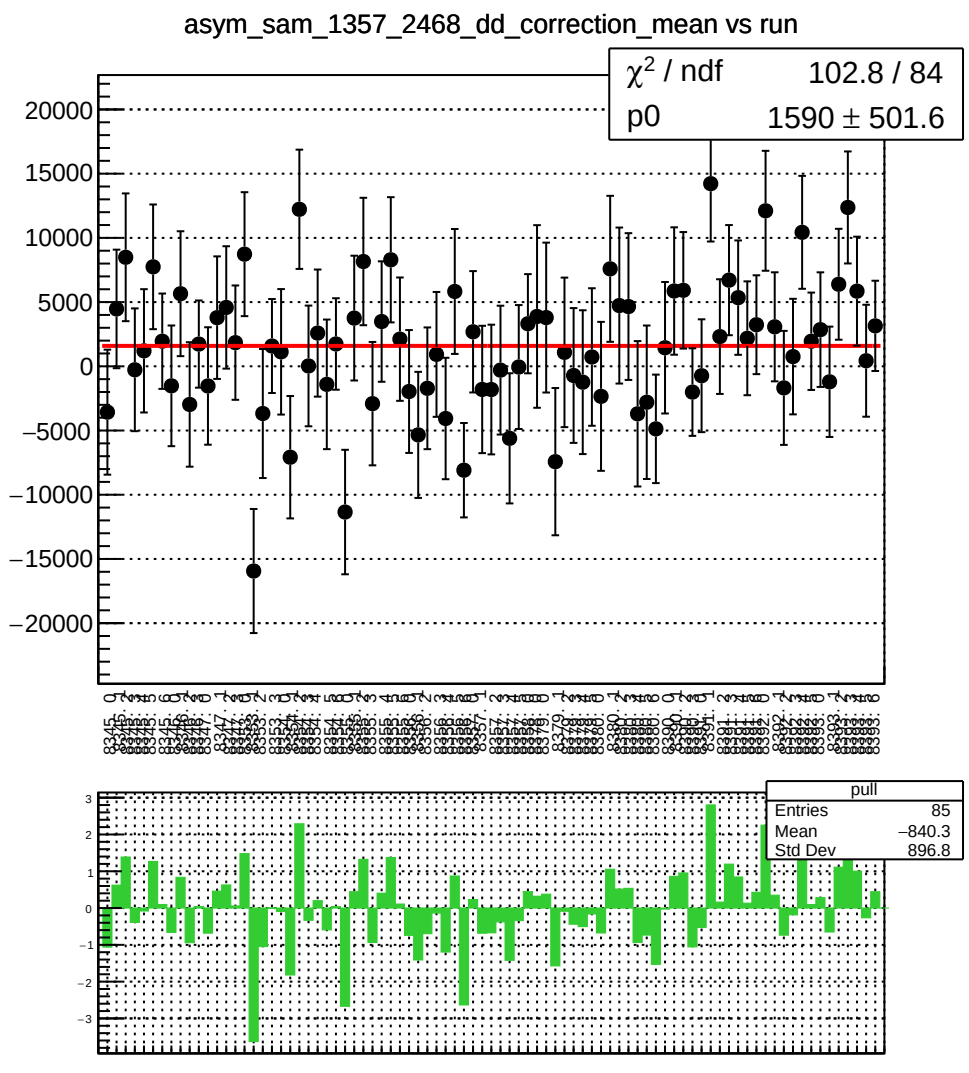

pull1D
Entries 85
Mean −0.007603
Std Dev 1.1

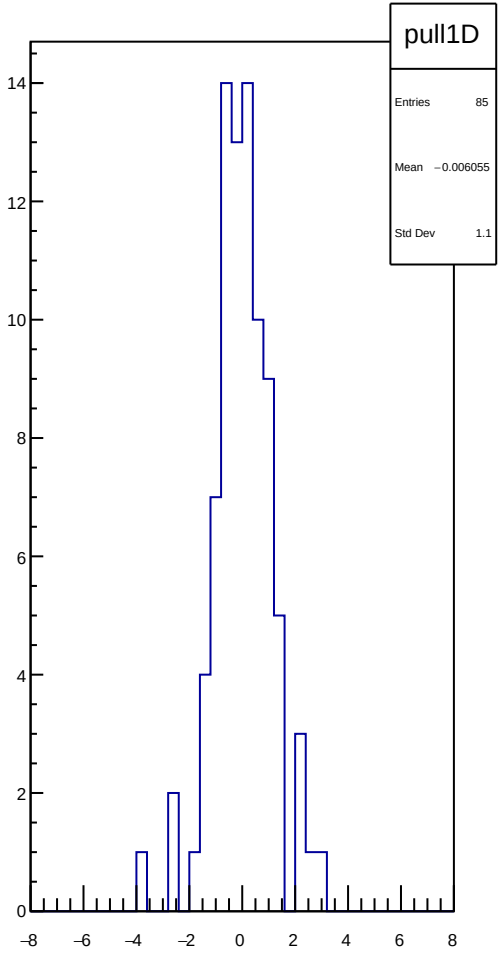

asym_sam_2468_avg_rms vs run
χ² / ndf 1.06e+04 / 84
p0 1835 ± 1.423
2300
2200
2100
2000
1900
1800
1700
1600

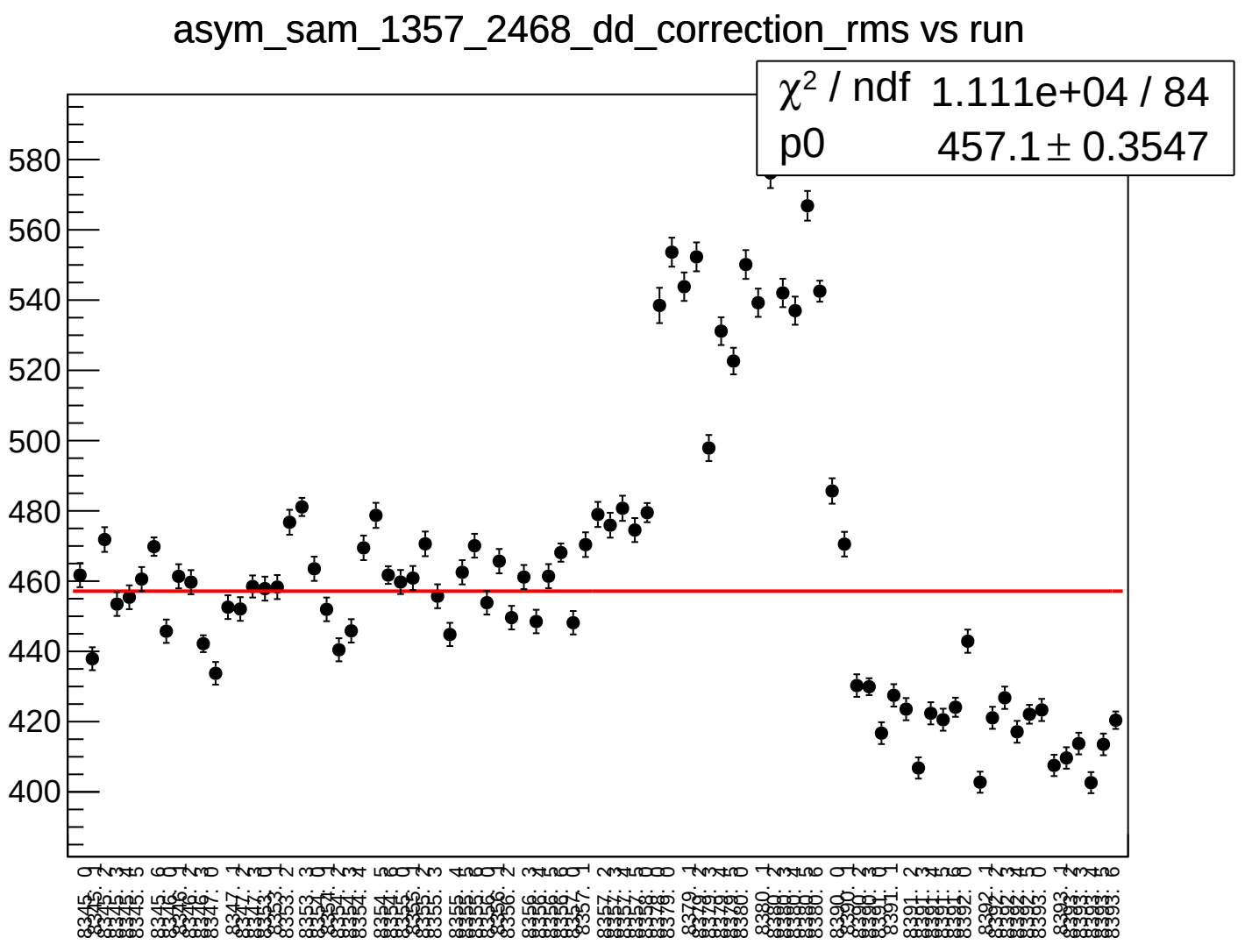

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 74.08 / 84
p0 26.66 ± 29.85
1500
1000
500
0
−500
−1000
pull
Entries 85
Mean −528.9
Std Dev 552.1
3
2
1
0
−1
−2

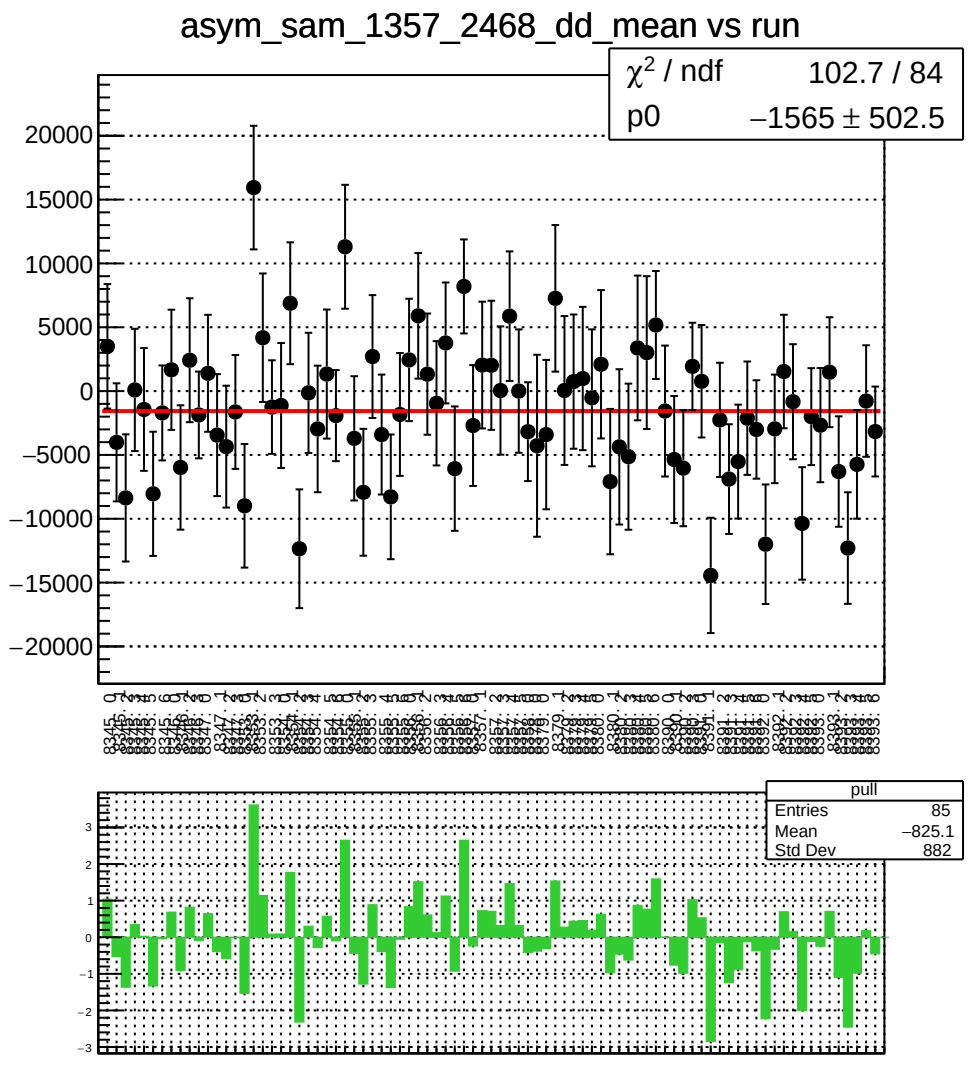

pull1D
Entries 85
Mean −0.001794
Std Dev 0.9336
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

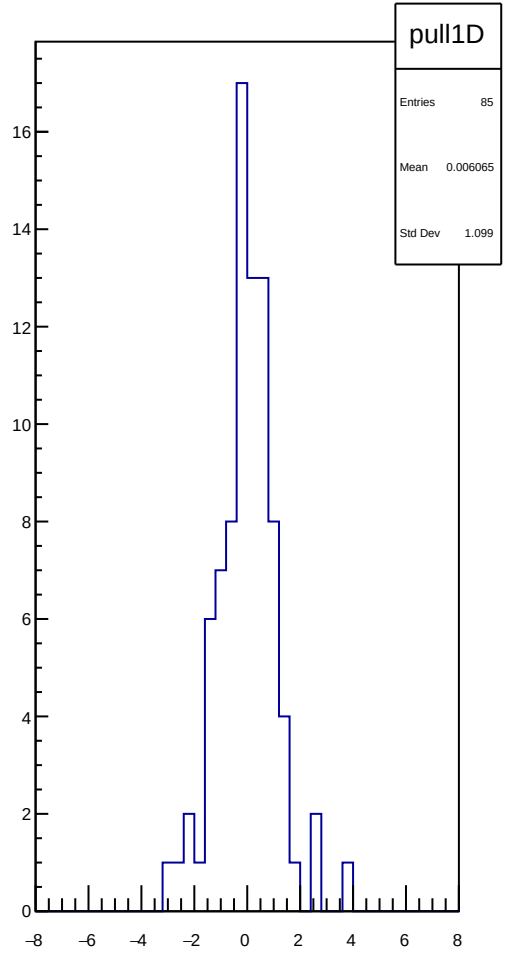

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.619e+04 / 84
p0 27.16 ± 0.02111
42
40
38
36
34
32
30
28
26
24
22

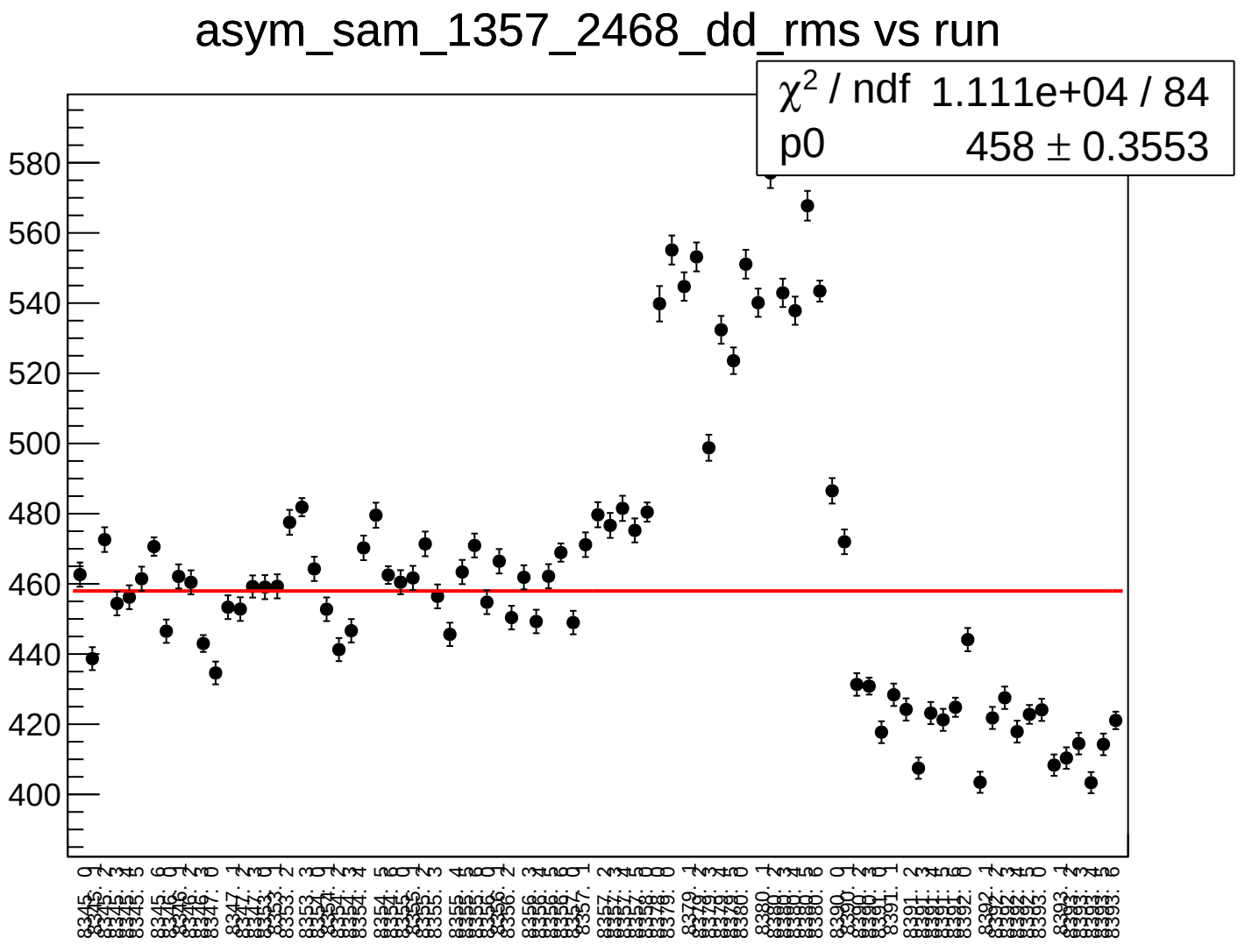

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 102.8 / 84
p0 1590 ± 501.6
pull
Entries 85
Mean −840.3
Std Dev 896.8

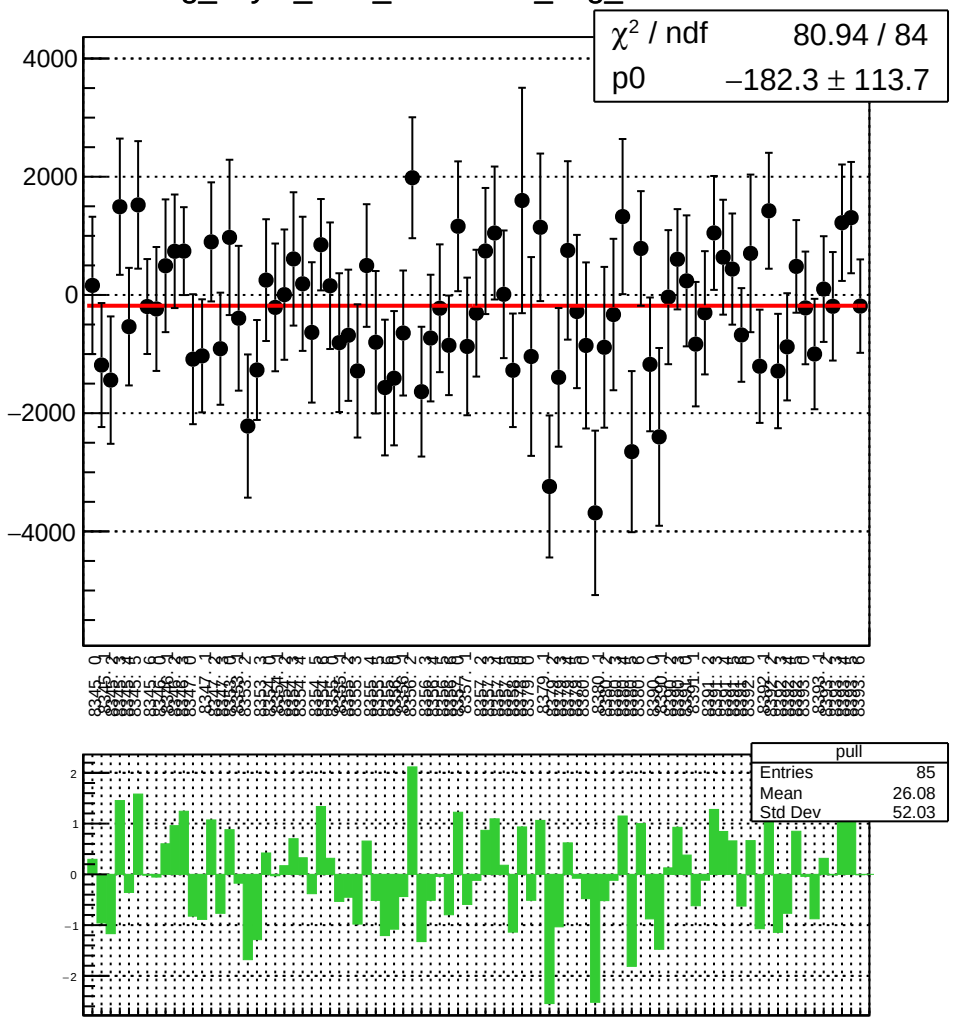

pull1D
Entries 85
Mean −0.006055
Std Dev 1.1

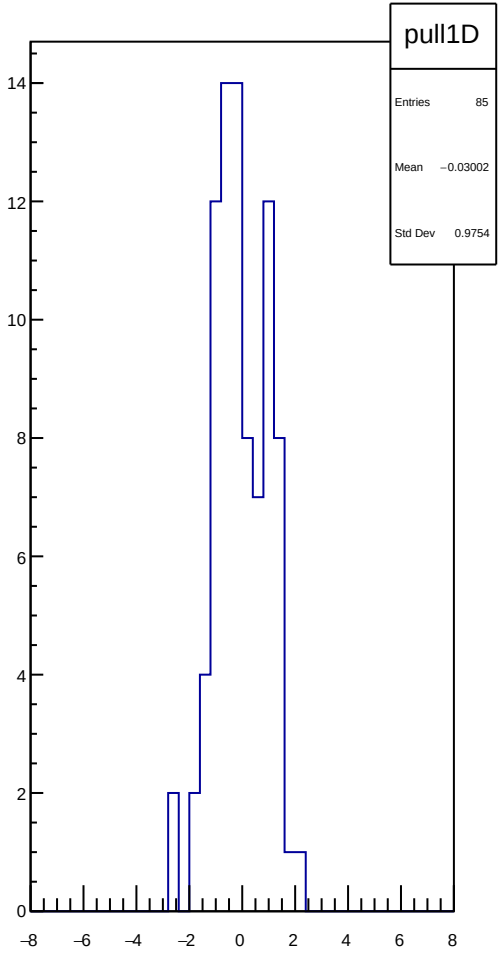

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 1.111e+04 / 84
p0 457.1 ± 0.3547
580
560
540
520
500
480
460
440
420
400

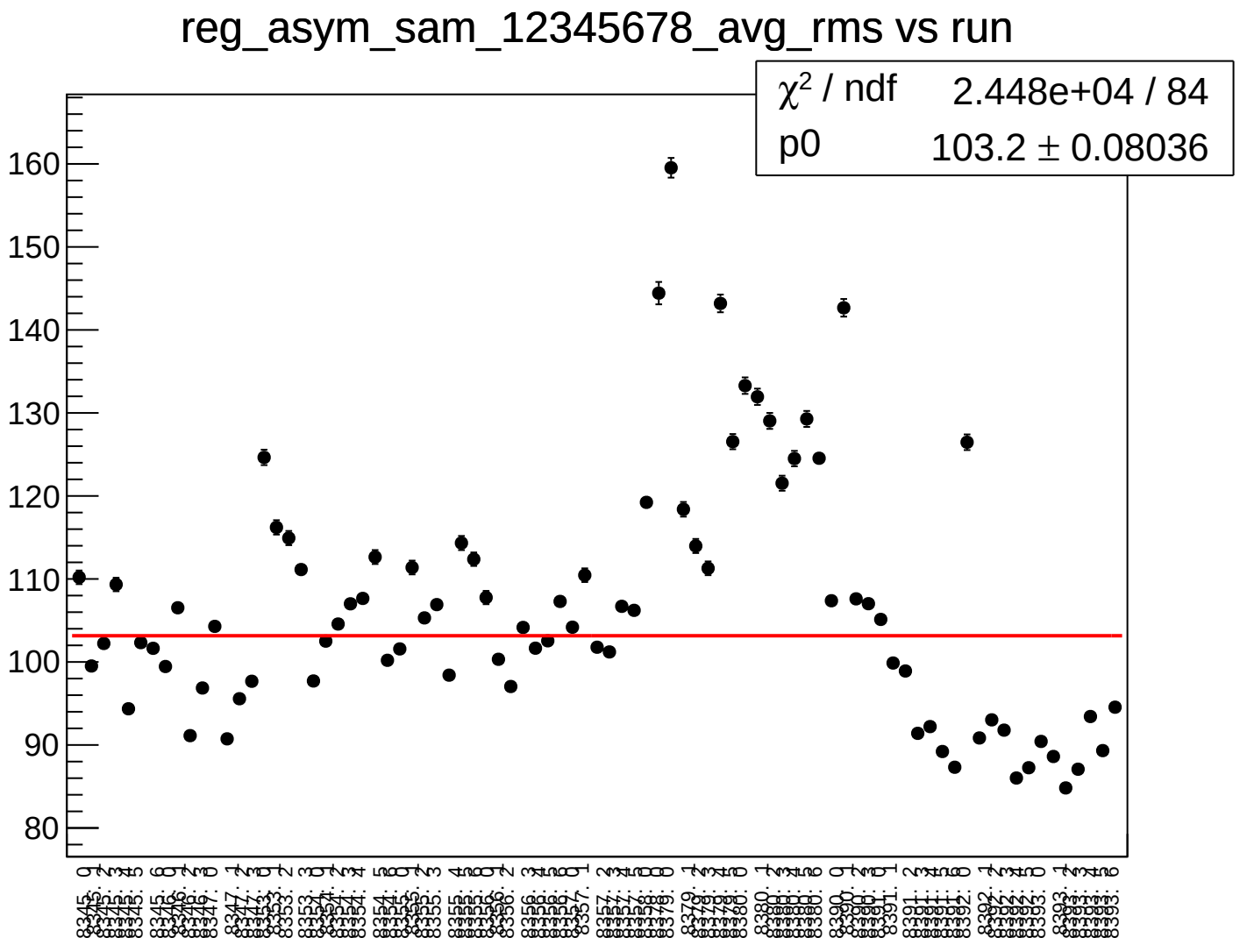

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 102.7 / 84
p0 −1565 ± 502.5
pull
Entries 85
Mean −825.1
Std Dev 882

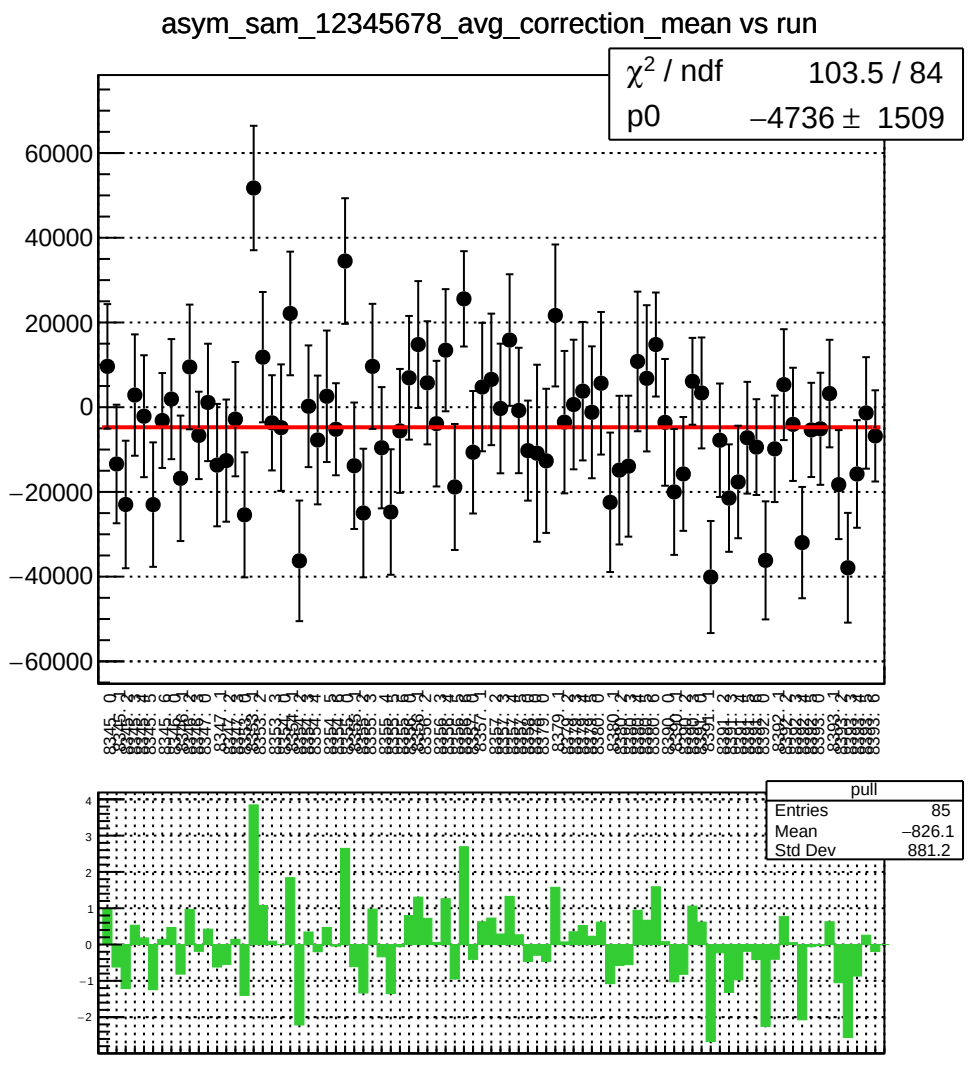

pull1D
Entries 85
Mean 0.006065
Std Dev 1.099

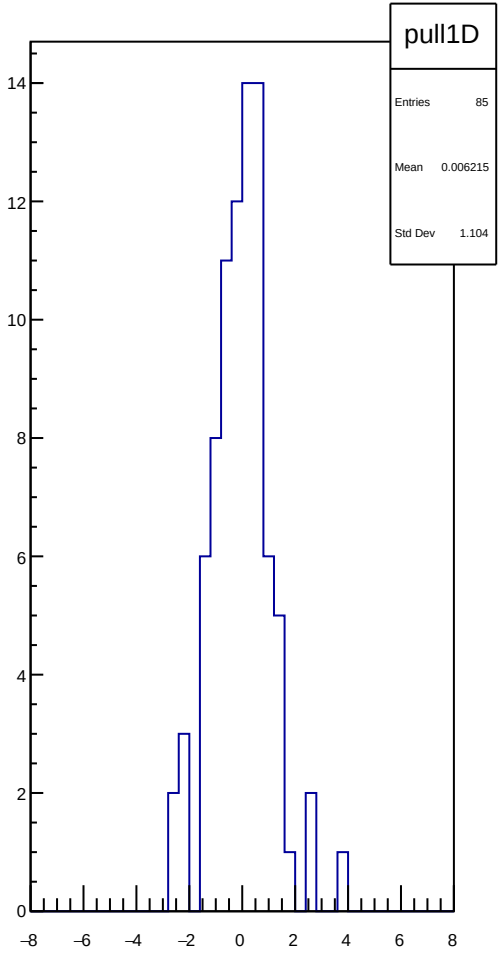

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.111e+04 / 84
p0 458 ± 0.3553
580
560
540
520
500
480
460
440
420
400

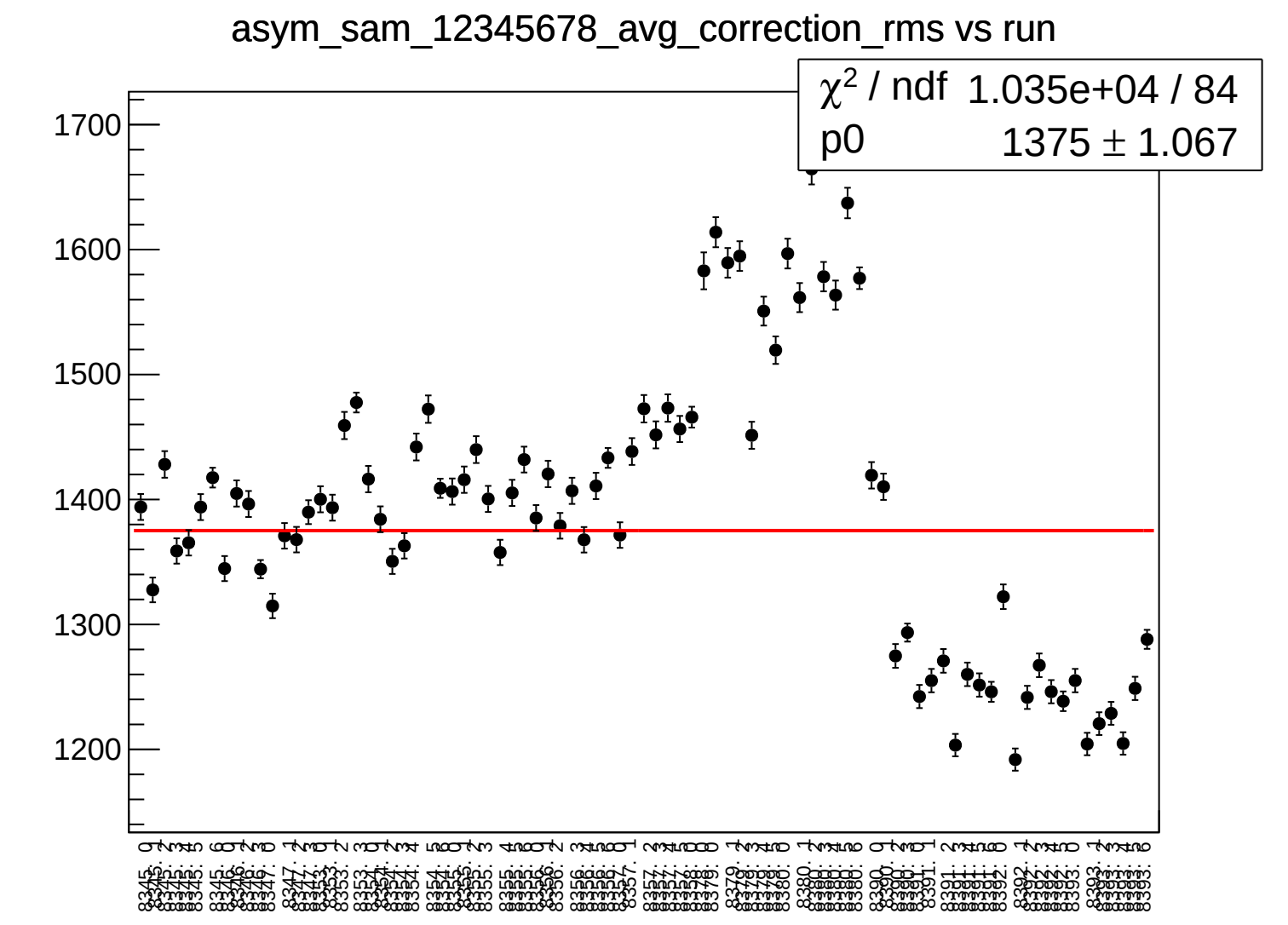

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 80.94 / 84
p0 −182.3 ± 113.7
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 26.08
Std Dev 52.03
2
1
0
−1
−2

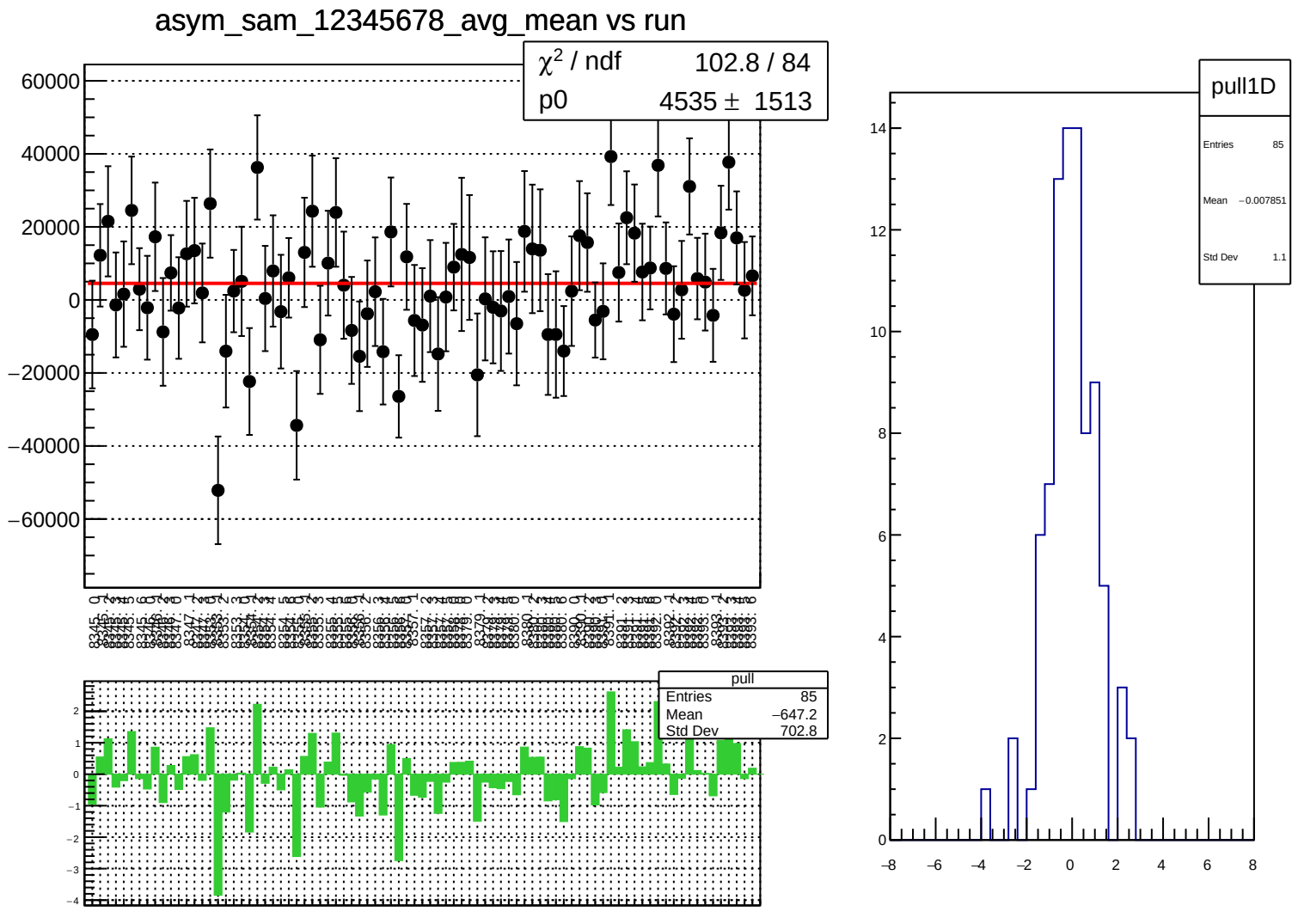

pull1D
Entries 85
Mean −0.03002
Std Dev 0.9754
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

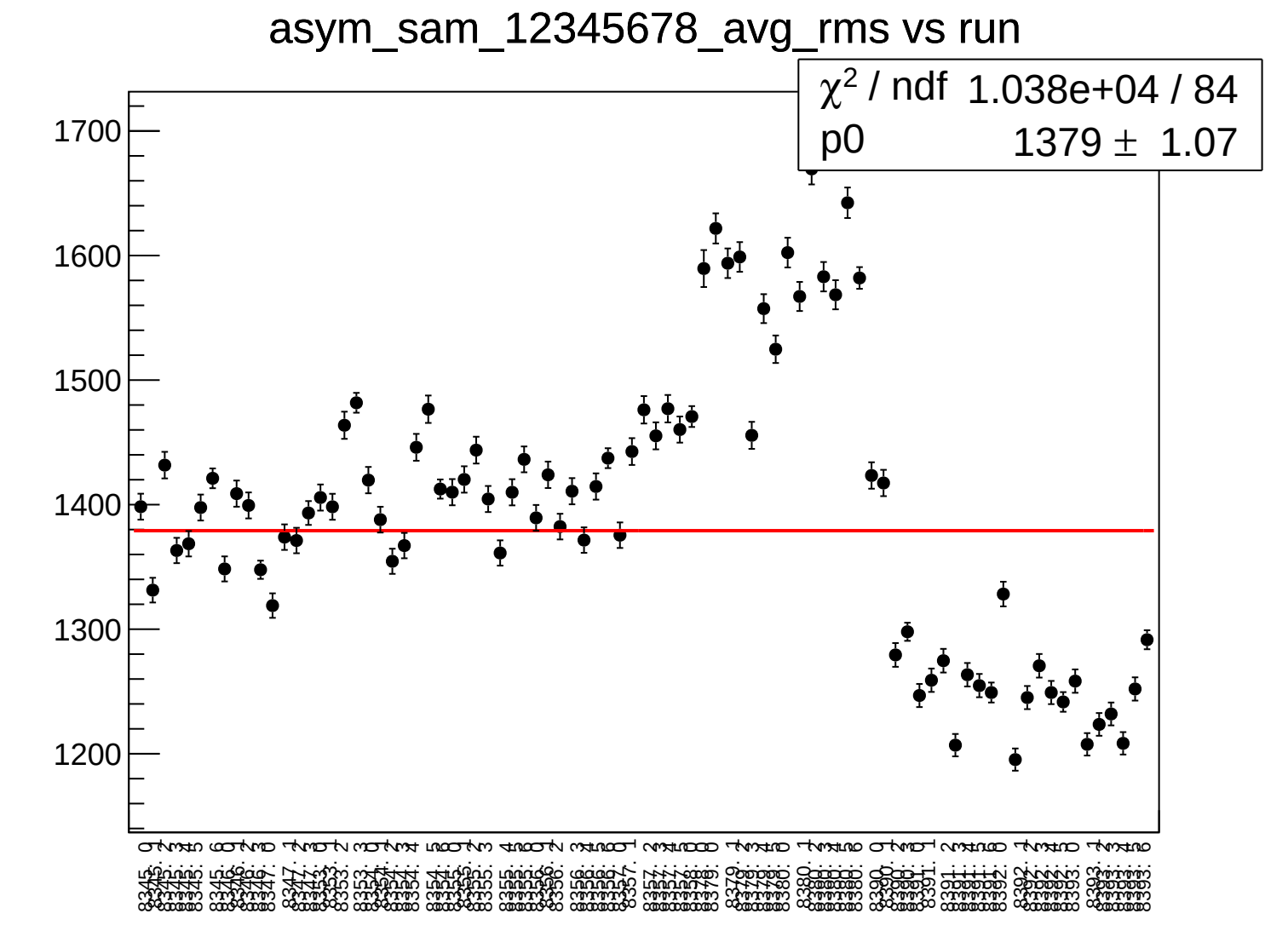

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 2.448e+04 / 84
p0 103.2 ± 0.08036
160
150
140
130
120
110
100
90
80

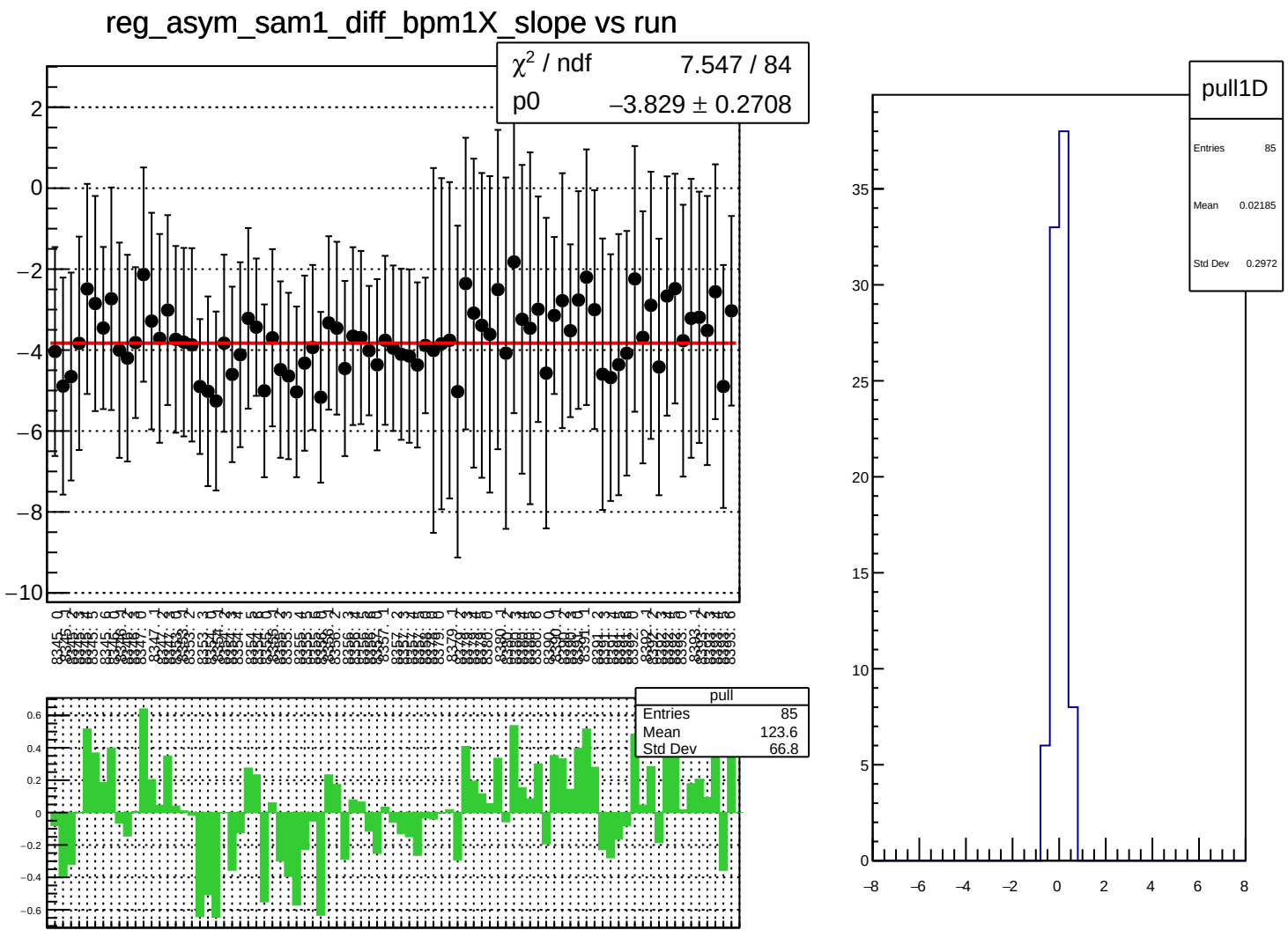

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 103.5 / 84
p0 −4736 ± 1509
pull
Entries 85
Mean −826.1
Std Dev 881.2

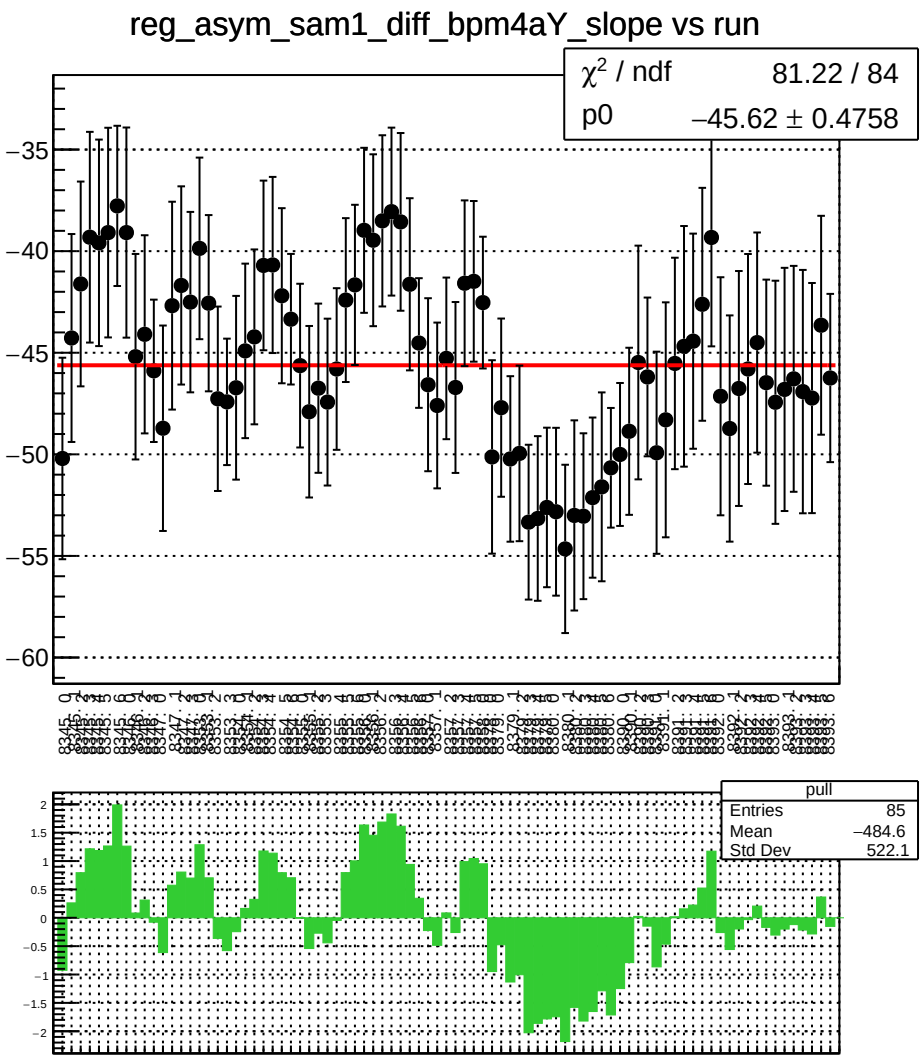

pull1D
Entries 85
Mean 0.006215
Std Dev 1.104

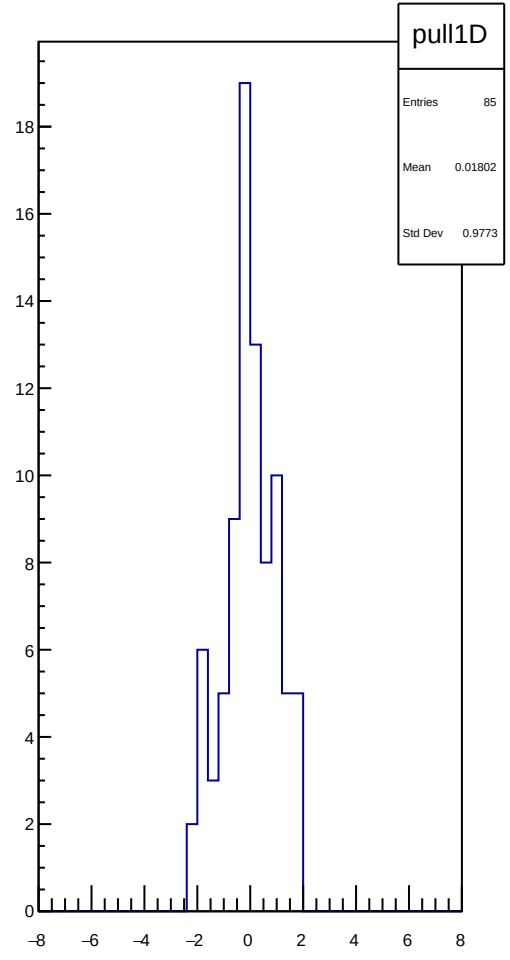

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 1.035e+04 / 84
p0 1375 ± 1.067
1700
1600
1500
1400
1300
1200

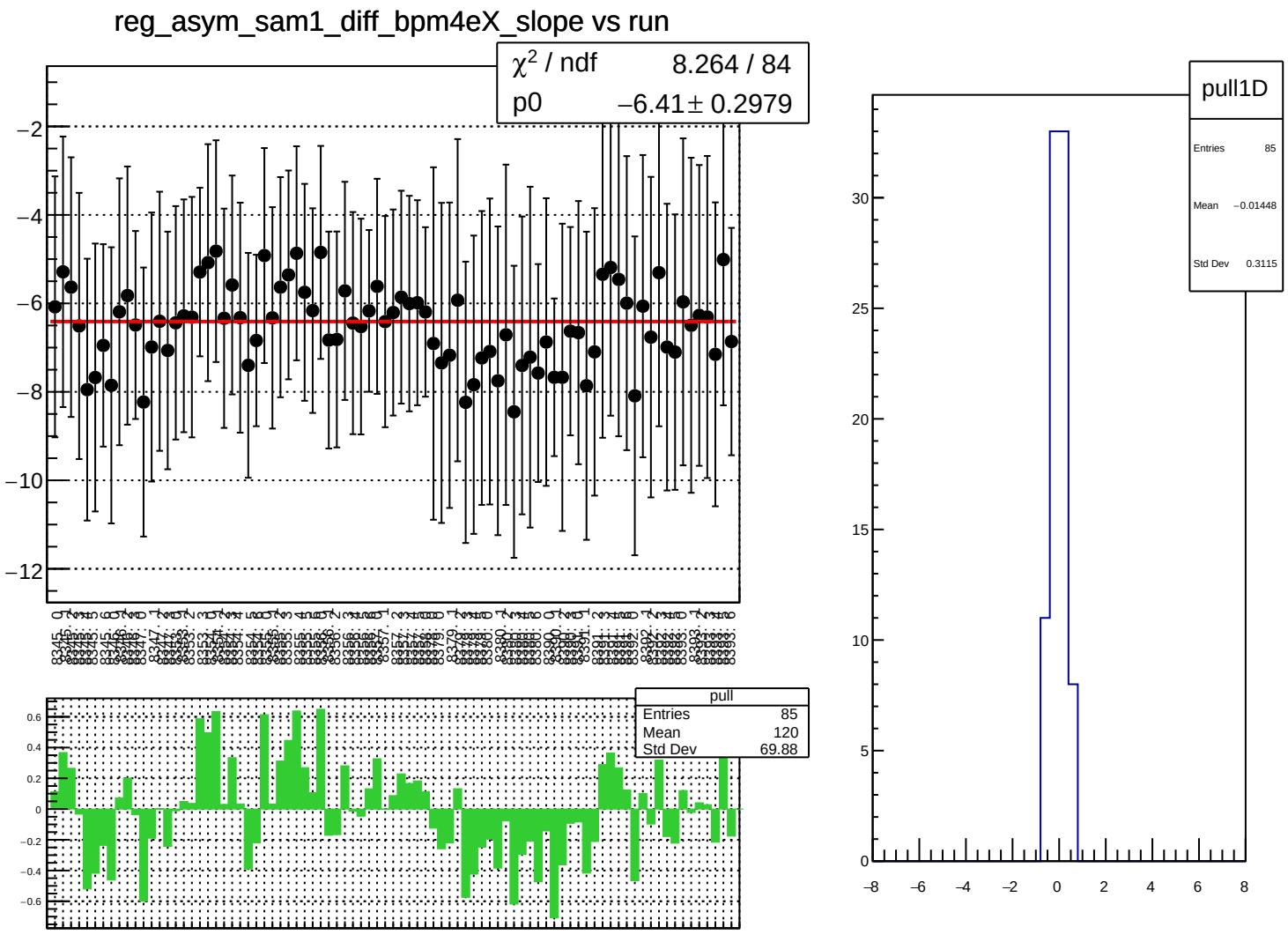

asym_sam_12345678_avg_mean vs run
χ² / ndf 102.8 / 84
p0 4535 ± 1513
pull
Entries 85
Mean −647.2
Std Dev 702.8
pull1D
Entries 85
Mean −0.007851
Std Dev 1.1

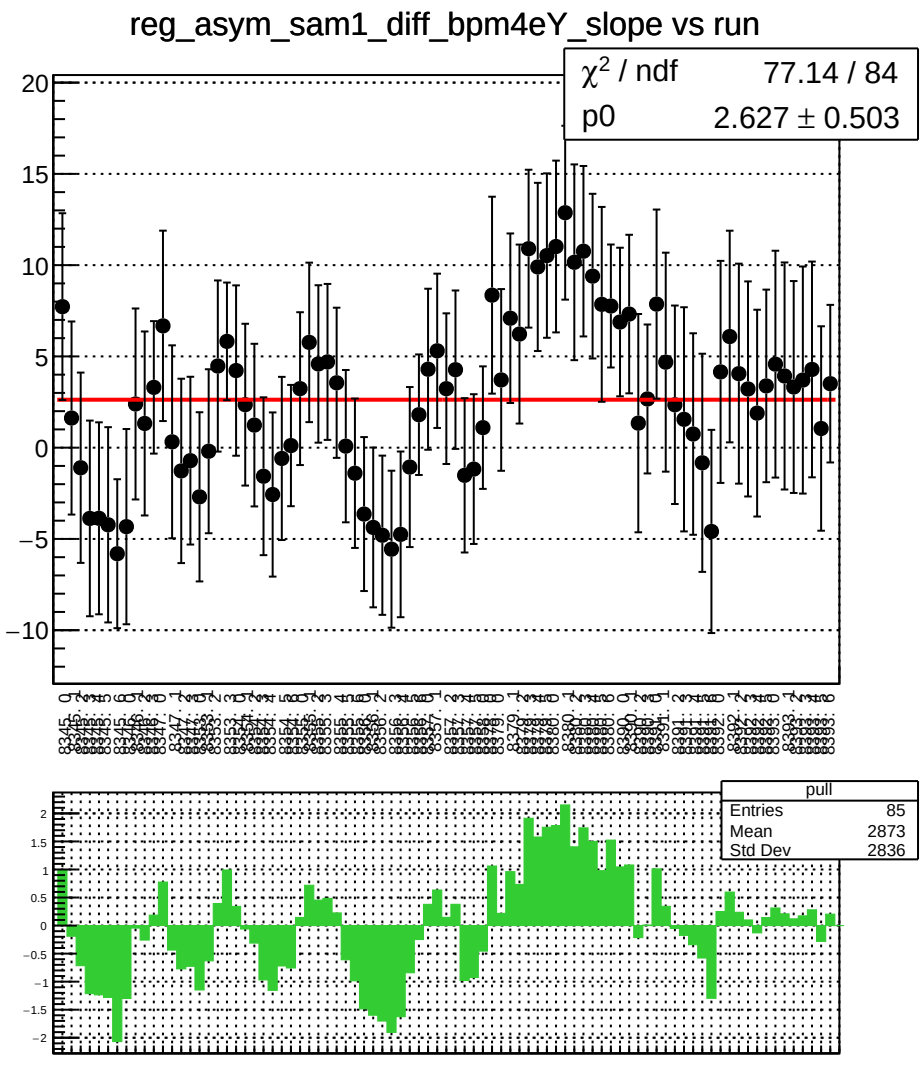

asym_sam_12345678_avg_rms vs run
χ² / ndf 1.038e+04 / 84
p0 1379 ± 1.07
1700
1600
1500
1400
1300
1200

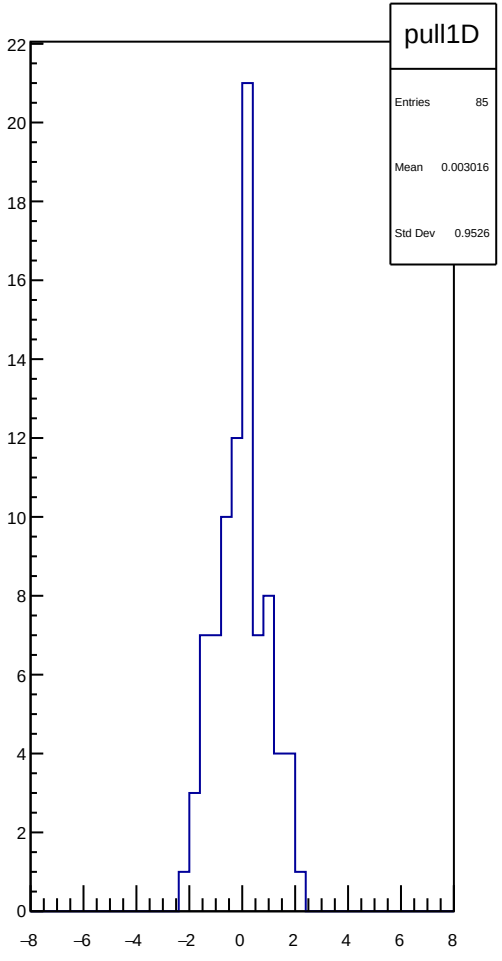

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 7.547 / 84
p0 −3.829 ± 0.2708
pull
Entries 85
Mean 123.6
Std Dev 66.8
pull1D
Entries 85
Mean 0.02185
Std Dev 0.2972

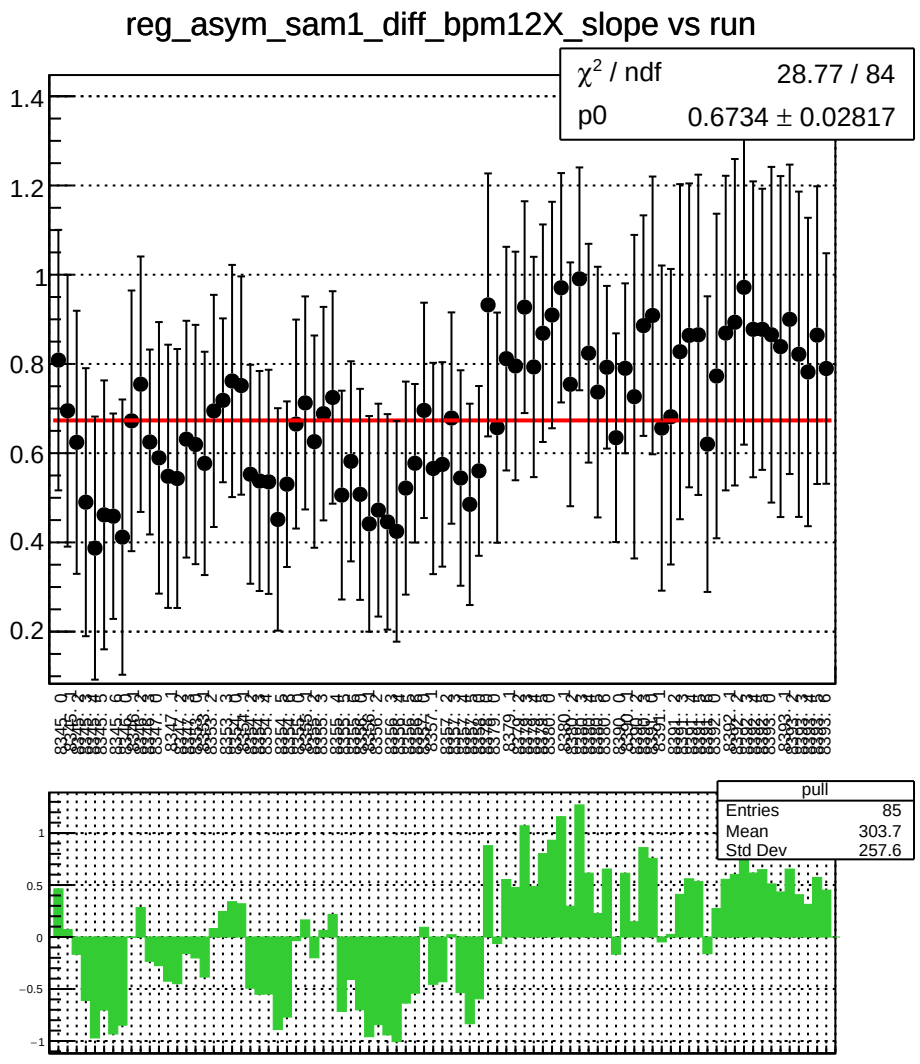

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 81.22 / 84
p0 −45.62 ± 0.4758
pull
Entries 85
Mean −484.6
Std Dev 522.1

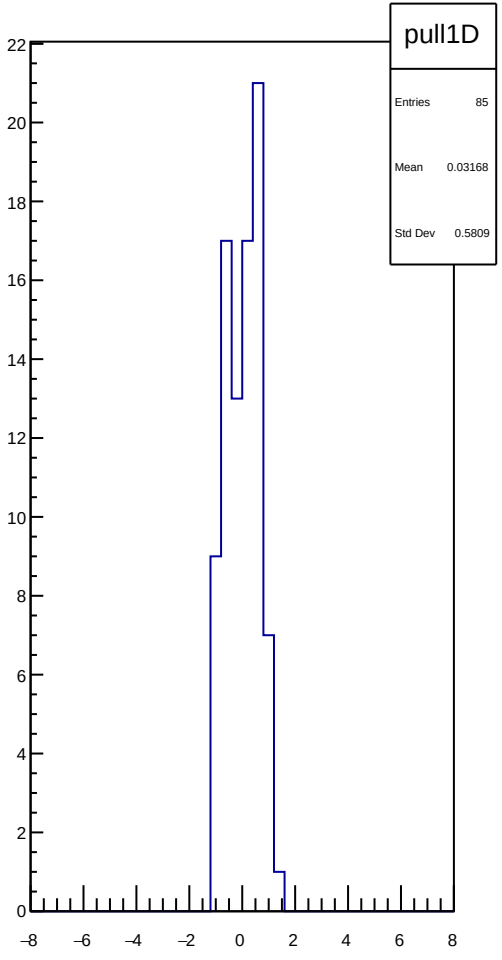

pull1D
Entries 85
Mean 0.01802
Std Dev 0.9773

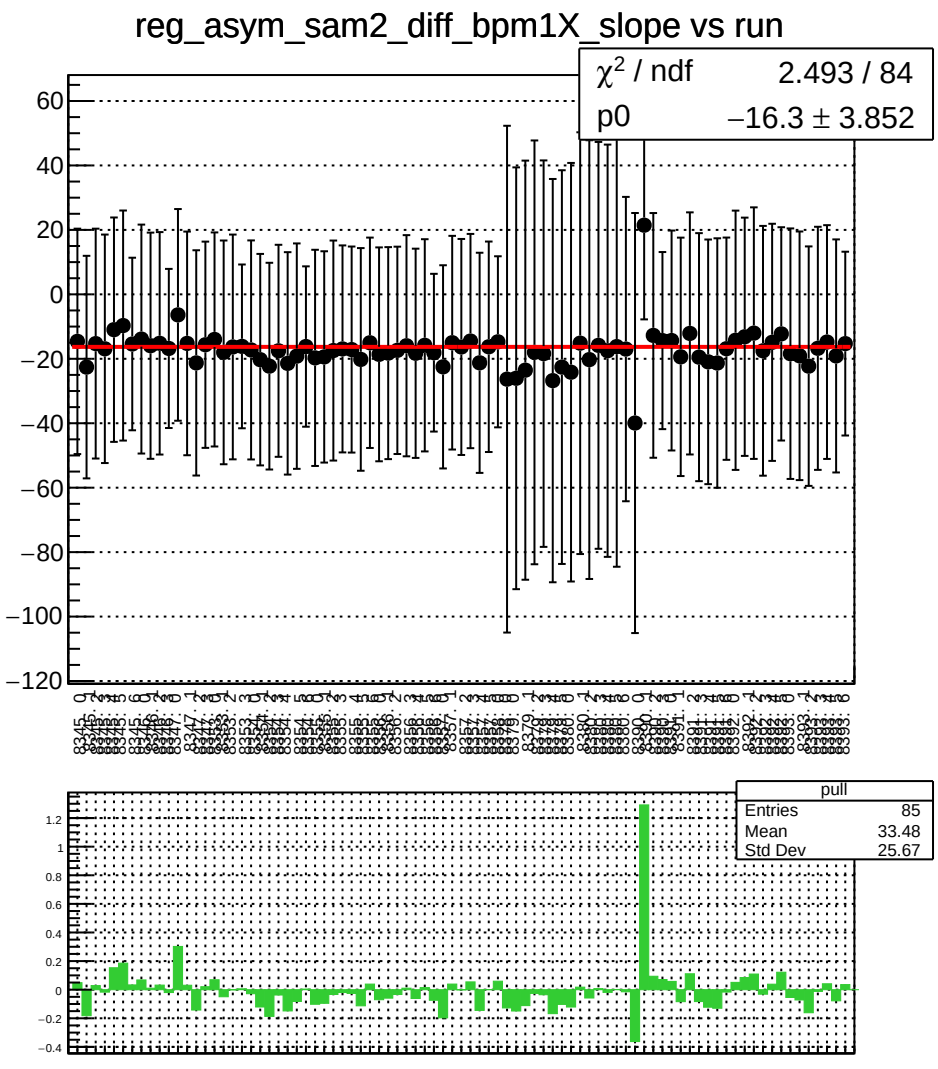

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 8.264 / 84
p0 −6.41 ± 0.2979
pull
Entries 85
Mean 120
Std Dev 69.88
pull1D
Entries 85
Mean −0.01448
Std Dev 0.3115

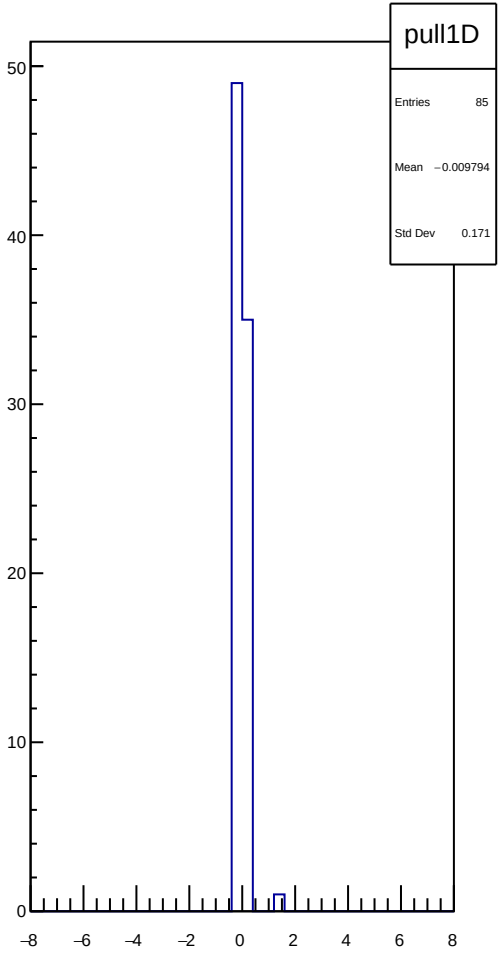

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 77.14 / 84
p0 2.627 ± 0.503
pull
Entries 85
Mean 2873
Std Dev 2836

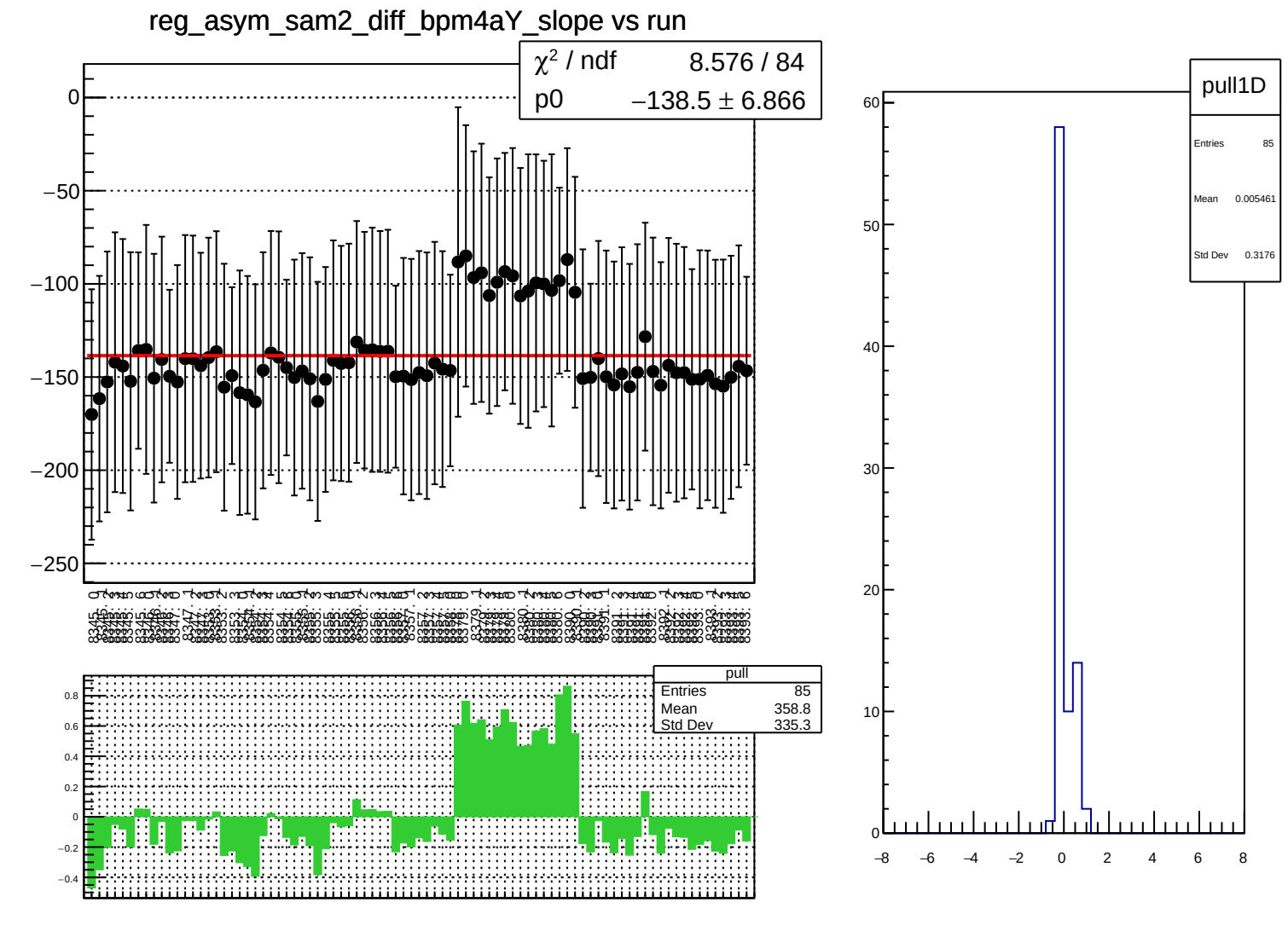

pull1D
Entries 85
Mean 0.003016
Std Dev 0.9526

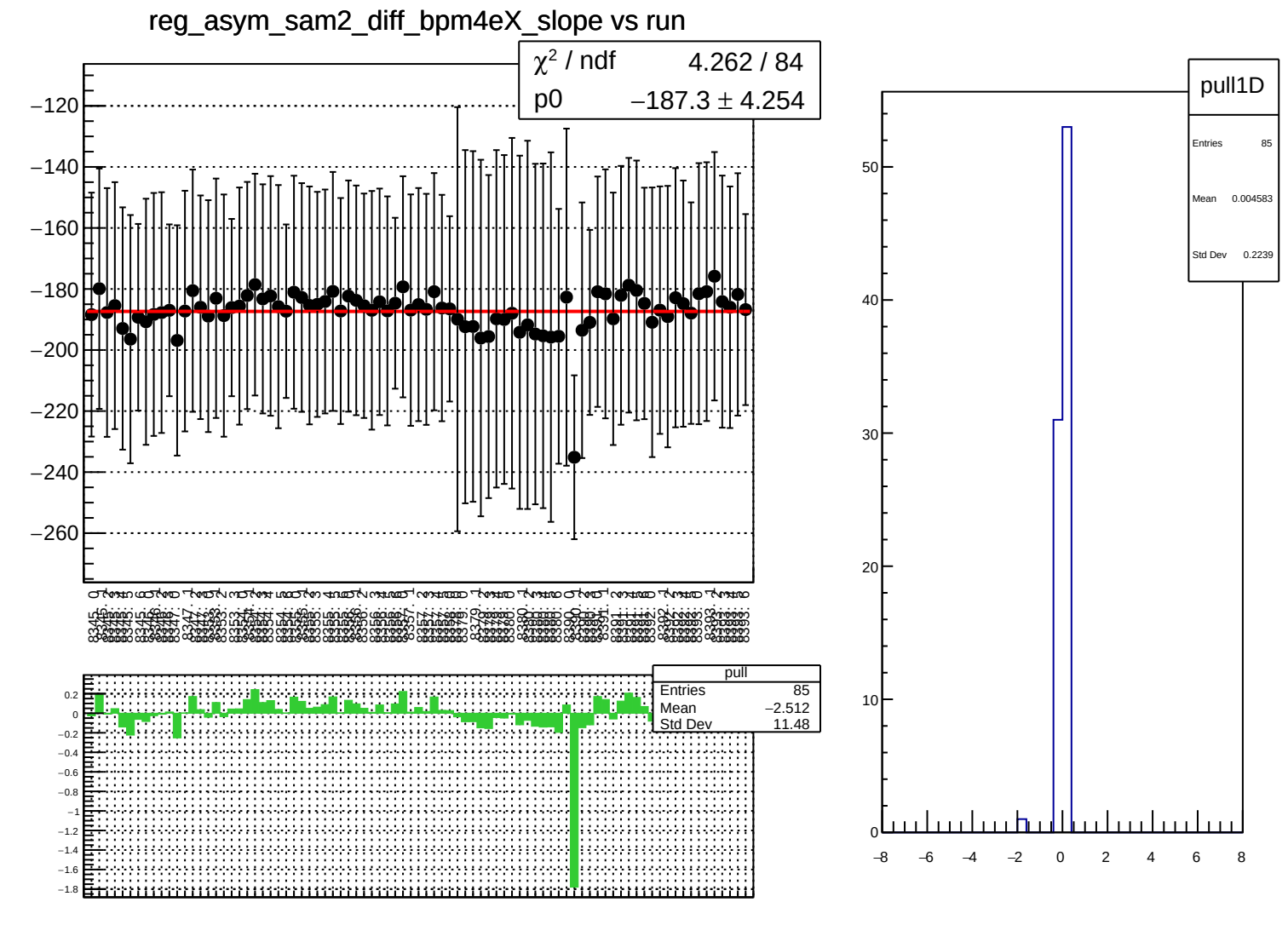

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 28.77 / 84
p0 0.6734 ± 0.02817
pull
Entries 85
Mean 303.7
Std Dev 257.6

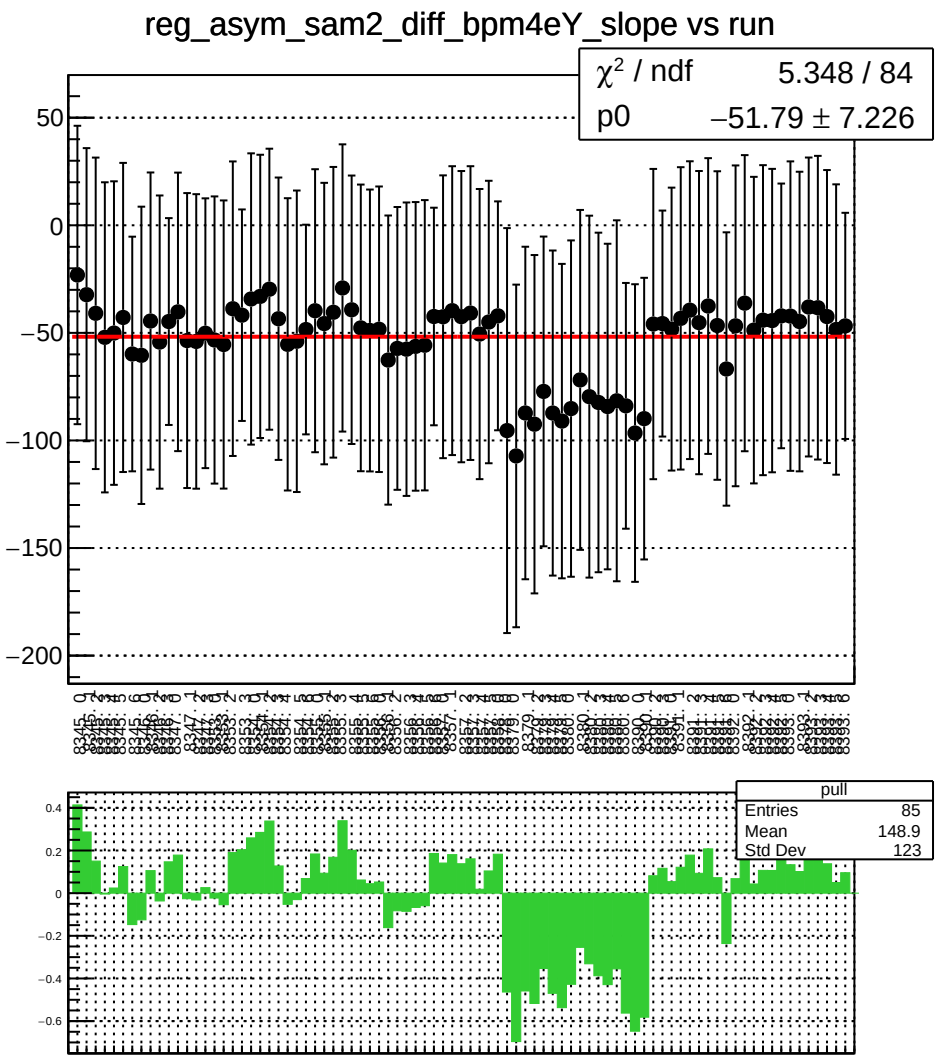

pull1D
Entries 85
Mean 0.03168
Std Dev 0.5809

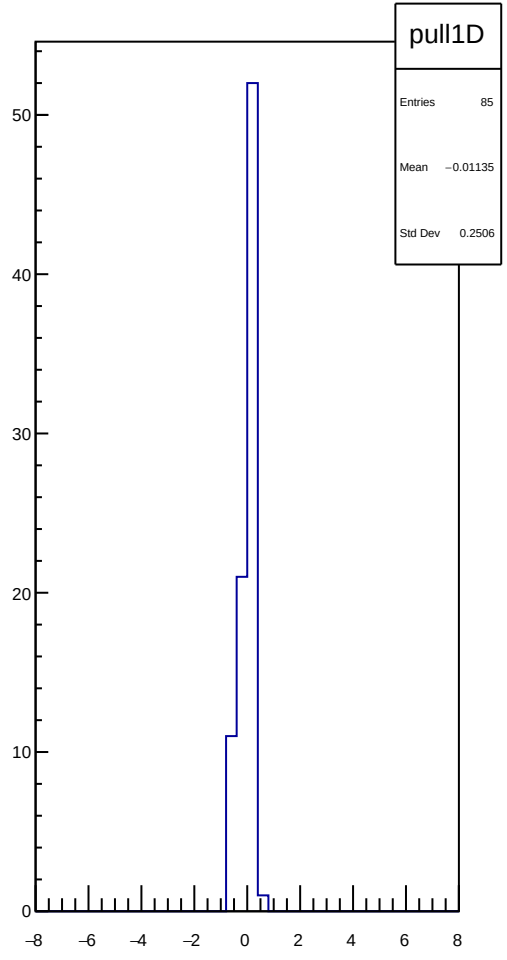

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 2.493 / 84
p0 −16.3 ± 3.852
pull
Entries 85
Mean 33.48
Std Dev 25.67

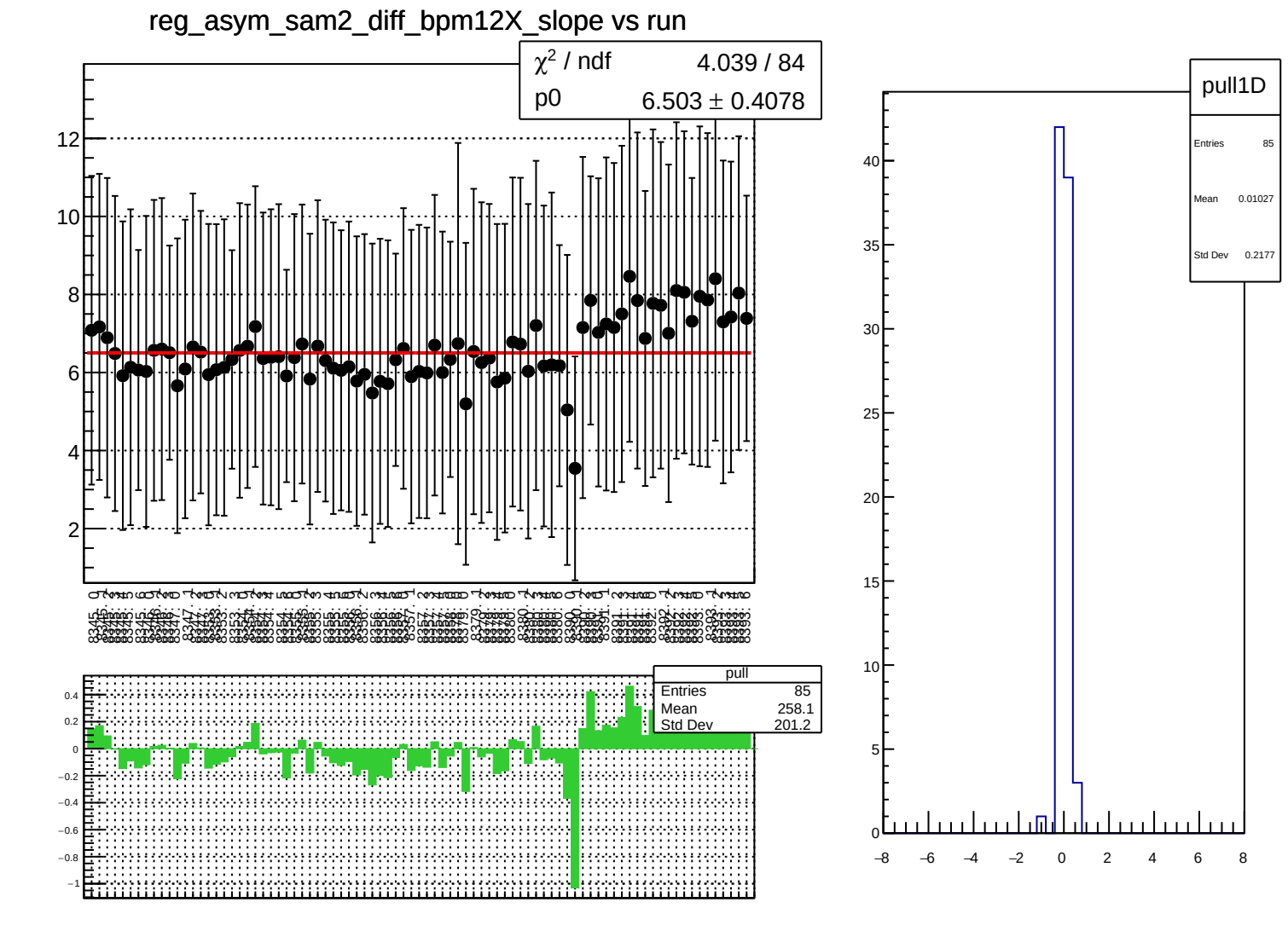

pull1D
Entries 85
Mean −0.009794
Std Dev 0.171

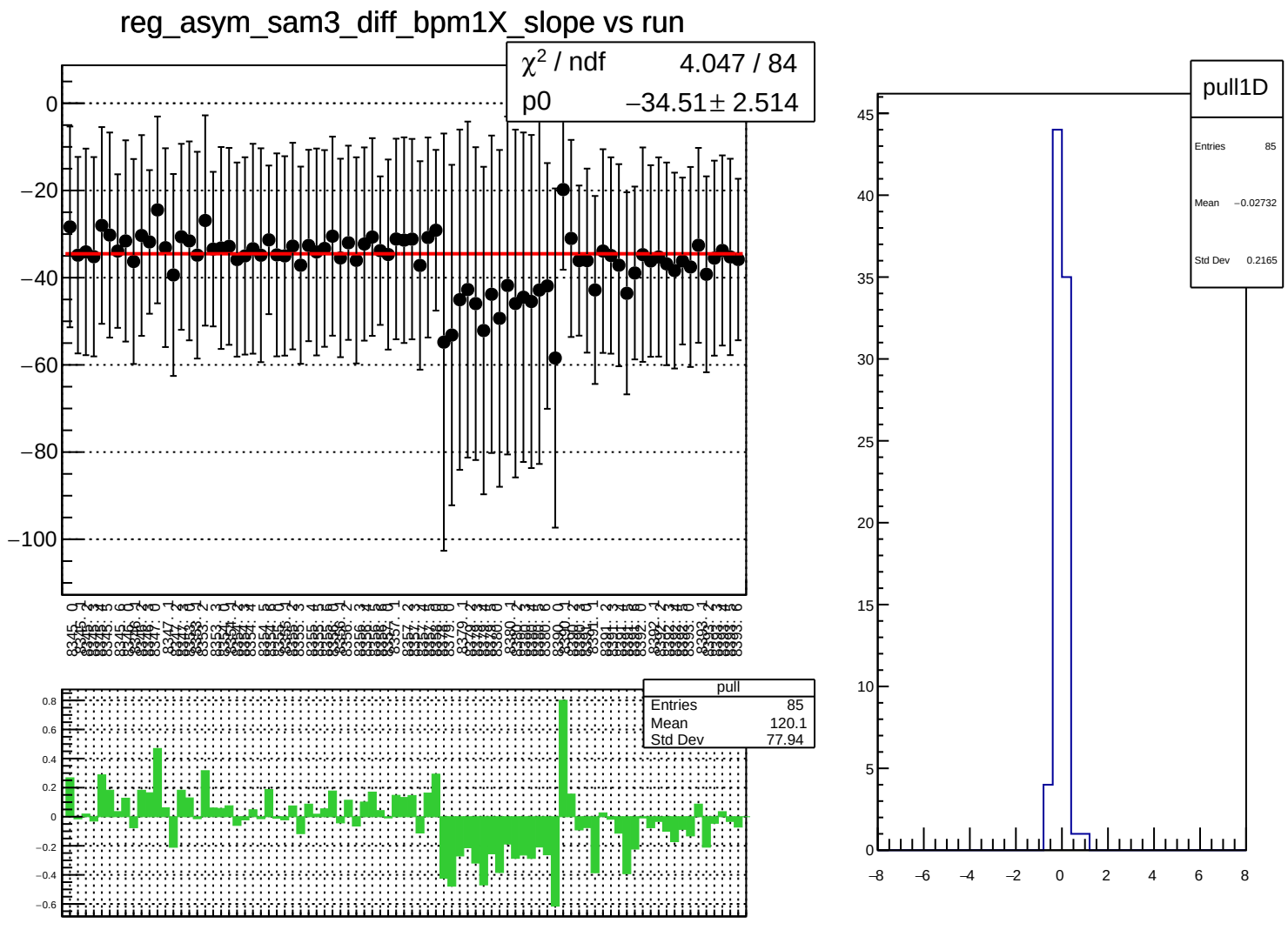

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 8.576 / 84
p0 −138.5 ± 6.866
pull
Entries 85
Mean 358.8
Std Dev 335.3
pull1D
Entries 85
Mean 0.005461
Std Dev 0.3176

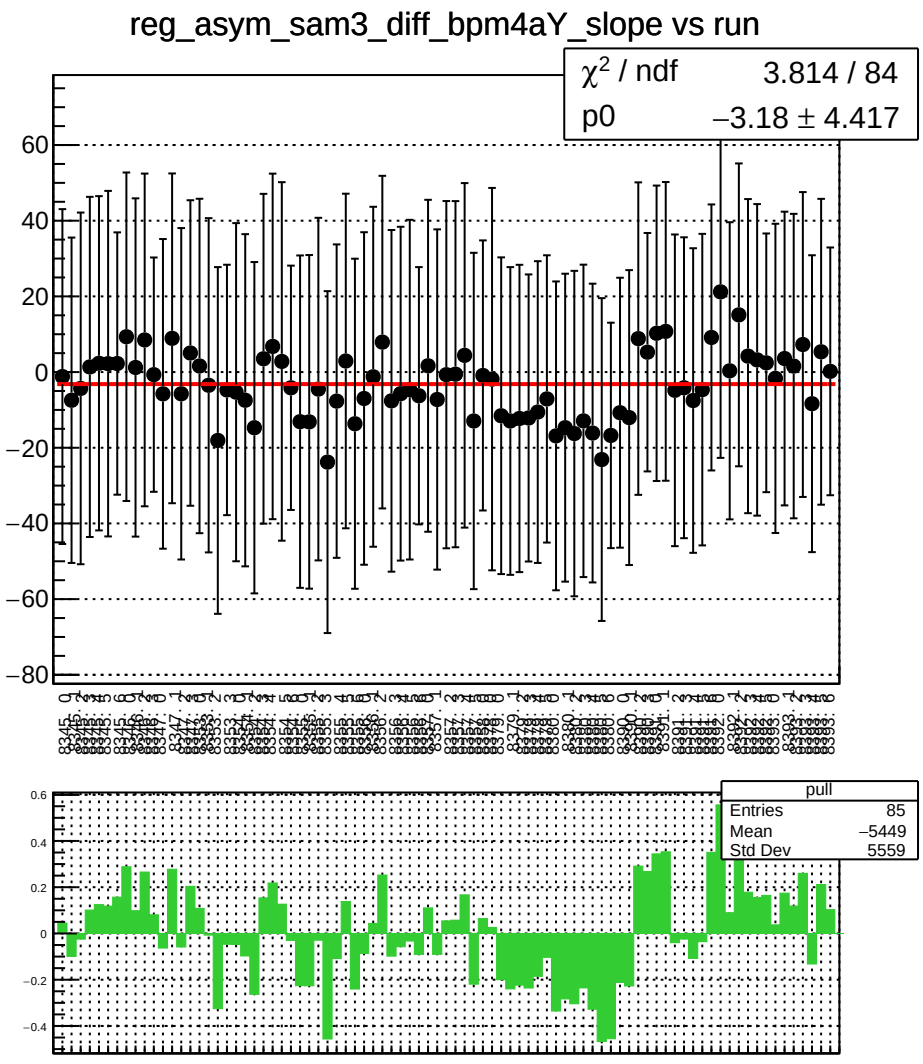

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 4.262 / 84
p0 −187.3 ± 4.254
pull
Entries 85
Mean −2.512
Std Dev 11.48
pull1D
Entries 85
Mean 0.004583
Std Dev 0.2239

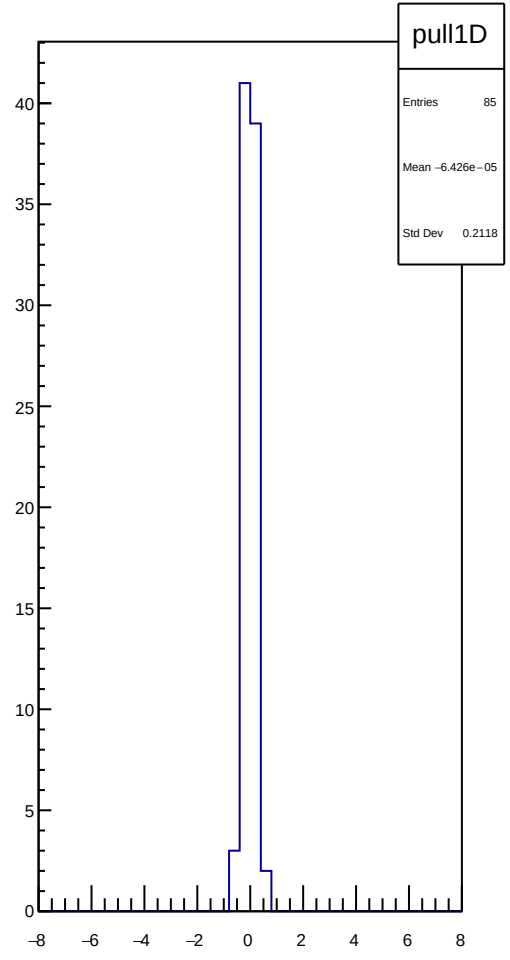

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 5.348 / 84
p0 −51.79 ± 7.226
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 148.9
Std Dev 123
0.4
0.2
0
−0.2
−0.4
−0.6

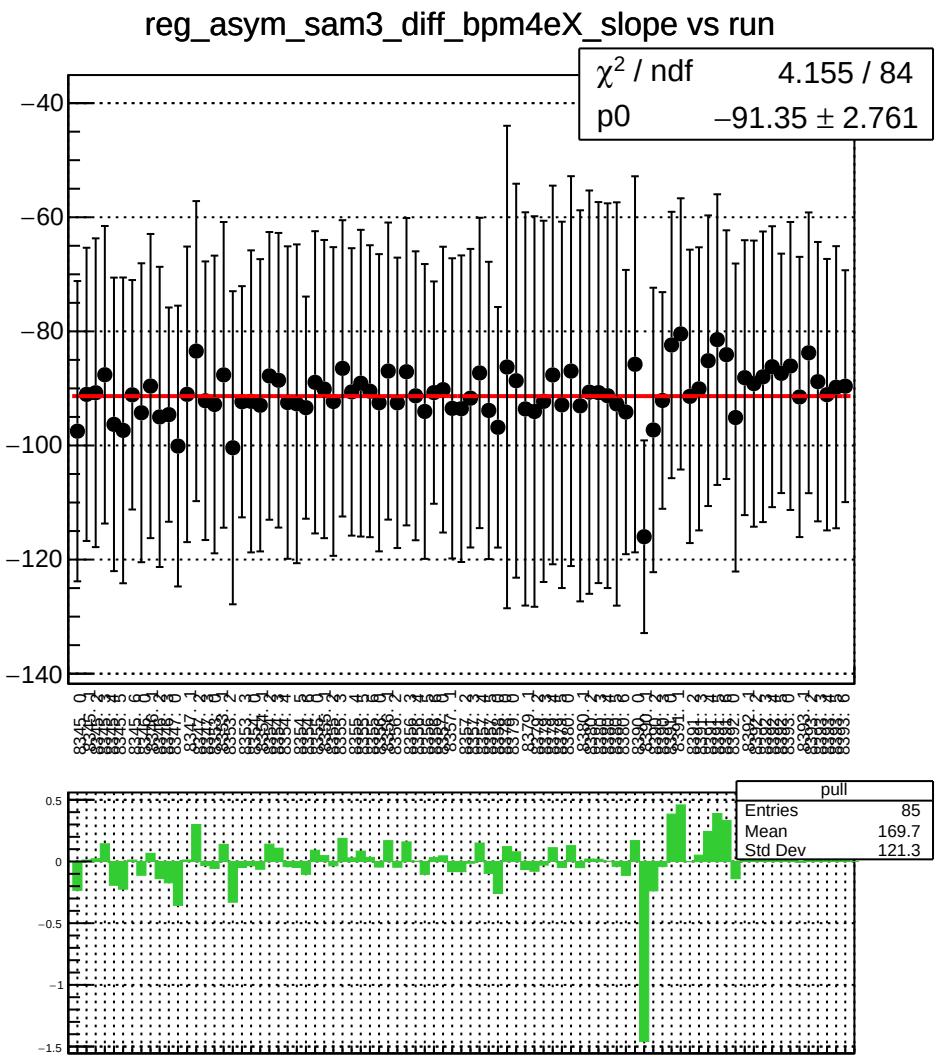

pull1D
Entries 85
Mean −0.01135
Std Dev 0.2506
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

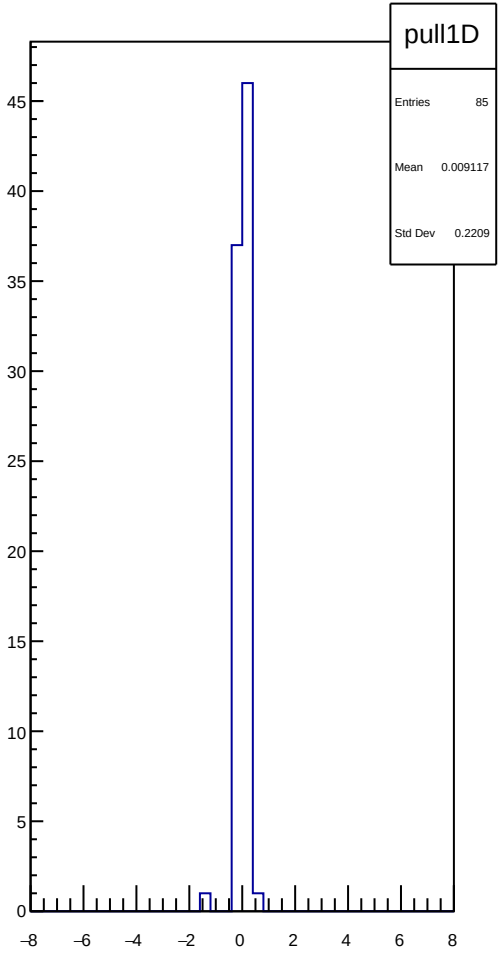

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 4.039 / 84
p0 6.503 ± 0.4078
pull
Entries 85
Mean 258.1
Std Dev 201.2
pull1D
Entries 85
Mean 0.01027
Std Dev 0.2177

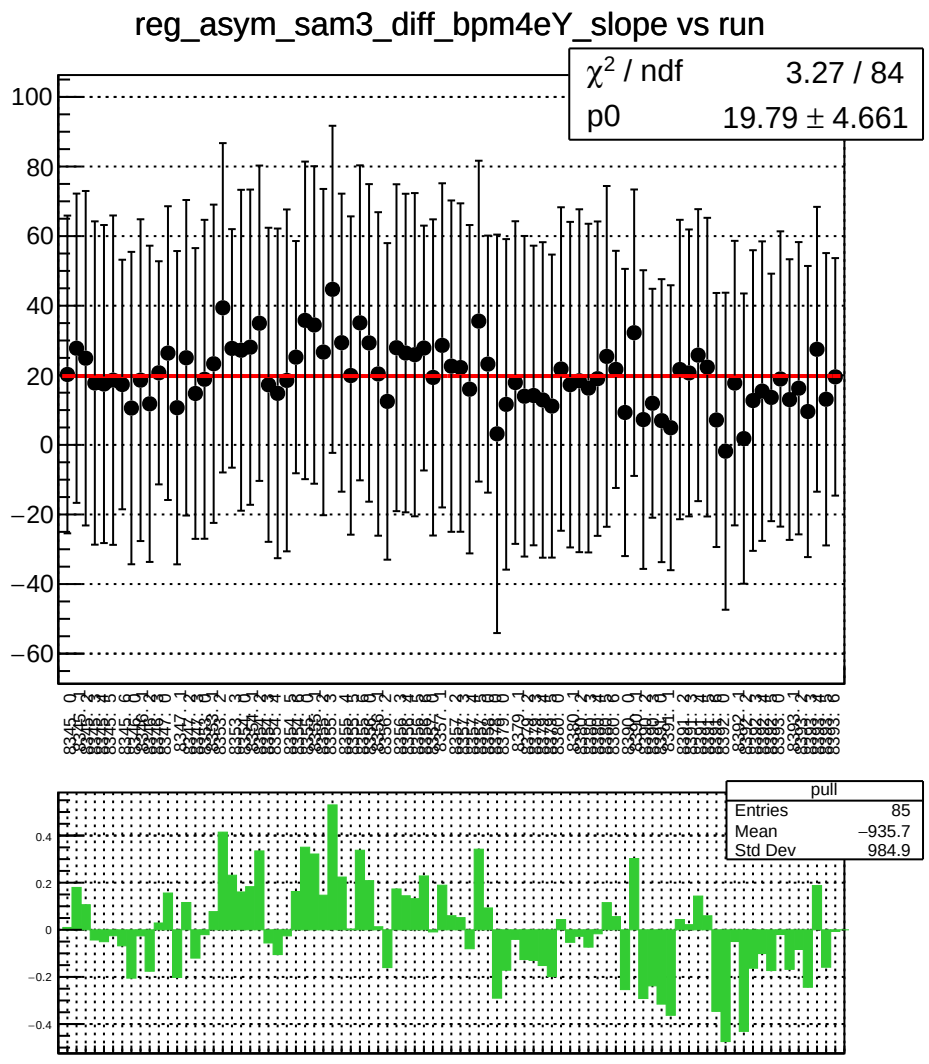

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 4.047 / 84
p0 −34.51 ± 2.514
pull
Entries 85
Mean 120.1
Std Dev 77.94
pull1D
Entries 85
Mean −0.02732
Std Dev 0.2165

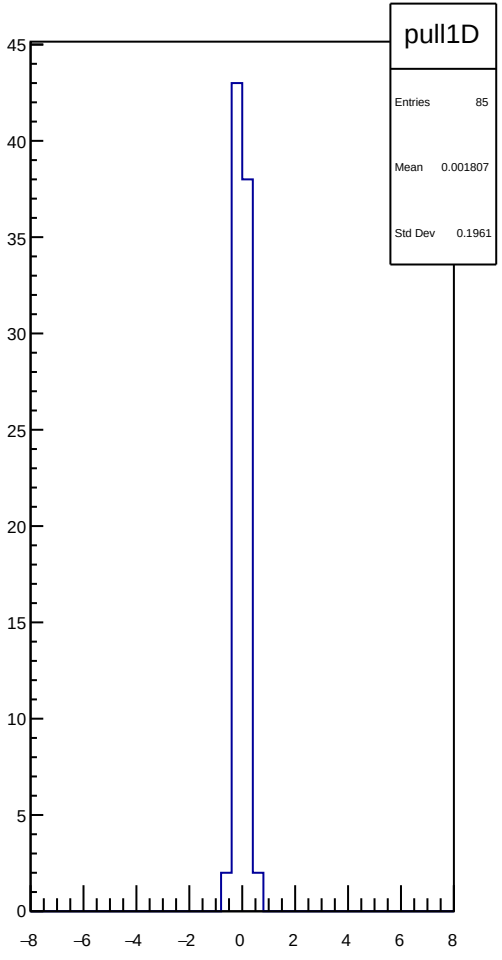

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 3.814 / 84
p0 −3.18 ± 4.417
pull
Entries 85
Mean −5449
Std Dev 5559

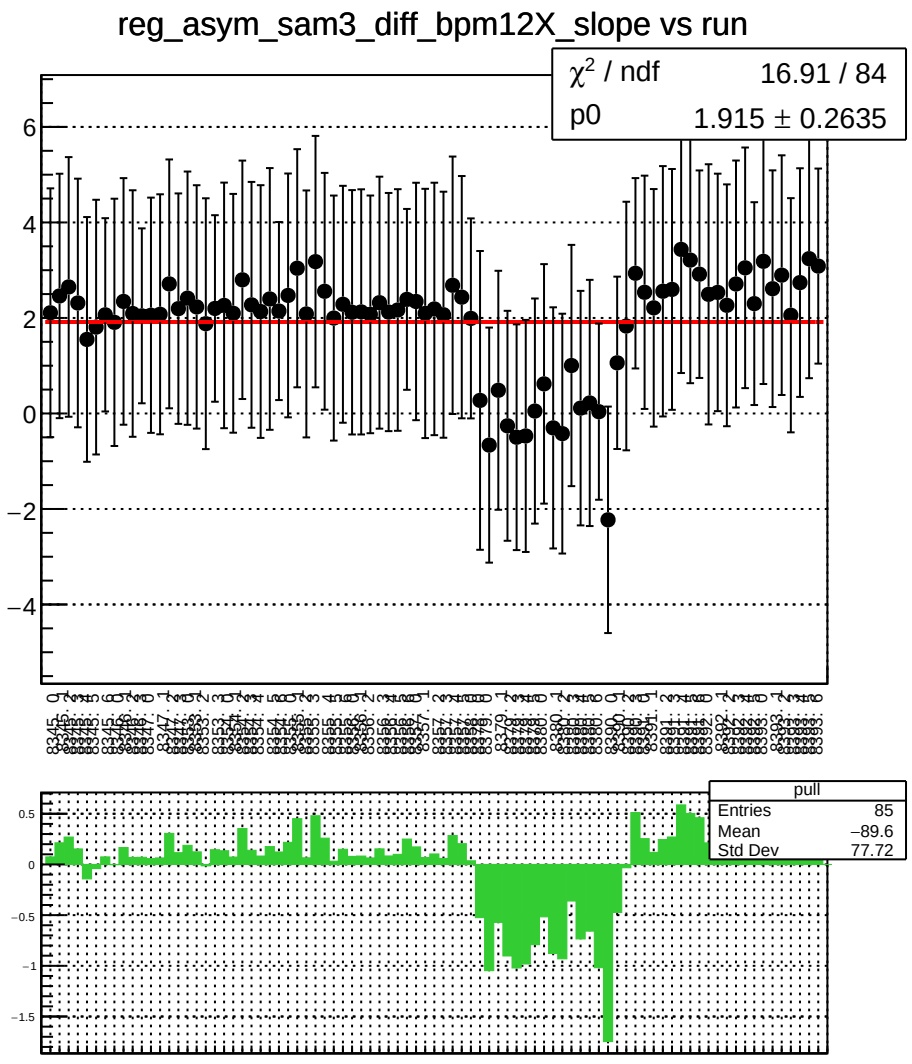

pull1D
Entries 85
Mean −6.426e−05
Std Dev 0.2118

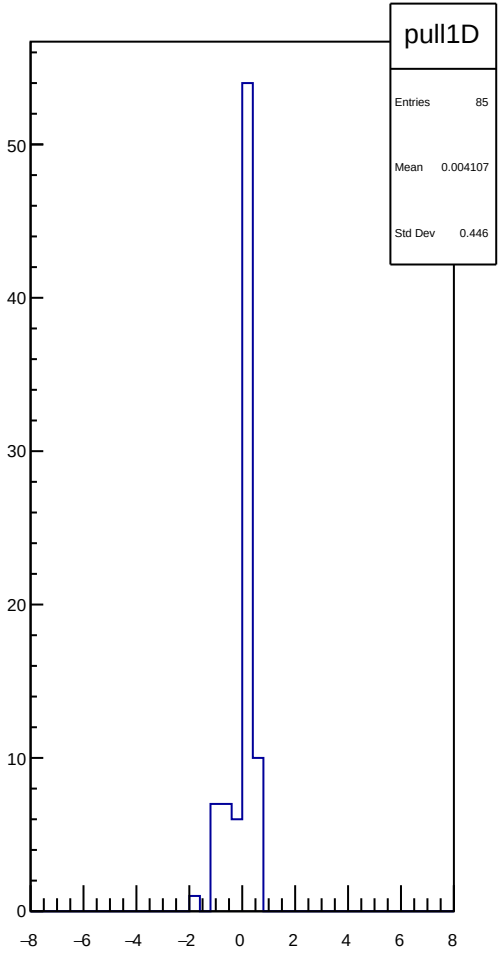

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 4.155 / 84
p0 −91.35 ± 2.761
pull
Entries 85
Mean 169.7
Std Dev 121.3

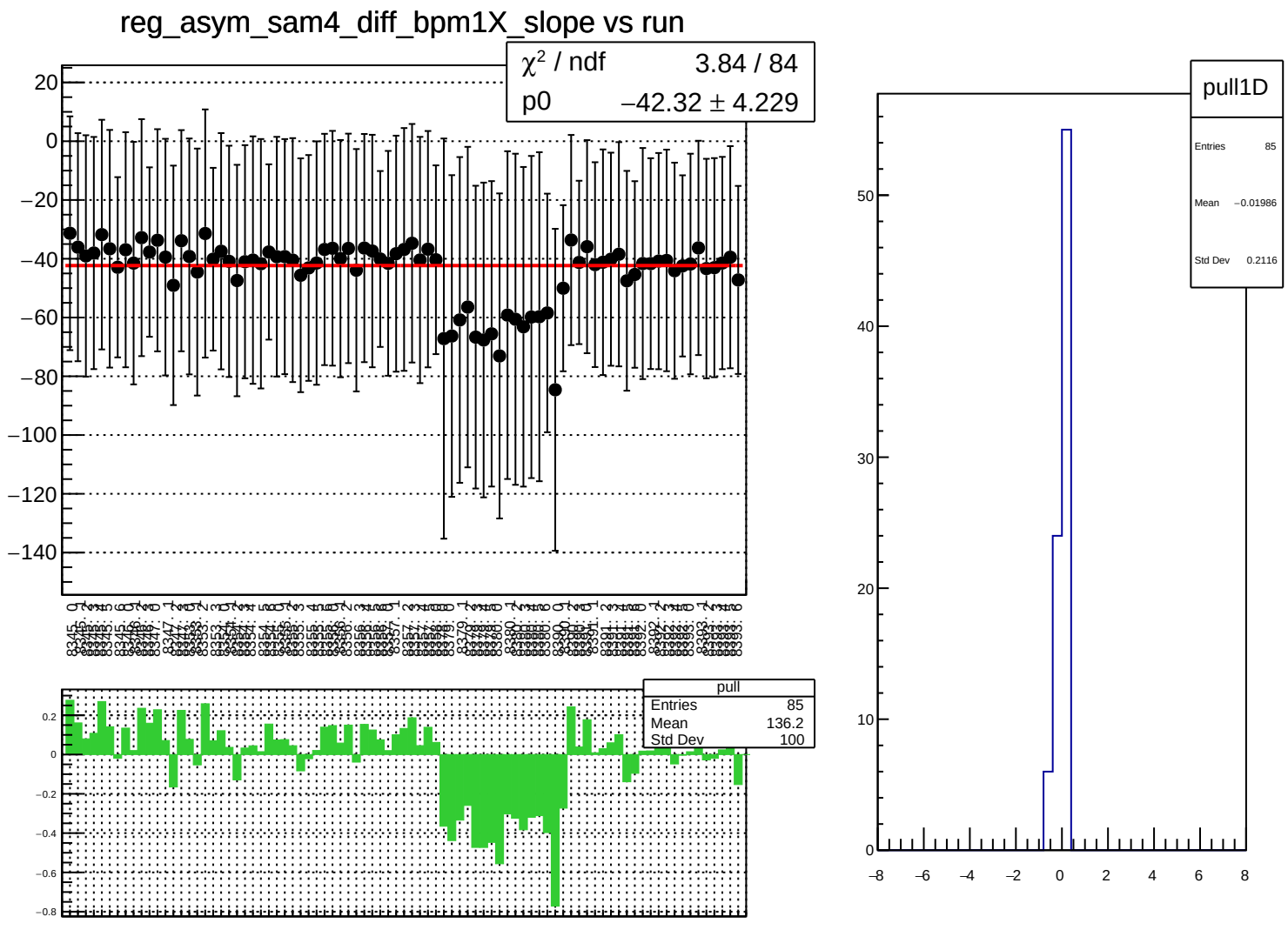

pull1D
Entries 85
Mean 0.009117
Std Dev 0.2209

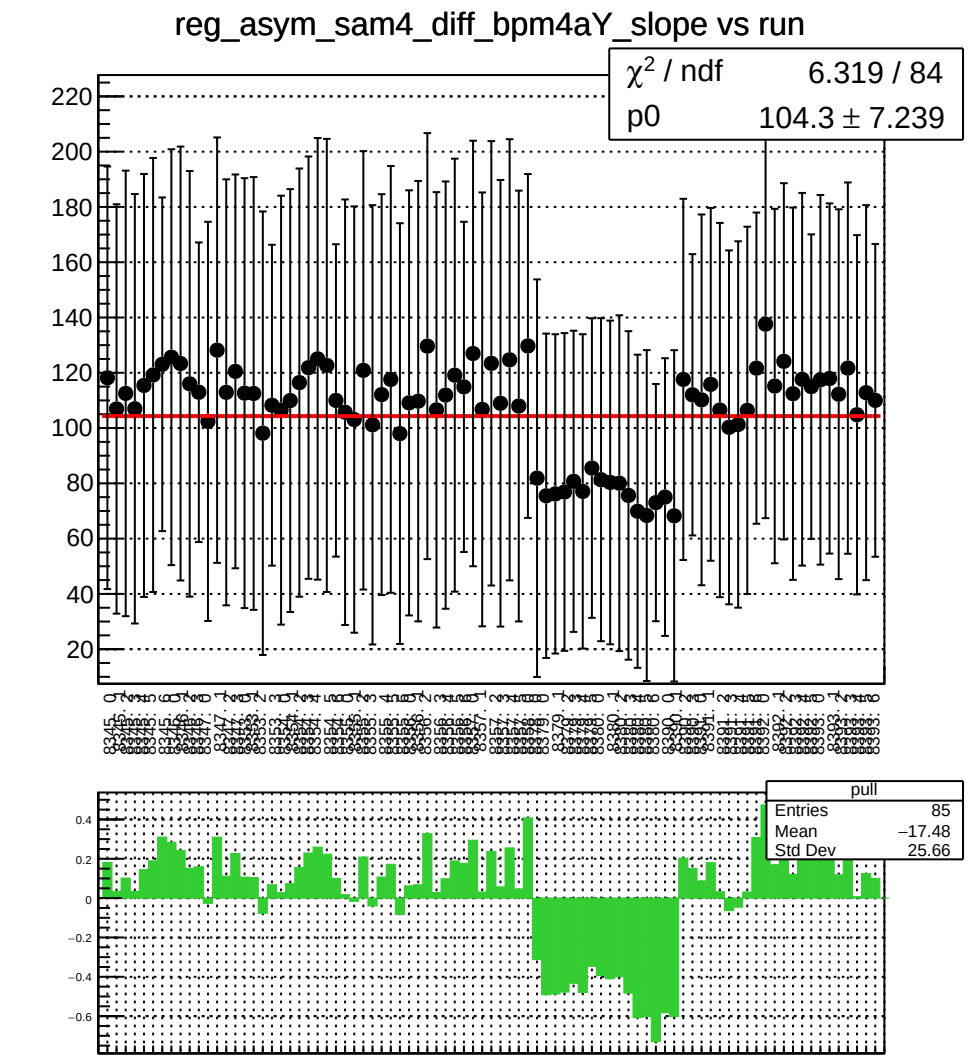

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 3.27 / 84
p0 19.79 ± 4.661
pull
Entries 85
Mean −935.7
Std Dev 984.9

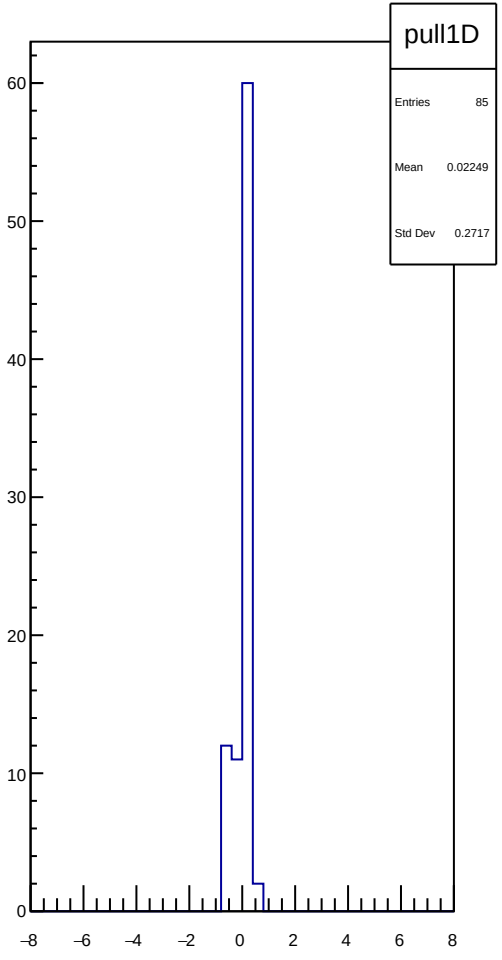

pull1D
Entries 85
Mean 0.001807
Std Dev 0.1961

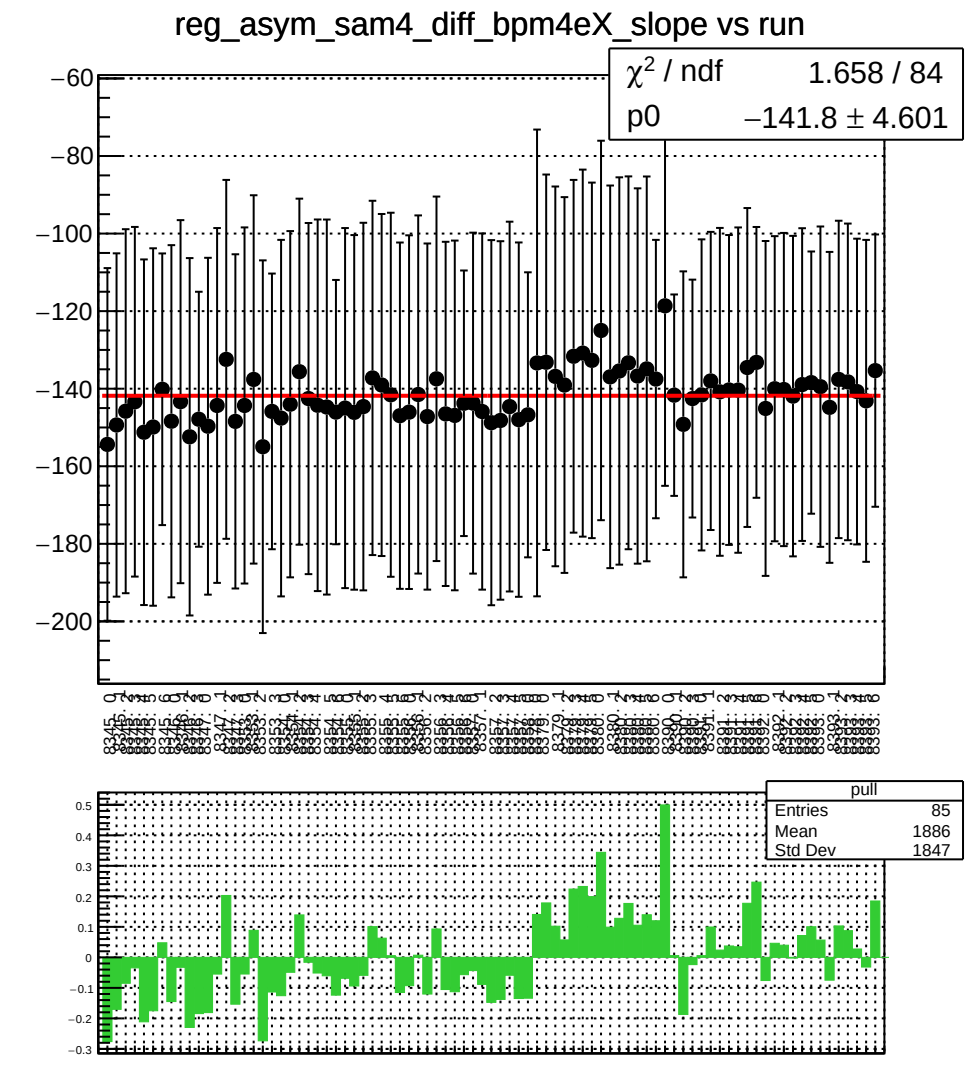

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 16.91 / 84
p0 1.915 ± 0.2635
pull
Entries 85
Mean −89.6
Std Dev 77.72

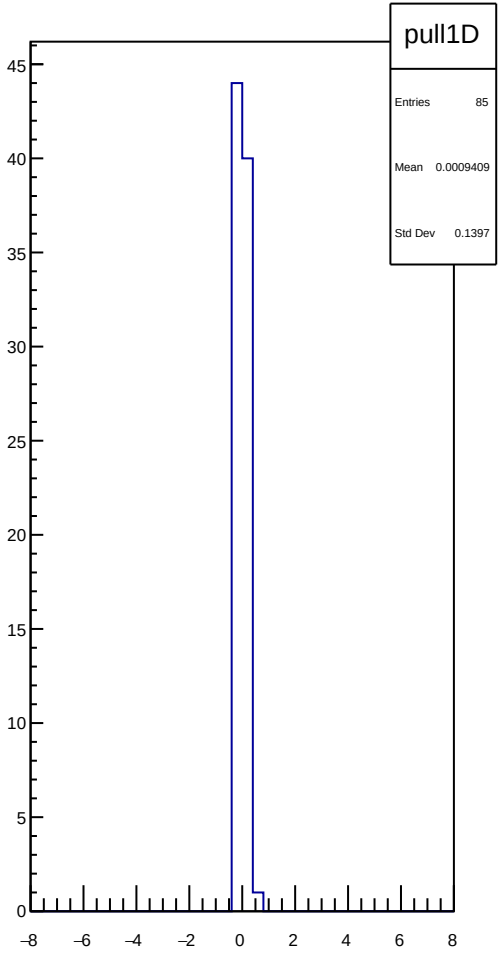

pull1D
Entries 85
Mean 0.004107
Std Dev 0.446

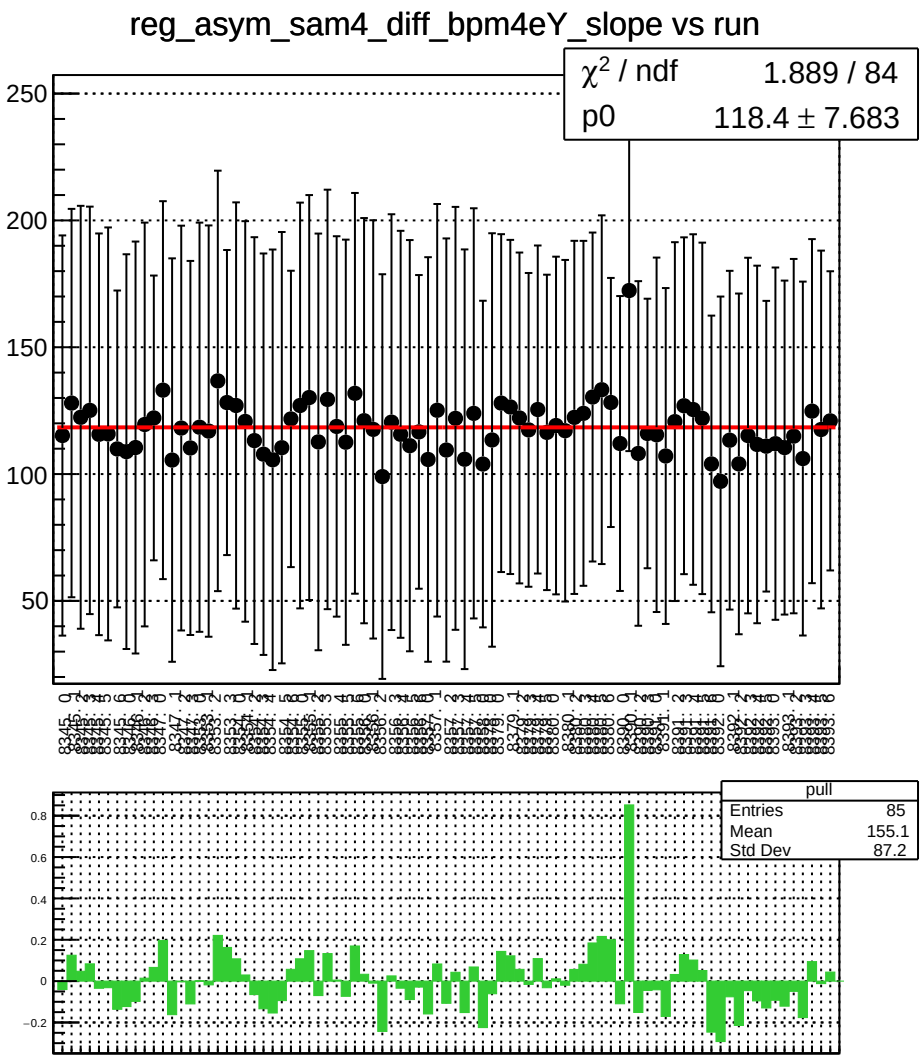

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 3.84 / 84
p0 −42.32 ± 4.229
pull
Entries 85
Mean 136.2
Std Dev 100
pull1D
Entries 85
Mean −0.01986
Std Dev 0.2116

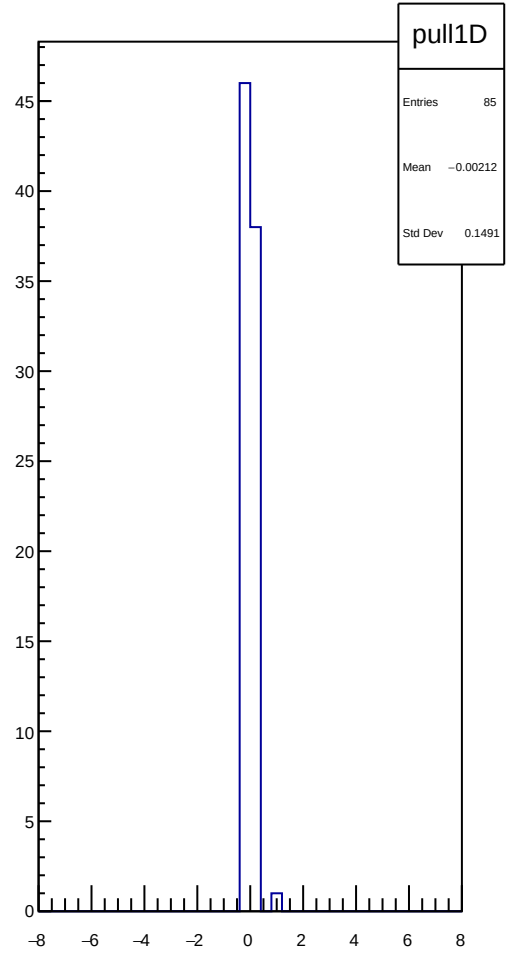

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 6.319 / 84
p0 104.3 ± 7.239
pull
Entries 85
Mean −17.48
Std Dev 25.66

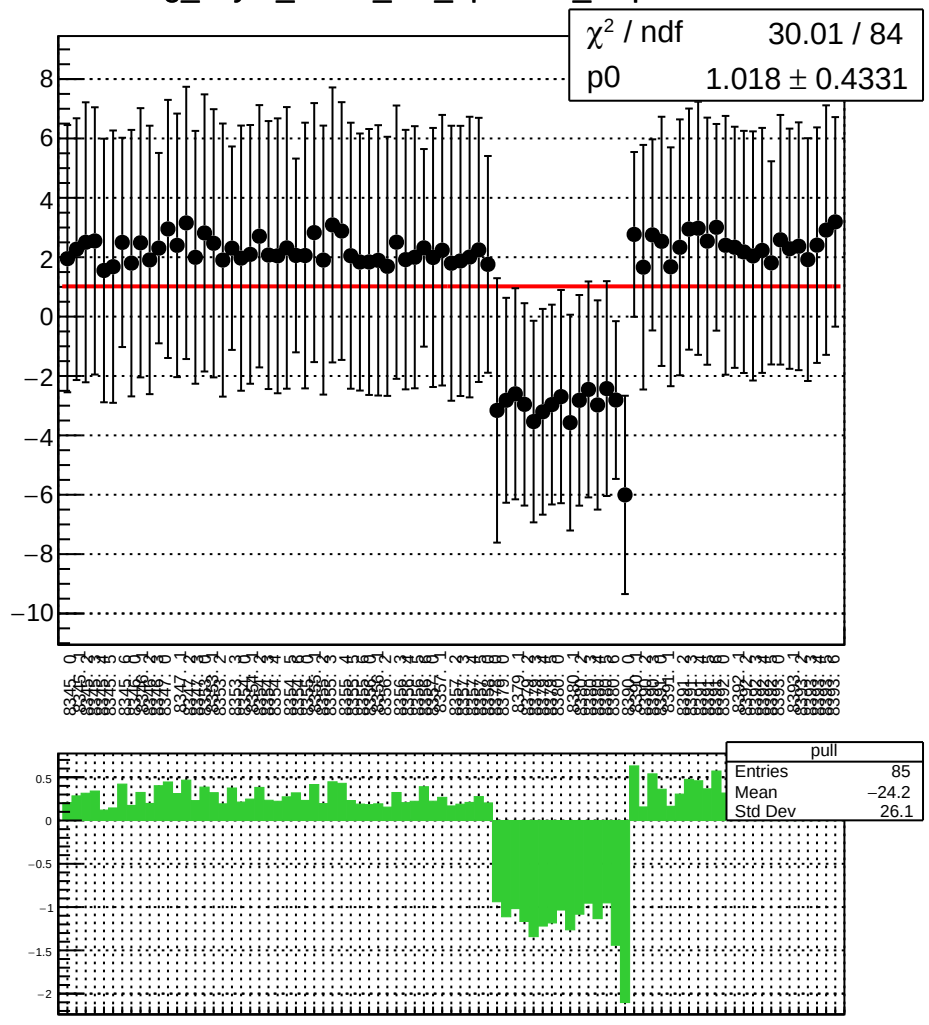

pull1D
Entries 85
Mean 0.02249
Std Dev 0.2717

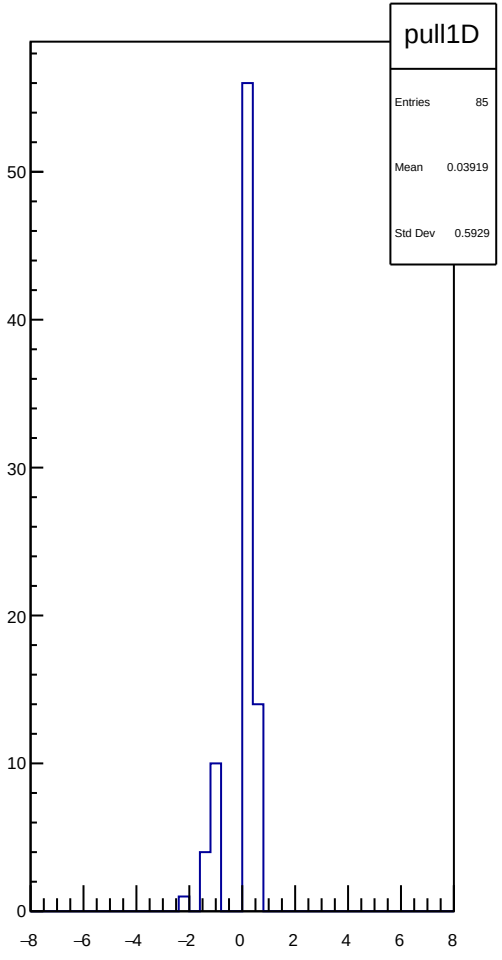

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 1.658 / 84
p0 −141.8 ± 4.601
pull
Entries 85
Mean 1886
Std Dev 1847

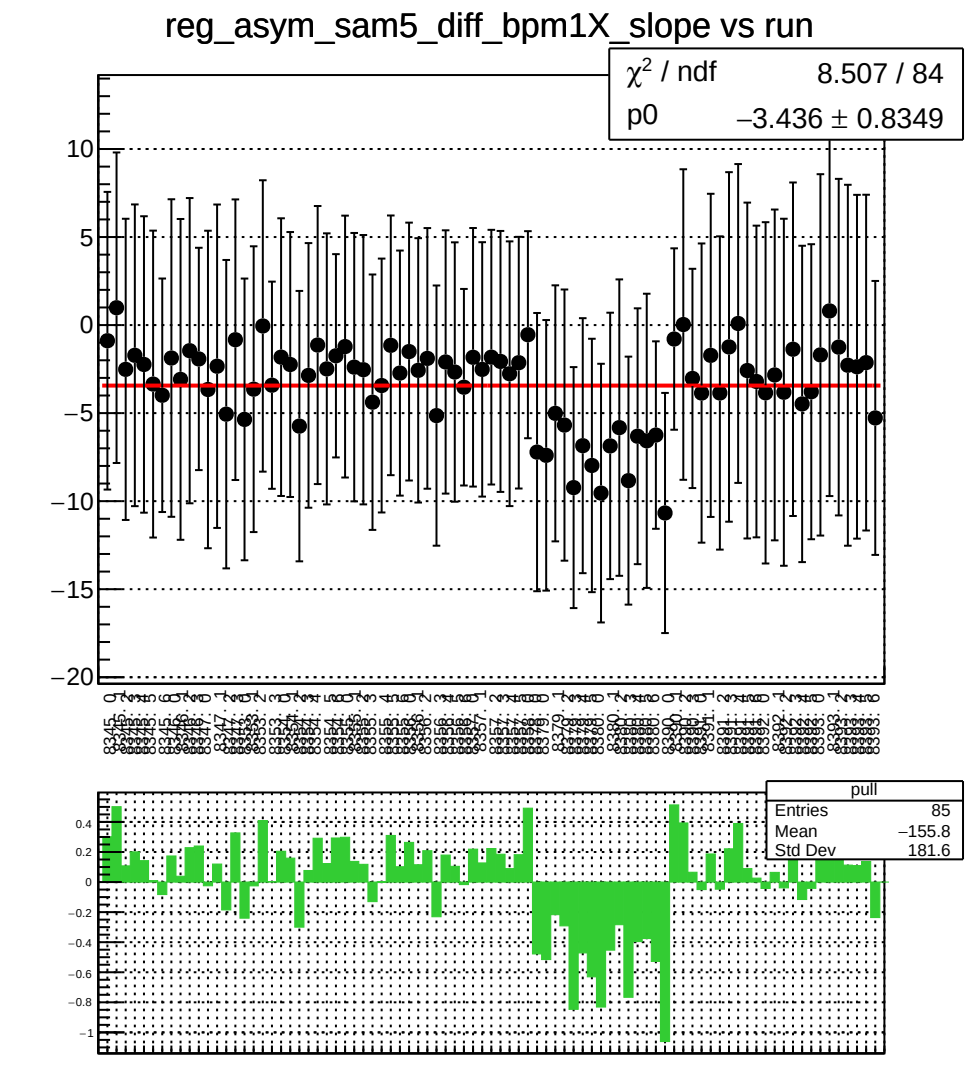

pull1D
Entries 85
Mean 0.0009409
Std Dev 0.1397

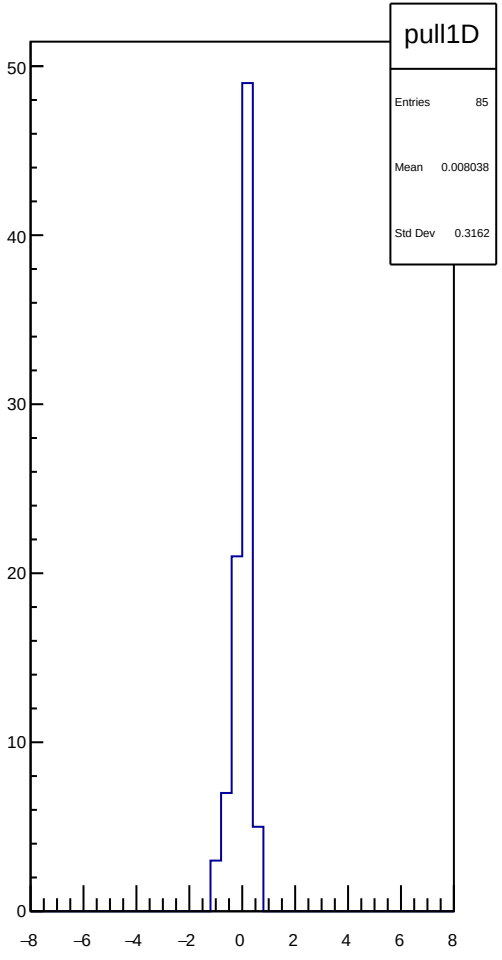

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 1.889 / 84
p0 118.4 ± 7.683
250
200
150
100
50
pull
Entries 85
Mean 155.1
Std Dev 87.2
0.8
0.6
0.4
0.2
0
−0.2

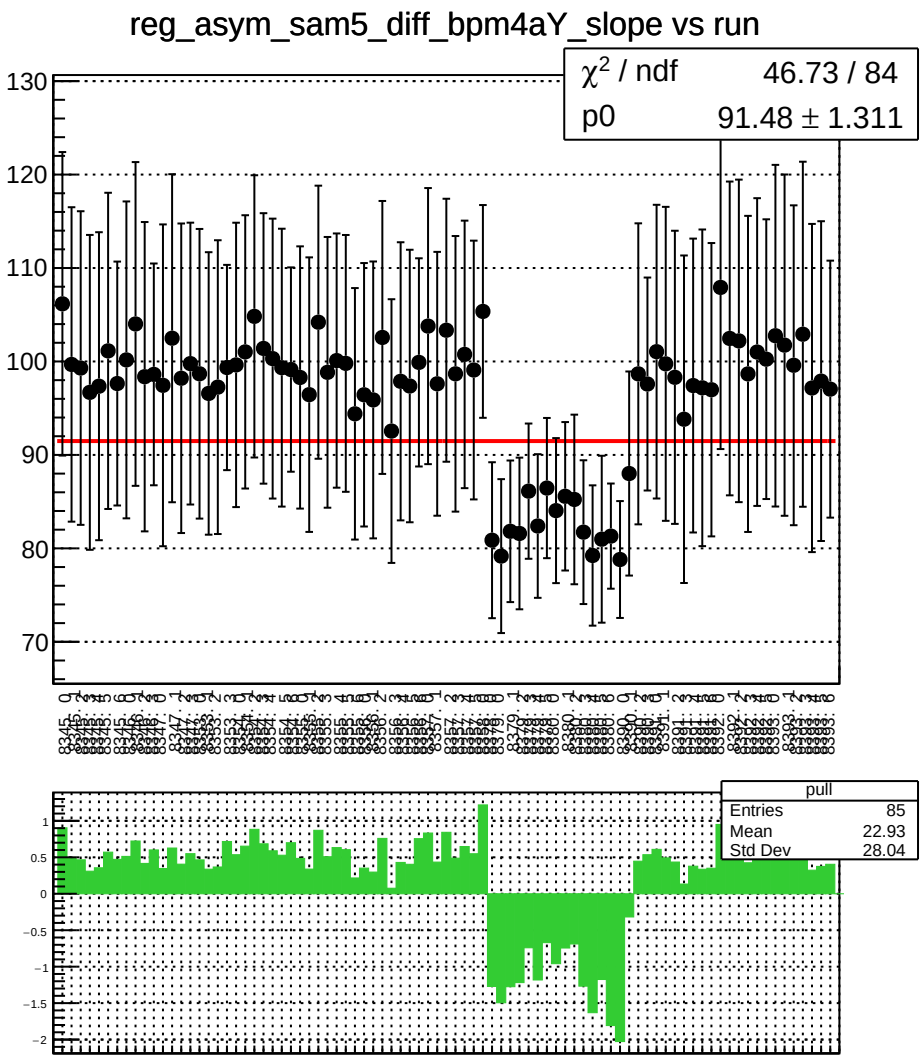

pull1D
Entries 85
Mean −0.00212
Std Dev 0.1491
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

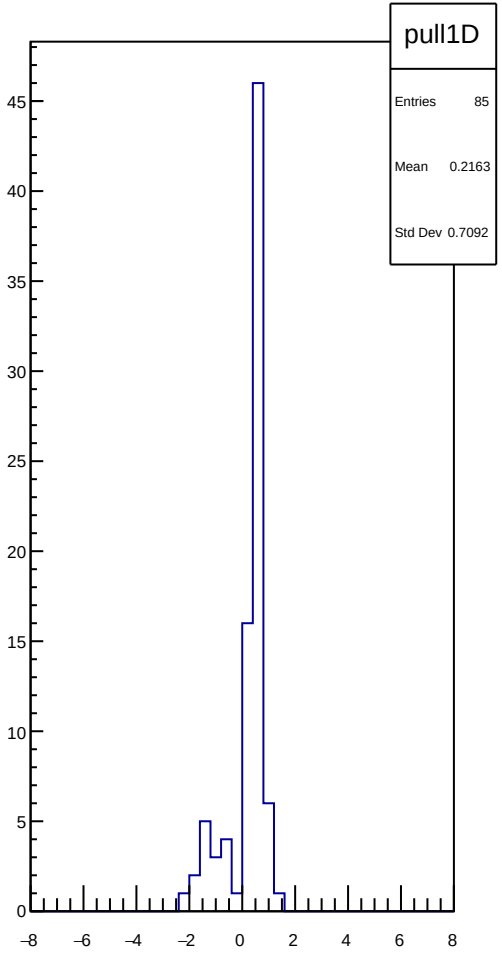

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 30.01 / 84
p0 1.018 ± 0.4331
pull
Entries 85
Mean −24.2
Std Dev 26.1

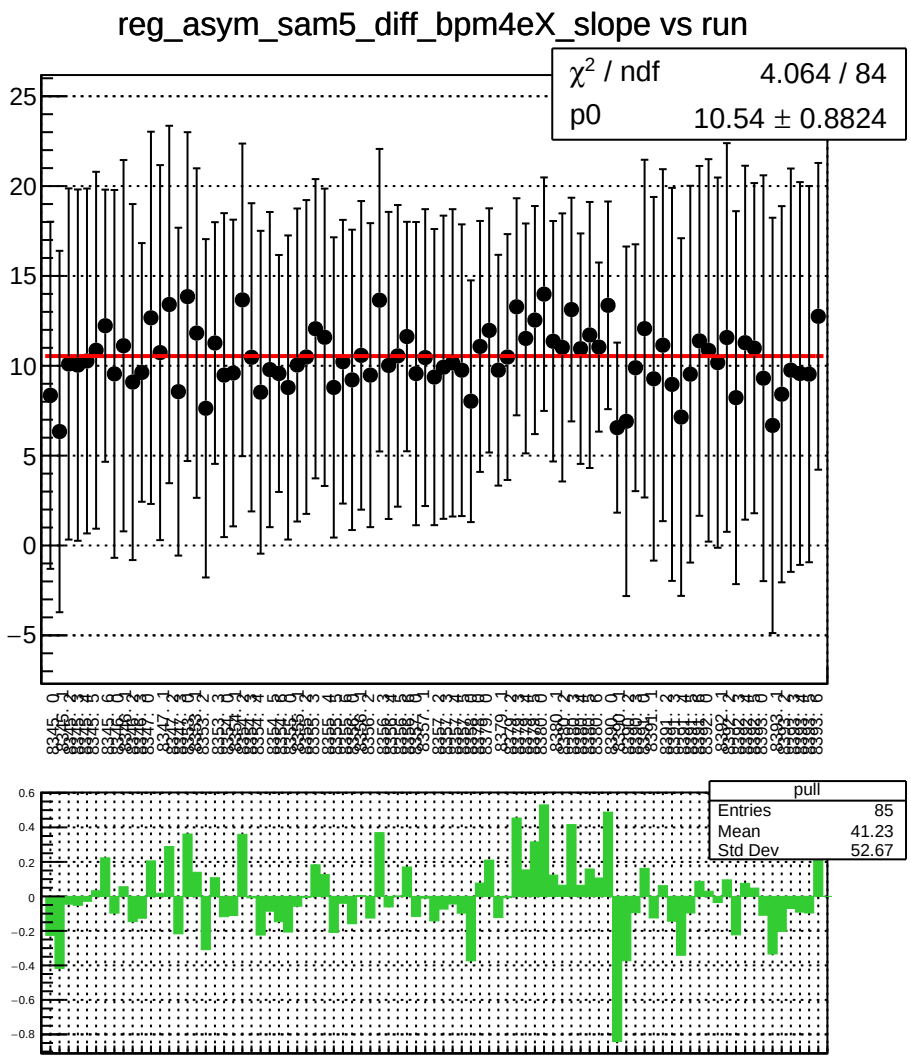

pull1D
Entries 85
Mean 0.03919
Std Dev 0.5929

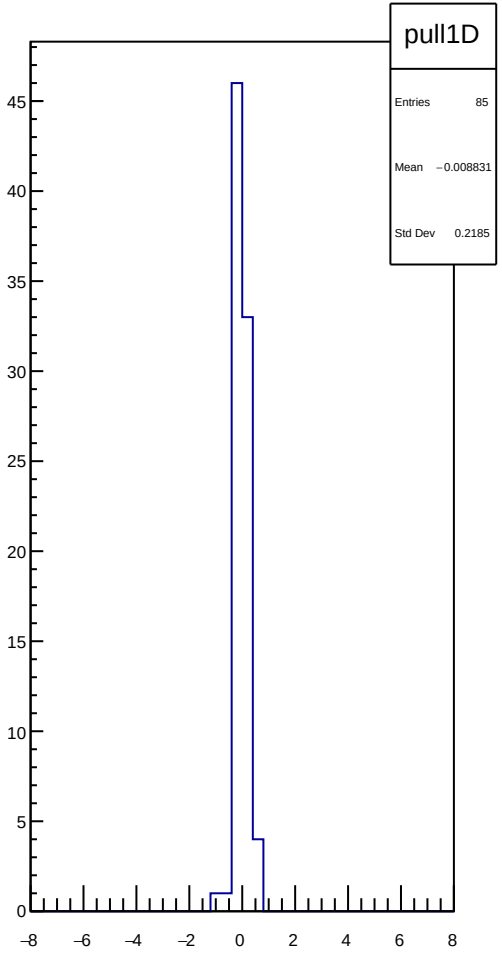

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 8.507 / 84
p0 −3.436 ± 0.8349
pull
Entries 85
Mean −155.8
Std Dev 181.6

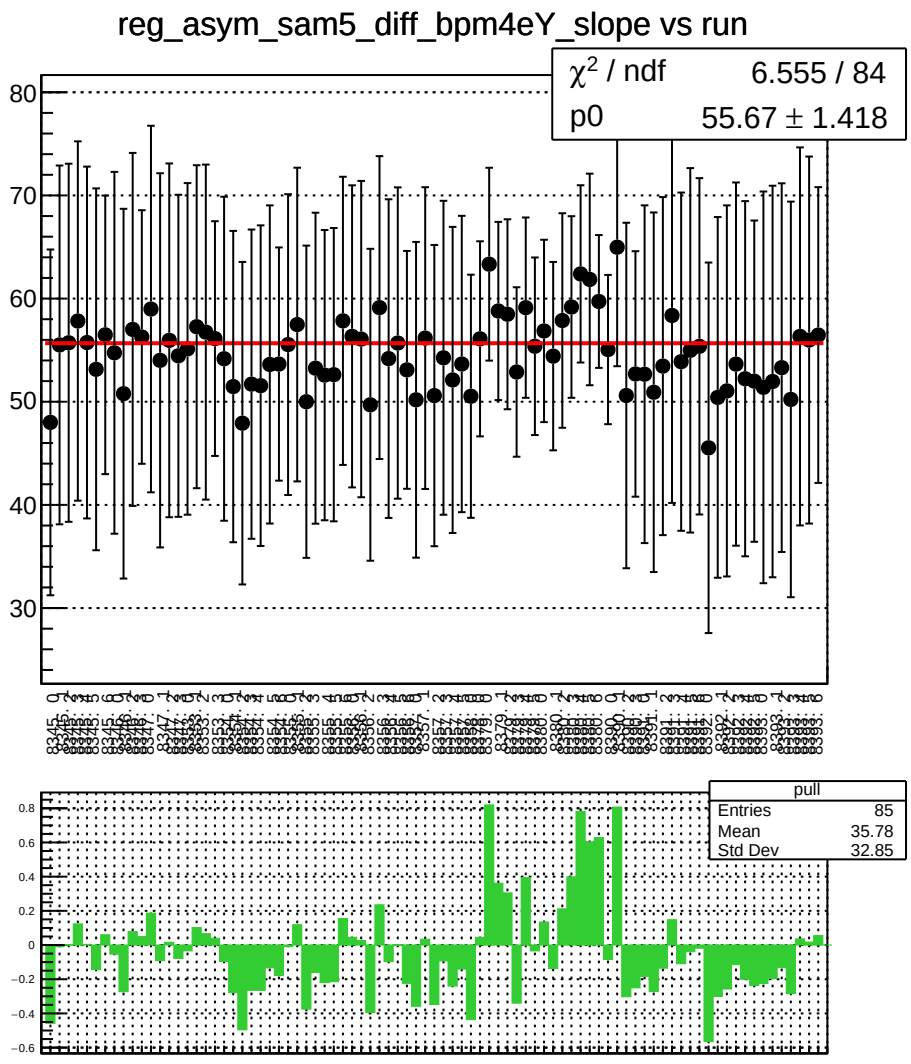

pull1D
Entries 85
Mean 0.008038
Std Dev 0.3162

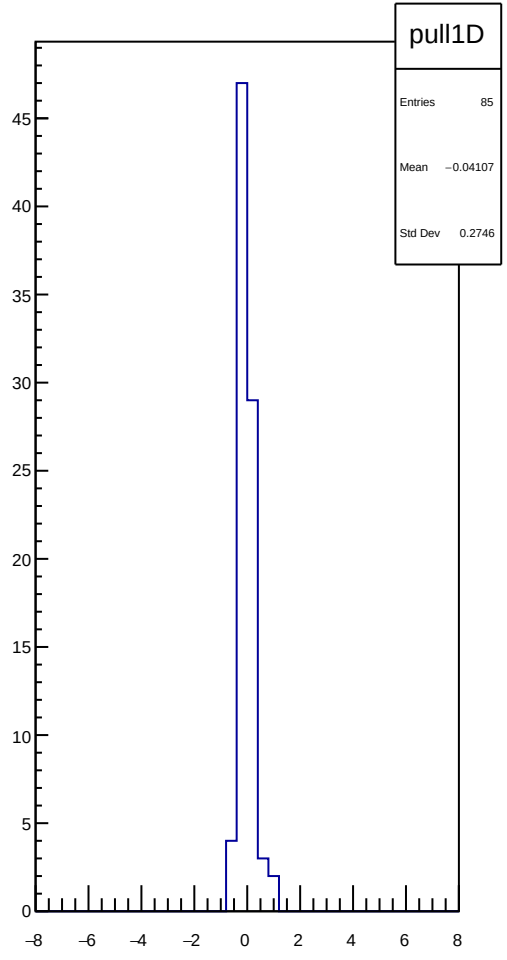

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 46.73 / 84
p0 91.48 ± 1.311
pull
Entries 85
Mean 22.93
Std Dev 28.04

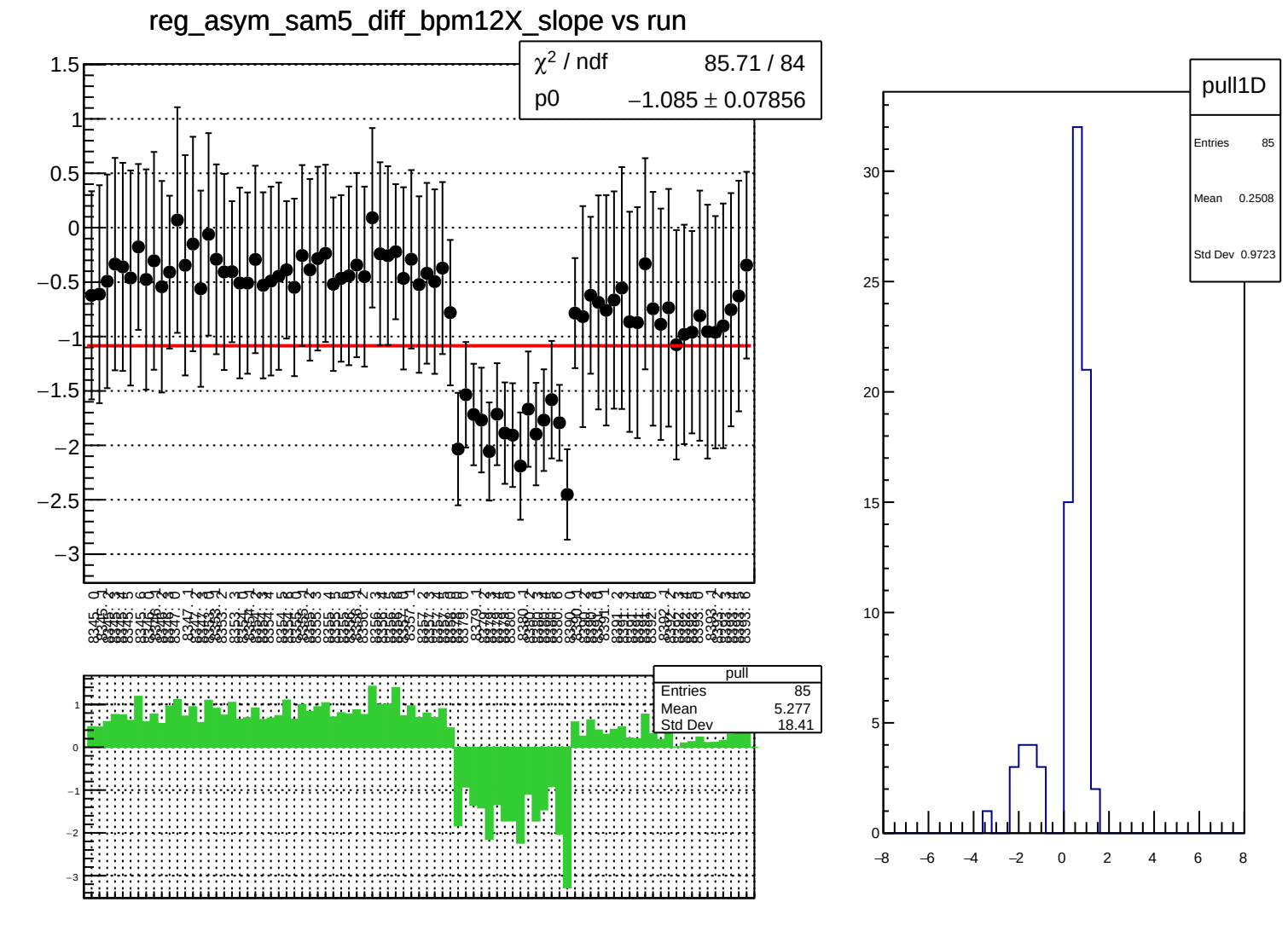

pull1D
Entries 85
Mean 0.2163
Std Dev 0.7092

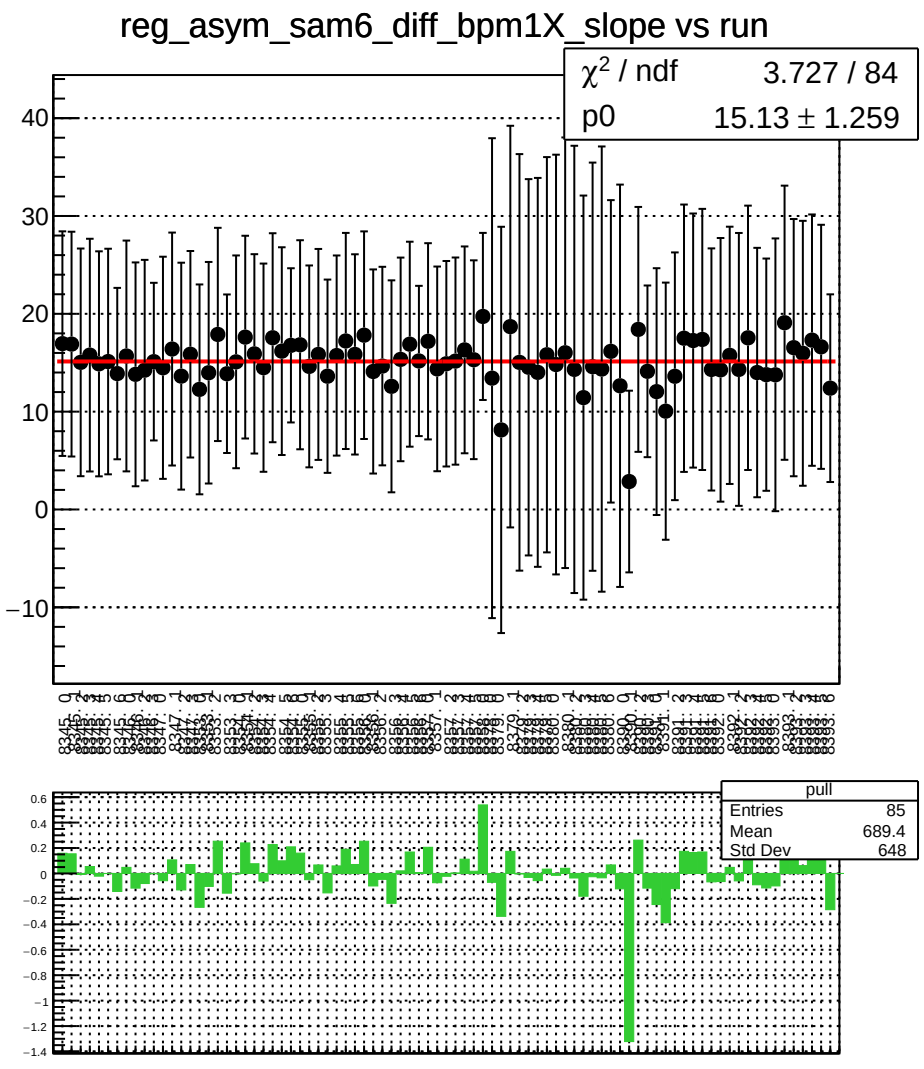

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 4.064 / 84
p0 10.54 ± 0.8824
pull
Entries 85
Mean 41.23
Std Dev 52.67

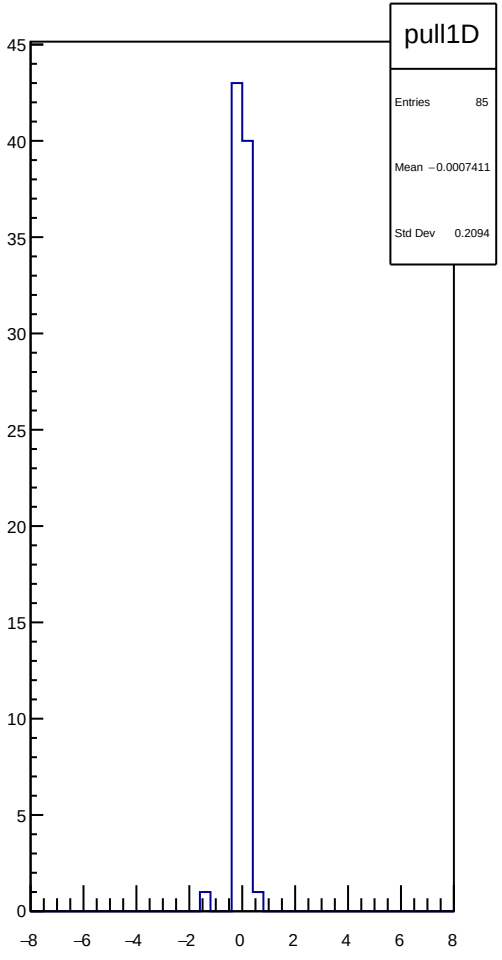

pull1D
Entries 85
Mean −0.008831
Std Dev 0.2185

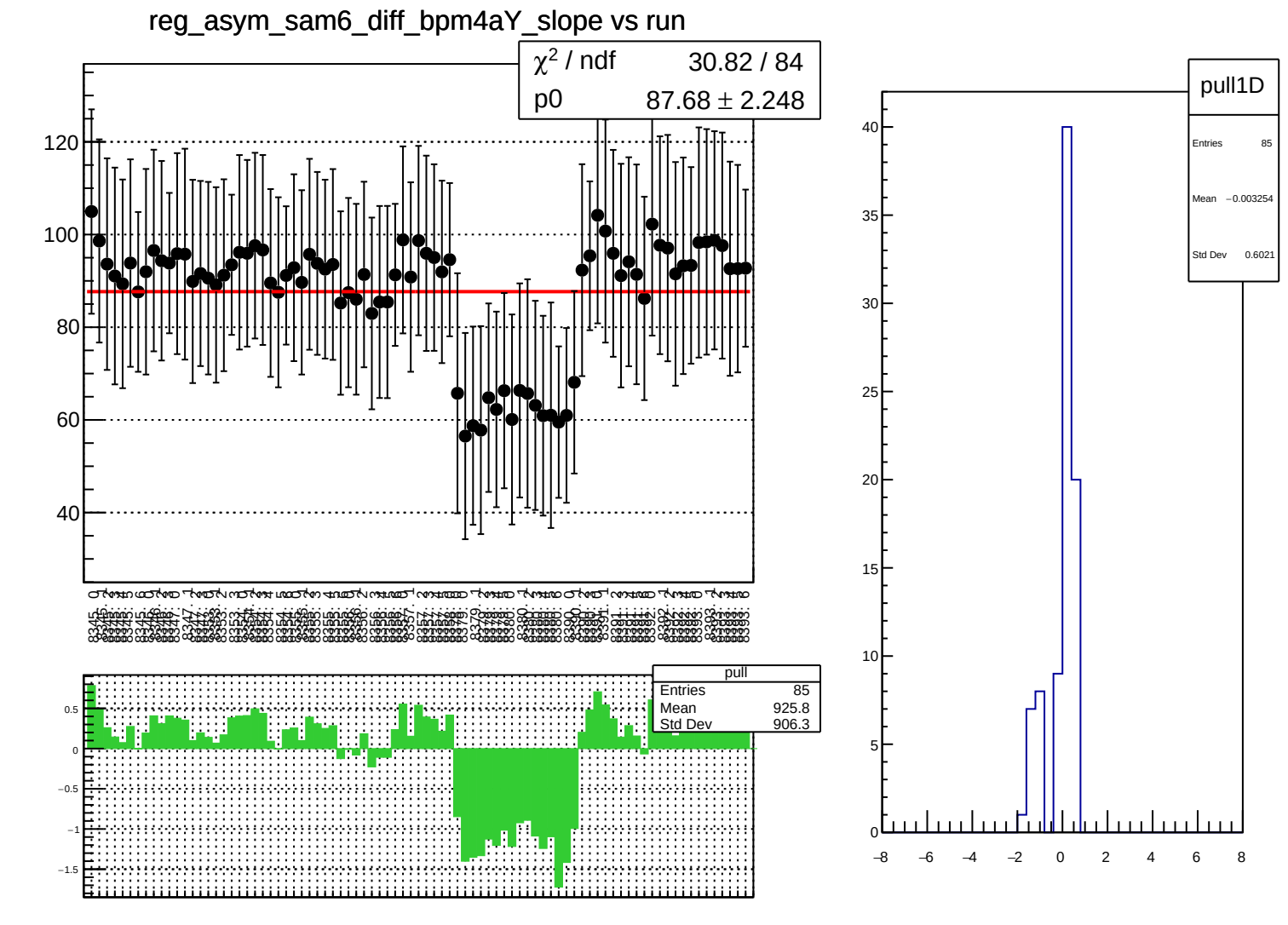

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 6.555 / 84
p0 55.67 ± 1.418
pull
Entries 85
Mean 35.78
Std Dev 32.85

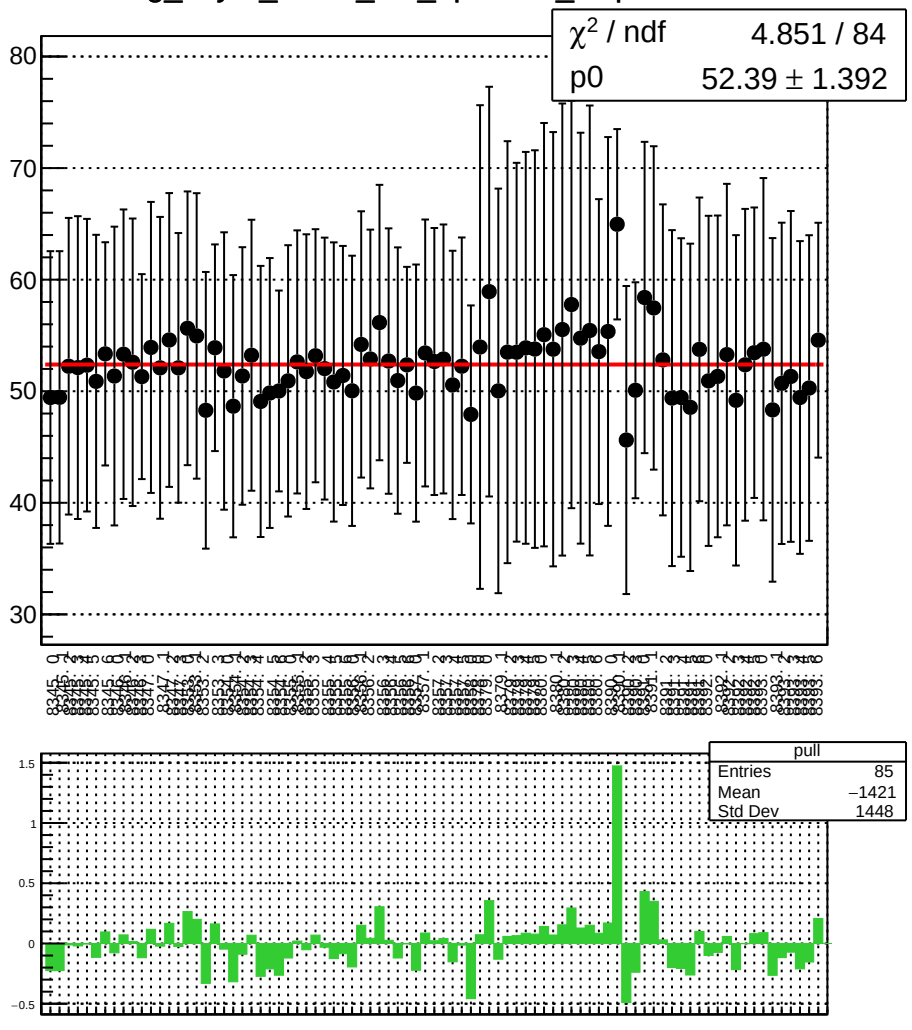

pull1D
Entries 85
Mean −0.04107
Std Dev 0.2746

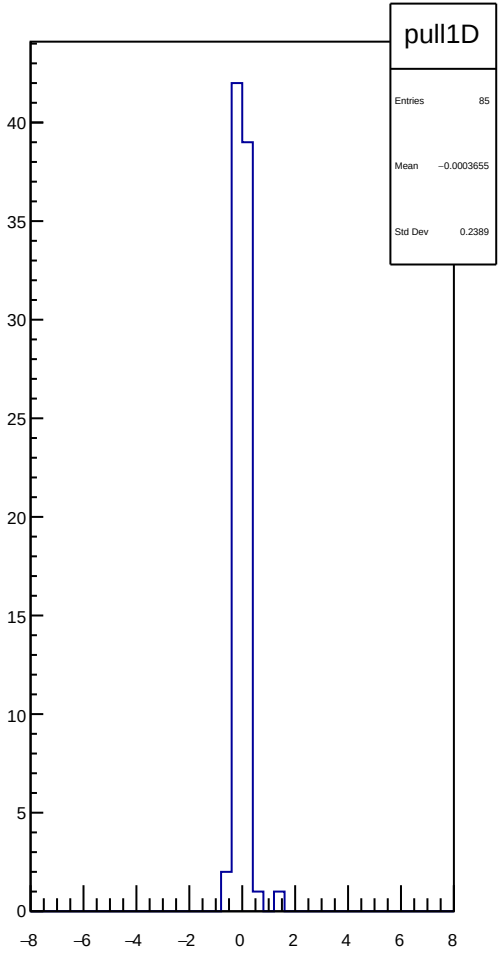

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 85.71 / 84
p0 −1.085 ± 0.07856
pull
Entries 85
Mean 5.277
Std Dev 18.41
pull1D
Entries 85
Mean 0.2508
Std Dev 0.9723

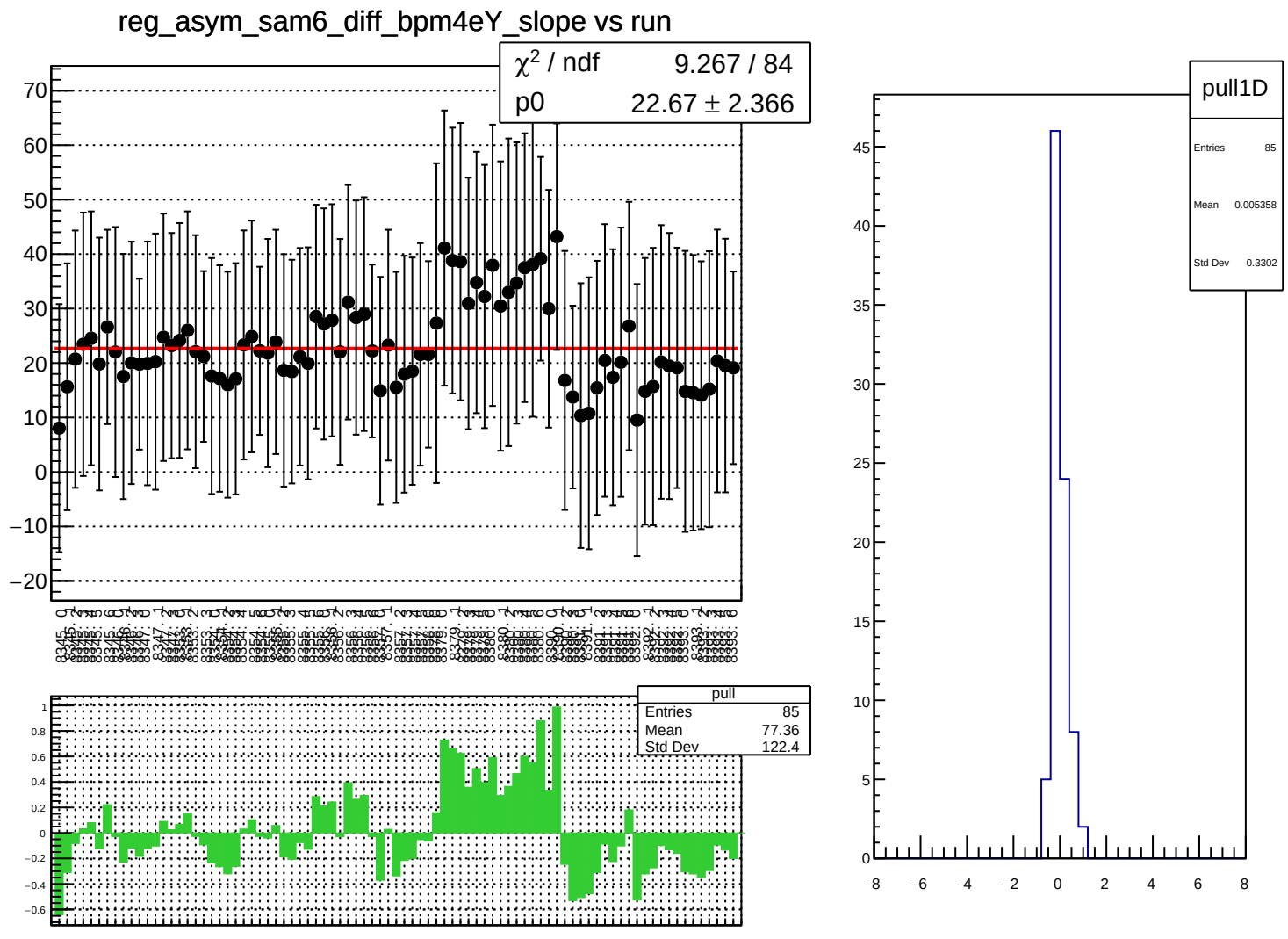

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 3.727 / 84
p0 15.13 ± 1.259
pull
Entries 85
Mean 689.4
Std Dev 648

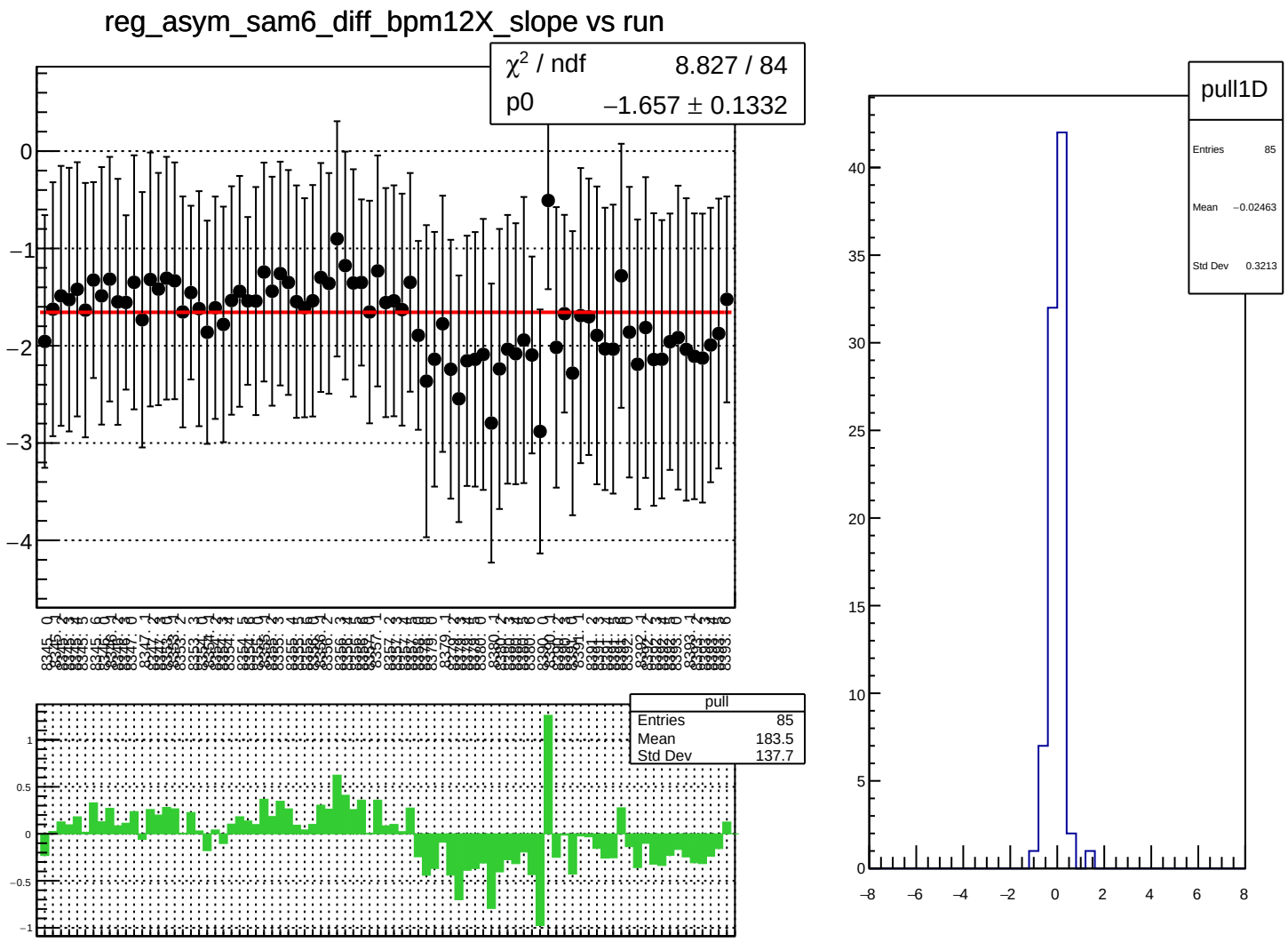

pull1D
Entries 85
Mean −0.0007411
Std Dev 0.2094

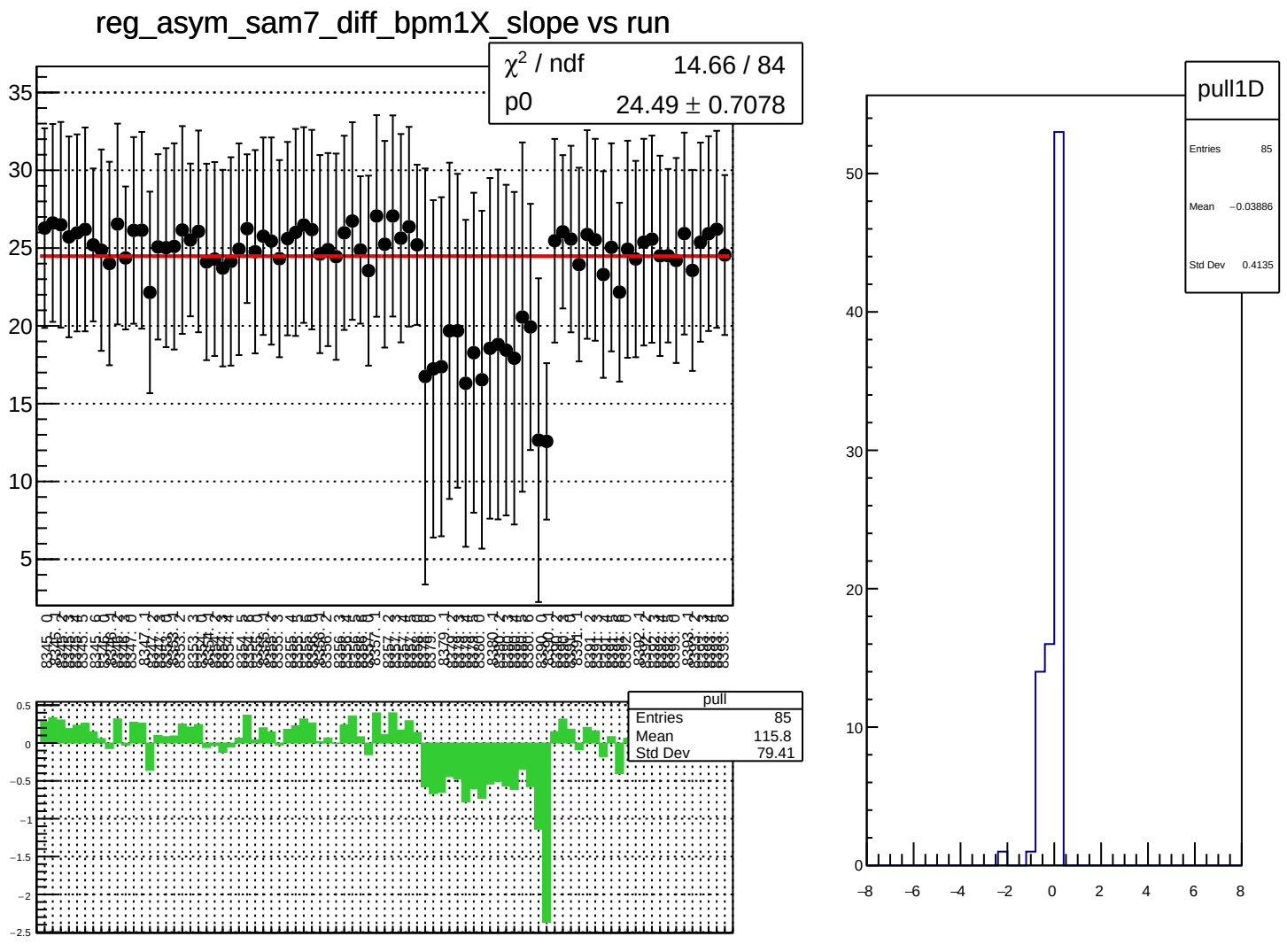

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 30.82 / 84
p0 87.68 ± 2.248
120
100
80
60
40
pull
Entries 85
Mean 925.8
Std Dev 906.3
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean −0.003254
Std Dev 0.6021
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

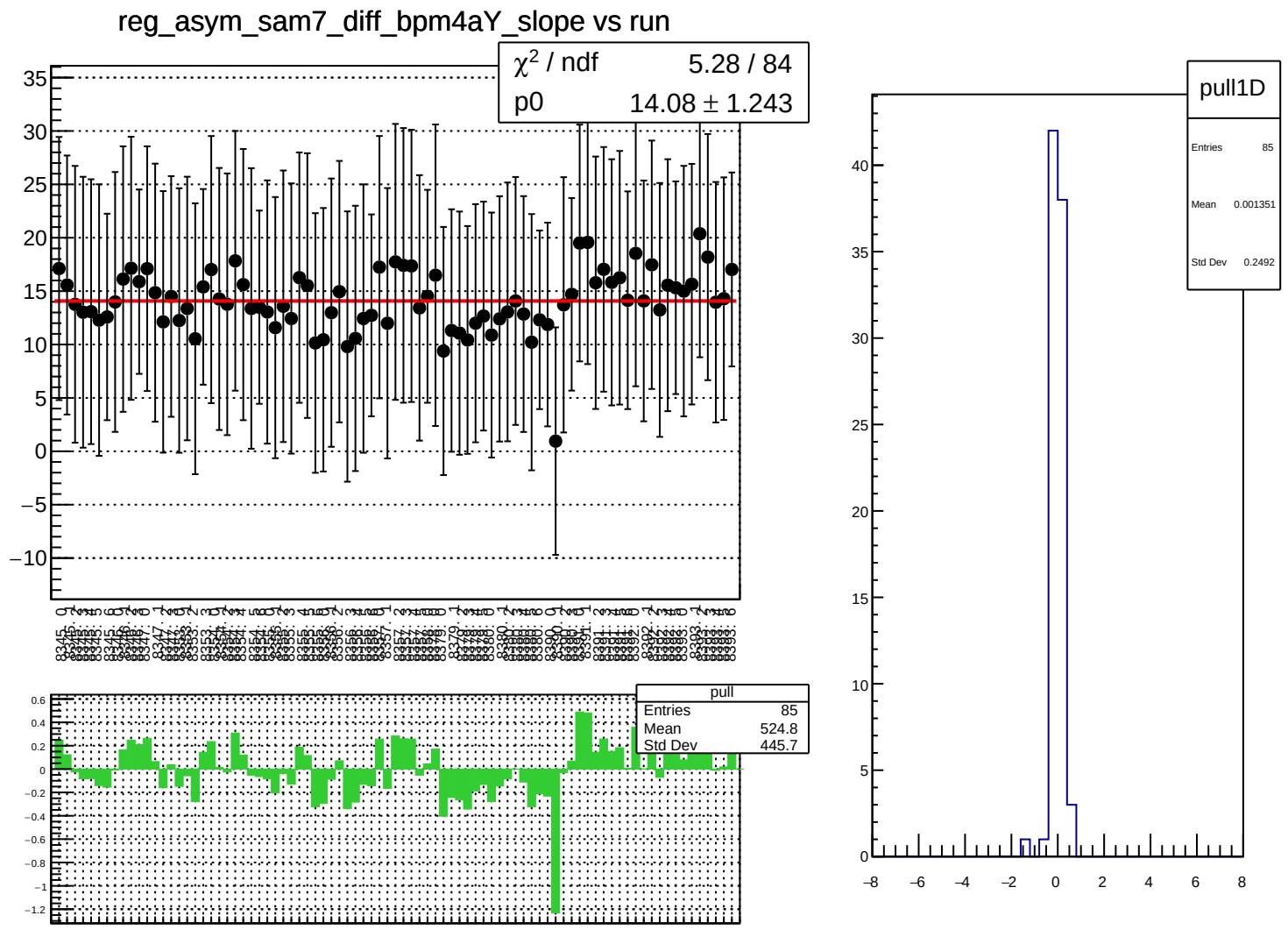

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 4.851 / 84
p0 52.39 ± 1.392
pull
Entries 85
Mean −1421
Std Dev 1448

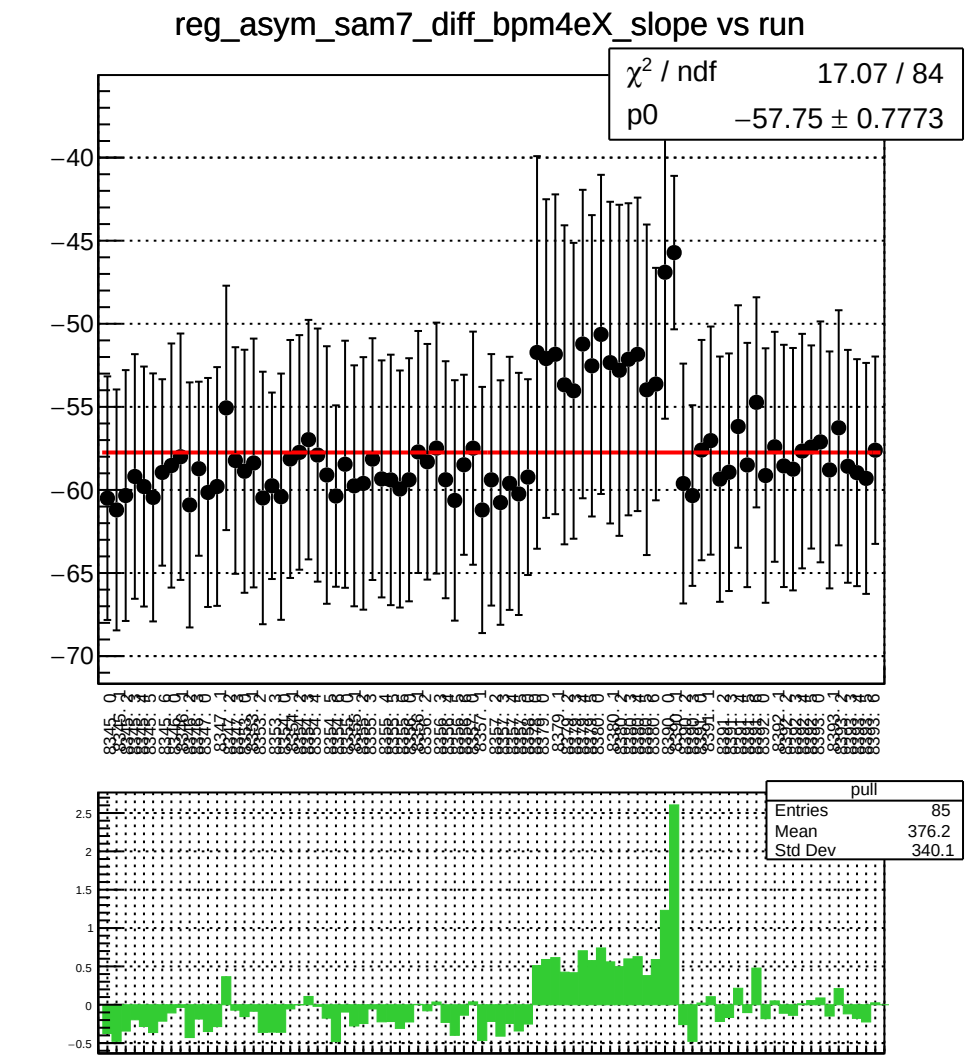

pull1D
Entries 85
Mean −0.0003655
Std Dev 0.2389

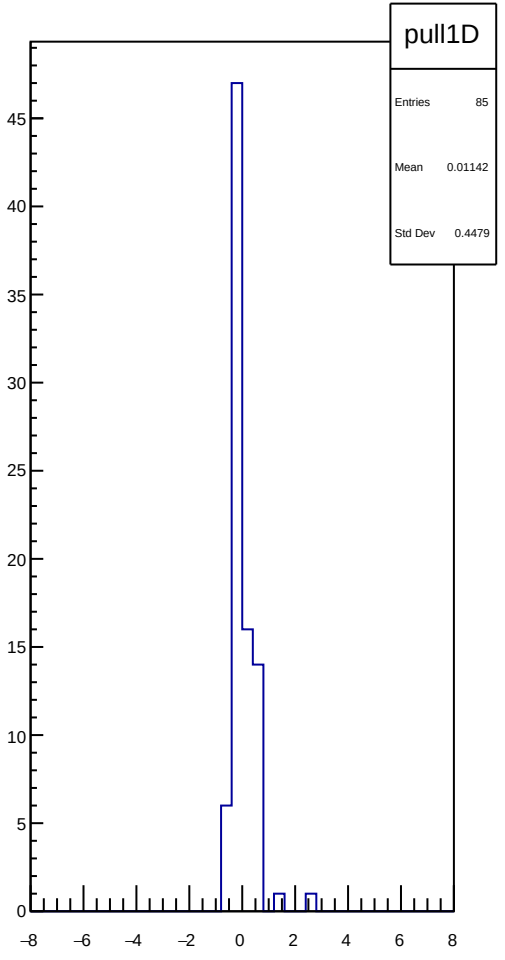

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 9.267 / 84
p0 22.67 ± 2.366
pull
Entries 85
Mean 77.36
Std Dev 122.4
pull1D
Entries 85
Mean 0.005358
Std Dev 0.3302

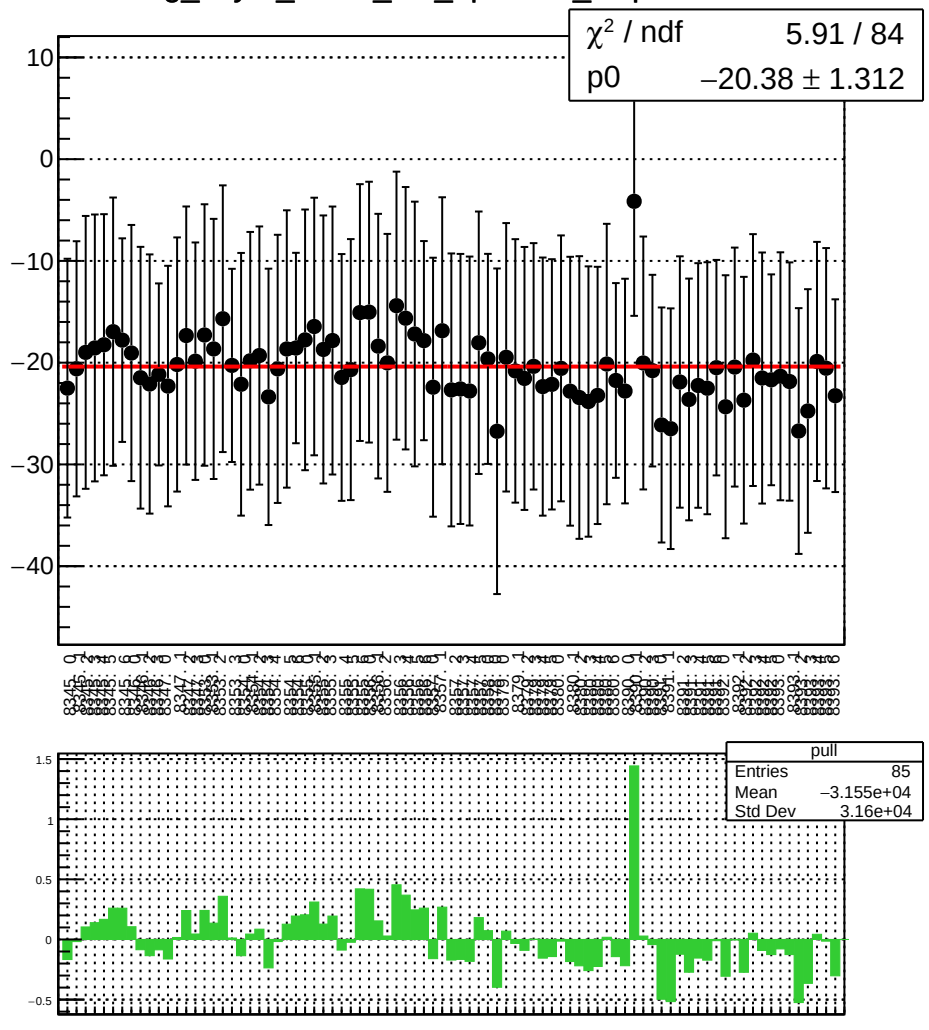

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 8.827 / 84
p0 −1.657 ± 0.1332
pull
Entries 85
Mean 183.5
Std Dev 137.7
pull1D
Entries 85
Mean −0.02463
Std Dev 0.3213

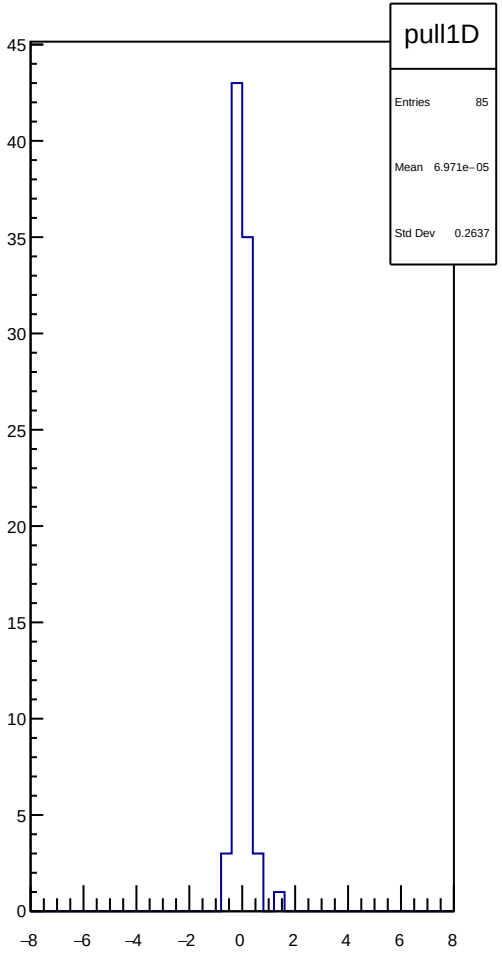

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 14.66 / 84
p0 24.49 ± 0.7078
pull
Entries 85
Mean 115.8
Std Dev 79.41
pull1D
Entries 85
Mean −0.03886
Std Dev 0.4135

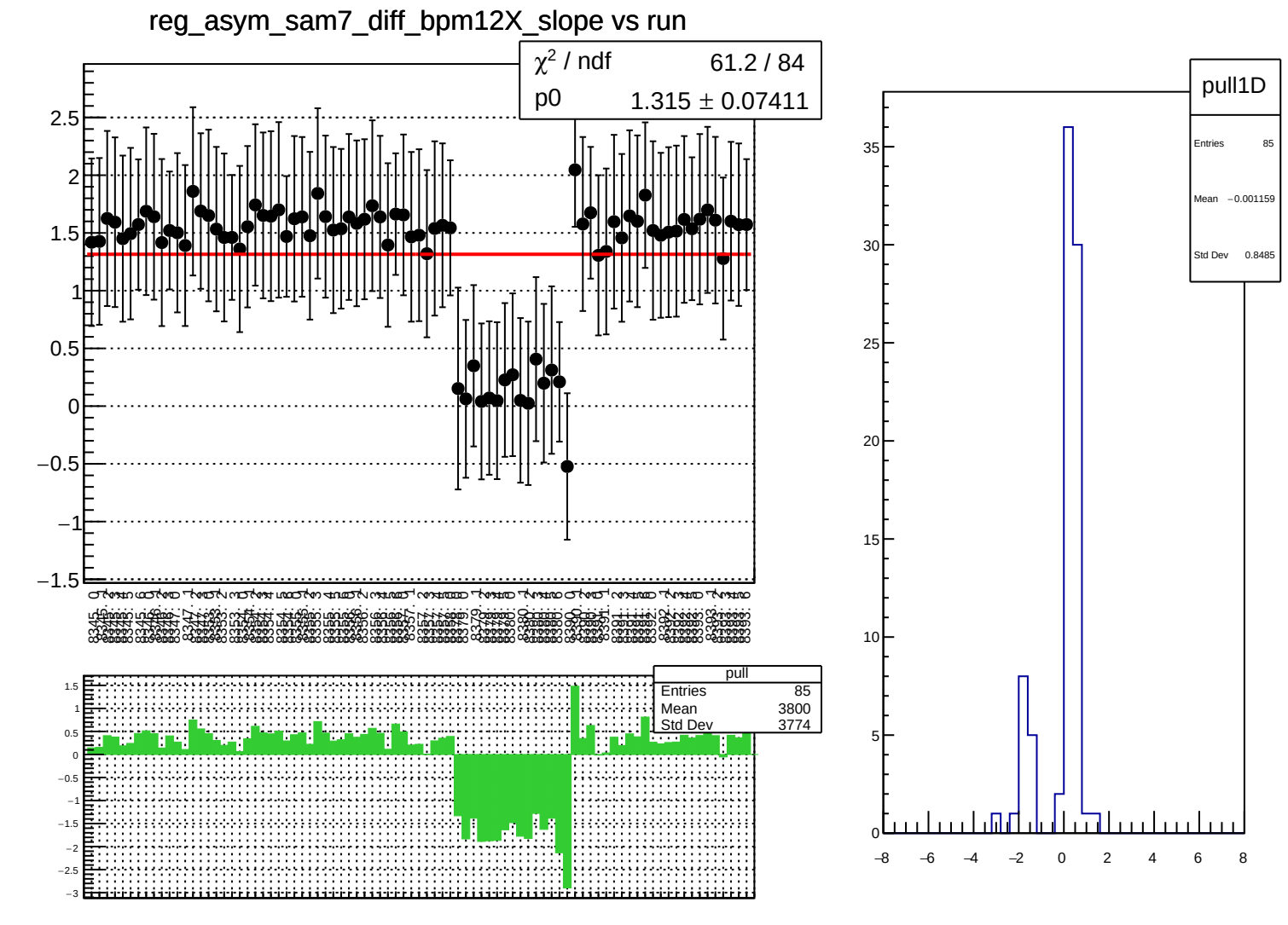

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 5.28 / 84
p0 14.08 ± 1.243
pull
Entries 85
Mean 524.8
Std Dev 445.7
pull1D
Entries 85
Mean 0.001351
Std Dev 0.2492

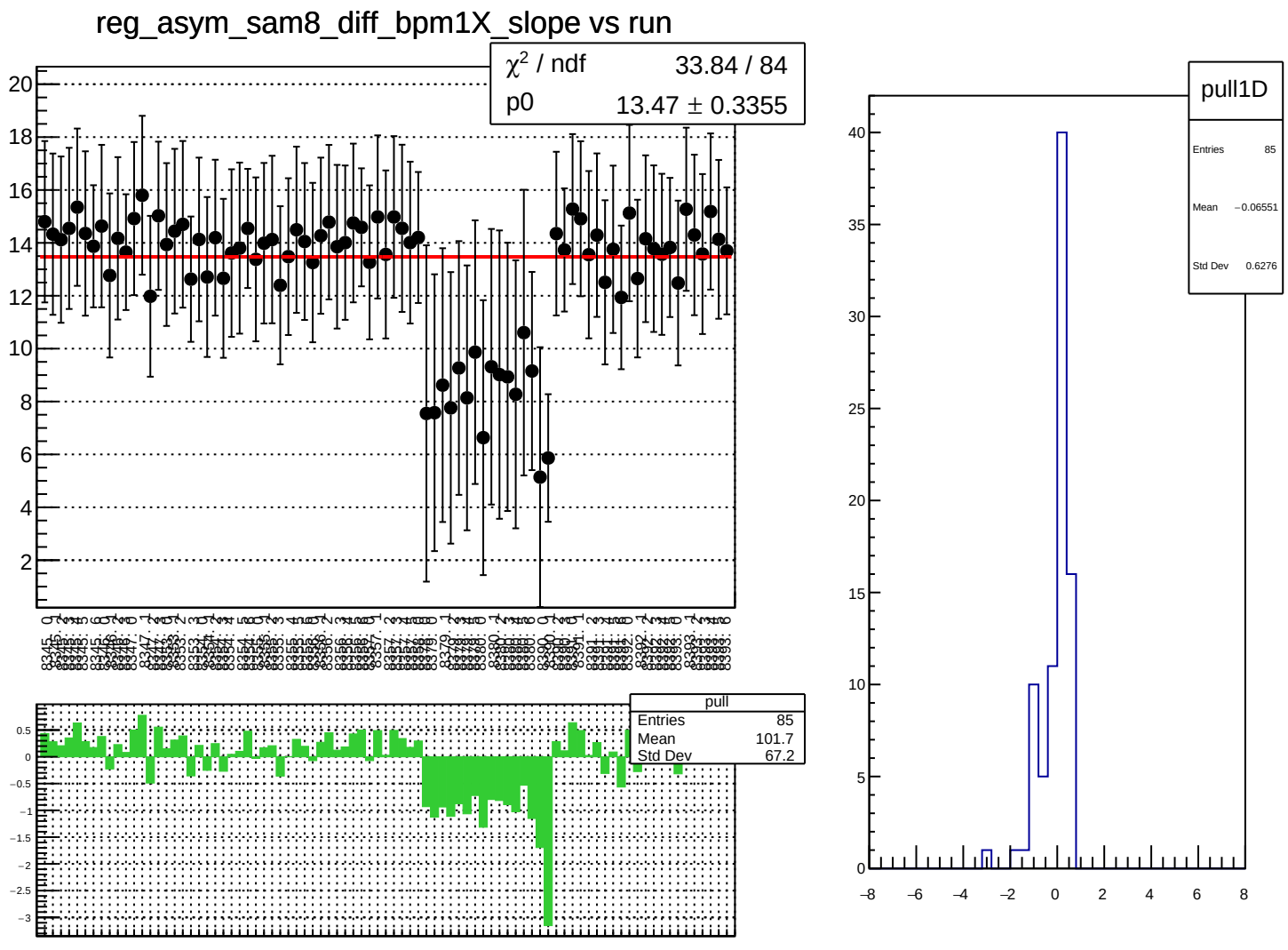

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 17.07 / 84
p0 −57.75 ± 0.7773
pull
Entries 85
Mean 376.2
Std Dev 340.1

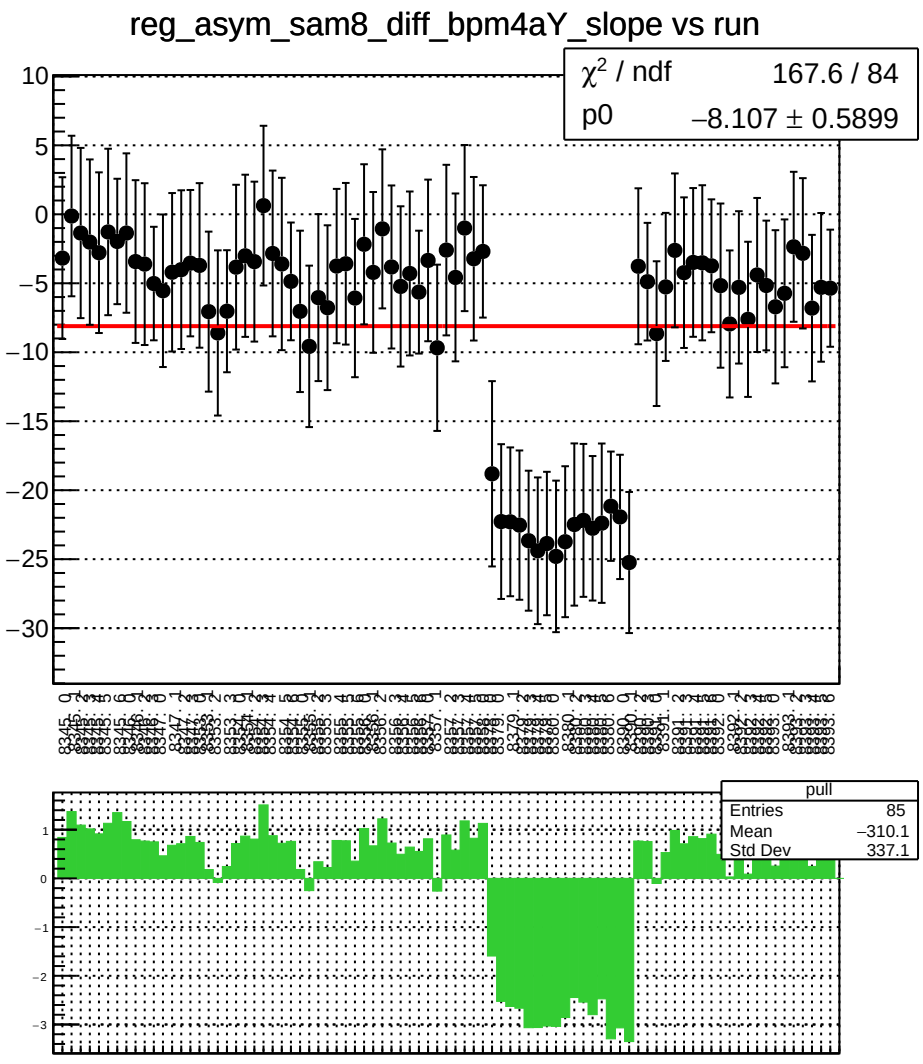

pull1D
Entries 85
Mean 0.01142
Std Dev 0.4479

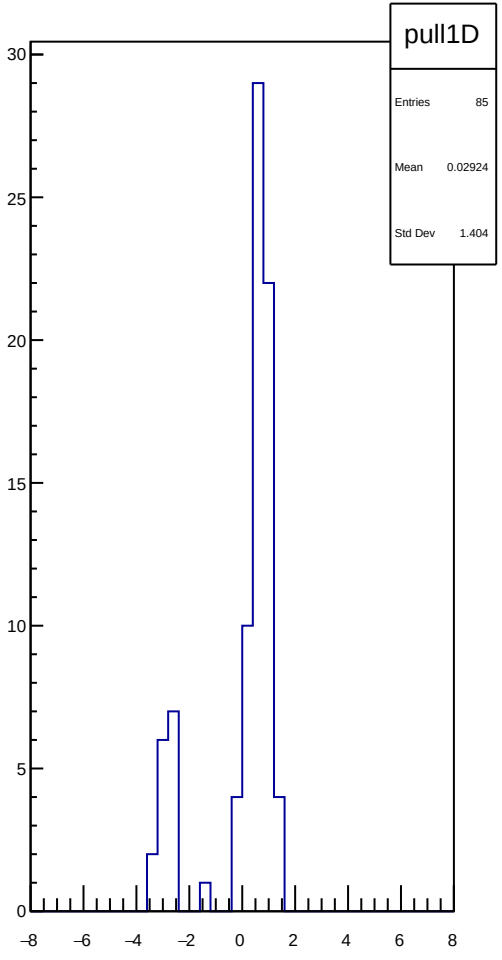

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 5.91 / 84
p0 −20.38 ± 1.312
pull
Entries 85
Mean −3.155e+04
Std Dev 3.16e+04

