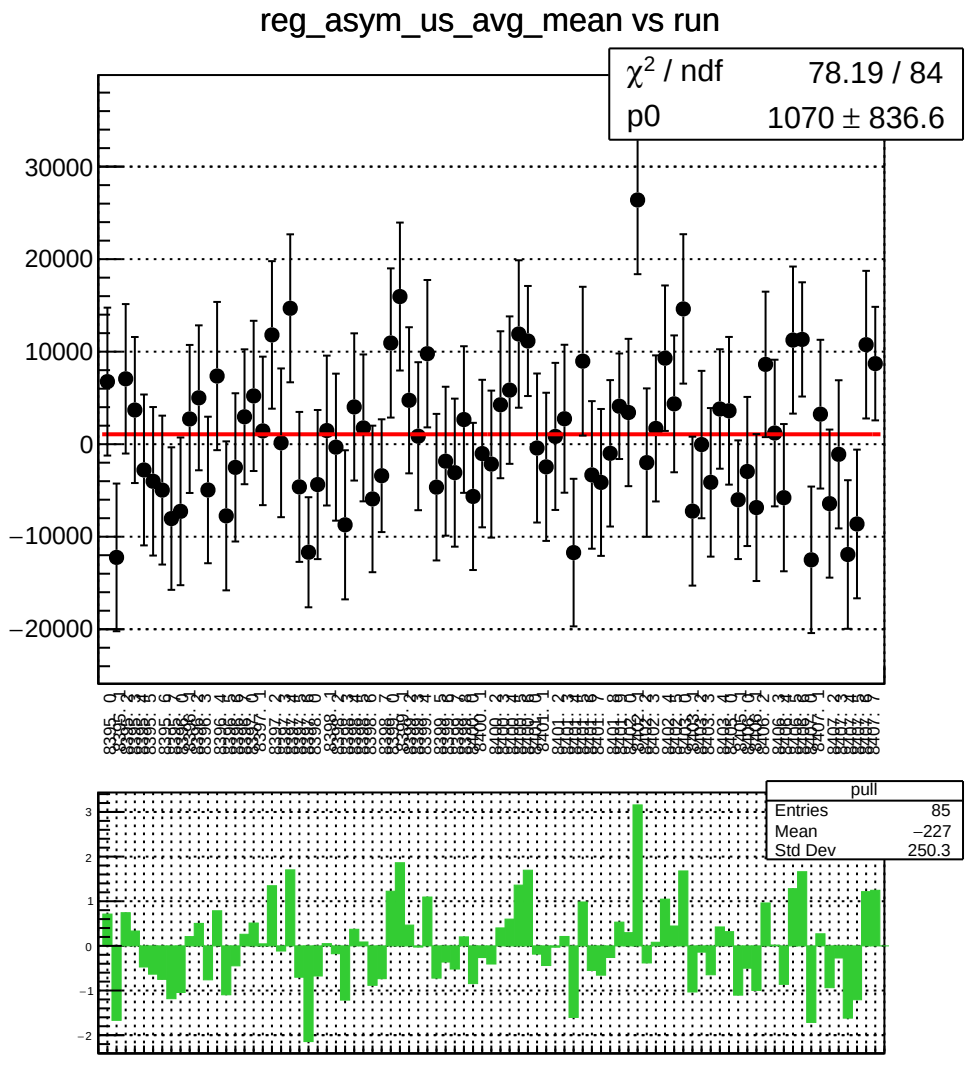
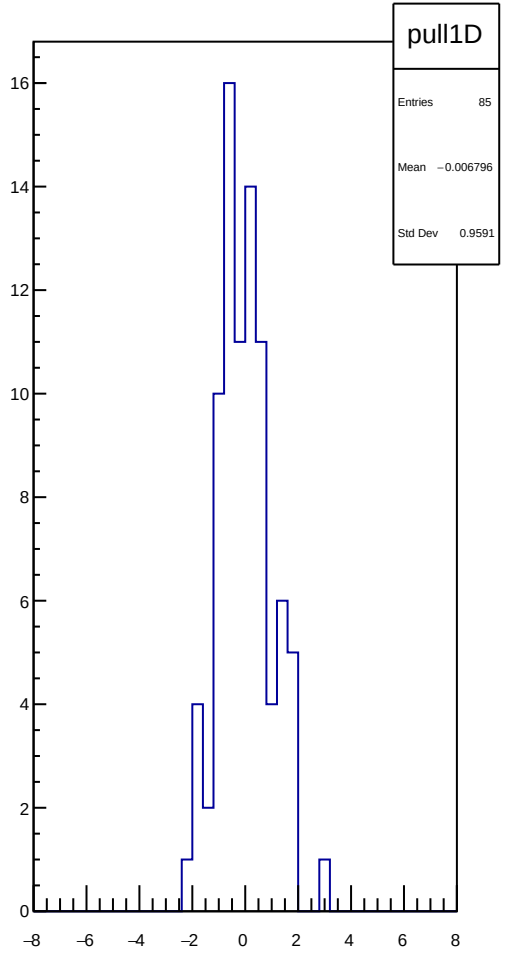
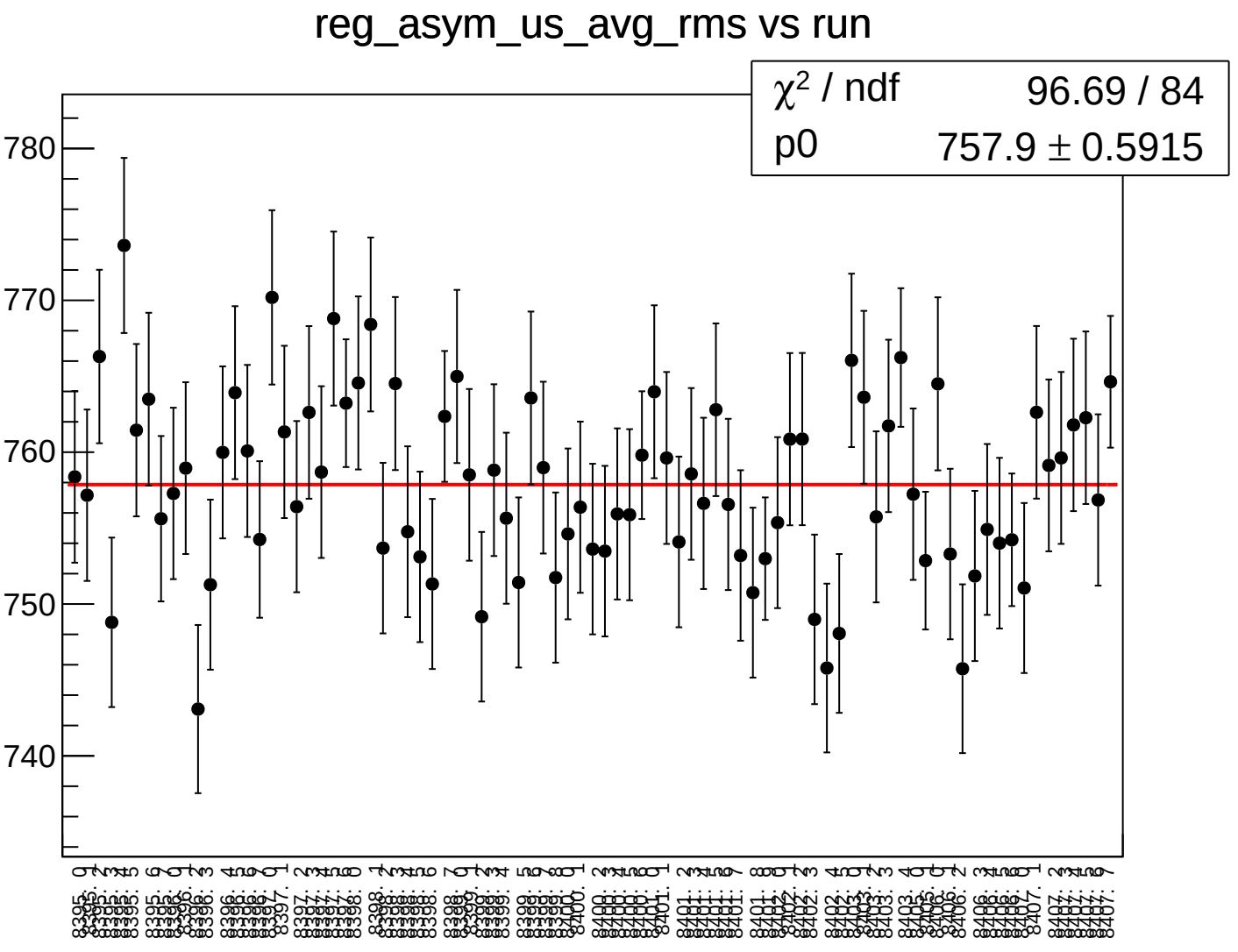
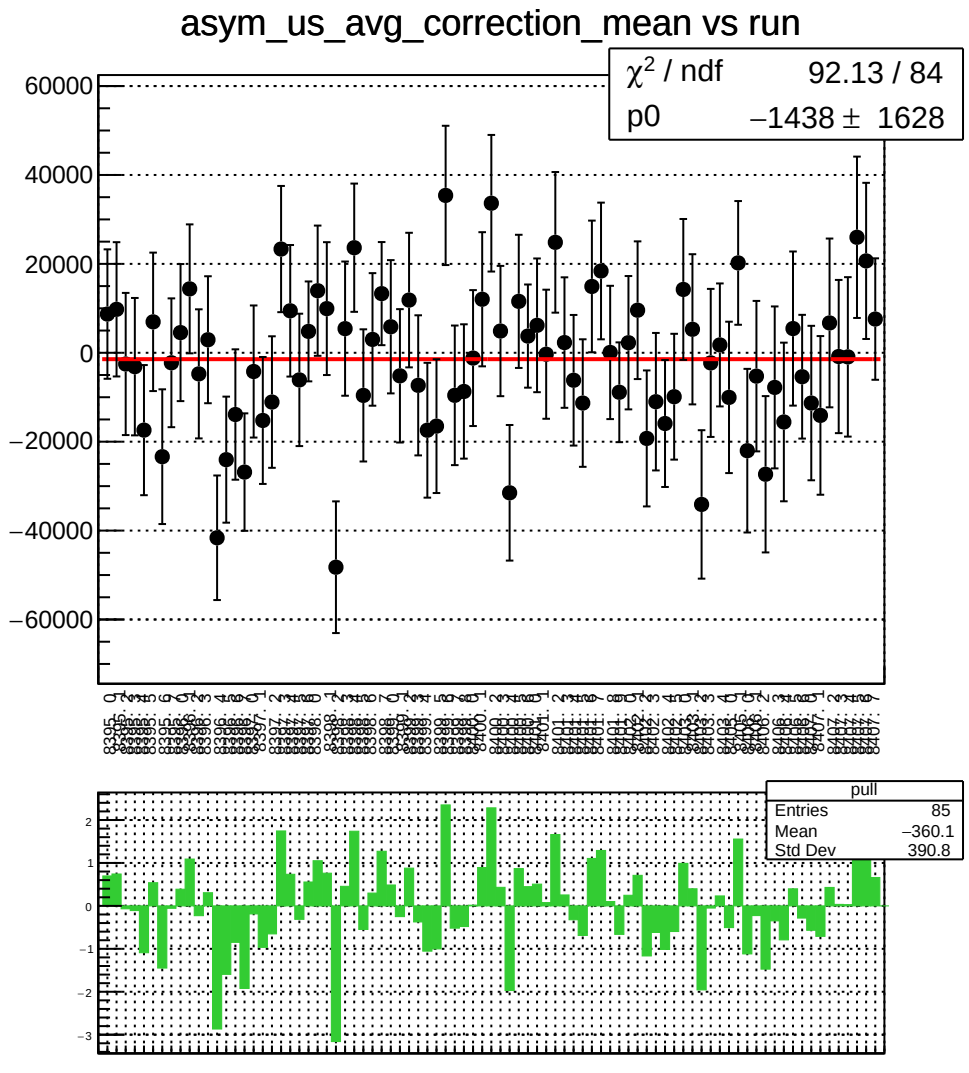
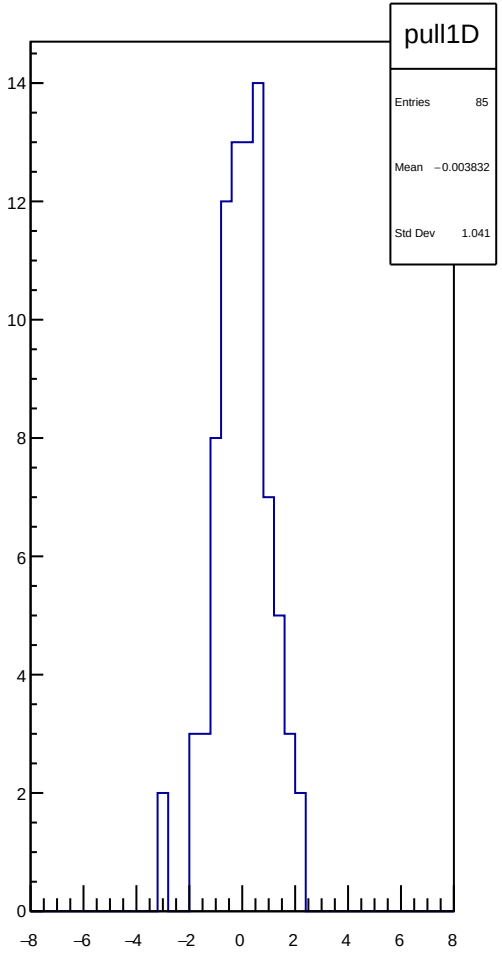
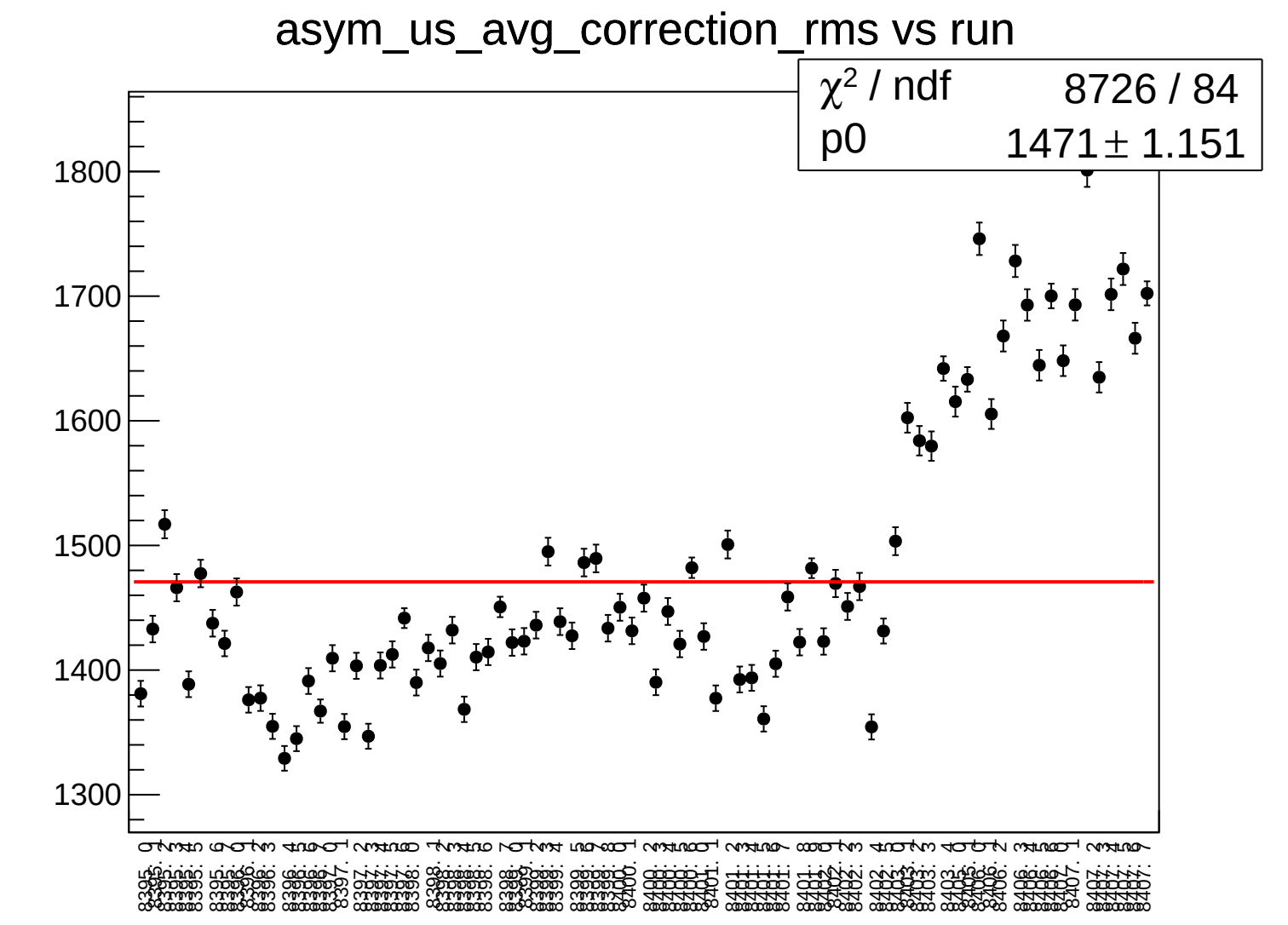

reg_asym_us_avg_mean vs run
χ² / ndf 78.19 / 84
p0 1070 ± 836.6
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −227
Std Dev 250.3
3
2
1
0
−1
−2

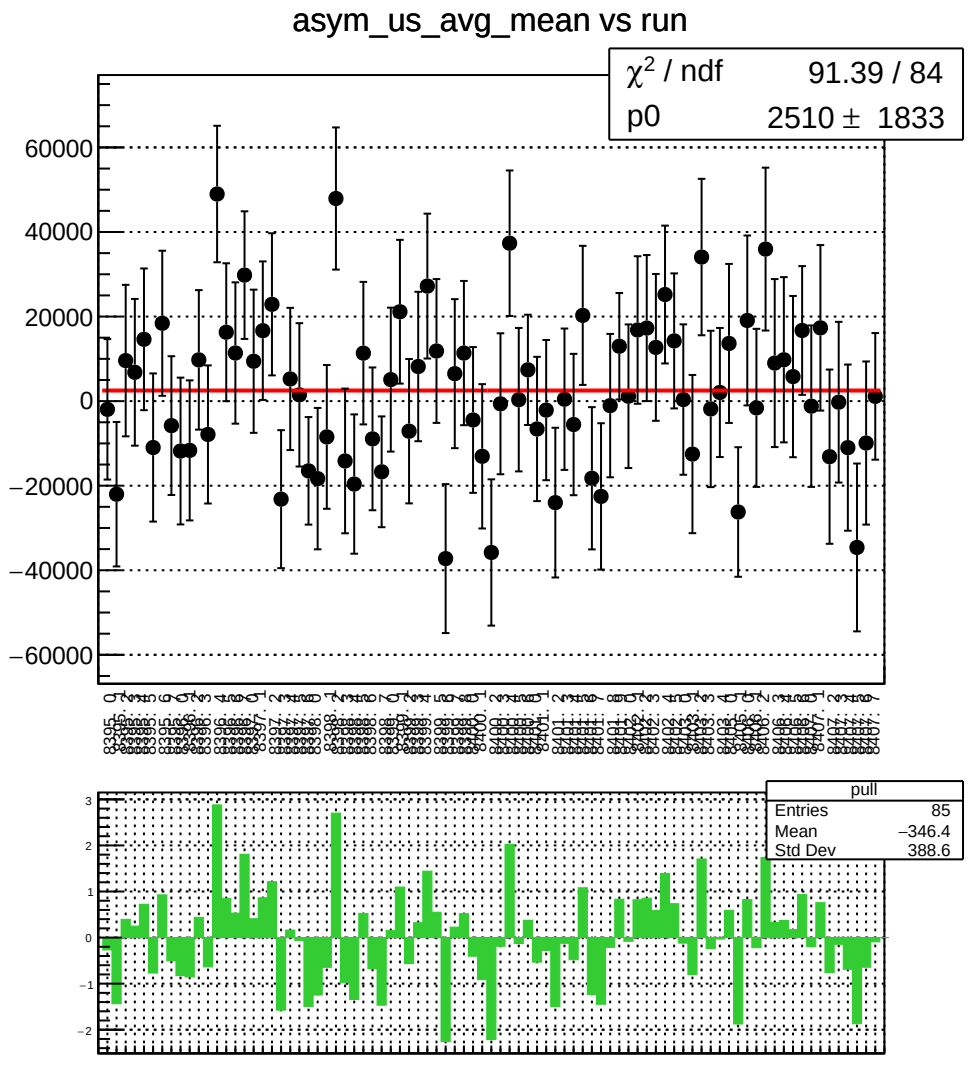

pull1D
Entries 85
Mean −0.006796
Std Dev 0.9591
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

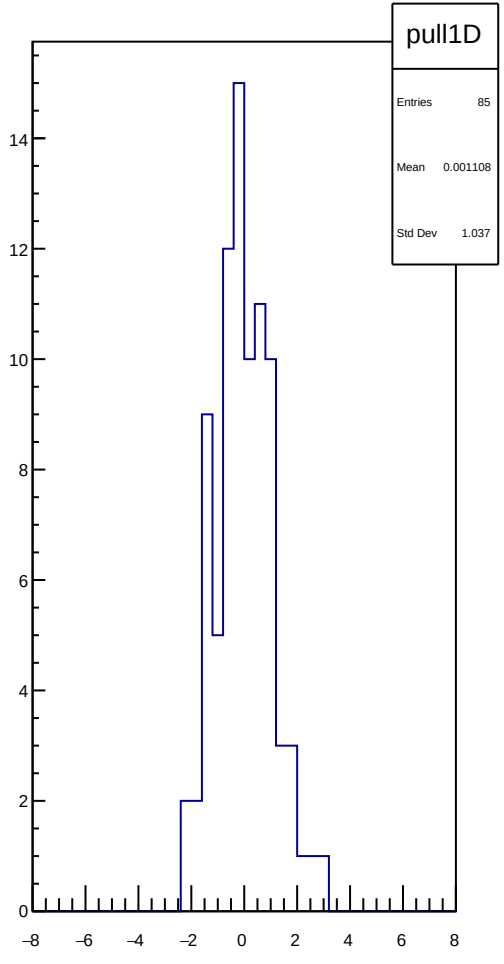

reg_asym_us_avg_rms vs run
χ^2 / ndf 96.69 / 84
p0 757.9 ± 0.5915
780
770
760
750
740

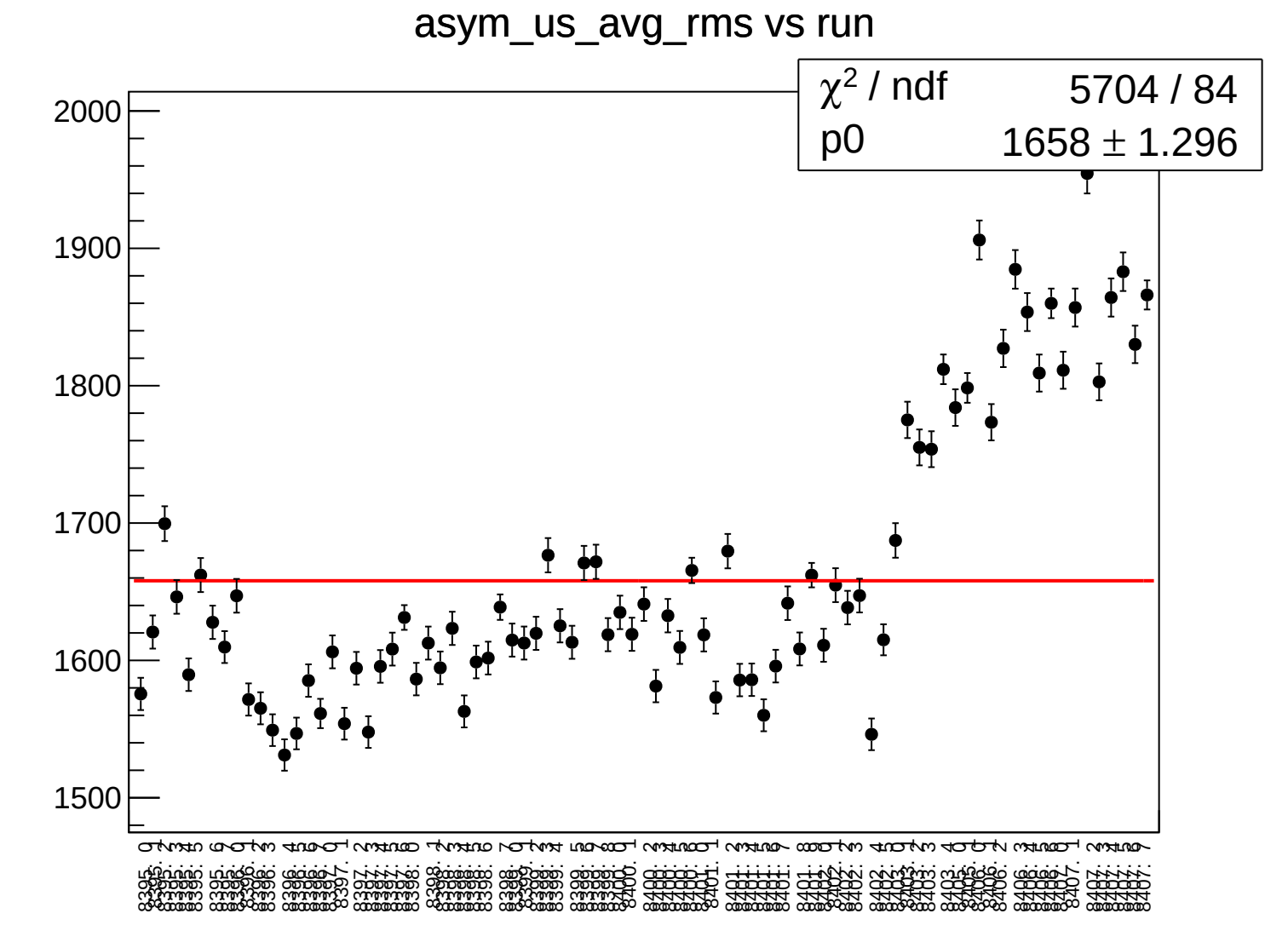

asym_us_avg_correction_mean vs run
χ² / ndf 92.13 / 84
p0 −1438 ± 1628
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −360.1
Std Dev 390.8
2
1
0
−1
−2
−3

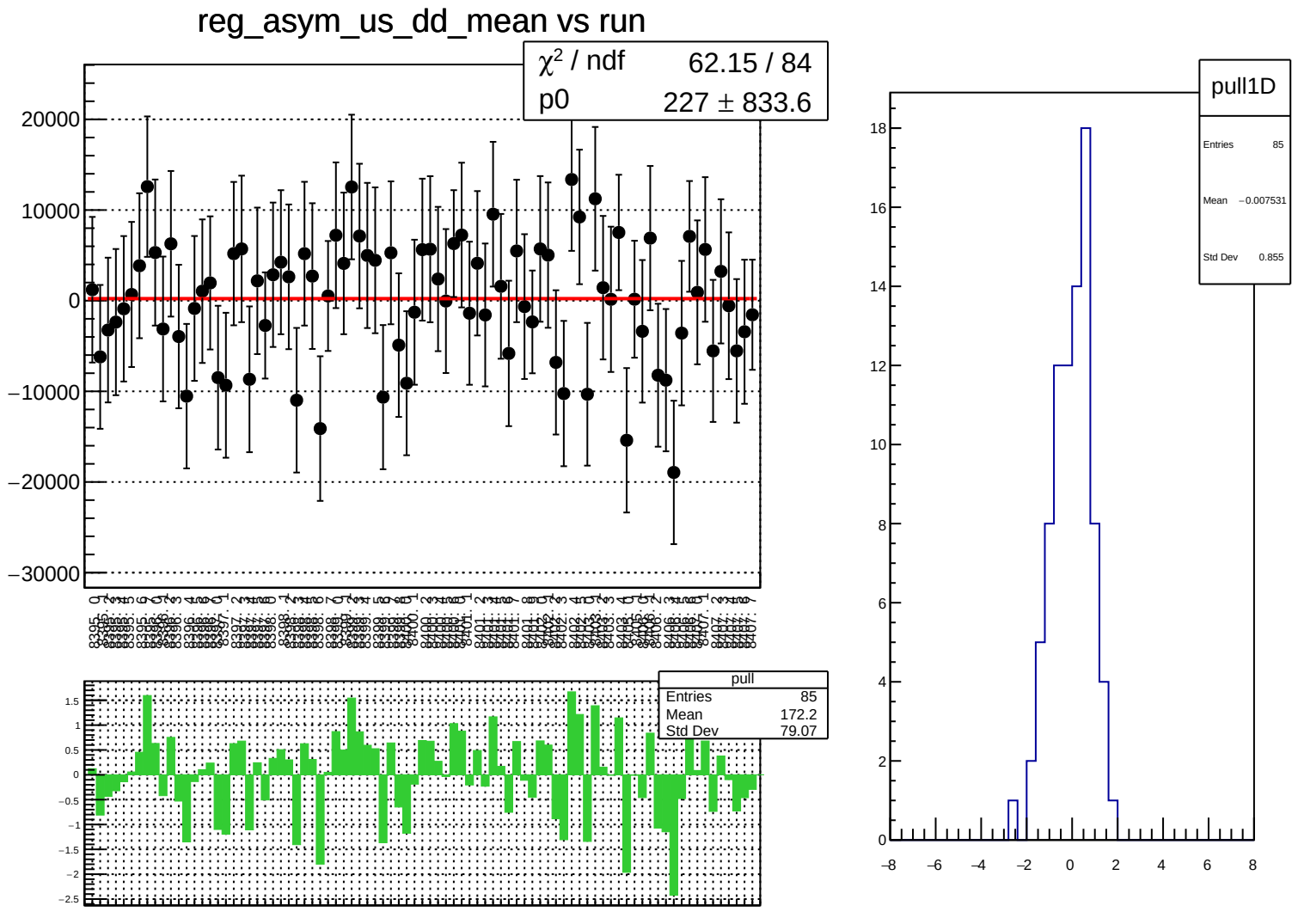

pull1D
Entries 85
Mean −0.003832
Std Dev 1.041
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

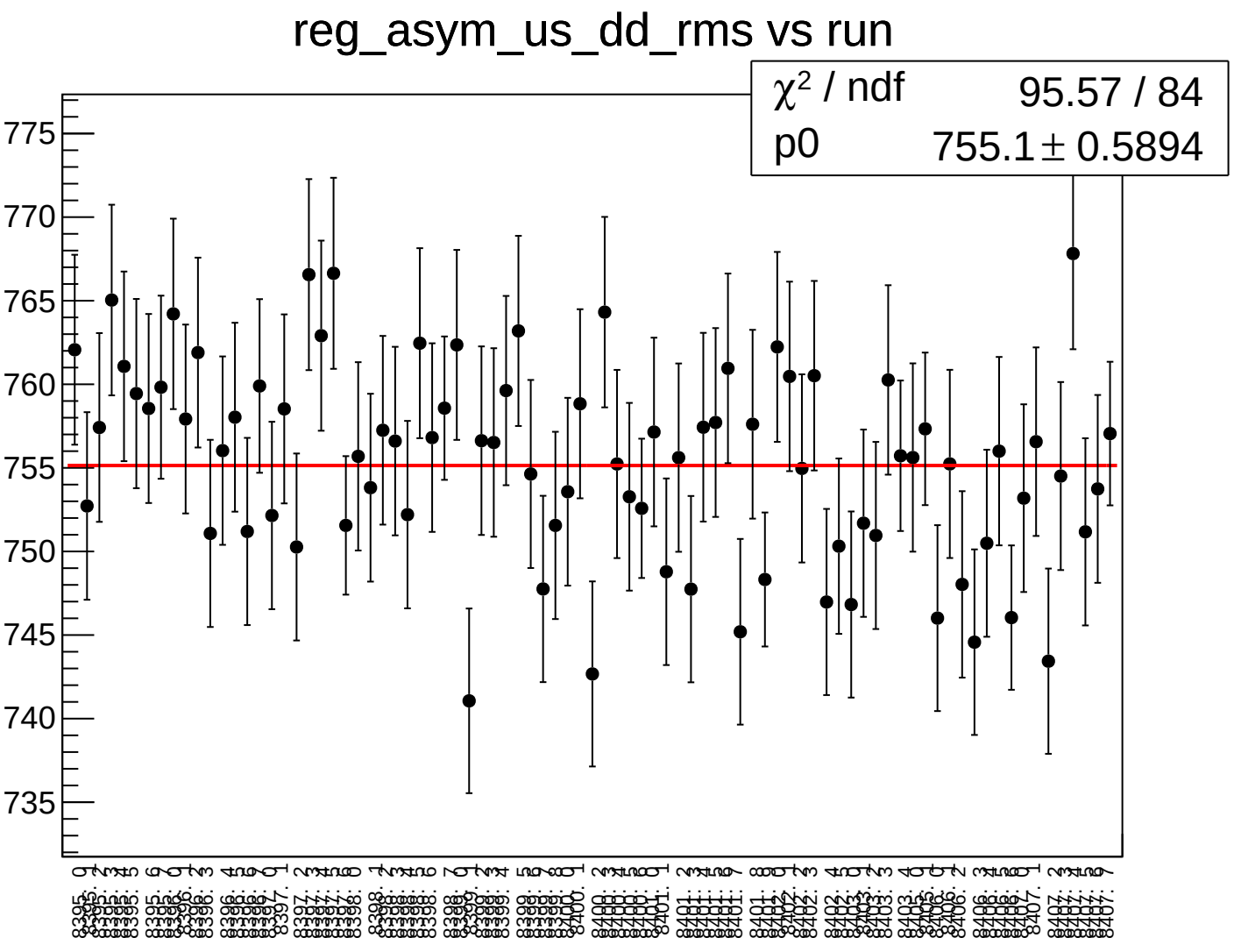

asym_us_avg_correction_rms vs run
χ² / ndf 8726 / 84
p0 1471 ± 1.151
1800
1700
1600
1500
1400
1300

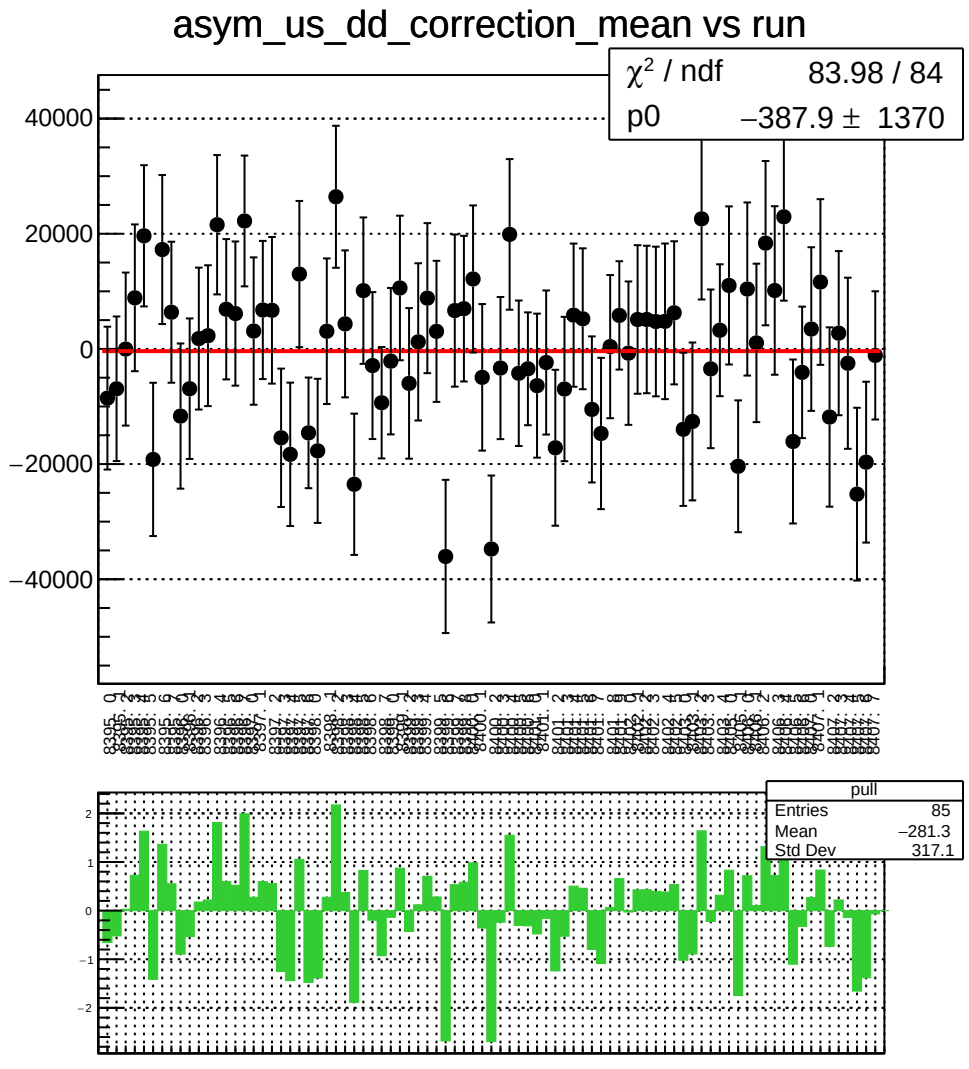

asym_us_avg_mean vs run
χ^2 / ndf 91.39 / 84
p0 2510 ± 1833
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −346.4
Std Dev 388.6
3
2
1
0
−1
−2

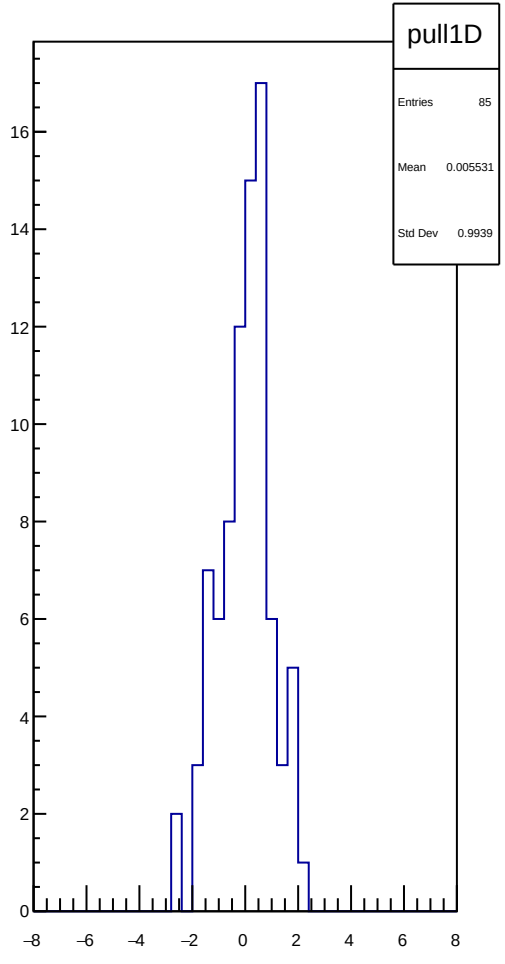

pull1D
Entries 85
Mean 0.001108
Std Dev 1.037
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

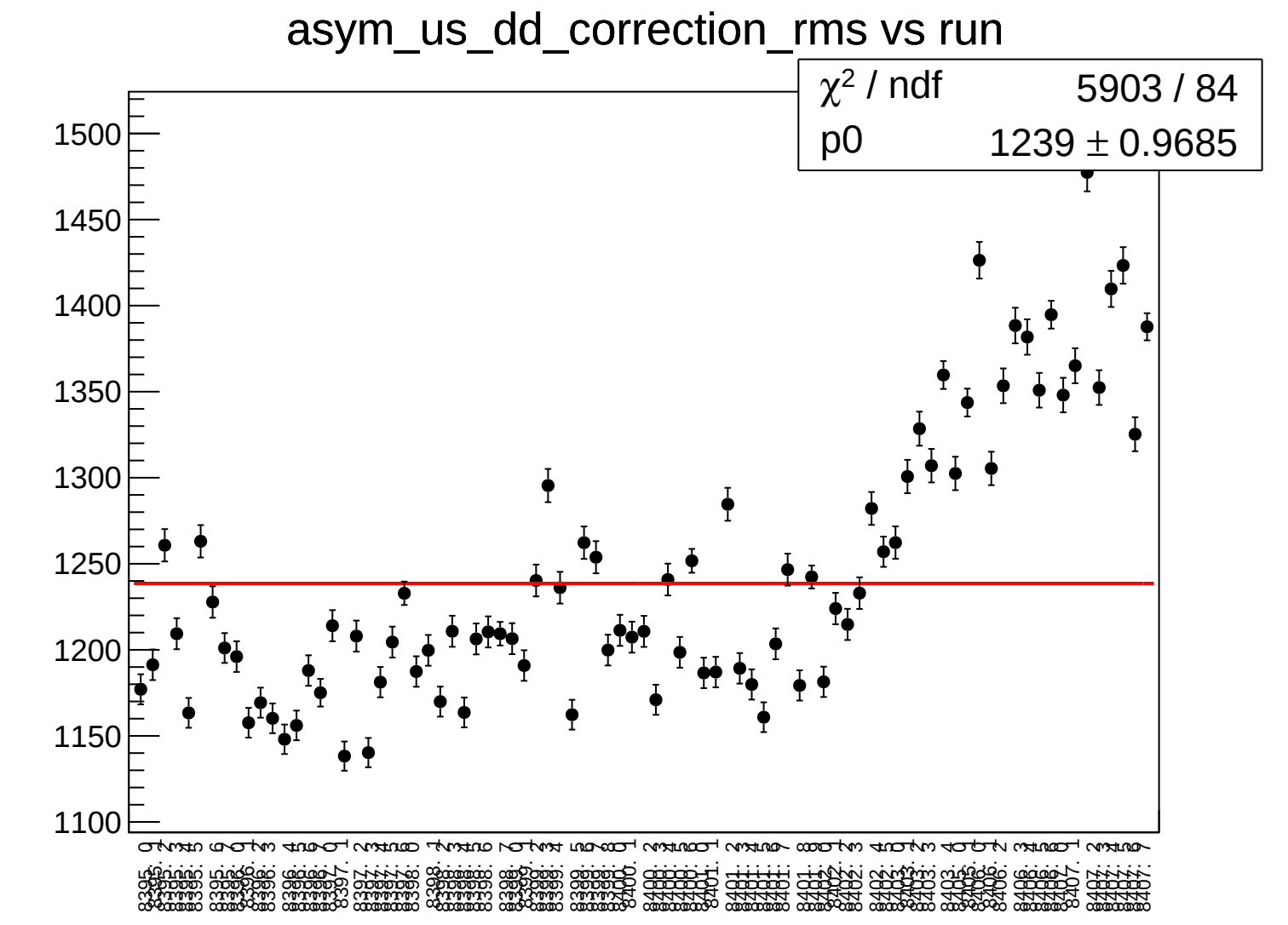

asym_us_avg_rms vs run
χ² / ndf 5704 / 84
p0 1658 ± 1.296
2000
1900
1800
1700
1600
1500

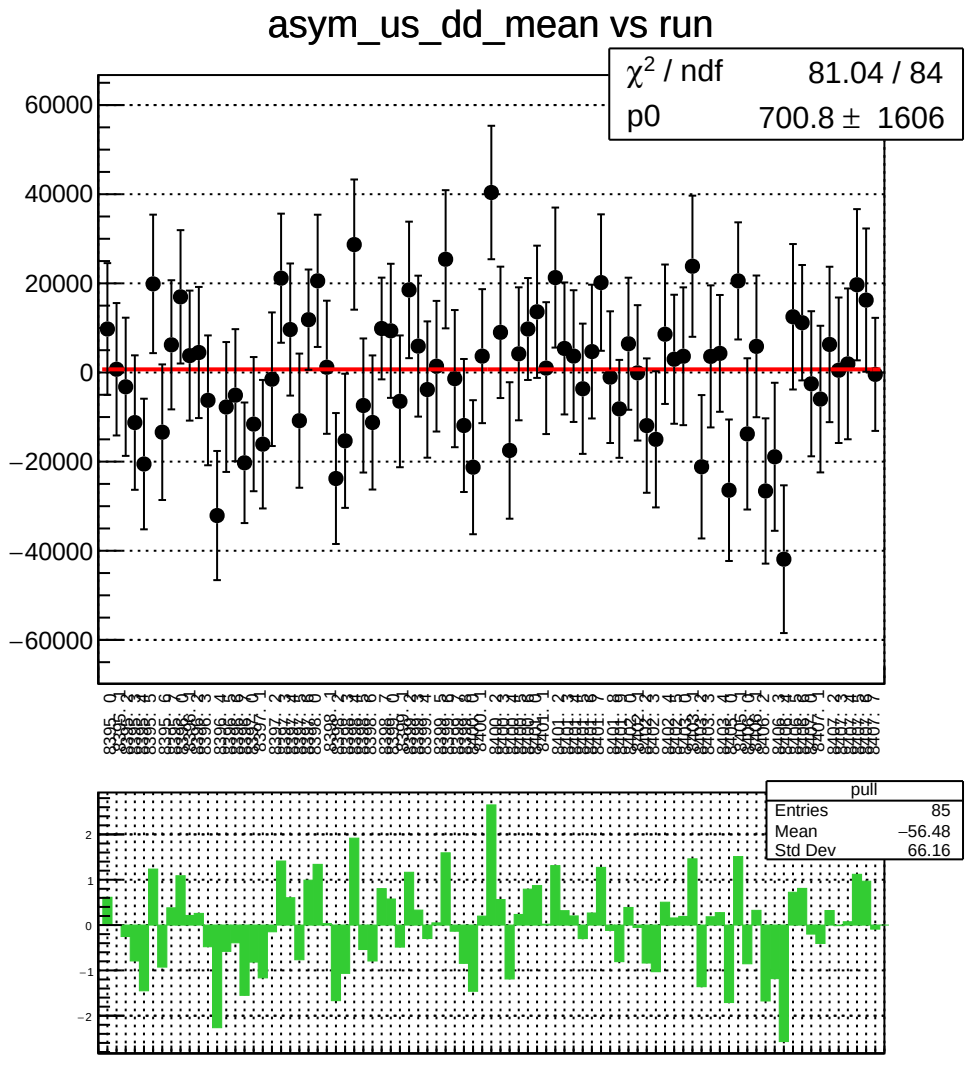

reg_asym_us_dd_mean vs run
χ² / ndf 62.15 / 84
p0 227 ± 833.6
pull
Entries 85
Mean 172.2
Std Dev 79.07
pull1D
Entries 85
Mean −0.007531
Std Dev 0.855

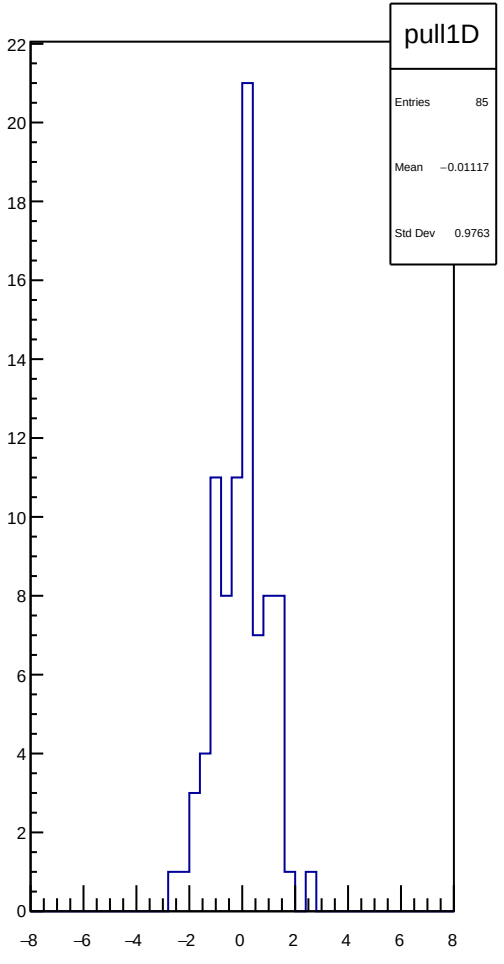

reg_asym_us_dd_rms vs run
χ² / ndf 95.57 / 84
p0 755.1 ± 0.5894
775
770
765
760
755
750
745
740
735

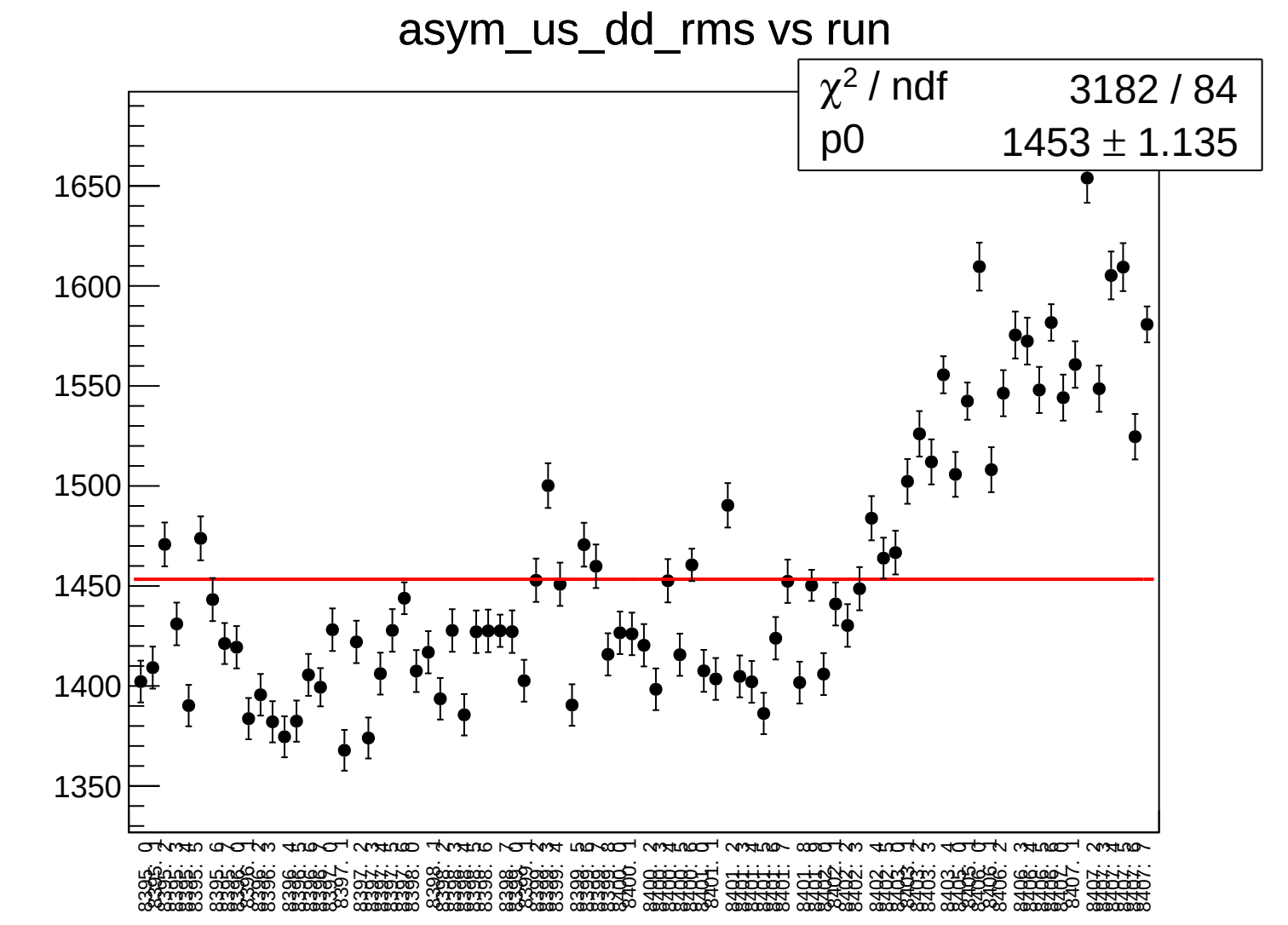

asym_us_dd_correction_mean vs run
χ² / ndf 83.98 / 84
p0 −387.9 ± 1370
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −281.3
Std Dev 317.1
2
1
0
−1
−2

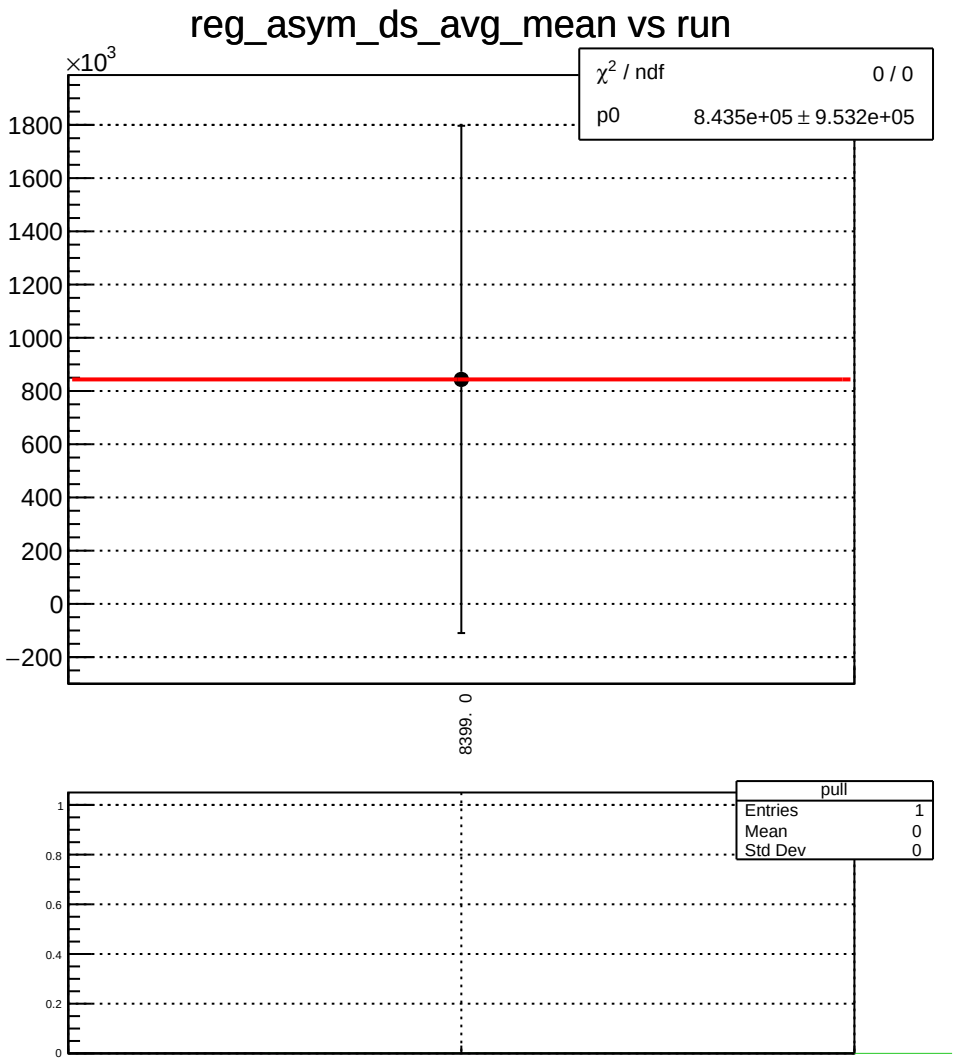

pull1D
Entries 85
Mean 0.005531
Std Dev 0.9939
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

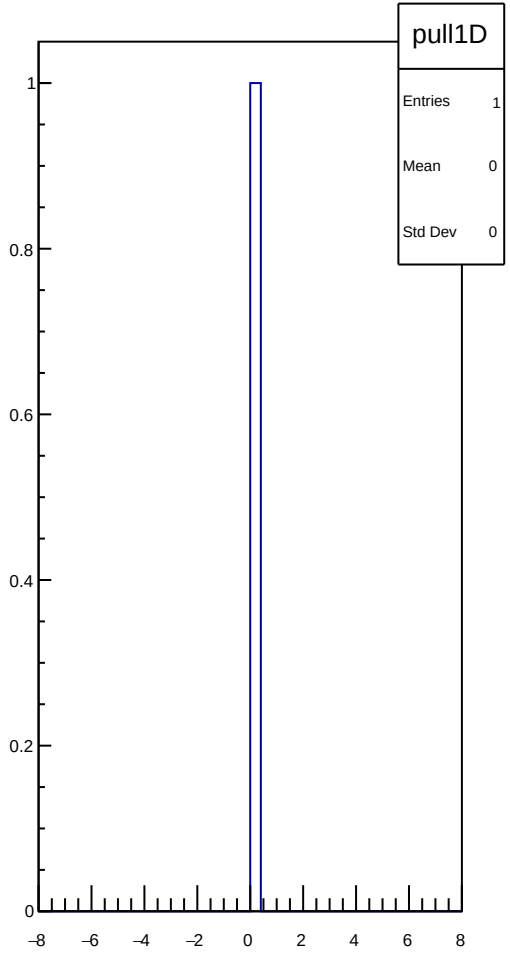

asym_us_dd_correction_rms vs run
χ² / ndf 5903 / 84
p0 1239 ± 0.9685
1500
1450
1400
1350
1300
1250
1200
1150
1100

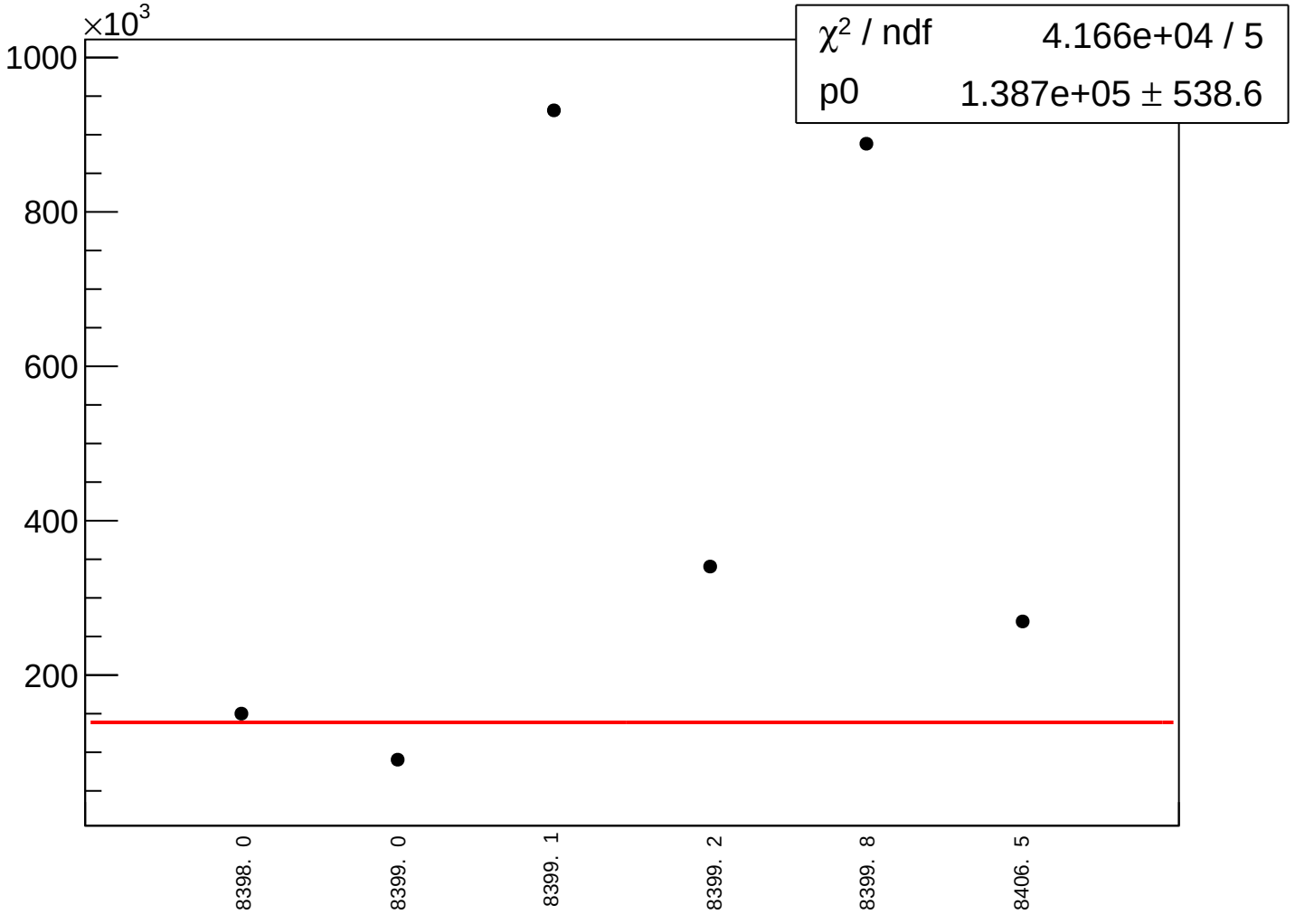

asym_us_dd_mean vs run
χ² / ndf 81.04 / 84
p0 700.8 ± 1606
pull
Entries 85
Mean −56.48
Std Dev 66.16

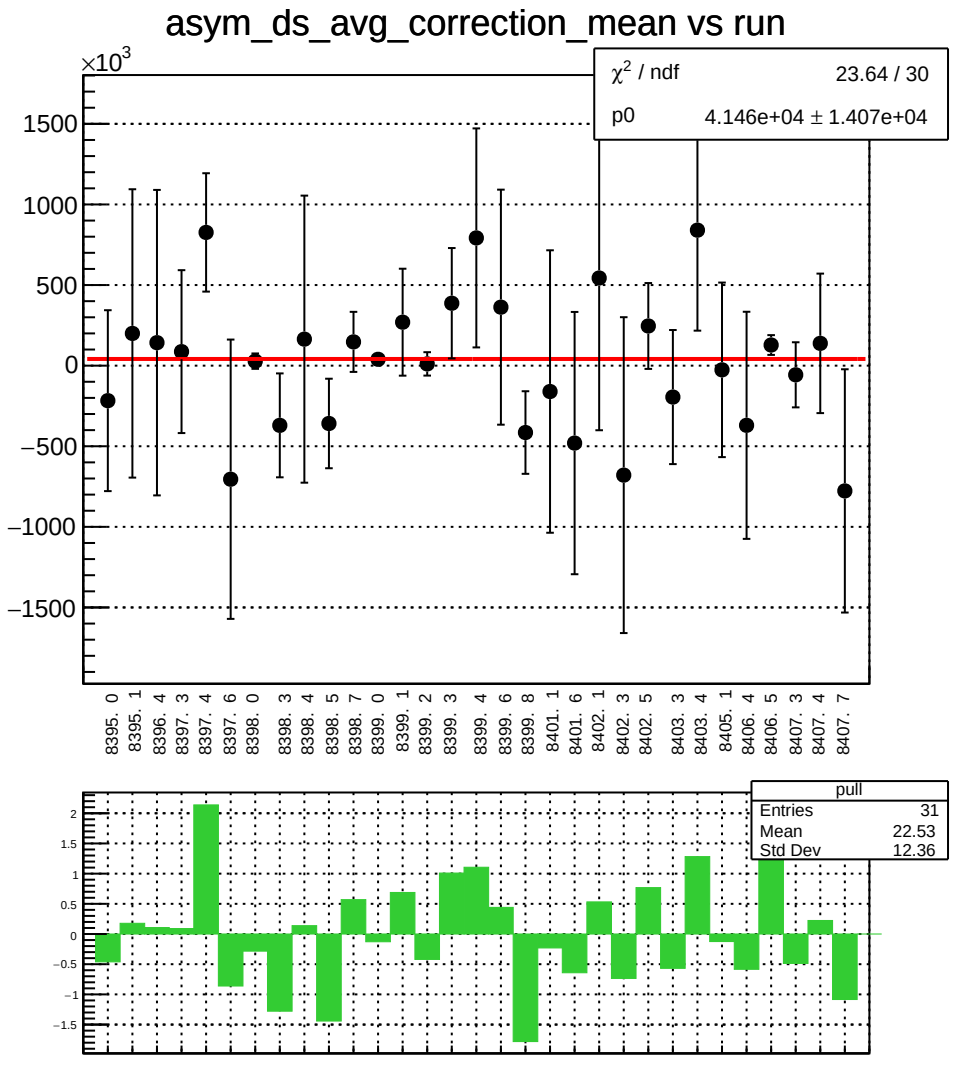

pull1D
Entries 85
Mean −0.01117
Std Dev 0.9763

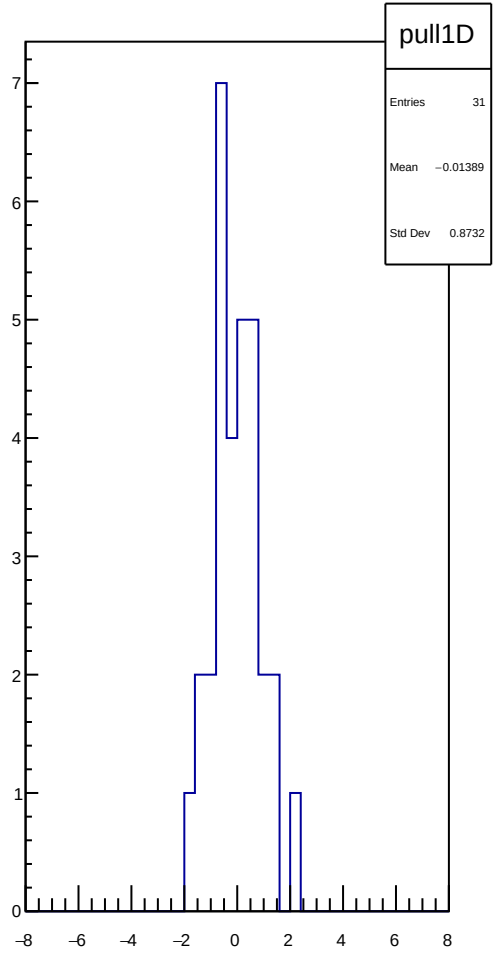

asym_us_dd_rms vs run
χ² / ndf 3182 / 84
p0 1453 ± 1.135
1650
1600
1550
1500
1450
1400
1350

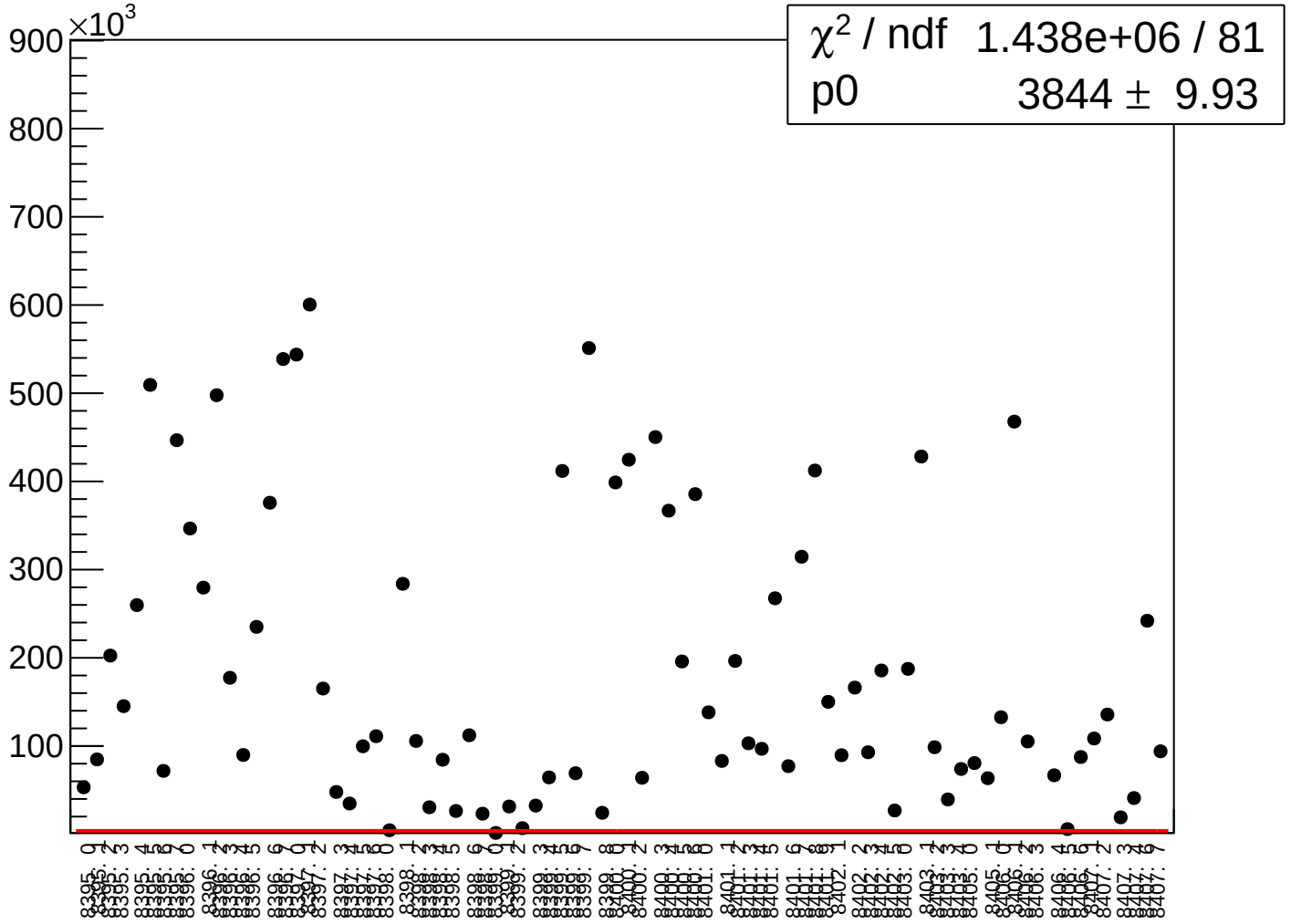

reg_asym_ds_avg_mean vs run
×10^3
χ² / ndf 0 / 0
p0 8.435e+05 ± 9.532e+05
1800
1600
1400
1200
1000
800
600
400
200
0
−200
8399. 0
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

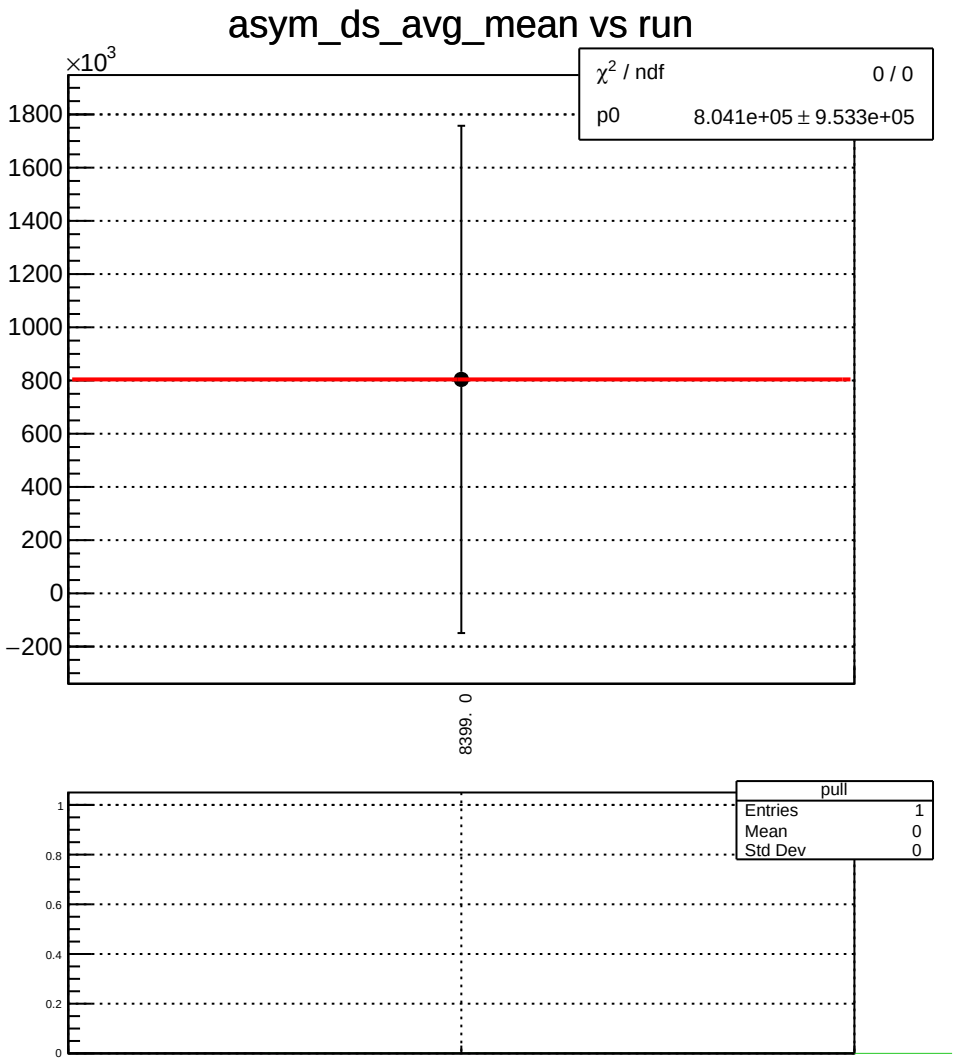

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

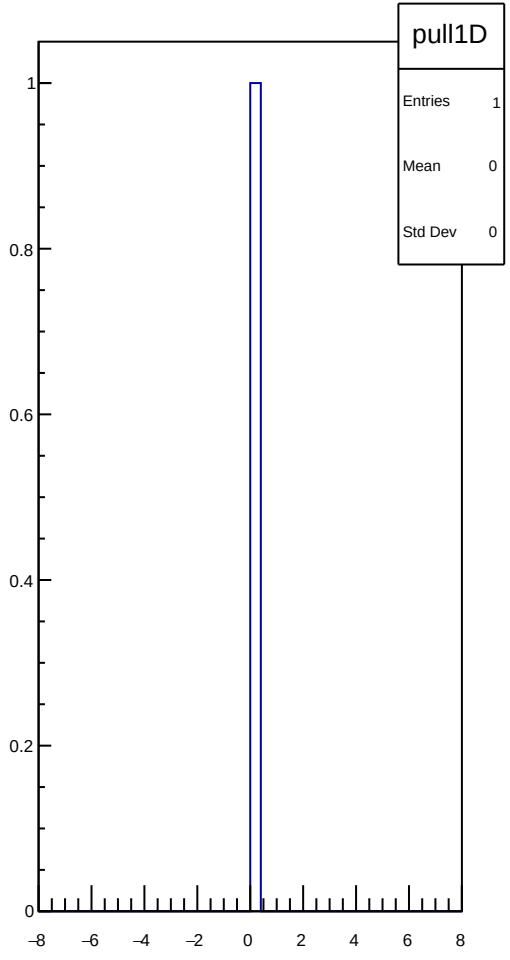

reg_asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.166e+04 / 5
p0 1.387e+05 ± 538.6
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

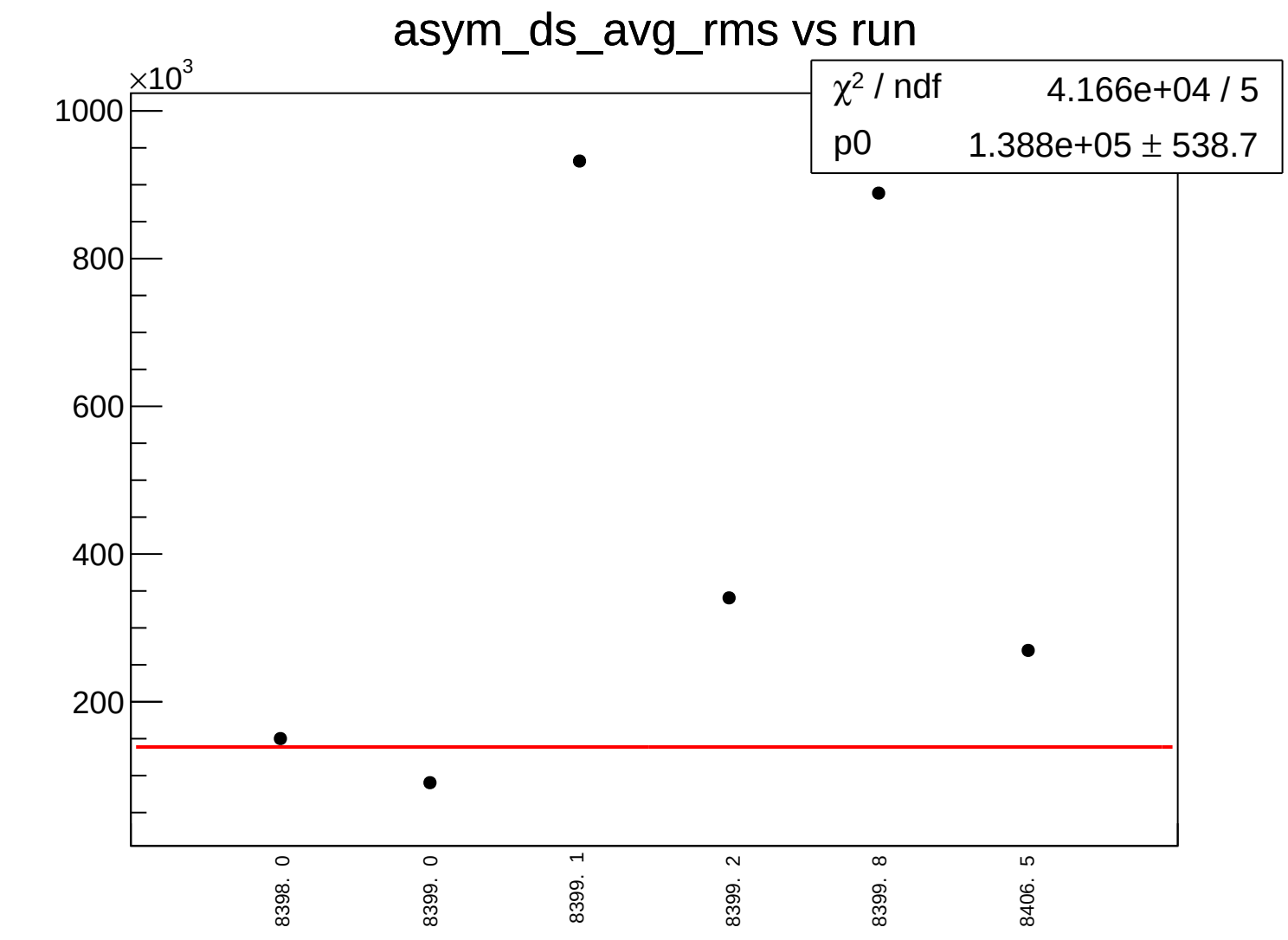

asym_ds_avg_correction_mean vs run
×10^3
χ² / ndf 23.64 / 30
p0 4.146e+04 ± 1.407e+04
1500
1000
500
0
−500
−1000
−1500
8395. 0
8395. 1
8396. 4
8397. 3
8397. 4
8397. 6
8398. 0
8398. 3
8398. 4
8398. 5
8398. 7
8399. 0
8399. 1
8399. 2
8399. 3
8399. 4
8399. 6
8399. 8
8401. 1
8401. 6
8402. 1
8402. 3
8402. 5
8403. 3
8403. 4
8405. 1
8406. 4
8406. 5
8407. 3
8407. 4
8407. 7
pull
Entries 31
Mean 22.53
Std Dev 12.36
2
1.5
1
0.5
0
−0.5
−1
−1.5

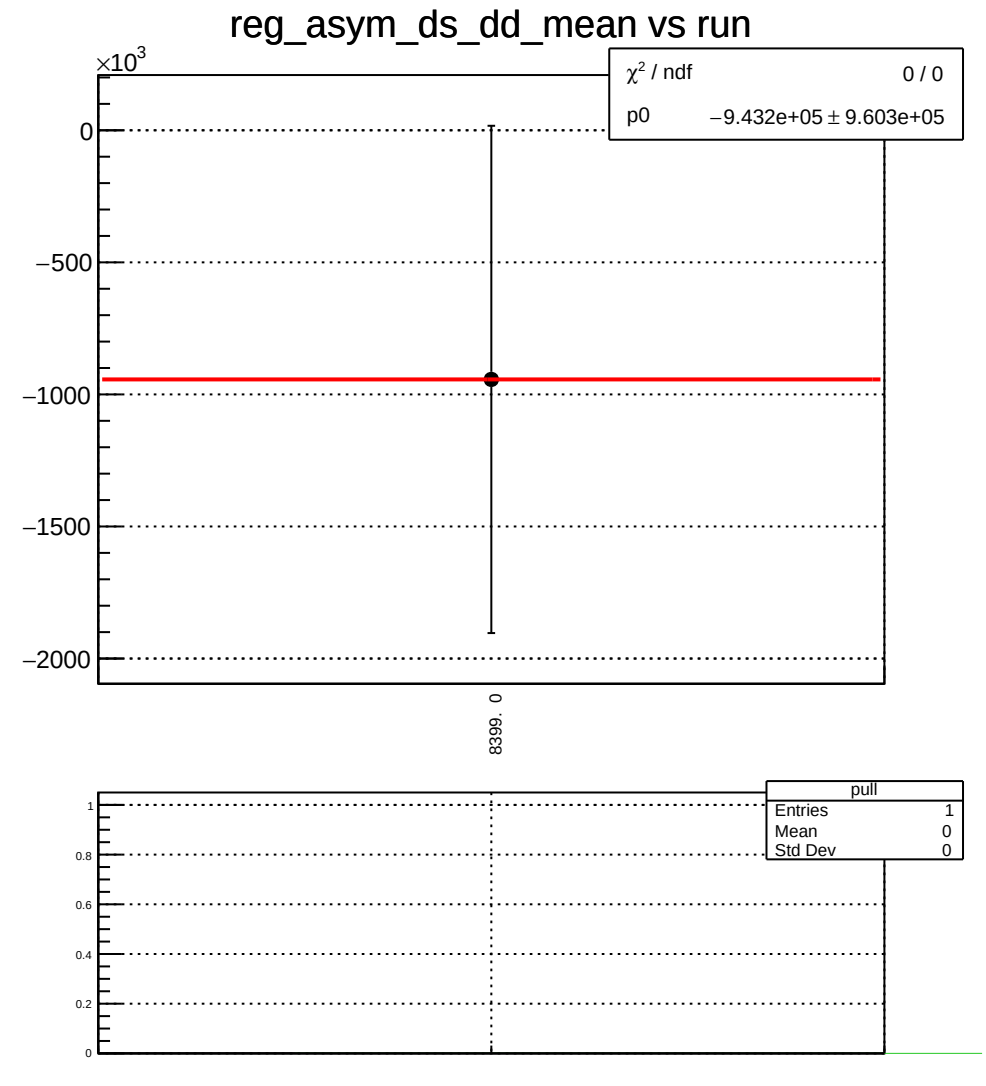

pull1D
Entries 31
Mean −0.01389
Std Dev 0.8732
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

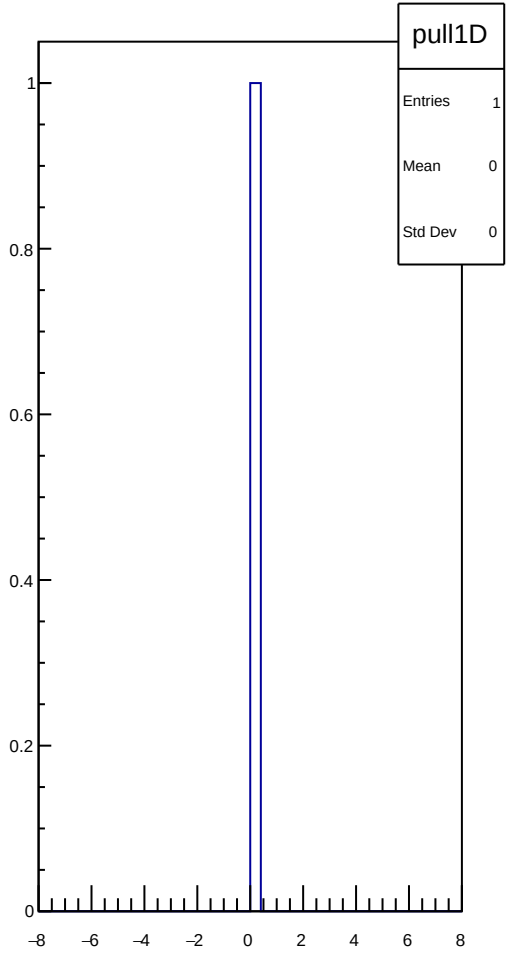

asym_ds_avg_correction_rms vs run
×10^3
900
800
700
600
500
400
300
200
100
χ² / ndf 1.438e+06 / 81
p0 3844 ± 9.93

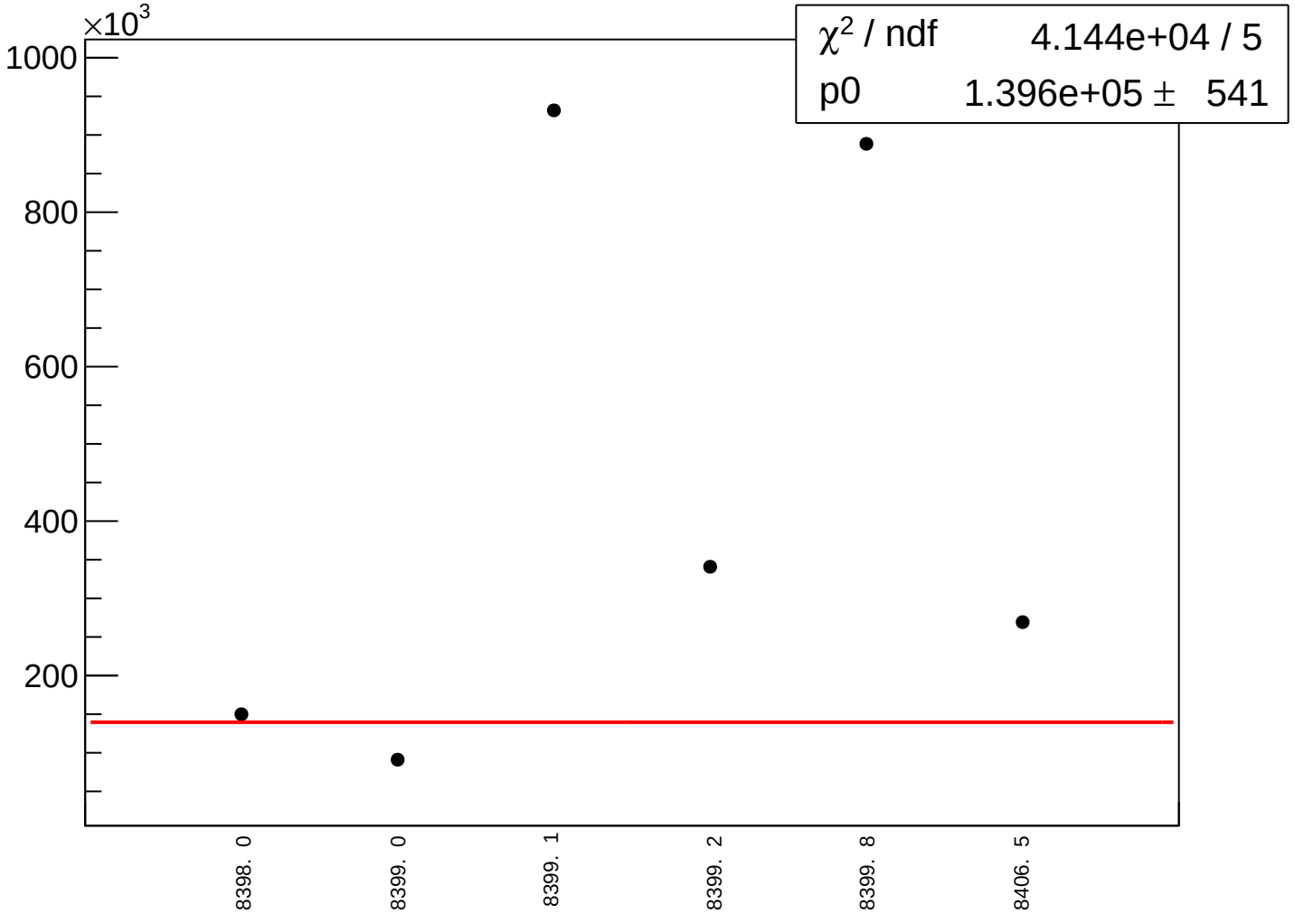

asym_ds_avg_mean vs run
×10^3
χ² / ndf 0 / 0
p0 8.041e+05 ± 9.533e+05
1800
1600
1400
1200
1000
800
600
400
200
0
−200
8399. 0
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

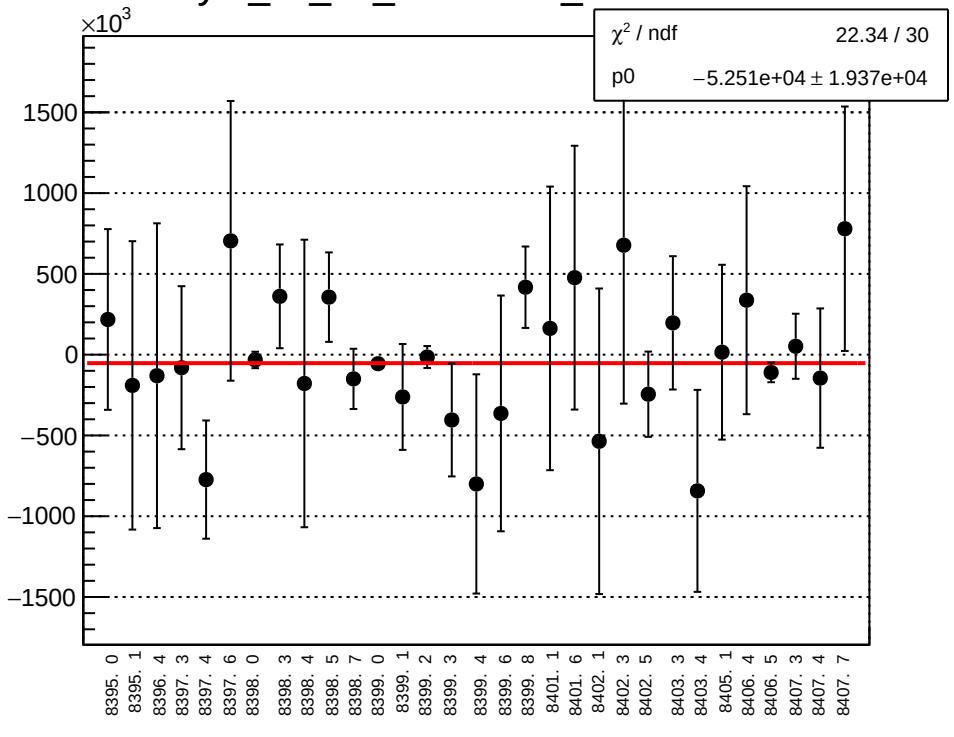

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

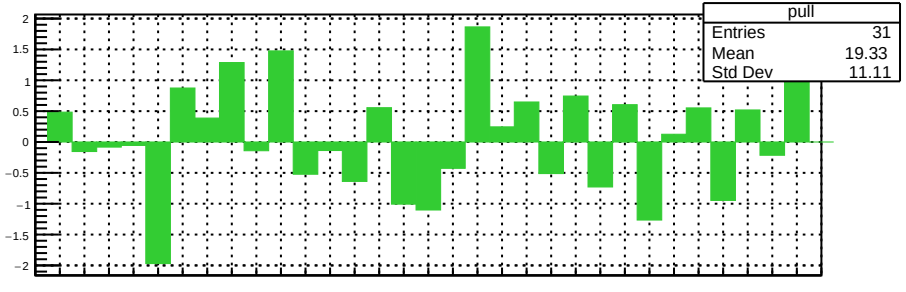

asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.166e+04 / 5
p0 1.388e+05 ± 538.7
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

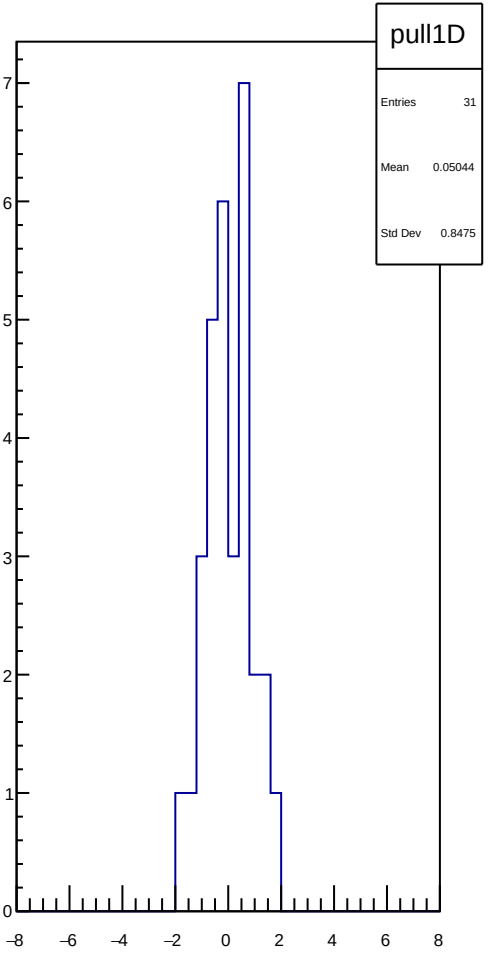

reg_asym_ds_dd_mean vs run
×10^3
χ² / ndf 0 / 0
p0 −9.432e+05 ± 9.603e+05
0
−500
−1000
−1500
−2000
8399. 0
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

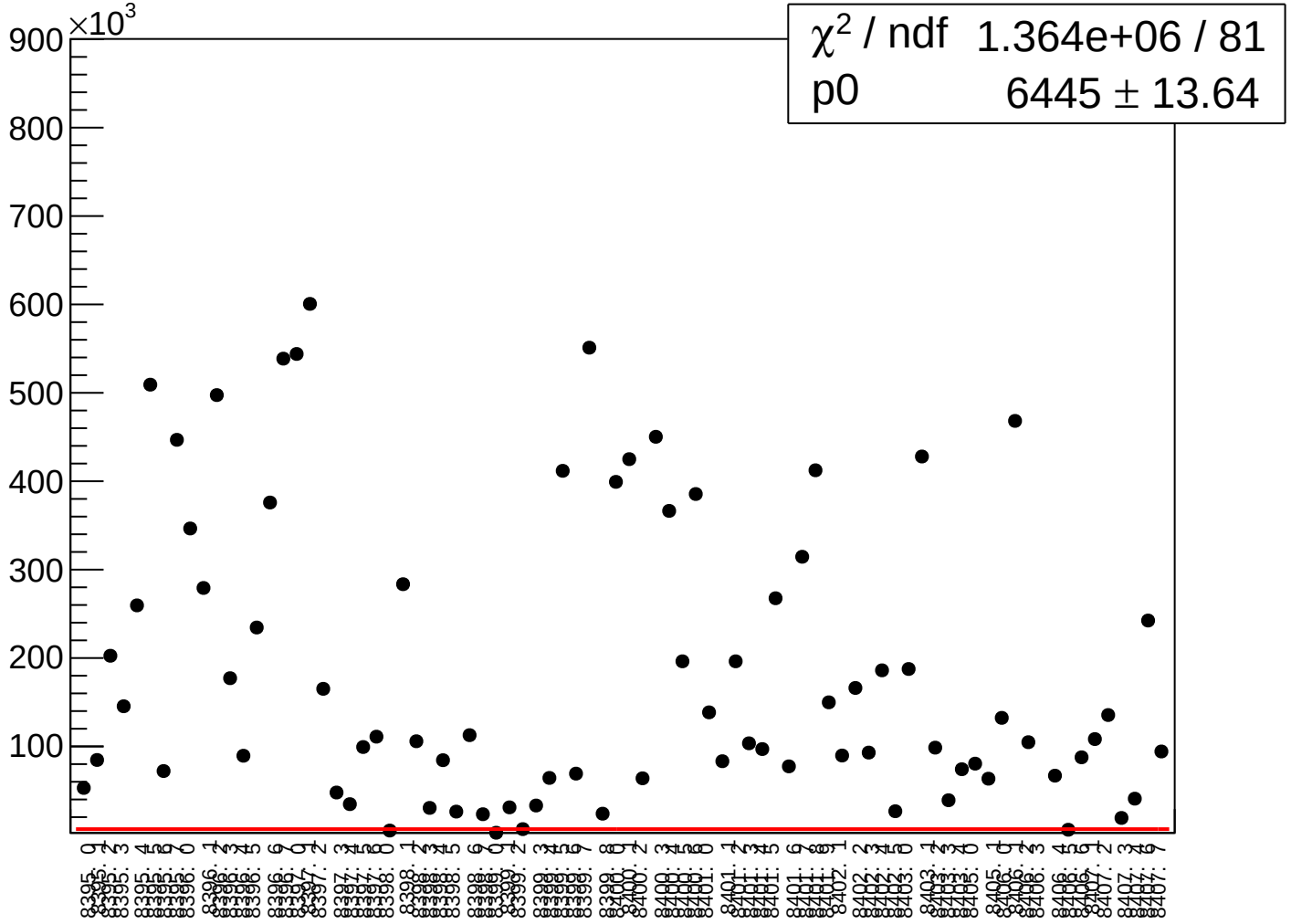

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

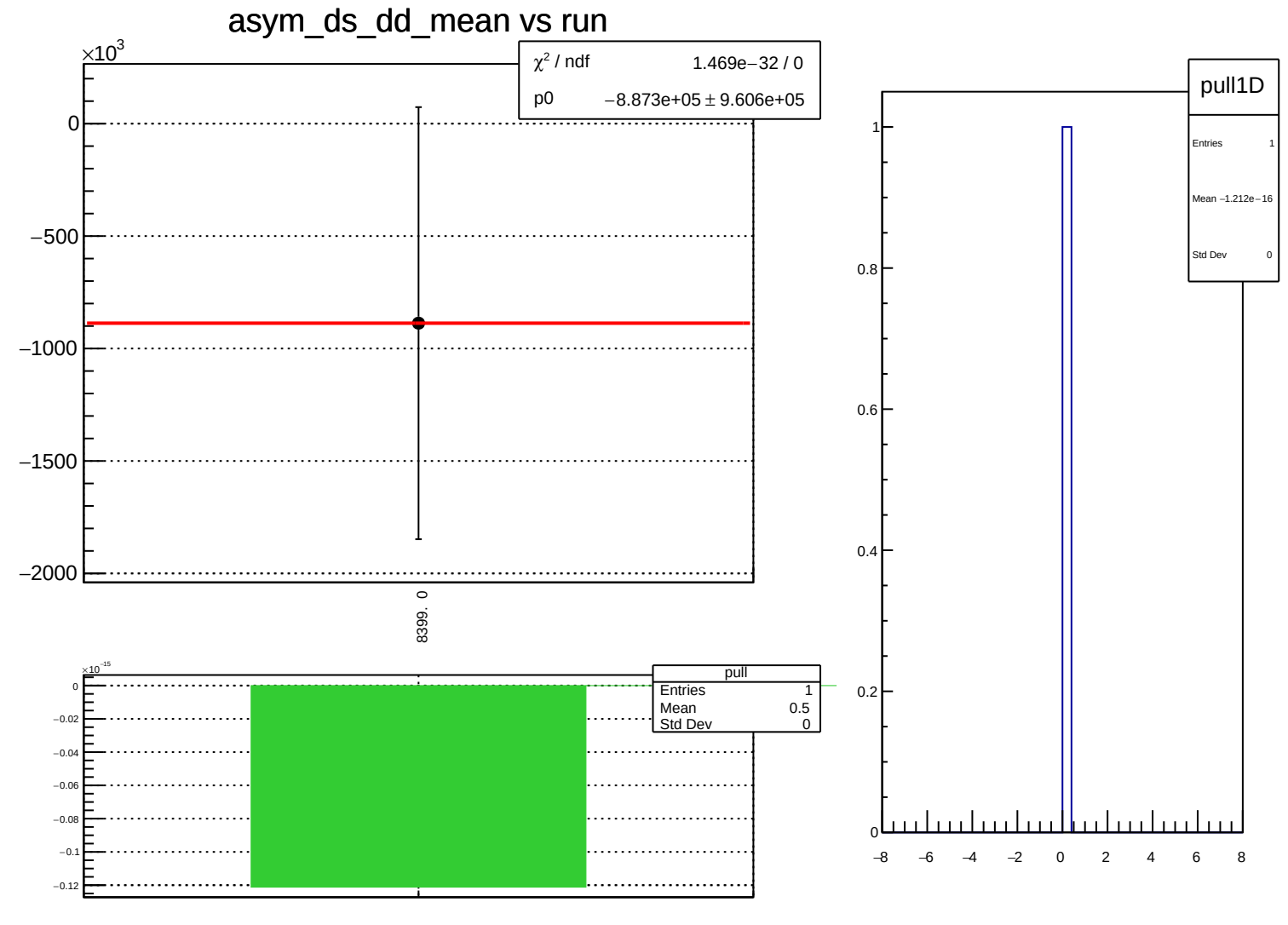

reg_asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.144e+04 / 5
p0 1.396e+05 ± 541
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

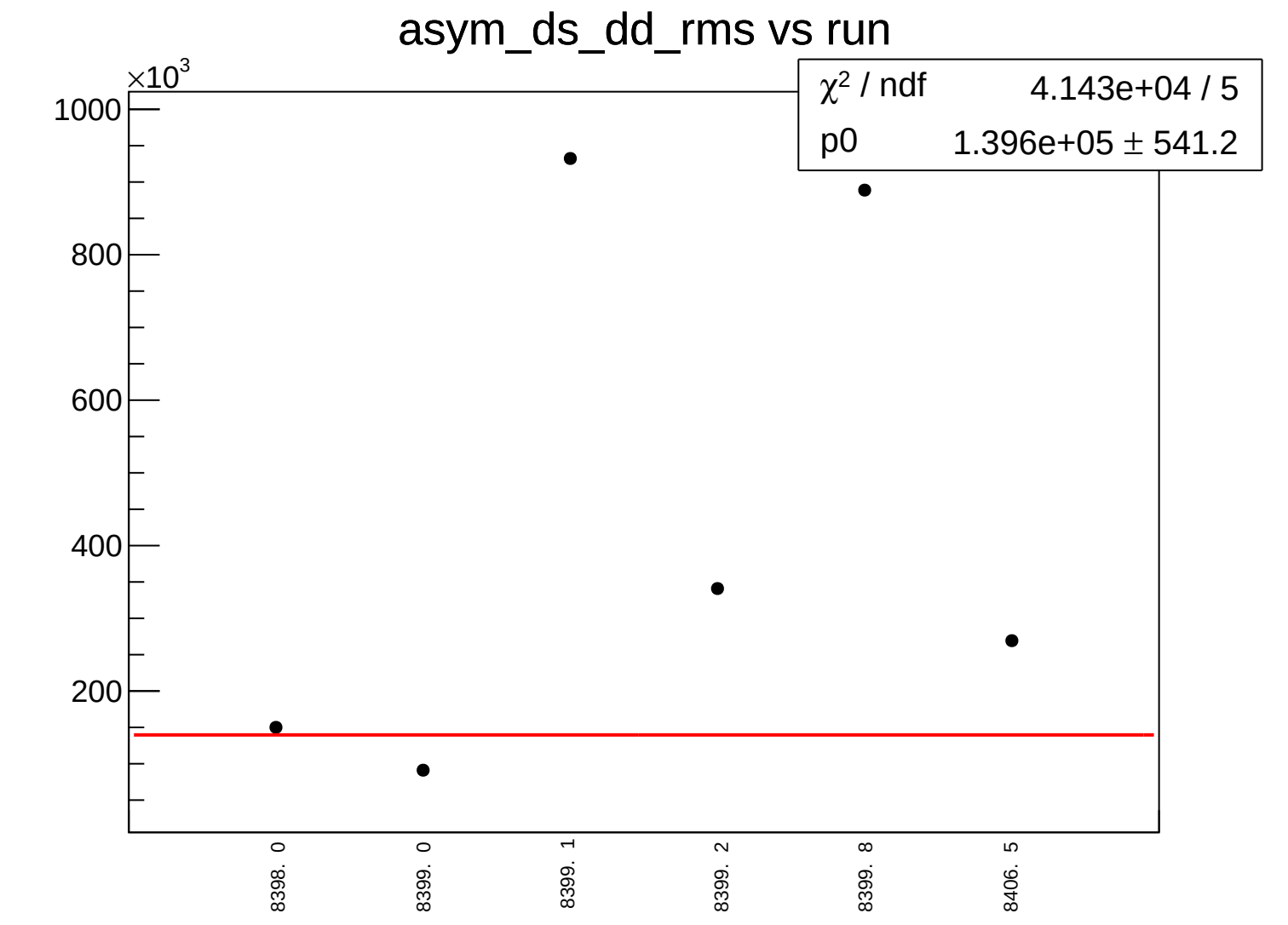

asym_ds_dd_correction_mean vs run
×10^3
χ² / ndf 22.34 / 30
p0 −5.251e+04 ± 1.937e+04
1500
1000
500
0
−500
−1000
−1500
8395. 0
8395. 1
8396. 4
8397. 3
8397. 4
8397. 6
8398. 0
8398. 3
8398. 4
8398. 5
8398. 7
8399. 0
8399. 1
8399. 2
8399. 3
8399. 4
8399. 6
8399. 8
8401. 1
8401. 6
8402. 1
8402. 3
8402. 5
8403. 3
8403. 4
8405. 1
8406. 4
8406. 5
8407. 3
8407. 4
8407. 7

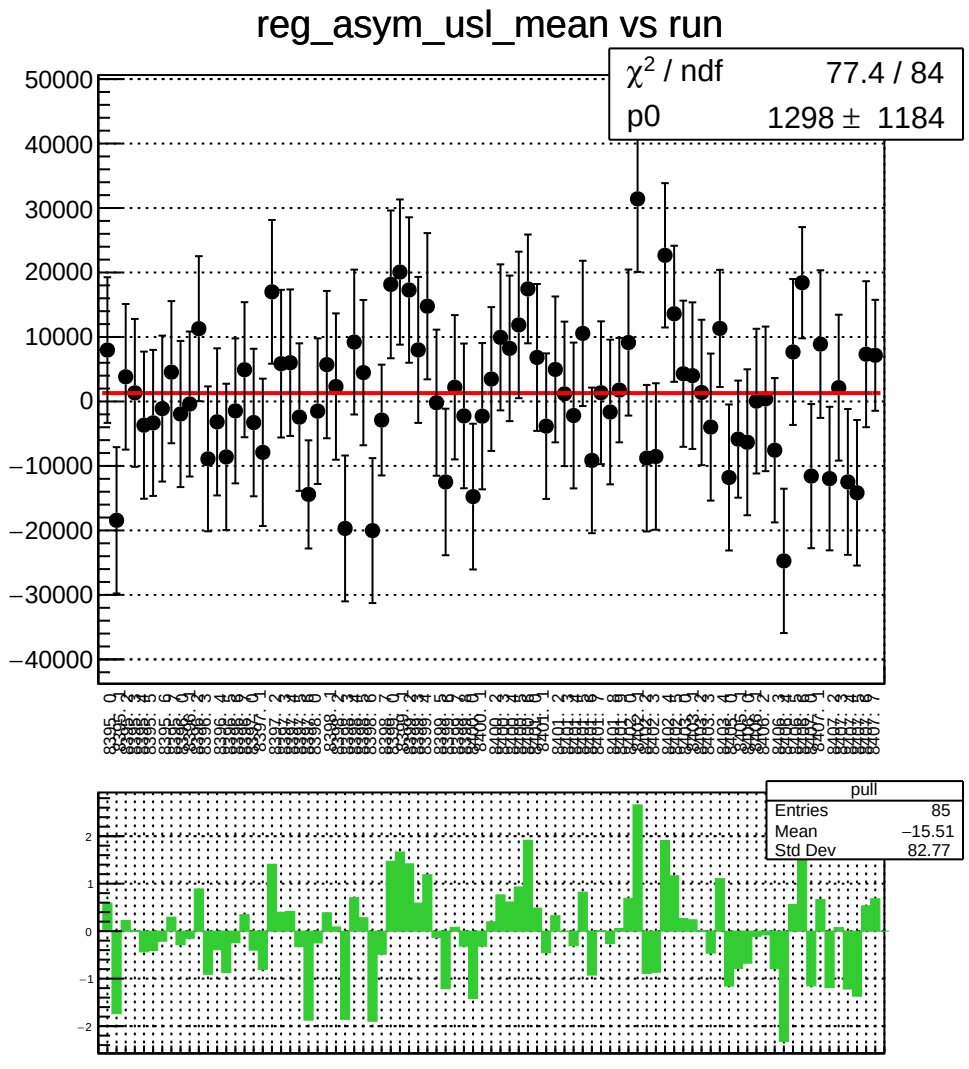

pull
Entries 31
Mean 19.33
Std Dev 11.11
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

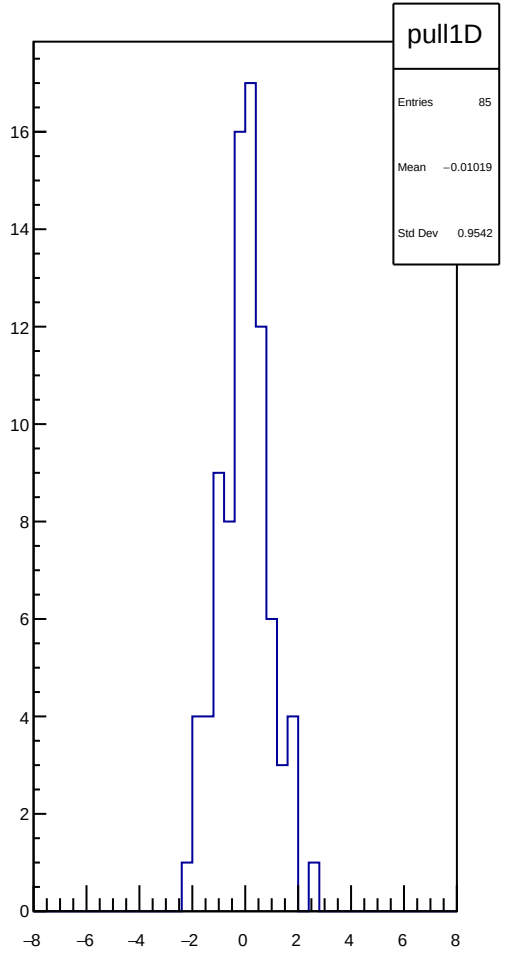

pull1D
Entries 31
Mean 0.05044
Std Dev 0.8475
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

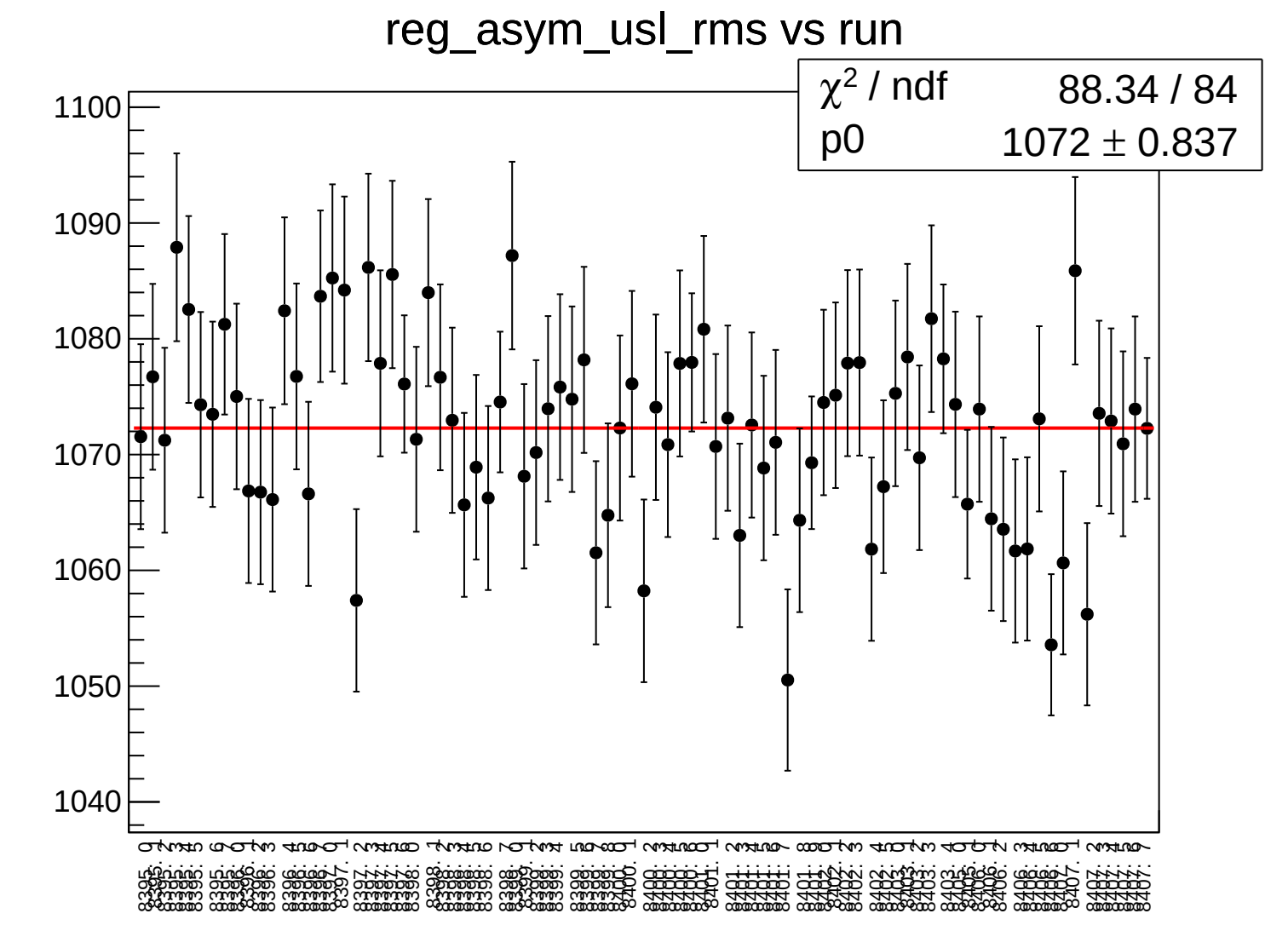

asym_ds_dd_correction_rms vs run
×10^3
900
800
700
600
500
400
300
200
100
χ² / ndf 1.364e+06 / 81
p0 6445 ± 13.64

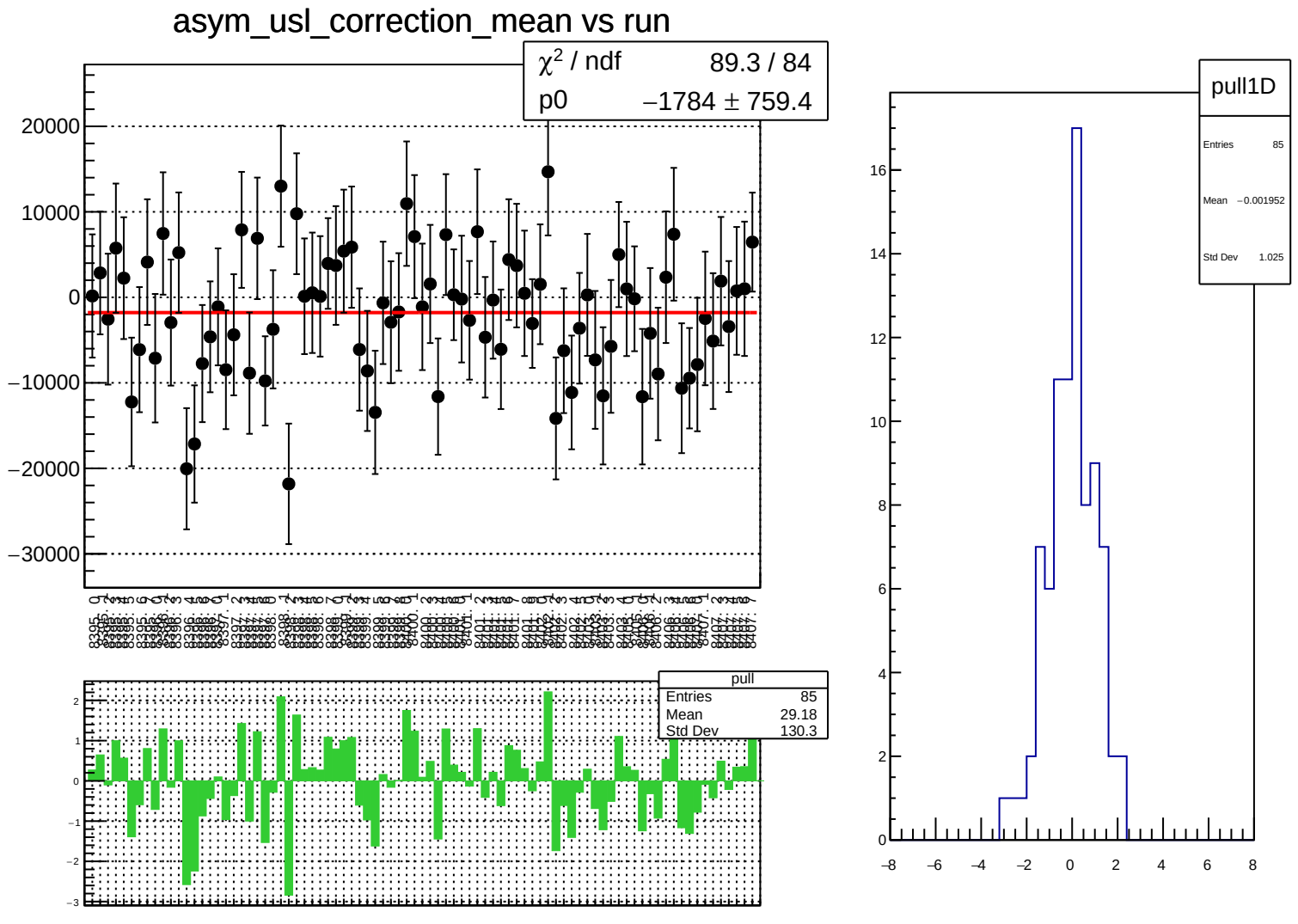

asym_ds_dd_mean vs run
×10^3
χ² / ndf 1.469e−32 / 0
p0 −8.873e+05 ± 9.606e+05
0
−500
−1000
−1500
−2000
8399. 0
×10^-15
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
pull
Entries 1
Mean 0.5
Std Dev 0
pull1D
Entries 1
Mean −1.212e−16
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

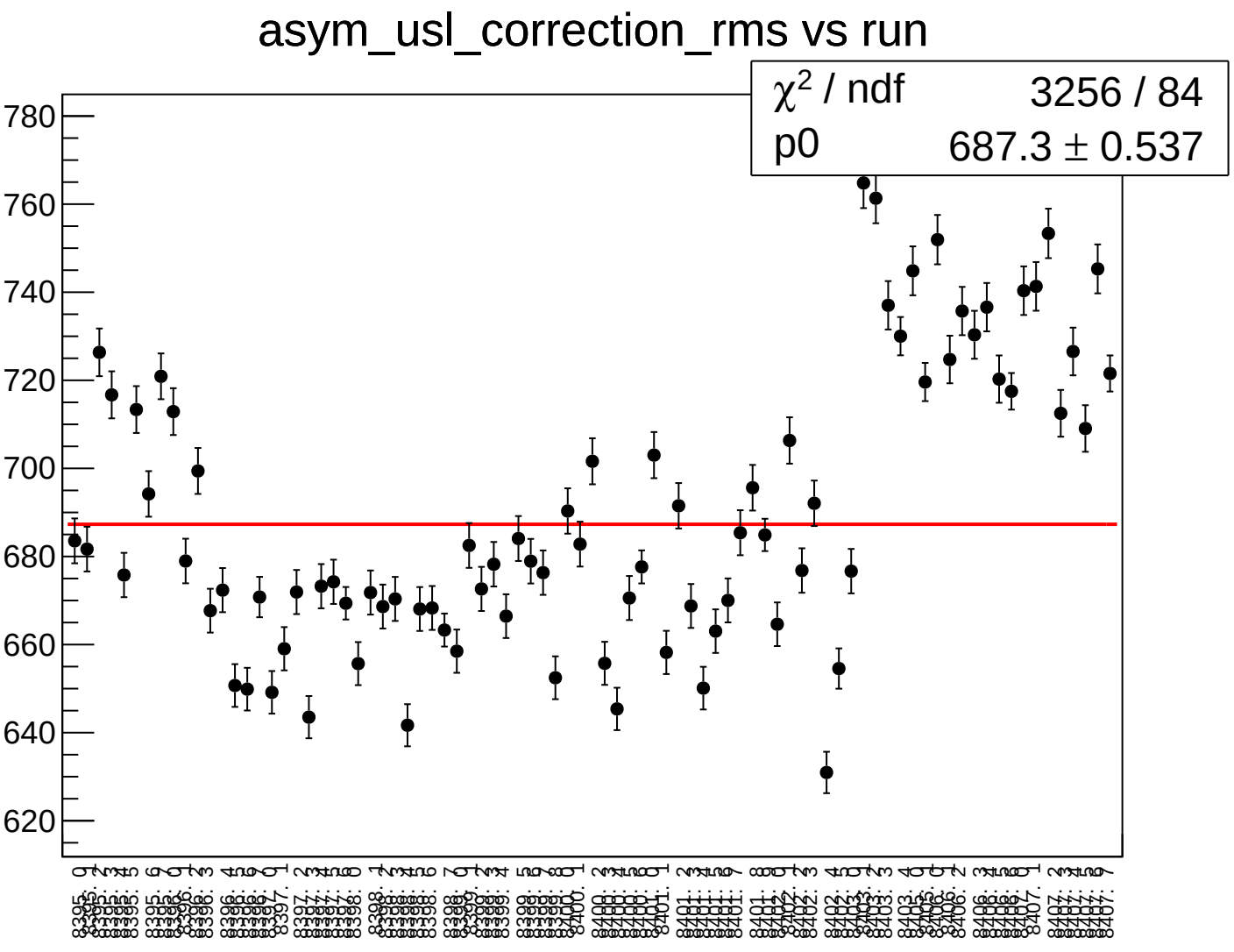

asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.143e+04 / 5
p0 1.396e+05 ± 541.2
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

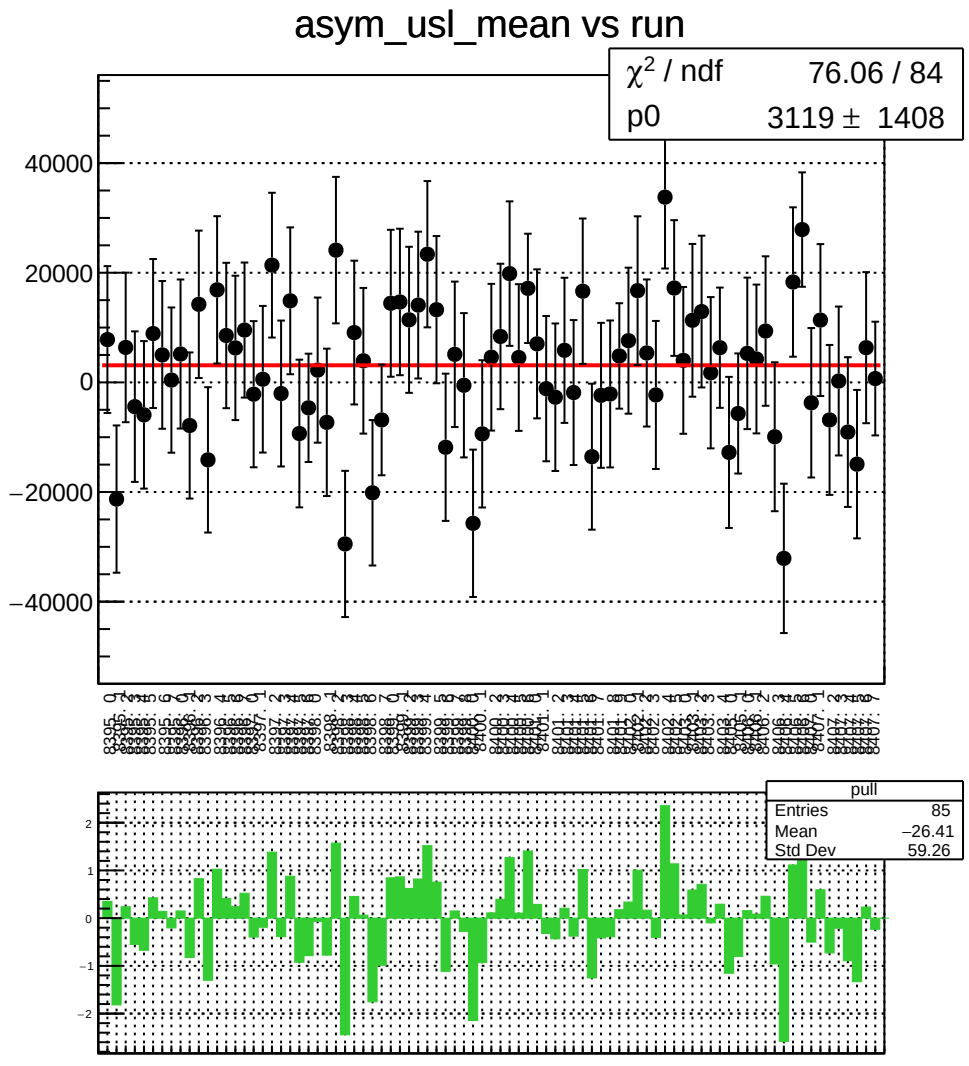

reg_asym_usl_mean vs run
χ² / ndf 77.4 / 84
p0 1298 ± 1184
pull
Entries 85
Mean −15.51
Std Dev 82.77

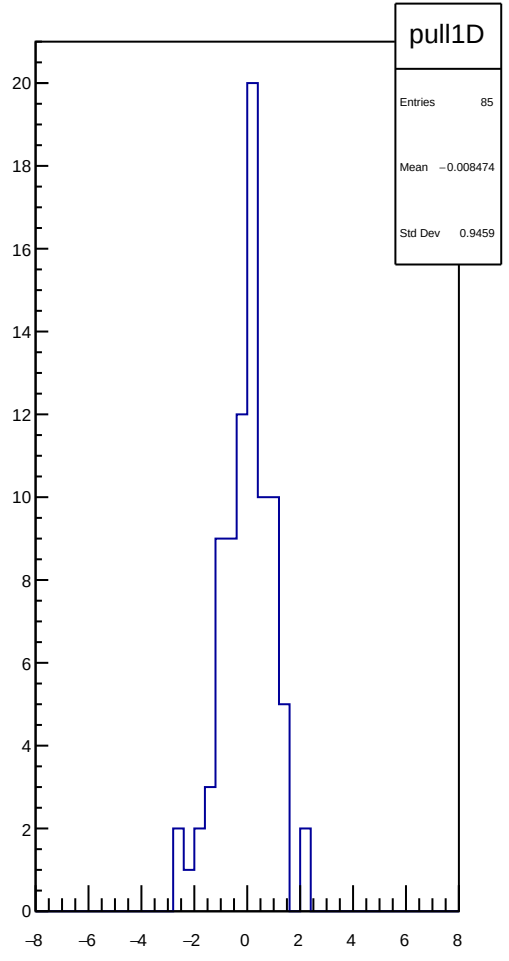

pull1D
Entries 85
Mean −0.01019
Std Dev 0.9542

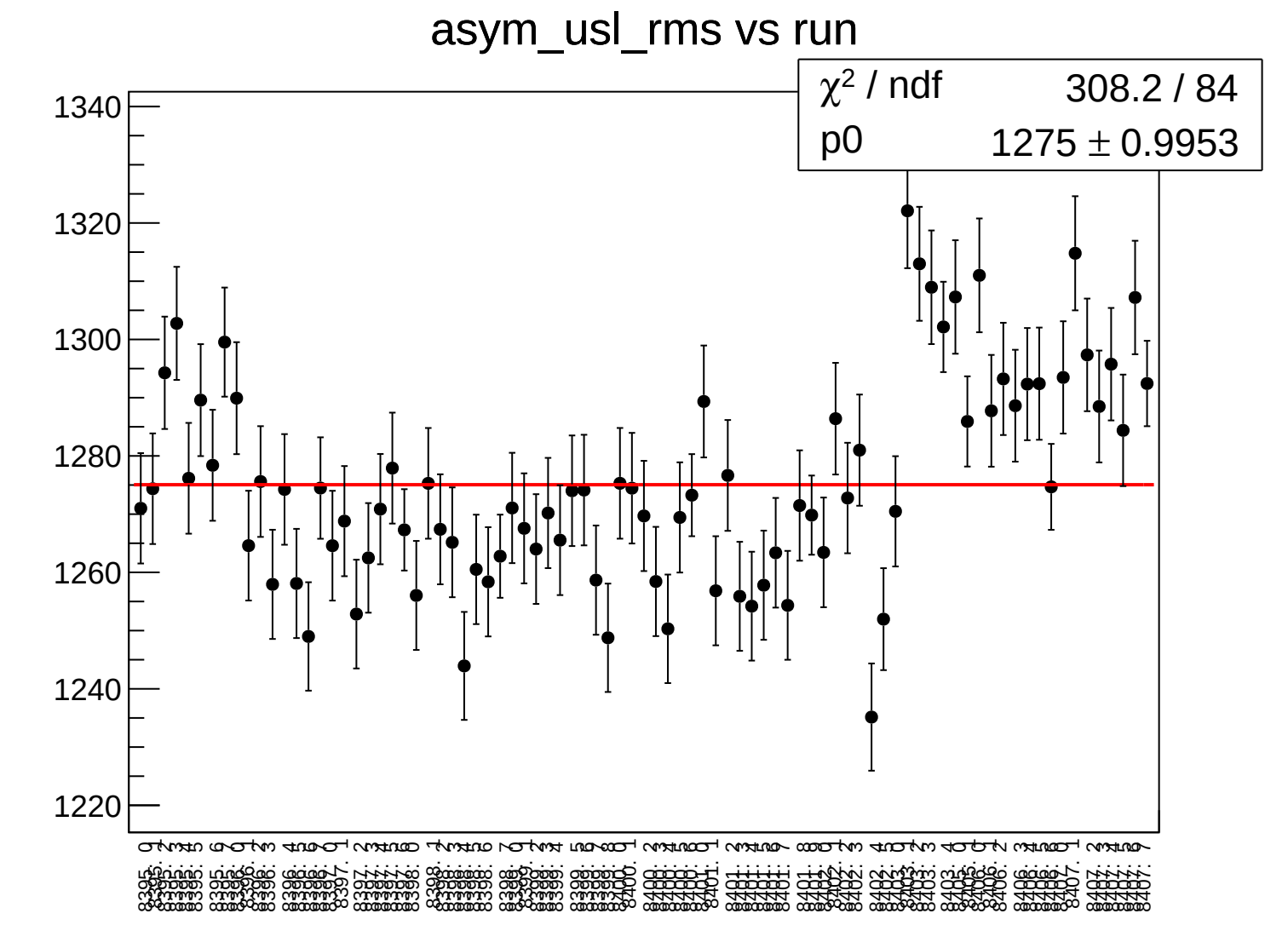

reg_asym_usl_rms vs run
χ² / ndf 88.34 / 84
p0 1072 ± 0.837
1100
1090
1080
1070
1060
1050
1040

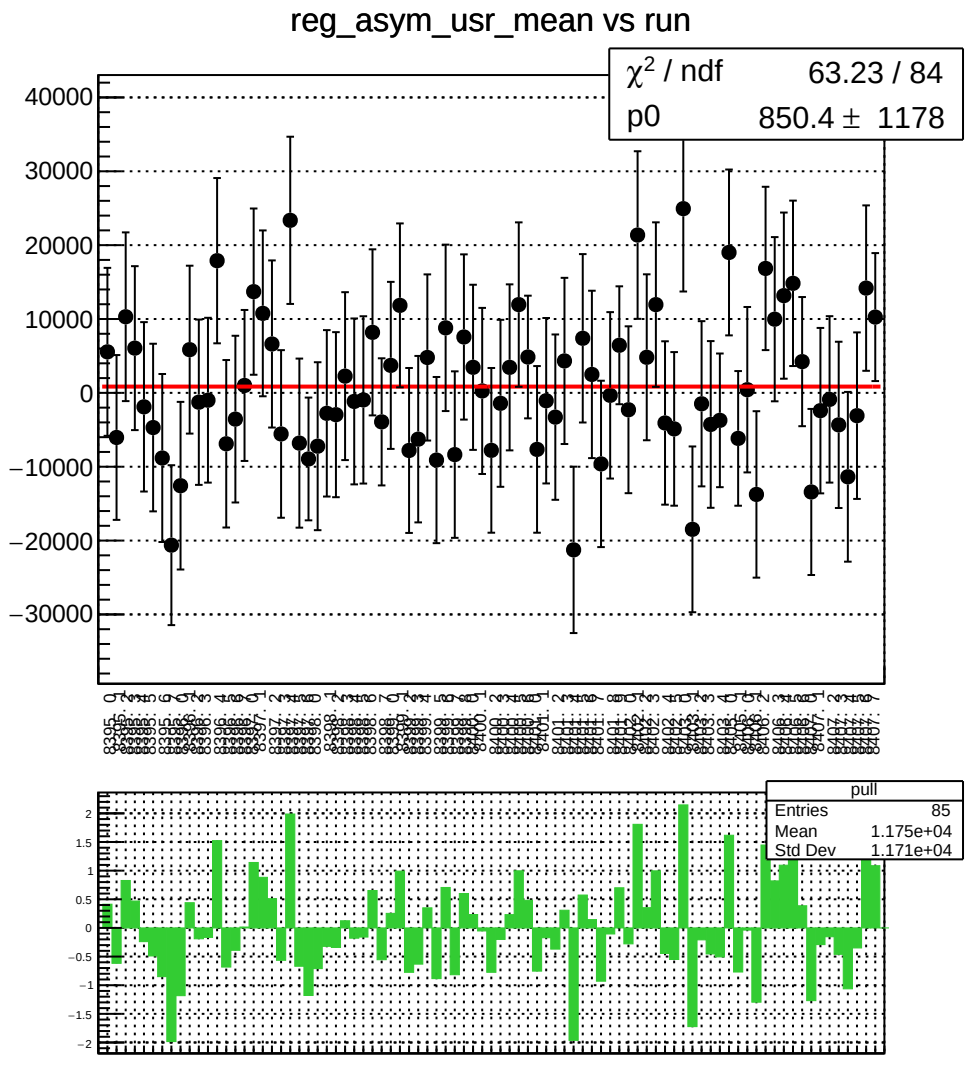

asym_usl_correction_mean vs run
χ² / ndf 89.3 / 84
p0 −1784 ± 759.4
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean 29.18
Std Dev 130.3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.001952
Std Dev 1.025
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

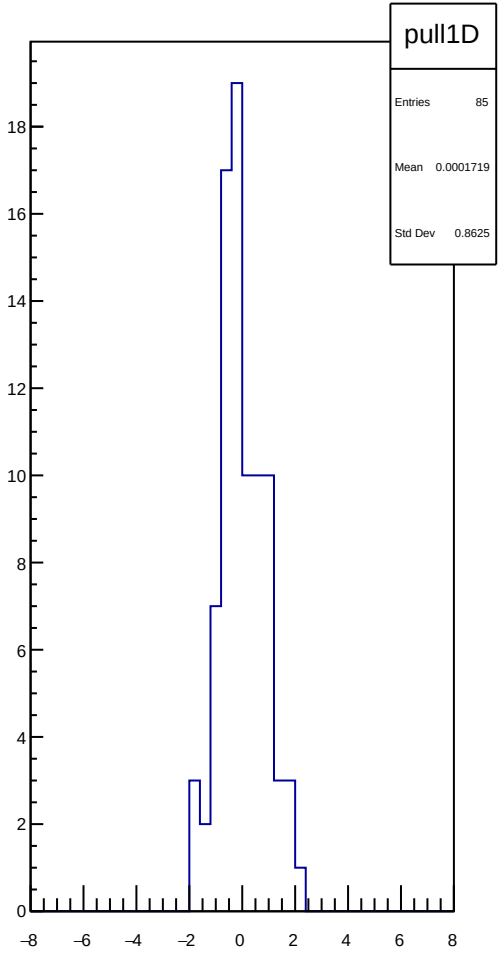

asym_usl_correction_rms vs run
χ² / ndf 3256 / 84
p0 687.3 ± 0.537
780
760
740
720
700
680
660
640
620

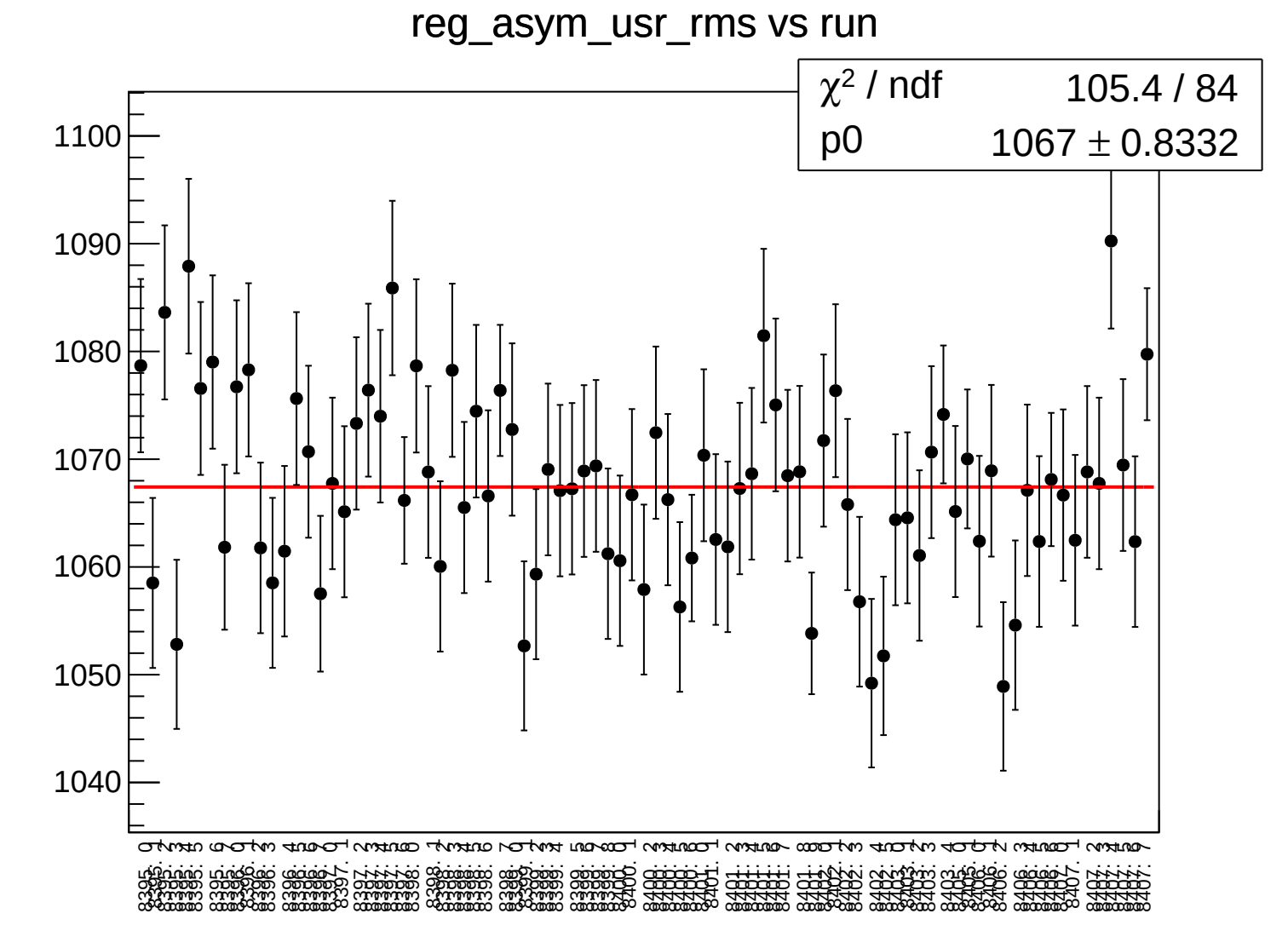

asym_usl_mean vs run
χ² / ndf 76.06 / 84
p0 3119 ± 1408
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −26.41
Std Dev 59.26
2
1
0
−1
−2

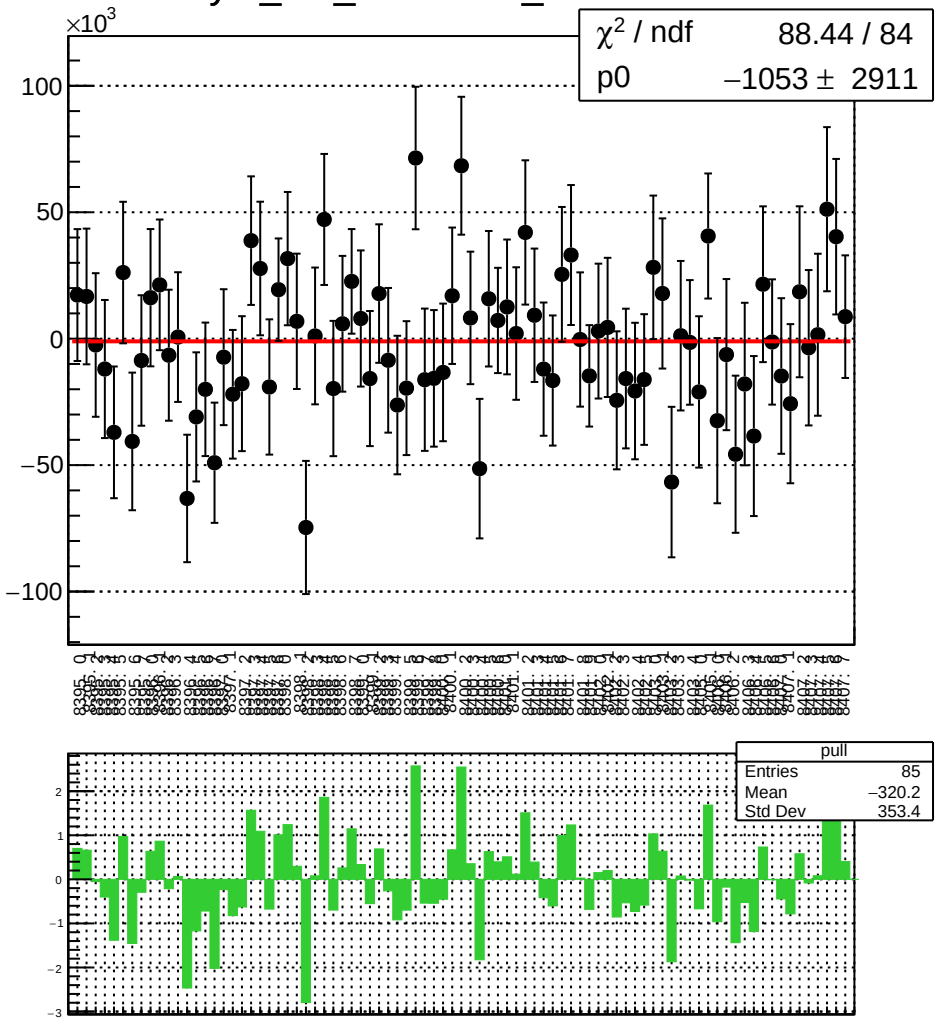

pull1D
Entries 85
Mean −0.008474
Std Dev 0.9459
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

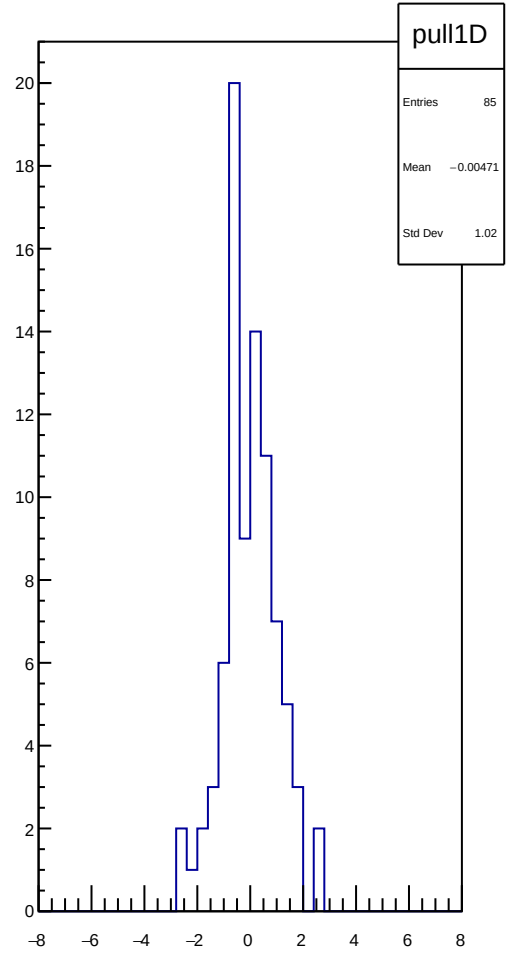

asym_usl_rms vs run
χ² / ndf 308.2 / 84
p0 1275 ± 0.9953
1340
1320
1300
1280
1260
1240
1220

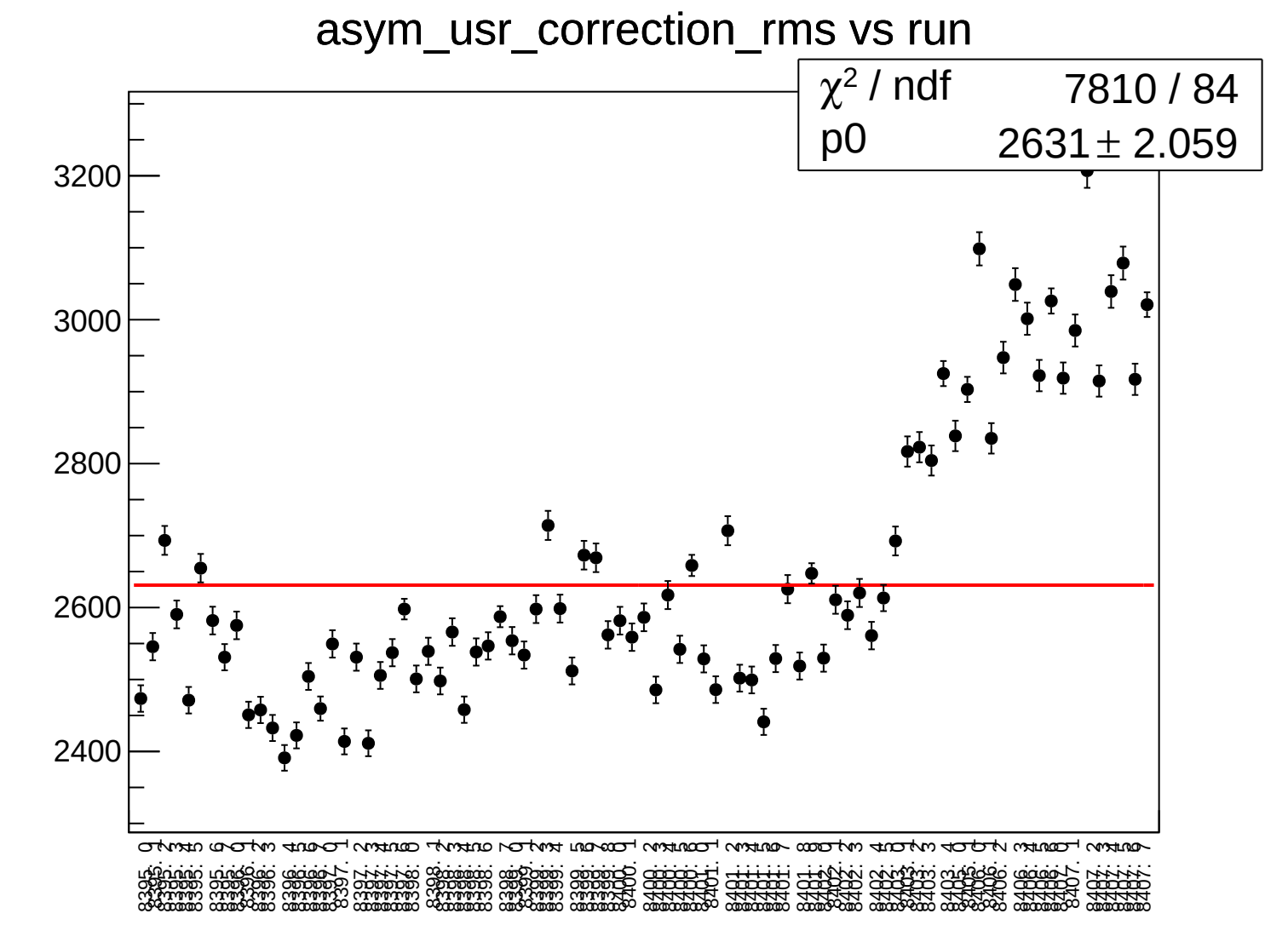

reg_asym_usr_mean vs run
χ² / ndf 63.23 / 84
p0 850.4 ± 1178
pull
Entries 85
Mean 1.175e+04
Std Dev 1.171e+04

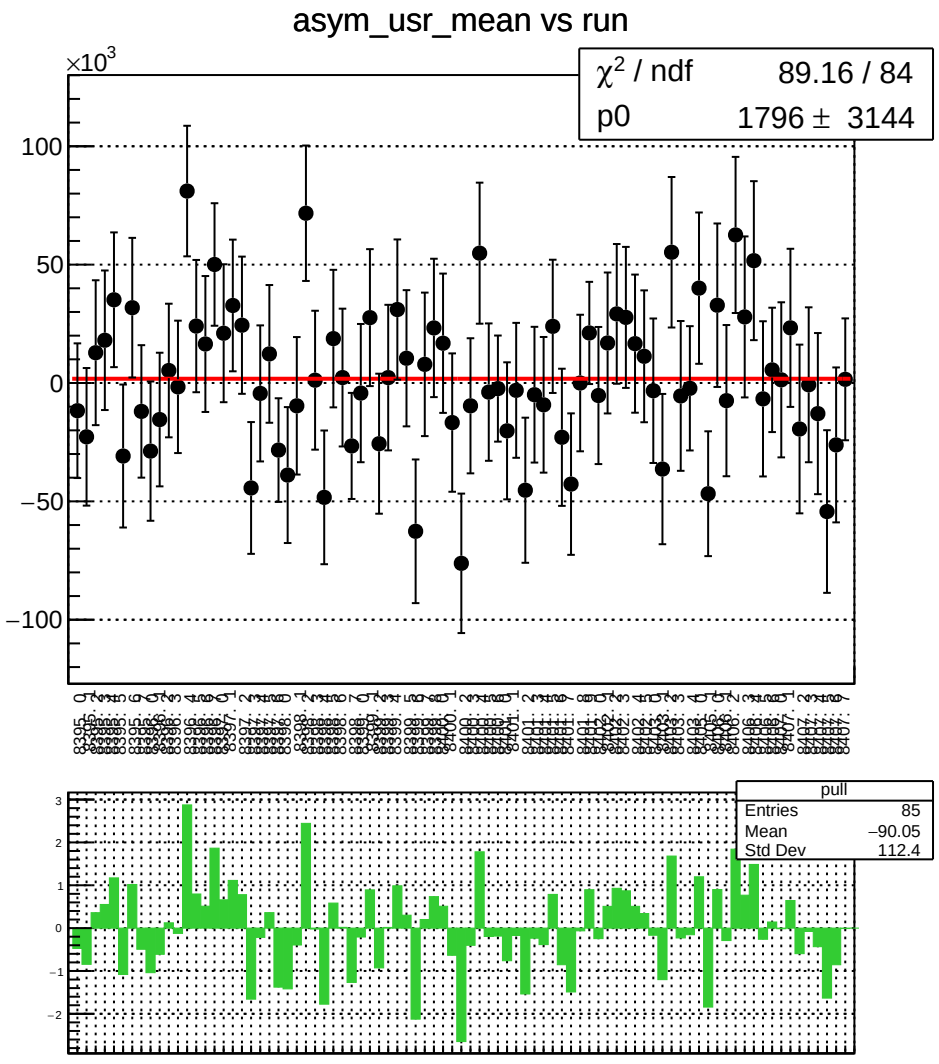

pull1D
Entries 85
Mean 0.0001719
Std Dev 0.8625

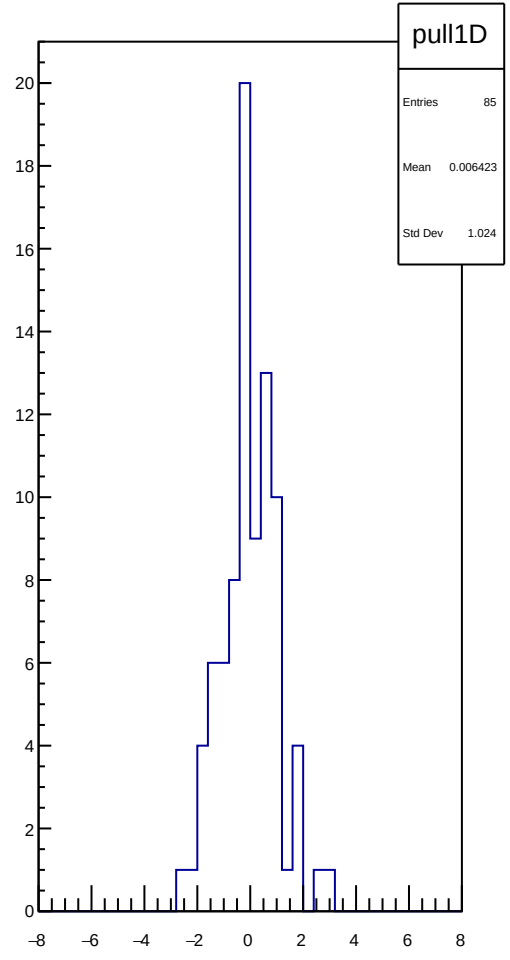

reg_asym_usr_rms vs run
χ² / ndf 105.4 / 84
p0 1067 ± 0.8332
1100
1090
1080
1070
1060
1050
1040

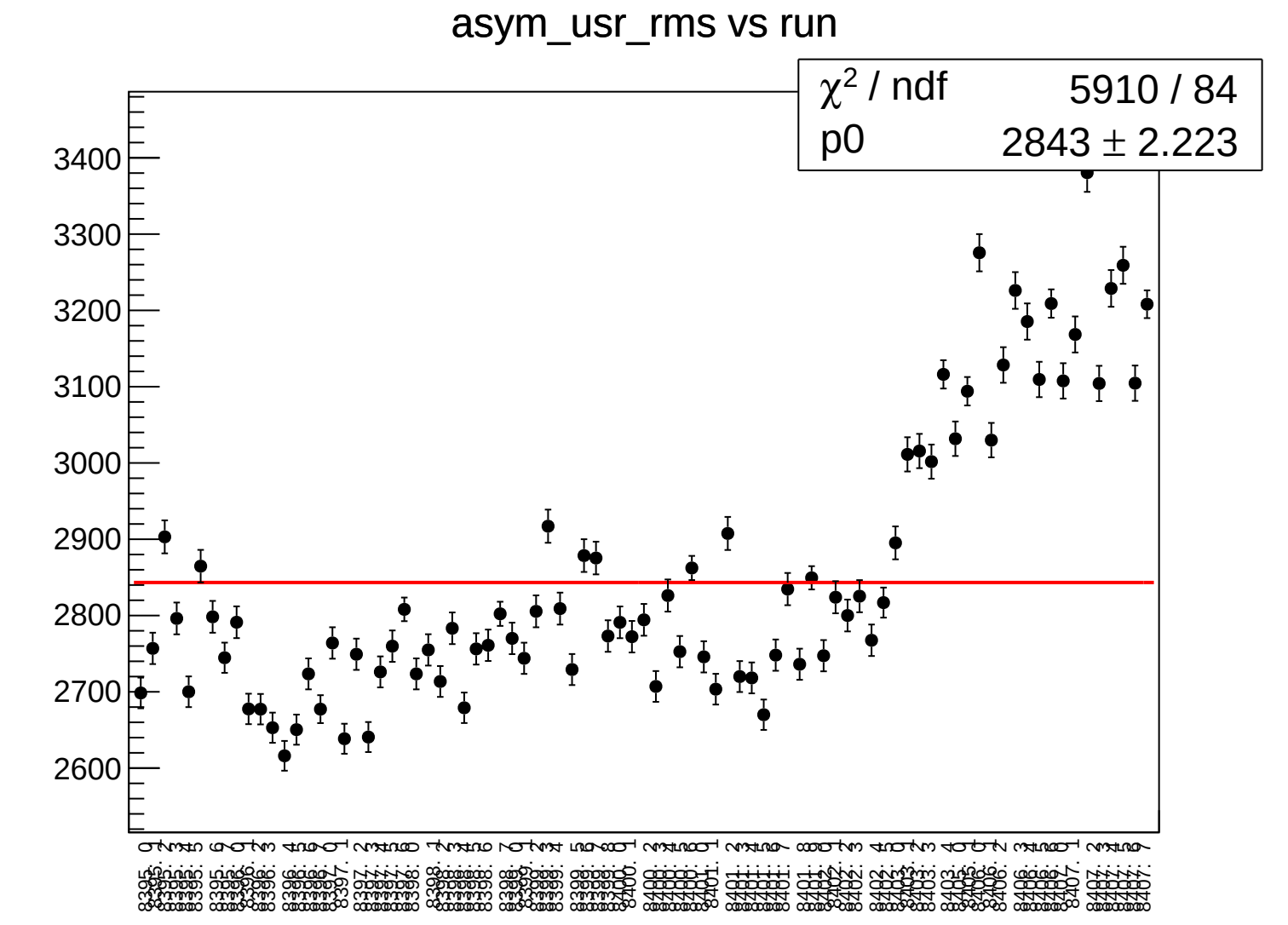

asym_usr_correction_mean vs run
×10^3
χ² / ndf 88.44 / 84
p0 −1053 ± 2911
100
50
0
−50
−100
pull
Entries 85
Mean −320.2
Std Dev 353.4
2
1
0
−1
−2
−3

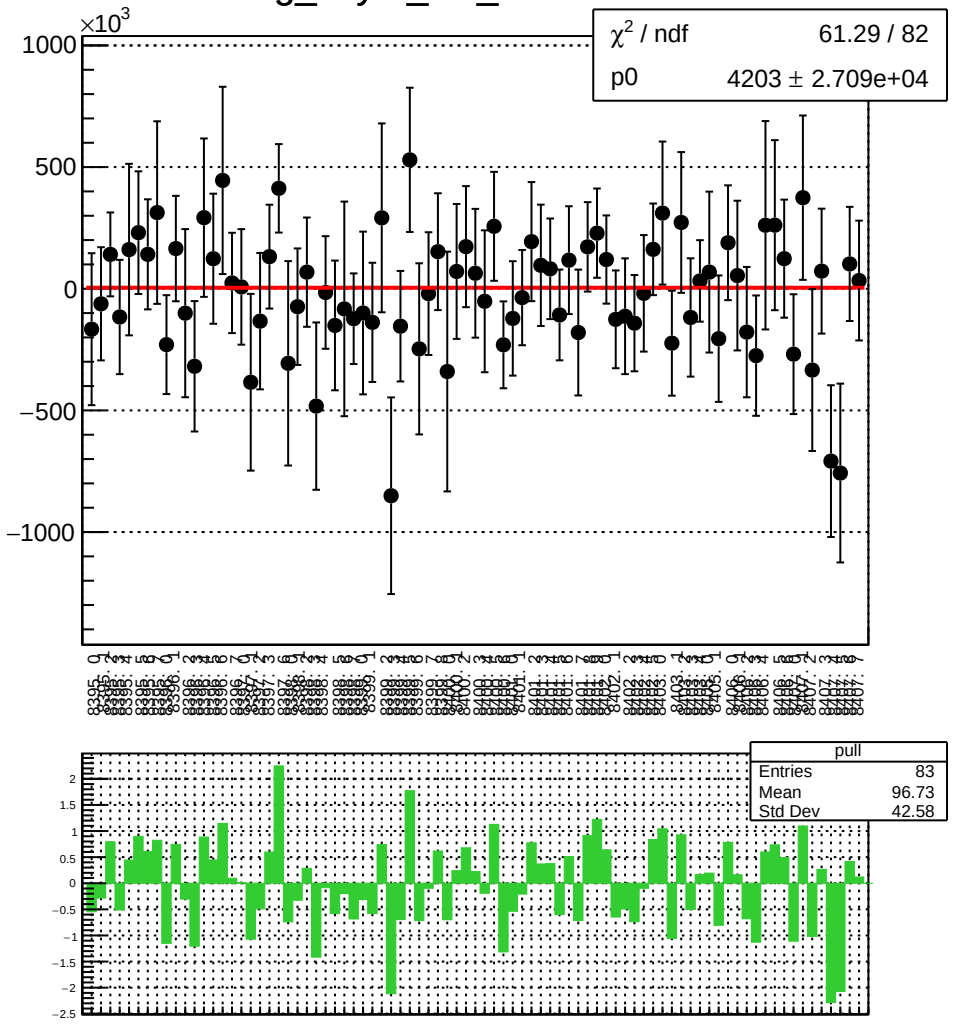

pull1D
Entries 85
Mean −0.00471
Std Dev 1.02
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

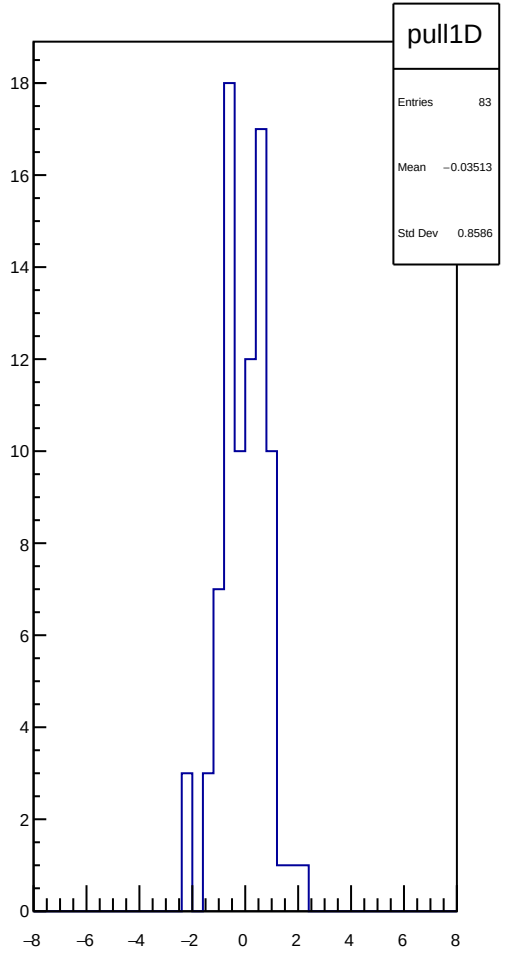

asym_usr_correction_rms vs run
χ² / ndf 7810 / 84
p0 2631 ± 2.059
3200
3000
2800
2600
2400

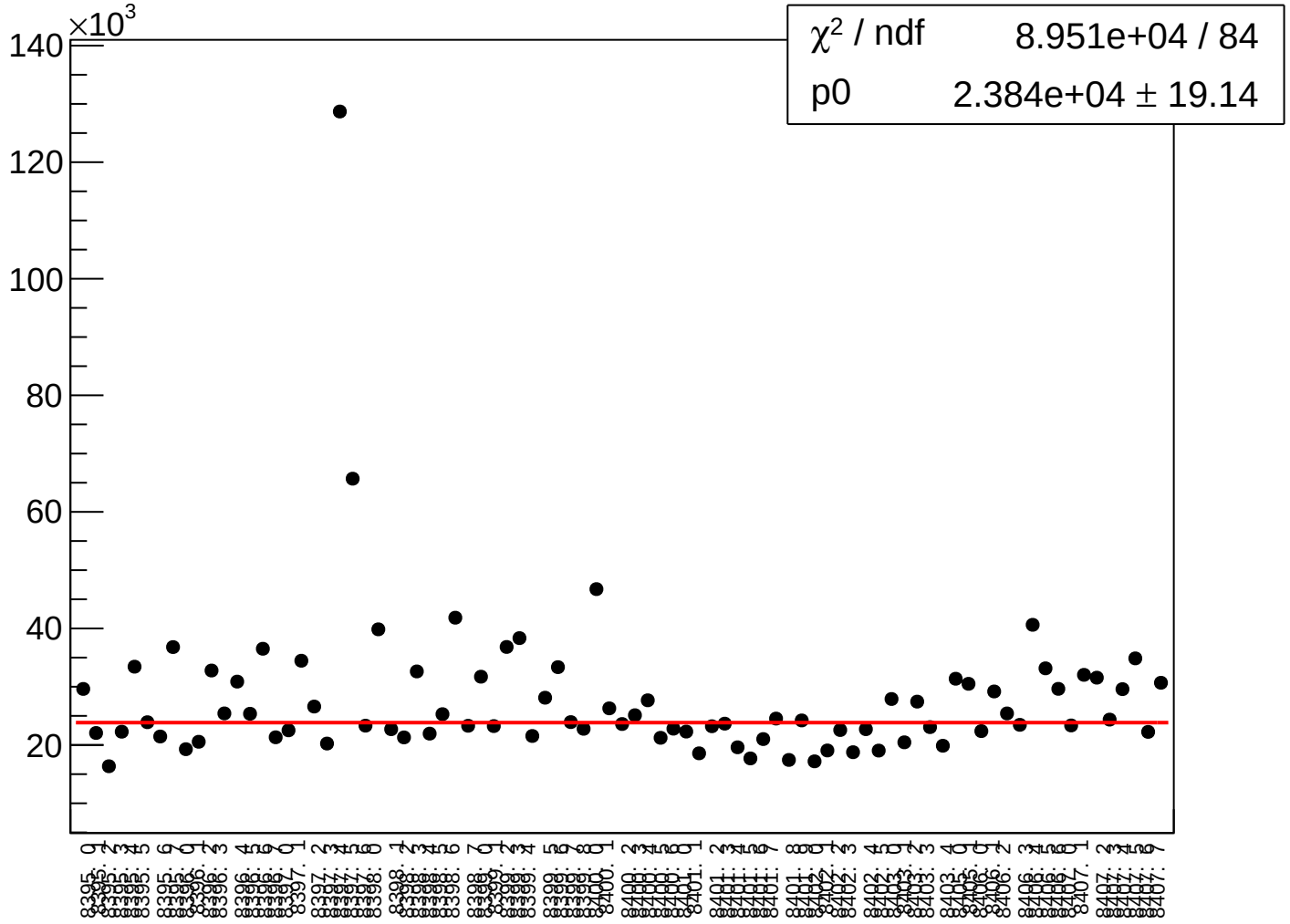

asym_usr_mean vs run
×10^3
χ² / ndf 89.16 / 84
p0 1796 ± 3144
100
50
0
−50
−100
pull
Entries 85
Mean −90.05
Std Dev 112.4
3
2
1
0
−1
−2

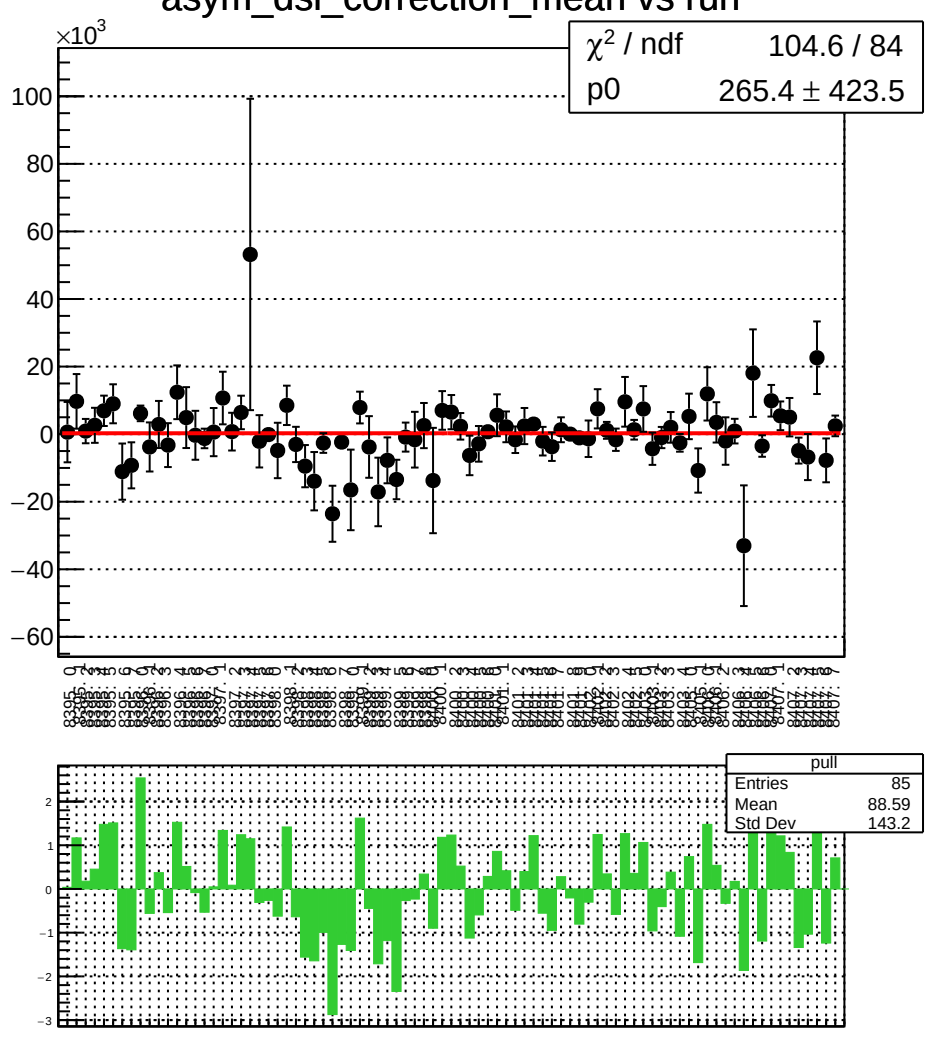

pull1D
Entries 85
Mean 0.006423
Std Dev 1.024
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

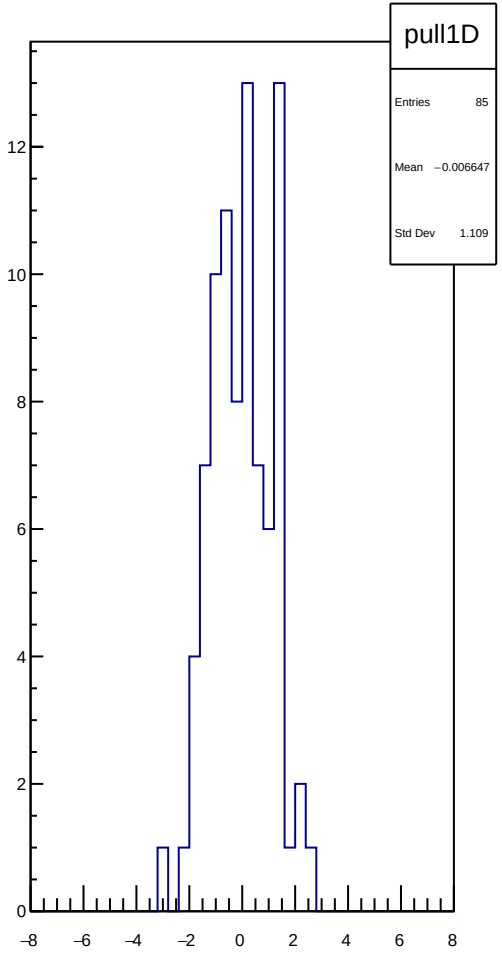

asym_usr_rms vs run
χ² / ndf 5910 / 84
p0 2843 ± 2.223
3400
3300
3200
3100
3000
2900
2800
2700
2600

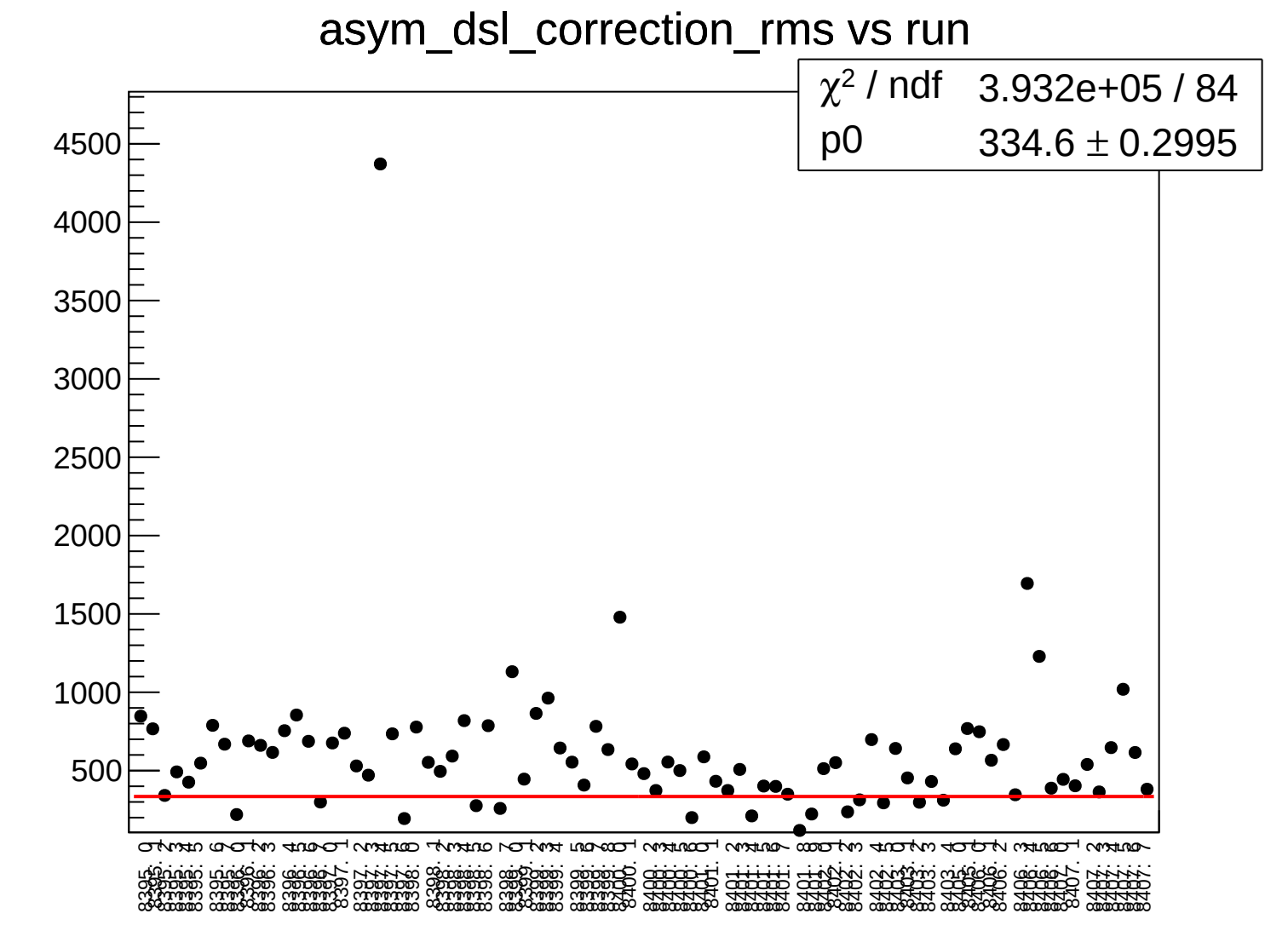

reg_asym_dsl_mean vs run
×10^3
1000
500
0
−500
−1000
χ² / ndf 61.29 / 82
p0 4203 ± 2.709e+04
pull
Entries 83
Mean 96.73
Std Dev 42.58
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

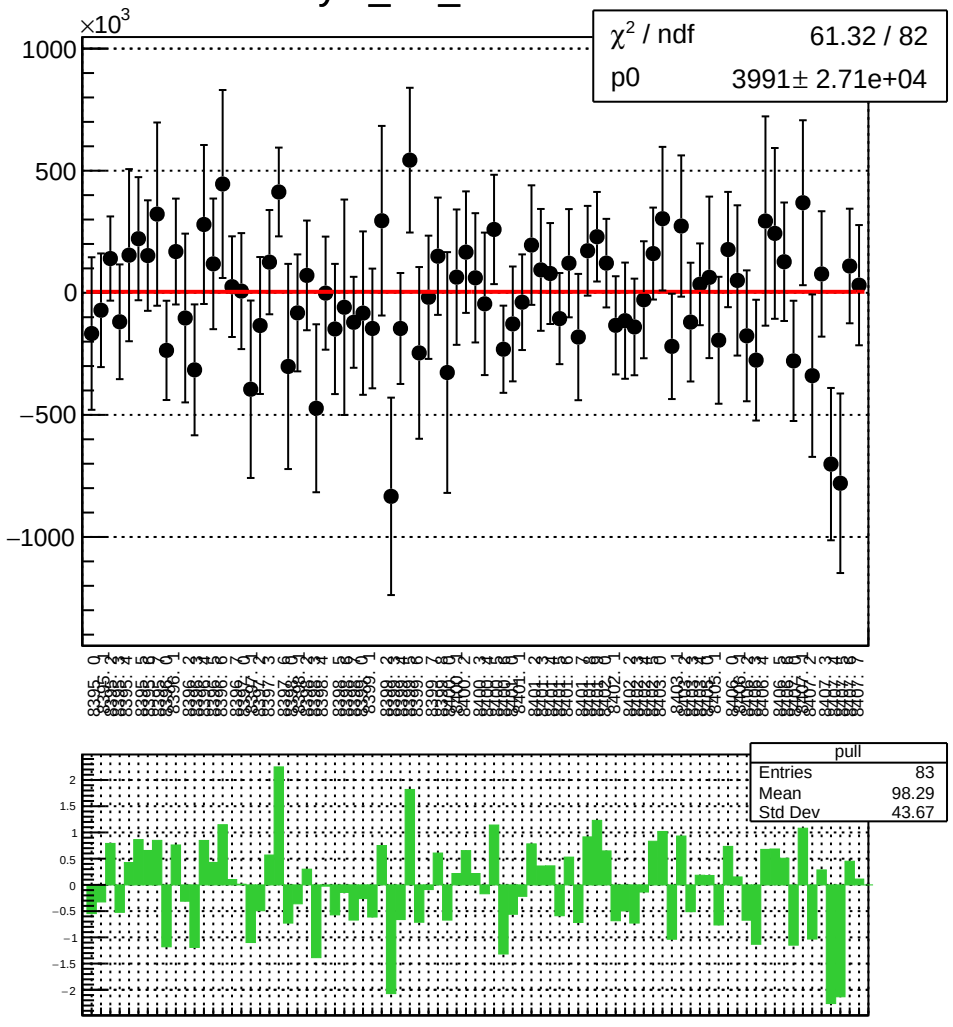

pull1D
Entries 83
Mean −0.03513
Std Dev 0.8586
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

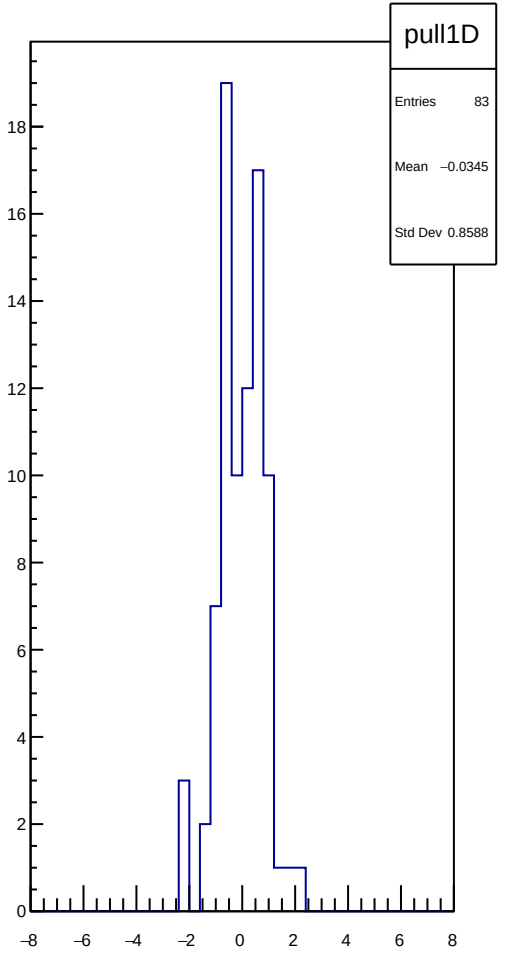

reg_asym_dsl_rms vs run
χ^2 / ndf 8.951e+04 / 84
p0 2.384e+04 ± 19.14
×10^3
140
120
100
80
60
40
20

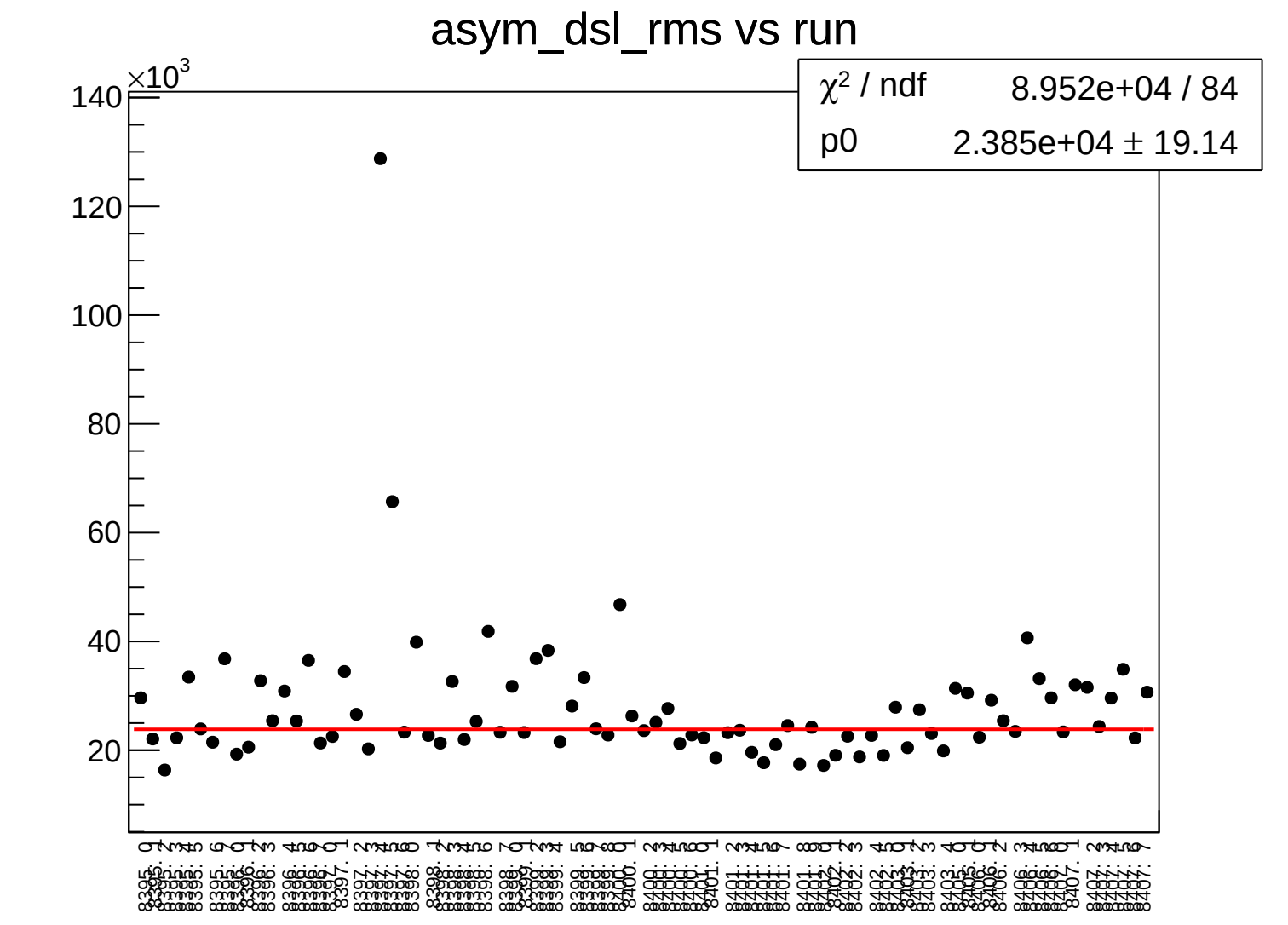

asym_dsl_correction_mean vs run
×10^3
χ^2 / ndf 104.6 / 84
p0 265.4 ± 423.5
100
80
60
40
20
0
−20
−40
−60
pull
Entries 85
Mean 88.59
Std Dev 143.2
2
1
0
−1
−2
−3

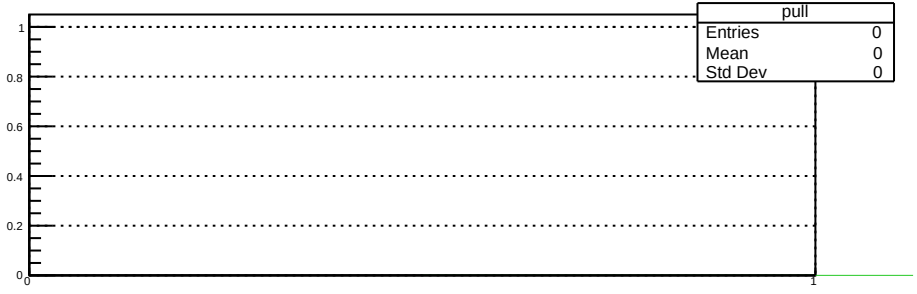

pull1D
Entries 85
Mean −0.006647
Std Dev 1.109
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

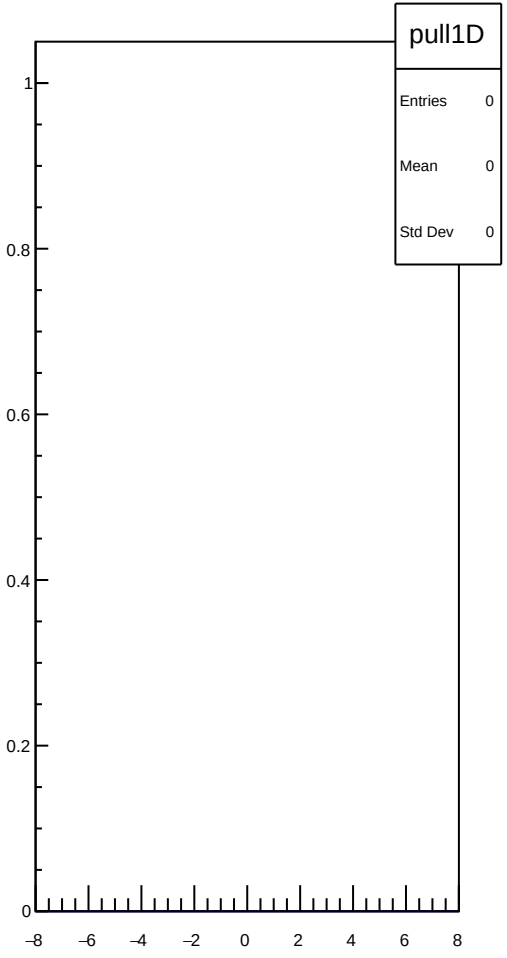

asym_dsl_correction_rms vs run
χ² / ndf 3.932e+05 / 84
p0 334.6 ± 0.2995
4500
4000
3500
3000
2500
2000
1500
1000
500

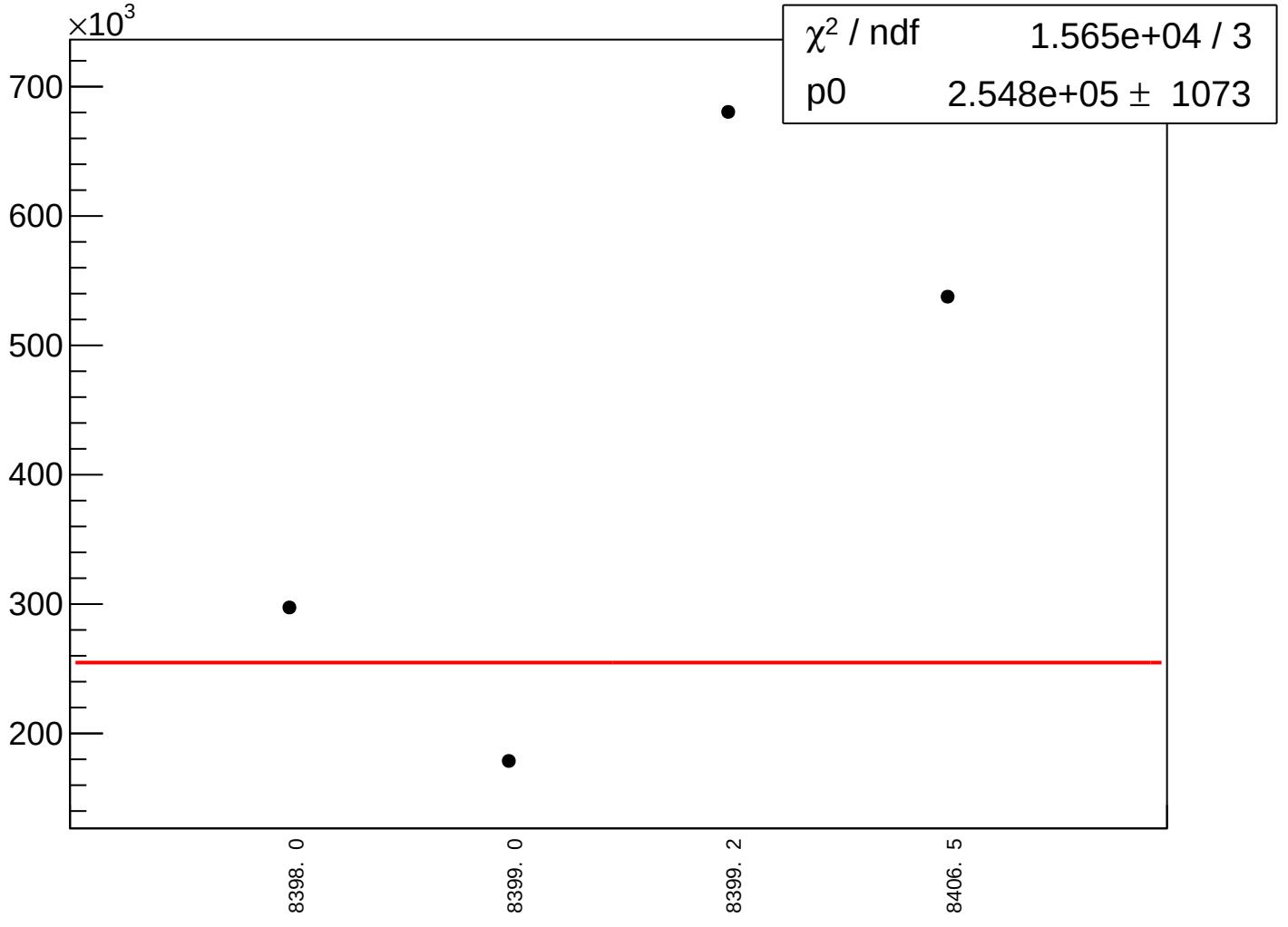

asym_dsl_mean vs run
×10^3
1000
500
0
−500
−1000
χ² / ndf 61.32 / 82
p0 3991± 2.71e+04
pull
Entries 83
Mean 98.29
Std Dev 43.67
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

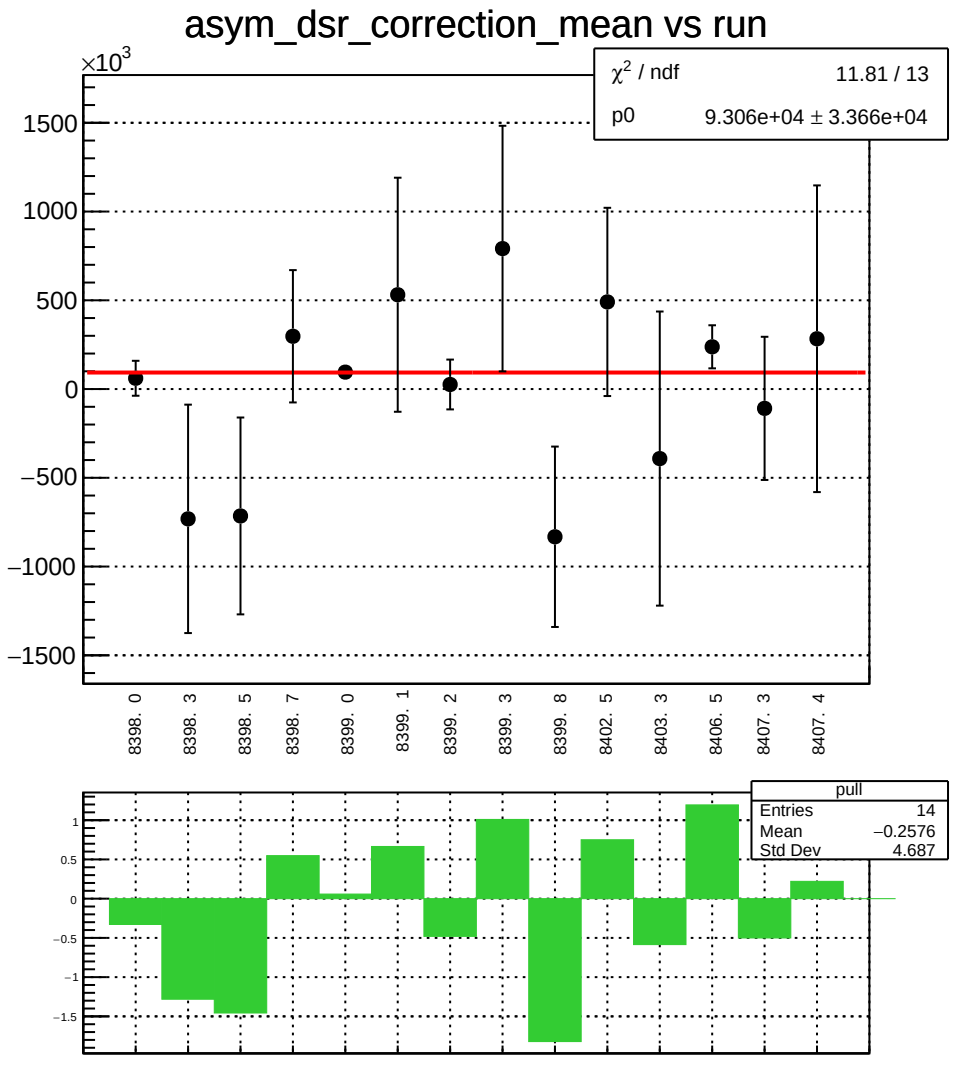

pull1D
Entries 83
Mean −0.0345
Std Dev 0.8588
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

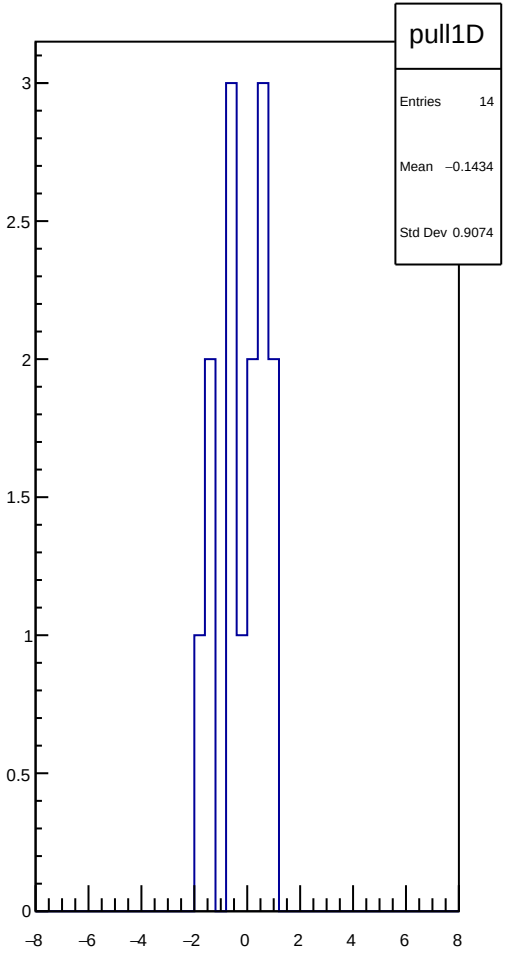

asym_dsl_rms vs run
×10^3
140
120
100
80
60
40
20
χ² / ndf 8.952e+04 / 84
p0 2.385e+04 ± 19.14

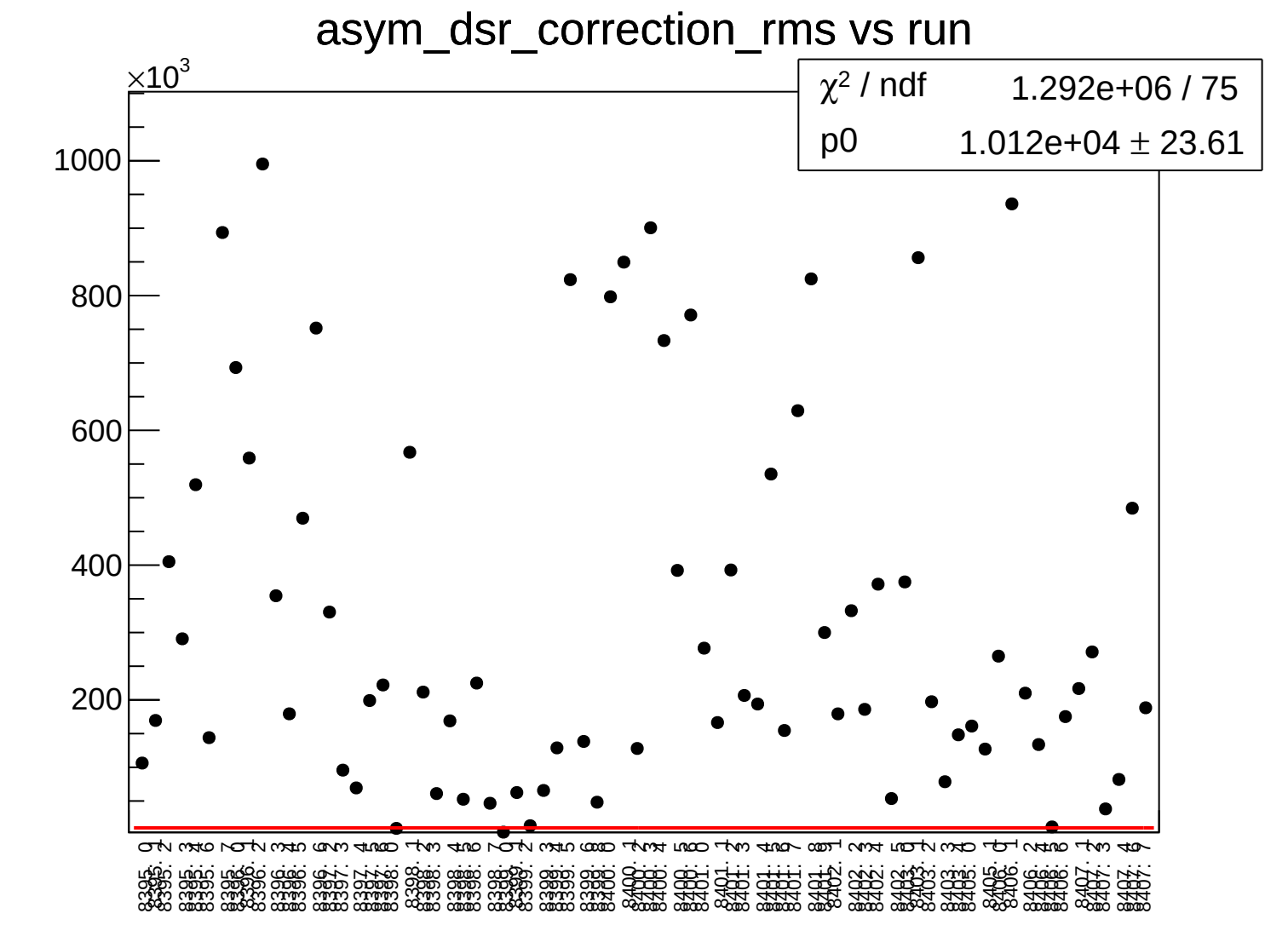

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

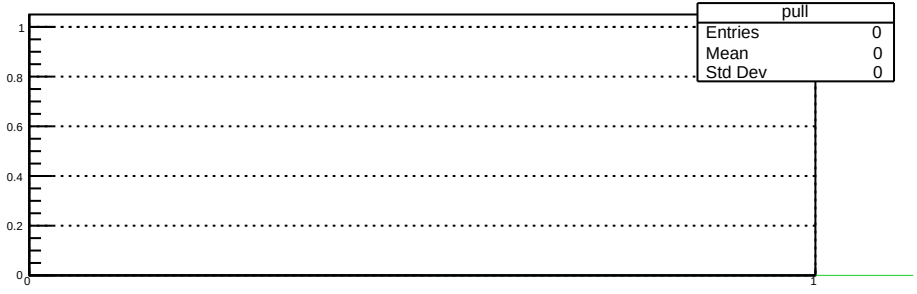

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

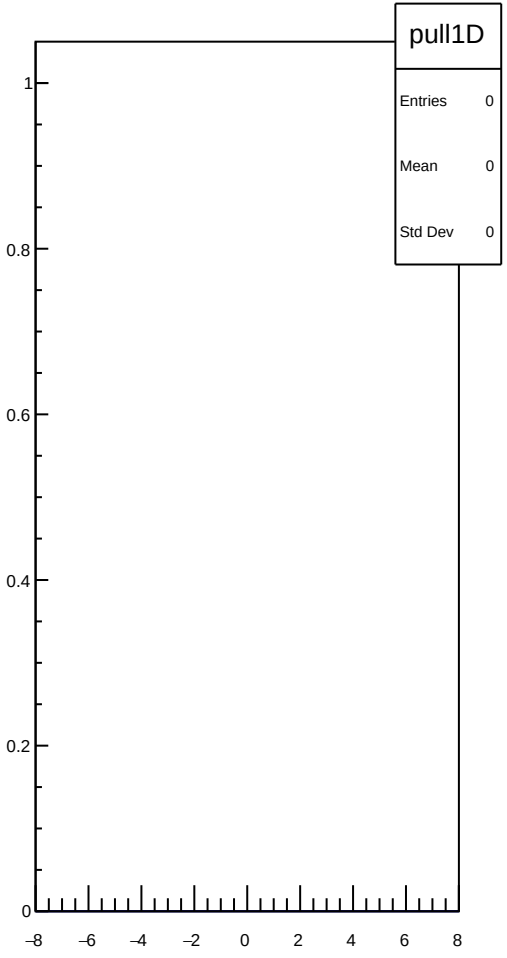

reg_asym_dsr_rms vs run
×10^3
700
600
500
400
300
200
χ² / ndf 1.565e+04 / 3
p0 2.548e+05 ± 1073
8398. 0
8399. 0
8399. 2
8406. 5

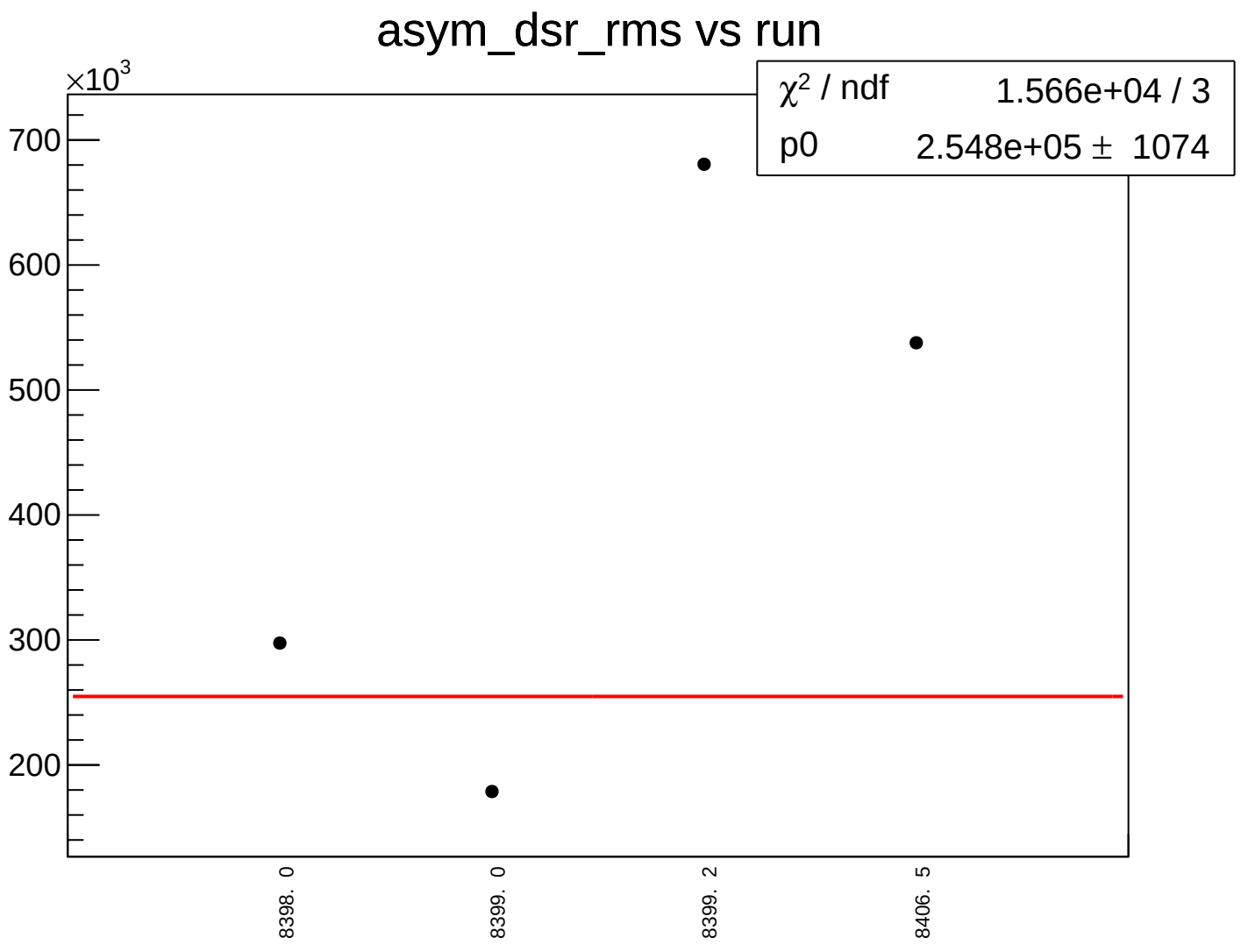

asym_dsr_correction_mean vs run
×10^3
χ² / ndf 11.81 / 13
p0 9.306e+04 ± 3.366e+04
1500
1000
500
0
−500
−1000
−1500
8398. 0
8398. 3
8398. 5
8398. 7
8399. 0
8399. 1
8399. 2
8399. 3
8399. 8
8402. 5
8403. 3
8406. 5
8407. 3
8407. 4
pull
Entries 14
Mean −0.2576
Std Dev 4.687
1
0.5
0
−0.5
−1
−1.5

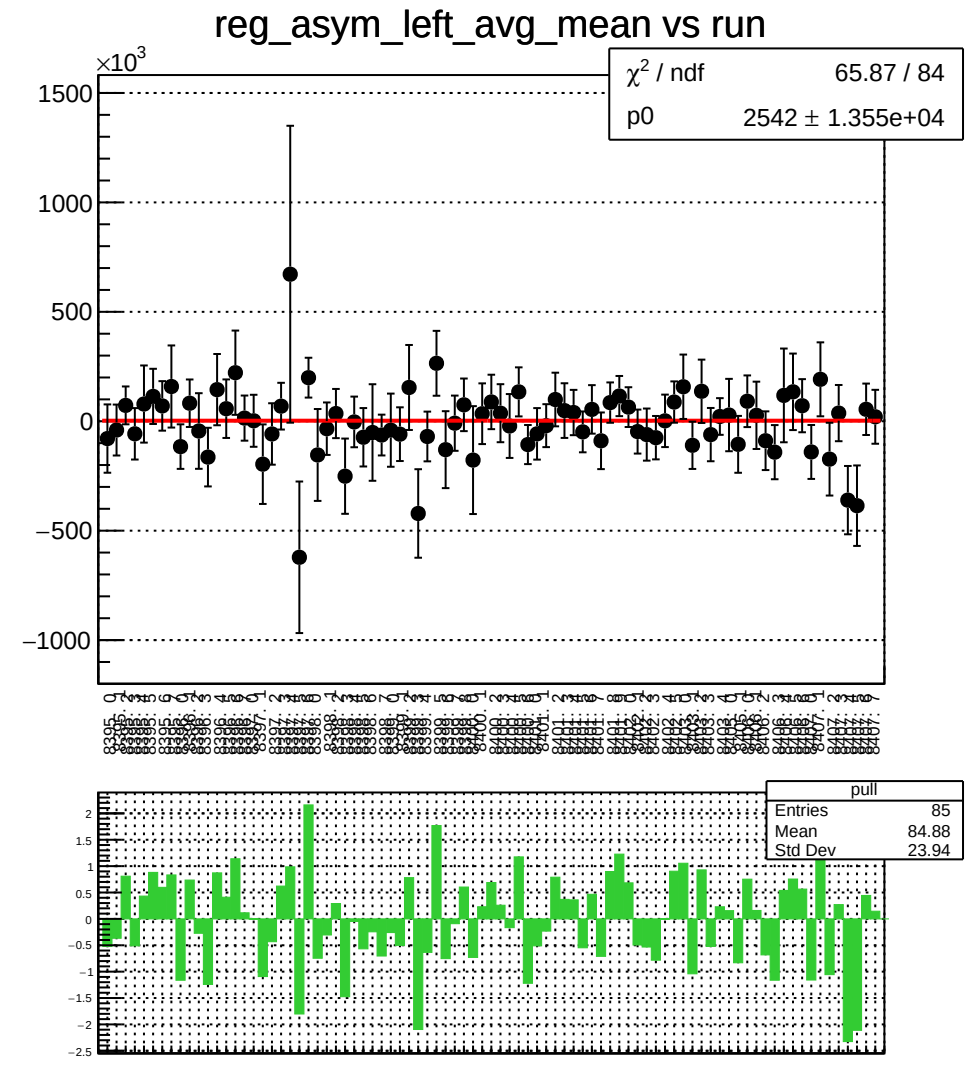

pull1D
Entries 14
Mean −0.1434
Std Dev 0.9074
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

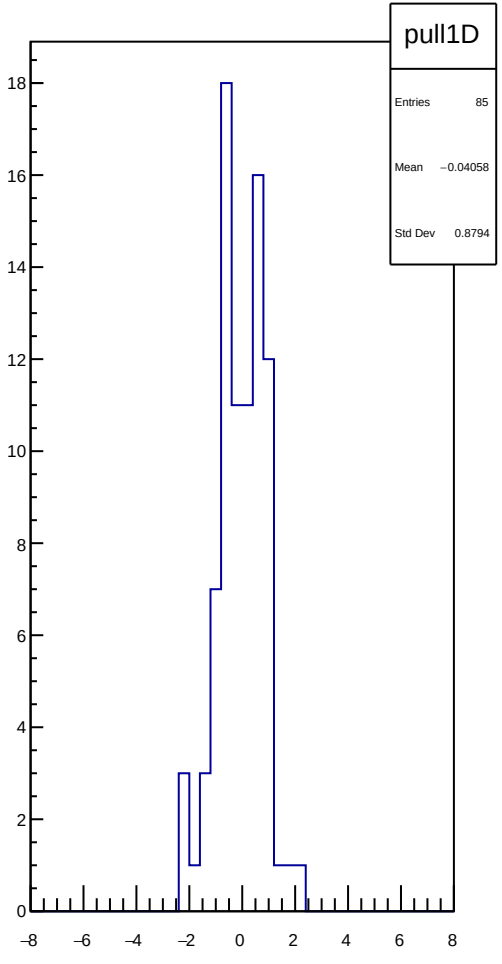

asym_dsr_correction_rms vs run
×10^3
χ² / ndf 1.292e+06 / 75
p0 1.012e+04 ± 23.61
1000
800
600
400
200

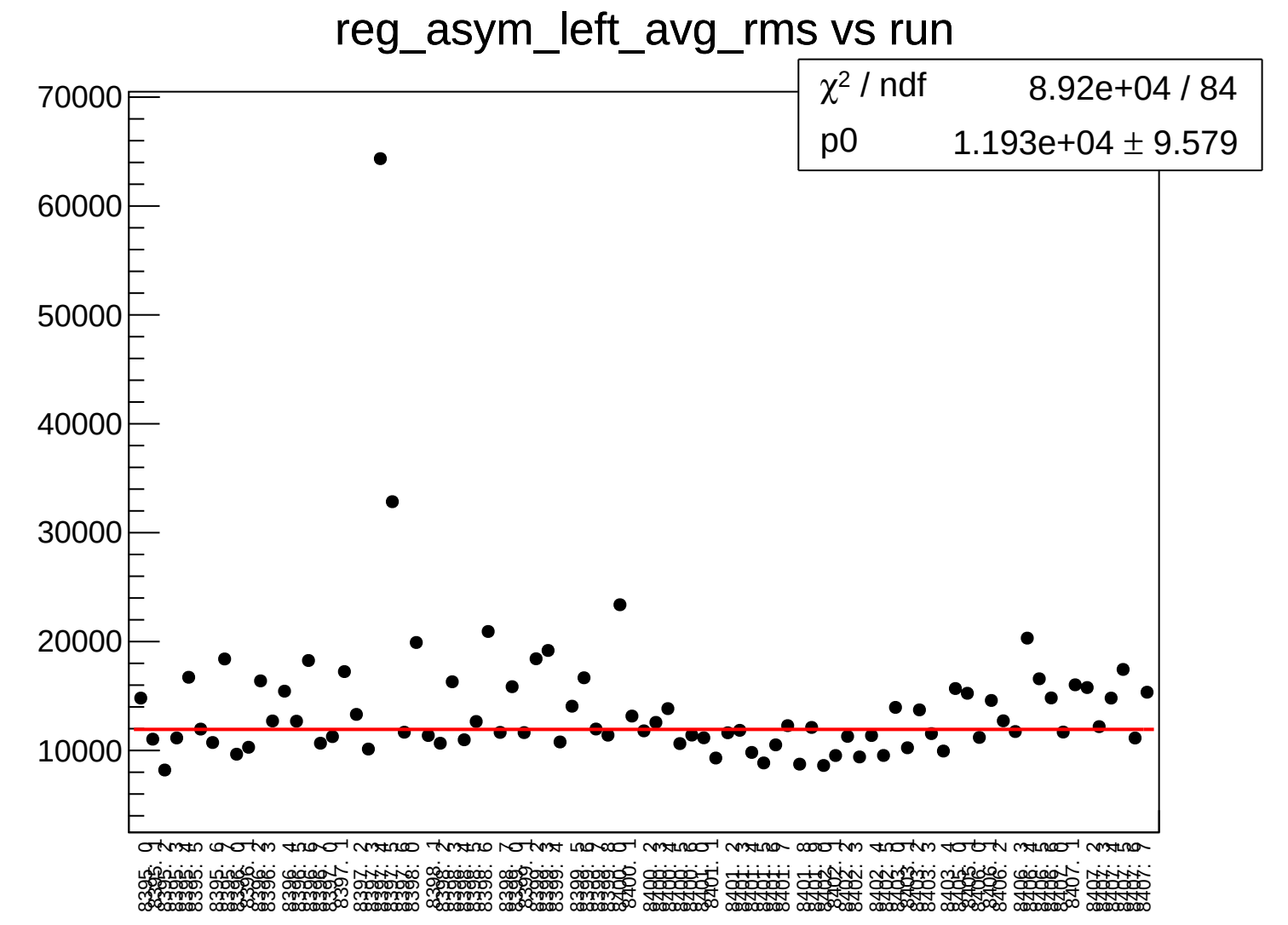

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

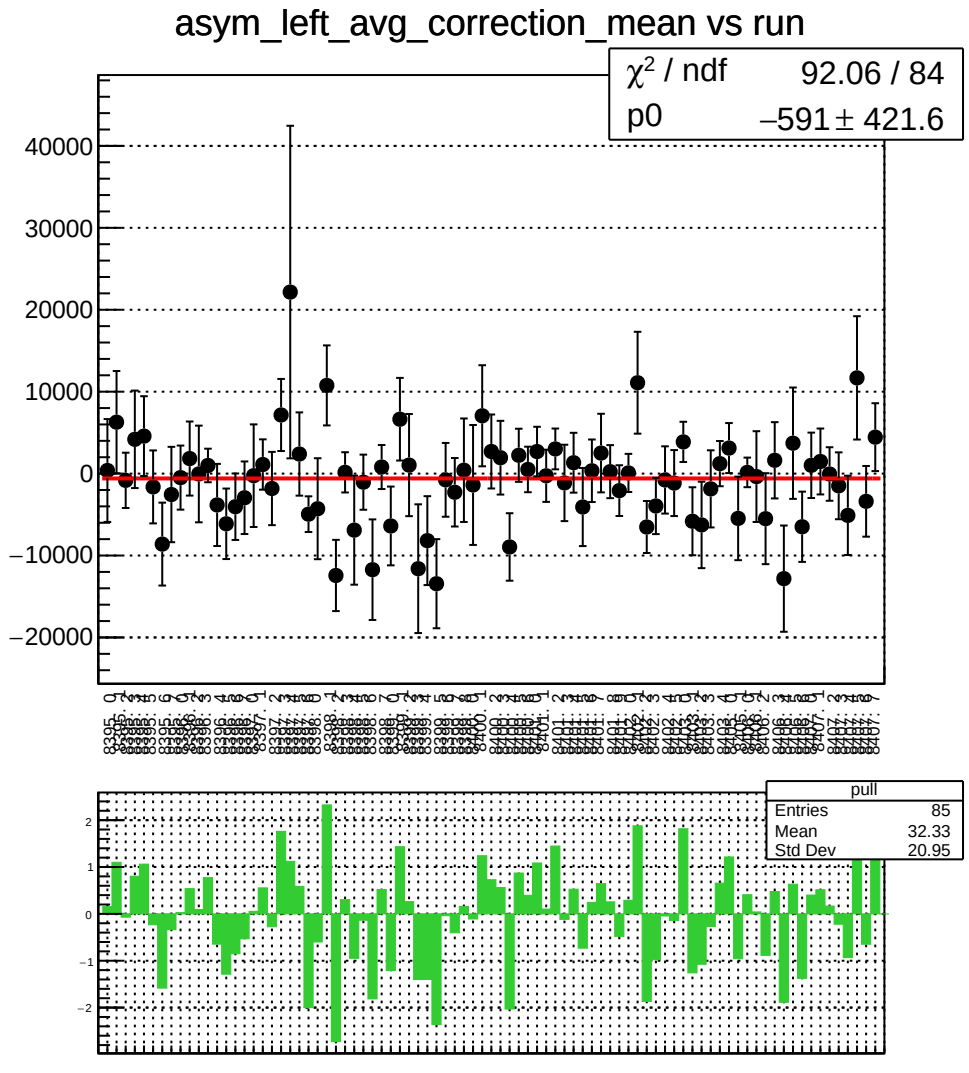

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

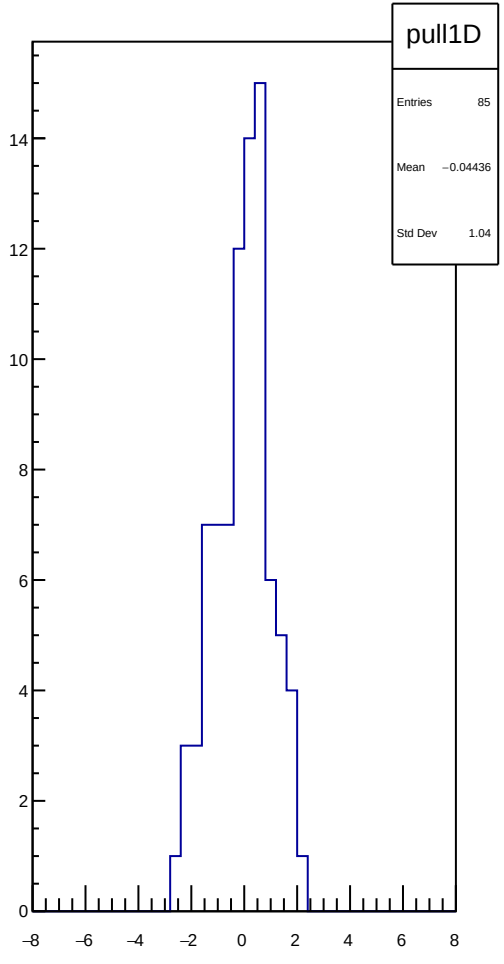

asym_dsr_rms vs run
×10^3
700
600
500
400
300
200
χ² / ndf 1.566e+04 / 3
p0 2.548e+05 ± 1074
8398. 0
8399. 0
8399. 2
8406. 5

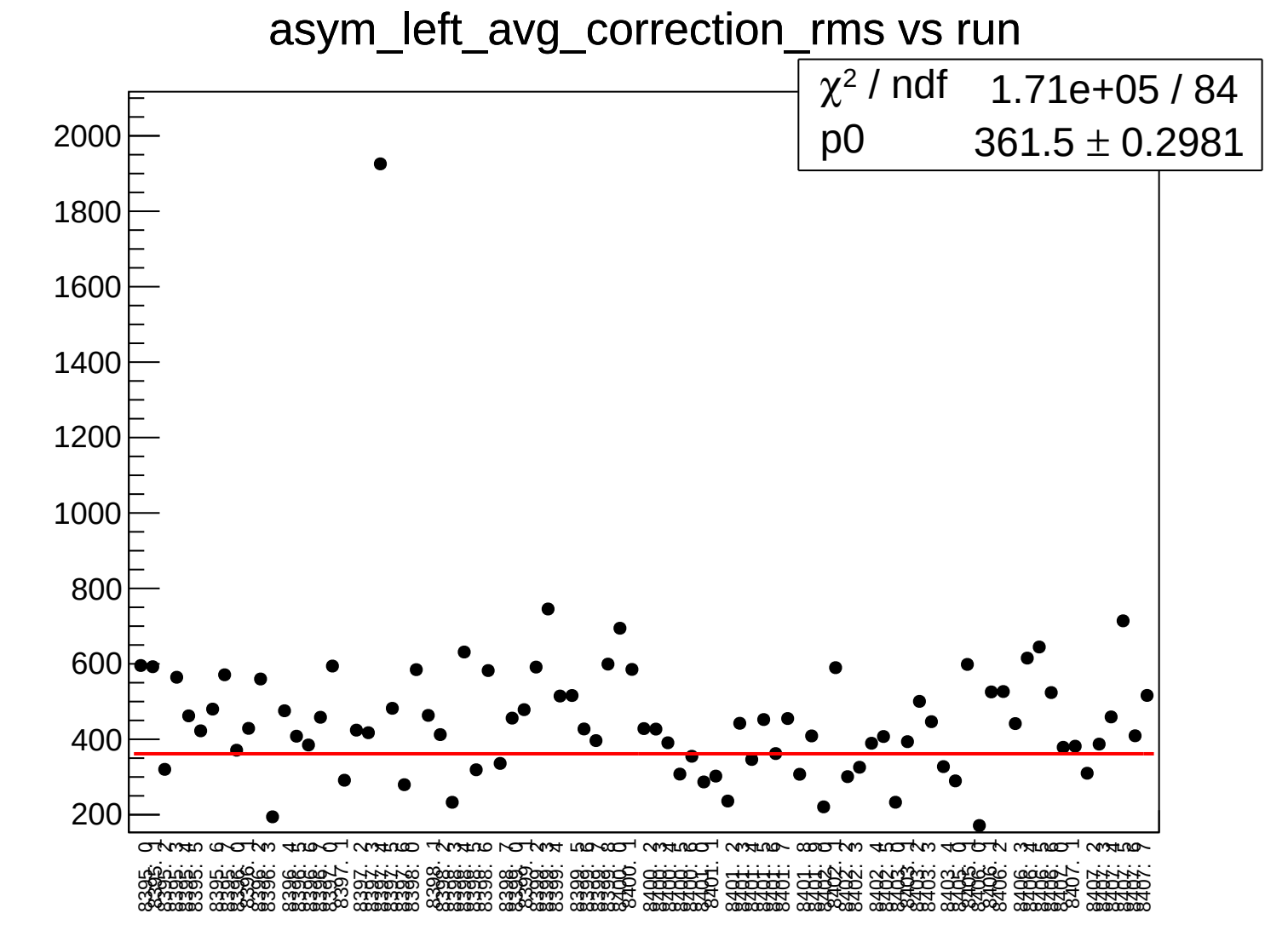

reg_asym_left_avg_mean vs run
×10^3
χ² / ndf 65.87 / 84
p0 2542 ± 1.355e+04
1500
1000
500
0
−500
−1000
pull
Entries 85
Mean 84.88
Std Dev 23.94
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