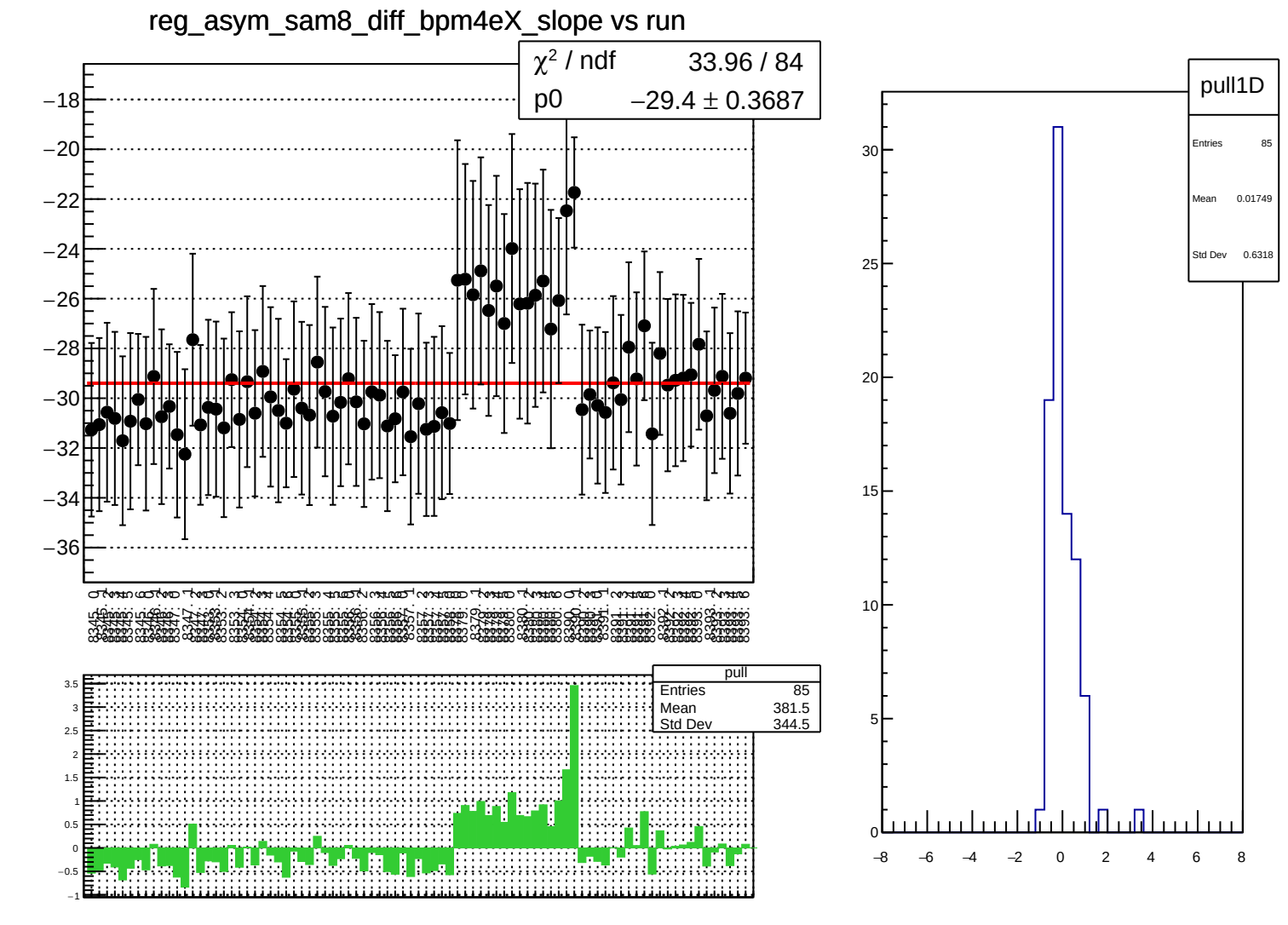

pull1D
Entries 85
Mean 6.971e−05
Std Dev 0.2637

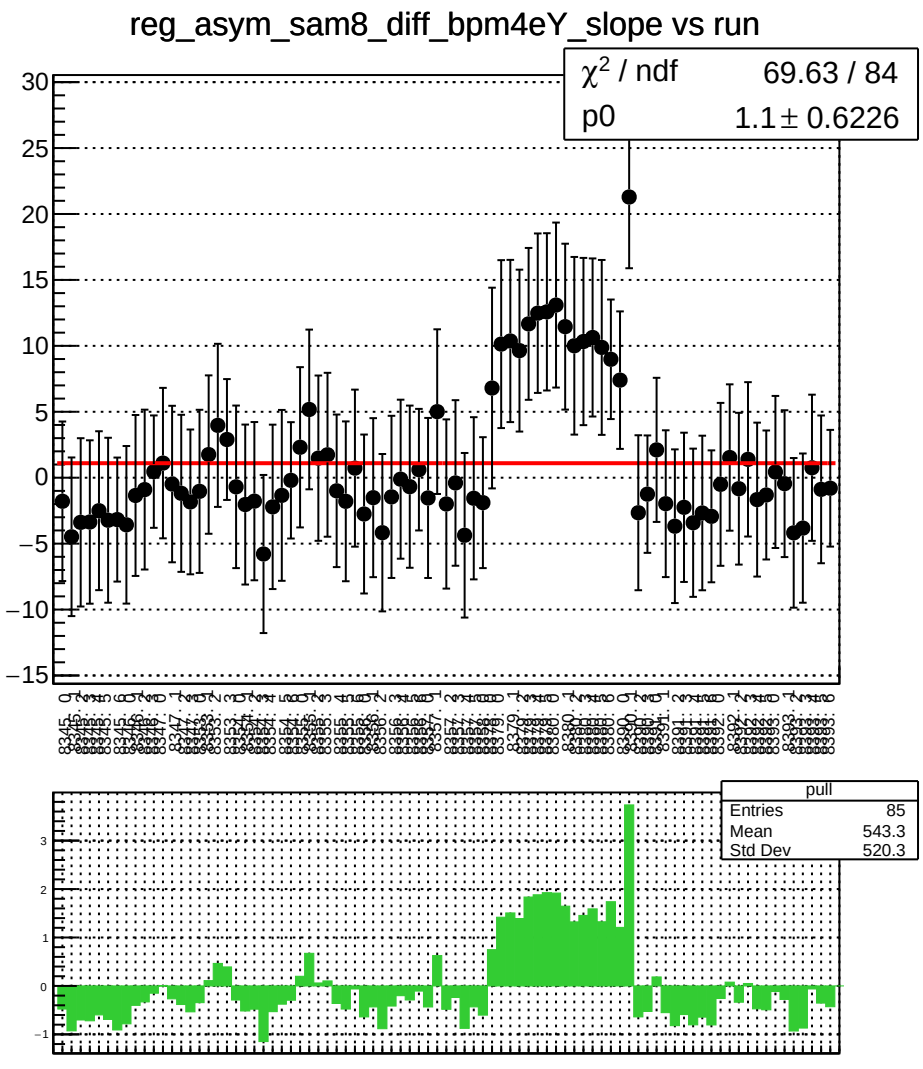

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 61.2 / 84
p0 1.315 ± 0.07411
pull
Entries 85
Mean 3800
Std Dev 3774
pull1D
Entries 85
Mean −0.001159
Std Dev 0.8485

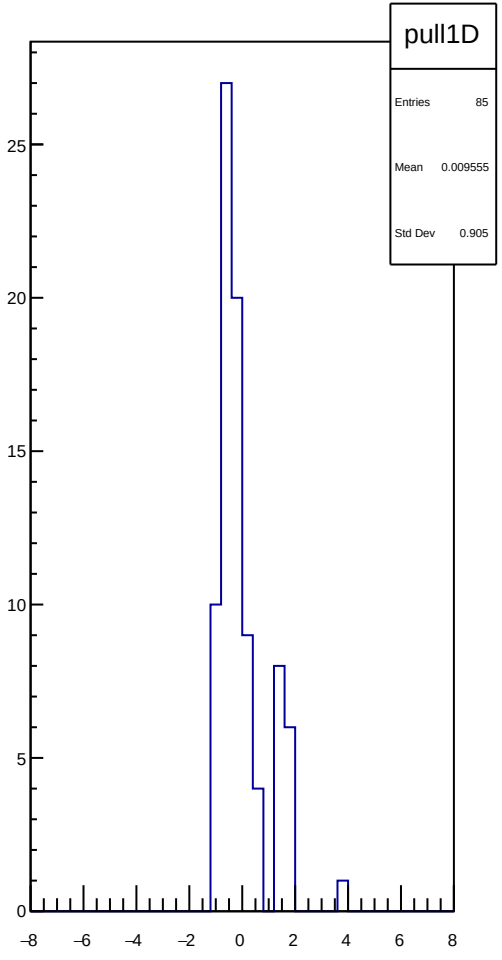

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 33.84 / 84
p0 13.47 ± 0.3355
pull
Entries 85
Mean 101.7
Std Dev 67.2
pull1D
Entries 85
Mean −0.06551
Std Dev 0.6276

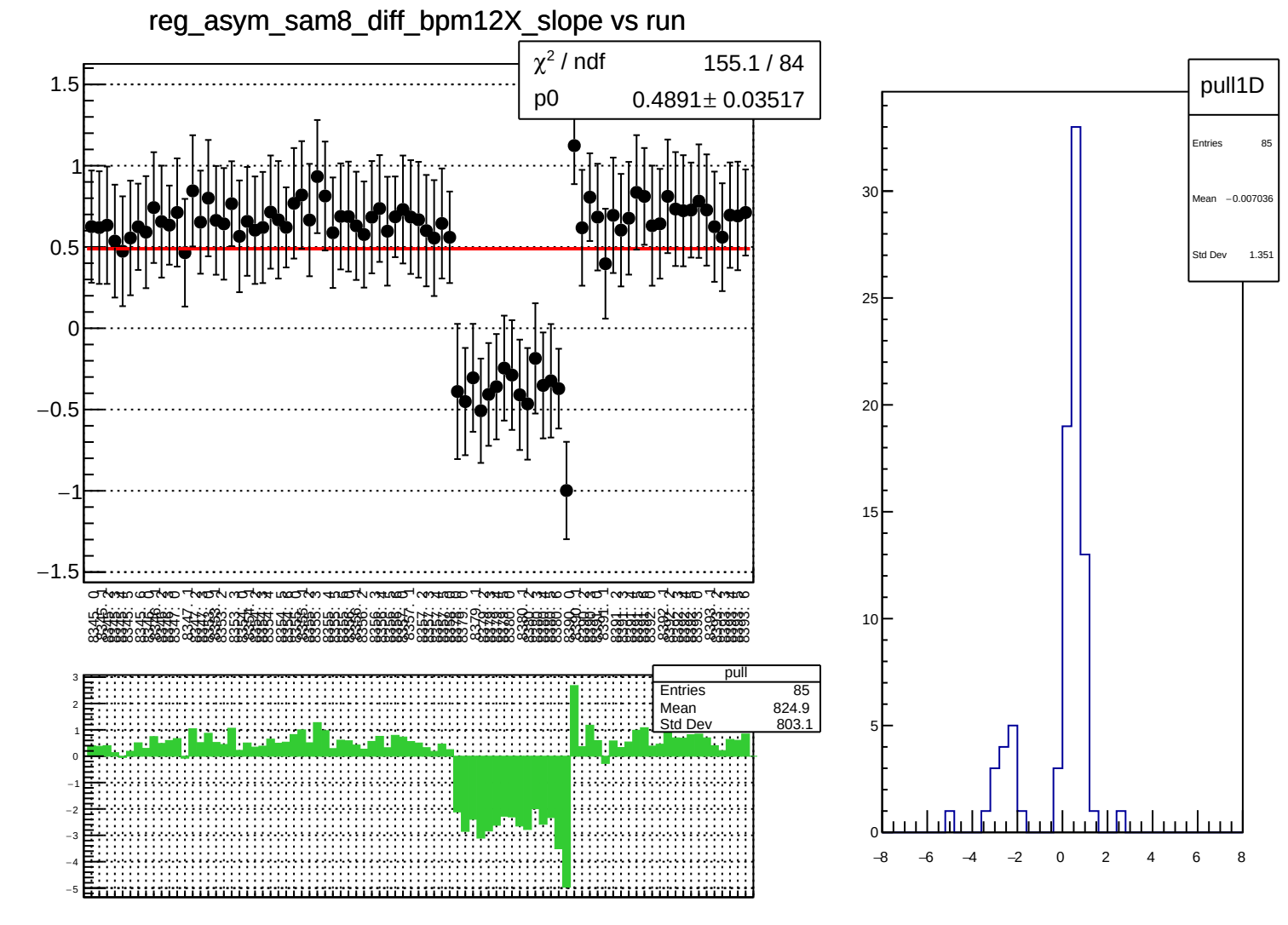

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 167.6 / 84
p0 −8.107 ± 0.5899
pull
Entries 85
Mean −310.1
Std Dev 337.1

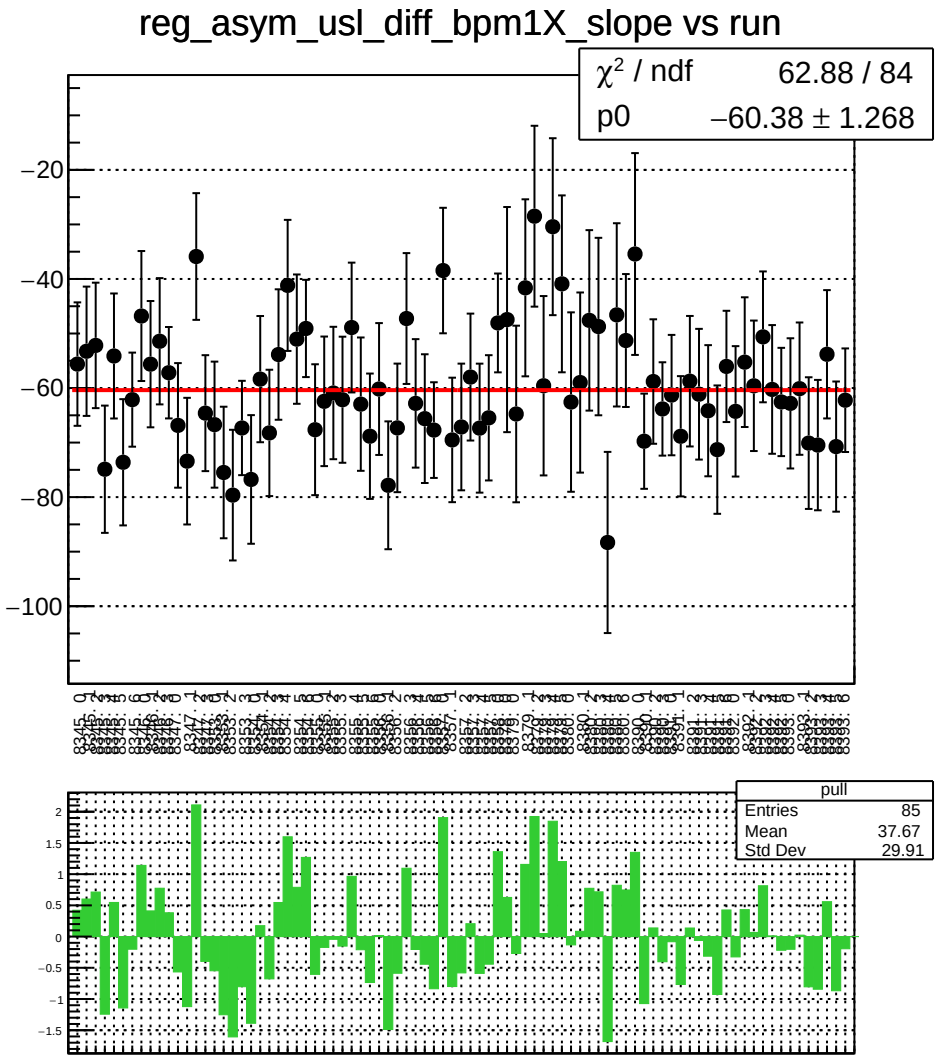

pull1D
Entries 85
Mean 0.02924
Std Dev 1.404

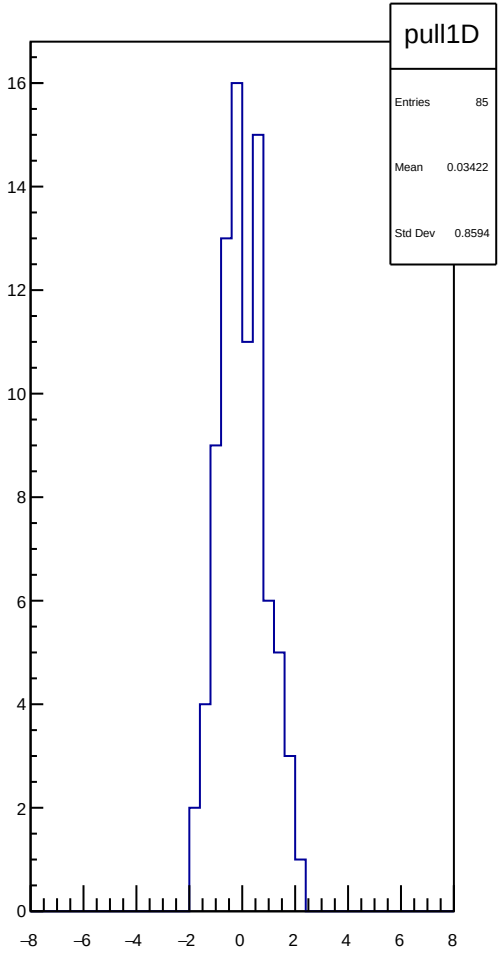

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 33.96 / 84
p0 −29.4 ± 0.3687
pull
Entries 85
Mean 381.5
Std Dev 344.5
pull1D
Entries 85
Mean 0.01749
Std Dev 0.6318

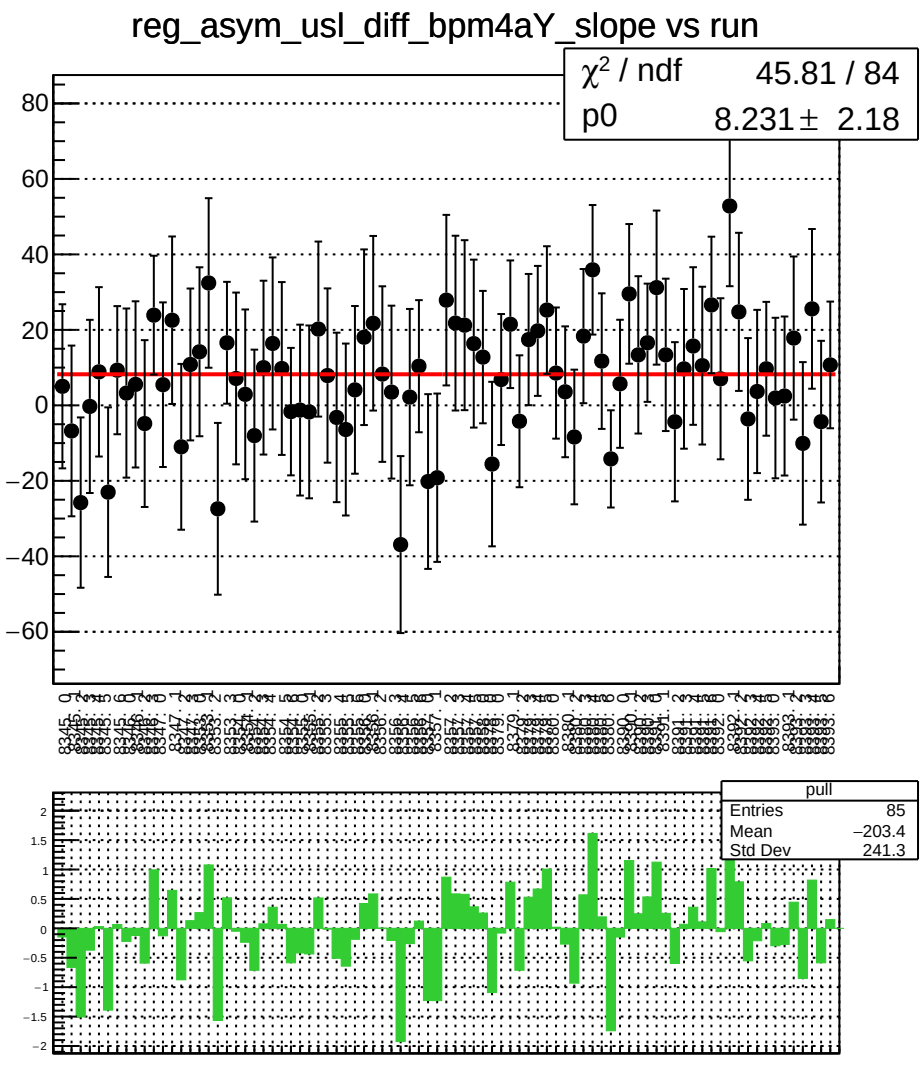

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 69.63 / 84
p0 1.1 ± 0.6226
pull
Entries 85
Mean 543.3
Std Dev 520.3

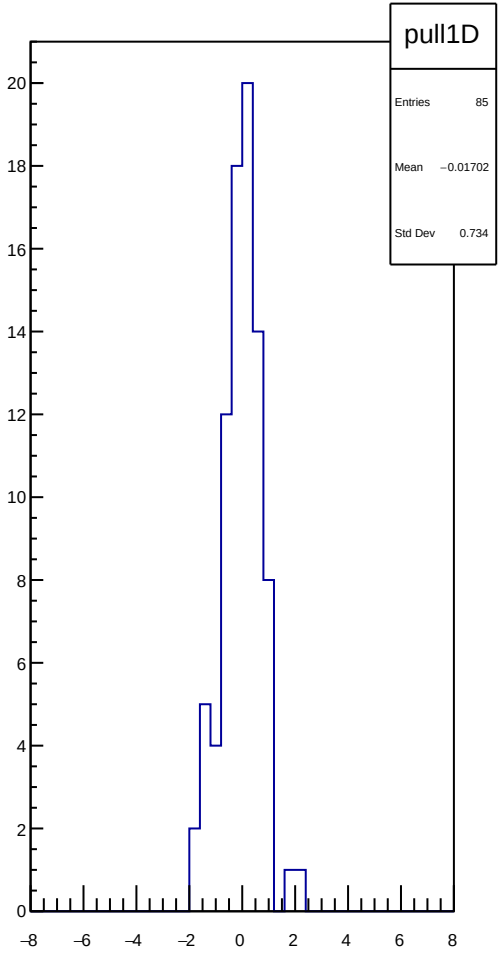

pull1D
Entries 85
Mean 0.009555
Std Dev 0.905

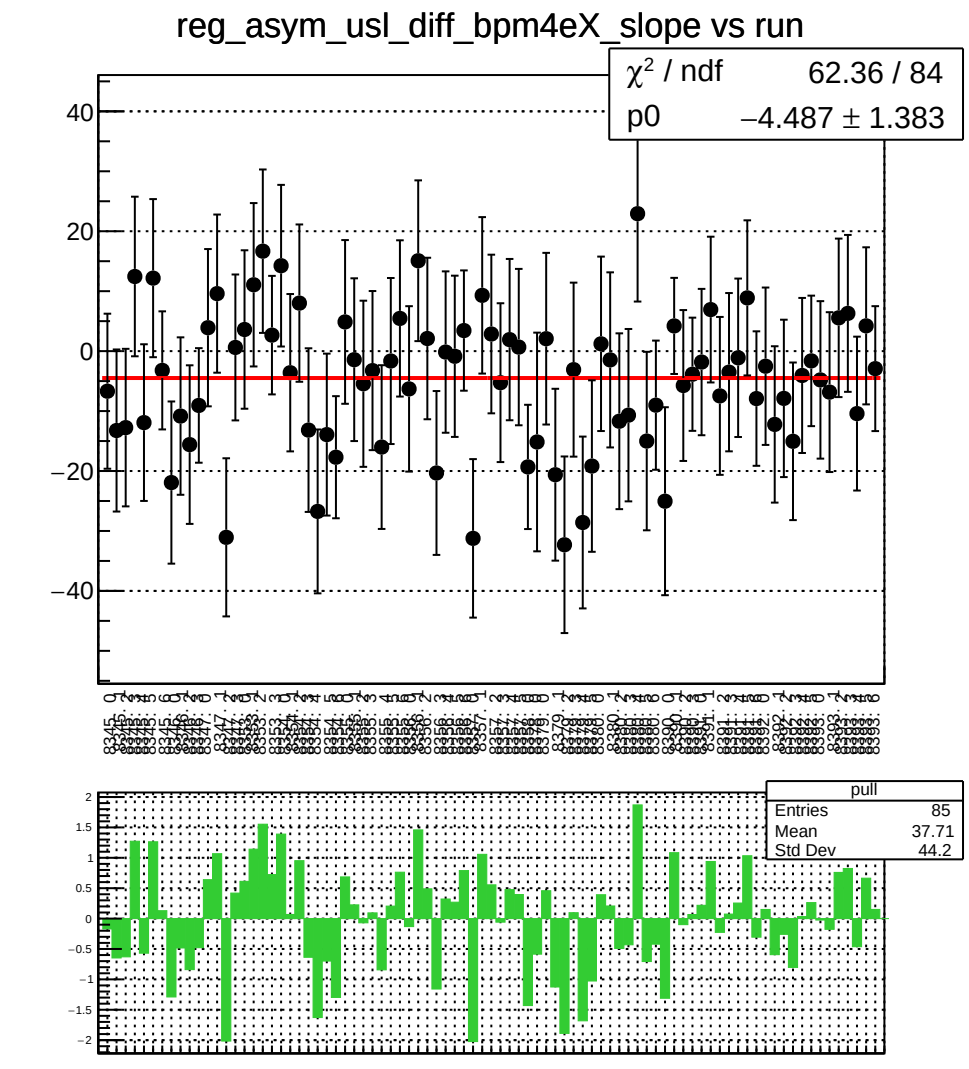

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 155.1 / 84
p0 0.4891± 0.03517
pull
Entries 85
Mean 824.9
Std Dev 803.1
pull1D
Entries 85
Mean −0.007036
Std Dev 1.351

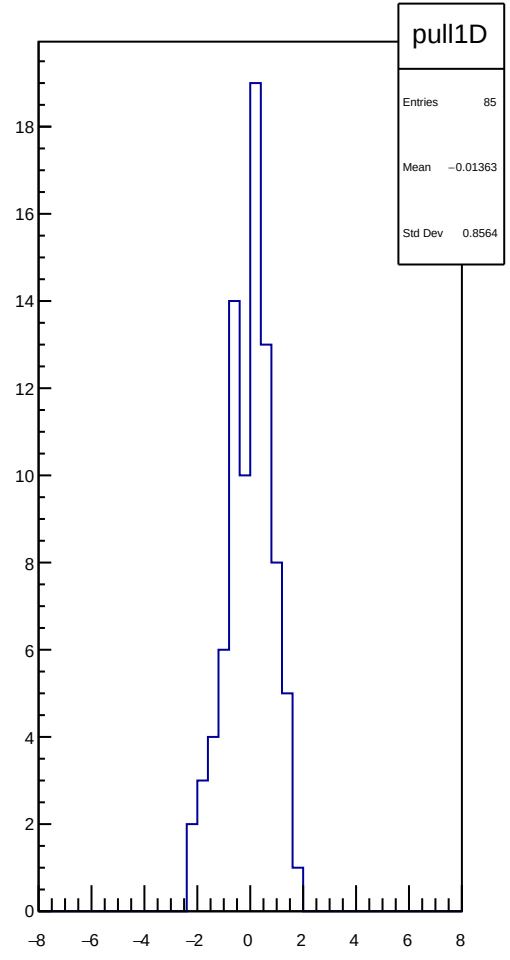

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 62.88 / 84
p0 −60.38 ± 1.268
pull
Entries 85
Mean 37.67
Std Dev 29.91

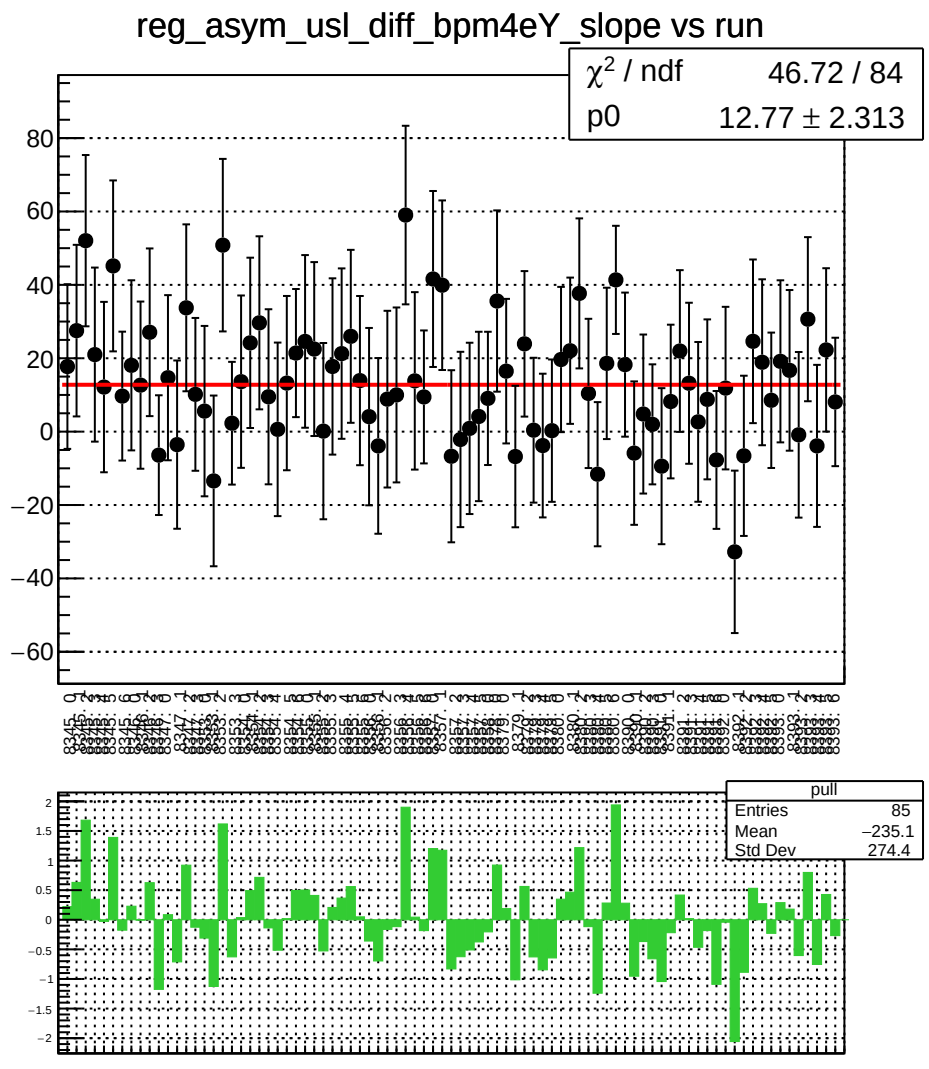

pull1D
Entries 85
Mean 0.03422
Std Dev 0.8594

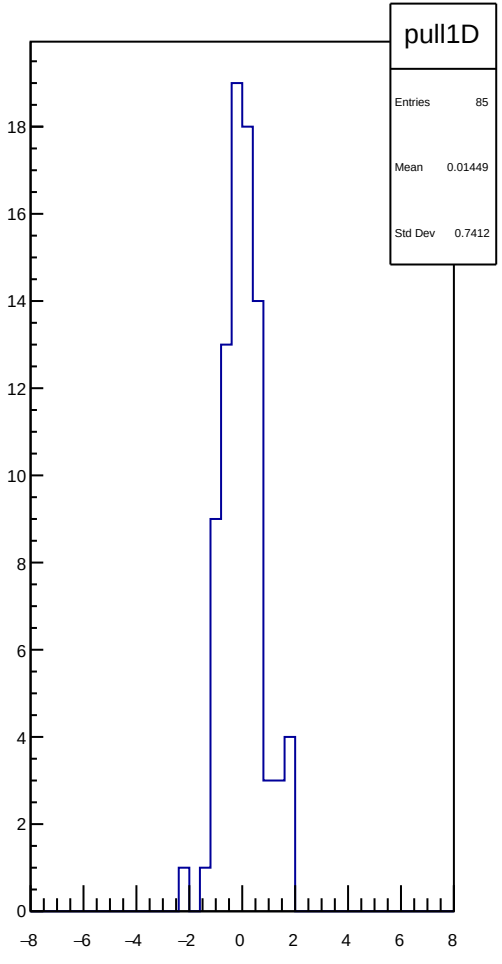

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 45.81 / 84
p0 8.231 ± 2.18
pull
Entries 85
Mean −203.4
Std Dev 241.3

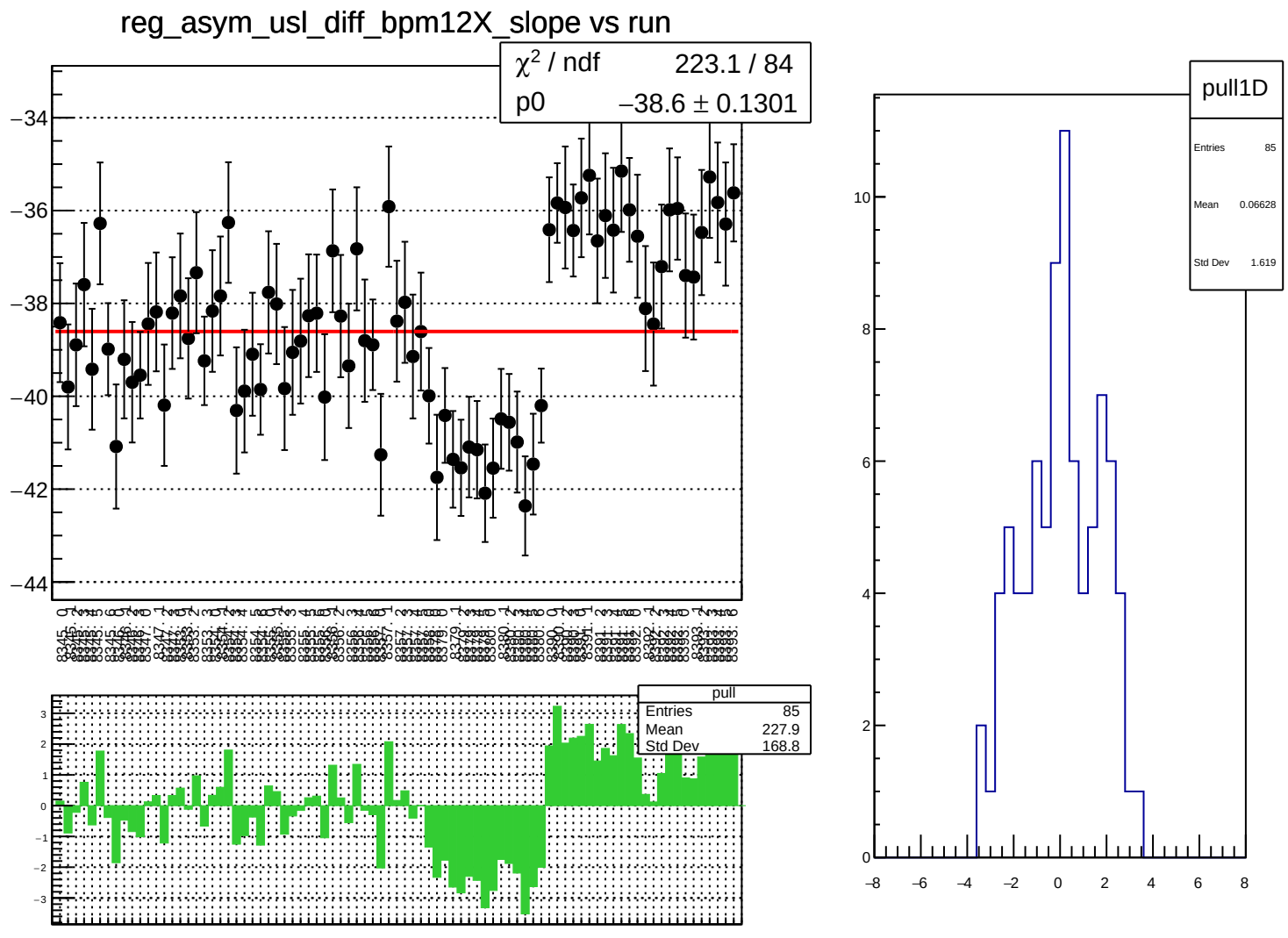

pull1D
Entries 85
Mean −0.01702
Std Dev 0.734

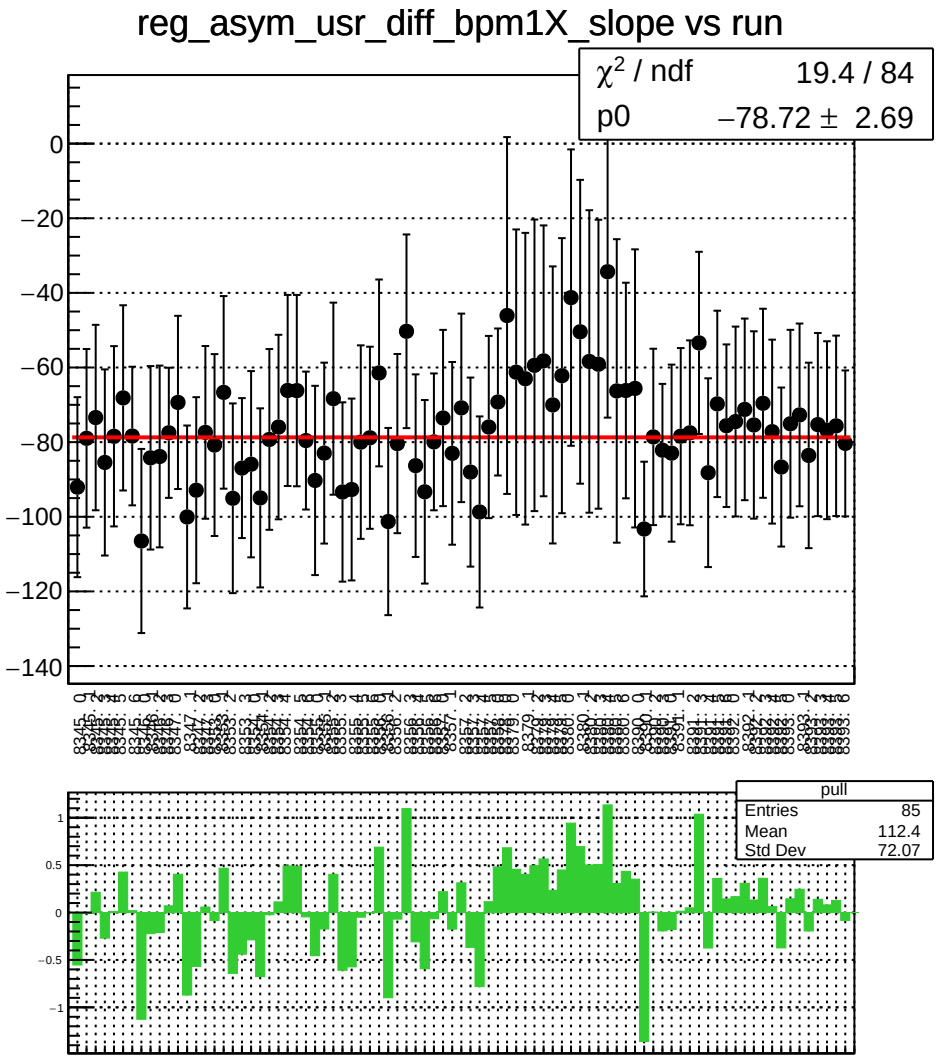

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 62.36 / 84
p0 −4.487 ± 1.383
pull
Entries 85
Mean 37.71
Std Dev 44.2

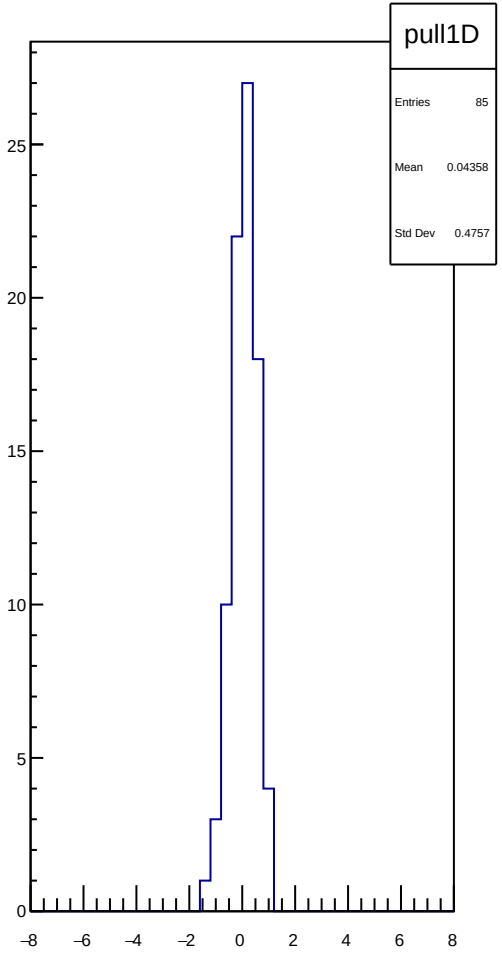

pull1D
Entries 85
Mean −0.01363
Std Dev 0.8564

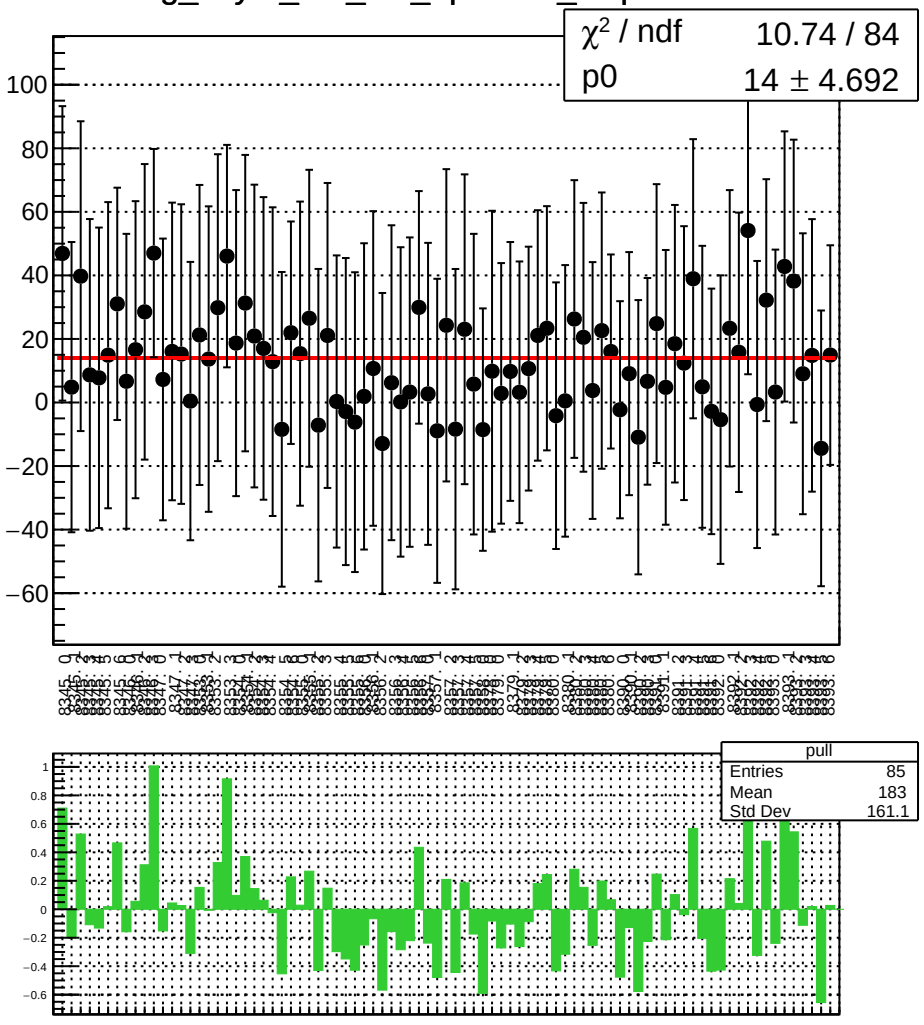

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 46.72 / 84
p0 12.77 ± 2.313
pull
Entries 85
Mean −235.1
Std Dev 274.4

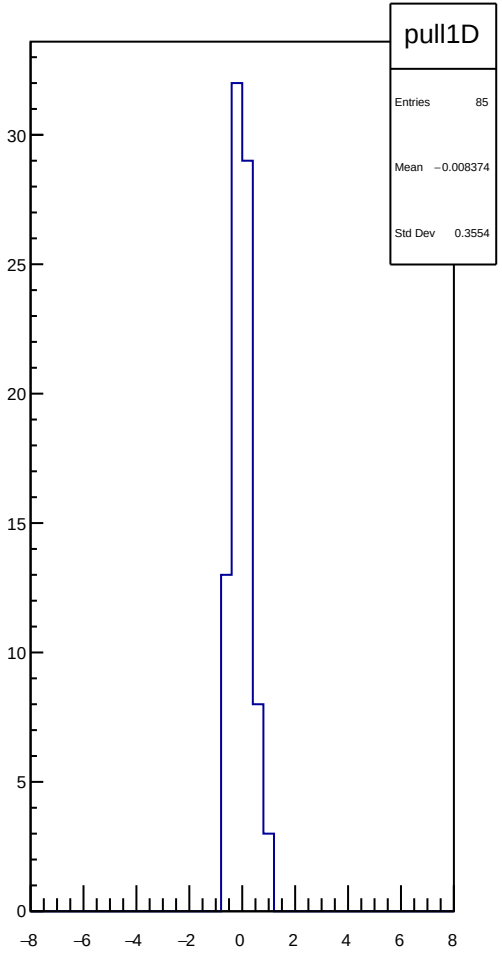

pull1D
Entries 85
Mean 0.01449
Std Dev 0.7412

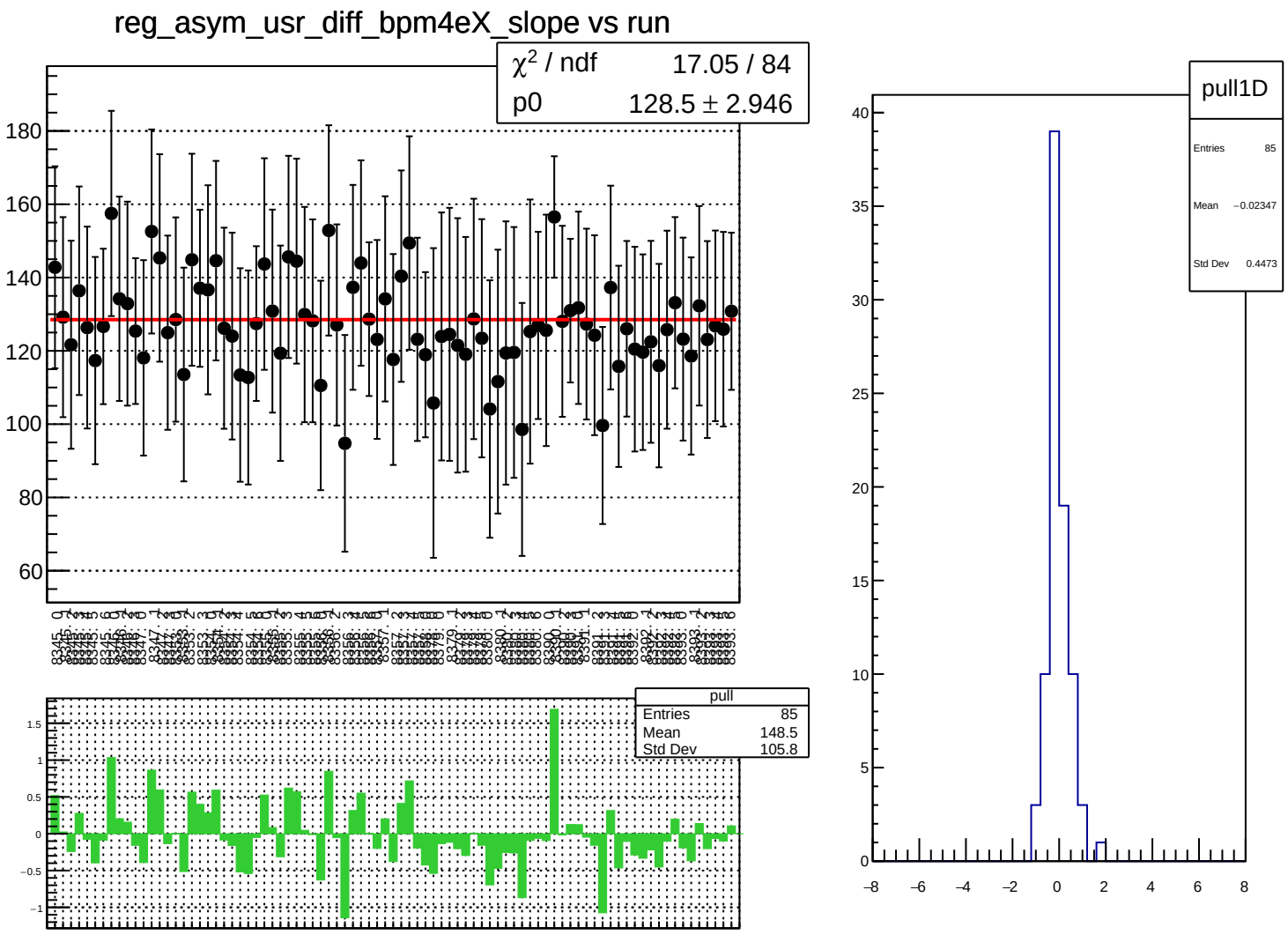

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 223.1 / 84
p0 −38.6 ± 0.1301
−34
−36
−38
−40
−42
−44
pull
Entries 85
Mean 227.9
Std Dev 168.8
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean 0.06628
Std Dev 1.619
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

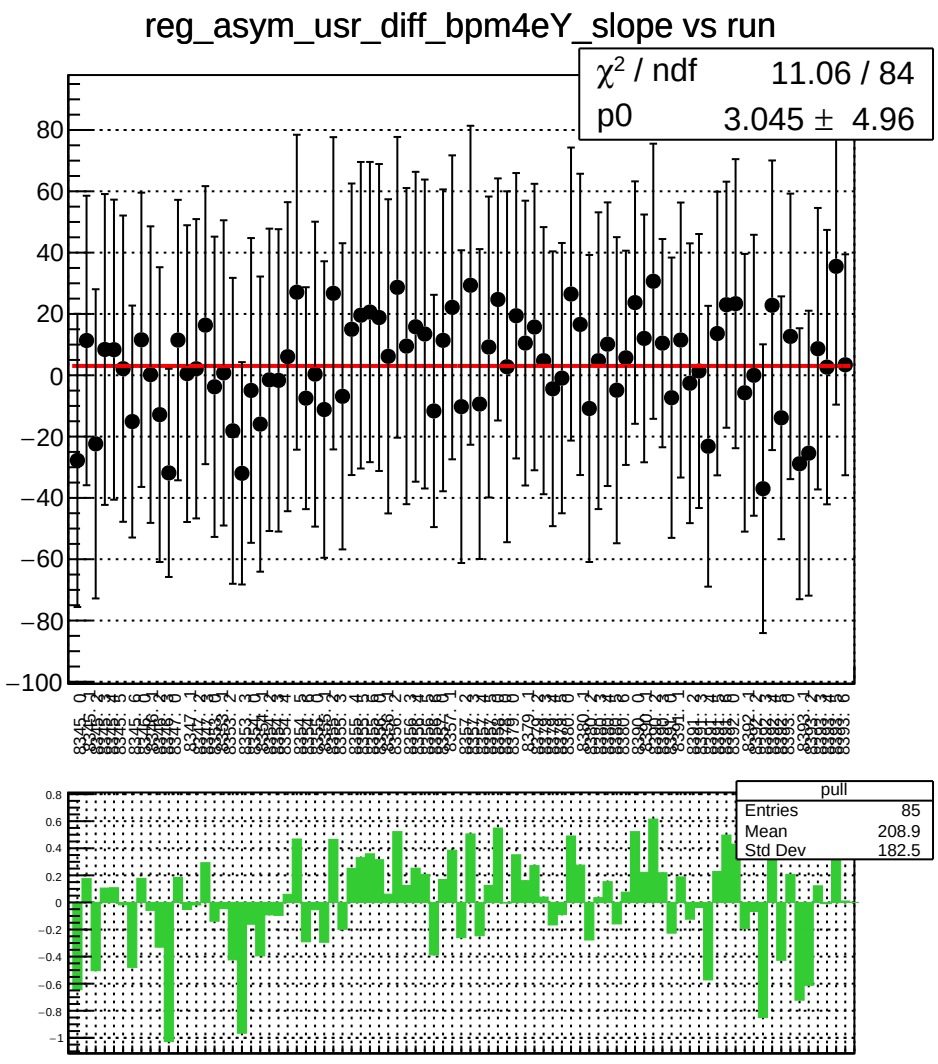

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 19.4 / 84
p0 −78.72 ± 2.69
pull
Entries 85
Mean 112.4
Std Dev 72.07

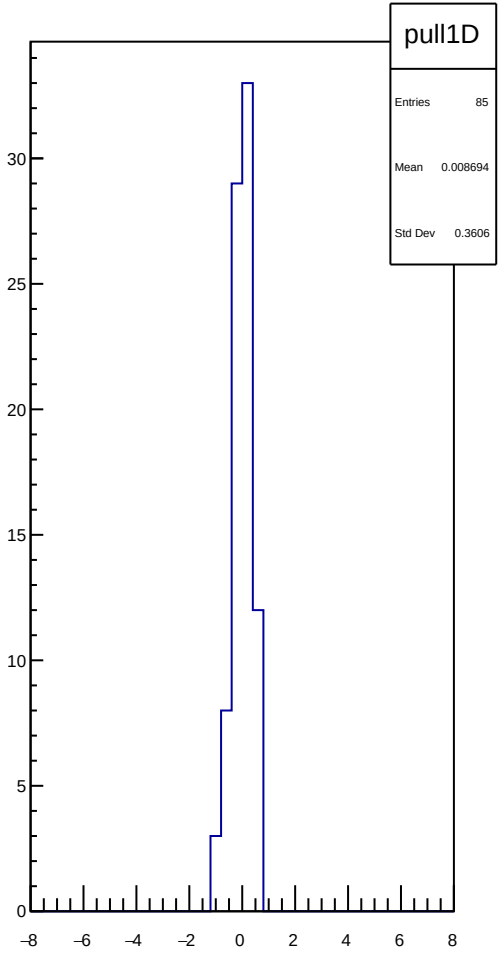

pull1D
Entries 85
Mean 0.04358
Std Dev 0.4757

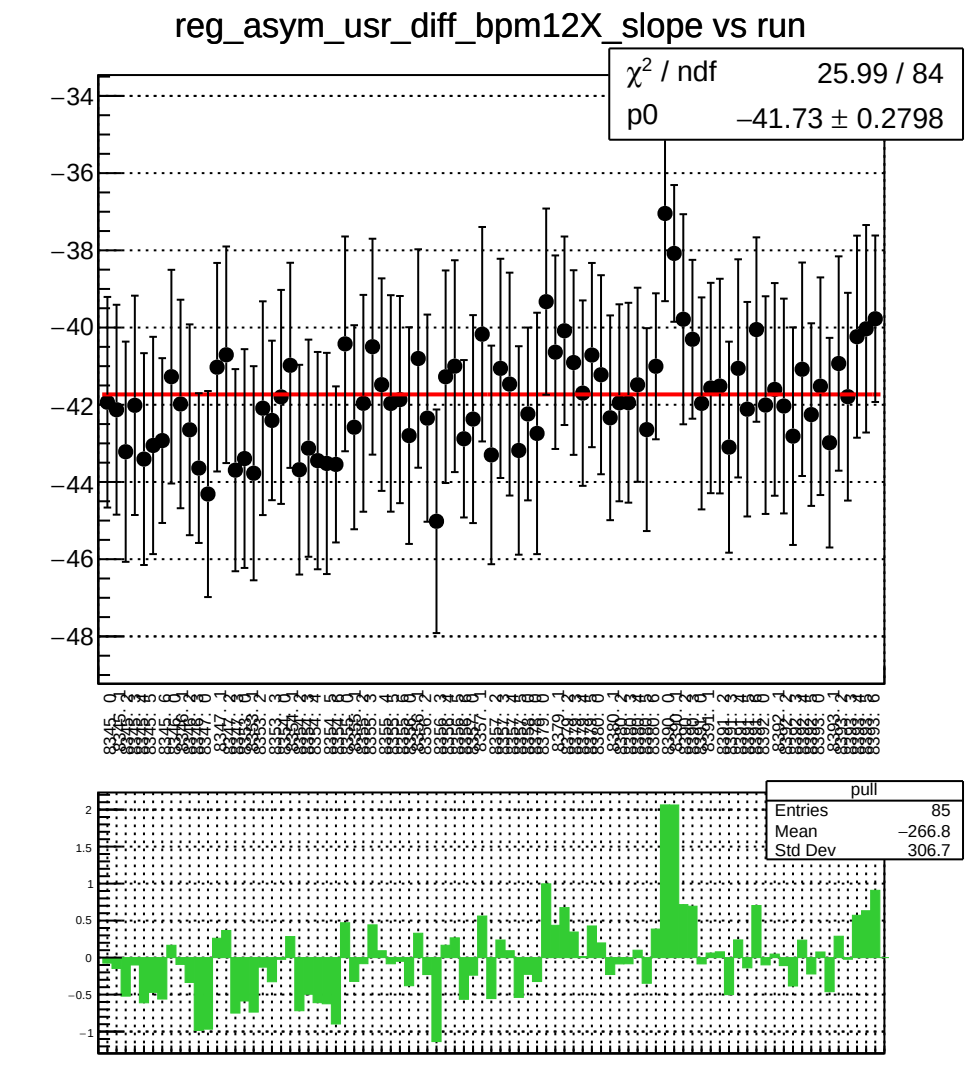

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 10.74 / 84
p0 14 ± 4.692
pull
Entries 85
Mean 183
Std Dev 161.1

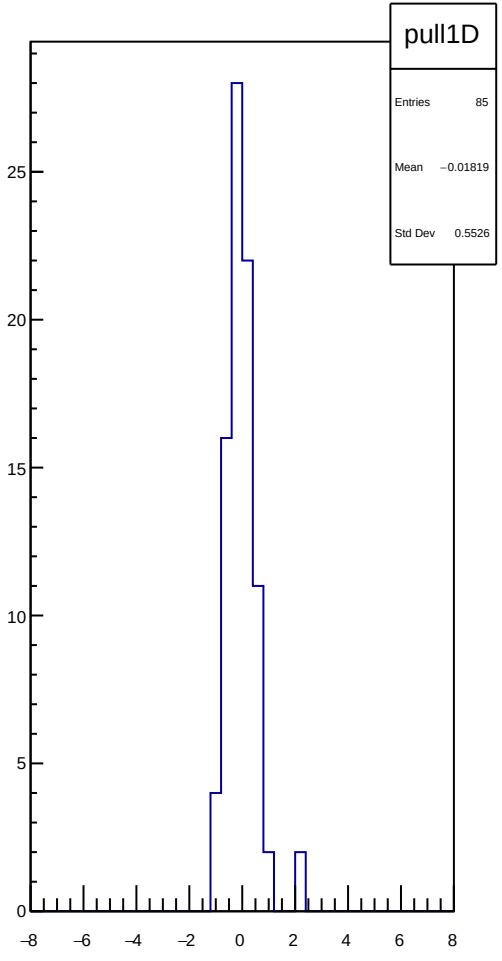

pull1D
Entries 85
Mean −0.008374
Std Dev 0.3554

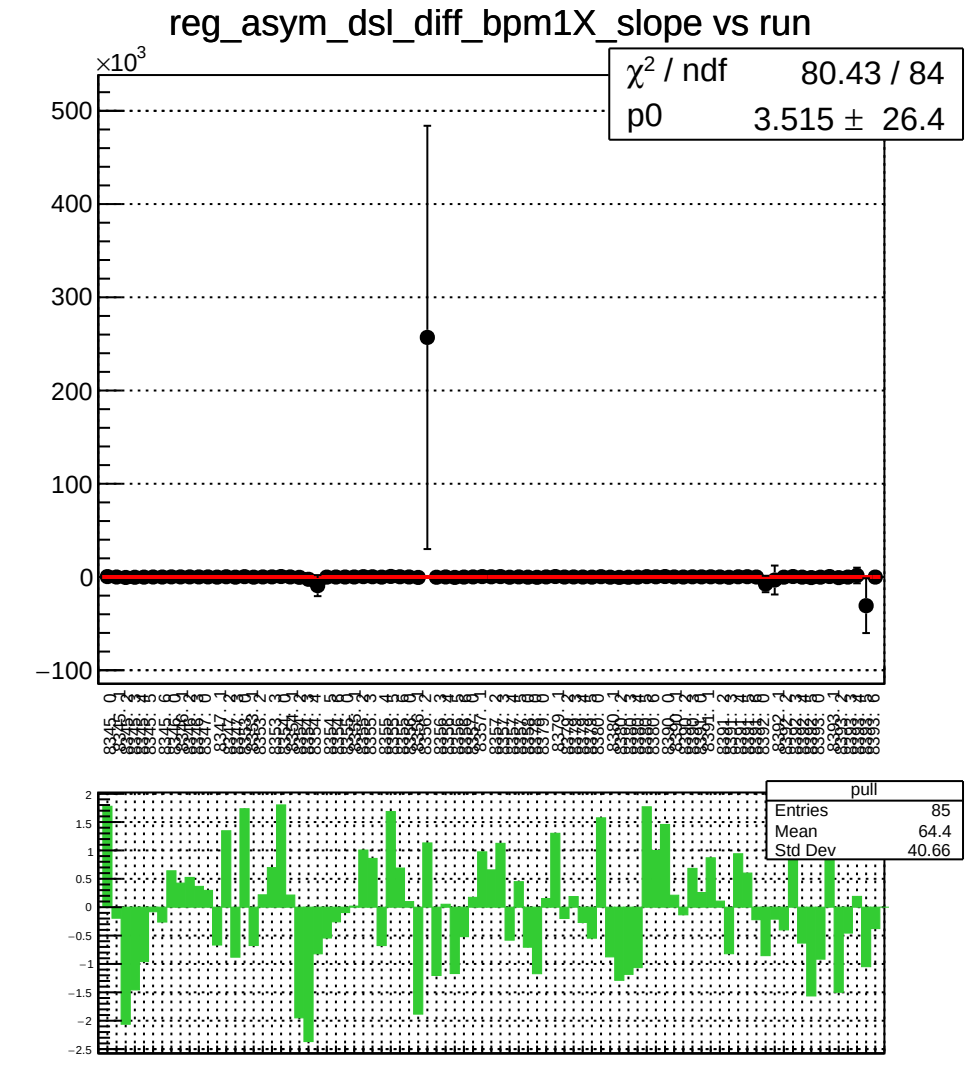

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 17.05 / 84
p0 128.5 ± 2.946
pull
Entries 85
Mean 148.5
Std Dev 105.8
pull1D
Entries 85
Mean −0.02347
Std Dev 0.4473

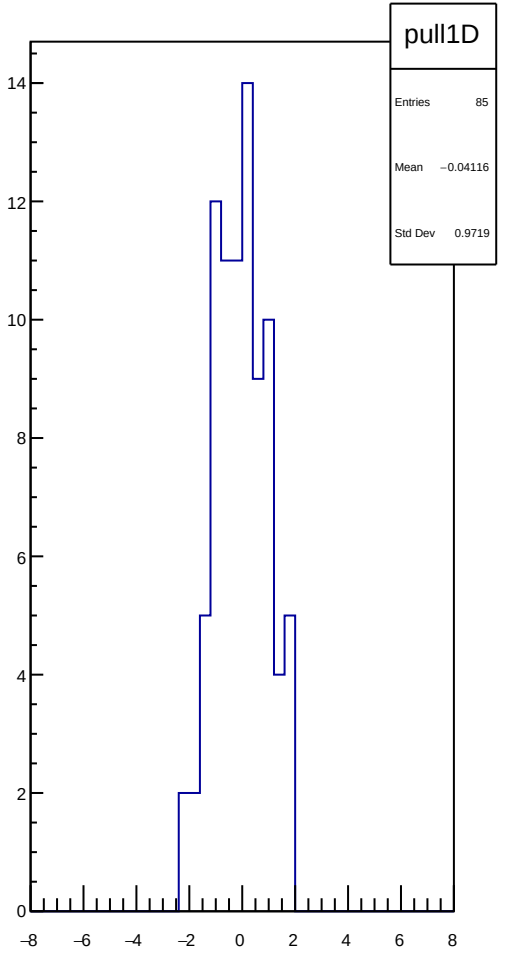

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 11.06 / 84
p0 3.045 ± 4.96
pull
Entries 85
Mean 208.9
Std Dev 182.5

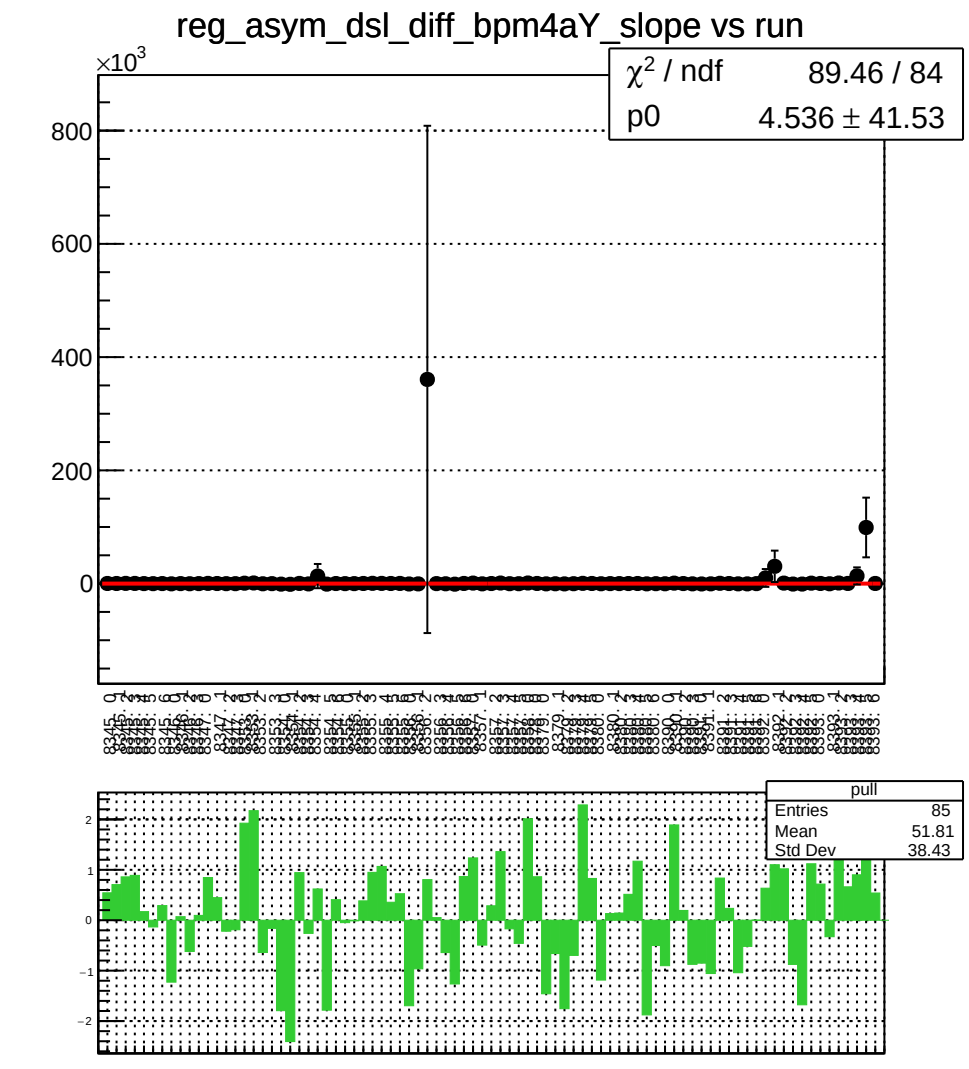

pull1D
Entries 85
Mean 0.008694
Std Dev 0.3606

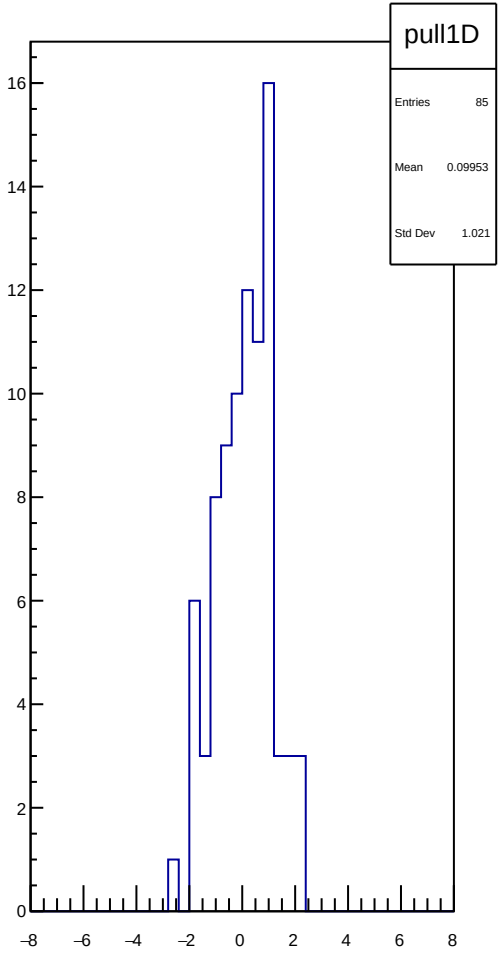

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 25.99 / 84
p0 −41.73 ± 0.2798
pull
Entries 85
Mean −266.8
Std Dev 306.7

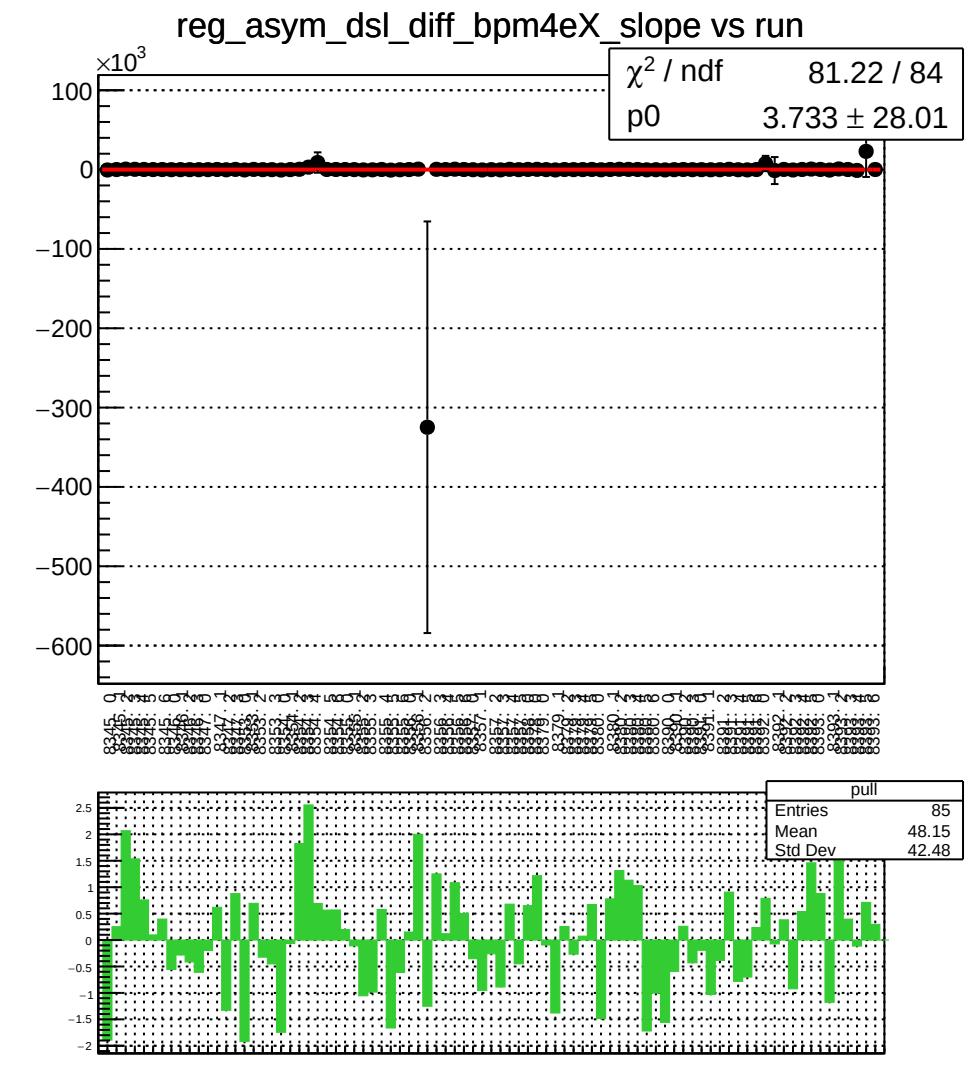

pull1D
Entries 85
Mean −0.01819
Std Dev 0.5526

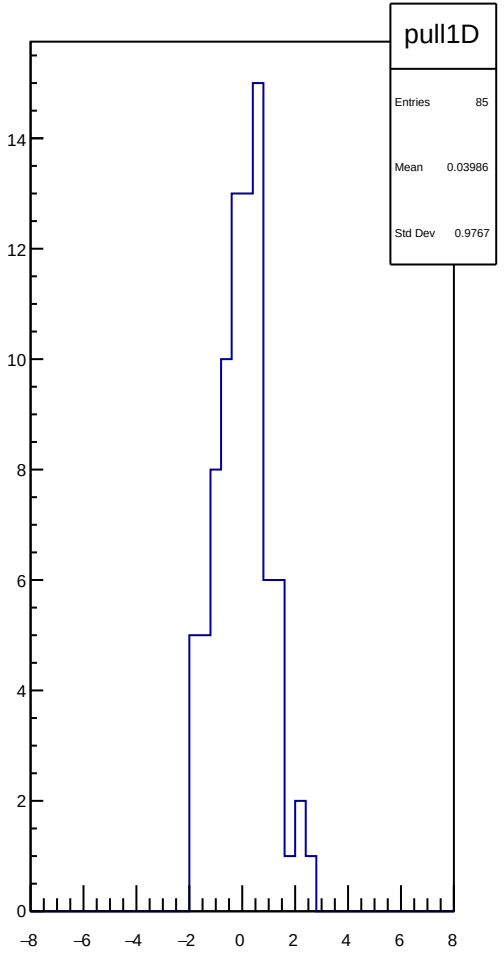

reg_asym_dsl_diff_bpm1X_slope vs run
×10^3
χ^2 / ndf 80.43 / 84
p0 3.515 ± 26.4
pull
Entries 85
Mean 64.4
Std Dev 40.66

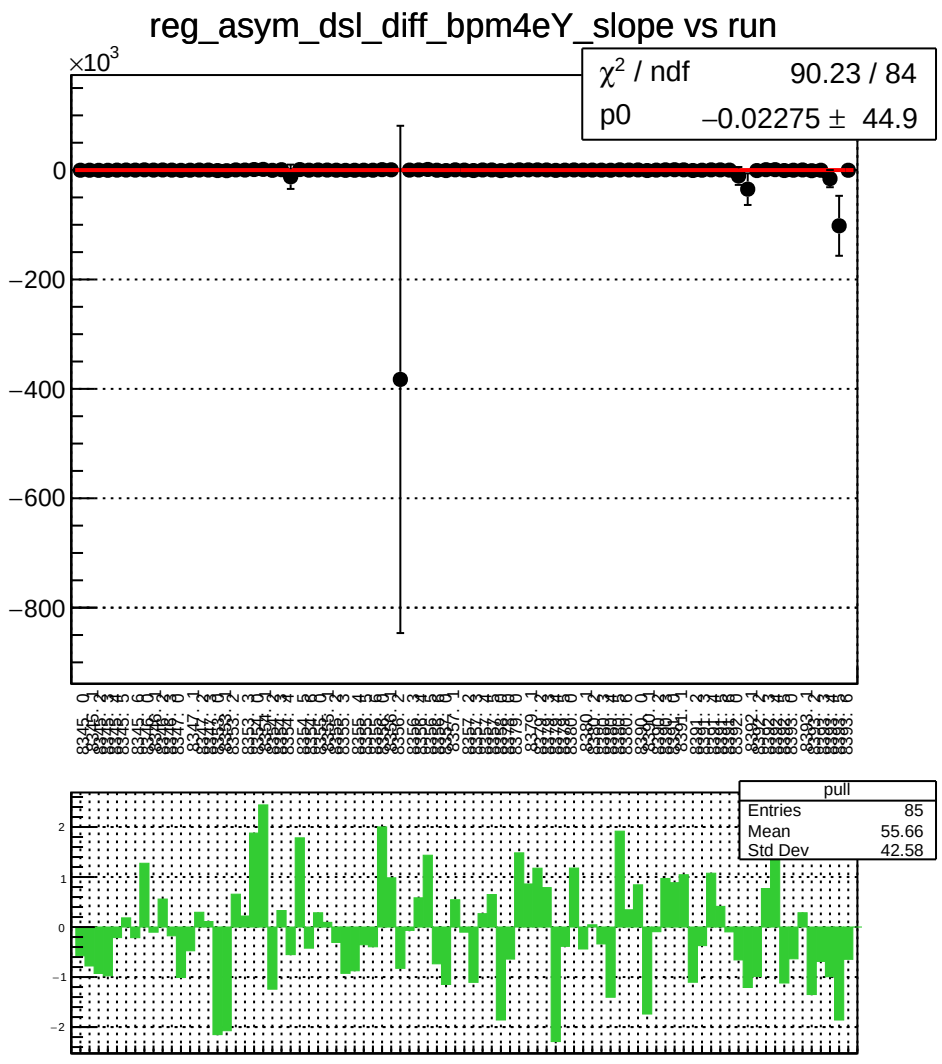

pull1D
Entries 85
Mean −0.04116
Std Dev 0.9719

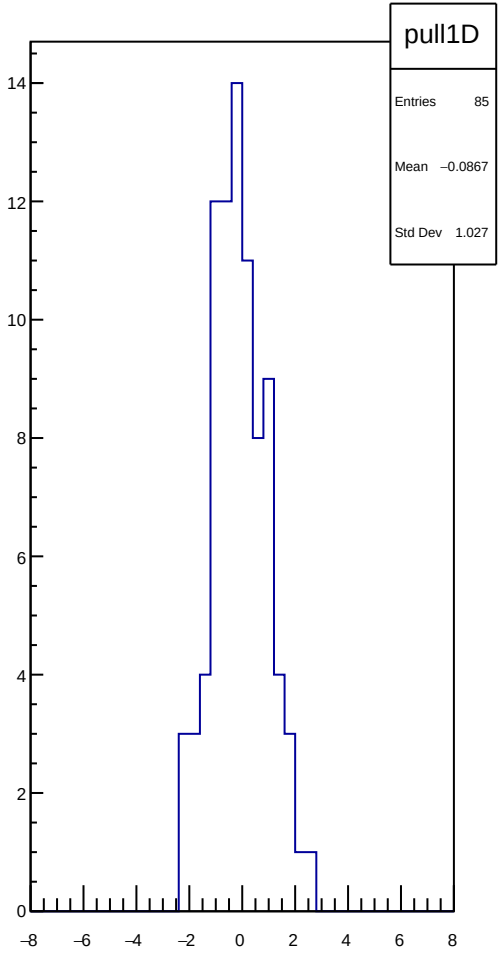

reg_asym_dsl_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 89.46 / 84
p0 4.536 ± 41.53
800
600
400
200
0
pull
Entries 85
Mean 51.81
Std Dev 38.43
2
1
0
−1
−2

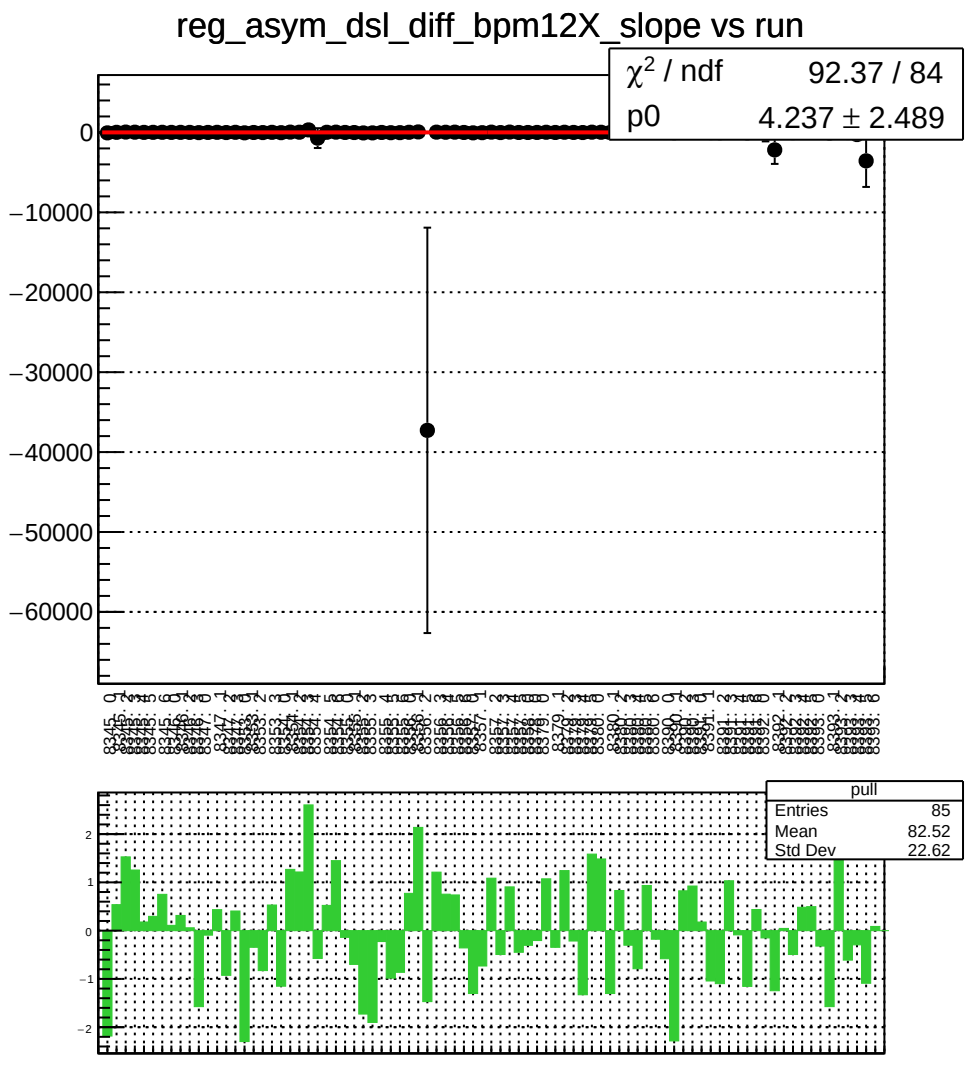

pull1D
Entries 85
Mean 0.09953
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

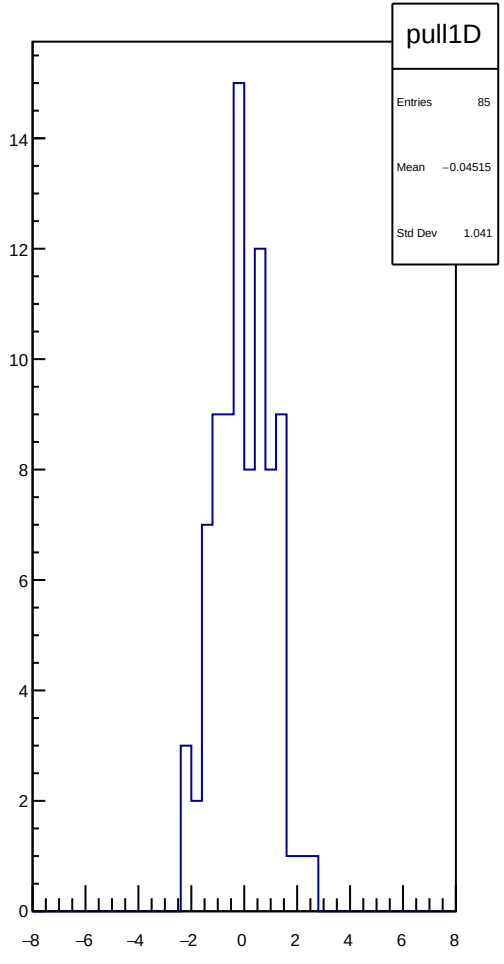

reg_asym_dsl_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 81.22 / 84
p0 3.733 ± 28.01
pull
Entries 85
Mean 48.15
Std Dev 42.48

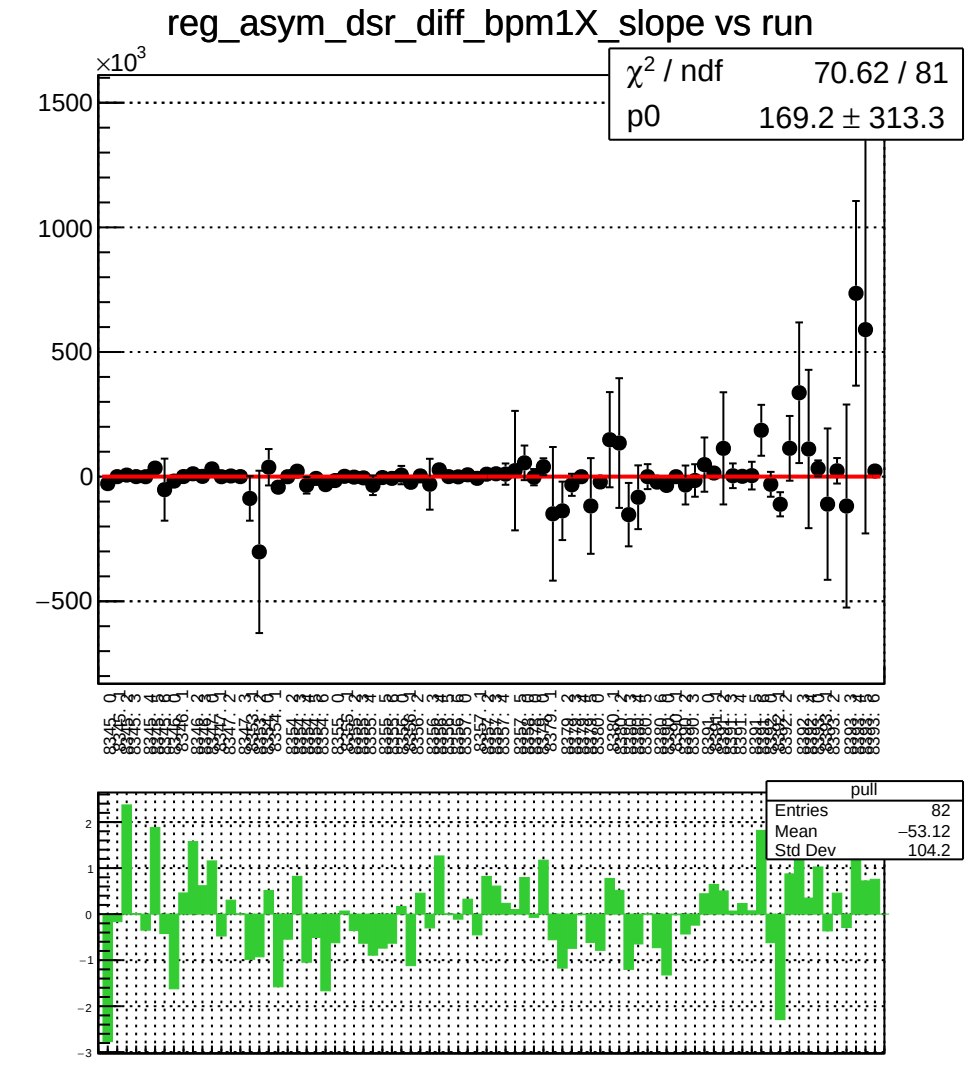

pull1D
Entries 85
Mean 0.03986
Std Dev 0.9767

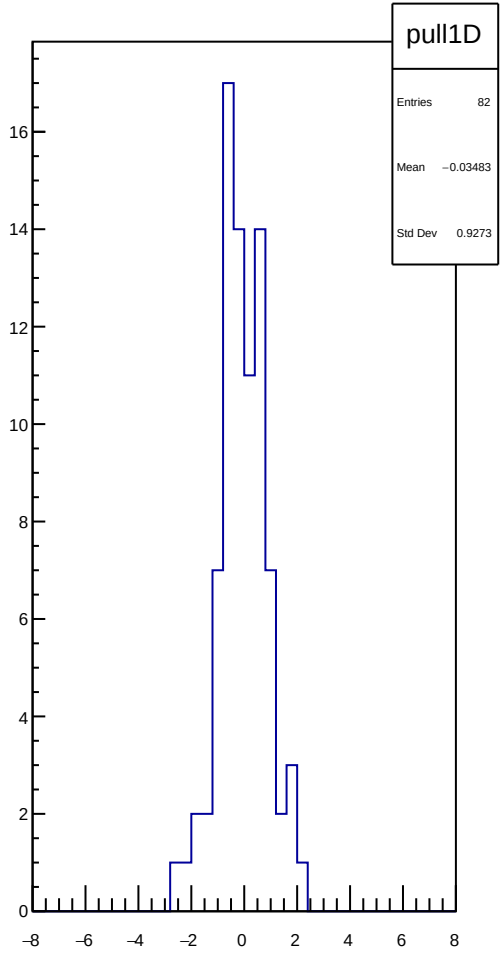

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 90.23 / 84
p0 −0.02275 ± 44.9
pull
Entries 85
Mean 55.66
Std Dev 42.58

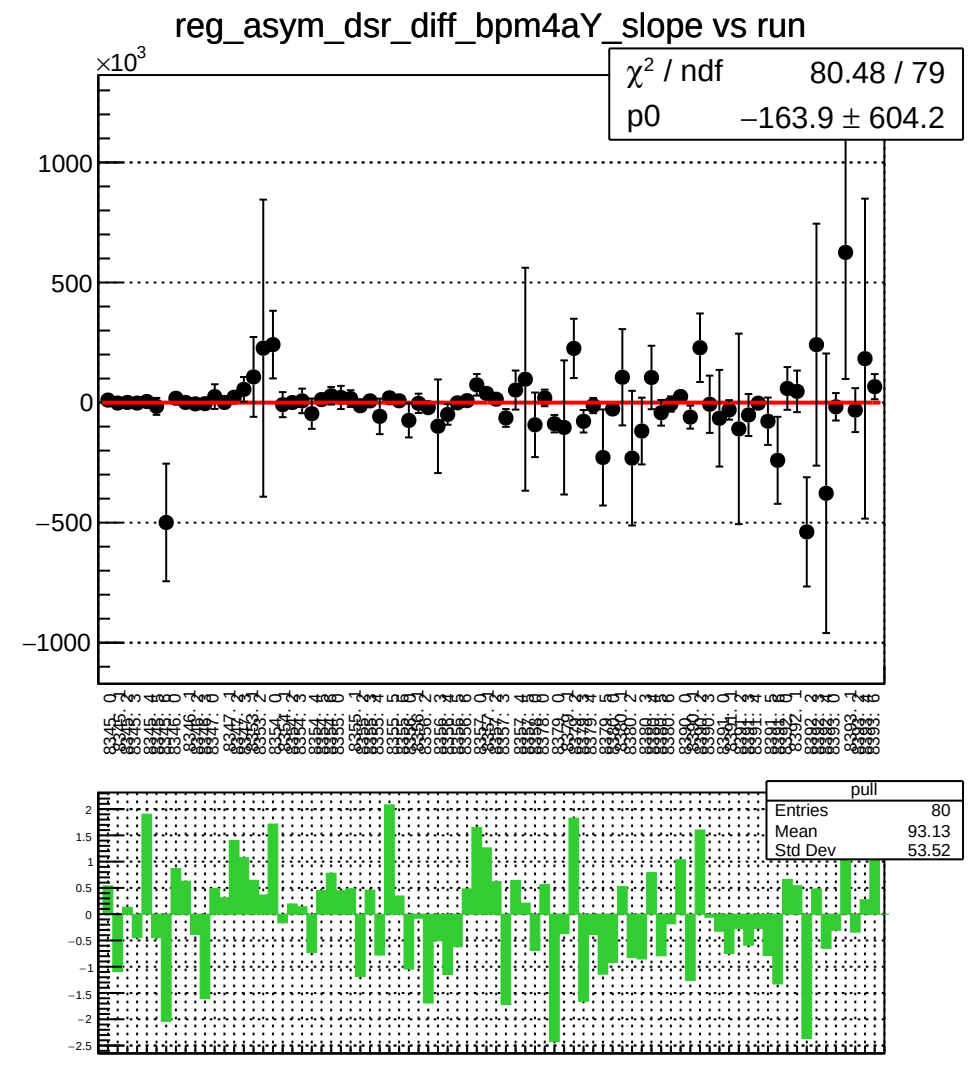

pull1D
Entries 85
Mean −0.0867
Std Dev 1.027

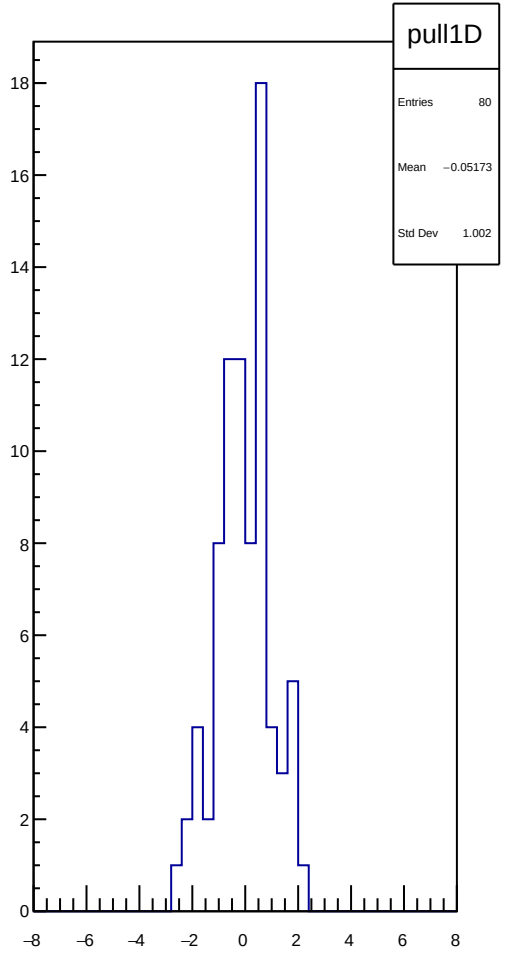

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 92.37 / 84
p0 4.237 ± 2.489
0
−10000
−20000
−30000
−40000
−50000
−60000
pull
Entries 85
Mean 82.52
Std Dev 22.62
2
1
0
−1
−2

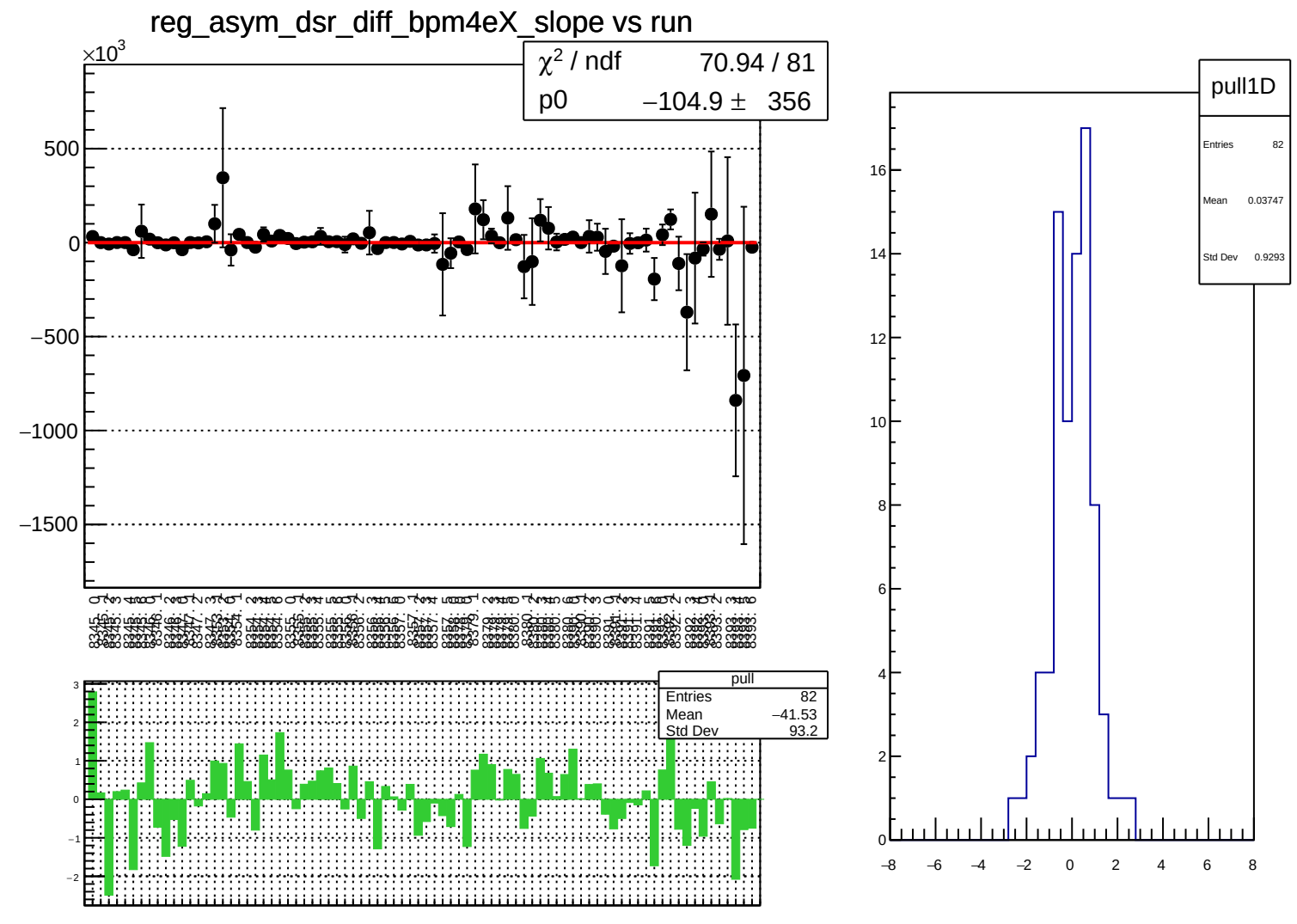

pull1D
Entries 85
Mean −0.04515
Std Dev 1.041
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

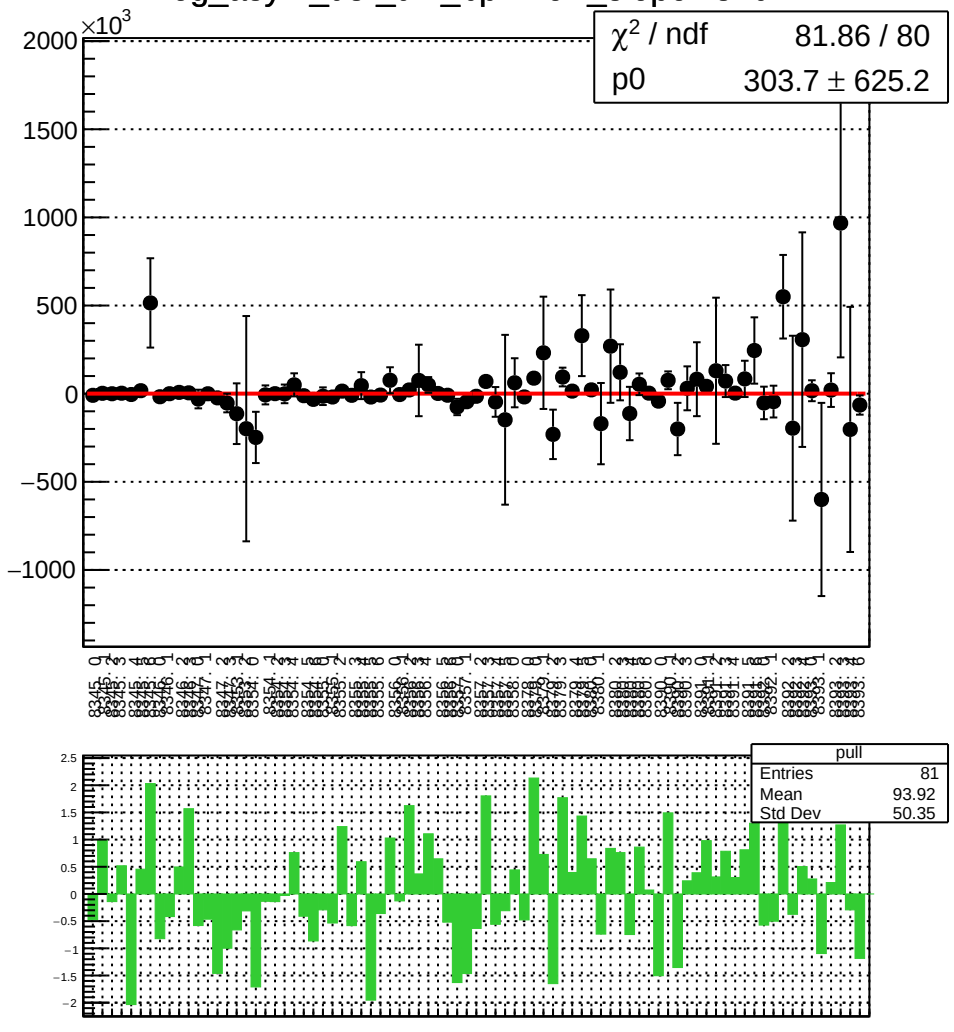

reg_asym_dsr_diff_bpm1X_slope vs run
×10^3
χ^2 / ndf 70.62 / 81
p0 169.2 ± 313.3
1500
1000
500
0
−500
pull
Entries 82
Mean −53.12
Std Dev 104.2
2
1
0
−1
−2
−3

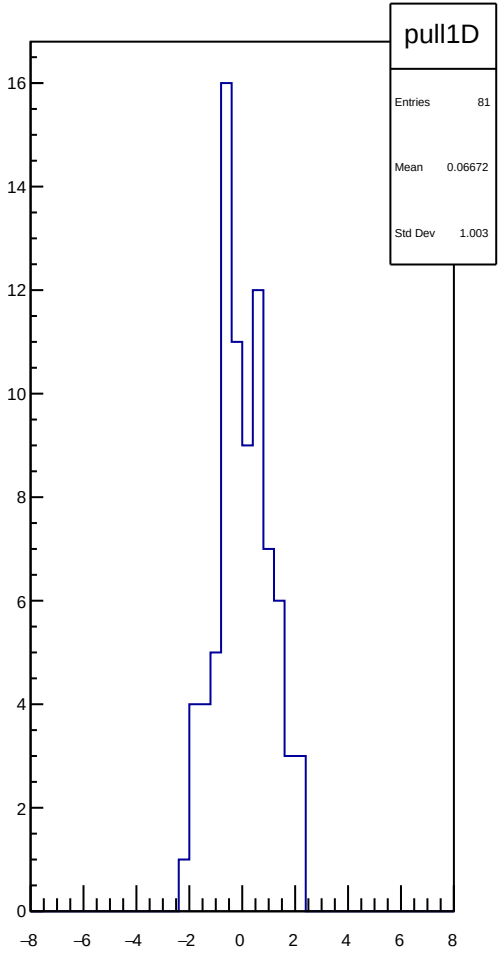

pull1D
Entries 82
Mean −0.03483
Std Dev 0.9273
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

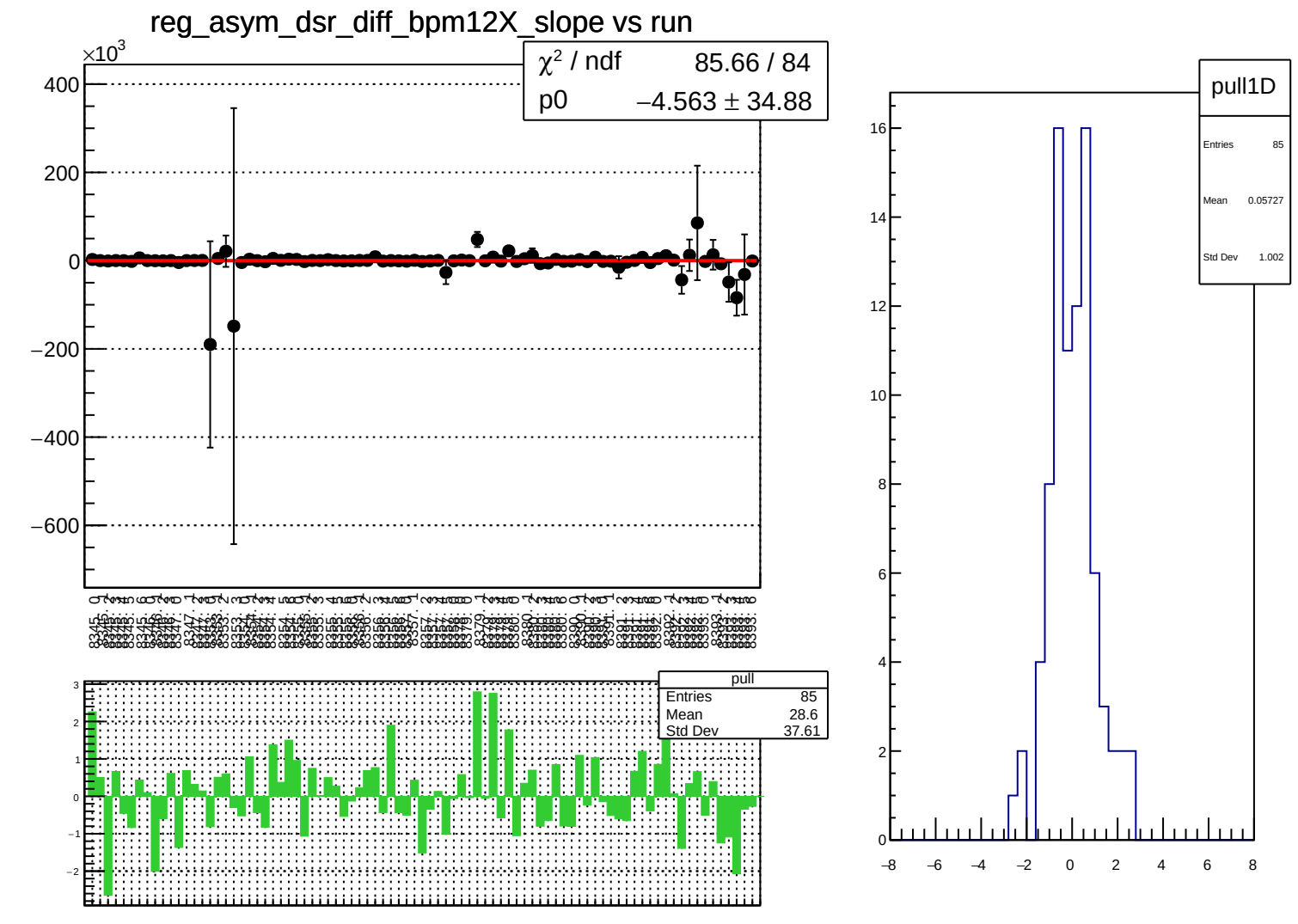

reg_asym_dsr_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 80.48 / 79
p0 −163.9 ± 604.2
1000
500
0
−500
−1000
pull
Entries 80
Mean 93.13
Std Dev 53.52
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

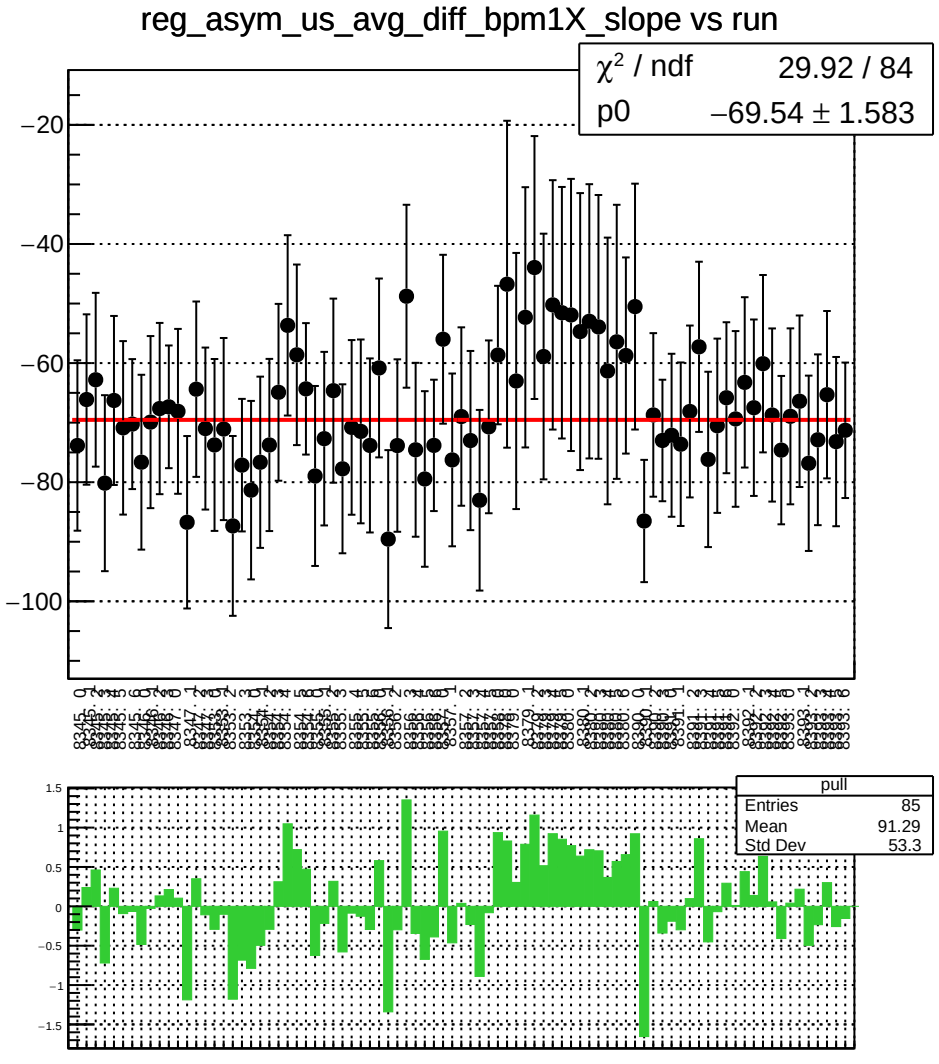

pull1D
Entries 80
Mean −0.05173
Std Dev 1.002
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

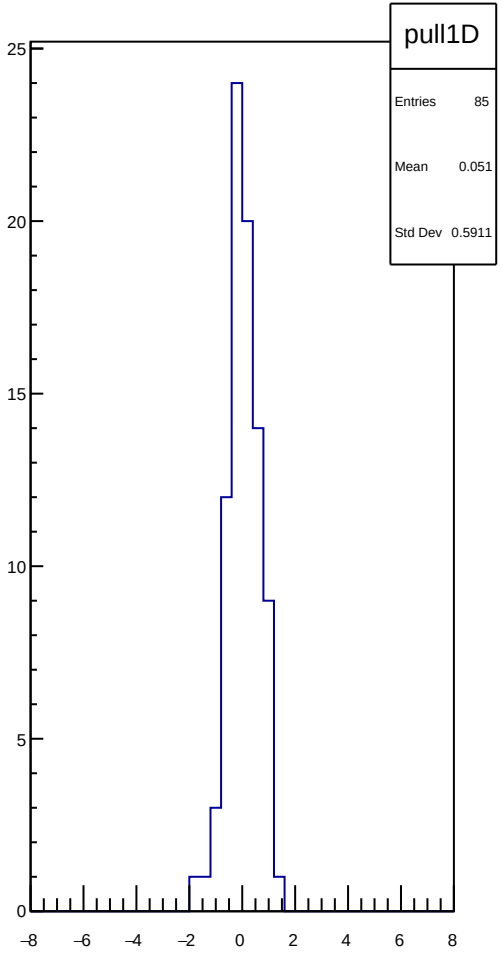

reg_asym_dsr_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 70.94 / 81
p0 −104.9 ± 356
500
0
−500
−1000
−1500
pull
Entries 82
Mean −41.53
Std Dev 93.2
3
2
1
0
−1
−2
pull1D
Entries 82
Mean 0.03747
Std Dev 0.9293
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

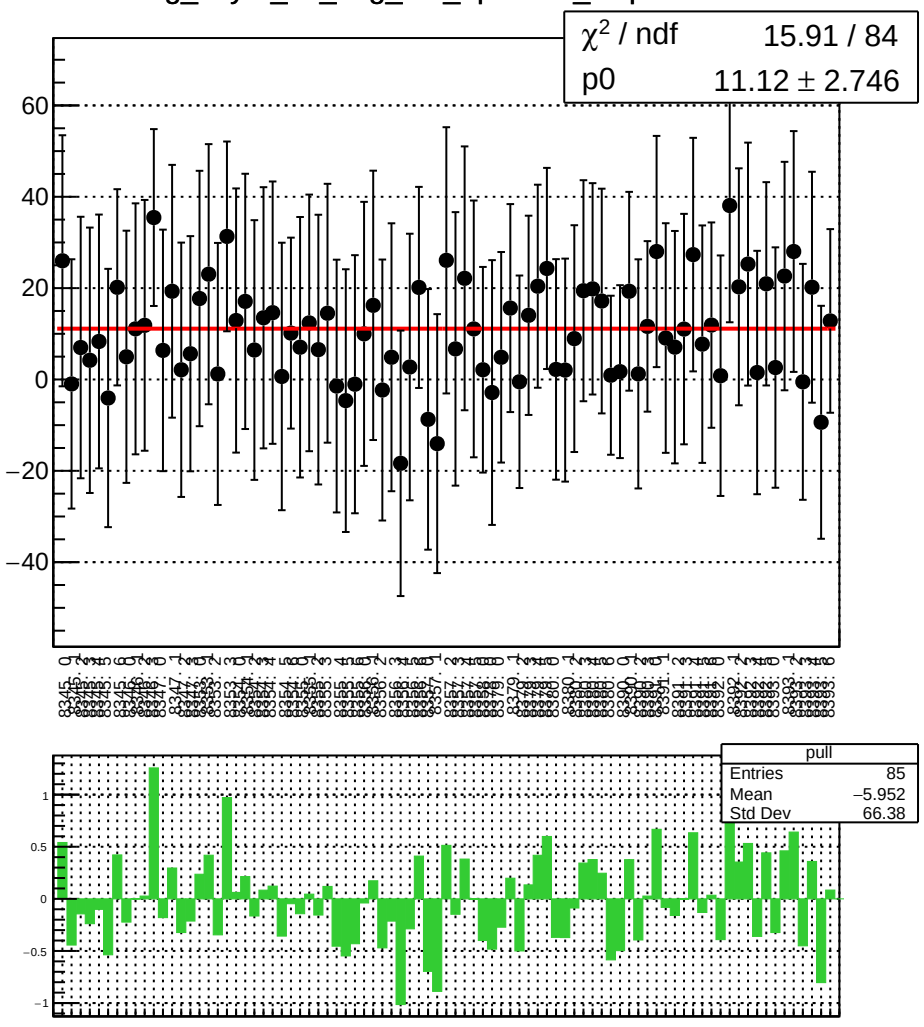

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 81.86 / 80
p0 303.7 ± 625.2
×10³
pull
Entries 81
Mean 93.92
Std Dev 50.35

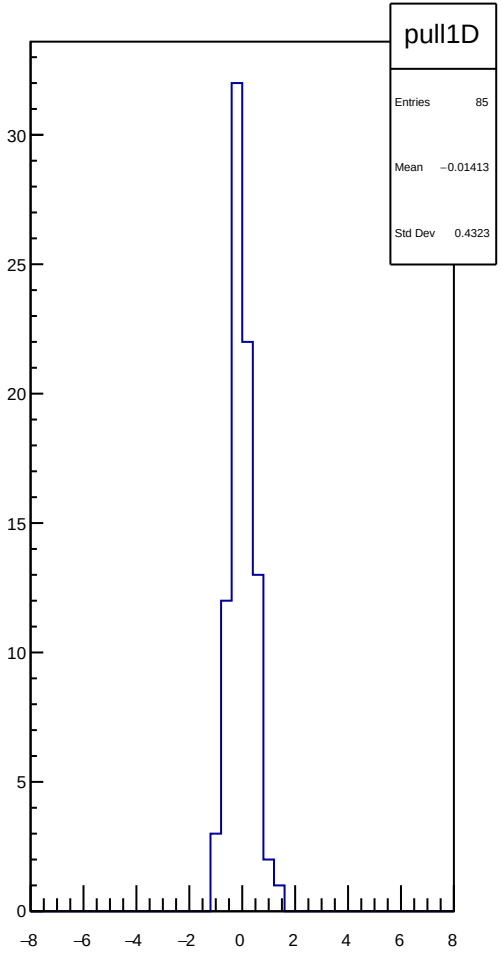

pull1D
Entries 81
Mean 0.06672
Std Dev 1.003

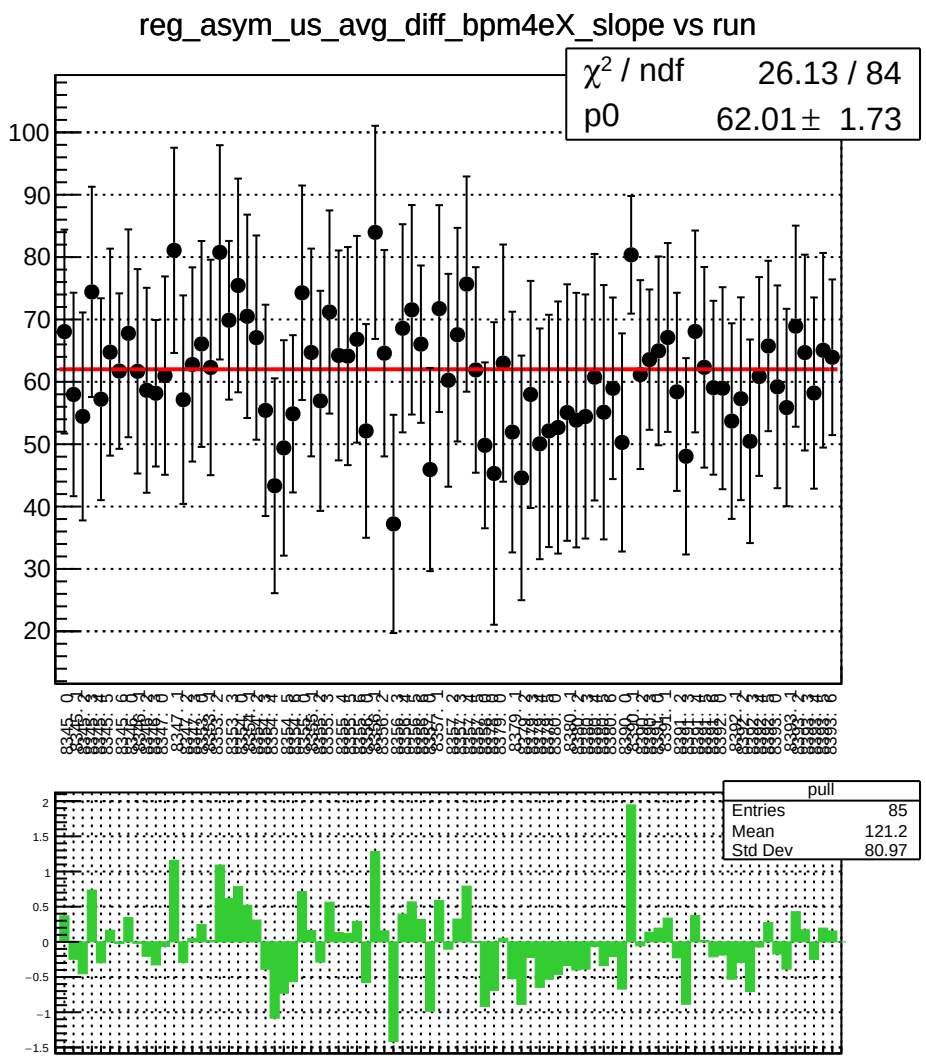

reg_asym_dsr_diff_bpm12X_slope vs run
×10^3
400
200
0
−200
−400
−600
χ² / ndf 85.66 / 84
p0 −4.563 ± 34.88
pull
Entries 85
Mean 28.6
Std Dev 37.61
3
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.05727
Std Dev 1.002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

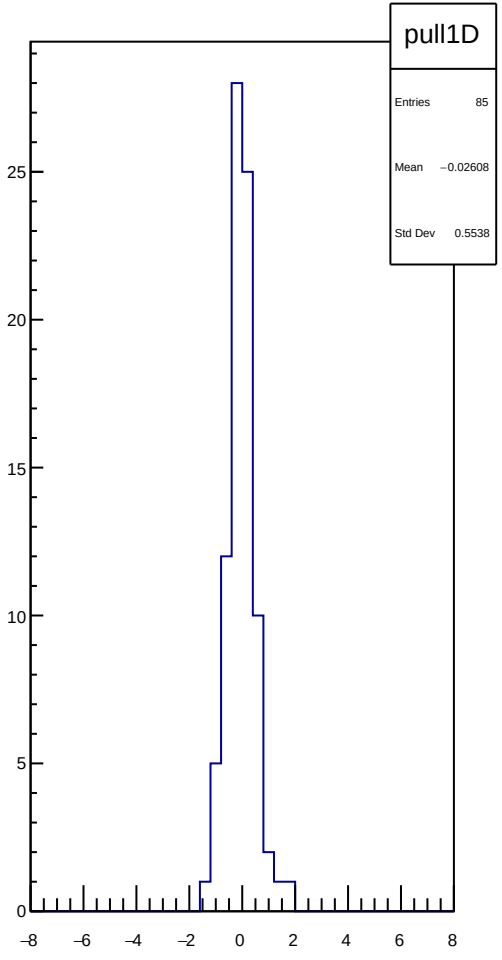

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 29.92 / 84
p0 −69.54 ± 1.583
pull
Entries 85
Mean 91.29
Std Dev 53.3

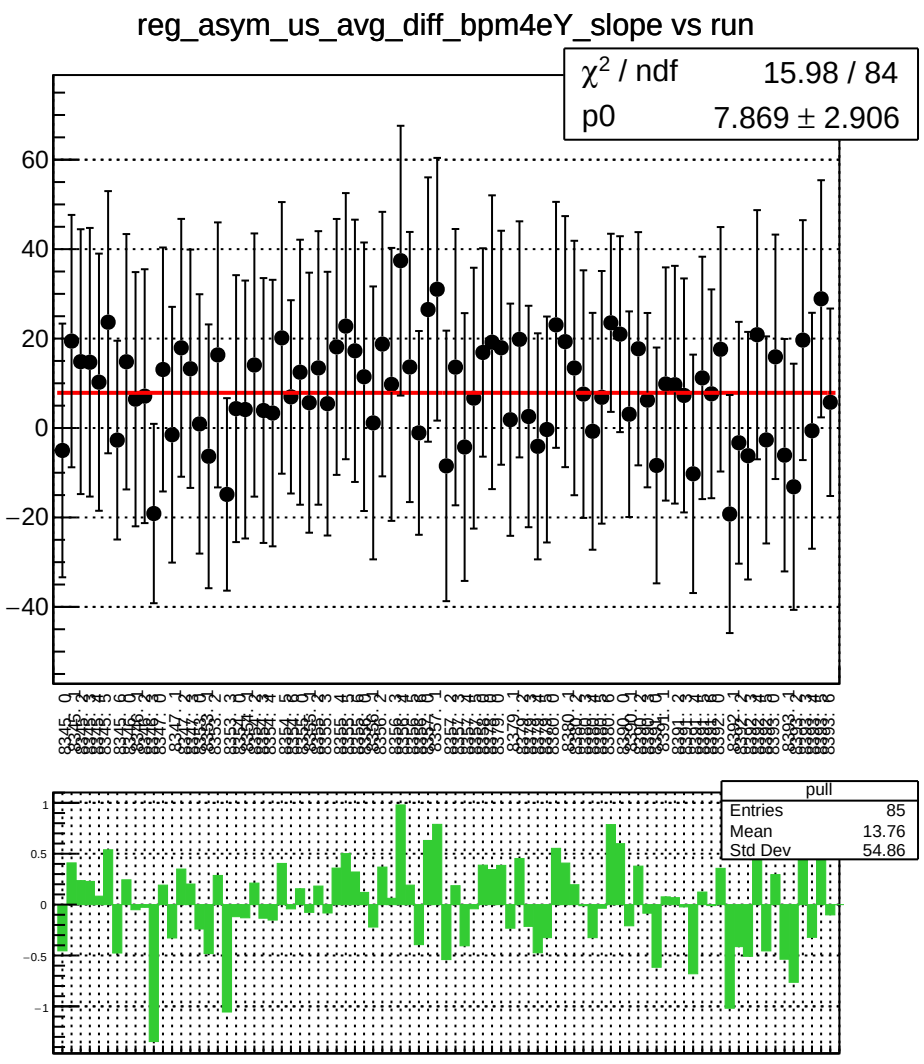

pull1D
Entries 85
Mean 0.051
Std Dev 0.5911

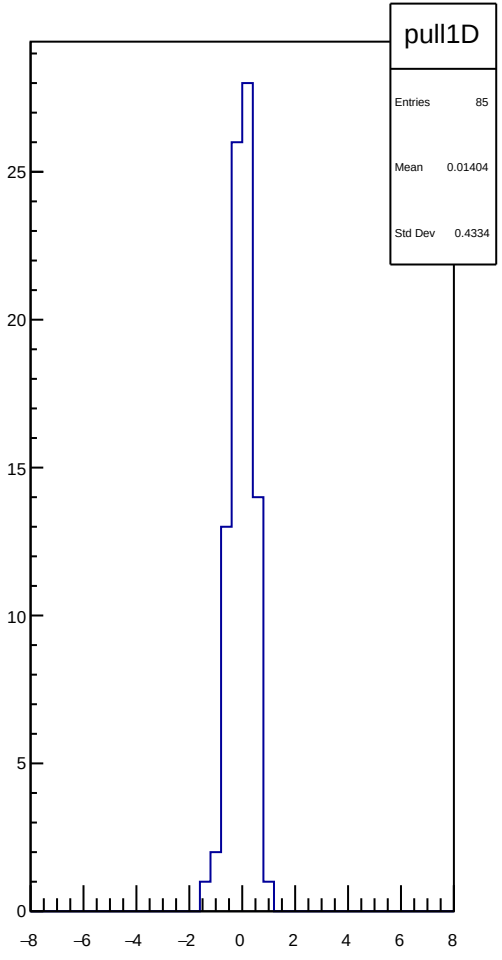

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 15.91 / 84
p0 11.12 ± 2.746
pull
Entries 85
Mean −5.952
Std Dev 66.38

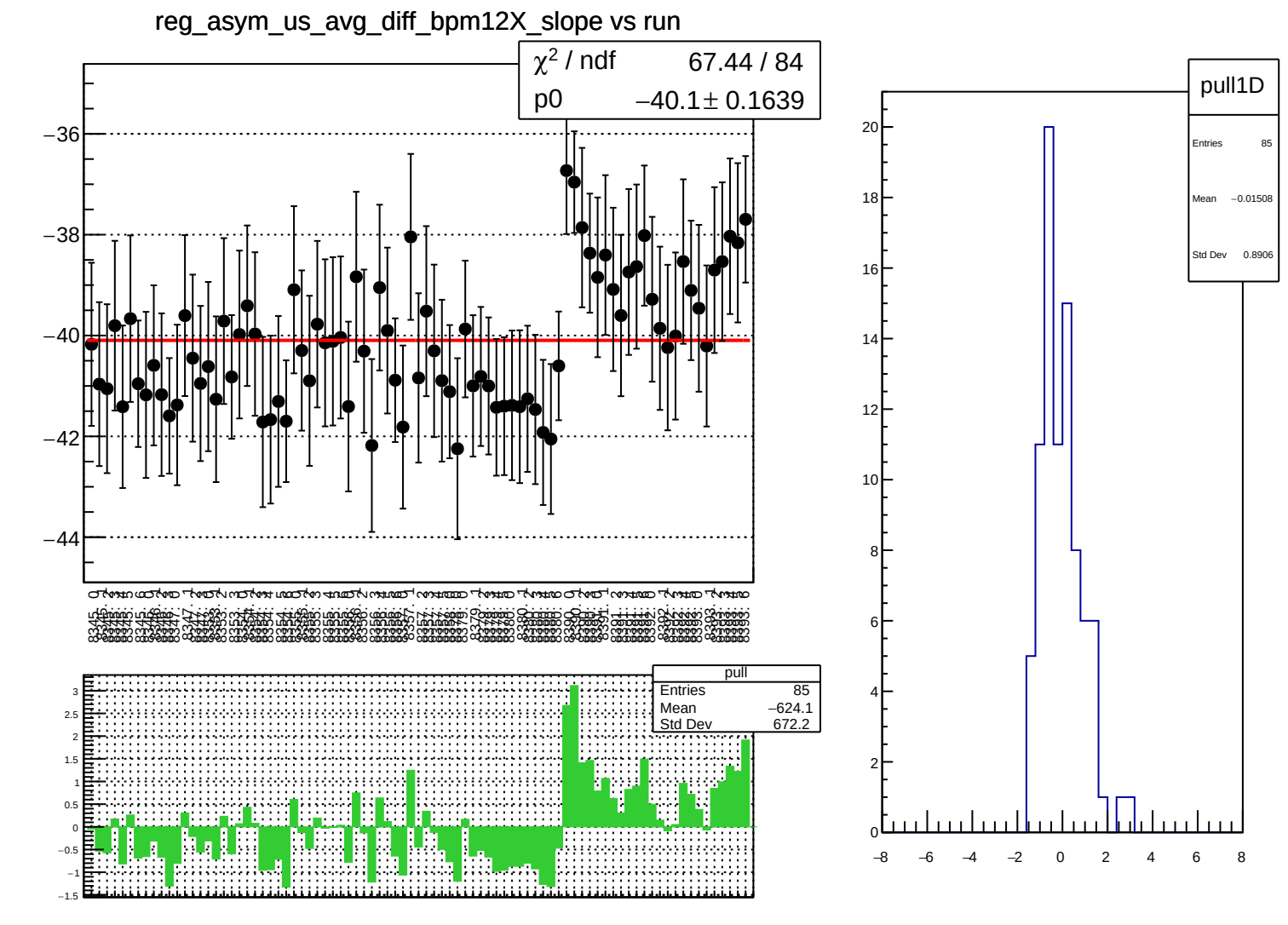

pull1D
Entries 85
Mean −0.01413
Std Dev 0.4323

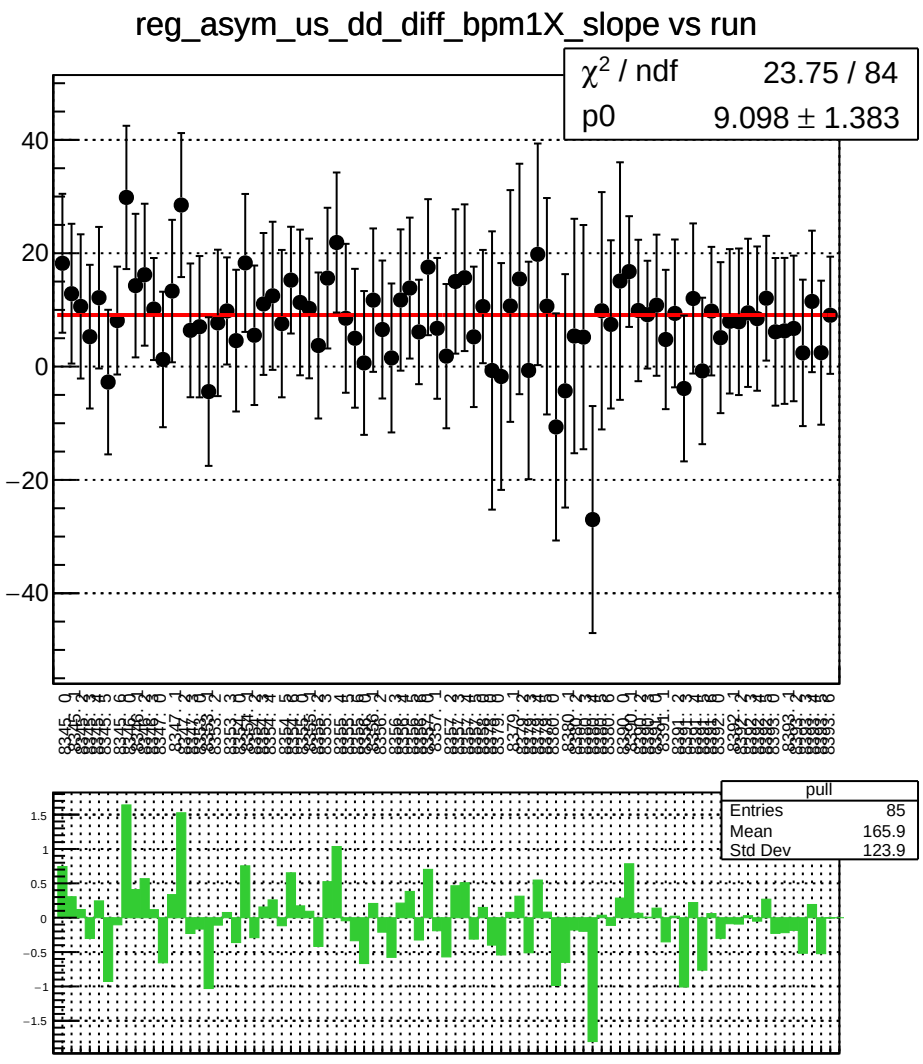

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 26.13 / 84
p0 62.01 ± 1.73
pull
Entries 85
Mean 121.2
Std Dev 80.97

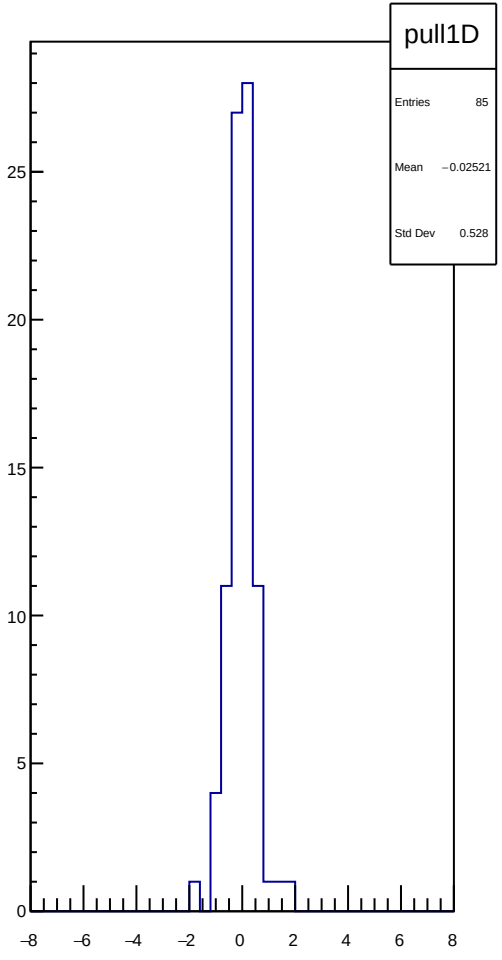

pull1D
Entries 85
Mean −0.02608
Std Dev 0.5538

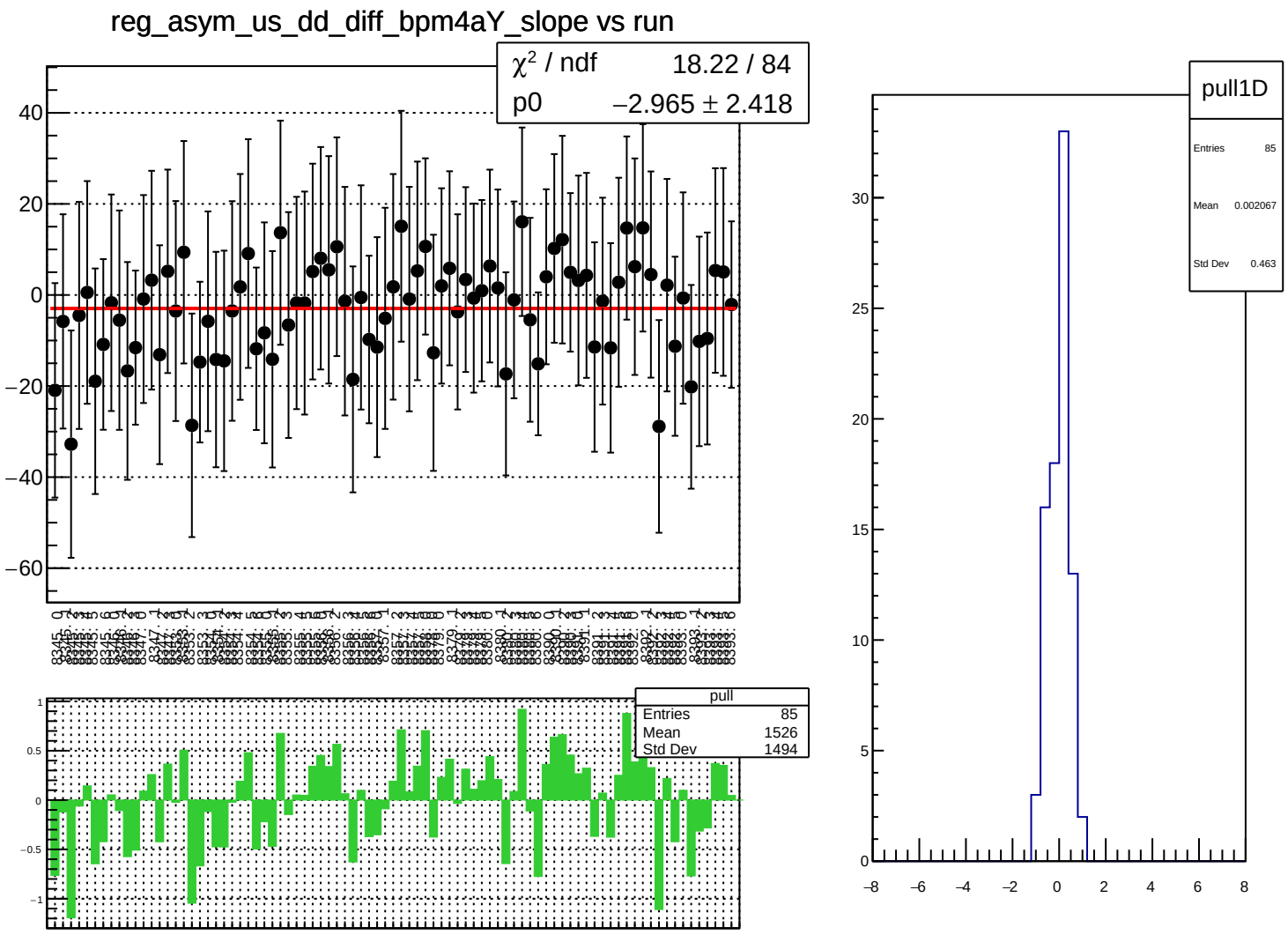

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 15.98 / 84
p0 7.869 ± 2.906
pull
Entries 85
Mean 13.76
Std Dev 54.86

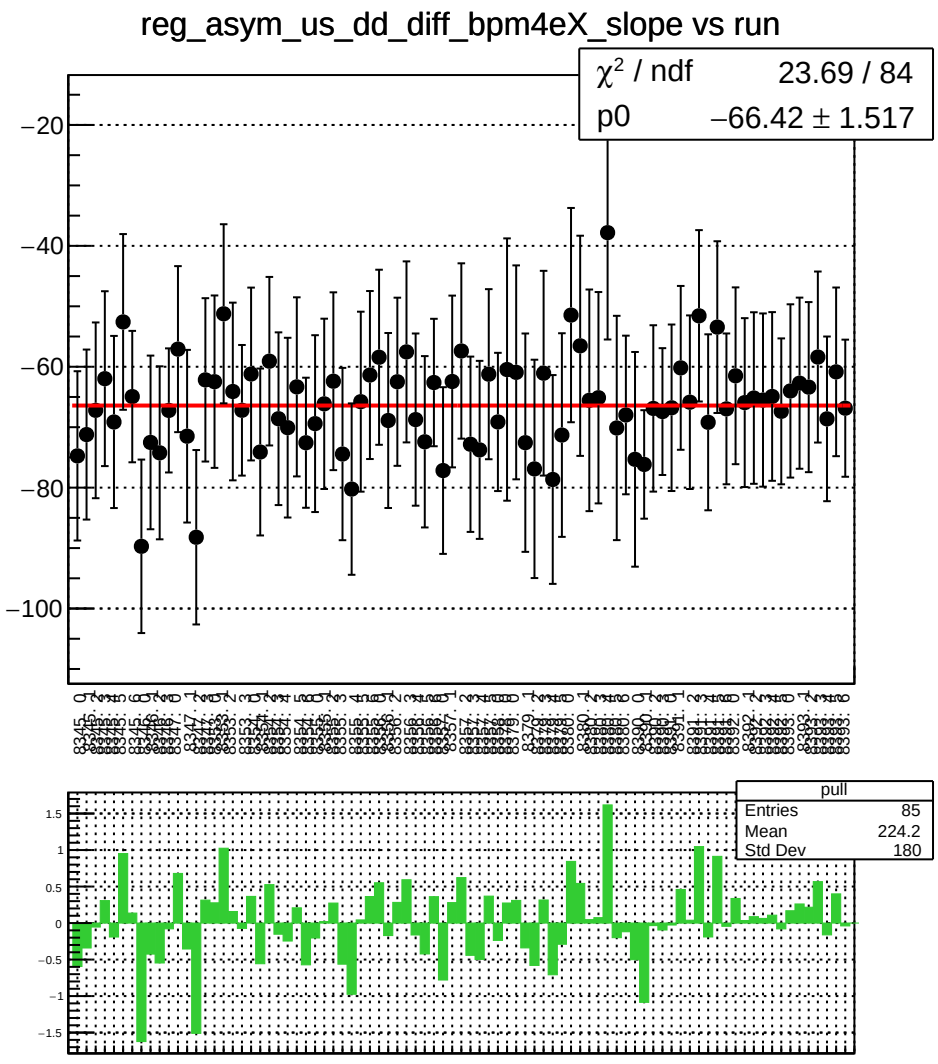

pull1D
Entries 85
Mean 0.01404
Std Dev 0.4334

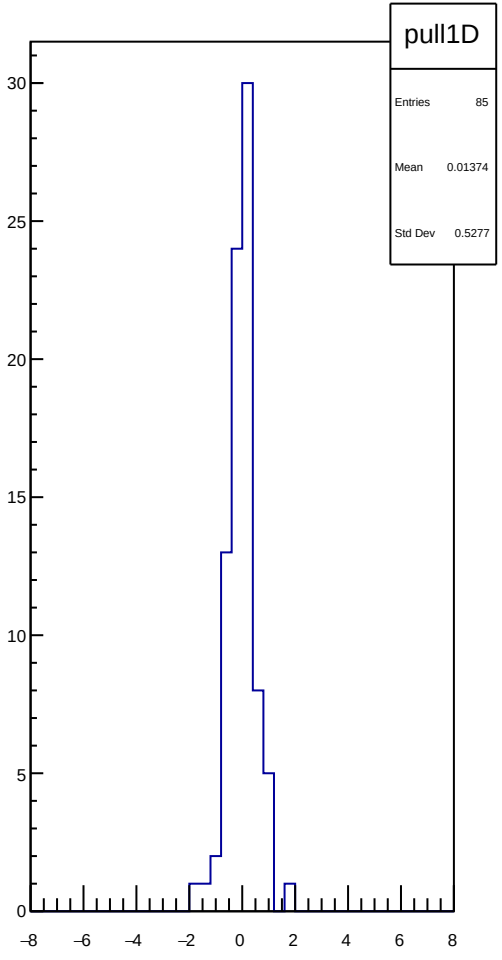

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 67.44 / 84
p0 −40.1 ± 0.1639
pull
Entries 85
Mean −624.1
Std Dev 672.2
pull1D
Entries 85
Mean −0.01508
Std Dev 0.8906

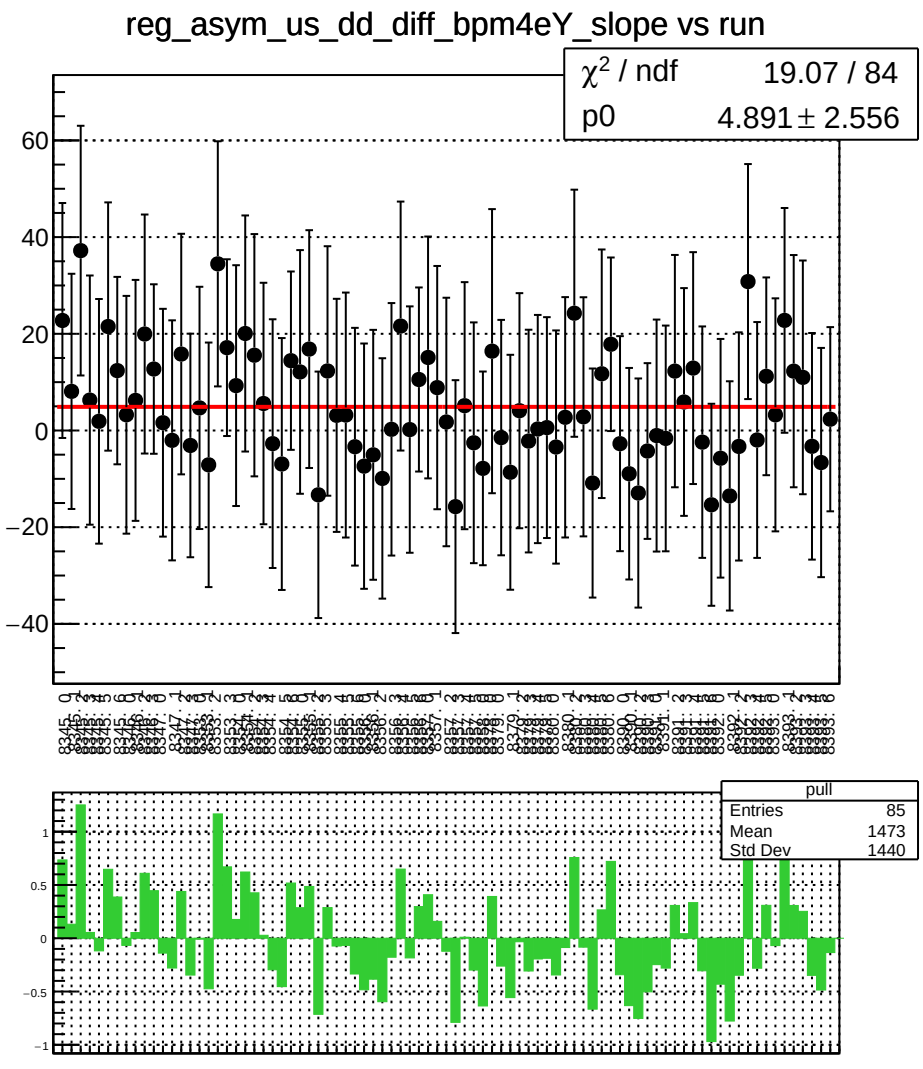

reg_asym_us_dd_diff_bpm1X_slope vs run
χ^2 / ndf 23.75 / 84
p0 9.098 ± 1.383
pull
Entries 85
Mean 165.9
Std Dev 123.9

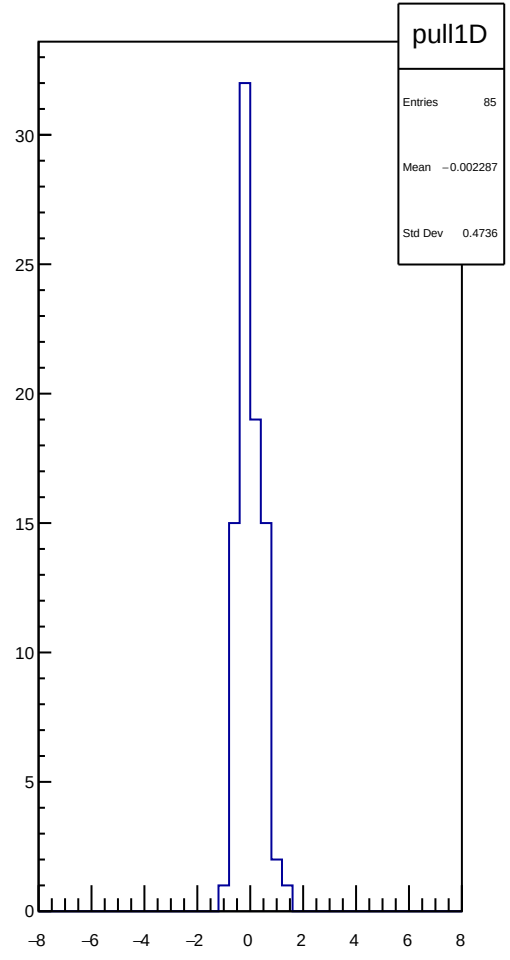

pull1D
Entries 85
Mean −0.02521
Std Dev 0.528

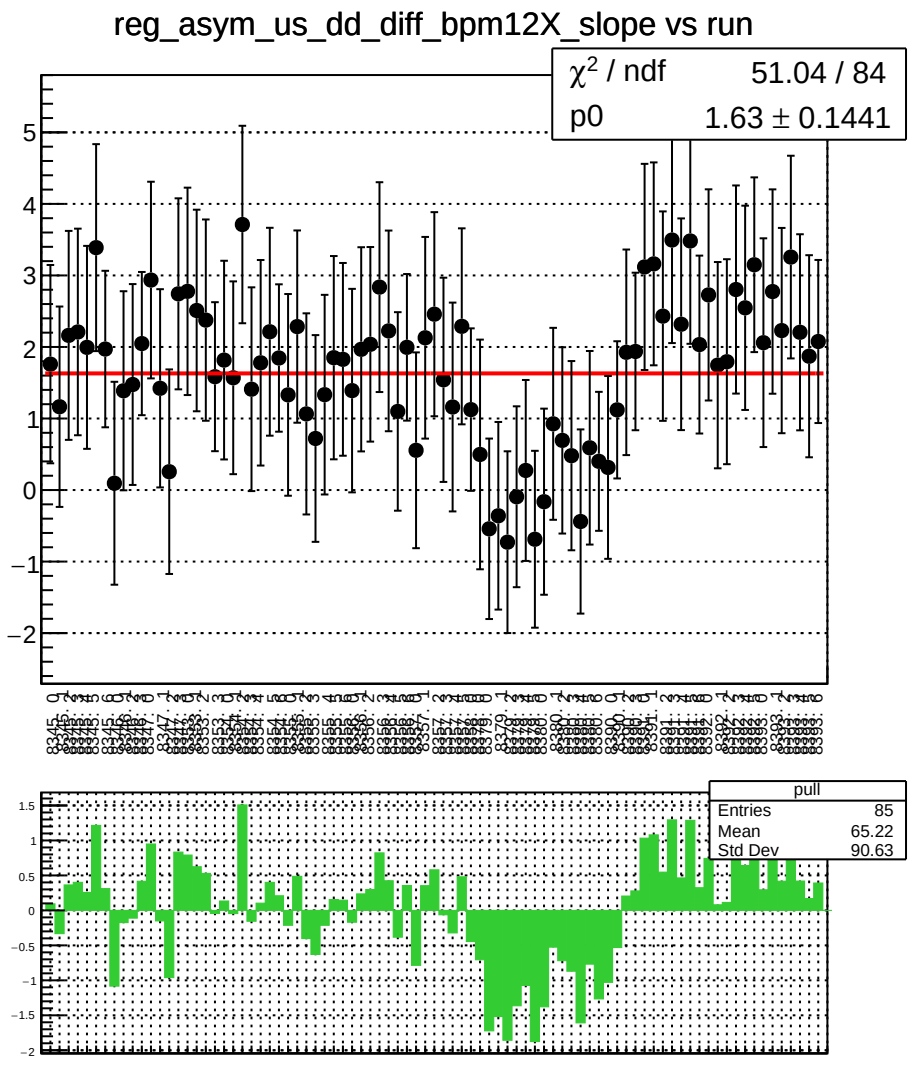

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.22 / 84
p0 −2.965 ± 2.418
pull
Entries 85
Mean 1526
Std Dev 1494
pull1D
Entries 85
Mean 0.002067
Std Dev 0.463

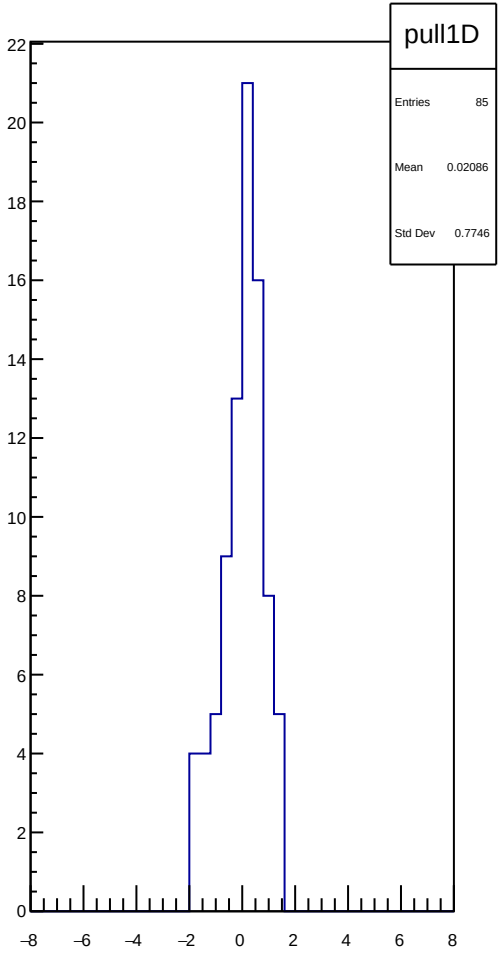

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.69 / 84
p0 −66.42 ± 1.517
pull
Entries 85
Mean 224.2
Std Dev 180

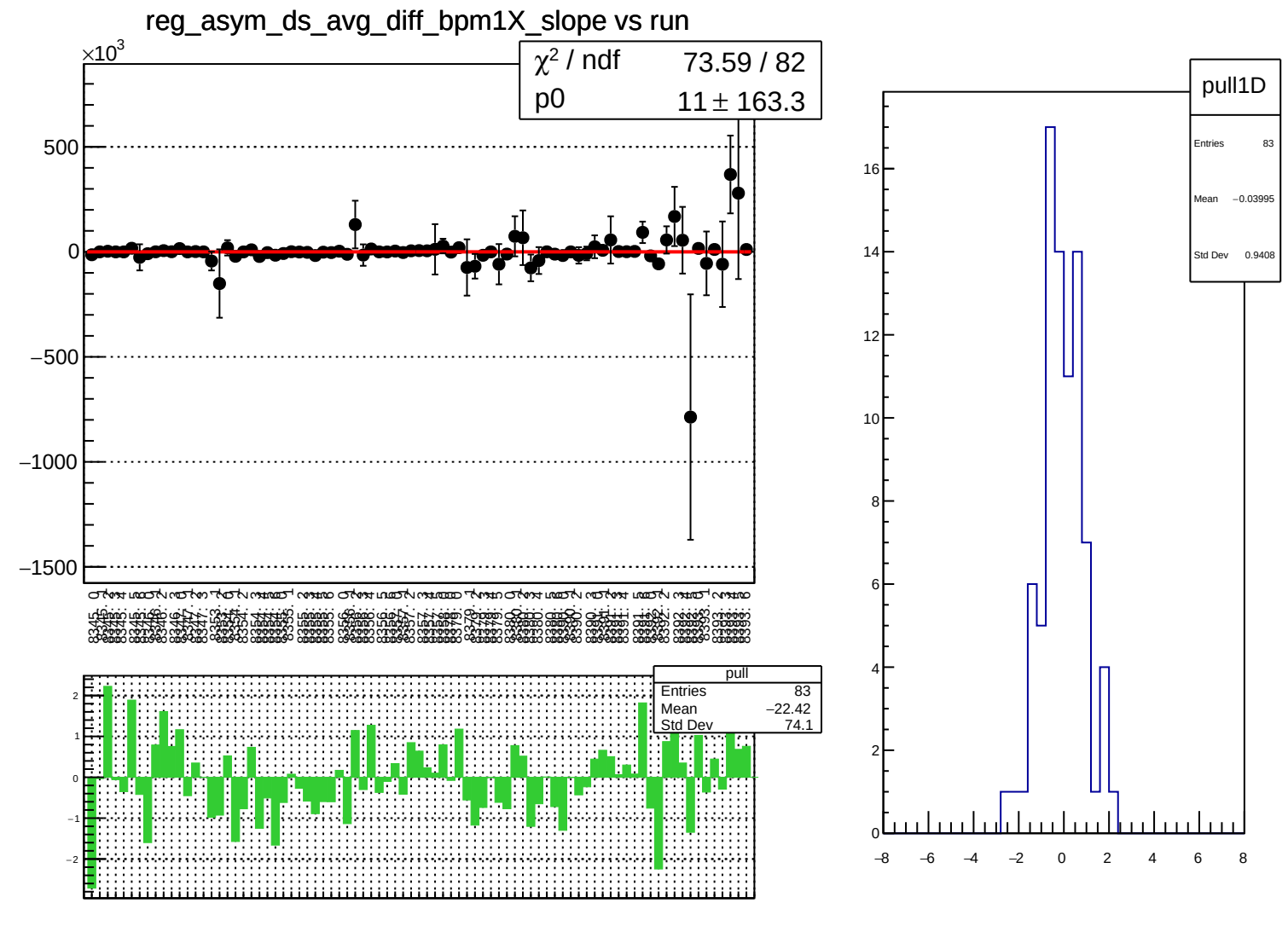

pull1D
Entries 85
Mean 0.01374
Std Dev 0.5277

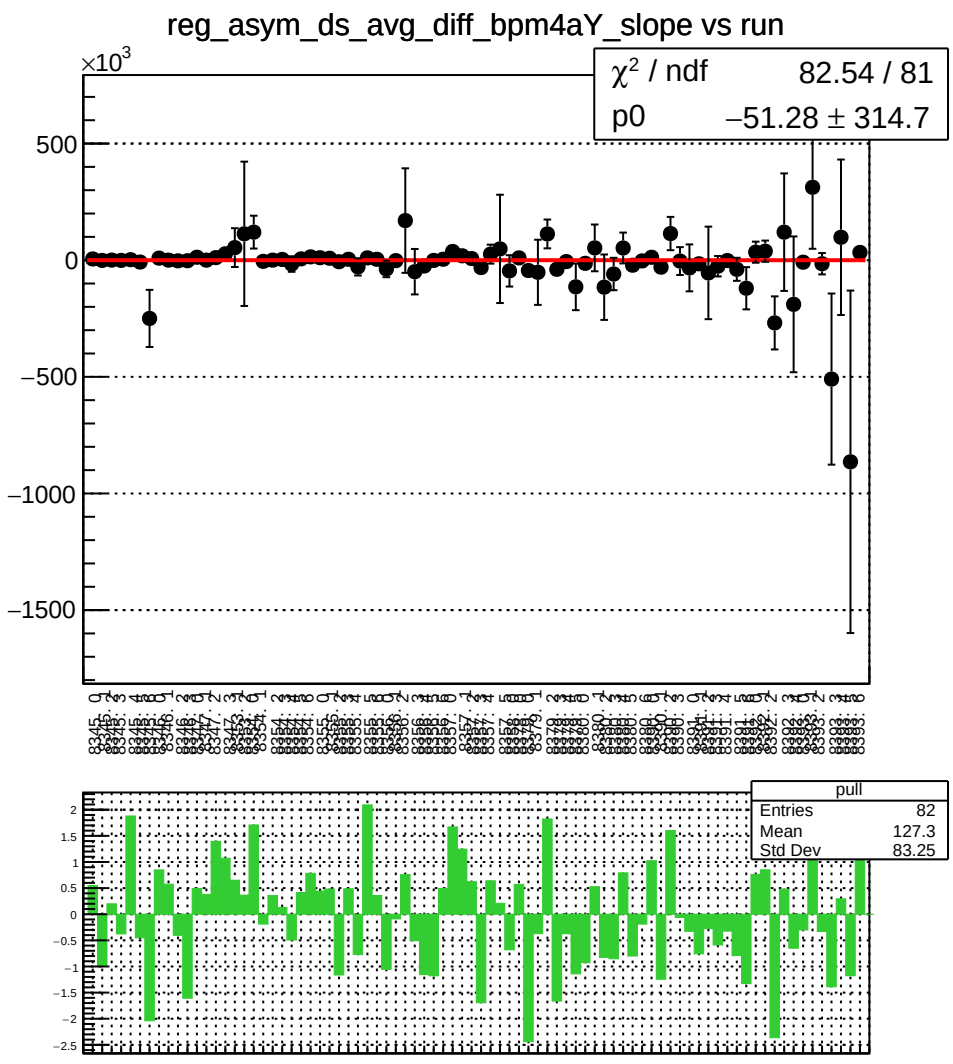

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 19.07 / 84
p0 4.891 ± 2.556
pull
Entries 85
Mean 1473
Std Dev 1440

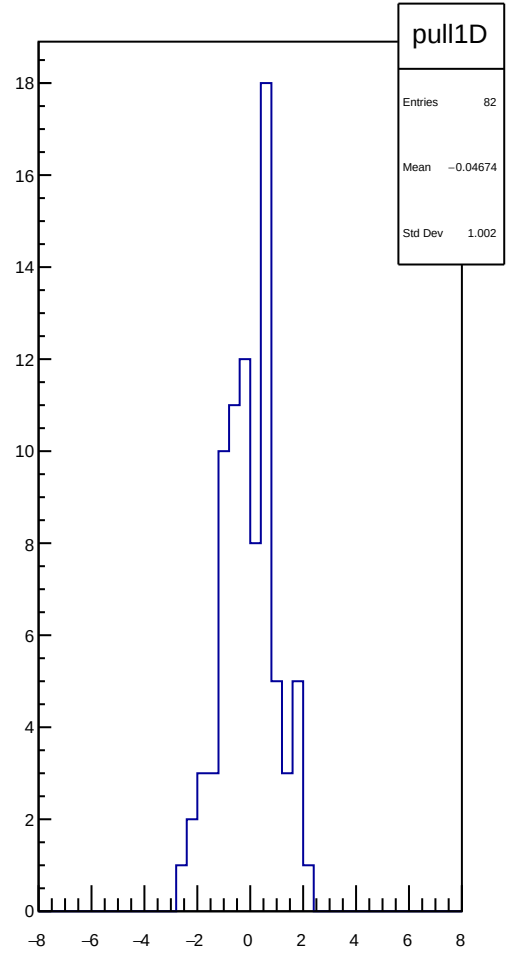

pull1D
Entries 85
Mean −0.002287
Std Dev 0.4736

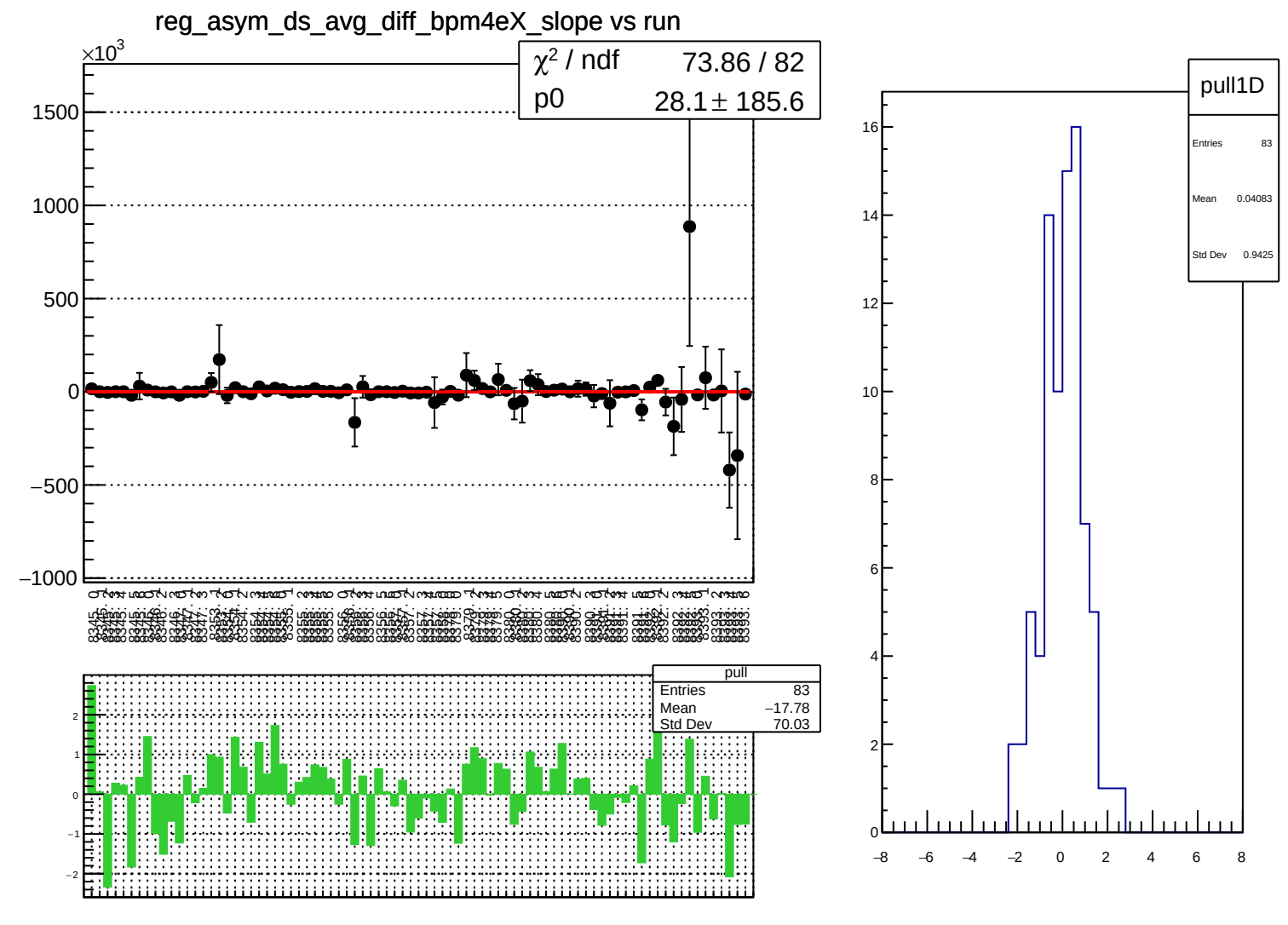

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 51.04 / 84
p0 1.63 ± 0.1441
pull
Entries 85
Mean 65.22
Std Dev 90.63

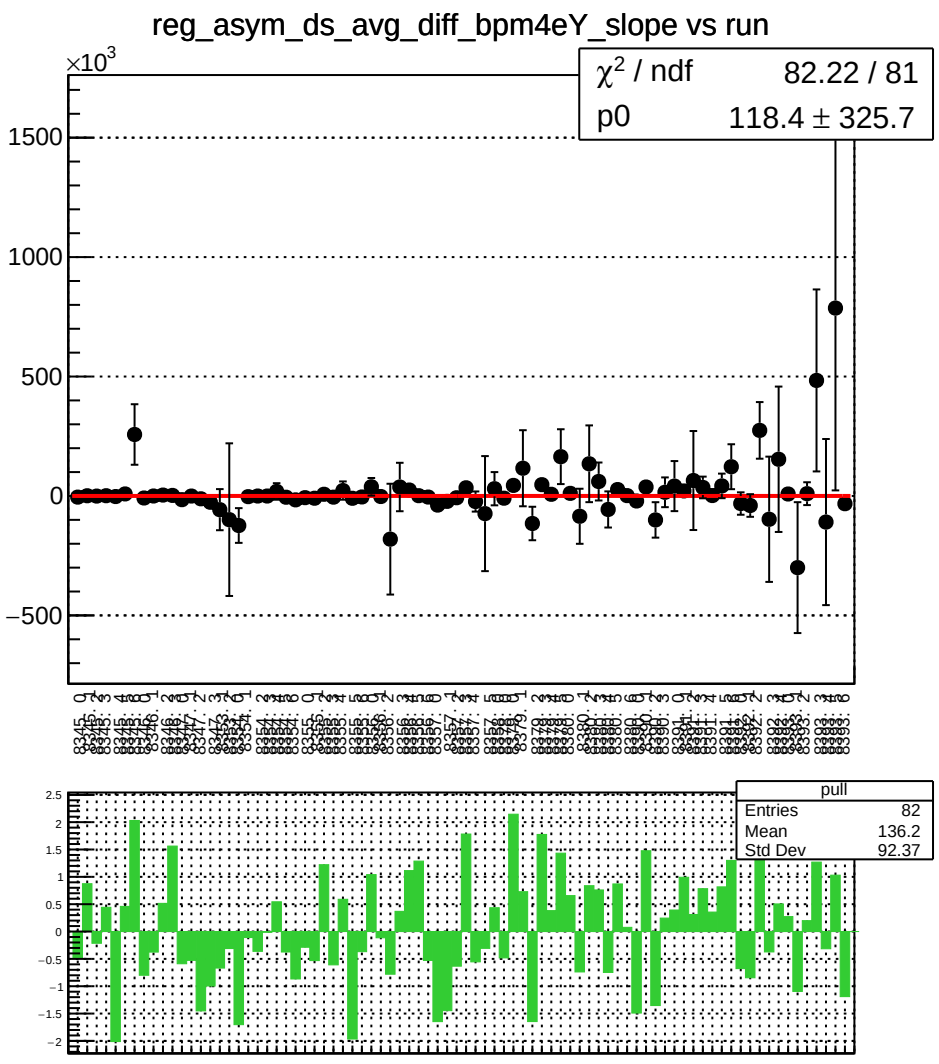

pull1D
Entries 85
Mean 0.02086
Std Dev 0.7746

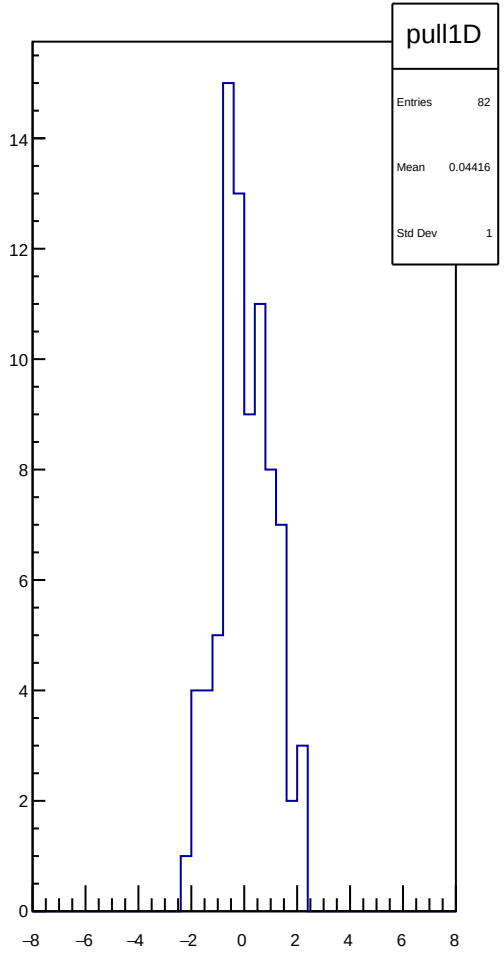

reg_asym_ds_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 73.59 / 82
p0 11 ± 163.3
500
0
−500
−1000
−1500
pull
Entries 83
Mean −22.42
Std Dev 74.1
2
1
0
−1
−2
pull1D
Entries 83
Mean −0.03995
Std Dev 0.9408
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

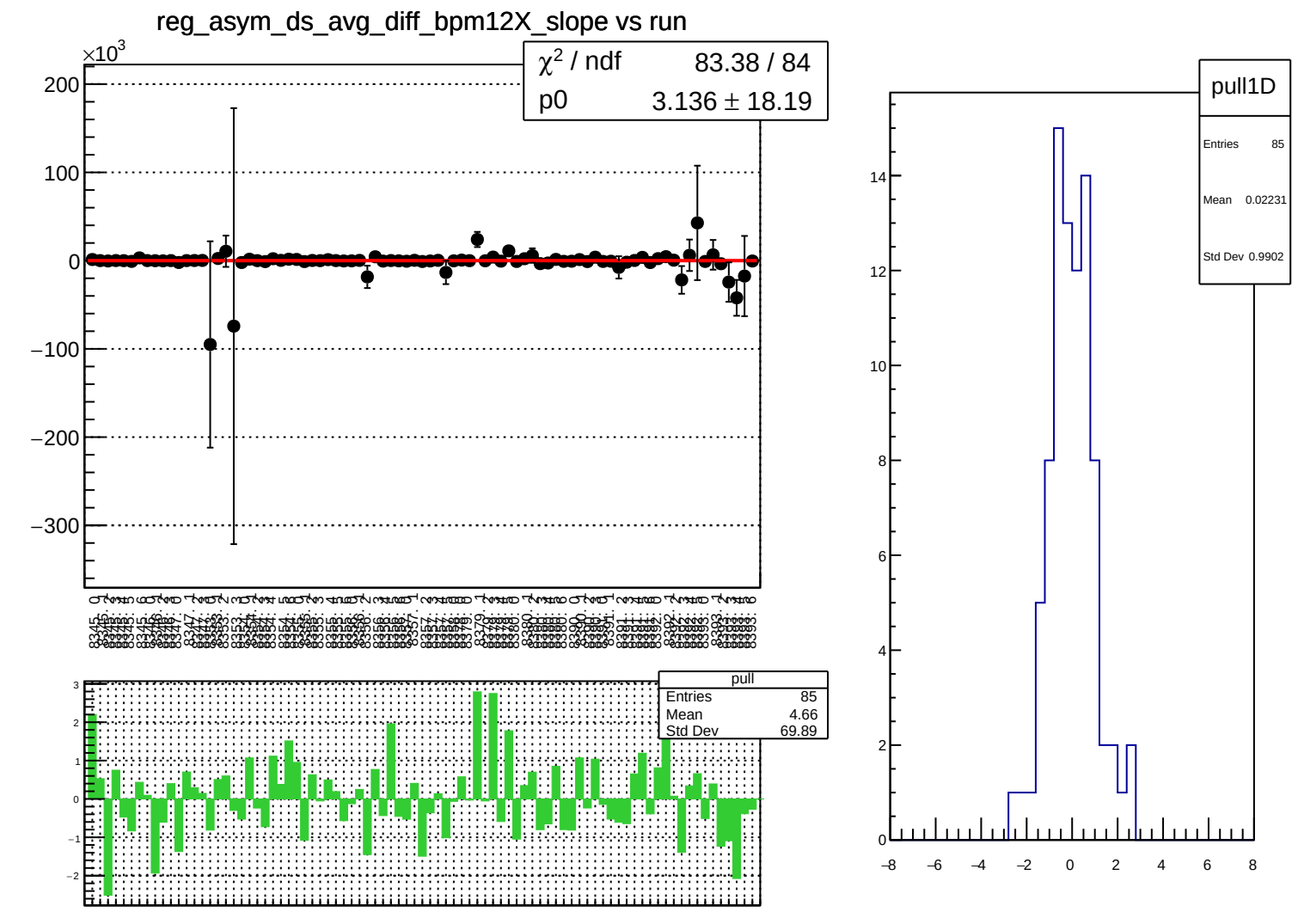

reg_asym_ds_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 82.54 / 81
p0 −51.28 ± 314.7
500
0
−500
−1000
−1500
pull
Entries 82
Mean 127.3
Std Dev 83.25
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

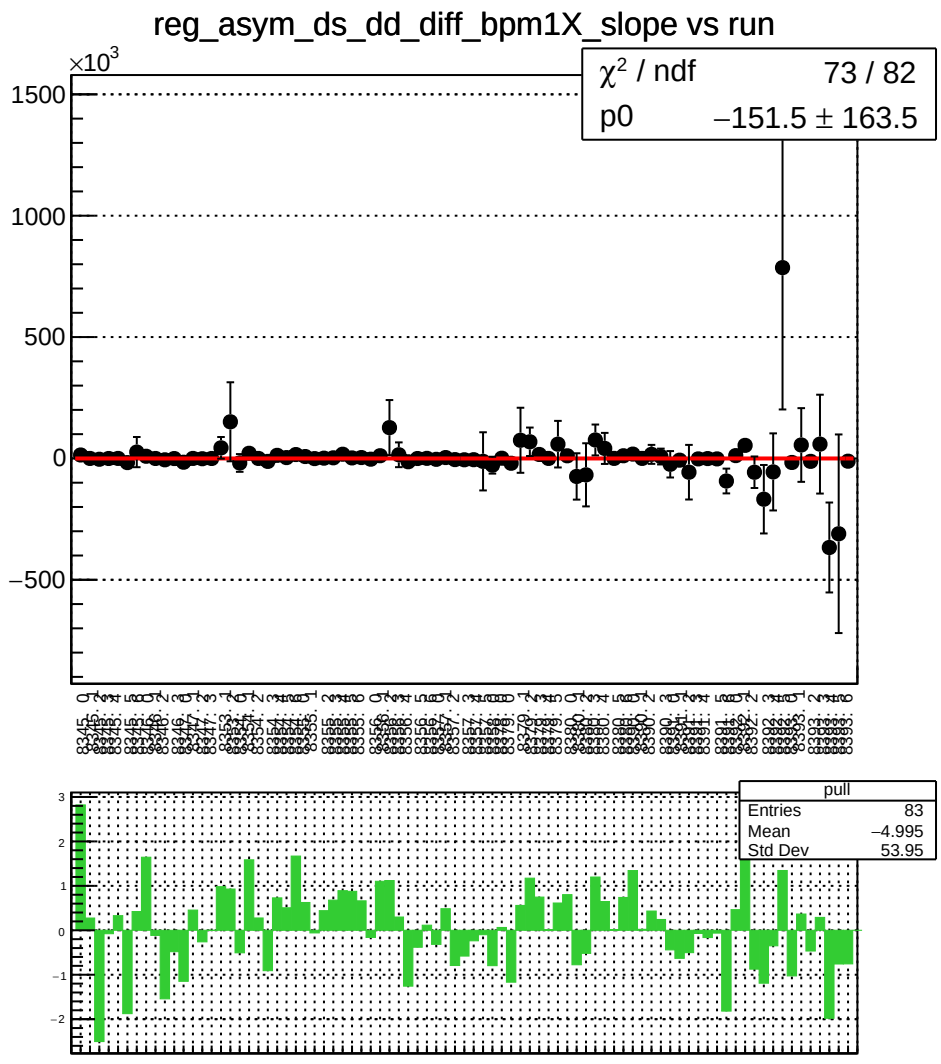

pull1D
Entries 82
Mean −0.04674
Std Dev 1.002
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

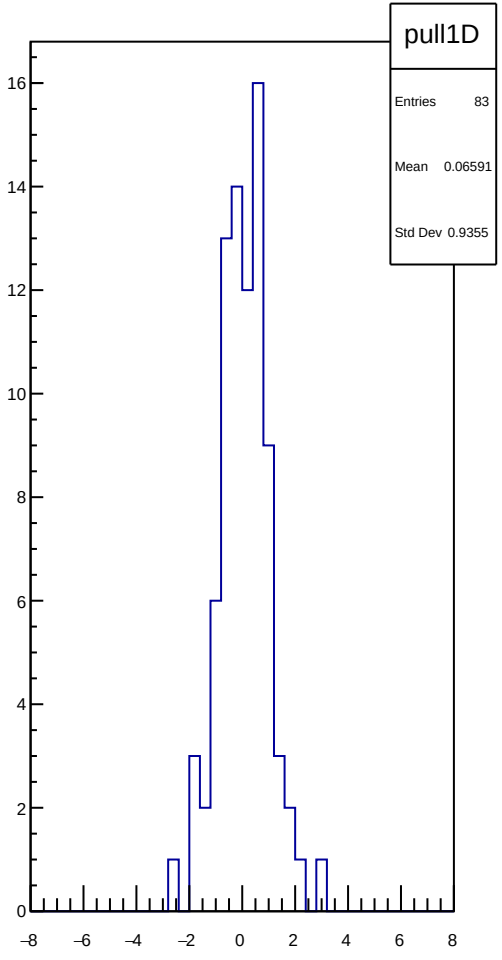

reg_asym_ds_avg_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 73.86 / 82
p0 28.1 ± 185.6
1500
1000
500
0
−500
−1000
pull
Entries 83
Mean −17.78
Std Dev 70.03
2
1
0
−1
−2
pull1D
Entries 83
Mean 0.04083
Std Dev 0.9425
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

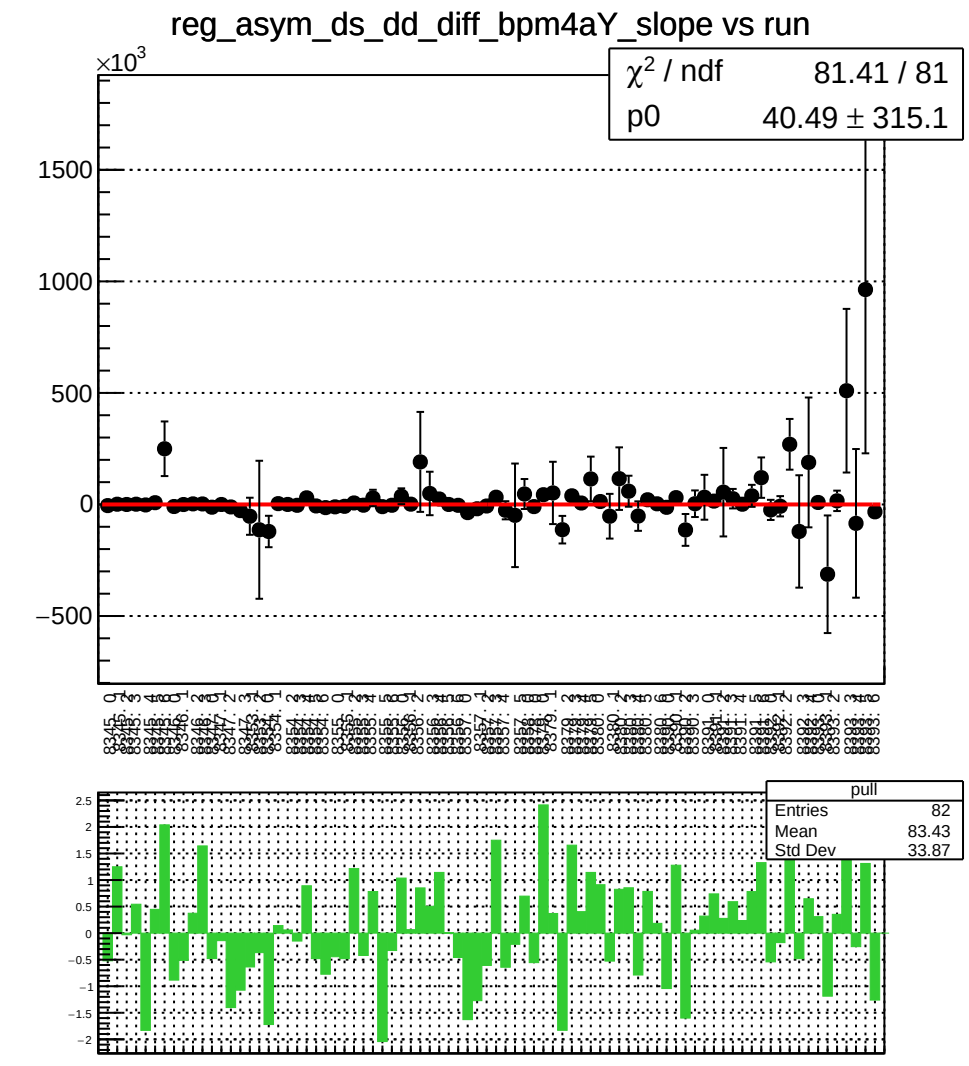

reg_asym_ds_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 82.22 / 81
p0 118.4 ± 325.7
1500
1000
500
0
−500
pull
Entries 82
Mean 136.2
Std Dev 92.37
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

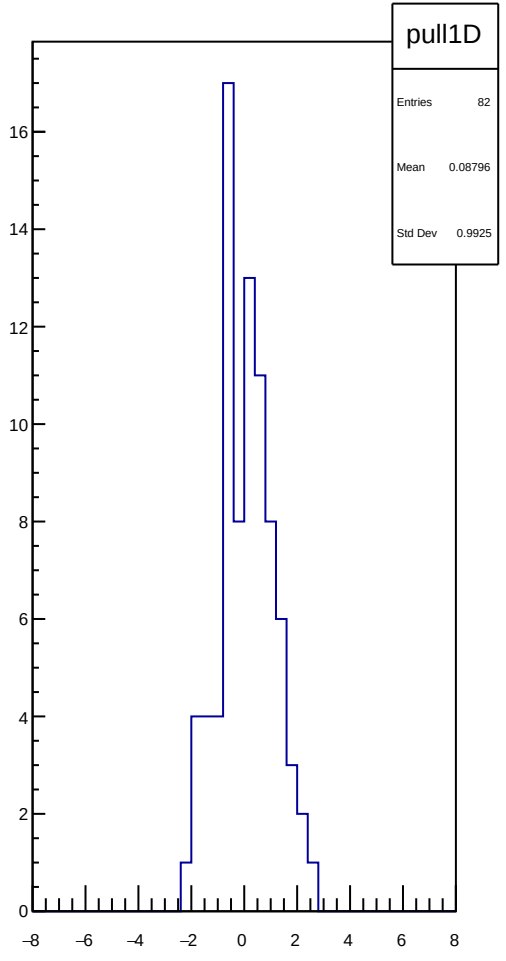

pull1D
Entries 82
Mean 0.04416
Std Dev 1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

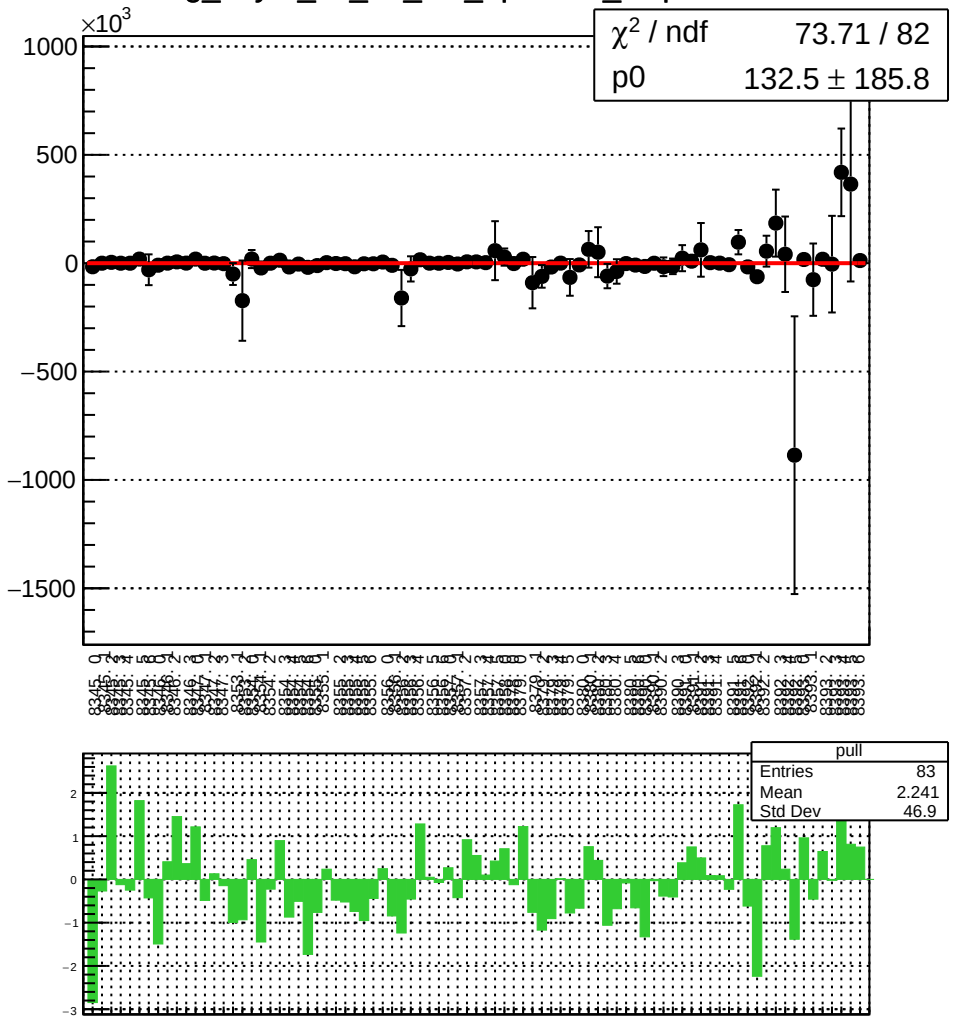

reg_asym_ds_avg_diff_bpm12X_slope vs run
×10^3
χ² / ndf 83.38 / 84
p0 3.136 ± 18.19
200
100
0
−100
−200
−300
pull
Entries 85
Mean 4.66
Std Dev 69.89
3
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.02231
Std Dev 0.9902
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

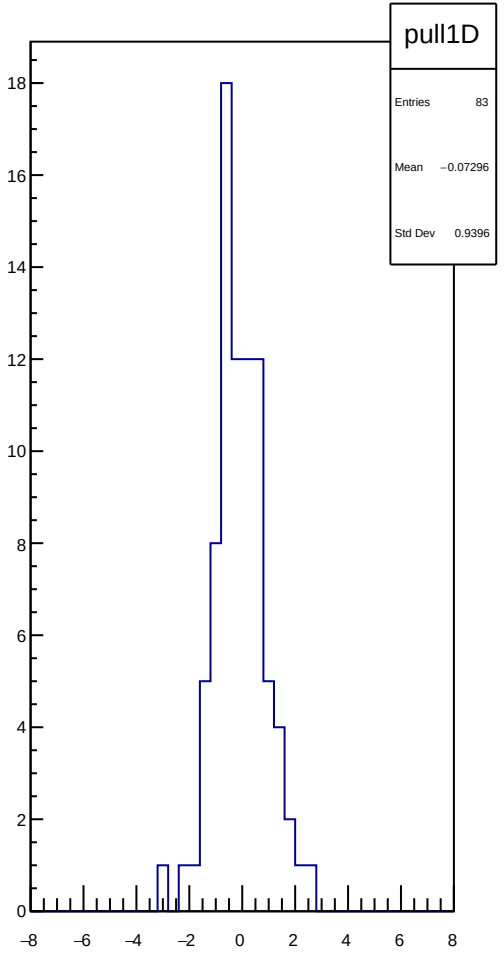

reg_asym_ds_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 73 / 82
p0 −151.5 ± 163.5
1500
1000
500
0
−500
pull
Entries 83
Mean −4.995
Std Dev 53.95
3
2
1
0
−1
−2

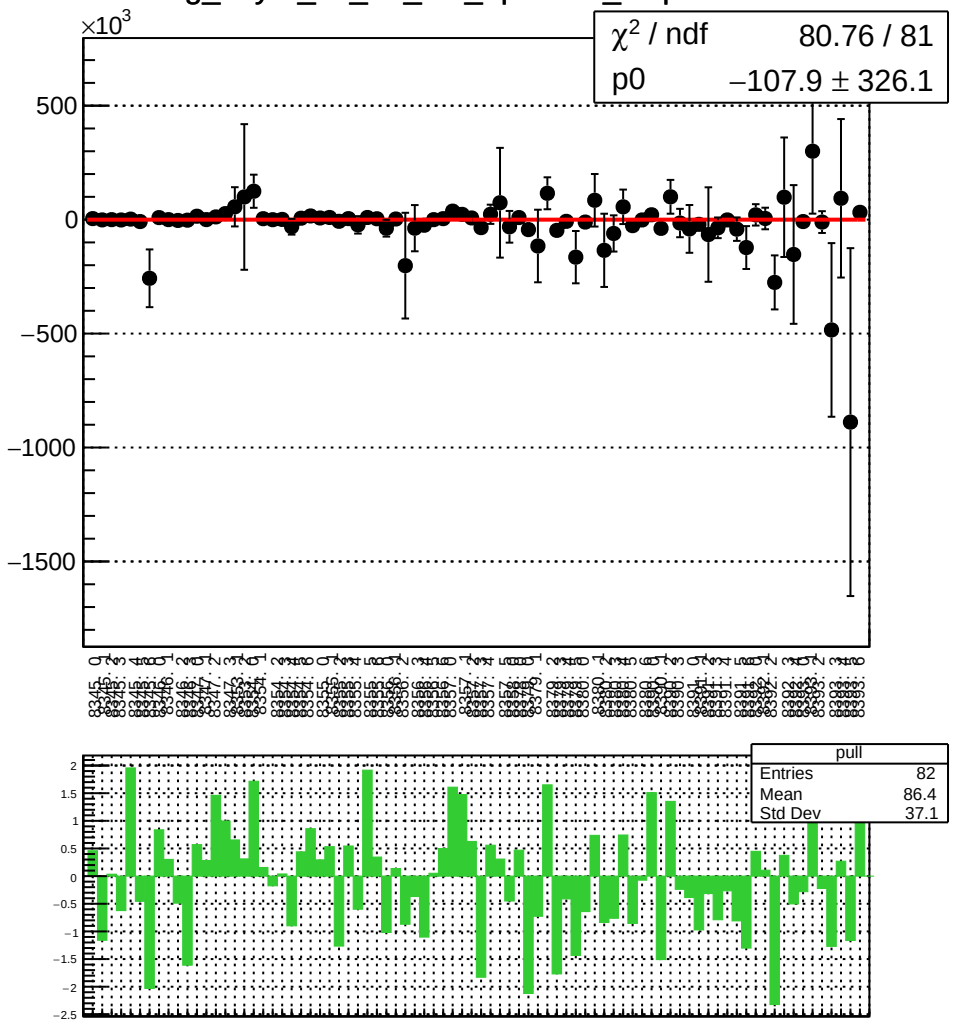

pull1D
Entries 83
Mean 0.06591
Std Dev 0.9355
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

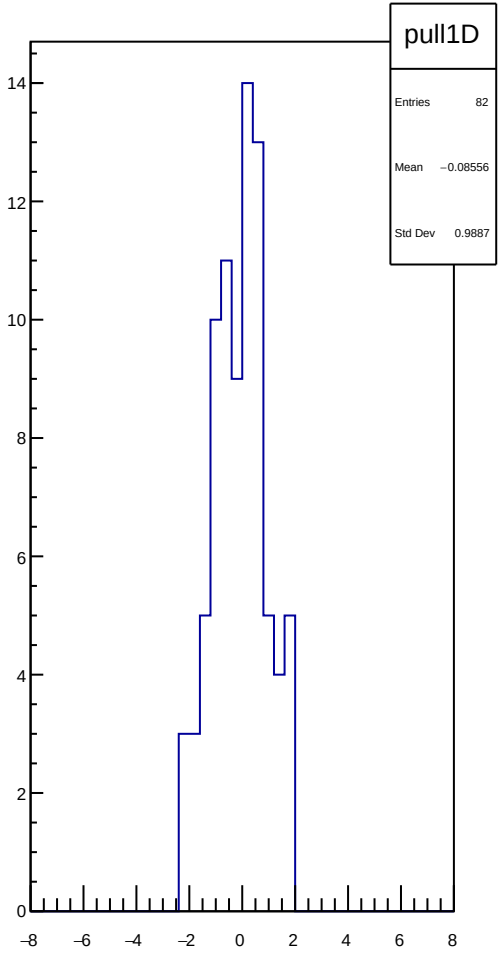

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 81.41 / 81
p0 40.49 ± 315.1
×10³
1500
1000
500
0
−500
pull
Entries 82
Mean 83.43
Std Dev 33.87
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

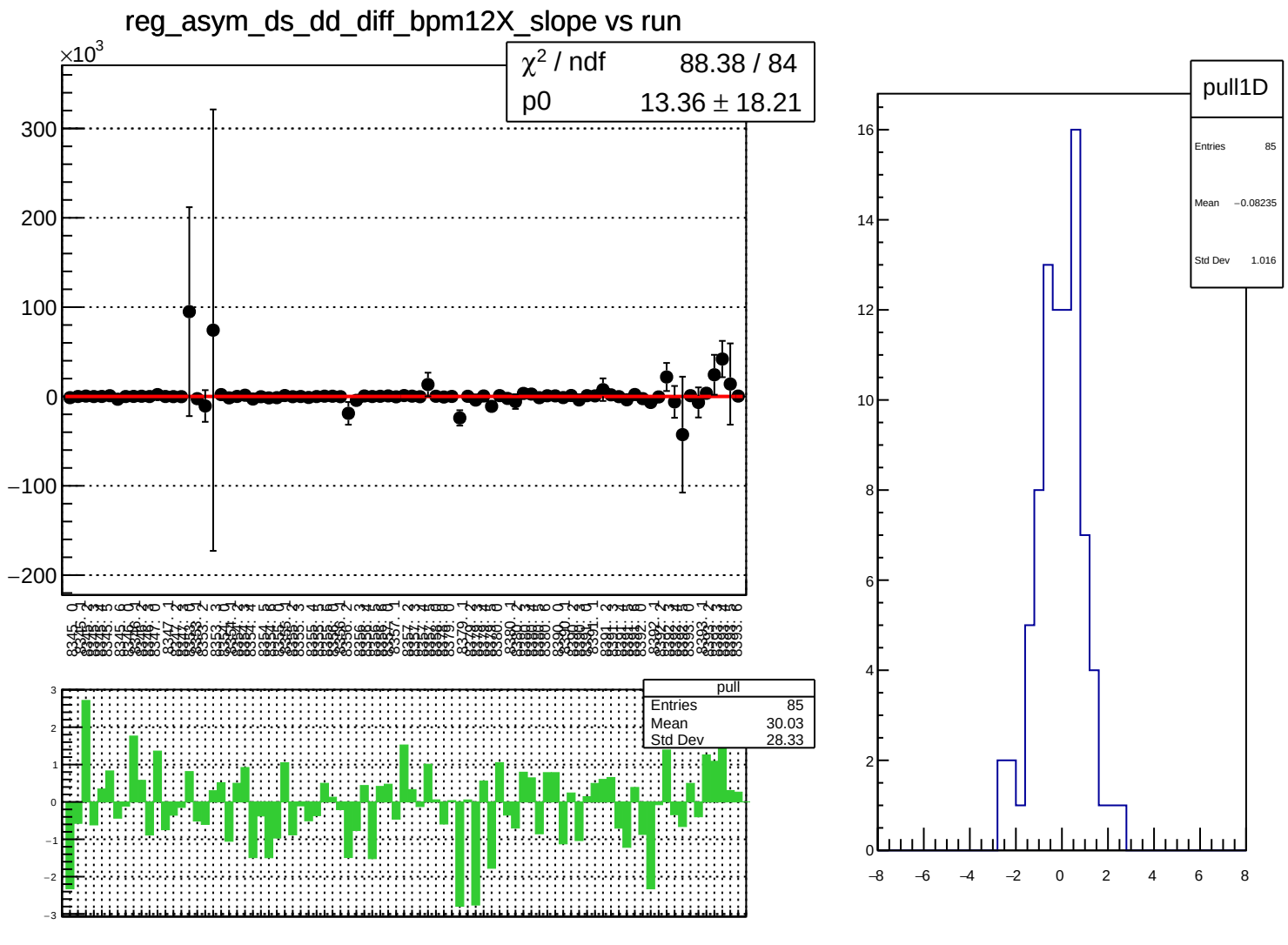

pull1D
Entries 82
Mean 0.08796
Std Dev 0.9925
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

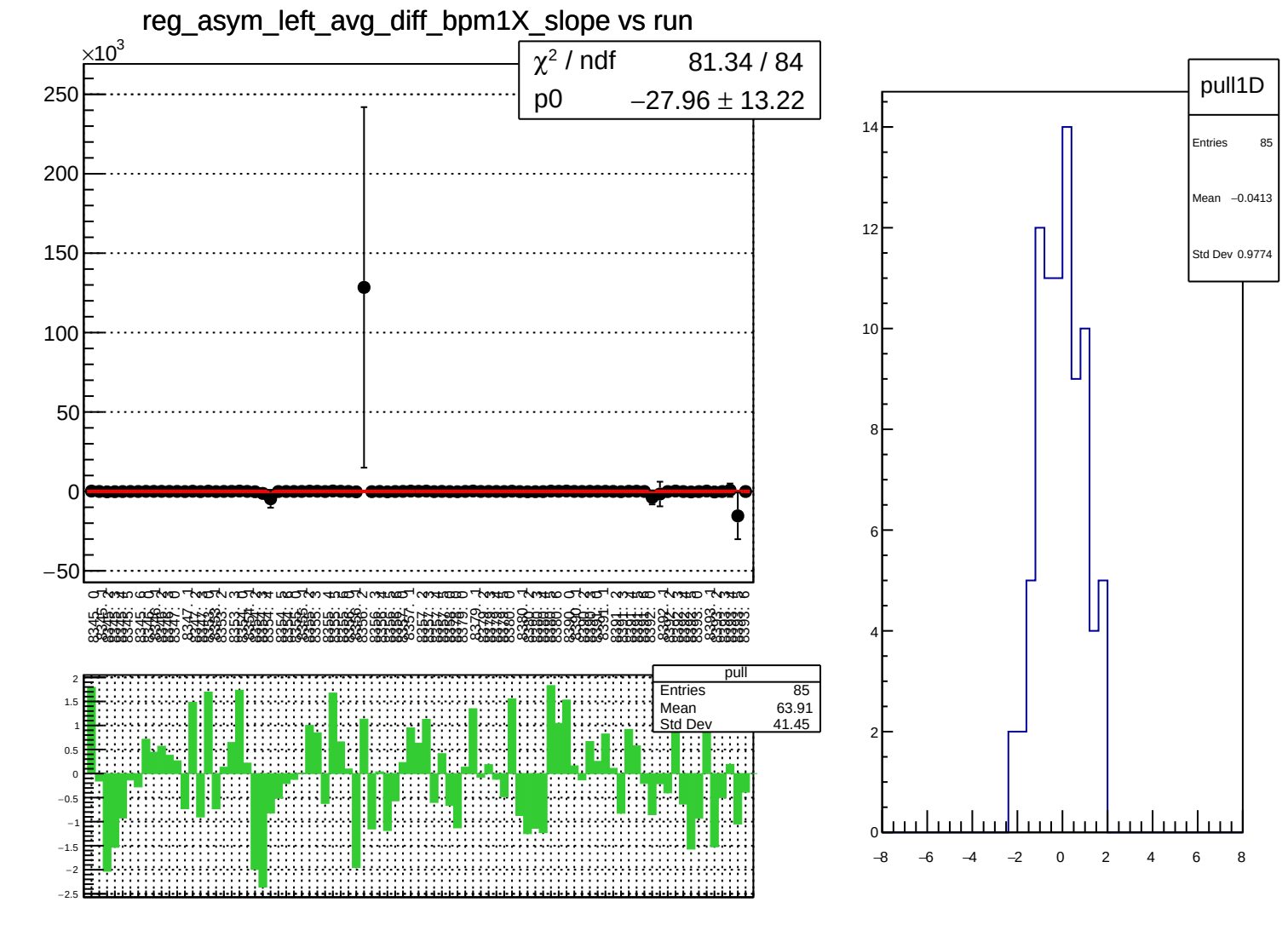

reg_asym_ds_dd_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 73.71 / 82
p0 132.5 ± 185.8
pull
Entries 83
Mean 2.241
Std Dev 46.9

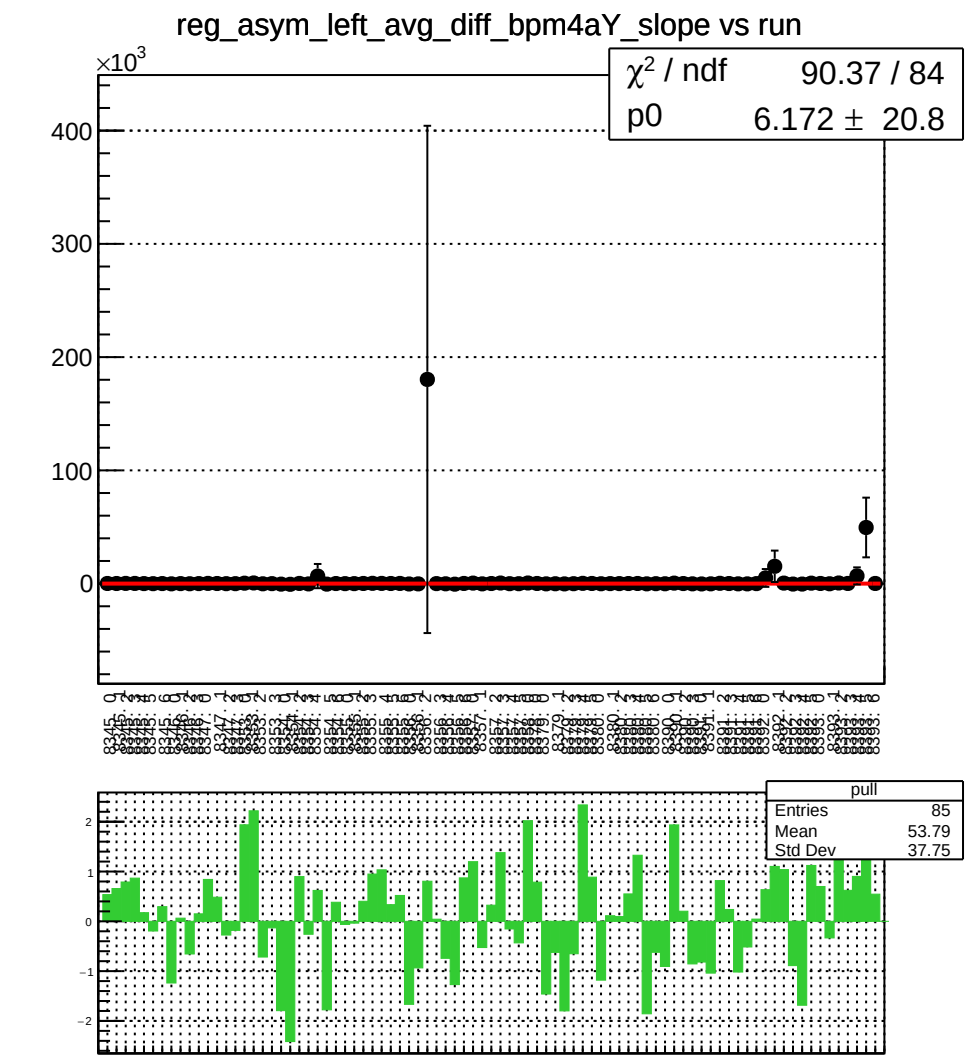

pull1D
Entries 83
Mean −0.07296
Std Dev 0.9396

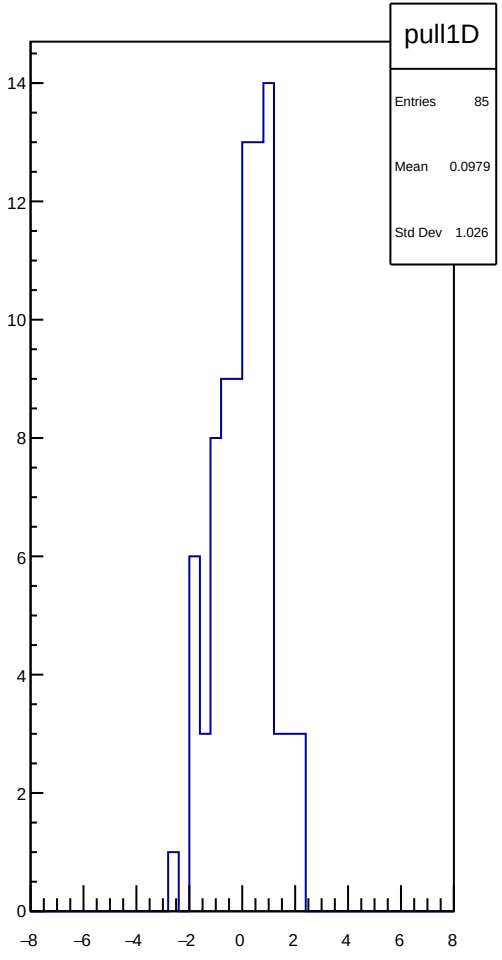

reg_asym_ds_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 80.76 / 81
p0 −107.9 ± 326.1
500
0
−500
−1000
−1500
pull
Entries 82
Mean 86.4
Std Dev 37.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

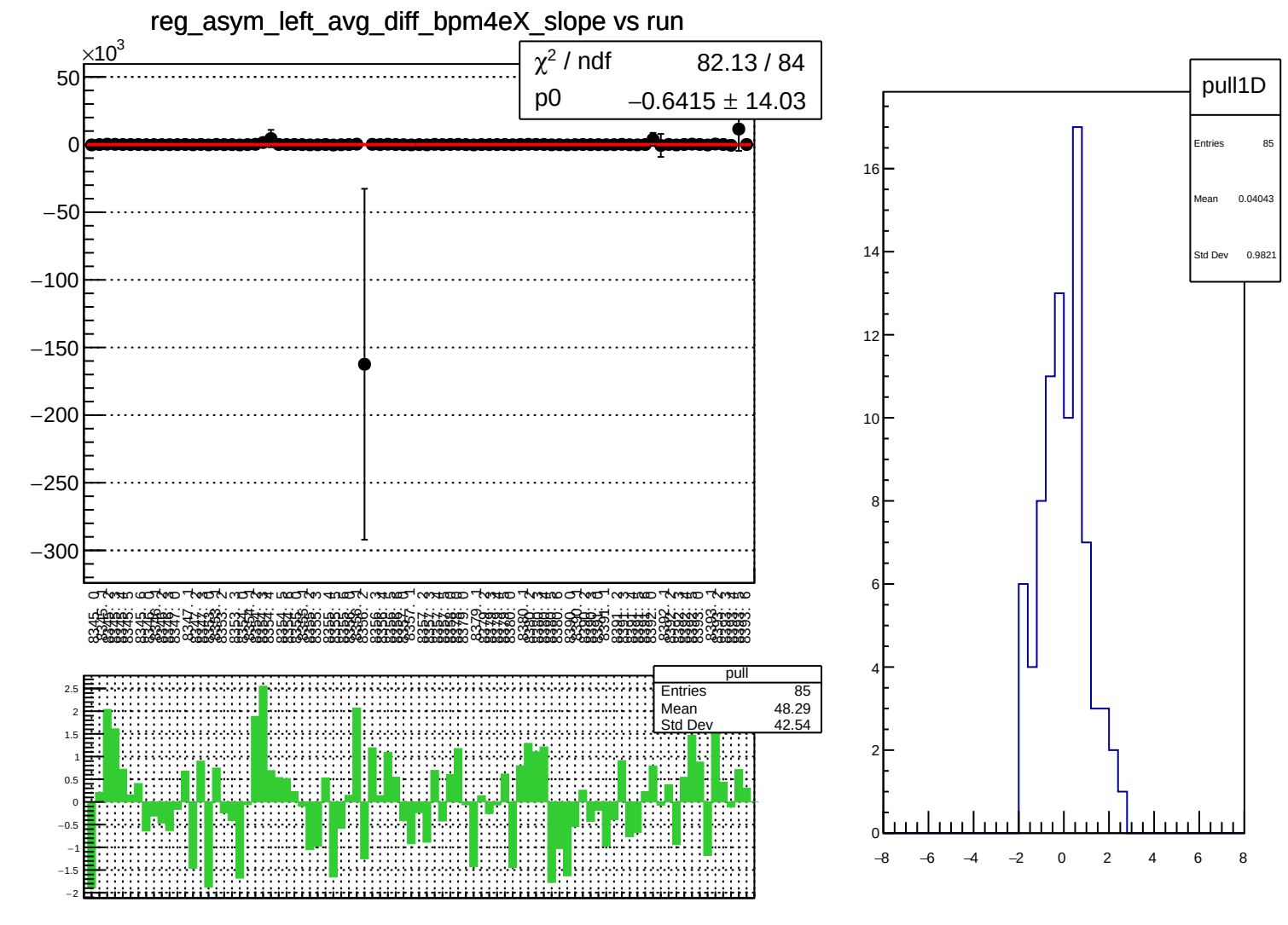

pull1D
Entries 82
Mean −0.08556
Std Dev 0.9887
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