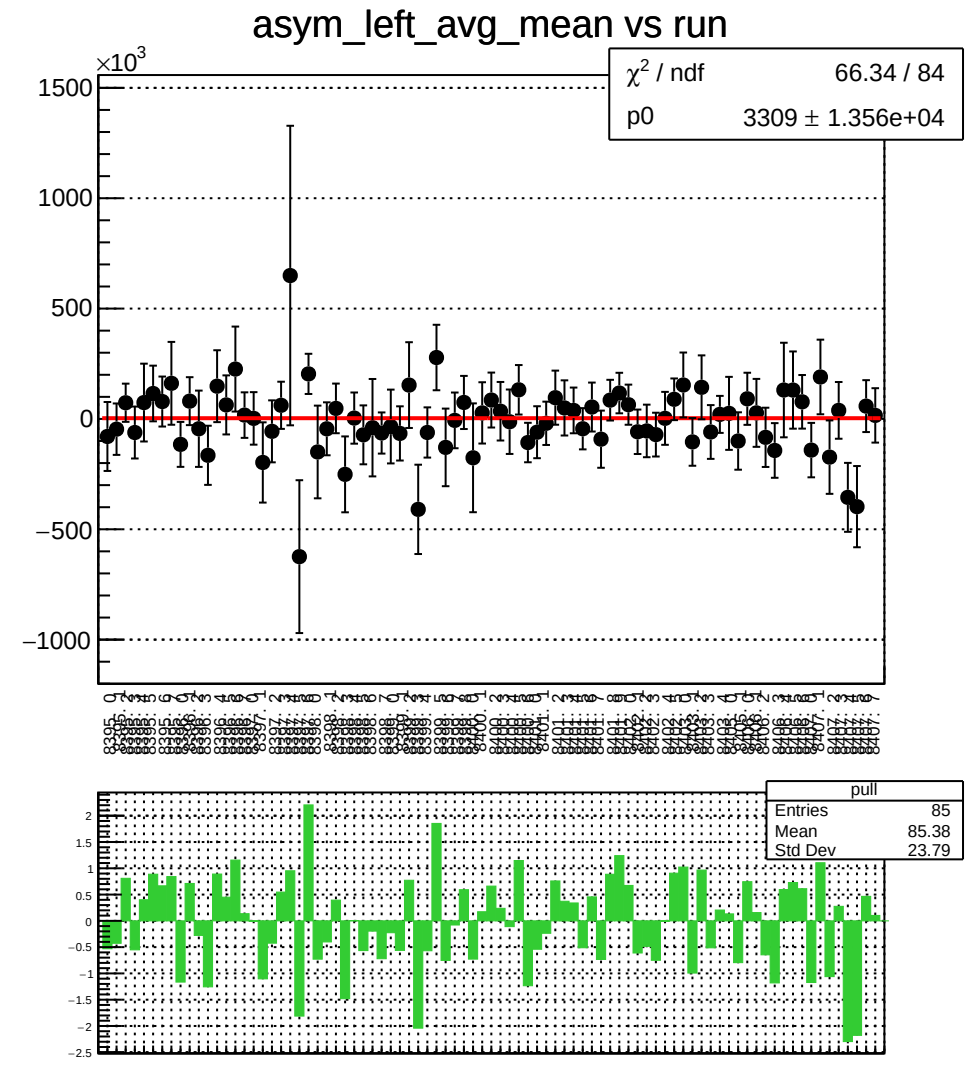

pull1D
Entries 85
Mean −0.04058
Std Dev 0.8794
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

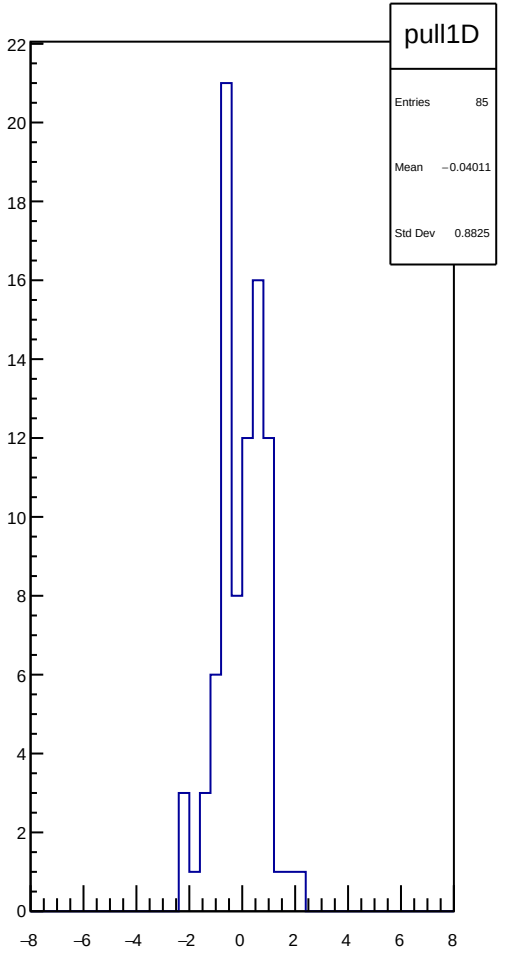

reg_asym_left_avg_rms vs run
χ^2 / ndf 8.92e+04 / 84
p0 1.193e+04 ± 9.579
70000
60000
50000
40000
30000
20000
10000

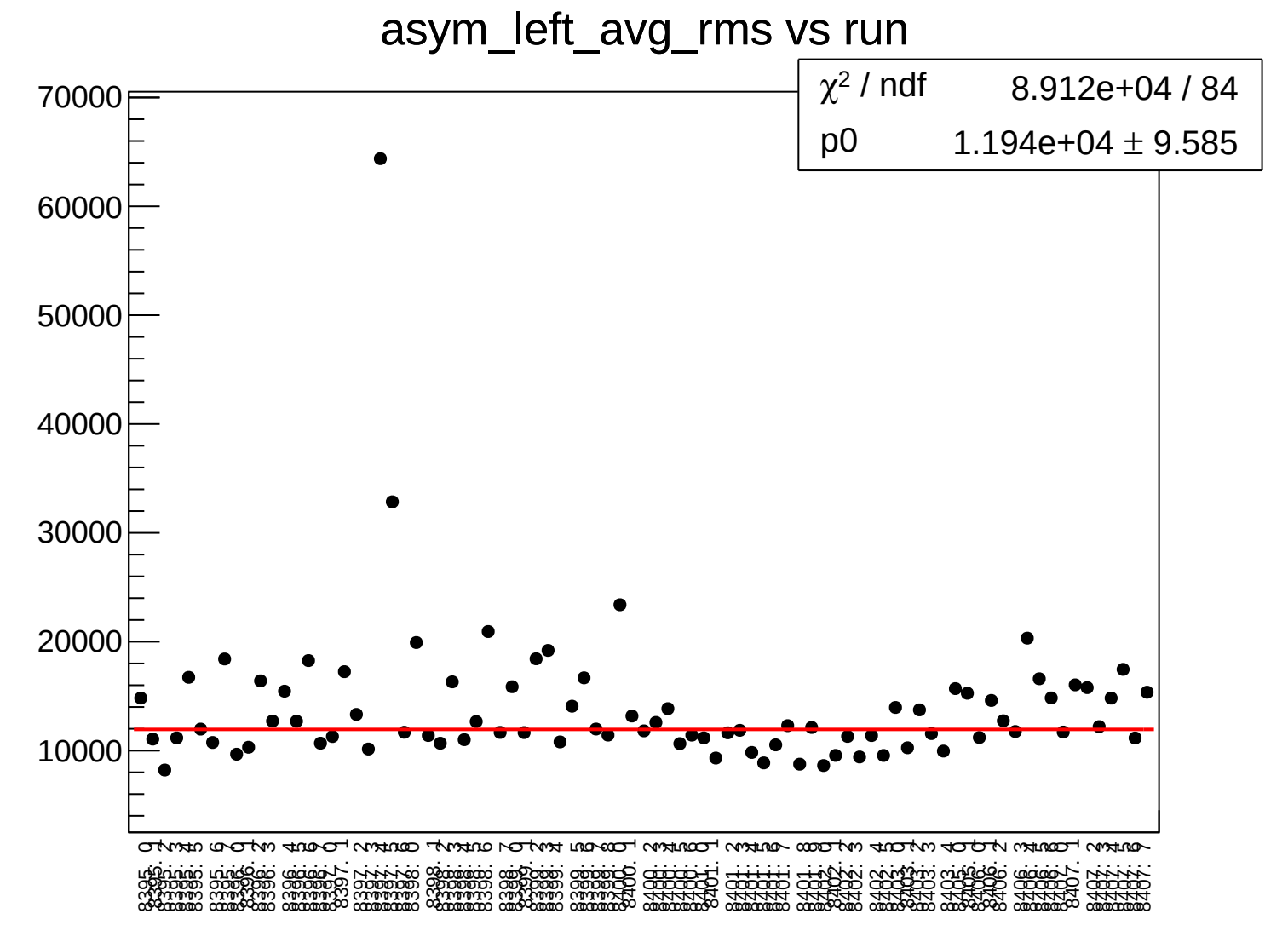

asym_left_avg_correction_mean vs run
χ² / ndf 92.06 / 84
p0 −591 ± 421.6
40000
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean 32.33
Std Dev 20.95
2
1
0
−1
−2

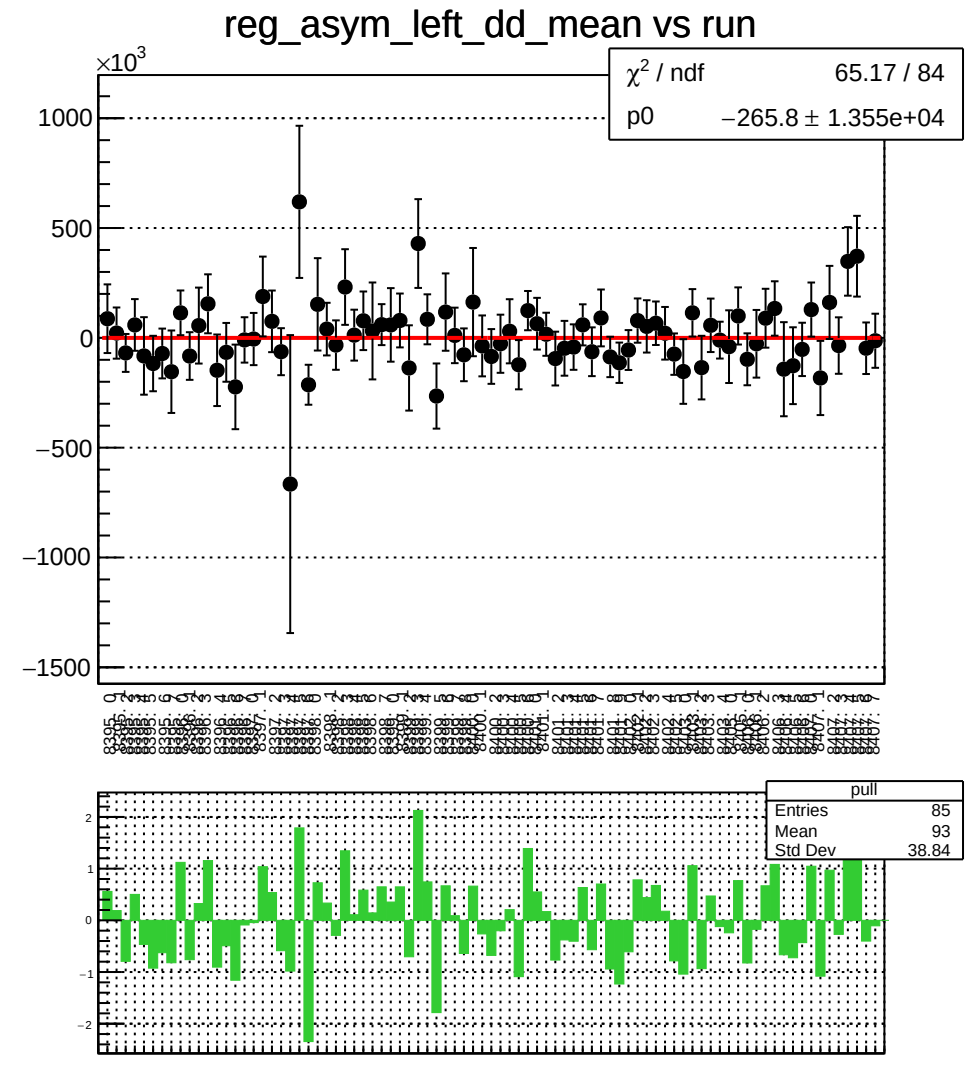

pull1D
Entries 85
Mean −0.04436
Std Dev 1.04
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

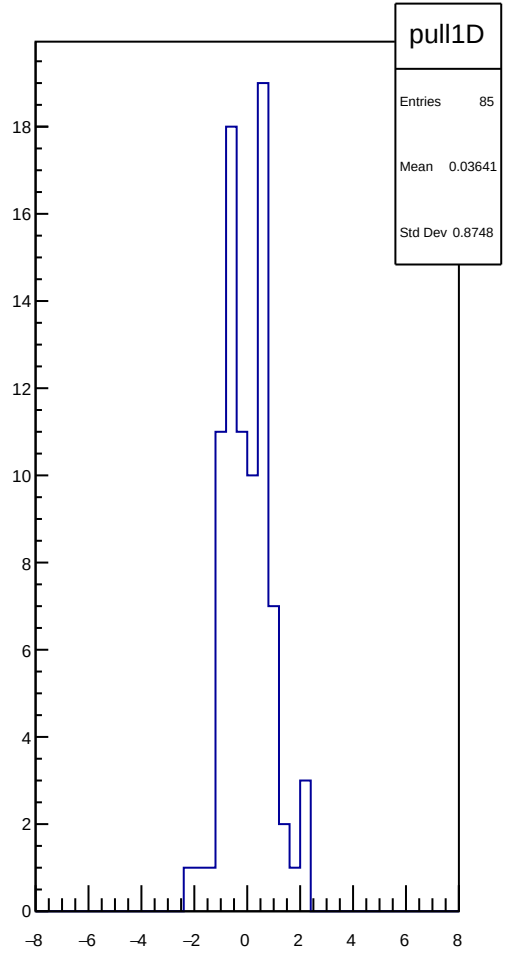

asym_left_avg_correction_rms vs run
χ² / ndf 1.71e+05 / 84
p0 361.5 ± 0.2981
2000
1800
1600
1400
1200
1000
800
600
400
200

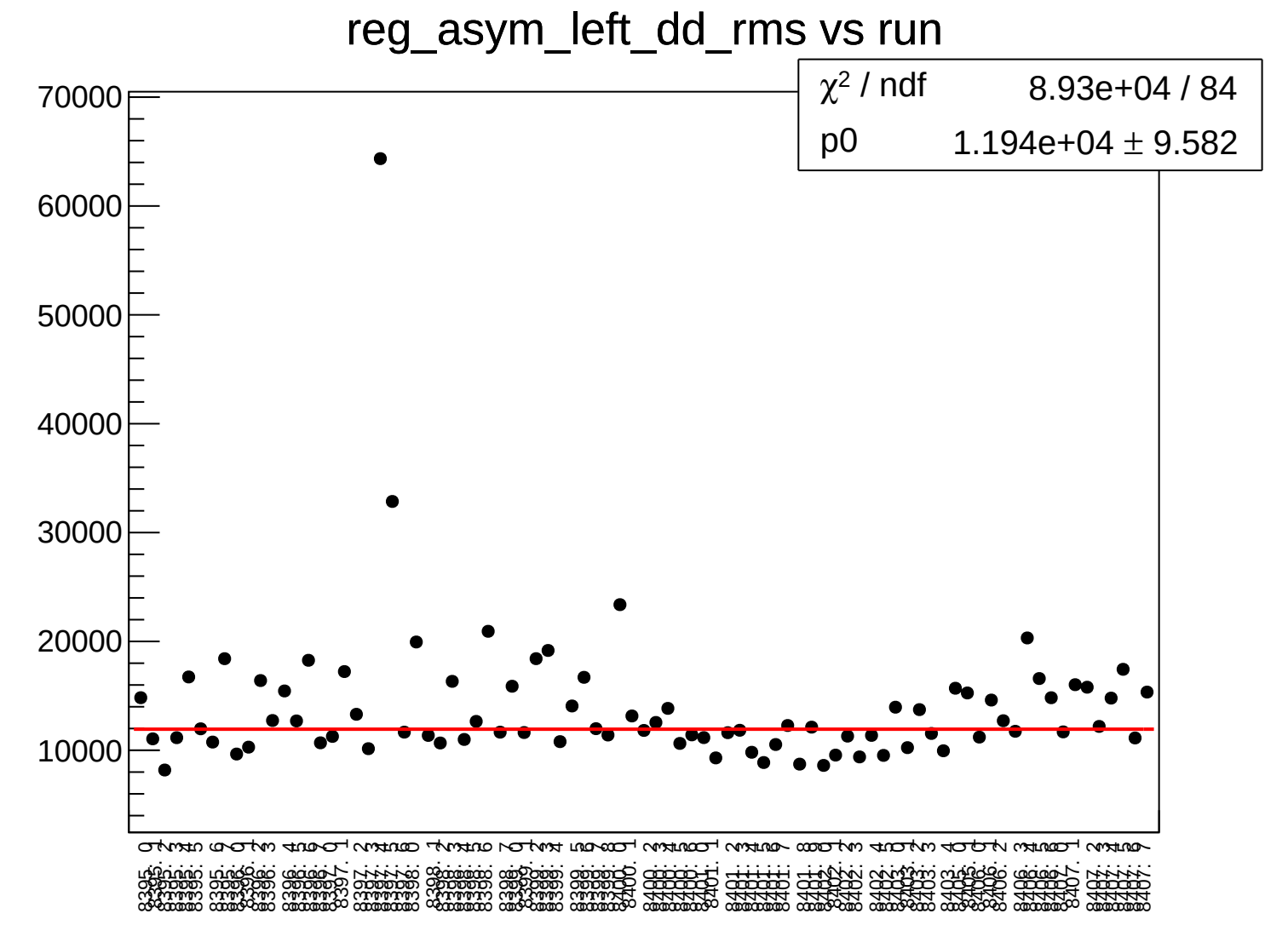

asym_left_avg_mean vs run
×10^3
χ² / ndf 66.34 / 84
p0 3309 ± 1.356e+04
1500
1000
500
0
−500
−1000
pull
Entries 85
Mean 85.38
Std Dev 23.79
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

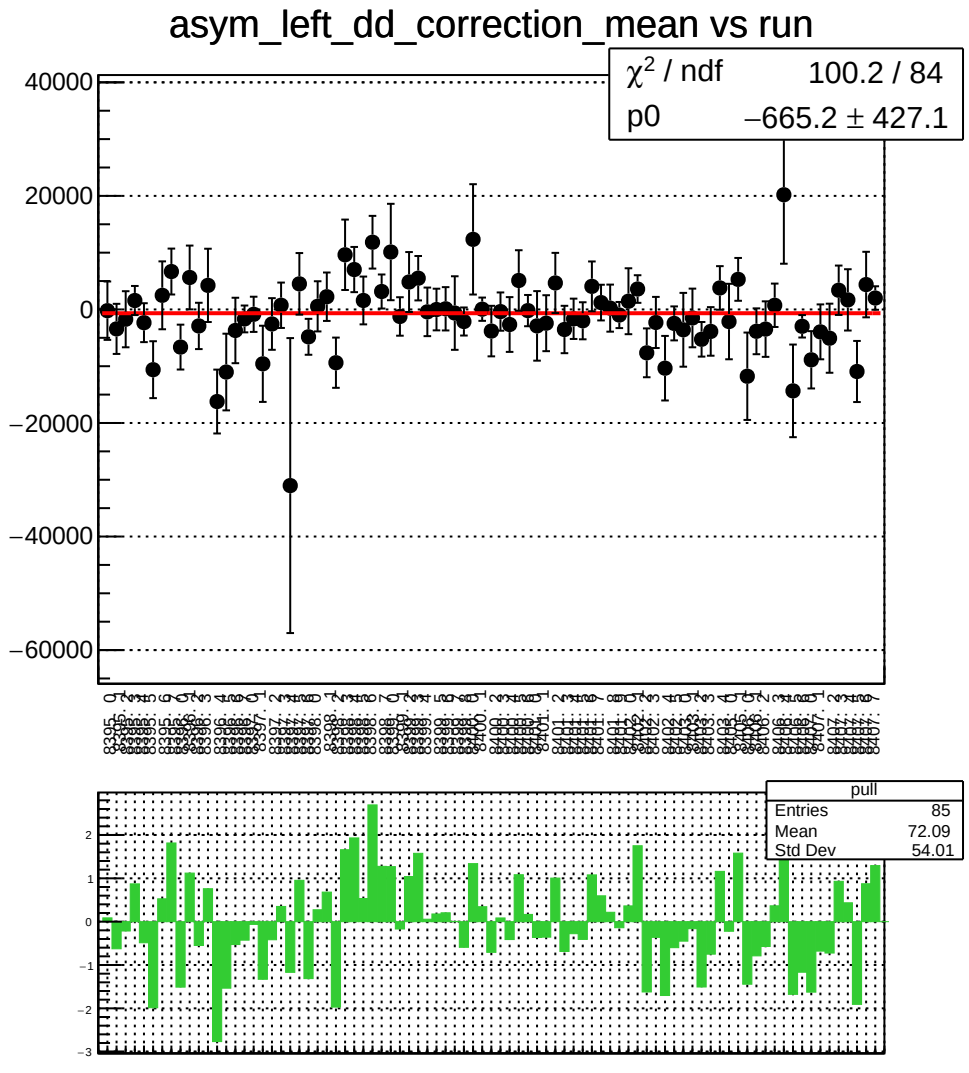

pull1D
Entries 85
Mean −0.04011
Std Dev 0.8825
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

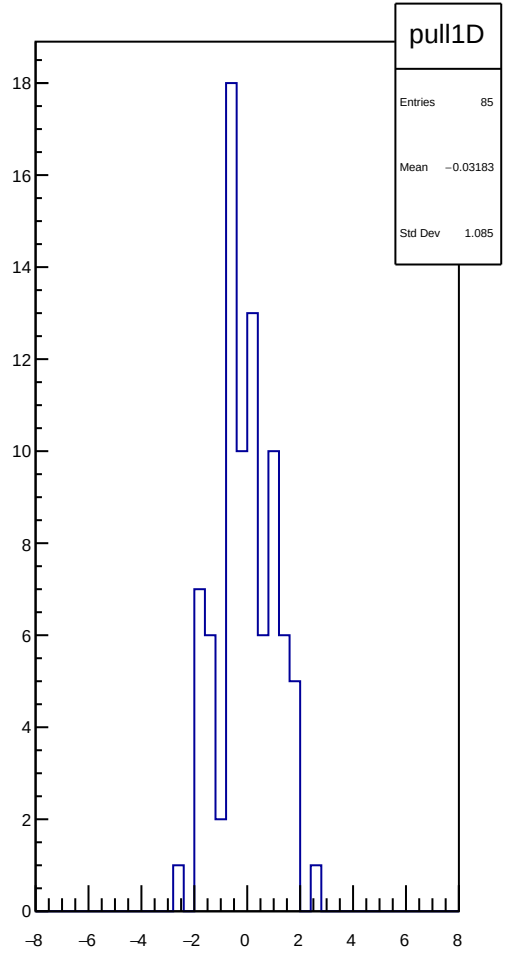

asym_left_avg_rms vs run
χ^2 / ndf 8.912e+04 / 84
p0 1.194e+04 ± 9.585
70000
60000
50000
40000
30000
20000
10000

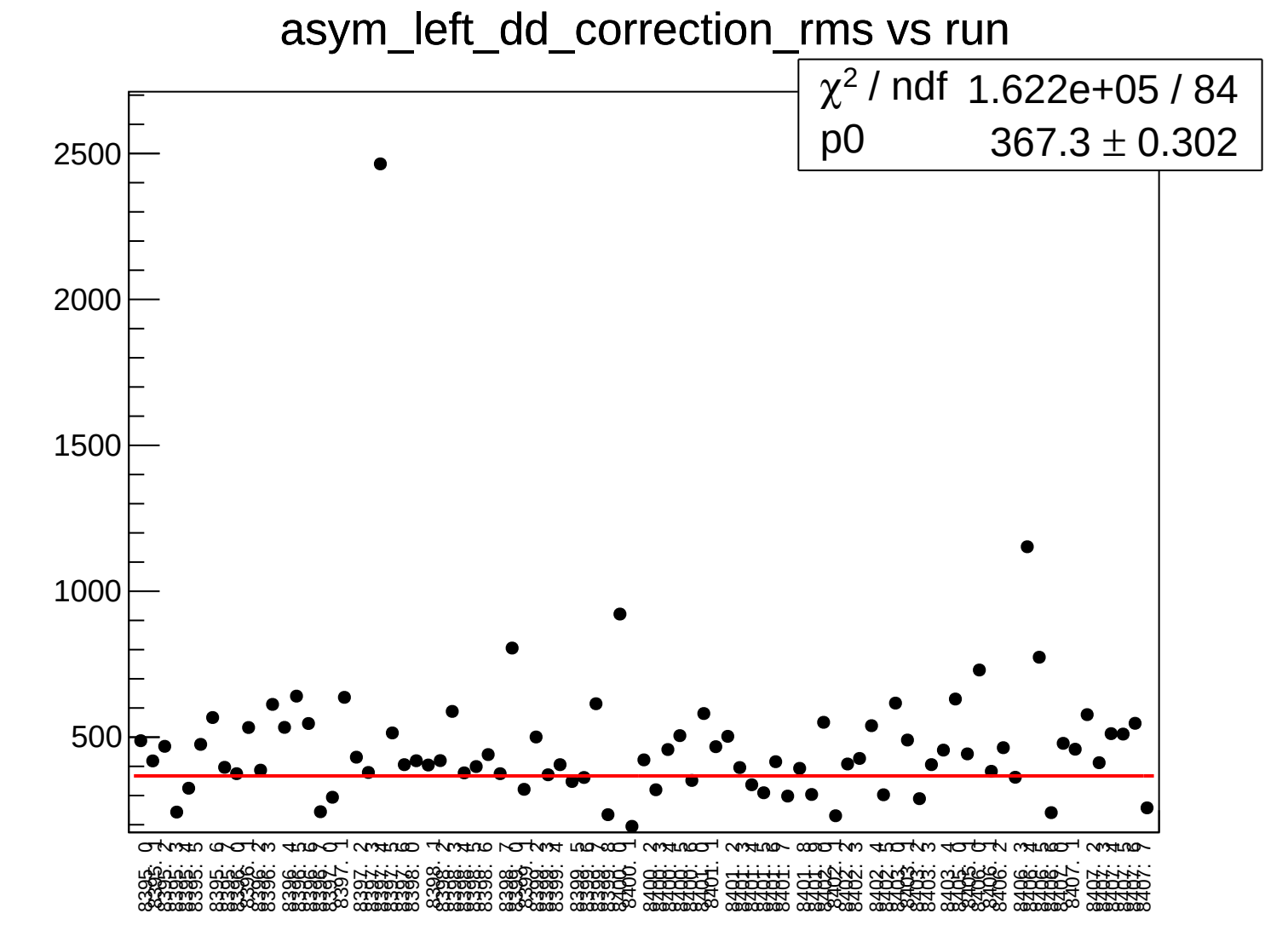

reg_asym_left_dd_mean vs run
×10^3
χ² / ndf 65.17 / 84
p0 −265.8 ± 1.355e+04
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 93
Std Dev 38.84
2
1
0
−1
−2

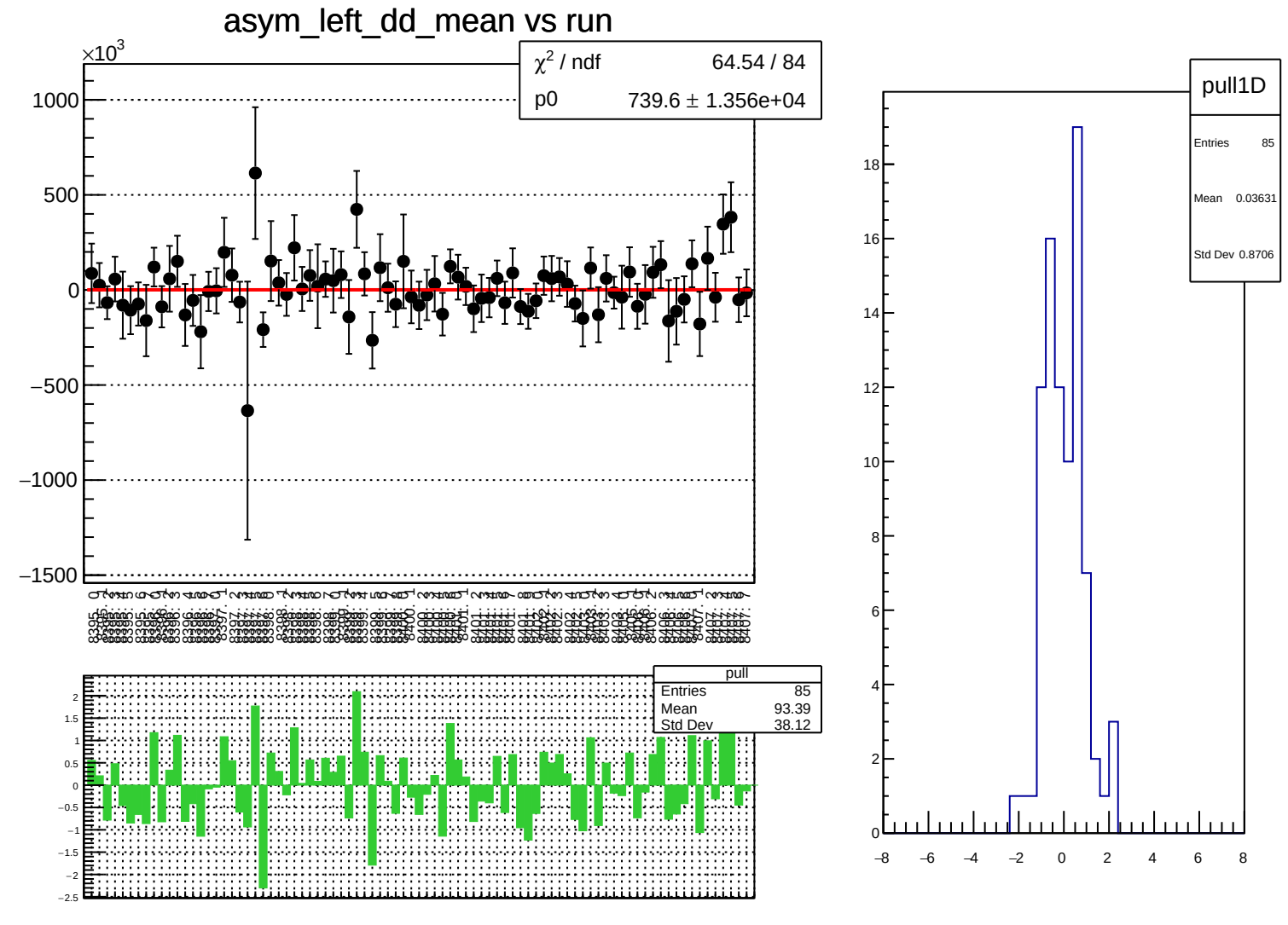

pull1D
Entries 85
Mean 0.03641
Std Dev 0.8748
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

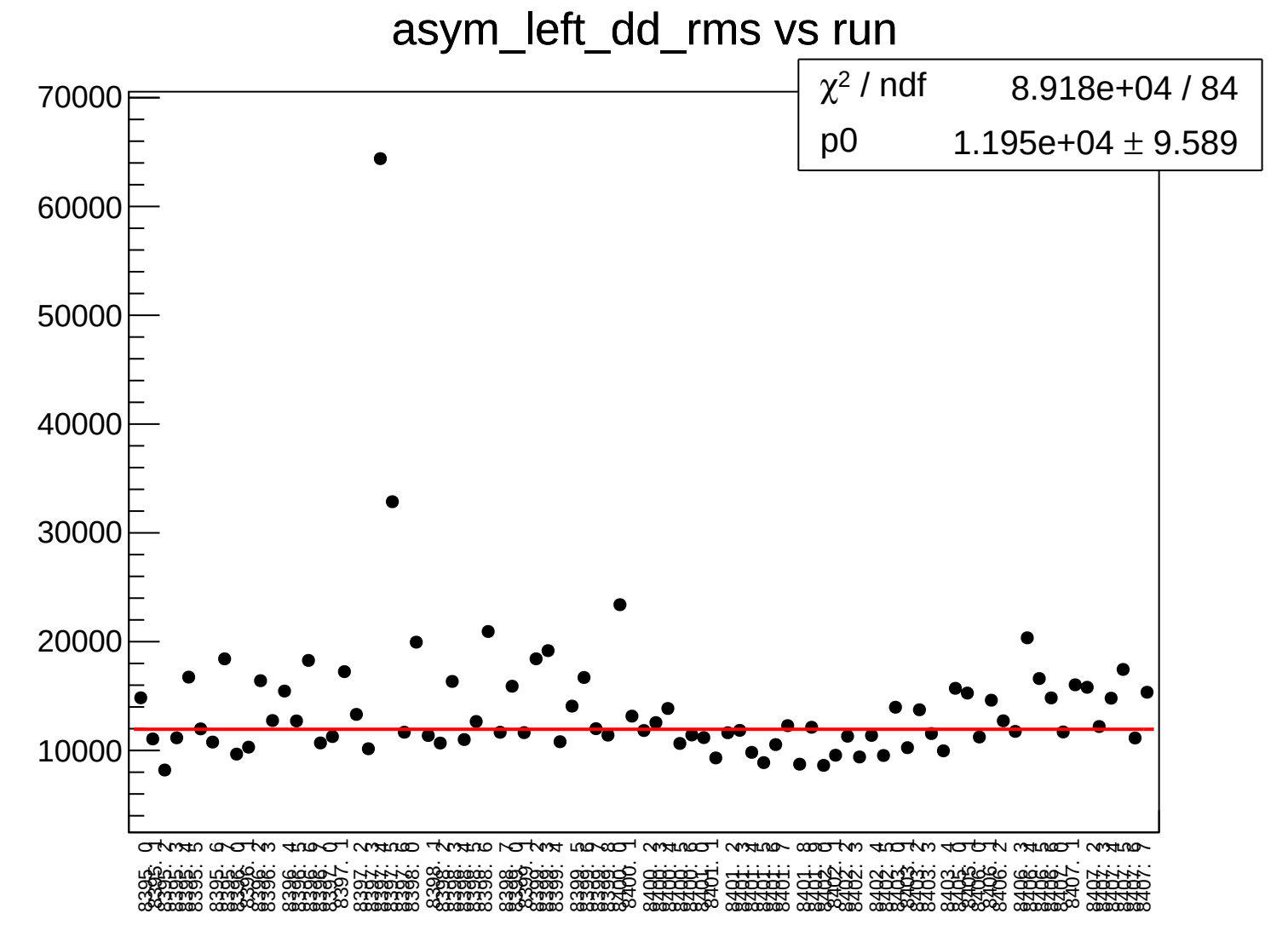

reg_asym_left_dd_rms vs run
χ^2 / ndf 8.93e+04 / 84
p0 1.194e+04 ± 9.582
70000
60000
50000
40000
30000
20000
10000

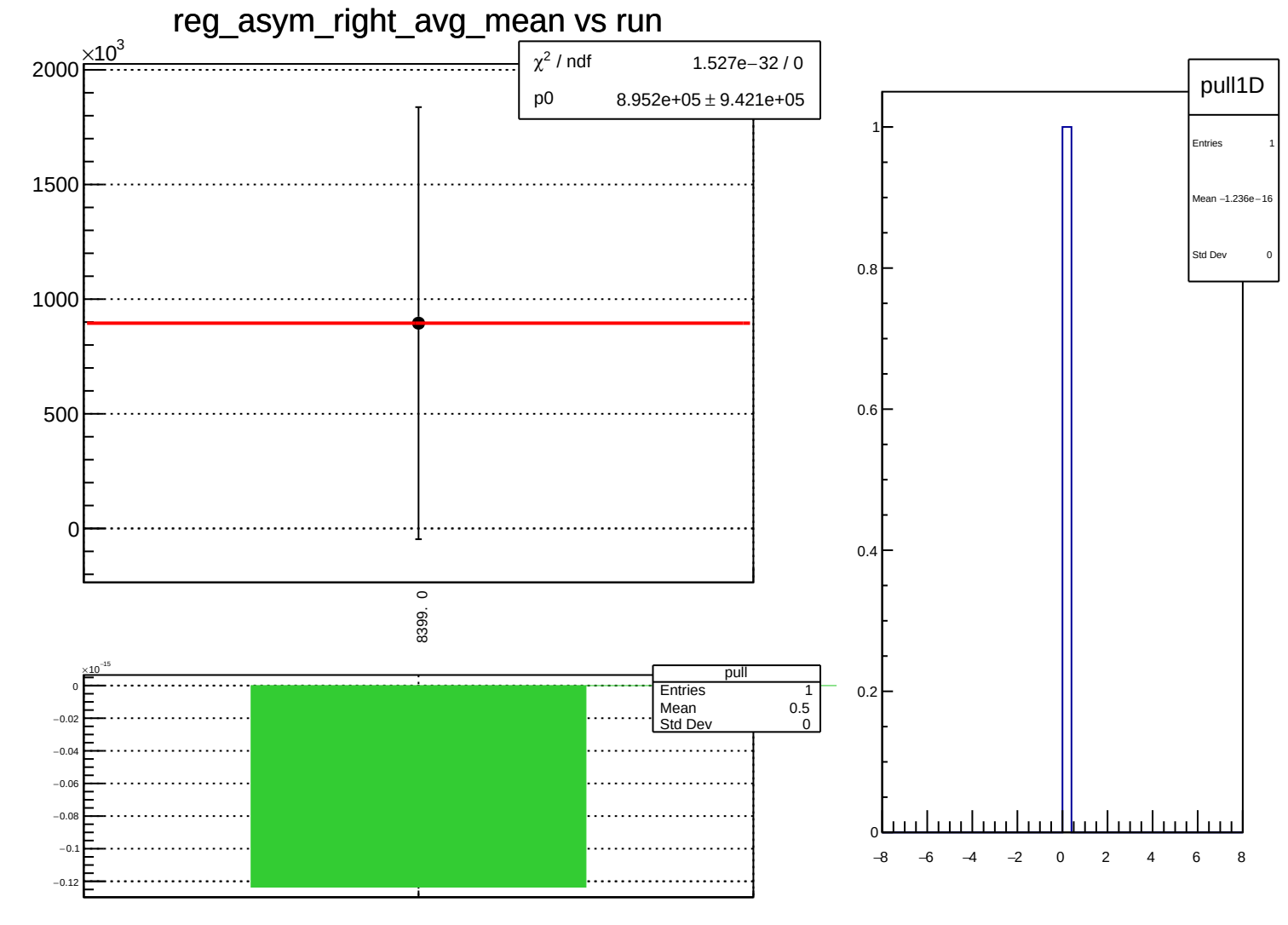

asym_left_dd_correction_mean vs run
χ² / ndf 100.2 / 84
p0 −665.2 ± 427.1
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 72.09
Std Dev 54.01
2
1
0
−1
−2
−3

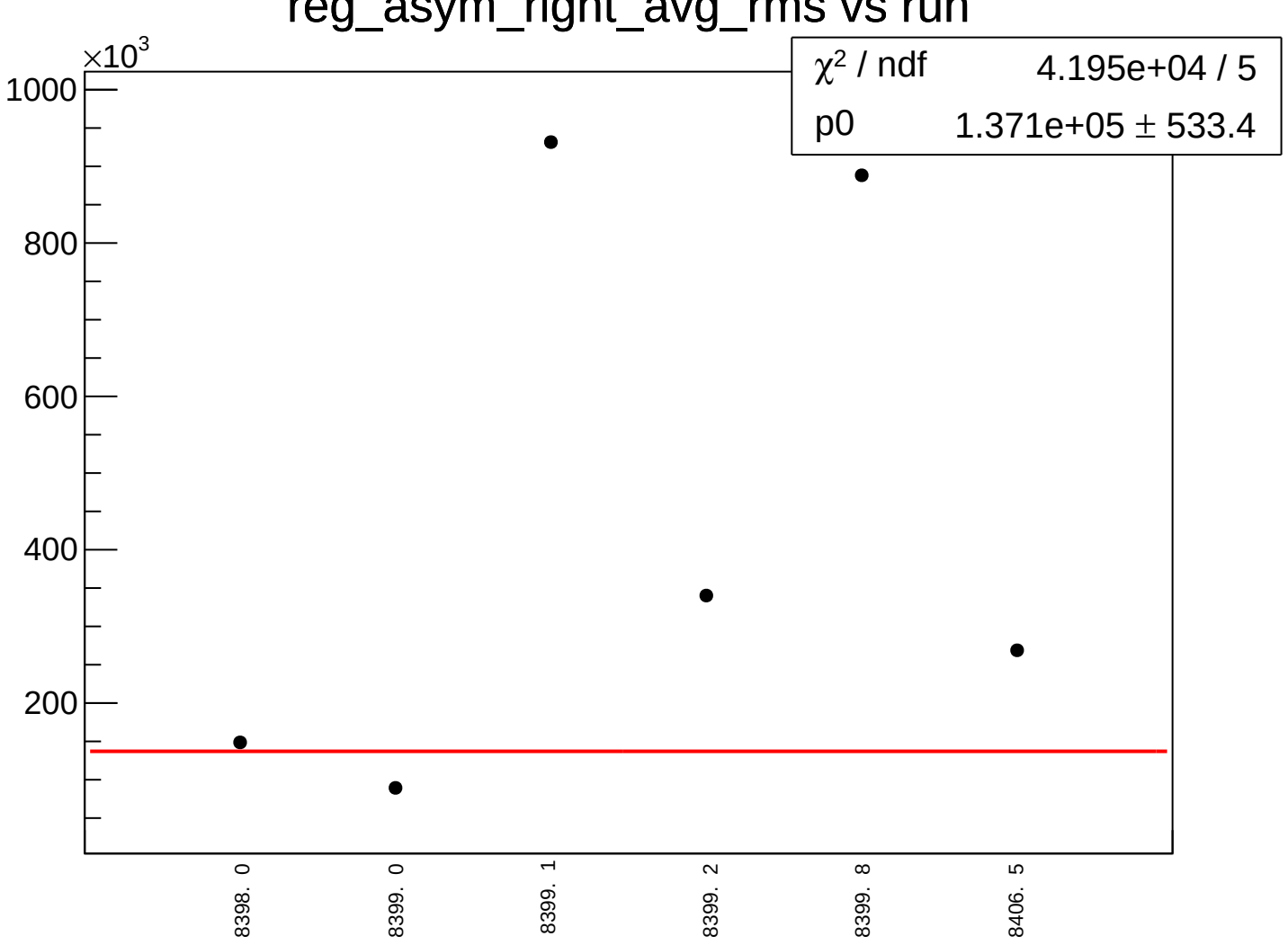

pull1D
Entries 85
Mean −0.03183
Std Dev 1.085
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

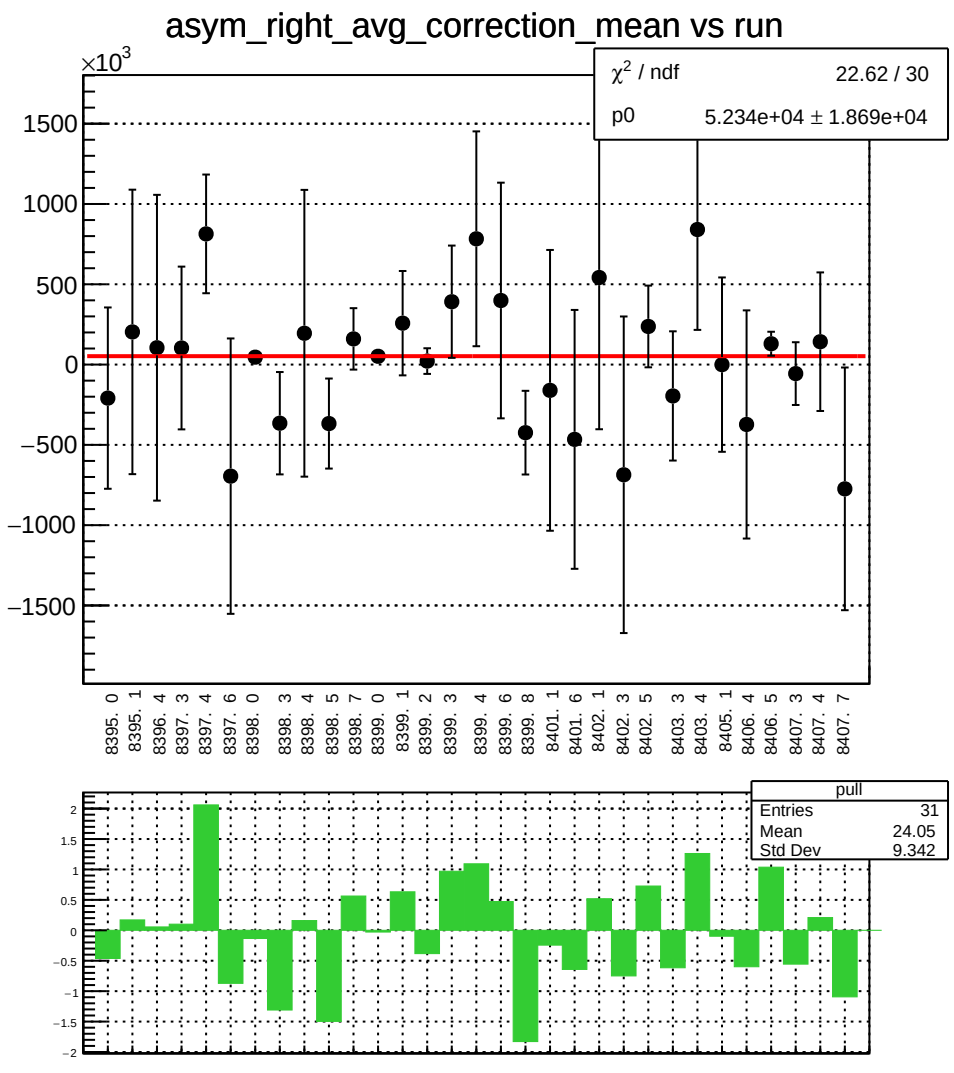

asym_left_dd_correction_rms vs run
χ^2 / ndf 1.622e+05 / 84
p0 367.3 ± 0.302
2500
2000
1500
1000
500

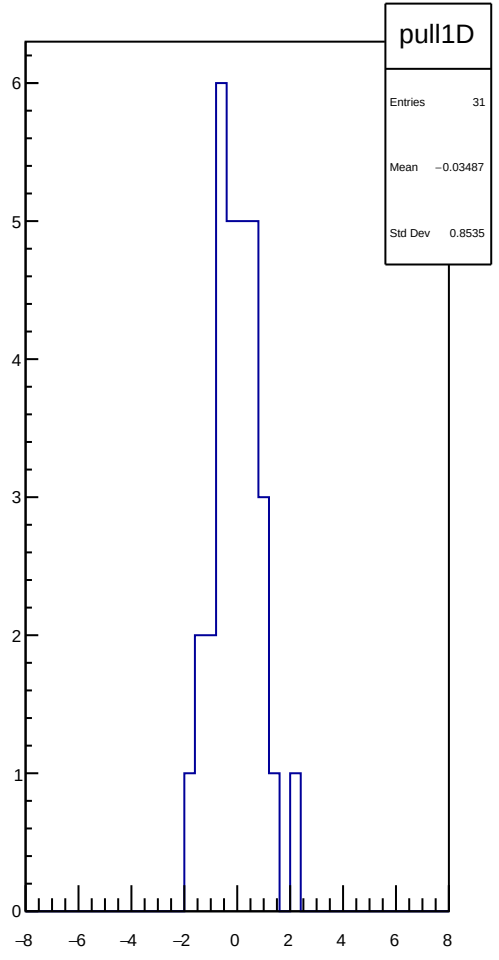

asym_left_dd_mean vs run
×10^3
χ² / ndf 64.54 / 84
p0 739.6 ± 1.356e+04
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 93.39
Std Dev 38.12
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 85
Mean 0.03631
Std Dev 0.8706
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


asym_left_dd_rms vs run
χ^2 / ndf 8.918e+04 / 84
p0 1.195e+04 ± 9.589
70000
60000
50000
40000
30000
20000
10000

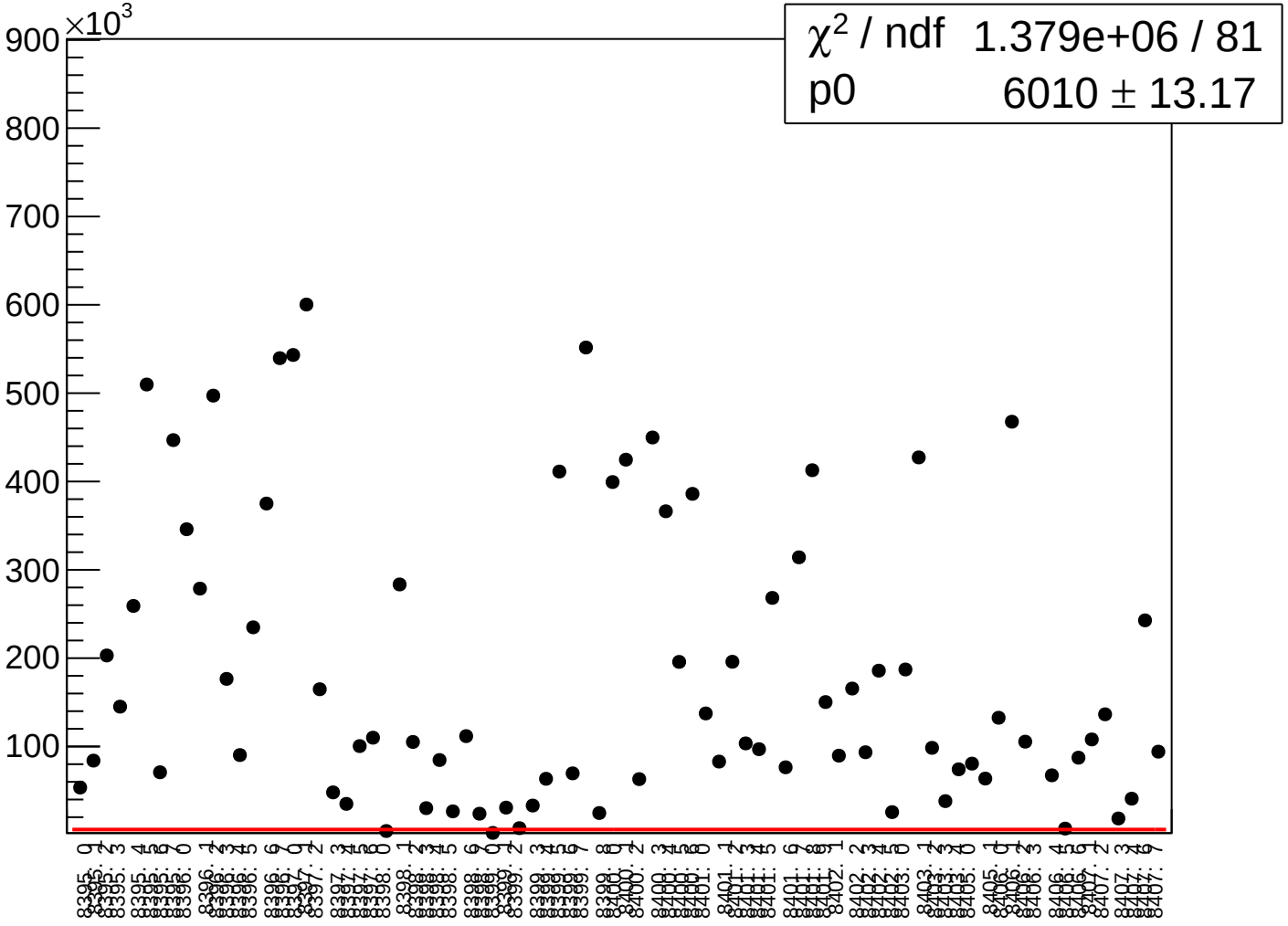

reg_asym_right_avg_mean vs run
×10^3
2000
1500
1000
500
0
χ² / ndf 1.527e−32 / 0
p0 8.952e+05 ± 9.421e+05
8399. 0
×10^-15
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
pull
Entries 1
Mean 0.5
Std Dev 0
pull1D
Entries 1
Mean −1.236e−16
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

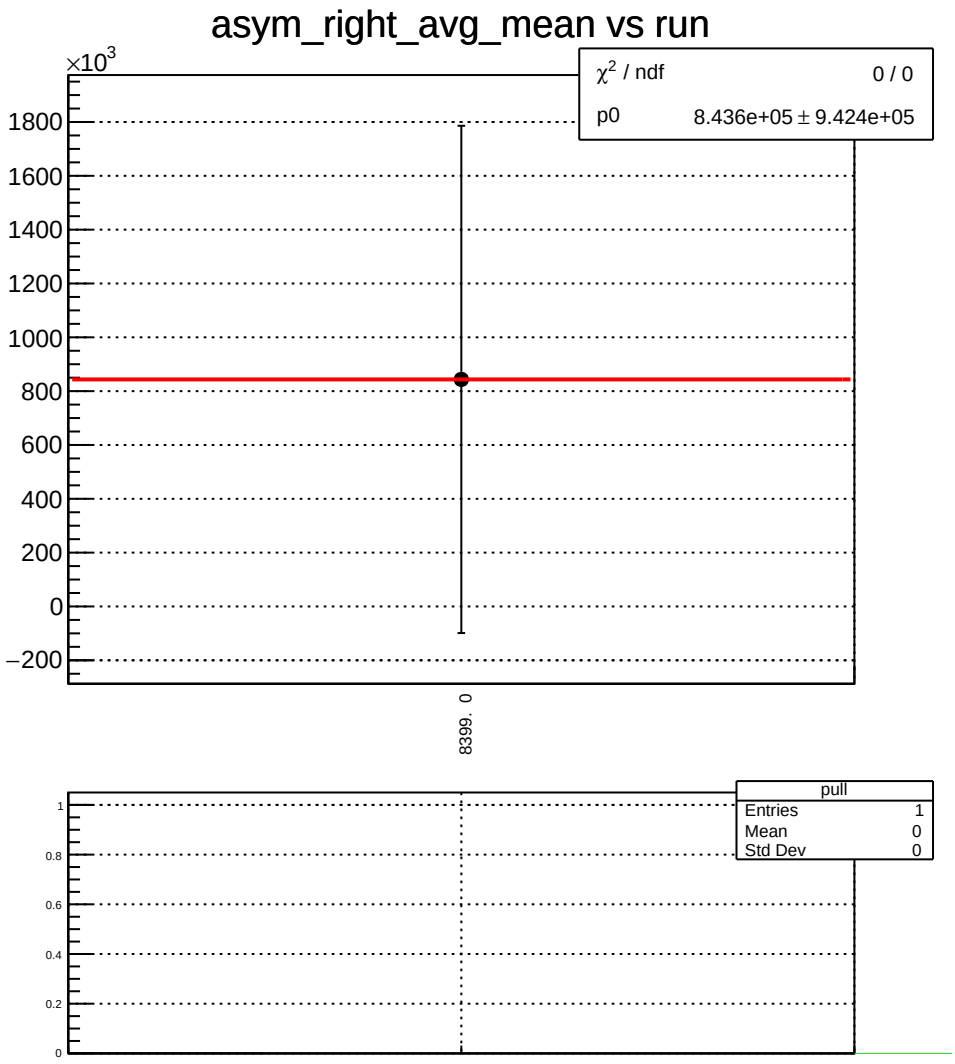

reg_asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.195e+04 / 5
p0 1.371e+05 ± 533.4
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

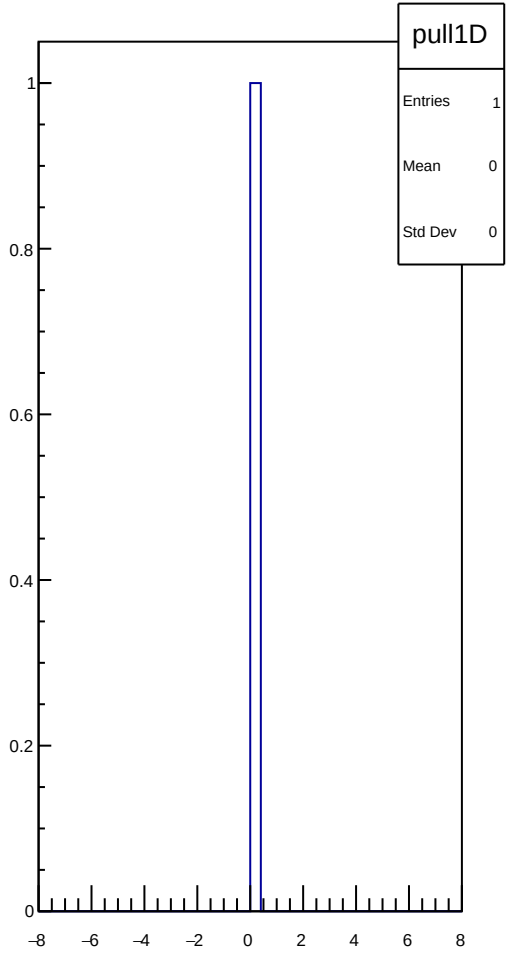

asym_right_avg_correction_mean vs run
×10^3
χ² / ndf 22.62 / 30
p0 5.234e+04 ± 1.869e+04
1500
1000
500
0
−500
−1000
−1500
8395. 0
8395. 1
8396. 4
8397. 3
8397. 4
8397. 6
8398. 0
8398. 3
8398. 4
8398. 5
8398. 7
8399. 0
8399. 1
8399. 2
8399. 3
8399. 4
8399. 6
8399. 8
8401. 1
8401. 6
8402. 1
8402. 3
8402. 5
8403. 3
8403. 4
8405. 1
8406. 4
8406. 5
8407. 3
8407. 4
8407. 7
pull
Entries 31
Mean 24.05
Std Dev 9.342
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

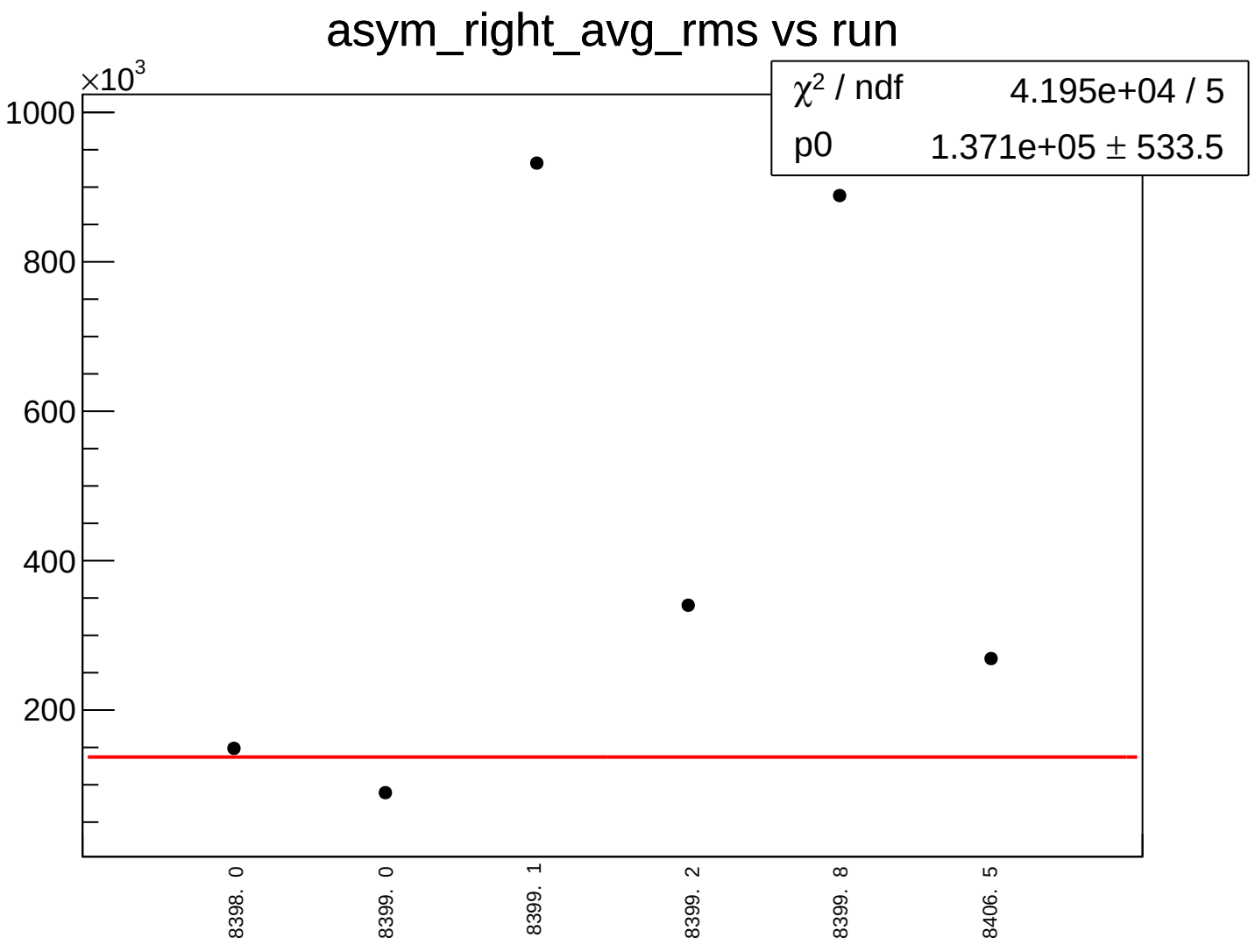

pull1D
Entries 31
Mean −0.03487
Std Dev 0.8535
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

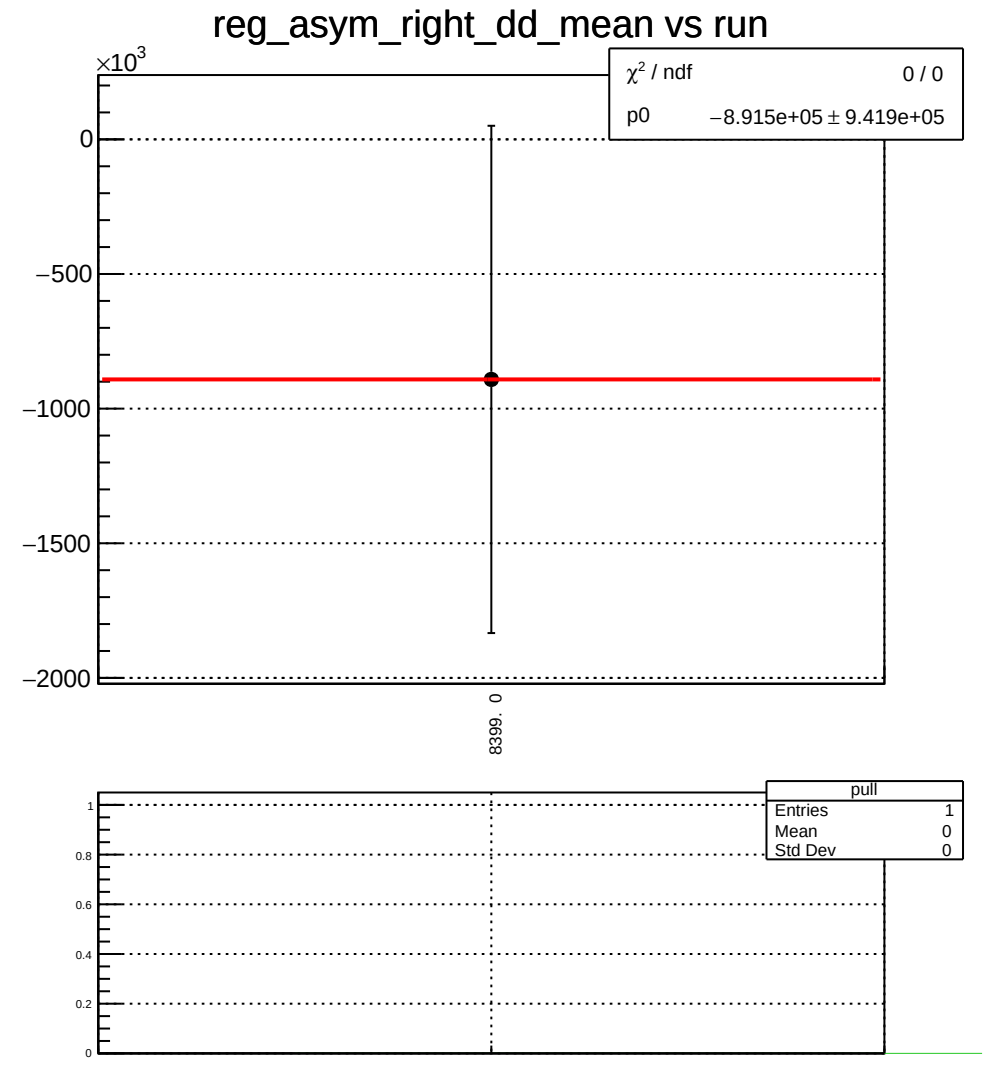
asym_right_avg_correction_rms vs run

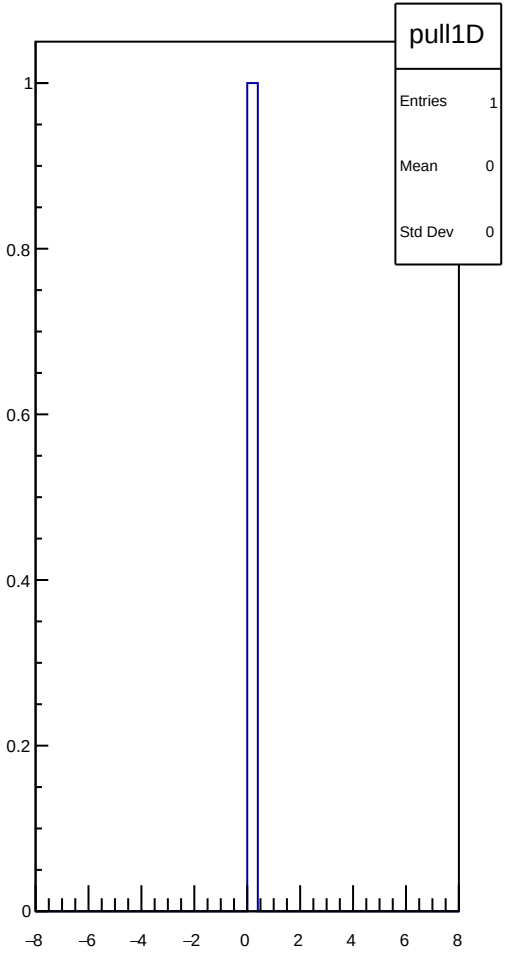


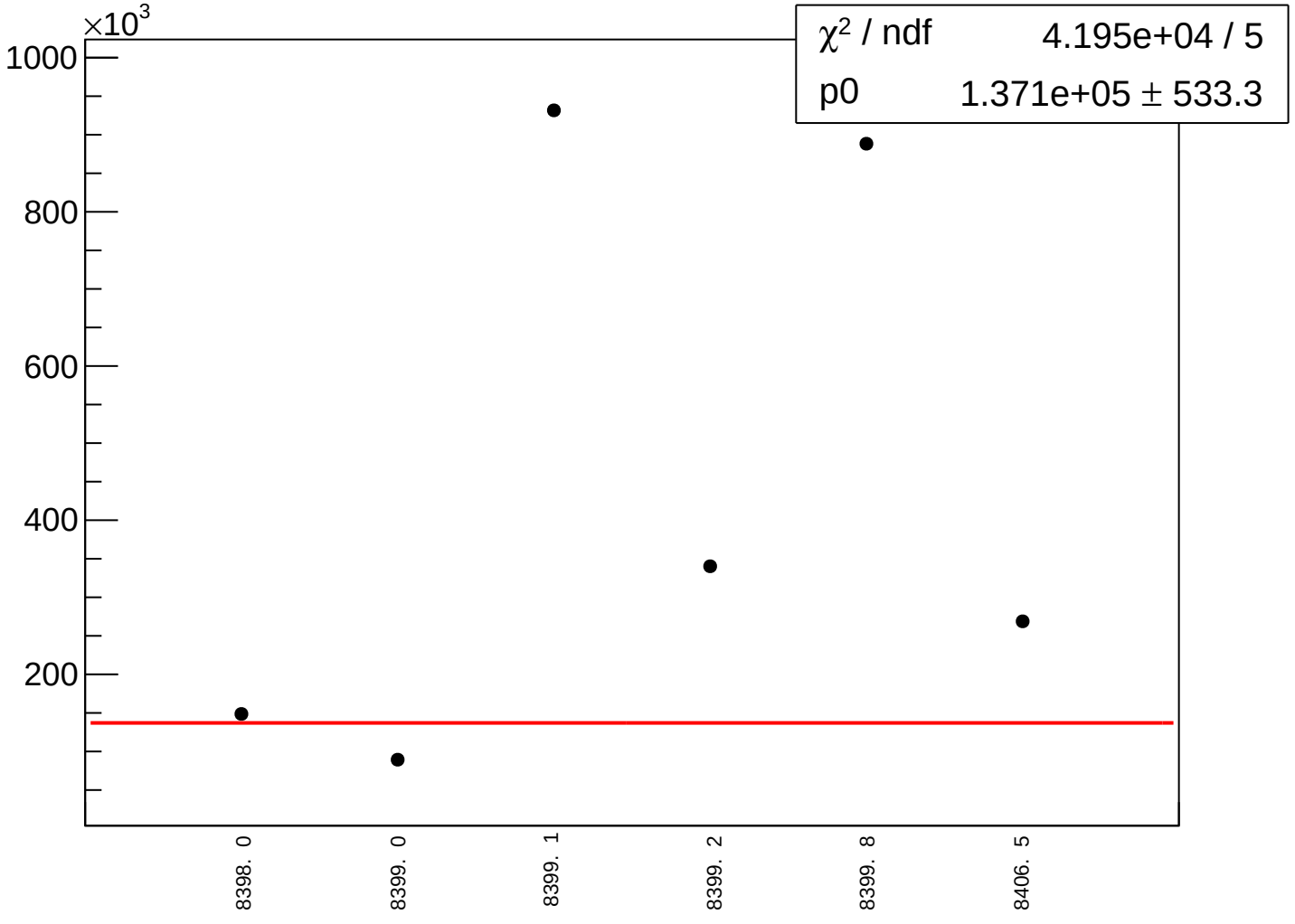

asym_right_avg_mean vs run
×10^3
χ² / ndf 0 / 0
p0 8.436e+05 ± 9.424e+05
1800
1600
1400
1200
1000
800
600
400
200
0
−200
8399. 0
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

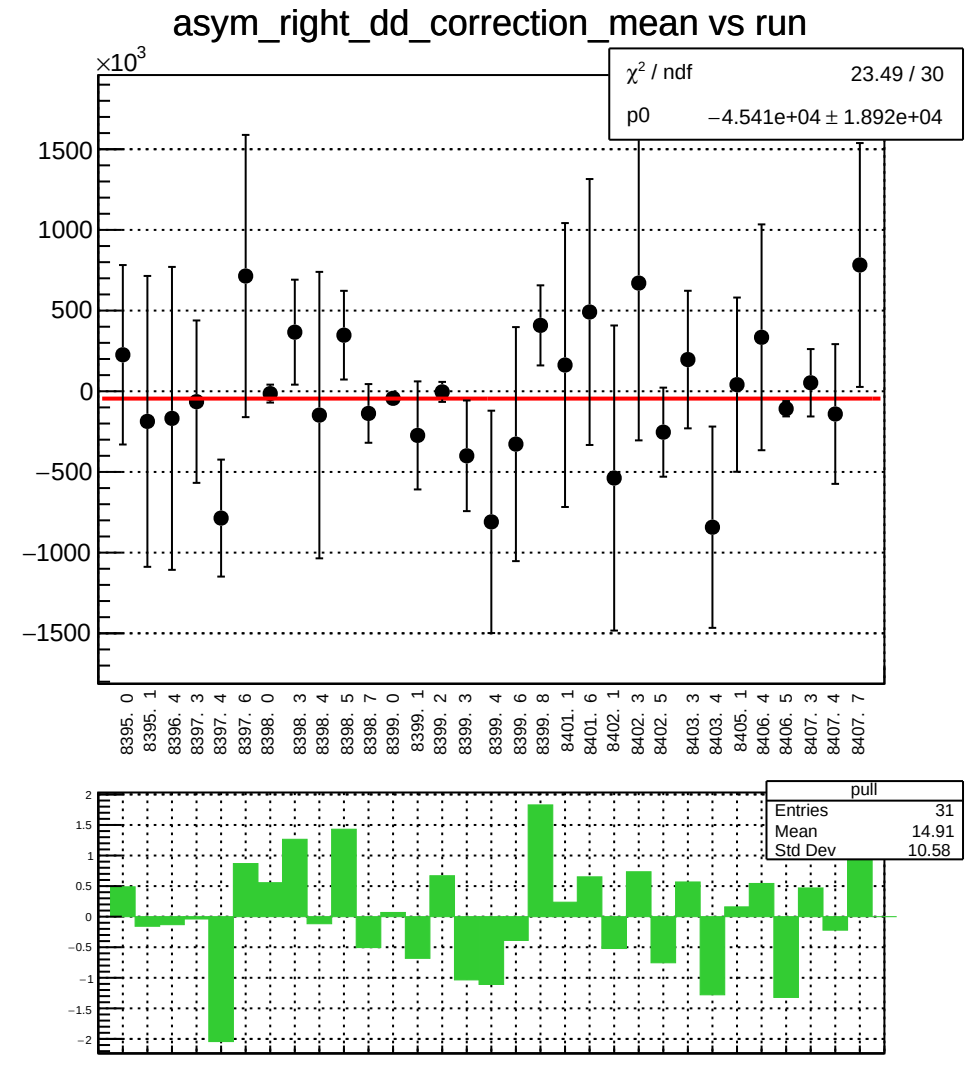

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

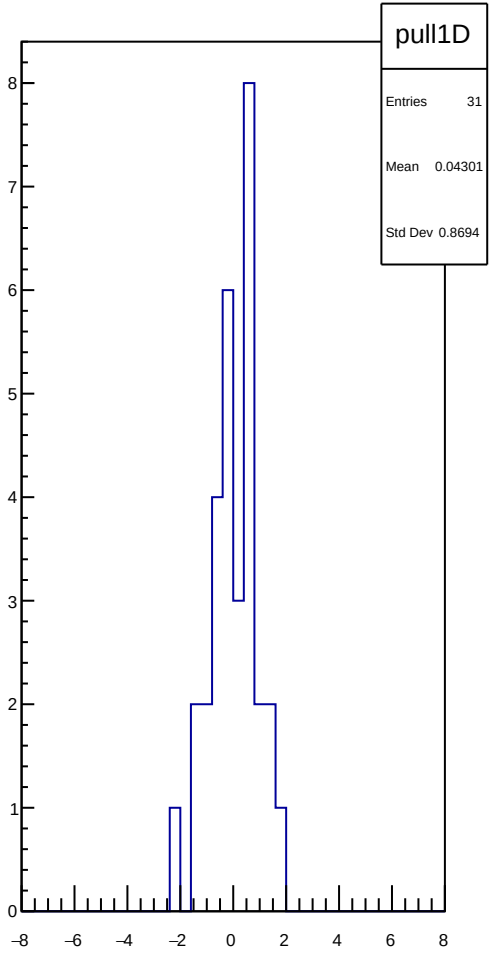

asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.195e+04 / 5
p0 1.371e+05 ± 533.5
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

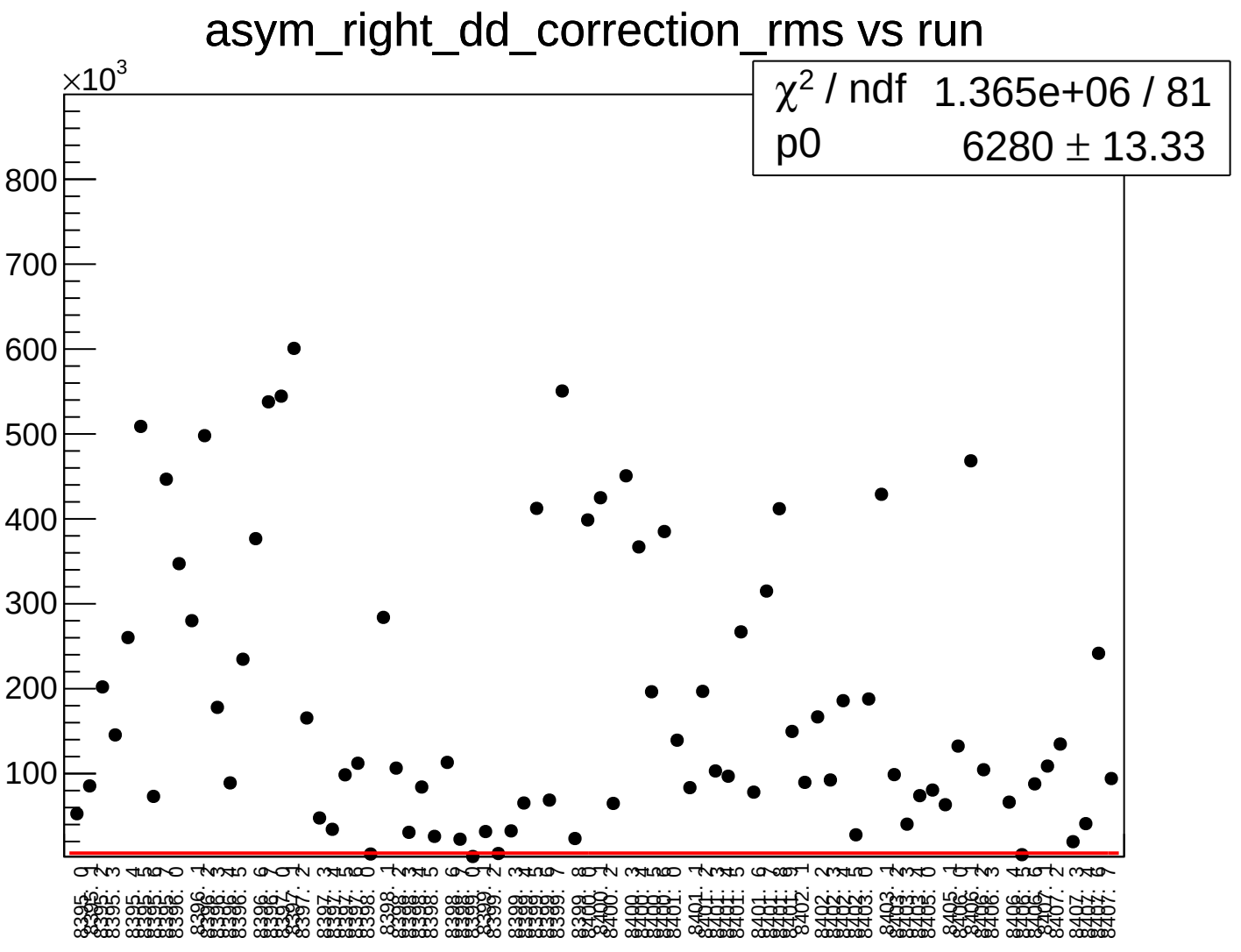

reg_asym_right_dd_mean vs run
×10^3
χ² / ndf 0 / 0
p0 −8.915e+05 ± 9.419e+05
0
−500
−1000
−1500
−2000
8399. 0
pull
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

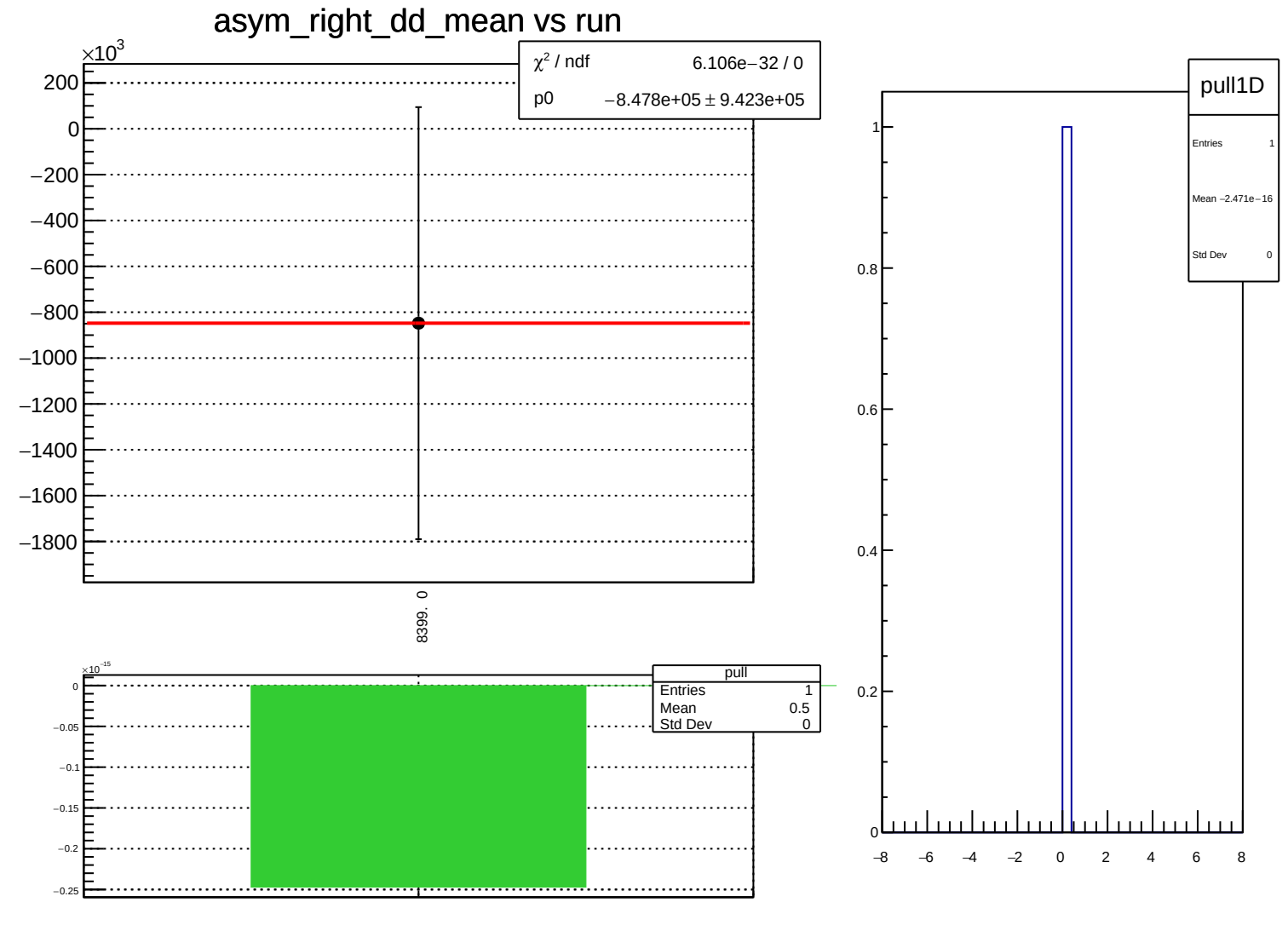

pull1D
Entries 1
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

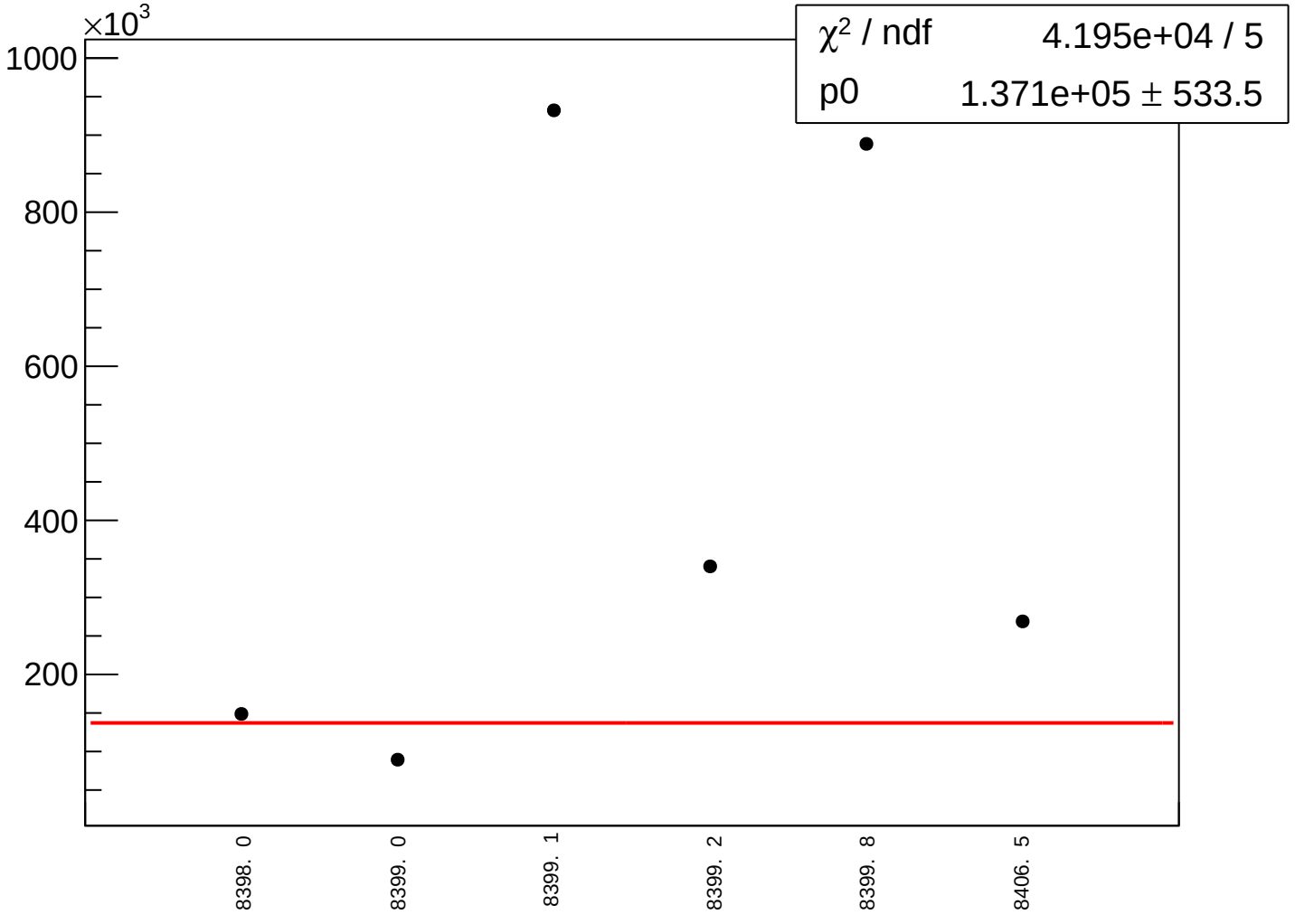

reg_asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.195e+04 / 5
p0 1.371e+05 ± 533.3
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

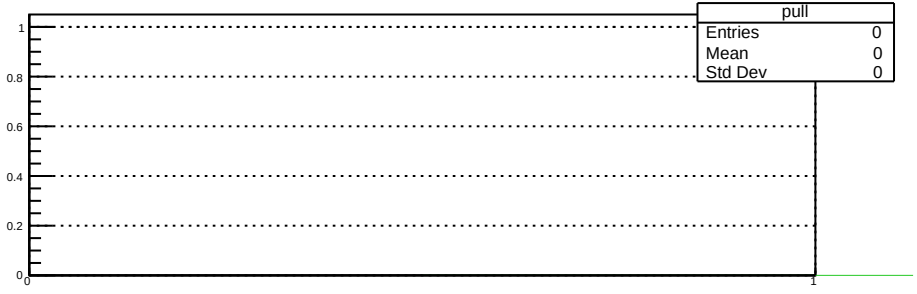

asym_right_dd_correction_mean vs run
×10^3
χ² / ndf 23.49 / 30
p0 −4.541e+04 ± 1.892e+04
1500
1000
500
0
−500
−1000
−1500
8395. 0
8395. 1
8396. 4
8397. 3
8397. 4
8397. 6
8398. 0
8398. 3
8398. 4
8398. 5
8398. 7
8399. 0
8399. 1
8399. 2
8399. 3
8399. 4
8399. 6
8399. 8
8401. 1
8401. 6
8402. 1
8402. 3
8402. 5
8403. 3
8403. 4
8405. 1
8406. 4
8406. 5
8407. 3
8407. 4
8407. 7
pull
Entries 31
Mean 14.91
Std Dev 10.58
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

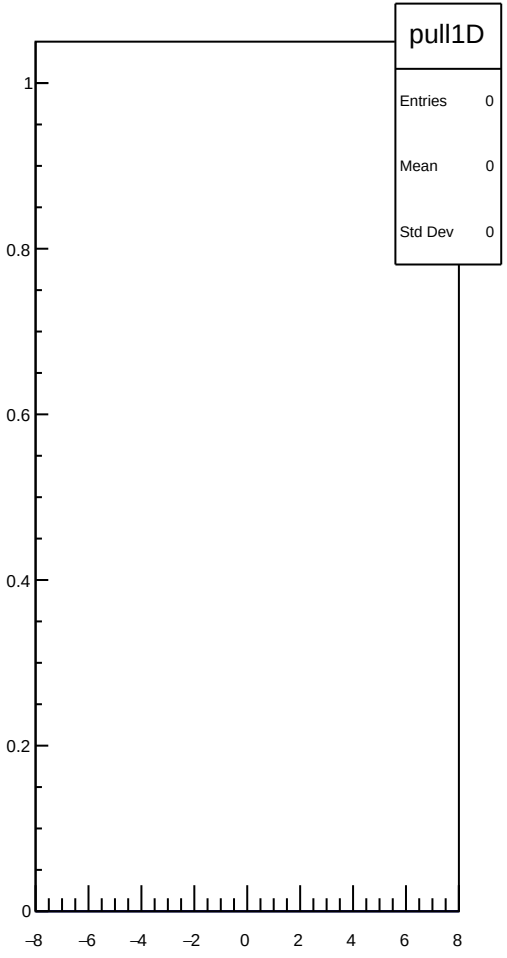

pull1D
Entries 31
Mean 0.04301
Std Dev 0.8694
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

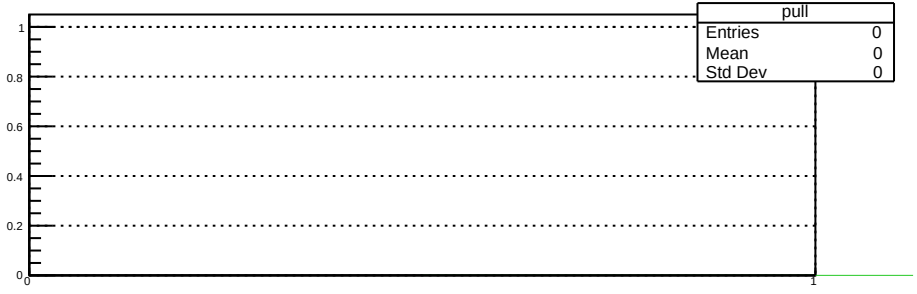

asym_right_dd_correction_rms vs run
×10^3
χ^2 / ndf 1.365e+06 / 81
p0 6280 ± 13.33
800
700
600
500
400
300
200
100

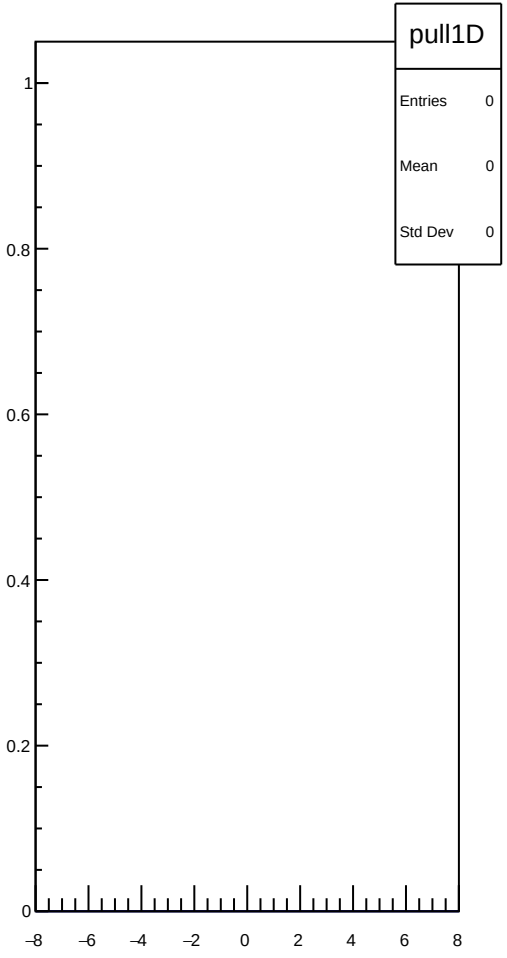

asym_right_dd_mean vs run
×10^3
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800
χ² / ndf 6.106e−32 / 0
p0 −8.478e+05 ± 9.423e+05
8399. 0
×10^-15
0
−0.05
−0.1
−0.15
−0.2
−0.25
pull
Entries 1
Mean 0.5
Std Dev 0
pull1D
Entries 1
Mean −2.471e−16
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

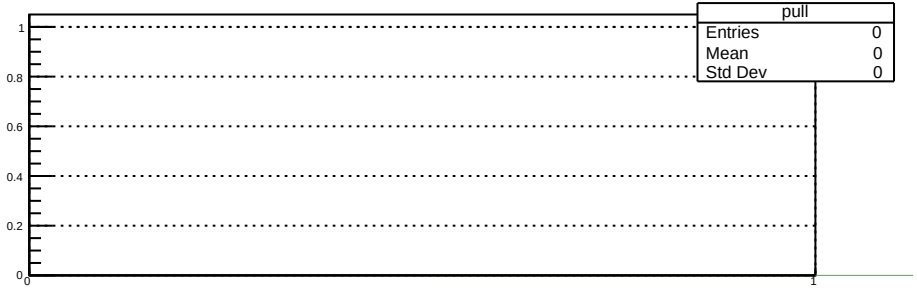

asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 4.195e+04 / 5
p0 1.371e+05 ± 533.5
8398. 0
8399. 0
8399. 1
8399. 2
8399. 8
8406. 5

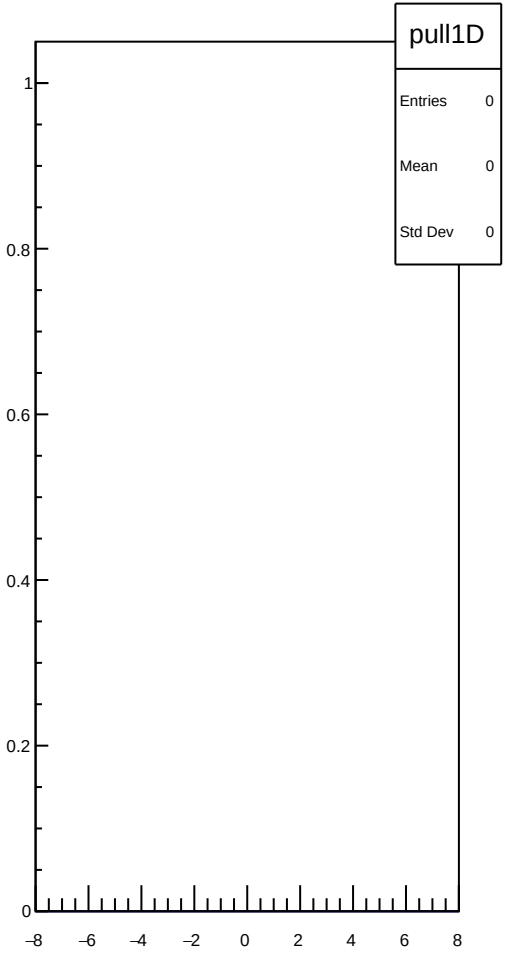

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

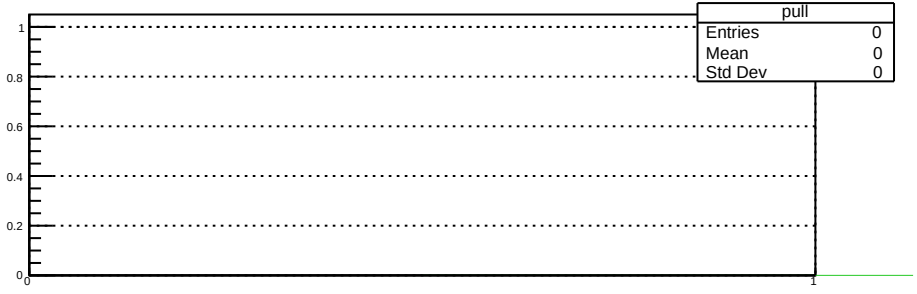

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

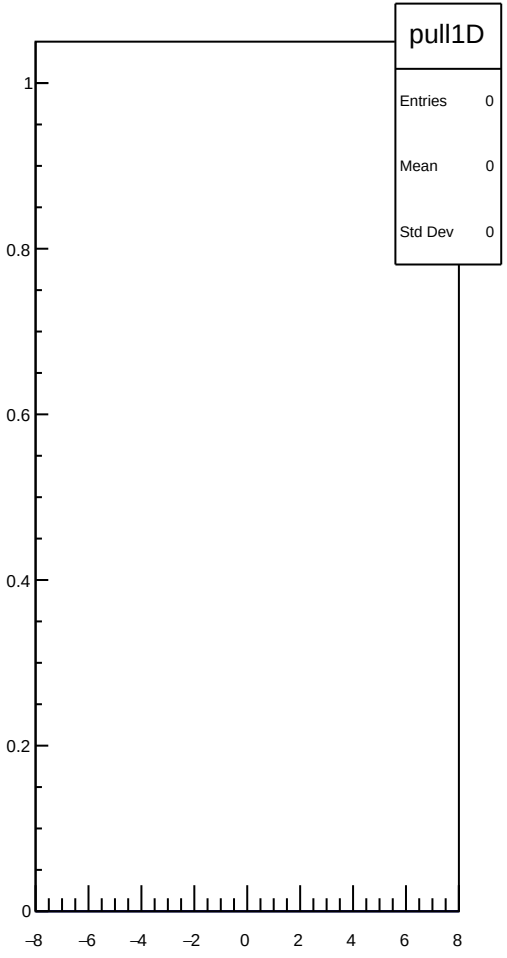

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

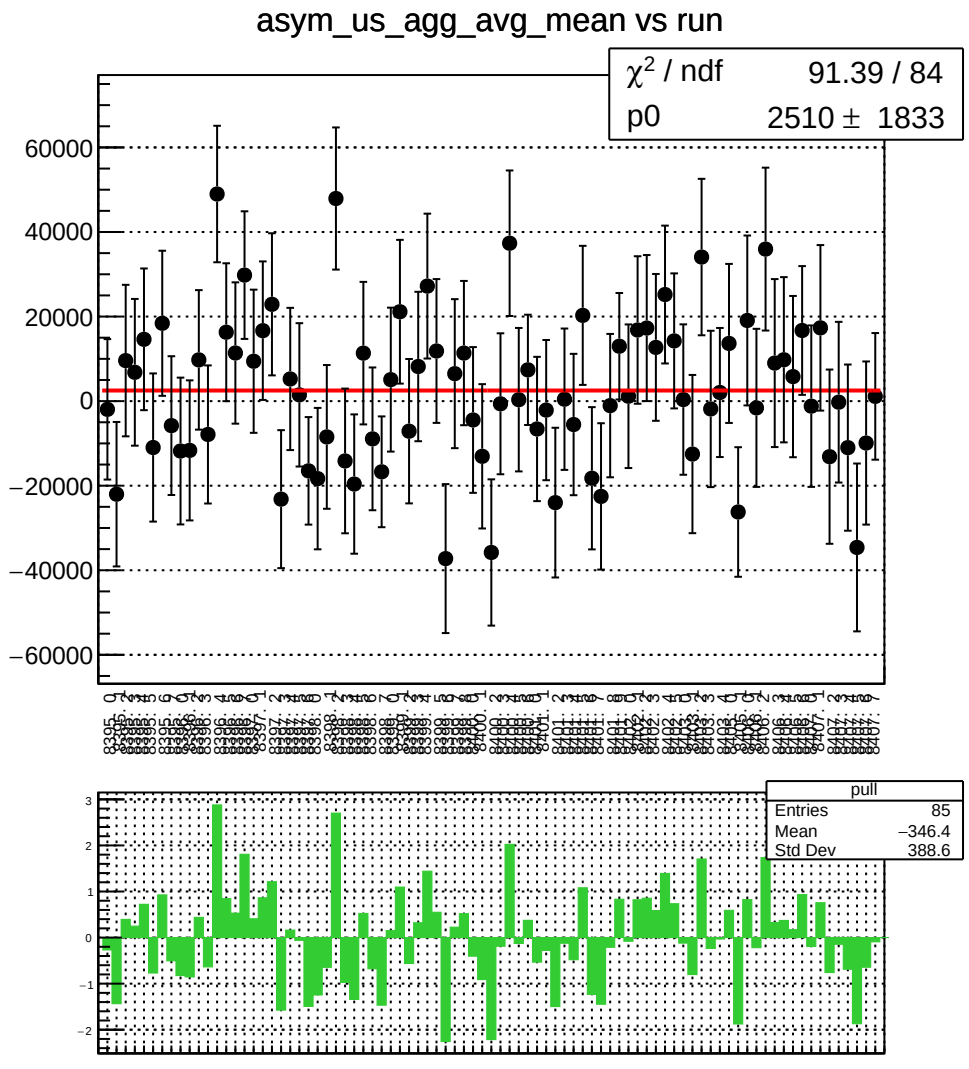

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

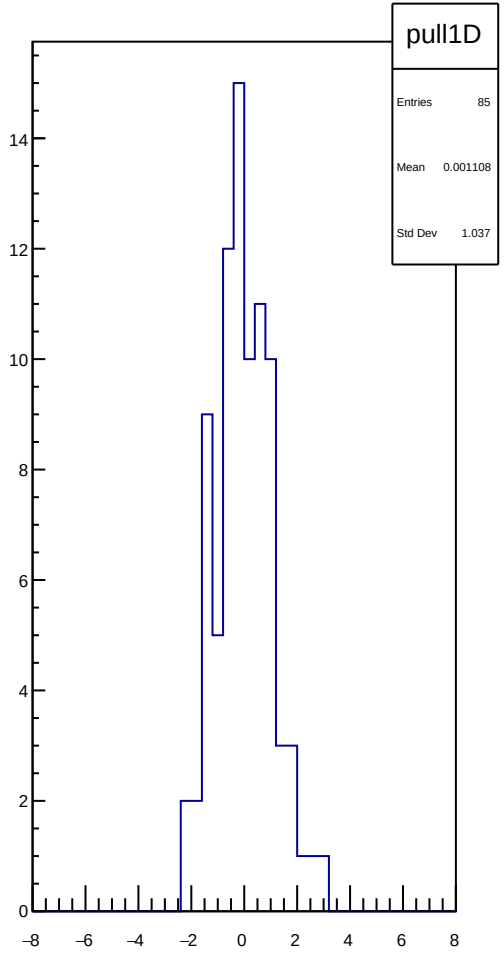

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

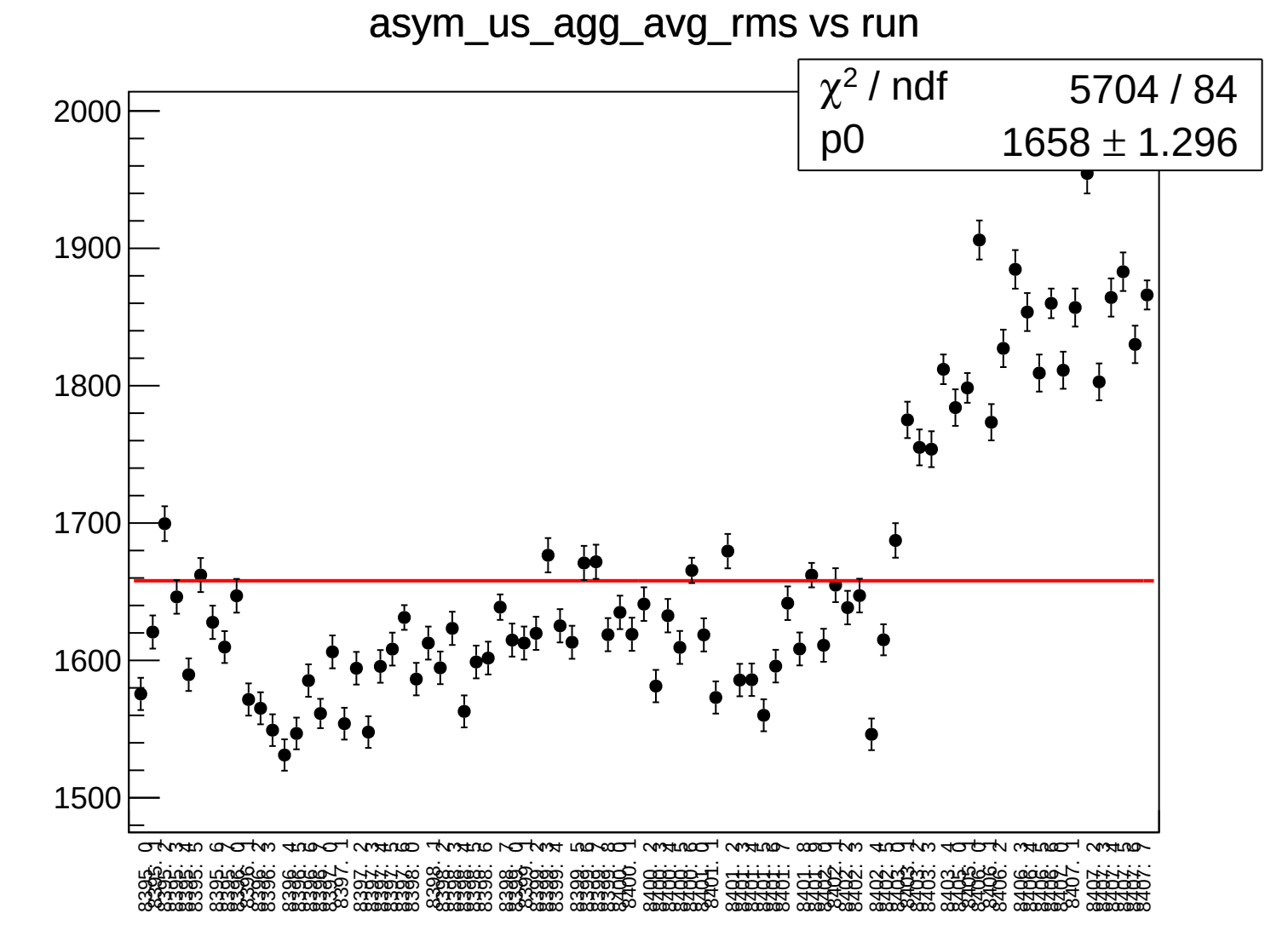

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

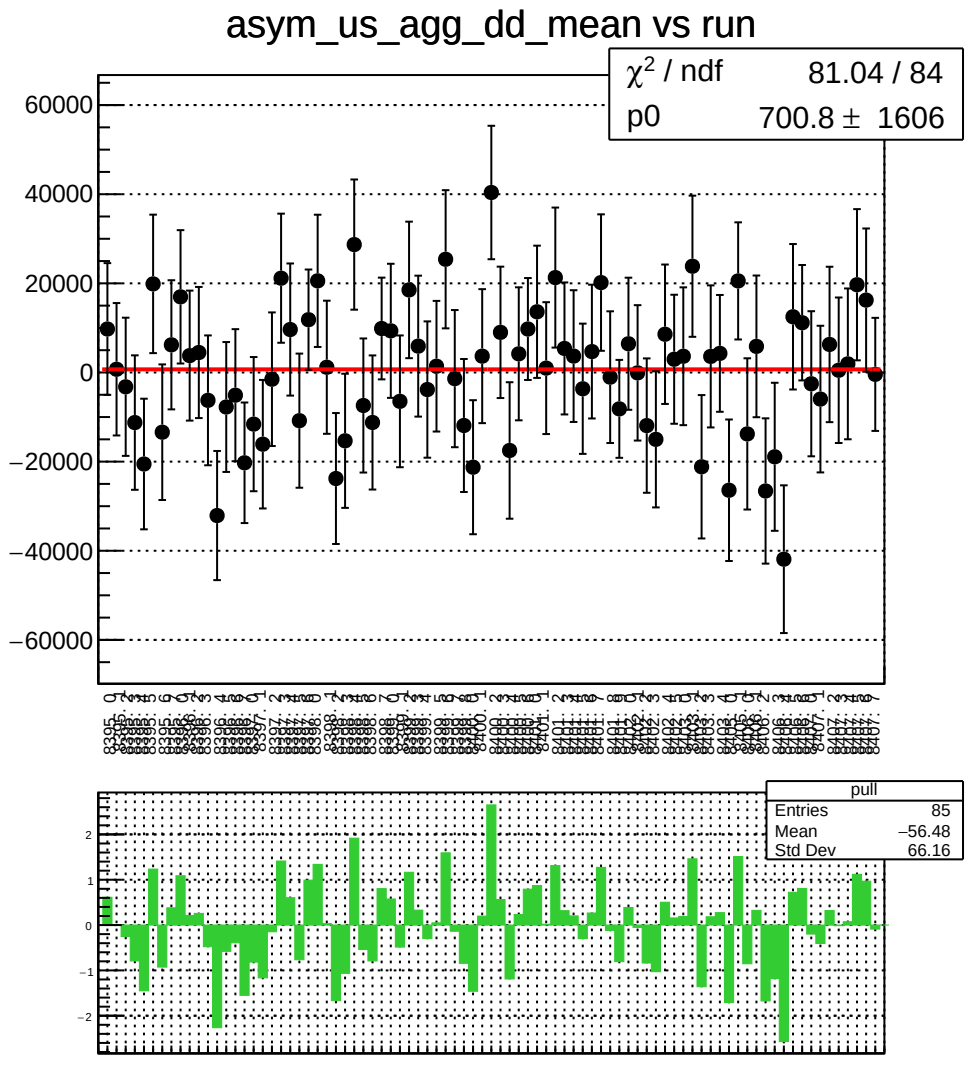

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

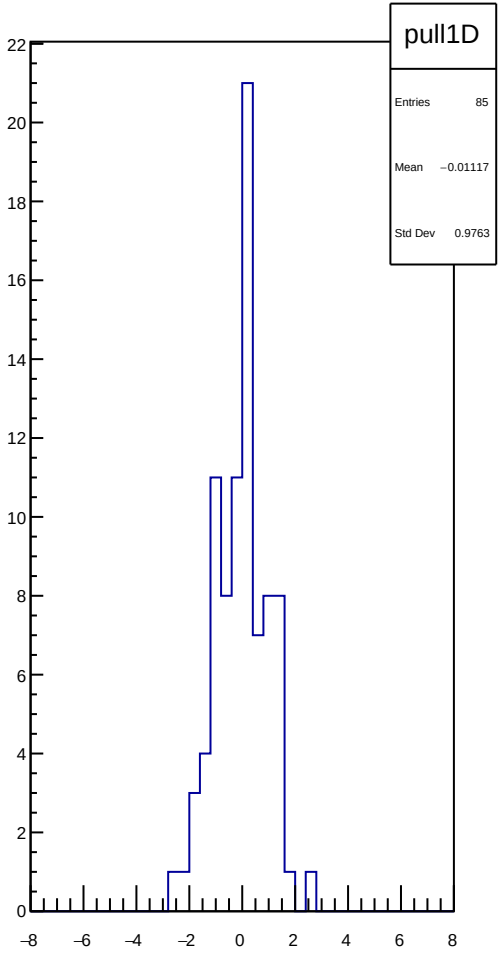

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

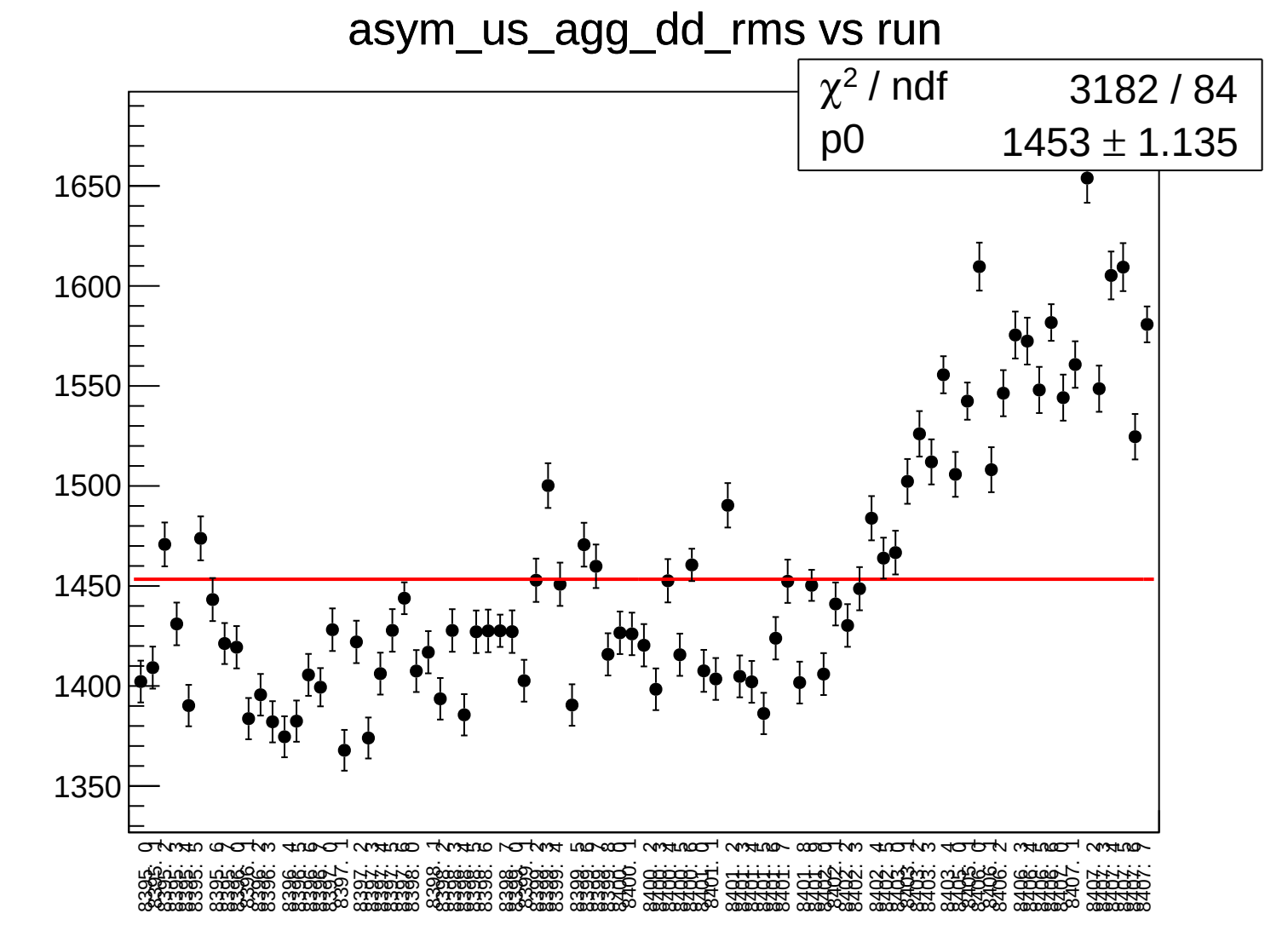

asym_us_agg_avg_mean vs run
χ² / ndf 91.39 / 84
p0 2510 ± 1833
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −346.4
Std Dev 388.6
3
2
1
0
−1
−2

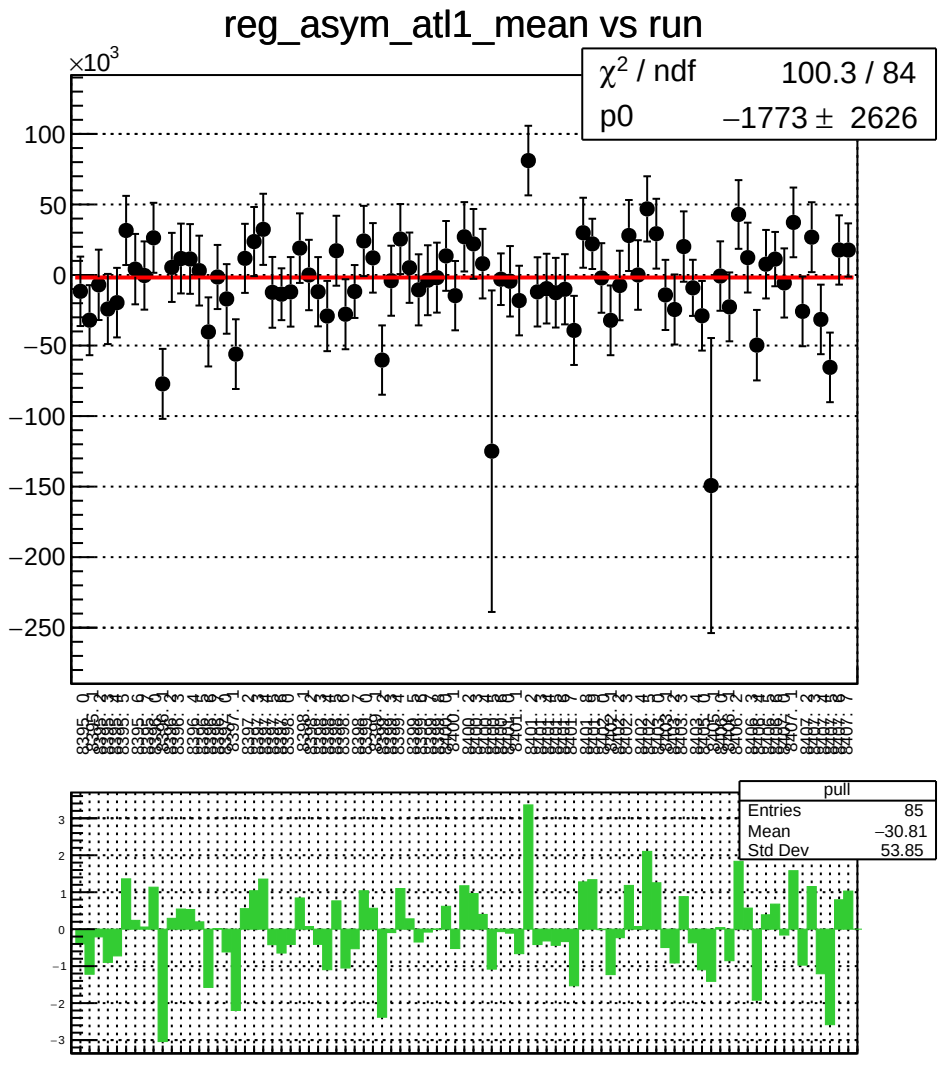

pull1D
Entries 85
Mean 0.001108
Std Dev 1.037
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

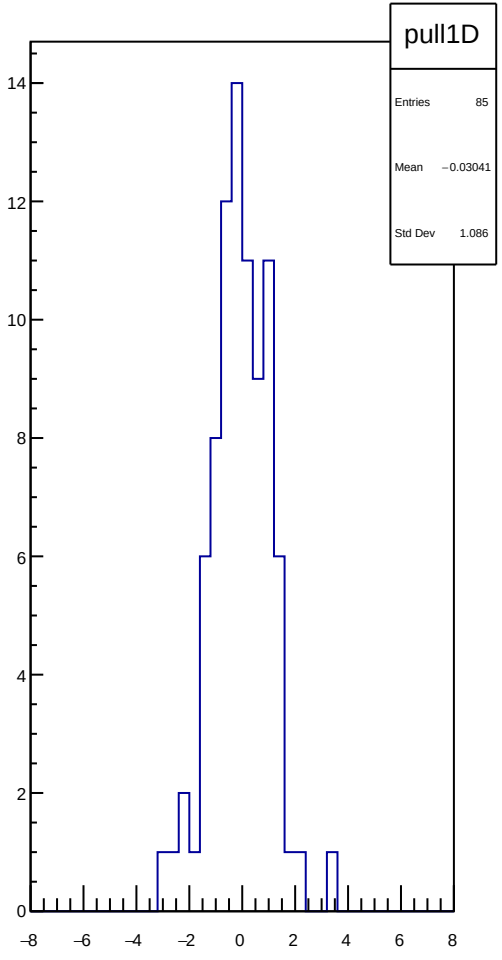

asym_us_agg_avg_rms vs run
χ² / ndf 5704 / 84
p0 1658 ± 1.296
2000
1900
1800
1700
1600
1500

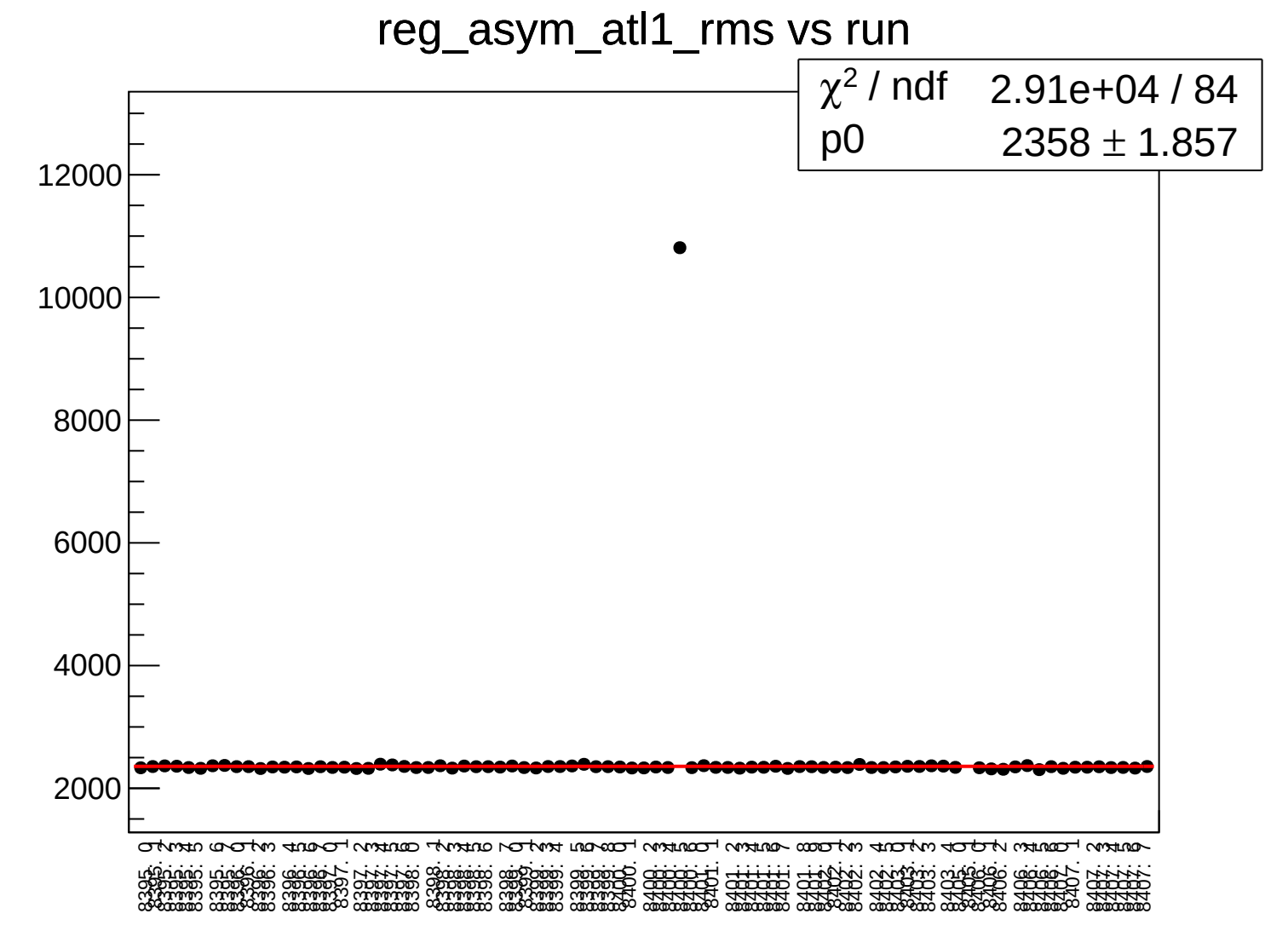

asym_us_agg_dd_mean vs run
χ² / ndf 81.04 / 84
p0 700.8 ± 1606
pull
Entries 85
Mean −56.48
Std Dev 66.16

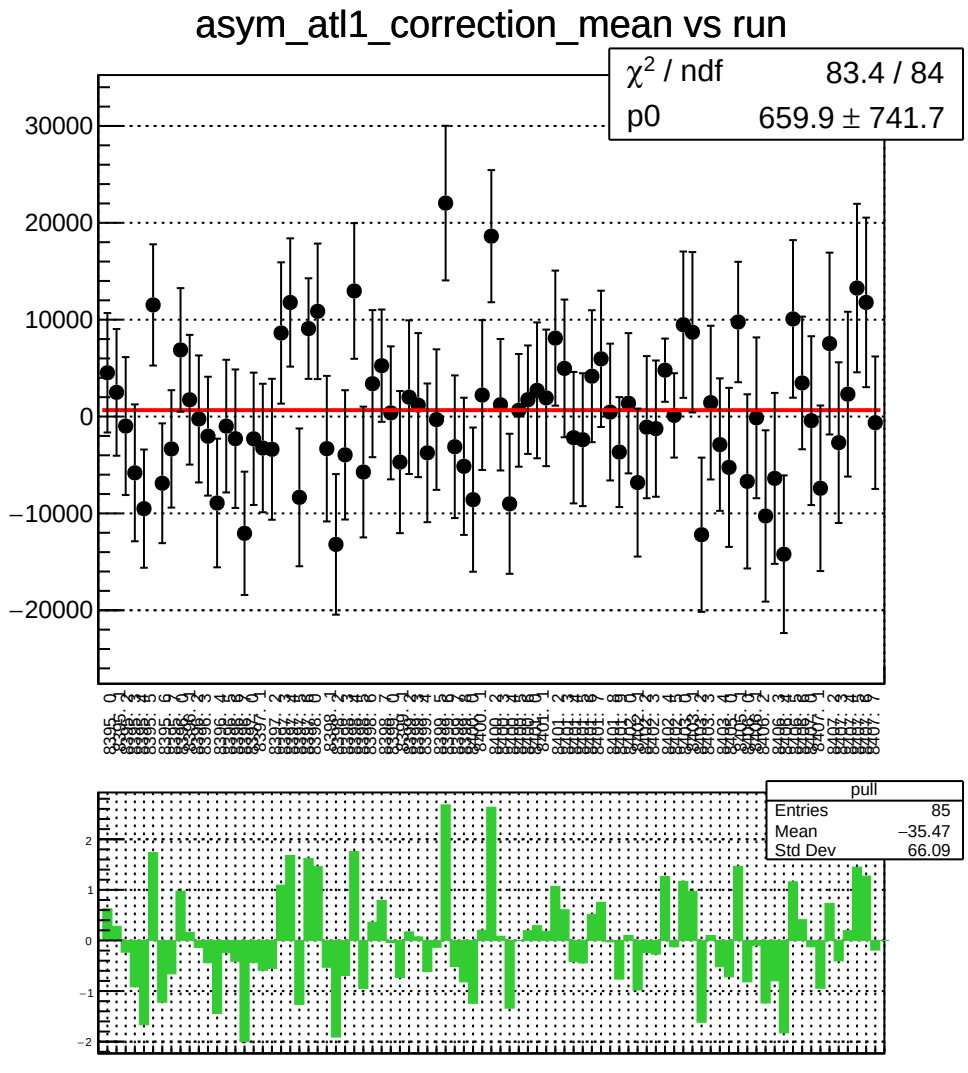

pull1D
Entries 85
Mean −0.01117
Std Dev 0.9763

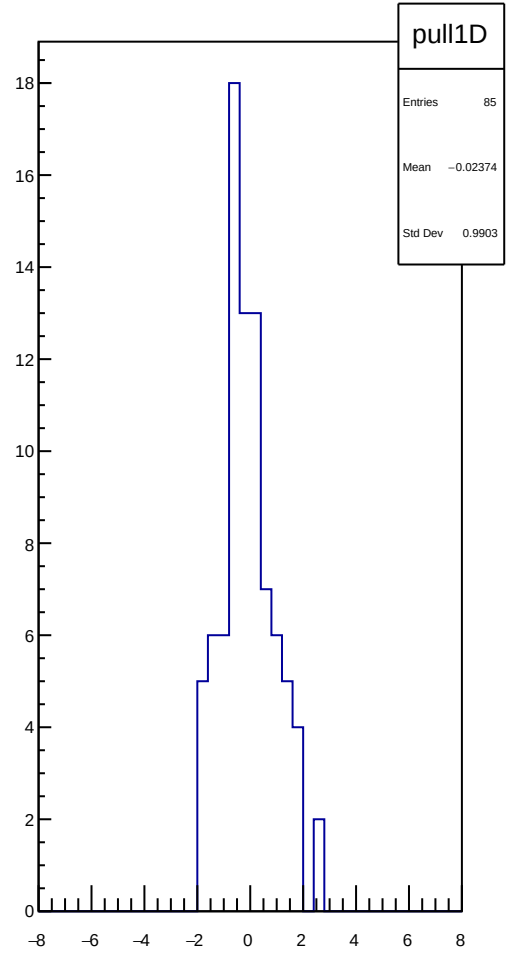

asym_us_agg_dd_rms vs run
χ² / ndf 3182 / 84
p0 1453 ± 1.135
1650
1600
1550
1500
1450
1400
1350

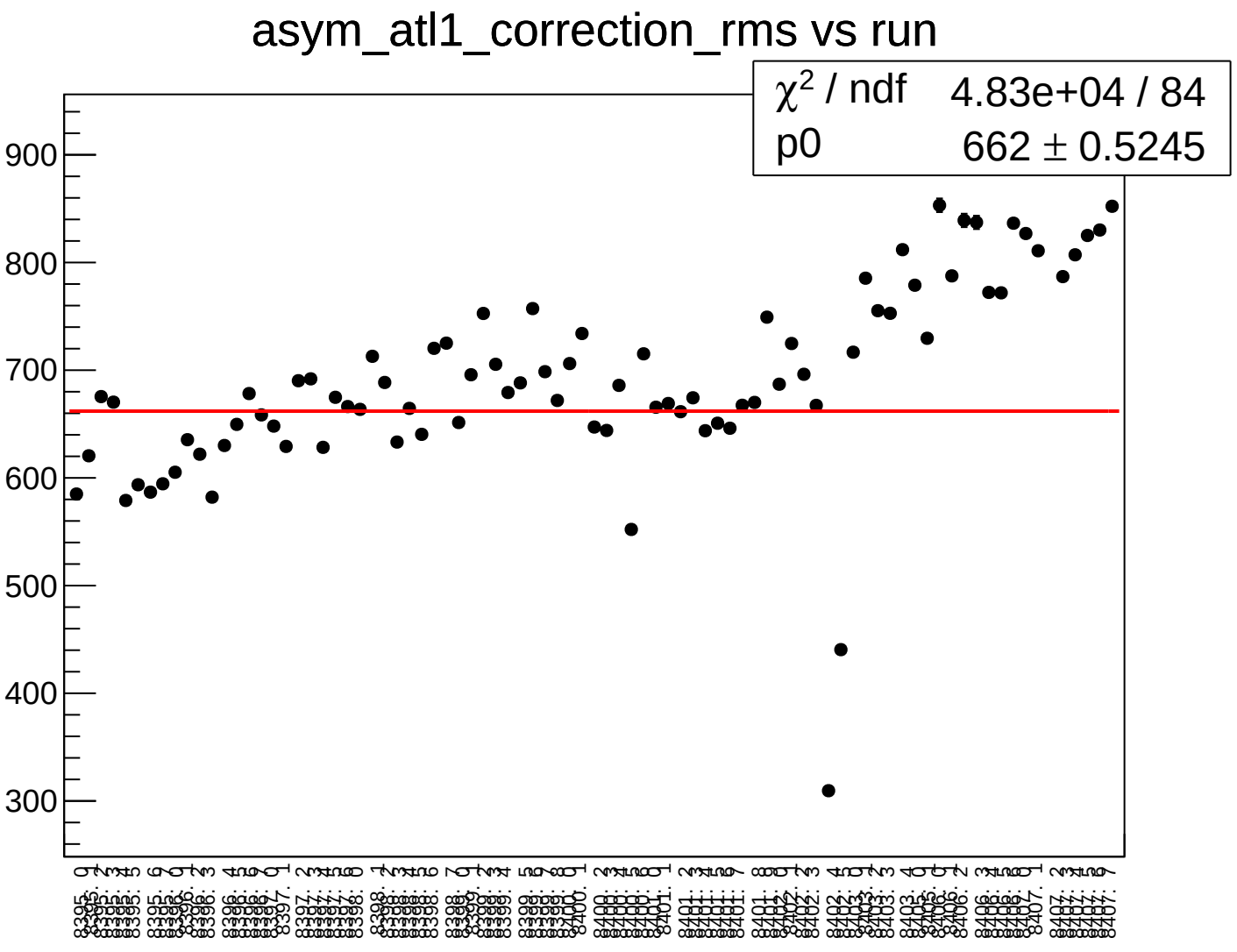

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 100.3 / 84
p0 −1773 ± 2626
100
50
0
−50
−100
−150
−200
−250
pull
Entries 85
Mean −30.81
Std Dev 53.85
3
2
1
0
−1
−2
−3

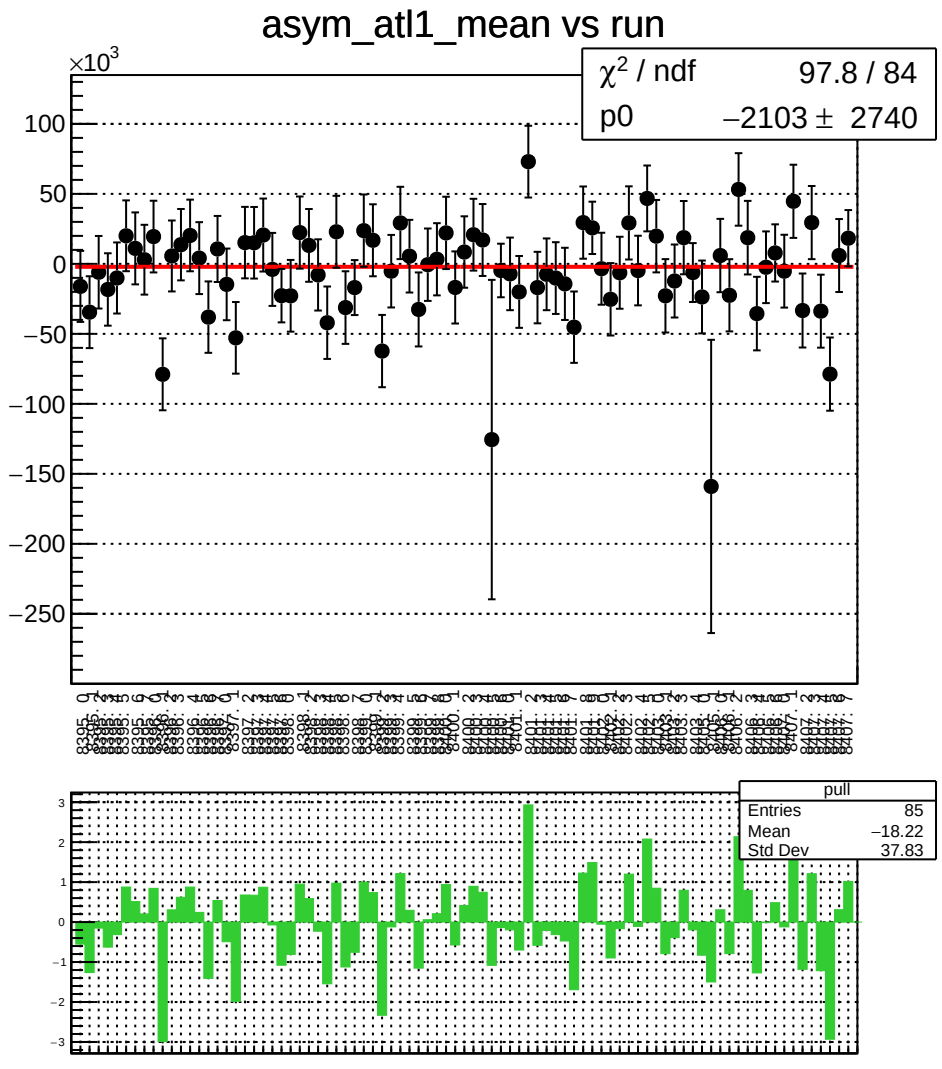

pull1D
Entries 85
Mean −0.03041
Std Dev 1.086
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

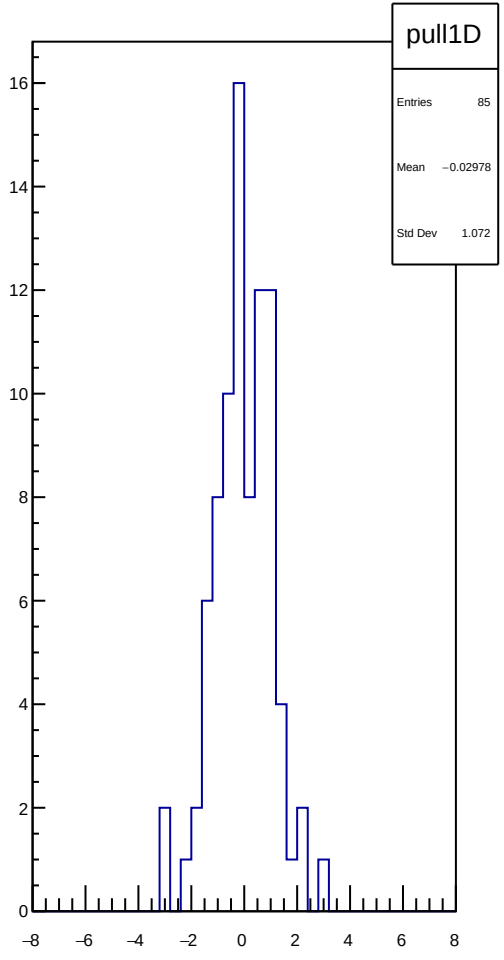

reg_asym_atl1_rms vs run
χ² / ndf 2.91e+04 / 84
p0 2358 ± 1.857
12000
10000
8000
6000
4000
2000

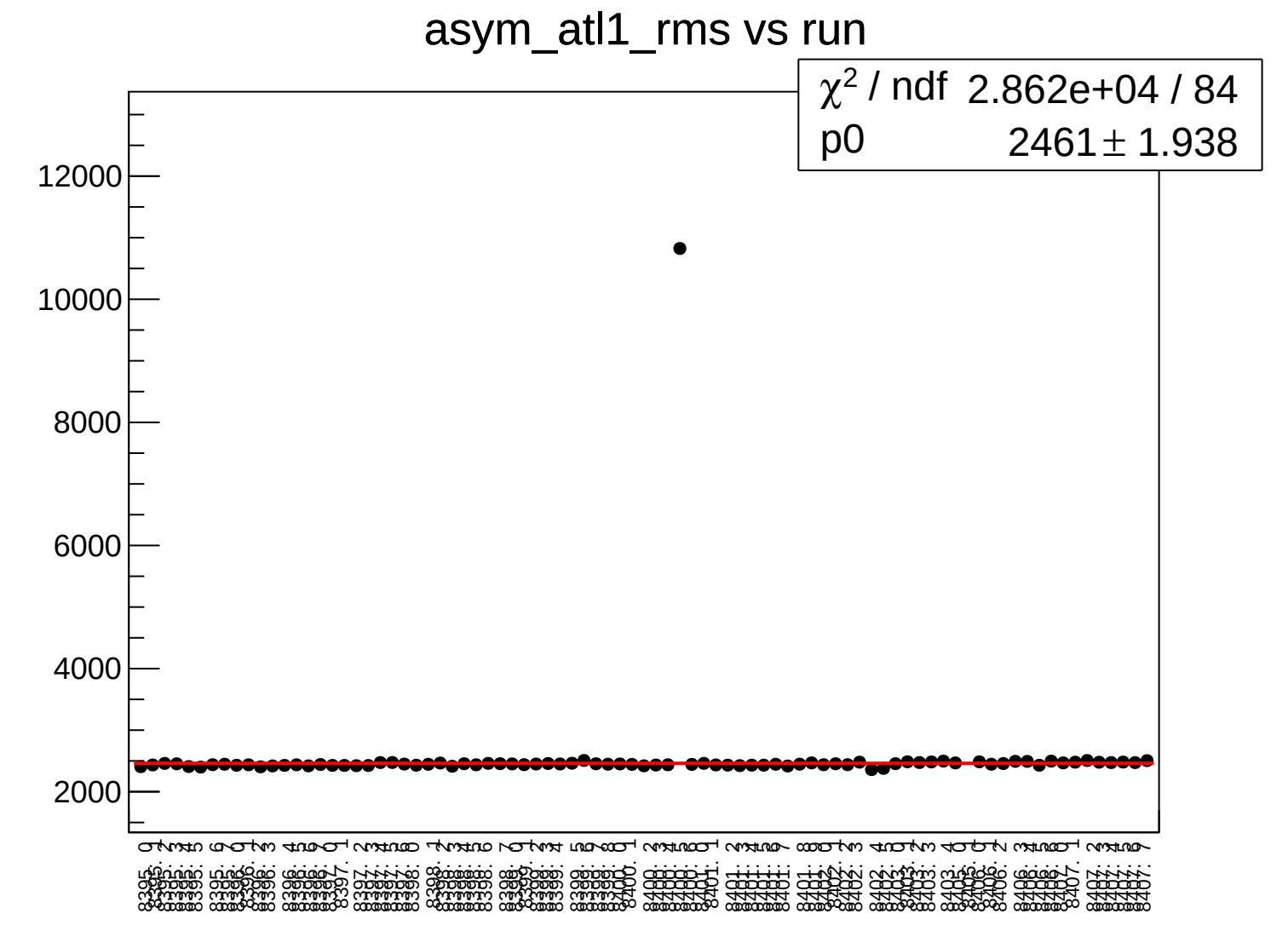

asym_atl1_correction_mean vs run
χ² / ndf 83.4 / 84
p0 659.9 ± 741.7
pull
Entries 85
Mean −35.47
Std Dev 66.09

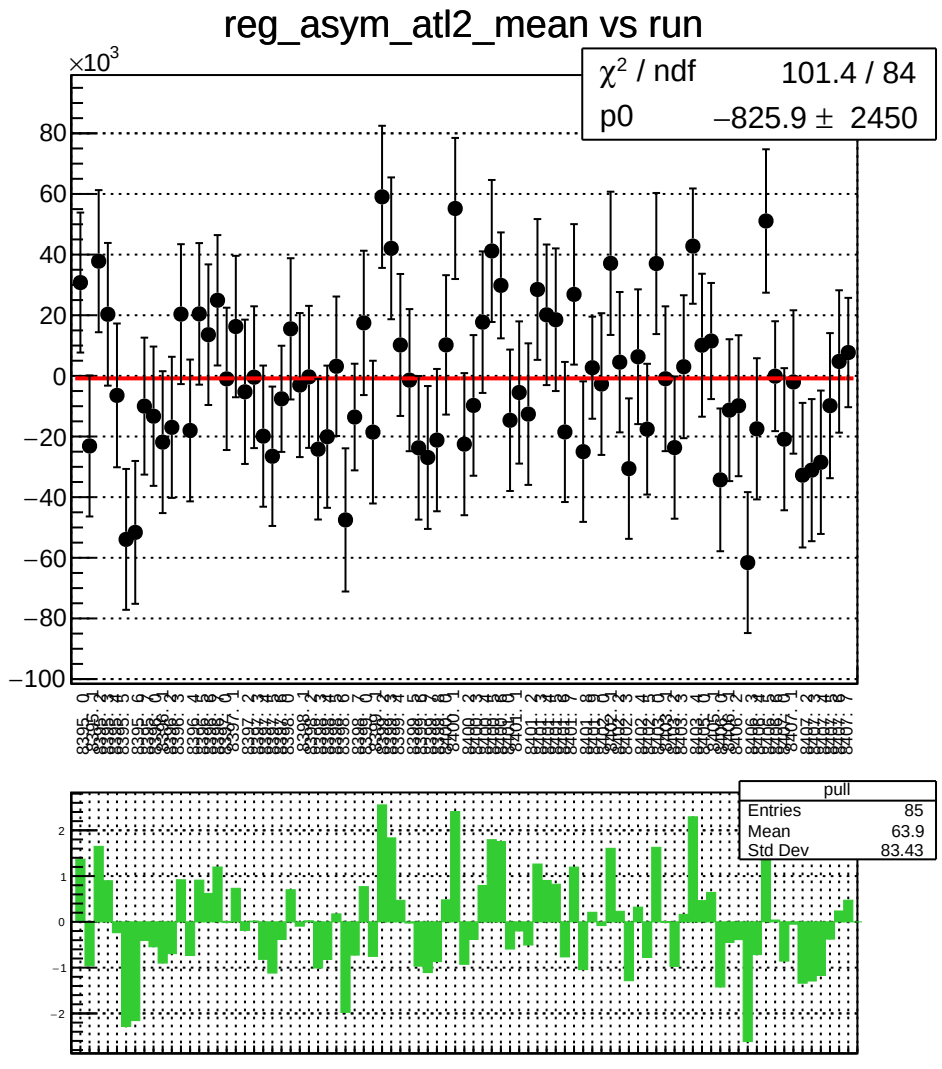

pull1D
Entries 85
Mean −0.02374
Std Dev 0.9903

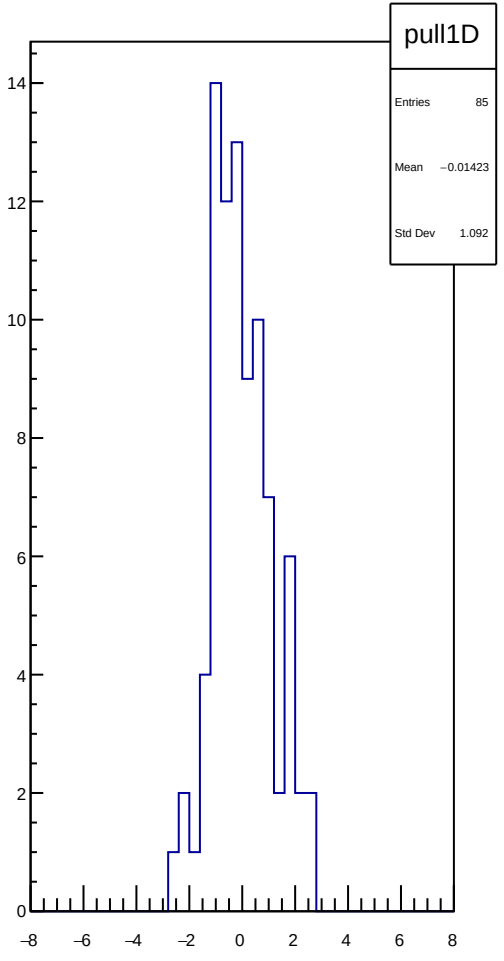

asym_atl1_correction_rms vs run
χ² / ndf 4.83e+04 / 84
p0 662 ± 0.5245
900
800
700
600
500
400
300

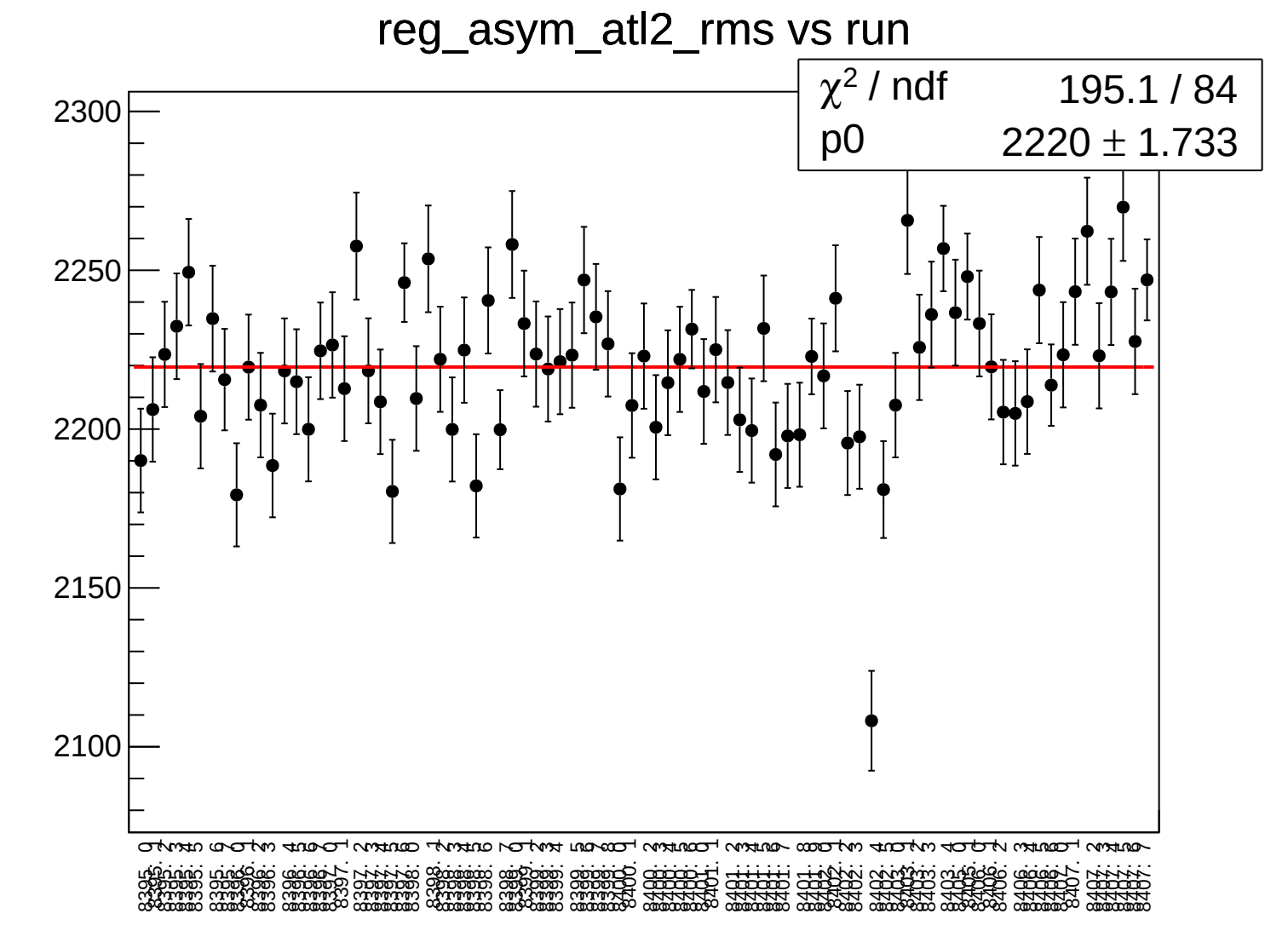

asym_atl1_mean vs run
×10^3
χ^2 / ndf 97.8 / 84
p0 −2103 ± 2740
100
50
0
−50
−100
−150
−200
−250
pull
Entries 85
Mean −18.22
Std Dev 37.83
3
2
1
0
−1
−2
−3

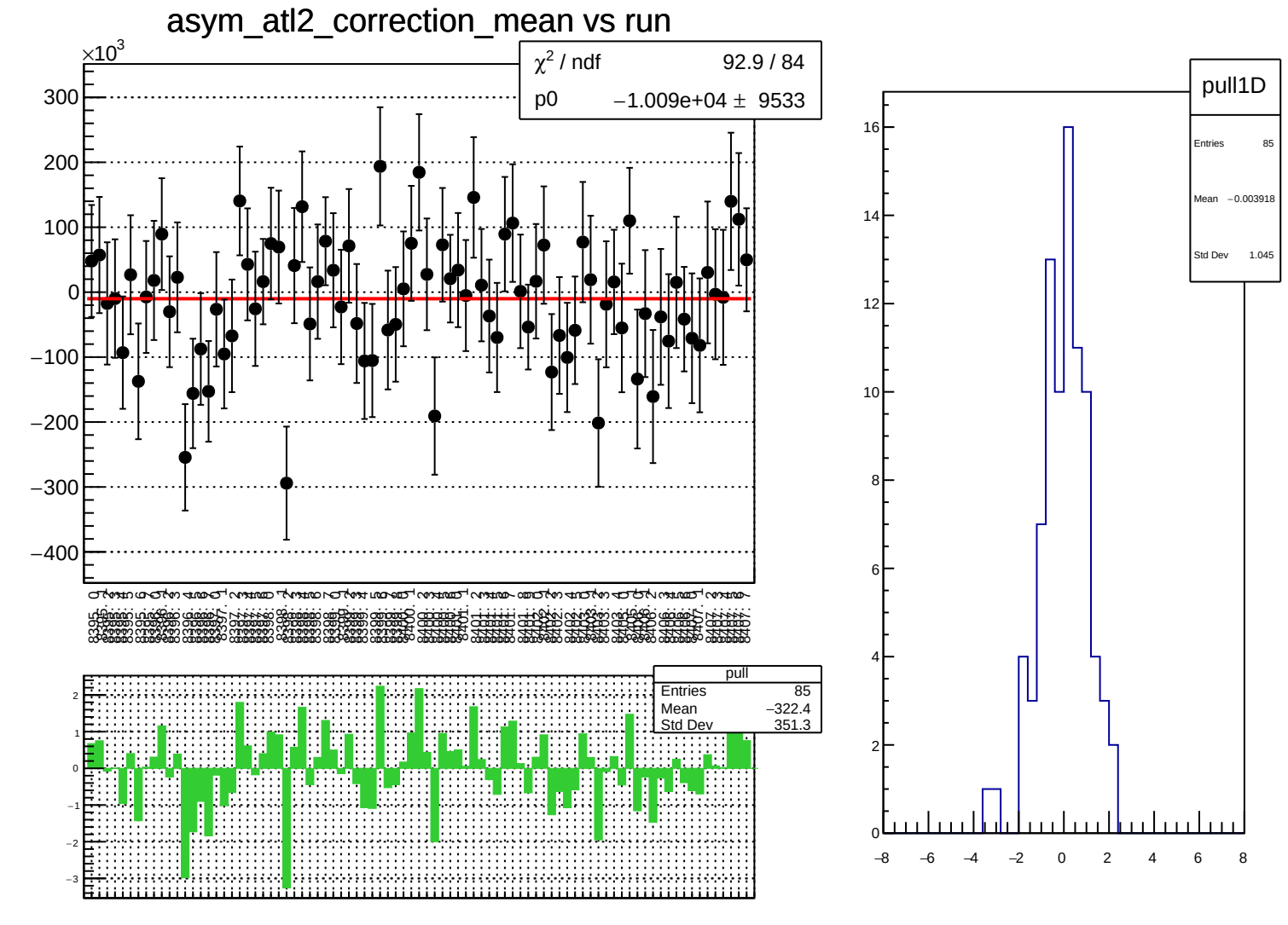

pull1D
Entries 85
Mean −0.02978
Std Dev 1.072
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

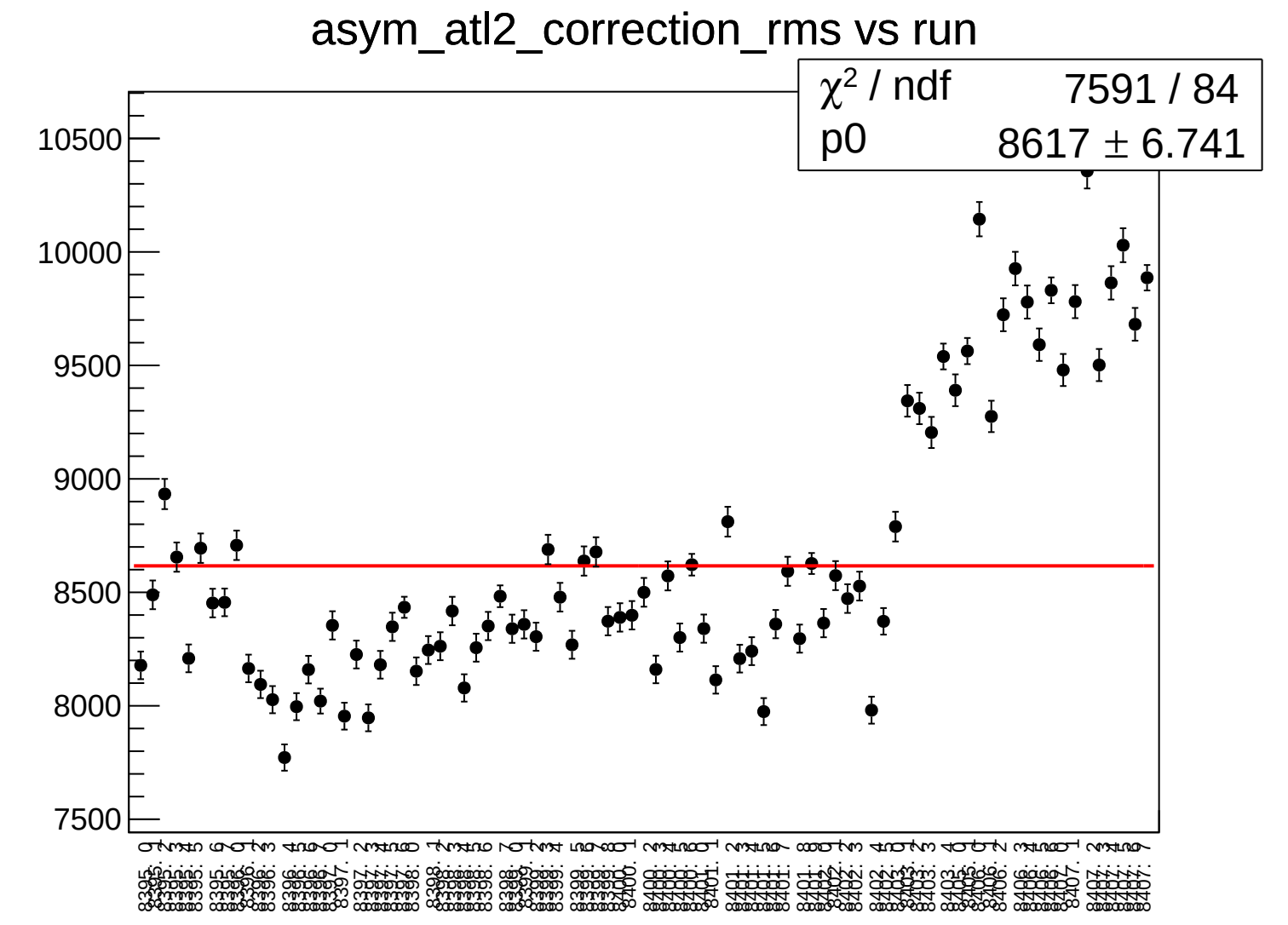

asym_atl1_rms vs run
χ² / ndf 2.862e+04 / 84
p0 2461 ± 1.938
12000
10000
8000
6000
4000
2000

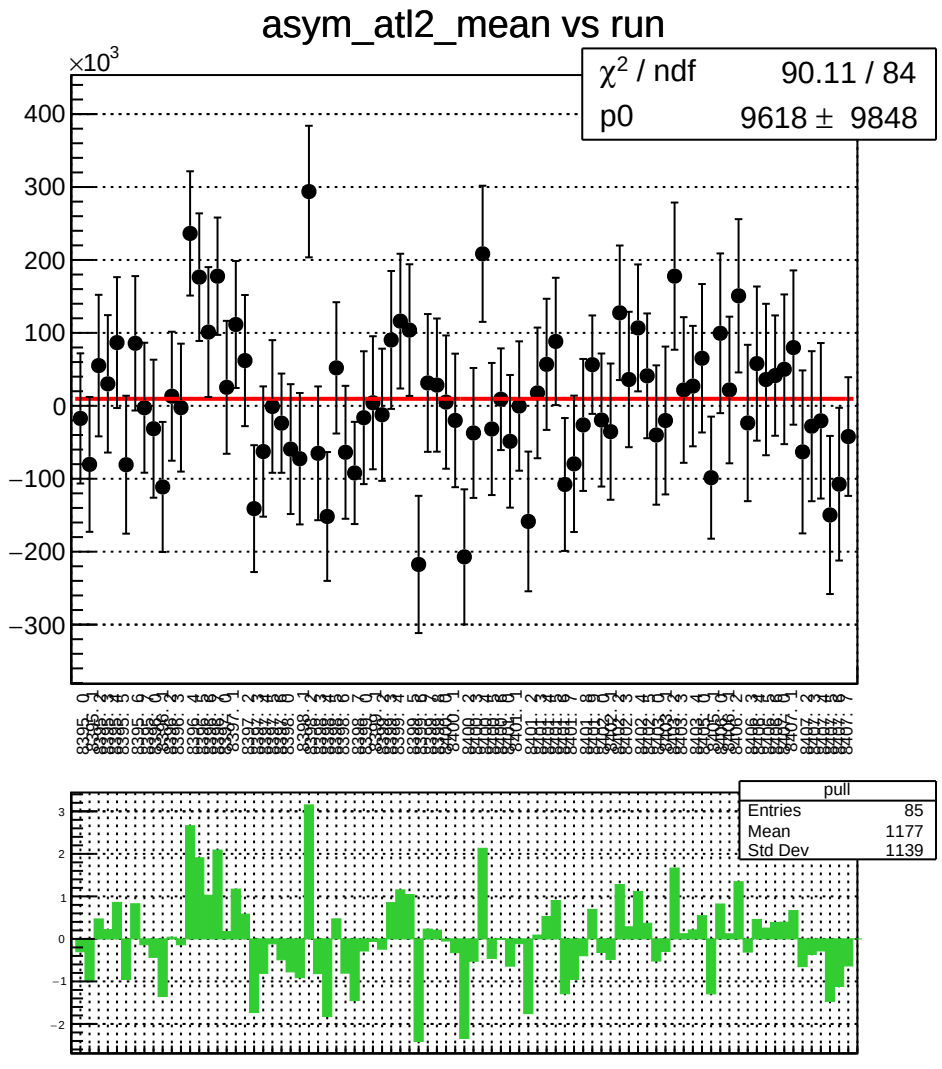

reg_asym_atl2_mean vs run
×10^3
χ² / ndf 101.4 / 84
p0 −825.9 ± 2450
pull
Entries 85
Mean 63.9
Std Dev 83.43

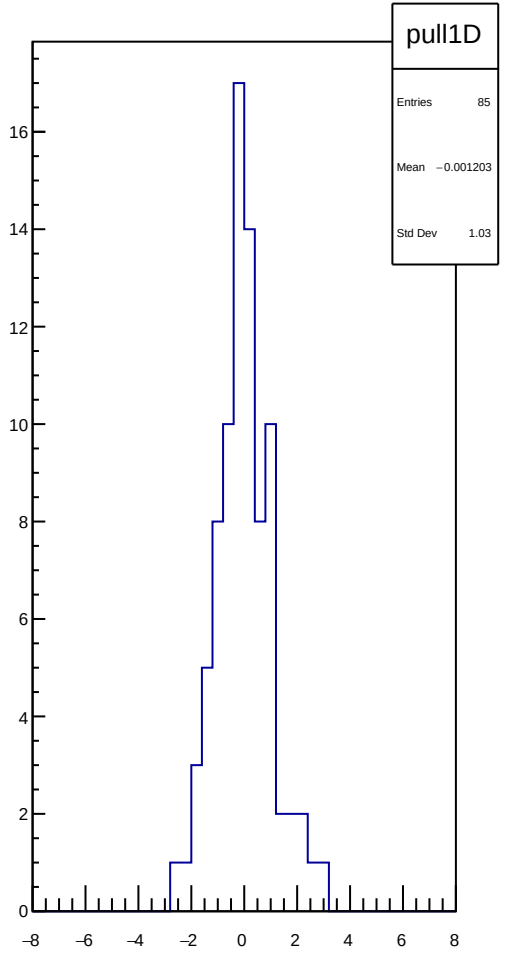

pull1D
Entries 85
Mean −0.01423
Std Dev 1.092

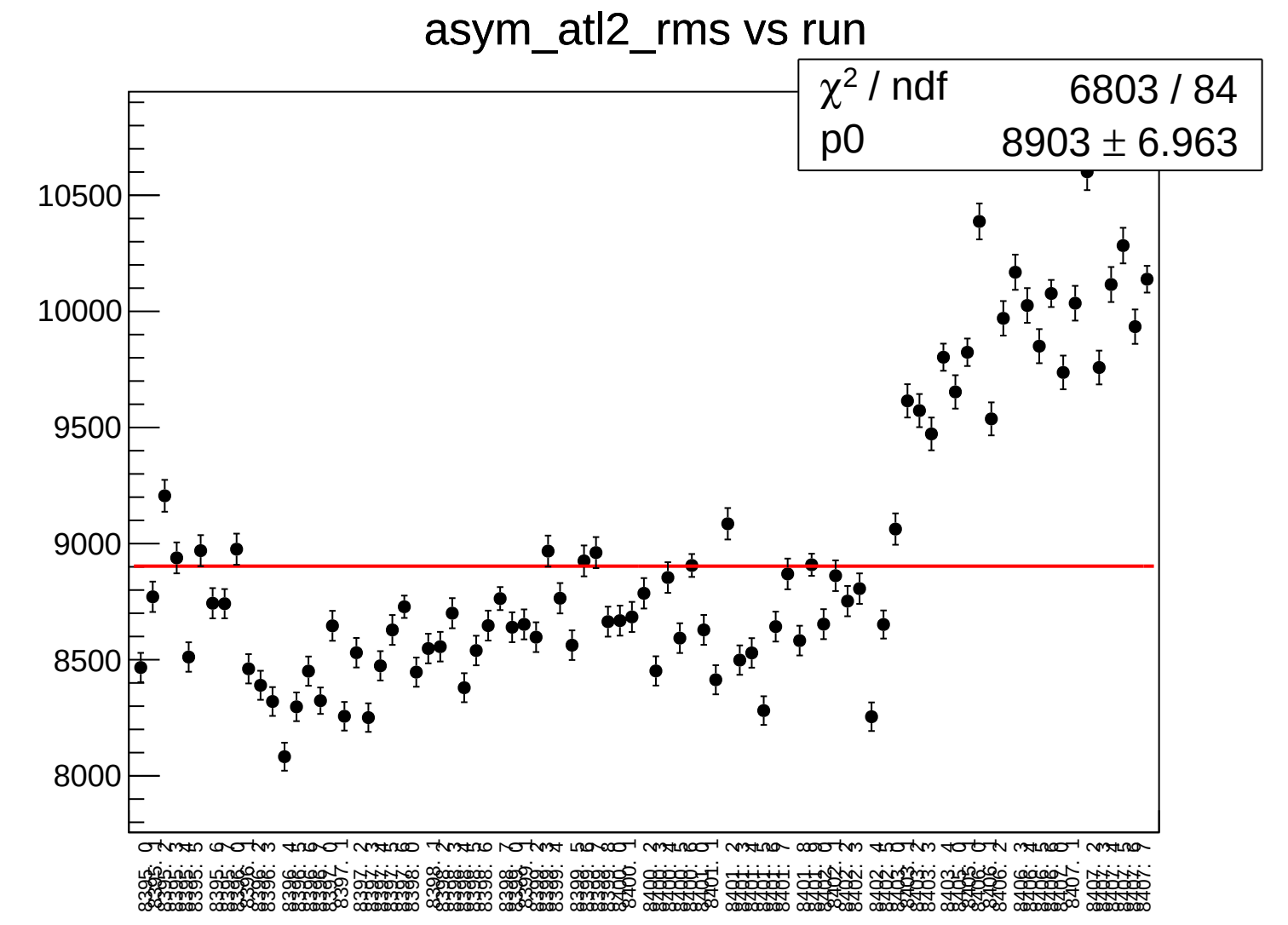

reg_asym_atl2_rms vs run
χ² / ndf 195.1 / 84
p0 2220 ± 1.733
2300
2250
2200
2150
2100

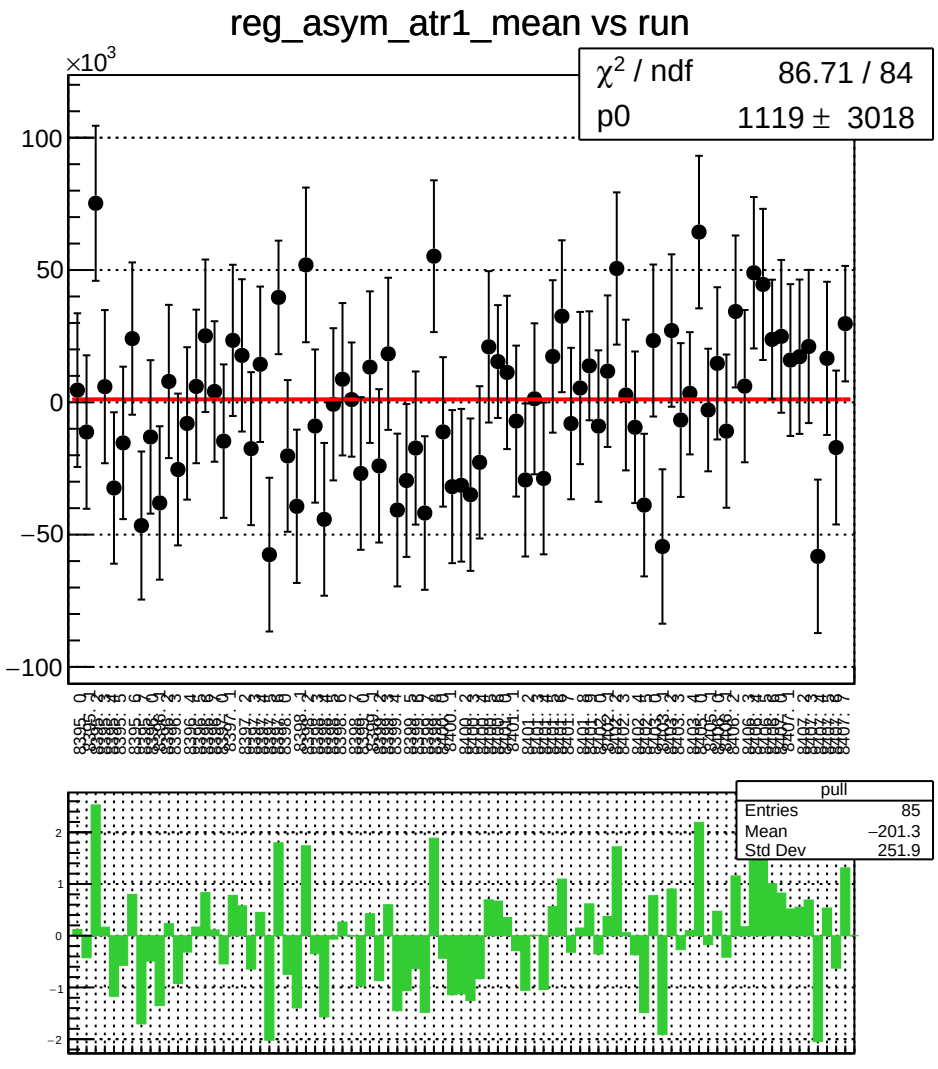

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 92.9 / 84
p0 −1.009e+04 ± 9533
pull
Entries 85
Mean −322.4
Std Dev 351.3
pull1D
Entries 85
Mean −0.003918
Std Dev 1.045

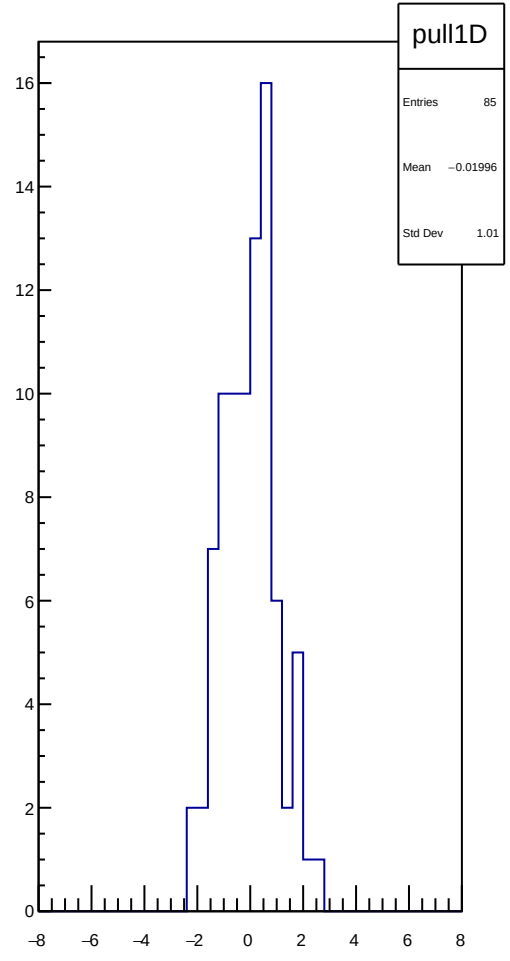

asym_atl2_correction_rms vs run
χ² / ndf 7591 / 84
p0 8617 ± 6.741
10500
10000
9500
9000
8500
8000
7500

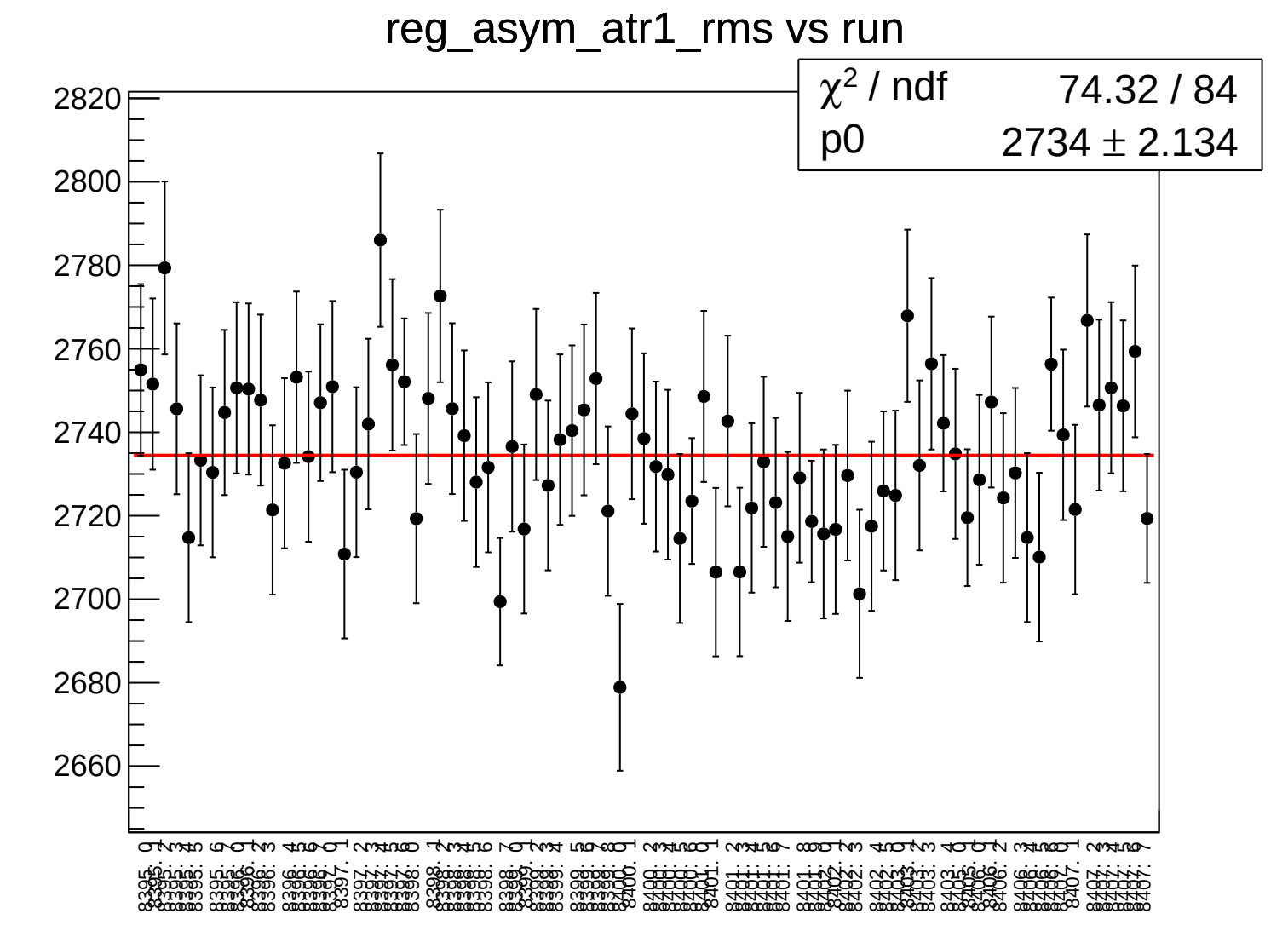

asym_atl2_mean vs run
×10^3
400
300
200
100
0
−100
−200
−300
χ² / ndf 90.11 / 84
p0 9618 ± 9848
pull
Entries 85
Mean 1177
Std Dev 1139
3
2
1
0
−1
−2

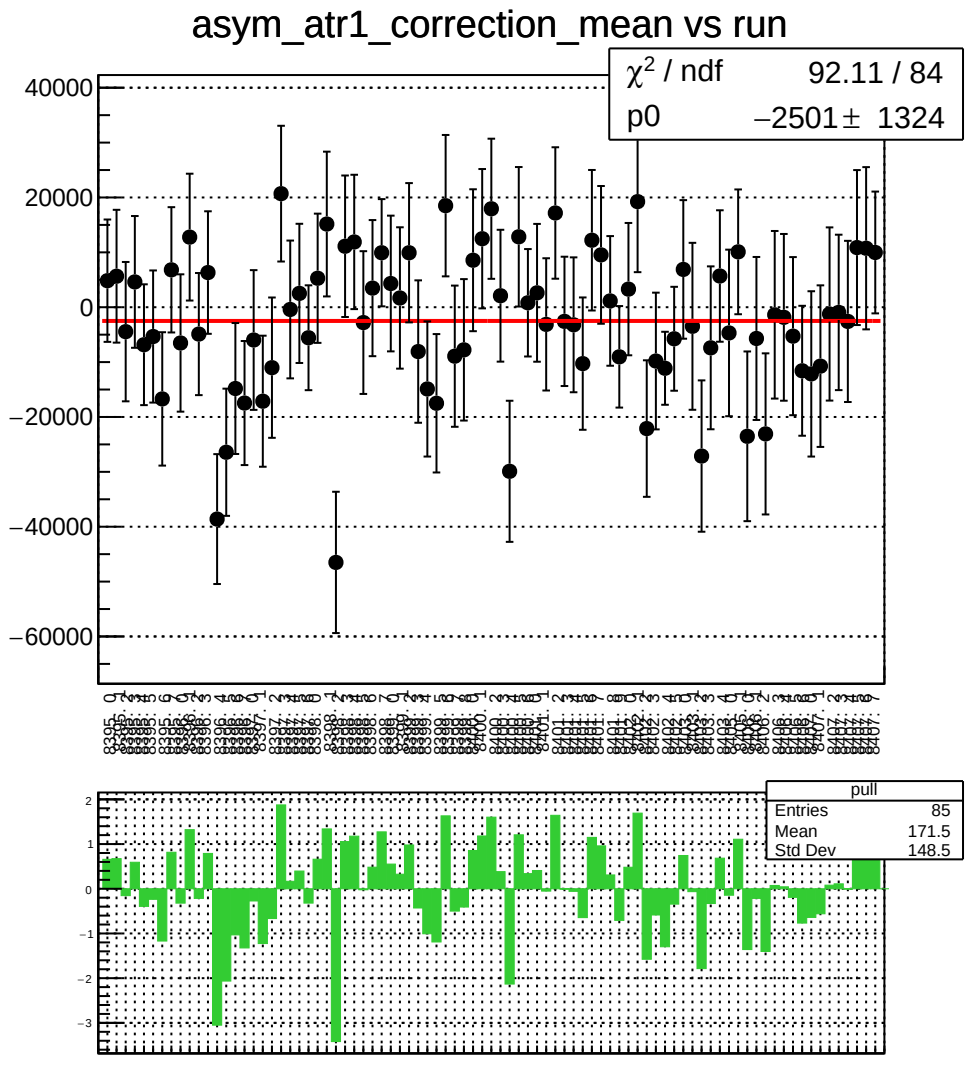

pull1D
Entries 85
Mean −0.001203
Std Dev 1.03
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

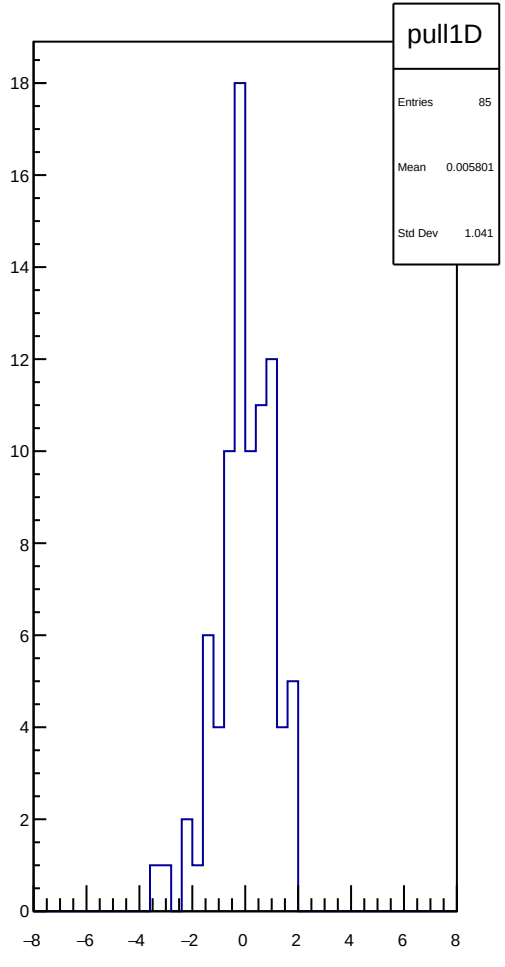

asym_atl2_rms vs run
χ² / ndf 6803 / 84
p0 8903 ± 6.963
10500
10000
9500
9000
8500
8000

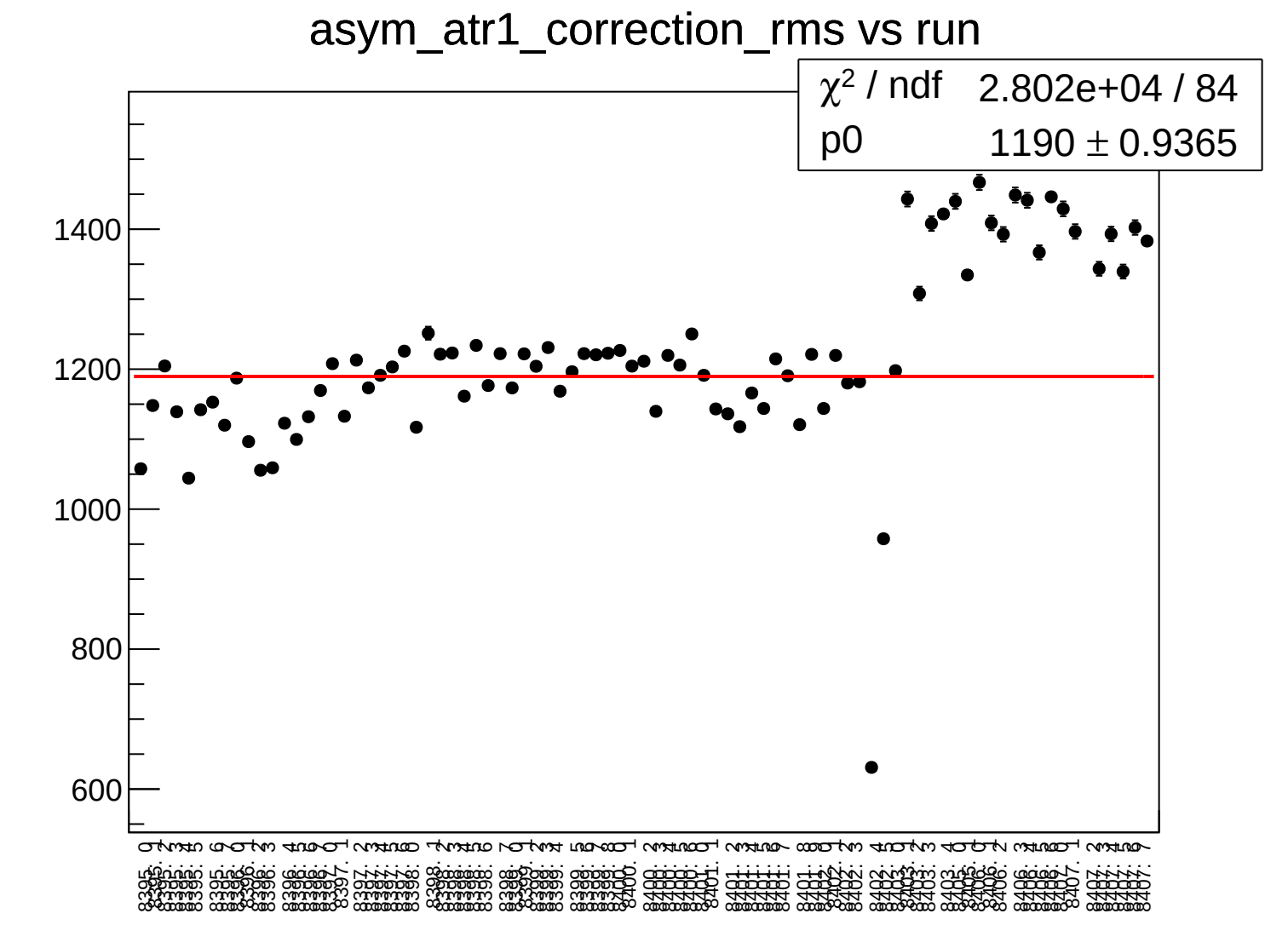

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 86.71 / 84
p0 1119 ± 3018
100
50
0
−50
−100
pull
Entries 85
Mean −201.3
Std Dev 251.9
2
1
0
−1
−2

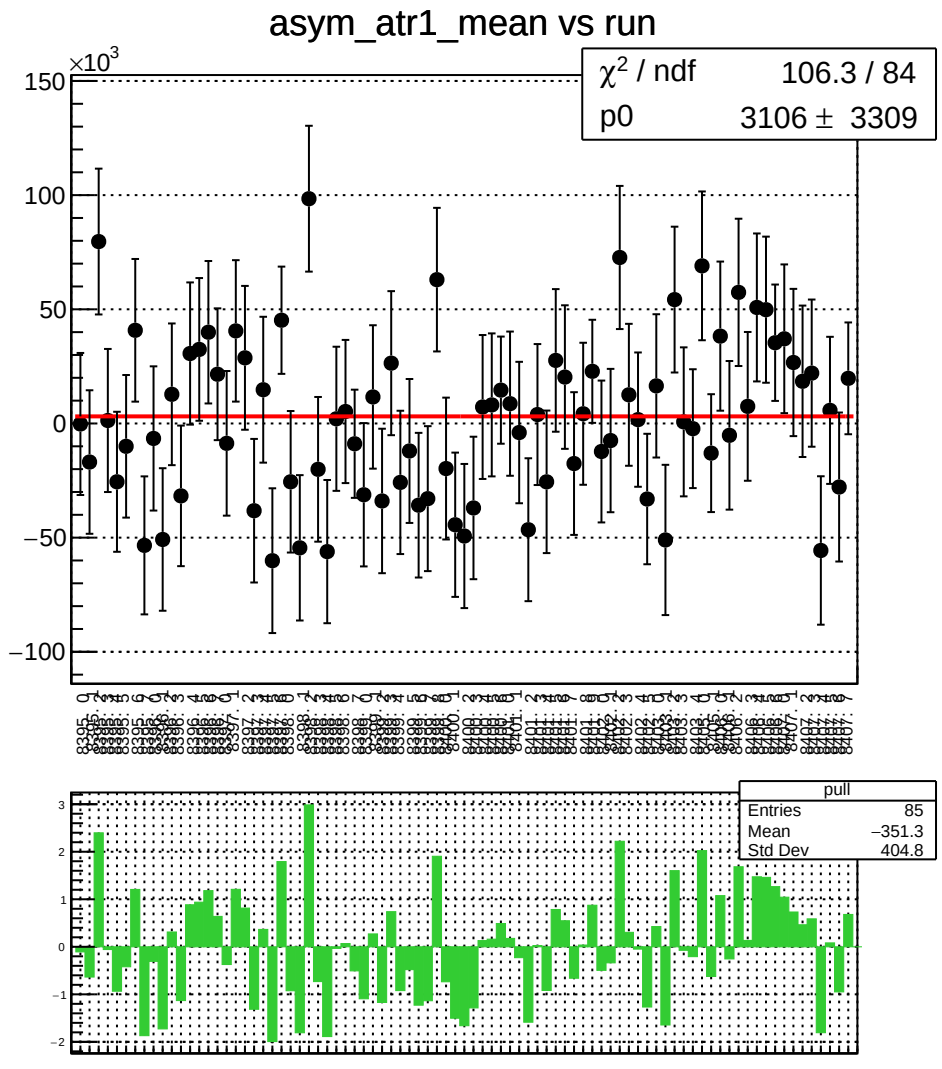

pull1D
Entries 85
Mean −0.01996
Std Dev 1.01
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

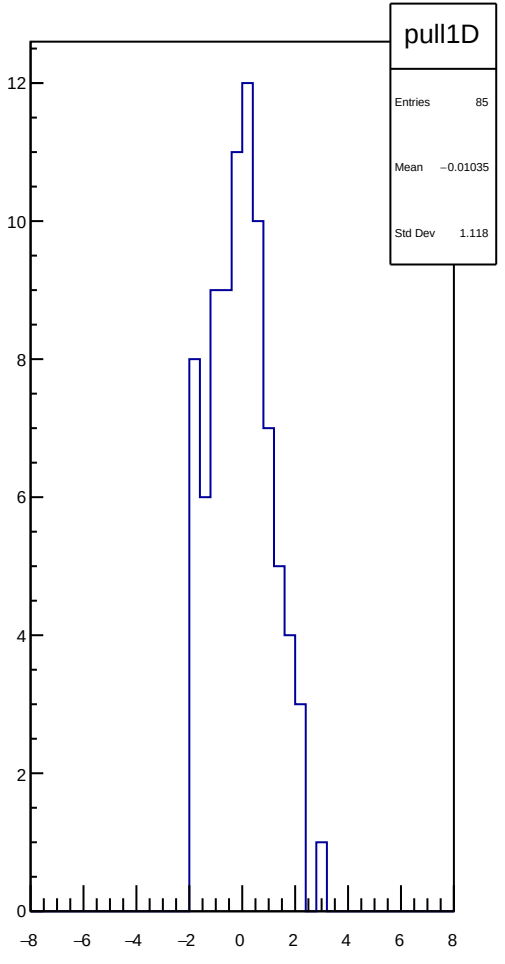

reg_asym_atr1_rms vs run
χ^2 / ndf 74.32 / 84
p0 2734 ± 2.134
2820
2800
2780
2760
2740
2720
2700
2680
2660

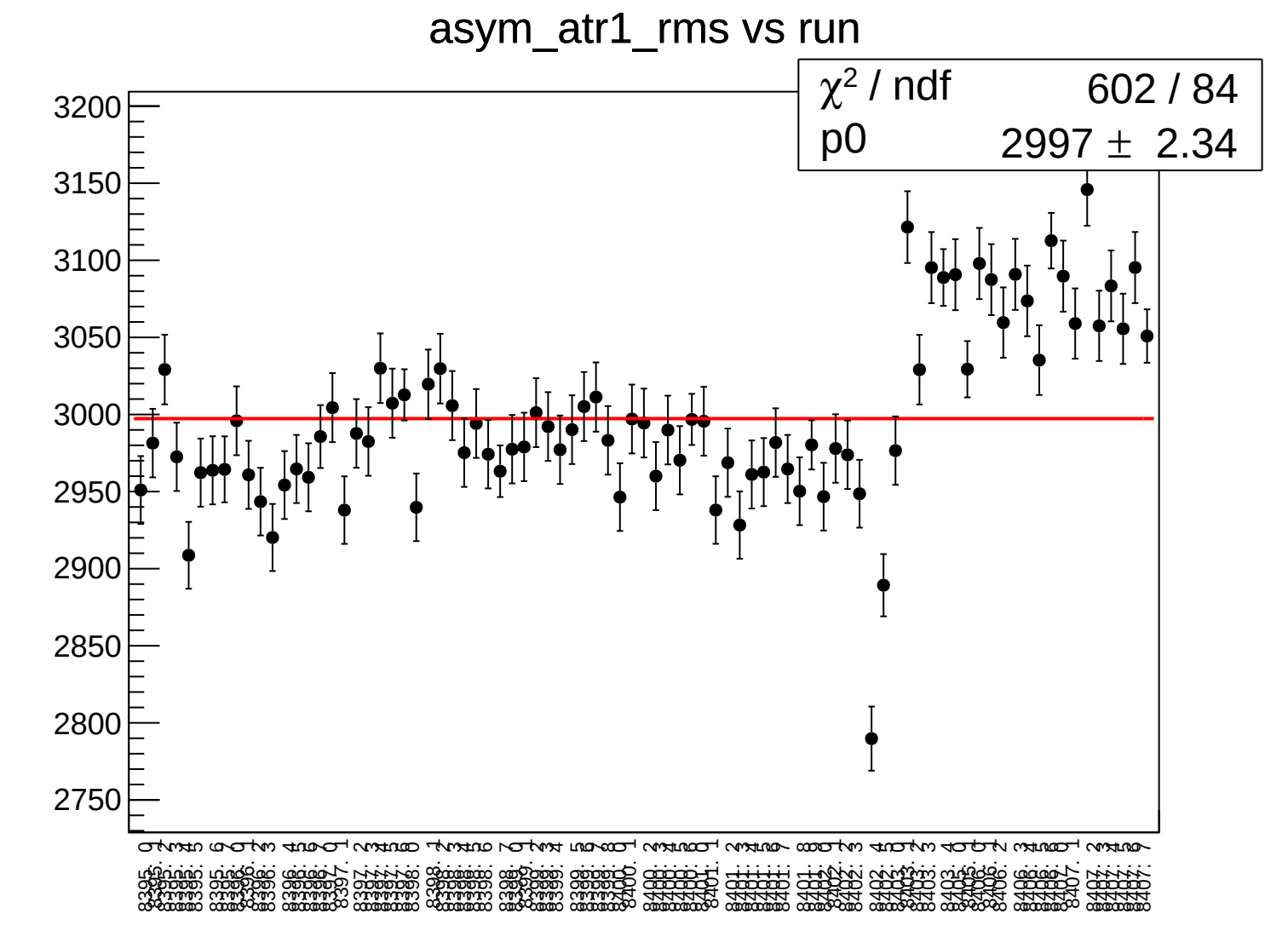

asym_atr1_correction_mean vs run
χ² / ndf 92.11 / 84
p0 −2501 ± 1324
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 171.5
Std Dev 148.5
2
1
0
−1
−2
−3

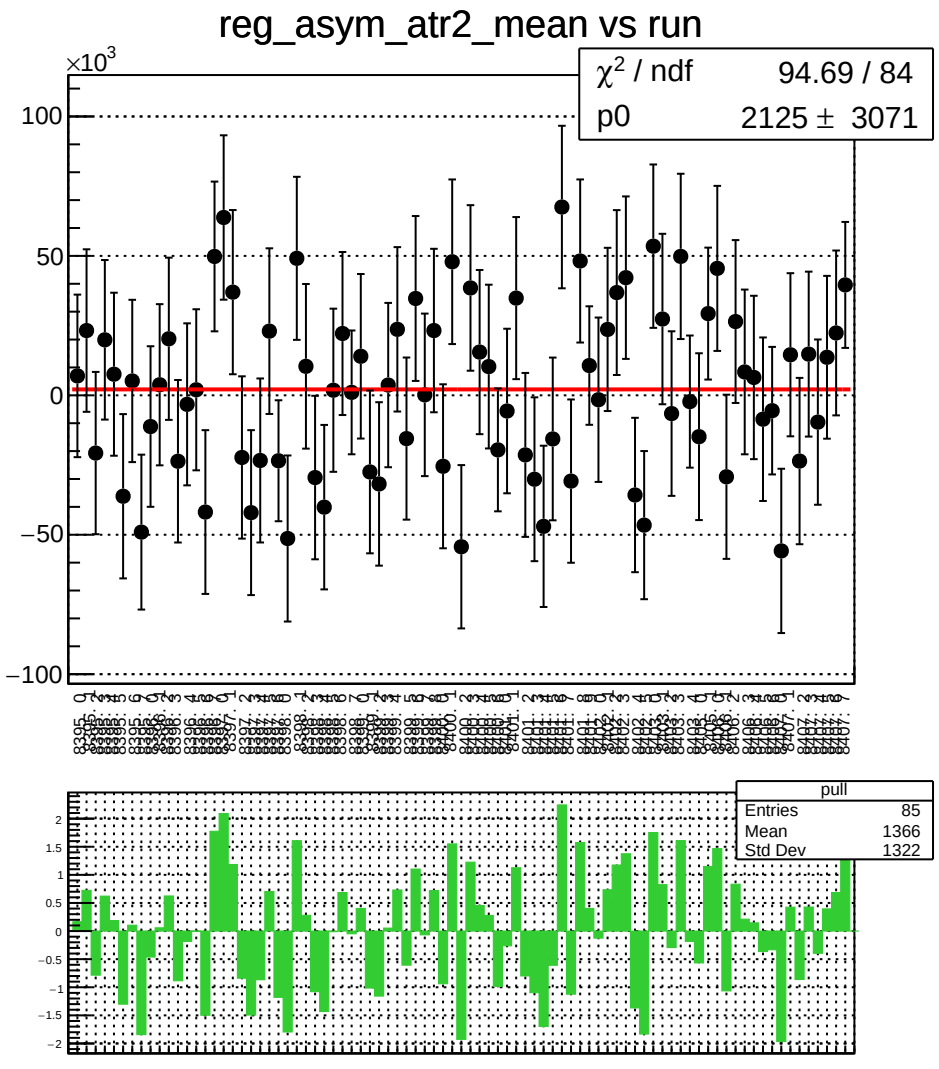

pull1D
Entries 85
Mean 0.005801
Std Dev 1.041
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

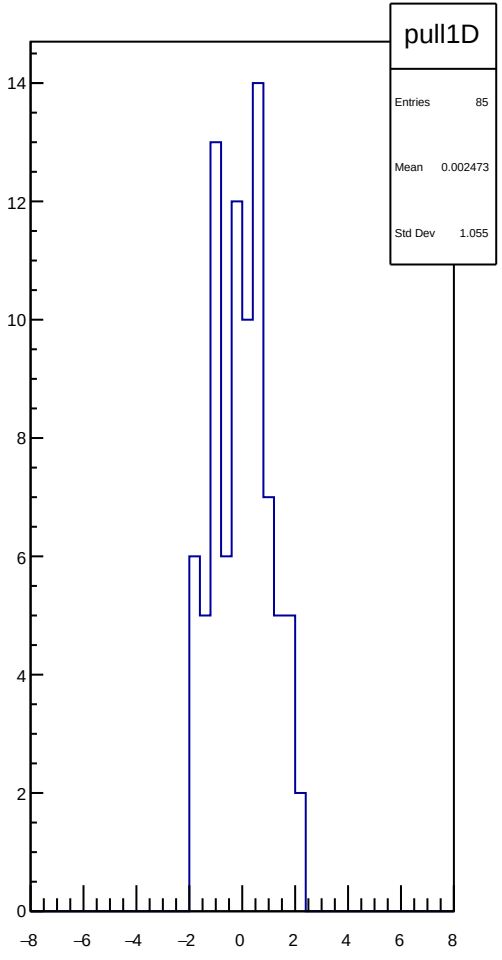

asym_atr1_correction_rms vs run
χ² / ndf 2.802e+04 / 84
p0 1190 ± 0.9365
1400
1200
1000
800
600

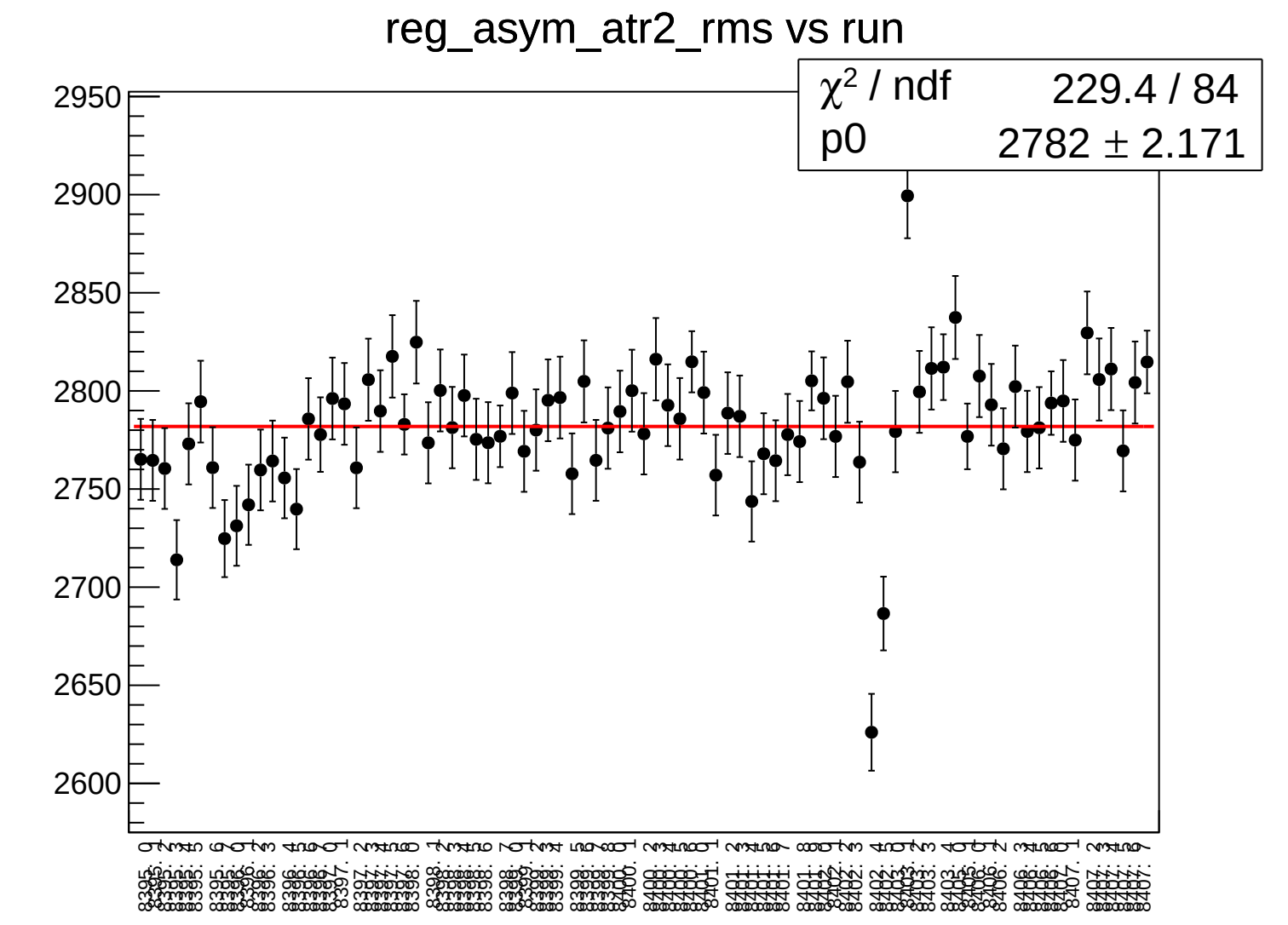

asym_atr1_mean vs run
×10^3
χ² / ndf 106.3 / 84
p0 3106 ± 3309
150
100
50
0
−50
−100
pull
Entries 85
Mean −351.3
Std Dev 404.8
3
2
1
0
−1
−2

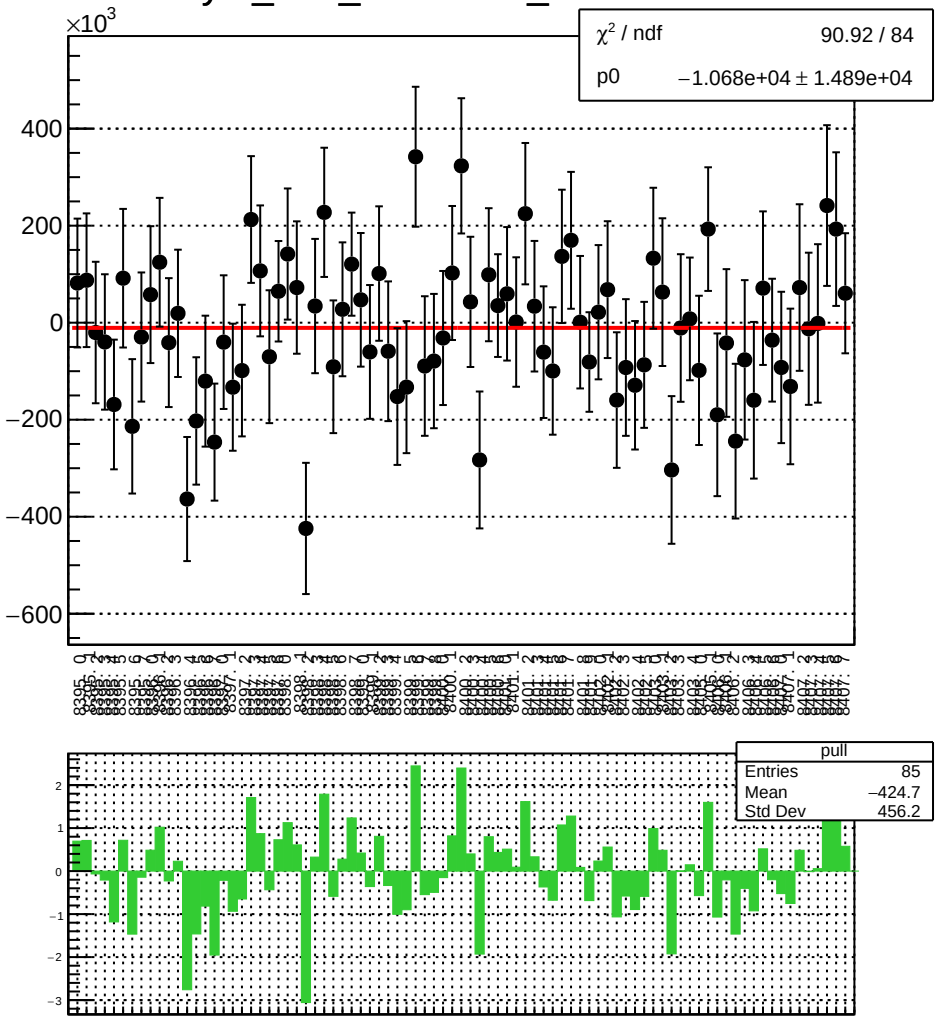

pull1D
Entries 85
Mean −0.01035
Std Dev 1.118
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

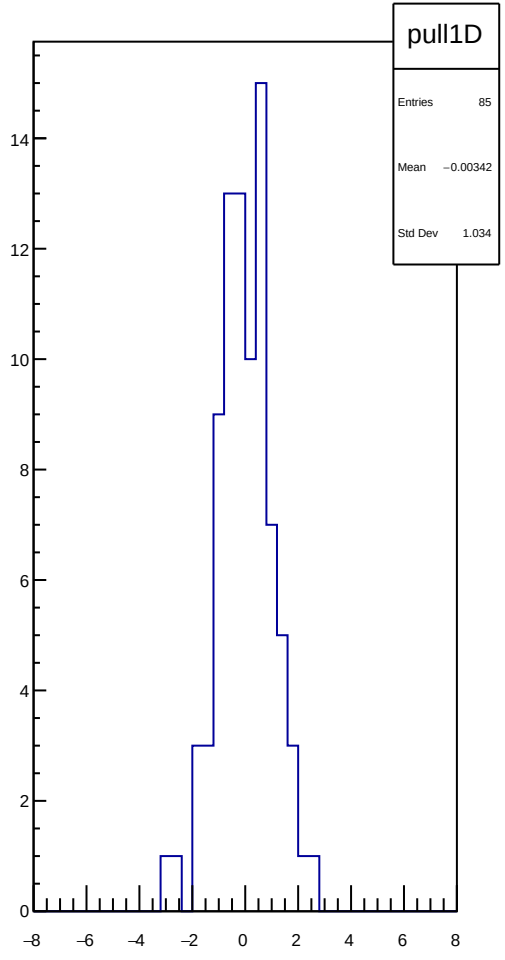

asym_atr1_rms vs run
χ² / ndf 602 / 84
p0 2997 ± 2.34
3200
3150
3100
3050
3000
2950
2900
2850
2800
2750

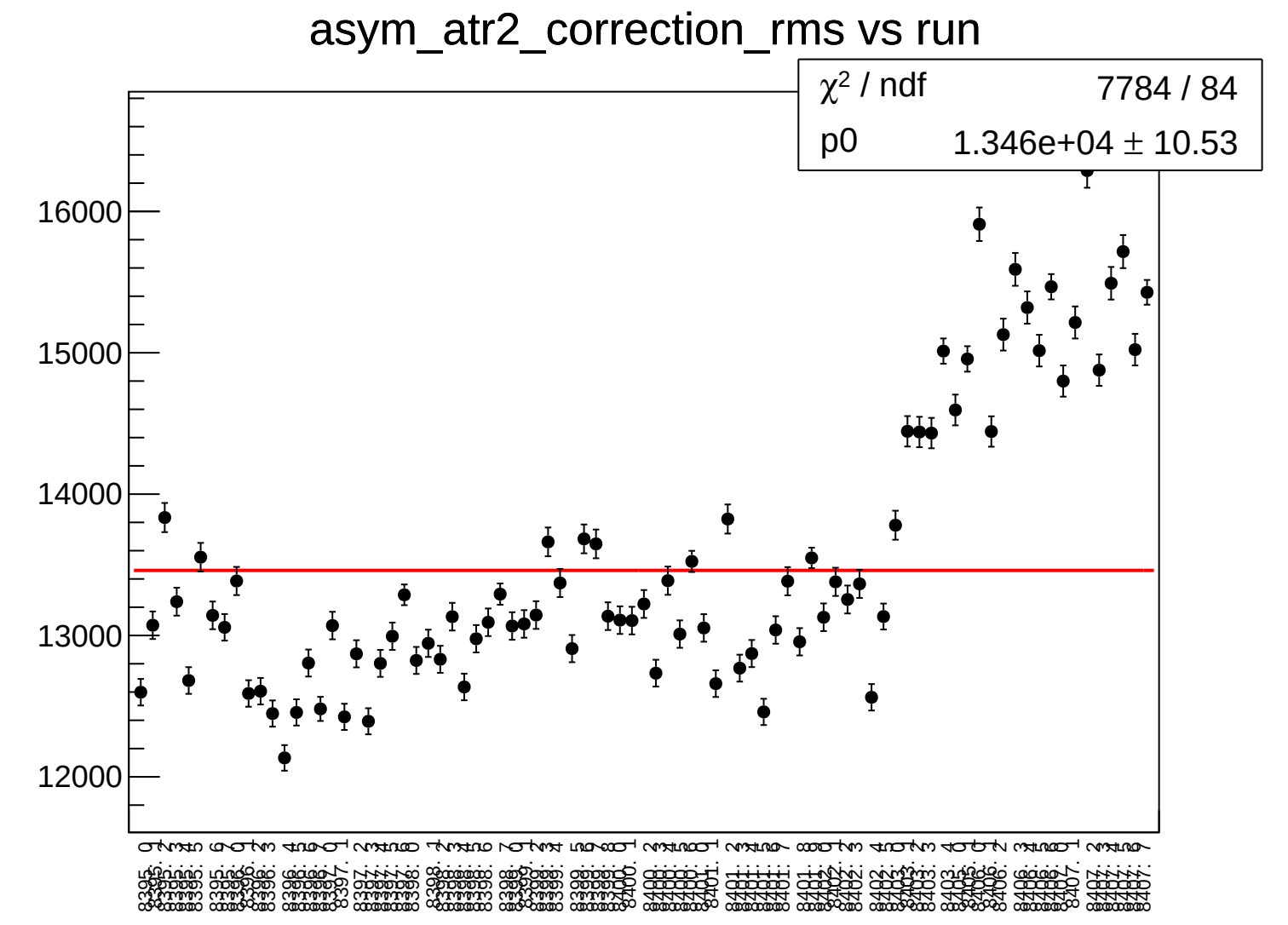

reg_asym_atr2_mean vs run
χ^2 / ndf 94.69 / 84
p0 2125 ± 3071
×10^3
pull
Entries 85
Mean 1366
Std Dev 1322

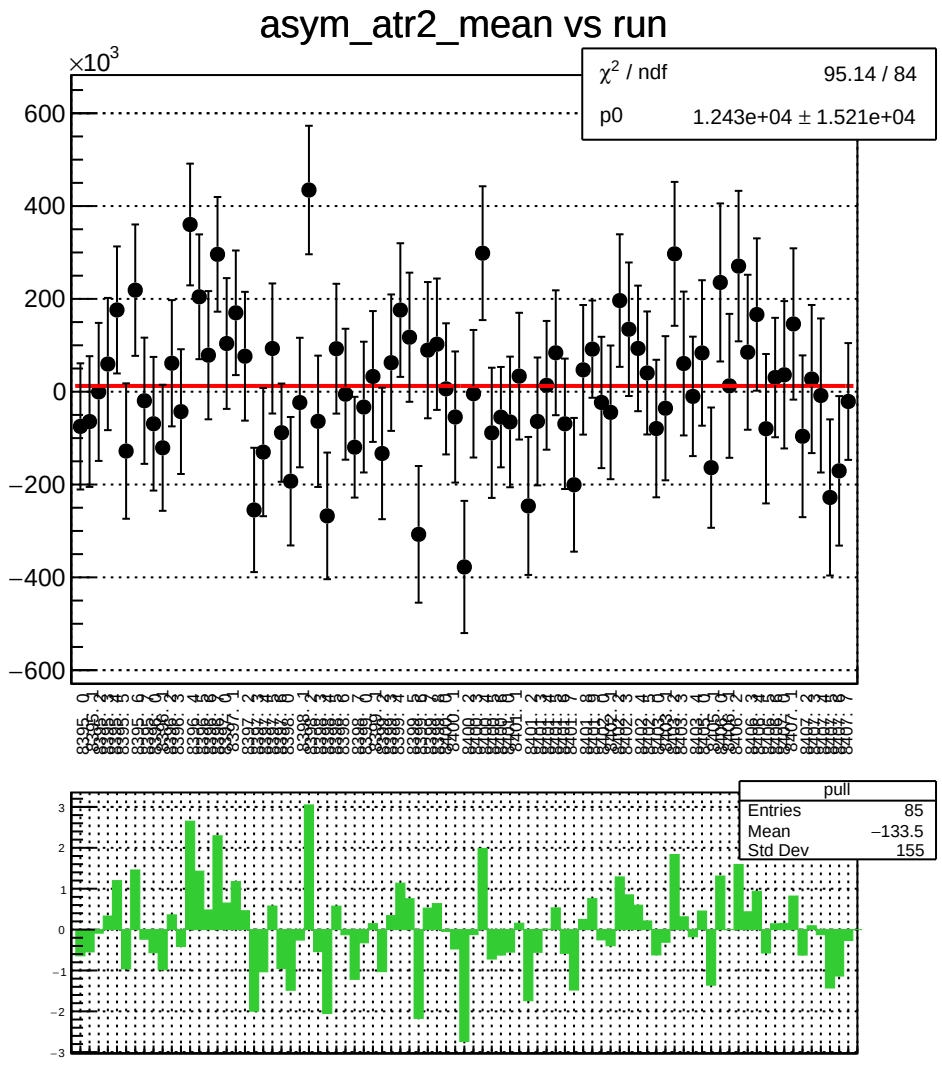

pull1D
Entries 85
Mean 0.002473
Std Dev 1.055

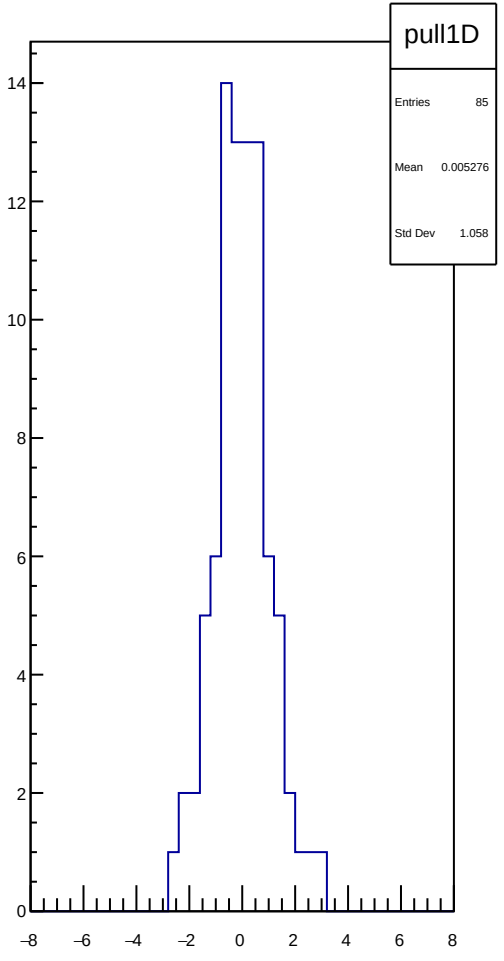

reg_asym_atr2_rms vs run
χ^2 / ndf 229.4 / 84
p0 2782 ± 2.171
2950
2900
2850
2800
2750
2700
2650
2600

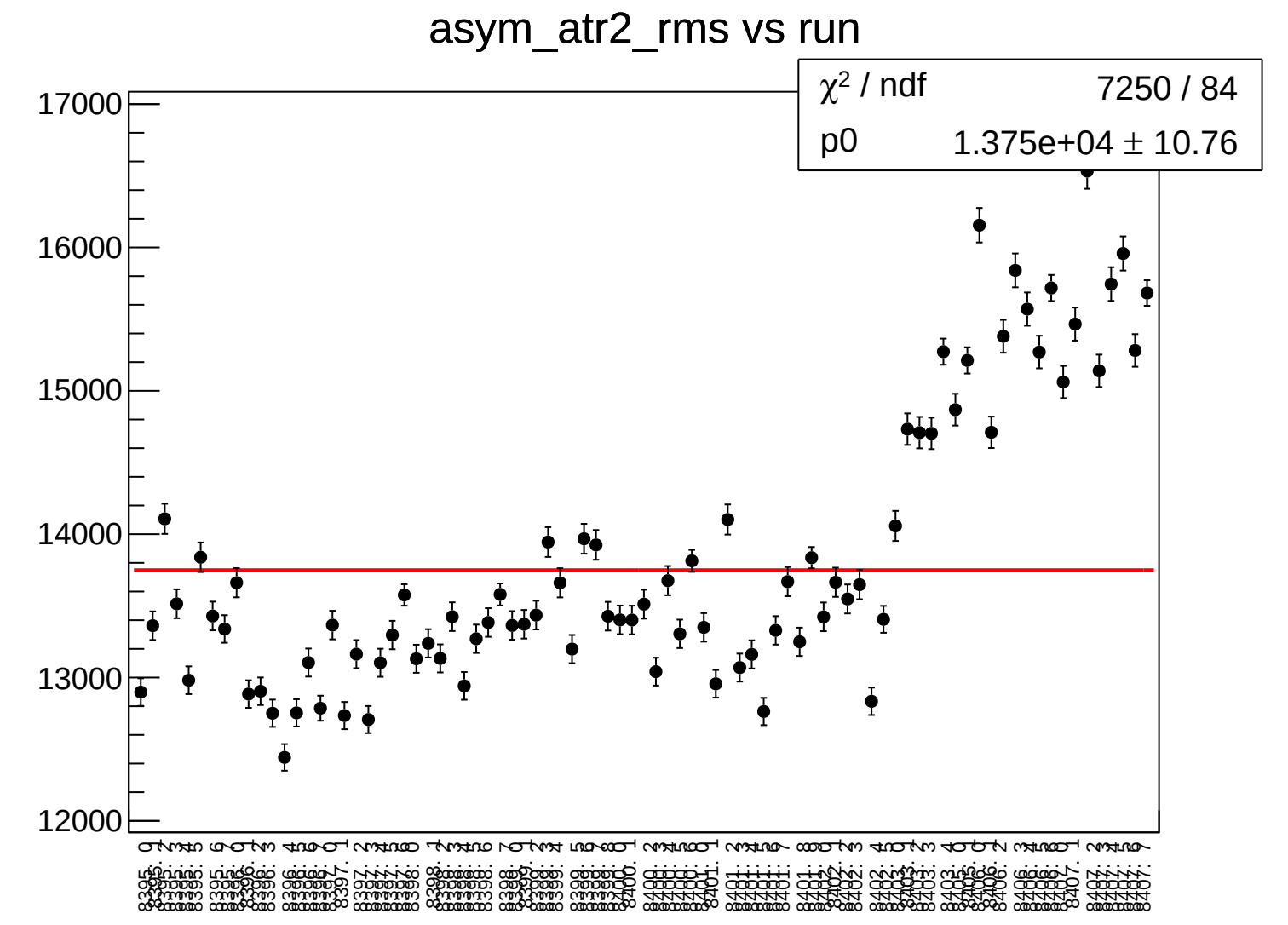

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 90.92 / 84
p0 −1.068e+04 ± 1.489e+04
400
200
0
−200
−400
−600
pull
Entries 85
Mean −424.7
Std Dev 456.2
2
1
0
−1
−2
−3

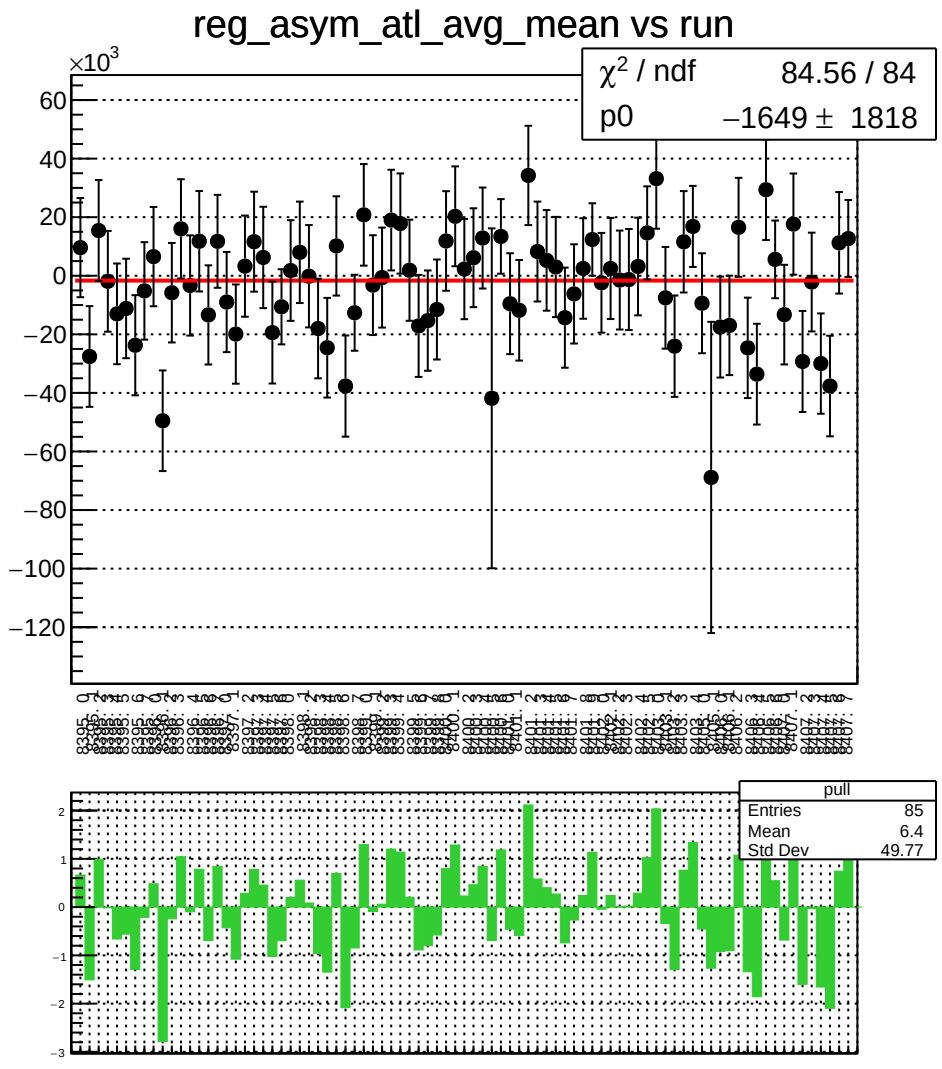

pull1D
Entries 85
Mean −0.00342
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