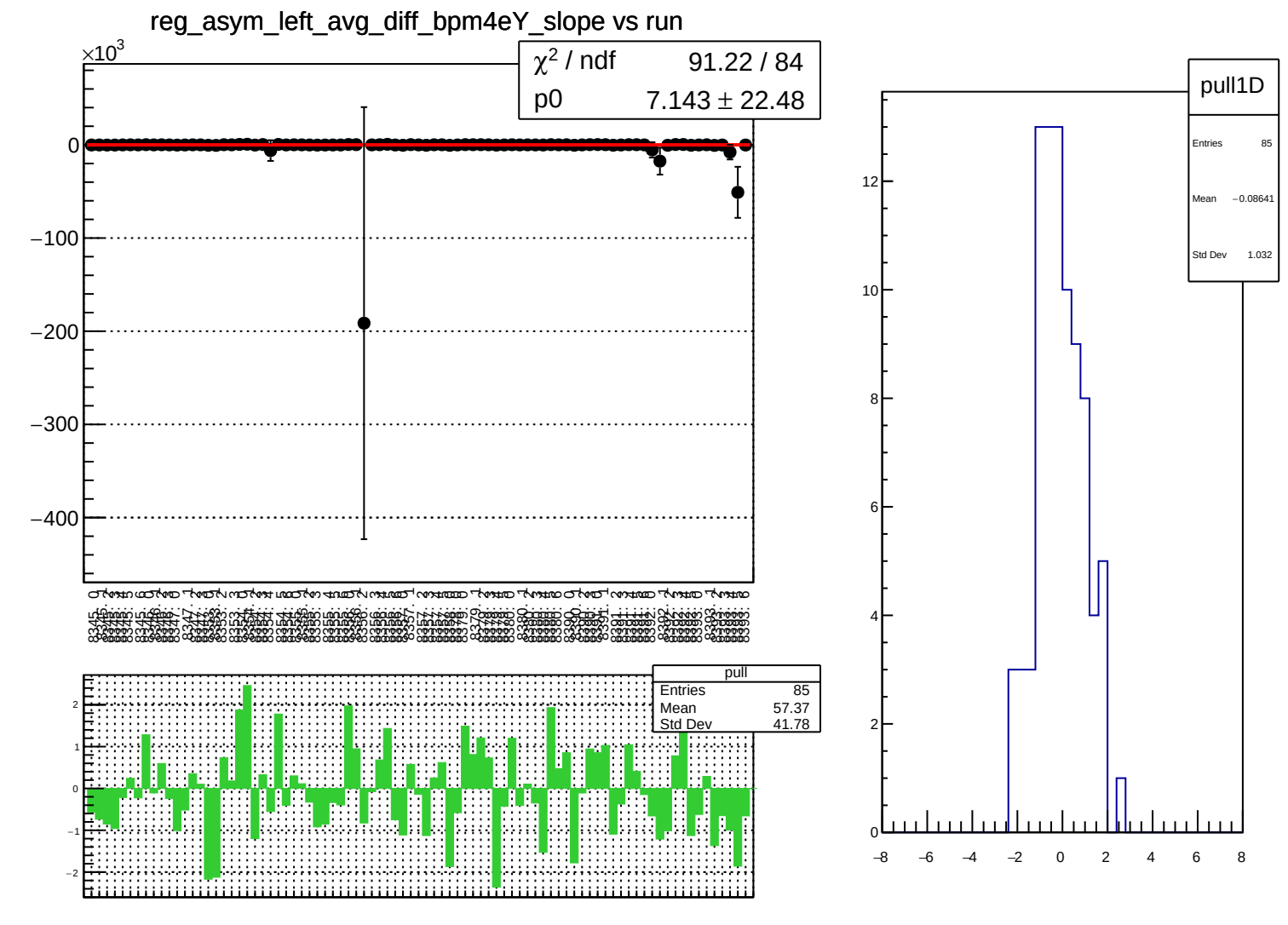

reg_asym_ds_dd_diff_bpm12X_slope vs run
×10^3
χ^2 / ndf 88.38 / 84
p0 13.36 ± 18.21
300
200
100
0
−100
−200
pull
Entries 85
Mean 30.03
Std Dev 28.33
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.08235
Std Dev 1.016
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

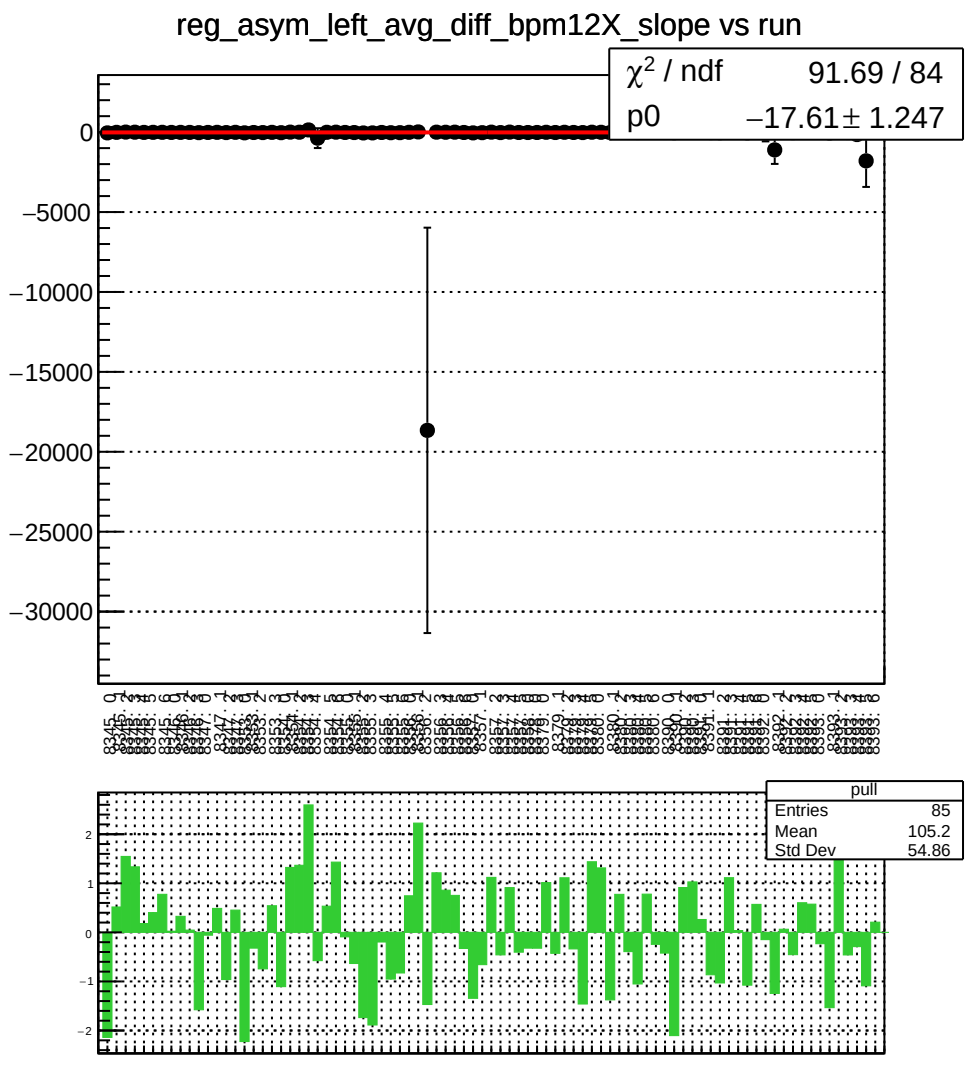

reg_asym_left_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 81.34 / 84
p0 −27.96 ± 13.22
pull
Entries 85
Mean 63.91
Std Dev 41.45
pull1D
Entries 85
Mean −0.0413
Std Dev 0.9774

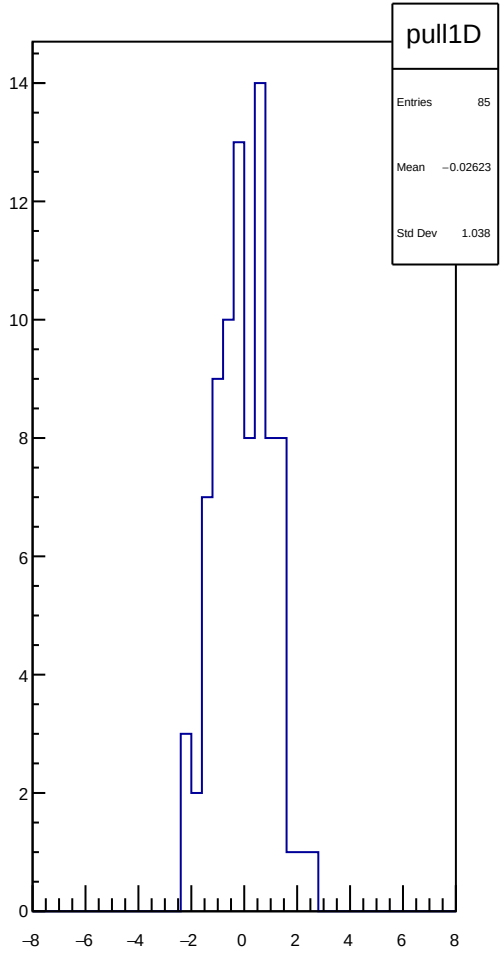

reg_asym_left_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 90.37 / 84
p0 6.172 ± 20.8
400
300
200
100
0
pull
Entries 85
Mean 53.79
Std Dev 37.75
2
1
0
−1
−2

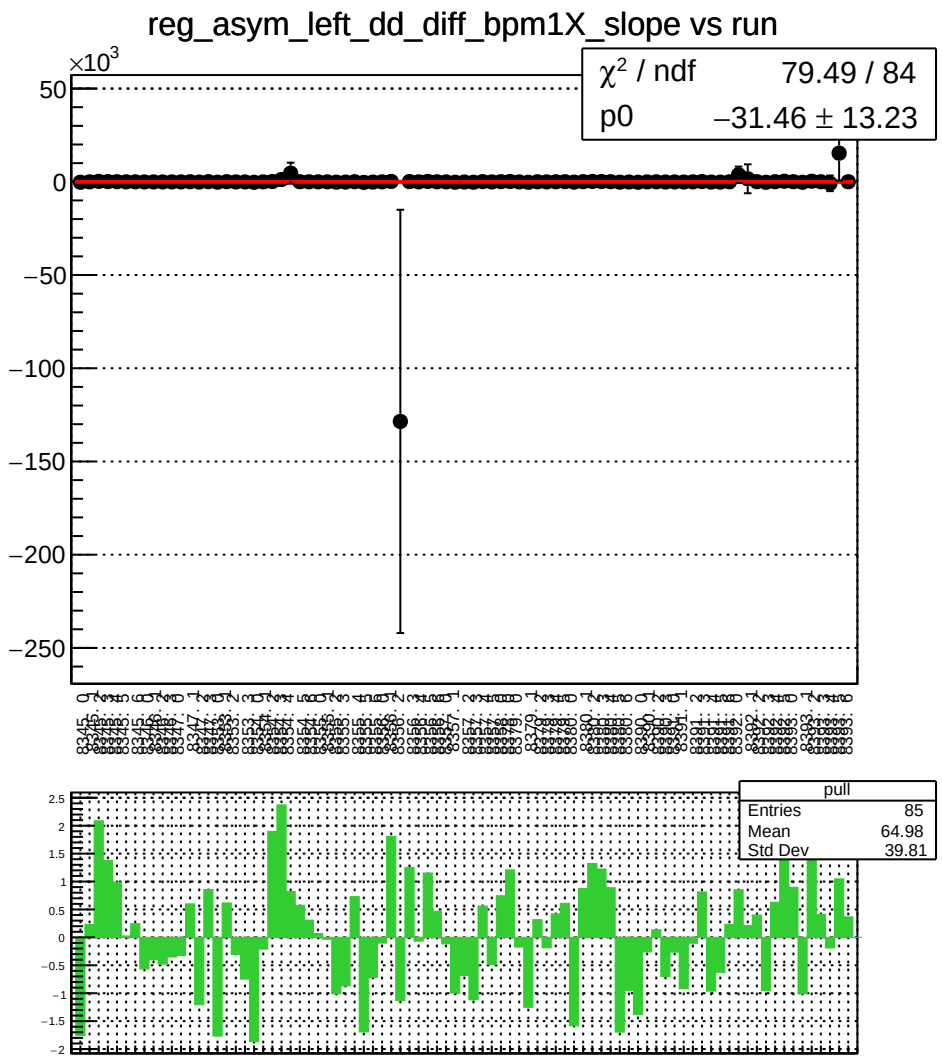

pull1D
Entries 85
Mean 0.0979
Std Dev 1.026
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

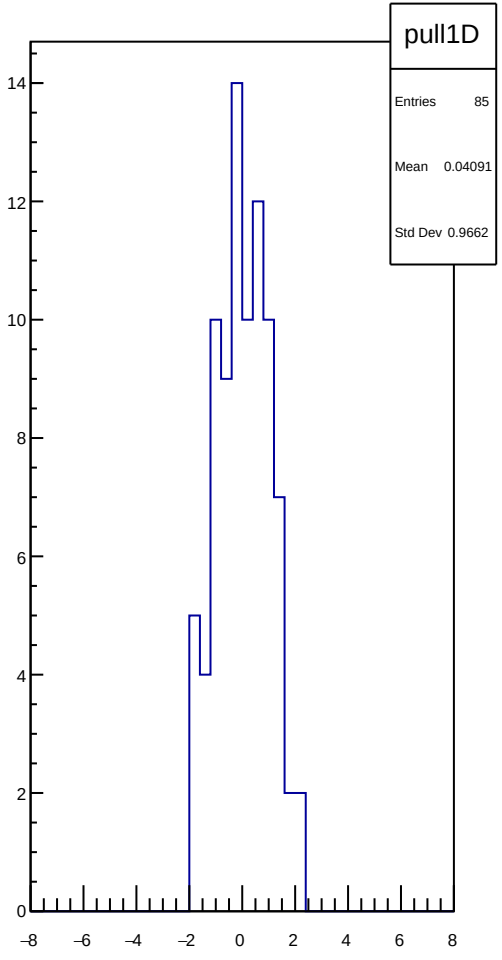

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 82.13 / 84
p0 −0.6415 ± 14.03
×10³
pull
Entries 85
Mean 48.29
Std Dev 42.54
pull1D
Entries 85
Mean 0.04043
Std Dev 0.9821

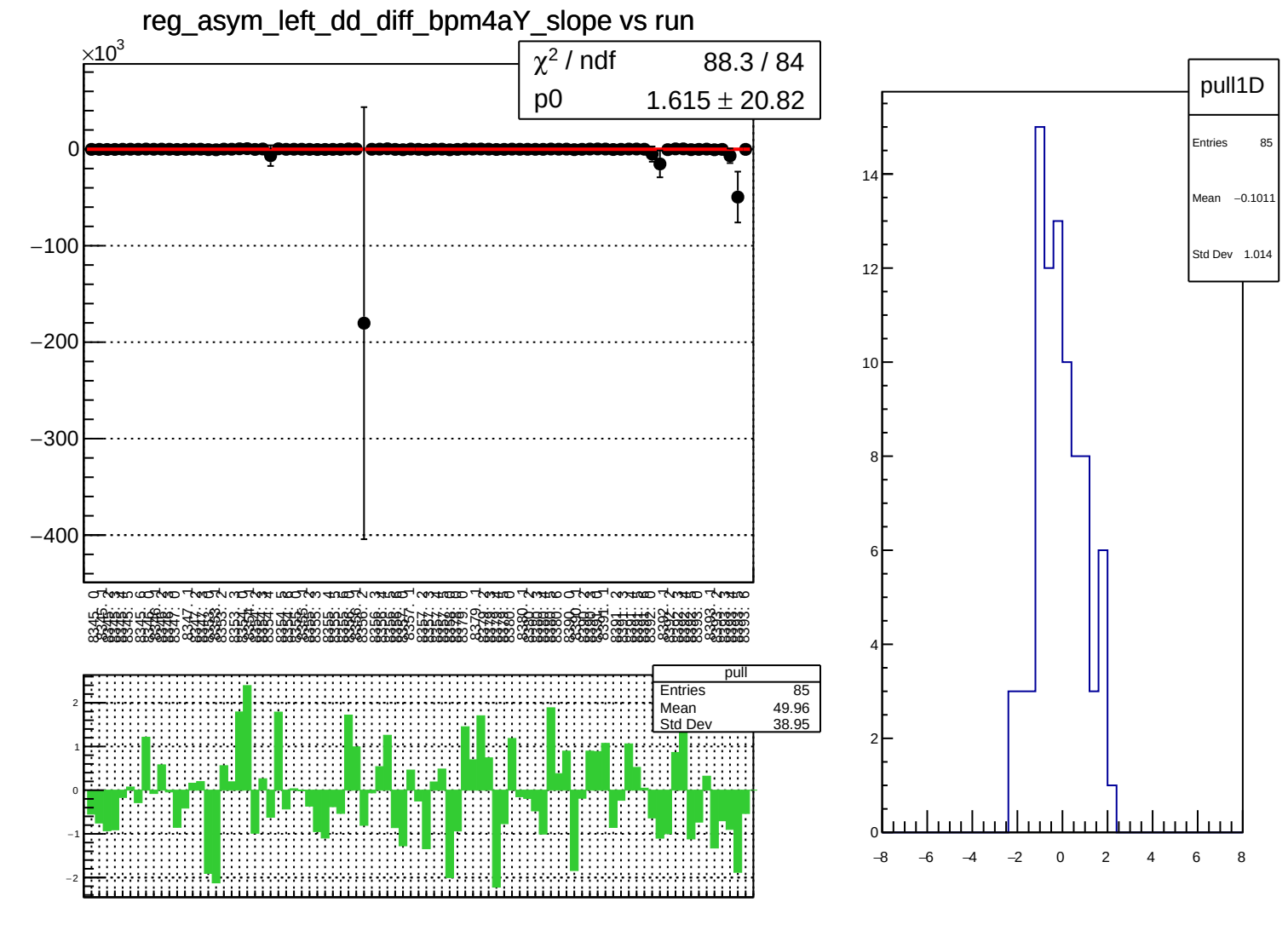

reg_asym_left_avg_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 91.22 / 84
p0 7.143 ± 22.48
0
−100
−200
−300
−400
pull
Entries 85
Mean 57.37
Std Dev 41.78
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.08641
Std Dev 1.032
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

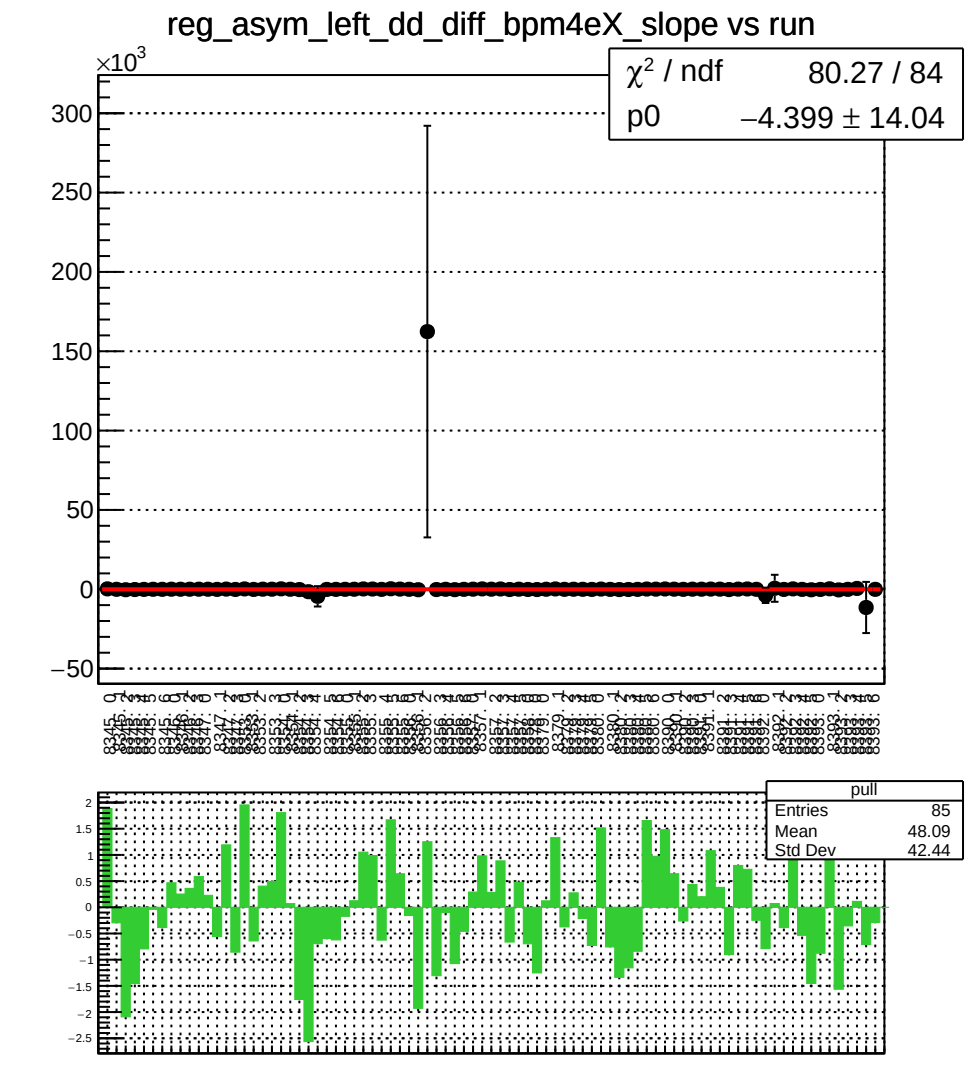

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 91.69 / 84
p0 −17.61± 1.247
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 85
Mean 105.2
Std Dev 54.86
2
1
0
−1
−2

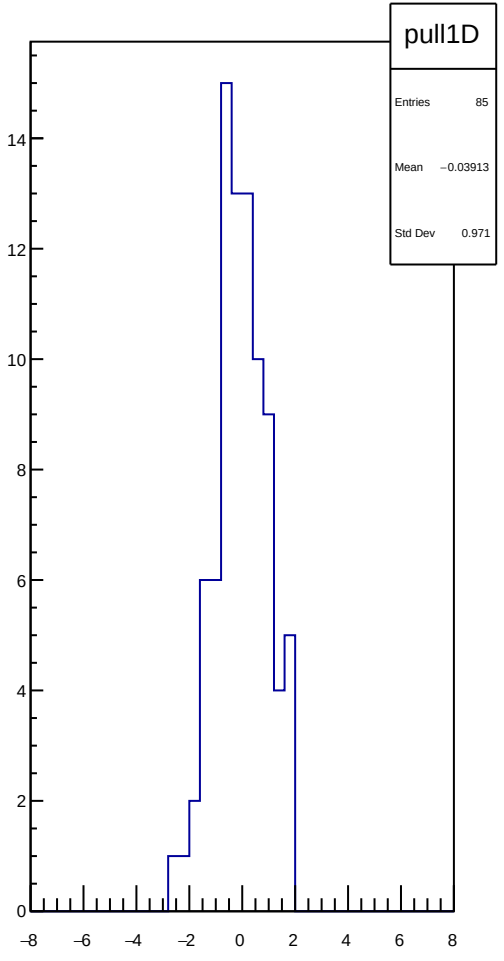

pull1D
Entries 85
Mean −0.02623
Std Dev 1.038
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

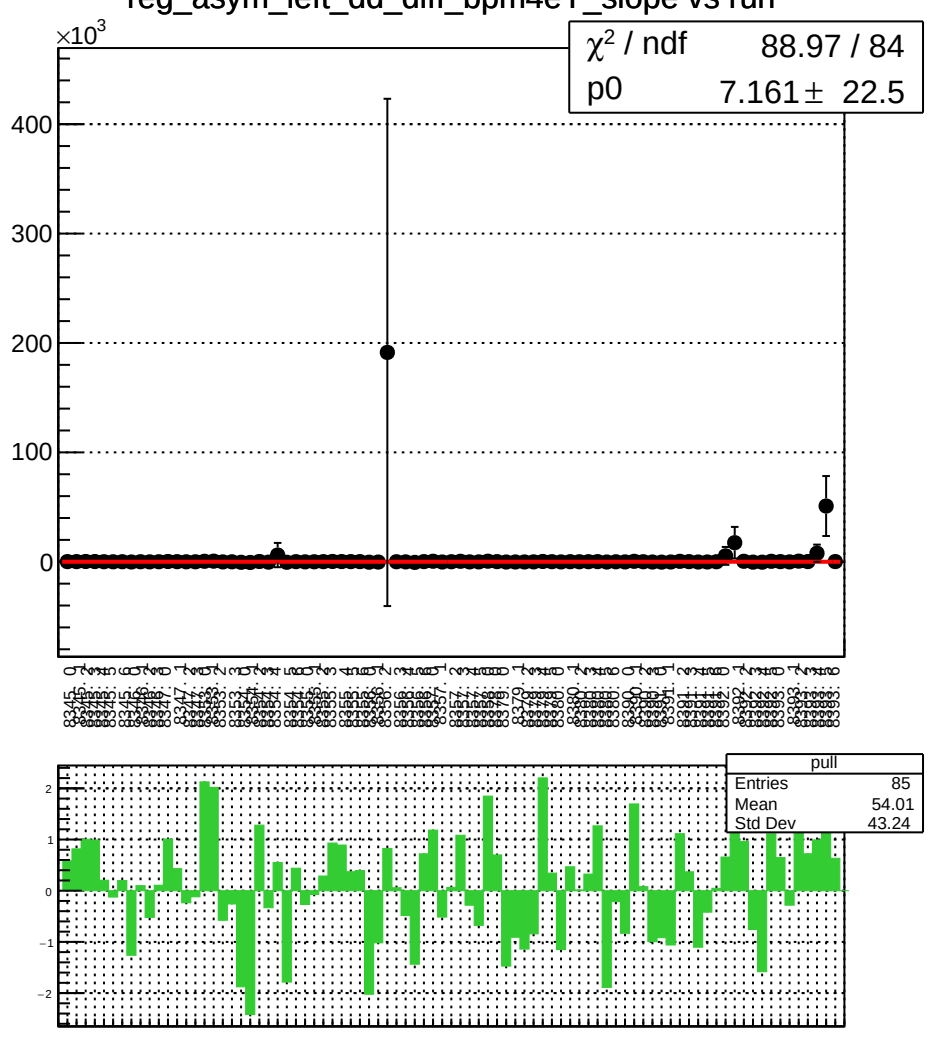

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 79.49 / 84
p0 −31.46 ± 13.23
×10³
pull
Entries 85
Mean 64.98
Std Dev 39.81

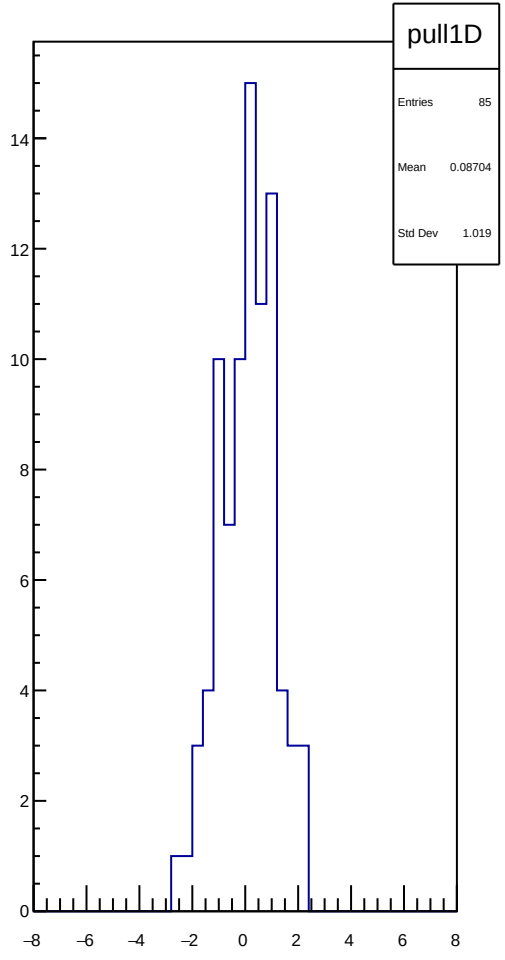

pull1D
Entries 85
Mean 0.04091
Std Dev 0.9662

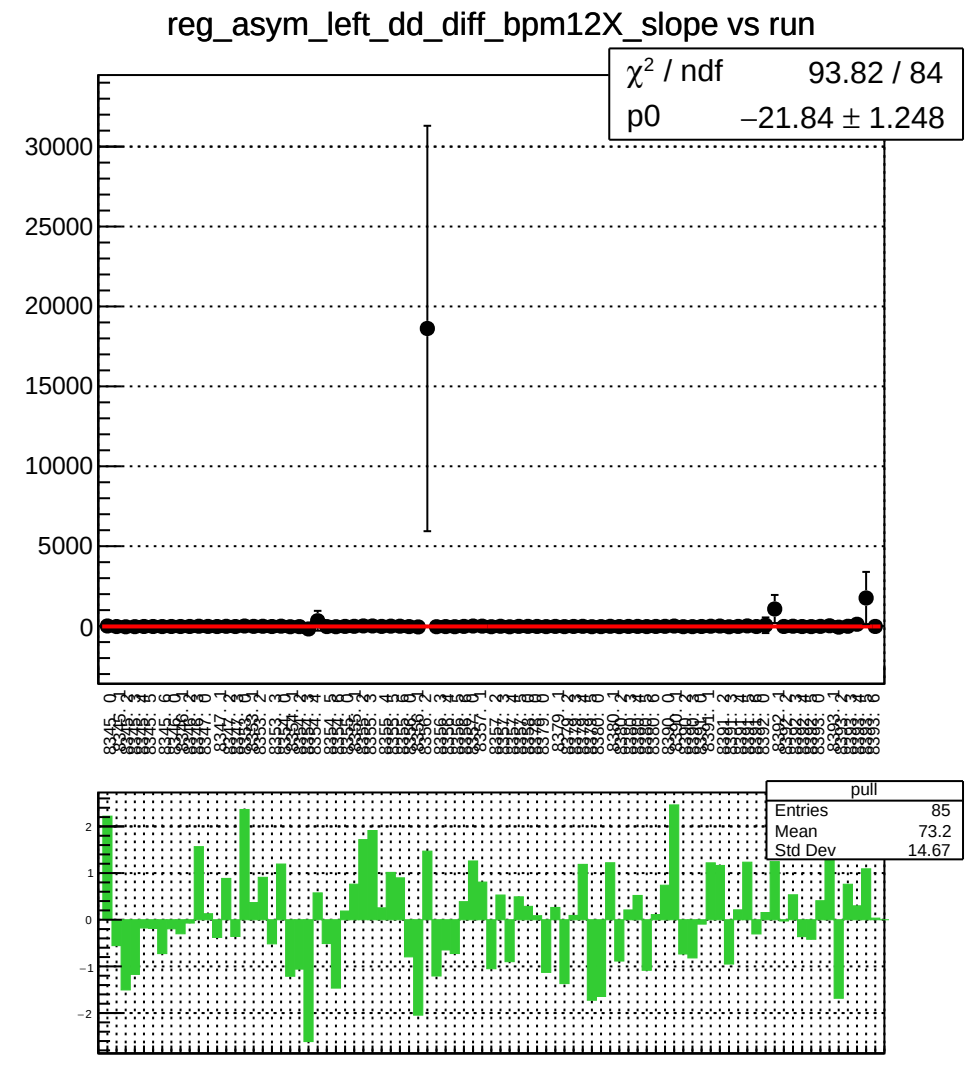

reg_asym_left_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 88.3 / 84
p0 1.615 ± 20.82
0
−100
−200
−300
−400
pull
Entries 85
Mean 49.96
Std Dev 38.95
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.1011
Std Dev 1.014
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

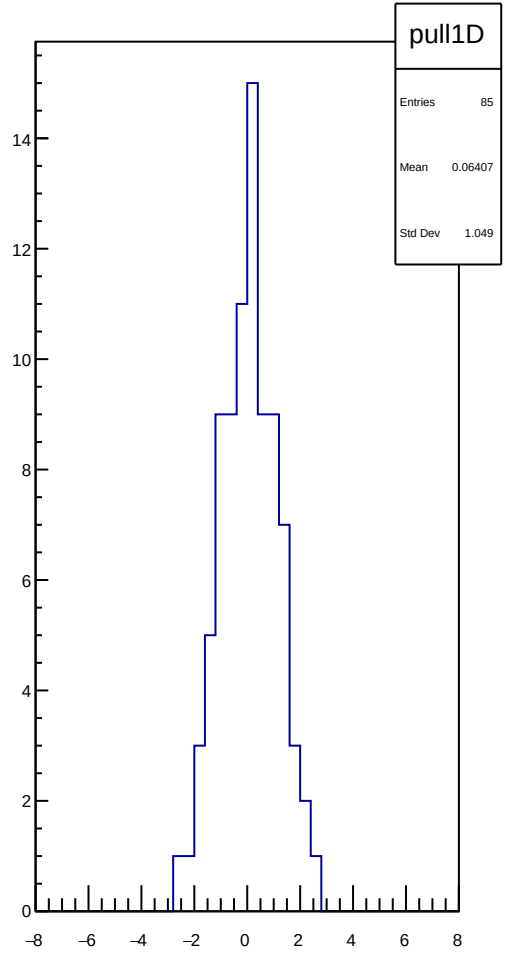

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 80.27 / 84
p0 −4.399 ± 14.04
×10³
pull
Entries 85
Mean 48.09
Std Dev 42.44

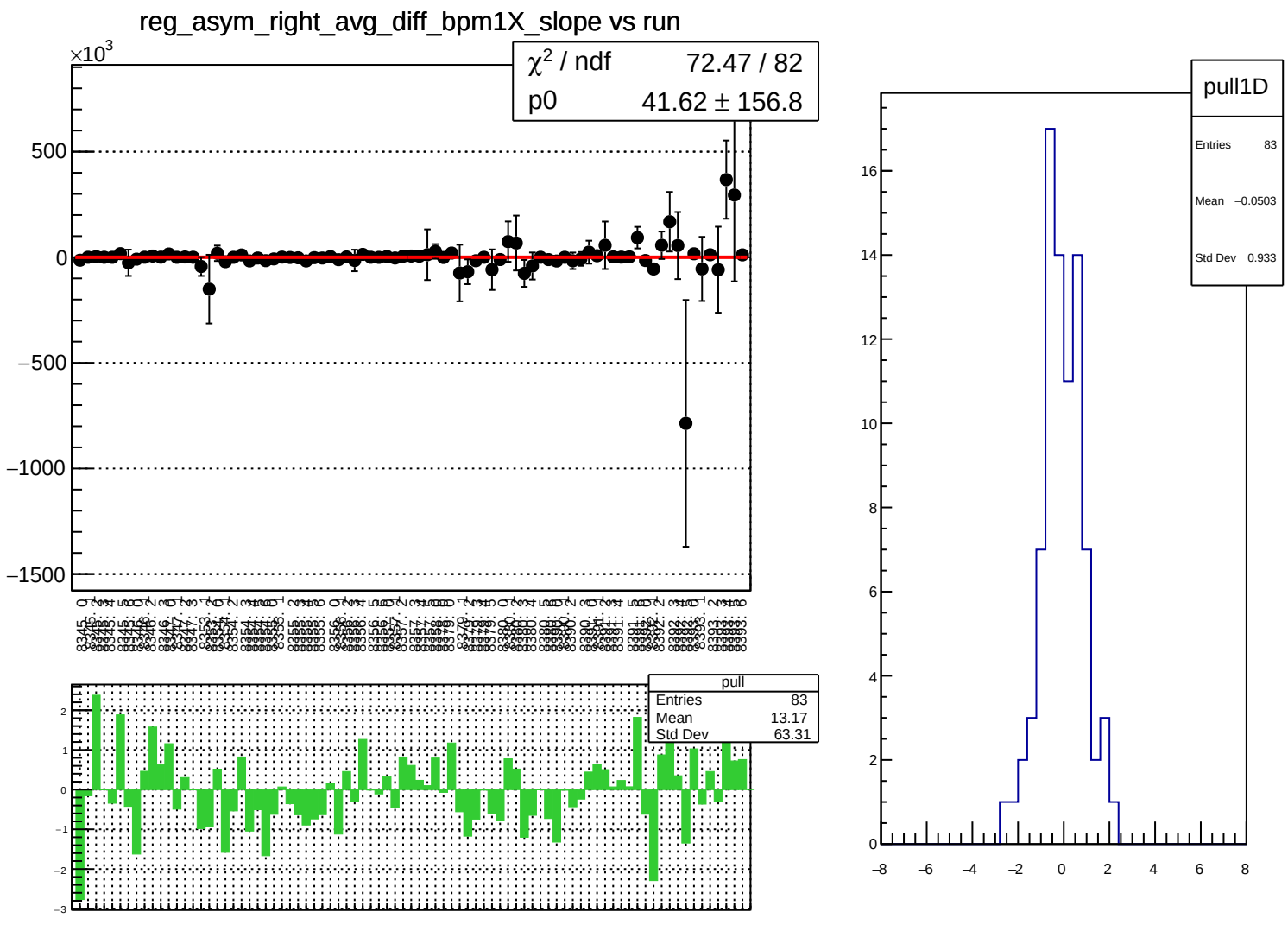

pull1D
Entries 85
Mean −0.03913
Std Dev 0.971

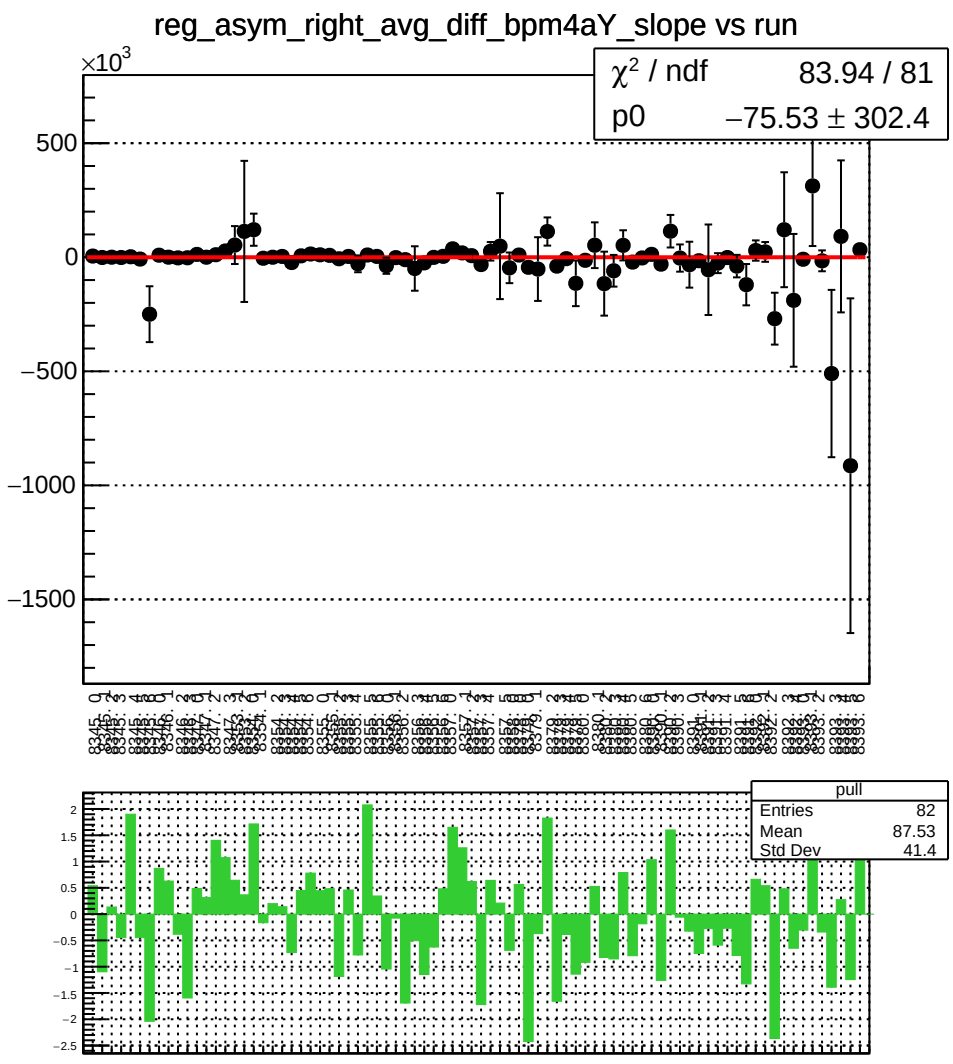

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 88.97 / 84
p0 7.161 ± 22.5
×10³
400
300
200
100
0
pull
Entries 85
Mean 54.01
Std Dev 43.24
2
1
0
−1
−2

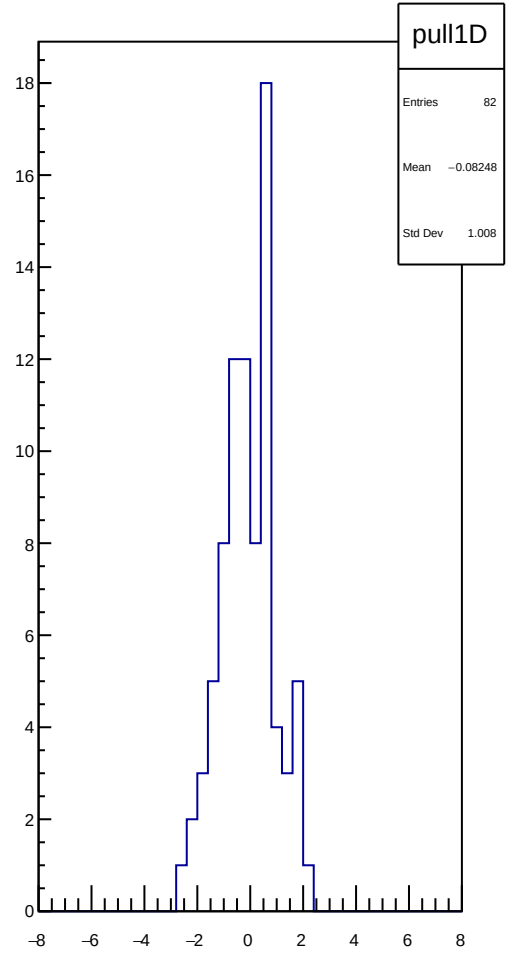

pull1D
Entries 85
Mean 0.08704
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

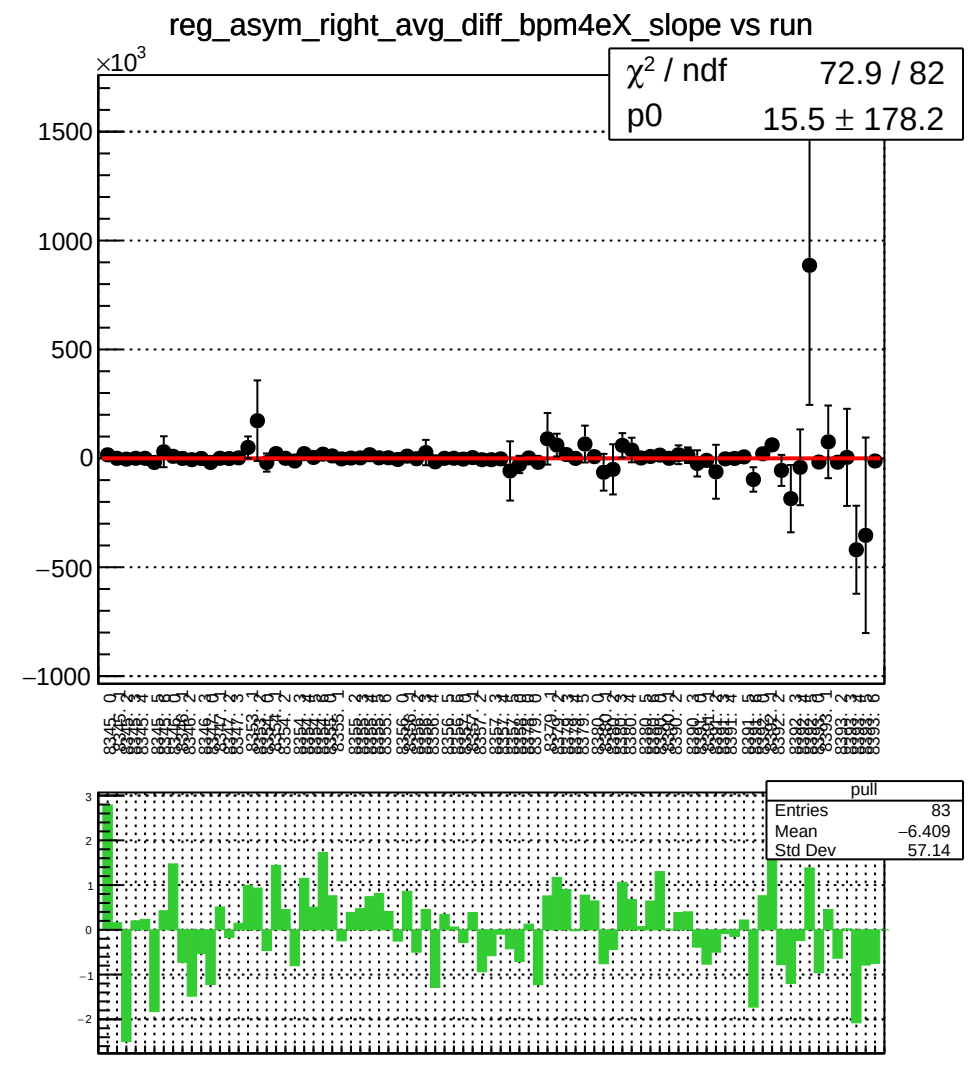

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 93.82 / 84
p0 −21.84 ± 1.248
30000
25000
20000
15000
10000
5000
0
pull
Entries 85
Mean 73.2
Std Dev 14.67
2
1
0
−1
−2

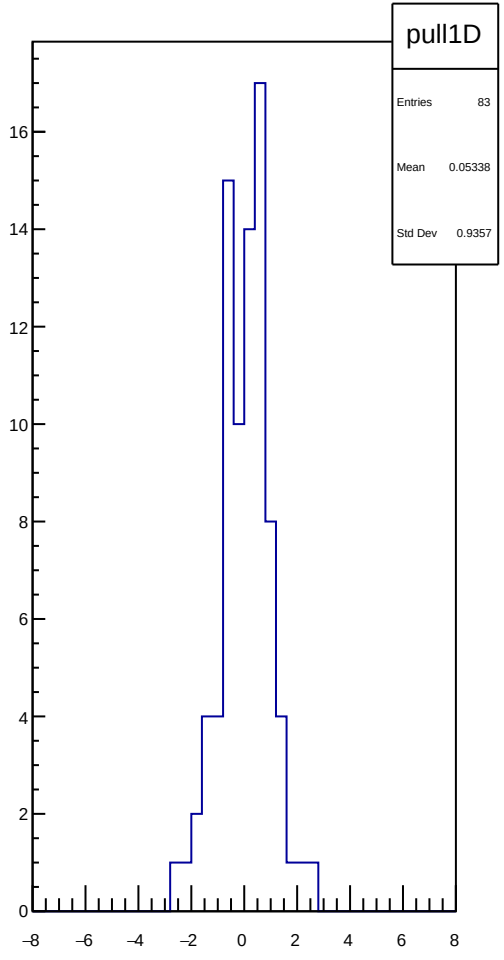

pull1D
Entries 85
Mean 0.06407
Std Dev 1.049
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

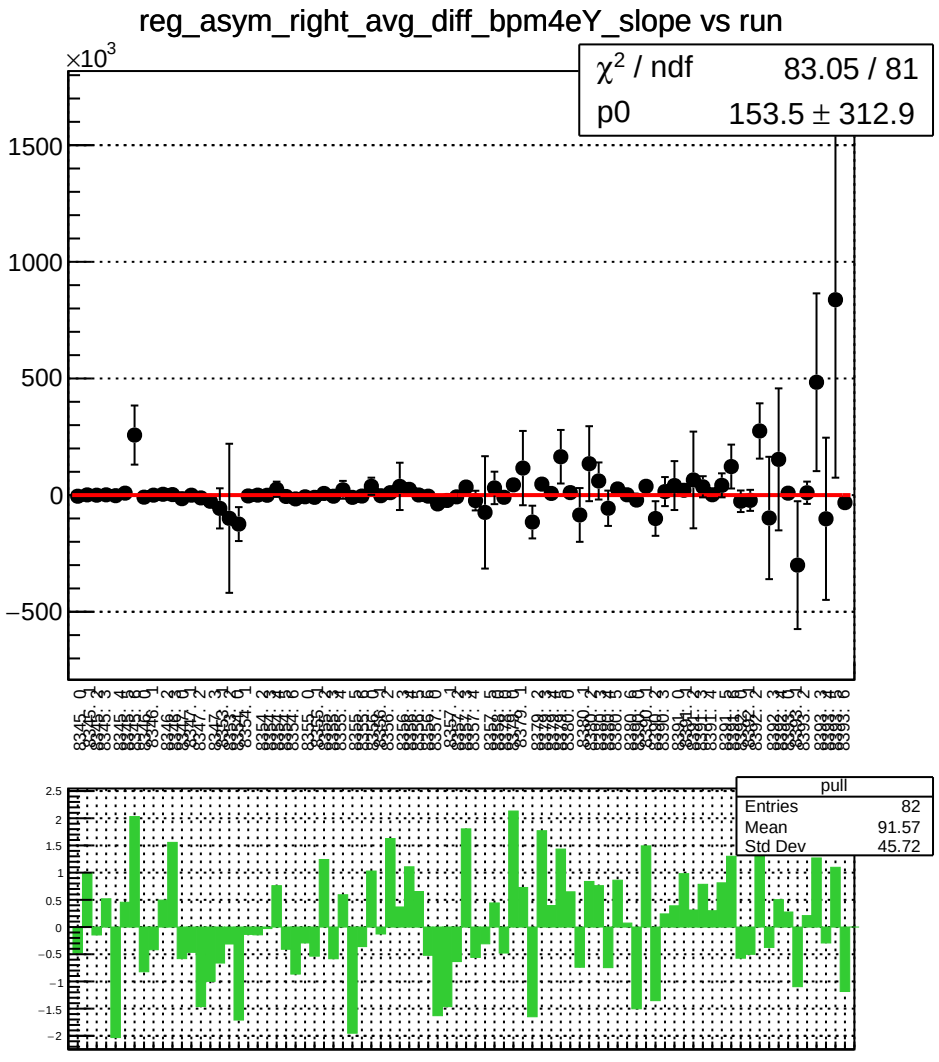

reg_asym_right_avg_diff_bpm1X_slope vs run
×10^3
χ^2 / ndf 72.47 / 82
p0 41.62 ± 156.8
500
0
−500
−1000
−1500
pull
Entries 83
Mean −13.17
Std Dev 63.31
pull1D
Entries 83
Mean −0.0503
Std Dev 0.933

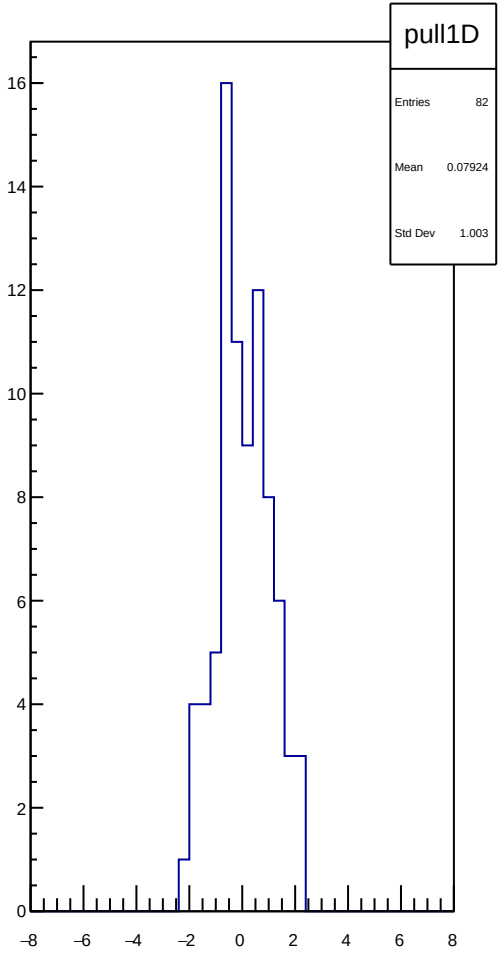

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 83.94 / 81
p0 −75.53 ± 302.4
×10³
500
0
−500
−1000
−1500
pull
Entries 82
Mean 87.53
Std Dev 41.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

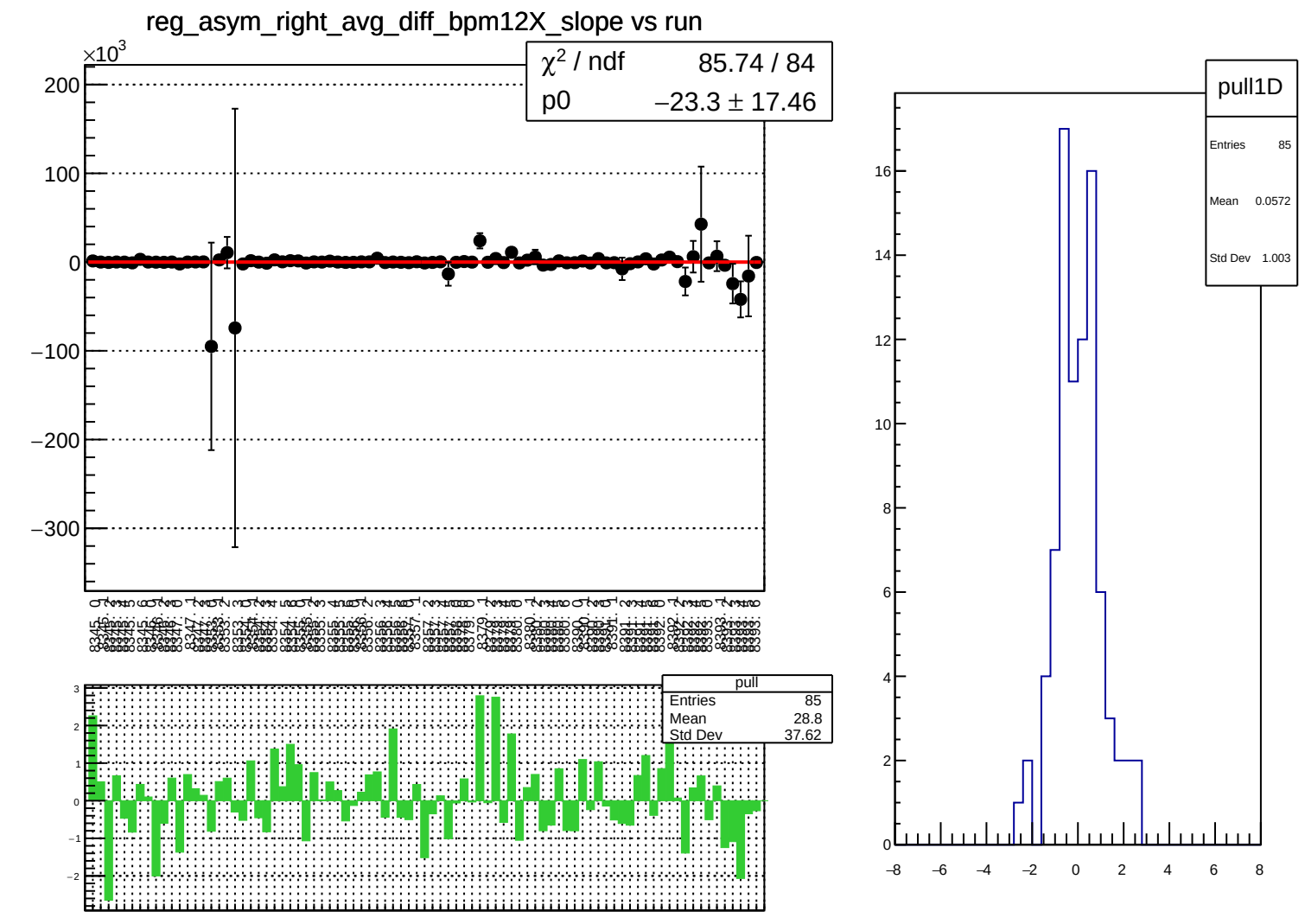

pull1D
Entries 82
Mean −0.08248
Std Dev 1.008
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

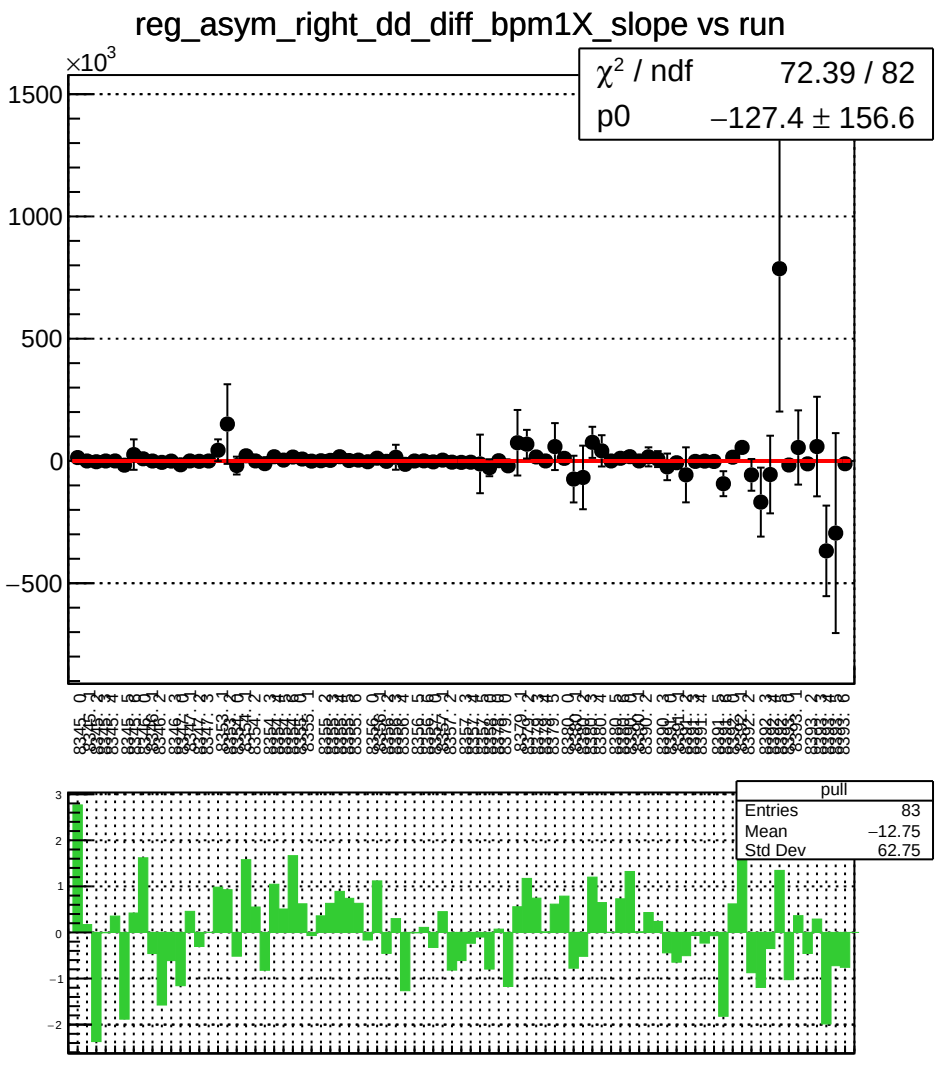

reg_asym_right_avg_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 72.9 / 82
p0 15.5 ± 178.2
1500
1000
500
0
−500
−1000
pull
Entries 83
Mean −6.409
Std Dev 57.14
3
2
1
0
−1
−2

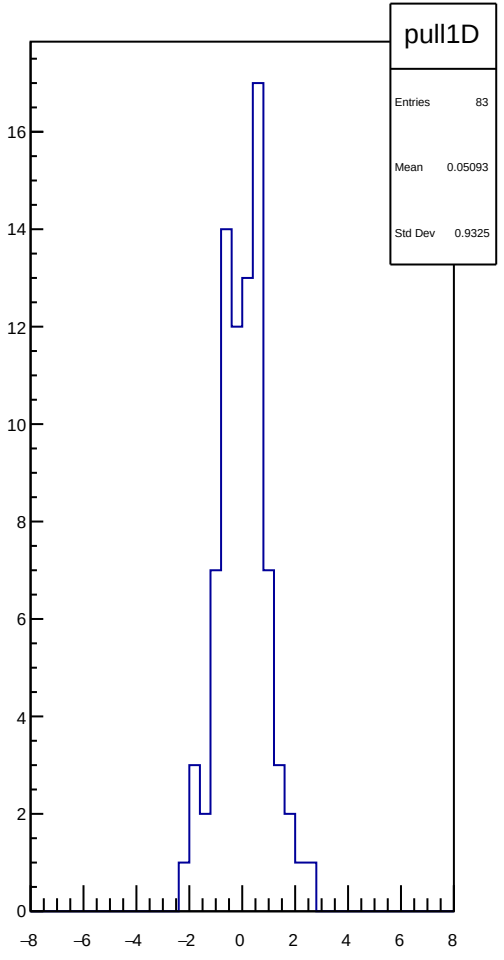

pull1D
Entries 83
Mean 0.05338
Std Dev 0.9357
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

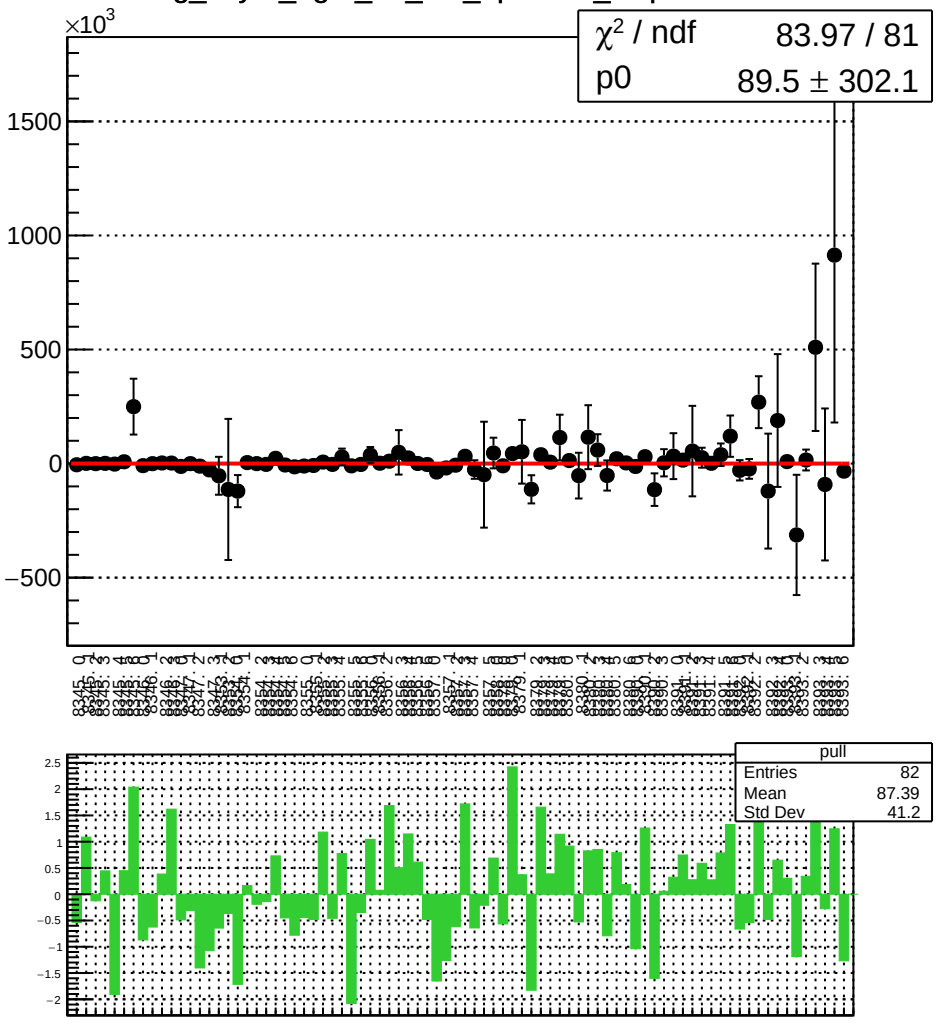

reg_asym_right_avg_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 83.05 / 81
p0 153.5 ± 312.9
1500
1000
500
0
−500
pull
Entries 82
Mean 91.57
Std Dev 45.72
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

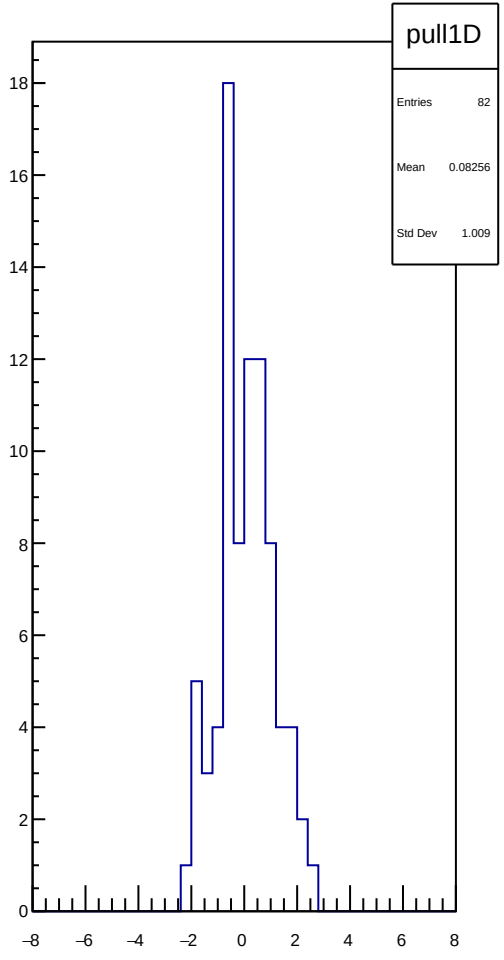

pull1D
Entries 82
Mean 0.07924
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

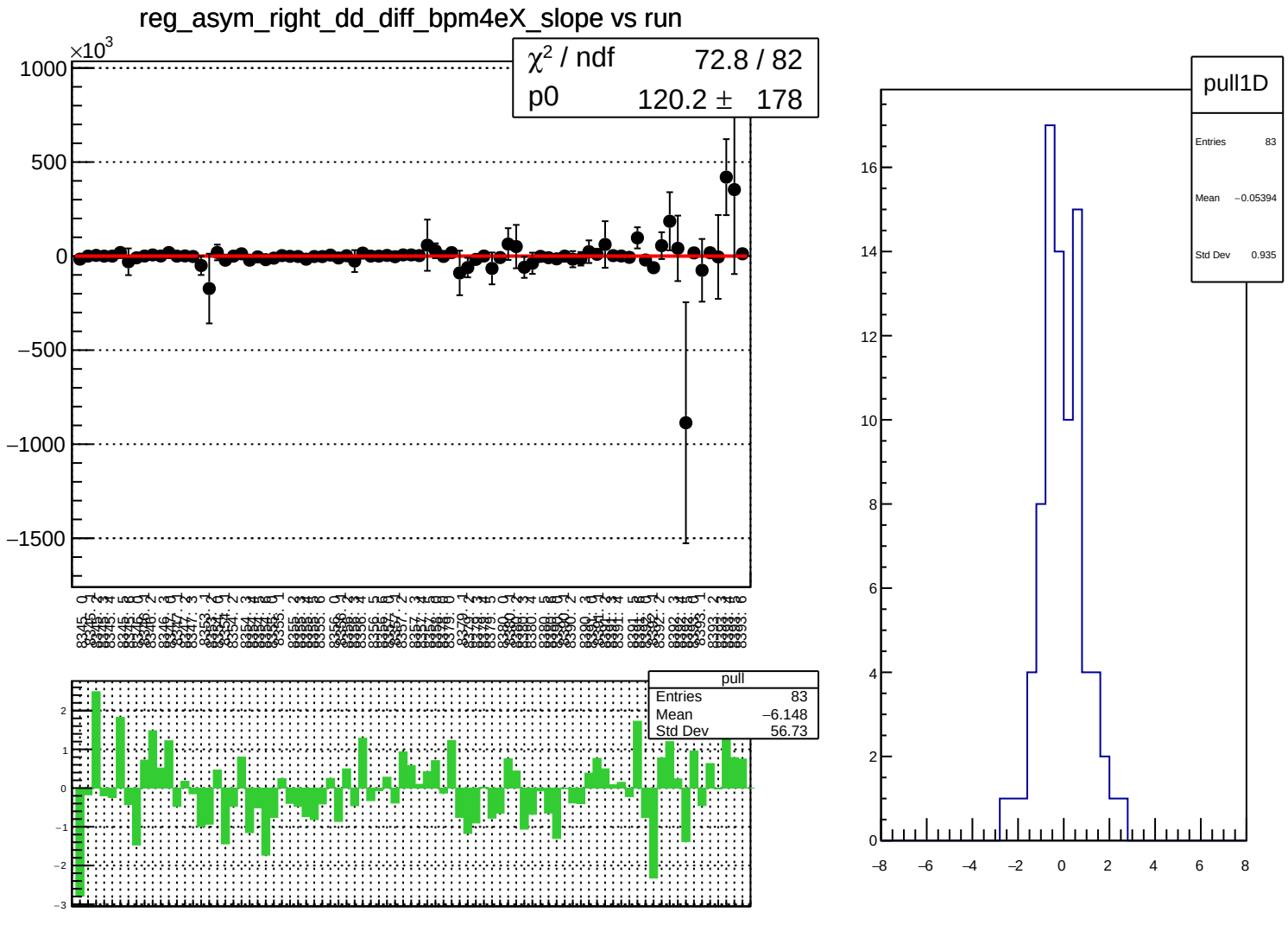

reg_asym_right_avg_diff_bpm12X_slope vs run
×10^3
χ^2 / ndf 85.74 / 84
p0 −23.3 ± 17.46
200
100
0
−100
−200
−300
pull
Entries 85
Mean 28.8
Std Dev 37.62
3
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.0572
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

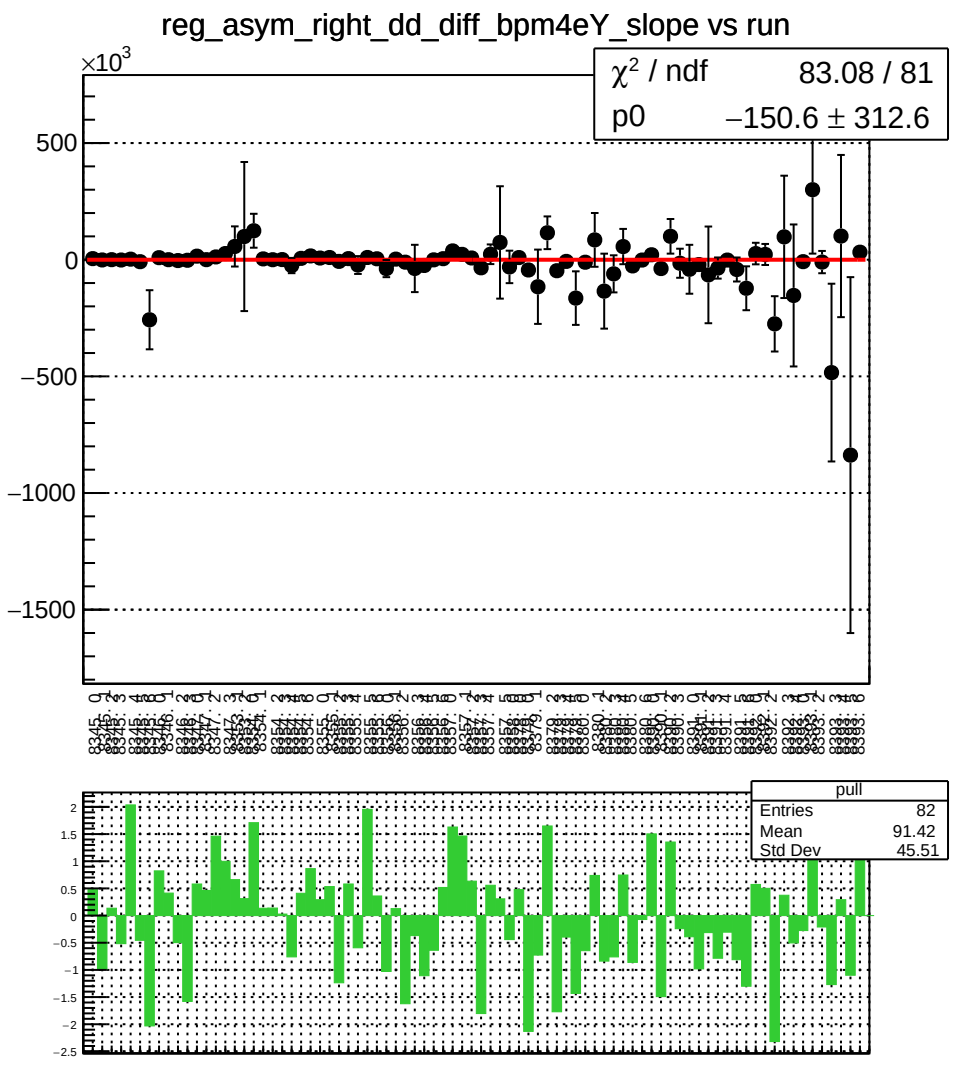

reg_asym_right_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 72.39 / 82
p0 −127.4 ± 156.6
1500
1000
500
0
−500
pull
Entries 83
Mean −12.75
Std Dev 62.75
3
2
1
0
−1
−2

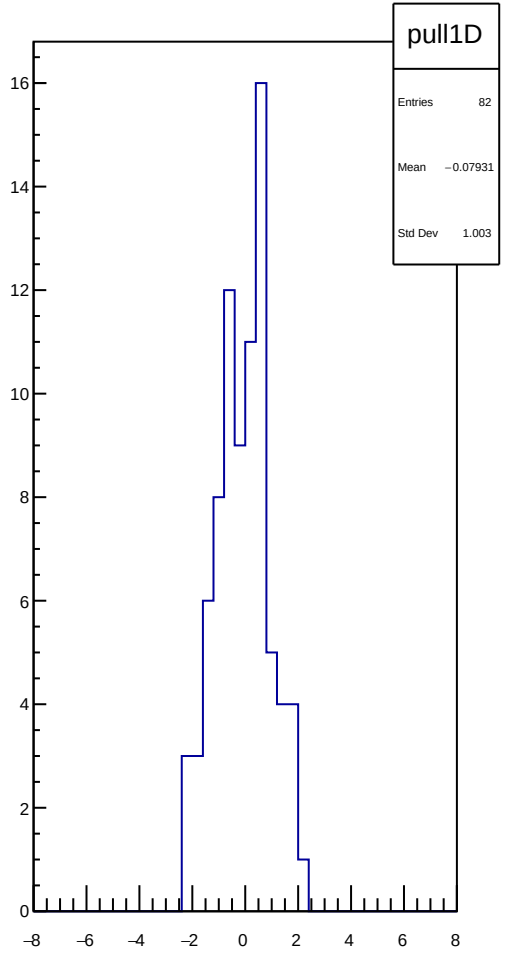

pull1D
Entries 83
Mean 0.05093
Std Dev 0.9325
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

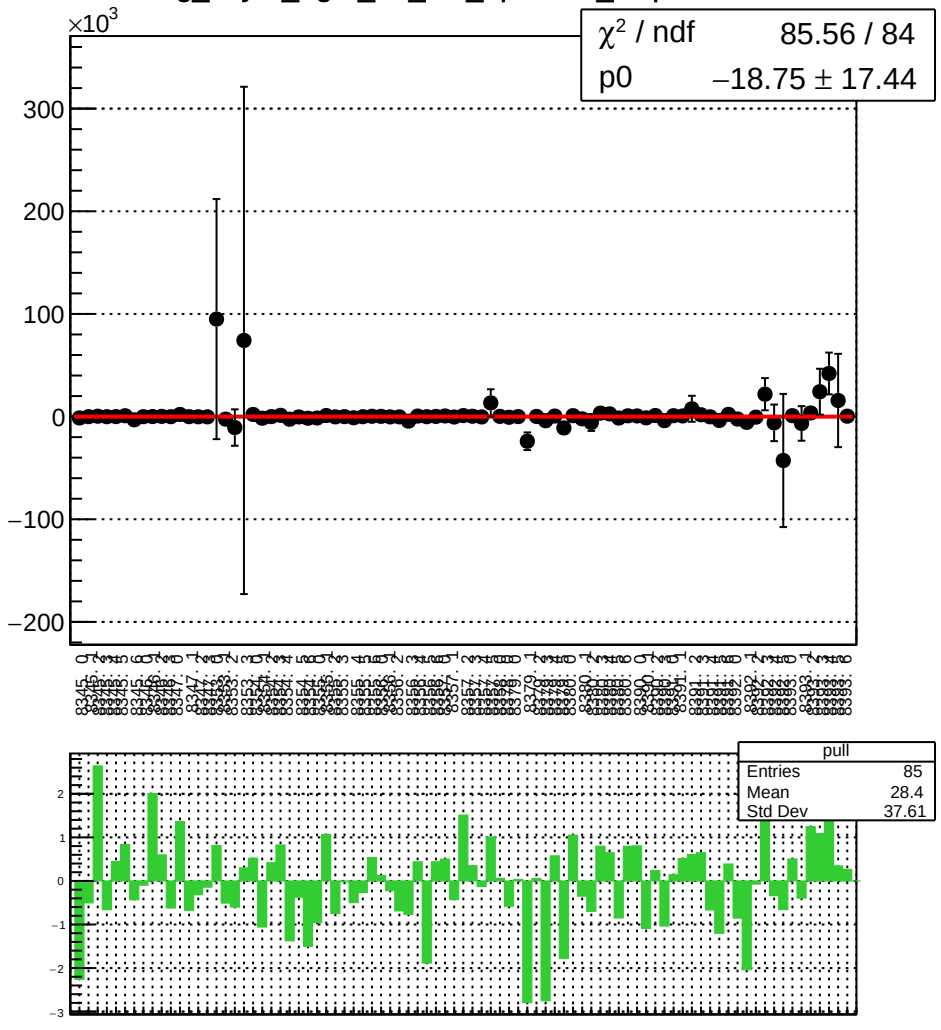

reg_asym_right_dd_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 83.97 / 81
p0 89.5 ± 302.1
1500
1000
500
0
−500
pull
Entries 82
Mean 87.39
Std Dev 41.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

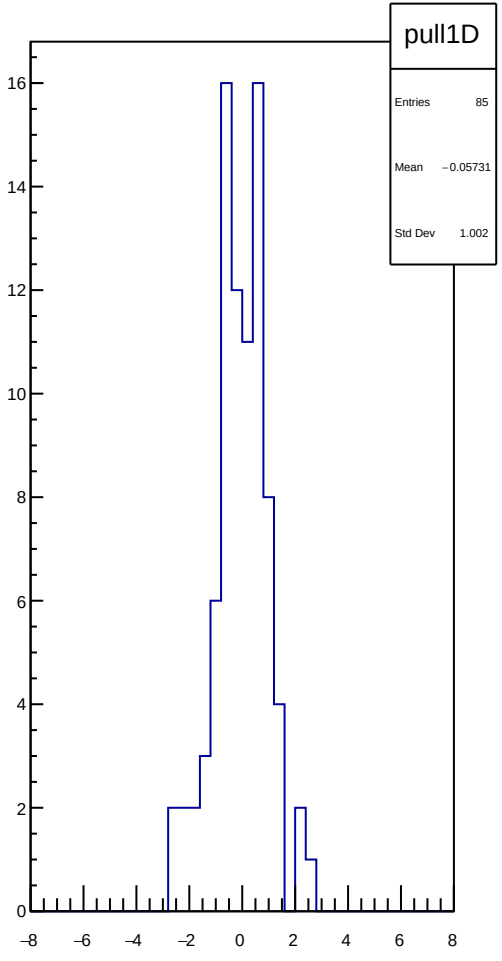

pull1D
Entries 82
Mean 0.08256
Std Dev 1.009
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

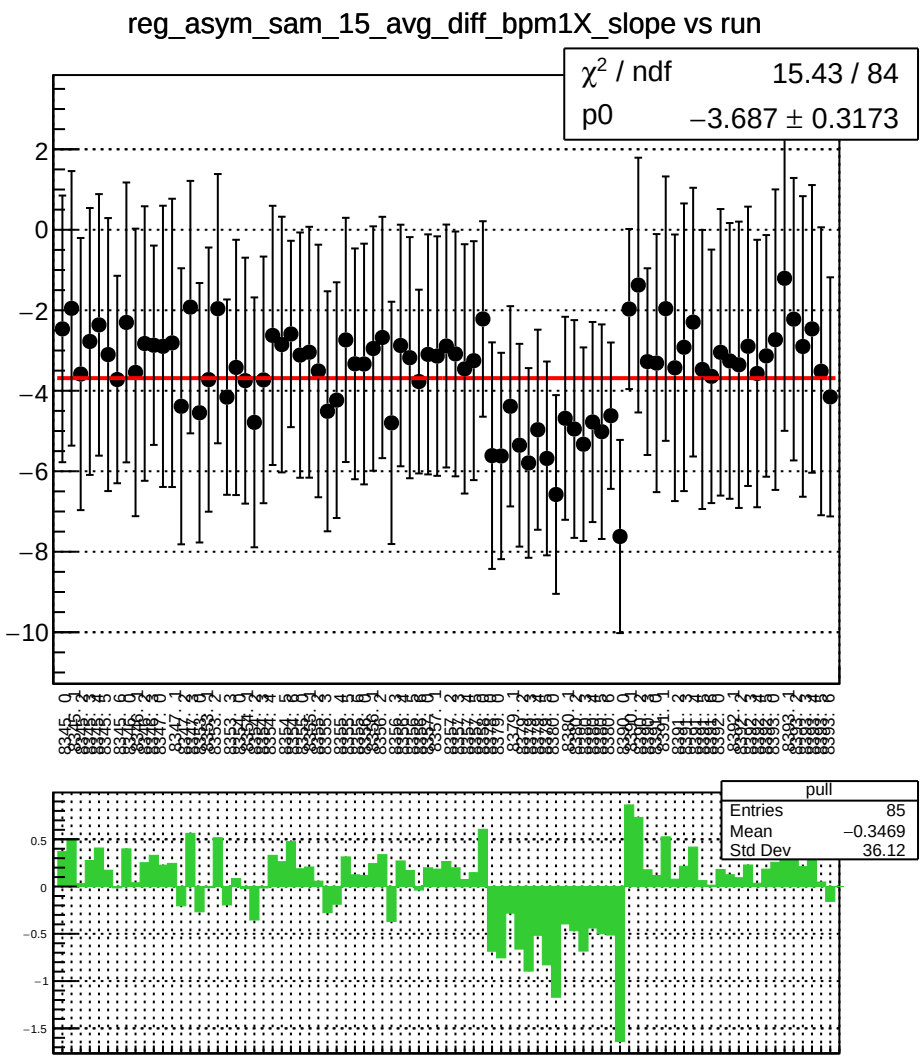

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 72.8 / 82
p0 120.2 ± 178
×10³
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean −6.148
Std Dev 56.73
pull1D
Entries 83
Mean −0.05394
Std Dev 0.935

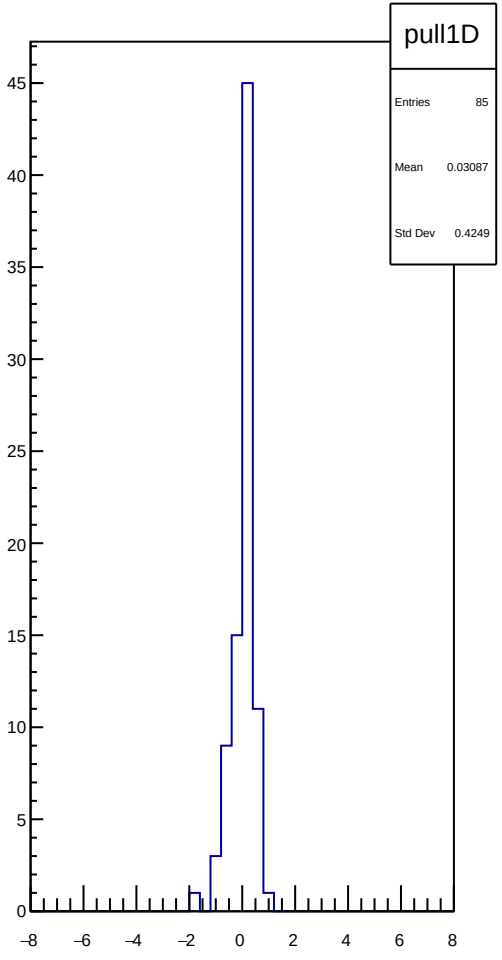

reg_asym_right_dd_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 83.08 / 81
p0 −150.6 ± 312.6
500
0
−500
−1000
−1500
pull
Entries 82
Mean 91.42
Std Dev 45.51
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

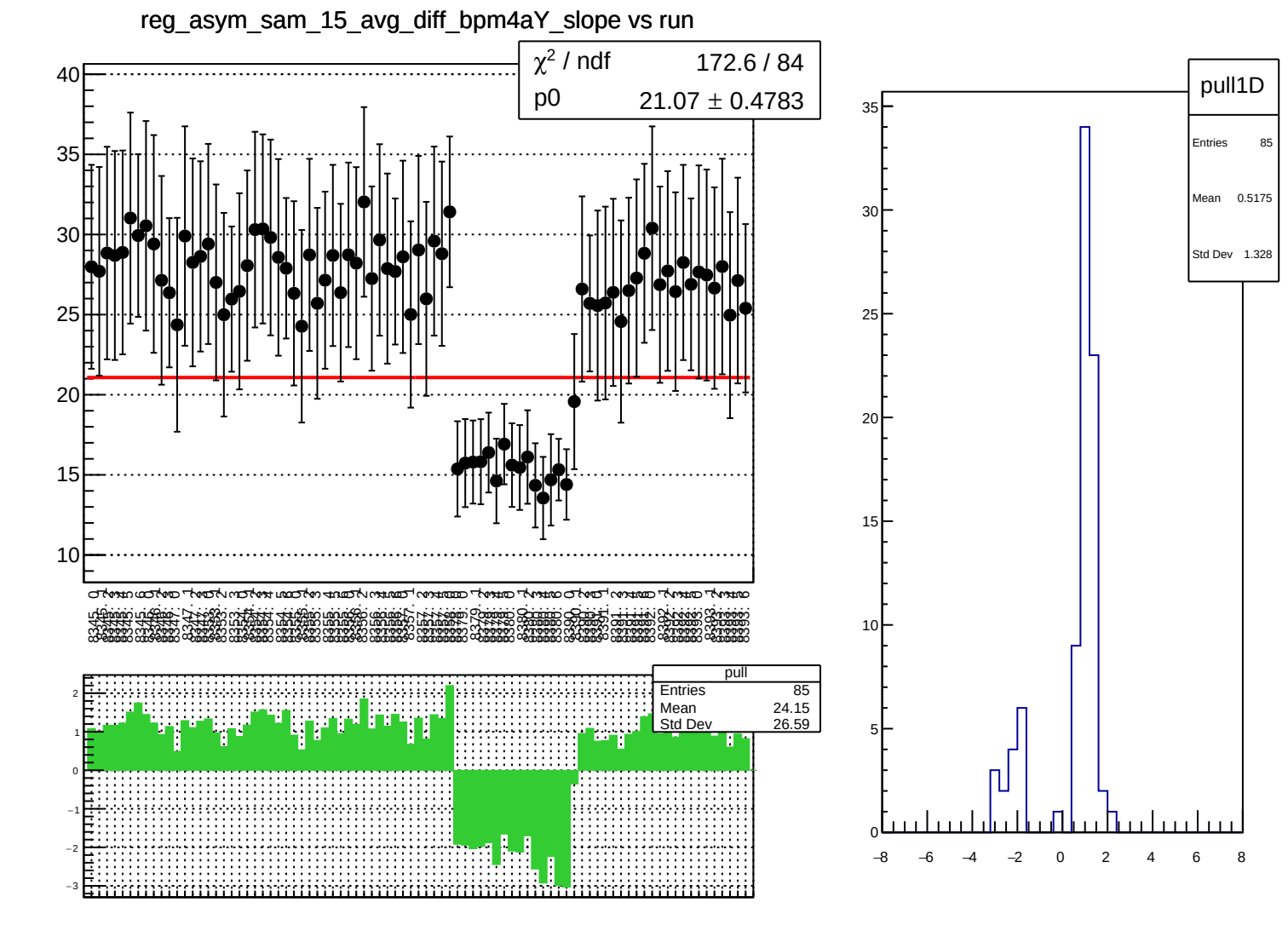

pull1D
Entries 82
Mean −0.07931
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

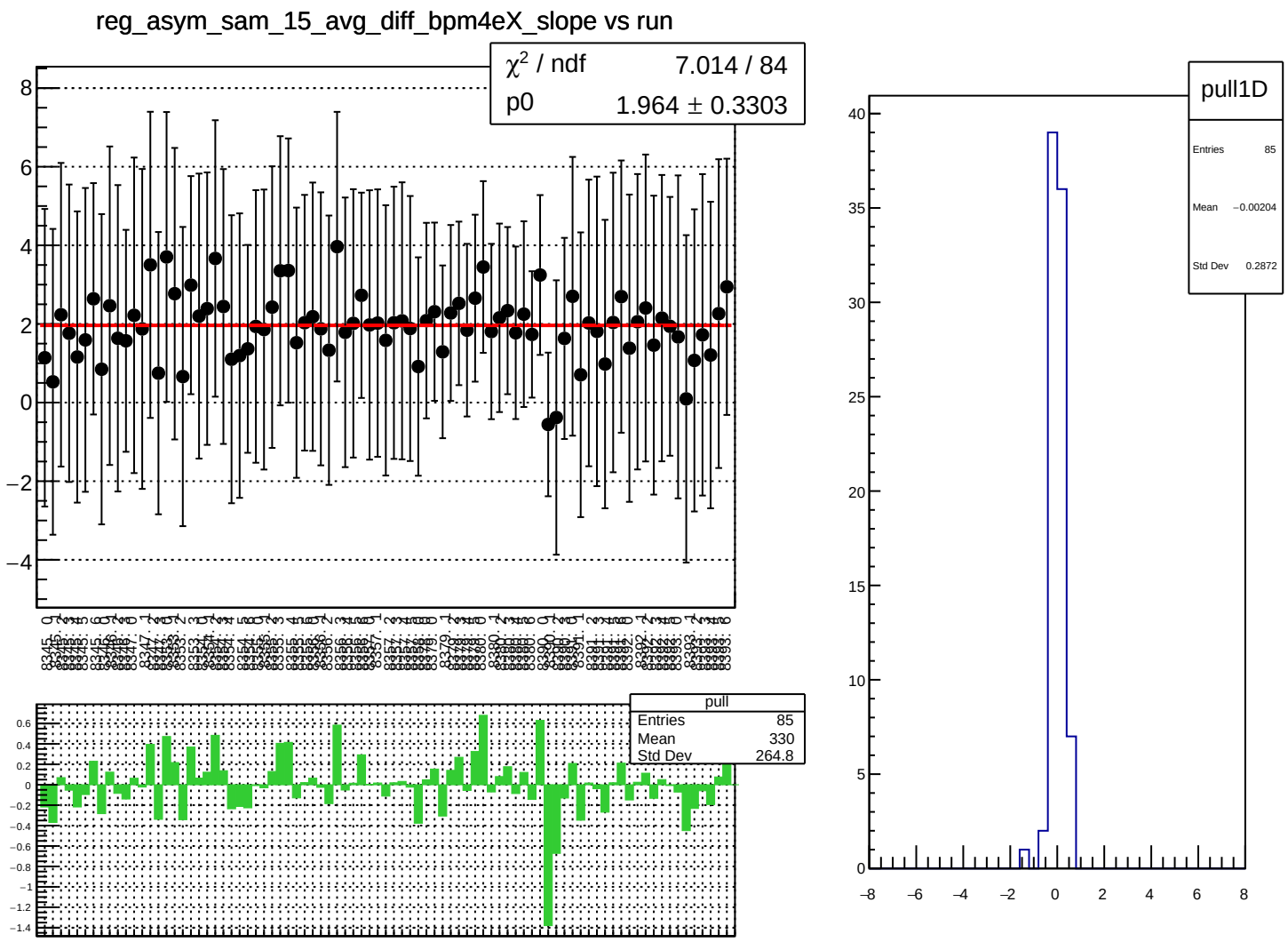

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 85.56 / 84
p0 −18.75 ± 17.44
×10³
300
200
100
0
−100
−200
pull
Entries 85
Mean 28.4
Std Dev 37.61
2
1
0
−1
−2
−3

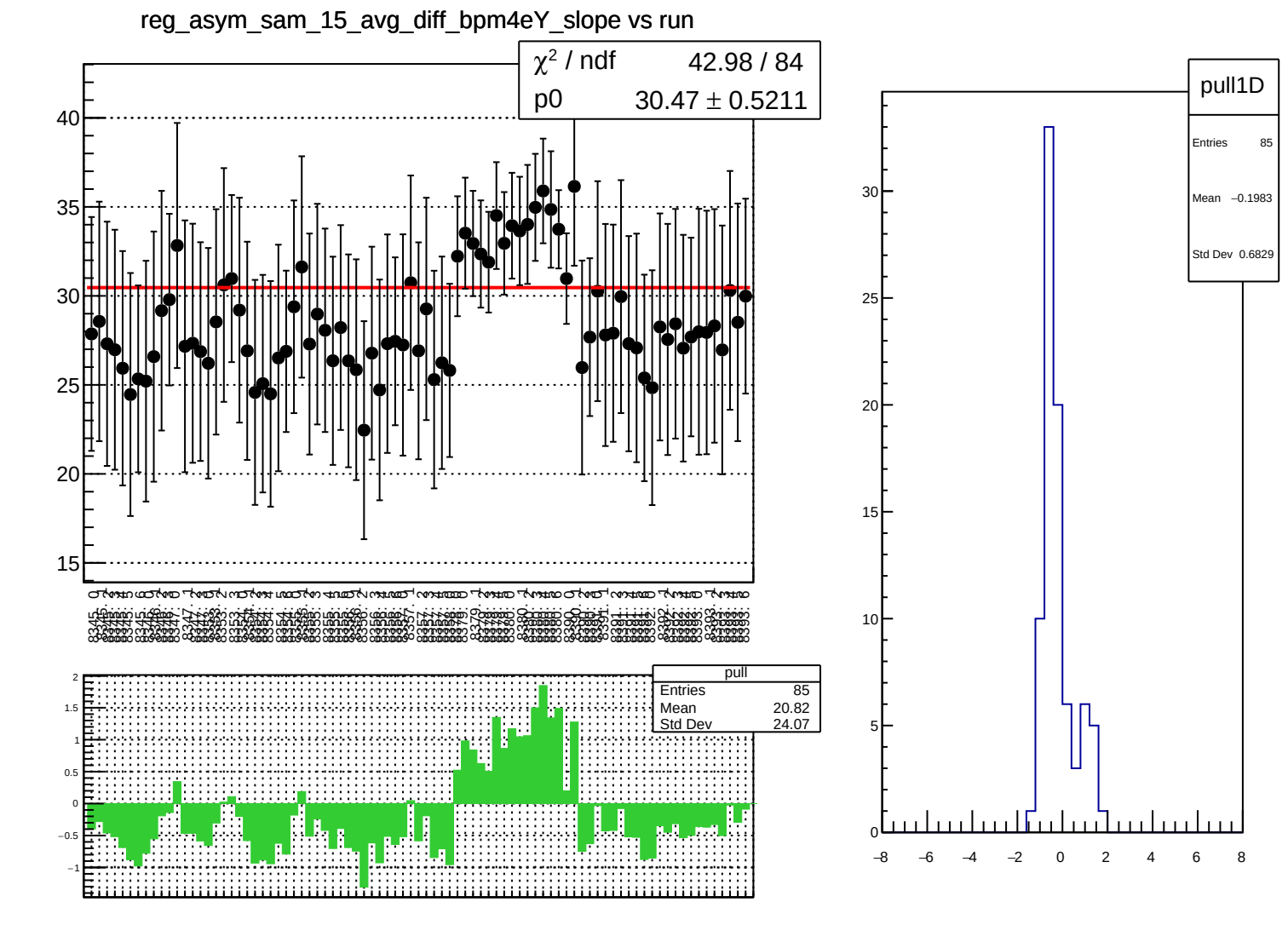

pull1D
Entries 85
Mean −0.05731
Std Dev 1.002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

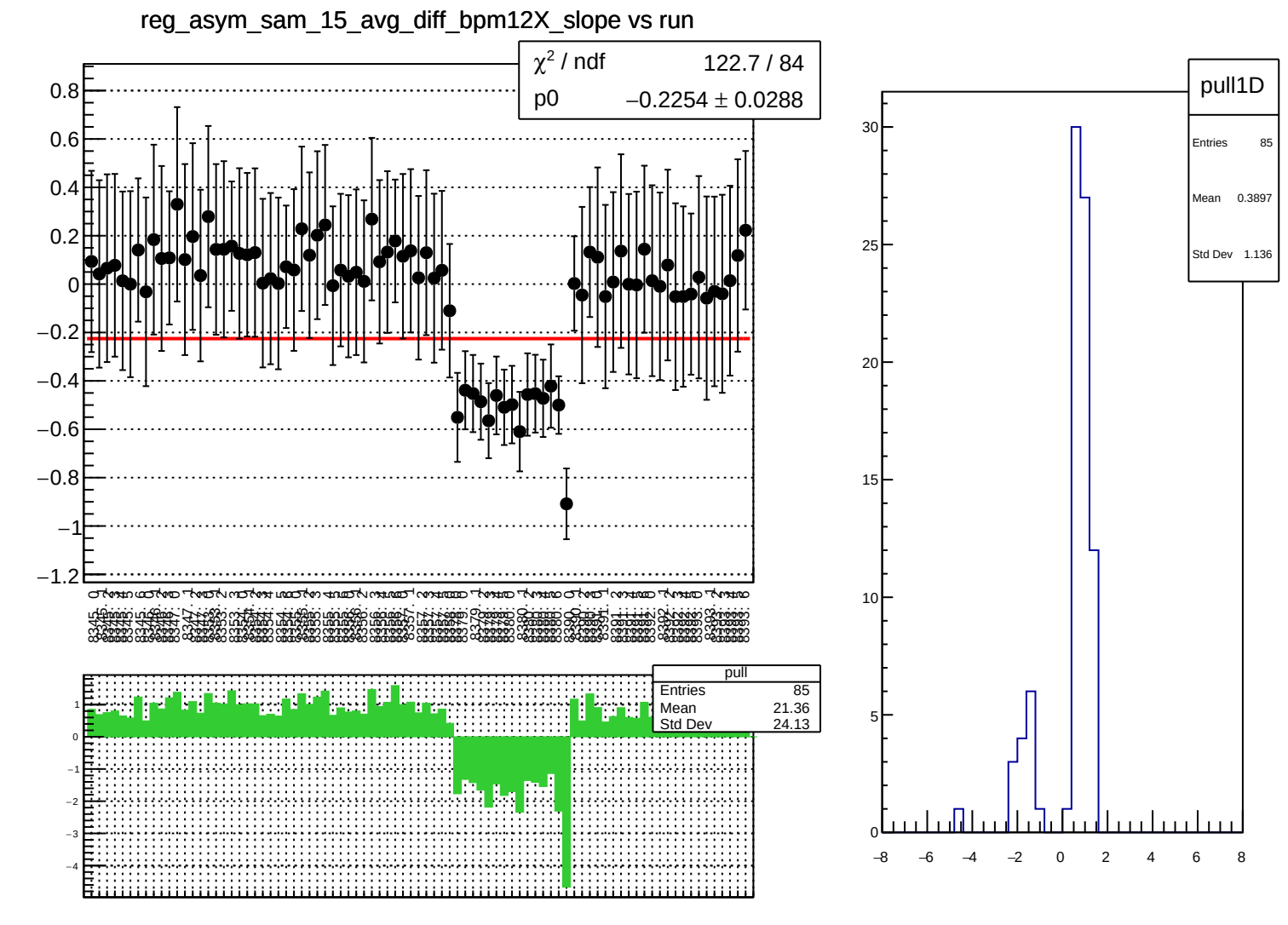

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 15.43 / 84
p0 −3.687 ± 0.3173
pull
Entries 85
Mean −0.3469
Std Dev 36.12

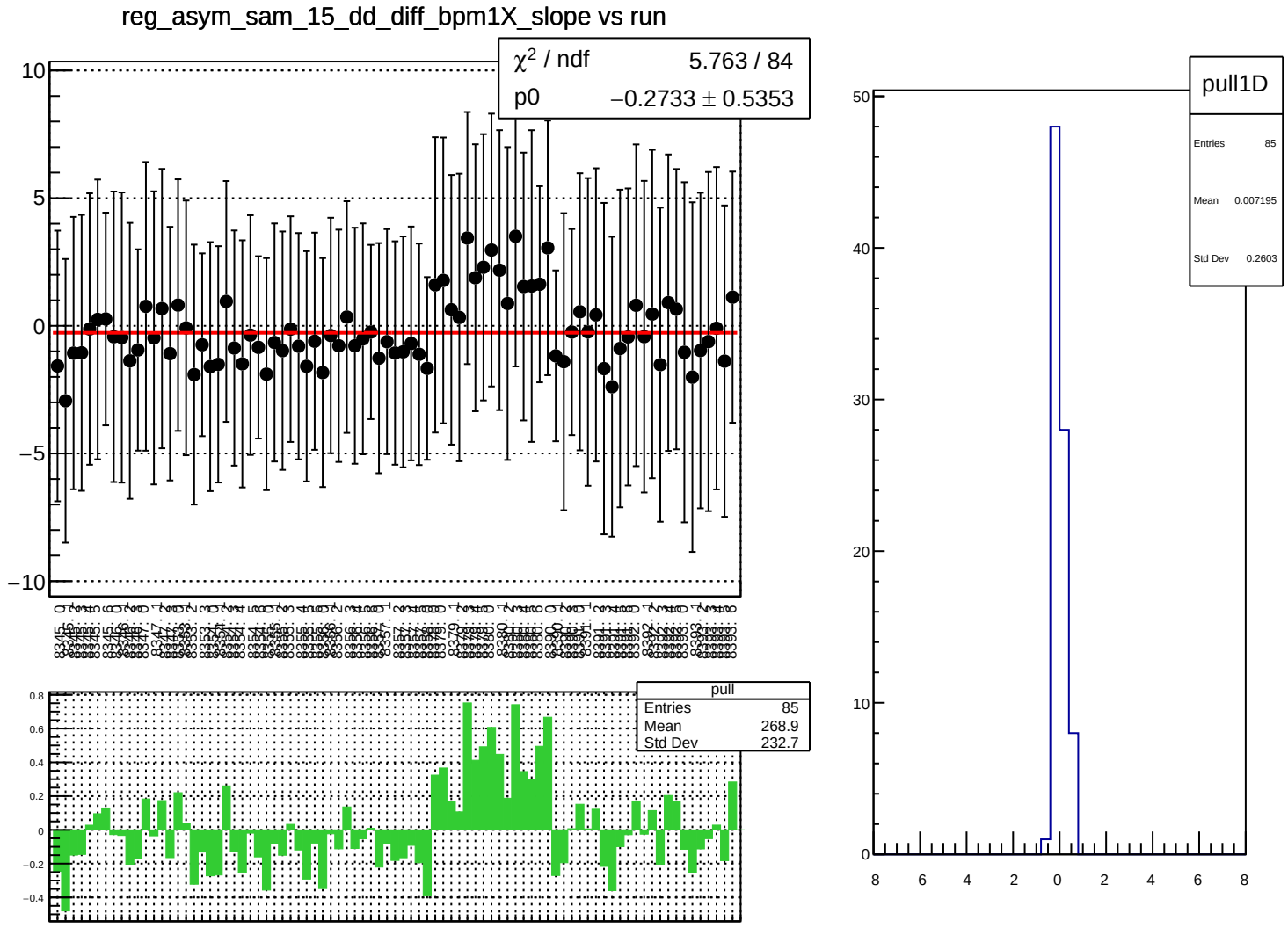

pull1D
Entries 85
Mean 0.03087
Std Dev 0.4249

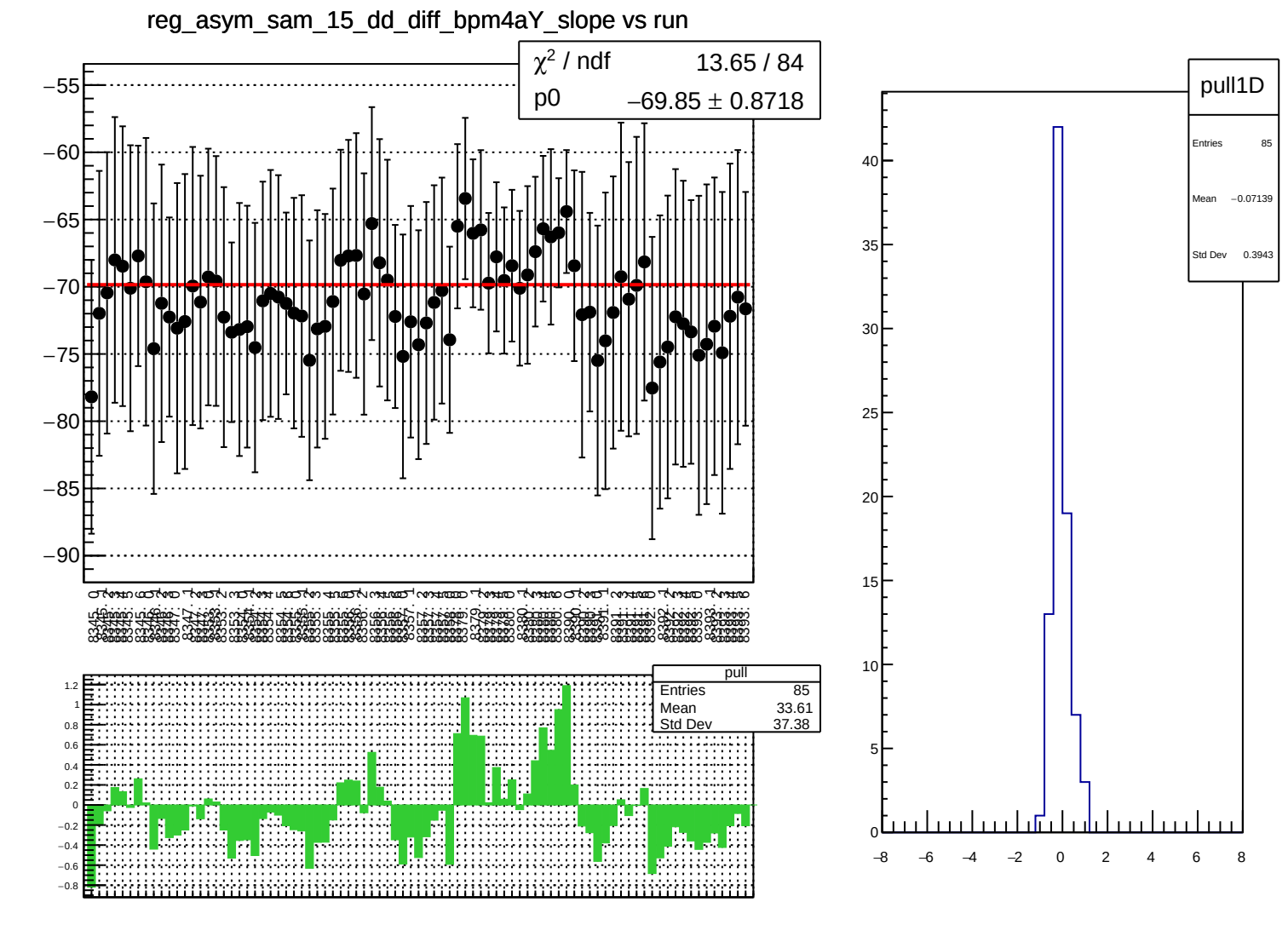

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 172.6 / 84
p0 21.07 ± 0.4783
pull
Entries 85
Mean 24.15
Std Dev 26.59
pull1D
Entries 85
Mean 0.5175
Std Dev 1.328

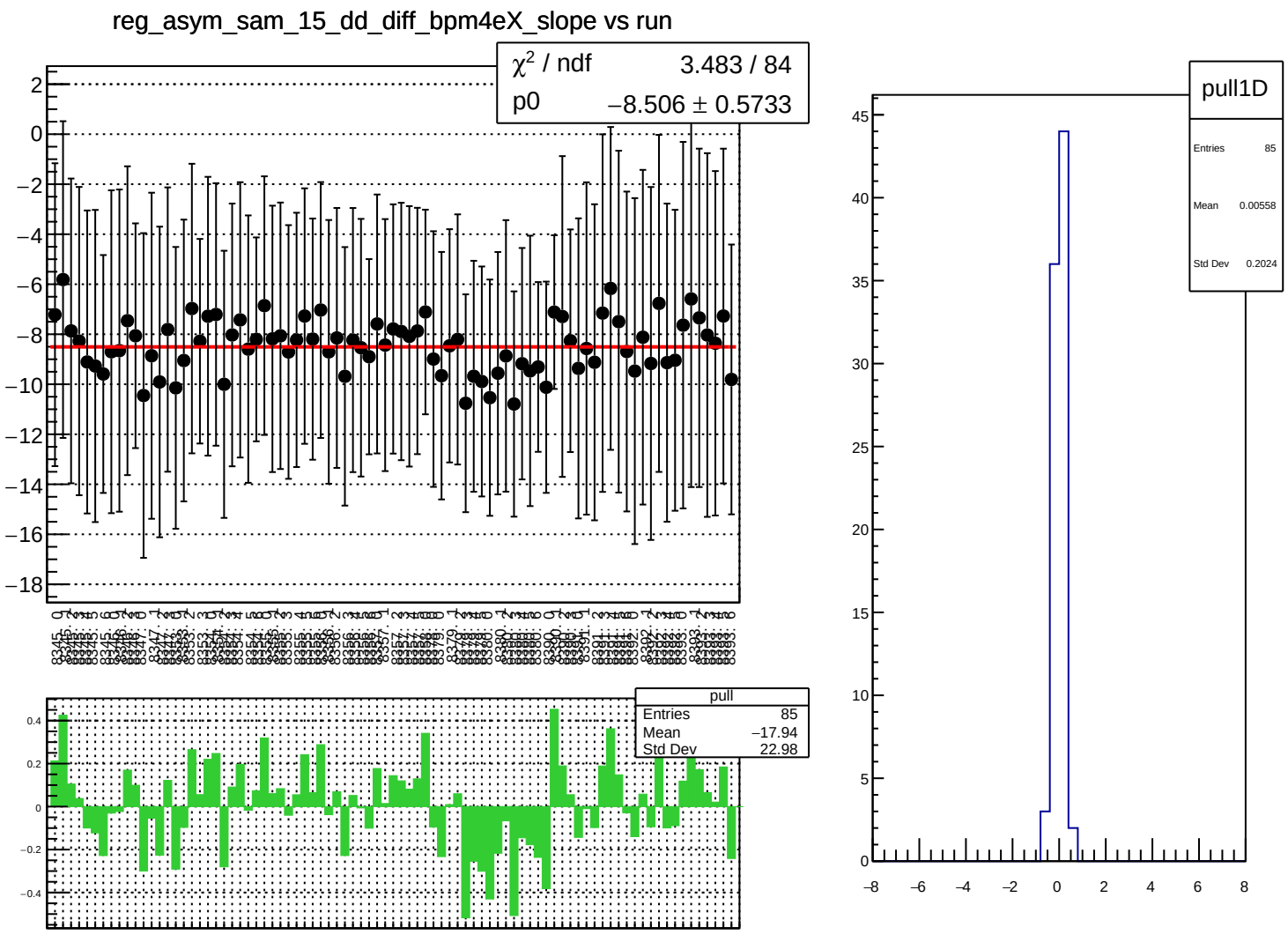

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.014 / 84
p0 1.964 ± 0.3303
pull
Entries 85
Mean 330
Std Dev 264.8
pull1D
Entries 85
Mean −0.00204
Std Dev 0.2872

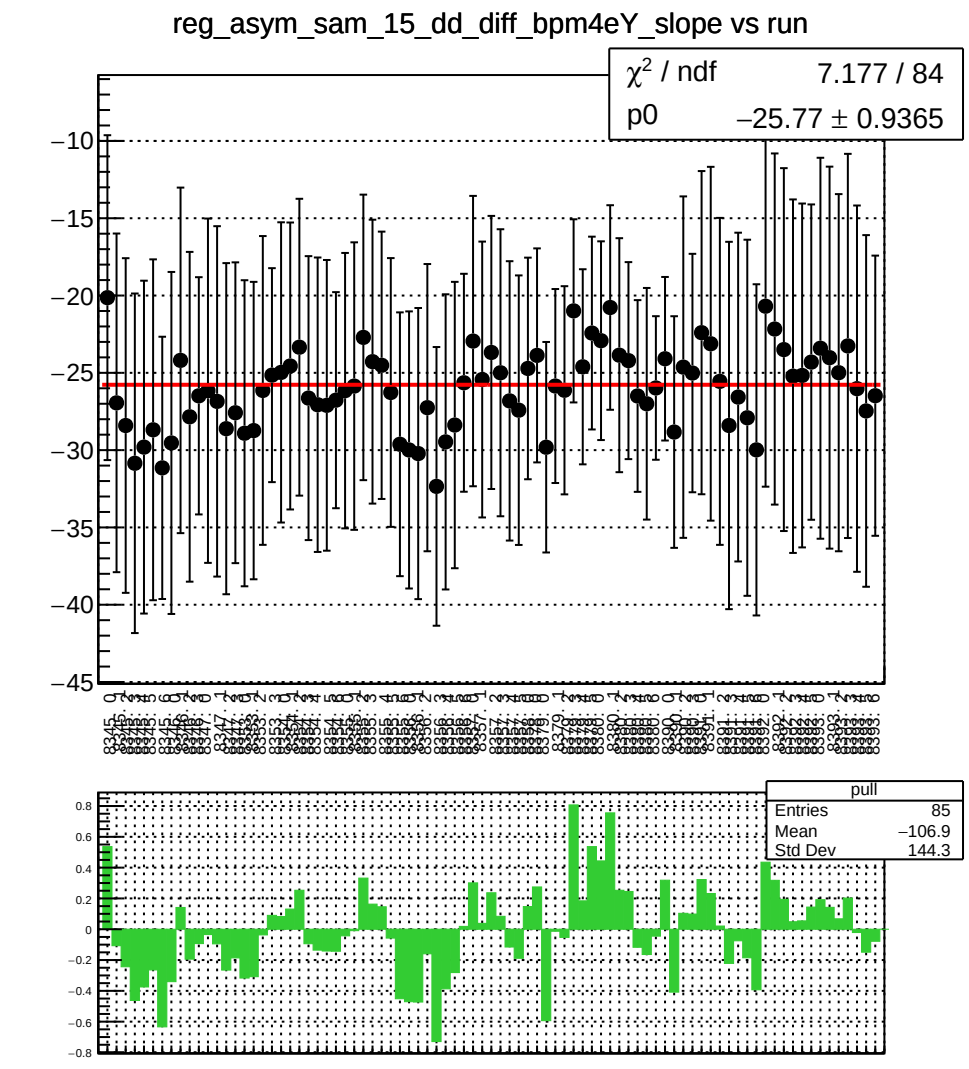

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 42.98 / 84
p0 30.47 ± 0.5211
pull
Entries 85
Mean 20.82
Std Dev 24.07
pull1D
Entries 85
Mean −0.1983
Std Dev 0.6829

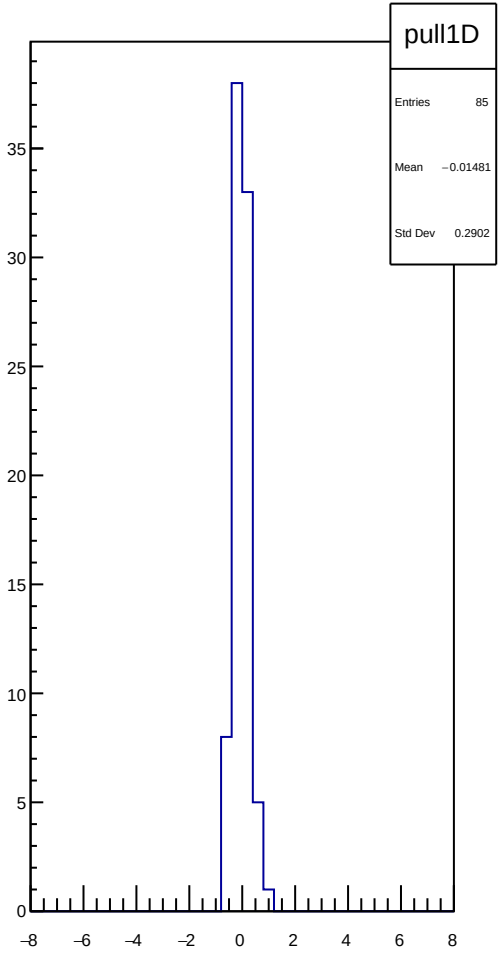

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 122.7 / 84
p0 −0.2254 ± 0.0288
pull
Entries 85
Mean 21.36
Std Dev 24.13
pull1D
Entries 85
Mean 0.3897
Std Dev 1.136

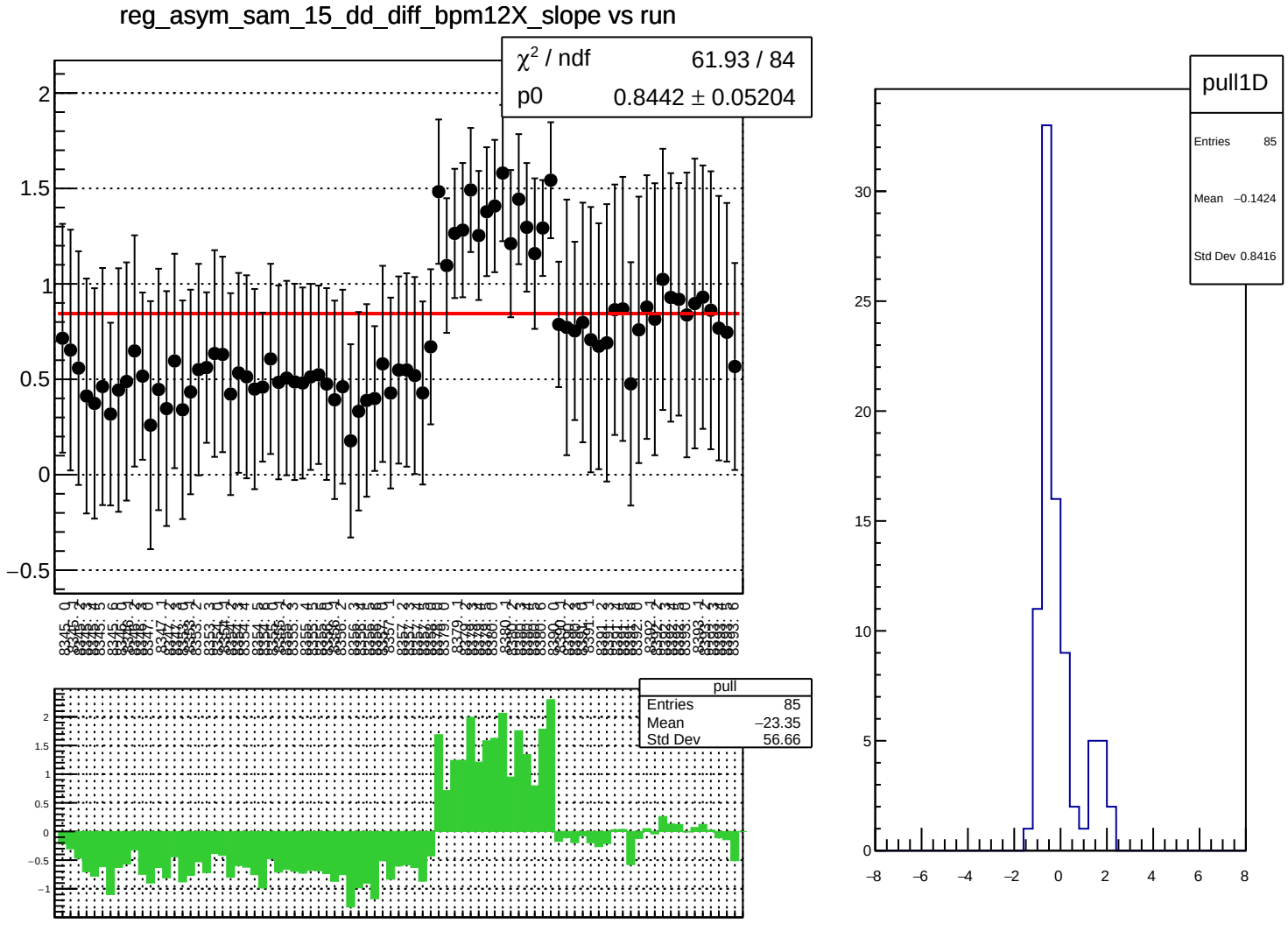

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 5.763 / 84
p0 −0.2733 ± 0.5353
pull
Entries 85
Mean 268.9
Std Dev 232.7
pull1D
Entries 85
Mean 0.007195
Std Dev 0.2603

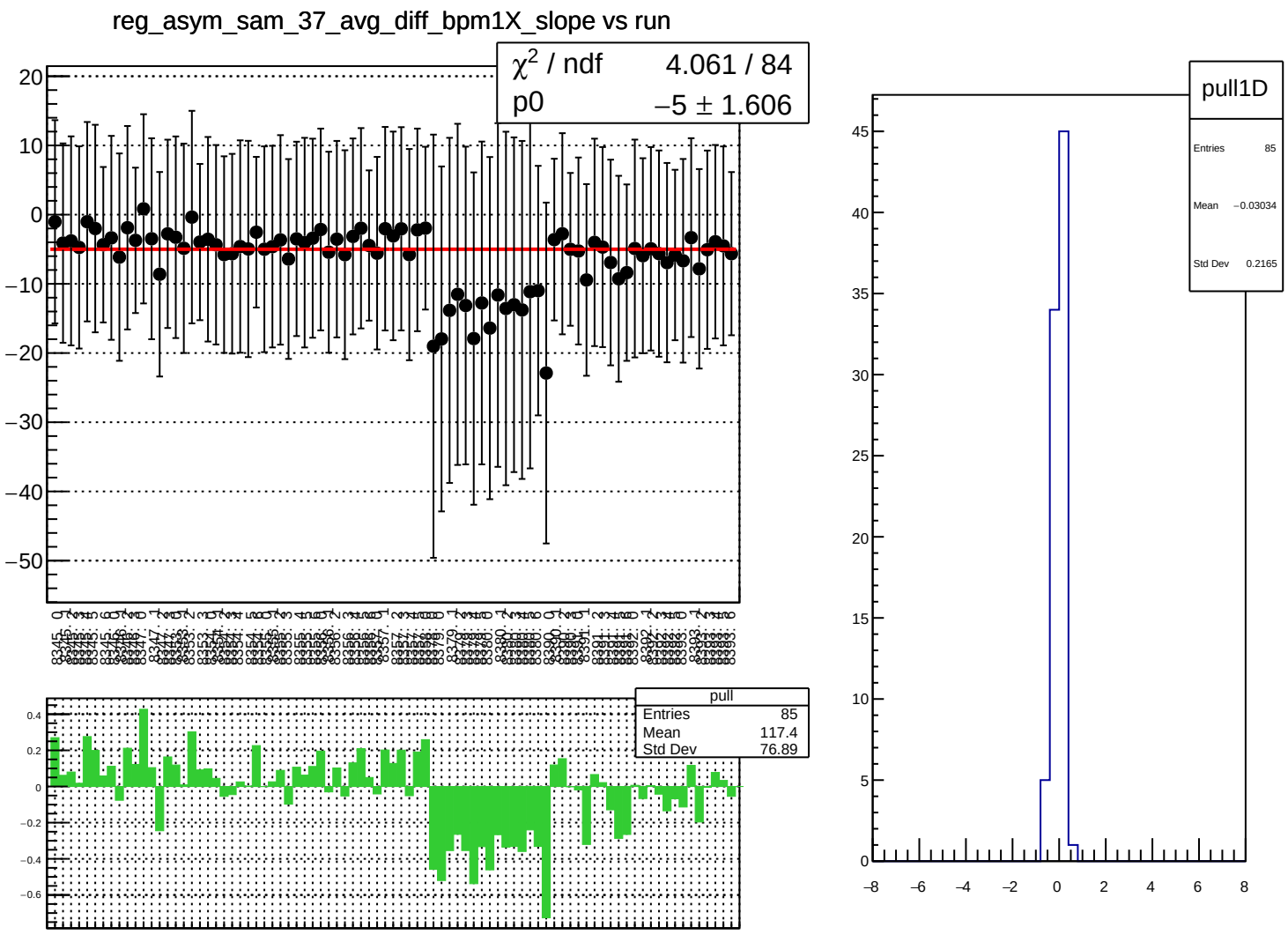

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.65 / 84
p0 −69.85 ± 0.8718
pull
Entries 85
Mean 33.61
Std Dev 37.38
pull1D
Entries 85
Mean −0.07139
Std Dev 0.3943

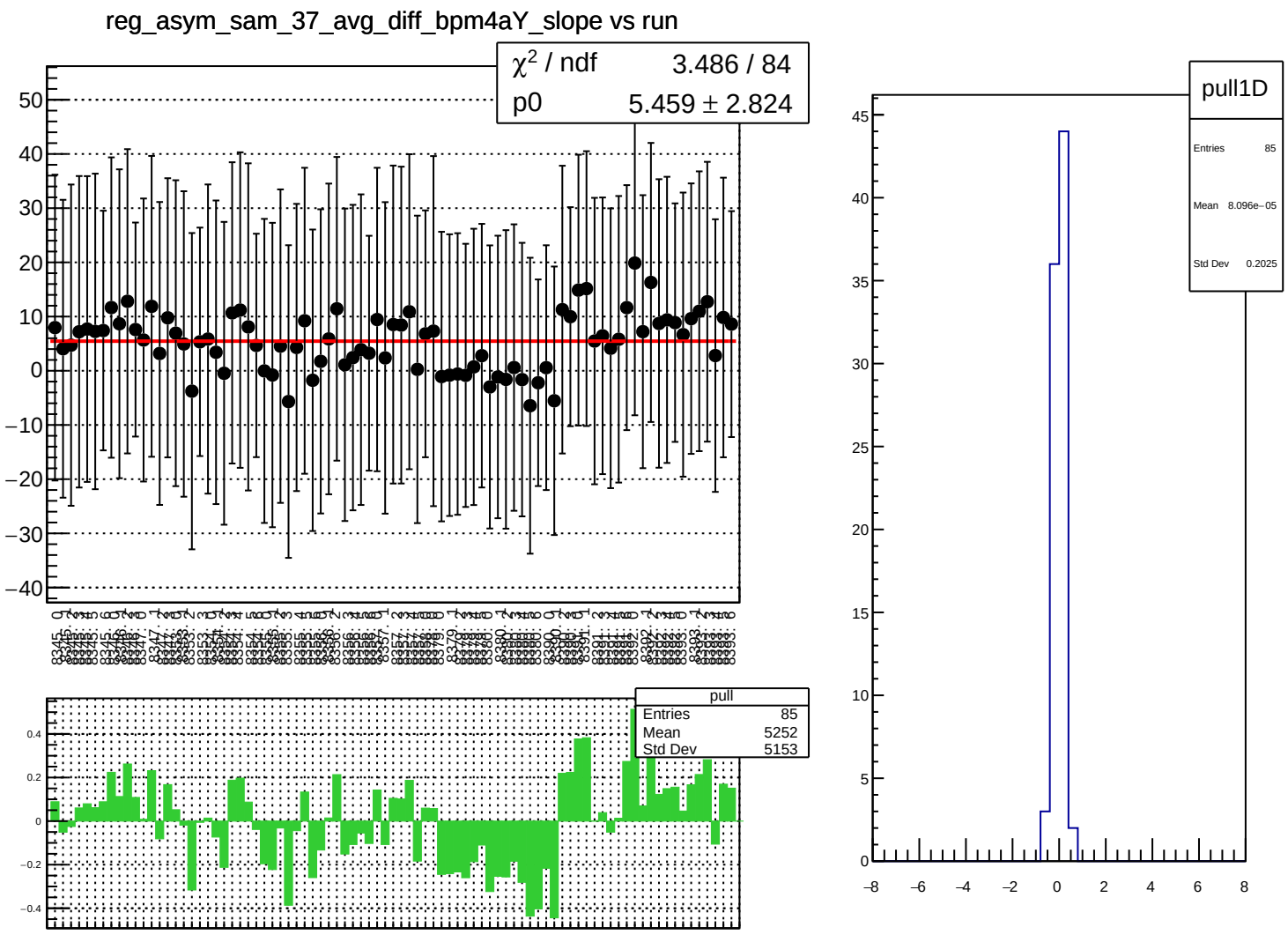

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.483 / 84
p0 −8.506 ± 0.5733
pull
Entries 85
Mean −17.94
Std Dev 22.98
pull1D
Entries 85
Mean 0.00558
Std Dev 0.2024

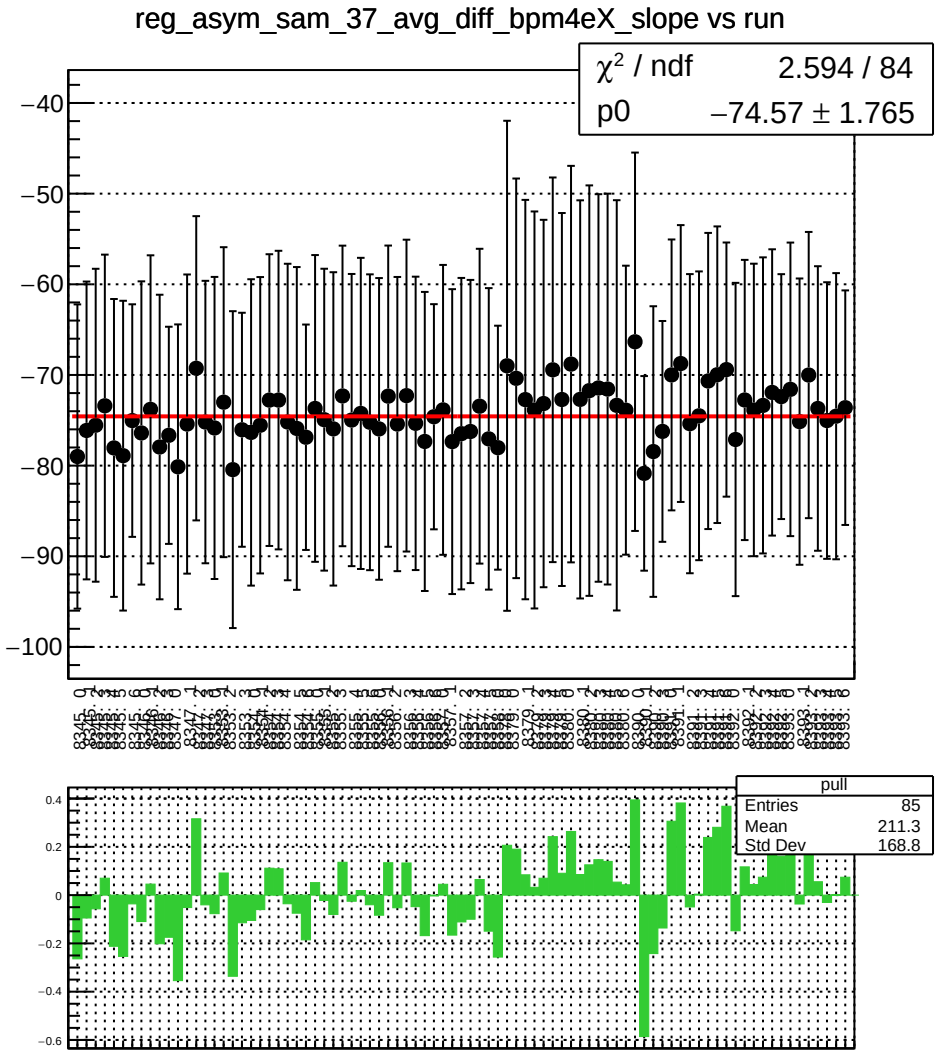

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.177 / 84
p0 −25.77 ± 0.9365
pull
Entries 85
Mean −106.9
Std Dev 144.3

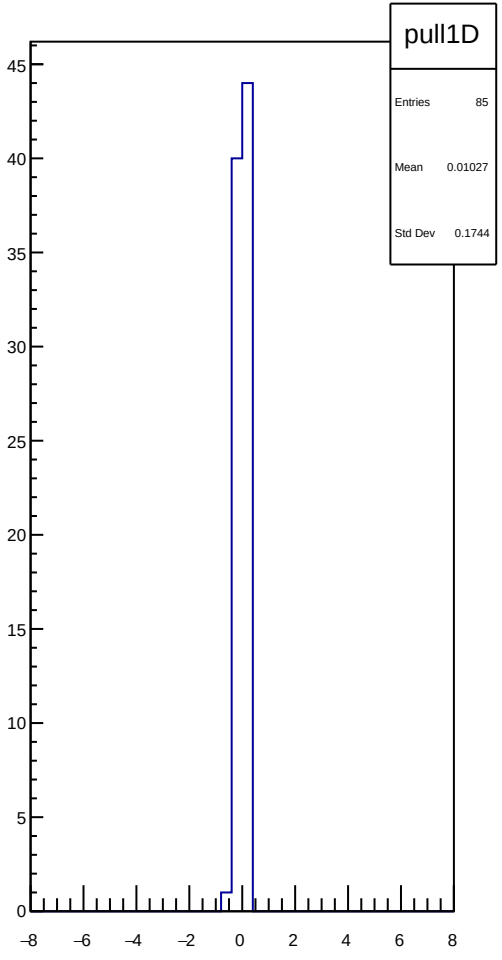

pull1D
Entries 85
Mean −0.01481
Std Dev 0.2902

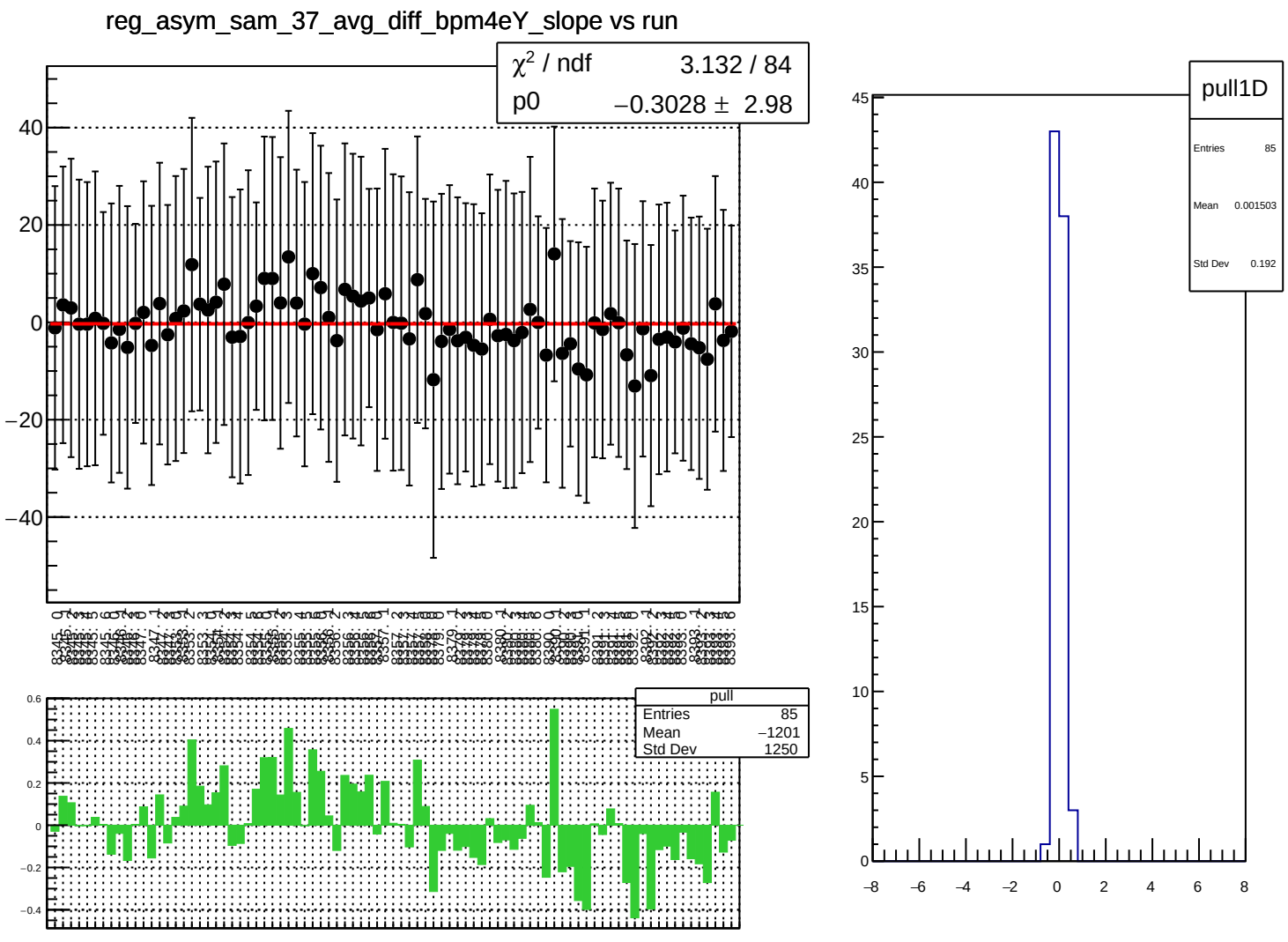

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 61.93 / 84
p0 0.8442 ± 0.05204
pull
Entries 85
Mean −23.35
Std Dev 56.66
pull1D
Entries 85
Mean −0.1424
Std Dev 0.8416

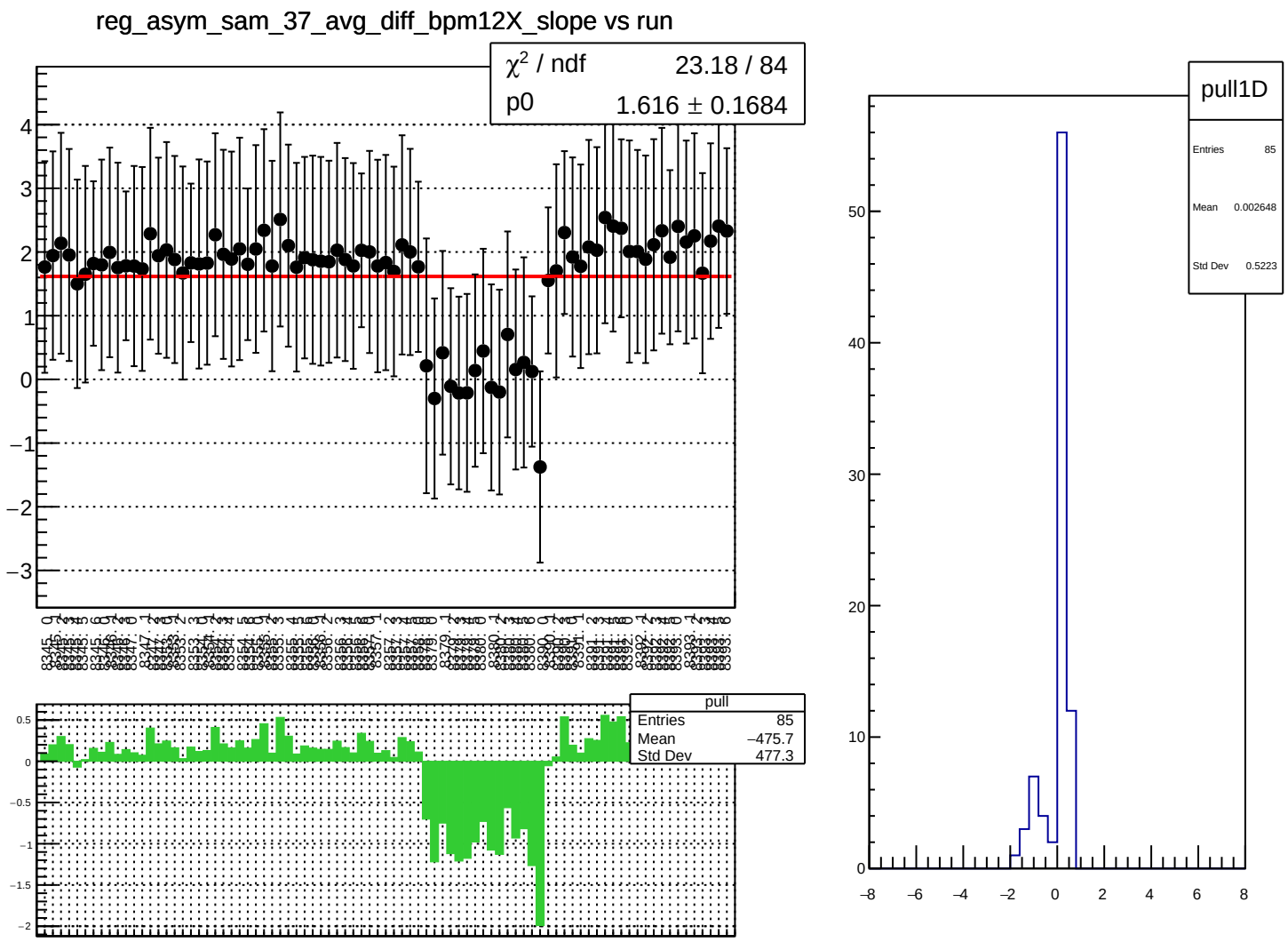

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 4.061 / 84
p0 −5 ± 1.606
pull
Entries 85
Mean 117.4
Std Dev 76.89
pull1D
Entries 85
Mean −0.03034
Std Dev 0.2165

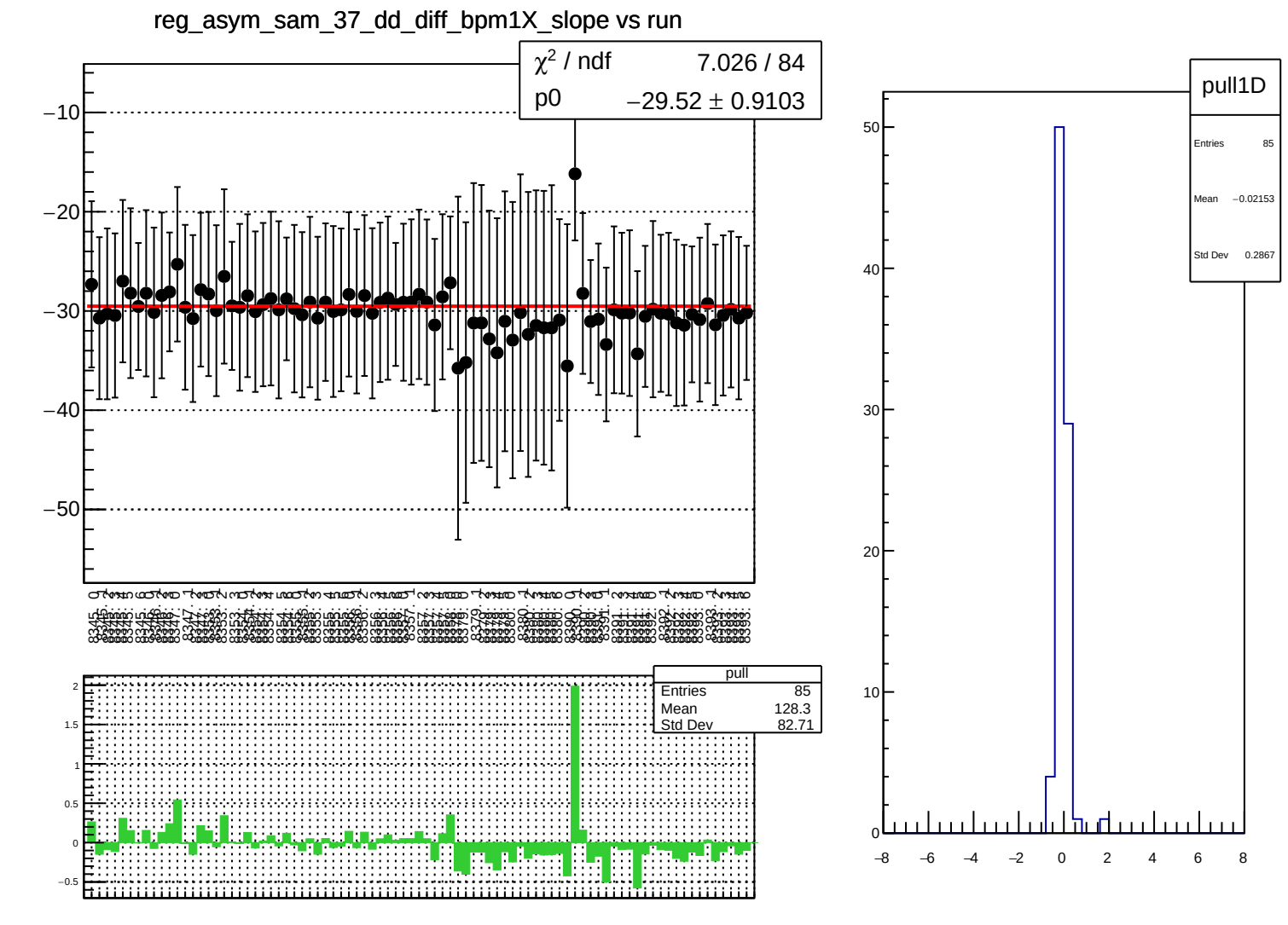

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.486 / 84
p0 5.459 ± 2.824
pull
Entries 85
Mean 5252
Std Dev 5153
pull1D
Entries 85
Mean 8.096e−05
Std Dev 0.2025

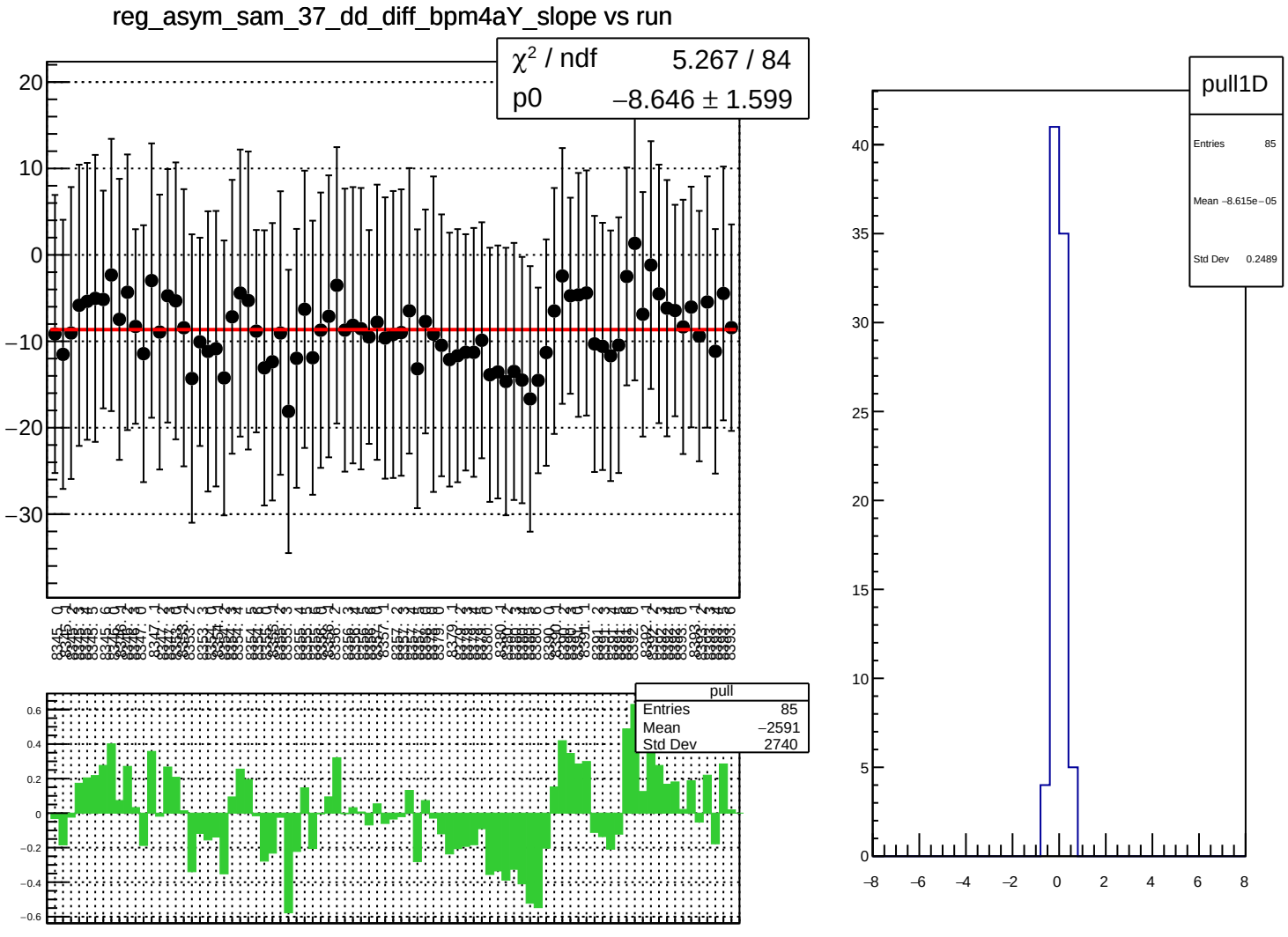

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.594 / 84
p0 −74.57 ± 1.765
pull
Entries 85
Mean 211.3
Std Dev 168.8

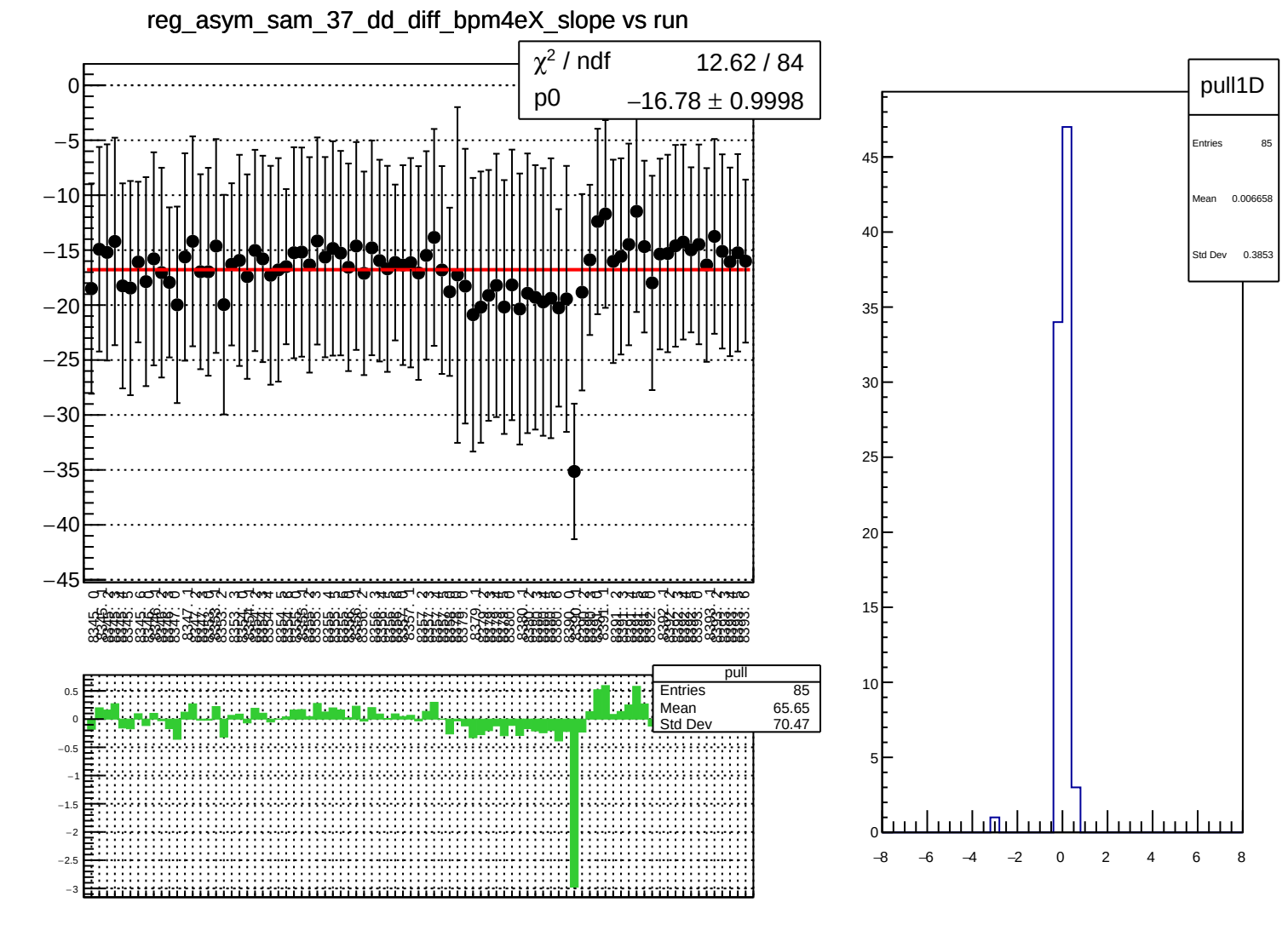

pull1D
Entries 85
Mean 0.01027
Std Dev 0.1744

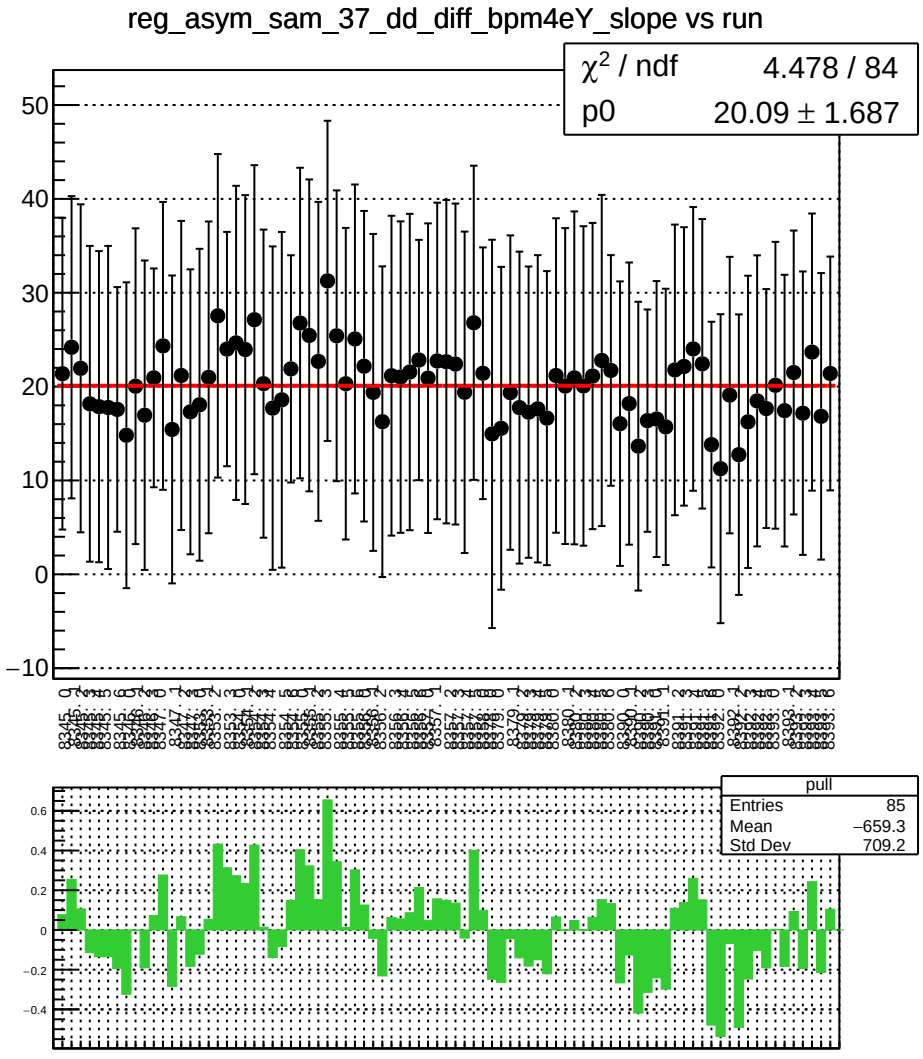

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.132 / 84
p0 −0.3028 ± 2.98
pull
Entries 85
Mean −1201
Std Dev 1250
pull1D
Entries 85
Mean 0.001503
Std Dev 0.192

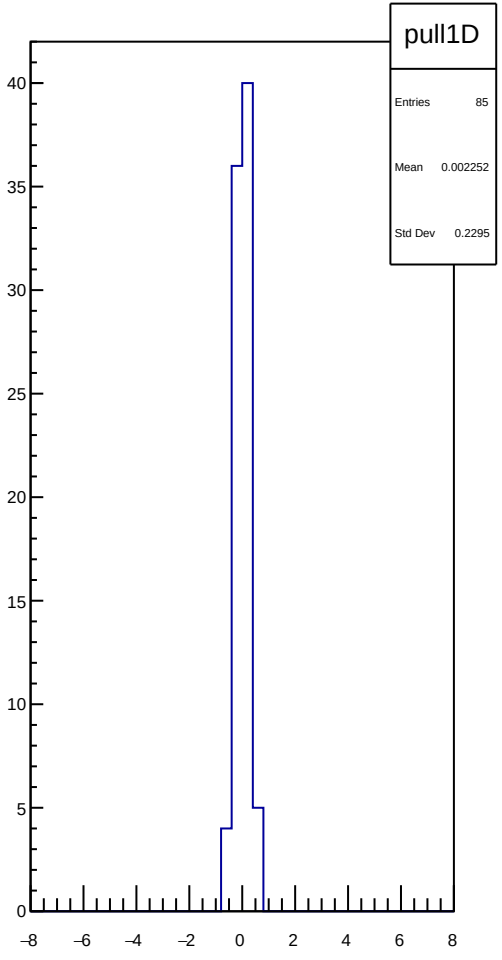

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 23.18 / 84
p0 1.616 ± 0.1684
pull
Entries 85
Mean −475.7
Std Dev 477.3
pull1D
Entries 85
Mean 0.002648
Std Dev 0.5223

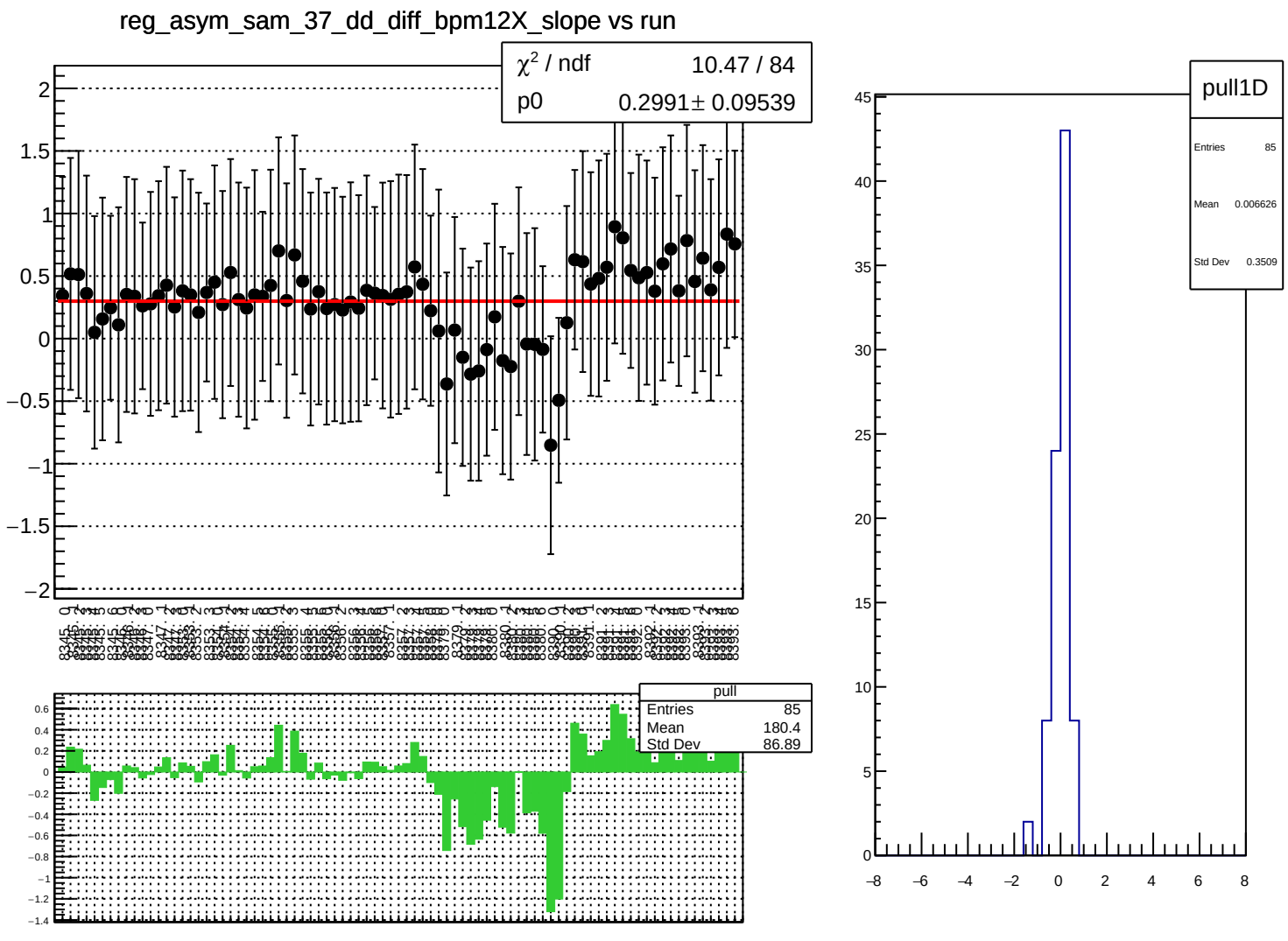

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 7.026 / 84
p0 −29.52 ± 0.9103
pull
Entries 85
Mean 128.3
Std Dev 82.71
pull1D
Entries 85
Mean −0.02153
Std Dev 0.2867

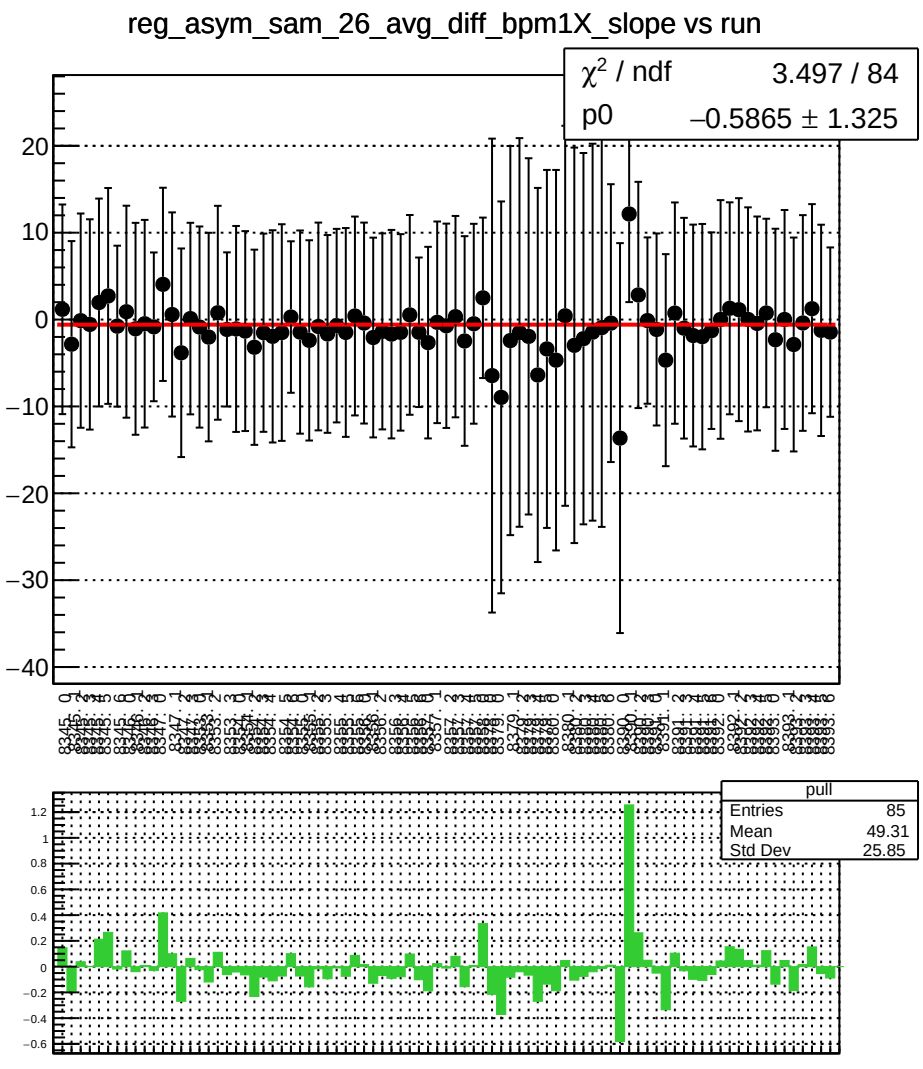

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.267 / 84
p0 −8.646 ± 1.599
pull
Entries 85
Mean −2591
Std Dev 2740
pull1D
Entries 85
Mean −8.615e−05
Std Dev 0.2489

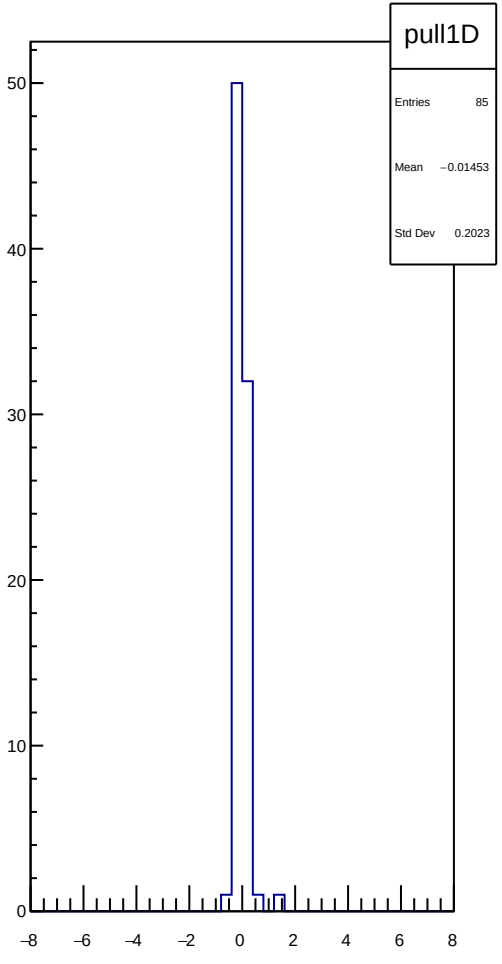

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.62 / 84
p0 −16.78 ± 0.9998
pull
Entries 85
Mean 65.65
Std Dev 70.47
pull1D
Entries 85
Mean 0.006658
Std Dev 0.3853

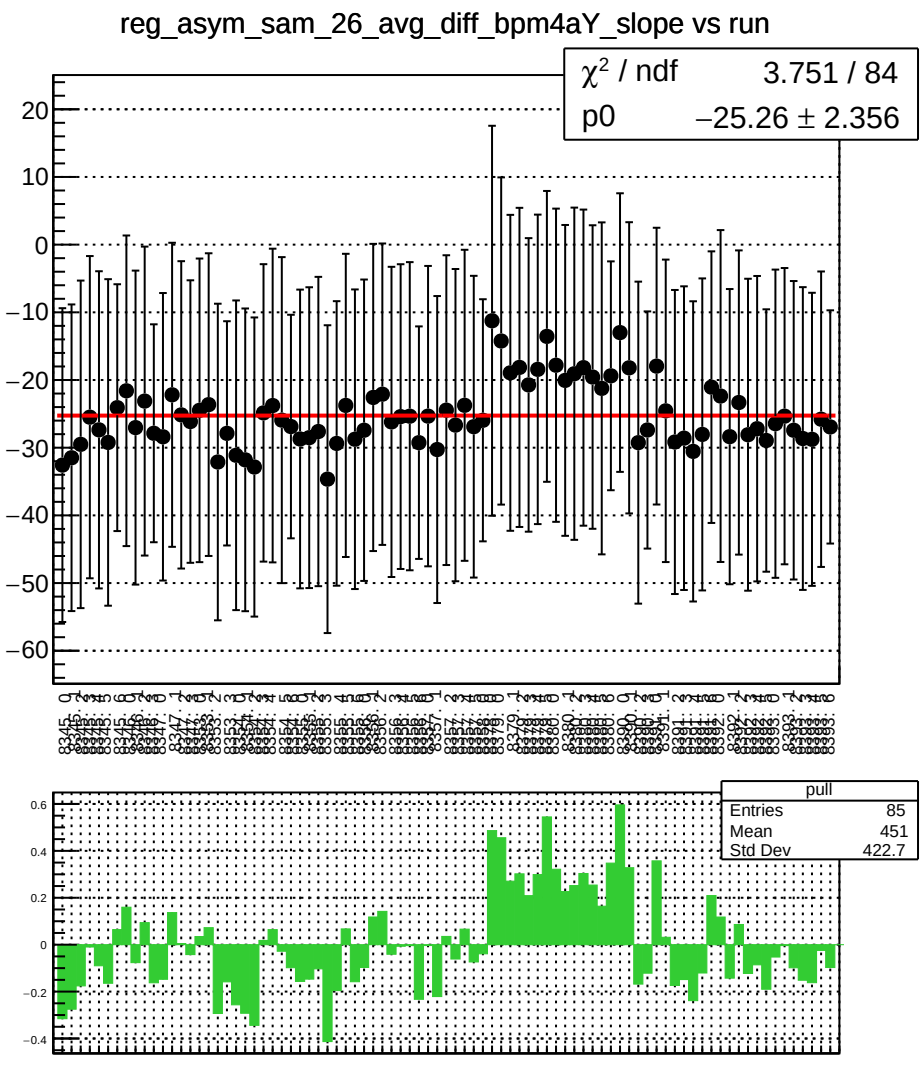

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.478 / 84
p0 20.09 ± 1.687
pull
Entries 85
Mean −659.3
Std Dev 709.2

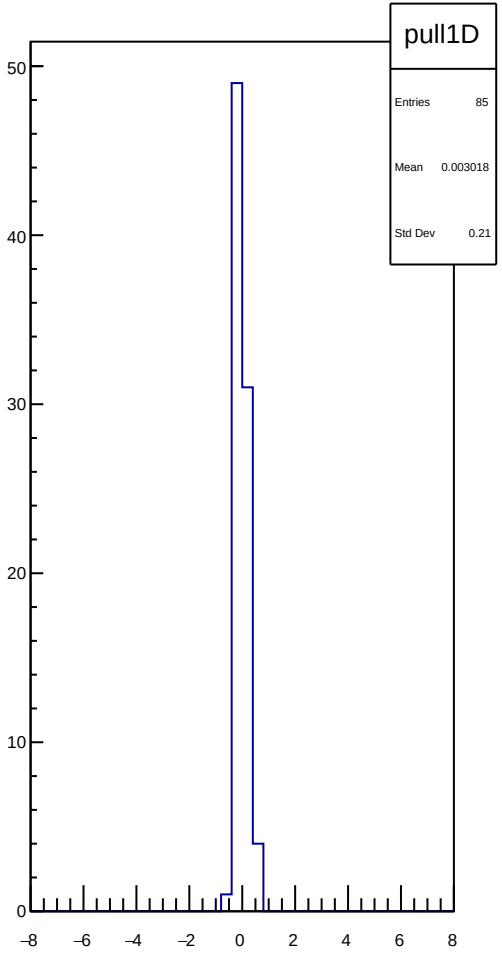

pull1D
Entries 85
Mean 0.002252
Std Dev 0.2295

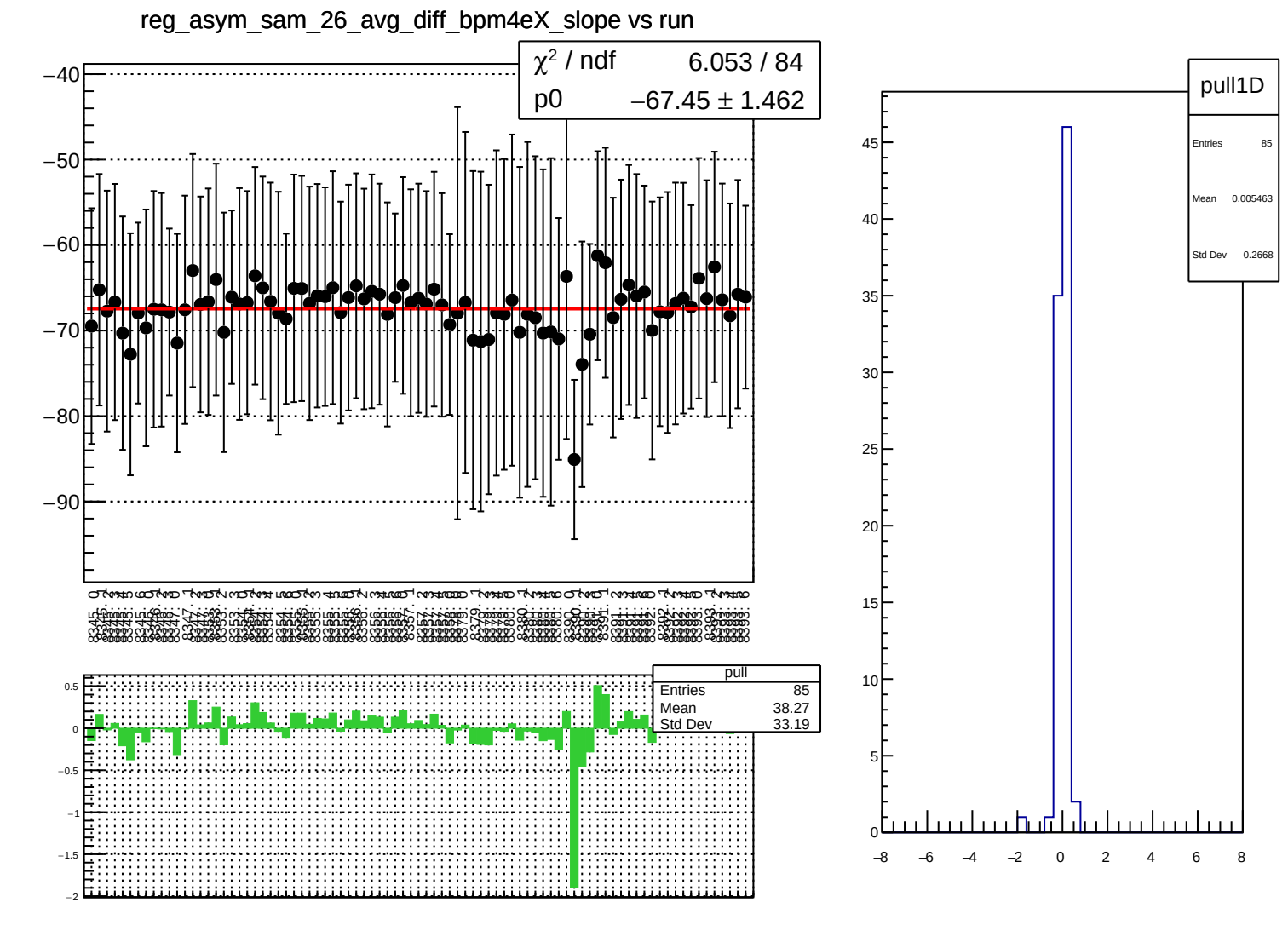

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 10.47 / 84
p0 0.2991± 0.09539
pull
Entries 85
Mean 180.4
Std Dev 86.89
pull1D
Entries 85
Mean 0.006626
Std Dev 0.3509

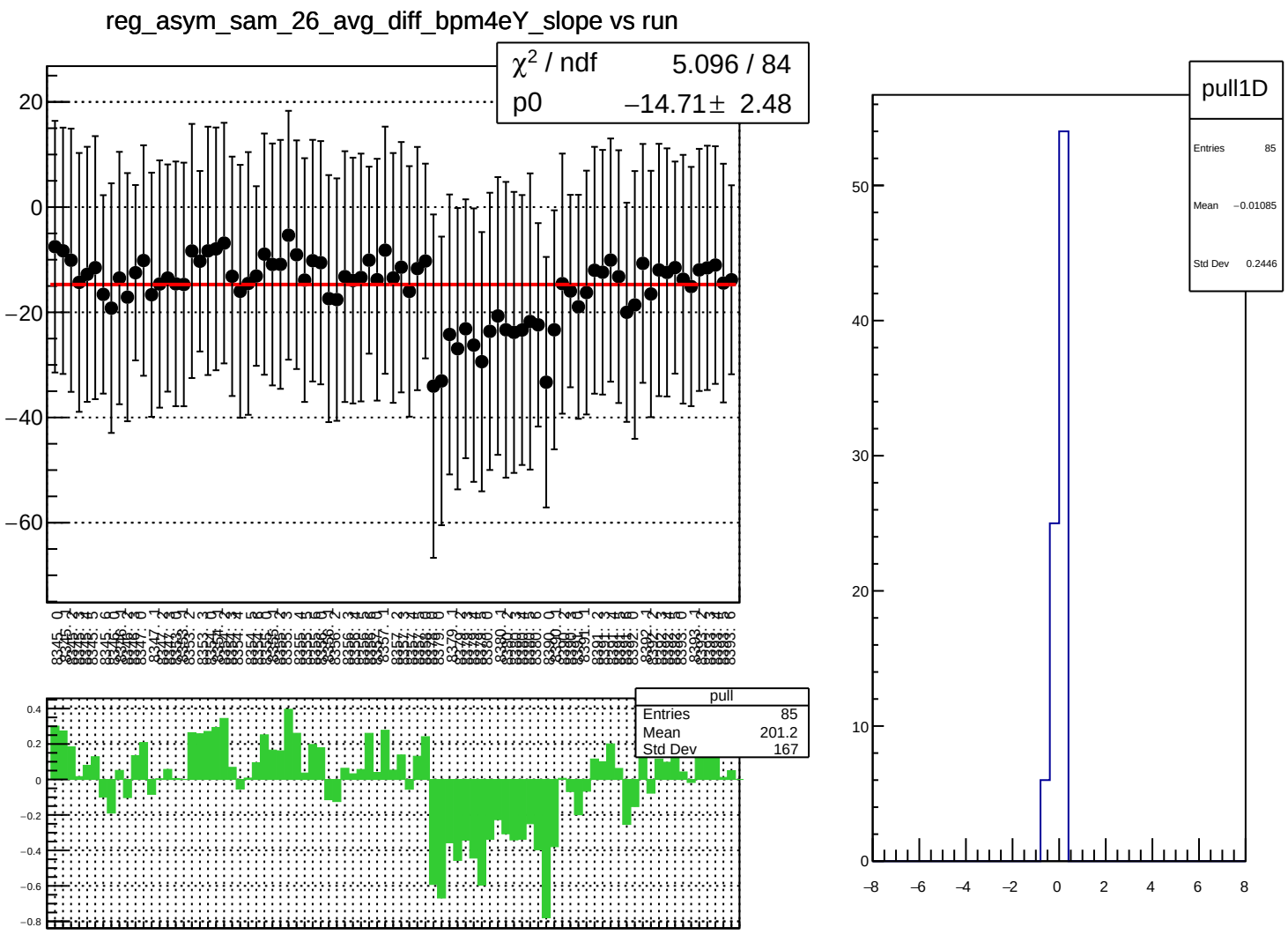

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 3.497 / 84
p0 −0.5865 ± 1.325
pull
Entries 85
Mean 49.31
Std Dev 25.85

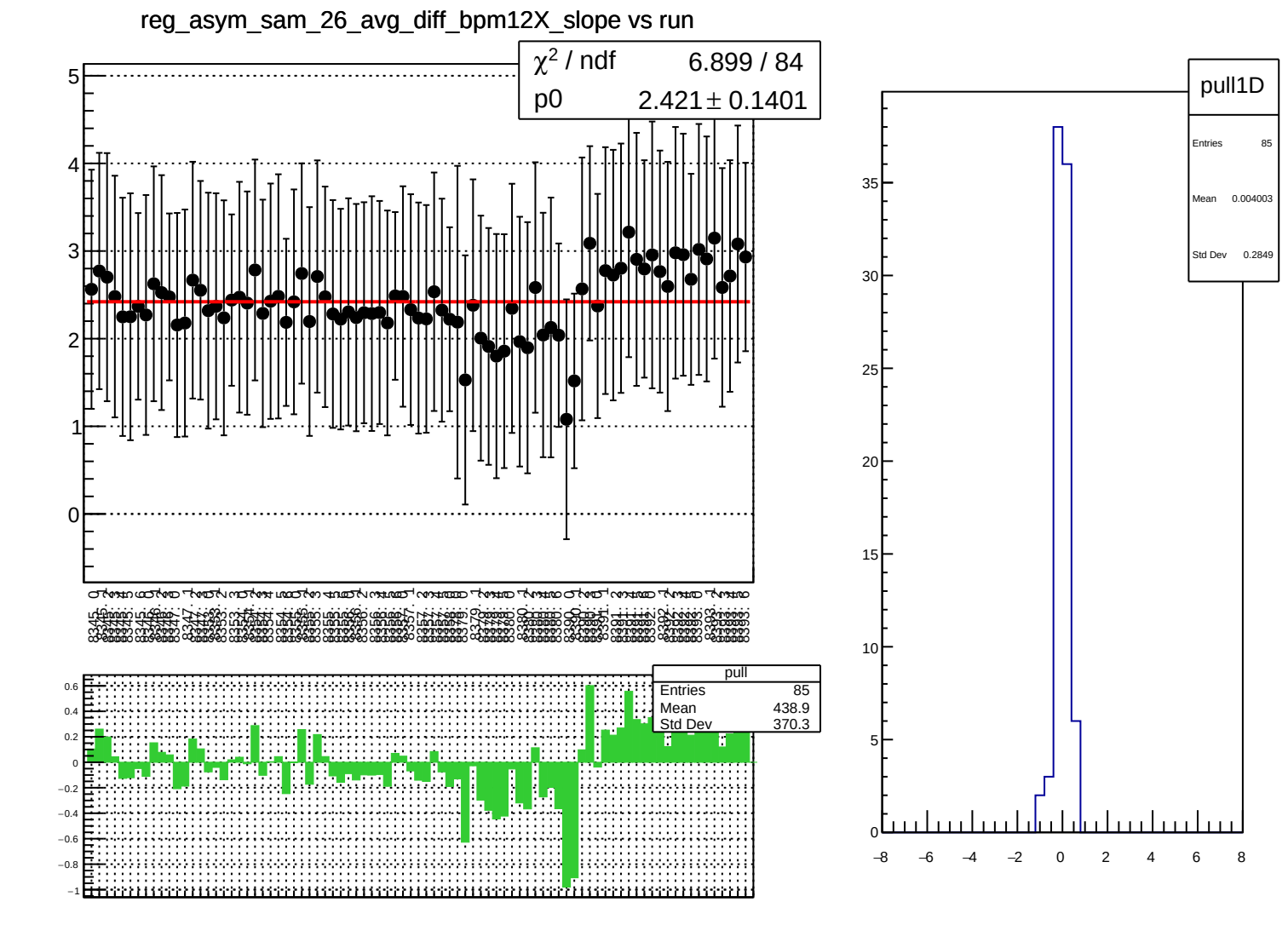

pull1D
Entries 85
Mean −0.01453
Std Dev 0.2023

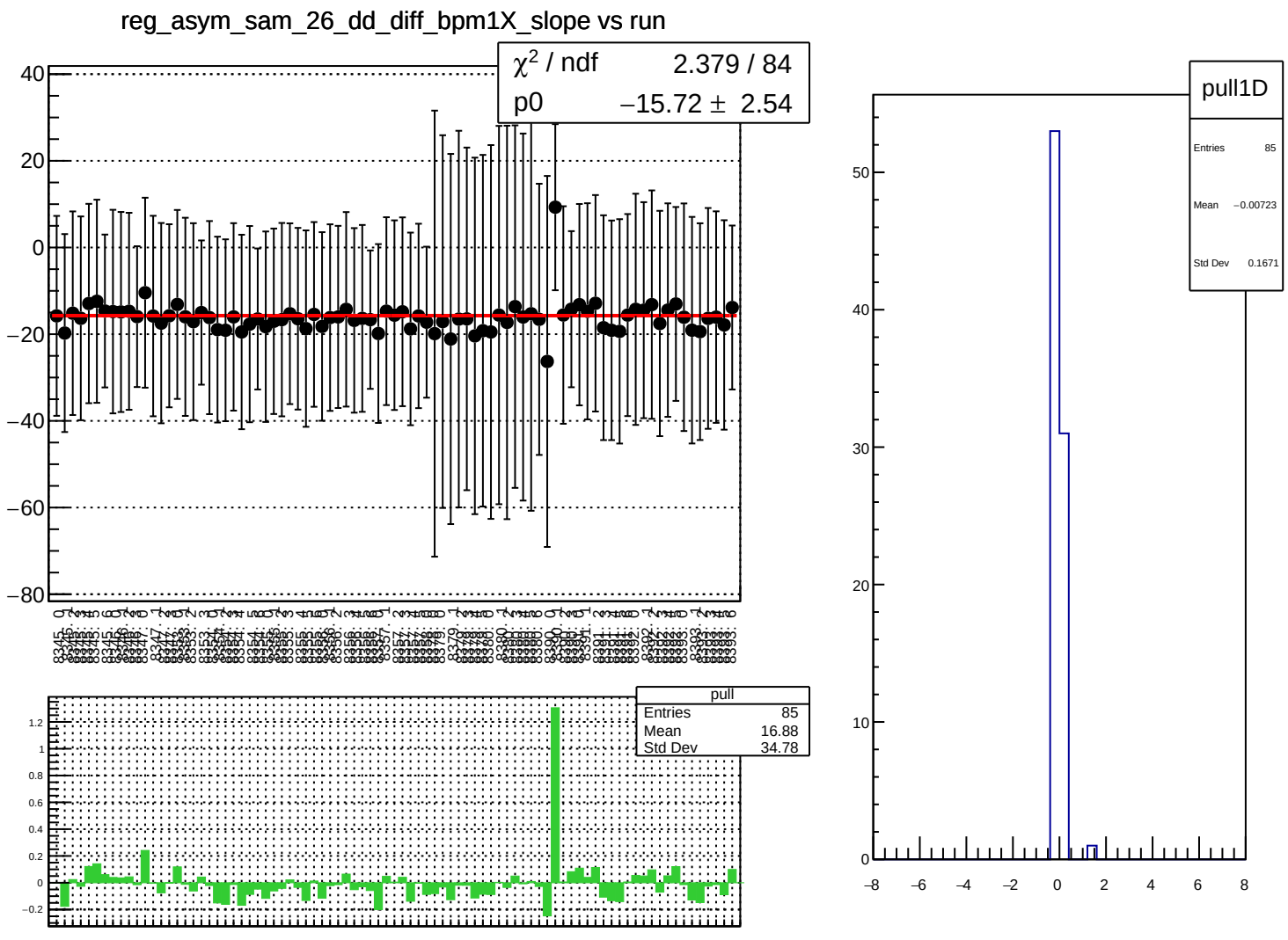

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.751 / 84
p0 −25.26 ± 2.356
pull
Entries 85
Mean 451
Std Dev 422.7

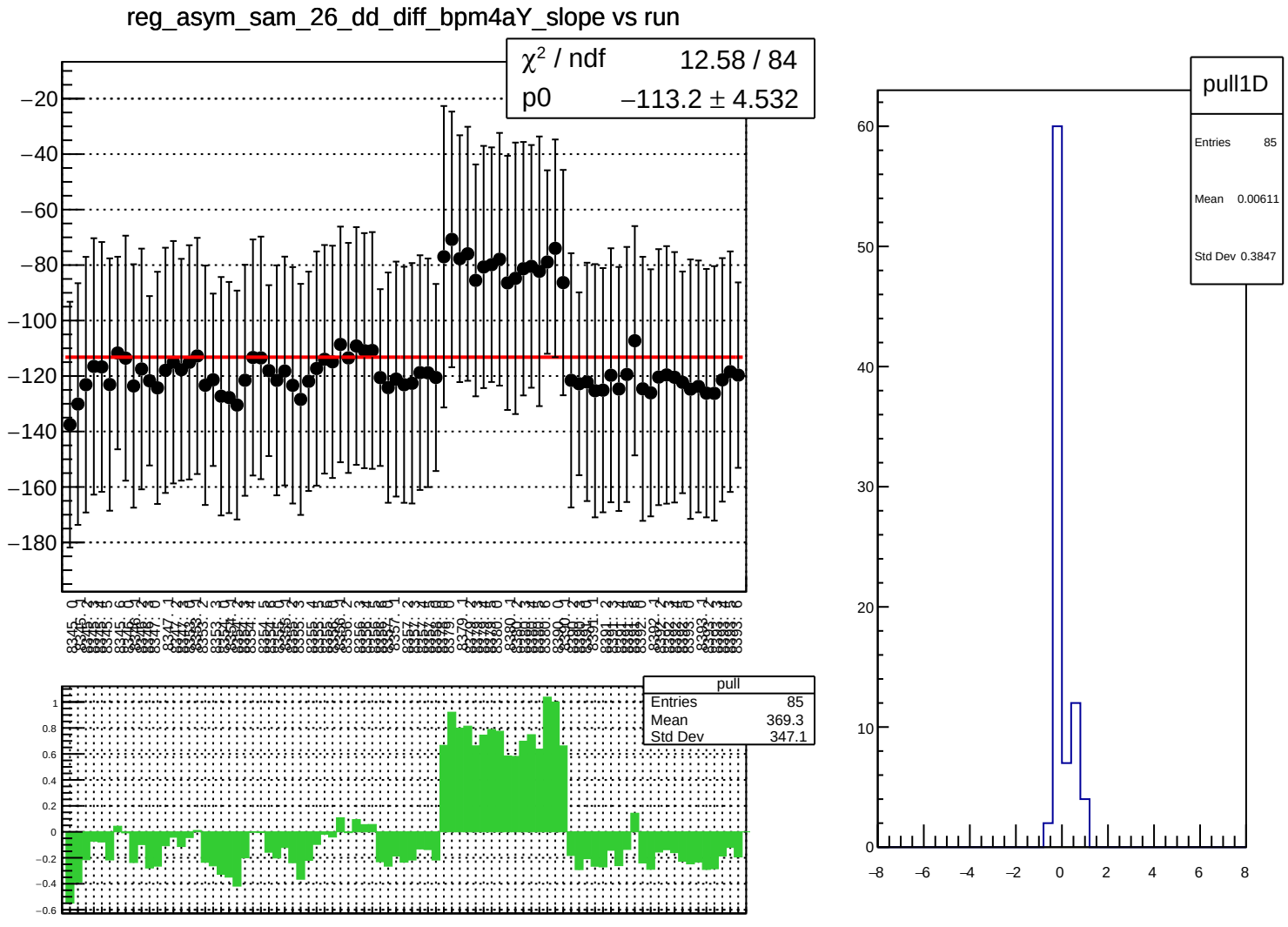

pull1D
Entries 85
Mean 0.003018
Std Dev 0.21

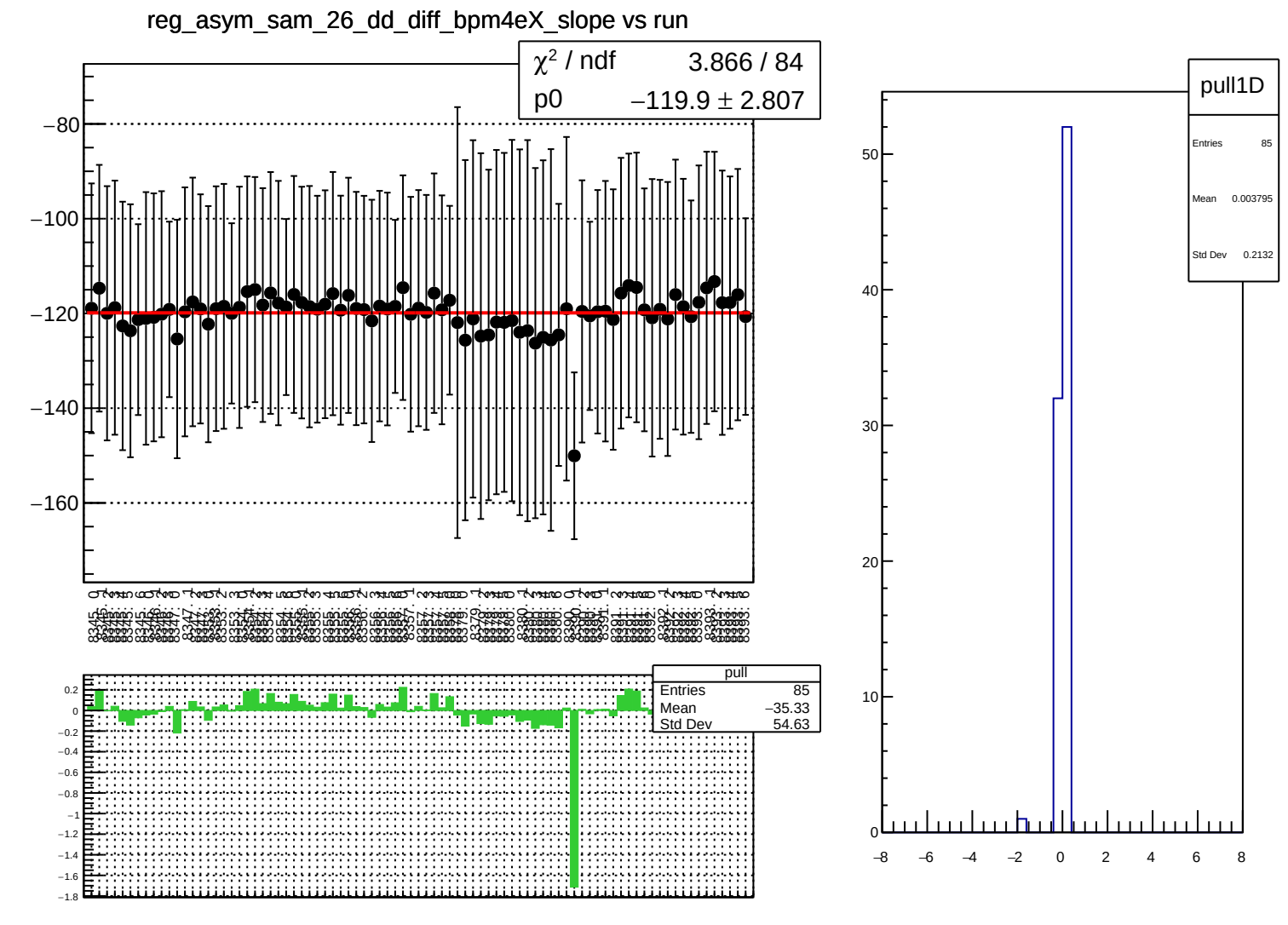

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.053 / 84
p0 −67.45 ± 1.462
pull
Entries 85
Mean 38.27
Std Dev 33.19
pull1D
Entries 85
Mean 0.005463
Std Dev 0.2668

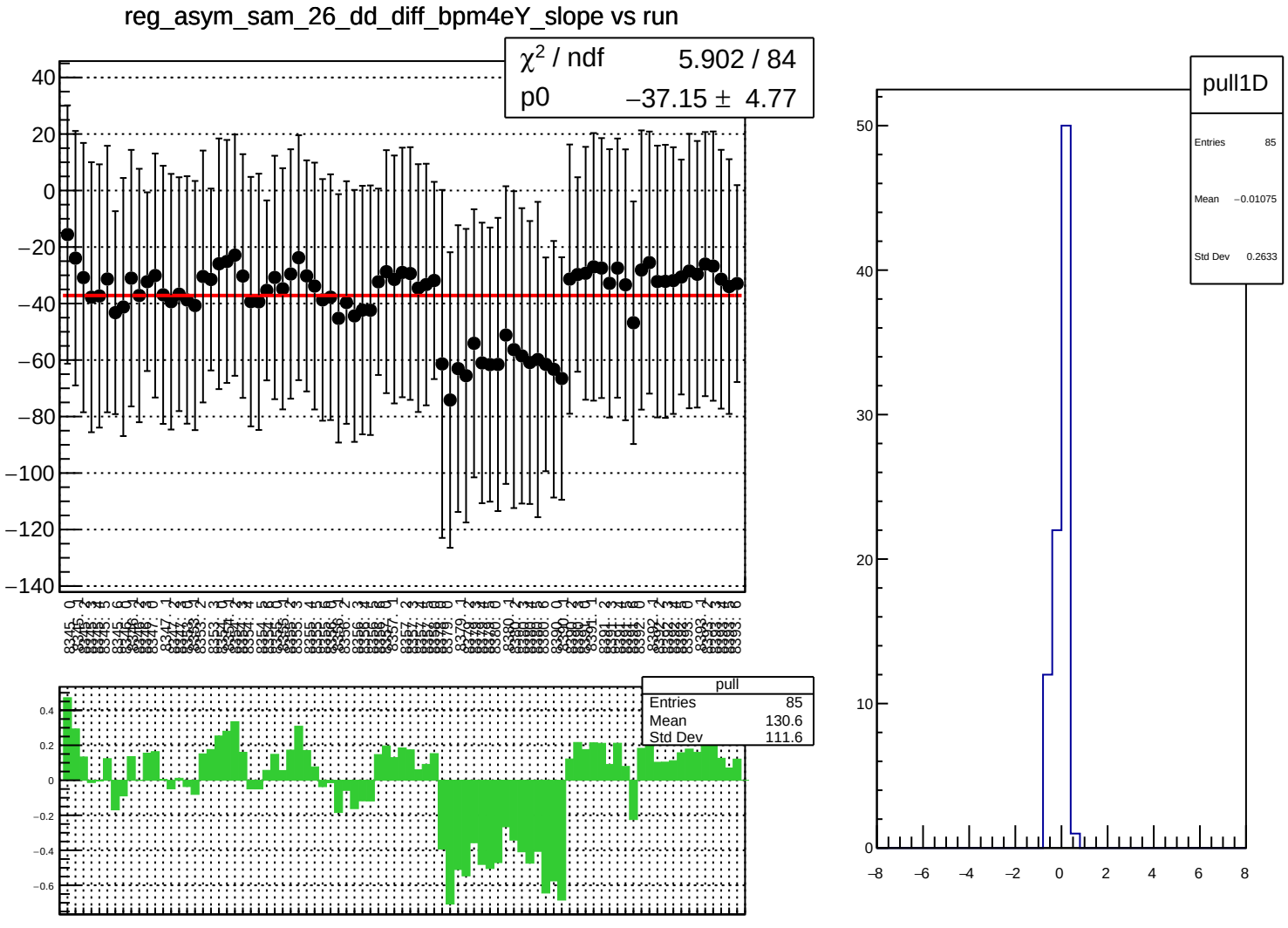

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.096 / 84
p0 −14.71 ± 2.48
pull
Entries 85
Mean 201.2
Std Dev 167
pull1D
Entries 85
Mean −0.01085
Std Dev 0.2446

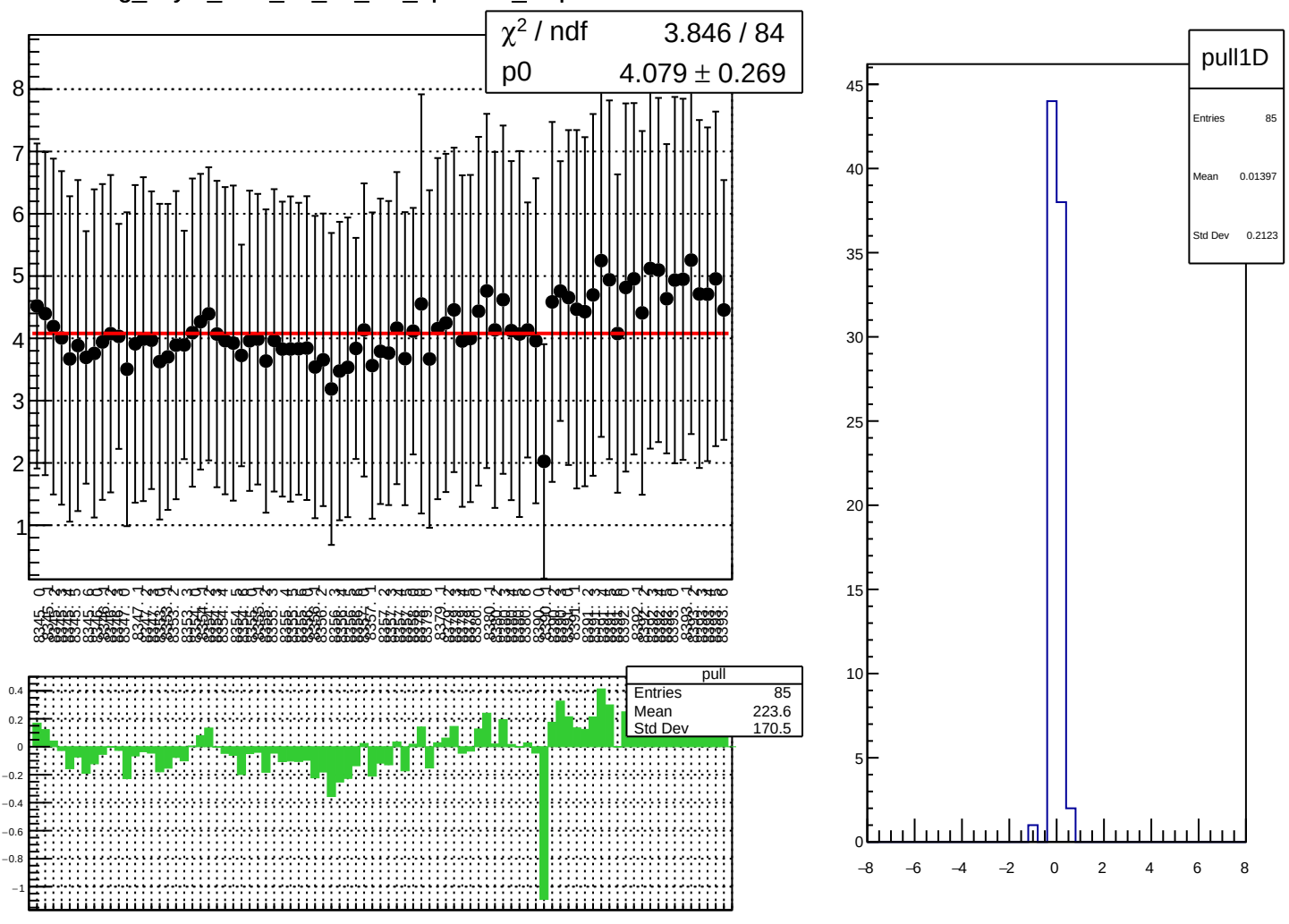

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 6.899 / 84
p0 2.421 ± 0.1401
pull
Entries 85
Mean 438.9
Std Dev 370.3
pull1D
Entries 85
Mean 0.004003
Std Dev 0.2849

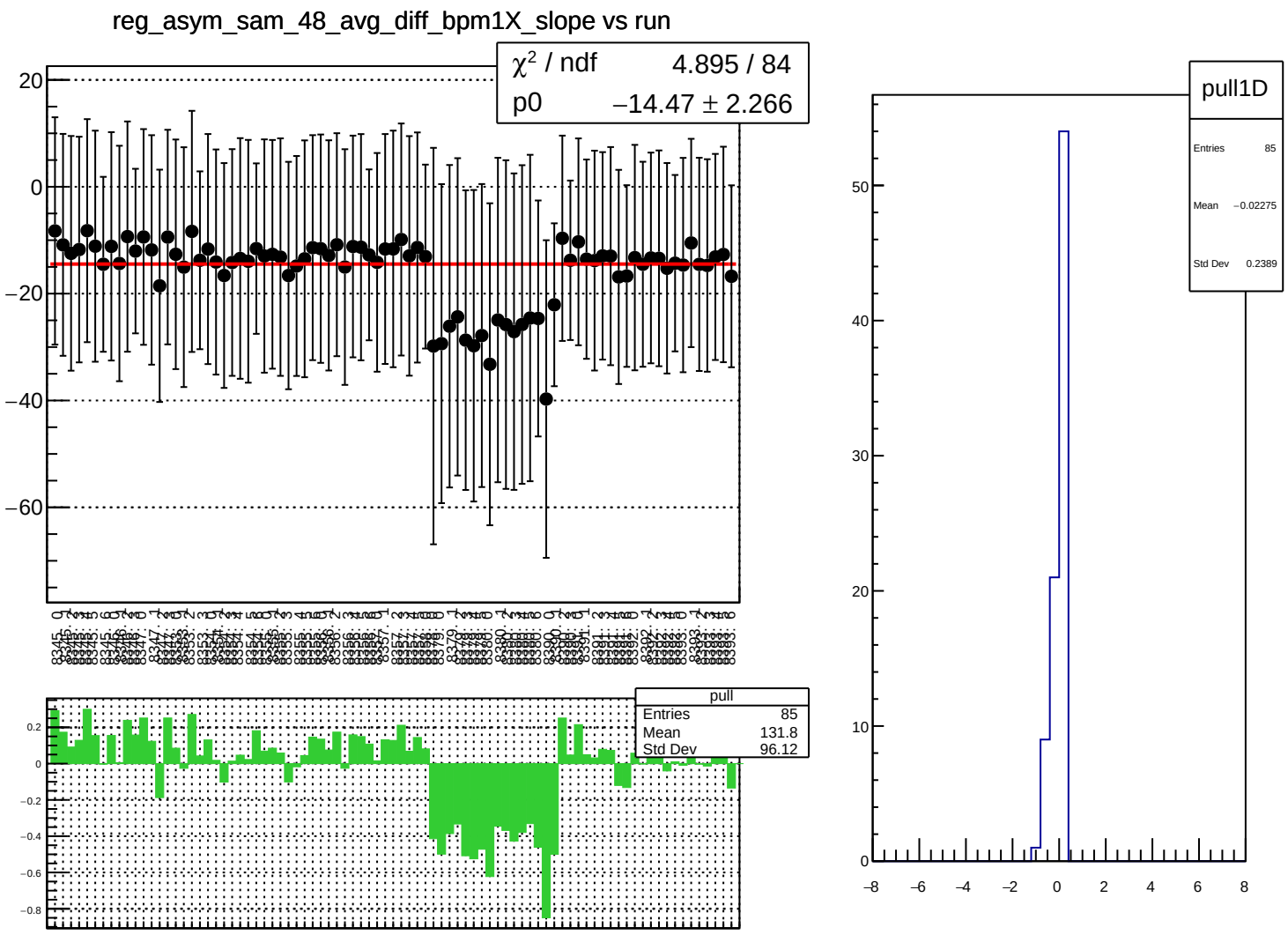

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 2.379 / 84
p0 −15.72 ± 2.54
pull
Entries 85
Mean 16.88
Std Dev 34.78
pull1D
Entries 85
Mean −0.00723
Std Dev 0.1671

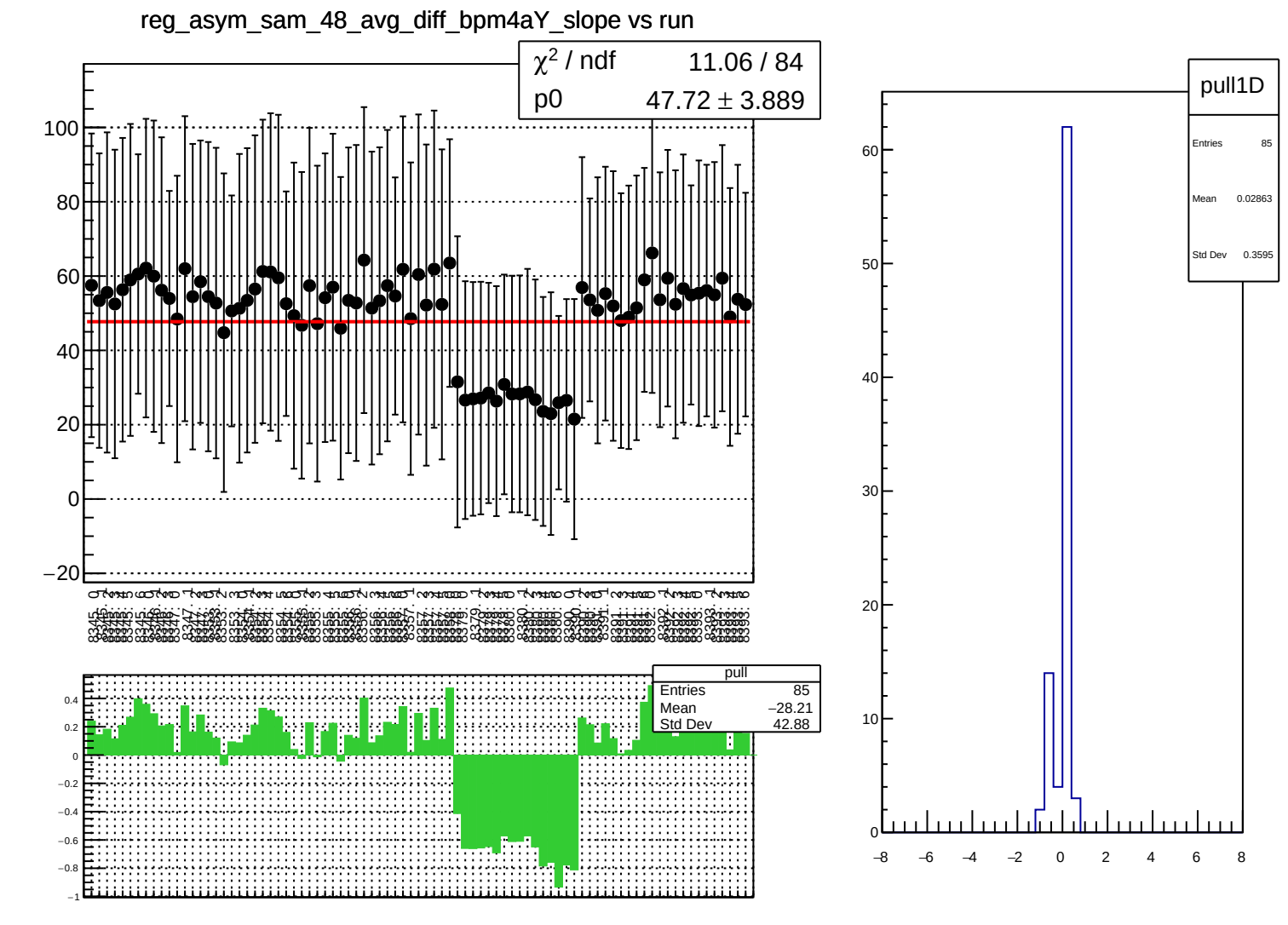

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 12.58 / 84
p0 −113.2 ± 4.532
pull
Entries 85
Mean 369.3
Std Dev 347.1
pull1D
Entries 85
Mean 0.00611
Std Dev 0.3847