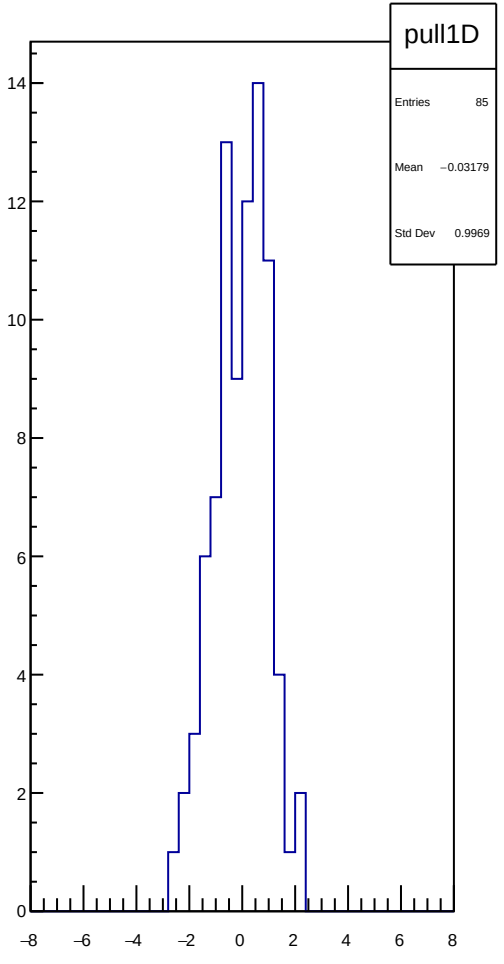

asym_atr2_correction_rms vs run
χ² / ndf 7784 / 84
p0 1.346e+04 ± 10.53
16000
15000
14000
13000
12000

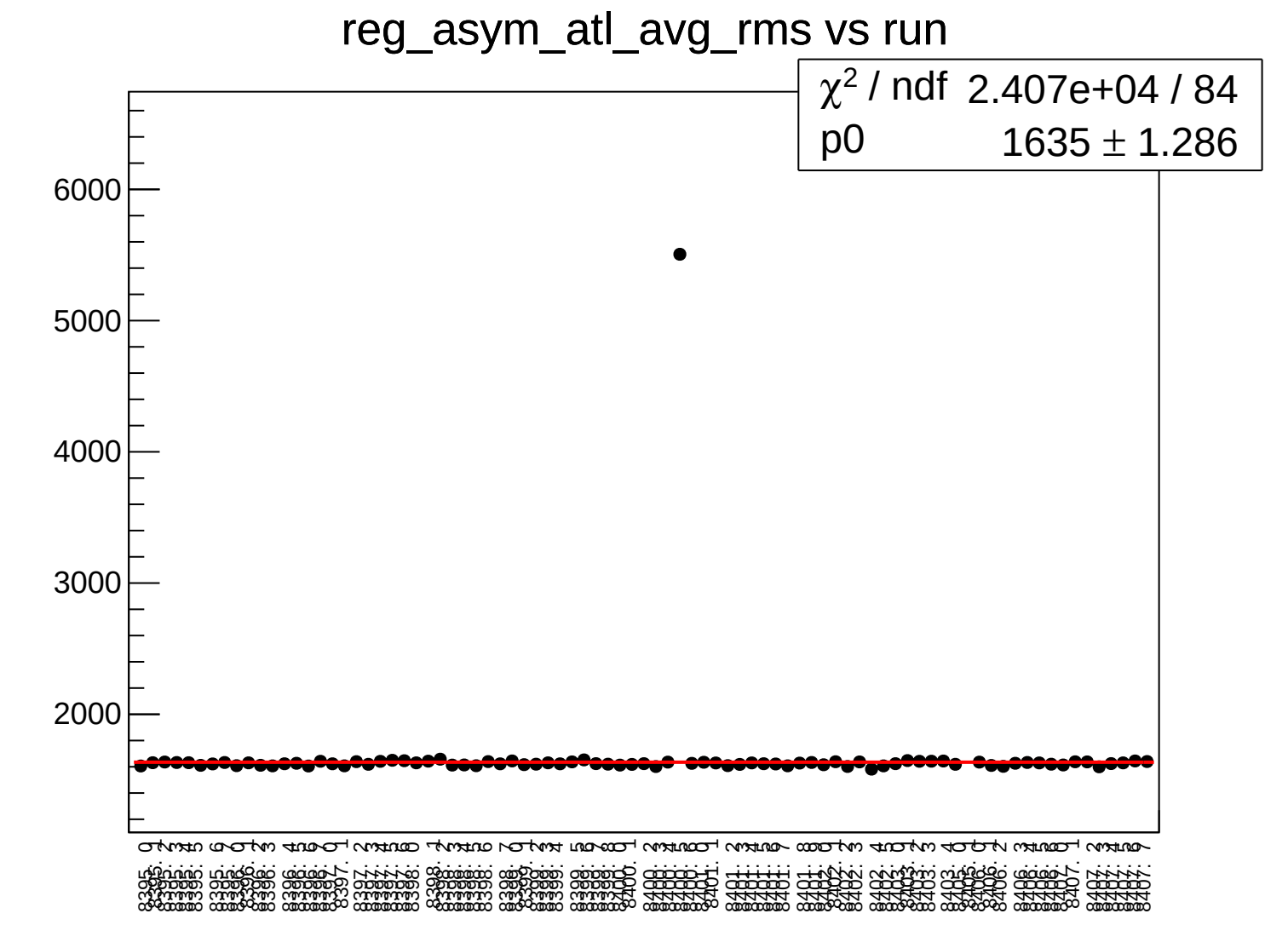

asym_atr2_mean vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 95.14 / 84
p0 1.243e+04 ± 1.521e+04
pull
Entries 85
Mean −133.5
Std Dev 155
3
2
1
0
−1
−2
−3

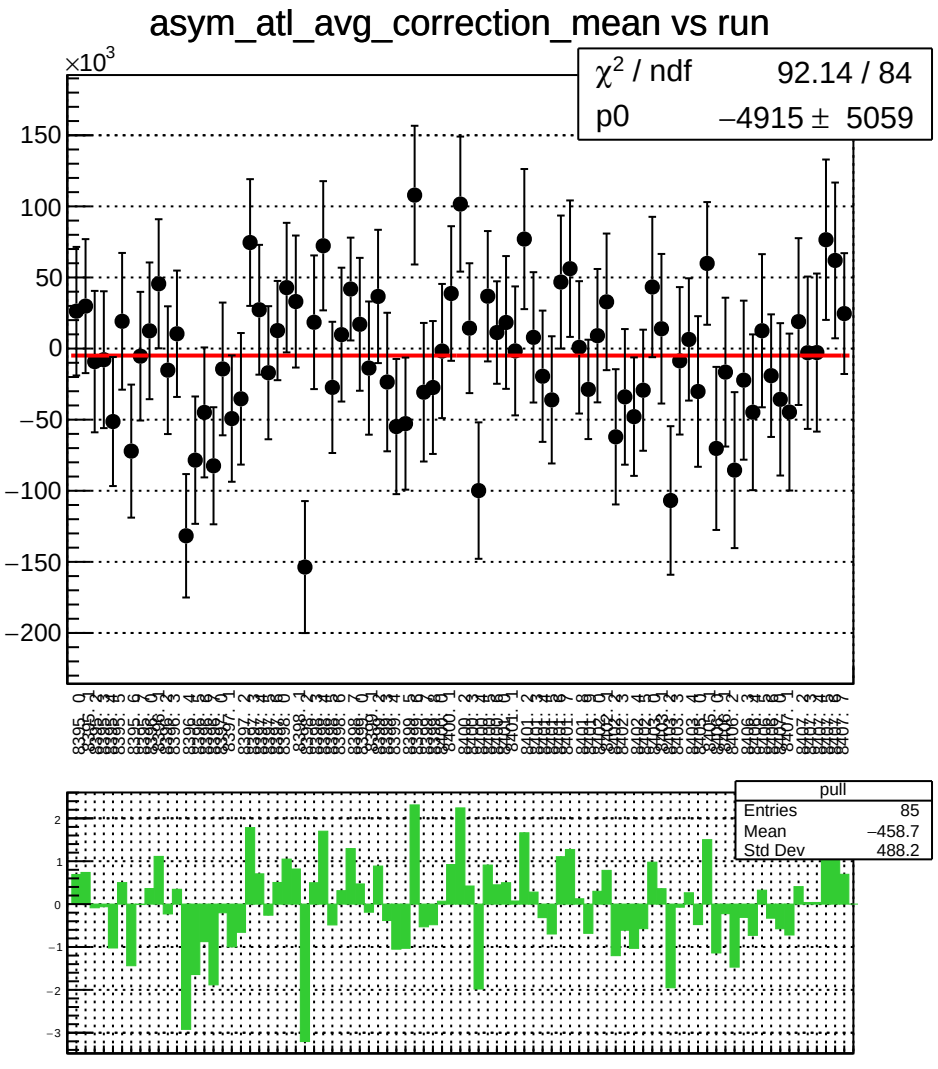

pull1D
Entries 85
Mean 0.005276
Std Dev 1.058
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

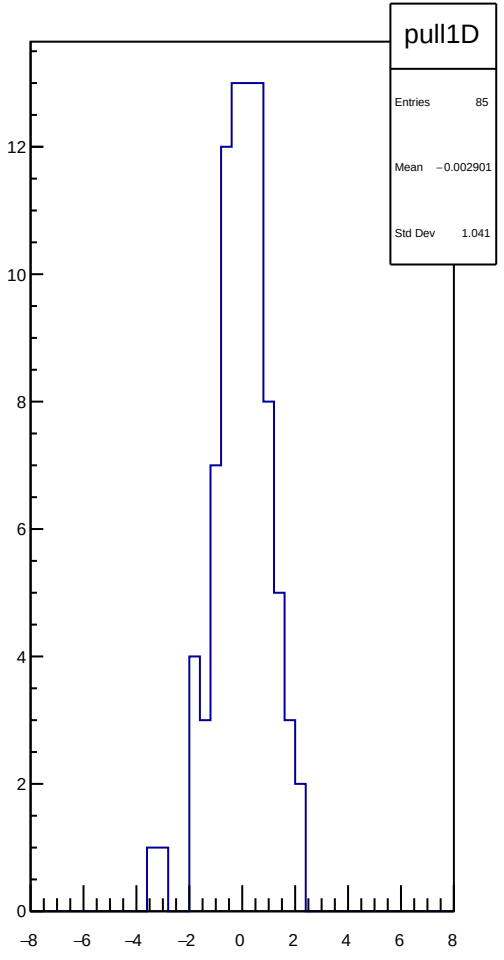

asym_atr2_rms vs run
χ² / ndf 7250 / 84
p0 1.375e+04 ± 10.76
17000
16000
15000
14000
13000
12000

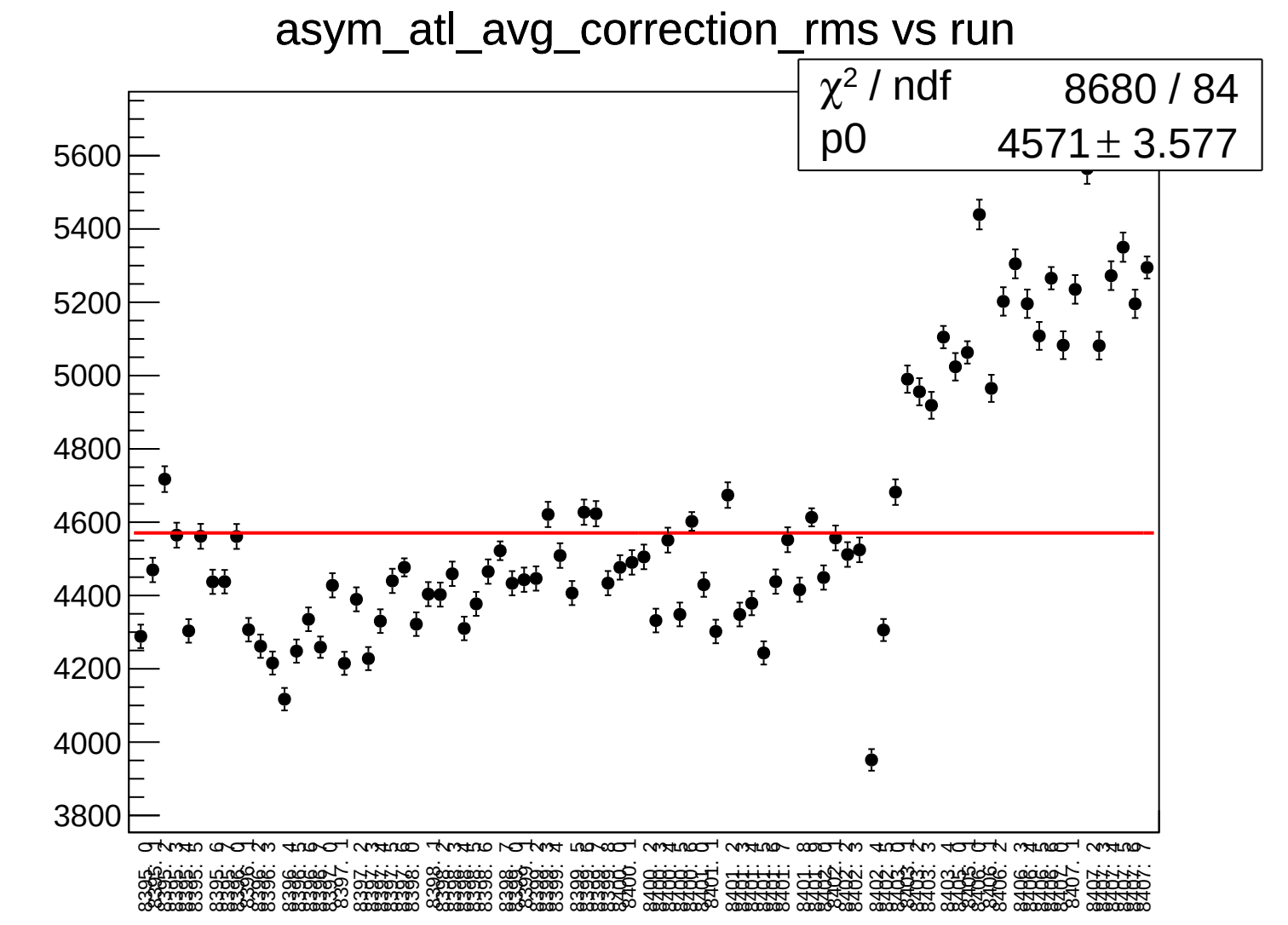

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 84.56 / 84
p0 −1649 ± 1818
pull
Entries 85
Mean 6.4
Std Dev 49.77

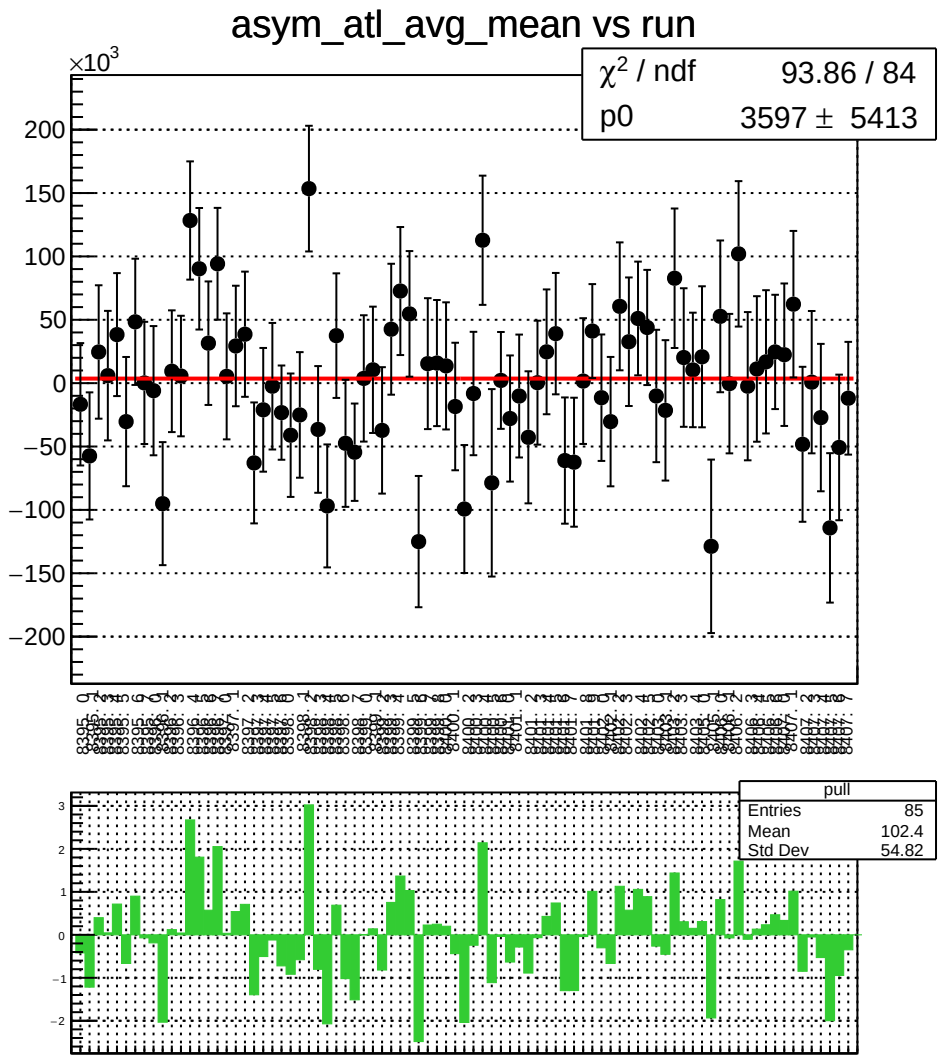

pull1D
Entries 85
Mean −0.03179
Std Dev 0.9969

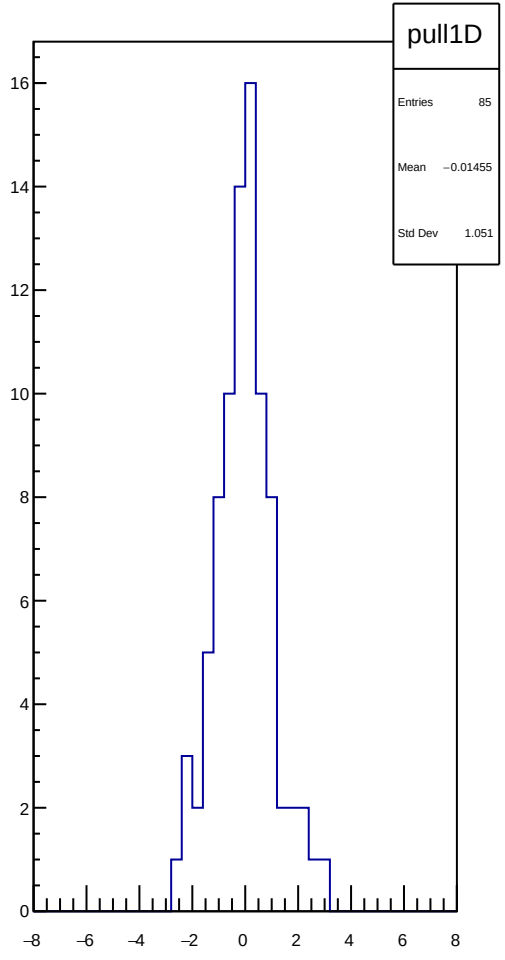

reg_asym_atl_avg_rms vs run
χ² / ndf 2.407e+04 / 84
p0 1635 ± 1.286
6000
5000
4000
3000
2000

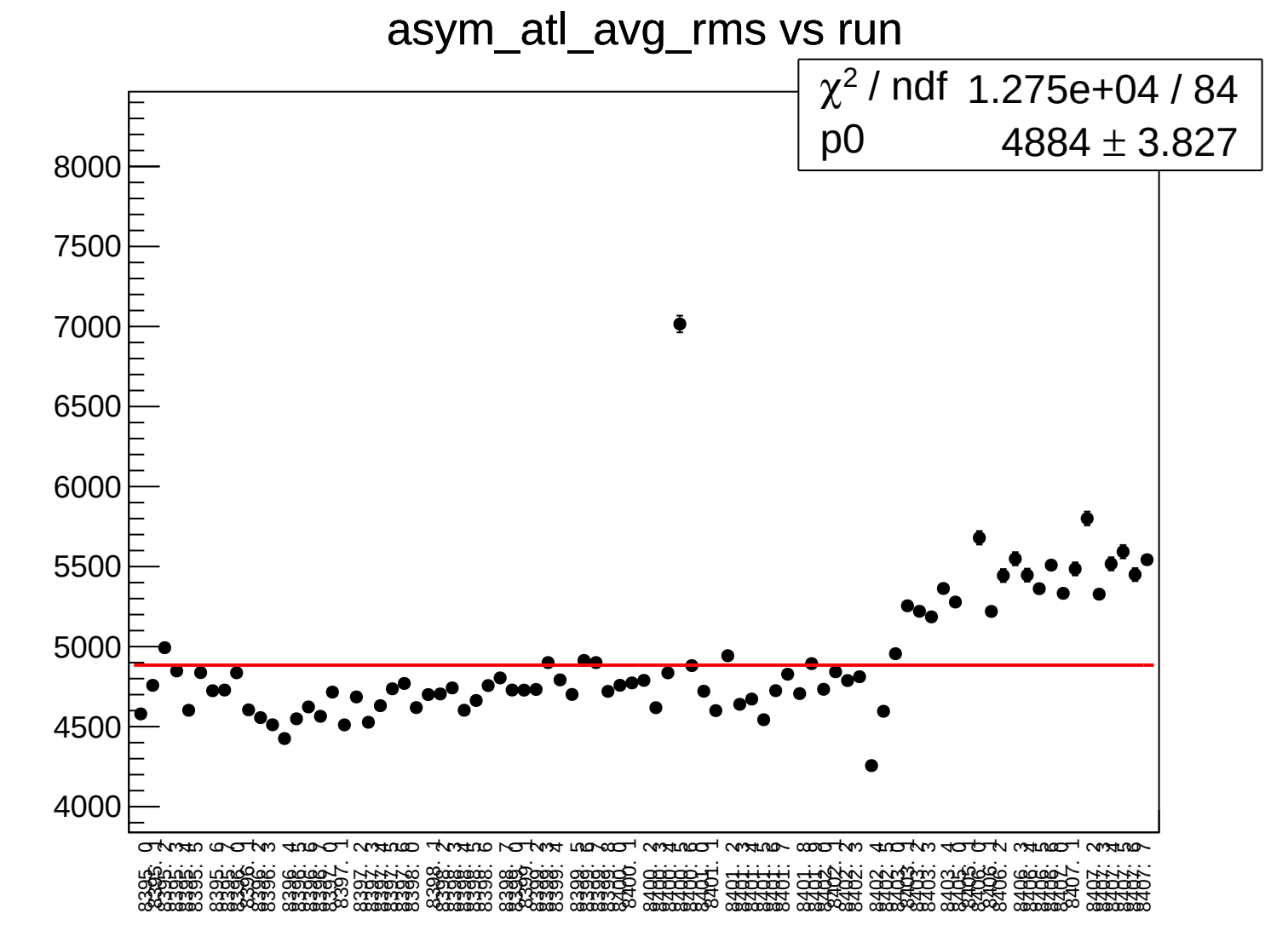

asym_atl_avg_correction_mean vs run
×10^3
χ^2 / ndf 92.14 / 84
p0 −4915 ± 5059
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −458.7
Std Dev 488.2
2
1
0
−1
−2
−3

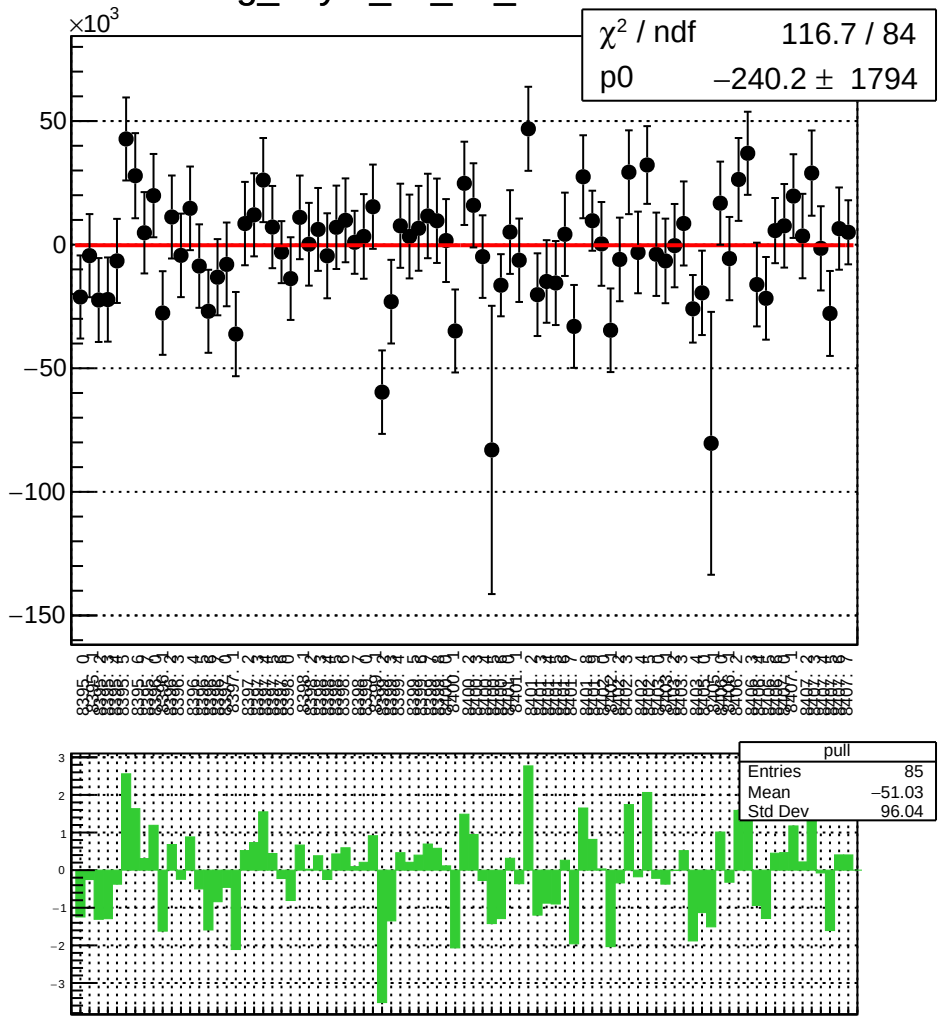

pull1D
Entries 85
Mean −0.002901
Std Dev 1.041
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

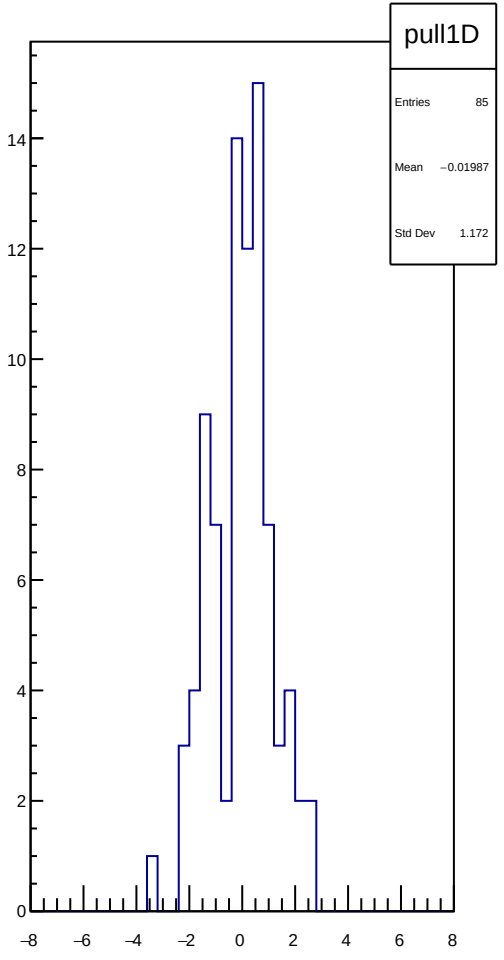

asym_atl_avg_correction_rms vs run
χ² / ndf 8680 / 84
p0 4571 ± 3.577
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800

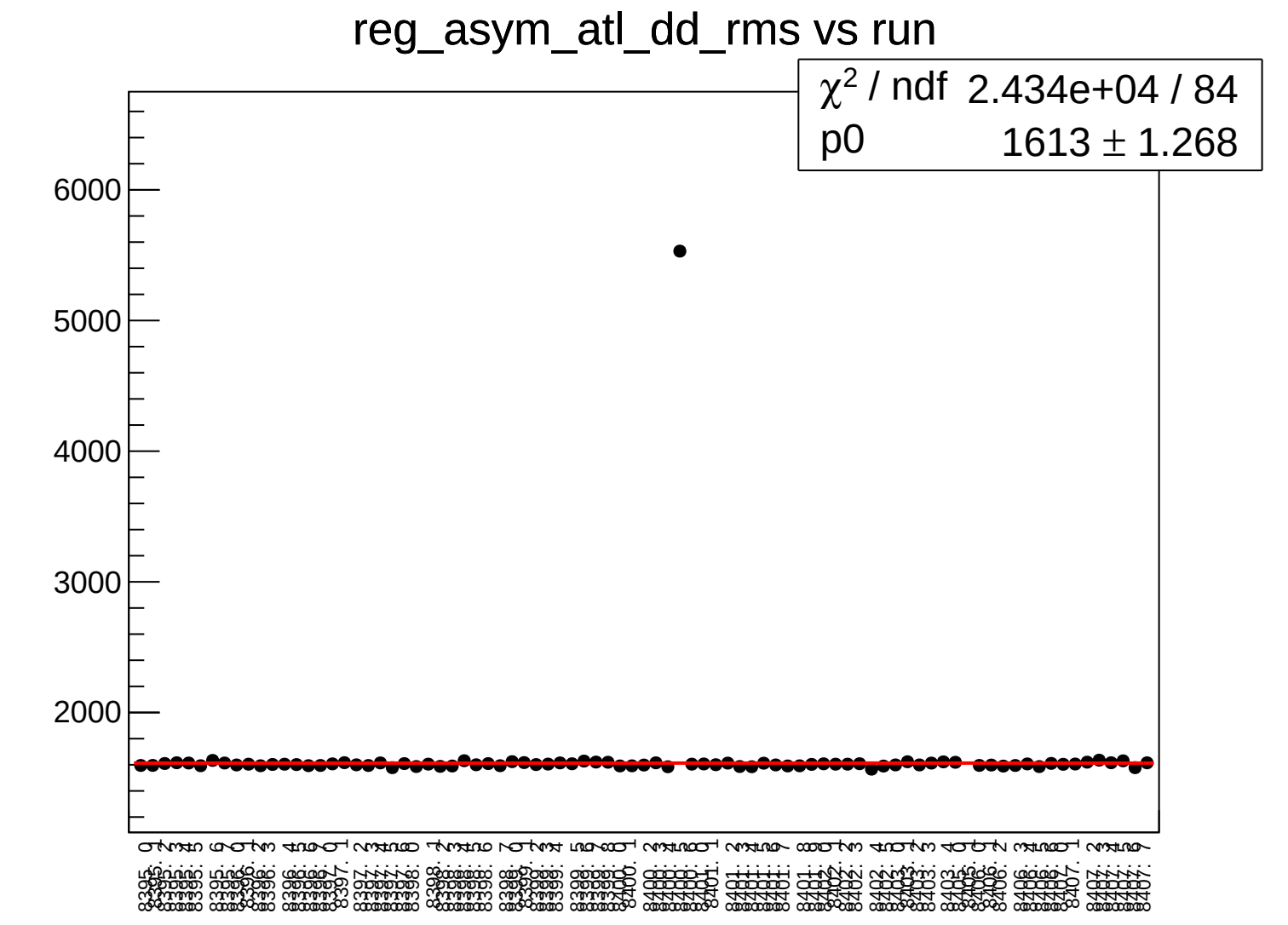

asym_atl_avg_mean vs run
×10^3
χ² / ndf 93.86 / 84
p0 3597 ± 5413
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 102.4
Std Dev 54.82
3
2
1
0
−1
−2

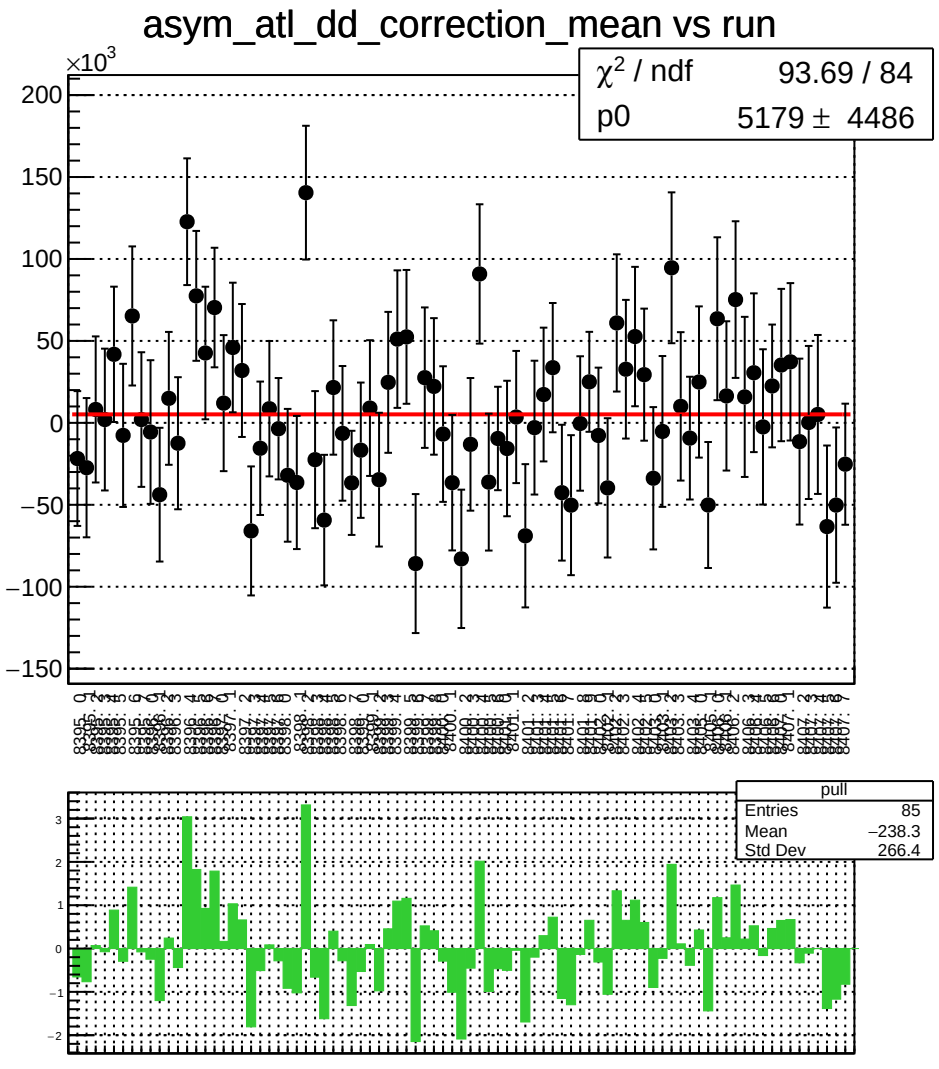

pull1D
Entries 85
Mean −0.01455
Std Dev 1.051
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

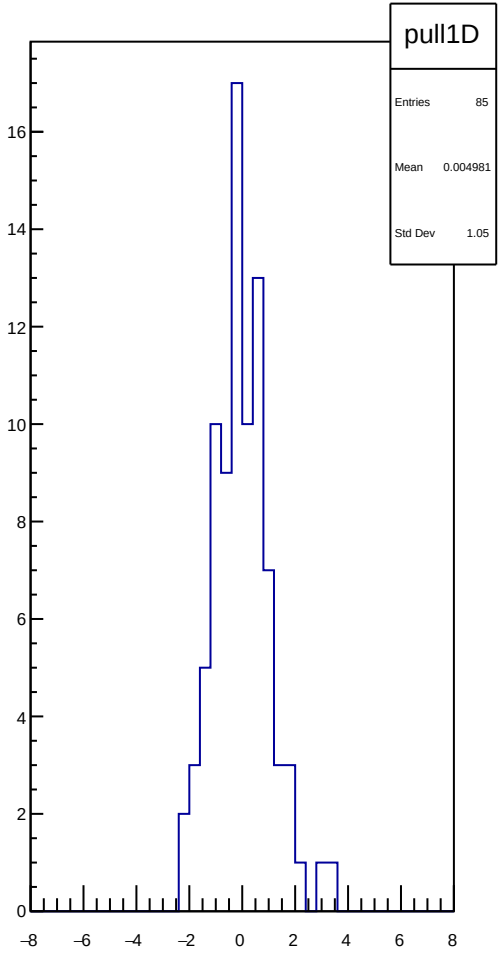

asym_atl_avg_rms vs run
χ² / ndf 1.275e+04 / 84
p0 4884 ± 3.827
8000
7500
7000
6500
6000
5500
5000
4500
4000

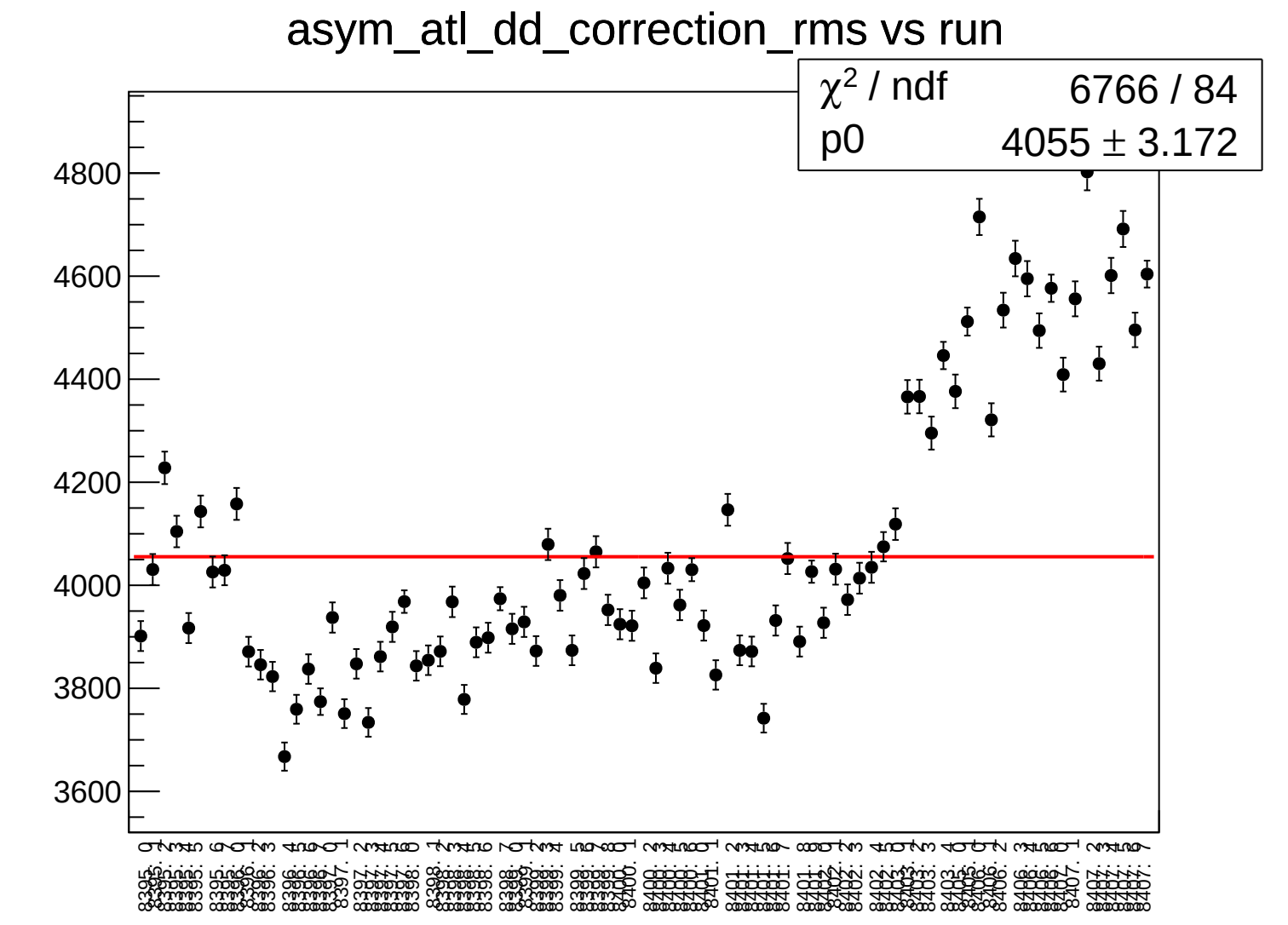

reg_asym_atl_dd_mean vs run
×10^3
χ² / ndf 116.7 / 84
p0 −240.2 ± 1794
50
0
−50
−100
−150
pull
Entries 85
Mean −51.03
Std Dev 96.04
3
2
1
0
−1
−2
−3

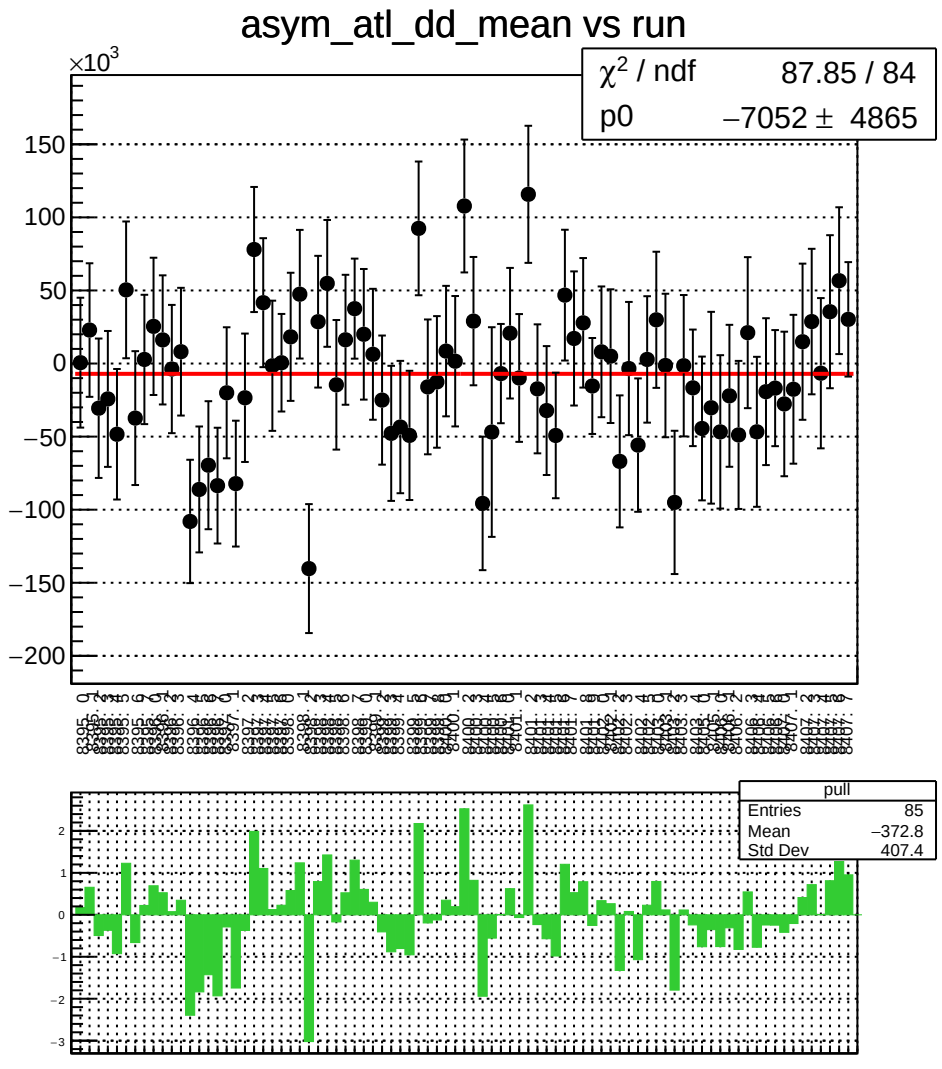

pull1D
Entries 85
Mean −0.01987
Std Dev 1.172
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

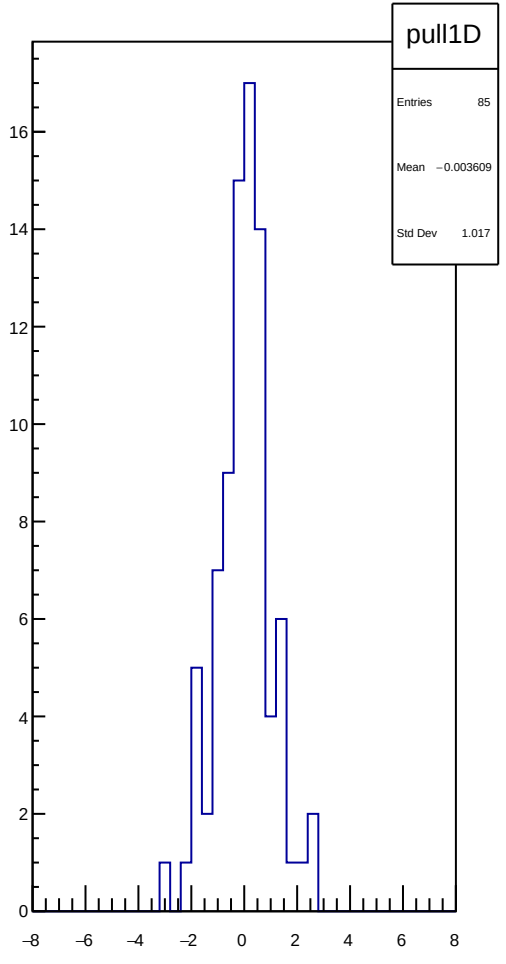

reg_asym_atl_dd_rms vs run
χ² / ndf 2.434e+04 / 84
p0 1613 ± 1.268
6000
5000
4000
3000
2000

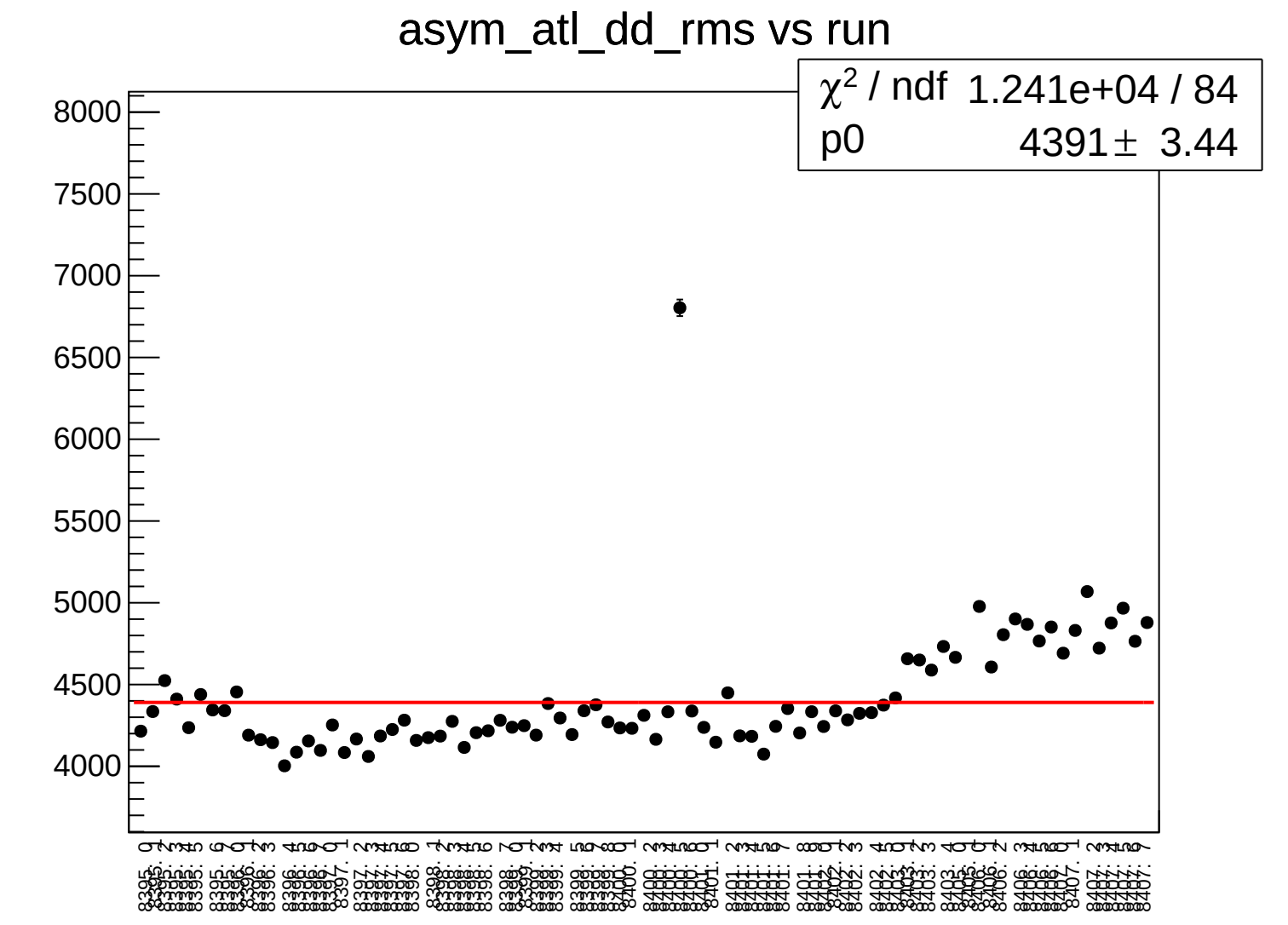

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 93.69 / 84
p0 5179 ± 4486
pull
Entries 85
Mean −238.3
Std Dev 266.4

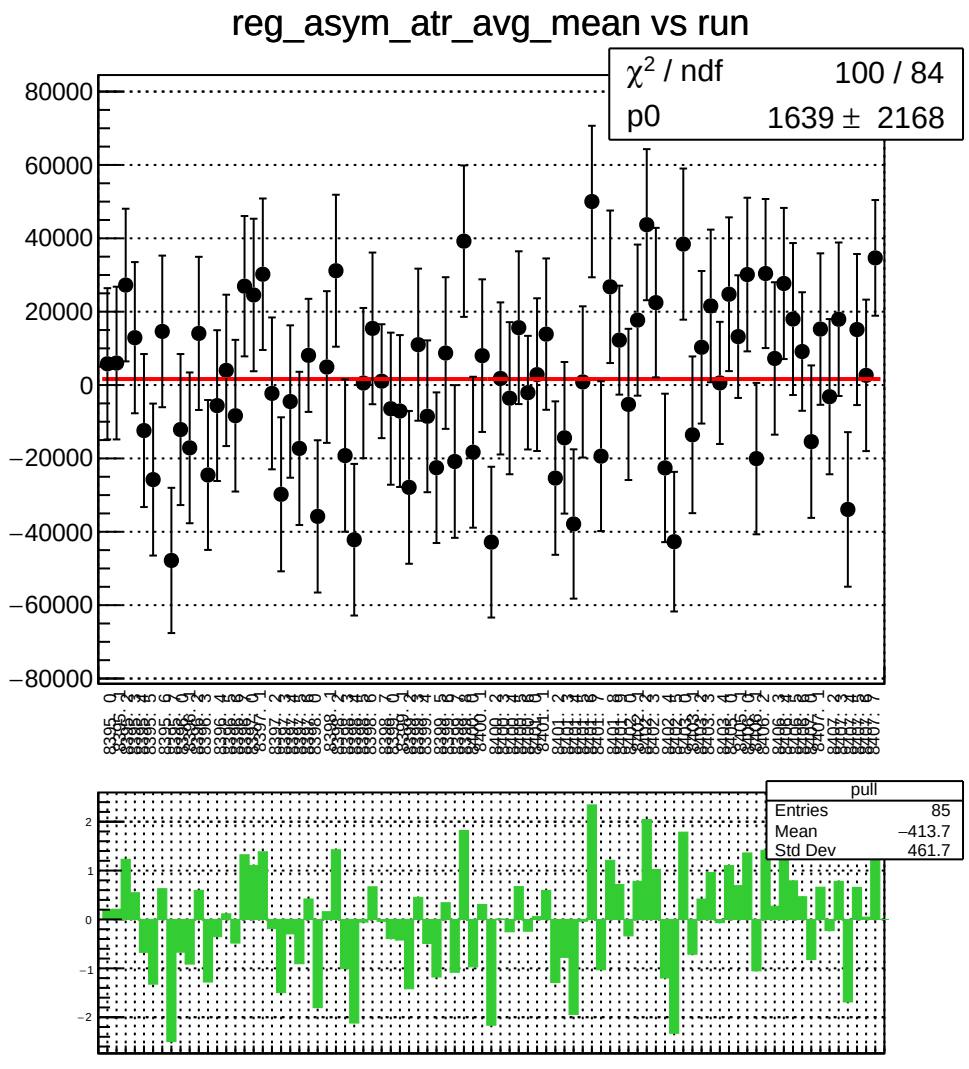

pull1D
Entries 85
Mean 0.004981
Std Dev 1.05

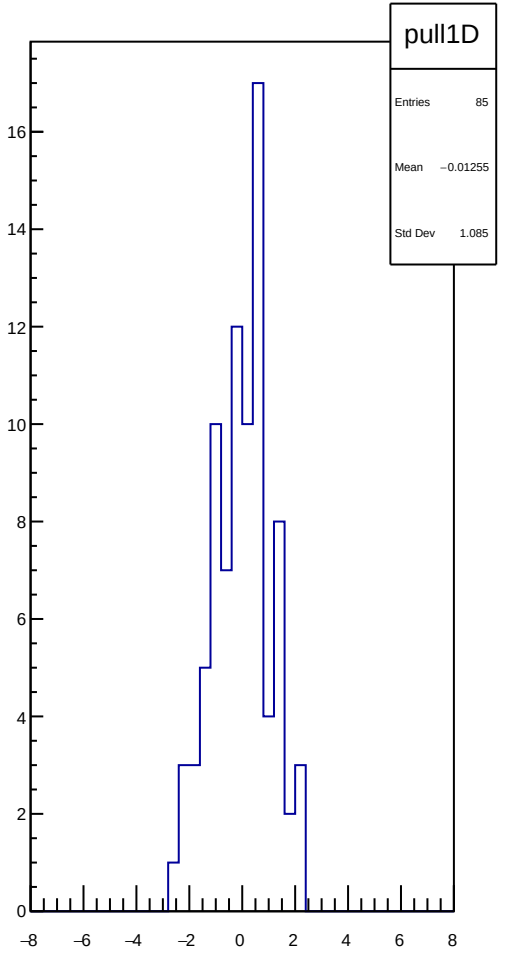

asym_atl_dd_correction_rms vs run
χ² / ndf 6766 / 84
p0 4055 ± 3.172
4800
4600
4400
4200
4000
3800
3600

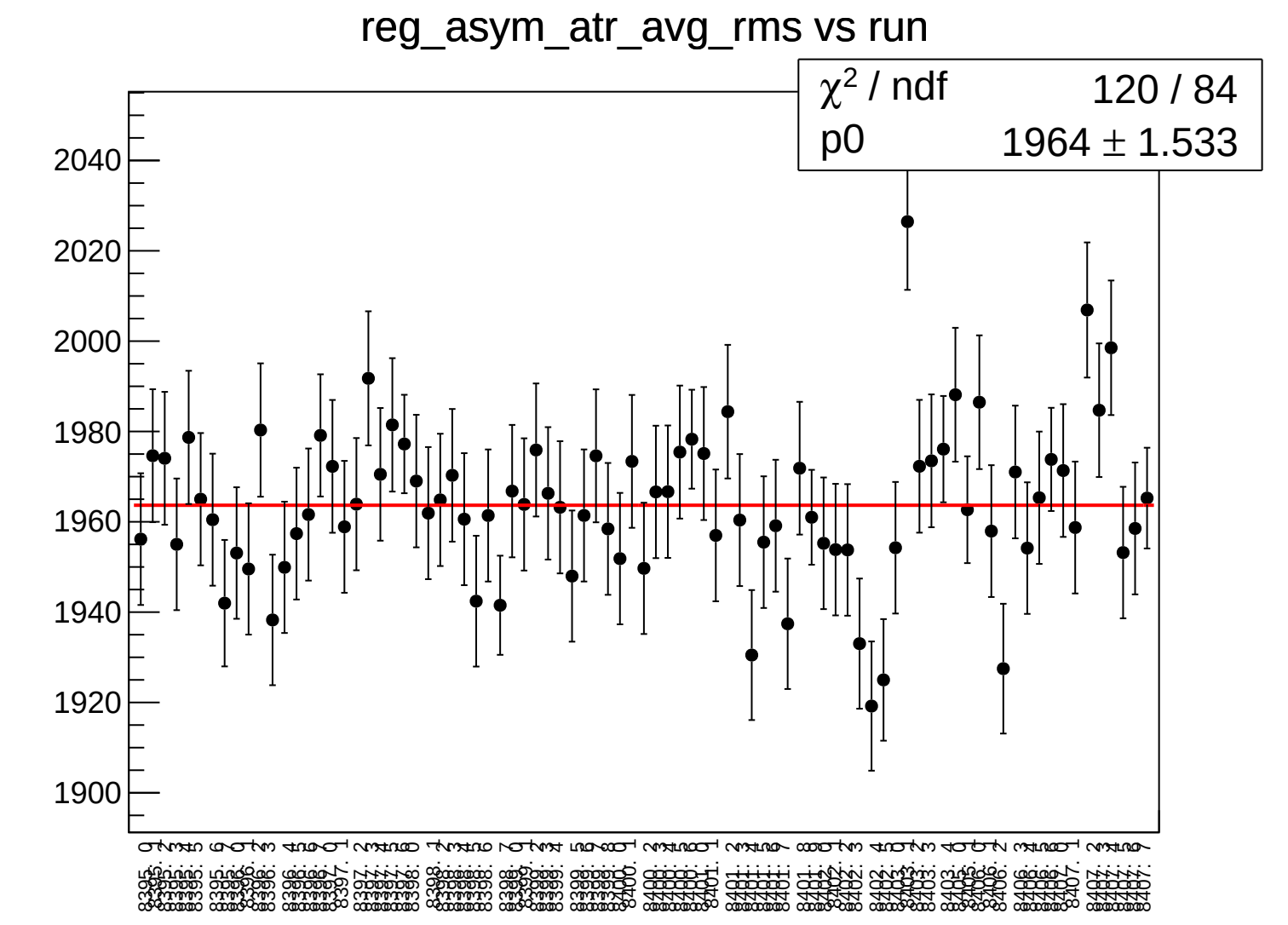

asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 87.85 / 84
p0 −7052 ± 4865
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −372.8
Std Dev 407.4
2
1
0
−1
−2
−3

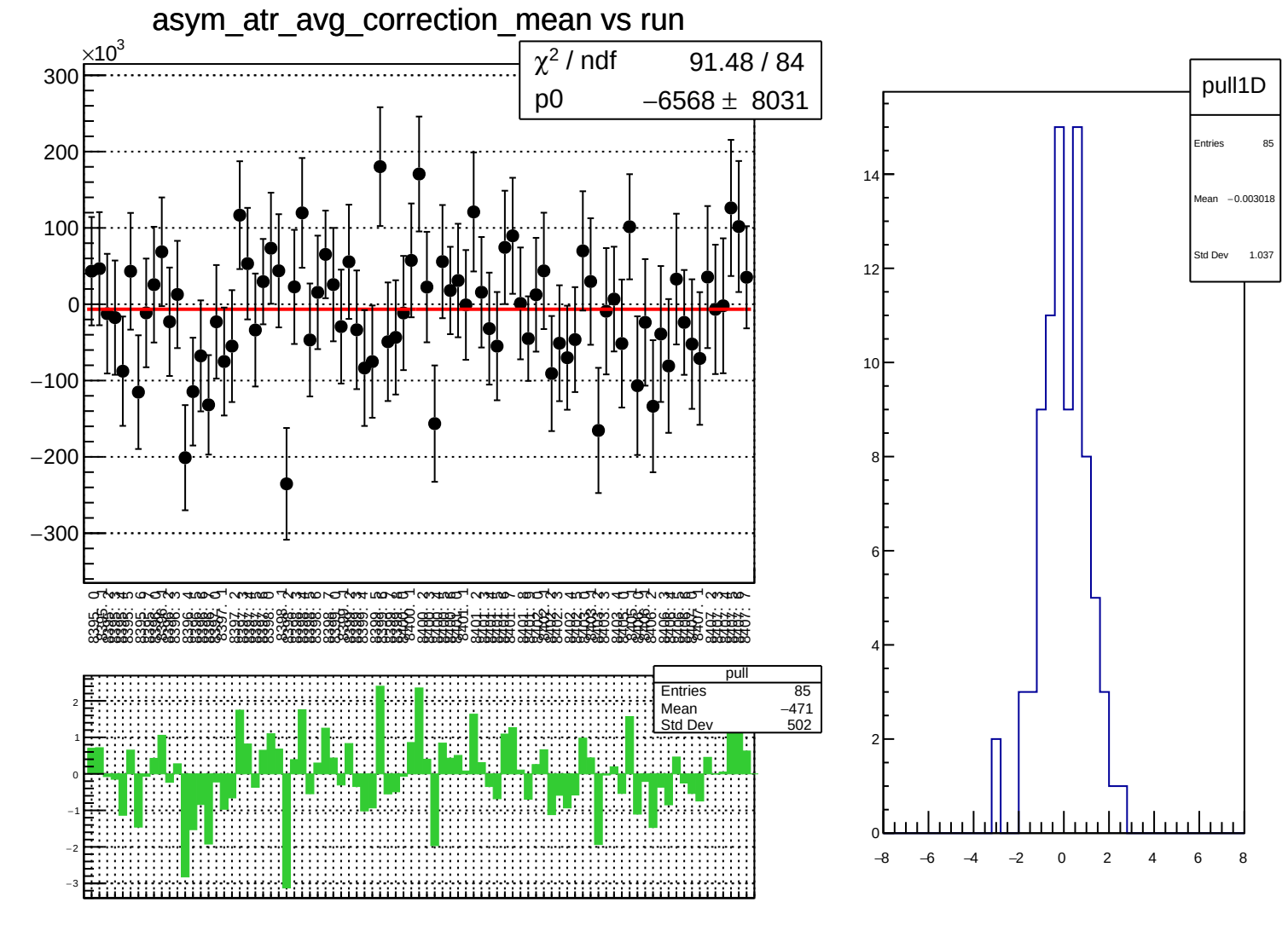

pull1D
Entries 85
Mean −0.003609
Std Dev 1.017
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

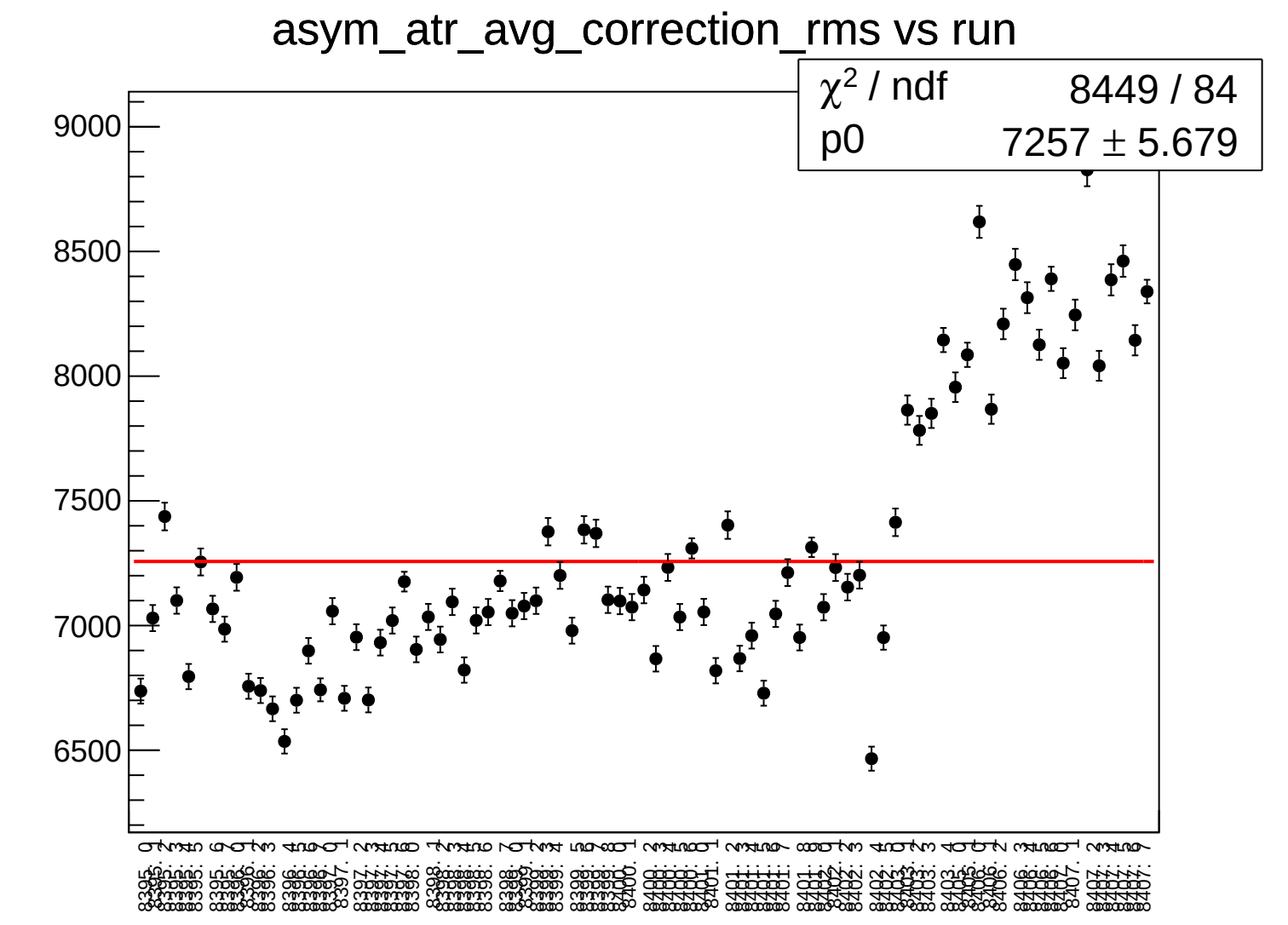

asym_atl_dd_rms vs run
χ² / ndf 1.241e+04 / 84
p0 4391 ± 3.44
8000
7500
7000
6500
6000
5500
5000
4500
4000

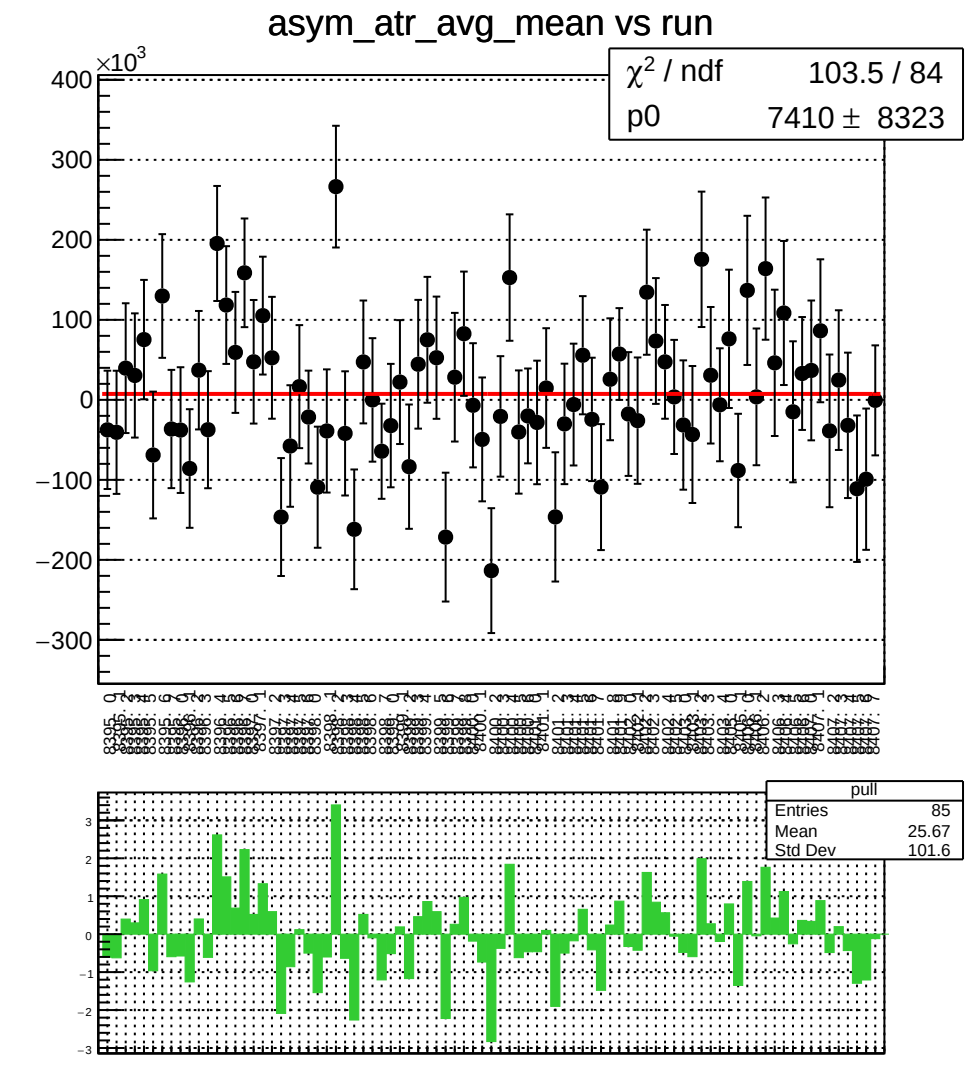

reg_asym_atr_avg_mean vs run
χ² / ndf 100 / 84
p0 1639 ± 2168
pull
Entries 85
Mean −413.7
Std Dev 461.7

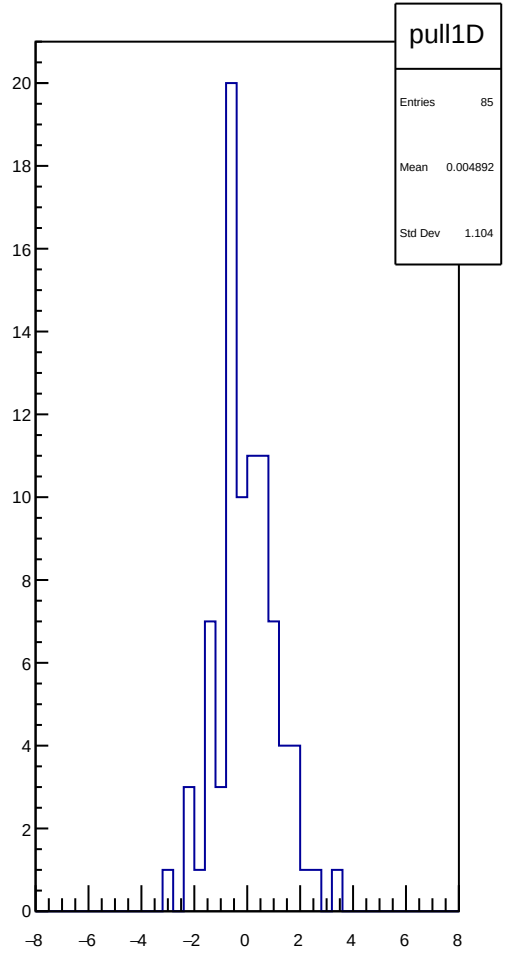

pull1D
Entries 85
Mean −0.01255
Std Dev 1.085

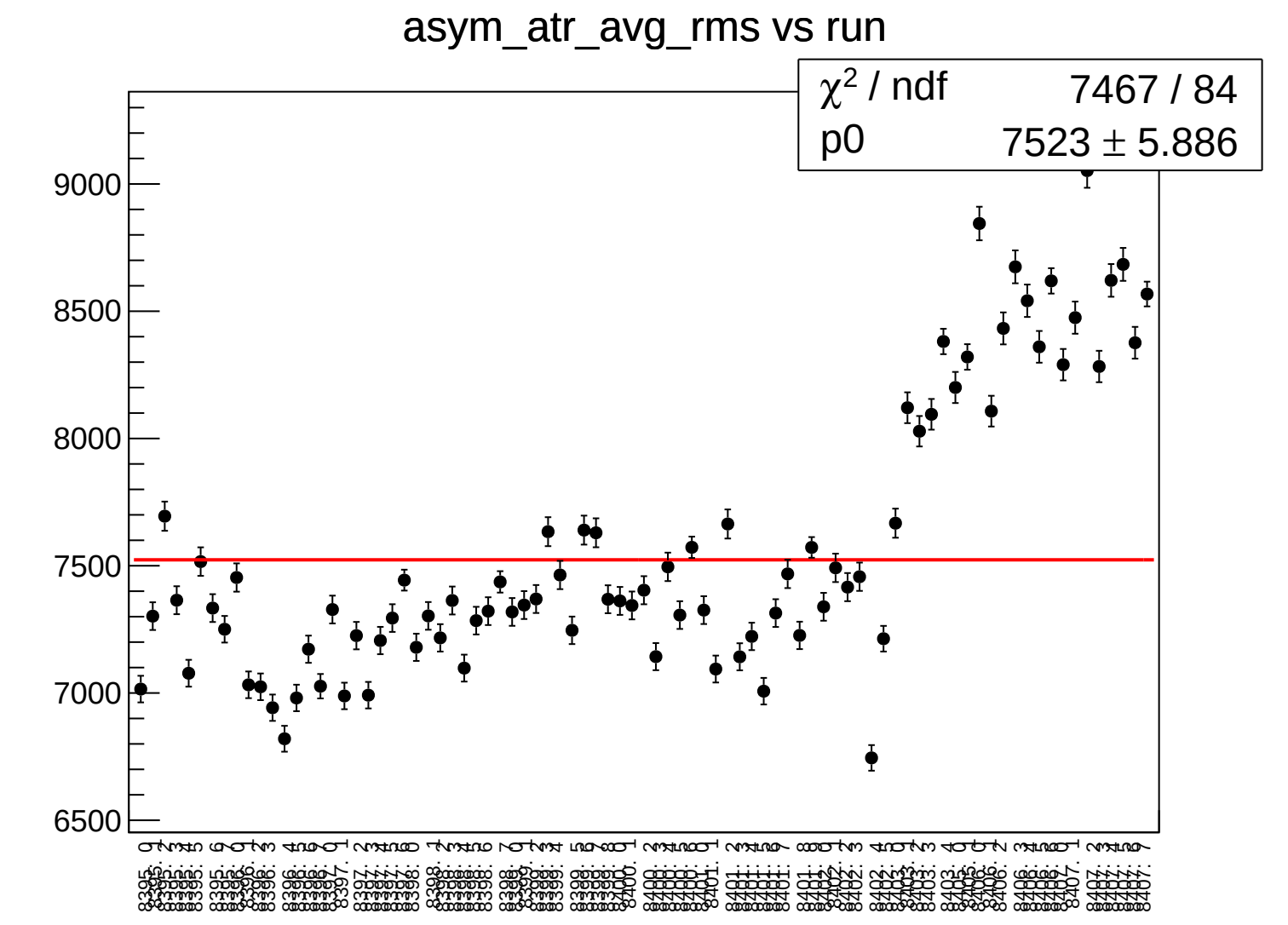

reg_asym_atr_avg_rms vs run
χ^2 / ndf 120 / 84
p0 1964 ± 1.533
2040
2020
2000
1980
1960
1940
1920
1900

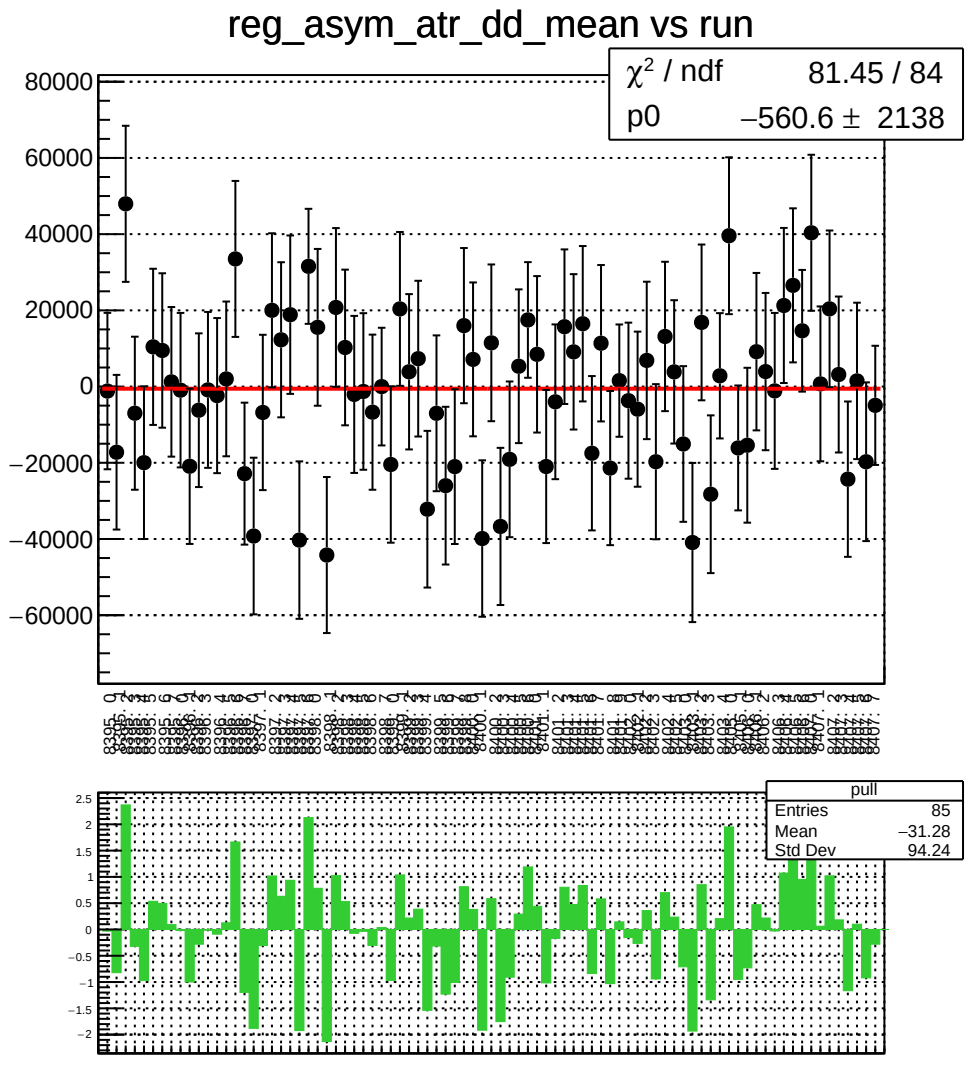

asym_atr_avg_correction_mean vs run
×10^3
χ^2 / ndf 91.48 / 84
p0 −6568 ± 8031
pull
Entries 85
Mean −471
Std Dev 502
pull1D
Entries 85
Mean −0.003018
Std Dev 1.037

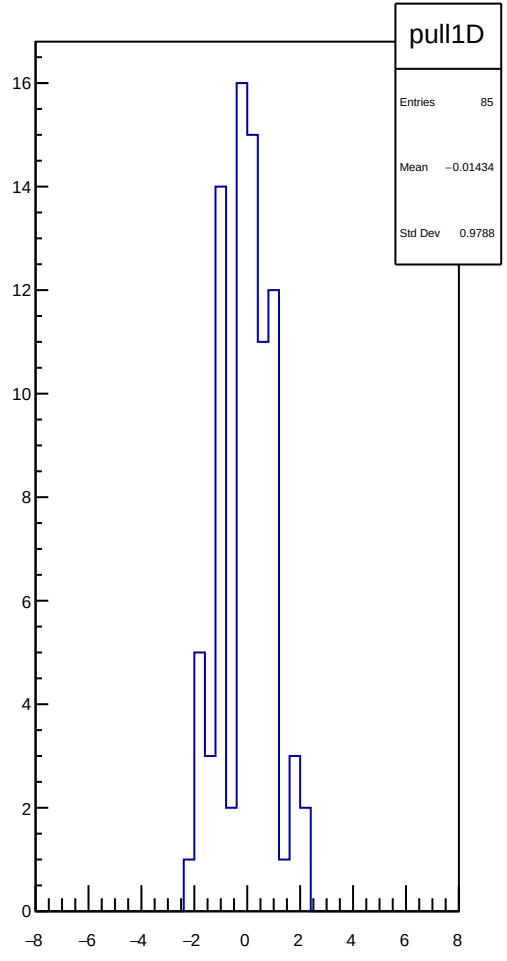

asym_atr_avg_correction_rms vs run
χ² / ndf 8449 / 84
p0 7257 ± 5.679
9000
8500
8000
7500
7000
6500

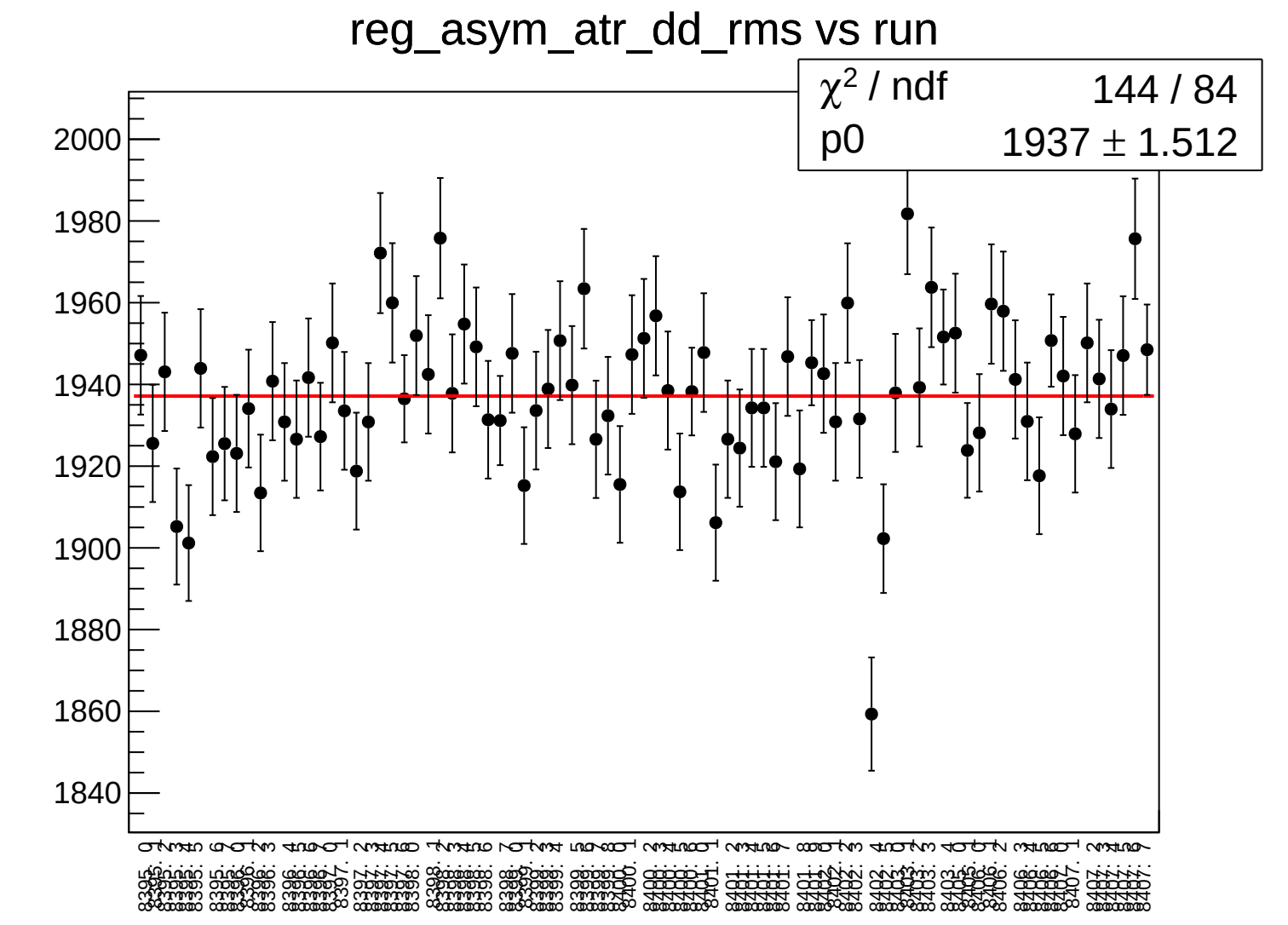

asym_atr_avg_mean vs run
×10^3
400
300
200
100
0
−100
−200
−300
χ² / ndf 103.5 / 84
p0 7410 ± 8323
pull
Entries 85
Mean 25.67
Std Dev 101.6
3
2
1
0
−1
−2
−3

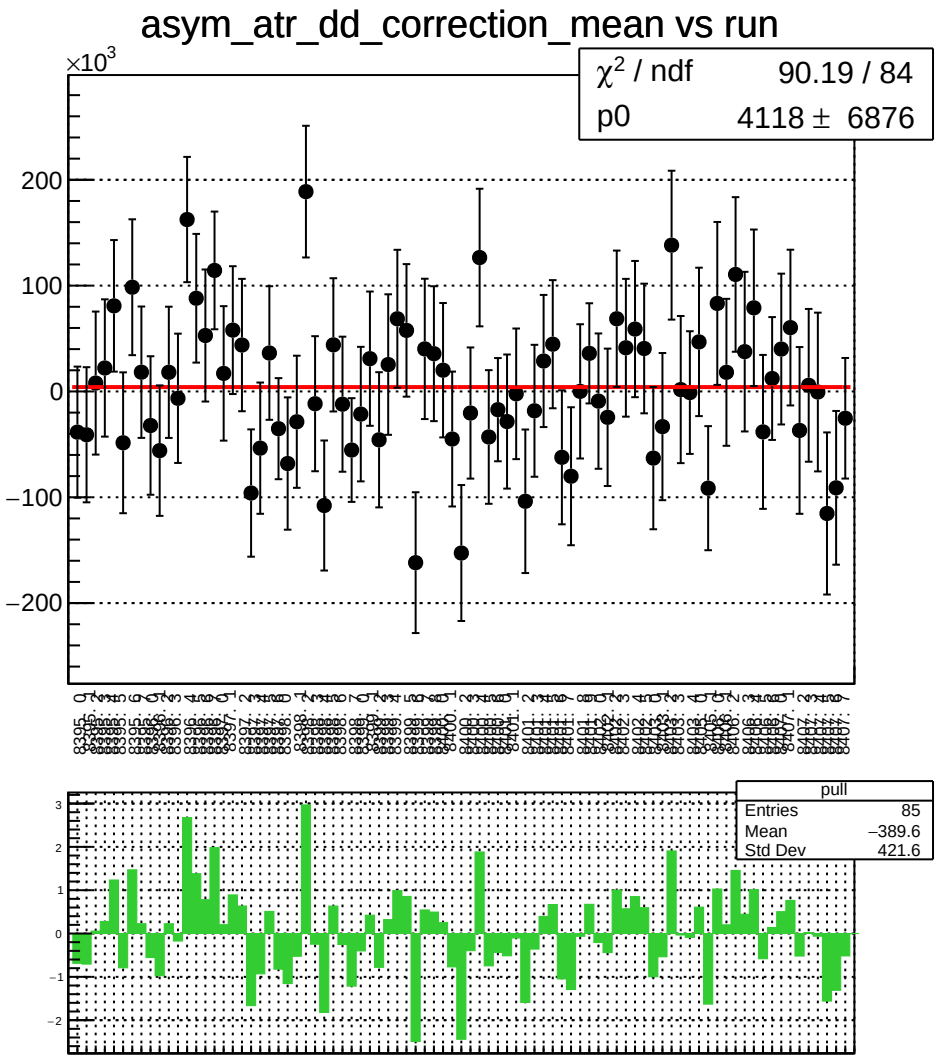

pull1D
Entries 85
Mean 0.004892
Std Dev 1.104
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

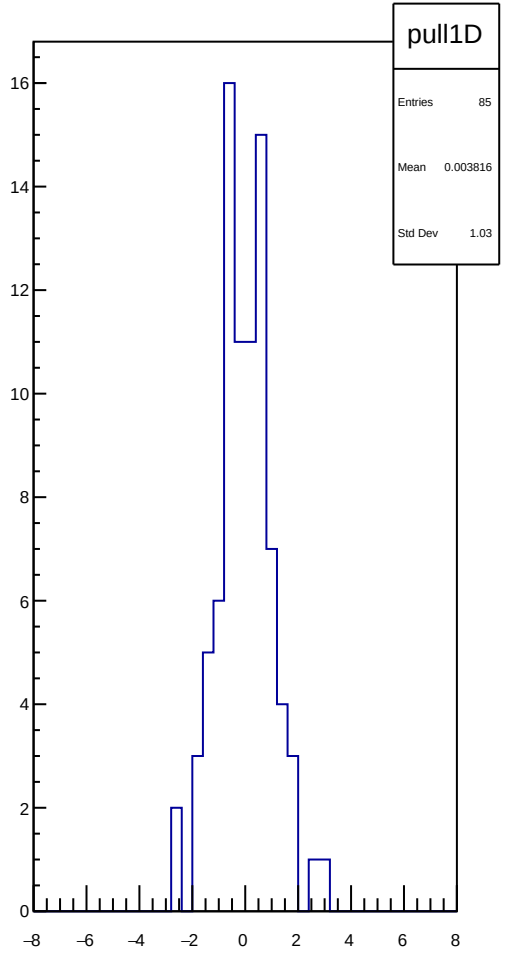

asym_atr_avg_rms vs run
χ^2 / ndf 7467 / 84
p0 7523 ± 5.886
9000
8500
8000
7500
7000
6500

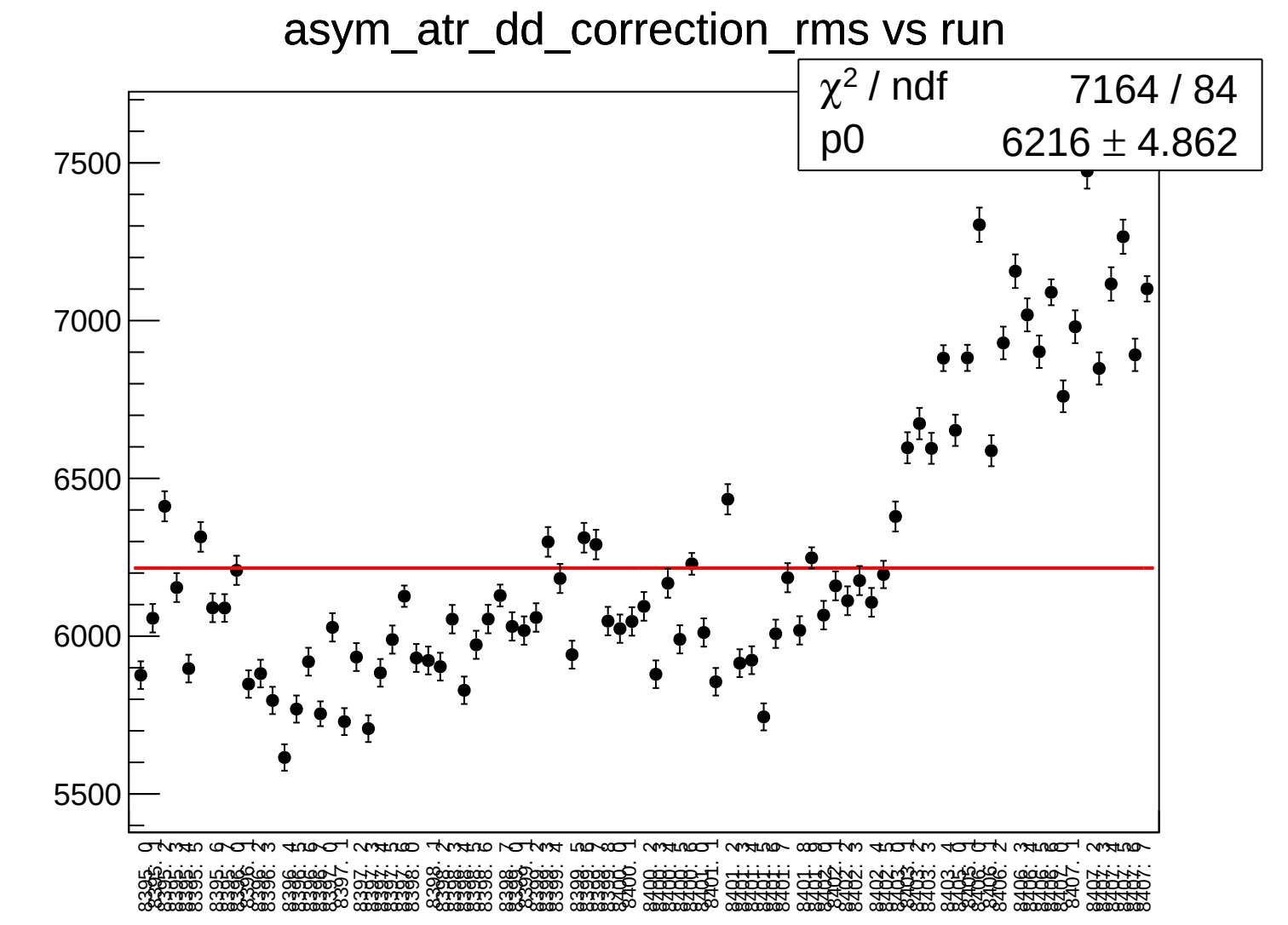

reg_asym_atr_dd_mean vs run
χ² / ndf 81.45 / 84
p0 −560.6 ± 2138
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −31.28
Std Dev 94.24
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

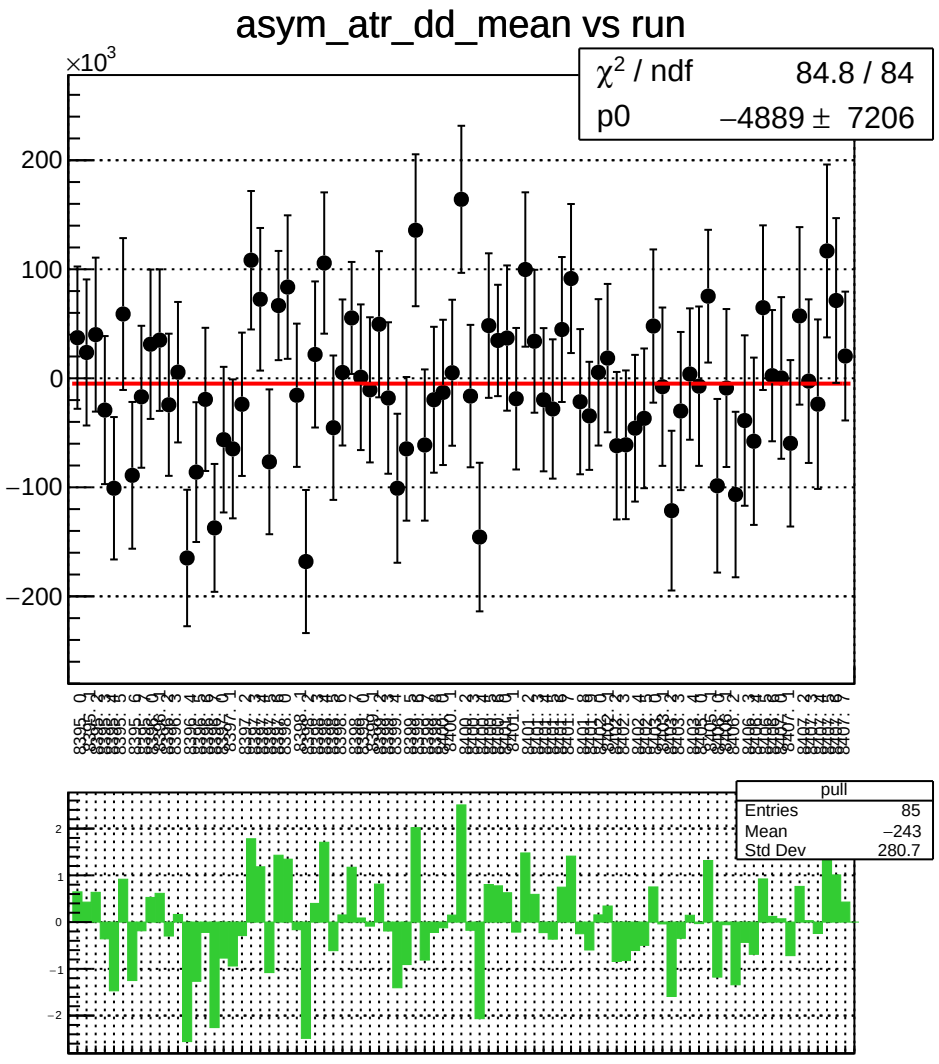

pull1D
Entries 85
Mean −0.01434
Std Dev 0.9788
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

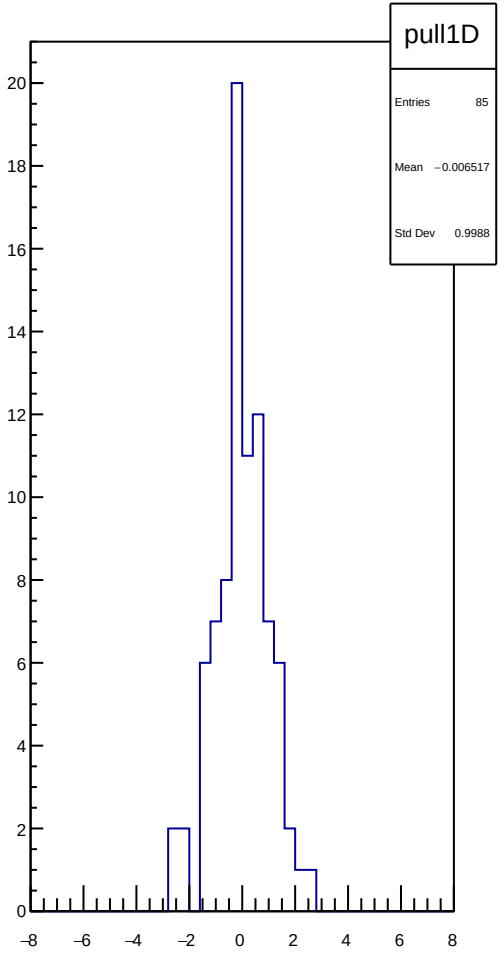

reg_asym_atr_dd_rms vs run
χ² / ndf 144 / 84
p0 1937 ± 1.512
2000
1980
1960
1940
1920
1900
1880
1860
1840

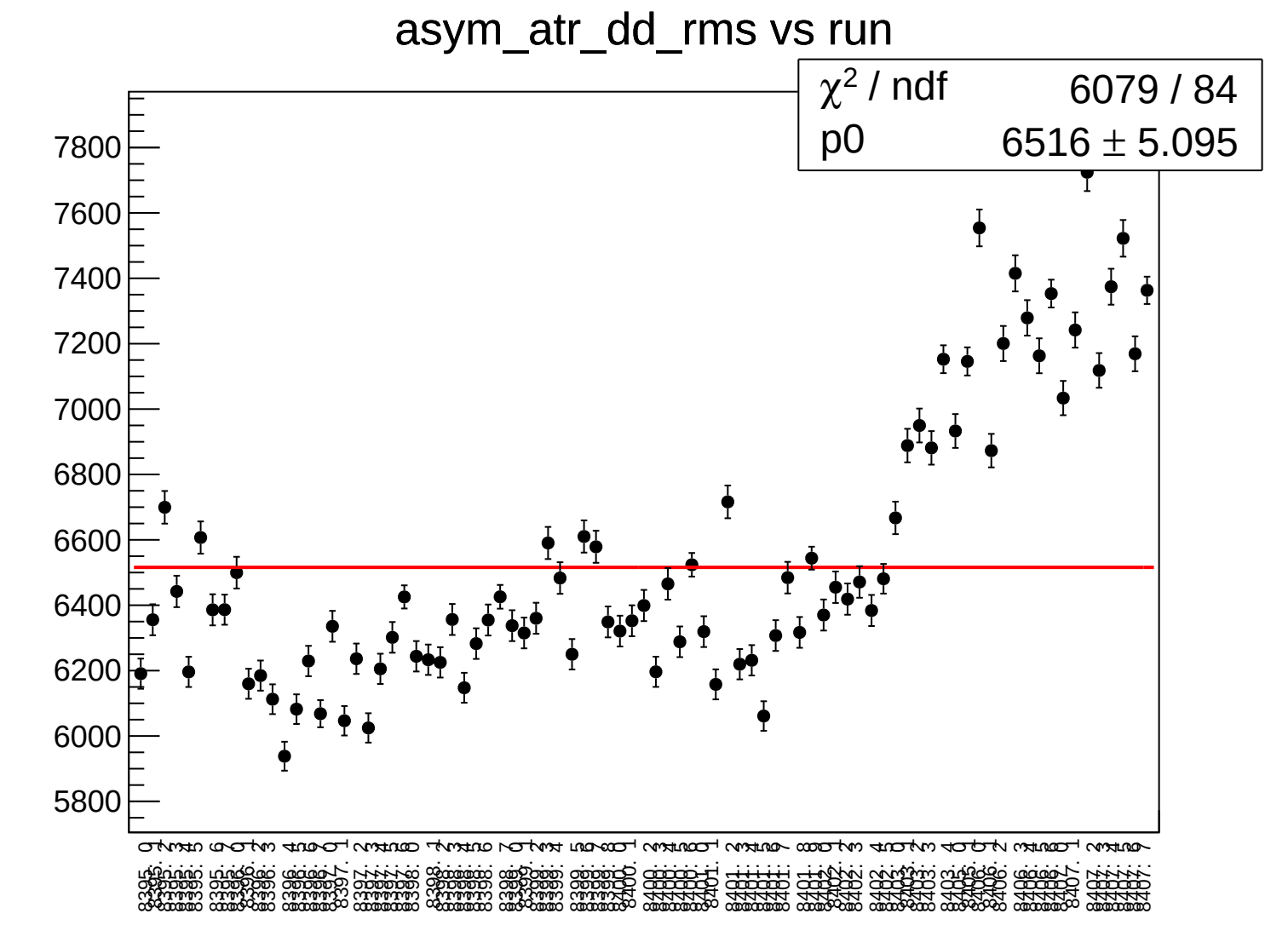

asym_atr_dd_correction_mean vs run
×10^3
χ^2 / ndf 90.19 / 84
p0 4118 ± 6876
200
100
0
−100
−200
pull
Entries 85
Mean −389.6
Std Dev 421.6
3
2
1
0
−1
−2

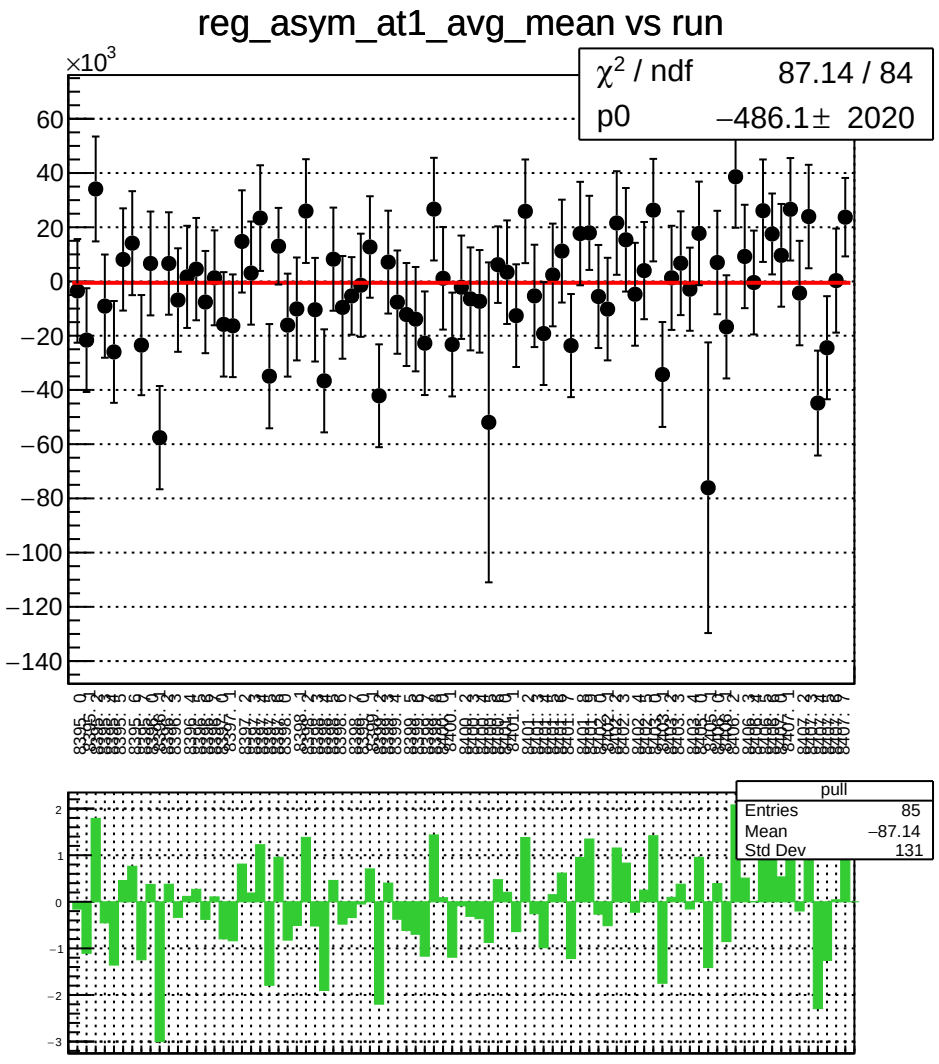

pull1D
Entries 85
Mean 0.003816
Std Dev 1.03
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

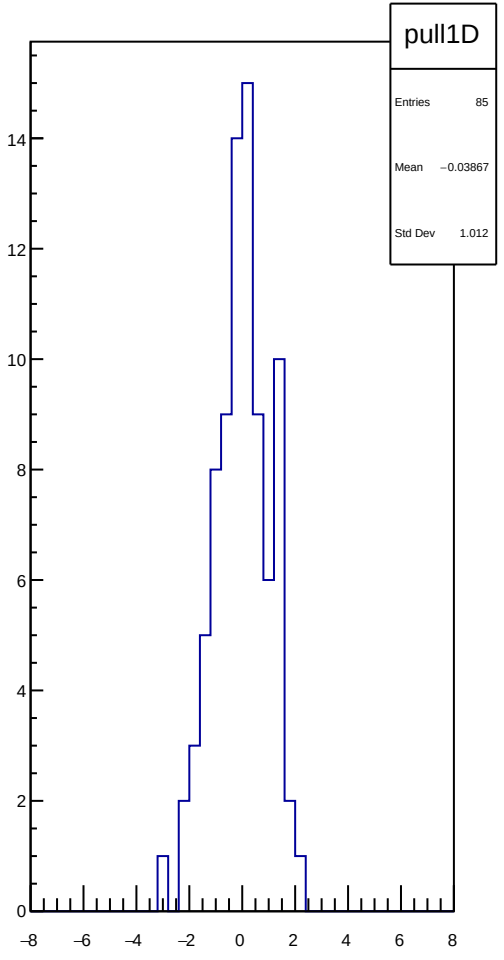

asym_atr_dd_correction_rms vs run
χ² / ndf 7164 / 84
p0 6216 ± 4.862
7500
7000
6500
6000
5500

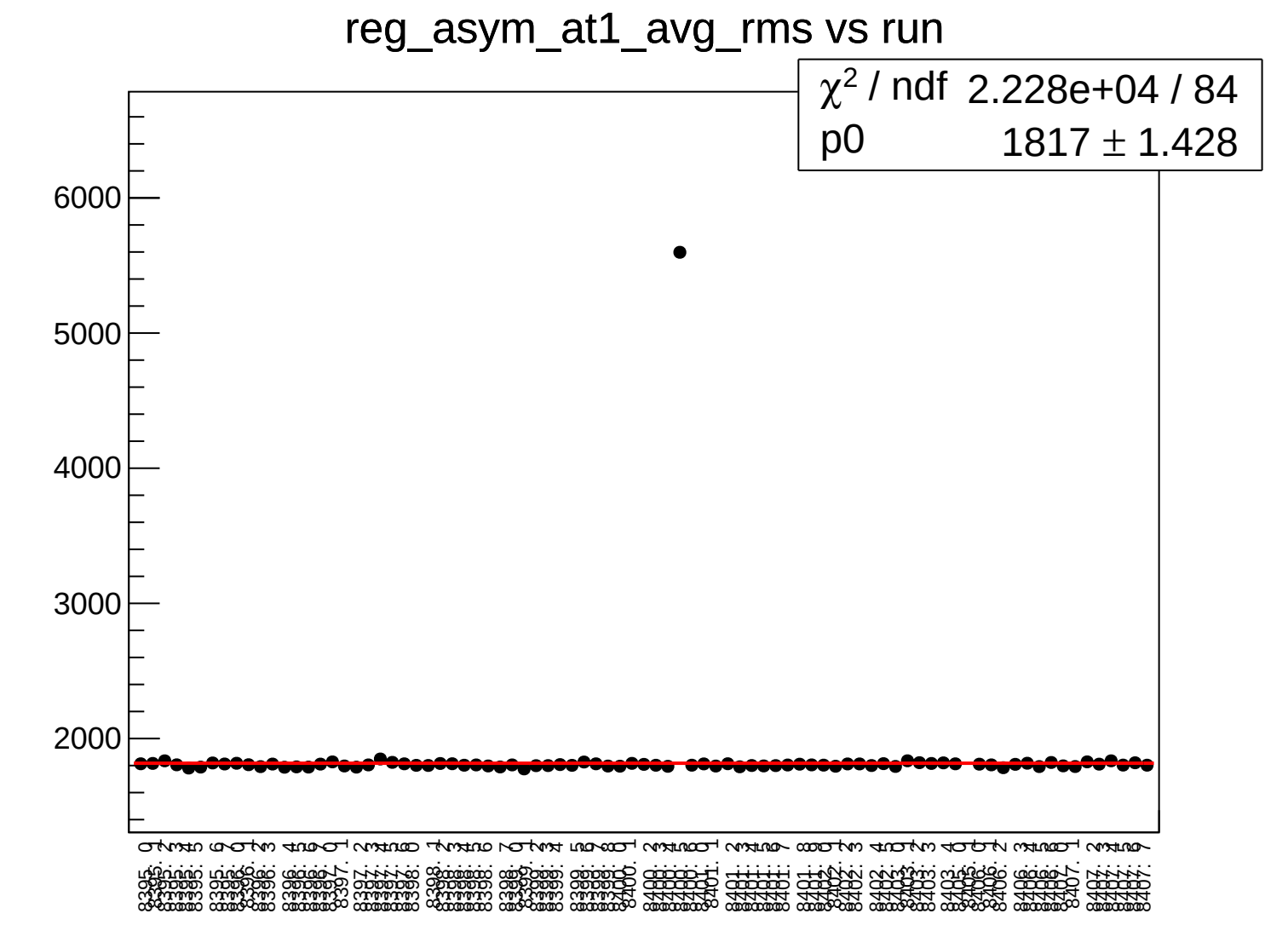

asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 84.8 / 84
p0 −4889 ± 7206
200
100
0
−100
−200
pull
Entries 85
Mean −243
Std Dev 280.7
2
1
0
−1
−2

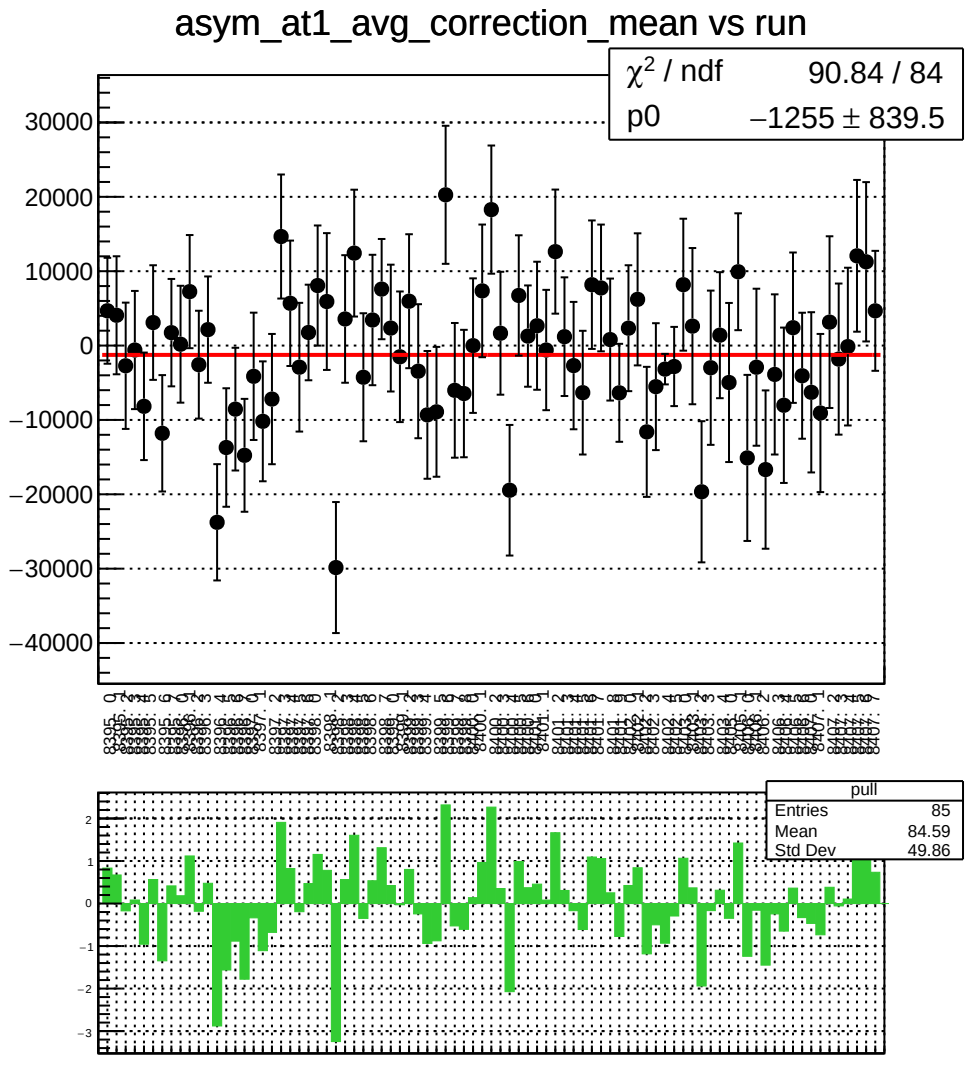

pull1D
Entries 85
Mean −0.006517
Std Dev 0.9988
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

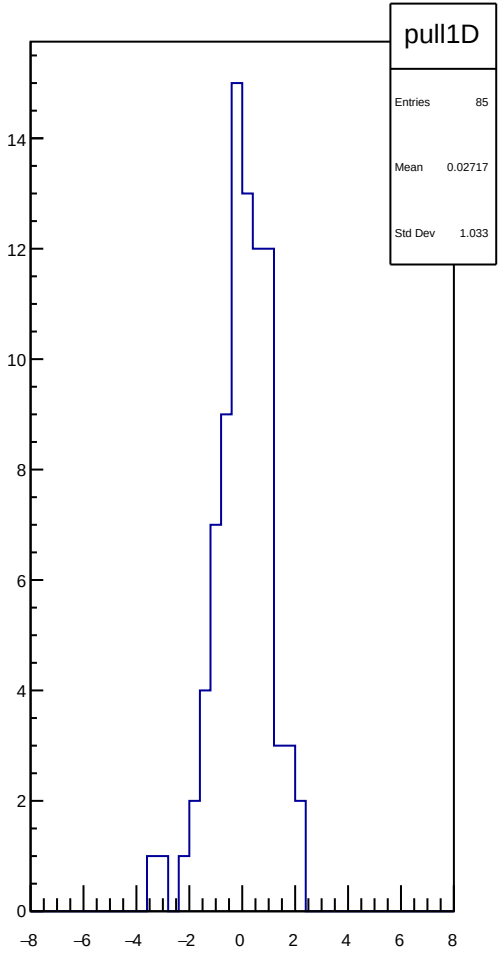

asym_atr_dd_rms vs run
χ^2 / ndf 6079 / 84
p0 6516 ± 5.095
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800

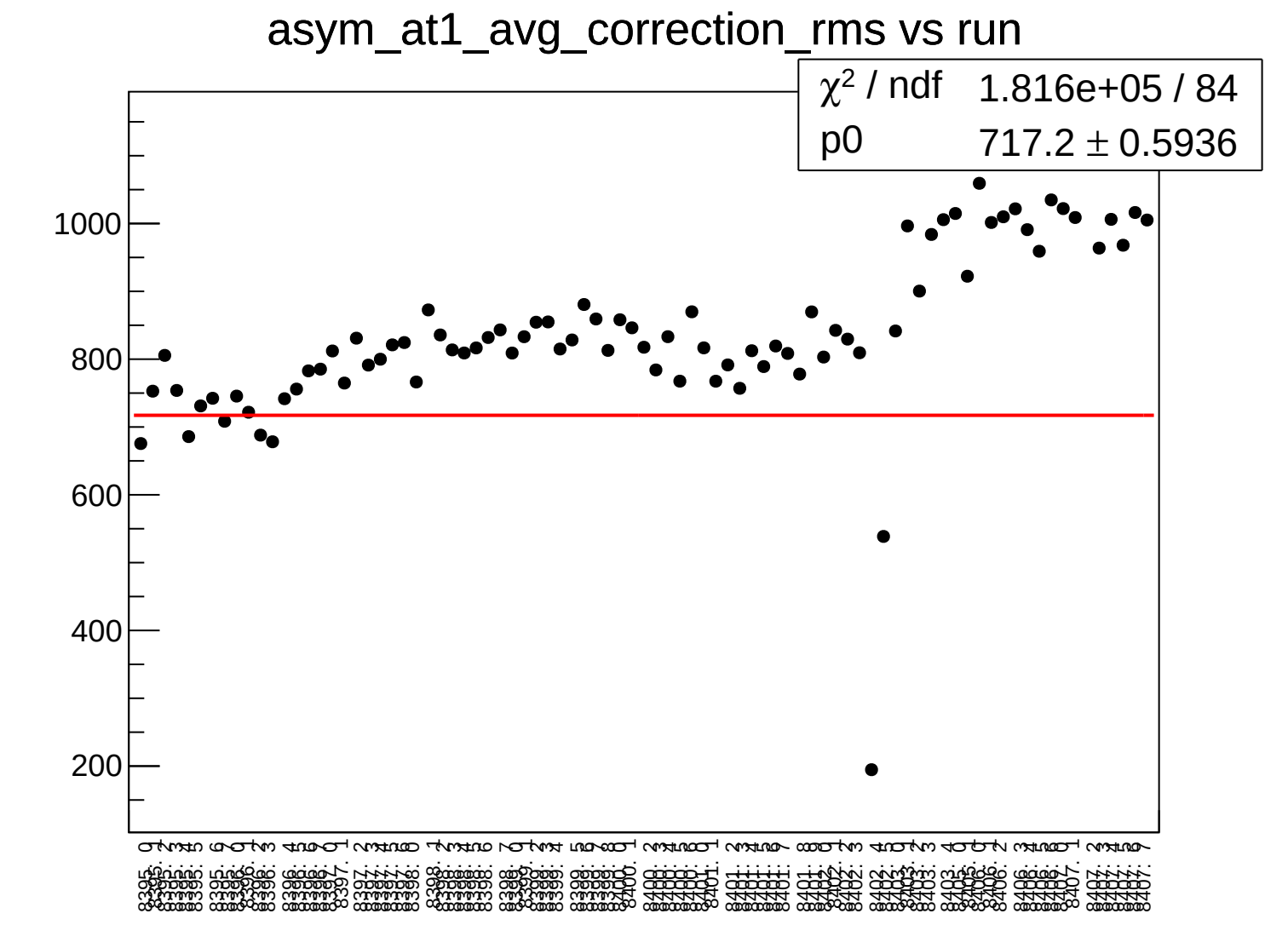

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 87.14 / 84
p0 −486.1± 2020
pull
Entries 85
Mean −87.14
Std Dev 131

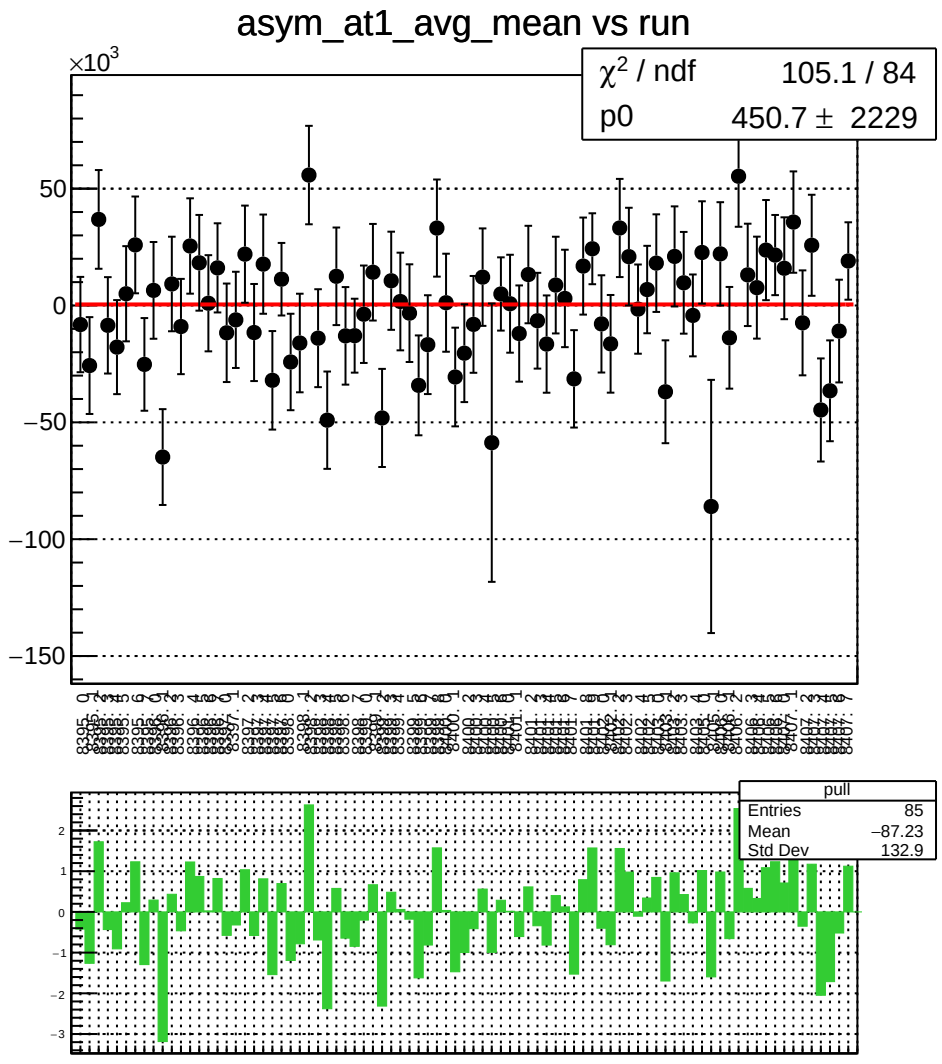

pull1D
Entries 85
Mean −0.03867
Std Dev 1.012

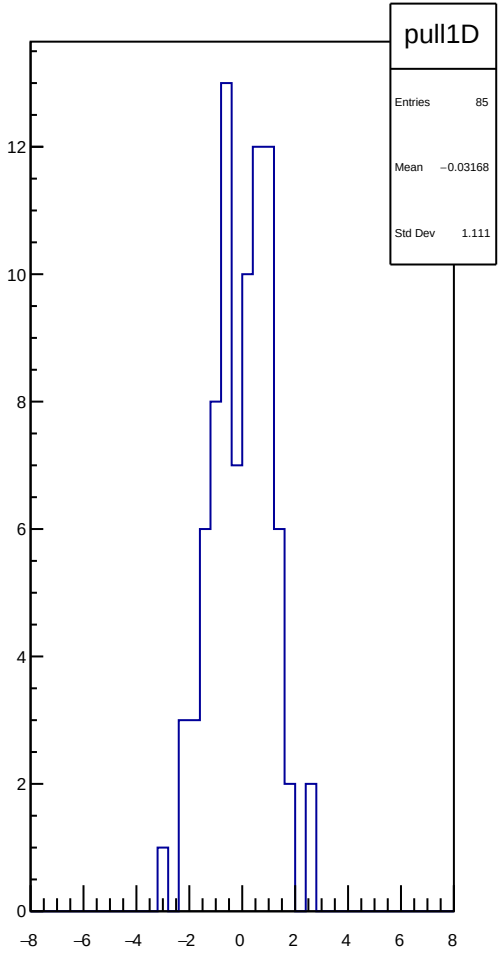

reg_asym_at1_avg_rms vs run
χ² / ndf 2.228e+04 / 84
p0 1817 ± 1.428
6000
5000
4000
3000
2000

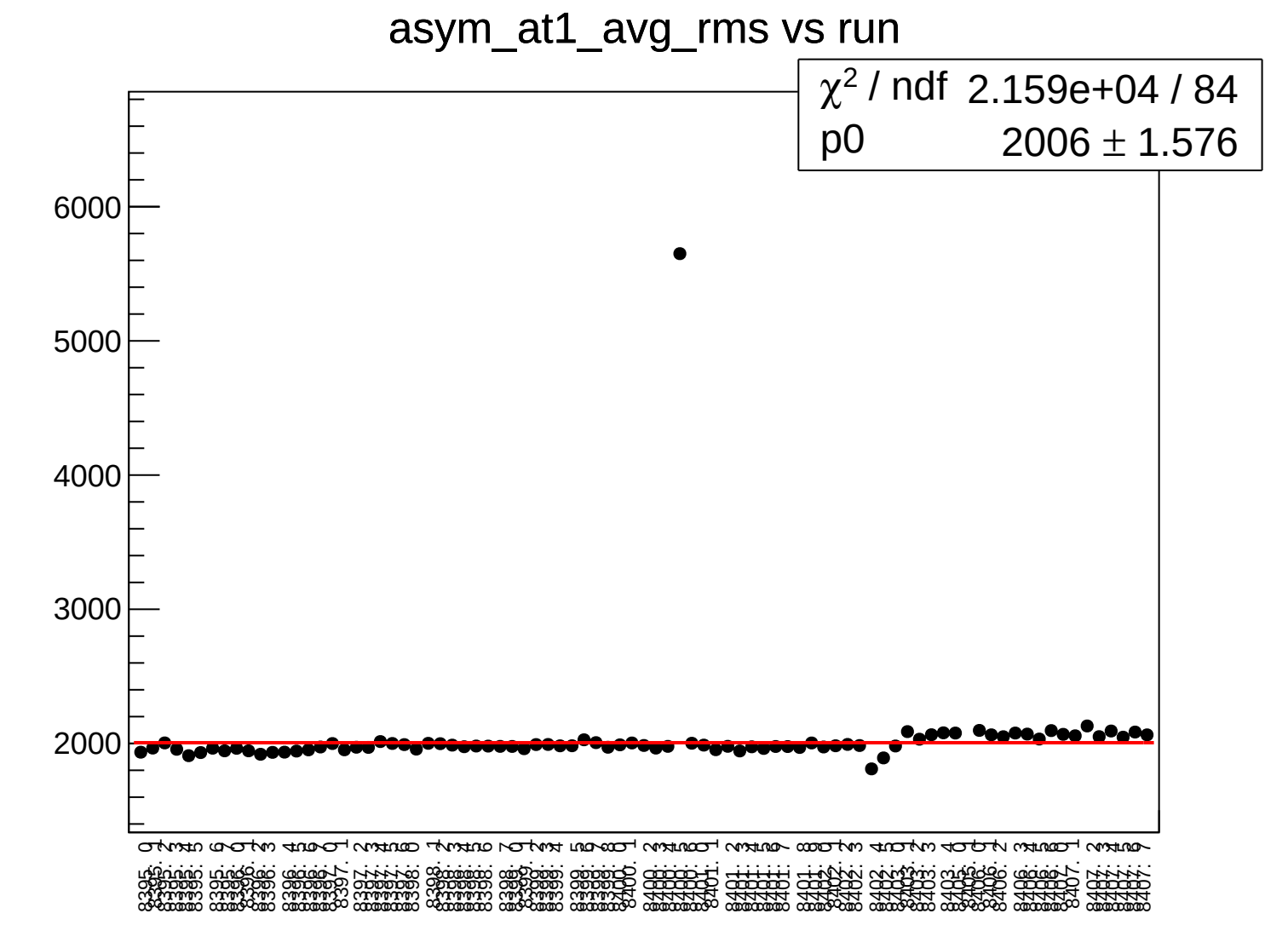

asym_at1_avg_correction_mean vs run
χ² / ndf 90.84 / 84
p0 −1255 ± 839.5
pull
Entries 85
Mean 84.59
Std Dev 49.86

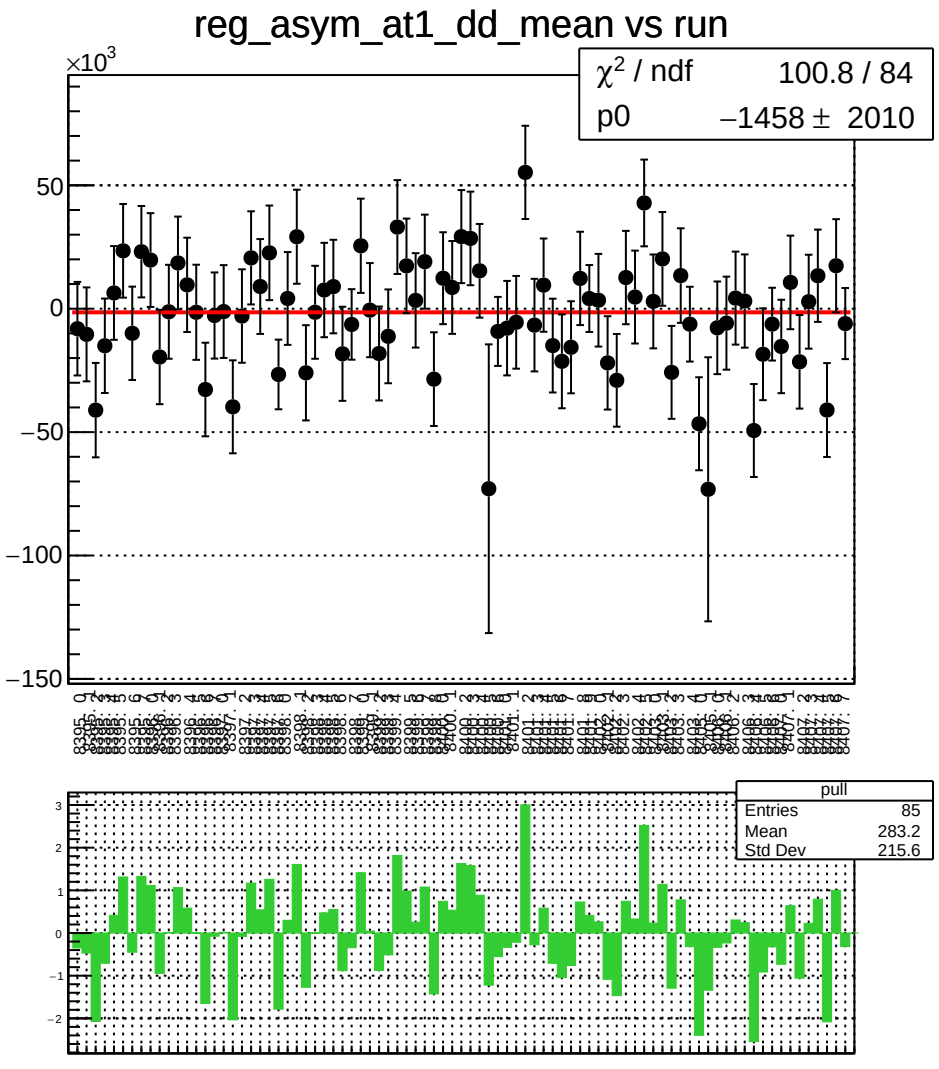

pull1D
Entries 85
Mean 0.02717
Std Dev 1.033

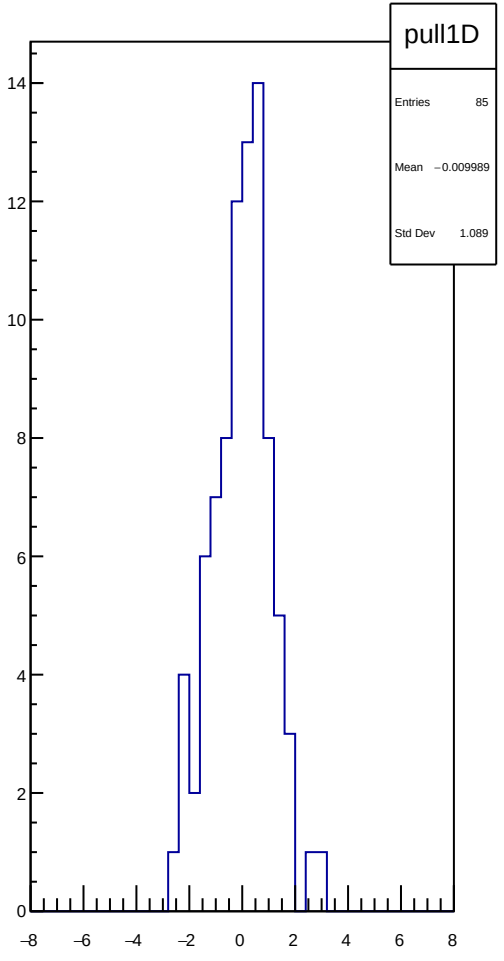

asym_at1_avg_correction_rms vs run
χ² / ndf 1.816e+05 / 84
p0 717.2 ± 0.5936
1000
800
600
400
200

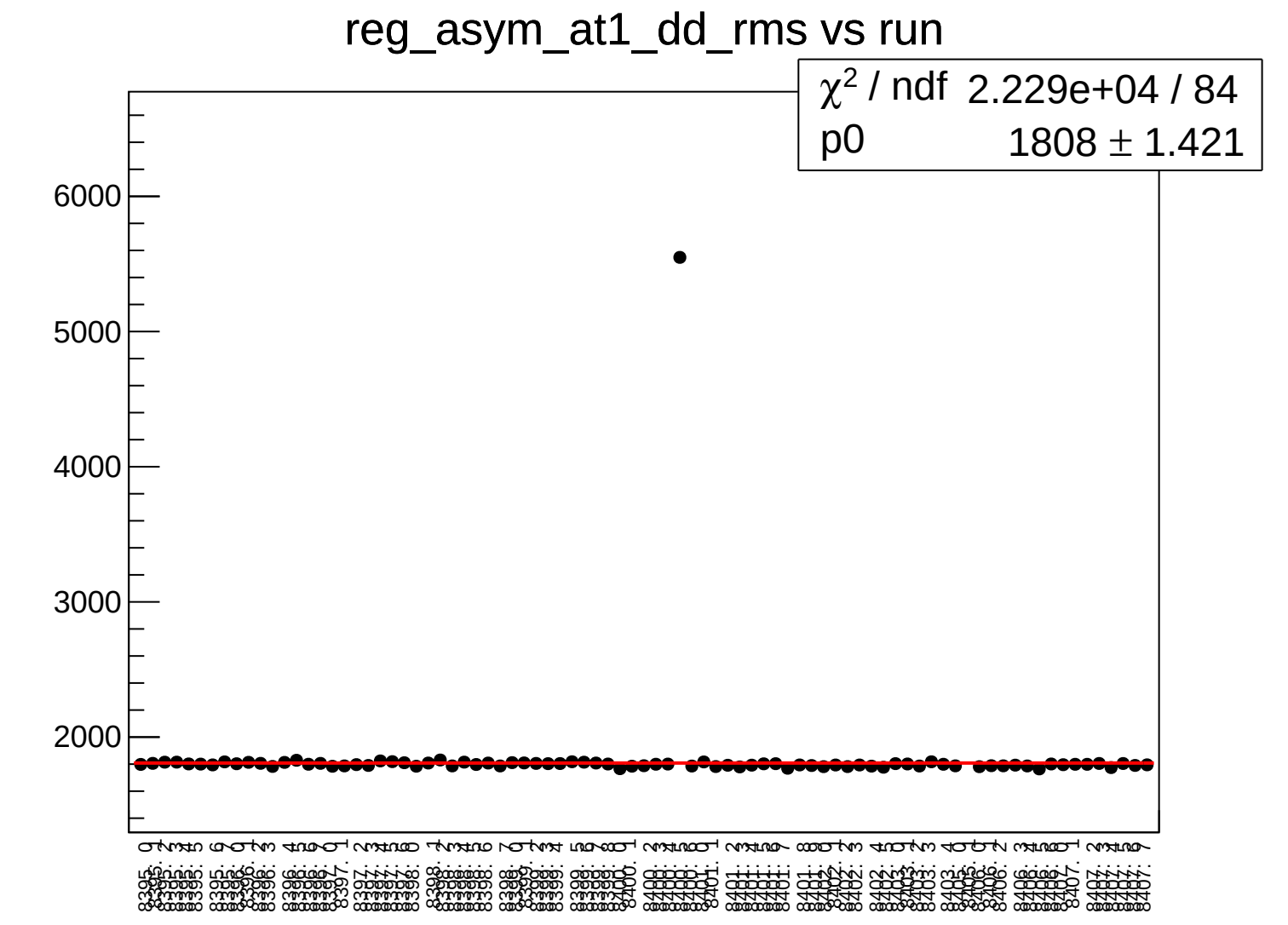

asym_at1_avg_mean vs run
×10^3
χ² / ndf 105.1 / 84
p0 450.7 ± 2229
50
0
−50
−100
−150
pull
Entries 85
Mean −87.23
Std Dev 132.9
2
1
0
−1
−2
−3

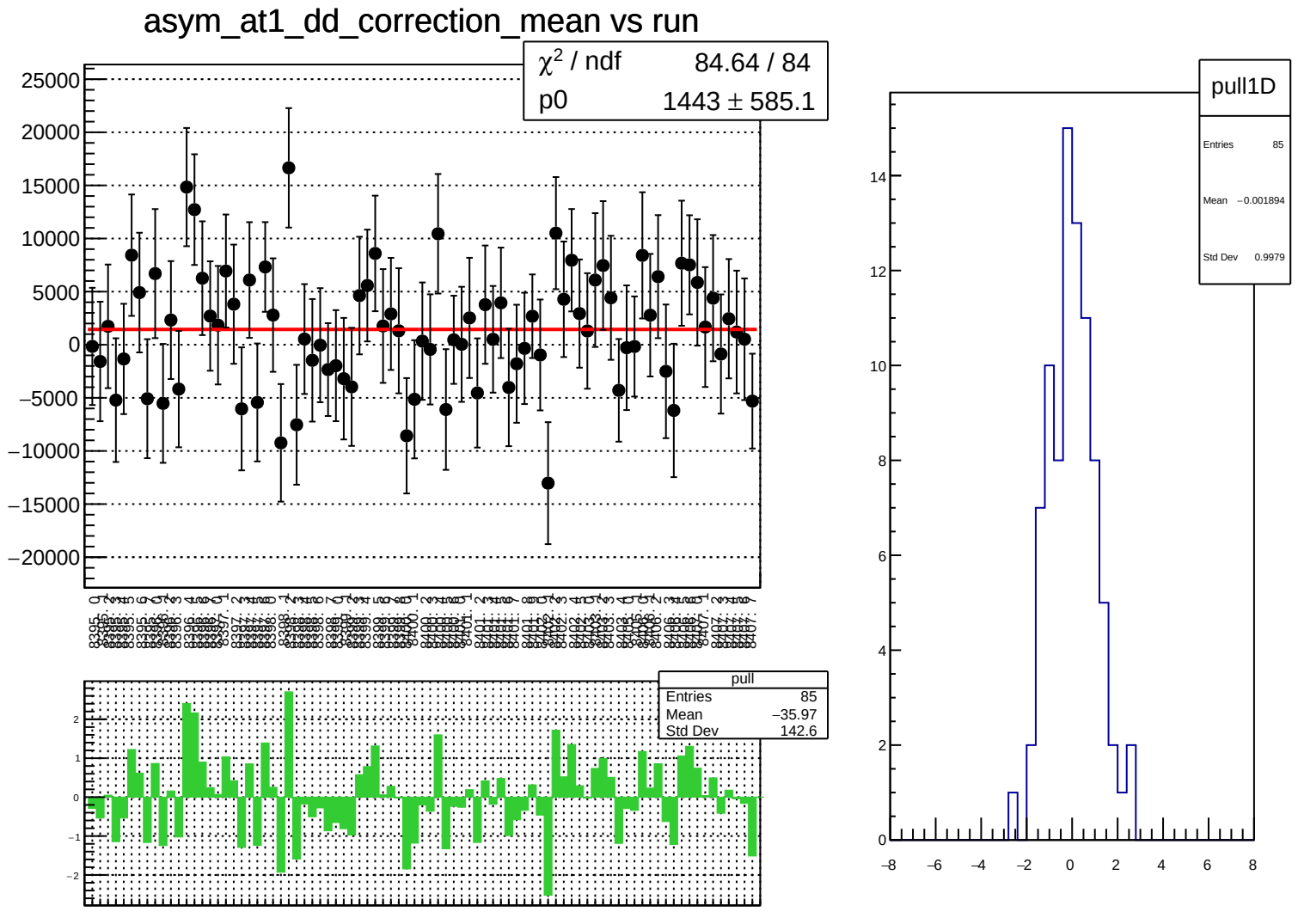

pull1D
Entries 85
Mean −0.03168
Std Dev 1.111
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

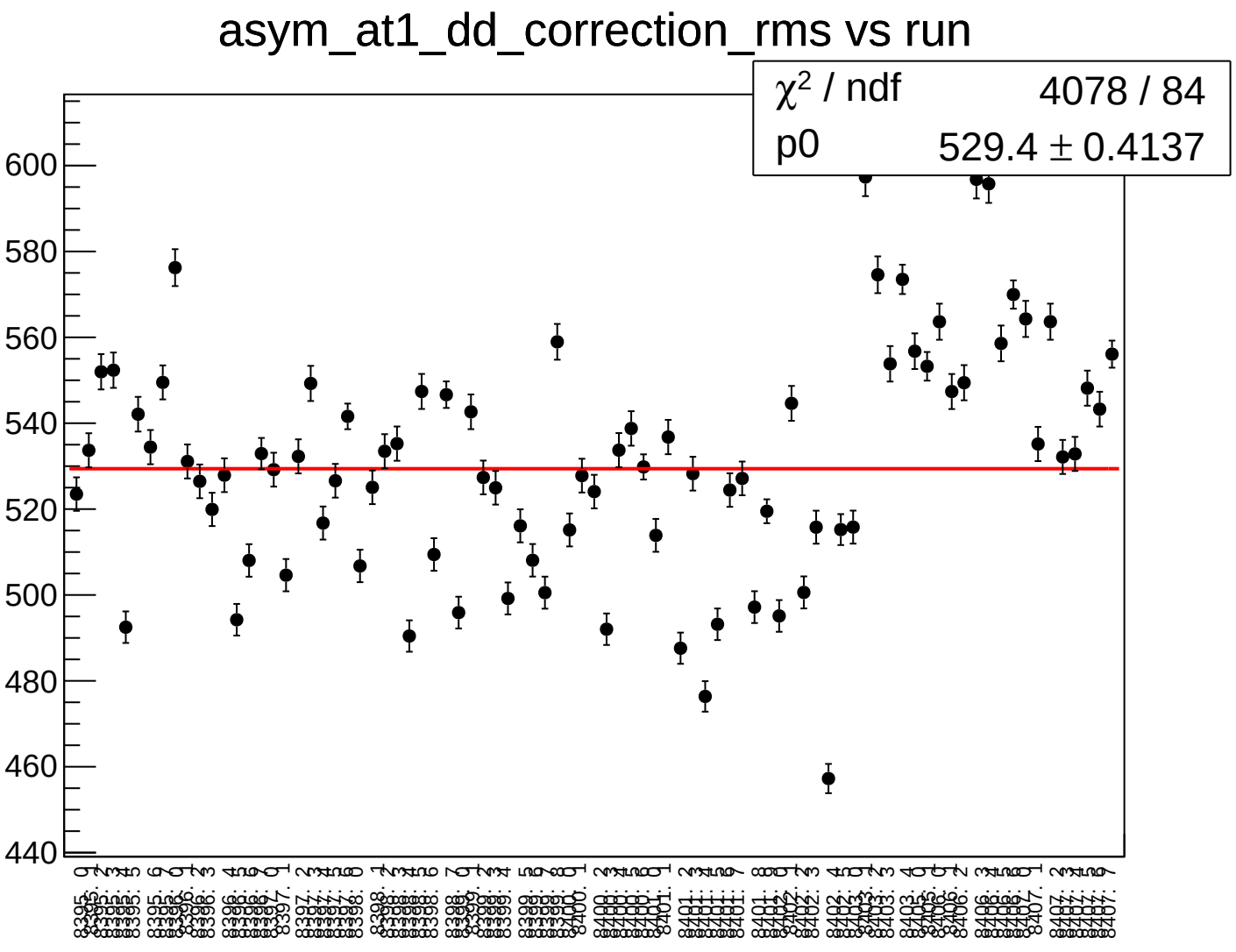

asym_at1_avg_rms vs run
χ² / ndf 2.159e+04 / 84
p0 2006 ± 1.576
6000
5000
4000
3000
2000

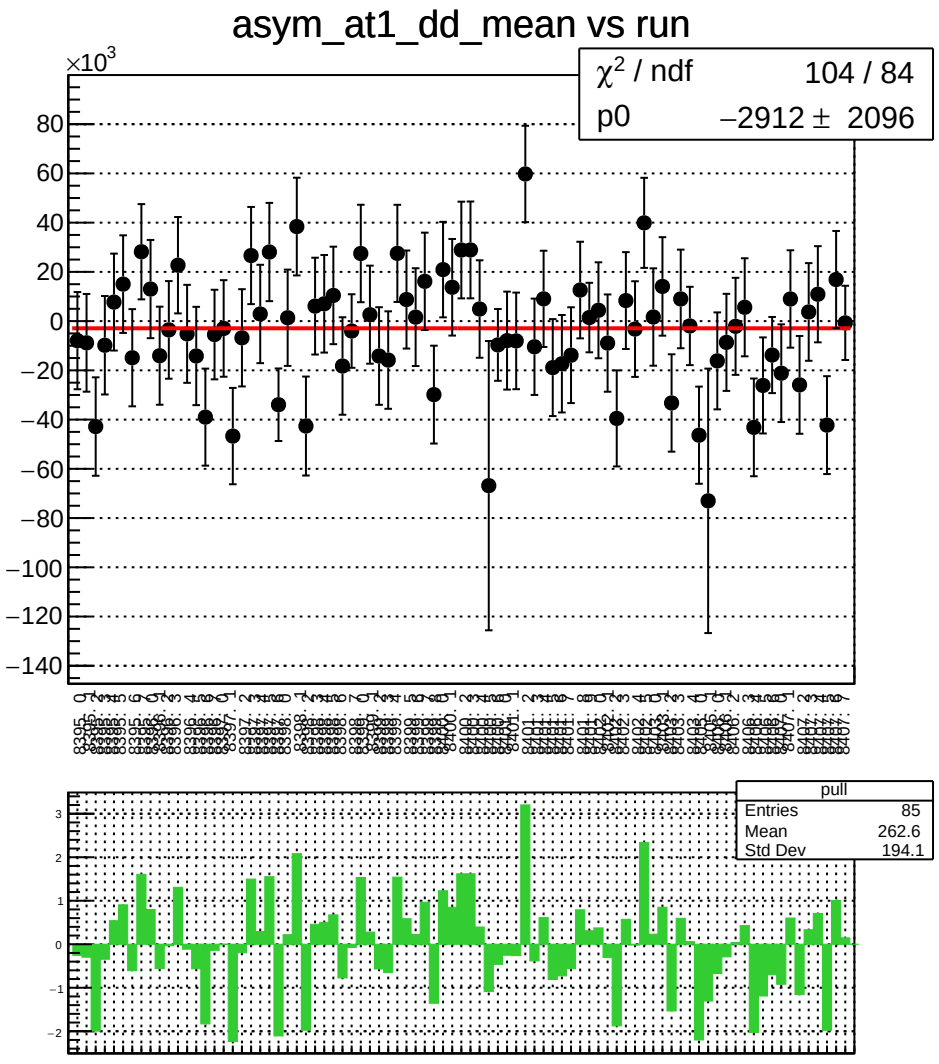

reg_asym_at1_dd_mean vs run
×10^3
χ^2 / ndf 100.8 / 84
p0 −1458 ± 2010
50
0
−50
−100
−150
pull
Entries 85
Mean 283.2
Std Dev 215.6
3
2
1
0
−1
−2

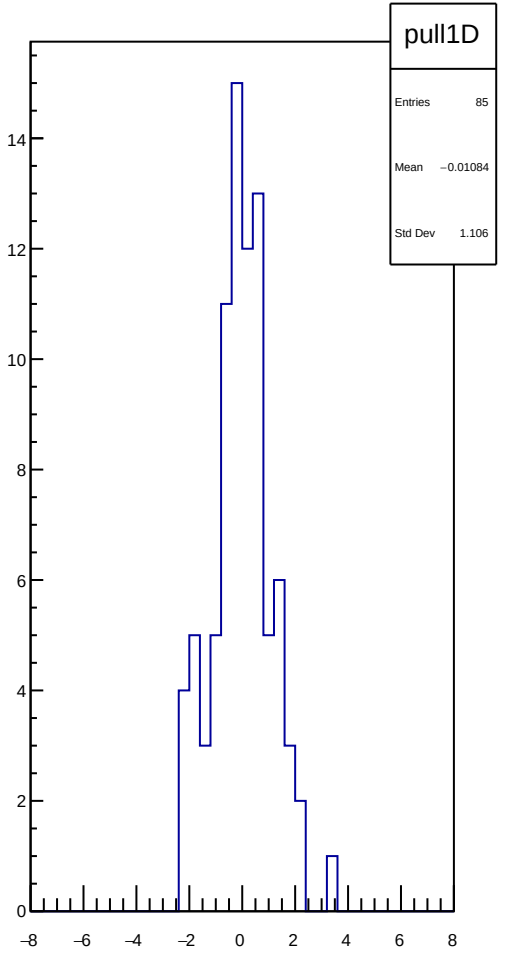

pull1D
Entries 85
Mean −0.009989
Std Dev 1.089
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

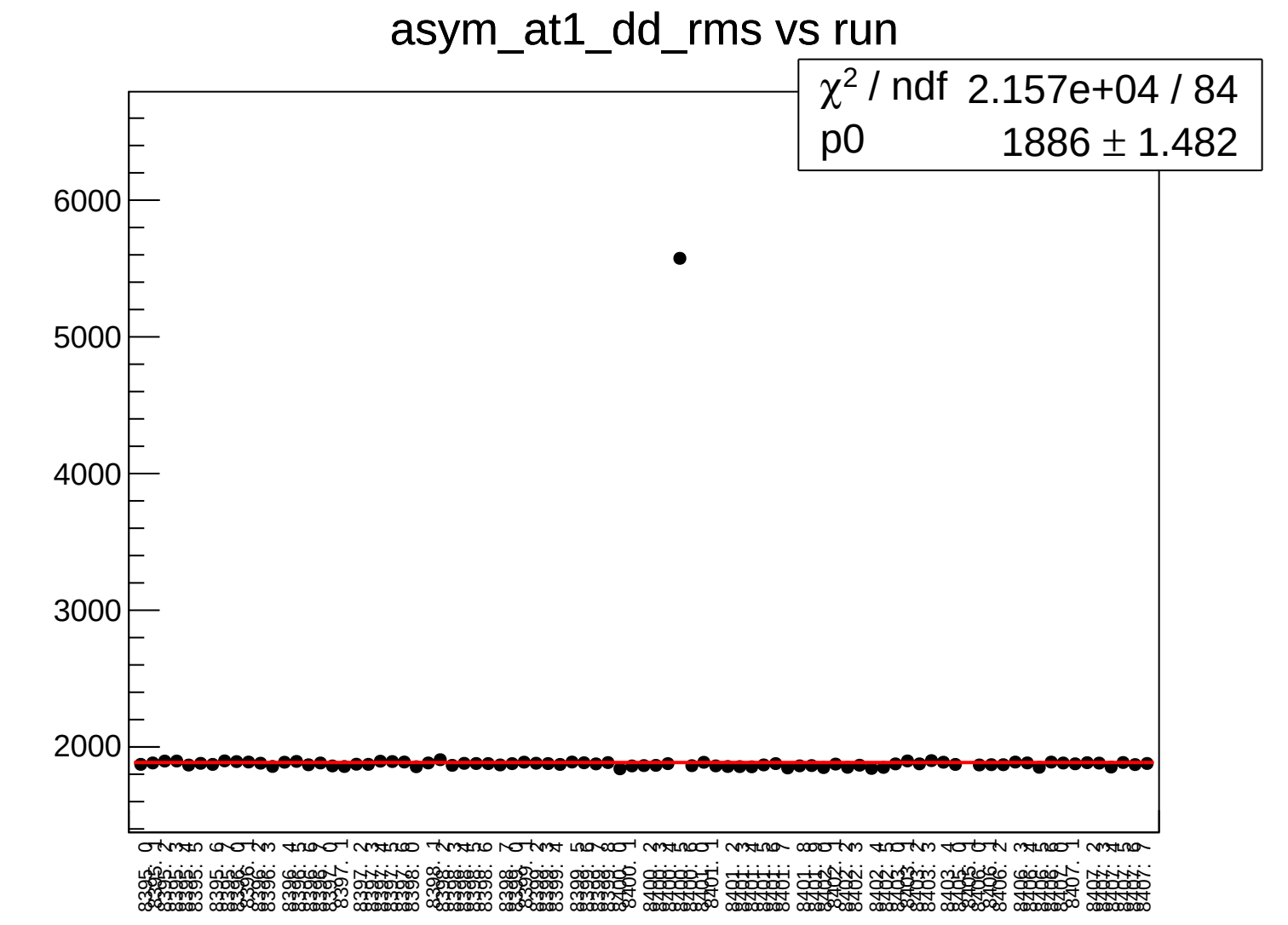

reg_asym_at1_dd_rms vs run
χ² / ndf 2.229e+04 / 84
p0 1808 ± 1.421
6000
5000
4000
3000
2000

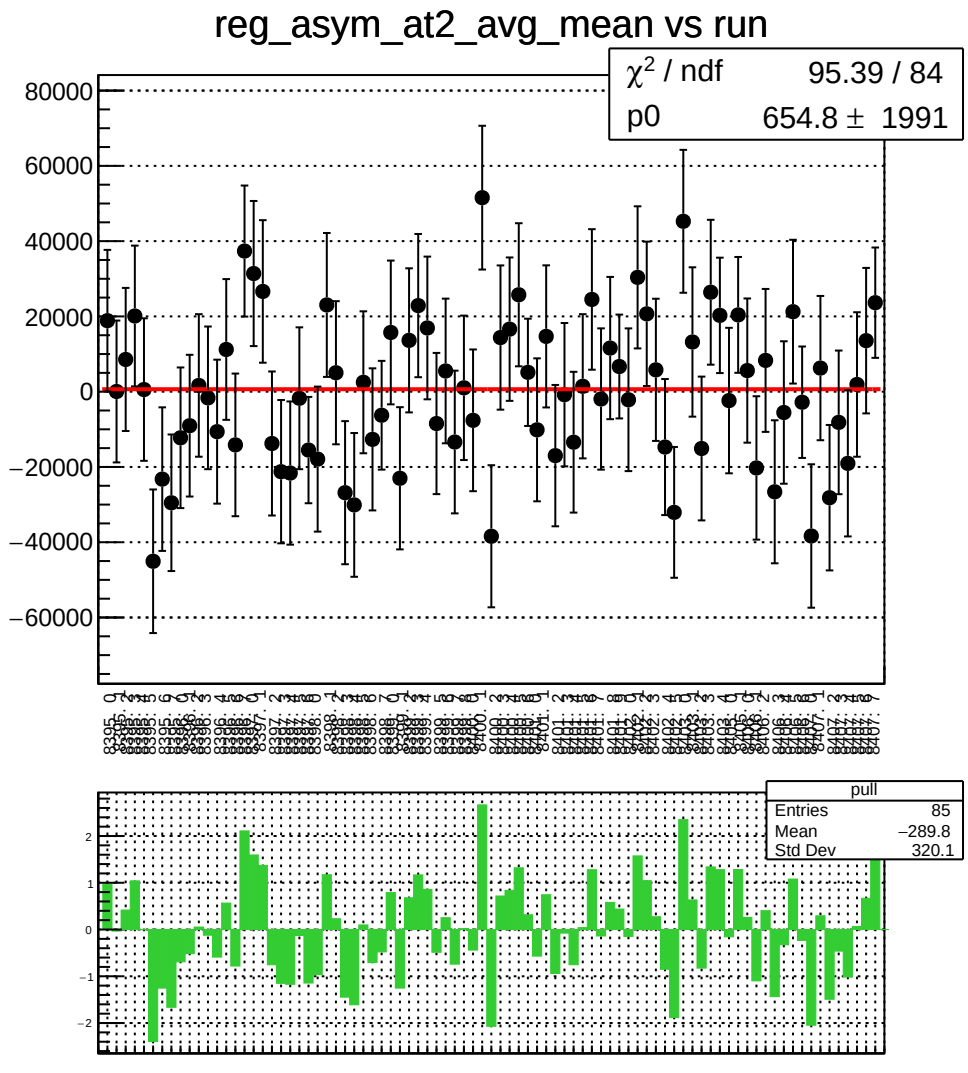

asym_at1_dd_correction_mean vs run
χ² / ndf 84.64 / 84
p0 1443 ± 585.1
pull
Entries 85
Mean −35.97
Std Dev 142.6
pull1D
Entries 85
Mean −0.001894
Std Dev 0.9979

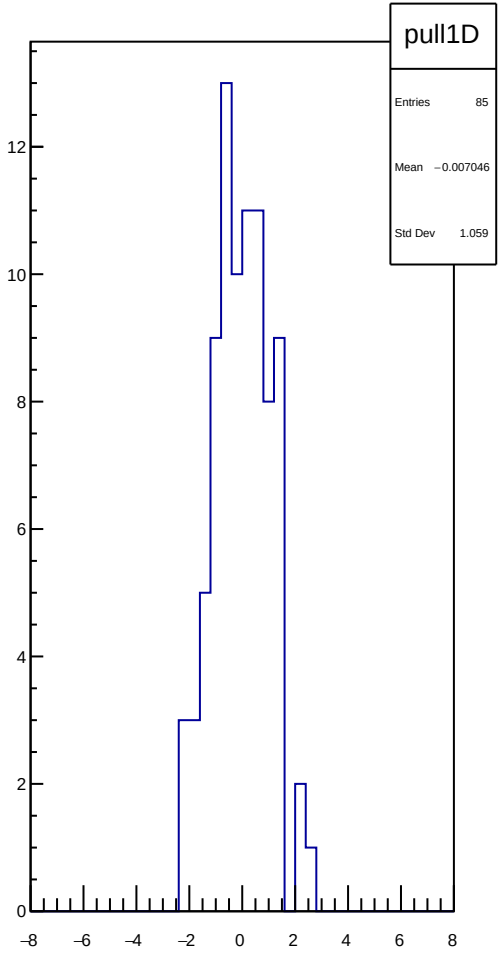

asym_at1_dd_correction_rms vs run
χ² / ndf 4078 / 84
p0 529.4 ± 0.4137
600
580
560
540
520
500
480
460
440

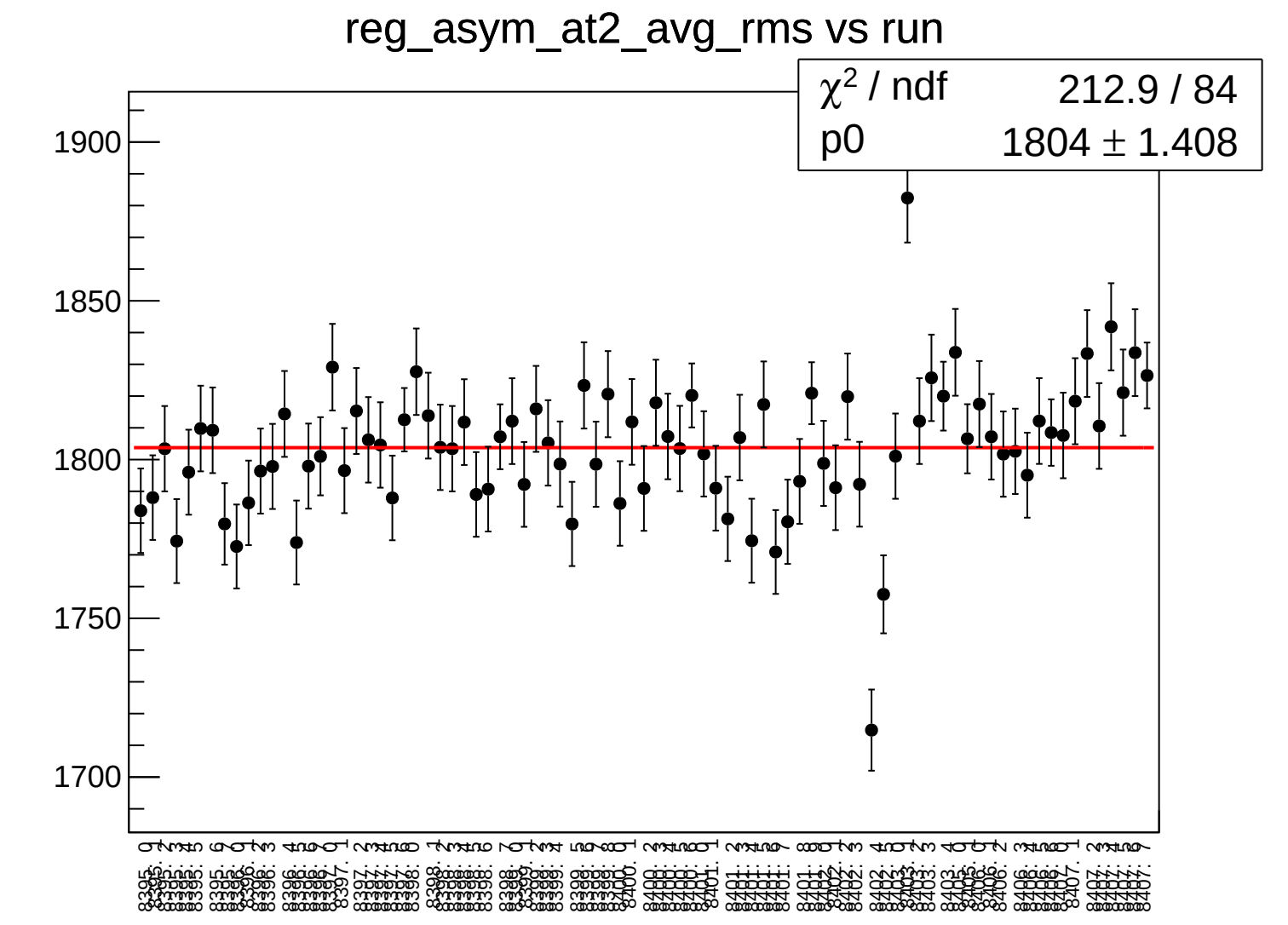

asym_at1_dd_mean vs run
×10^3
χ² / ndf 104 / 84
p0 −2912 ± 2096
pull
Entries 85
Mean 262.6
Std Dev 194.1

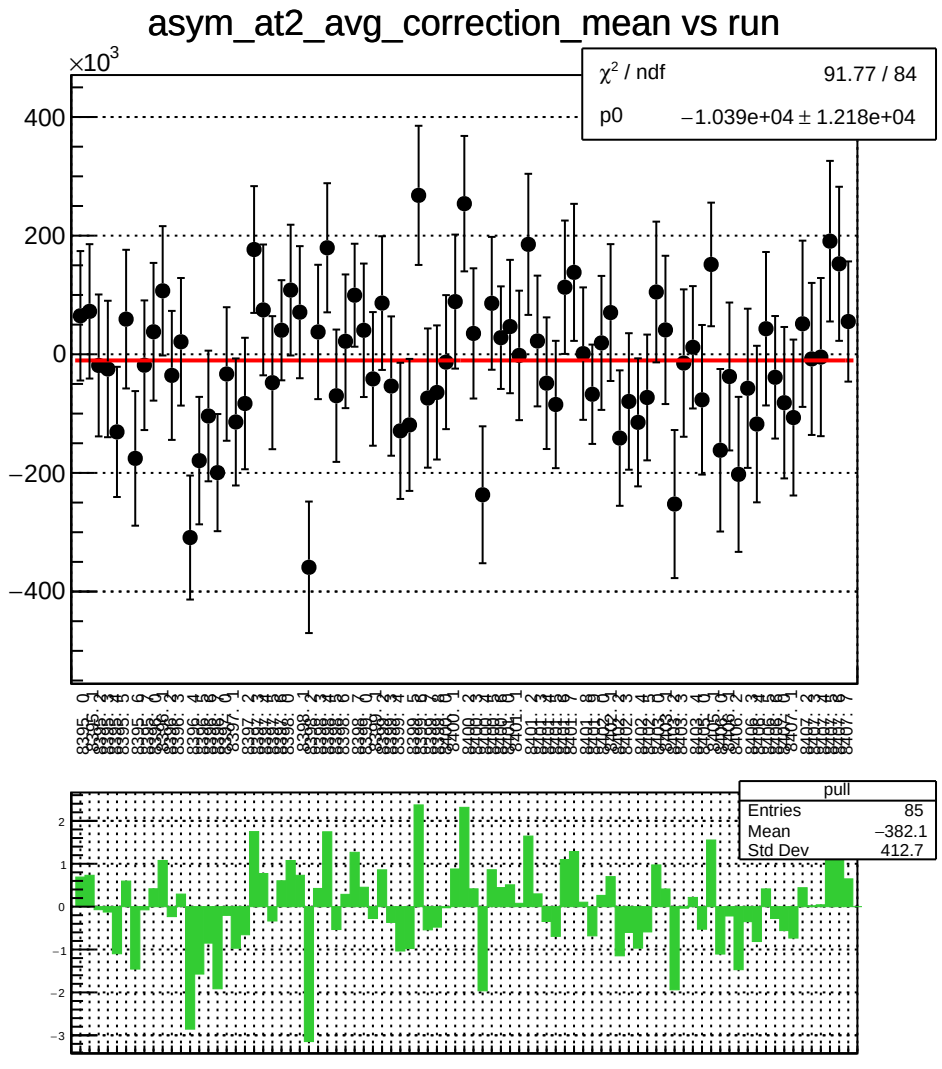

pull1D
Entries 85
Mean −0.01084
Std Dev 1.106

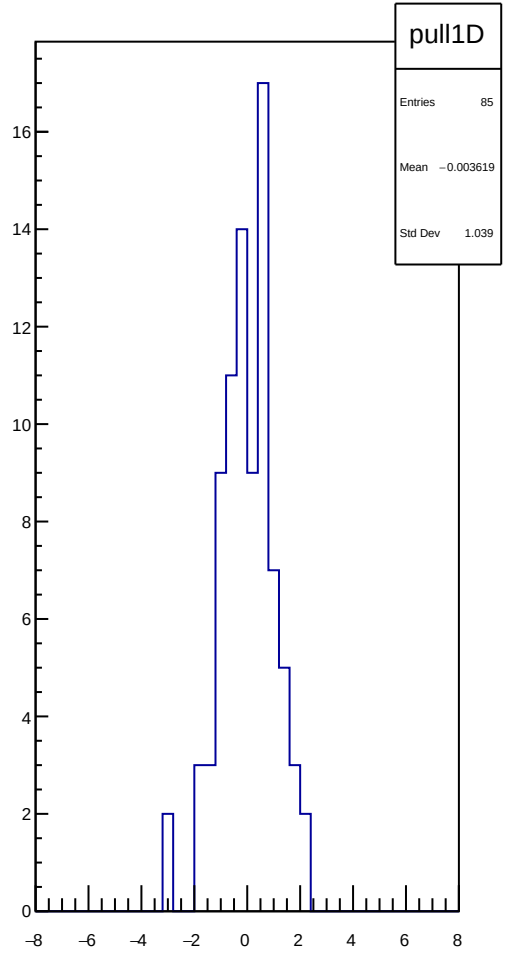

asym_at1_dd_rms vs run
χ² / ndf 2.157e+04 / 84
p0 1886 ± 1.482
6000
5000
4000
3000
2000

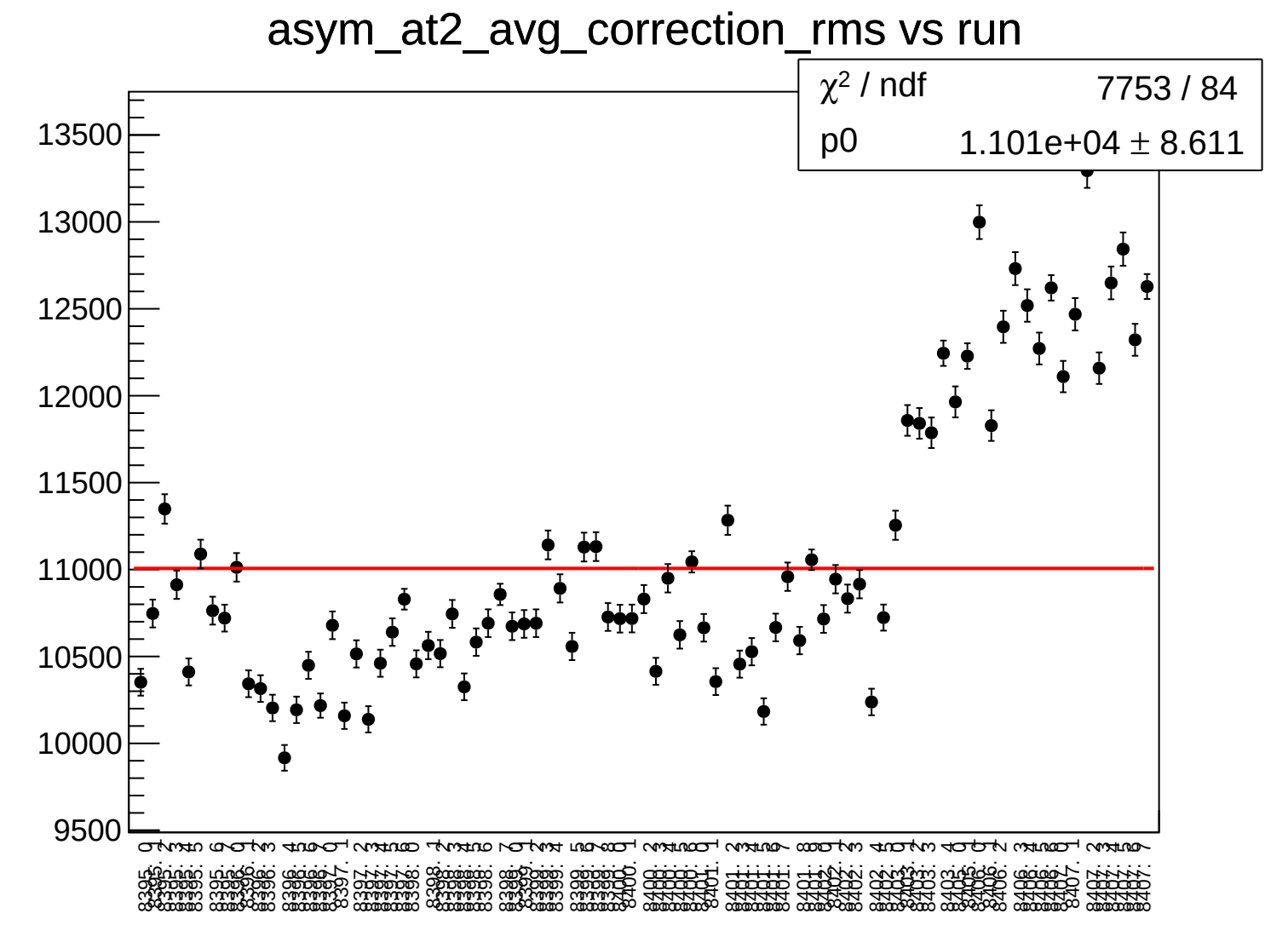

reg_asym_at2_avg_mean vs run
χ² / ndf 95.39 / 84
p0 654.8 ± 1991
pull
Entries 85
Mean −289.8
Std Dev 320.1

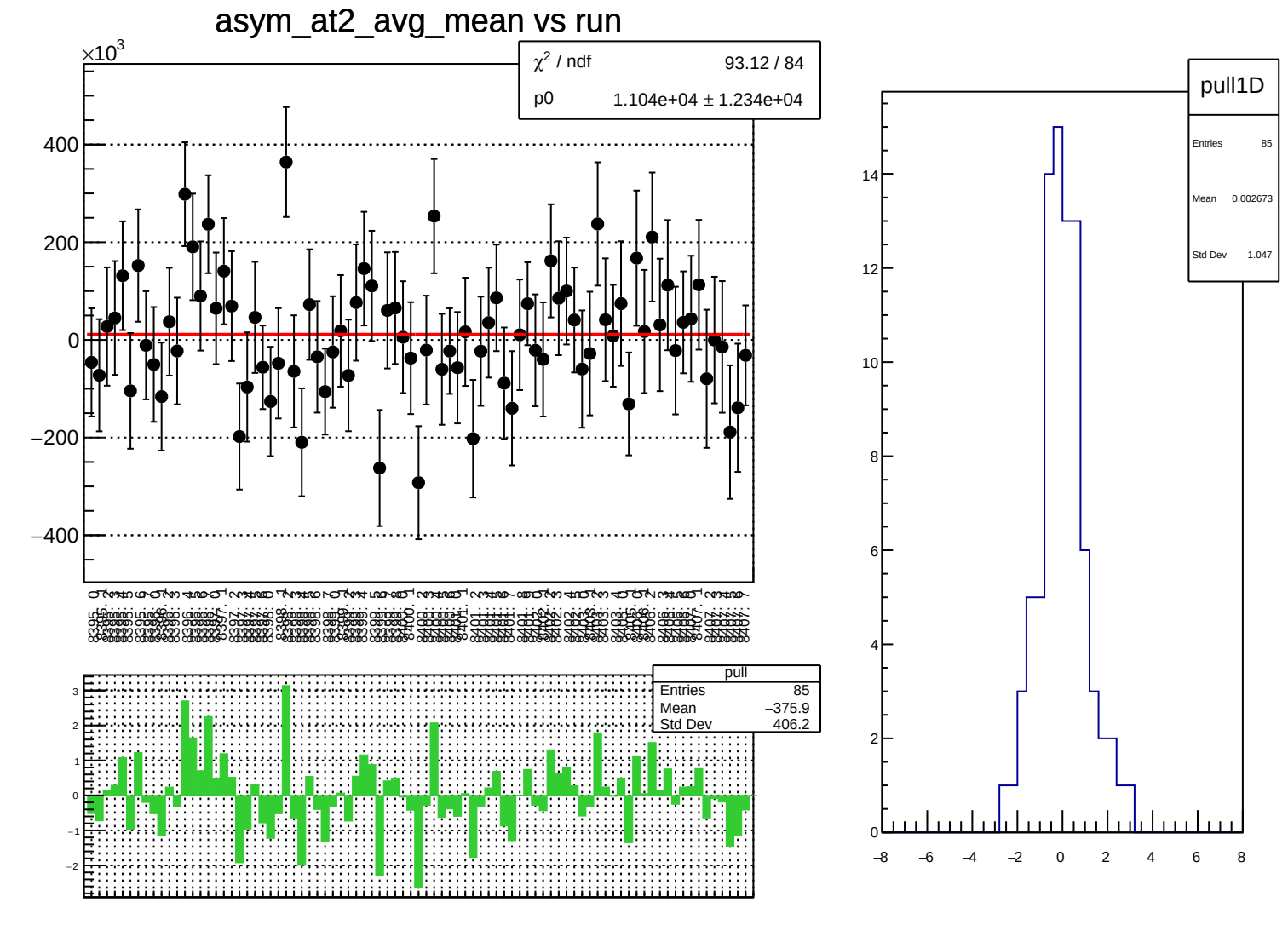

pull1D
Entries 85
Mean −0.007046
Std Dev 1.059

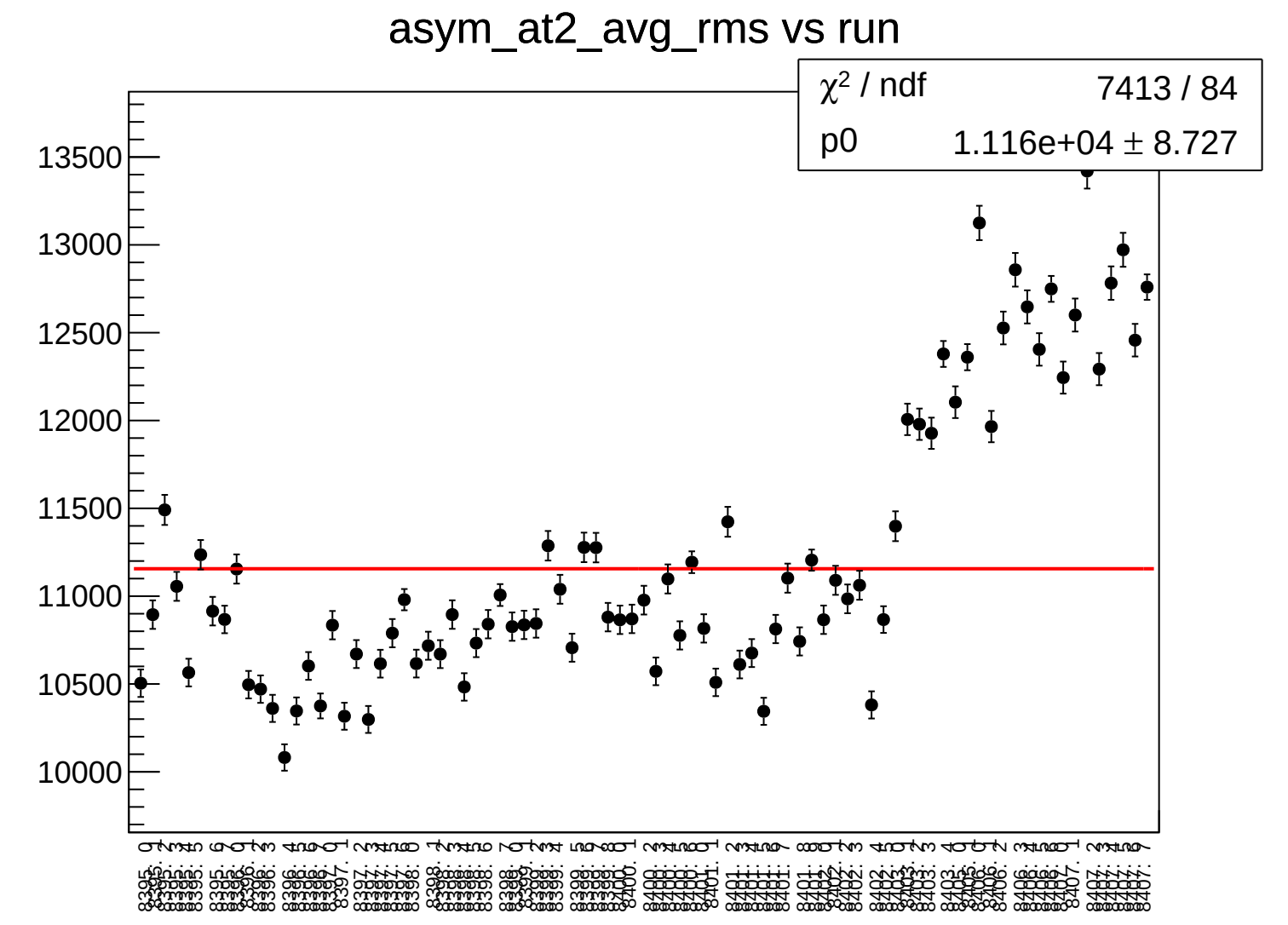

reg_asym_at2_avg_rms vs run
χ² / ndf 212.9 / 84
p0 1804 ± 1.408
1900
1850
1800
1750
1700

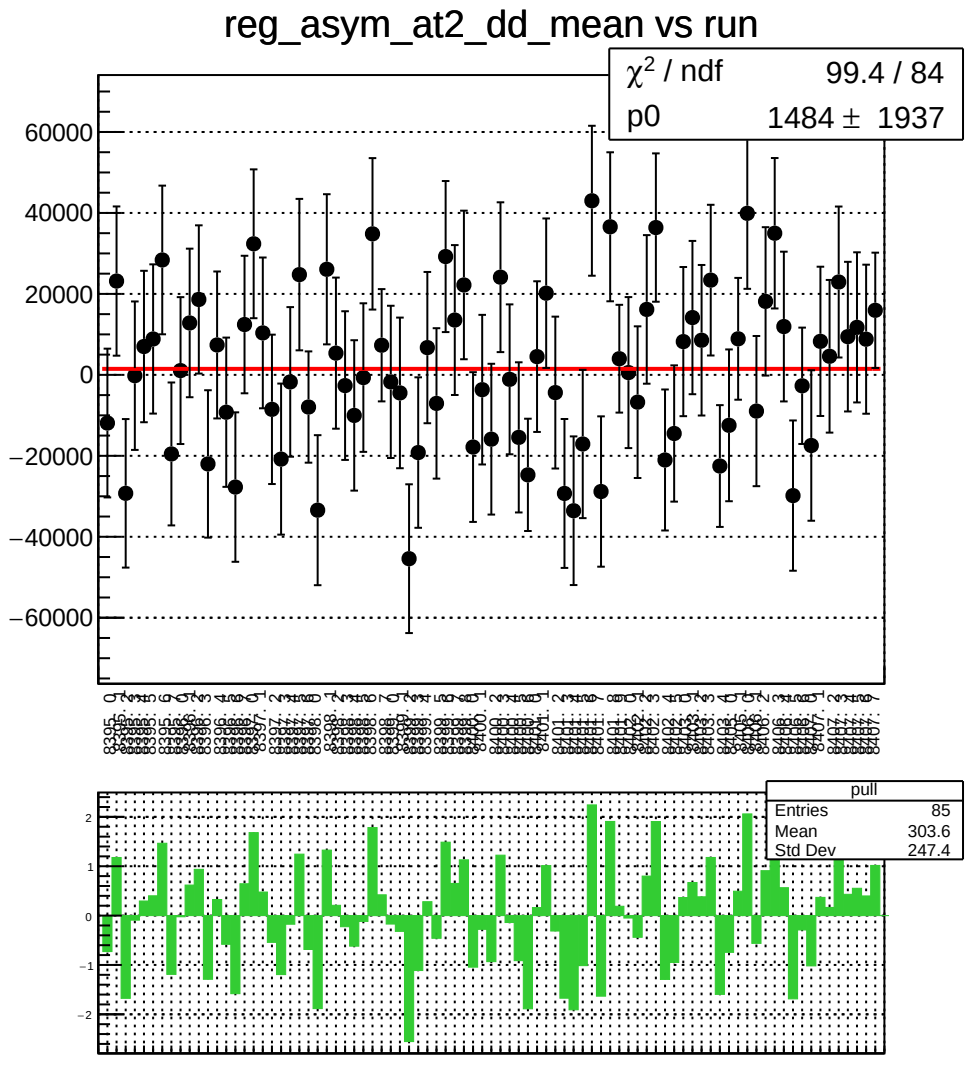

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 91.77 / 84
p0 −1.039e+04 ± 1.218e+04
400
200
0
−200
−400
pull
Entries 85
Mean −382.1
Std Dev 412.7
2
1
0
−1
−2
−3

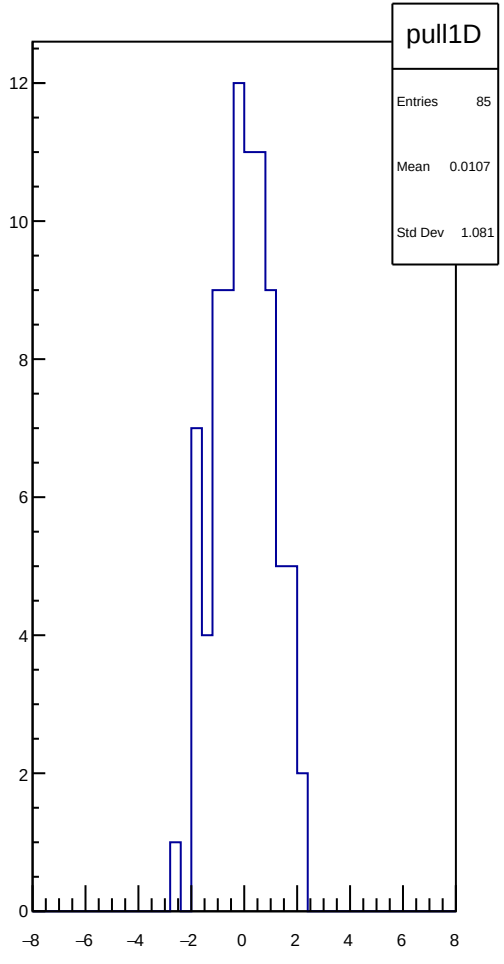

pull1D
Entries 85
Mean −0.003619
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

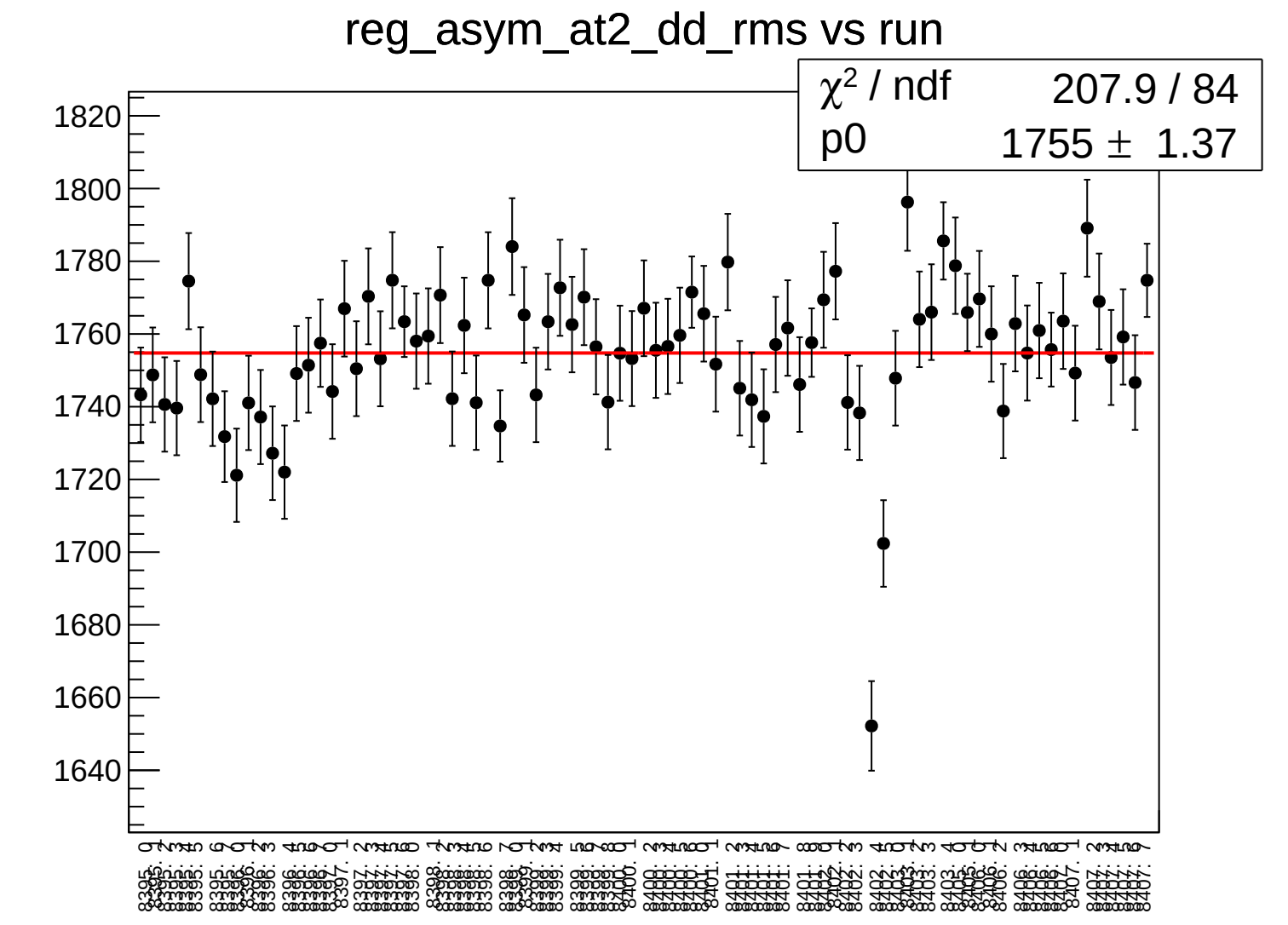

asym_at2_avg_correction_rms vs run
χ² / ndf 7753 / 84
p0 1.101e+04 ± 8.611
13500
13000
12500
12000
11500
11000
10500
10000
9500

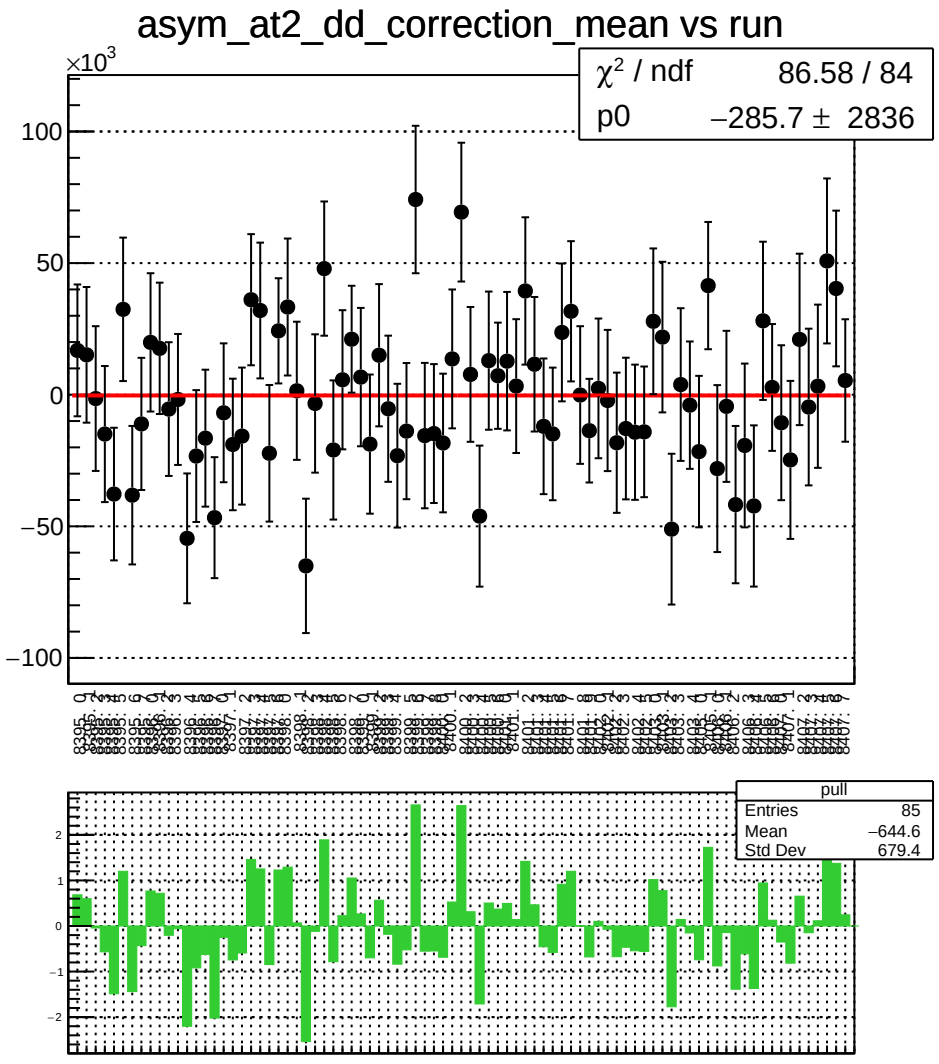

asym_at2_avg_mean vs run
×10^3
χ² / ndf 93.12 / 84
p0 1.104e+04 ± 1.234e+04
400
200
0
−200
−400
pull
Entries 85
Mean −375.9
Std Dev 406.2
3
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.002673
Std Dev 1.047
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

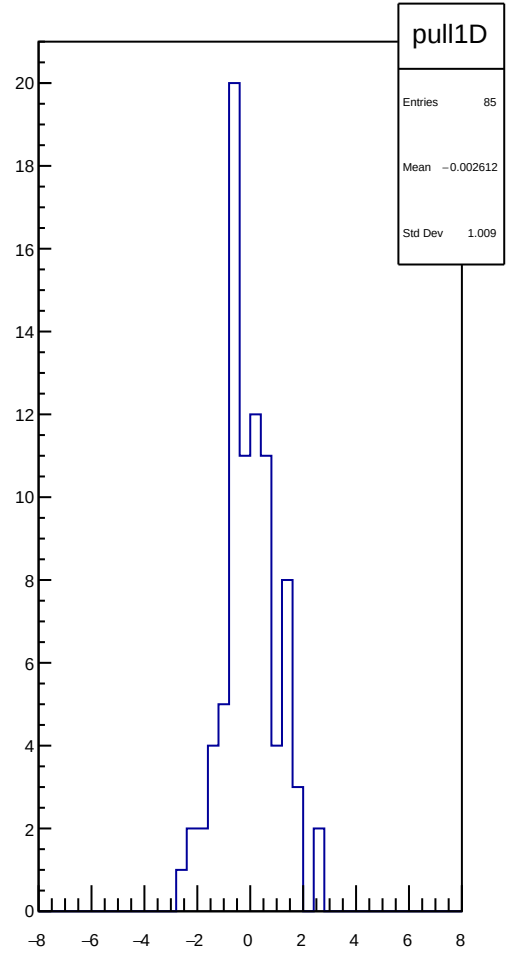

asym_at2_avg_rms vs run
χ² / ndf 7413 / 84
p0 1.116e+04 ± 8.727
13500
13000
12500
12000
11500
11000
10500
10000

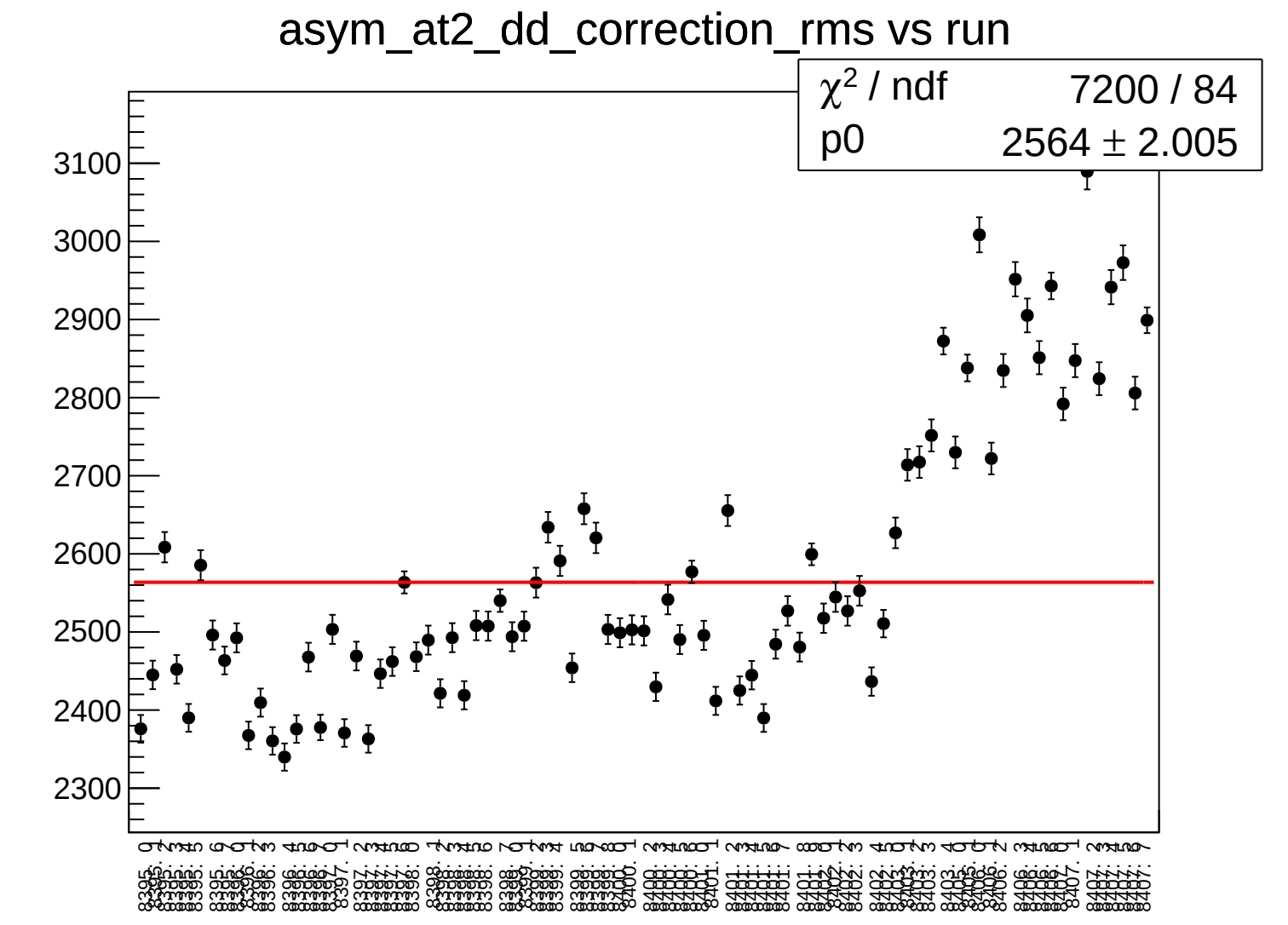

reg_asym_at2_dd_mean vs run
χ^2 / ndf 99.4 / 84
p0 1484 ± 1937
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 303.6
Std Dev 247.4
2
1
0
−1
−2

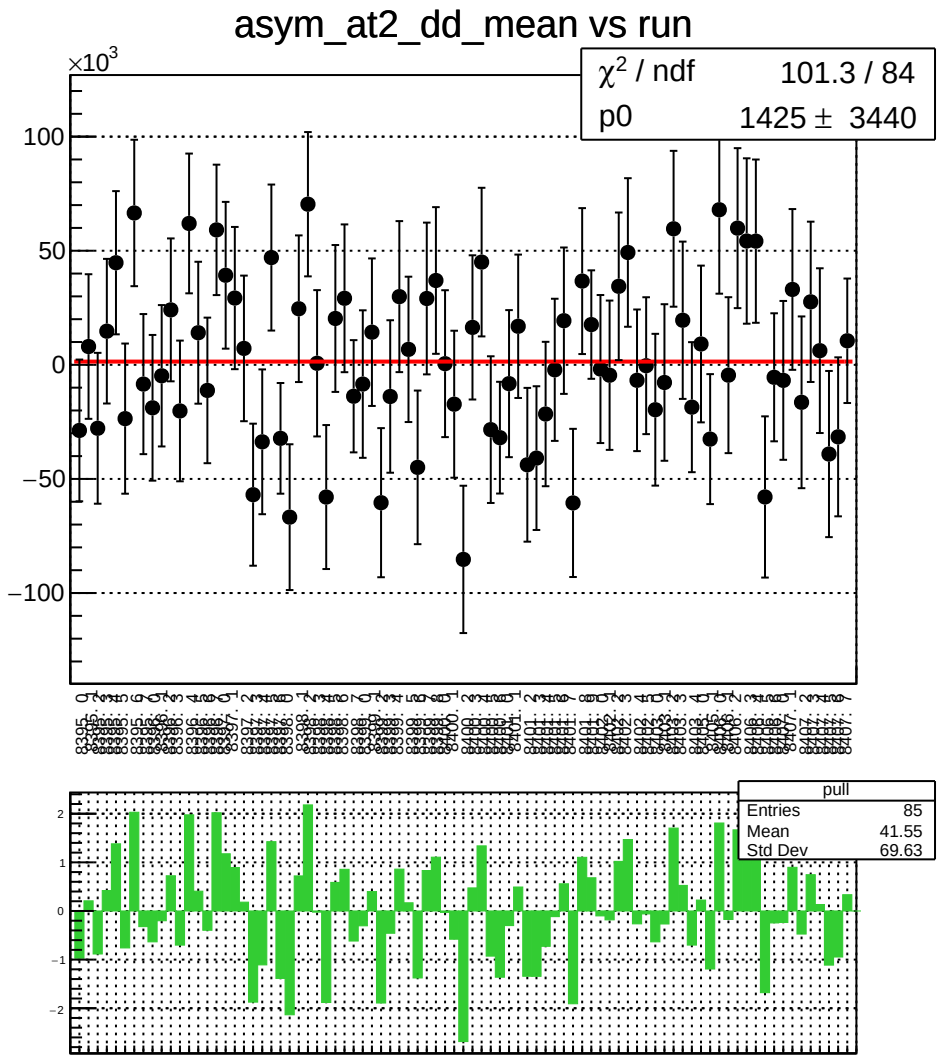

pull1D
Entries 85
Mean 0.0107
Std Dev 1.081
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

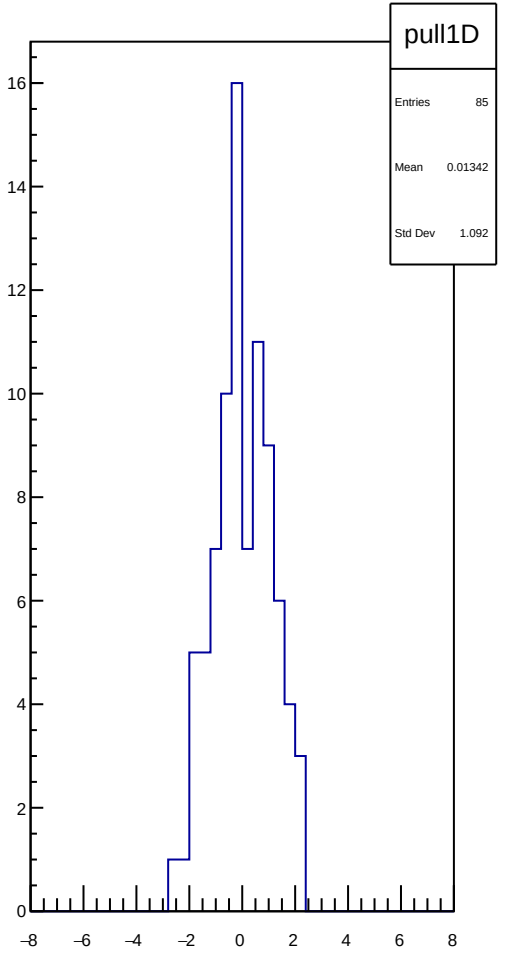

reg_asym_at2_dd_rms vs run
χ^2 / ndf 207.9 / 84
p0 1755 ± 1.37
1820
1800
1780
1760
1740
1720
1700
1680
1660
1640

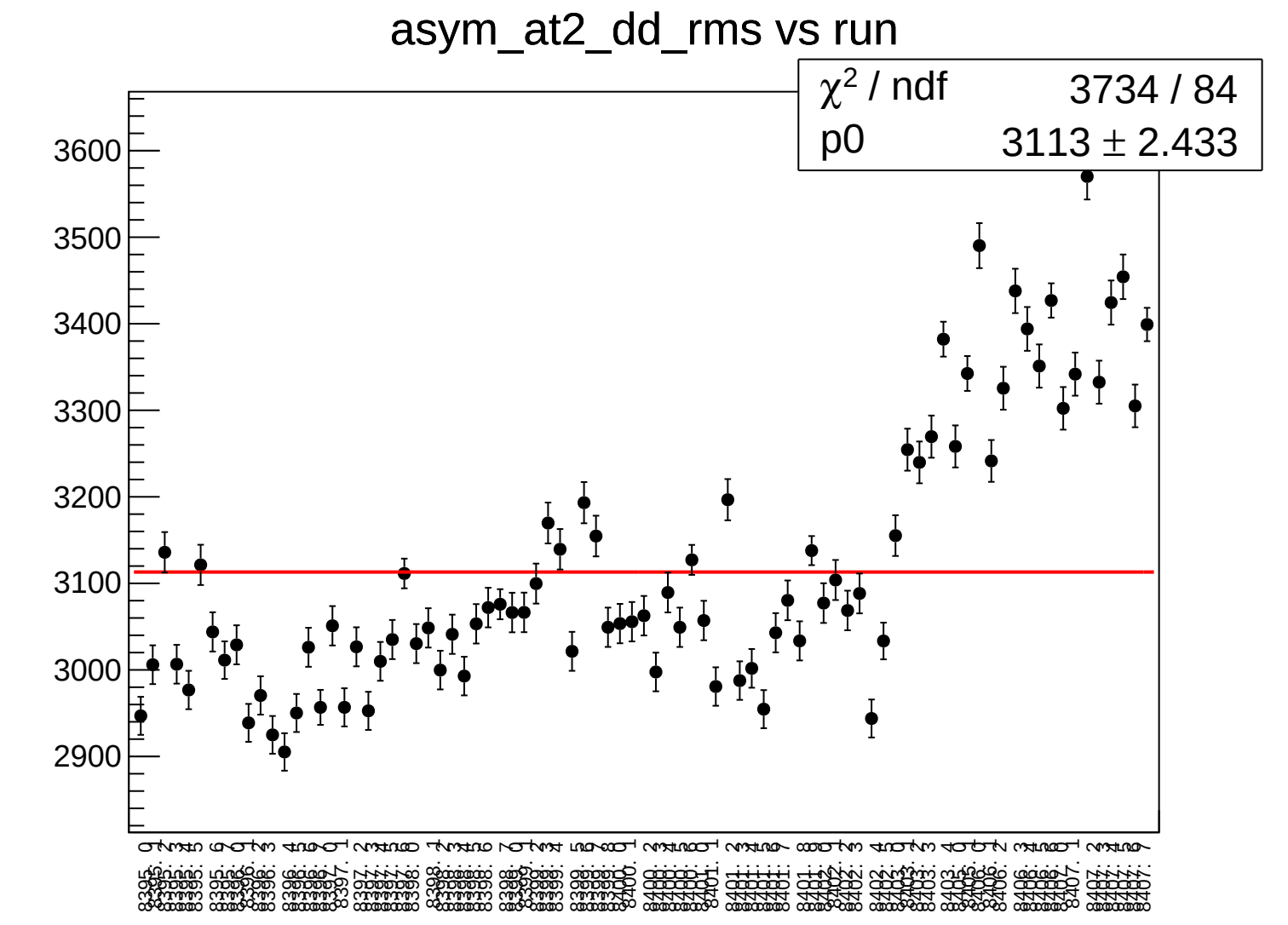

asym_at2_dd_correction_mean vs run
×10^3
χ² / ndf 86.58 / 84
p0 −285.7 ± 2836
100
50
0
−50
−100
pull
Entries 85
Mean −644.6
Std Dev 679.4
2
1
0
−1
−2

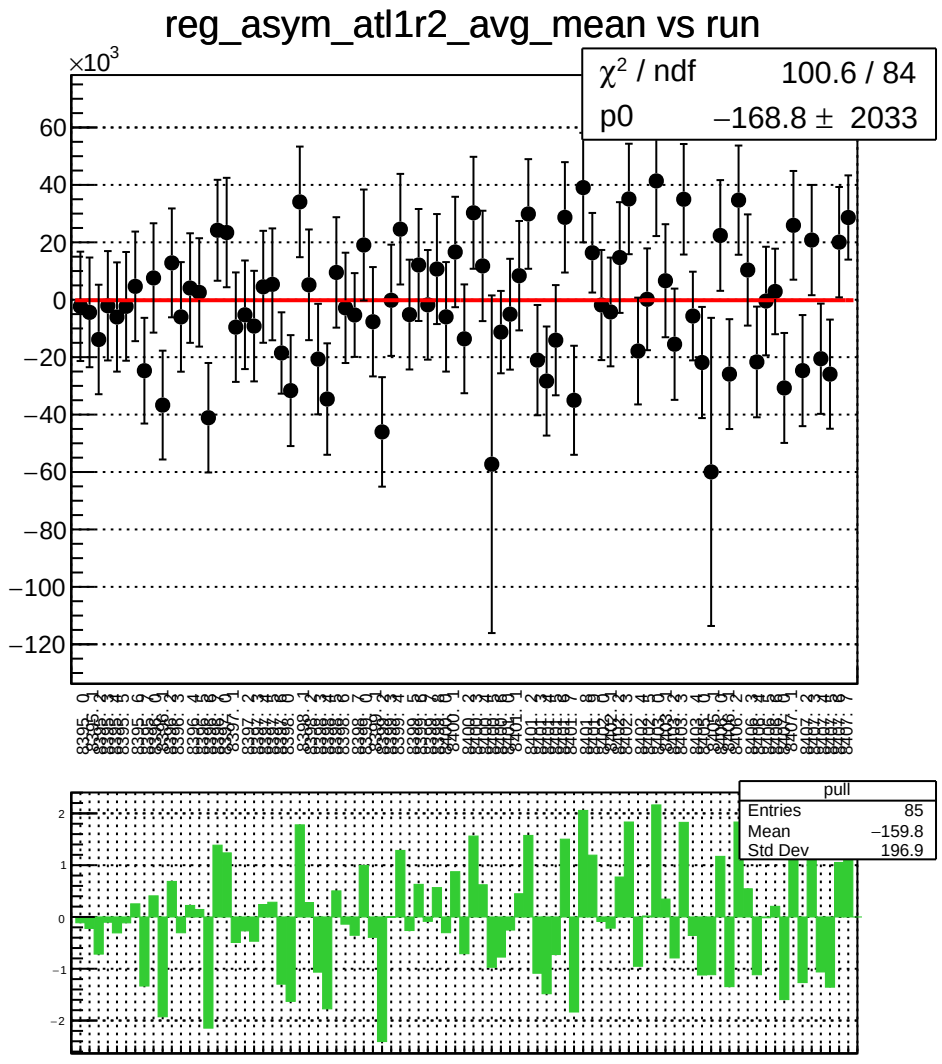

pull1D
Entries 85
Mean −0.002612
Std Dev 1.009
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

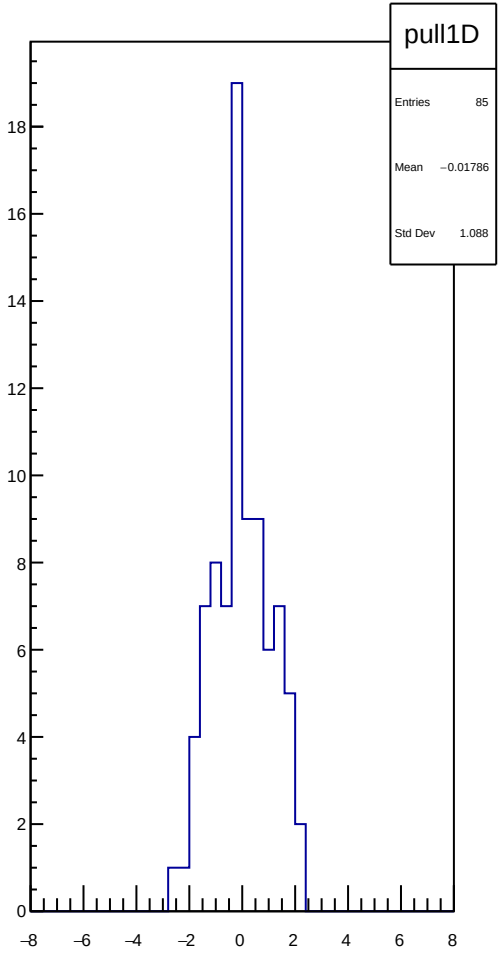

asym_at2_dd_correction_rms vs run
χ² / ndf 7200 / 84
p0 2564 ± 2.005
3100
3000
2900
2800
2700
2600
2500
2400
2300

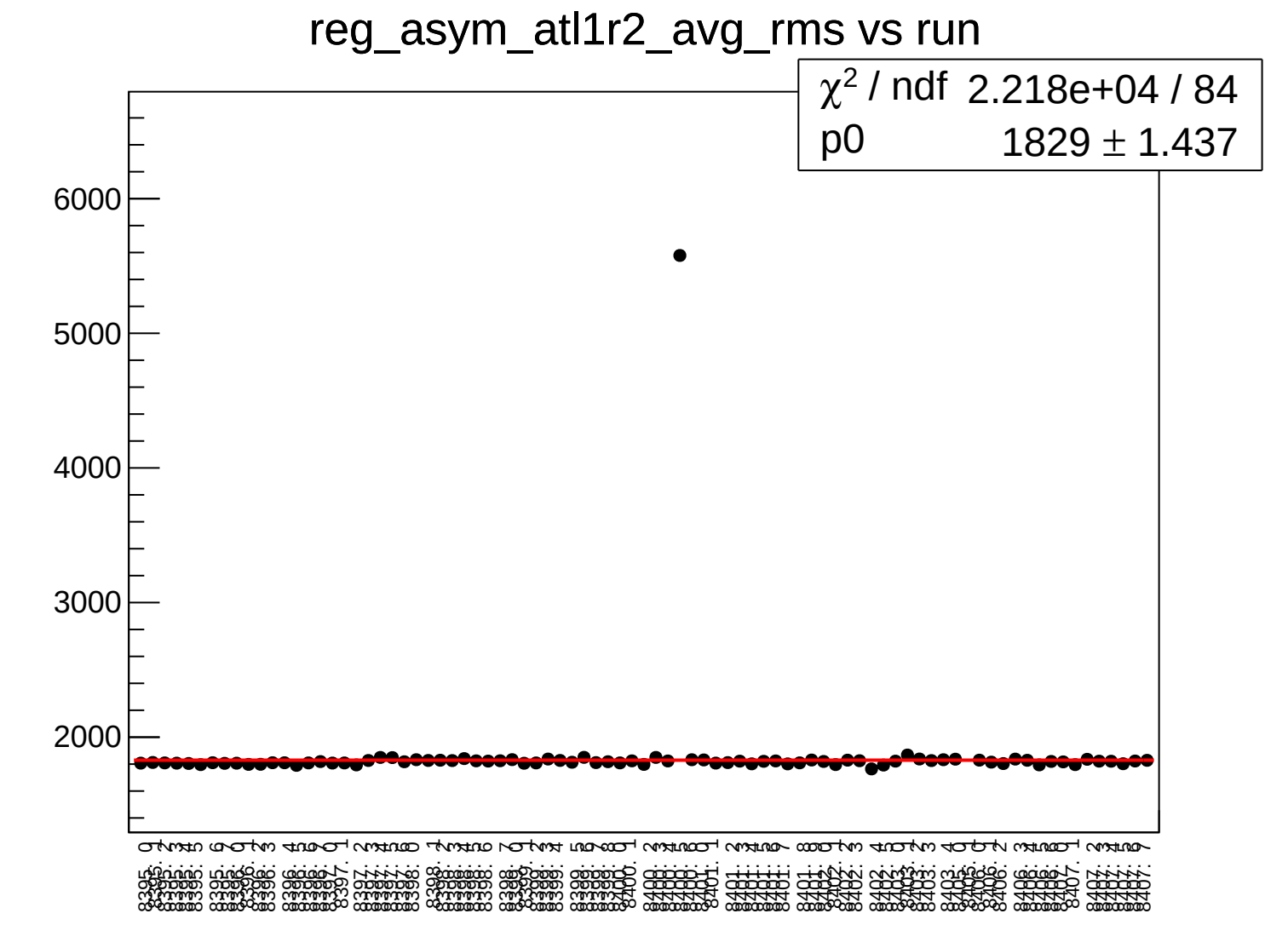

asym_at2_dd_mean vs run
×10^3
χ² / ndf 101.3 / 84
p0 1425 ± 3440
100
50
0
−50
−100
pull
Entries 85
Mean 41.55
Std Dev 69.63
2
1
0
−1
−2

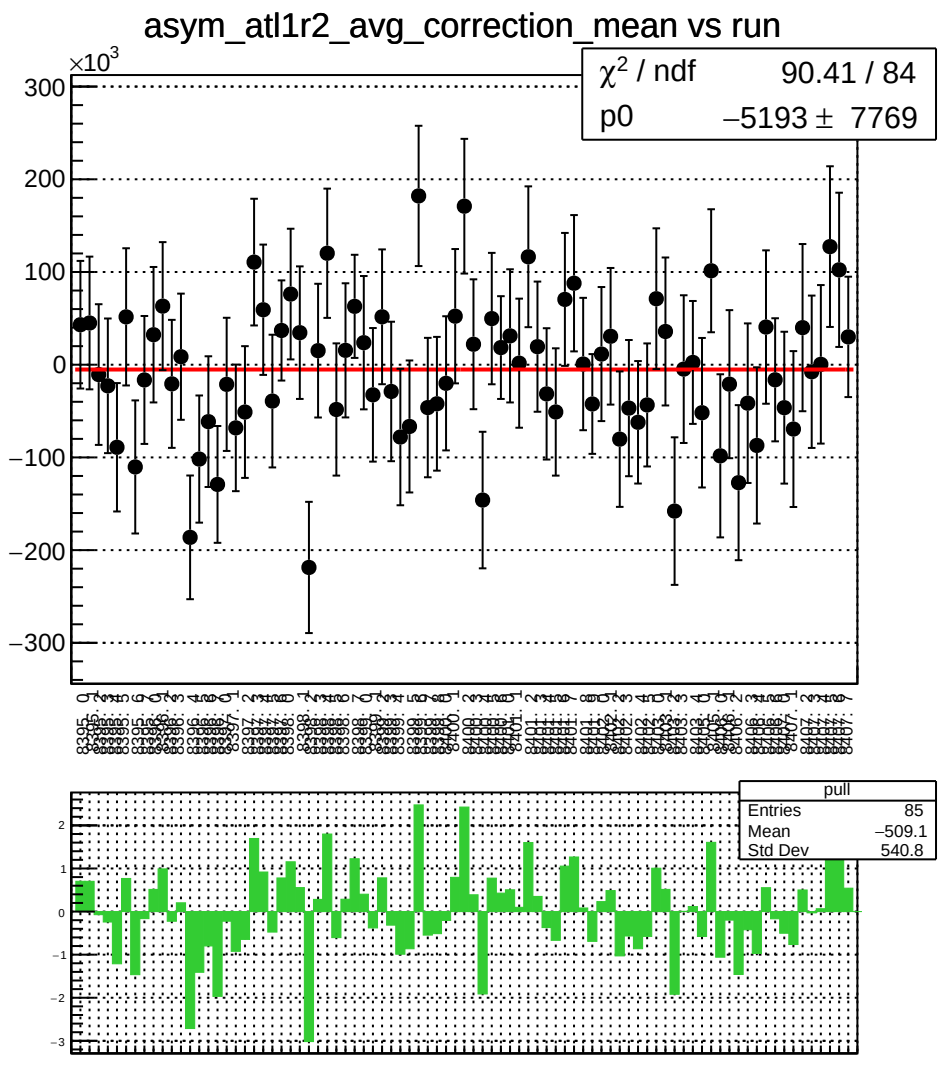

pull1D
Entries 85
Mean 0.01342
Std Dev 1.092
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

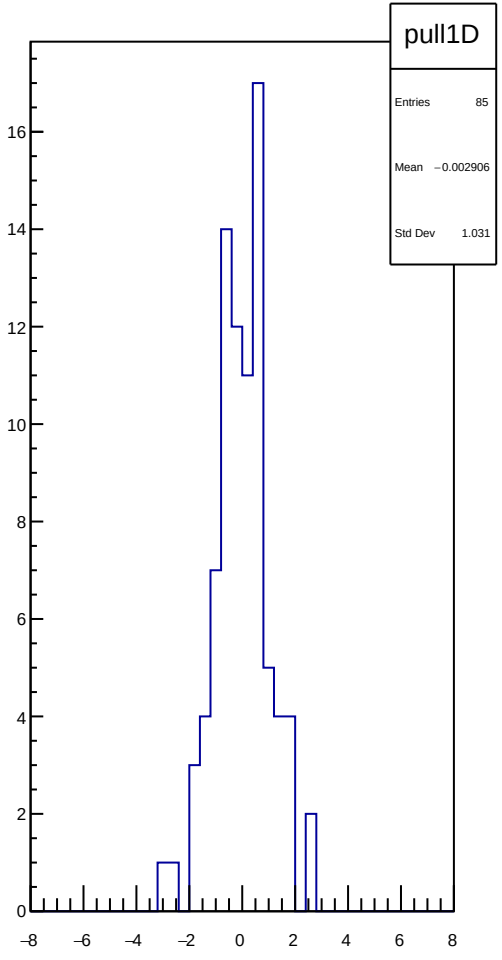

asym_at2_dd_rms vs run
χ^2 / ndf 3734 / 84
p0 3113 ± 2.433
3600
3500
3400
3300
3200
3100
3000
2900

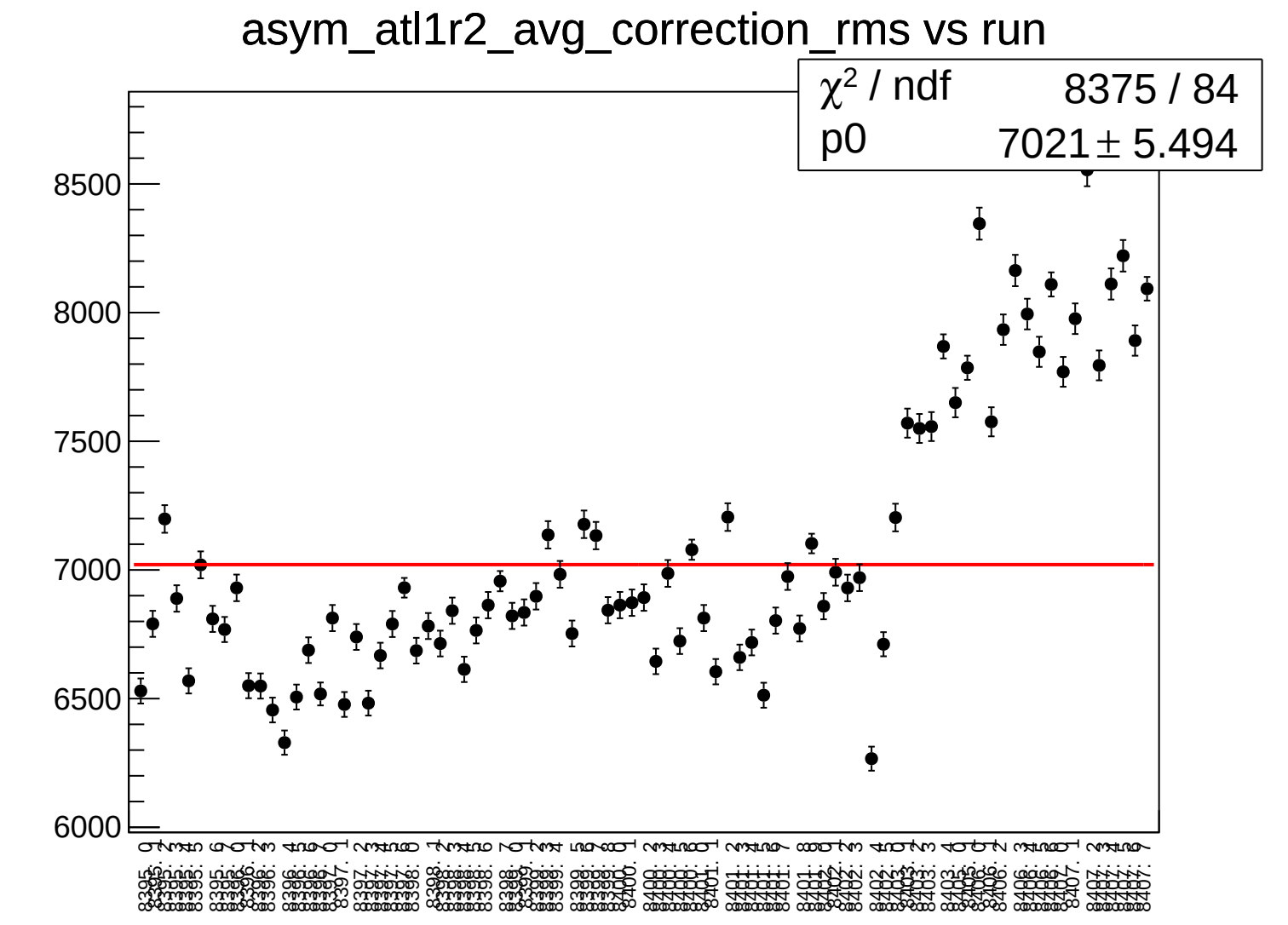

reg_asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 100.6 / 84
p0 −168.8 ± 2033
pull
Entries 85
Mean −159.8
Std Dev 196.9