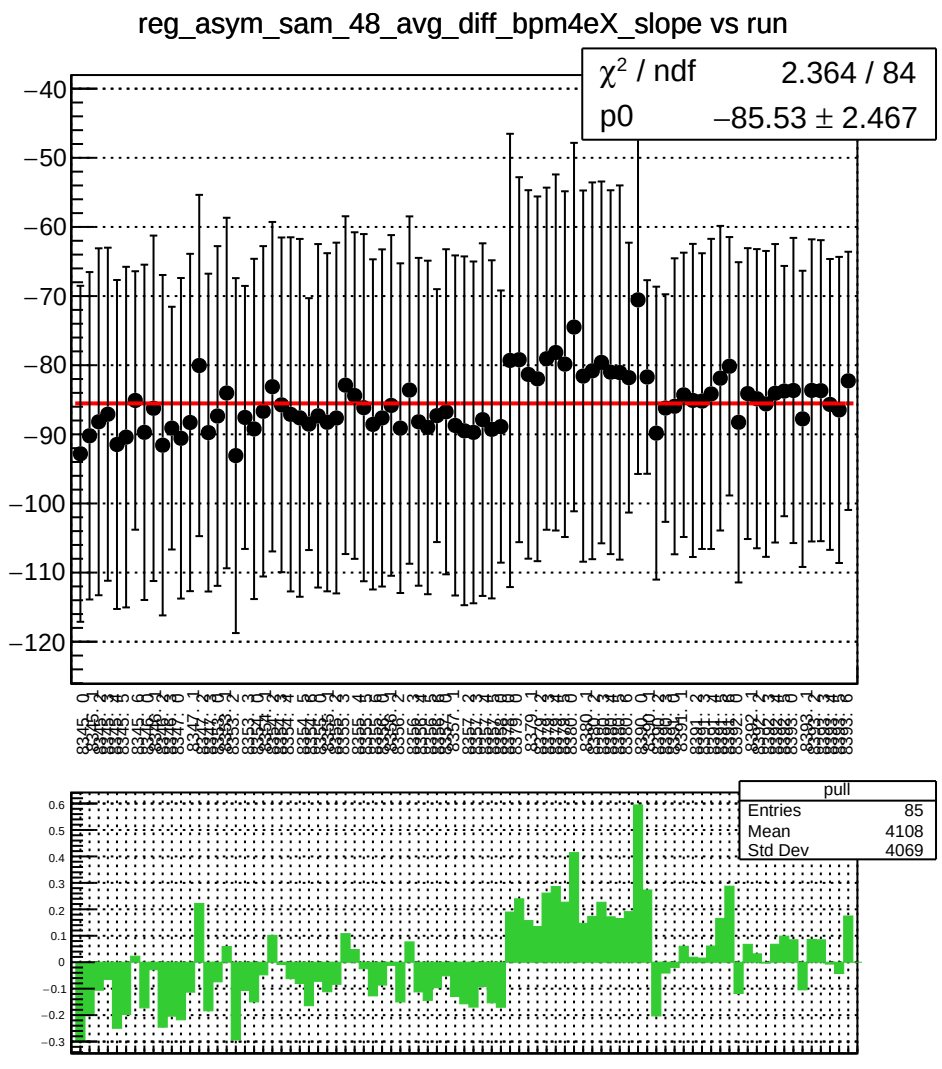

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.866 / 84
p0 −119.9 ± 2.807
−80
−100
−120
−140
−160
pull
Entries 85
Mean −35.33
Std Dev 54.63
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
−1.6
−1.8
pull1D
Entries 85
Mean 0.003795
Std Dev 0.2132
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

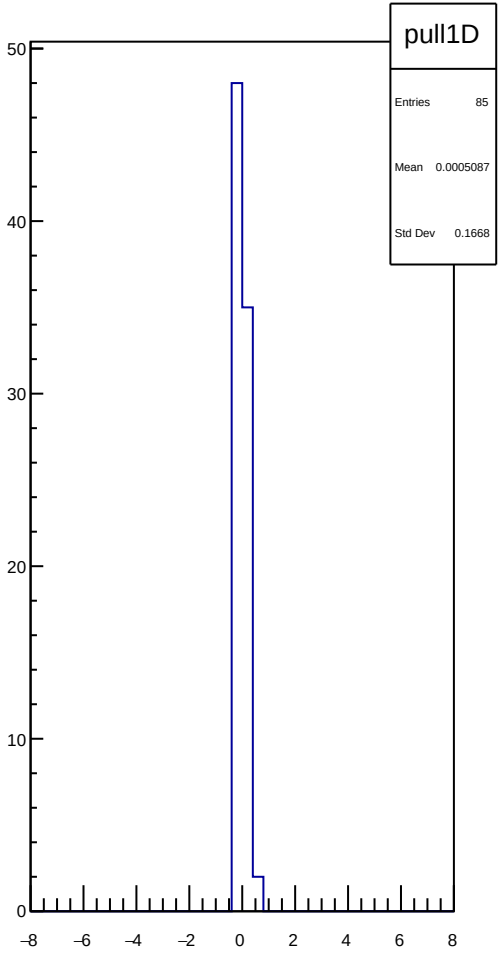

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.902 / 84
p0 −37.15 ± 4.77
pull
Entries 85
Mean 130.6
Std Dev 111.6
pull1D
Entries 85
Mean −0.01075
Std Dev 0.2633

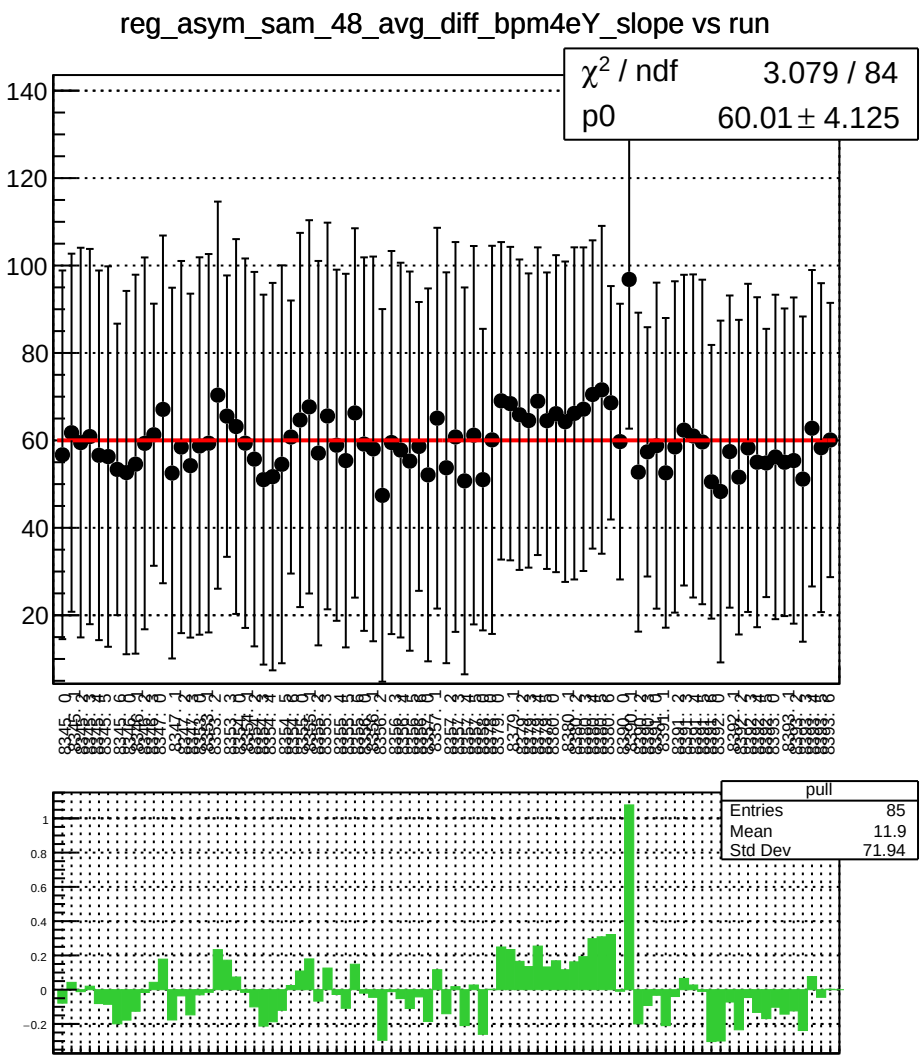

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 3.846 / 84
p0 4.079 ± 0.269
pull
Entries 85
Mean 223.6
Std Dev 170.5
pull1D
Entries 85
Mean 0.01397
Std Dev 0.2123

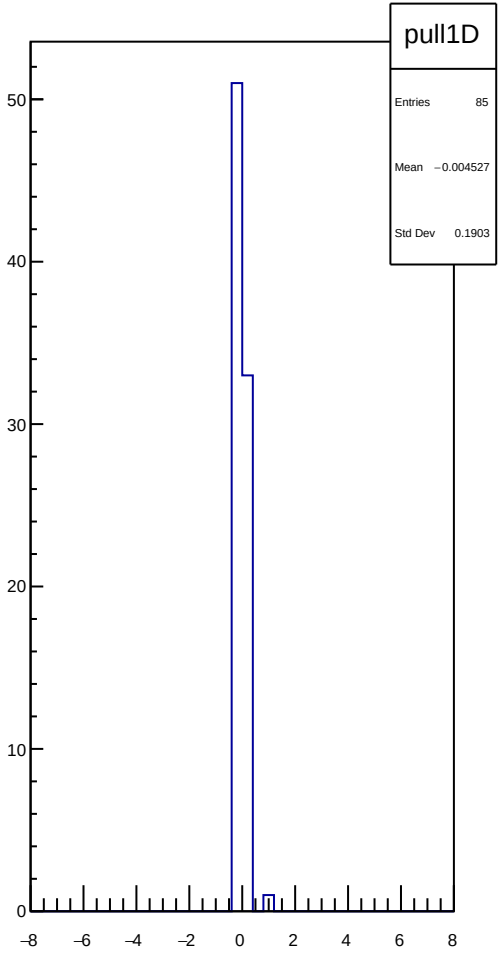

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 4.895 / 84
p0 −14.47 ± 2.266
pull
Entries 85
Mean 131.8
Std Dev 96.12
pull1D
Entries 85
Mean −0.02275
Std Dev 0.2389

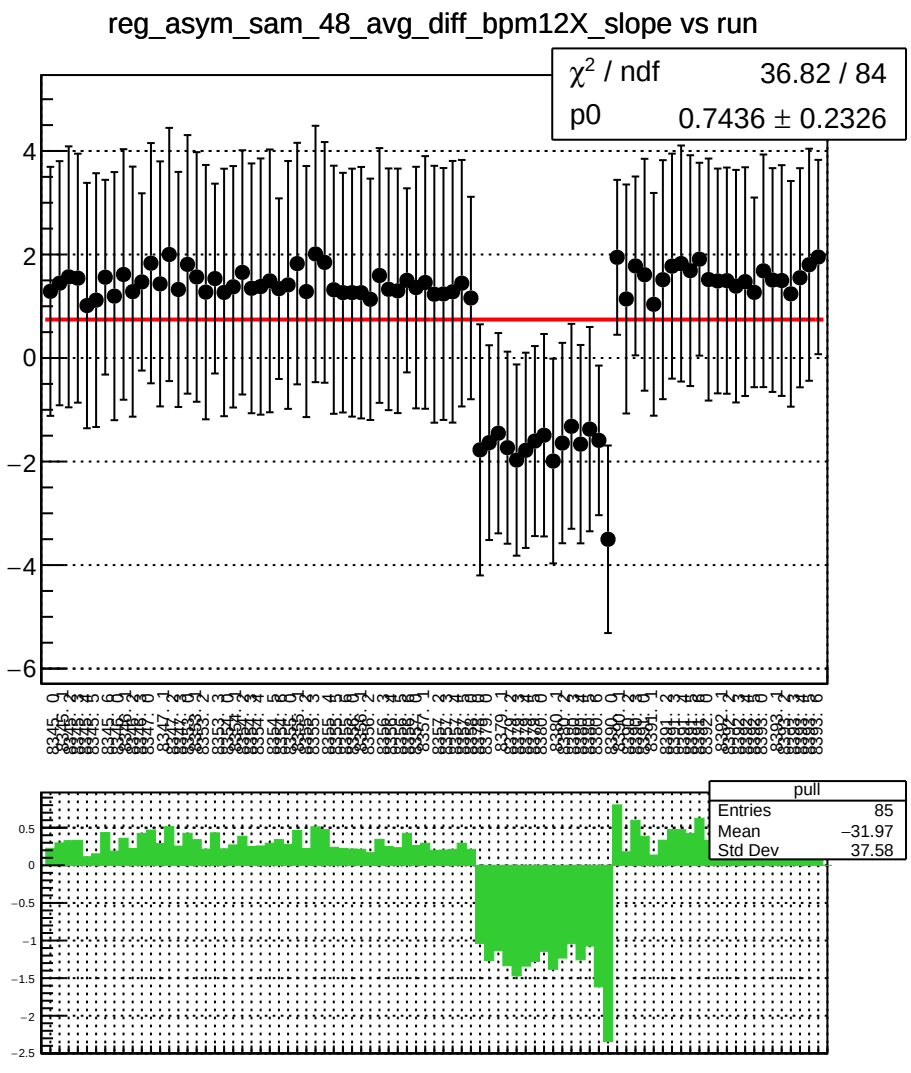

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 11.06 / 84
p0 47.72 ± 3.889
pull
Entries 85
Mean −28.21
Std Dev 42.88
pull1D
Entries 85
Mean 0.02863
Std Dev 0.3595

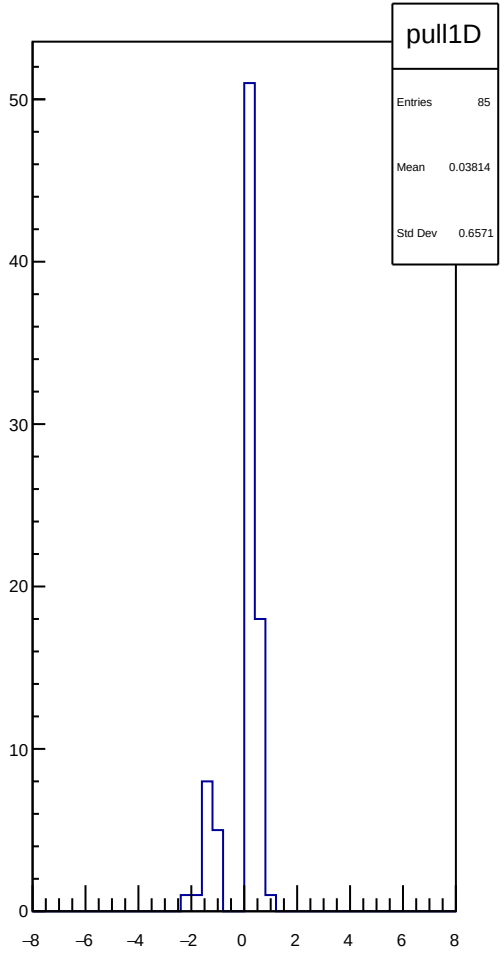

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.364 / 84
p0 −85.53 ± 2.467
pull
Entries 85
Mean 4108
Std Dev 4069

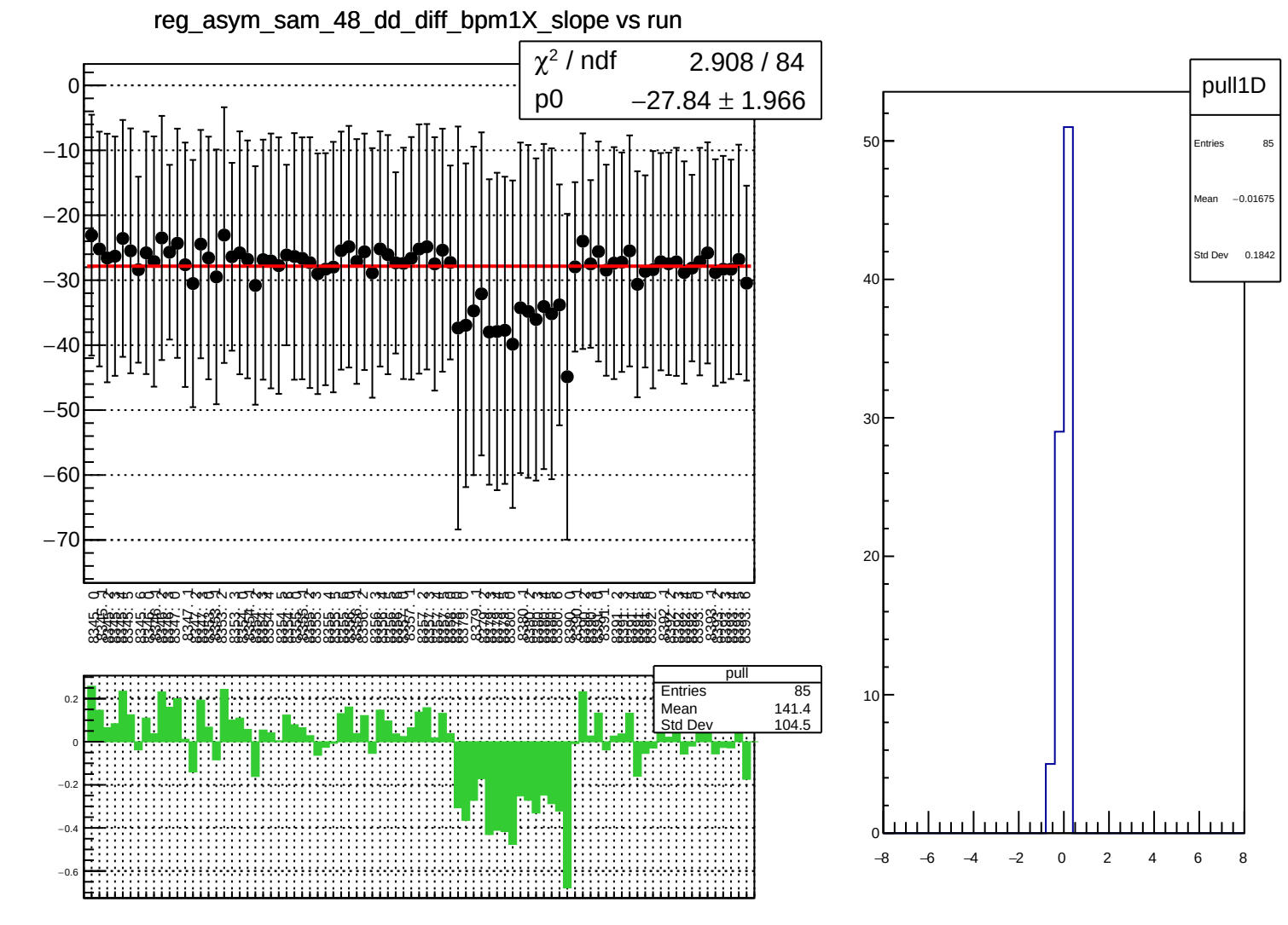

pull1D
Entries 85
Mean 0.0005087
Std Dev 0.1668

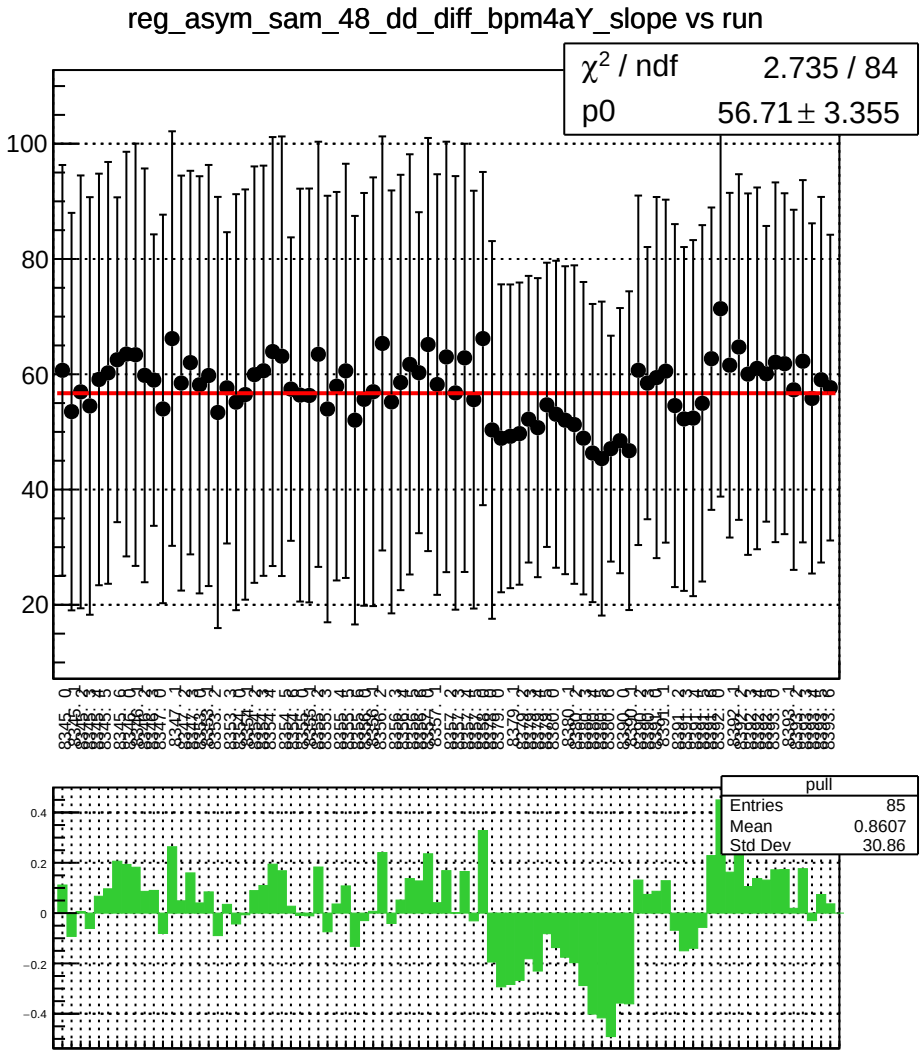

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.079 / 84
p0 60.01 ± 4.125
pull
Entries 85
Mean 11.9
Std Dev 71.94

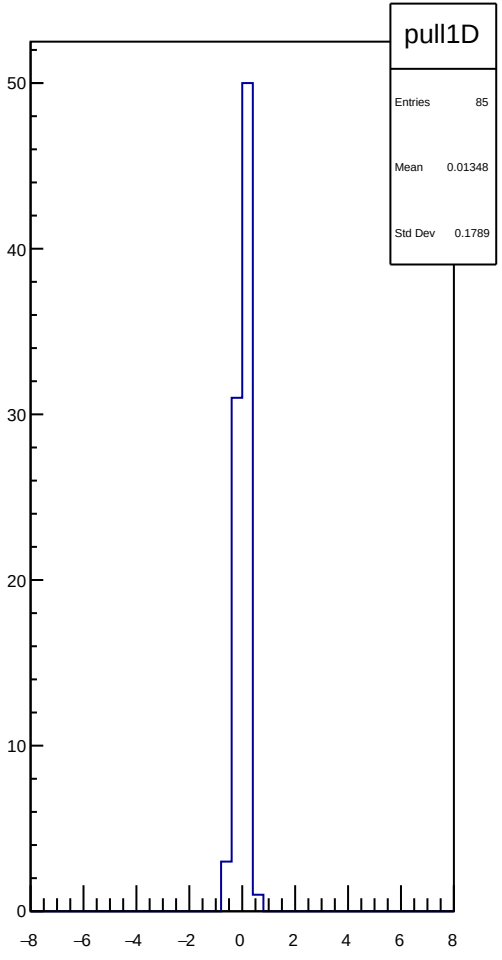

pull1D
Entries 85
Mean −0.004527
Std Dev 0.1903

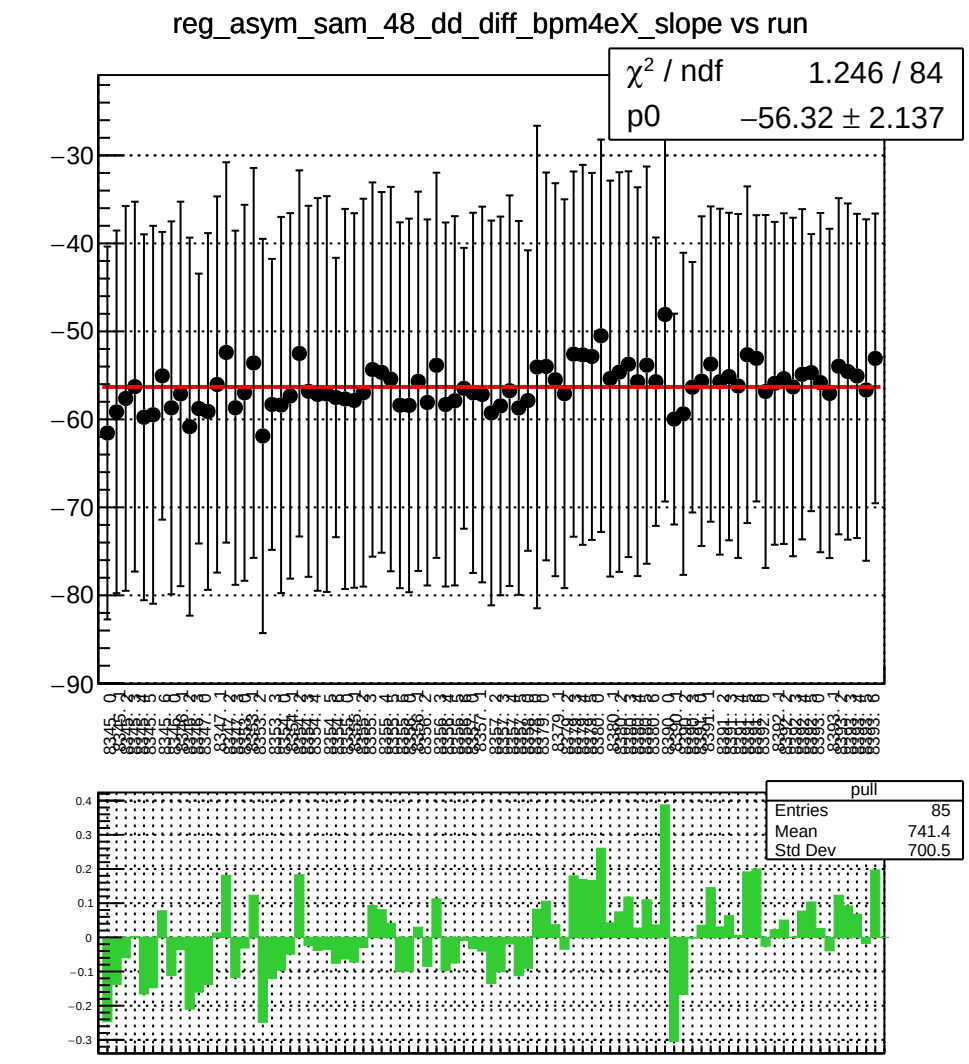

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 36.82 / 84
p0 0.7436 ± 0.2326
pull
Entries 85
Mean −31.97
Std Dev 37.58

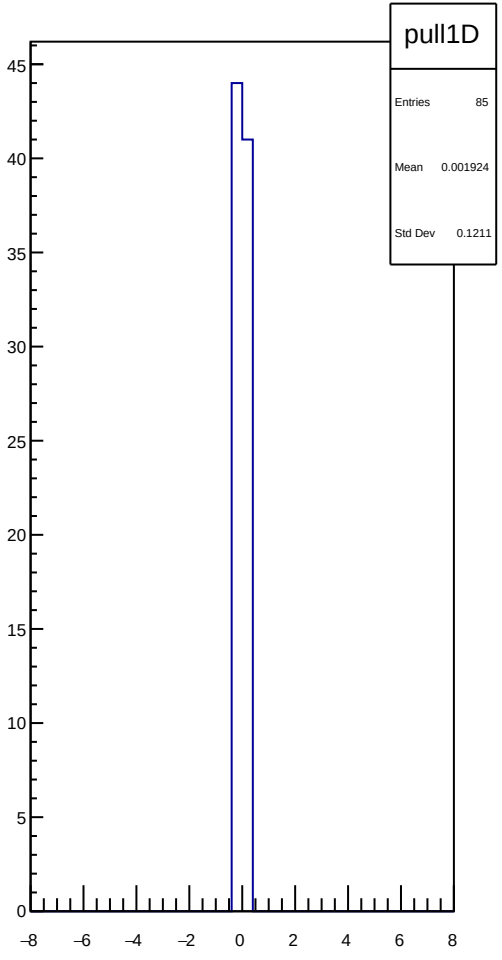

pull1D
Entries 85
Mean 0.03814
Std Dev 0.6571

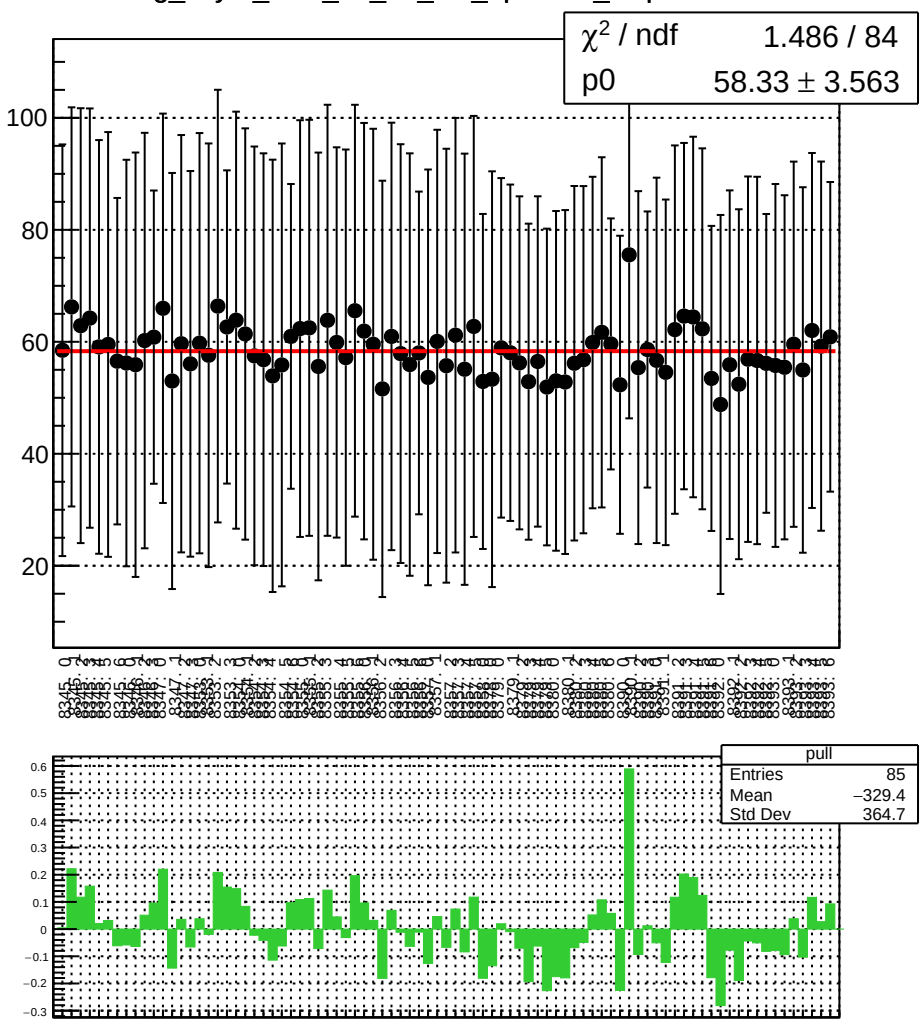

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 2.908 / 84
p0 −27.84 ± 1.966
pull
Entries 85
Mean 141.4
Std Dev 104.5
pull1D
Entries 85
Mean −0.01675
Std Dev 0.1842

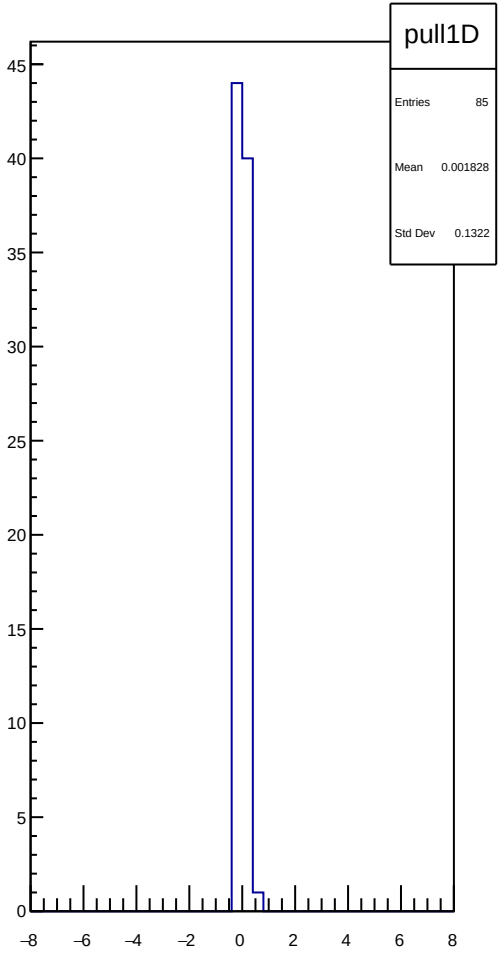

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.735 / 84
p0 56.71 ± 3.355
pull
Entries 85
Mean 0.8607
Std Dev 30.86

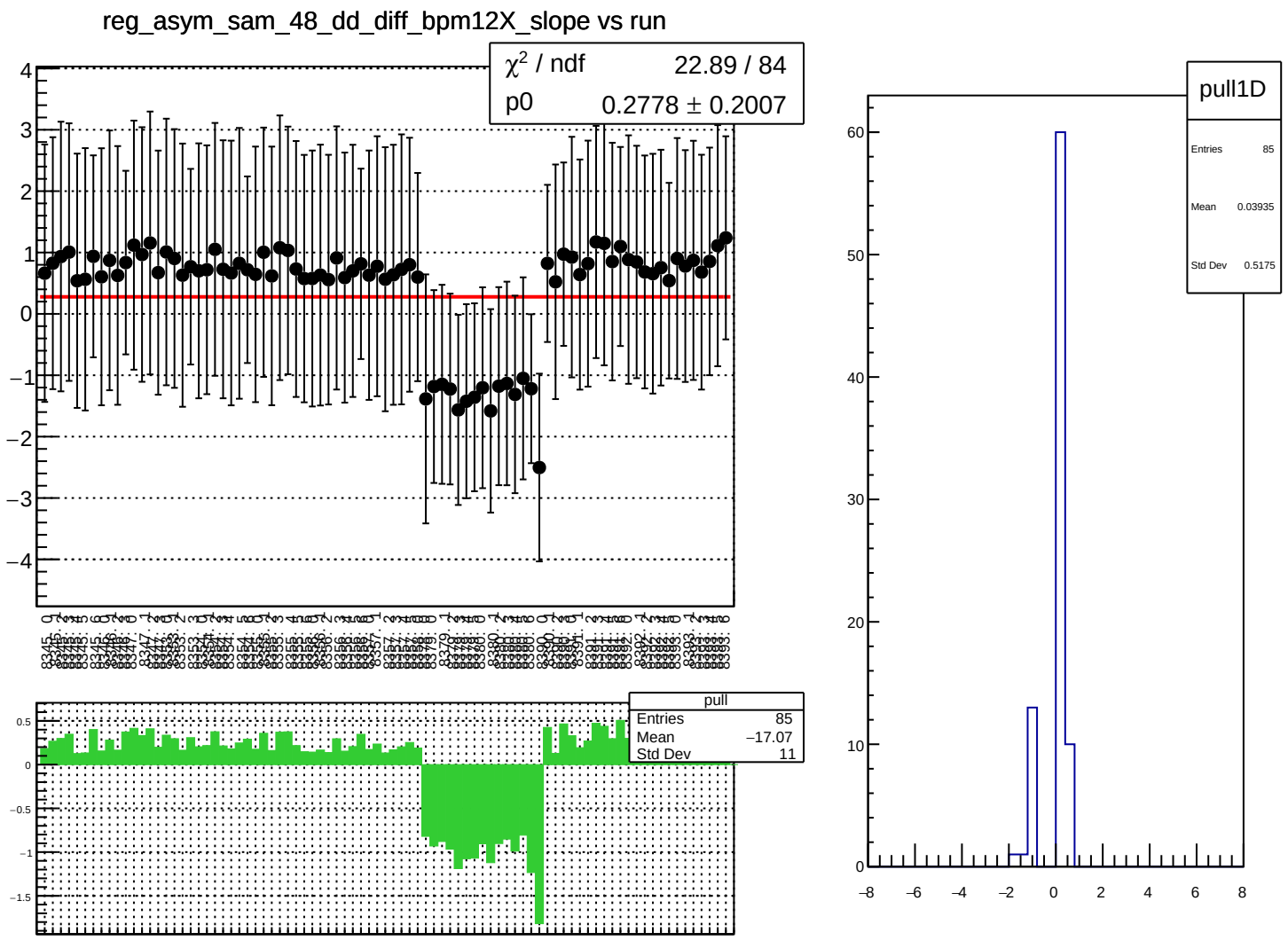

pull1D
Entries 85
Mean 0.01348
Std Dev 0.1789

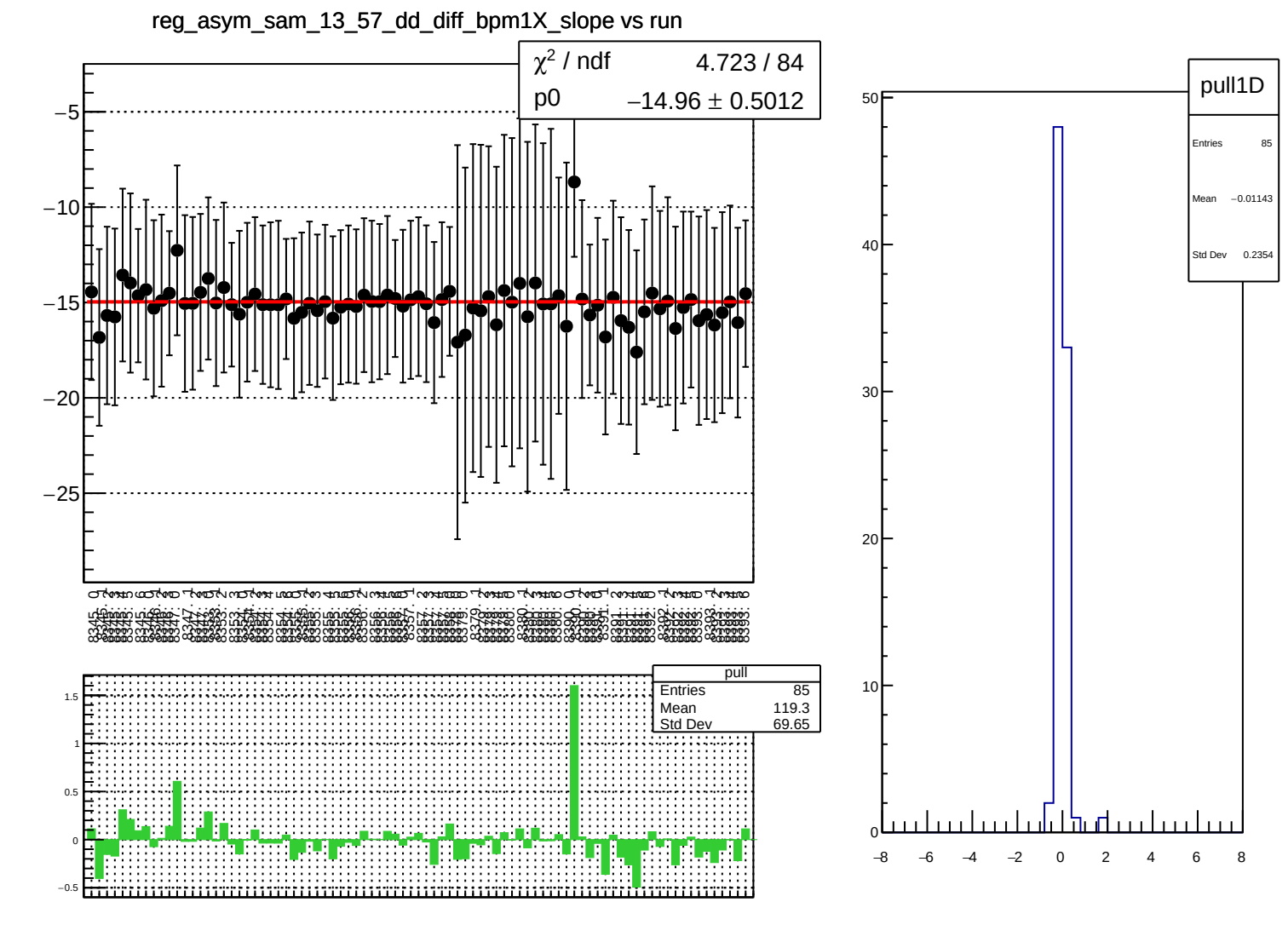

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.246 / 84
p0 −56.32 ± 2.137
pull
Entries 85
Mean 741.4
Std Dev 700.5

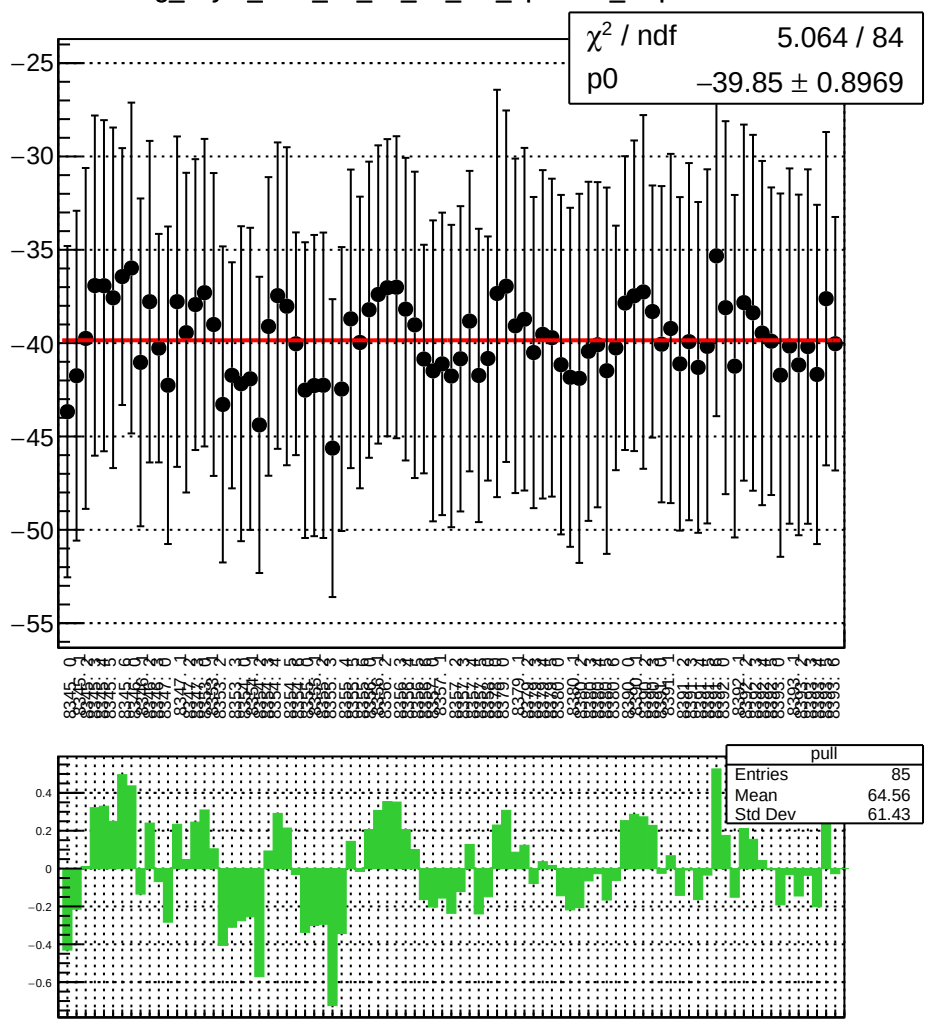

pull1D
Entries 85
Mean 0.001924
Std Dev 0.1211

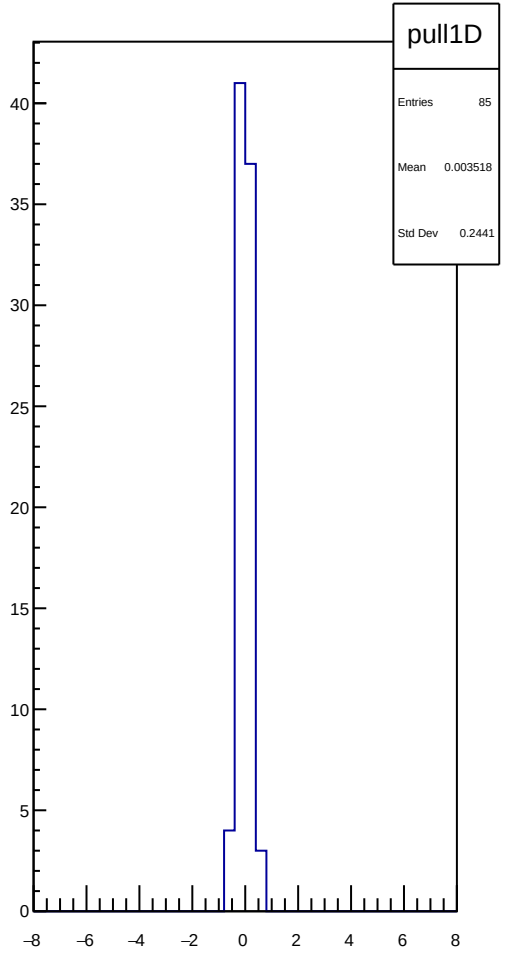

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.486 / 84
p0 58.33 ± 3.563
pull
Entries 85
Mean −329.4
Std Dev 364.7

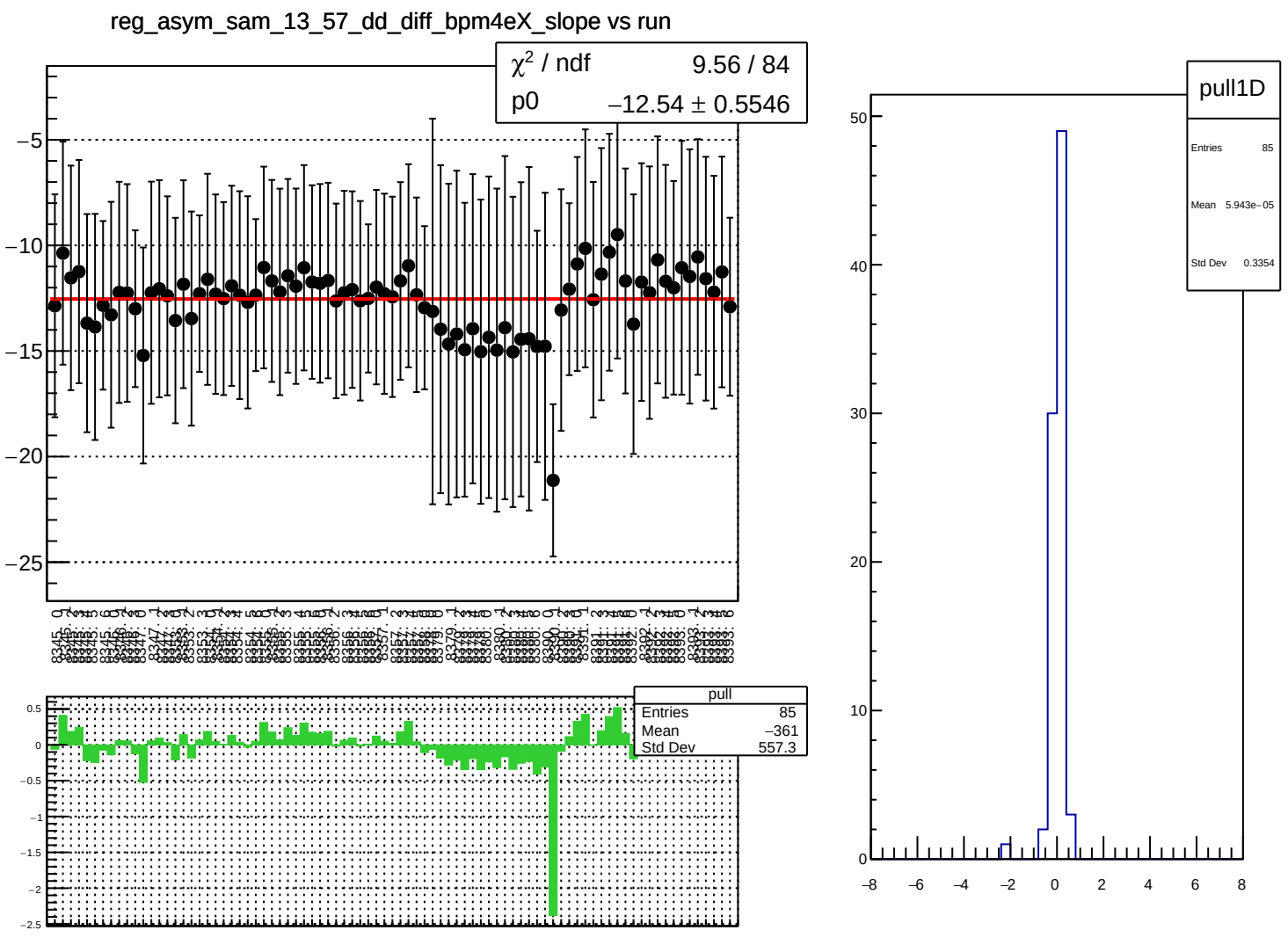

pull1D
Entries 85
Mean 0.001828
Std Dev 0.1322

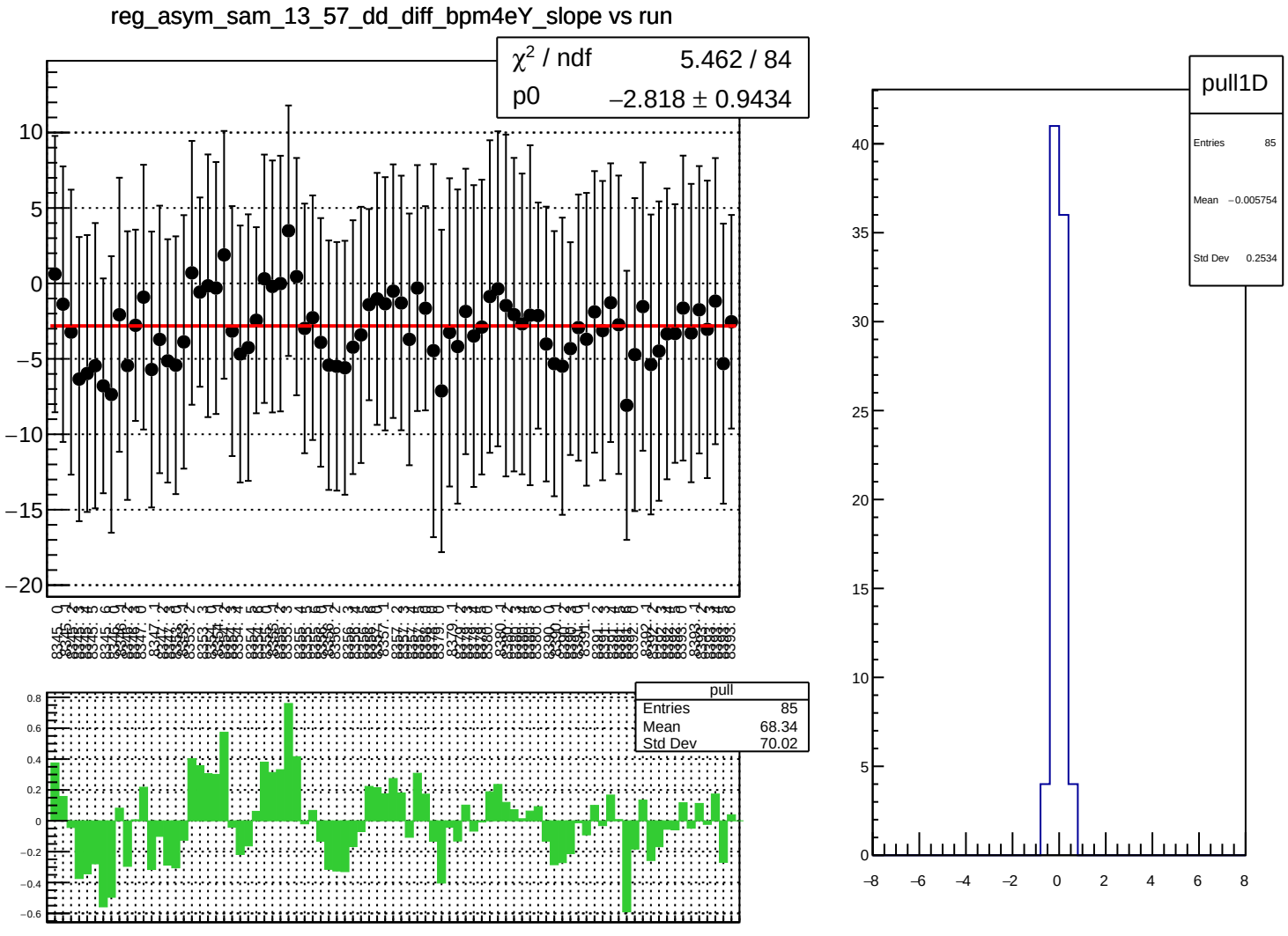

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 22.89 / 84
p0 0.2778 ± 0.2007
pull
Entries 85
Mean −17.07
Std Dev 11
pull1D
Entries 85
Mean 0.03935
Std Dev 0.5175

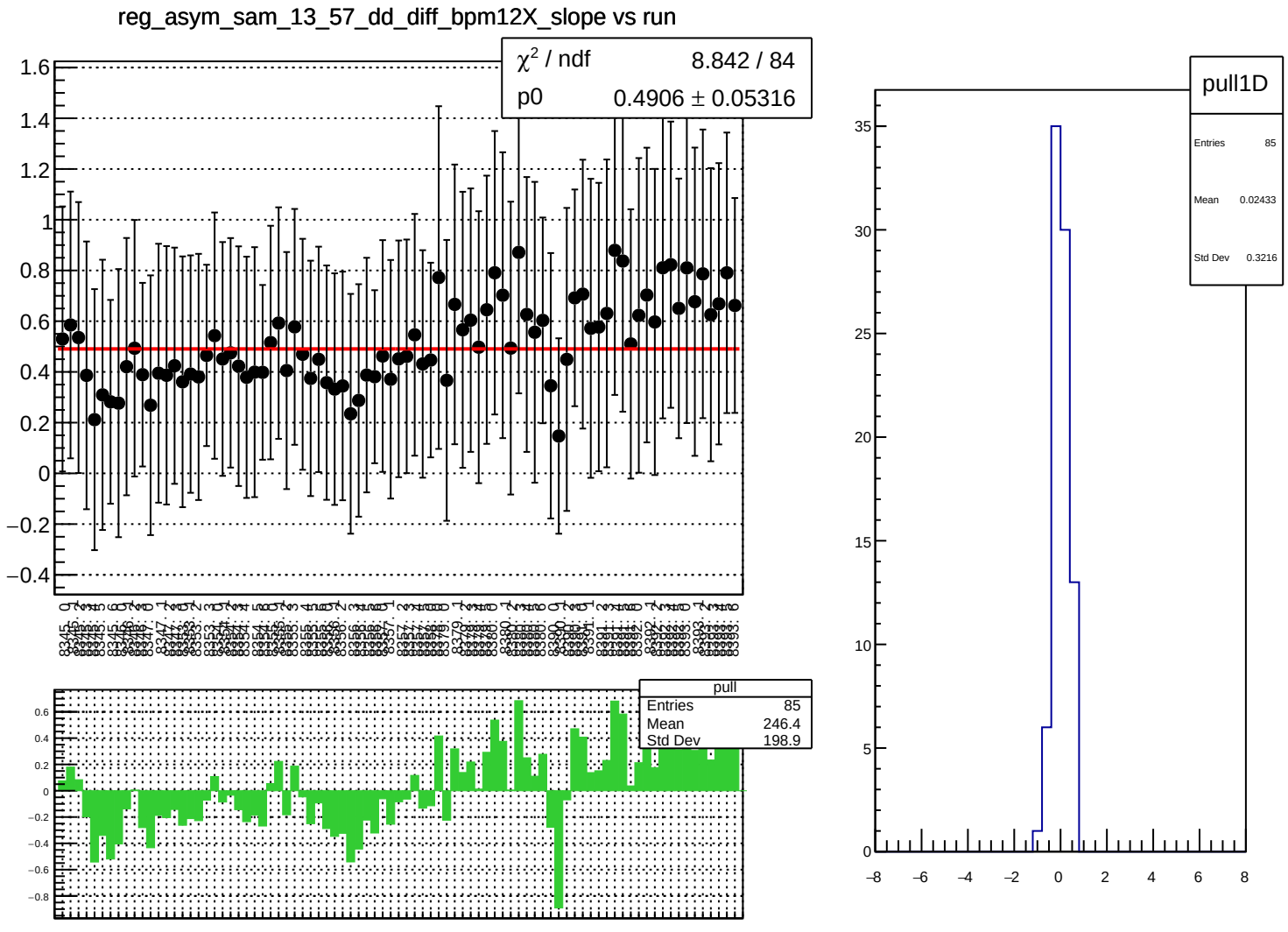

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 4.723 / 84
p0 −14.96 ± 0.5012
pull
Entries 85
Mean 119.3
Std Dev 69.65
pull1D
Entries 85
Mean −0.01143
Std Dev 0.2354

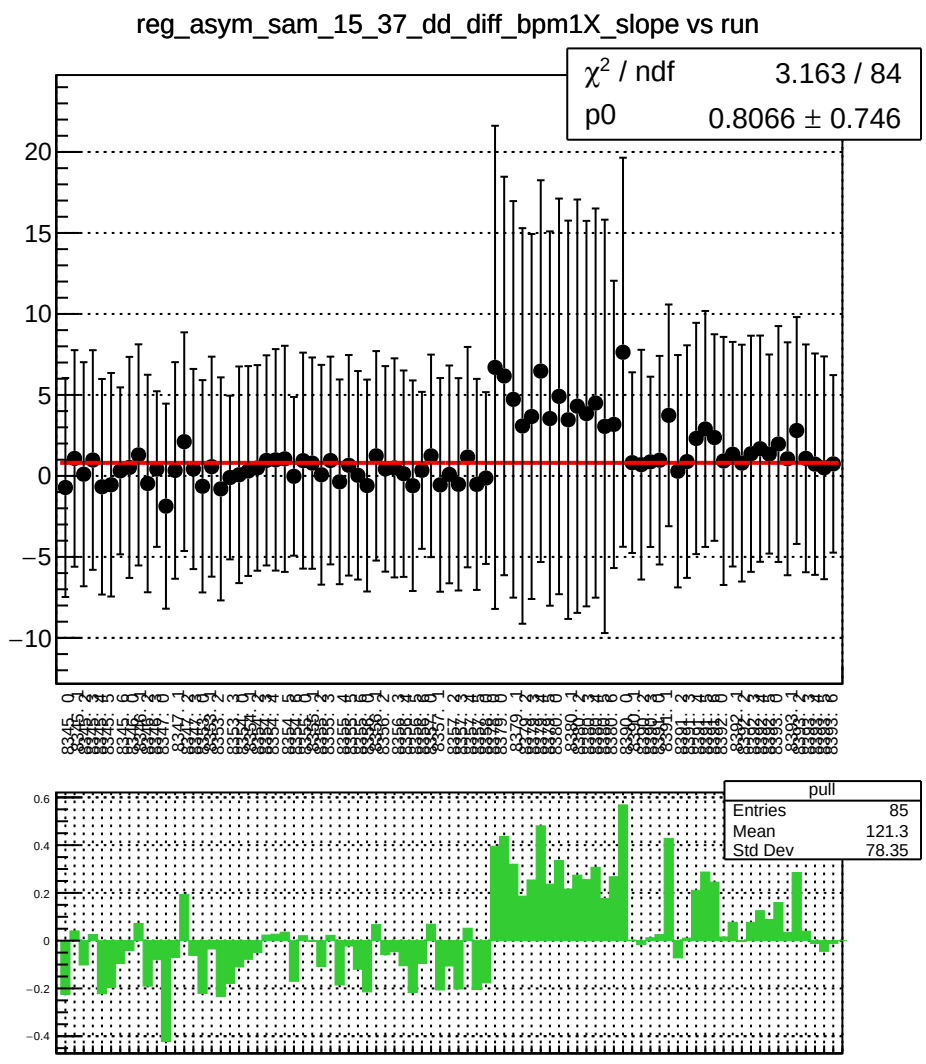

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.064 / 84
p0 −39.85 ± 0.8969
pull
Entries 85
Mean 64.56
Std Dev 61.43

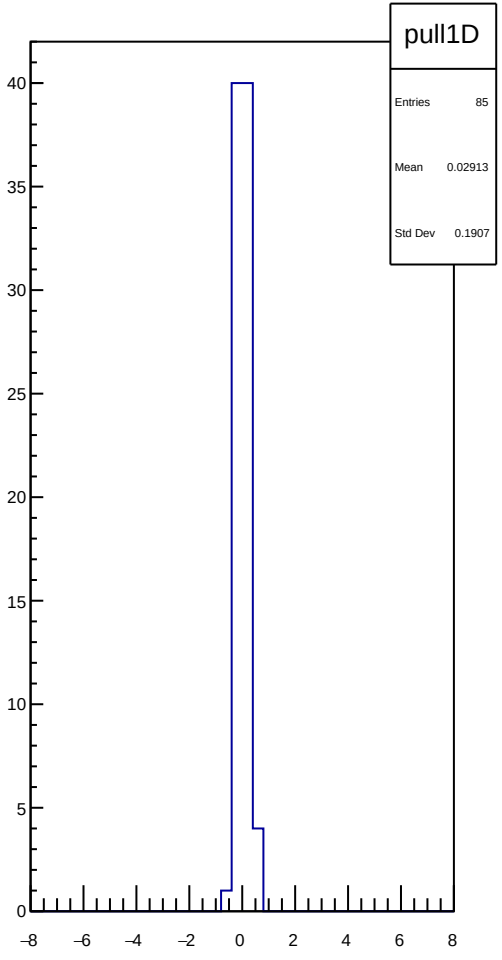

pull1D
Entries 85
Mean 0.003518
Std Dev 0.2441

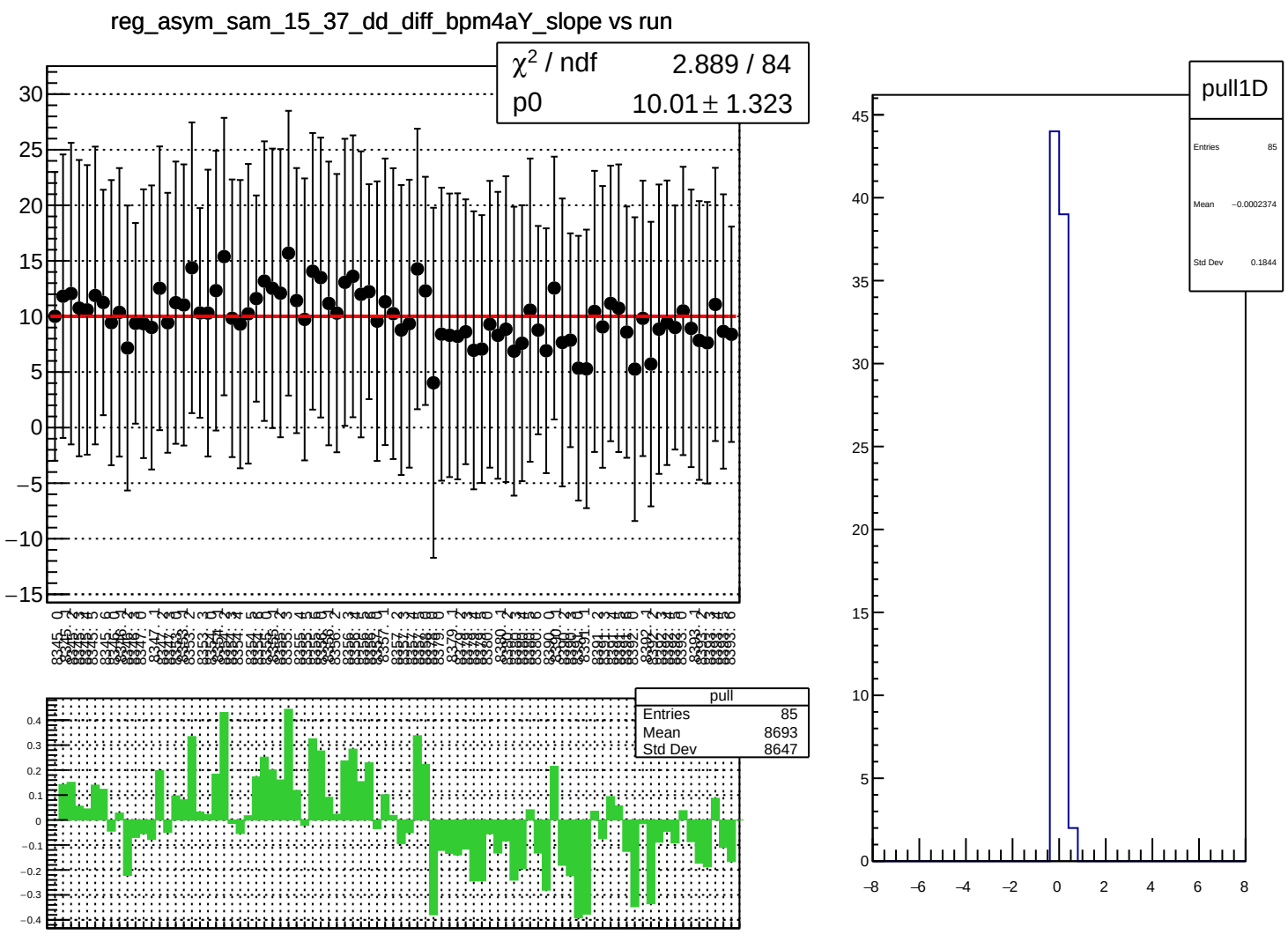

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 9.56 / 84
p0 −12.54 ± 0.5546
pull
Entries 85
Mean −361
Std Dev 557.3
pull1D
Entries 85
Mean 5.943e−05
Std Dev 0.3354

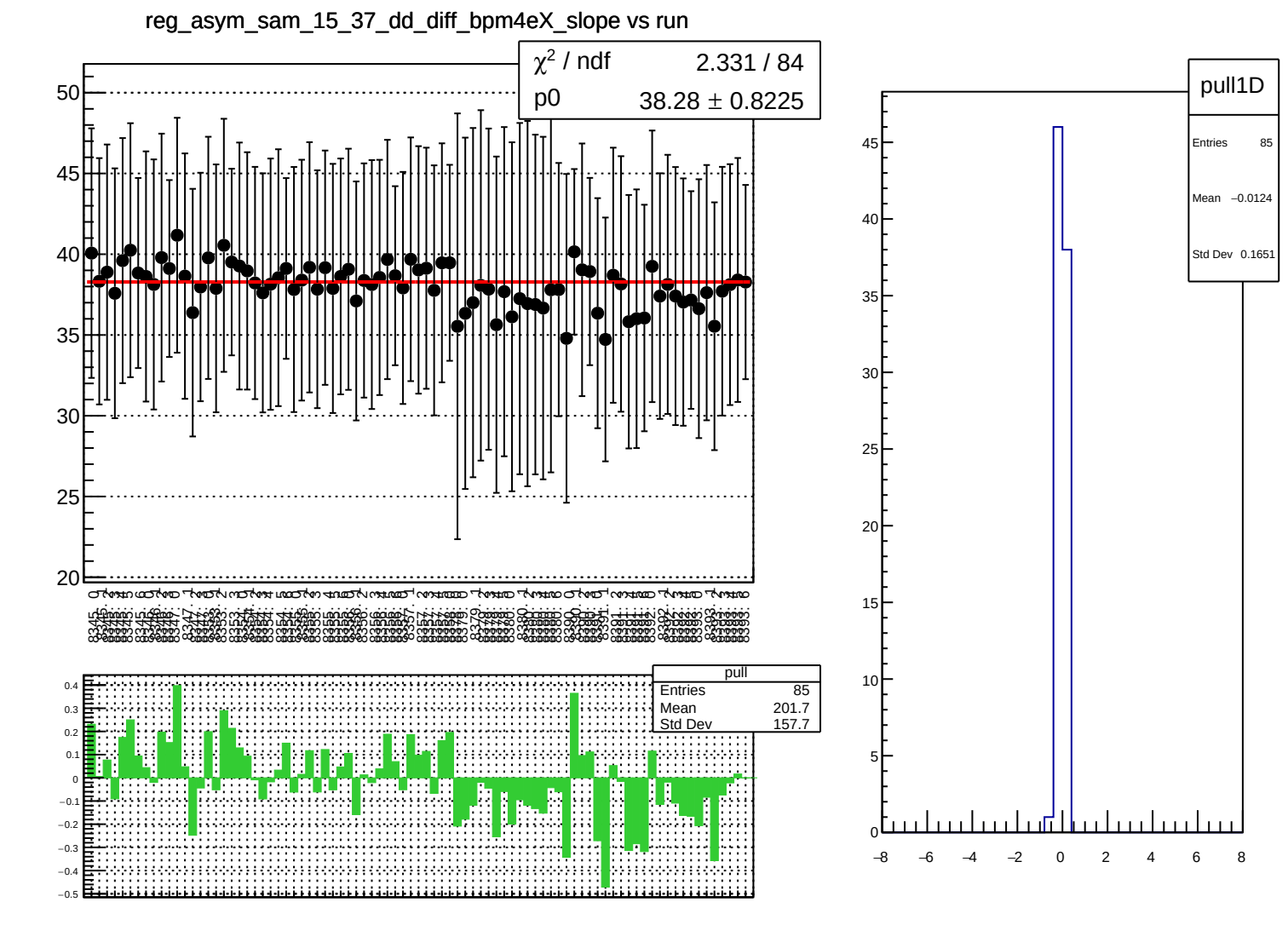

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.462 / 84
p0 −2.818 ± 0.9434
pull
Entries 85
Mean 68.34
Std Dev 70.02
pull1D
Entries 85
Mean −0.005754
Std Dev 0.2534

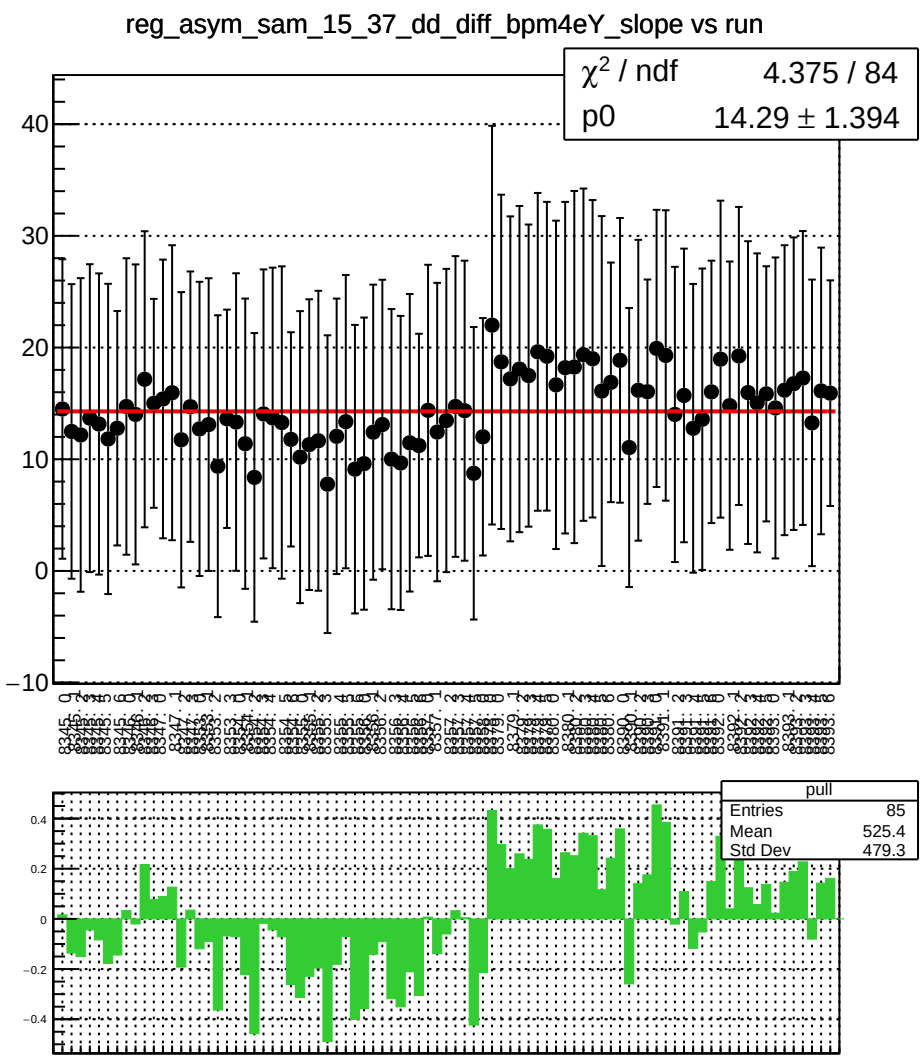

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 8.842 / 84
p0 0.4906 ± 0.05316
pull
Entries 85
Mean 246.4
Std Dev 198.9
pull1D
Entries 85
Mean 0.02433
Std Dev 0.3216

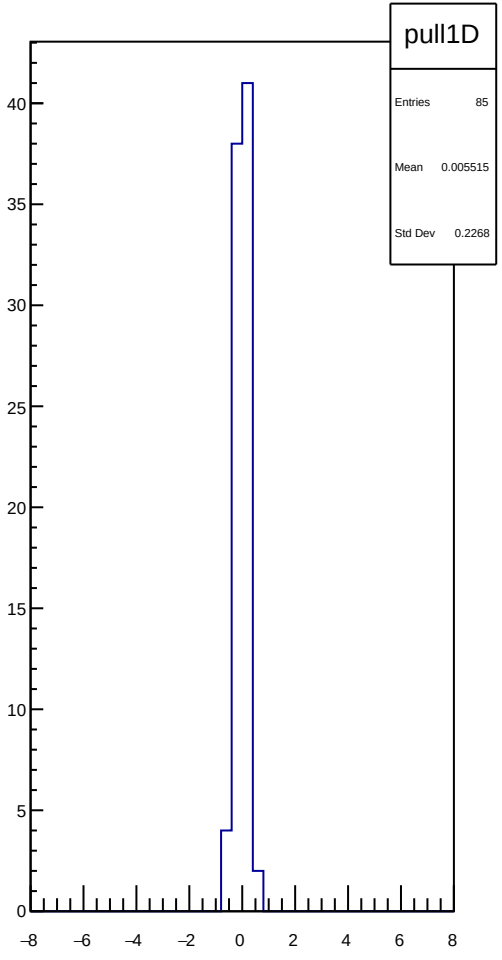

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 3.163 / 84
p0 0.8066 ± 0.746
pull
Entries 85
Mean 121.3
Std Dev 78.35

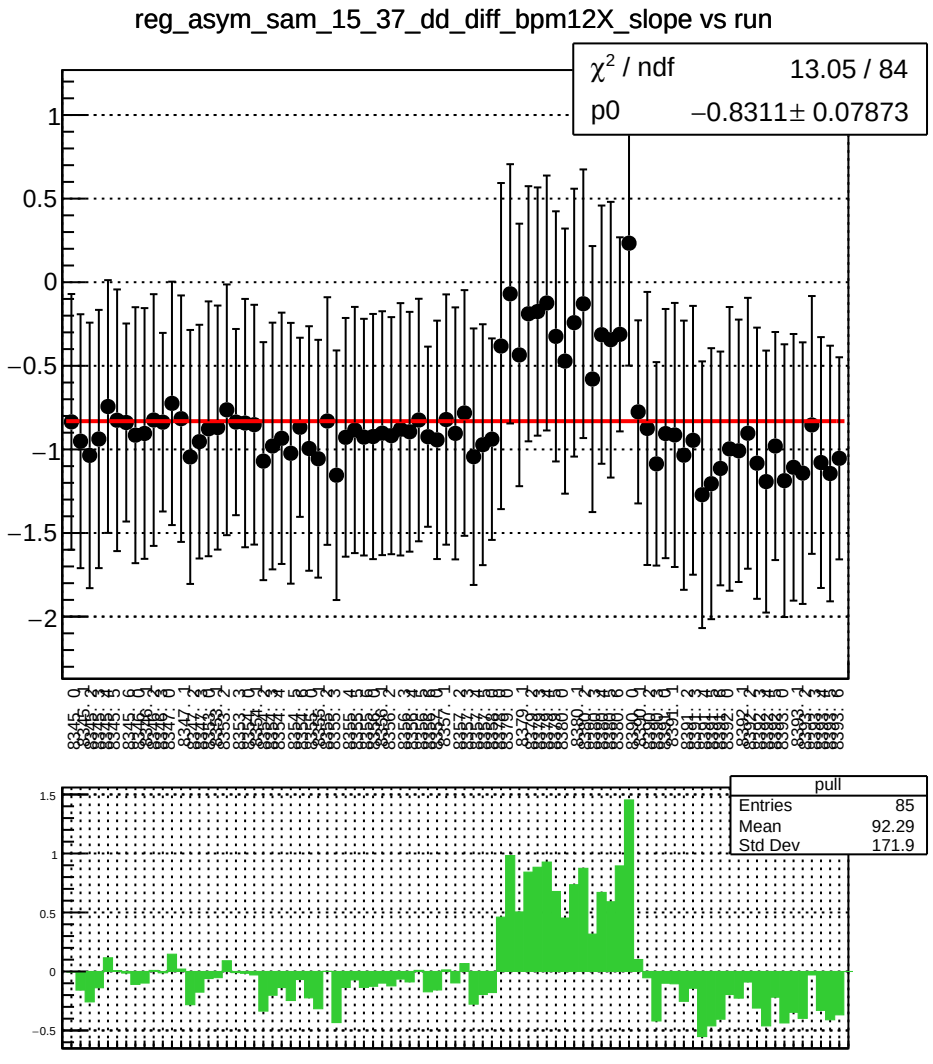

pull1D
Entries 85
Mean 0.02913
Std Dev 0.1907

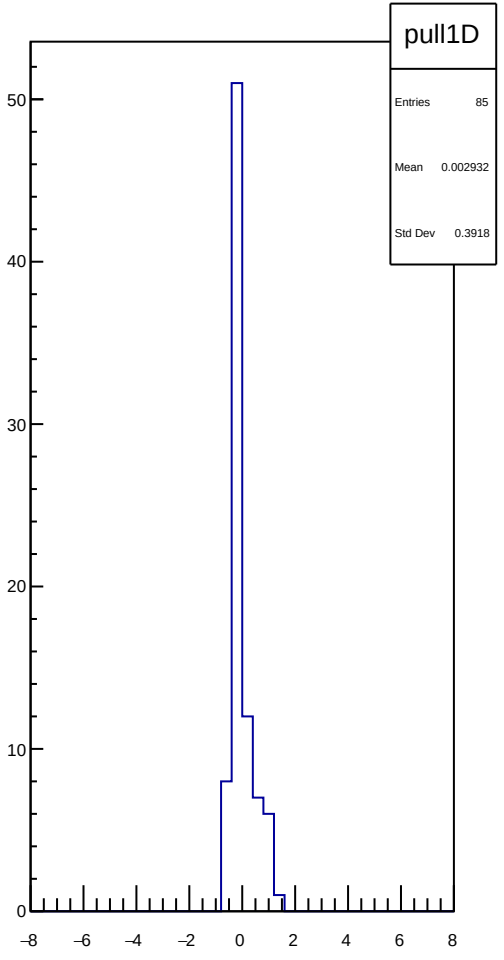

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.889 / 84
p0 10.01 ± 1.323
pull
Entries 85
Mean 8693
Std Dev 8647
pull1D
Entries 85
Mean −0.0002374
Std Dev 0.1844

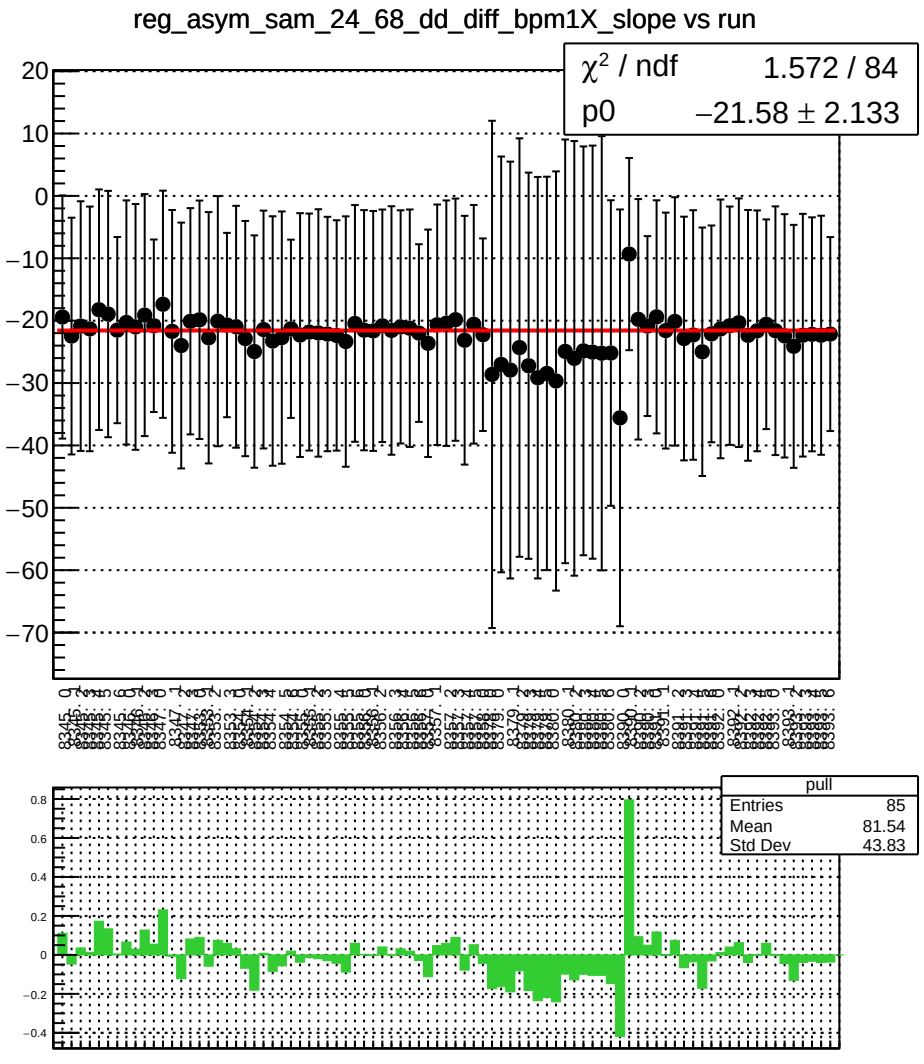

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.331 / 84
p0 38.28 ± 0.8225
pull
Entries 85
Mean 201.7
Std Dev 157.7
pull1D
Entries 85
Mean −0.0124
Std Dev 0.1651

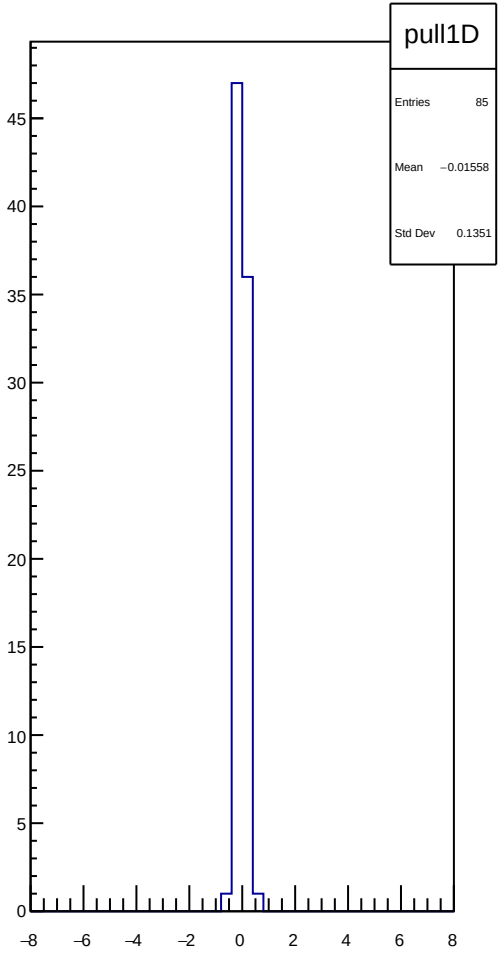

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.375 / 84
p0 14.29 ± 1.394
pull
Entries 85
Mean 525.4
Std Dev 479.3

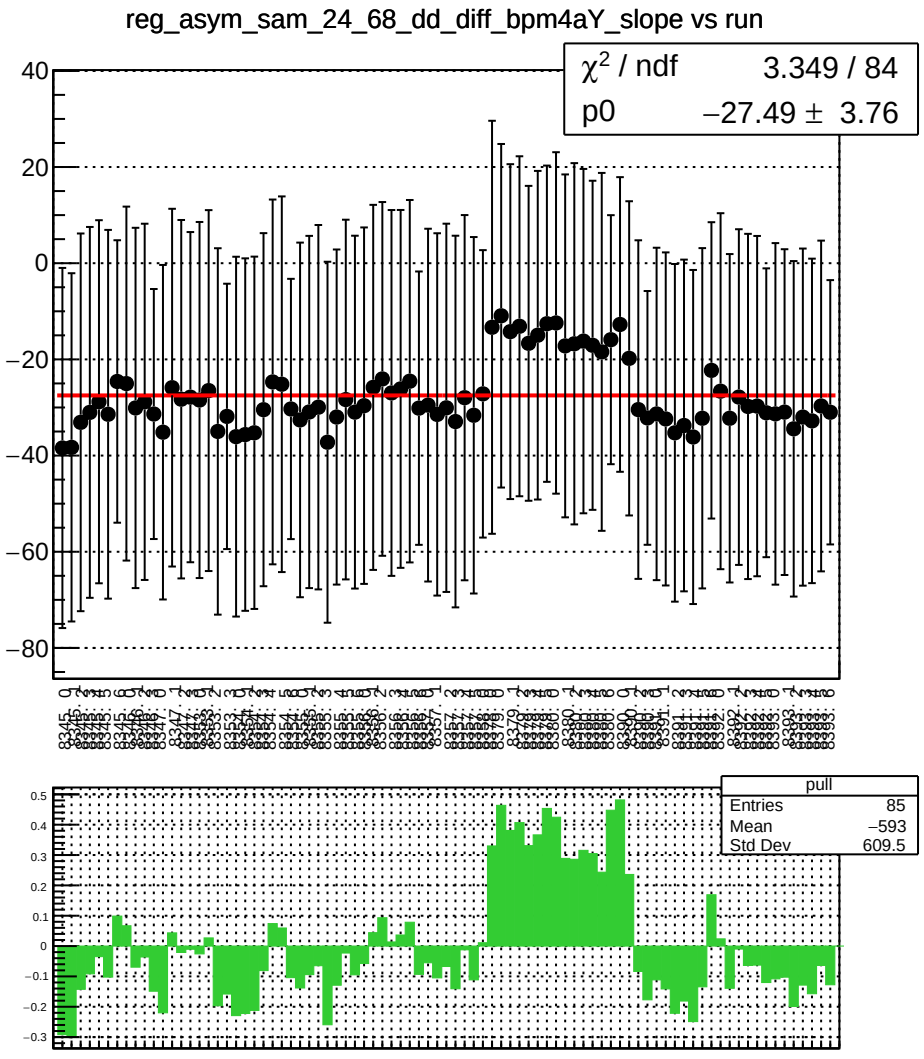

pull1D
Entries 85
Mean 0.005515
Std Dev 0.2268

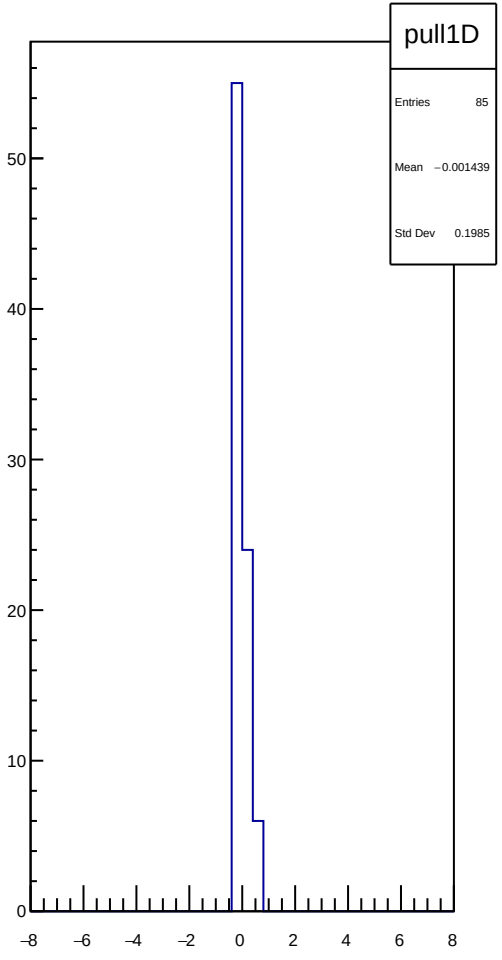

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 13.05 / 84
p0 −0.8311± 0.07873
pull
Entries 85
Mean 92.29
Std Dev 171.9

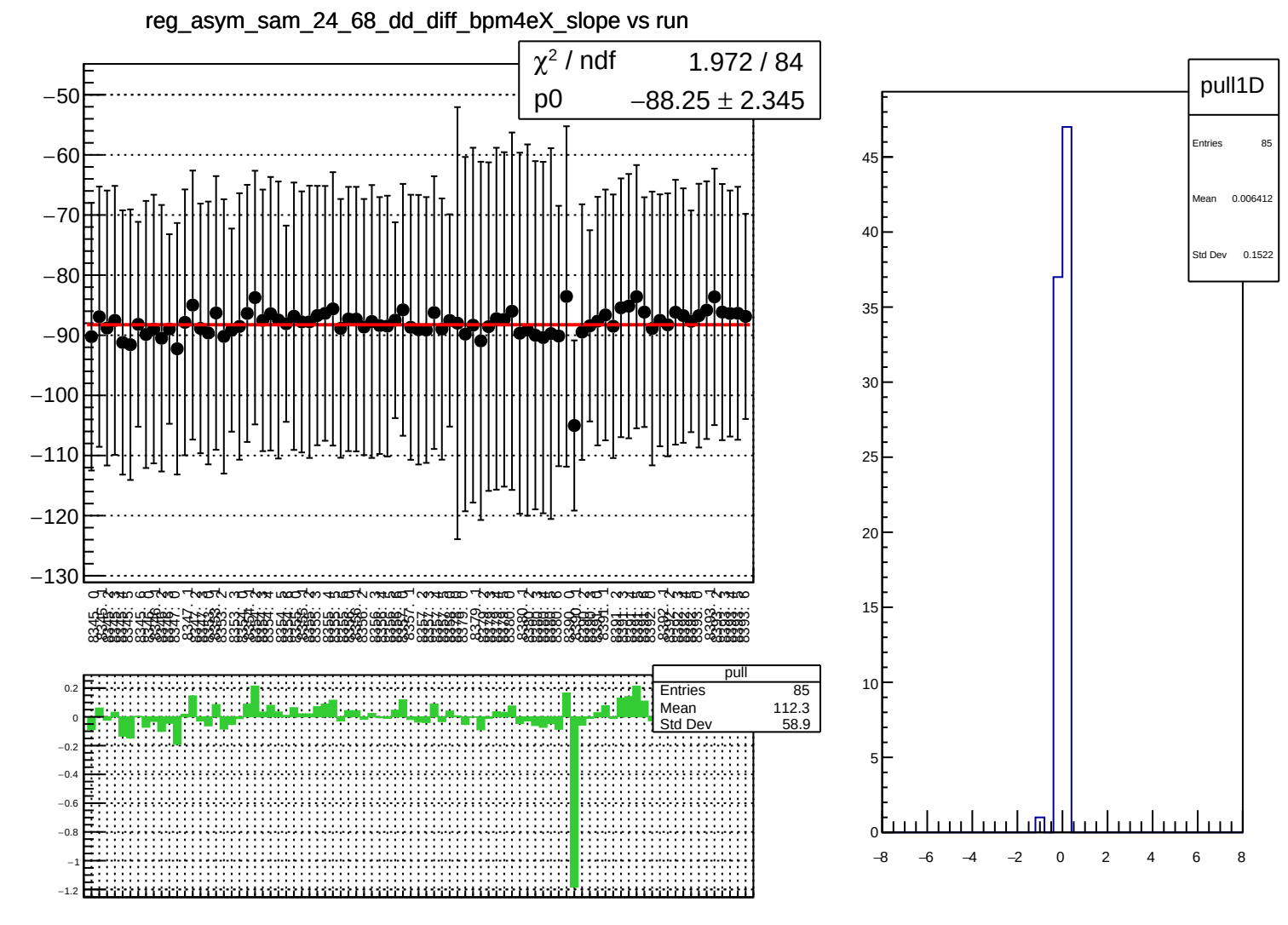

pull1D
Entries 85
Mean 0.002932
Std Dev 0.3918

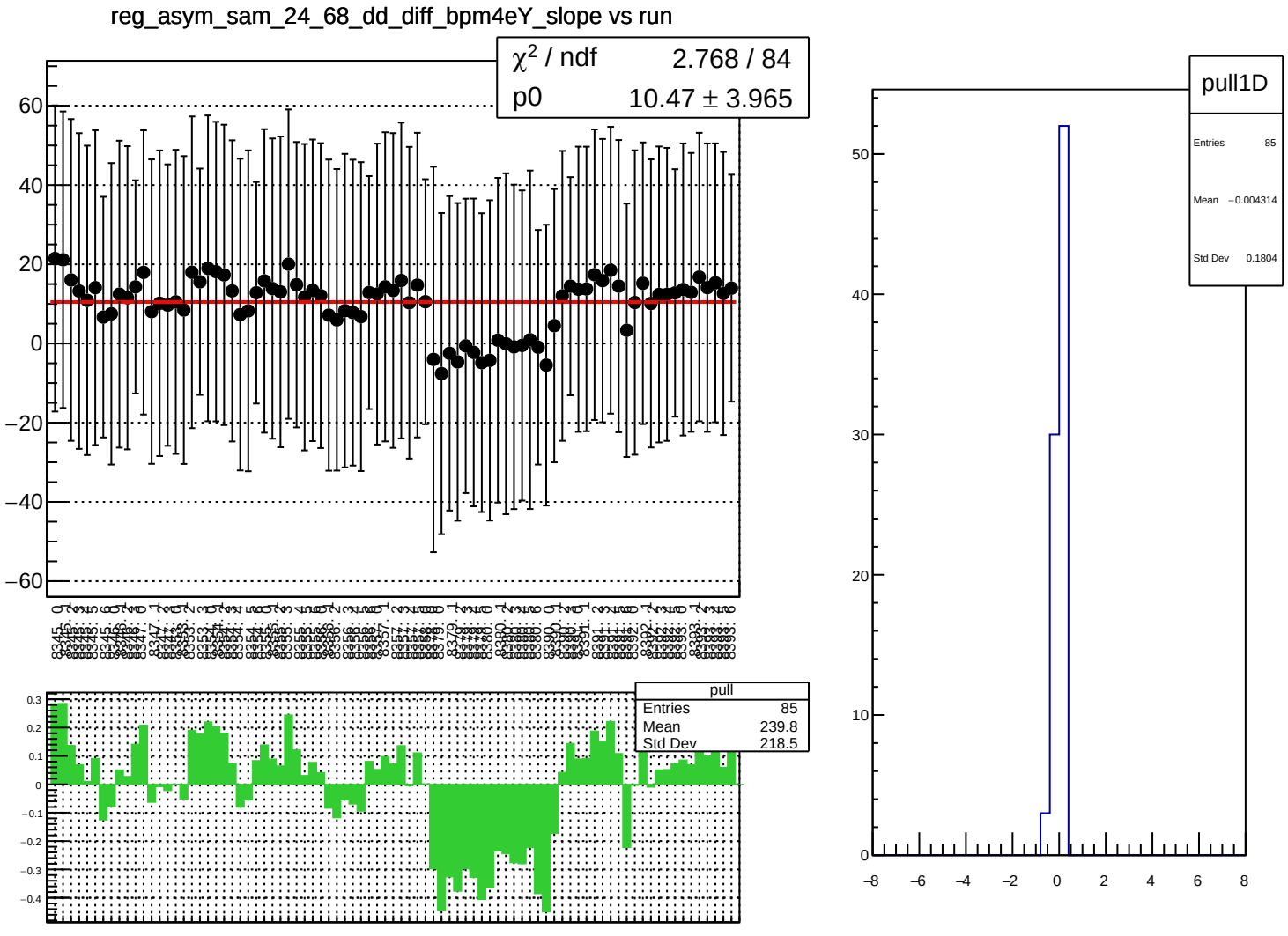

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 1.572 / 84
p0 −21.58 ± 2.133
pull
Entries 85
Mean 81.54
Std Dev 43.83

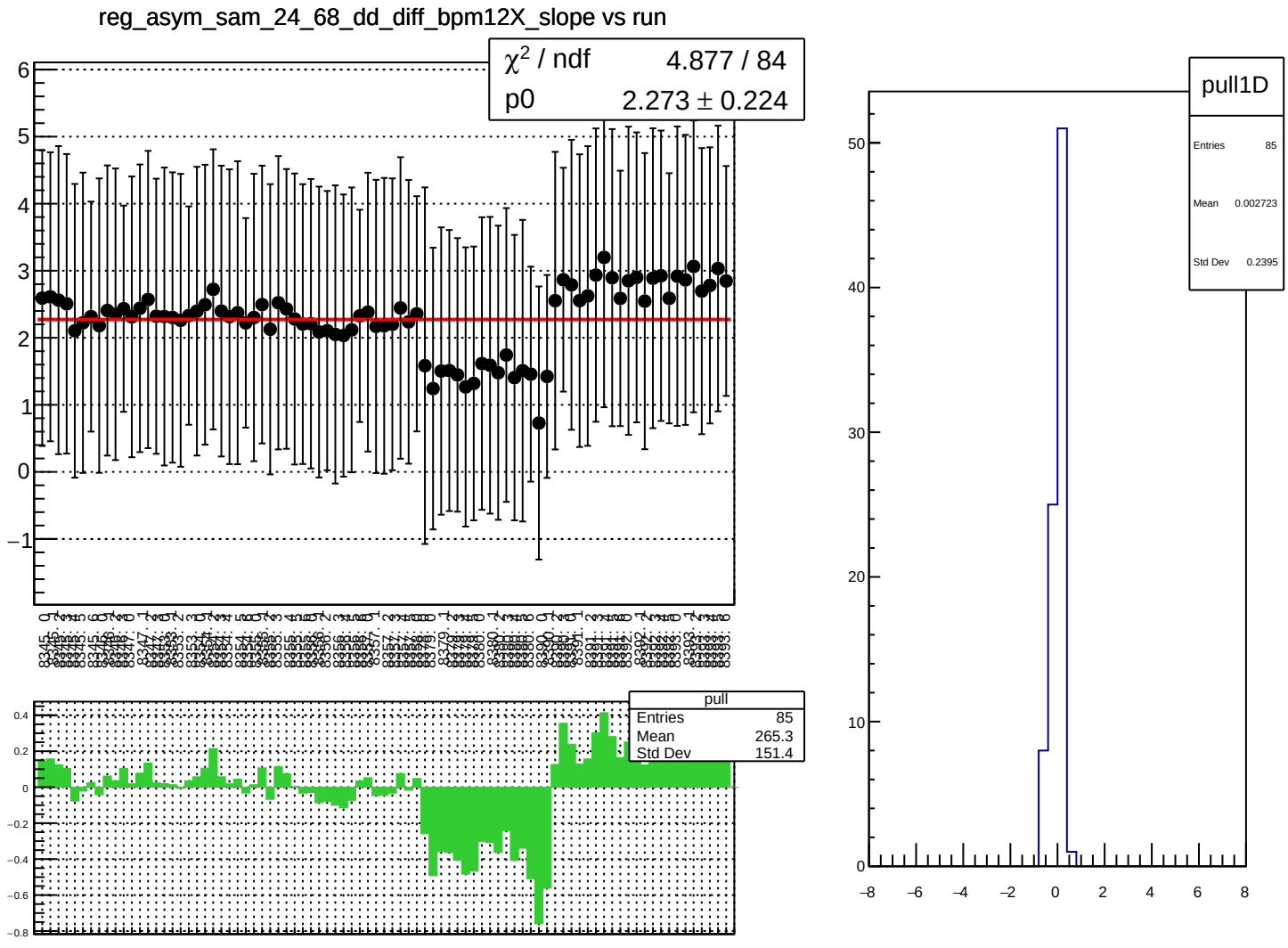

pull1D
Entries 85
Mean −0.01558
Std Dev 0.1351

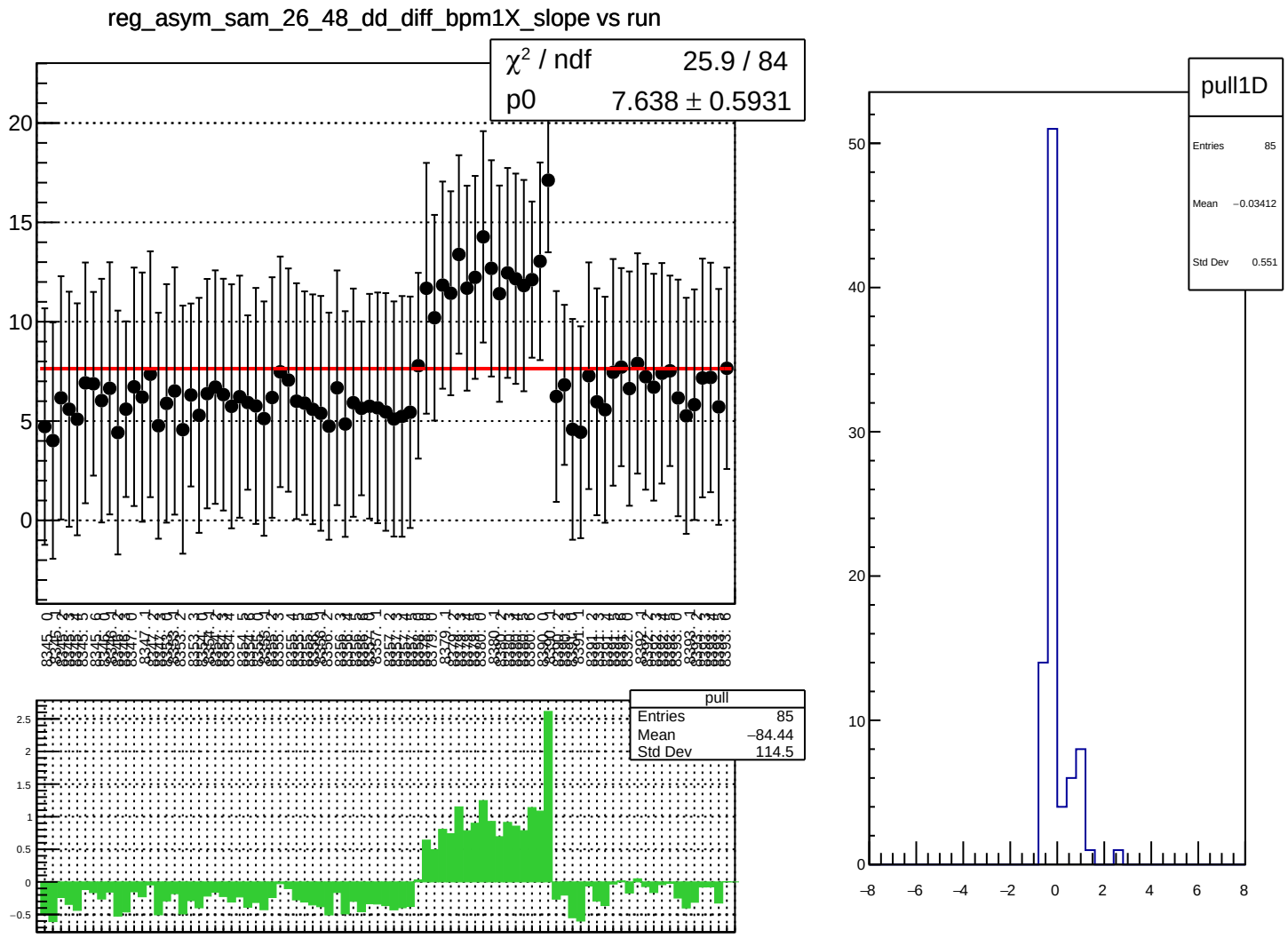

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.349 / 84
p0 −27.49 ± 3.76
pull
Entries 85
Mean −593
Std Dev 609.5

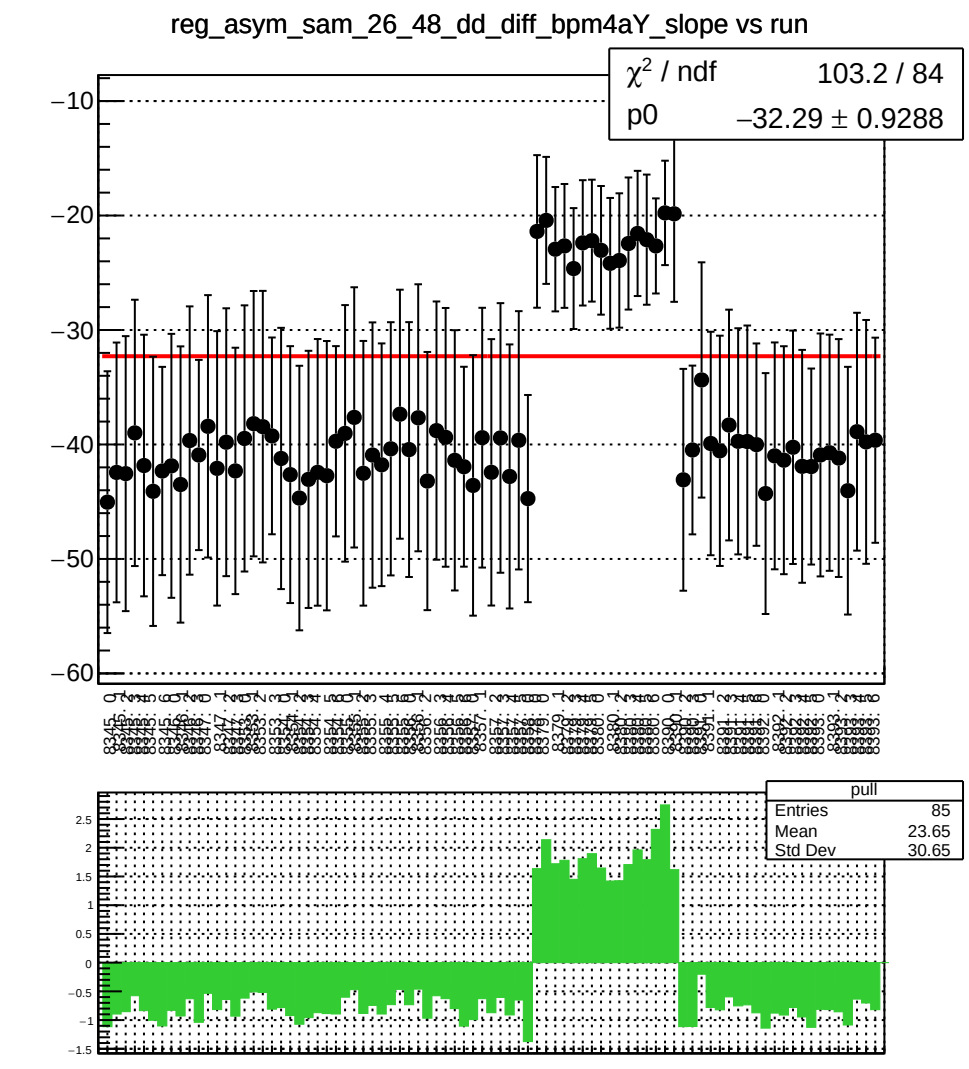

pull1D
Entries 85
Mean −0.001439
Std Dev 0.1985

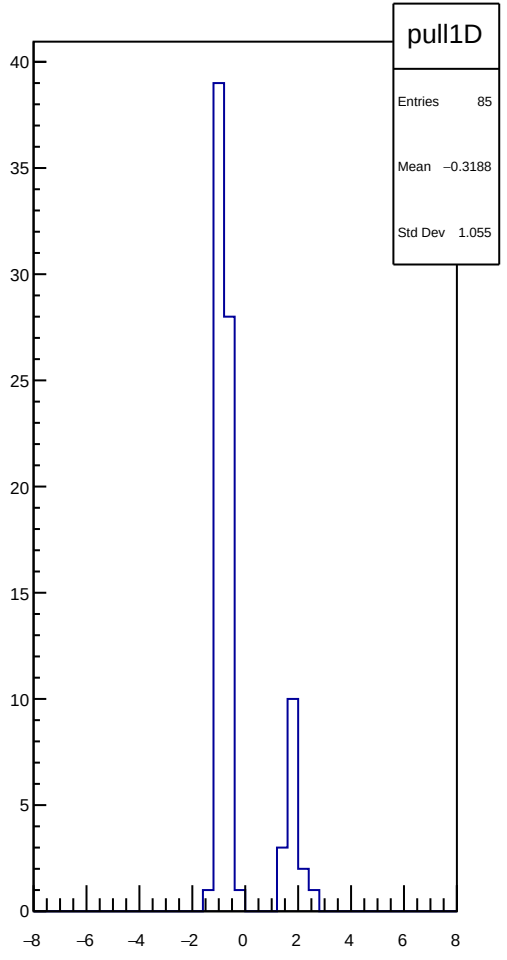

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.972 / 84
p0 −88.25 ± 2.345
pull
Entries 85
Mean 112.3
Std Dev 58.9
pull1D
Entries 85
Mean 0.006412
Std Dev 0.1522

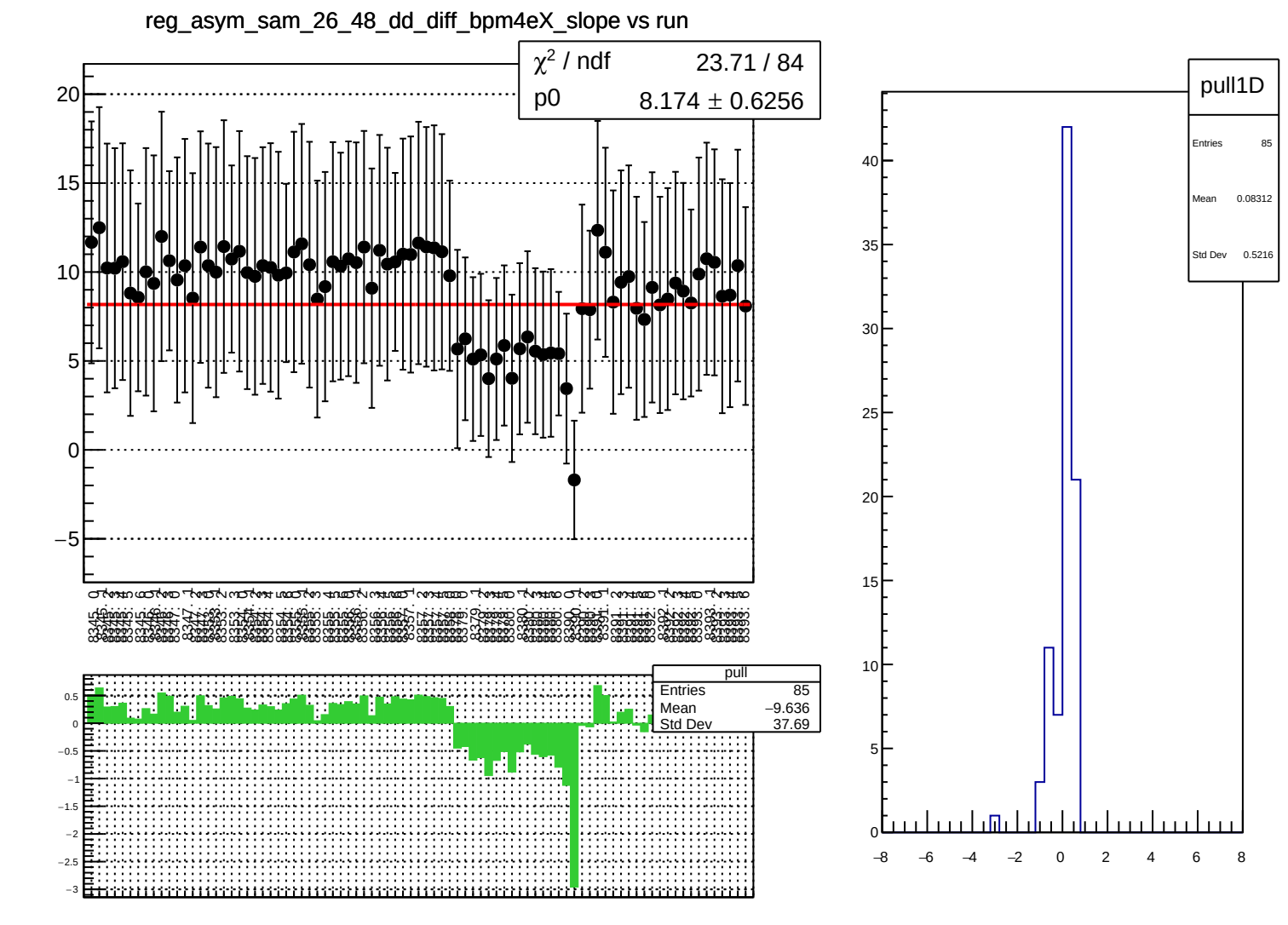

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.768 / 84
p0 10.47 ± 3.965
pull
Entries 85
Mean 239.8
Std Dev 218.5
pull1D
Entries 85
Mean −0.004314
Std Dev 0.1804

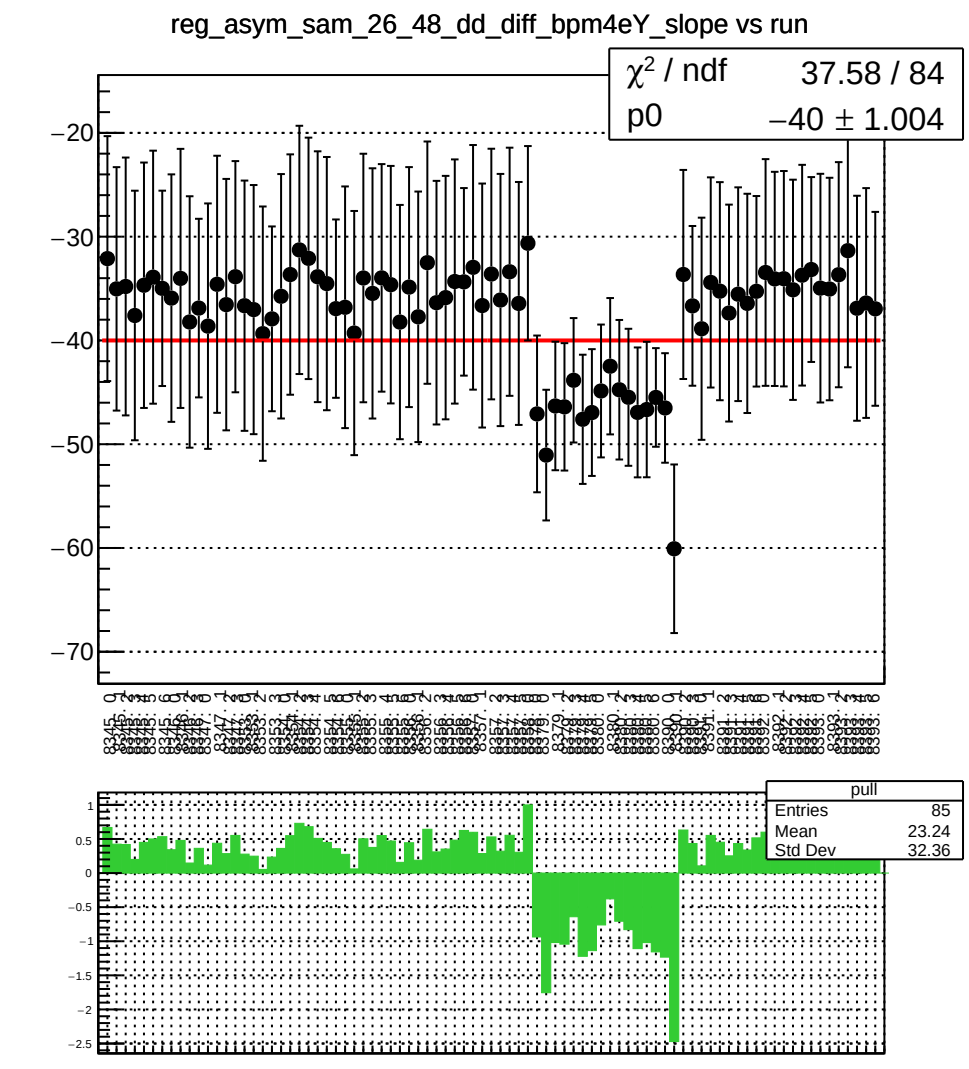

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 4.877 / 84
p0 2.273 ± 0.224
pull
Entries 85
Mean 265.3
Std Dev 151.4
pull1D
Entries 85
Mean 0.002723
Std Dev 0.2395

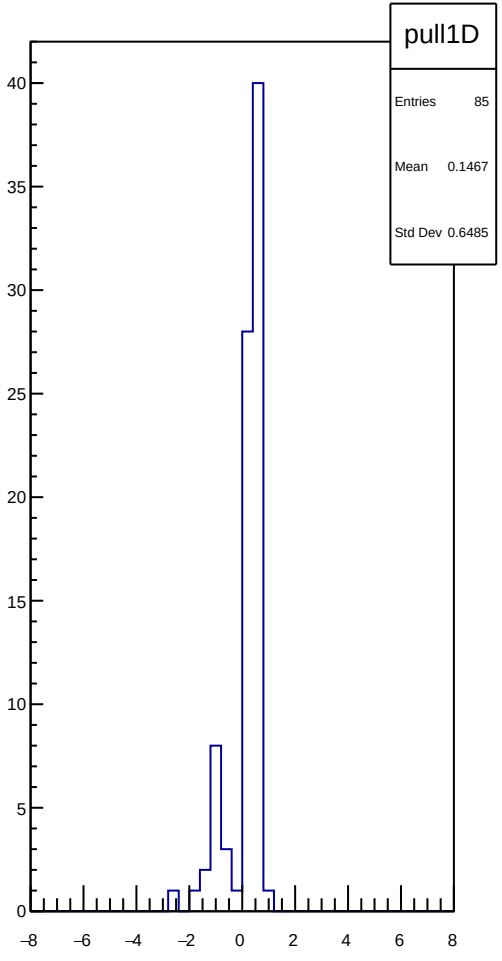

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 25.9 / 84
p0 7.638 ± 0.5931
pull
Entries 85
Mean −84.44
Std Dev 114.5
pull1D
Entries 85
Mean −0.03412
Std Dev 0.551

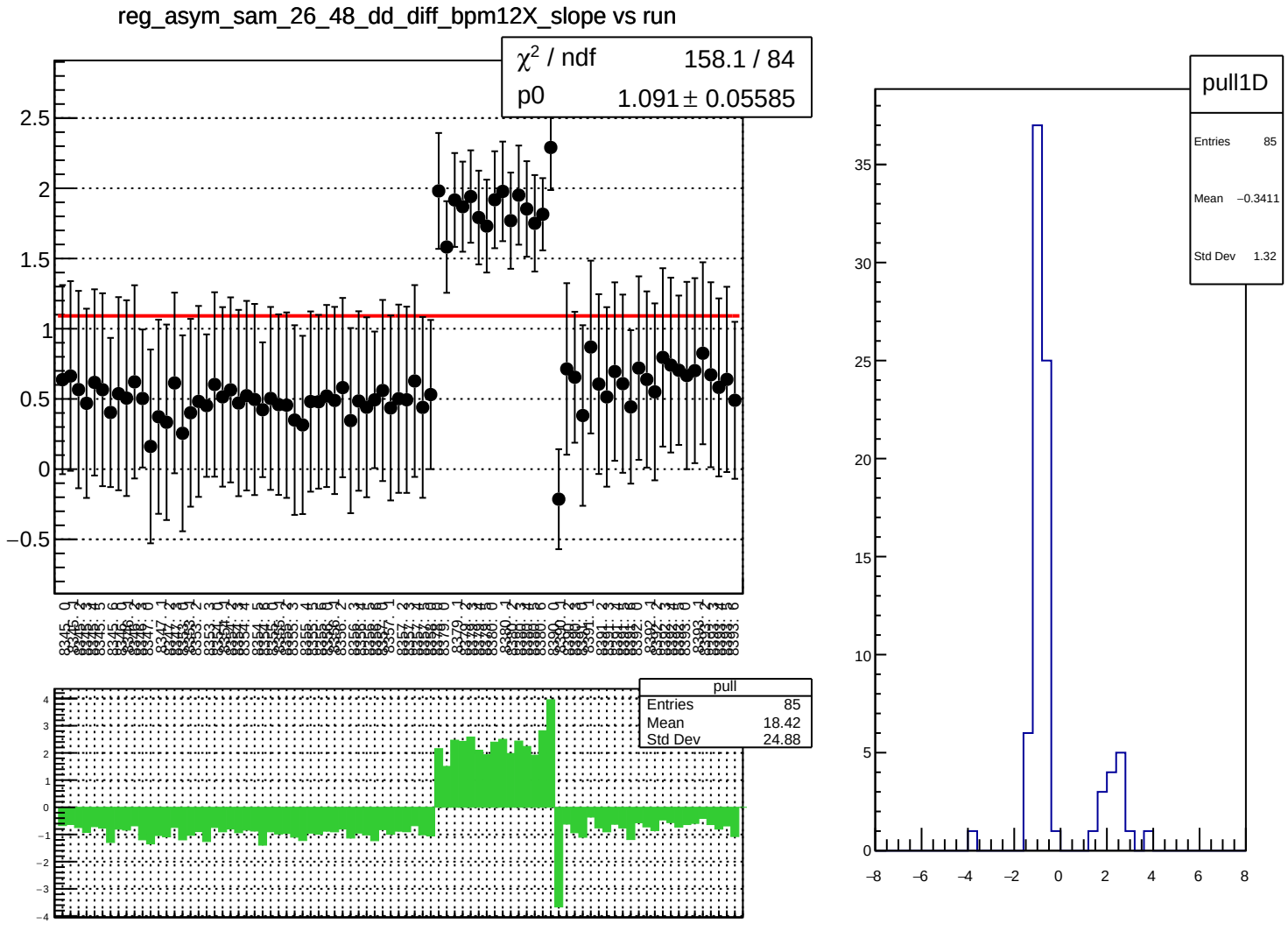

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 103.2 / 84
p0 −32.29 ± 0.9288
pull
Entries 85
Mean 23.65
Std Dev 30.65

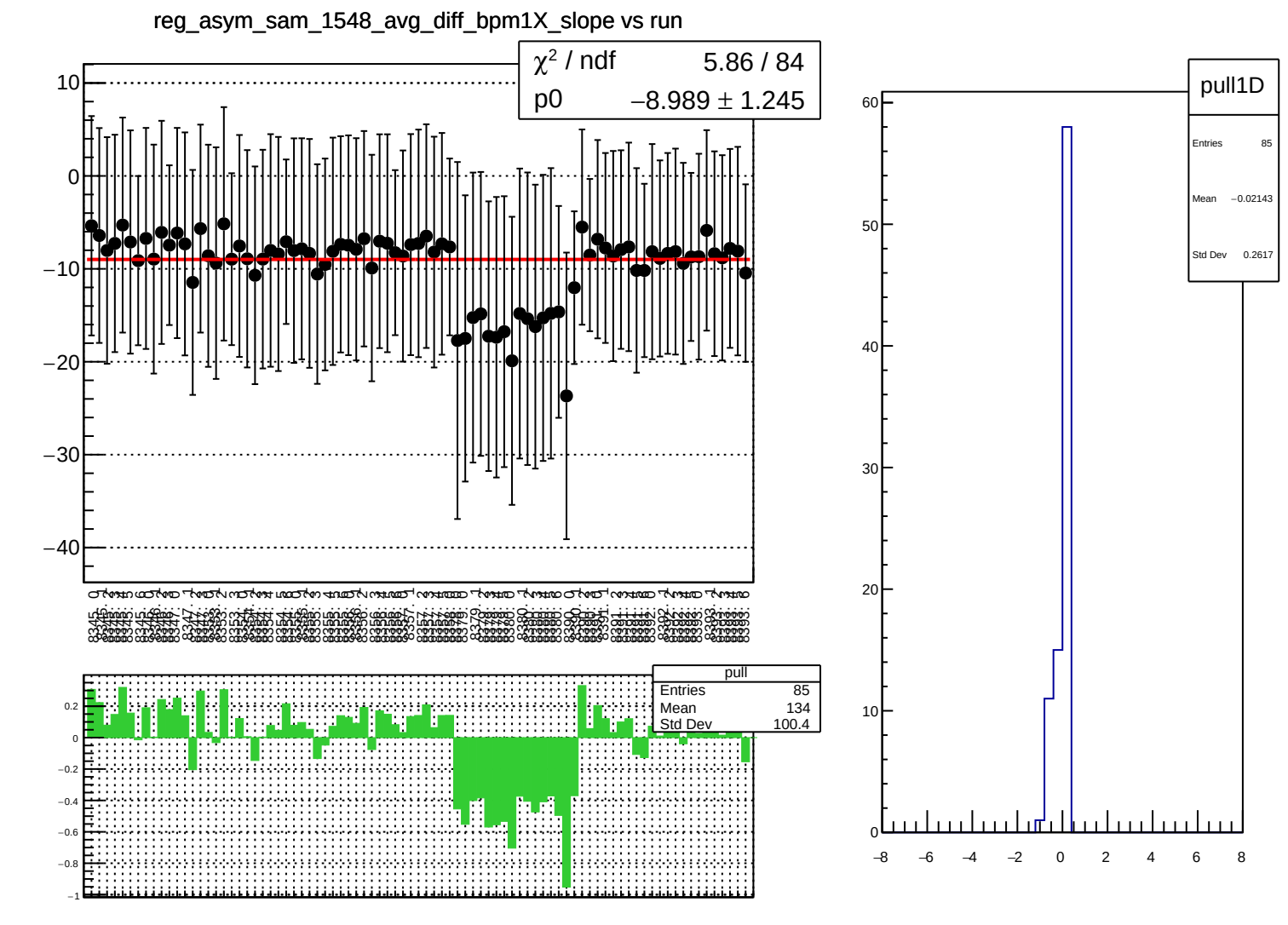

pull1D
Entries 85
Mean −0.3188
Std Dev 1.055

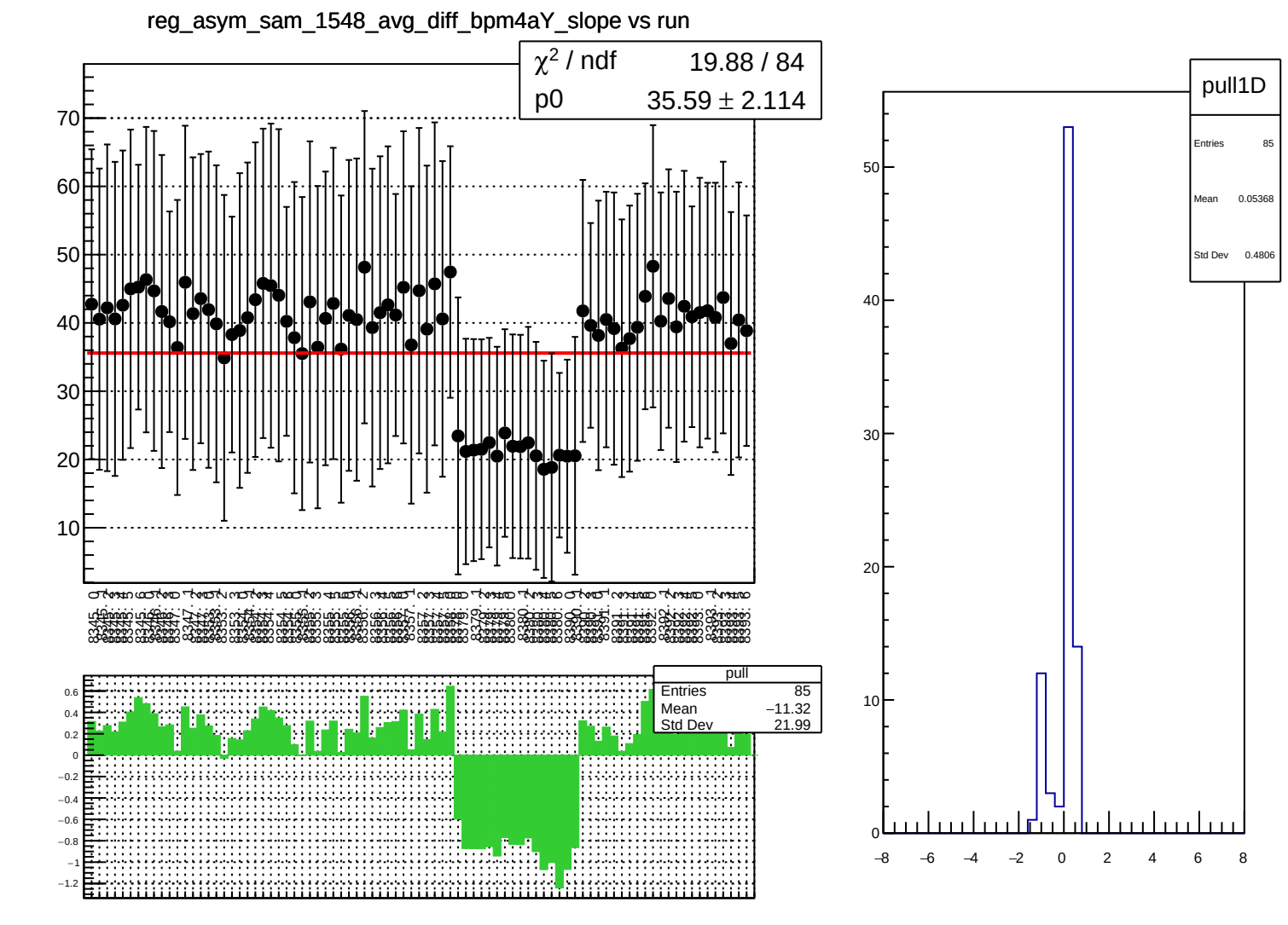

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.71 / 84
p0 8.174 ± 0.6256
pull
Entries 85
Mean −9.636
Std Dev 37.69
pull1D
Entries 85
Mean 0.08312
Std Dev 0.5216

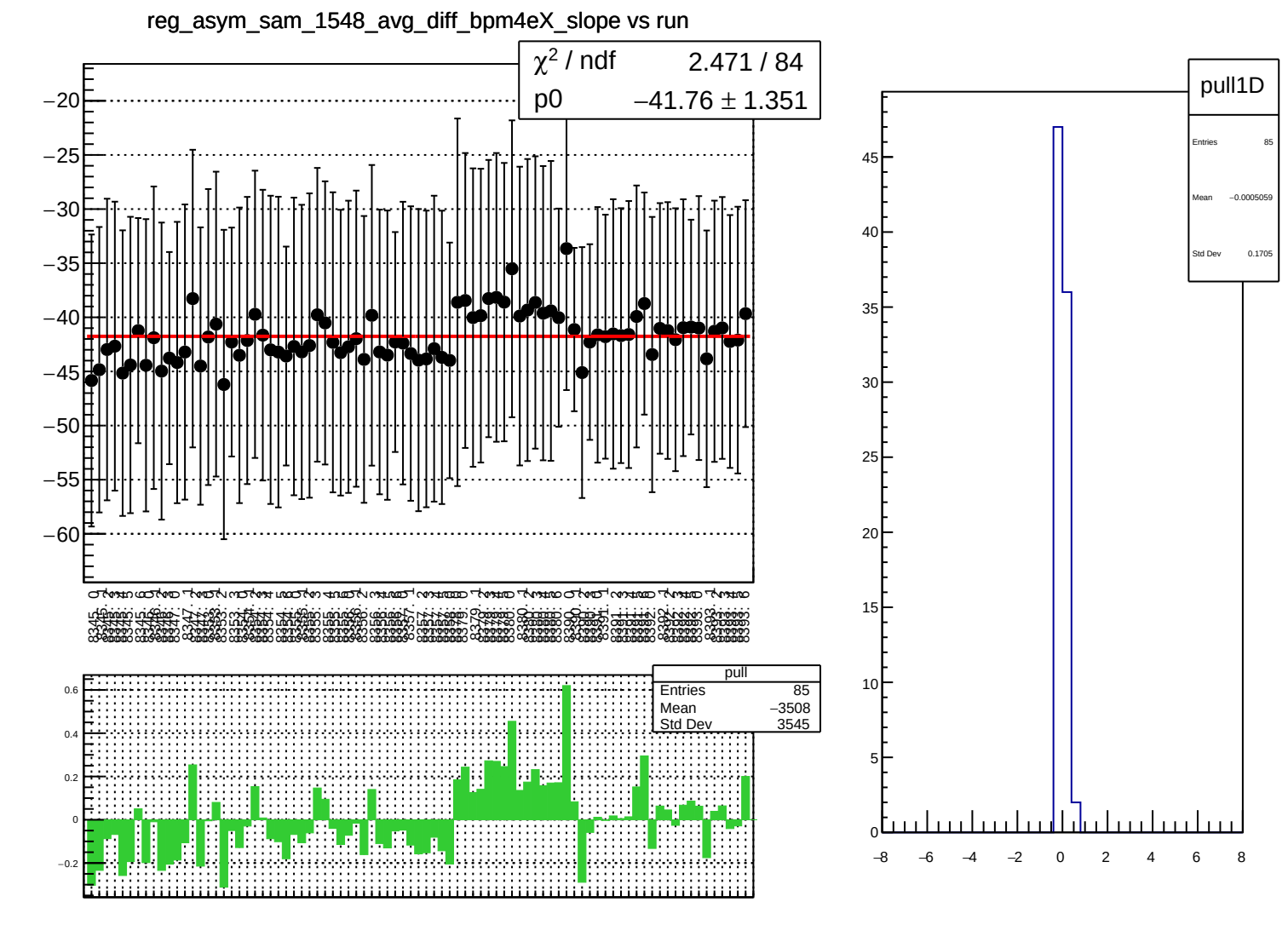

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 37.58 / 84
p0 −40 ± 1.004
pull
Entries 85
Mean 23.24
Std Dev 32.36

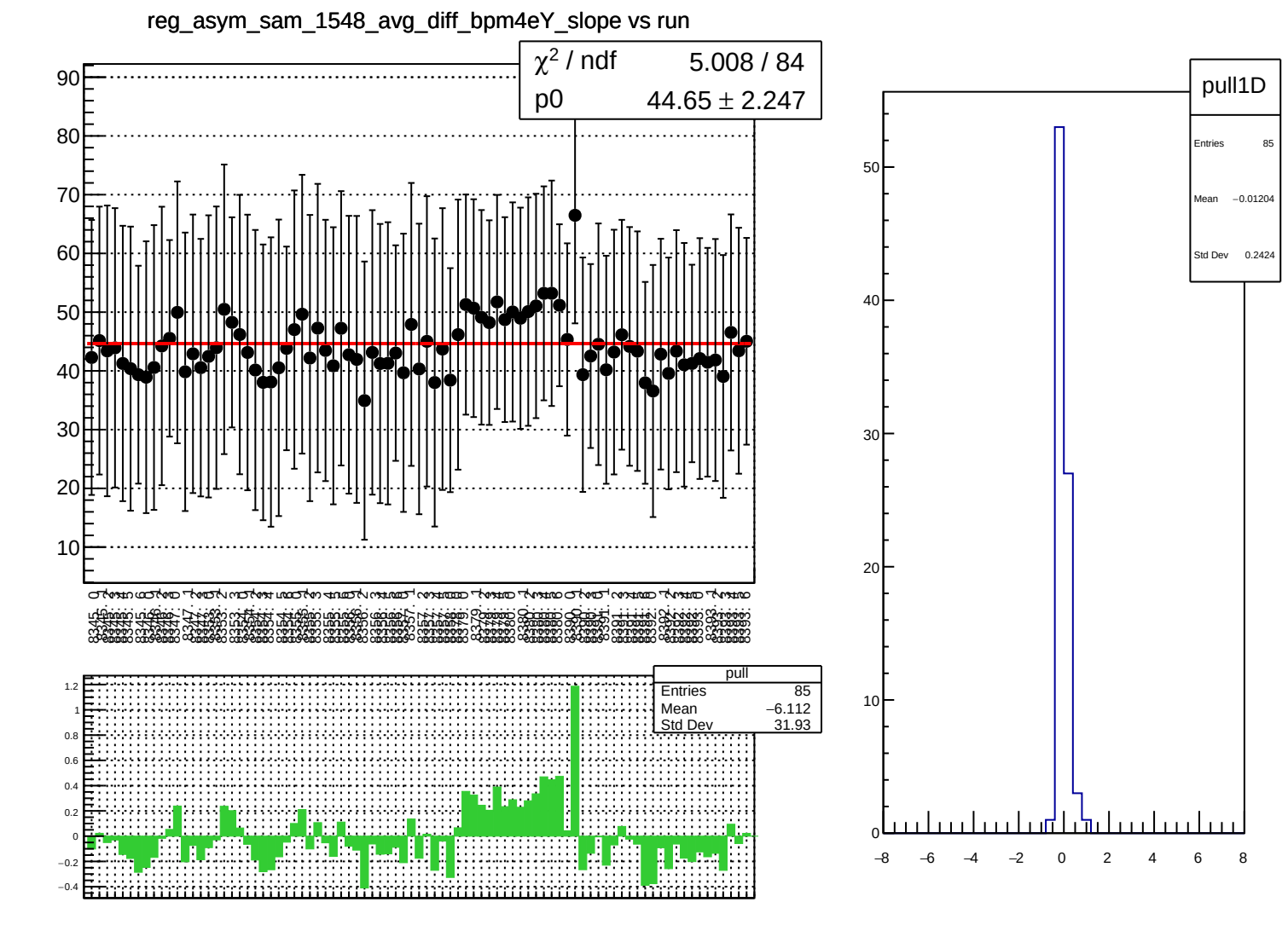

pull1D
Entries 85
Mean 0.1467
Std Dev 0.6485

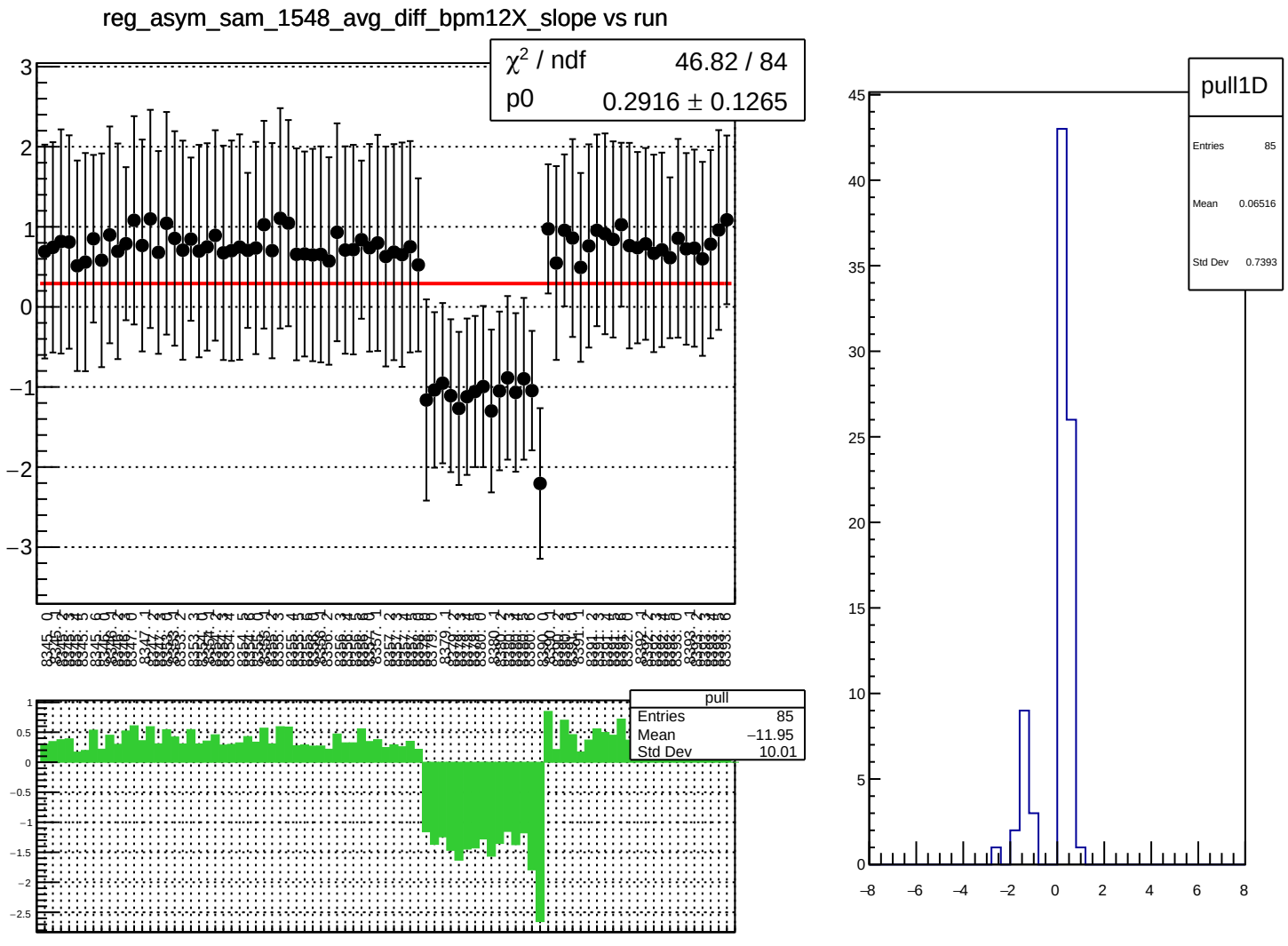

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 158.1 / 84
p0 1.091 ± 0.05585
pull
Entries 85
Mean 18.42
Std Dev 24.88
pull1D
Entries 85
Mean −0.3411
Std Dev 1.32

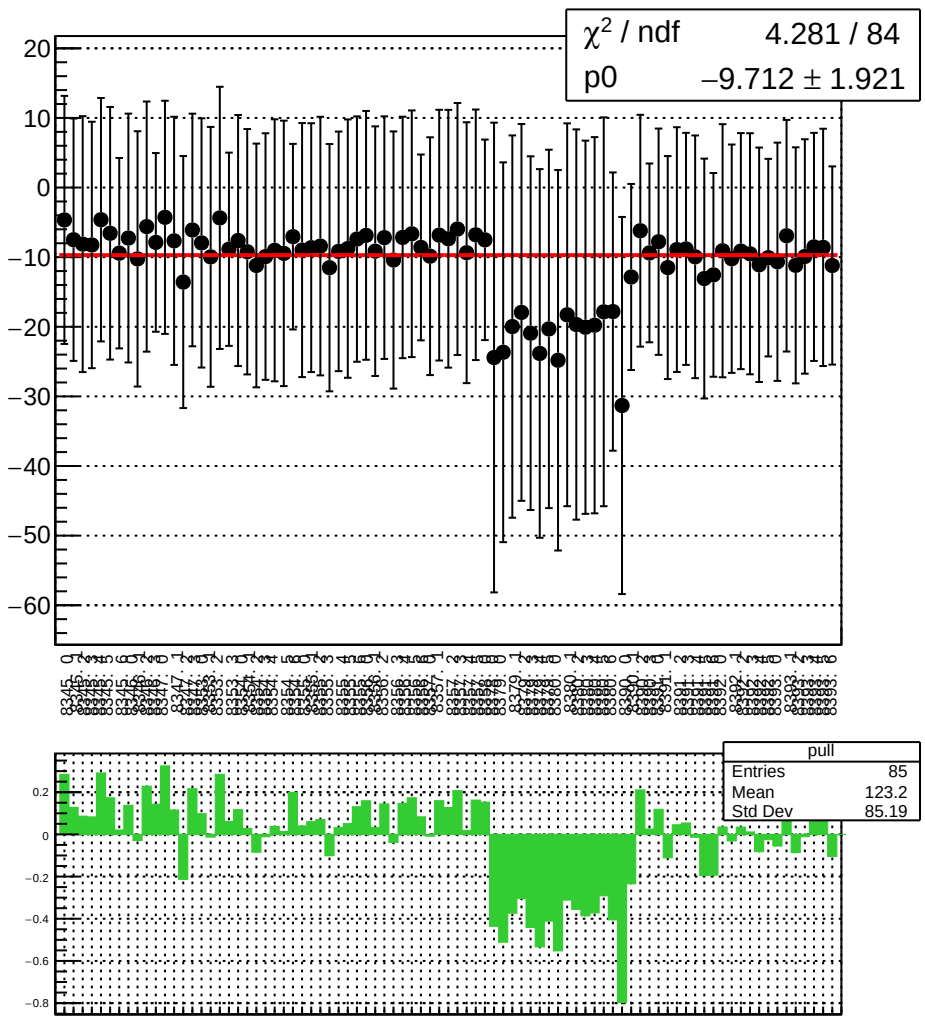

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 5.86 / 84
p0 −8.989 ± 1.245
pull
Entries 85
Mean 134
Std Dev 100.4
pull1D
Entries 85
Mean −0.02143
Std Dev 0.2617

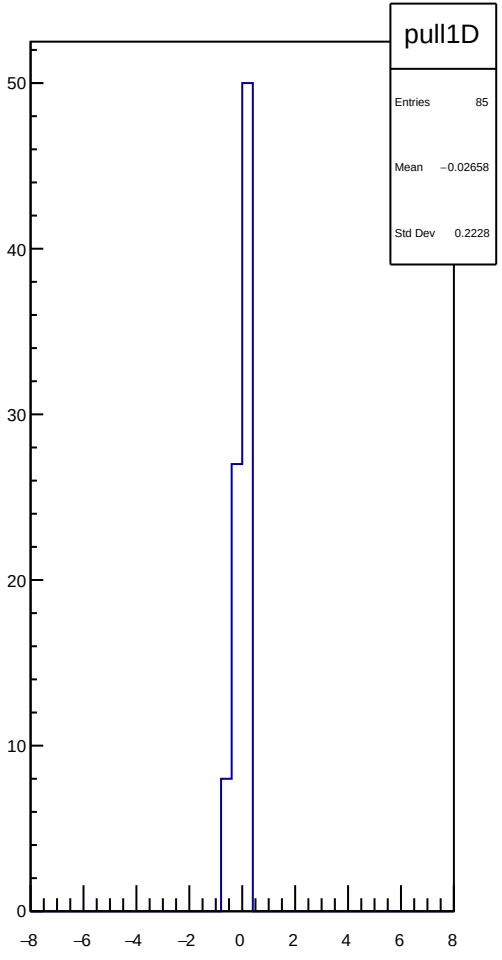

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 19.88 / 84
p0 35.59 ± 2.114
pull
Entries 85
Mean −11.32
Std Dev 21.99
pull1D
Entries 85
Mean 0.05368
Std Dev 0.4806

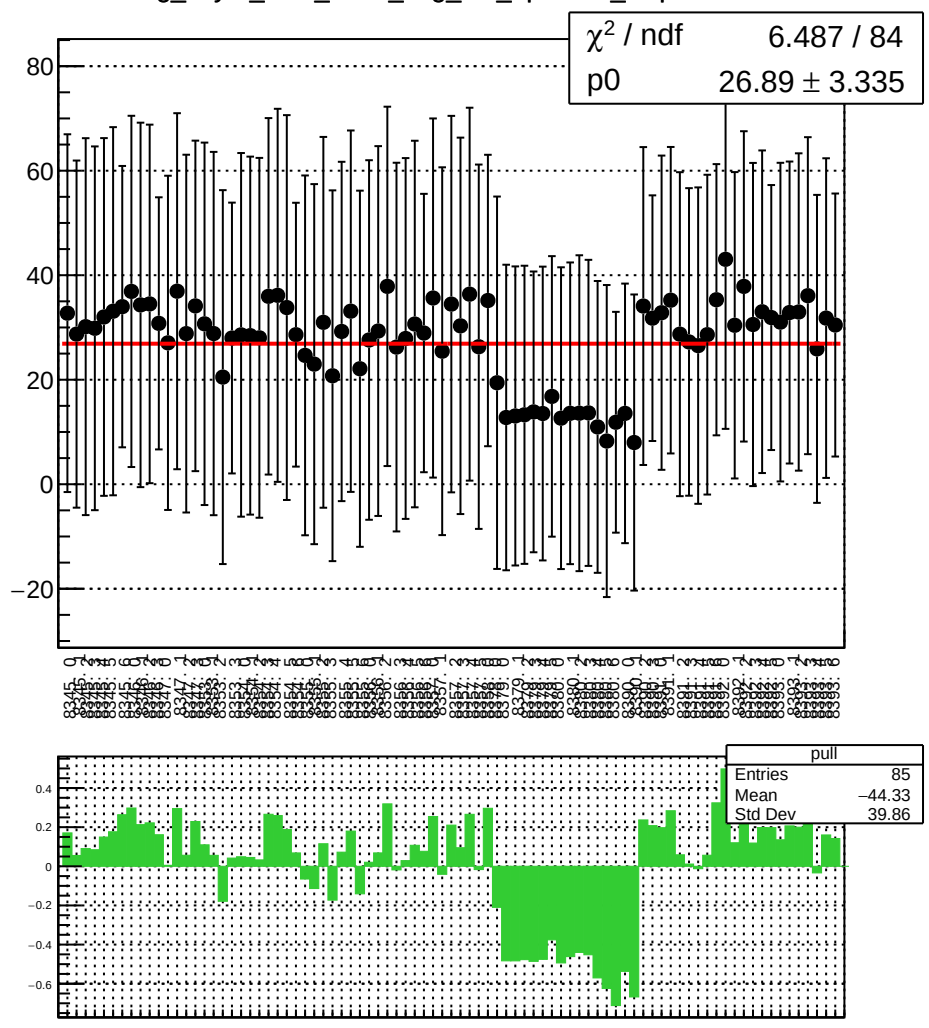

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.471 / 84
p0 −41.76 ± 1.351
pull
Entries 85
Mean −3508
Std Dev 3545
pull1D
Entries 85
Mean −0.0005059
Std Dev 0.1705

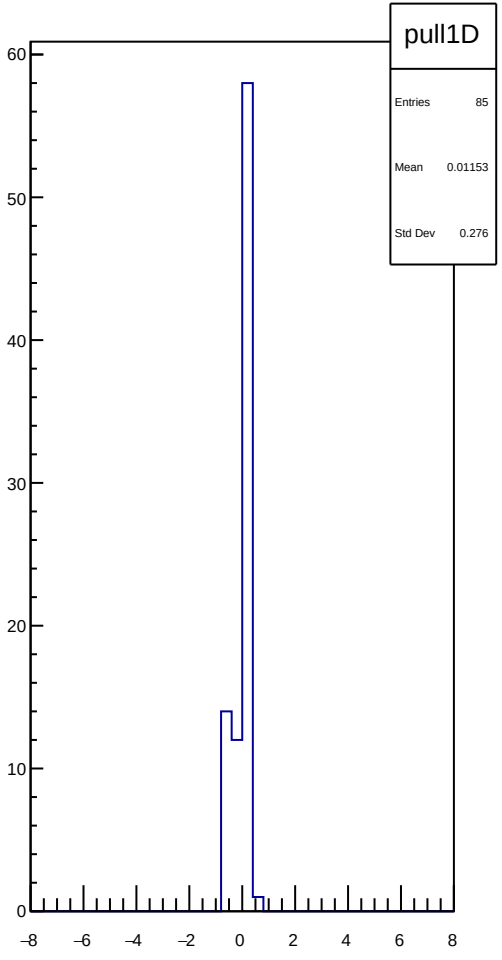

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.008 / 84
p0 44.65 ± 2.247
pull
Entries 85
Mean −6.112
Std Dev 31.93
pull1D
Entries 85
Mean −0.01204
Std Dev 0.2424

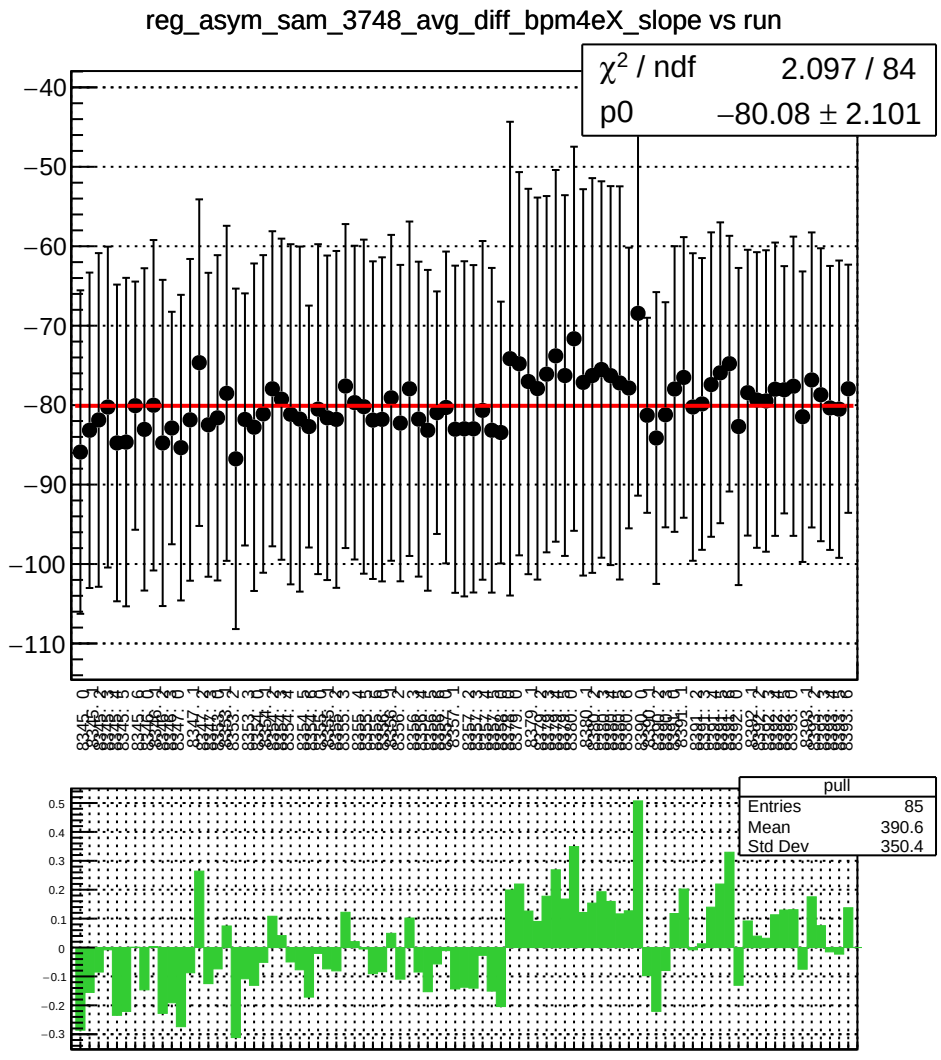

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 46.82 / 84
p0 0.2916 ± 0.1265
pull
Entries 85
Mean −11.95
Std Dev 10.01
pull1D
Entries 85
Mean 0.06516
Std Dev 0.7393

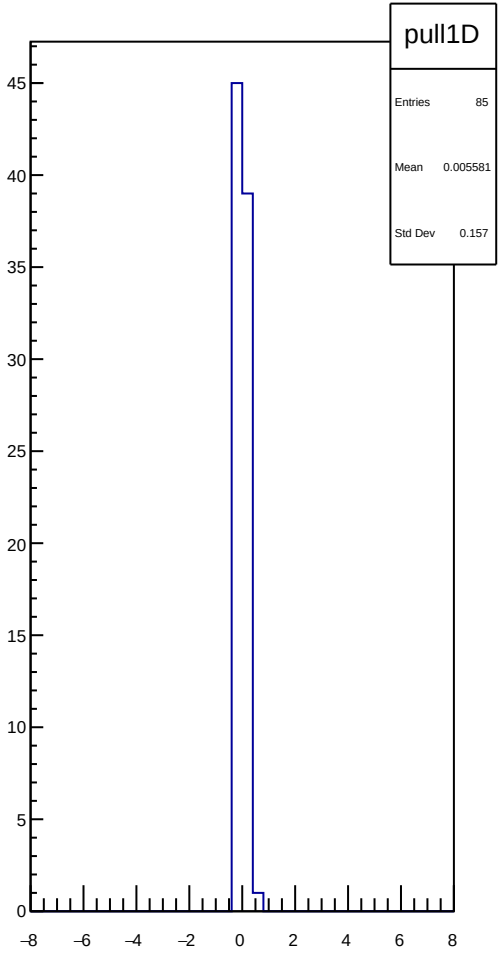

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 4.281 / 84
p0 −9.712 ± 1.921
pull
Entries 85
Mean 123.2
Std Dev 85.19

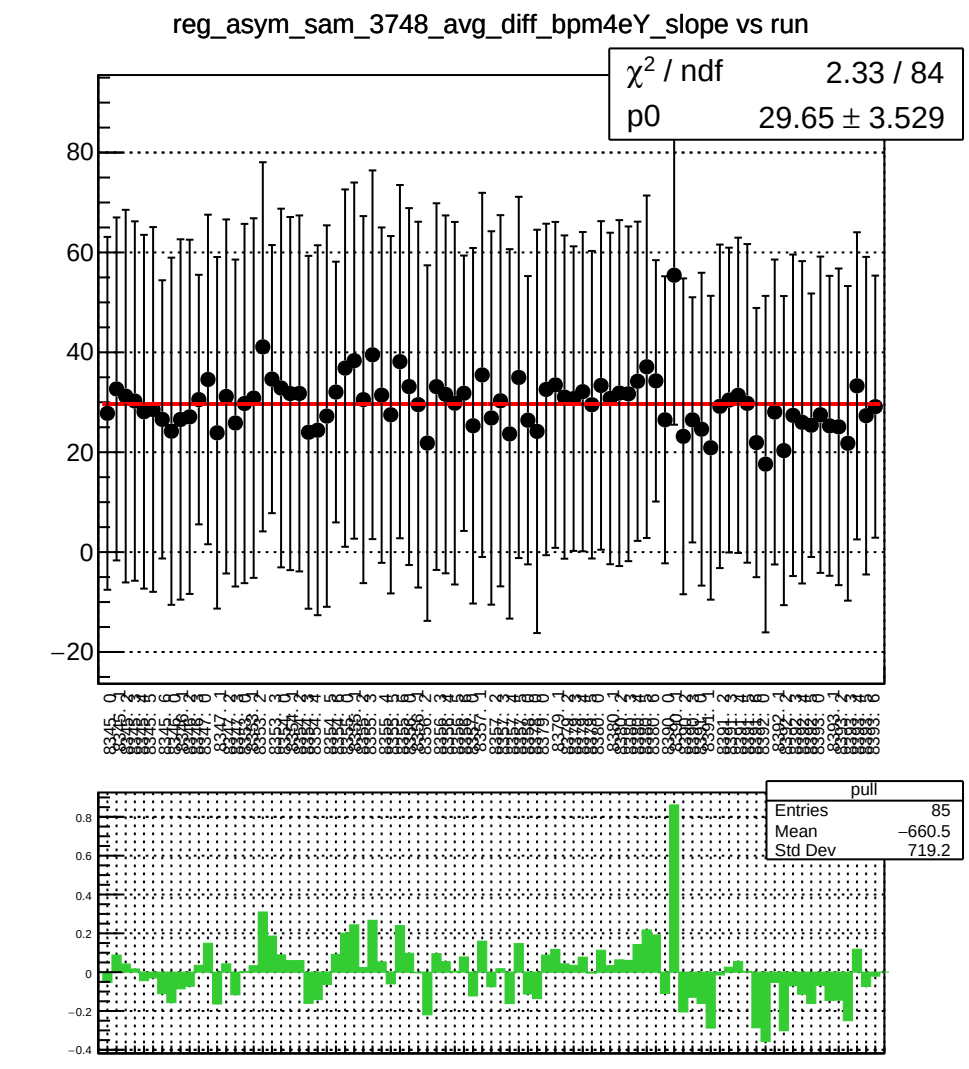

pull1D
Entries 85
Mean −0.02658
Std Dev 0.2228

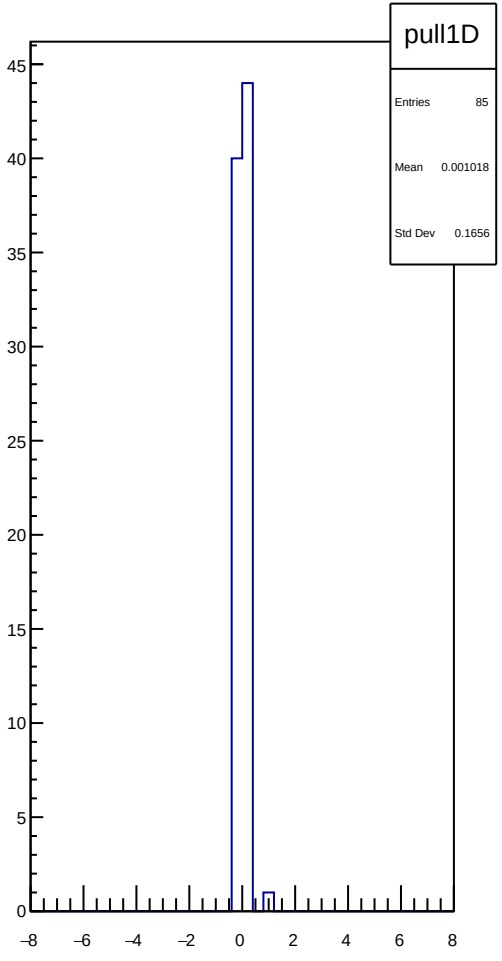

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.487 / 84
p0 26.89 ± 3.335
pull
Entries 85
Mean −44.33
Std Dev 39.86

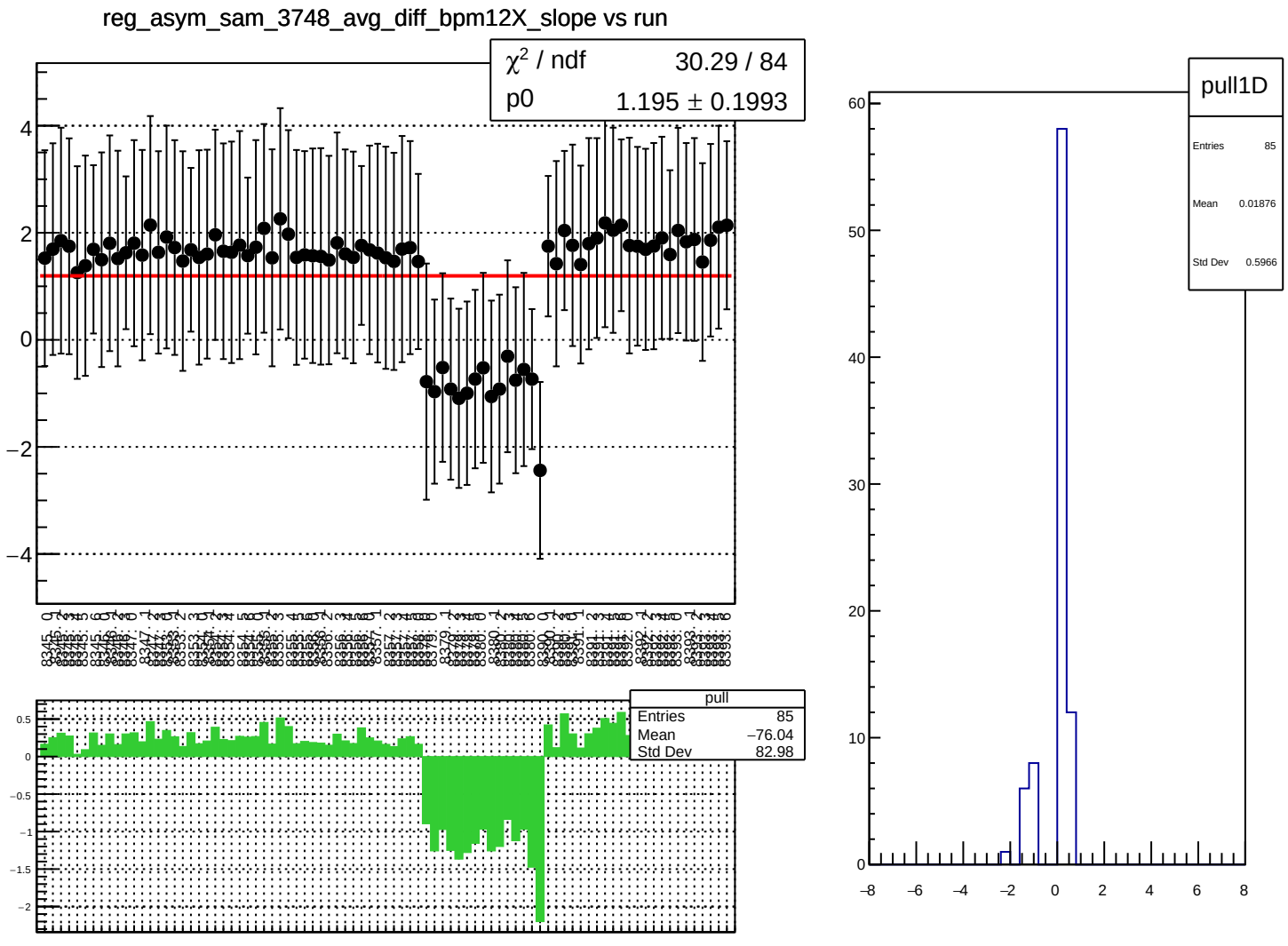

pull1D
Entries 85
Mean 0.01153
Std Dev 0.276

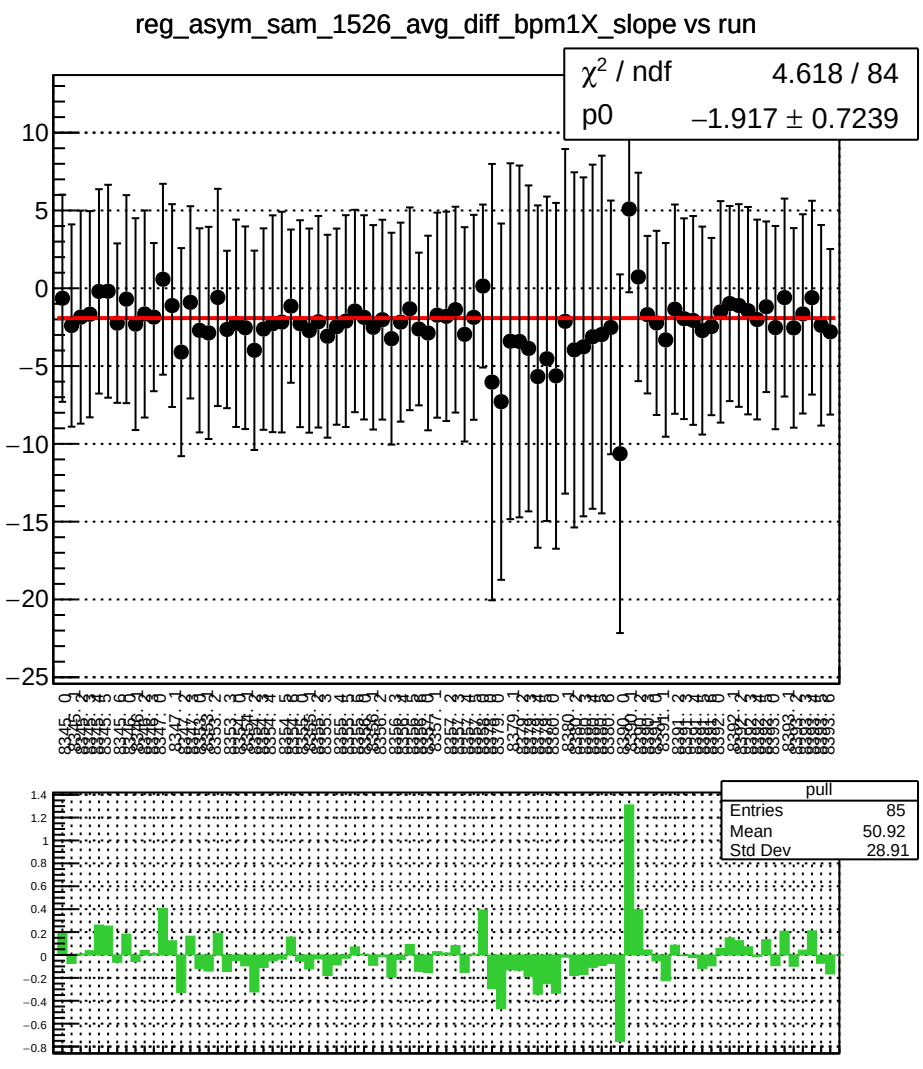

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.097 / 84
p0 −80.08 ± 2.101
pull
Entries 85
Mean 390.6
Std Dev 350.4

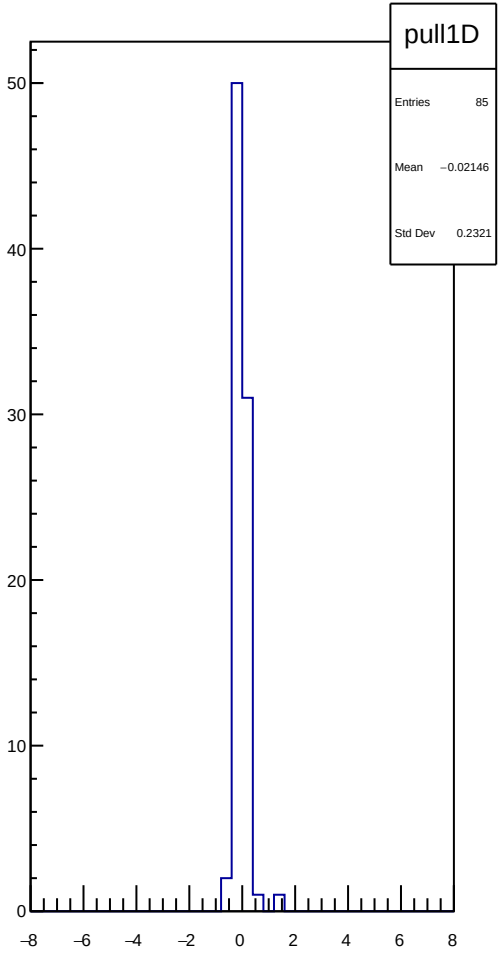

pull1D
Entries 85
Mean 0.005581
Std Dev 0.157

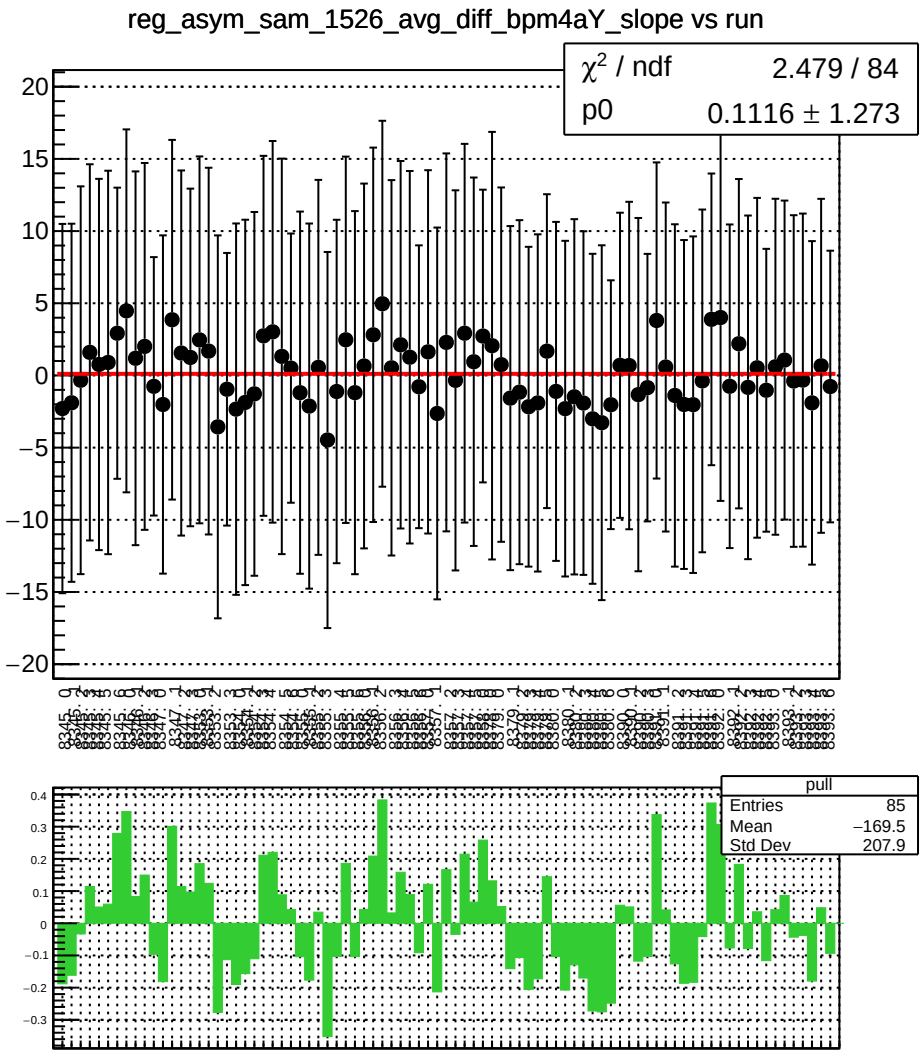

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.33 / 84
p0 29.65 ± 3.529
pull
Entries 85
Mean −660.5
Std Dev 719.2

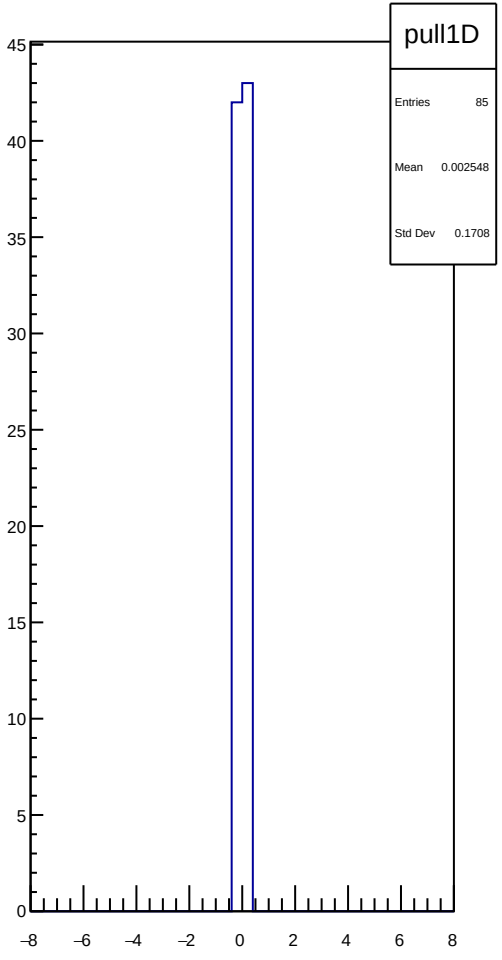

pull1D
Entries 85
Mean 0.001018
Std Dev 0.1656

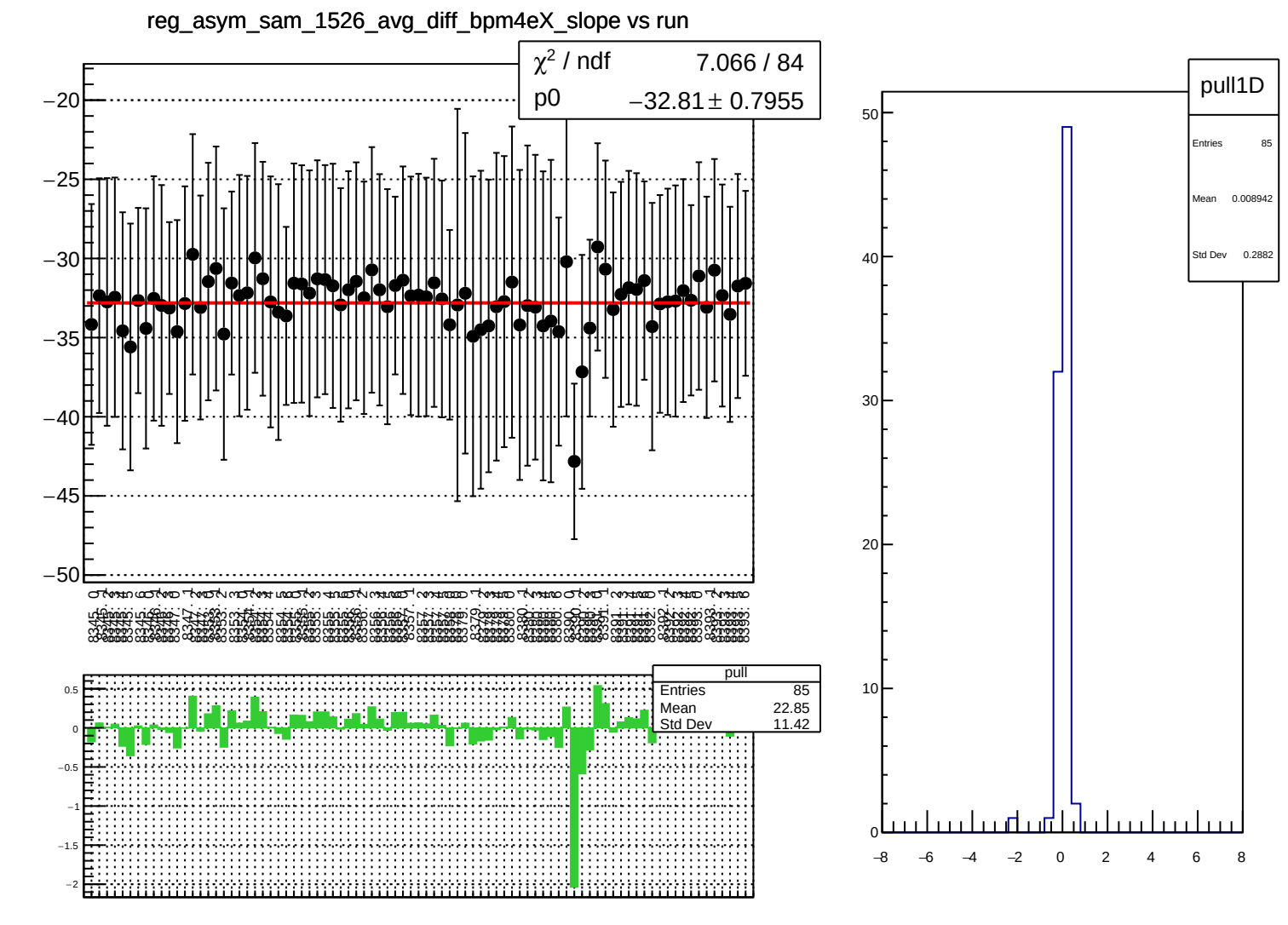

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 30.29 / 84
p0 1.195 ± 0.1993
pull
Entries 85
Mean −76.04
Std Dev 82.98
pull1D
Entries 85
Mean 0.01876
Std Dev 0.5966

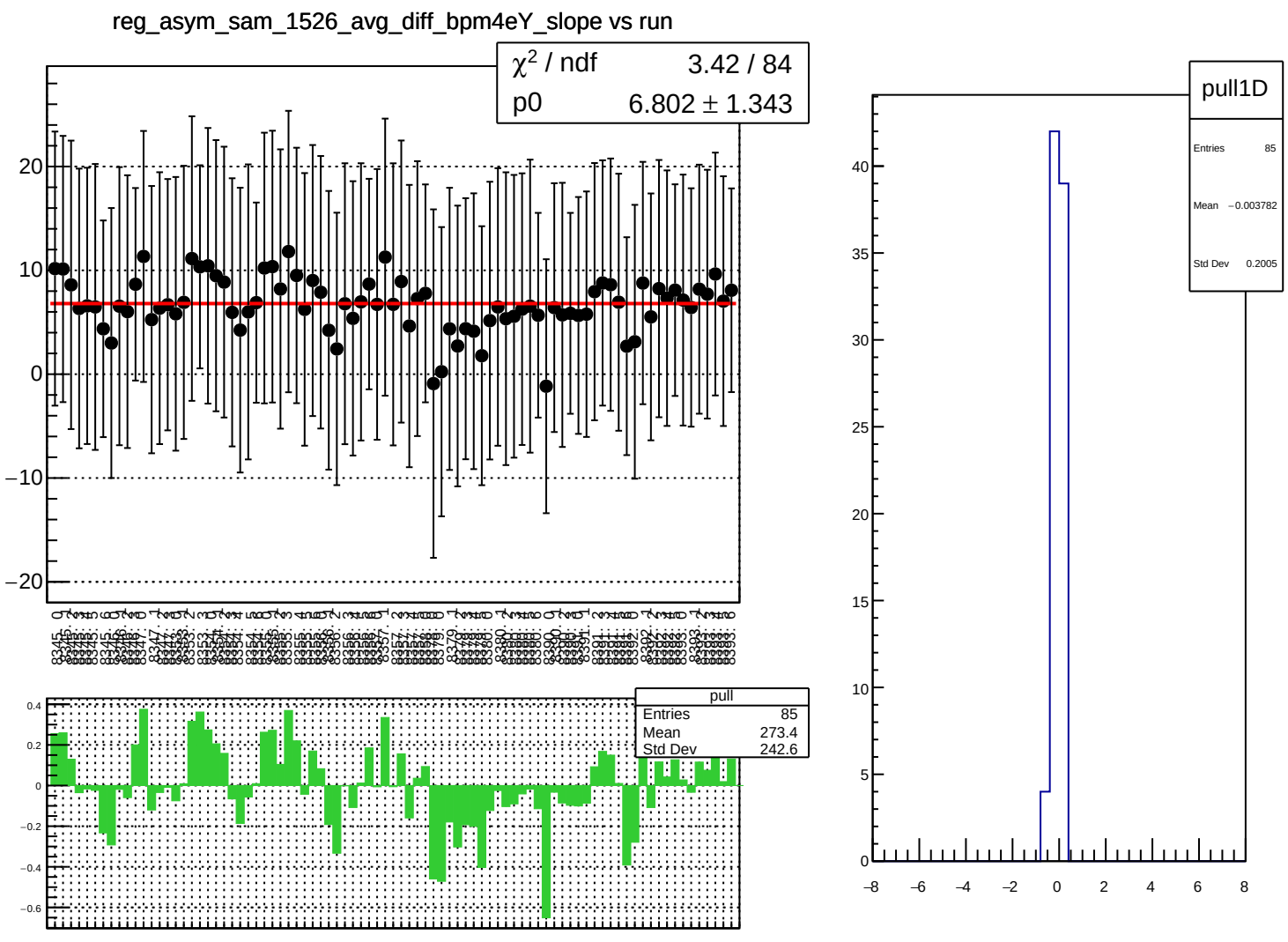

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 4.618 / 84
p0 −1.917 ± 0.7239
pull
Entries 85
Mean 50.92
Std Dev 28.91

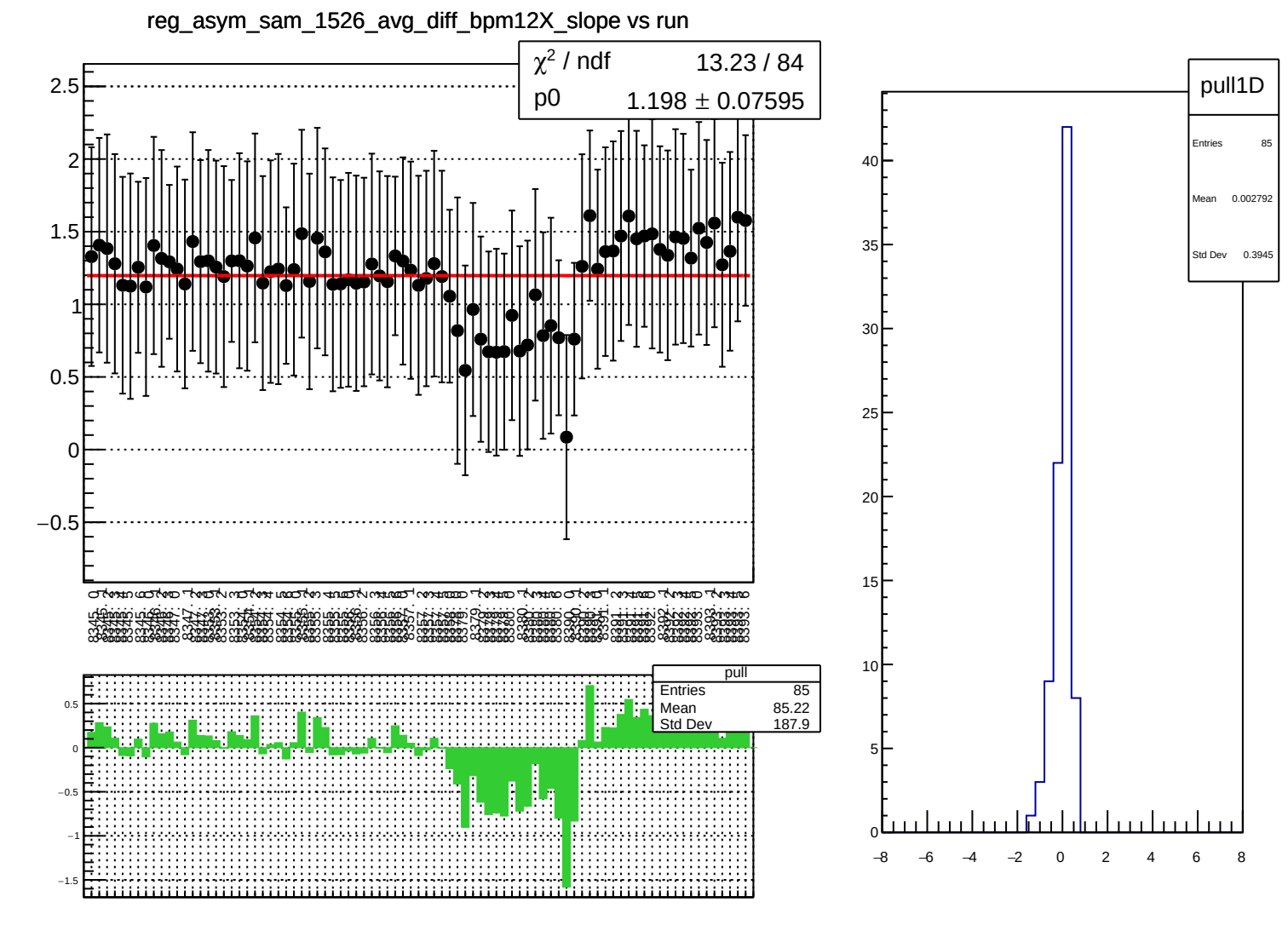

pull1D
Entries 85
Mean −0.02146
Std Dev 0.2321

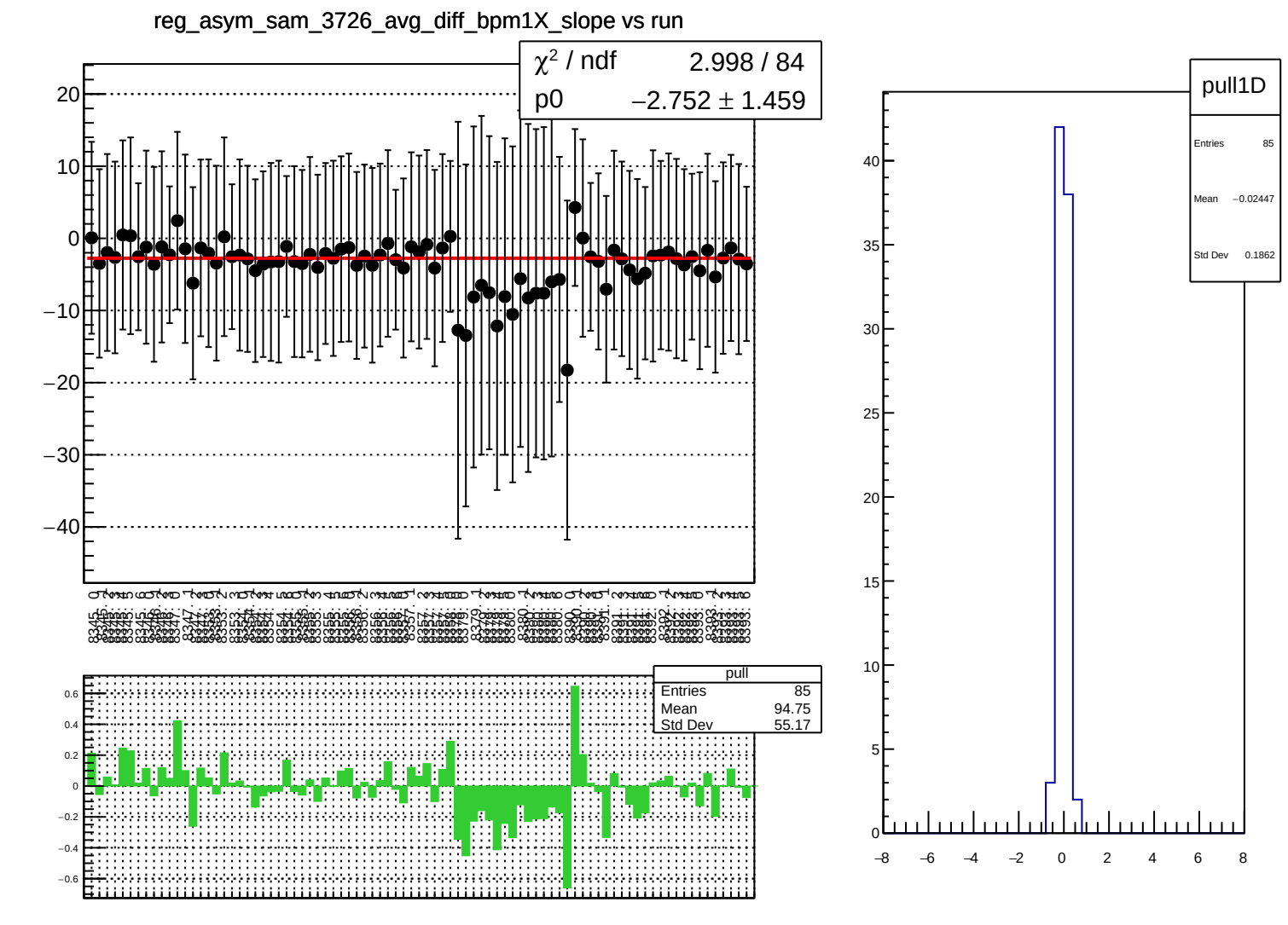

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.479 / 84
p0 0.1116 ± 1.273
pull
Entries 85
Mean −169.5
Std Dev 207.9

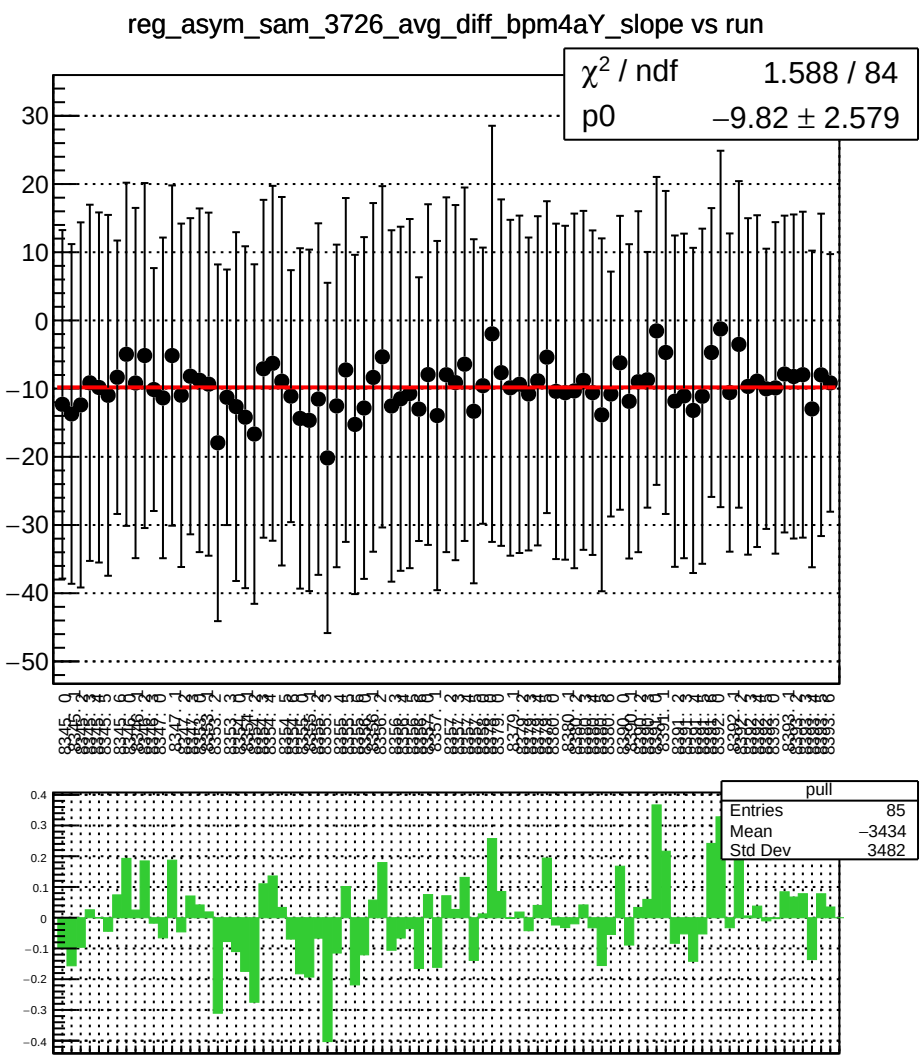

pull1D
Entries 85
Mean 0.002548
Std Dev 0.1708

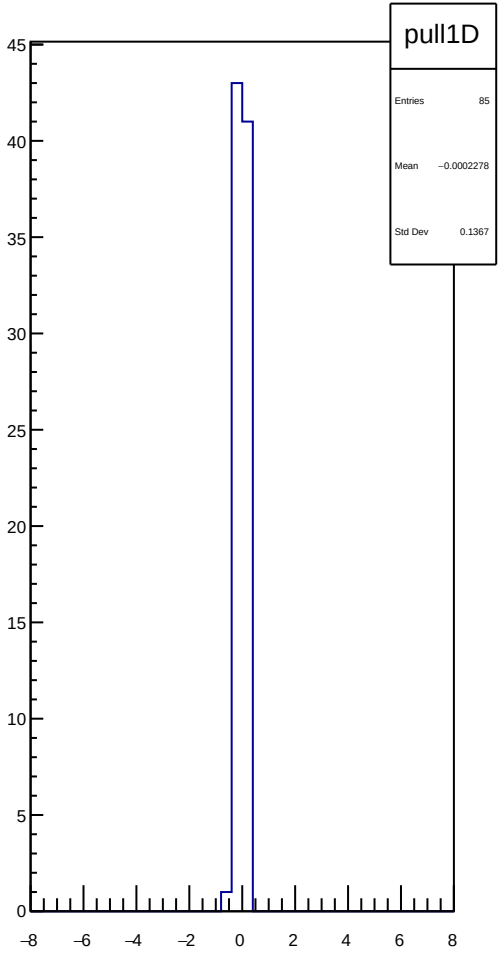

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.066 / 84
p0 −32.81 ± 0.7955
pull
Entries 85
Mean 22.85
Std Dev 11.42
pull1D
Entries 85
Mean 0.008942
Std Dev 0.2882

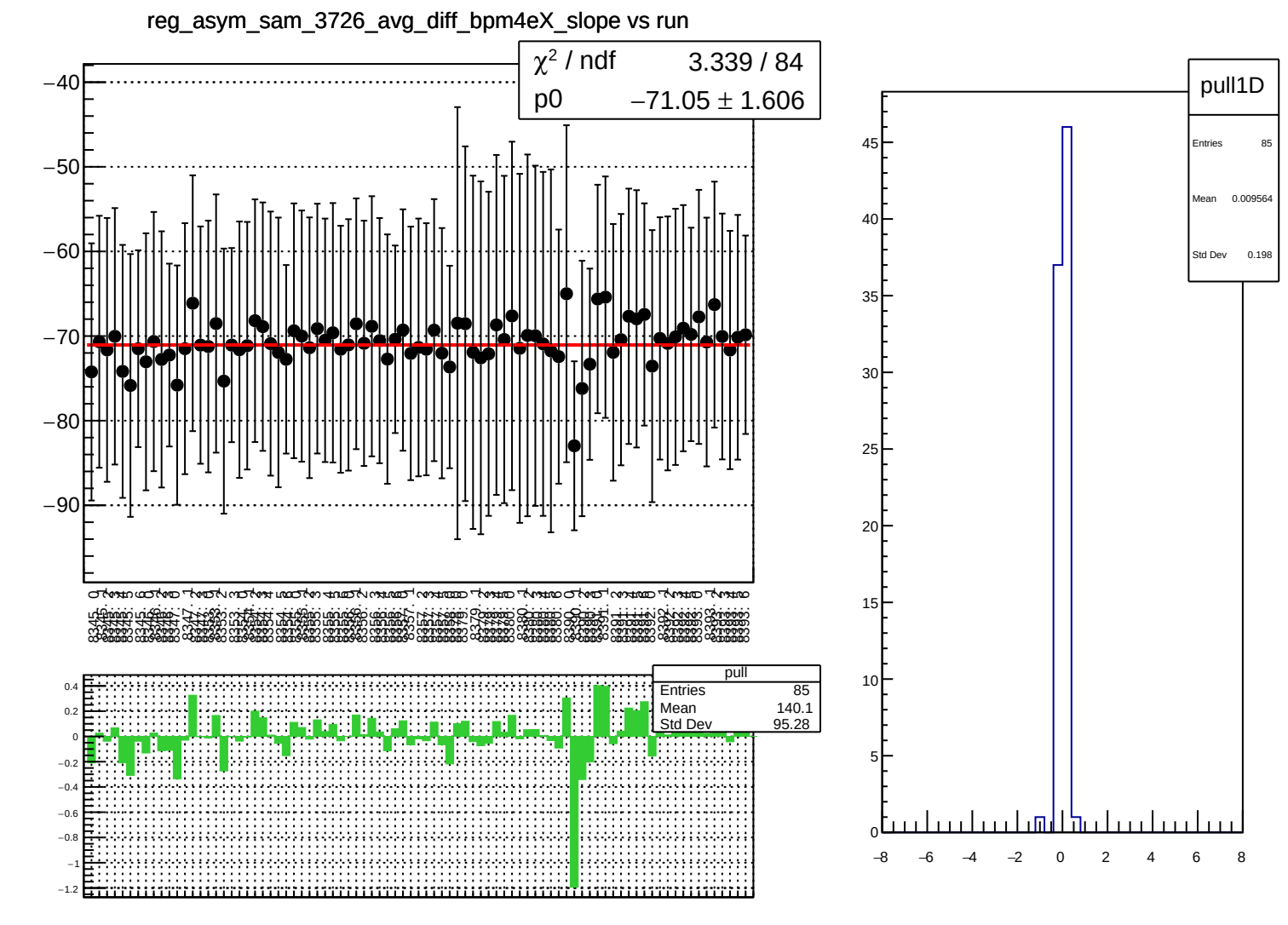

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.42 / 84
p0 6.802 ± 1.343
pull
Entries 85
Mean 273.4
Std Dev 242.6
pull1D
Entries 85
Mean −0.003782
Std Dev 0.2005

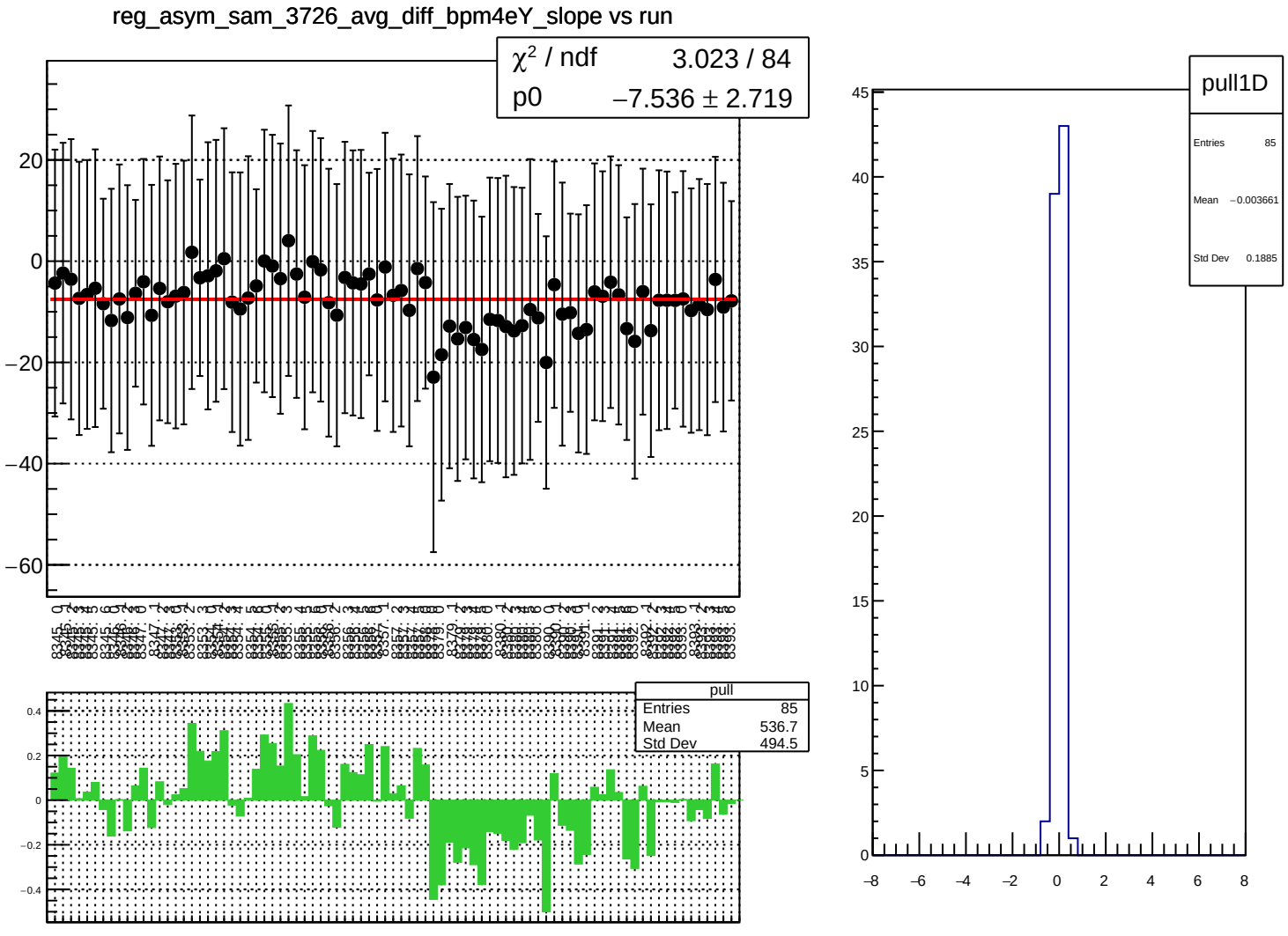

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 13.23 / 84
p0 1.198 ± 0.07595
pull
Entries 85
Mean 85.22
Std Dev 187.9
pull1D
Entries 85
Mean 0.002792
Std Dev 0.3945

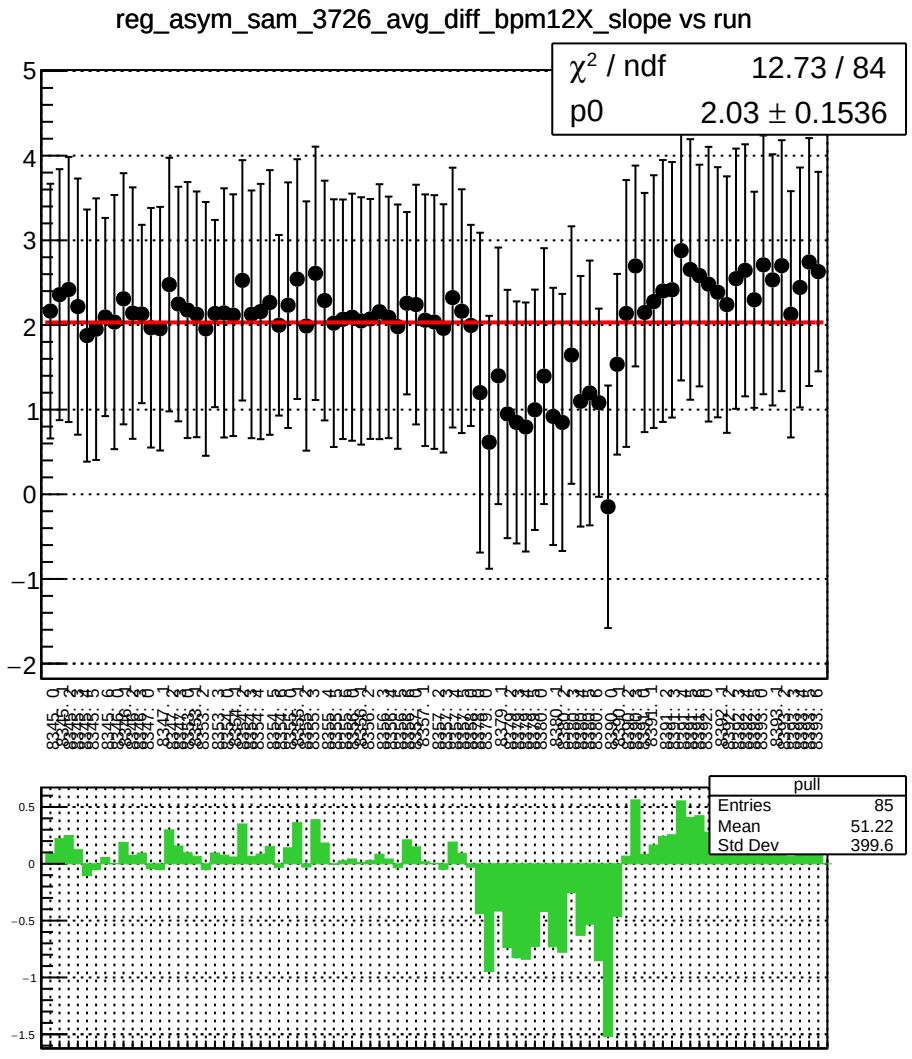

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 2.998 / 84
p0 −2.752 ± 1.459
pull
Entries 85
Mean 94.75
Std Dev 55.17
pull1D
Entries 85
Mean −0.02447
Std Dev 0.1862

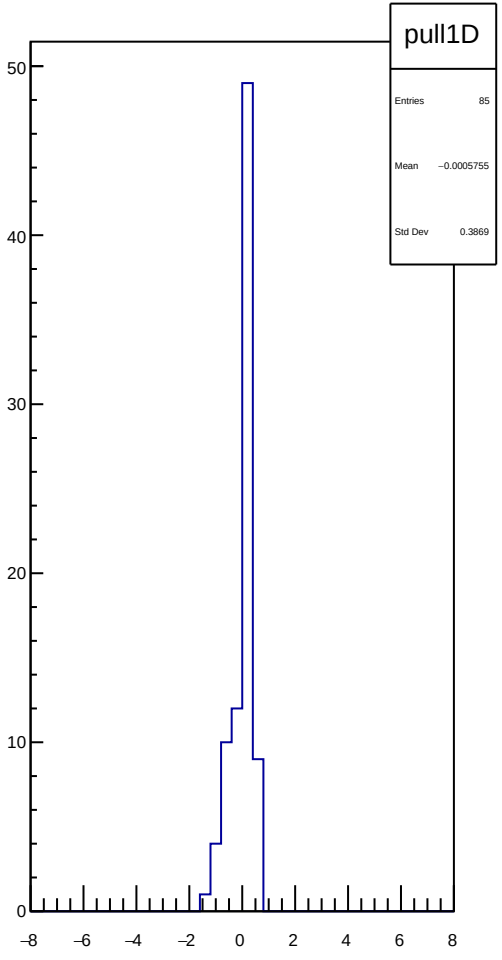

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.588 / 84
p0 −9.82 ± 2.579
pull
Entries 85
Mean −3434
Std Dev 3482