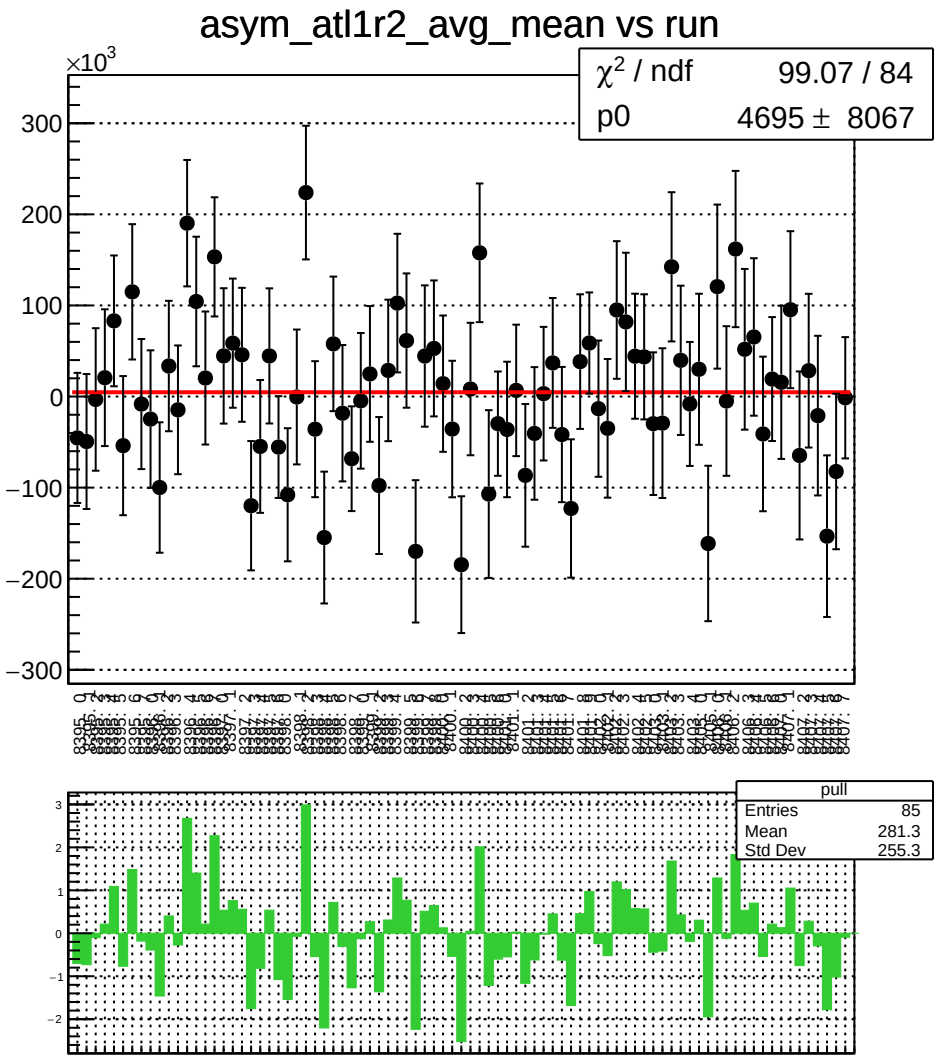

pull1D
Entries 85
Mean −0.01786
Std Dev 1.088

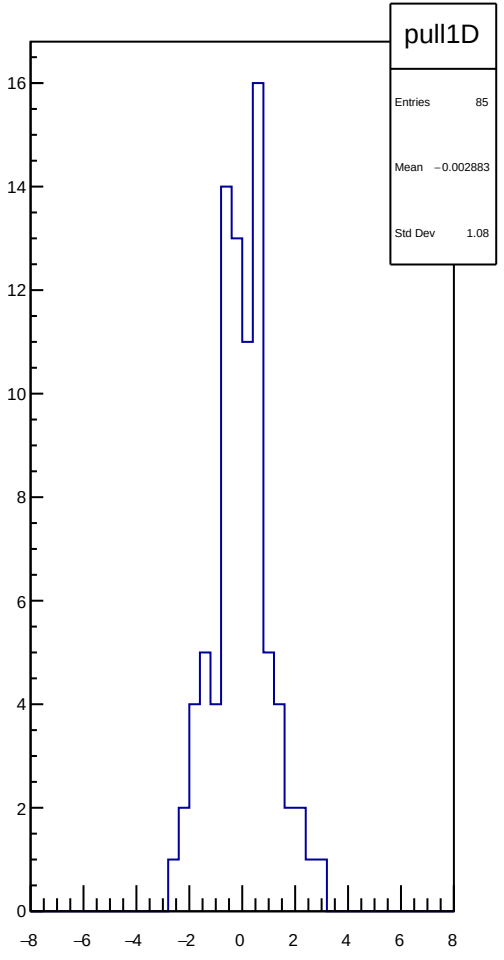

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 2.218e+04 / 84
p0 1829 ± 1.437
6000
5000
4000
3000
2000

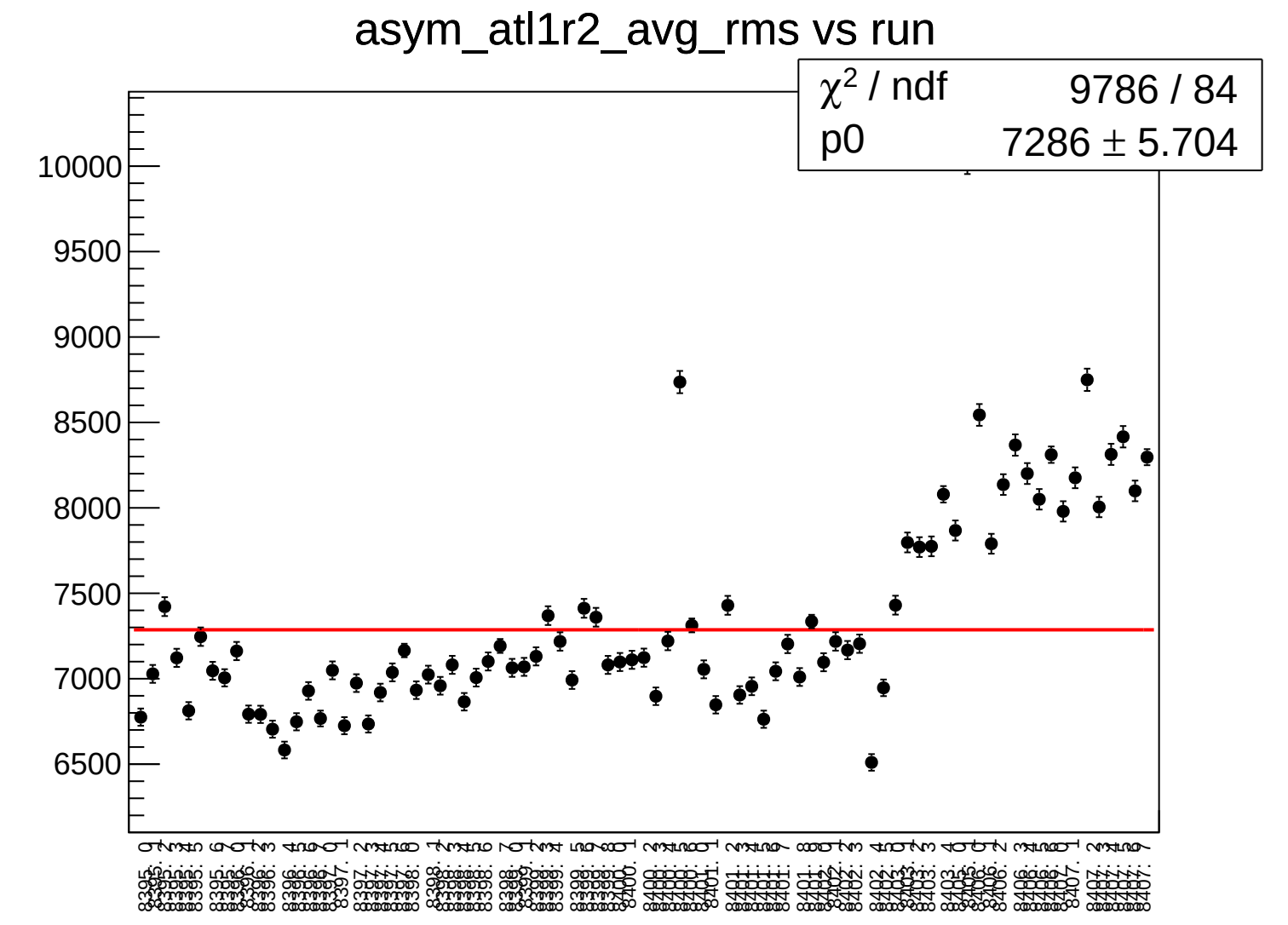

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 90.41 / 84
p0 −5193 ± 7769
pull
Entries 85
Mean −509.1
Std Dev 540.8

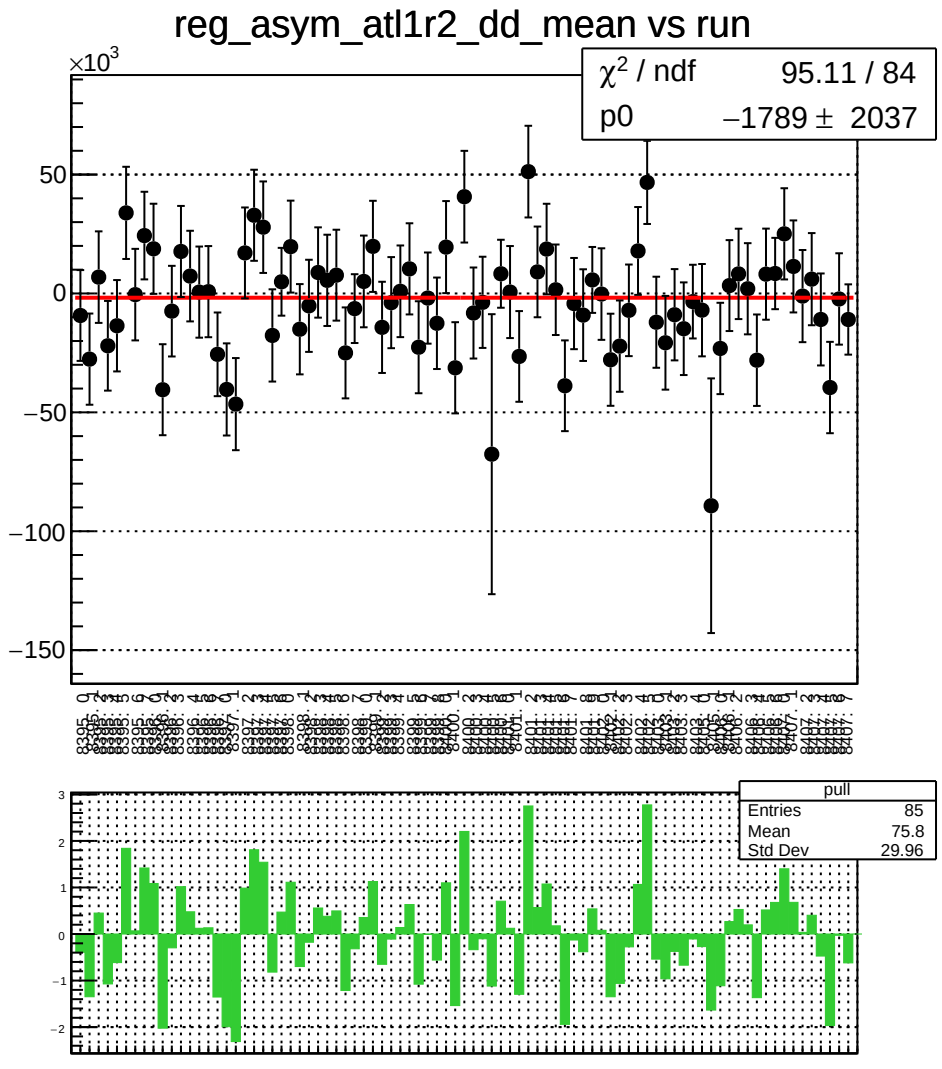

pull1D
Entries 85
Mean −0.002906
Std Dev 1.031

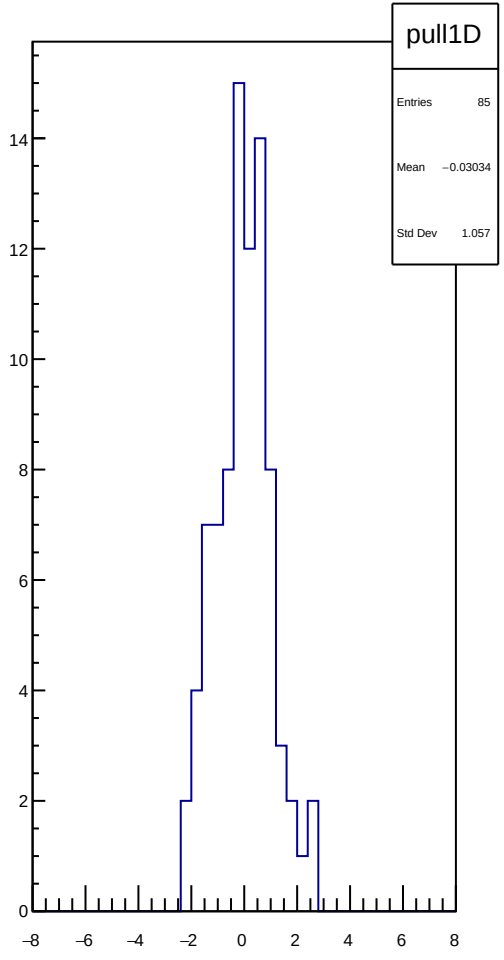

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 8375 / 84
p0 7021 ± 5.494
8500
8000
7500
7000
6500
6000

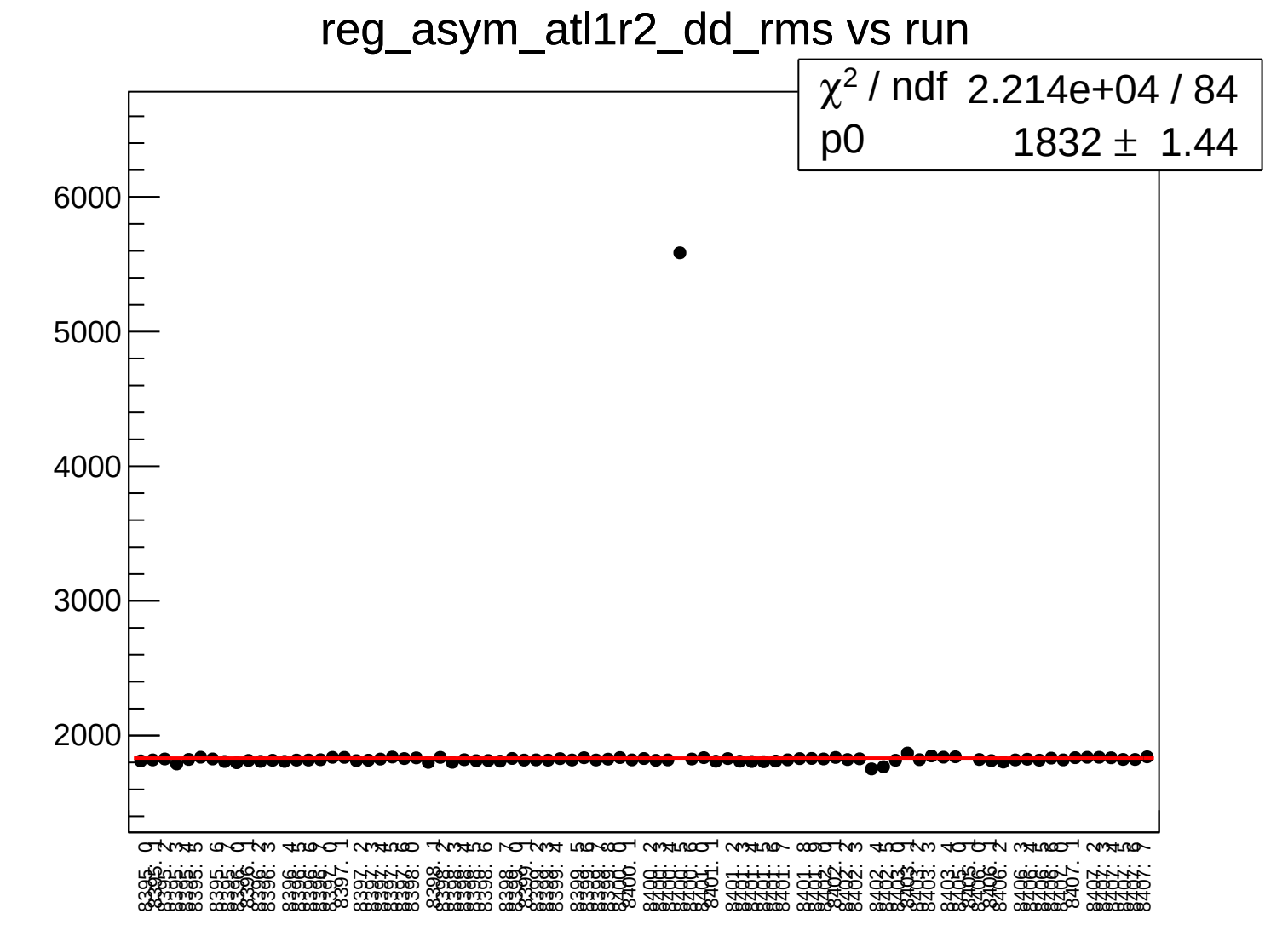

asym_atl1r2_avg_mean vs run
χ² / ndf 99.07 / 84
p0 4695 ± 8067
pull
Entries 85
Mean 281.3
Std Dev 255.3

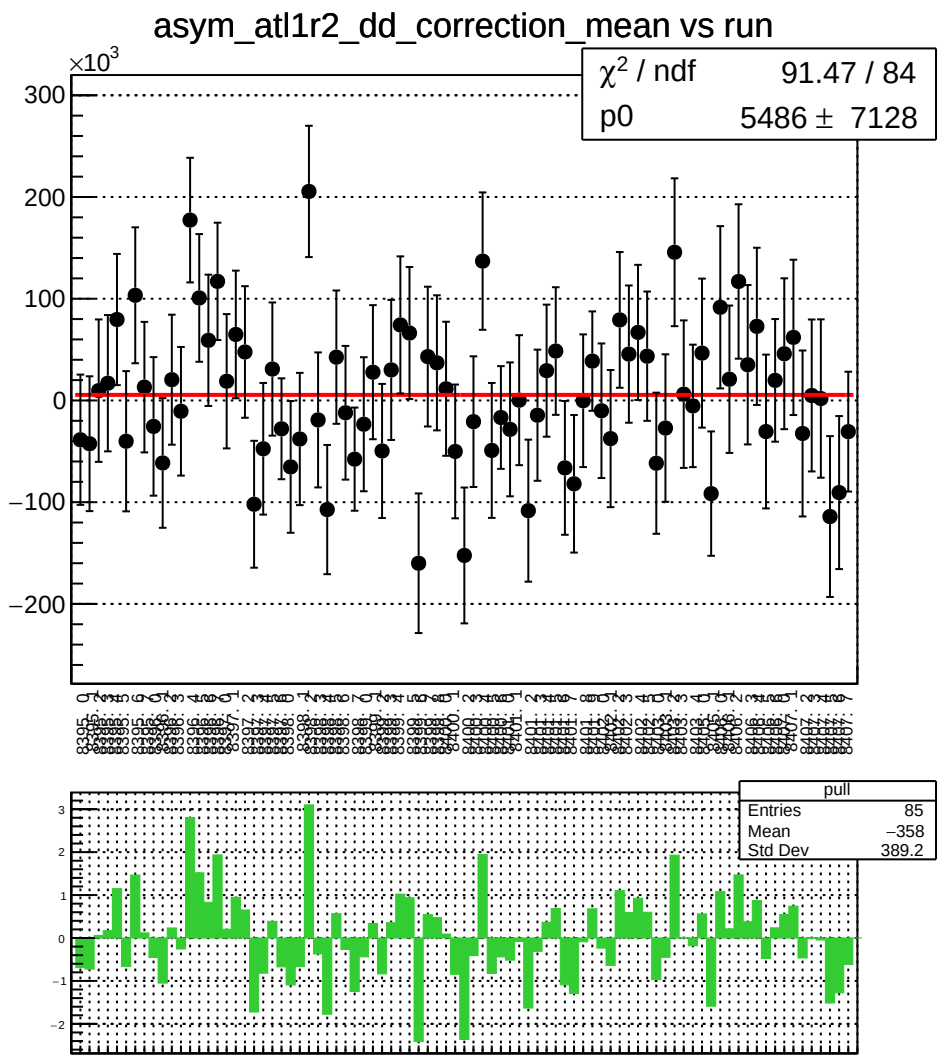

pull1D
Entries 85
Mean −0.002883
Std Dev 1.08

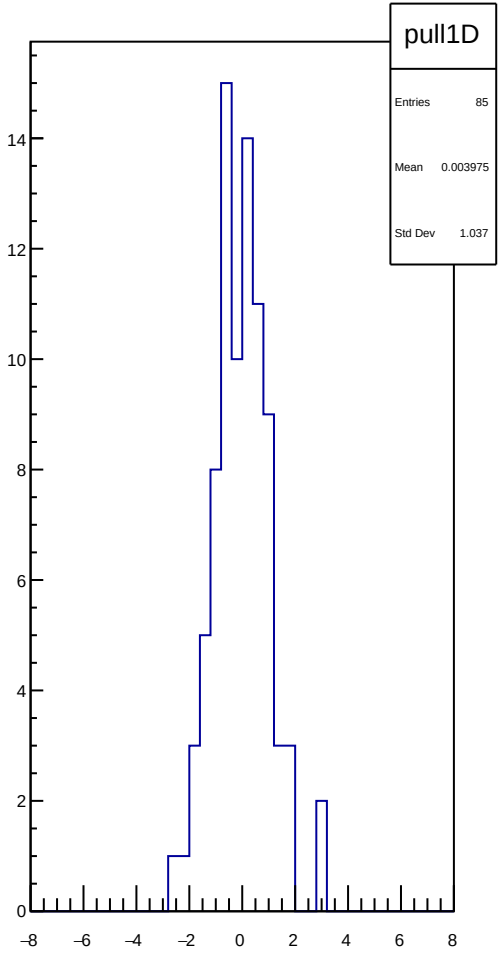

asym_atl1r2_avg_rms vs run
χ² / ndf 9786 / 84
p0 7286 ± 5.704
10000
9500
9000
8500
8000
7500
7000
6500

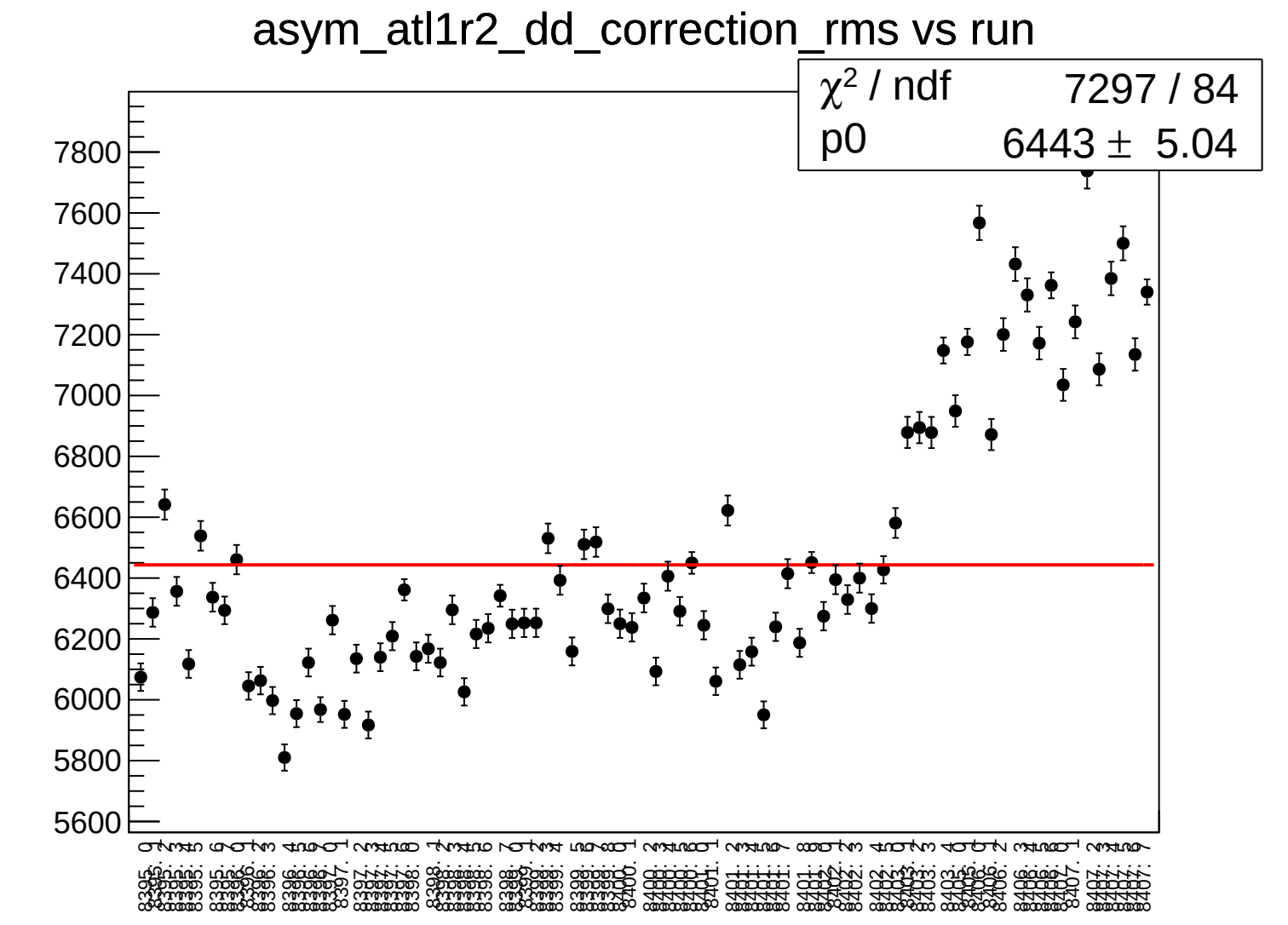

reg_asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 95.11 / 84
p0 −1789 ± 2037
50
0
−50
−100
−150
pull
Entries 85
Mean 75.8
Std Dev 29.96
3
2
1
0
−1
−2

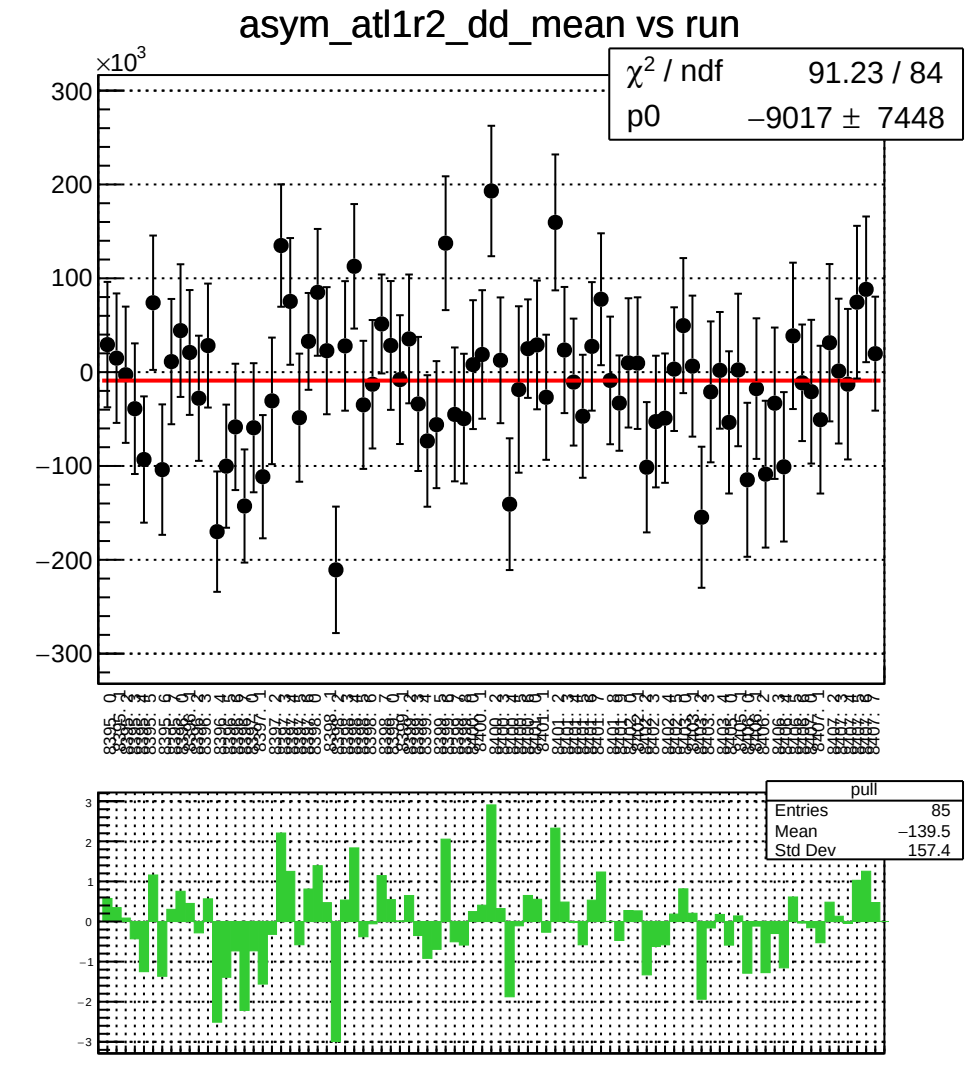

pull1D
Entries 85
Mean −0.03034
Std Dev 1.057
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

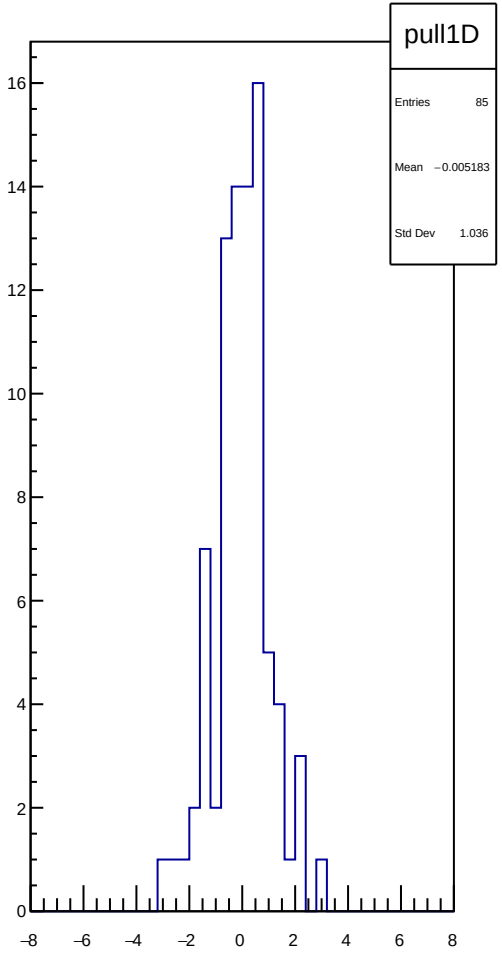

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 2.214e+04 / 84
p0 1832 ± 1.44
6000
5000
4000
3000
2000

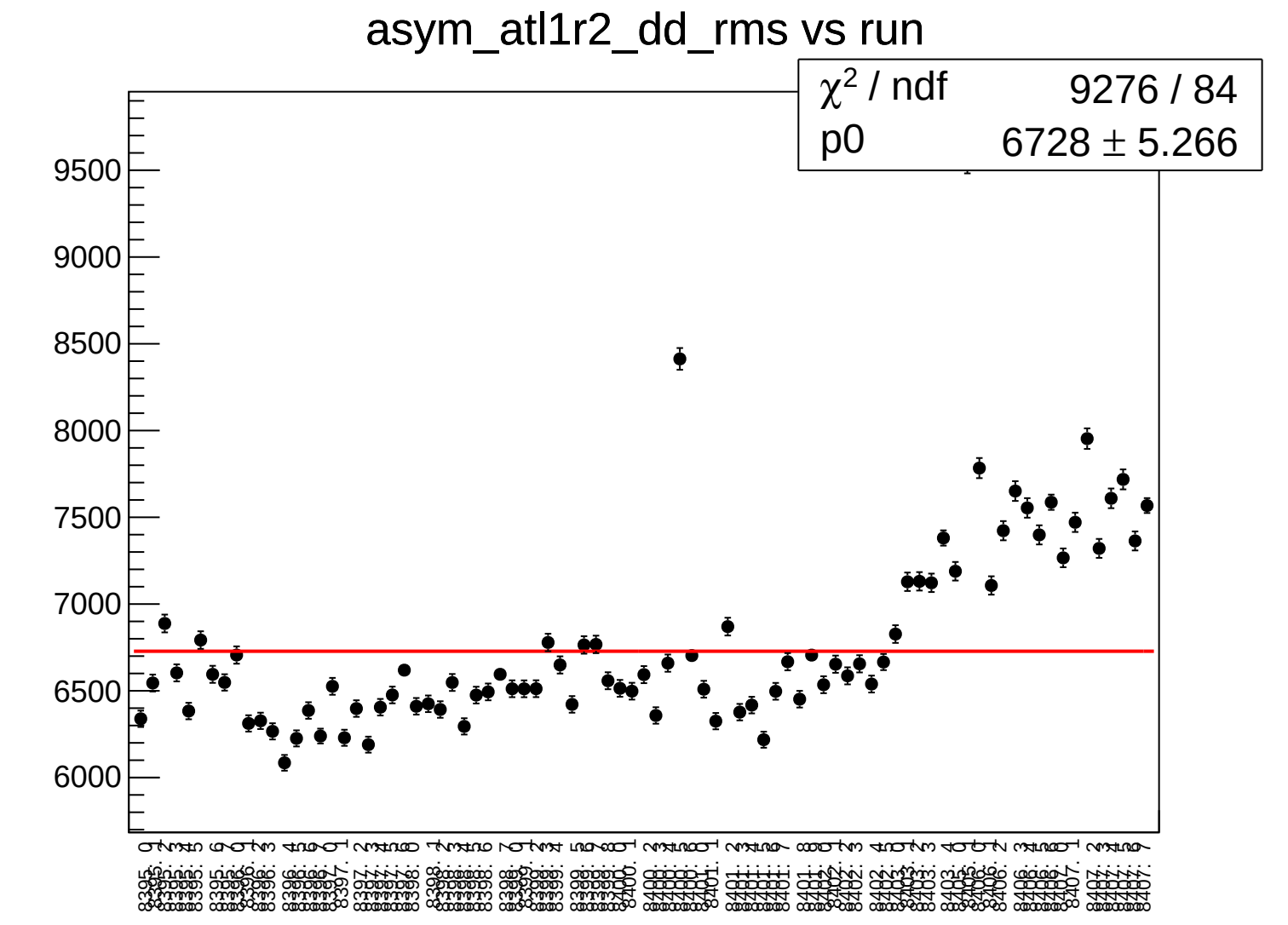

asym_atl1r2_dd_correction_mean vs run
×10^3
χ^2 / ndf 91.47 / 84
p0 5486 ± 7128
300
200
100
0
−100
−200
pull
Entries 85
Mean −358
Std Dev 389.2
3
2
1
0
−1
−2

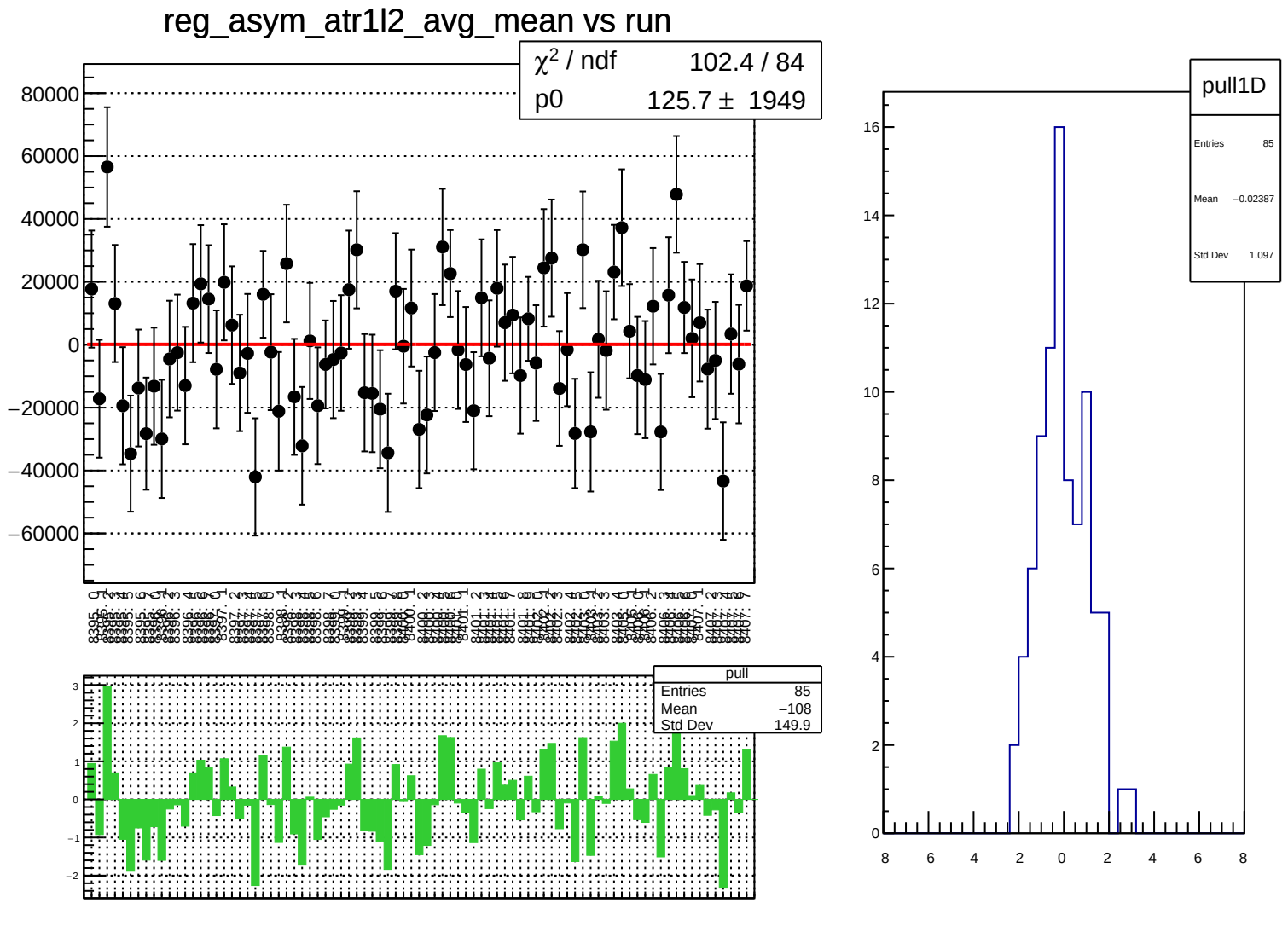

pull1D
Entries 85
Mean 0.003975
Std Dev 1.037
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

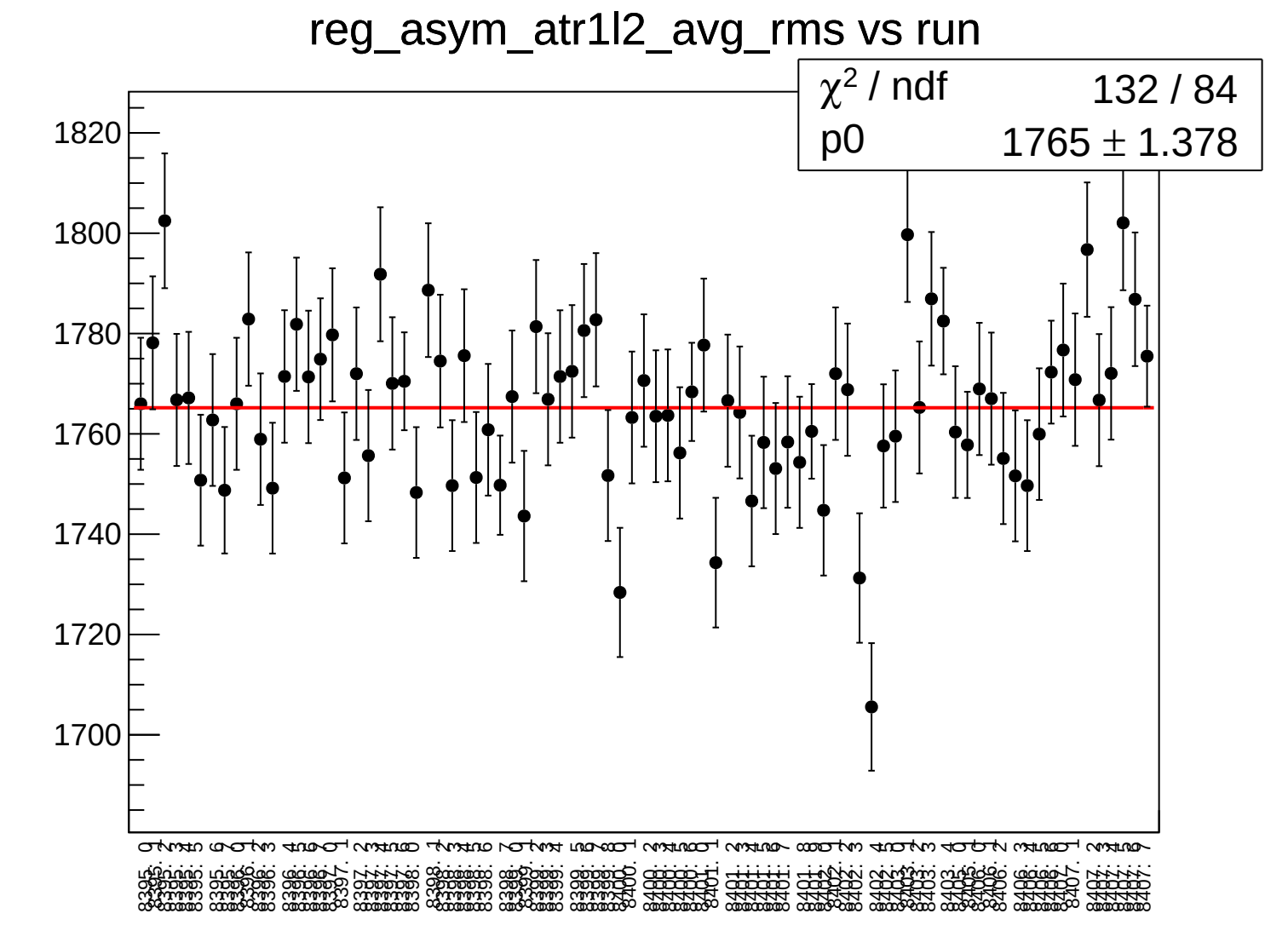

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 7297 / 84
p0 6443 ± 5.04
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600

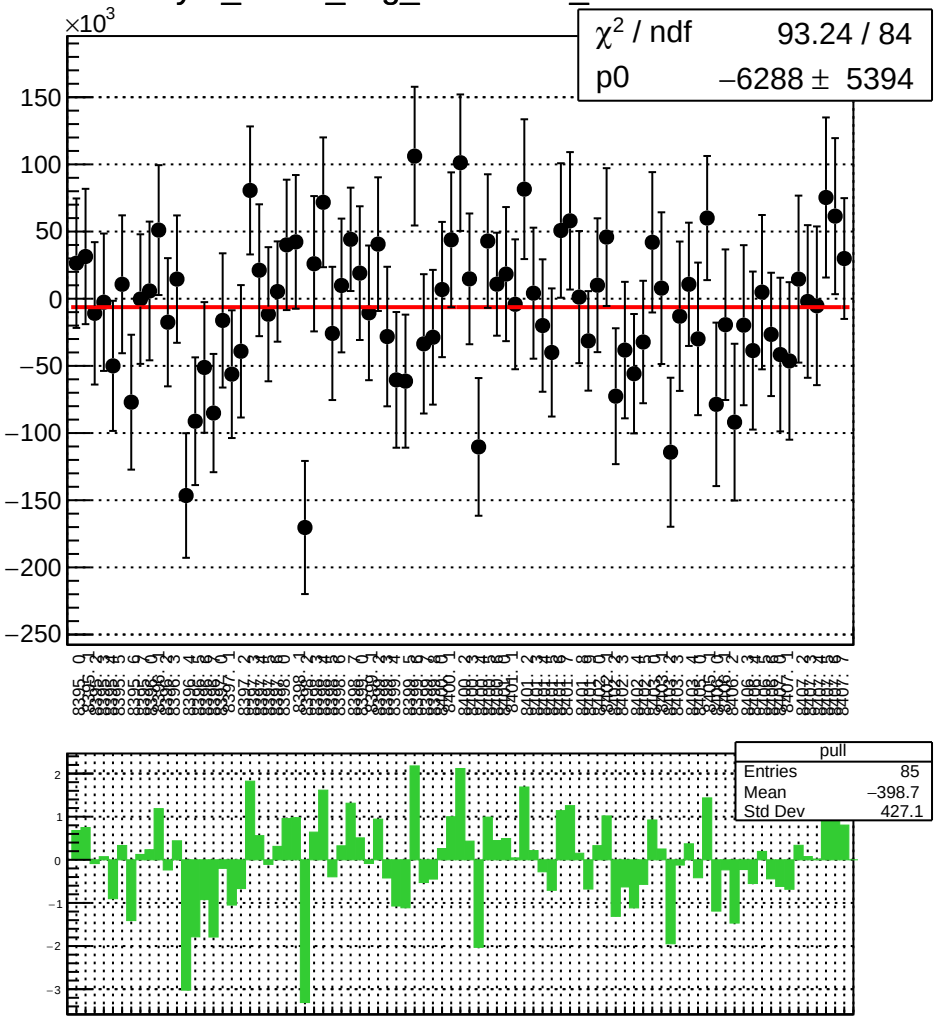

asym_atl1r2_dd_mean vs run
χ² / ndf 91.23 / 84
p0 −9017 ± 7448
pull
Entries 85
Mean −139.5
Std Dev 157.4

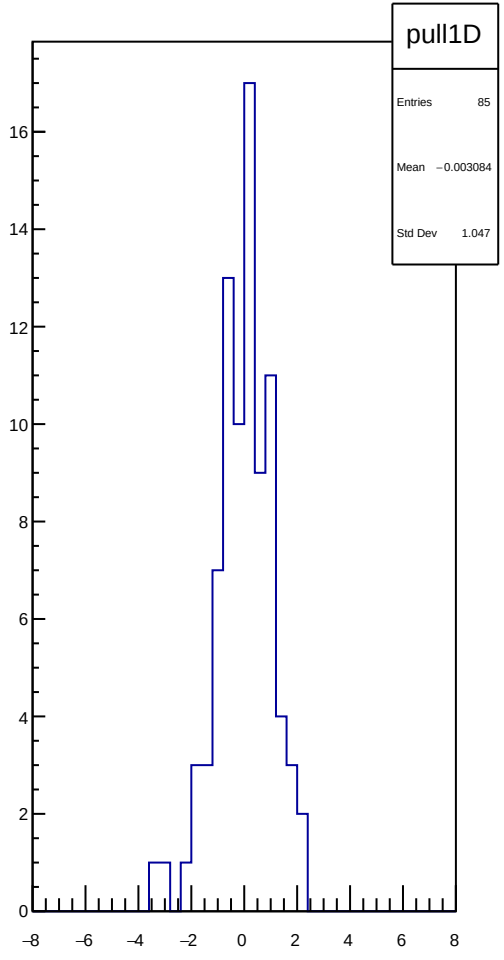

pull1D
Entries 85
Mean −0.005183
Std Dev 1.036

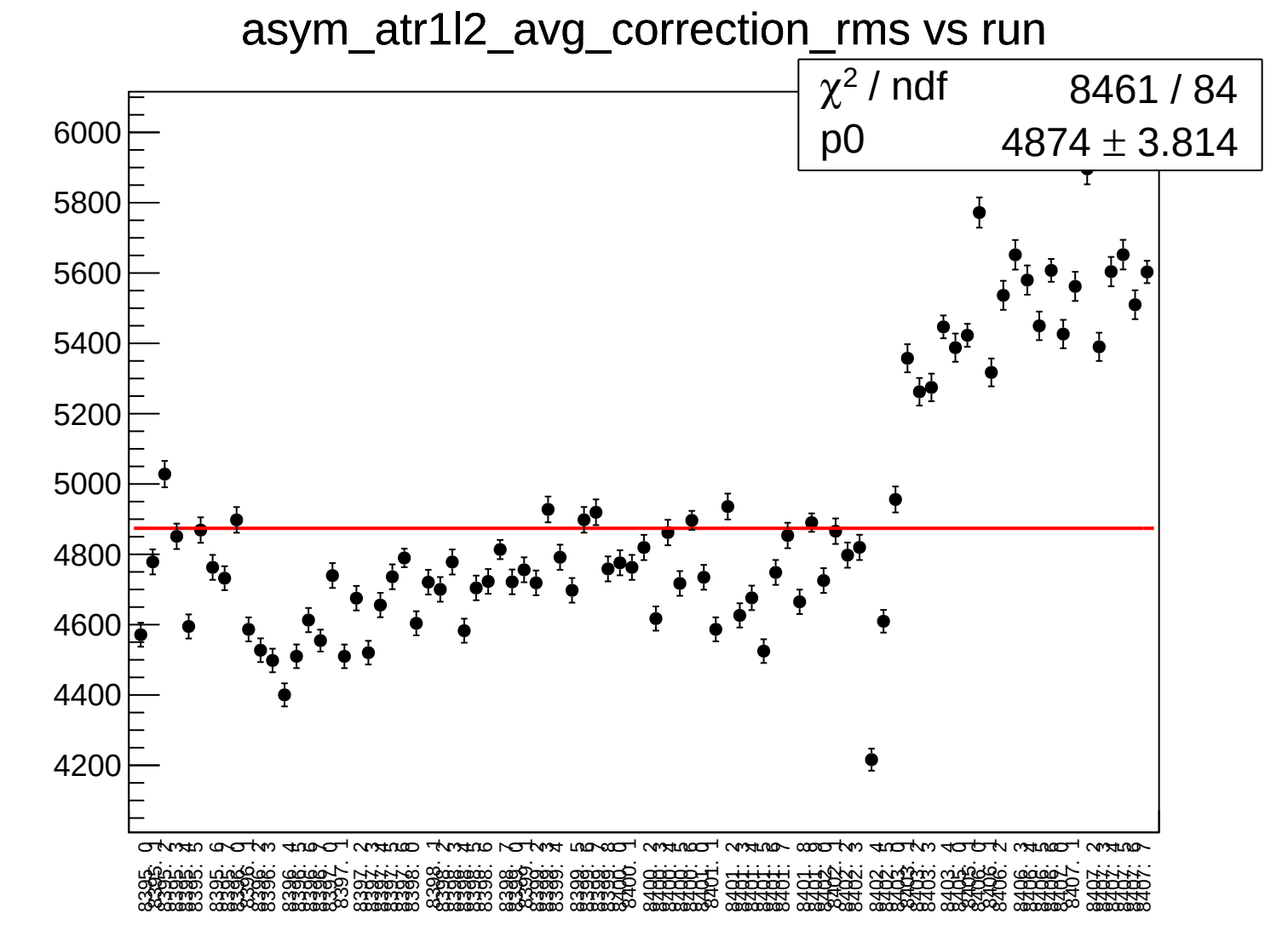

asym_atl1r2_dd_rms vs run
χ^2 / ndf 9276 / 84
p0 6728 ± 5.266
9500
9000
8500
8000
7500
7000
6500
6000

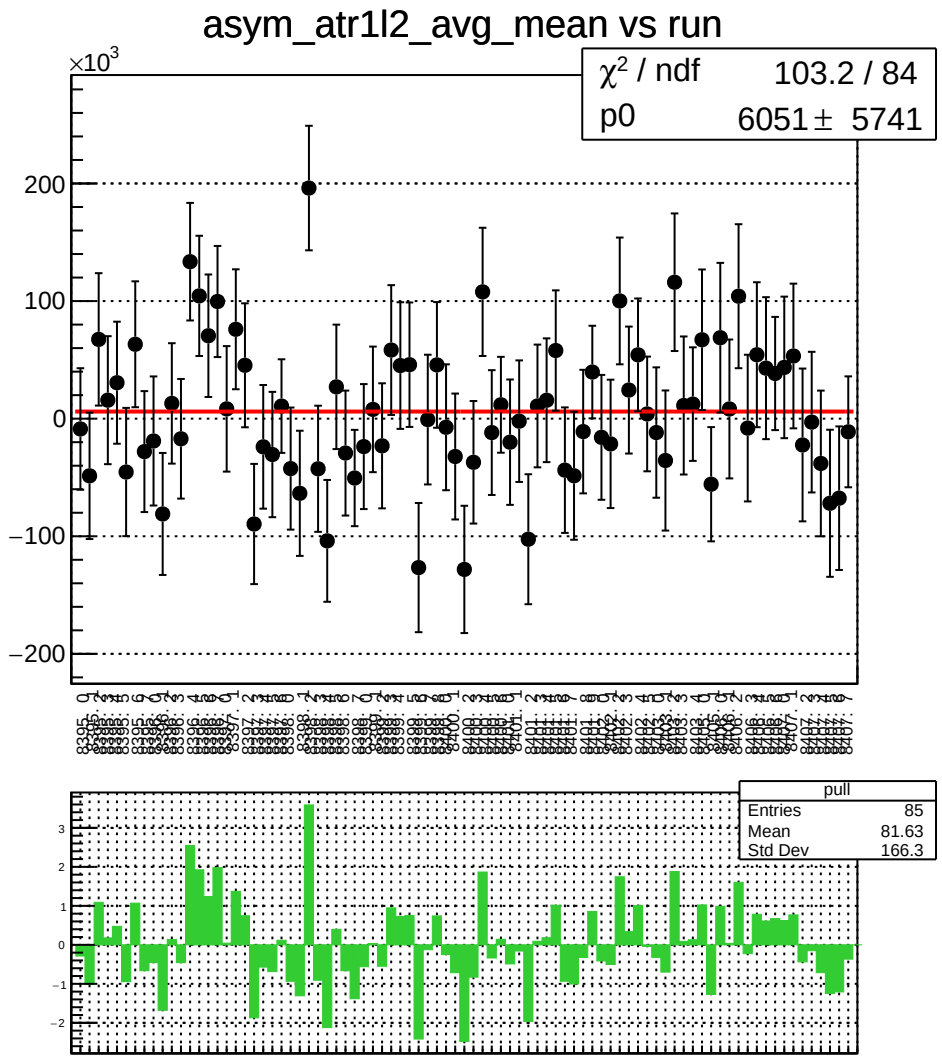

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 102.4 / 84
p0 125.7 ± 1949
pull
Entries 85
Mean −108
Std Dev 149.9
pull1D
Entries 85
Mean −0.02387
Std Dev 1.097

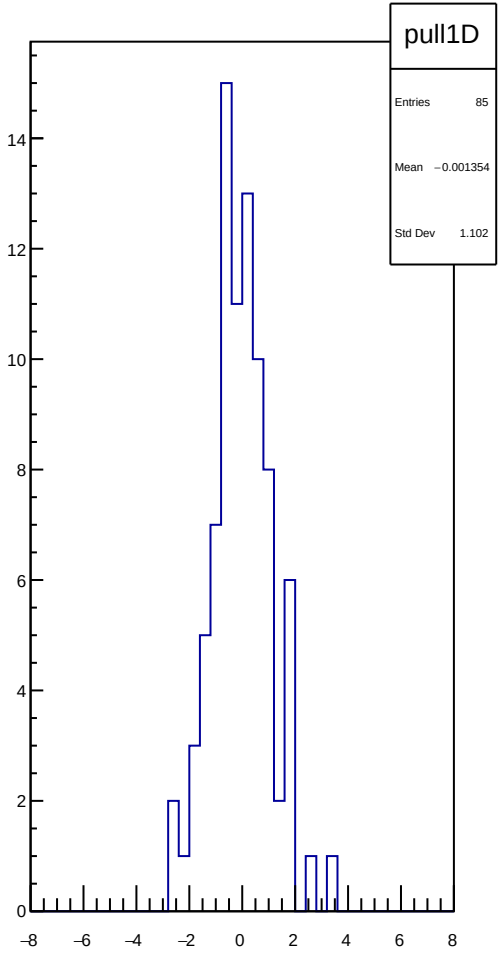

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 132 / 84
p0 1765 ± 1.378
1820
1800
1780
1760
1740
1720
1700

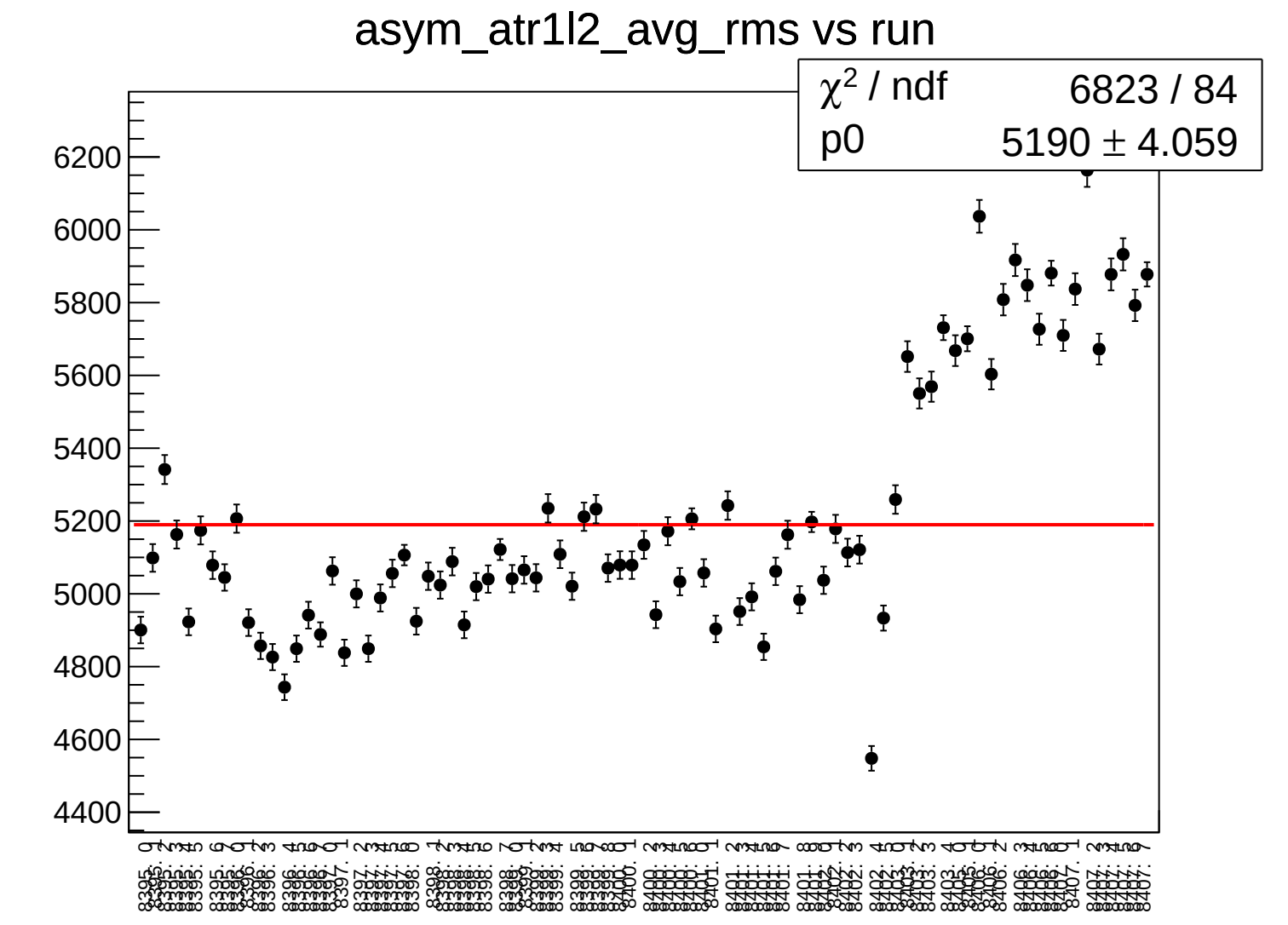

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 93.24 / 84
p0 −6288 ± 5394
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 85
Mean −398.7
Std Dev 427.1
2
1
0
−1
−2
−3

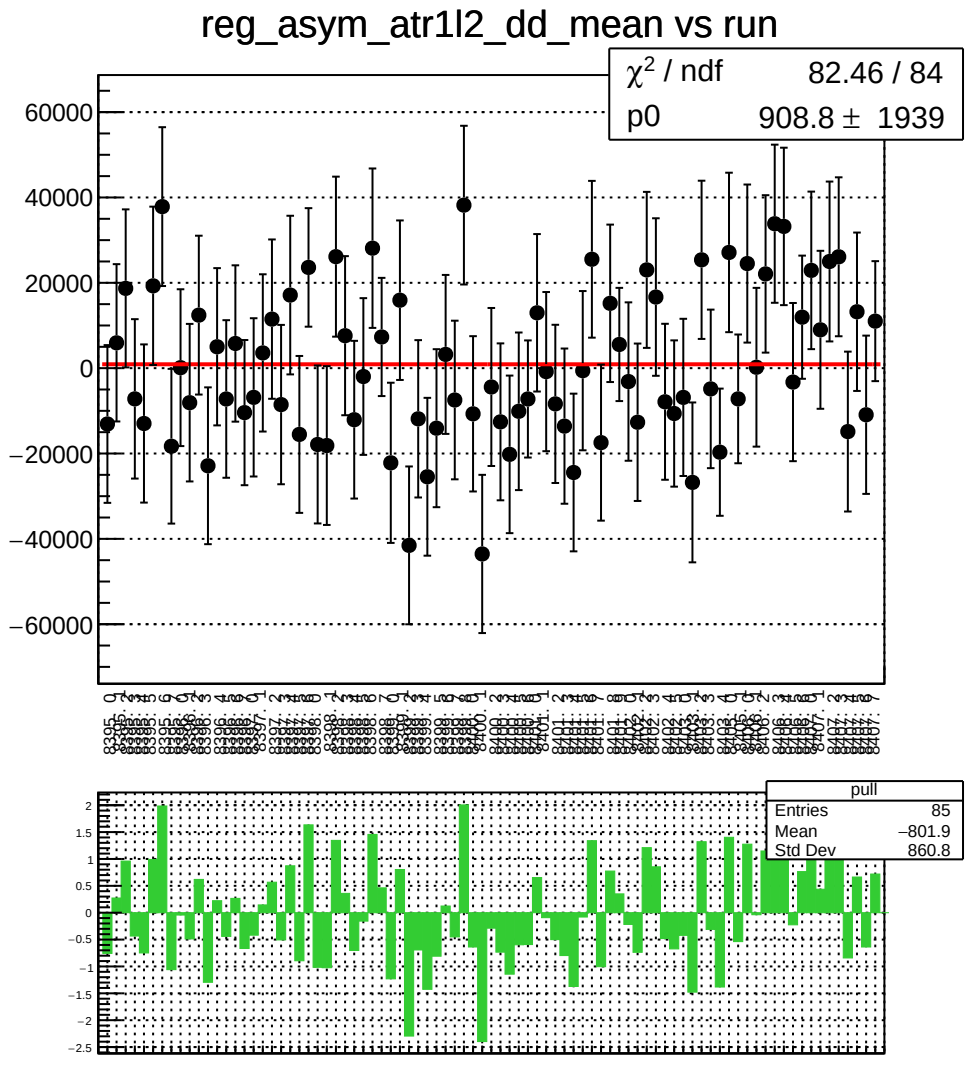

pull1D
Entries 85
Mean −0.003084
Std Dev 1.047
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

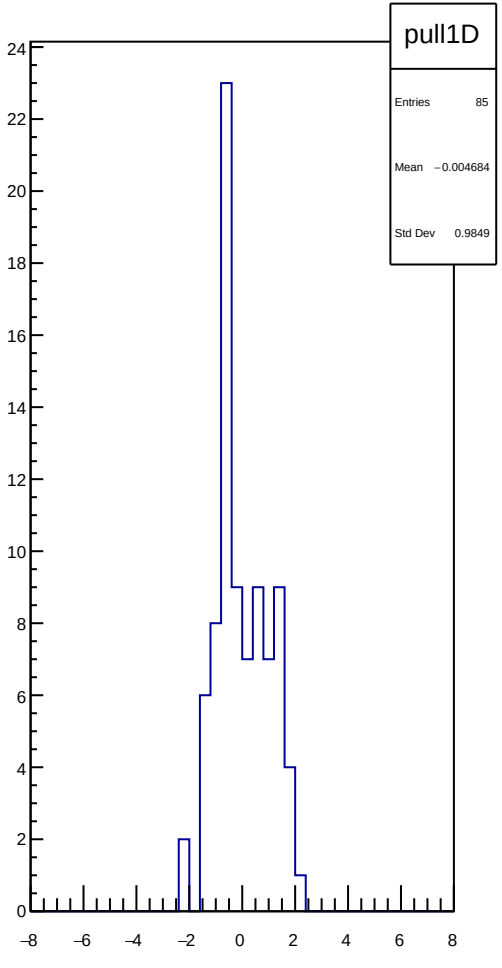

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 8461 / 84
p0 4874 ± 3.814
6000
5800
5600
5400
5200
5000
4800
4600
4400
4200

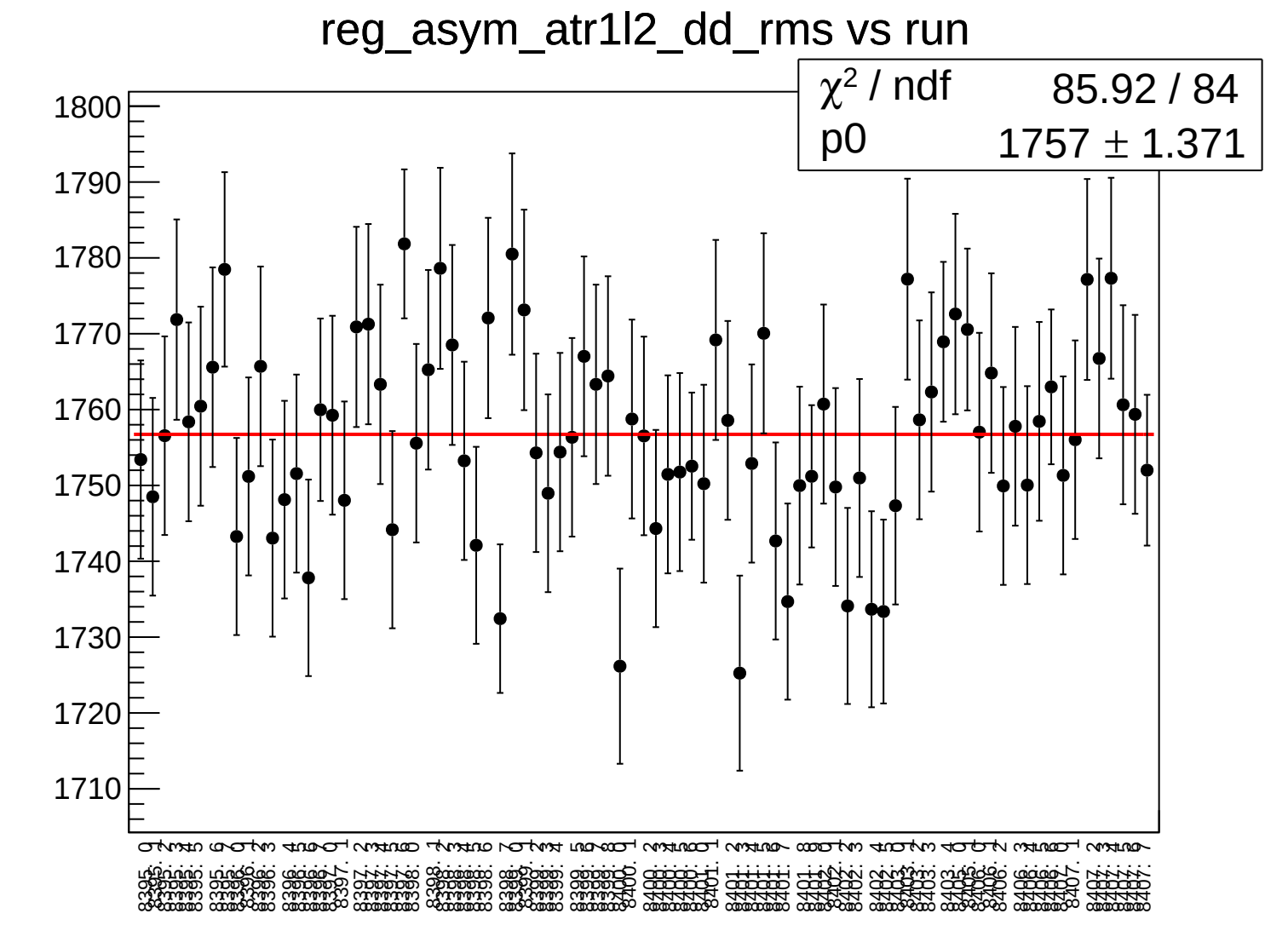

asym_atr1l2_avg_mean vs run
×10^3
χ^2 / ndf 103.2 / 84
p0 6051 ± 5741
200
100
0
−100
−200
pull
Entries 85
Mean 81.63
Std Dev 166.3
3
2
1
0
−1
−2

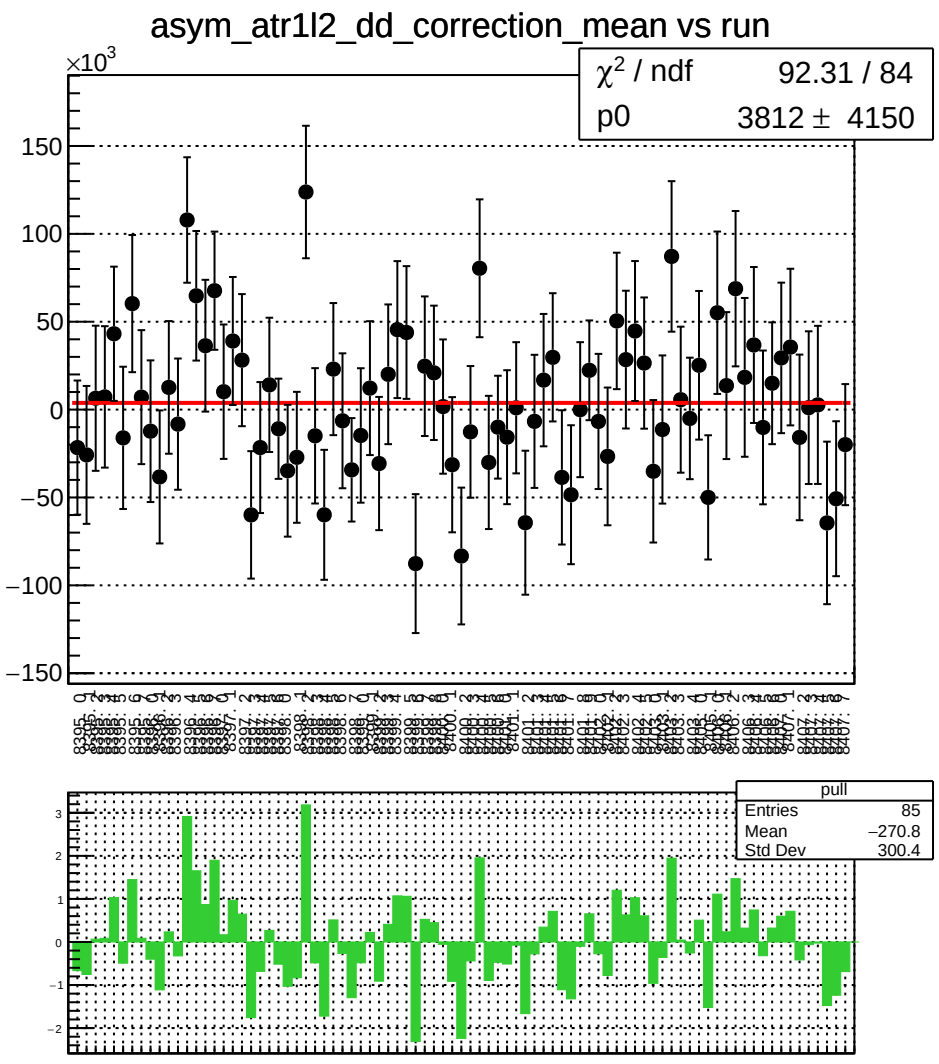

pull1D
Entries 85
Mean −0.001354
Std Dev 1.102
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

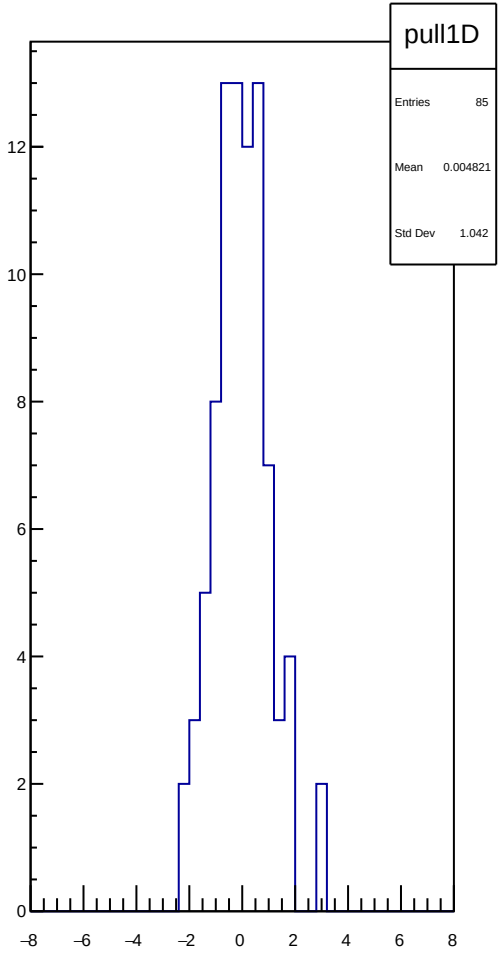

asym_atr1l2_avg_rms vs run
χ² / ndf 6823 / 84
p0 5190 ± 4.059
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

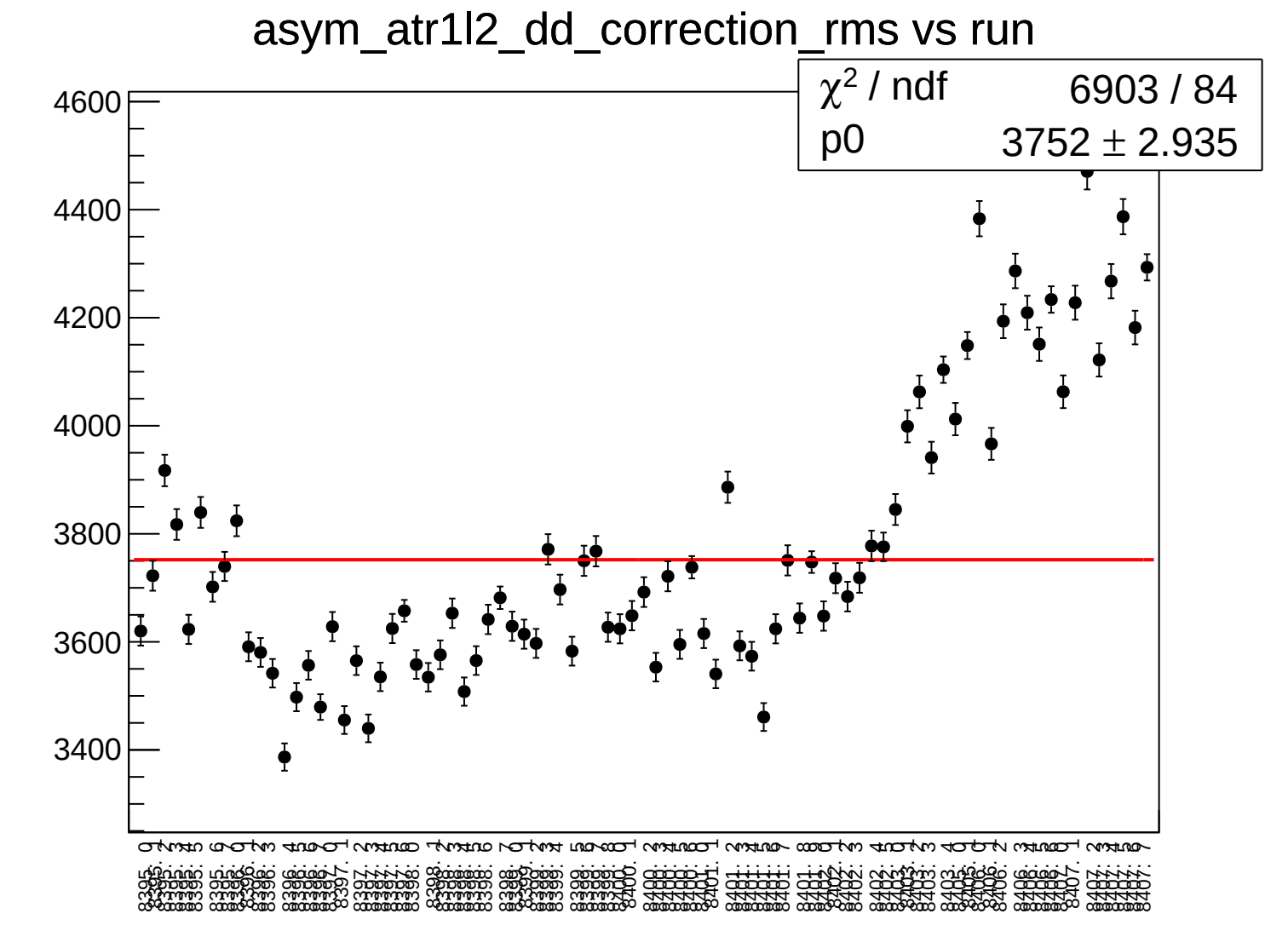

reg_asym_atr1l2_dd_mean vs run
χ² / ndf 82.46 / 84
p0 908.8 ± 1939
pull
Entries 85
Mean −801.9
Std Dev 860.8

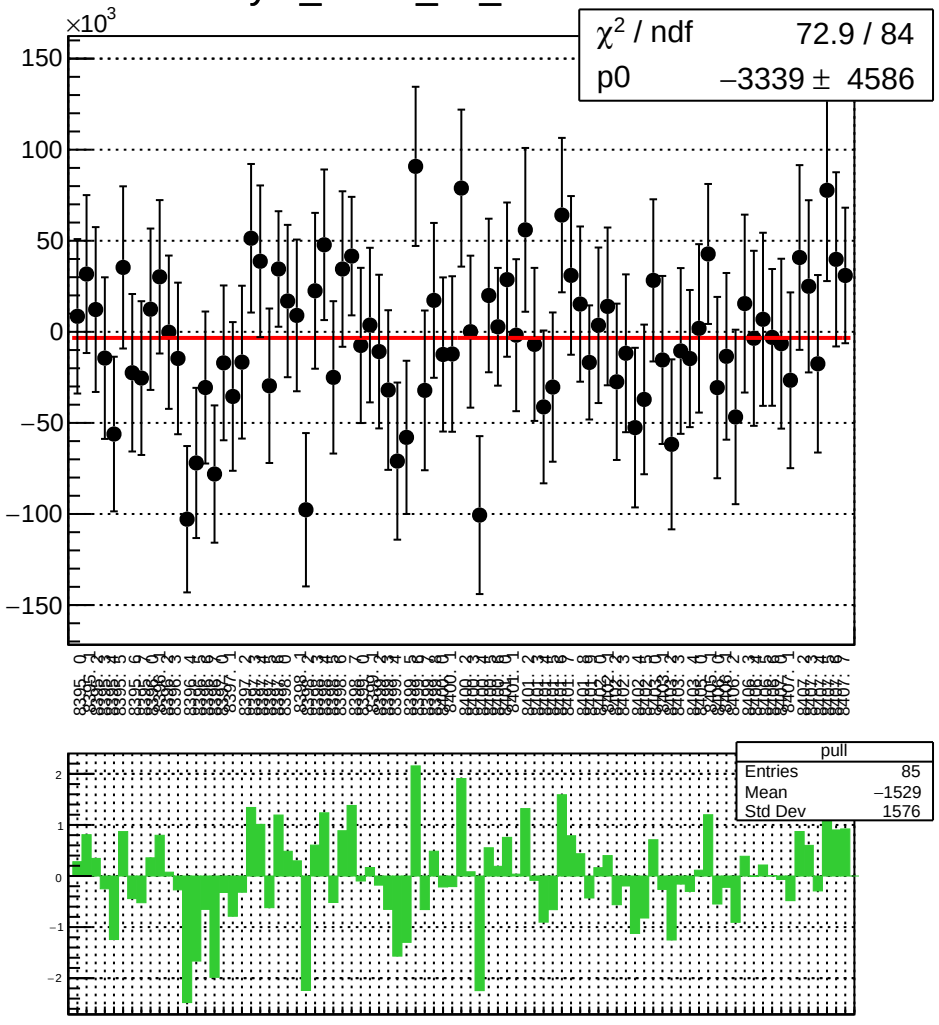

pull1D
Entries 85
Mean −0.004684
Std Dev 0.9849

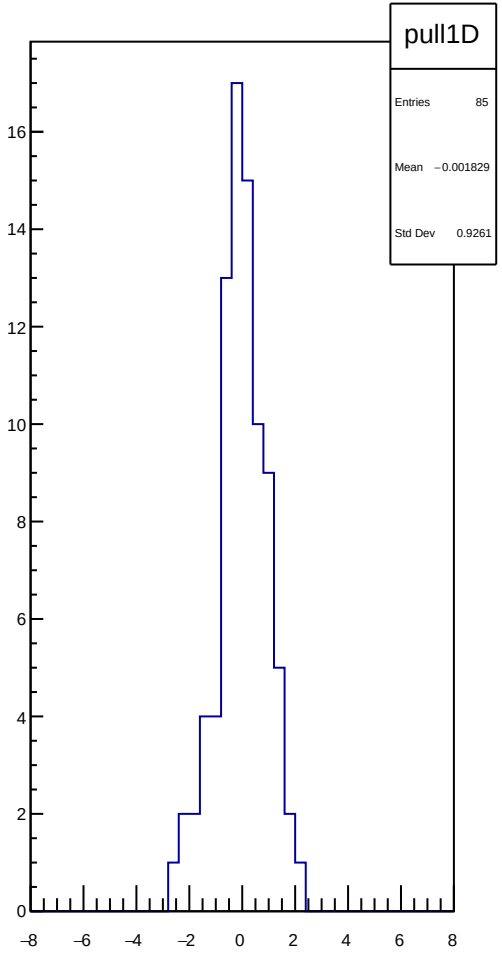

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 85.92 / 84
p0 1757 ± 1.371
1800
1790
1780
1770
1760
1750
1740
1730
1720
1710

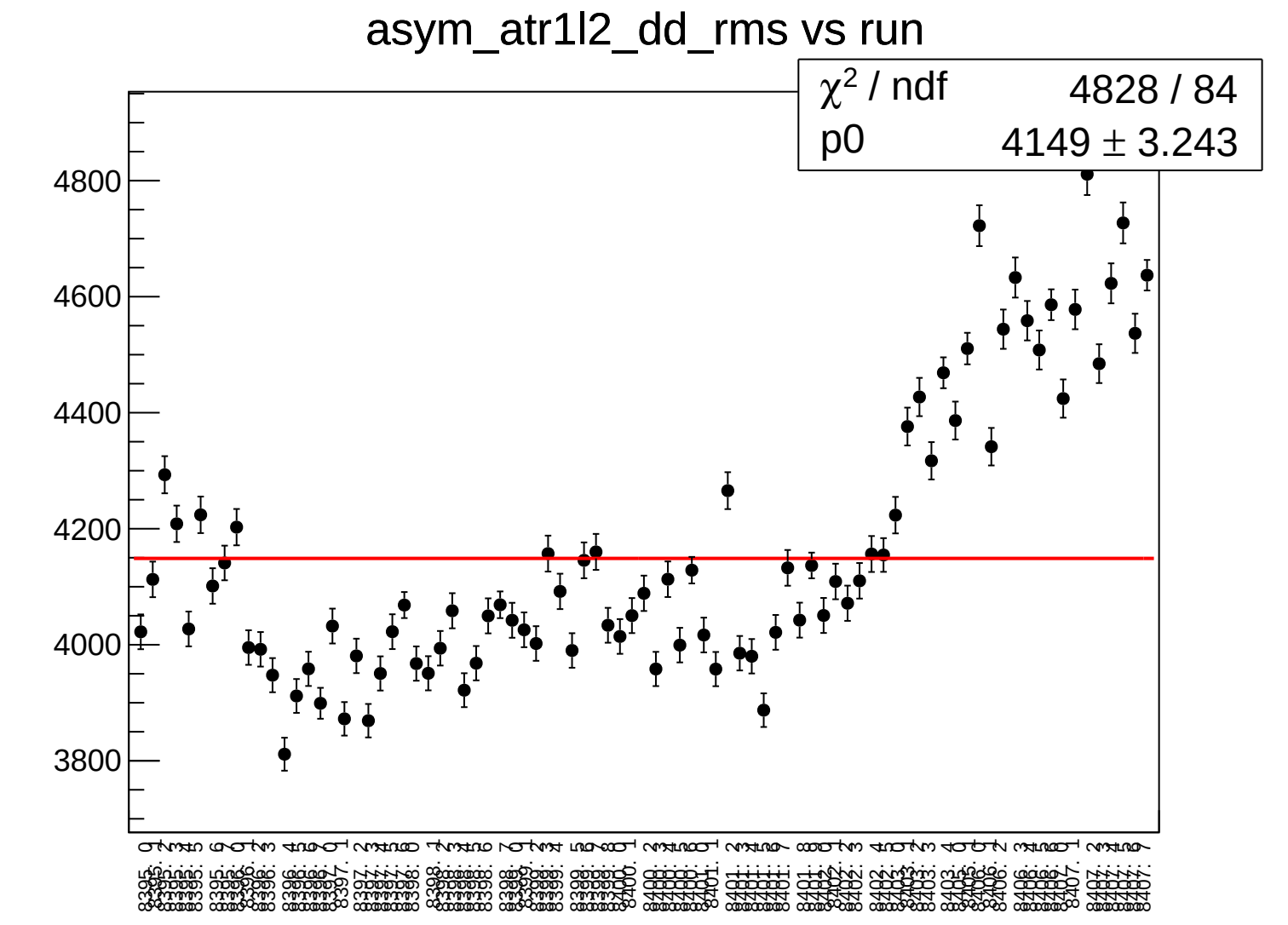

asym_atr1l2_dd_correction_mean vs run
×10^3
χ² / ndf 92.31 / 84
p0 3812 ± 4150
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −270.8
Std Dev 300.4
3
2
1
0
−1
−2

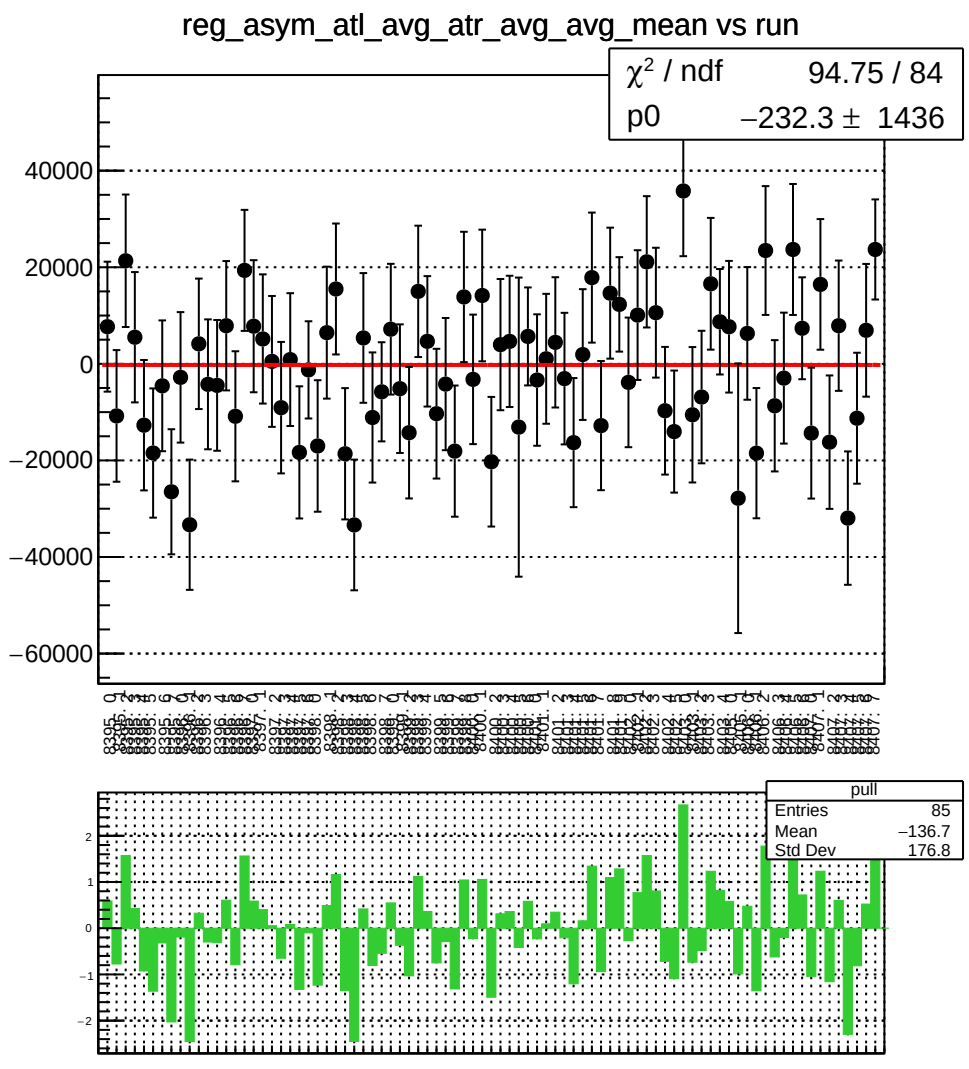

pull1D
Entries 85
Mean 0.004821
Std Dev 1.042
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

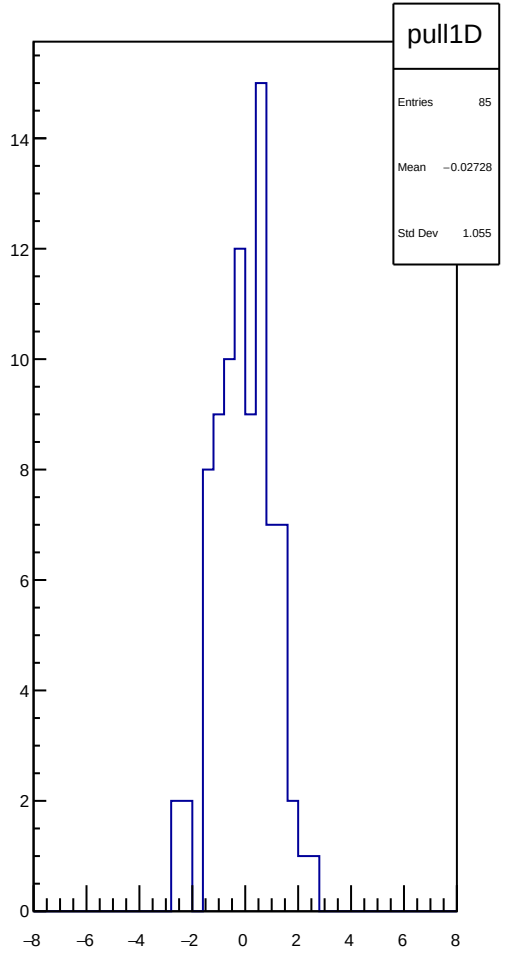

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 6903 / 84
p0 3752 ± 2.935
4600
4400
4200
4000
3800
3600
3400

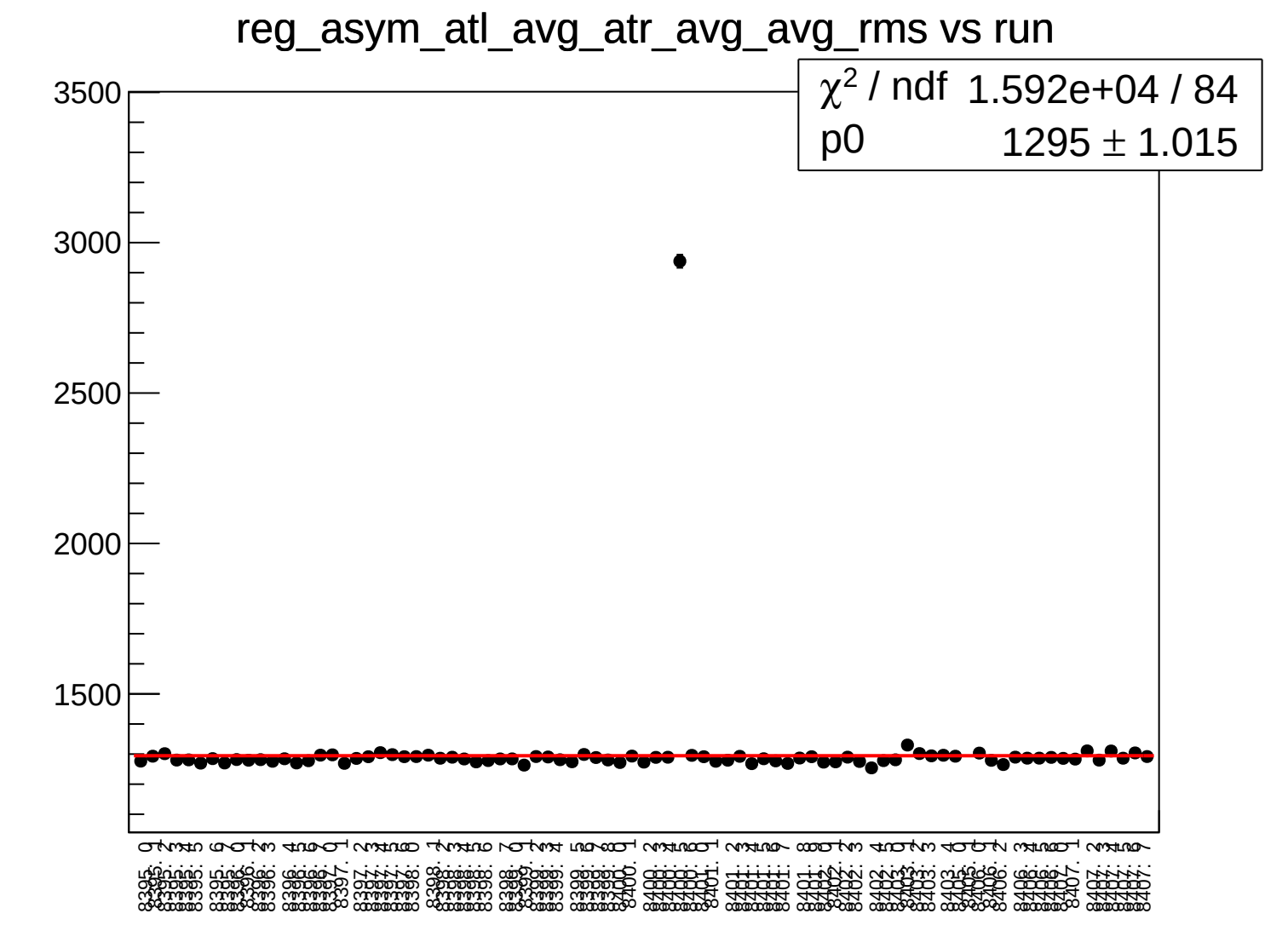

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 72.9 / 84
p0 −3339 ± 4586
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −1529
Std Dev 1576
2
1
0
−1
−2

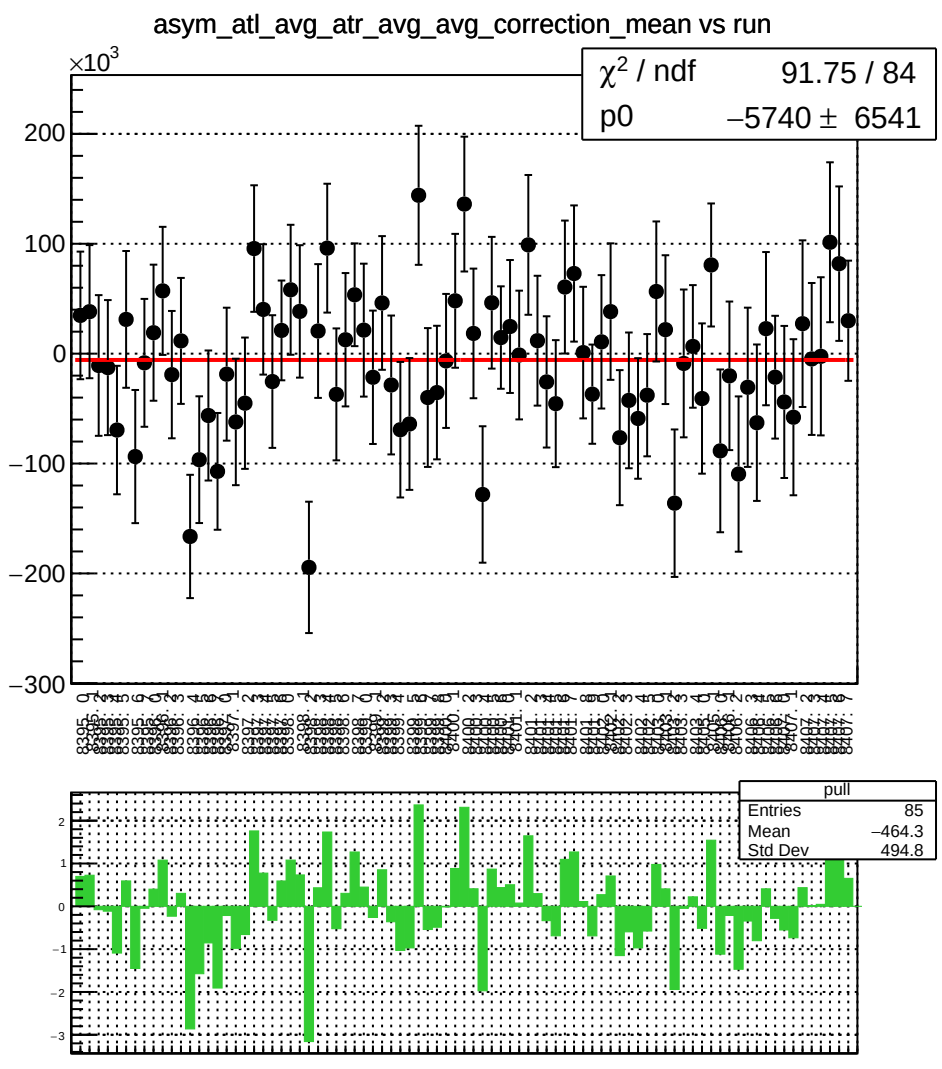

pull1D
Entries 85
Mean −0.001829
Std Dev 0.9261
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

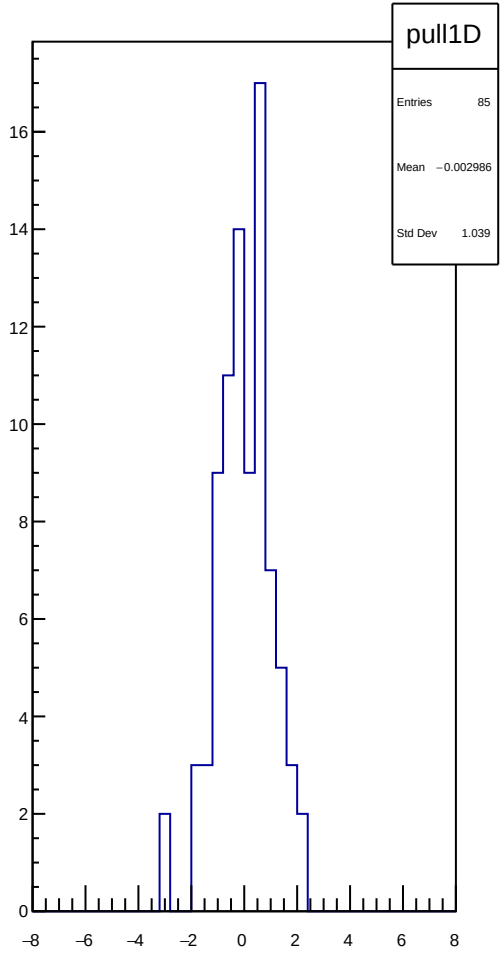

asym_atr1l2_dd_rms vs run
χ² / ndf 4828 / 84
p0 4149 ± 3.243
4800
4600
4400
4200
4000
3800

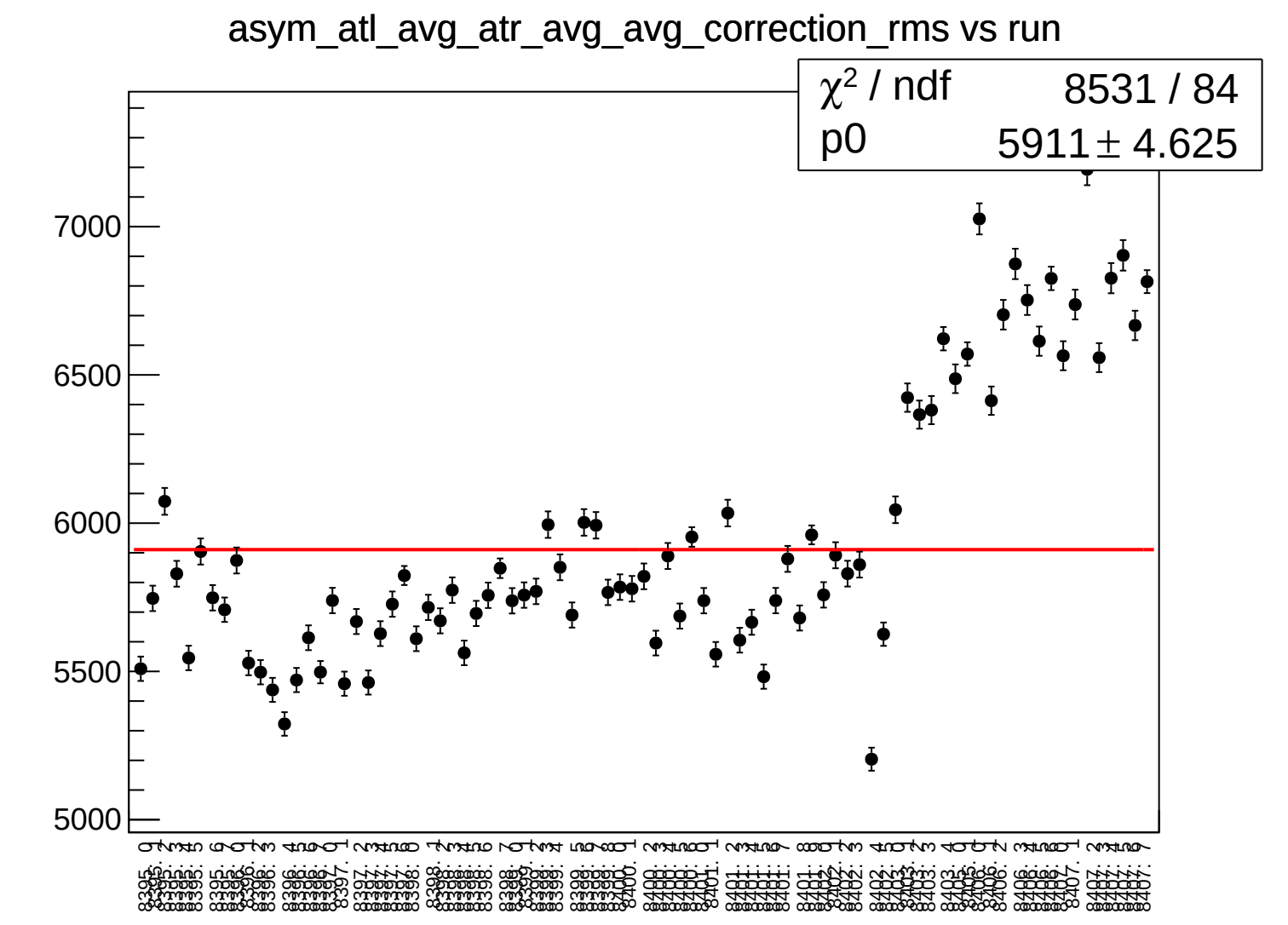

reg_asym_atl_avg_atr_avg_avg_mean vs run
χ² / ndf 94.75 / 84
p0 −232.3 ± 1436
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −136.7
Std Dev 176.8
2
1
0
−1
−2

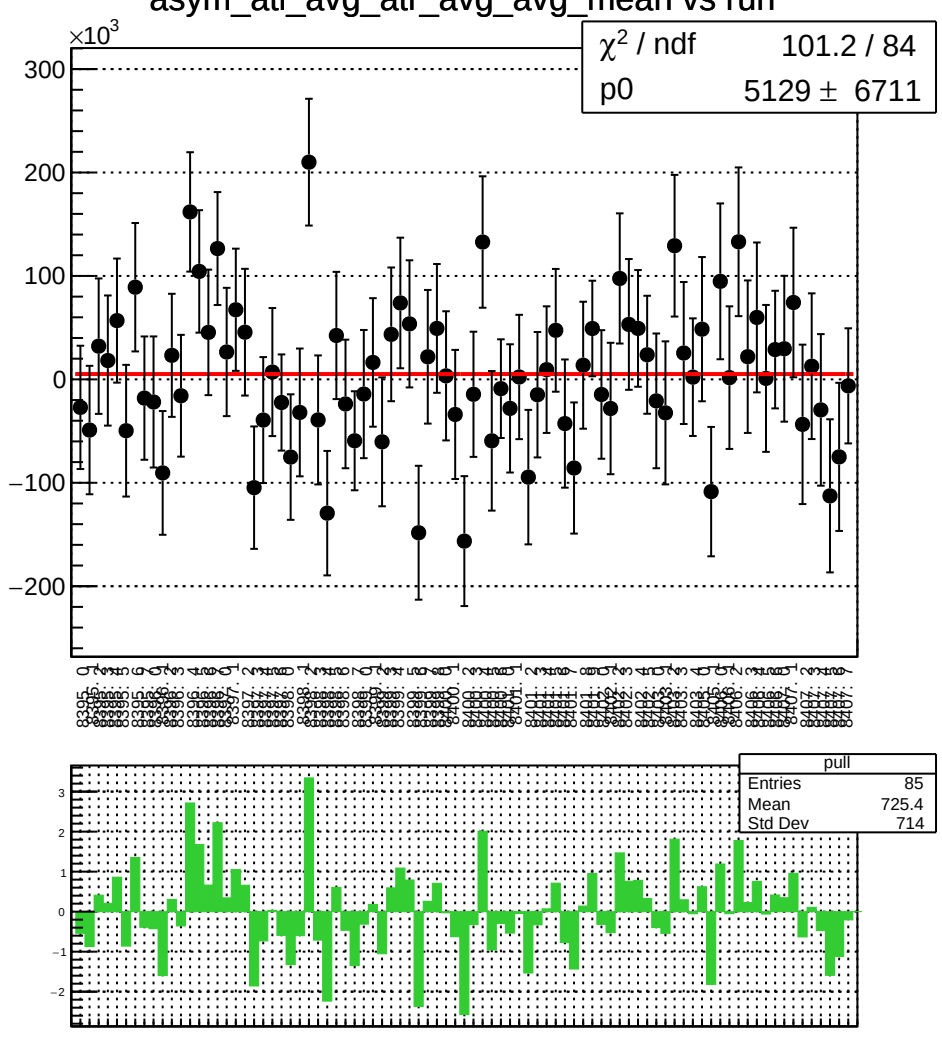

pull1D
Entries 85
Mean −0.02728
Std Dev 1.055
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

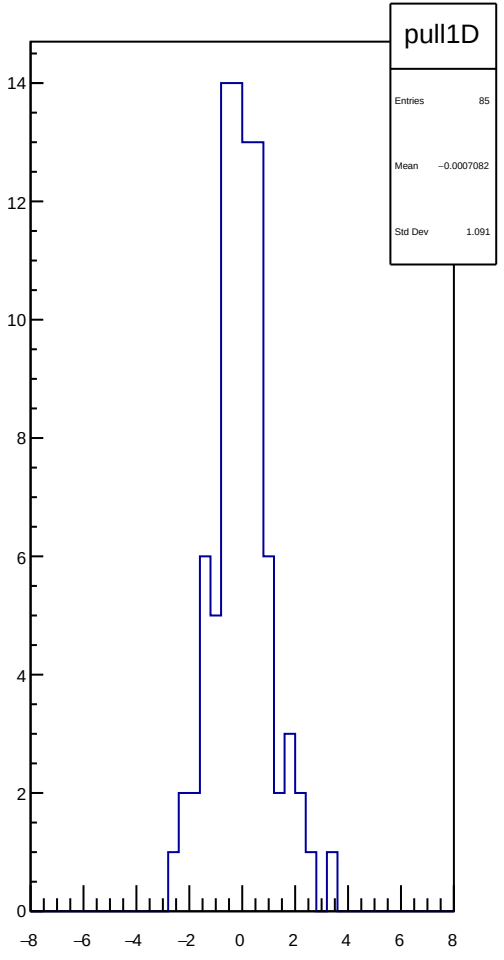

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.592e+04 / 84
p0 1295 ± 1.015
3500
3000
2500
2000
1500

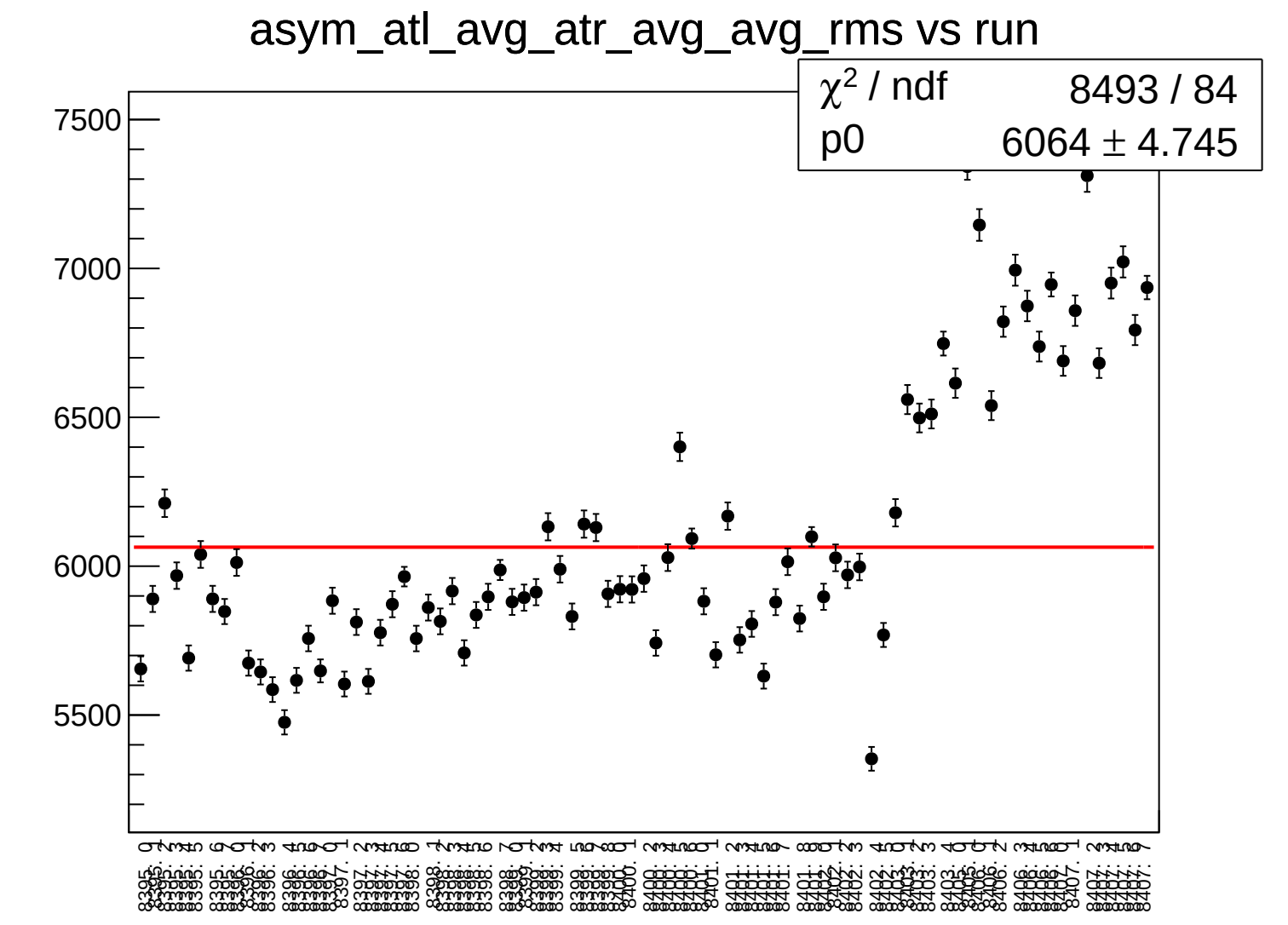

asym_atl_avg_atr_avg_avg_correction_mean vs run
×10^3
χ² / ndf 91.75 / 84
p0 −5740 ± 6541
200
100
0
−100
−200
−300
pull
Entries 85
Mean −464.3
Std Dev 494.8
2
1
0
−1
−2
−3

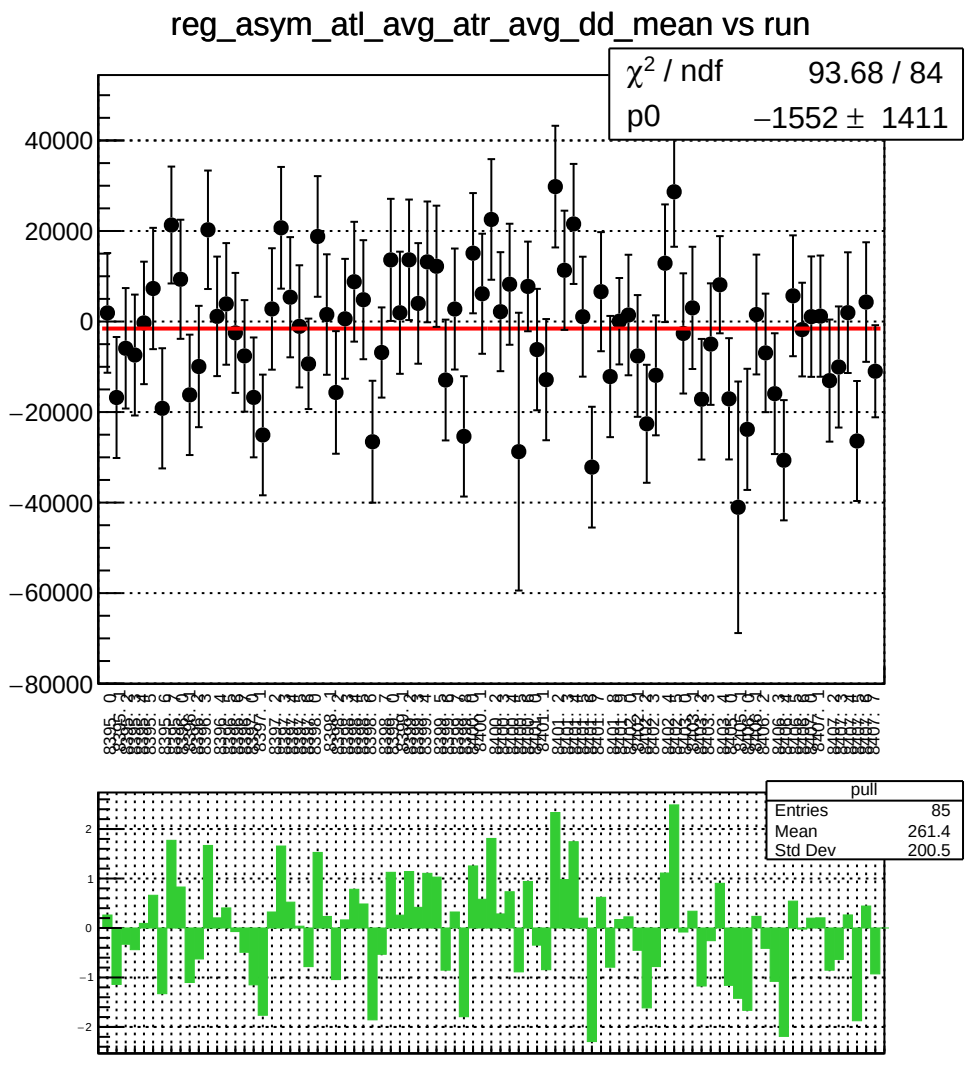

pull1D
Entries 85
Mean −0.002986
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

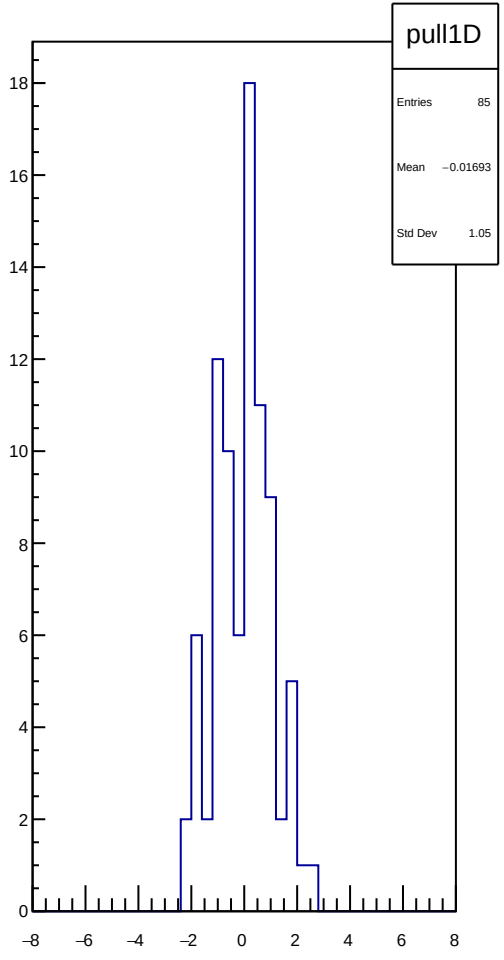

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 8531 / 84
p0 5911 ± 4.625
7000
6500
6000
5500
5000

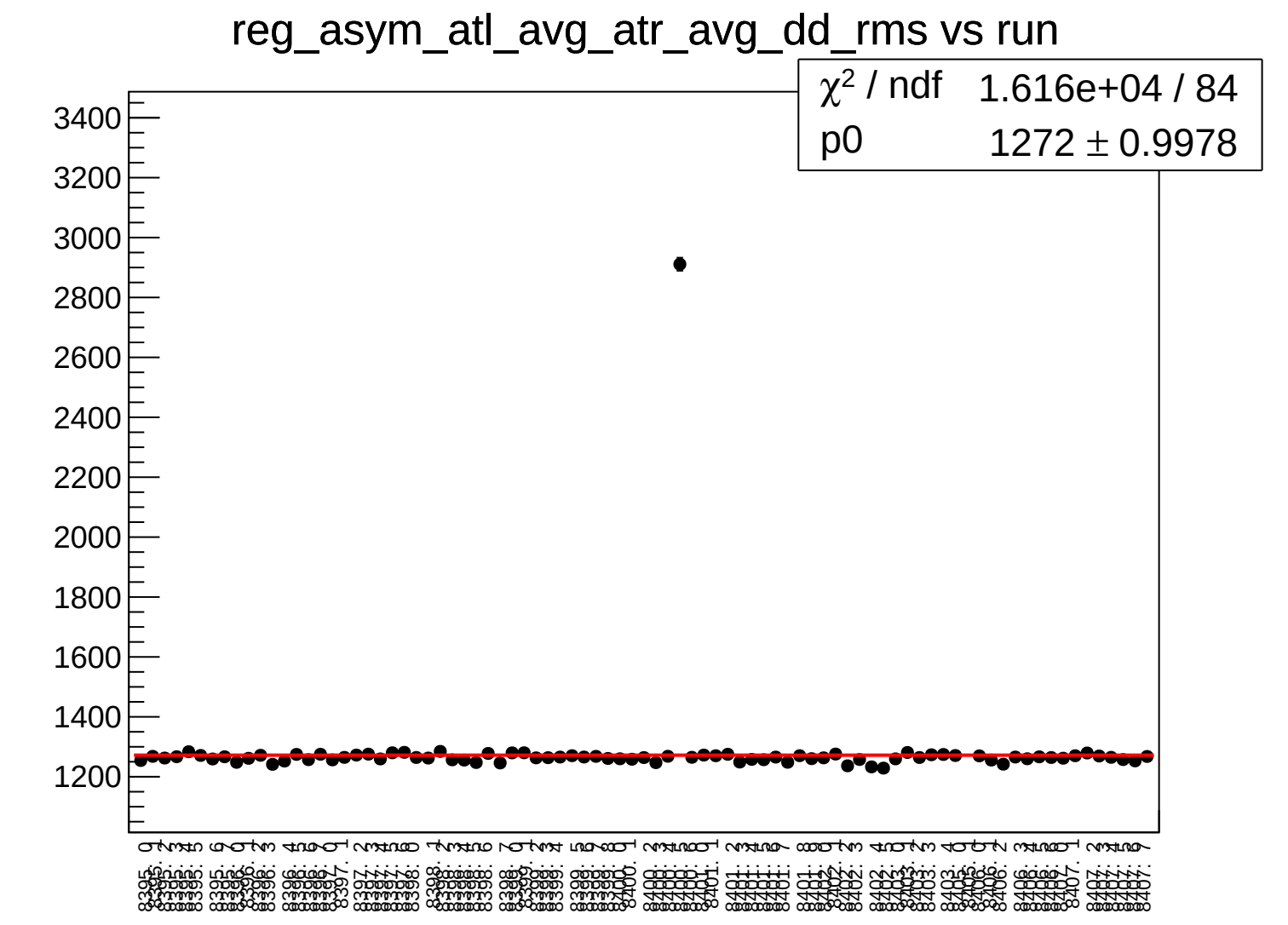

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 101.2 / 84
p0 5129 ± 6711
300
200
100
0
−100
−200
pull
Entries 85
Mean 725.4
Std Dev 714
3
2
1
0
−1
−2

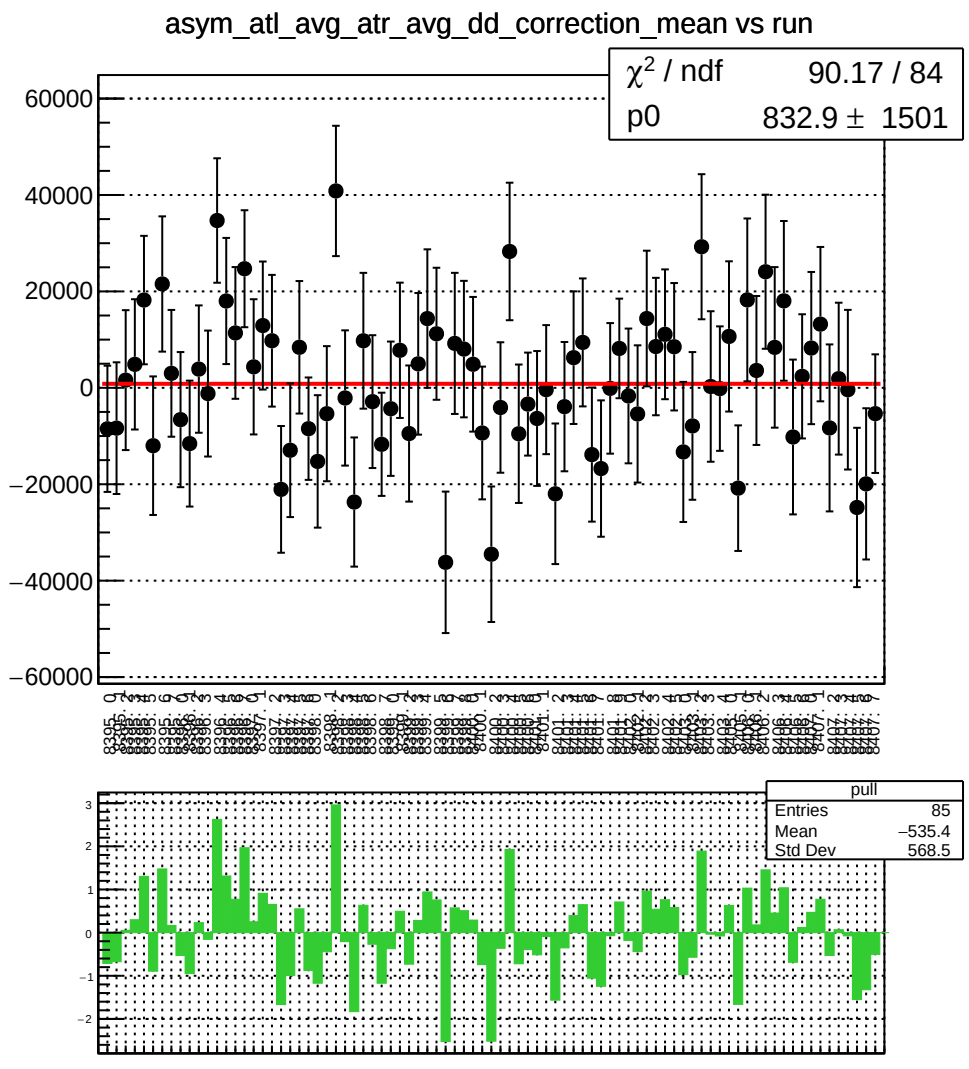

pull1D
Entries 85
Mean −0.0007082
Std Dev 1.091
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

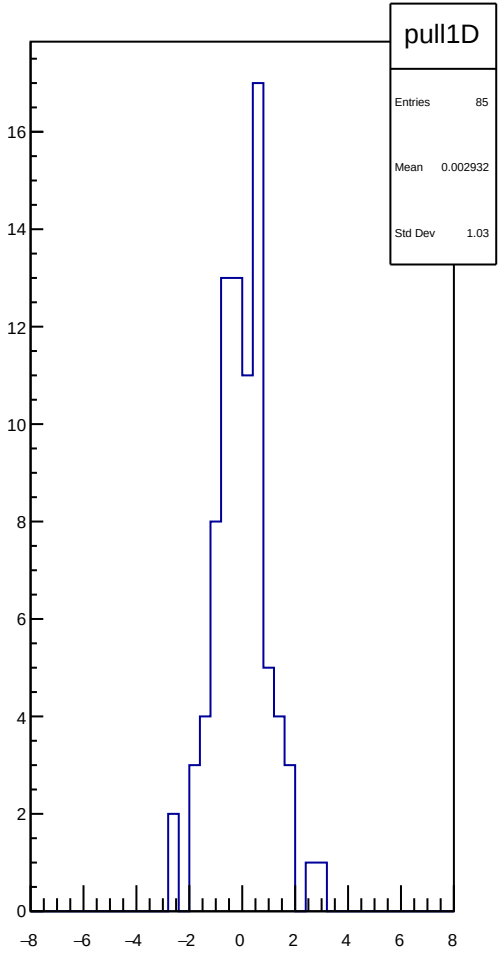

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 8493 / 84
p0 6064 ± 4.745
7500
7000
6500
6000
5500

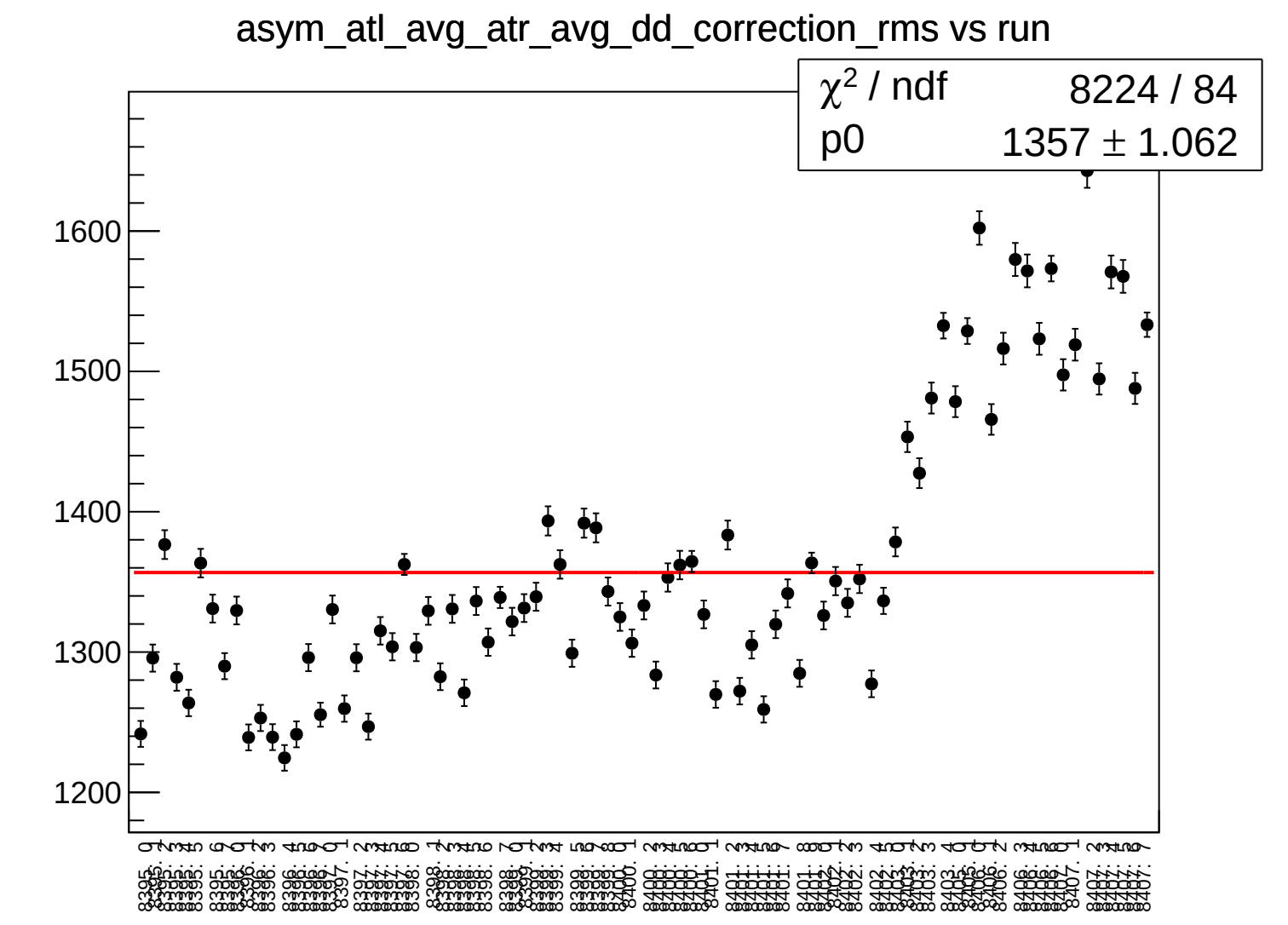

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 93.68 / 84
p0 −1552 ± 1411
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 261.4
Std Dev 200.5
2
1
0
−1
−2

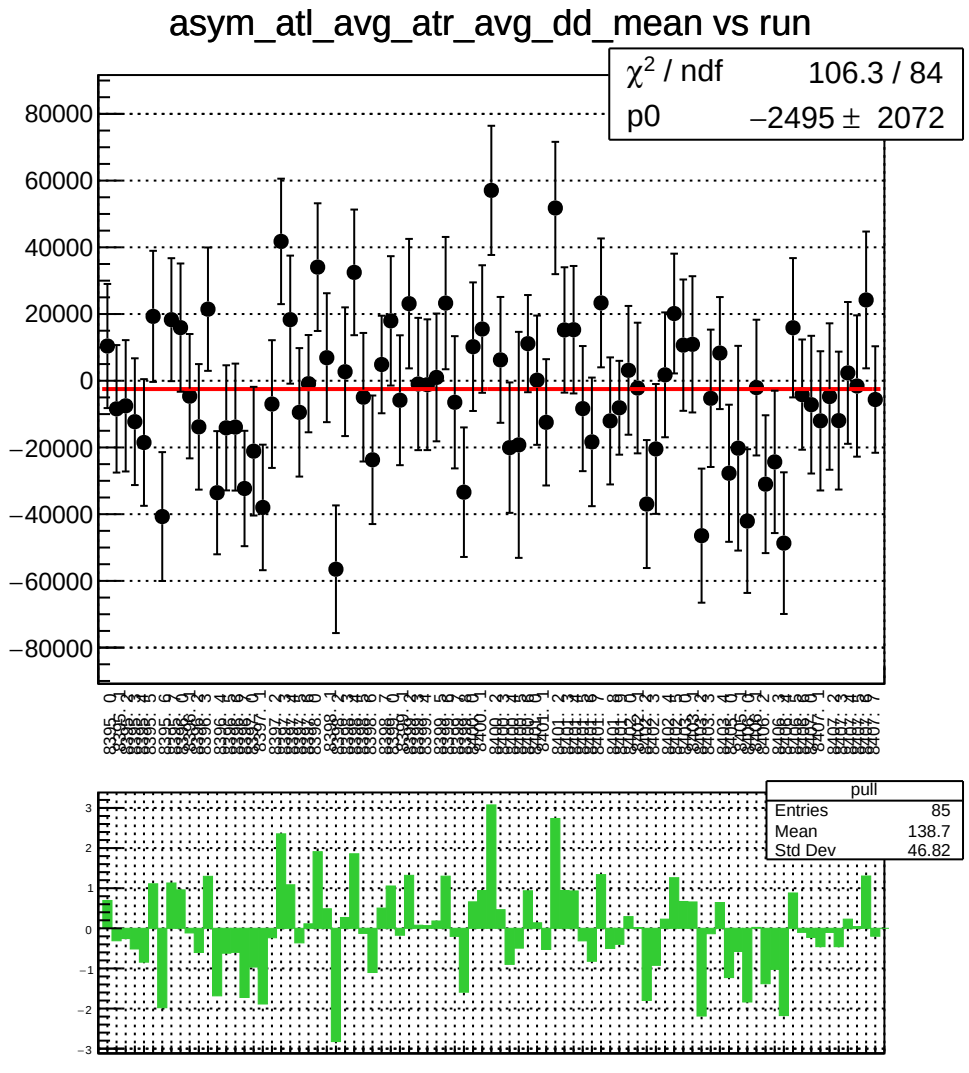

pull1D
Entries 85
Mean −0.01693
Std Dev 1.05
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

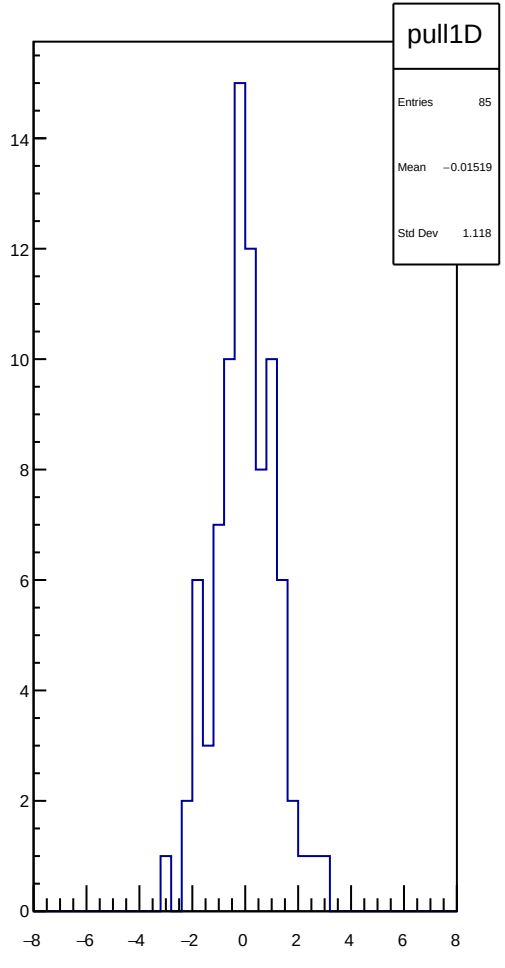

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.616e+04 / 84
p0 1272 ± 0.9978
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

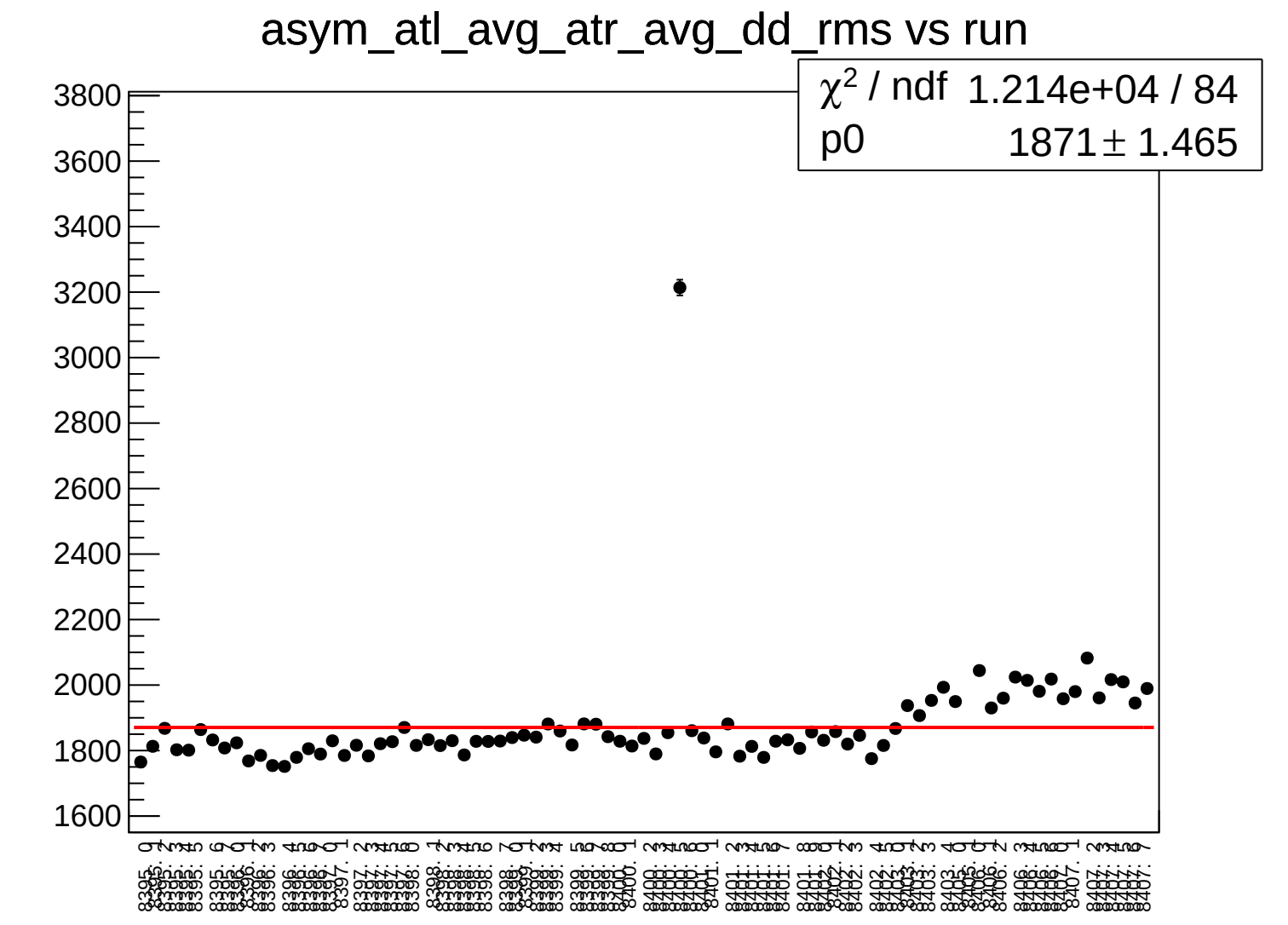

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 90.17 / 84
p0 832.9 ± 1501
pull
Entries 85
Mean −535.4
Std Dev 568.5

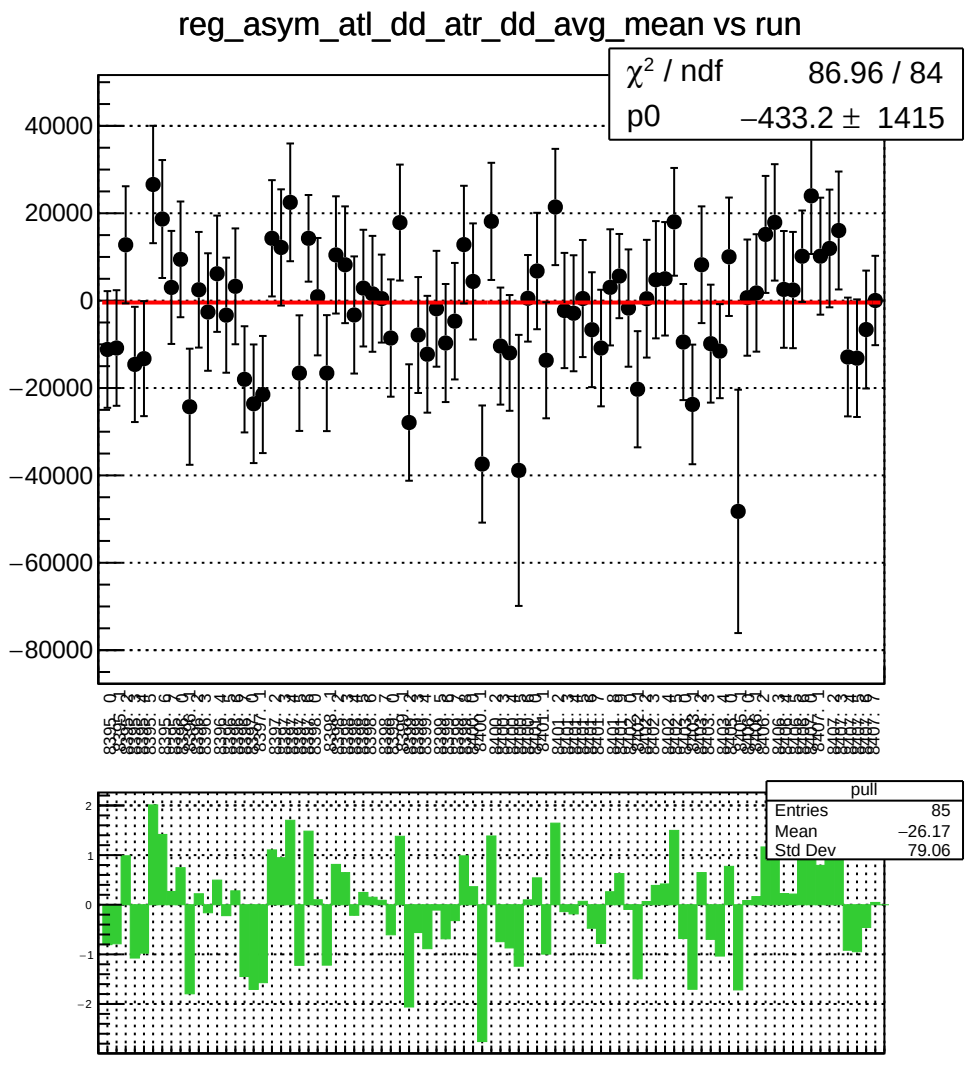

pull1D
Entries 85
Mean 0.002932
Std Dev 1.03

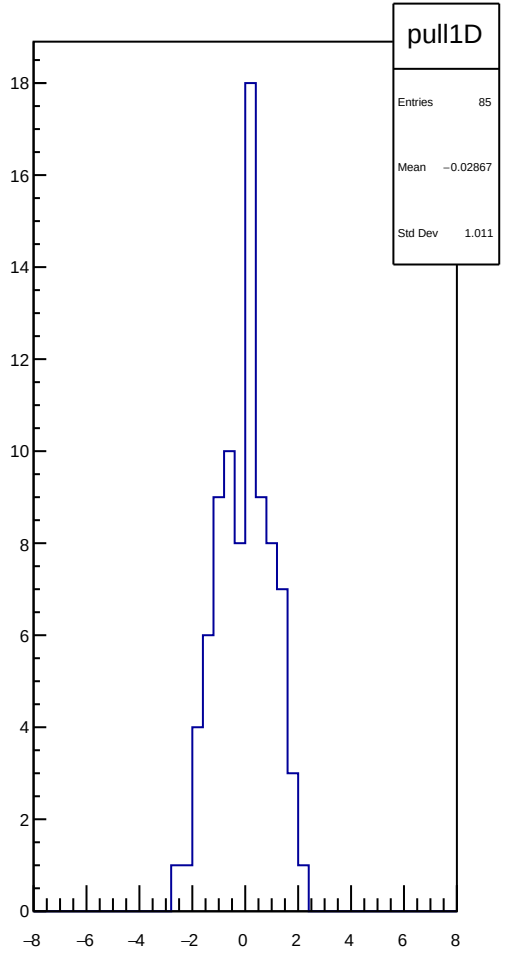

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 8224 / 84
p0 1357 ± 1.062
1600
1500
1400
1300
1200

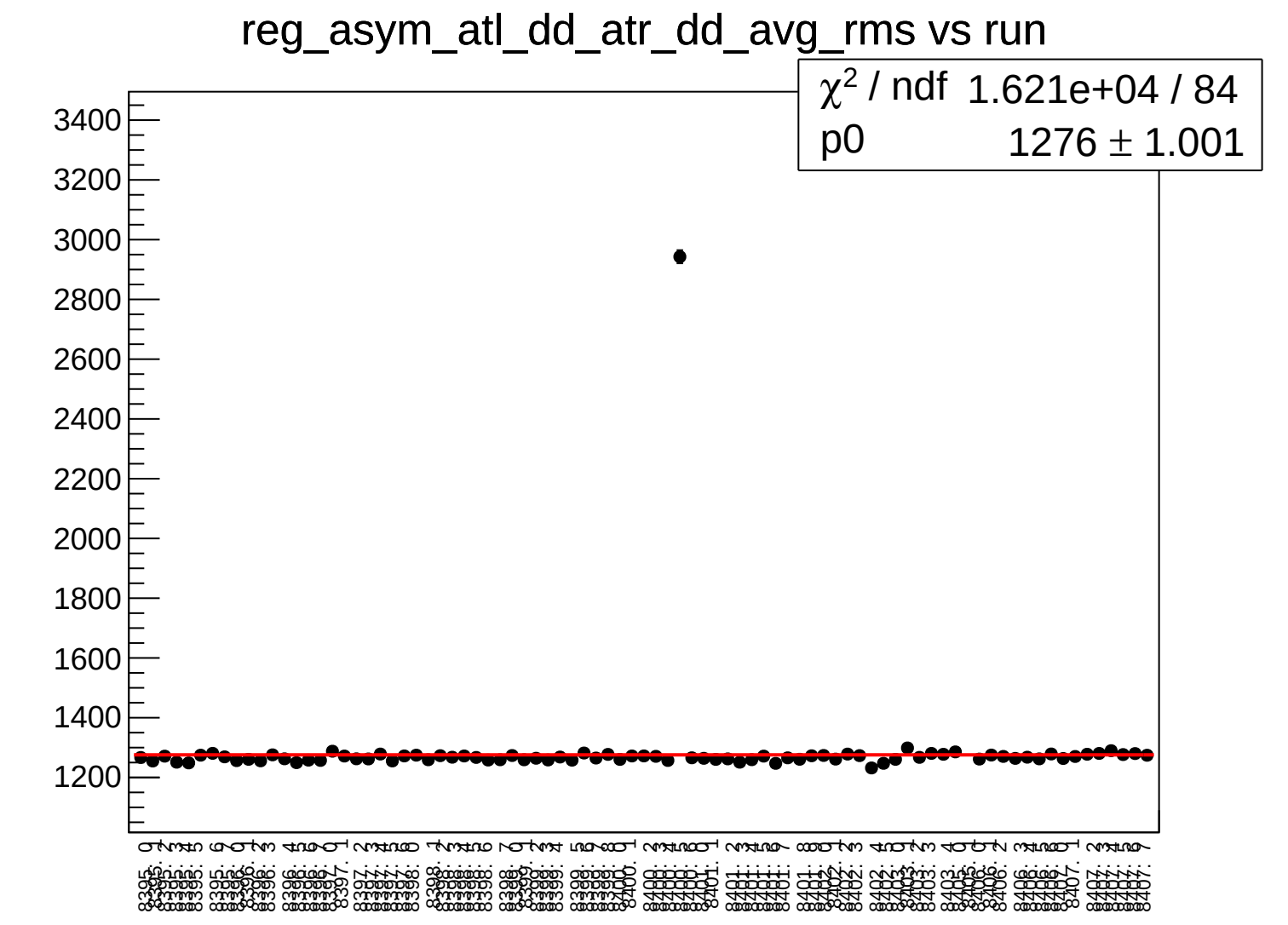

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 106.3 / 84
p0 −2495 ± 2072
pull
Entries 85
Mean 138.7
Std Dev 46.82

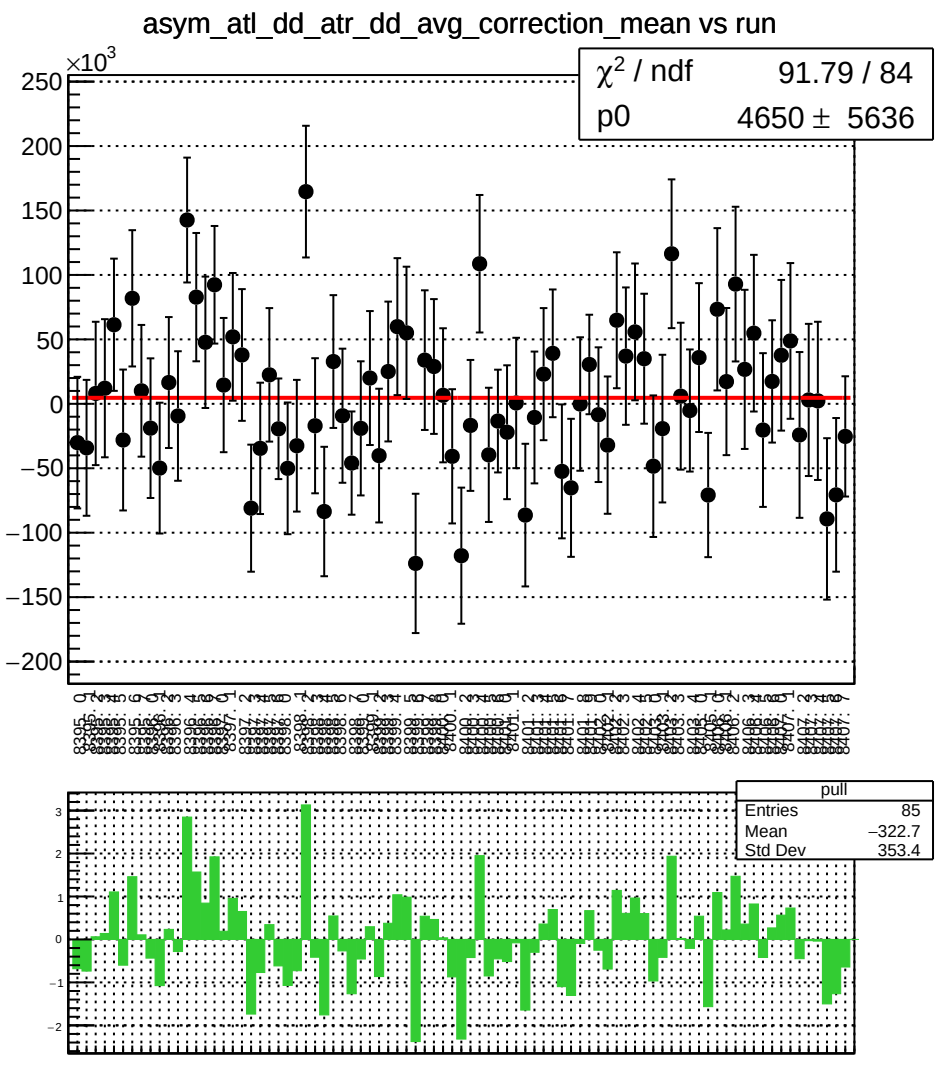

pull1D
Entries 85
Mean −0.01519
Std Dev 1.118

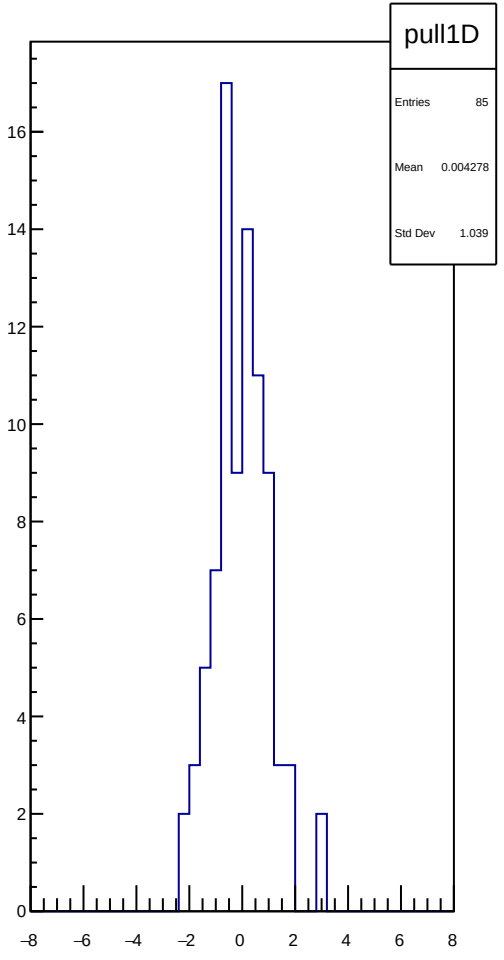

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.214e+04 / 84
p0 1871 ± 1.465
3800
3600
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600

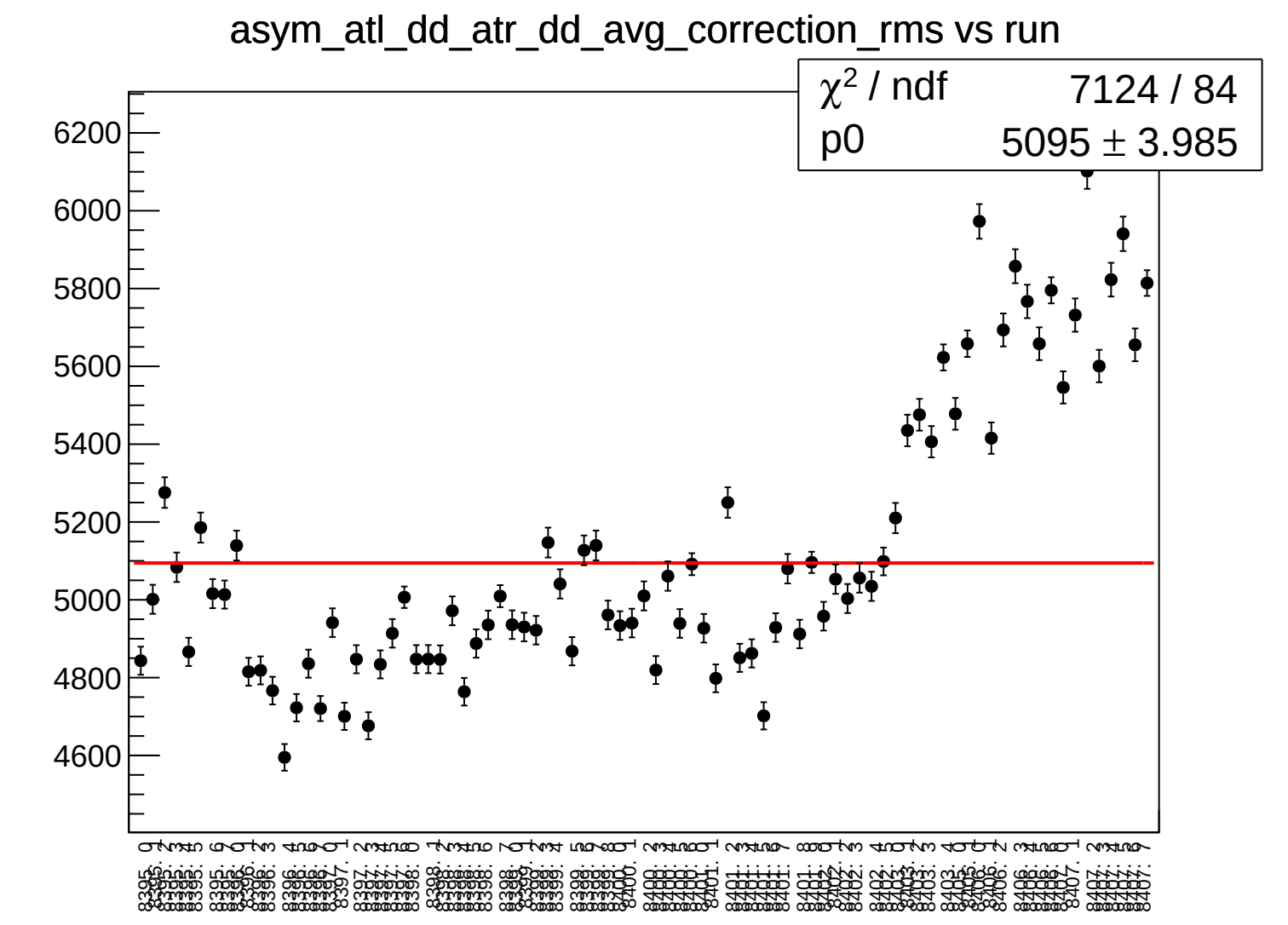

reg_asym_atl_dd_atr_dd_avg_mean vs run
χ² / ndf 86.96 / 84
p0 −433.2 ± 1415
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −26.17
Std Dev 79.06
2
1
0
−1
−2

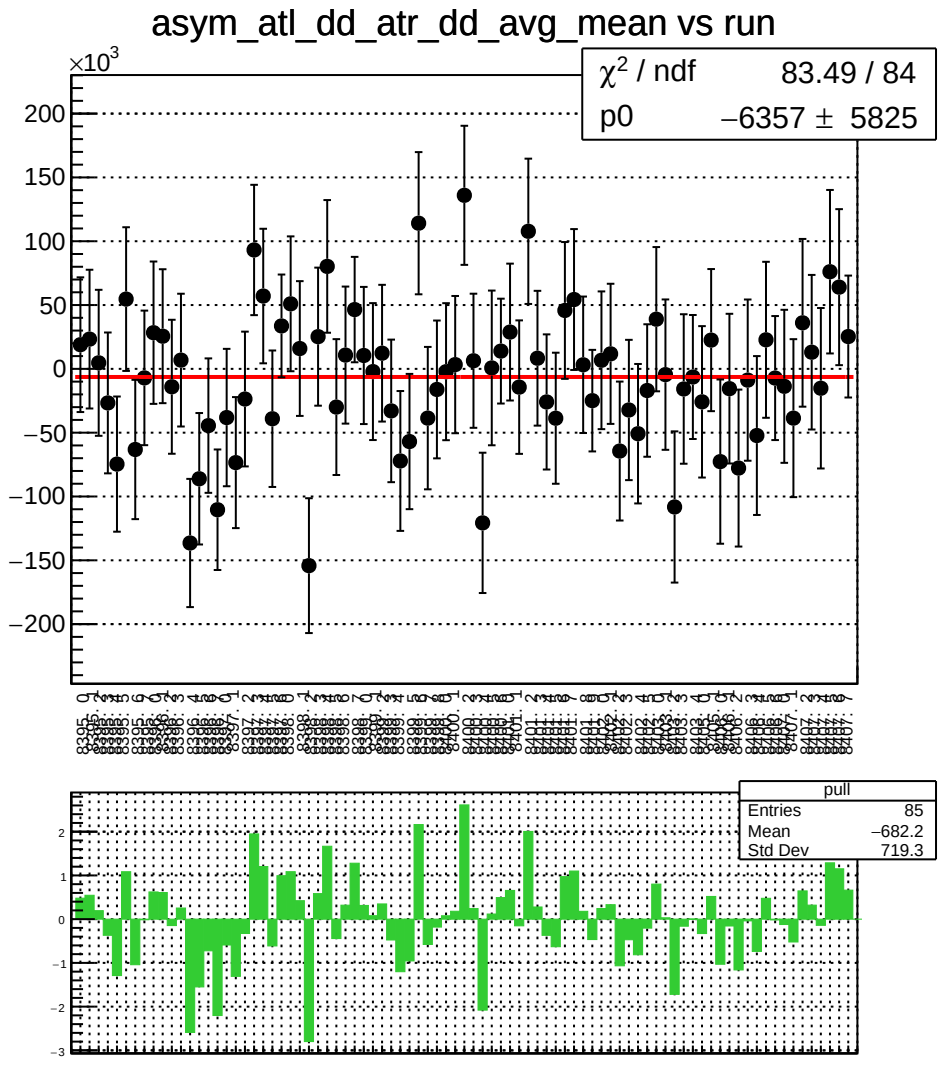

pull1D
Entries 85
Mean −0.02867
Std Dev 1.011
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

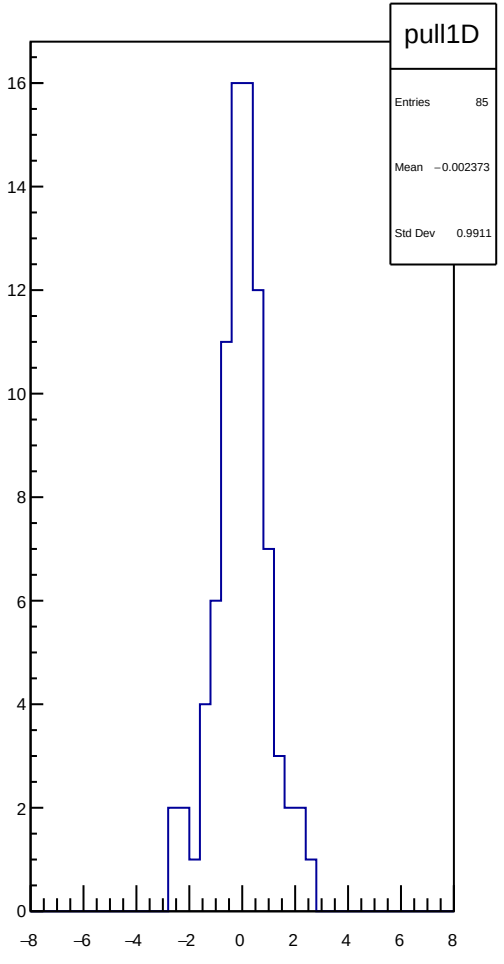

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 1.621e+04 / 84
p0 1276 ± 1.001
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

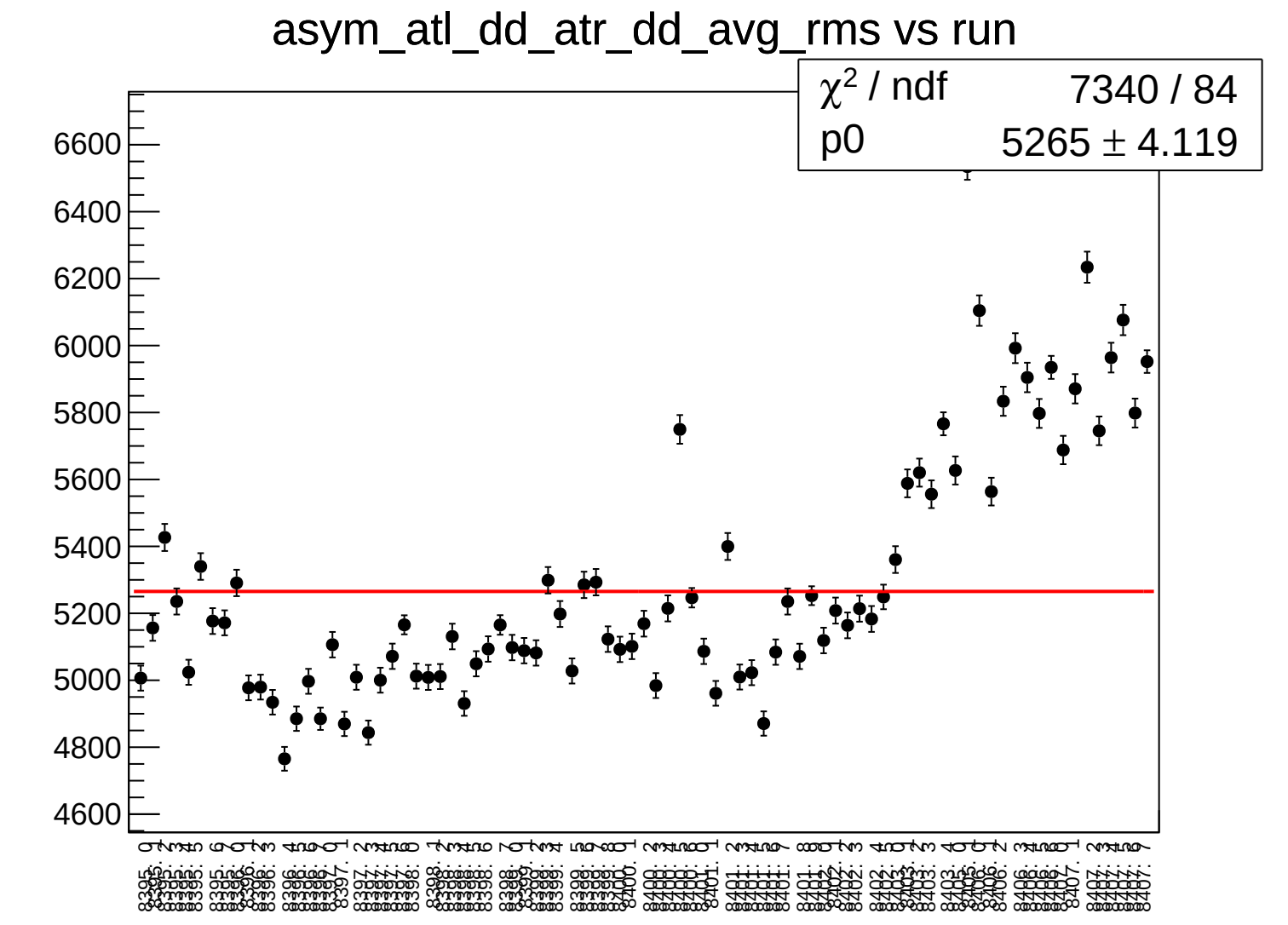

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 91.79 / 84
p0 4650 ± 5636
pull
Entries 85
Mean −322.7
Std Dev 353.4

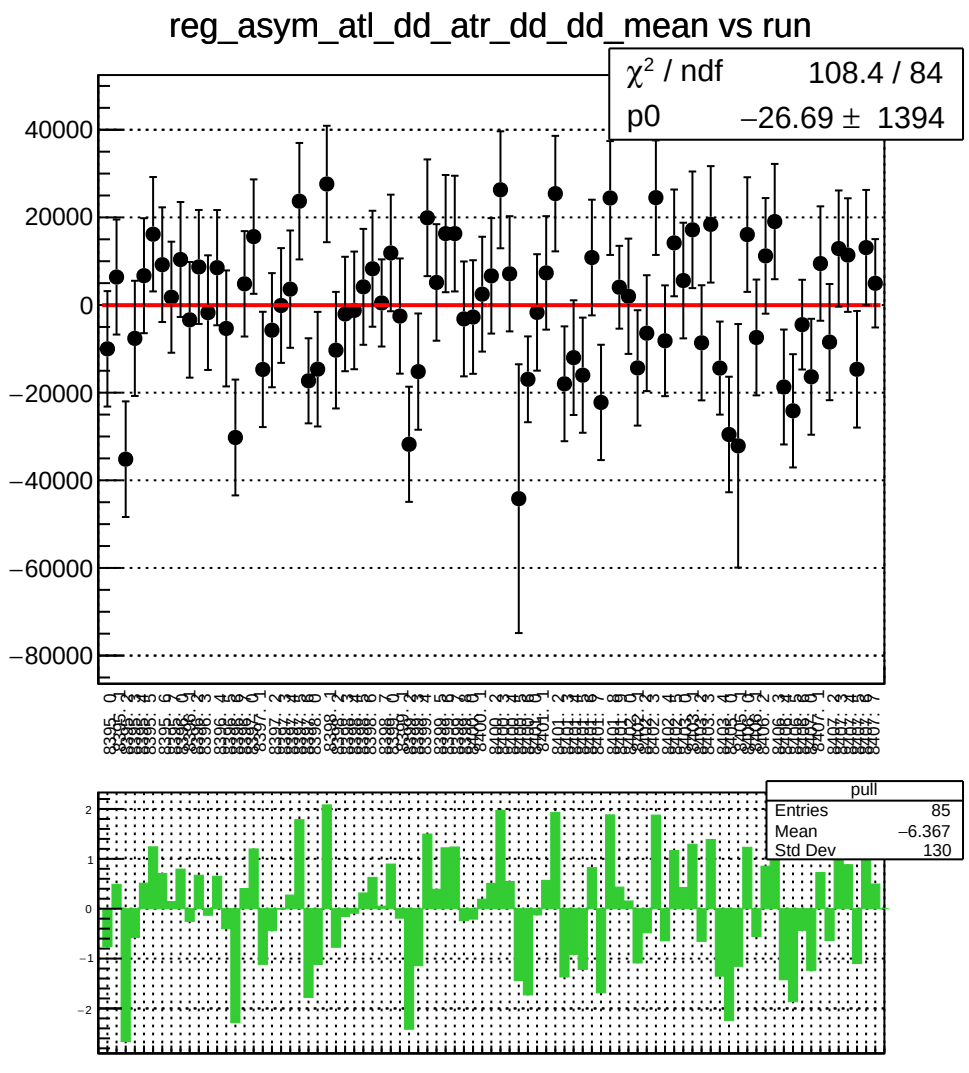

pull1D
Entries 85
Mean 0.004278
Std Dev 1.039

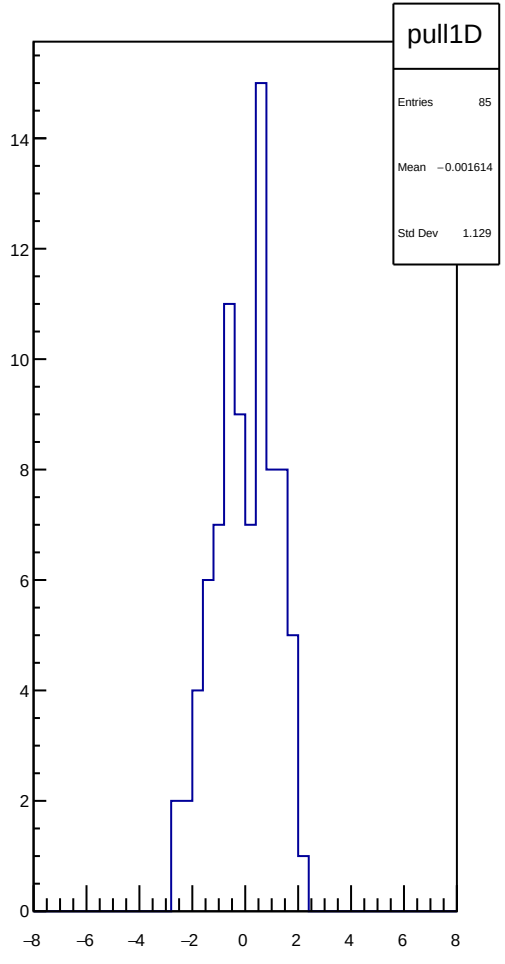

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 7124 / 84
p0 5095 ± 3.985
6200
6000
5800
5600
5400
5200
5000
4800
4600

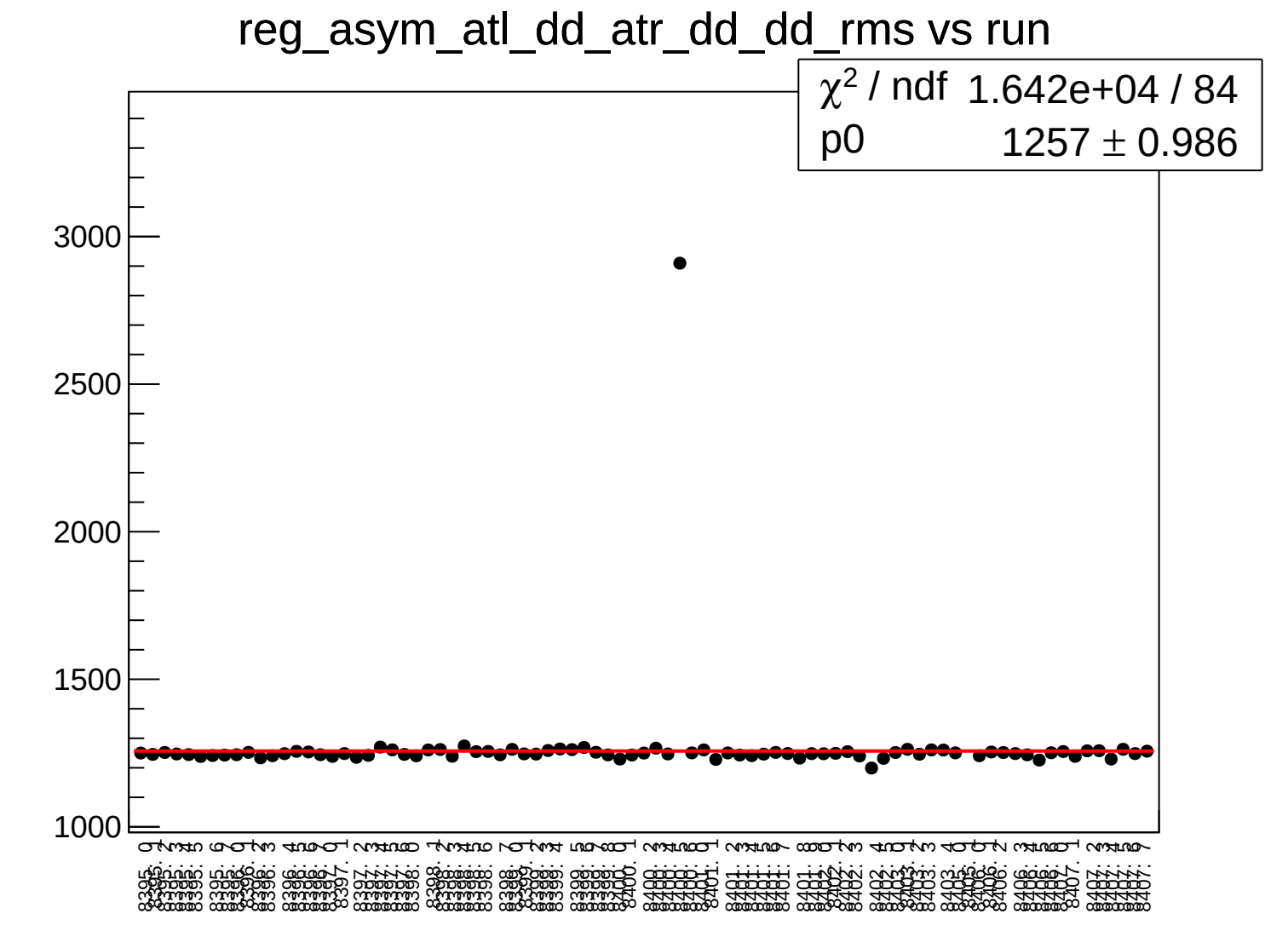

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 83.49 / 84
p0 −6357 ± 5825
pull
Entries 85
Mean −682.2
Std Dev 719.3

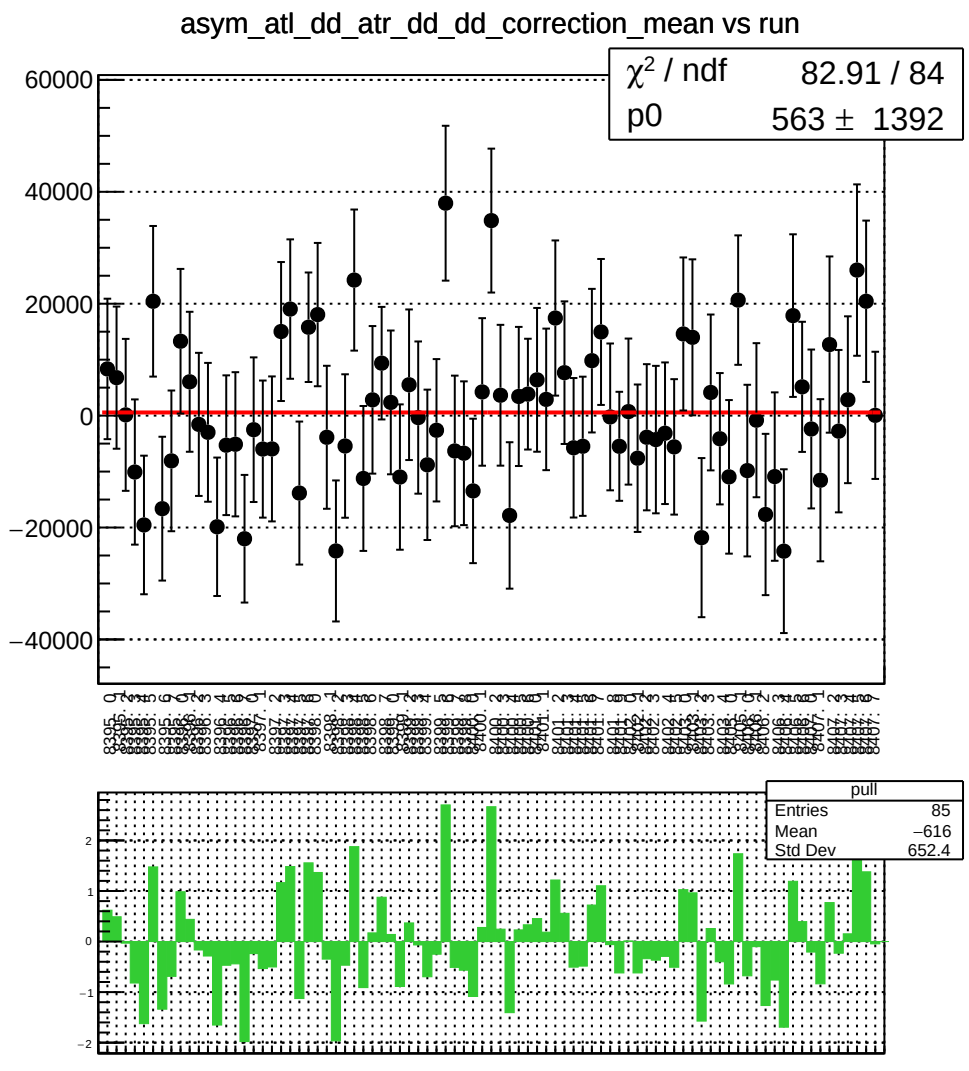

pull1D
Entries 85
Mean −0.002373
Std Dev 0.9911

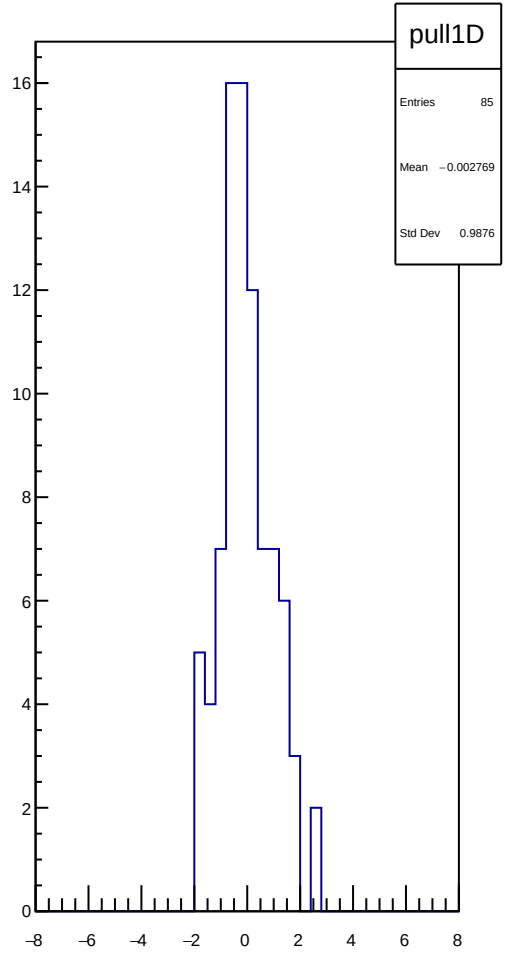

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 7340 / 84
p0 5265 ± 4.119
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800
4600

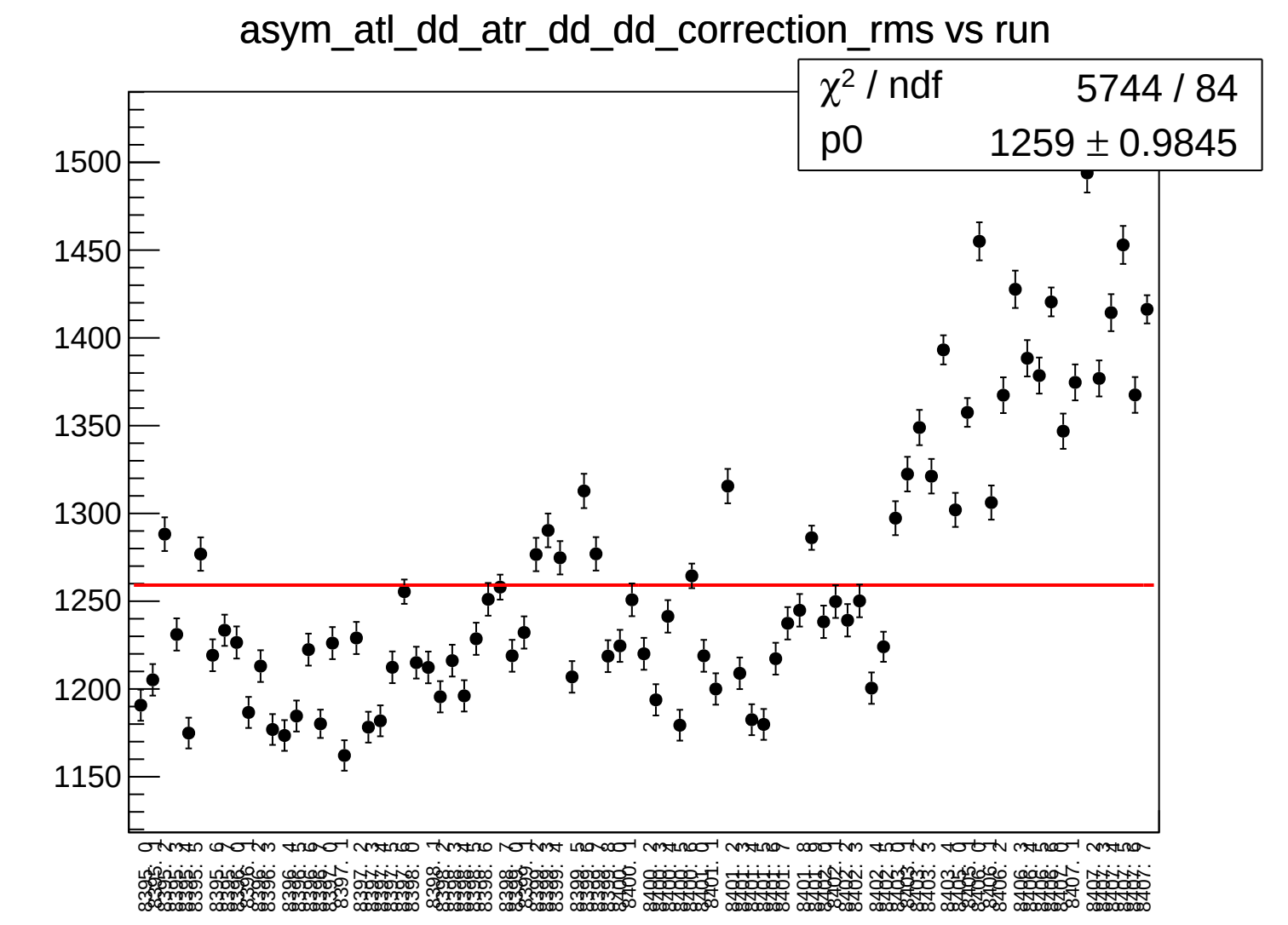

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 108.4 / 84
p0 −26.69 ± 1394
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −6.367
Std Dev 130
2
1
0
−1
−2

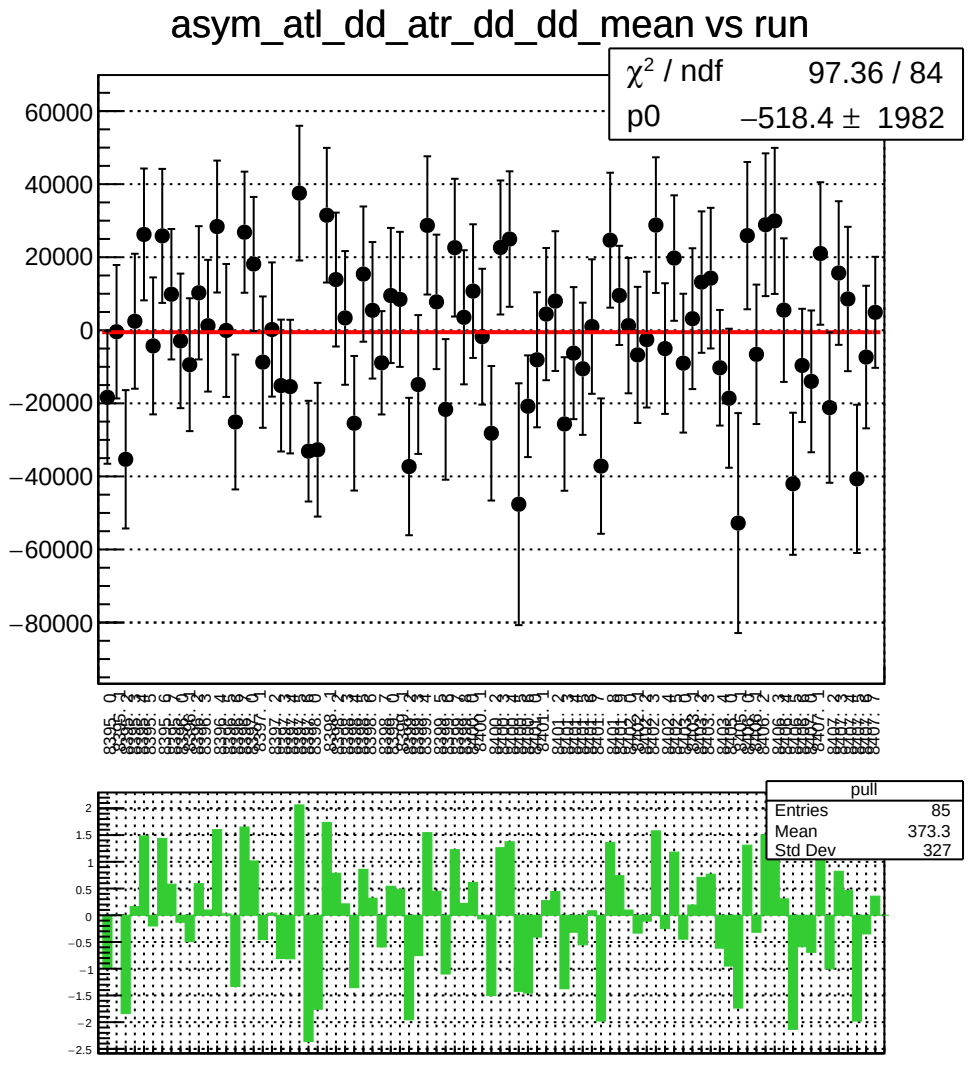

pull1D
Entries 85
Mean −0.001614
Std Dev 1.129
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

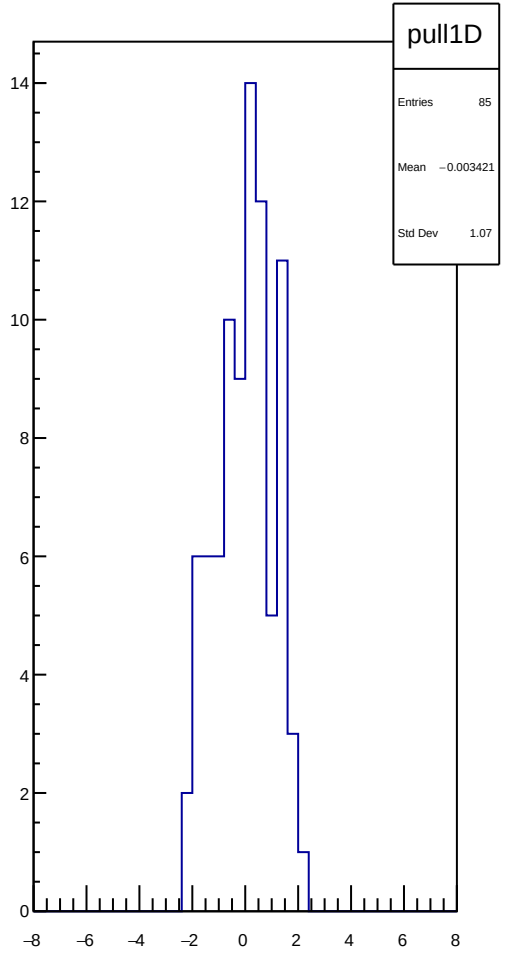

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.642e+04 / 84
p0 1257 ± 0.986
3000
2500
2000
1500
1000

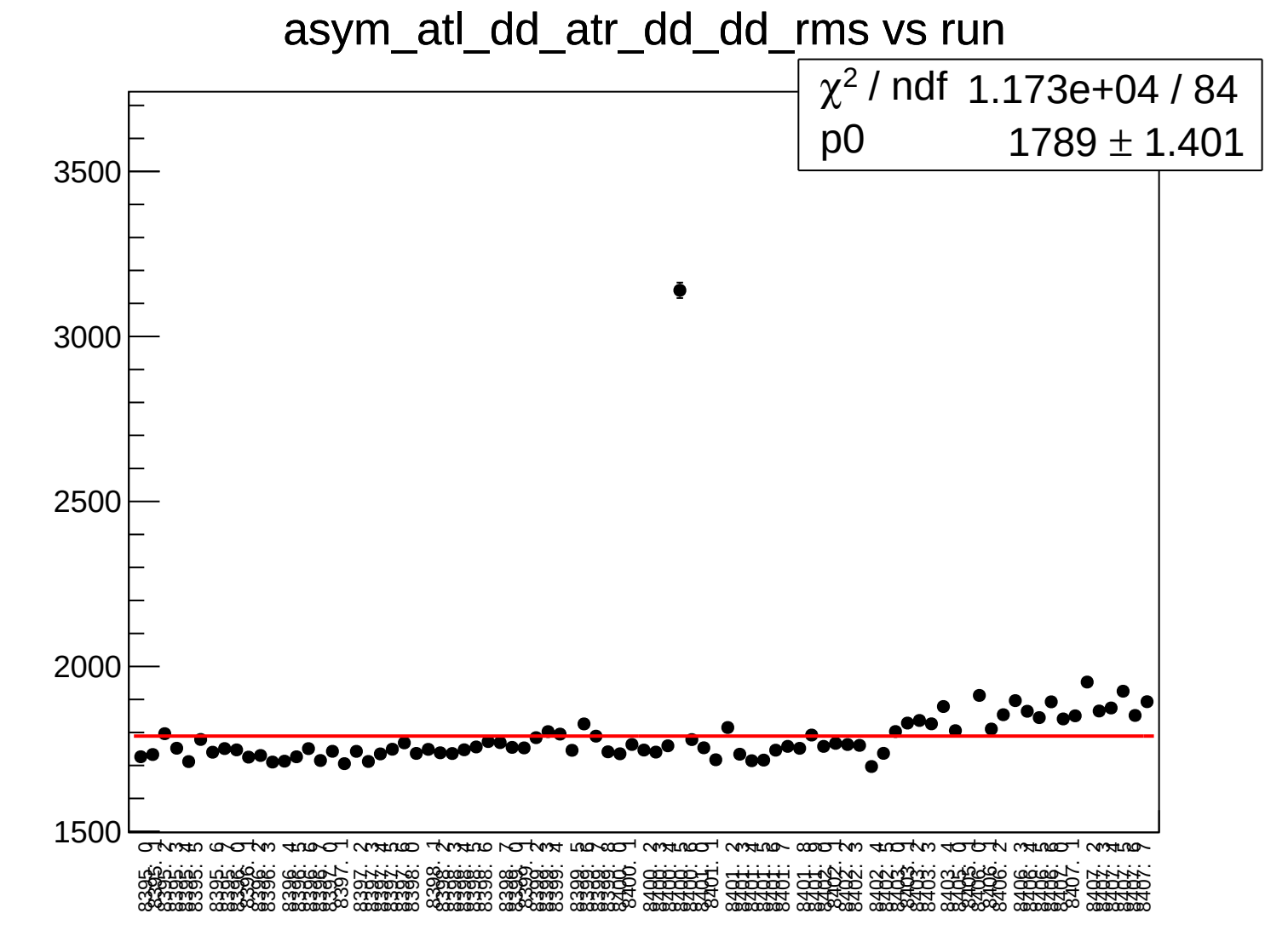

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 82.91 / 84
p0 563 ± 1392
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −616
Std Dev 652.4
2
1
0
−1
−2

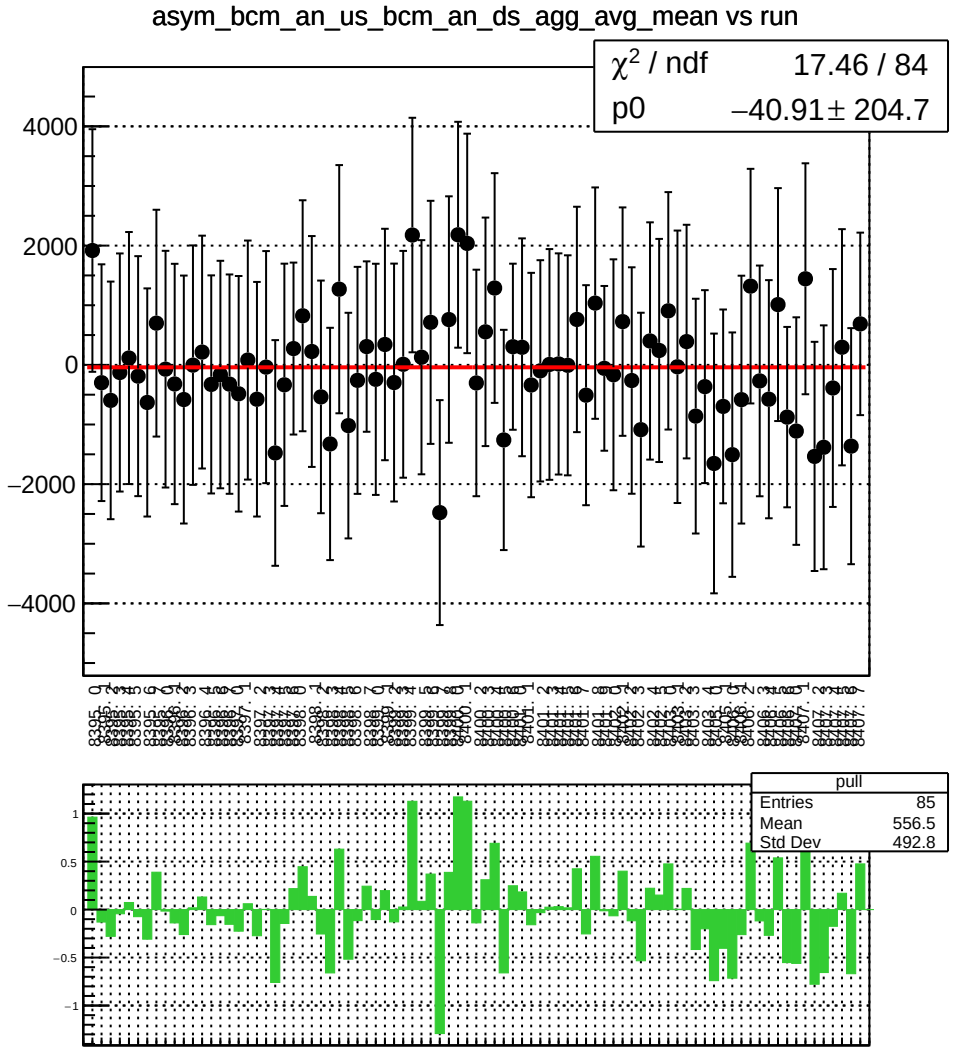

pull1D
Entries 85
Mean −0.002769
Std Dev 0.9876
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

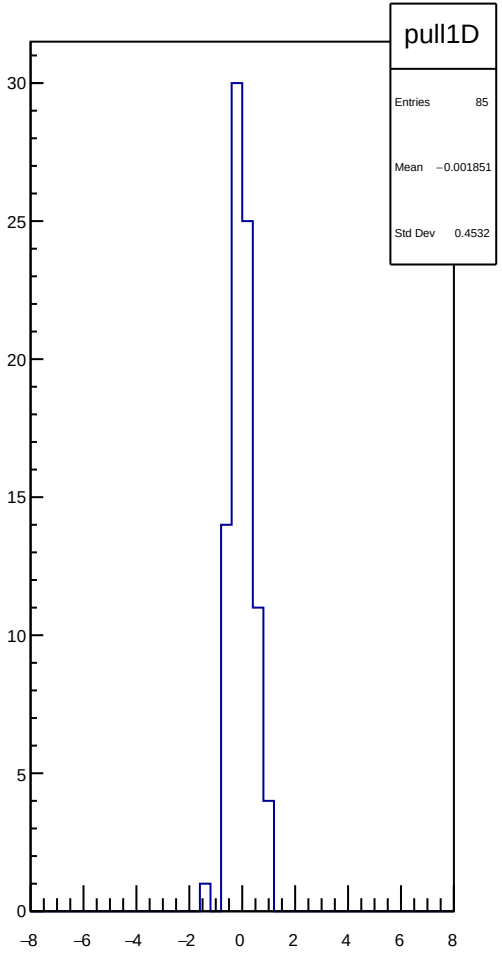

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 5744 / 84
p0 1259 ± 0.9845
1500
1450
1400
1350
1300
1250
1200
1150

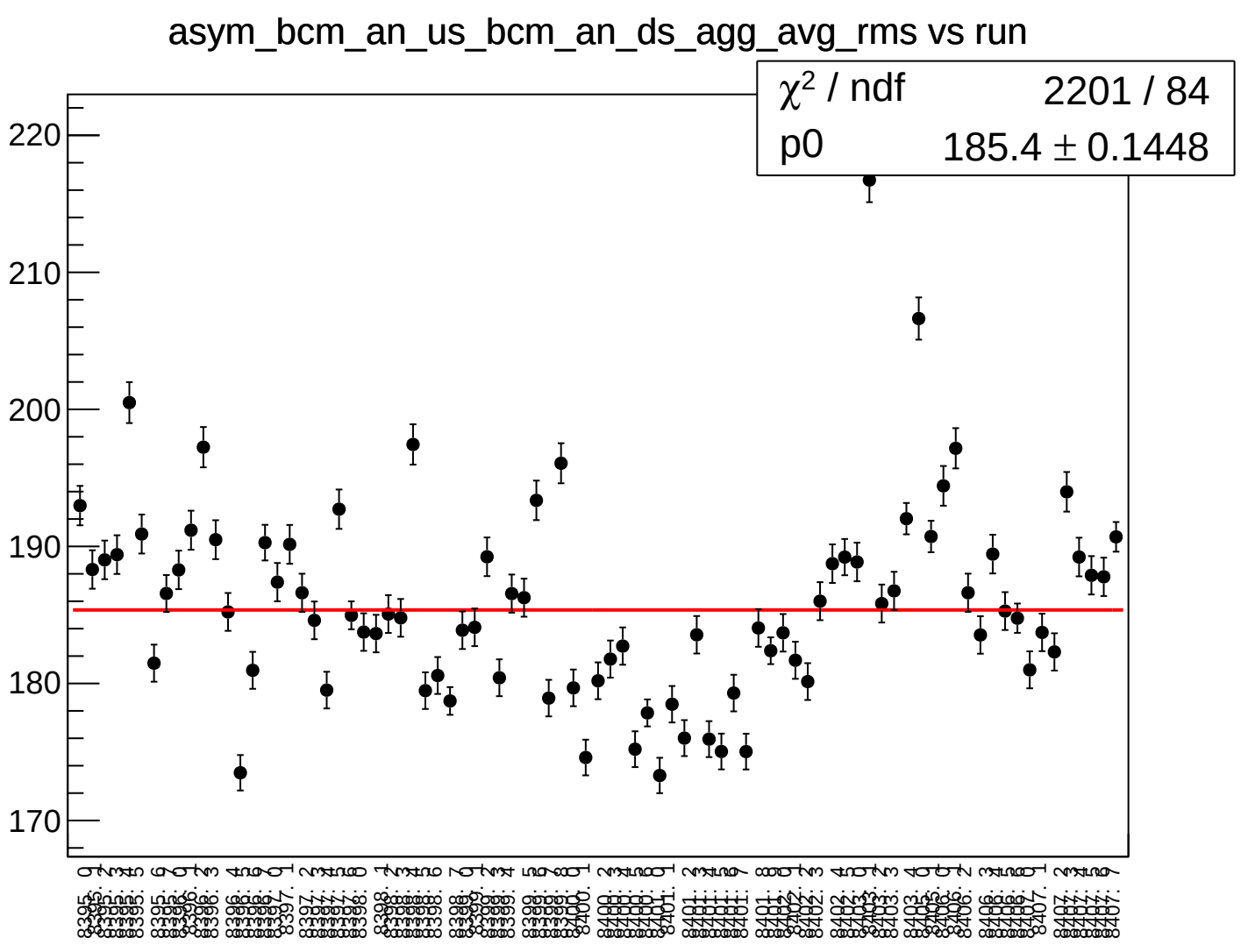

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 97.36 / 84
p0 −518.4 ± 1982
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 373.3
Std Dev 327
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

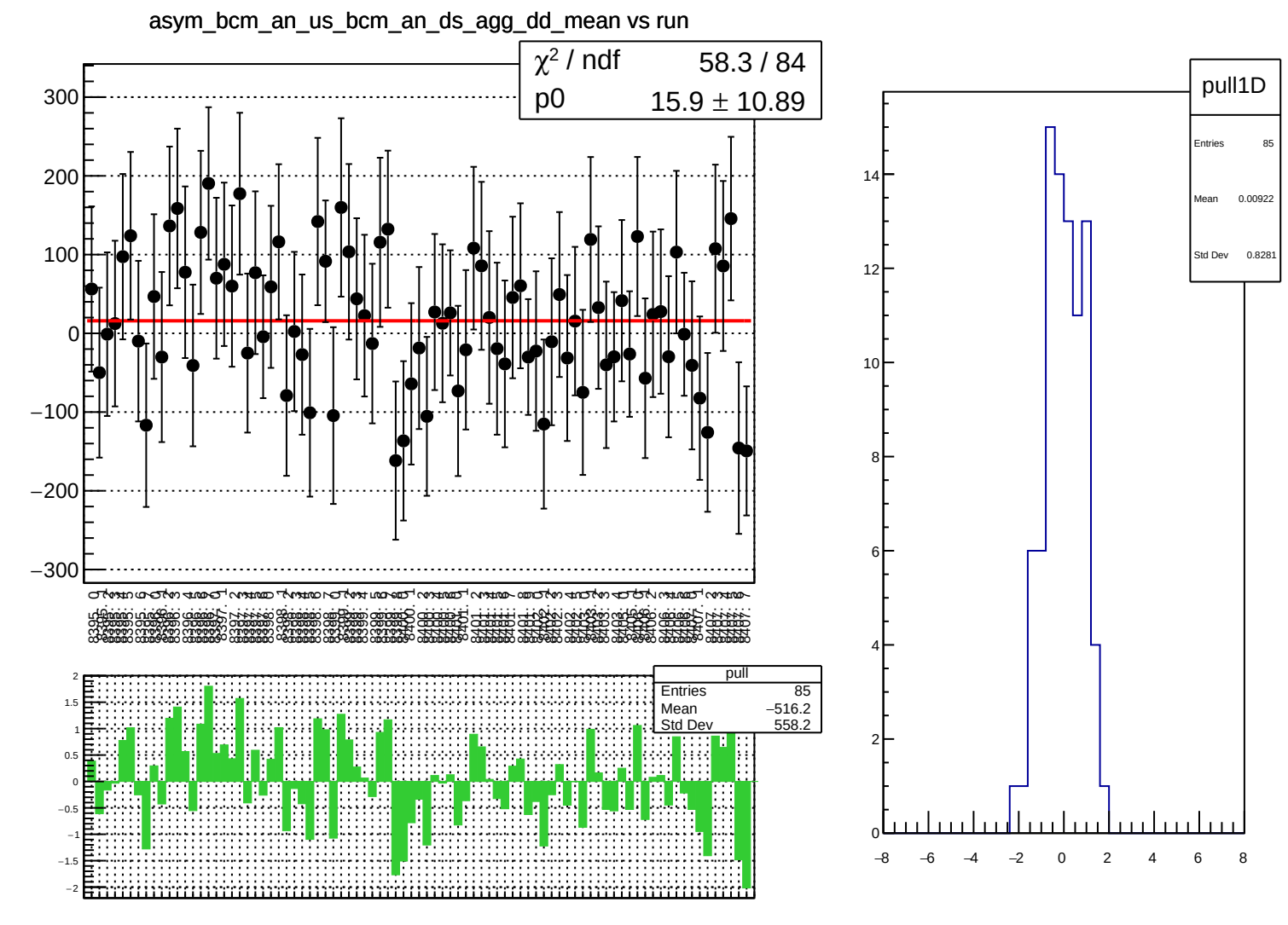

pull1D
Entries 85
Mean −0.003421
Std Dev 1.07
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

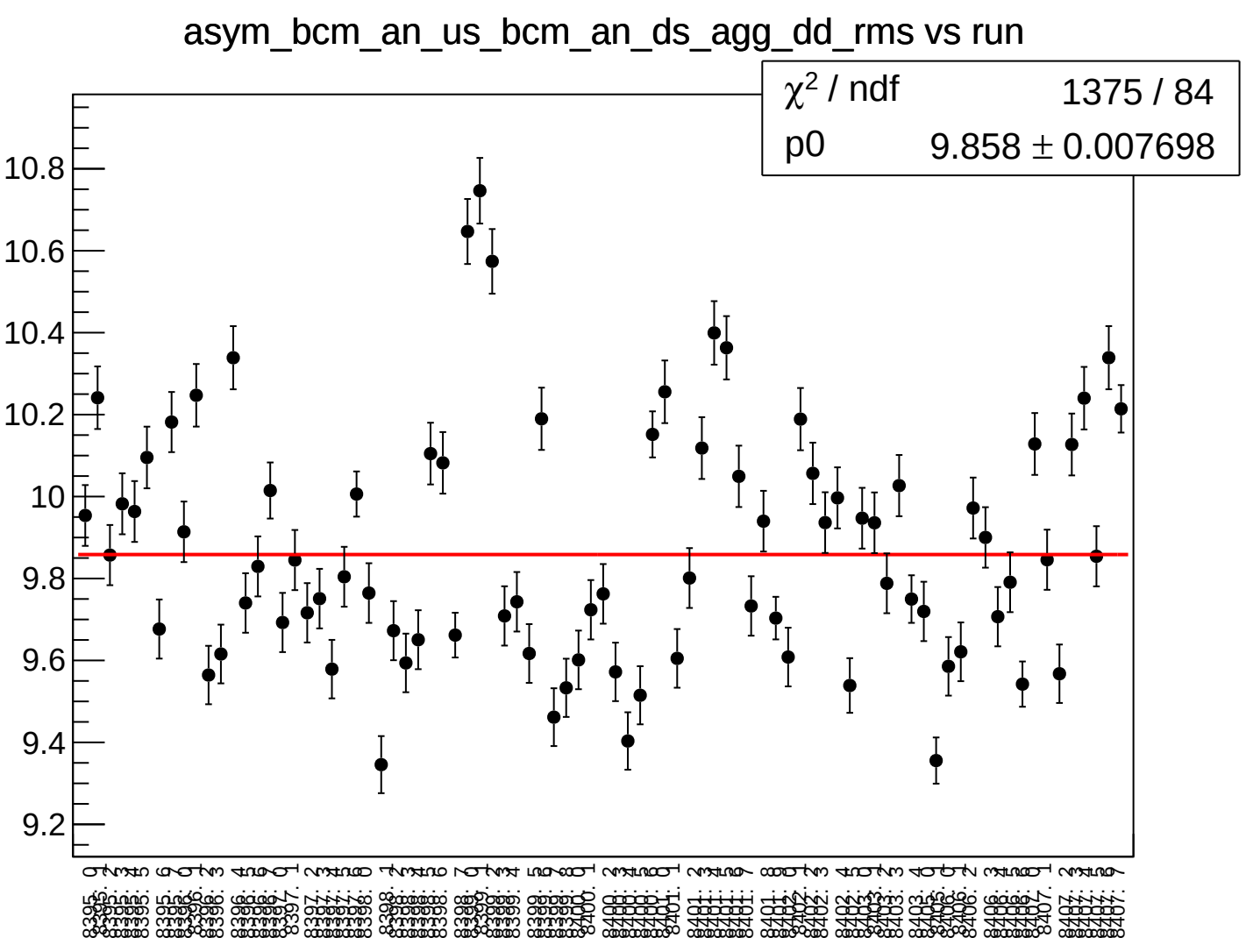

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.173e+04 / 84
p0 1789 ± 1.401
3500
3000
2500
2000
1500

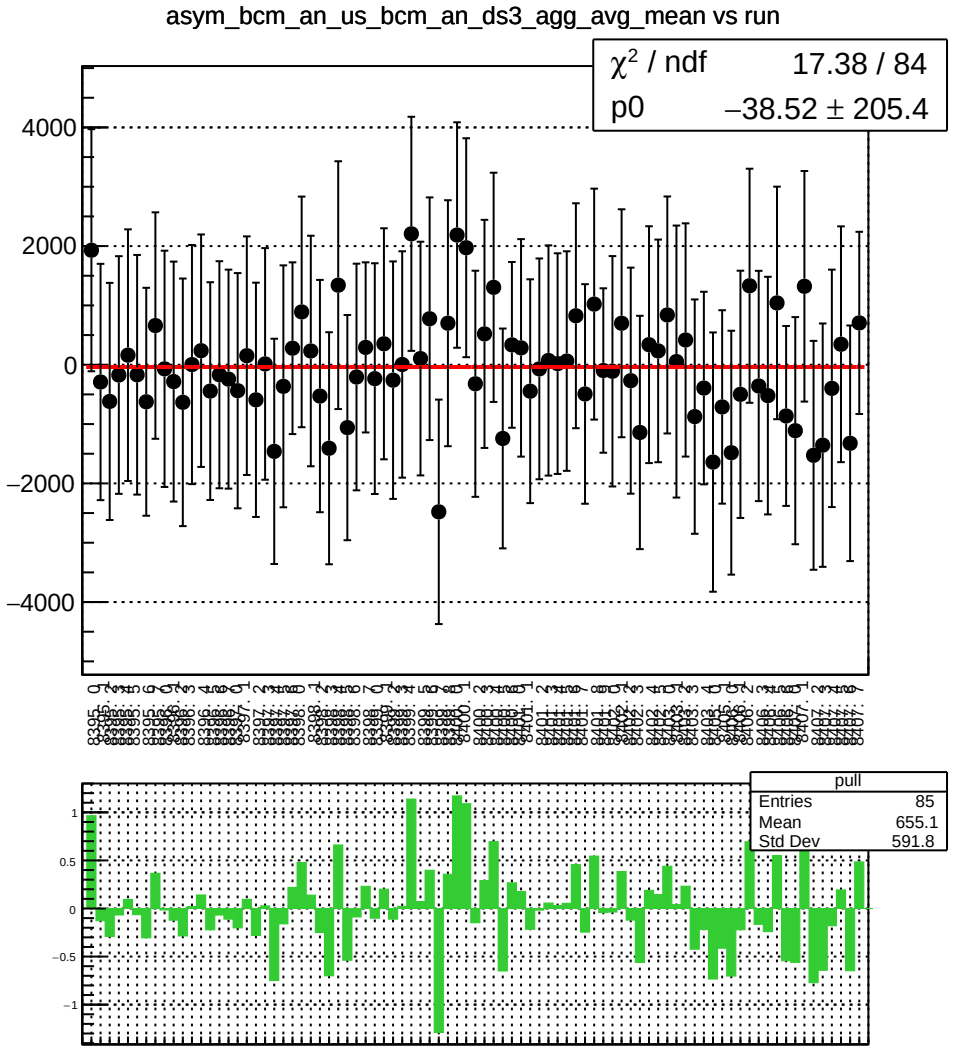

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.46 / 84
p0 −40.91 ± 204.7
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 556.5
Std Dev 492.8
1
0.5
0
−0.5
−1

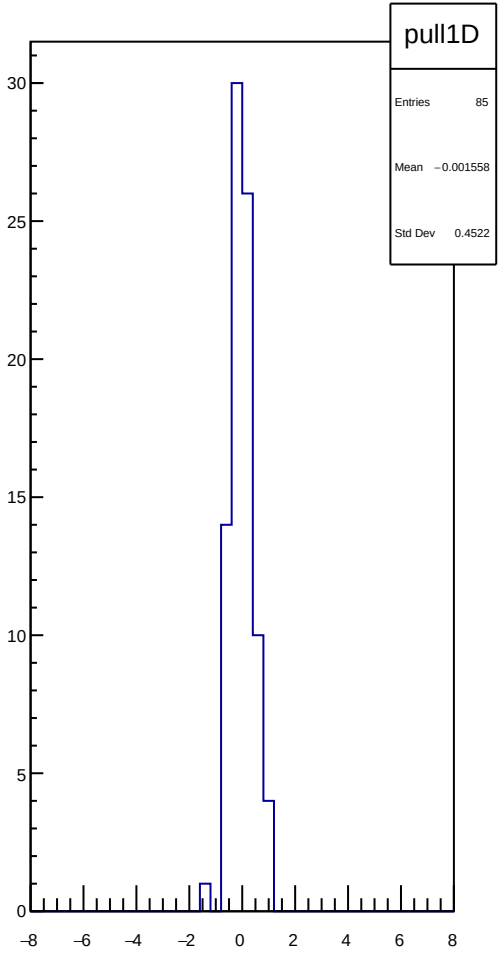

pull1D
Entries 85
Mean −0.001851
Std Dev 0.4532
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

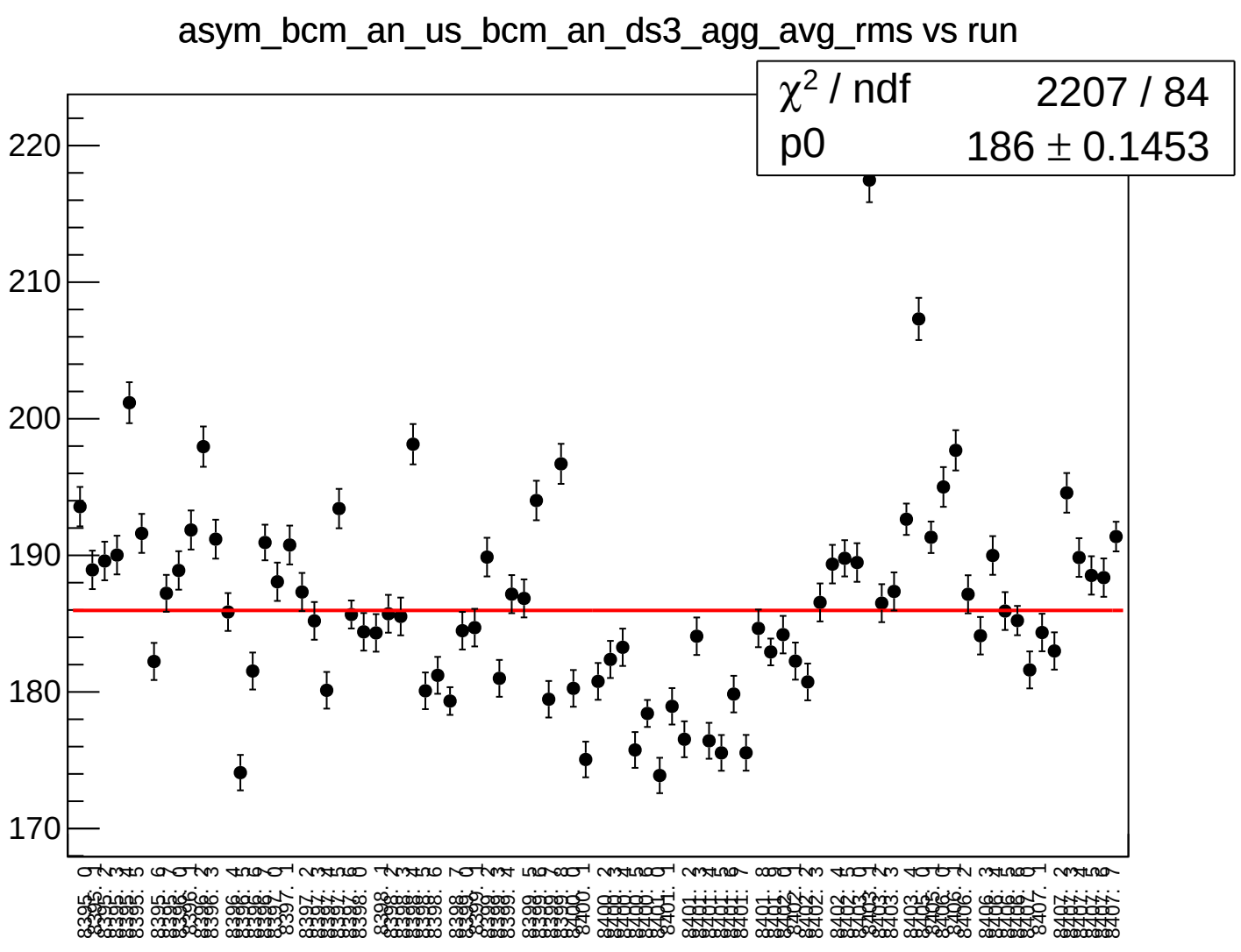

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2201 / 84
p0 185.4 ± 0.1448
220
210
200
190
180
170

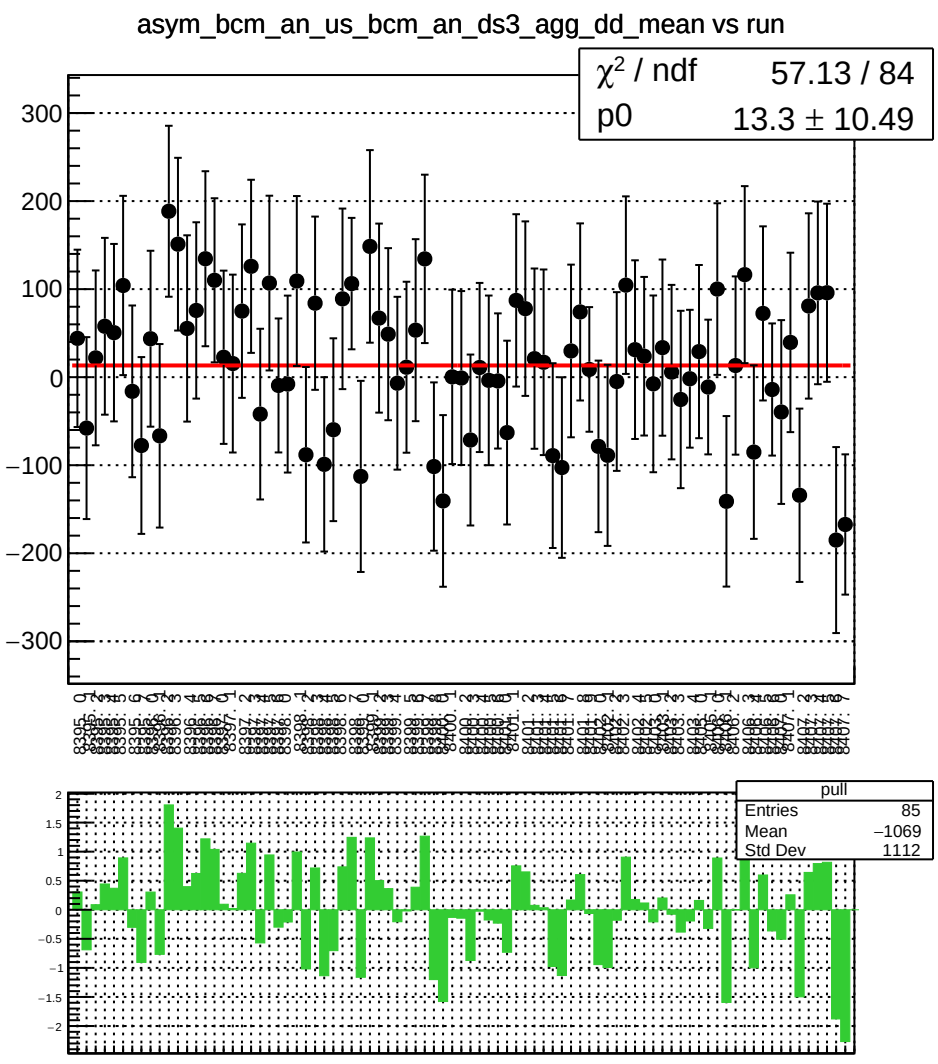

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 58.3 / 84
p0 15.9 ± 10.89
pull
Entries 85
Mean −516.2
Std Dev 558.2
pull1D
Entries 85
Mean 0.00922
Std Dev 0.8281

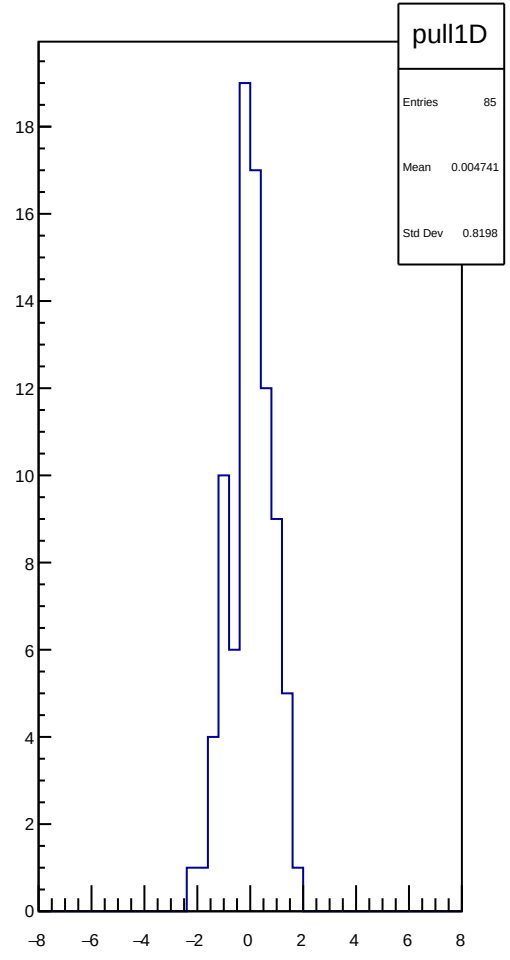

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1375 / 84
p0 9.858 ± 0.007698
10.8
10.6
10.4
10.2
10
9.8
9.6
9.4
9.2

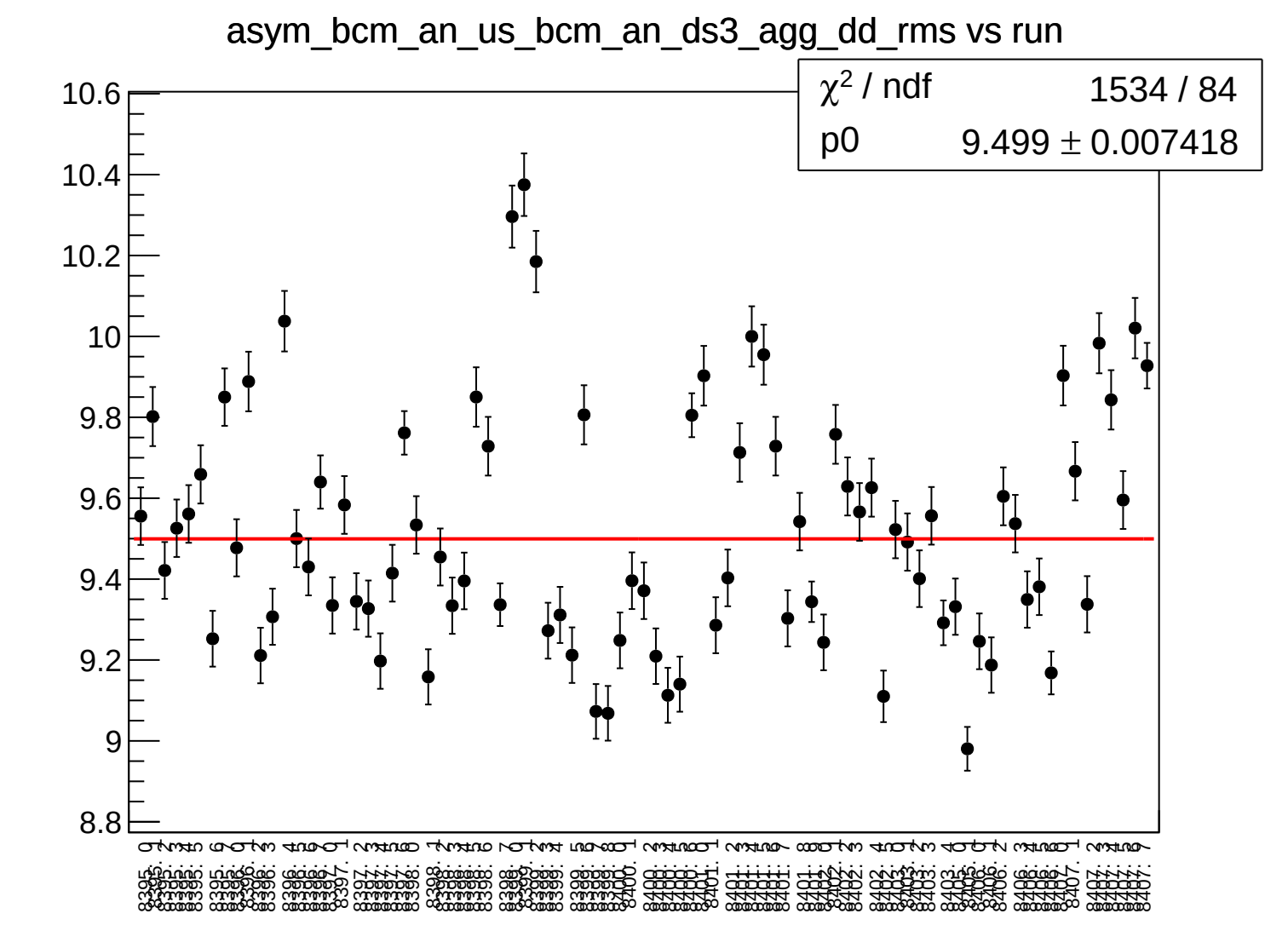

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 17.38 / 84
p0 −38.52 ± 205.4
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 655.1
Std Dev 591.8
1
0.5
0
−0.5
−1