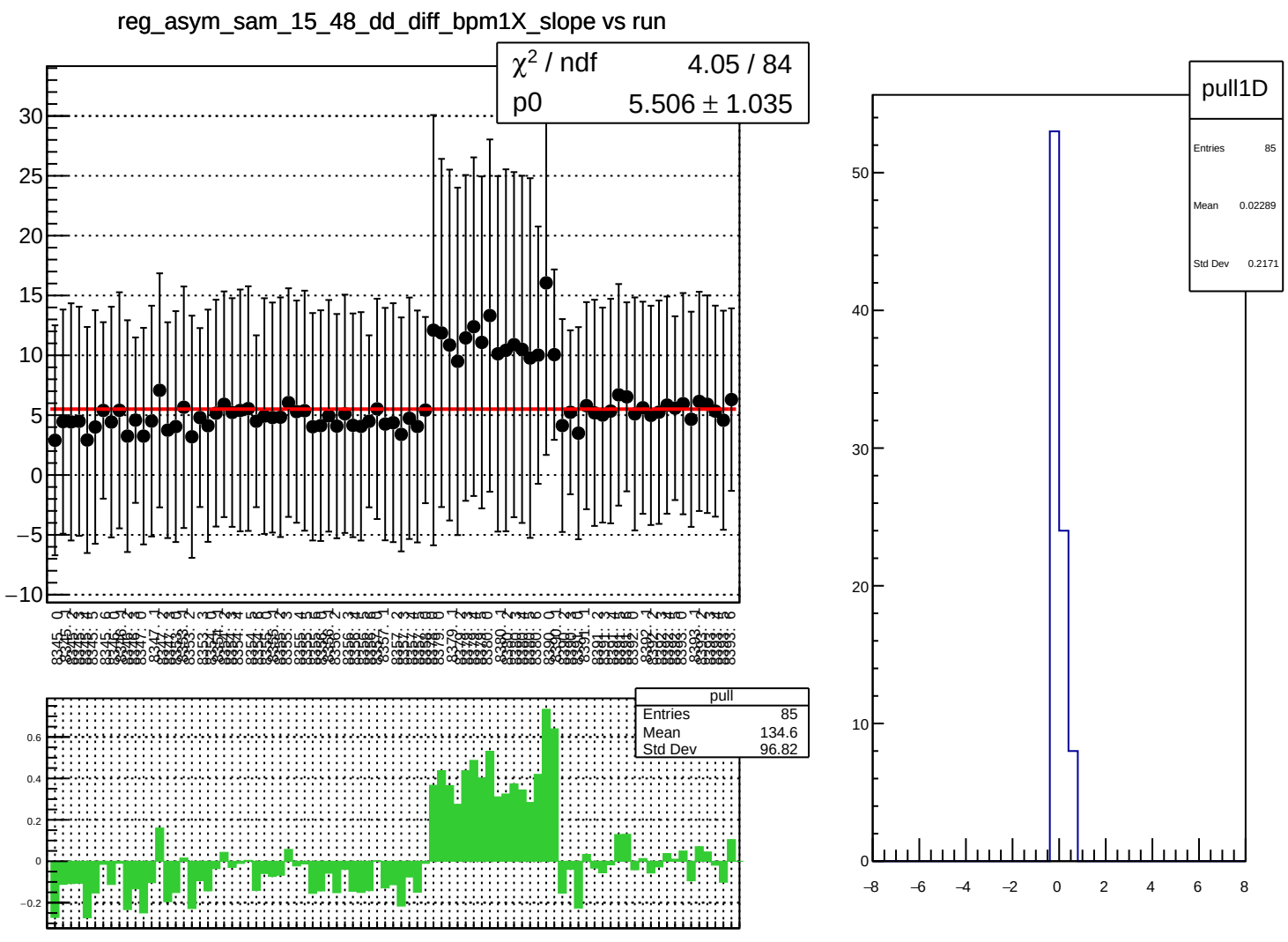

pull1D
Entries 85
Mean −0.0002278
Std Dev 0.1367

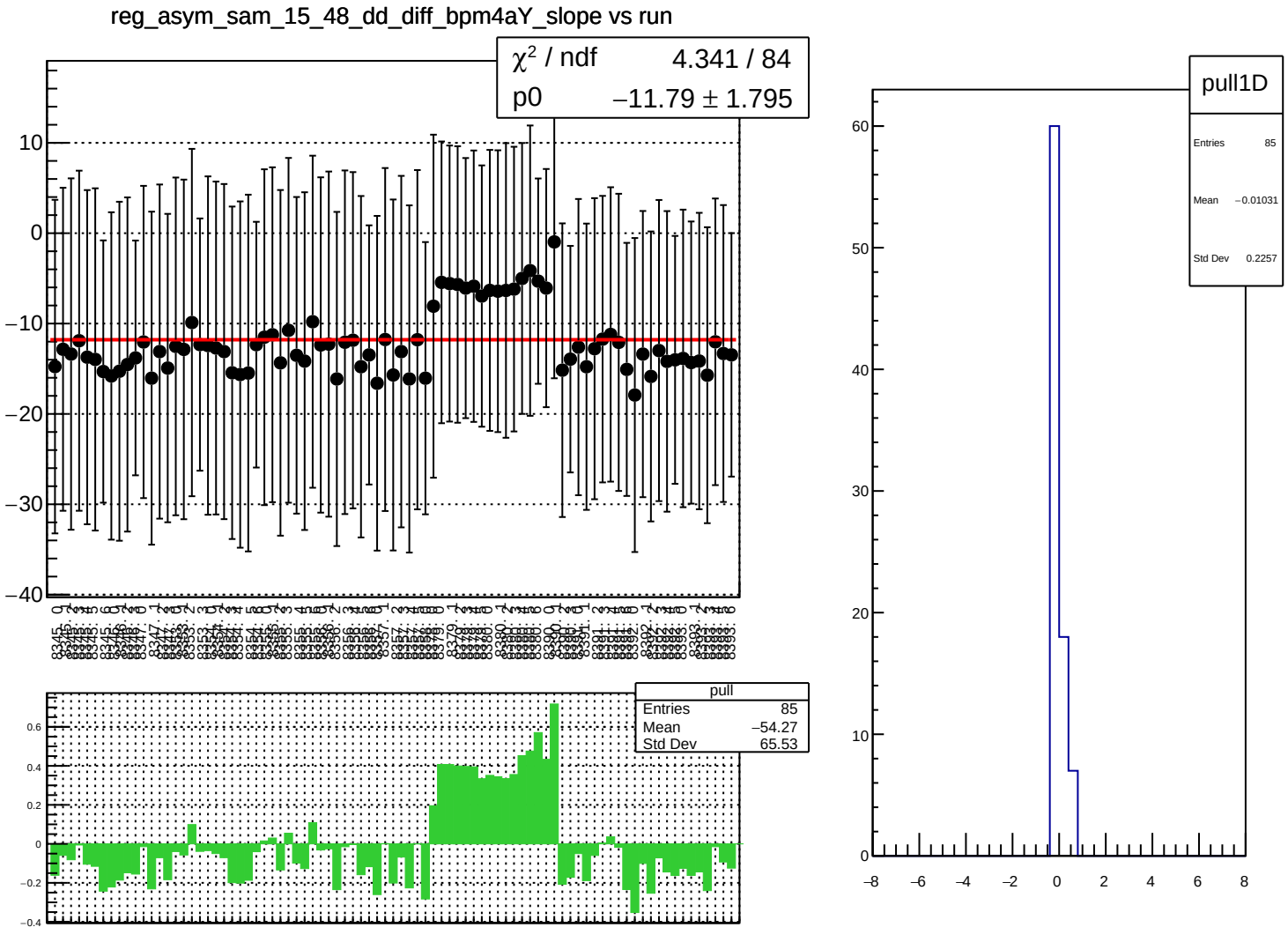

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.339 / 84
p0 −71.05 ± 1.606
pull
Entries 85
Mean 140.1
Std Dev 95.28
pull1D
Entries 85
Mean 0.009564
Std Dev 0.198

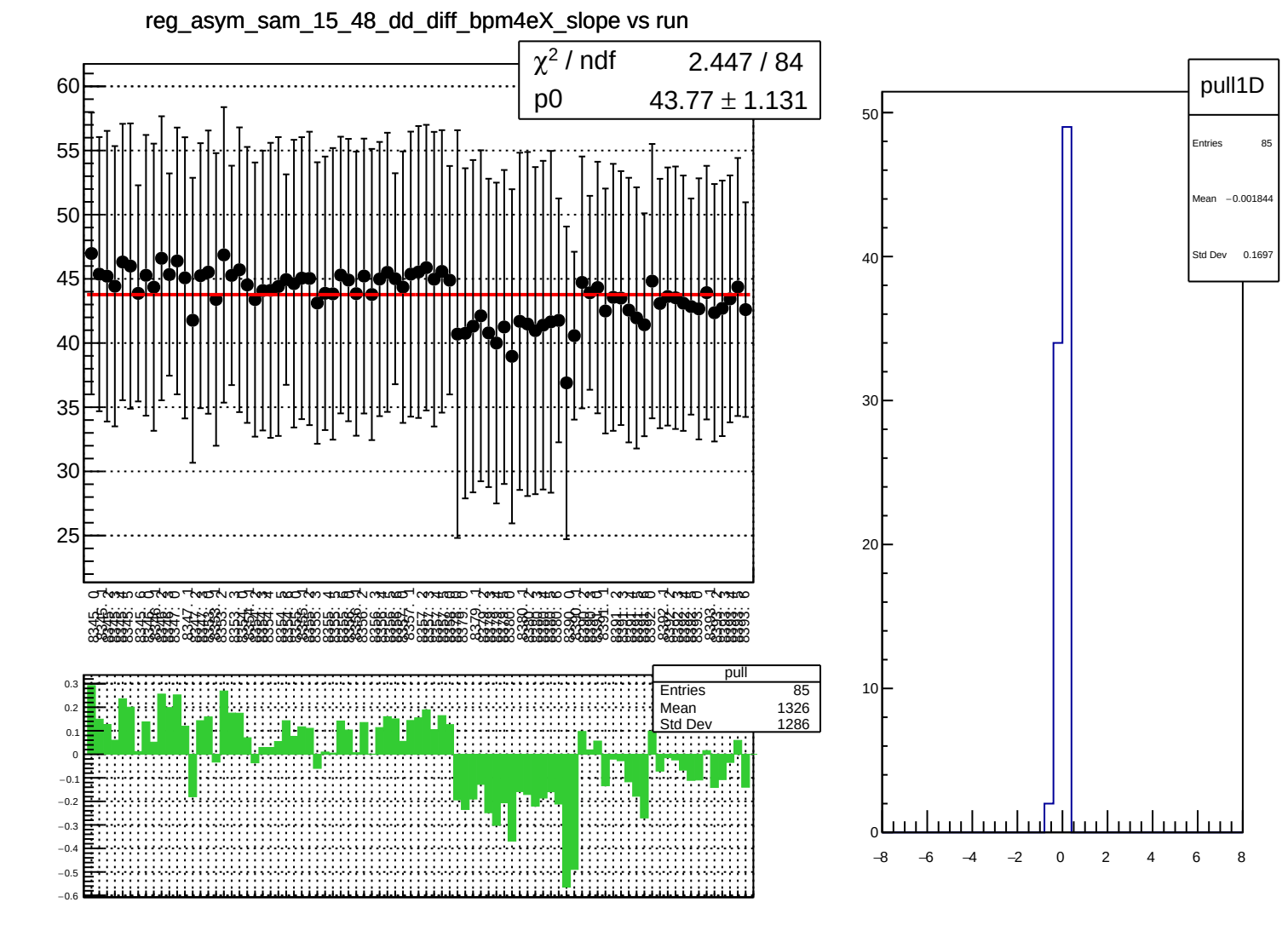

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.023 / 84
p0 −7.536 ± 2.719
20
0
−20
−40
−60
pull
Entries 85
Mean 536.7
Std Dev 494.5
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 85
Mean −0.003661
Std Dev 0.1885
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

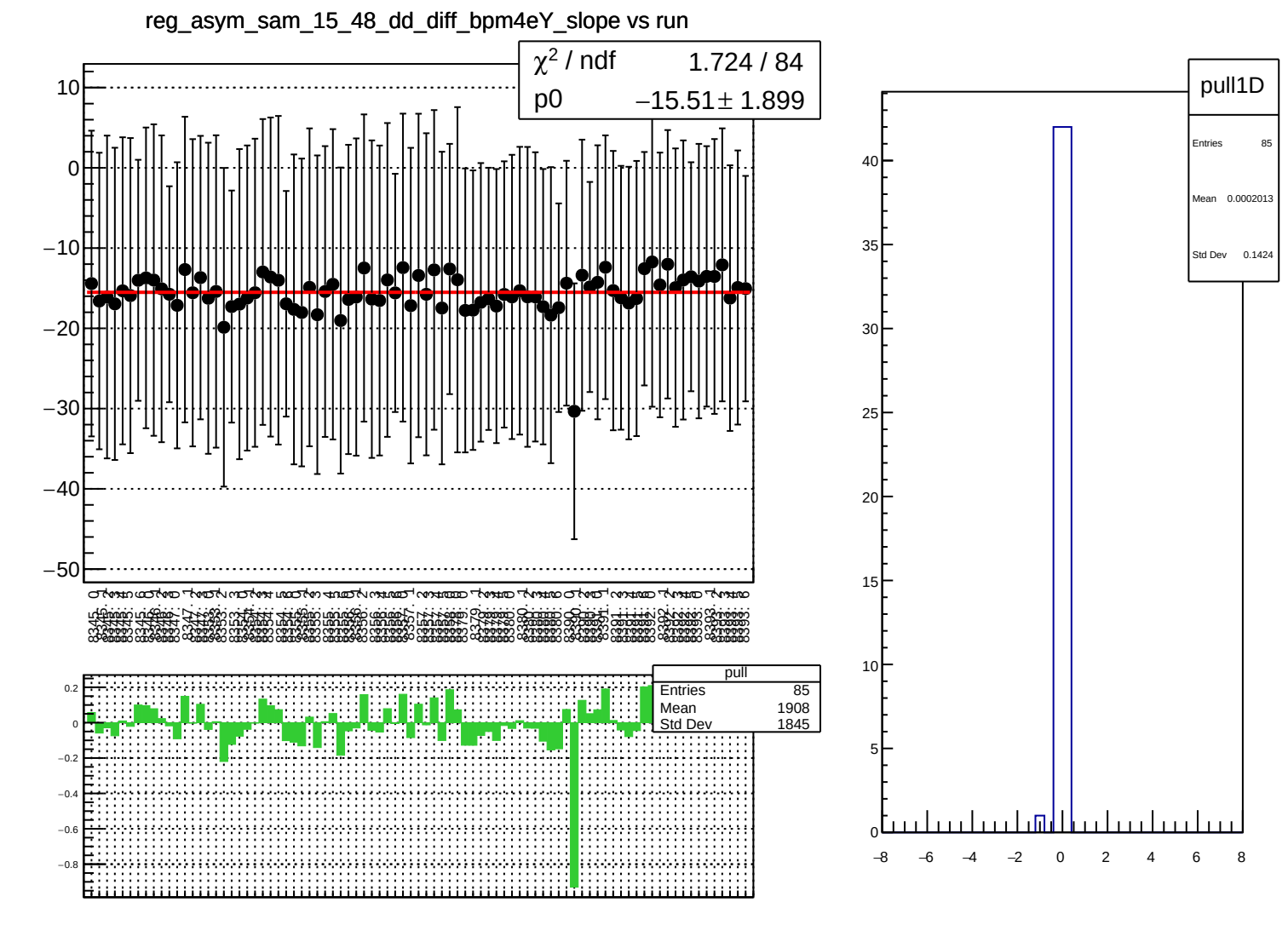

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 12.73 / 84
p0 2.03 ± 0.1536
pull
Entries 85
Mean 51.22
Std Dev 399.6

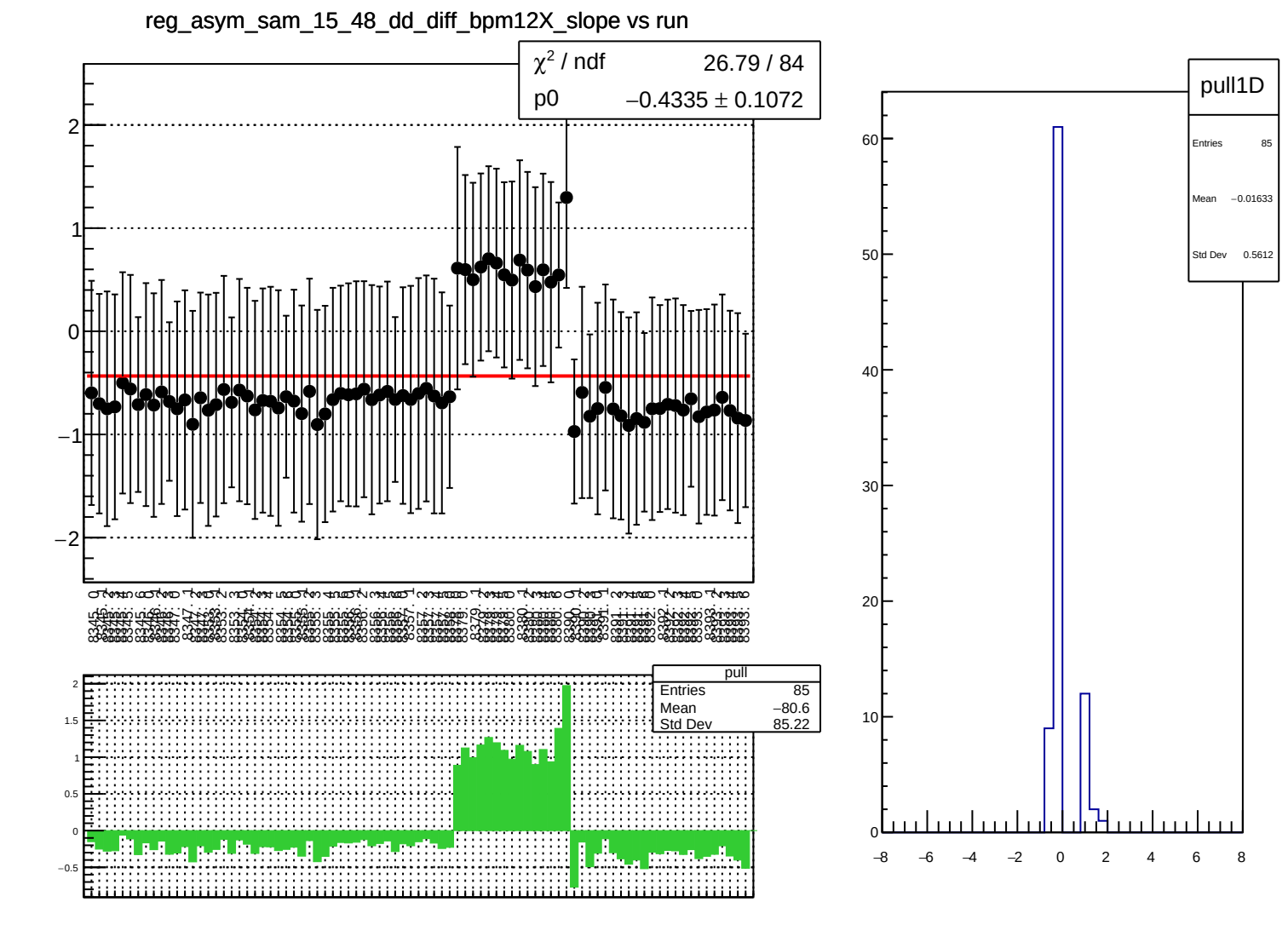

pull1D
Entries 85
Mean −0.0005755
Std Dev 0.3869

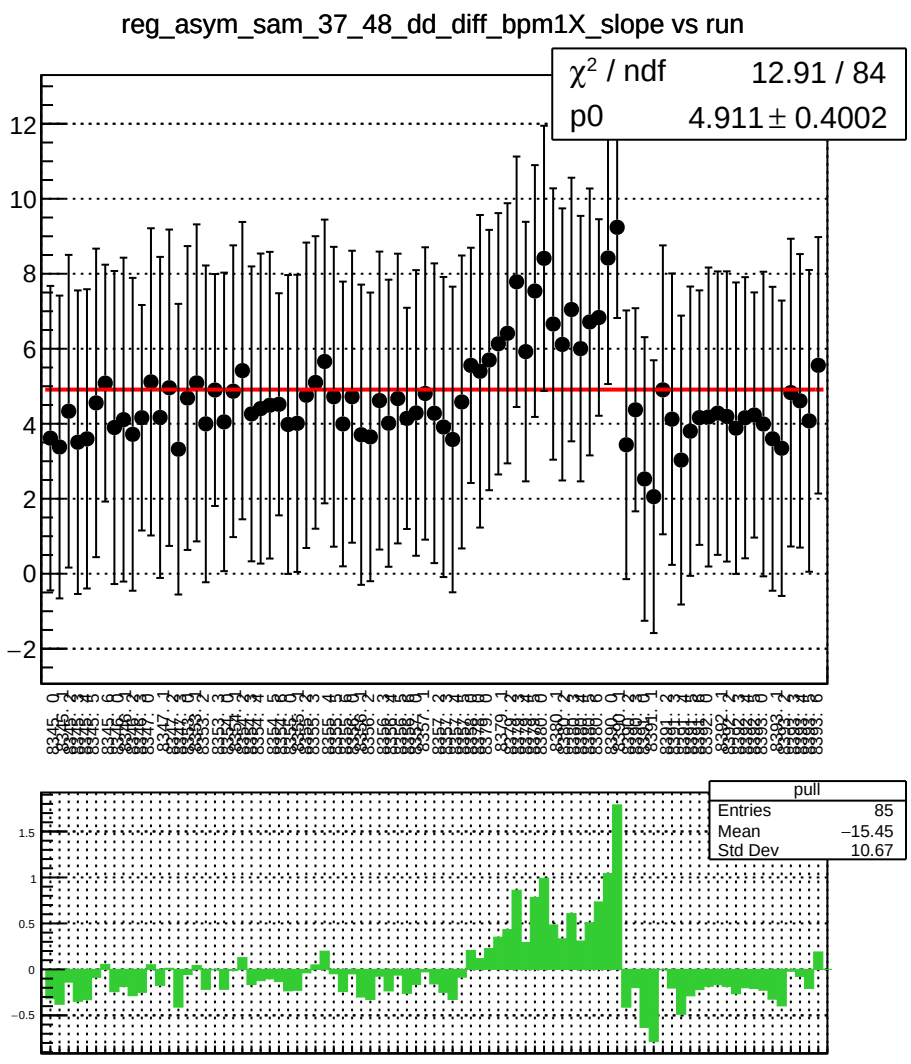

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 4.05 / 84
p0 5.506 ± 1.035
pull
Entries 85
Mean 134.6
Std Dev 96.82
pull1D
Entries 85
Mean 0.02289
Std Dev 0.2171

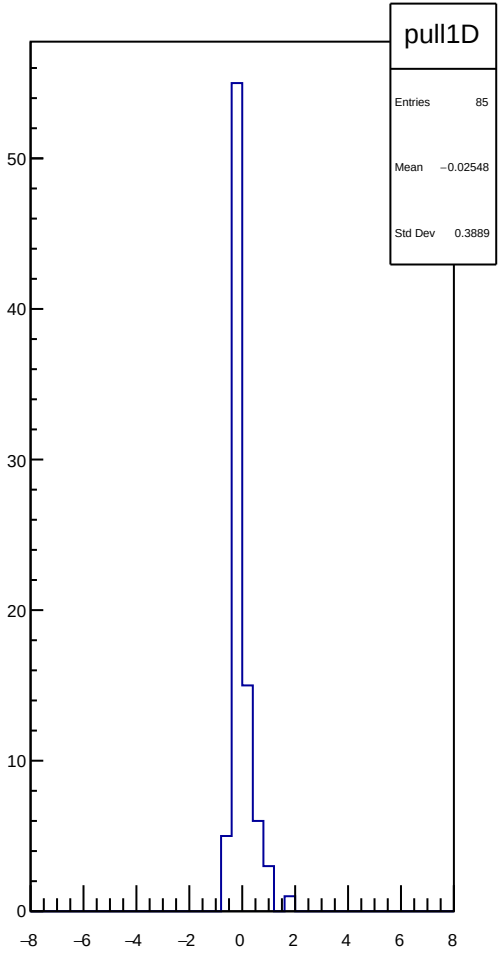

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.341 / 84
p0 −11.79 ± 1.795
pull
Entries 85
Mean −54.27
Std Dev 65.53
pull1D
Entries 85
Mean −0.01031
Std Dev 0.2257

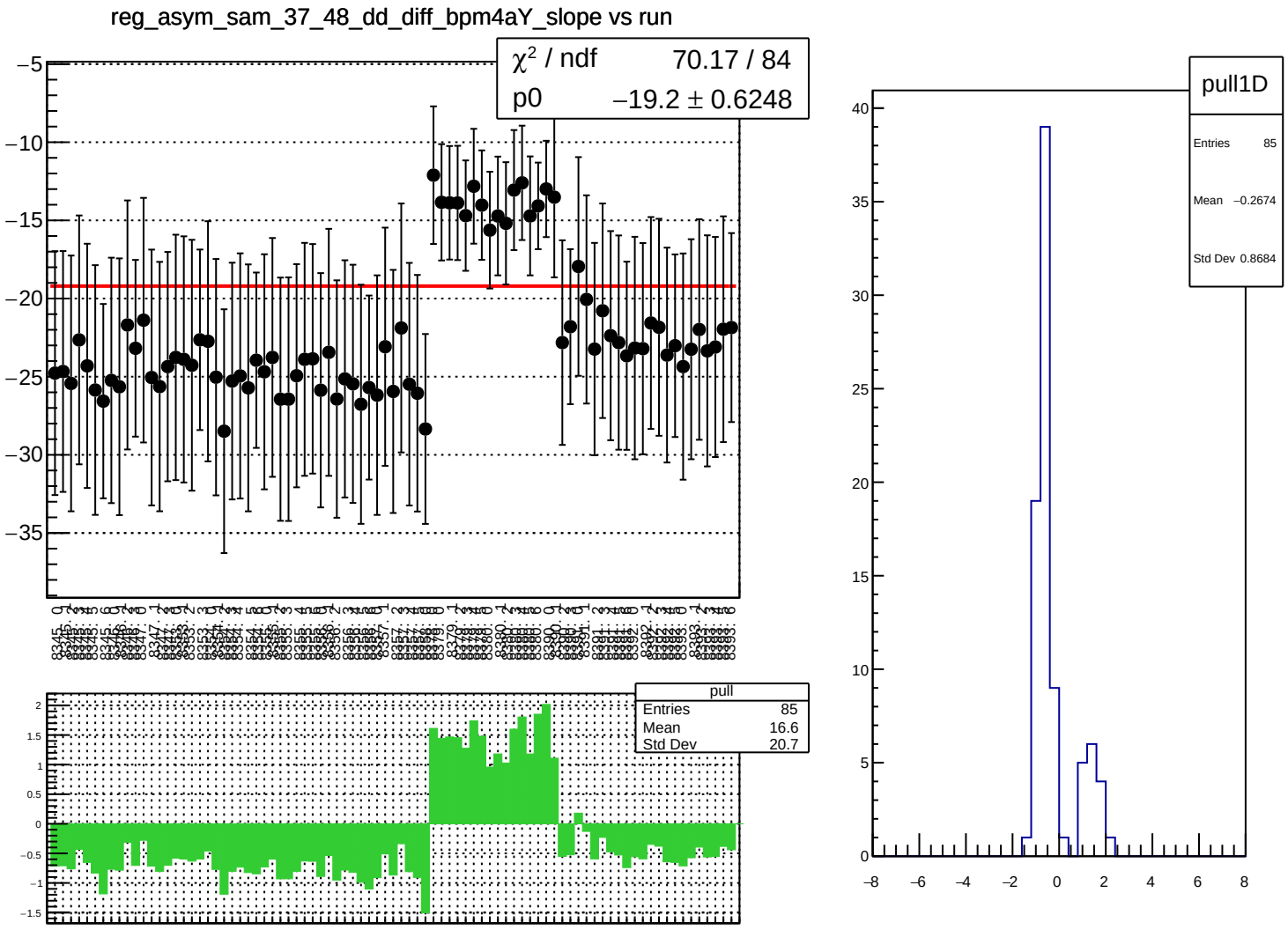

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.447 / 84
p0 43.77 ± 1.131
pull
Entries 85
Mean 1326
Std Dev 1286
pull1D
Entries 85
Mean −0.001844
Std Dev 0.1697

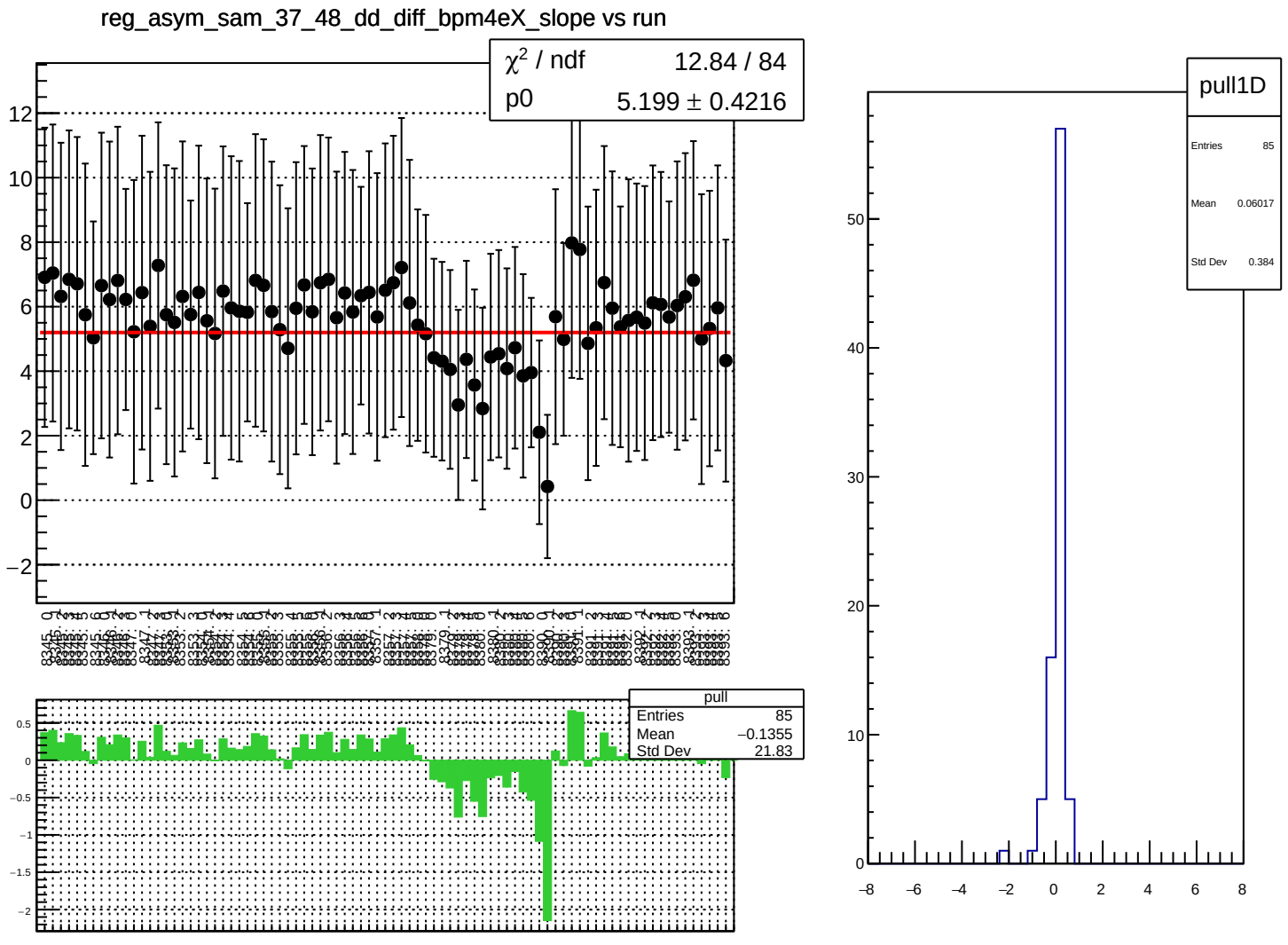

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.724 / 84
p0 −15.51± 1.899
pull
Entries 85
Mean 1908
Std Dev 1845
pull1D
Entries 85
Mean 0.0002013
Std Dev 0.1424

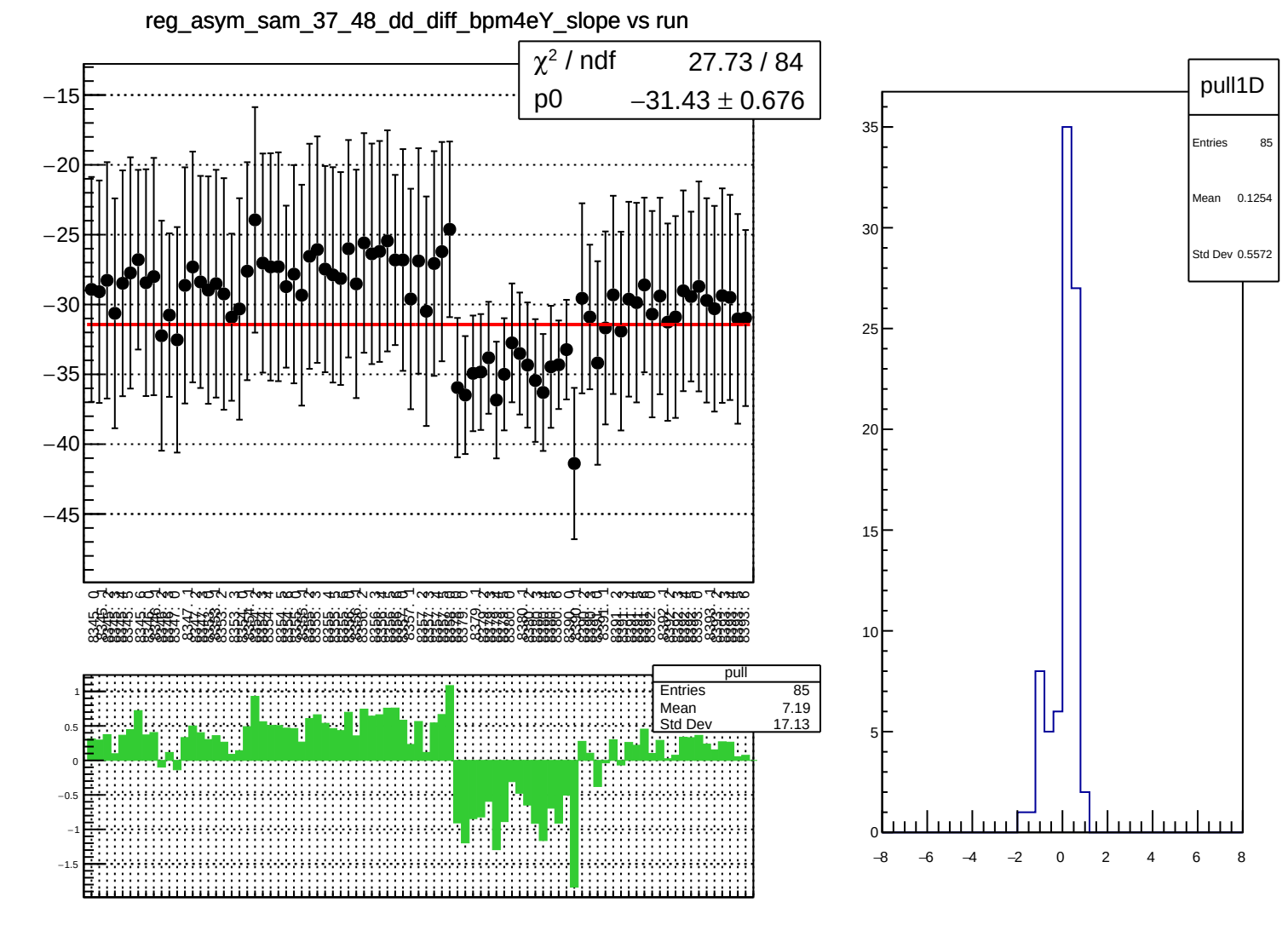

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 26.79 / 84
p0 −0.4335 ± 0.1072
pull
Entries 85
Mean −80.6
Std Dev 85.22
pull1D
Entries 85
Mean −0.01633
Std Dev 0.5612

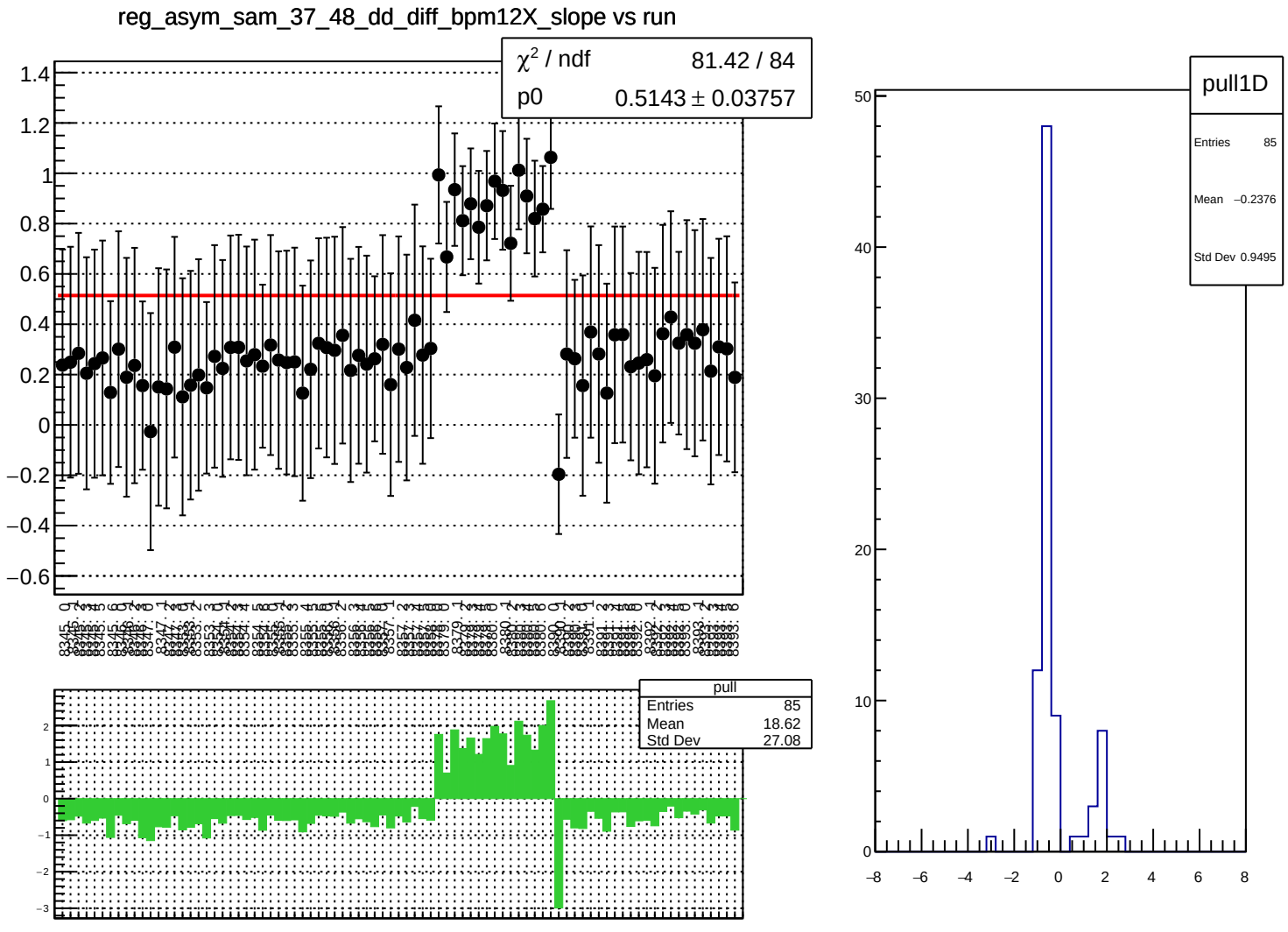

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 12.91 / 84
p0 4.911 ± 0.4002
pull
Entries 85
Mean −15.45
Std Dev 10.67

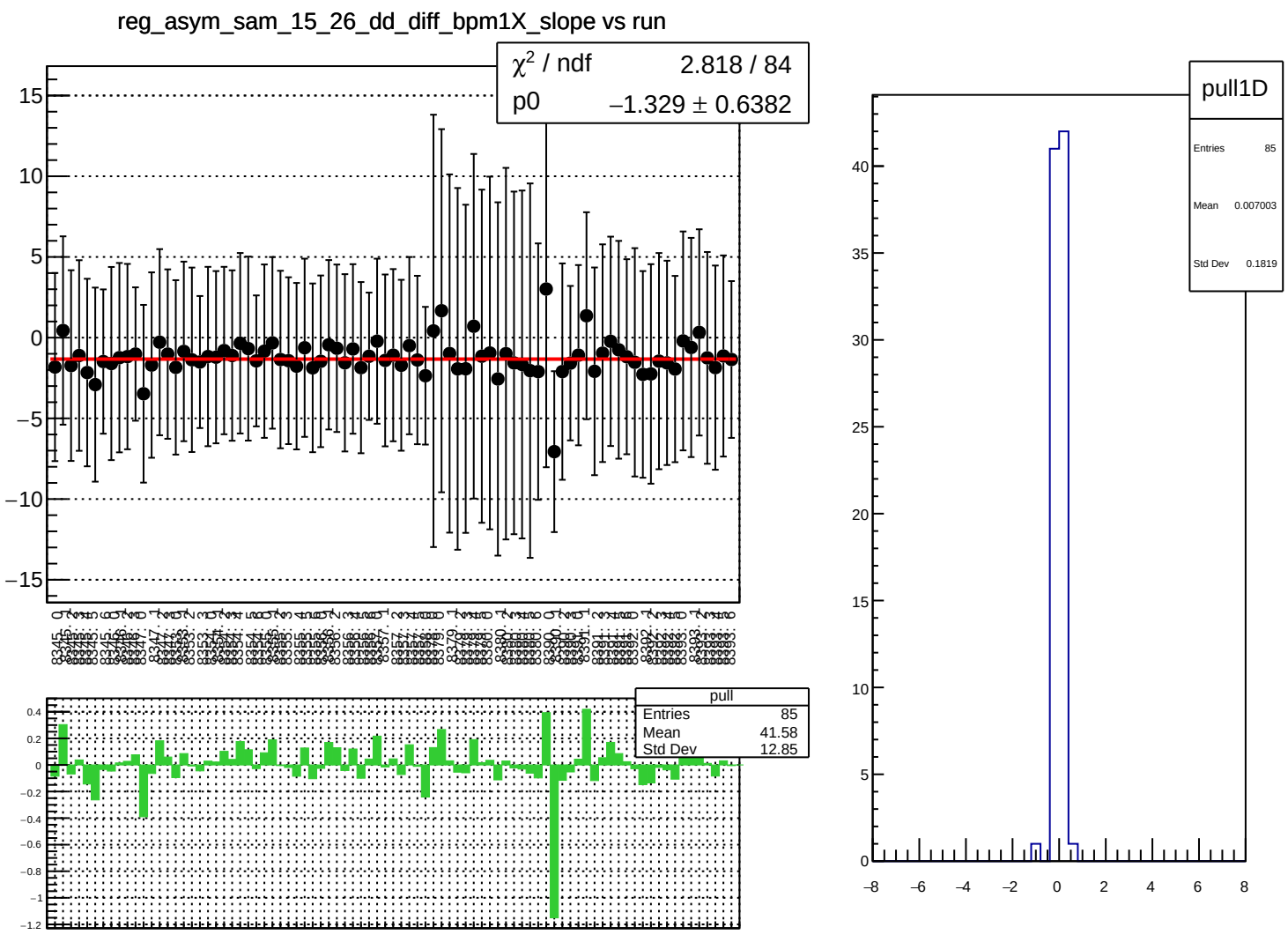

pull1D
Entries 85
Mean −0.02548
Std Dev 0.3889

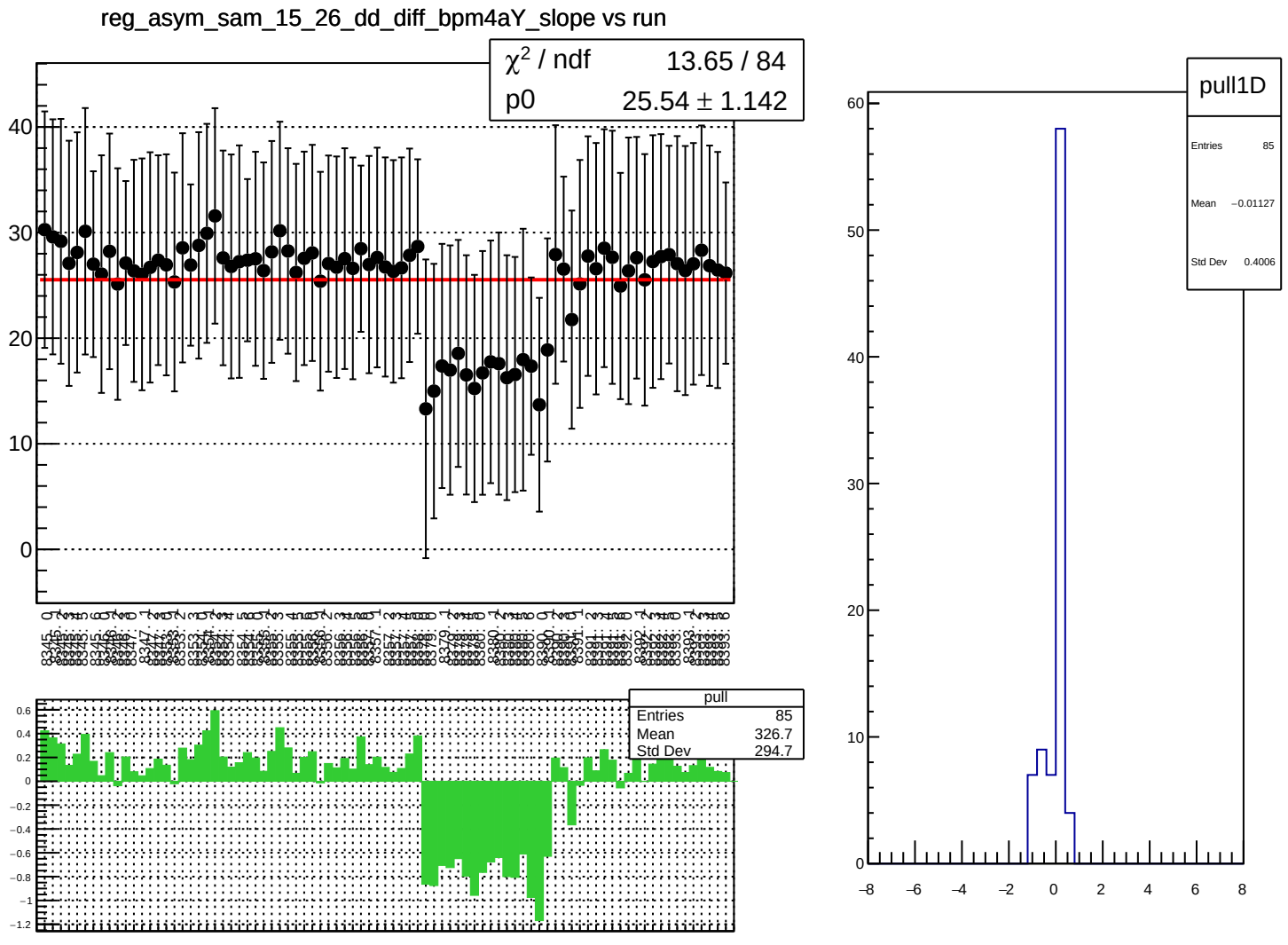

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 70.17 / 84
p0 −19.2 ± 0.6248
pull
Entries 85
Mean 16.6
Std Dev 20.7
pull1D
Entries 85
Mean −0.2674
Std Dev 0.8684

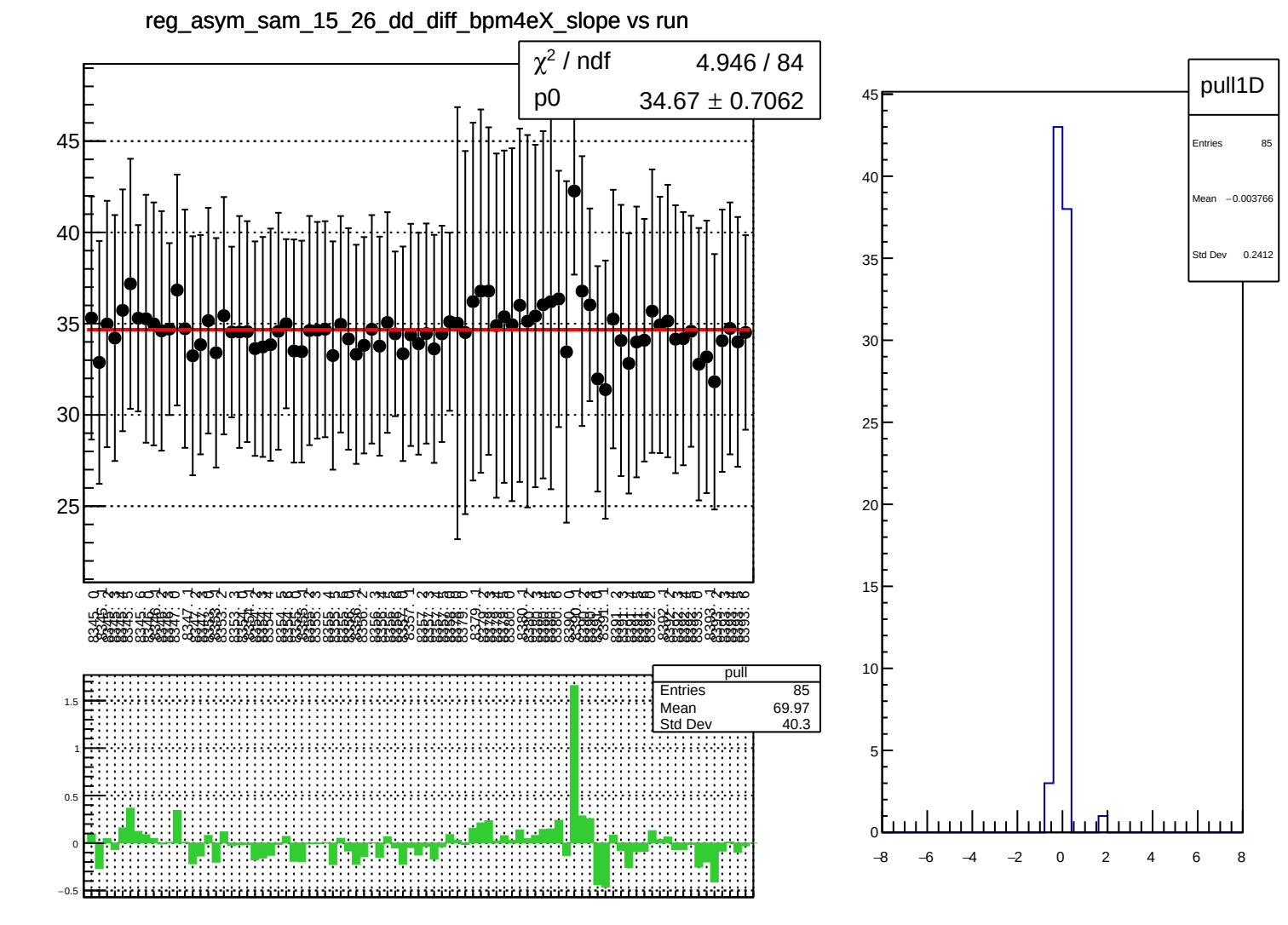

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.84 / 84
p0 5.199 ± 0.4216
pull
Entries 85
Mean −0.1355
Std Dev 21.83
pull1D
Entries 85
Mean 0.06017
Std Dev 0.384

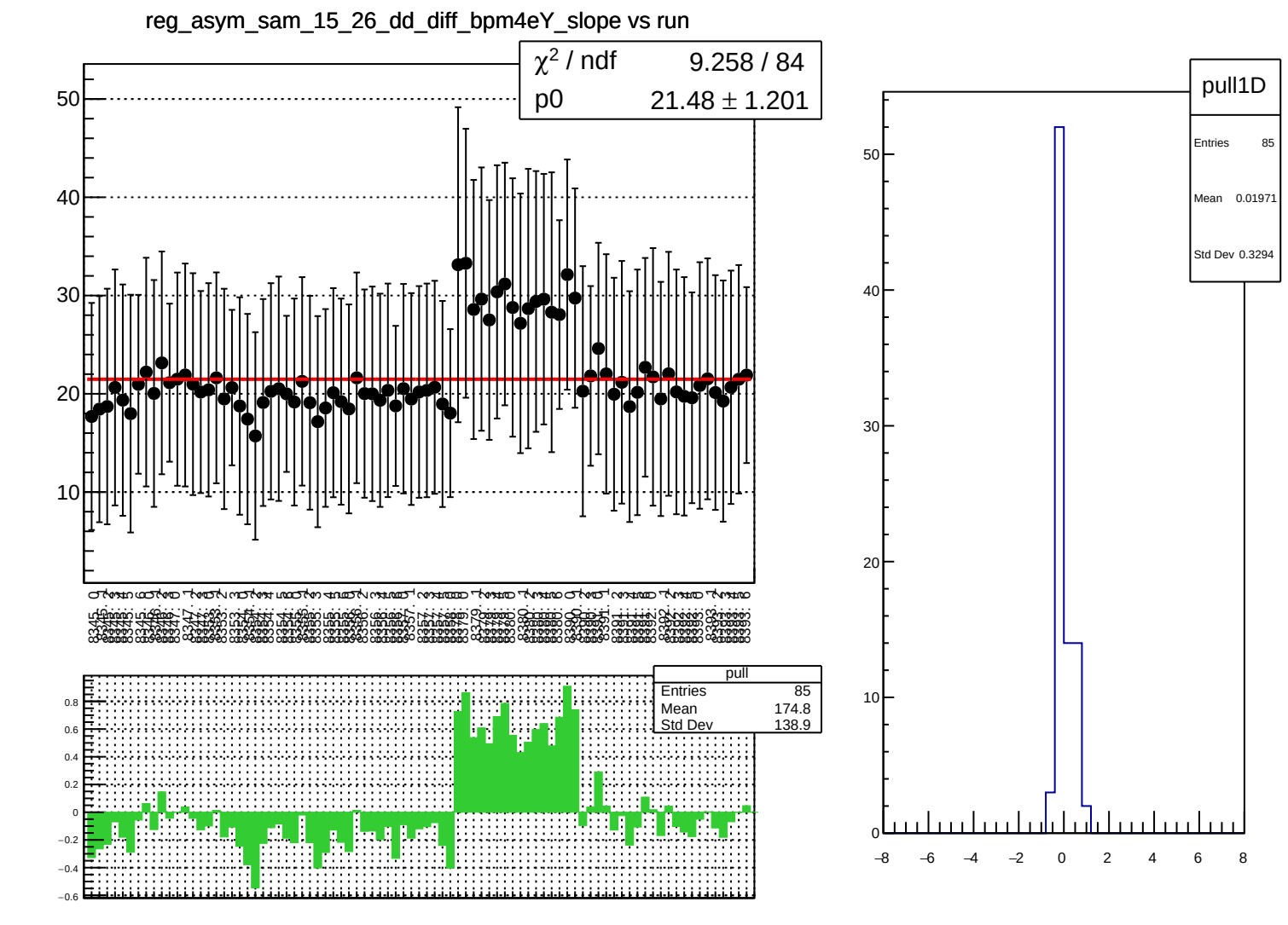

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 27.73 / 84
p0 −31.43 ± 0.676
pull
Entries 85
Mean 7.19
Std Dev 17.13
pull1D
Entries 85
Mean 0.1254
Std Dev 0.5572

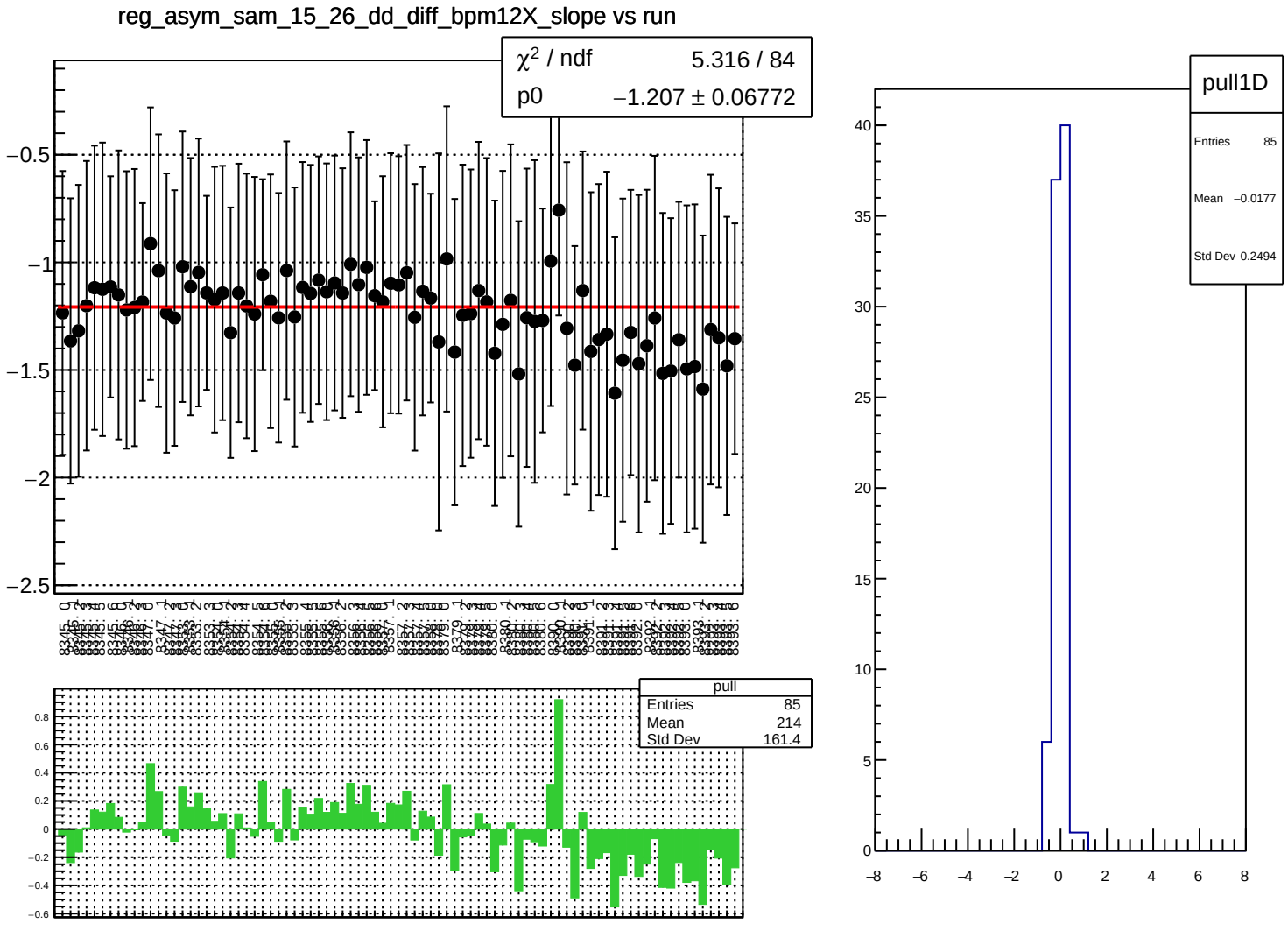

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 81.42 / 84
p0 0.5143 ± 0.03757
pull
Entries 85
Mean 18.62
Std Dev 27.08
pull1D
Entries 85
Mean −0.2376
Std Dev 0.9495

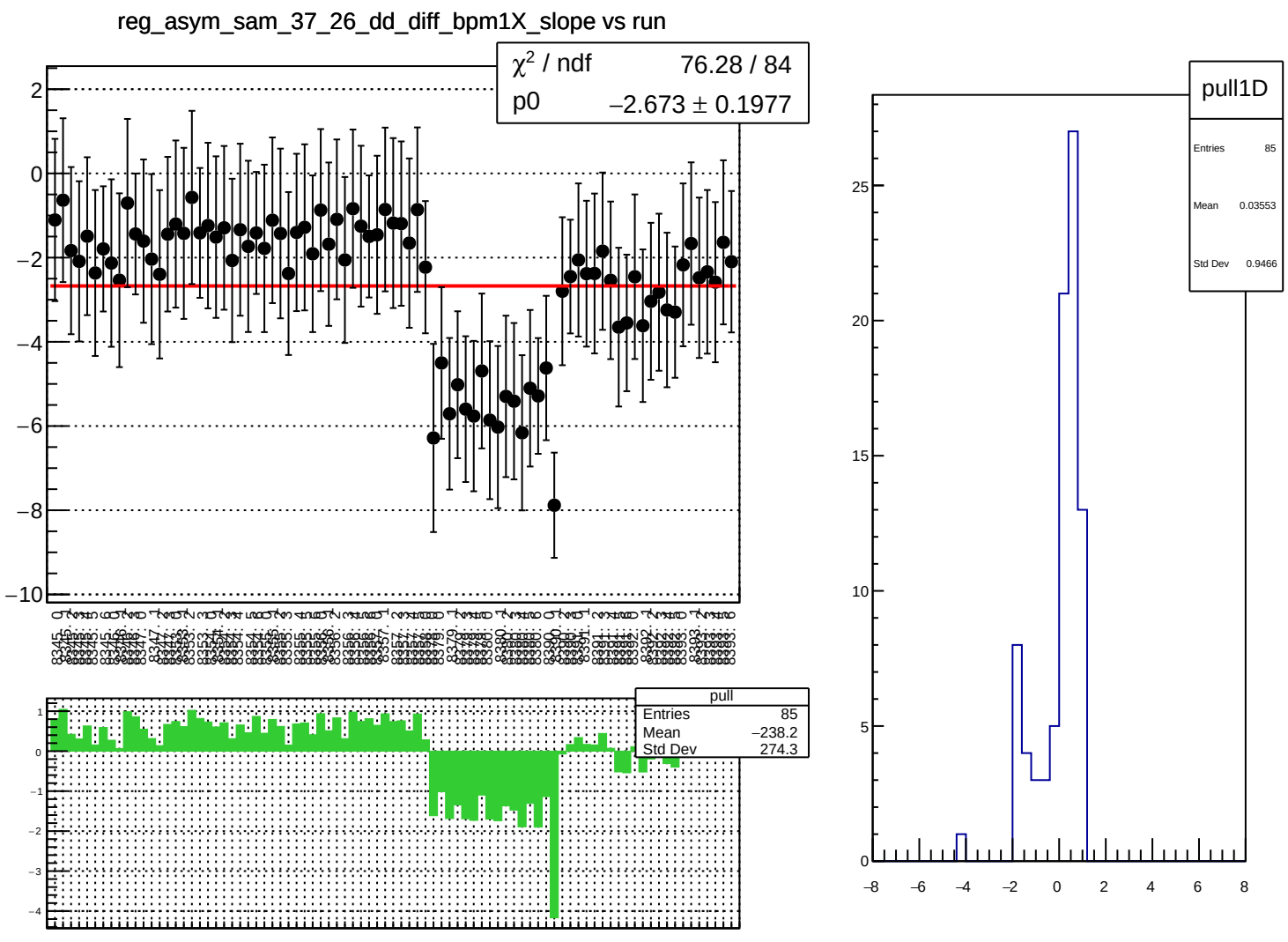

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 2.818 / 84
p0 −1.329 ± 0.6382
pull
Entries 85
Mean 41.58
Std Dev 12.85
pull1D
Entries 85
Mean 0.007003
Std Dev 0.1819

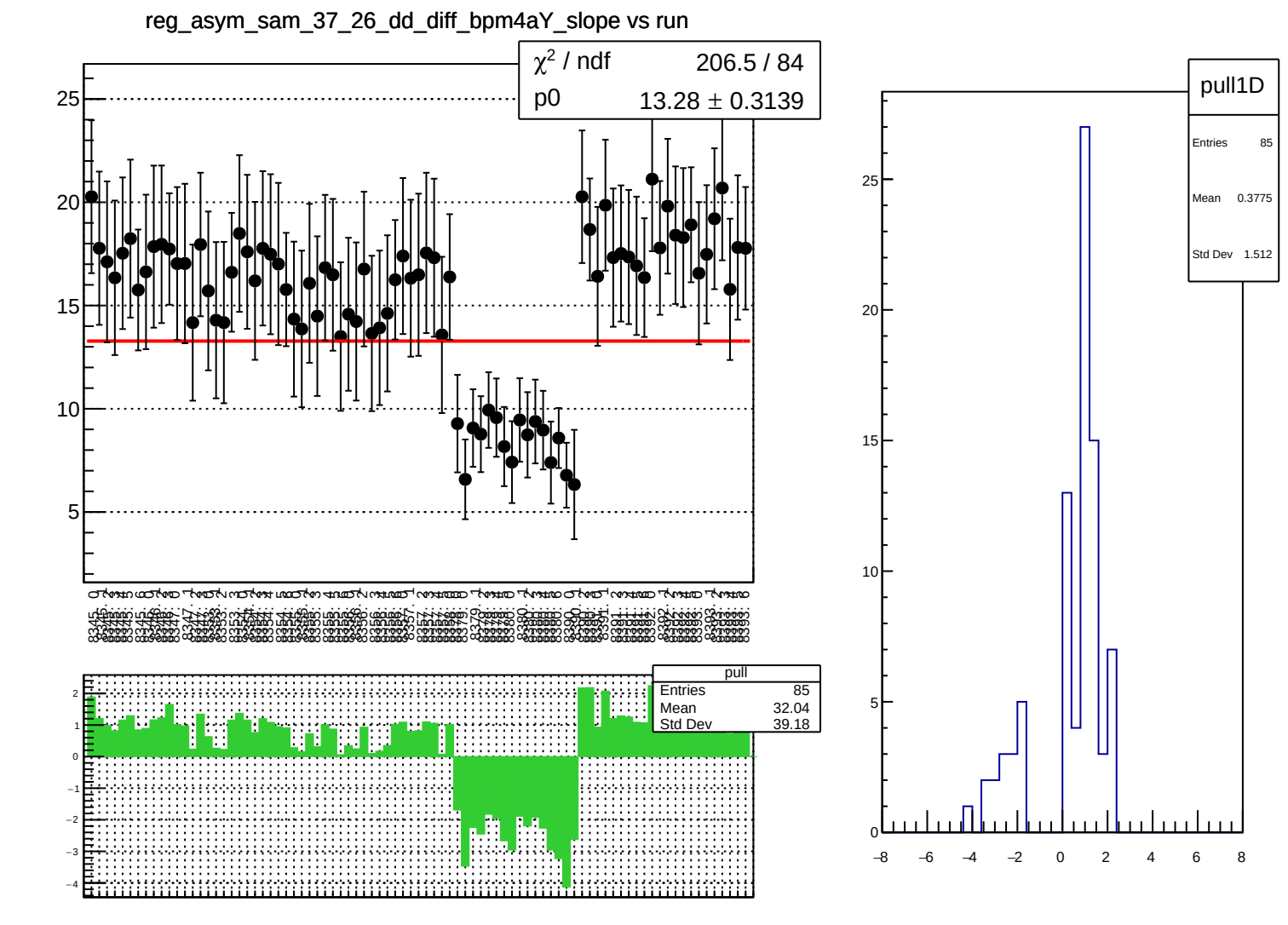

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.65 / 84
p0 25.54 ± 1.142
pull
Entries 85
Mean 326.7
Std Dev 294.7
pull1D
Entries 85
Mean −0.01127
Std Dev 0.4006

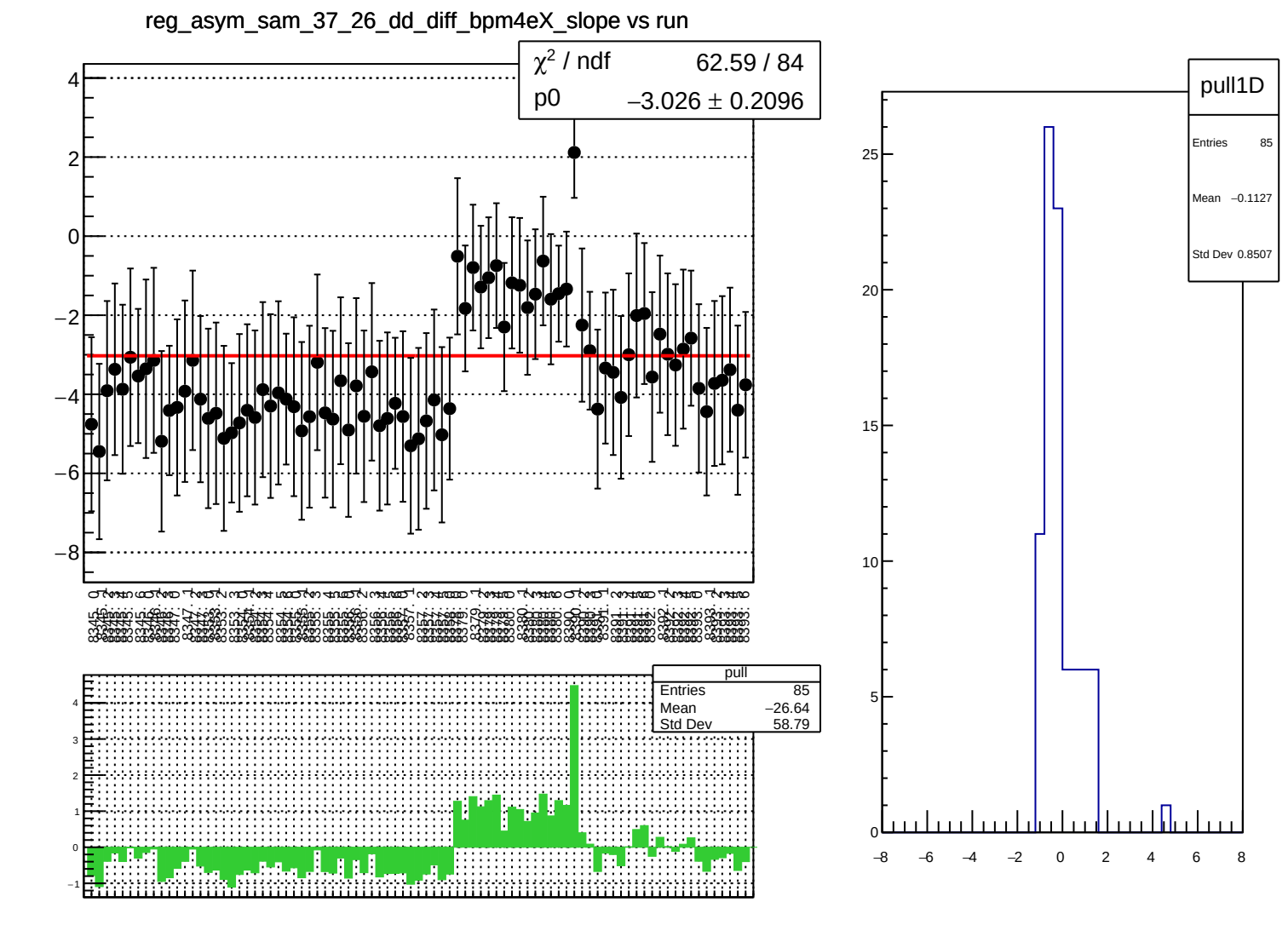

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.946 / 84
p0 34.67 ± 0.7062
pull
Entries 85
Mean 69.97
Std Dev 40.3
pull1D
Entries 85
Mean −0.003766
Std Dev 0.2412

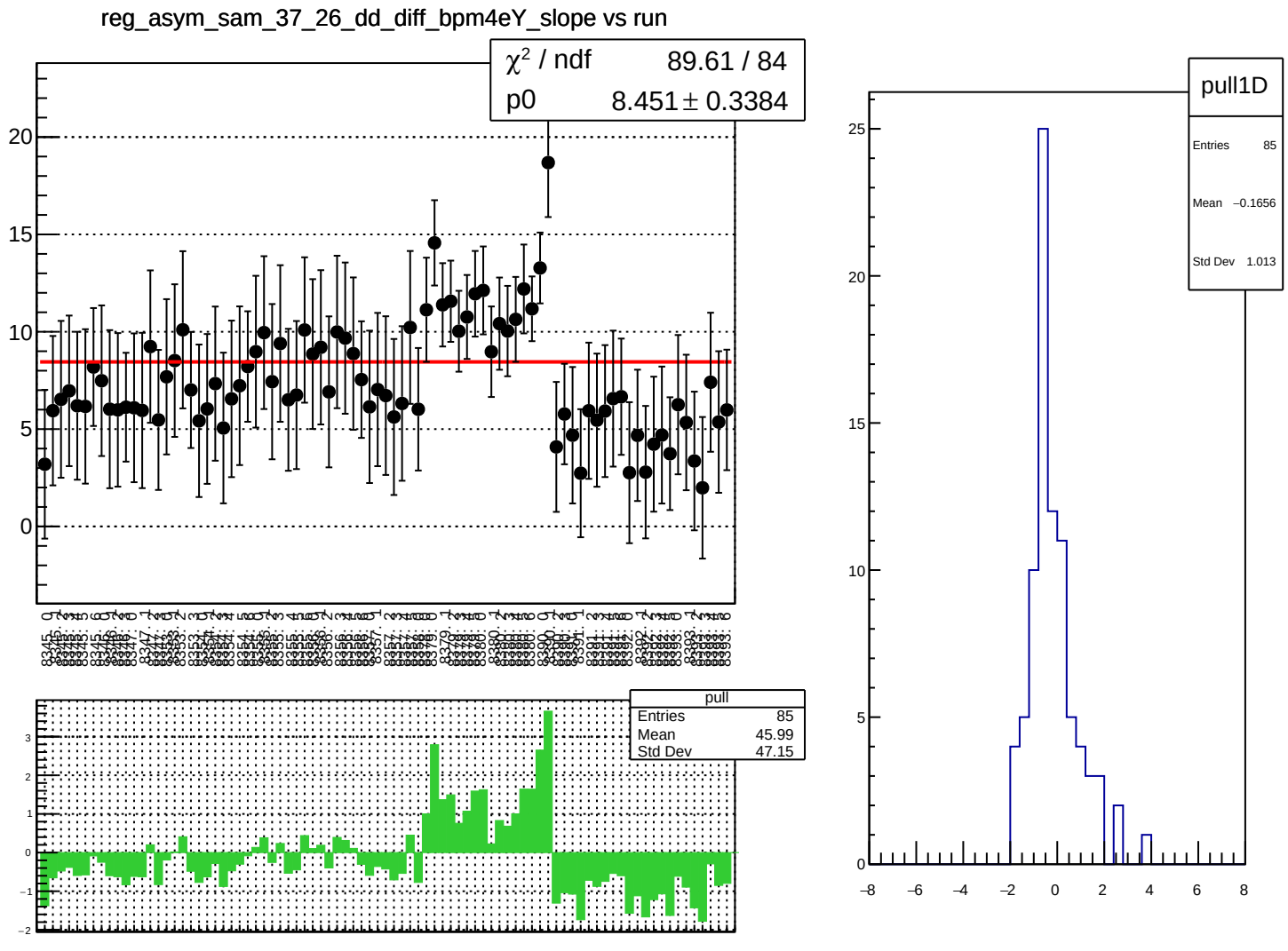

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 9.258 / 84
p0 21.48 ± 1.201
pull
Entries 85
Mean 174.8
Std Dev 138.9
pull1D
Entries 85
Mean 0.01971
Std Dev 0.3294

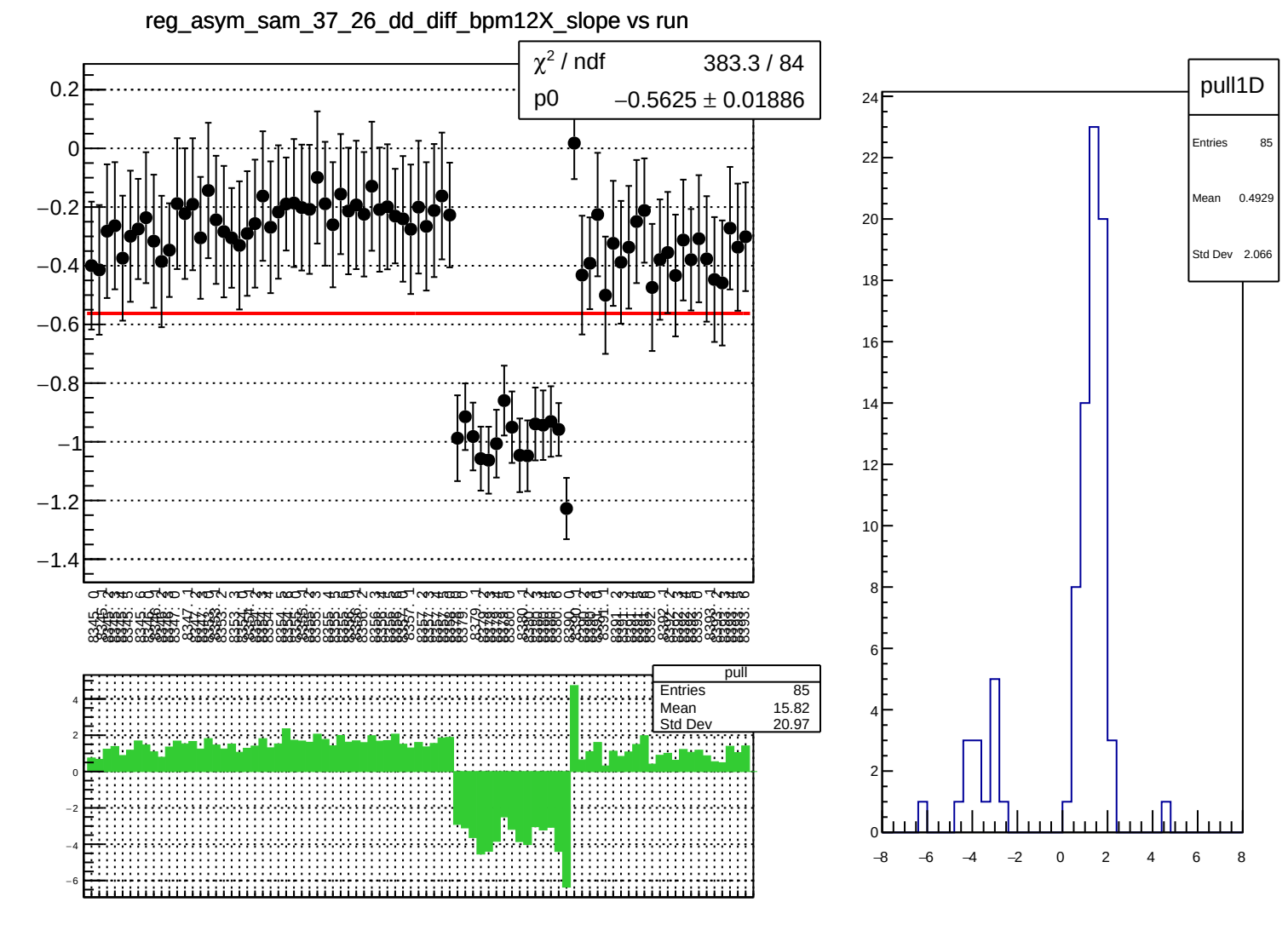

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 5.316 / 84
p0 −1.207 ± 0.06772
pull
Entries 85
Mean 214
Std Dev 161.4
pull1D
Entries 85
Mean −0.0177
Std Dev 0.2494

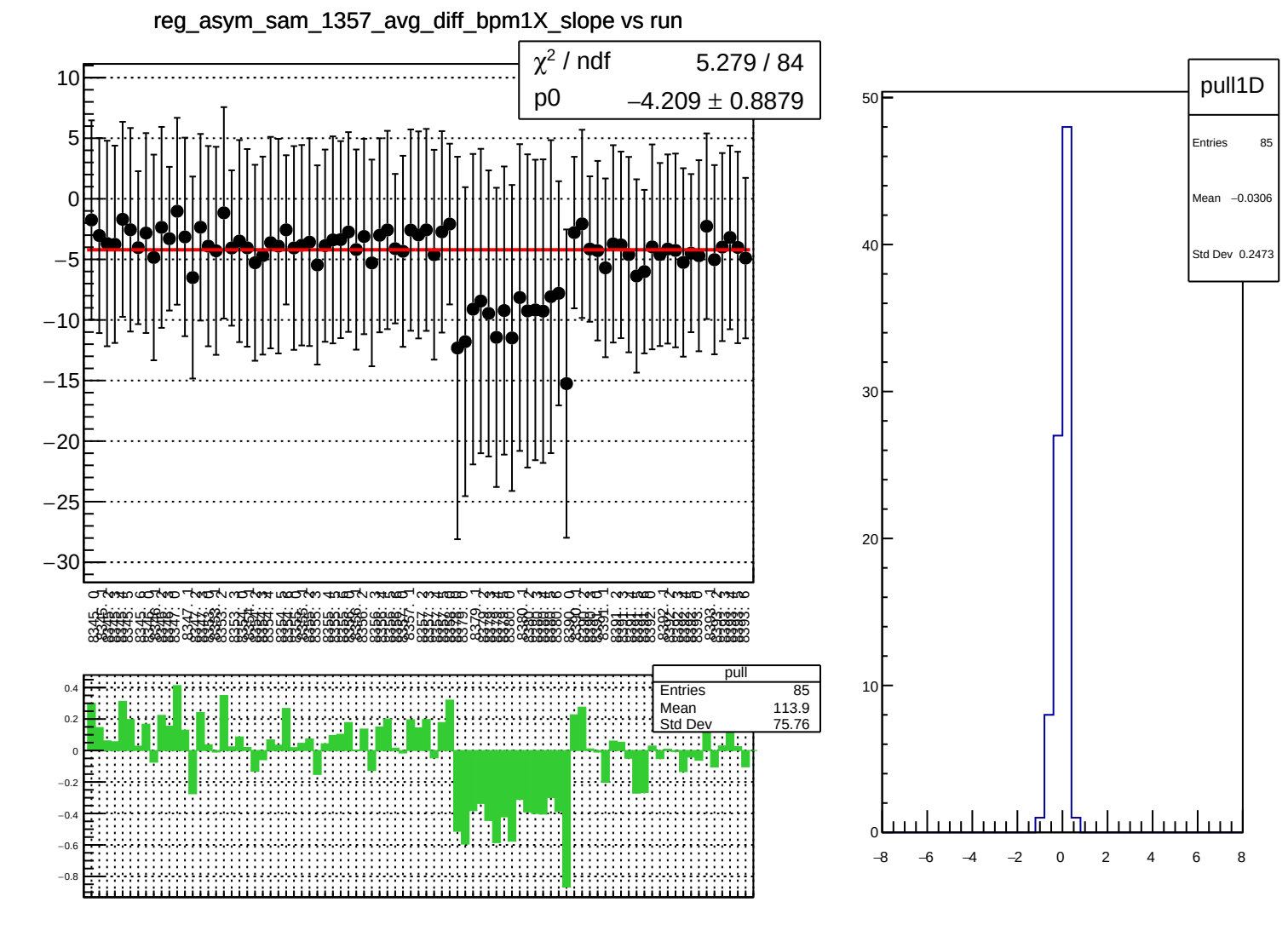

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 76.28 / 84
p0 −2.673 ± 0.1977
pull
Entries 85
Mean −238.2
Std Dev 274.3
pull1D
Entries 85
Mean 0.03553
Std Dev 0.9466

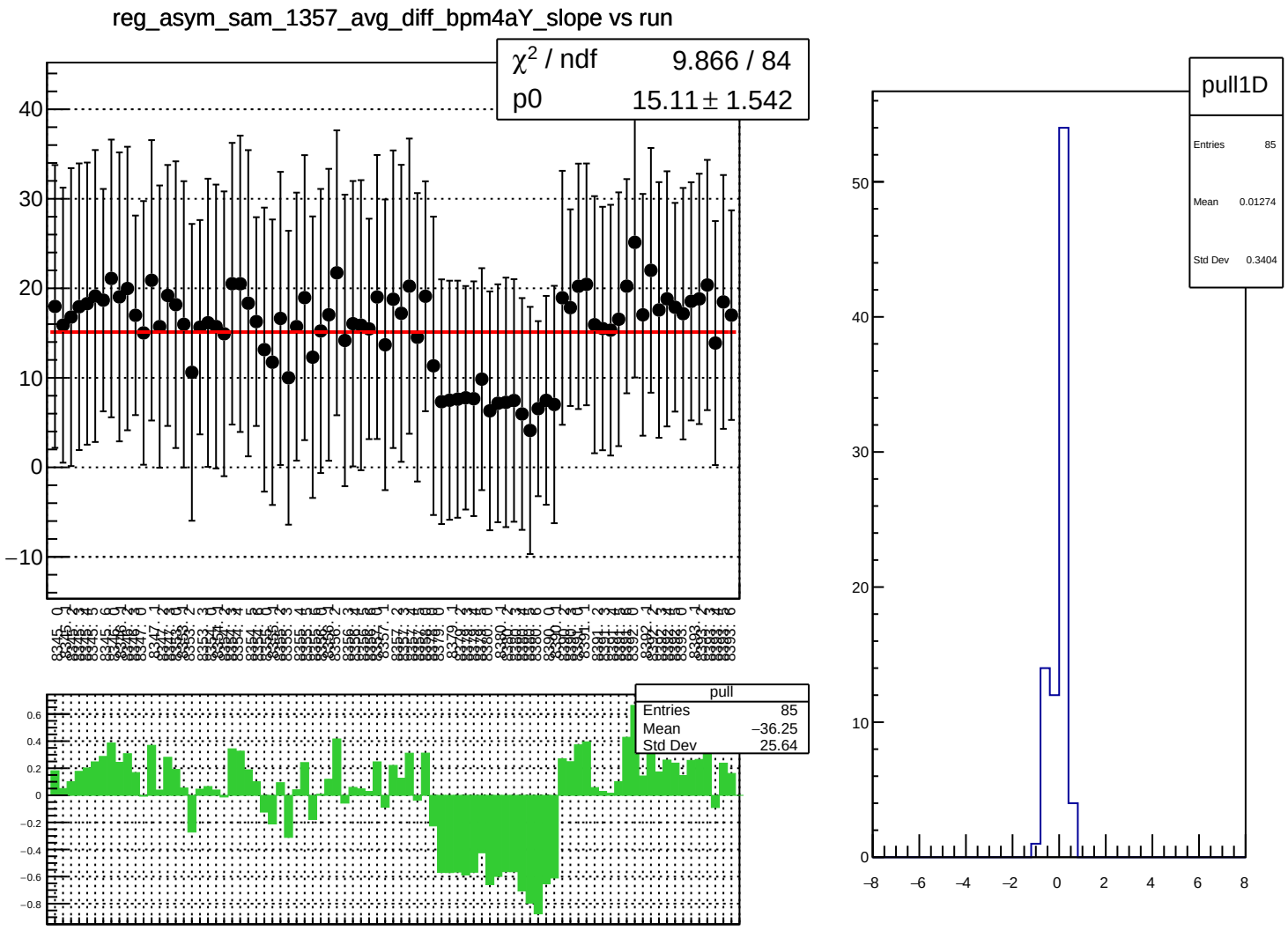

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 206.5 / 84
p0 13.28 ± 0.3139
pull
Entries 85
Mean 32.04
Std Dev 39.18
pull1D
Entries 85
Mean 0.3775
Std Dev 1.512

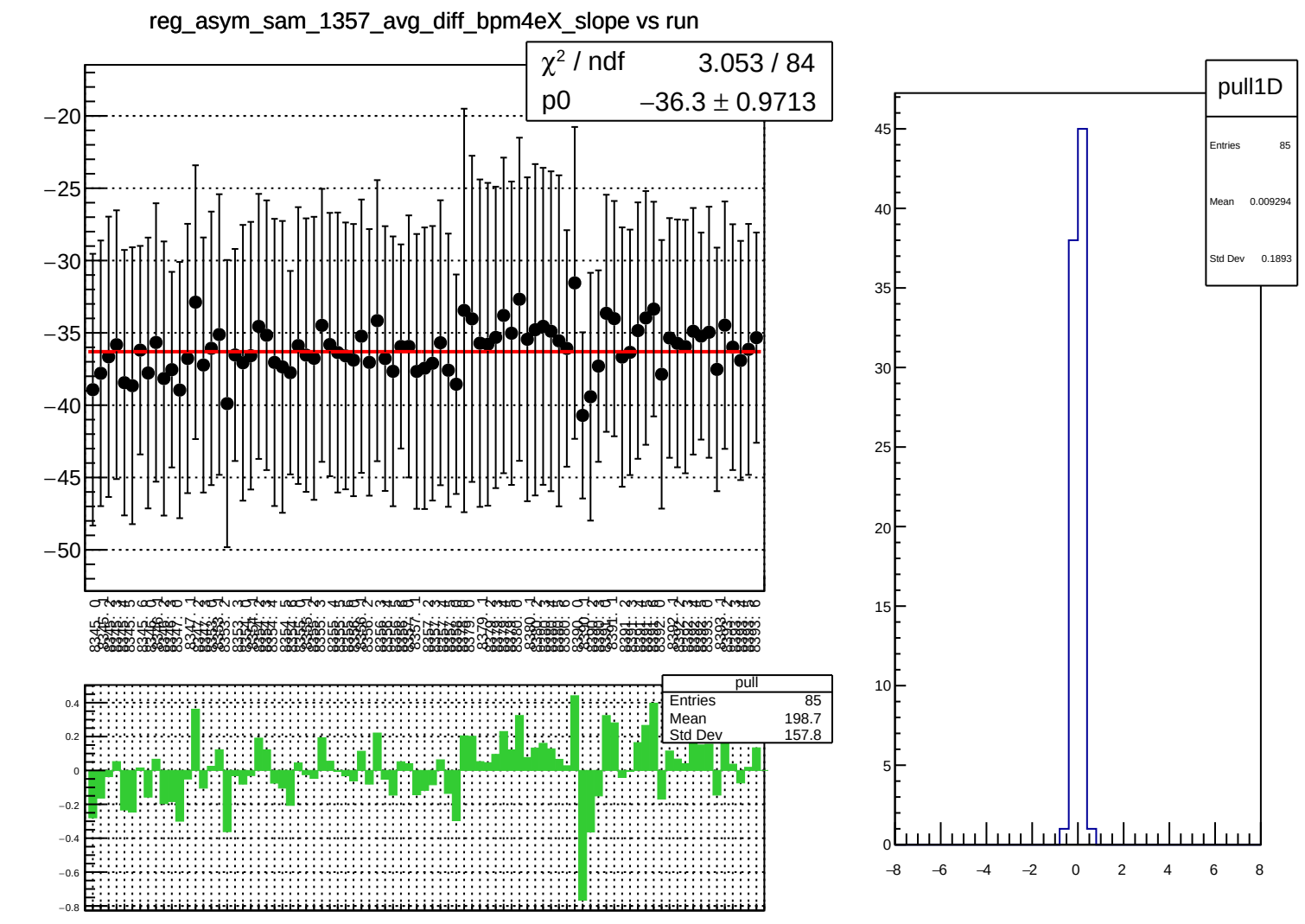

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 62.59 / 84
p0 −3.026 ± 0.2096
pull
Entries 85
Mean −26.64
Std Dev 58.79
pull1D
Entries 85
Mean −0.1127
Std Dev 0.8507

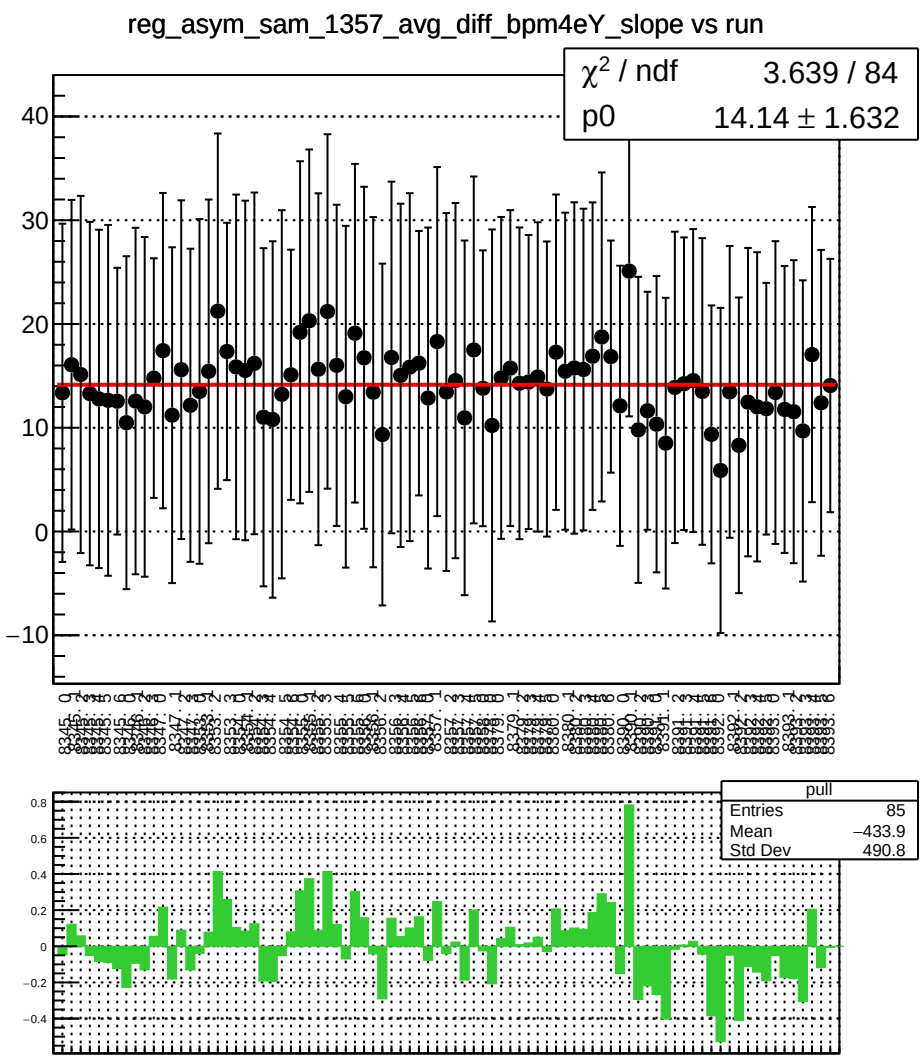

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 89.61 / 84
p0 8.451 ± 0.3384
pull
Entries 85
Mean 45.99
Std Dev 47.15
pull1D
Entries 85
Mean −0.1656
Std Dev 1.013

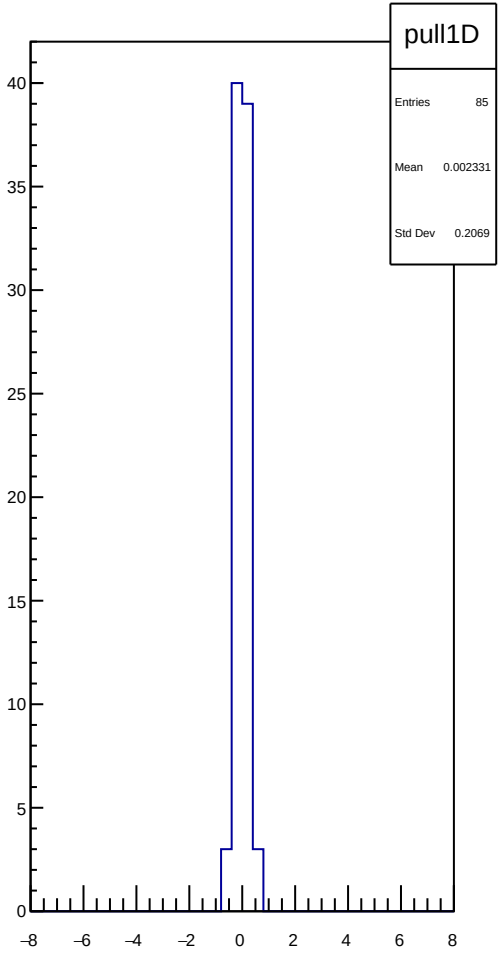

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 383.3 / 84
p0 −0.5625 ± 0.01886
pull
Entries 85
Mean 15.82
Std Dev 20.97
pull1D
Entries 85
Mean 0.4929
Std Dev 2.066

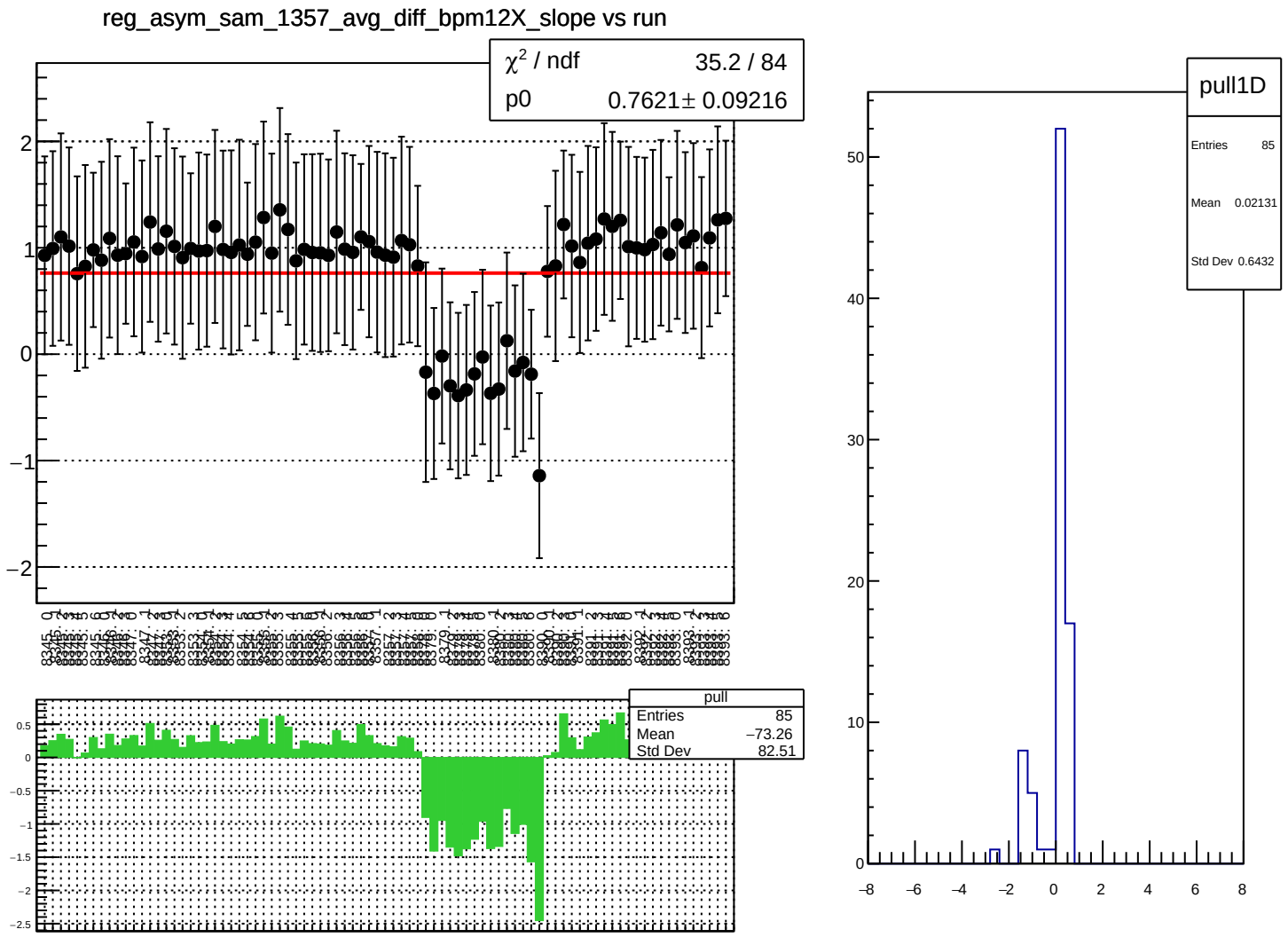

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 5.279 / 84
p0 −4.209 ± 0.8879
pull
Entries 85
Mean 113.9
Std Dev 75.76
pull1D
Entries 85
Mean −0.0306
Std Dev 0.2473

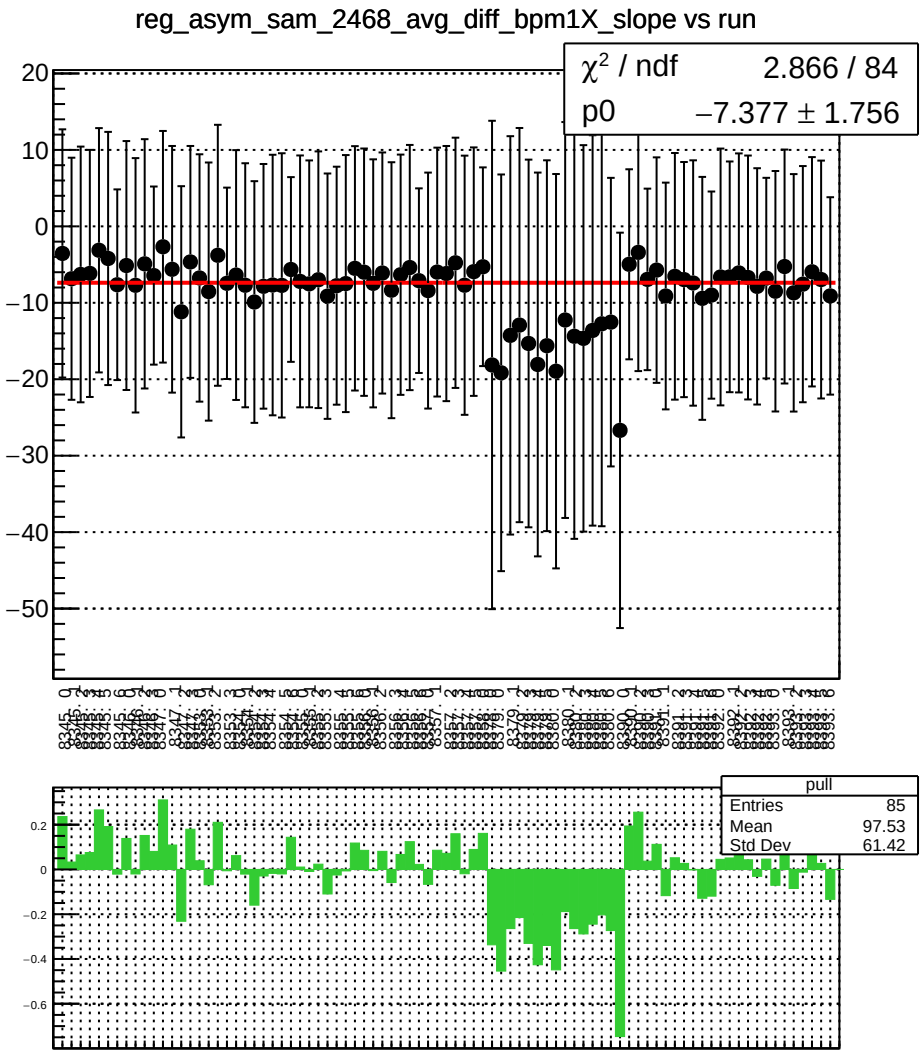

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.866 / 84
p0 15.11 ± 1.542
pull
Entries 85
Mean −36.25
Std Dev 25.64
pull1D
Entries 85
Mean 0.01274
Std Dev 0.3404

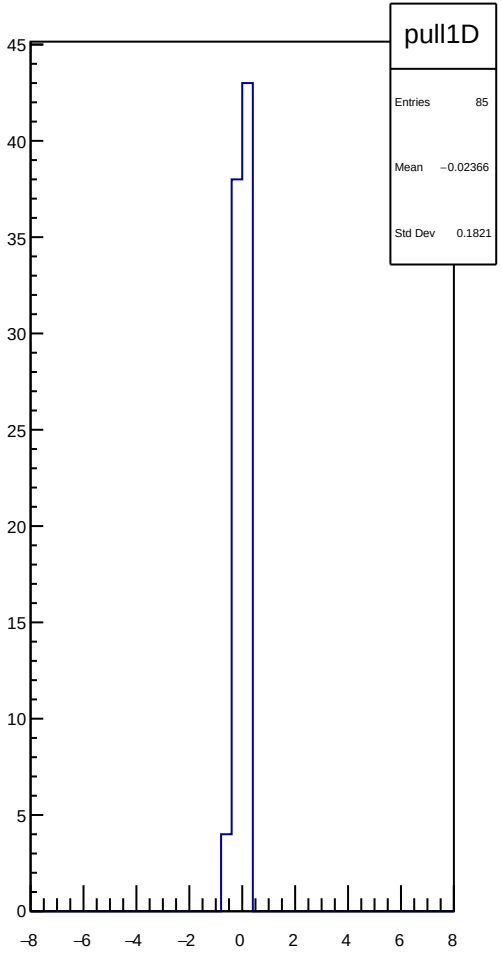

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.053 / 84
p0 −36.3 ± 0.9713
pull
Entries 85
Mean 198.7
Std Dev 157.8
pull1D
Entries 85
Mean 0.009294
Std Dev 0.1893

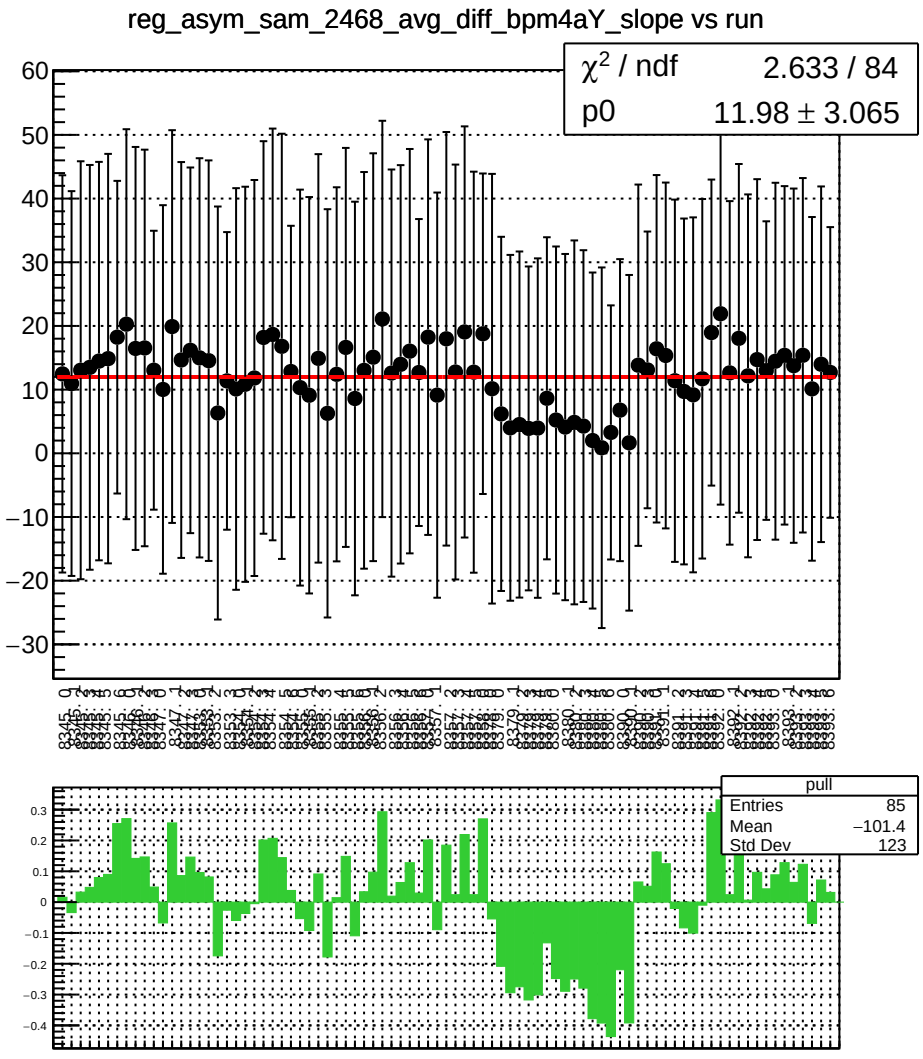

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.639 / 84
p0 14.14 ± 1.632
pull
Entries 85
Mean −433.9
Std Dev 490.8

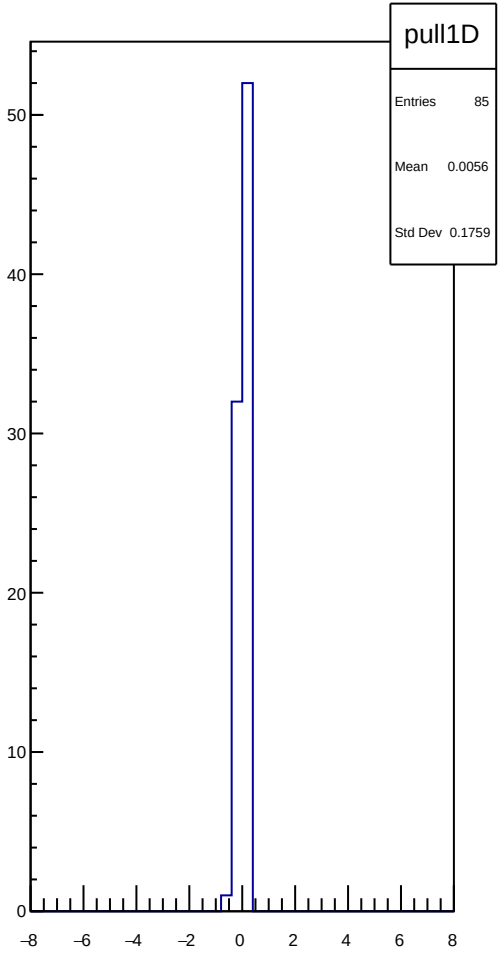

pull1D
Entries 85
Mean 0.002331
Std Dev 0.2069

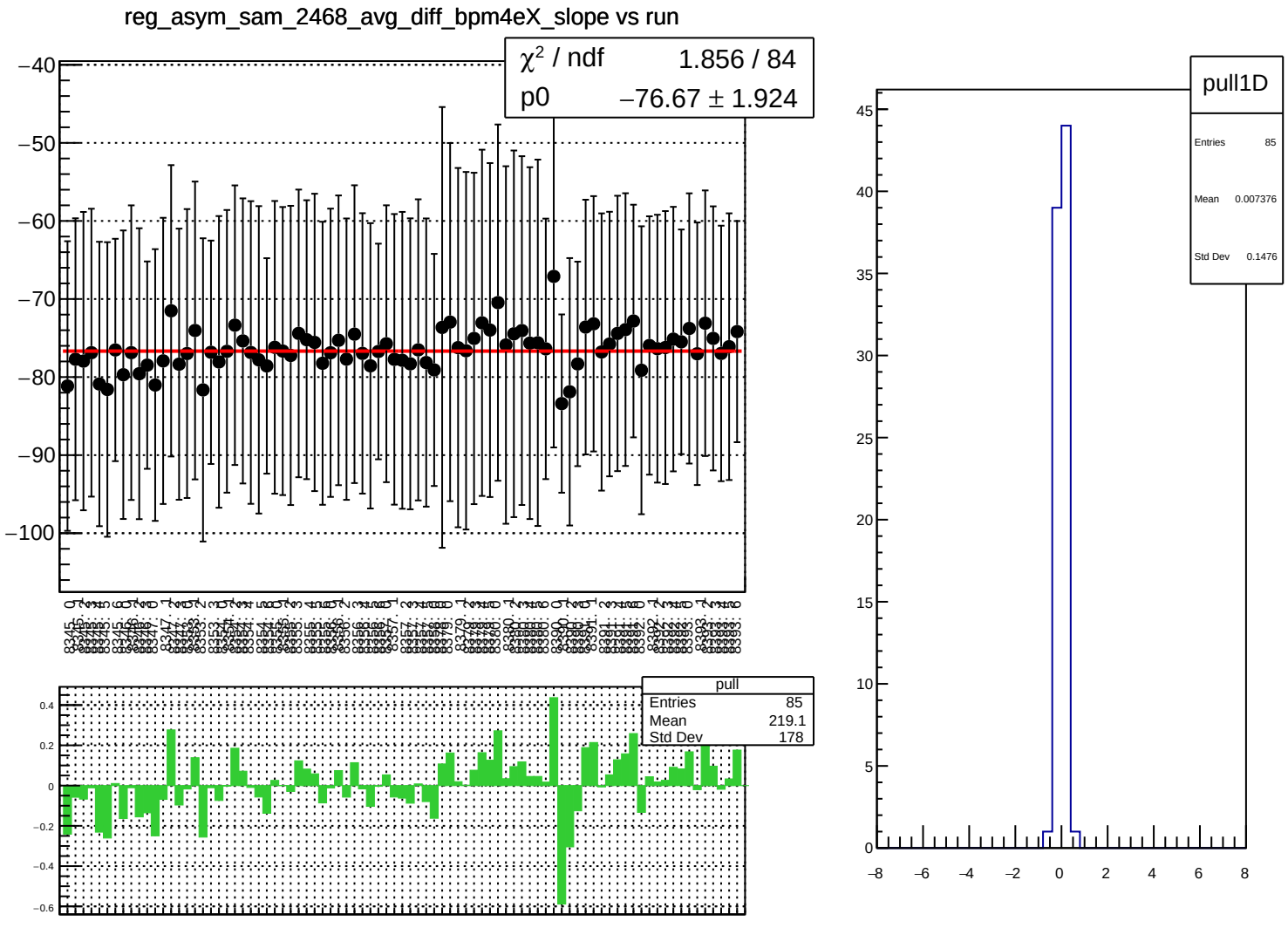

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 35.2 / 84
p0 0.7621± 0.09216
pull
Entries 85
Mean −73.26
Std Dev 82.51
pull1D
Entries 85
Mean 0.02131
Std Dev 0.6432

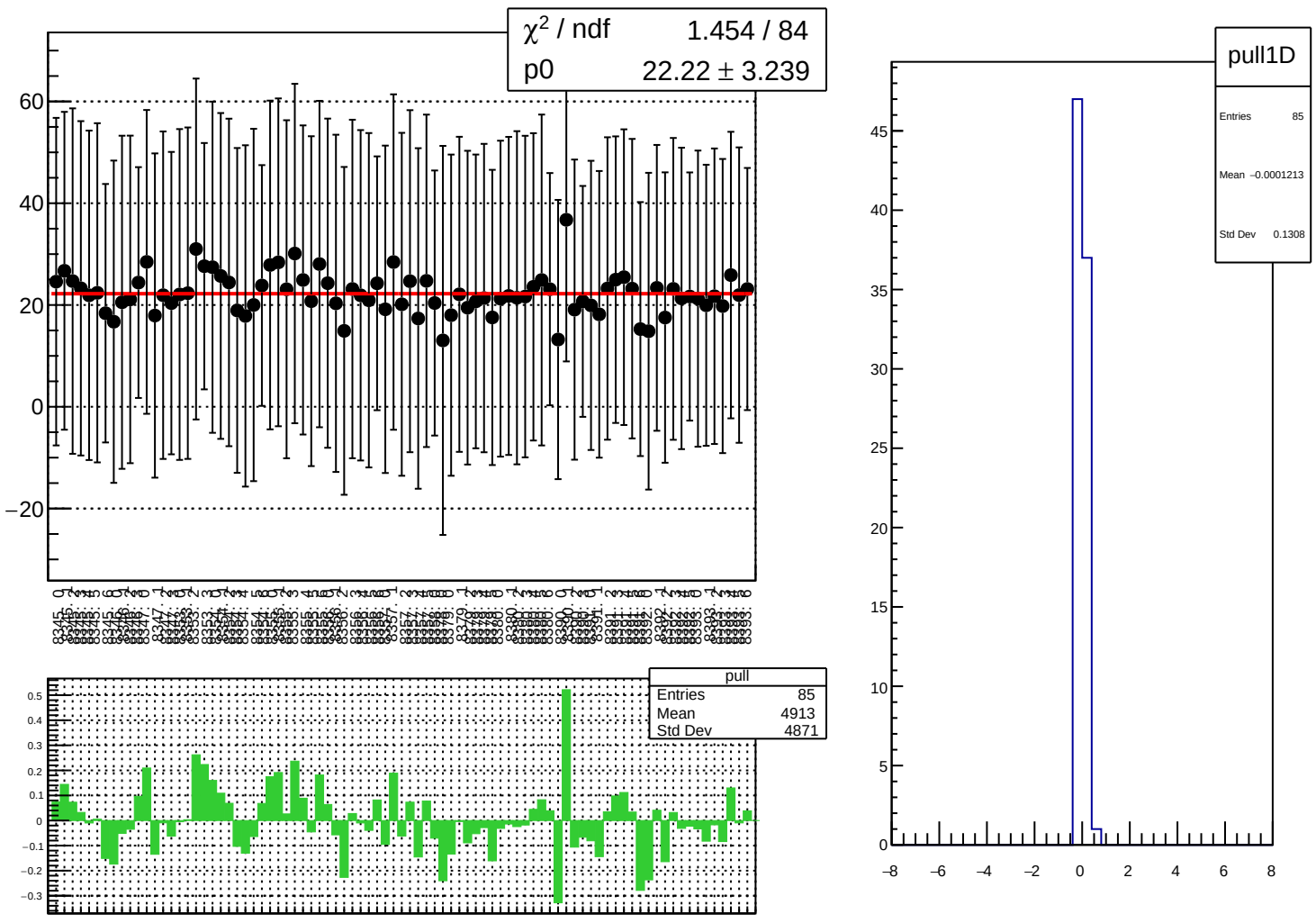

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 2.866 / 84
p0 −7.377 ± 1.756
pull
Entries 85
Mean 97.53
Std Dev 61.42

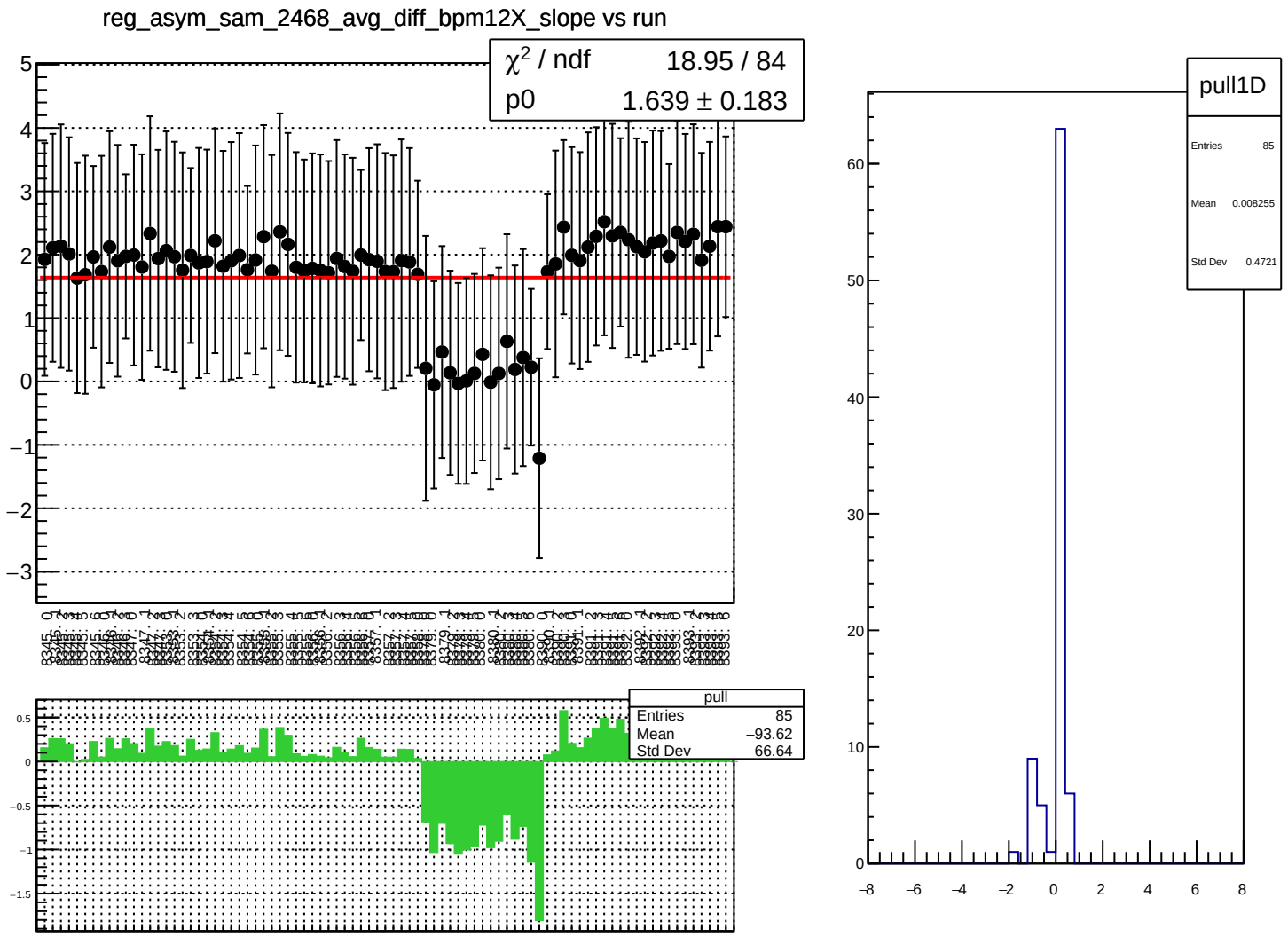

pull1D
Entries 85
Mean −0.02366
Std Dev 0.1821

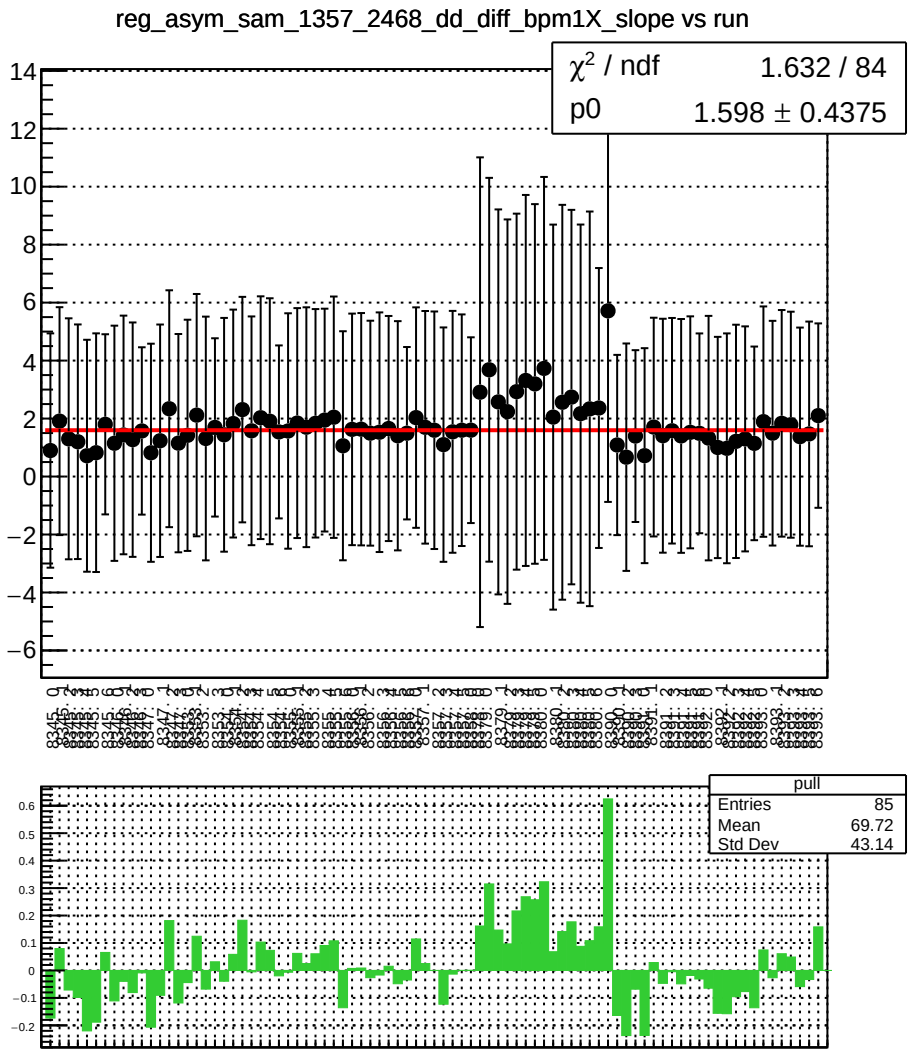

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.633 / 84
p0 11.98 ± 3.065
pull
Entries 85
Mean −101.4
Std Dev 123

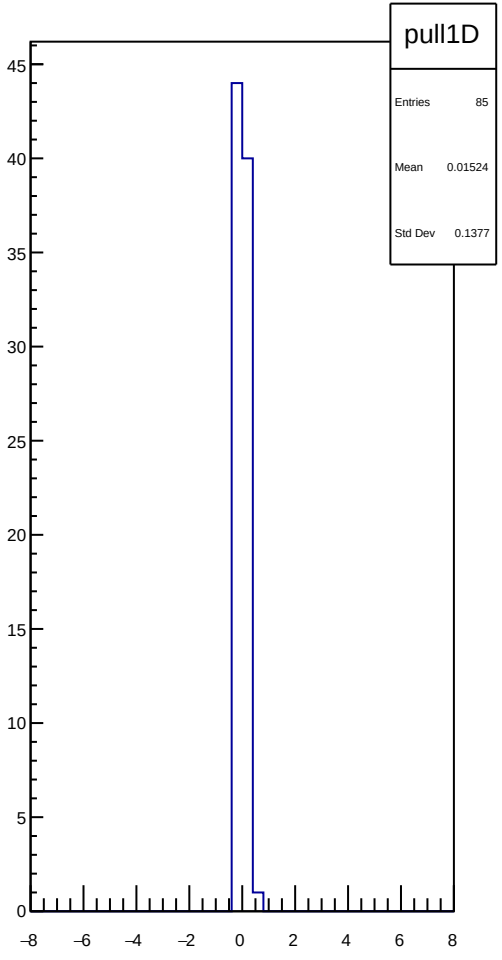

pull1D
Entries 85
Mean 0.0056
Std Dev 0.1759

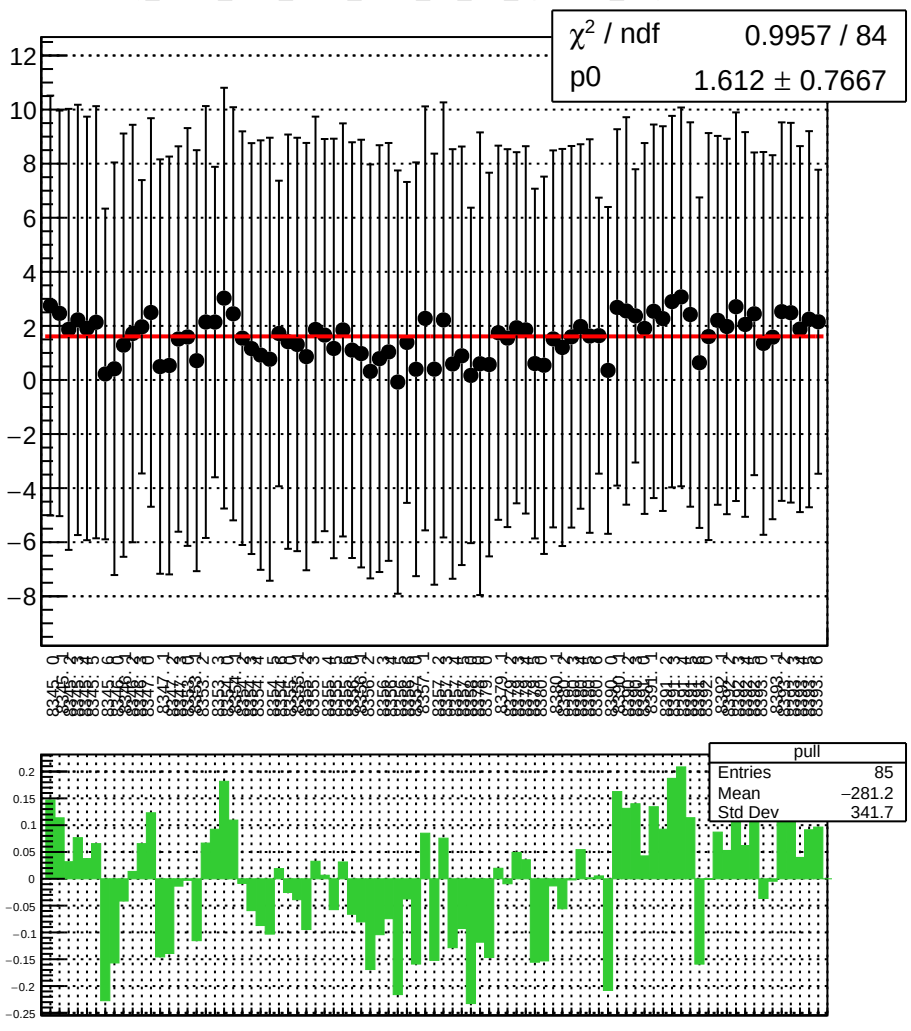

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.856 / 84
p0 −76.67 ± 1.924
pull
Entries 85
Mean 219.1
Std Dev 178
pull1D
Entries 85
Mean 0.007376
Std Dev 0.1476

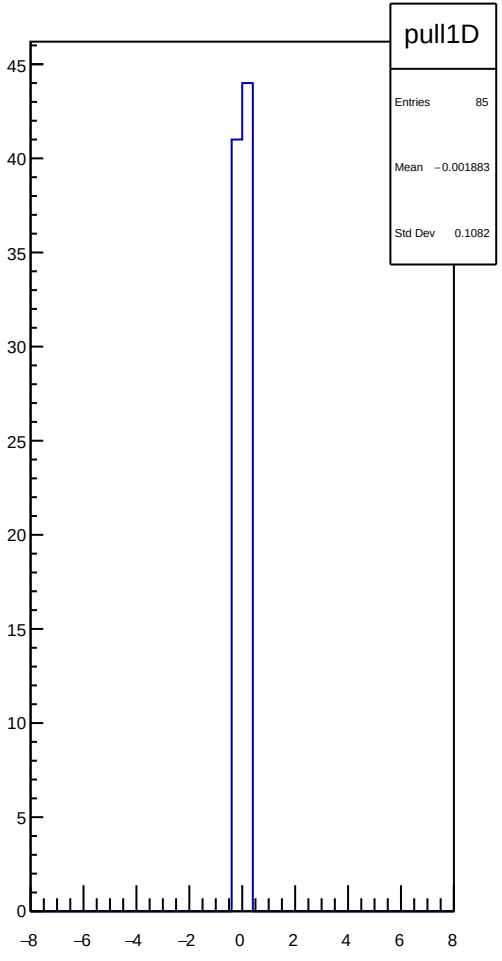

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.454 / 84
p0 22.22 ± 3.239
pull
Entries 85
Mean 4913
Std Dev 4871
pull1D
Entries 85
Mean −0.0001213
Std Dev 0.1308

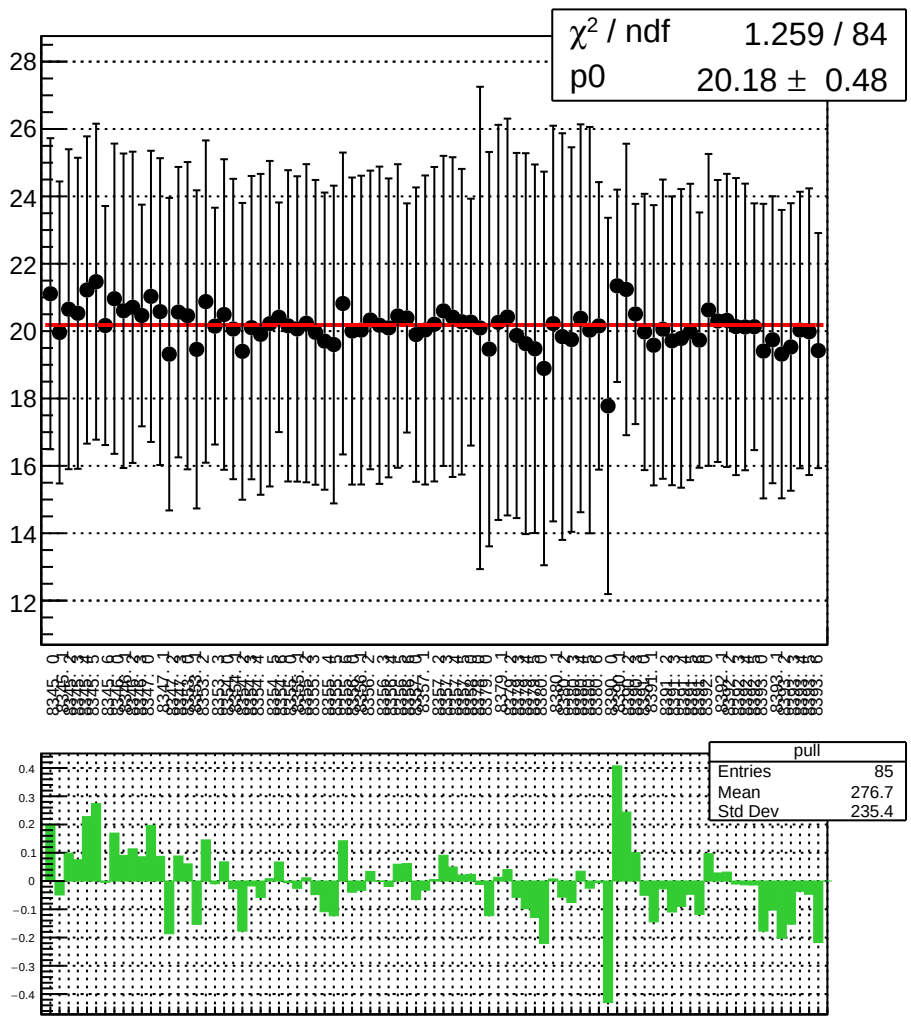

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 18.95 / 84
p0 1.639 ± 0.183
pull
Entries 85
Mean −93.62
Std Dev 66.64
pull1D
Entries 85
Mean 0.008255
Std Dev 0.4721

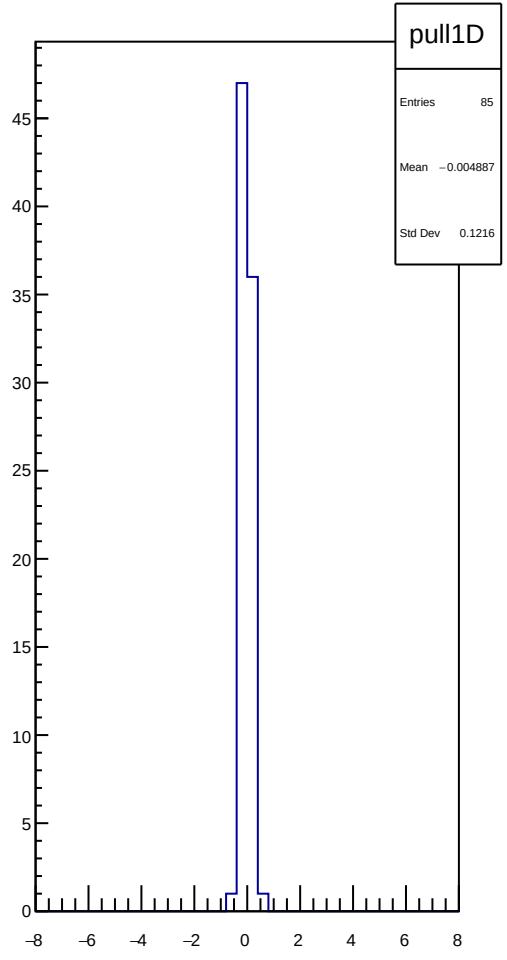

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 1.632 / 84
p0 1.598 ± 0.4375
pull
Entries 85
Mean 69.72
Std Dev 43.14

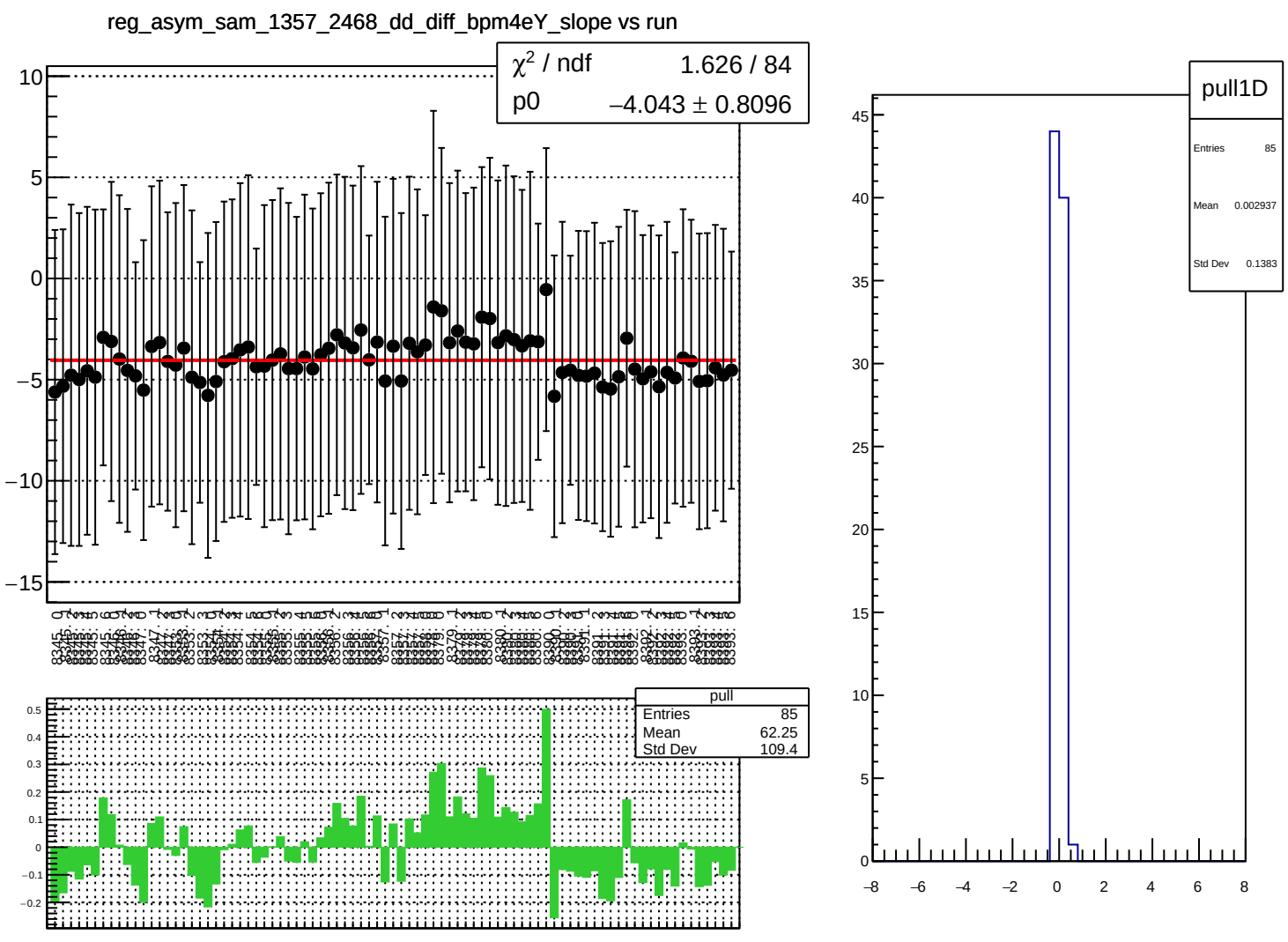

pull1D
Entries 85
Mean 0.01524
Std Dev 0.1377

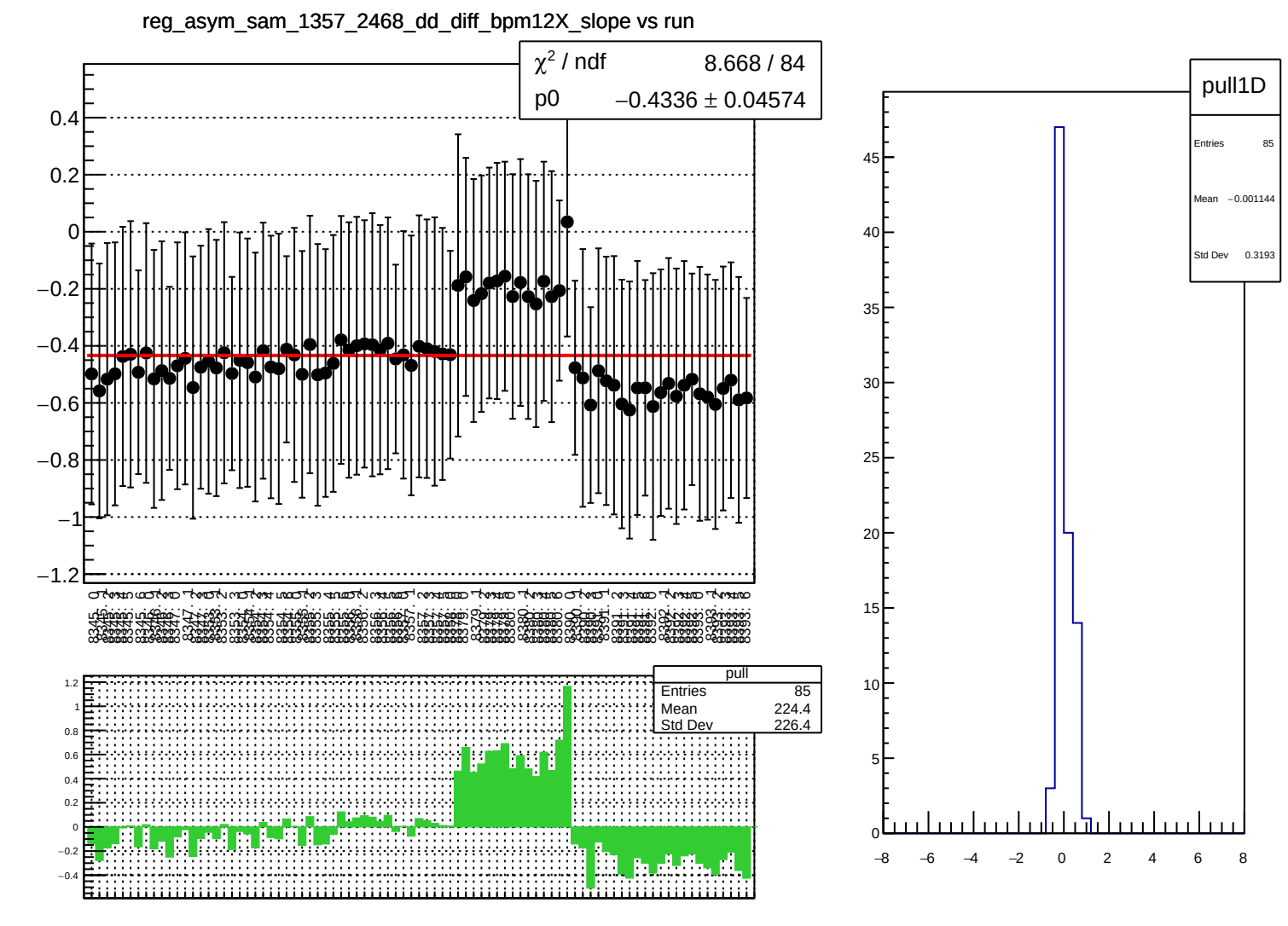

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.9957 / 84
p0 1.612 ± 0.7667
pull
Entries 85
Mean −281.2
Std Dev 341.7

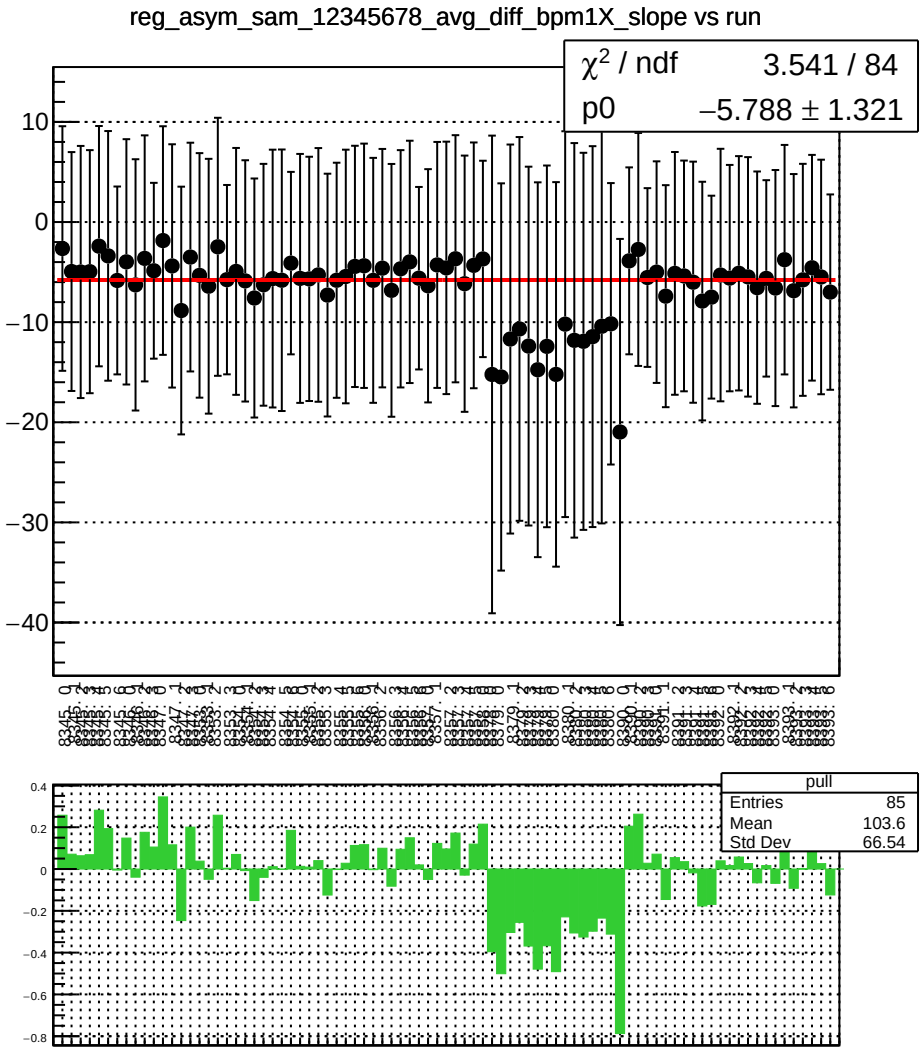

pull1D
Entries 85
Mean −0.001883
Std Dev 0.1082

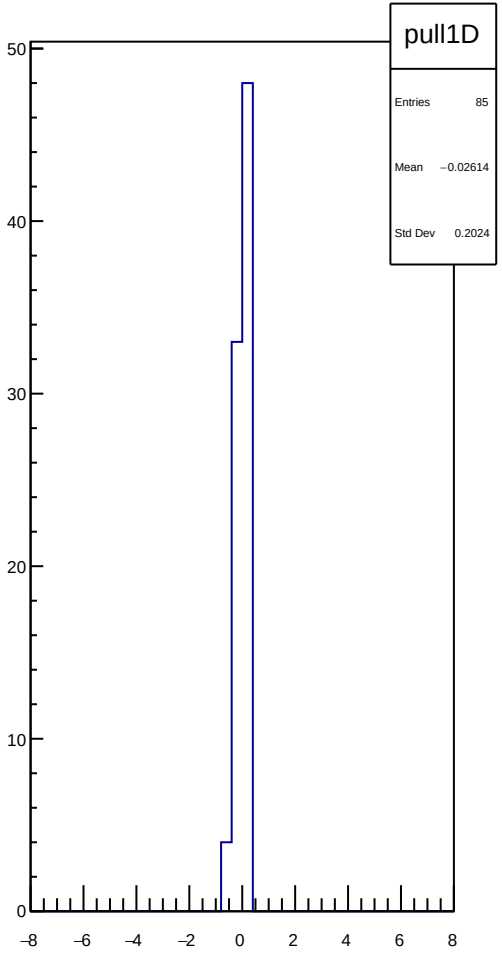

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.259 / 84
p0 20.18 ± 0.48
pull
Entries 85
Mean 276.7
Std Dev 235.4

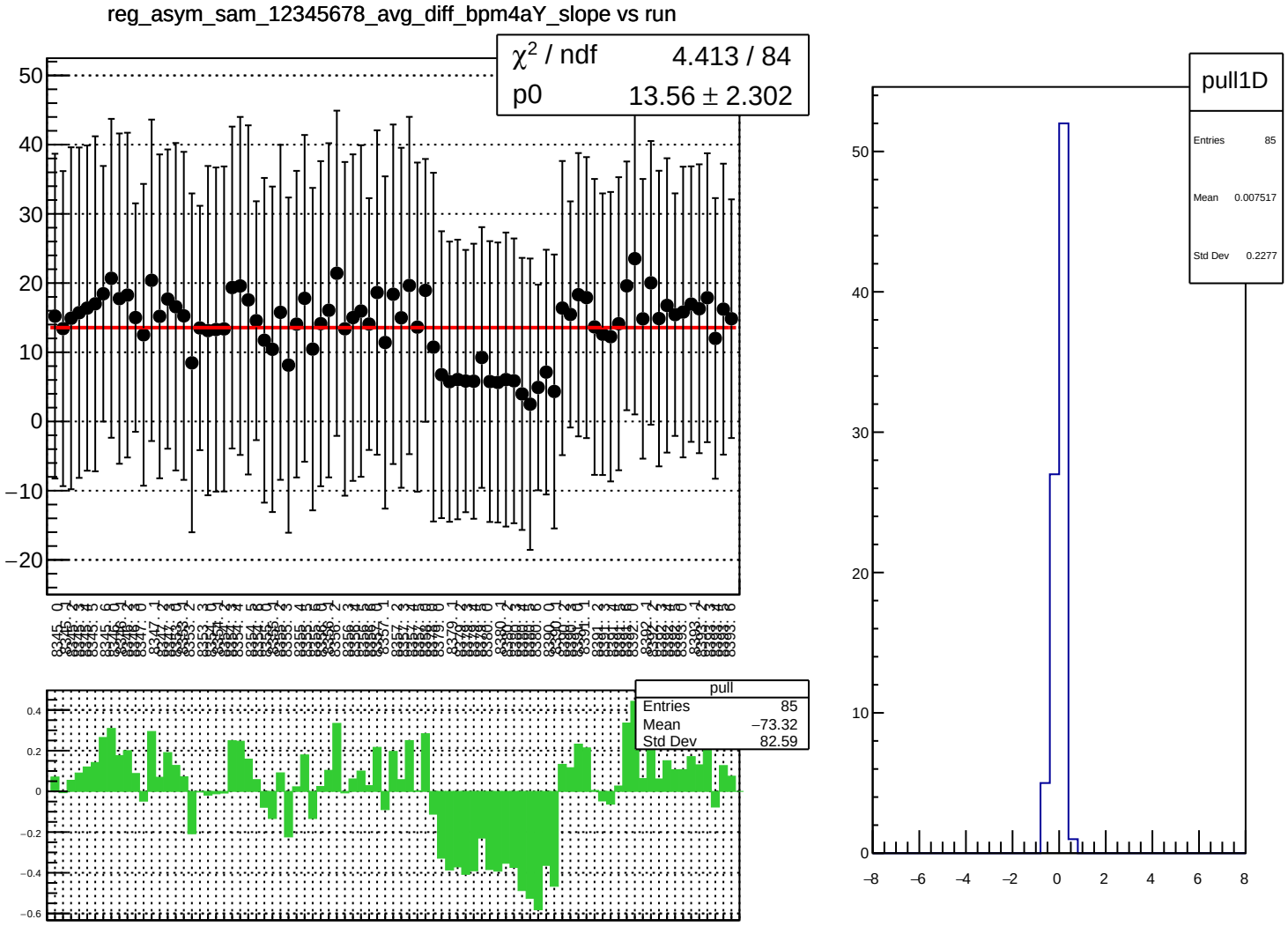

pull1D
Entries 85
Mean −0.004887
Std Dev 0.1216

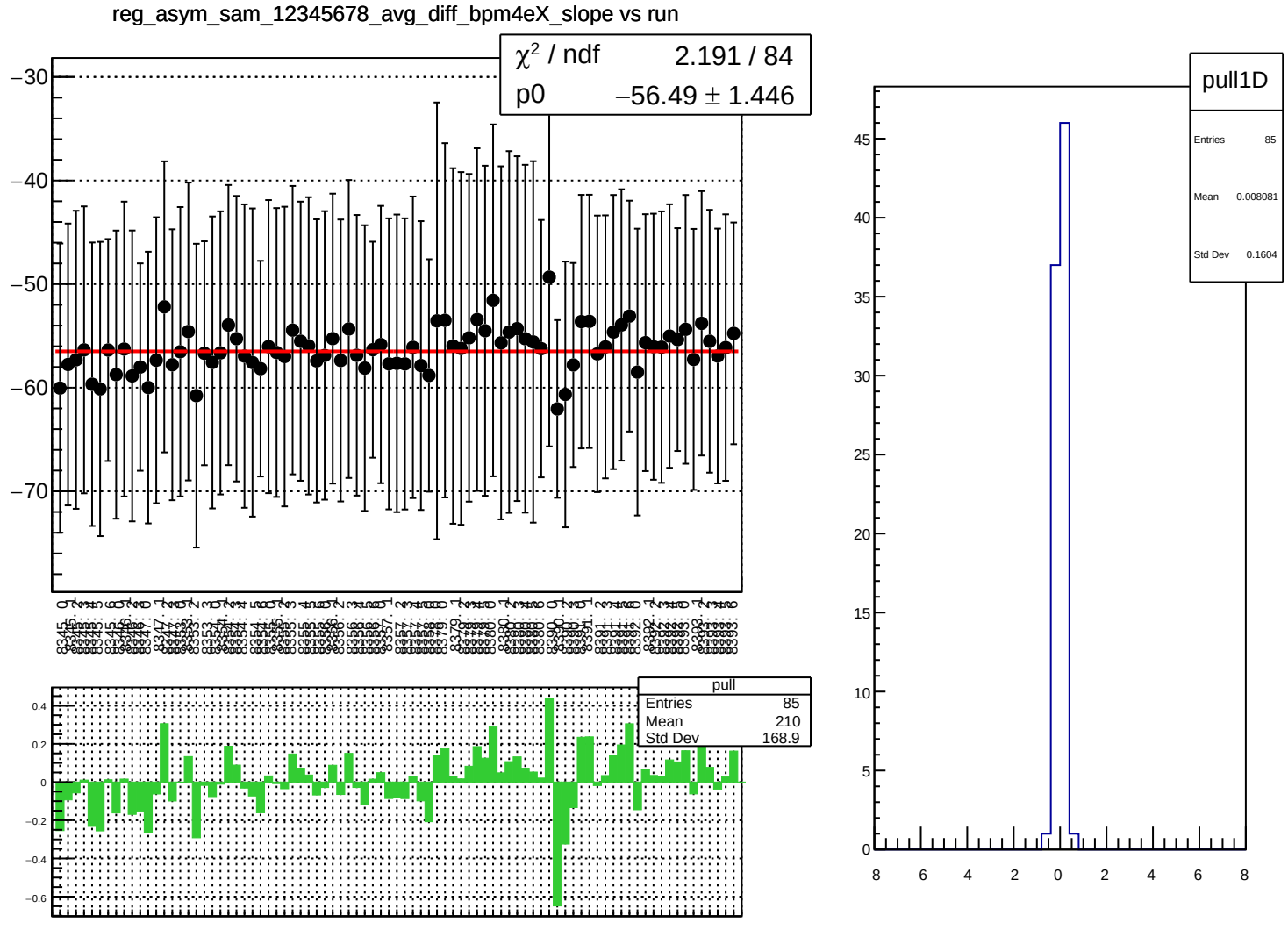

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.626 / 84
p0 −4.043 ± 0.8096
pull
Entries 85
Mean 62.25
Std Dev 109.4
pull1D
Entries 85
Mean 0.002937
Std Dev 0.1383

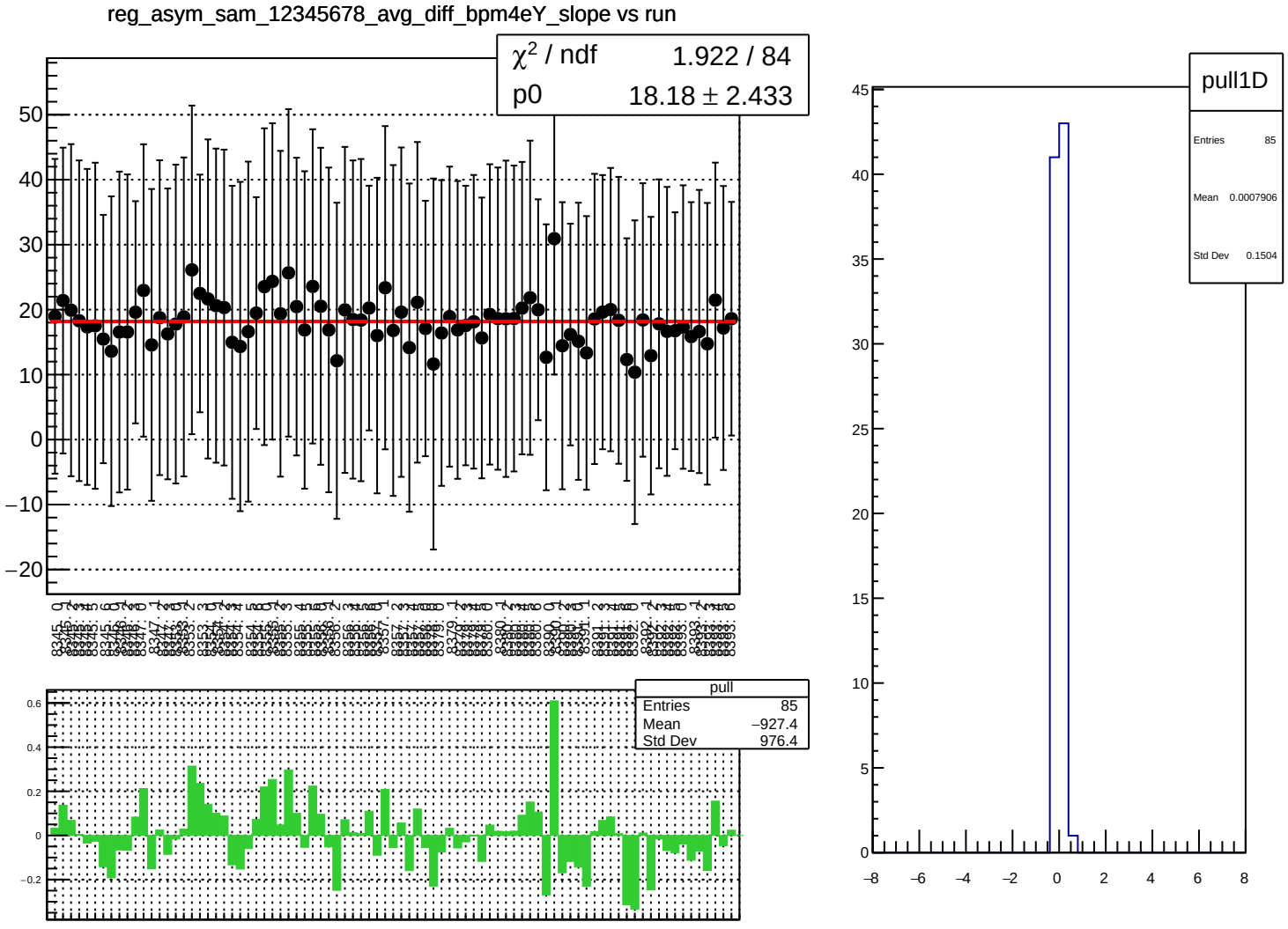

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 8.668 / 84
p0 −0.4336 ± 0.04574
pull
Entries 85
Mean 224.4
Std Dev 226.4
pull1D
Entries 85
Mean −0.001144
Std Dev 0.3193

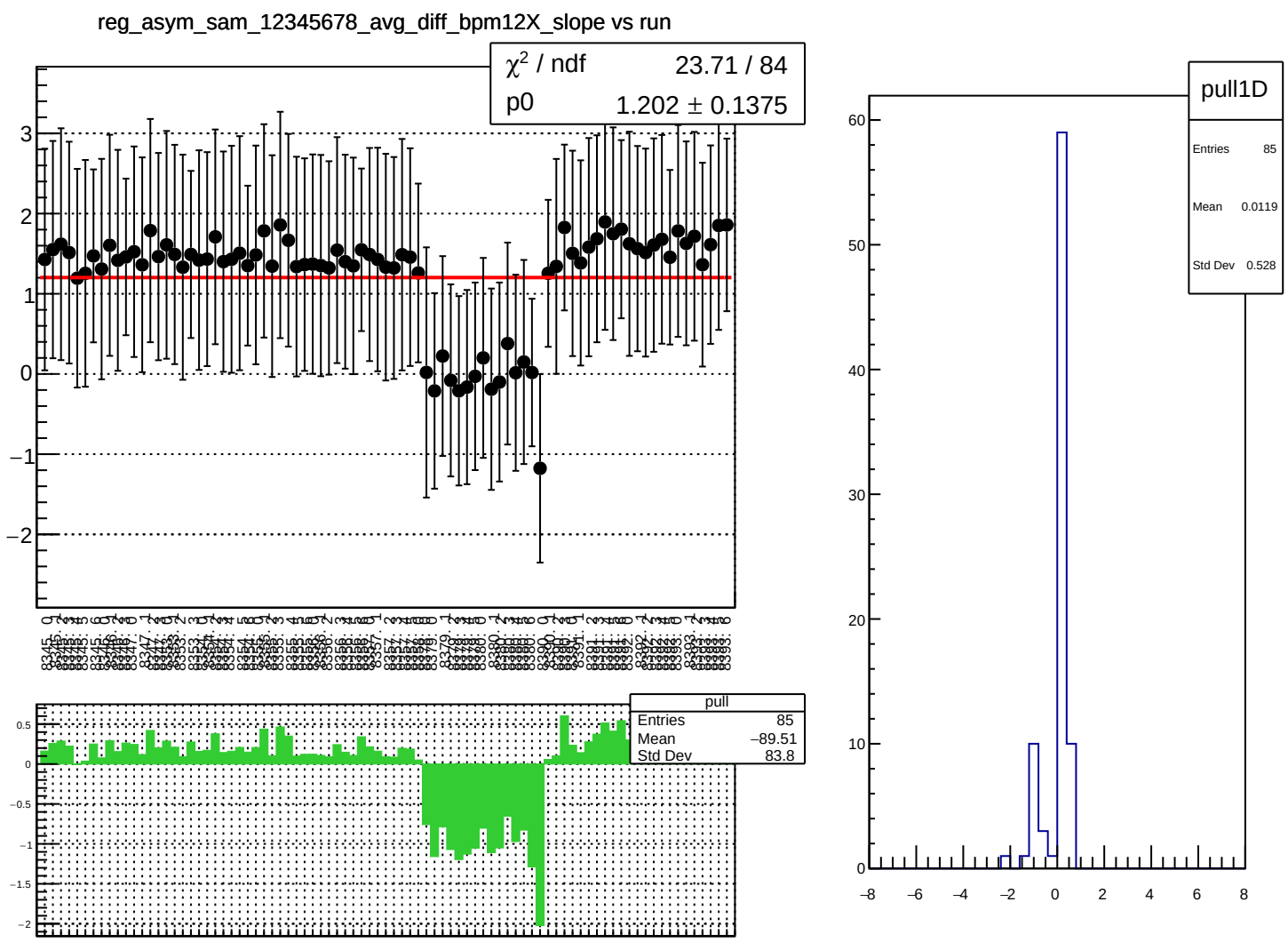

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 3.541 / 84
p0 −5.788 ± 1.321
pull
Entries 85
Mean 103.6
Std Dev 66.54

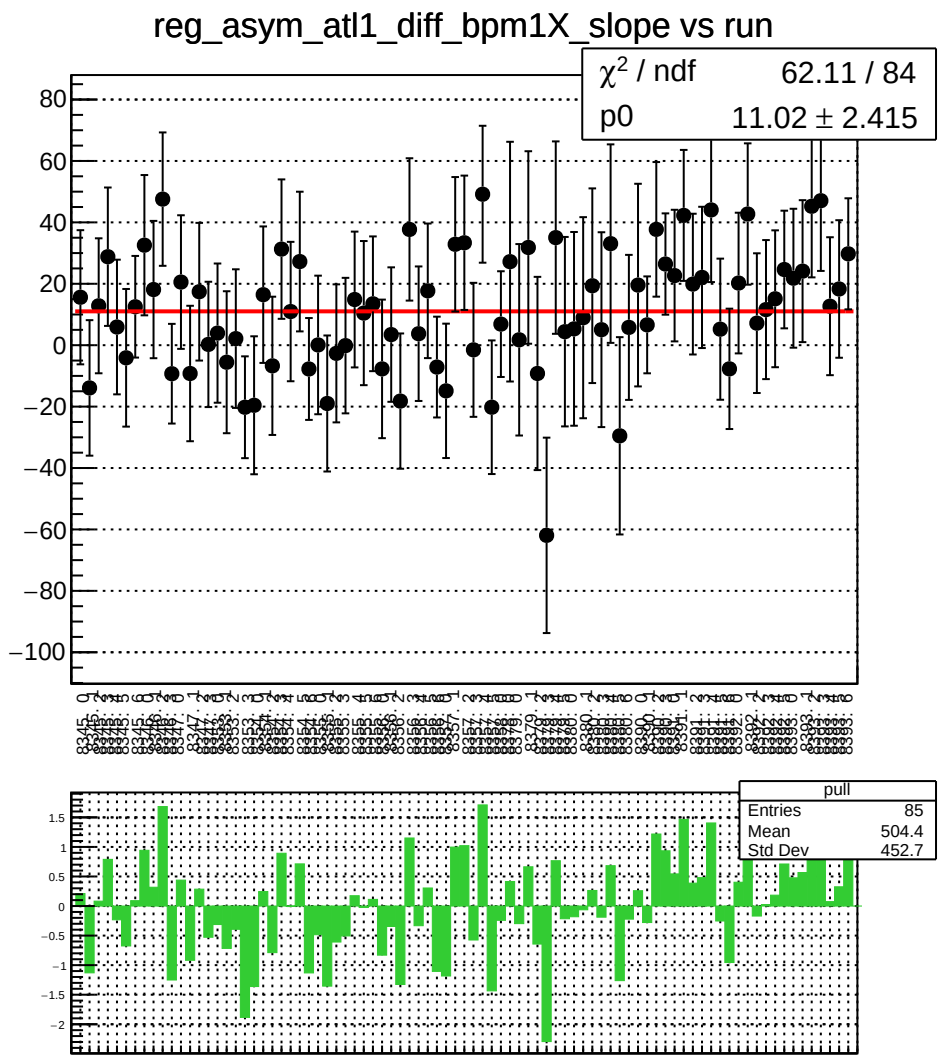

pull1D
Entries 85
Mean −0.02614
Std Dev 0.2024

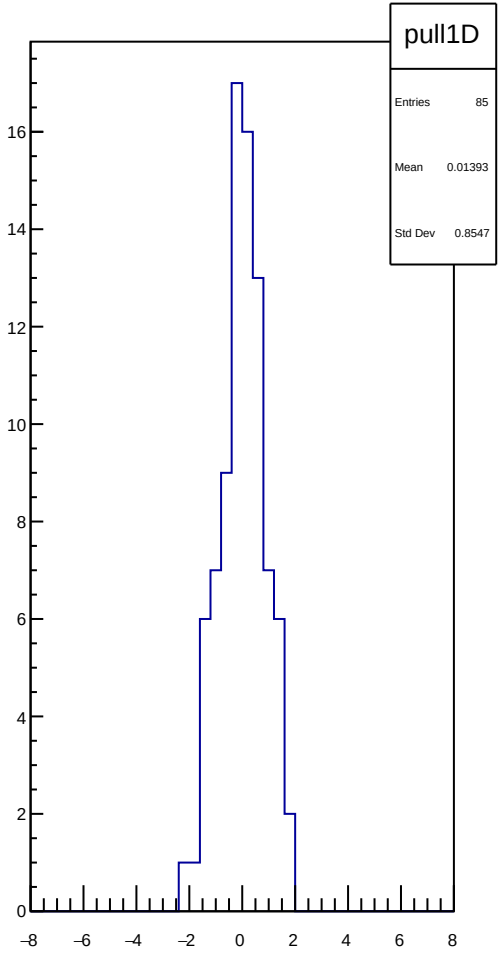

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.413 / 84
p0 13.56 ± 2.302
pull
Entries 85
Mean −73.32
Std Dev 82.59
pull1D
Entries 85
Mean 0.007517
Std Dev 0.2277

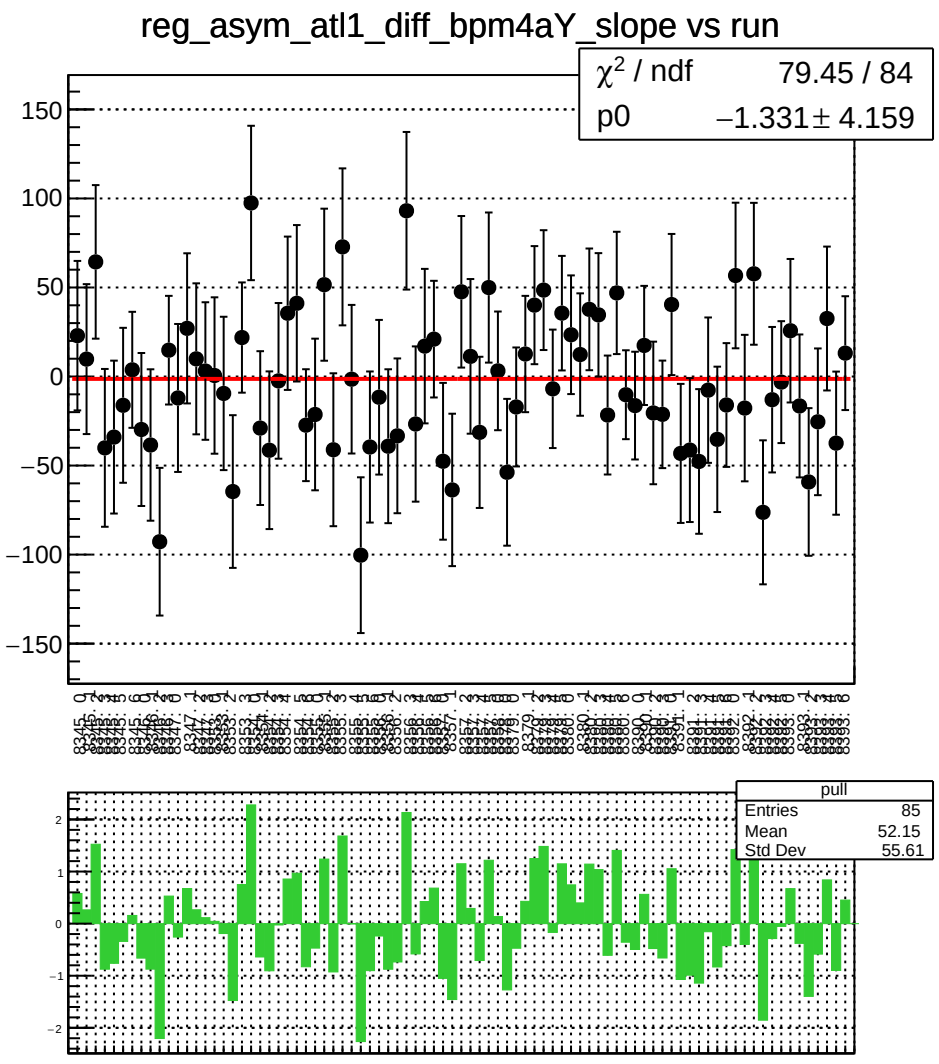

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.191 / 84
p0 −56.49 ± 1.446
pull
Entries 85
Mean 210
Std Dev 168.9
pull1D
Entries 85
Mean 0.008081
Std Dev 0.1604

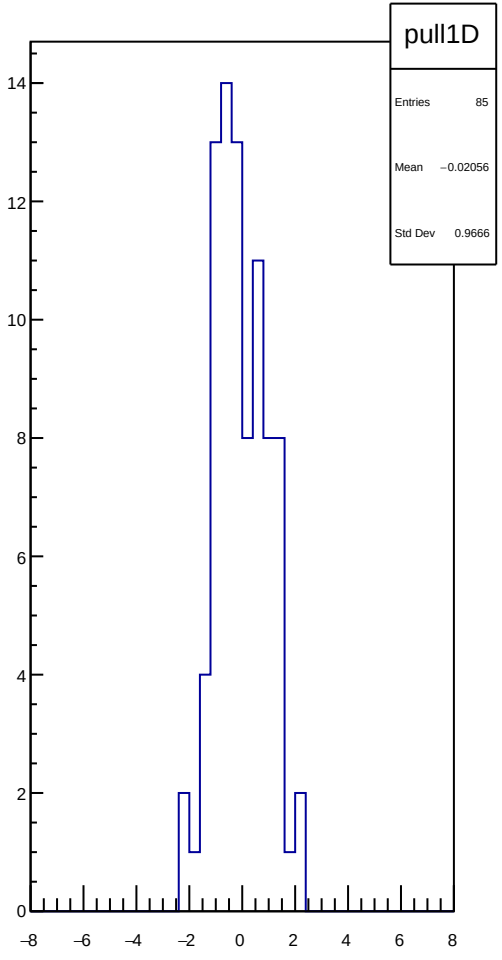

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.922 / 84
p0 18.18 ± 2.433
pull
Entries 85
Mean −927.4
Std Dev 976.4
pull1D
Entries 85
Mean 0.0007906
Std Dev 0.1504

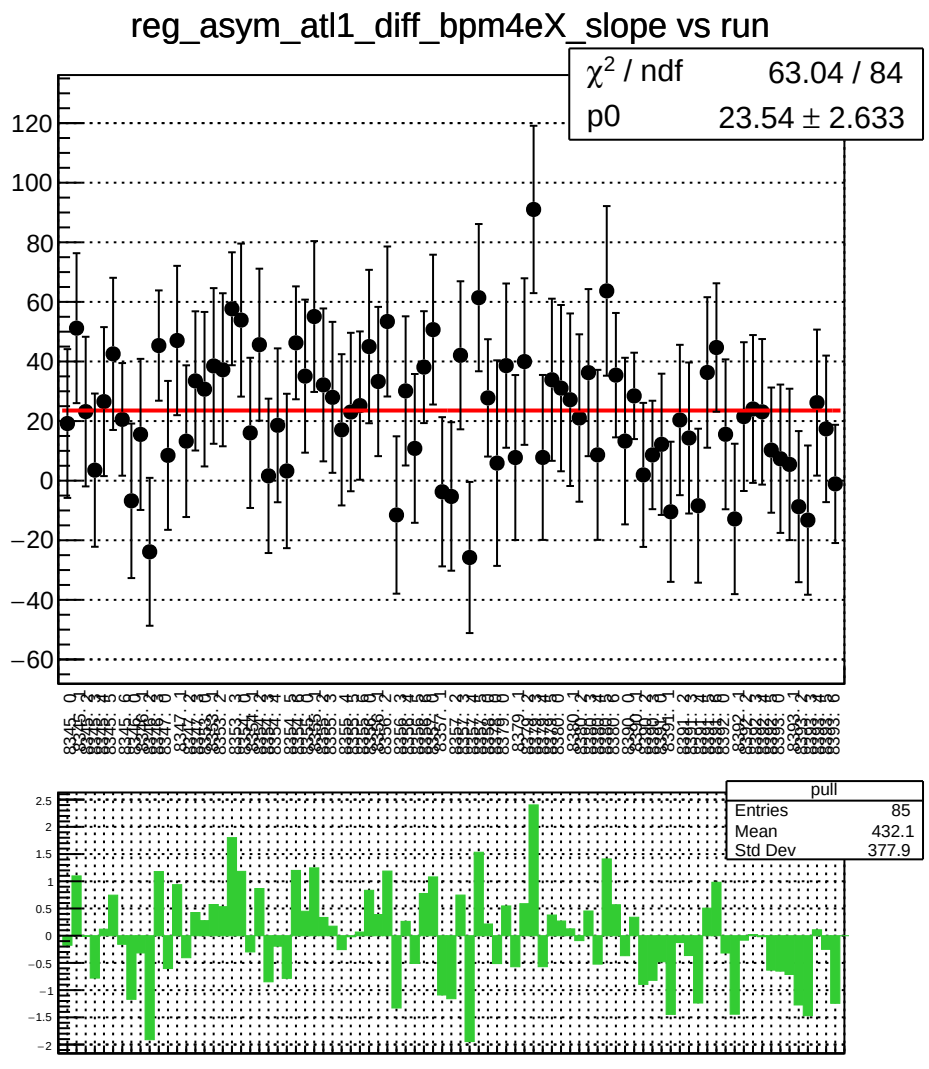

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 23.71 / 84
p0 1.202 ± 0.1375
pull
Entries 85
Mean −89.51
Std Dev 83.8
pull1D
Entries 85
Mean 0.0119
Std Dev 0.528

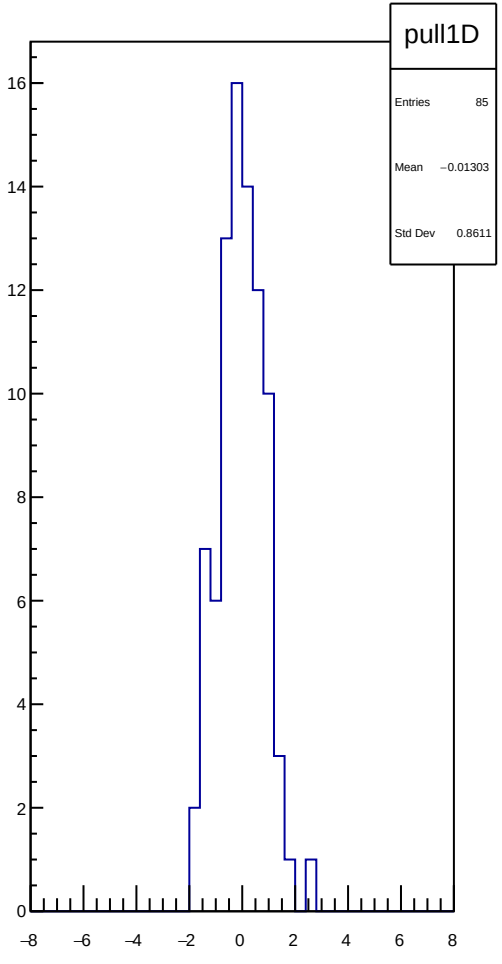

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 62.11 / 84
p0 11.02 ± 2.415
pull
Entries 85
Mean 504.4
Std Dev 452.7

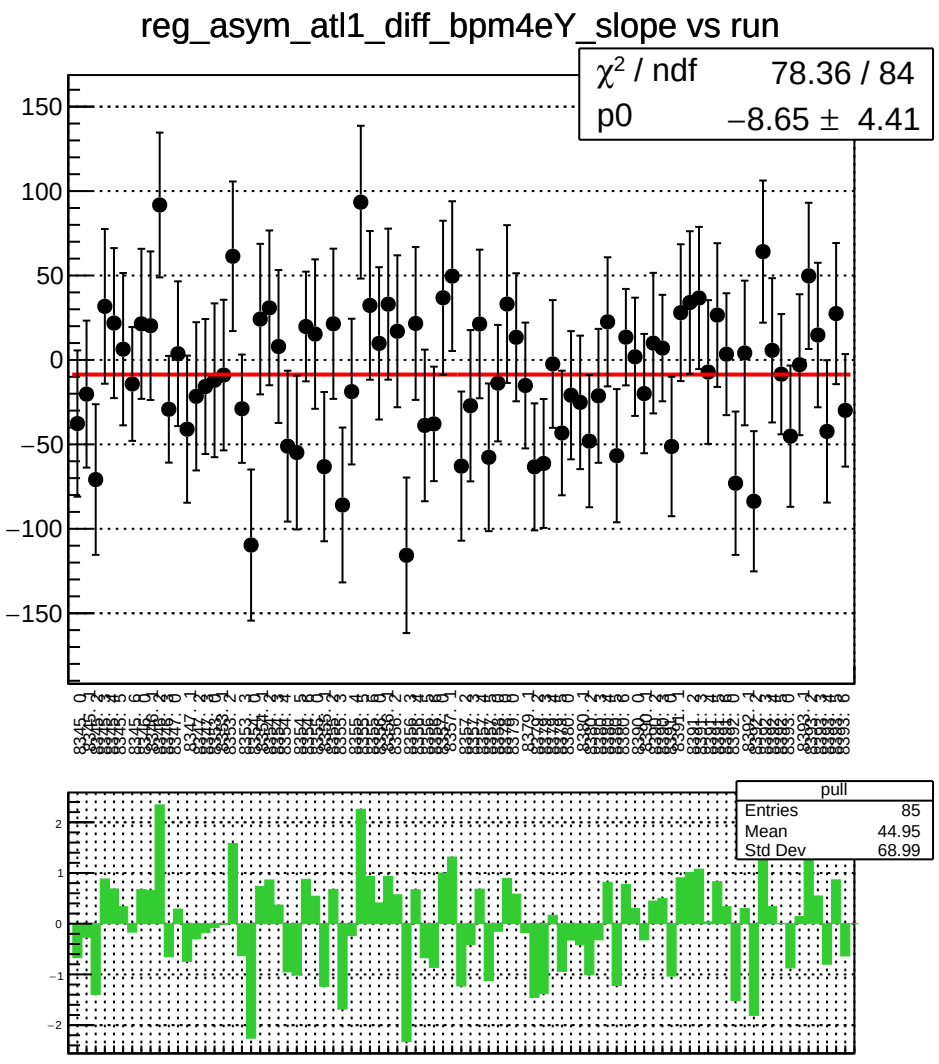

pull1D
Entries 85
Mean 0.01393
Std Dev 0.8547

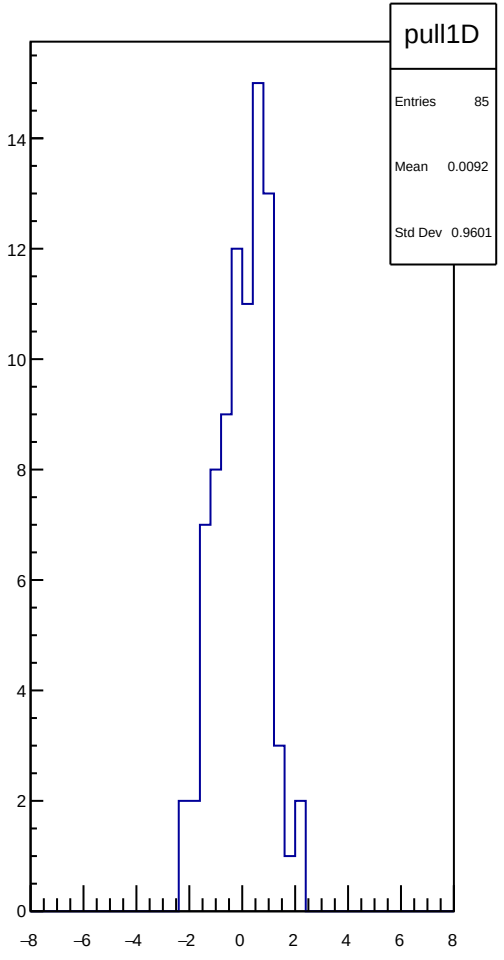

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 79.45 / 84
p0 −1.331 ± 4.159
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 52.15
Std Dev 55.61
2
1
0
−1
−2

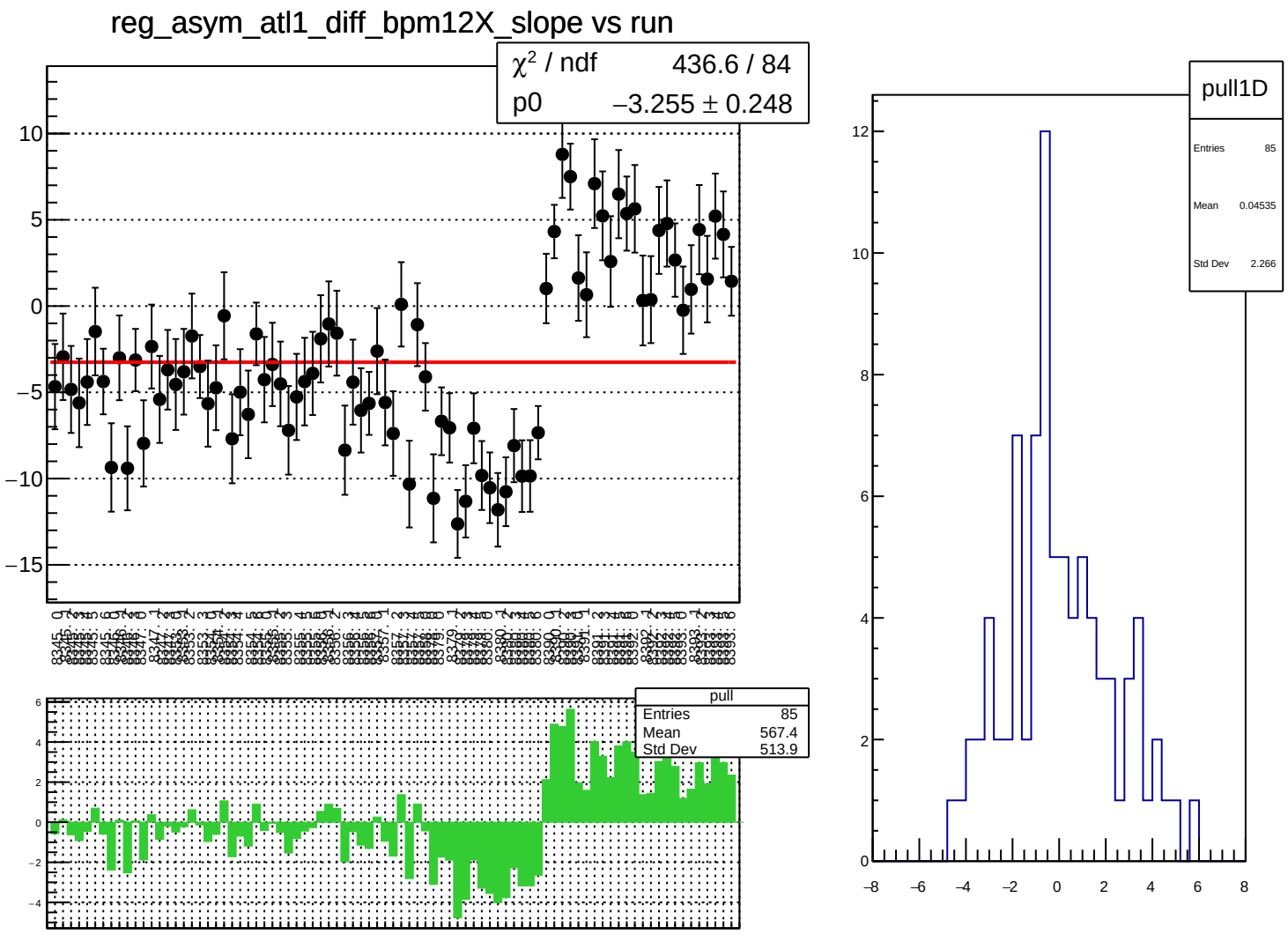

pull1D
Entries 85
Mean −0.02056
Std Dev 0.9666
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

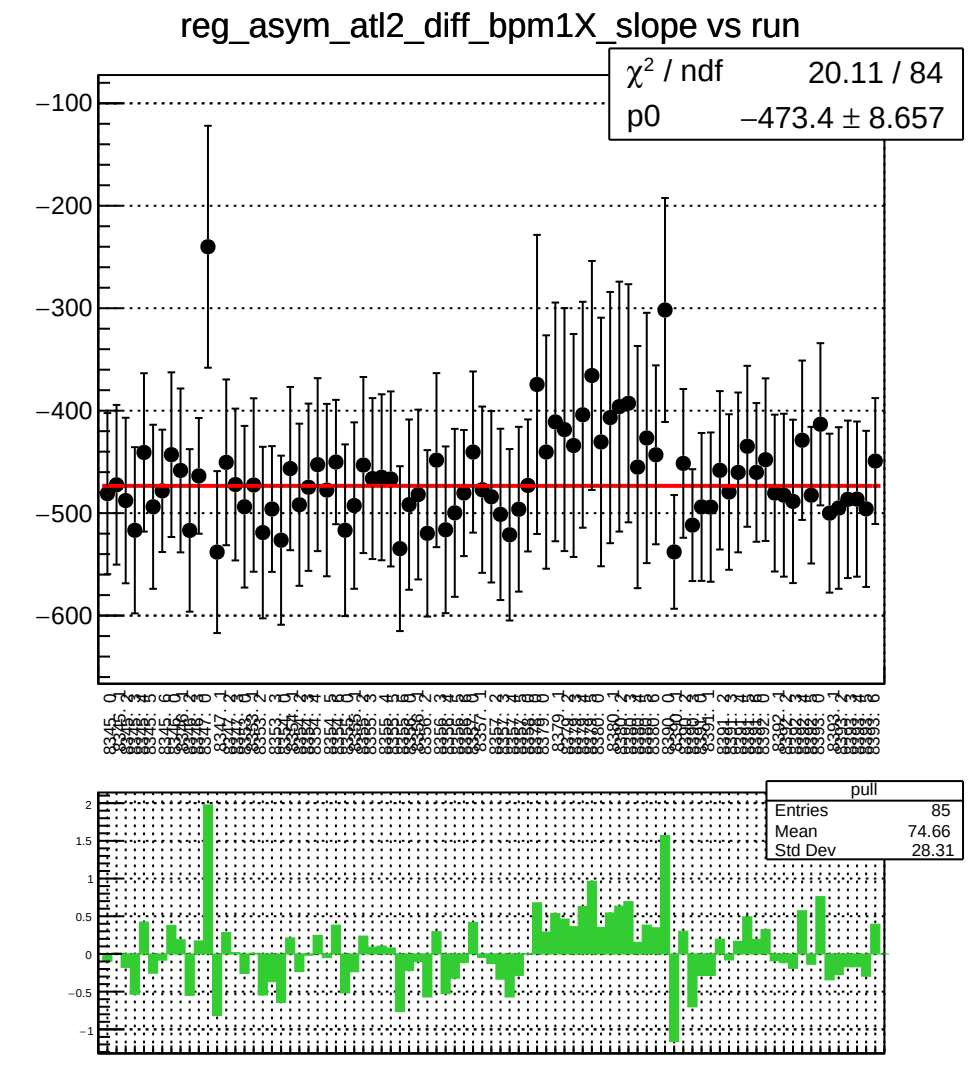

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 63.04 / 84
p0 23.54 ± 2.633
pull
Entries 85
Mean 432.1
Std Dev 377.9

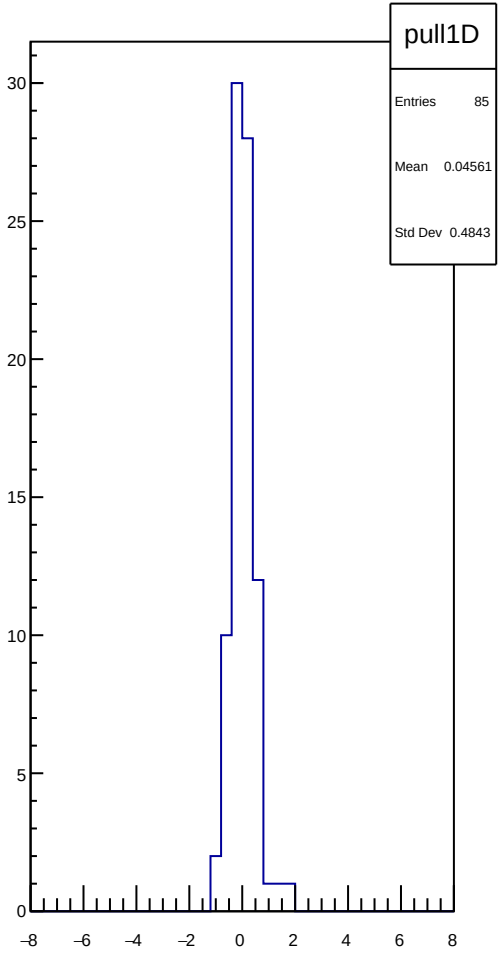

pull1D
Entries 85
Mean −0.01303
Std Dev 0.8611

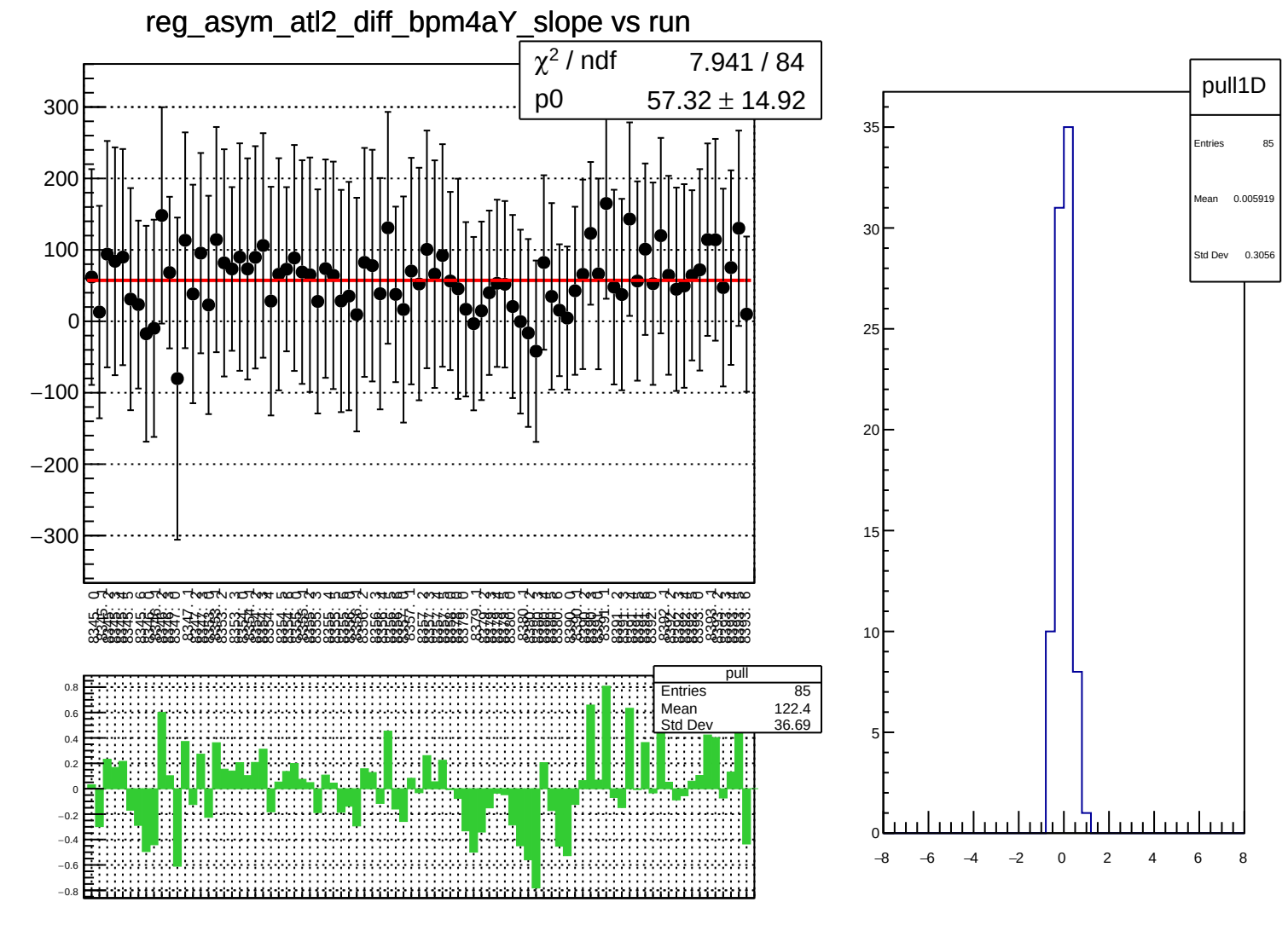

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 78.36 / 84
p0 −8.65 ± 4.41
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 44.95
Std Dev 68.99
2
1
0
−1
−2

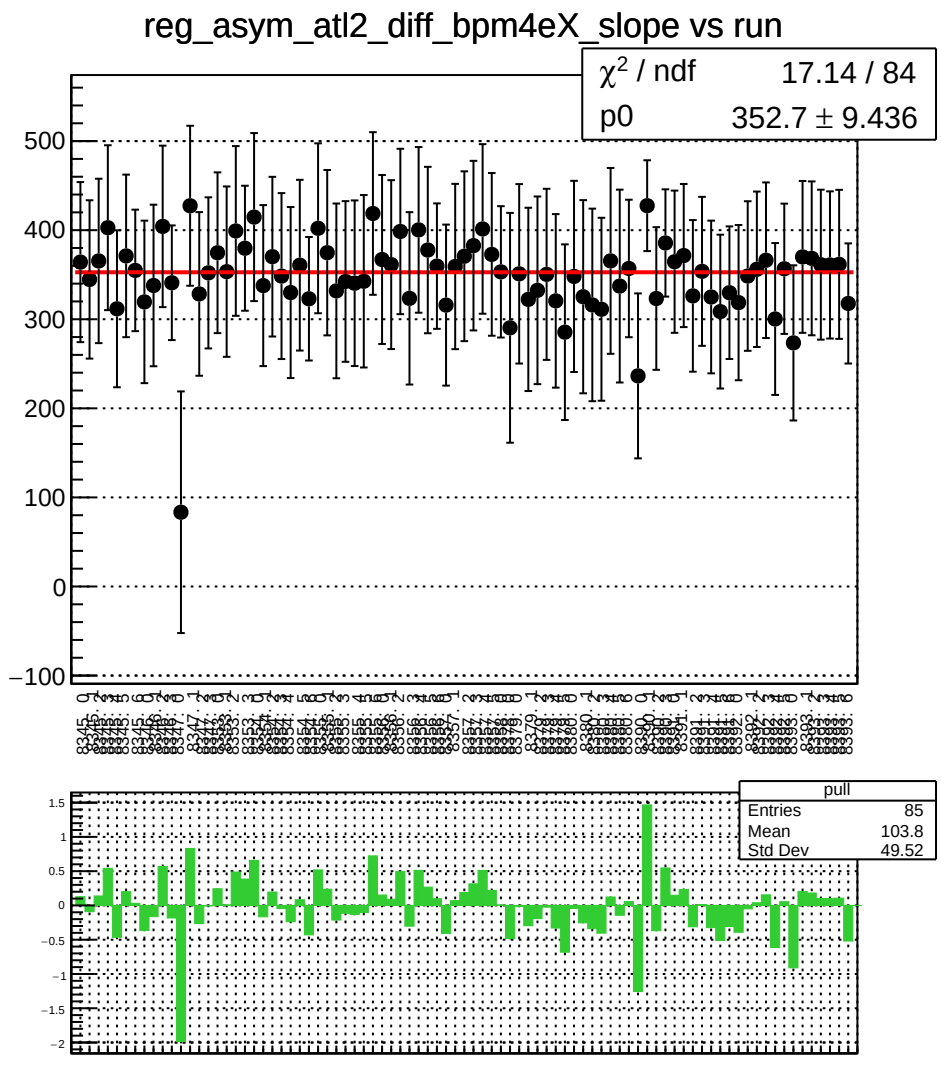

pull1D
Entries 85
Mean 0.0092
Std Dev 0.9601
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

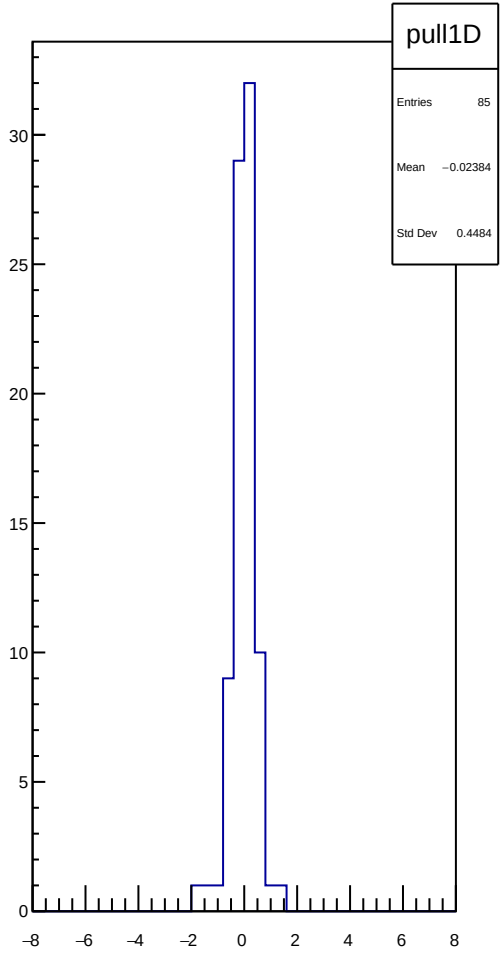

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 436.6 / 84
p0 −3.255 ± 0.248
pull
Entries 85
Mean 567.4
Std Dev 513.9
pull1D
Entries 85
Mean 0.04535
Std Dev 2.266

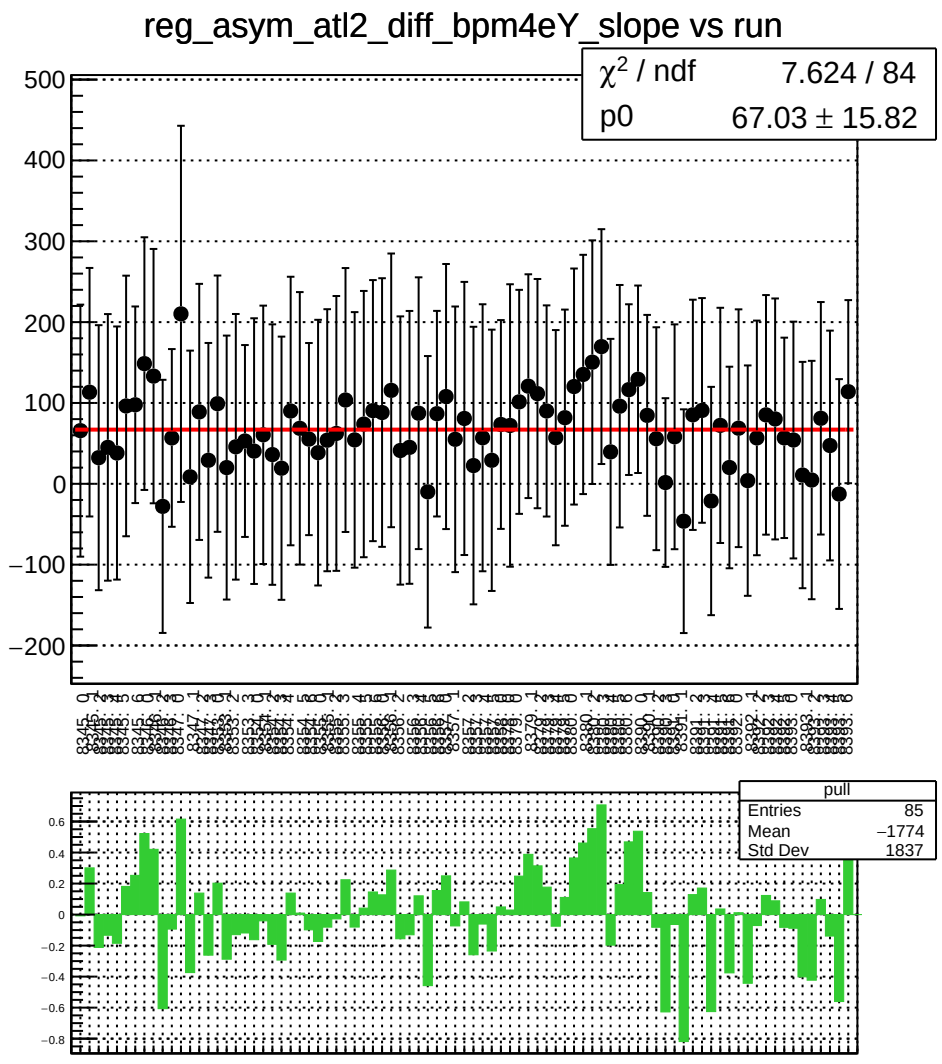

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 20.11 / 84
p0 −473.4 ± 8.657
−100
−200
−300
−400
−500
−600
pull
Entries 85
Mean 74.66
Std Dev 28.31
2
1.5
1
0.5
0
−0.5
−1

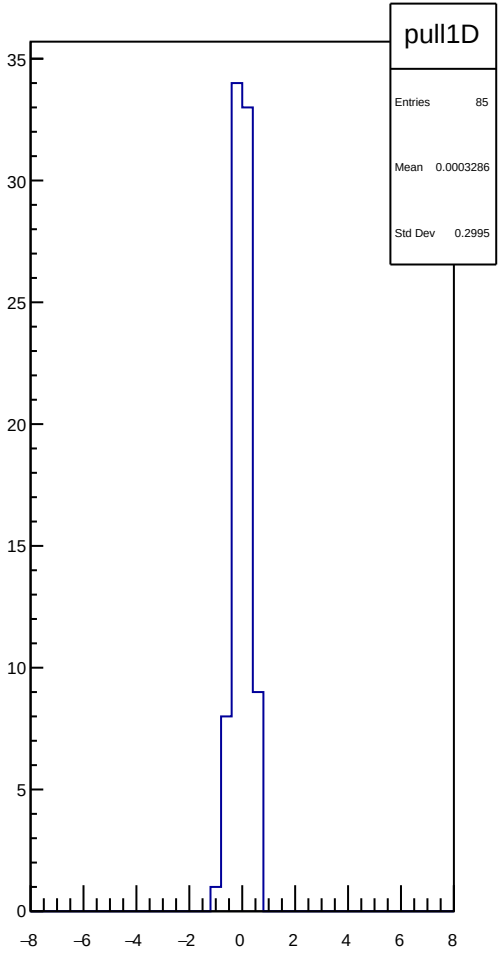

pull1D
Entries 85
Mean 0.04561
Std Dev 0.4843
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

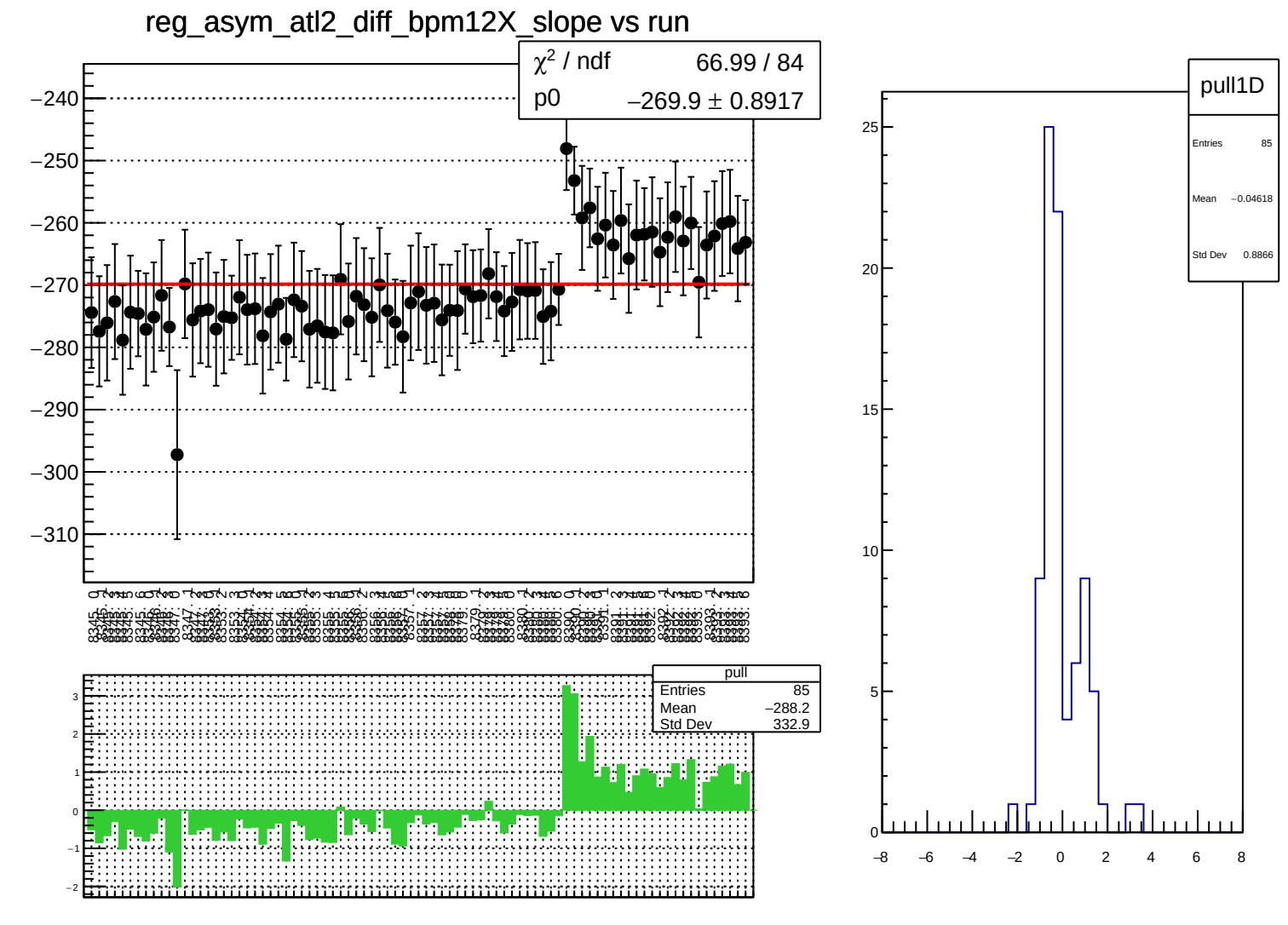

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 7.941 / 84
p0 57.32 ± 14.92
pull
Entries 85
Mean 122.4
Std Dev 36.69
pull1D
Entries 85
Mean 0.005919
Std Dev 0.3056