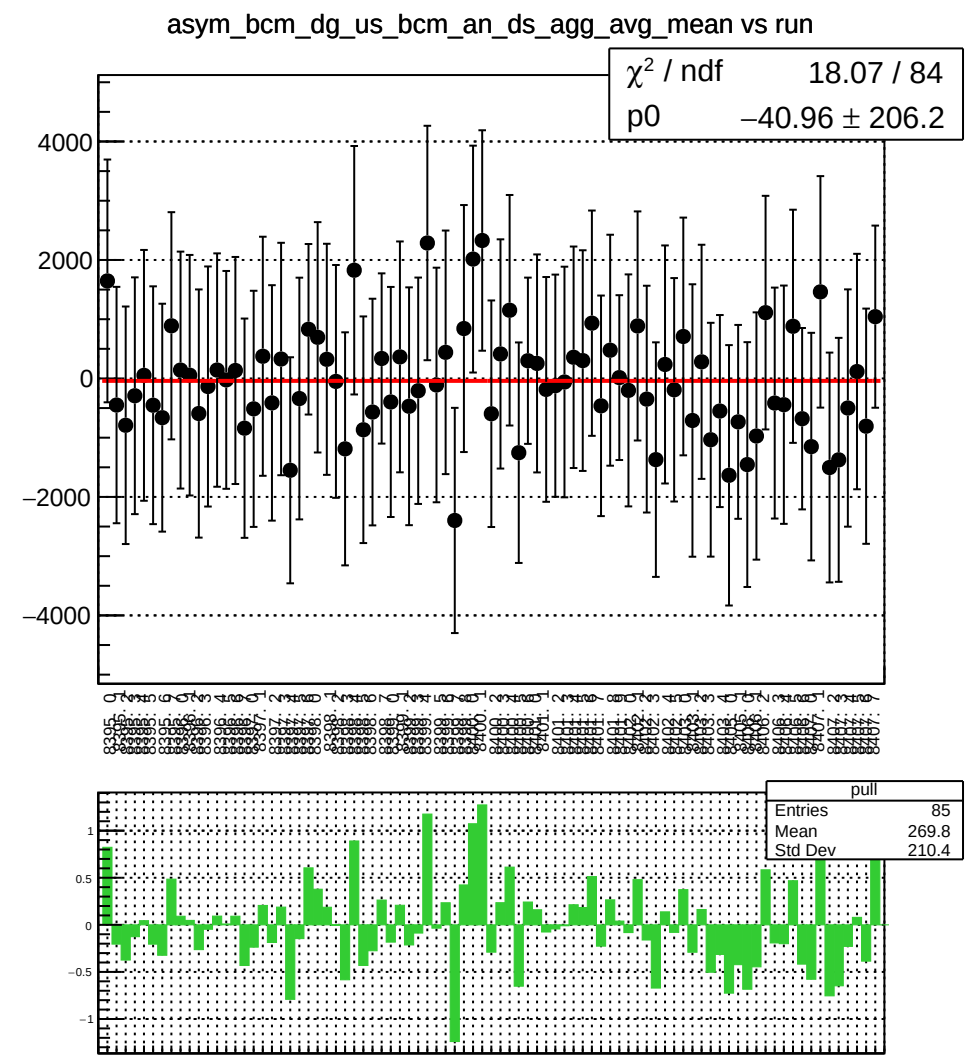

pull1D
Entries 85
Mean −0.001558
Std Dev 0.4522
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

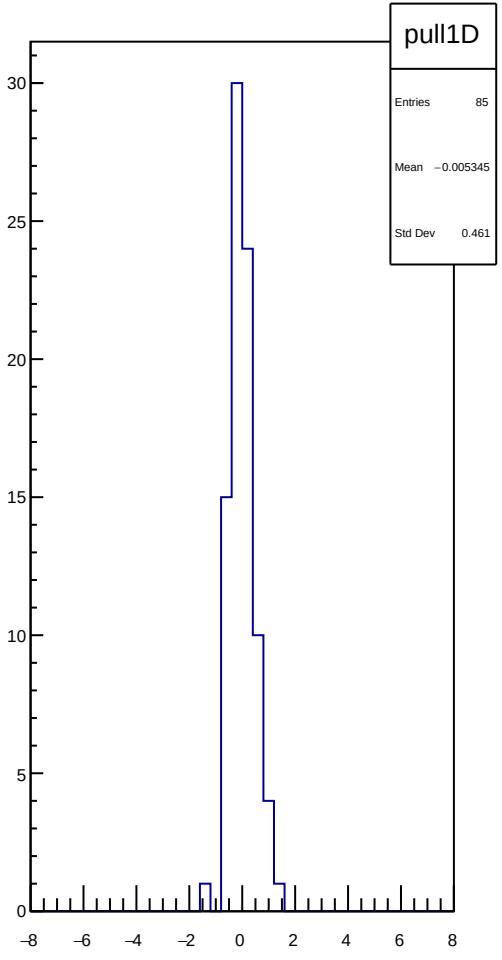

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2207 / 84
p0 186 ± 0.1453
220
210
200
190
180
170

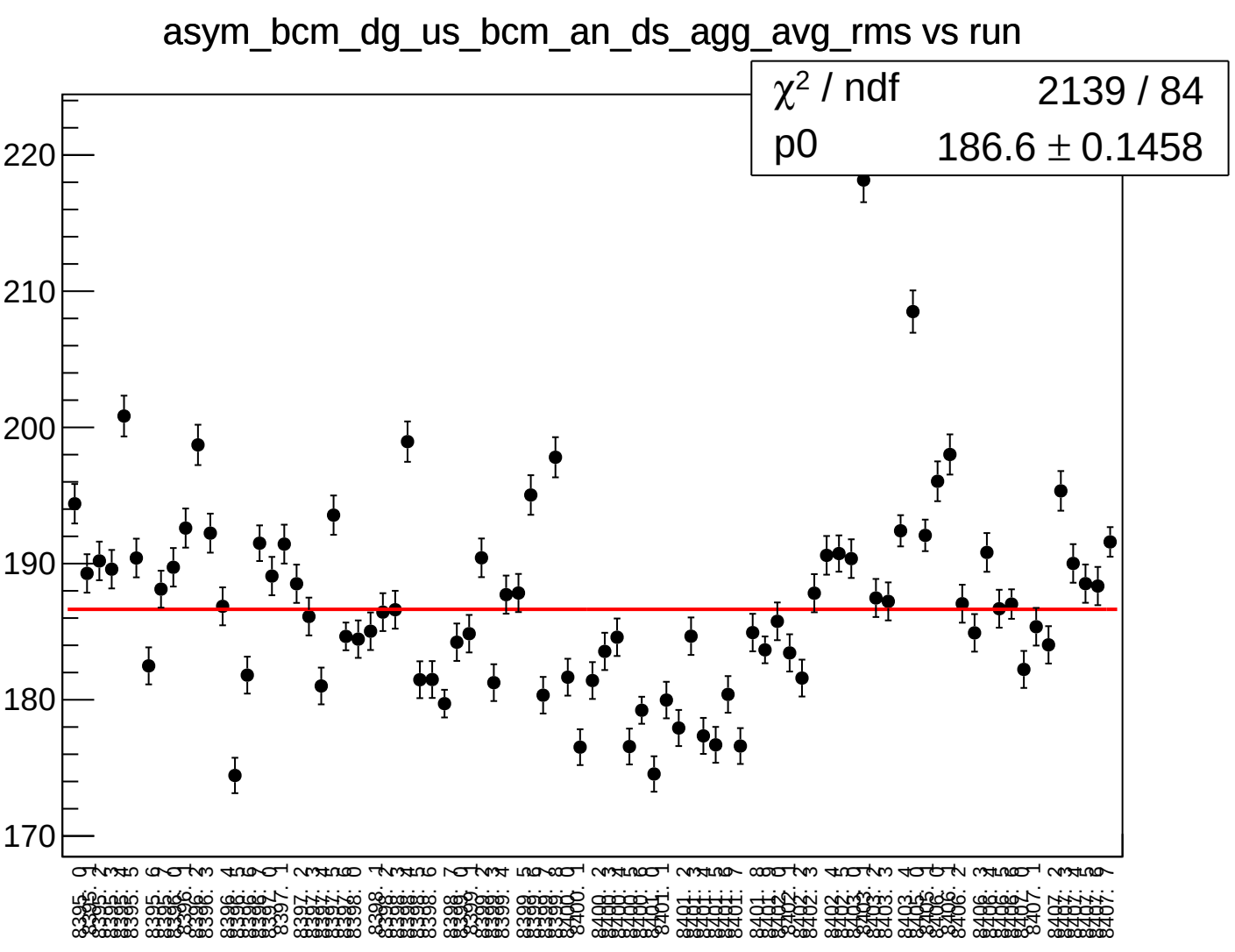

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 57.13 / 84
p0 13.3 ± 10.49
pull
Entries 85
Mean −1069
Std Dev 1112

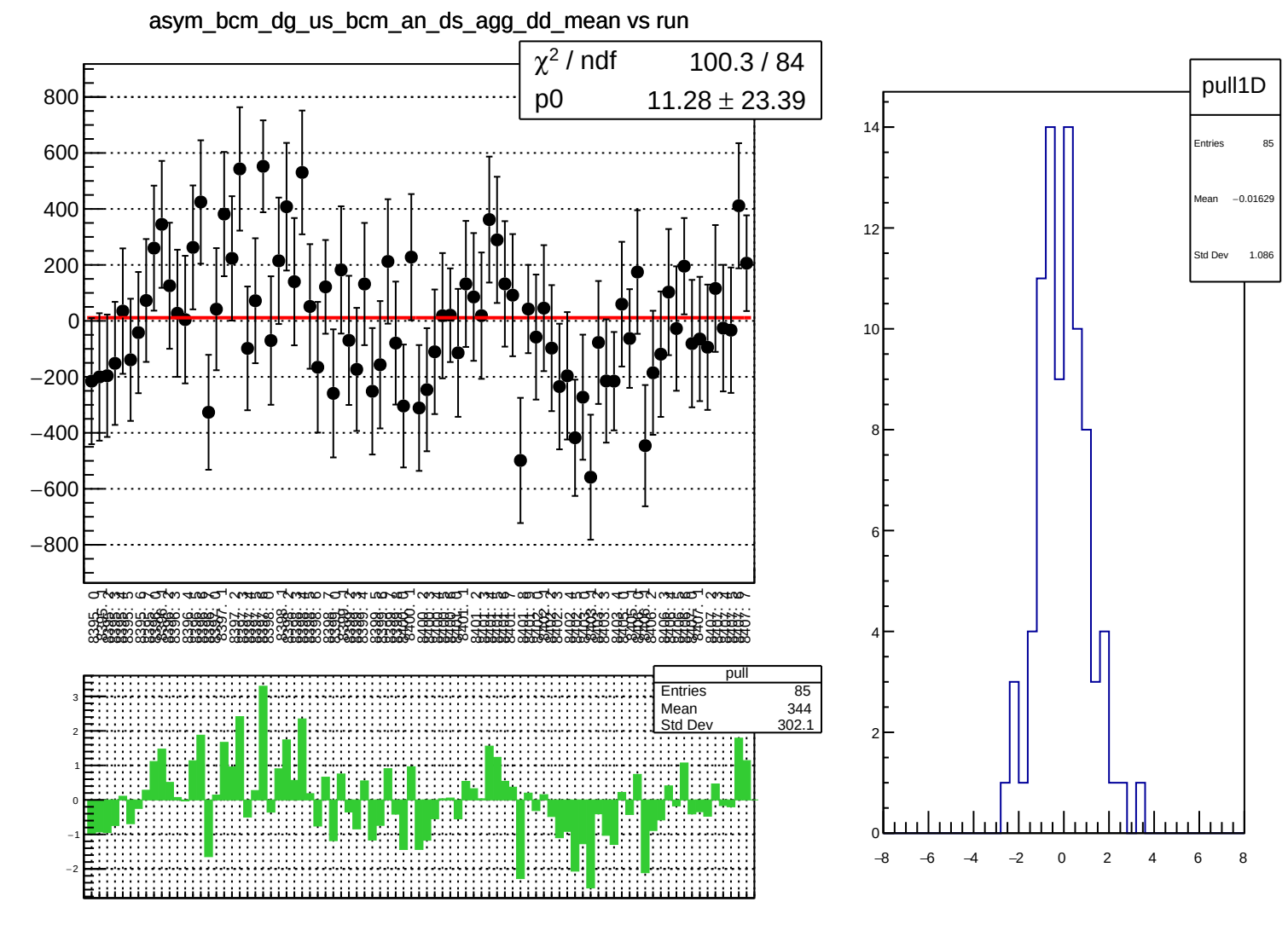

pull1D
Entries 85
Mean 0.004741
Std Dev 0.8198

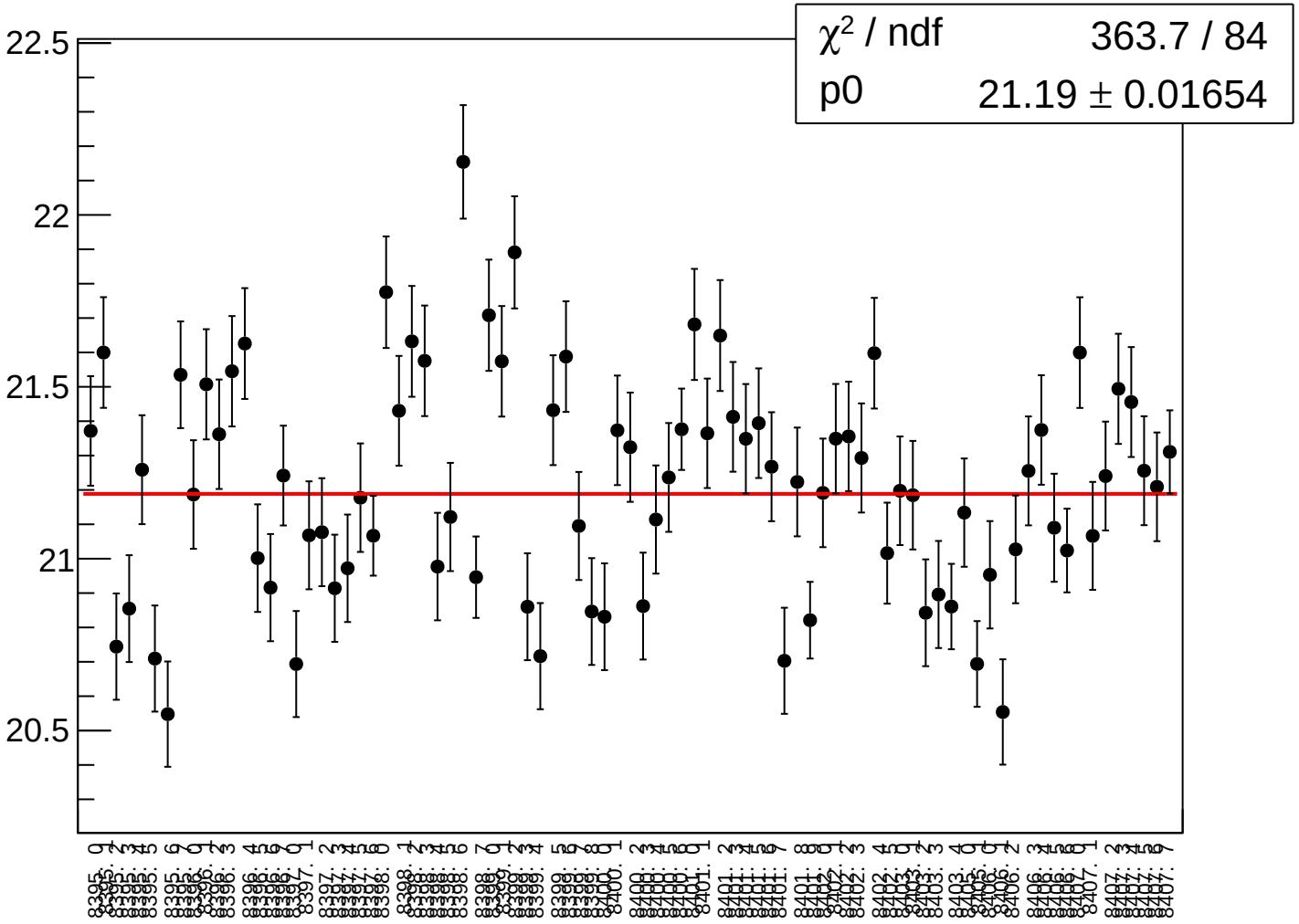

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1534 / 84
p0 9.499 ± 0.007418
10.6
10.4
10.2
10
9.8
9.6
9.4
9.2
9
8.8

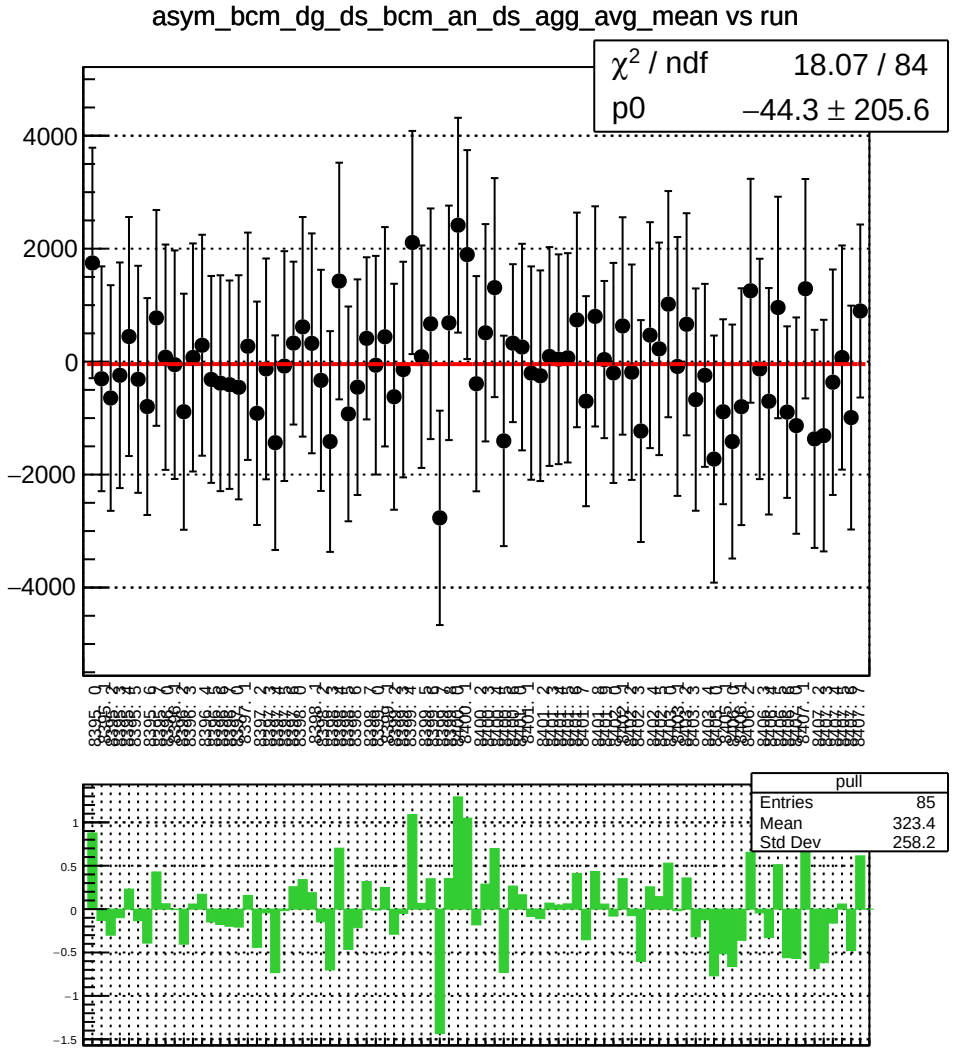

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.07 / 84
p0 −40.96 ± 206.2
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 269.8
Std Dev 210.4
1
0.5
0
−0.5
−1

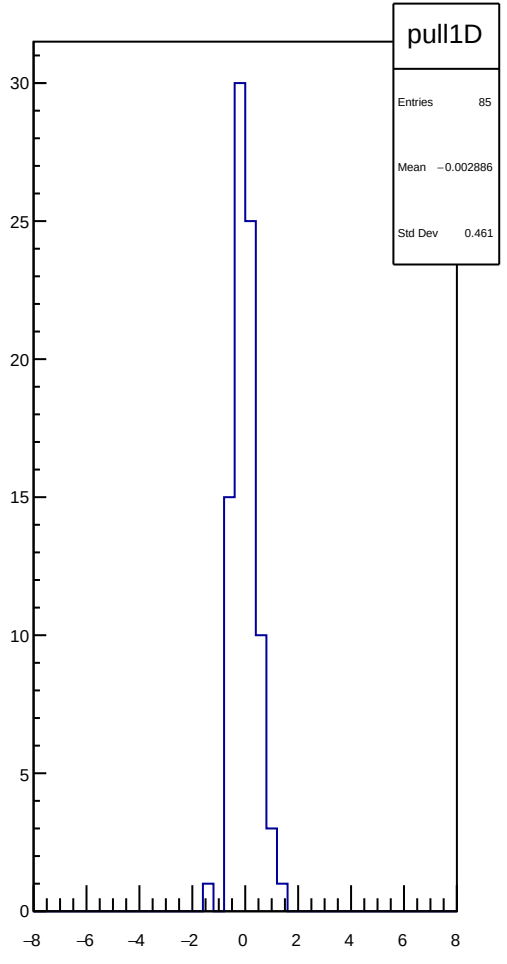

pull1D
Entries 85
Mean −0.005345
Std Dev 0.461
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

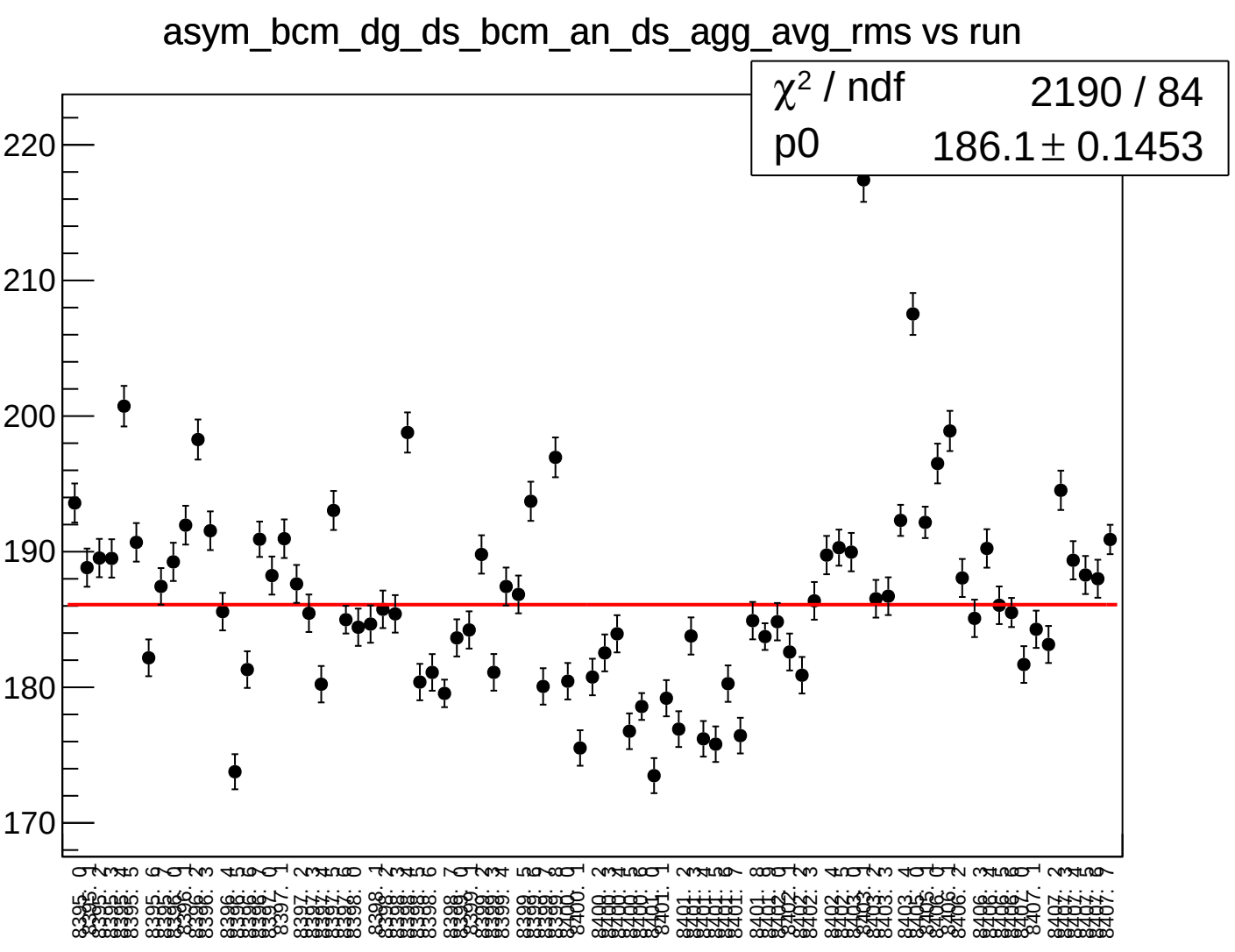

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2139 / 84
p0 186.6 ± 0.1458
220
210
200
190
180
170

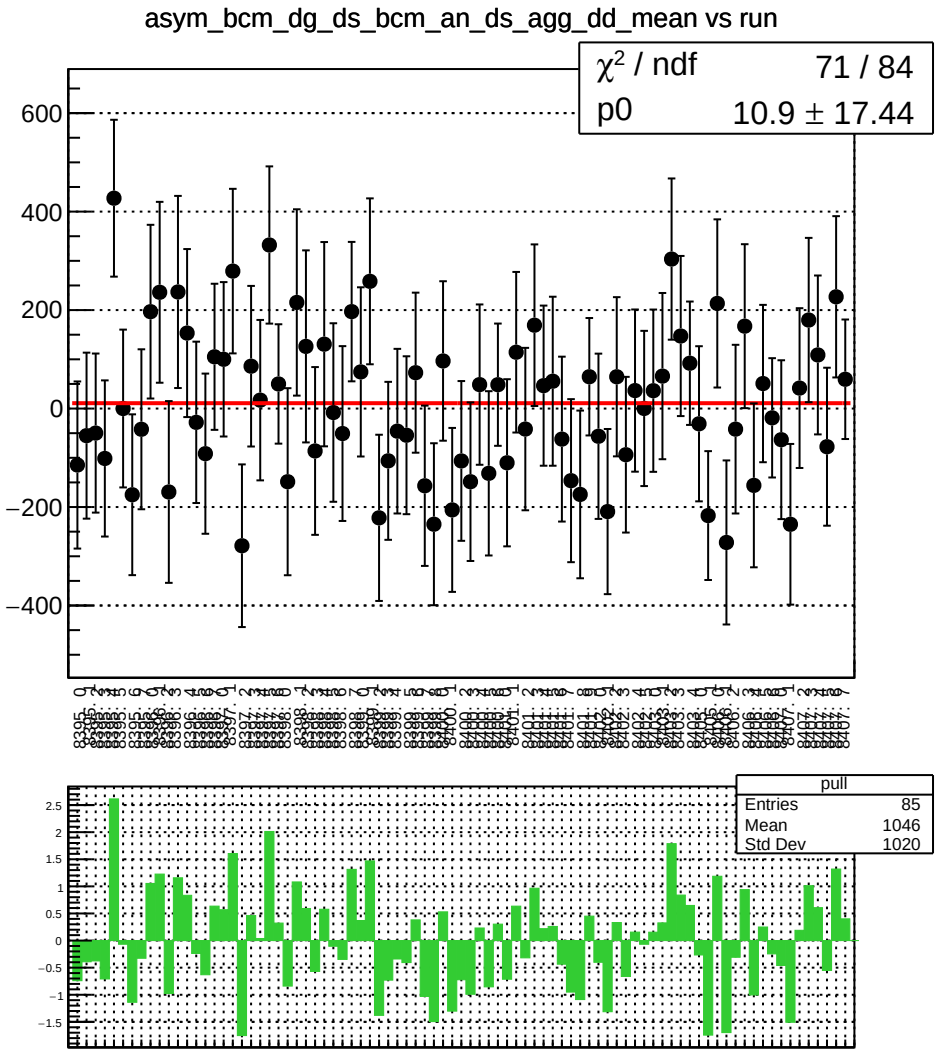

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 100.3 / 84
p0 11.28 ± 23.39
pull
Entries 85
Mean 344
Std Dev 302.1
pull1D
Entries 85
Mean −0.01629
Std Dev 1.086

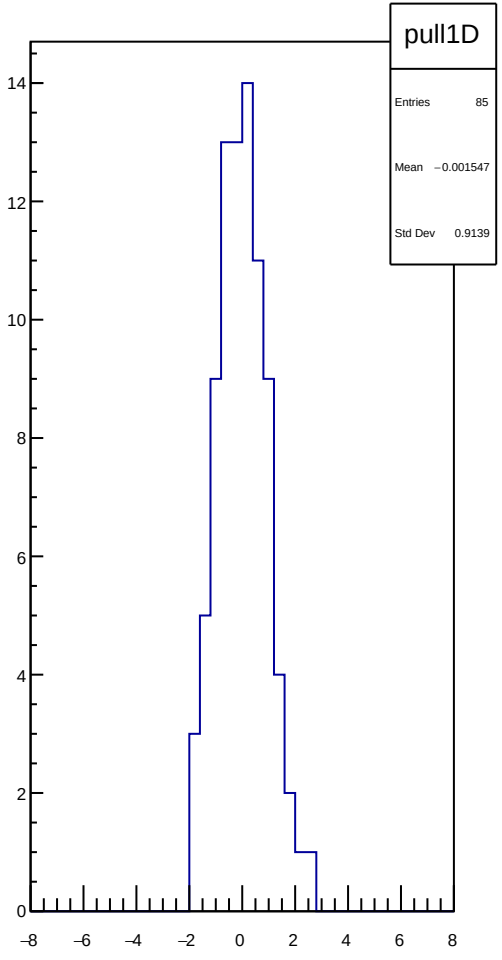

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 363.7 / 84
p0 21.19 ± 0.01654
22.5
22
21.5
21
20.5

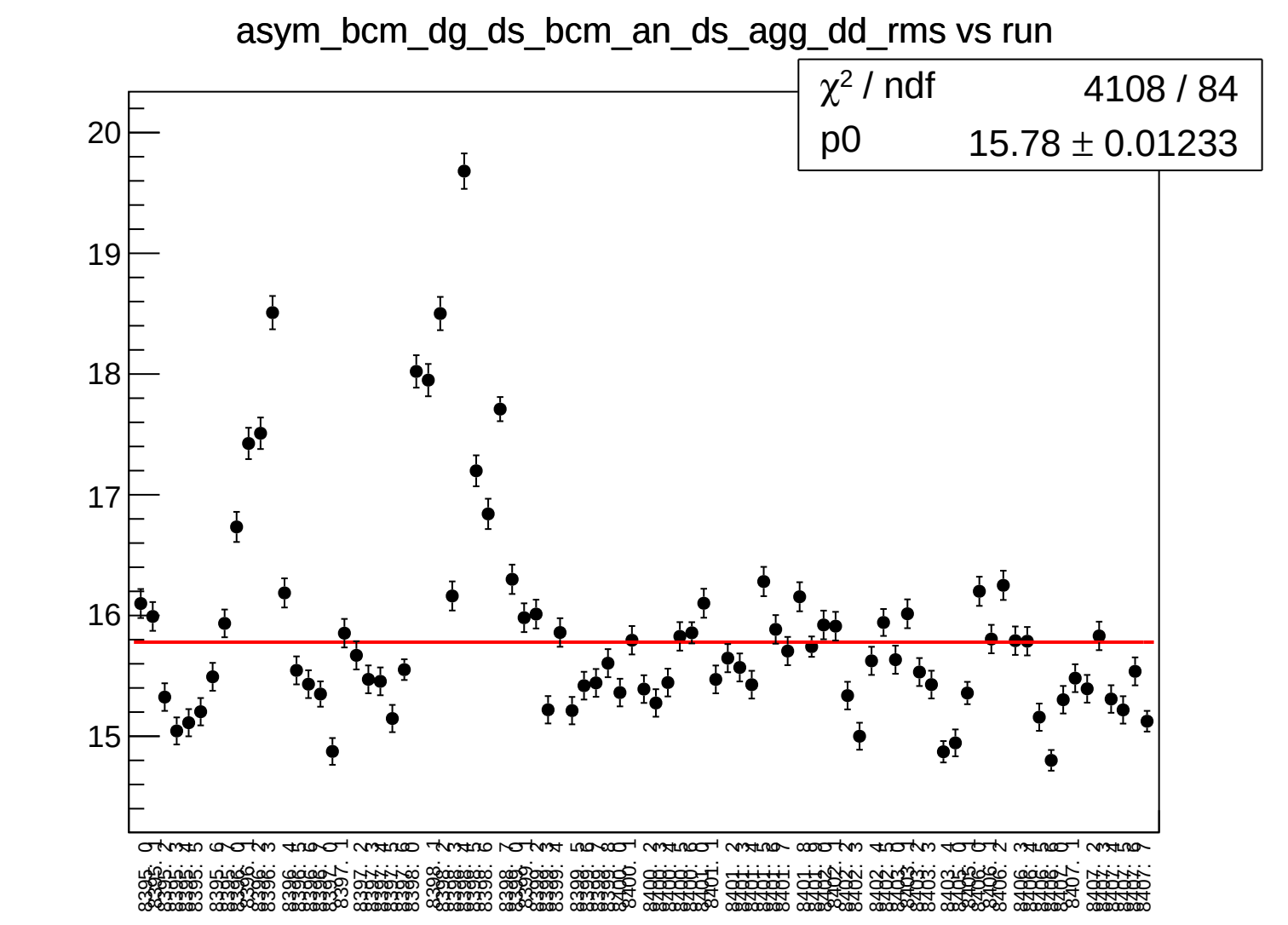

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.07 / 84
p0 −44.3 ± 205.6
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 323.4
Std Dev 258.2
1
0.5
0
−0.5
−1
−1.5

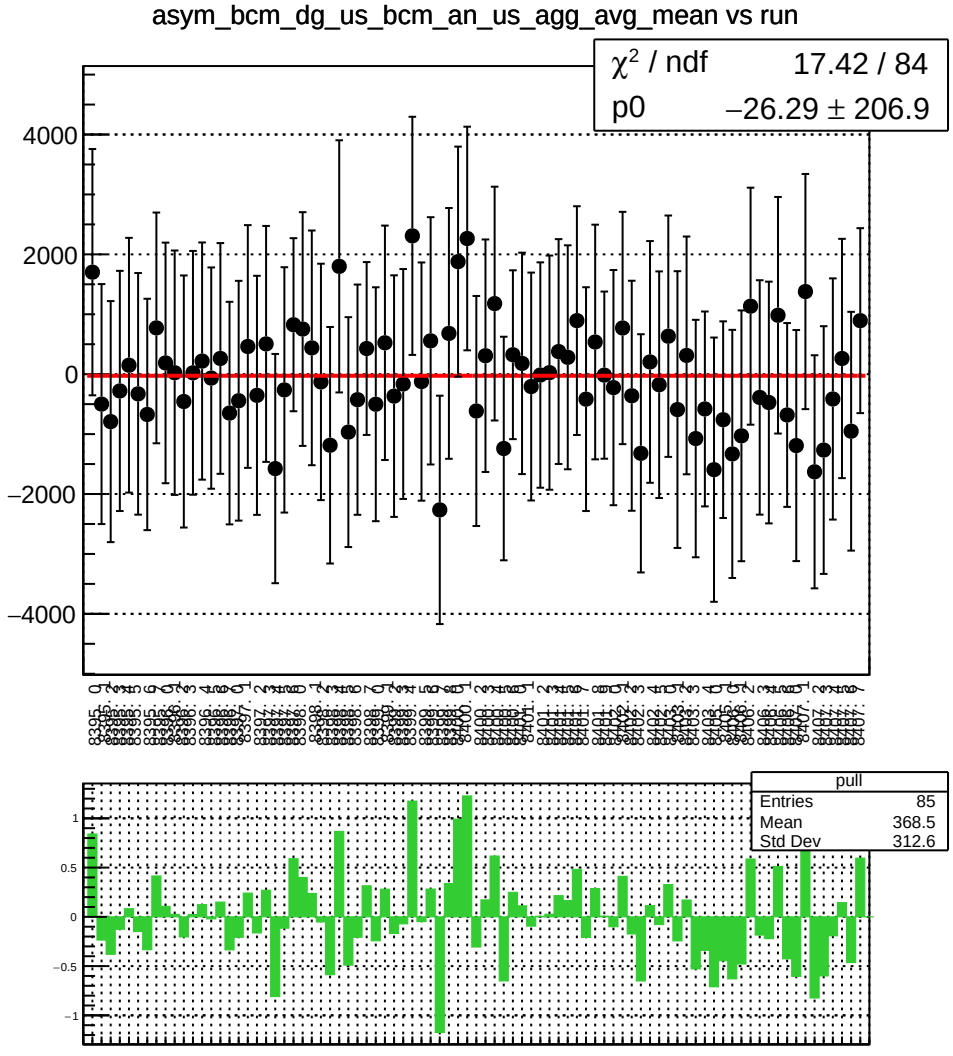

pull1D
Entries 85
Mean −0.002886
Std Dev 0.461
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

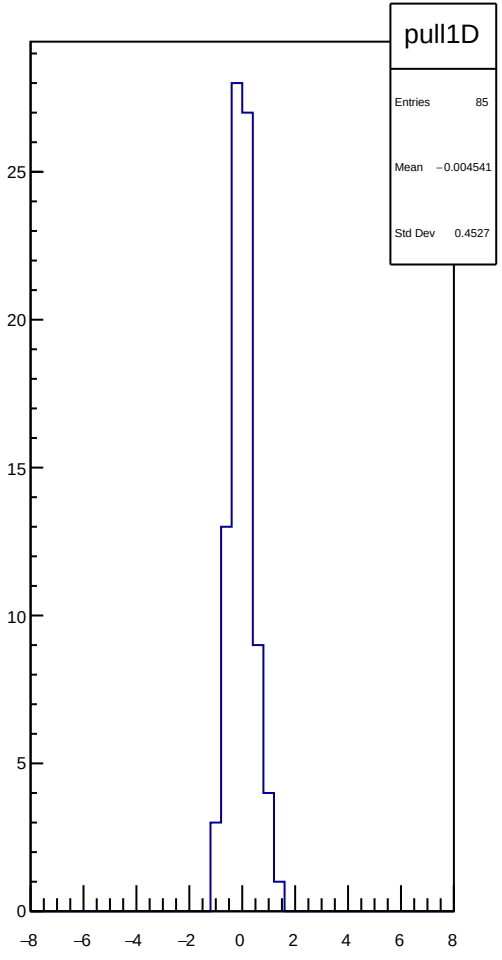

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2190 / 84
p0 186.1 ± 0.1453
220
210
200
190
180
170

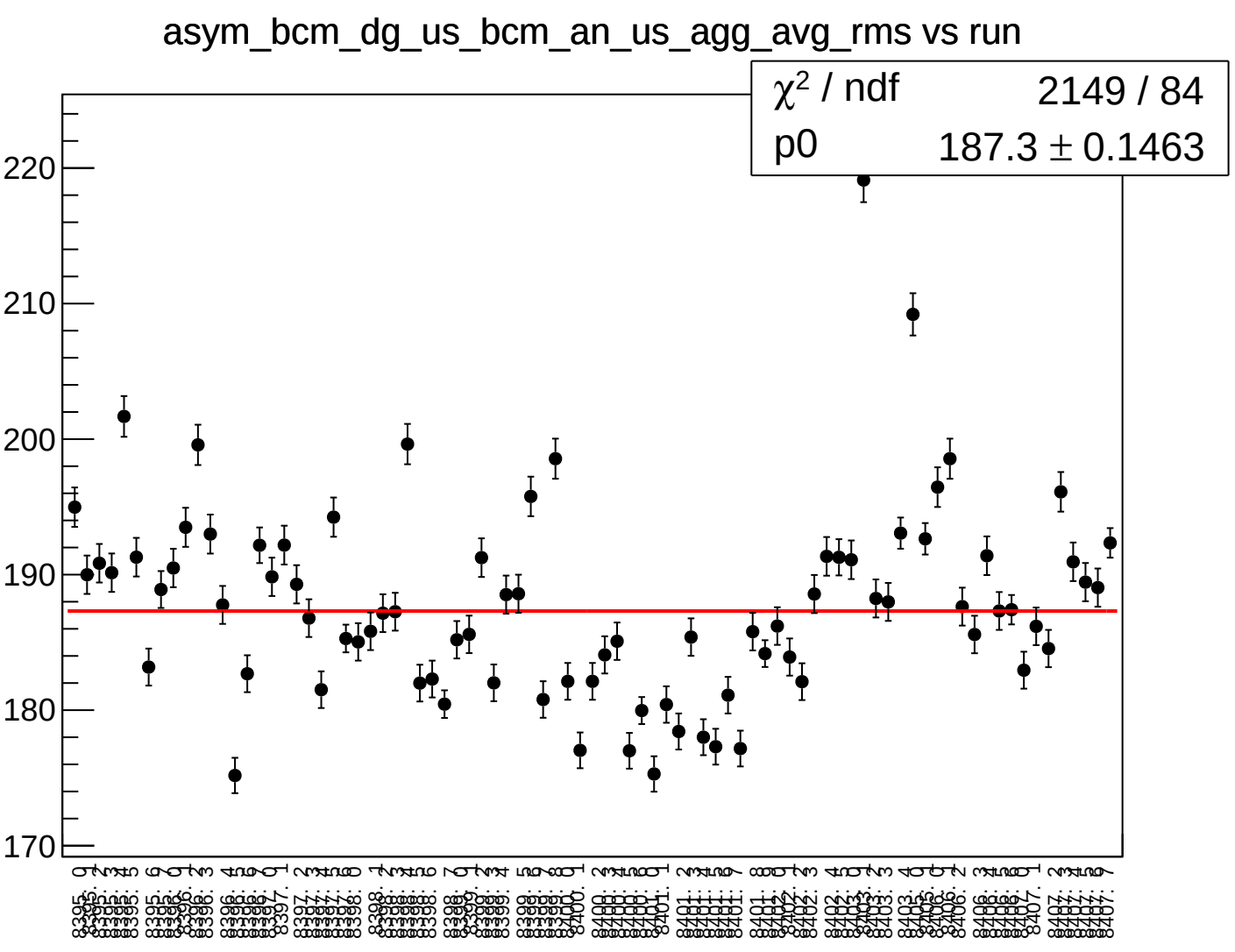

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 71 / 84
p0 10.9 ± 17.44
pull
Entries 85
Mean 1046
Std Dev 1020

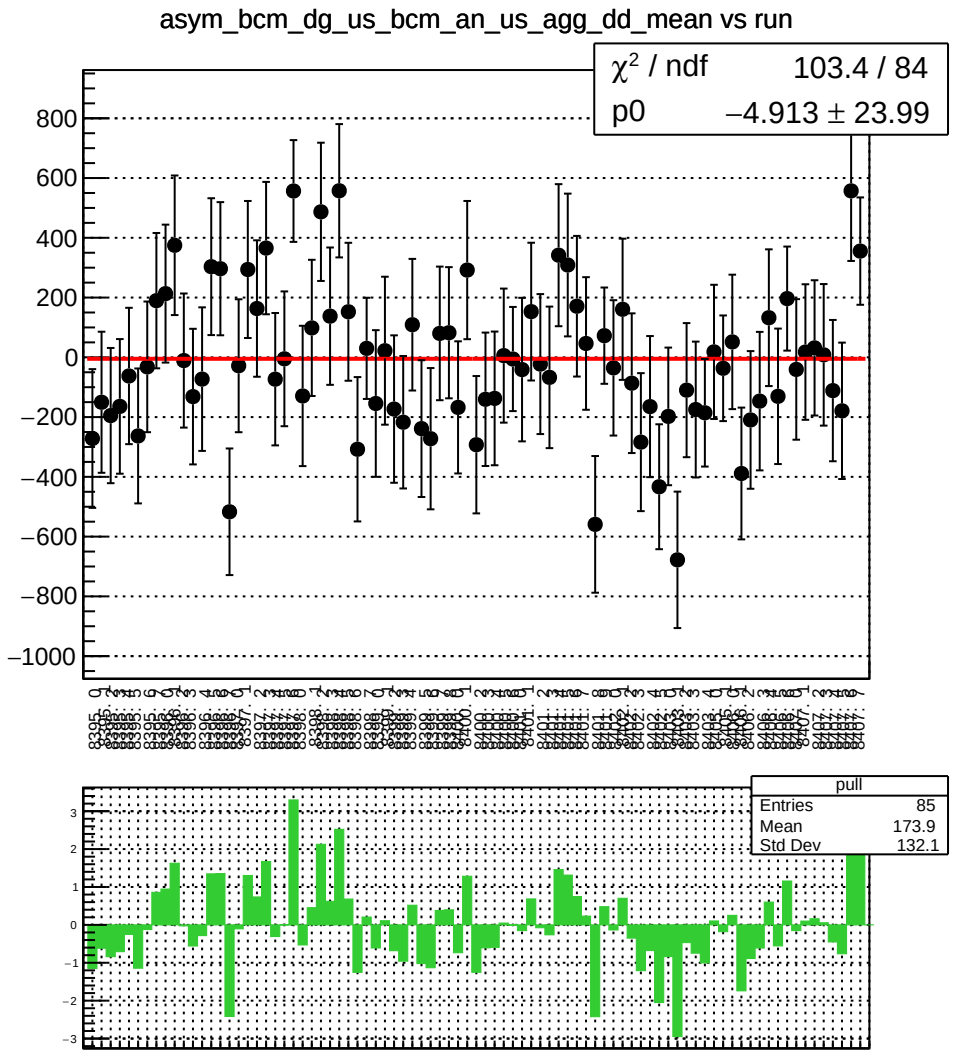

pull1D
Entries 85
Mean −0.001547
Std Dev 0.9139

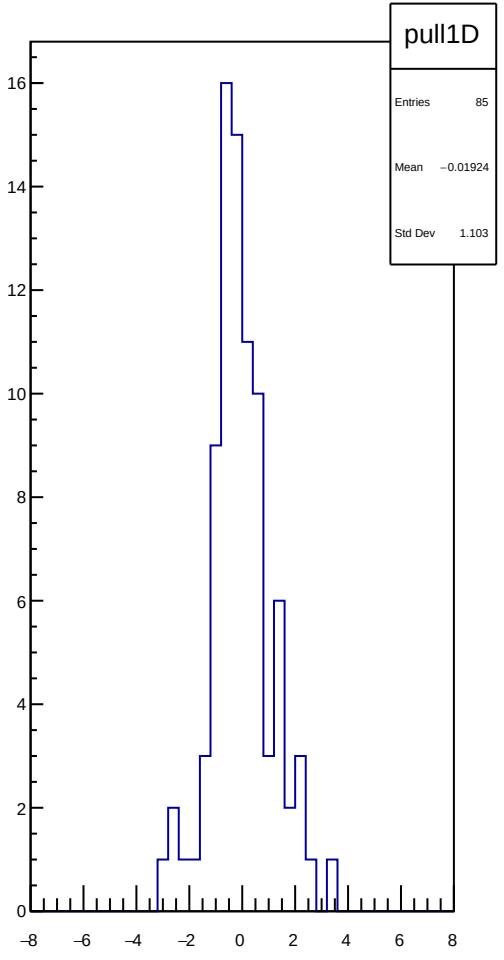

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4108 / 84
p0 15.78 ± 0.01233
20
19
18
17
16
15

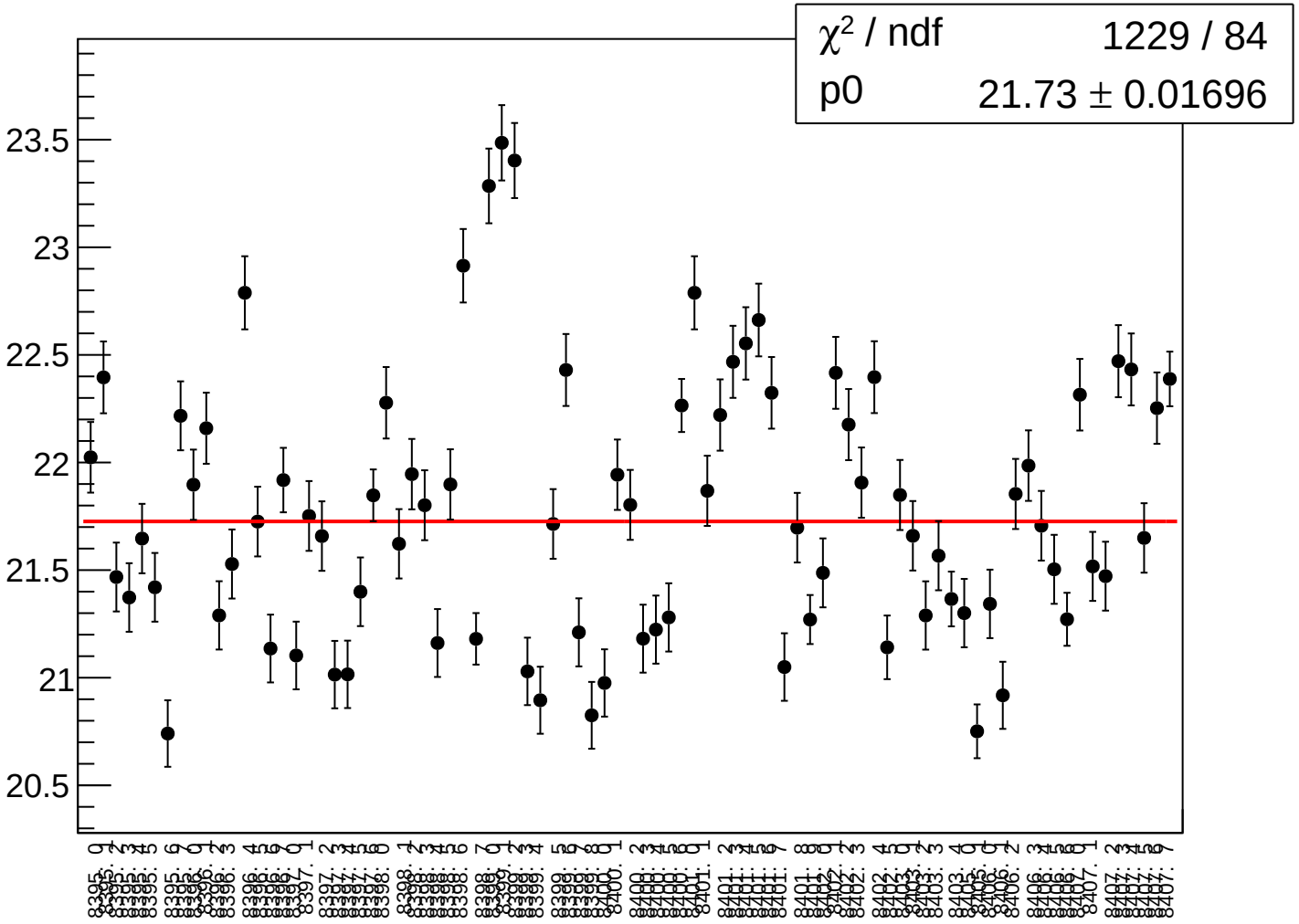

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.42 / 84
p0 −26.29 ± 206.9
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 368.5
Std Dev 312.6
1
0.5
0
−0.5
−1

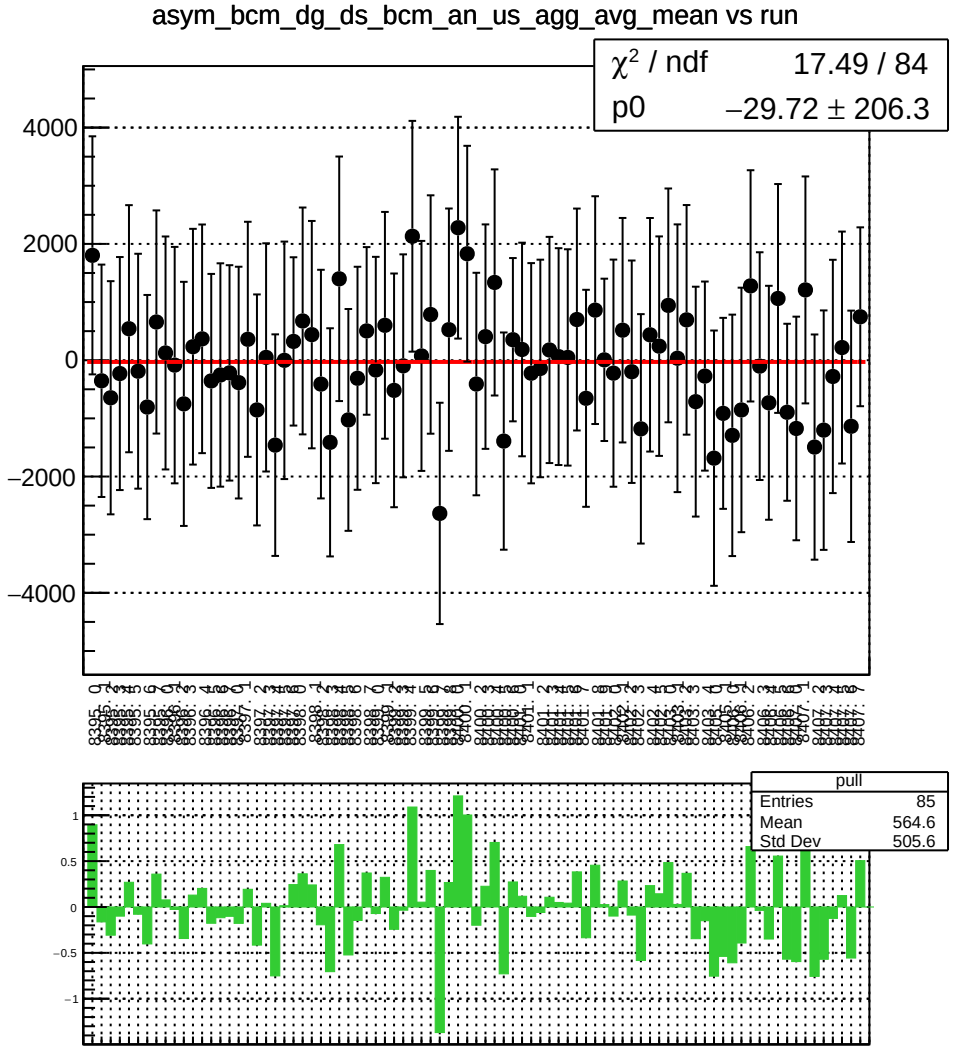

pull1D
Entries 85
Mean −0.004541
Std Dev 0.4527
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

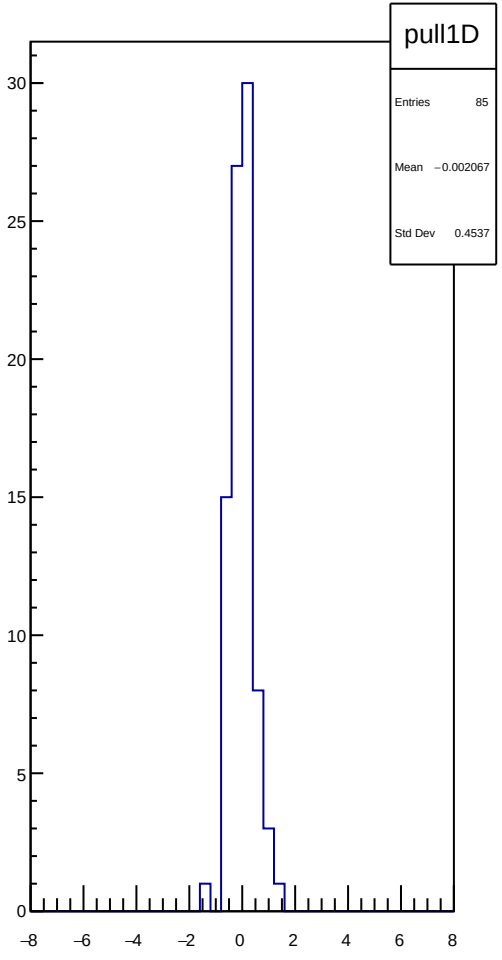

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2149 / 84
p0 187.3 ± 0.1463
220
210
200
190
180
170

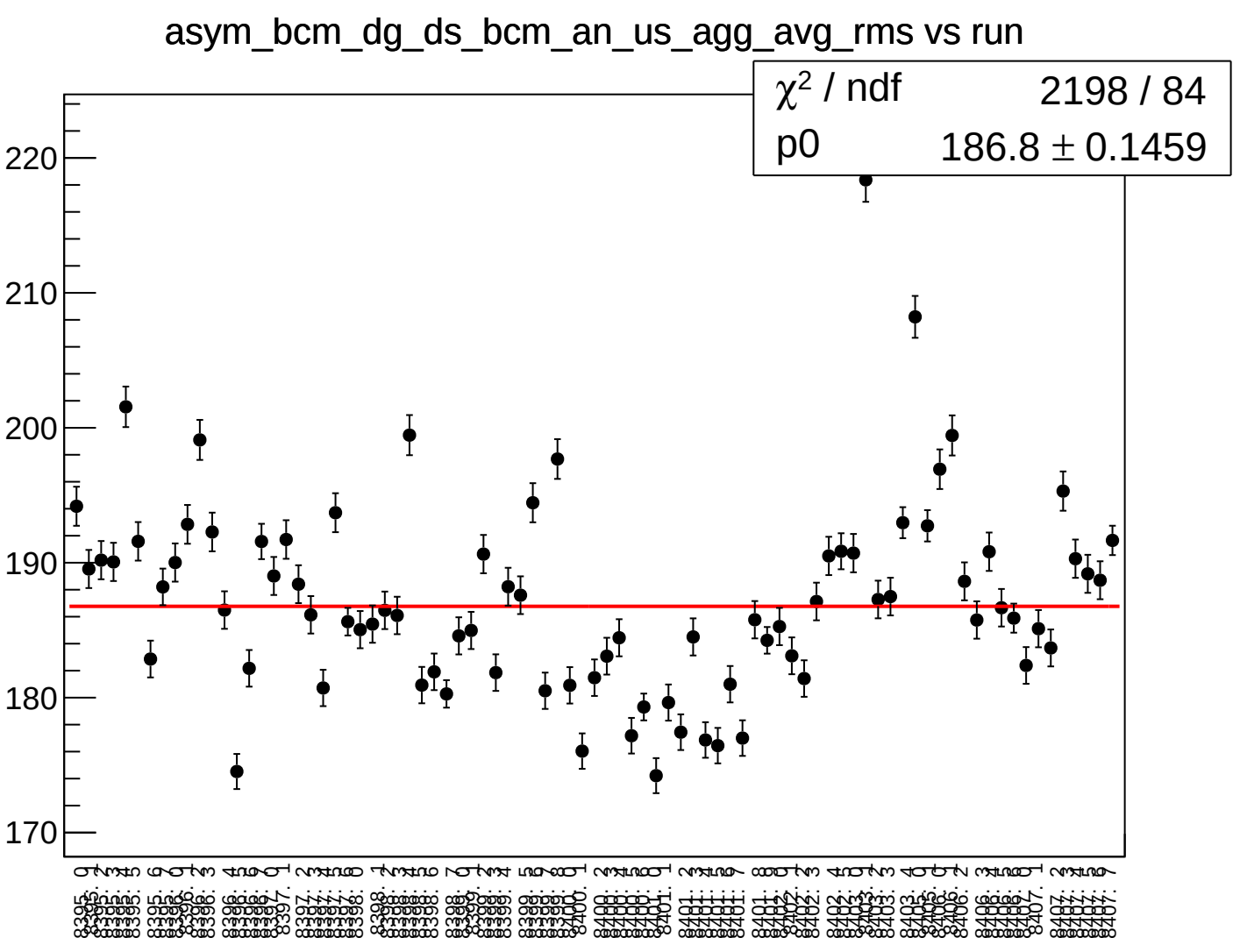

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 103.4 / 84
p0 −4.913 ± 23.99
pull
Entries 85
Mean 173.9
Std Dev 132.1

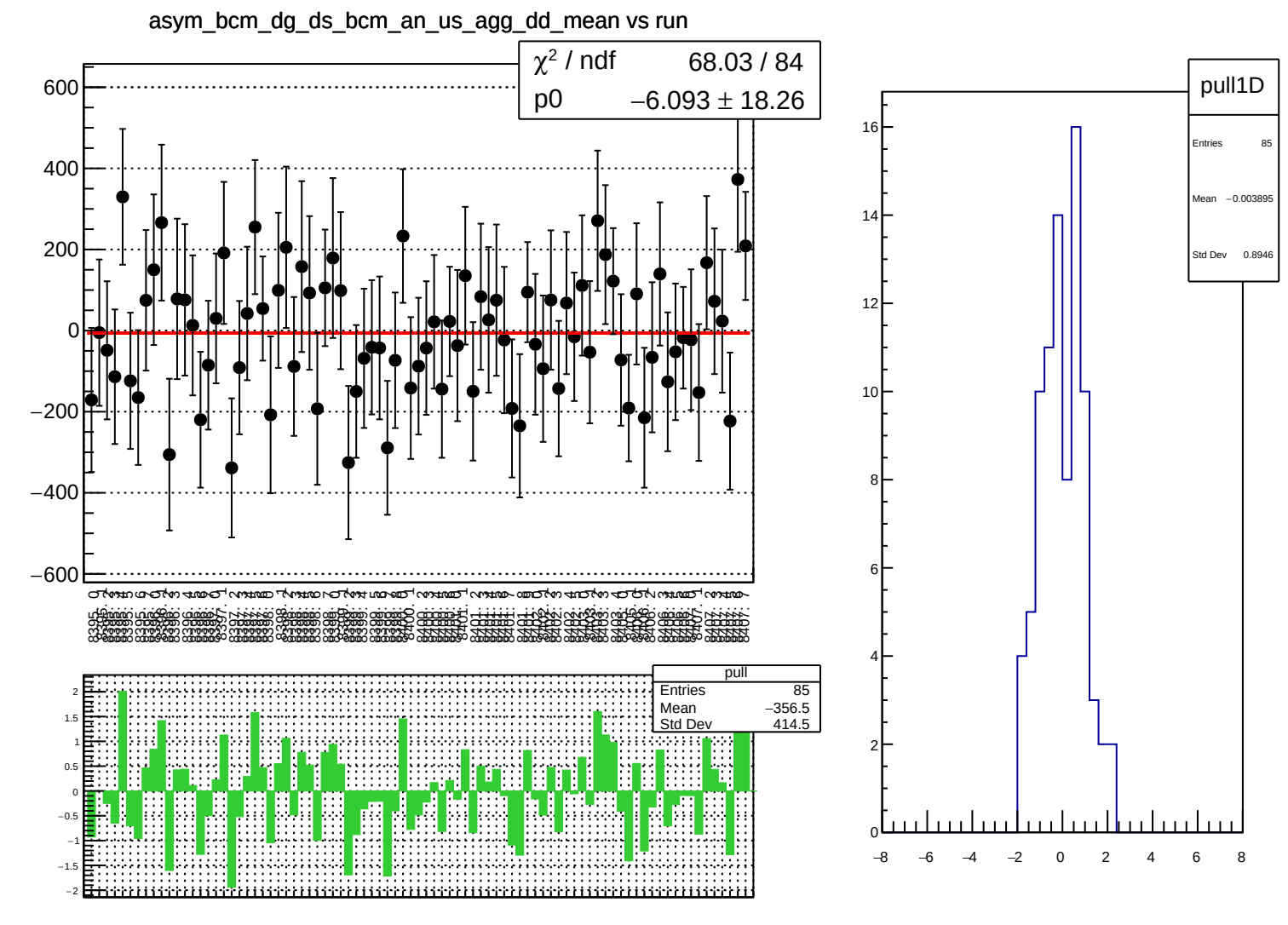

pull1D
Entries 85
Mean −0.01924
Std Dev 1.103

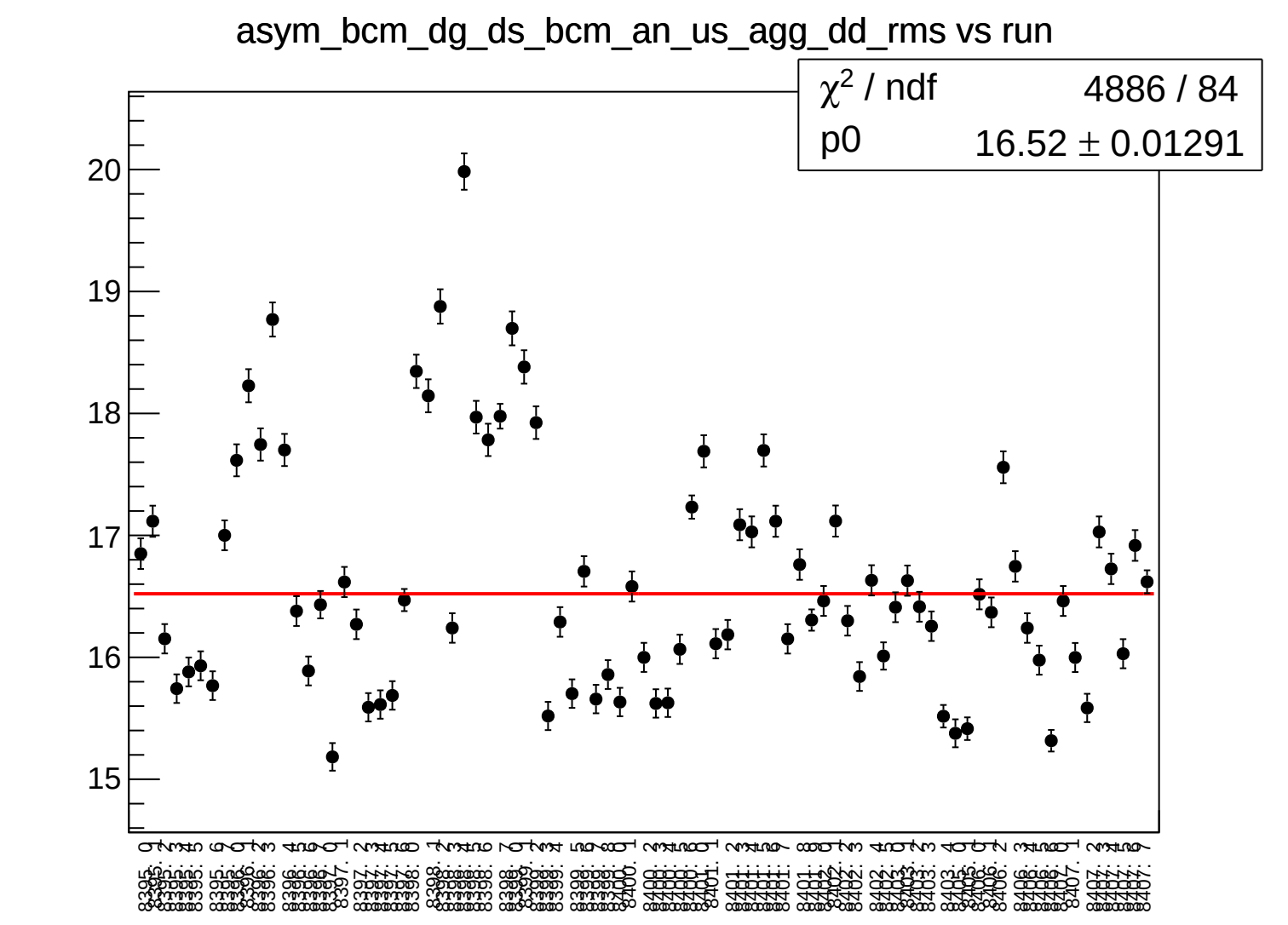

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1229 / 84
p0 21.73 ± 0.01696
23.5
23
22.5
22
21.5
21
20.5

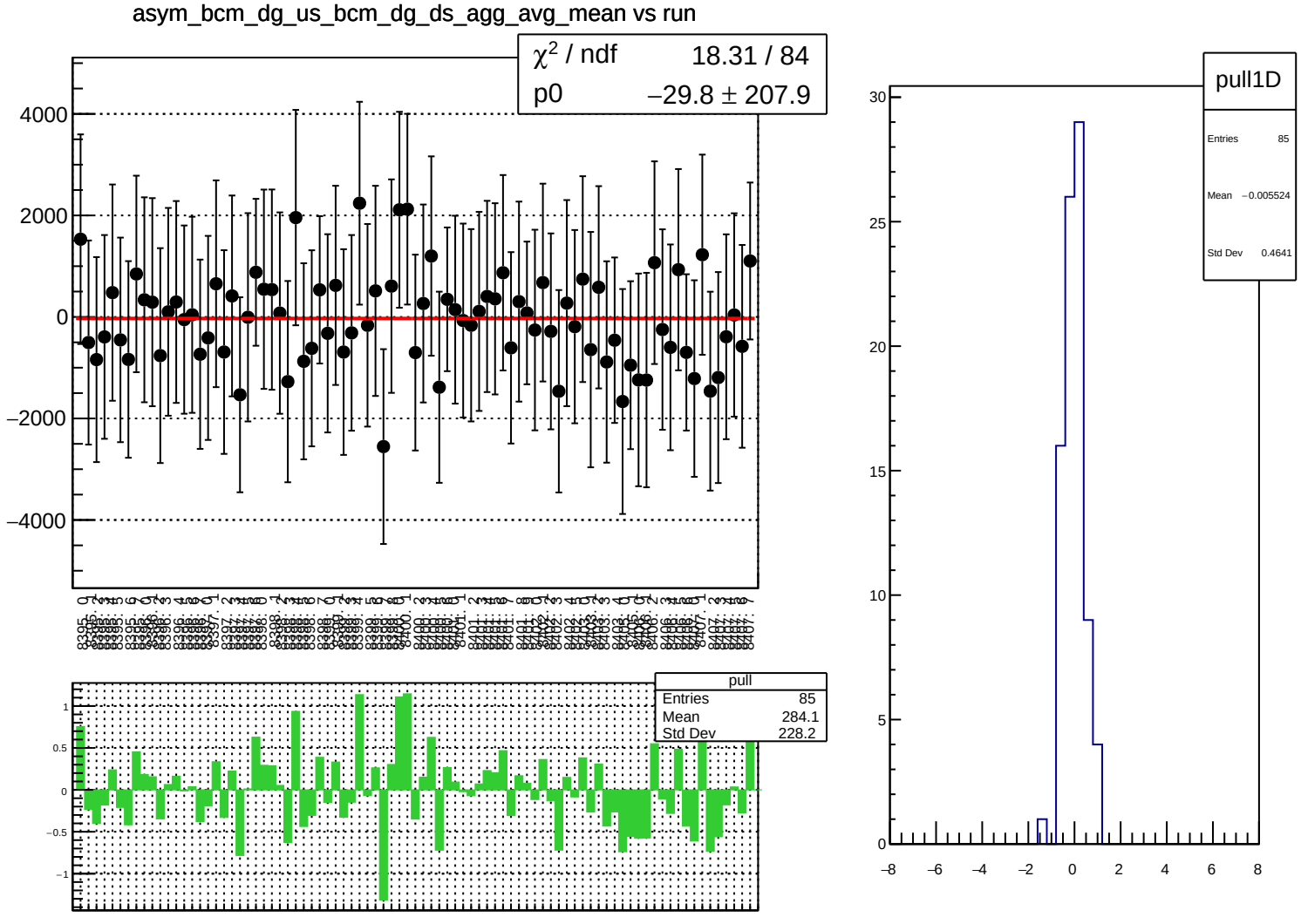

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.49 / 84
p0 −29.72 ± 206.3
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 564.6
Std Dev 505.6
1
0.5
0
−0.5
−1

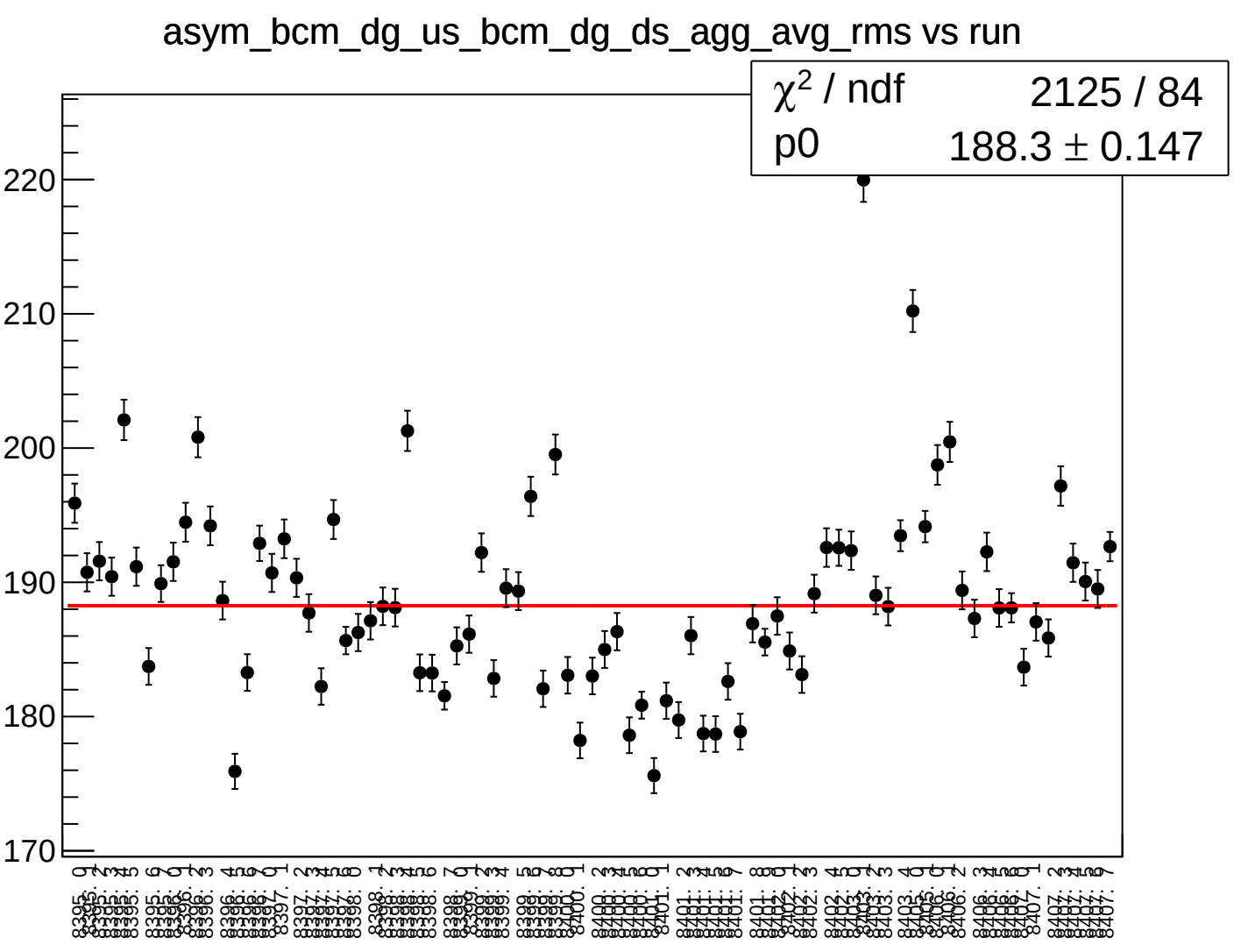

pull1D
Entries 85
Mean −0.002067
Std Dev 0.4537
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

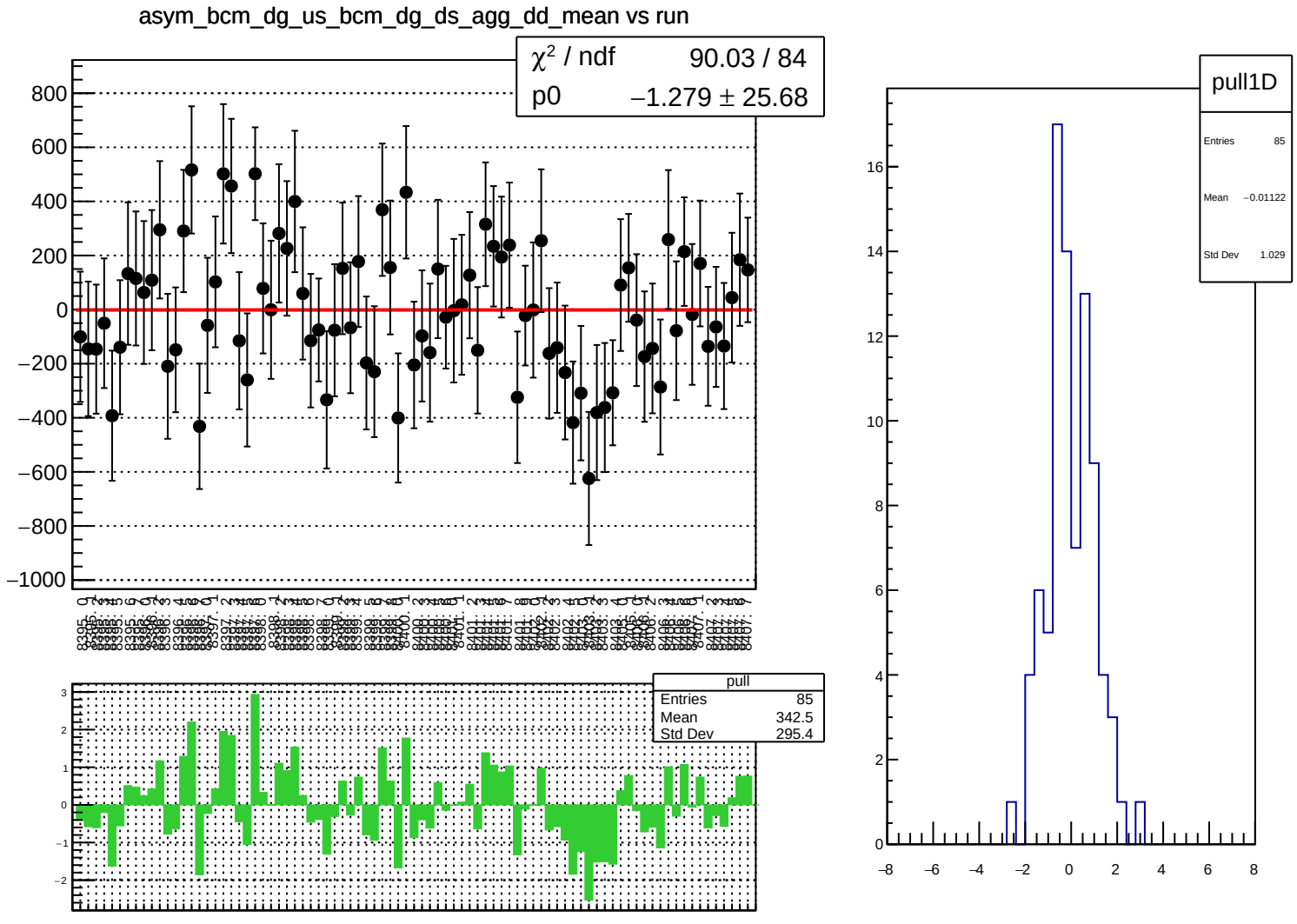

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2198 / 84
p0 186.8 ± 0.1459
220
210
200
190
180
170

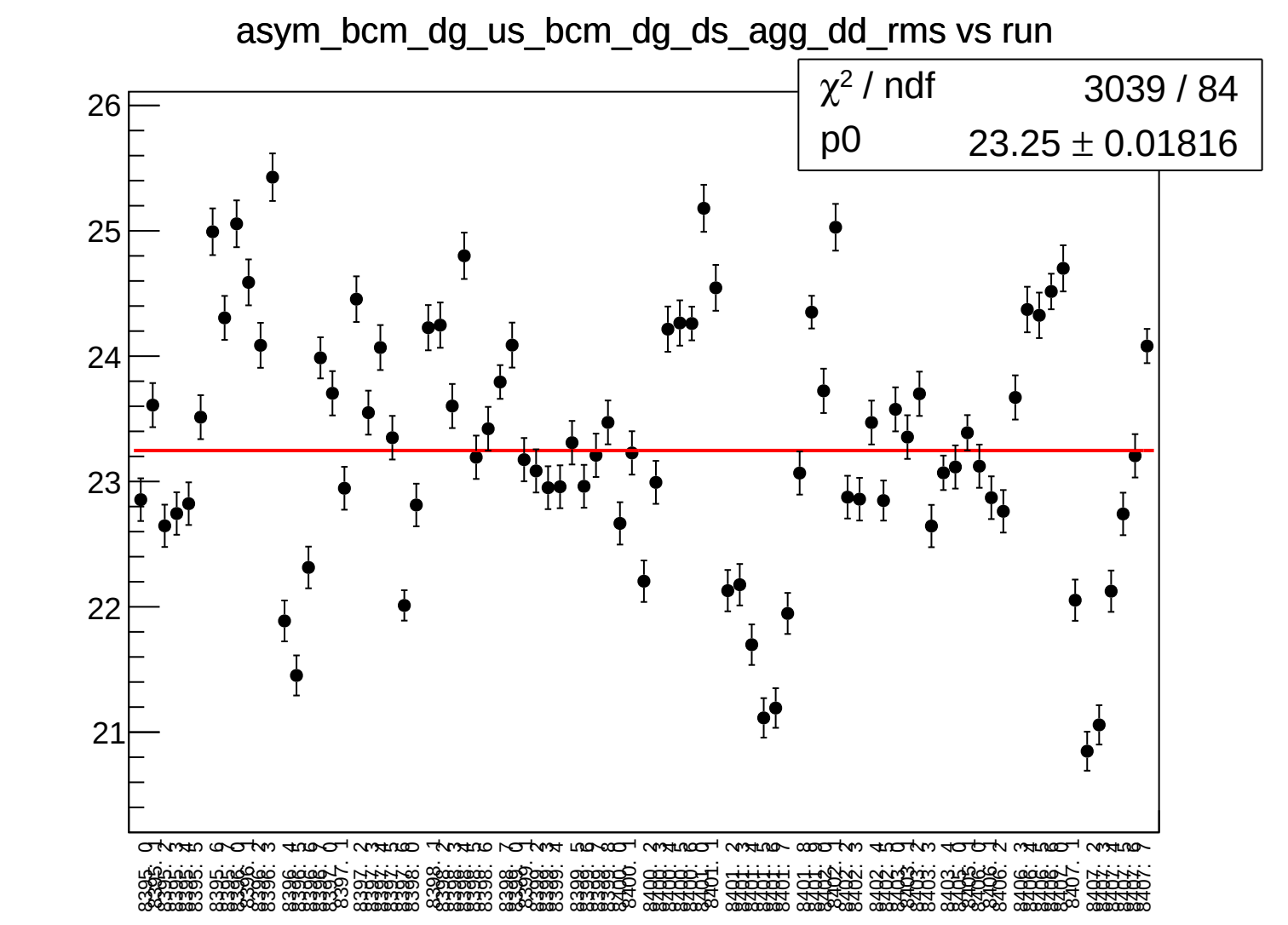

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 68.03 / 84
p0 −6.093 ± 18.26
pull
Entries 85
Mean −356.5
Std Dev 414.5
pull1D
Entries 85
Mean −0.003895
Std Dev 0.8946

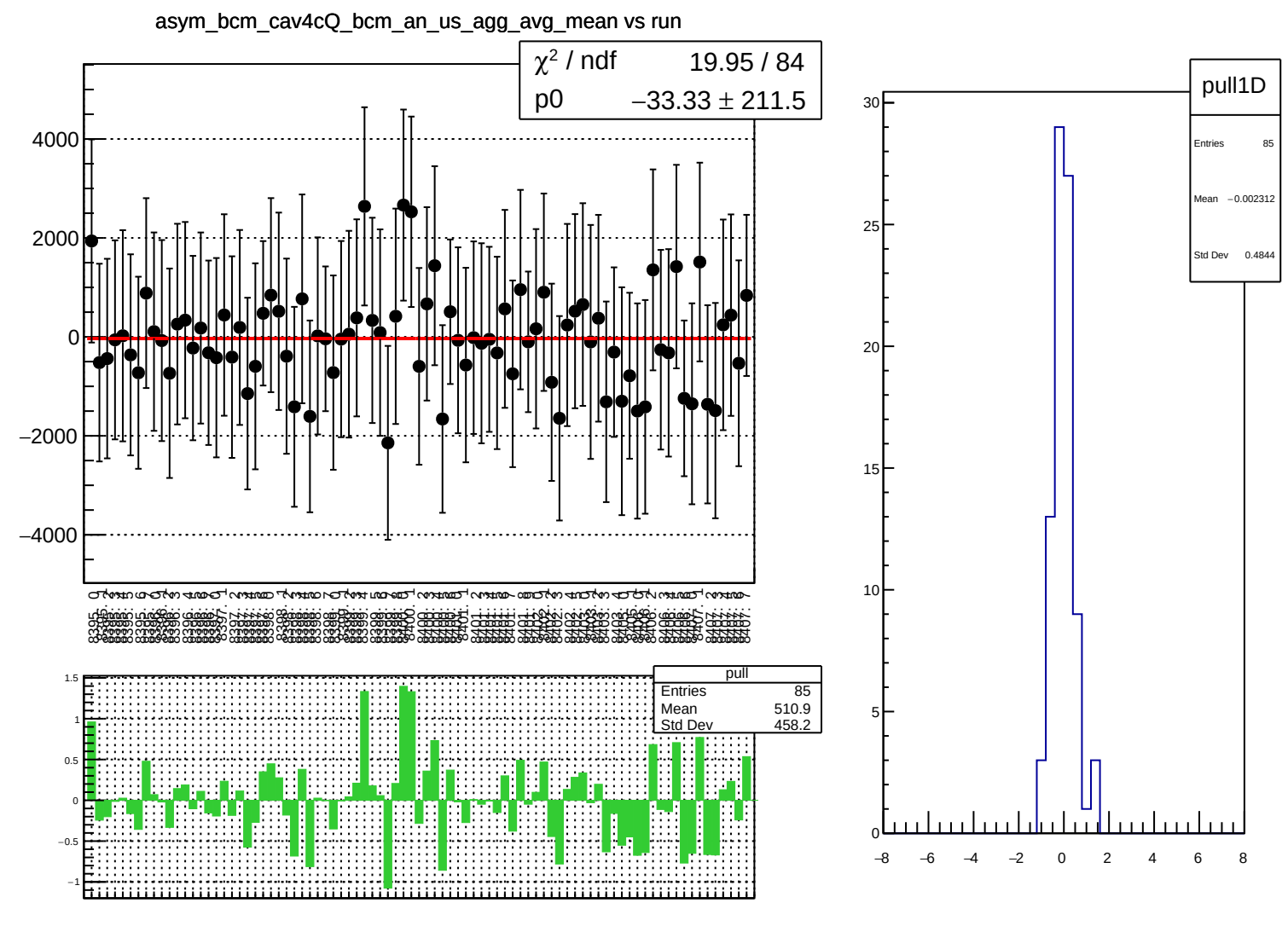

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4886 / 84
p0 16.52 ± 0.01291
20
19
18
17
16
15

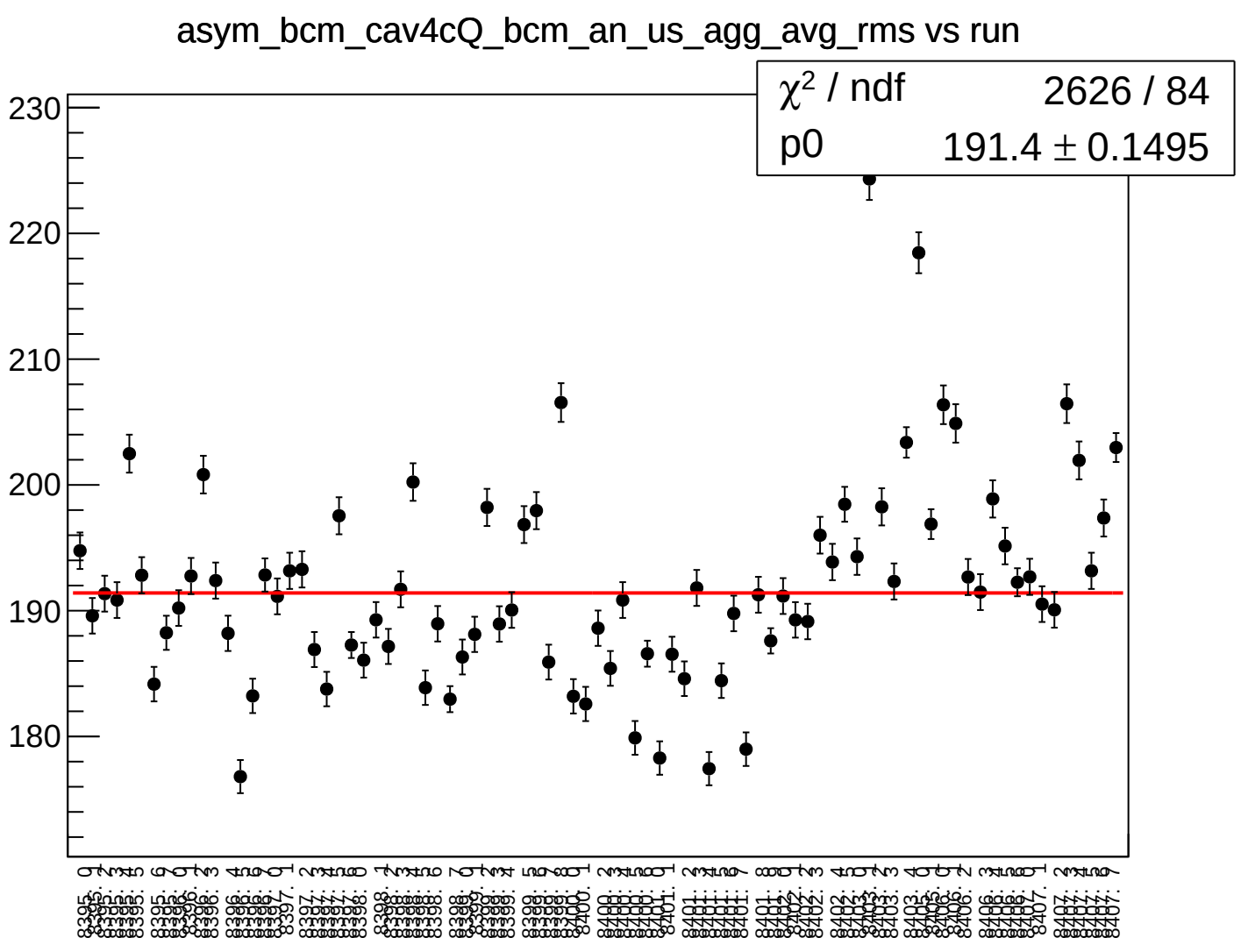

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.31 / 84
p0 −29.8 ± 207.9
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 284.1
Std Dev 228.2
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.005524
Std Dev 0.4641
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

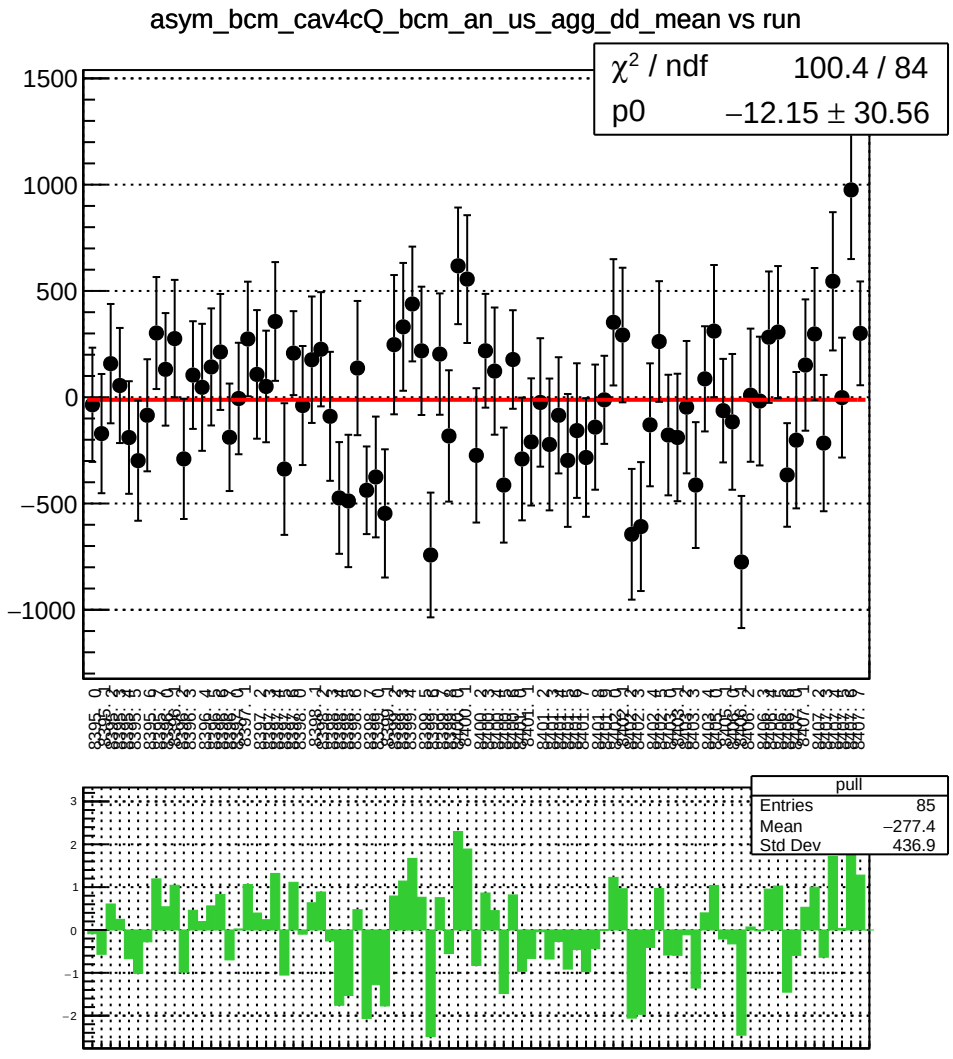

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2125 / 84
p0 188.3 ± 0.147
220
210
200
190
180
170

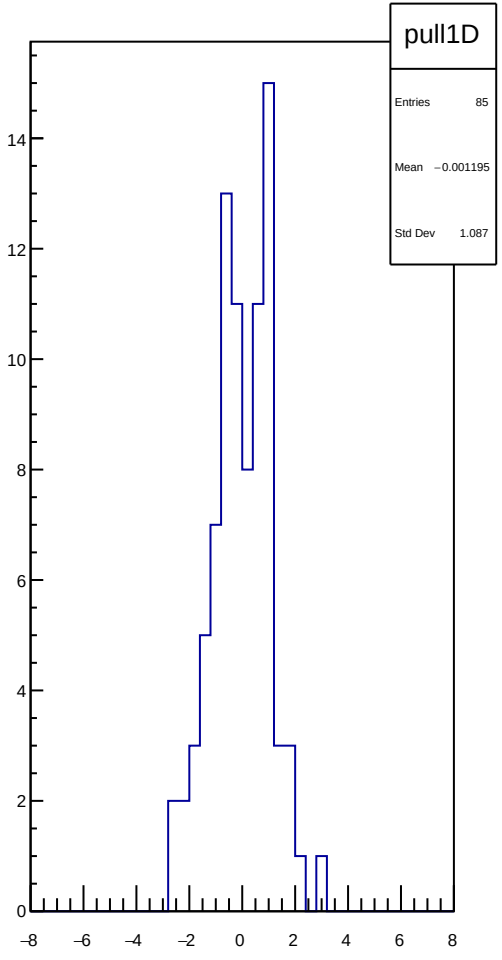

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 90.03 / 84
p0 −1.279 ± 25.68
pull
Entries 85
Mean 342.5
Std Dev 295.4
pull1D
Entries 85
Mean −0.01122
Std Dev 1.029

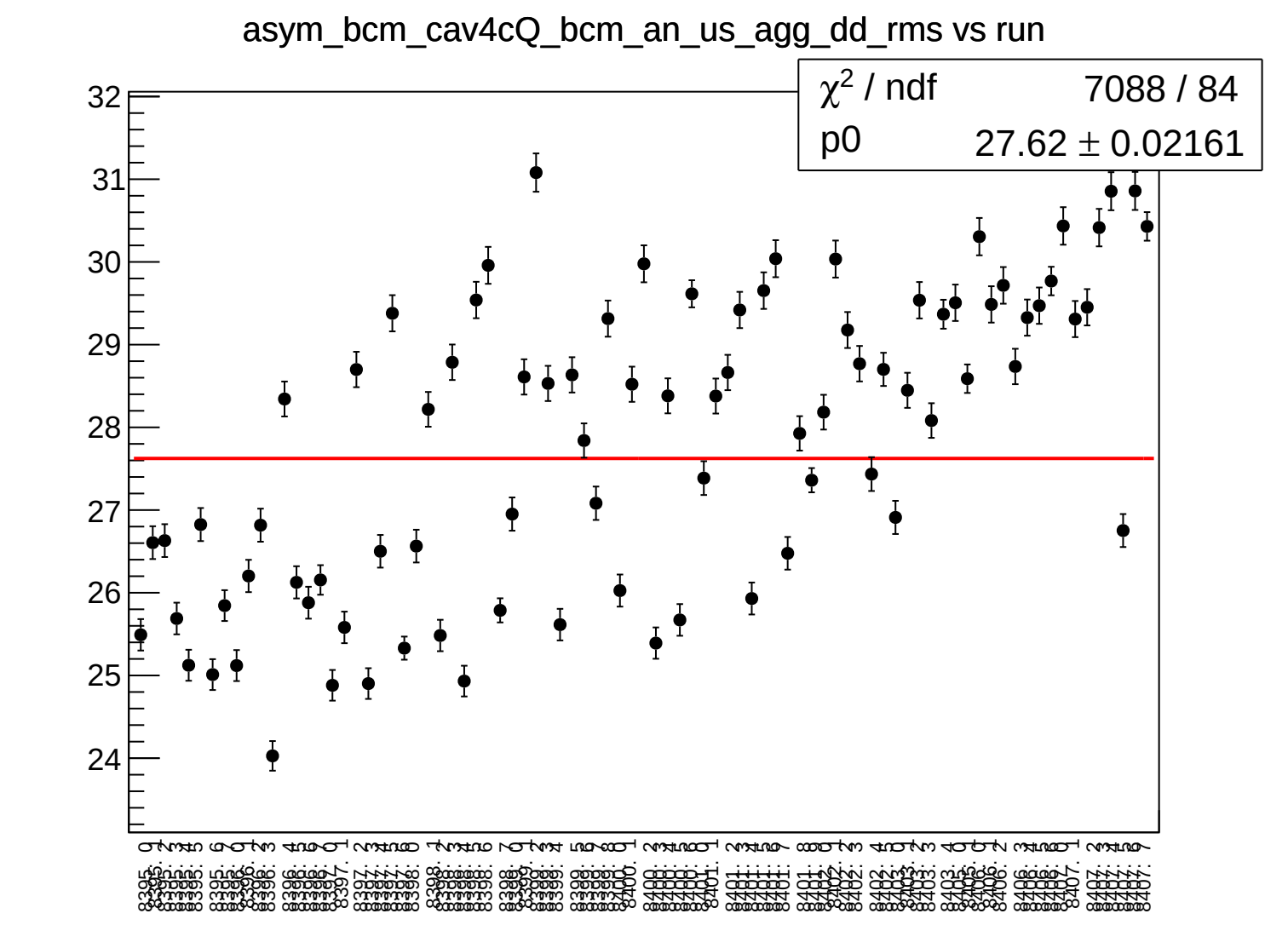

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3039 / 84
p0 23.25 ± 0.01816
26
25
24
23
22
21

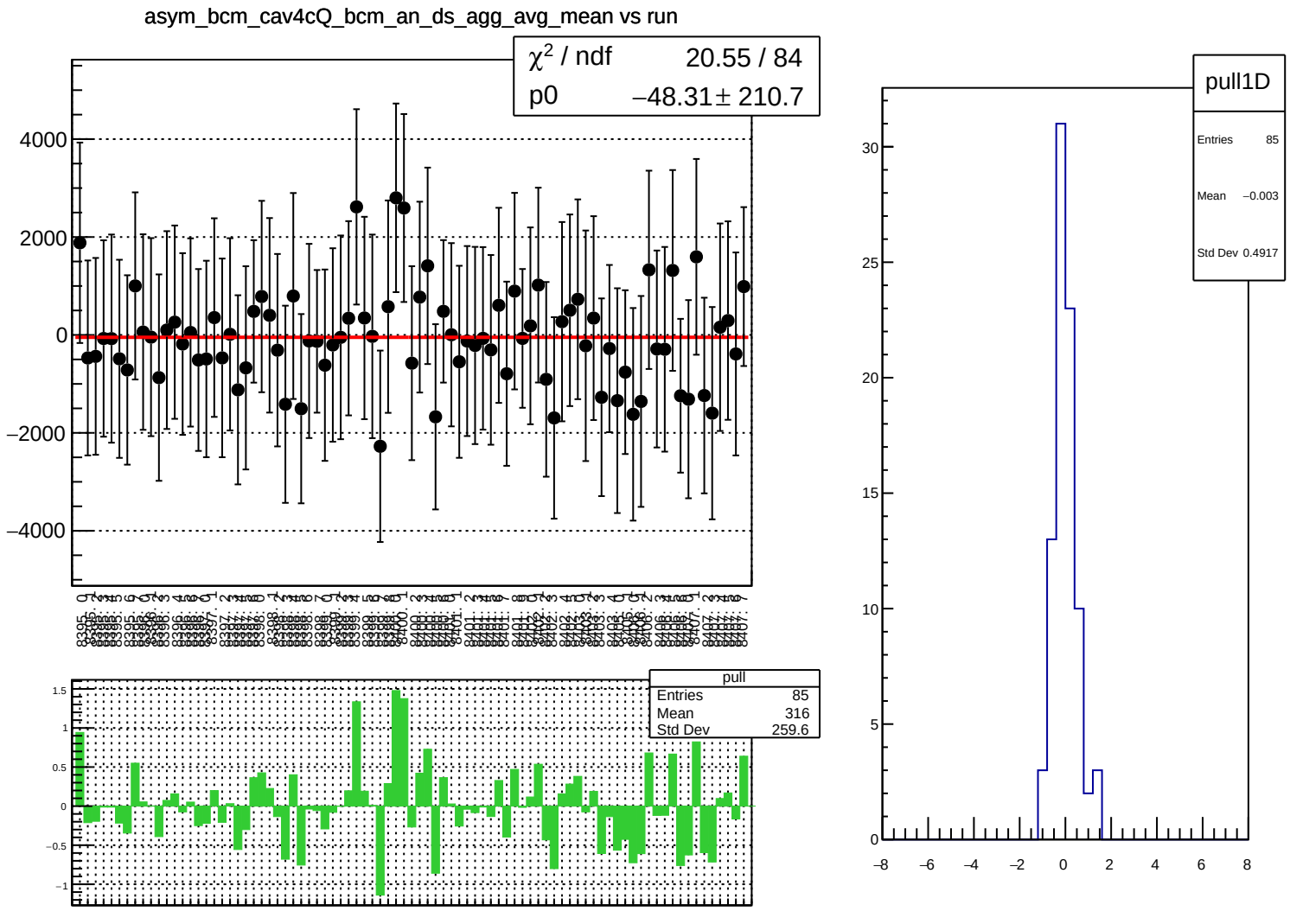

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 19.95 / 84
p0 −33.33 ± 211.5
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 510.9
Std Dev 458.2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.002312
Std Dev 0.4844
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

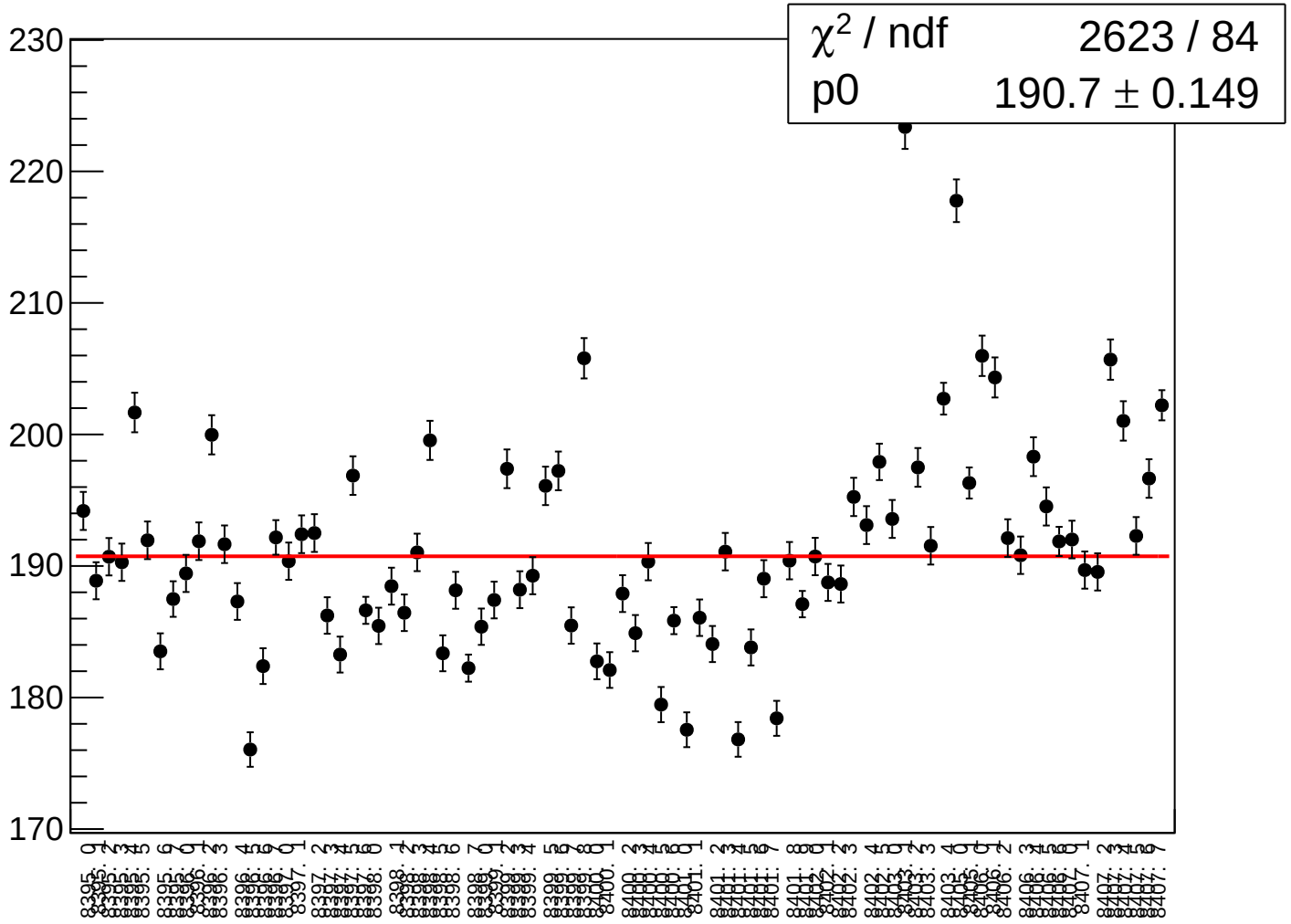

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2626 / 84
p0 191.4 ± 0.1495
230
220
210
200
190
180

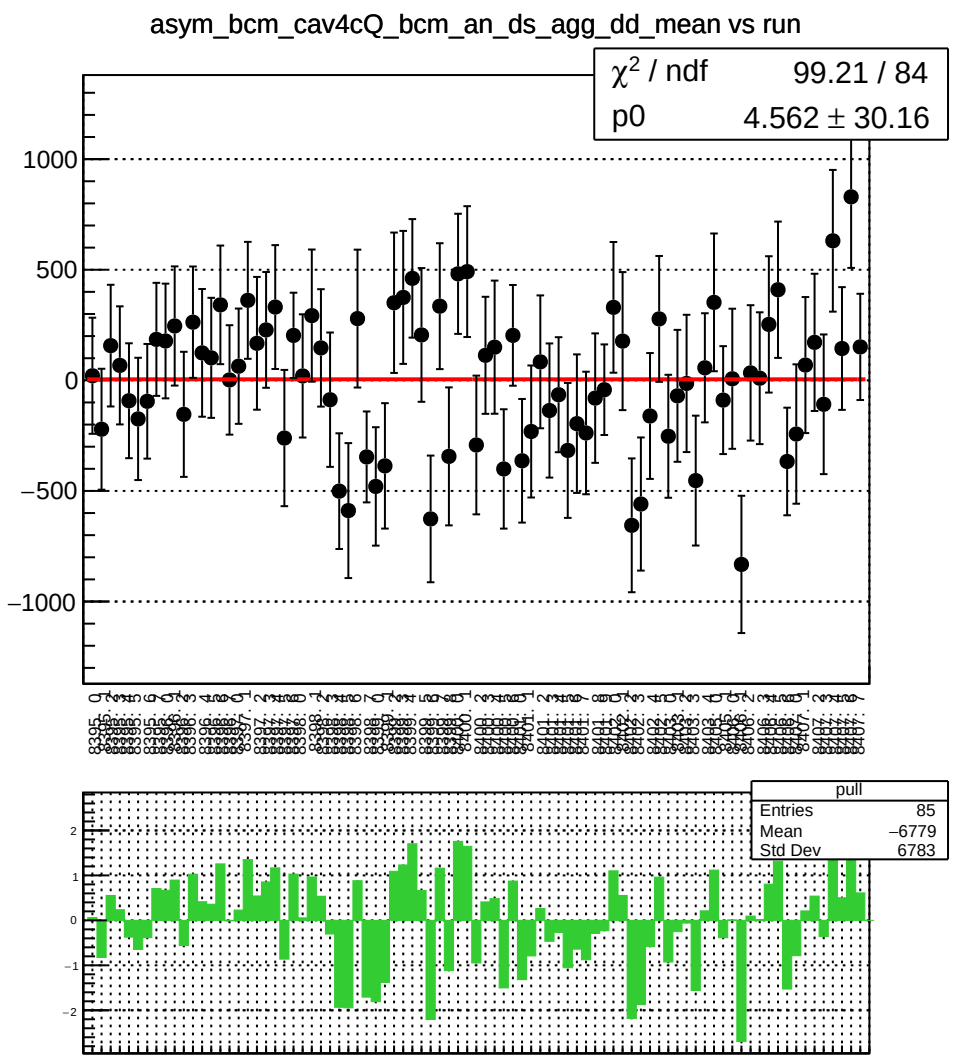

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 100.4 / 84
p0 −12.15 ± 30.56
pull
Entries 85
Mean −277.4
Std Dev 436.9

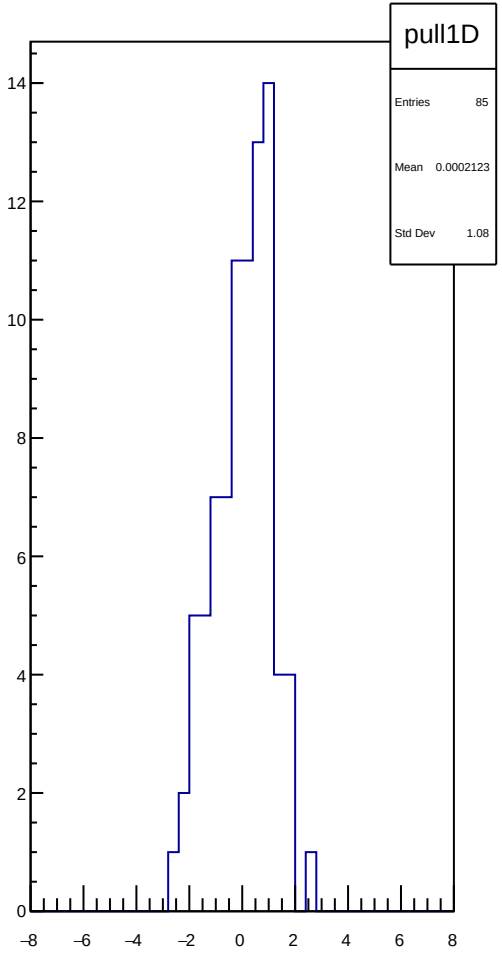

pull1D
Entries 85
Mean −0.001195
Std Dev 1.087

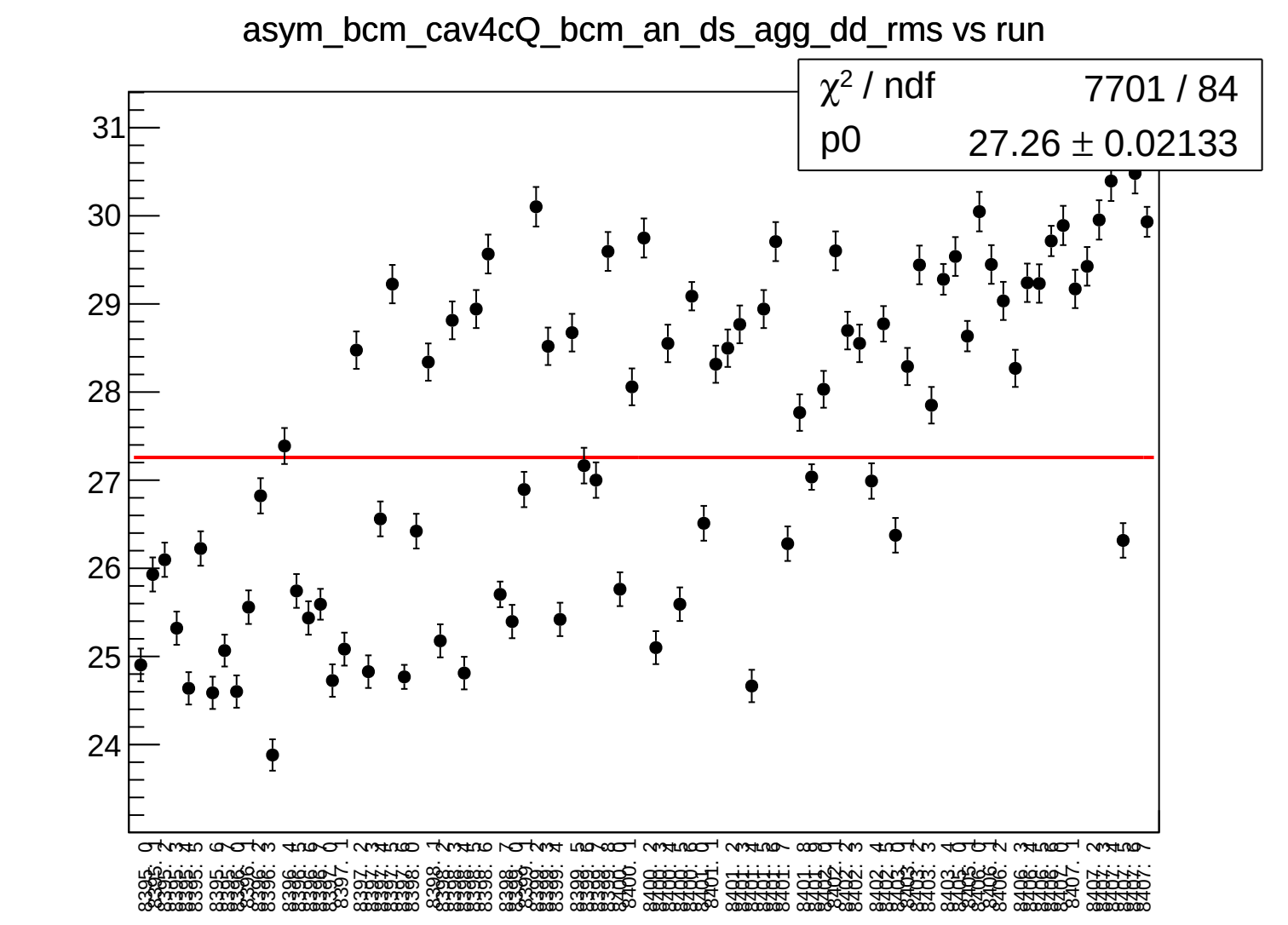

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 7088 / 84
p0 27.62 ± 0.02161
32
31
30
29
28
27
26
25
24

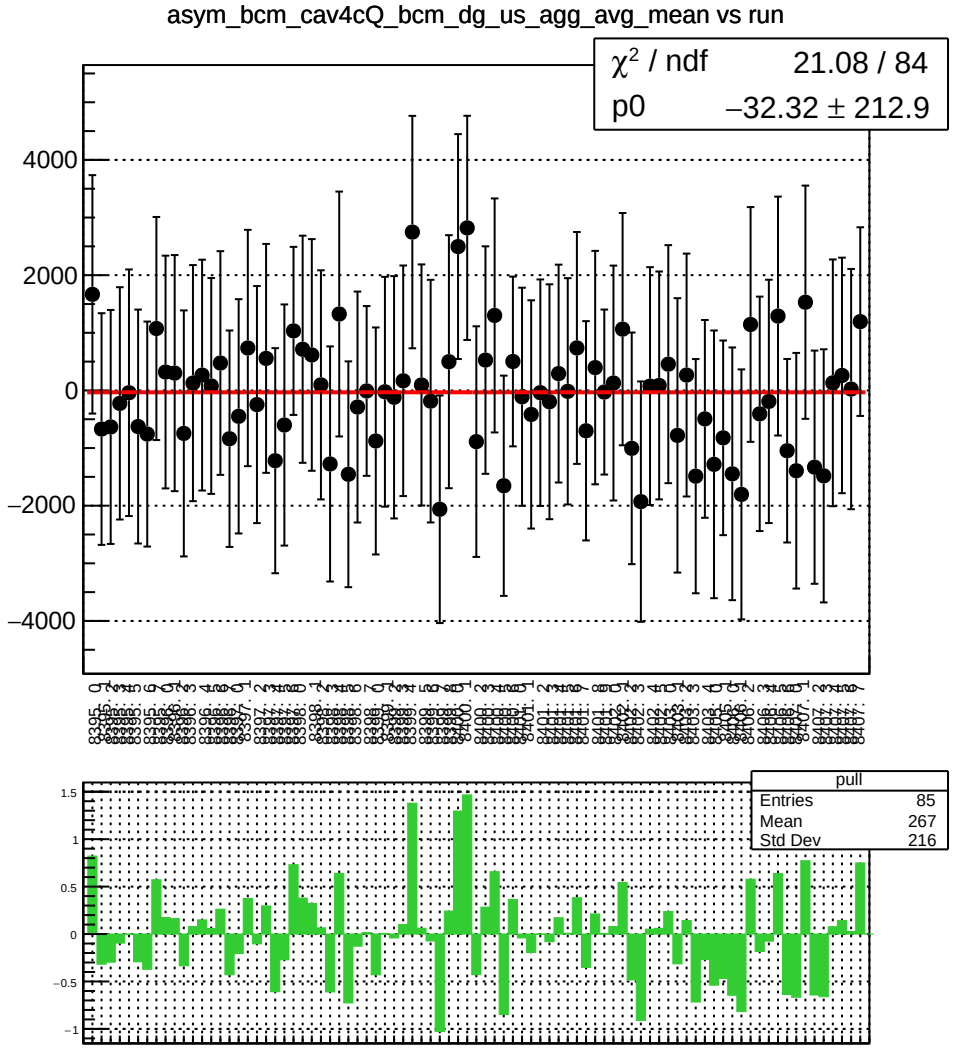

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 20.55 / 84
p0 −48.31 ± 210.7
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 316
Std Dev 259.6
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.003
Std Dev 0.4917
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

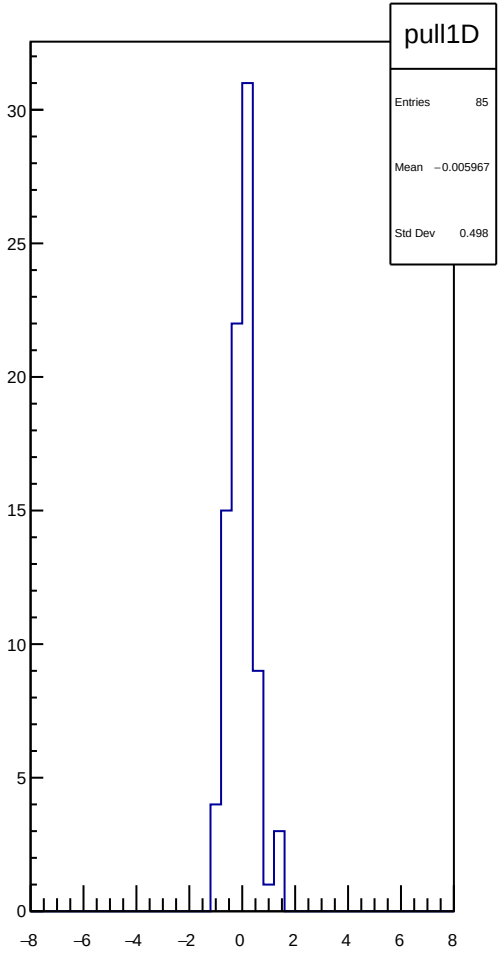

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2623 / 84
p0 190.7 ± 0.149
230
220
210
200
190
180
170

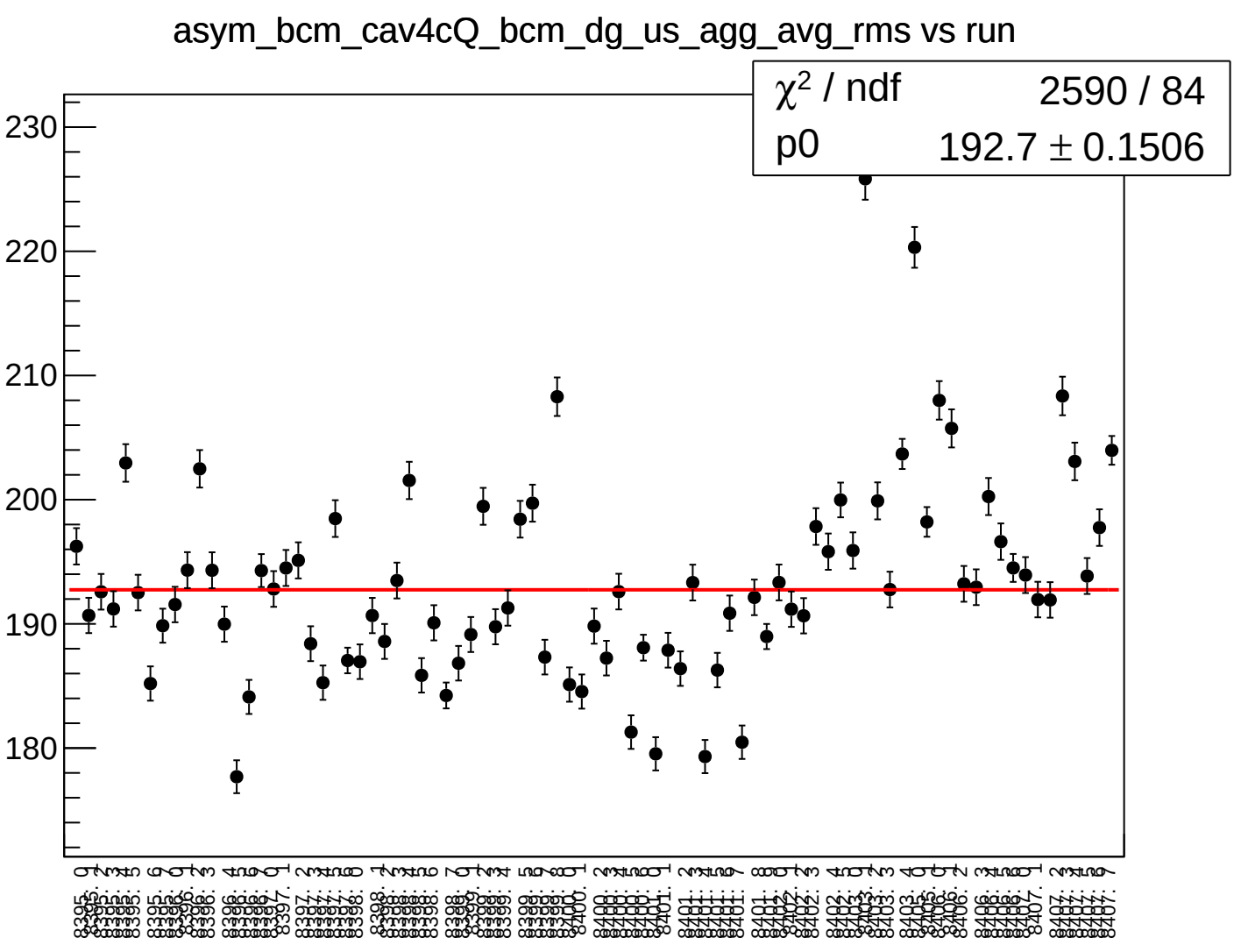

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 99.21 / 84
p0 4.562 ± 30.16
1000
500
0
−500
−1000
pull
Entries 85
Mean −6779
Std Dev 6783
2
1
0
−1
−2

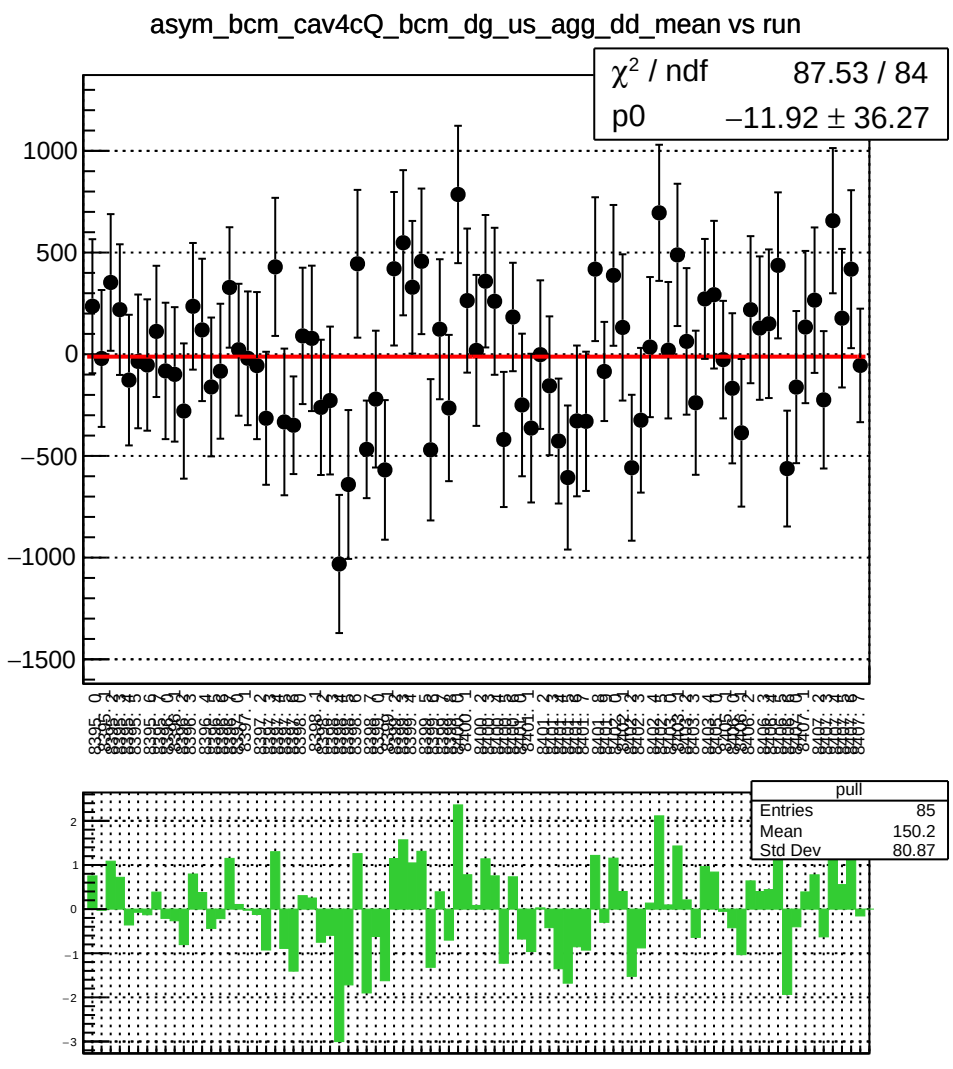

pull1D
Entries 85
Mean 0.0002123
Std Dev 1.08
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

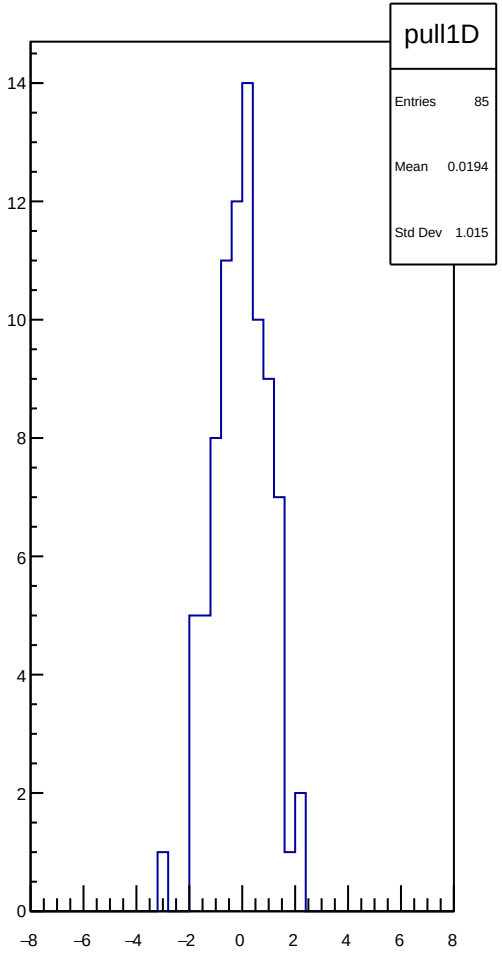

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 7701 / 84
p0 27.26 ± 0.02133
31
30
29
28
27
26
25
24

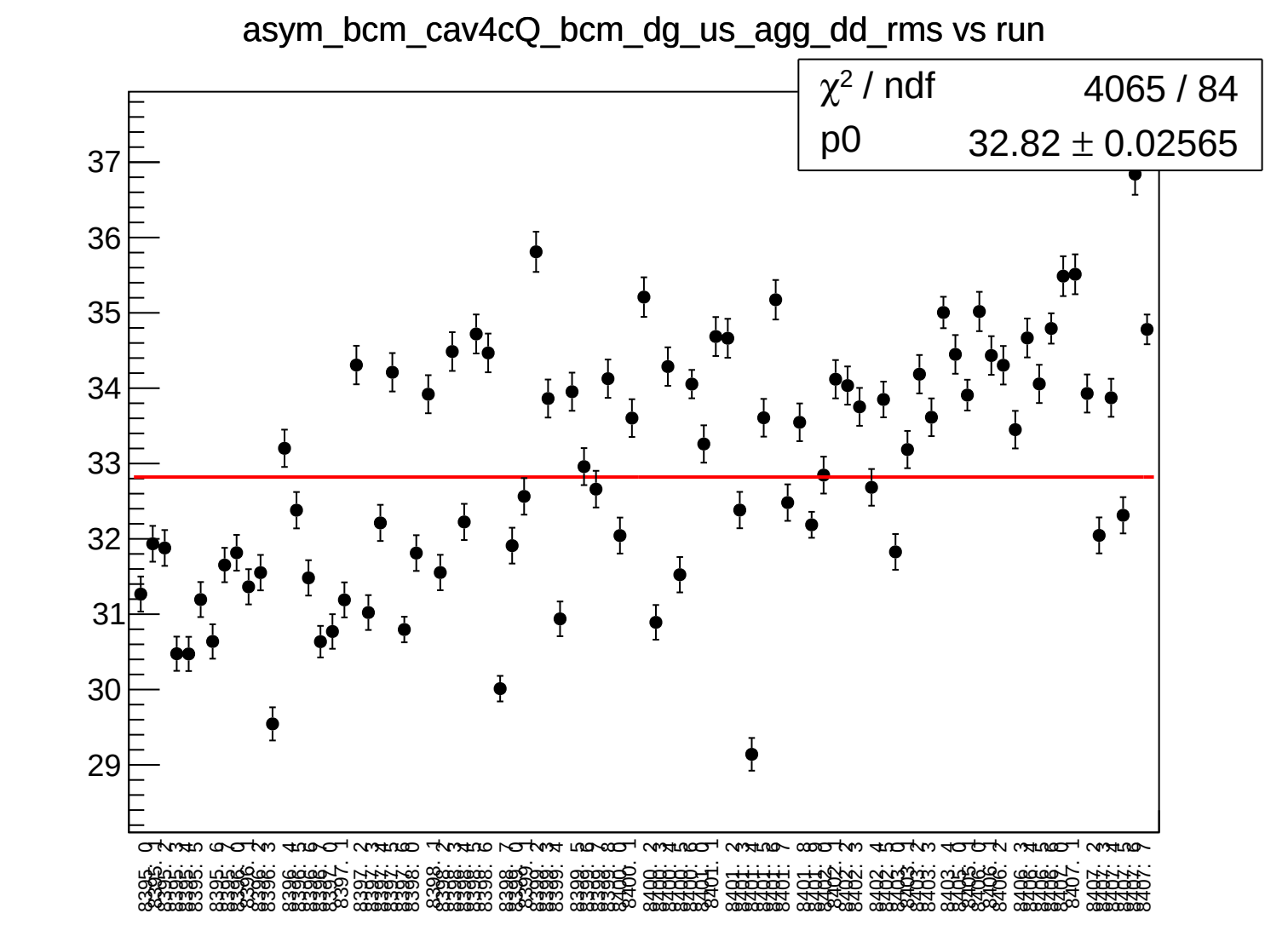

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 21.08 / 84
p0 −32.32 ± 212.9
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 267
Std Dev 216
1.5
1
0.5
0
−0.5
−1

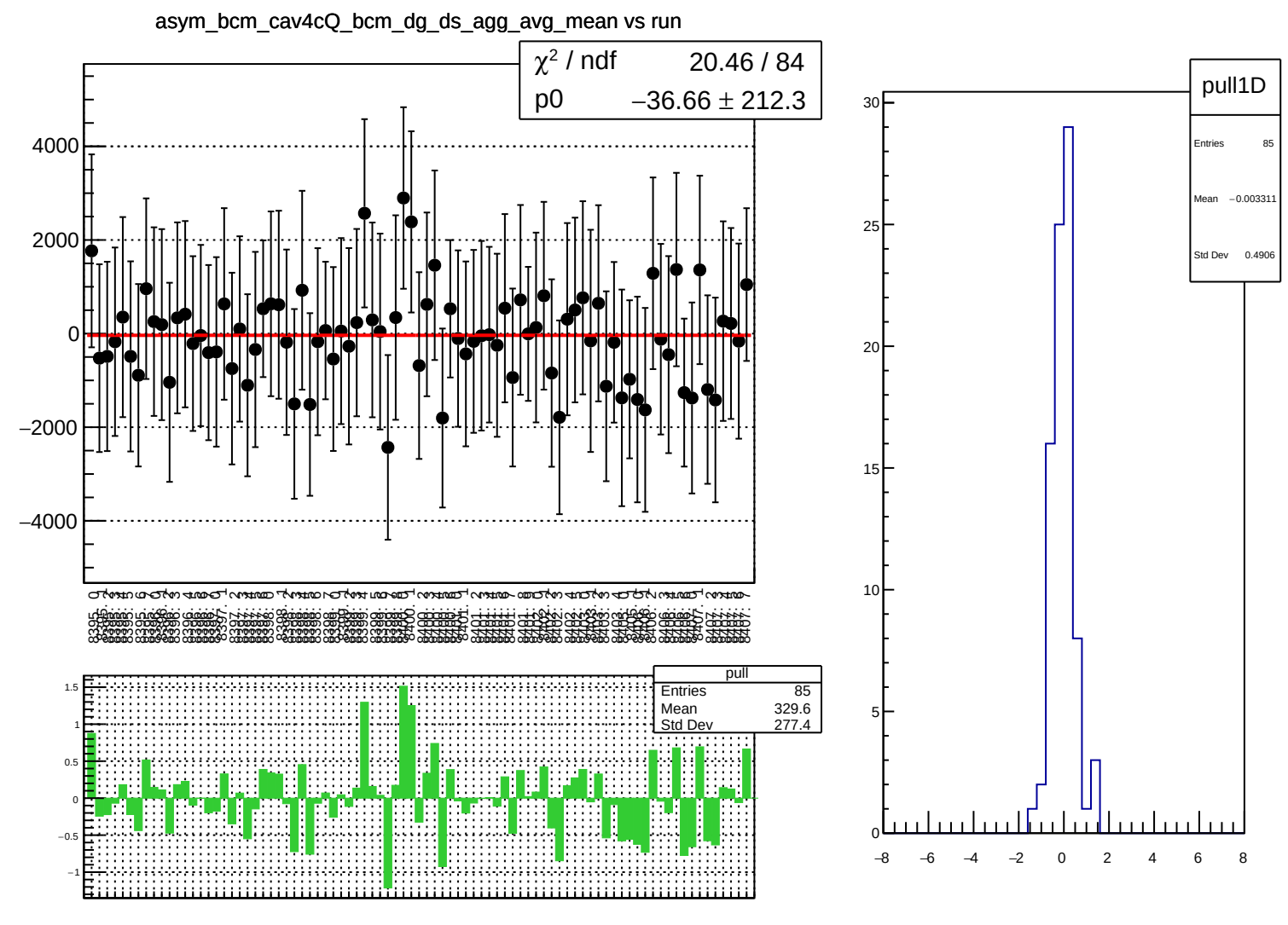

pull1D
Entries 85
Mean −0.005967
Std Dev 0.498
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

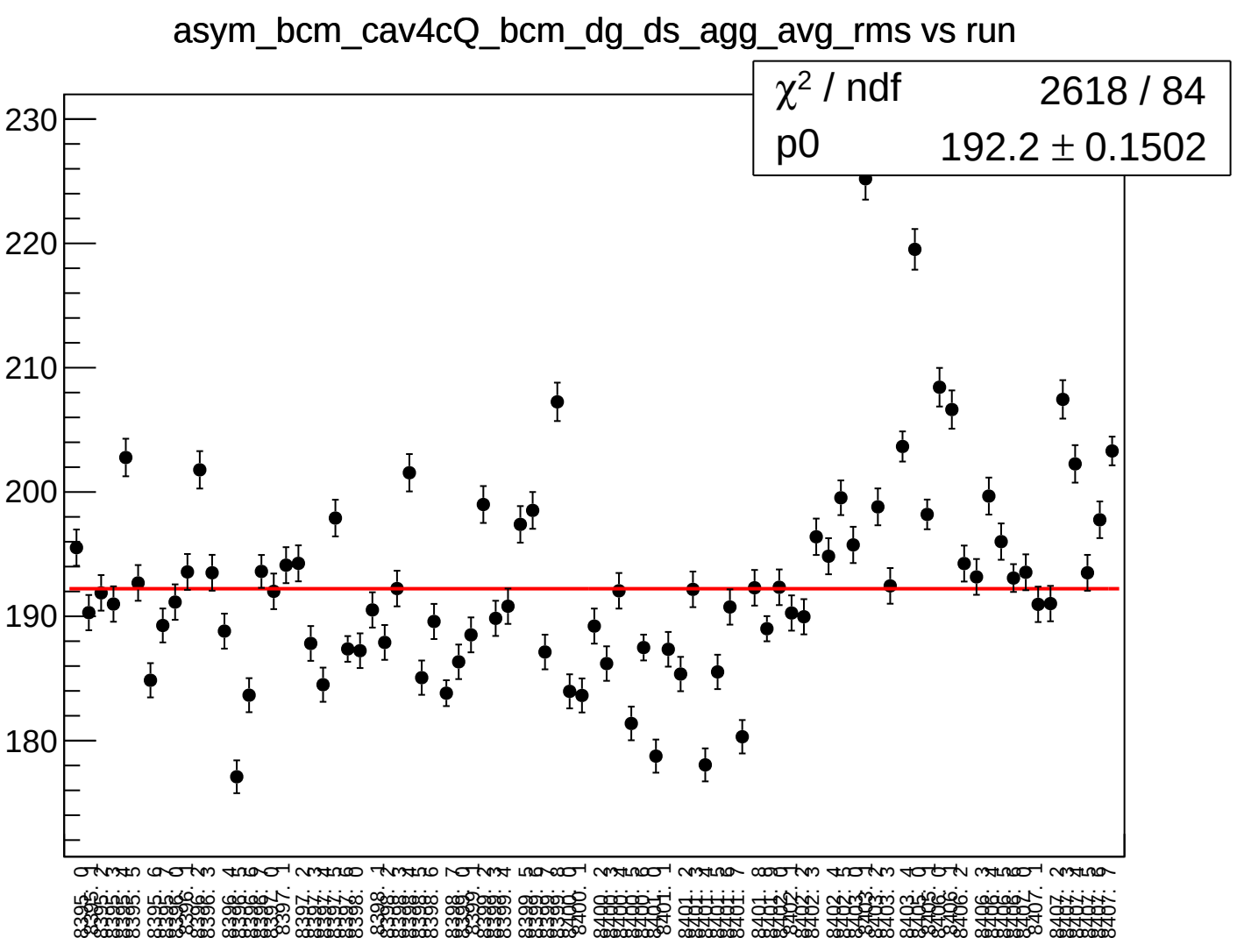

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2590 / 84
p0 192.7 ± 0.1506
230
220
210
200
190
180

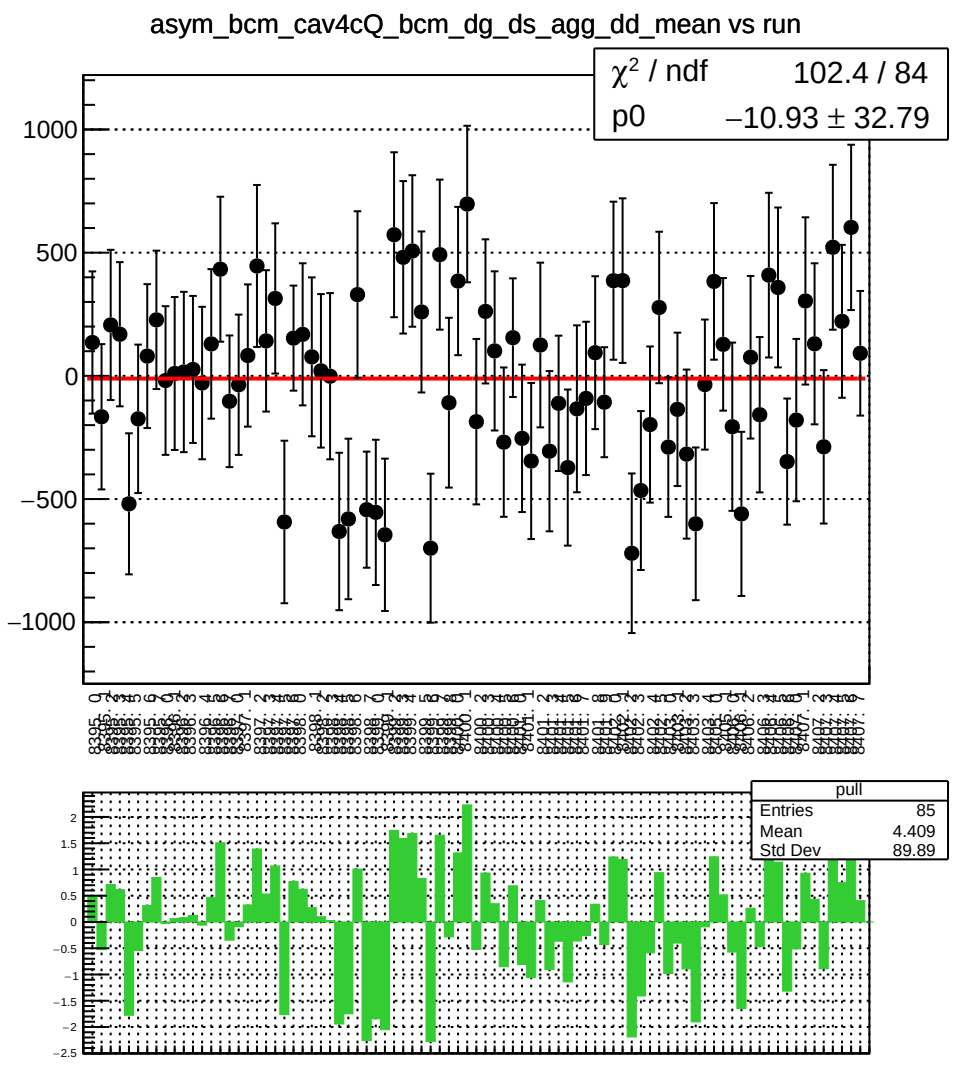

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 87.53 / 84
p0 −11.92 ± 36.27
pull
Entries 85
Mean 150.2
Std Dev 80.87

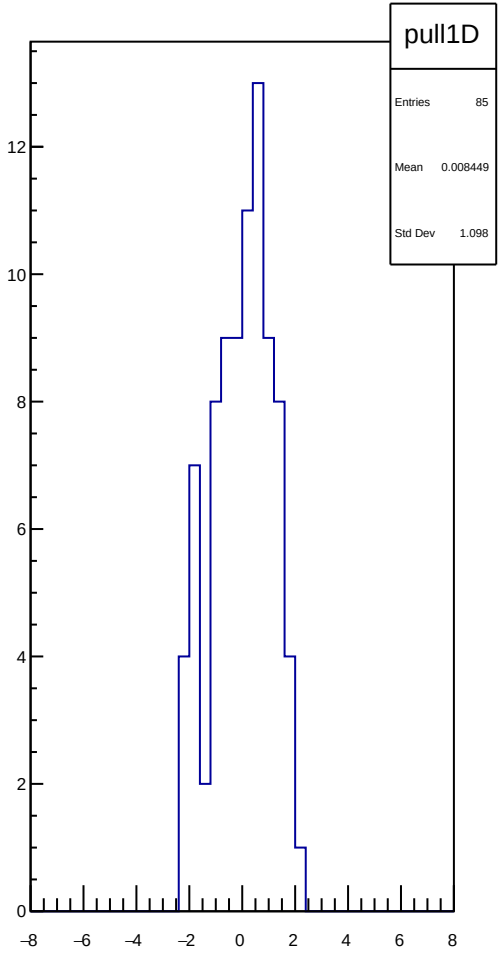

pull1D
Entries 85
Mean 0.0194
Std Dev 1.015

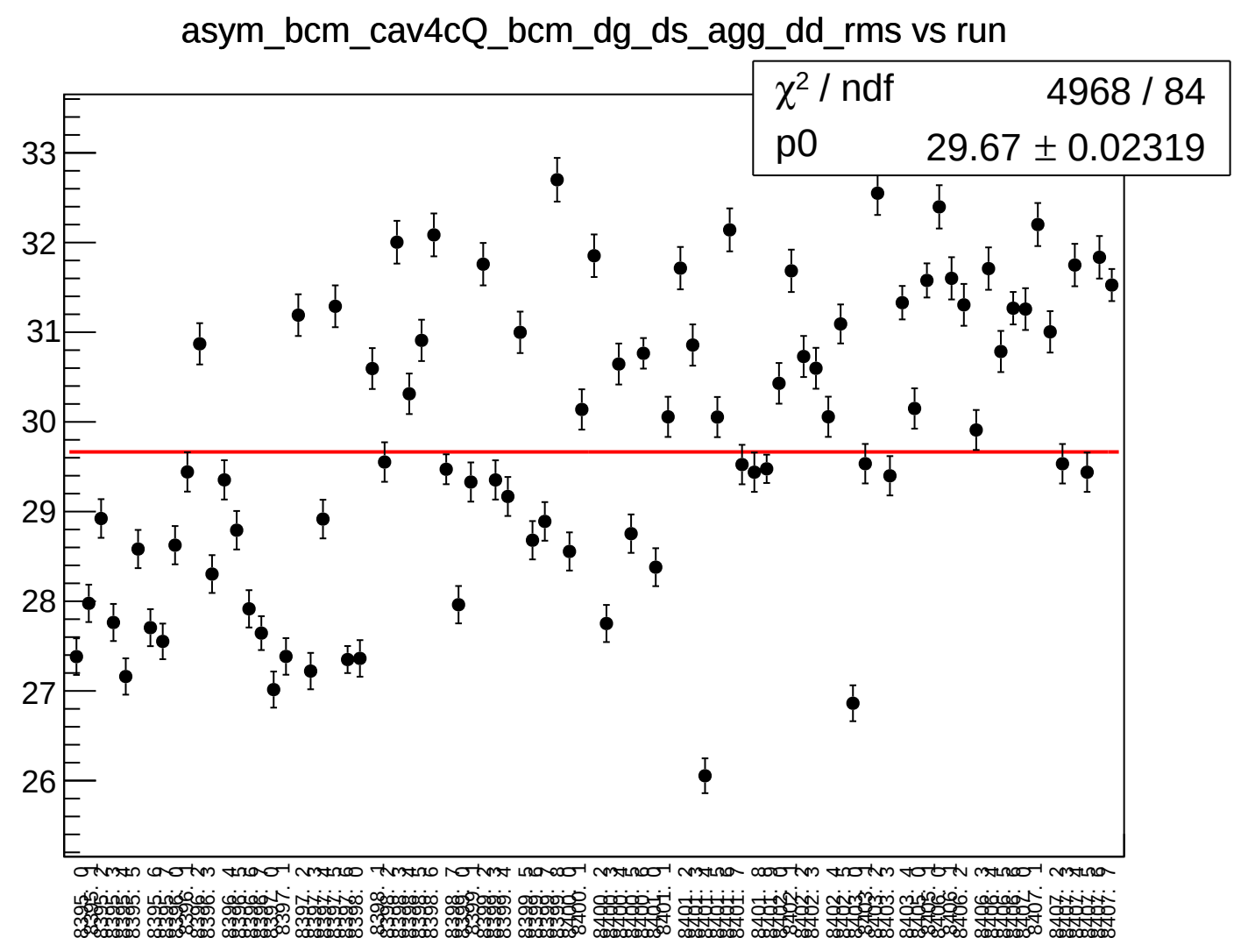

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 4065 / 84
p0 32.82 ± 0.02565
37
36
35
34
33
32
31
30
29

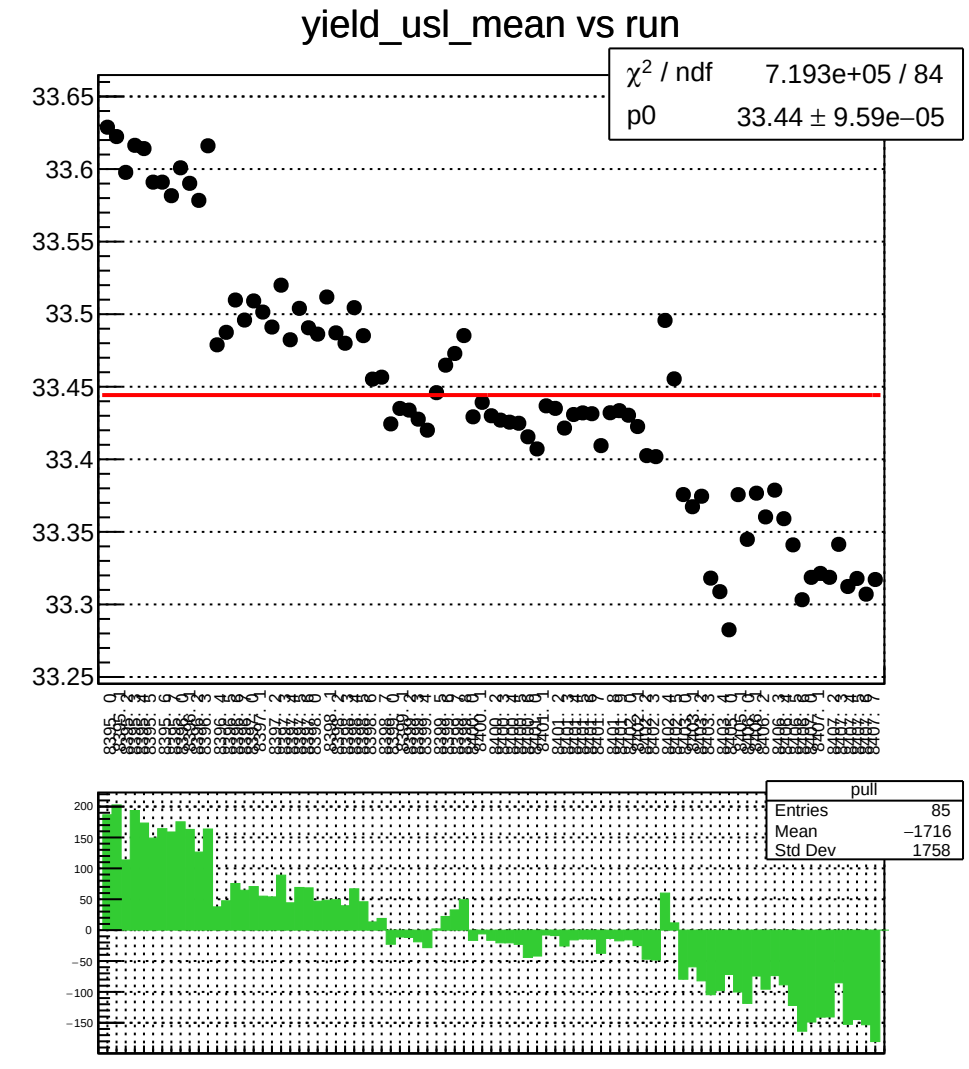

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 20.46 / 84
p0 −36.66 ± 212.3
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 329.6
Std Dev 277.4
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.003311
Std Dev 0.4906
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

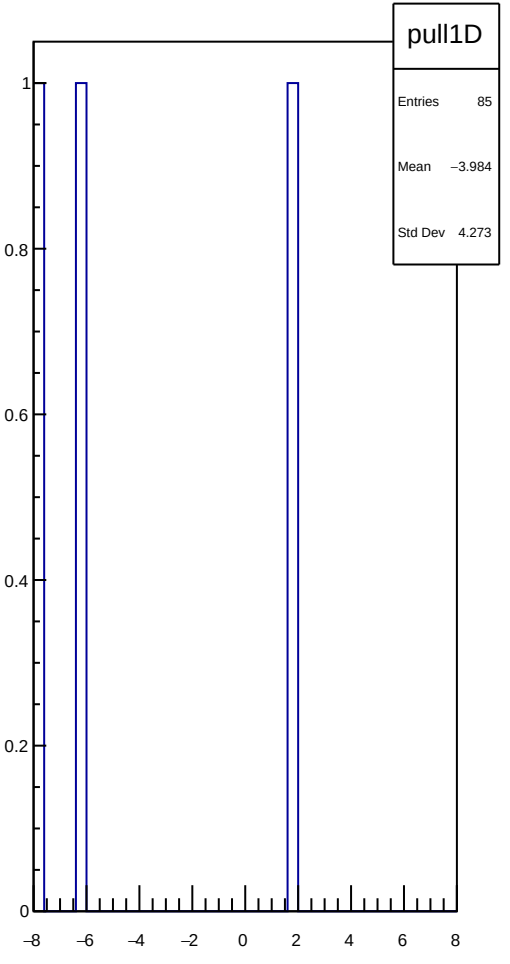

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2618 / 84
p0 192.2 ± 0.1502
230
220
210
200
190
180

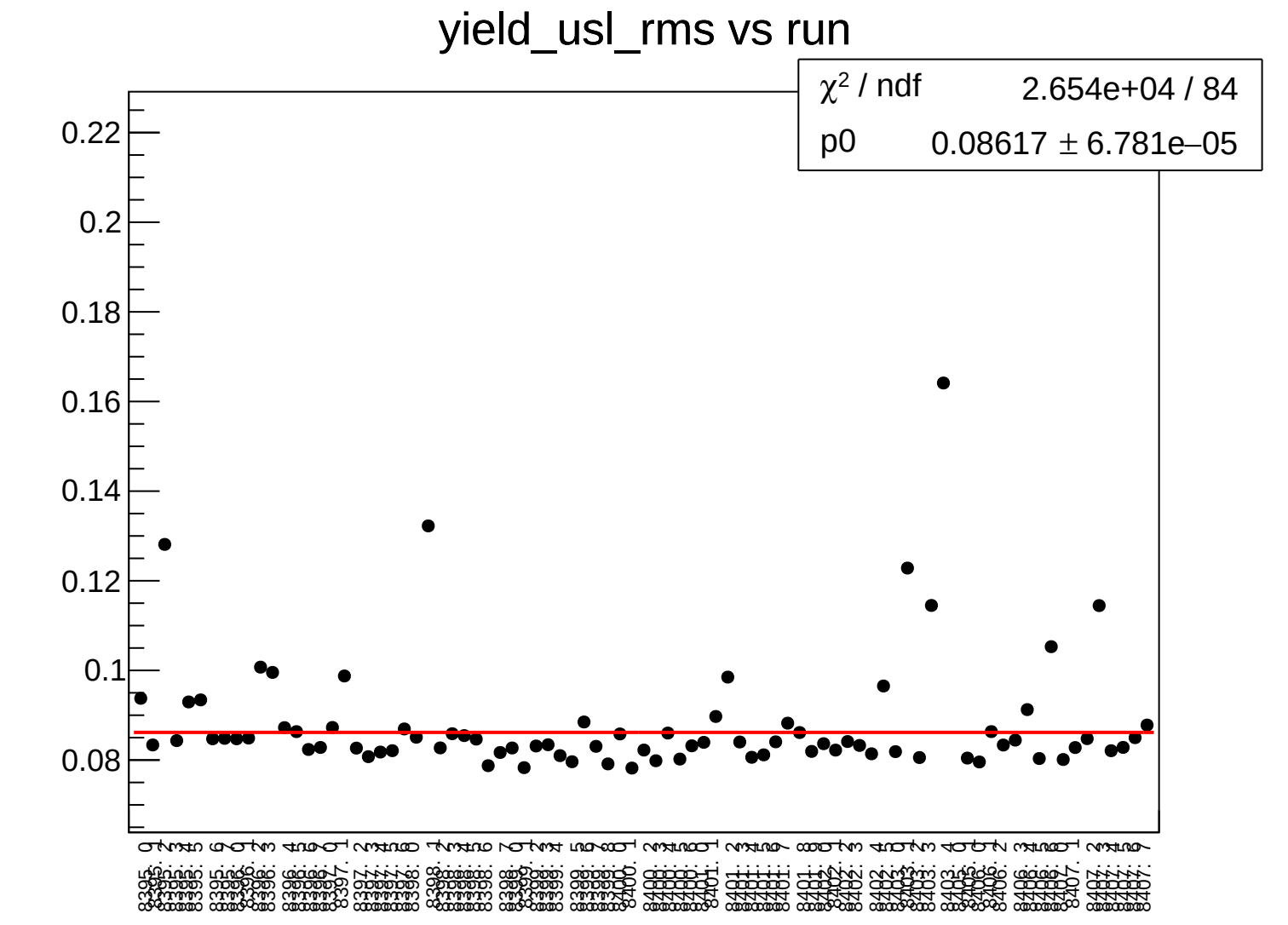

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 102.4 / 84
p0 −10.93 ± 32.79
1000
500
0
−500
−1000
pull
Entries 85
Mean 4.409
Std Dev 89.89
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

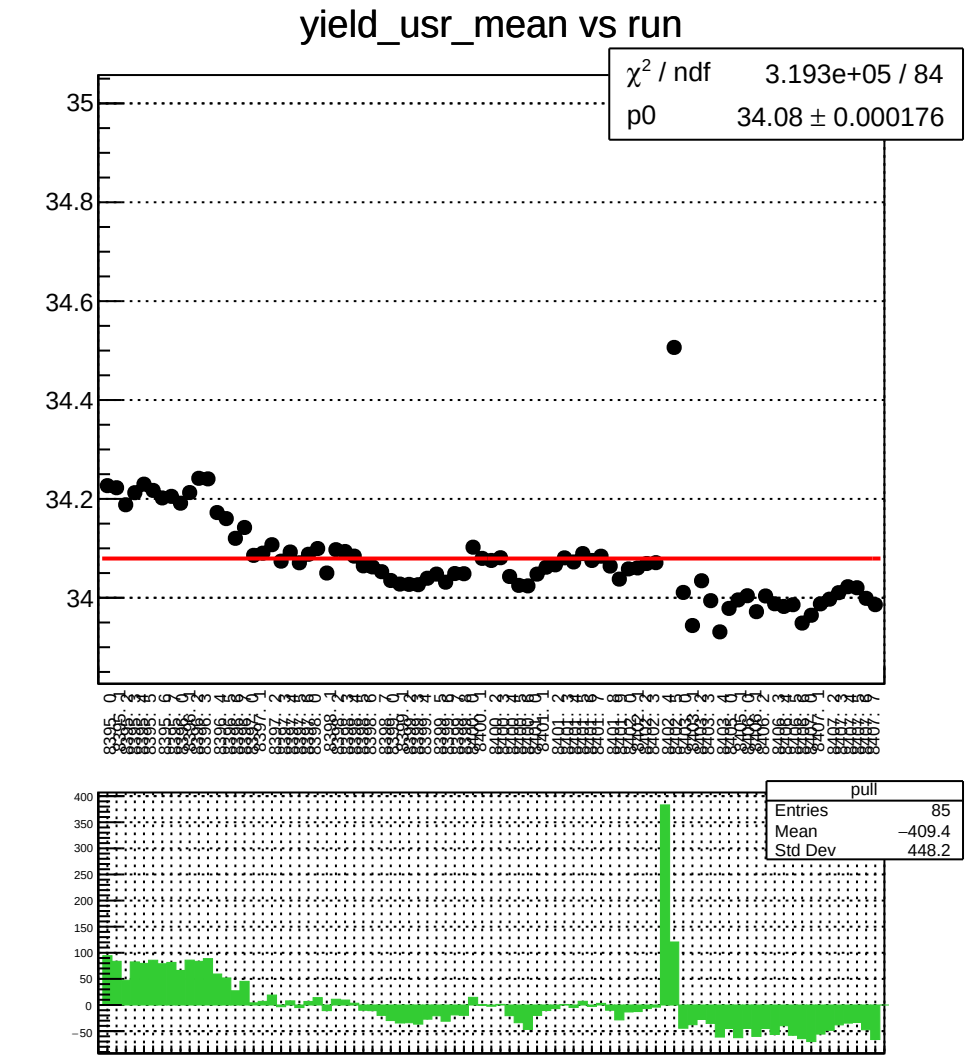

pull1D
Entries 85
Mean 0.008449
Std Dev 1.098
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

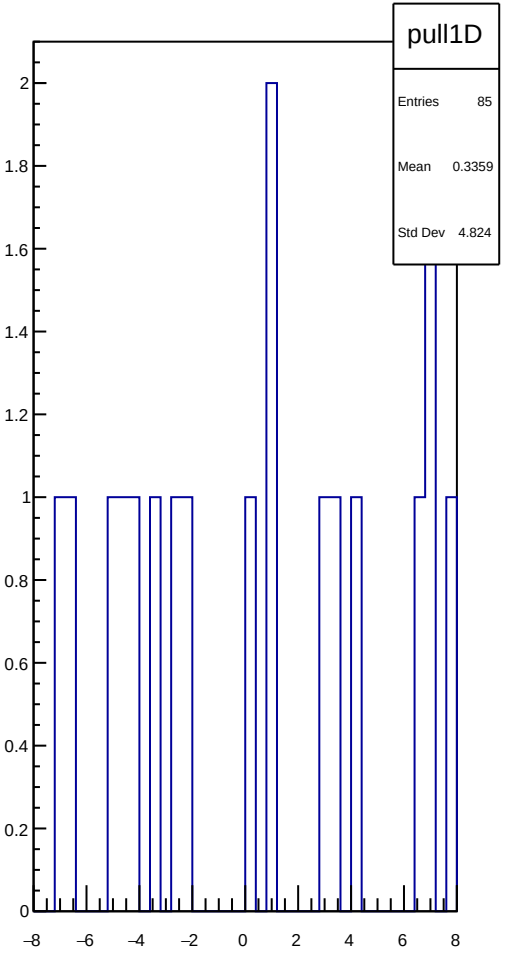

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4968 / 84
p0 29.67 ± 0.02319
33
32
31
30
29
28
27
26

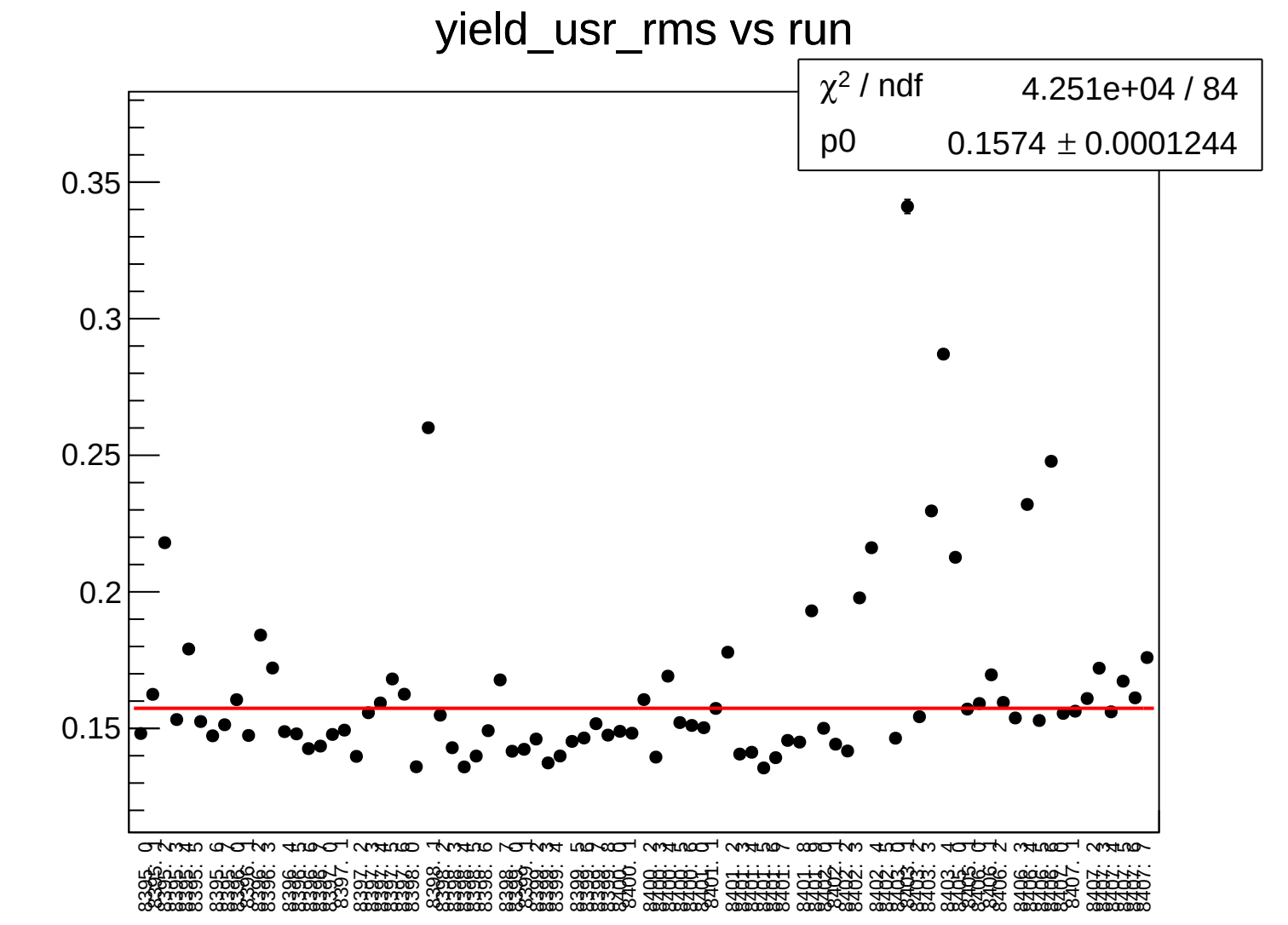

yield_usl_mean vs run
χ² / ndf 7.193e+05 / 84
p0 33.44 ± 9.59e−05
33.65
33.6
33.55
33.5
33.45
33.4
33.35
33.3
33.25
pull
Entries 85
Mean −1716
Std Dev 1758
200
150
100
50
0
−50
−100
−150

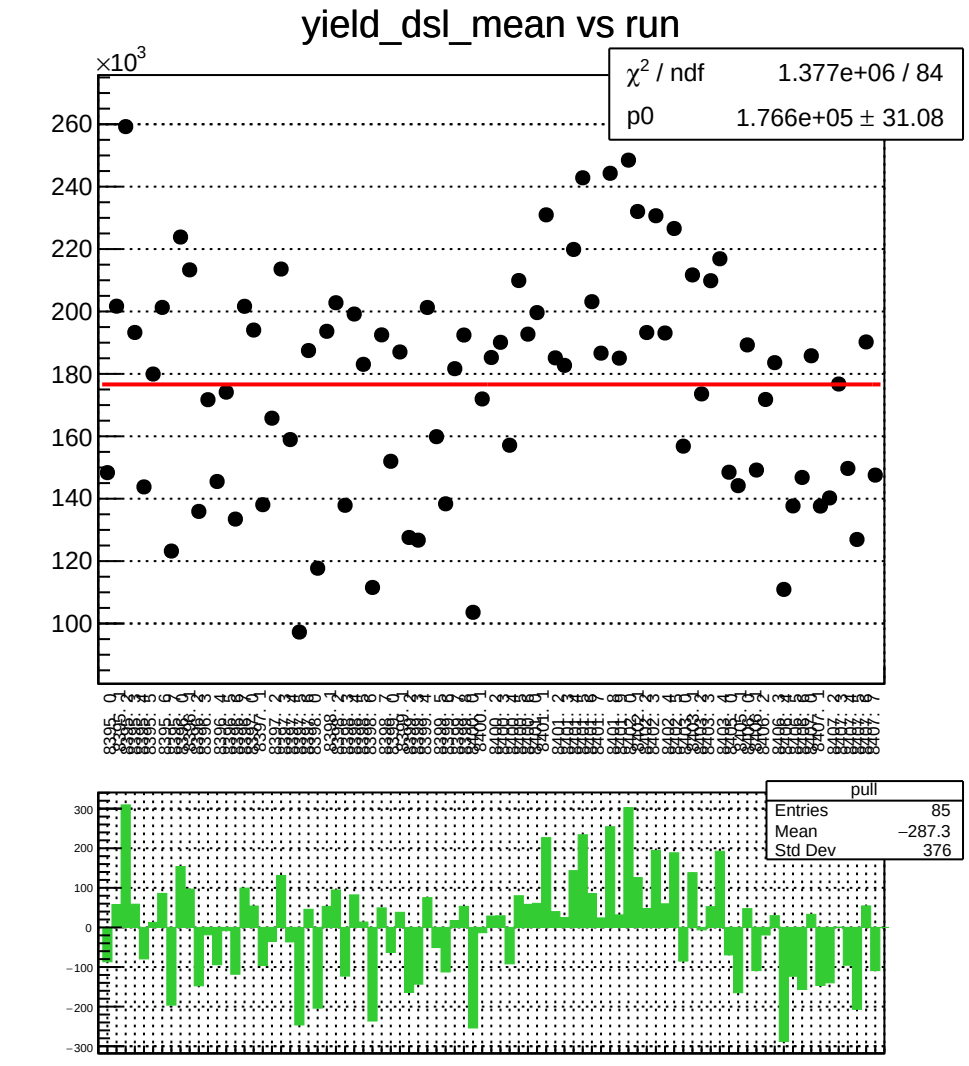

pull1D
Entries 85
Mean −3.984
Std Dev 4.273
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

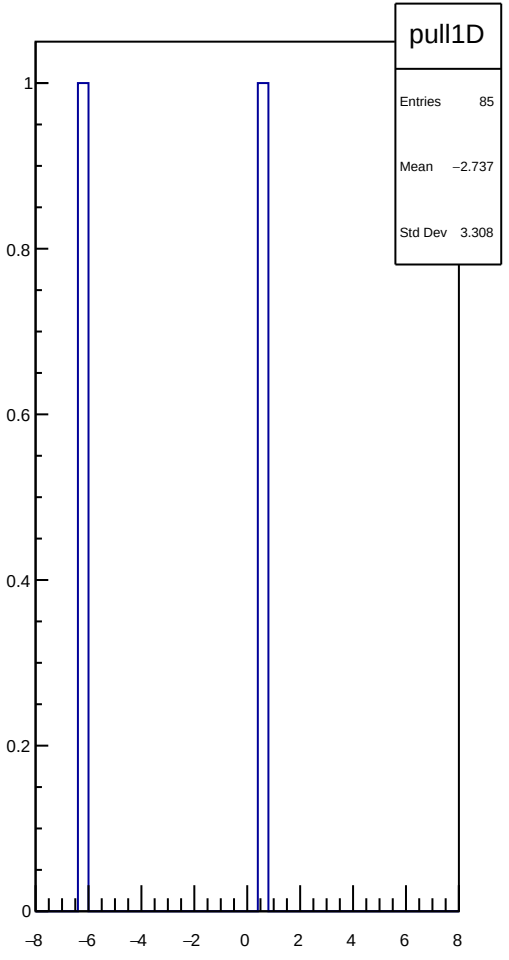

yield_usl_rms vs run
χ² / ndf 2.654e+04 / 84
p0 0.08617 ± 6.781e–05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08

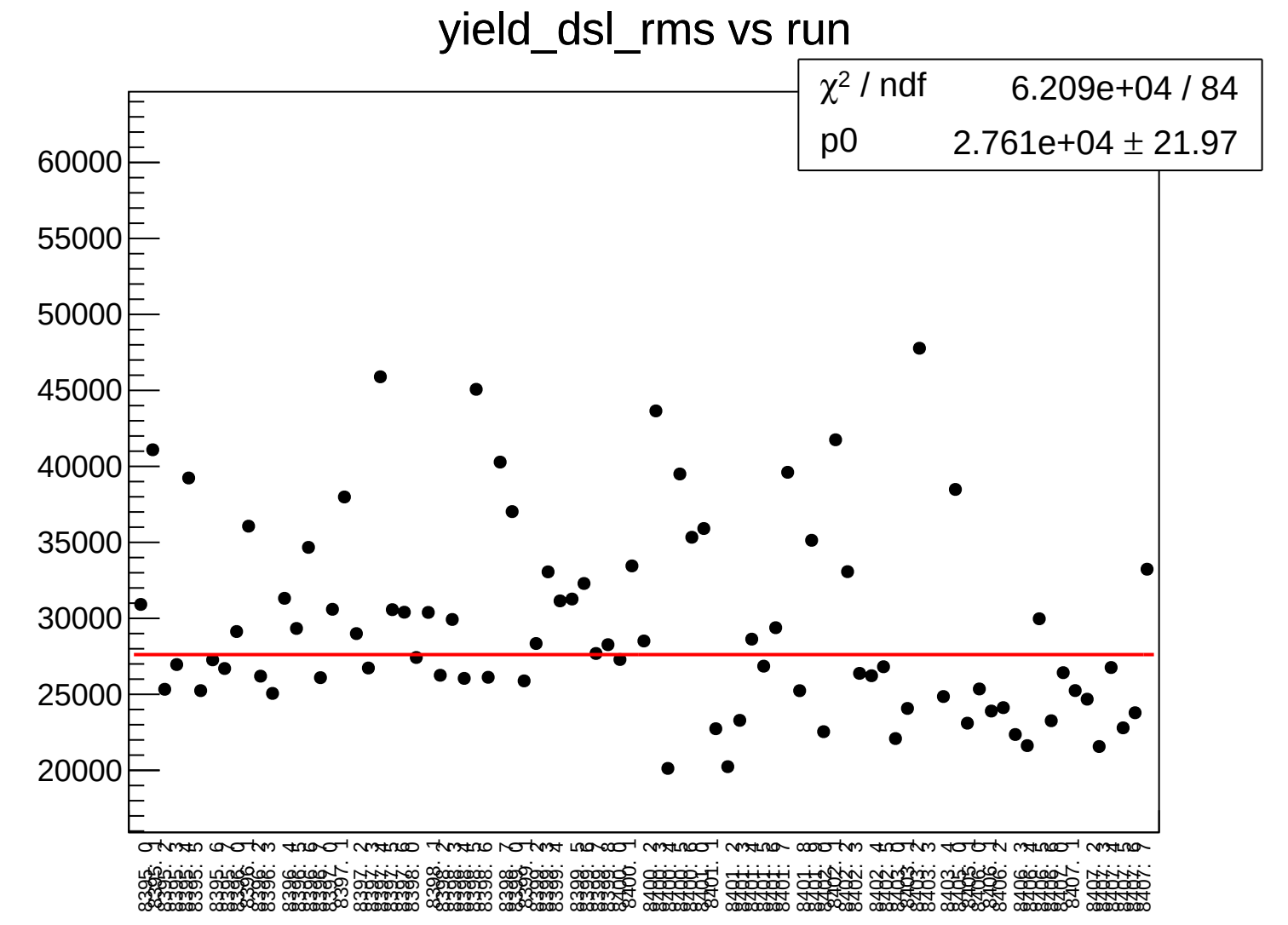

yield_usr_mean vs run
χ² / ndf 3.193e+05 / 84
p0 34.08 ± 0.000176
35
34.8
34.6
34.4
34.2
34
pull
Entries 85
Mean −409.4
Std Dev 448.2
400
350
300
250
200
150
100
50
0
−50

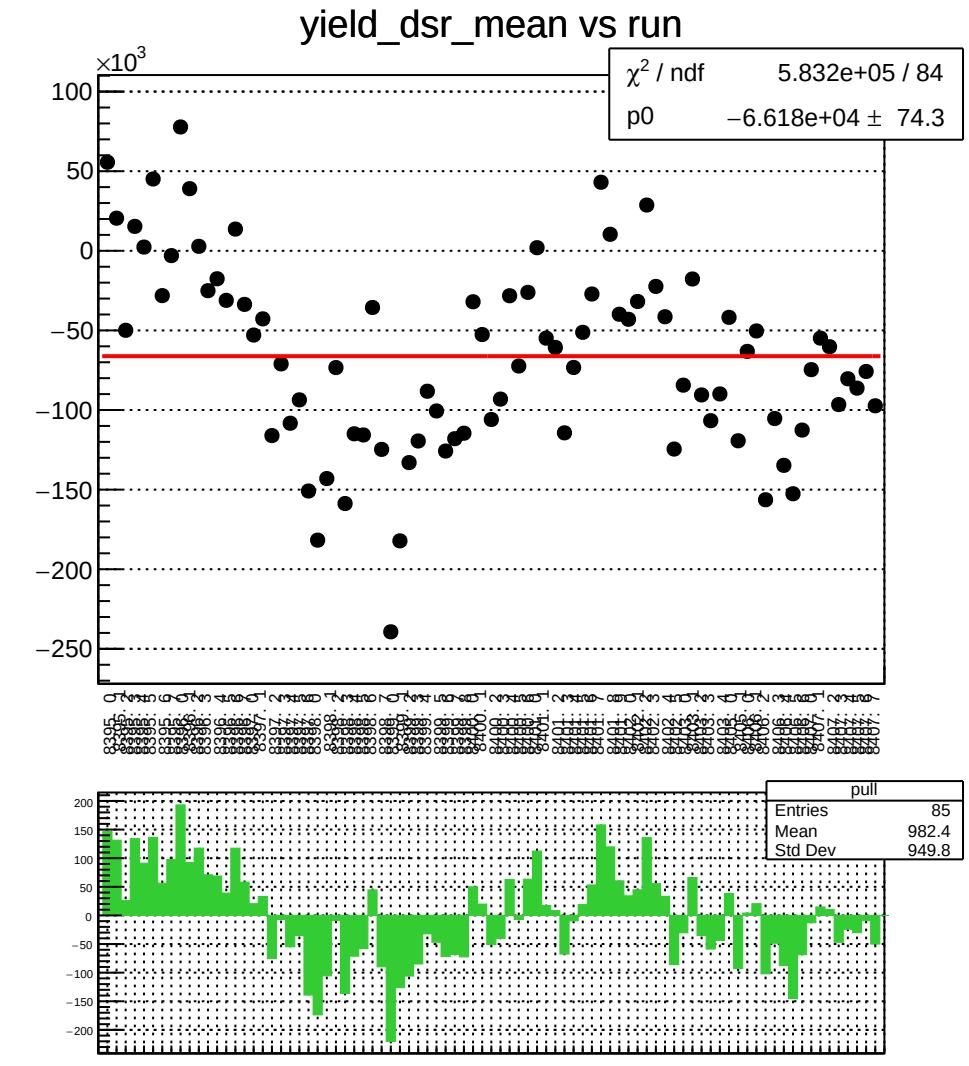

pull1D
Entries 85
Mean 0.3359
Std Dev 4.824
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

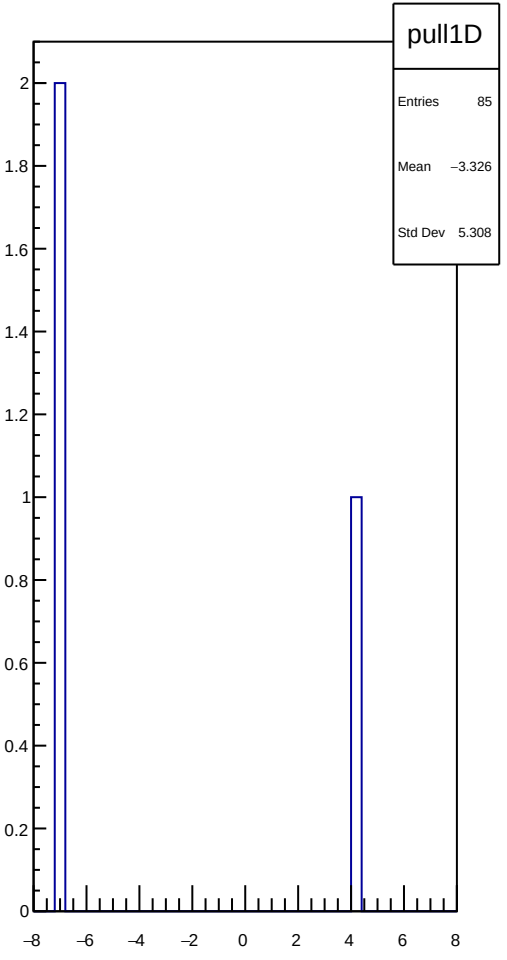

yield_usr_rms vs run
χ² / ndf 4.251e+04 / 84
p0 0.1574 ± 0.0001244
0.35
0.3
0.25
0.2
0.15

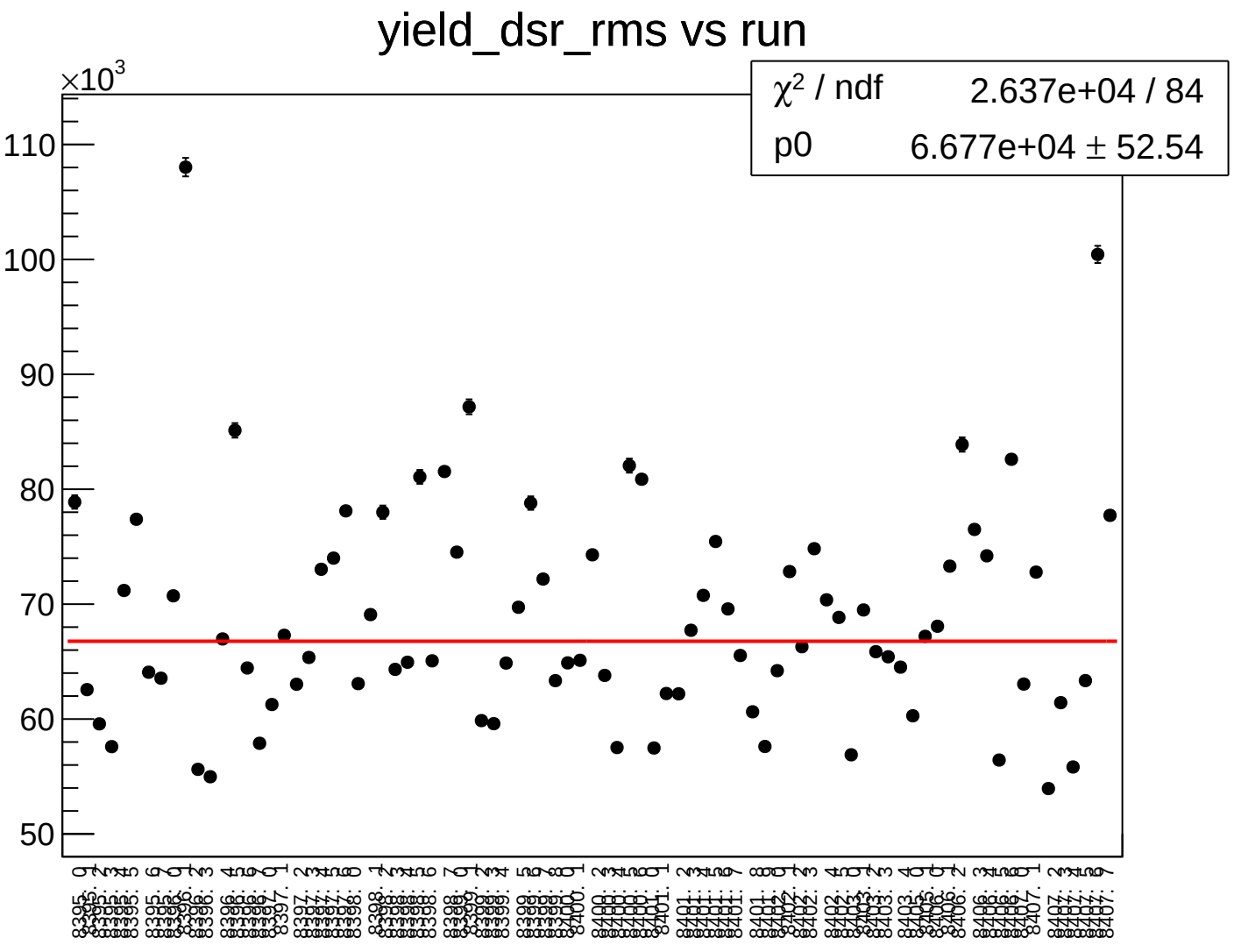

yield_dsl_mean vs run
×10^3
χ² / ndf 1.377e+06 / 84
p0 1.766e+05 ± 31.08
260
240
220
200
180
160
140
120
100
pull
Entries 85
Mean −287.3
Std Dev 376
300
200
100
0
−100
−200
−300

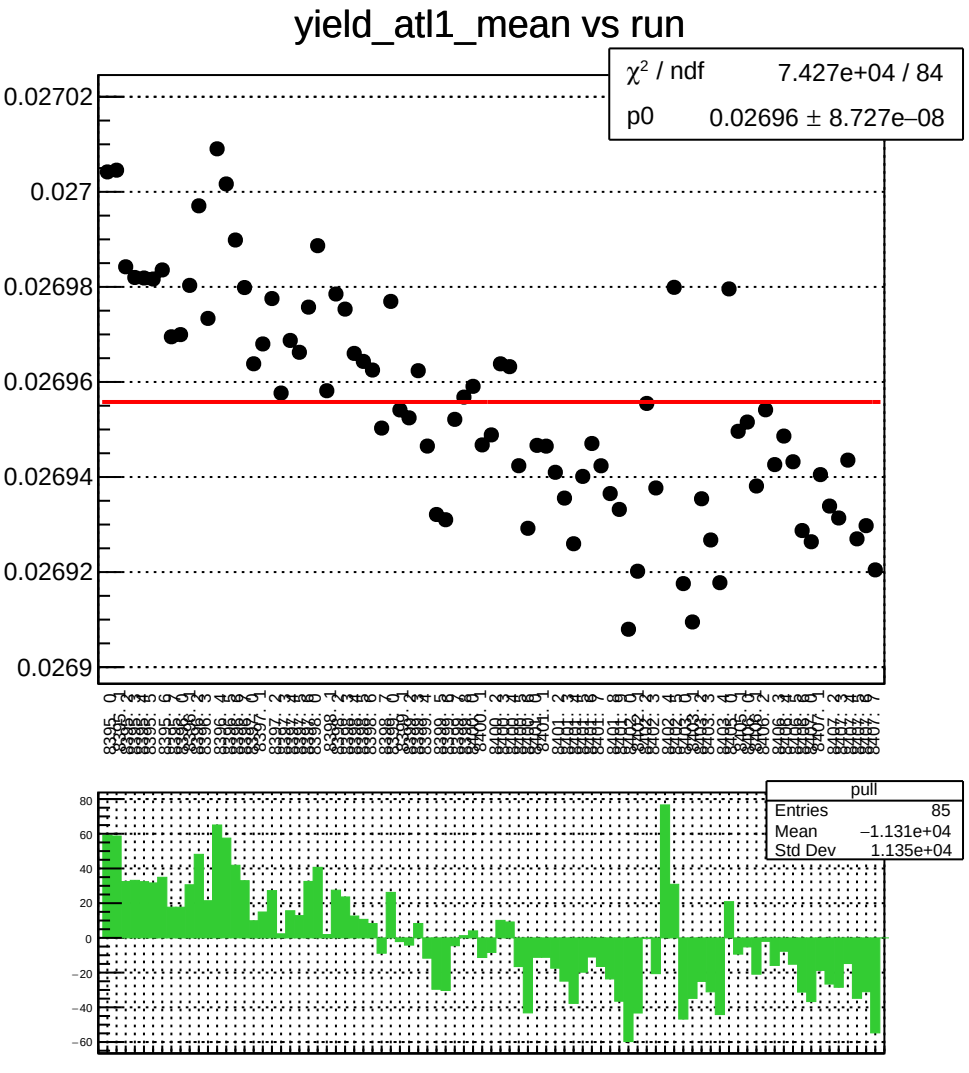

pull1D
Entries 85
Mean −2.737
Std Dev 3.308
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

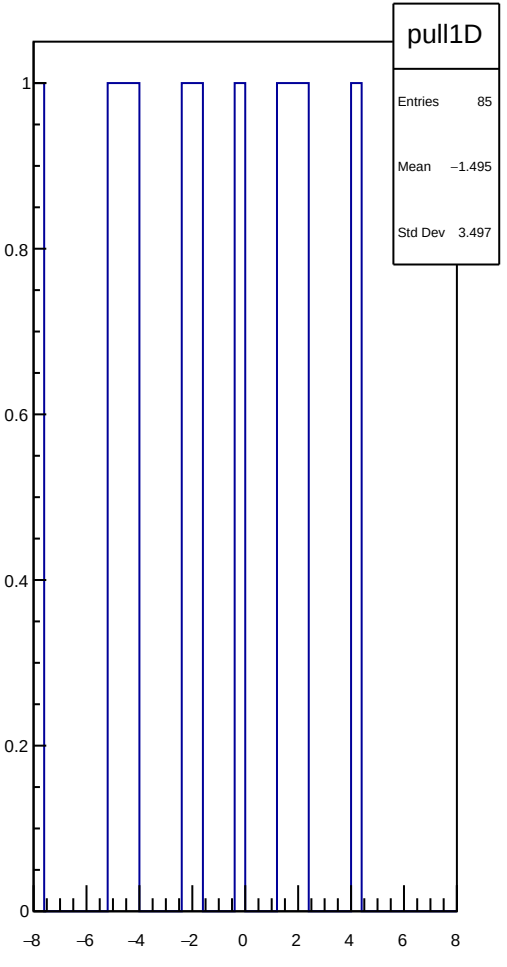

yield_dsl_rms vs run
χ² / ndf 6.209e+04 / 84
p0 2.761e+04 ± 21.97
60000
55000
50000
45000
40000
35000
30000
25000
20000

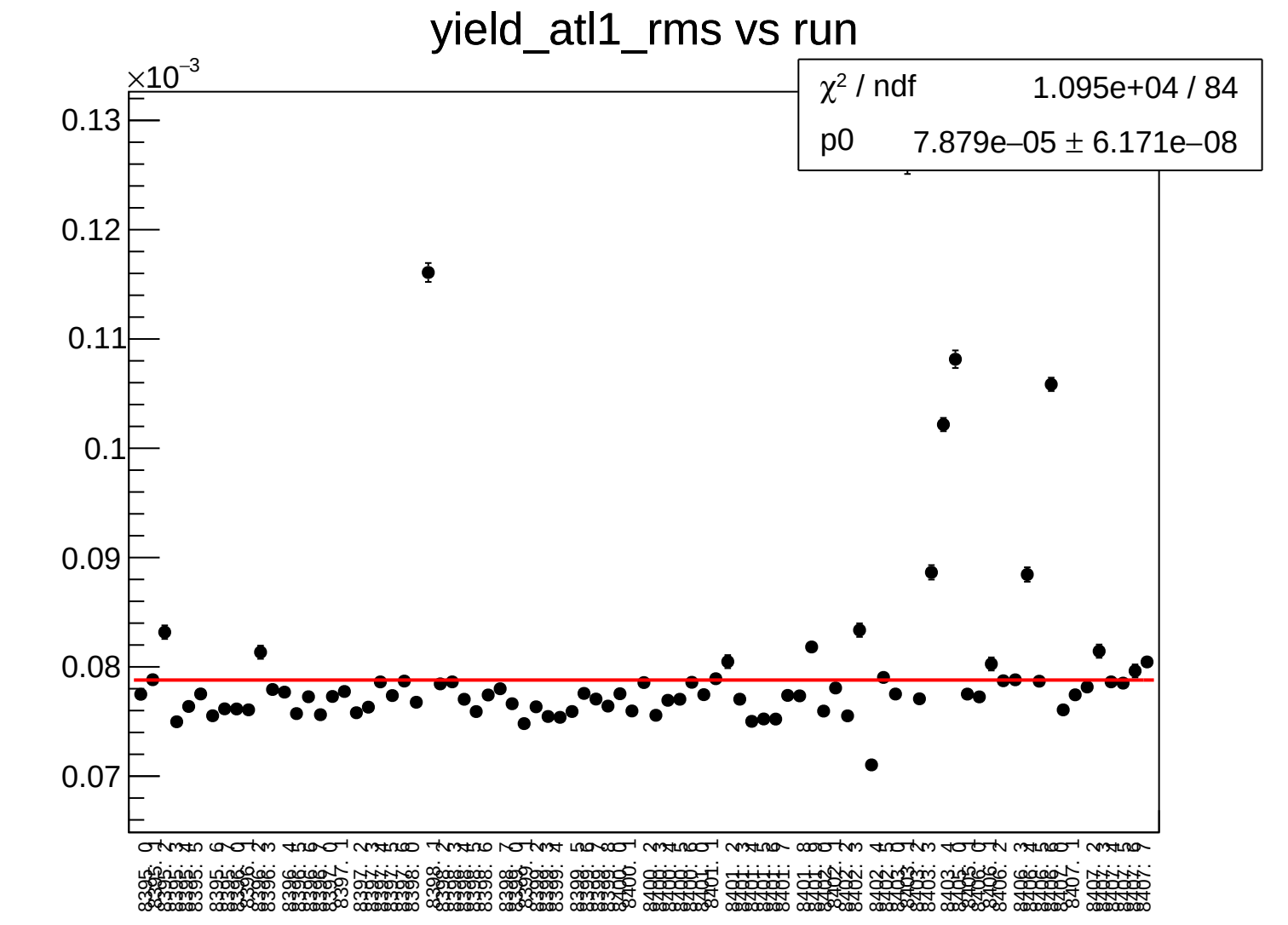

yield_dsr_mean vs run
×10^3
χ² / ndf 5.832e+05 / 84
p0 −6.618e+04 ± 74.3
pull
Entries 85
Mean 982.4
Std Dev 949.8

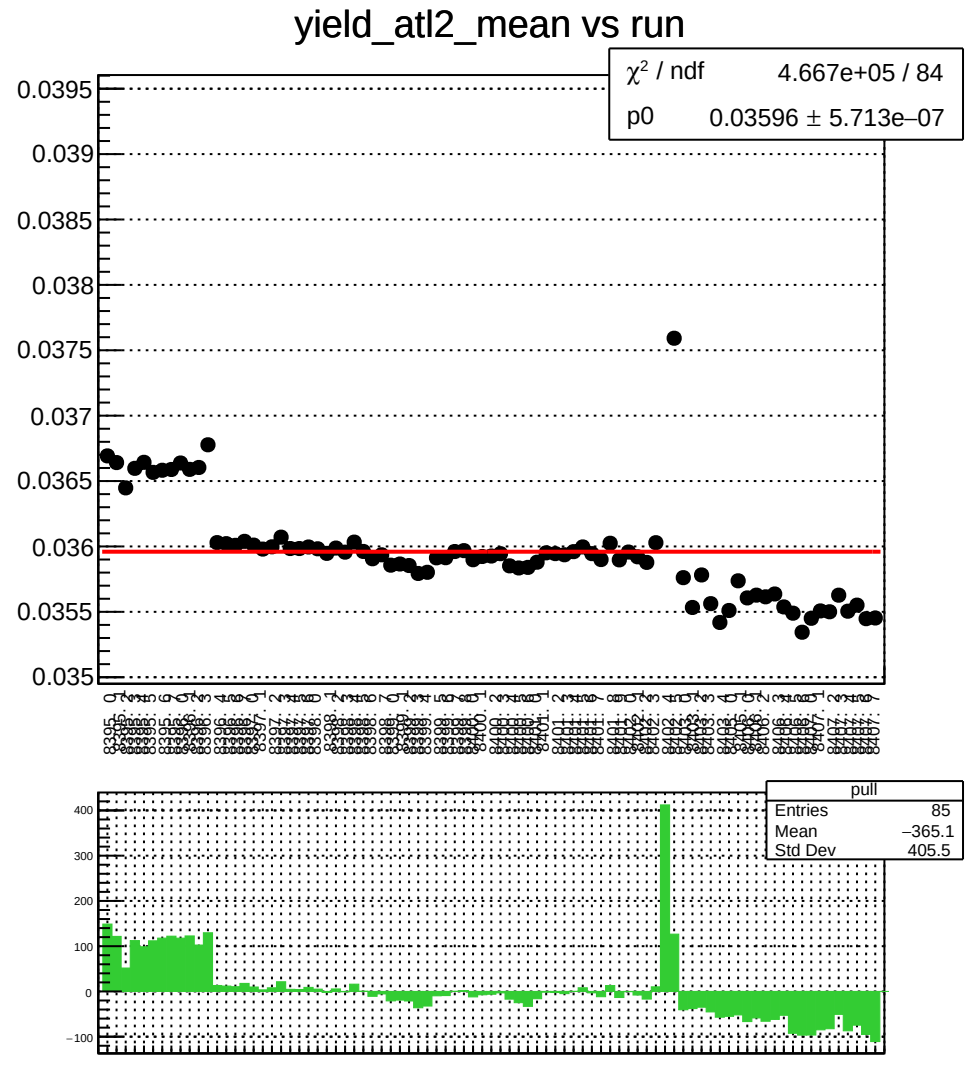

pull1D
Entries 85
Mean −3.326
Std Dev 5.308

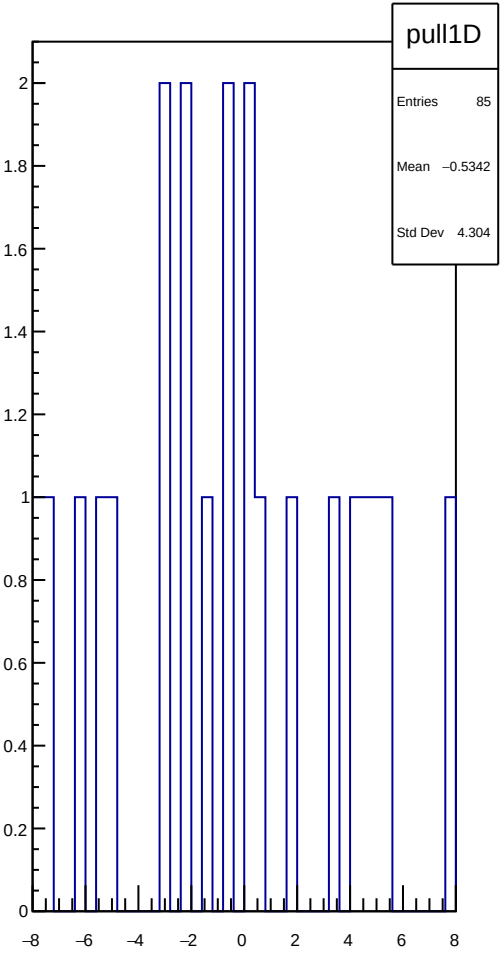

yield_dsr_rms vs run
×10^3
110
100
90
80
70
60
50
χ² / ndf 2.637e+04 / 84
p0 6.677e+04 ± 52.54

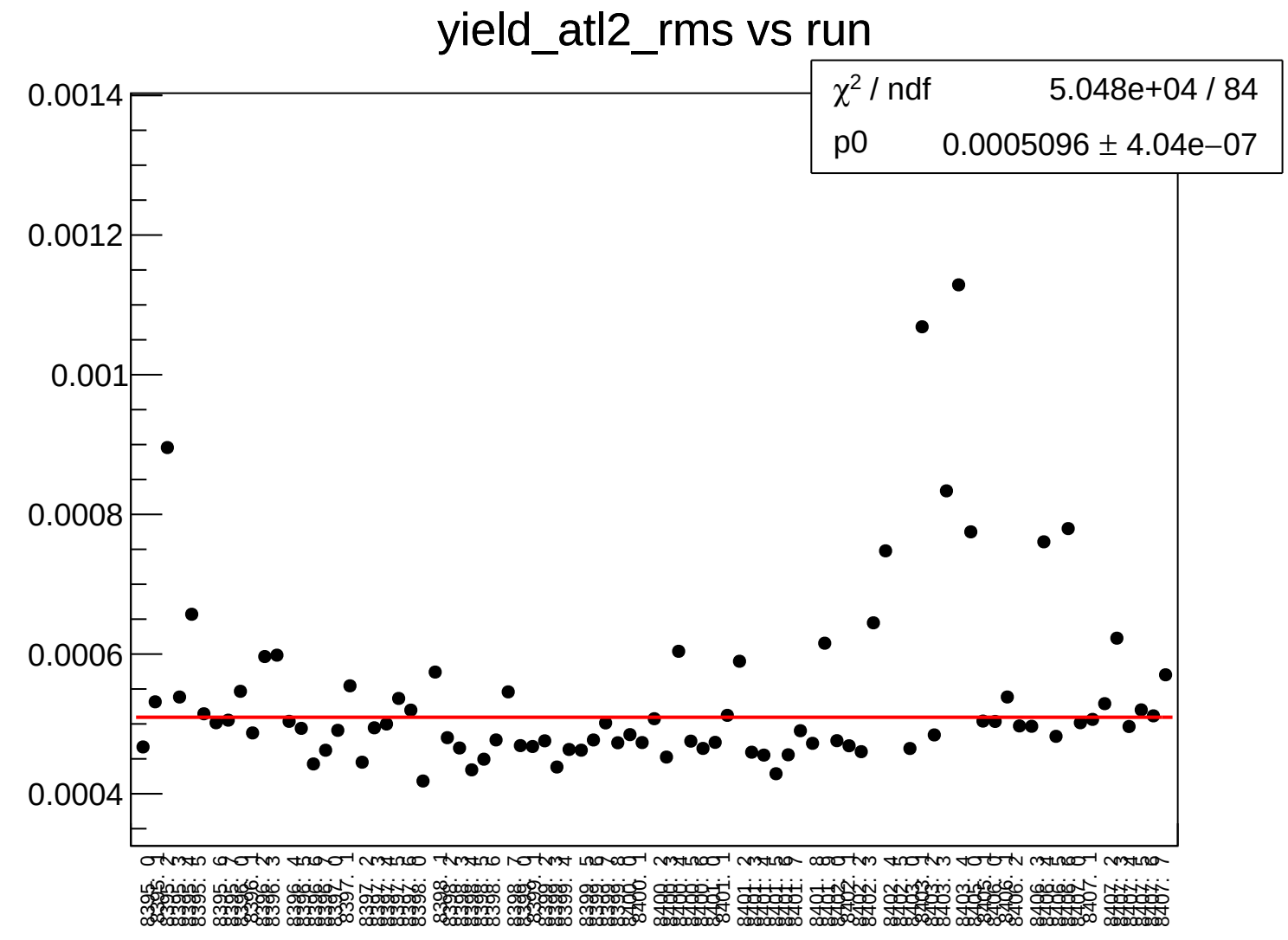

yield_atl1_mean vs run
χ² / ndf 7.427e+04 / 84
p0 0.02696 ± 8.727e−08
0.02702
0.027
0.02698
0.02696
0.02694
0.02692
0.0269
pull
Entries 85
Mean −1.131e+04
Std Dev 1.135e+04
80
60
40
20
0
−20
−40
−60

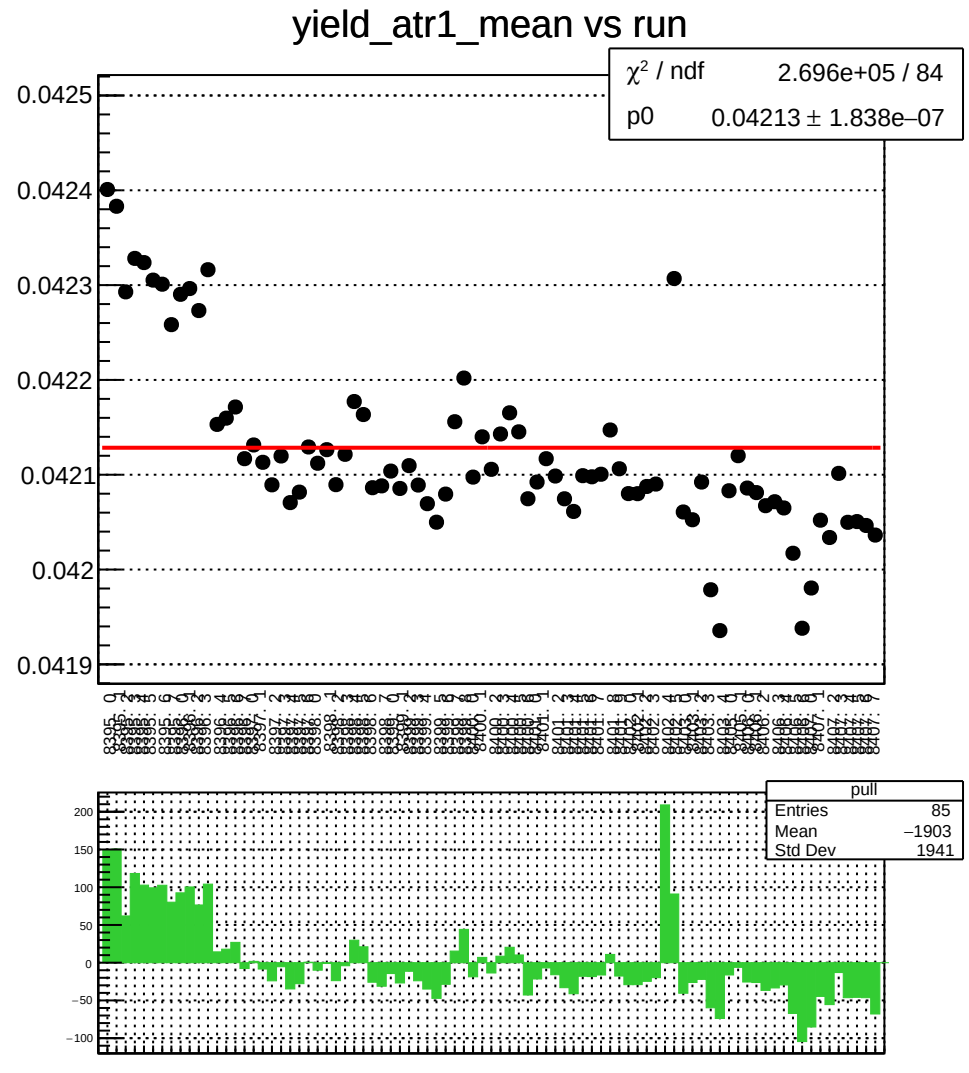

pull1D
Entries 85
Mean −1.495
Std Dev 3.497
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

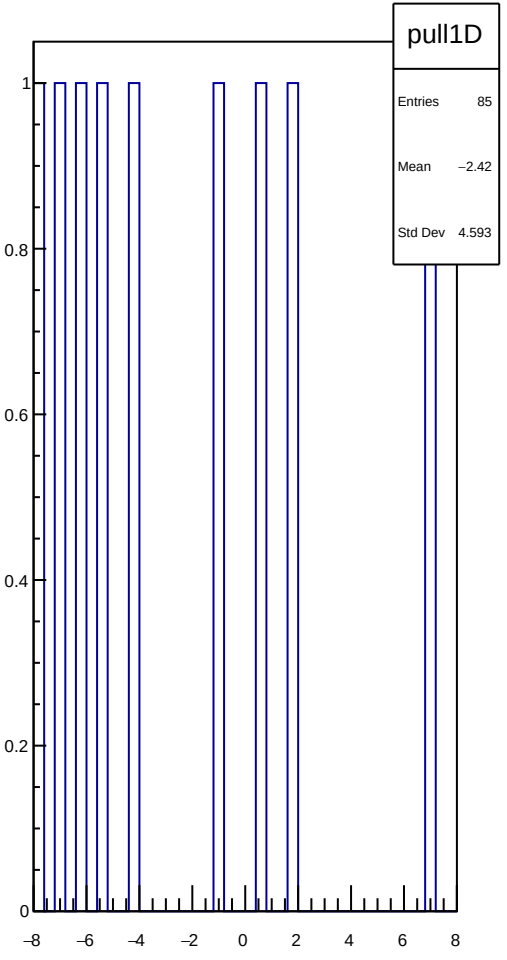

yield_atl1_rms vs run
×10⁻³
χ² / ndf 1.095e+04 / 84
p0 7.879e−05 ± 6.171e−08
0.13
0.12
0.11
0.1
0.09
0.08
0.07

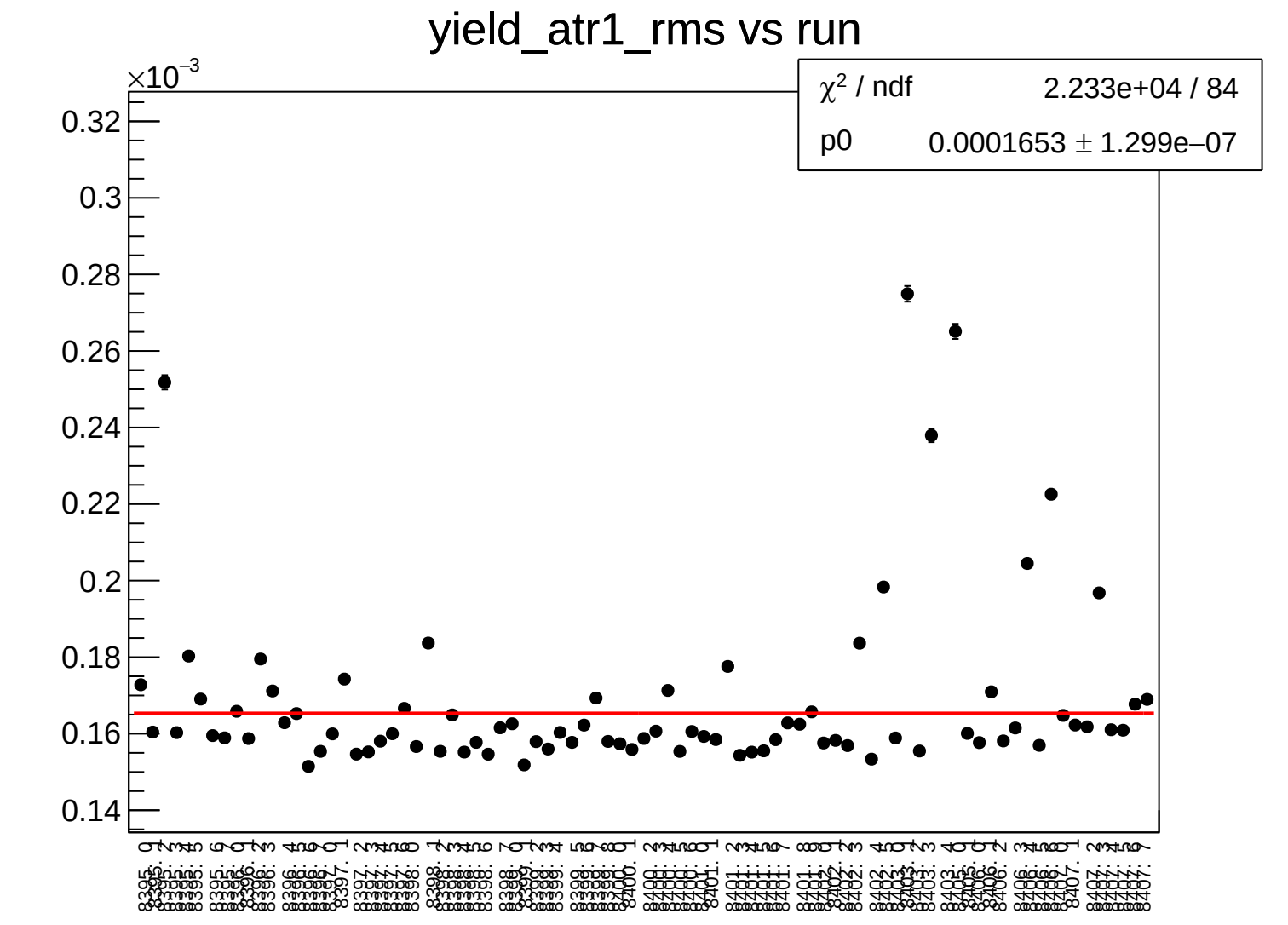

yield_atl2_mean vs run
χ² / ndf 4.667e+05 / 84
p0 0.03596 ± 5.713e−07
0.0395
0.039
0.0385
0.038
0.0375
0.037
0.0365
0.036
0.0355
0.035
pull
Entries 85
Mean −365.1
Std Dev 405.5
400
300
200
100
0
−100

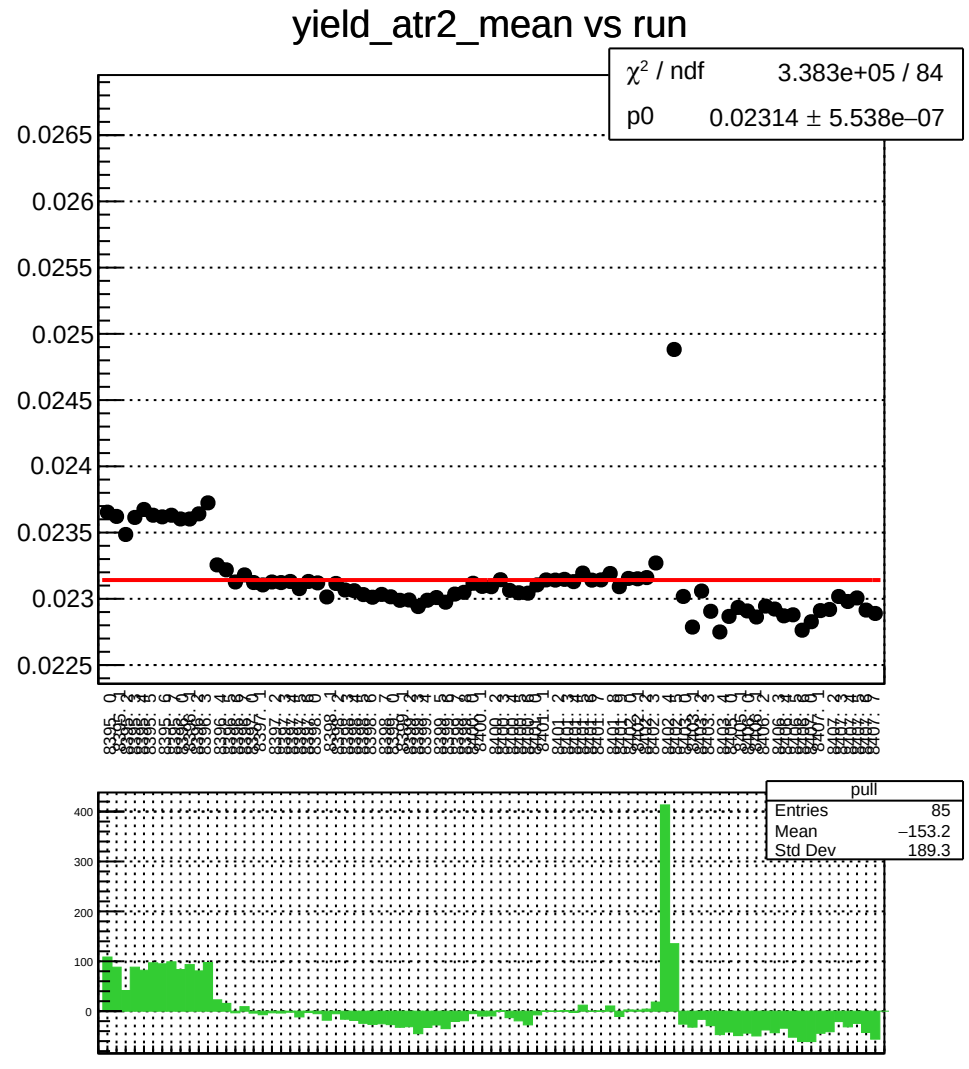

pull1D
Entries 85
Mean −0.5342
Std Dev 4.304
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

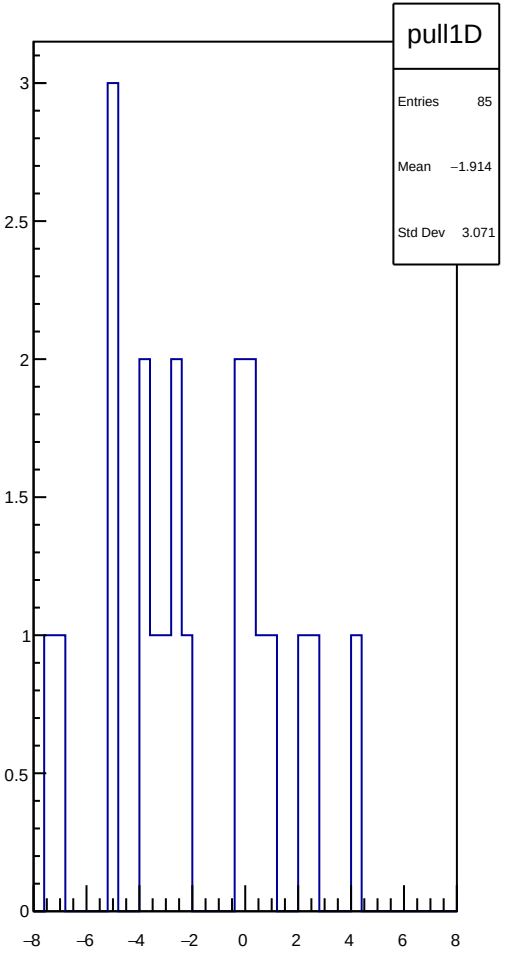

yield_atl2_rms vs run
χ² / ndf 5.048e+04 / 84
p0 0.0005096 ± 4.04e−07
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

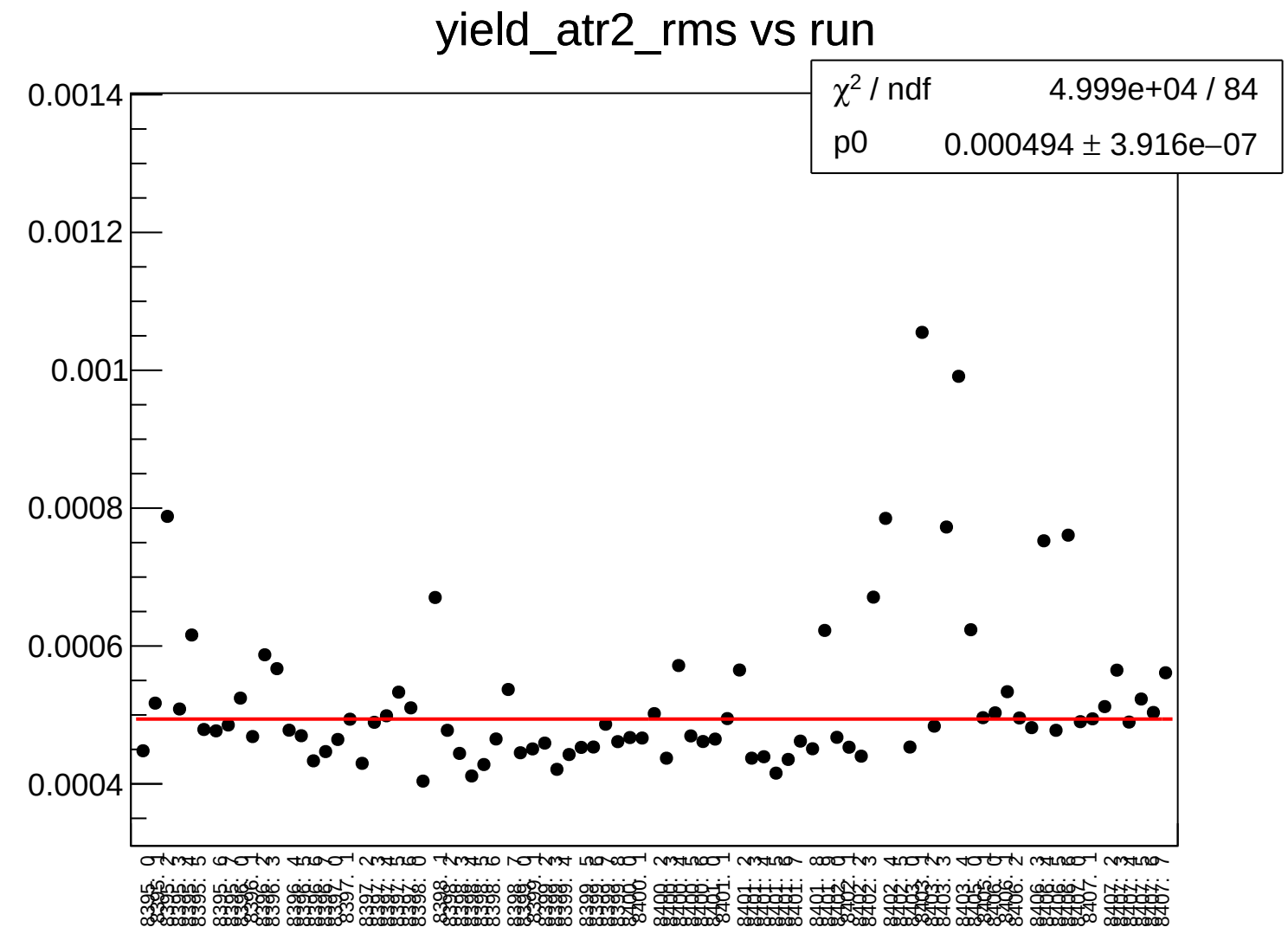

yield_atr1_mean vs run
χ² / ndf 2.696e+05 / 84
p0 0.04213 ± 1.838e−07
0.0425
0.0424
0.0423
0.0422
0.0421
0.042
0.0419
pull
Entries 85
Mean −1903
Std Dev 1941
200
150
100
50
0
−50
−100