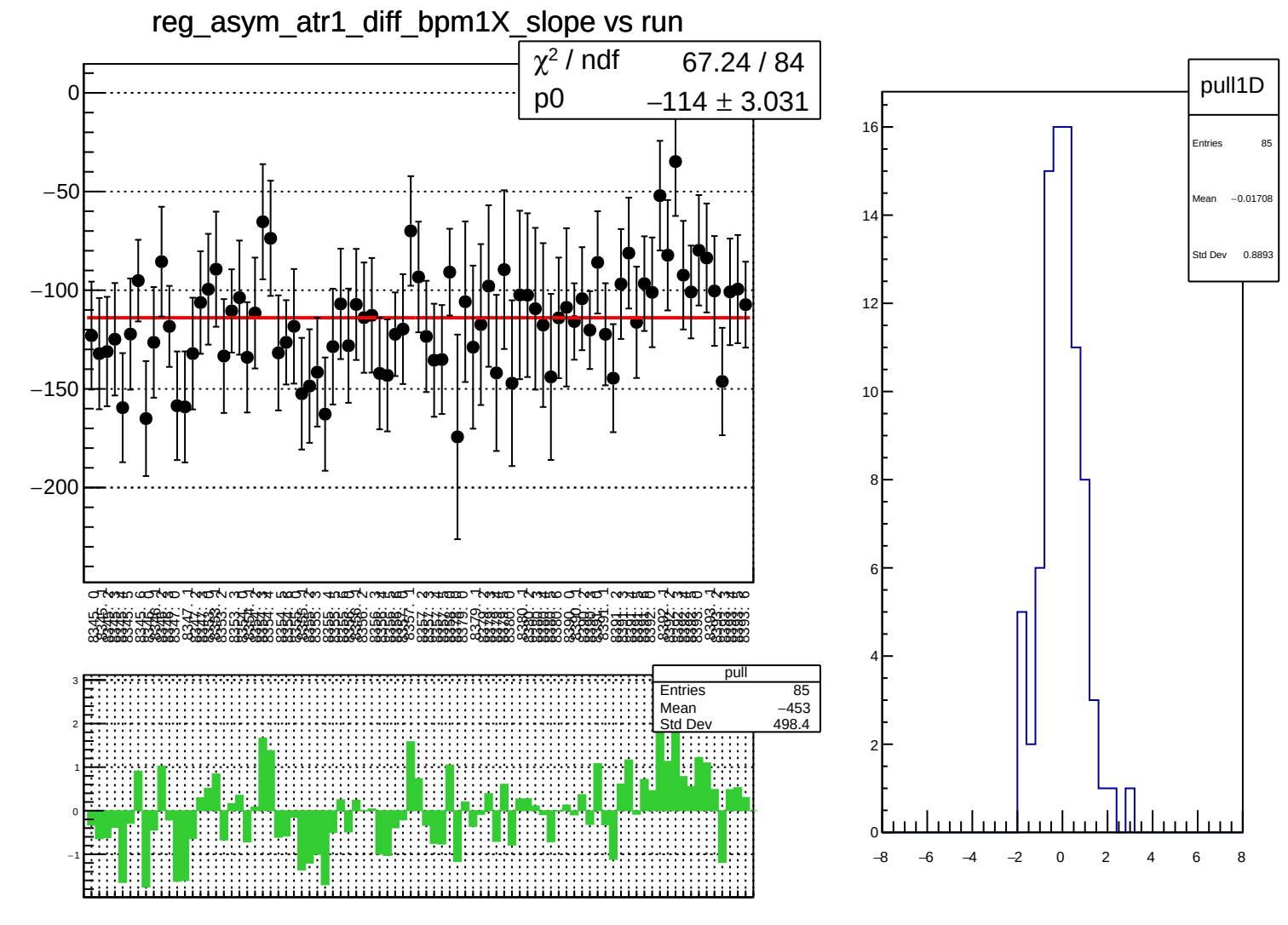

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 17.14 / 84
p0 352.7 ± 9.436
pull
Entries 85
Mean 103.8
Std Dev 49.52

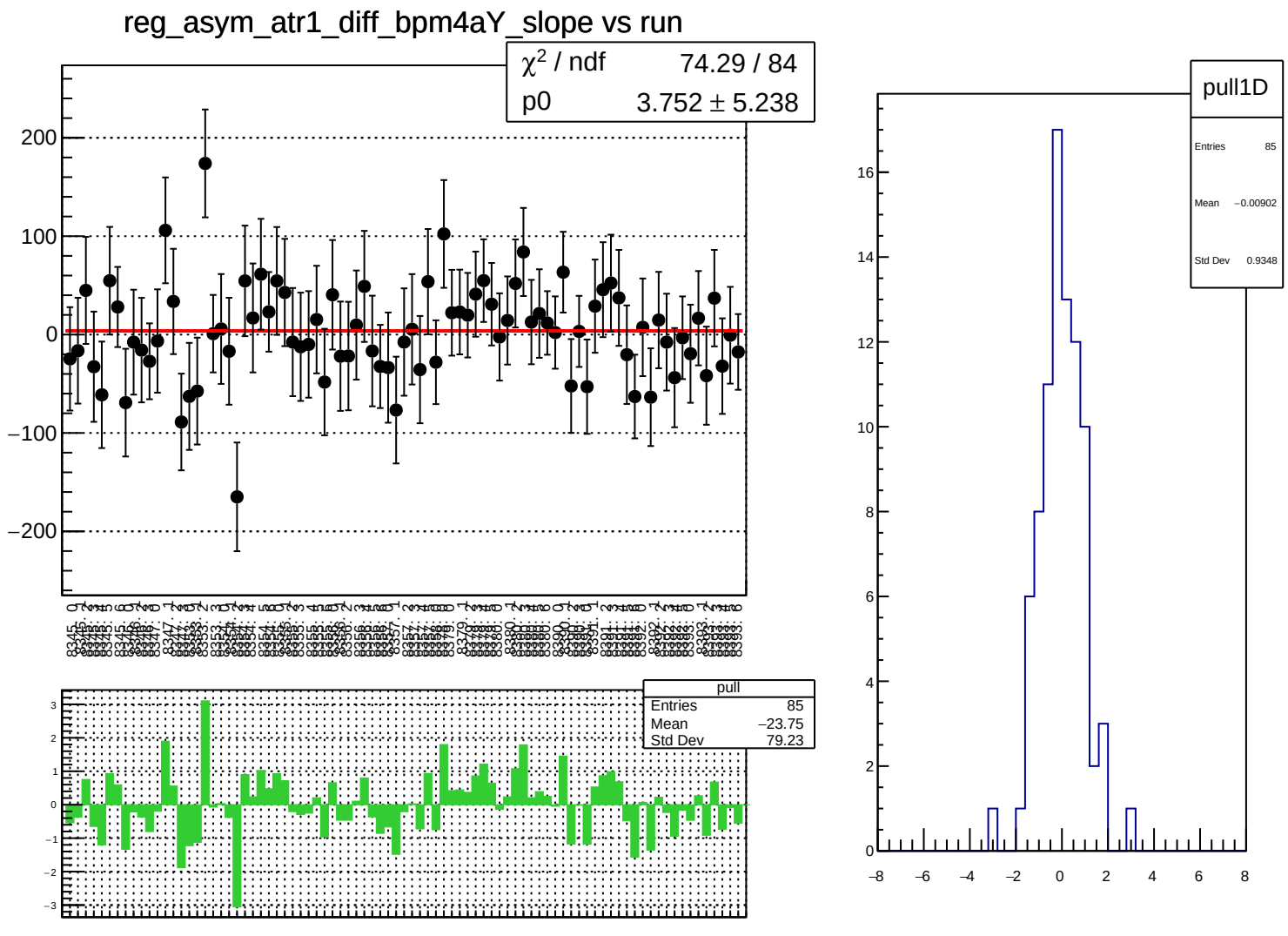

pull1D
Entries 85
Mean −0.02384
Std Dev 0.4484

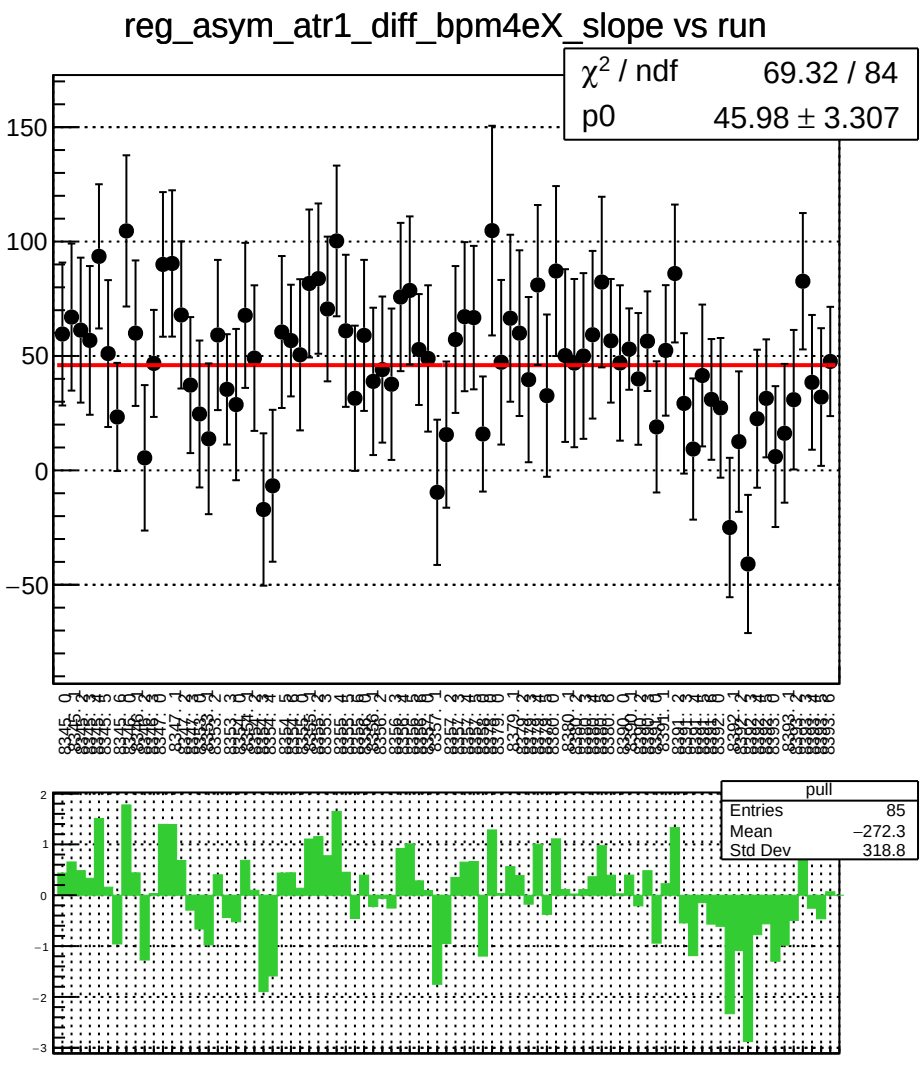

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 7.624 / 84
p0 67.03 ± 15.82
pull
Entries 85
Mean −1774
Std Dev 1837

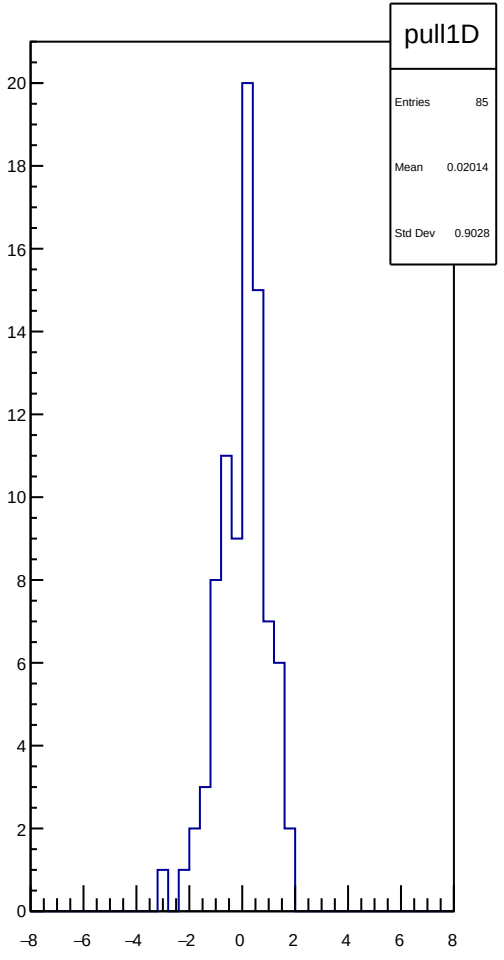

pull1D
Entries 85
Mean 0.0003286
Std Dev 0.2995

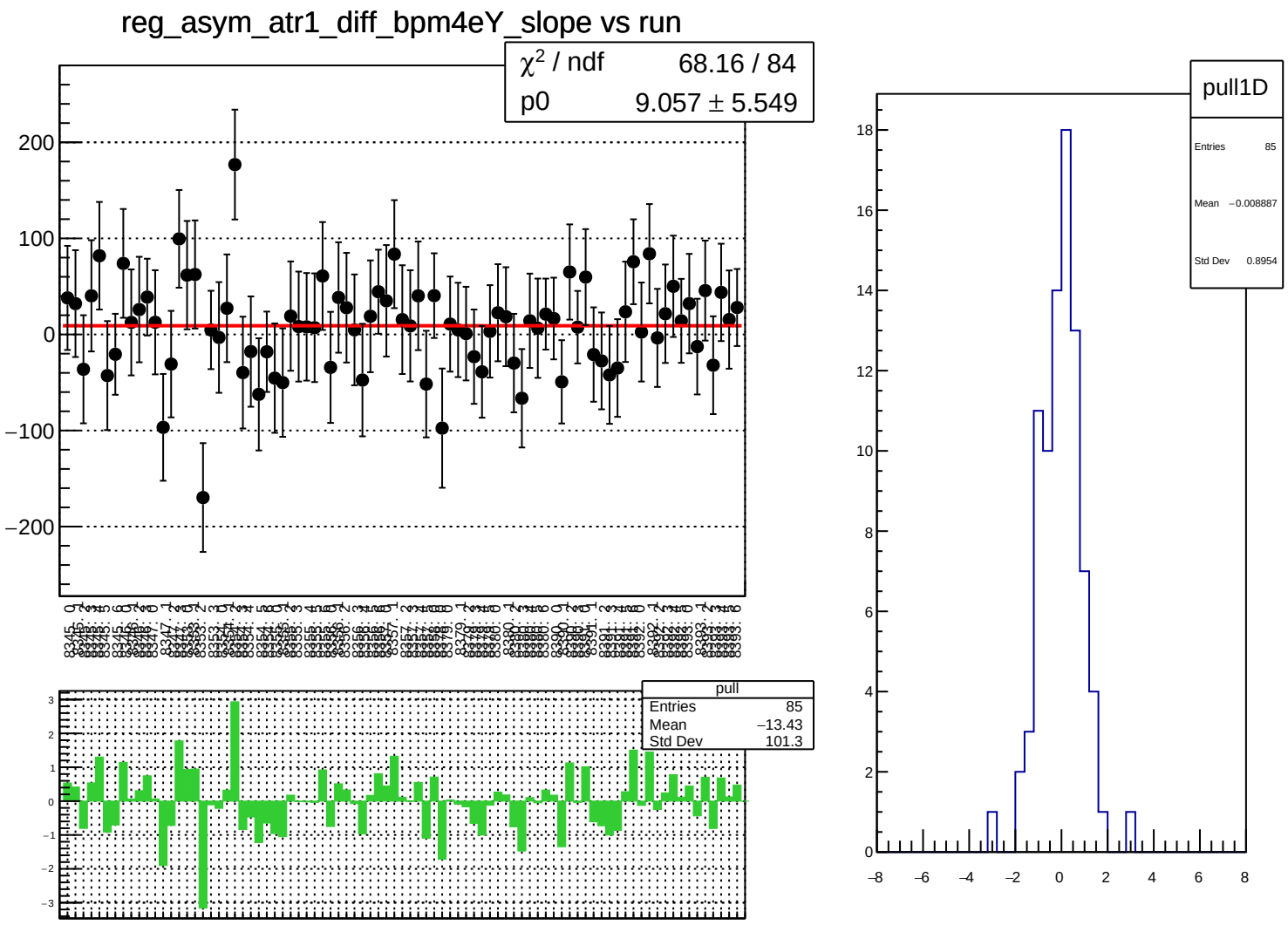

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 66.99 / 84
p0 −269.9 ± 0.8917
pull
Entries 85
Mean −288.2
Std Dev 332.9
pull1D
Entries 85
Mean −0.04618
Std Dev 0.8866

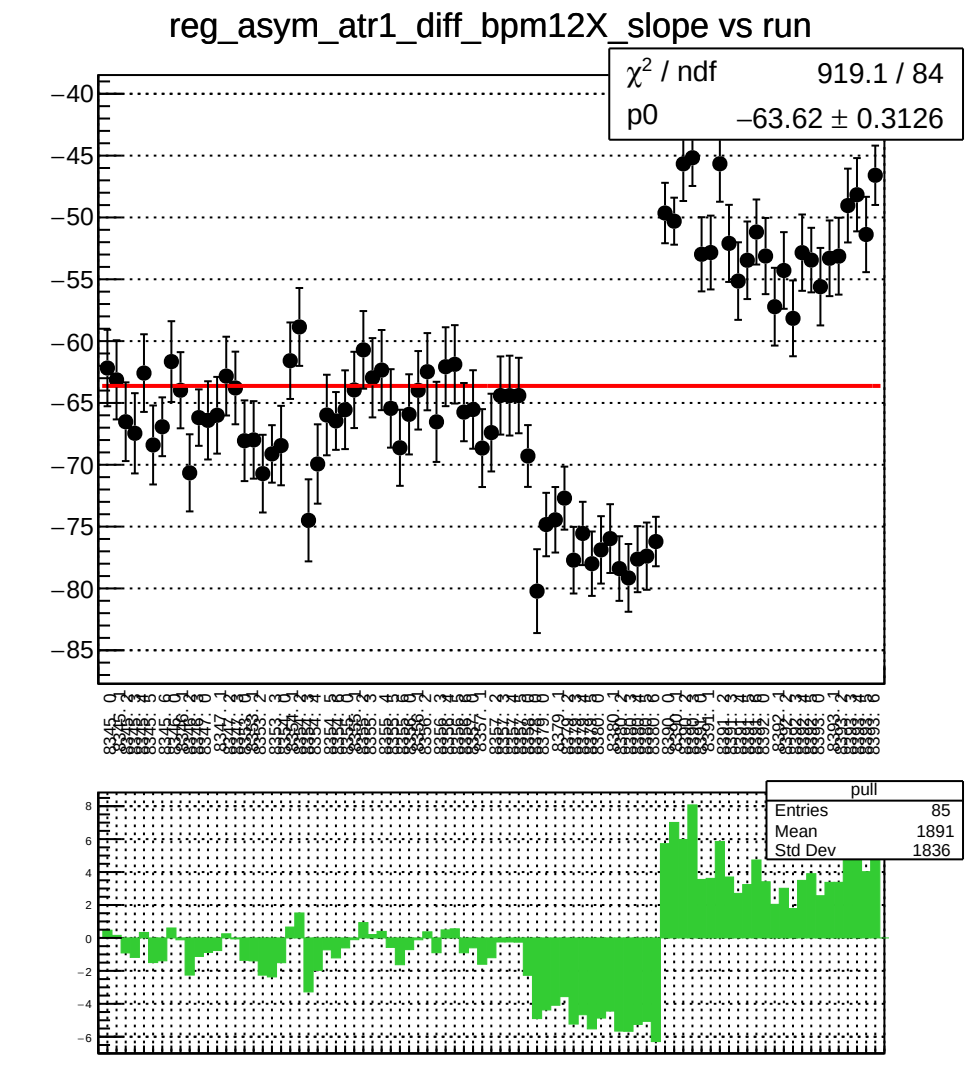

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 67.24 / 84
p0 −114 ± 3.031
pull
Entries 85
Mean −453
Std Dev 498.4
pull1D
Entries 85
Mean −0.01708
Std Dev 0.8893

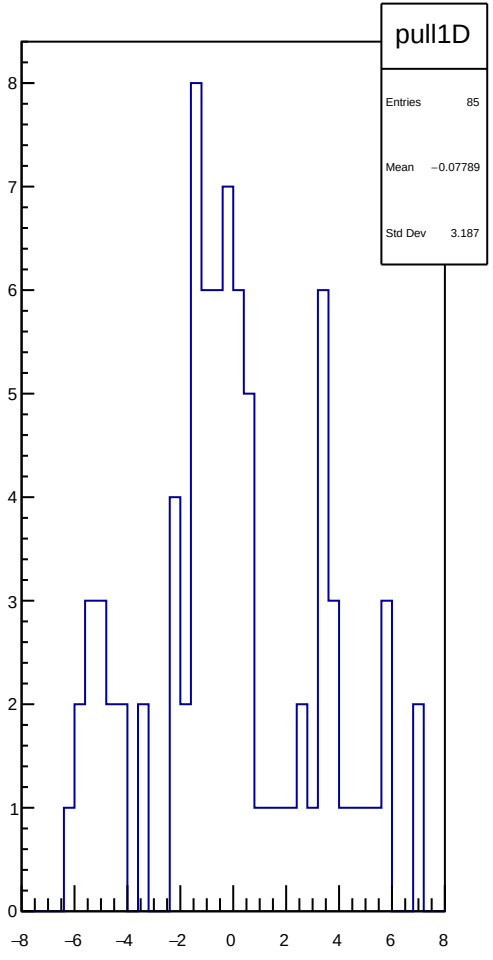

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 74.29 / 84
p0 3.752 ± 5.238
200
100
0
−100
−200
pull
Entries 85
Mean −23.75
Std Dev 79.23
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.00902
Std Dev 0.9348
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

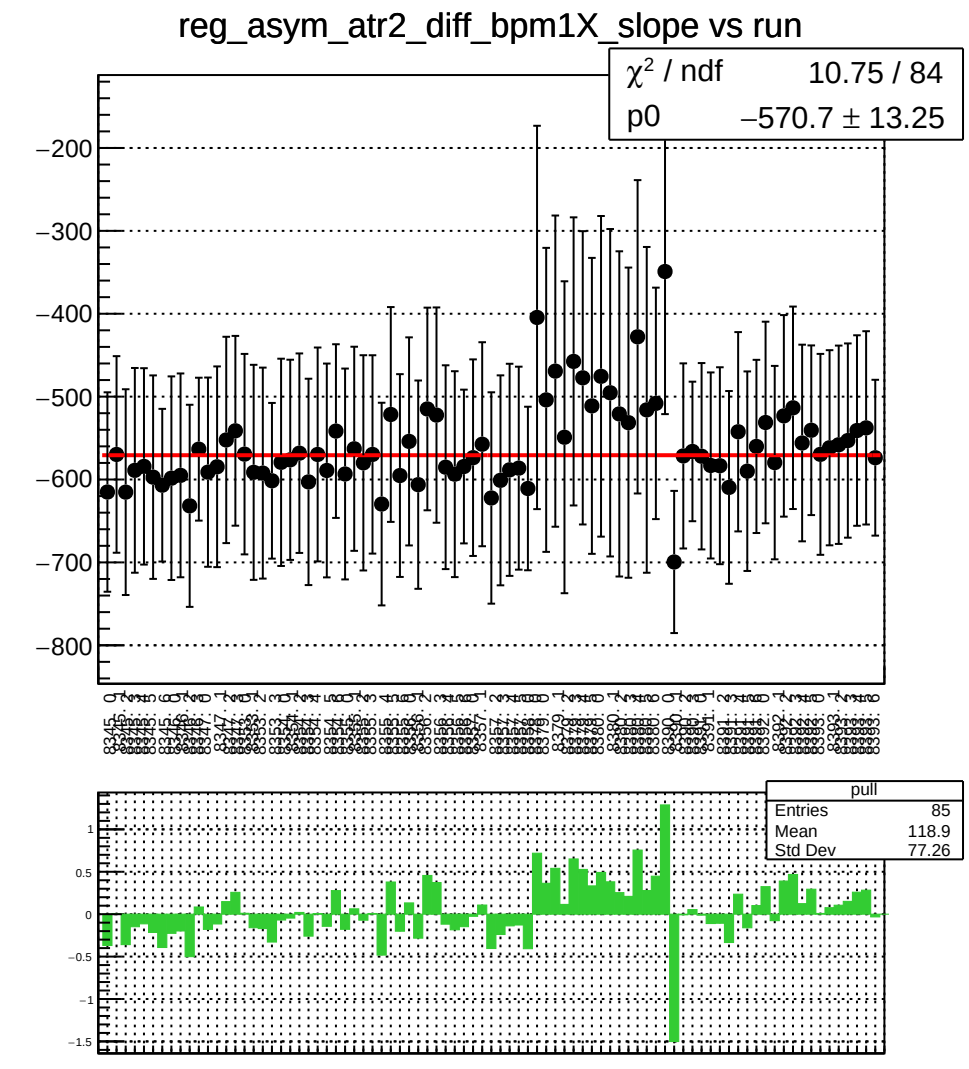

reg_asym_atr1_diff_bpm4eX_slope vs run
χ^2 / ndf 69.32 / 84
p0 45.98 ± 3.307
150
100
50
0
−50
pull
Entries 85
Mean −272.3
Std Dev 318.8
2
1
0
−1
−2
−3

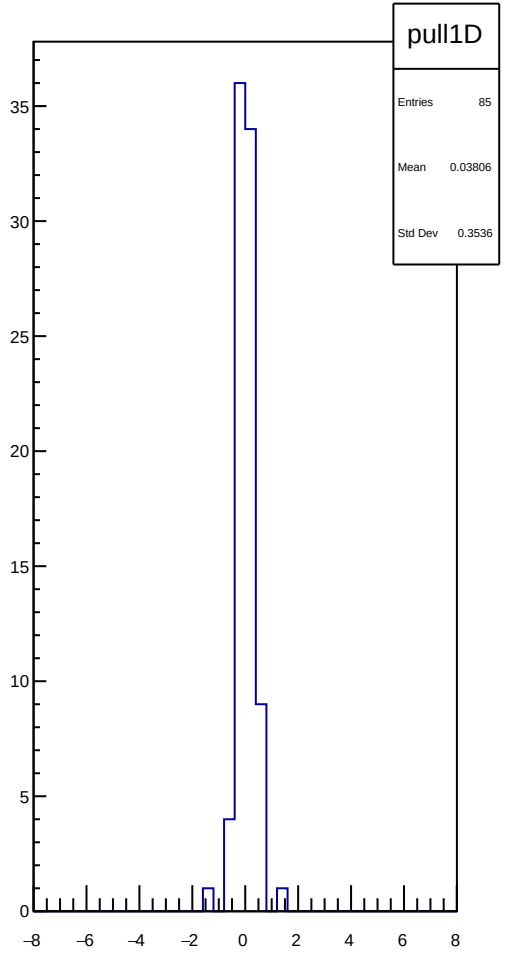

pull1D
Entries 85
Mean 0.02014
Std Dev 0.9028
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

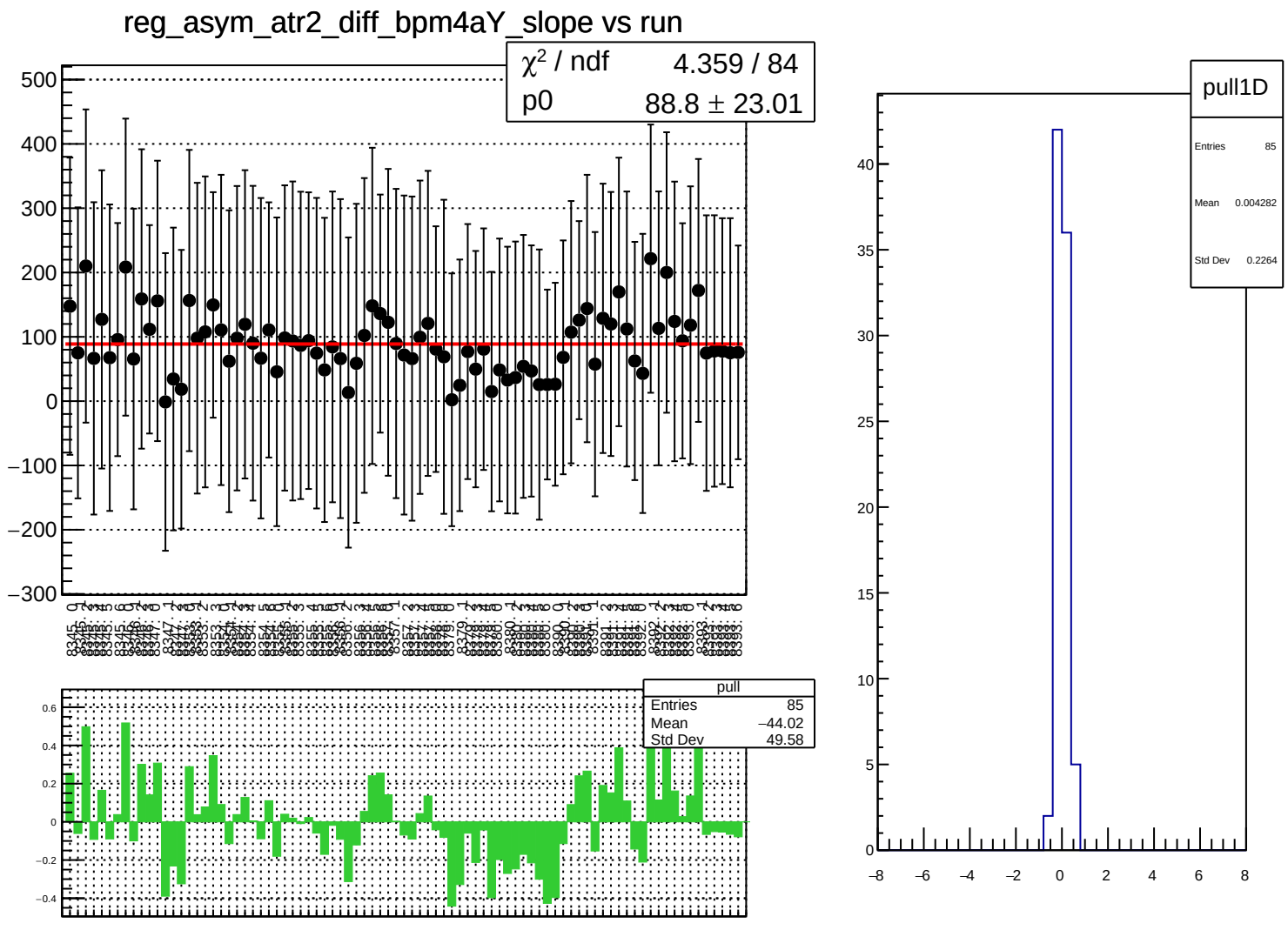

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 68.16 / 84
p0 9.057 ± 5.549
200
100
0
−100
−200
pull
Entries 85
Mean −13.43
Std Dev 101.3
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.008887
Std Dev 0.8954
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

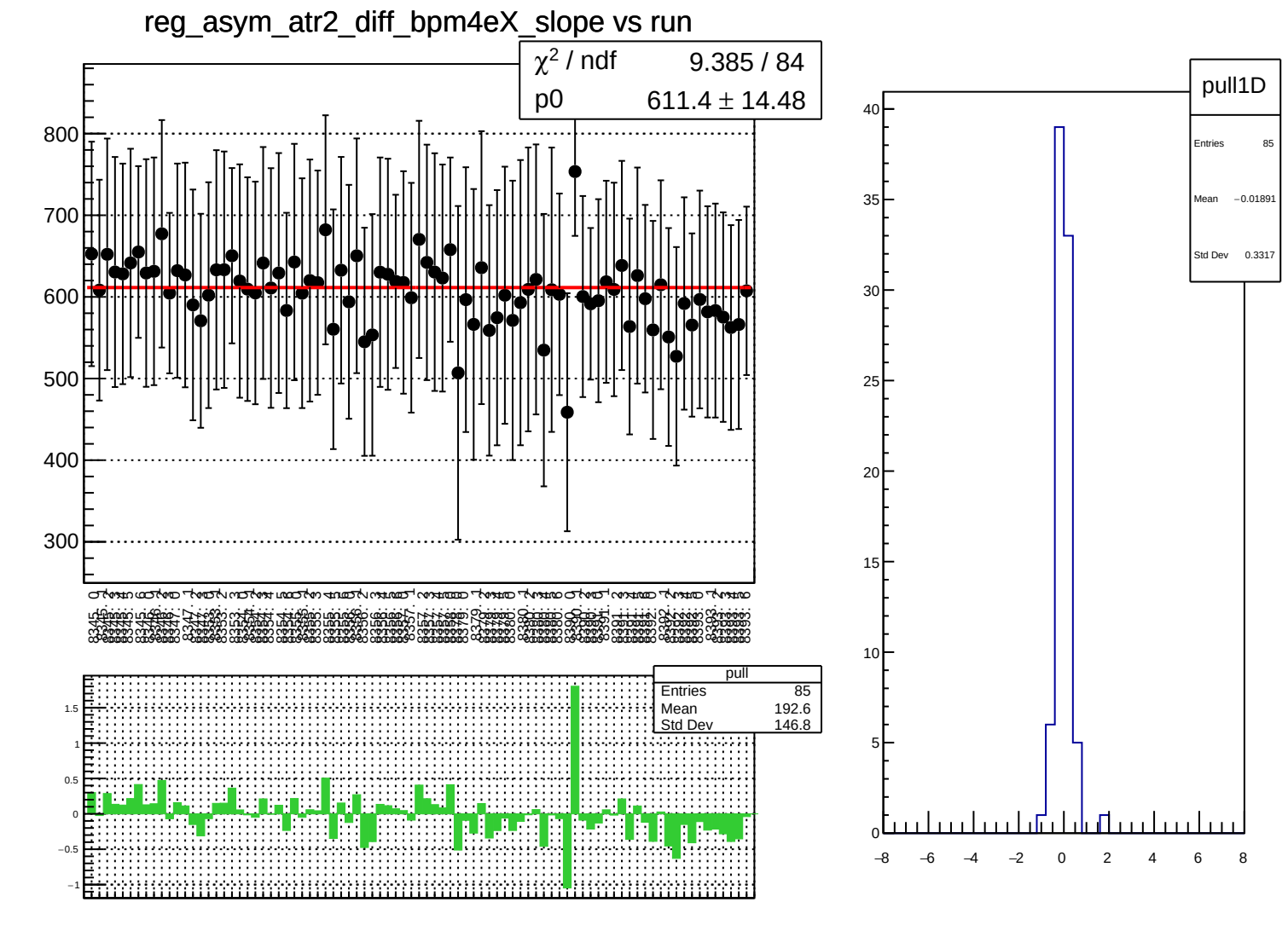

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 919.1 / 84
p0 −63.62 ± 0.3126
pull
Entries 85
Mean 1891
Std Dev 1836

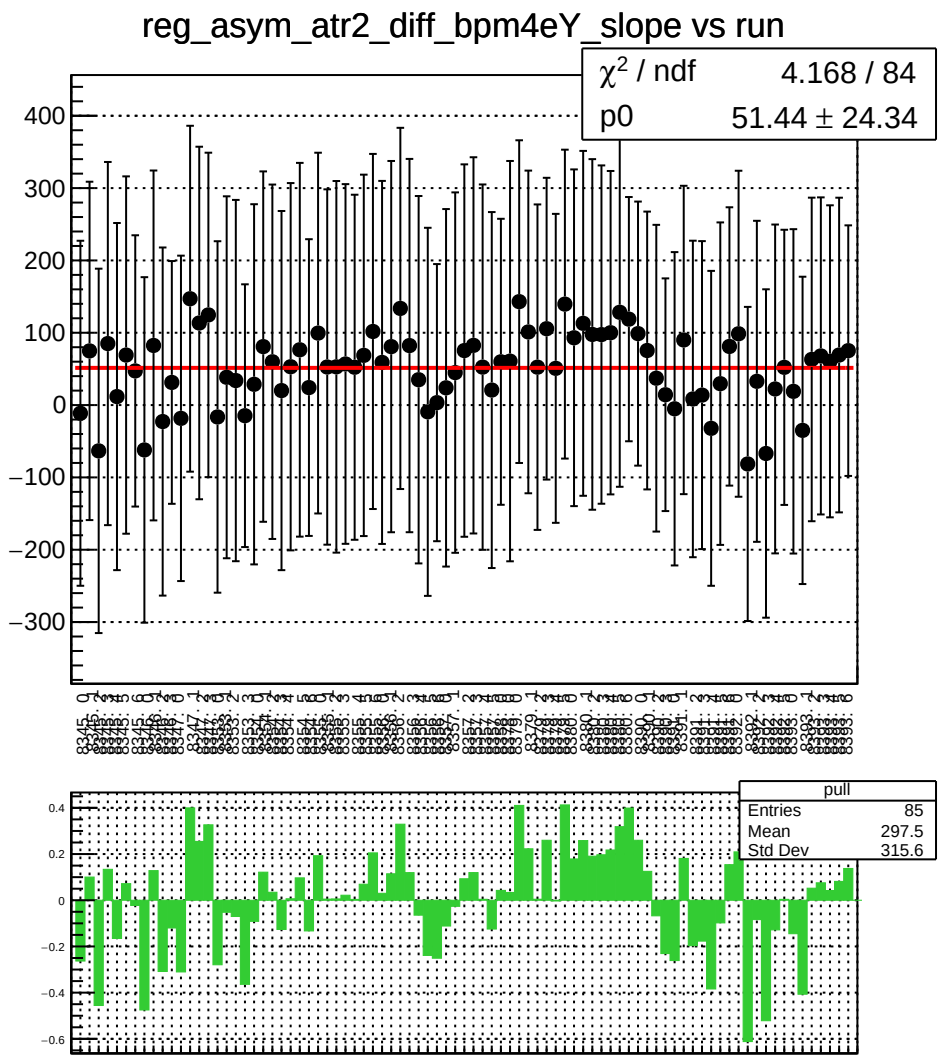

pull1D
Entries 85
Mean −0.07789
Std Dev 3.187

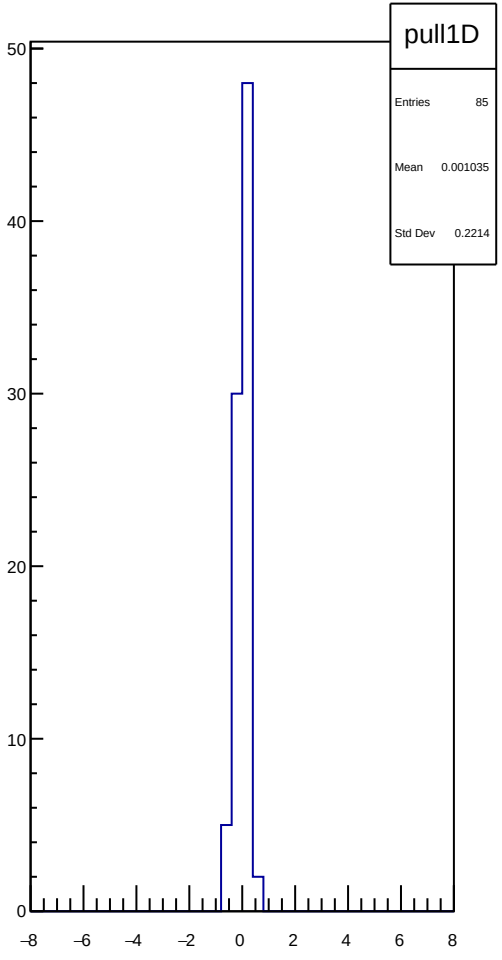

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 10.75 / 84
p0 −570.7 ± 13.25
pull
Entries 85
Mean 118.9
Std Dev 77.26

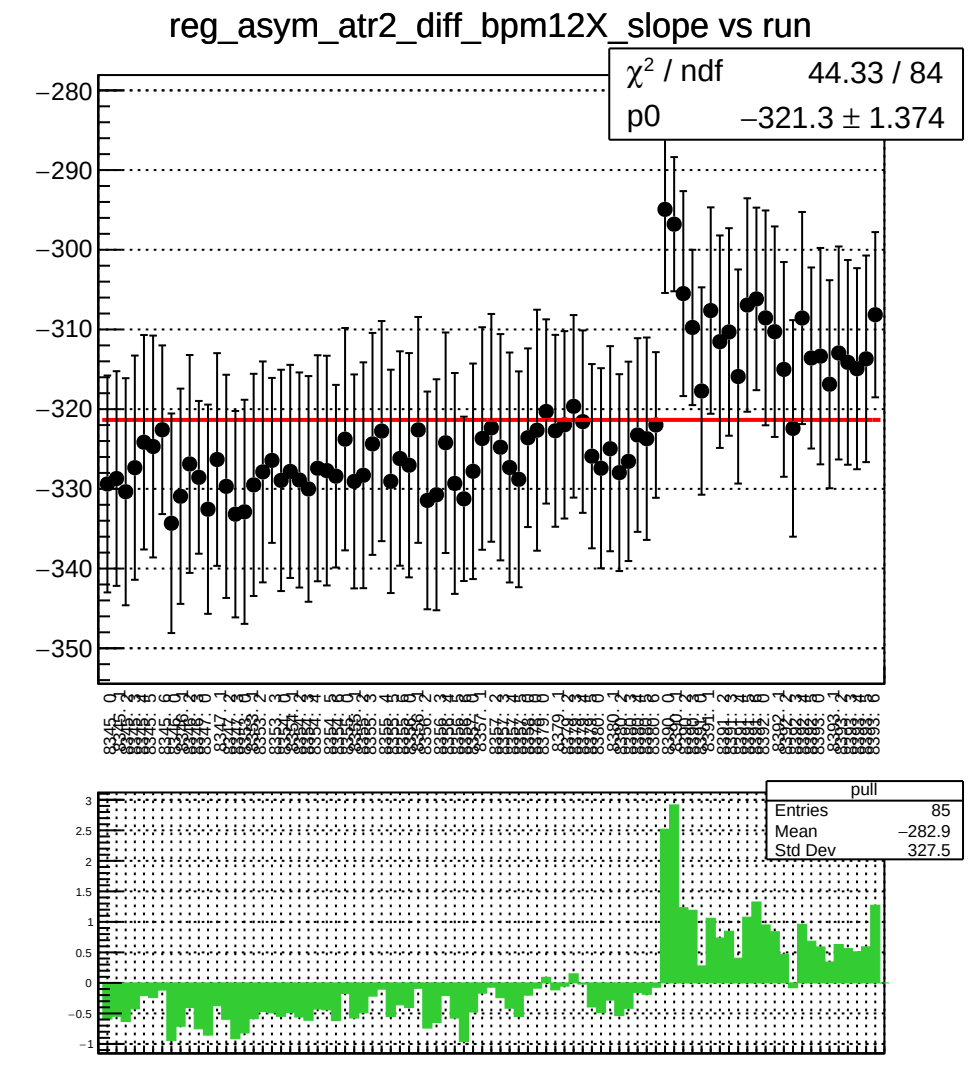

pull1D
Entries 85
Mean 0.03806
Std Dev 0.3536

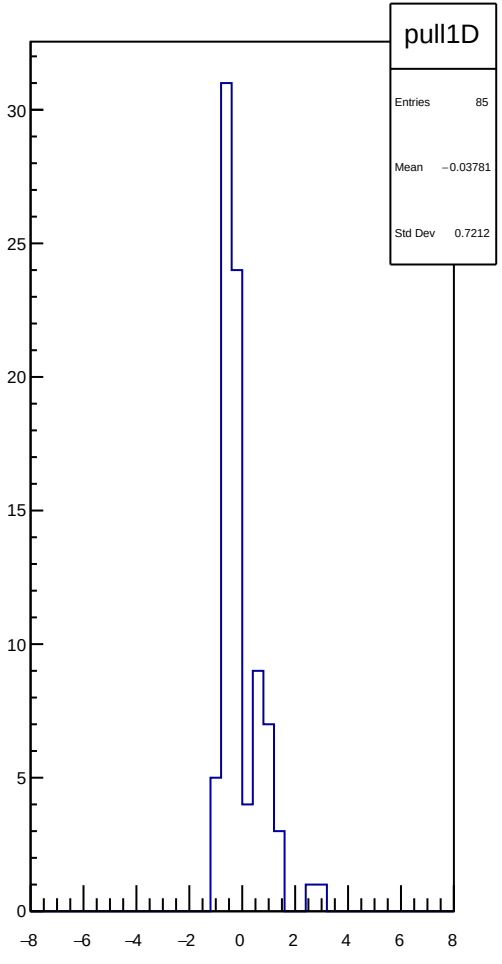

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 4.359 / 84
p0 88.8 ± 23.01
pull
Entries 85
Mean −44.02
Std Dev 49.58
pull1D
Entries 85
Mean 0.004282
Std Dev 0.2264

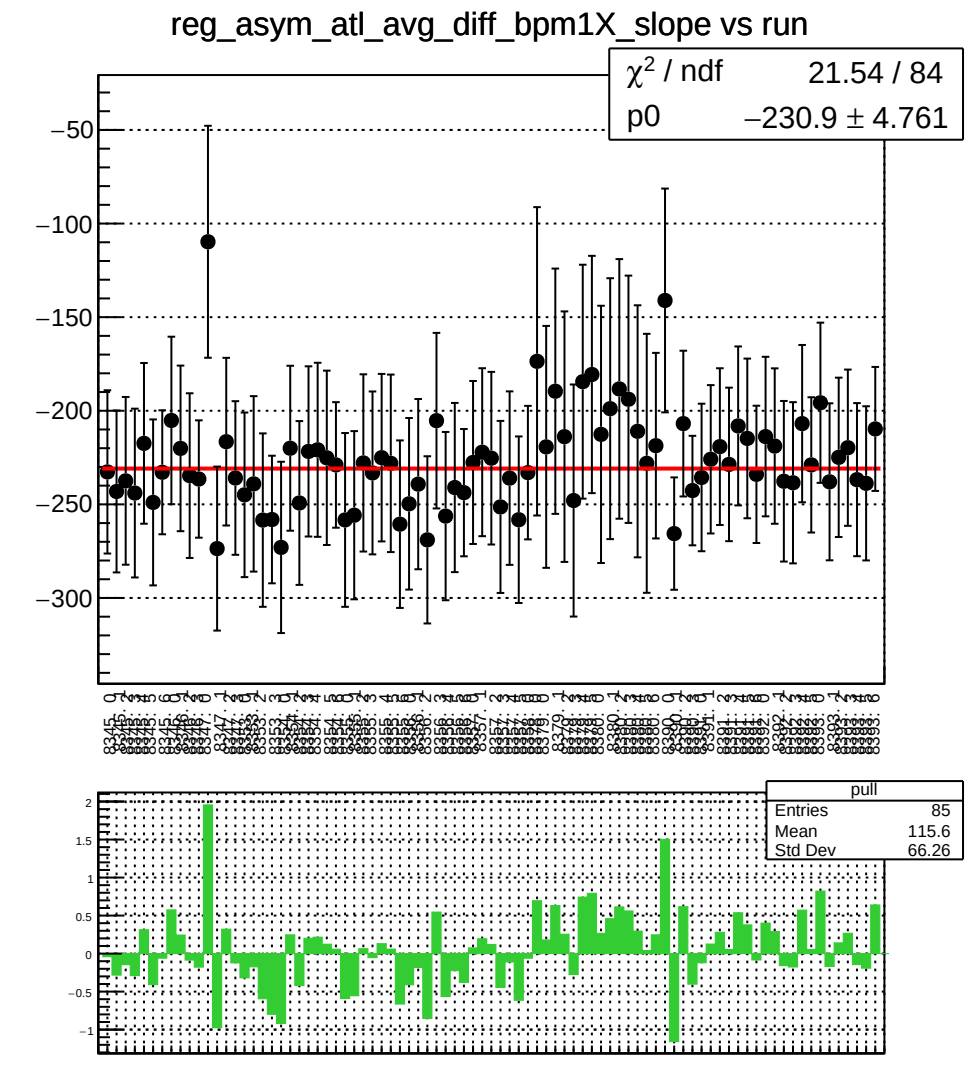

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 9.385 / 84
p0 611.4 ± 14.48
800
700
600
500
400
300
pull
Entries 85
Mean 192.6
Std Dev 146.8
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.01891
Std Dev 0.3317
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

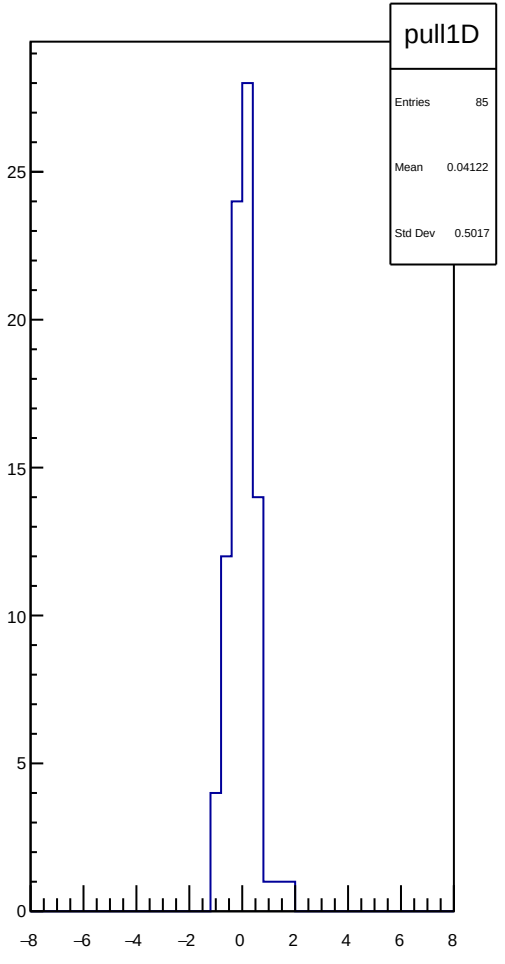

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 4.168 / 84
p0 51.44 ± 24.34
pull
Entries 85
Mean 297.5
Std Dev 315.6

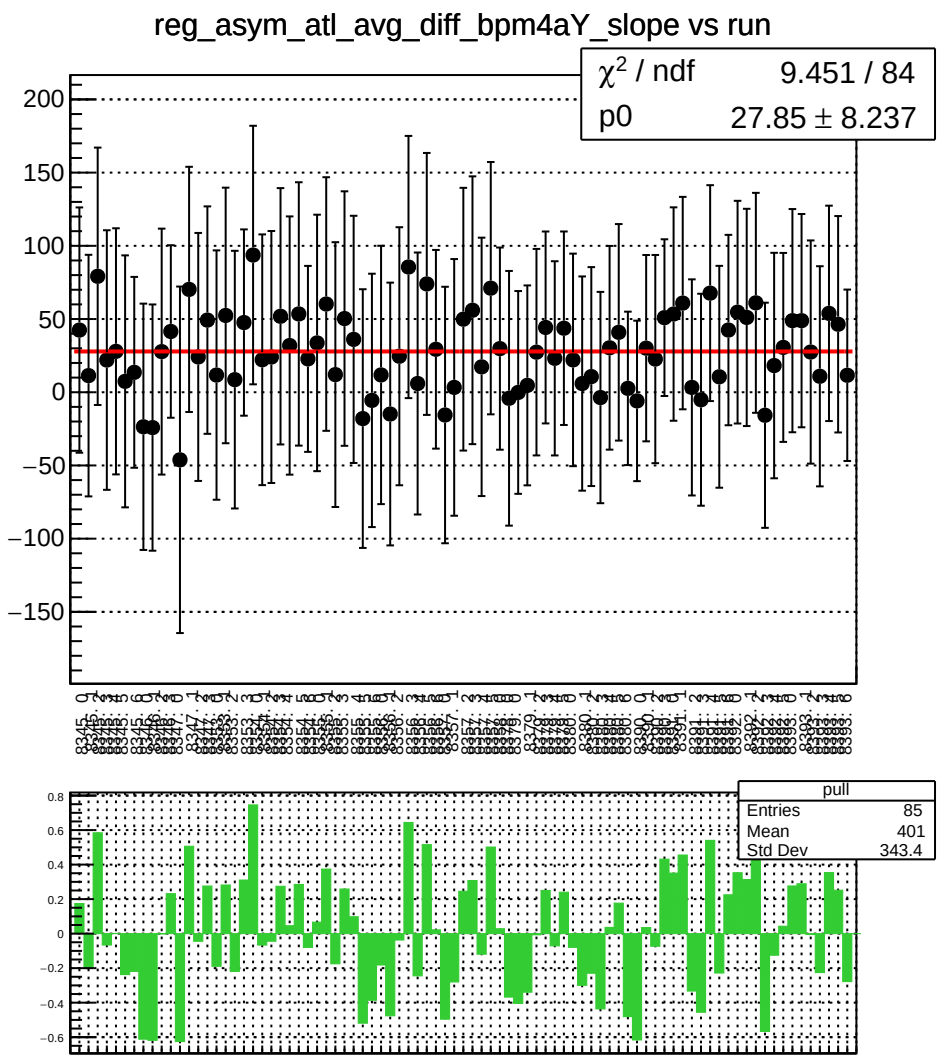

pull1D
Entries 85
Mean 0.001035
Std Dev 0.2214

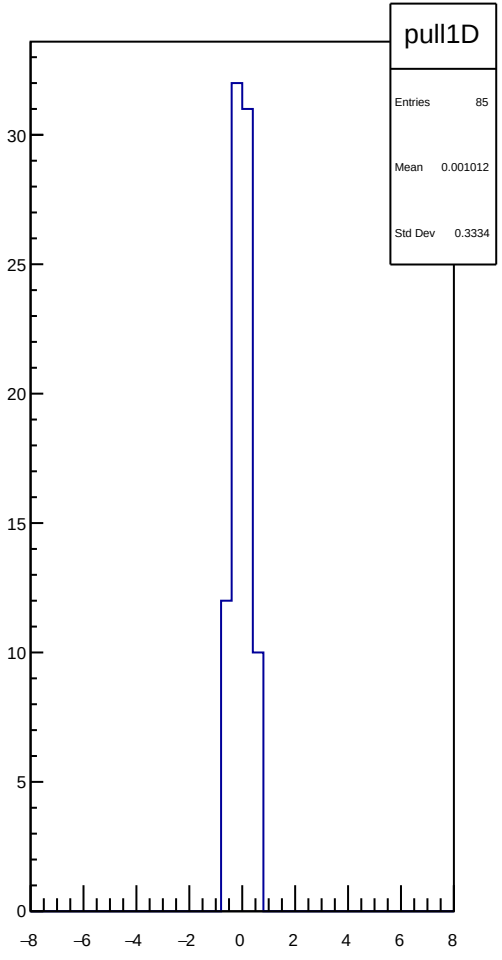

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 44.33 / 84
p0 −321.3 ± 1.374
pull
Entries 85
Mean −282.9
Std Dev 327.5

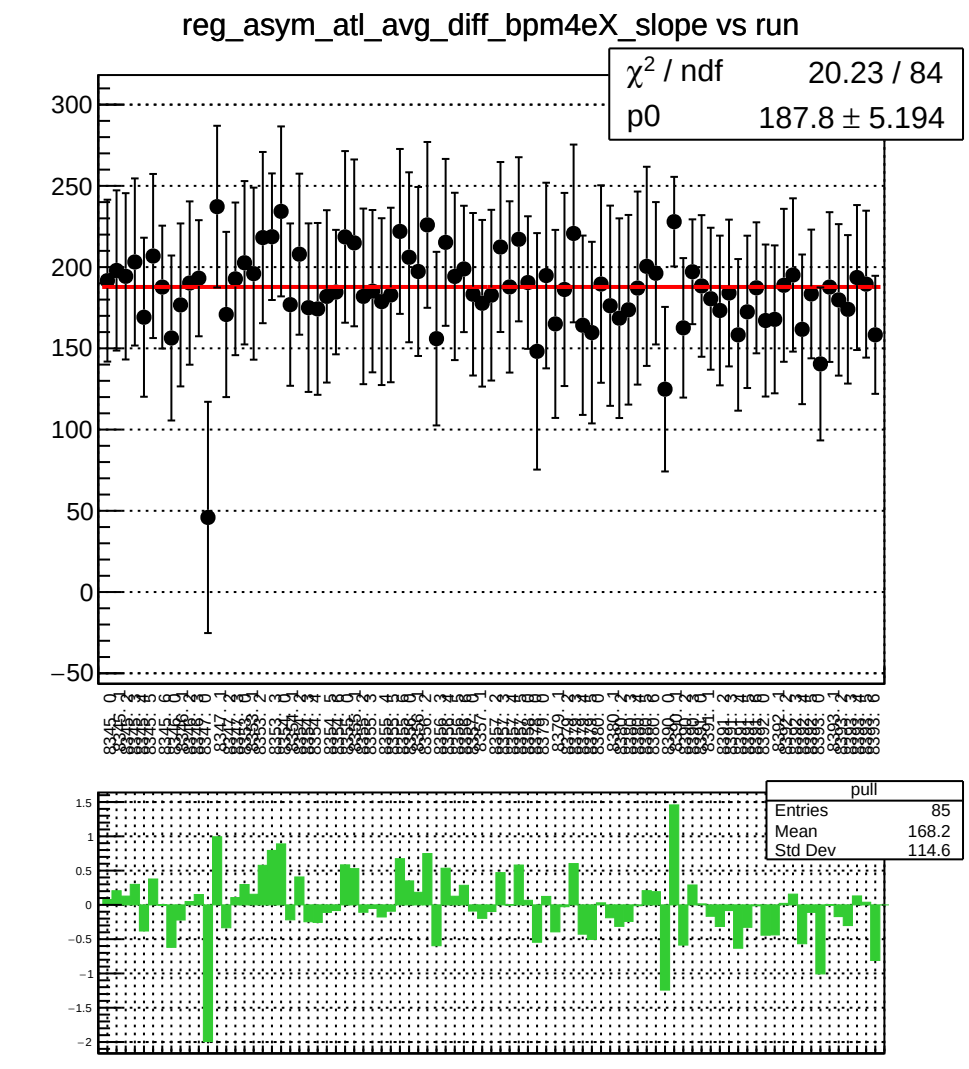

pull1D
Entries 85
Mean −0.03781
Std Dev 0.7212

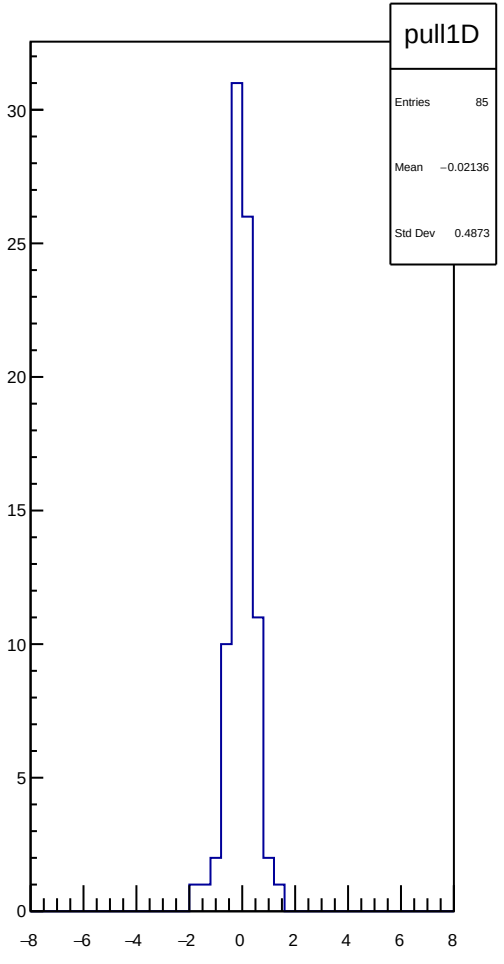

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 21.54 / 84
p0 −230.9 ± 4.761
pull
Entries 85
Mean 115.6
Std Dev 66.26

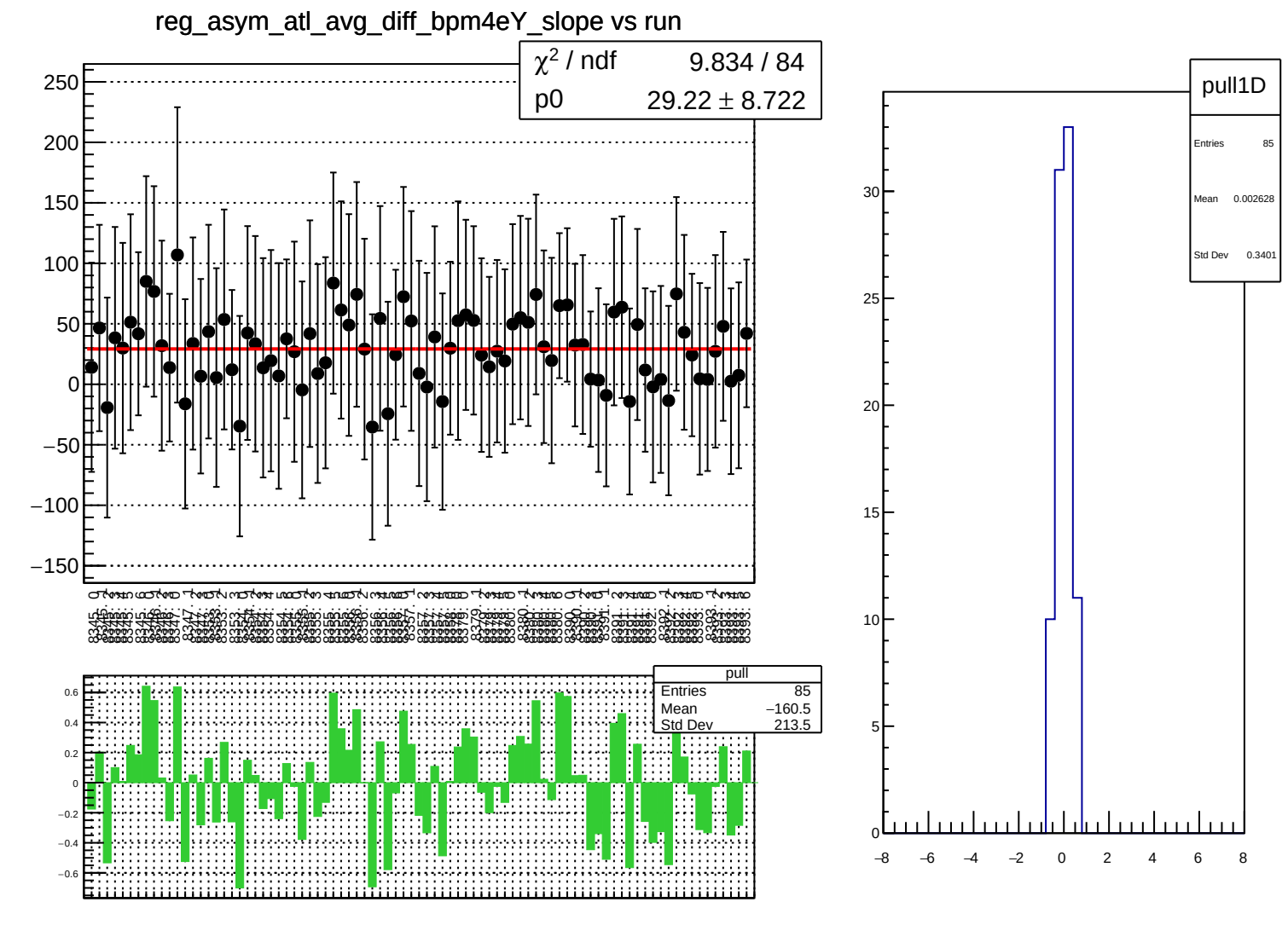

pull1D
Entries 85
Mean 0.04122
Std Dev 0.5017

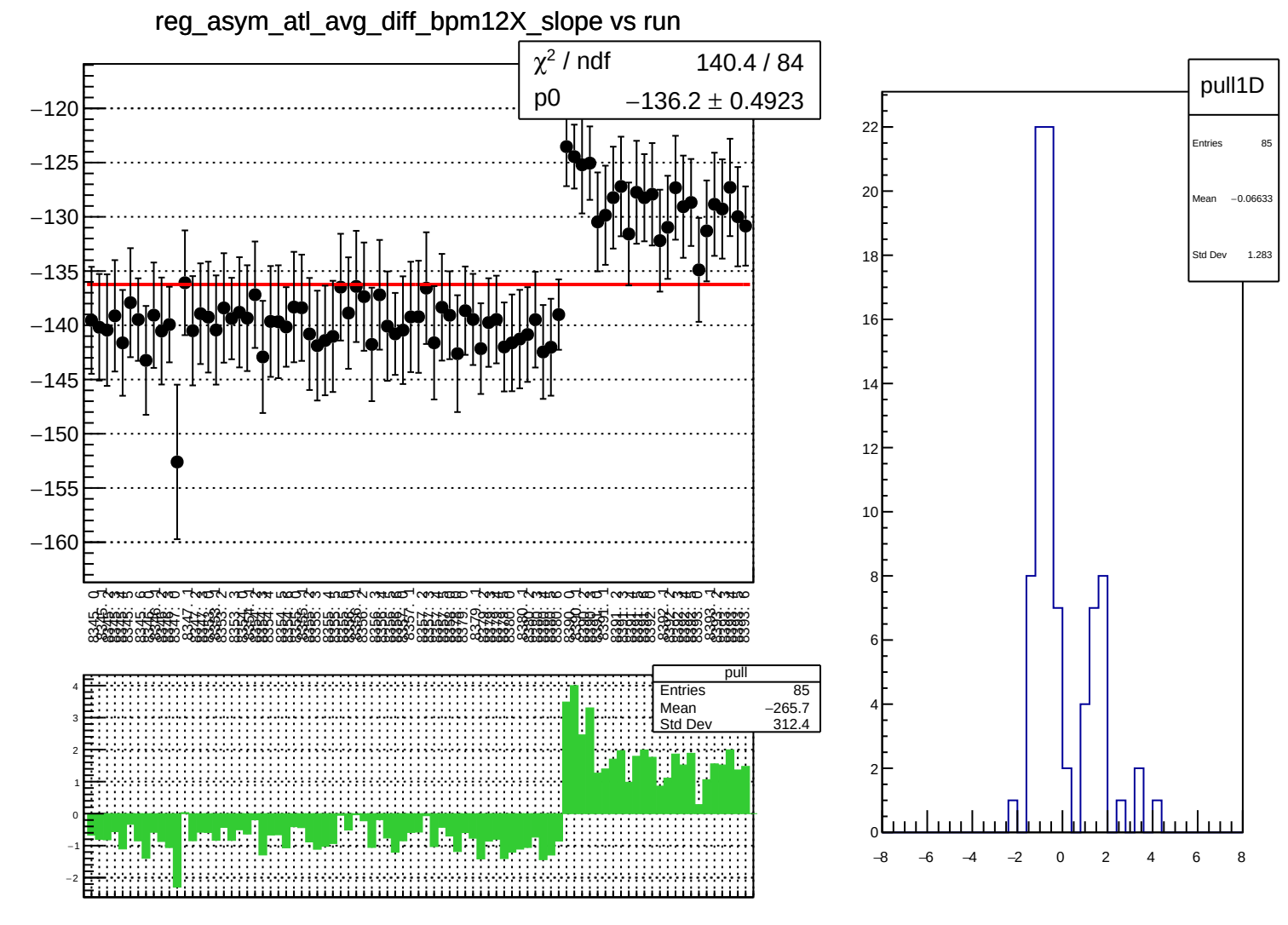

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.451 / 84
p0 27.85 ± 8.237
pull
Entries 85
Mean 401
Std Dev 343.4

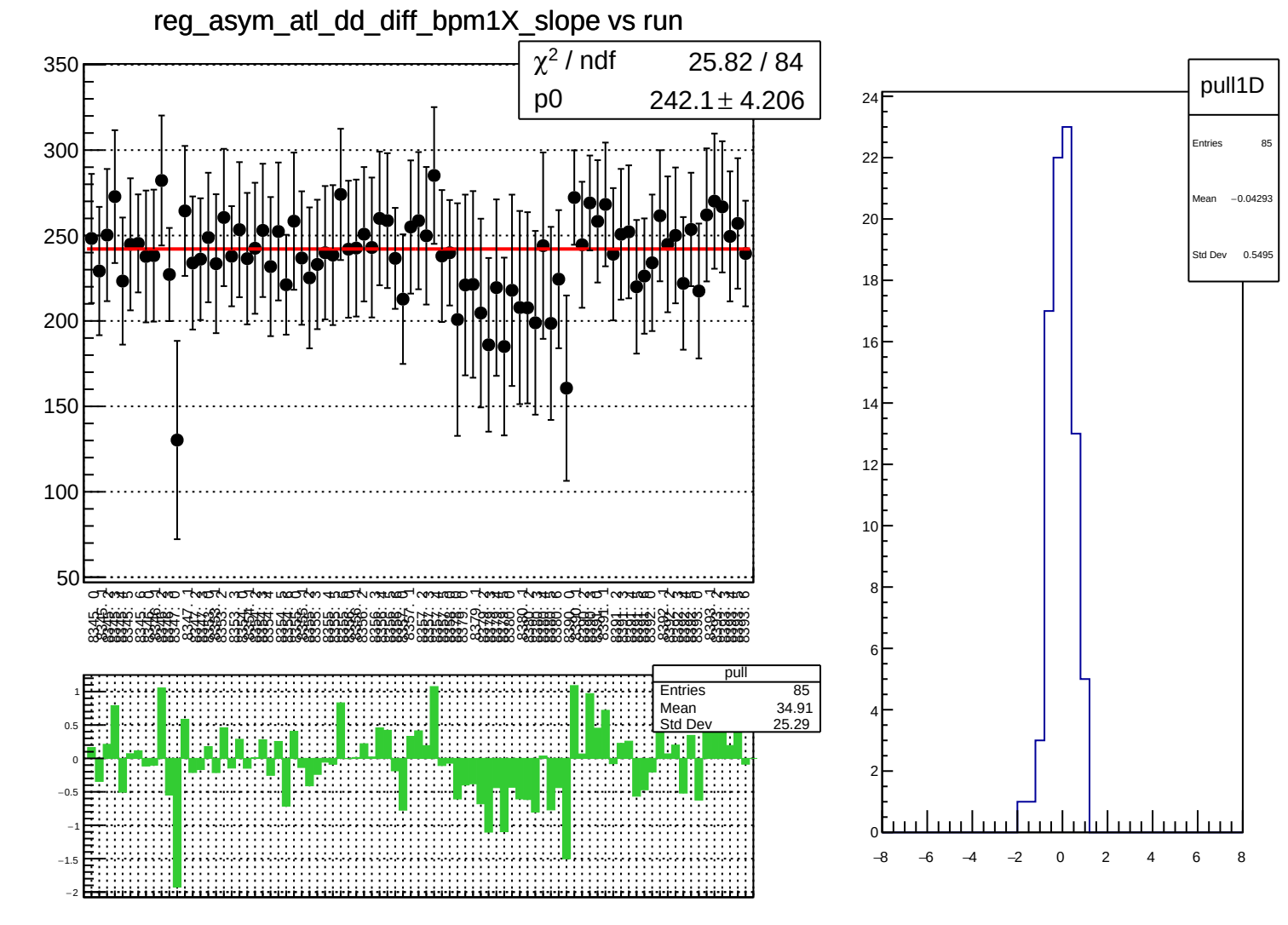

pull1D
Entries 85
Mean 0.001012
Std Dev 0.3334

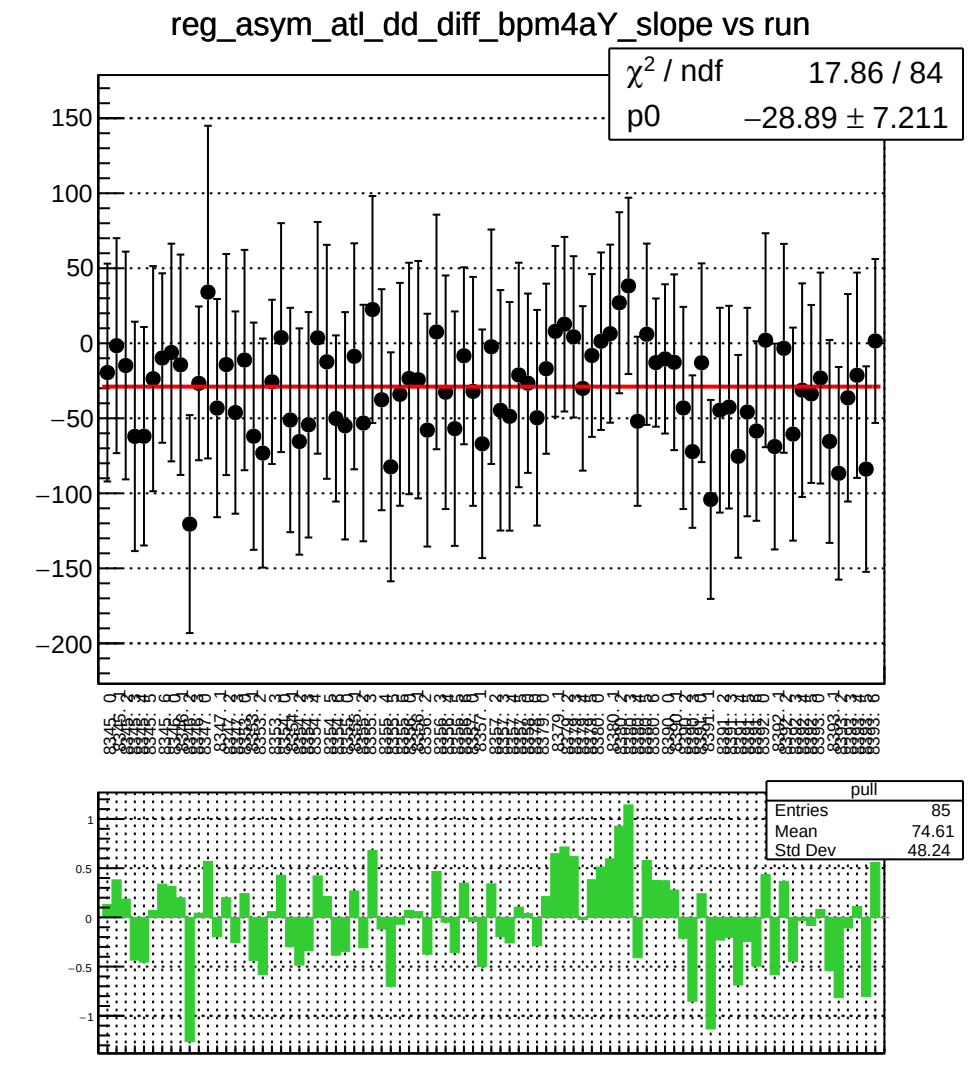

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 20.23 / 84
p0 187.8 ± 5.194
pull
Entries 85
Mean 168.2
Std Dev 114.6

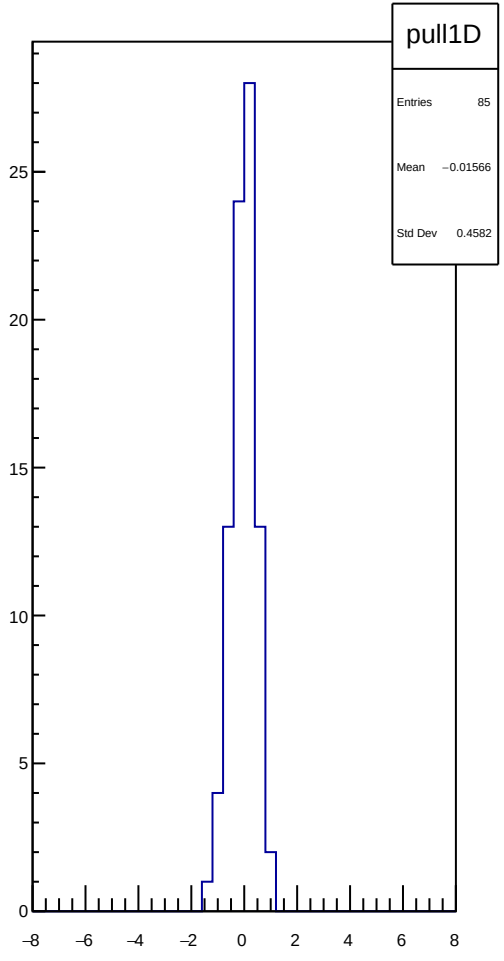

pull1D
Entries 85
Mean −0.02136
Std Dev 0.4873

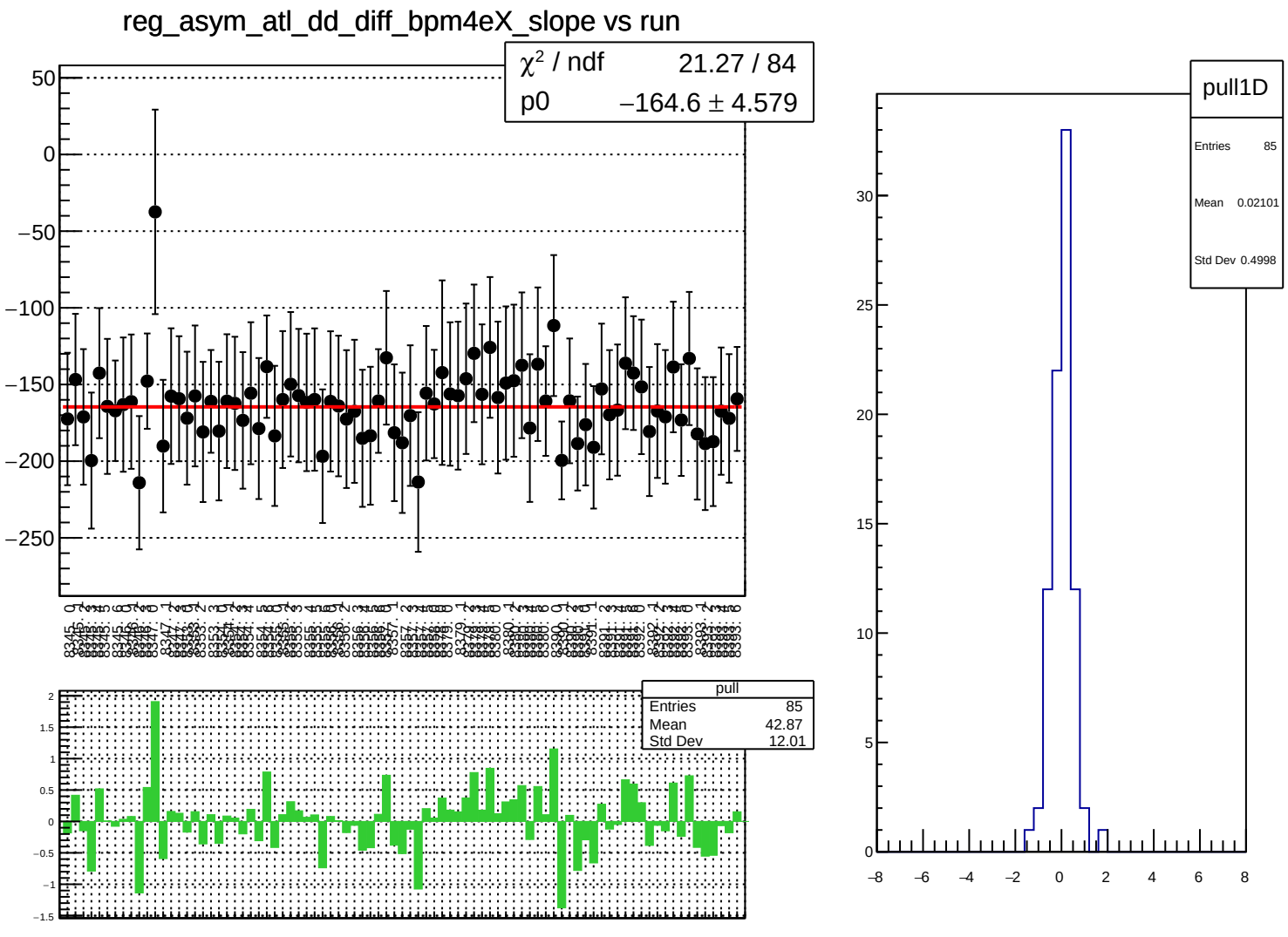

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.834 / 84
p0 29.22 ± 8.722
pull
Entries 85
Mean −160.5
Std Dev 213.5
pull1D
Entries 85
Mean 0.002628
Std Dev 0.3401

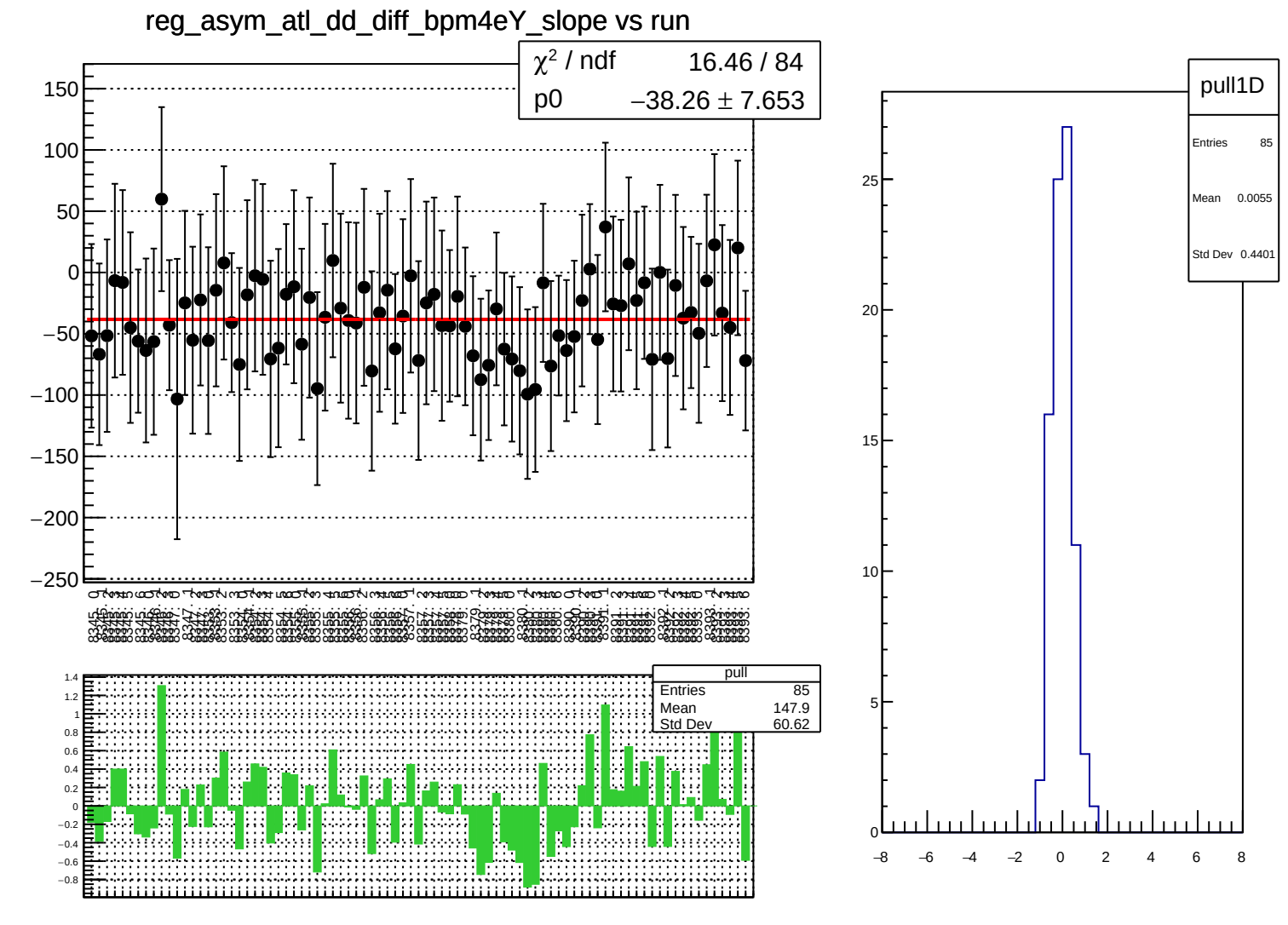

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 140.4 / 84
p0 −136.2 ± 0.4923
pull
Entries 85
Mean −265.7
Std Dev 312.4
pull1D
Entries 85
Mean −0.06633
Std Dev 1.283

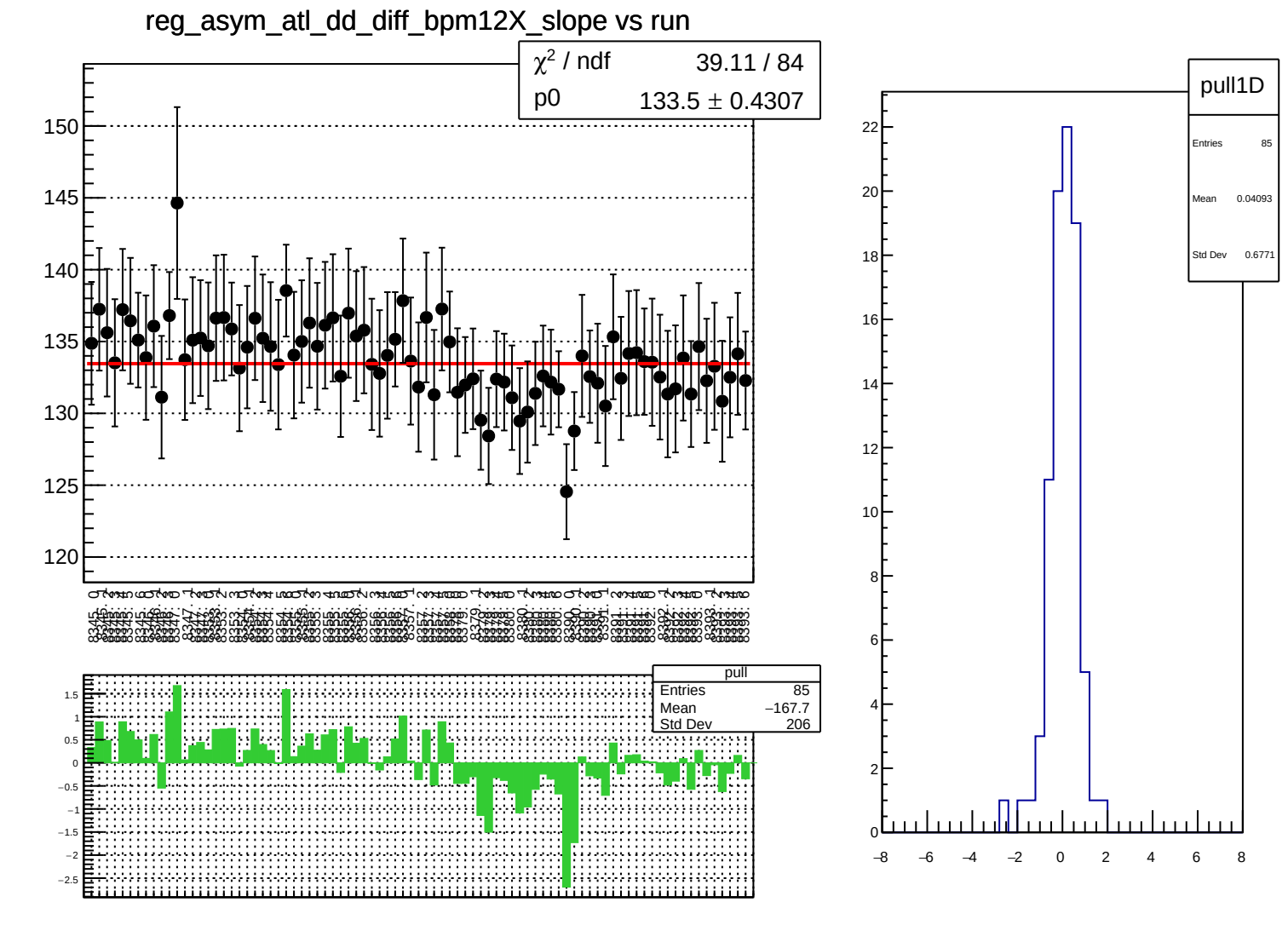

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 25.82 / 84
p0 242.1 ± 4.206
pull
Entries 85
Mean 34.91
Std Dev 25.29
pull1D
Entries 85
Mean −0.04293
Std Dev 0.5495

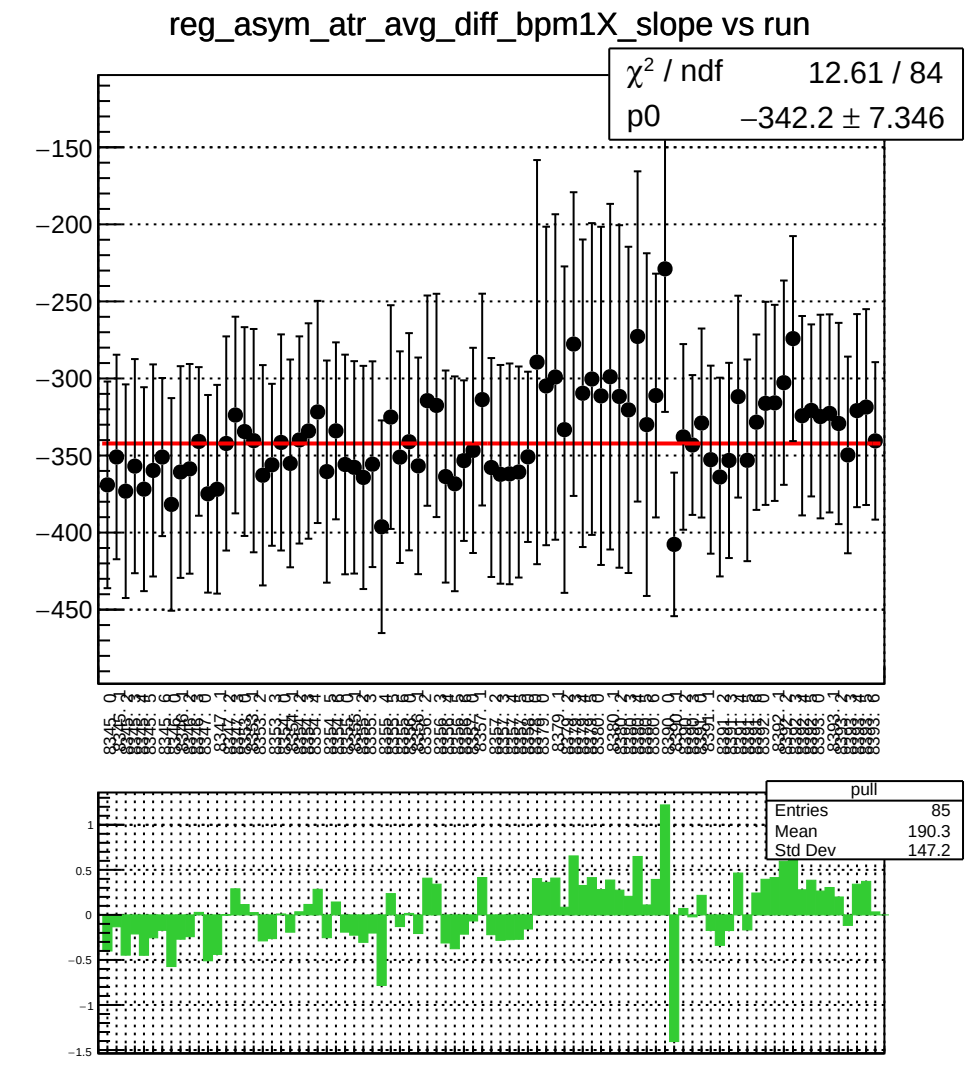

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 17.86 / 84
p0 −28.89 ± 7.211
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 74.61
Std Dev 48.24
1
0.5
0
−0.5
−1

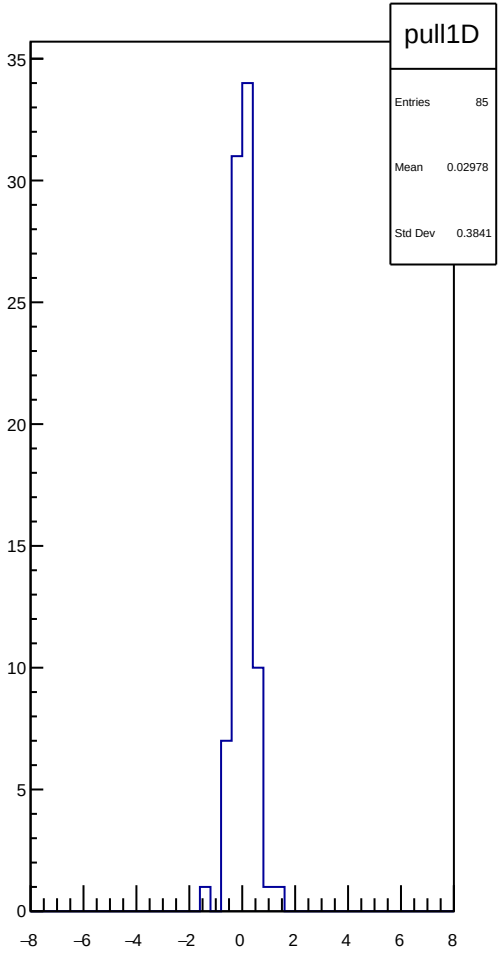

pull1D
Entries 85
Mean −0.01566
Std Dev 0.4582
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

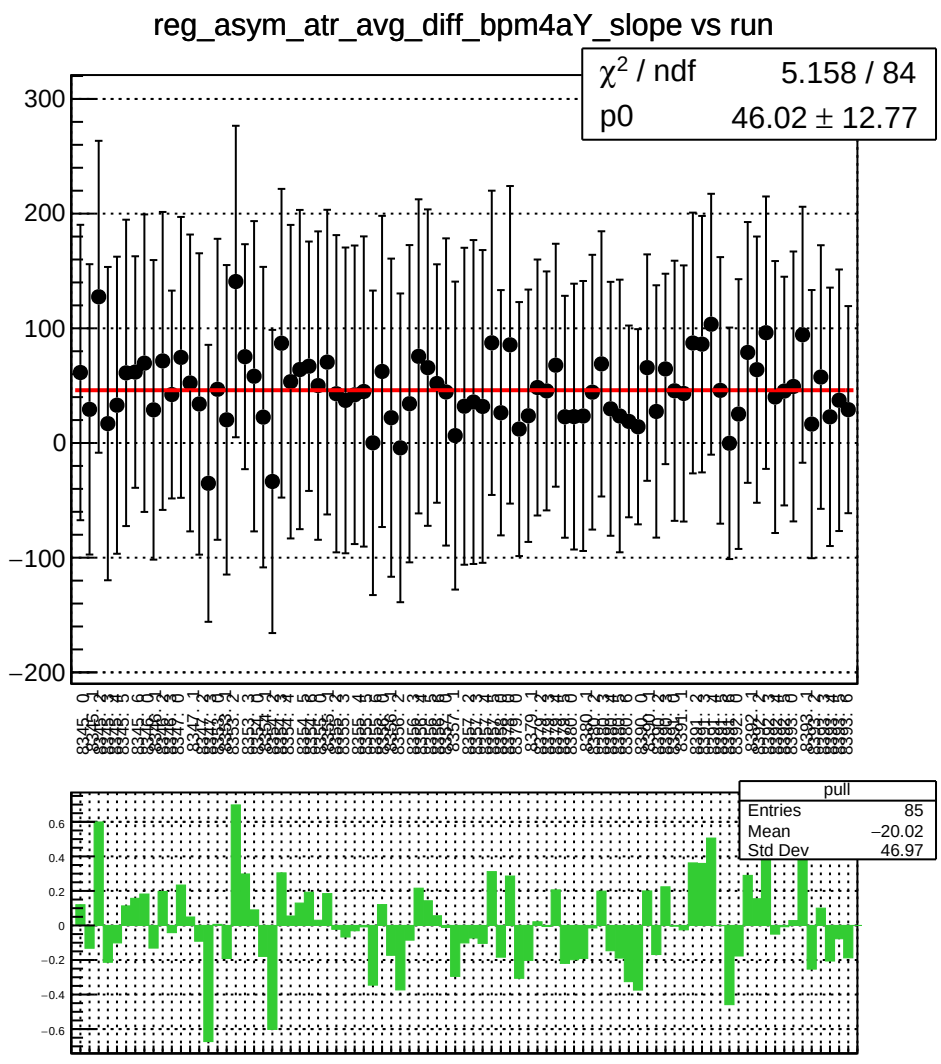

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 21.27 / 84
p0 −164.6 ± 4.579
pull
Entries 85
Mean 42.87
Std Dev 12.01
pull1D
Entries 85
Mean 0.02101
Std Dev 0.4998

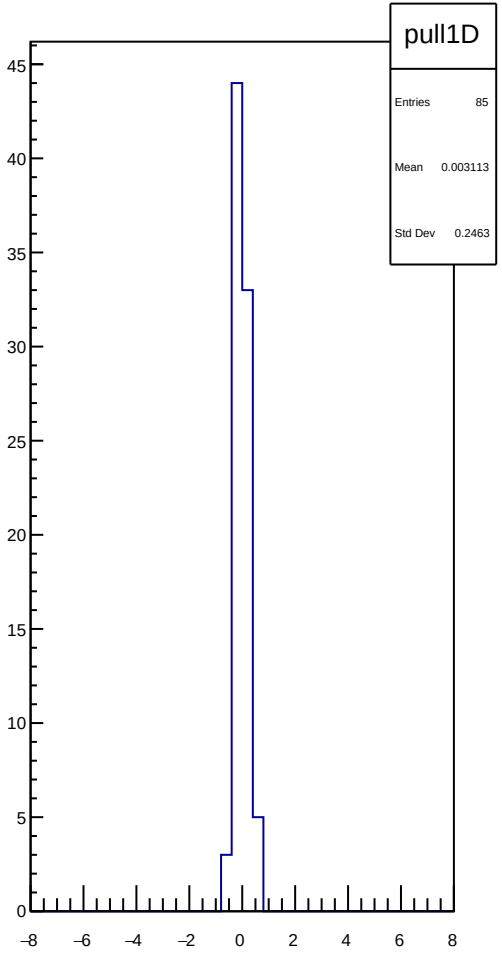

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 16.46 / 84
p0 −38.26 ± 7.653
pull
Entries 85
Mean 147.9
Std Dev 60.62
pull1D
Entries 85
Mean 0.0055
Std Dev 0.4401

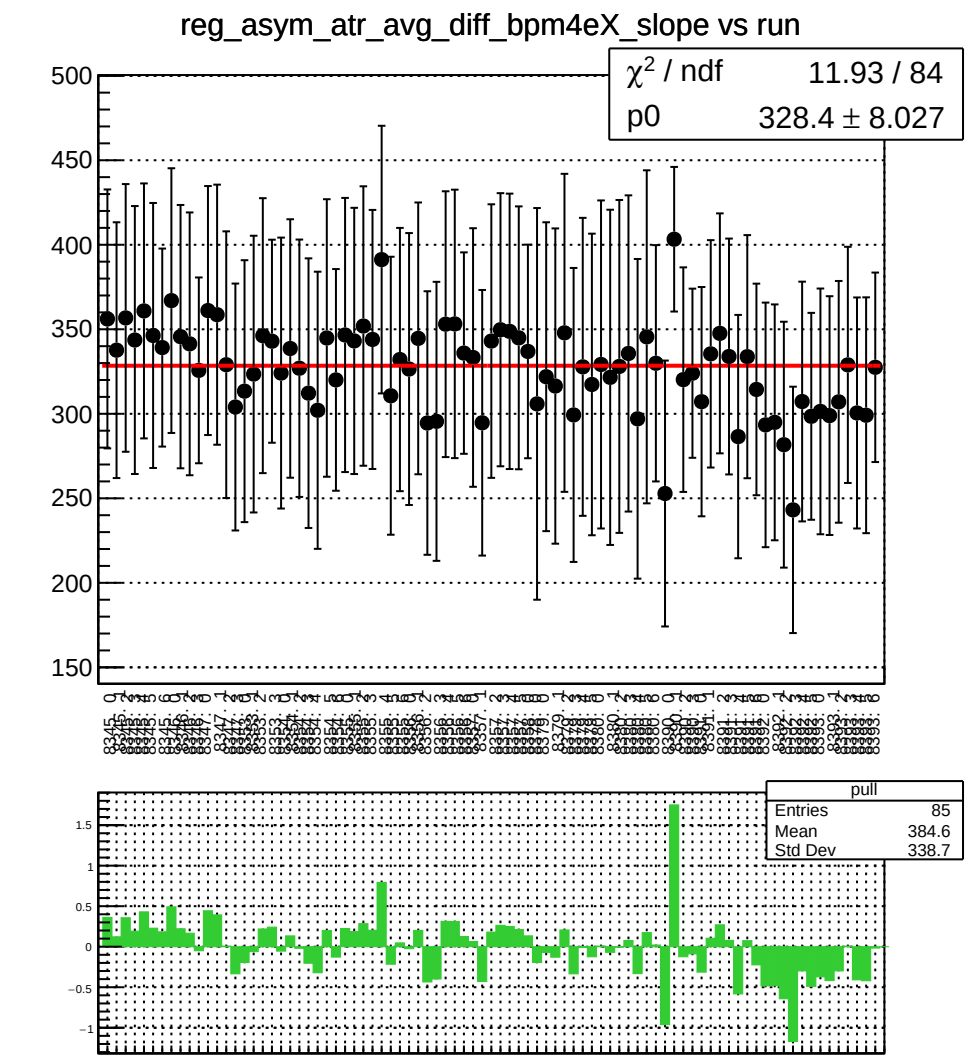

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 39.11 / 84
p0 133.5 ± 0.4307
pull
Entries 85
Mean −167.7
Std Dev 206
pull1D
Entries 85
Mean 0.04093
Std Dev 0.6771

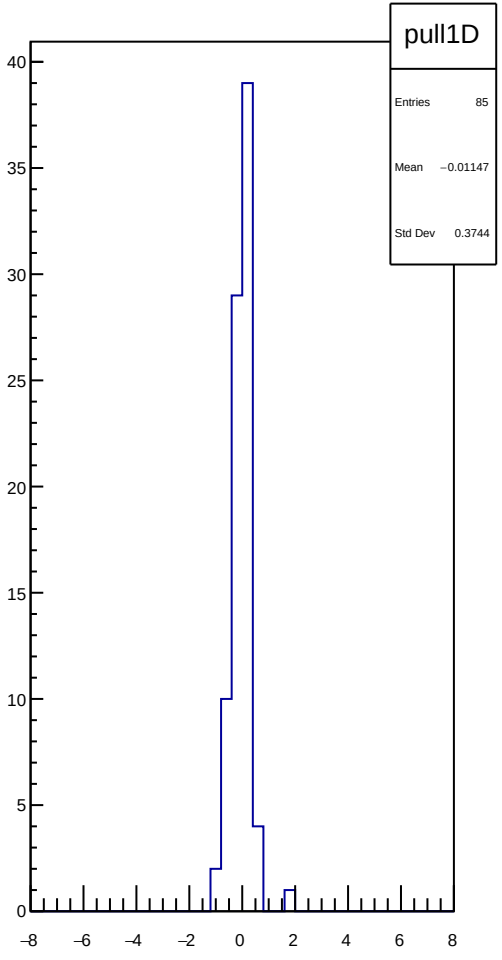

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 12.61 / 84
p0 −342.2 ± 7.346
−150
−200
−250
−300
−350
−400
−450
pull
Entries 85
Mean 190.3
Std Dev 147.2
1
0.5
0
−0.5
−1
−1.5

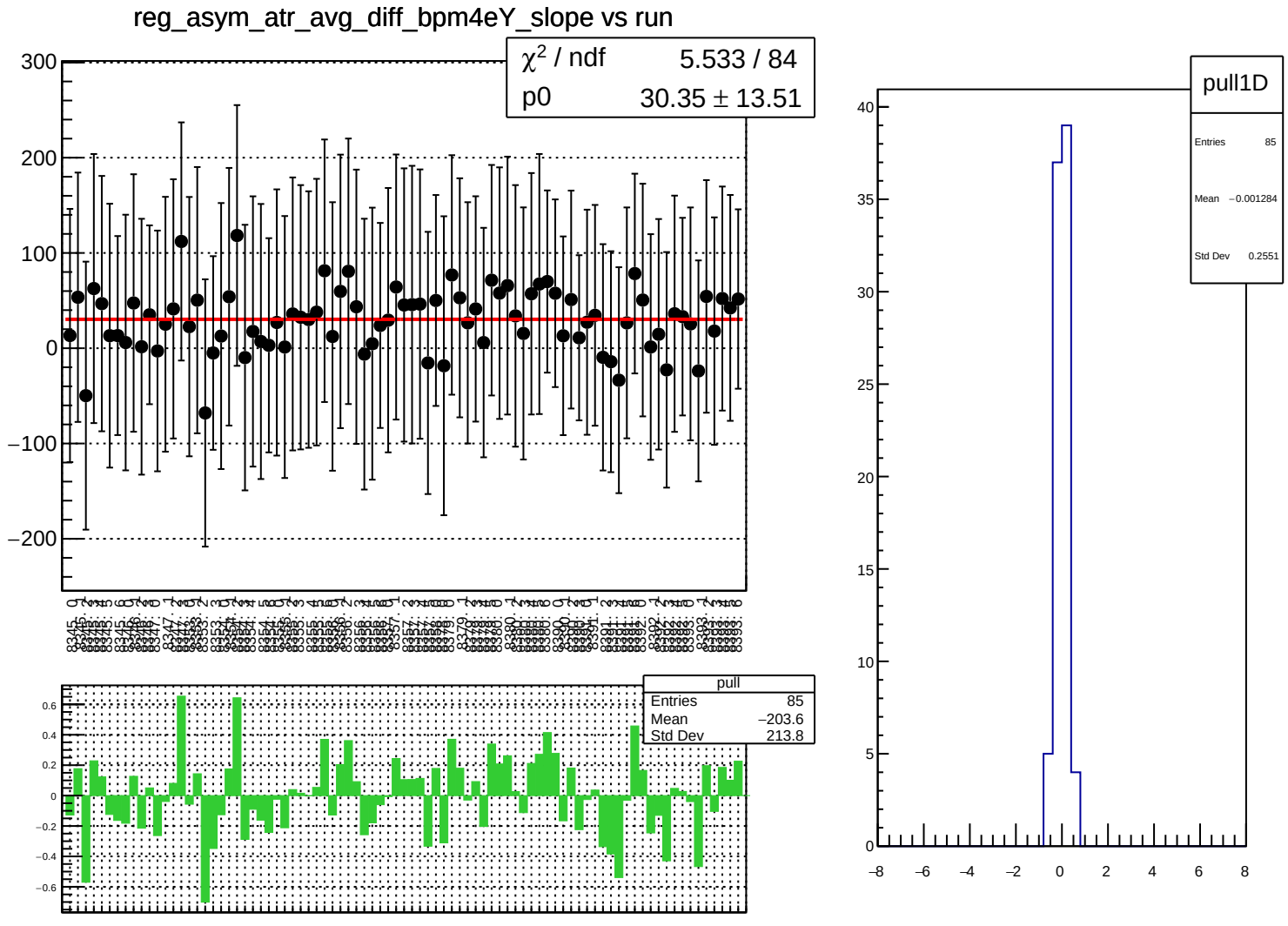

pull1D
Entries 85
Mean 0.02978
Std Dev 0.3841
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

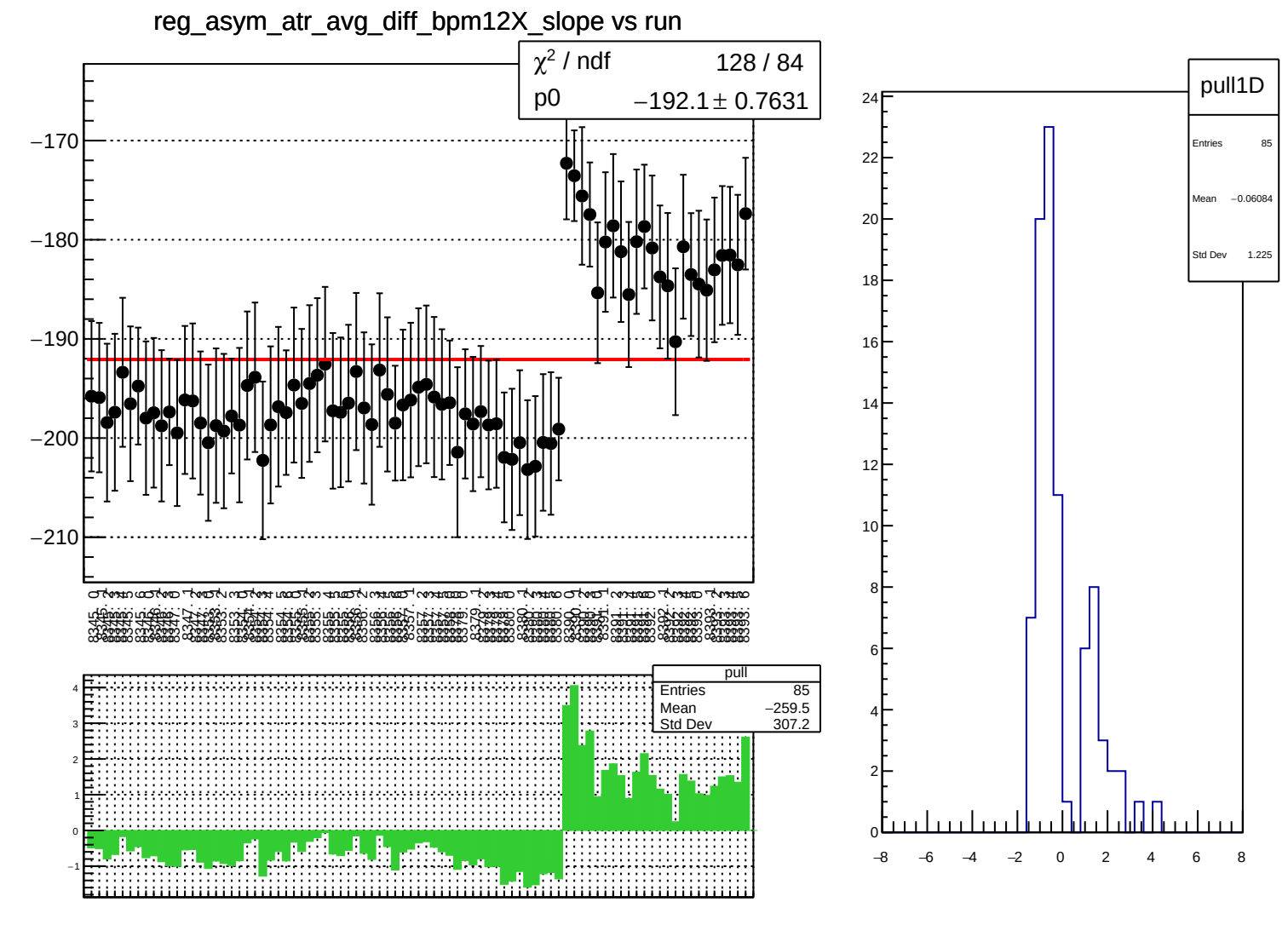

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.158 / 84
p0 46.02 ± 12.77
pull
Entries 85
Mean −20.02
Std Dev 46.97

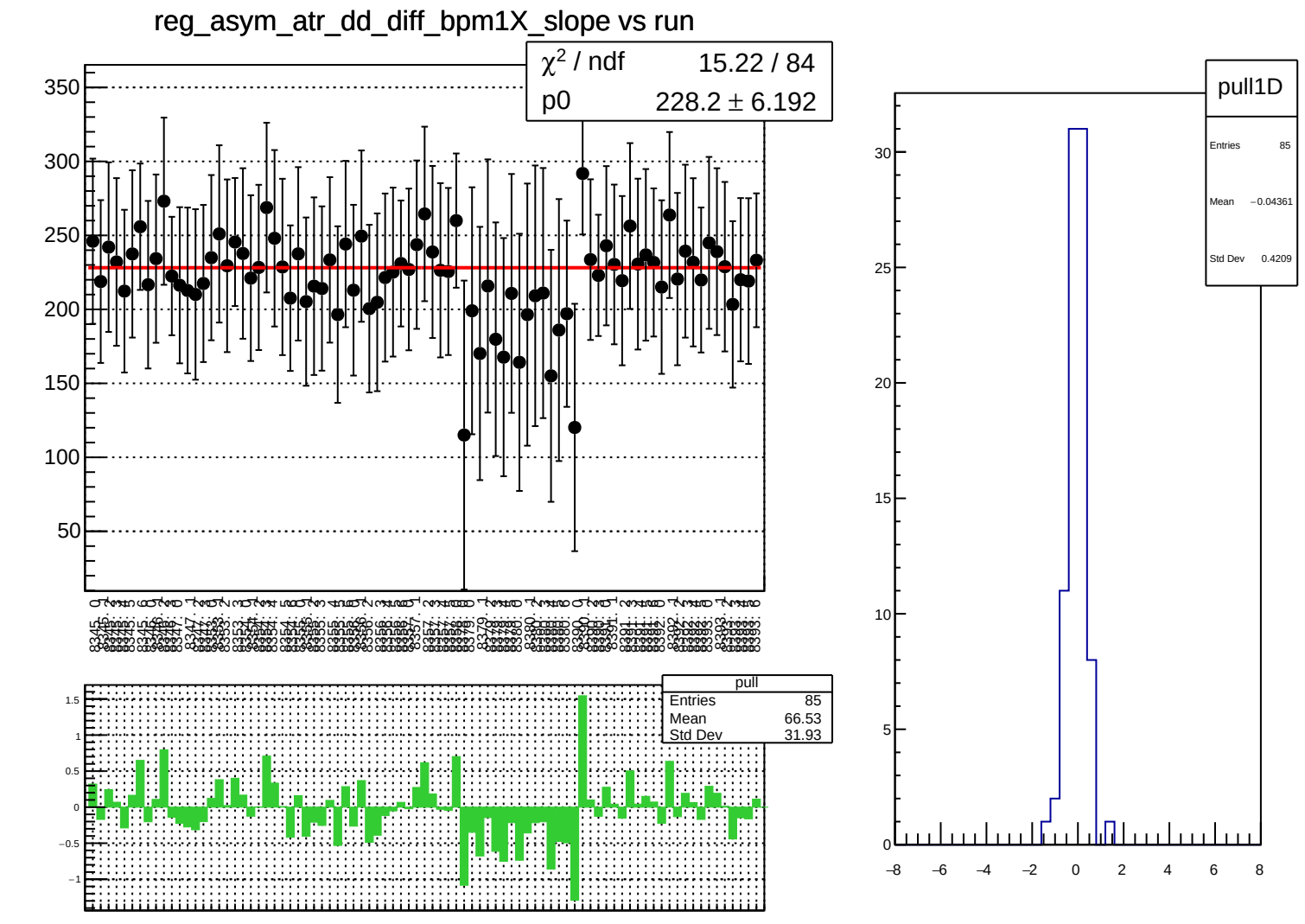

pull1D
Entries 85
Mean 0.003113
Std Dev 0.2463

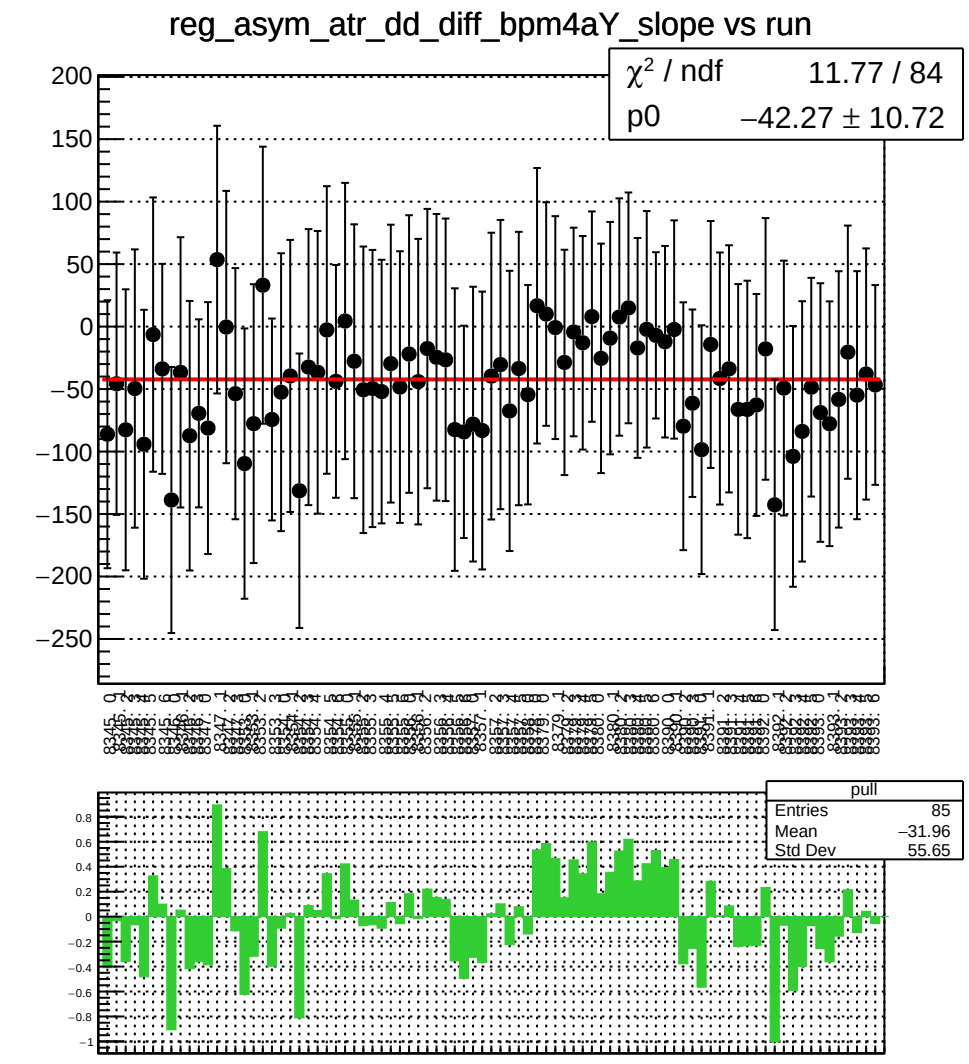

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 11.93 / 84
p0 328.4 ± 8.027
pull
Entries 85
Mean 384.6
Std Dev 338.7

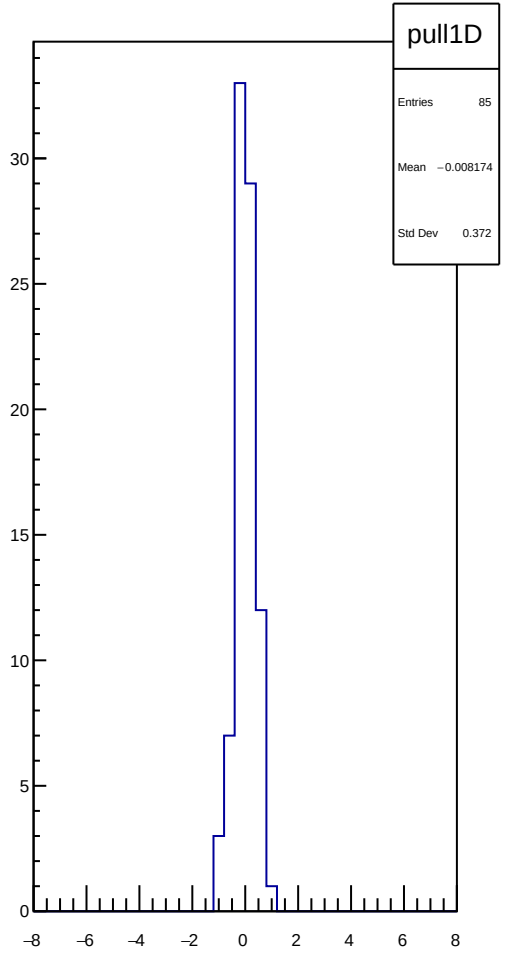

pull1D
Entries 85
Mean −0.01147
Std Dev 0.3744

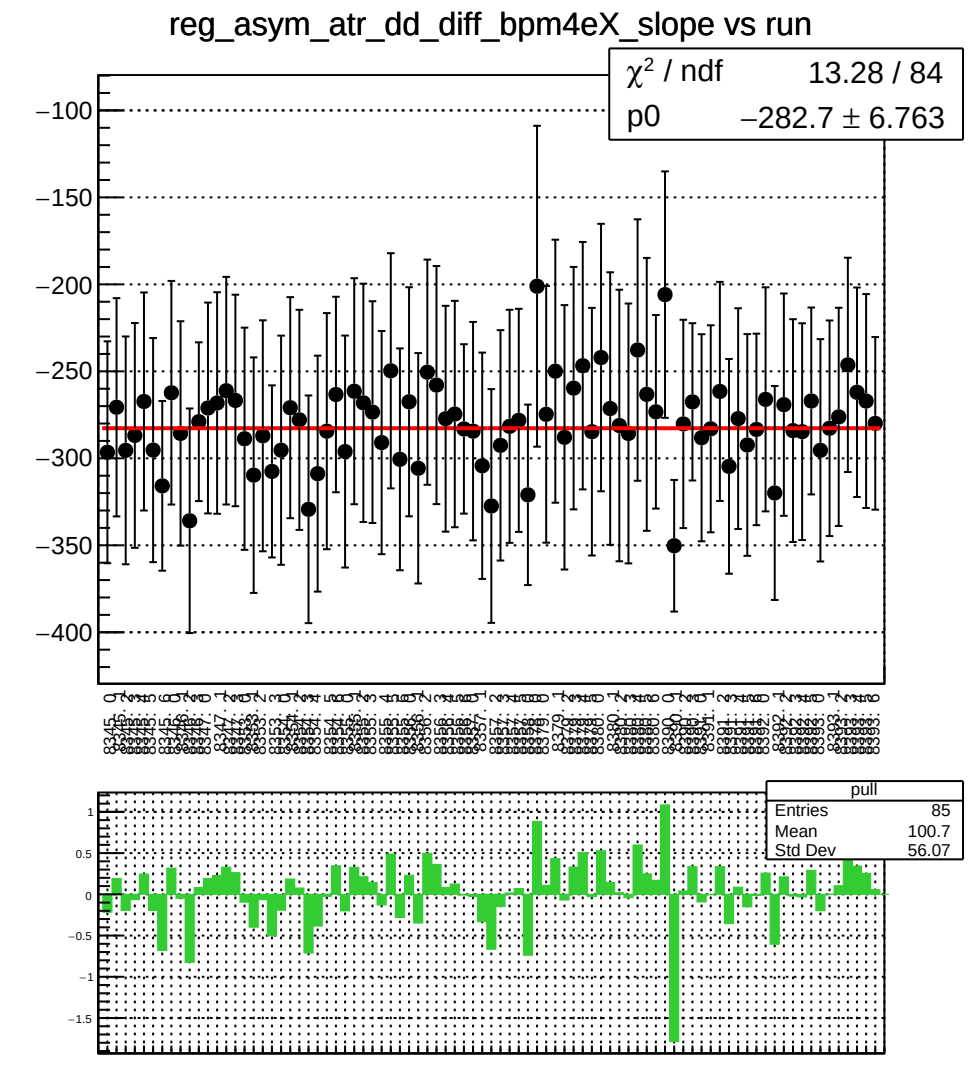

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.533 / 84
p0 30.35 ± 13.51
pull
Entries 85
Mean −203.6
Std Dev 213.8
pull1D
Entries 85
Mean −0.001284
Std Dev 0.2551

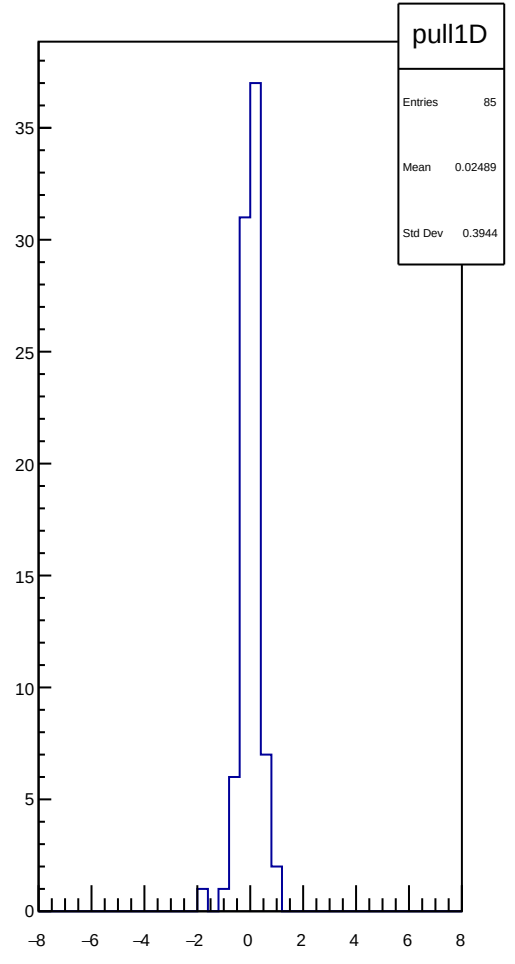

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 128 / 84
p0 −192.1 ± 0.7631
pull
Entries 85
Mean −259.5
Std Dev 307.2
pull1D
Entries 85
Mean −0.06084
Std Dev 1.225

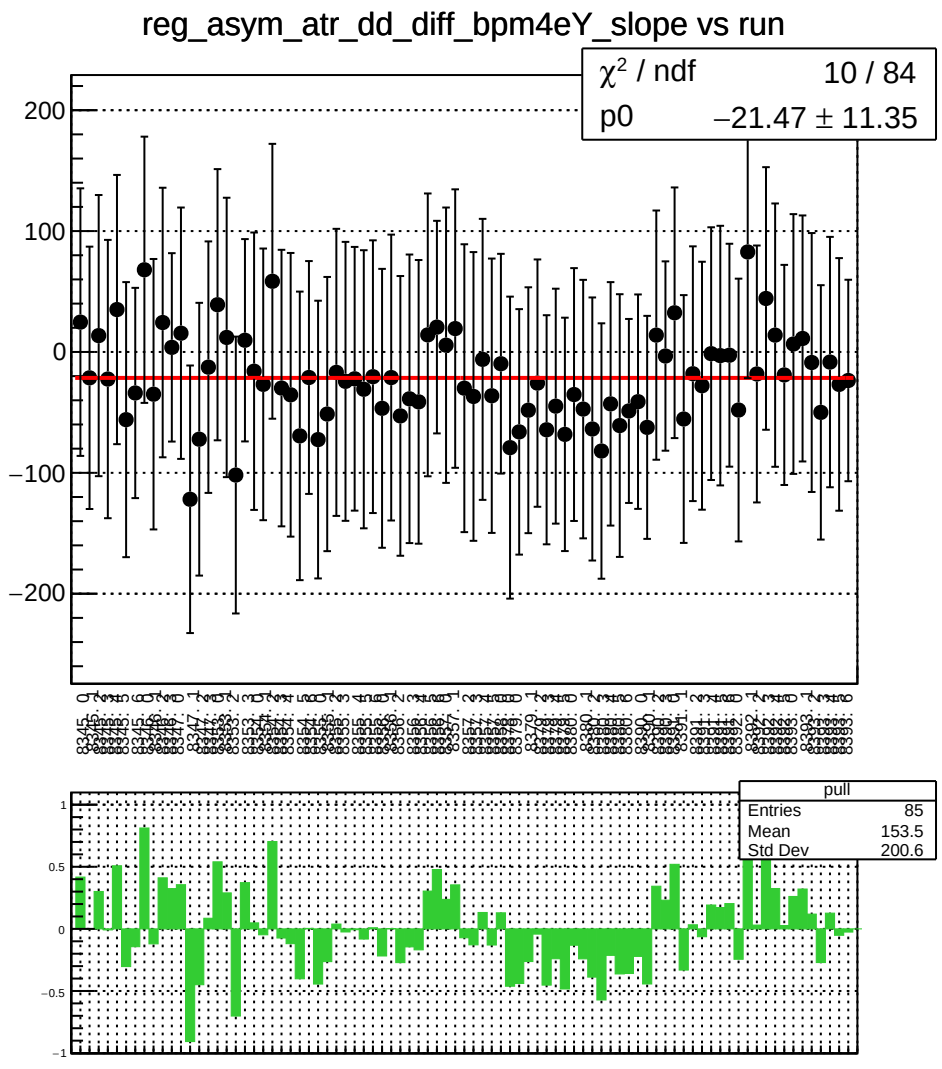

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 15.22 / 84
p0 228.2 ± 6.192
pull
Entries 85
Mean 66.53
Std Dev 31.93
pull1D
Entries 85
Mean −0.04361
Std Dev 0.4209

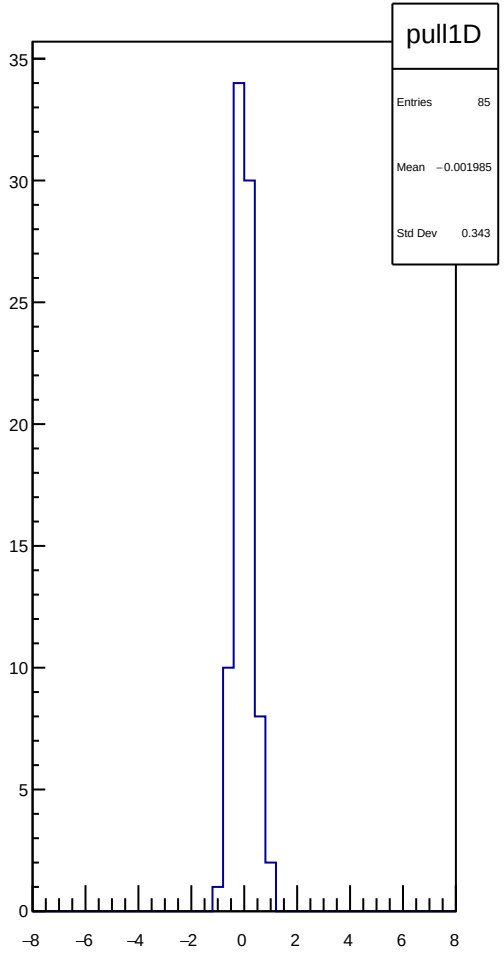

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.77 / 84
p0 −42.27 ± 10.72
pull
Entries 85
Mean −31.96
Std Dev 55.65

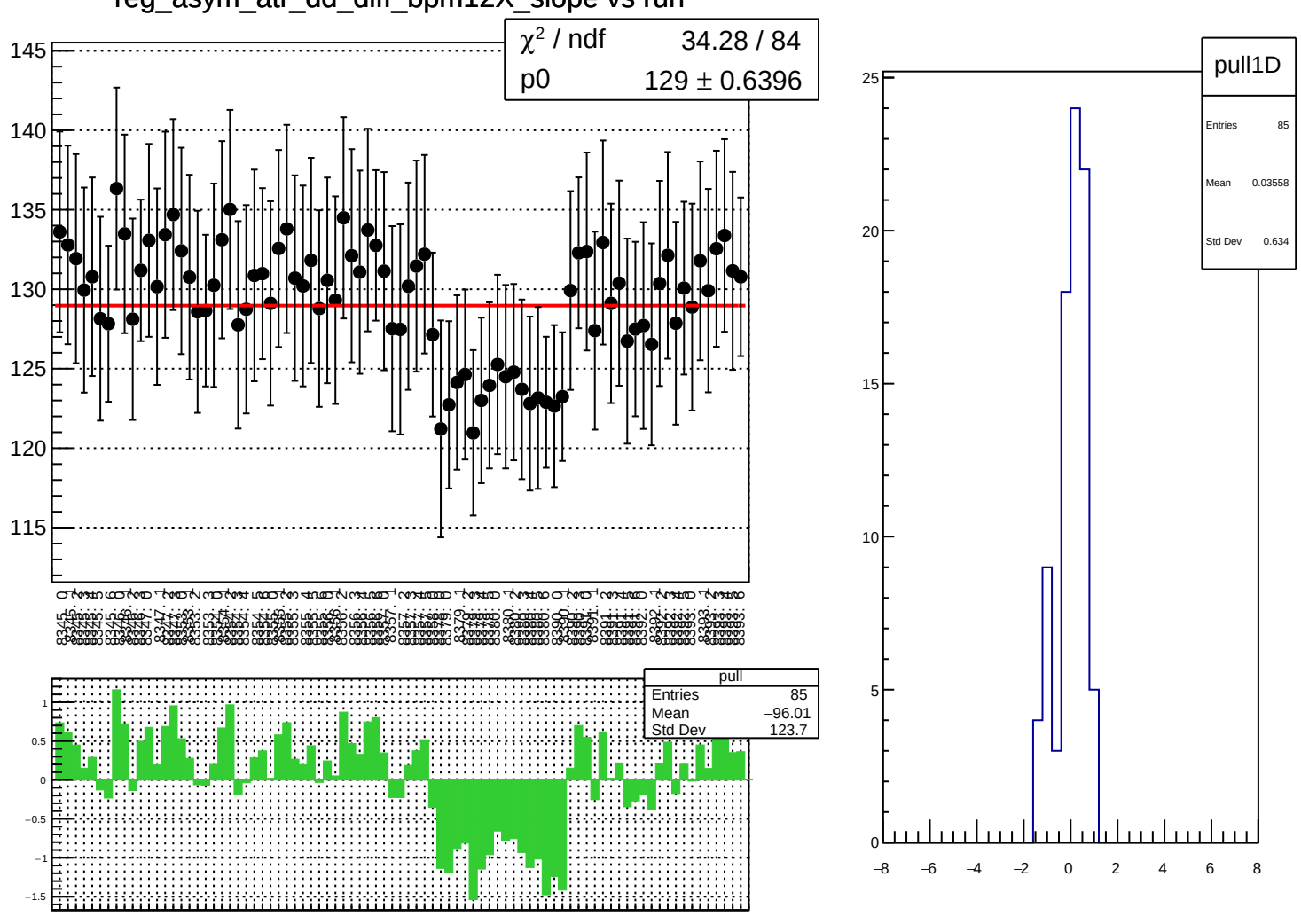

pull1D
Entries 85
Mean −0.008174
Std Dev 0.372

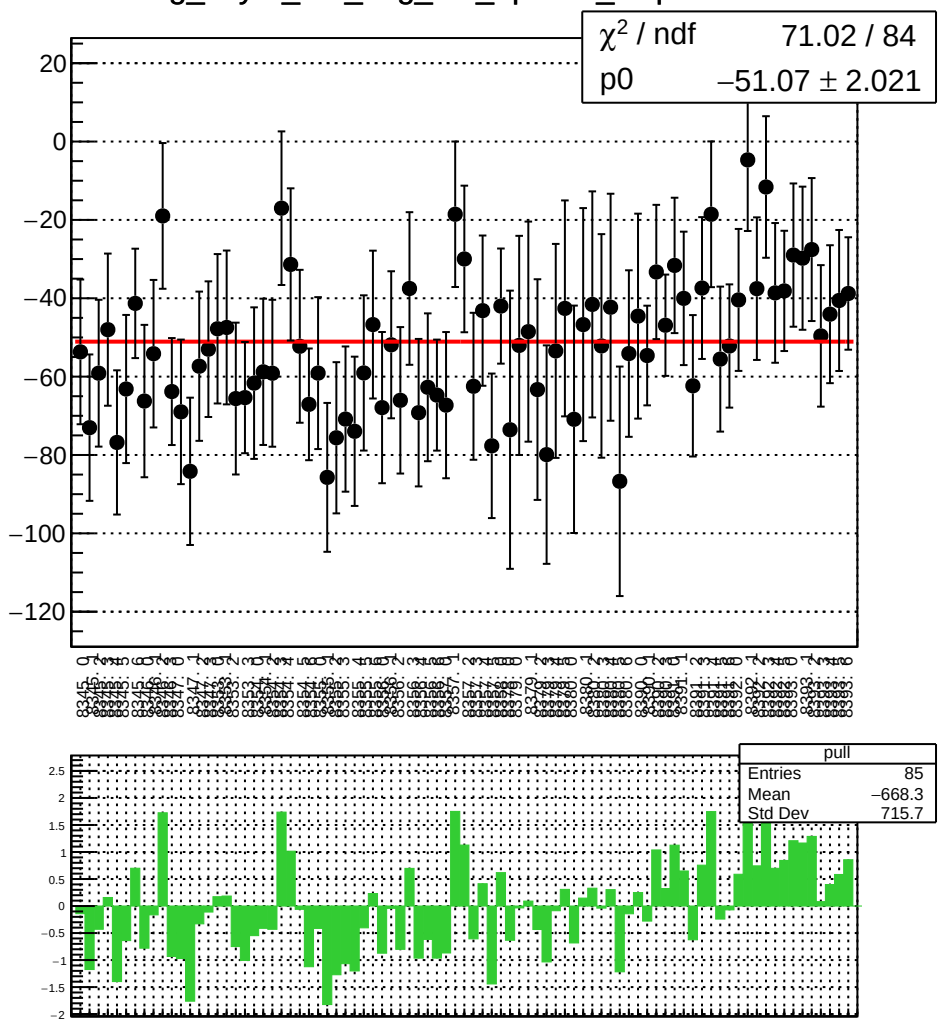

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 13.28 / 84
p0 −282.7 ± 6.763
pull
Entries 85
Mean 100.7
Std Dev 56.07

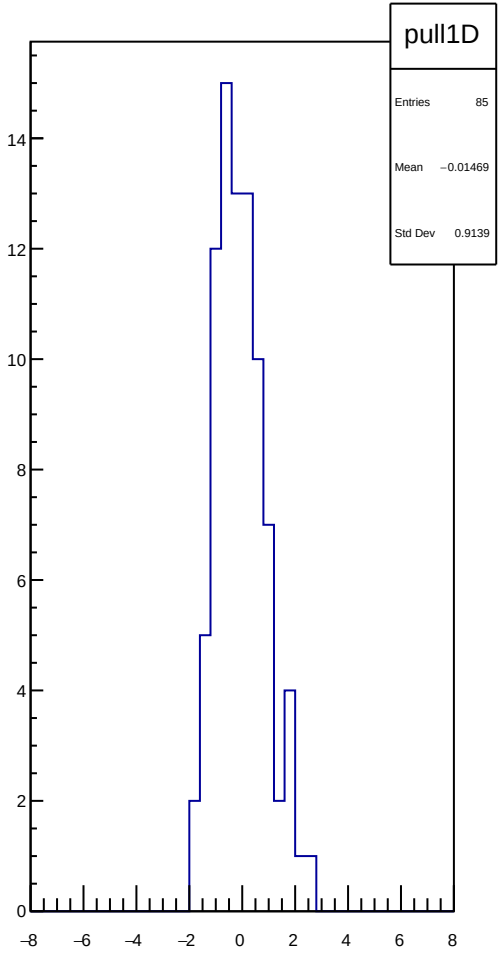

pull1D
Entries 85
Mean 0.02489
Std Dev 0.3944

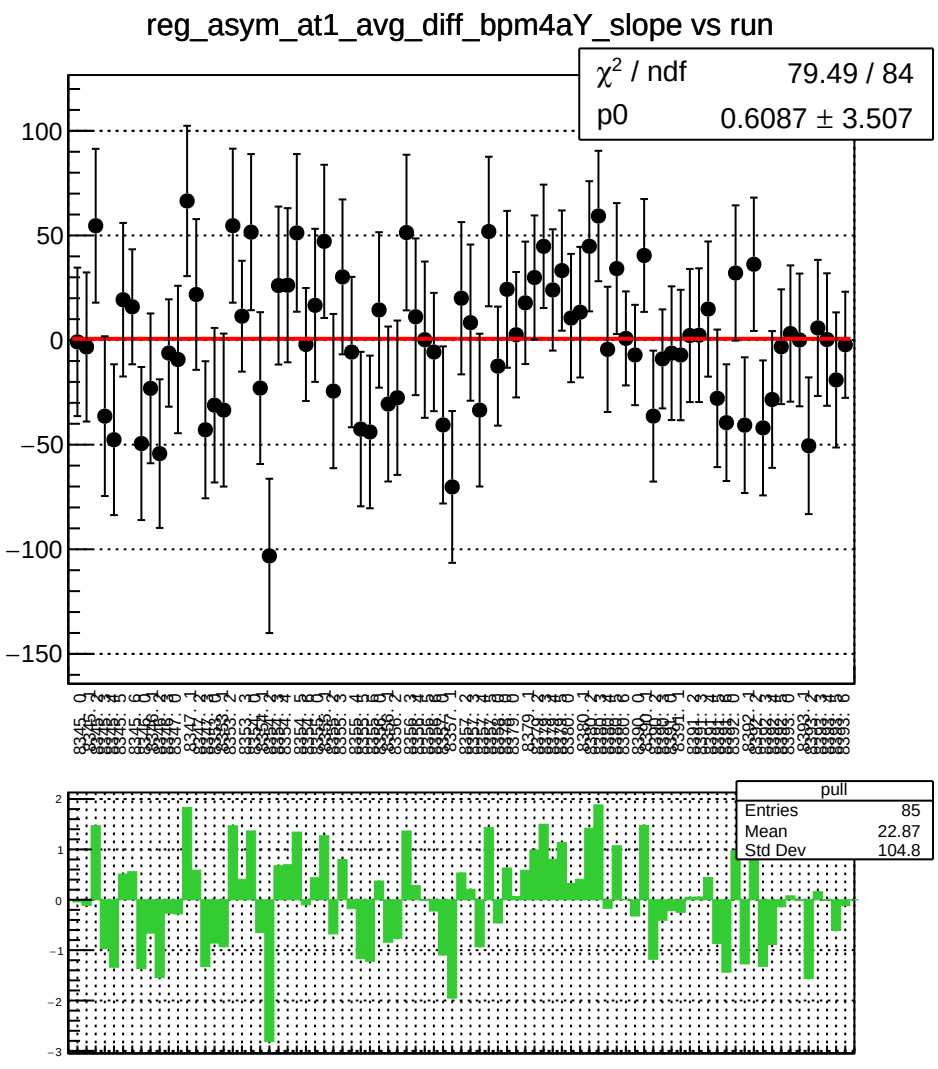

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 10 / 84
p0 −21.47 ± 11.35
200
100
0
−100
−200
pull
Entries 85
Mean 153.5
Std Dev 200.6
1
0.5
0
−0.5
−1

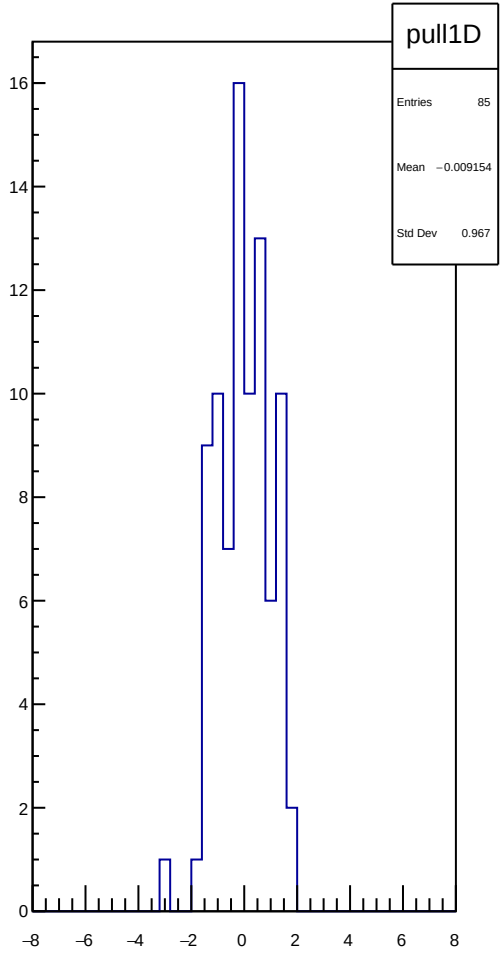

pull1D
Entries 85
Mean −0.001985
Std Dev 0.343
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

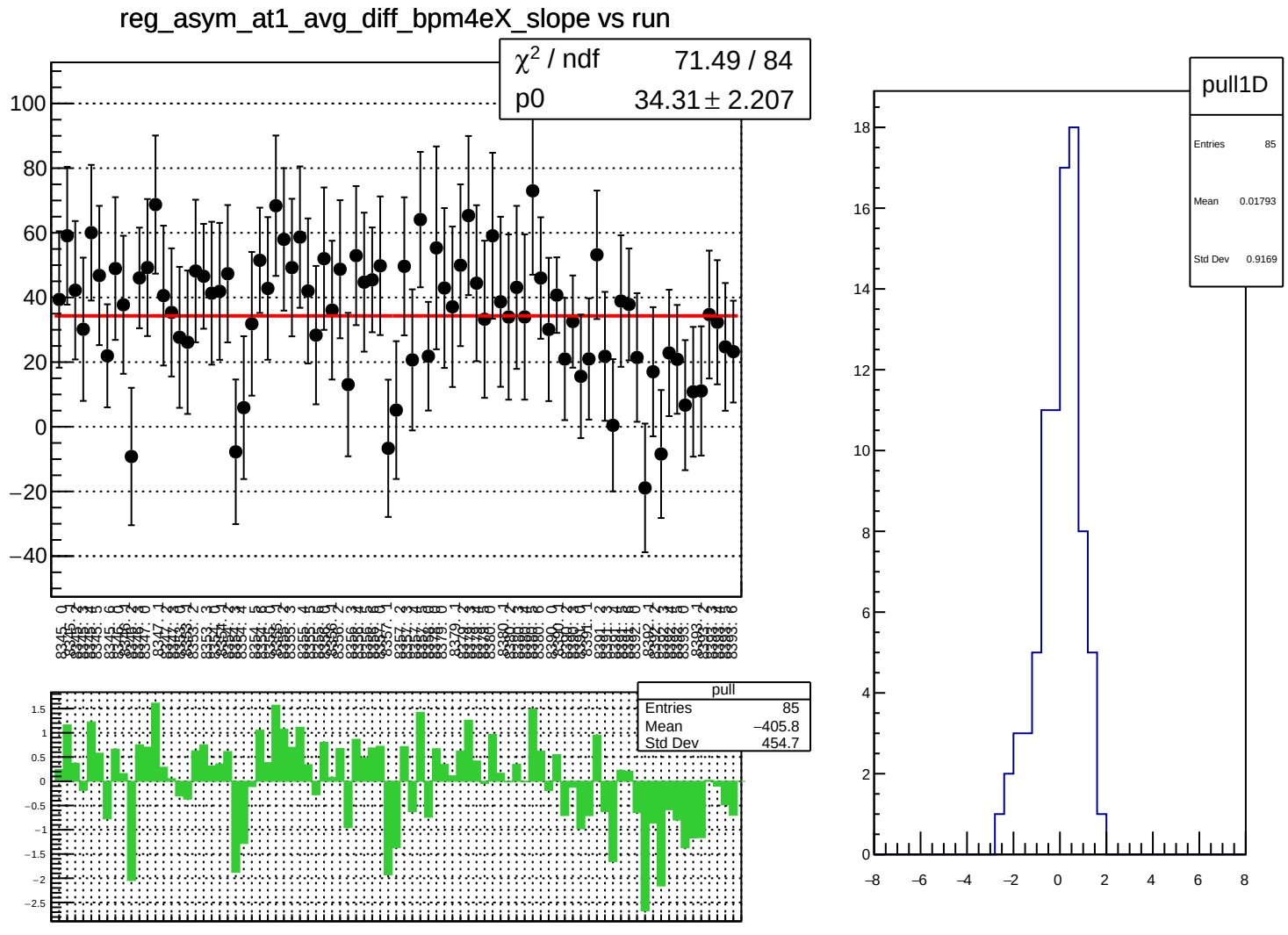

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 34.28 / 84
p0 129 ± 0.6396
pull
Entries 85
Mean −96.01
Std Dev 123.7
pull1D
Entries 85
Mean 0.03558
Std Dev 0.634

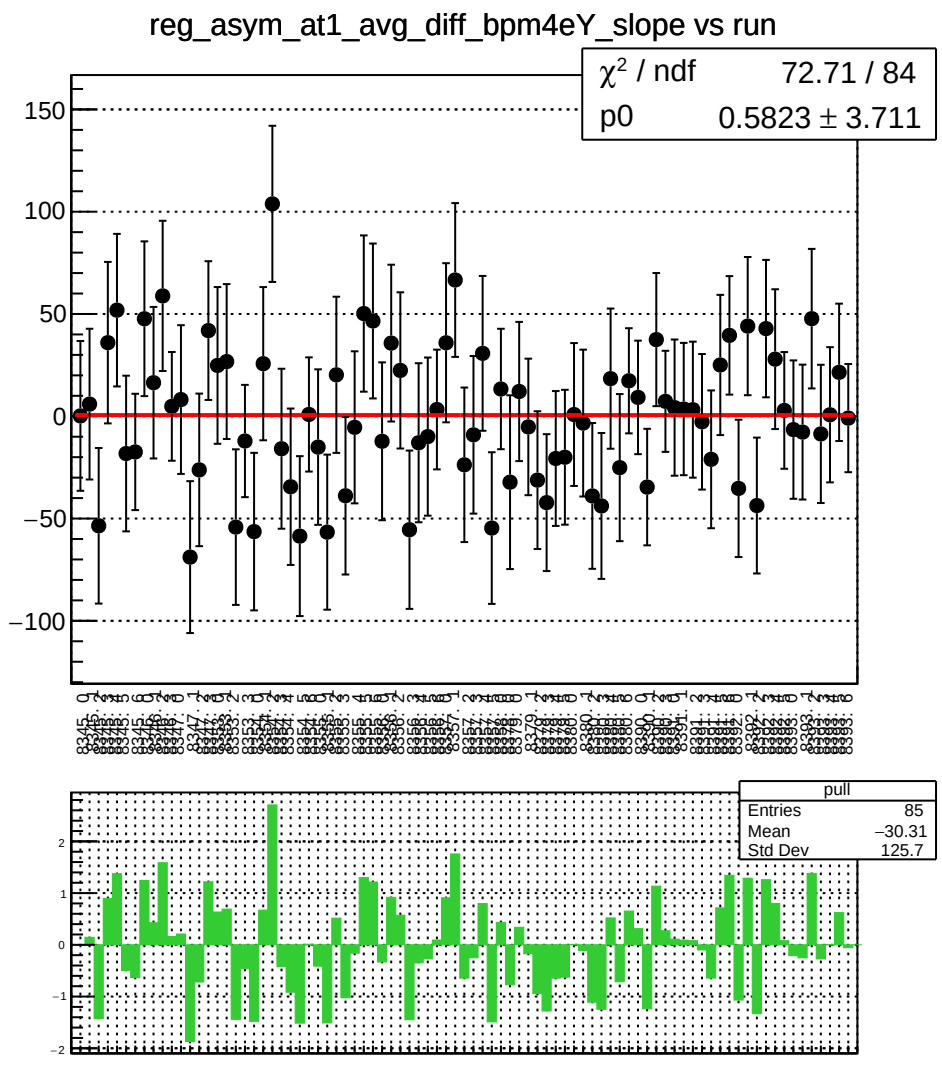

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 71.02 / 84
p0 −51.07 ± 2.021
pull
Entries 85
Mean −668.3
Std Dev 715.7

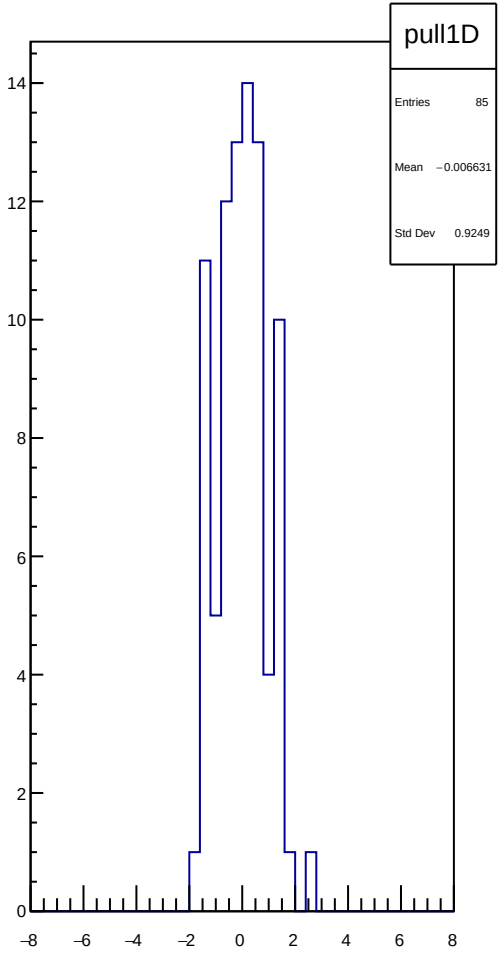

pull1D
Entries 85
Mean −0.01469
Std Dev 0.9139

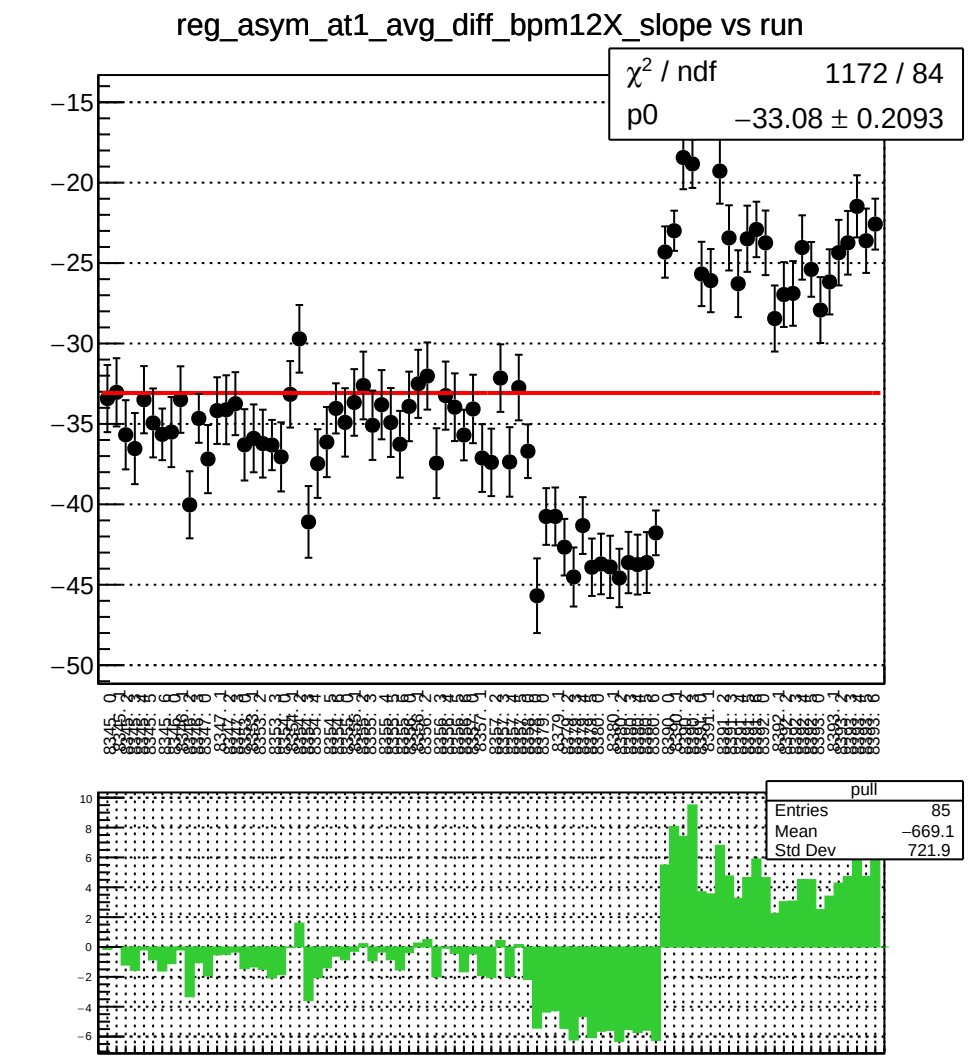

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 79.49 / 84
p0 0.6087 ± 3.507
100
50
0
−50
−100
−150
pull
Entries 85
Mean 22.87
Std Dev 104.8
2
1
0
−1
−2
−3

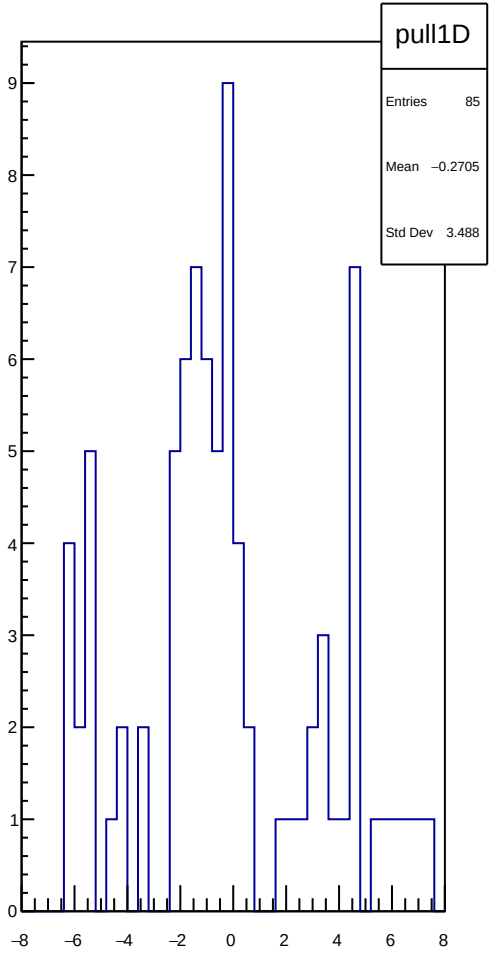

pull1D
Entries 85
Mean −0.009154
Std Dev 0.967
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

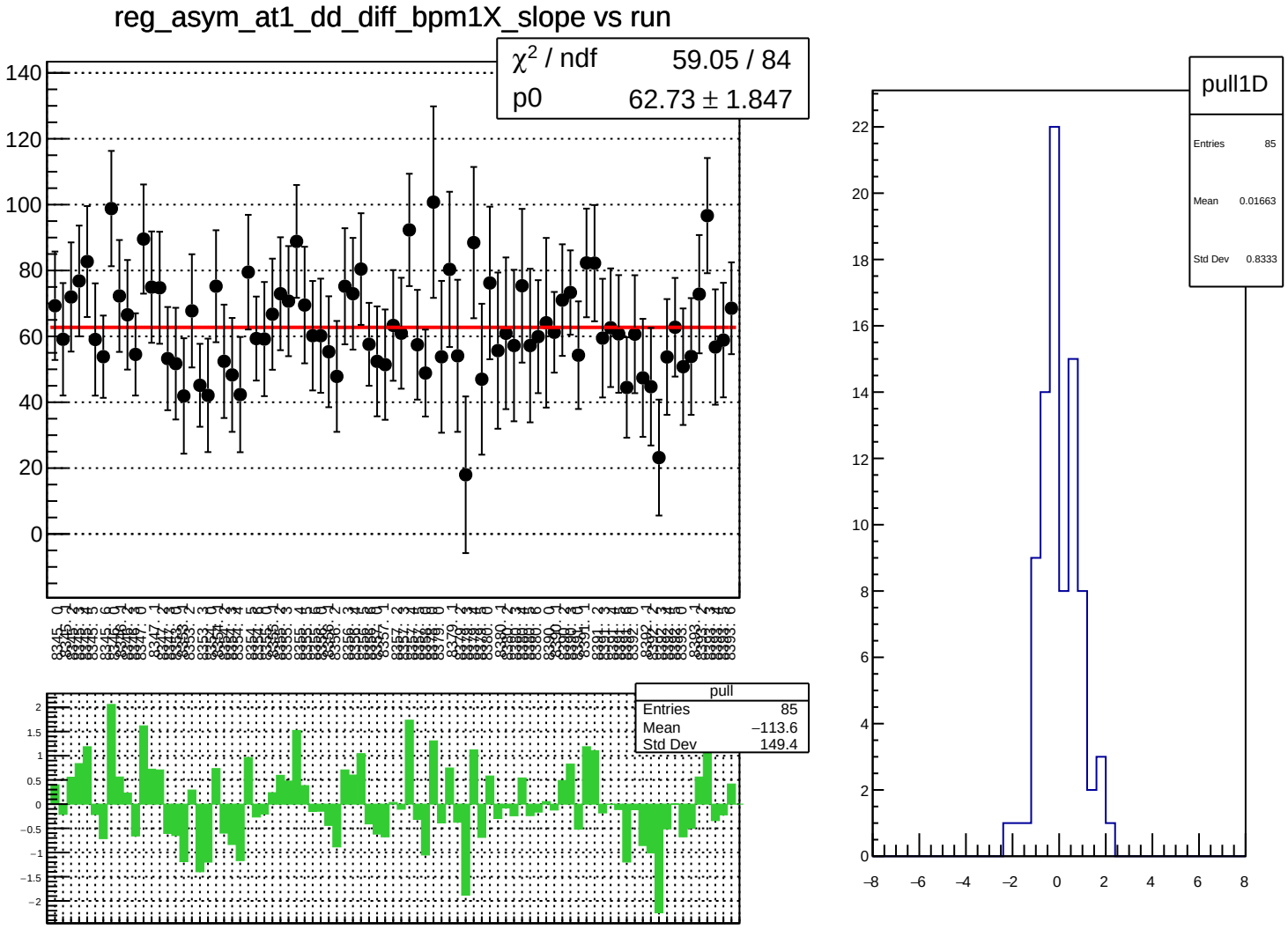

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 71.49 / 84
p0 34.31 ± 2.207
pull
Entries 85
Mean −405.8
Std Dev 454.7
pull1D
Entries 85
Mean 0.01793
Std Dev 0.9169

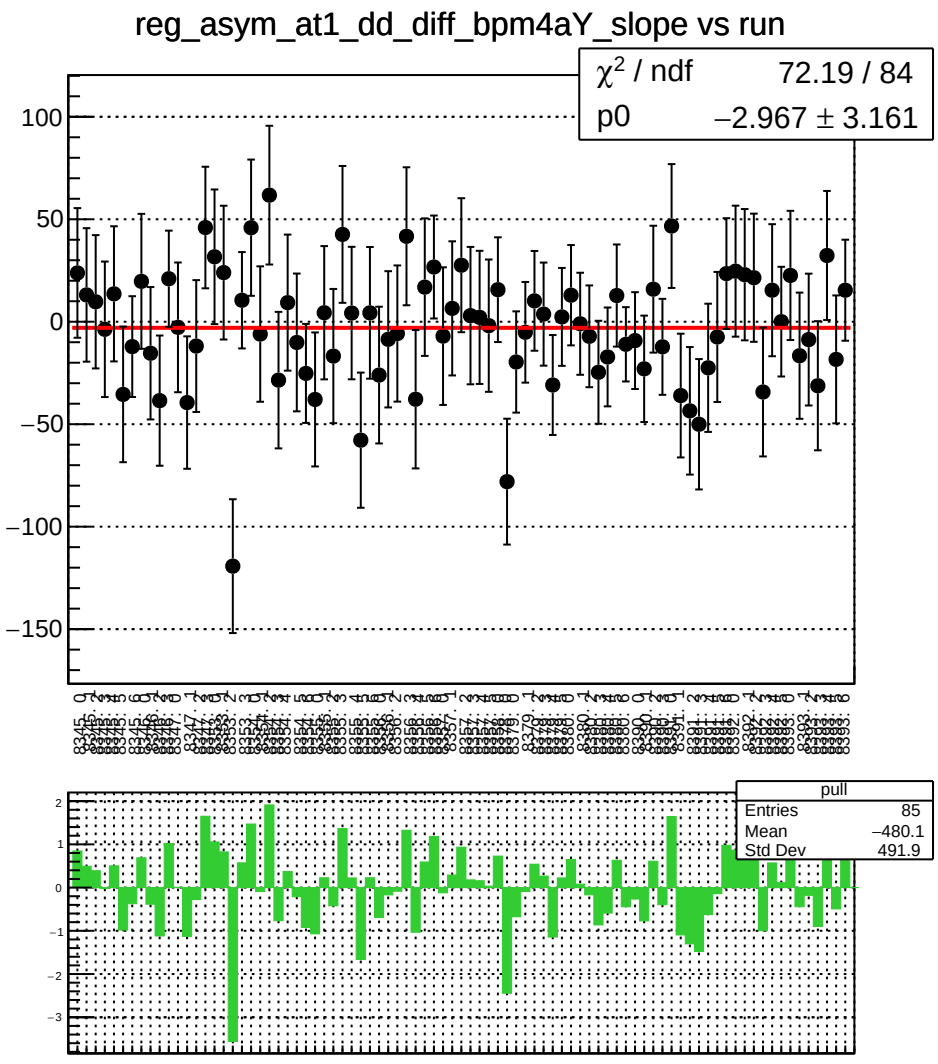

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 72.71 / 84
p0 0.5823 ± 3.711
150
100
50
0
−50
−100
pull
Entries 85
Mean −30.31
Std Dev 125.7
2
1
0
−1
−2

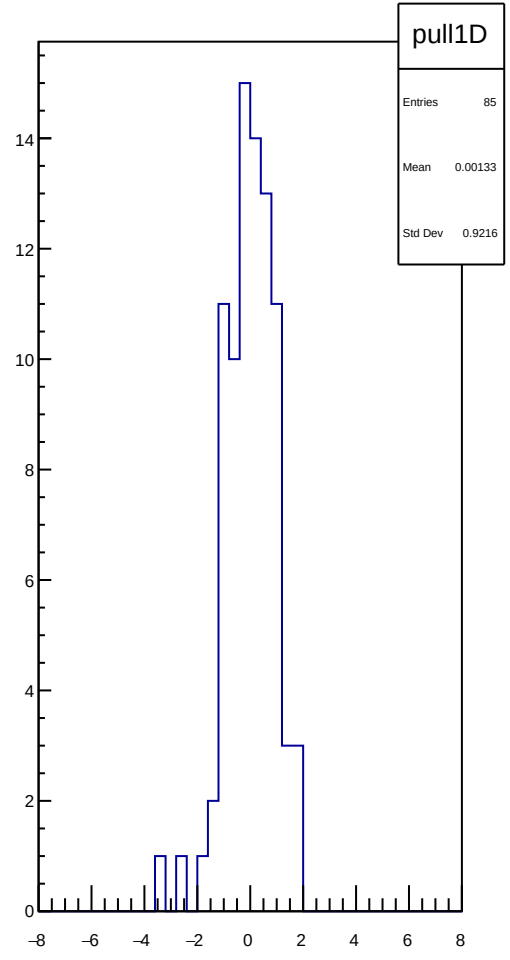

pull1D
Entries 85
Mean −0.006631
Std Dev 0.9249
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

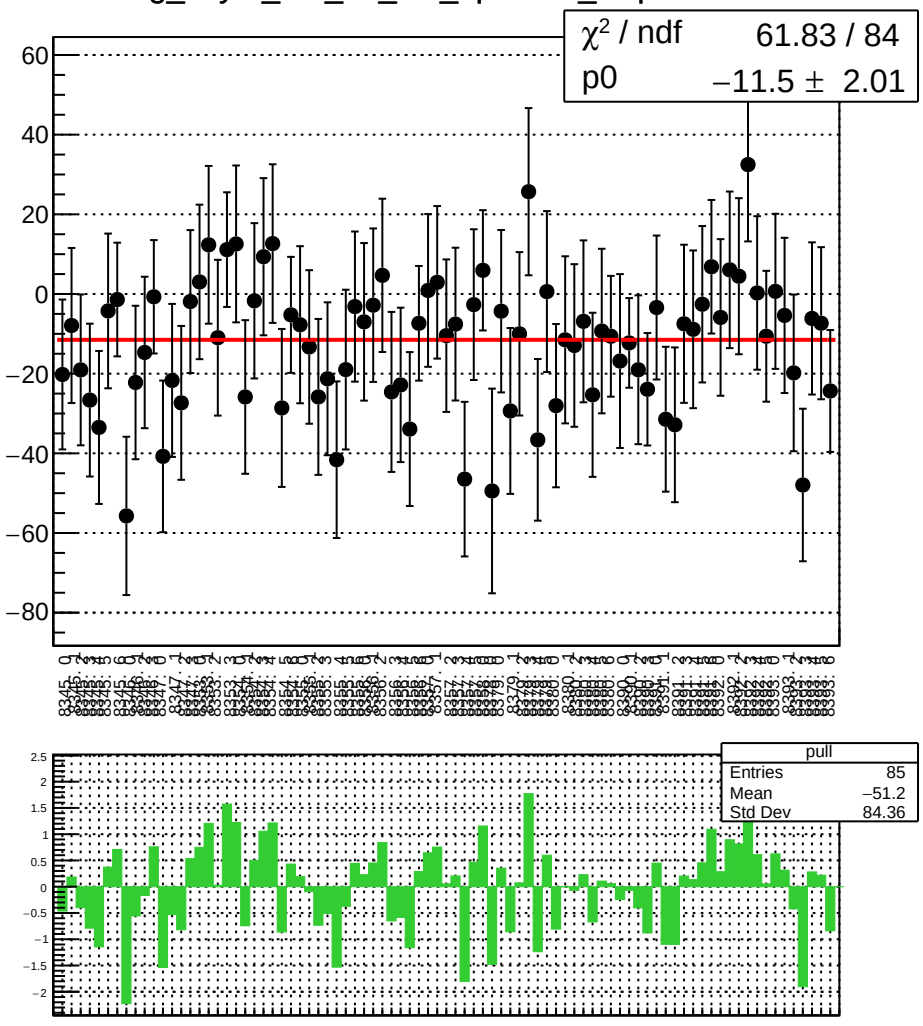

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 1172 / 84
p0 −33.08 ± 0.2093
pull
Entries 85
Mean −669.1
Std Dev 721.9

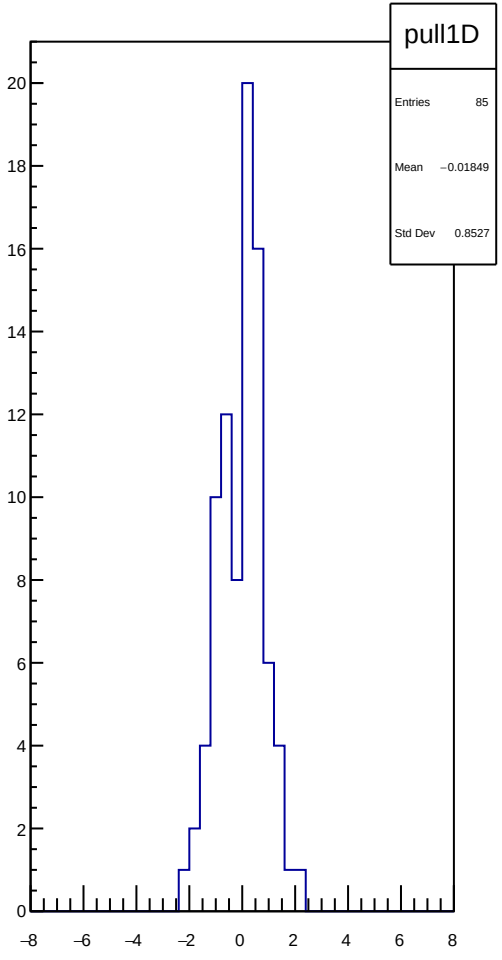

pull1D
Entries 85
Mean −0.2705
Std Dev 3.488

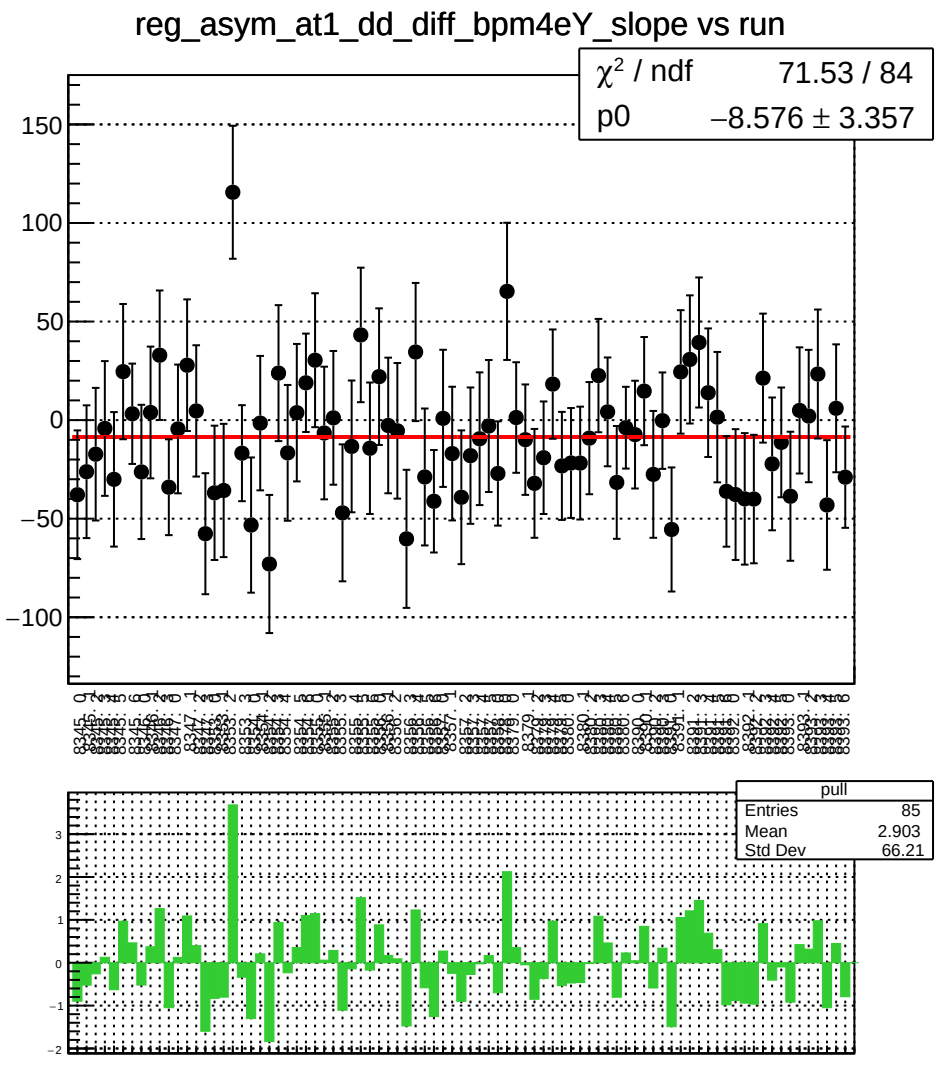

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 59.05 / 84
p0 62.73 ± 1.847
pull
Entries 85
Mean −113.6
Std Dev 149.4
pull1D
Entries 85
Mean 0.01663
Std Dev 0.8333

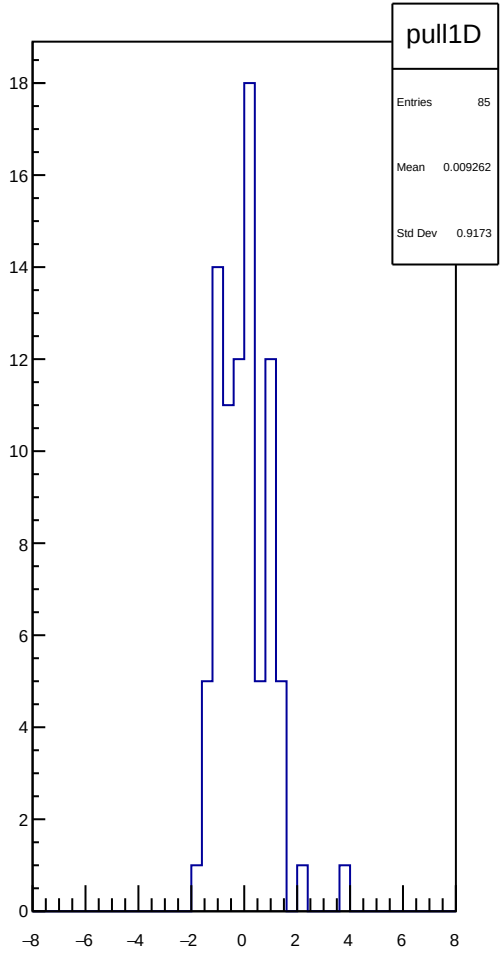

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 72.19 / 84
p0 −2.967 ± 3.161
pull
Entries 85
Mean −480.1
Std Dev 491.9

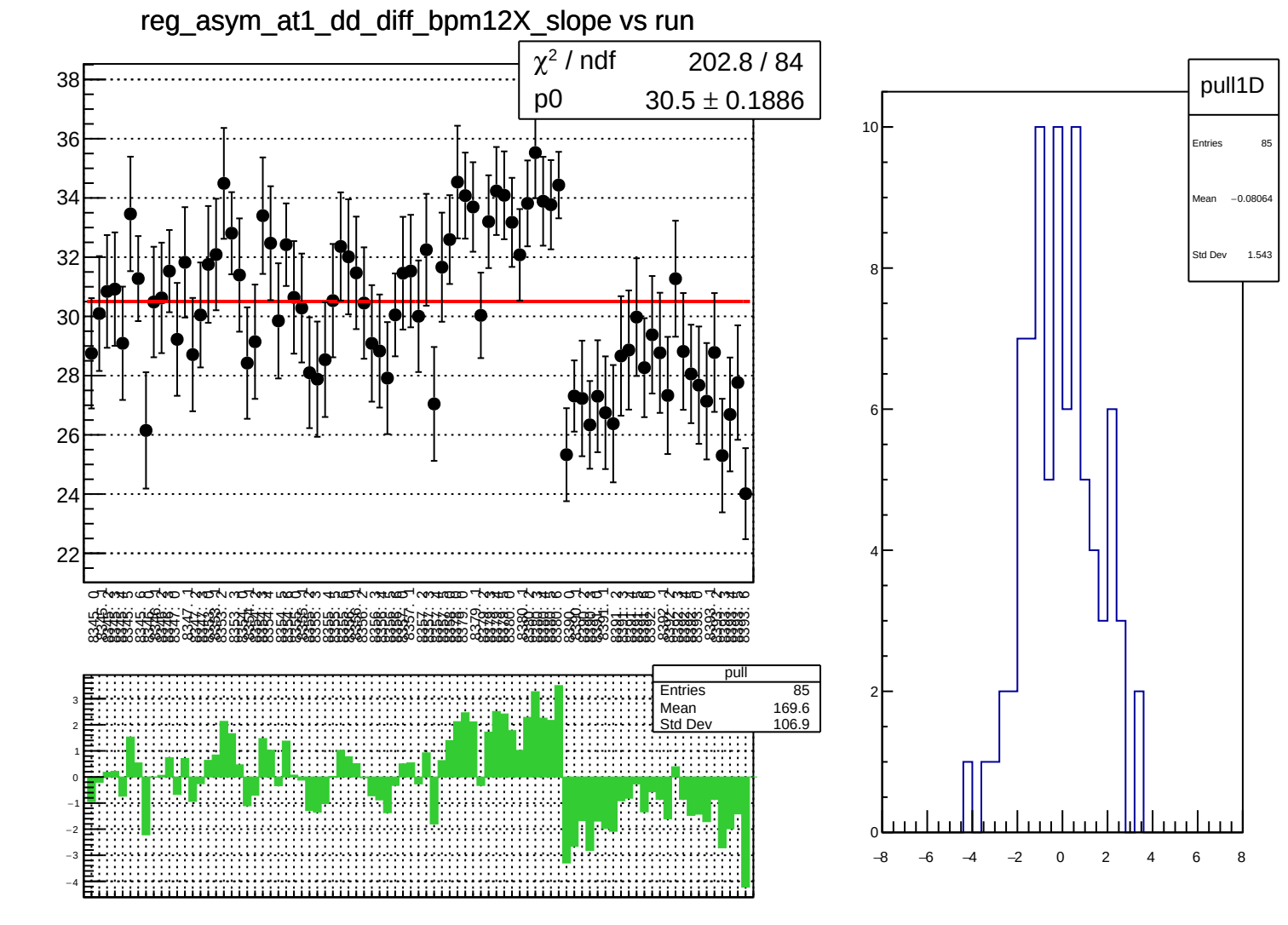

pull1D
Entries 85
Mean 0.00133
Std Dev 0.9216

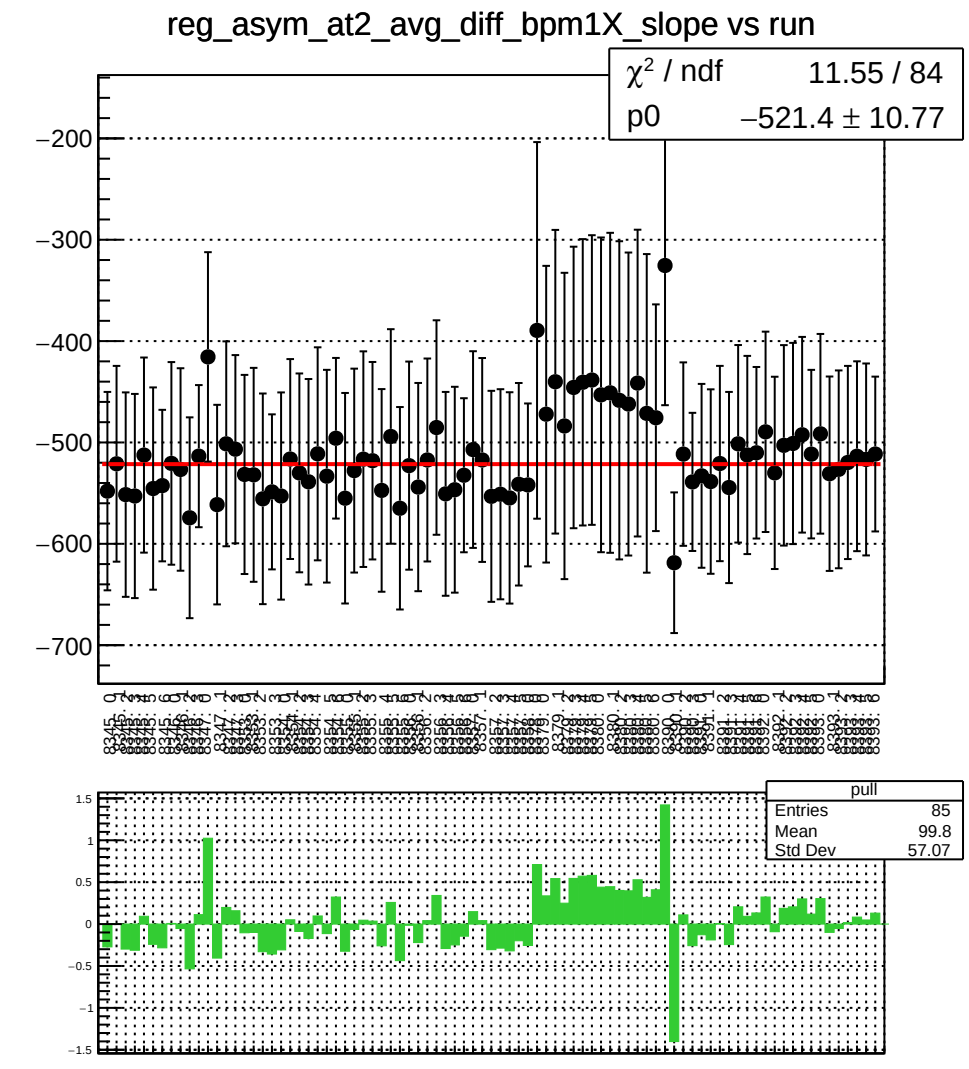

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 61.83 / 84
p0 −11.5 ± 2.01
pull
Entries 85
Mean −51.2
Std Dev 84.36

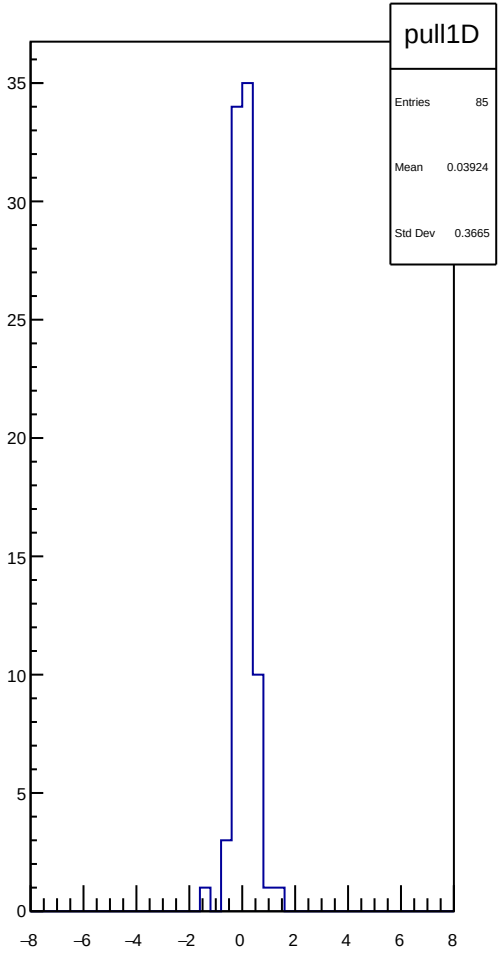

pull1D
Entries 85
Mean −0.01849
Std Dev 0.8527

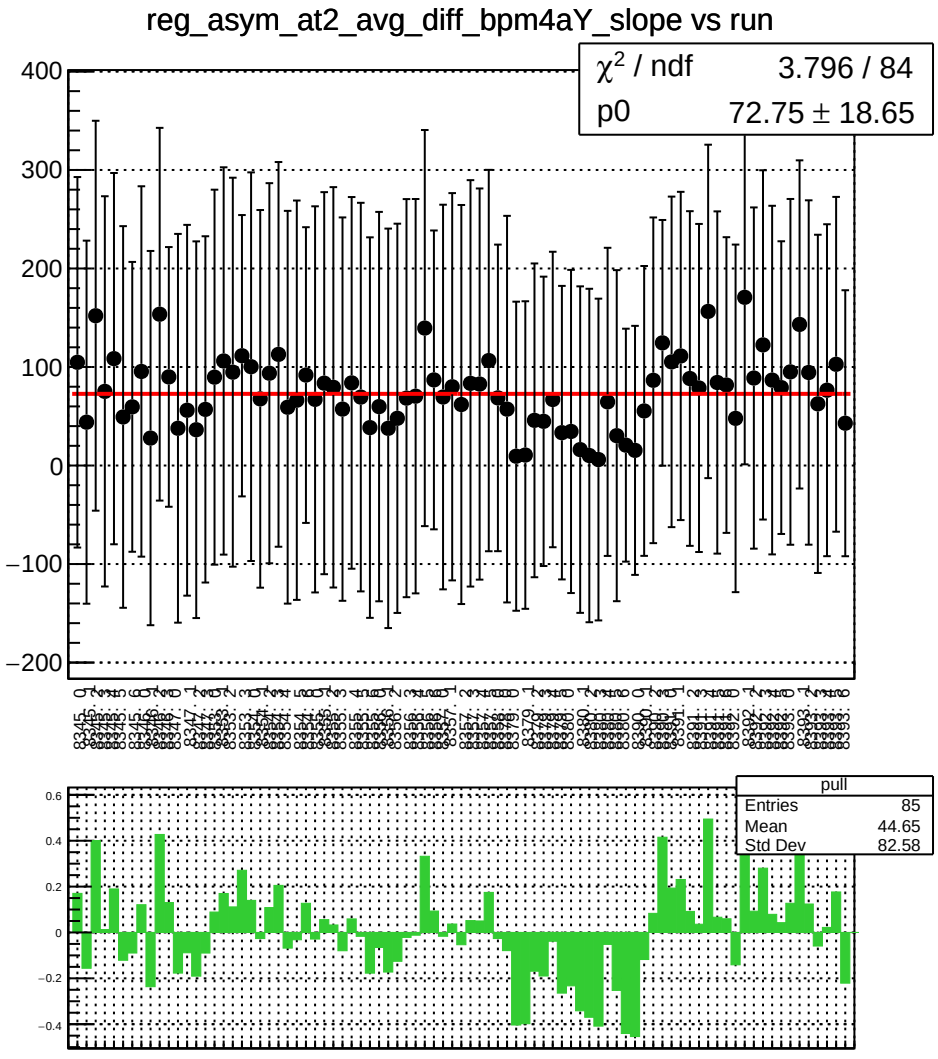

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 71.53 / 84
p0 −8.576 ± 3.357
150
100
50
0
−50
−100
pull
Entries 85
Mean 2.903
Std Dev 66.21
3
2
1
0
−1
−2

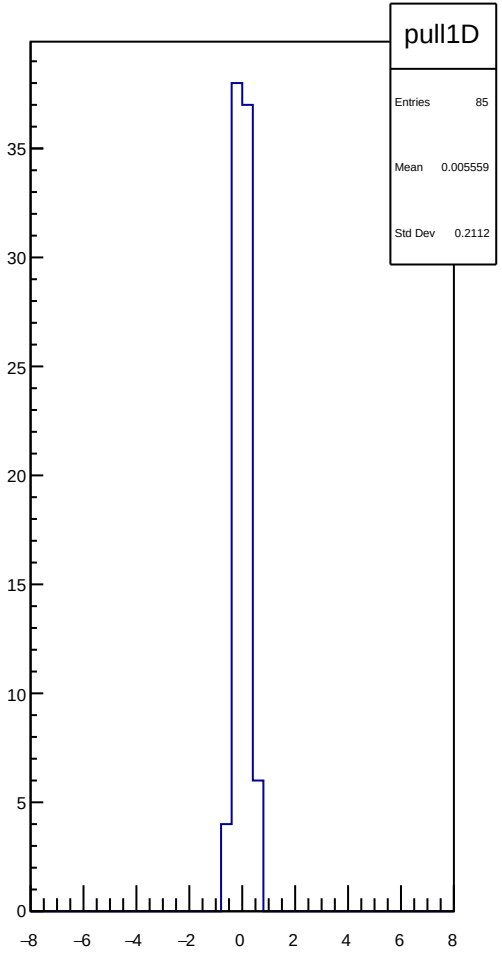

pull1D
Entries 85
Mean 0.009262
Std Dev 0.9173
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

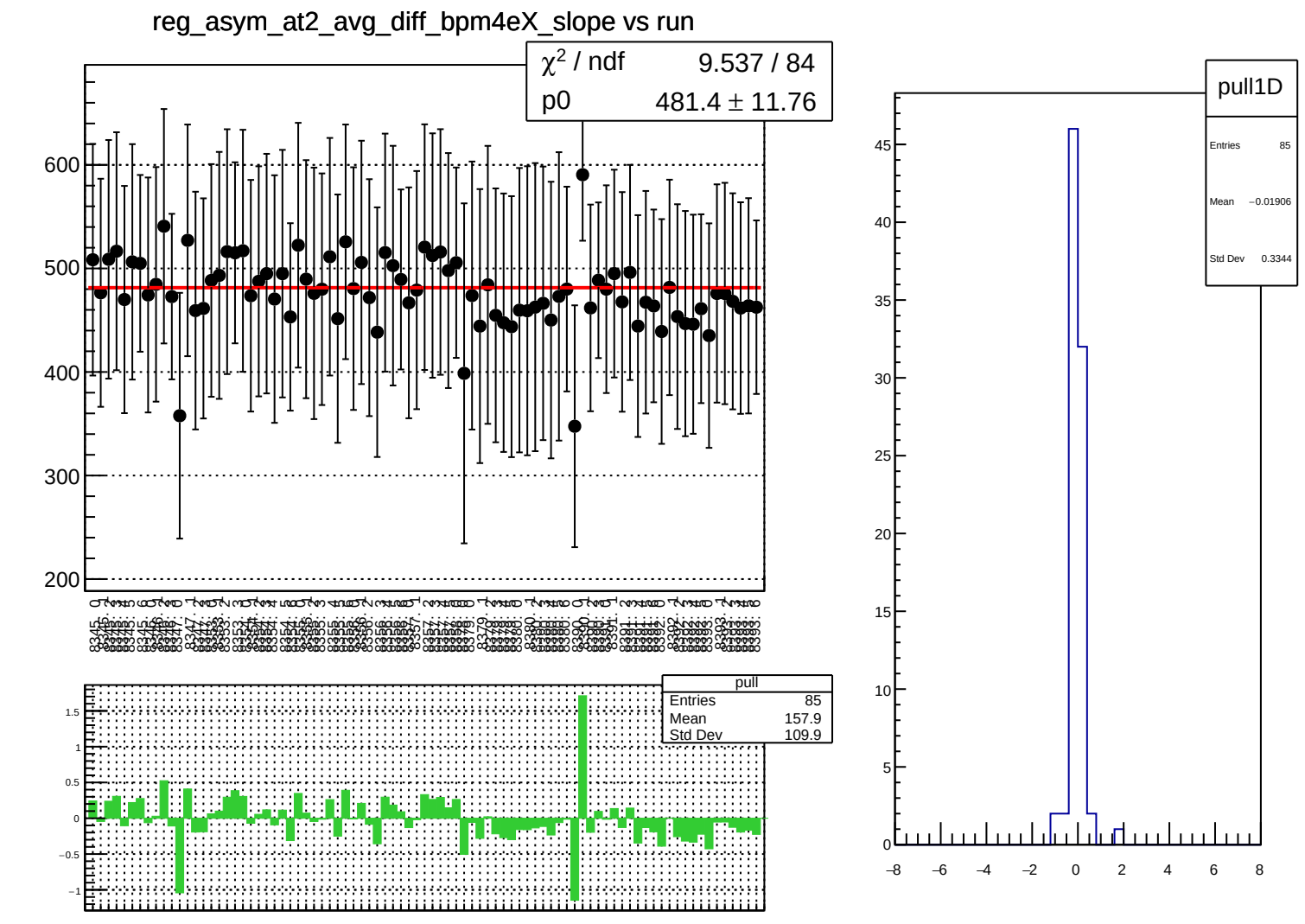

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 202.8 / 84
p0 30.5 ± 0.1886
pull
Entries 85
Mean 169.6
Std Dev 106.9
pull1D
Entries 85
Mean −0.08064
Std Dev 1.543

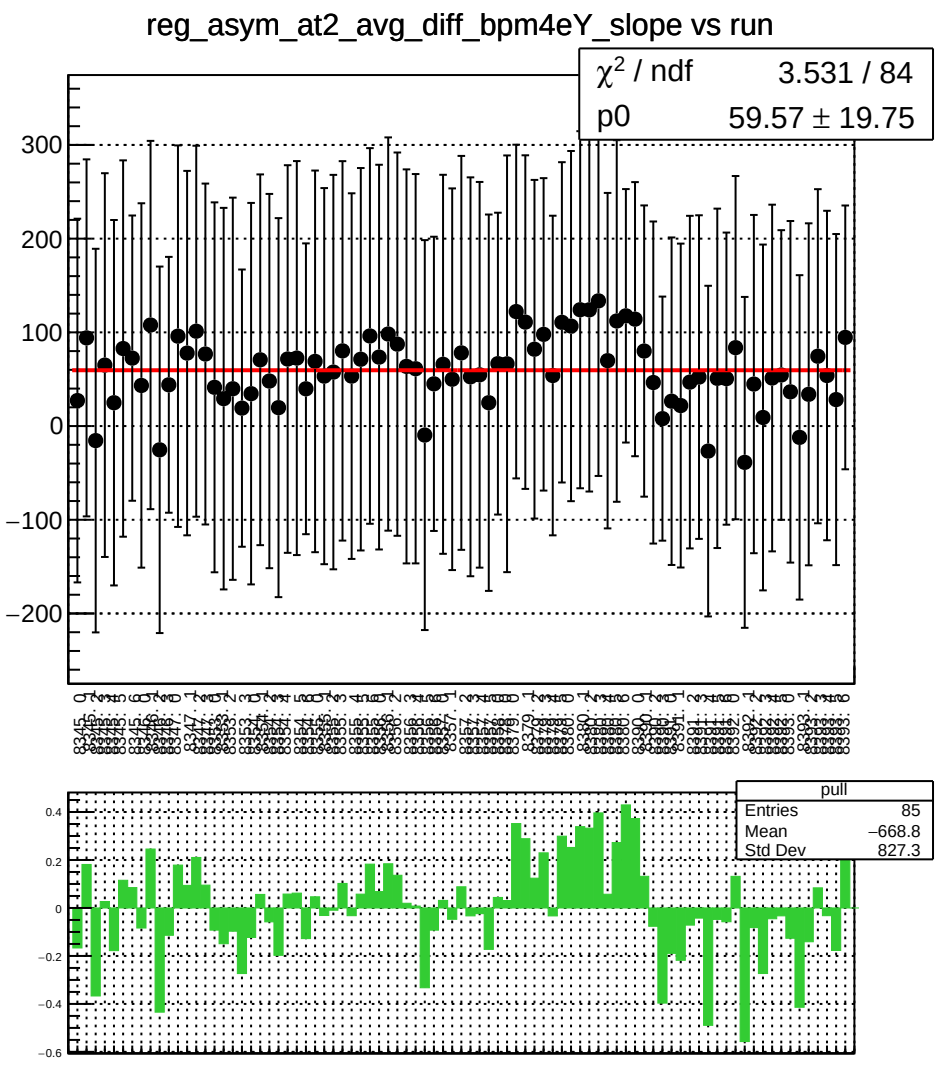

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 11.55 / 84
p0 −521.4 ± 10.77
pull
Entries 85
Mean 99.8
Std Dev 57.07

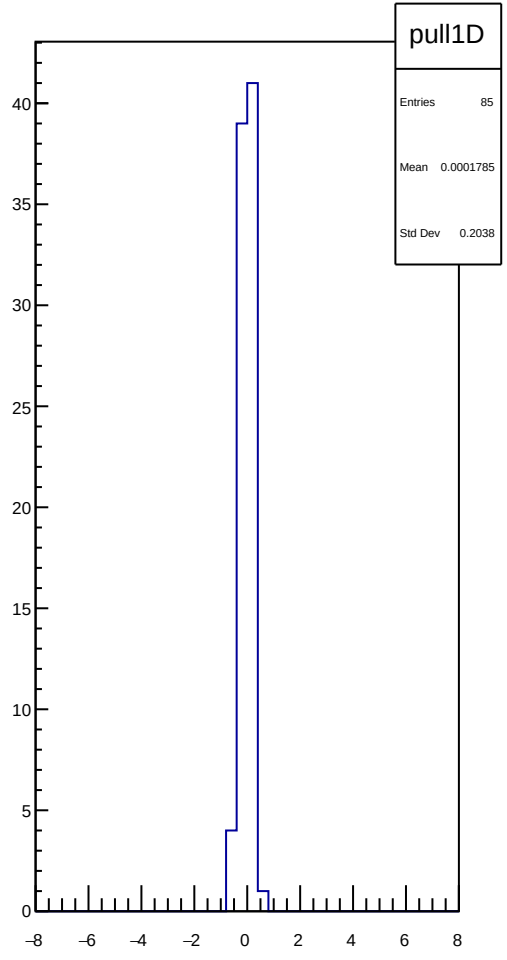

pull1D
Entries 85
Mean 0.03924
Std Dev 0.3665

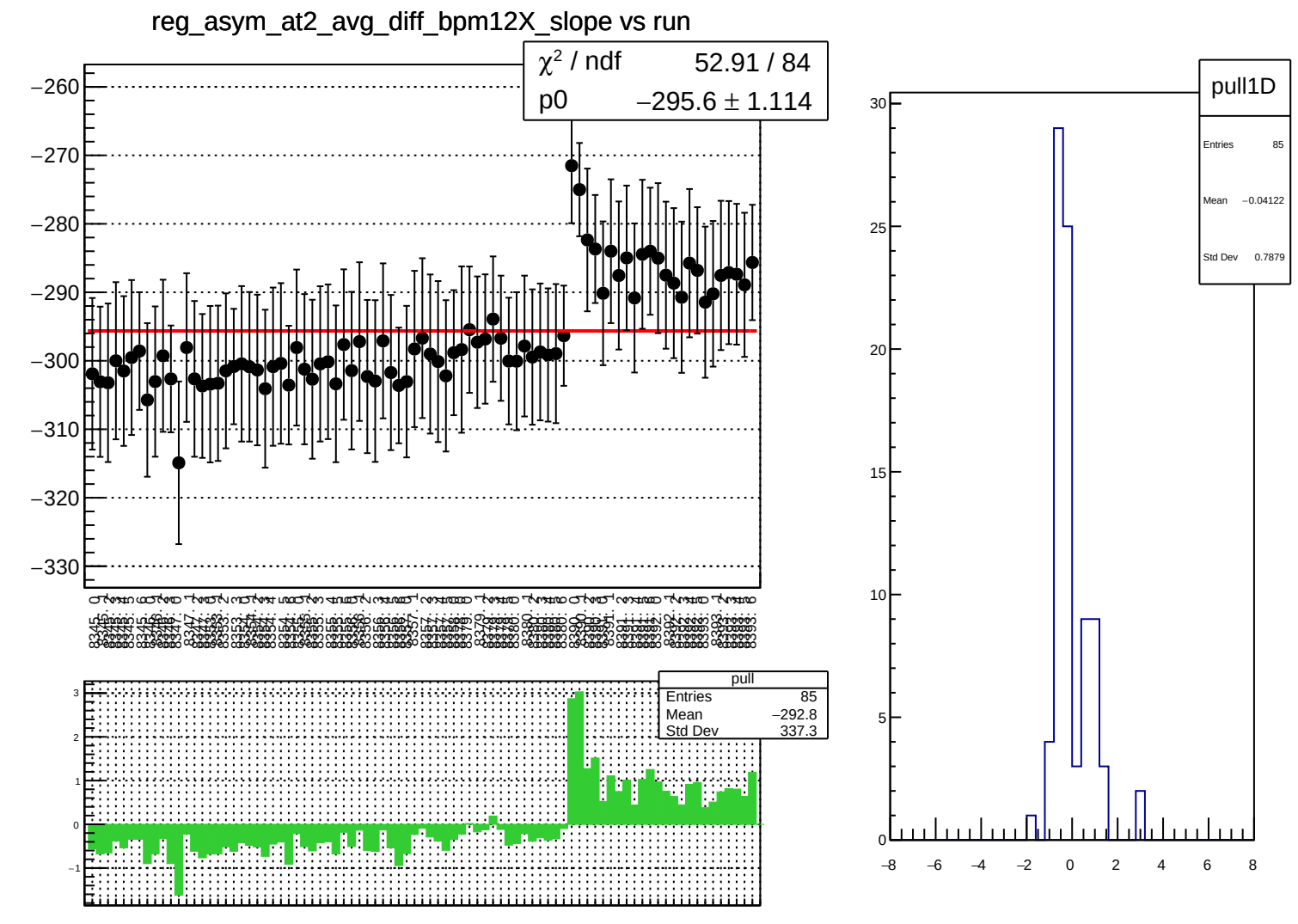

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.796 / 84
p0 72.75 ± 18.65
pull
Entries 85
Mean 44.65
Std Dev 82.58

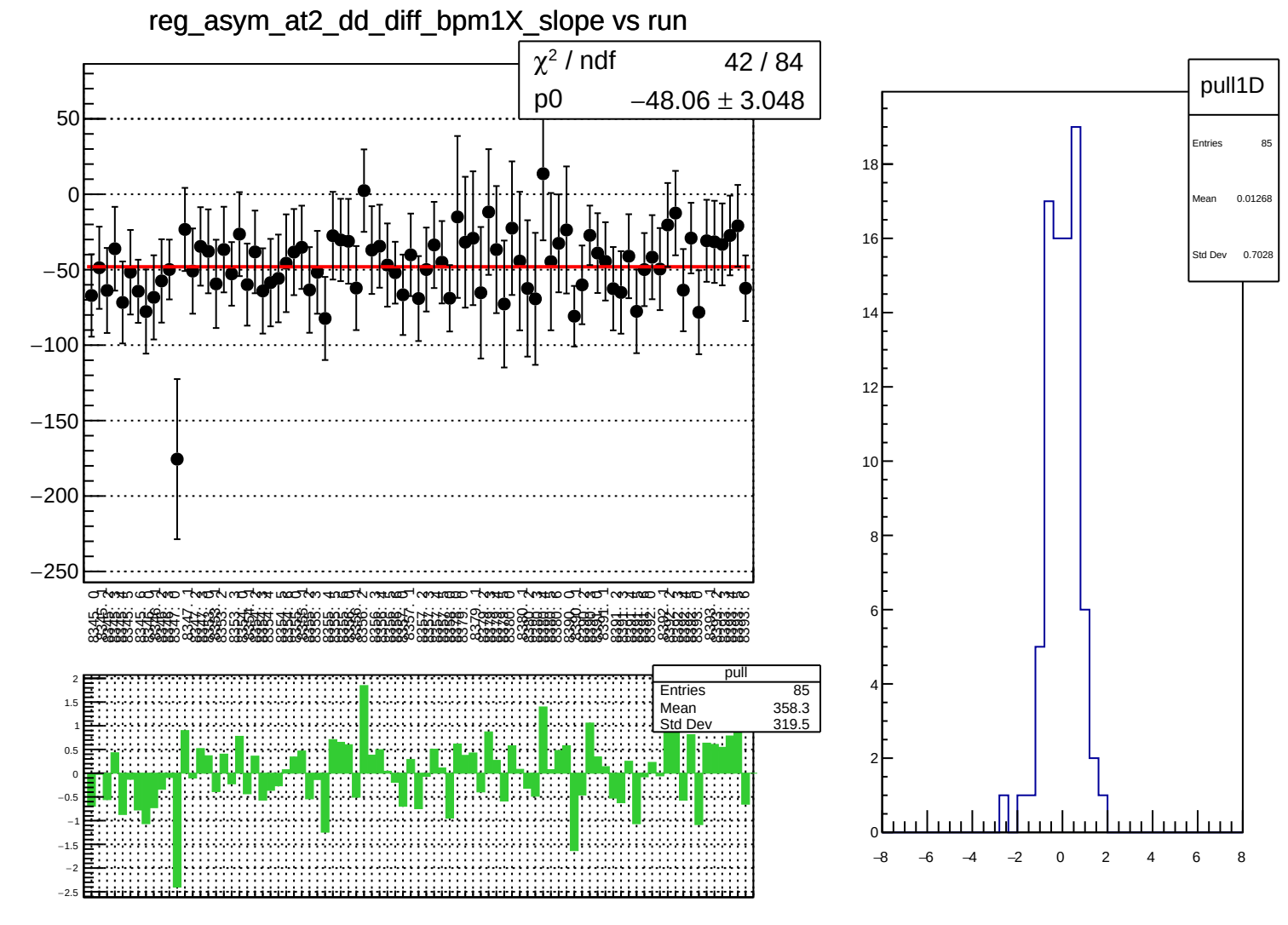

pull1D
Entries 85
Mean 0.005559
Std Dev 0.2112

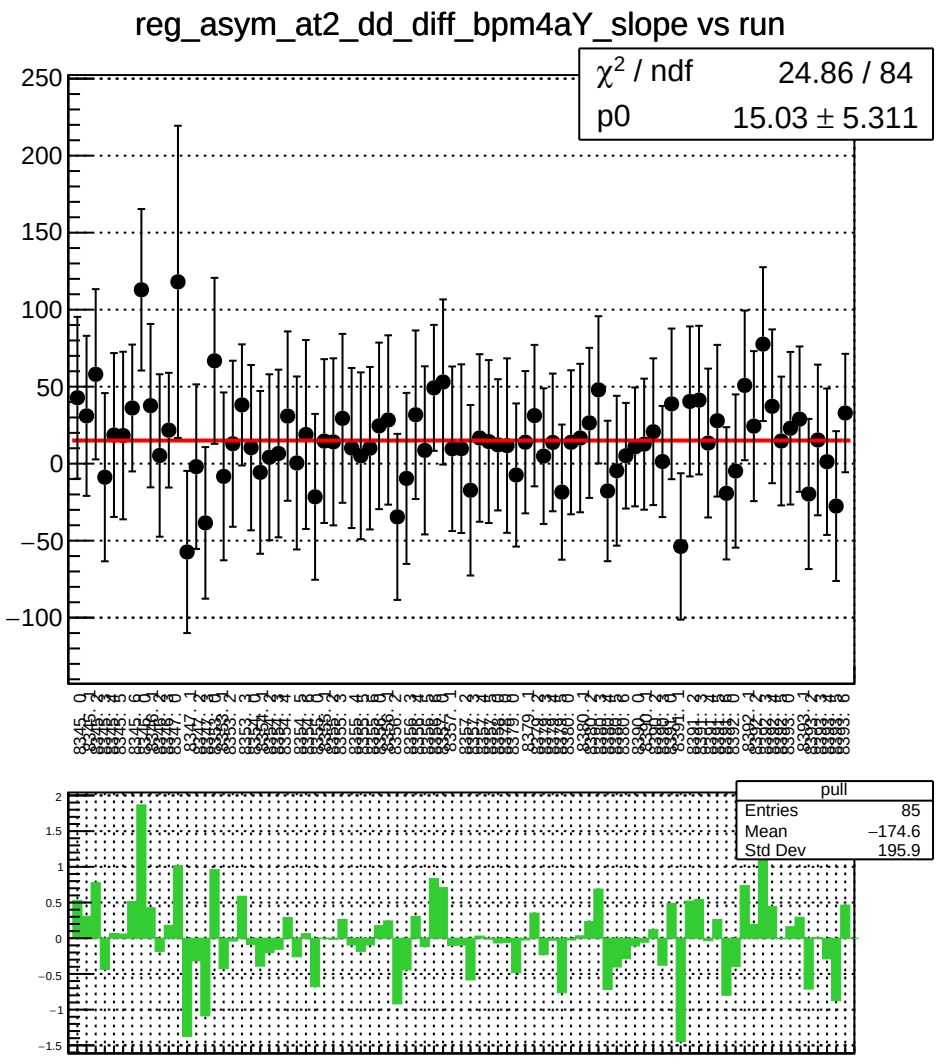

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.537 / 84
p0 481.4 ± 11.76
600
500
400
300
200
pull
Entries 85
Mean 157.9
Std Dev 109.9
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.01906
Std Dev 0.3344
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