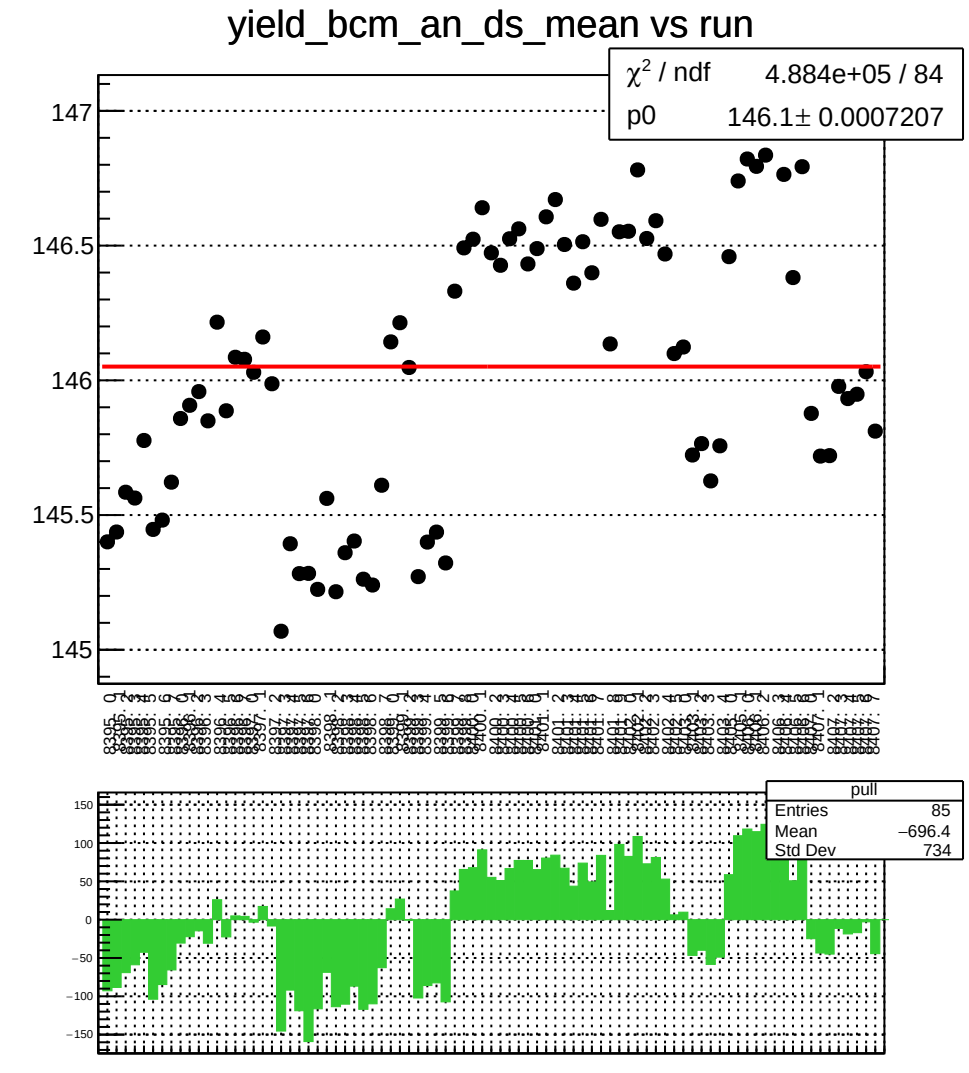

pull1D
Entries 85
Mean −2.42
Std Dev 4.593
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

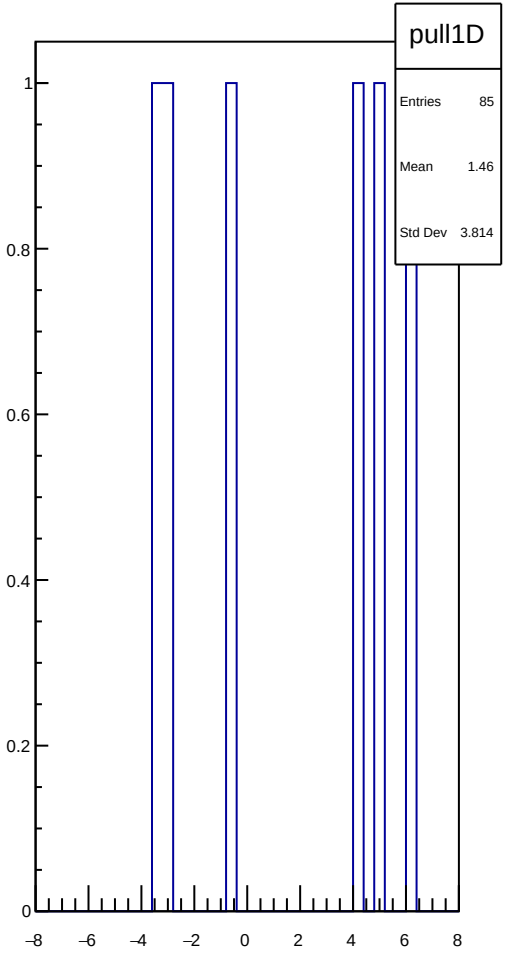

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.233e+04 / 84
p0 0.0001653 ± 1.299e−07
0.32
0.3
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14

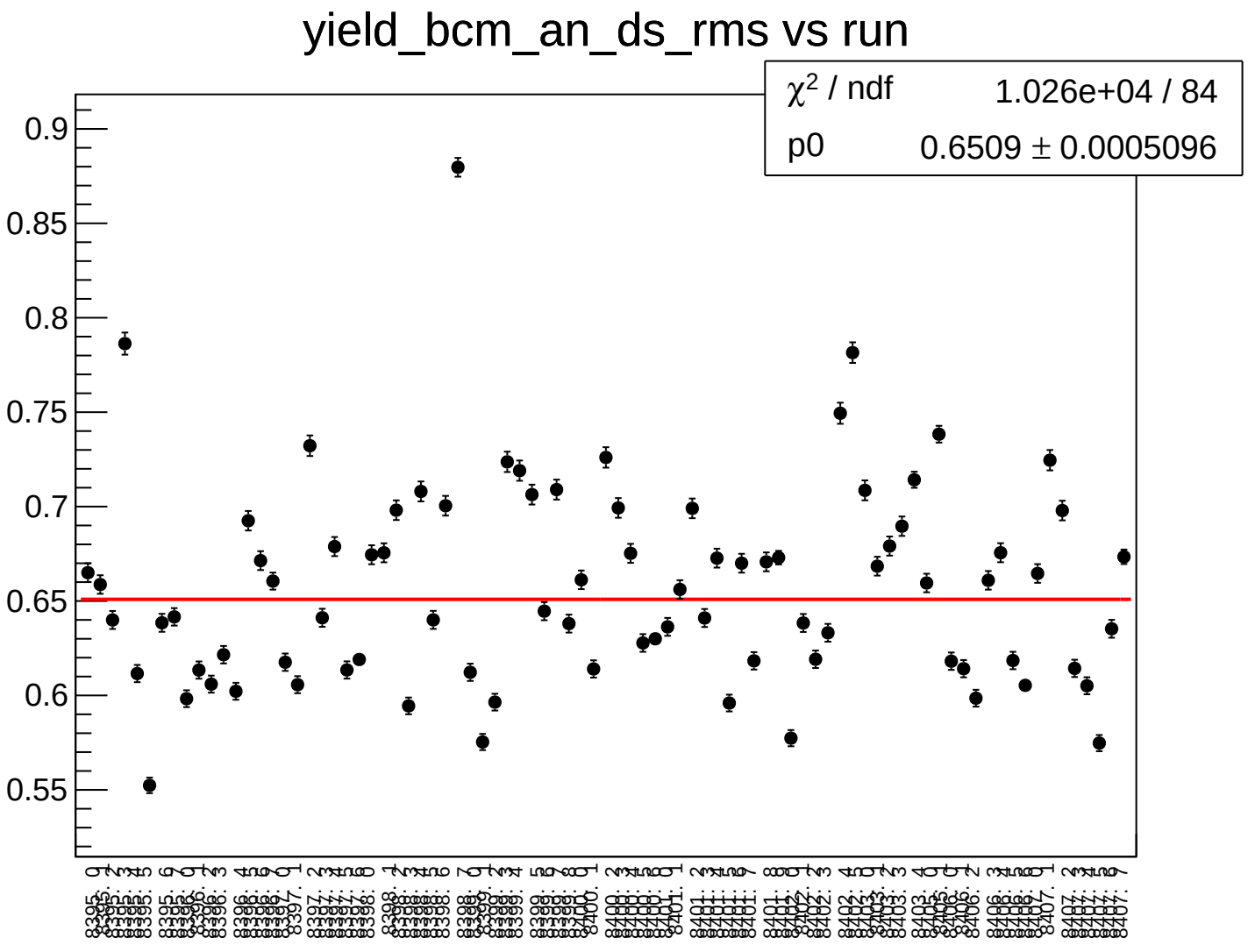

yield_atr2_mean vs run
χ² / ndf 3.383e+05 / 84
p0 0.02314 ± 5.538e−07
0.0265
0.026
0.0255
0.025
0.0245
0.024
0.0235
0.023
0.0225
pull
Entries 85
Mean −153.2
Std Dev 189.3
400
300
200
100
0

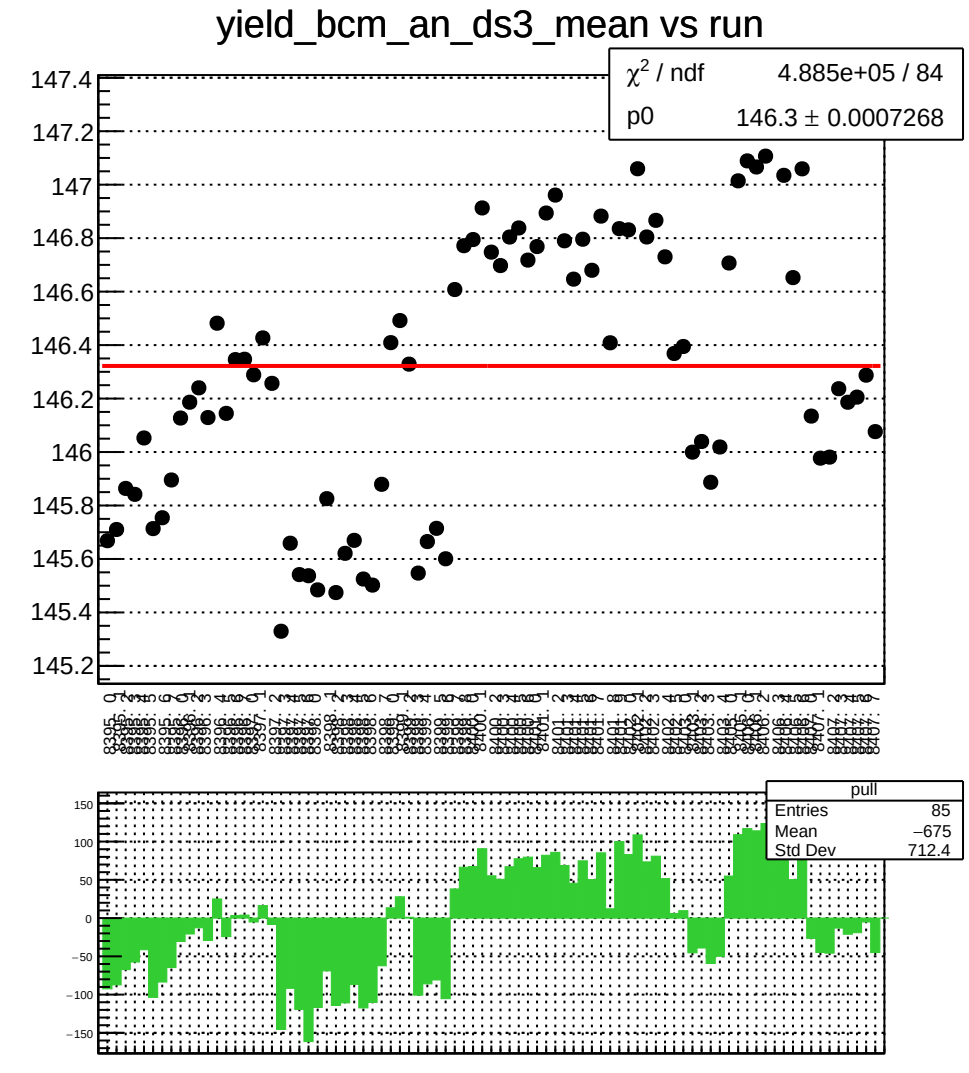

pull1D
Entries 85
Mean −1.914
Std Dev 3.071
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

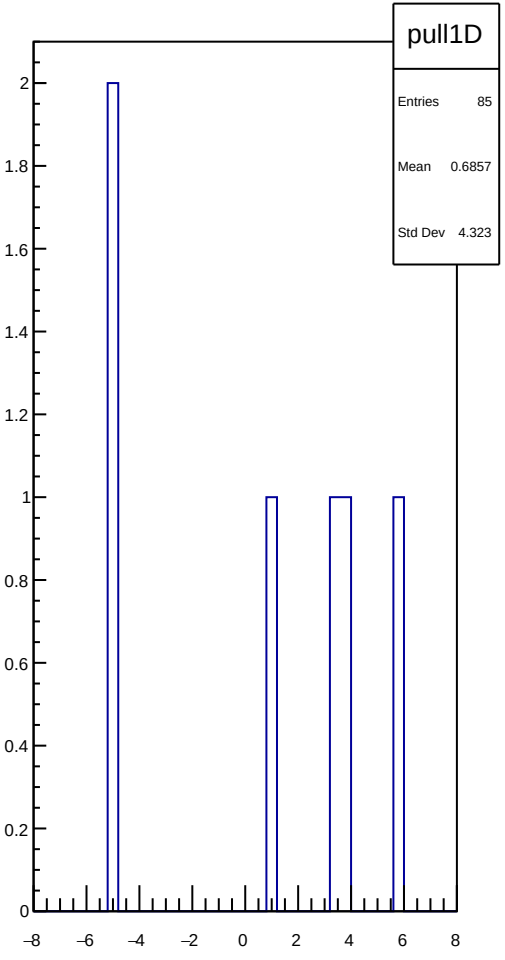

yield_atr2_rms vs run
χ² / ndf 4.999e+04 / 84
p0 0.000494 ± 3.916e−07
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

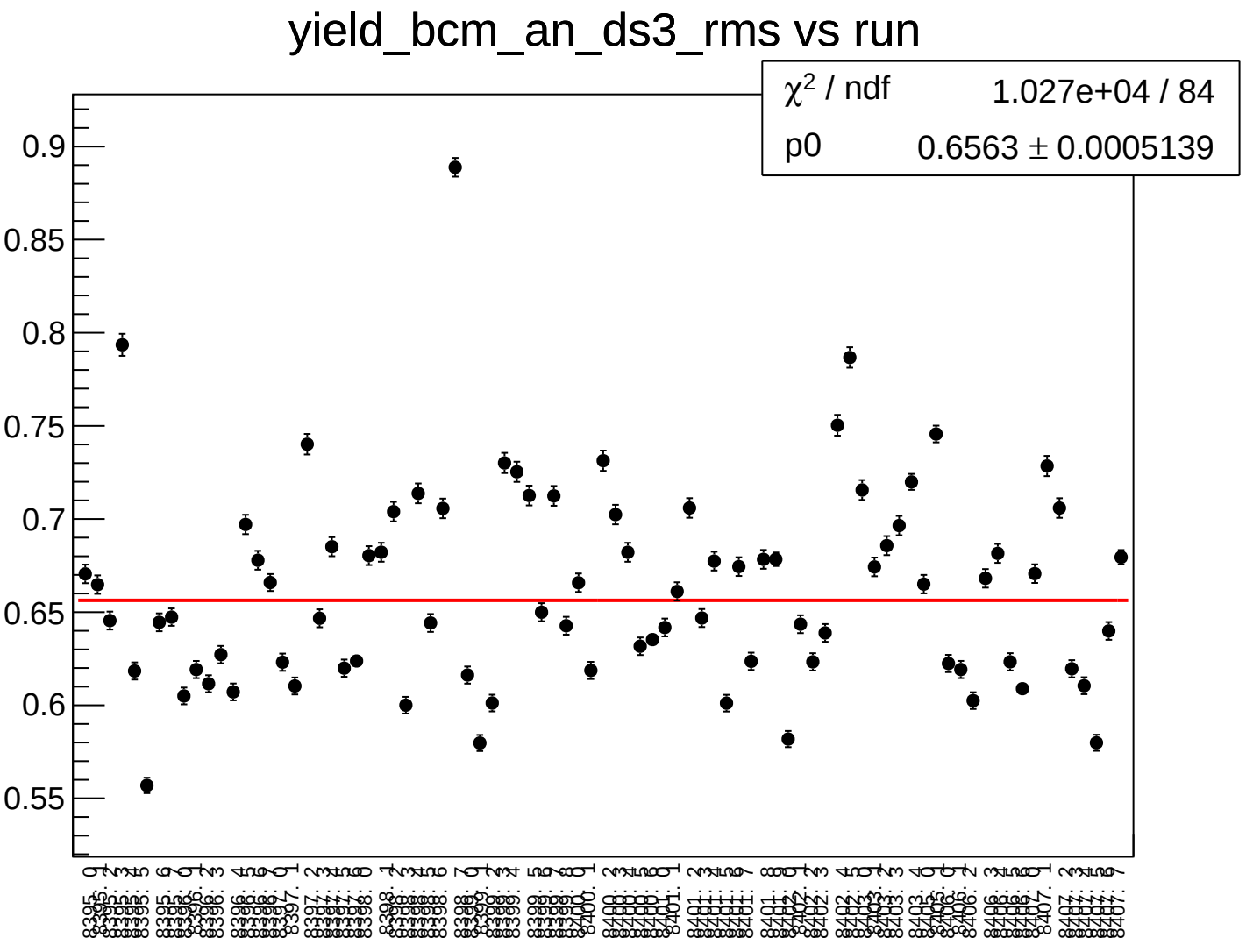

yield_bcm_an_ds_mean vs run
χ² / ndf 4.884e+05 / 84
p0 146.1± 0.0007207
147
146.5
146
145.5
145
pull
Entries 85
Mean −696.4
Std Dev 734
150
100
50
0
−50
−100
−150

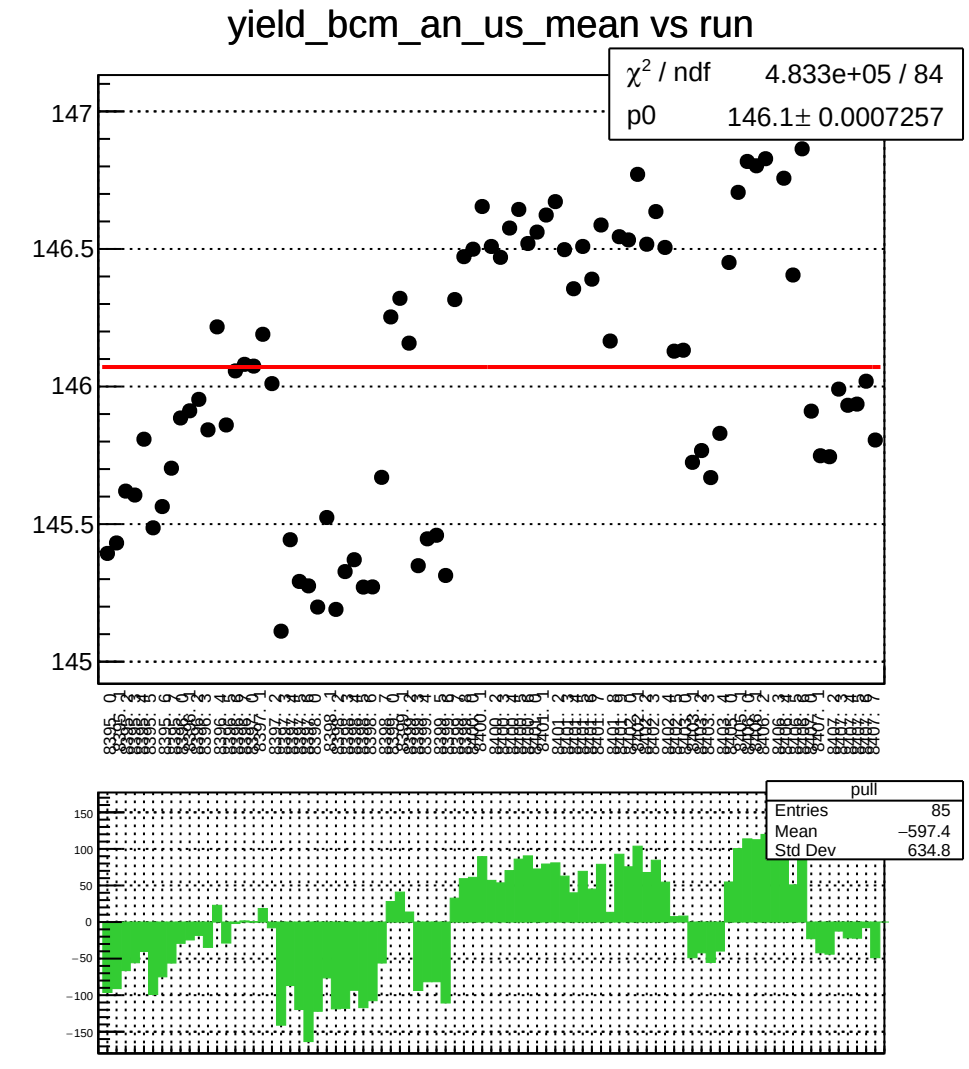

pull1D
Entries 85
Mean 1.46
Std Dev 3.814
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

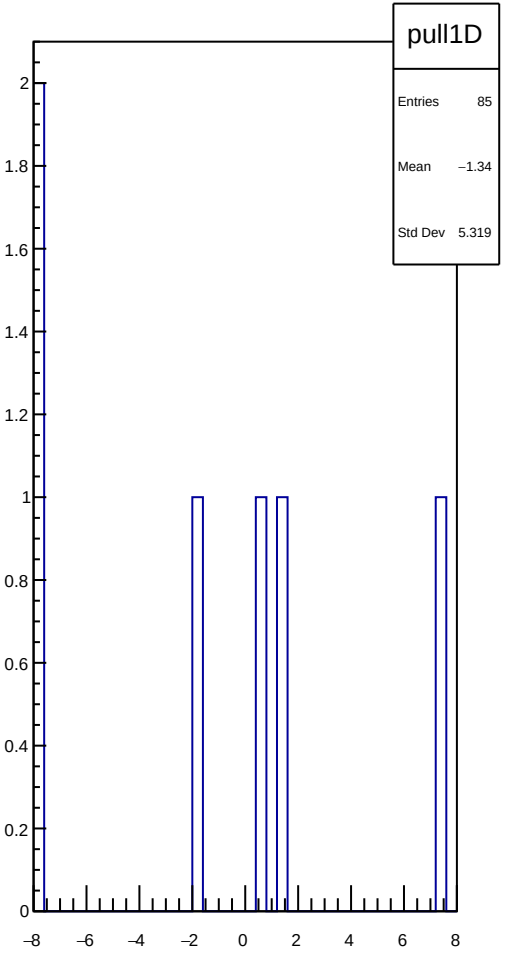

yield_bcm_an_ds_rms vs run
χ² / ndf 1.026e+04 / 84
p0 0.6509 ± 0.0005096
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

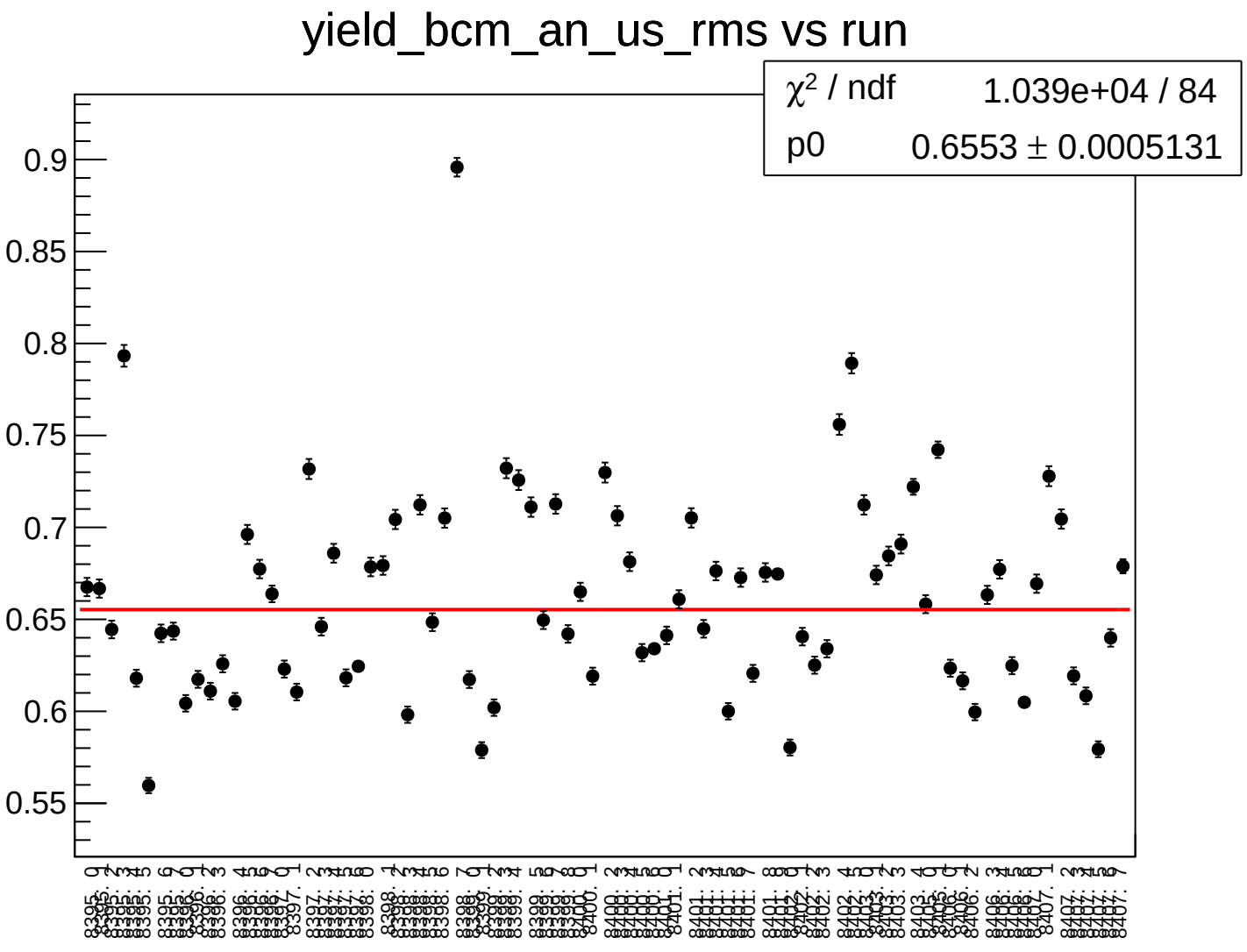

yield_bcm_an_ds3_mean vs run
χ² / ndf 4.885e+05 / 84
p0 146.3 ± 0.0007268
147.4
147.2
147
146.8
146.6
146.4
146.2
146
145.8
145.6
145.4
145.2
pull
Entries 85
Mean −675
Std Dev 712.4
150
100
50
0
−50
−100
−150

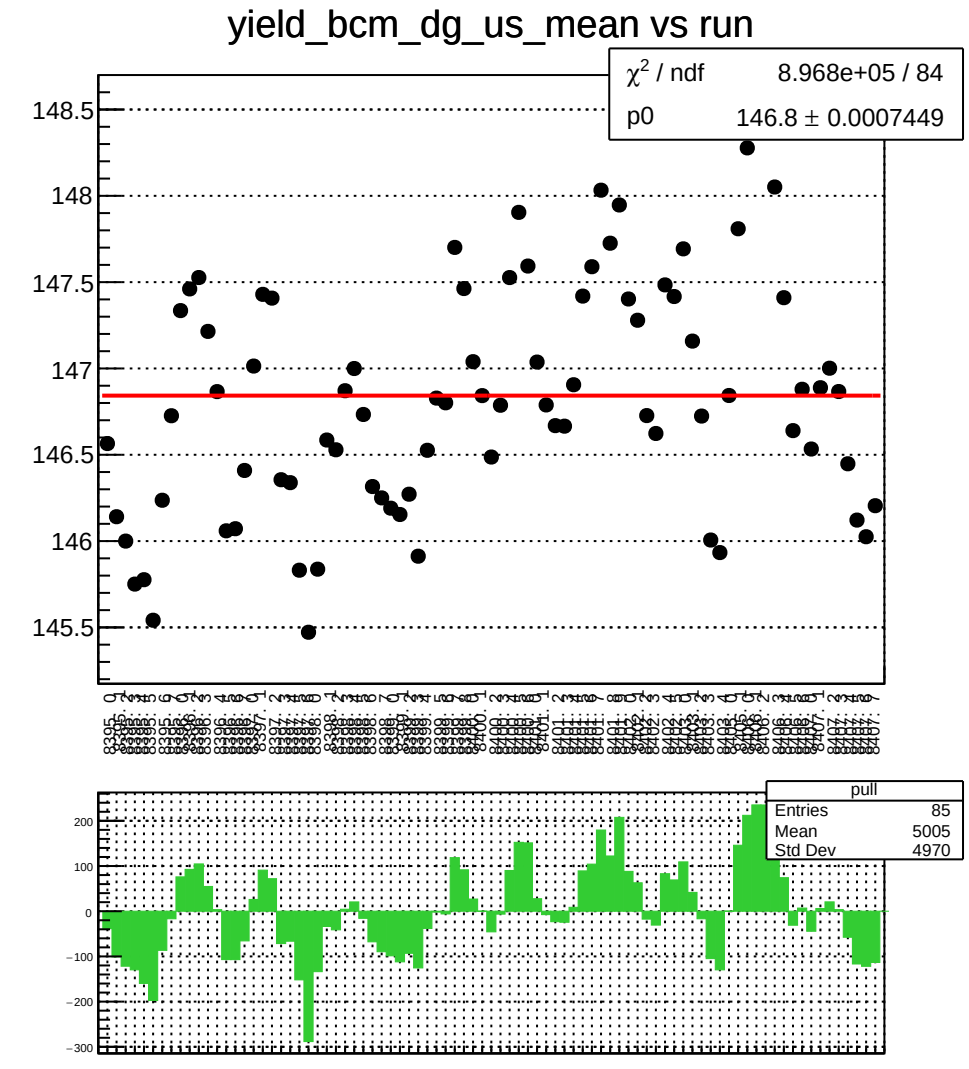

pull1D
Entries 85
Mean 0.6857
Std Dev 4.323
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

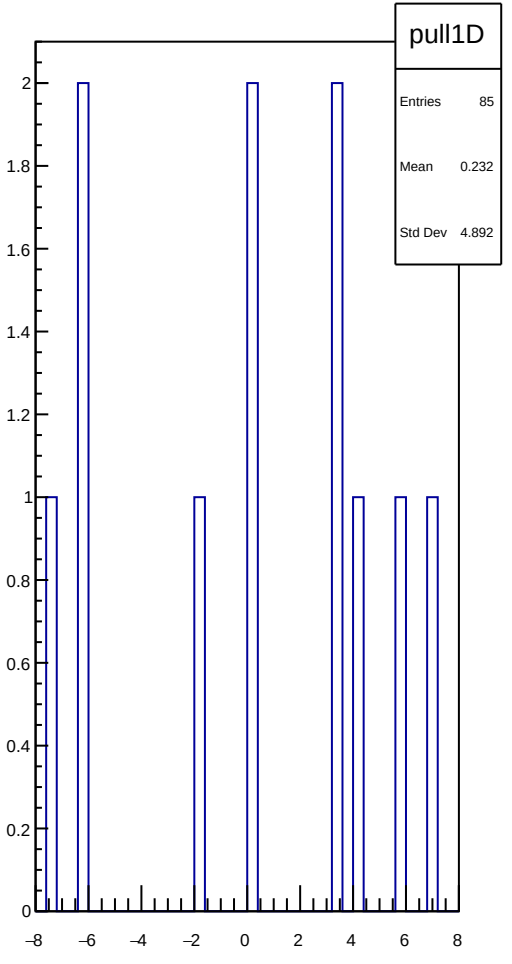

yield_bcm_an_ds3_rms vs run
χ² / ndf 1.027e+04 / 84
p0 0.6563 ± 0.0005139
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

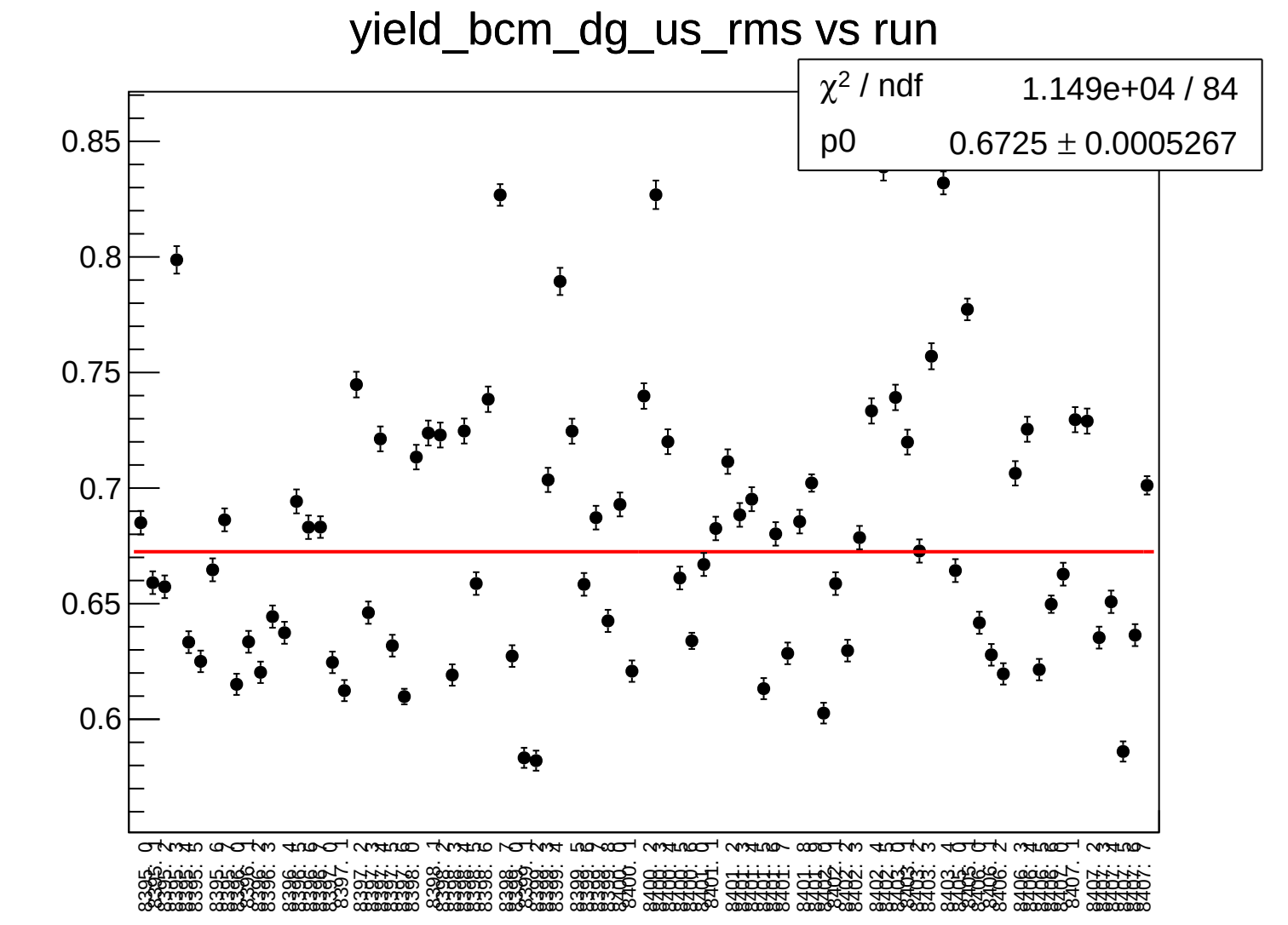

yield_bcm_an_us_mean vs run
χ² / ndf 4.833e+05 / 84
p0 146.1± 0.0007257
147
146.5
146
145.5
145
pull
Entries 85
Mean −597.4
Std Dev 634.8
150
100
50
0
−50
−100
−150

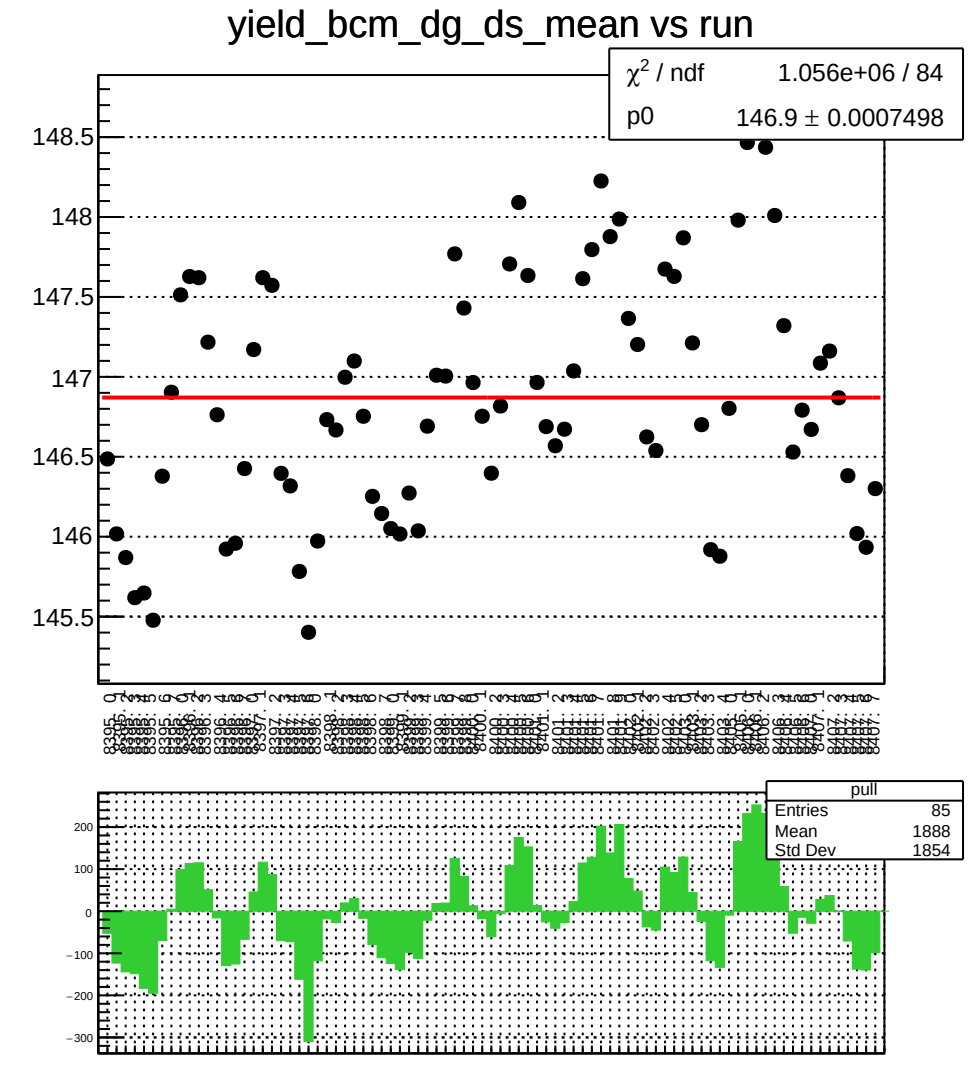

pull1D
Entries 85
Mean −1.34
Std Dev 5.319
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

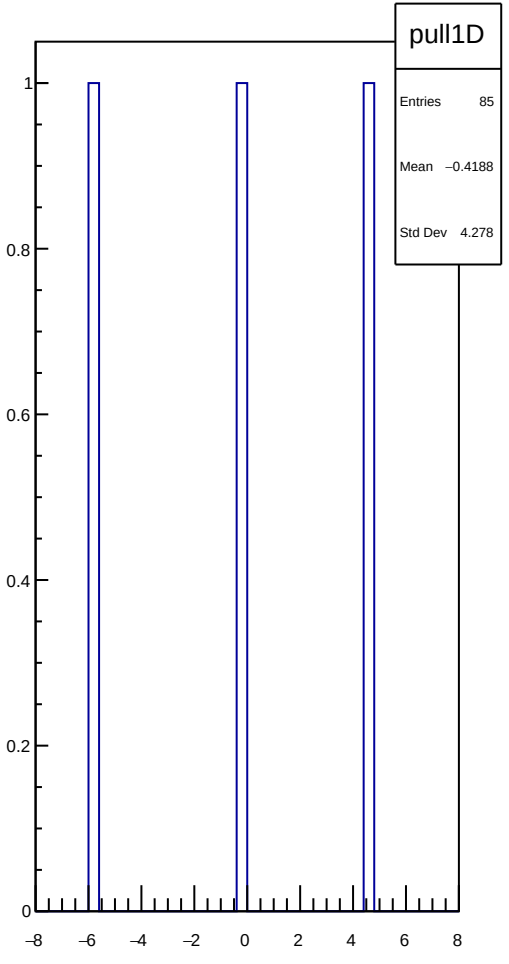

yield_bcm_an_us_rms vs run
χ² / ndf 1.039e+04 / 84
p0 0.6553 ± 0.0005131
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

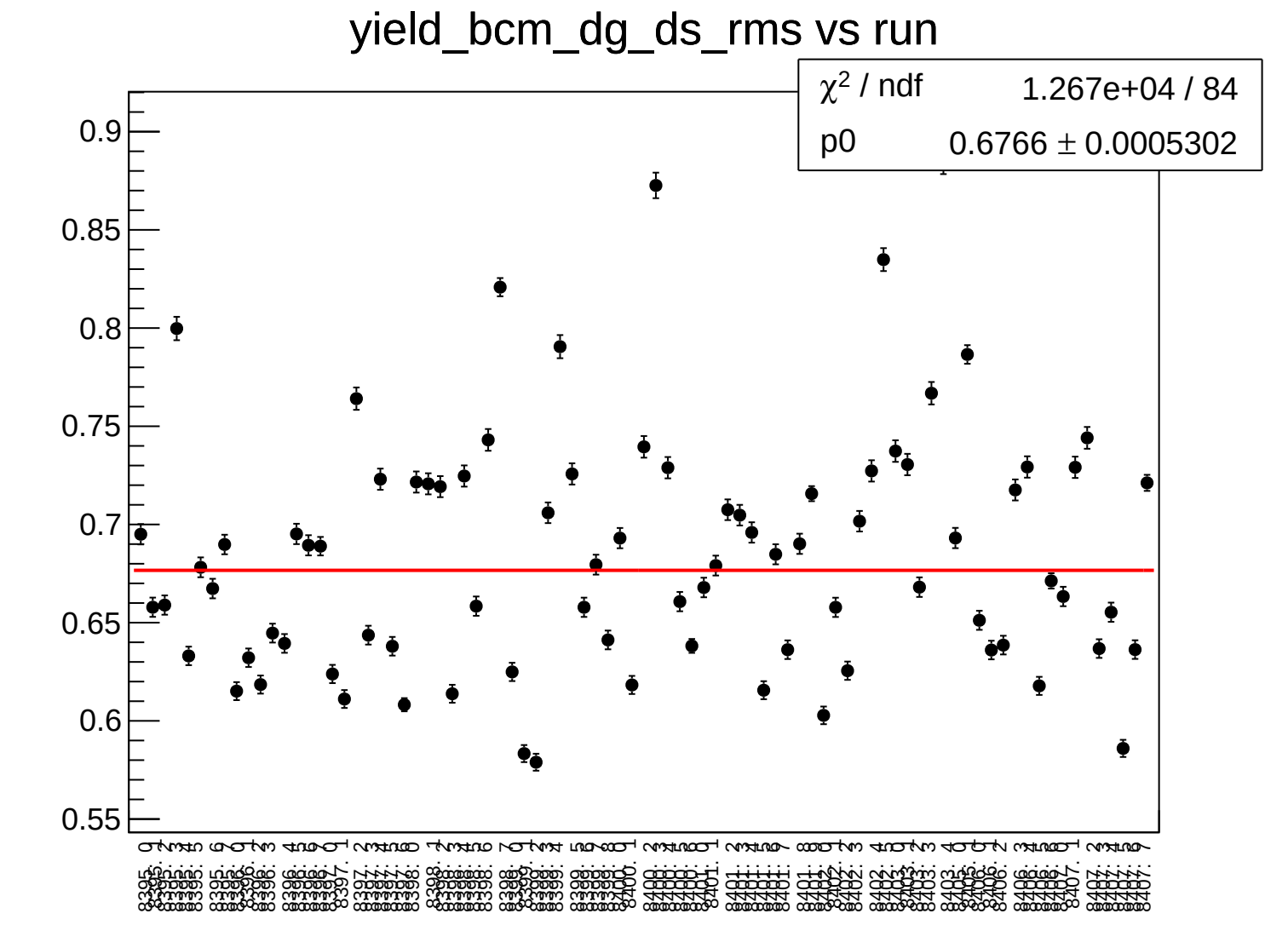

yield_bcm_dg_us_mean vs run
χ² / ndf 8.968e+05 / 84
p0 146.8 ± 0.0007449
148.5
148
147.5
147
146.5
146
145.5
pull
Entries 85
Mean 5005
Std Dev 4970
200
100
0
−100
−200
−300

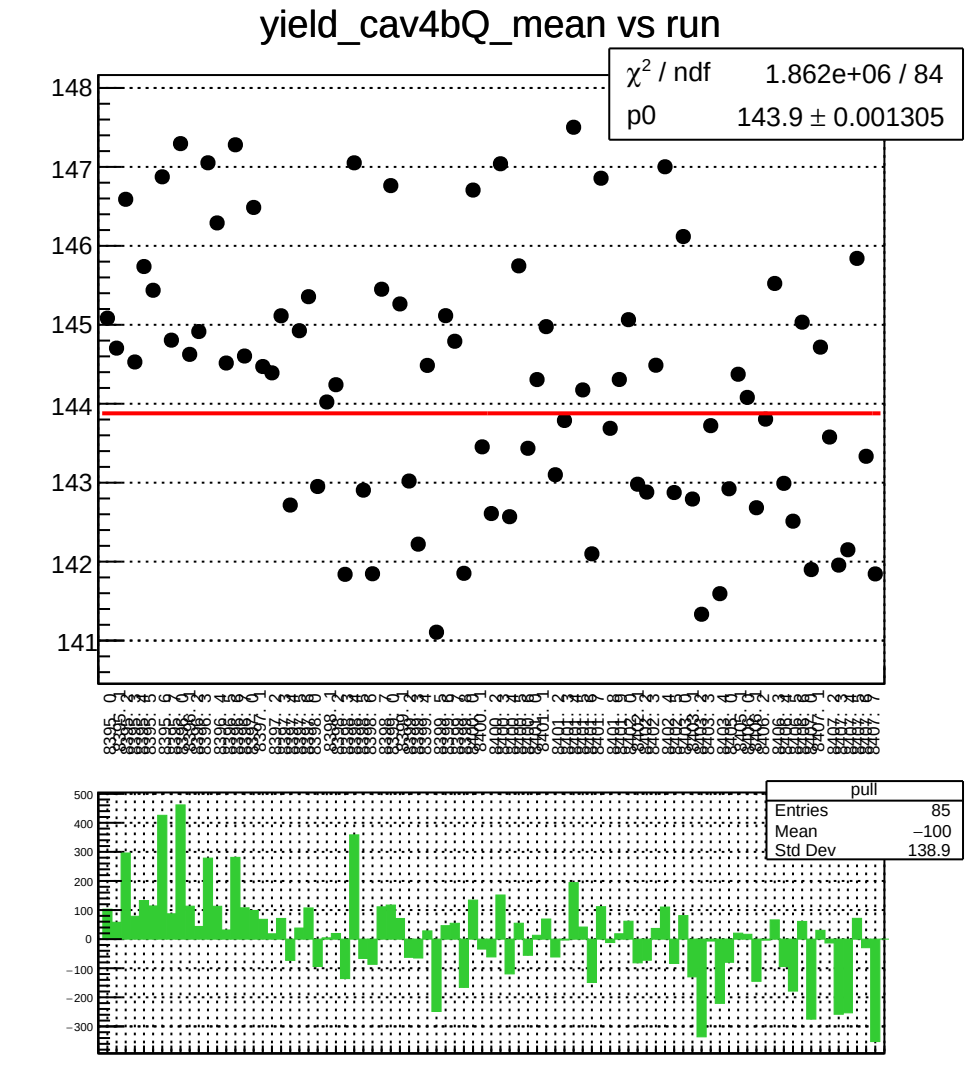

pull1D
Entries 85
Mean 0.232
Std Dev 4.892
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

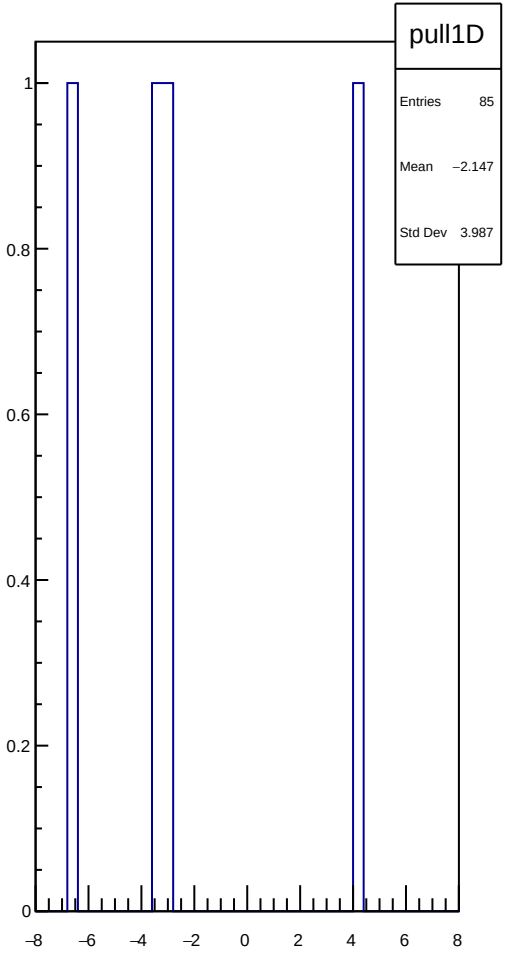

yield_bcm_dg_us_rms vs run
χ² / ndf 1.149e+04 / 84
p0 0.6725 ± 0.0005267
0.85
0.8
0.75
0.7
0.65
0.6

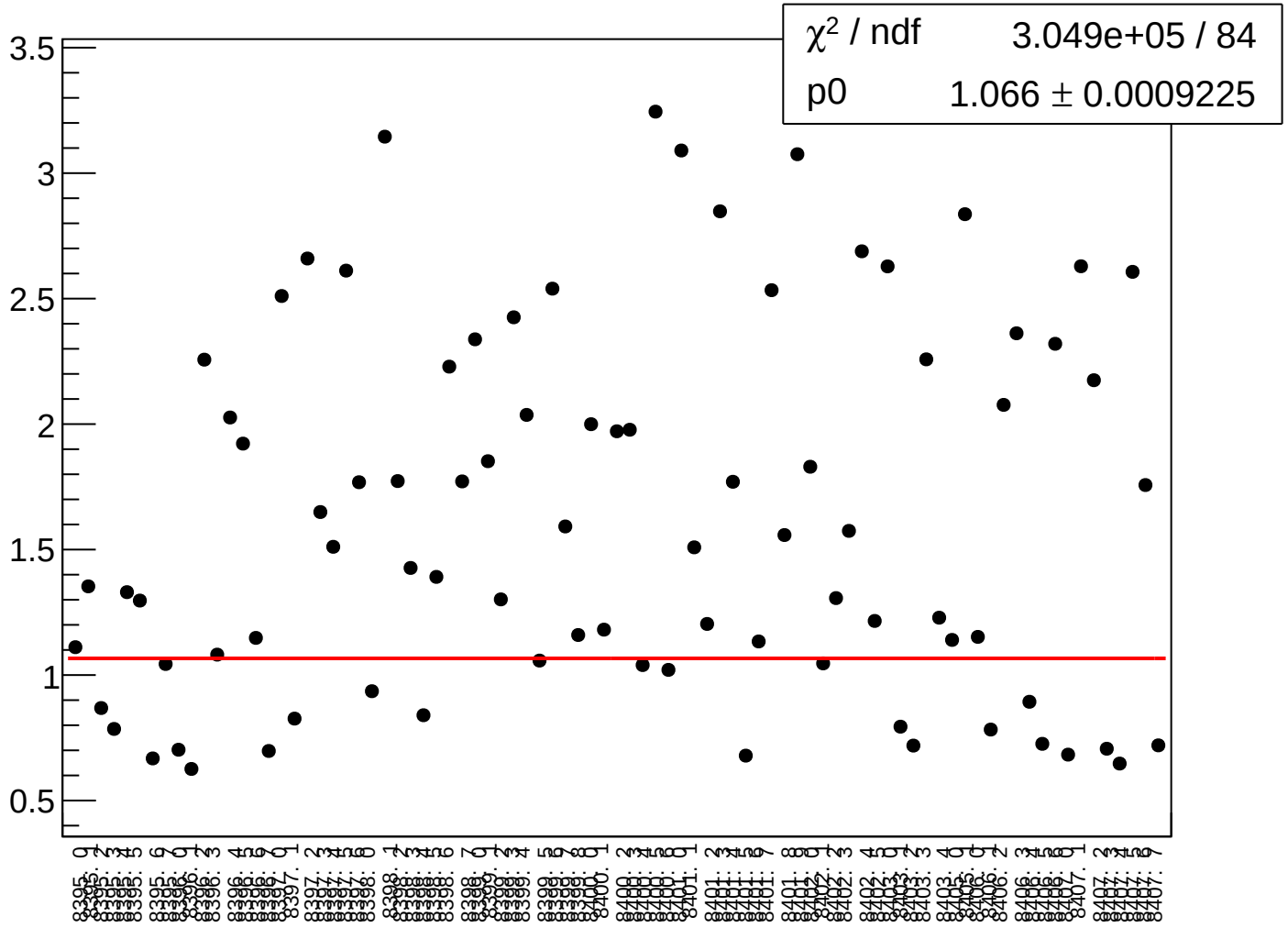

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.056e+06 / 84
p0 146.9 ± 0.0007498
148.5
148
147.5
147
146.5
146
145.5
pull
Entries 85
Mean 1888
Std Dev 1854
200
100
0
−100
−200
−300

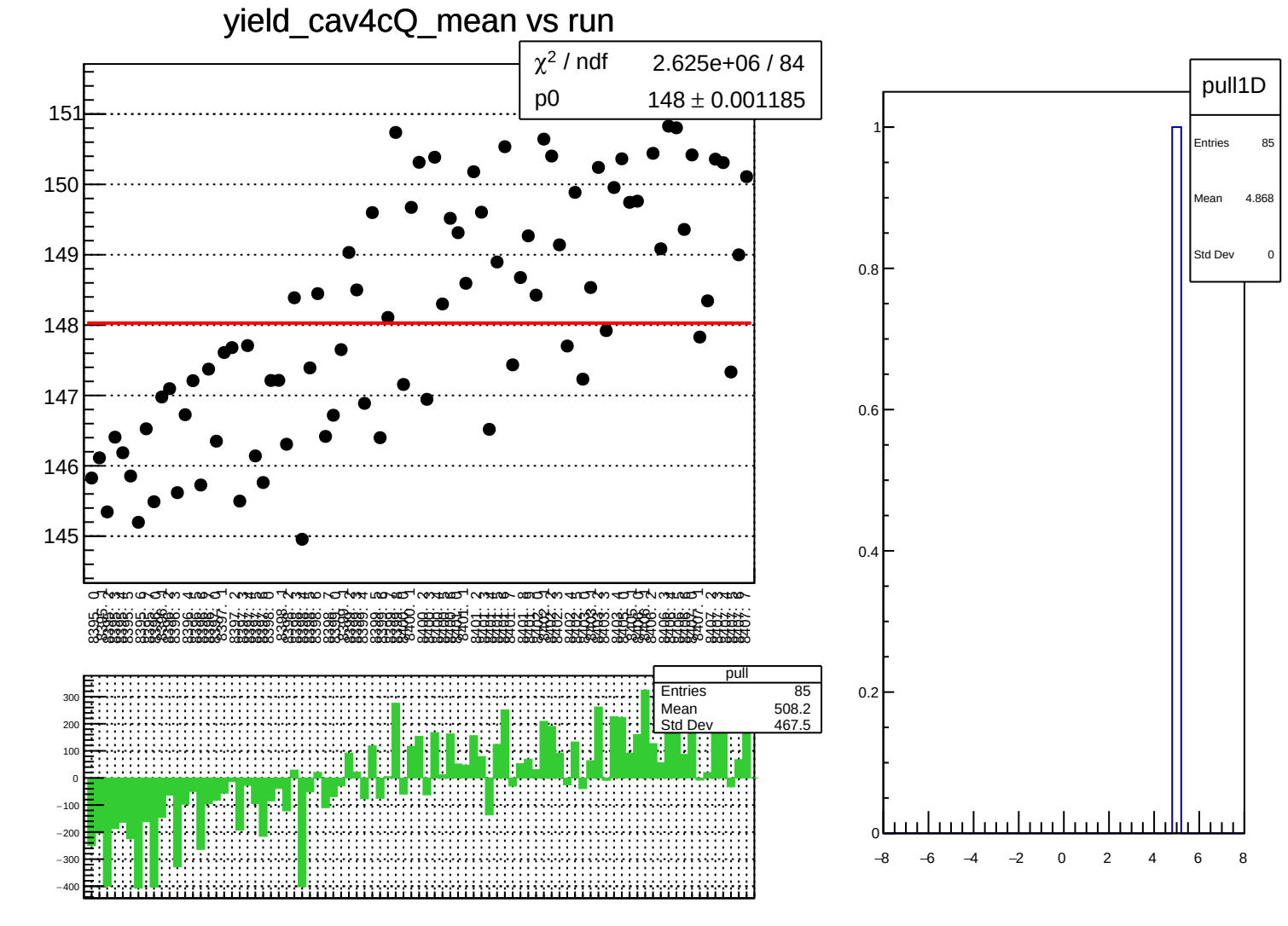

pull1D
Entries 85
Mean −0.4188
Std Dev 4.278
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

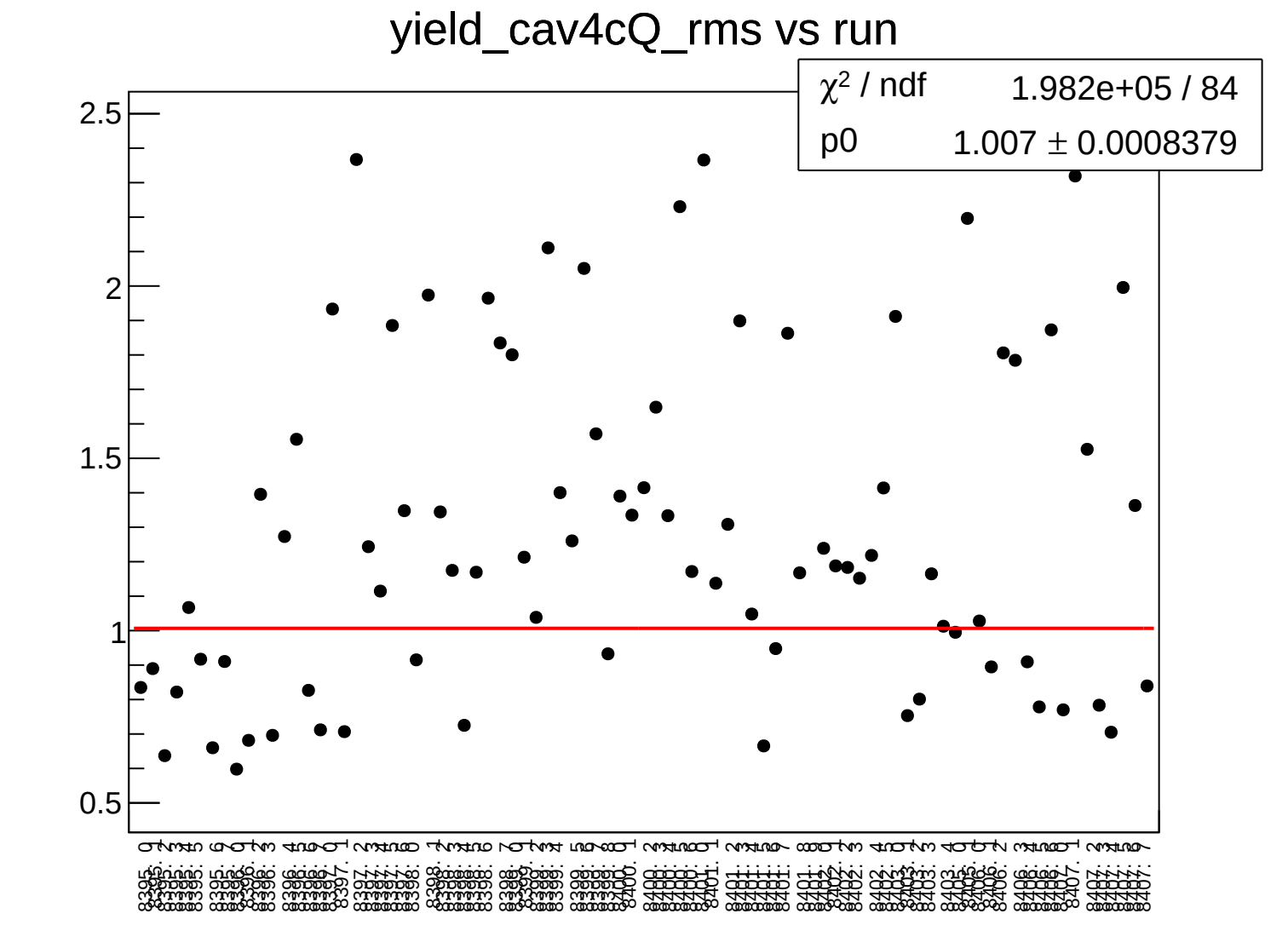

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.267e+04 / 84
p0 0.6766 ± 0.0005302
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

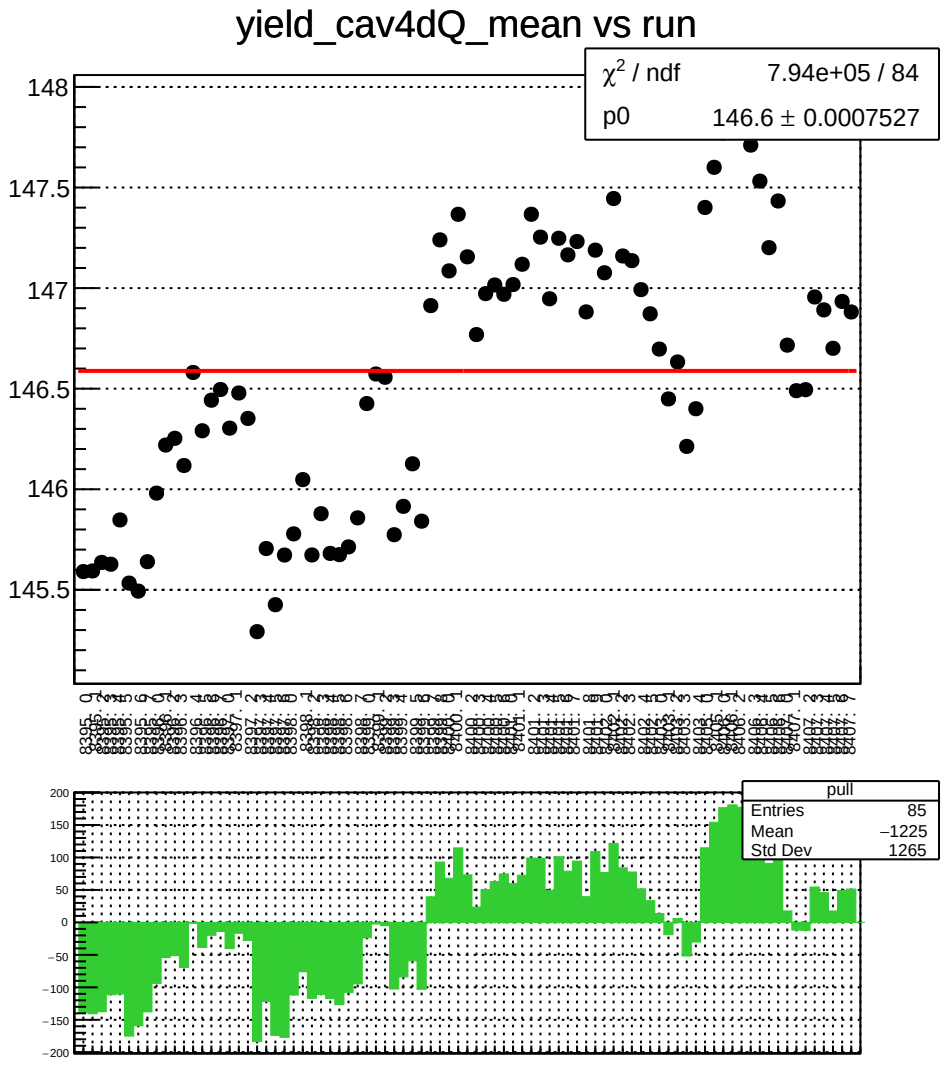

yield_cav4bQ_mean vs run
χ² / ndf 1.862e+06 / 84
p0 143.9 ± 0.001305
148
147
146
145
144
143
142
141
pull
Entries 85
Mean −100
Std Dev 138.9
500
400
300
200
100
0
−100
−200
−300

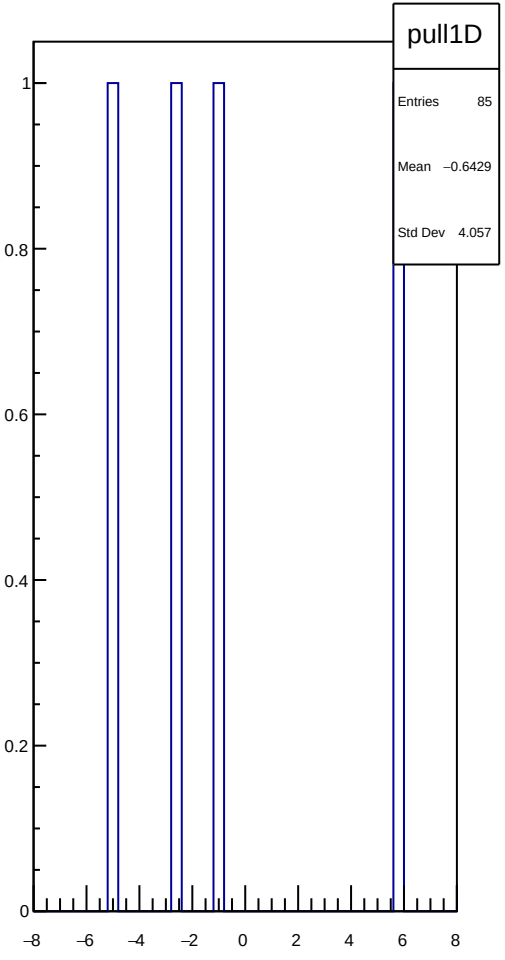

pull1D
Entries 85
Mean −2.147
Std Dev 3.987
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

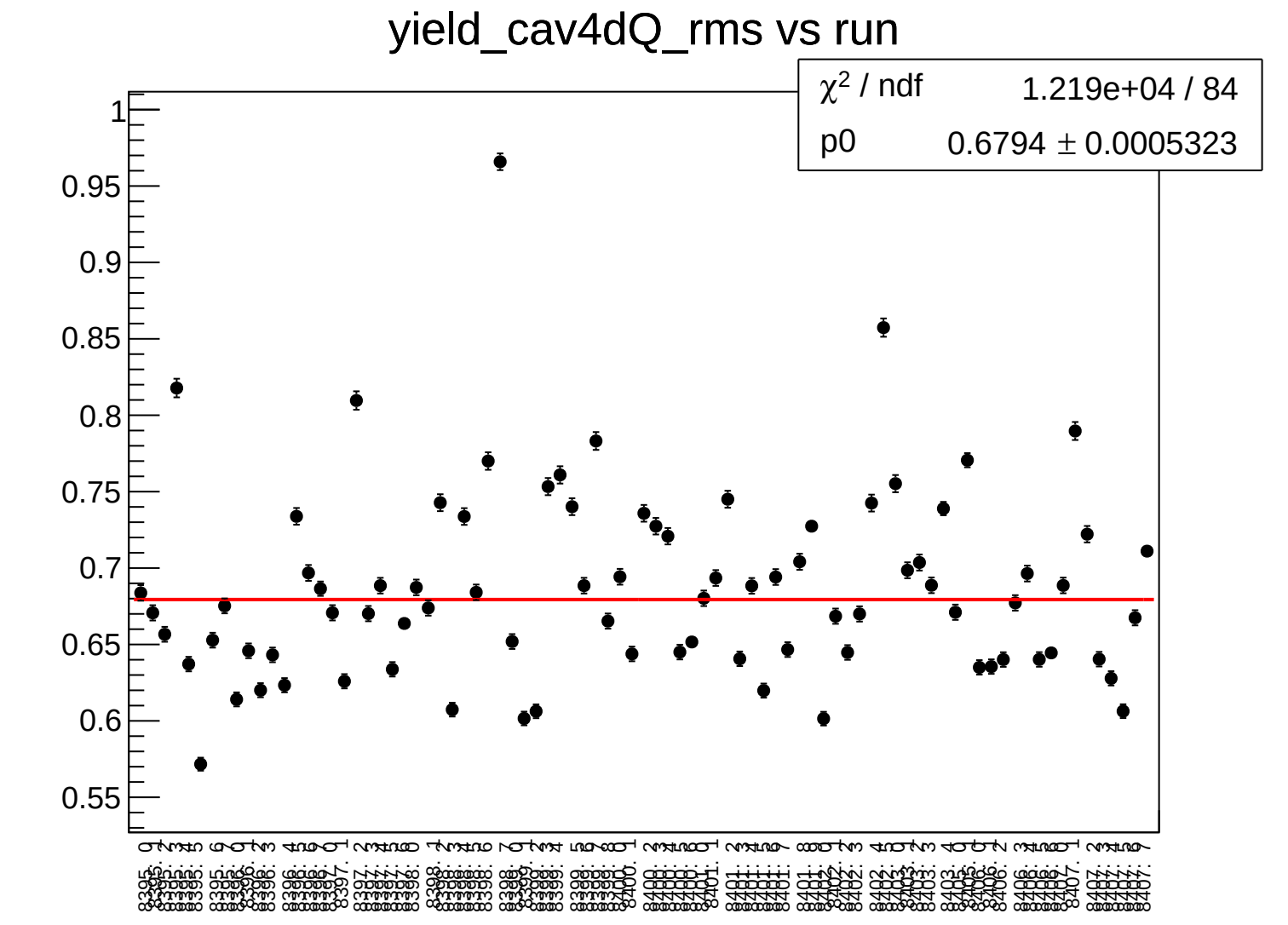

yield_cav4bQ_rms vs run
χ² / ndf 3.049e+05 / 84
p0 1.066 ± 0.0009225
3.5
3
2.5
2
1.5
1
0.5

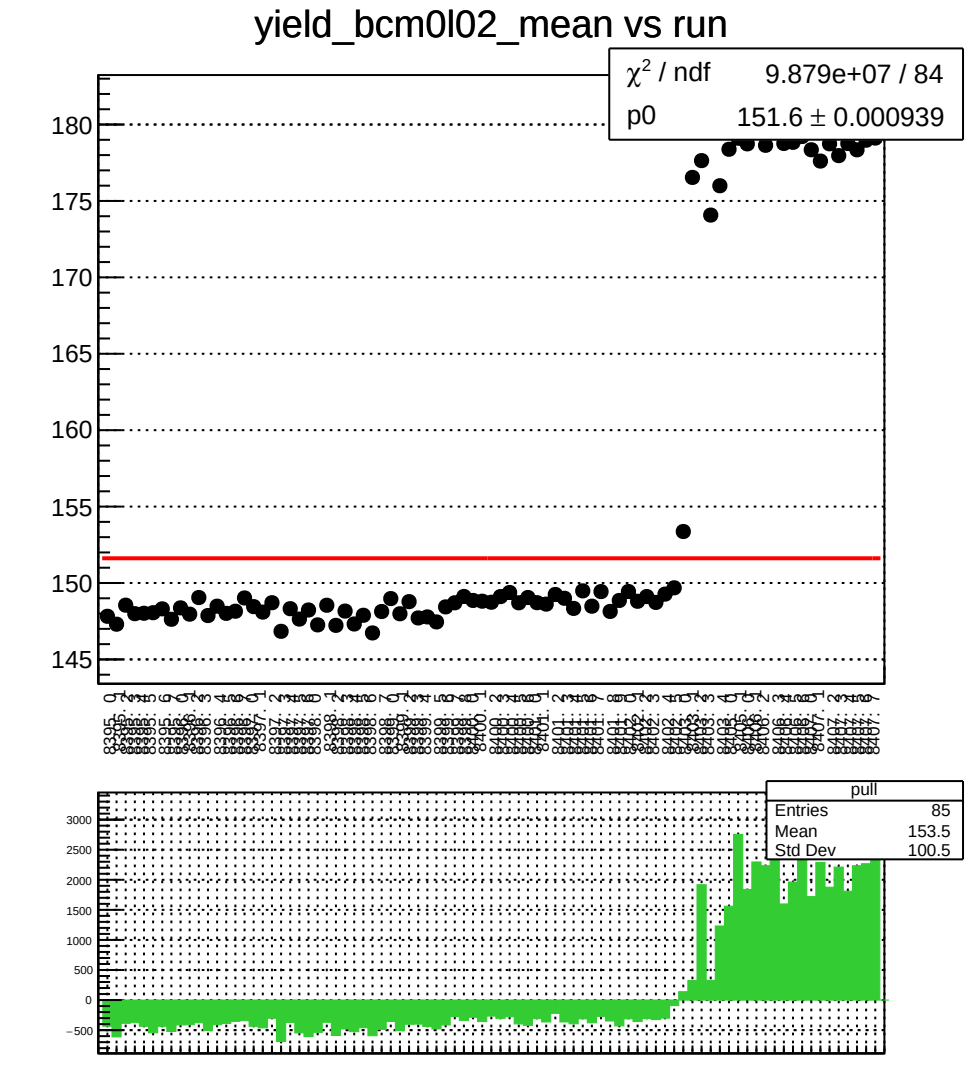

yield_cav4cQ_mean vs run
χ² / ndf 2.625e+06 / 84
p0 148 ± 0.001185
151
150
149
148
147
146
145
pull
Entries 85
Mean 508.2
Std Dev 467.5
300
200
100
0
−100
−200
−300
−400
pull1D
Entries 85
Mean 4.868
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

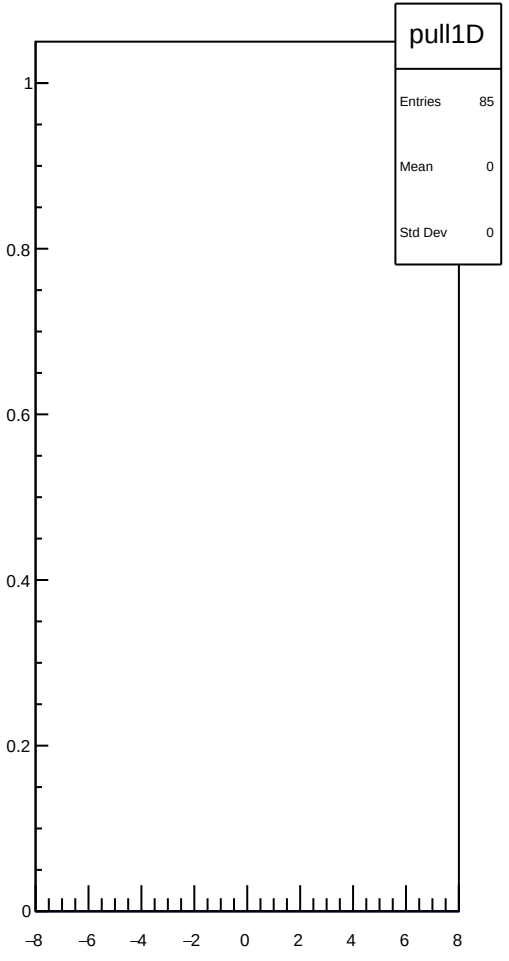

yield_cav4cQ_rms vs run
χ² / ndf 1.982e+05 / 84
p0 1.007 ± 0.0008379
2.5
2
1.5
1
0.5

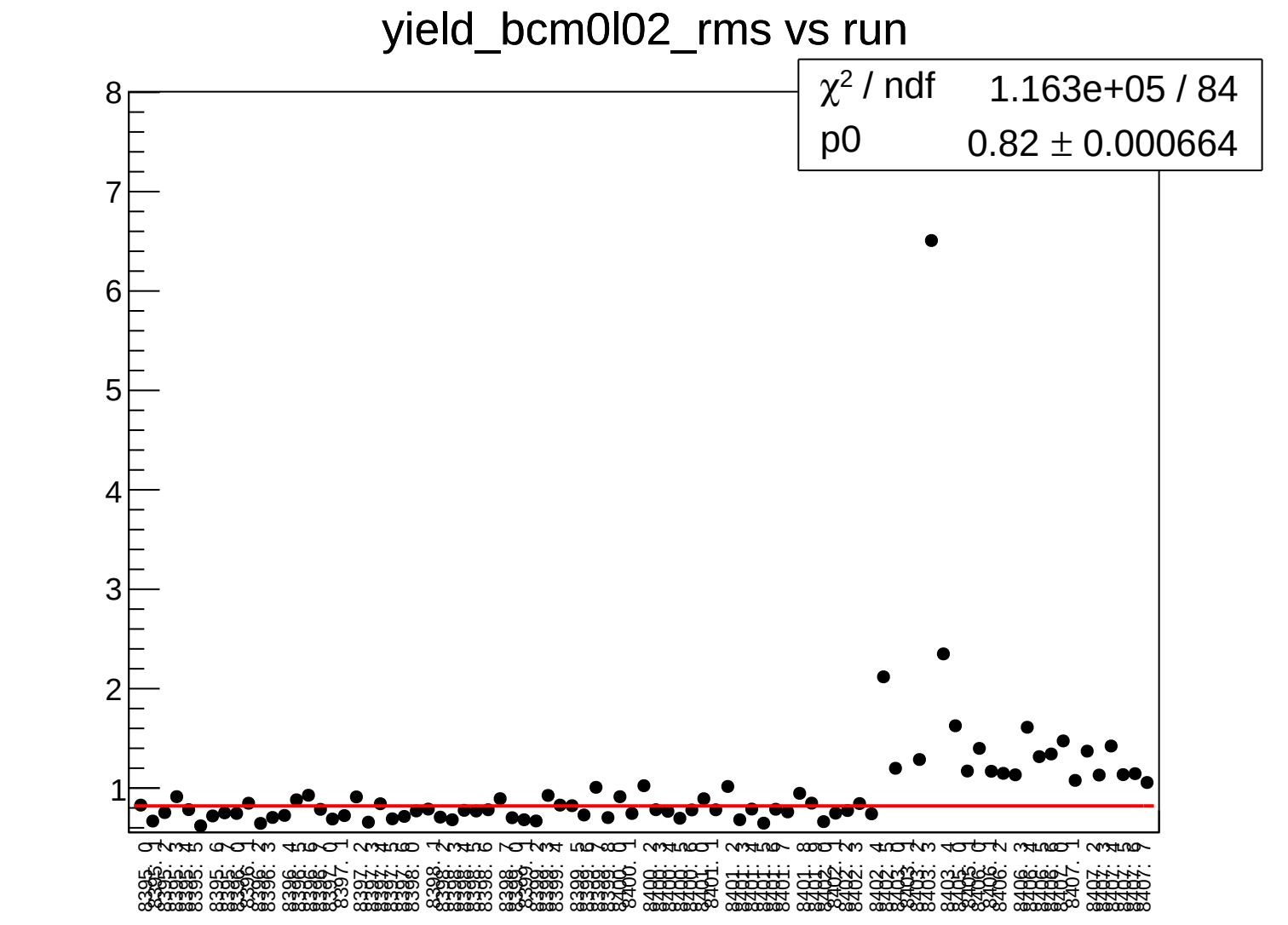

yield_cav4dQ_mean vs run
χ² / ndf 7.94e+05 / 84
p0 146.6 ± 0.0007527
148
147.5
147
146.5
146
145.5
pull
Entries 85
Mean −1225
Std Dev 1265
200
150
100
50
0
−50
−100
−150
−200

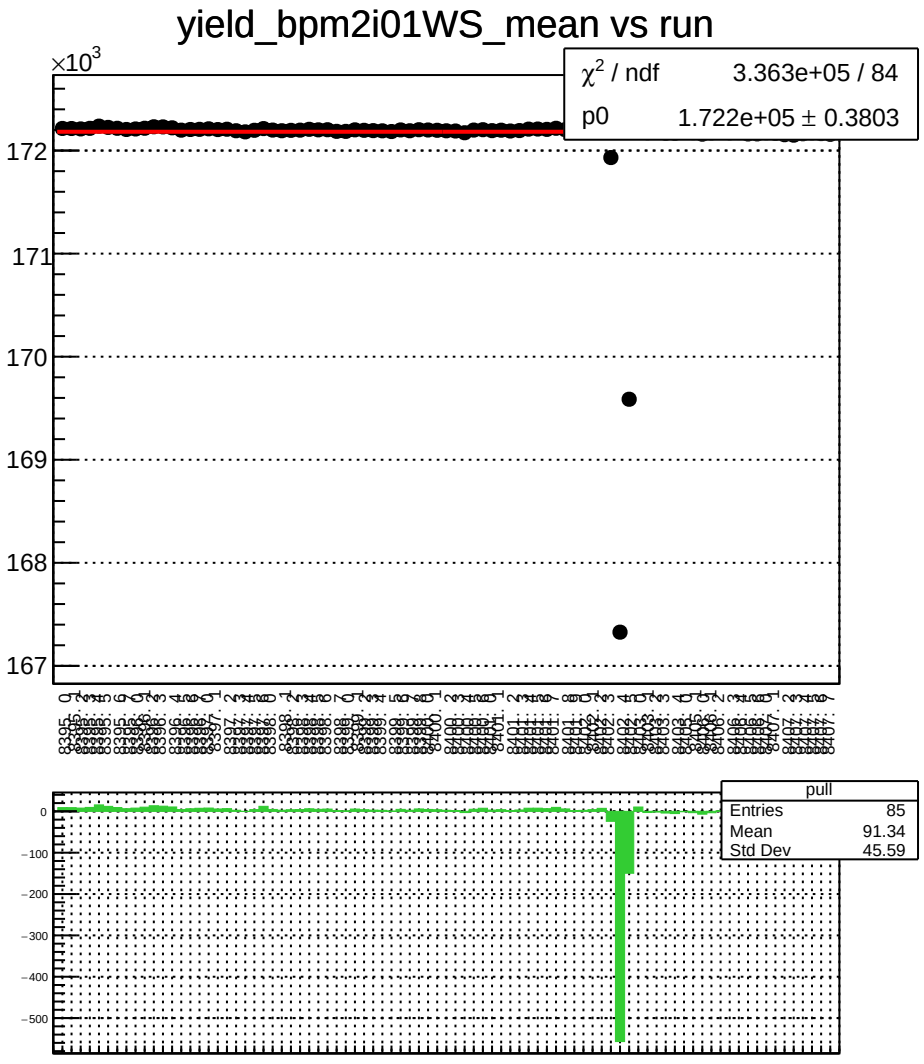

pull1D
Entries 85
Mean −0.6429
Std Dev 4.057
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

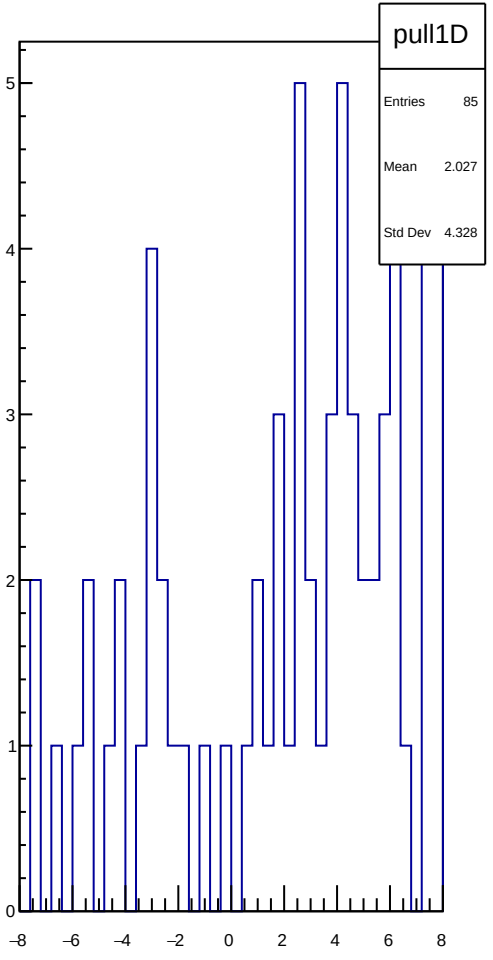

yield_cav4dQ_rms vs run
χ² / ndf 1.219e+04 / 84
p0 0.6794 ± 0.0005323
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

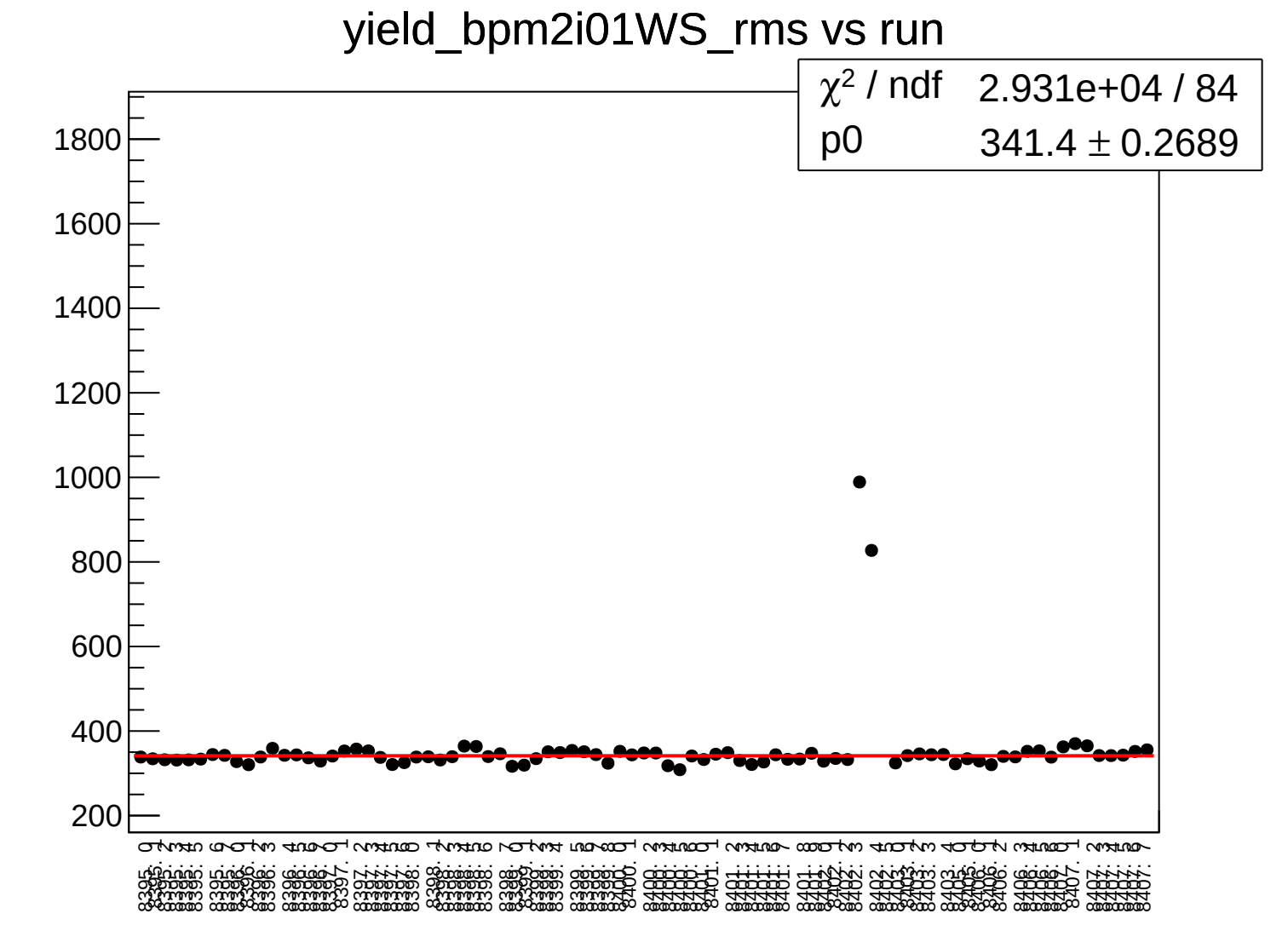

yield_bcm0l02_mean vs run
χ² / ndf 9.879e+07 / 84
p0 151.6 ± 0.000939
180
175
170
165
160
155
150
145
pull
Entries 85
Mean 153.5
Std Dev 100.5
3000
2500
2000
1500
1000
500
0
−500

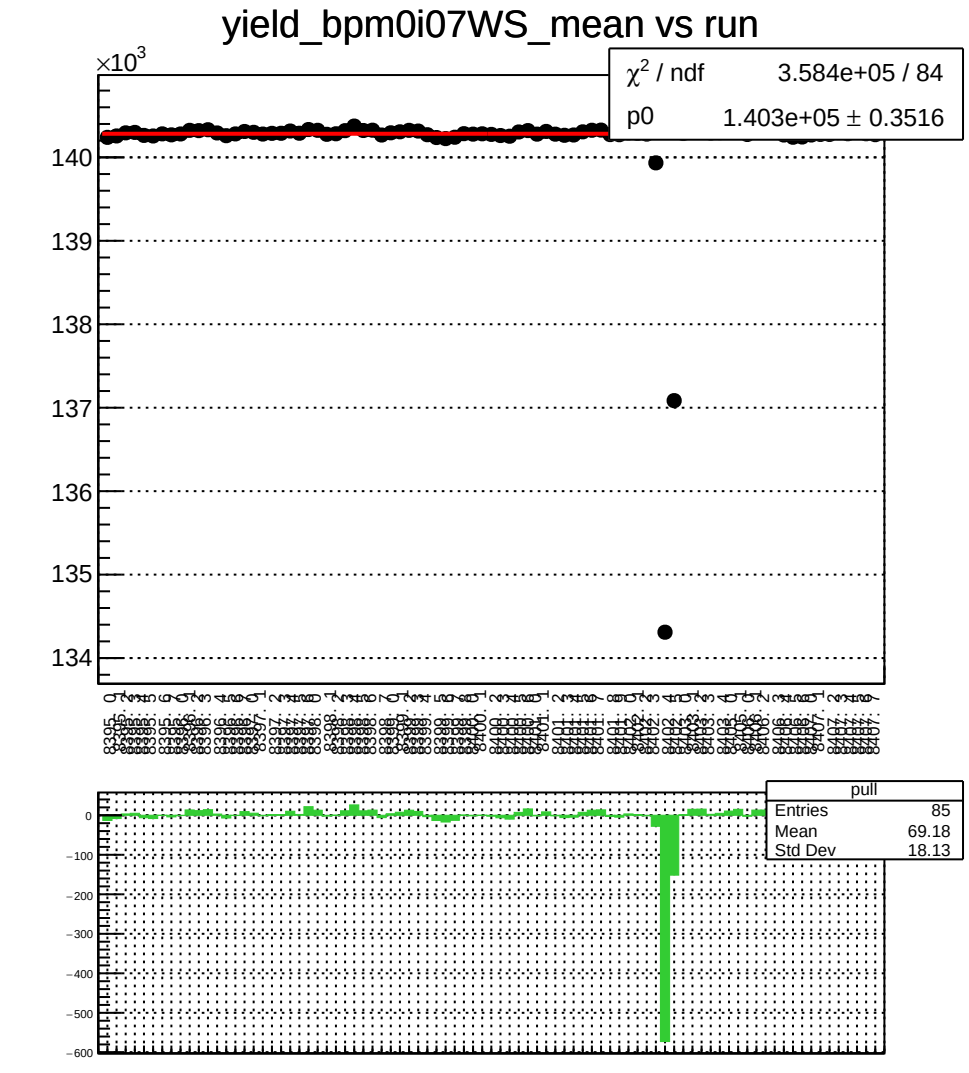

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

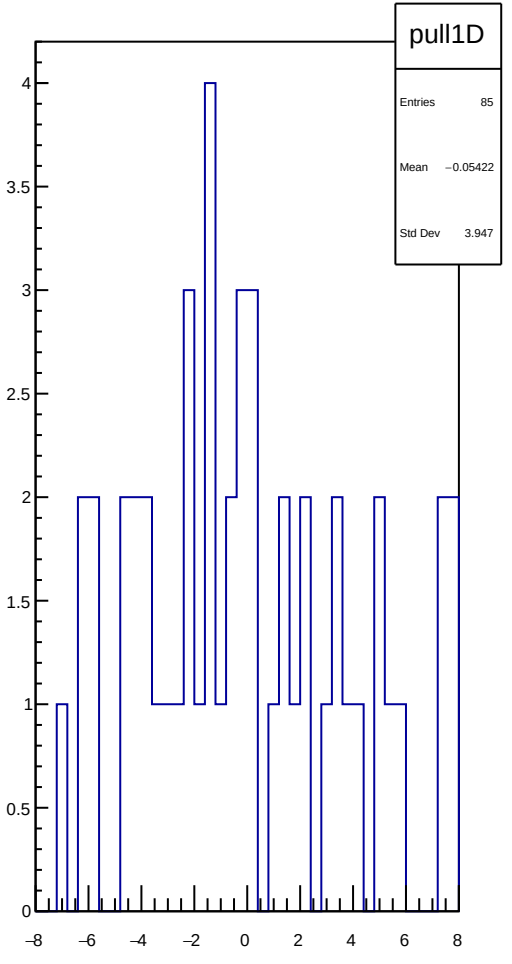

yield_bcm0l02_rms vs run
χ² / ndf 1.163e+05 / 84
p0 0.82 ± 0.000664
8
7
6
5
4
3
2
1

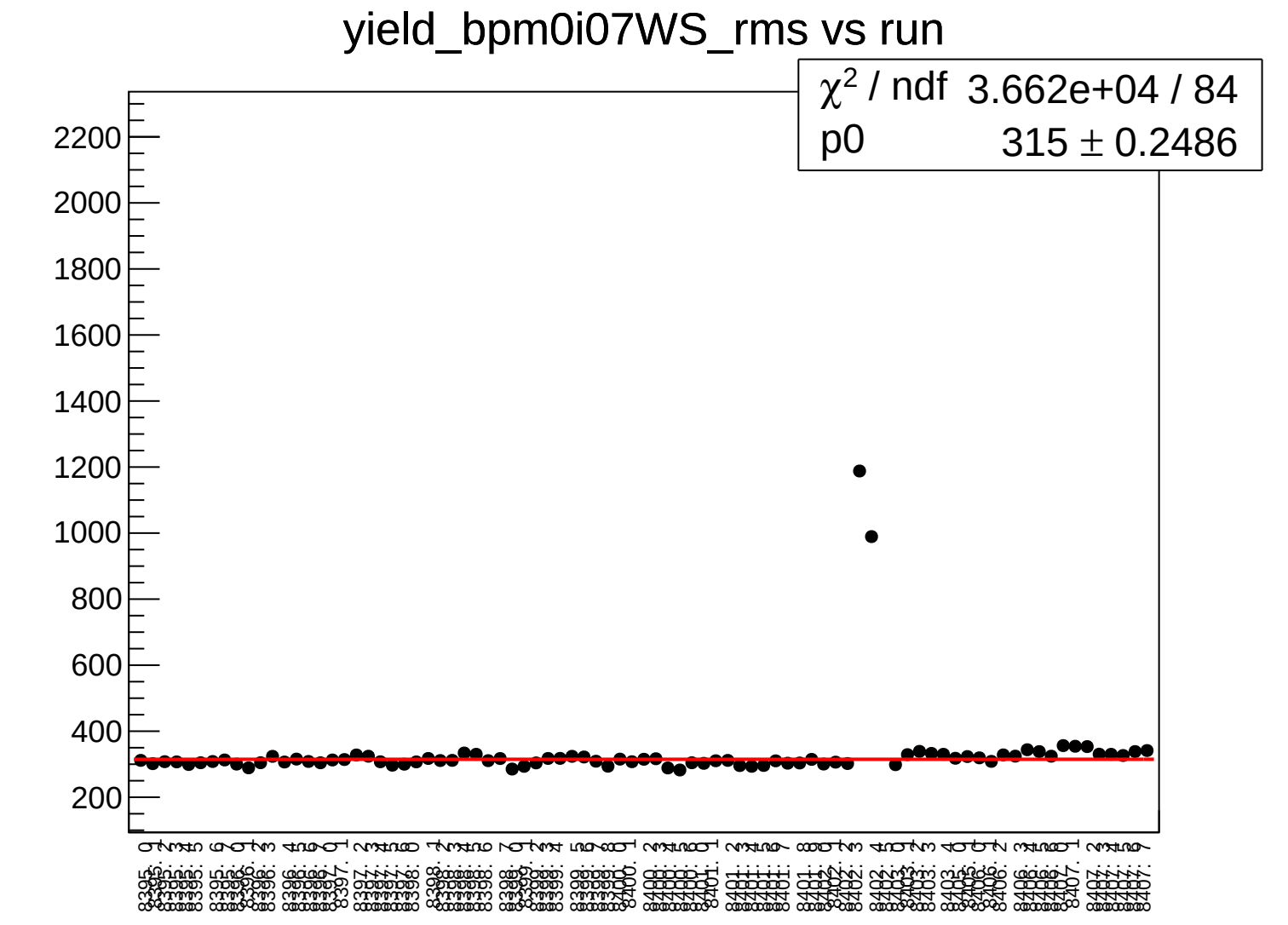

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 3.363e+05 / 84
p0 1.722e+05 ± 0.3803
172
171
170
169
168
167
pull
Entries 85
Mean 91.34
Std Dev 45.59
0
−100
−200
−300
−400
−500

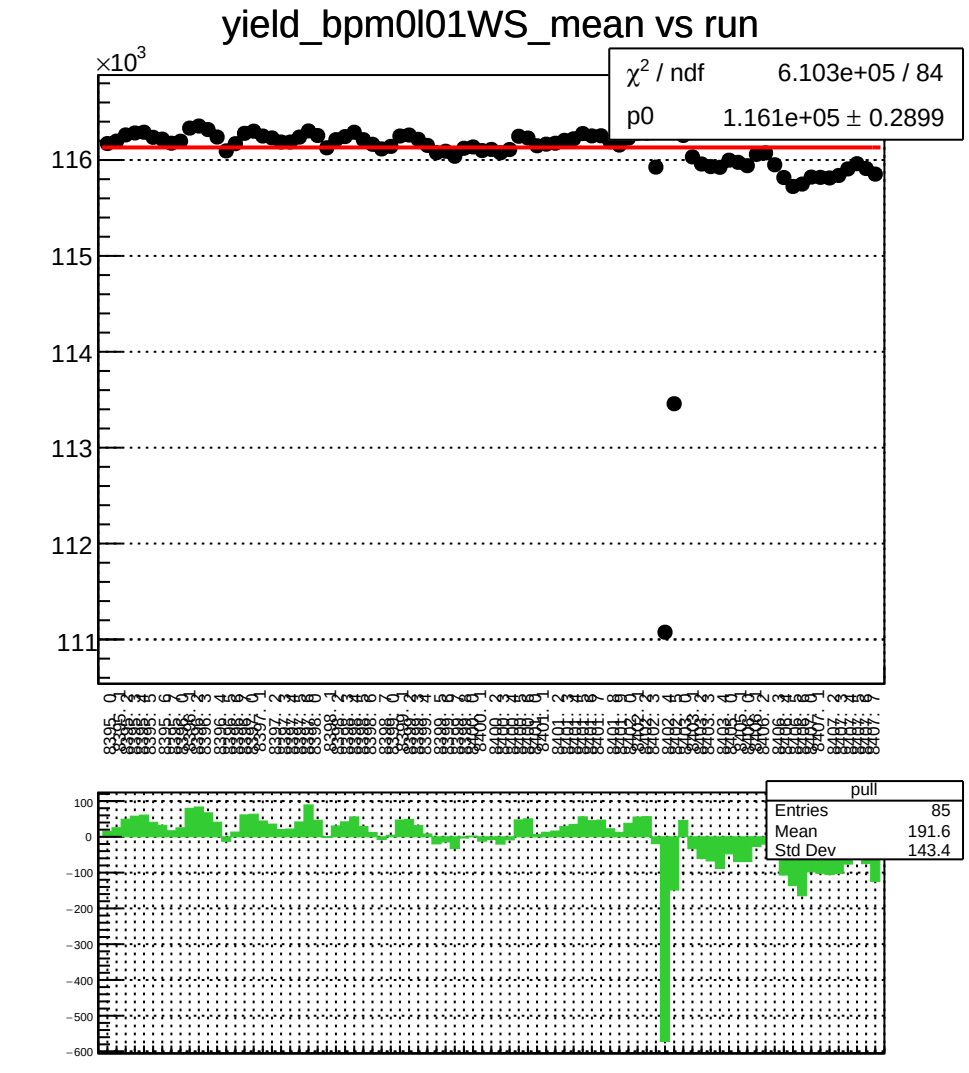

pull1D
Entries 85
Mean 2.027
Std Dev 4.328
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

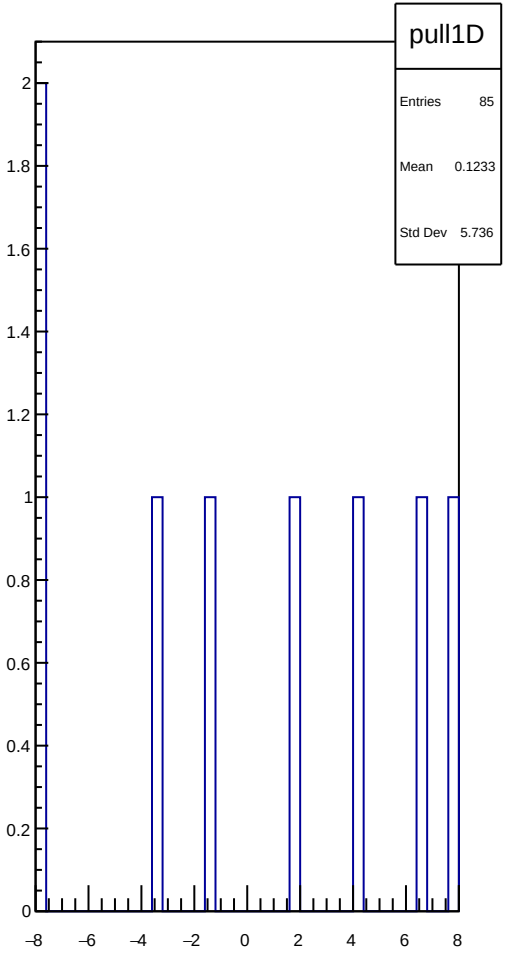

yield_bpm2i01WS_rms vs run
χ² / ndf 2.931e+04 / 84
p0 341.4 ± 0.2689
1800
1600
1400
1200
1000
800
600
400
200

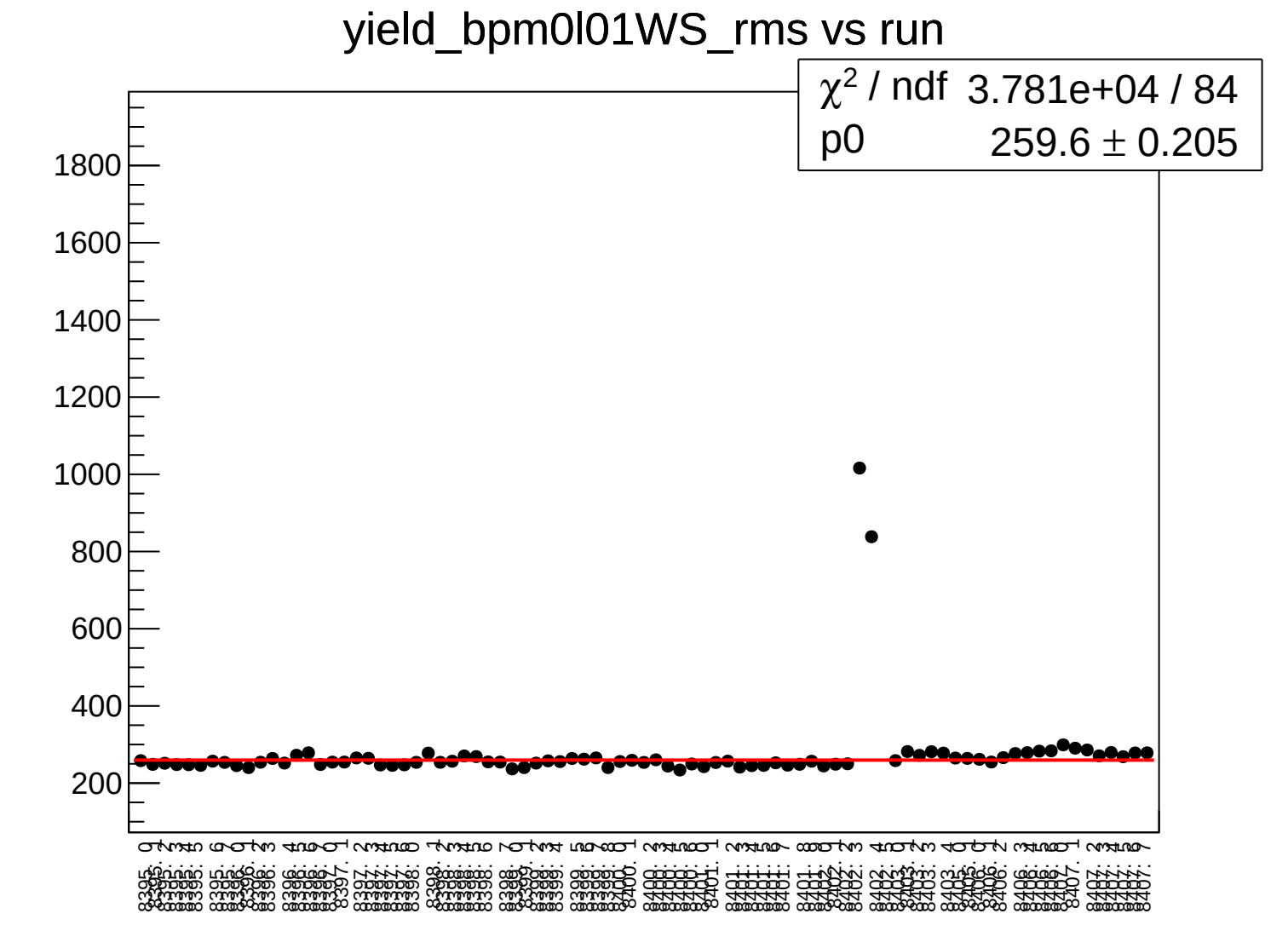

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 3.584e+05 / 84
p0 1.403e+05 ± 0.3516
140
139
138
137
136
135
134
pull
Entries 85
Mean 69.18
Std Dev 18.13
0
−100
−200
−300
−400
−500
−600

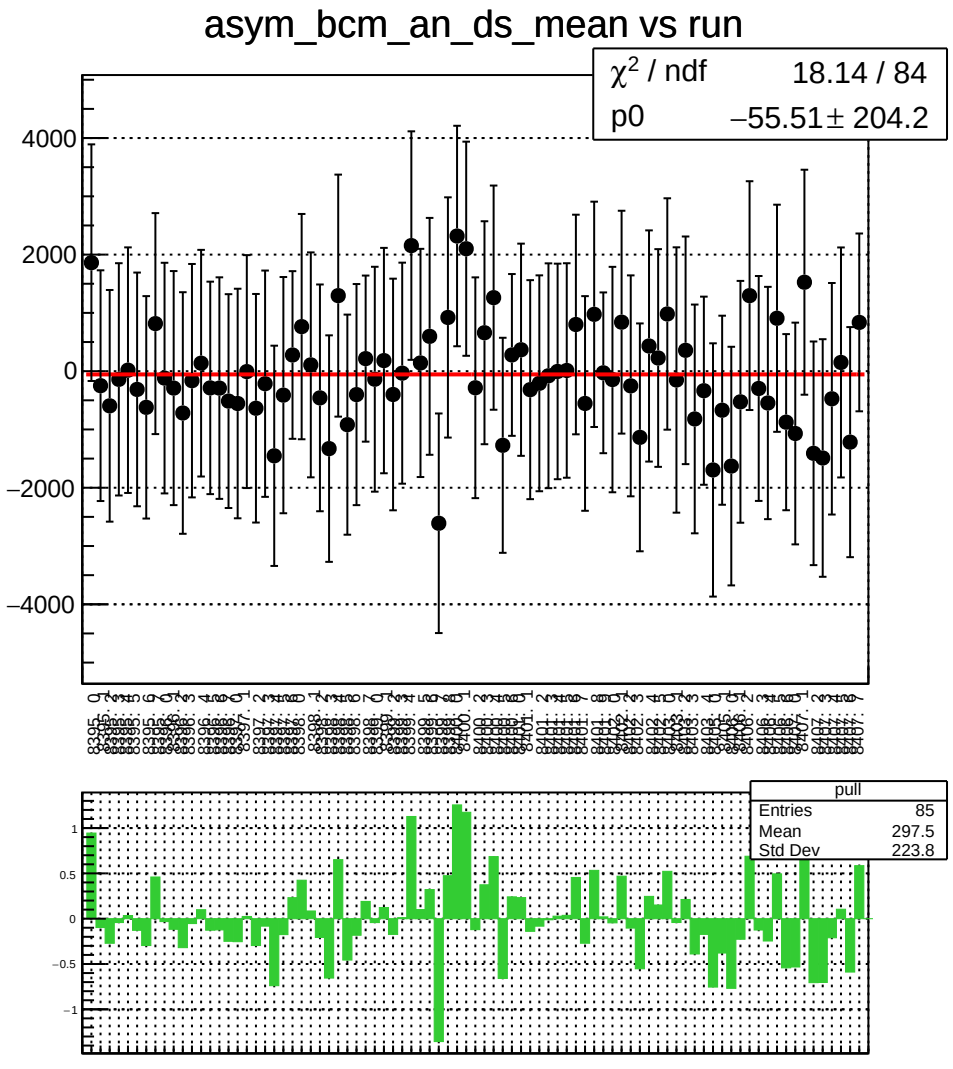

pull1D
Entries 85
Mean −0.05422
Std Dev 3.947
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

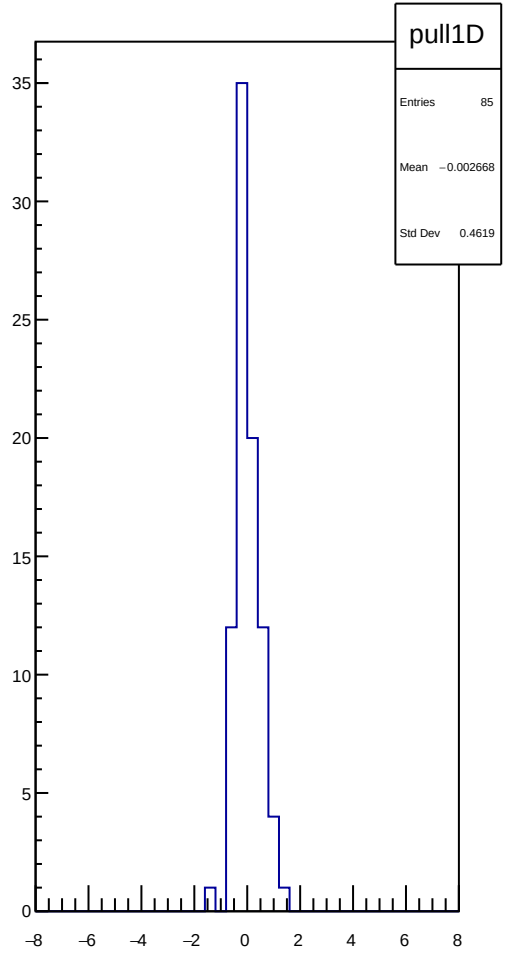

yield_bpm0i07WS_rms vs run
χ² / ndf 3.662e+04 / 84
p0 315 ± 0.2486
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

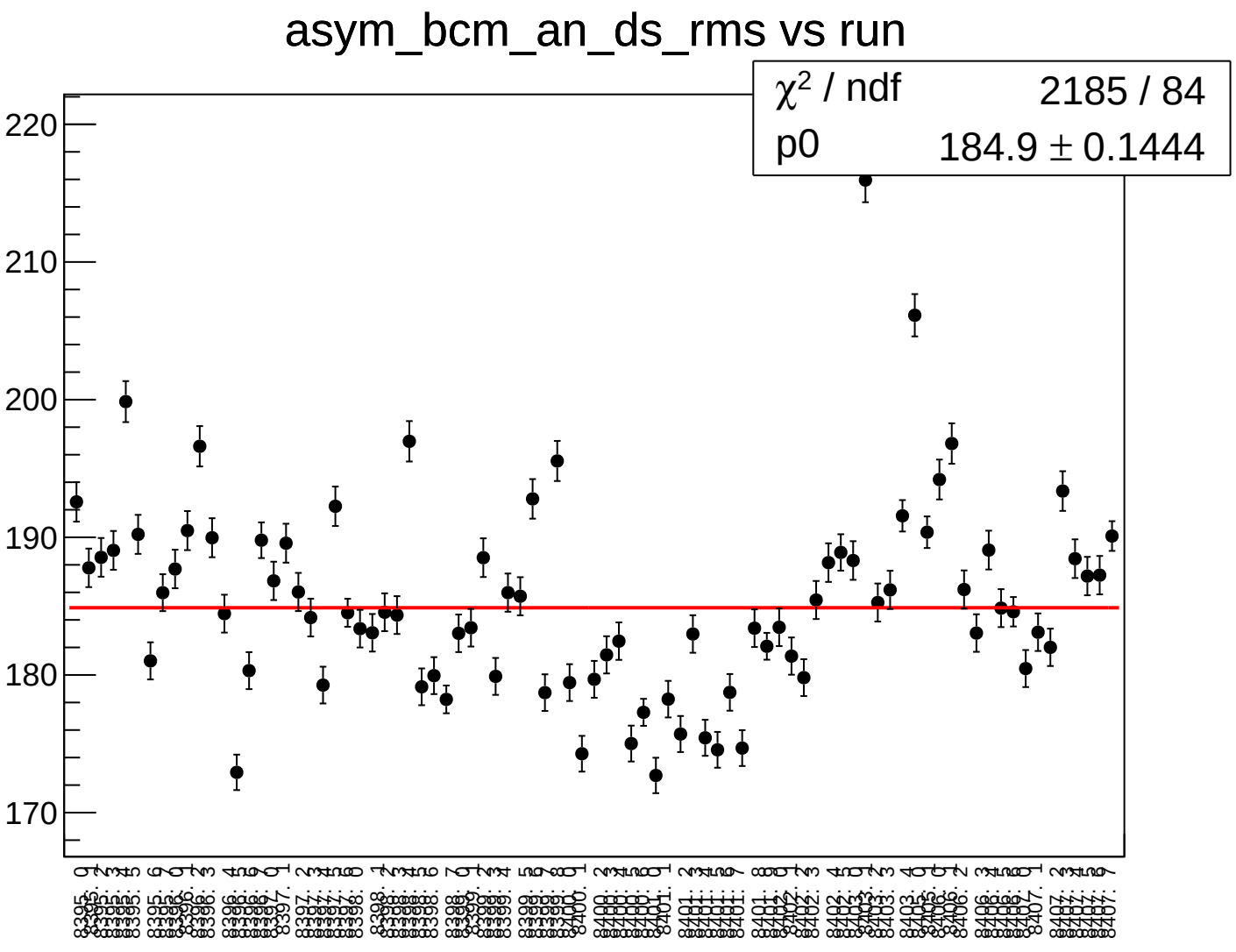

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 6.103e+05 / 84
p0 1.161e+05 ± 0.2899
116
115
114
113
112
111
pull
Entries 85
Mean 191.6
Std Dev 143.4
100
0
−100
−200
−300
−400
−500
−600

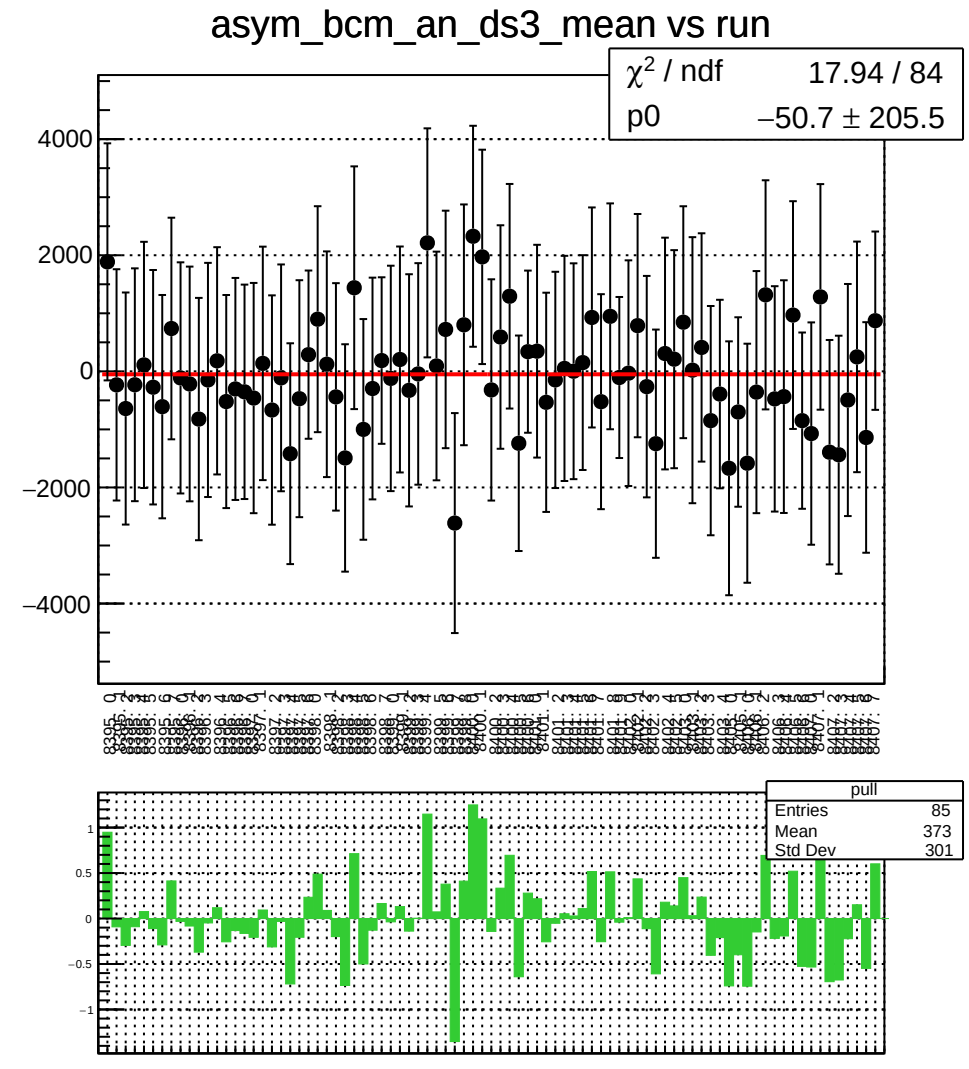

pull1D
Entries 85
Mean 0.1233
Std Dev 5.736
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

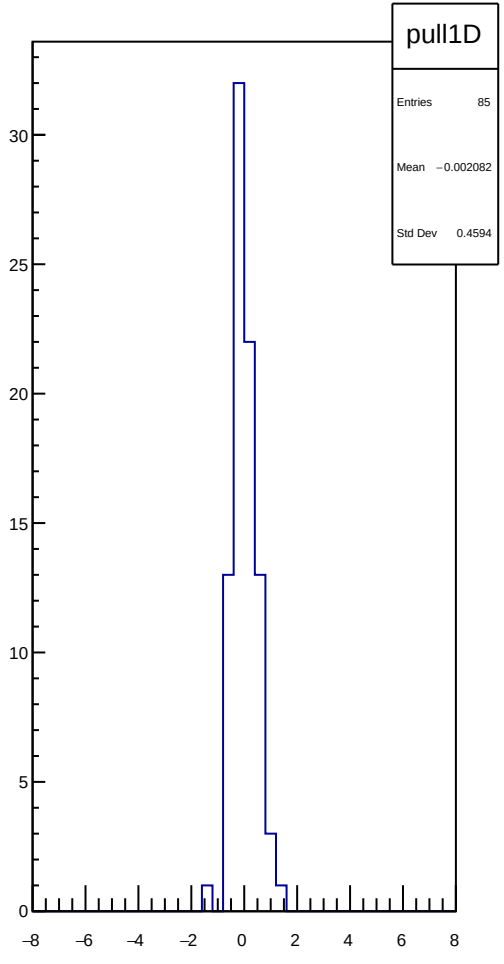

yield_bpm0l01WS_rms vs run
χ² / ndf 3.781e+04 / 84
p0 259.6 ± 0.205
1800
1600
1400
1200
1000
800
600
400
200

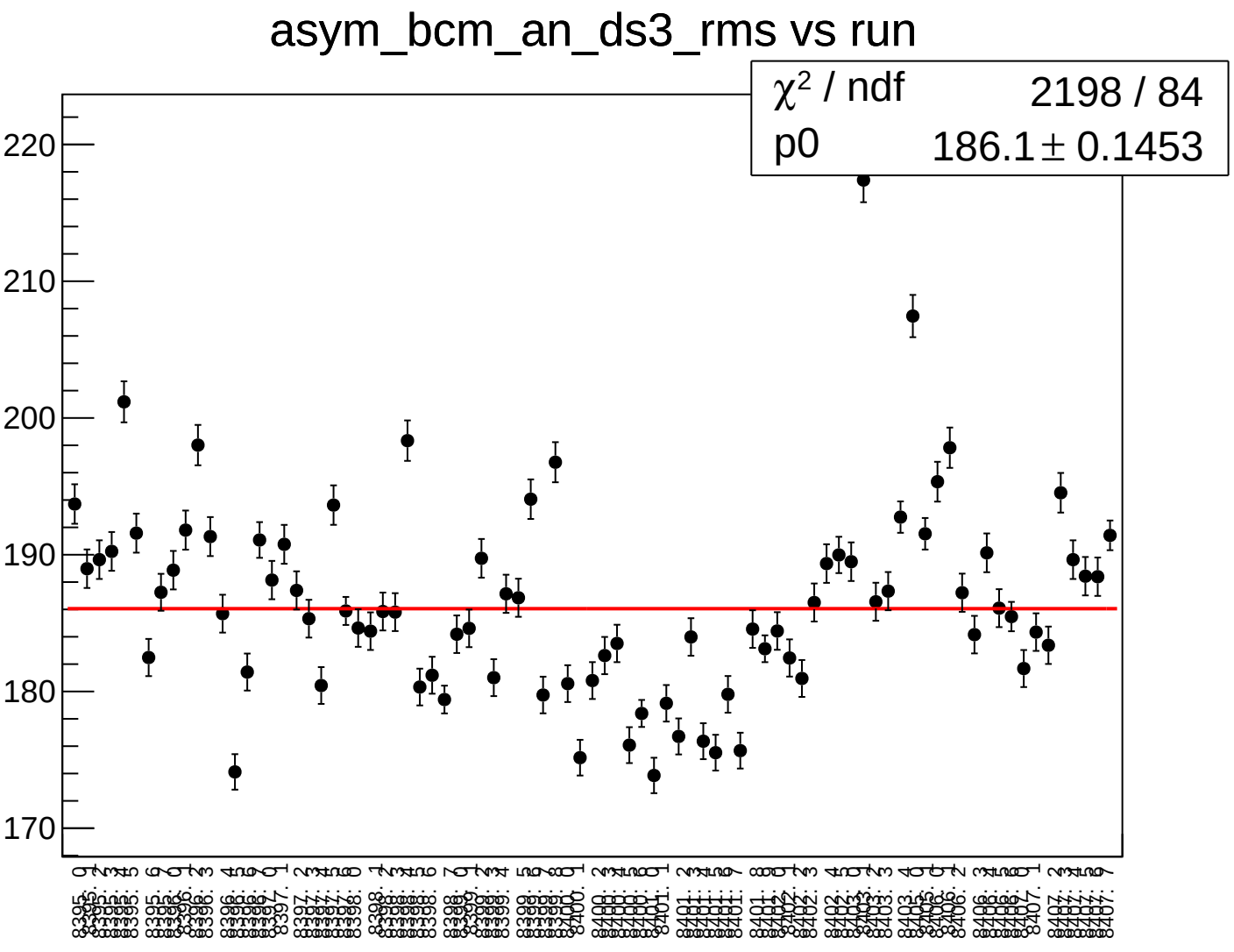

asym_bcm_an_ds_mean vs run
χ² / ndf 18.14 / 84
p0 −55.51 ± 204.2
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 297.5
Std Dev 223.8
1
0.5
0
−0.5
−1

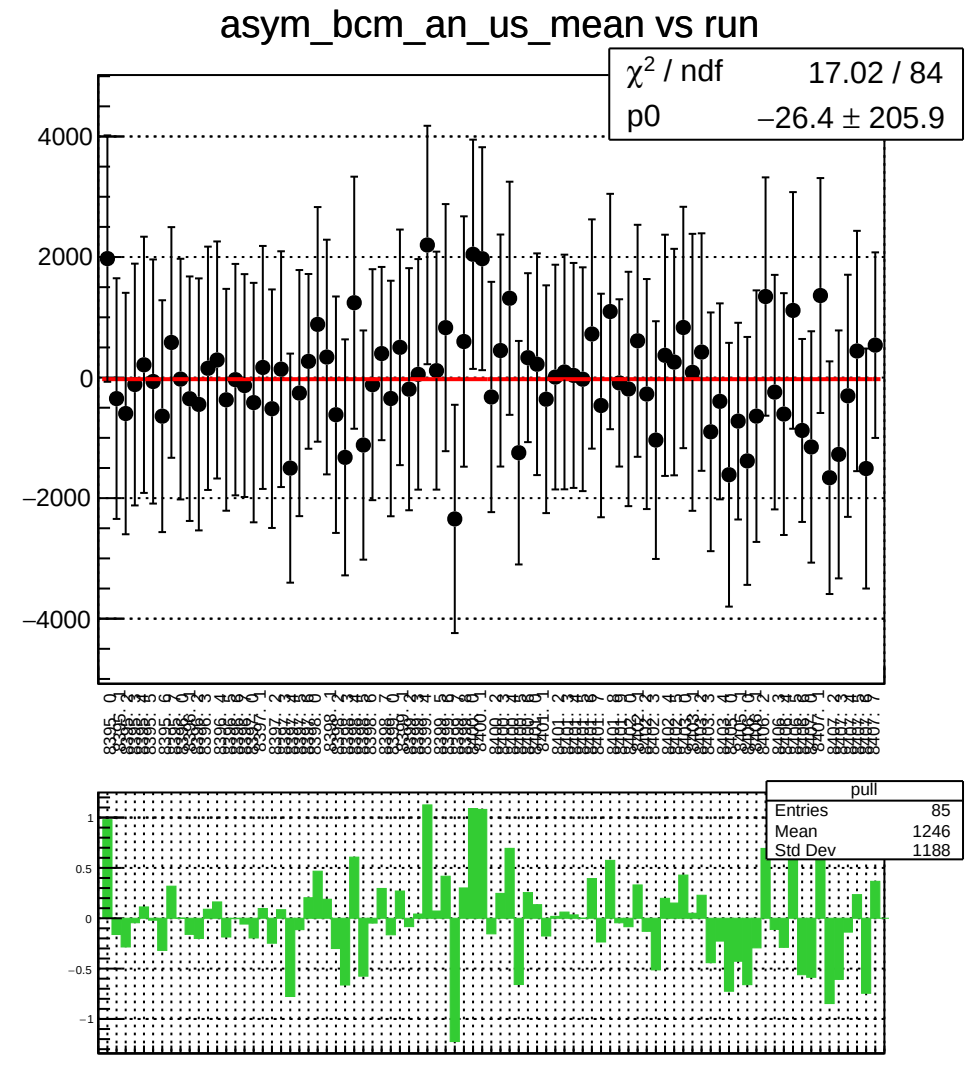

pull1D
Entries 85
Mean −0.002668
Std Dev 0.4619
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

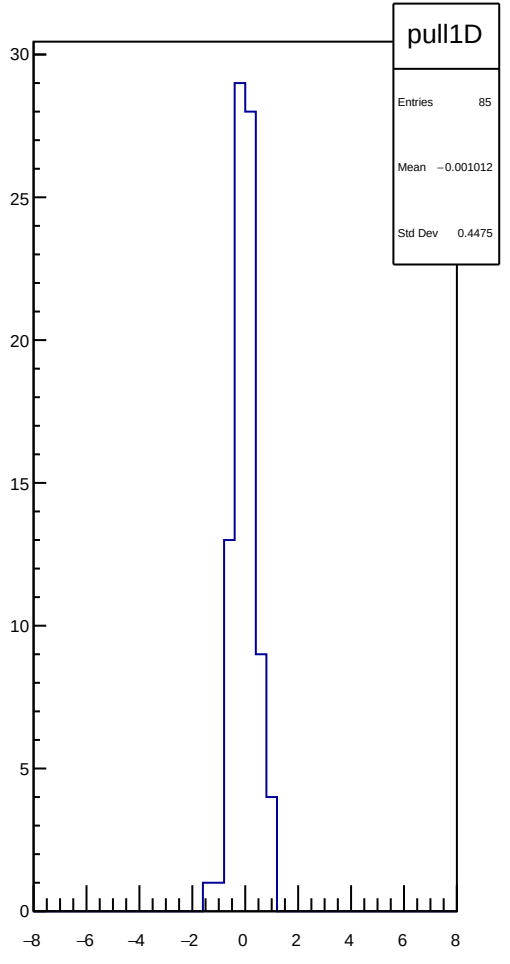

asym_bcm_an_ds_rms vs run
χ² / ndf 2185 / 84
p0 184.9 ± 0.1444
220
210
200
190
180
170

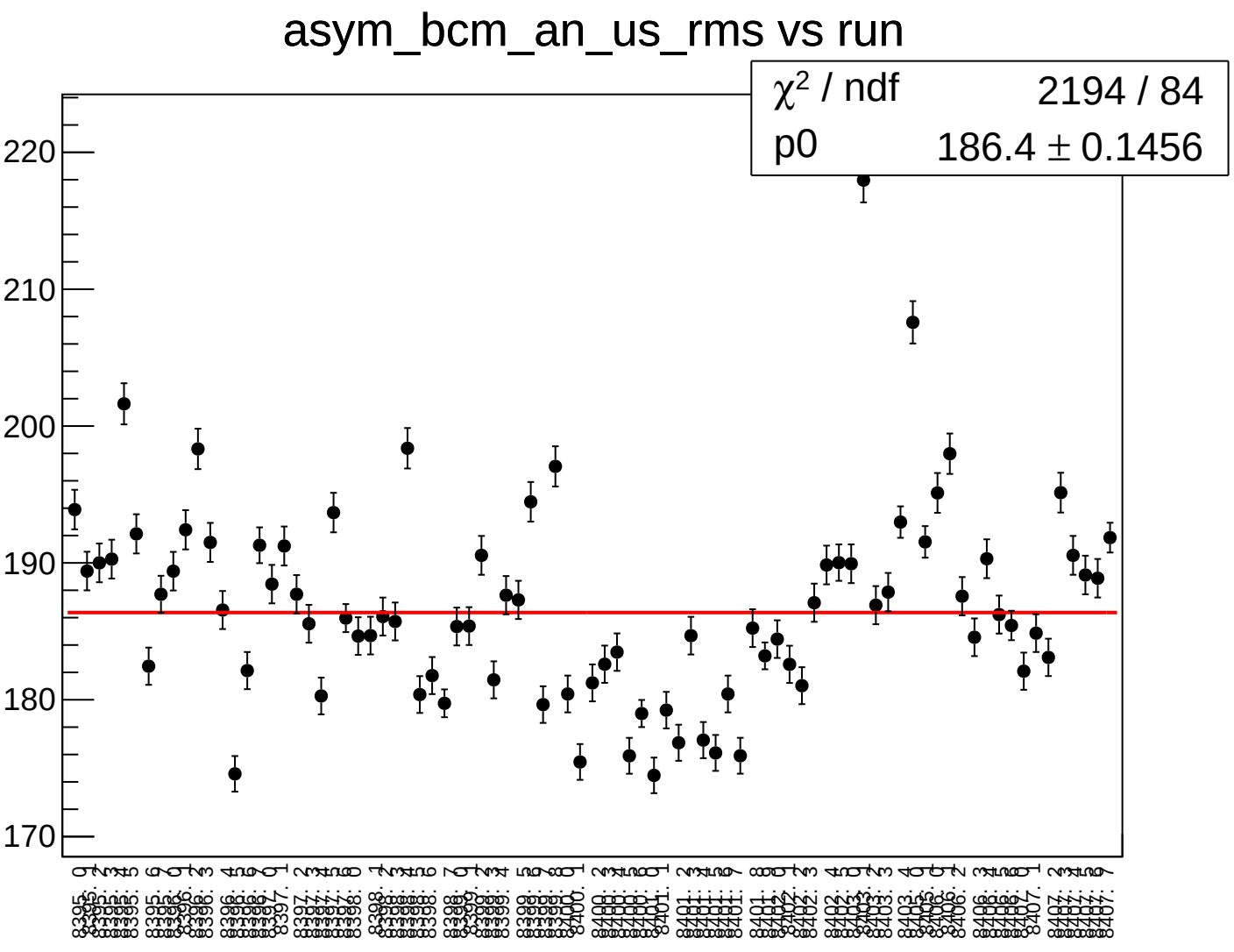

asym_bcm_an_ds3_mean vs run
χ² / ndf 17.94 / 84
p0 −50.7 ± 205.5
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 373
Std Dev 301
1
0.5
0
−0.5
−1

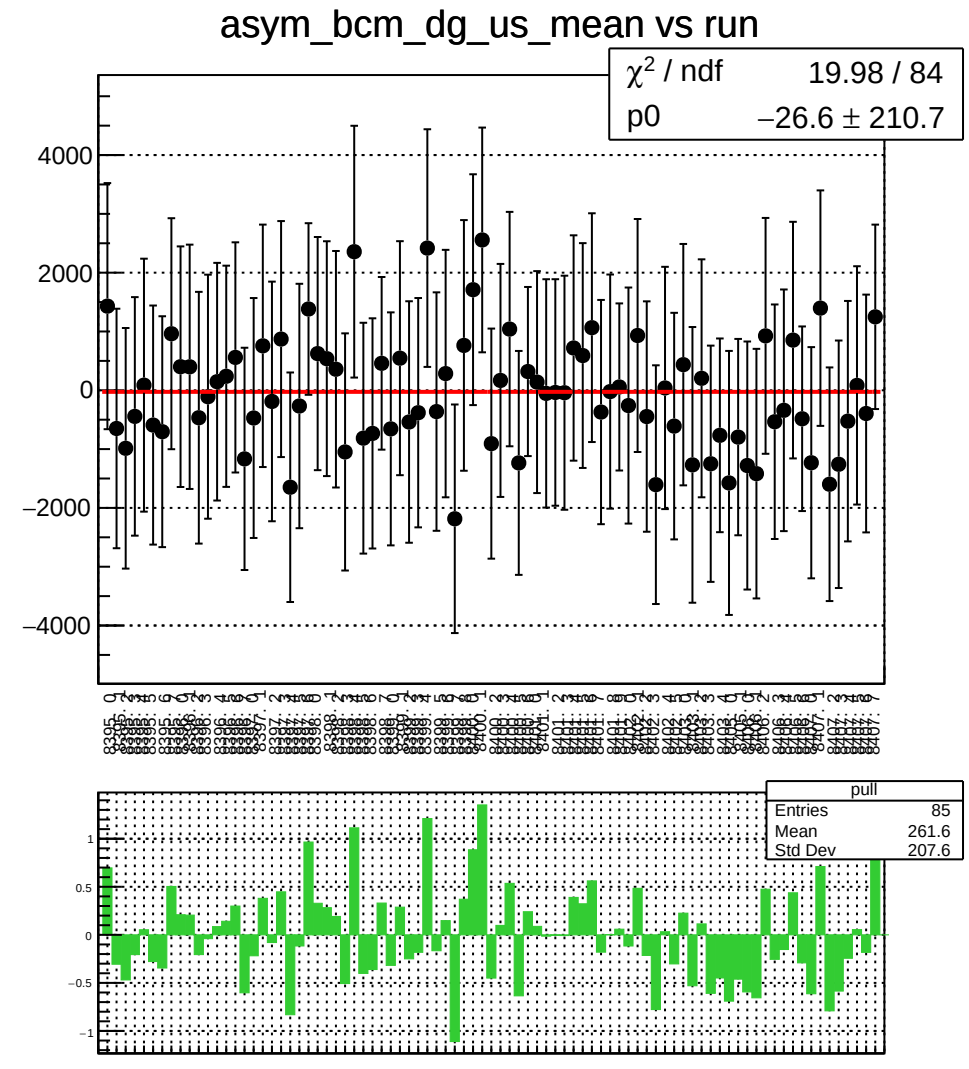

pull1D
Entries 85
Mean −0.002082
Std Dev 0.4594
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

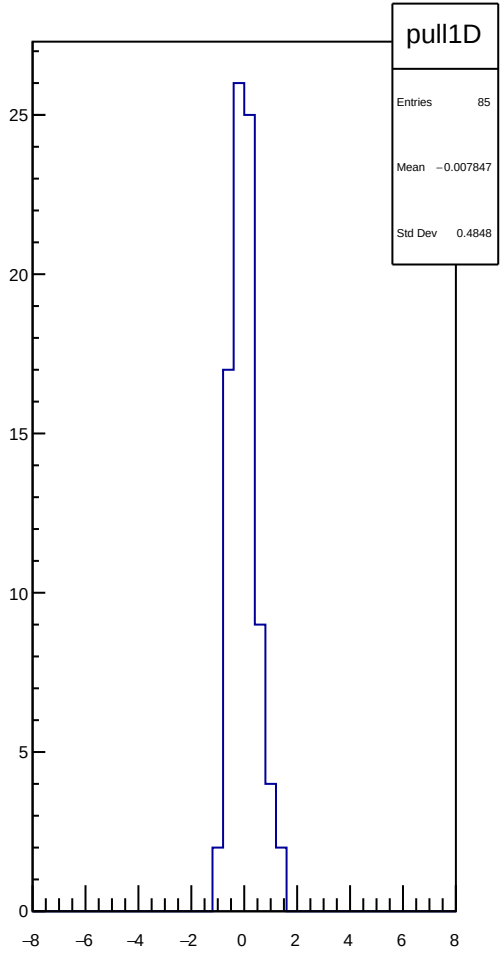

asym_bcm_an_ds3_rms vs run
χ² / ndf 2198 / 84
p0 186.1 ± 0.1453
220
210
200
190
180
170

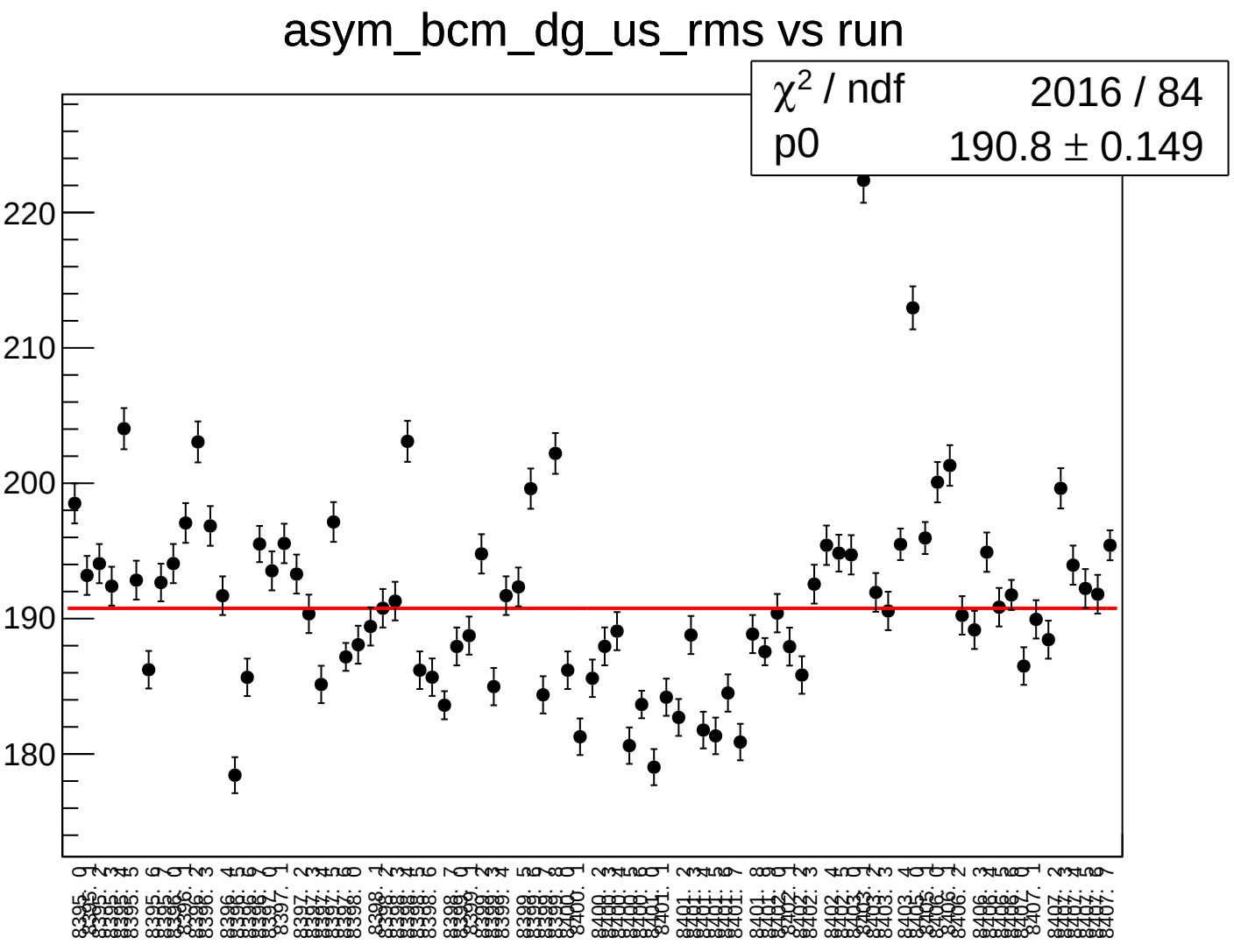

asym_bcm_an_us_mean vs run
χ² / ndf 17.02 / 84
p0 −26.4 ± 205.9
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 1246
Std Dev 1188
1
0.5
0
−0.5
−1

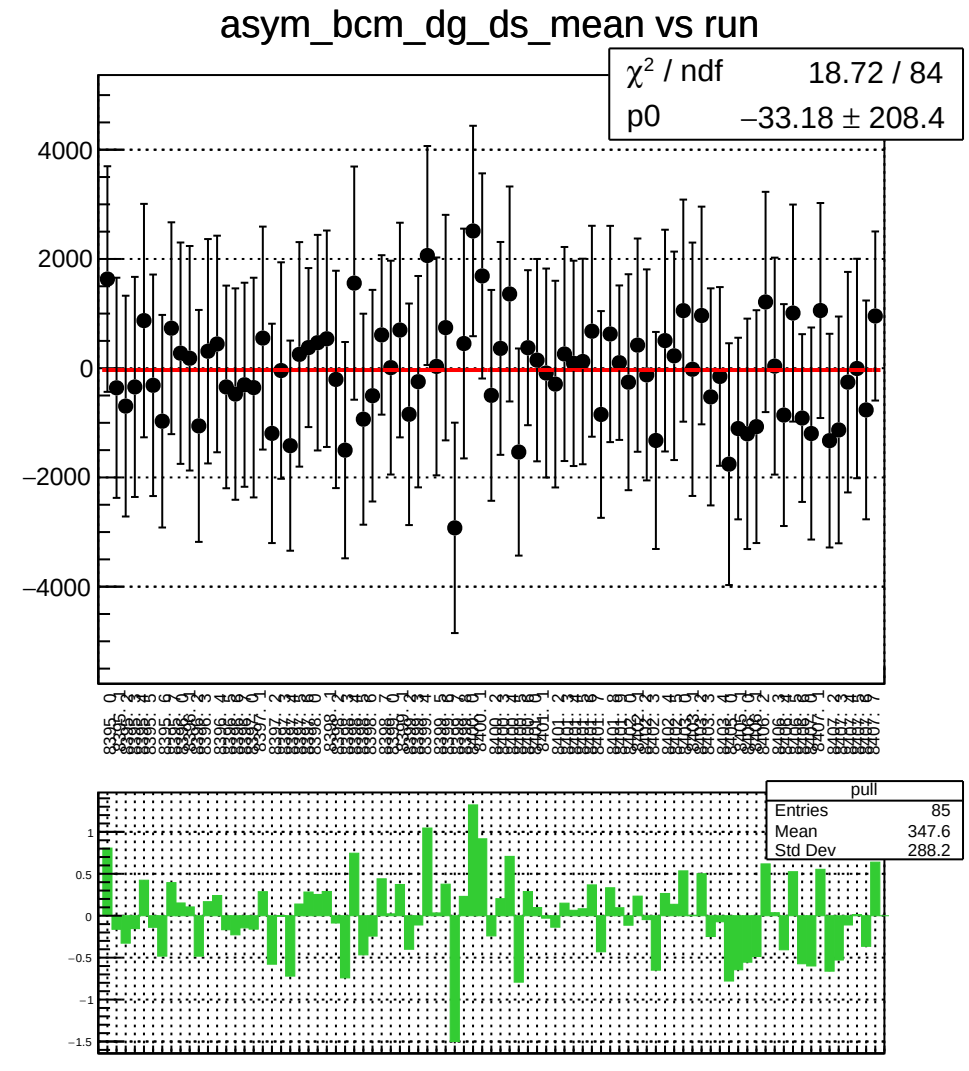

pull1D
Entries 85
Mean −0.001012
Std Dev 0.4475
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

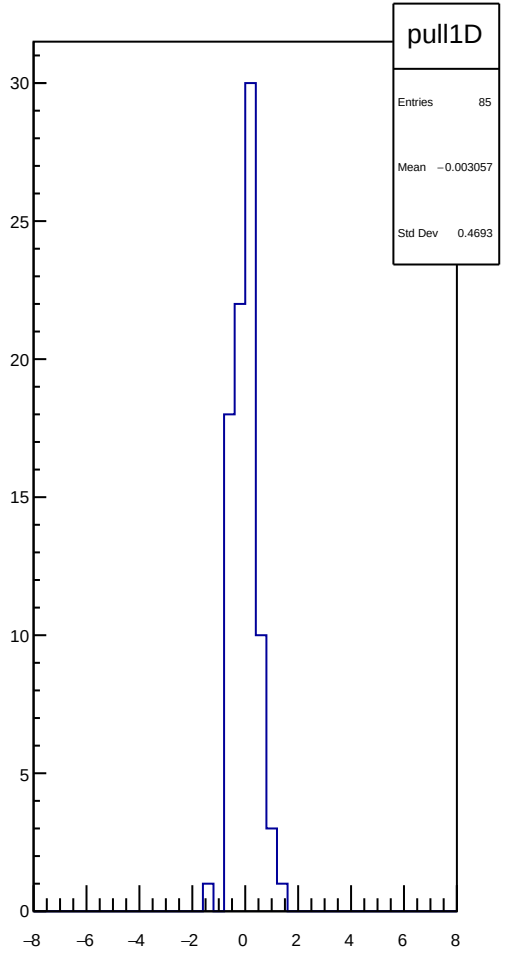

asym_bcm_an_us_rms vs run
χ² / ndf 2194 / 84
p0 186.4 ± 0.1456
220
210
200
190
180
170

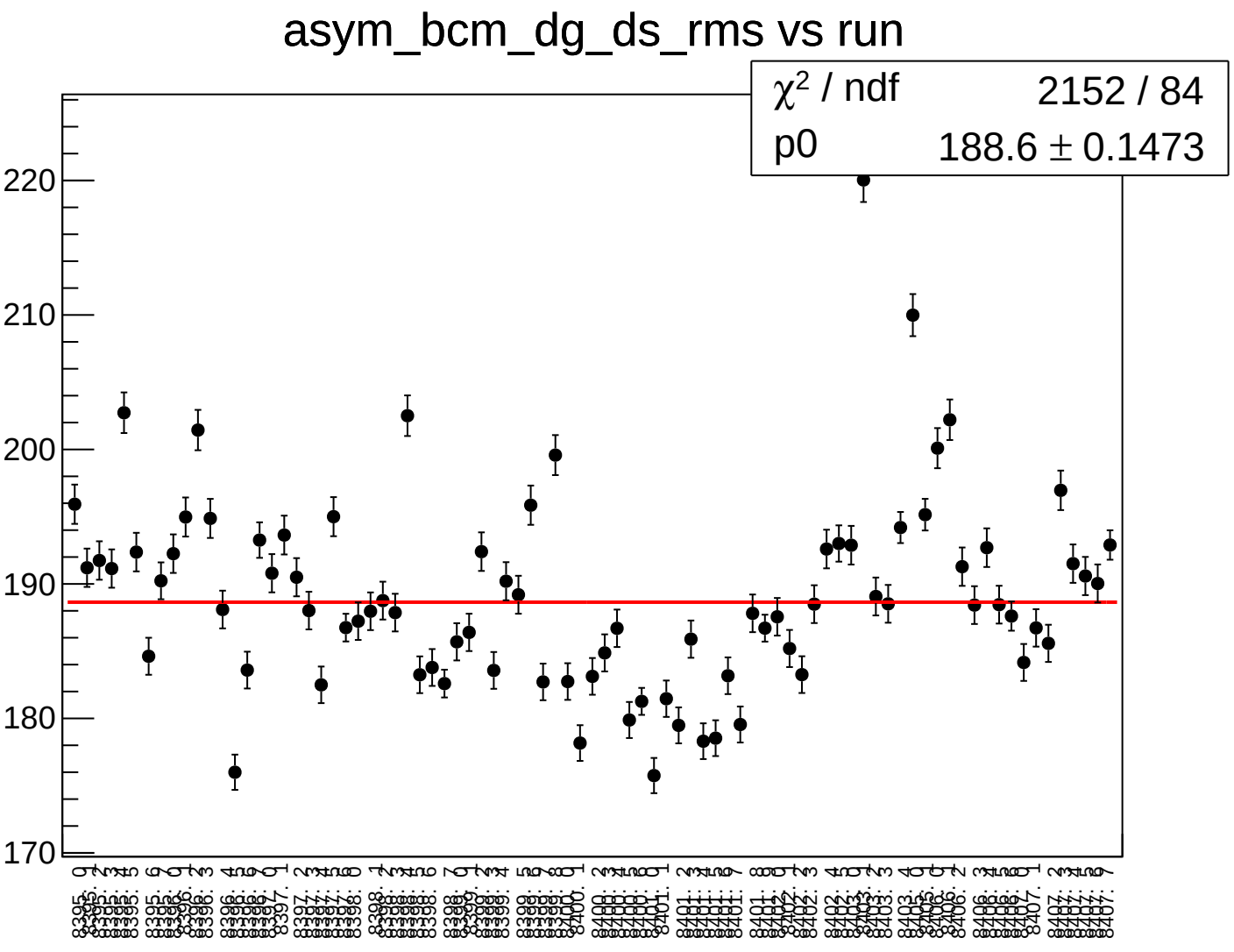

asym_bcm_dg_us_mean vs run
χ² / ndf 19.98 / 84
p0 −26.6 ± 210.7
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 261.6
Std Dev 207.6
1
0.5
0
−0.5
−1

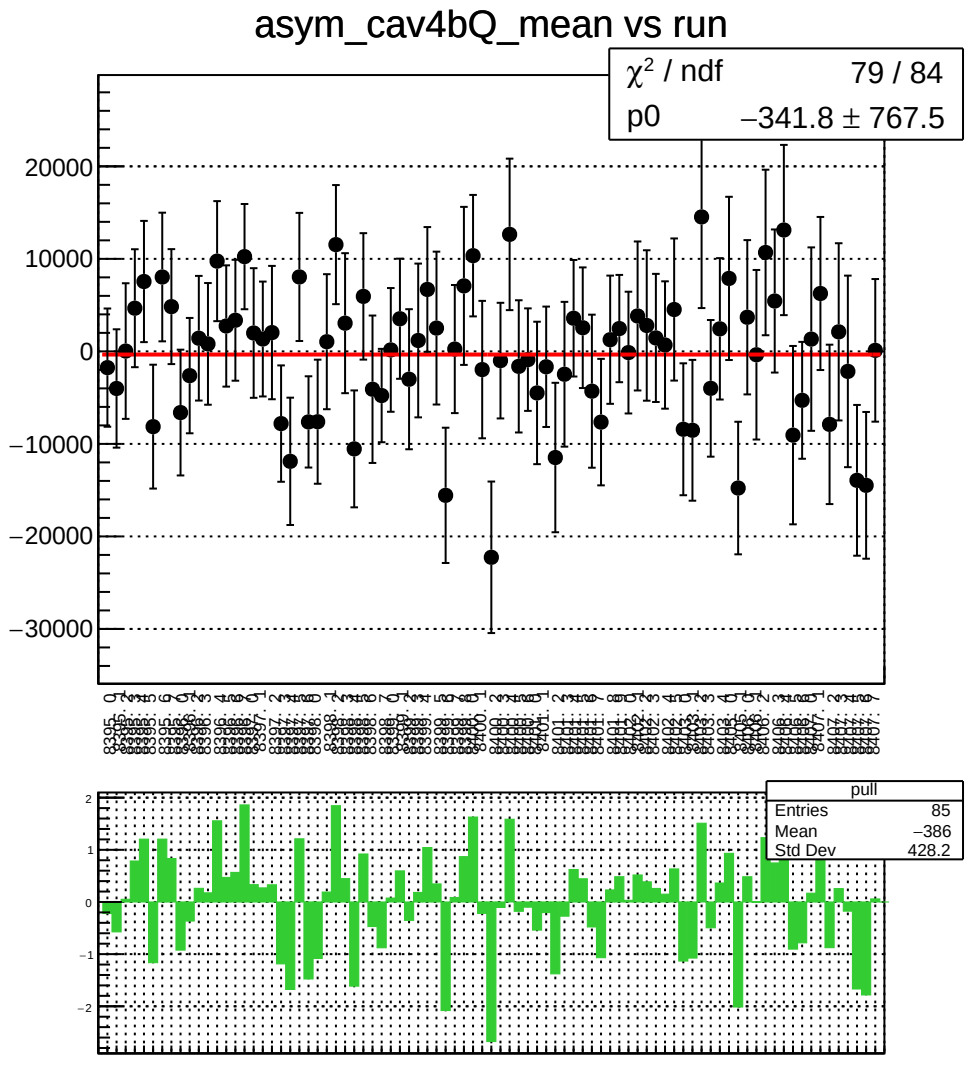

pull1D
Entries 85
Mean −0.007847
Std Dev 0.4848
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

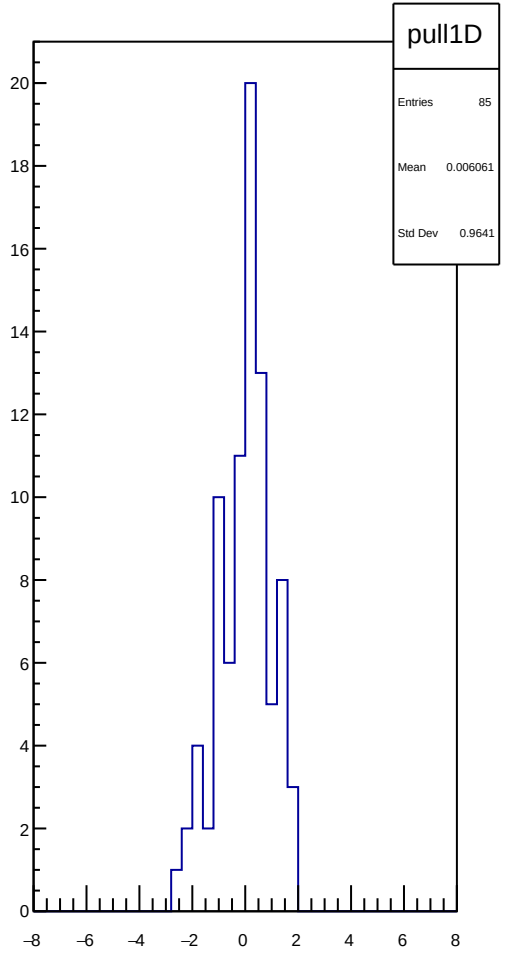

asym_bcm_dg_us_rms vs run
χ^2 / ndf 2016 / 84
p0 190.8 ± 0.149
220
210
200
190
180

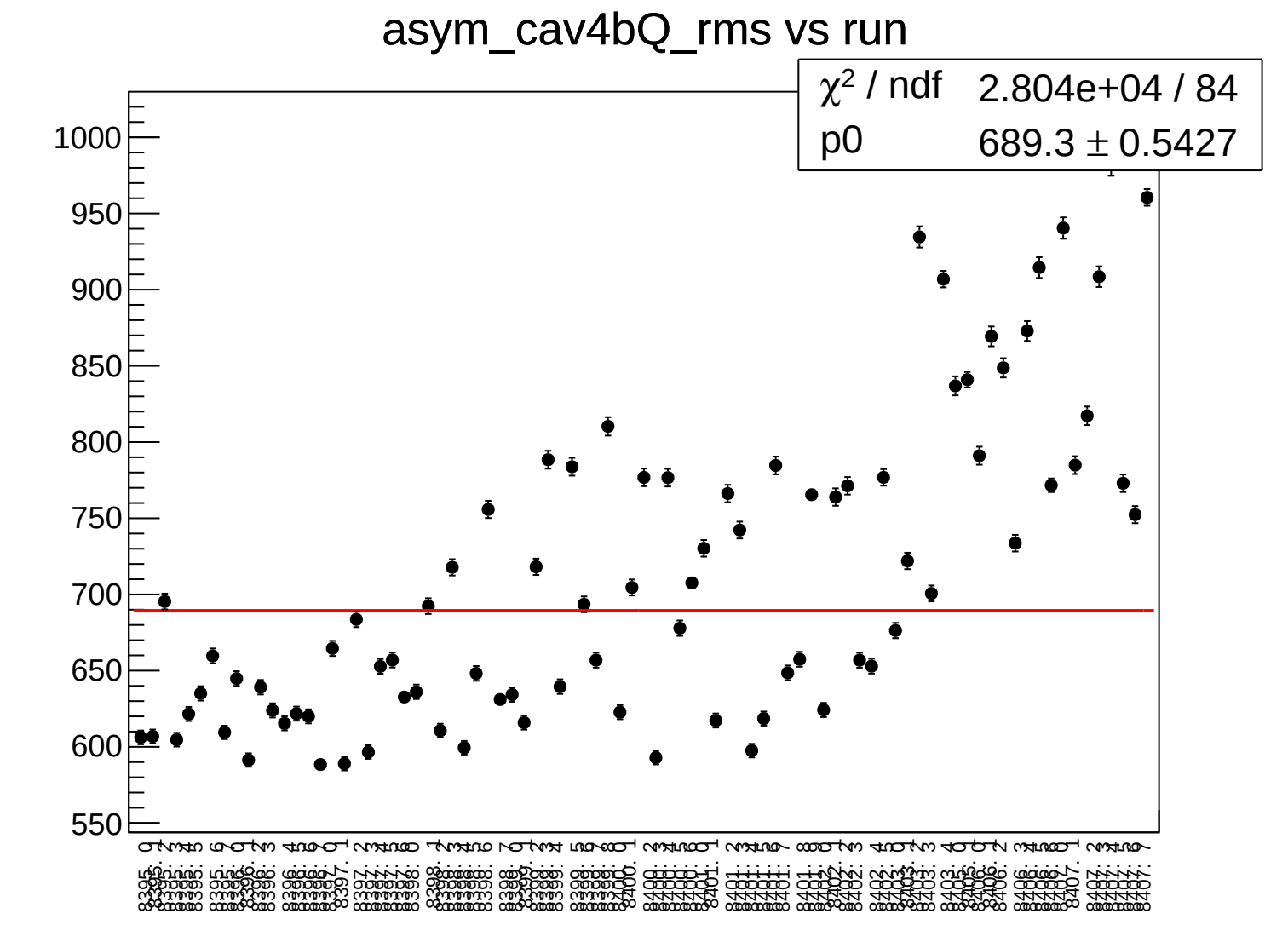

asym_bcm_dg_ds_mean vs run
χ² / ndf 18.72 / 84
p0 −33.18 ± 208.4
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 347.6
Std Dev 288.2
1
0.5
0
−0.5
−1
−1.5

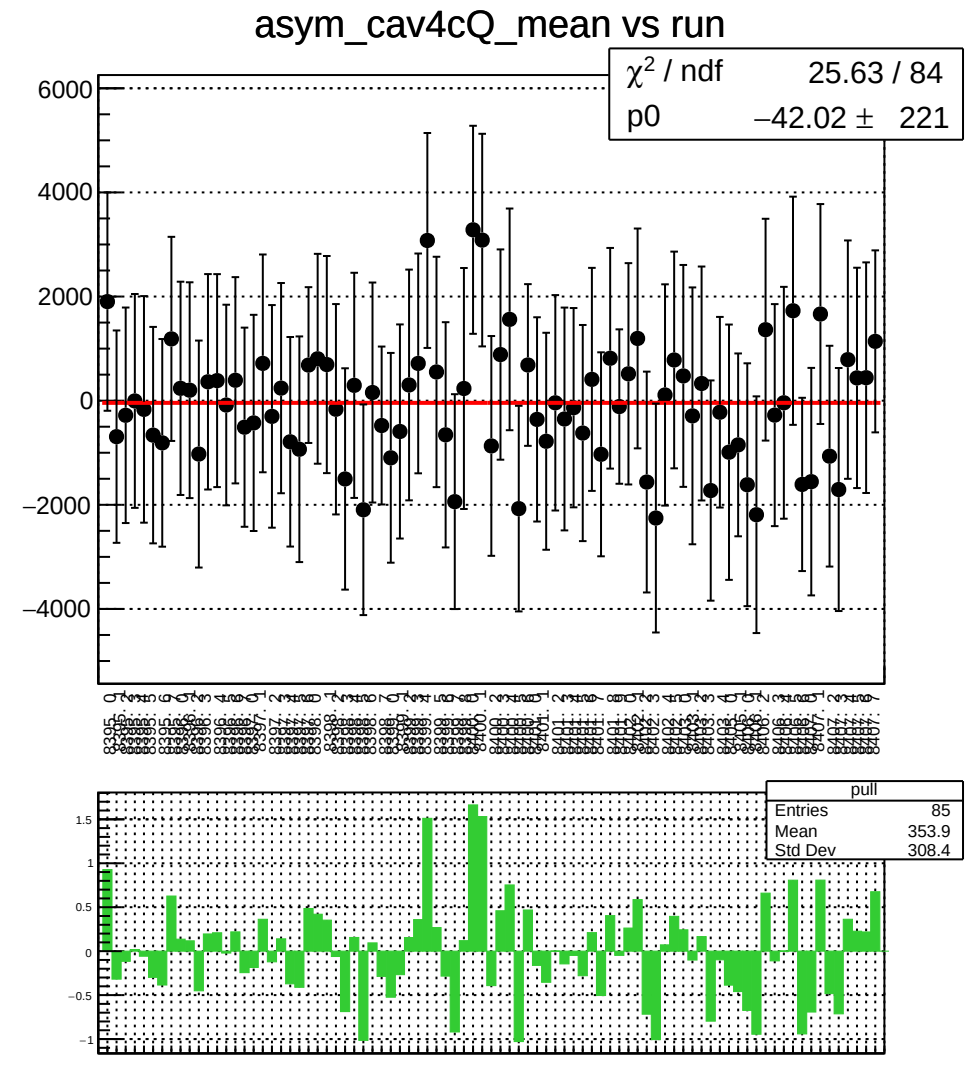

pull1D
Entries 85
Mean −0.003057
Std Dev 0.4693
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

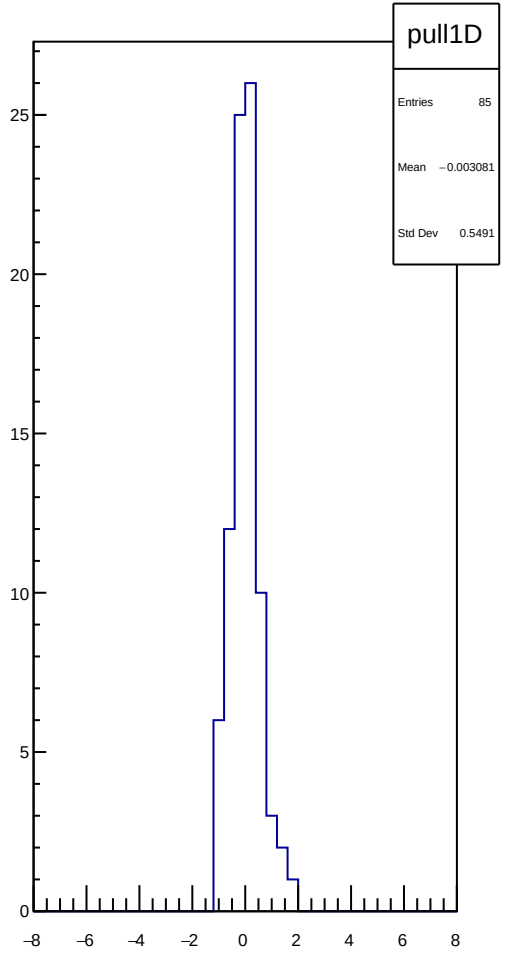

asym_bcm_dg_ds_rms vs run
χ² / ndf 2152 / 84
p0 188.6 ± 0.1473
220
210
200
190
180
170

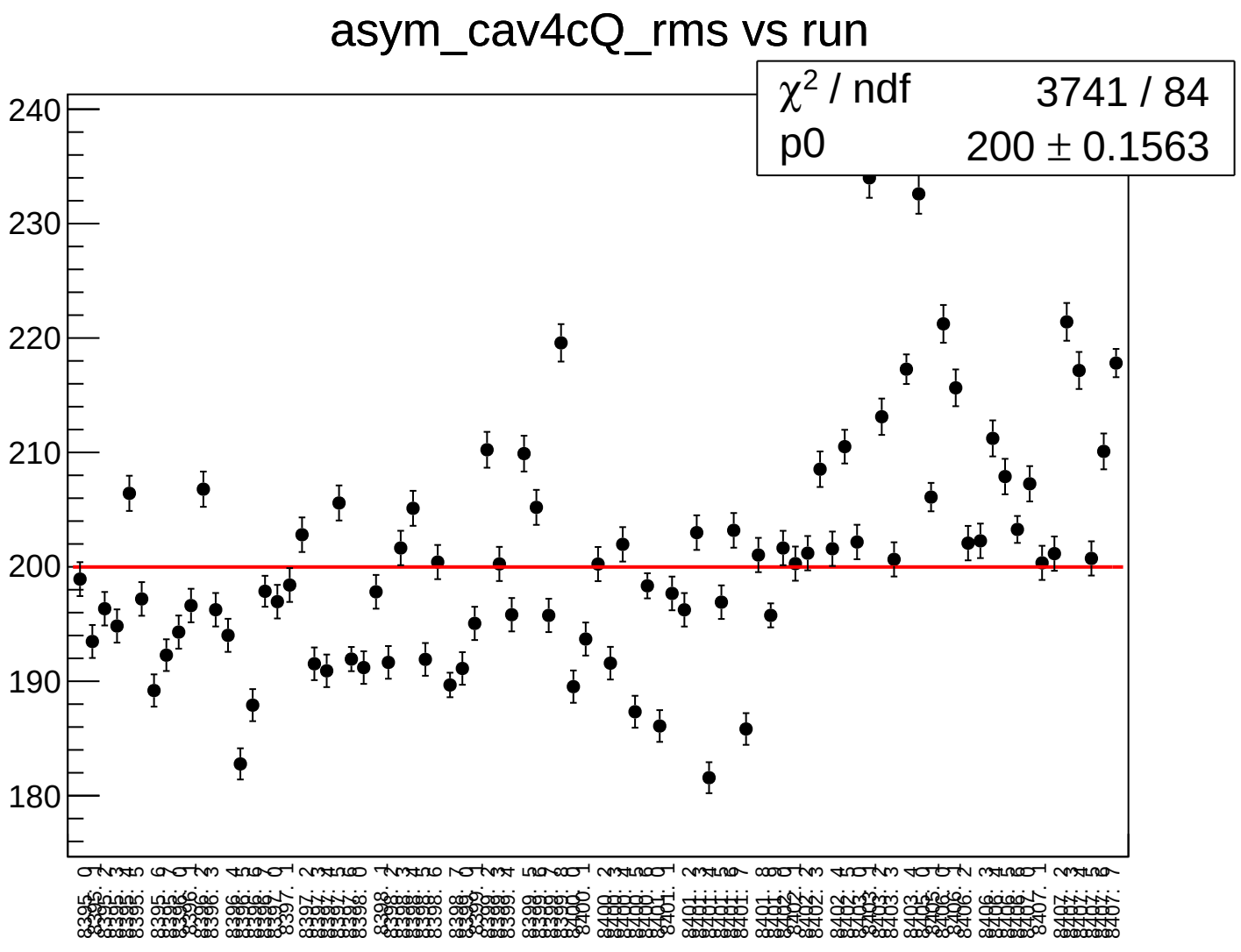

asym_cav4bQ_mean vs run
χ² / ndf 79 / 84
p0 −341.8 ± 767.5
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −386
Std Dev 428.2
2
1
0
−1
−2

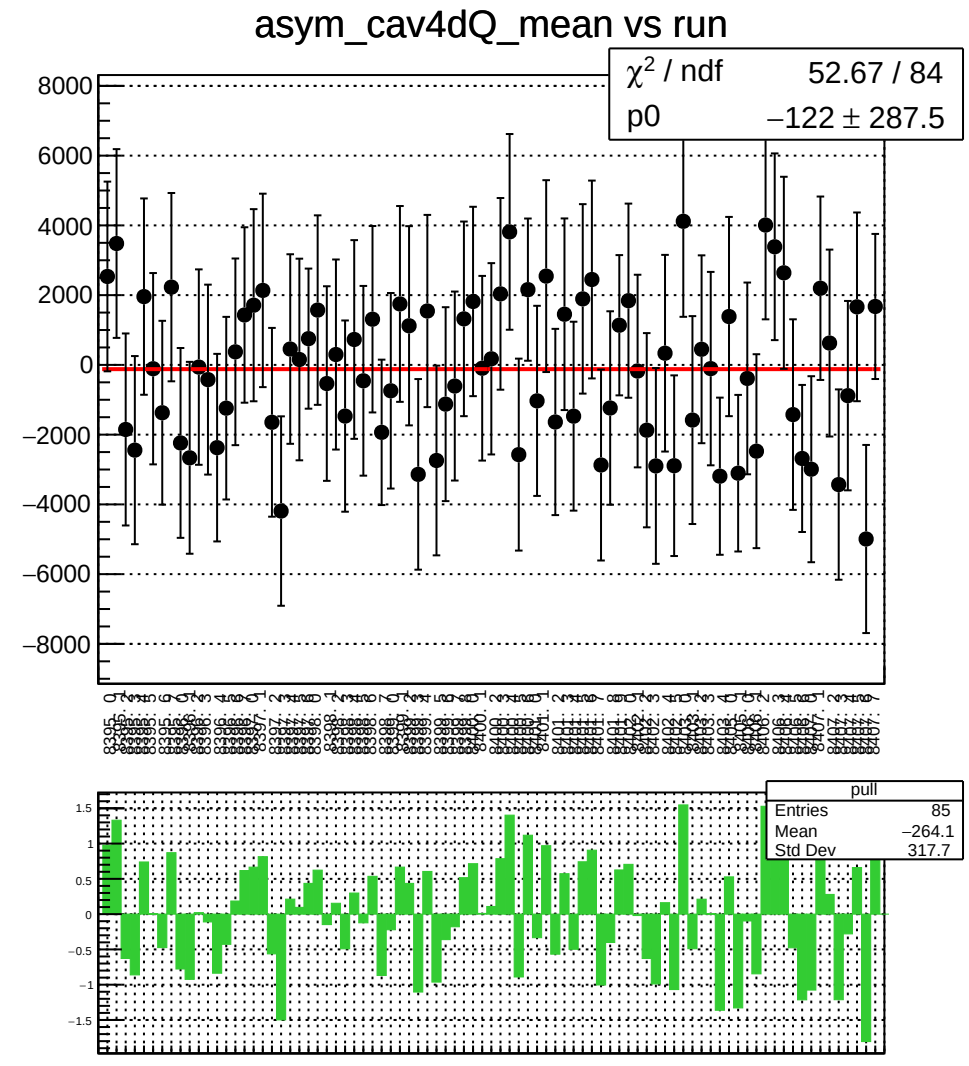

pull1D
Entries 85
Mean 0.006061
Std Dev 0.9641
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

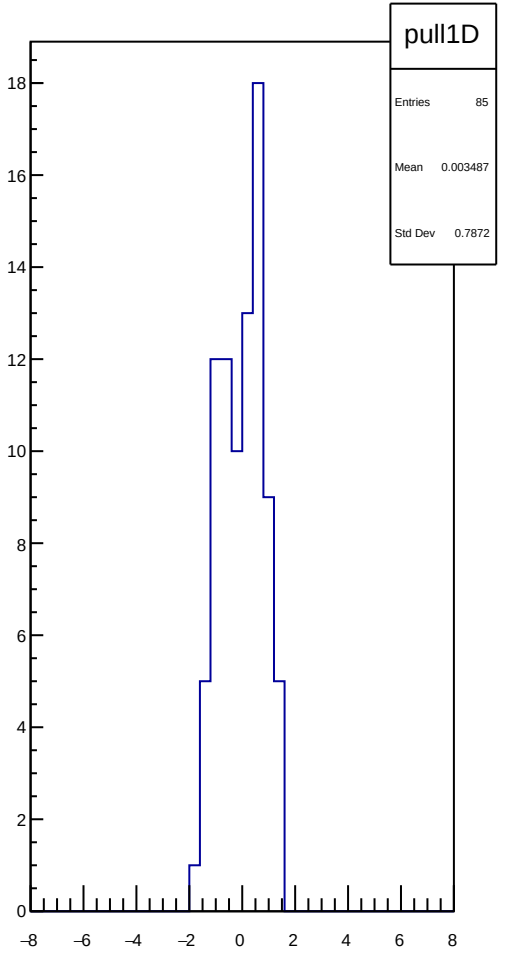

asym_cav4bQ_rms vs run
χ^2 / ndf 2.804e+04 / 84
p0 689.3 ± 0.5427
1000
950
900
850
800
750
700
650
600
550

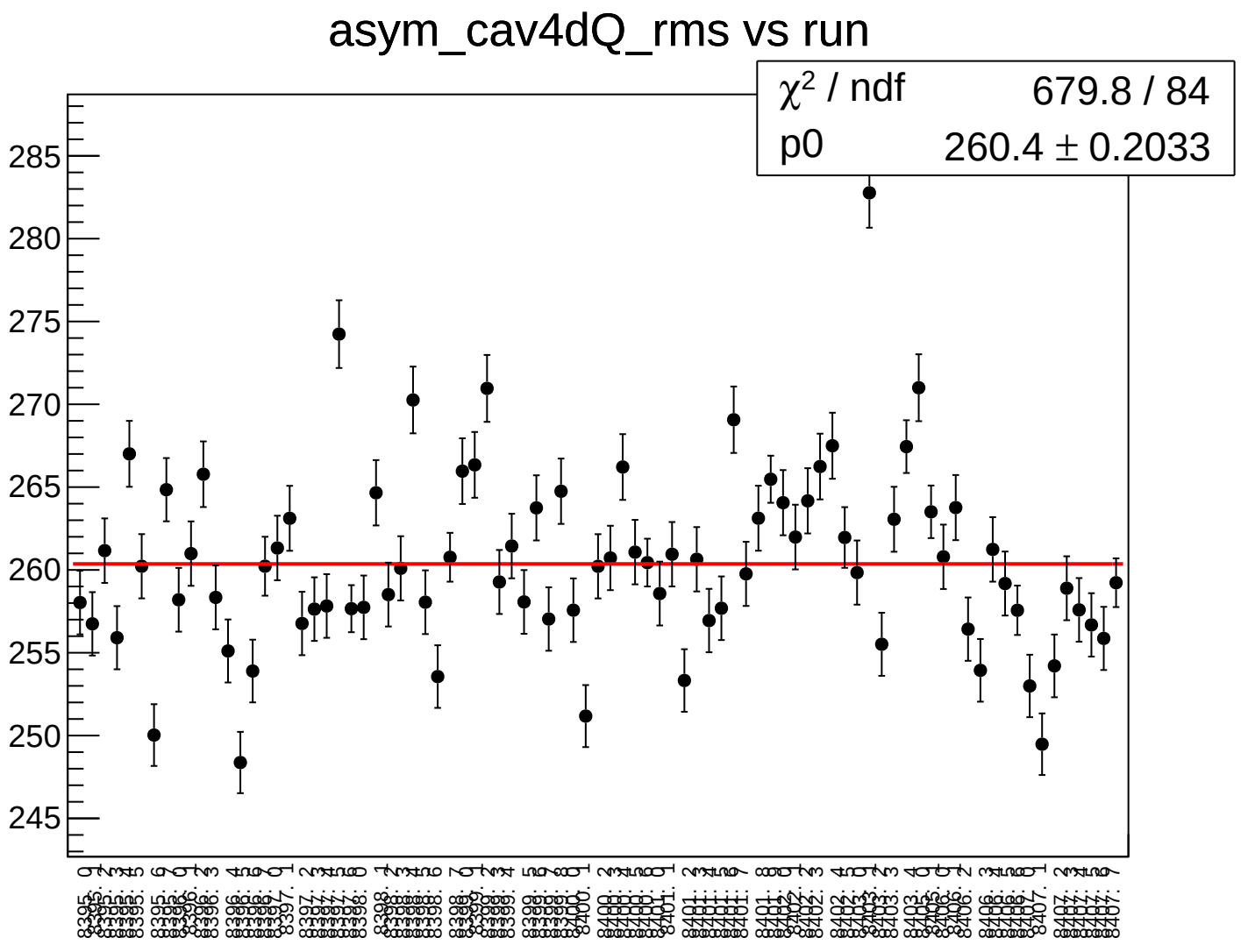

asym_cav4cQ_mean vs run
χ² / ndf 25.63 / 84
p0 −42.02 ± 221
6000
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 353.9
Std Dev 308.4
1.5
1
0.5
0
−0.5
−1

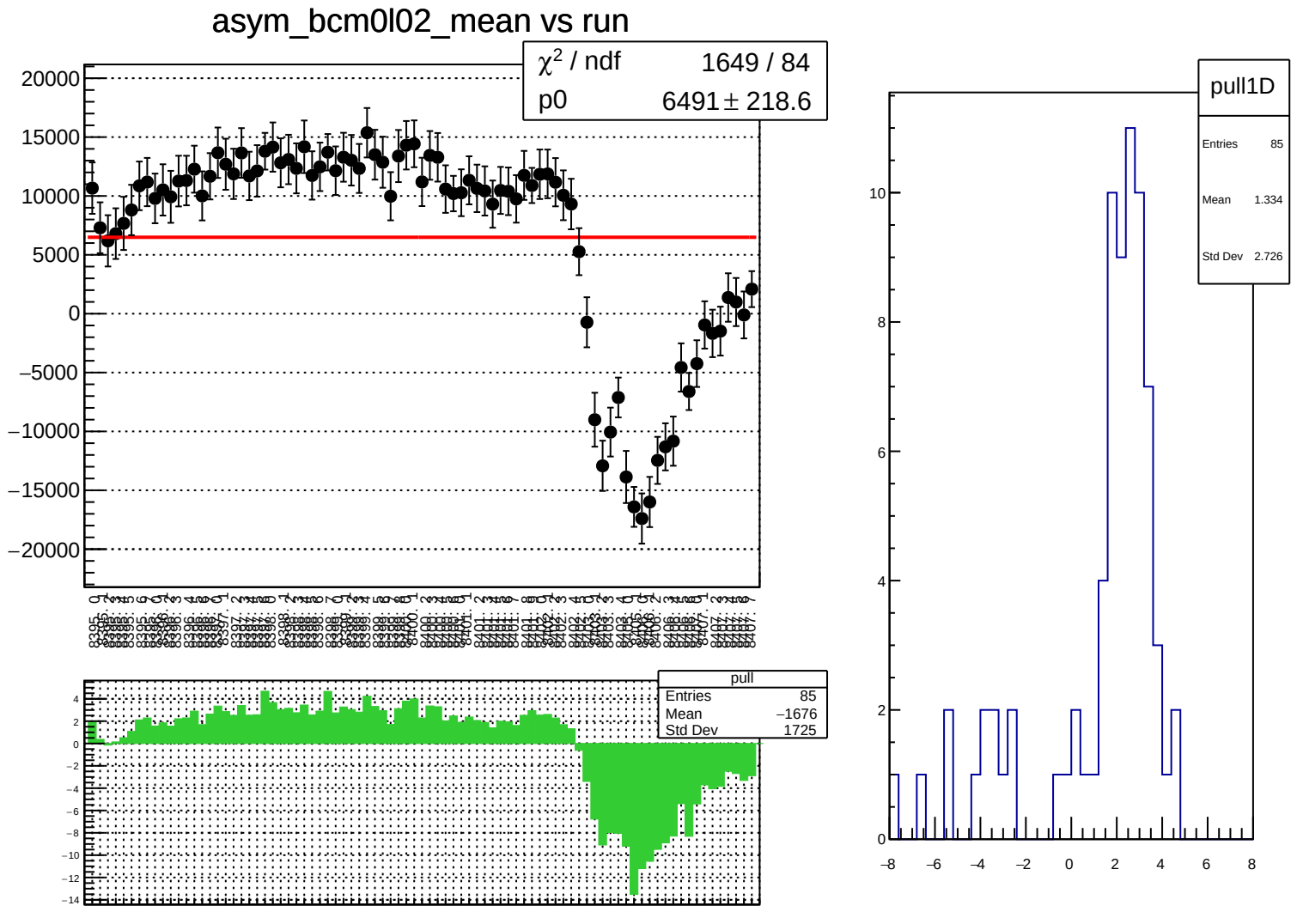

pull1D
Entries 85
Mean −0.003081
Std Dev 0.5491
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

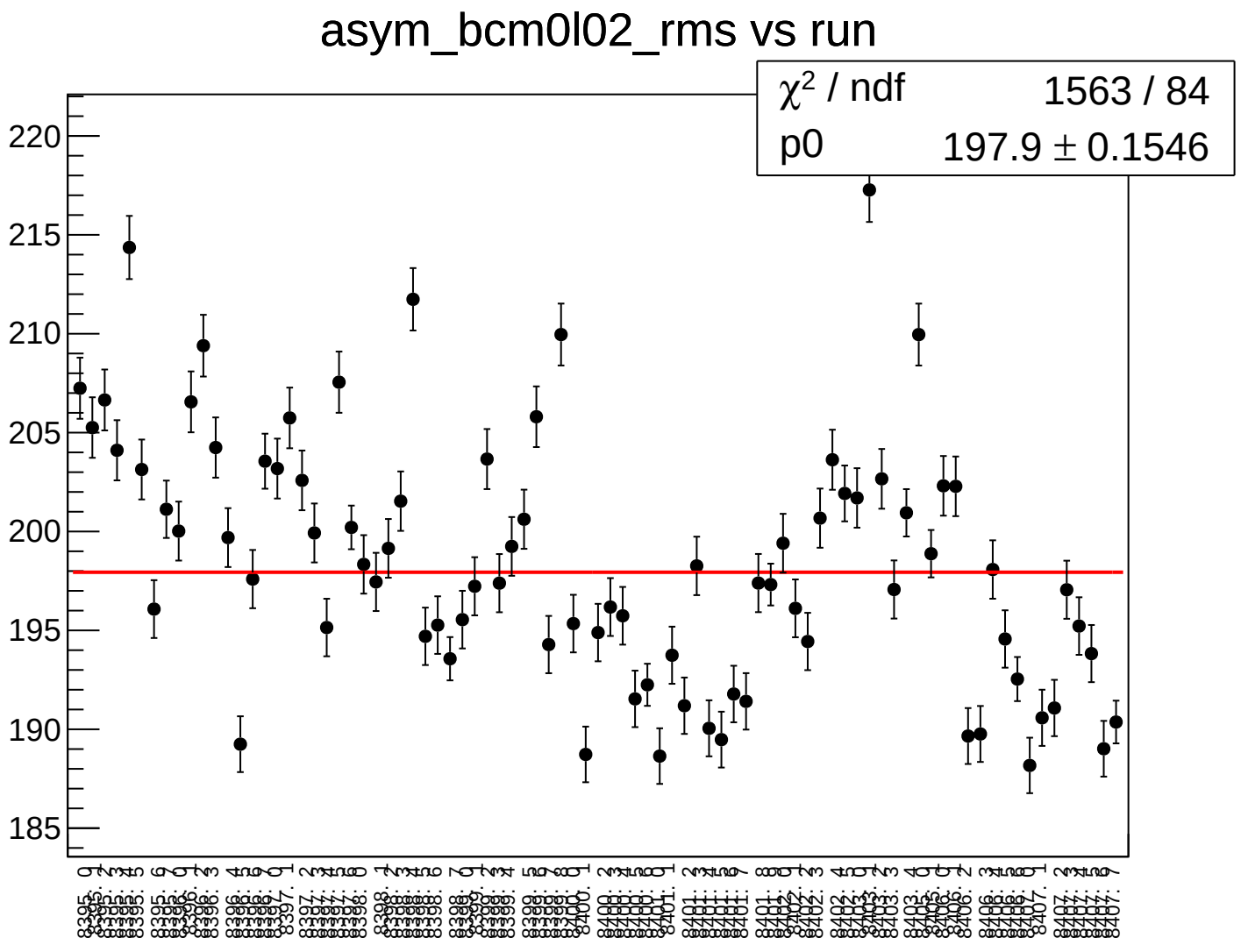

asym_cav4cQ_rms vs run
χ² / ndf 3741 / 84
p0 200 ± 0.1563
240
230
220
210
200
190
180

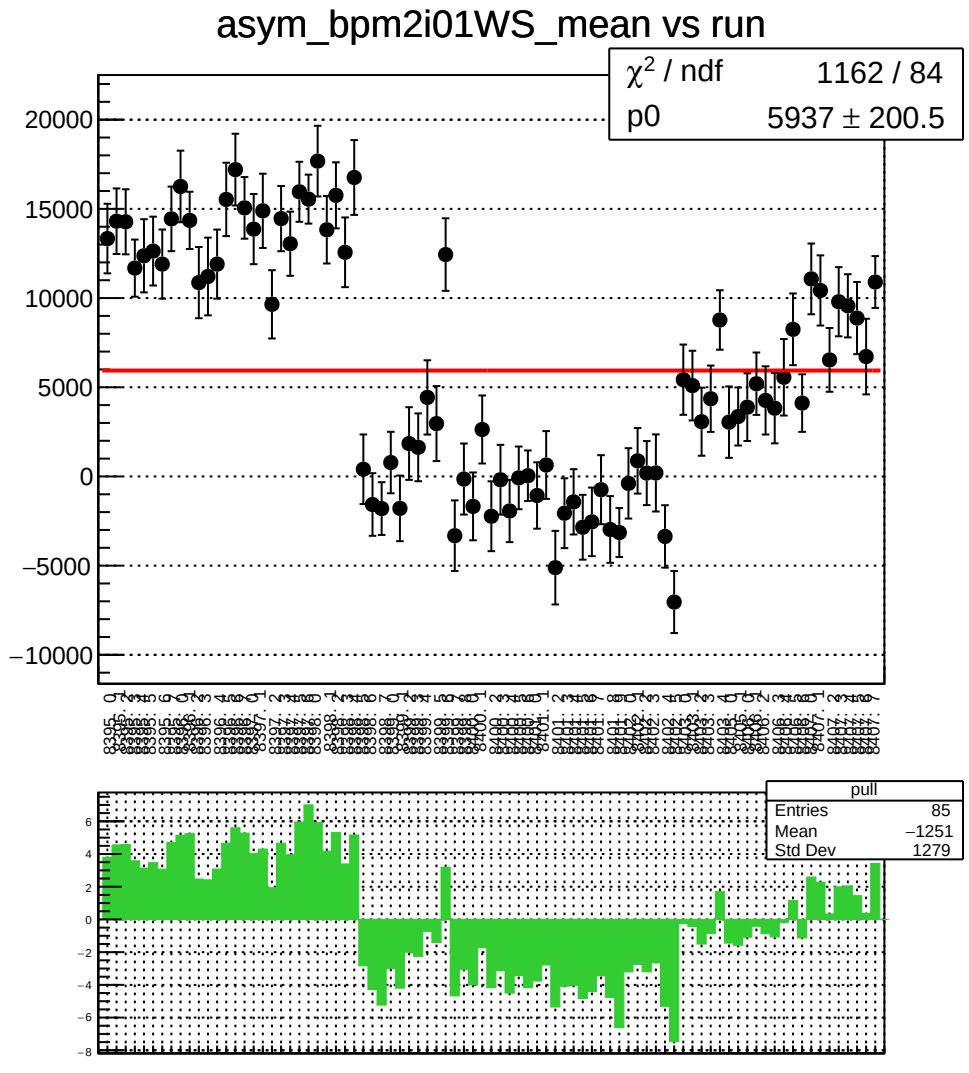

asym_cav4dQ_mean vs run
χ² / ndf 52.67 / 84
p0 −122 ± 287.5
pull
Entries 85
Mean −264.1
Std Dev 317.7

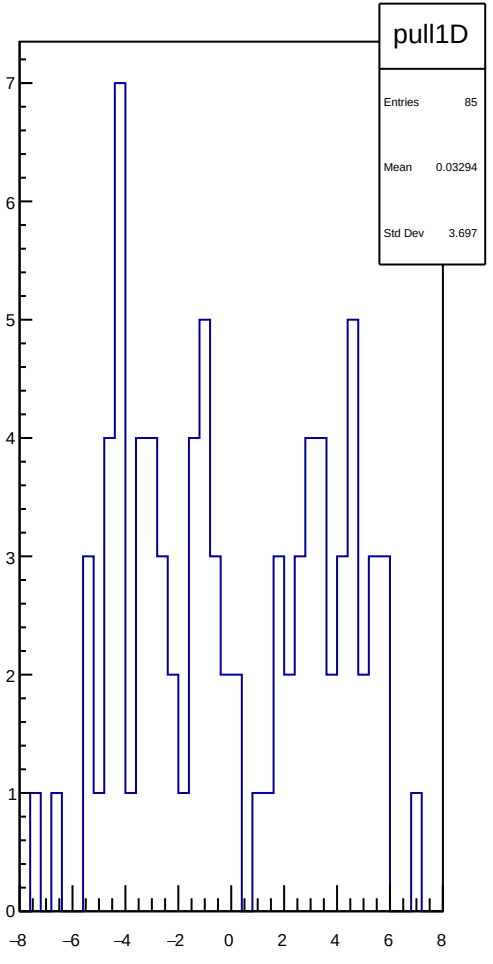

pull1D
Entries 85
Mean 0.003487
Std Dev 0.7872

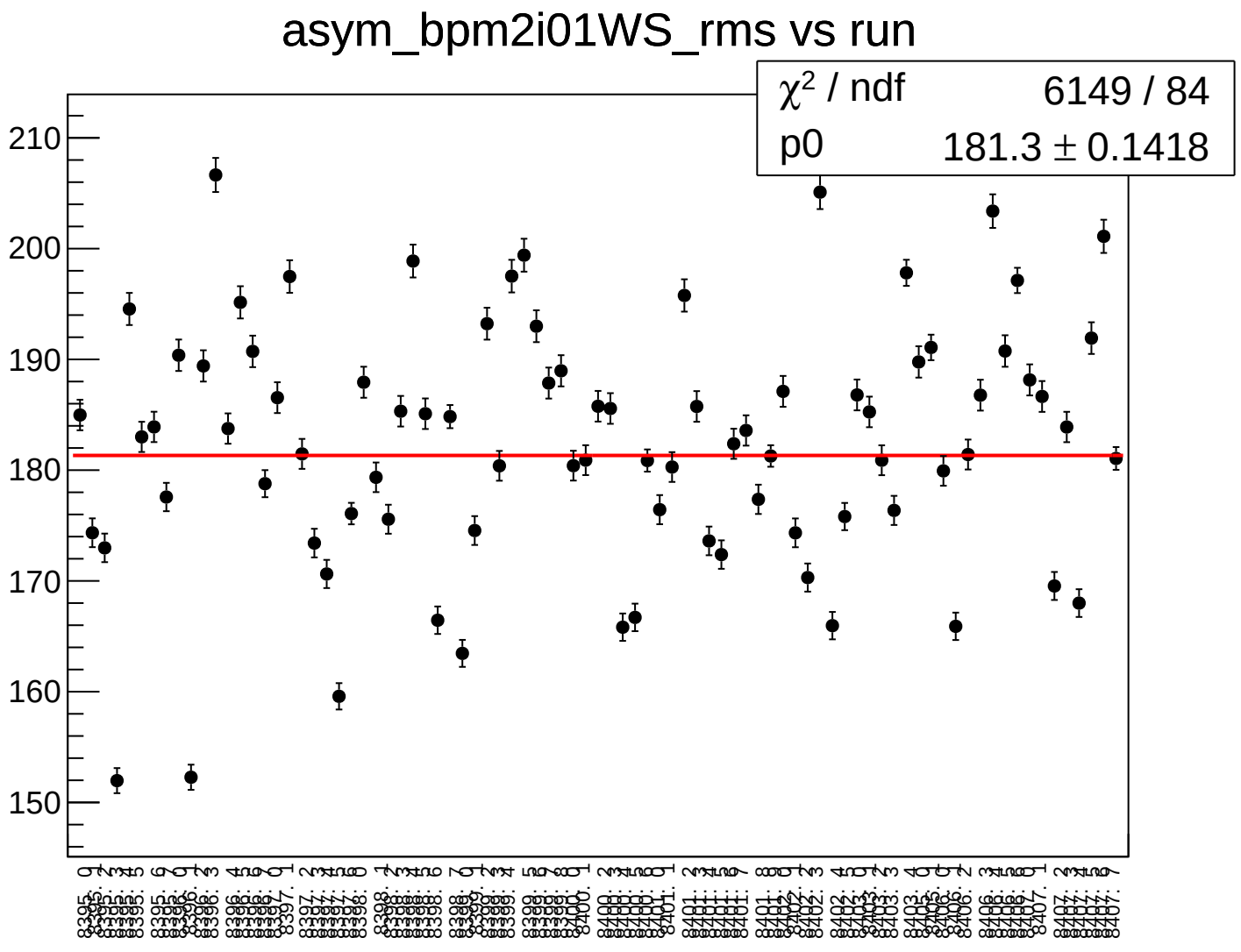

asym_cav4dQ_rms vs run
χ² / ndf 679.8 / 84
p0 260.4 ± 0.2033
285
280
275
270
265
260
255
250
245

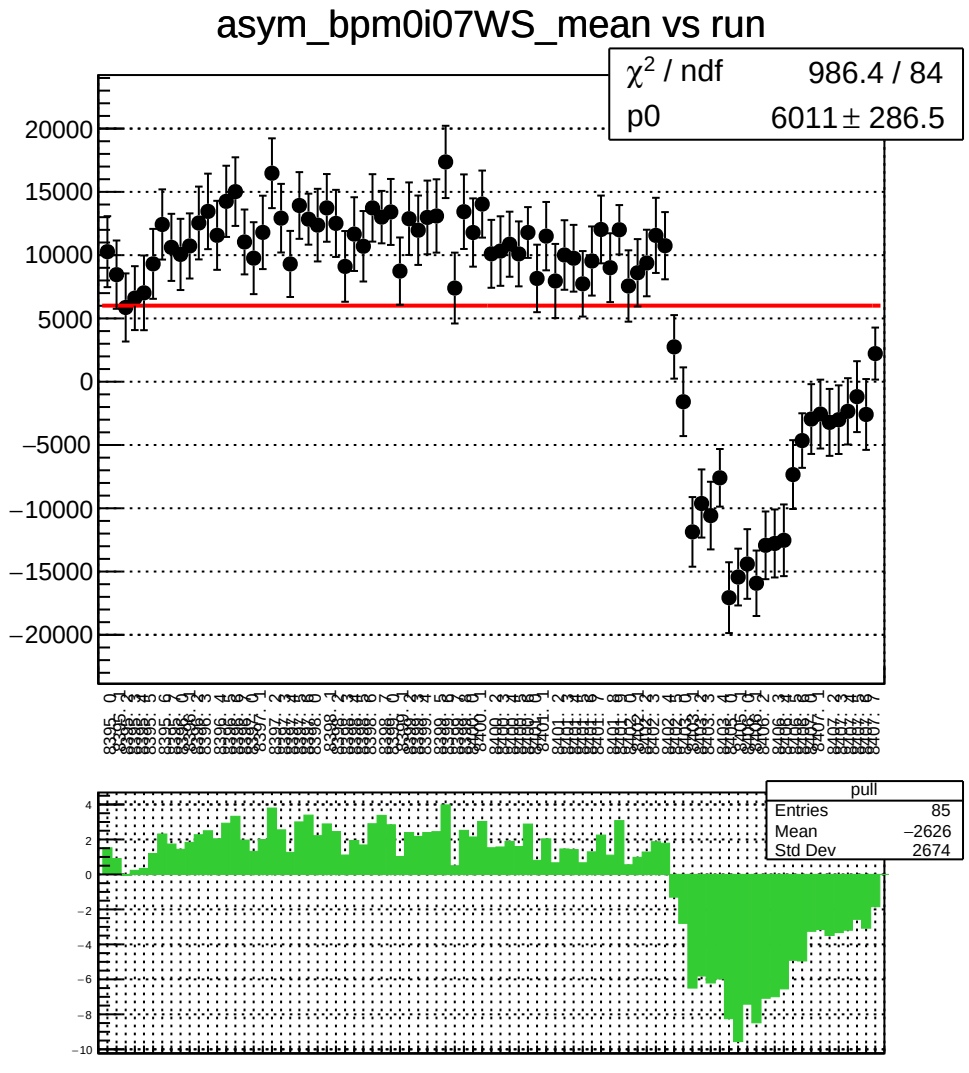

asym_bcm0l02_mean vs run
χ² / ndf 1649 / 84
p0 6491 ± 218.6
pull
Entries 85
Mean −1676
Std Dev 1725
pull1D
Entries 85
Mean 1.334
Std Dev 2.726

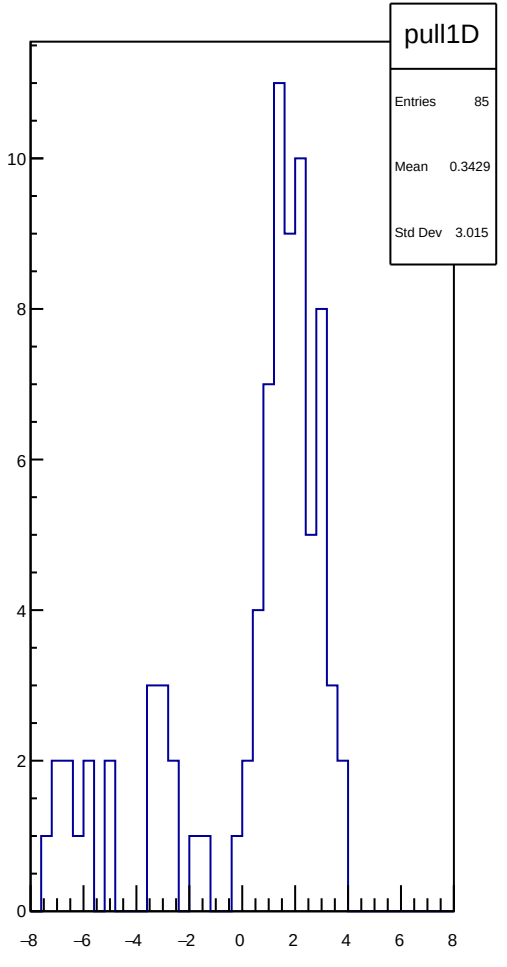

asym_bcm0l02_rms vs run
χ² / ndf 1563 / 84
p0 197.9 ± 0.1546
220
215
210
205
200
195
190
185

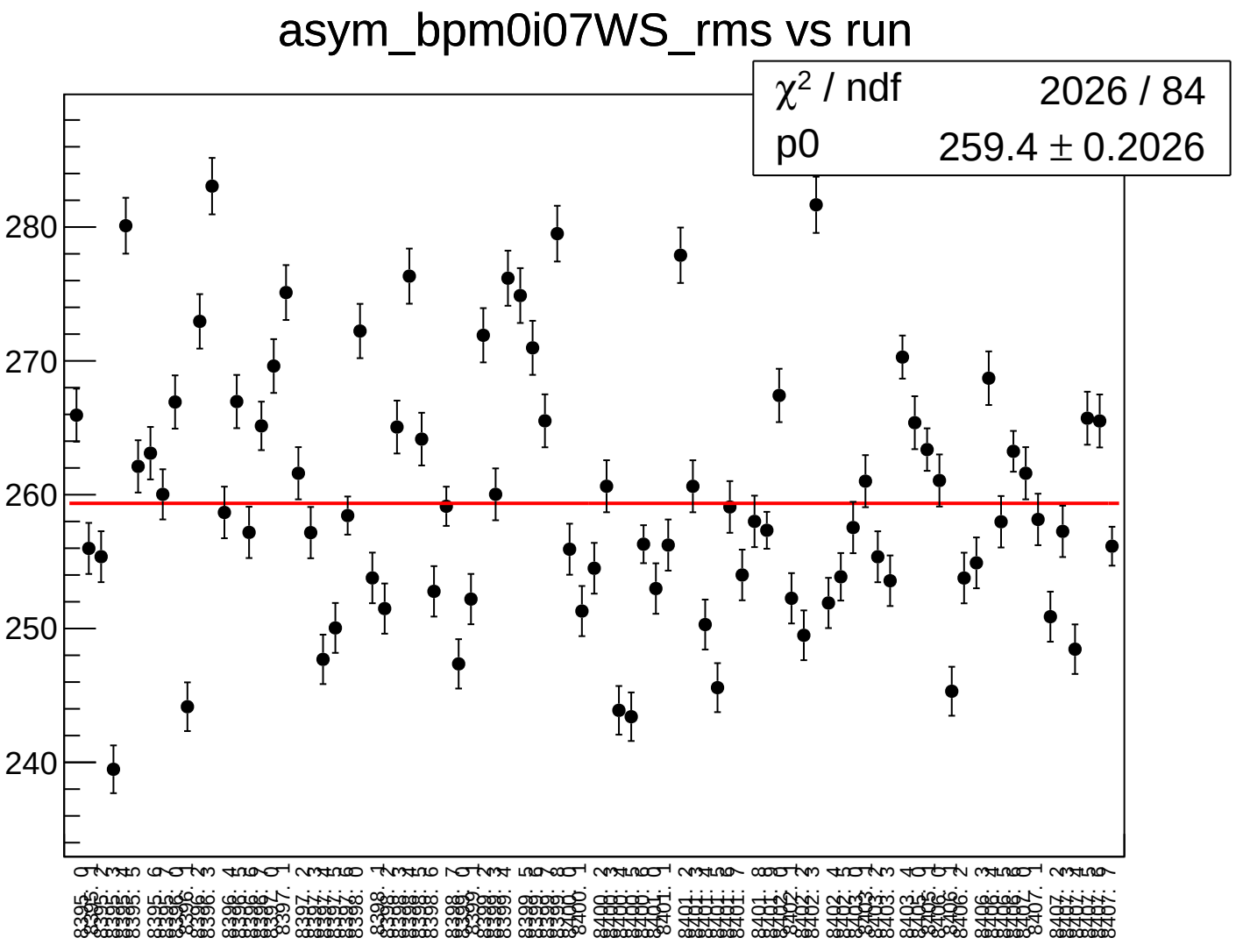

asym_bpm2i01WS_mean vs run
χ² / ndf 1162 / 84
p0 5937 ± 200.5
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −1251
Std Dev 1279
6
4
2
0
−2
−4
−6
−8

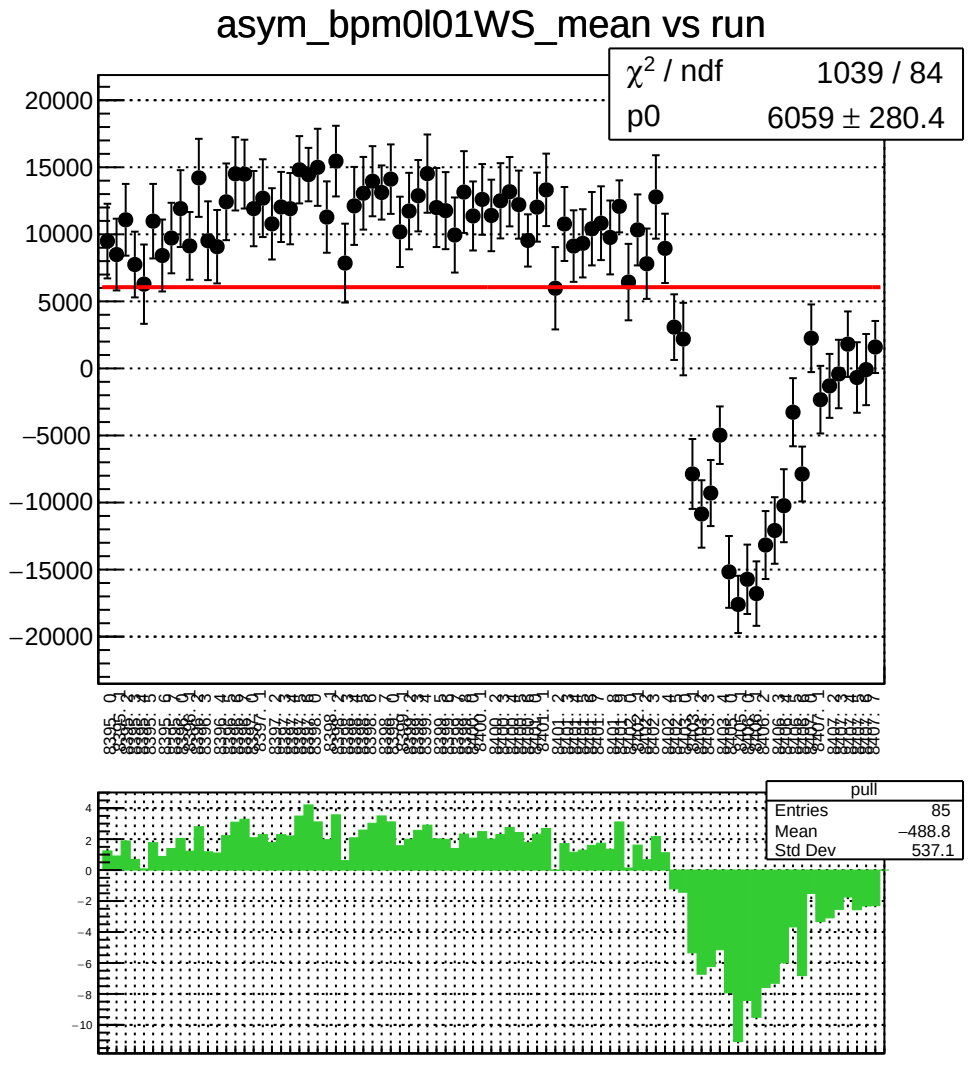

pull1D
Entries 85
Mean 0.03294
Std Dev 3.697
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

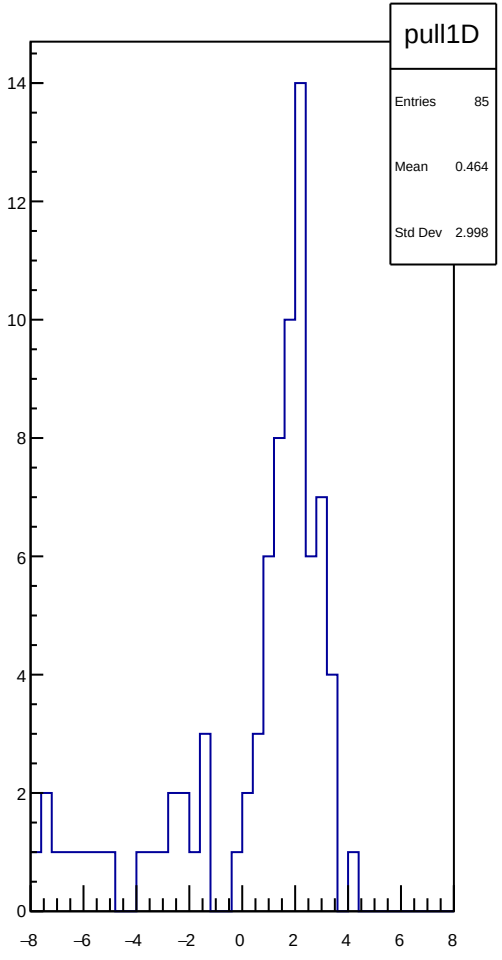

asym_bpm2i01WS_rms vs run
χ² / ndf 6149 / 84
p0 181.3 ± 0.1418
210
200
190
180
170
160
150

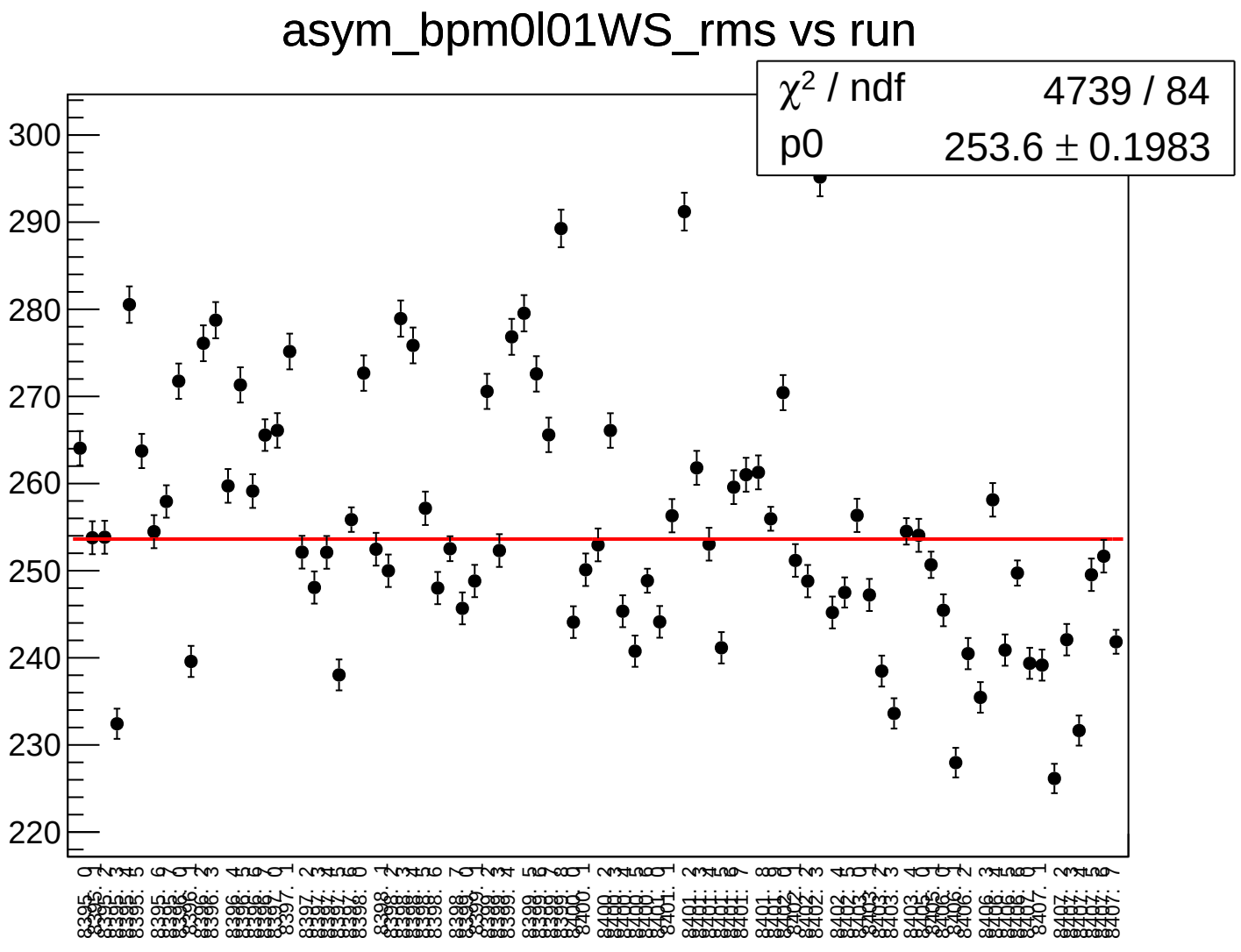

asym_bpm0i07WS_mean vs run
χ² / ndf 986.4 / 84
p0 6011 ± 286.5
pull
Entries 85
Mean −2626
Std Dev 2674

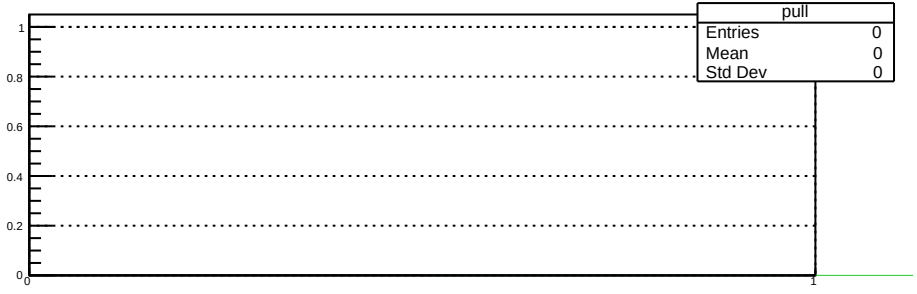

pull1D
Entries 85
Mean 0.3429
Std Dev 3.015

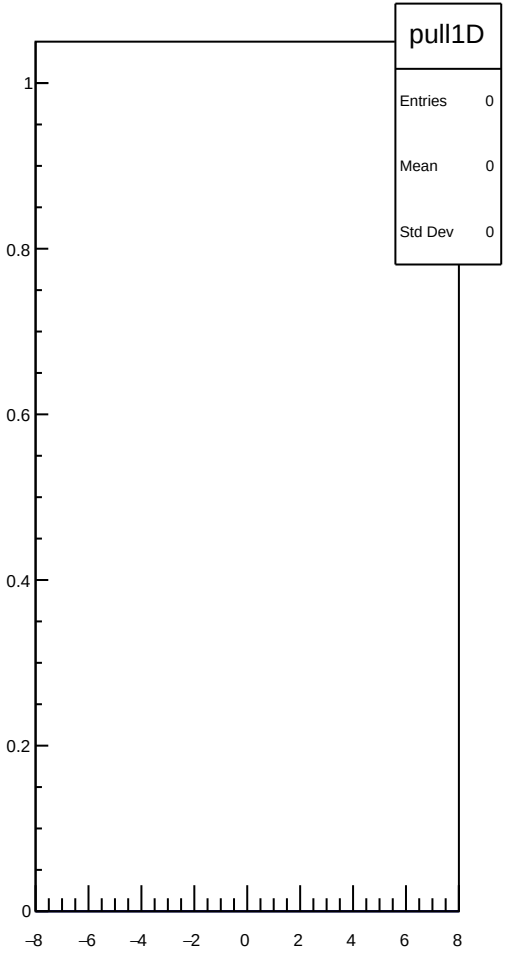

asym_bpm0i07WS_rms vs run
χ² / ndf 2026 / 84
p0 259.4 ± 0.2026
280
270
260
250
240

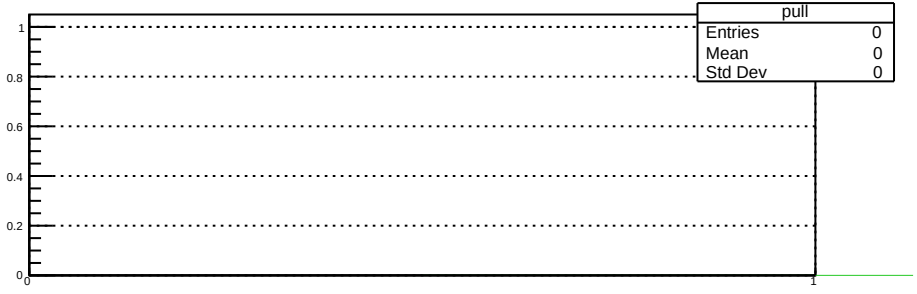

asym_bpm0l01WS_mean vs run
χ² / ndf 1039 / 84
p0 6059 ± 280.4
pull
Entries 85
Mean −488.8
Std Dev 537.1

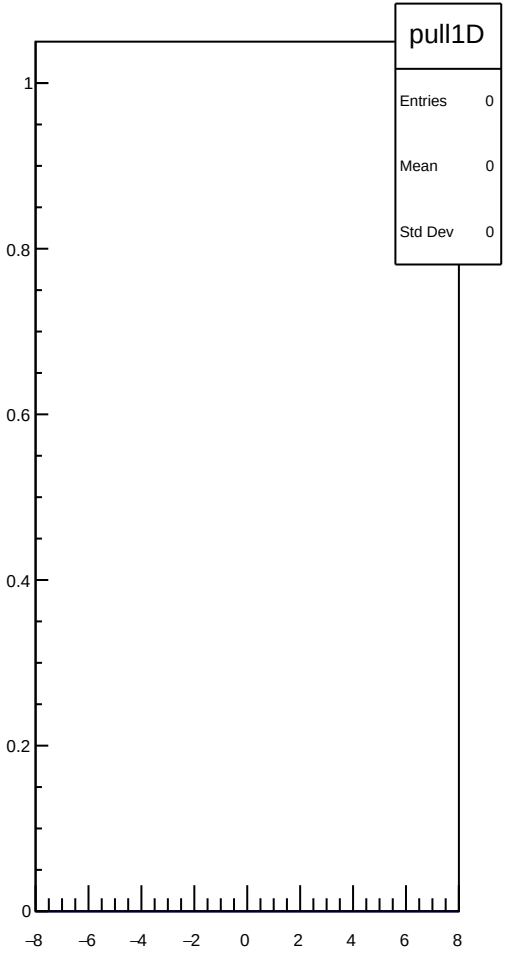

pull1D
Entries 85
Mean 0.464
Std Dev 2.998

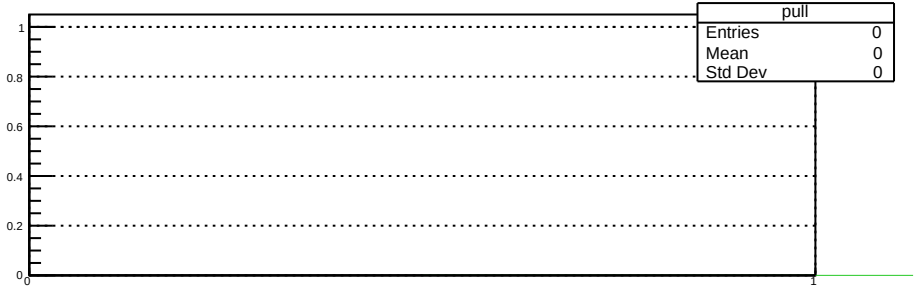

asym_bpm0l01WS_rms vs run
χ² / ndf 4739 / 84
p0 253.6 ± 0.1983
300
290
280
270
260
250
240
230
220