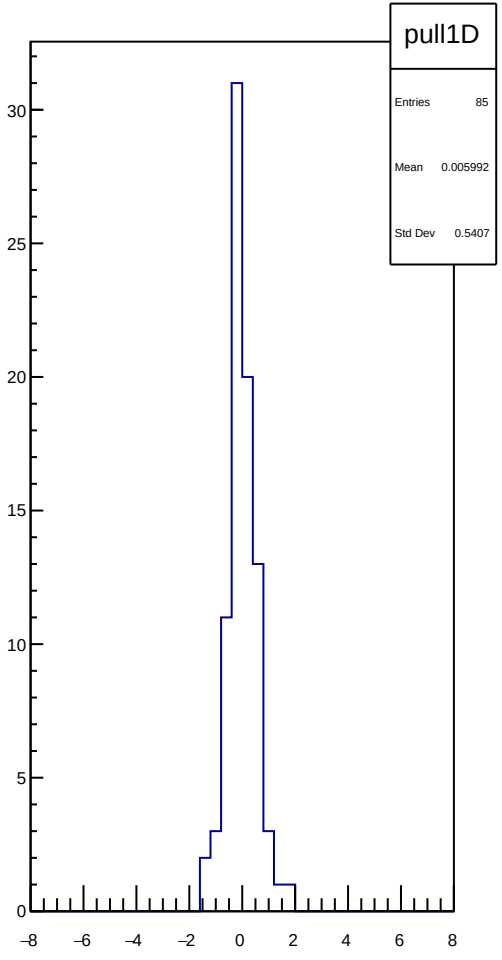

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.531 / 84
p0 59.57 ± 19.75
300
200
100
0
−100
−200
pull
Entries 85
Mean −668.8
Std Dev 827.3
0.4
0.2
0
−0.2
−0.4
−0.6

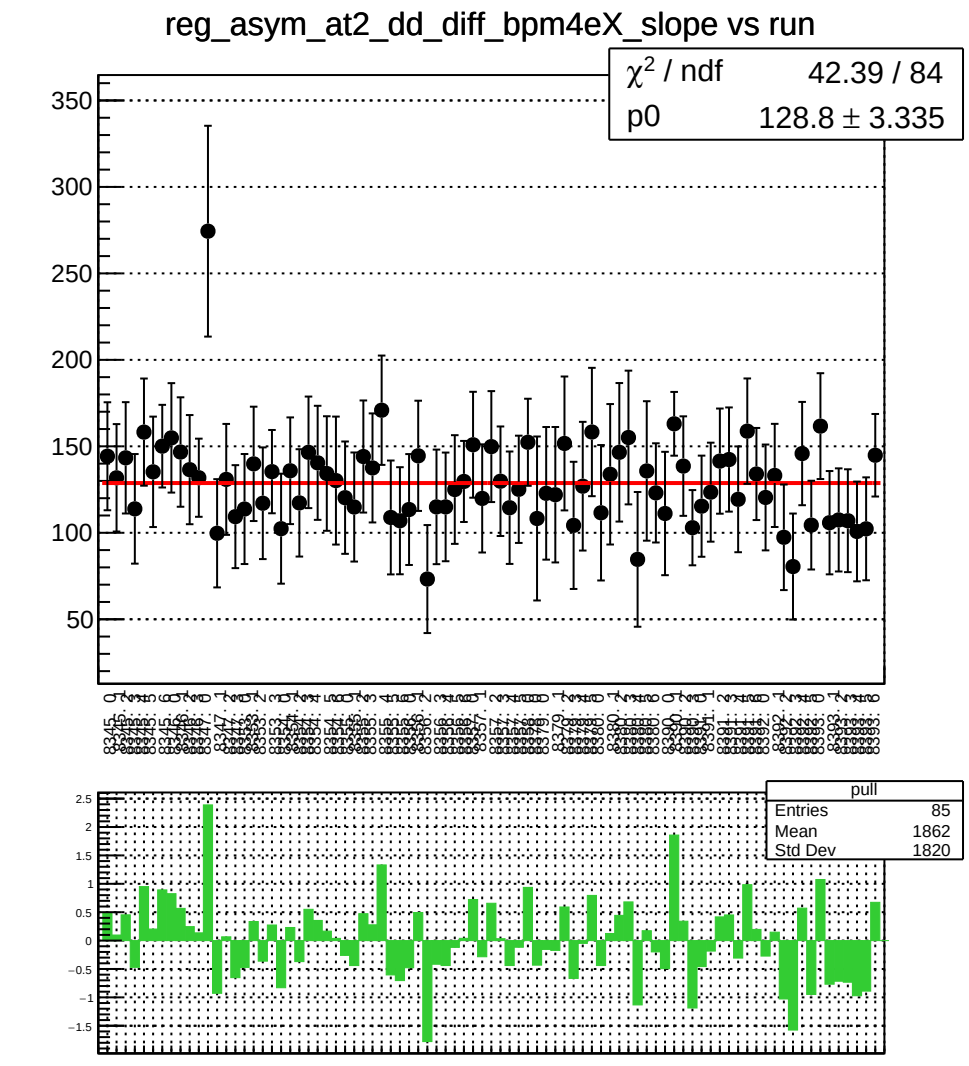

pull1D
Entries 85
Mean 0.0001785
Std Dev 0.2038
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

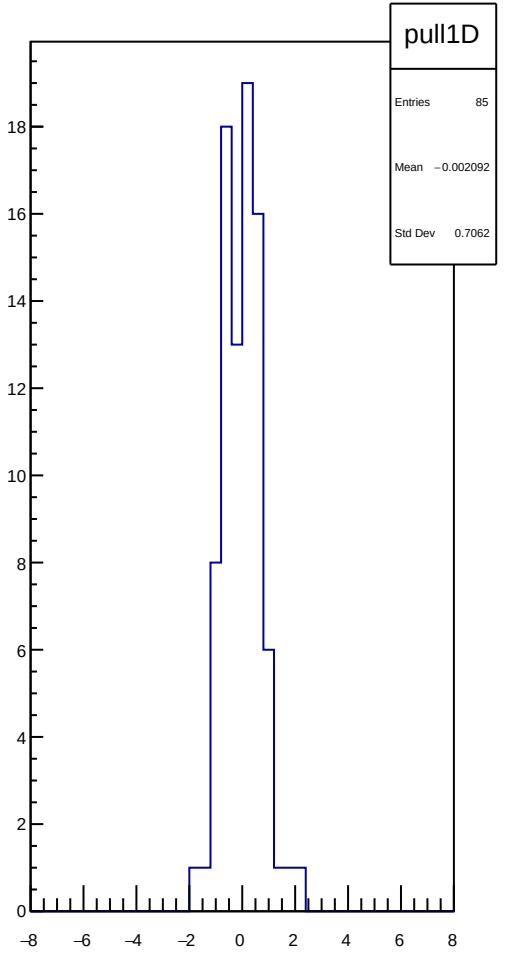

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 52.91 / 84
p0 −295.6 ± 1.114
−260
−270
−280
−290
−300
−310
−320
−330
pull
Entries 85
Mean −292.8
Std Dev 337.3
3
2
1
0
−1
pull1D
Entries 85
Mean −0.04122
Std Dev 0.7879
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

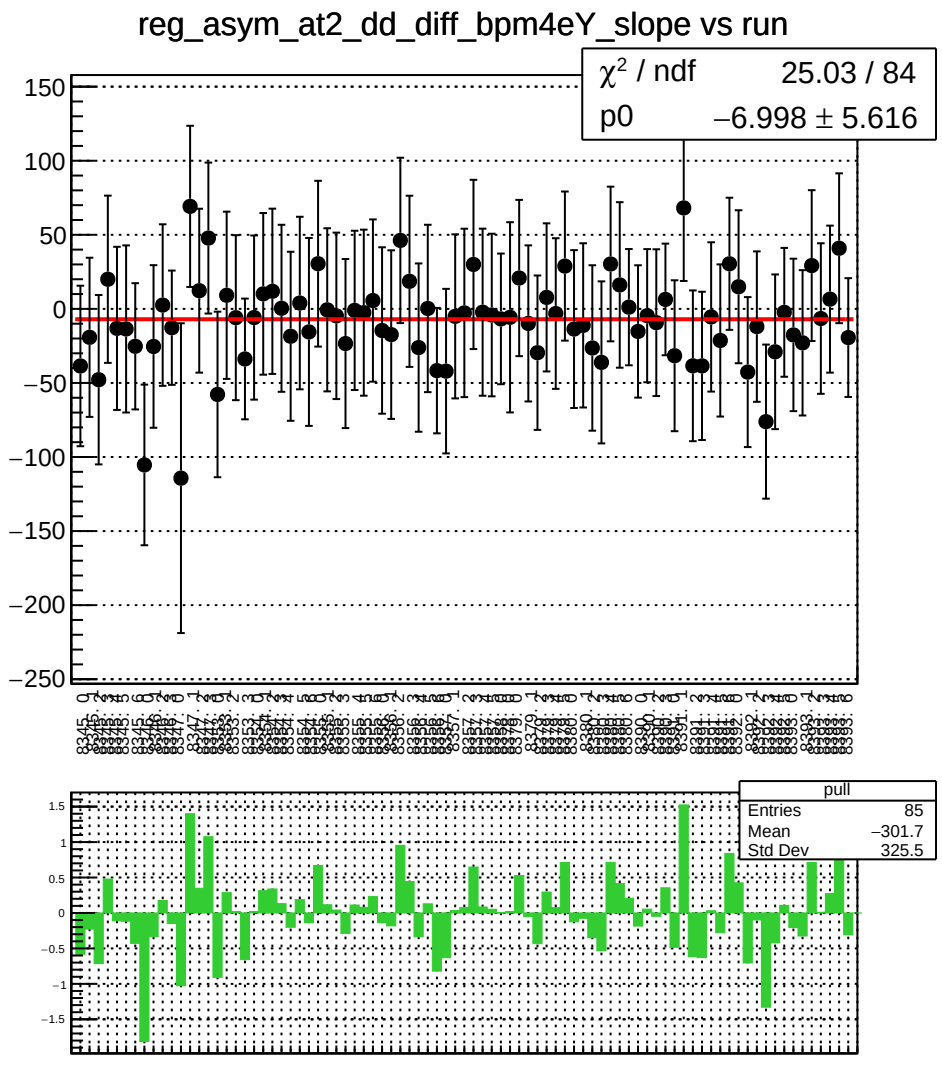

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 42 / 84
p0 −48.06 ± 3.048
pull
Entries 85
Mean 358.3
Std Dev 319.5
pull1D
Entries 85
Mean 0.01268
Std Dev 0.7028

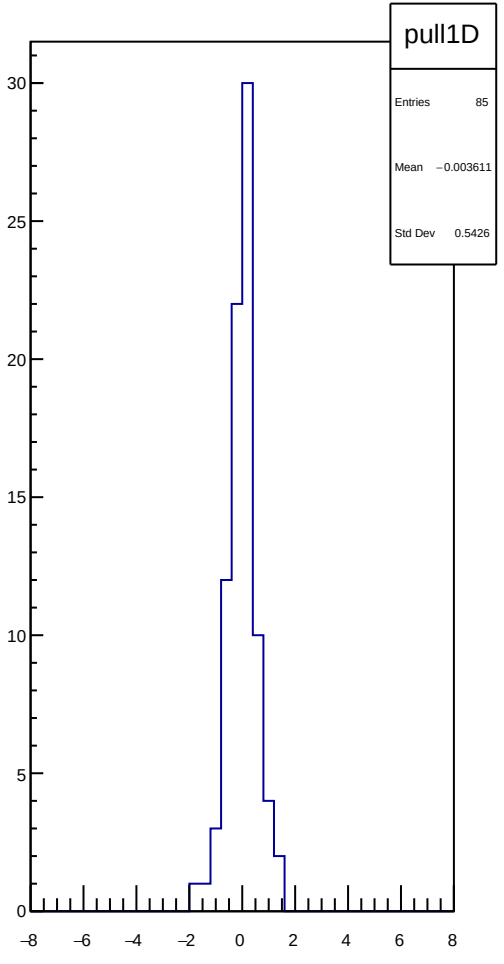

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 24.86 / 84
p0 15.03 ± 5.311
pull
Entries 85
Mean −174.6
Std Dev 195.9

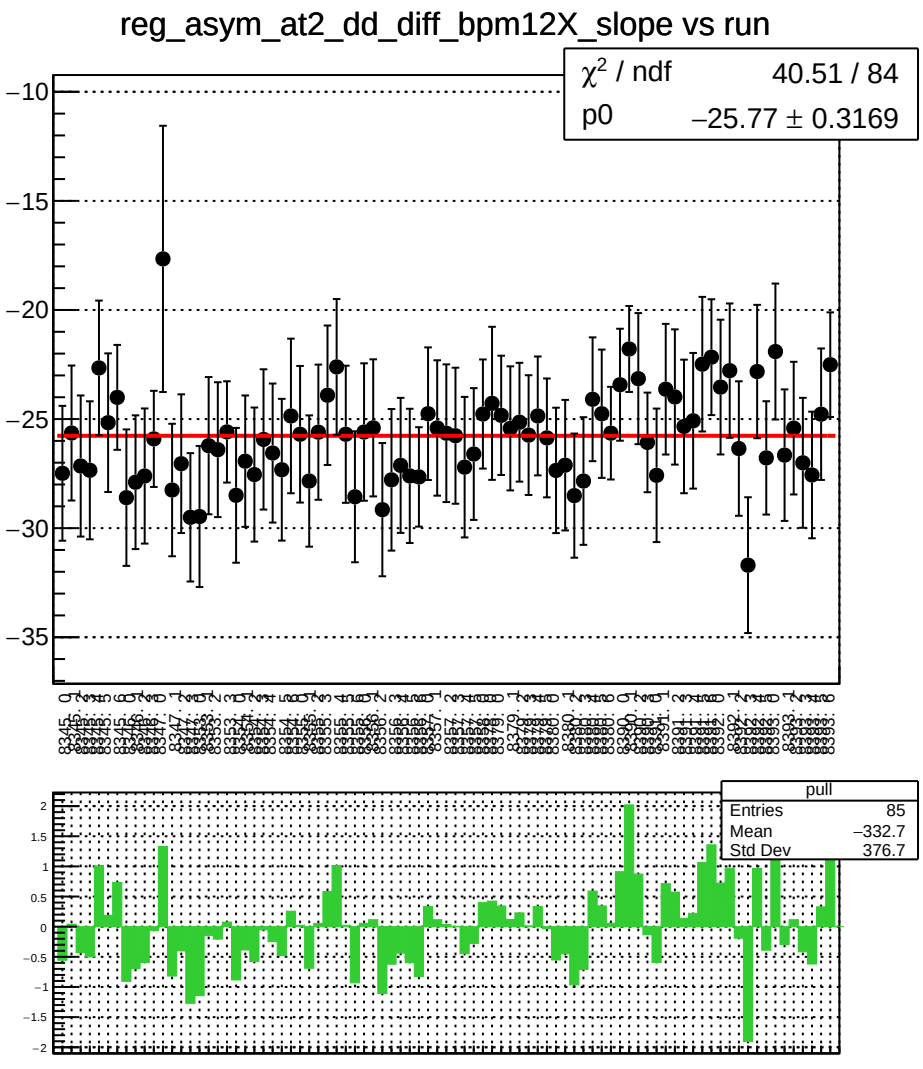

pull1D
Entries 85
Mean 0.005992
Std Dev 0.5407

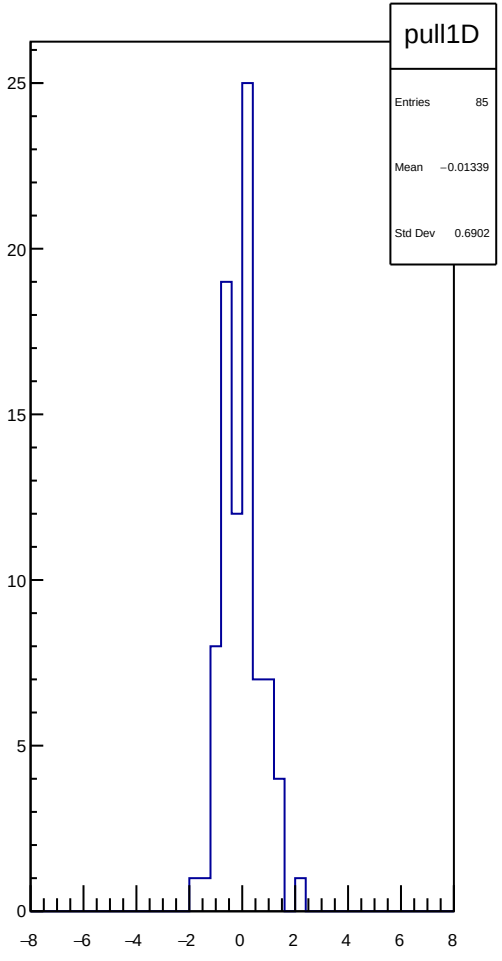

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 42.39 / 84
p0 128.8 ± 3.335
pull
Entries 85
Mean 1862
Std Dev 1820

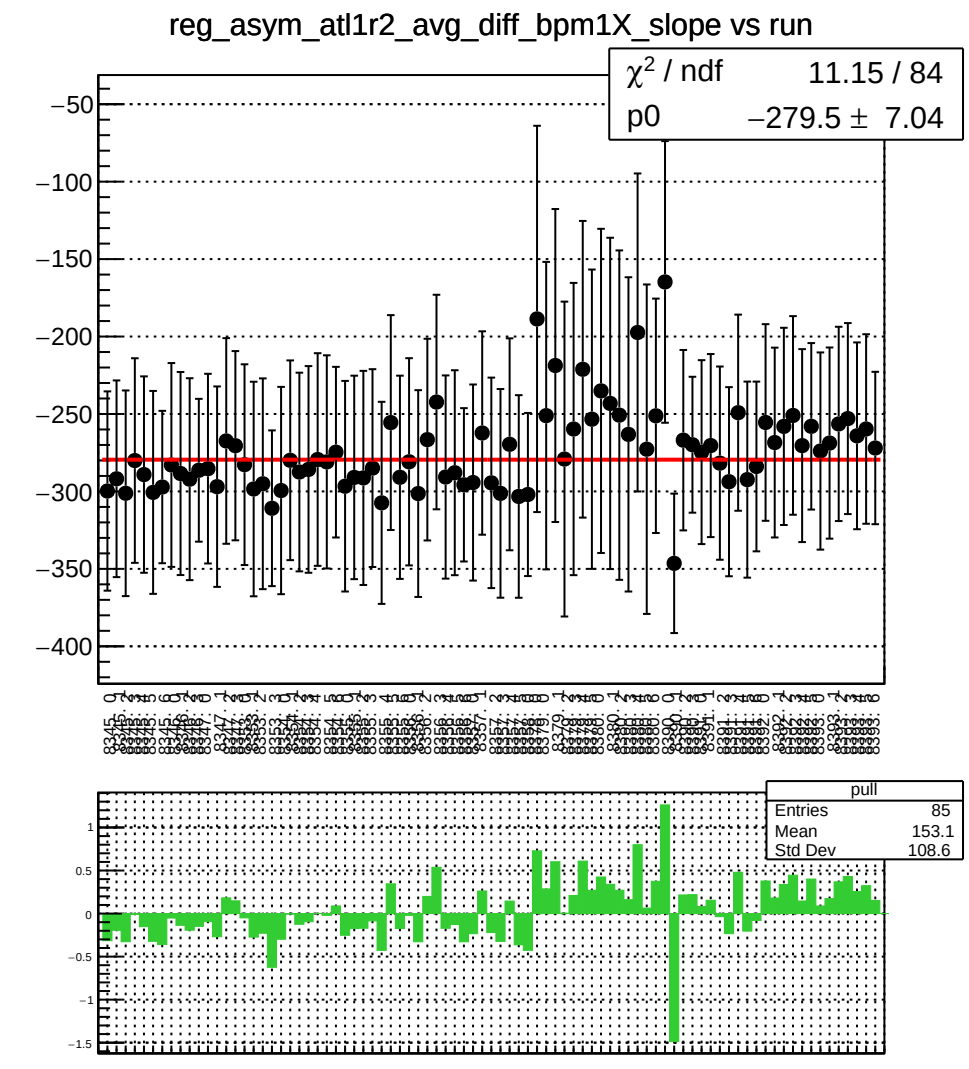

pull1D
Entries 85
Mean −0.002092
Std Dev 0.7062

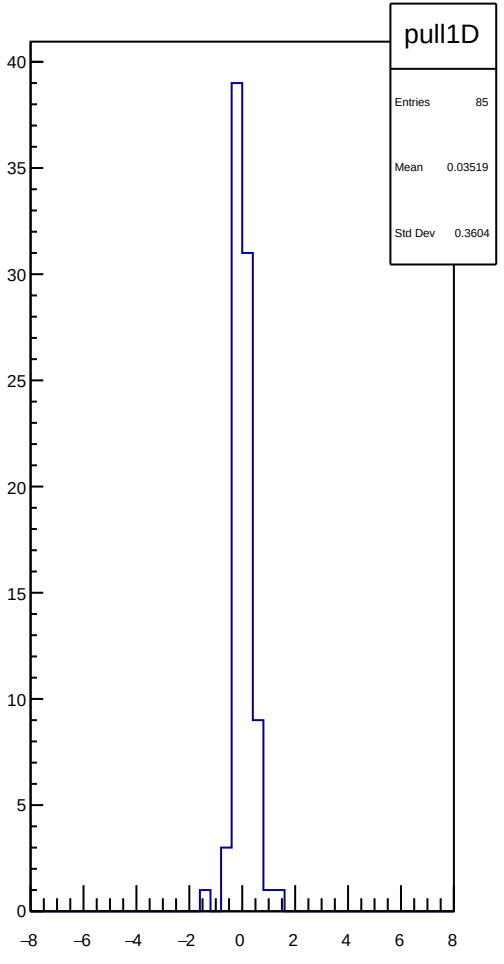

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 25.03 / 84
p0 −6.998 ± 5.616
pull
Entries 85
Mean −301.7
Std Dev 325.5

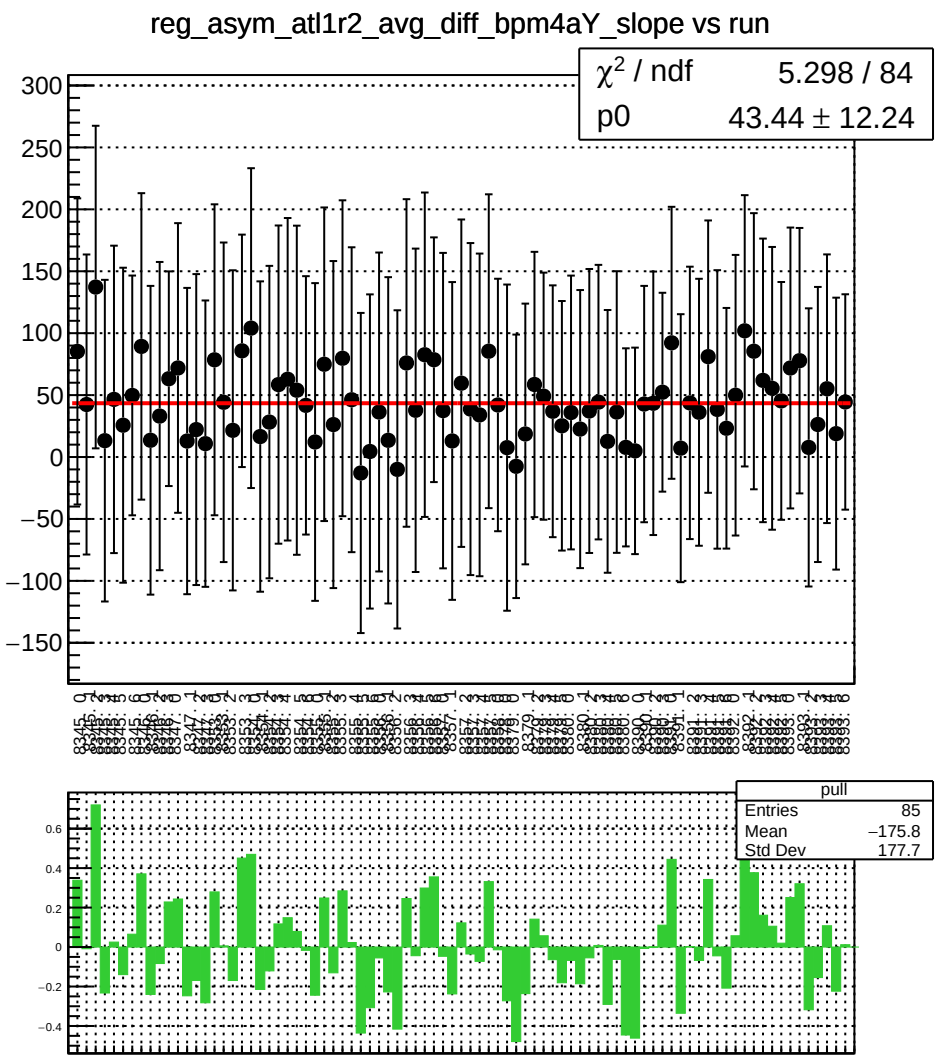

pull1D
Entries 85
Mean −0.003611
Std Dev 0.5426

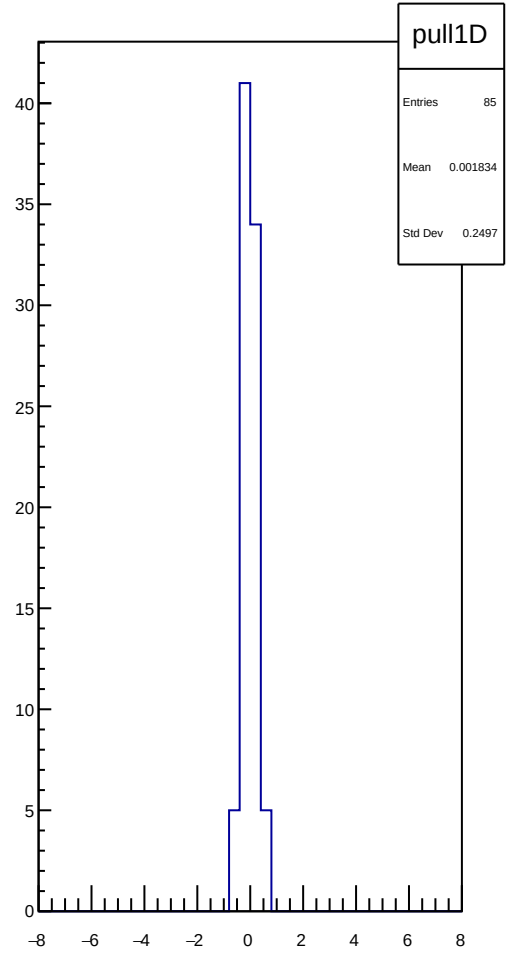

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 40.51 / 84
p0 −25.77 ± 0.3169
pull
Entries 85
Mean −332.7
Std Dev 376.7

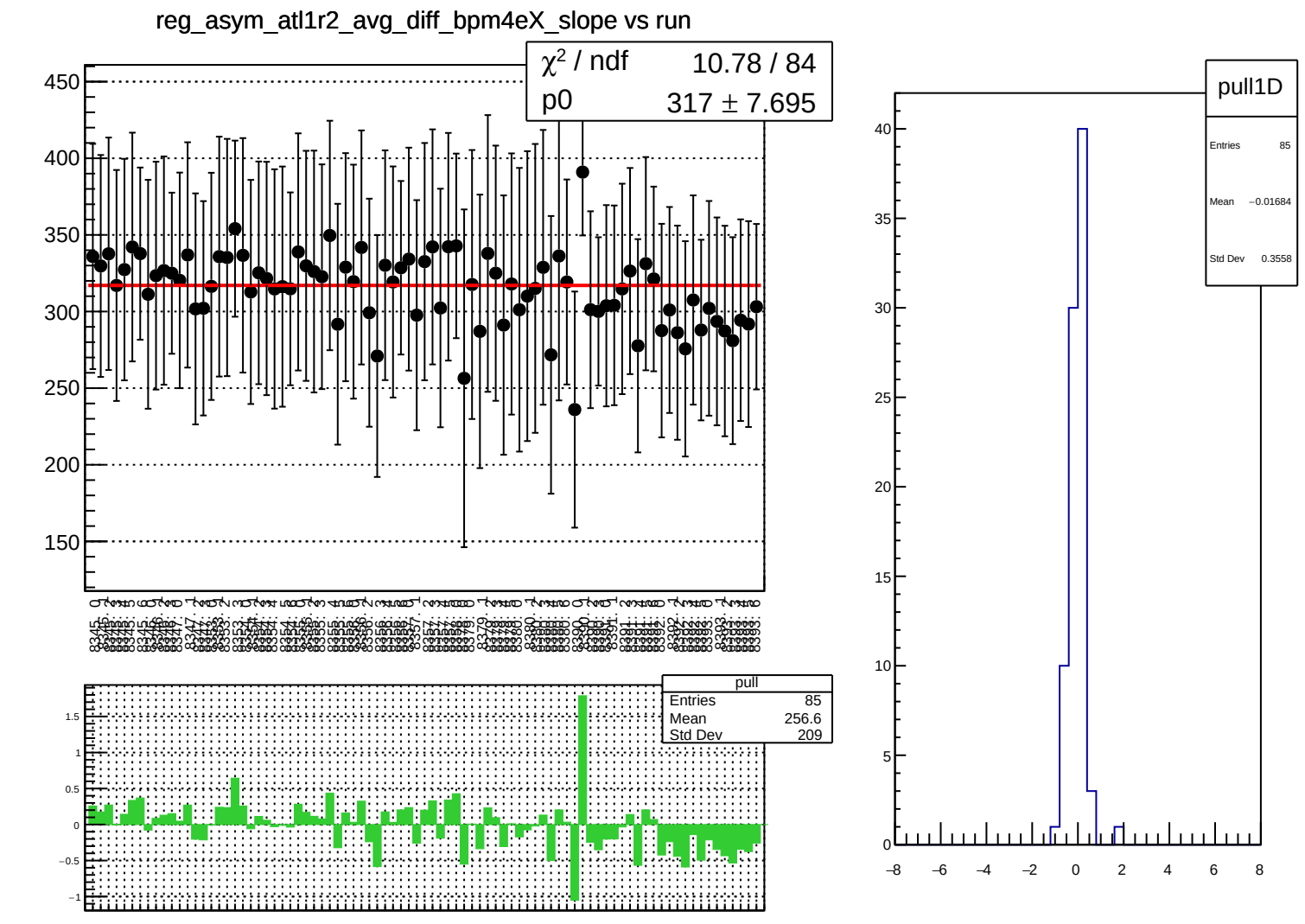

pull1D
Entries 85
Mean −0.01339
Std Dev 0.6902

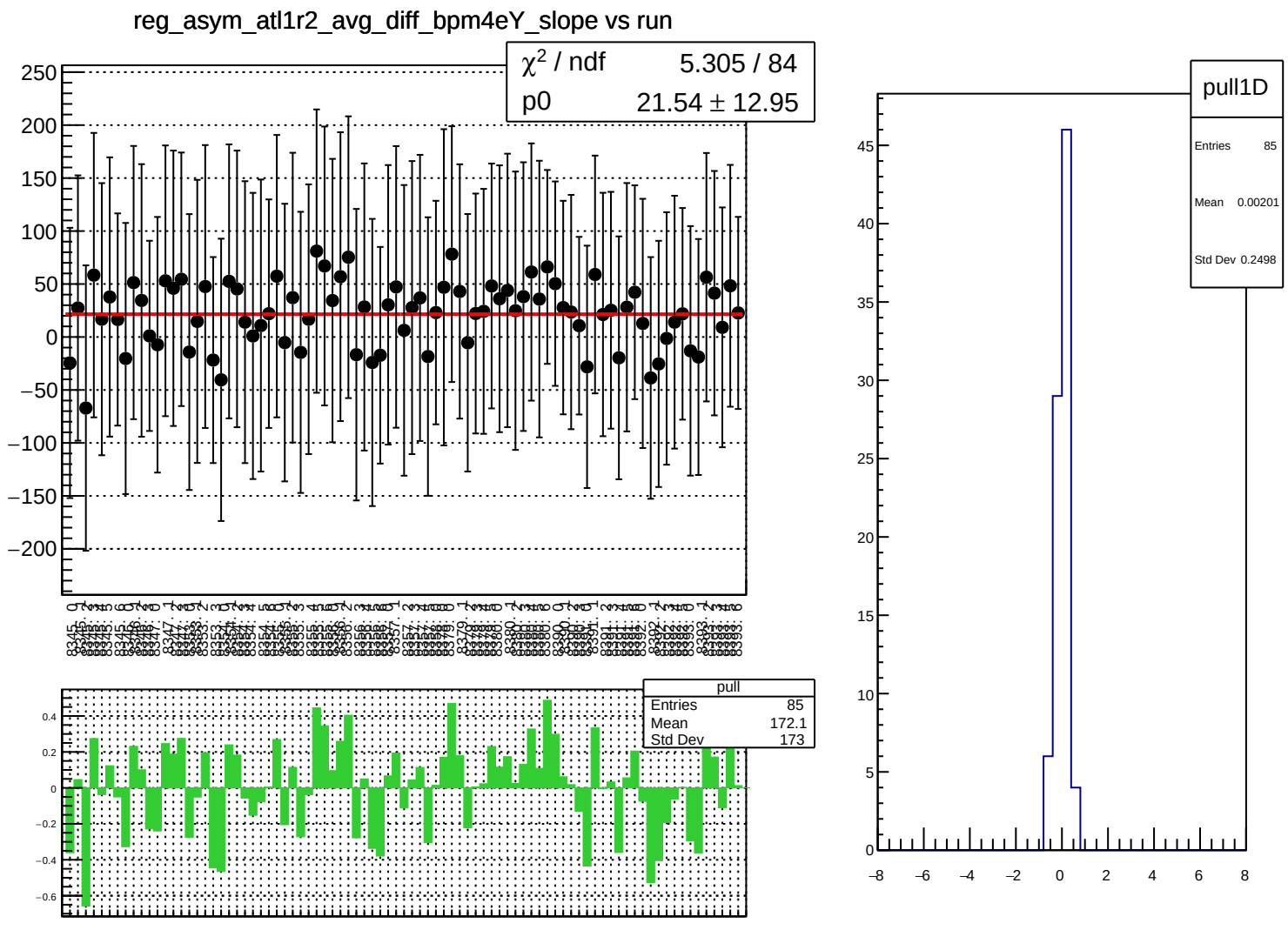

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 11.15 / 84
p0 −279.5 ± 7.04
pull
Entries 85
Mean 153.1
Std Dev 108.6

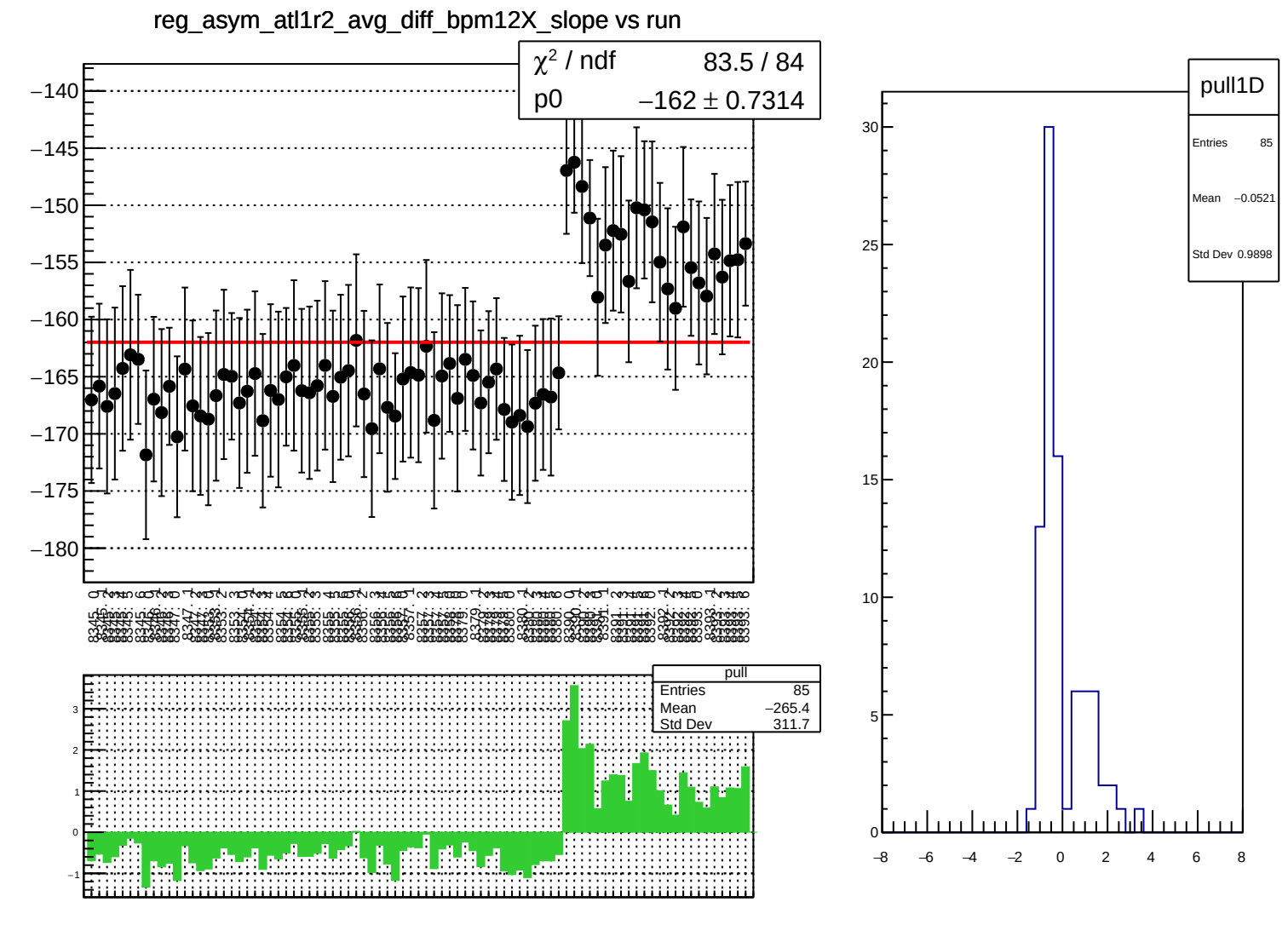

pull1D
Entries 85
Mean 0.03519
Std Dev 0.3604

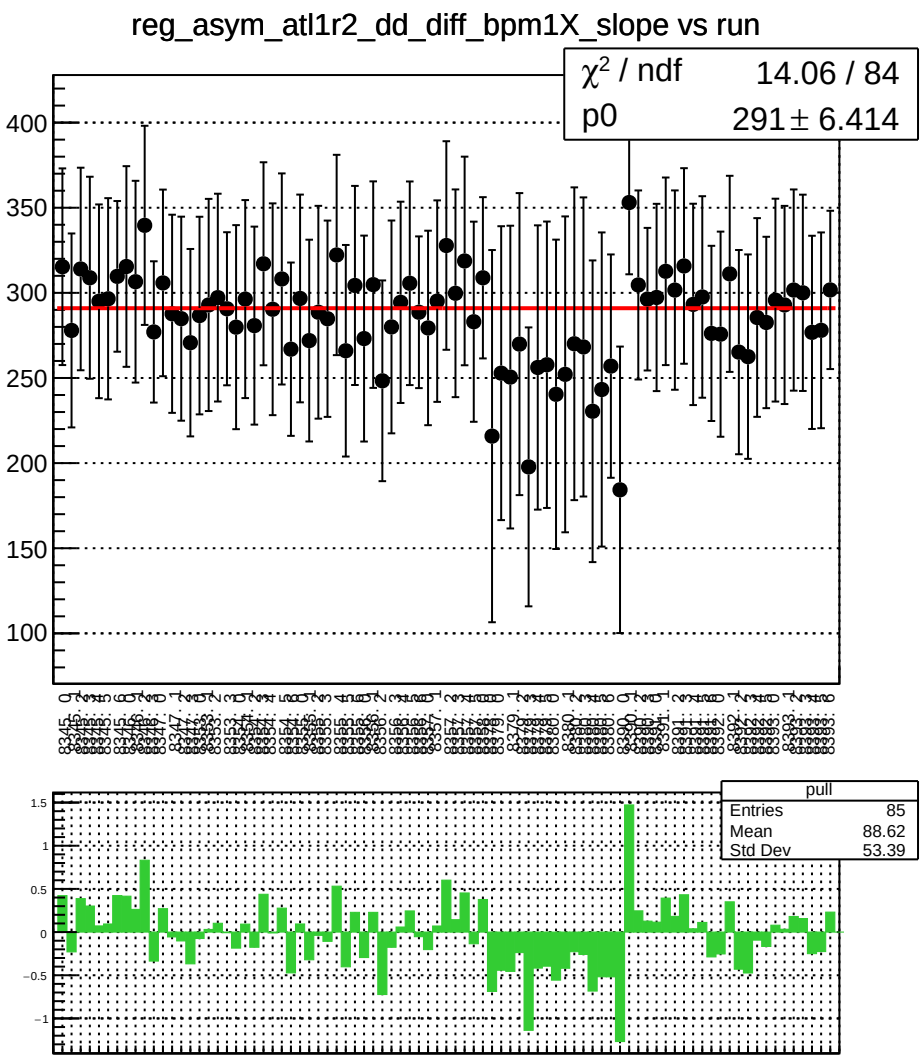

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.298 / 84
p0 43.44 ± 12.24
pull
Entries 85
Mean −175.8
Std Dev 177.7

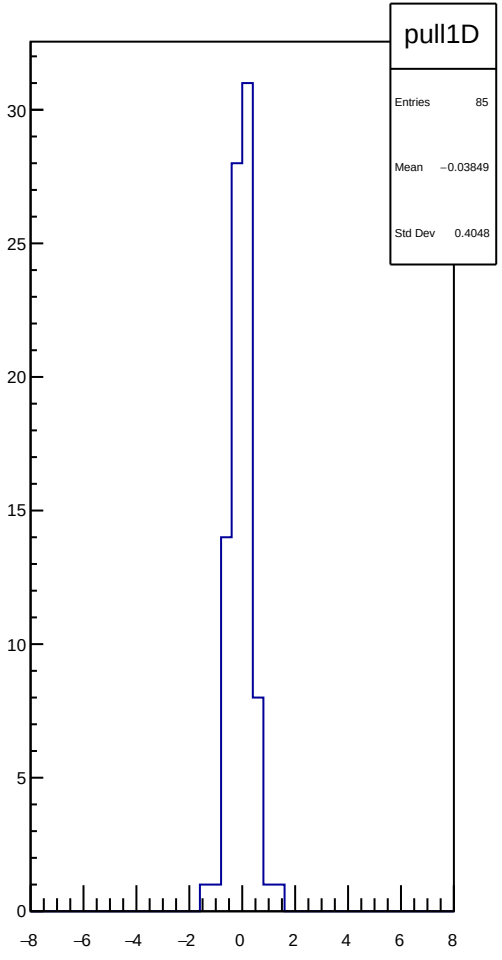

pull1D
Entries 85
Mean 0.001834
Std Dev 0.2497

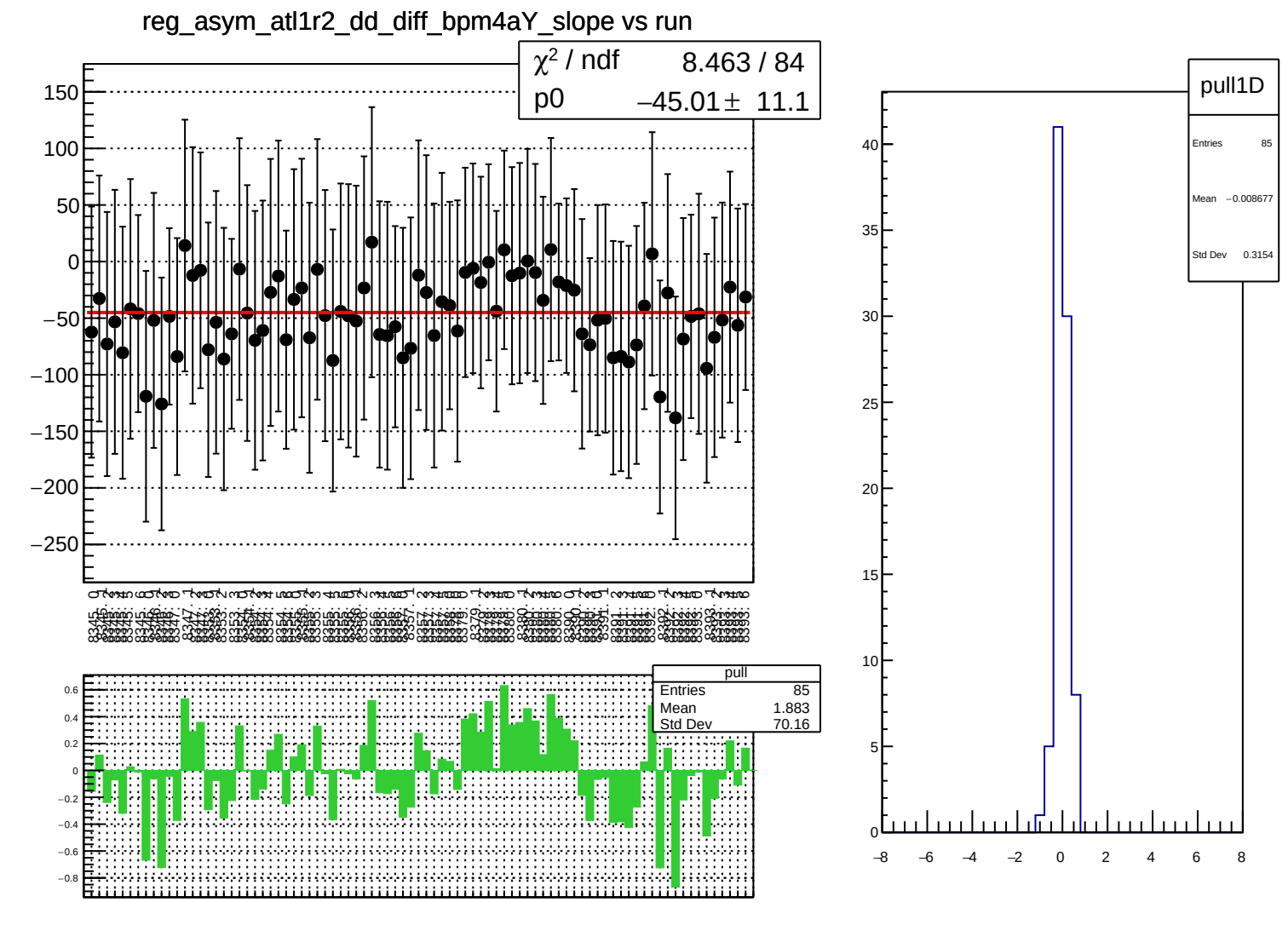

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 10.78 / 84
p0 317 ± 7.695
pull
Entries 85
Mean 256.6
Std Dev 209
pull1D
Entries 85
Mean −0.01684
Std Dev 0.3558

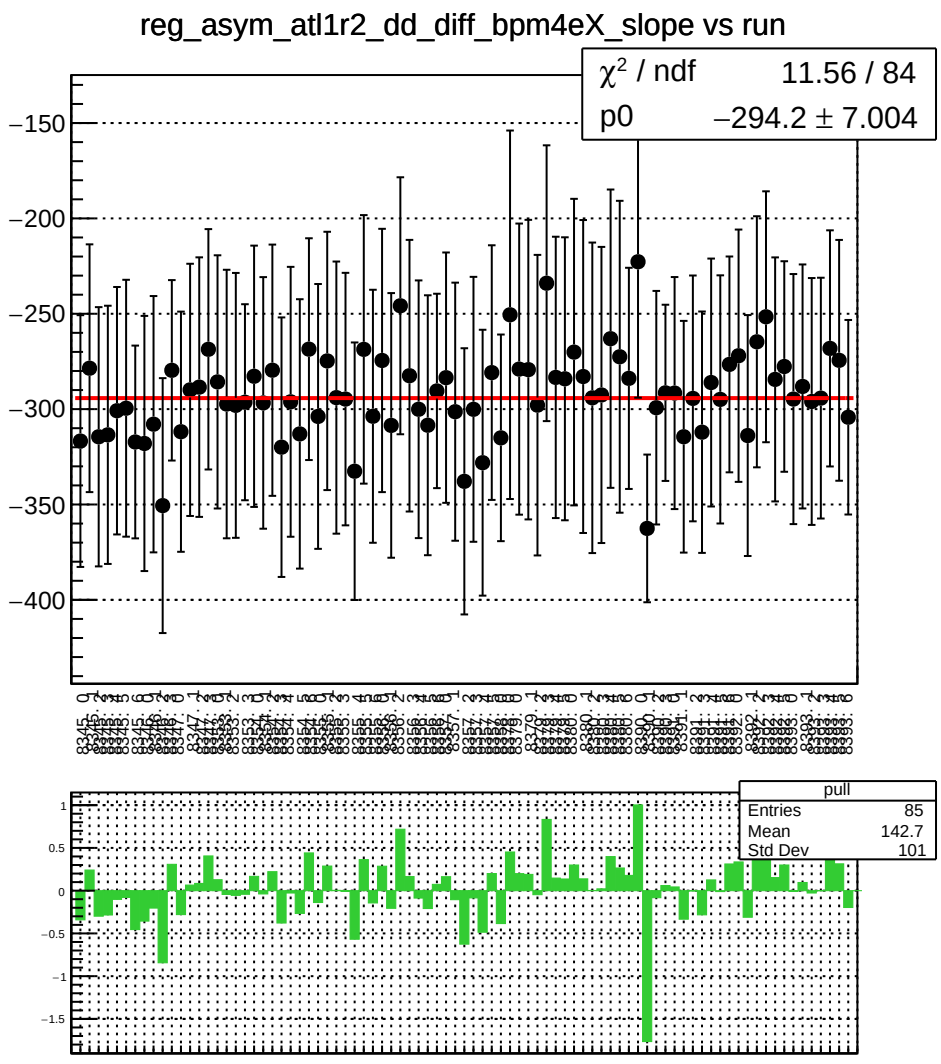

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.305 / 84
p0 21.54 ± 12.95
pull
Entries 85
Mean 172.1
Std Dev 173
pull1D
Entries 85
Mean 0.00201
Std Dev 0.2498

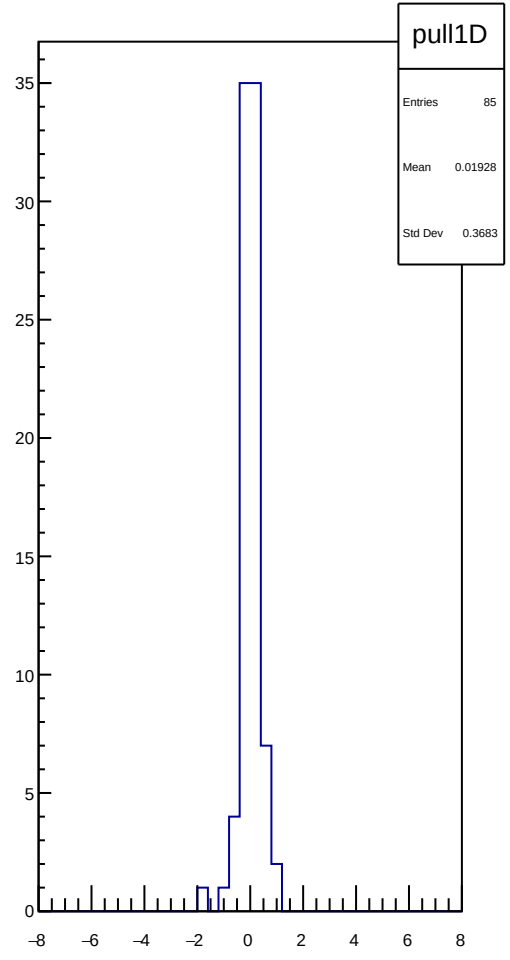

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 83.5 / 84
p0 −162 ± 0.7314
pull
Entries 85
Mean −265.4
Std Dev 311.7
pull1D
Entries 85
Mean −0.0521
Std Dev 0.9898

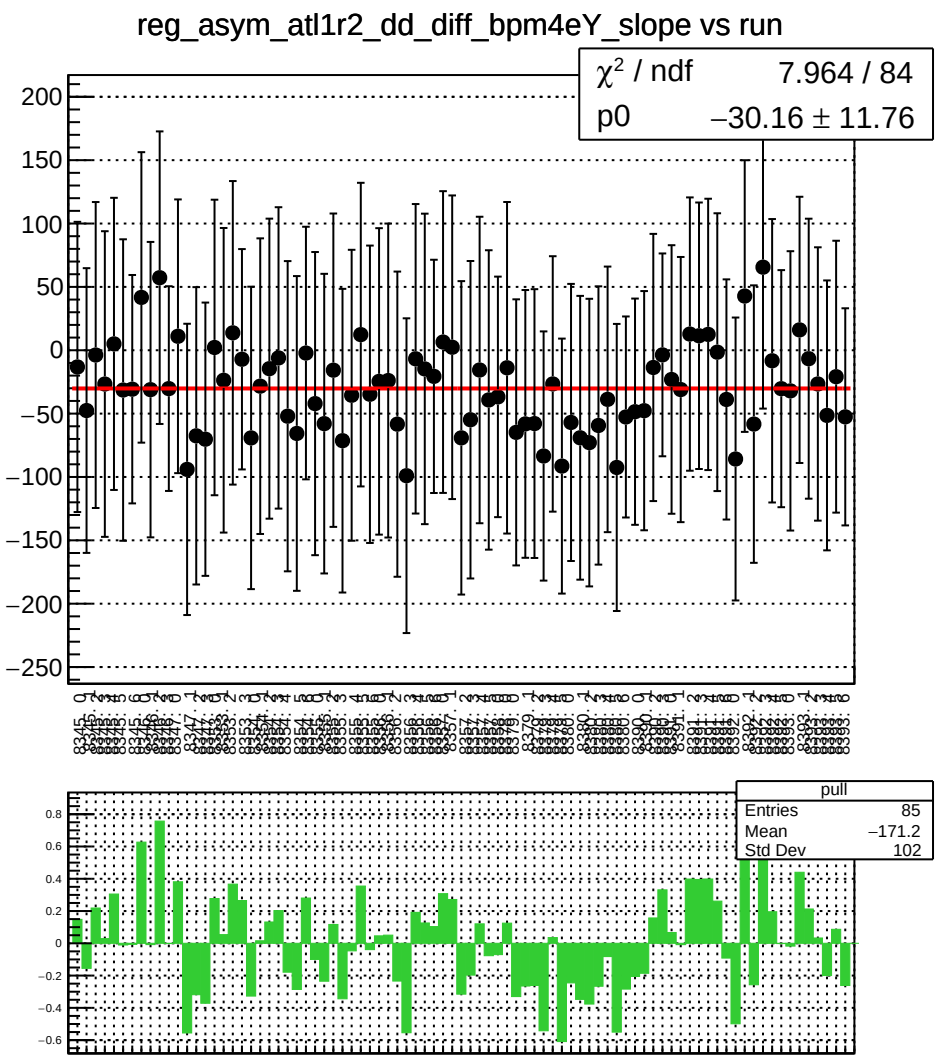

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 14.06 / 84
p0 291 ± 6.414
pull
Entries 85
Mean 88.62
Std Dev 53.39

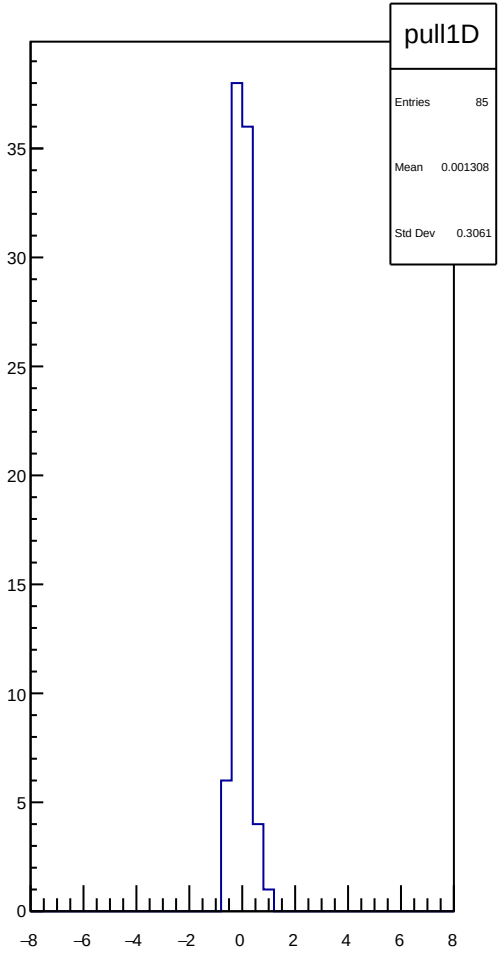

pull1D
Entries 85
Mean −0.03849
Std Dev 0.4048

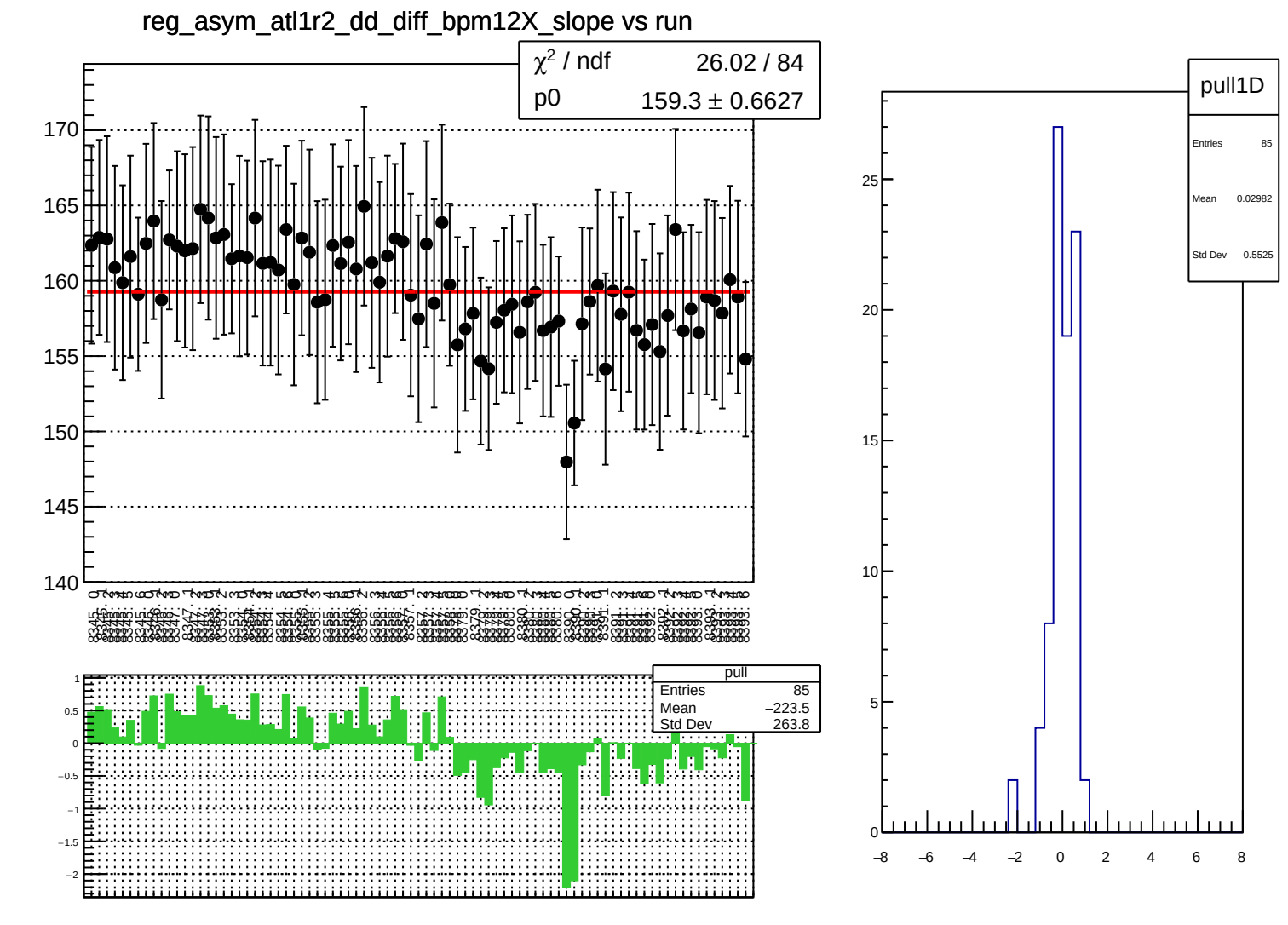

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.463 / 84
p0 −45.01 ± 11.1
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 85
Mean 1.883
Std Dev 70.16
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean −0.008677
Std Dev 0.3154
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

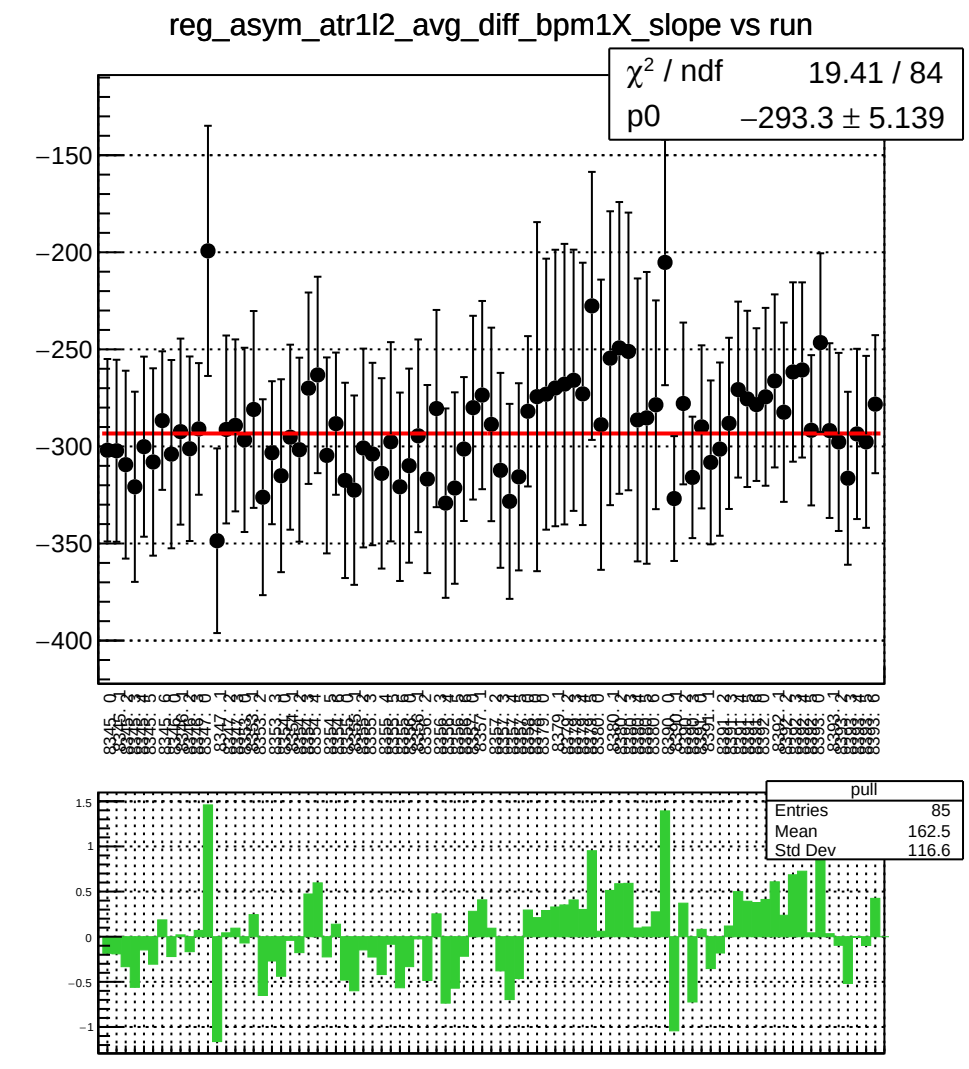

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 11.56 / 84
p0 −294.2 ± 7.004
−150
−200
−250
−300
−350
−400
pull
Entries 85
Mean 142.7
Std Dev 101
1
0.5
0
−0.5
−1
−1.5

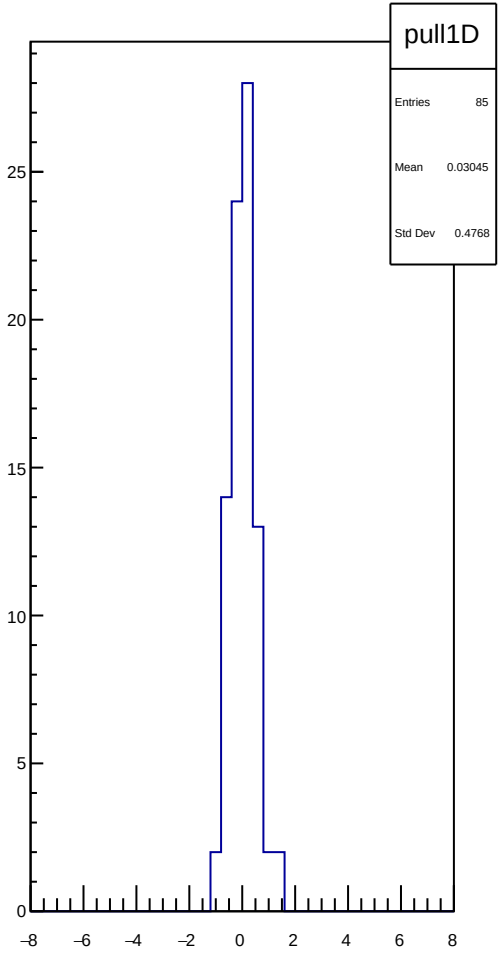

pull1D
Entries 85
Mean 0.01928
Std Dev 0.3683
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

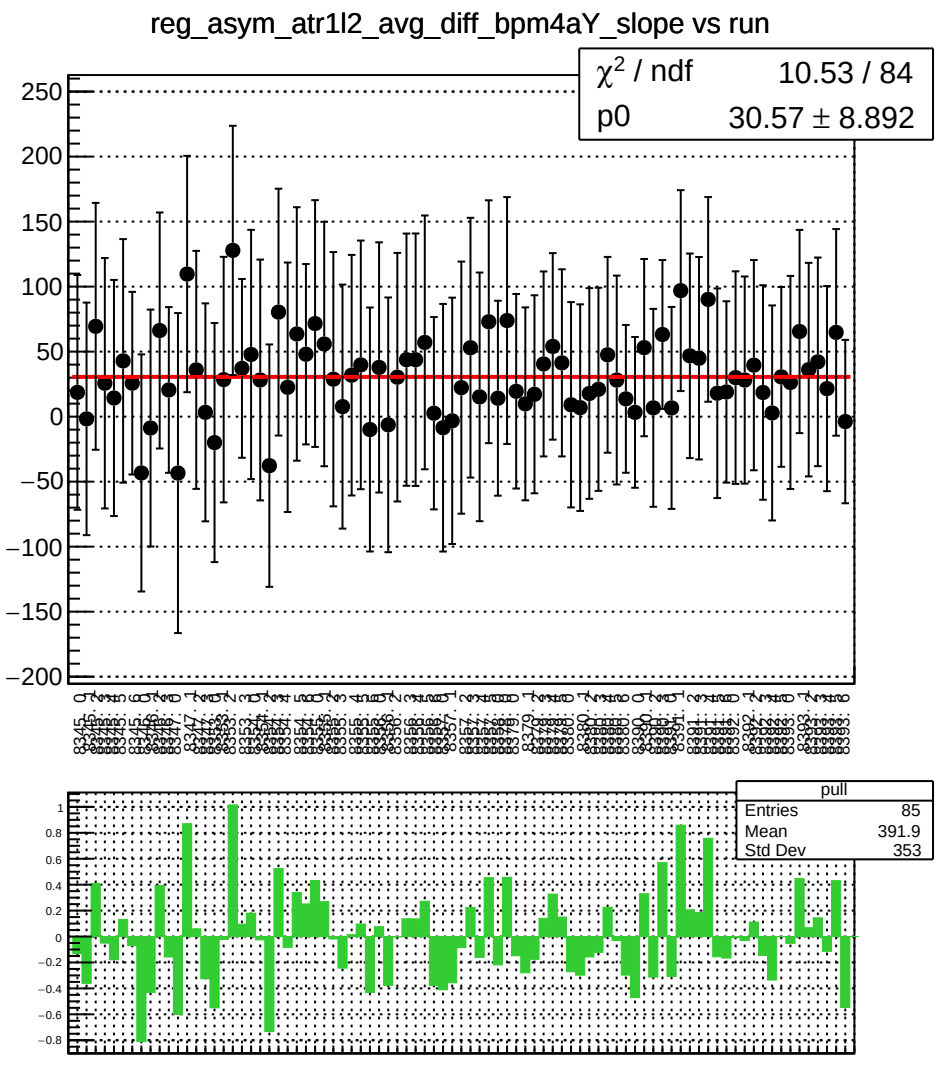

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.964 / 84
p0 −30.16 ± 11.76
pull
Entries 85
Mean −171.2
Std Dev 102

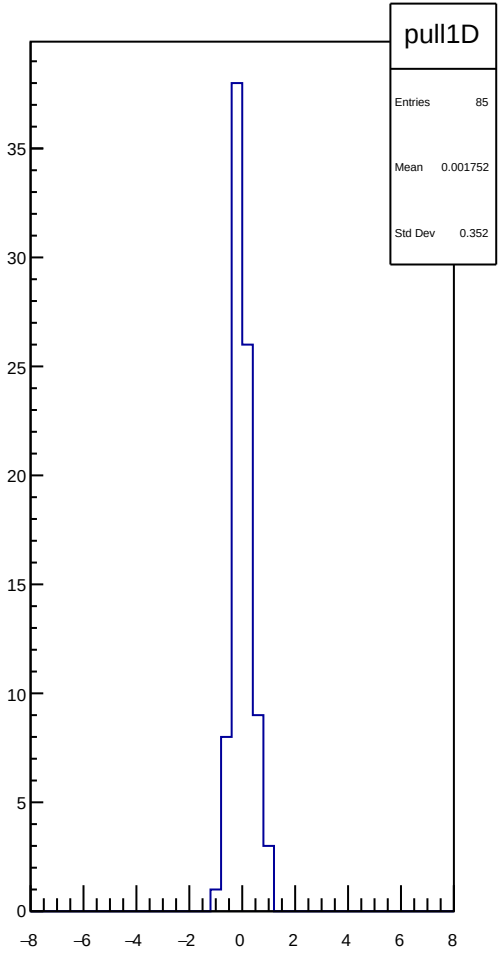

pull1D
Entries 85
Mean 0.001308
Std Dev 0.3061

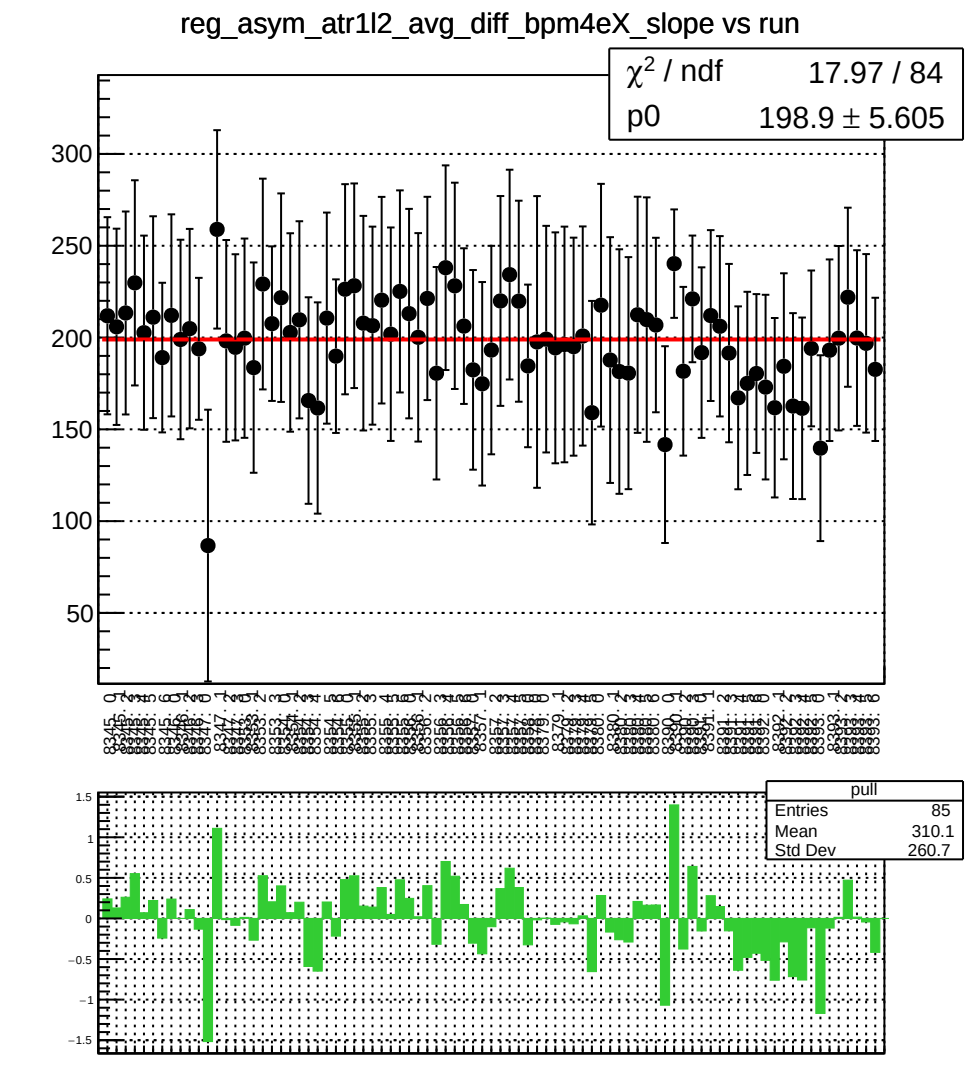

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 26.02 / 84
p0 159.3 ± 0.6627
pull
Entries 85
Mean −223.5
Std Dev 263.8
pull1D
Entries 85
Mean 0.02982
Std Dev 0.5525

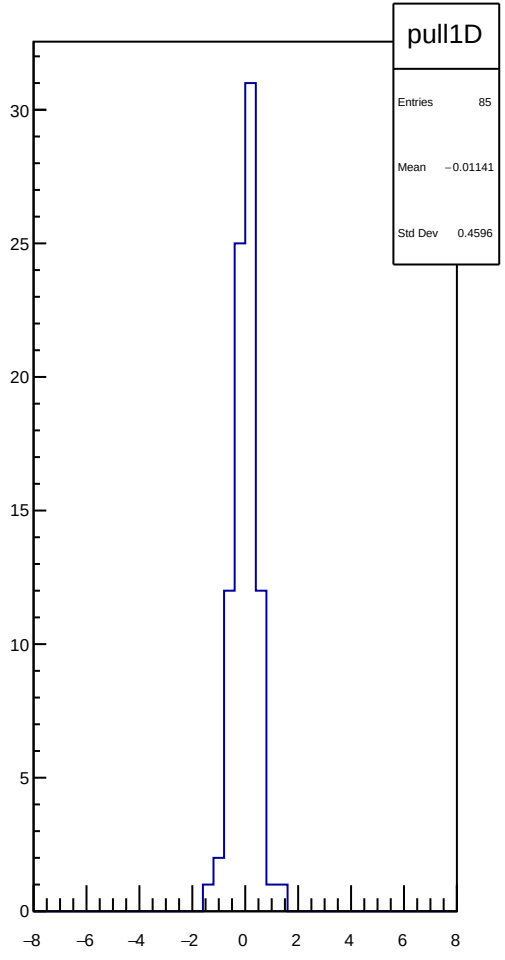

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 19.41 / 84
p0 −293.3 ± 5.139
−150
−200
−250
−300
−350
−400
pull
Entries 85
Mean 162.5
Std Dev 116.6
1.5
1
0.5
0
−0.5
−1

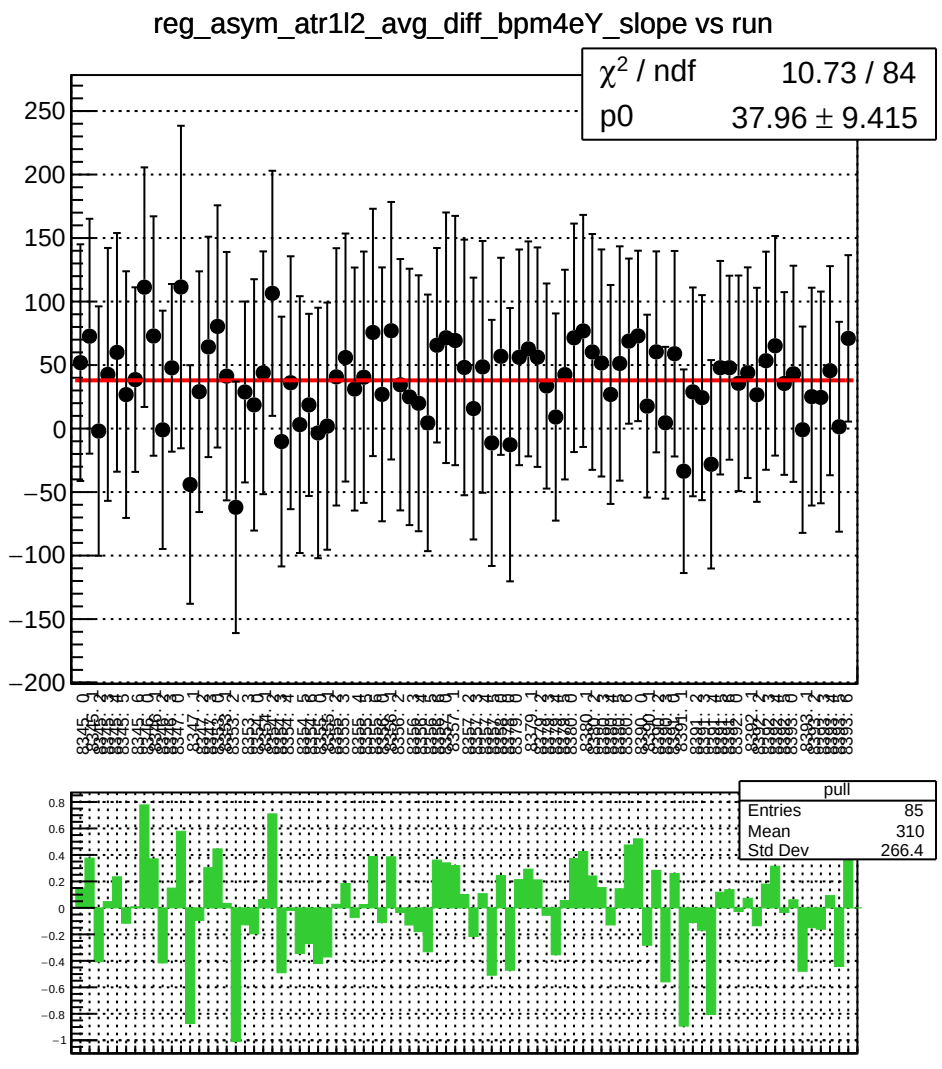

pull1D
Entries 85
Mean 0.03045
Std Dev 0.4768
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

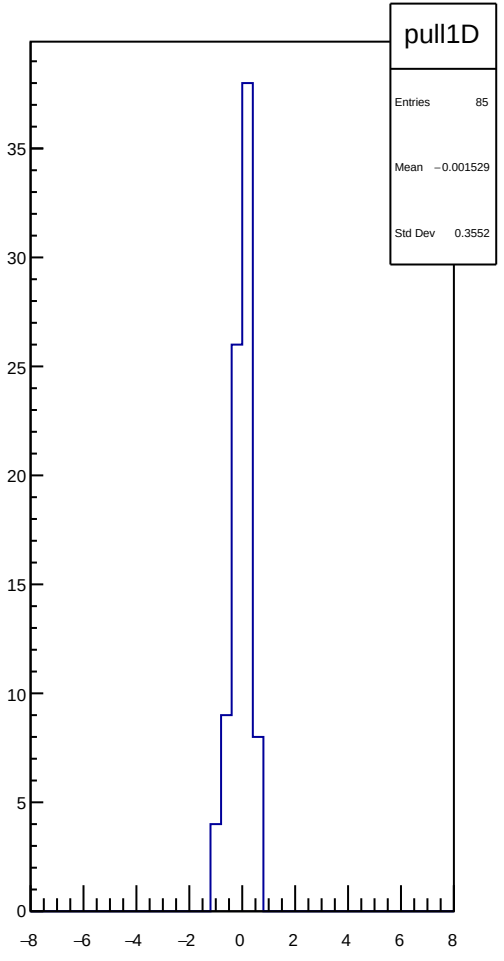

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.53 / 84
p0 30.57 ± 8.892
pull
Entries 85
Mean 391.9
Std Dev 353

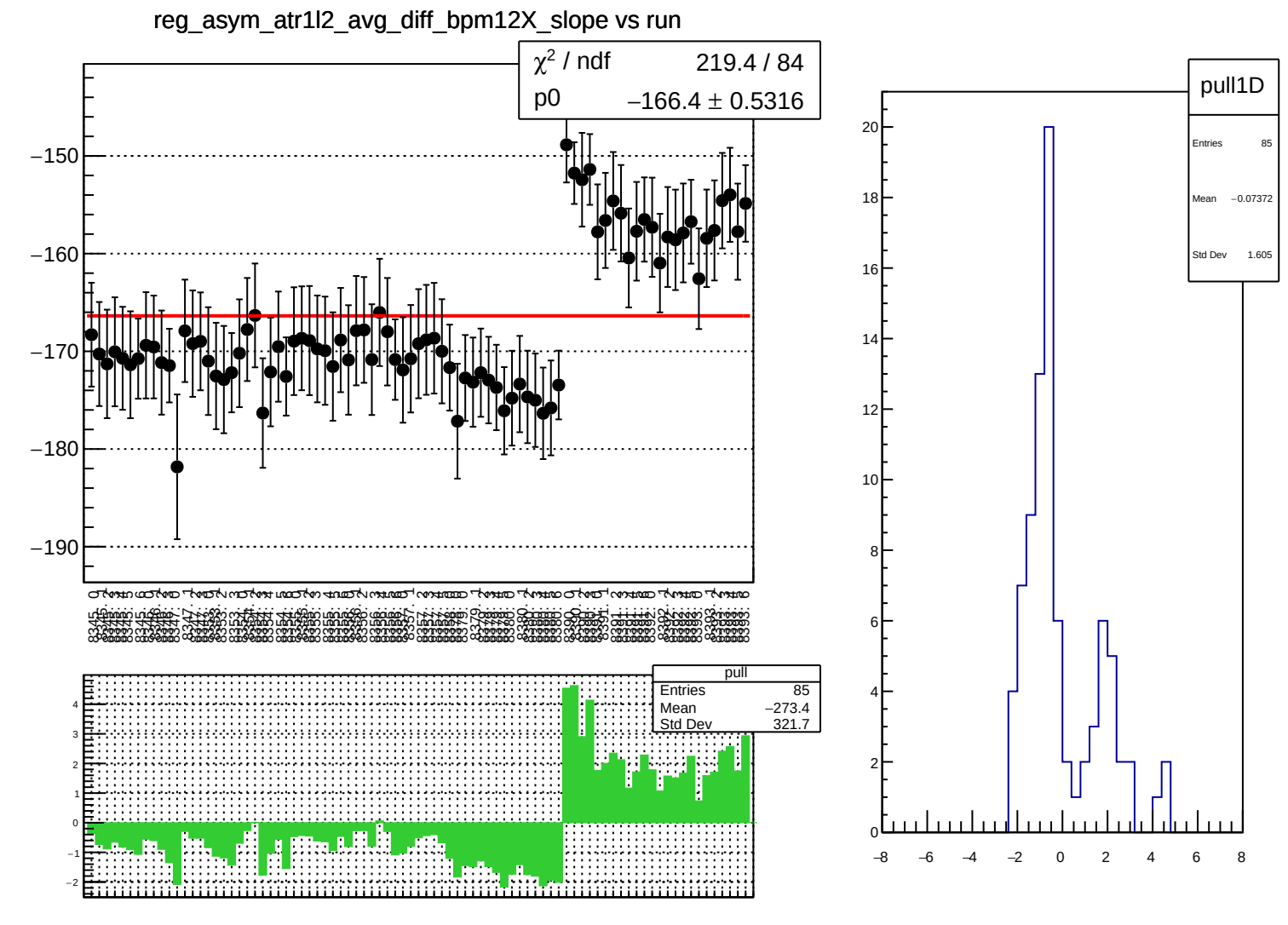

pull1D
Entries 85
Mean 0.001752
Std Dev 0.352

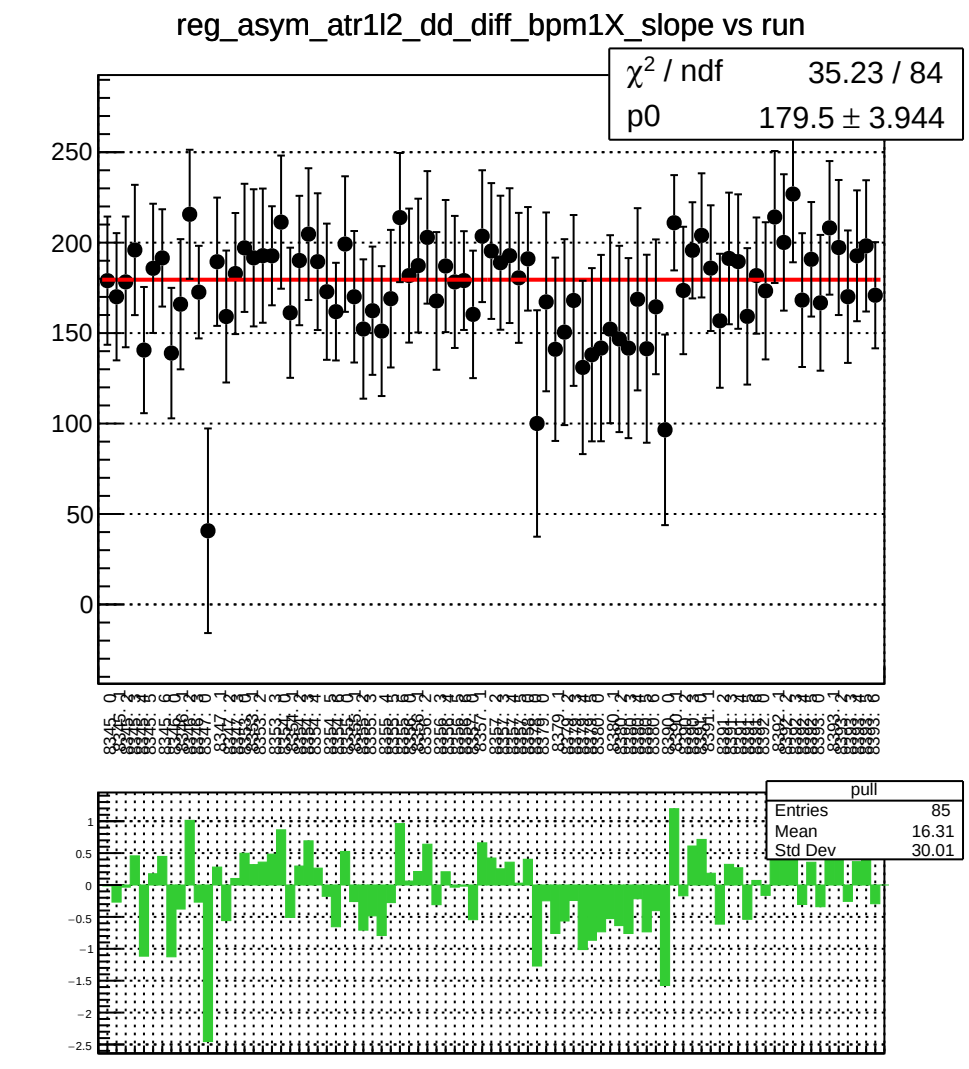

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 17.97 / 84
p0 198.9 ± 5.605
300
250
200
150
100
50
pull
Entries 85
Mean 310.1
Std Dev 260.7
1.5
1
0.5
0
−0.5
−1
−1.5

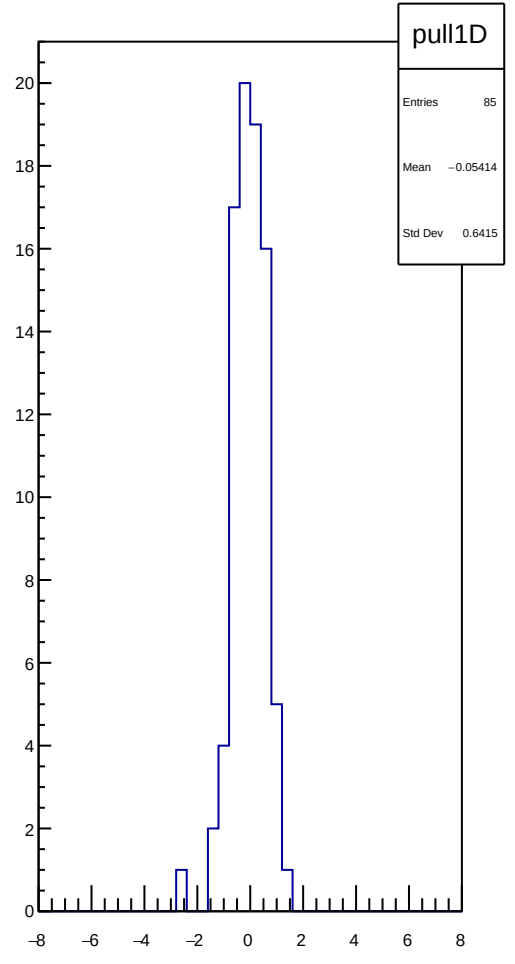

pull1D
Entries 85
Mean −0.01141
Std Dev 0.4596
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

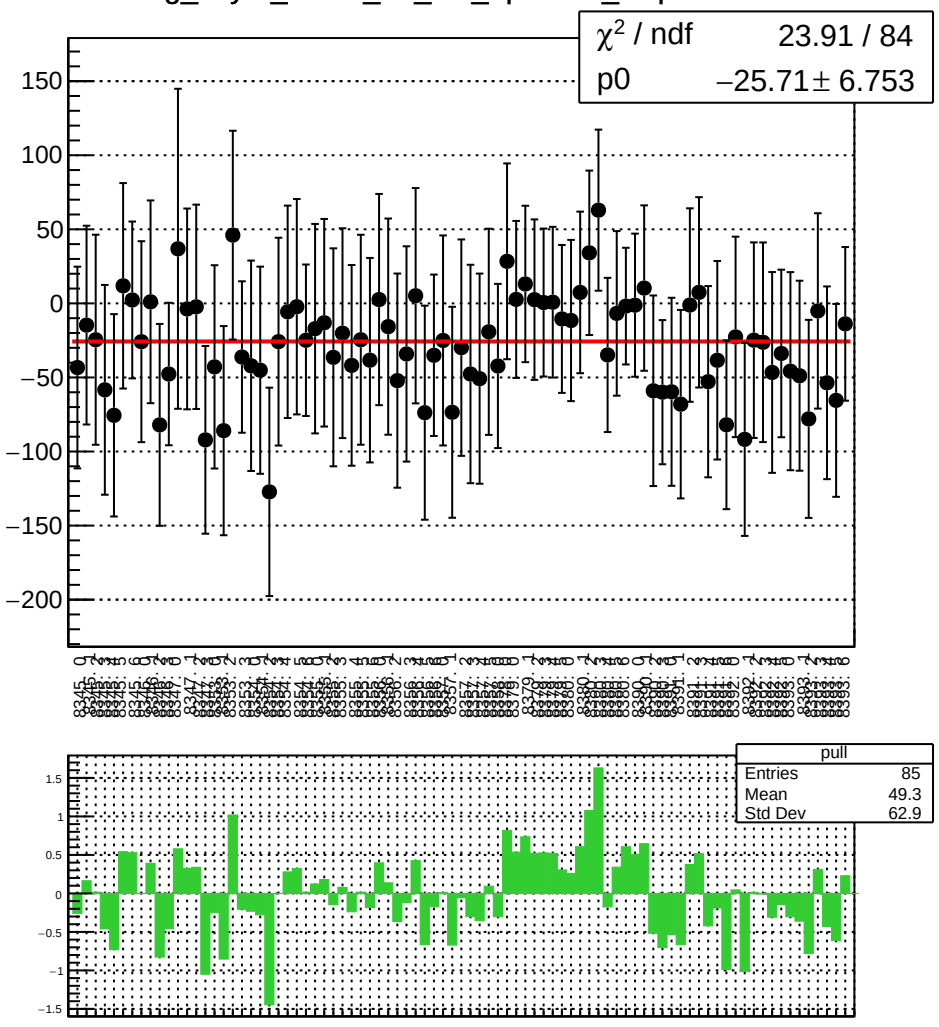

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.73 / 84
p0 37.96 ± 9.415
pull
Entries 85
Mean 310
Std Dev 266.4

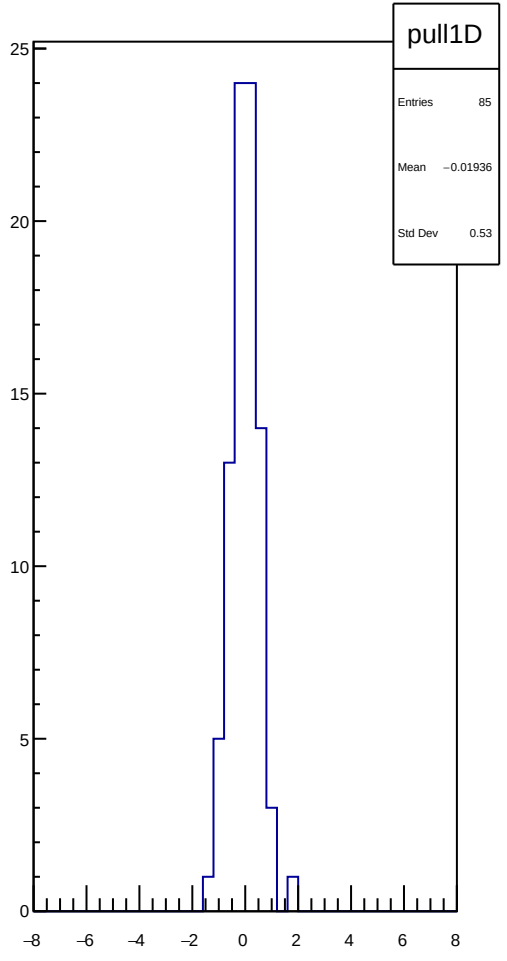

pull1D
Entries 85
Mean −0.001529
Std Dev 0.3552

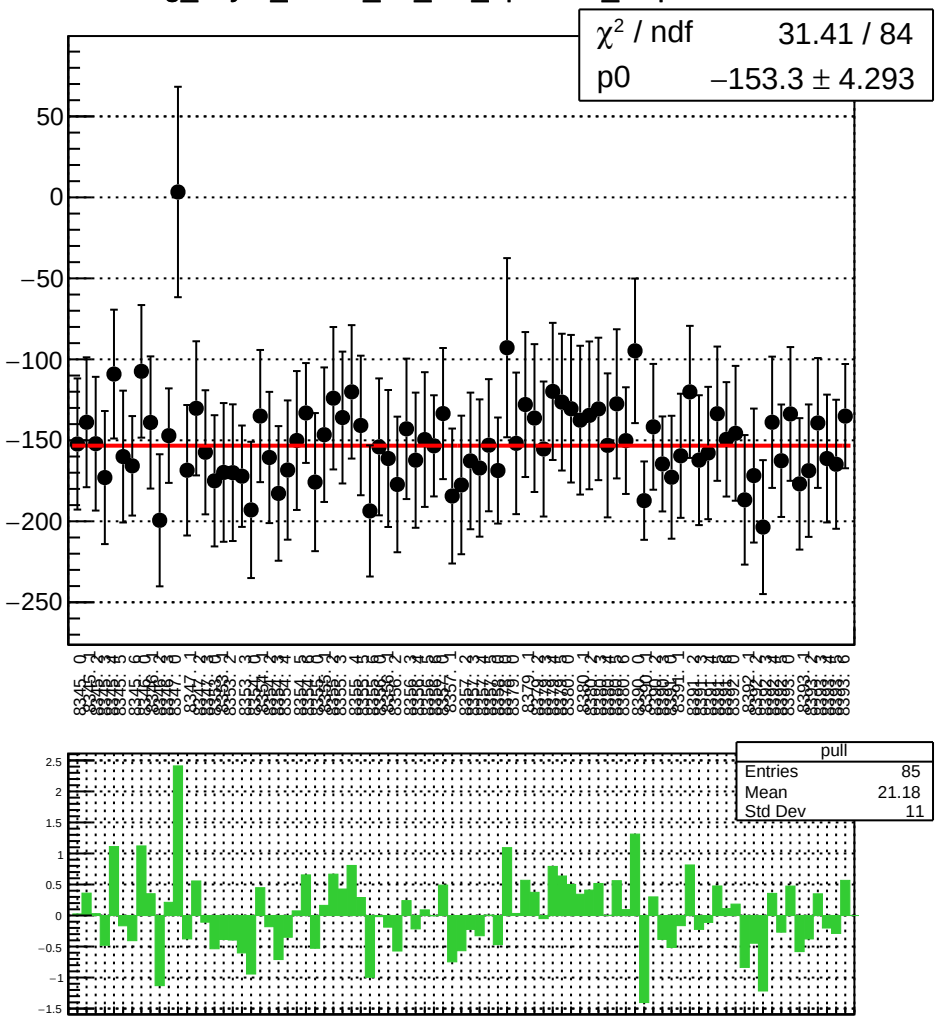

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 219.4 / 84
p0 −166.4 ± 0.5316
−150
−160
−170
−180
−190
pull
Entries 85
Mean −273.4
Std Dev 321.7
pull1D
Entries 85
Mean −0.07372
Std Dev 1.605

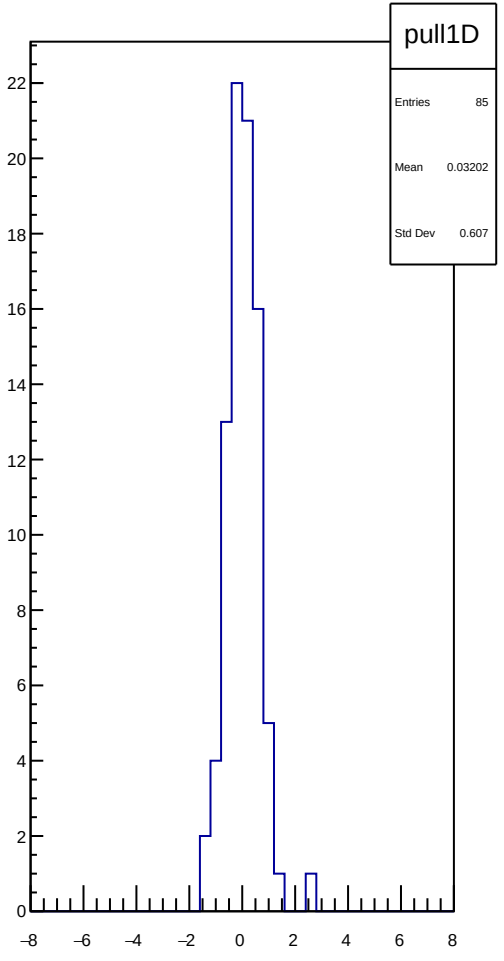

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ^2 / ndf 35.23 / 84
p0 179.5 ± 3.944
250
200
150
100
50
0
pull
Entries 85
Mean 16.31
Std Dev 30.01
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

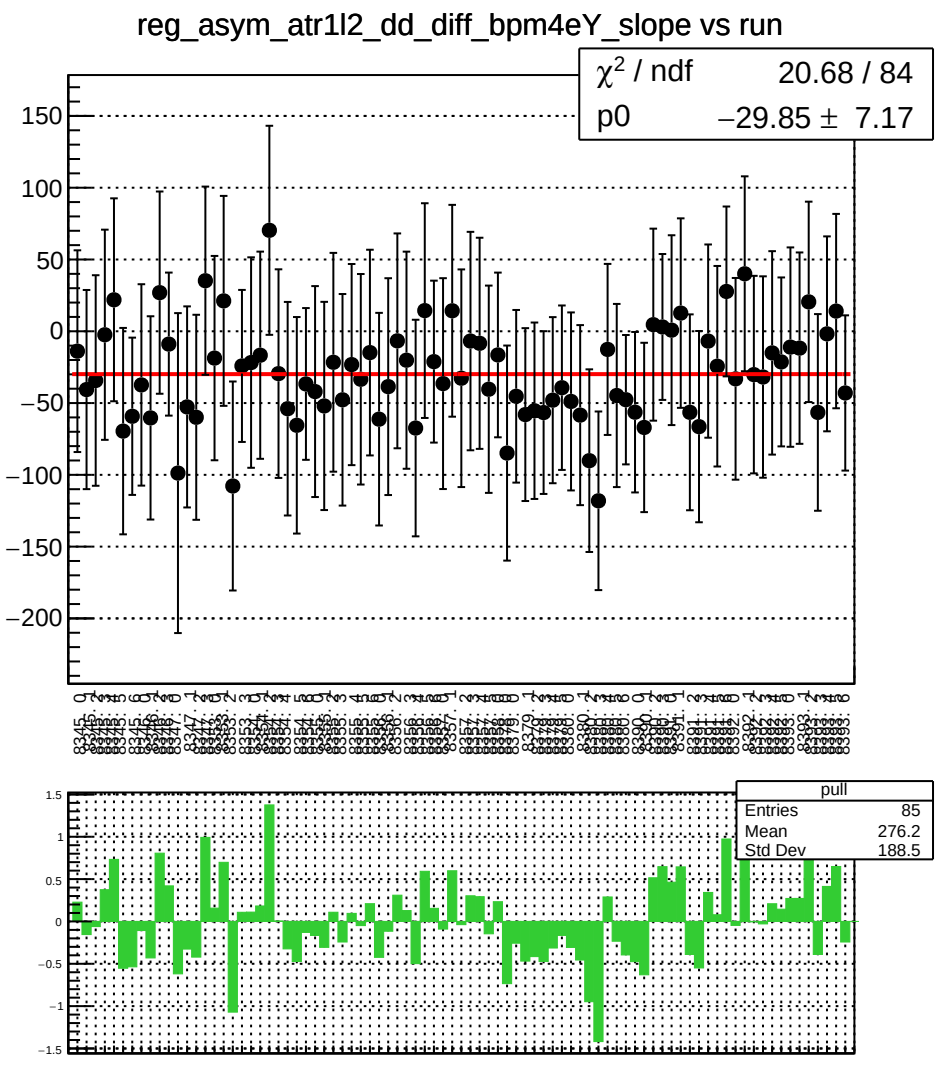

pull1D
Entries 85
Mean −0.05414
Std Dev 0.6415
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

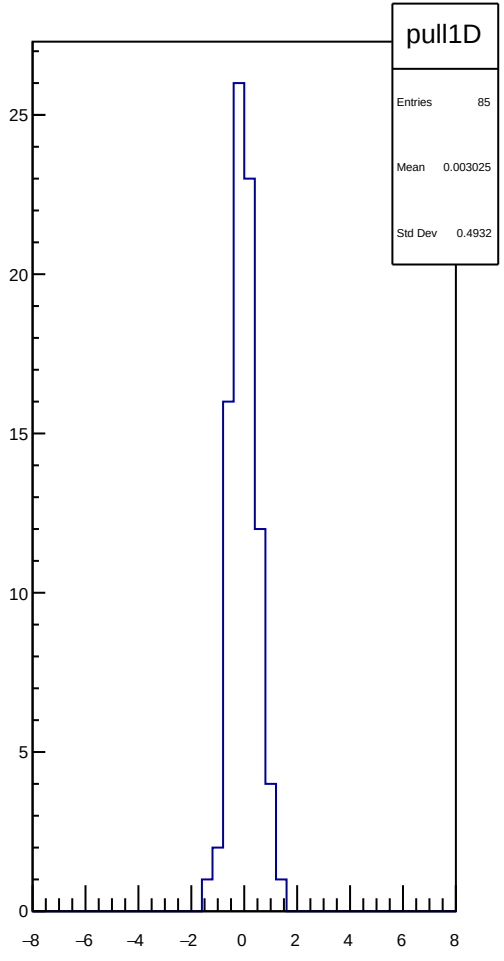

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 23.91 / 84
p0 −25.71± 6.753
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 49.3
Std Dev 62.9
1.5
1
0.5
0
−0.5
−1
−1.5

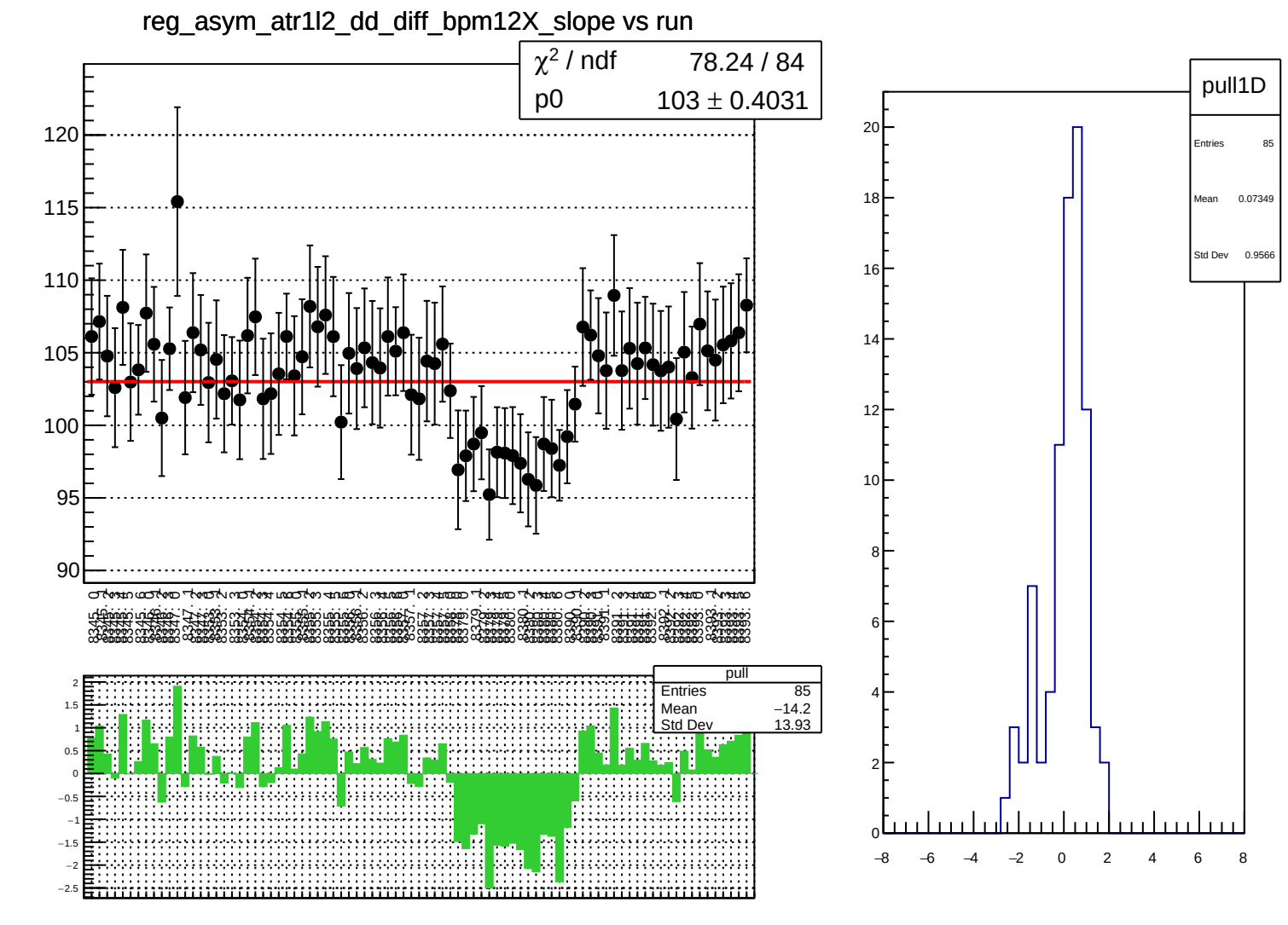

pull1D
Entries 85
Mean −0.01936
Std Dev 0.53
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

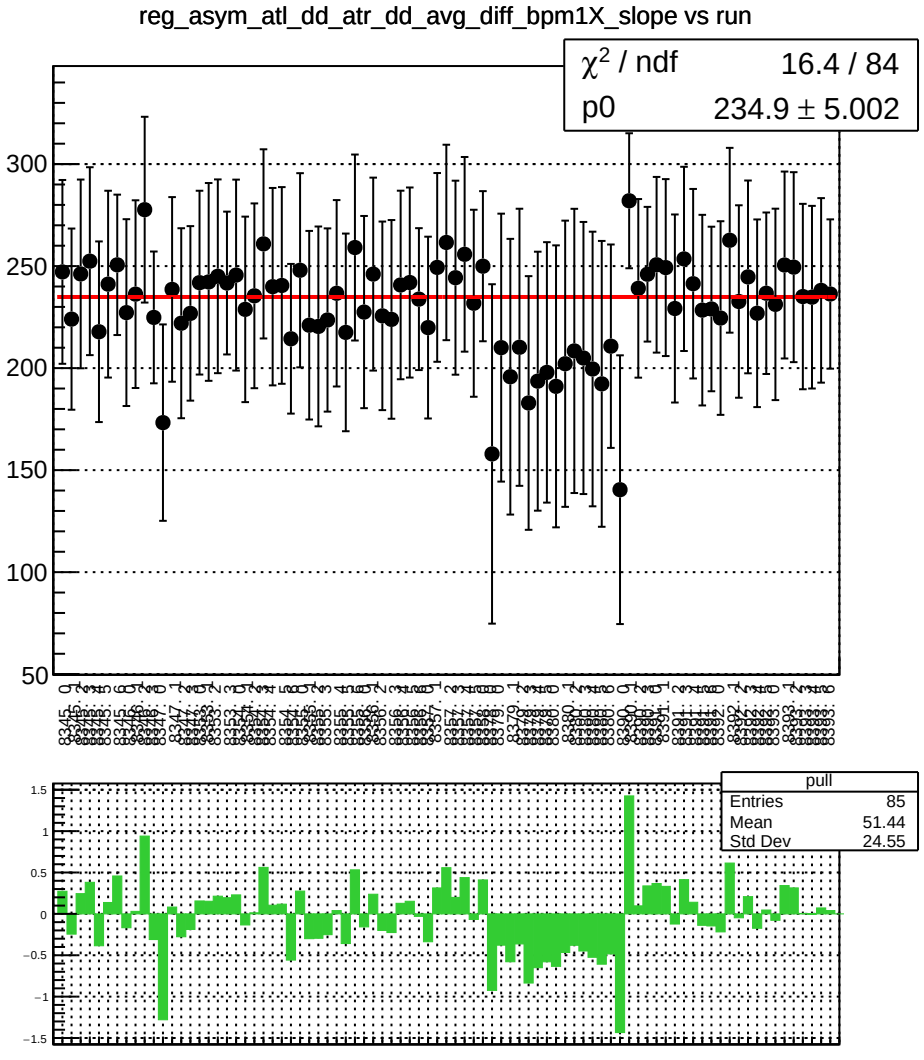

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 31.41 / 84
p0 −153.3 ± 4.293
pull
Entries 85
Mean 21.18
Std Dev 11

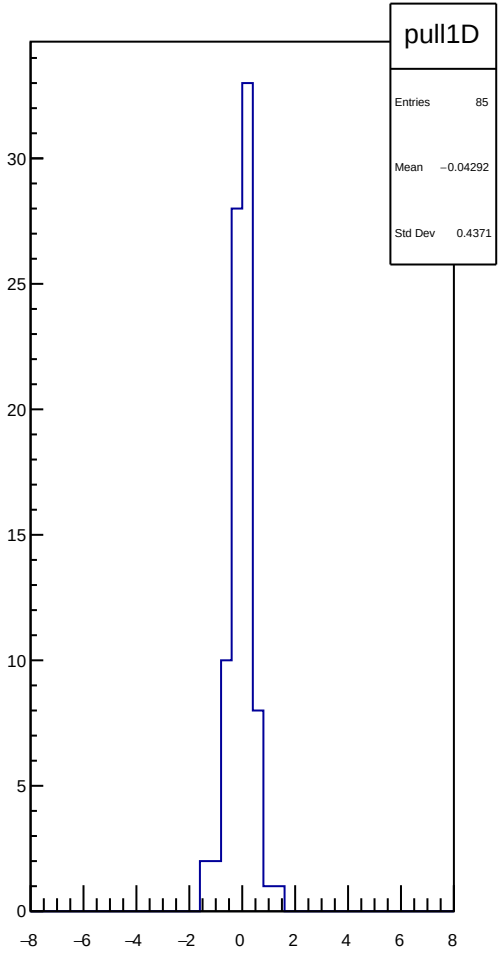

pull1D
Entries 85
Mean 0.03202
Std Dev 0.607

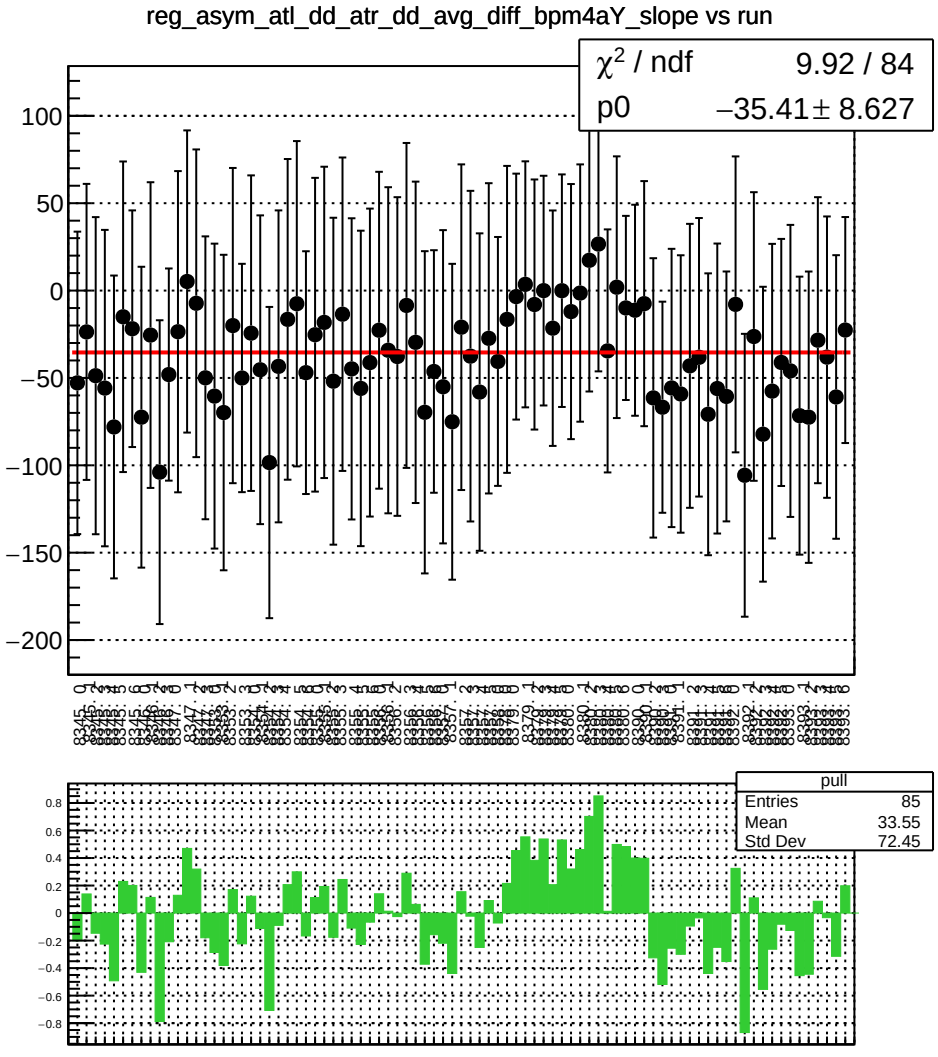

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 20.68 / 84
p0 −29.85 ± 7.17
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 276.2
Std Dev 188.5
1.5
1
0.5
0
−0.5
−1
−1.5

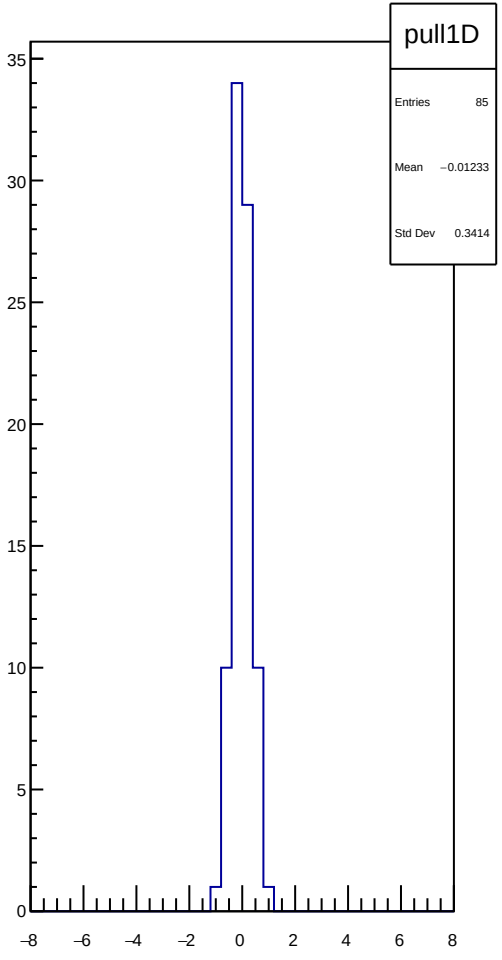

pull1D
Entries 85
Mean 0.003025
Std Dev 0.4932
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

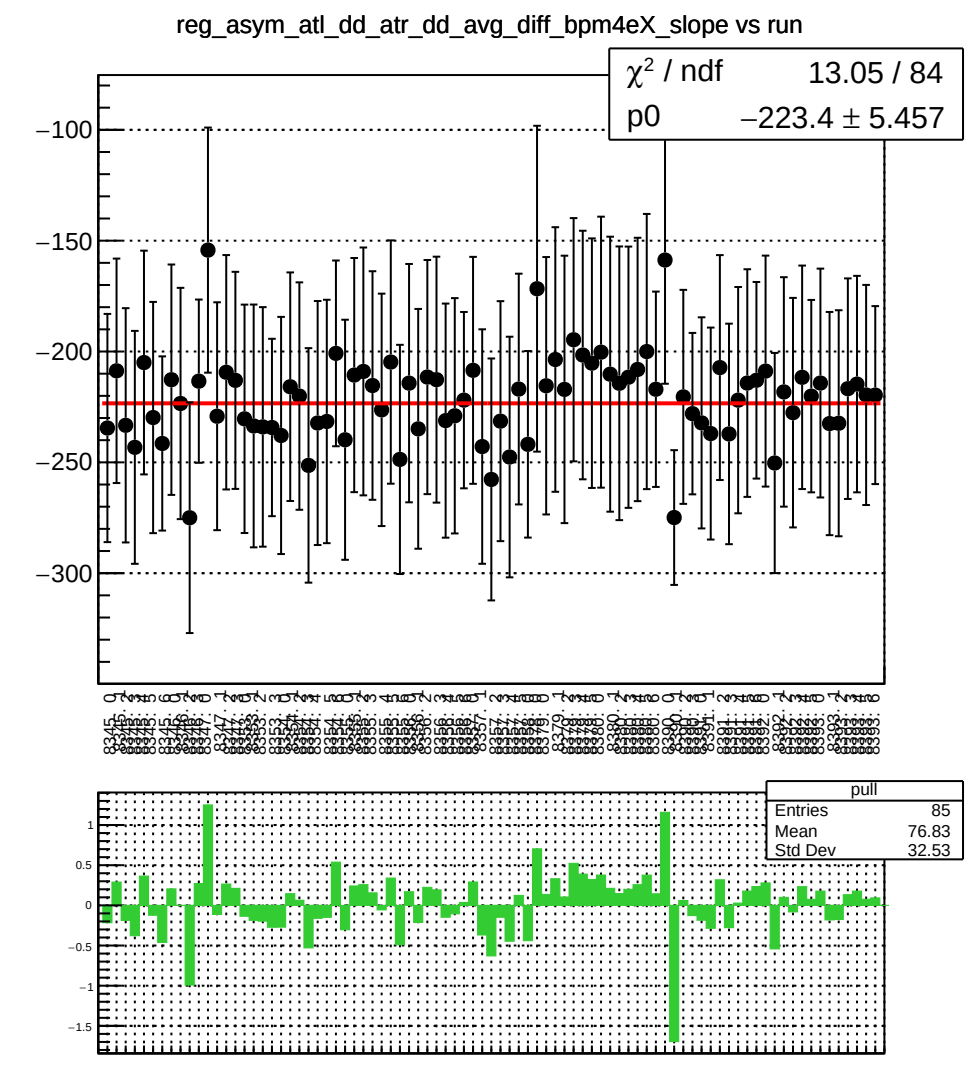

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 78.24 / 84
p0 103 ± 0.4031
pull
Entries 85
Mean −14.2
Std Dev 13.93
pull1D
Entries 85
Mean 0.07349
Std Dev 0.9566

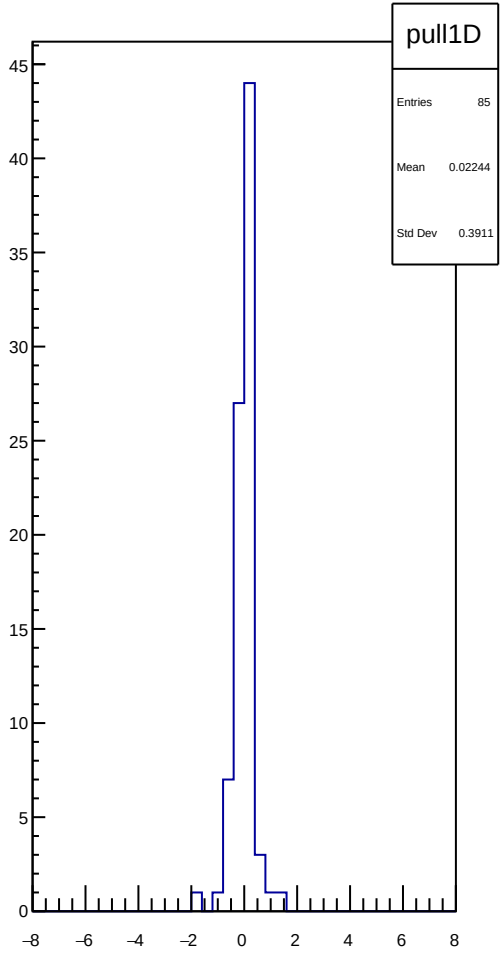

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 16.4 / 84
p0 234.9 ± 5.002
pull
Entries 85
Mean 51.44
Std Dev 24.55

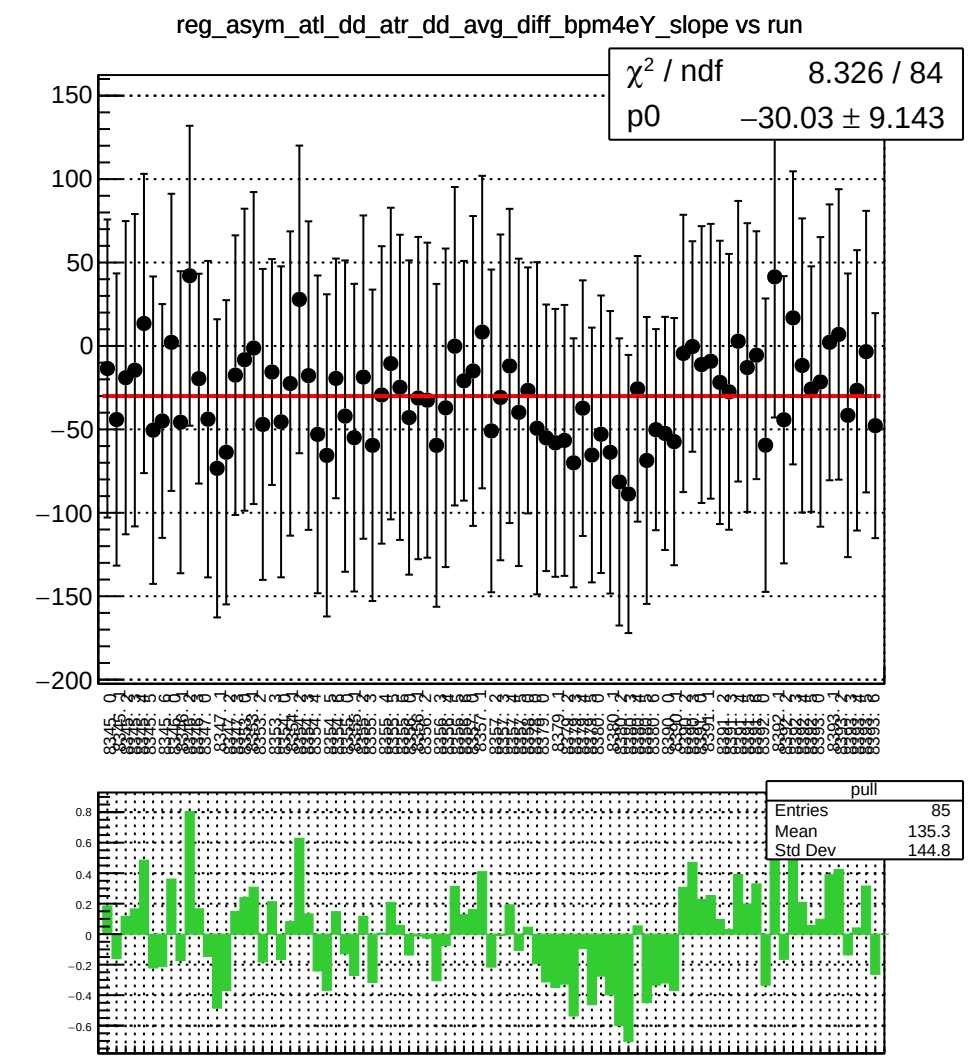

pull1D
Entries 85
Mean −0.04292
Std Dev 0.4371

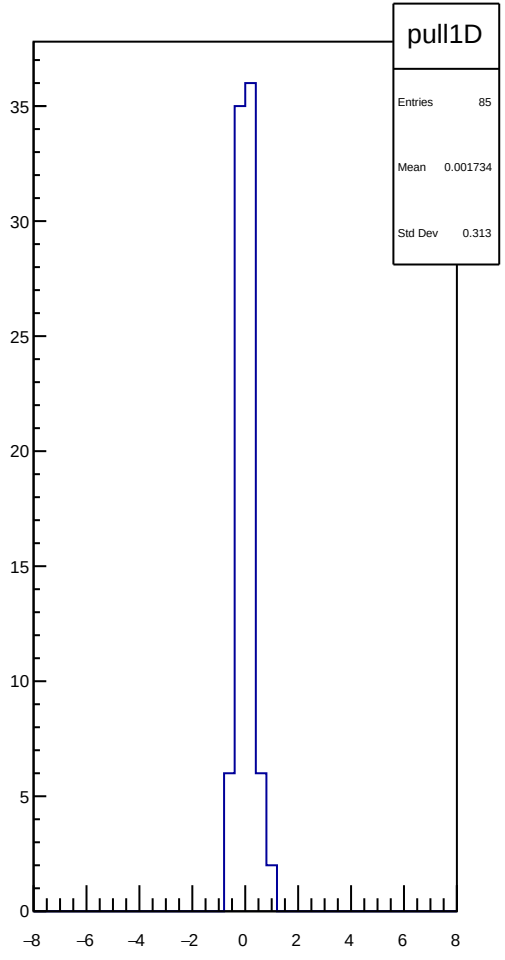

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.92 / 84
p0 −35.41 ± 8.627
pull
Entries 85
Mean 33.55
Std Dev 72.45

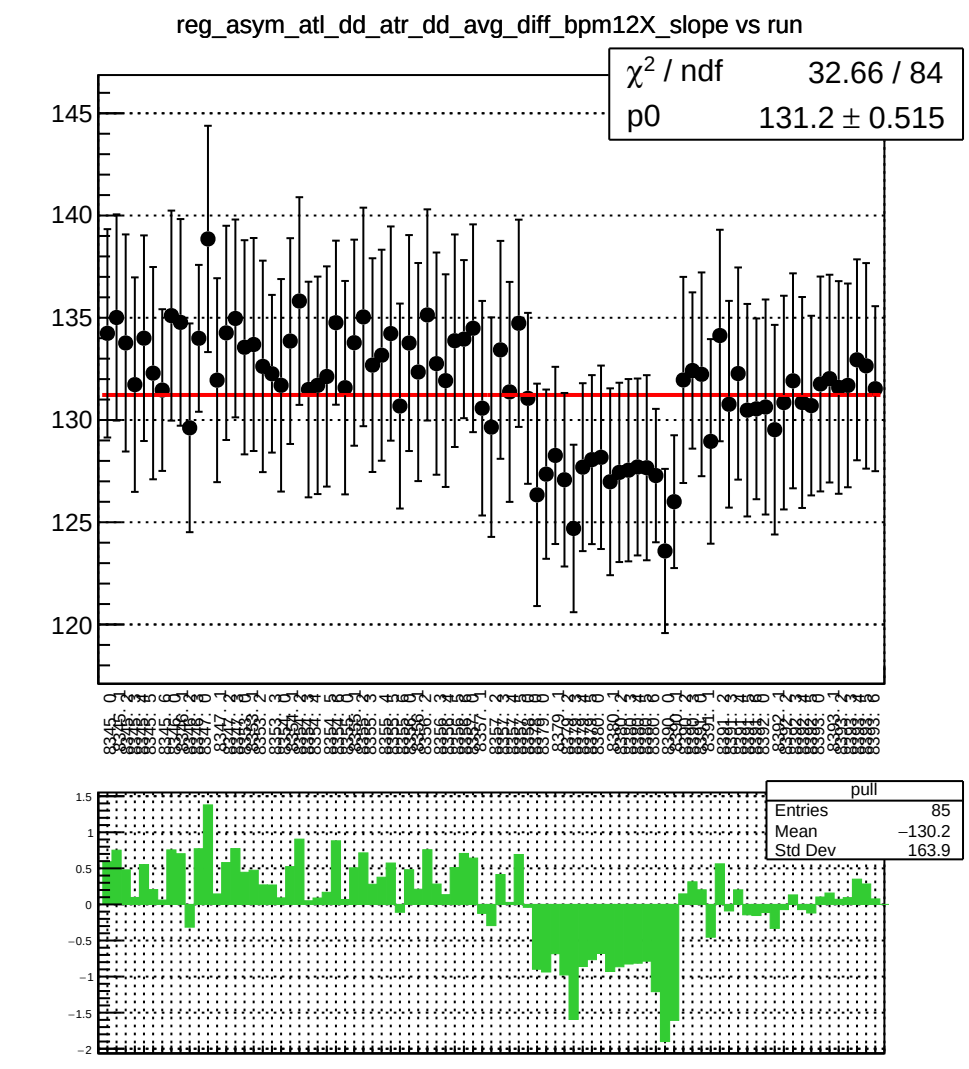

pull1D
Entries 85
Mean −0.01233
Std Dev 0.3414

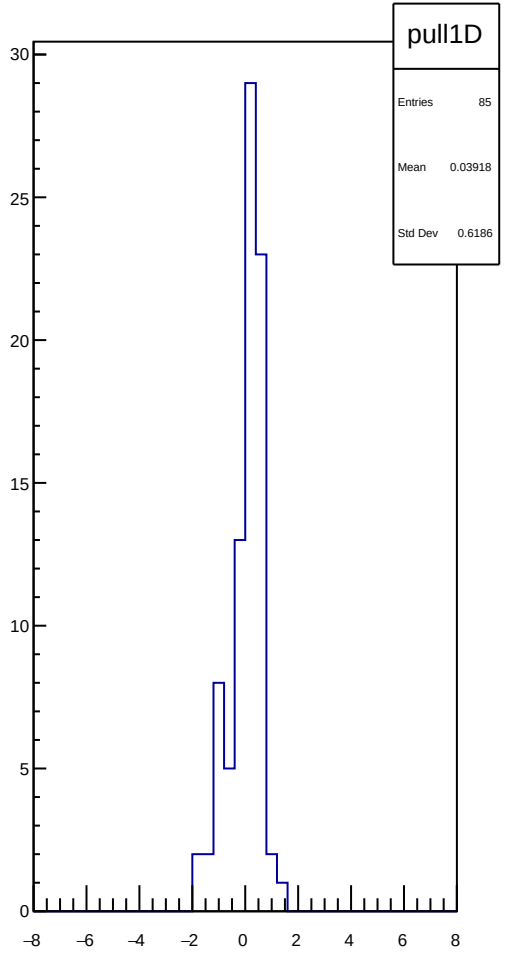

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 13.05 / 84
p0 −223.4 ± 5.457
−100
−150
−200
−250
−300
pull
Entries 85
Mean 76.83
Std Dev 32.53
1
0.5
0
−0.5
−1
−1.5

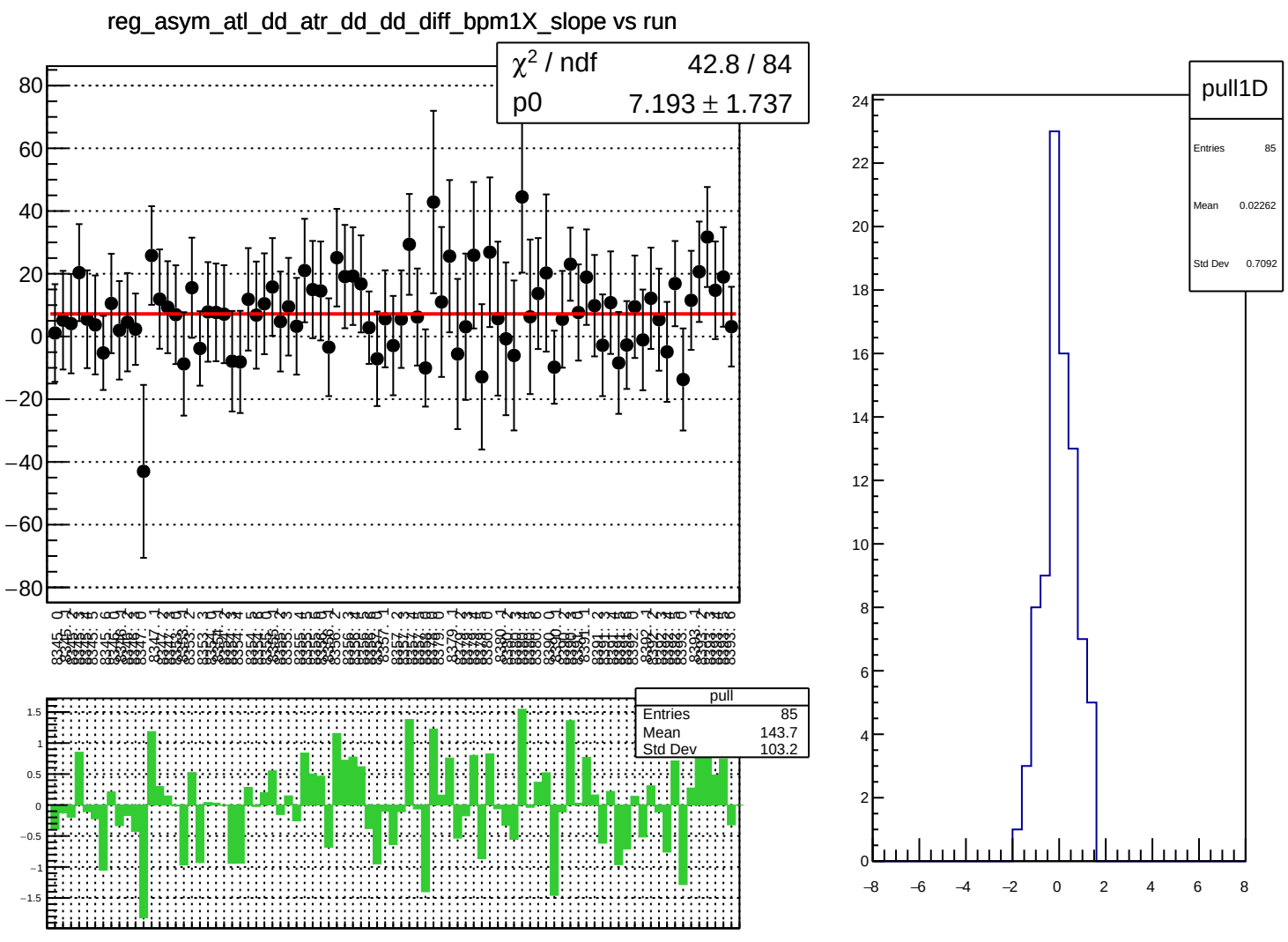

pull1D
Entries 85
Mean 0.02244
Std Dev 0.3911
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

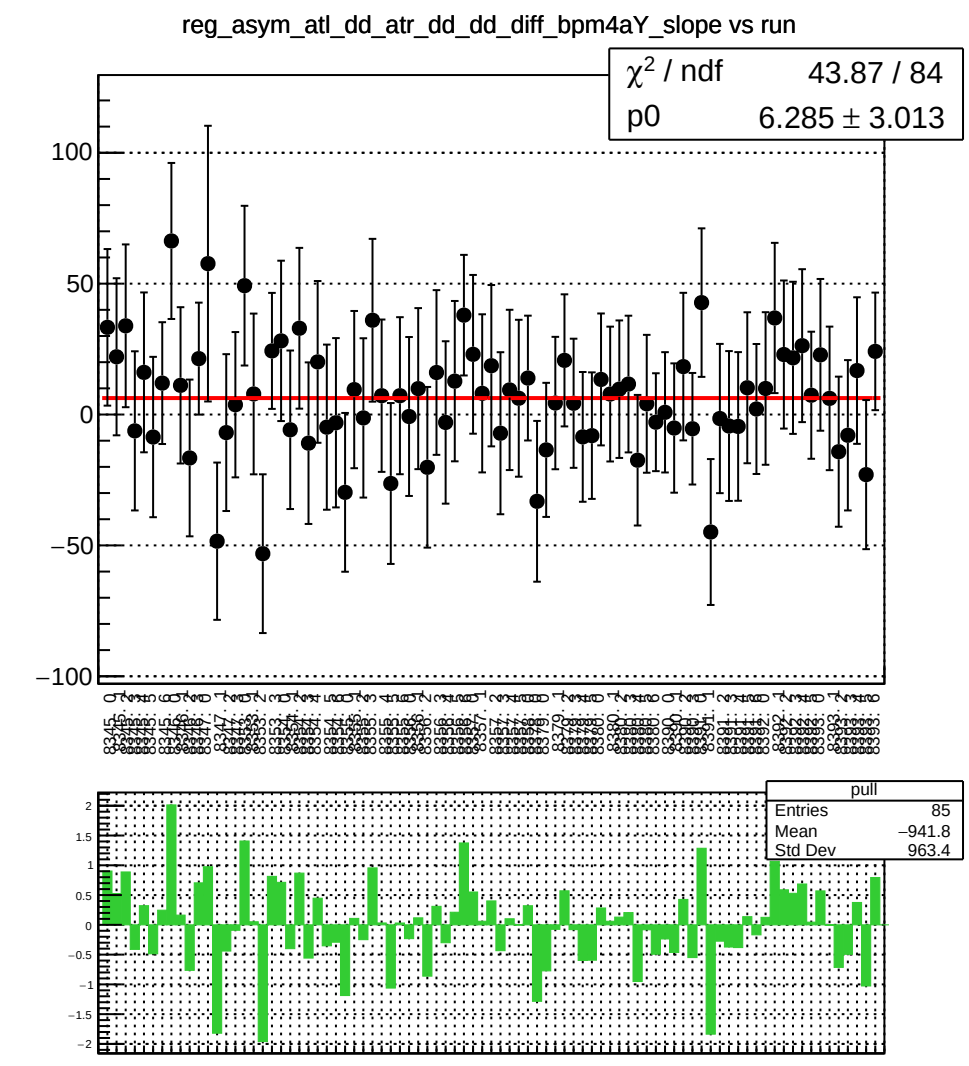

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.326 / 84
p0 −30.03 ± 9.143
pull
Entries 85
Mean 135.3
Std Dev 144.8

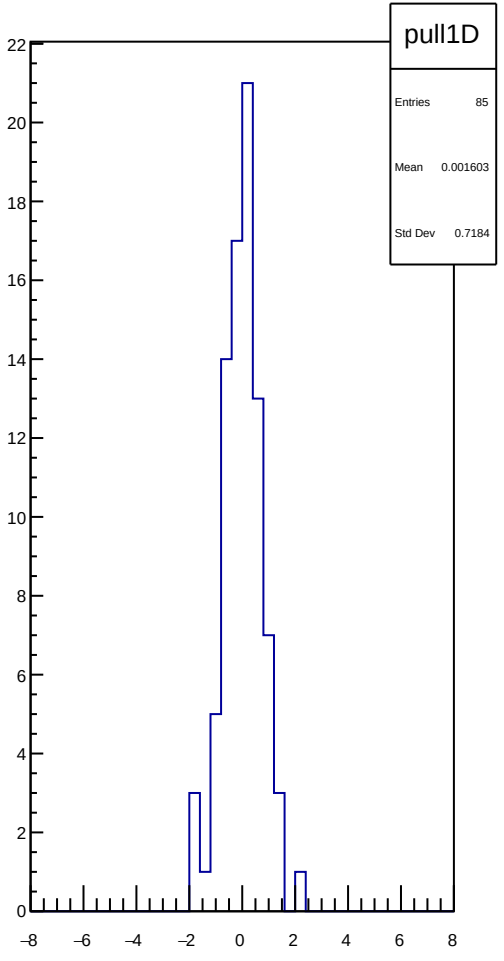

pull1D
Entries 85
Mean 0.001734
Std Dev 0.313

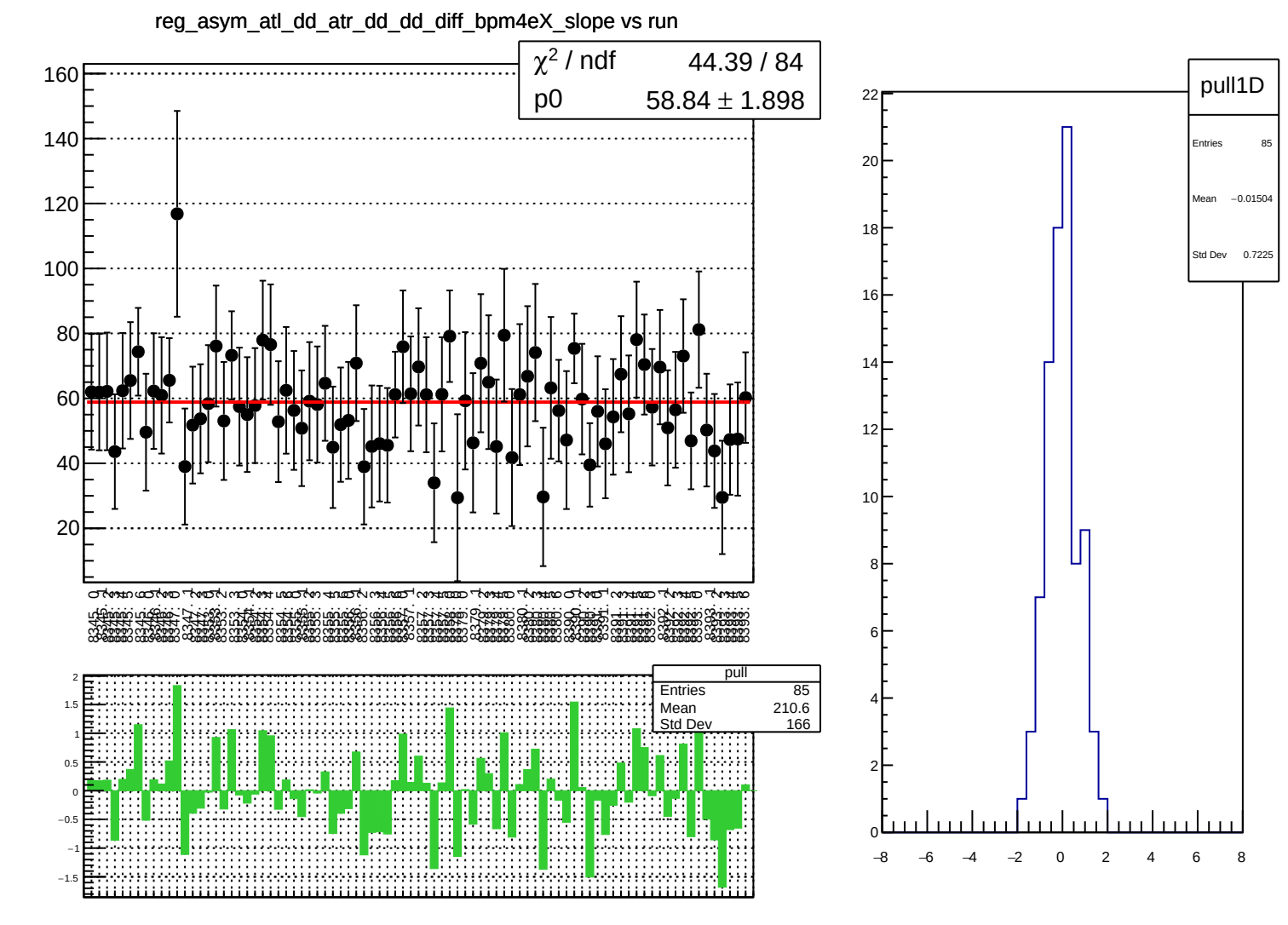

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 32.66 / 84
p0 131.2 ± 0.515
145
140
135
130
125
120
pull
Entries 85
Mean −130.2
Std Dev 163.9
1.5
1
0.5
0
−0.5
−1
−1.5
−2

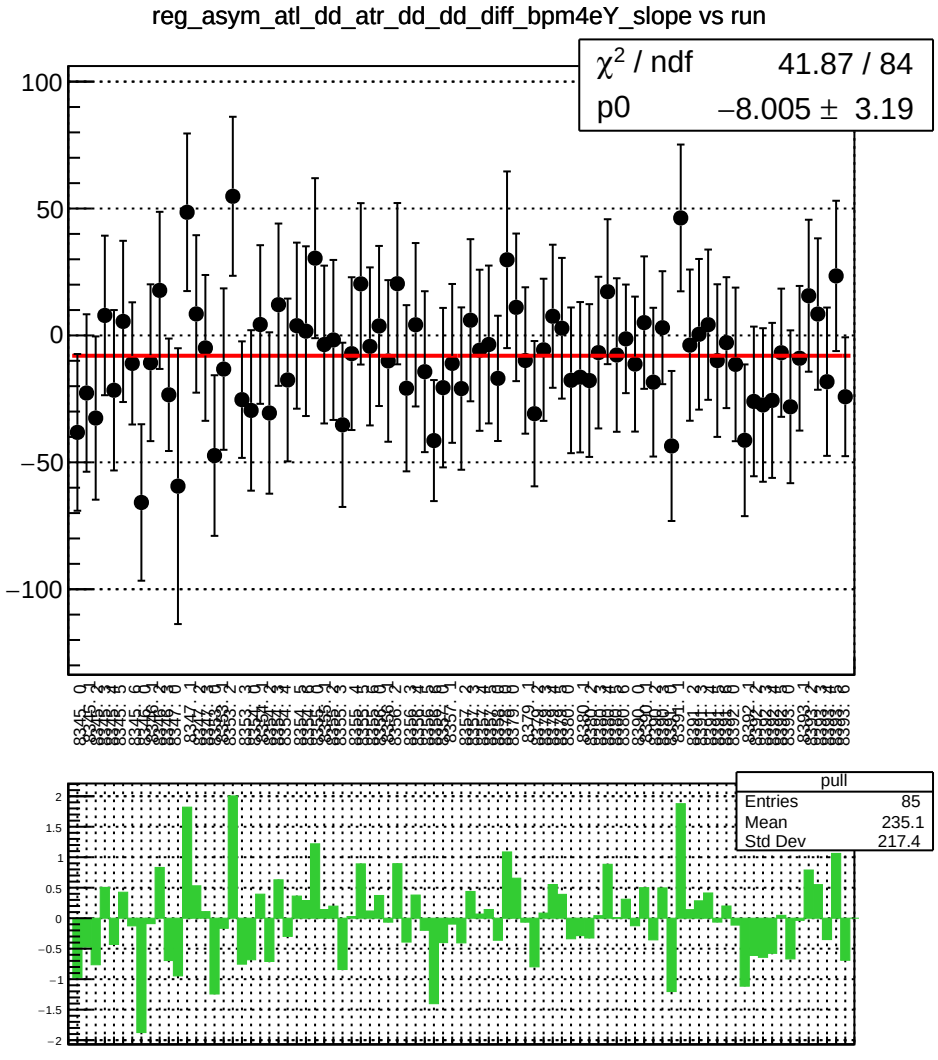

pull1D
Entries 85
Mean 0.03918
Std Dev 0.6186
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

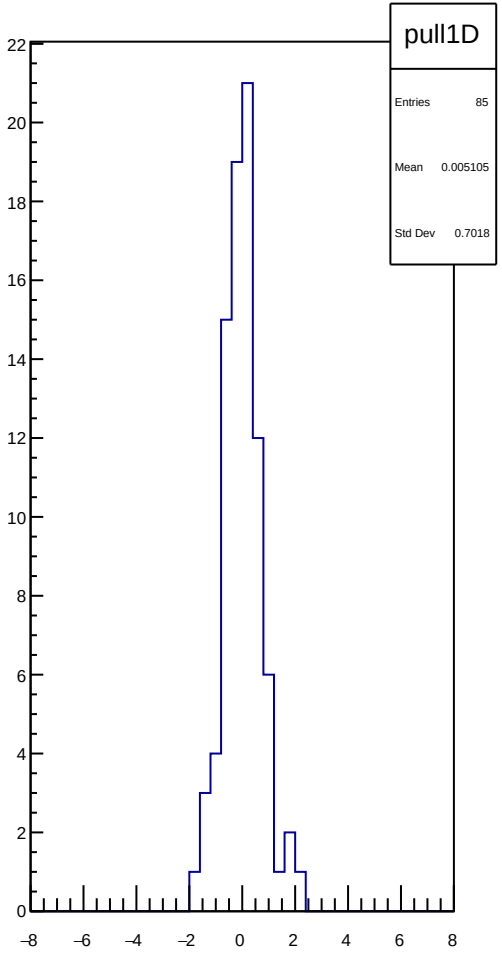

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 42.8 / 84
p0 7.193 ± 1.737
pull
Entries 85
Mean 143.7
Std Dev 103.2
pull1D
Entries 85
Mean 0.02262
Std Dev 0.7092

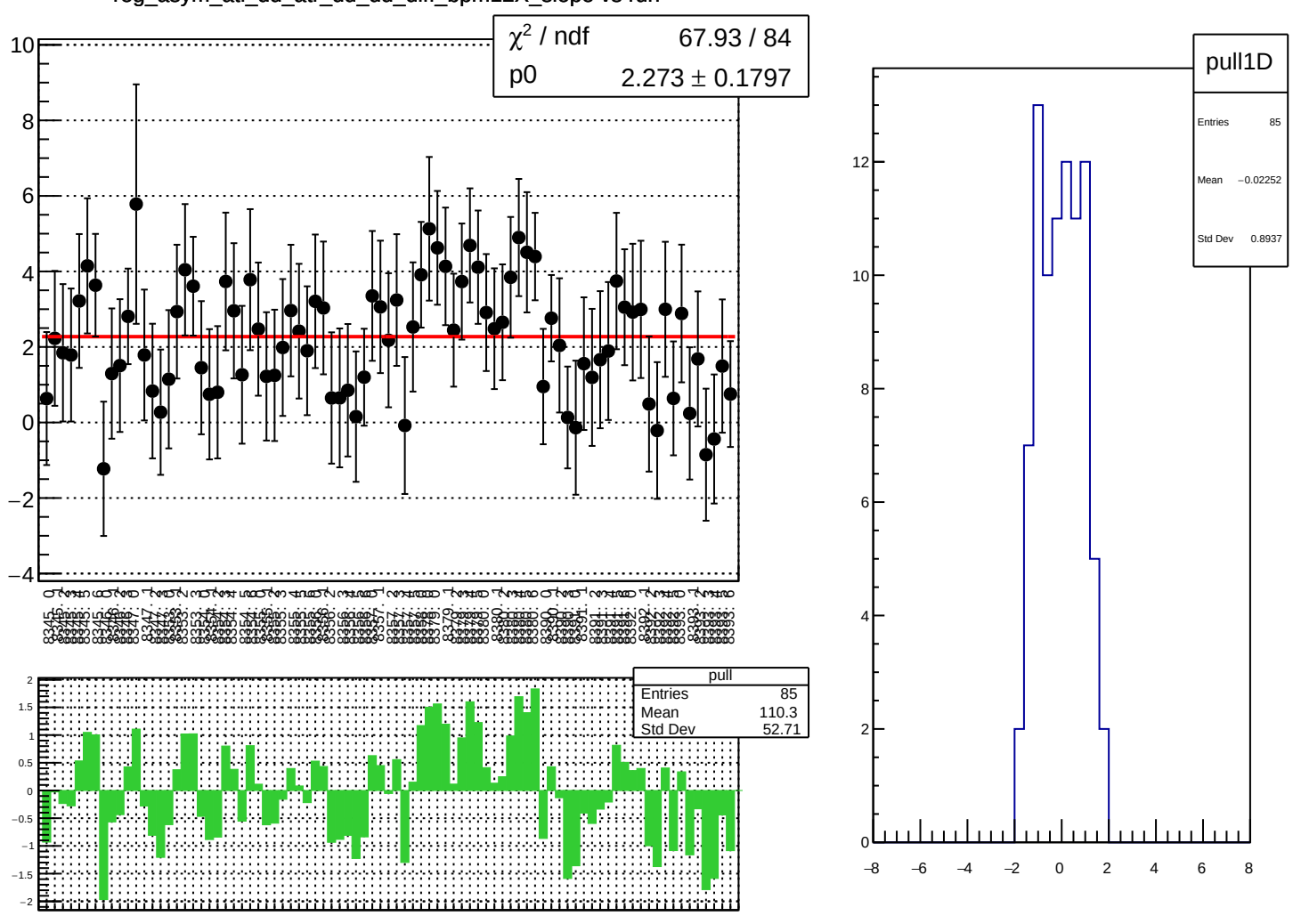

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 43.87 / 84
p0 6.285 ± 3.013
pull
Entries 85
Mean −941.8
Std Dev 963.4

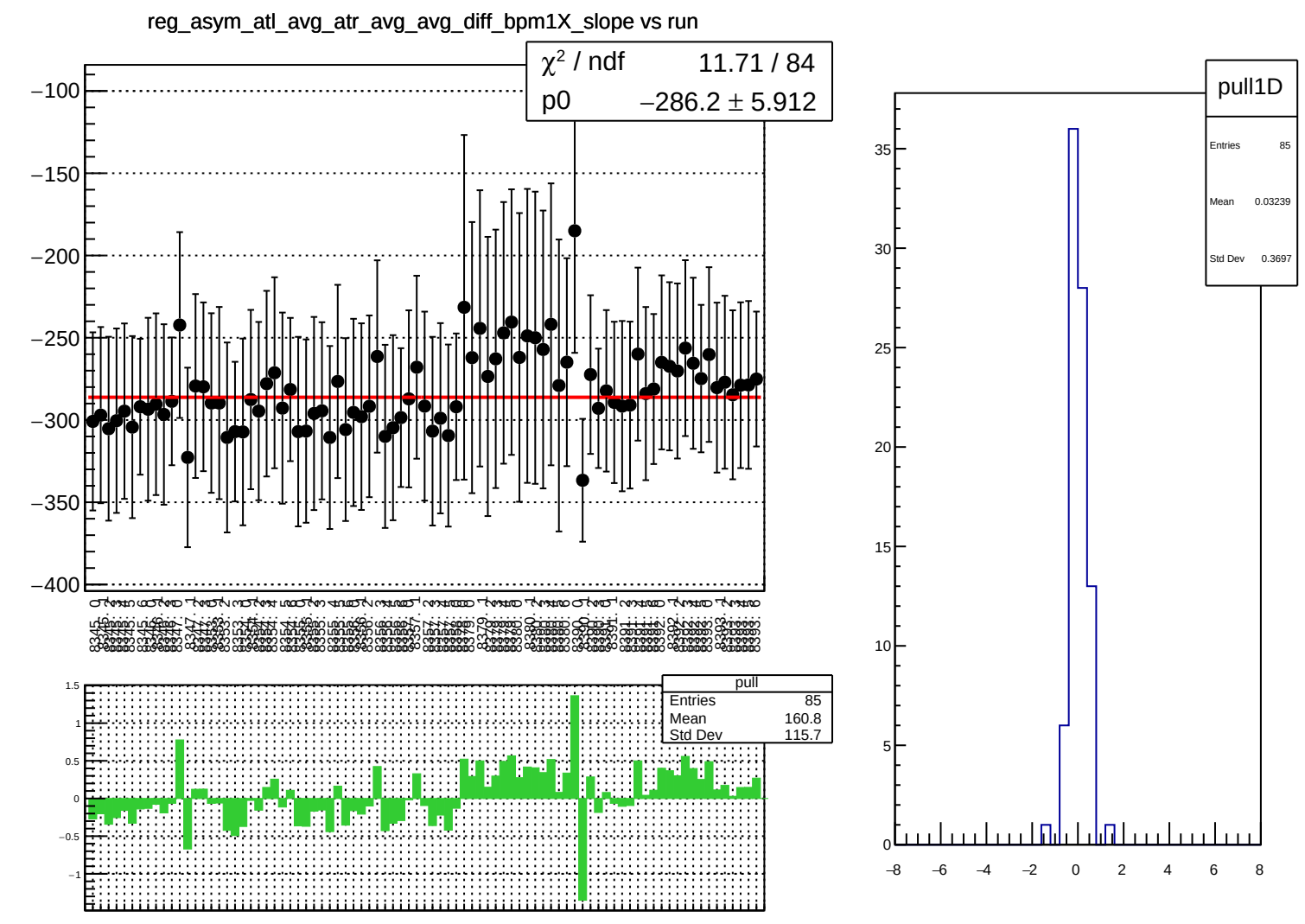

pull1D
Entries 85
Mean 0.001603
Std Dev 0.7184

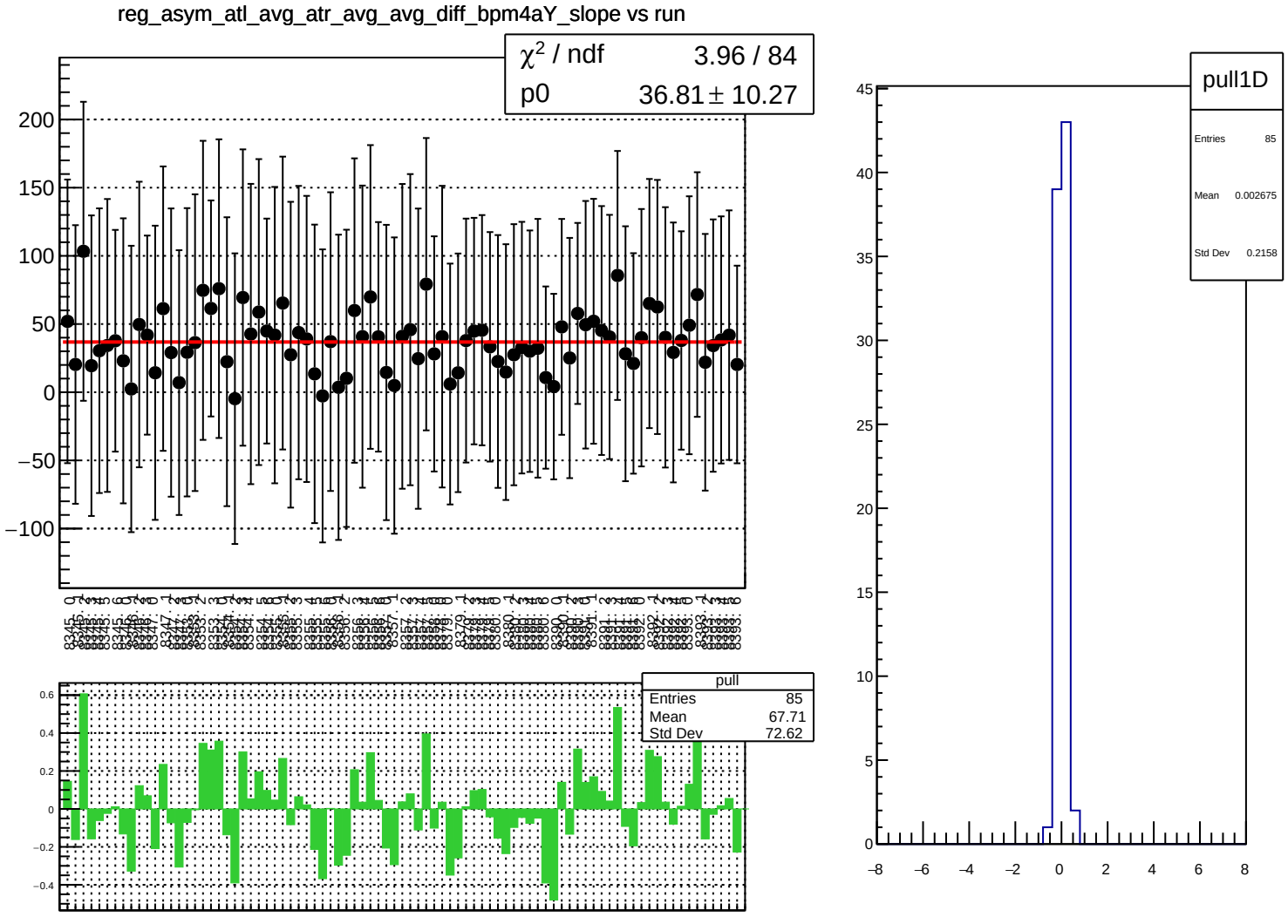

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 44.39 / 84
p0 58.84 ± 1.898
pull
Entries 85
Mean 210.6
Std Dev 166
pull1D
Entries 85
Mean −0.01504
Std Dev 0.7225

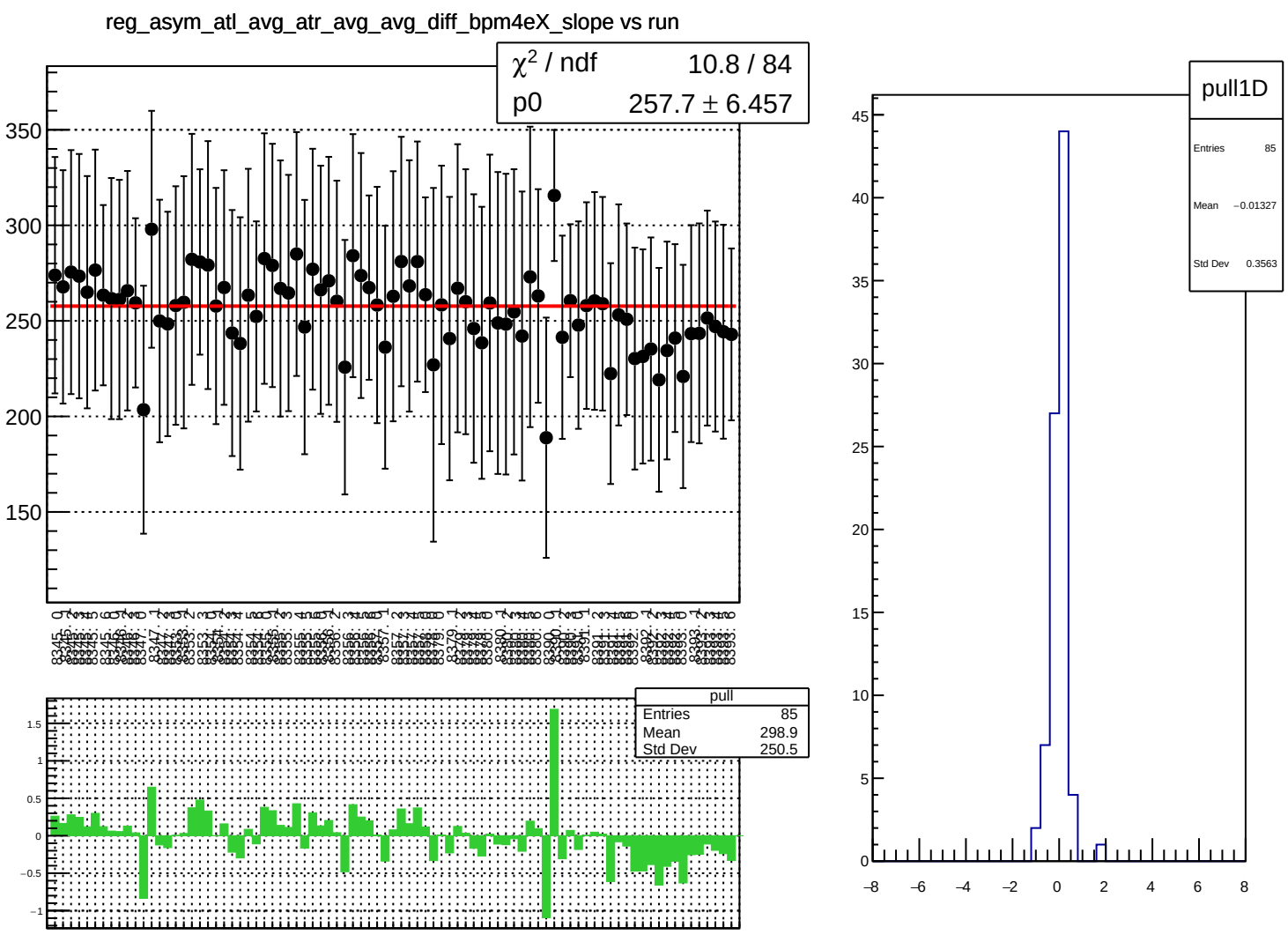

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 41.87 / 84
p0 −8.005 ± 3.19
pull
Entries 85
Mean 235.1
Std Dev 217.4

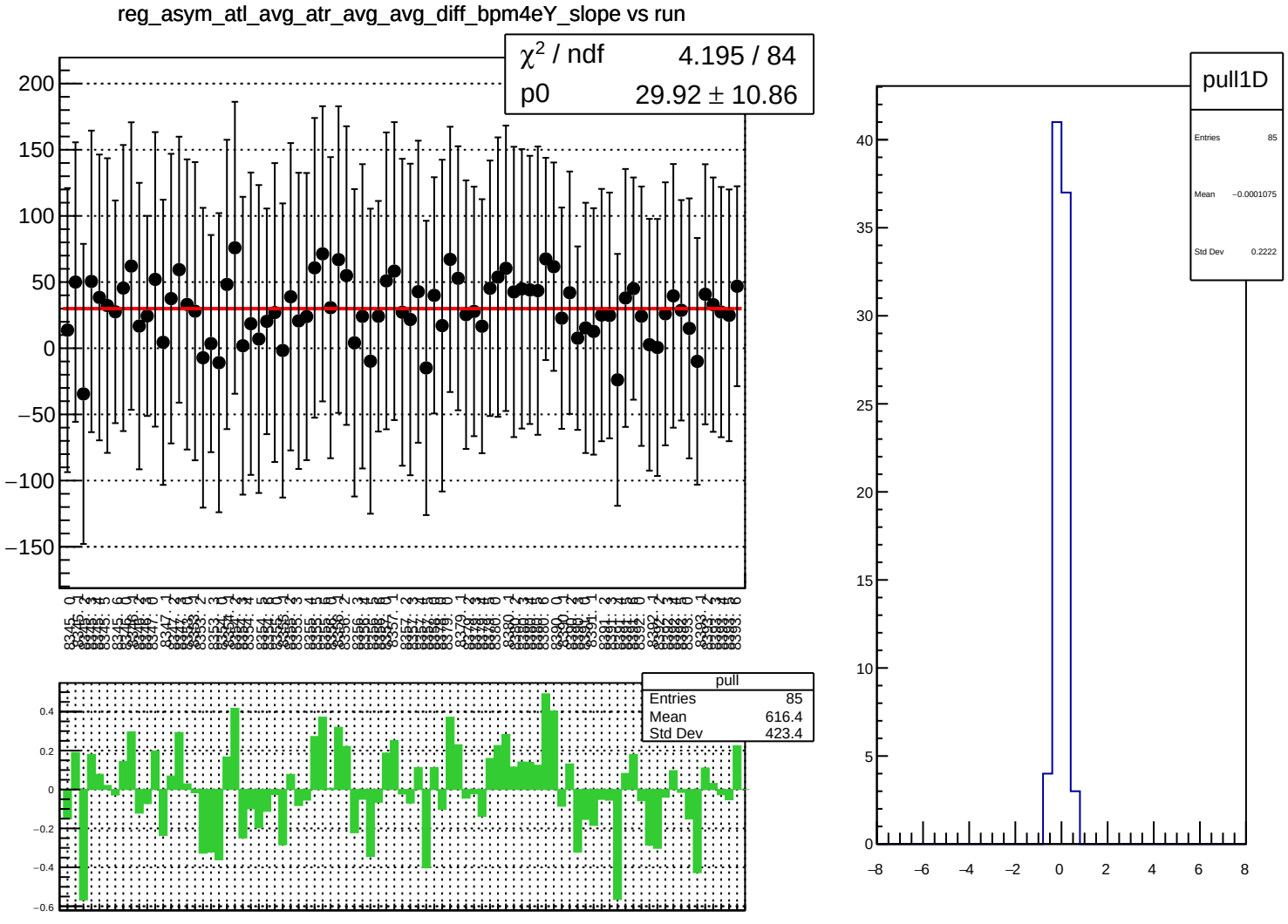

pull1D
Entries 85
Mean 0.005105
Std Dev 0.7018

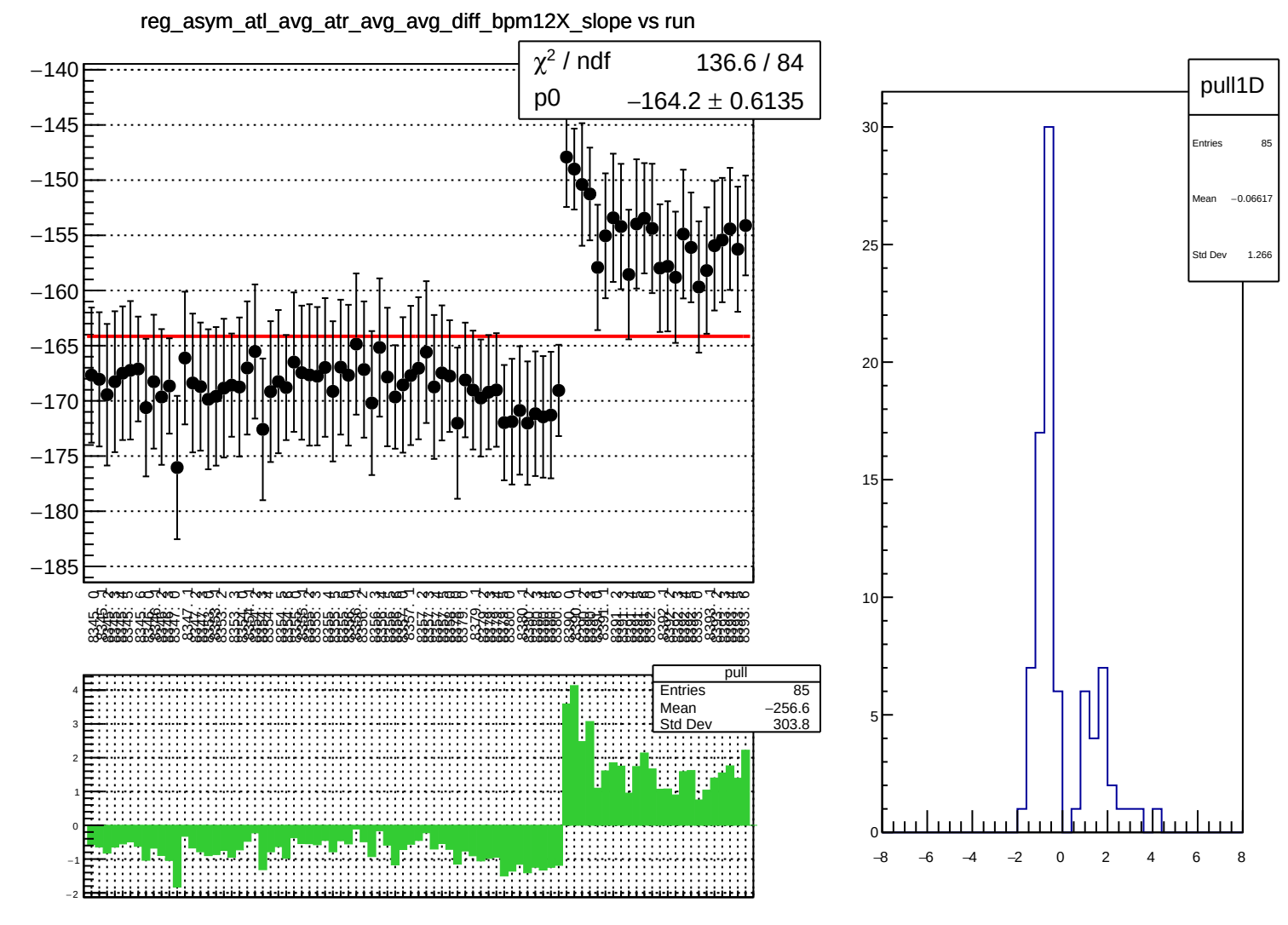

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 67.93 / 84
p0 2.273 ± 0.1797
pull
Entries 85
Mean 110.3
Std Dev 52.71
pull1D
Entries 85
Mean −0.02252
Std Dev 0.8937

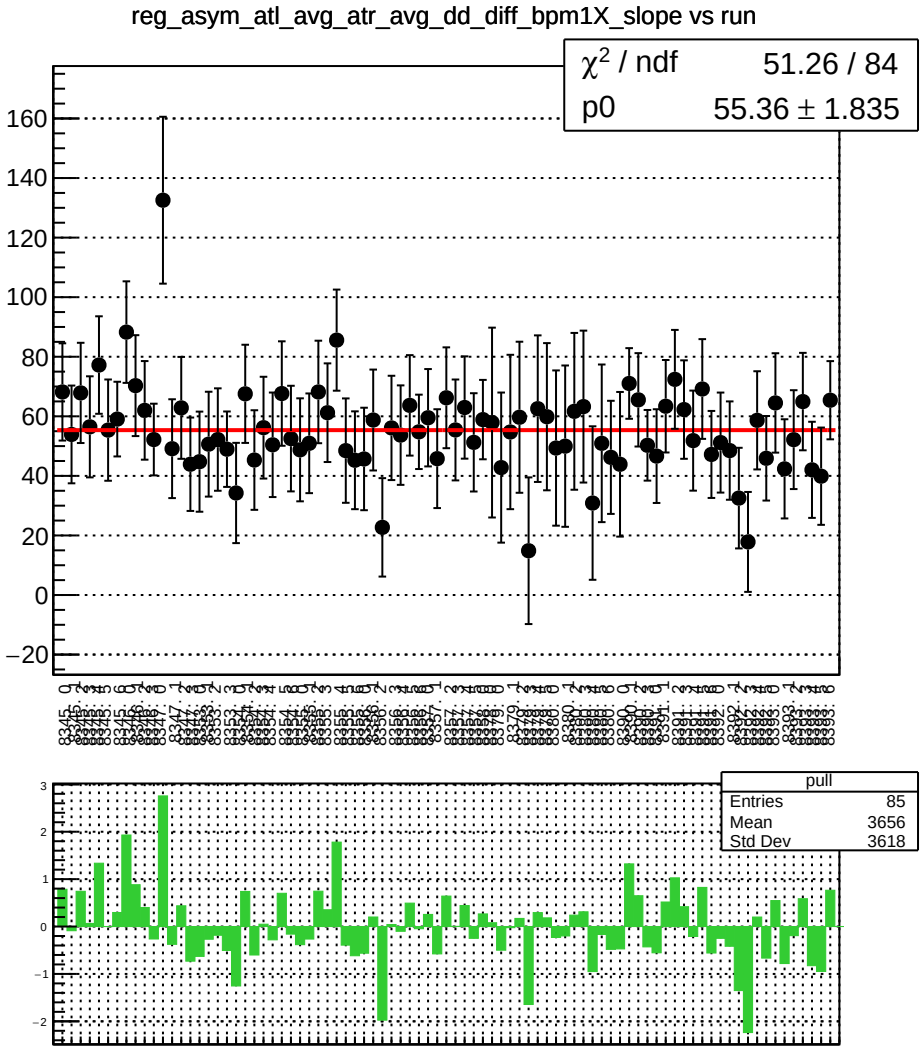

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 11.71 / 84
p0 −286.2 ± 5.912
pull
Entries 85
Mean 160.8
Std Dev 115.7
pull1D
Entries 85
Mean 0.03239
Std Dev 0.3697

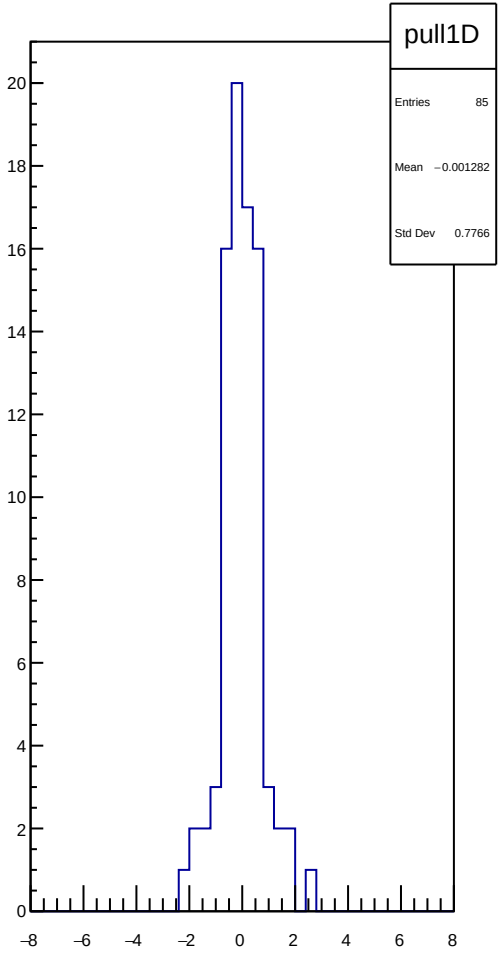

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.96 / 84
p0 36.81 ± 10.27
pull
Entries 85
Mean 67.71
Std Dev 72.62
pull1D
Entries 85
Mean 0.002675
Std Dev 0.2158

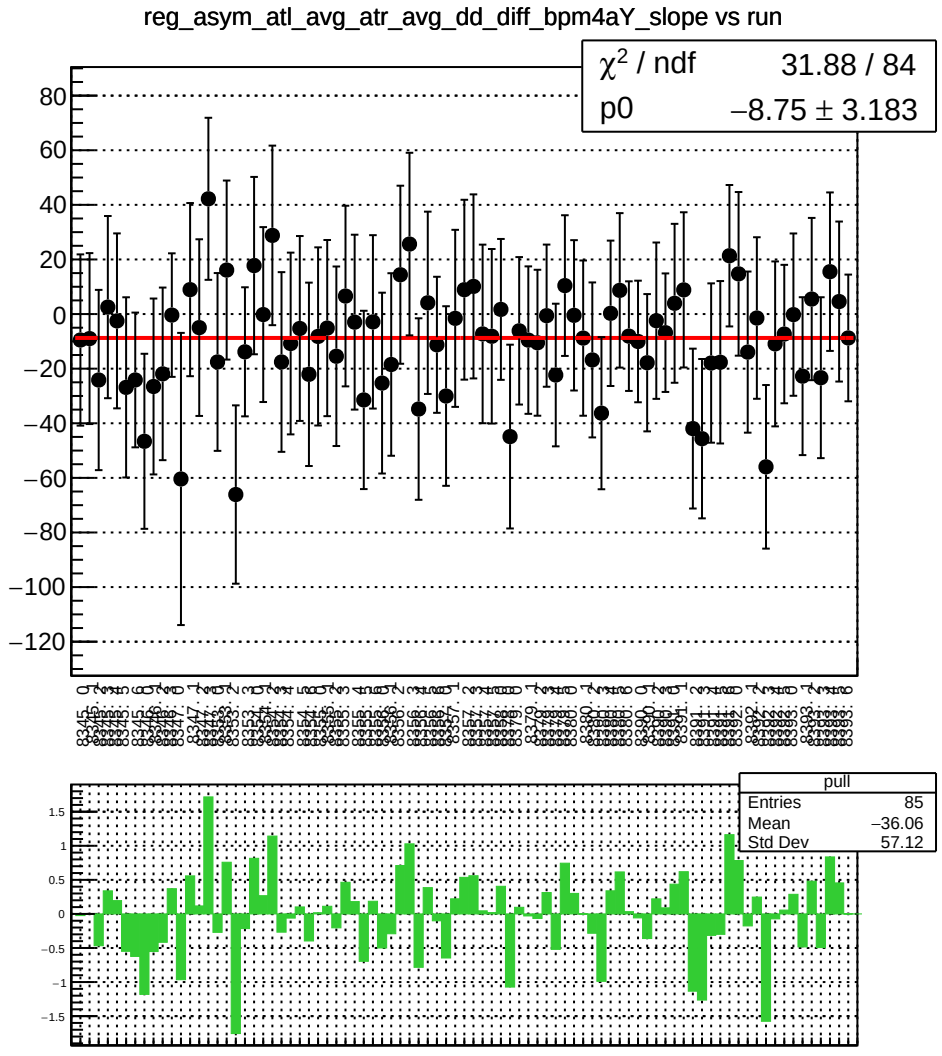

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 10.8 / 84
p0 257.7 ± 6.457
350
300
250
200
150
pull
Entries 85
Mean 298.9
Std Dev 250.5
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.01327
Std Dev 0.3563
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

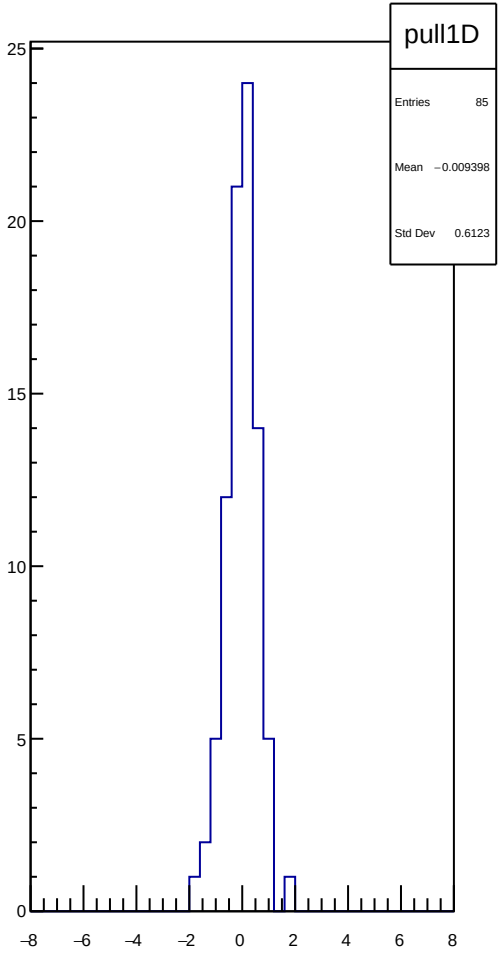

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.195 / 84
p0 29.92 ± 10.86
pull
Entries 85
Mean 616.4
Std Dev 423.4
pull1D
Entries 85
Mean −0.0001075
Std Dev 0.2222

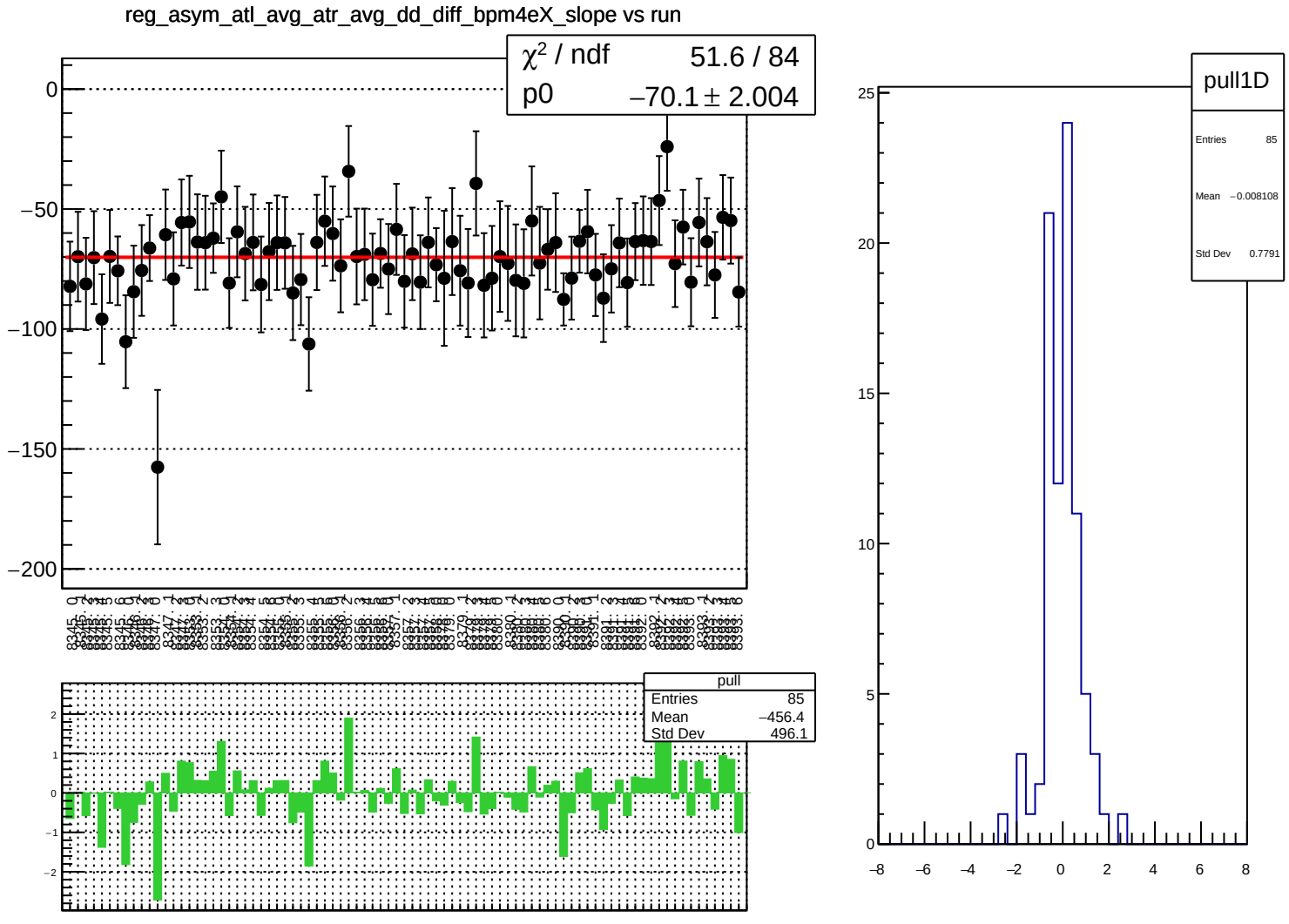

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 136.6 / 84
p0 −164.2 ± 0.6135
pull
Entries 85
Mean −256.6
Std Dev 303.8
pull1D
Entries 85
Mean −0.06617
Std Dev 1.266

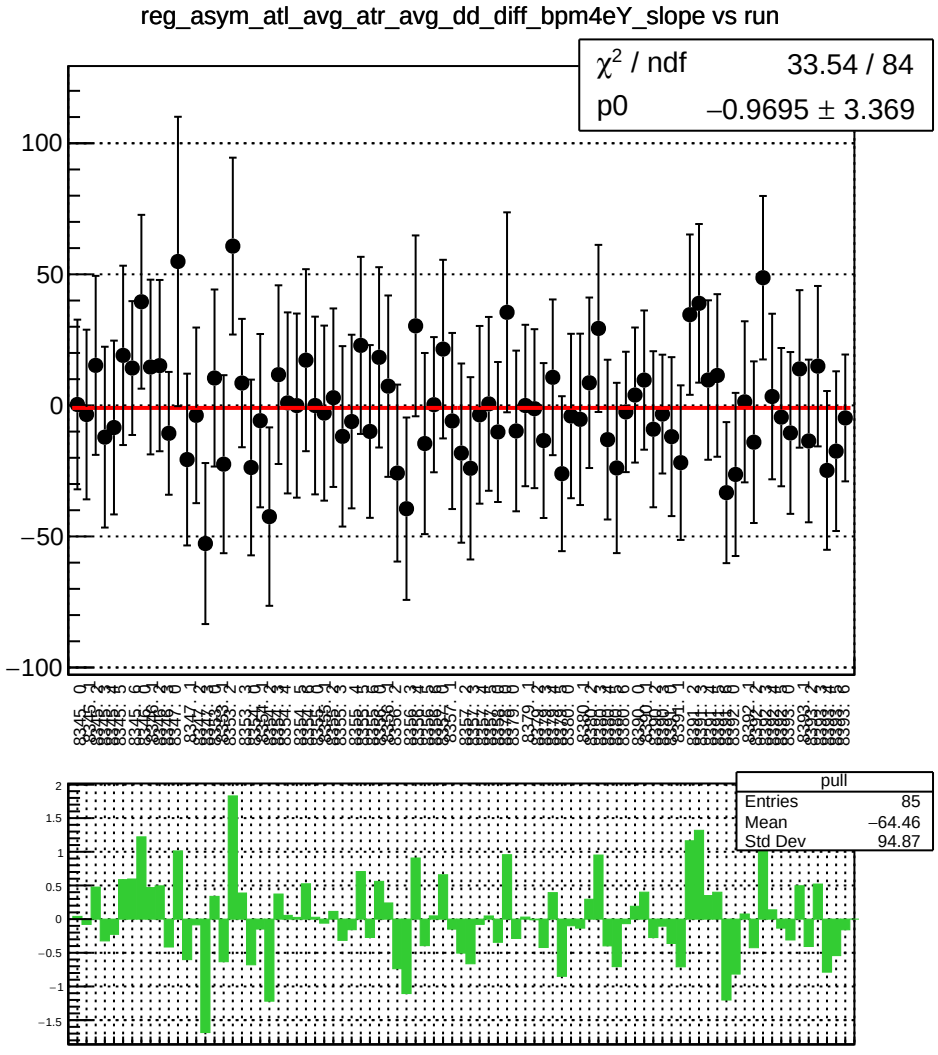

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 51.26 / 84
p0 55.36 ± 1.835
pull
Entries 85
Mean 3656
Std Dev 3618

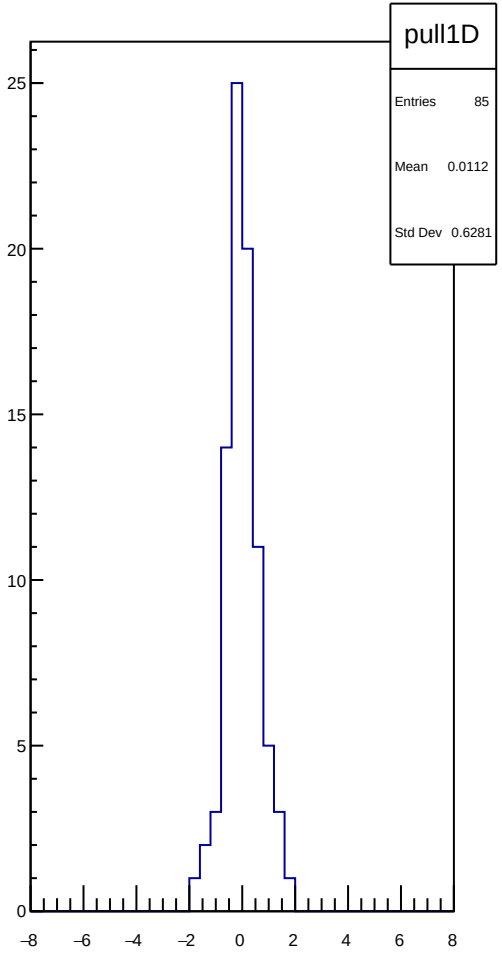

pull1D
Entries 85
Mean −0.001282
Std Dev 0.7766

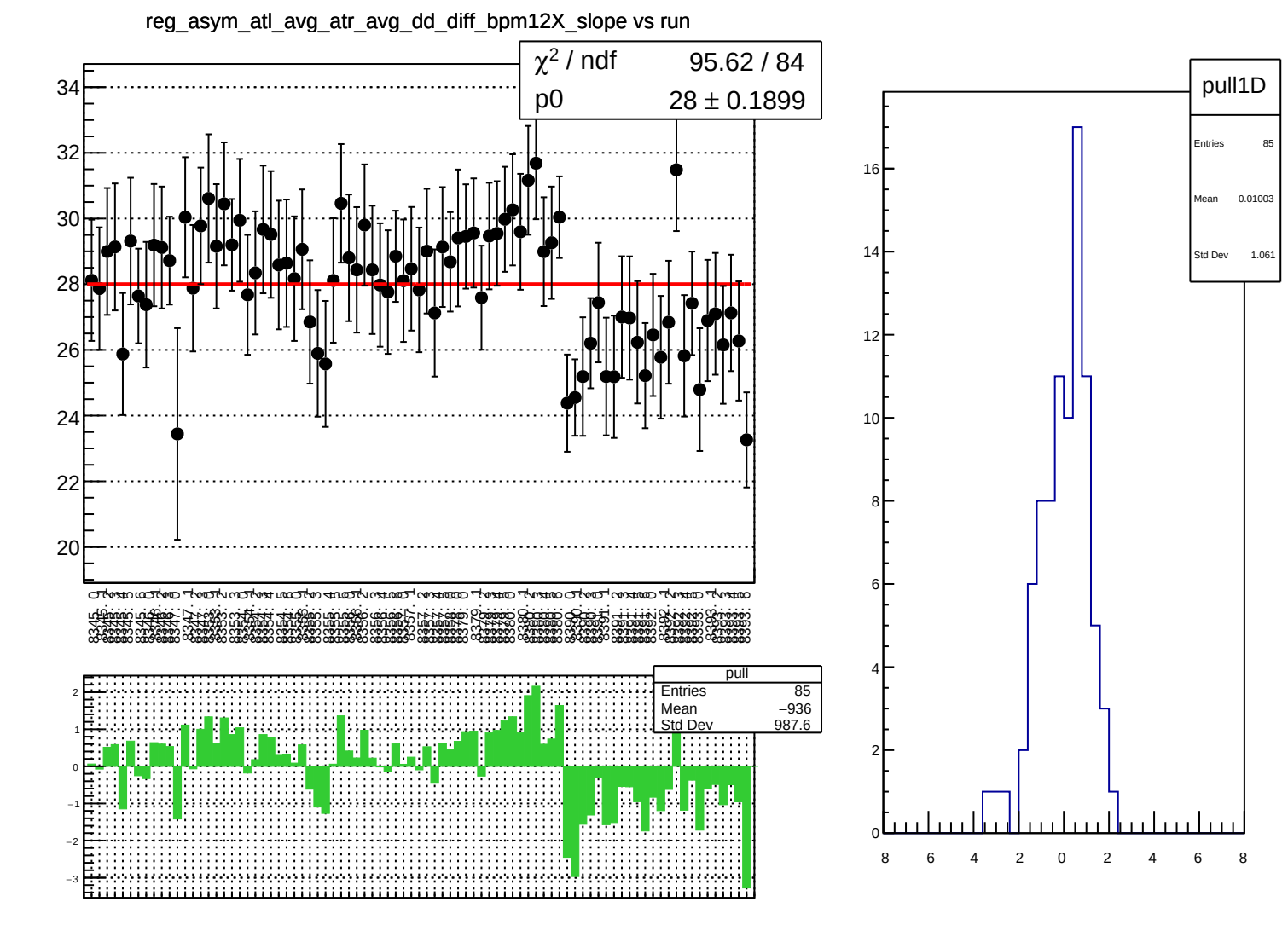

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 31.88 / 84
p0 −8.75 ± 3.183
pull
Entries 85
Mean −36.06
Std Dev 57.12

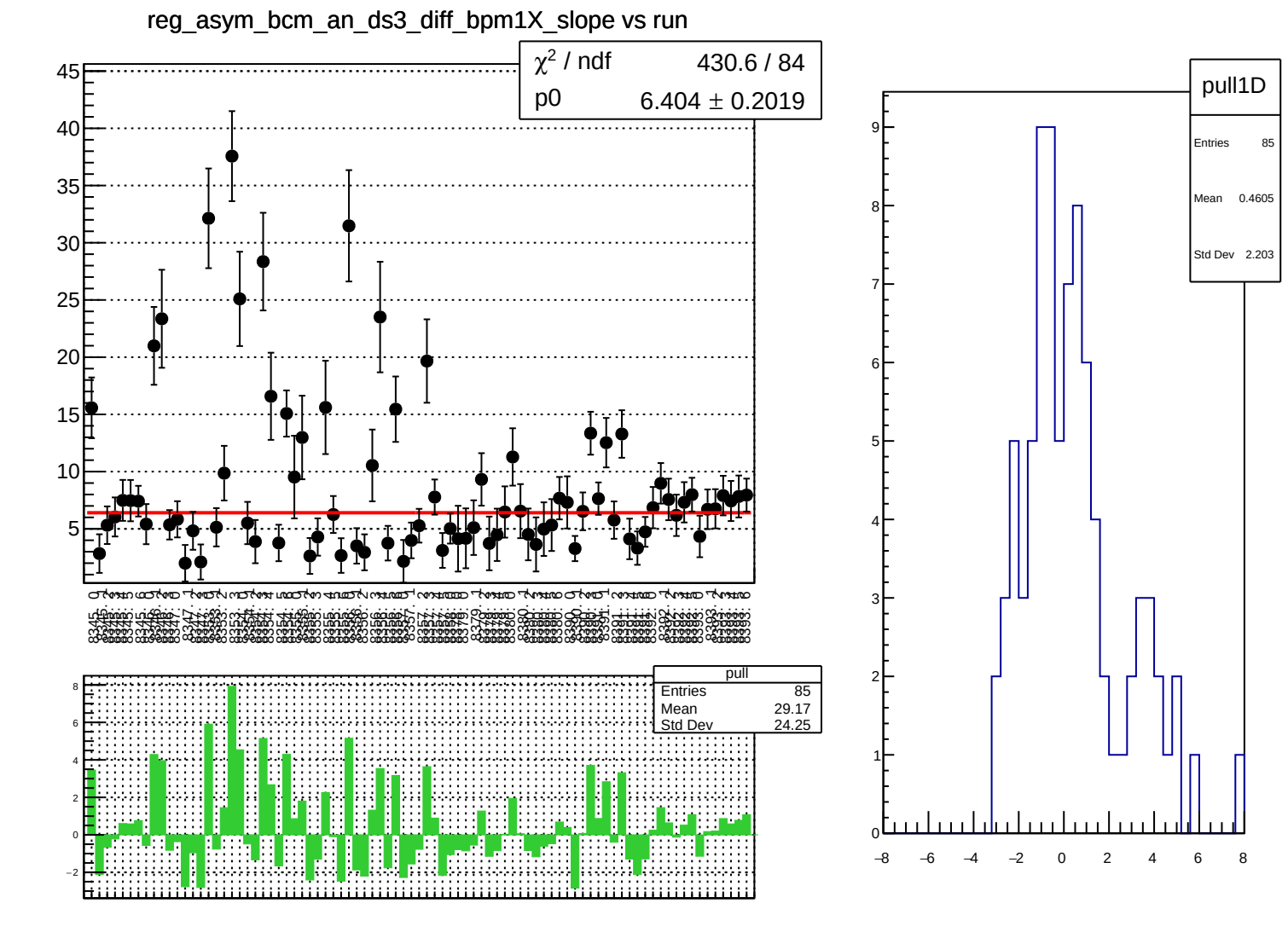

pull1D
Entries 85
Mean −0.009398
Std Dev 0.6123

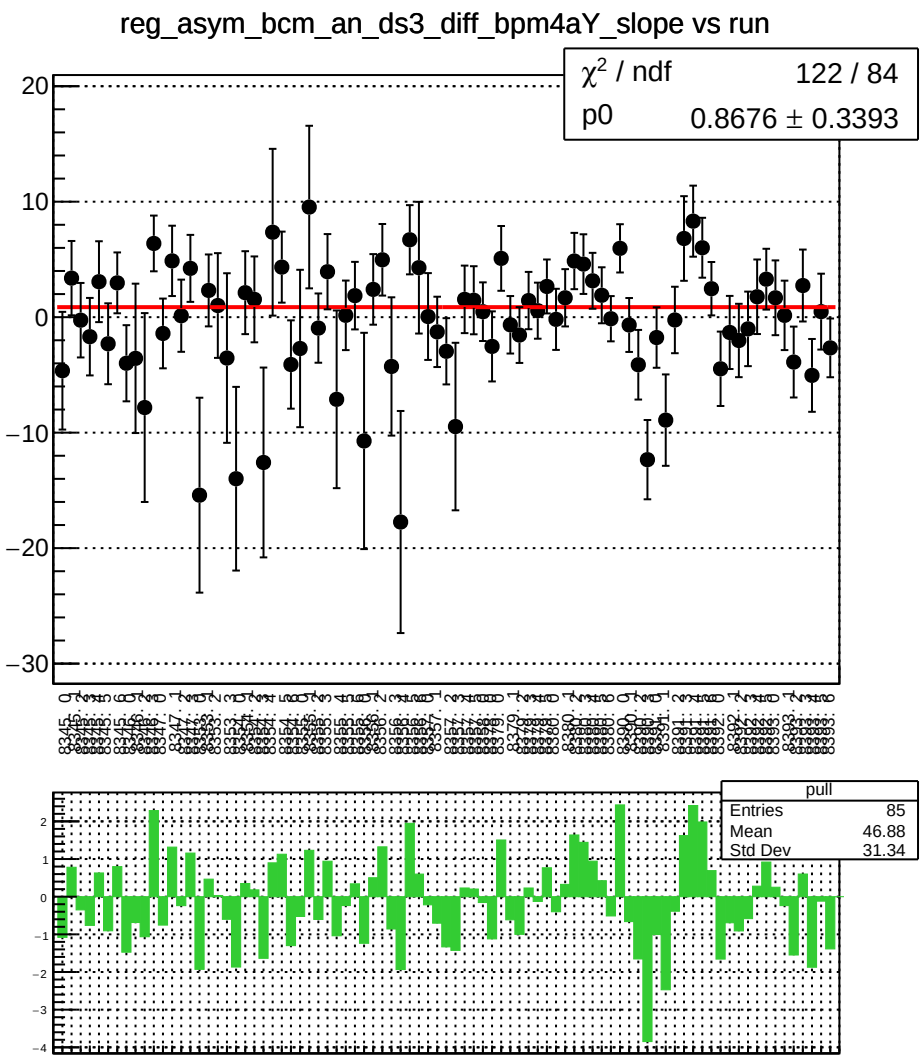

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 51.6 / 84
p0 −70.1 ± 2.004
0
−50
−100
−150
−200
pull
Entries 85
Mean −456.4
Std Dev 496.1
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.008108
Std Dev 0.7791
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

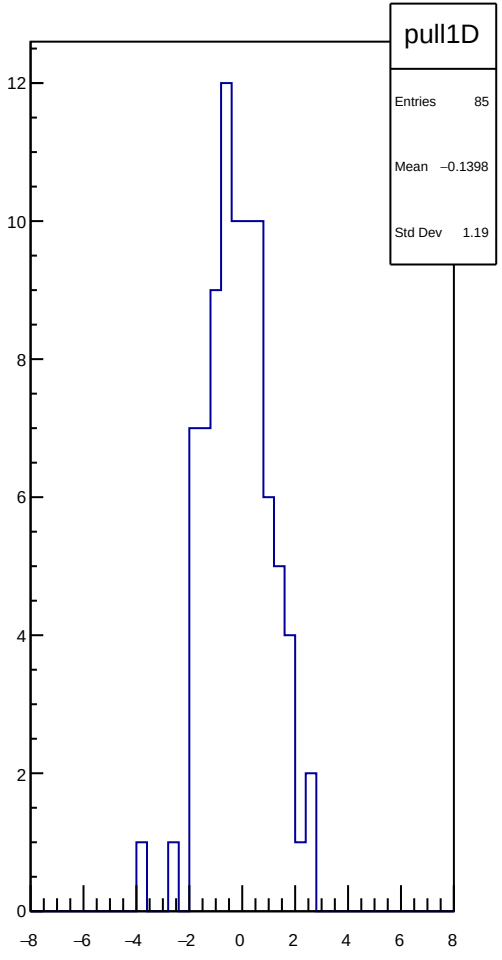

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 33.54 / 84
p0 −0.9695 ± 3.369
pull
Entries 85
Mean −64.46
Std Dev 94.87

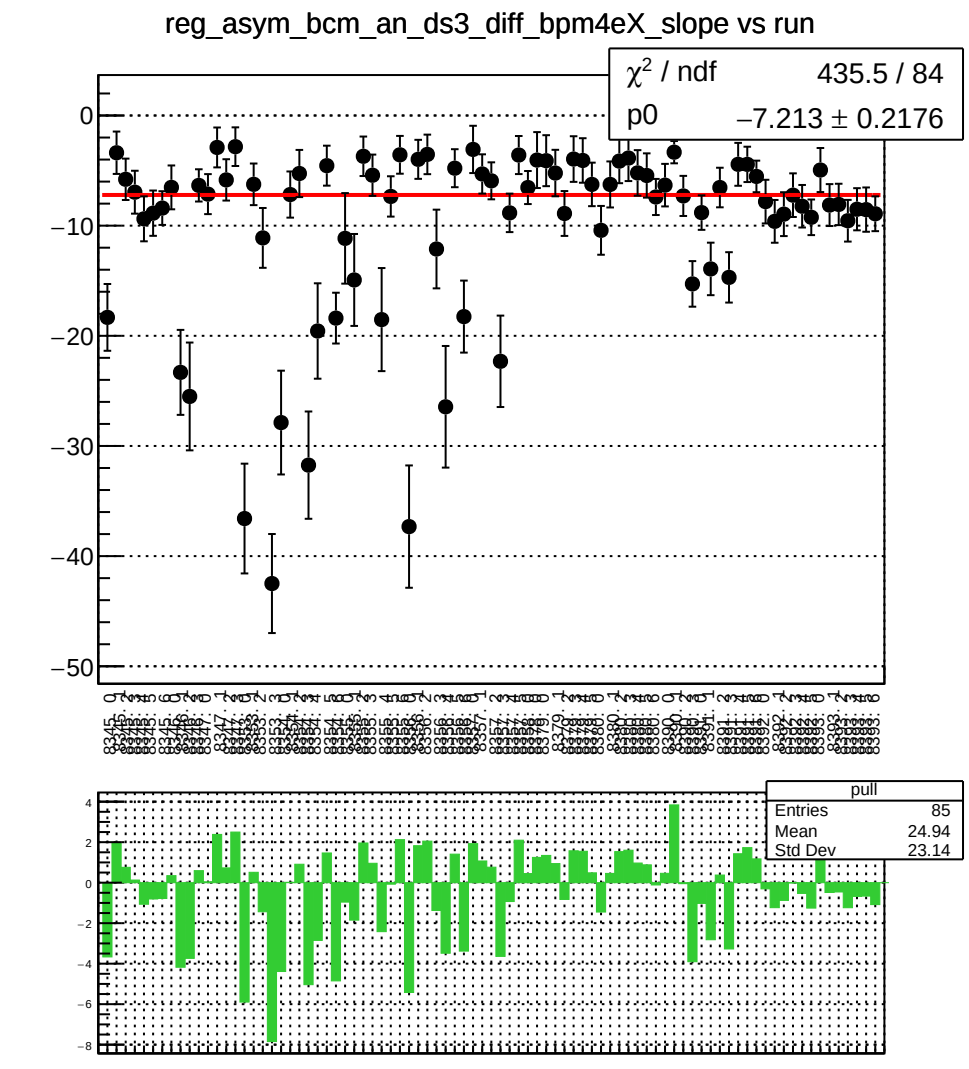

pull1D
Entries 85
Mean 0.0112
Std Dev 0.6281

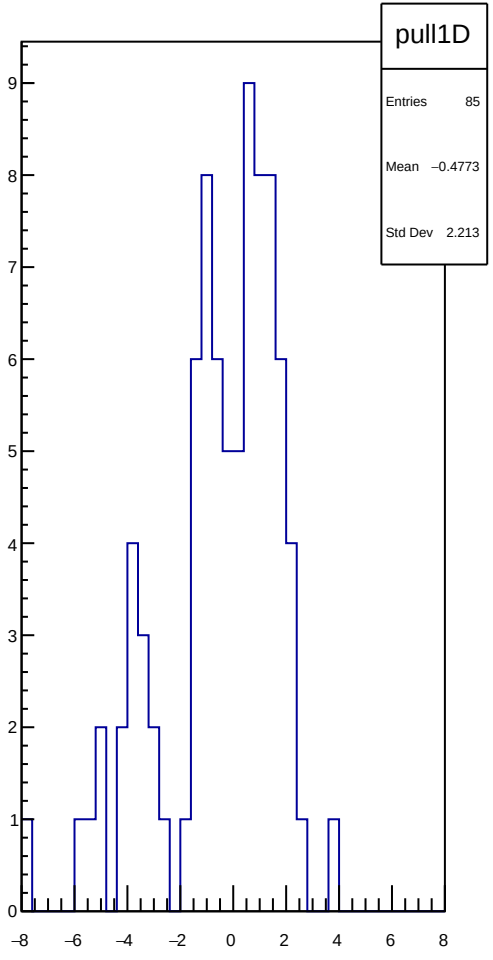

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 95.62 / 84
p0 28 ± 0.1899
pull
Entries 85
Mean −936
Std Dev 987.6
pull1D
Entries 85
Mean 0.01003
Std Dev 1.061

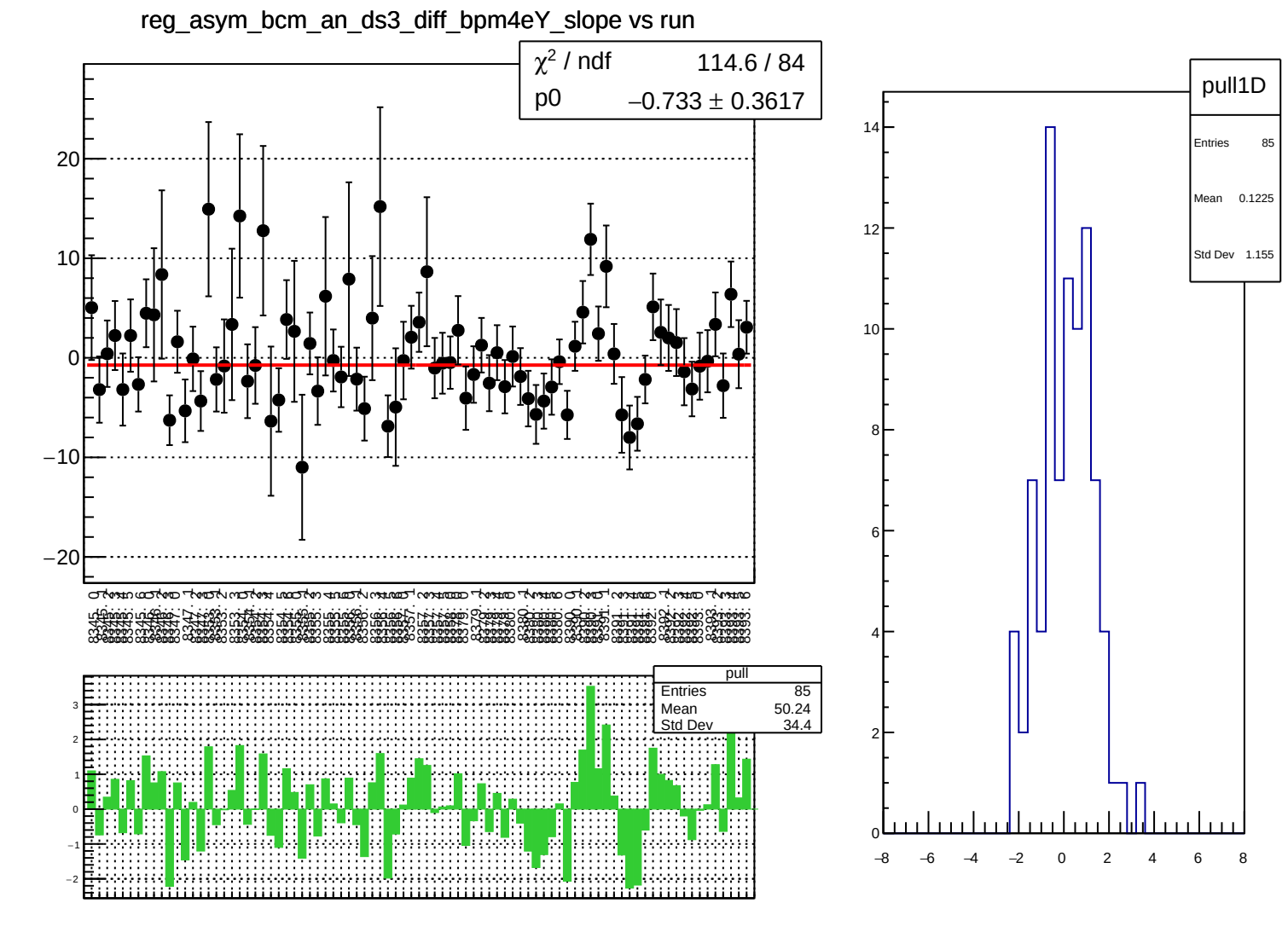

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 430.6 / 84
p0 6.404 ± 0.2019
pull
Entries 85
Mean 29.17
Std Dev 24.25
pull1D
Entries 85
Mean 0.4605
Std Dev 2.203

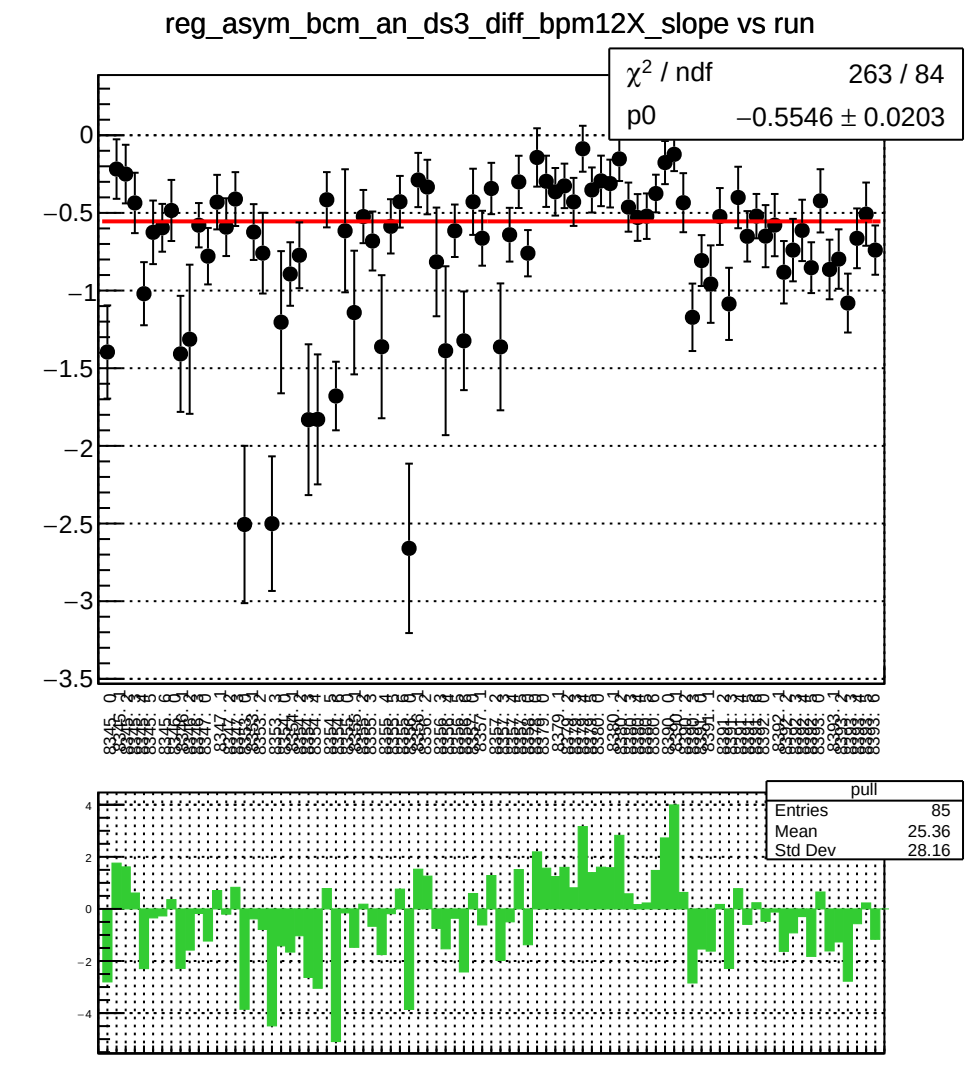

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 122 / 84
p0 0.8676 ± 0.3393
pull
Entries 85
Mean 46.88
Std Dev 31.34

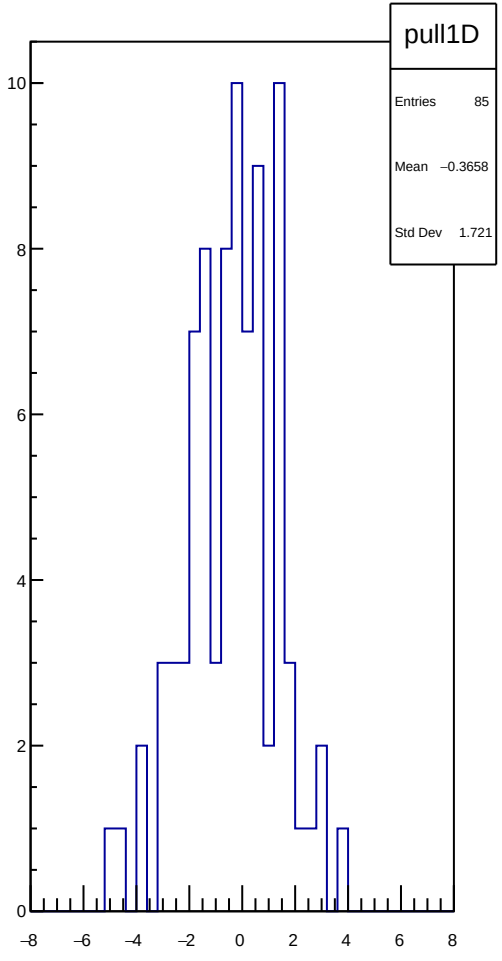

pull1D
Entries 85
Mean −0.1398
Std Dev 1.19

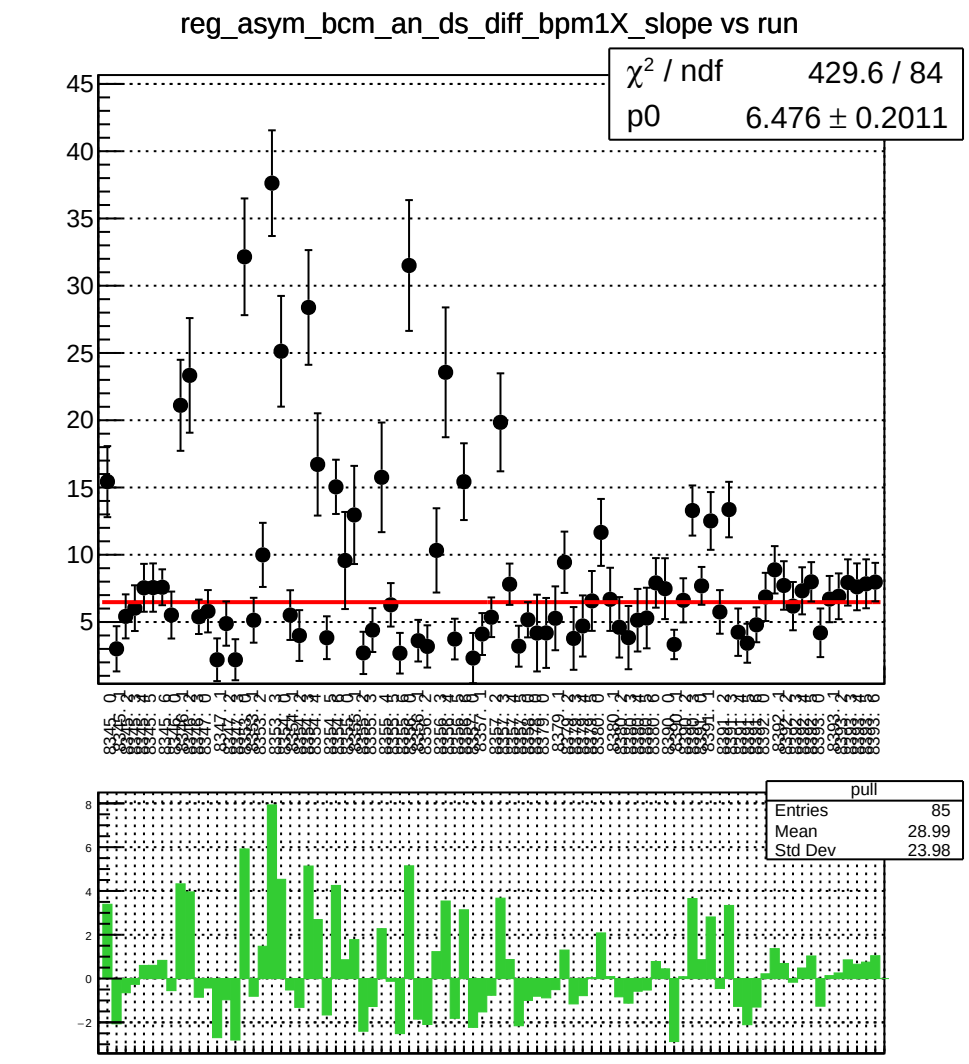

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 435.5 / 84
p0 −7.213 ± 0.2176
pull
Entries 85
Mean 24.94
Std Dev 23.14

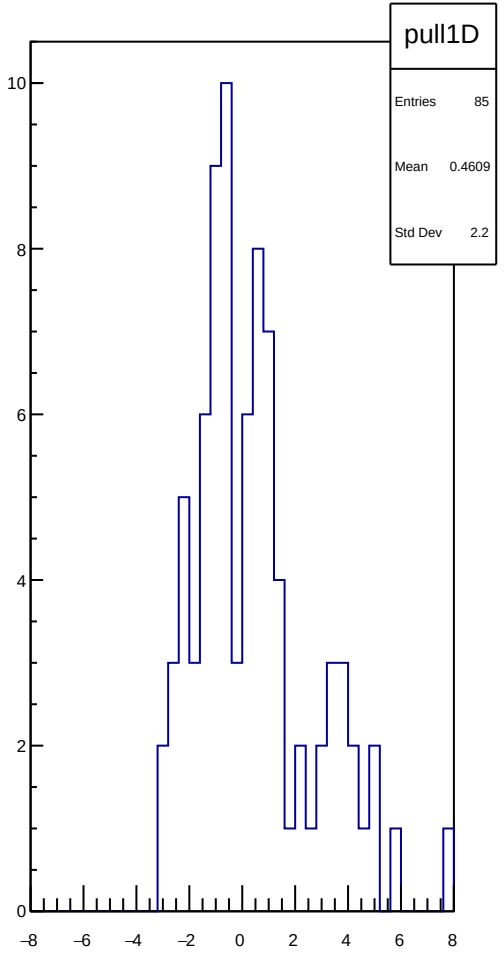

pull1D
Entries 85
Mean −0.4773
Std Dev 2.213

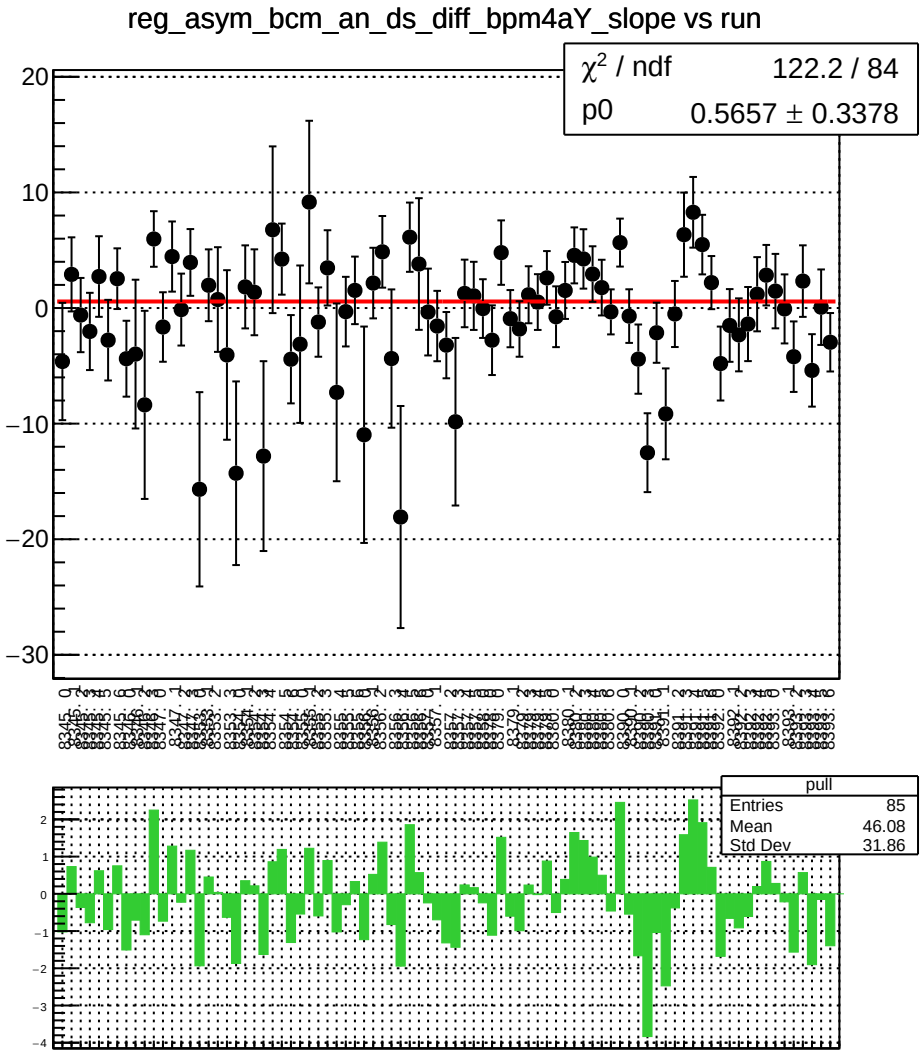

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 114.6 / 84
p0 −0.733 ± 0.3617
pull
Entries 85
Mean 50.24
Std Dev 34.4
pull1D
Entries 85
Mean 0.1225
Std Dev 1.155

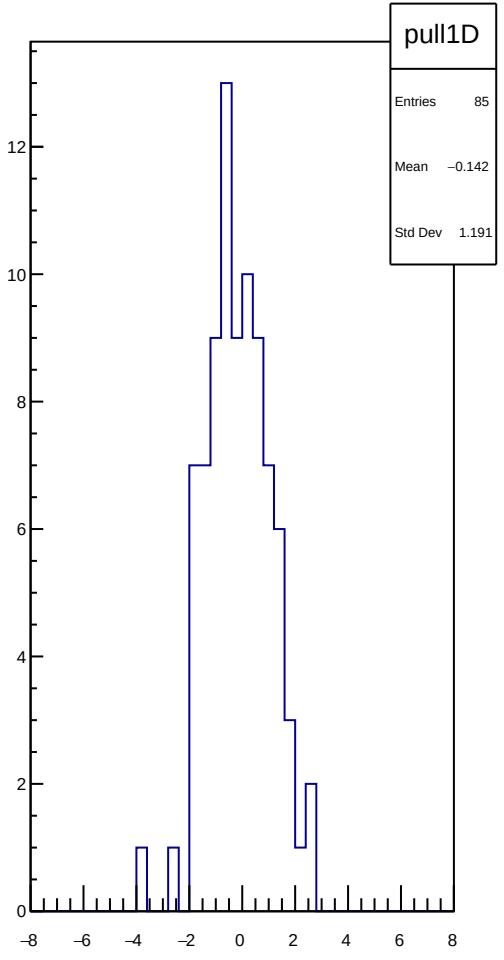

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 263 / 84
p0 −0.5546 ± 0.0203
pull
Entries 85
Mean 25.36
Std Dev 28.16

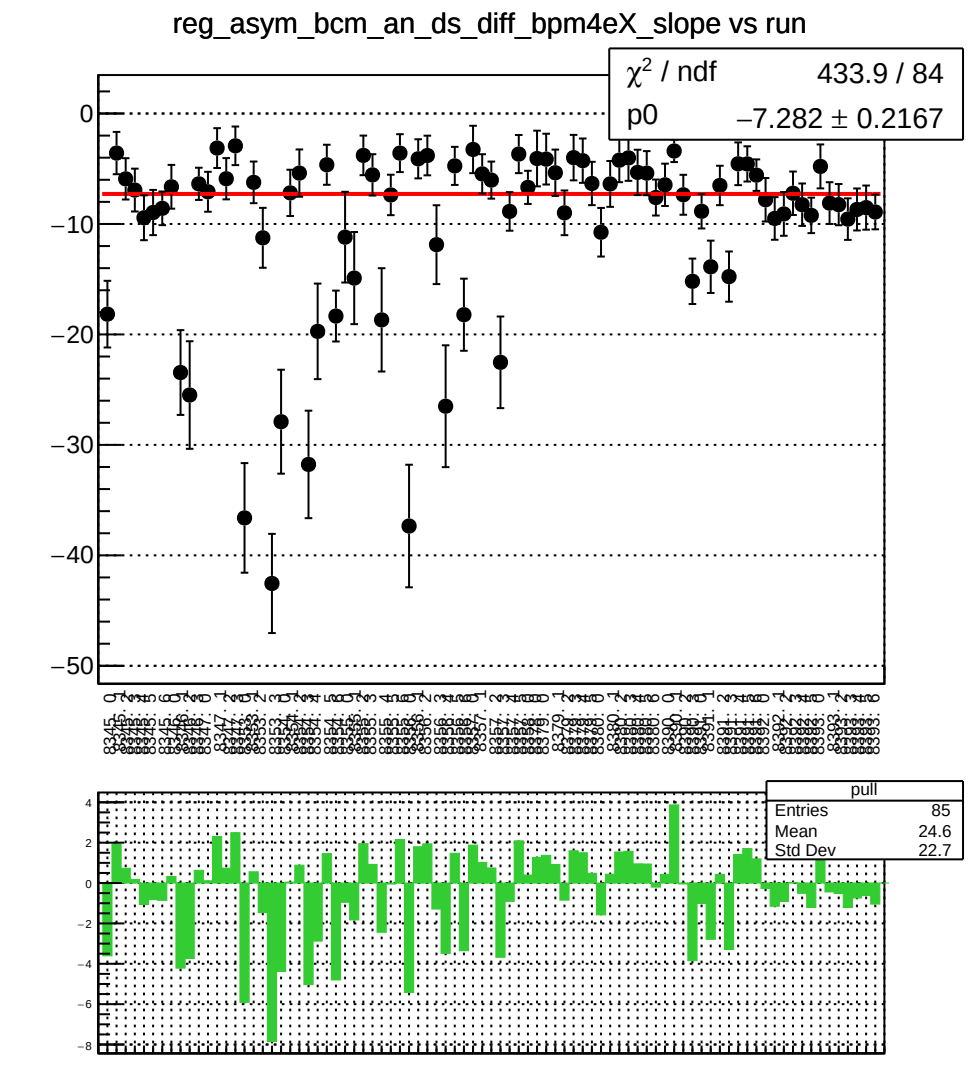

pull1D
Entries 85
Mean −0.3658
Std Dev 1.721

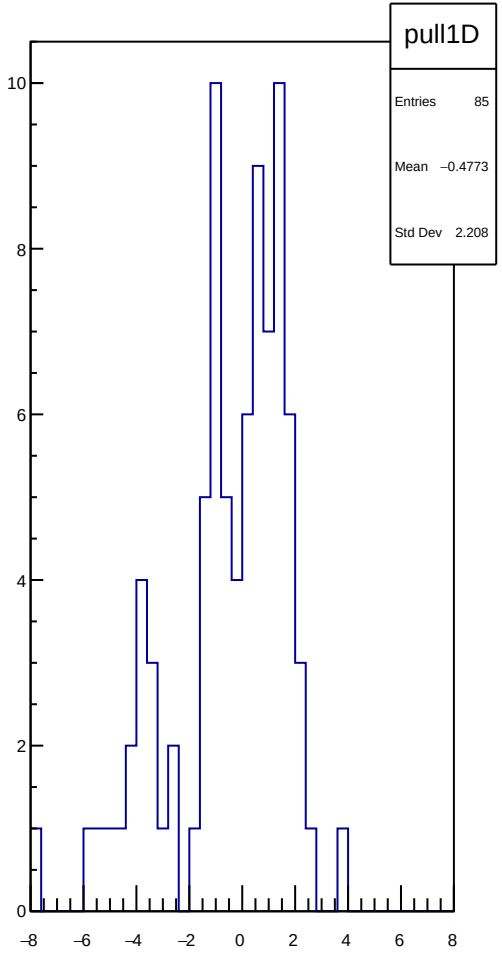

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 429.6 / 84
p0 6.476 ± 0.2011
pull
Entries 85
Mean 28.99
Std Dev 23.98

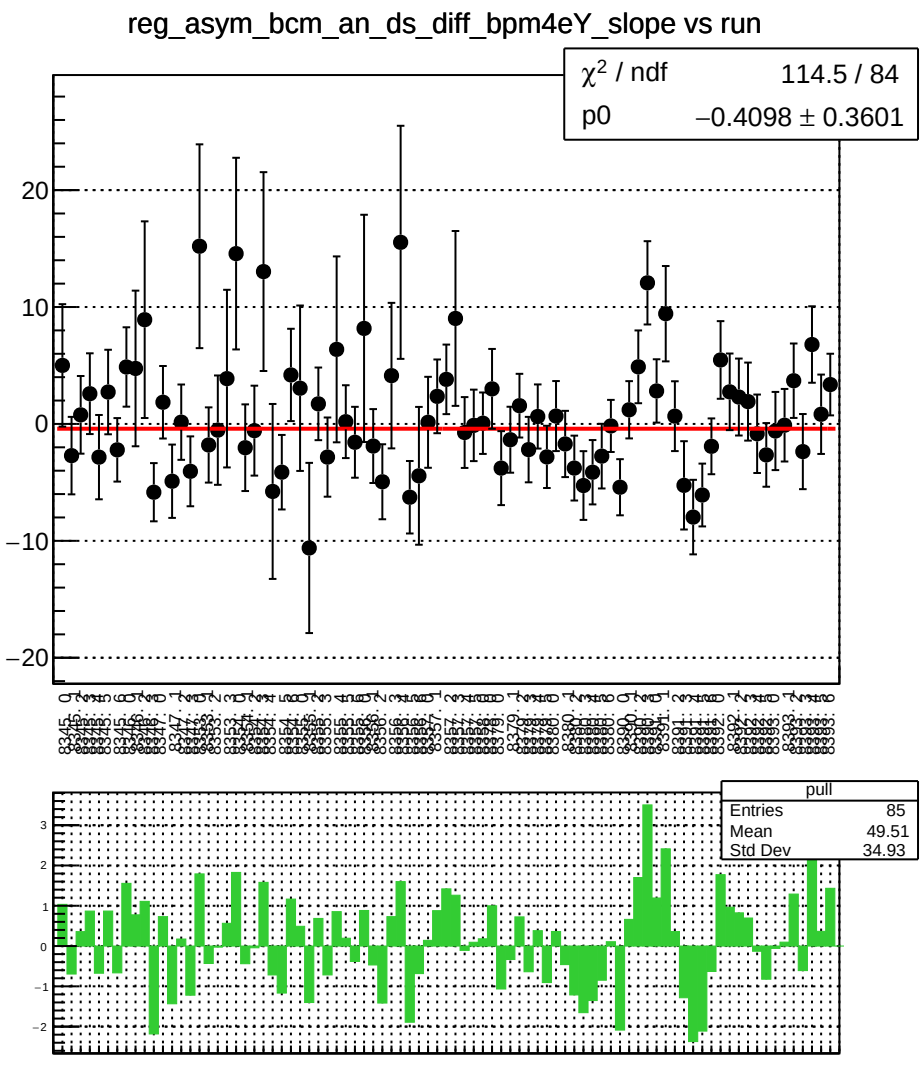

pull1D
Entries 85
Mean 0.4609
Std Dev 2.2

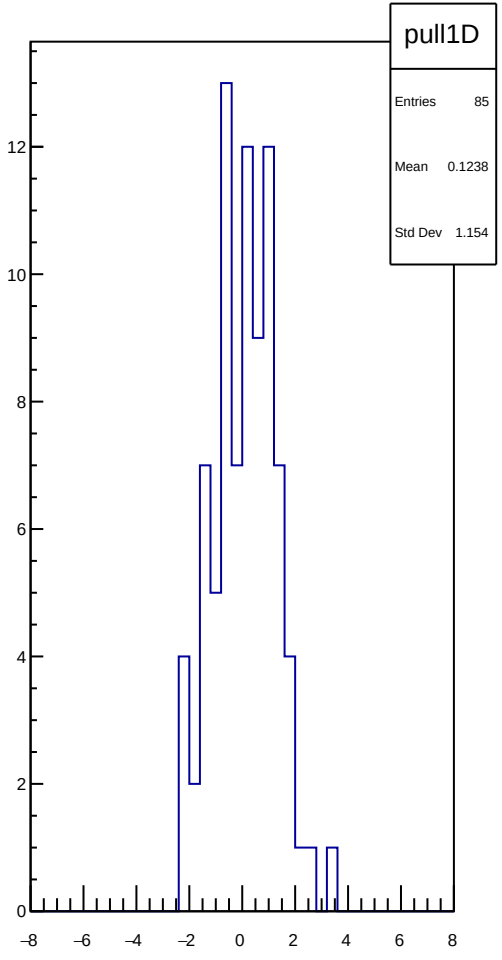

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 122.2 / 84
p0 0.5657 ± 0.3378
pull
Entries 85
Mean 46.08
Std Dev 31.86

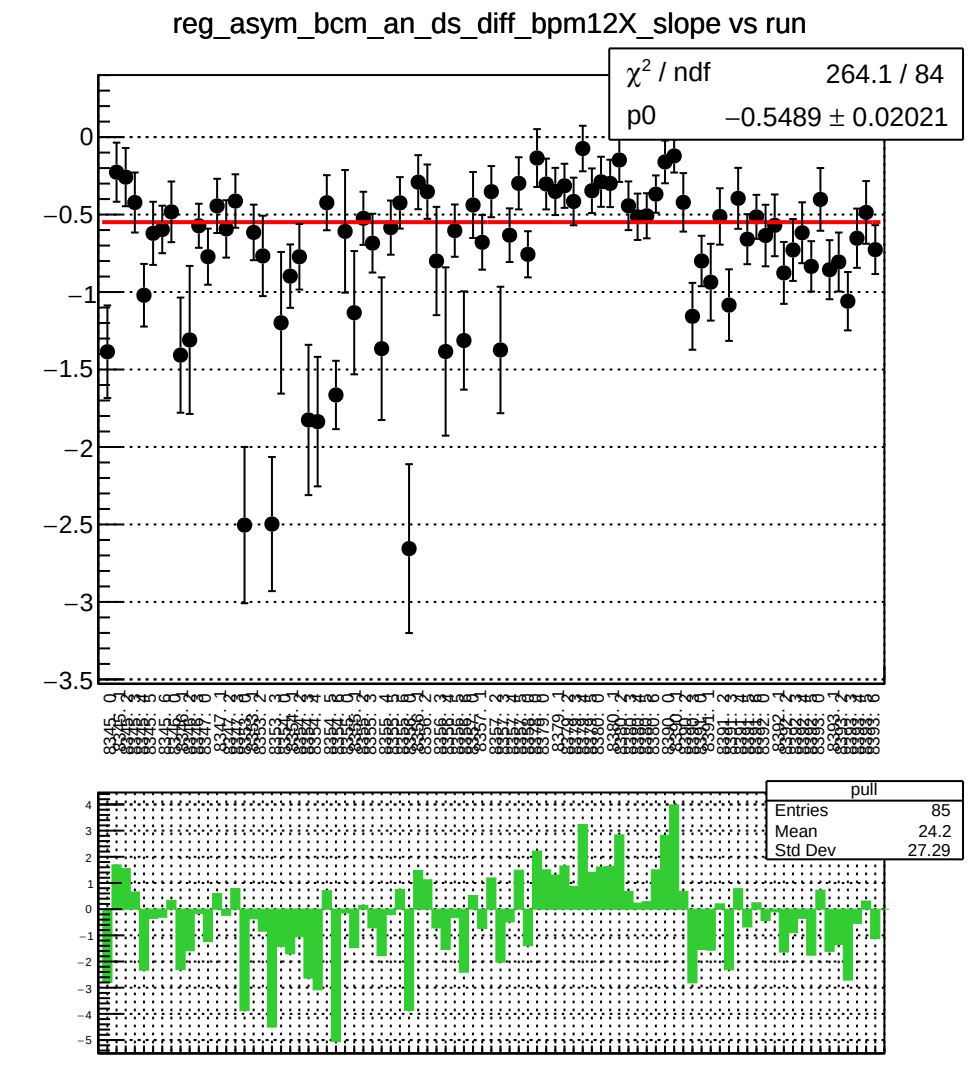

pull1D
Entries 85
Mean −0.142
Std Dev 1.191

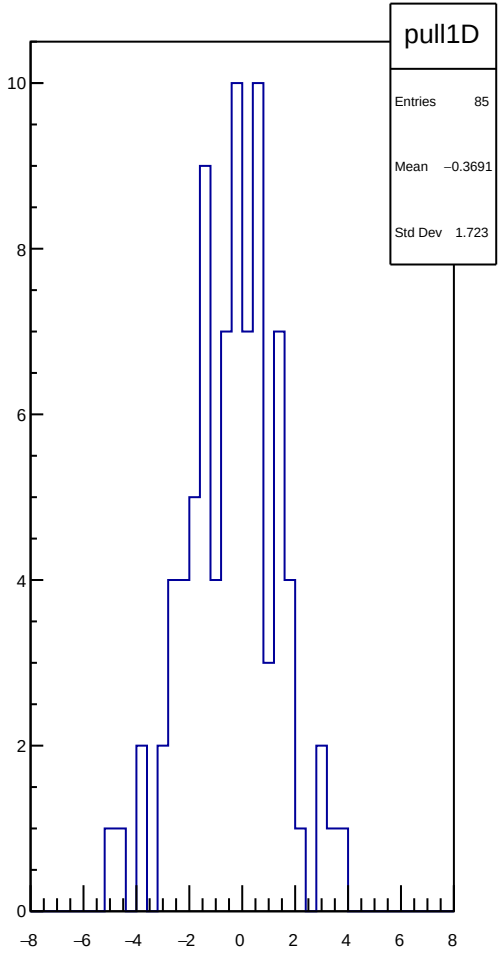

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 433.9 / 84
p0 −7.282 ± 0.2167
pull
Entries 85
Mean 24.6
Std Dev 22.7

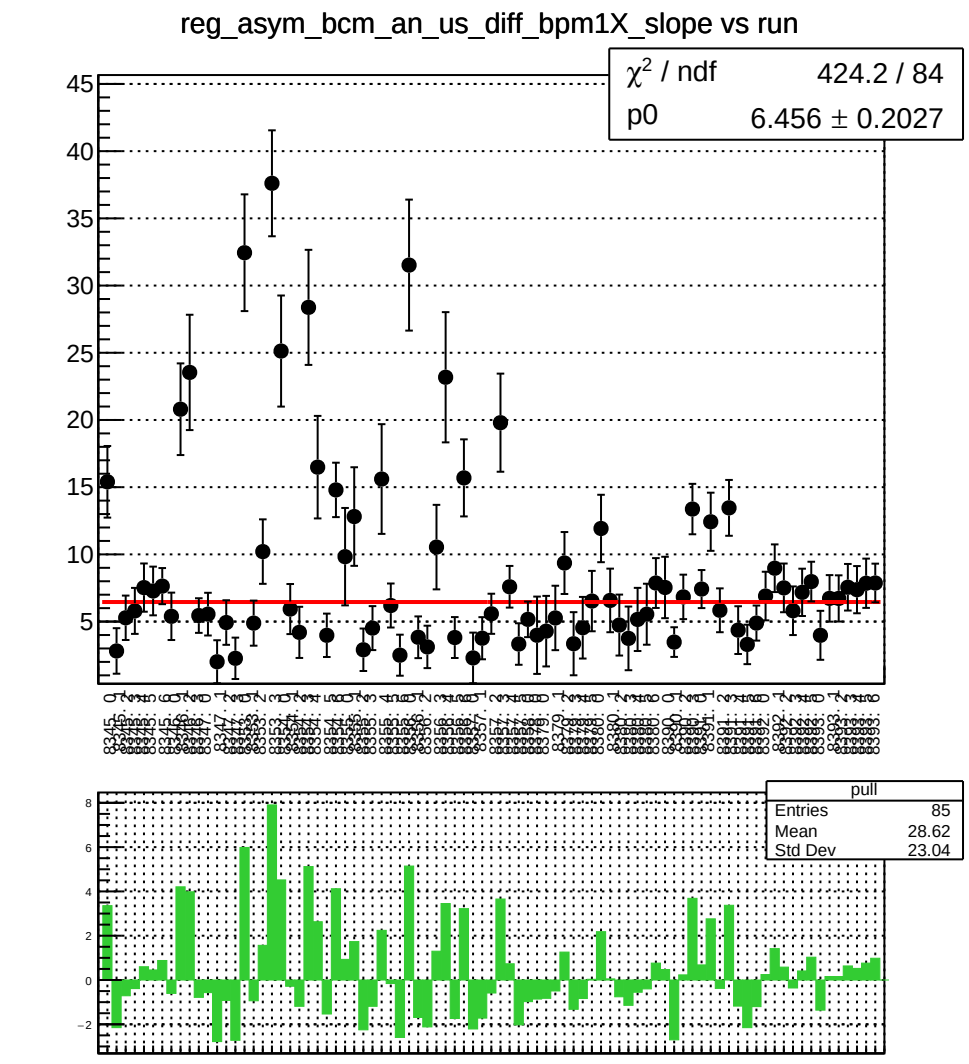

pull1D
Entries 85
Mean −0.4773
Std Dev 2.208

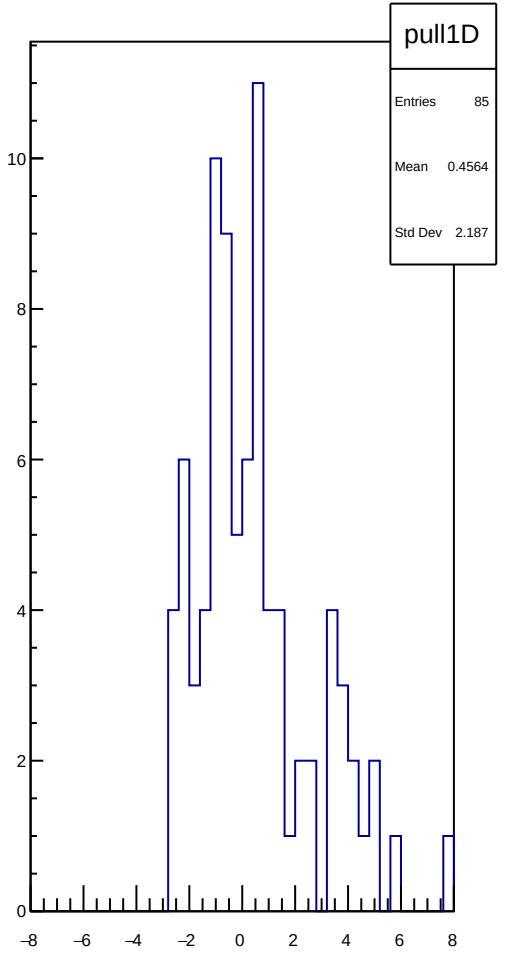

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 114.5 / 84
p0 −0.4098 ± 0.3601
pull
Entries 85
Mean 49.51
Std Dev 34.93

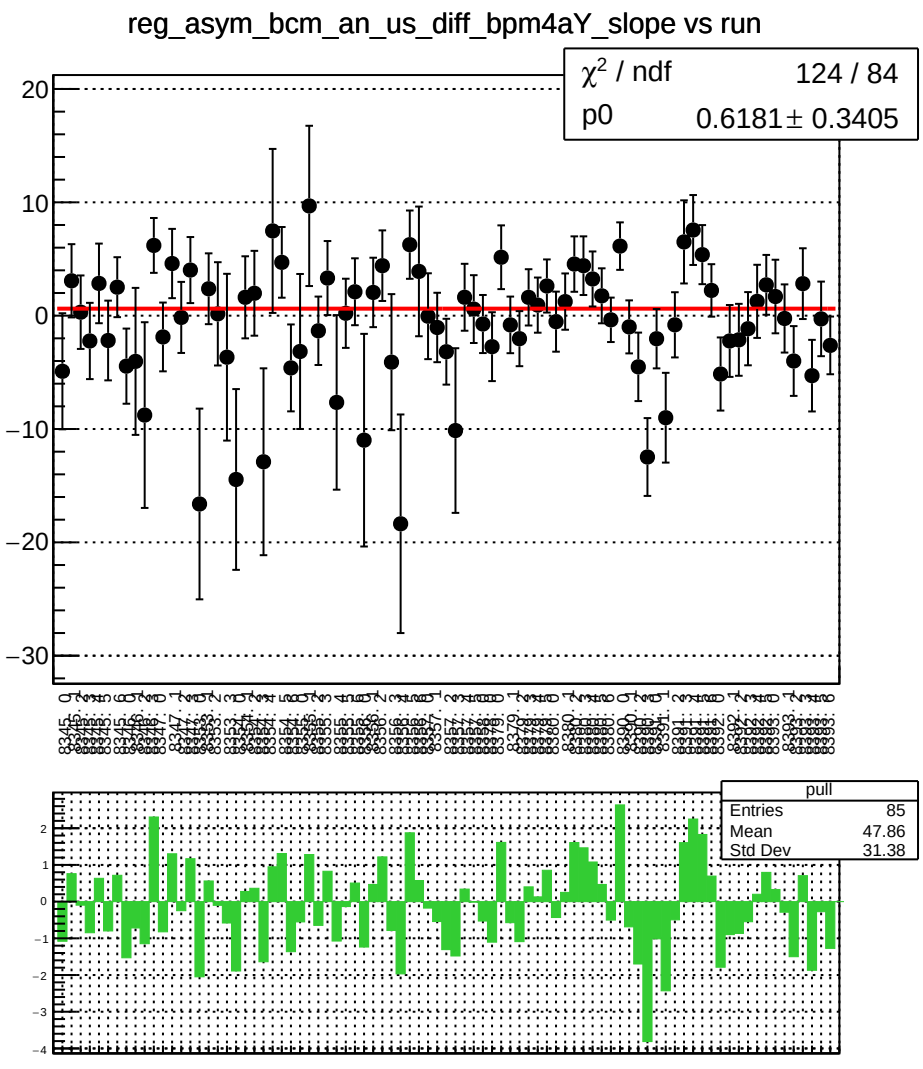

pull1D
Entries 85
Mean 0.1238
Std Dev 1.154

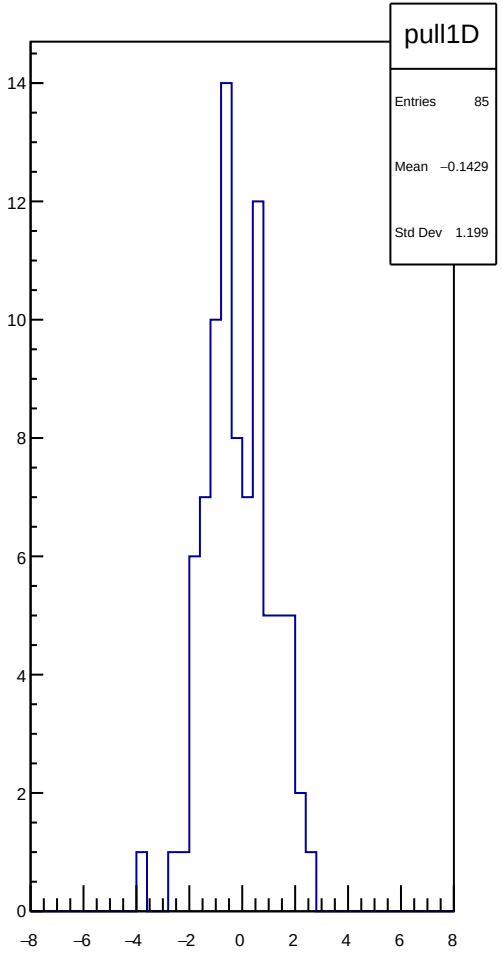

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 264.1 / 84
p0 −0.5489 ± 0.02021
pull
Entries 85
Mean 24.2
Std Dev 27.29

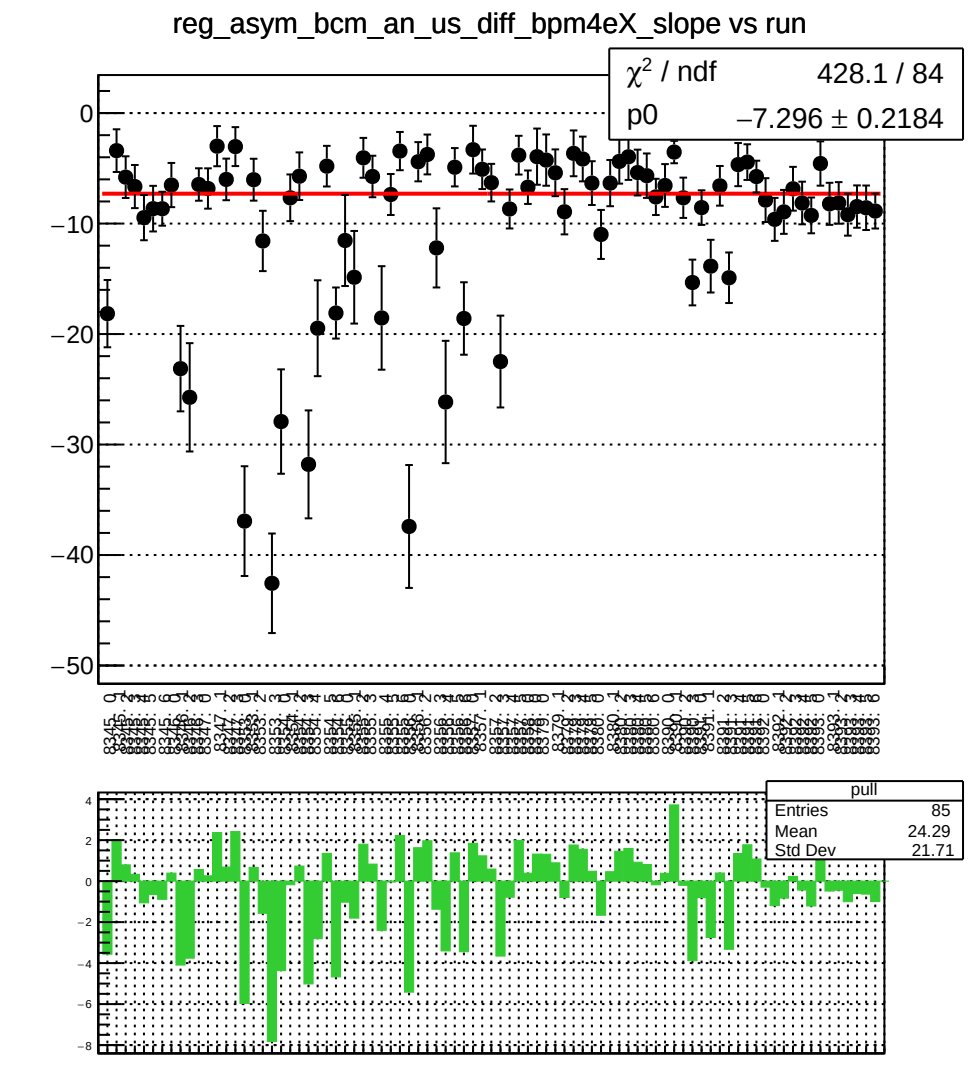

pull1D
Entries 85
Mean −0.3691
Std Dev 1.723

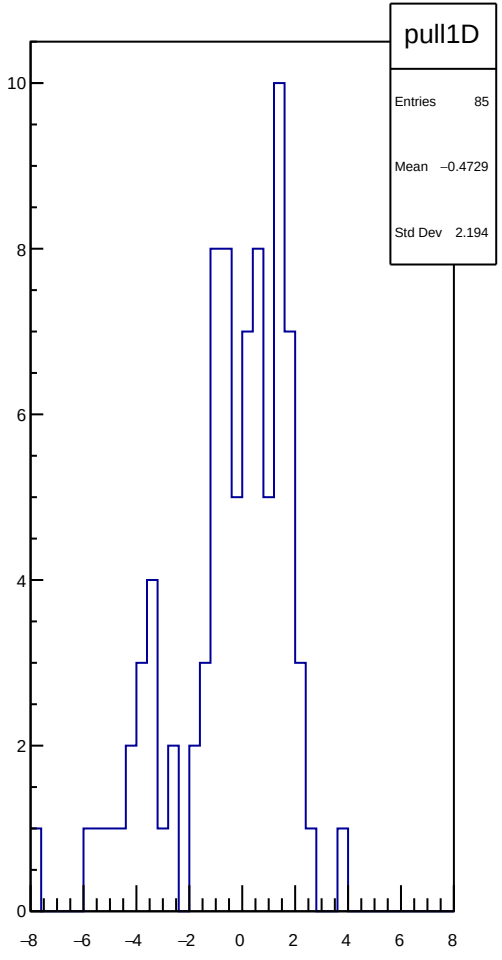

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 424.2 / 84
p0 6.456 ± 0.2027
pull
Entries 85
Mean 28.62
Std Dev 23.04

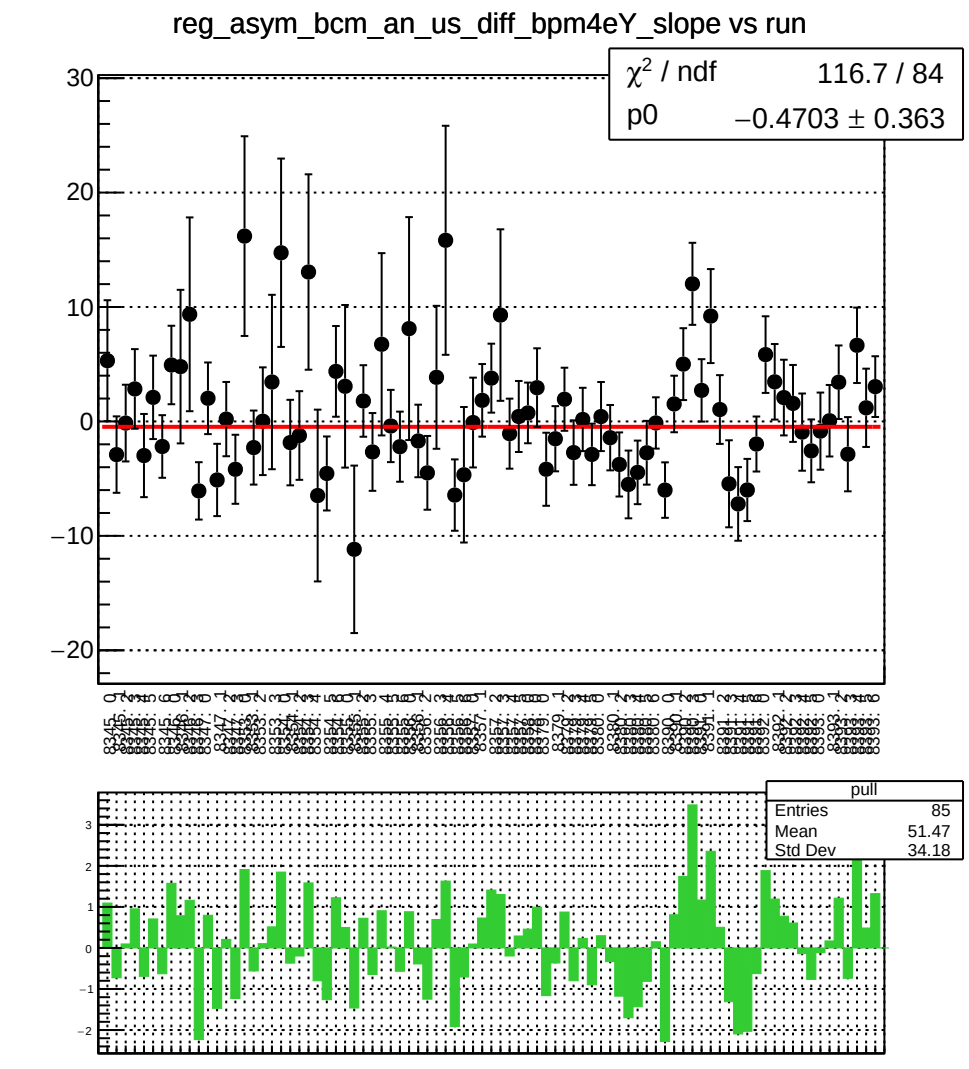

pull1D
Entries 85
Mean 0.4564
Std Dev 2.187

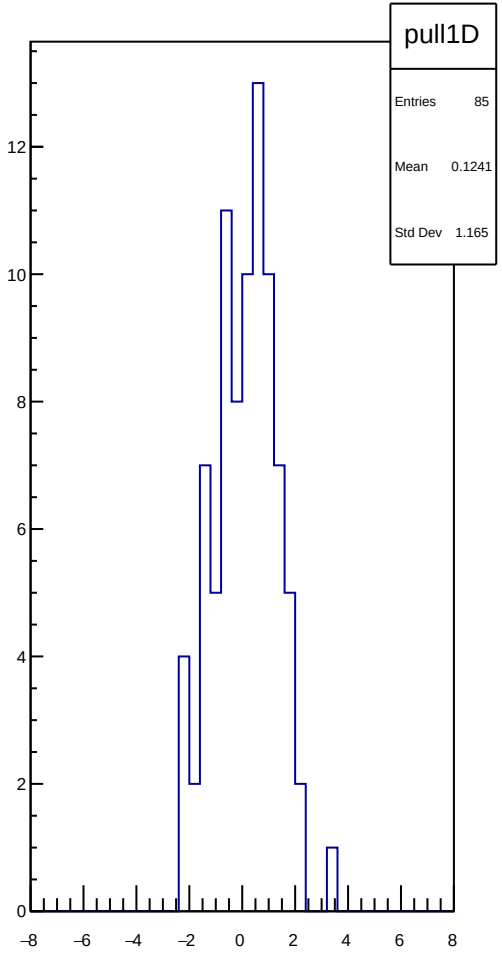

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 124 / 84
p0 0.6181 ± 0.3405
pull
Entries 85
Mean 47.86
Std Dev 31.38

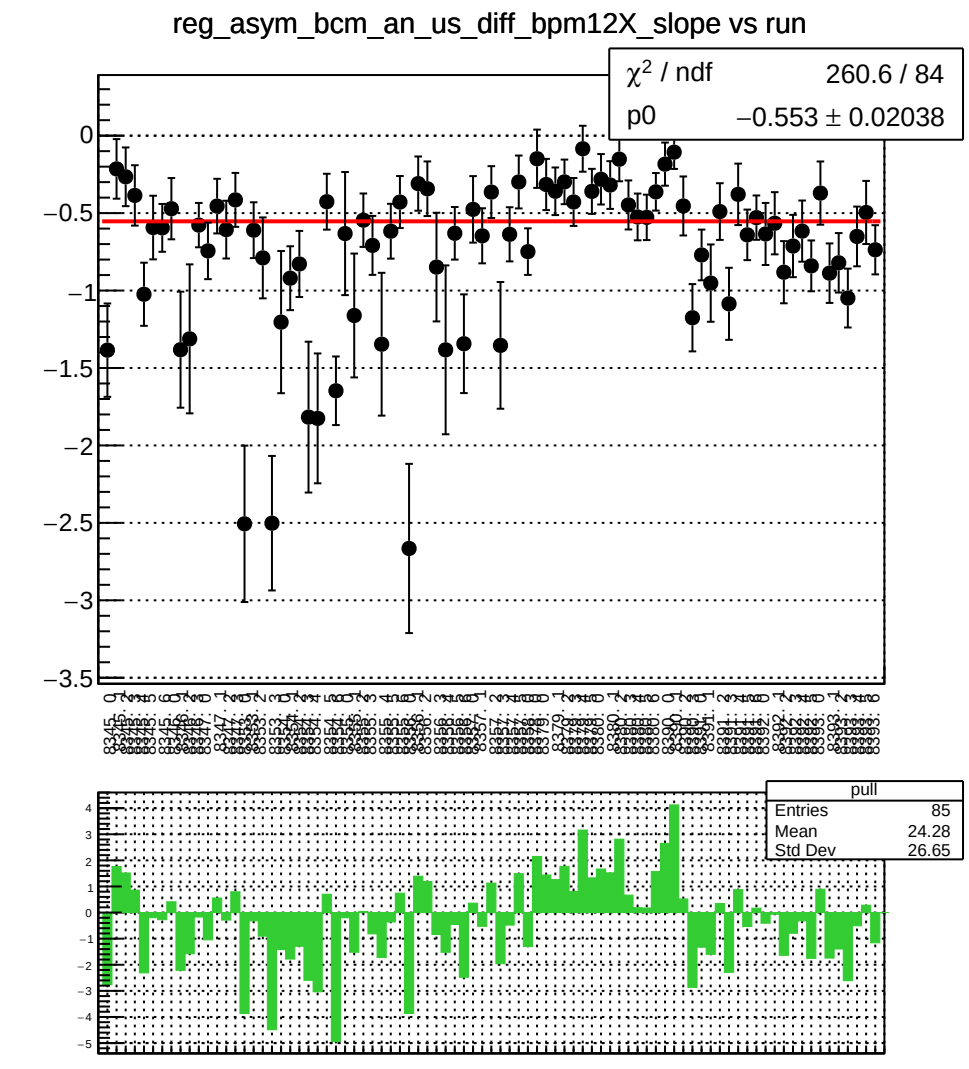

pull1D
Entries 85
Mean −0.1429
Std Dev 1.199

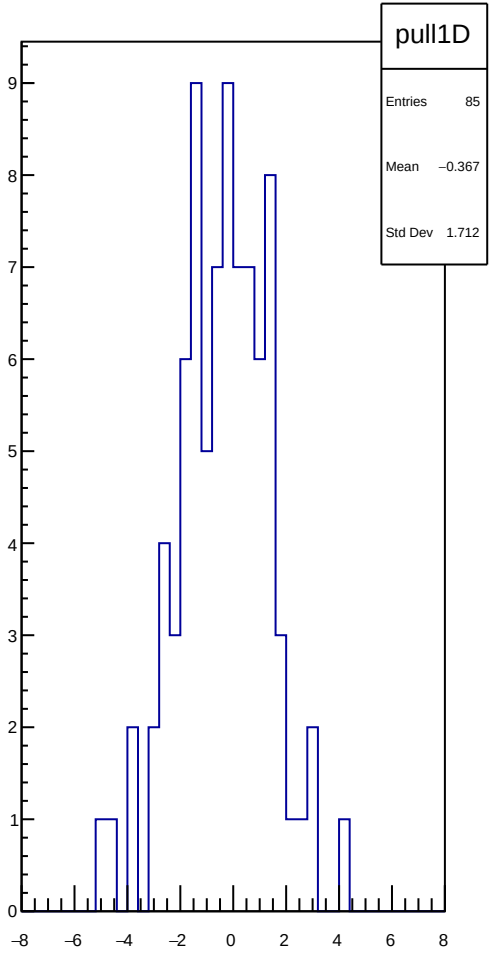

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 428.1 / 84
p0 −7.296 ± 0.2184
pull
Entries 85
Mean 24.29
Std Dev 21.71

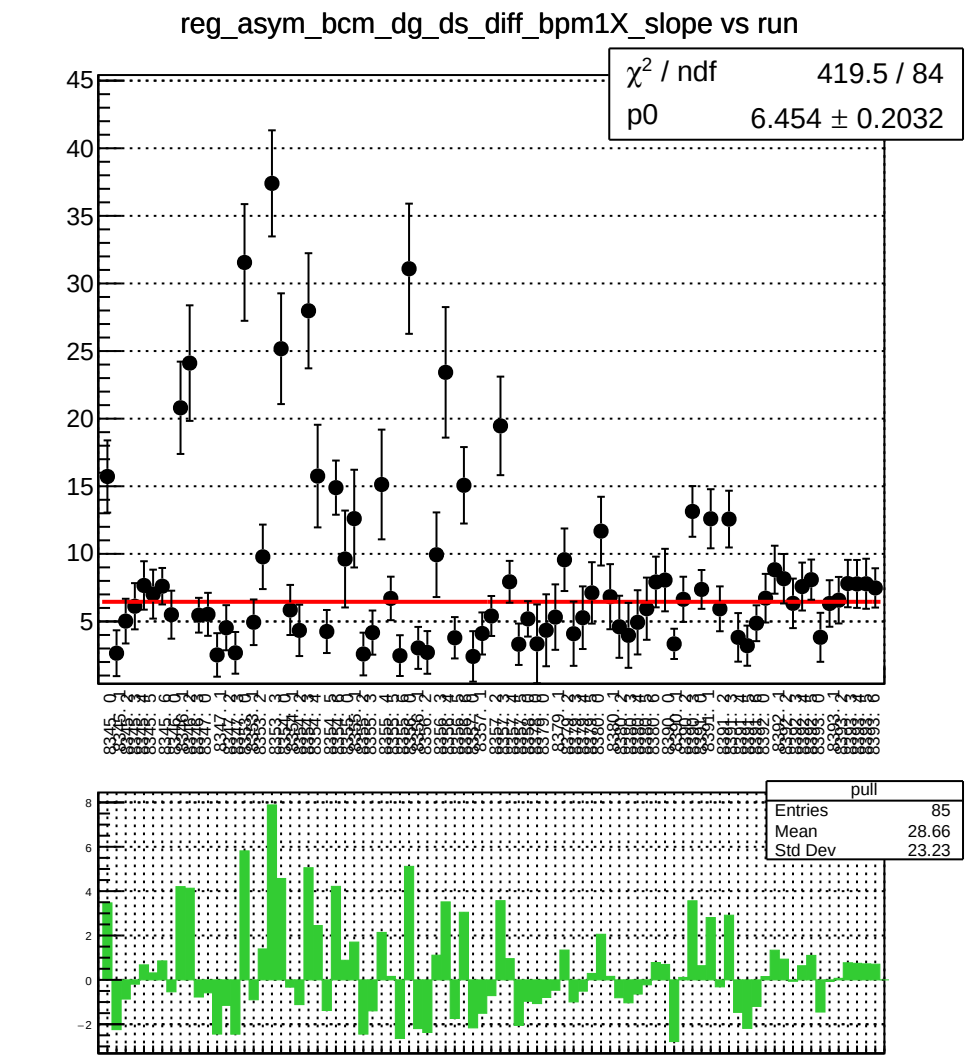

pull1D
Entries 85
Mean −0.4729
Std Dev 2.194

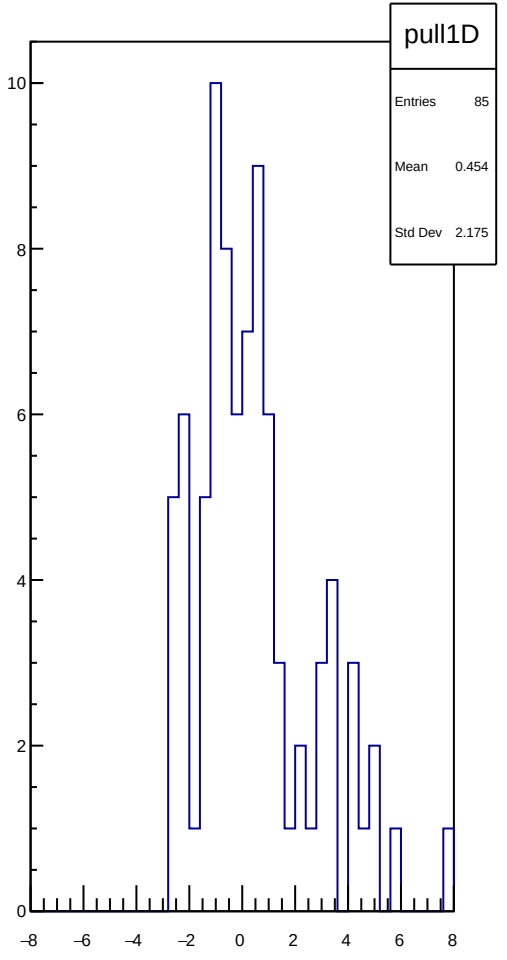

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 116.7 / 84
p0 −0.4703 ± 0.363
pull
Entries 85
Mean 51.47
Std Dev 34.18

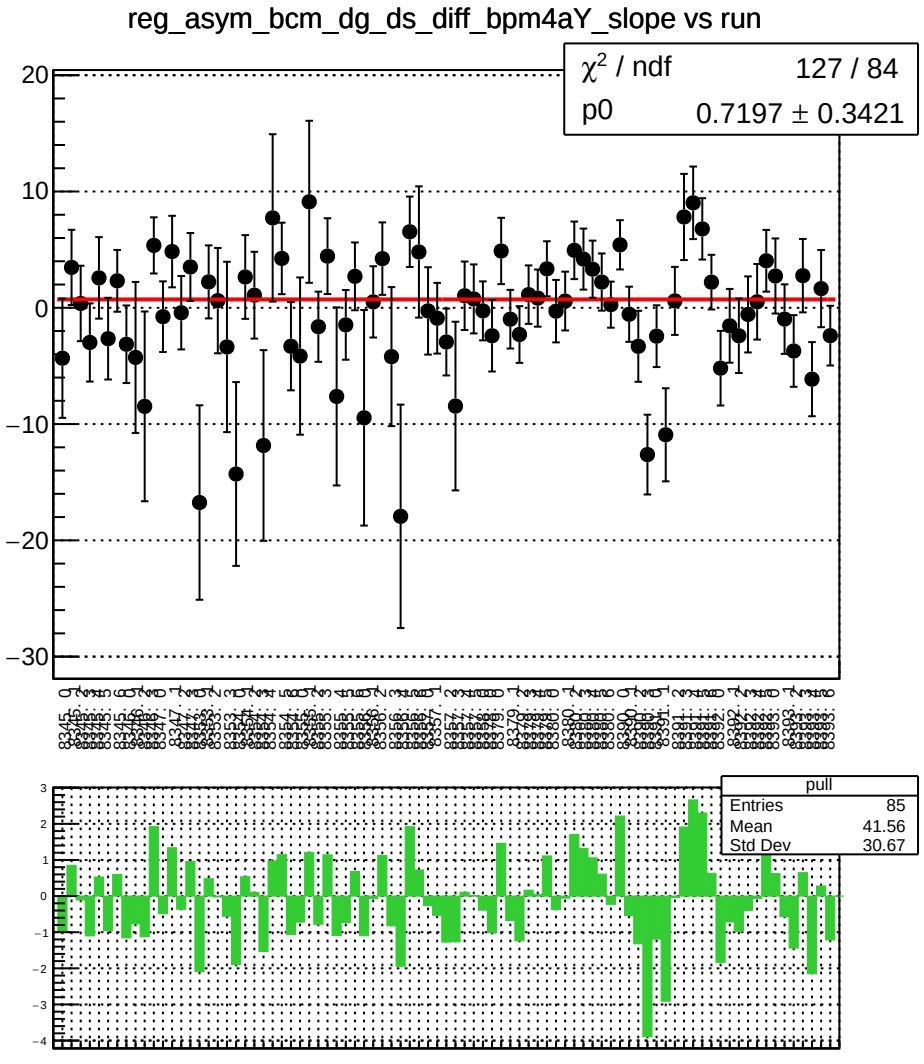

pull1D
Entries 85
Mean 0.1241
Std Dev 1.165

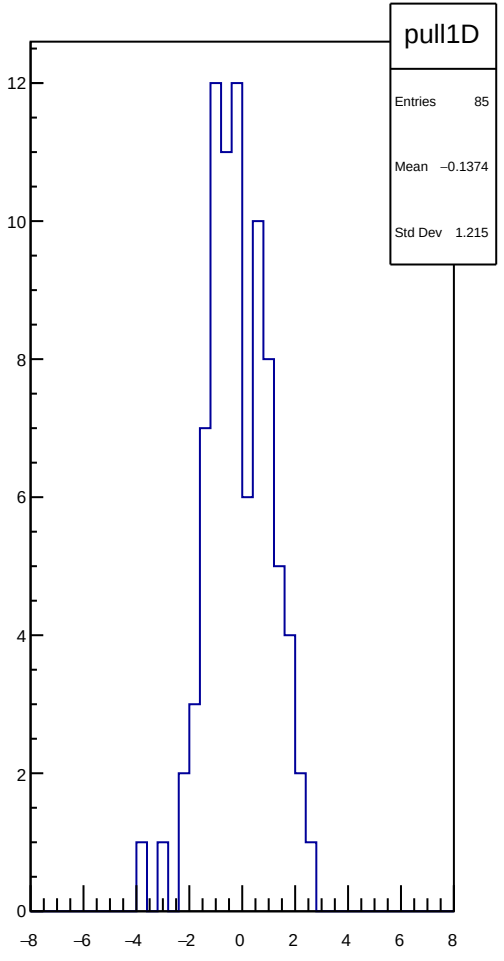

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 260.6 / 84
p0 −0.553 ± 0.02038
pull
Entries 85
Mean 24.28
Std Dev 26.65

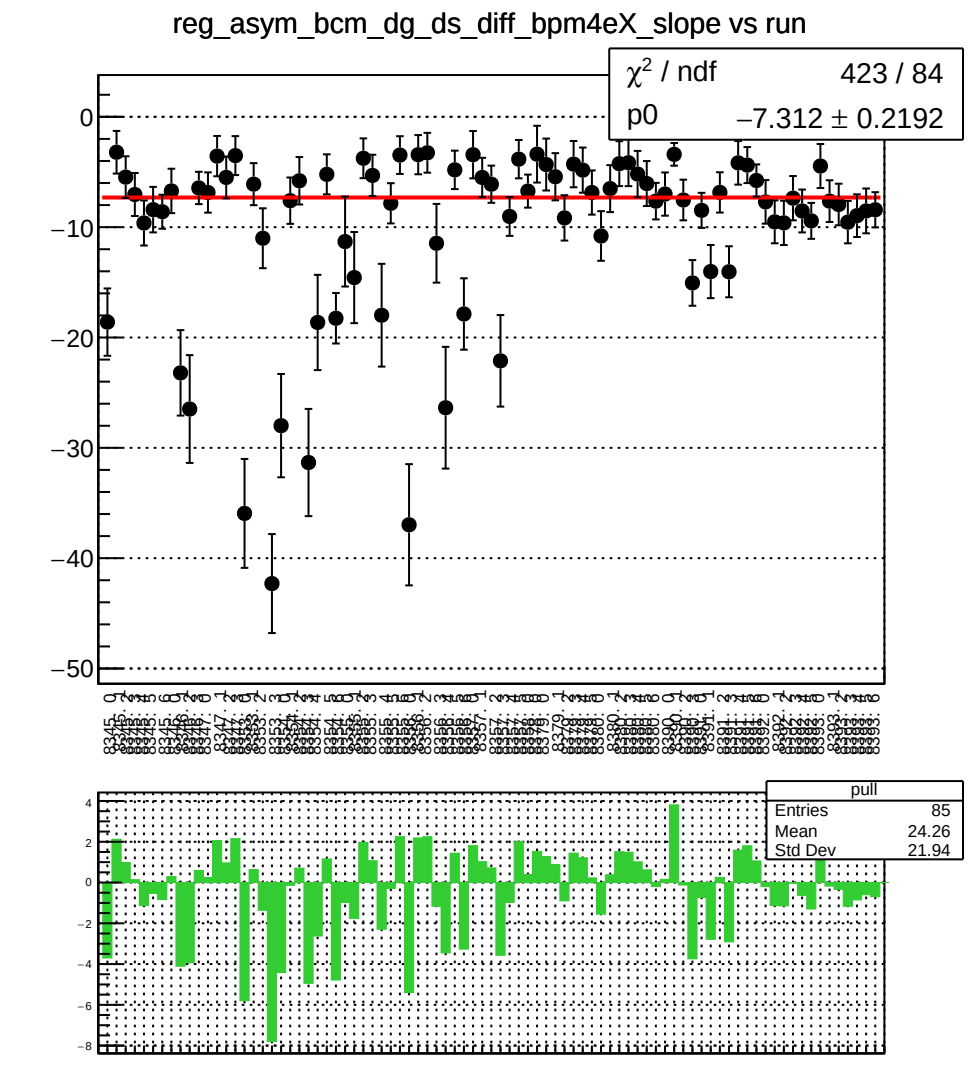

pull1D
Entries 85
Mean −0.367
Std Dev 1.712

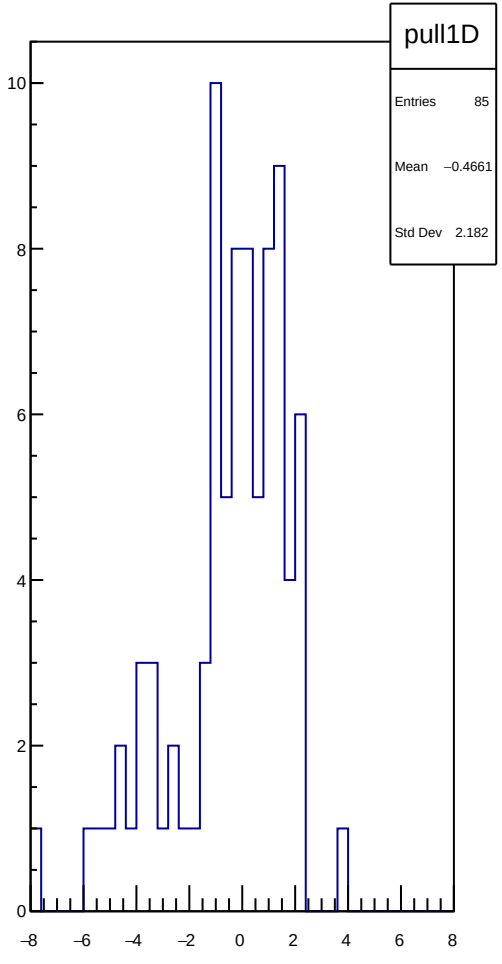

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 419.5 / 84
p0 6.454 ± 0.2032
pull
Entries 85
Mean 28.66
Std Dev 23.23

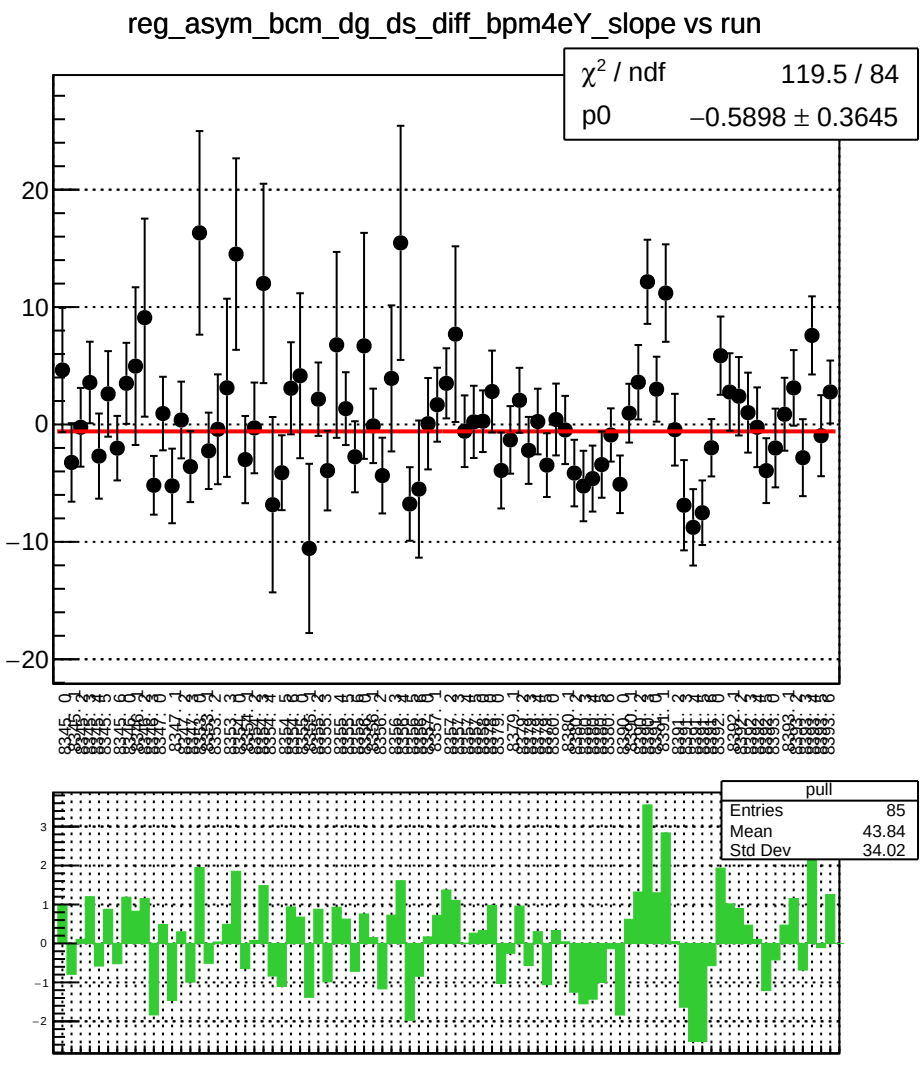

pull1D
Entries 85
Mean 0.454
Std Dev 2.175

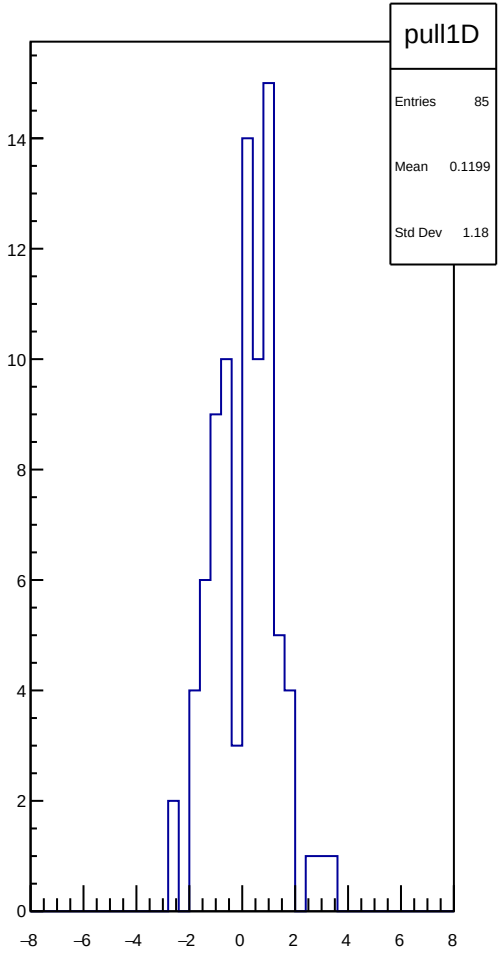

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 127 / 84
p0 0.7197 ± 0.3421
pull
Entries 85
Mean 41.56
Std Dev 30.67

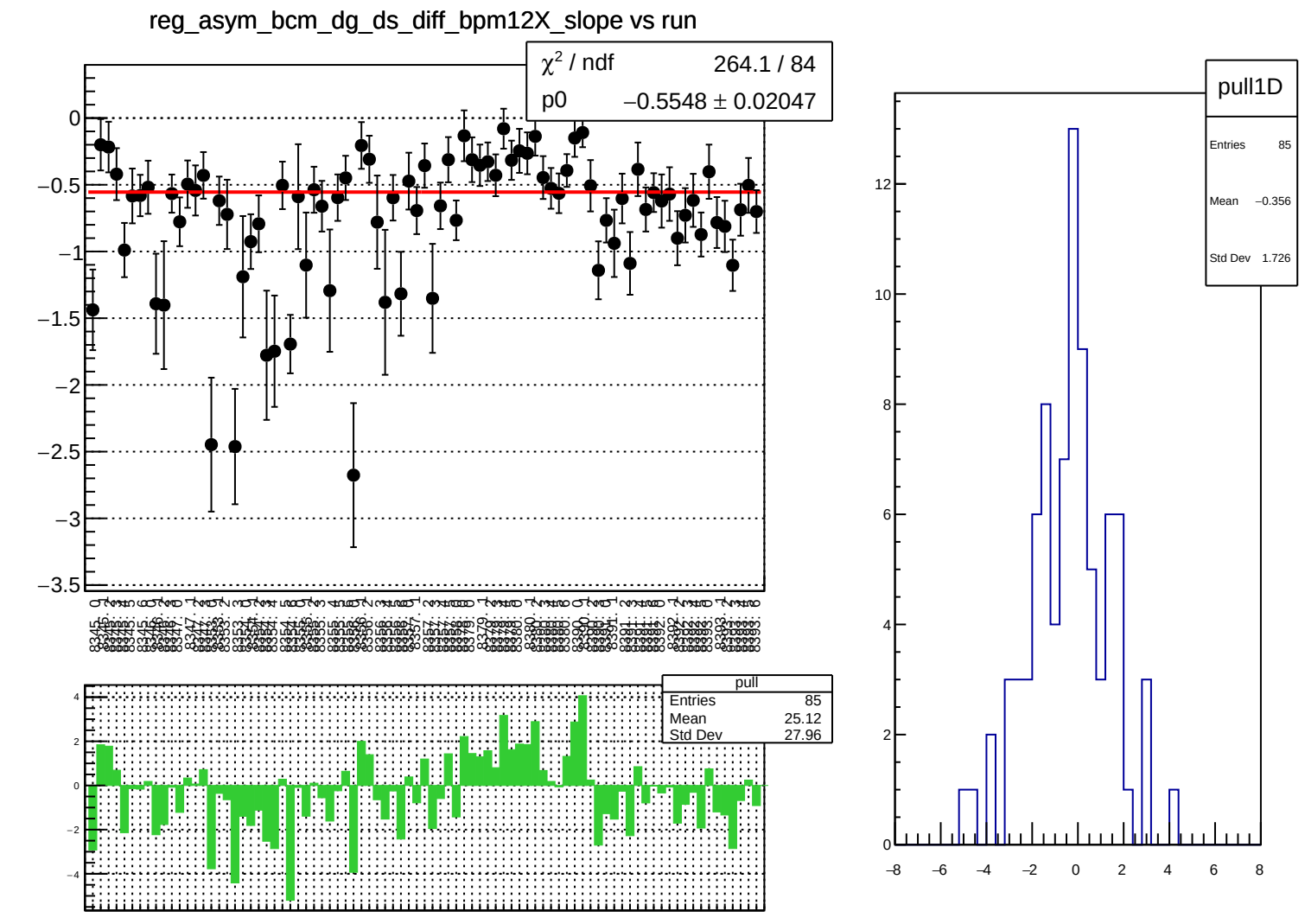

pull1D
Entries 85
Mean −0.1374
Std Dev 1.215

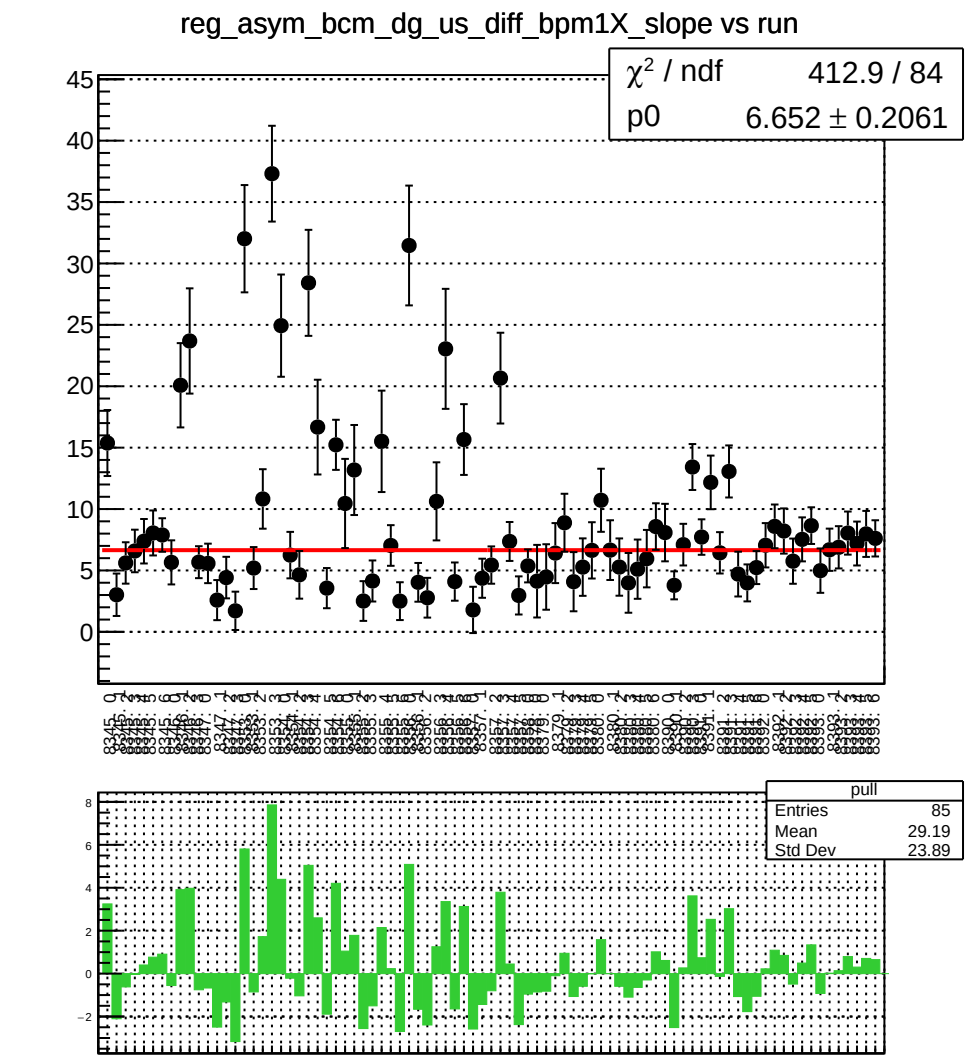

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 423 / 84
p0 −7.312 ± 0.2192
pull
Entries 85
Mean 24.26
Std Dev 21.94

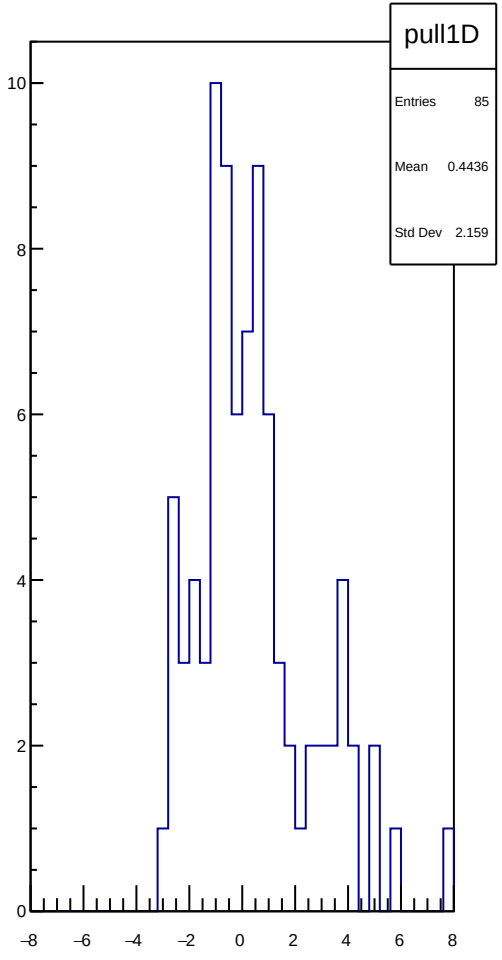

pull1D
Entries 85
Mean −0.4661
Std Dev 2.182

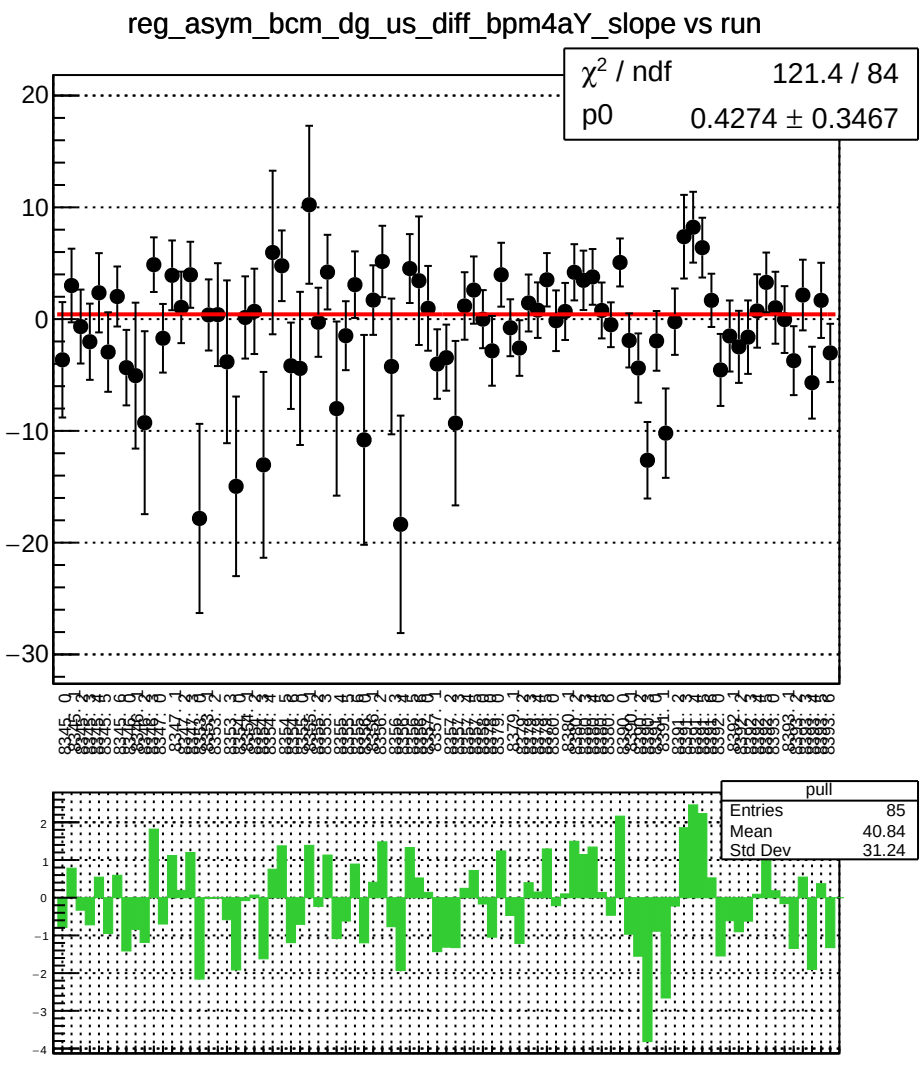

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 119.5 / 84
p0 −0.5898 ± 0.3645
pull
Entries 85
Mean 43.84
Std Dev 34.02

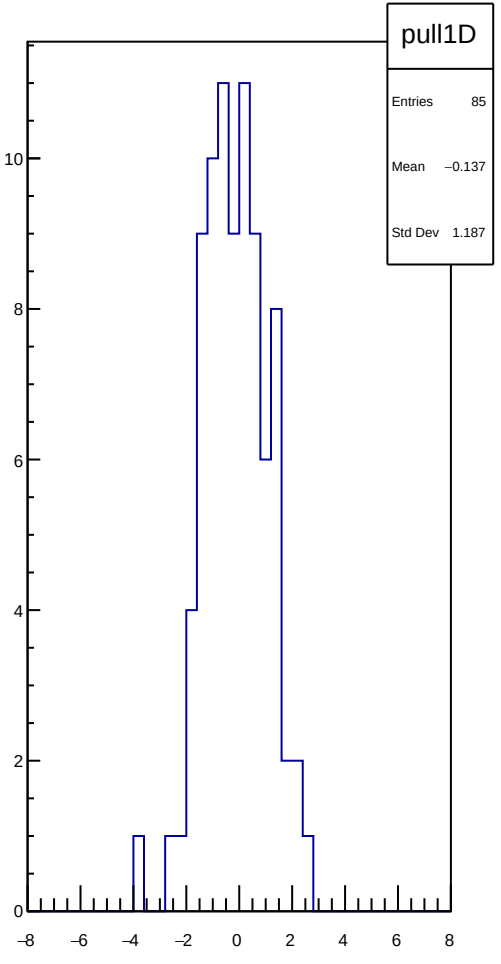

pull1D
Entries 85
Mean 0.1199
Std Dev 1.18

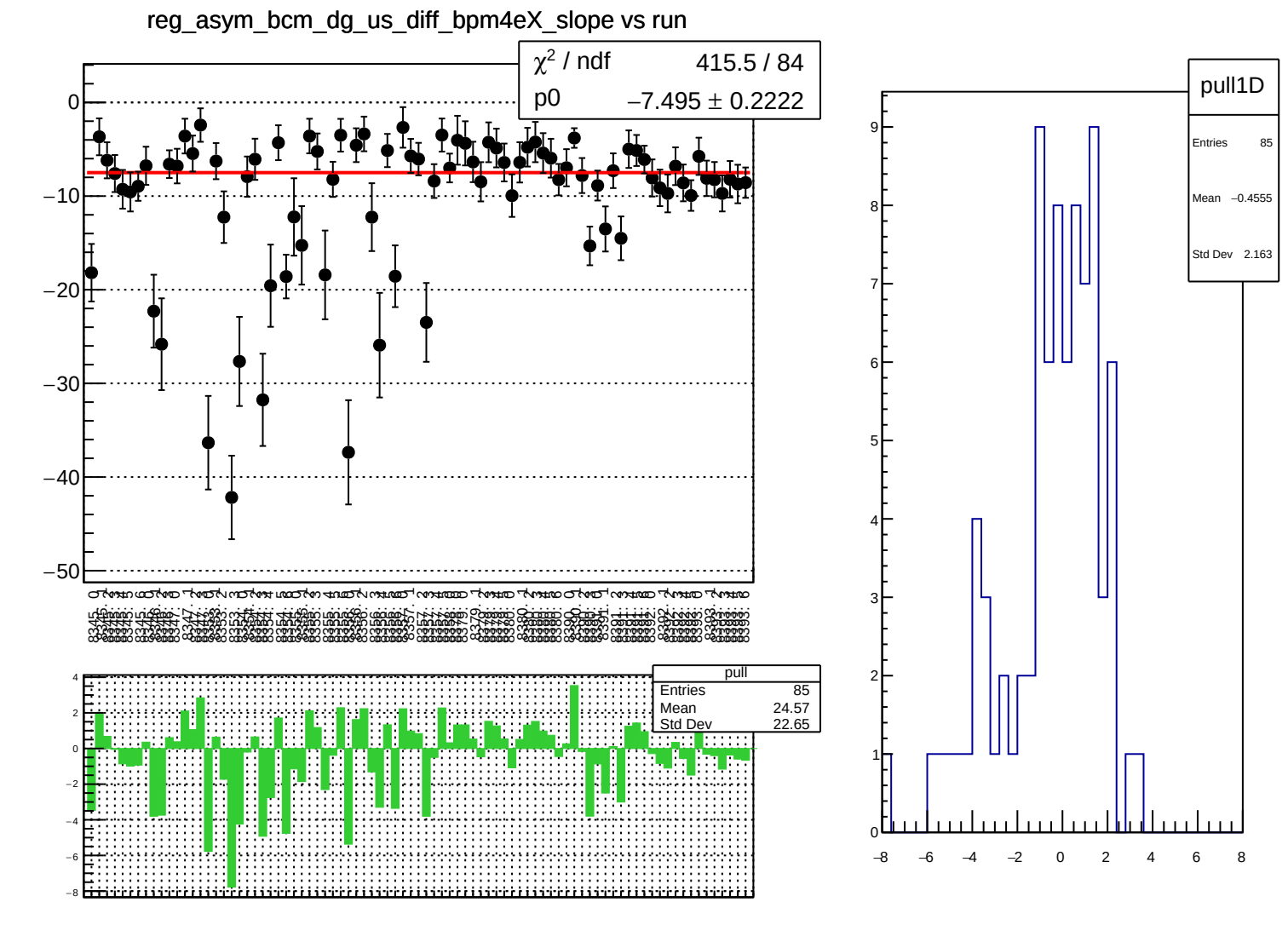

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 264.1 / 84
p0 −0.5548 ± 0.02047
pull
Entries 85
Mean 25.12
Std Dev 27.96
pull1D
Entries 85
Mean −0.356
Std Dev 1.726

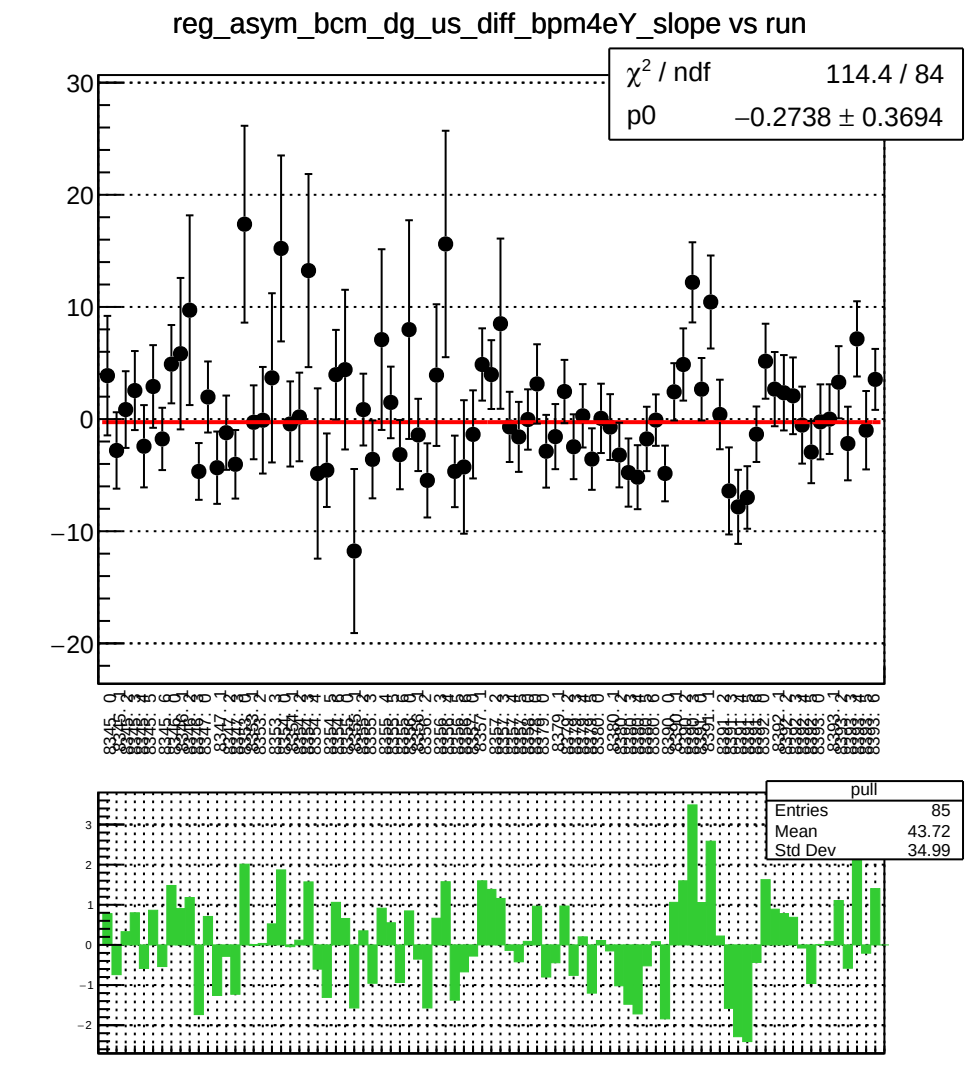

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 412.9 / 84
p0 6.652 ± 0.2061
pull
Entries 85
Mean 29.19
Std Dev 23.89

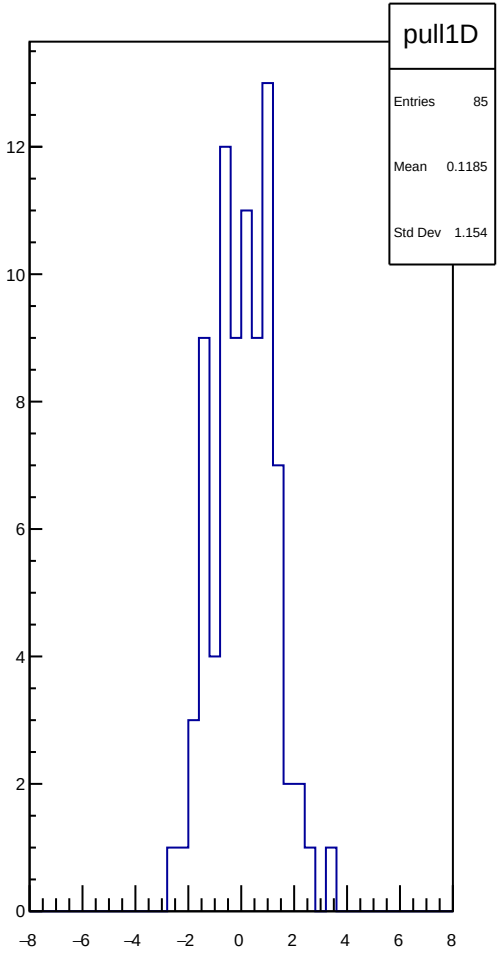

pull1D
Entries 85
Mean 0.4436
Std Dev 2.159

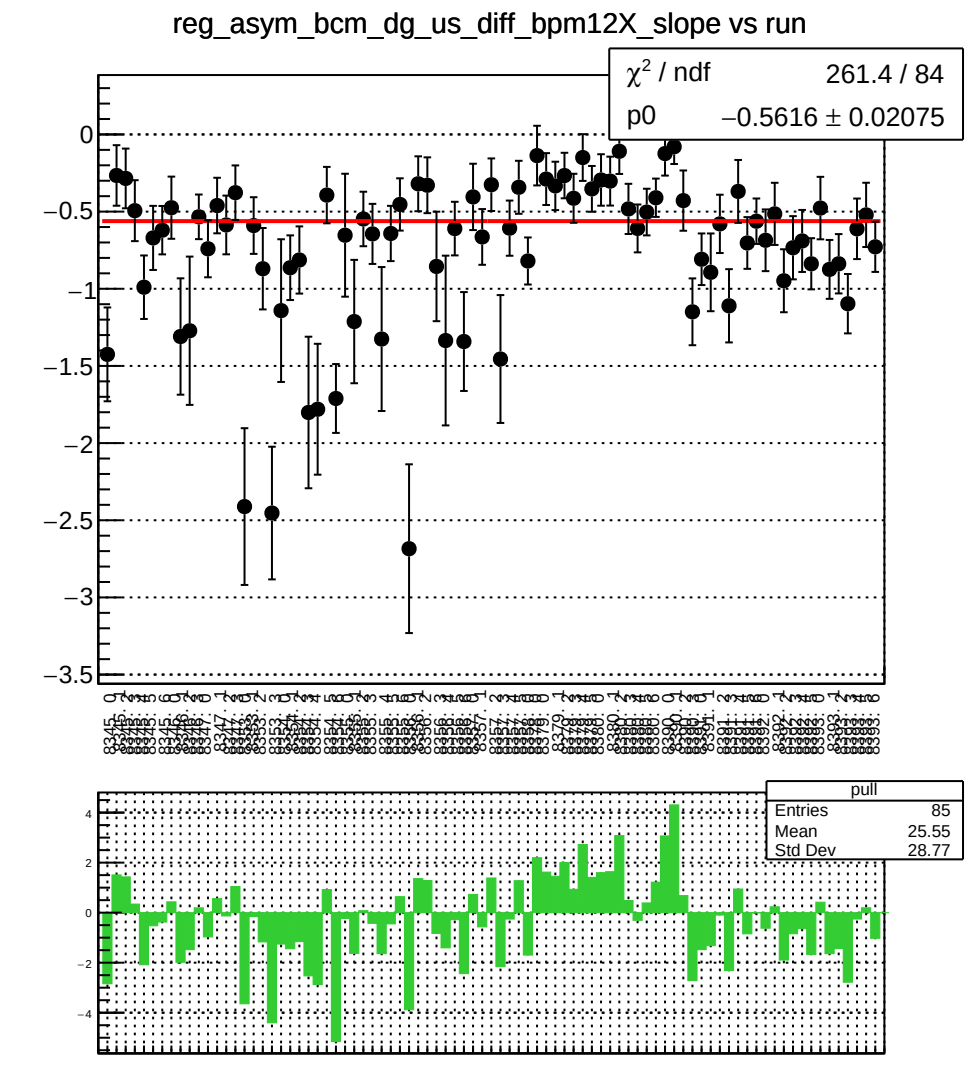

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 121.4 / 84
p0 0.4274 ± 0.3467
pull
Entries 85
Mean 40.84
Std Dev 31.24

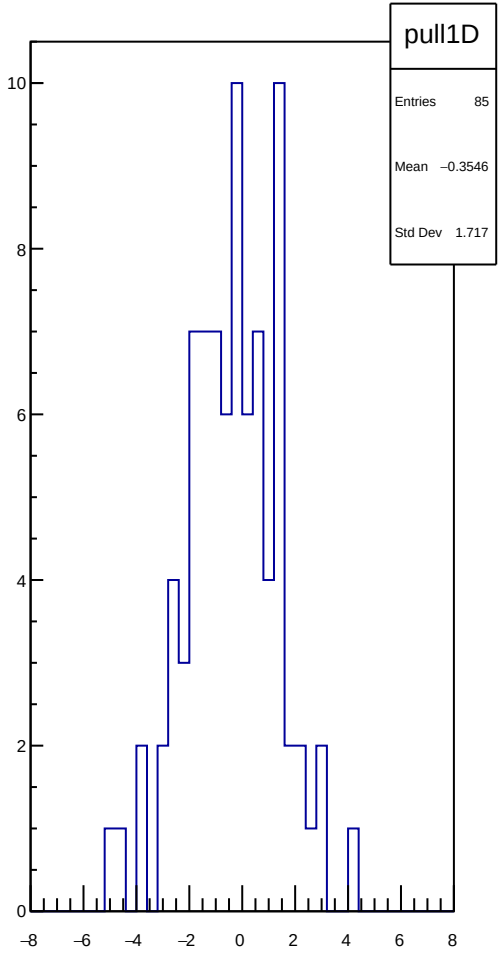

pull1D
Entries 85
Mean −0.137
Std Dev 1.187

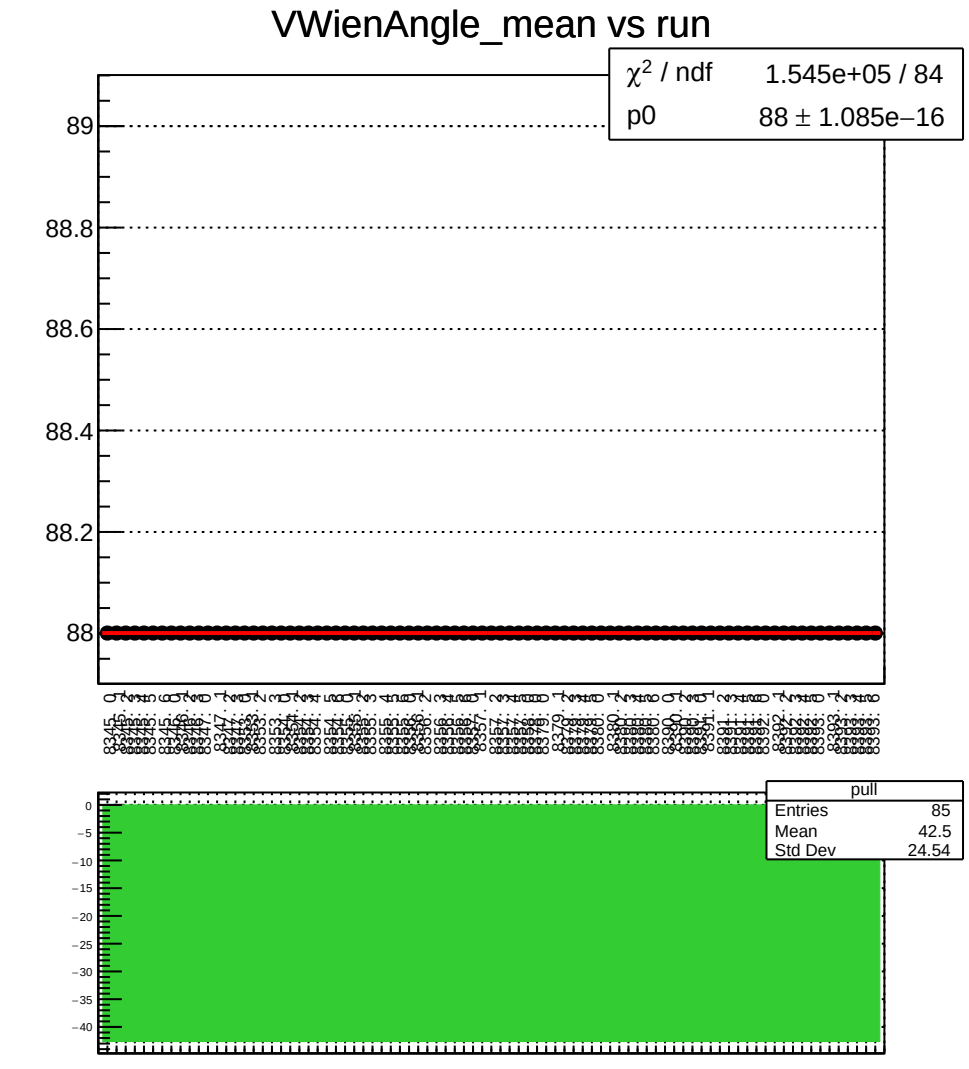

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 415.5 / 84
p0 −7.495 ± 0.2222
pull
Entries 85
Mean 24.57
Std Dev 22.65
pull1D
Entries 85
Mean −0.4555
Std Dev 2.163

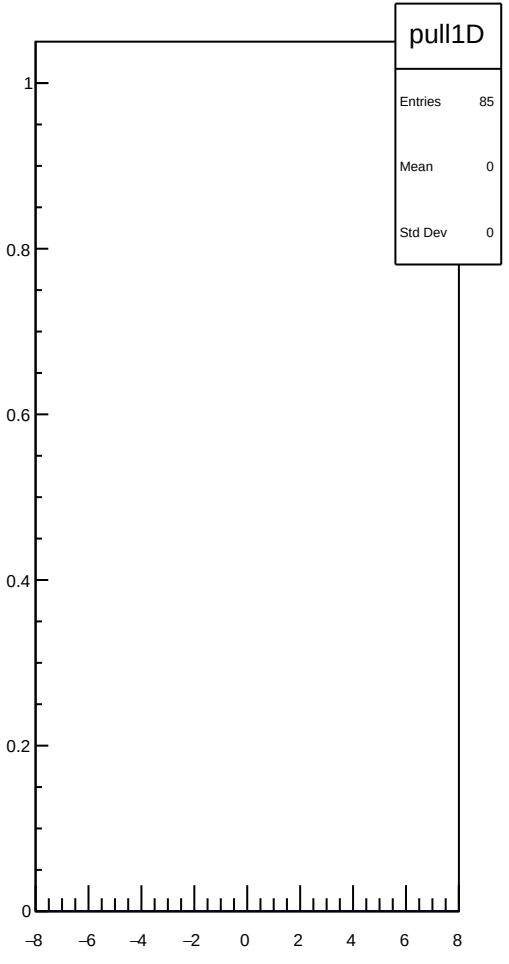

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 114.4 / 84
p0 −0.2738 ± 0.3694
pull
Entries 85
Mean 43.72
Std Dev 34.99

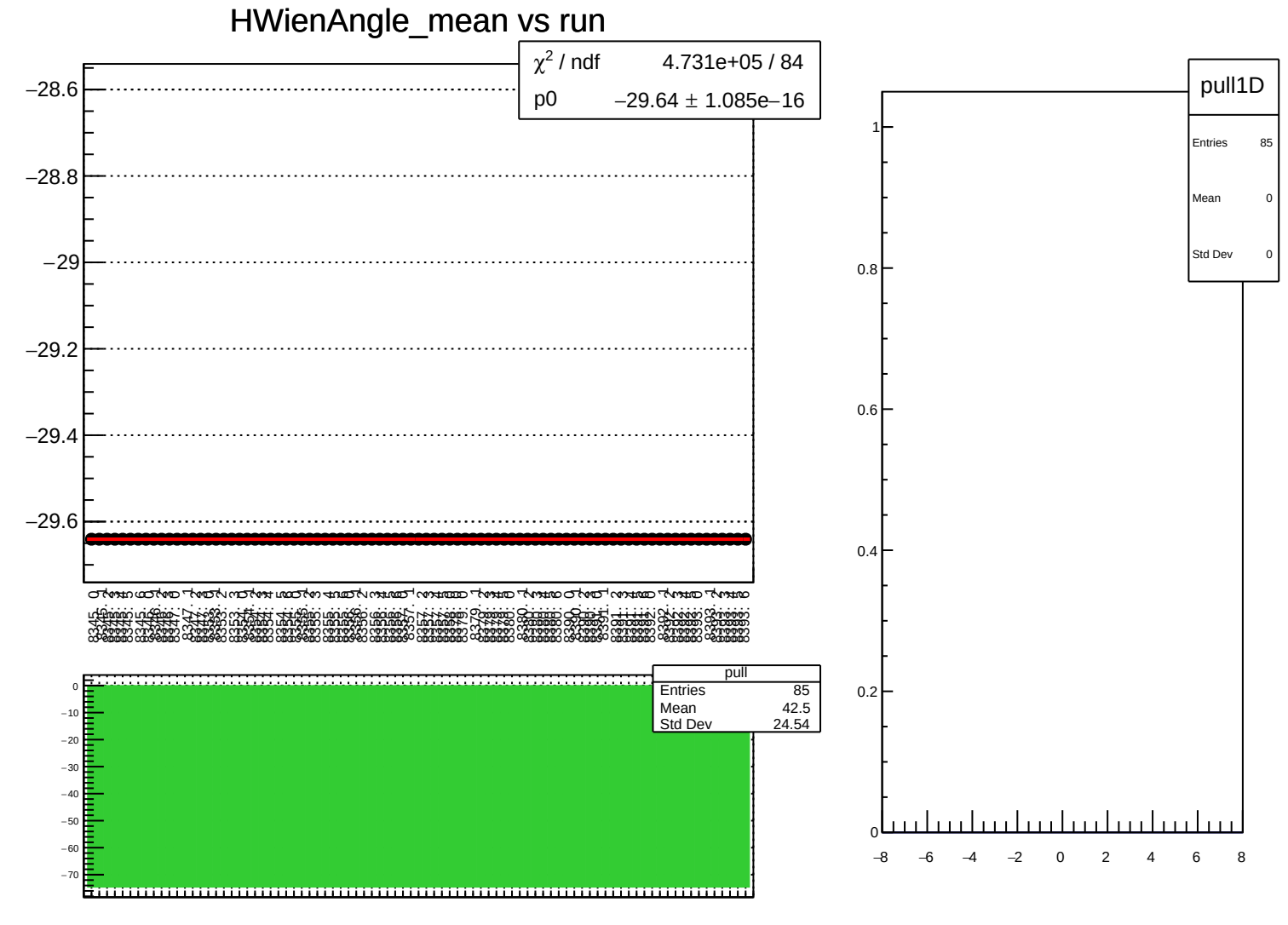

pull1D
Entries 85
Mean 0.1185
Std Dev 1.154

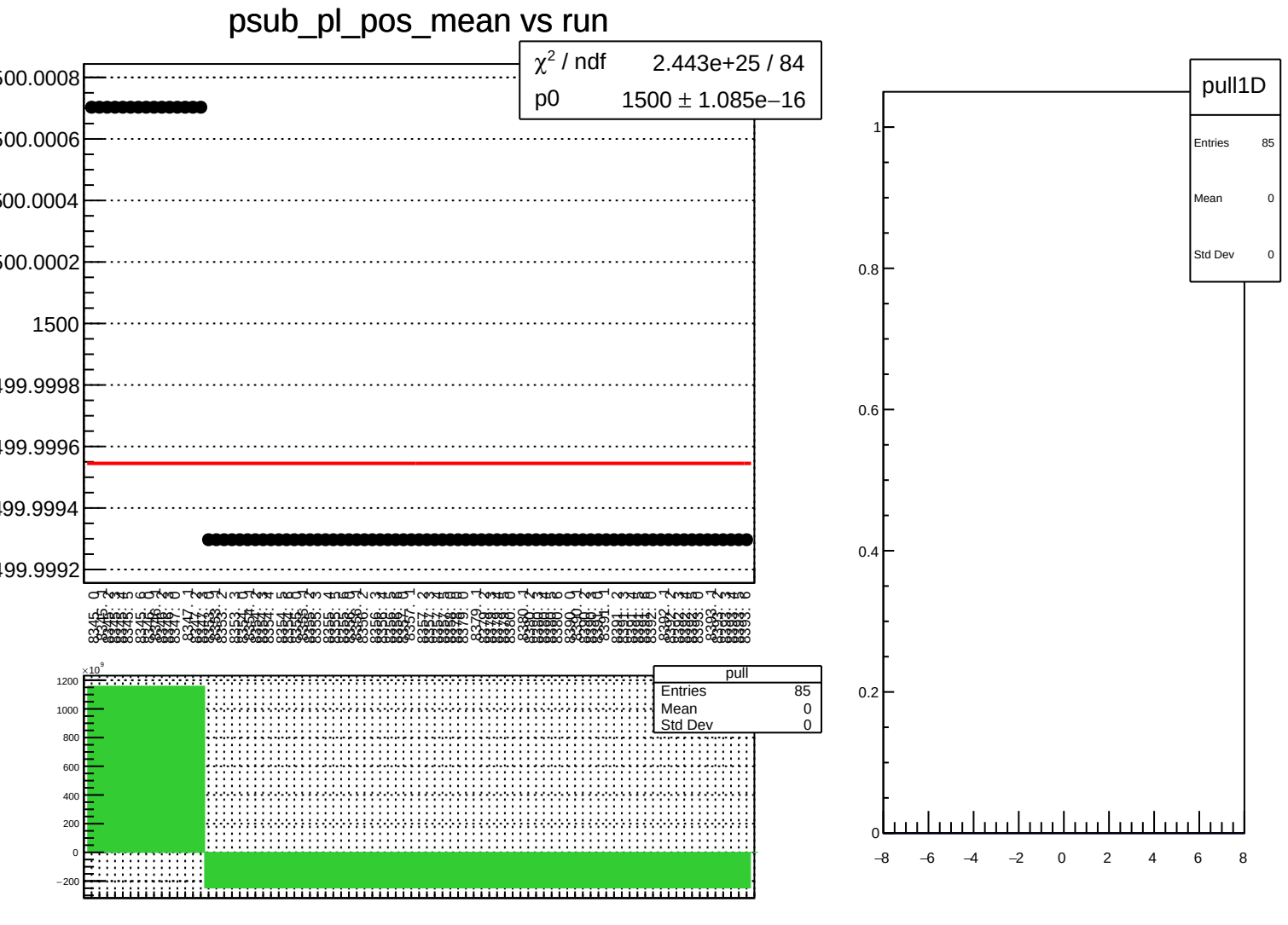

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 261.4 / 84
p0 −0.5616 ± 0.02075
pull
Entries 85
Mean 25.55
Std Dev 28.77

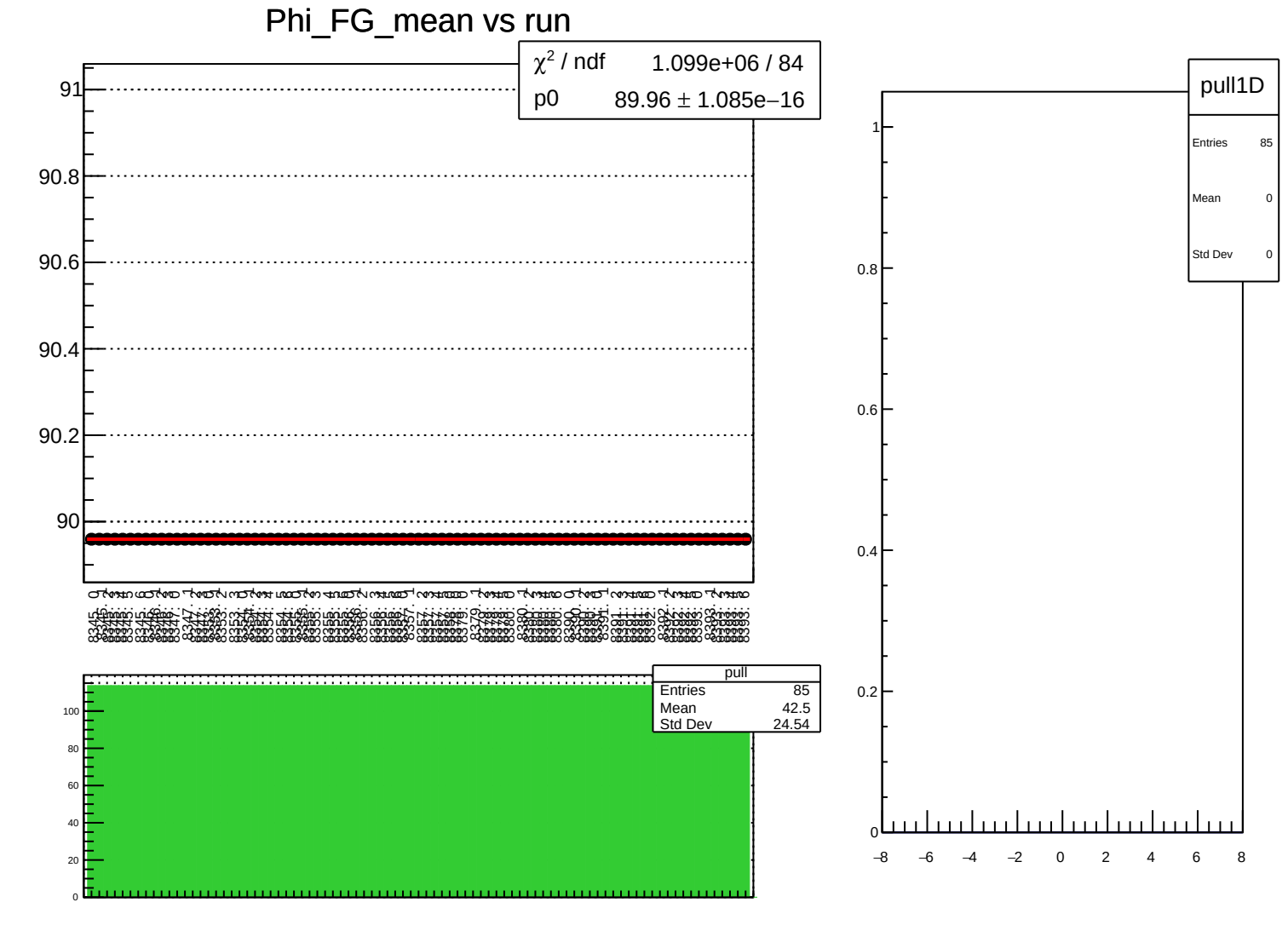

pull1D
Entries 85
Mean −0.3546
Std Dev 1.717

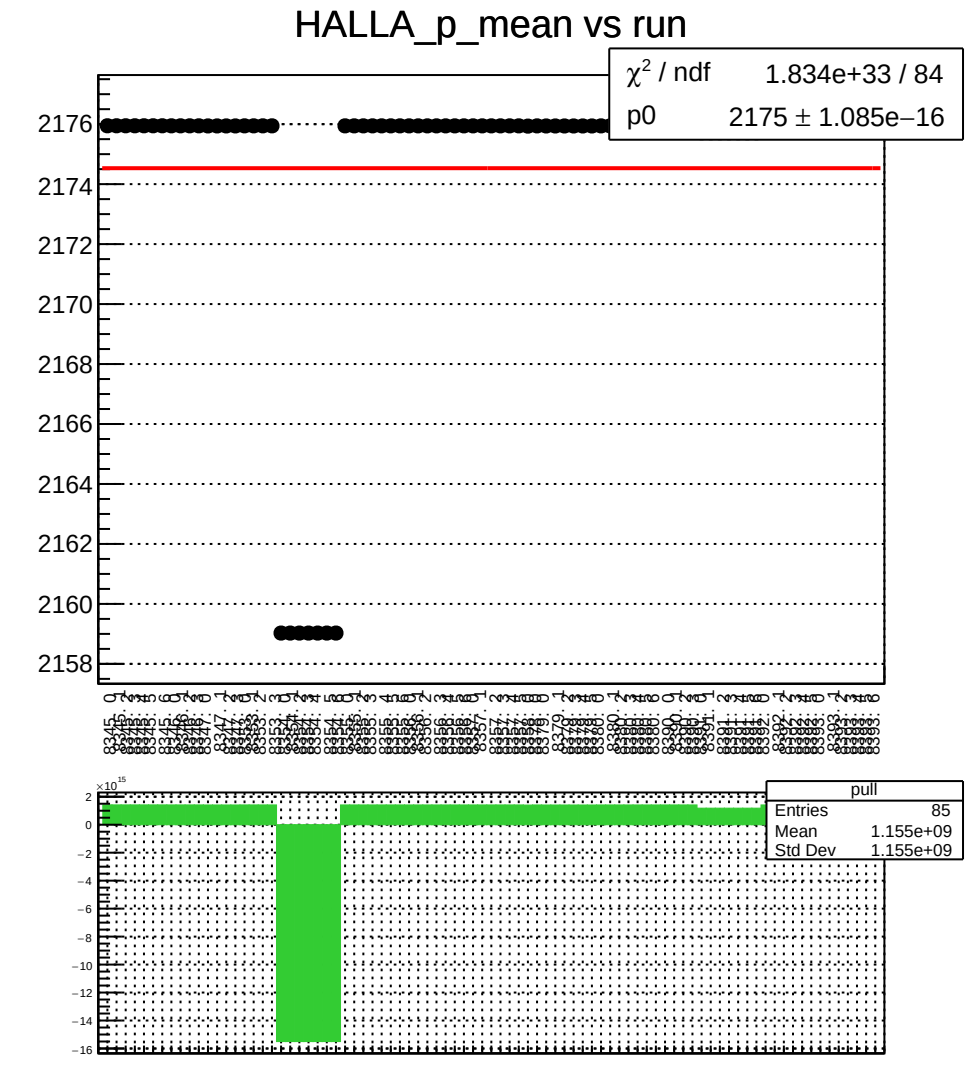

VWienAngle_mean vs run
χ² / ndf 1.545e+05 / 84
p0 88 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−5
−10
−15
−20
−25
−30
−35
−40

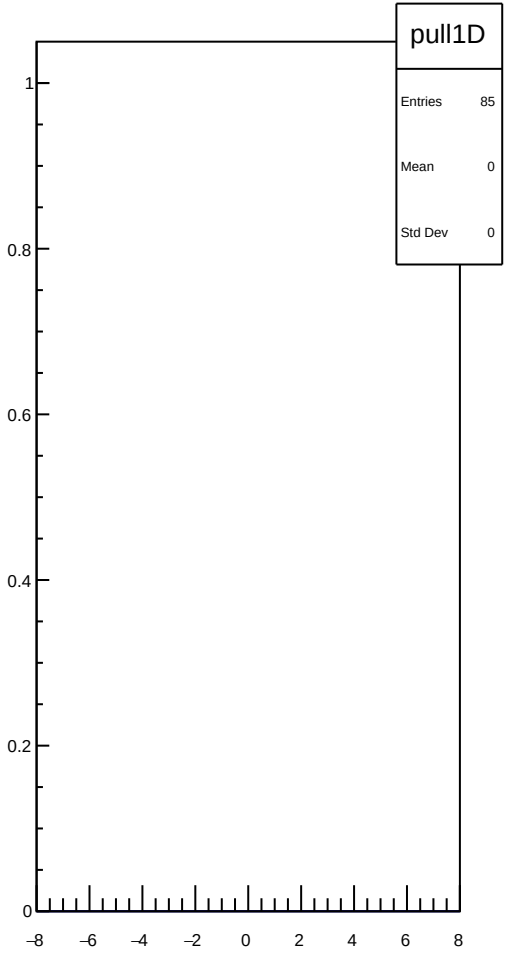

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

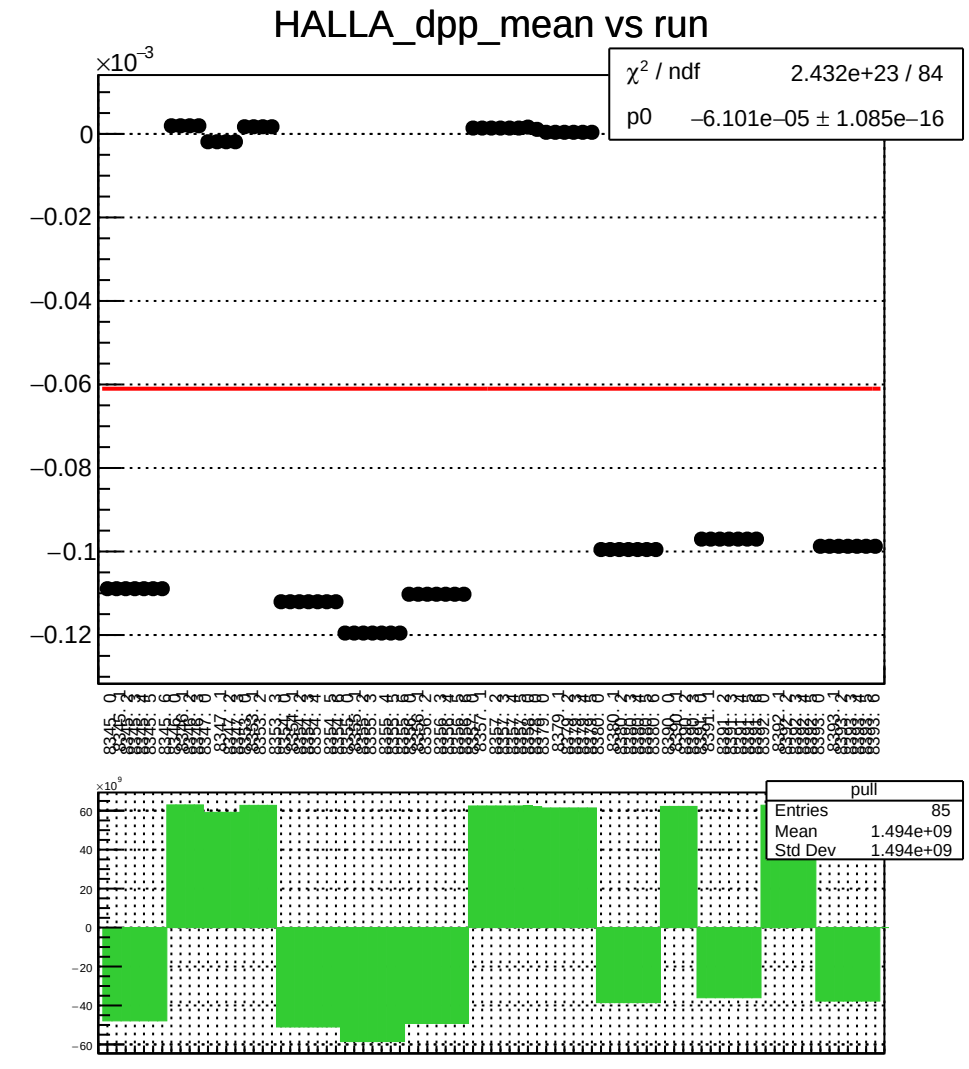

HWienAngle_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

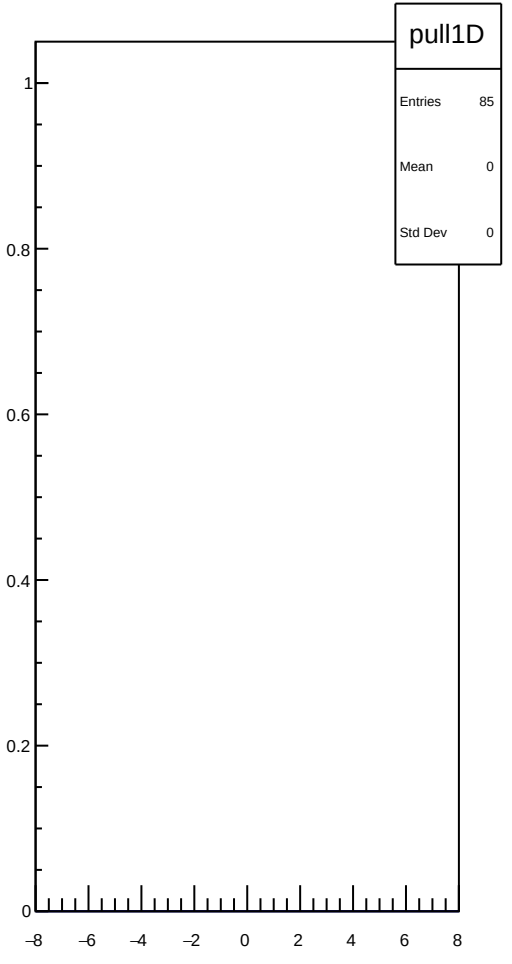

psub_pl_pos_mean vs run
χ² / ndf 2.443e+25 / 84
p0 1500 ± 1.085e−16
500.0008
500.0006
500.0004
500.0002
1500
499.9998
499.9996
499.9994
499.9992
pull
Entries 85
Mean 0
Std Dev 0
×10⁹
1200
1000
800
600
400
200
0
−200
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

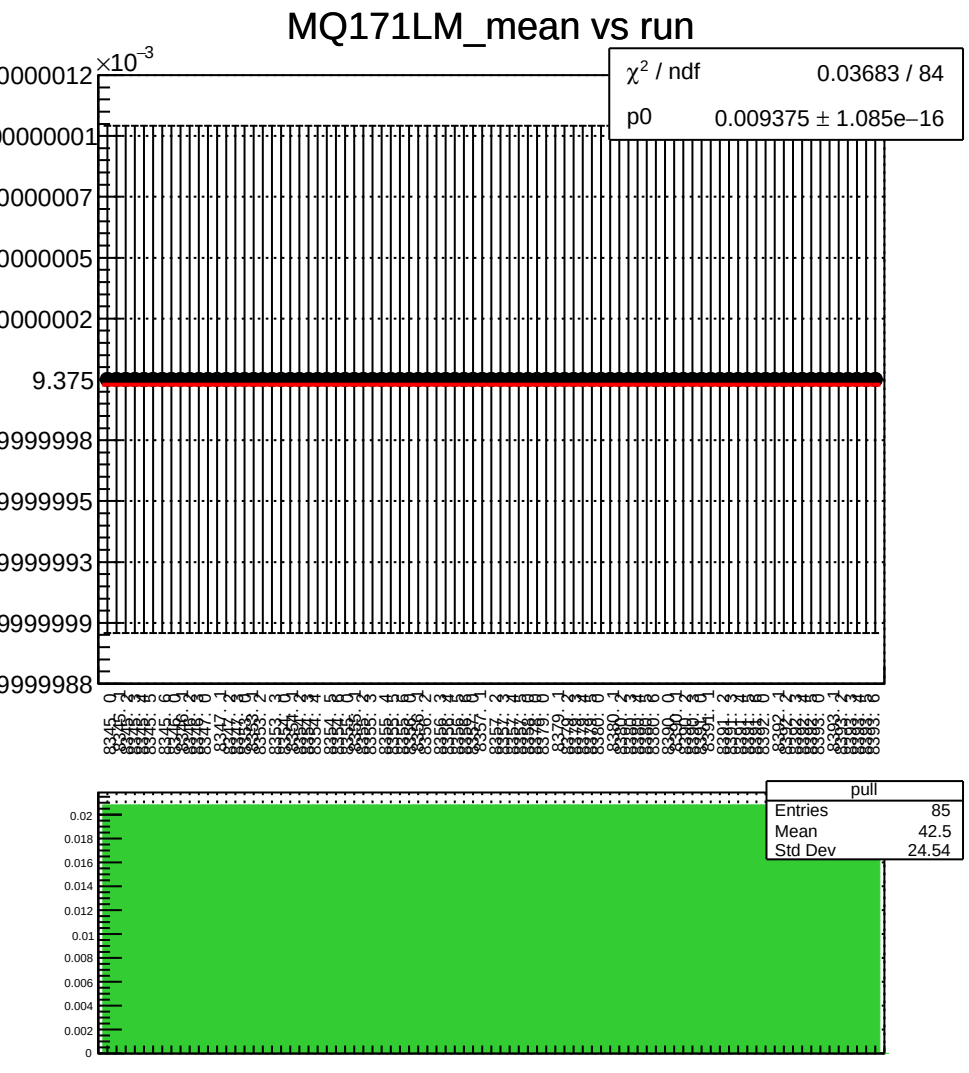

Phi_FG_mean vs run
χ² / ndf 1.099e+06 / 84
p0 89.96 ± 1.085e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 85
Mean 42.5
Std Dev 24.54
100
80
60
40
20
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

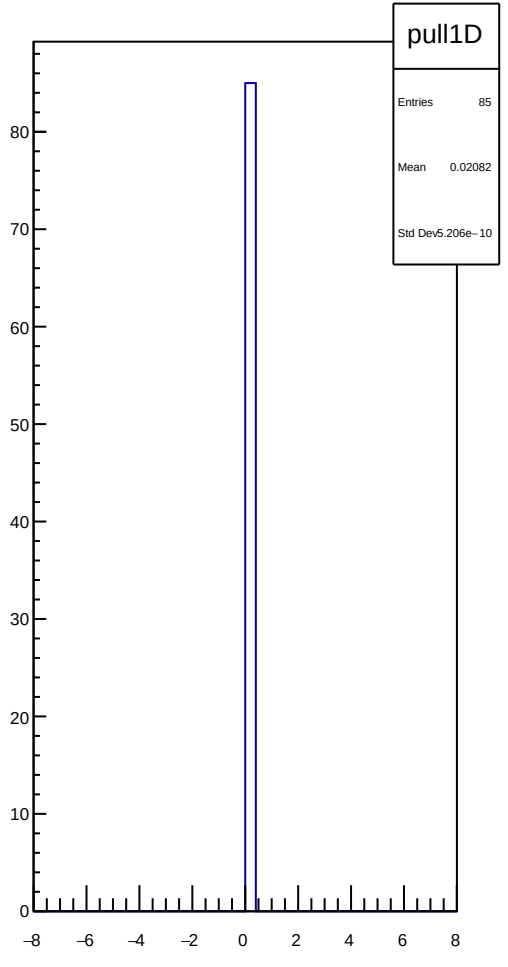

HALLA_p_mean vs run
χ² / ndf 1.834e+33 / 84
p0 2175 ± 1.085e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 85
Mean 1.155e+09
Std Dev 1.155e+09
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14
−16

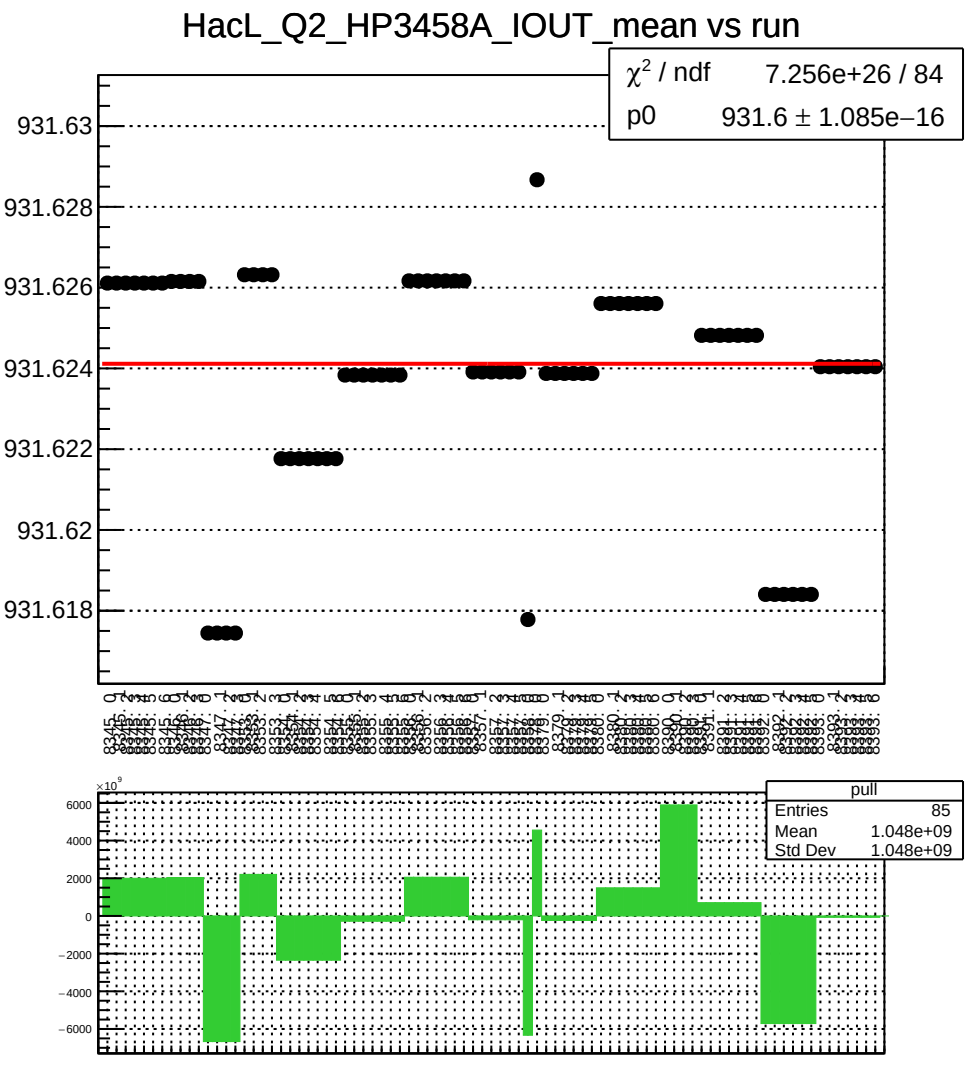

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

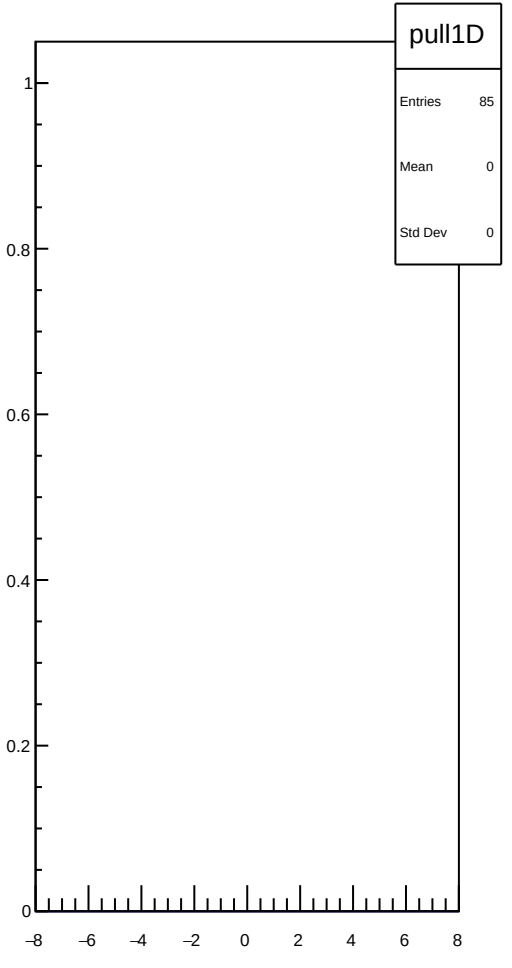

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 2.432e+23 / 84
p0 −6.101e−05 ± 1.085e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
×10⁹
pull
Entries 85
Mean 1.494e+09
Std Dev 1.494e+09
60
40
20
0
−20
−40
−60

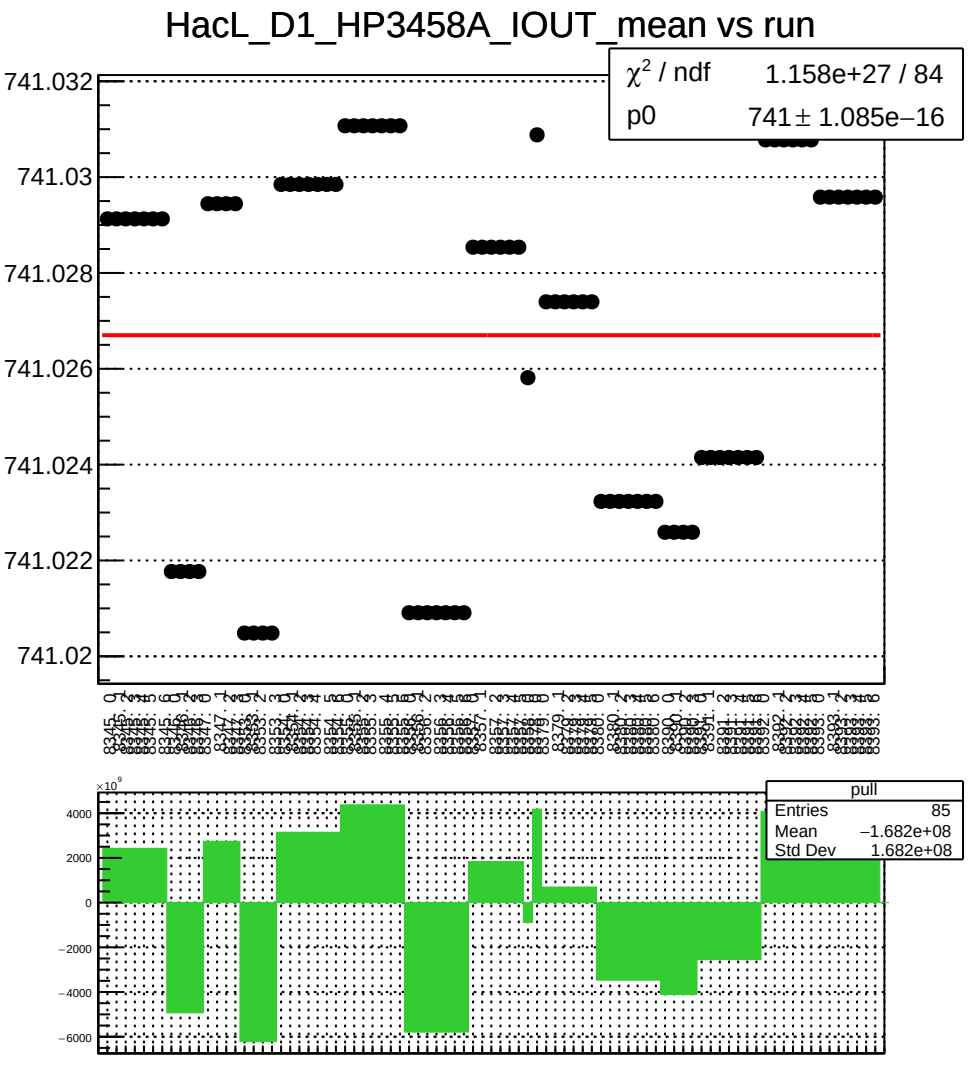

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

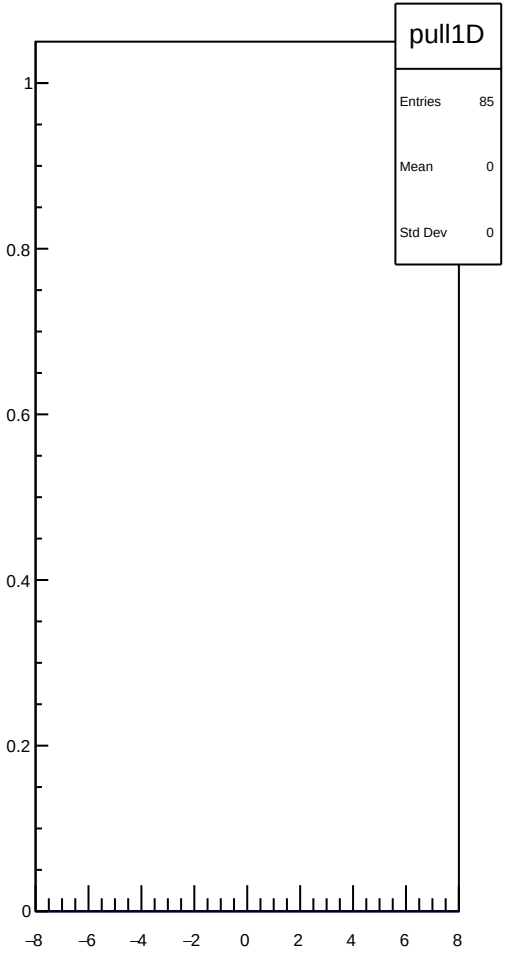

MQ171LM_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54

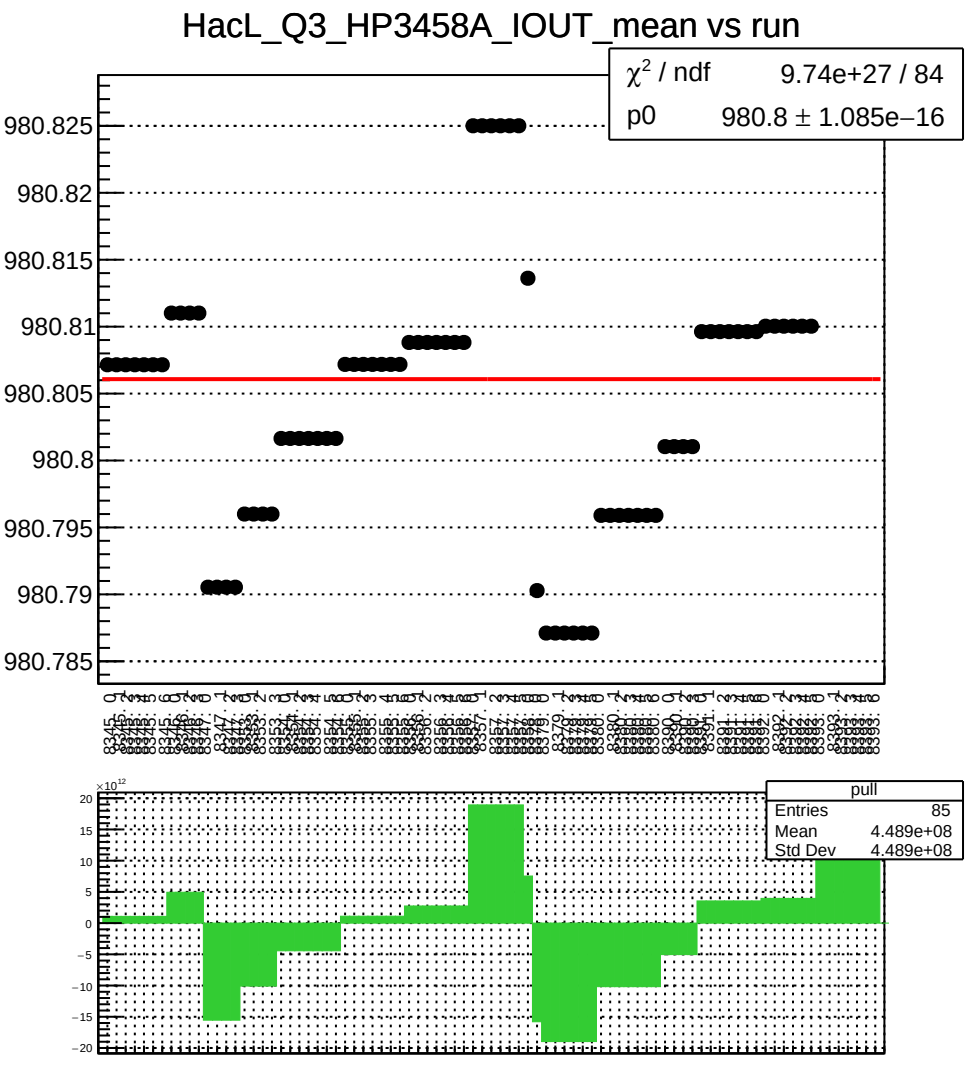

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

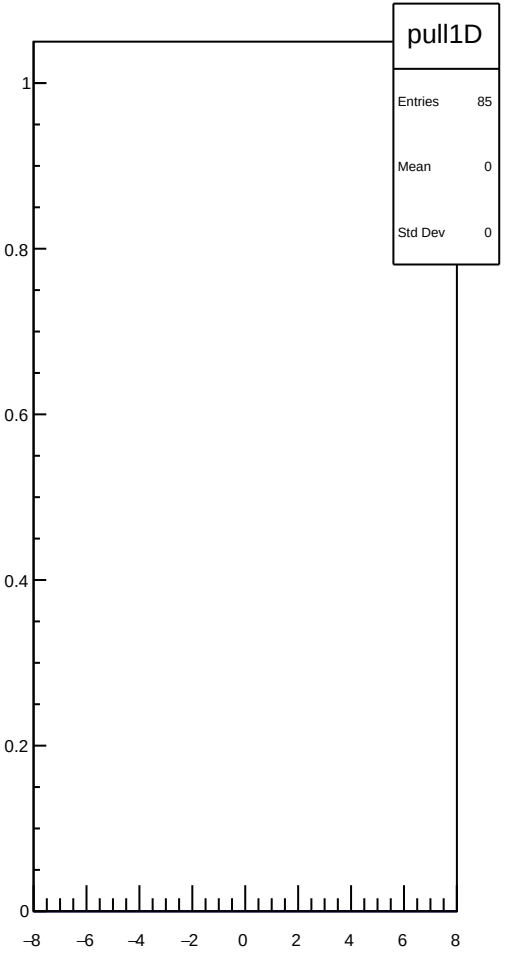

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 7.256e+26 / 84
p0 931.6 ± 1.085e−16
931.63
931.628
931.626
931.624
931.622
931.62
931.618
pull
Entries 85
Mean 1.048e+09
Std Dev 1.048e+09
×10⁹
6000
4000
2000
0
−2000
−4000
−6000

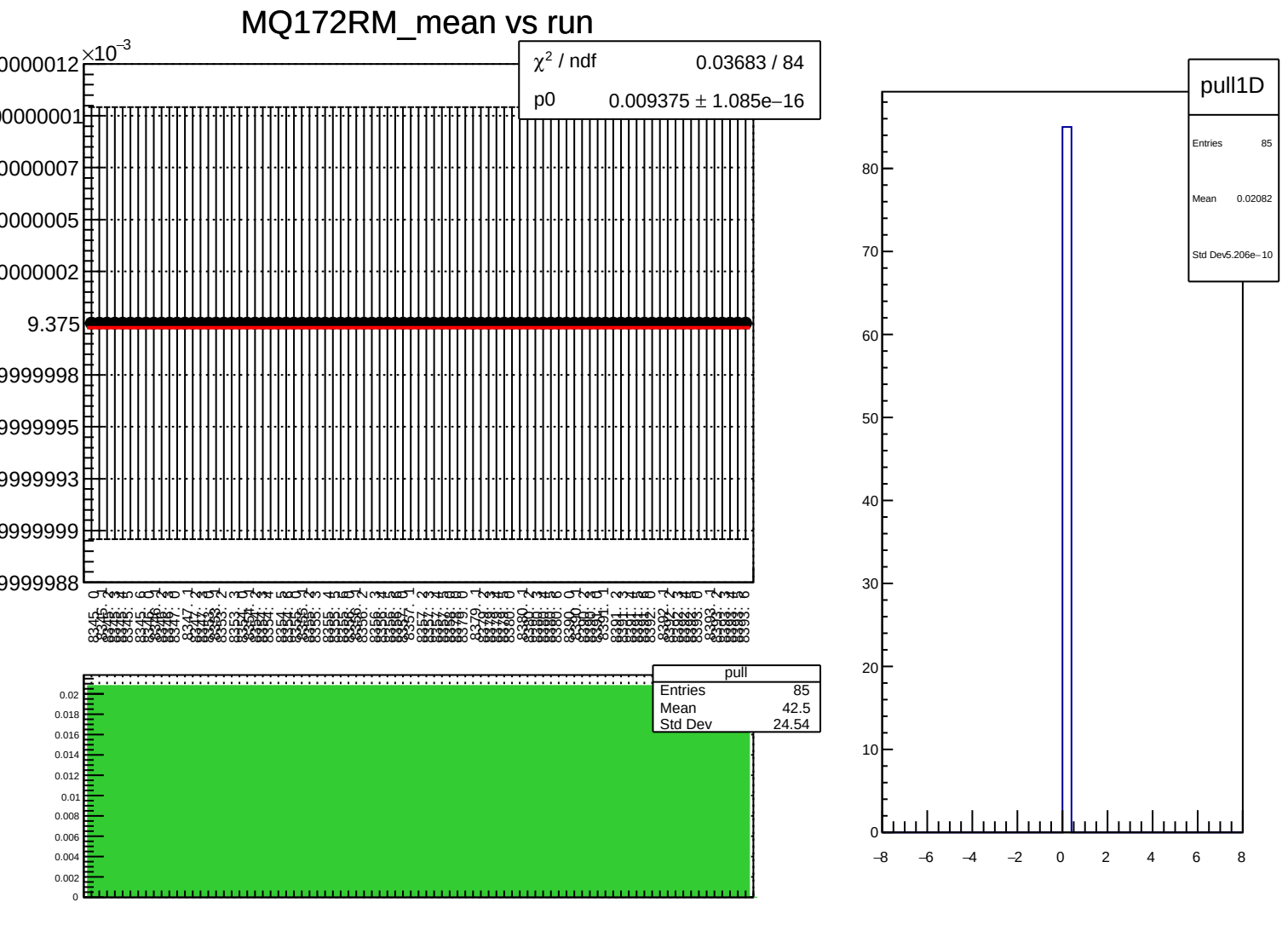

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

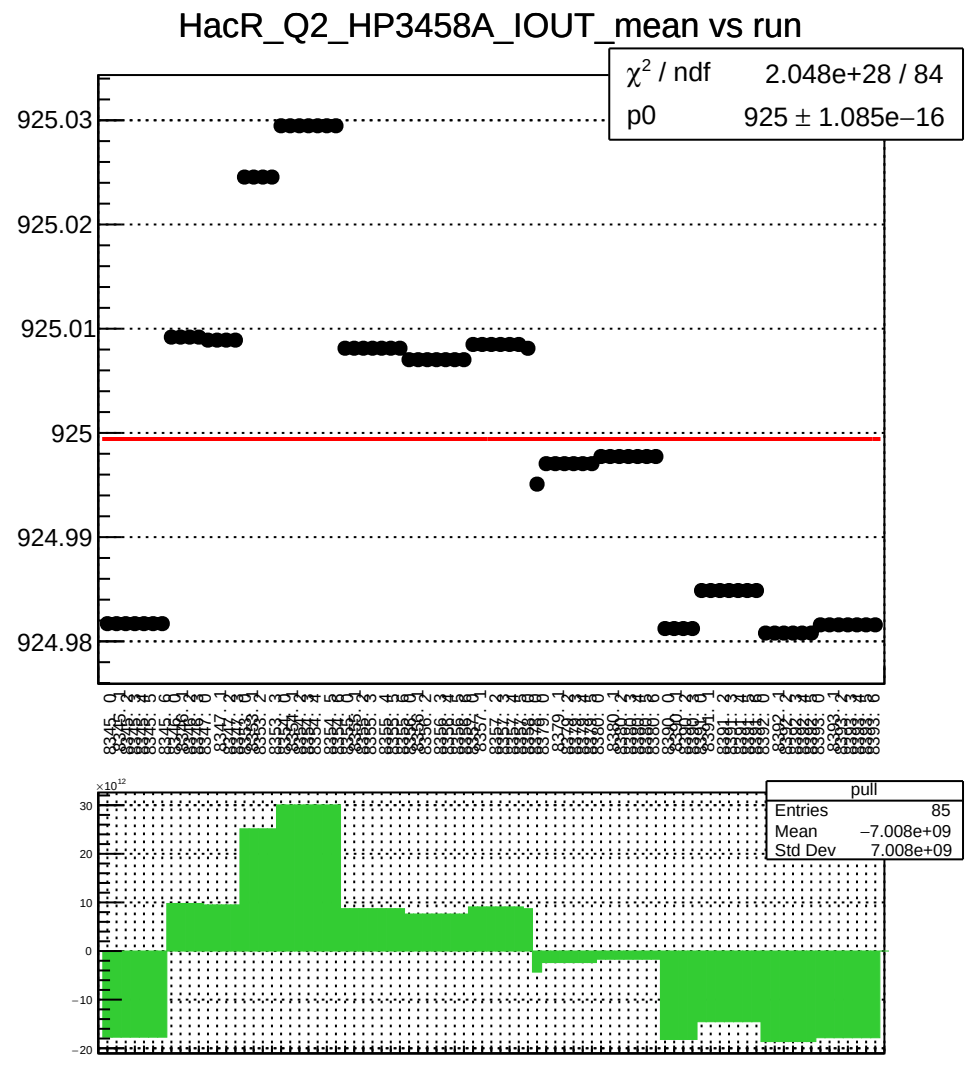

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.158e+27 / 84
p0 741 ± 1.085e−16
741.032
741.03
741.028
741.026
741.024
741.022
741.02
pull
Entries 85
Mean −1.682e+08
Std Dev 1.682e+08
×10⁹
4000
2000
0
−2000
−4000
−6000

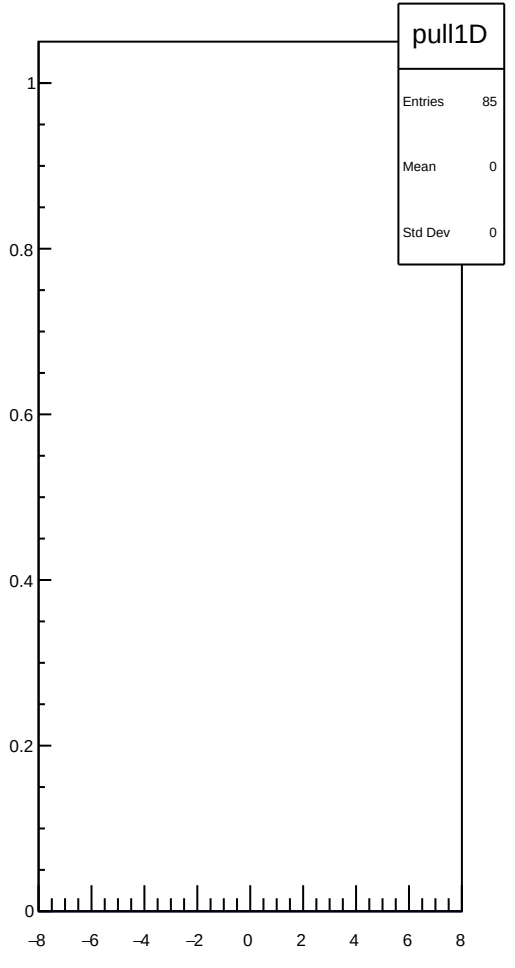

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

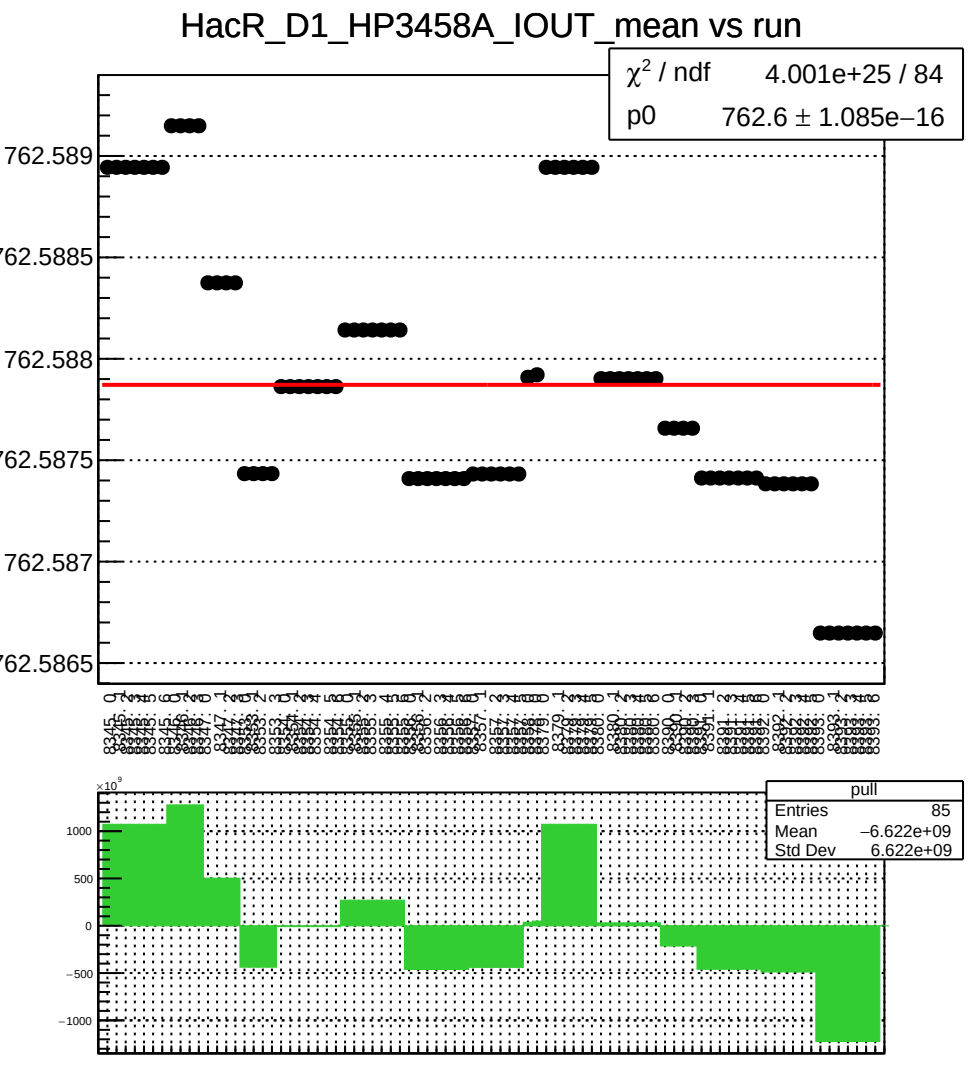

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 9.74e+27 / 84
p0 980.8 ± 1.085e−16
980.825
980.82
980.815
980.81
980.805
980.8
980.795
980.79
980.785
pull
Entries 85
Mean 4.489e+08
Std Dev 4.489e+08
×10¹²
20
15
10
5
0
−5
−10
−15
−20

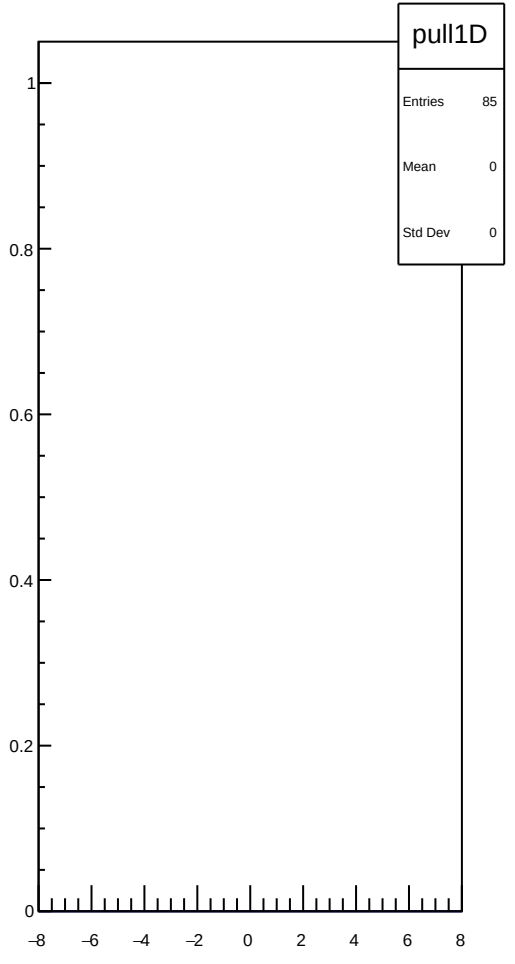

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

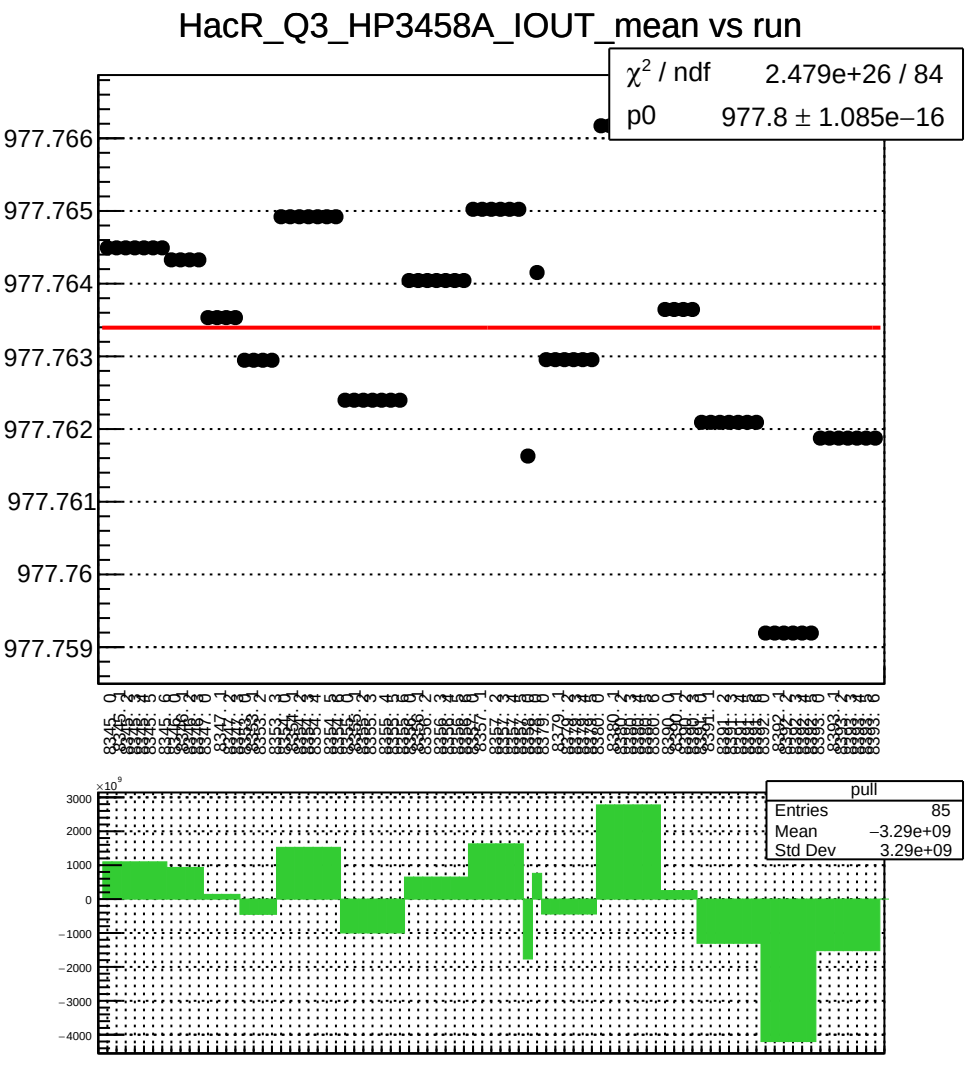

MQ172RM_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54
pull1D
Entries 85
Mean 0.02082
Std Dev5.206e−10

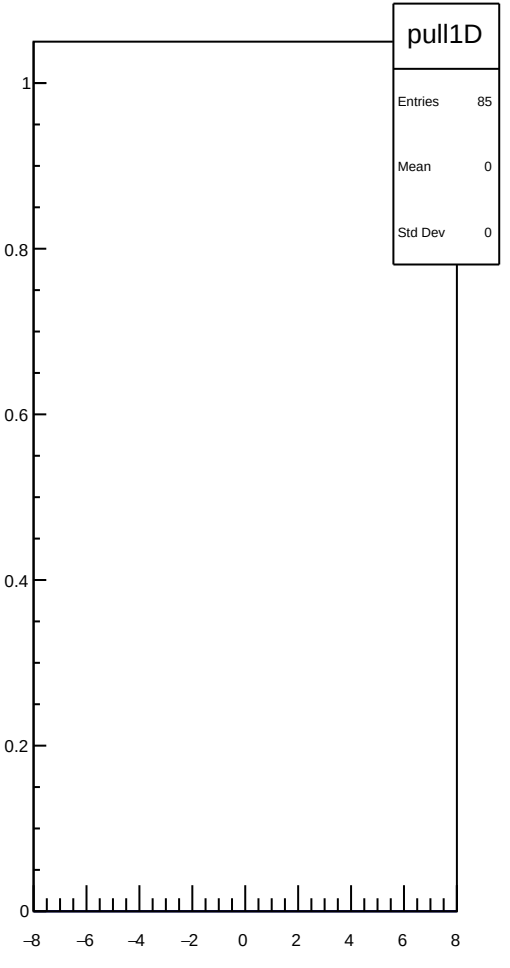

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 2.048e+28 / 84
p0 925 ± 1.085e−16
925.03
925.02
925.01
925
924.99
924.98
pull
Entries 85
Mean −7.008e+09
Std Dev 7.008e+09
×10¹²
30
20
10
0
−10
−20

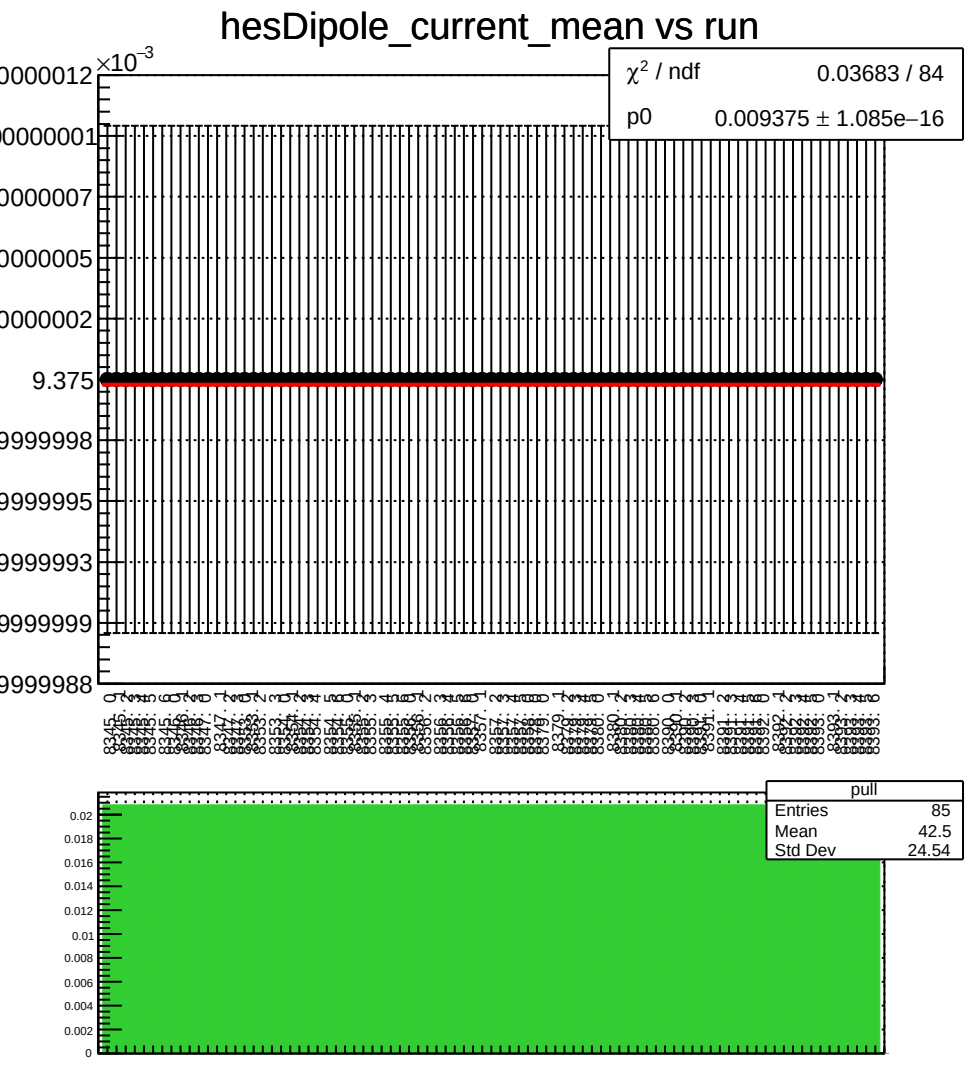

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

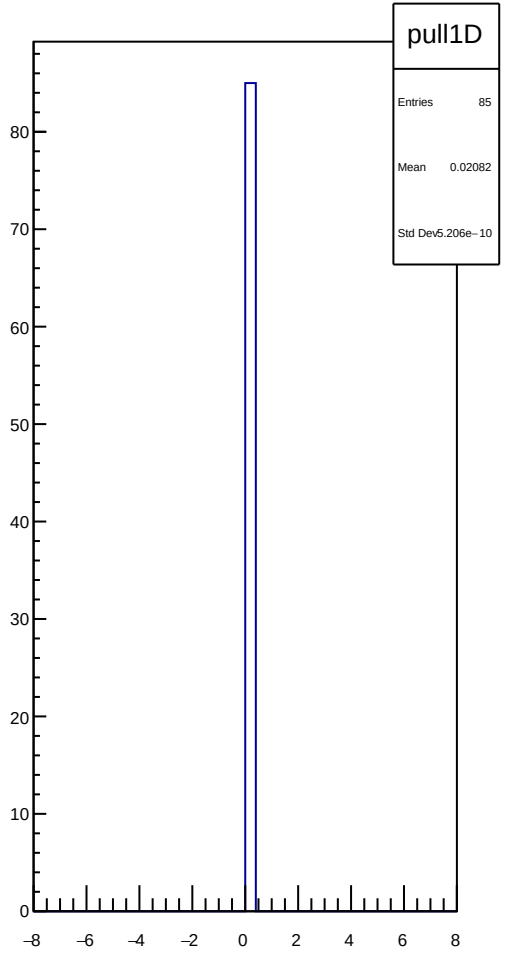

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 4.001e+25 / 84
p0 762.6 ± 1.085e−16
762.589
762.5885
762.588
762.5875
762.587
762.5865
pull
Entries 85
Mean −6.622e+09
Std Dev 6.622e+09
×10⁹
1000
500
0
−500
−1000

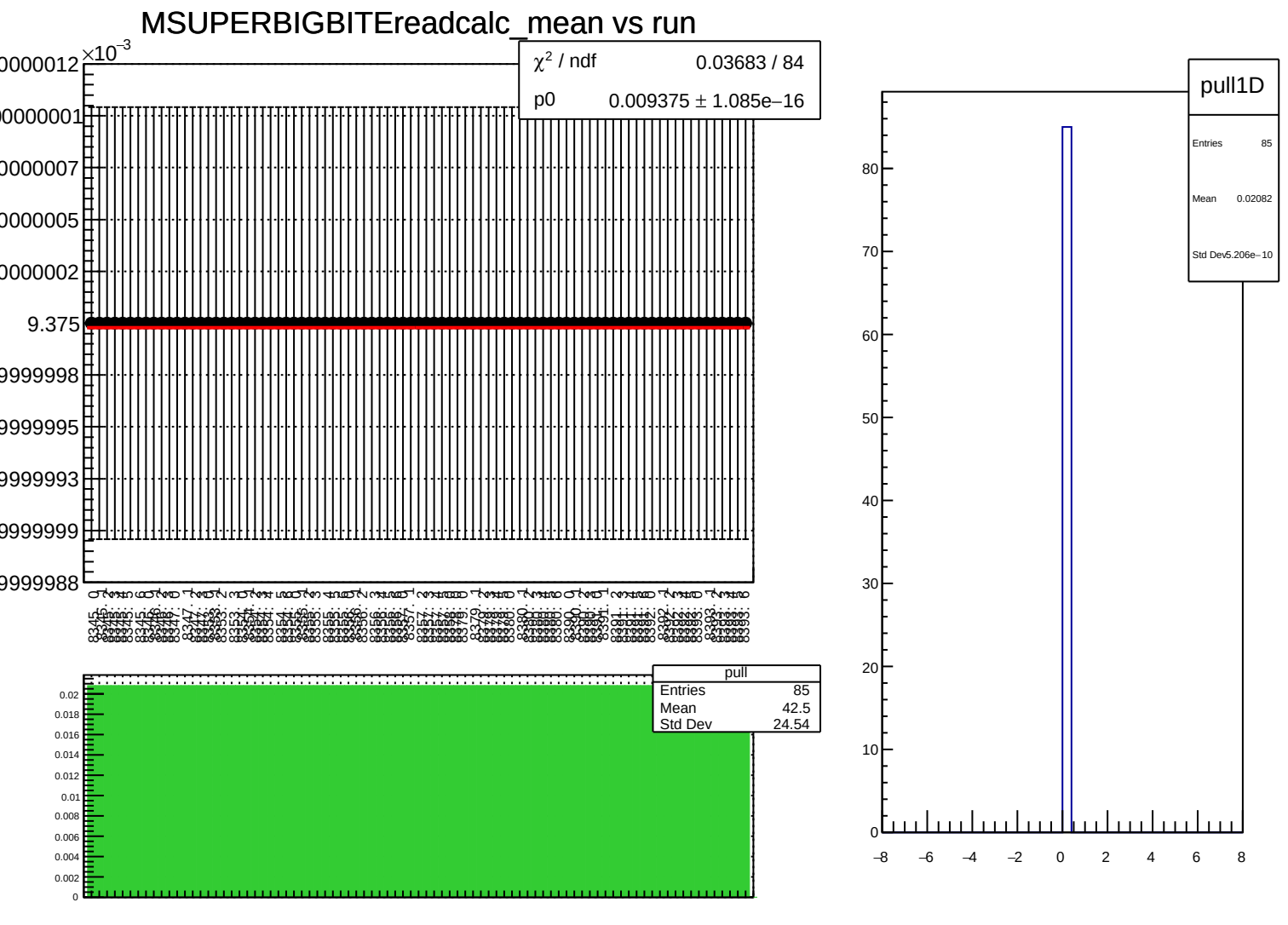

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

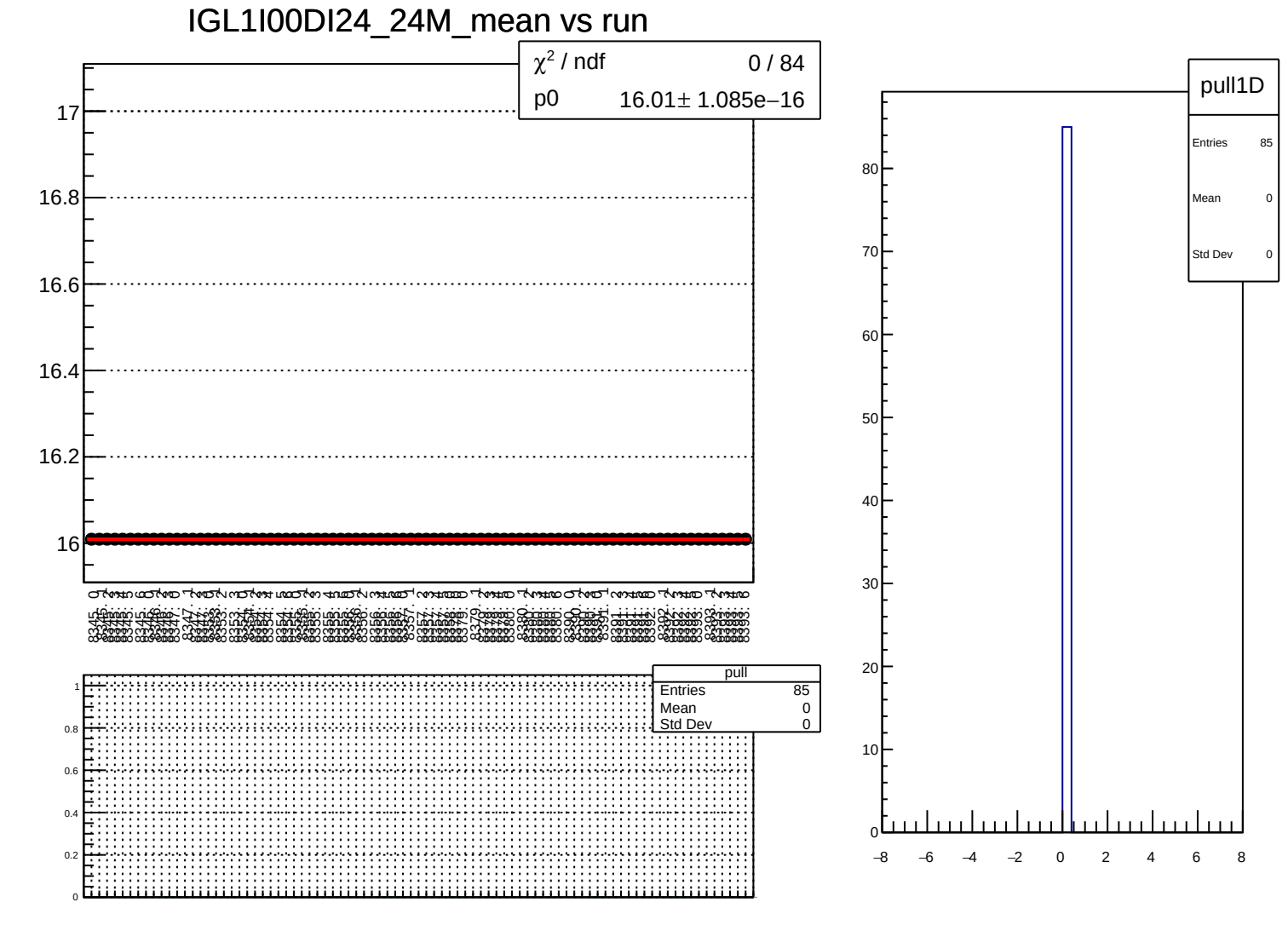

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.479e+26 / 84
p0 977.8 ± 1.085e−16
977.766
977.765
977.764
977.763
977.762
977.761
977.76
977.759
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 85
Mean −3.29e+09
Std Dev 3.29e+09

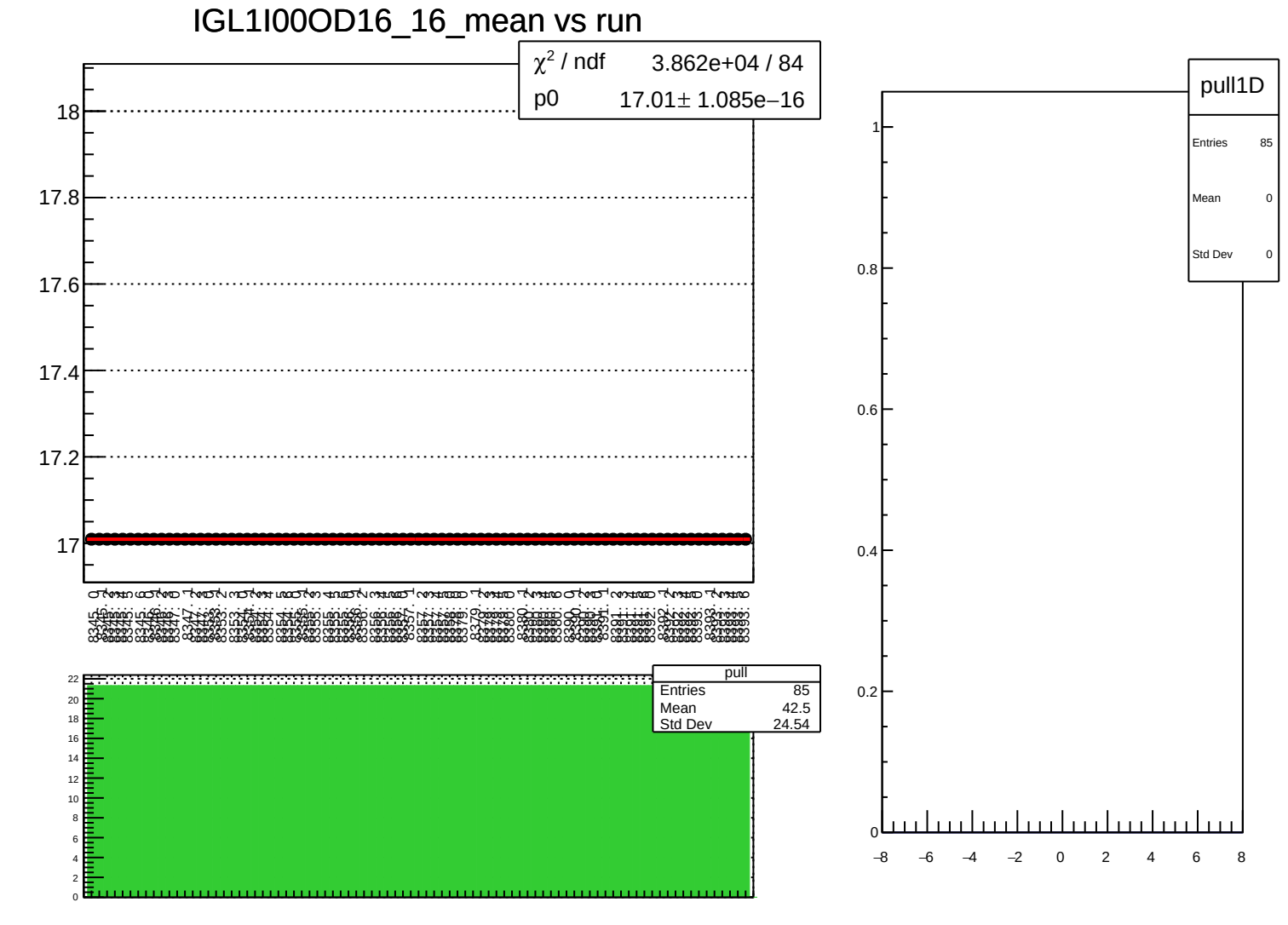

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

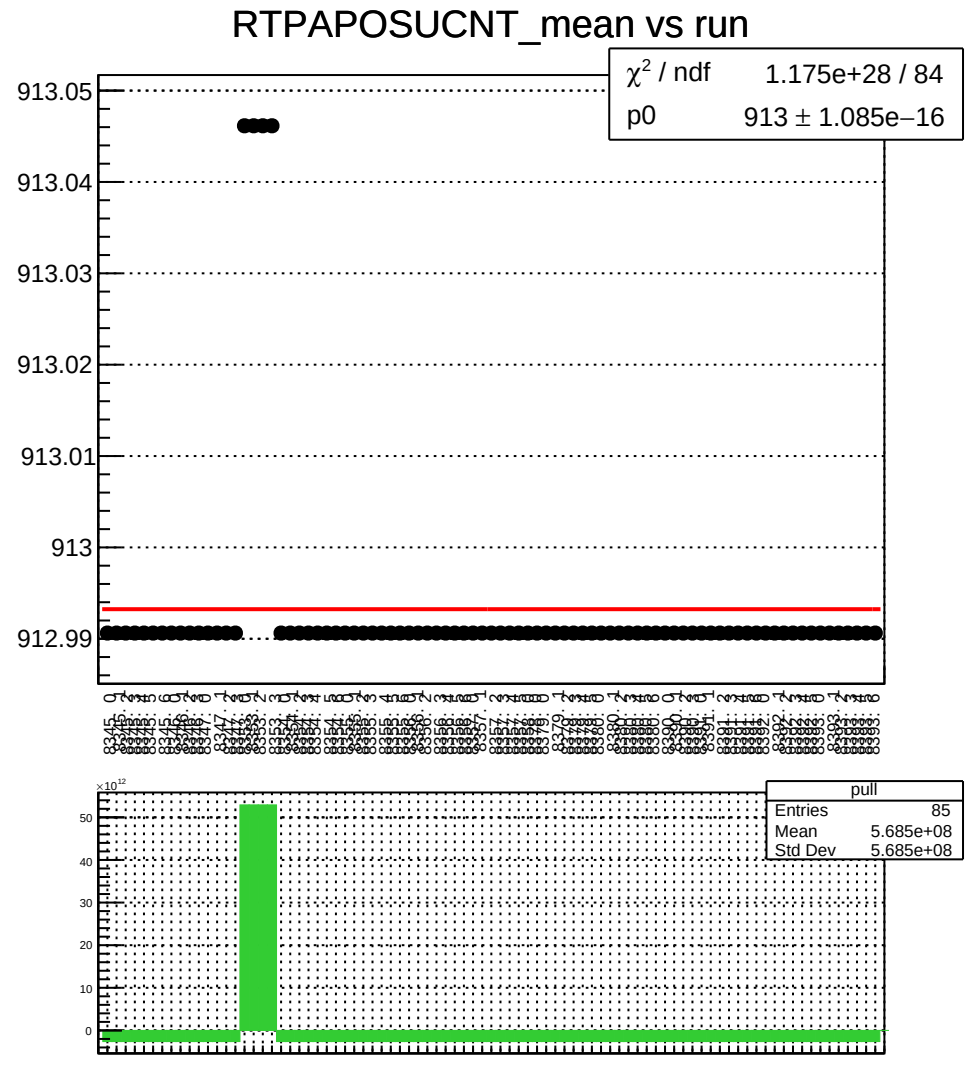

hesDipole_current_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54

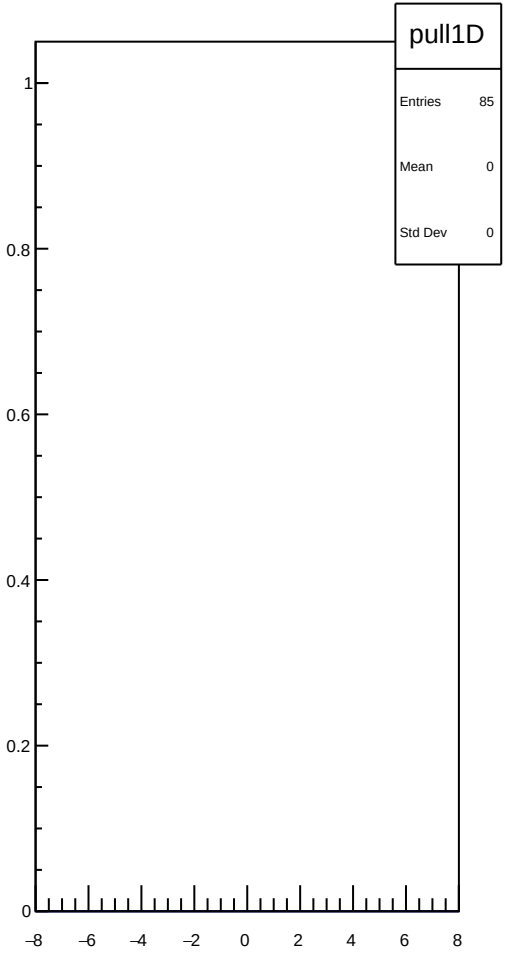

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

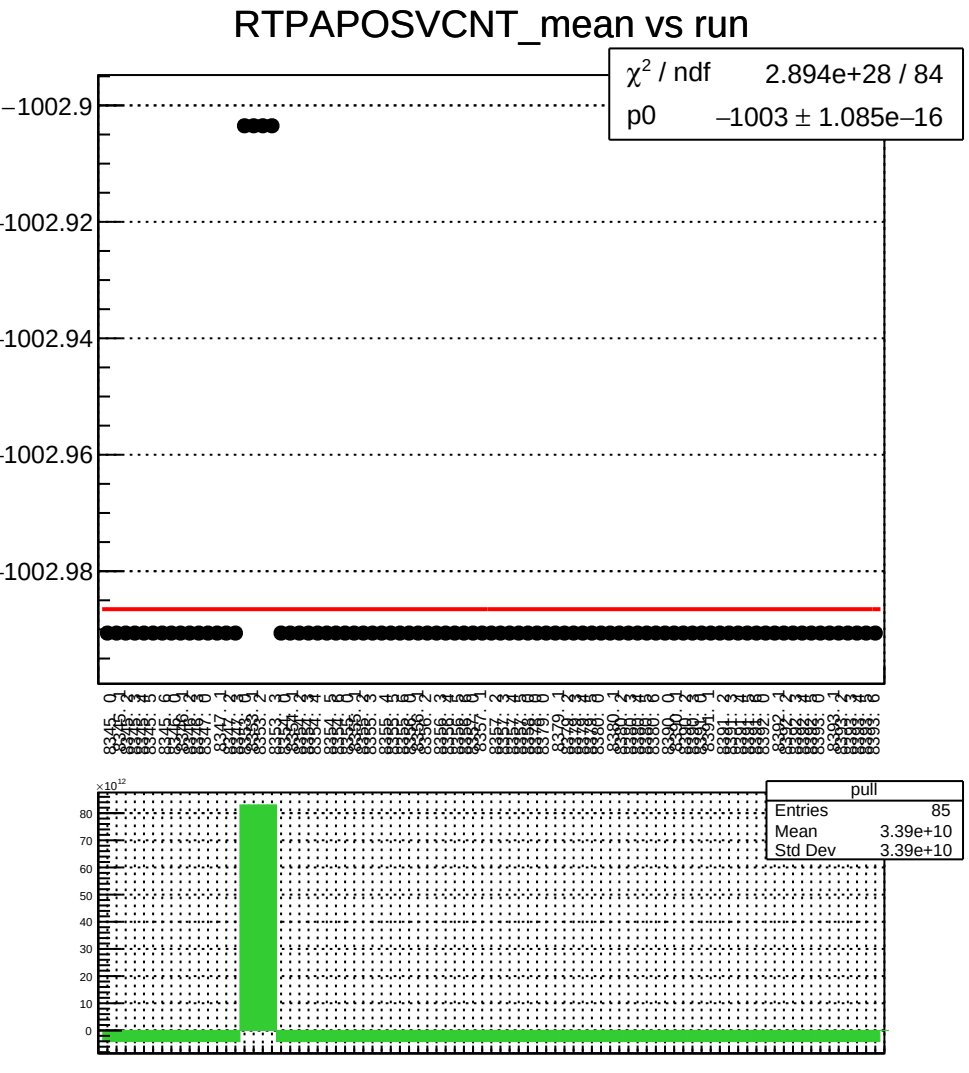

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54
pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

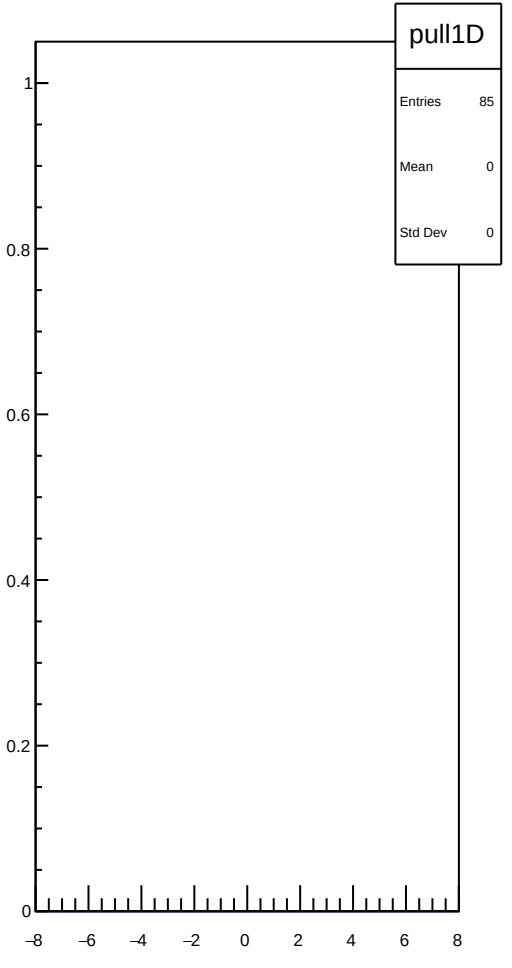

IGL1I00DI24_24M_mean vs run
χ² / ndf 0 / 84
p0 16.01± 1.085e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 85
Mean 0
Std Dev 0
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

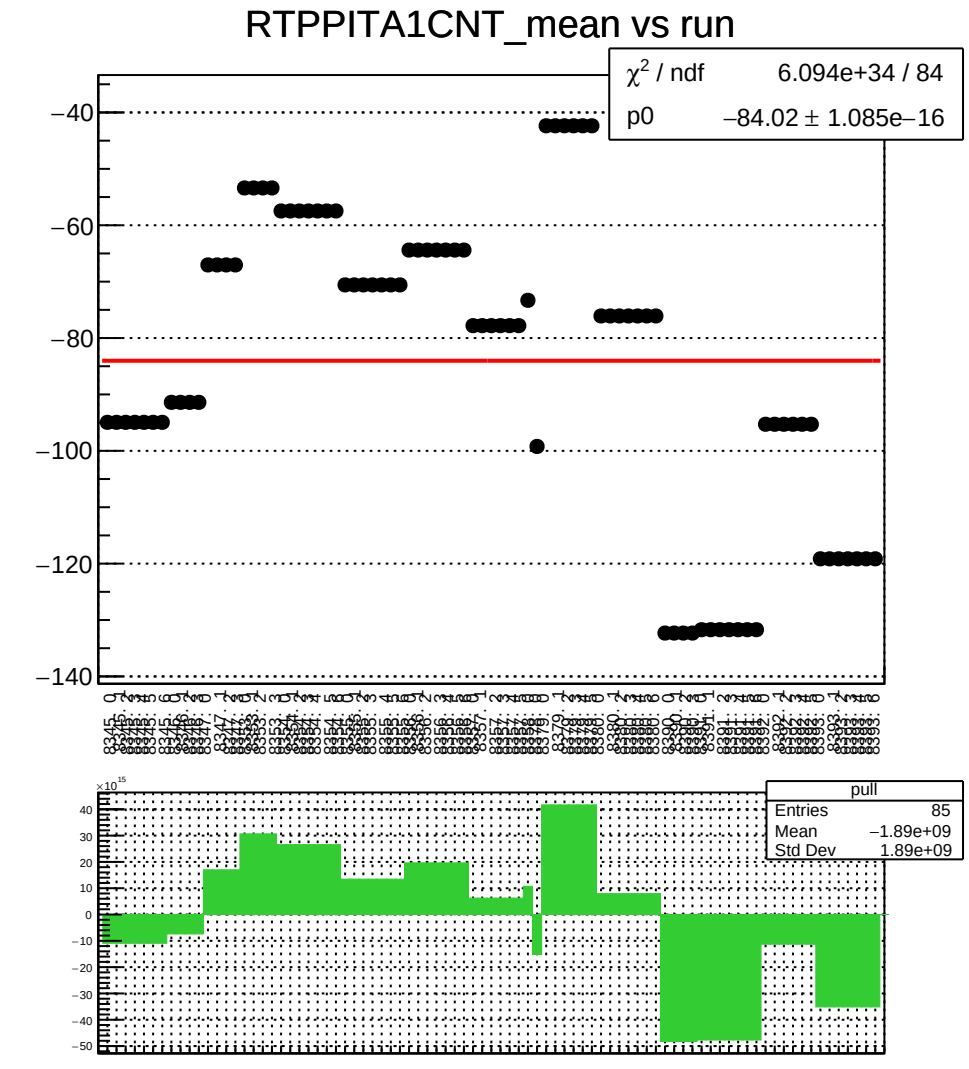

IGL1I00OD16_16_mean vs run
χ² / ndf 3.862e+04 / 84
p0 17.01± 1.085e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 85
Mean 42.5
Std Dev 24.54
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

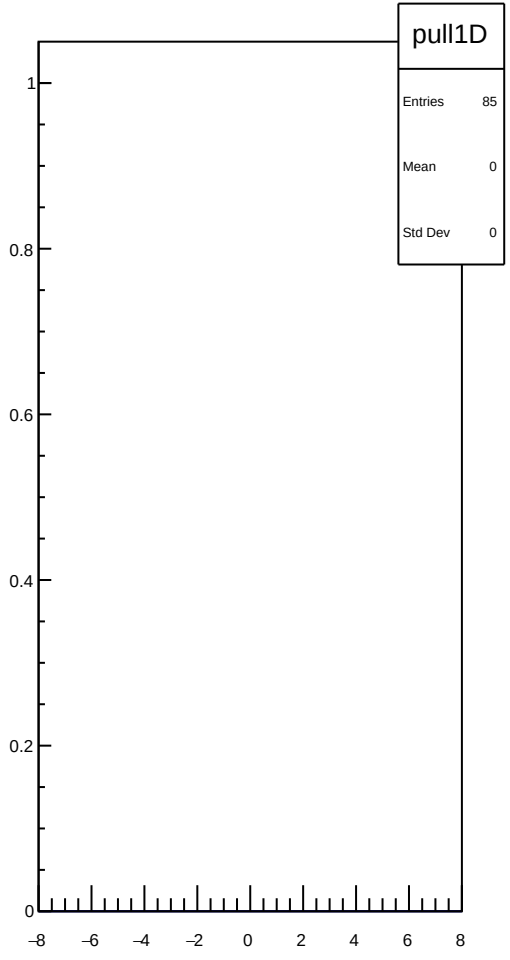

RTPAPOSUCNT_mean vs run
χ² / ndf 1.175e+28 / 84
p0 913 ± 1.085e−16
913.05
913.04
913.03
913.02
913.01
913
912.99
pull
Entries 85
Mean 5.685e+08
Std Dev 5.685e+08
×10¹²
50
40
30
20
10
0

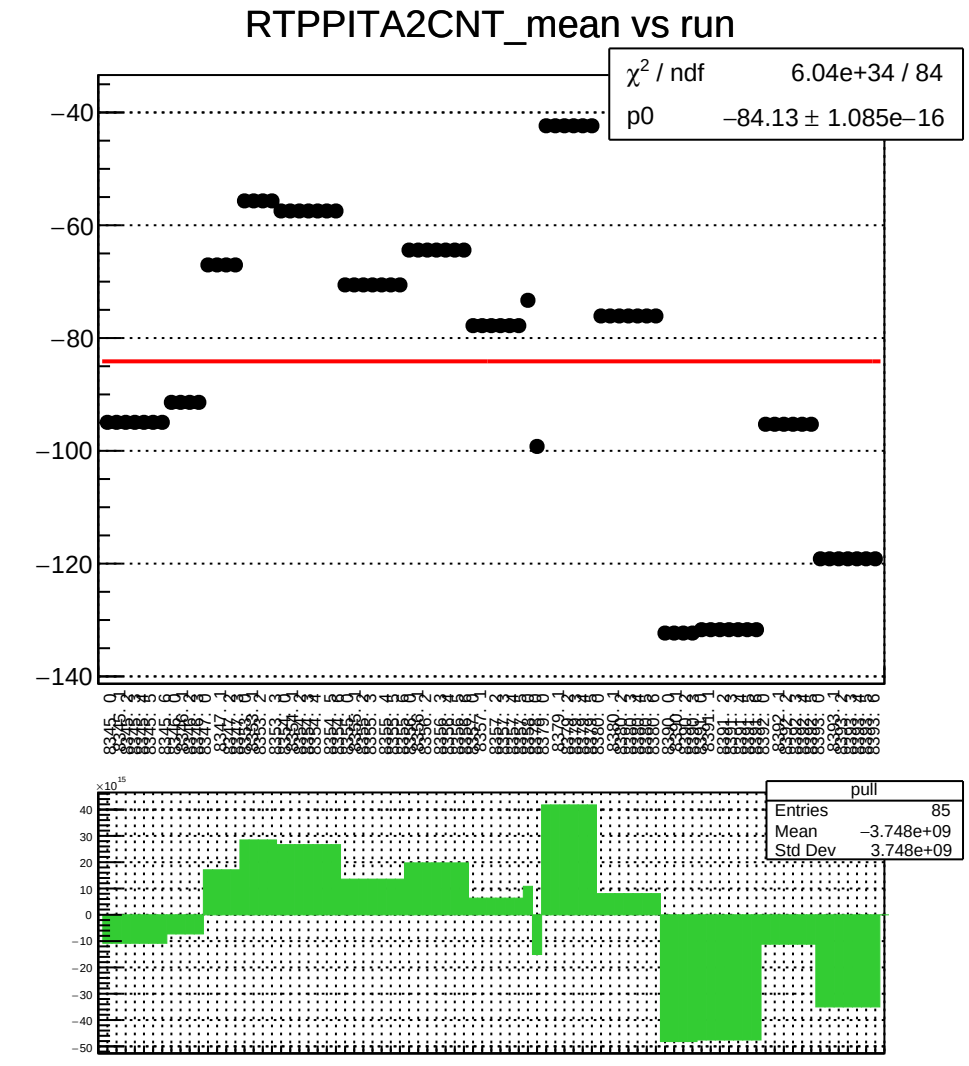

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

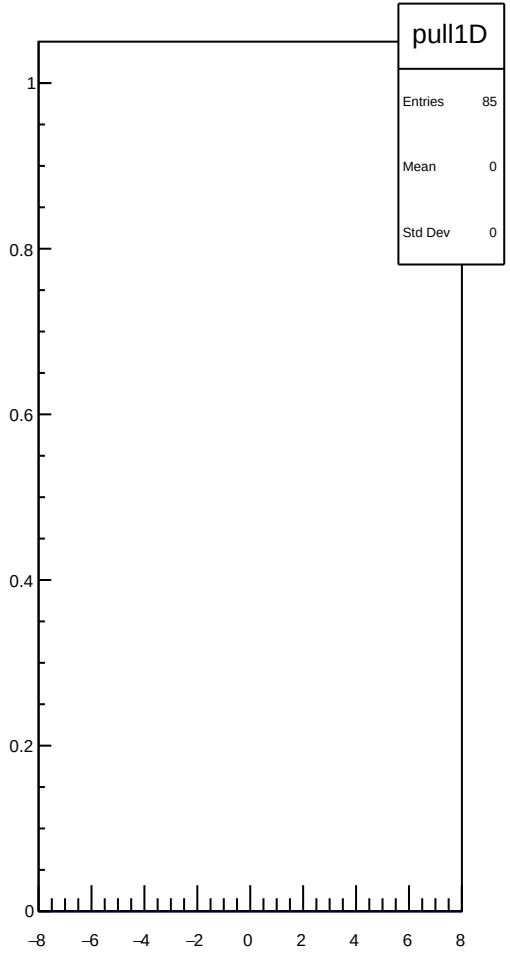

RTPAPOSVCNT_mean vs run
χ² / ndf 2.894e+28 / 84
p0 −1003 ± 1.085e−16
−1002.9
−1002.92
−1002.94
−1002.96
−1002.98
pull
Entries 85
Mean 3.39e+10
Std Dev 3.39e+10
×10¹²
80
70
60
50
40
30
20
10
0


pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPPITA1CNT_mean vs run
χ² / ndf 6.094e+34 / 84
p0 −84.02 ± 1.085e−16
pull
Entries 85
Mean −1.89e+09
Std Dev 1.89e+09


pull1D
Entries 85
Mean 0
Std Dev 0


RTPPITA2CNT_mean vs run
χ² / ndf 6.04e+34 / 84
p0 −84.13 ± 1.085e−16
pull
Entries 85
Mean −3.748e+09
Std Dev 3.748e+09


pull1D
Entries 85
Mean 0
Std Dev 0