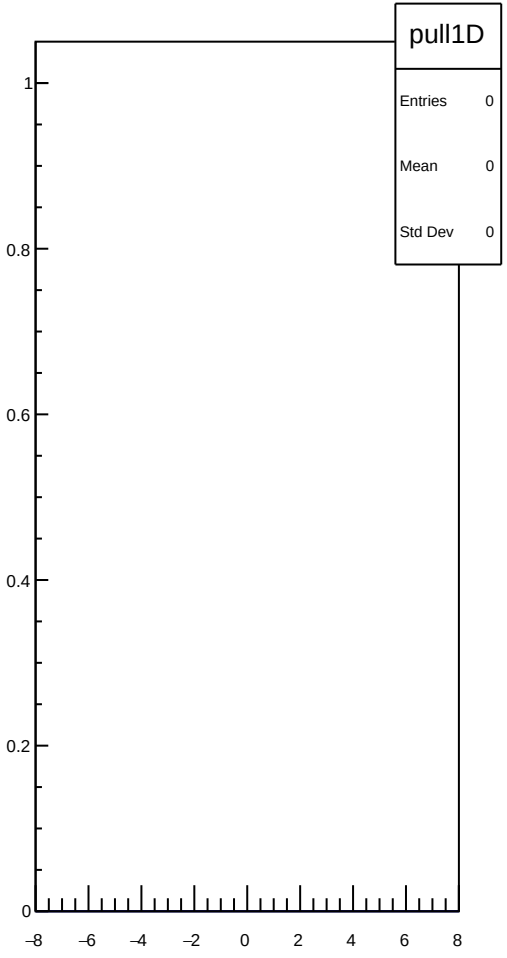

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

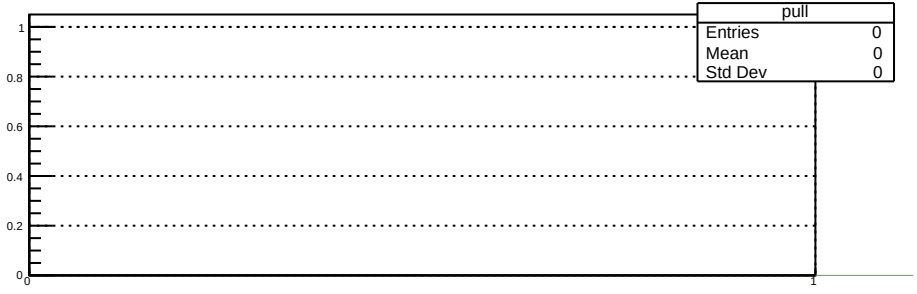

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

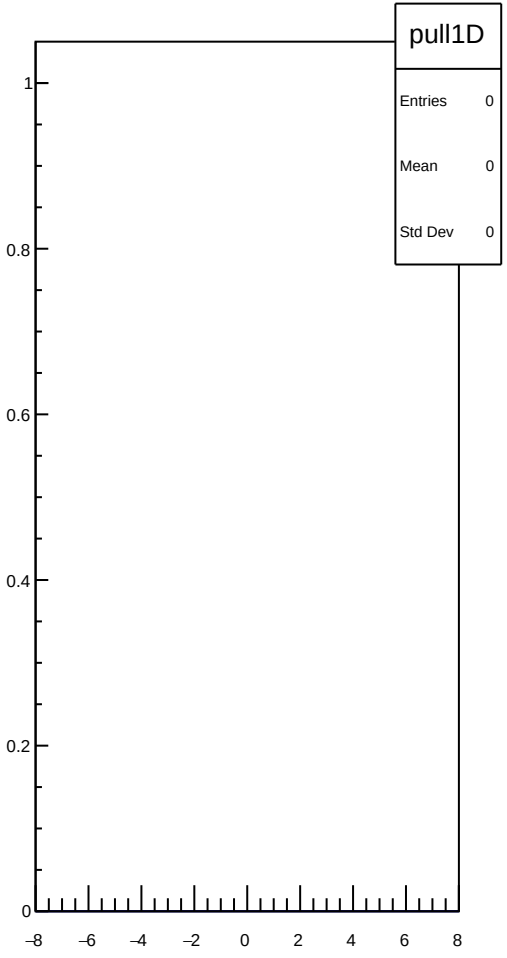

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

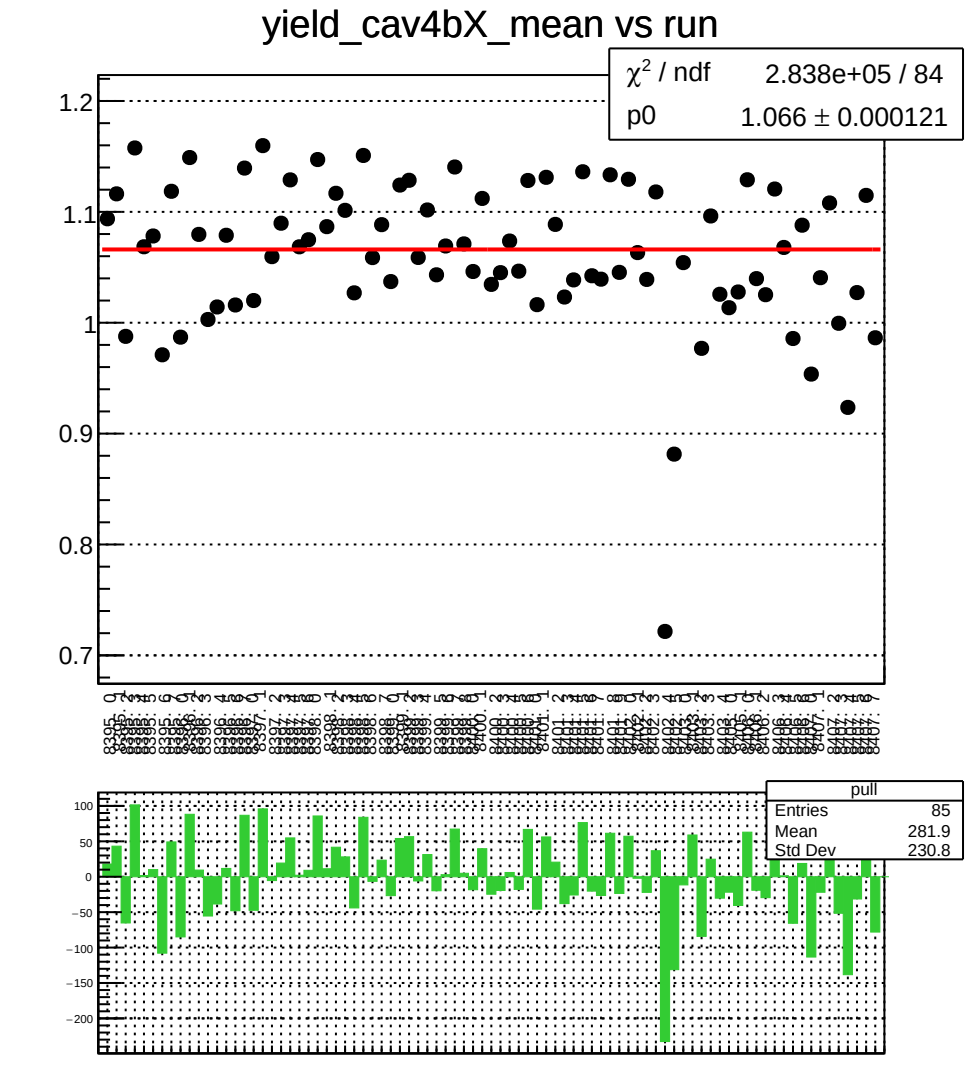

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

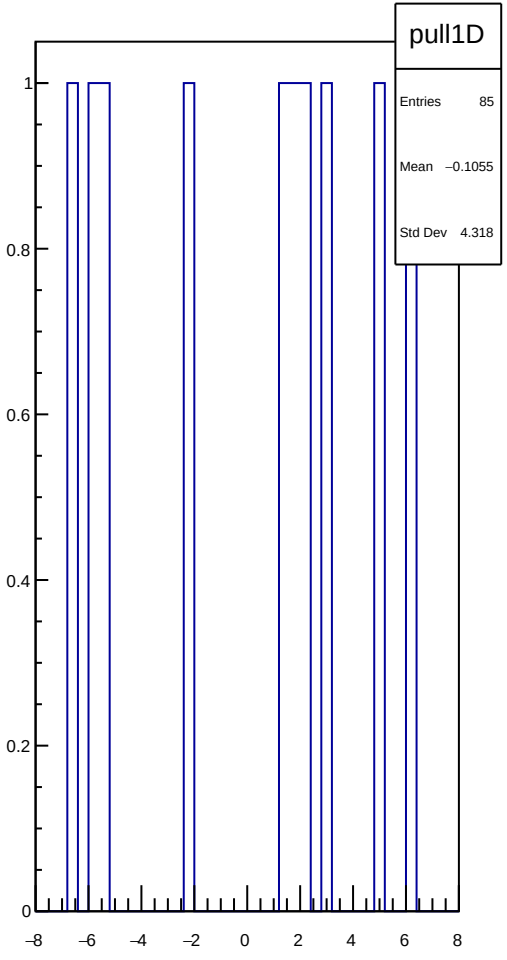

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

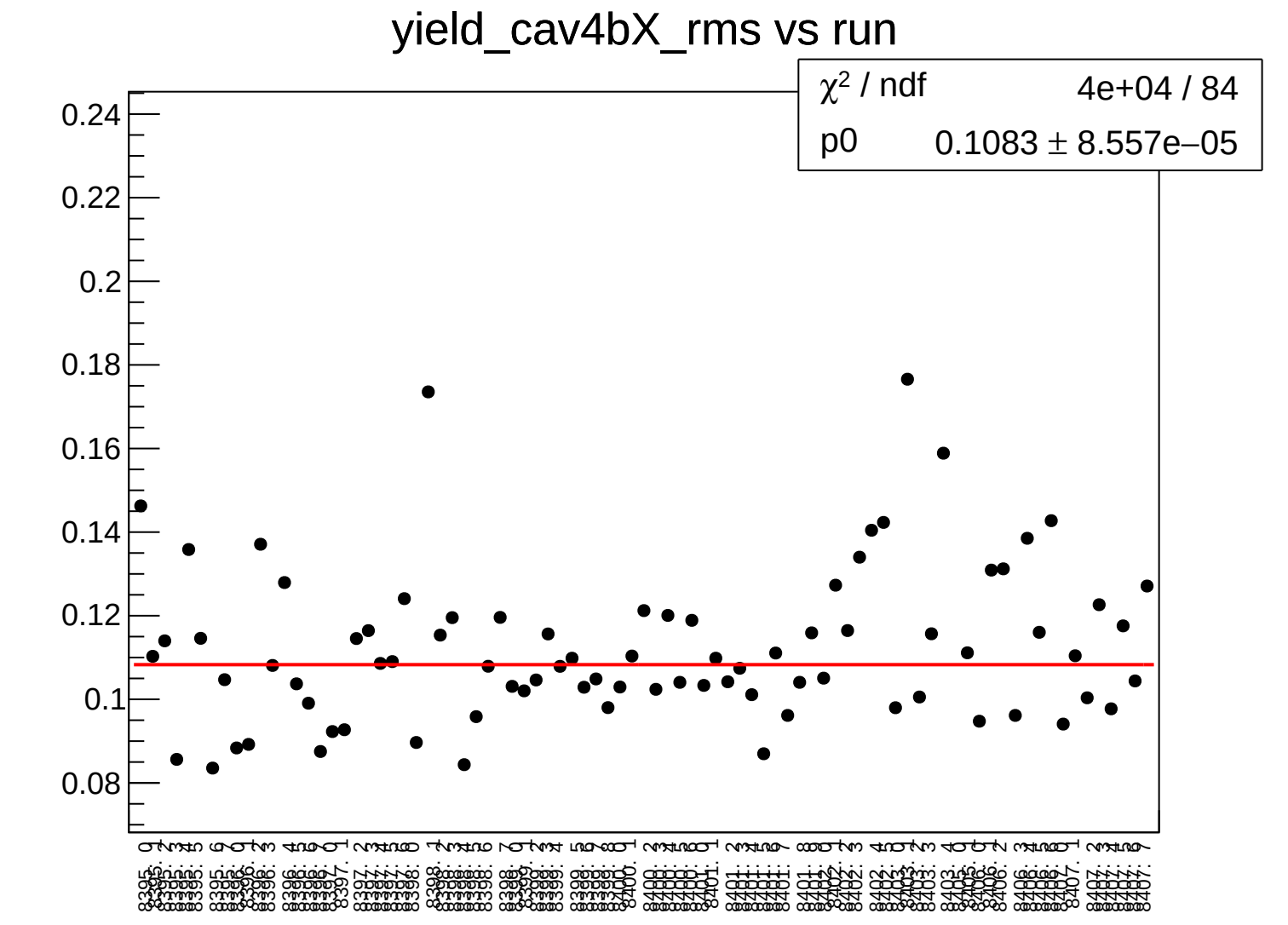

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

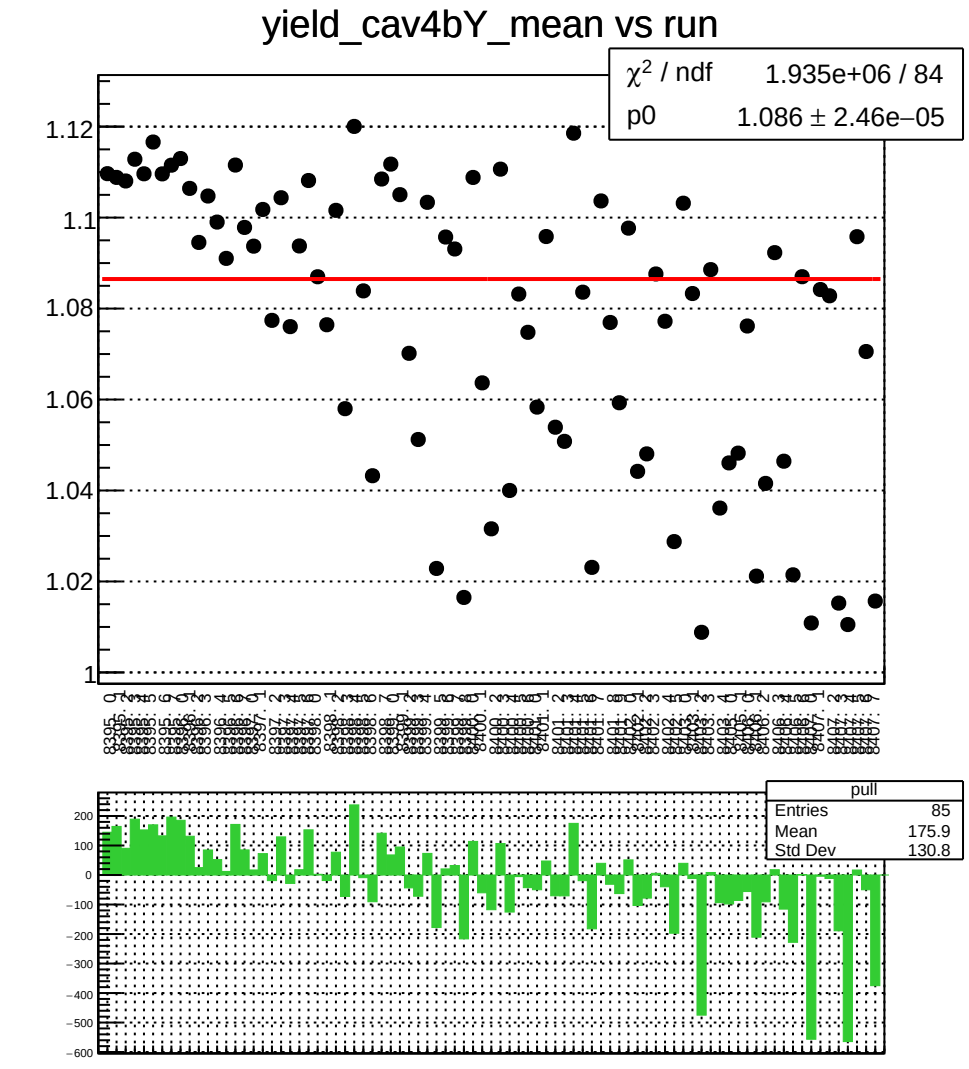

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

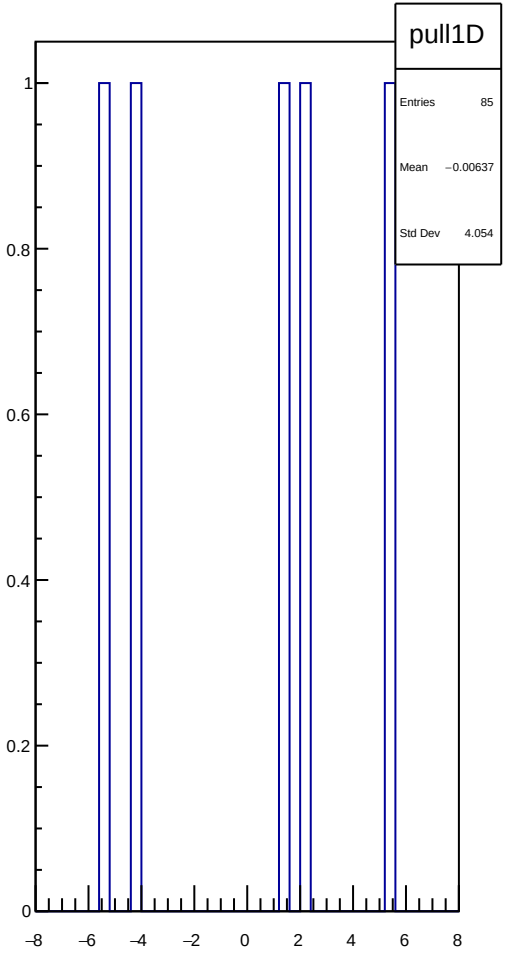

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

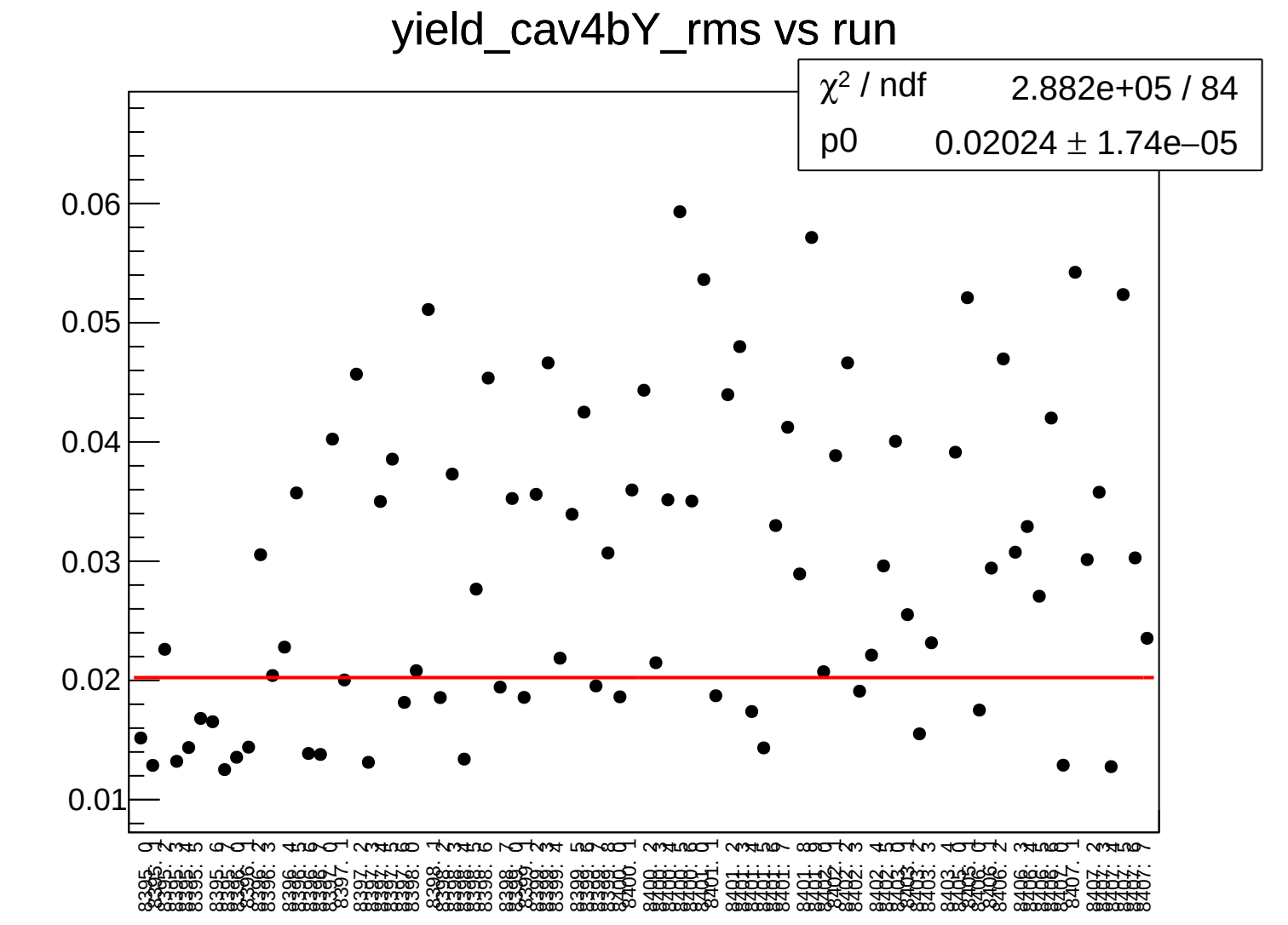

yield_cav4bX_mean vs run
χ² / ndf 2.838e+05 / 84
p0 1.066 ± 0.000121
pull
Entries 85
Mean 281.9
Std Dev 230.8

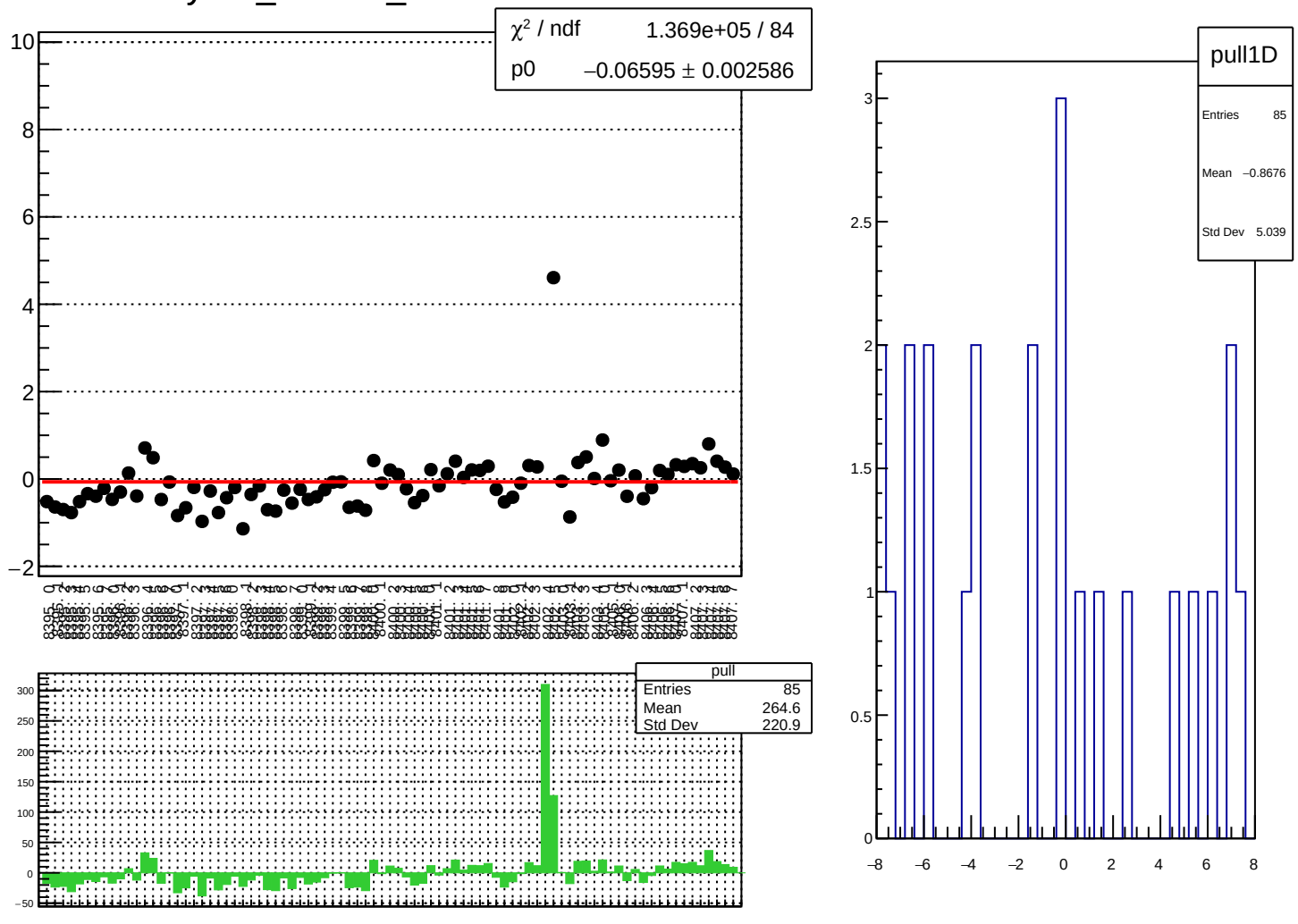

pull1D
Entries 85
Mean −0.1055
Std Dev 4.318

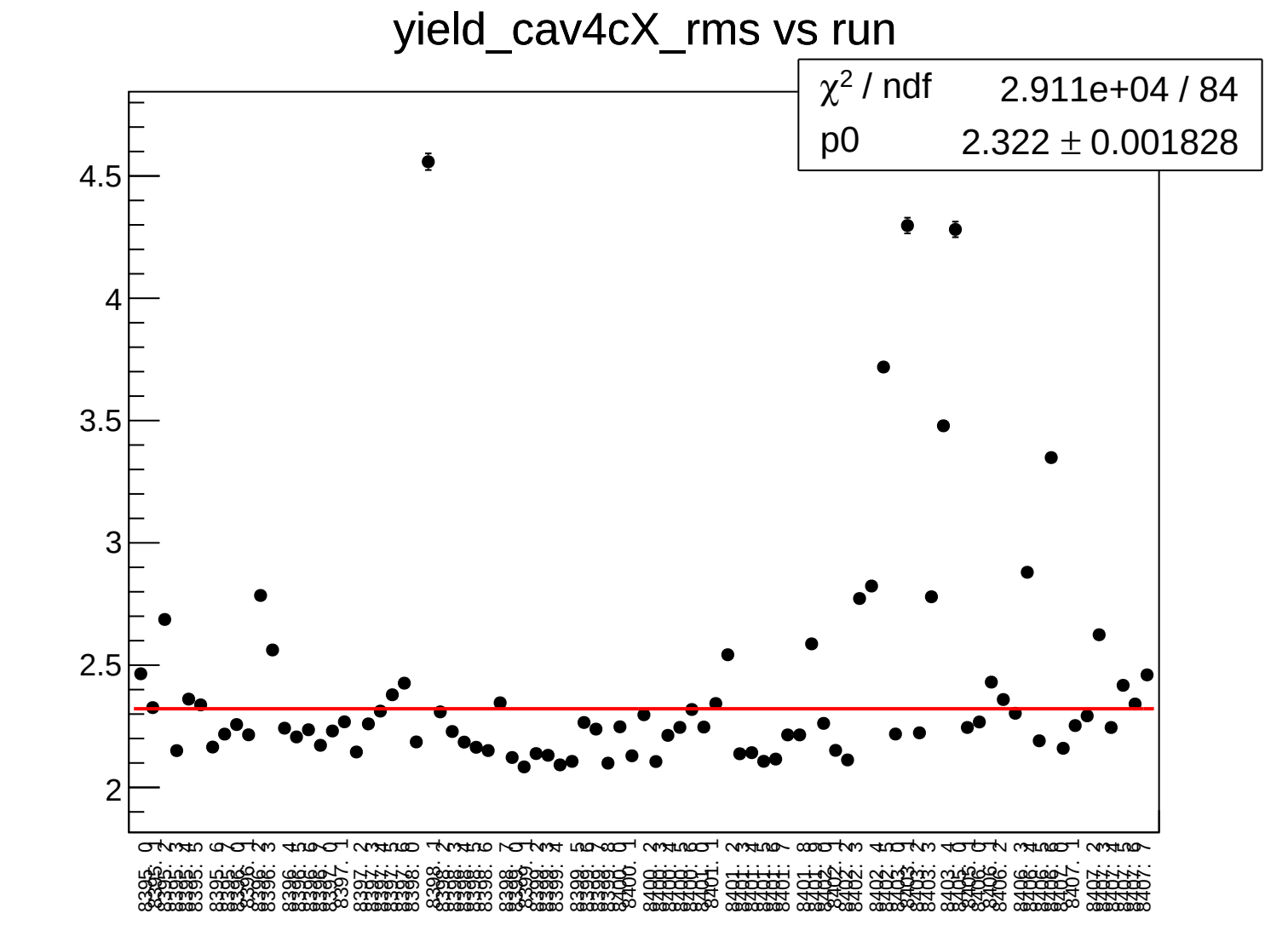

yield_cav4bX_rms vs run
χ² / ndf 4e+04 / 84
p0 0.1083 ± 8.557e−05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08

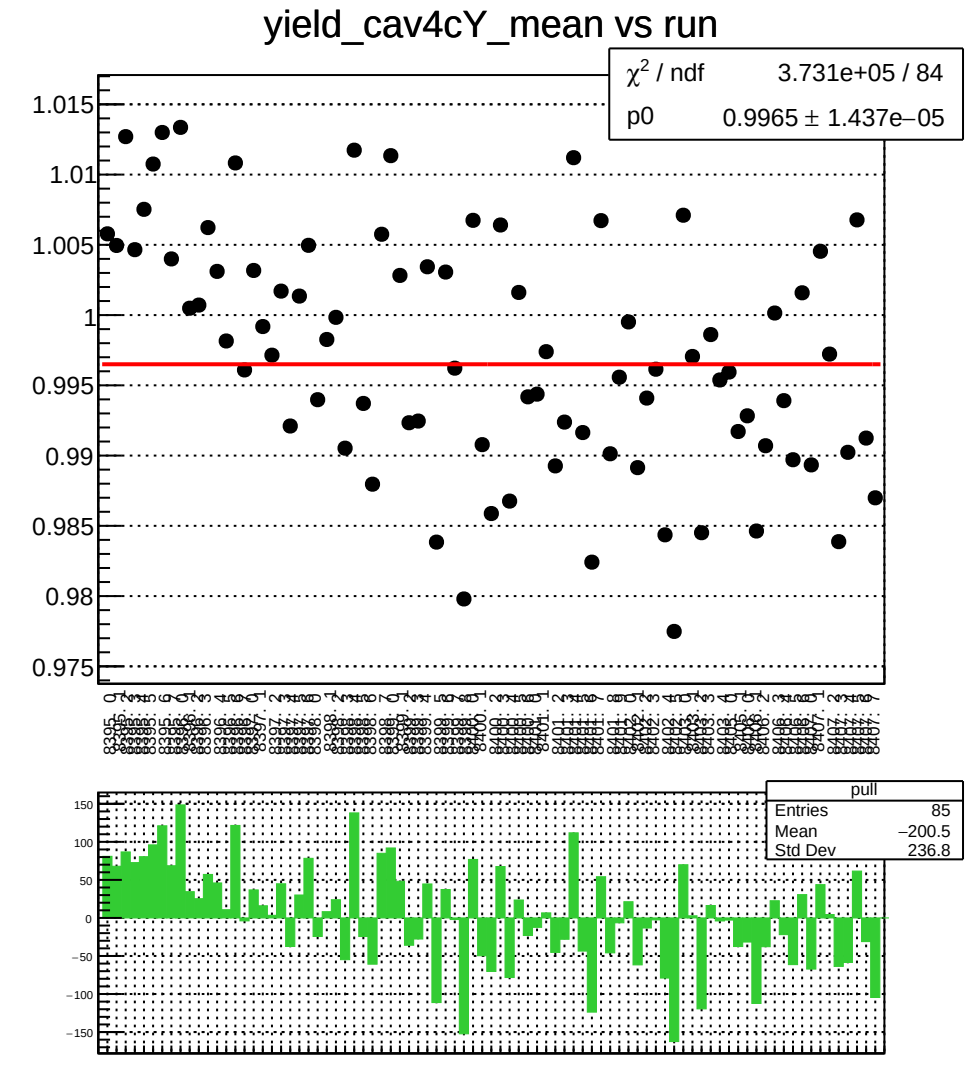

yield_cav4bY_mean vs run
χ² / ndf 1.935e+06 / 84
p0 1.086 ± 2.46e−05
1.12
1.1
1.08
1.06
1.04
1.02
1
pull
Entries 85
Mean 175.9
Std Dev 130.8
200
100
0
−100
−200
−300
−400
−500
−600

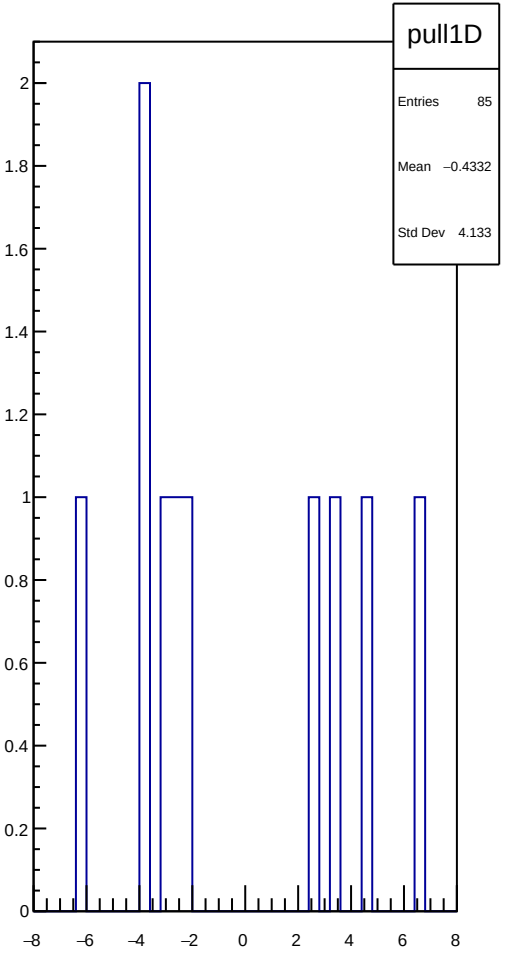

pull1D
Entries 85
Mean −0.00637
Std Dev 4.054
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

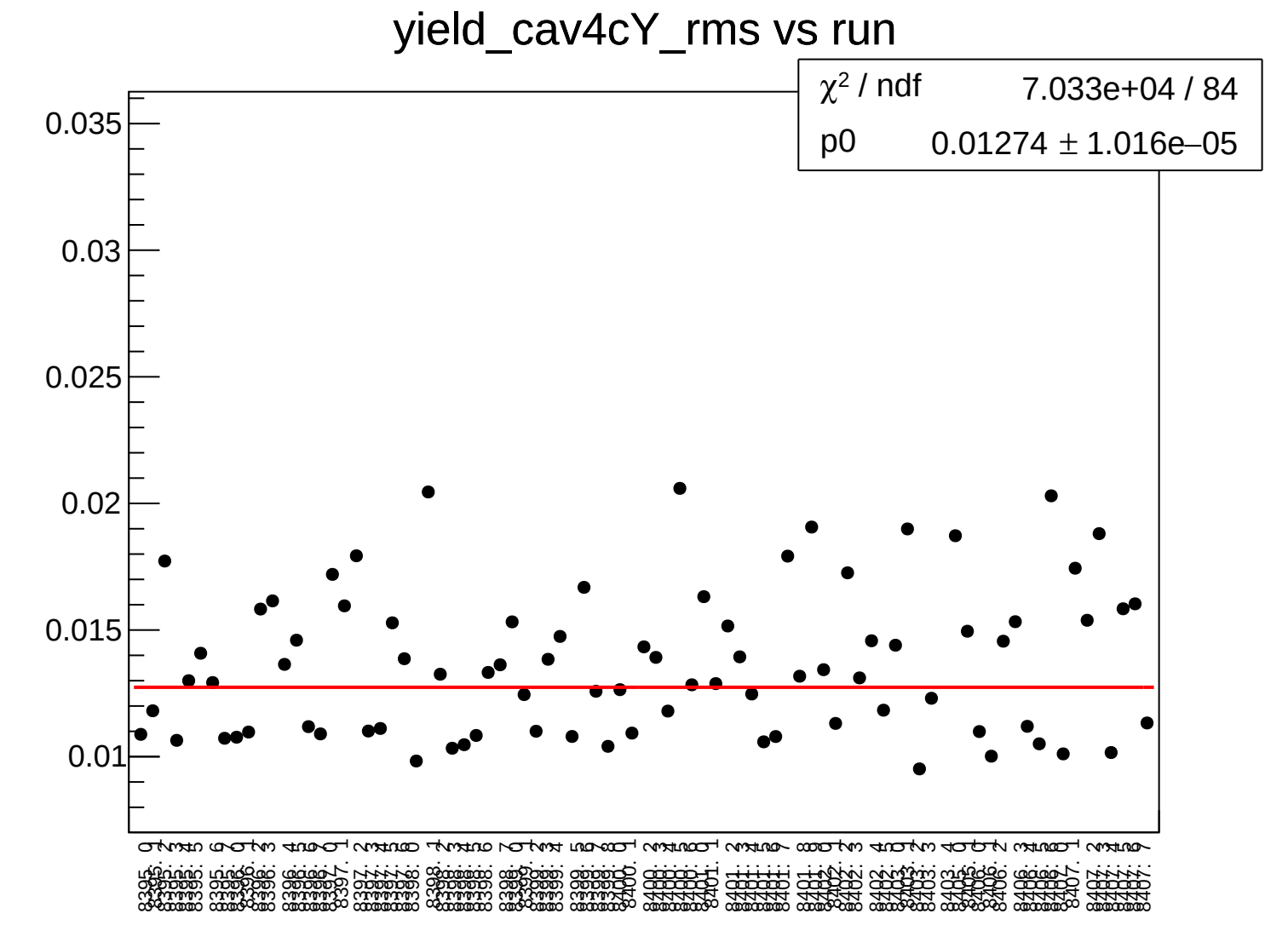

yield_cav4bY_rms vs run
χ² / ndf 2.882e+05 / 84
p0 0.02024 ± 1.74e−05
0.06
0.05
0.04
0.03
0.02
0.01

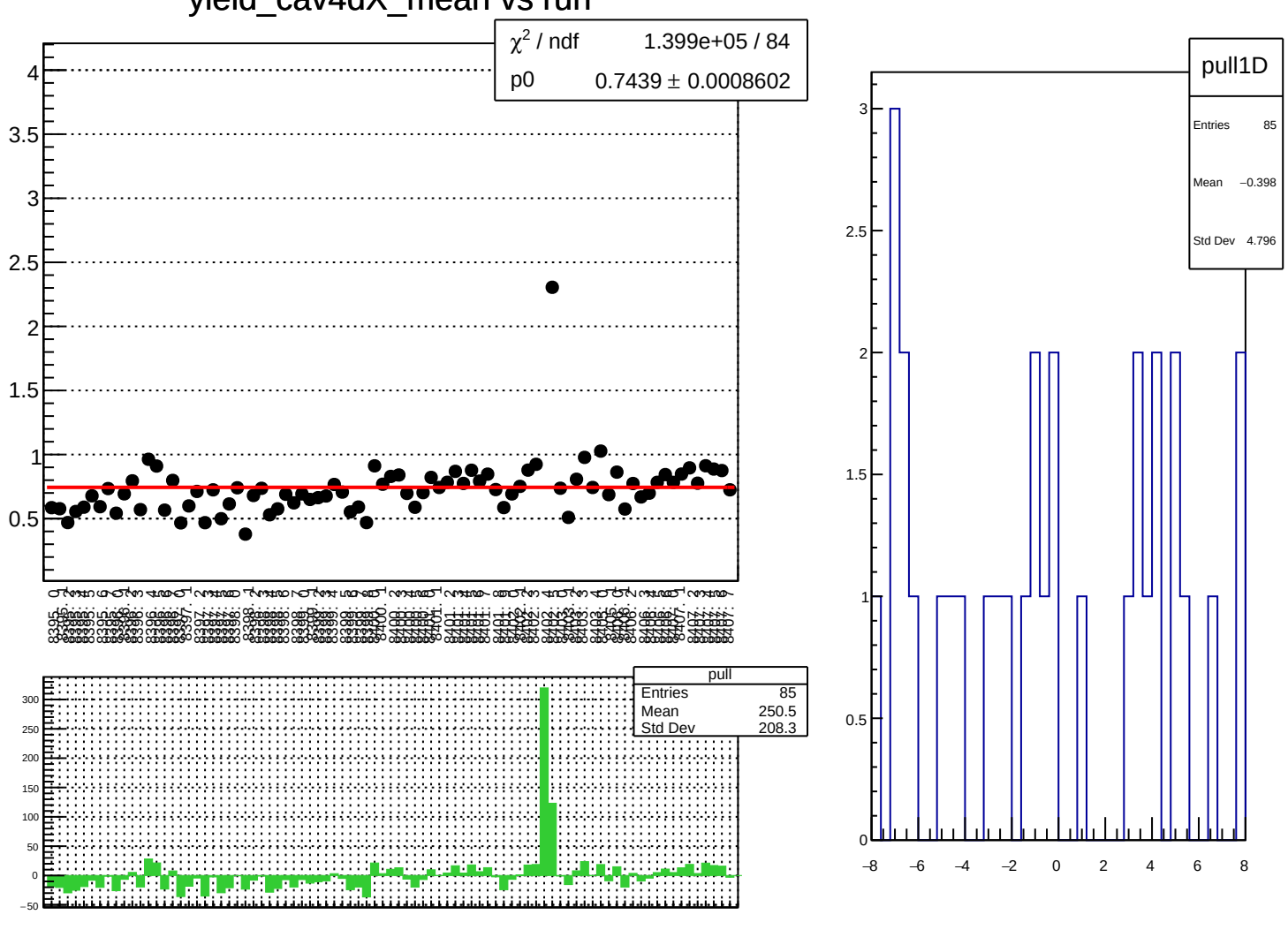

yield_cav4cX_mean vs run
χ² / ndf 1.369e+05 / 84
p0 −0.06595 ± 0.002586
pull
Entries 85
Mean 264.6
Std Dev 220.9
pull1D
Entries 85
Mean −0.8676
Std Dev 5.039

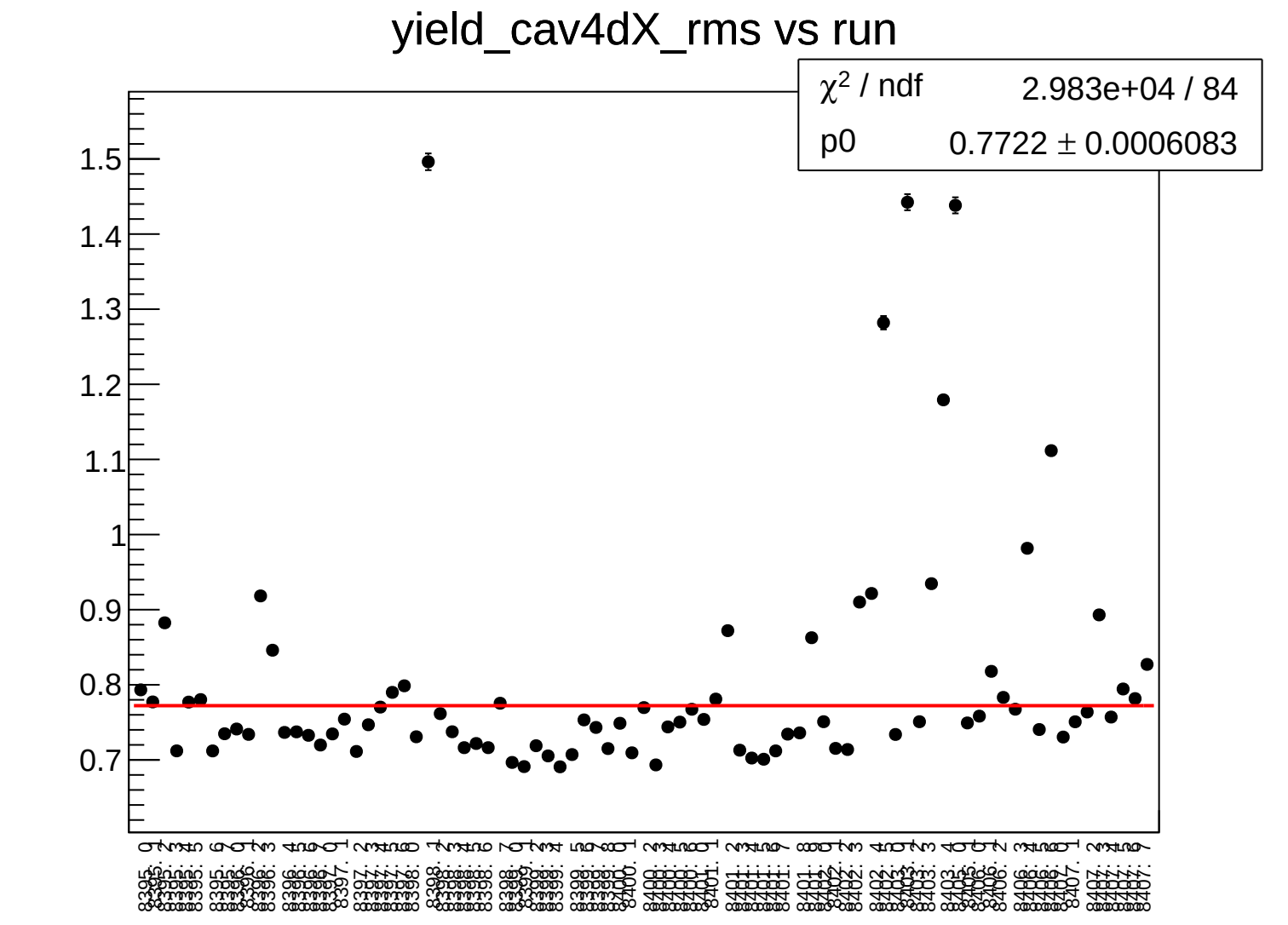

yield_cav4cX_rms vs run
χ^2 / ndf 2.911e+04 / 84
p0 2.322 ± 0.001828
4.5
4
3.5
3
2.5
2

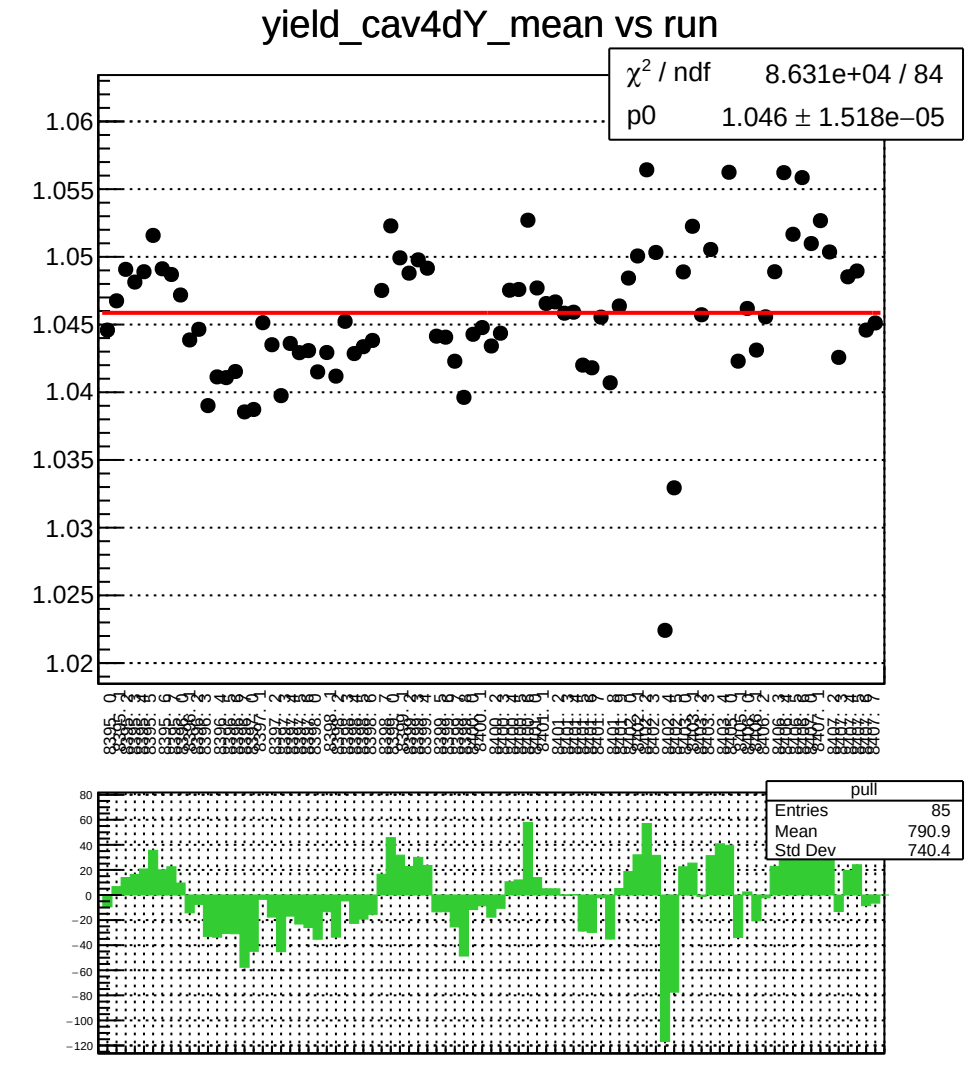

yield_cav4cY_mean vs run
χ² / ndf 3.731e+05 / 84
p0 0.9965 ± 1.437e−05
1.015
1.01
1.005
1
0.995
0.99
0.985
0.98
0.975
pull
Entries 85
Mean −200.5
Std Dev 236.8
150
100
50
0
−50
−100
−150

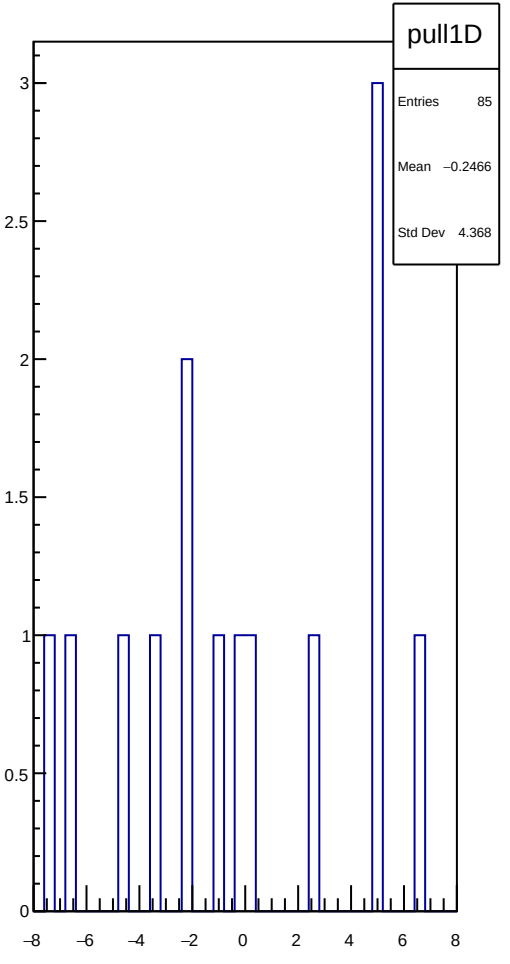

pull1D
Entries 85
Mean −0.4332
Std Dev 4.133
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

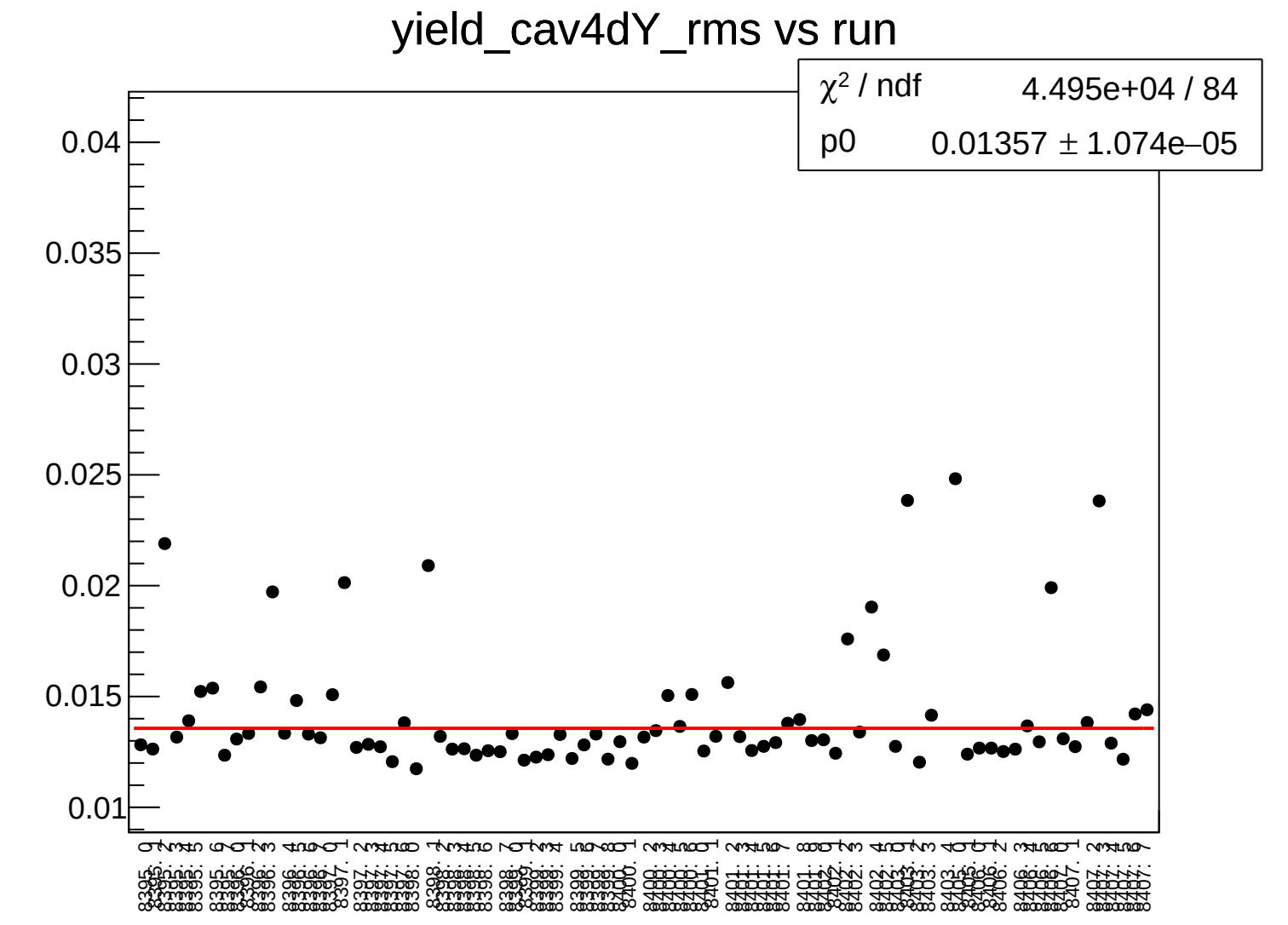

yield_cav4cY_rms vs run
χ² / ndf 7.033e+04 / 84
p0 0.01274 ± 1.016e−05
0.035
0.03
0.025
0.02
0.015
0.01

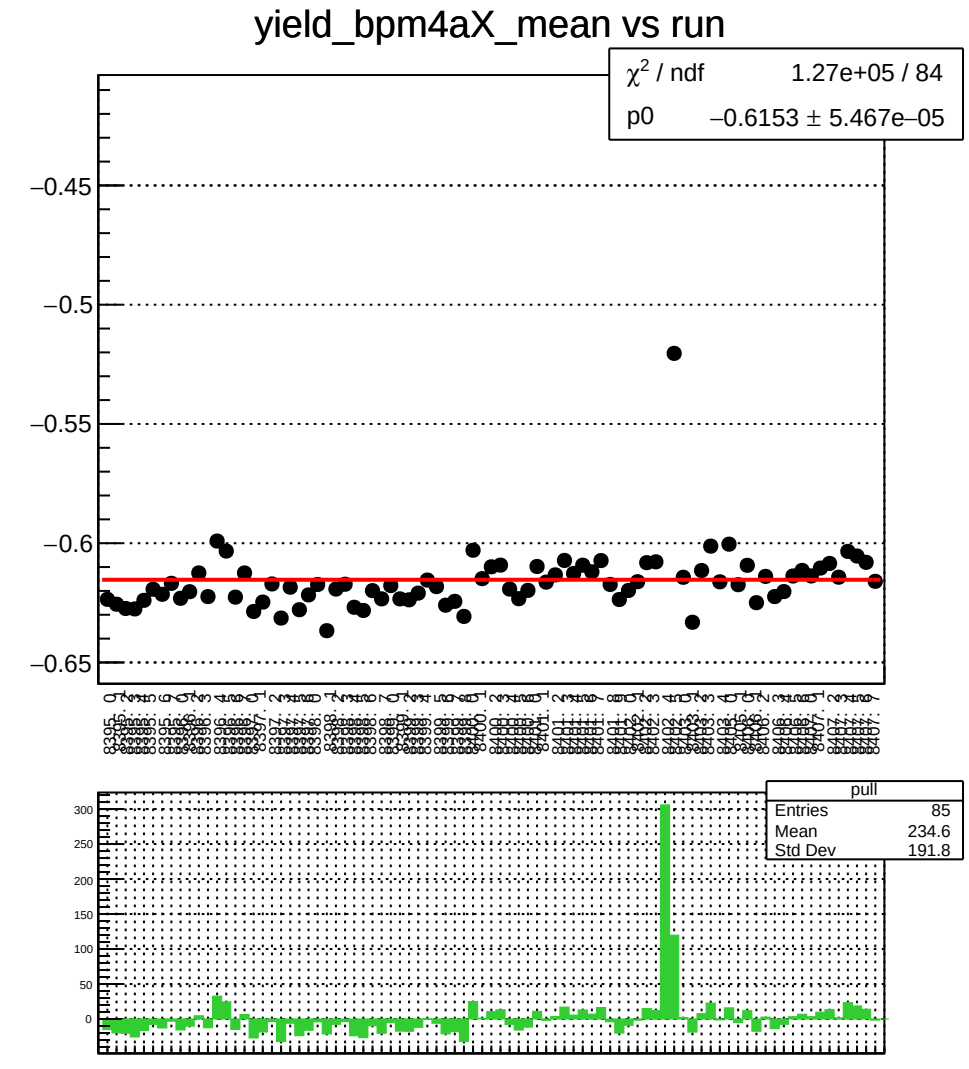

yield_cav4dX_mean vs run
χ² / ndf 1.399e+05 / 84
p0 0.7439 ± 0.0008602
pull
Entries 85
Mean 250.5
Std Dev 208.3
pull1D
Entries 85
Mean −0.398
Std Dev 4.796

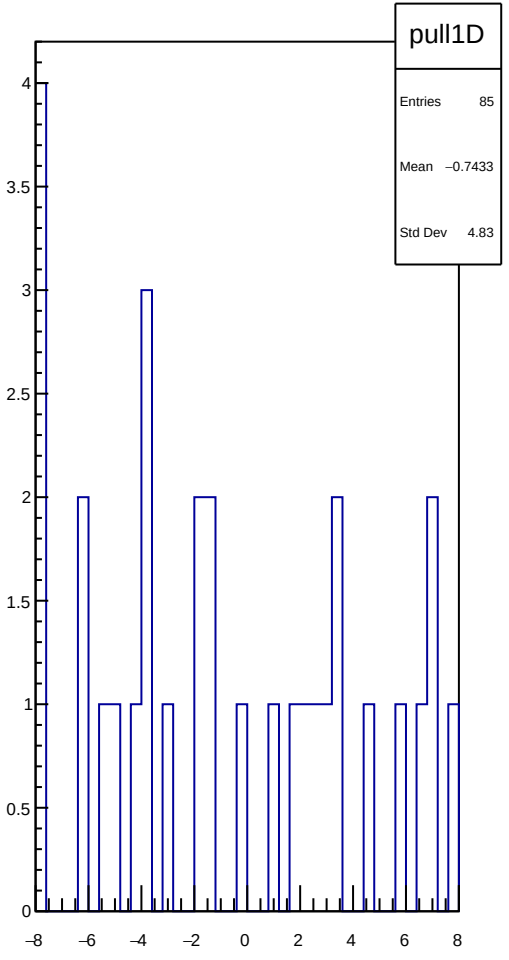

yield_cav4dX_rms vs run
χ² / ndf 2.983e+04 / 84
p0 0.7722 ± 0.0006083
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7

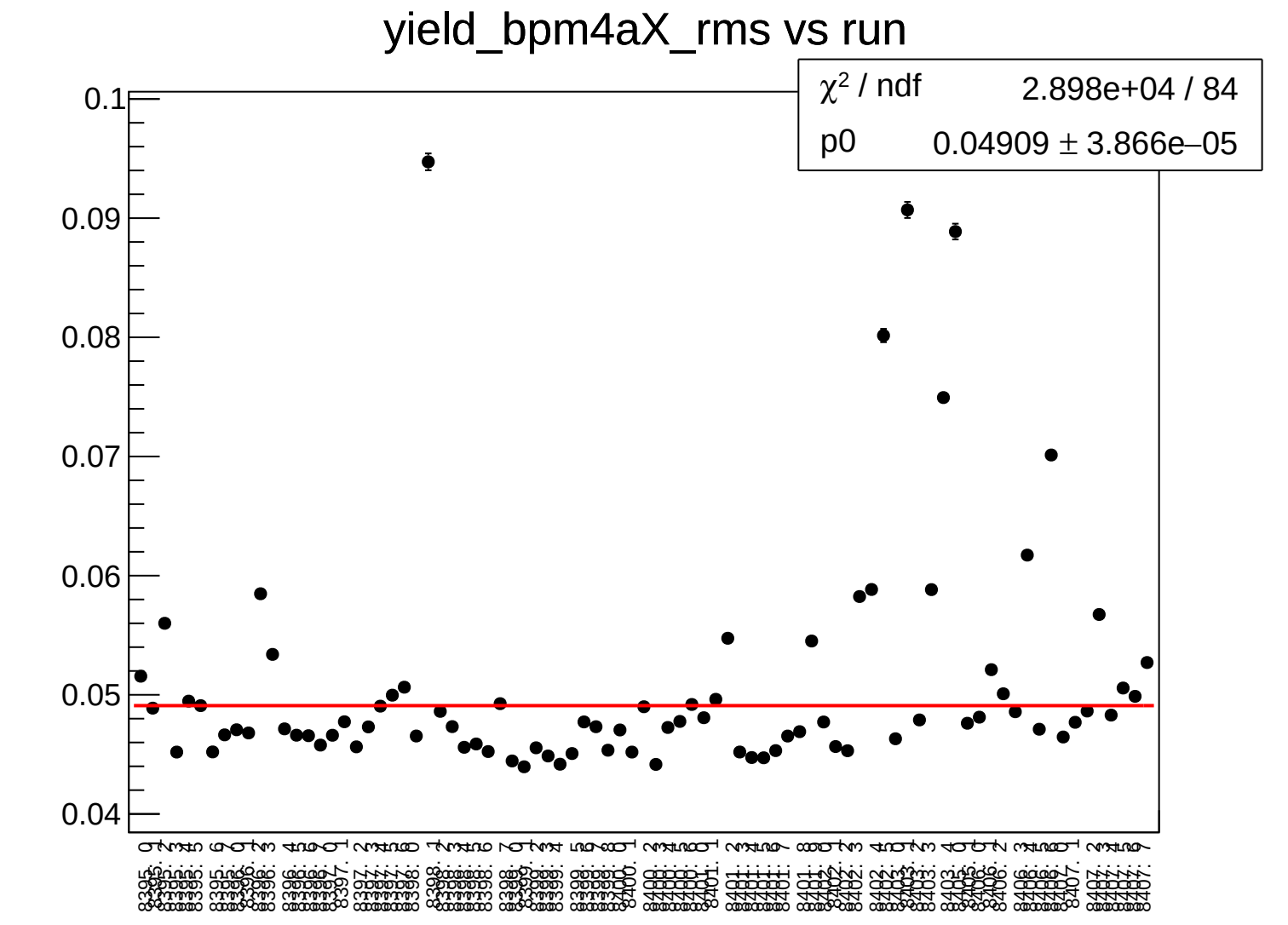

yield_cav4dY_mean vs run
χ² / ndf 8.631e+04 / 84
p0 1.046 ± 1.518e−05
1.06
1.055
1.05
1.045
1.04
1.035
1.03
1.025
1.02
pull
Entries 85
Mean 790.9
Std Dev 740.4
80
60
40
20
0
−20
−40
−60
−80
−100
−120

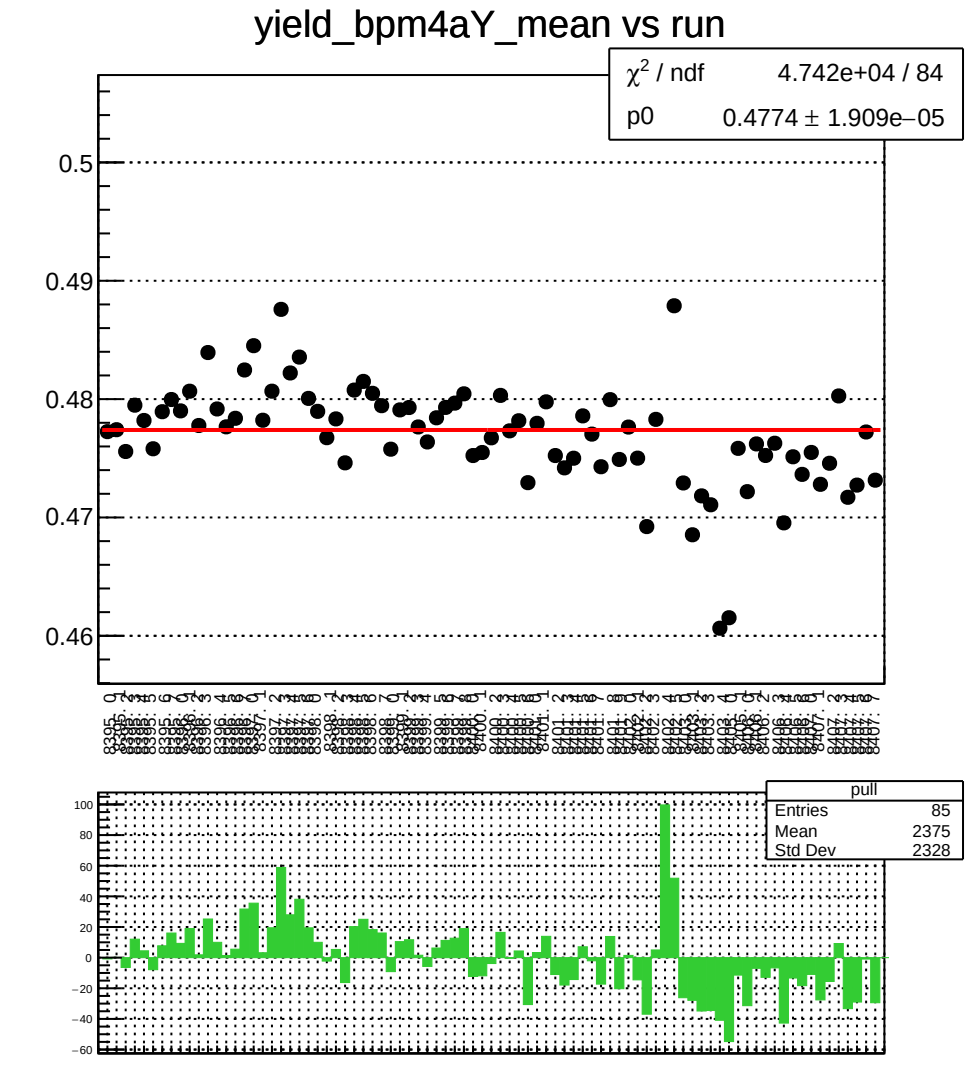

pull1D
Entries 85
Mean −0.2466
Std Dev 4.368
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

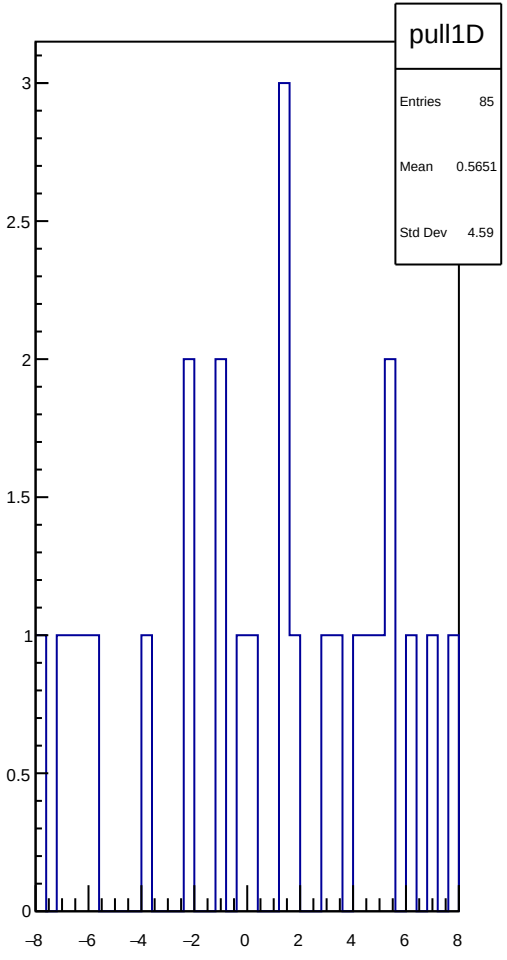

yield_cav4dY_rms vs run
χ² / ndf 4.495e+04 / 84
p0 0.01357 ± 1.074e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

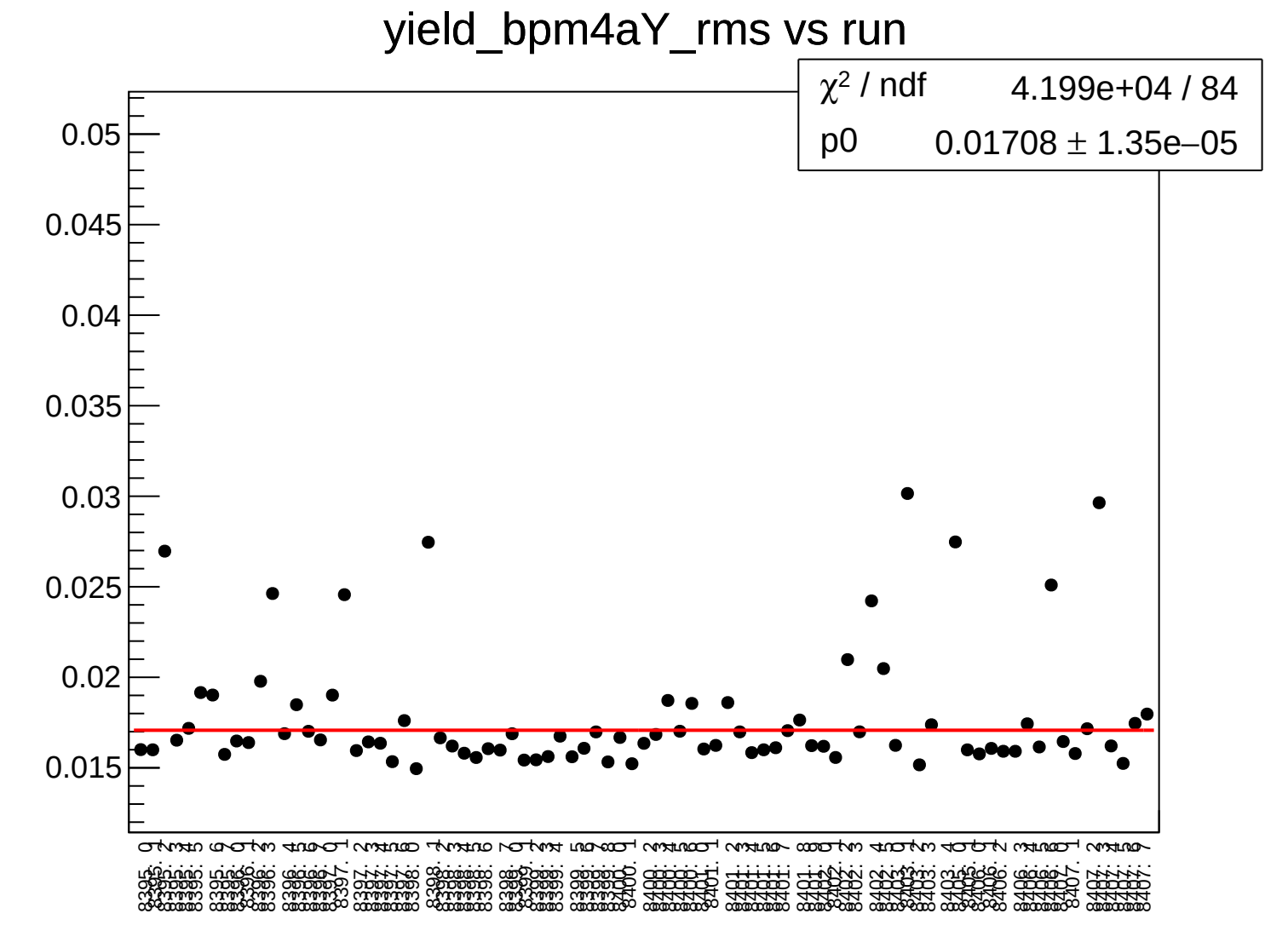

yield_bpm4aX_mean vs run
χ² / ndf 1.27e+05 / 84
p0 −0.6153 ± 5.467e−05
−0.45
−0.5
−0.55
−0.6
−0.65
pull
Entries 85
Mean 234.6
Std Dev 191.8
300
250
200
150
100
50
0

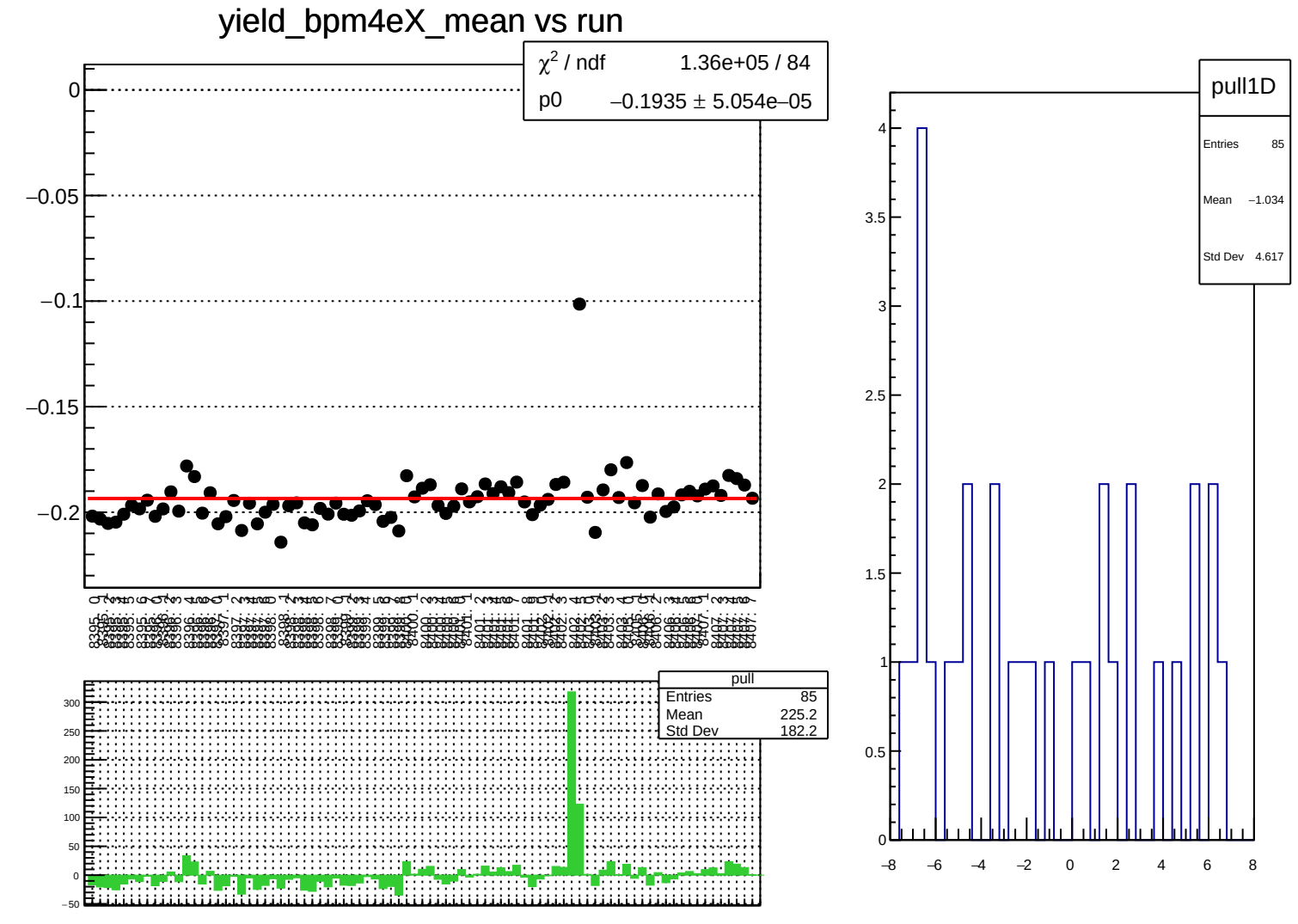

pull1D
Entries 85
Mean −0.7433
Std Dev 4.83
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

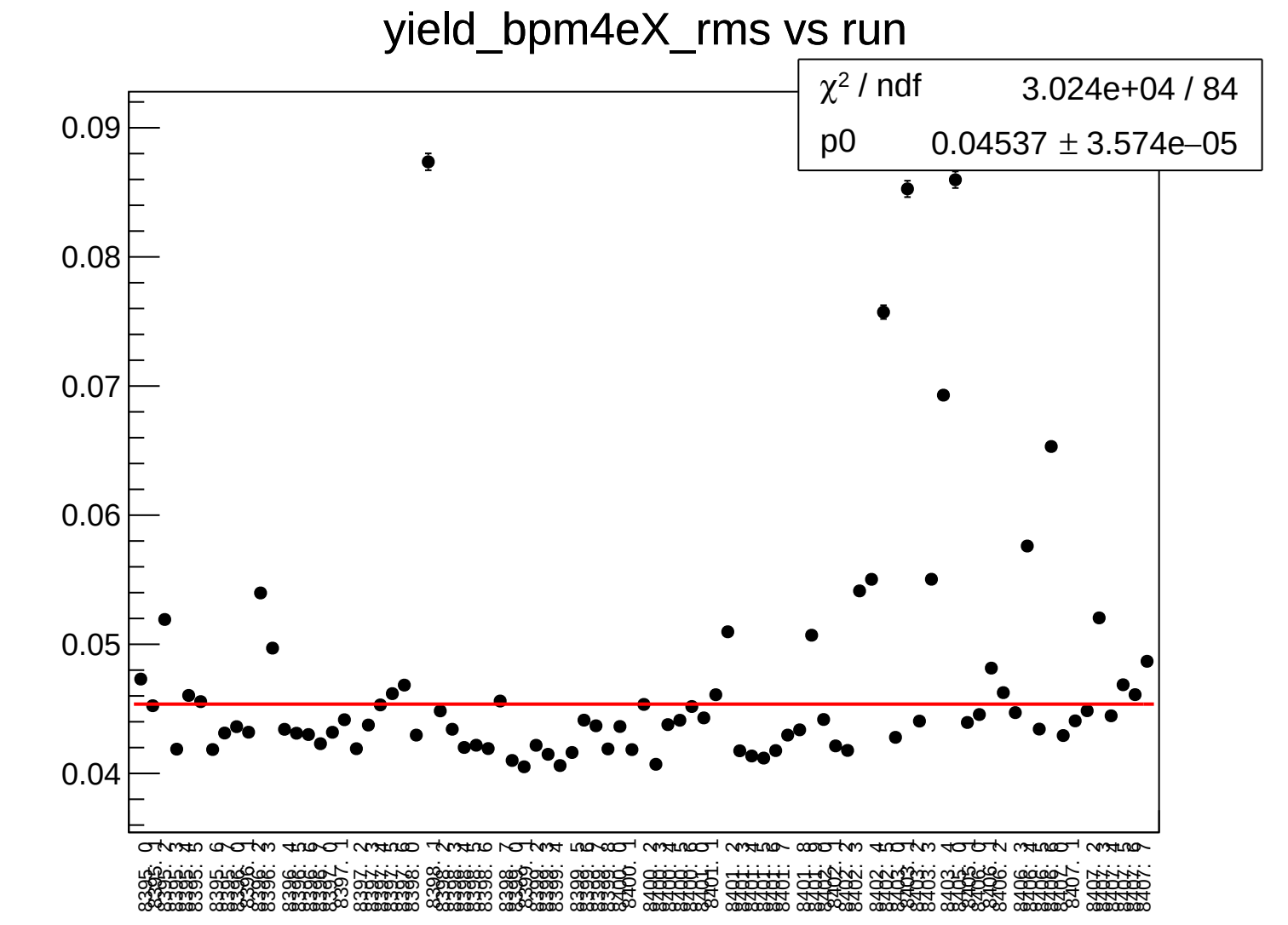

yield_bpm4aX_rms vs run
χ² / ndf 2.898e+04 / 84
p0 0.04909 ± 3.866e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

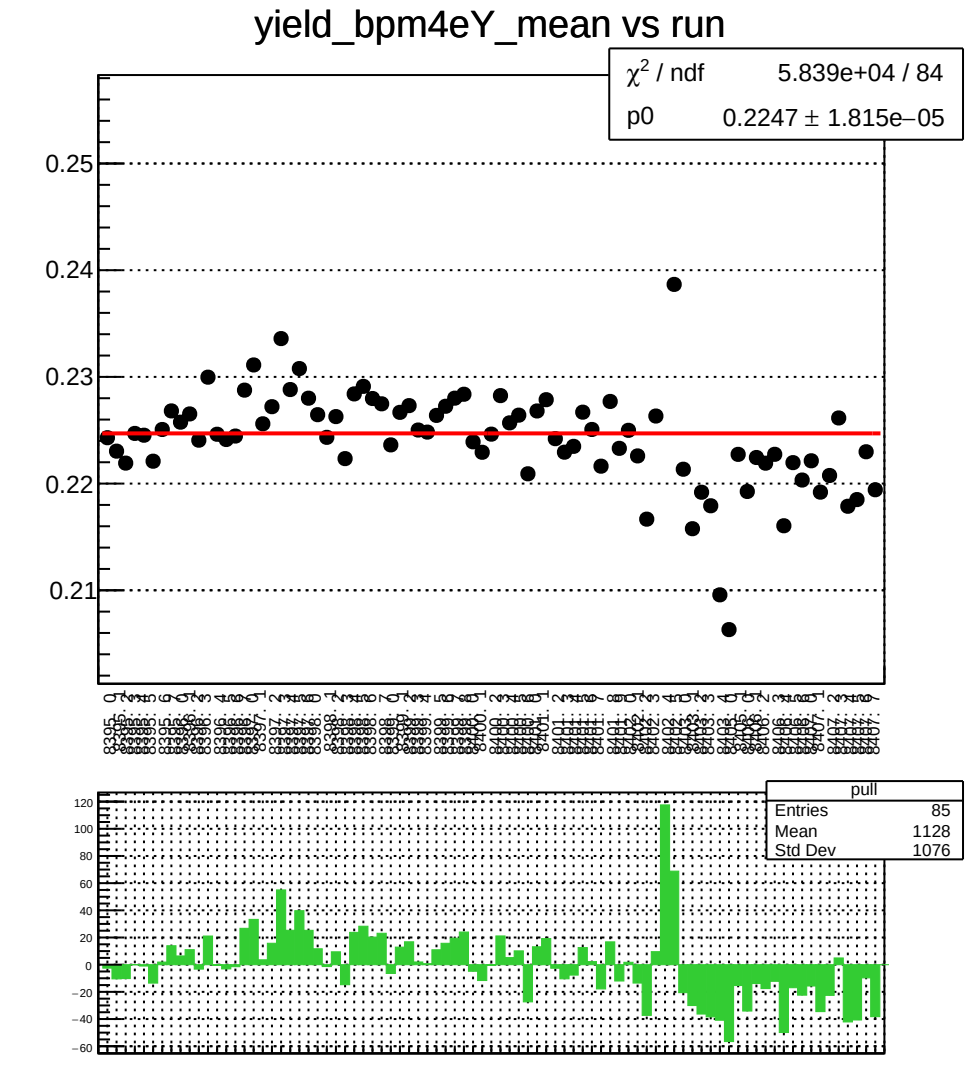

yield_bpm4aY_mean vs run
χ² / ndf 4.742e+04 / 84
p0 0.4774 ± 1.909e−05
0.5
0.49
0.48
0.47
0.46
pull
Entries 85
Mean 2375
Std Dev 2328
100
80
60
40
20
0
−20
−40
−60

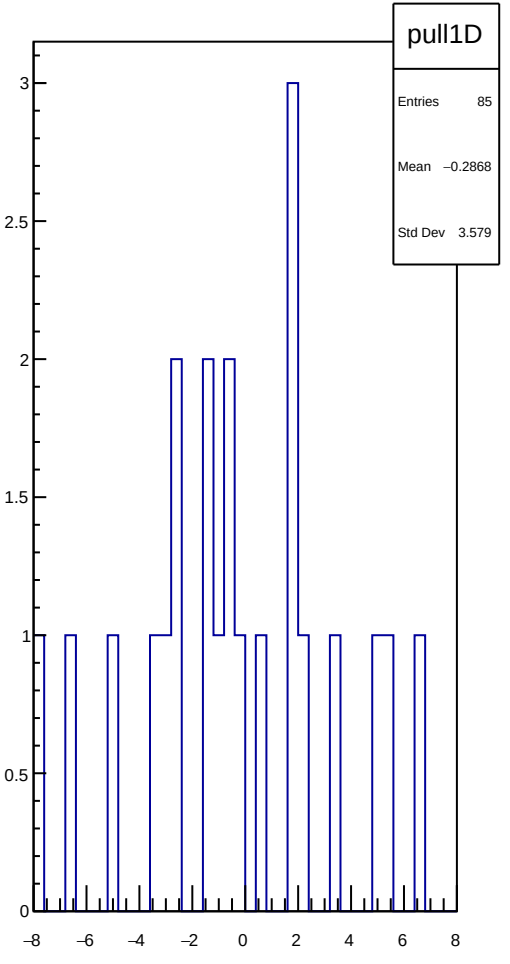

pull1D
Entries 85
Mean 0.5651
Std Dev 4.59
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

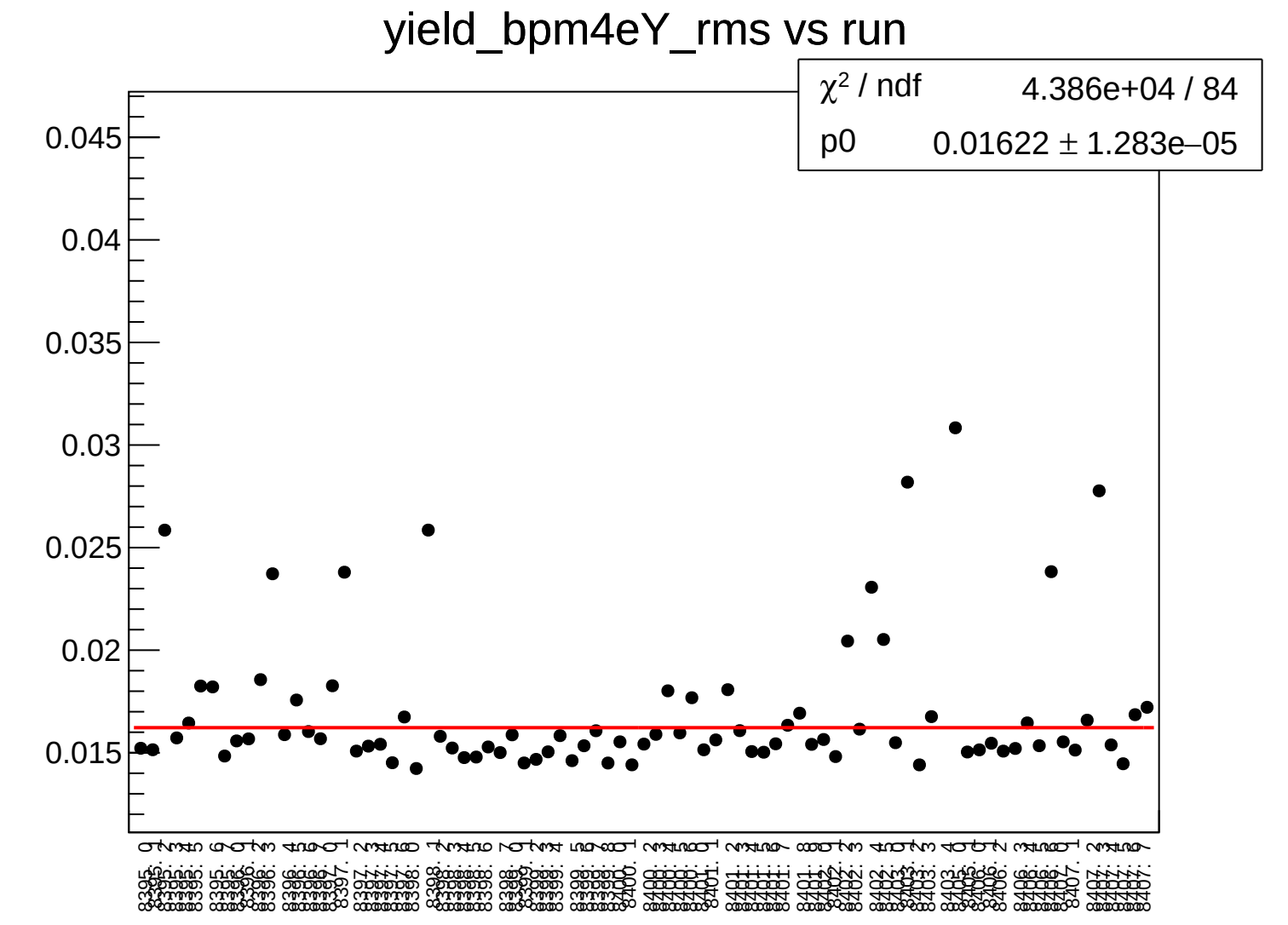

yield_bpm4aY_rms vs run
χ² / ndf 4.199e+04 / 84
p0 0.01708 ± 1.35e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

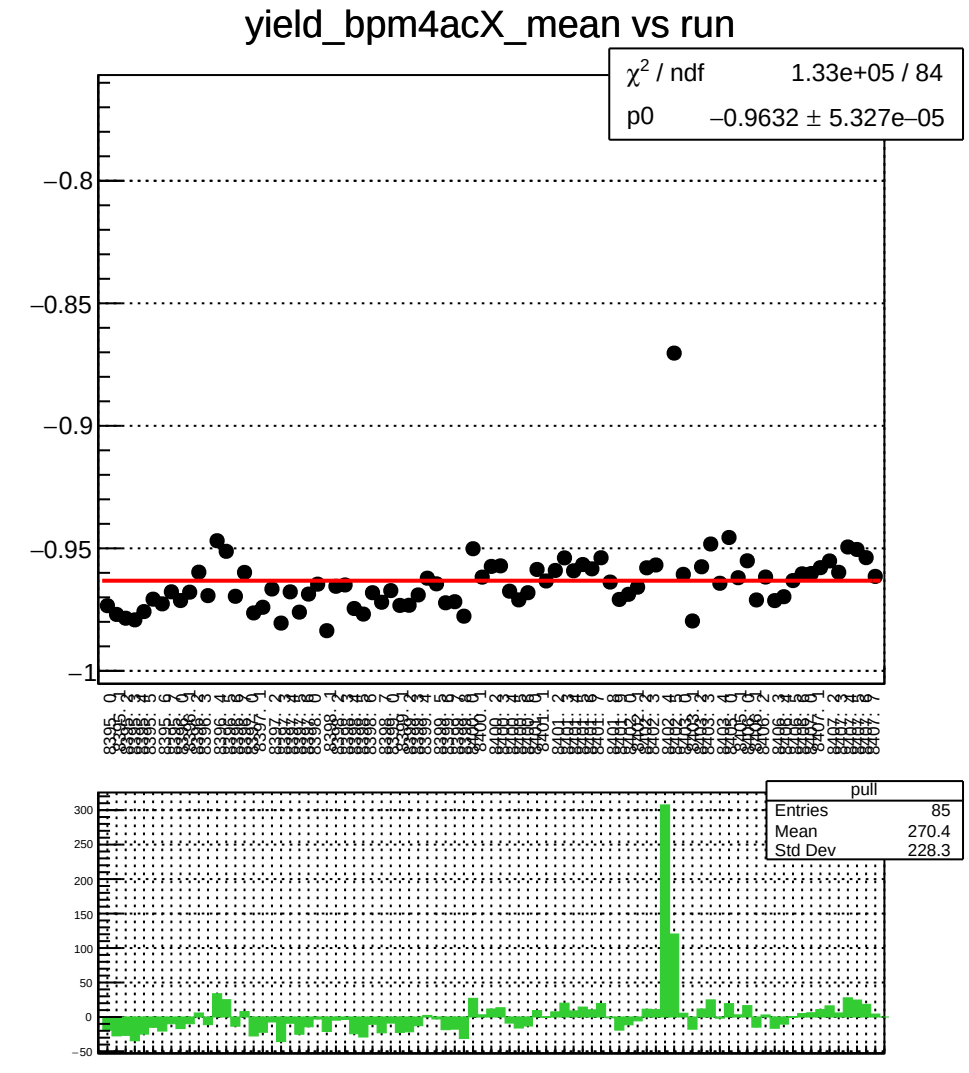

yield_bpm4eX_mean vs run
χ² / ndf 1.36e+05 / 84
p0 −0.1935 ± 5.054e−05
0
−0.05
−0.1
−0.15
−0.2
pull
Entries 85
Mean 225.2
Std Dev 182.2
300
250
200
150
100
50
0
−50
pull1D
Entries 85
Mean −1.034
Std Dev 4.617
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

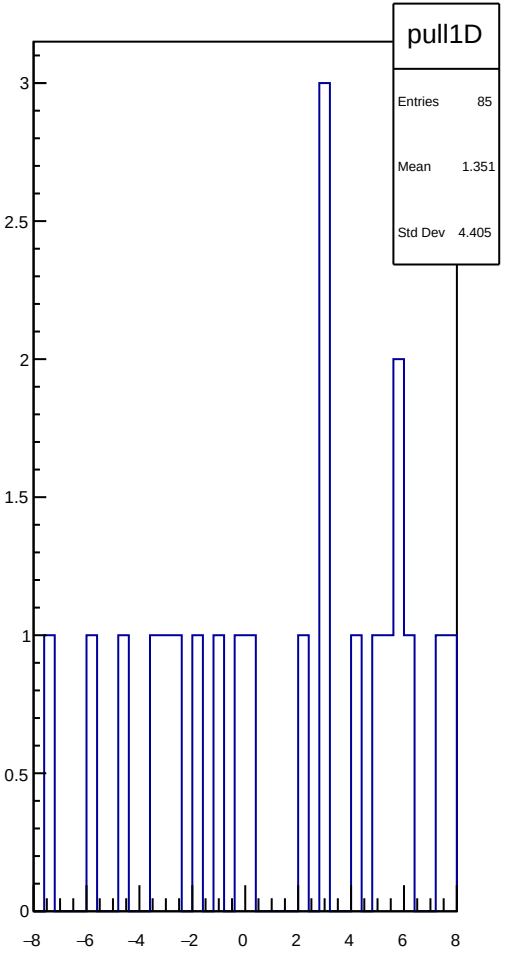

yield_bpm4eX_rms vs run
χ² / ndf 3.024e+04 / 84
p0 0.04537 ± 3.574e−05
0.09
0.08
0.07
0.06
0.05
0.04

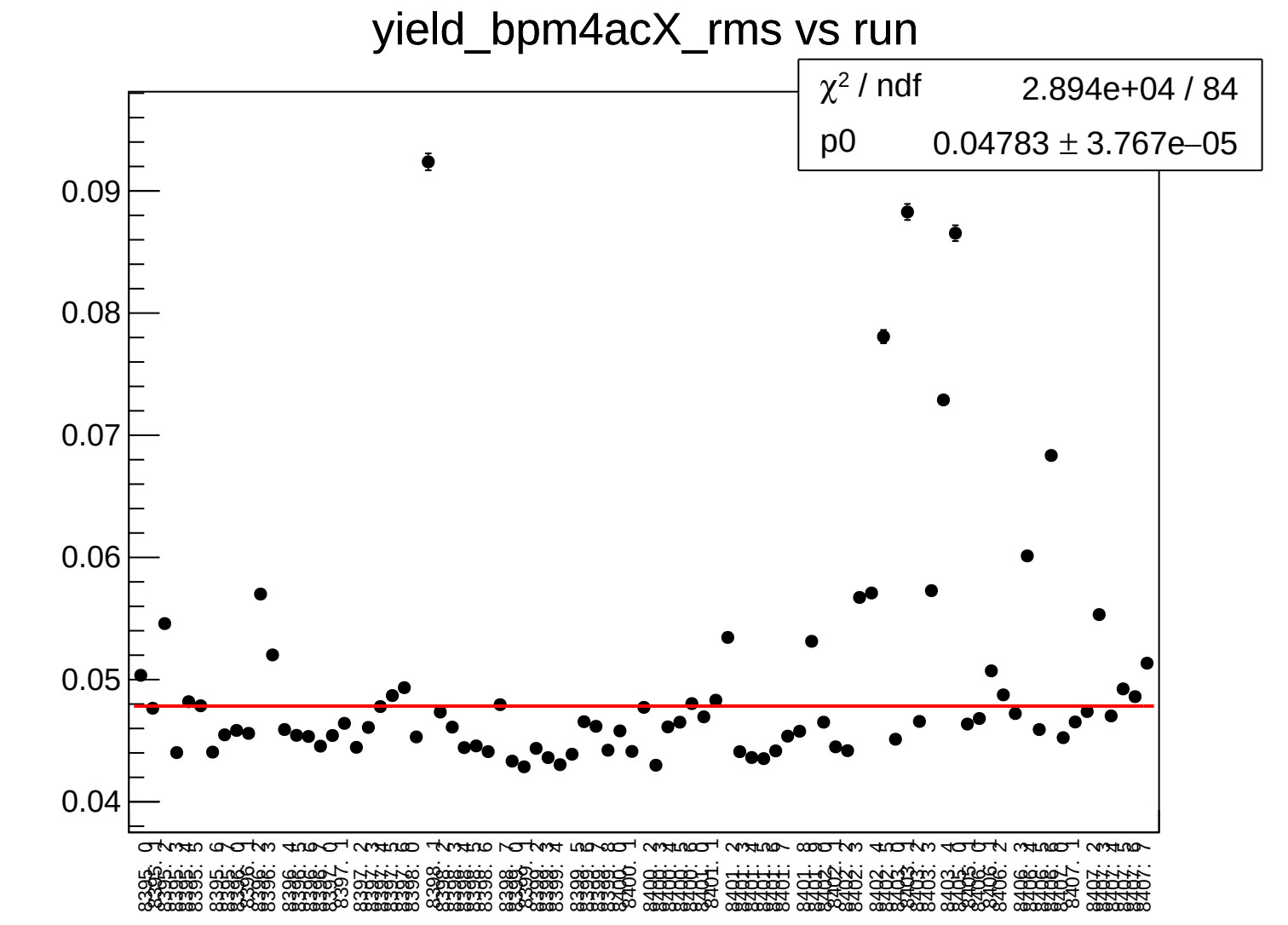

yield_bpm4eY_mean vs run
χ² / ndf 5.839e+04 / 84
p0 0.2247 ± 1.815e−05
0.25
0.24
0.23
0.22
0.21
pull
Entries 85
Mean 1128
Std Dev 1076
120
100
80
60
40
20
0
−20
−40
−60

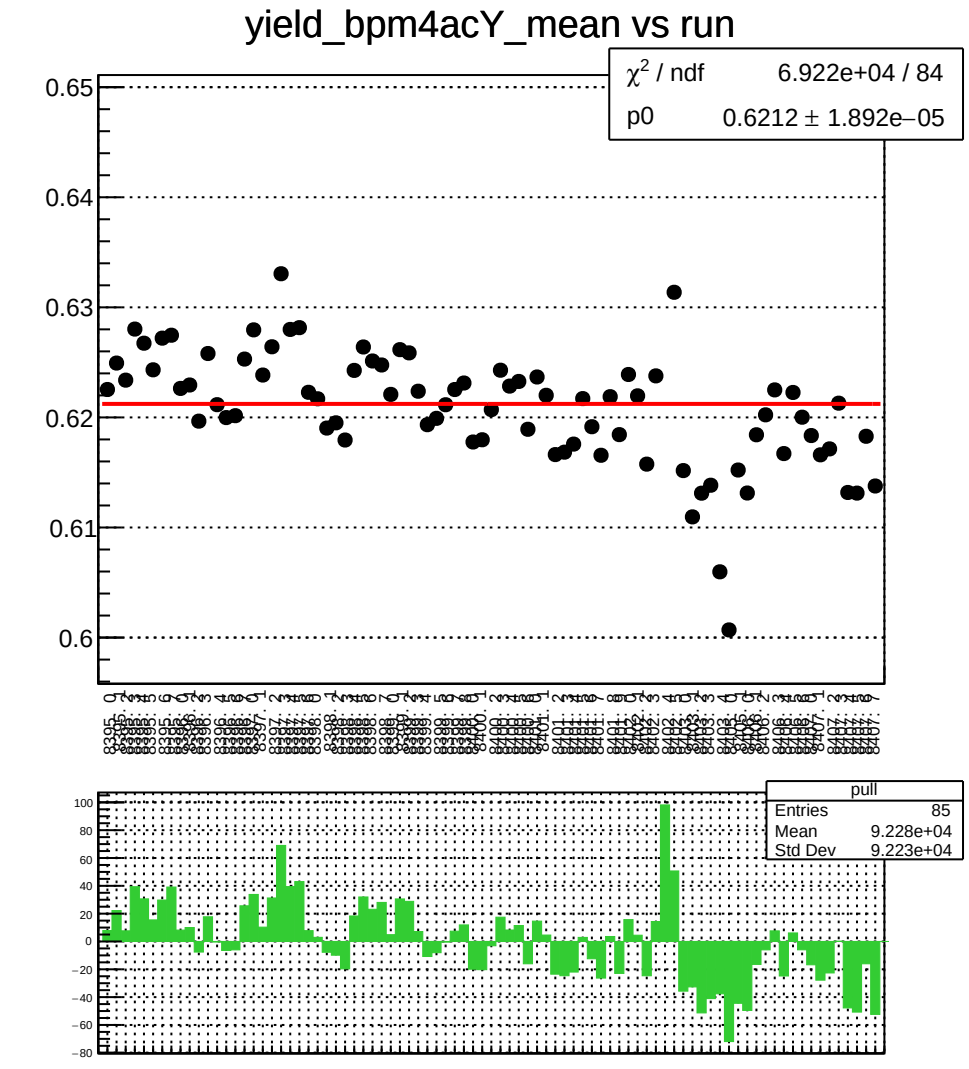

pull1D
Entries 85
Mean −0.2868
Std Dev 3.579
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

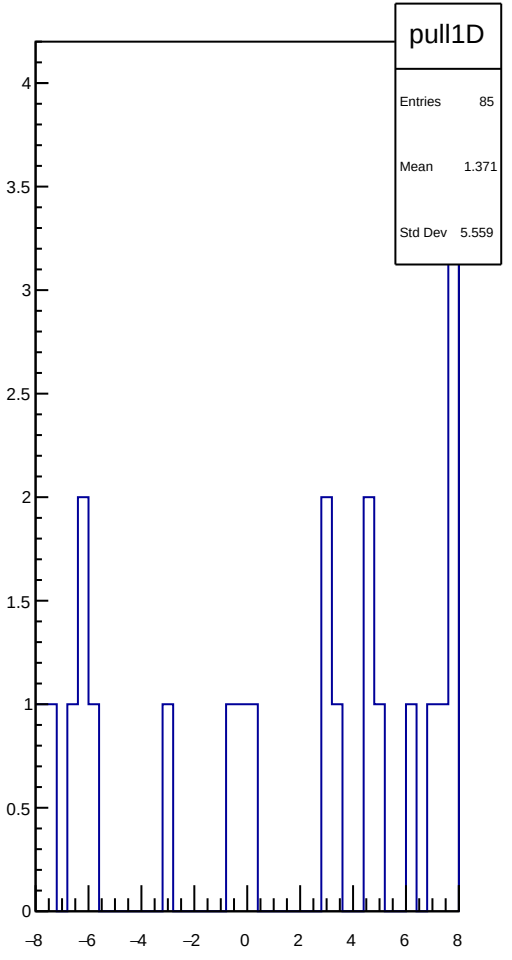

yield_bpm4eY_rms vs run
χ² / ndf 4.386e+04 / 84
p0 0.01622 ± 1.283e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

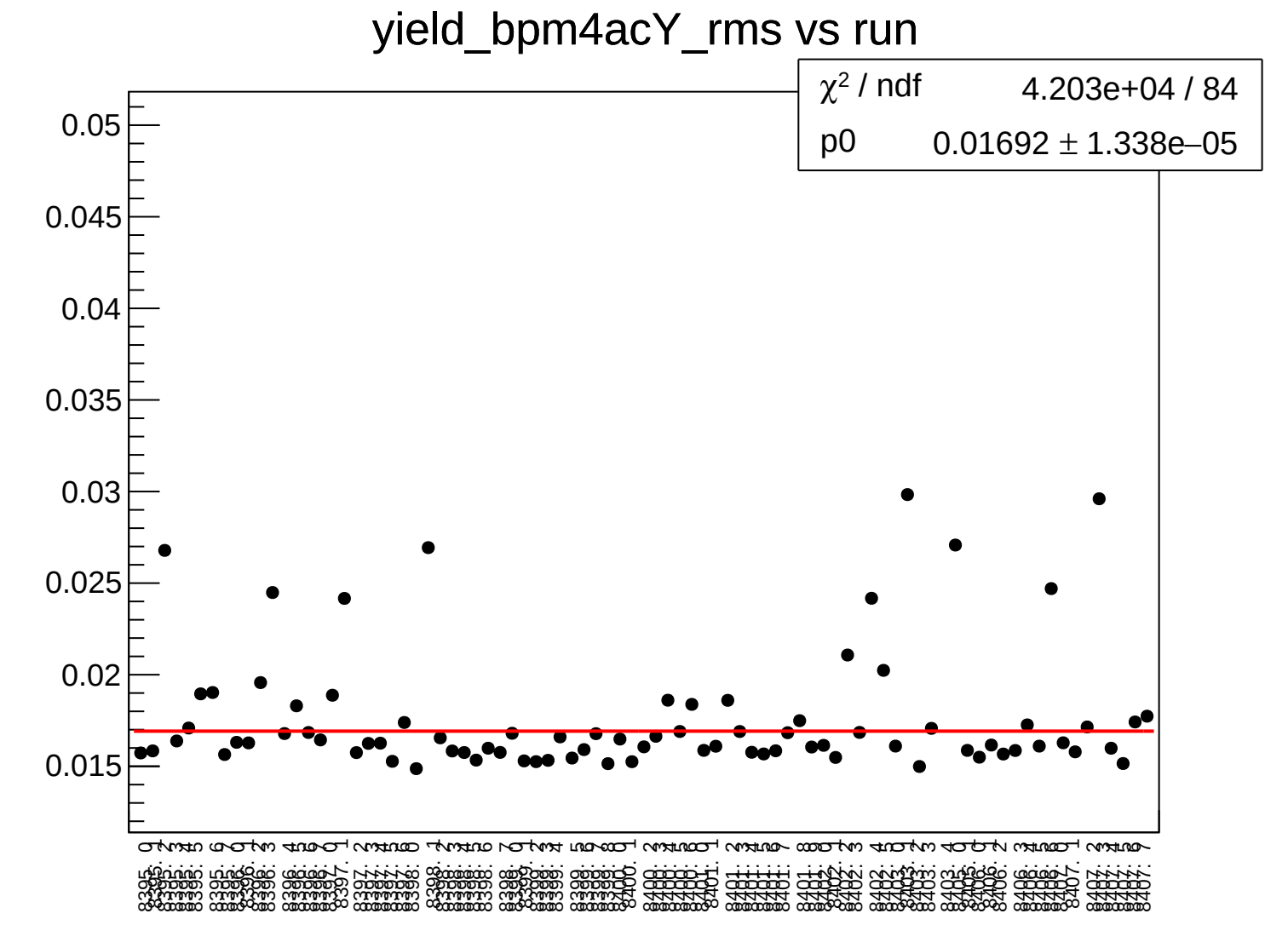

yield_bpm4acX_mean vs run
χ² / ndf 1.33e+05 / 84
p0 −0.9632 ± 5.327e−05
−0.8
−0.85
−0.9
−0.95
−1
pull
Entries 85
Mean 270.4
Std Dev 228.3
300
250
200
150
100
50
0
−50

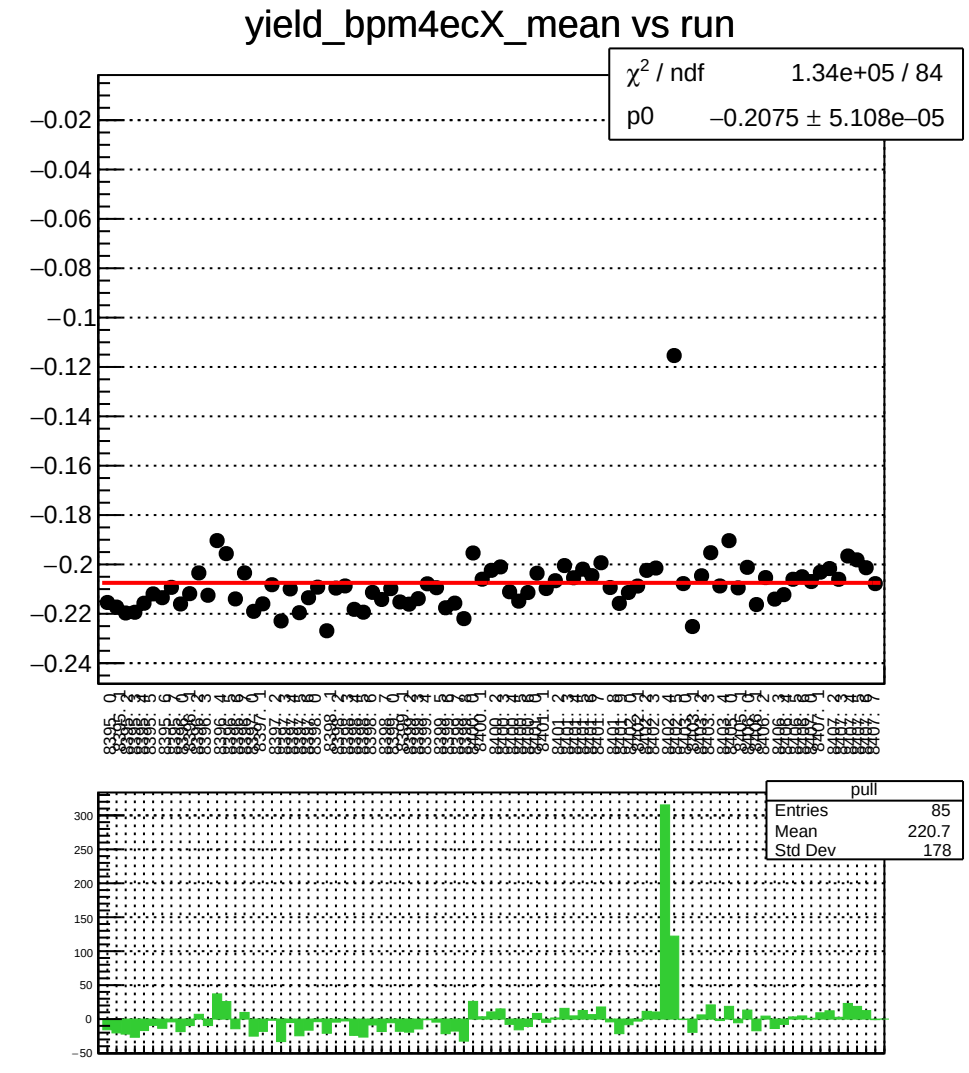

pull1D
Entries 85
Mean 1.351
Std Dev 4.405
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

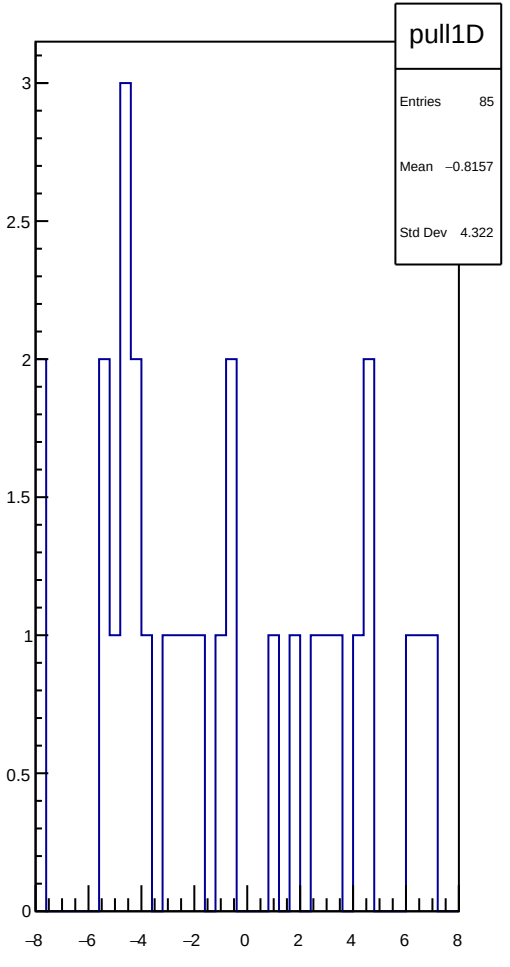

yield_bpm4acX_rms vs run
χ² / ndf 2.894e+04 / 84
p0 0.04783 ± 3.767e–05
0.09
0.08
0.07
0.06
0.05
0.04

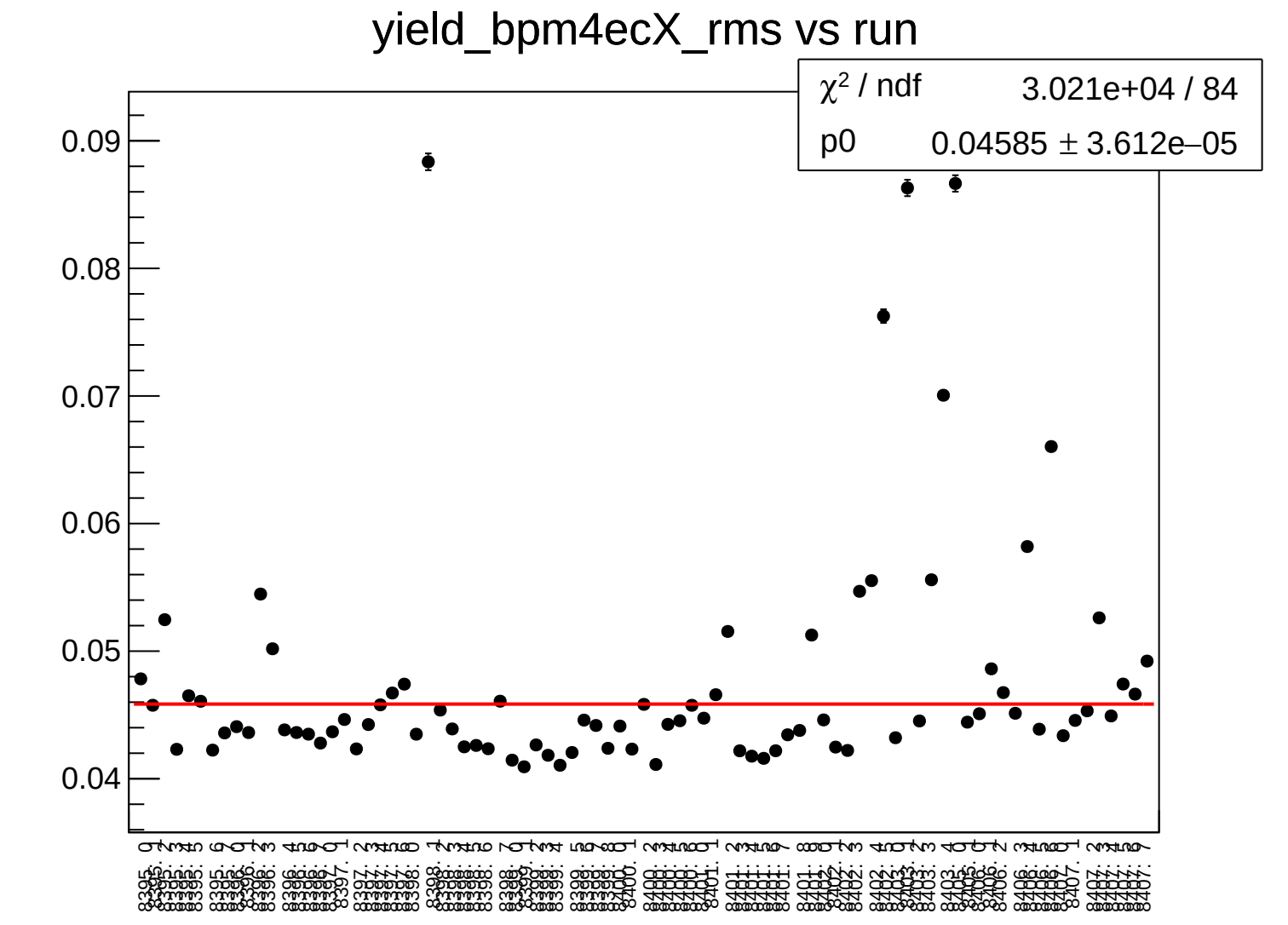

yield_bpm4acY_mean vs run
χ² / ndf 6.922e+04 / 84
p0 0.6212 ± 1.892e−05
0.65
0.64
0.63
0.62
0.61
0.6
pull
Entries 85
Mean 9.228e+04
Std Dev 9.223e+04
100
80
60
40
20
0
−20
−40
−60
−80

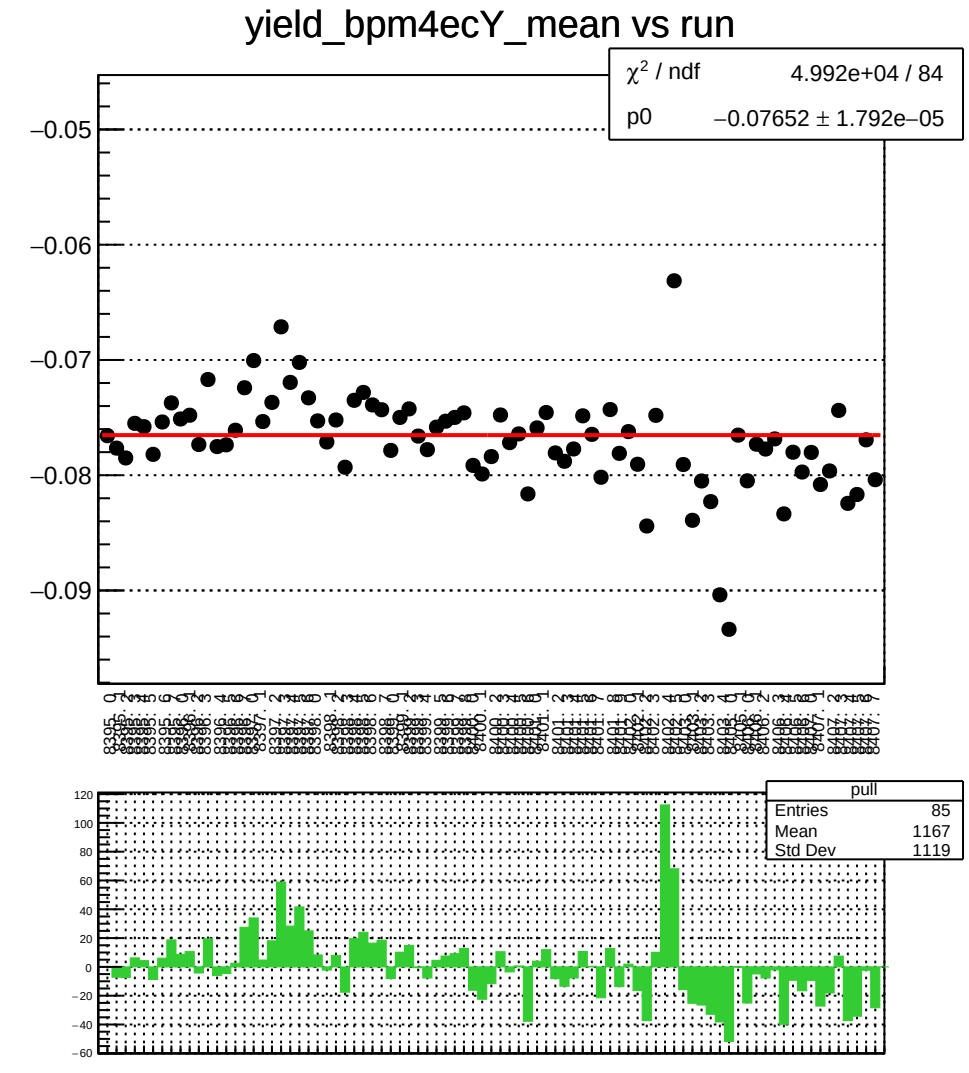

pull1D
Entries 85
Mean 1.371
Std Dev 5.559
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

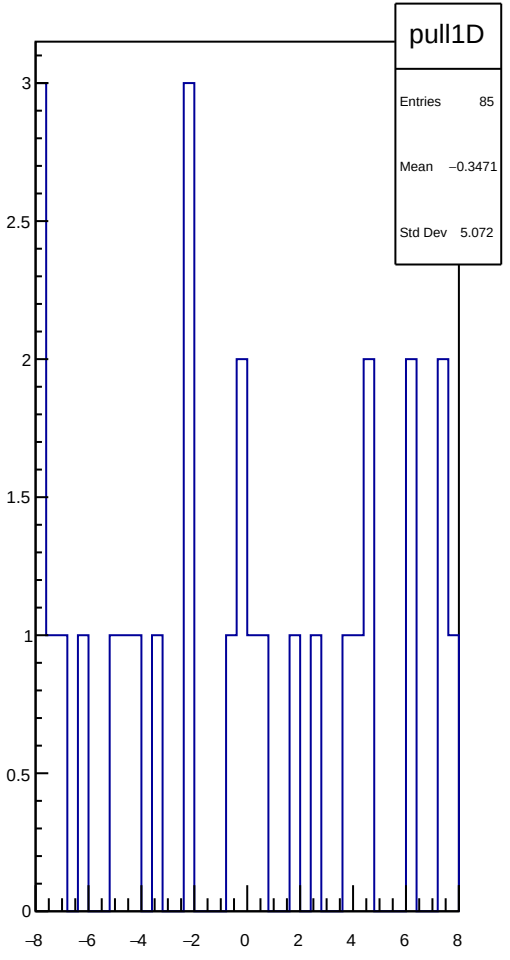

yield_bpm4acY_rms vs run
χ² / ndf 4.203e+04 / 84
p0 0.01692 ± 1.338e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

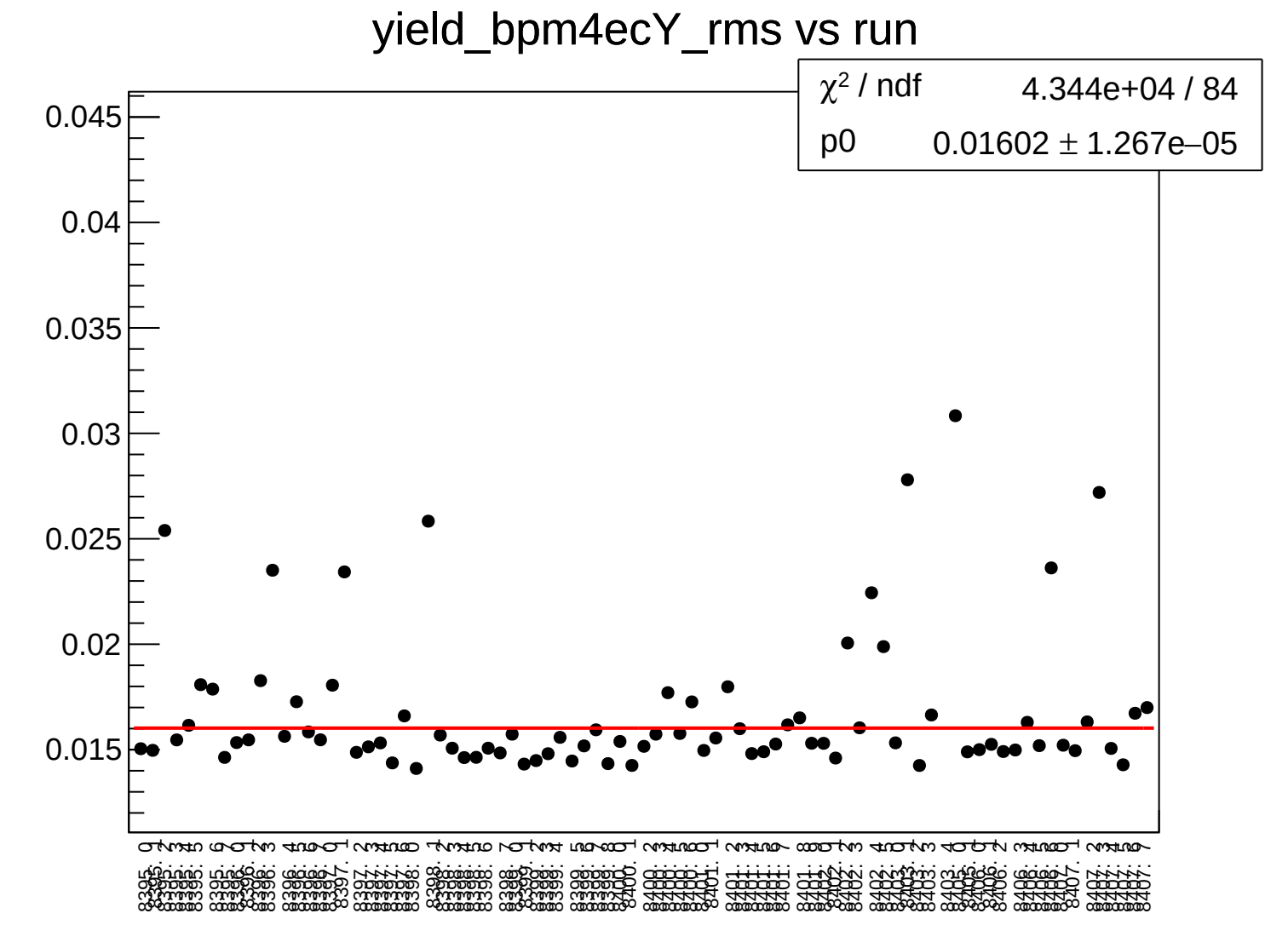

yield_bpm4ecX_mean vs run
χ² / ndf 1.34e+05 / 84
p0 −0.2075 ± 5.108e−05
pull
Entries 85
Mean 220.7
Std Dev 178

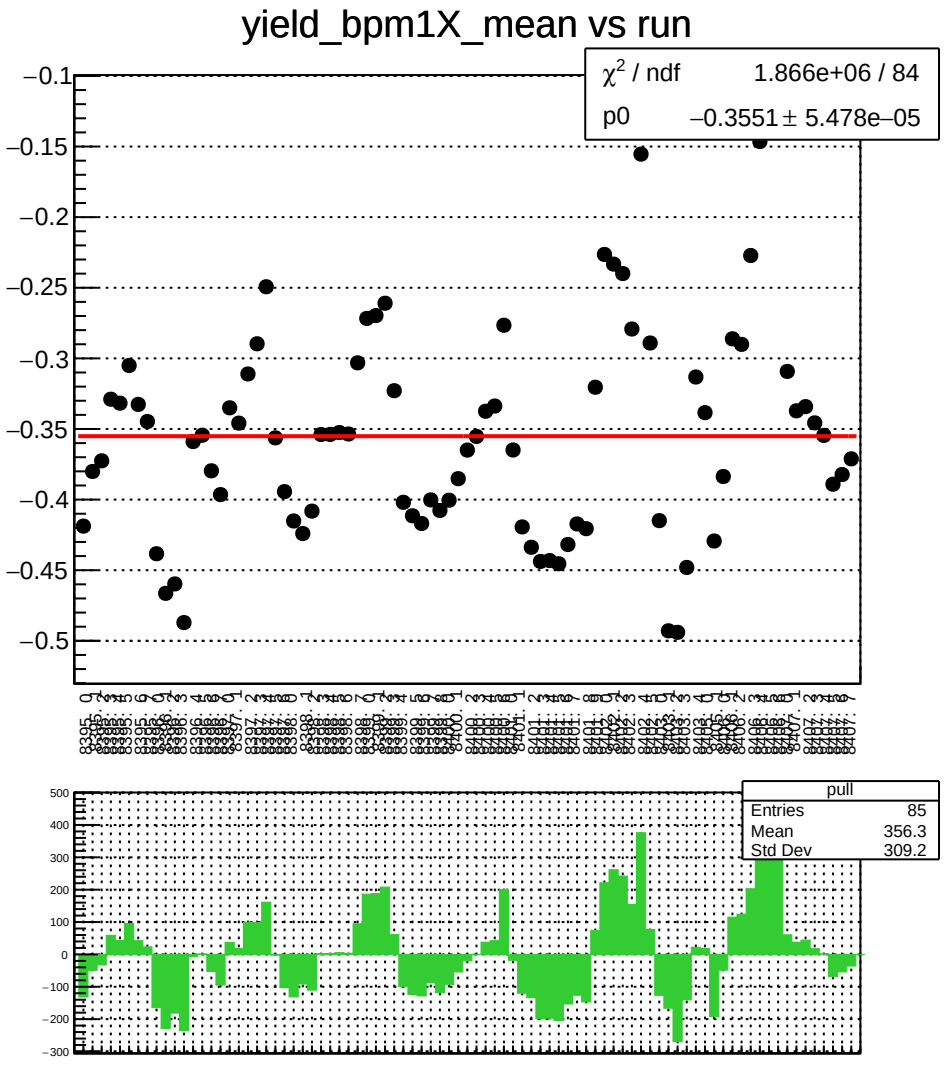

pull1D
Entries 85
Mean −0.8157
Std Dev 4.322

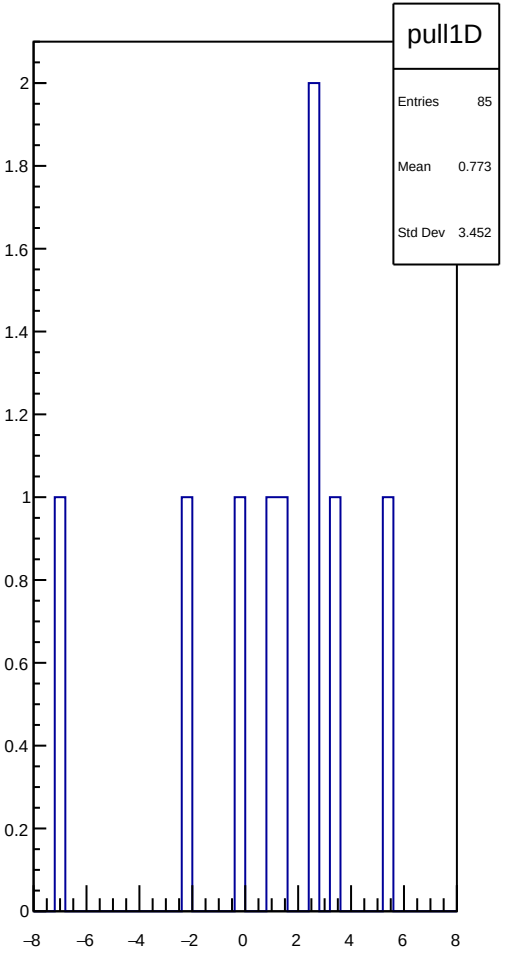

yield_bpm4ecX_rms vs run
χ² / ndf 3.021e+04 / 84
p0 0.04585 ± 3.612e–05
0.09
0.08
0.07
0.06
0.05
0.04

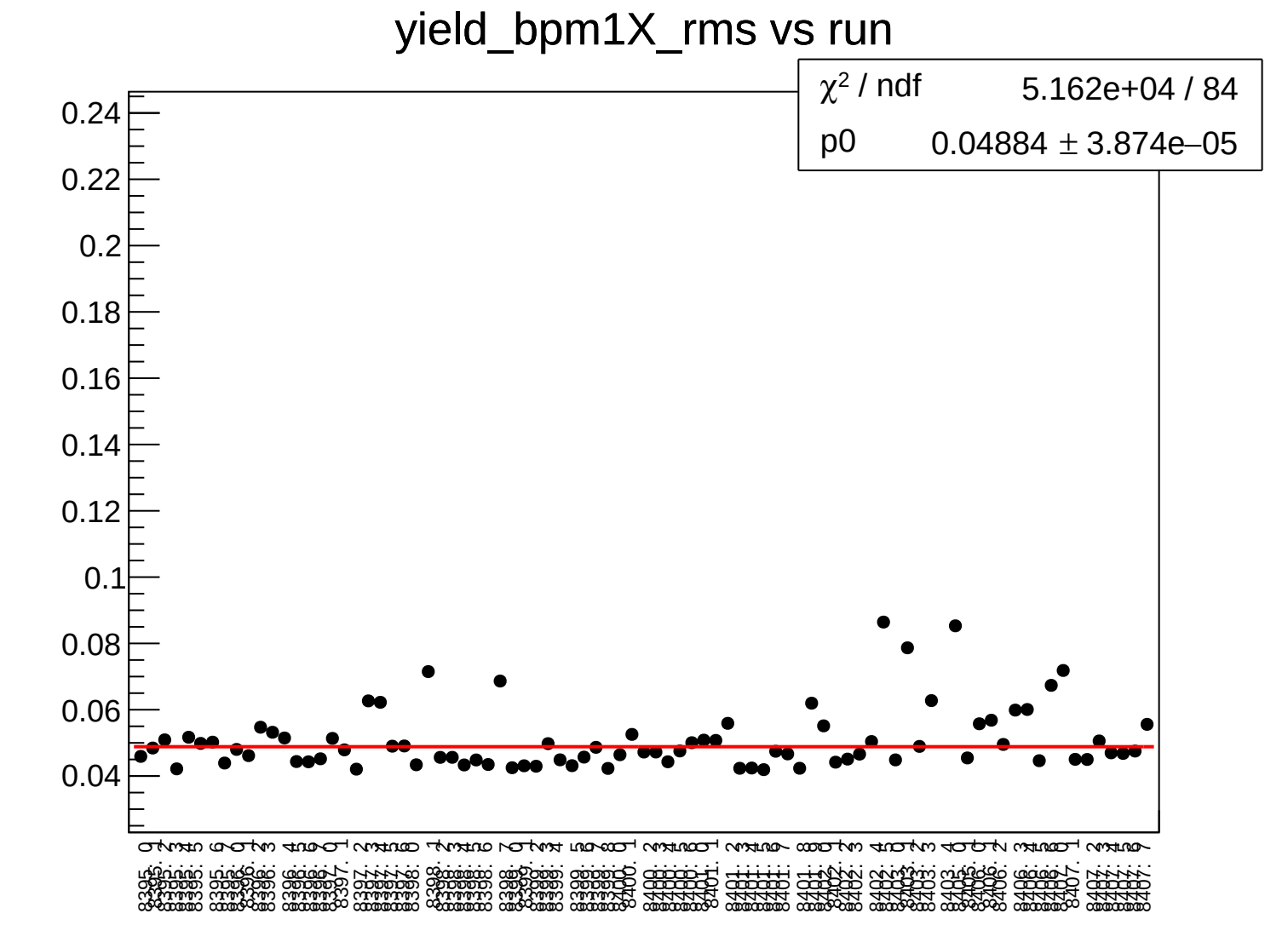

yield_bpm4ecY_mean vs run
χ² / ndf 4.992e+04 / 84
p0 −0.07652 ± 1.792e−05
−0.05
−0.06
−0.07
−0.08
−0.09
pull
Entries 85
Mean 1167
Std Dev 1119
120
100
80
60
40
20
0
−20
−40
−60

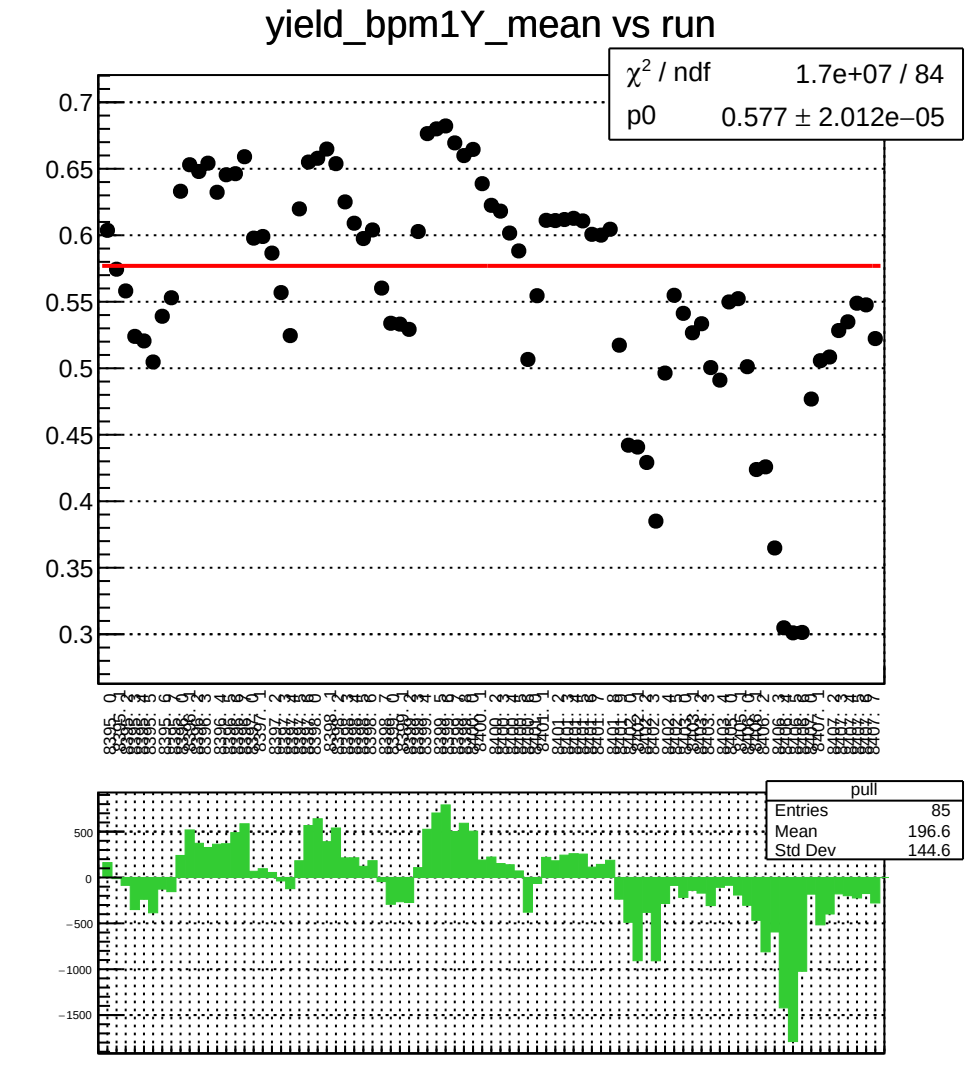

pull1D
Entries 85
Mean −0.3471
Std Dev 5.072
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

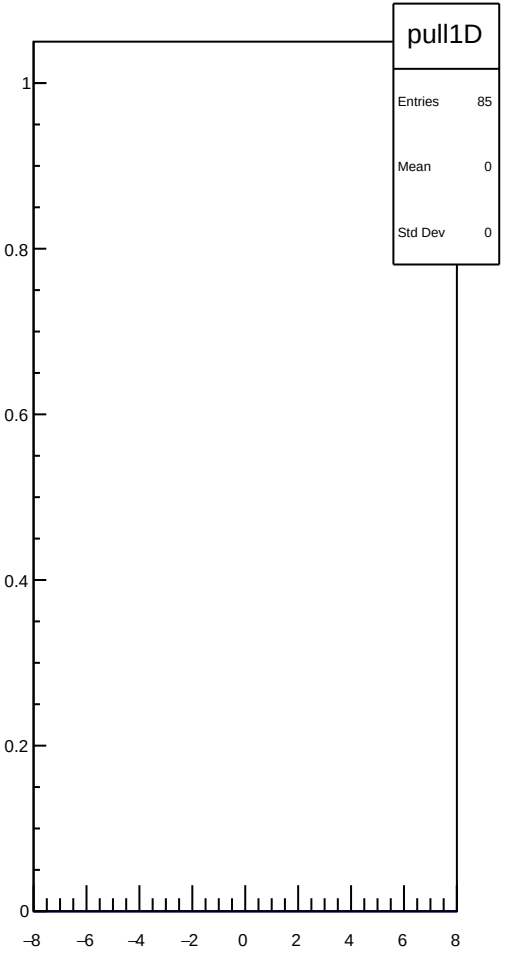

yield_bpm4ecY_rms vs run
χ² / ndf 4.344e+04 / 84
p0 0.01602 ± 1.267e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

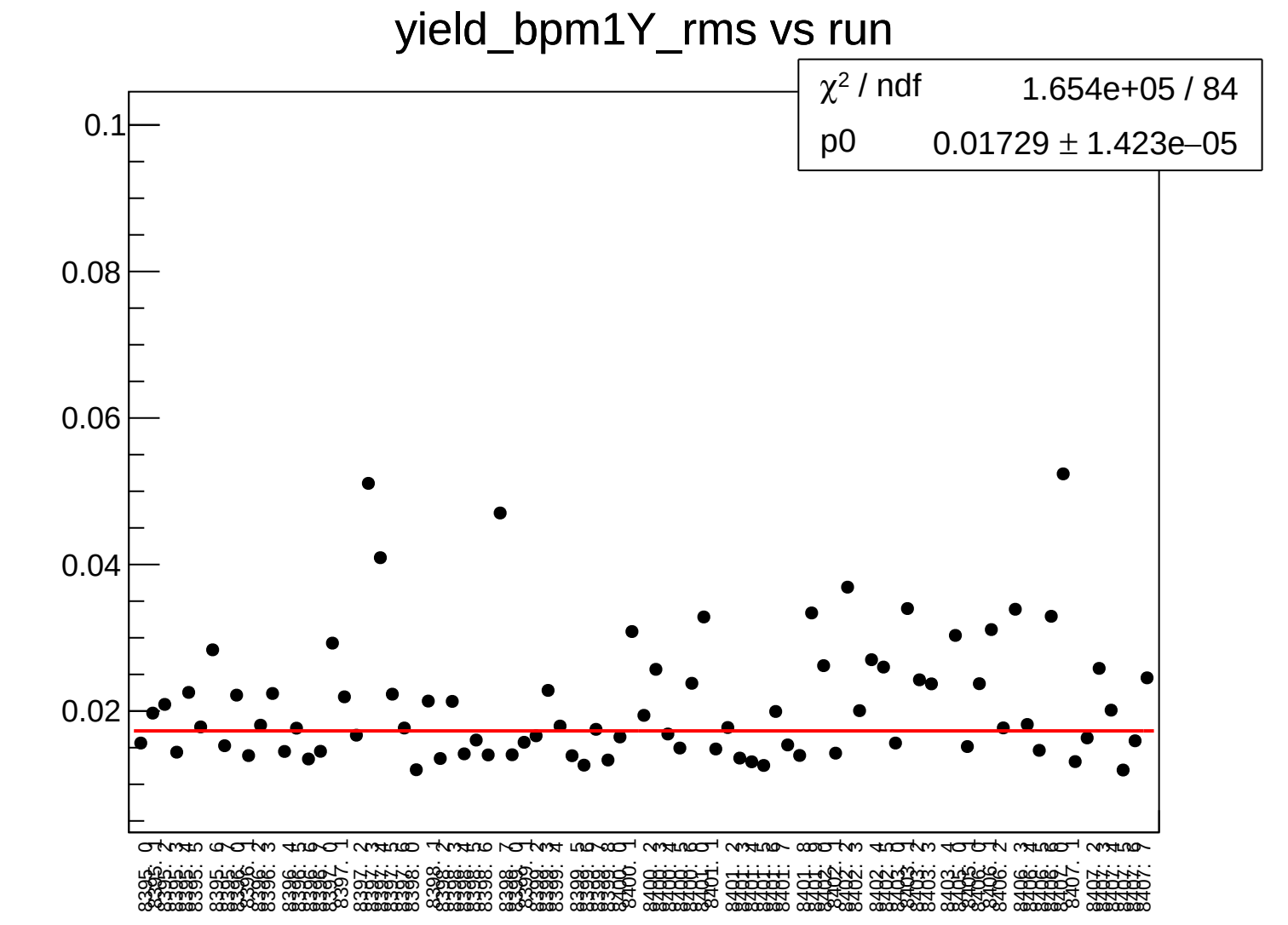

yield_bpm1X_mean vs run
χ² / ndf 1.866e+06 / 84
p0 −0.3551 ± 5.478e−05
pull
Entries 85
Mean 356.3
Std Dev 309.2

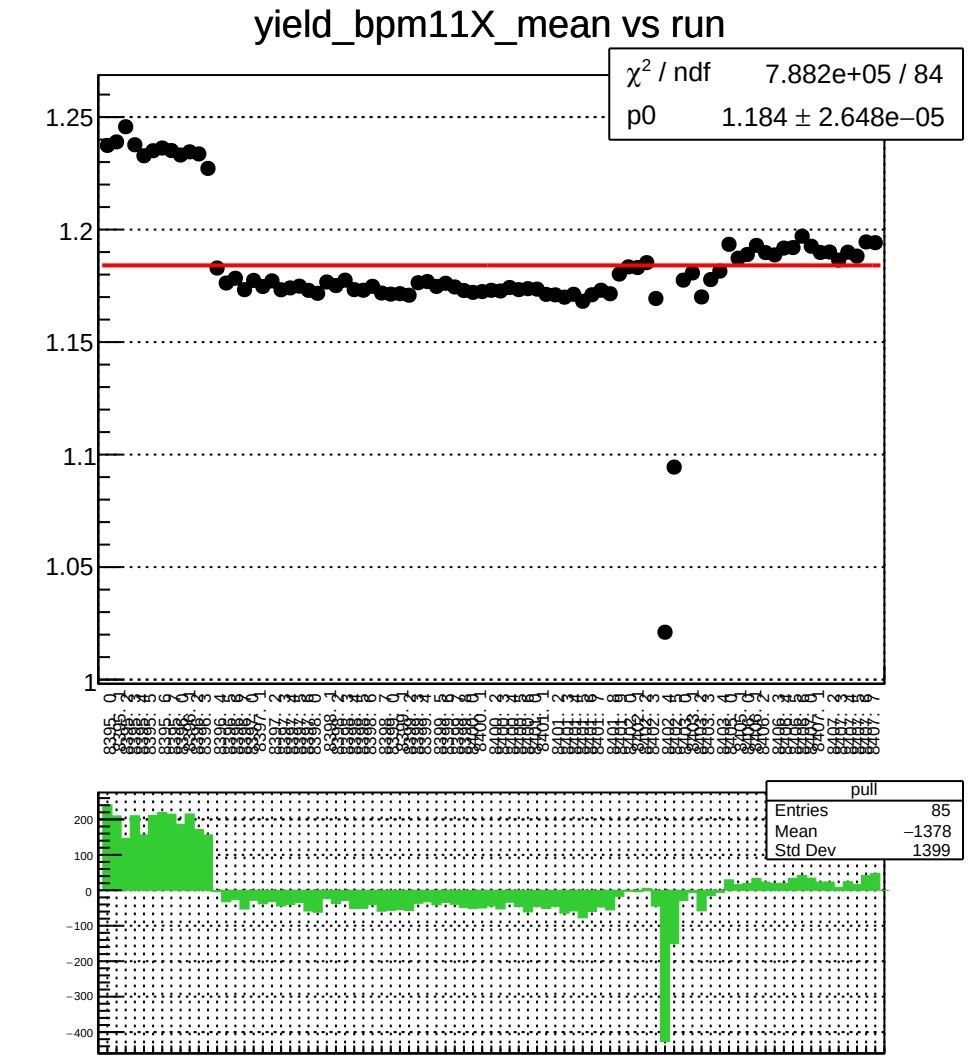

pull1D
Entries 85
Mean 0.773
Std Dev 3.452

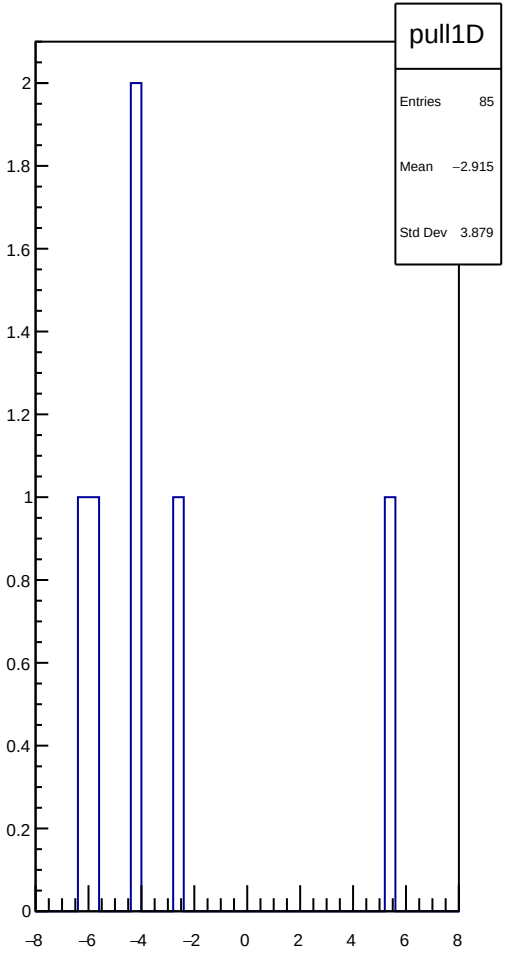

yield_bpm1X_rms vs run
χ² / ndf 5.162e+04 / 84
p0 0.04884 ± 3.874e−05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

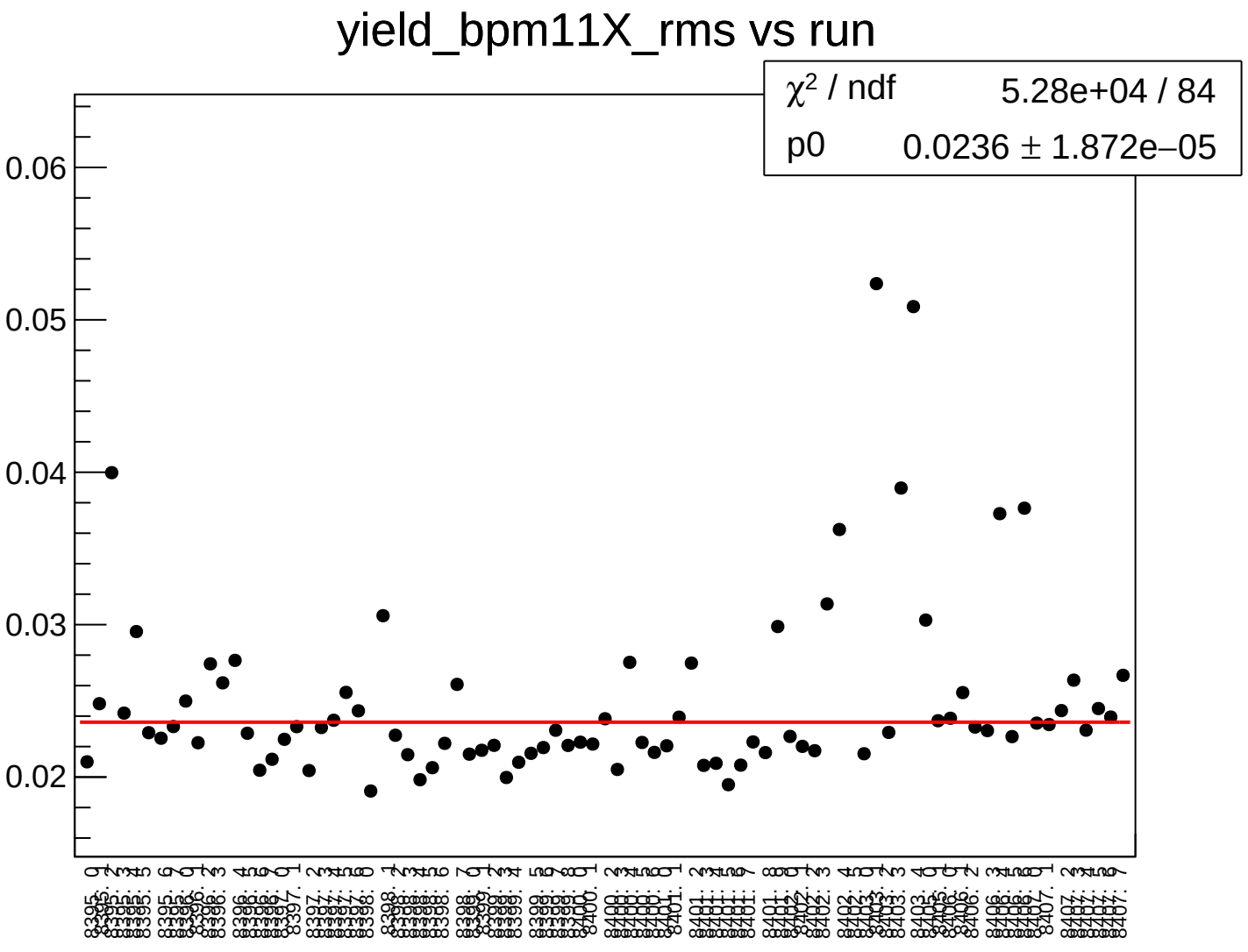

yield_bpm1Y_mean vs run
χ² / ndf 1.7e+07 / 84
p0 0.577 ± 2.012e−05
pull
Entries 85
Mean 196.6
Std Dev 144.6

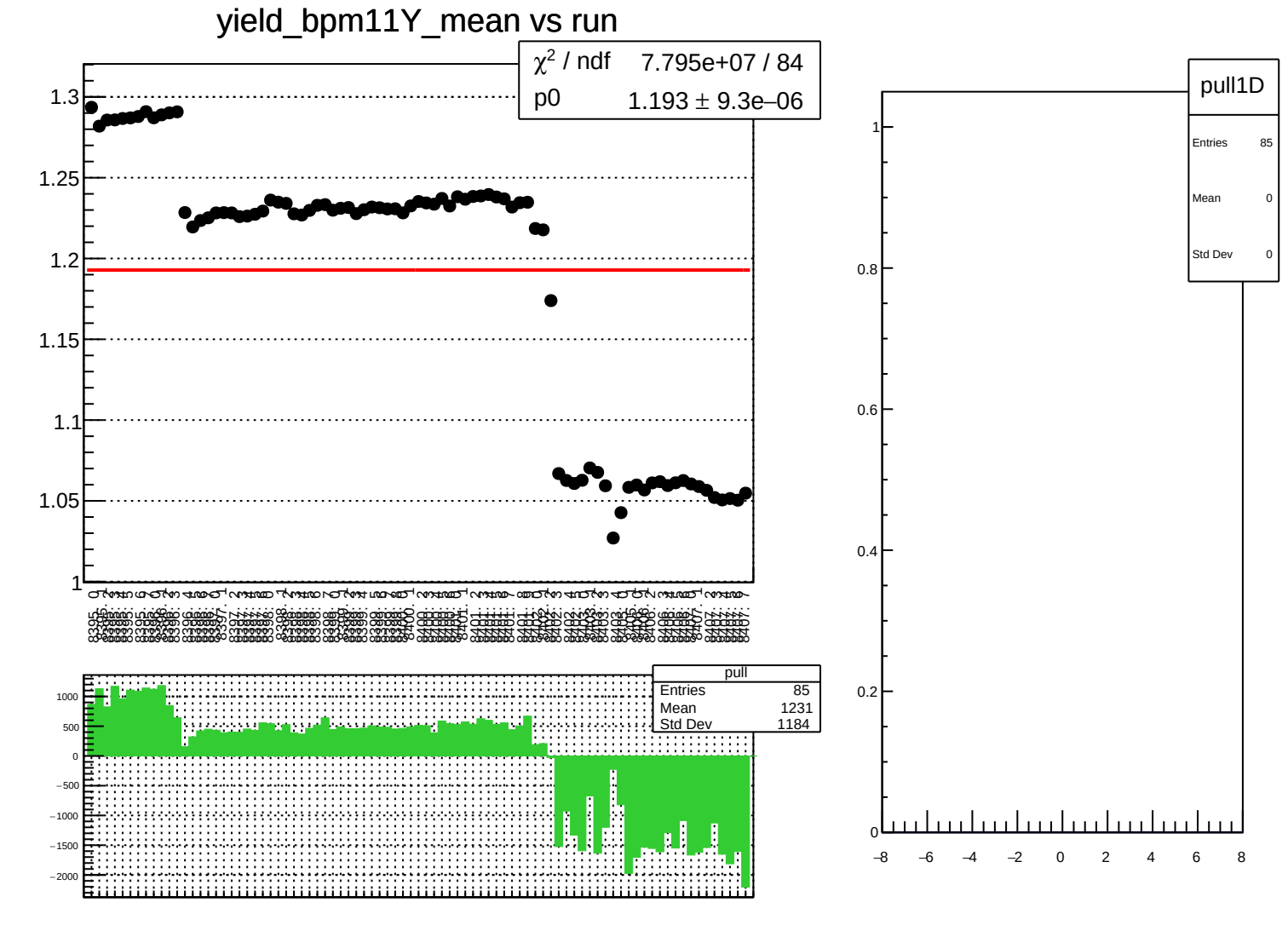

pull1D
Entries 85
Mean 0
Std Dev 0

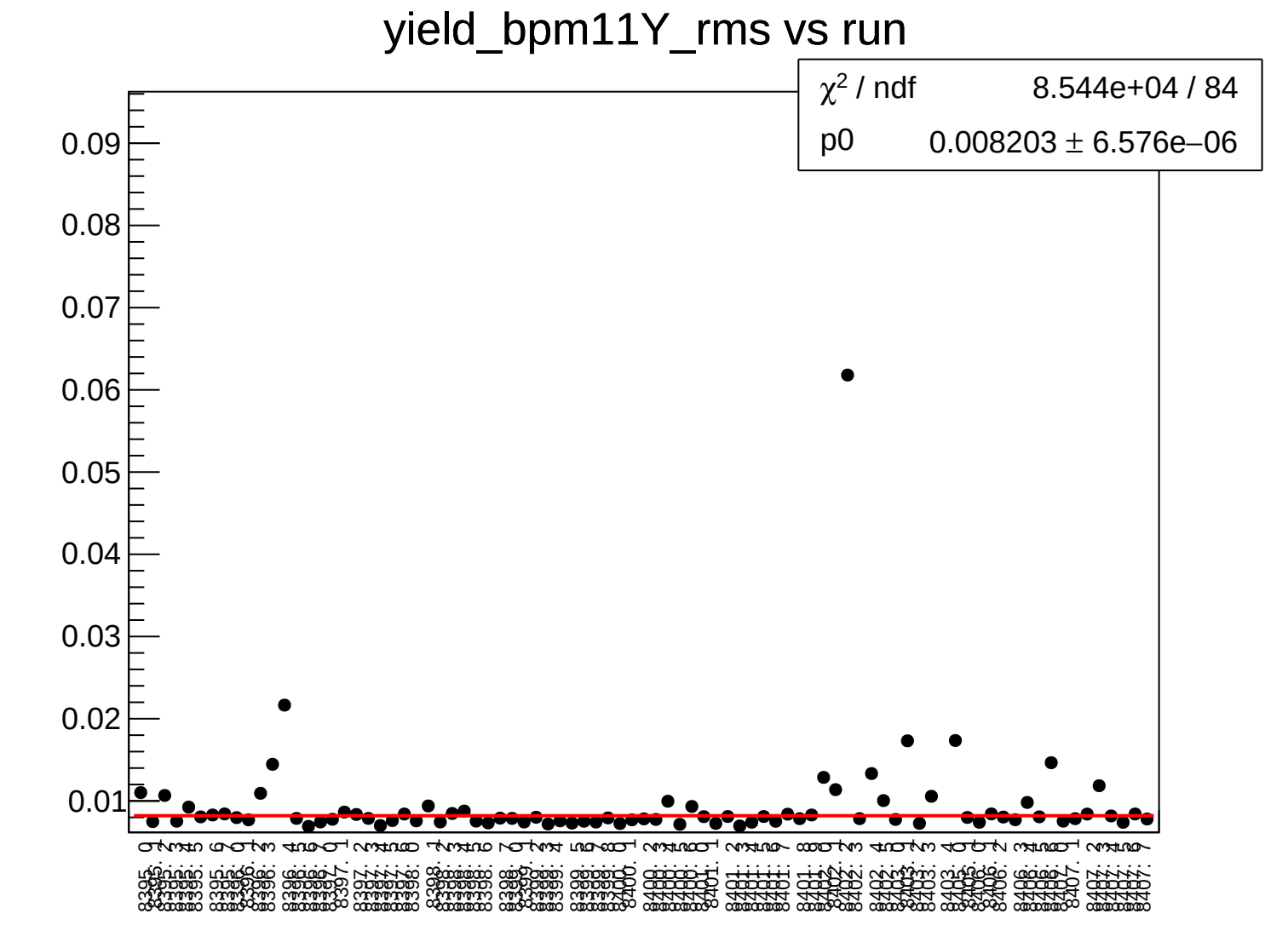

yield_bpm1Y_rms vs run
χ² / ndf 1.654e+05 / 84
p0 0.01729 ± 1.423e−05
0.1
0.08
0.06
0.04
0.02

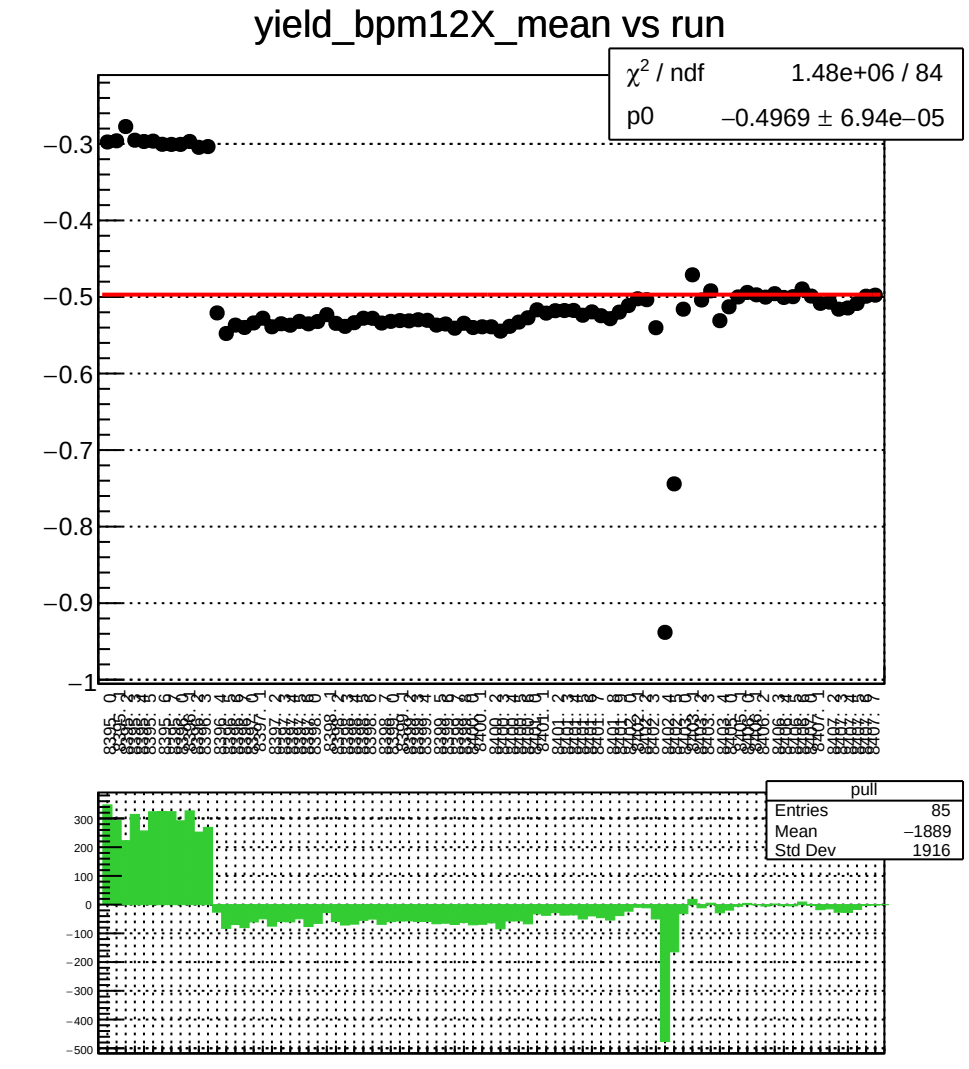

yield_bpm11X_mean vs run
χ² / ndf 7.882e+05 / 84
p0 1.184 ± 2.648e−05
1.25
1.2
1.15
1.1
1.05
1
pull
Entries 85
Mean −1378
Std Dev 1399
200
100
0
−100
−200
−300
−400

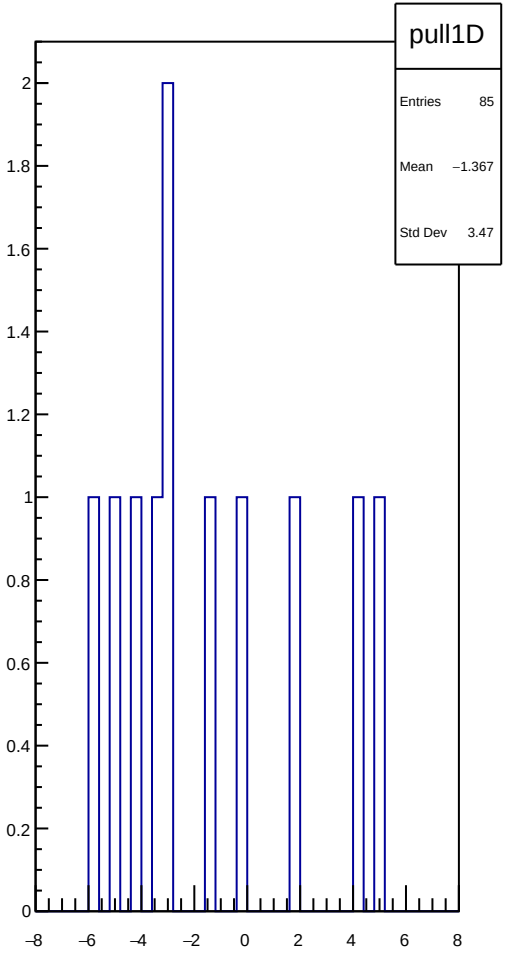

pull1D
Entries 85
Mean −2.915
Std Dev 3.879
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

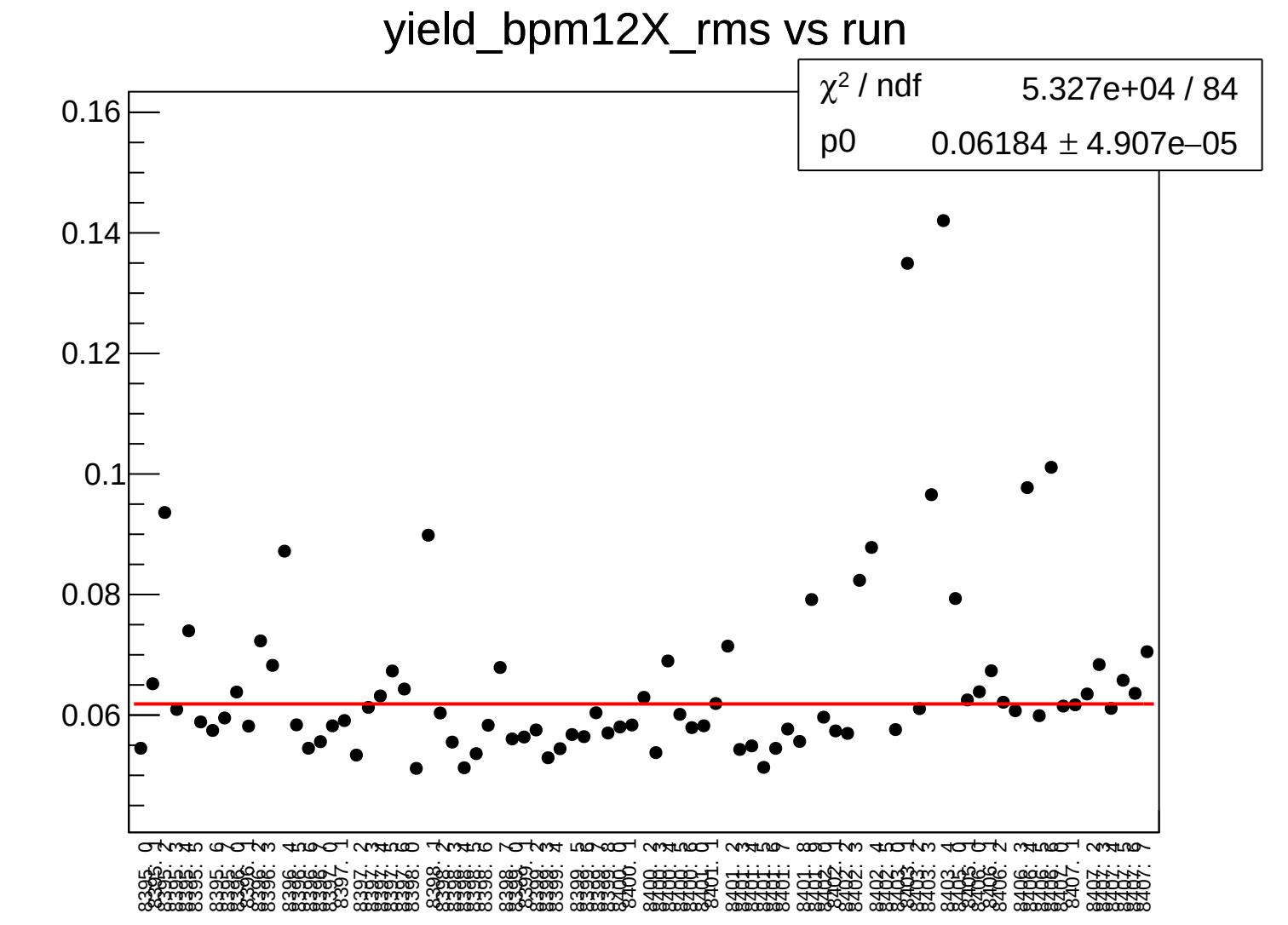

yield_bpm11X_rms vs run
χ² / ndf 5.28e+04 / 84
p0 0.0236 ± 1.872e−05
0.06
0.05
0.04
0.03
0.02

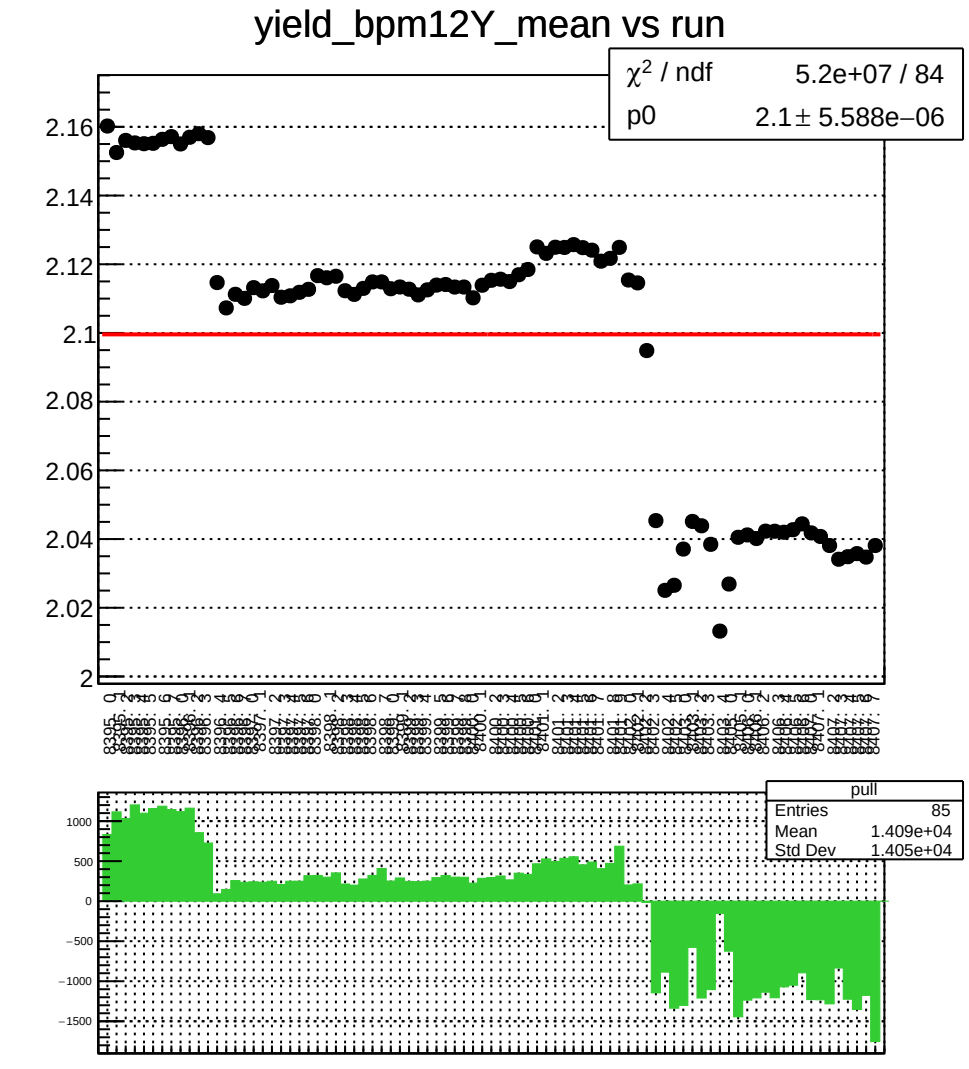

yield_bpm11Y_mean vs run
χ² / ndf 7.795e+07 / 84
p0 1.193 ± 9.3e–06
1.3
1.25
1.2
1.15
1.1
1.05
1
pull
Entries 85
Mean 1231
Std Dev 1184
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

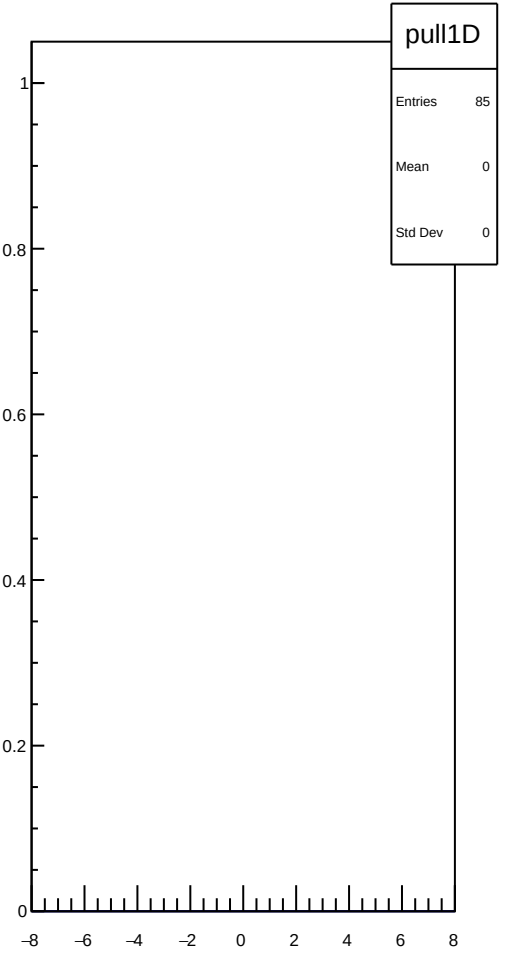

yield_bpm11Y_rms vs run
χ² / ndf 8.544e+04 / 84
p0 0.008203 ± 6.576e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

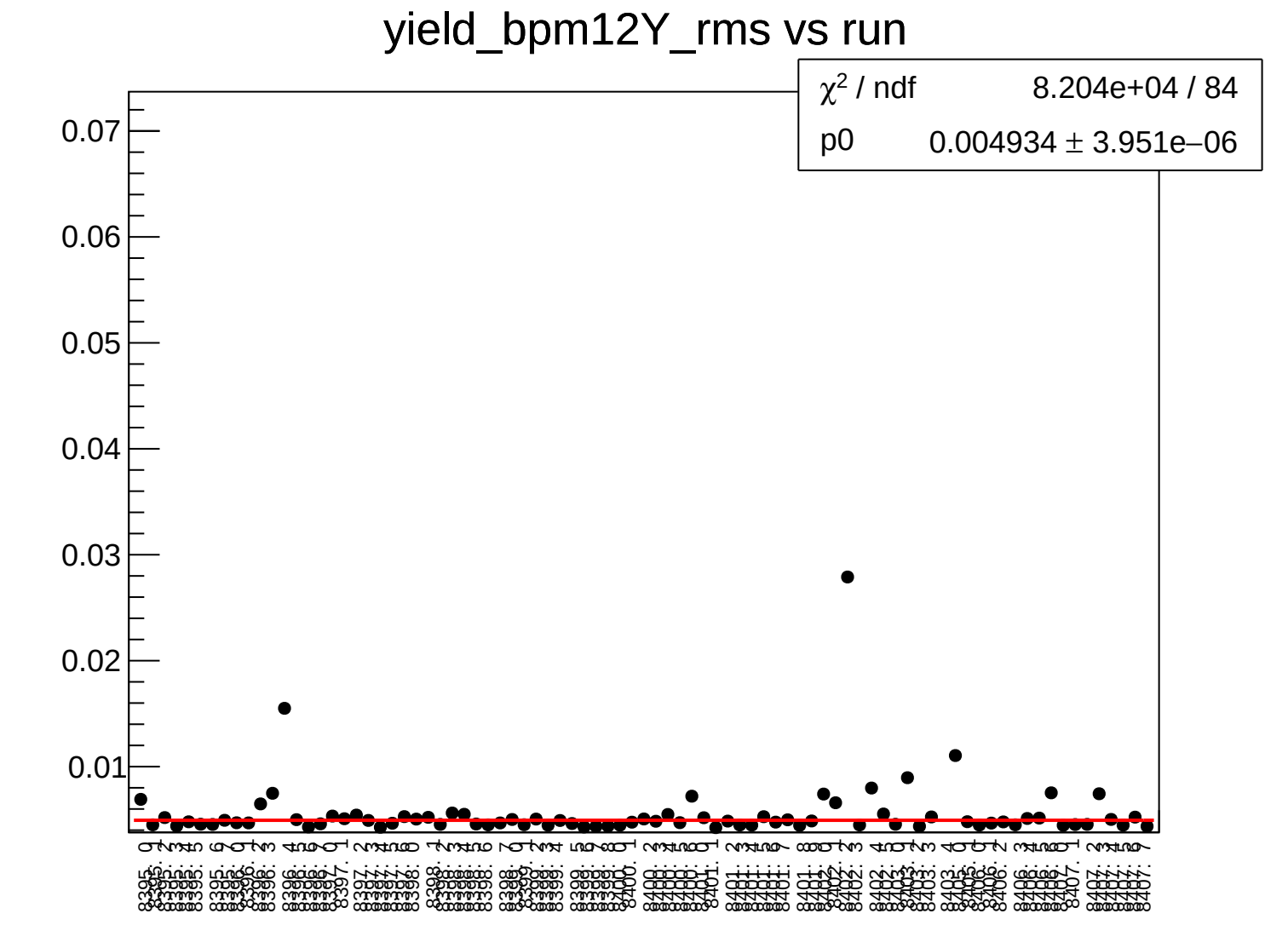

yield_bpm12X_mean vs run
χ² / ndf 1.48e+06 / 84
p0 −0.4969 ± 6.94e−05
pull
Entries 85
Mean −1889
Std Dev 1916

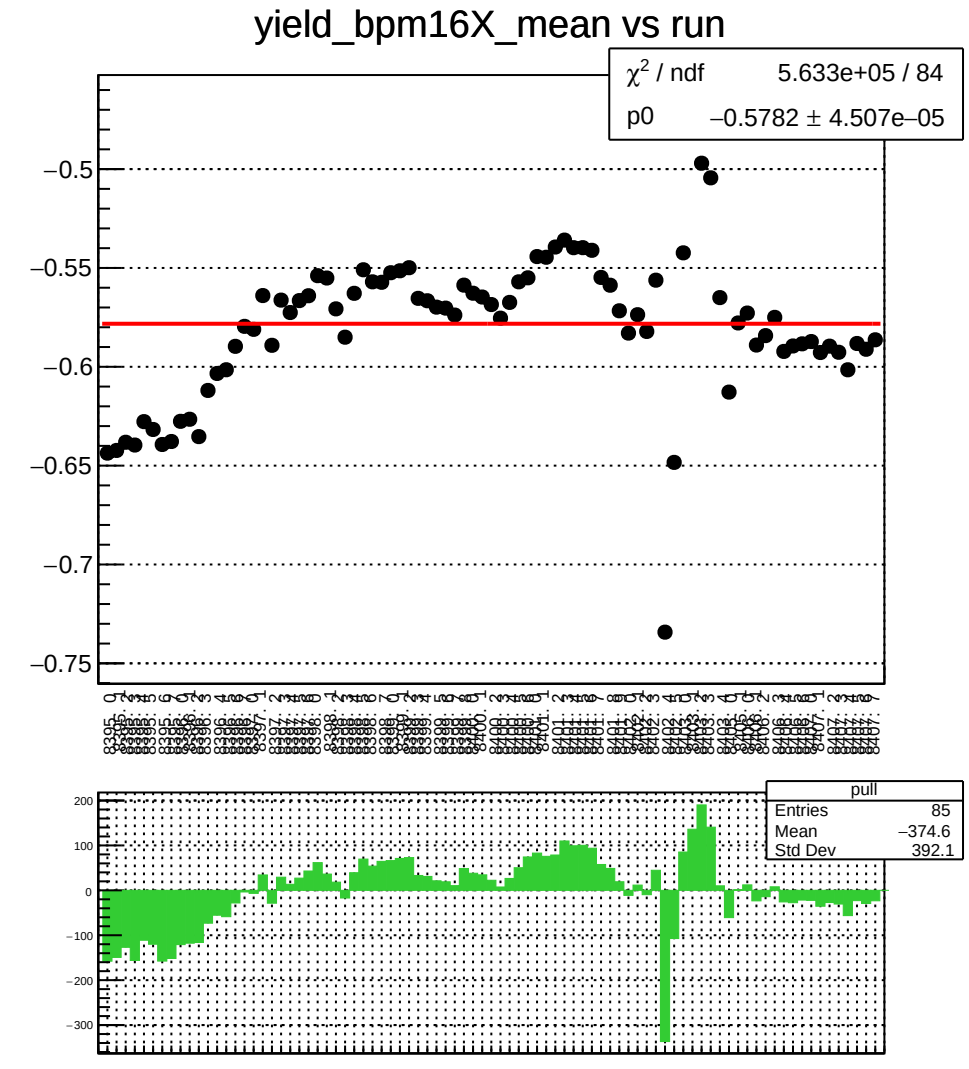

pull1D
Entries 85
Mean −1.367
Std Dev 3.47

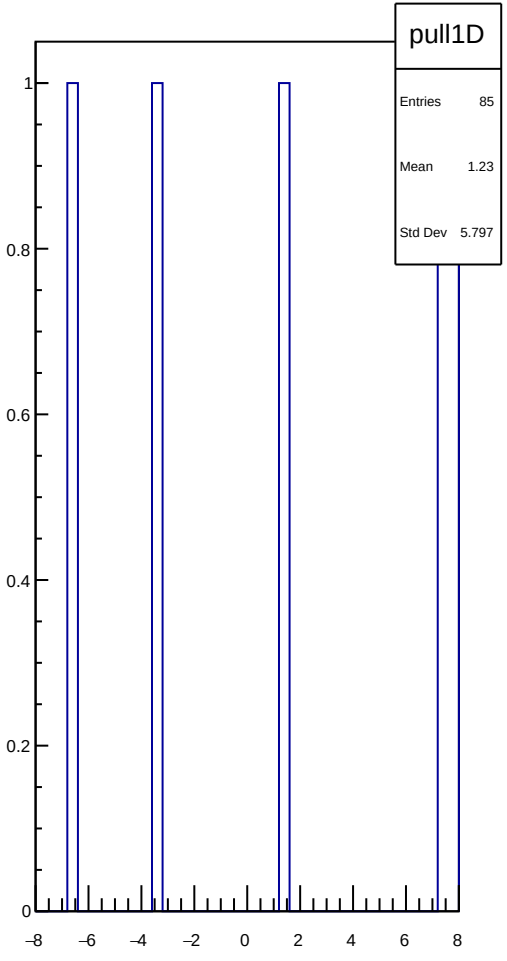

yield_bpm12X_rms vs run
χ² / ndf 5.327e+04 / 84
p0 0.06184 ± 4.907e–05
0.16
0.14
0.12
0.1
0.08
0.06

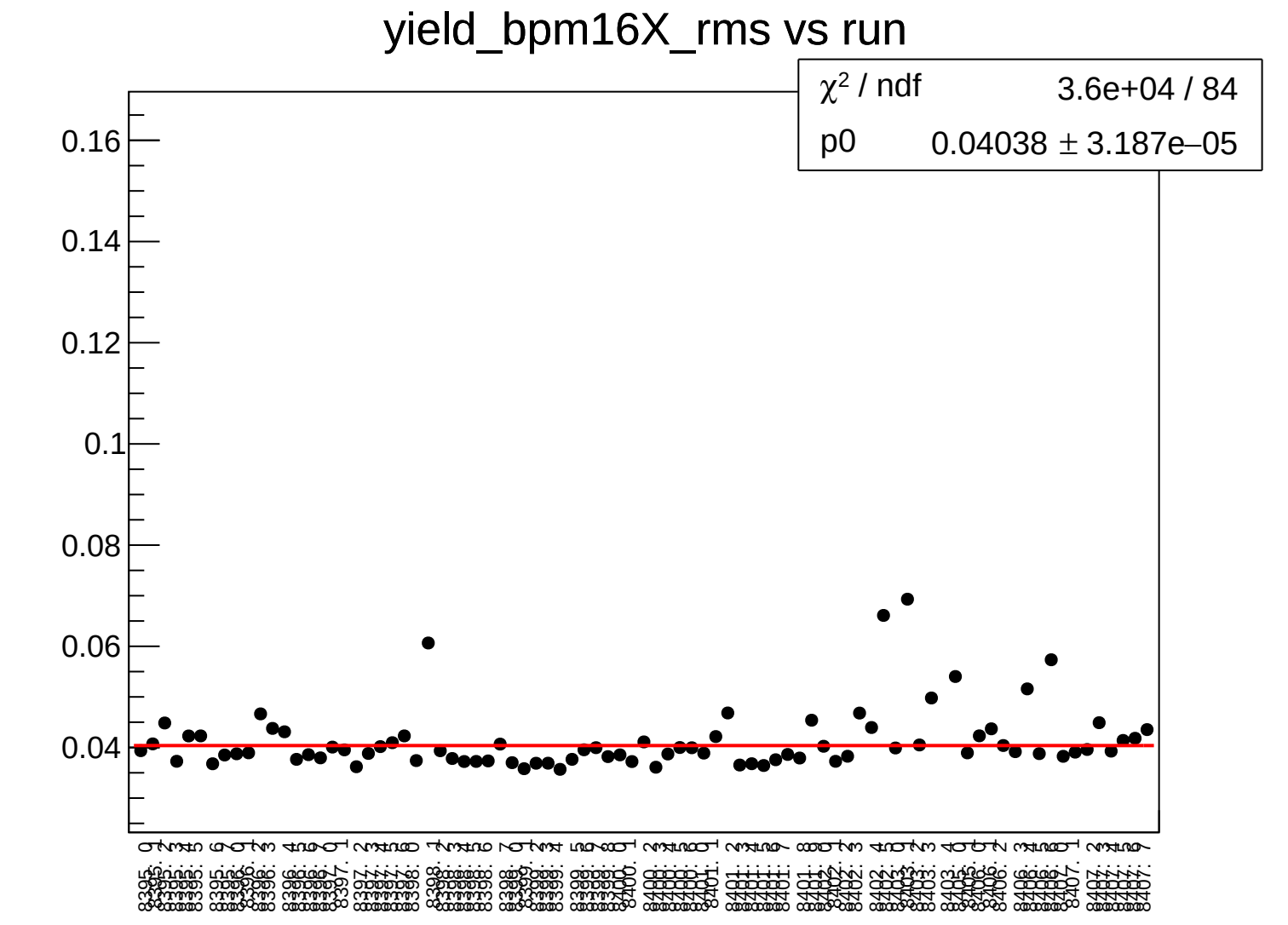

yield_bpm12Y_mean vs run
χ² / ndf 5.2e+07 / 84
p0 2.1 ± 5.588e−06
pull
Entries 85
Mean 1.409e+04
Std Dev 1.405e+04

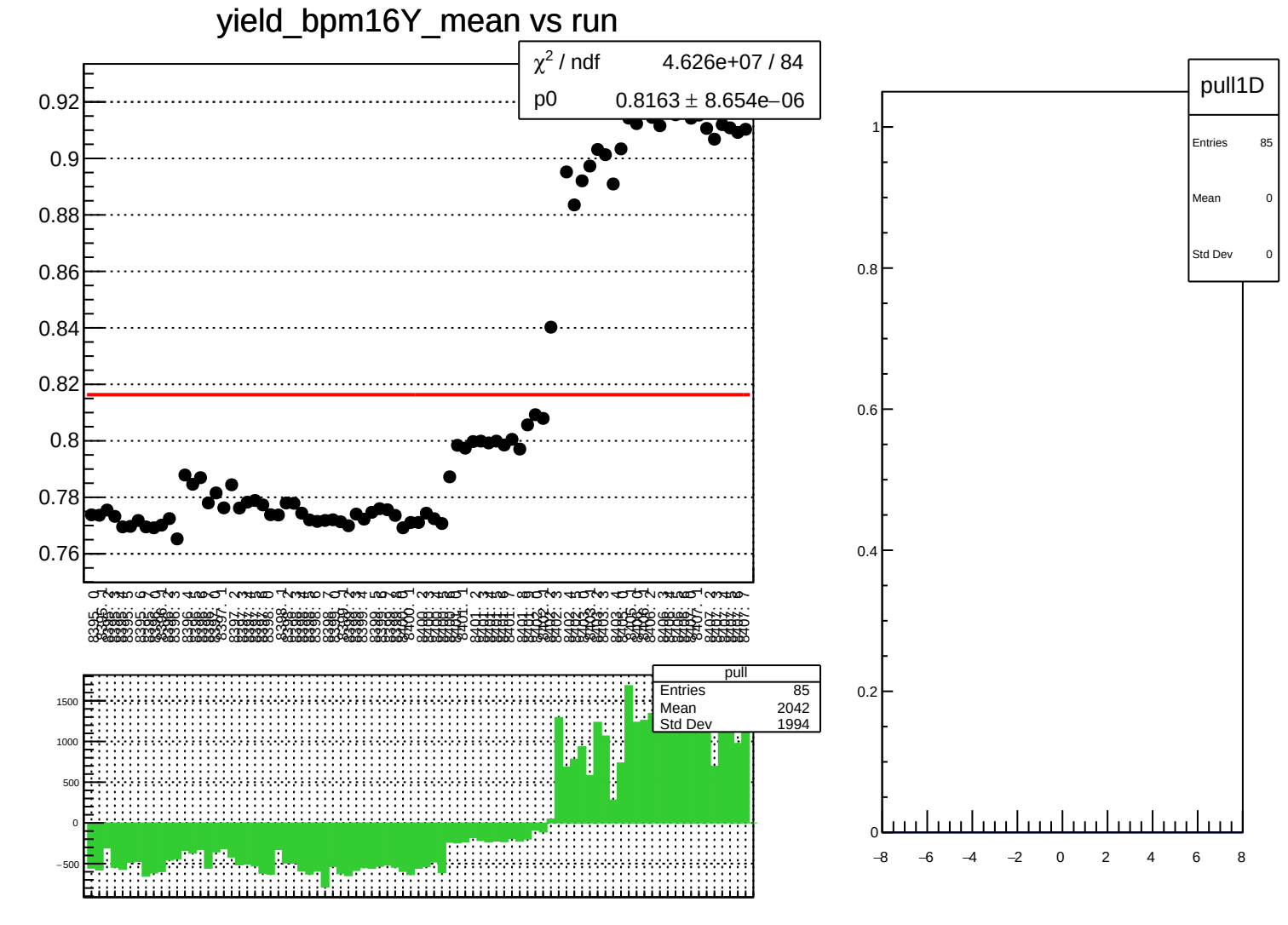

pull1D
Entries 85
Mean 0
Std Dev 0

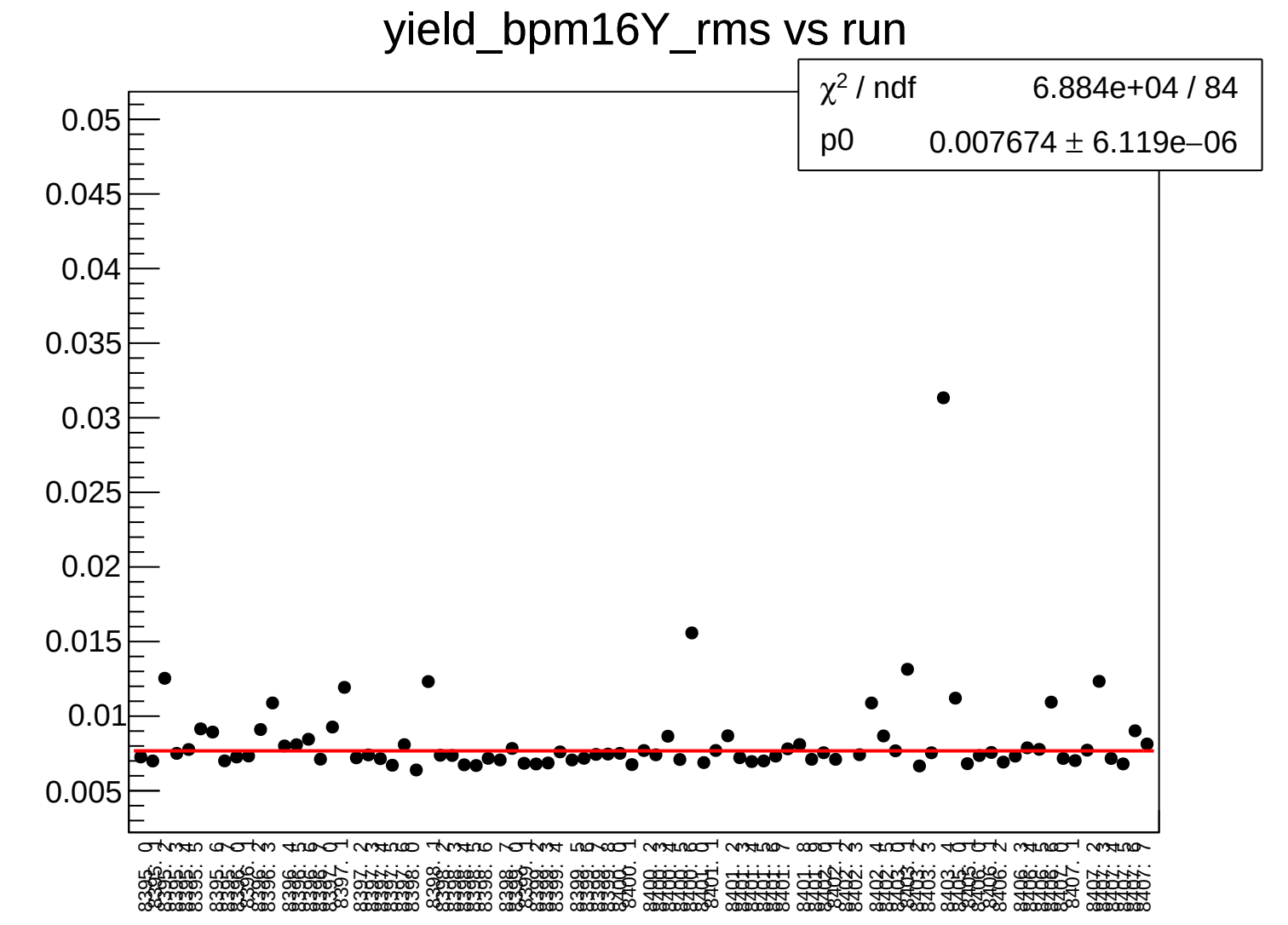

yield_bpm12Y_rms vs run
χ² / ndf 8.204e+04 / 84
p0 0.004934 ± 3.951e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

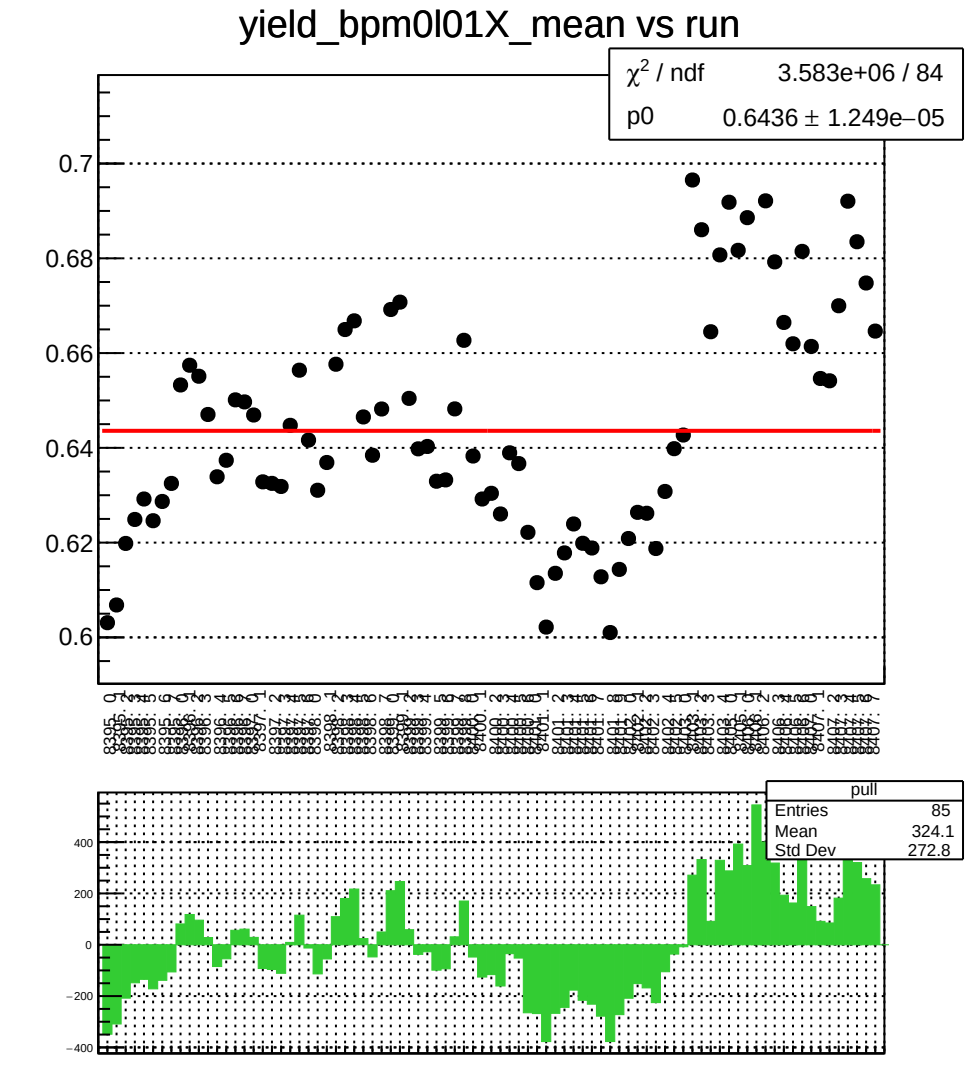

yield_bpm16X_mean vs run
χ² / ndf 5.633e+05 / 84
p0 −0.5782 ± 4.507e−05
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 85
Mean −374.6
Std Dev 392.1
200
100
0
−100
−200
−300

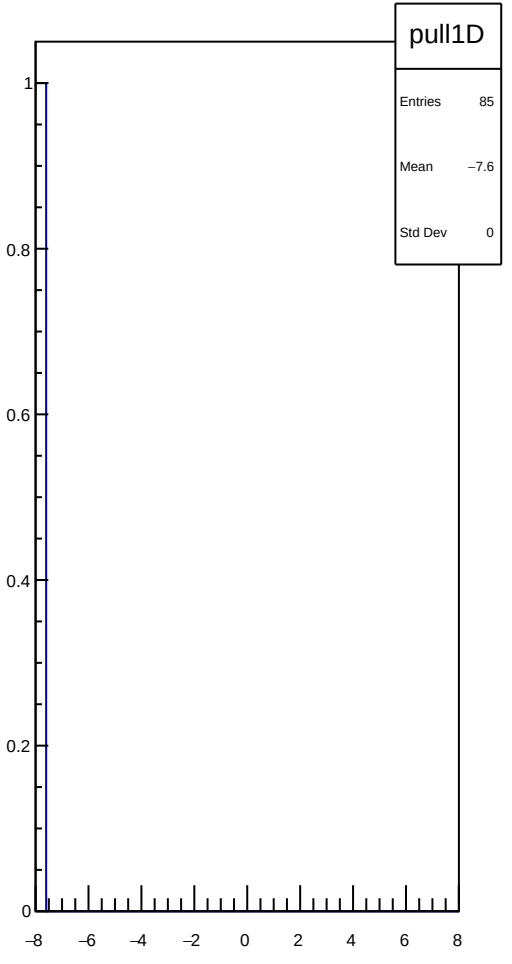

pull1D
Entries 85
Mean 1.23
Std Dev 5.797
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

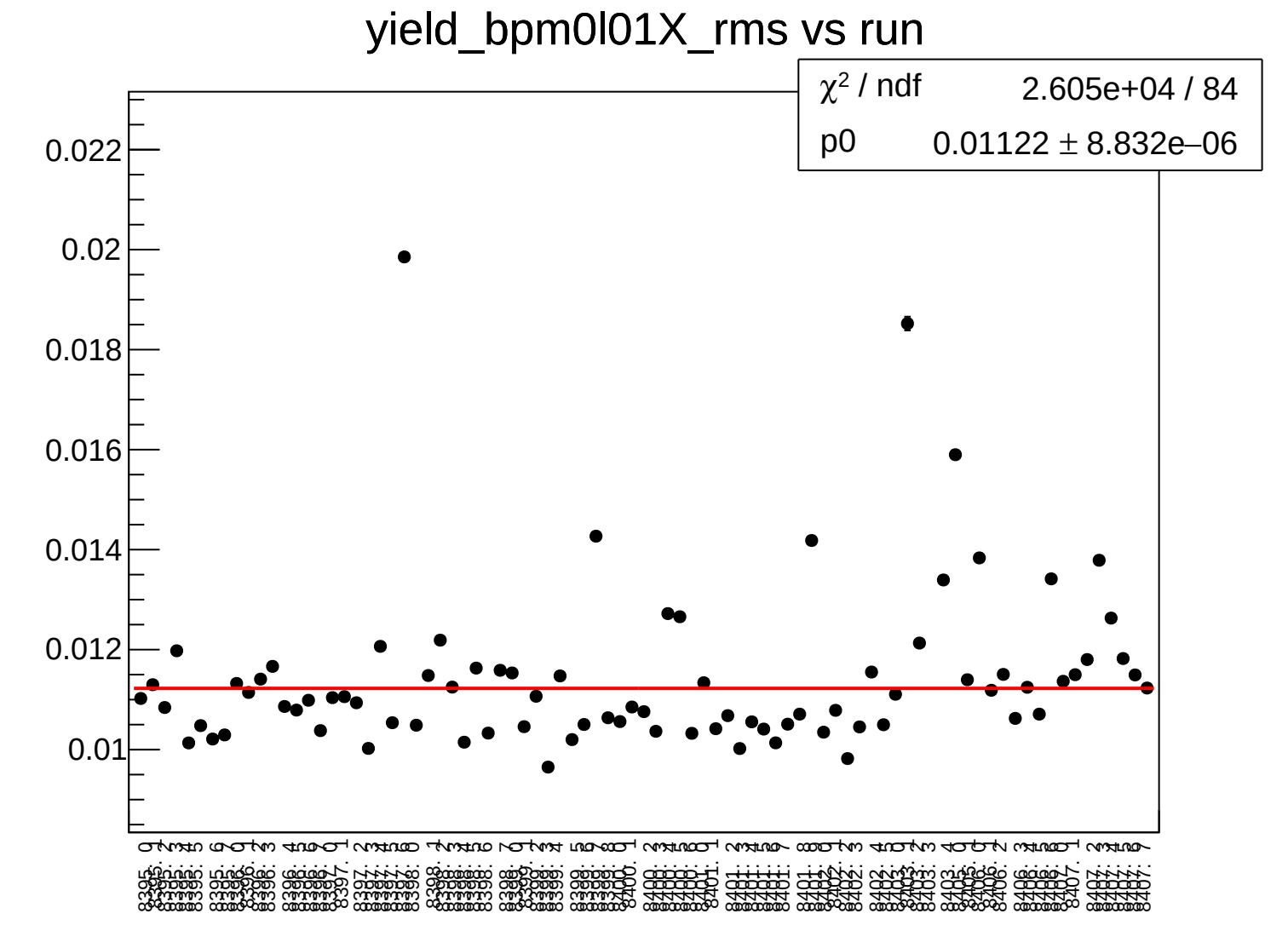

yield_bpm16X_rms vs run
χ² / ndf 3.6e+04 / 84
p0 0.04038 ± 3.187e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

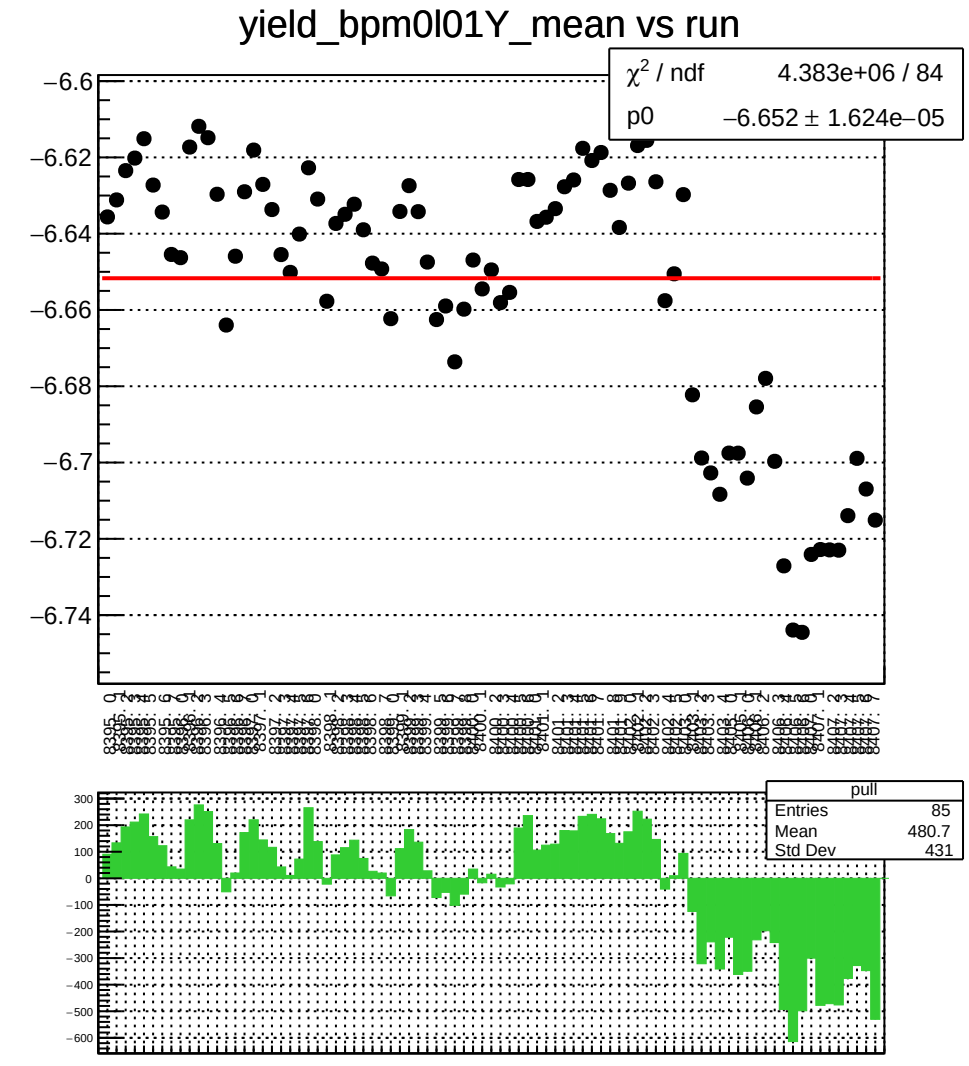

yield_bpm16Y_mean vs run
χ² / ndf 4.626e+07 / 84
p0 0.8163 ± 8.654e−06
0.92
0.9
0.88
0.86
0.84
0.82
0.8
0.78
0.76
pull
Entries 85
Mean 2042
Std Dev 1994
1500
1000
500
0
−500
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

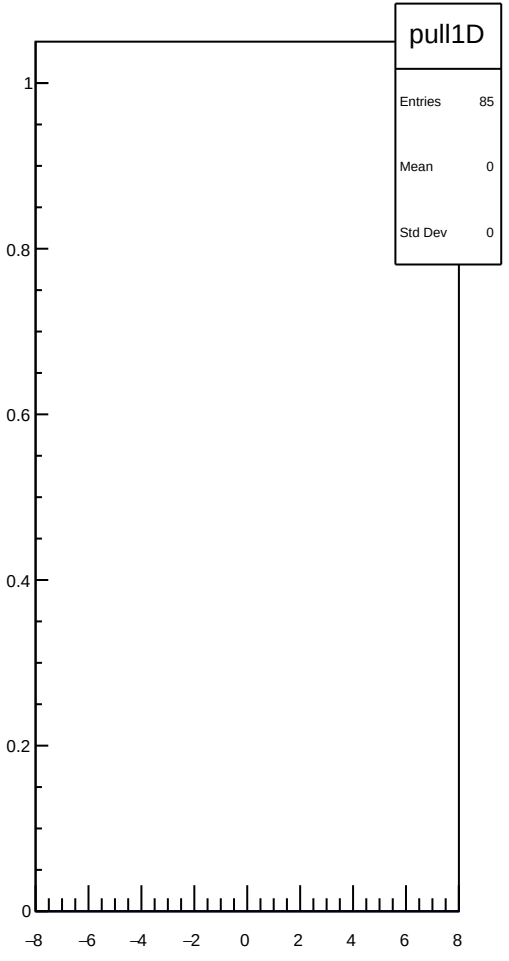

yield_bpm16Y_rms vs run
χ^2 / ndf 6.884e+04 / 84
p0 0.007674 ± 6.119e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

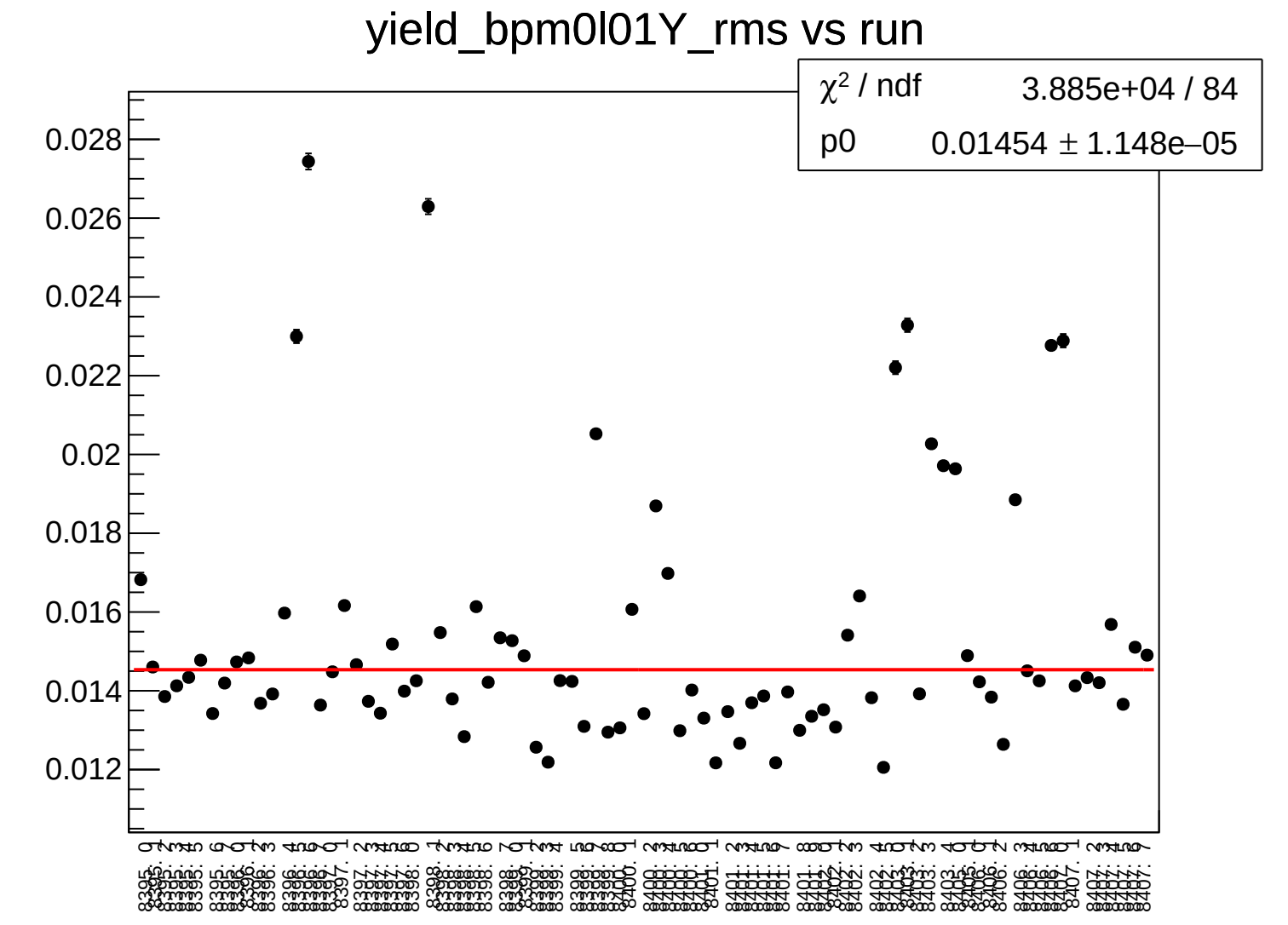

yield_bpm0l01X_mean vs run
χ² / ndf 3.583e+06 / 84
p0 0.6436 ± 1.249e−05
0.7
0.68
0.66
0.64
0.62
0.6
pull
Entries 85
Mean 324.1
Std Dev 272.8
400
200
0
−200
−400

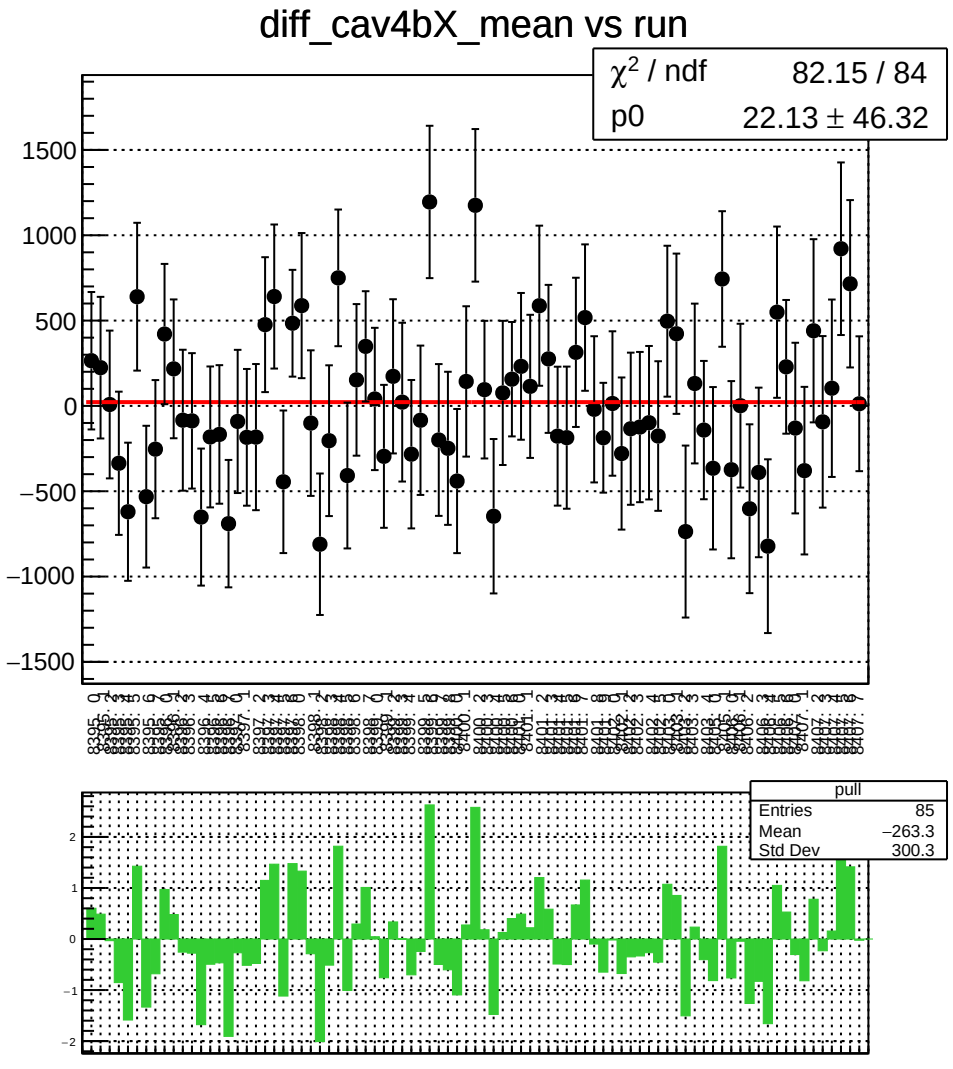

pull1D
Entries 85
Mean −7.6
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

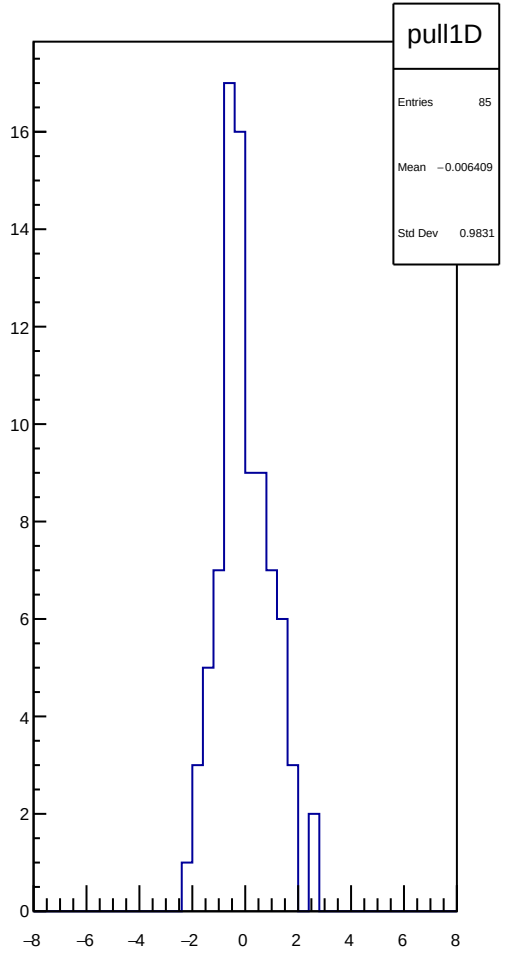

yield_bpm0l01X_rms vs run
χ² / ndf 2.605e+04 / 84
p0 0.01122 ± 8.832e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

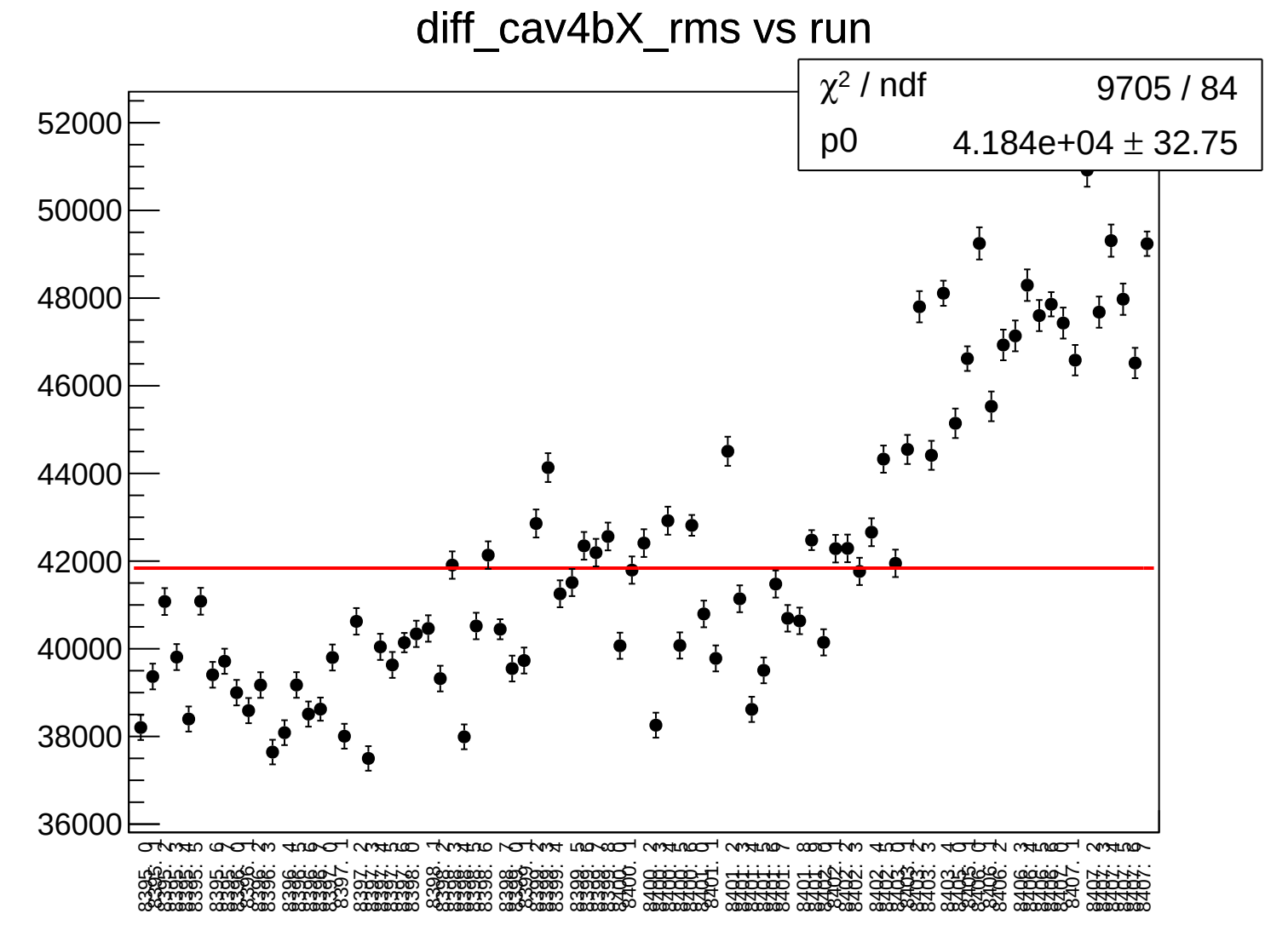

yield_bpm0l01Y_mean vs run
χ² / ndf 4.383e+06 / 84
p0 −6.652 ± 1.624e−05
−6.6
−6.62
−6.64
−6.66
−6.68
−6.7
−6.72
−6.74
pull
Entries 85
Mean 480.7
Std Dev 431
300
200
100
0
−100
−200
−300
−400
−500
−600

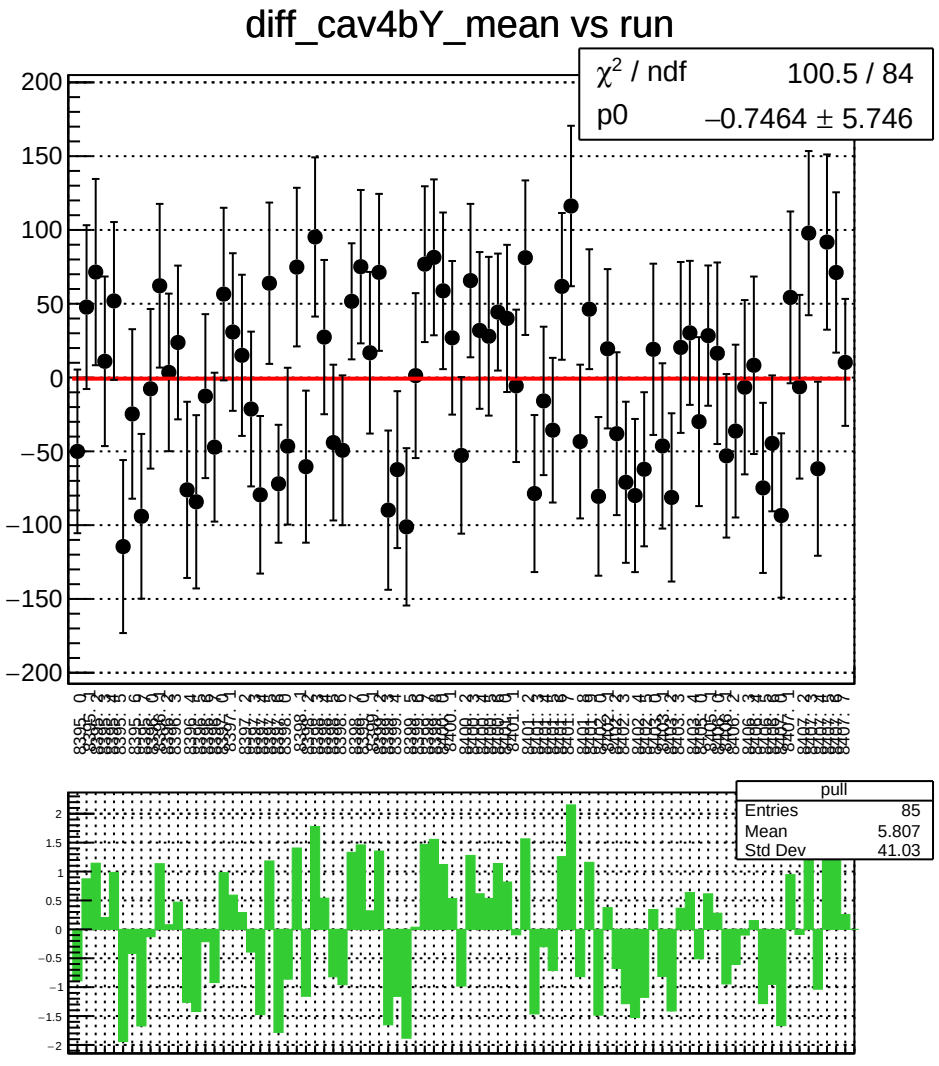

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

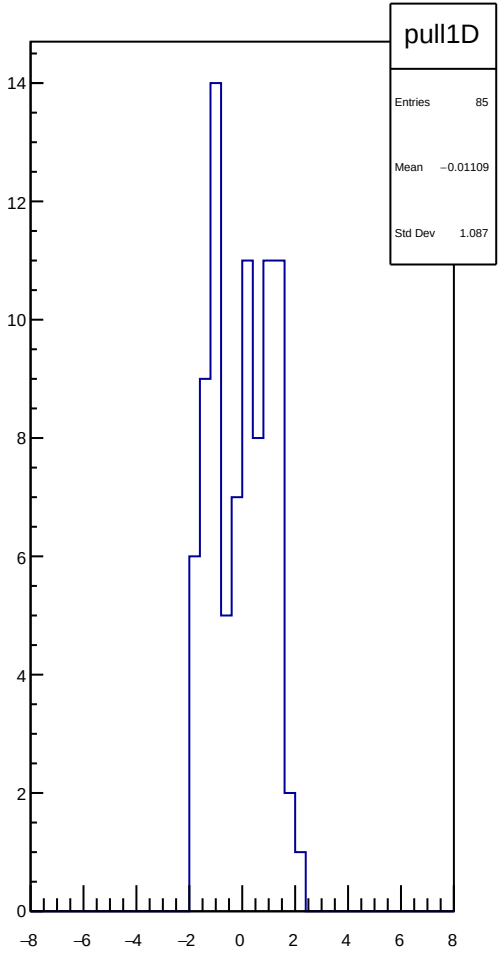

yield_bpm0l01Y_rms vs run
χ² / ndf 3.885e+04 / 84
p0 0.01454 ± 1.148e−05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

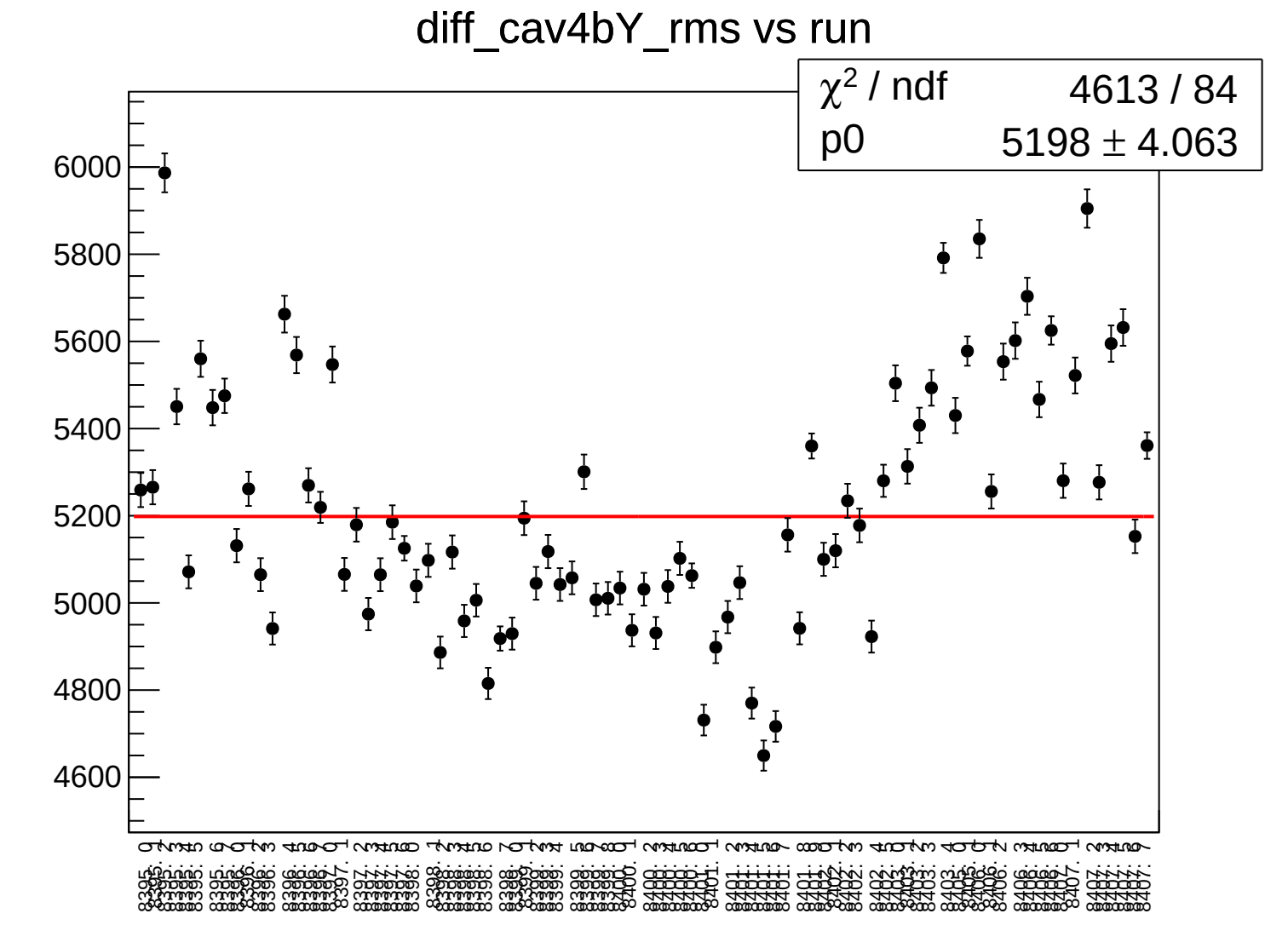

diff_cav4bX_mean vs run
χ² / ndf 82.15 / 84
p0 22.13 ± 46.32
1500
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −263.3
Std Dev 300.3
2
1
0
−1
−2

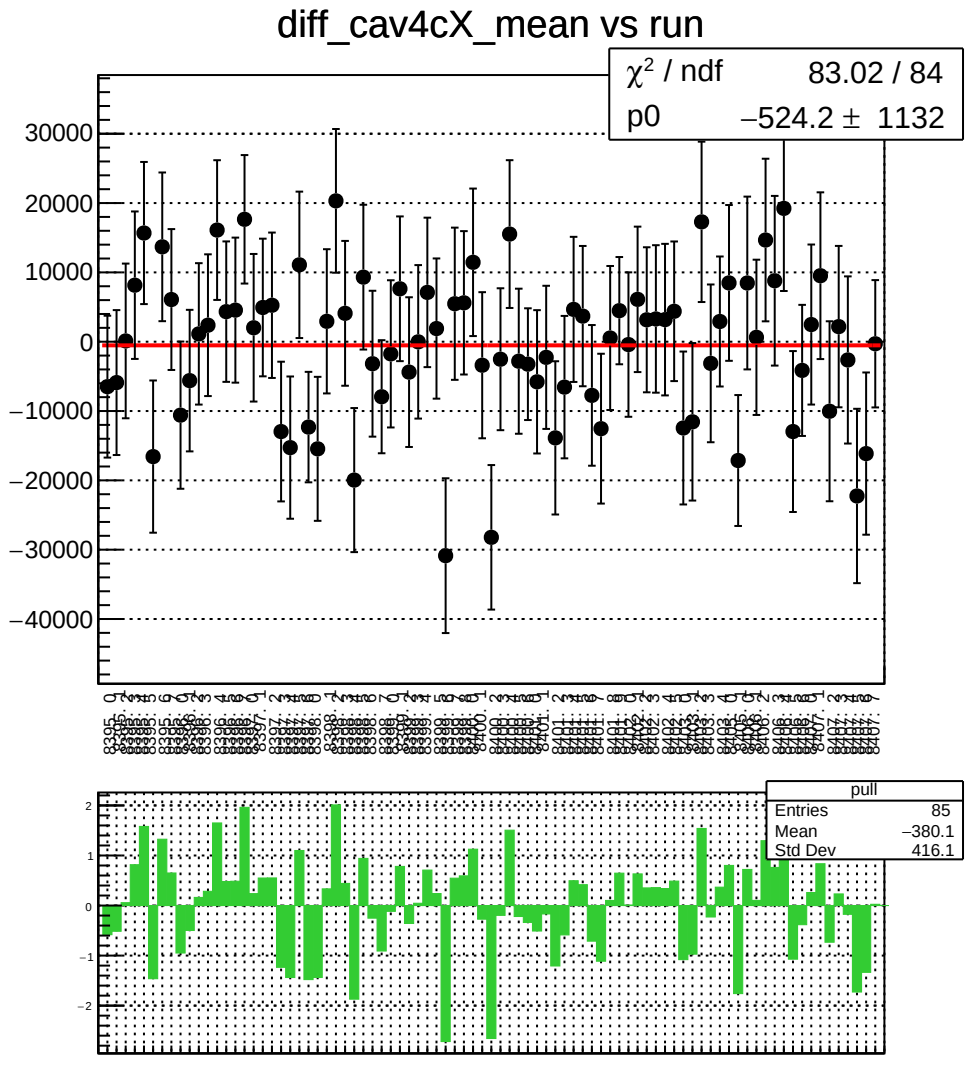

pull1D
Entries 85
Mean −0.006409
Std Dev 0.9831
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

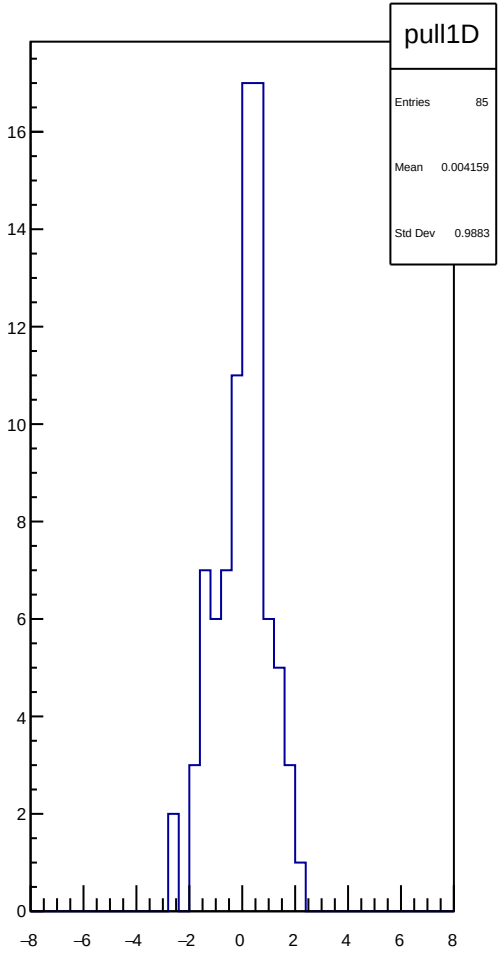

diff_cav4bX_rms vs run
χ² / ndf 9705 / 84
p0 4.184e+04 ± 32.75
52000
50000
48000
46000
44000
42000
40000
38000
36000

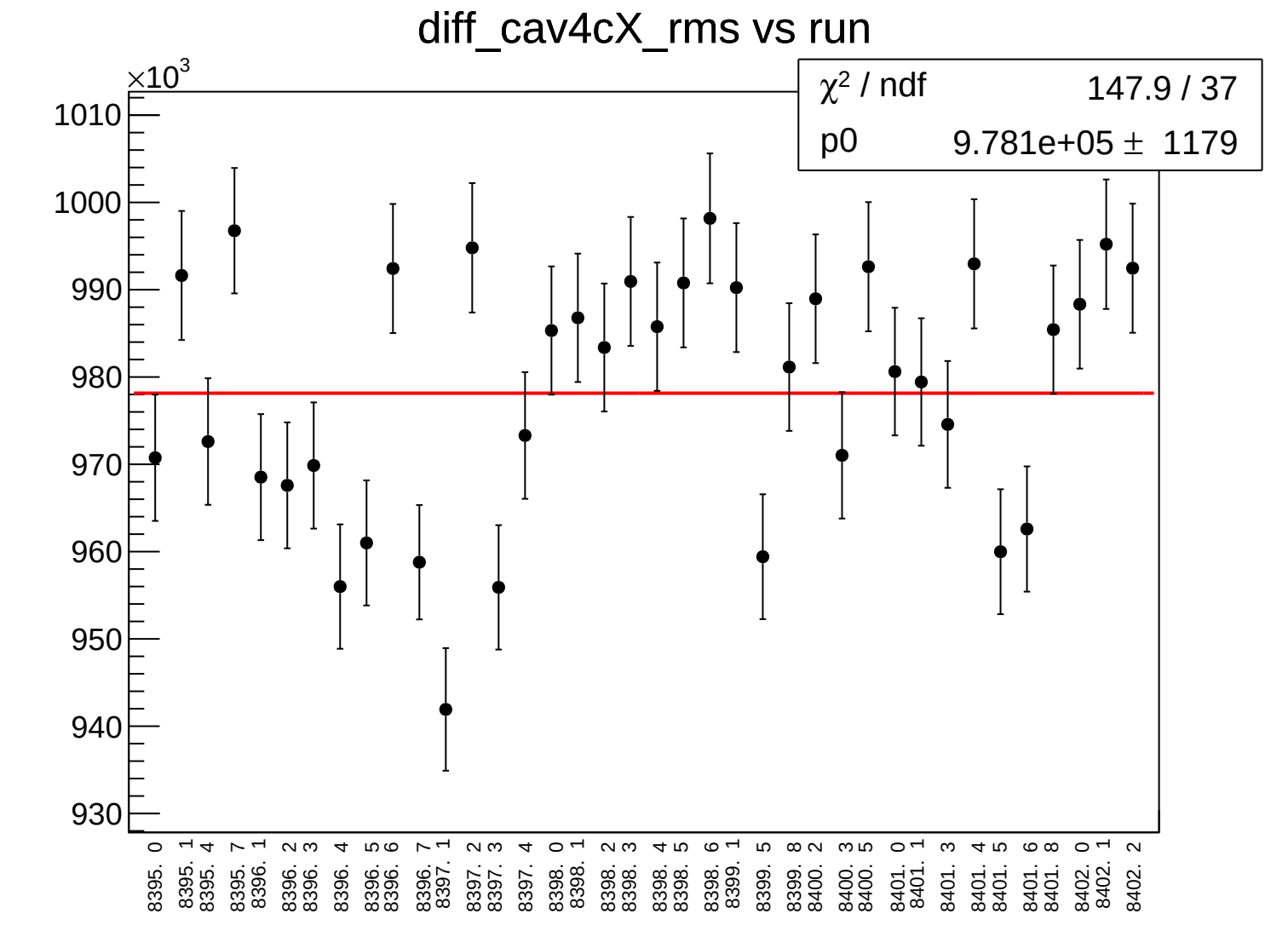

diff_cav4bY_mean vs run
χ² / ndf 100.5 / 84
p0 −0.7464 ± 5.746
pull
Entries 85
Mean 5.807
Std Dev 41.03

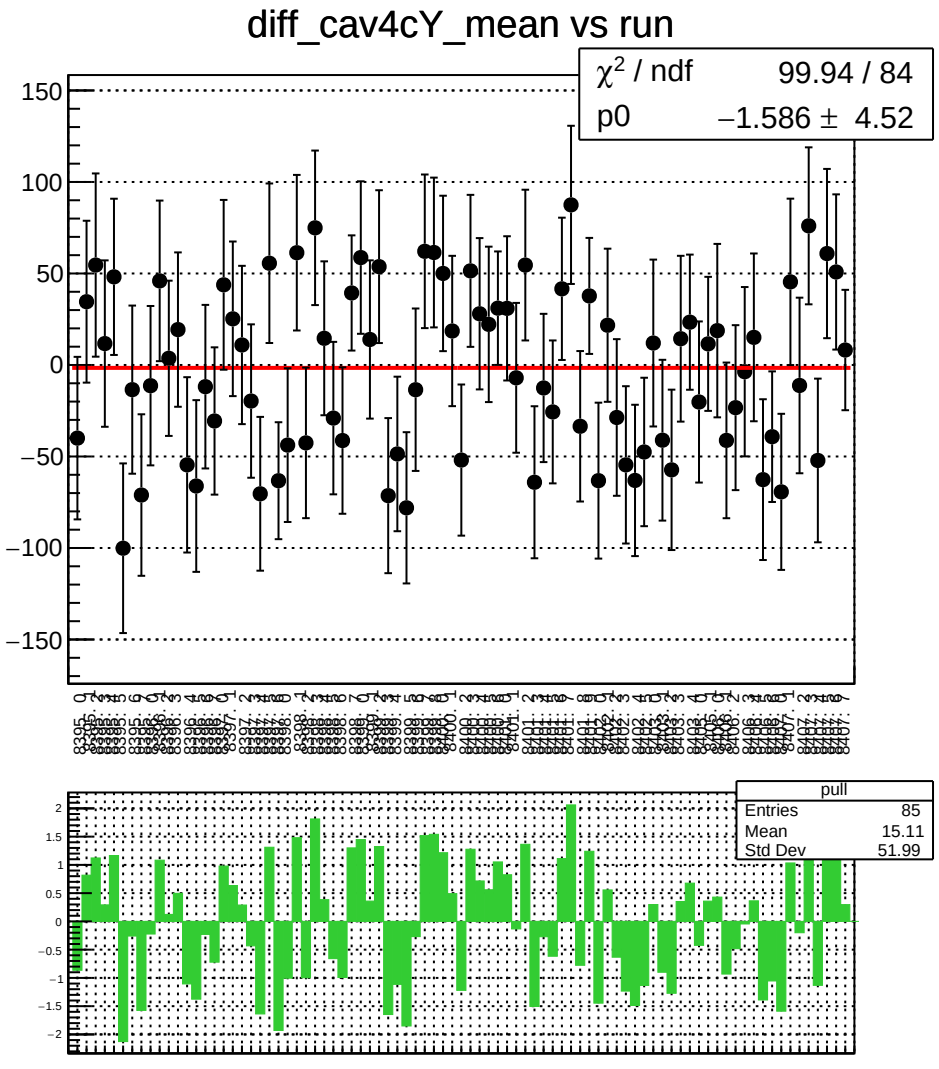

pull1D
Entries 85
Mean −0.01109
Std Dev 1.087

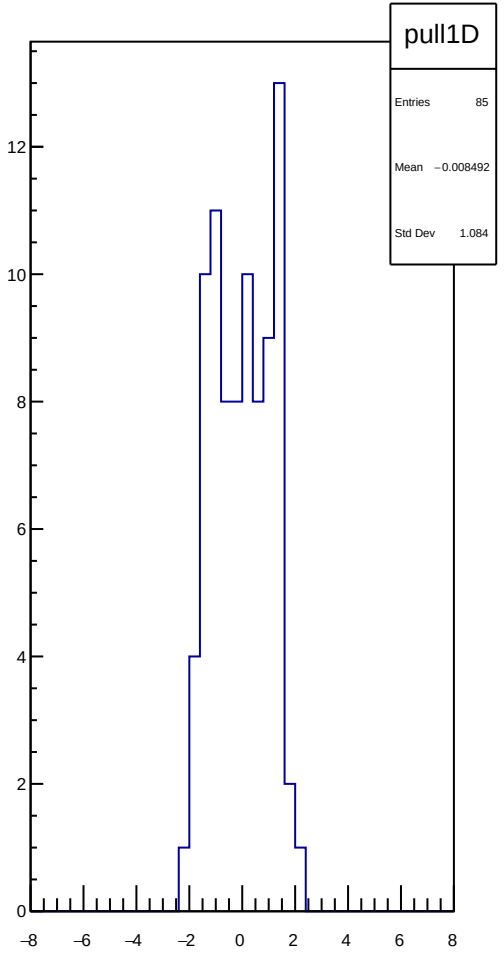

diff_cav4bY_rms vs run
χ² / ndf 4613 / 84
p0 5198 ± 4.063
6000
5800
5600
5400
5200
5000
4800
4600

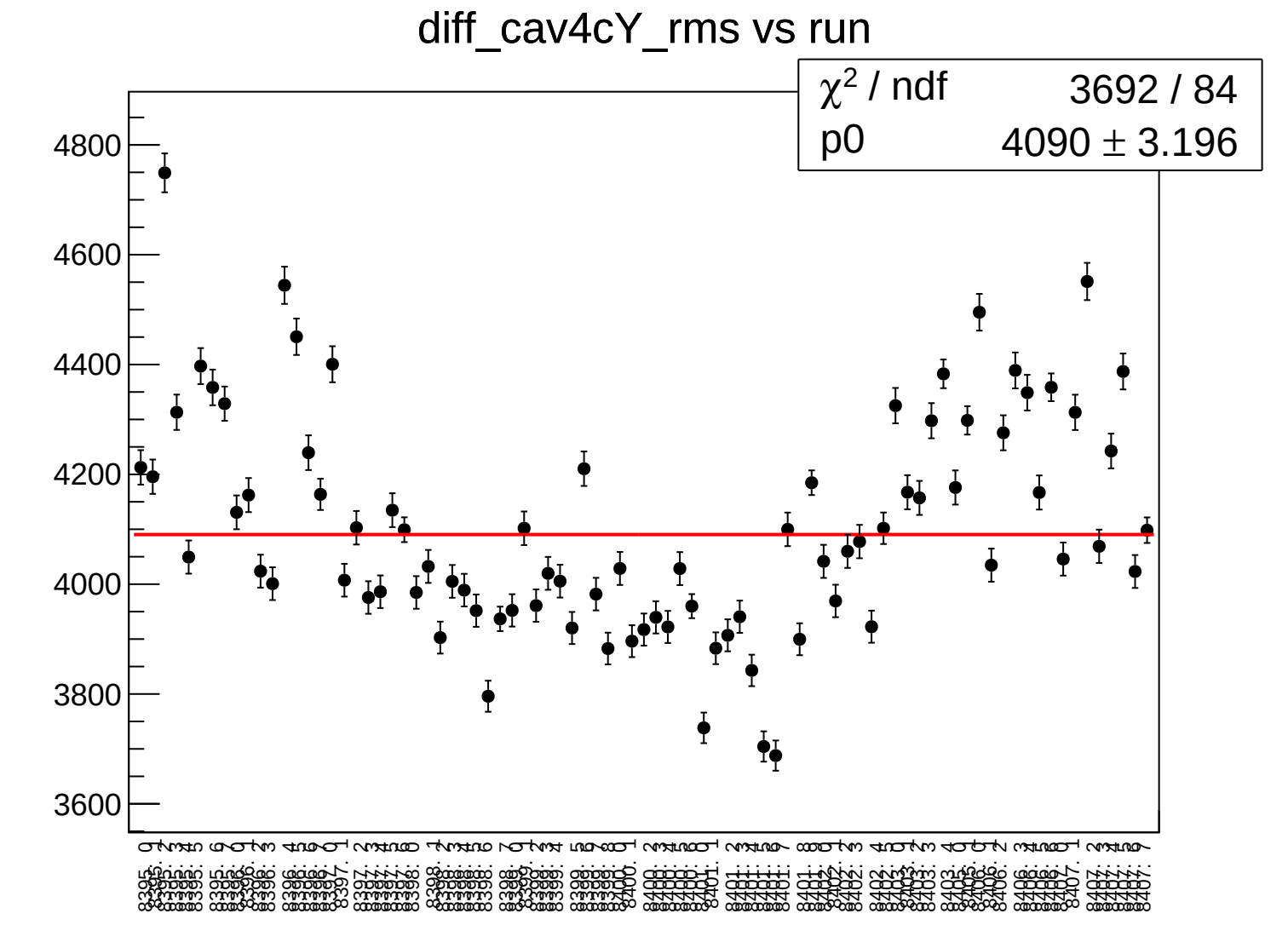

diff_cav4cX_mean vs run
χ² / ndf 83.02 / 84
p0 −524.2 ± 1132
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −380.1
Std Dev 416.1
2
1
0
−1
−2

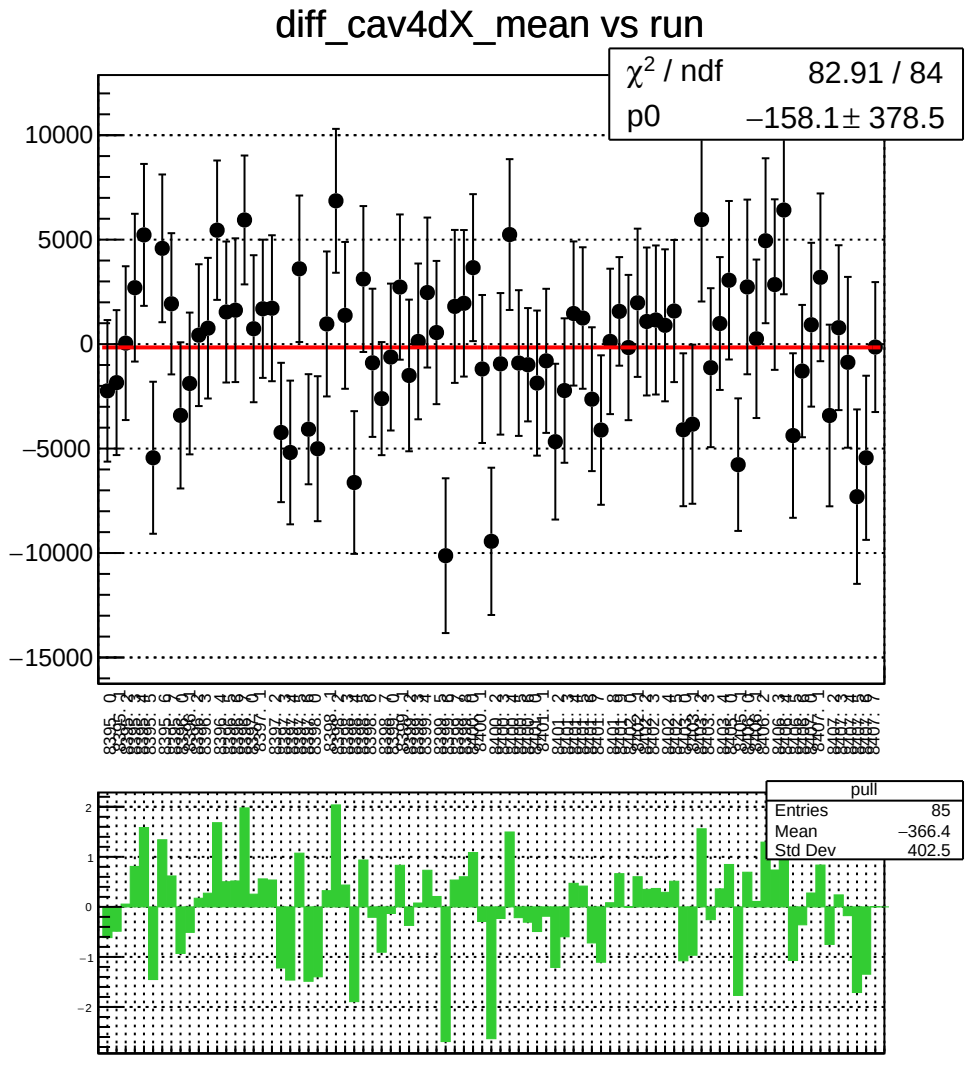

pull1D
Entries 85
Mean 0.004159
Std Dev 0.9883
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

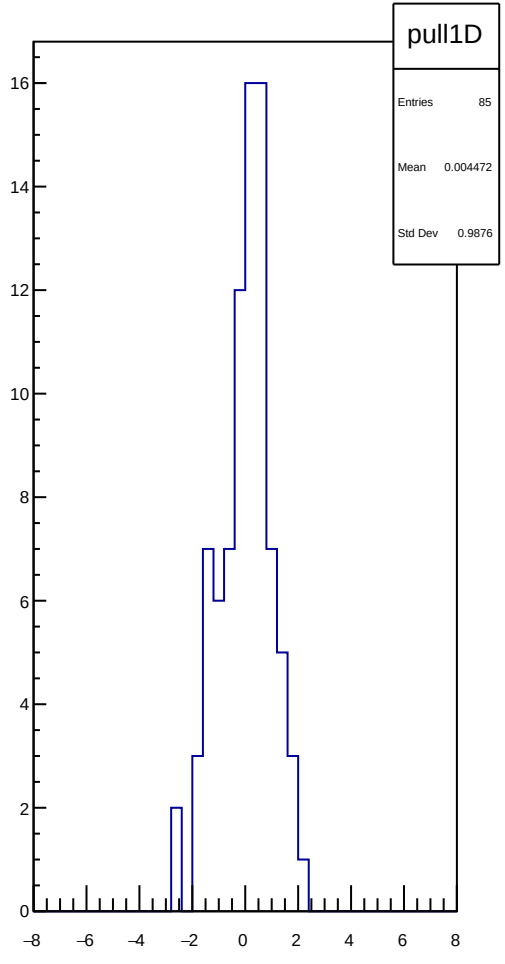

diff_cav4cX_rms vs run
×10^3
χ² / ndf 147.9 / 37
p0 9.781e+05 ± 1179
1010
1000
990
980
970
960
950
940
930
8395. 0
8395. 1
8395. 4
8395. 7
8396. 1
8396. 2
8396. 3
8396. 4
8396. 5
8396. 6
8396. 7
8397. 1
8397. 2
8397. 3
8397. 4
8398. 0
8398. 1
8398. 2
8398. 3
8398. 4
8398. 5
8398. 6
8399. 1
8399. 5
8399. 8
8400. 2
8400. 3
8400. 5
8401. 0
8401. 1
8401. 3
8401. 4
8401. 5
8401. 6
8401. 8
8402. 0
8402. 1
8402. 2

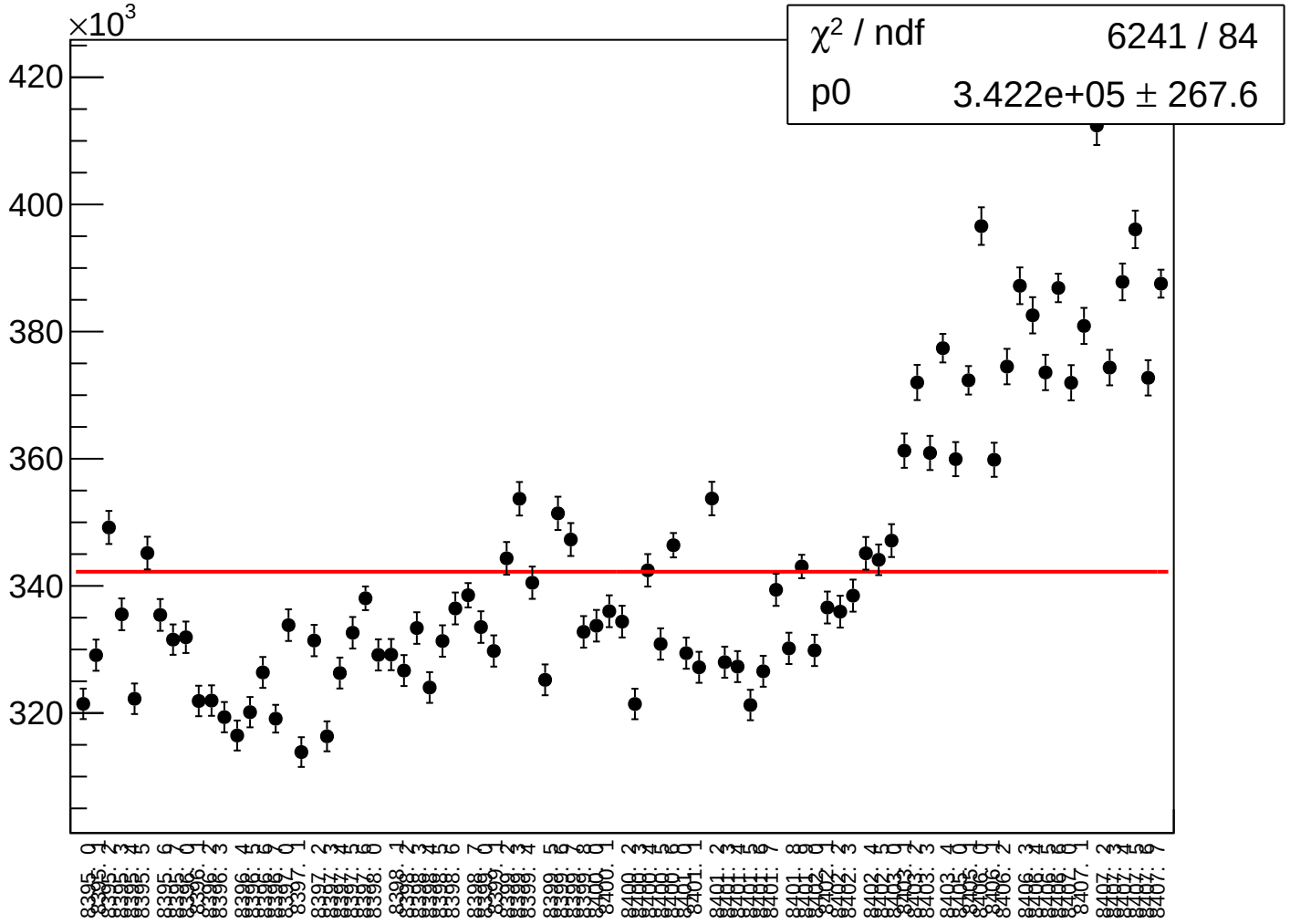

diff_cav4cY_mean vs run
χ² / ndf 99.94 / 84
p0 −1.586 ± 4.52
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 15.11
Std Dev 51.99
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

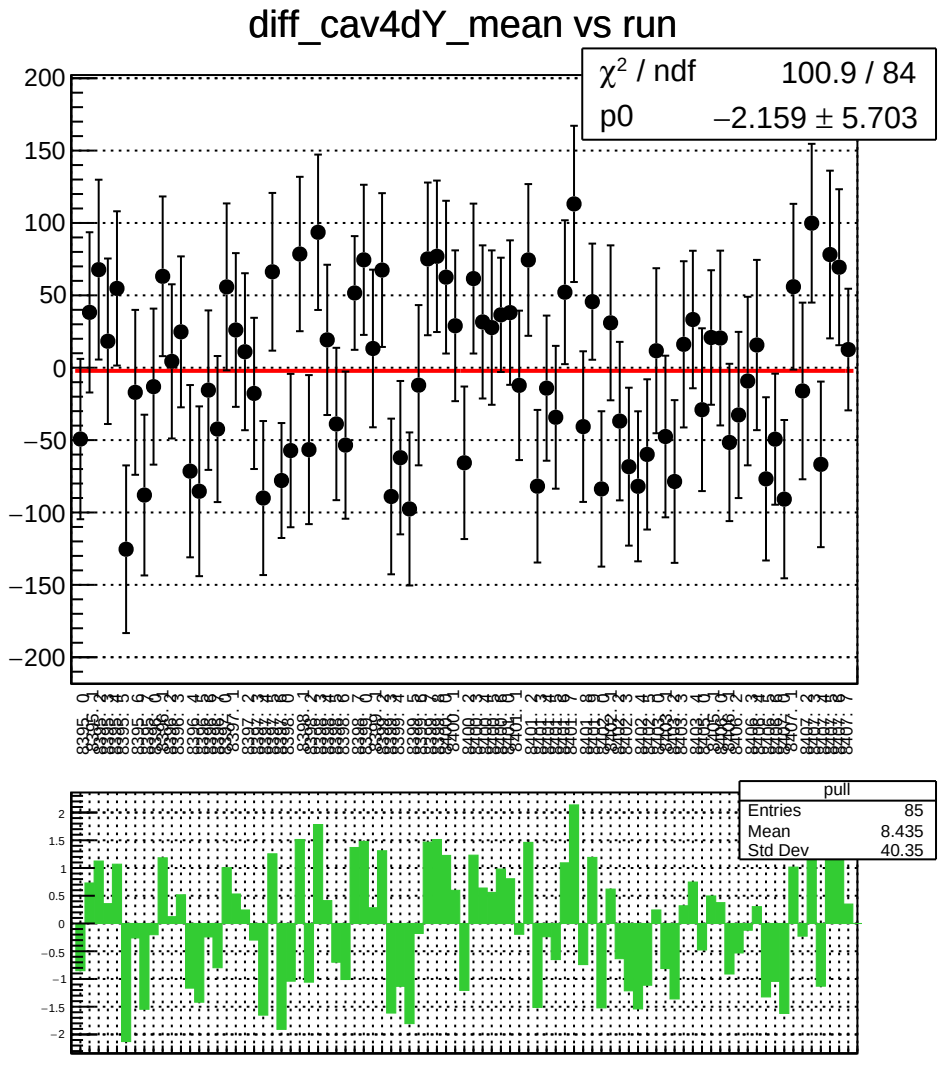

pull1D
Entries 85
Mean −0.008492
Std Dev 1.084
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

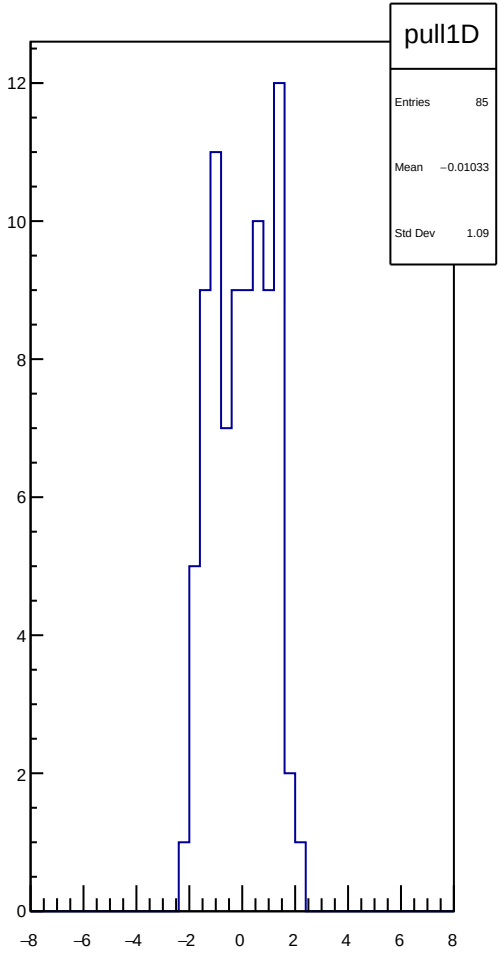

diff_cav4cY_rms vs run
χ² / ndf 3692 / 84
p0 4090 ± 3.196
4800
4600
4400
4200
4000
3800
3600

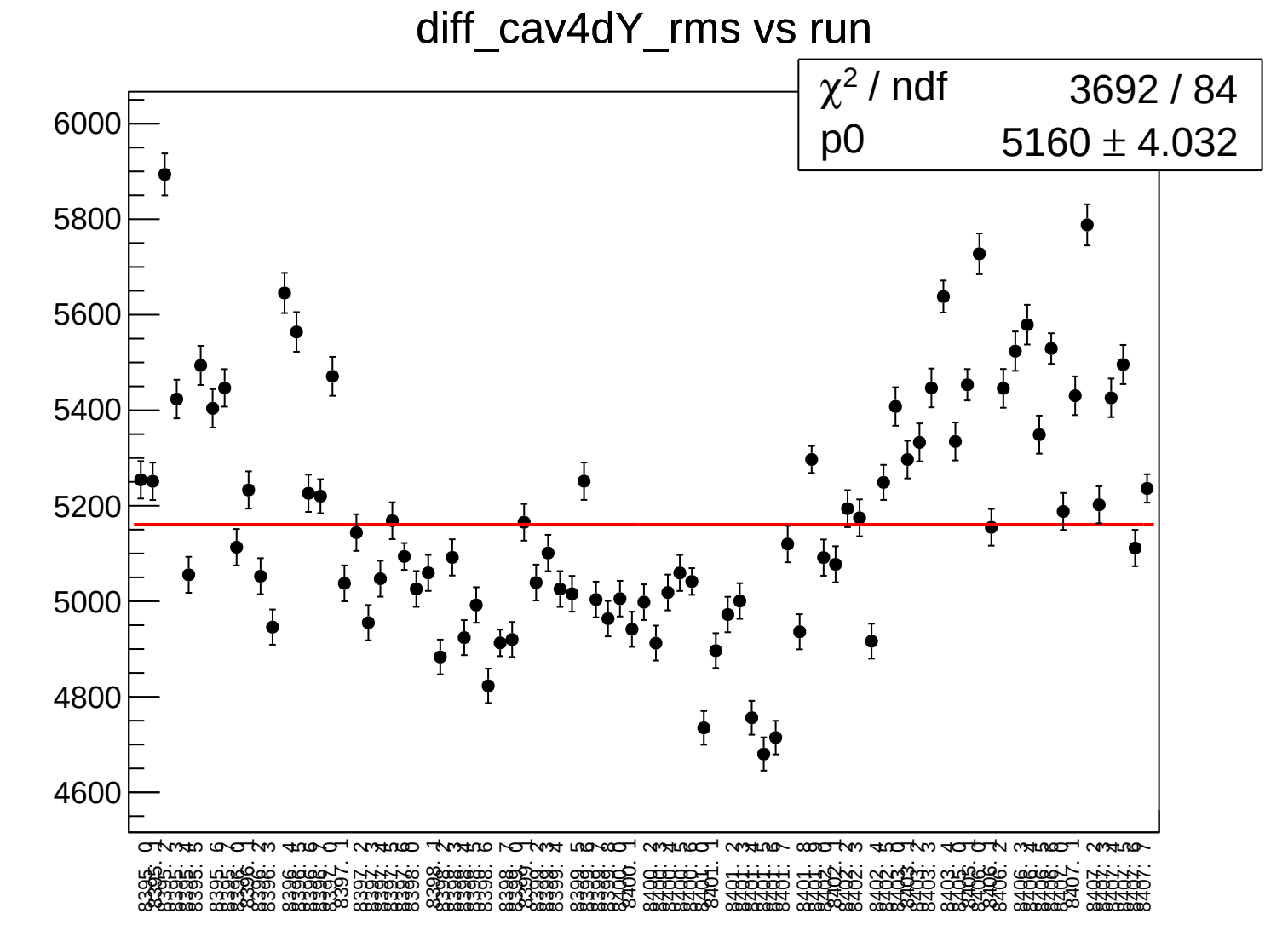

diff_cav4dX_mean vs run
χ^2 / ndf 82.91 / 84
p0 −158.1± 378.5
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −366.4
Std Dev 402.5
2
1
0
−1
−2

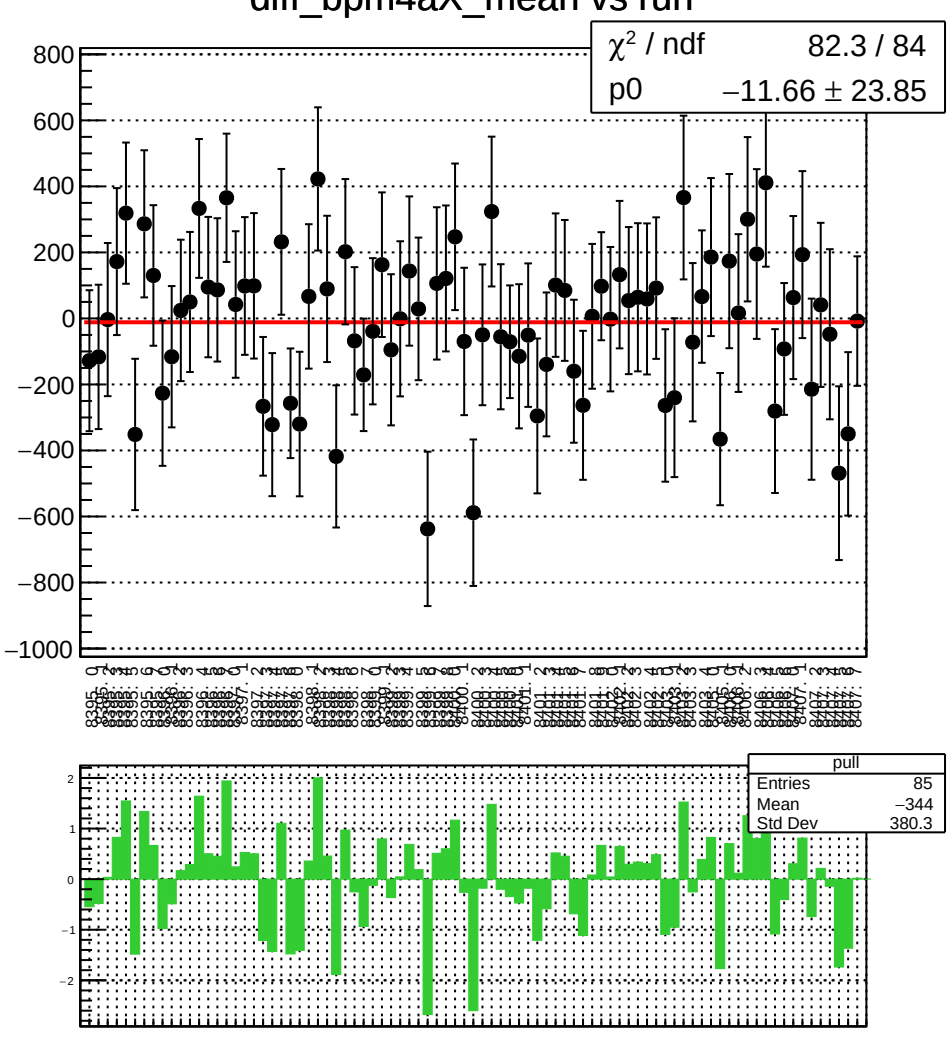

pull1D
Entries 85
Mean 0.004472
Std Dev 0.9876
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

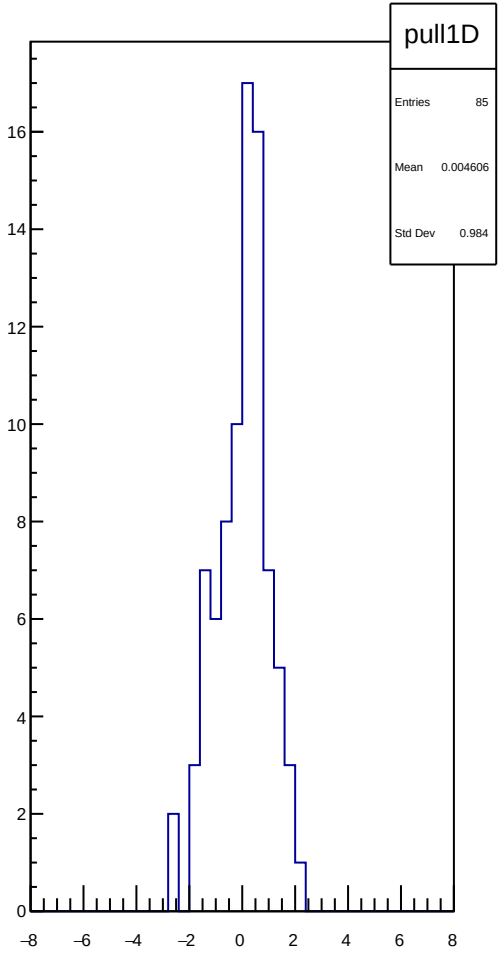

diff_cav4dX_rms vs run
×10^3
420
400
380
360
340
320
χ² / ndf 6241 / 84
p0 3.422e+05 ± 267.6

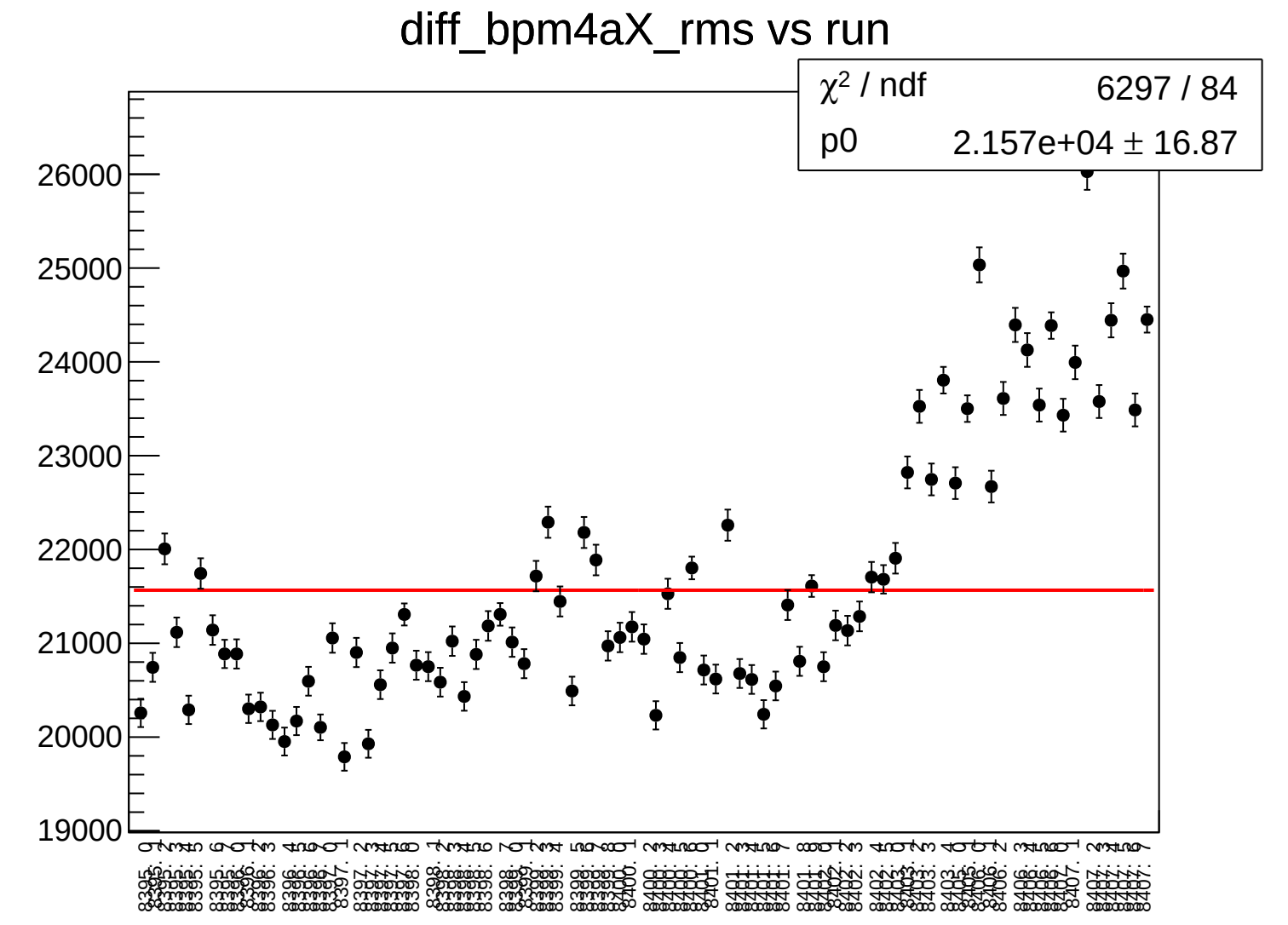

diff_cav4dY_mean vs run
χ² / ndf 100.9 / 84
p0 −2.159 ± 5.703
pull
Entries 85
Mean 8.435
Std Dev 40.35

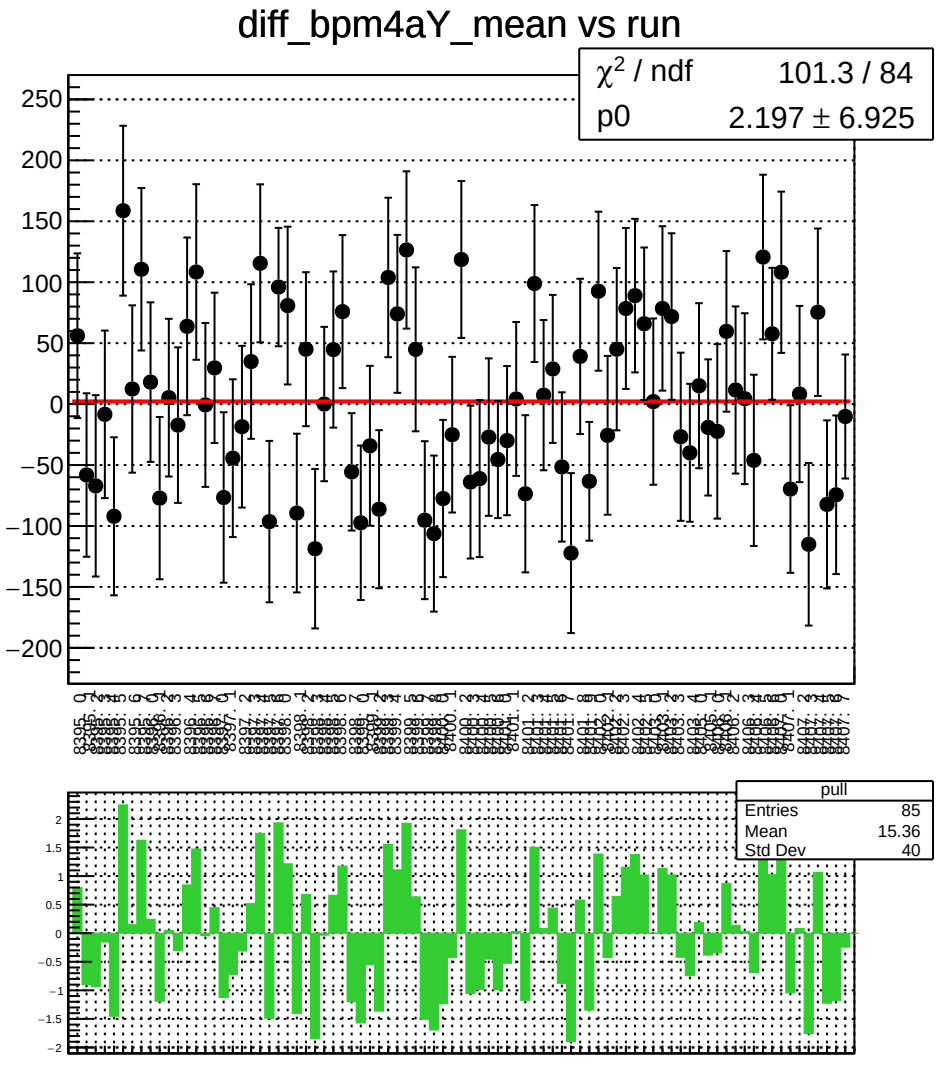

pull1D
Entries 85
Mean −0.01033
Std Dev 1.09

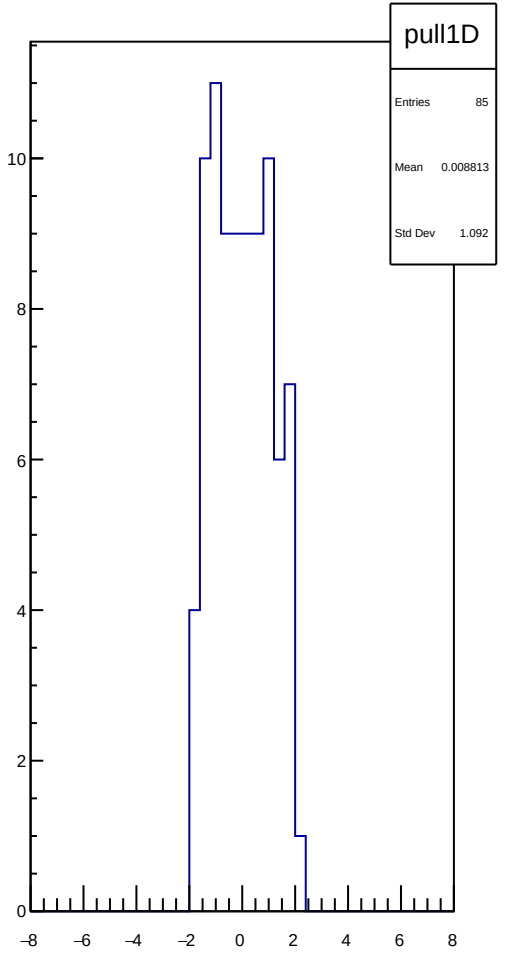

diff_cav4dY_rms vs run
χ² / ndf 3692 / 84
p0 5160 ± 4.032
6000
5800
5600
5400
5200
5000
4800
4600

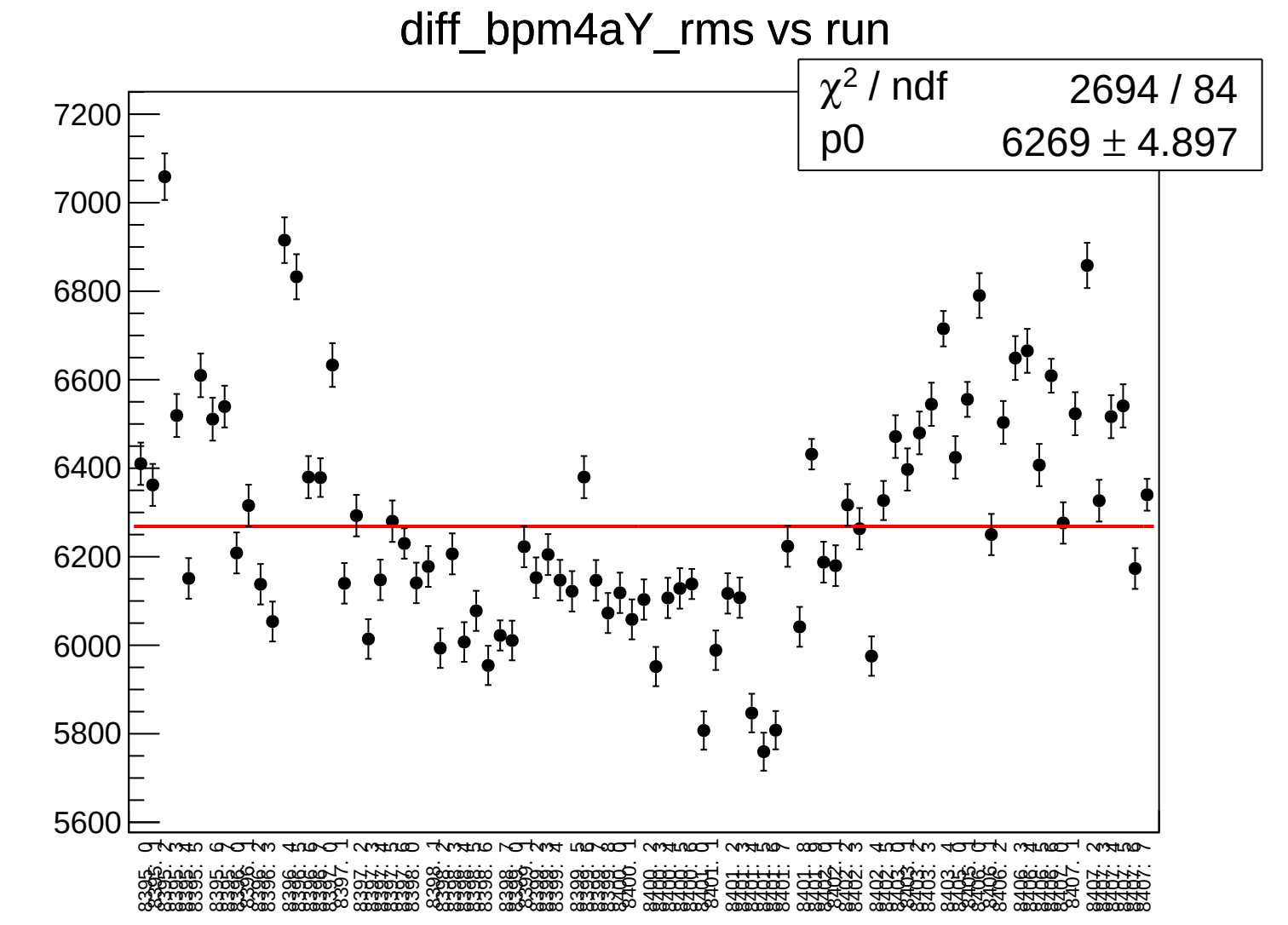

diff_bpm4aX_mean vs run
χ² / ndf 82.3 / 84
p0 −11.66 ± 23.85
pull
Entries 85
Mean −344
Std Dev 380.3

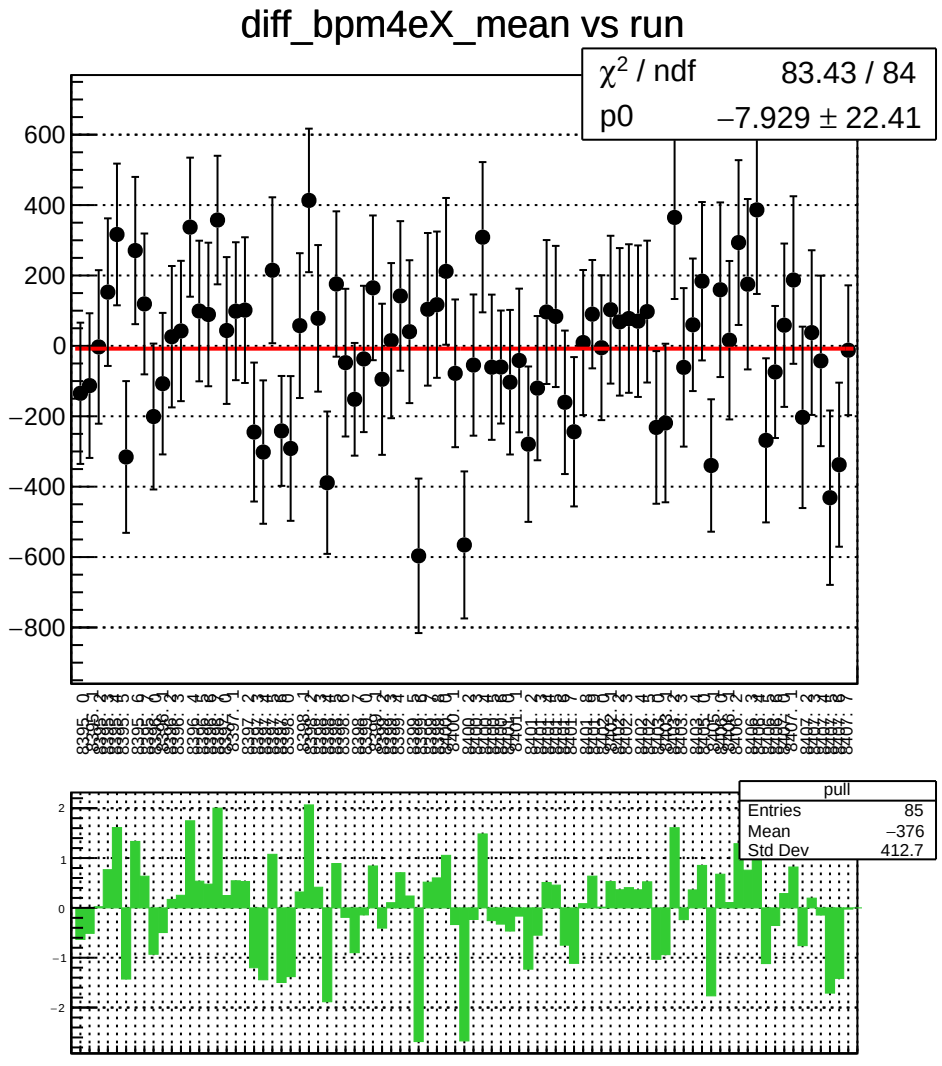

pull1D
Entries 85
Mean 0.004606
Std Dev 0.984

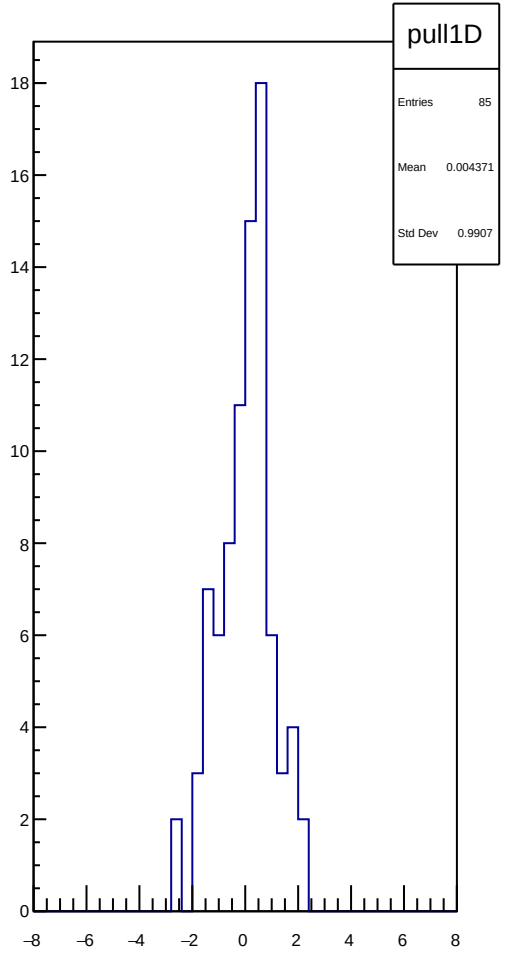

diff_bpm4aX_rms vs run
χ² / ndf 6297 / 84
p0 2.157e+04 ± 16.87
26000
25000
24000
23000
22000
21000
20000
19000

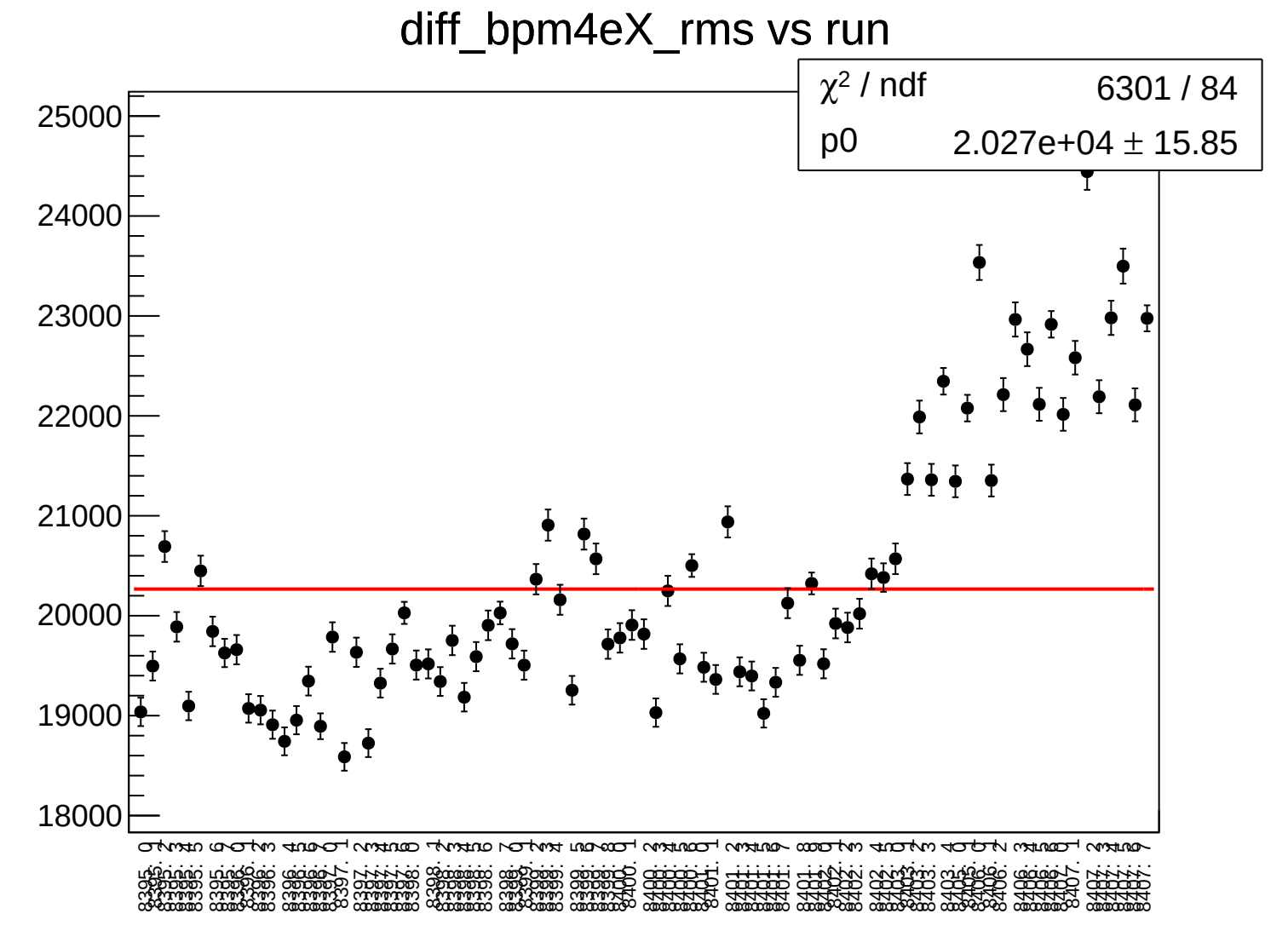

diff_bpm4aY_mean vs run
χ² / ndf 101.3 / 84
p0 2.197 ± 6.925
pull
Entries 85
Mean 15.36
Std Dev 40

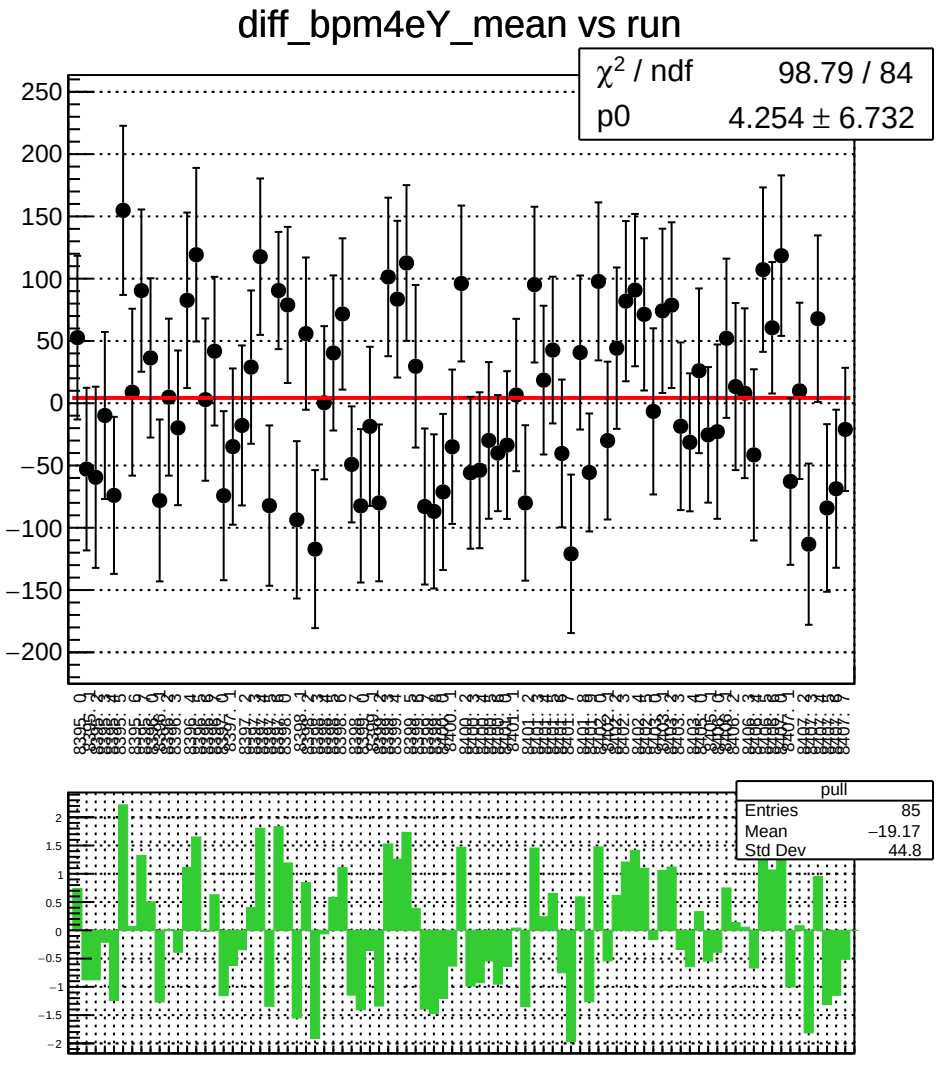

pull1D
Entries 85
Mean 0.008813
Std Dev 1.092

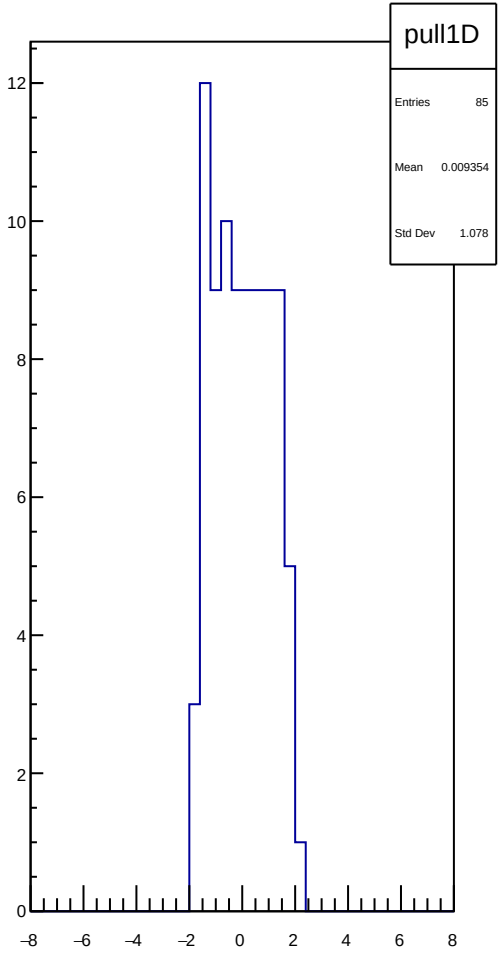

diff_bpm4aY_rms vs run
χ² / ndf 2694 / 84
p0 6269 ± 4.897
7200
7000
6800
6600
6400
6200
6000
5800
5600

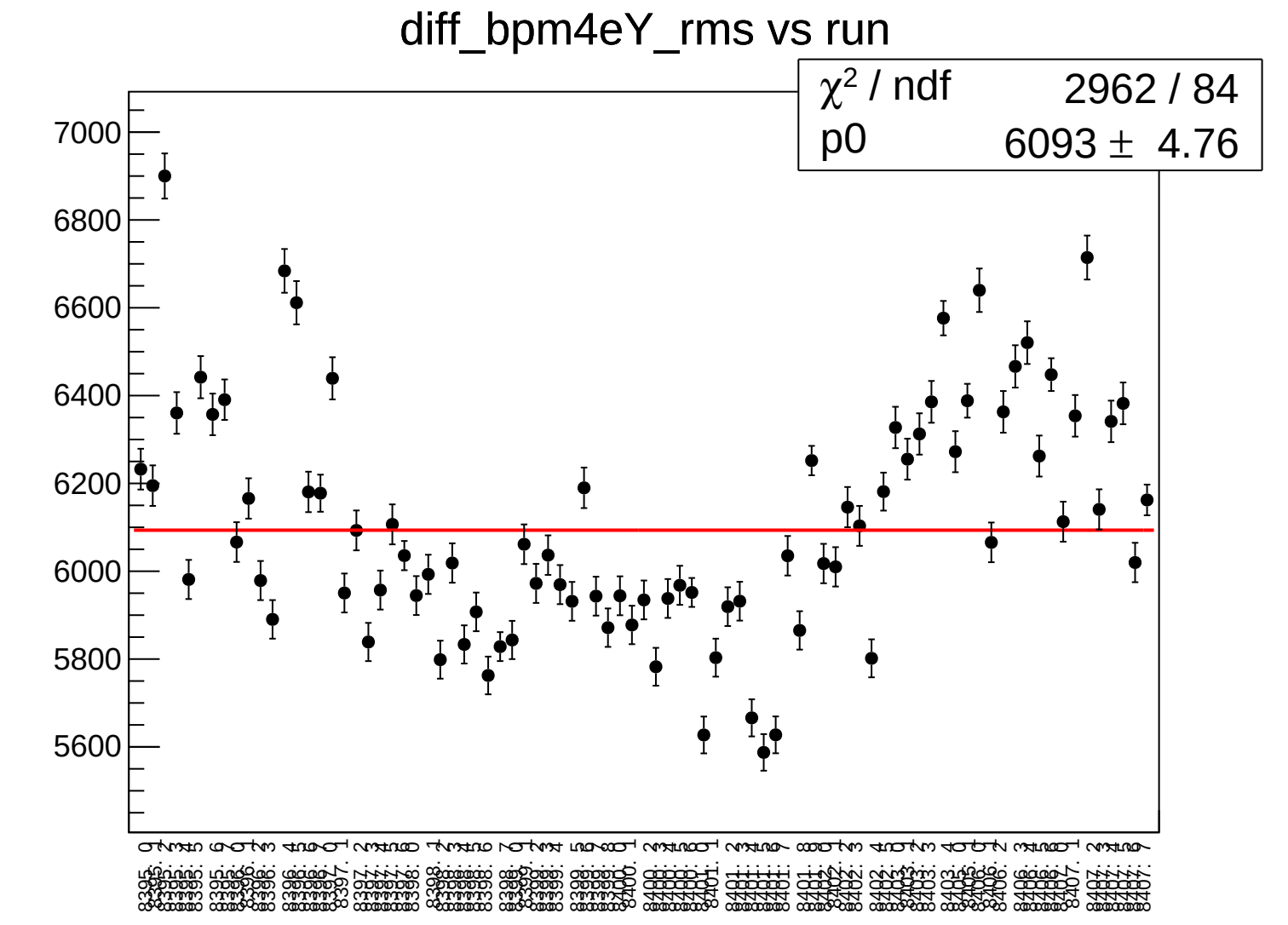

diff_bpm4eX_mean vs run
χ^2 / ndf 83.43 / 84
p0 −7.929 ± 22.41
600
400
200
0
−200
−400
−600
−800
pull
Entries 85
Mean −376
Std Dev 412.7
2
1
0
−1
−2

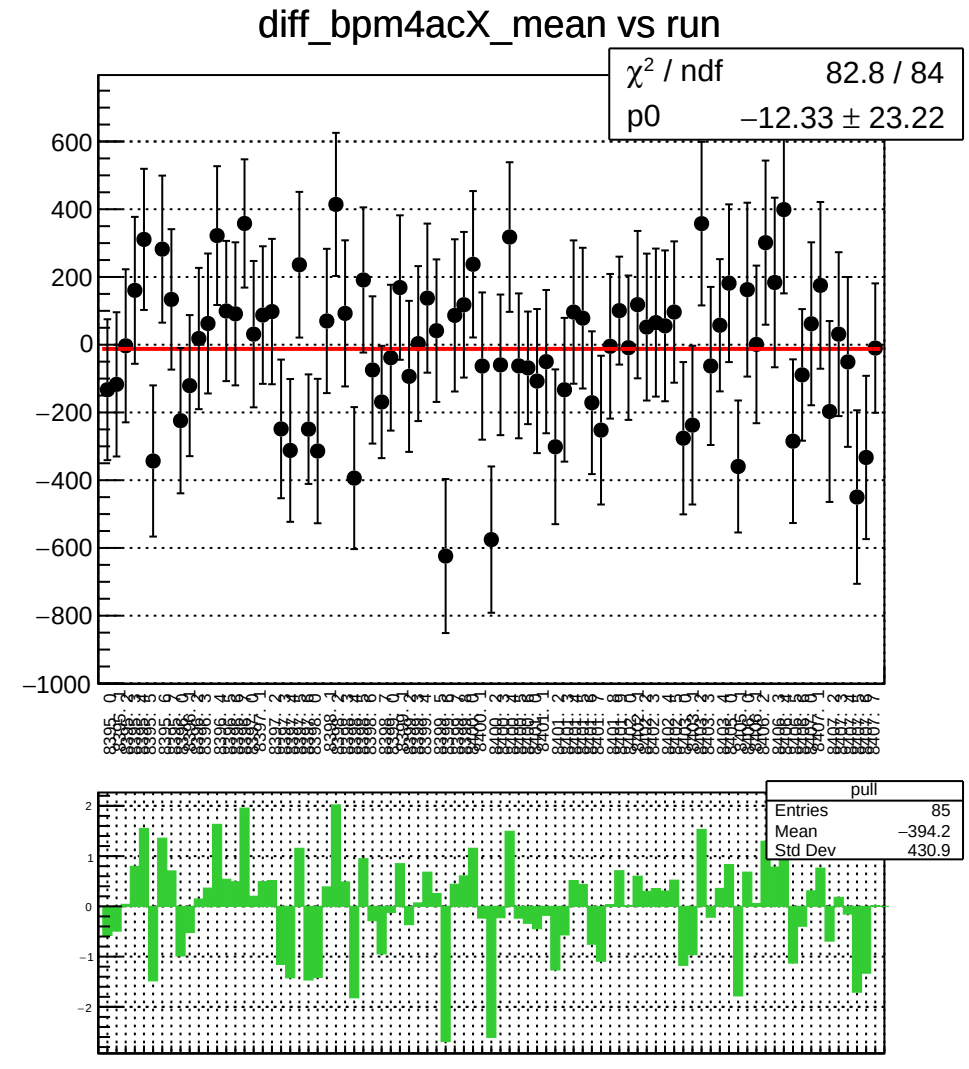

pull1D
Entries 85
Mean 0.004371
Std Dev 0.9907
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

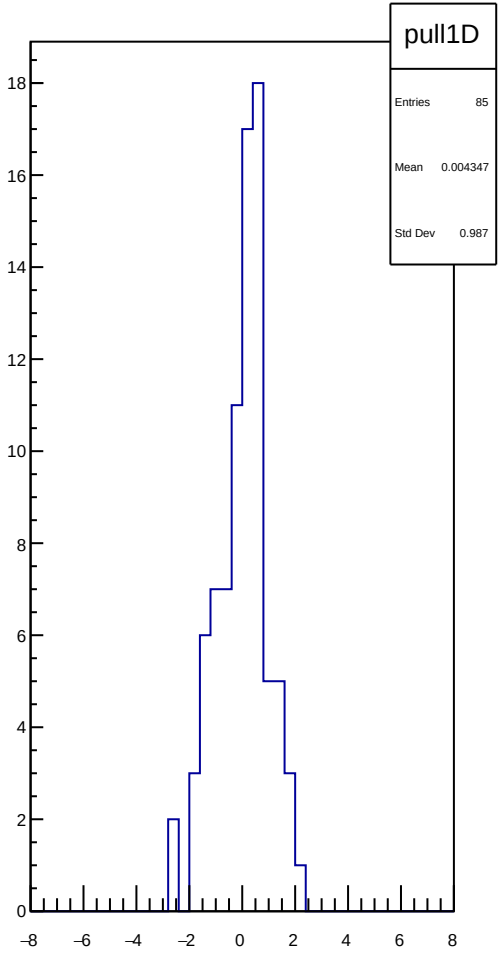

diff_bpm4eX_rms vs run
χ² / ndf 6301 / 84
p0 2.027e+04 ± 15.85
25000
24000
23000
22000
21000
20000
19000
18000

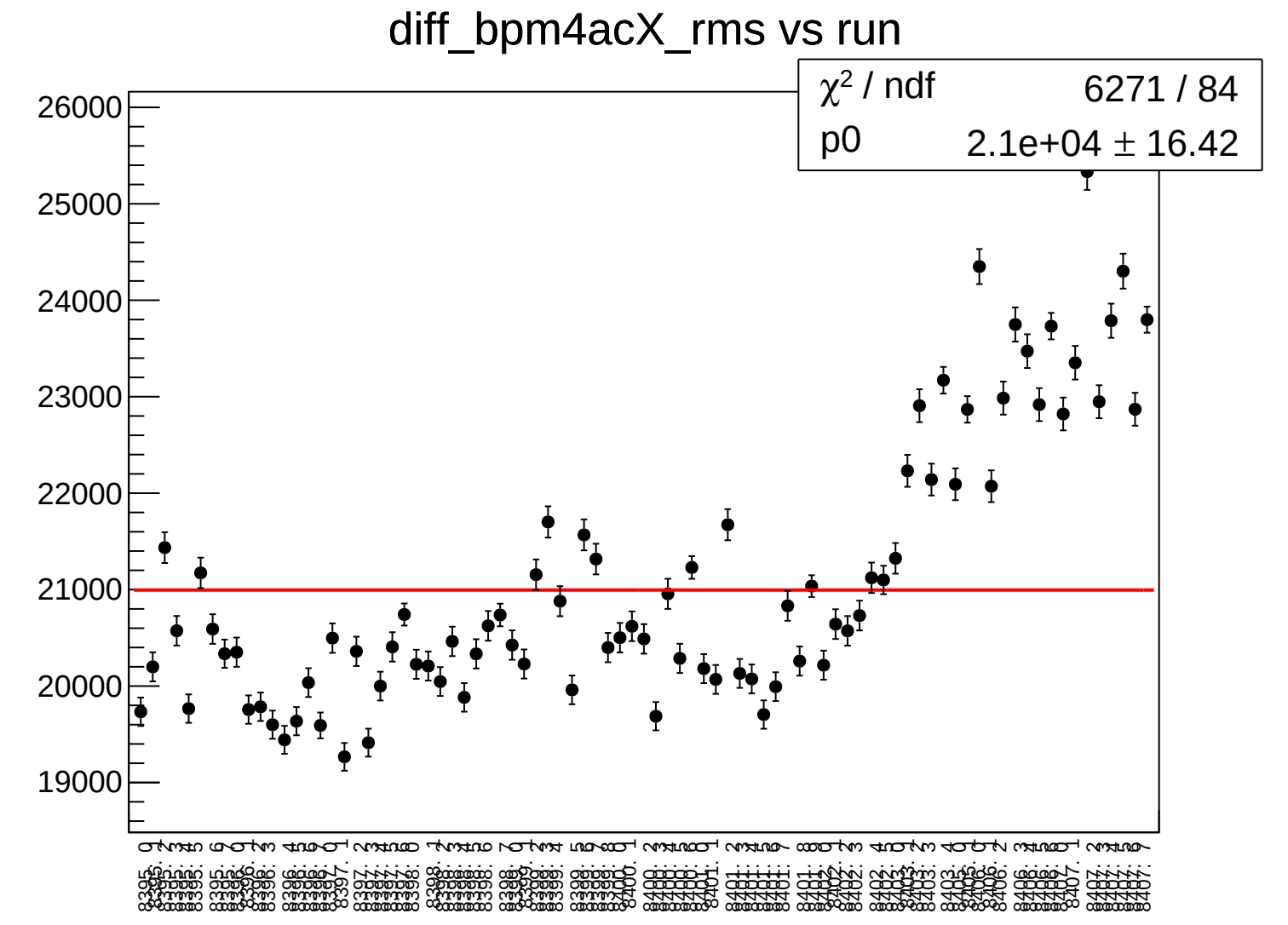

diff_bpm4eY_mean vs run
χ² / ndf 98.79 / 84
p0 4.254 ± 6.732
pull
Entries 85
Mean −19.17
Std Dev 44.8

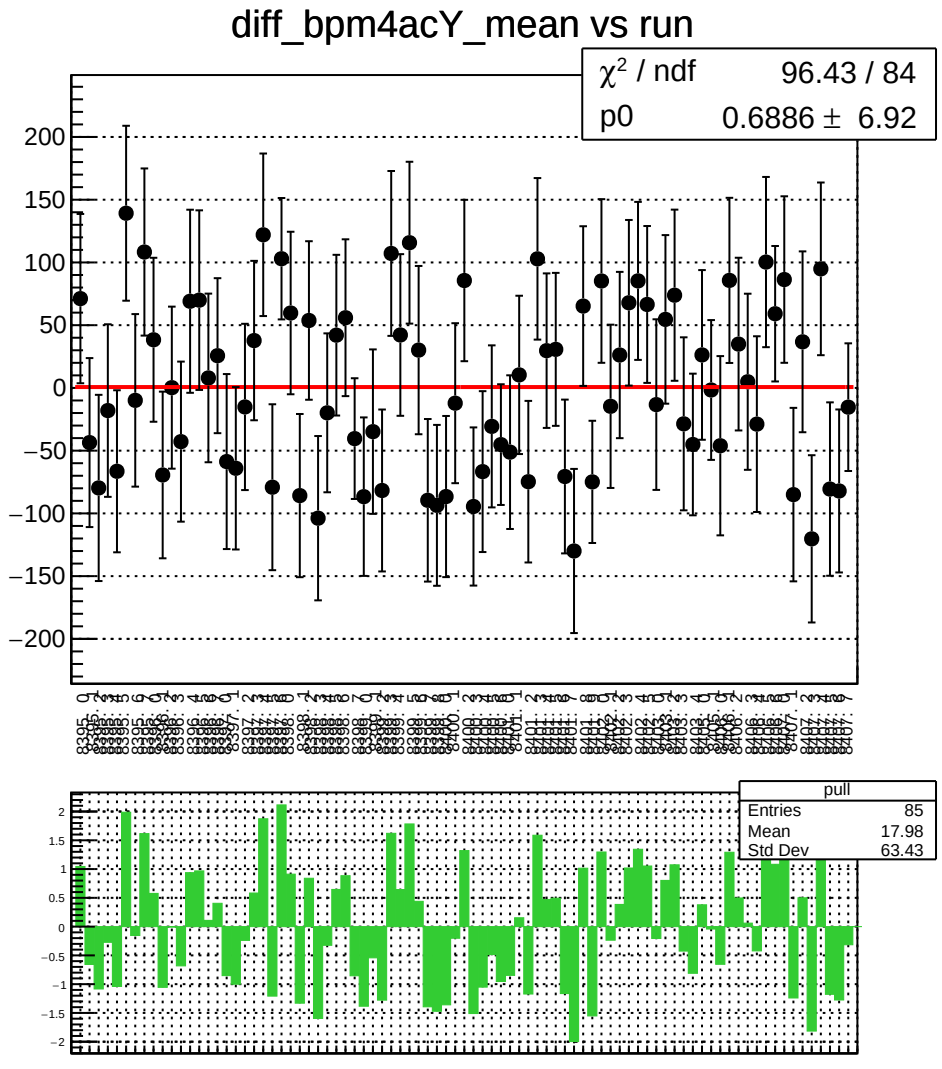

pull1D
Entries 85
Mean 0.009354
Std Dev 1.078

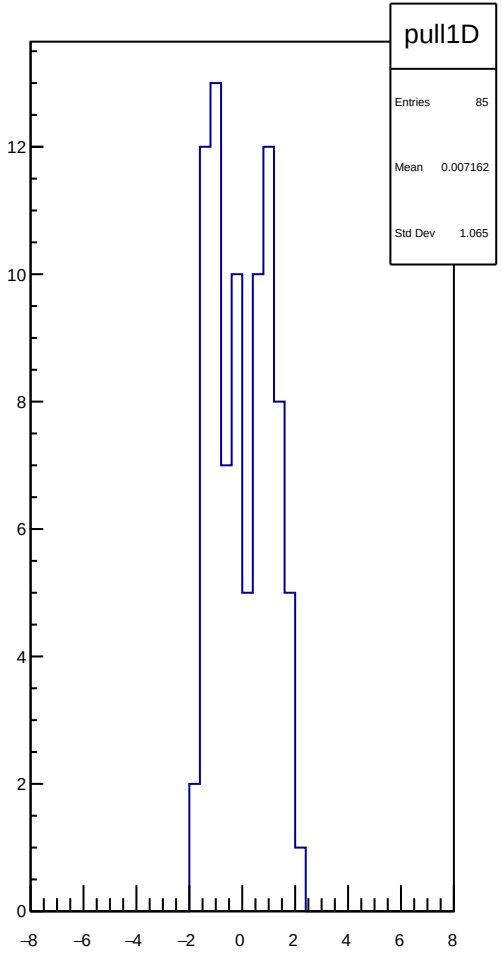

diff_bpm4eY_rms vs run
χ² / ndf 2962 / 84
p0 6093 ± 4.76
7000
6800
6600
6400
6200
6000
5800
5600

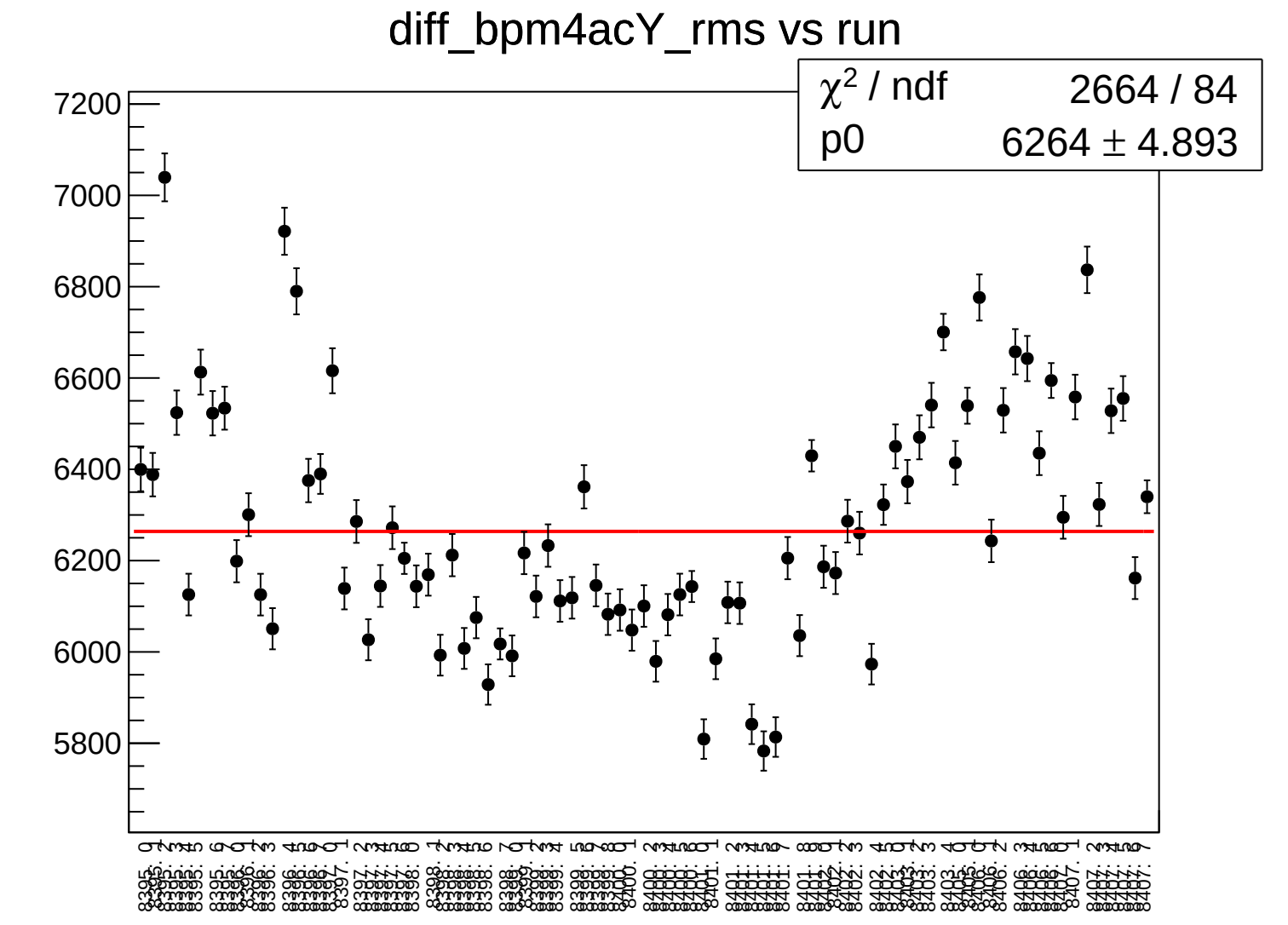

diff_bpm4acX_mean vs run
χ² / ndf 82.8 / 84
p0 −12.33 ± 23.22
pull
Entries 85
Mean −394.2
Std Dev 430.9

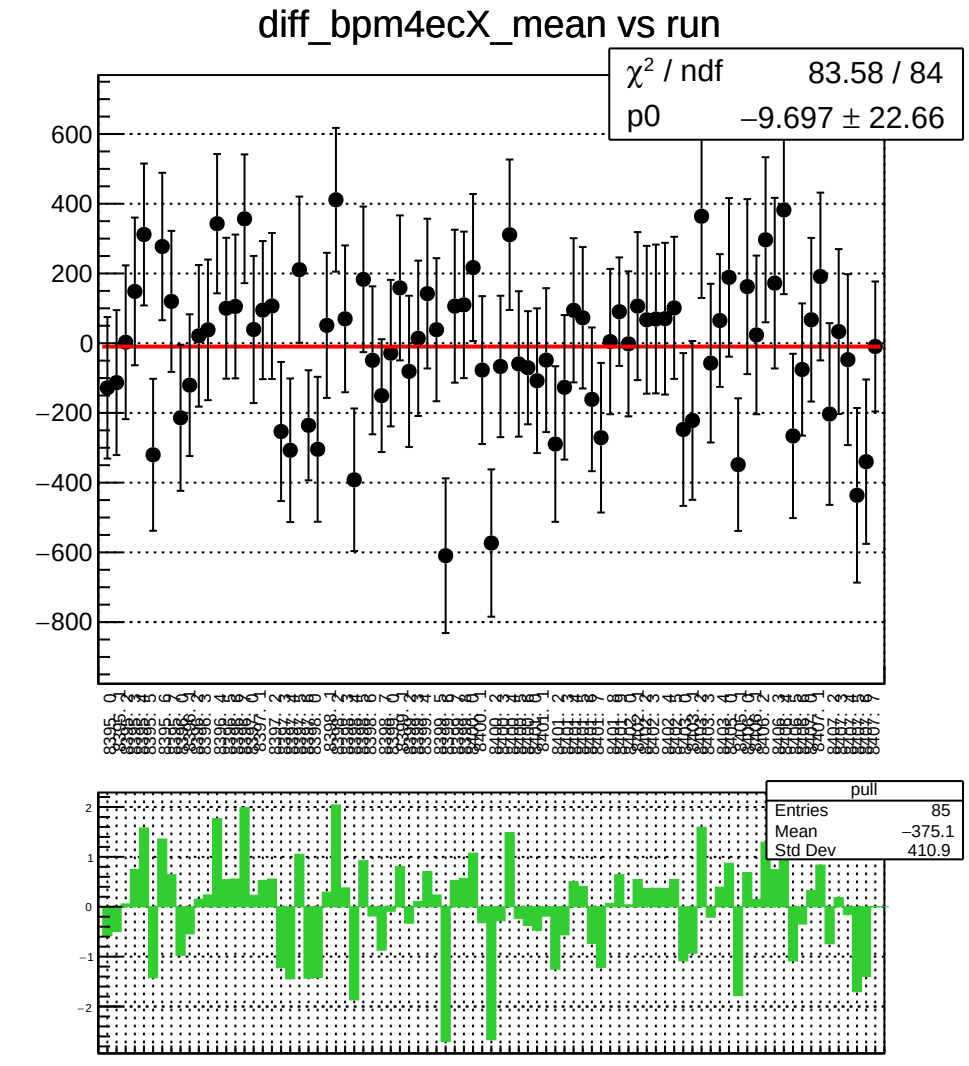

pull1D
Entries 85
Mean 0.004347
Std Dev 0.987

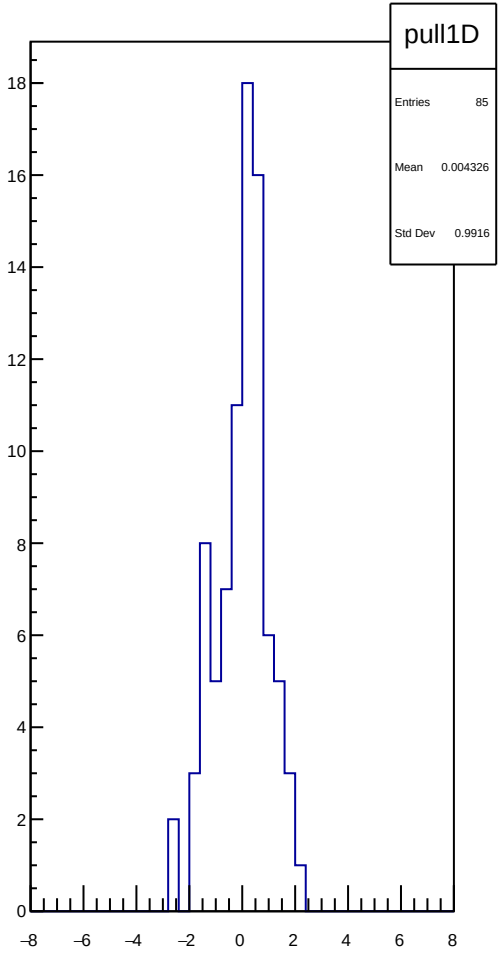

diff_bpm4acX_rms vs run
χ² / ndf 6271 / 84
p0 2.1e+04 ± 16.42
26000
25000
24000
23000
22000
21000
20000
19000

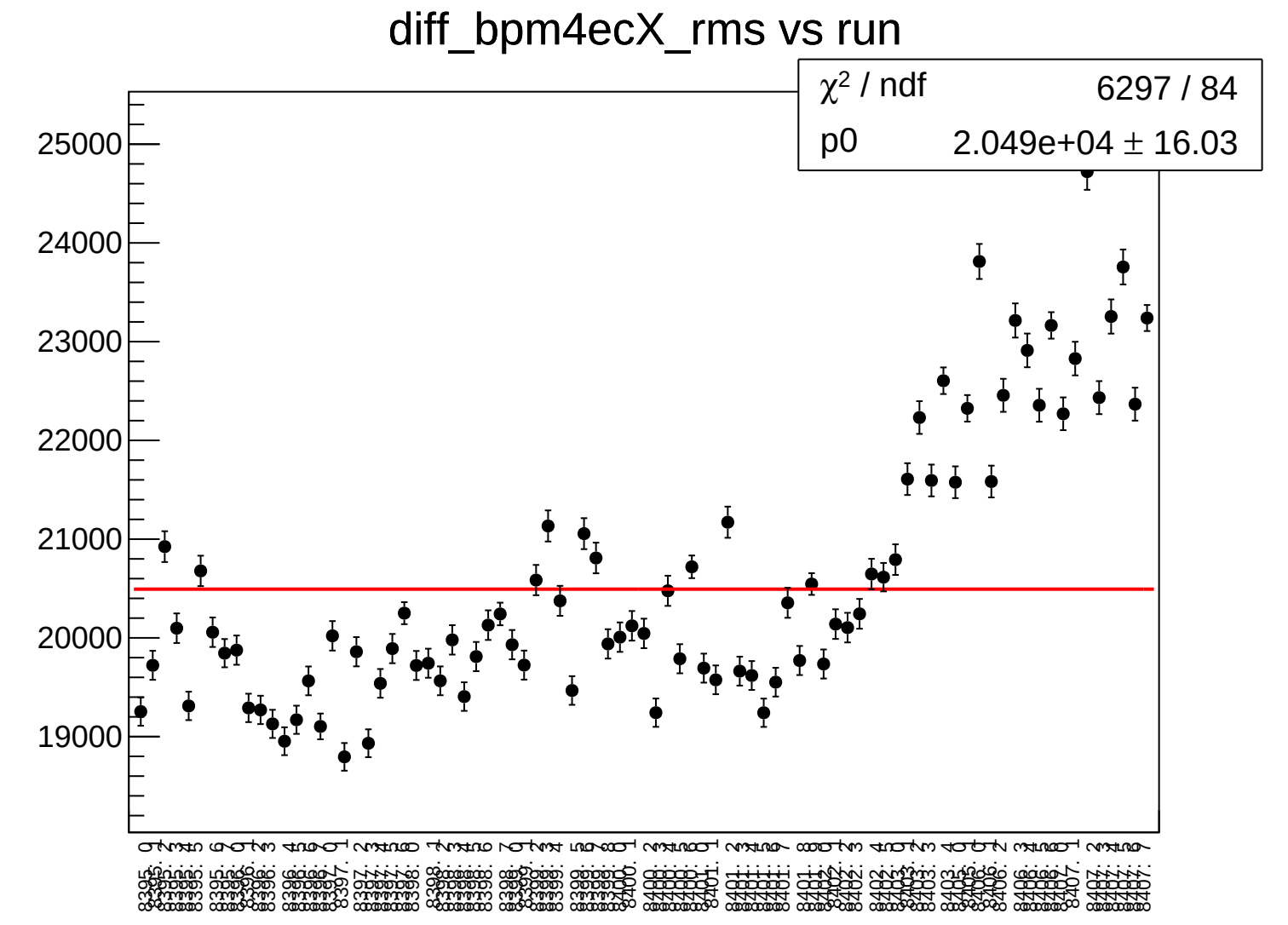

diff_bpm4acY_mean vs run
χ² / ndf 96.43 / 84
p0 0.6886 ± 6.92
pull
Entries 85
Mean 17.98
Std Dev 63.43

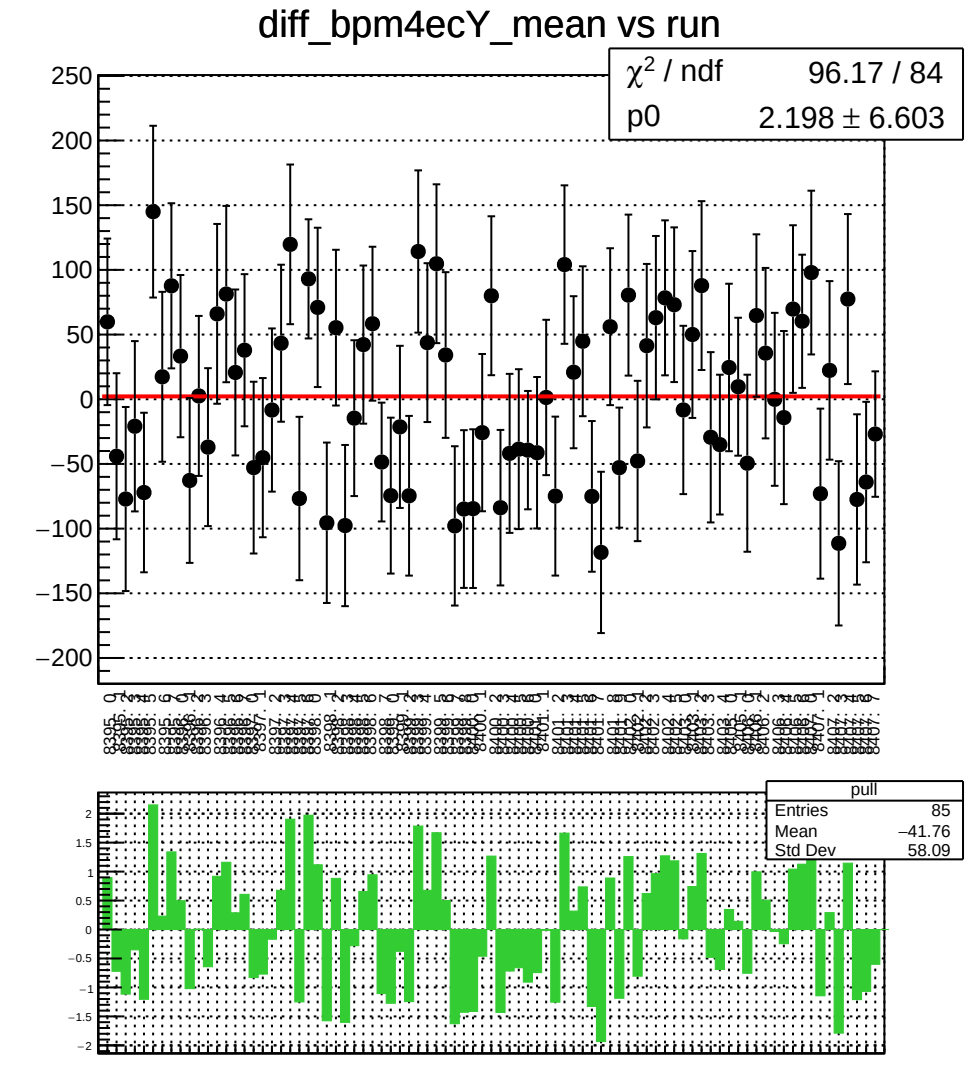

pull1D
Entries 85
Mean 0.007162
Std Dev 1.065

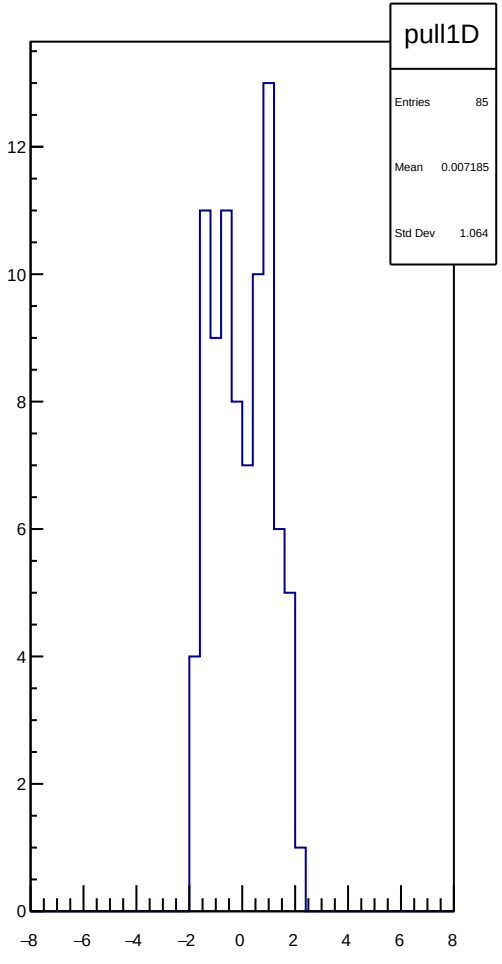

diff_bpm4acY_rms vs run
χ² / ndf 2664 / 84
p0 6264 ± 4.893
7200
7000
6800
6600
6400
6200
6000
5800

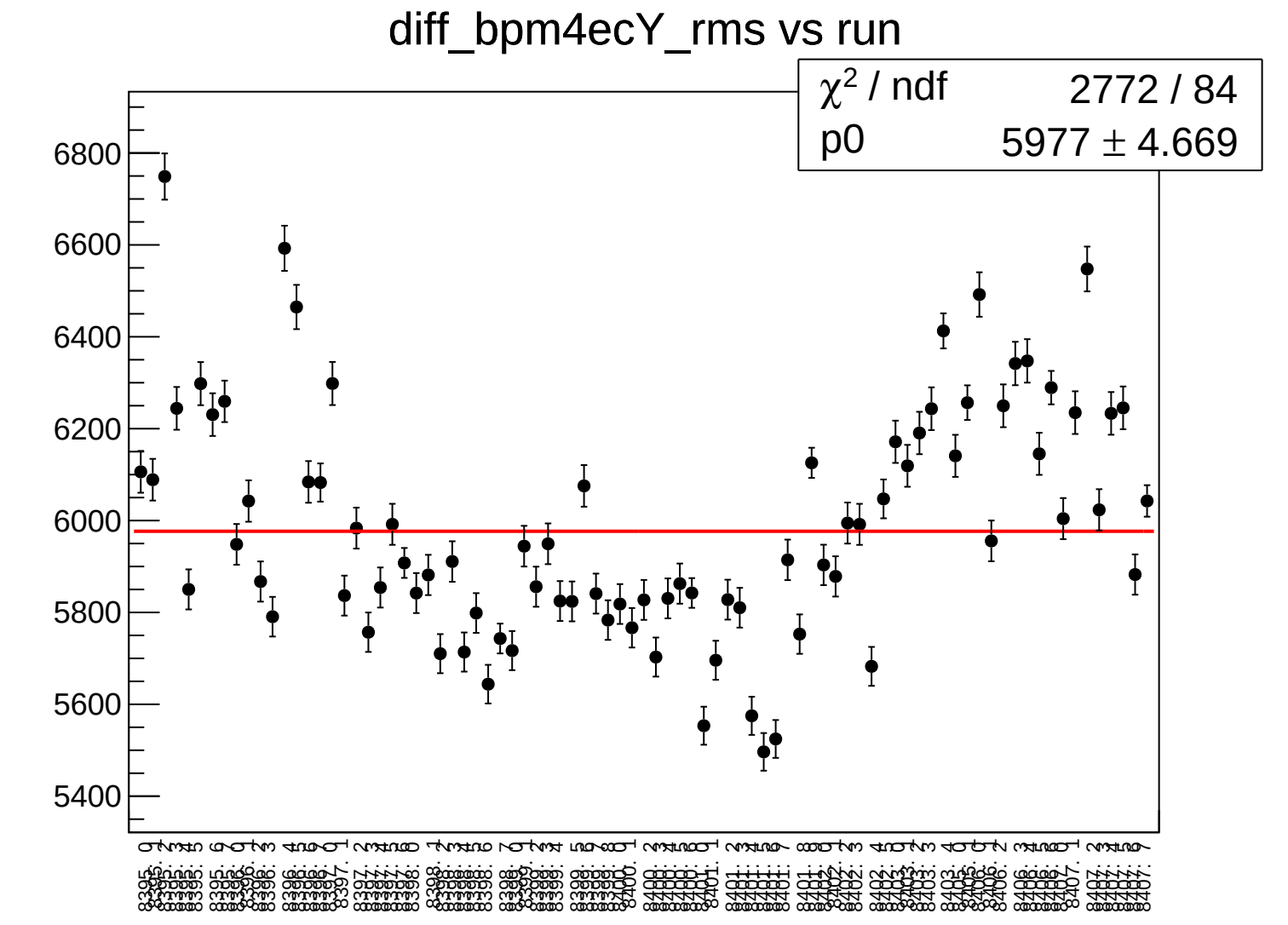

diff_bpm4ecX_mean vs run
χ² / ndf 83.58 / 84
p0 −9.697 ± 22.66
pull
Entries 85
Mean −375.1
Std Dev 410.9

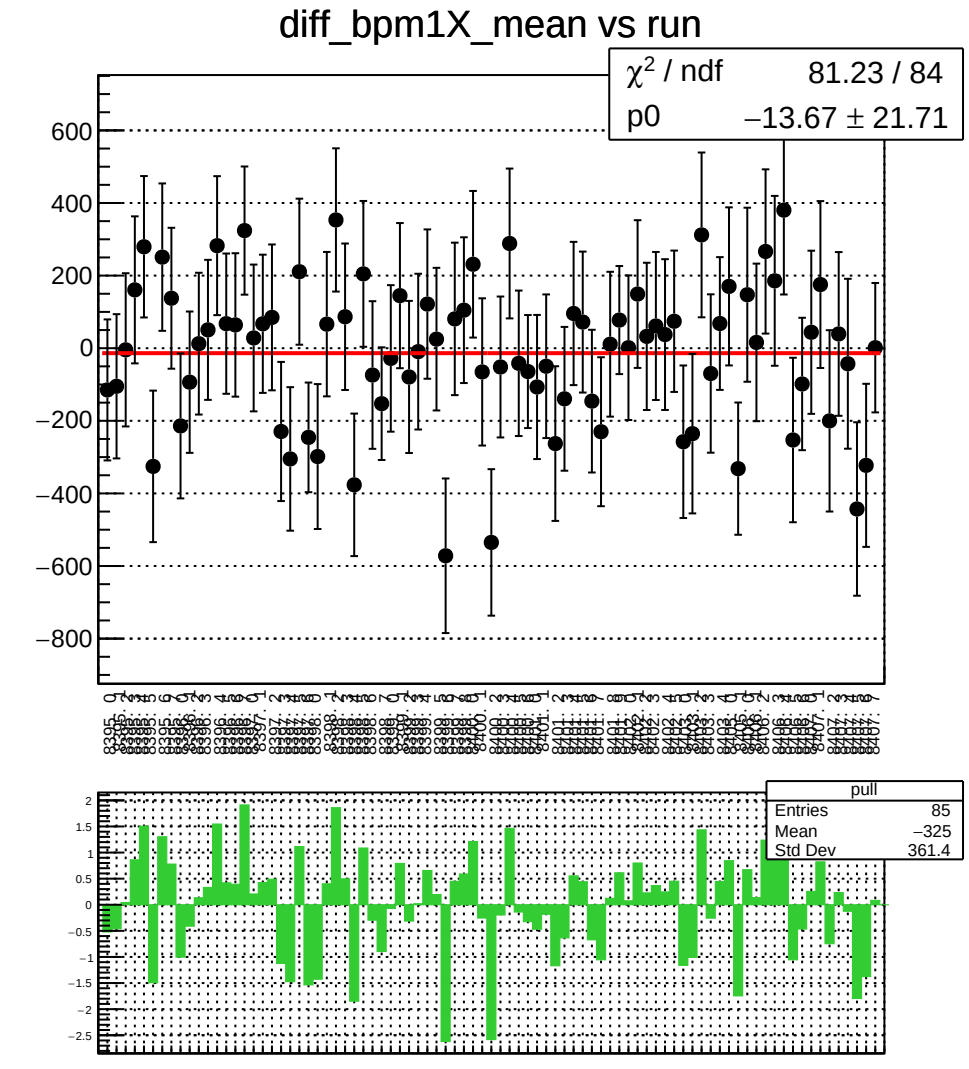

pull1D
Entries 85
Mean 0.004326
Std Dev 0.9916

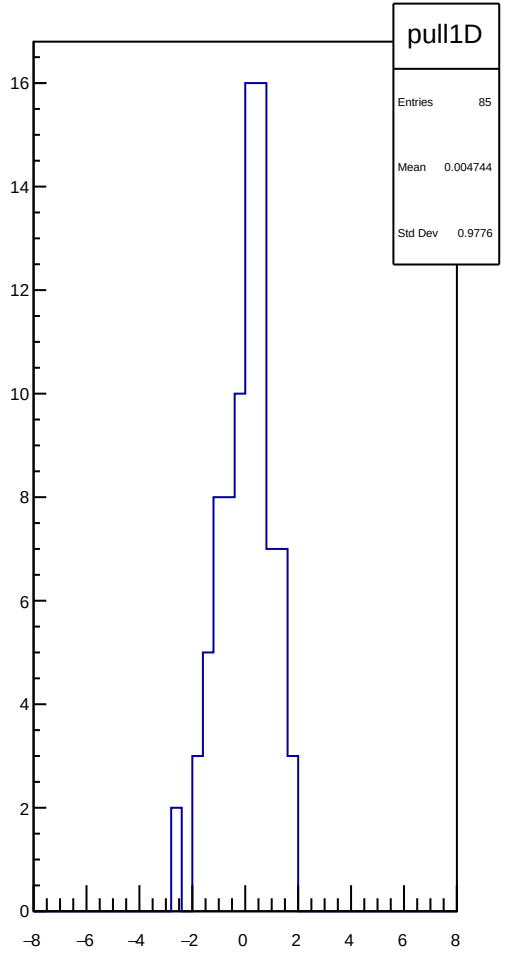

diff_bpm4ecX_rms vs run
χ² / ndf 6297 / 84
p0 2.049e+04 ± 16.03
25000
24000
23000
22000
21000
20000
19000

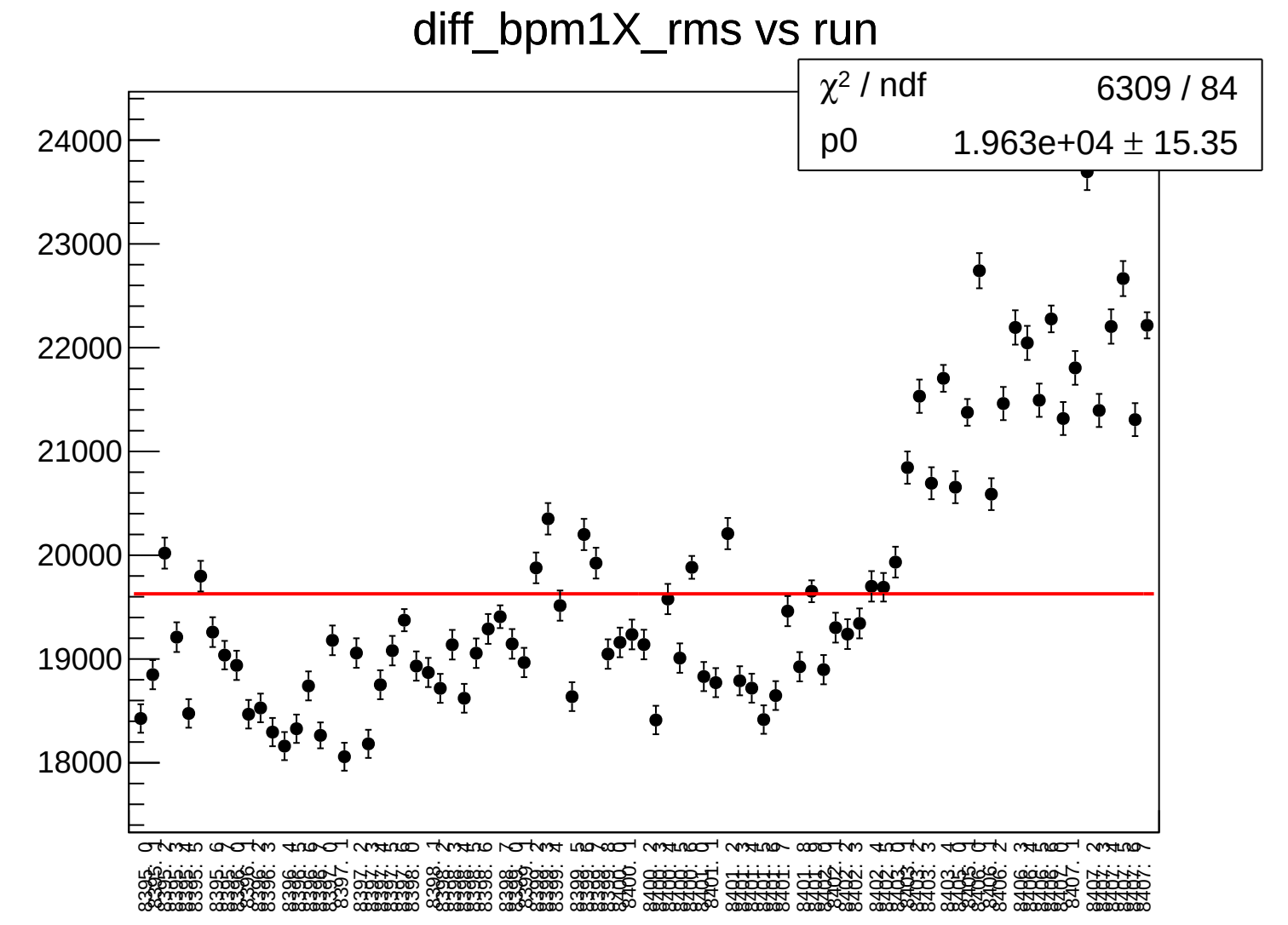

diff_bpm4ecY_mean vs run
χ² / ndf 96.17 / 84
p0 2.198 ± 6.603
pull
Entries 85
Mean −41.76
Std Dev 58.09

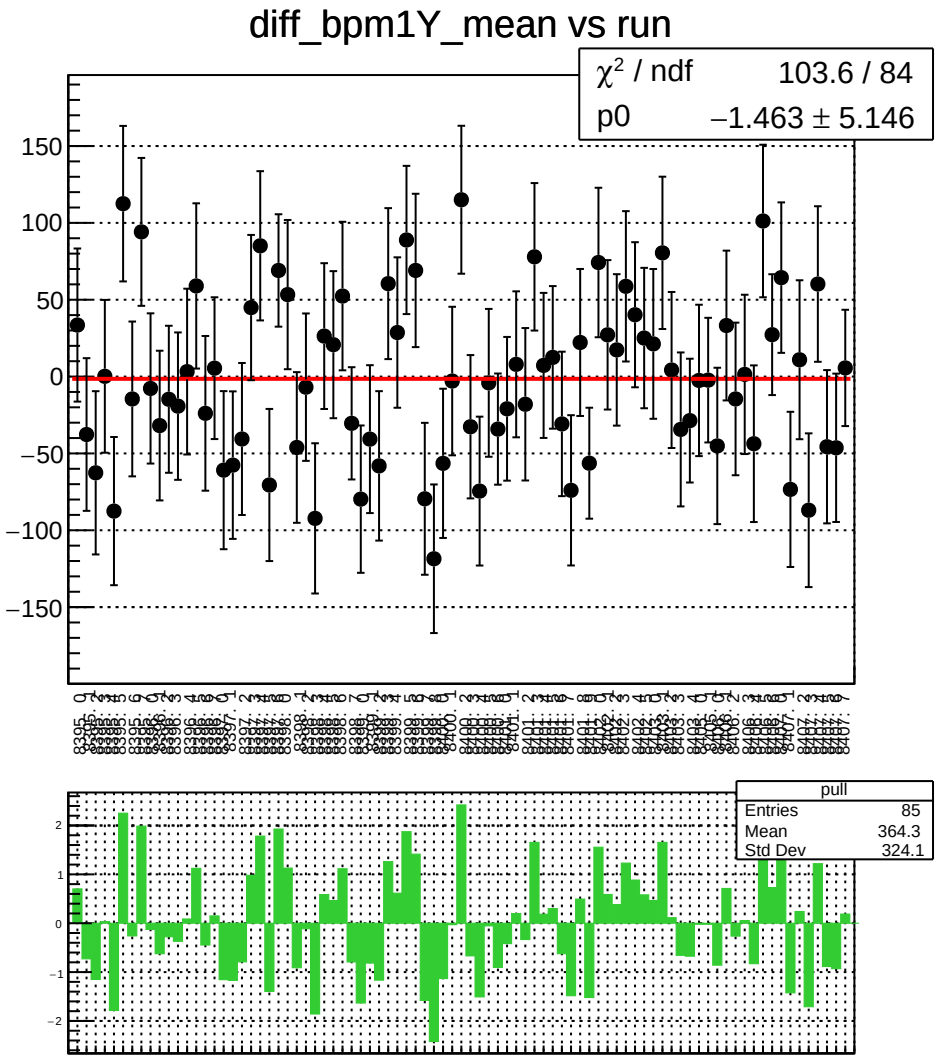

pull1D
Entries 85
Mean 0.007185
Std Dev 1.064

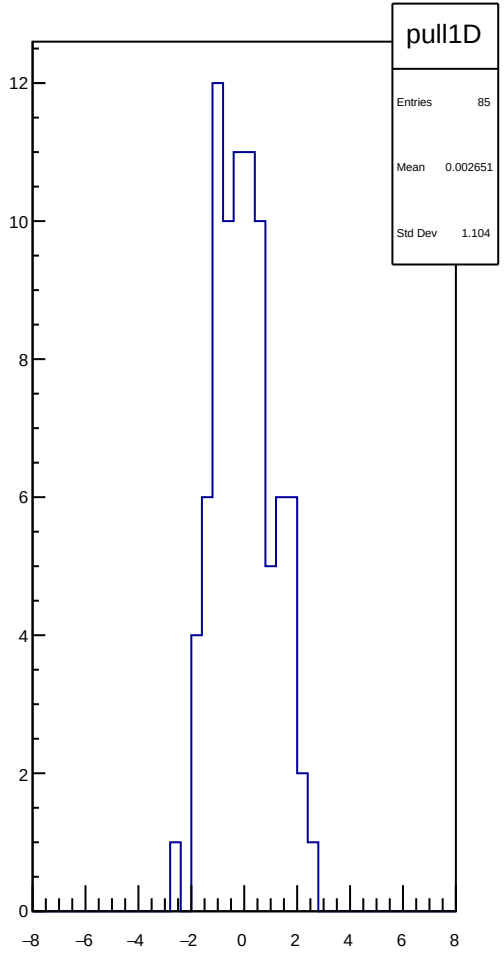

diff_bpm4ecY_rms vs run
χ² / ndf 2772 / 84
p0 5977 ± 4.669
6800
6600
6400
6200
6000
5800
5600
5400

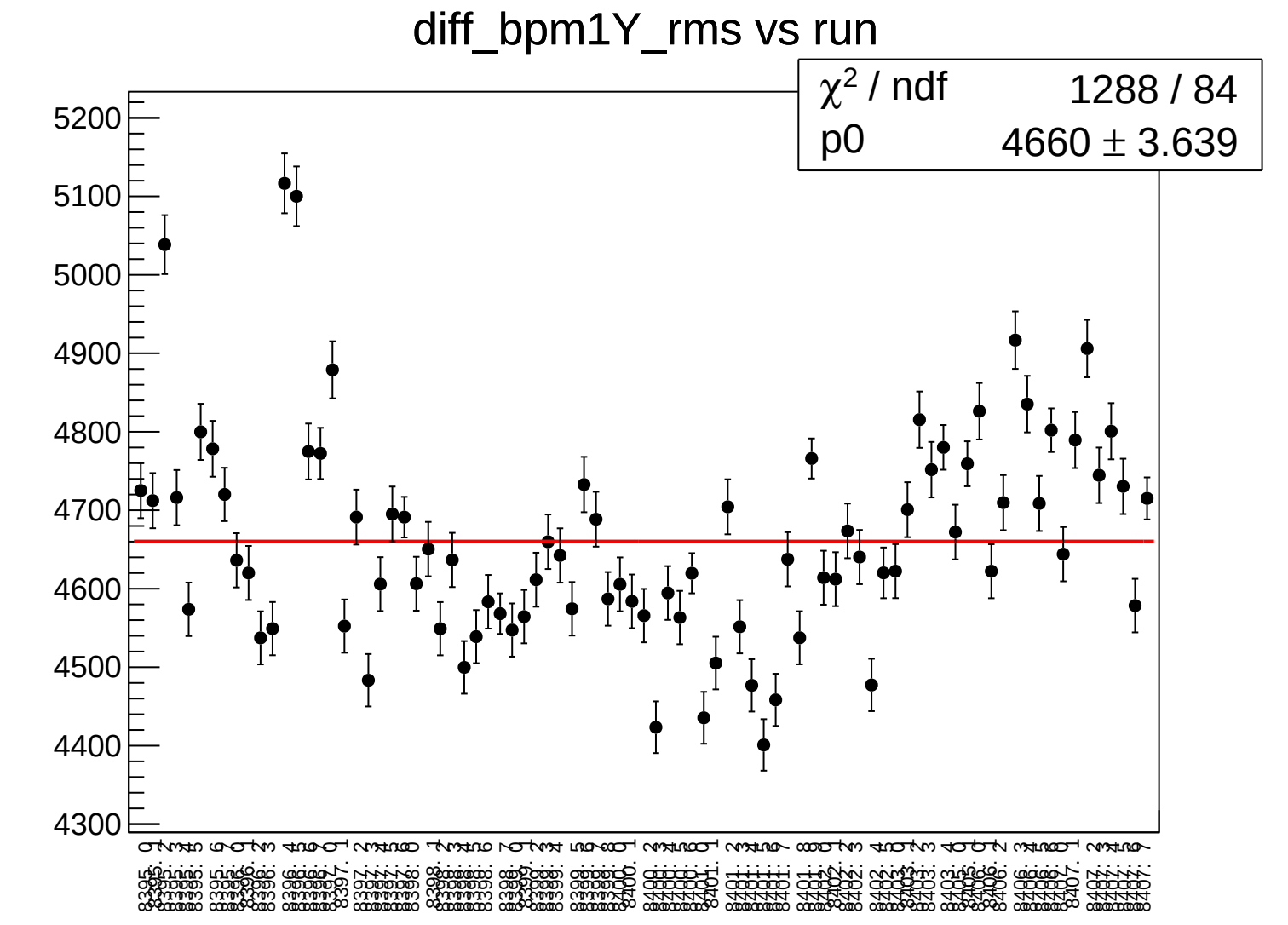

diff_bpm1X_mean vs run
χ² / ndf 81.23 / 84
p0 −13.67 ± 21.71
pull
Entries 85
Mean −325
Std Dev 361.4

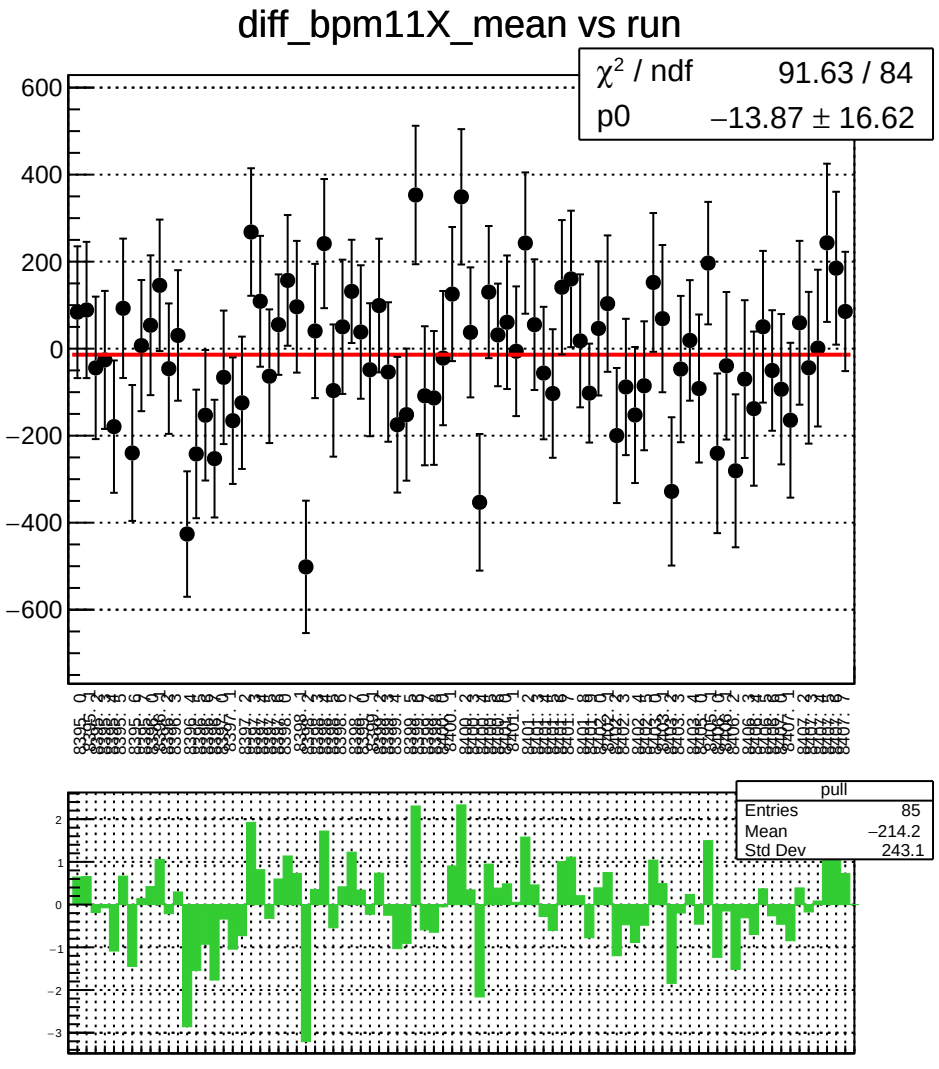

pull1D
Entries 85
Mean 0.004744
Std Dev 0.9776

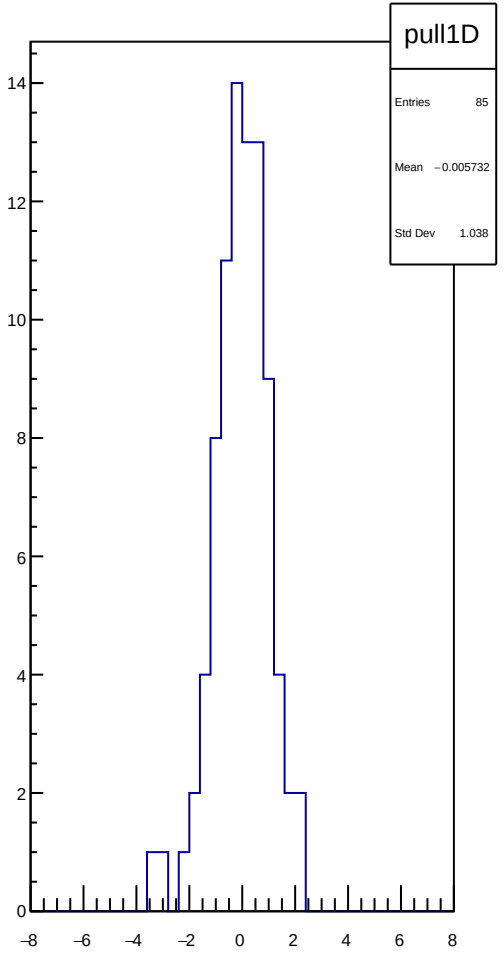

diff_bpm1X_rms vs run
χ² / ndf 6309 / 84
p0 1.963e+04 ± 15.35
24000
23000
22000
21000
20000
19000
18000

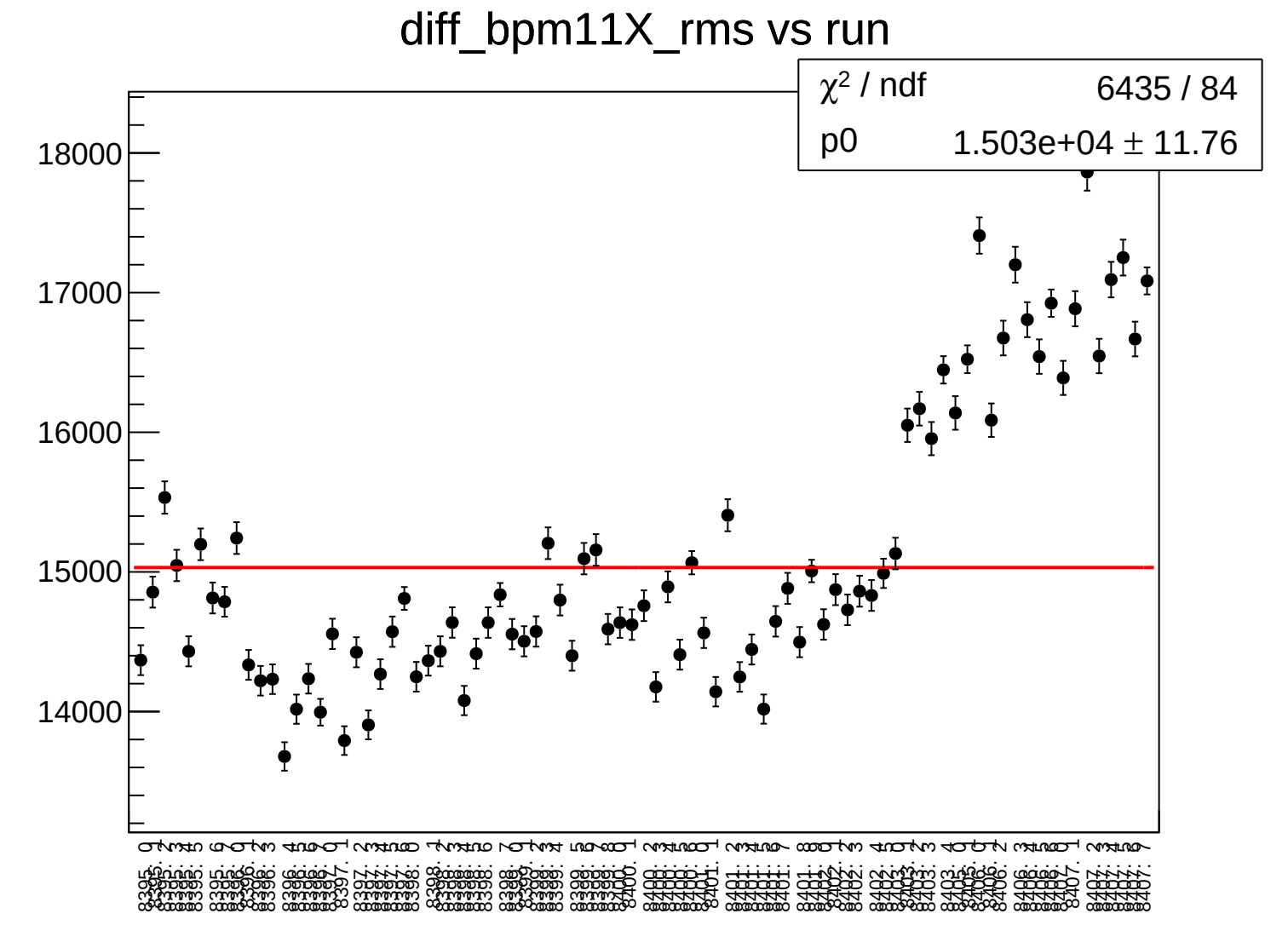

diff_bpm1Y_mean vs run
χ² / ndf 103.6 / 84
p0 −1.463 ± 5.146
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 364.3
Std Dev 324.1
2
1
0
−1
−2

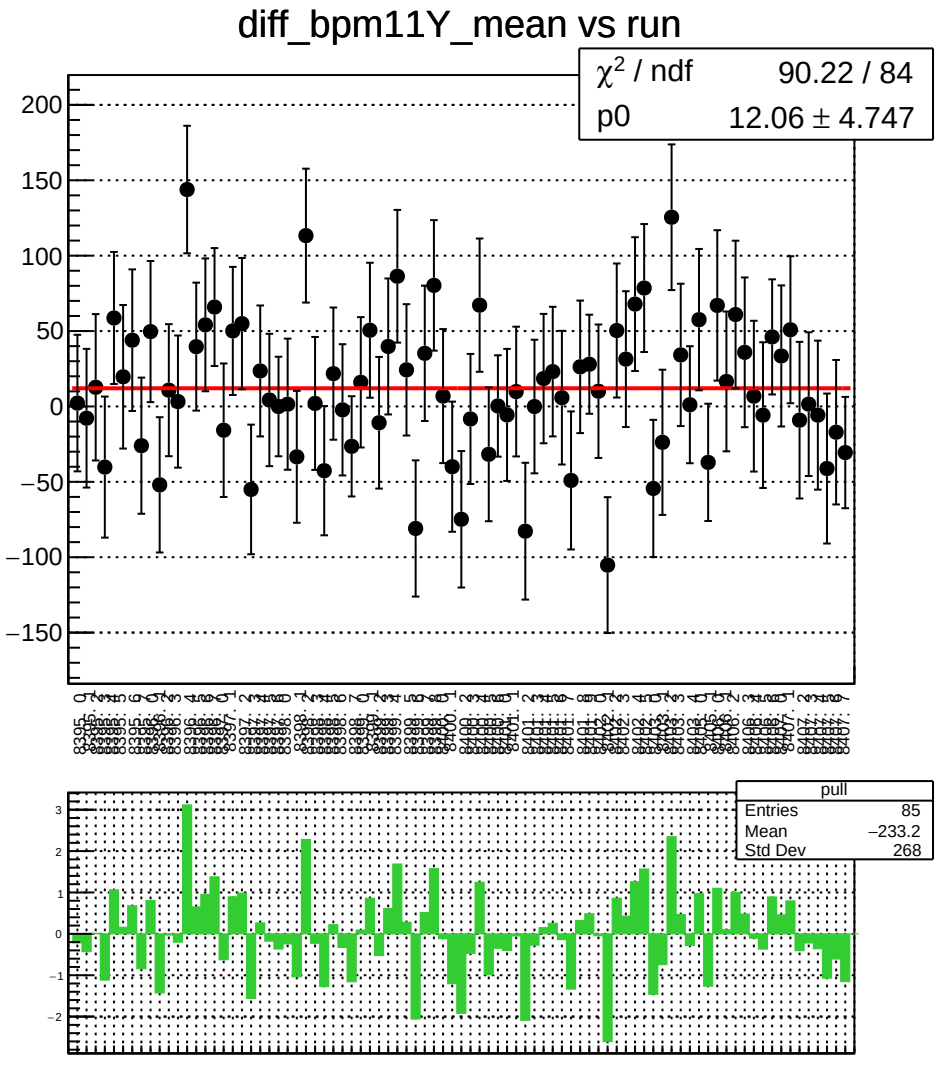

pull1D
Entries 85
Mean 0.002651
Std Dev 1.104
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

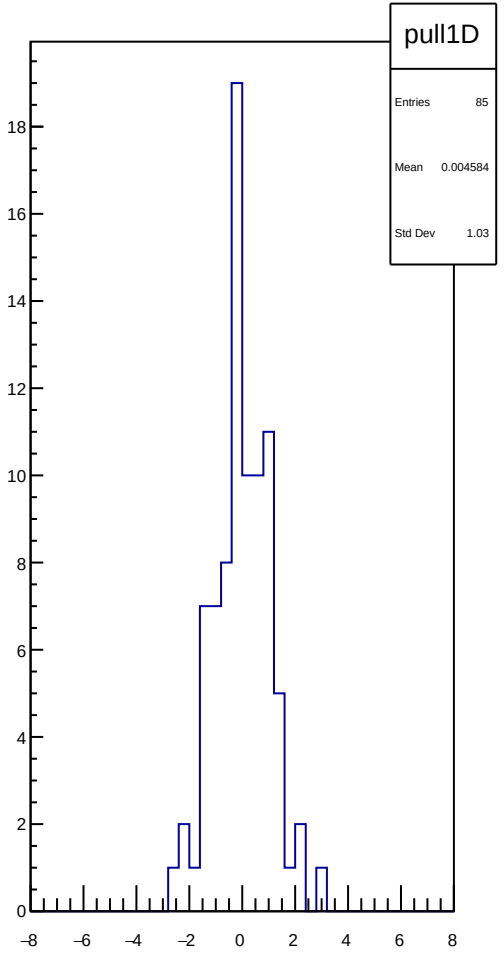

diff_bpm1Y_rms vs run
χ^2 / ndf 1288 / 84
p0 4660 ± 3.639
5200
5100
5000
4900
4800
4700
4600
4500
4400
4300

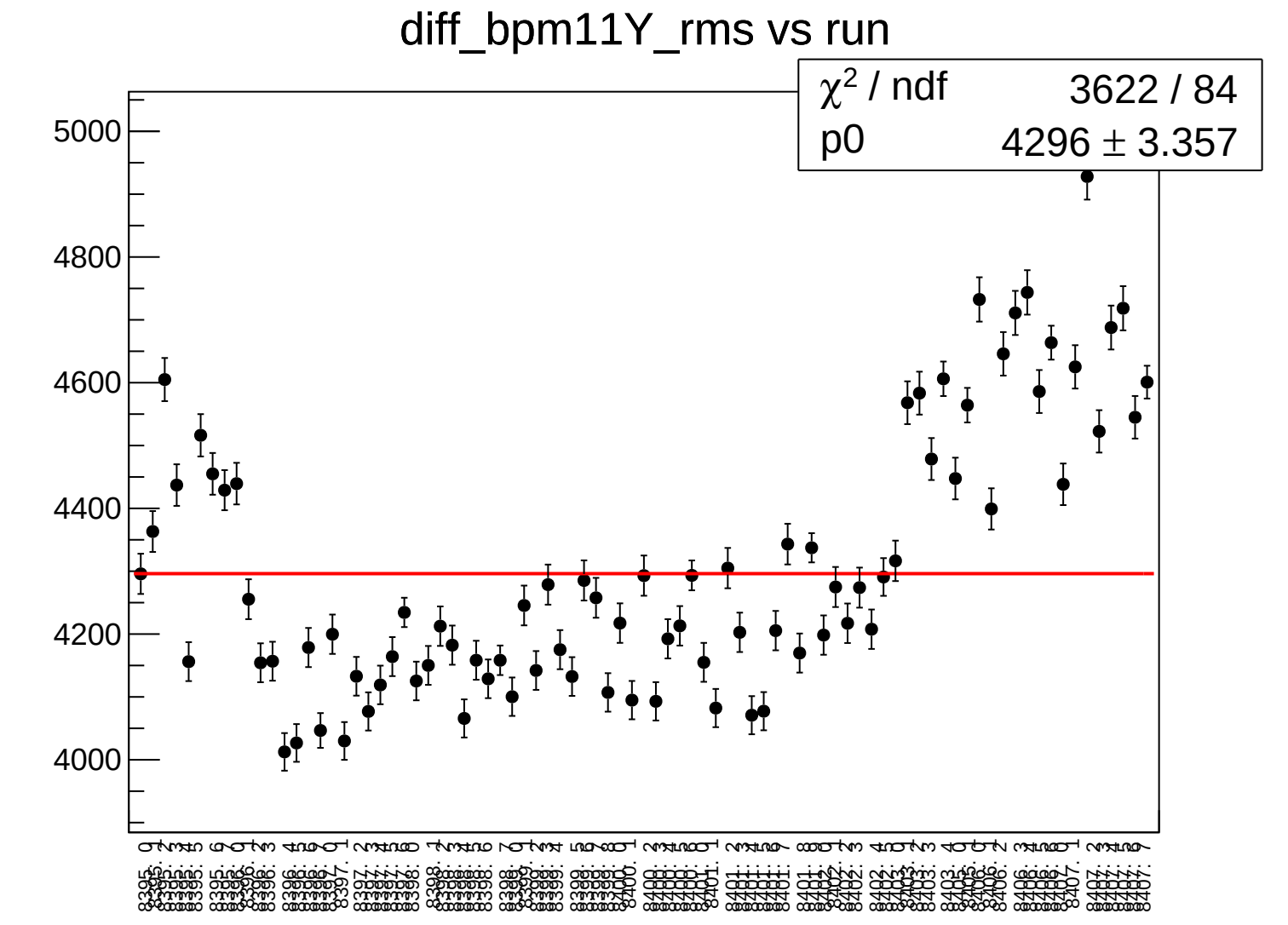

diff_bpm11X_mean vs run
χ² / ndf 91.63 / 84
p0 −13.87 ± 16.62
pull
Entries 85
Mean −214.2
Std Dev 243.1

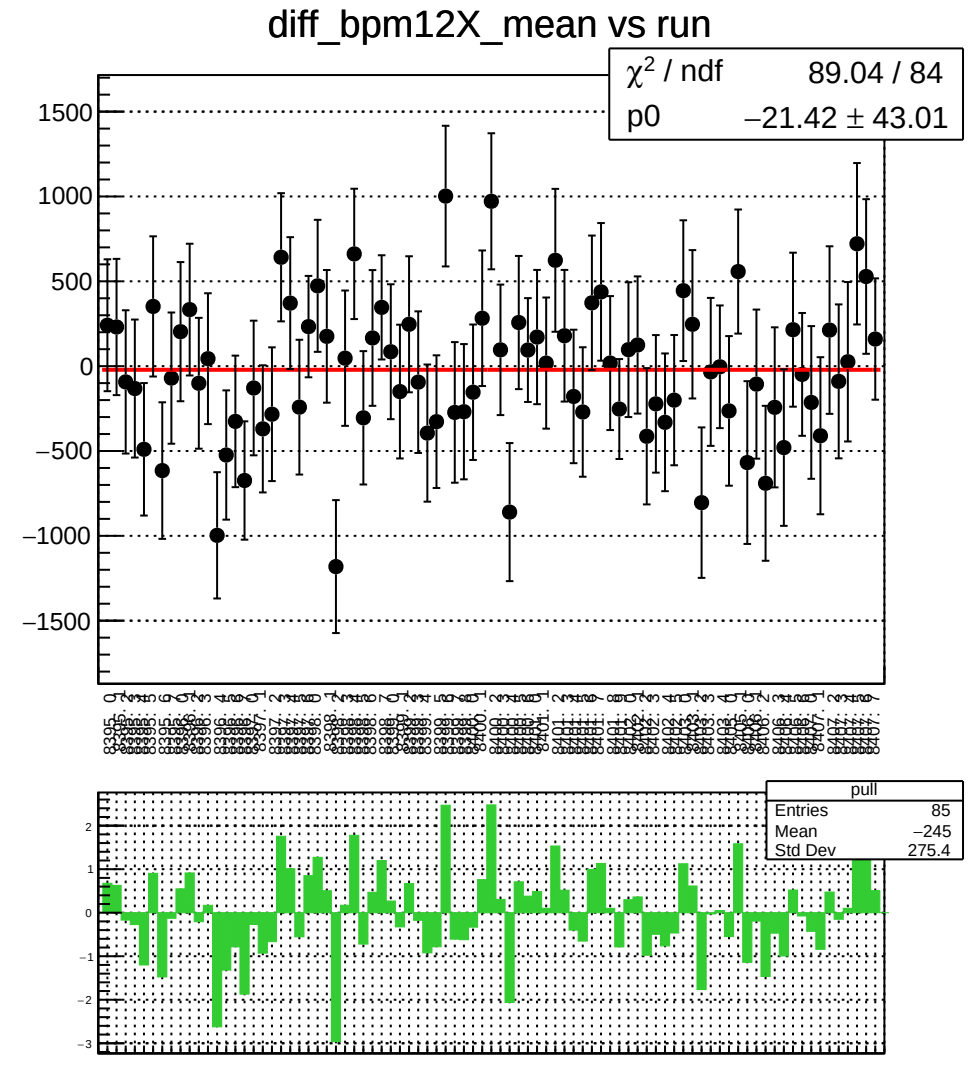

pull1D
Entries 85
Mean −0.005732
Std Dev 1.038

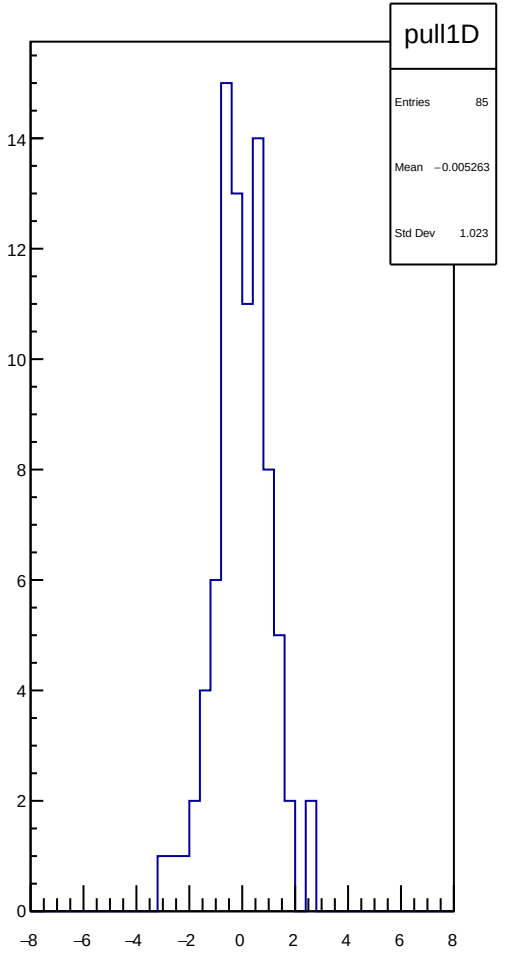

diff_bpm11X_rms vs run
χ² / ndf 6435 / 84
p0 1.503e+04 ± 11.76
18000
17000
16000
15000
14000

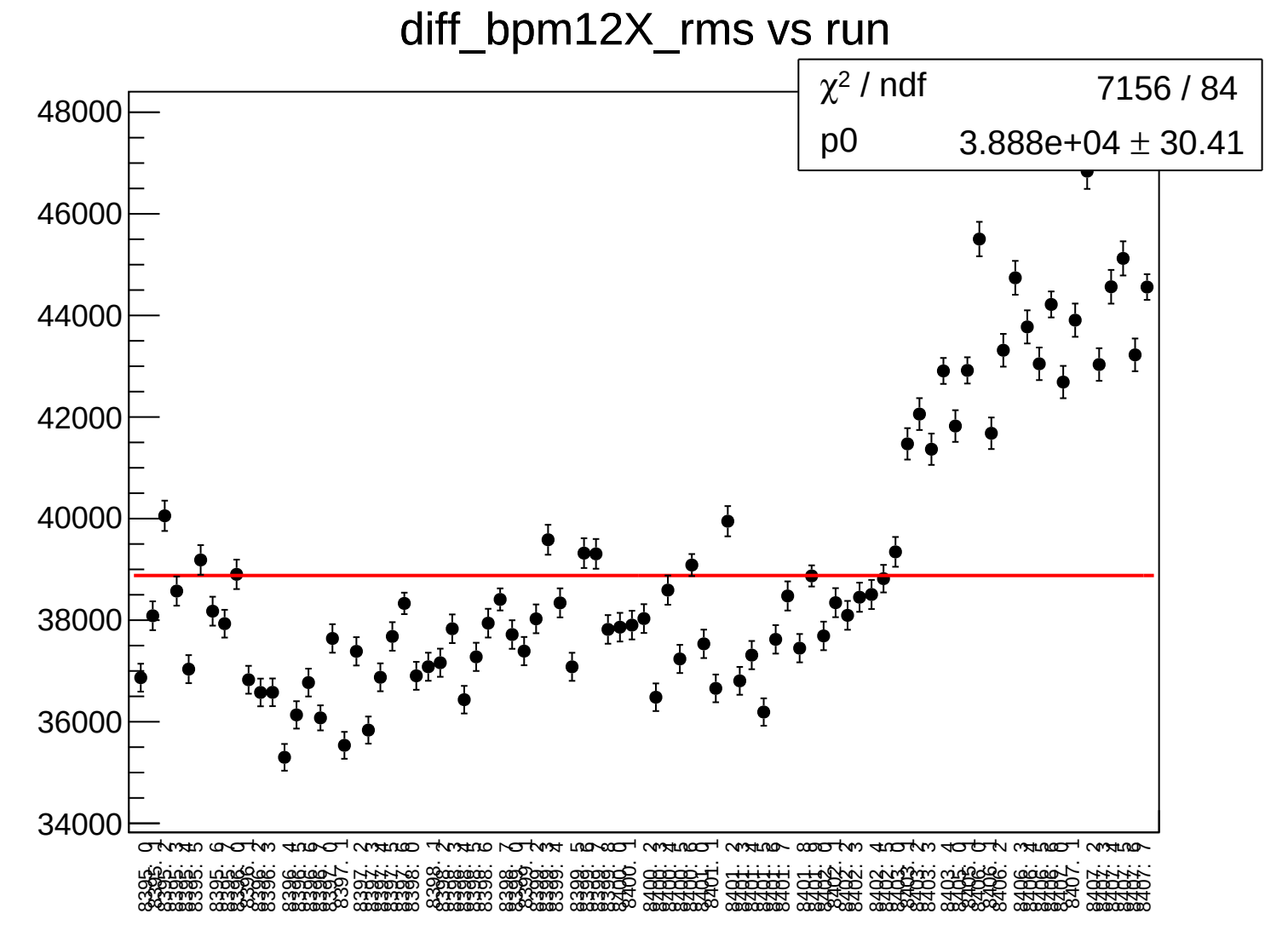

diff_bpm11Y_mean vs run
χ^2 / ndf 90.22 / 84
p0 12.06 ± 4.747
pull
Entries 85
Mean −233.2
Std Dev 268

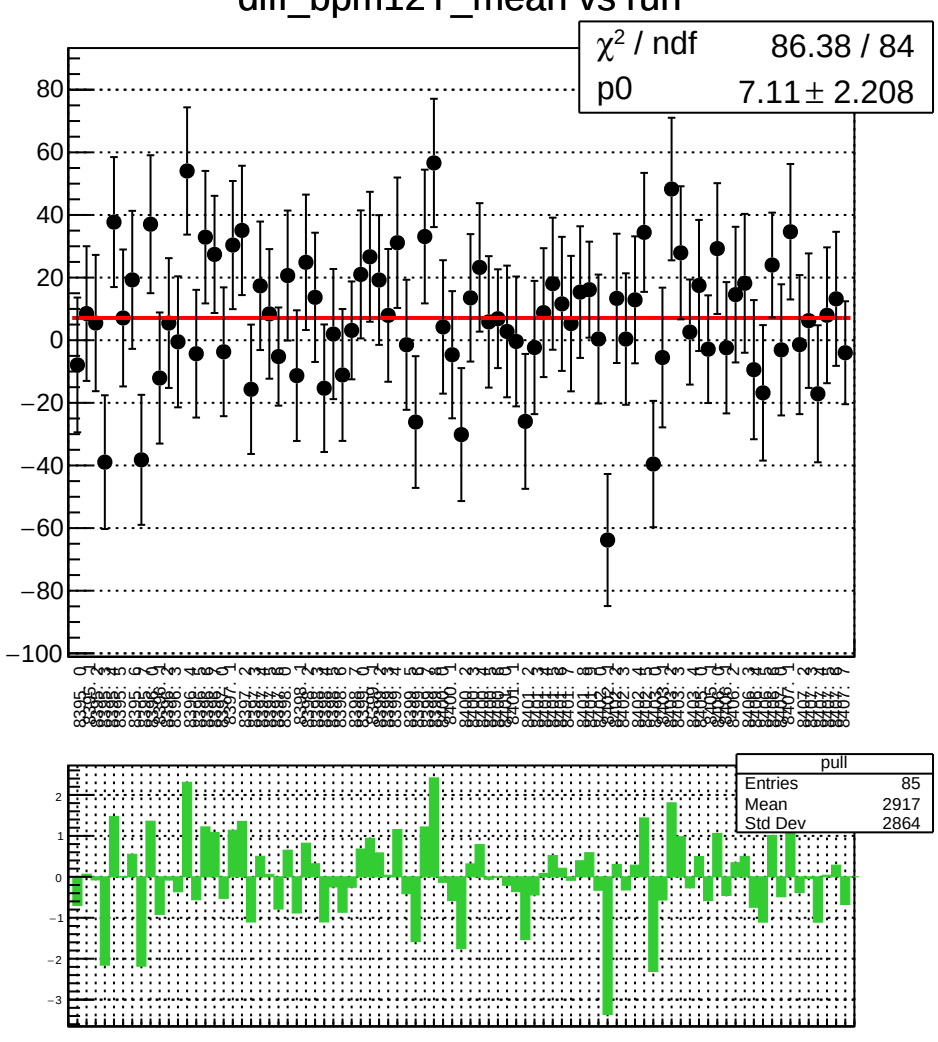

pull1D
Entries 85
Mean 0.004584
Std Dev 1.03

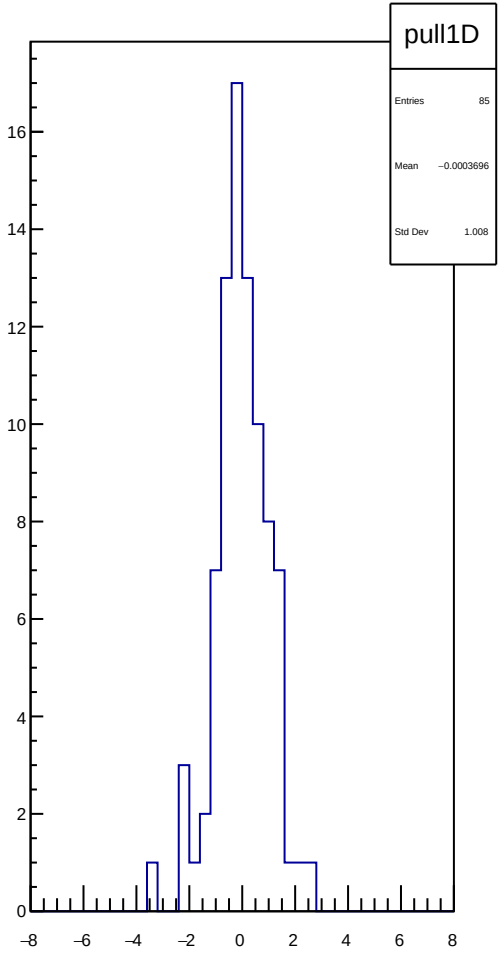

diff_bpm11Y_rms vs run
χ^2 / ndf 3622 / 84
p0 4296 ± 3.357
5000
4800
4600
4400
4200
4000

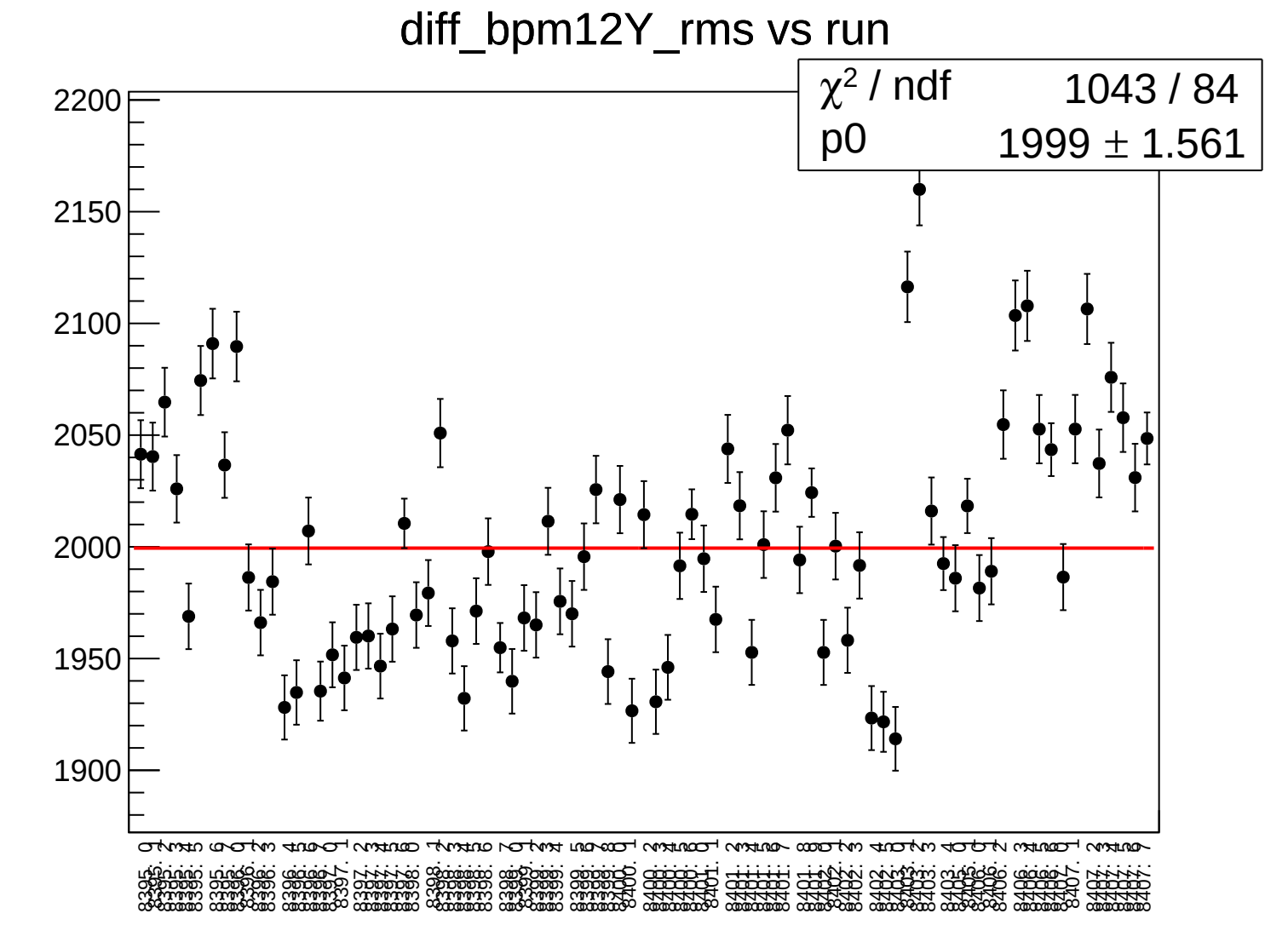

diff_bpm12X_mean vs run
χ² / ndf 89.04 / 84
p0 −21.42 ± 43.01
1500
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −245
Std Dev 275.4
2
1
0
−1
−2
−3

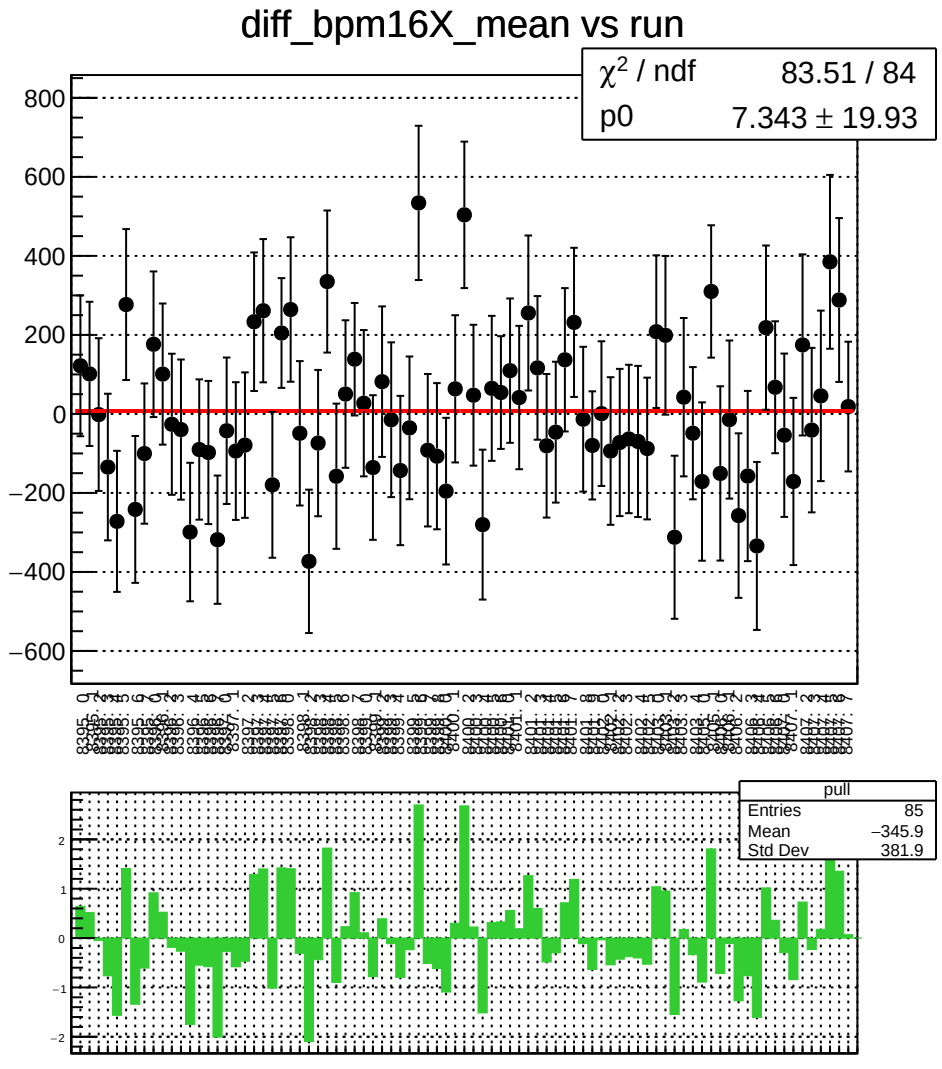

pull1D
Entries 85
Mean −0.005263
Std Dev 1.023
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

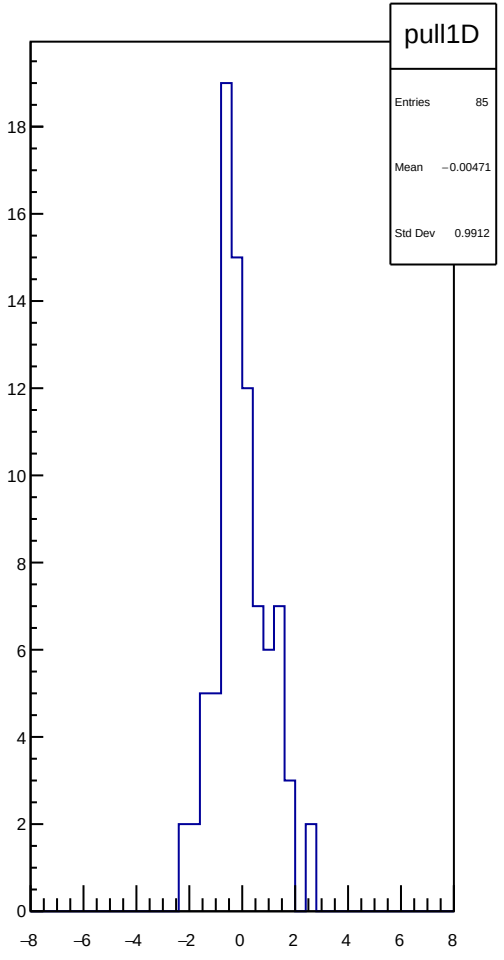

diff_bpm12X_rms vs run
χ² / ndf 7156 / 84
p0 3.888e+04 ± 30.41
48000
46000
44000
42000
40000
38000
36000
34000

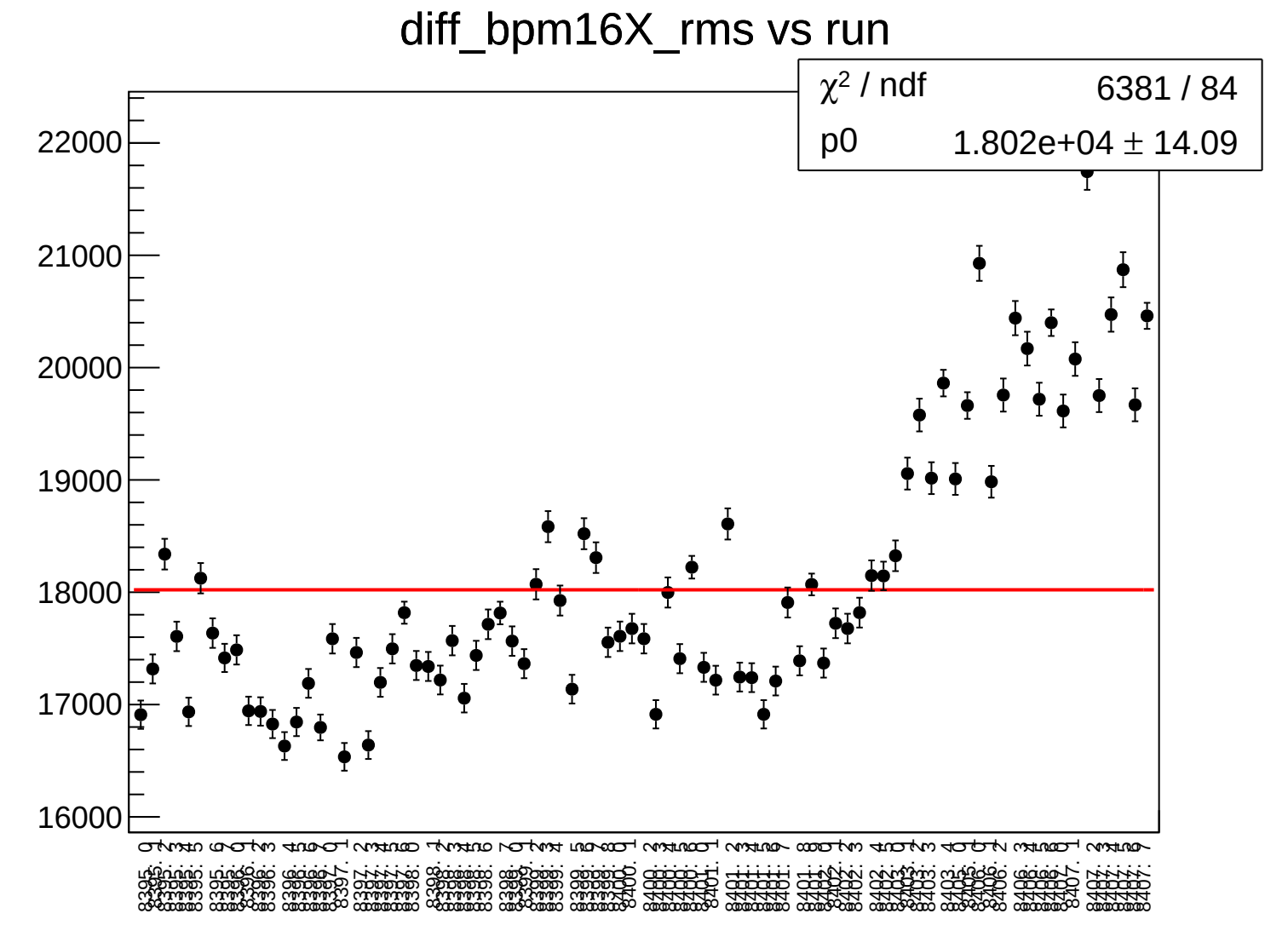

diff_bpm12Y_mean vs run
χ² / ndf 86.38 / 84
p0 7.11 ± 2.208
pull
Entries 85
Mean 2917
Std Dev 2864

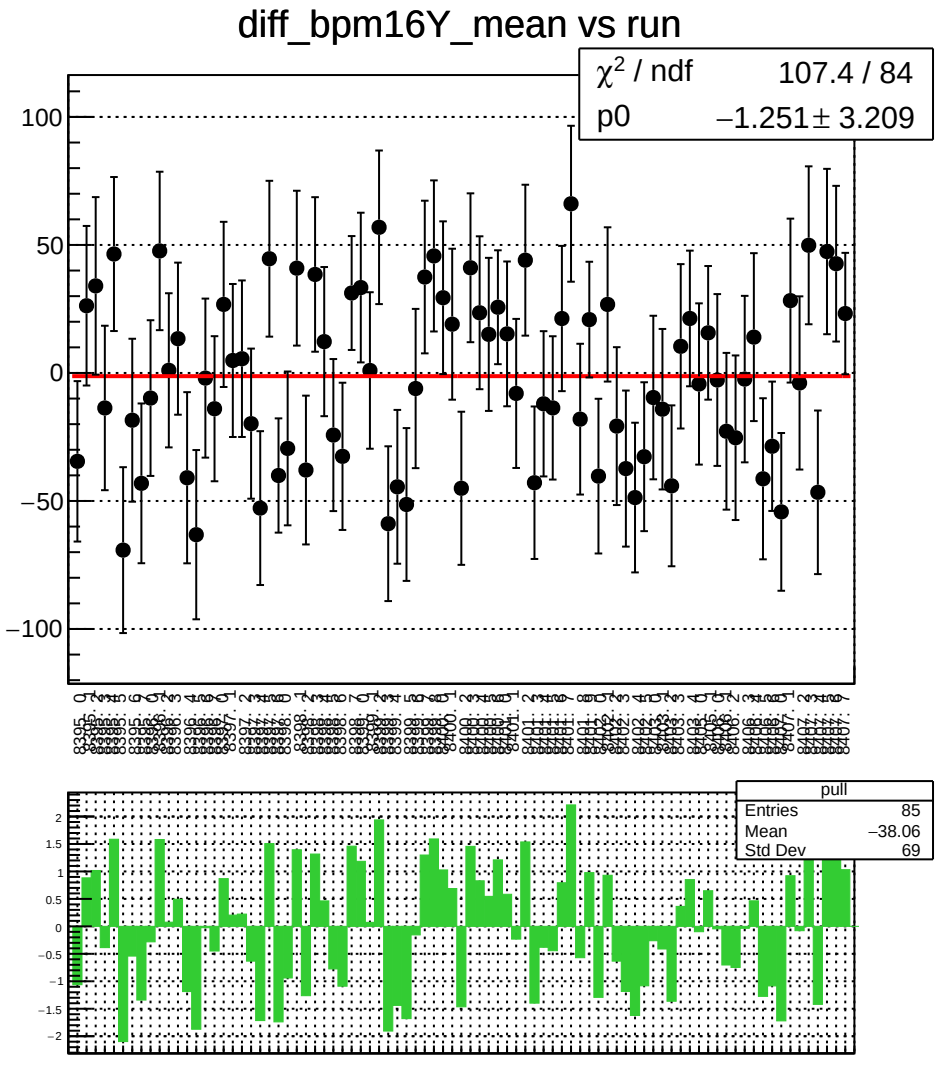

pull1D
Entries 85
Mean −0.0003696
Std Dev 1.008

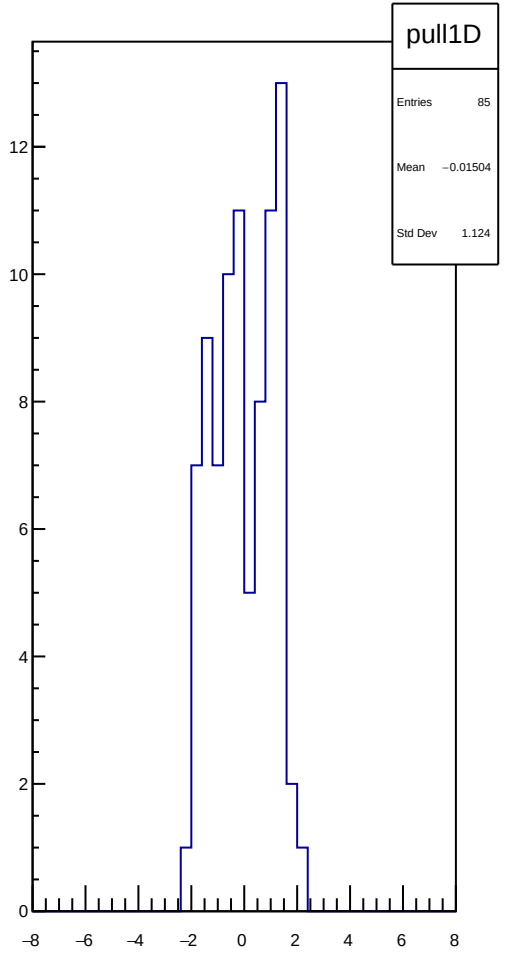

diff_bpm12Y_rms vs run
χ² / ndf 1043 / 84
p0 1999 ± 1.561
2200
2150
2100
2050
2000
1950
1900

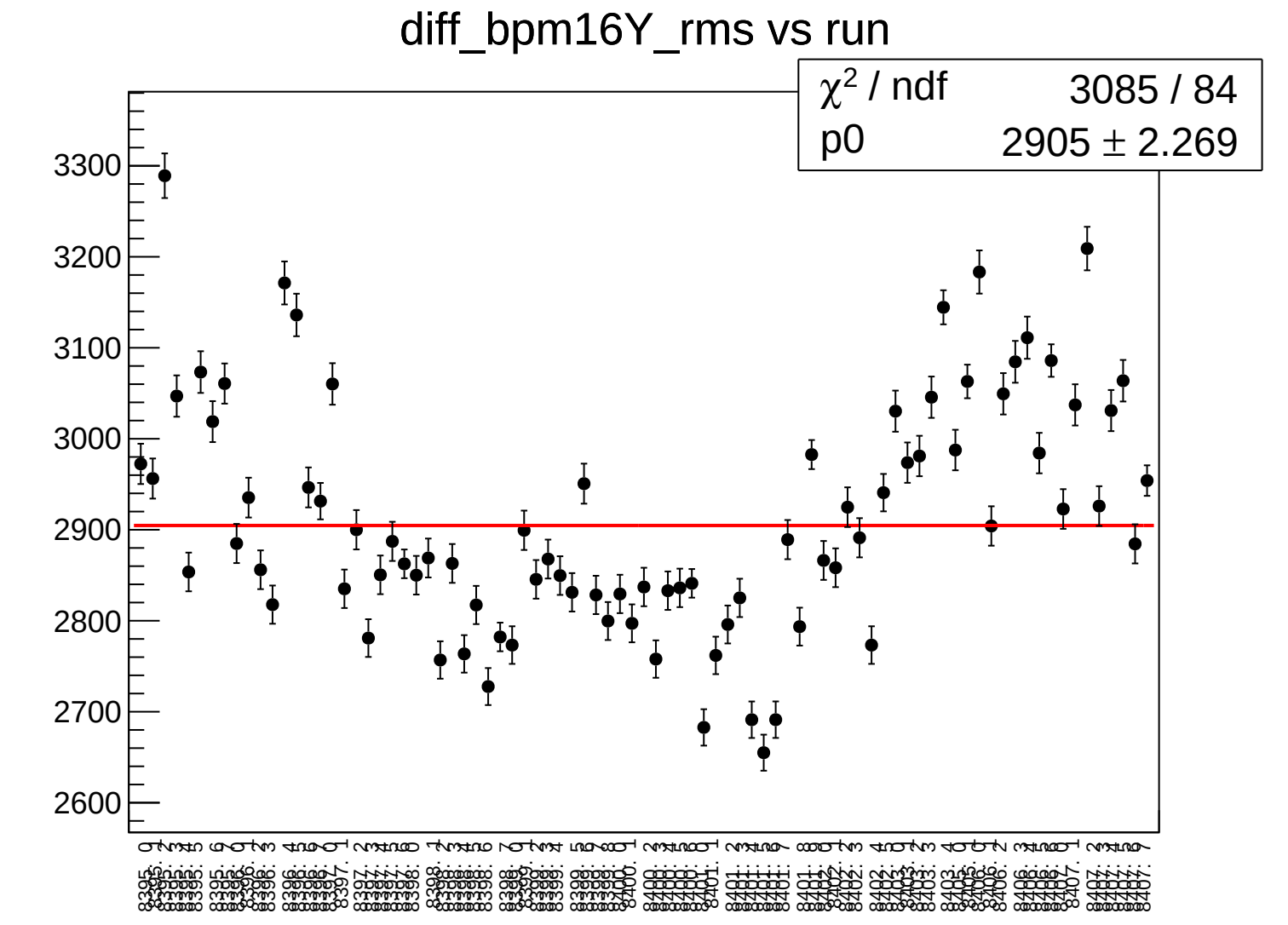

diff_bpm16X_mean vs run
χ² / ndf 83.51 / 84
p0 7.343 ± 19.93
pull
Entries 85
Mean −345.9
Std Dev 381.9

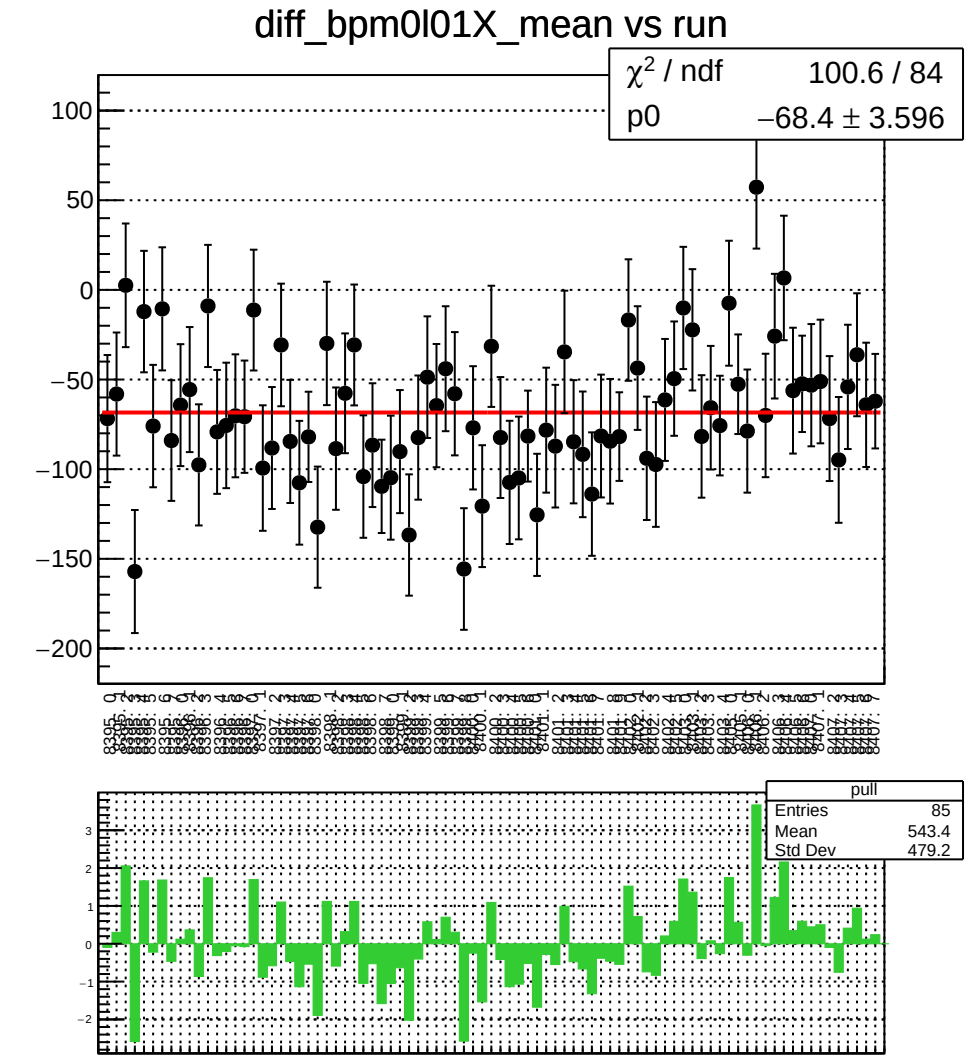

pull1D
Entries 85
Mean −0.00471
Std Dev 0.9912

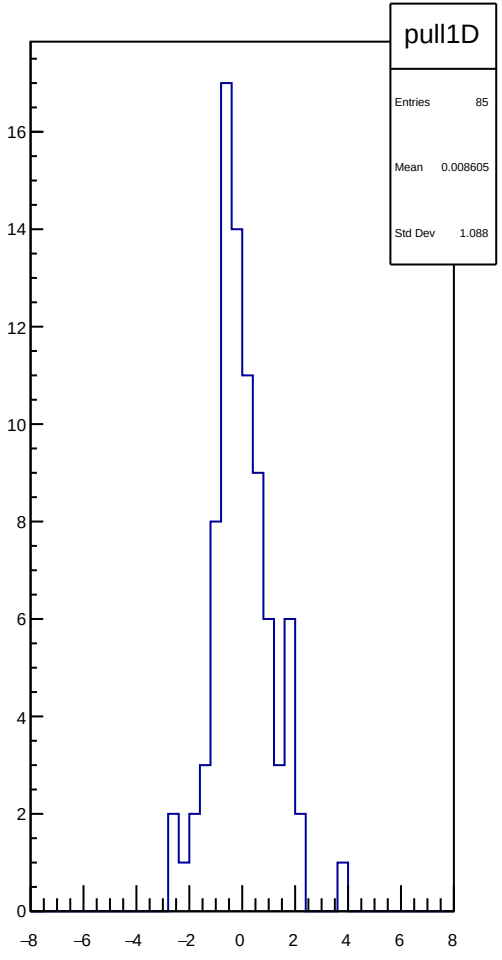

diff_bpm16X_rms vs run
χ² / ndf 6381 / 84
p0 1.802e+04 ± 14.09
22000
21000
20000
19000
18000
17000
16000

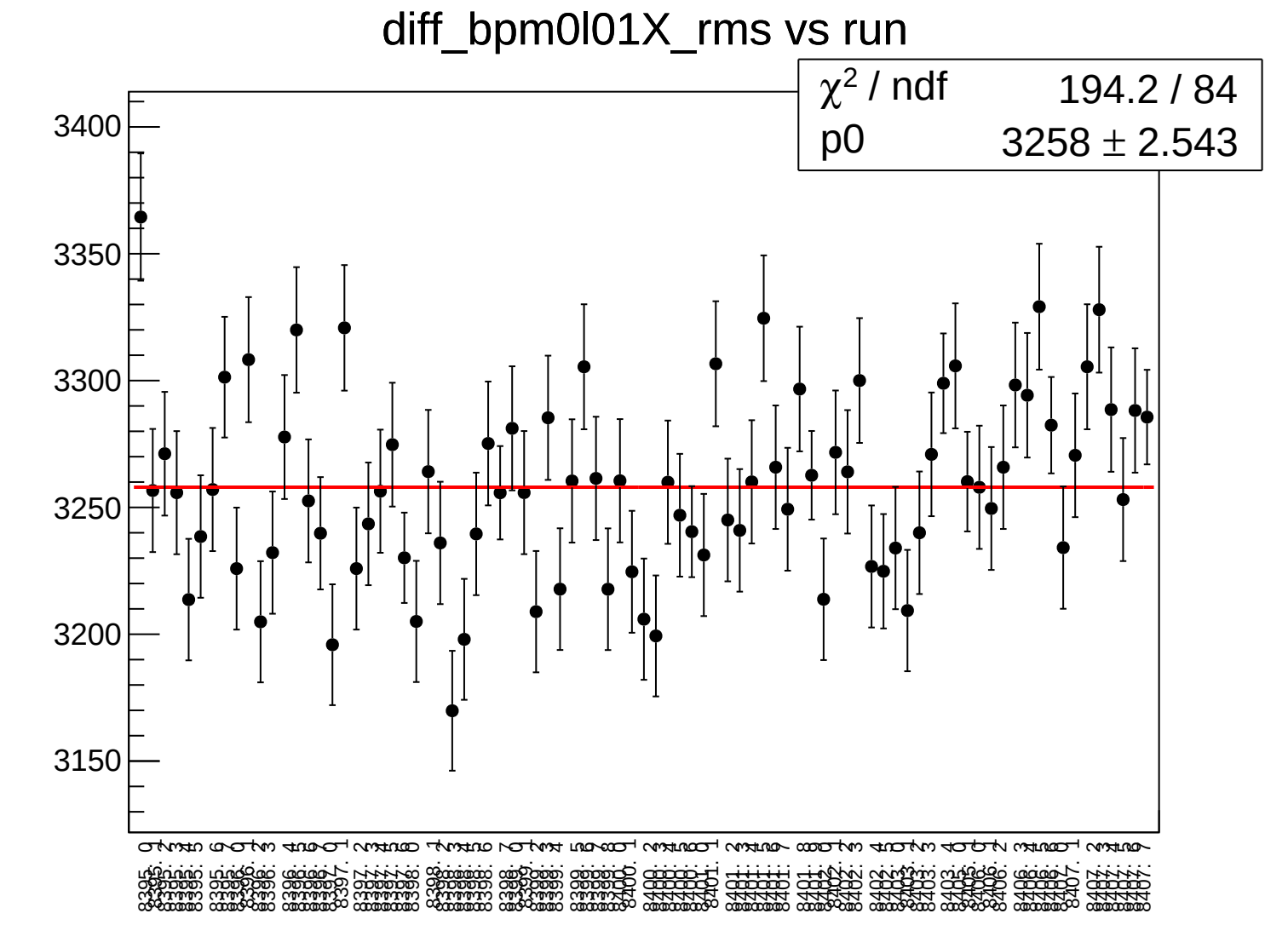

diff_bpm16Y_mean vs run
χ² / ndf 107.4 / 84
p0 −1.251 ± 3.209
100
50
0
−50
−100
pull
Entries 85
Mean −38.06
Std Dev 69
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

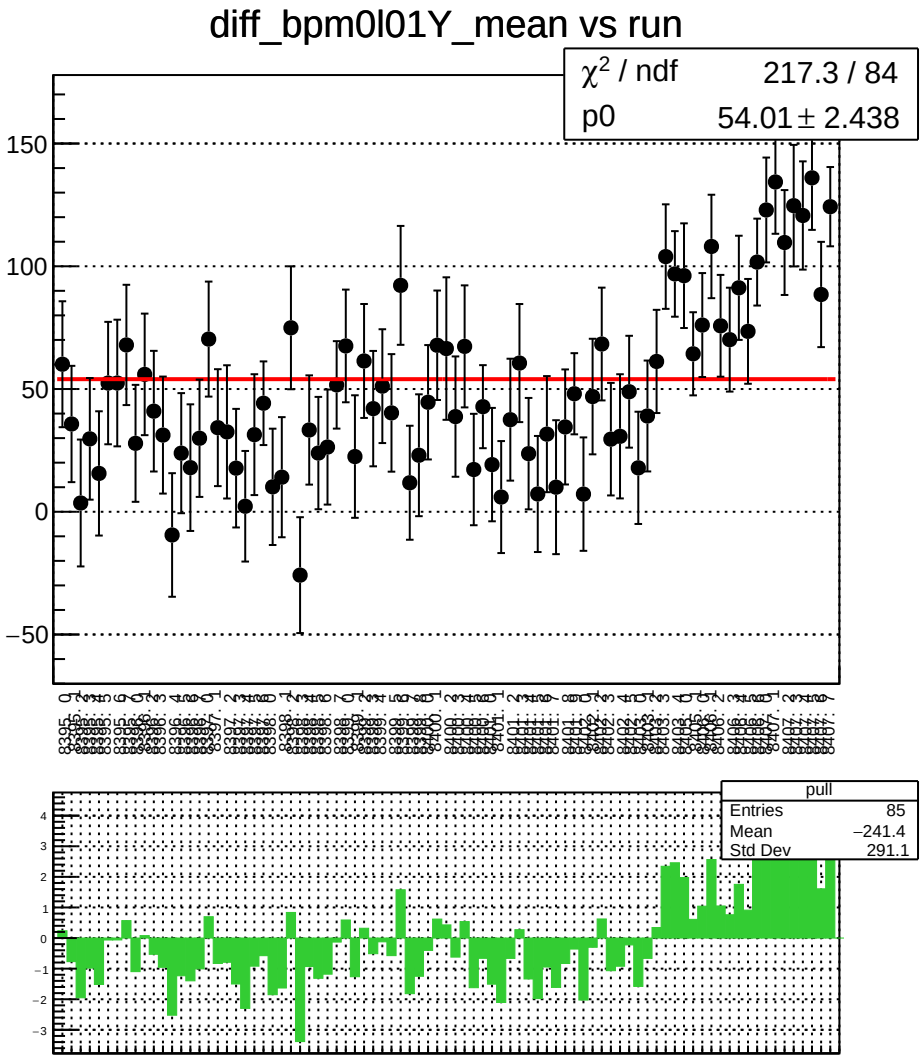

pull1D
Entries 85
Mean −0.01504
Std Dev 1.124
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

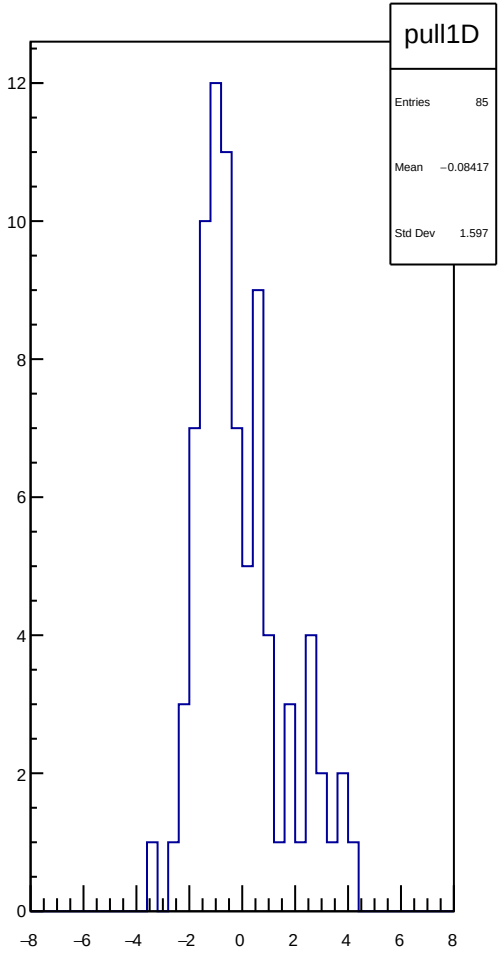

diff_bpm16Y_rms vs run
χ^2 / ndf 3085 / 84
p0 2905 ± 2.269
3300
3200
3100
3000
2900
2800
2700
2600

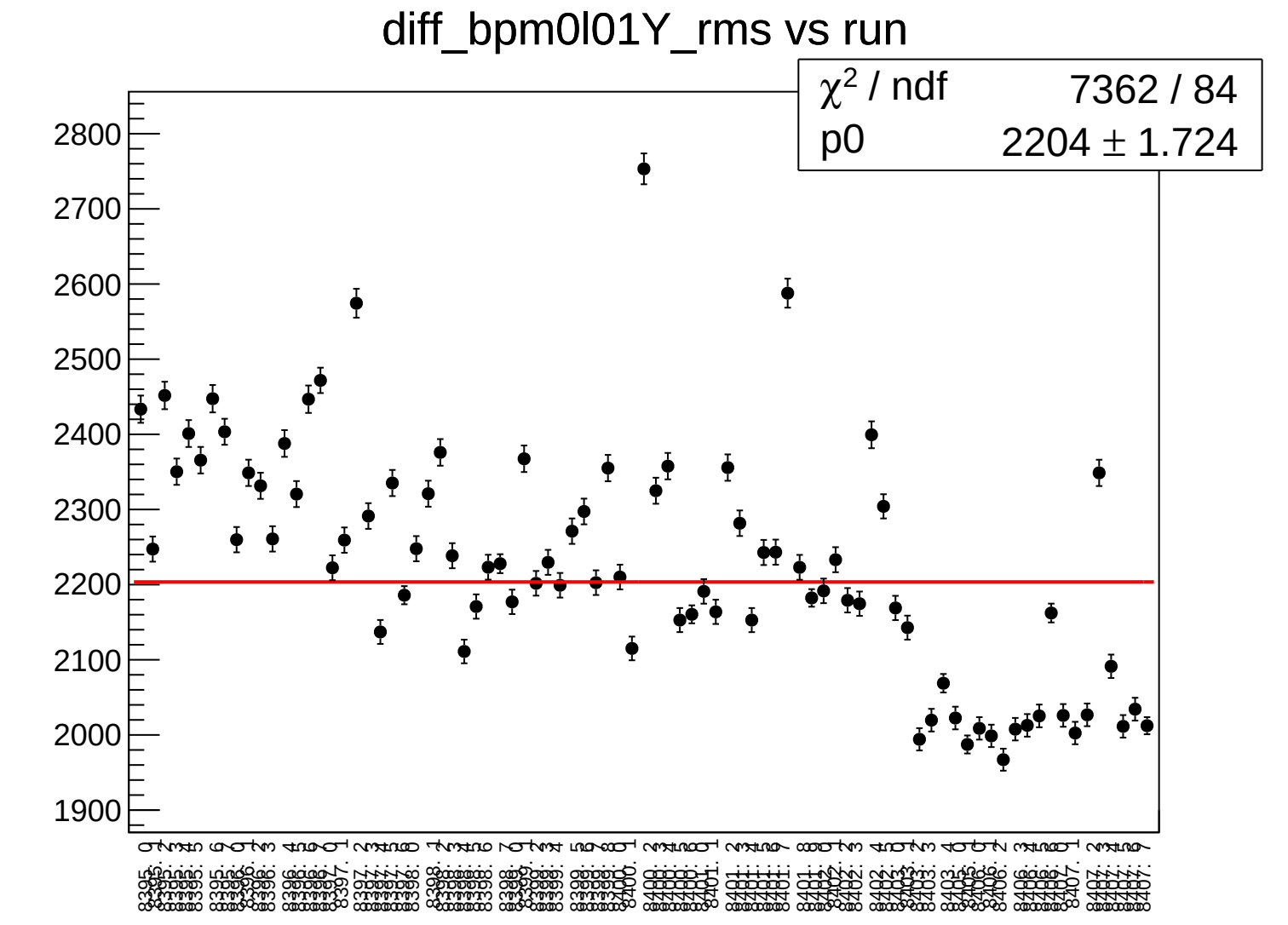

diff_bpm0l01X_mean vs run
χ² / ndf 100.6 / 84
p0 −68.4 ± 3.596
pull
Entries 85
Mean 543.4
Std Dev 479.2

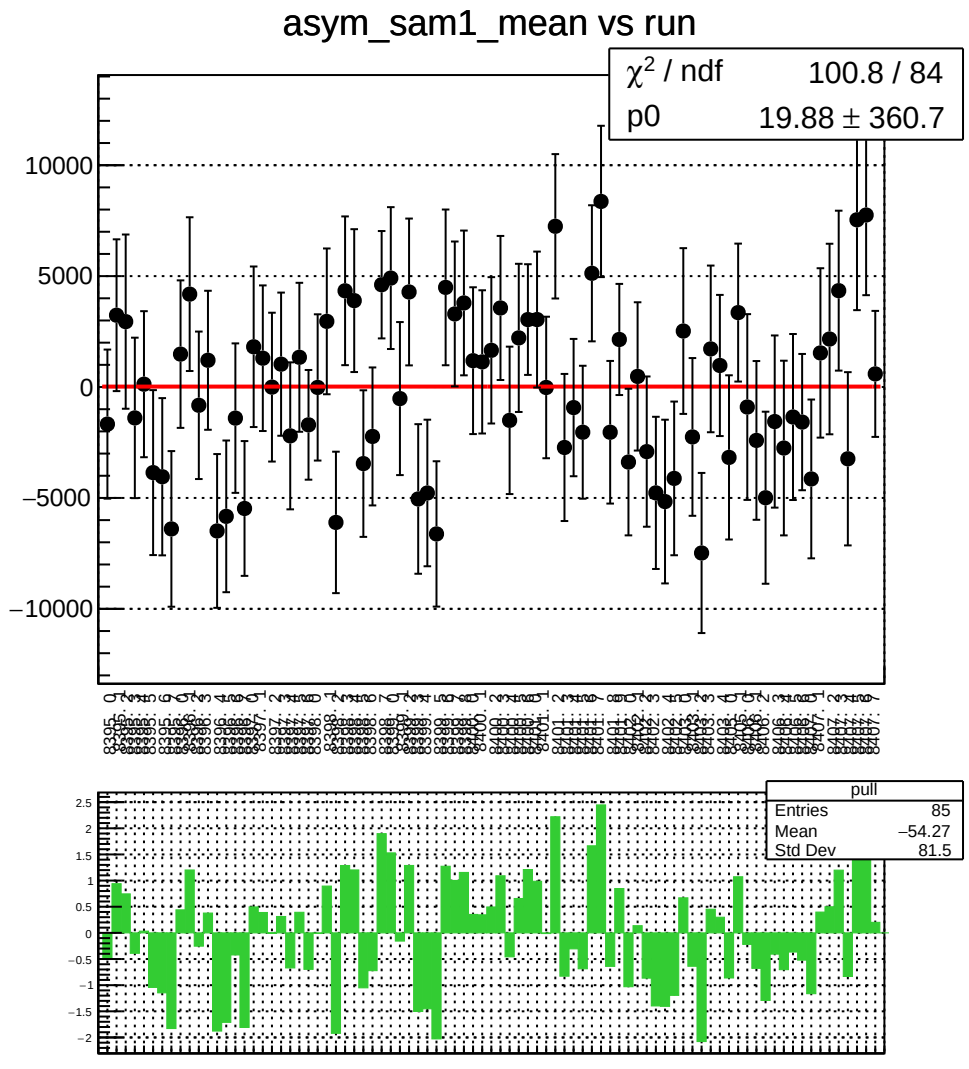

pull1D
Entries 85
Mean 0.008605
Std Dev 1.088

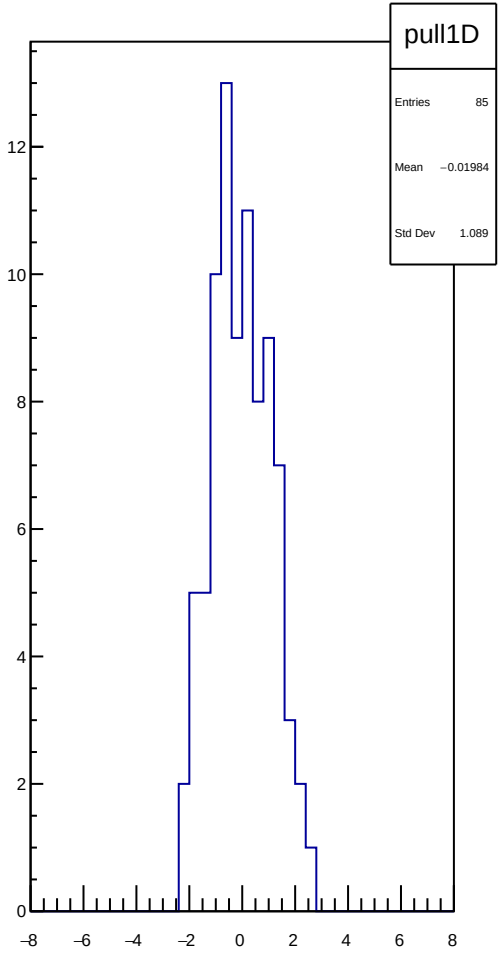

diff_bpm0l01X_rms vs run
χ² / ndf 194.2 / 84
p0 3258 ± 2.543
3400
3350
3300
3250
3200
3150

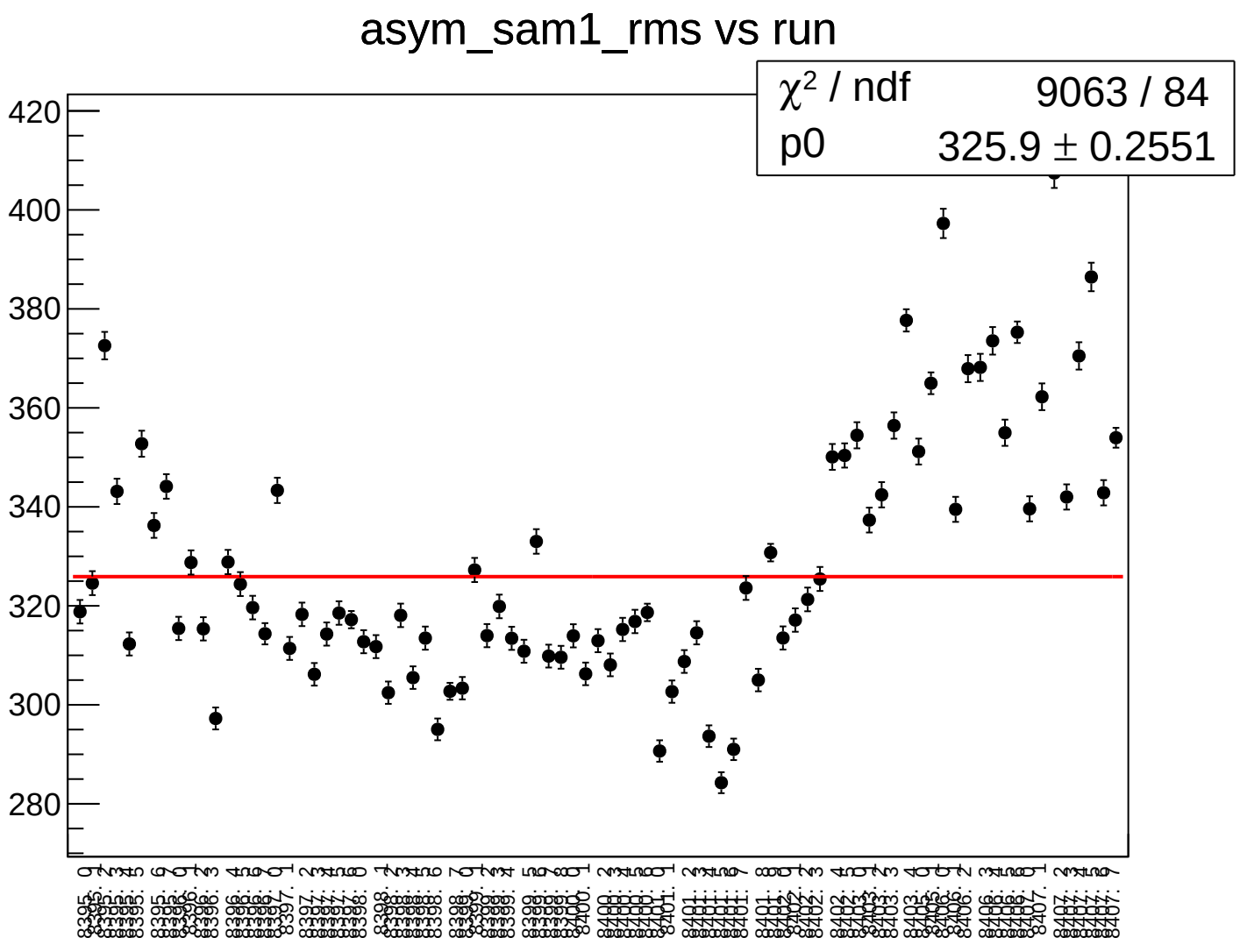

diff_bpm0l01Y_mean vs run
χ² / ndf 217.3 / 84
p0 54.01 ± 2.438
150
100
50
0
−50
pull
Entries 85
Mean −241.4
Std Dev 291.1
4
3
2
1
0
−1
−2
−3

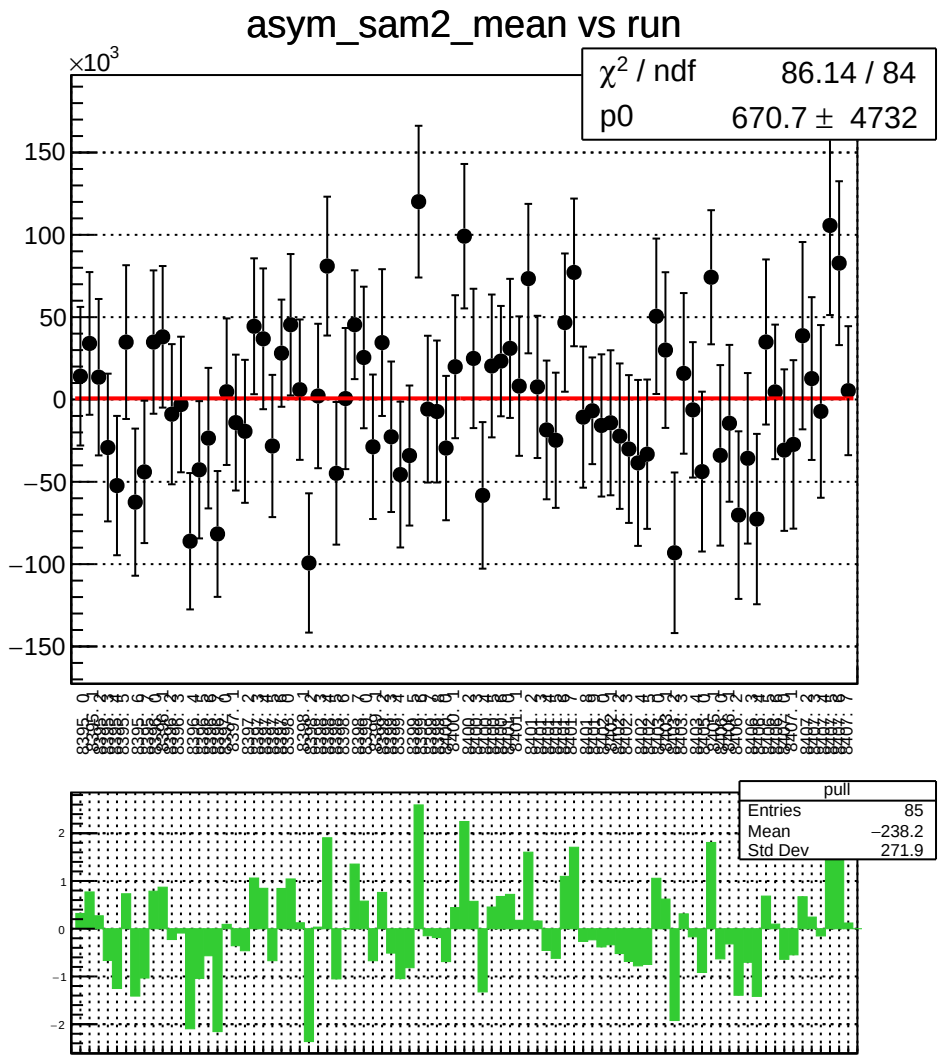

pull1D
Entries 85
Mean −0.08417
Std Dev 1.597
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

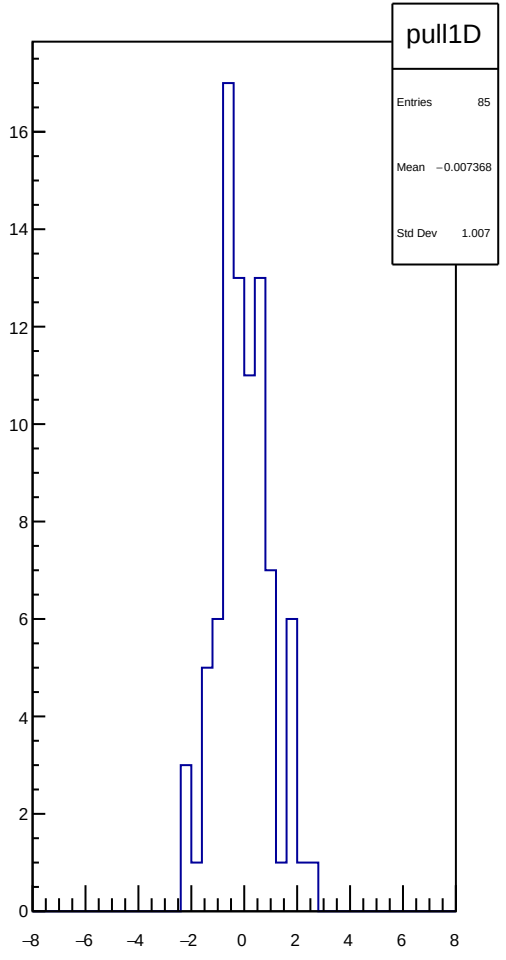

diff_bpm0l01Y_rms vs run
χ² / ndf 7362 / 84
p0 2204 ± 1.724
2800
2700
2600
2500
2400
2300
2200
2100
2000
1900

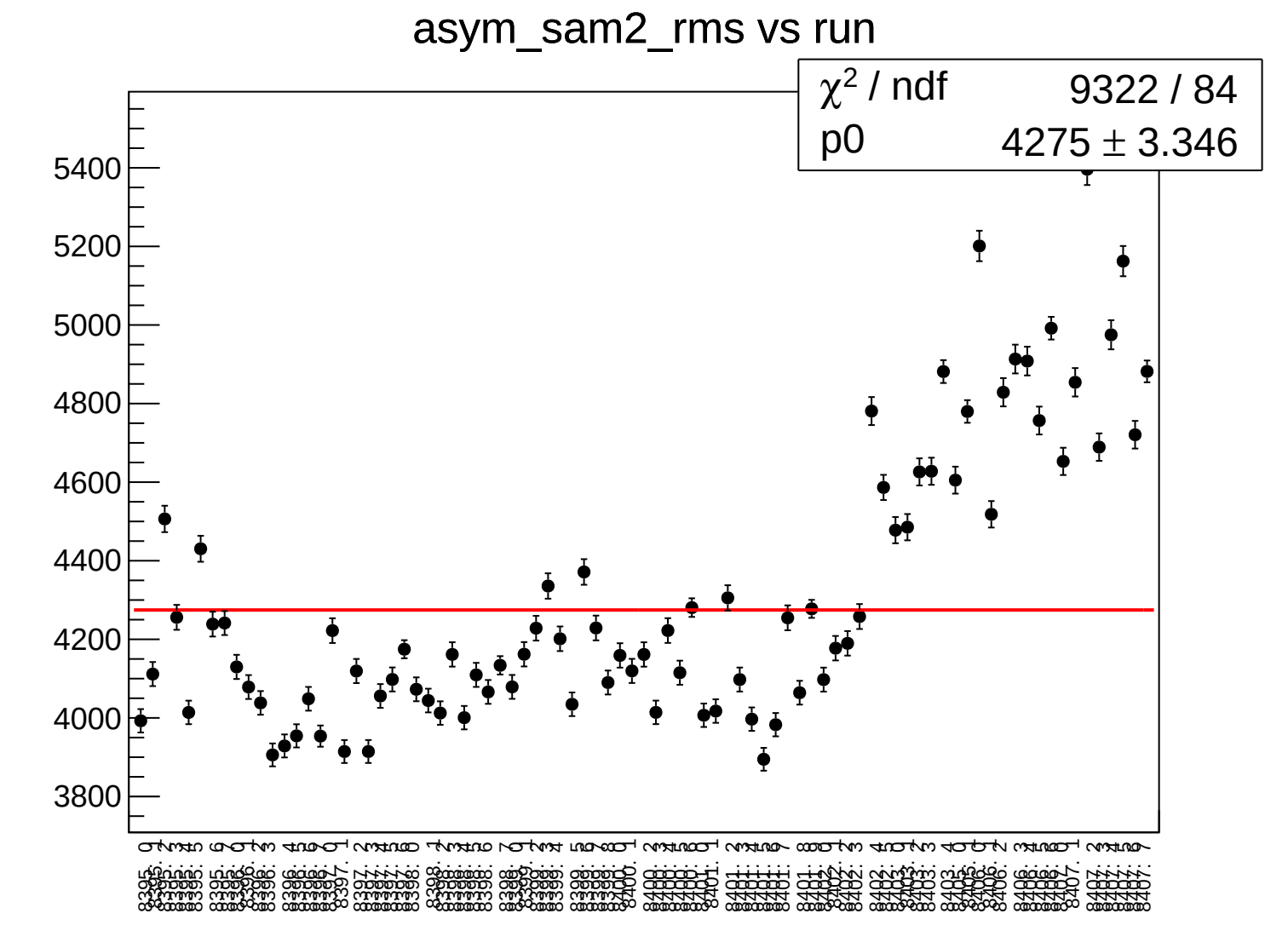

asym_sam1_mean vs run
χ² / ndf 100.8 / 84
p0 19.88 ± 360.7
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −54.27
Std Dev 81.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

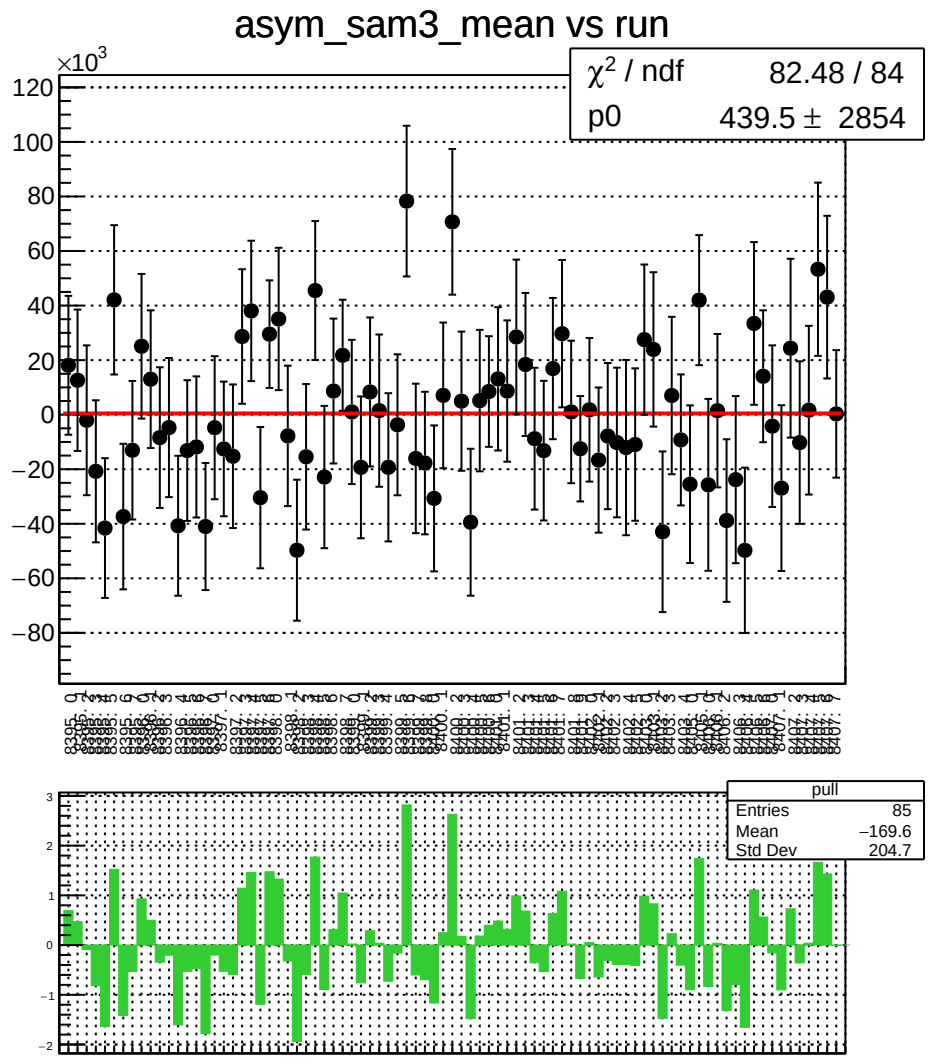

pull1D
Entries 85
Mean −0.01984
Std Dev 1.089
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

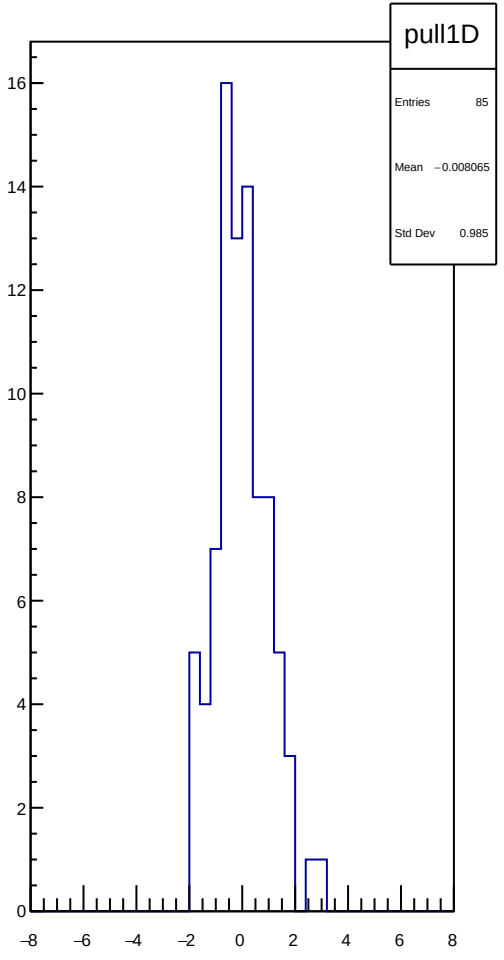

asym_sam1_rms vs run
χ² / ndf 9063 / 84
p0 325.9 ± 0.2551
420
400
380
360
340
320
300
280

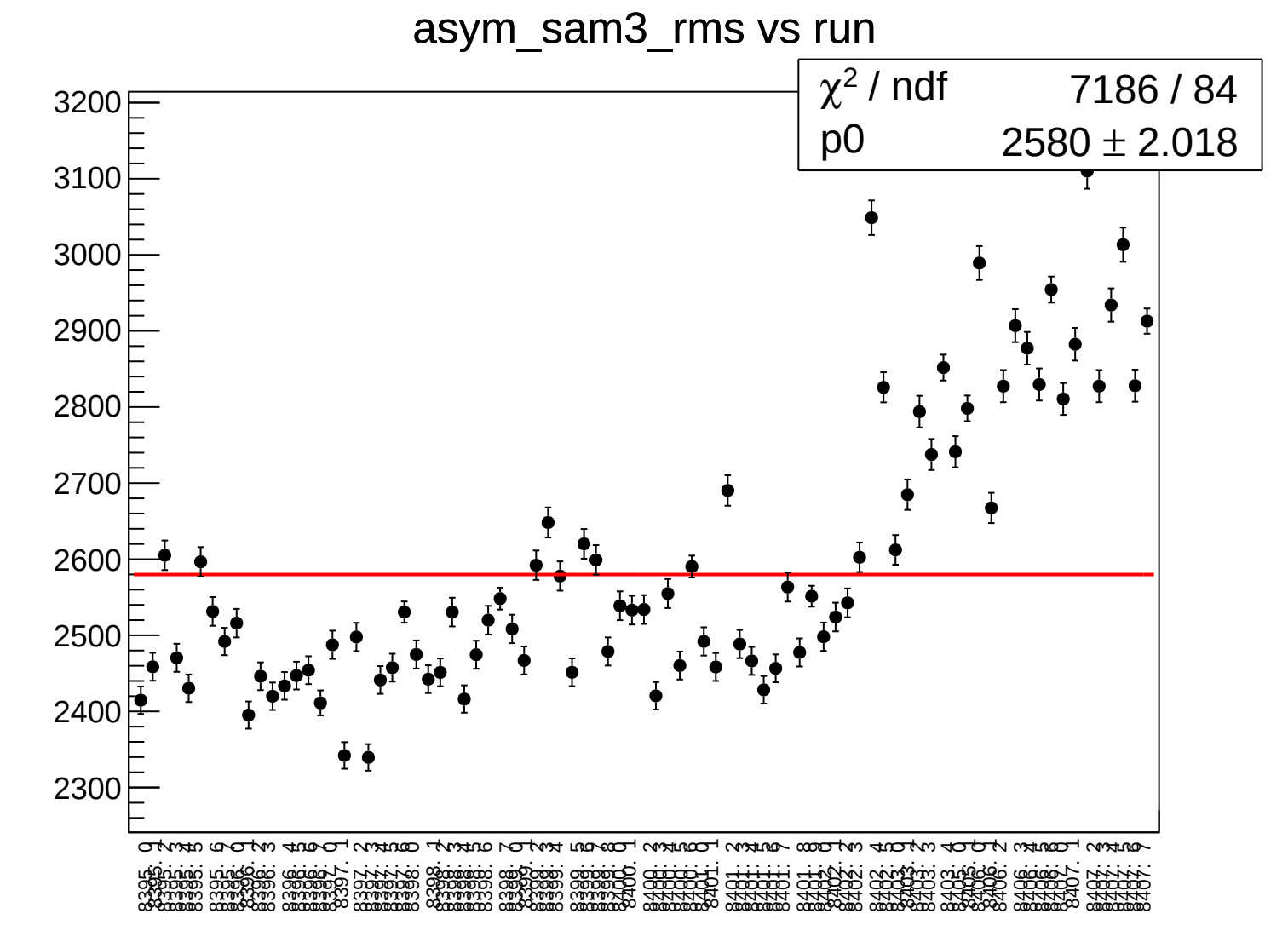

asym_sam2_mean vs run
×10^3
χ^2 / ndf 86.14 / 84
p0 670.7 ± 4732
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −238.2
Std Dev 271.9
2
1
0
−1
−2

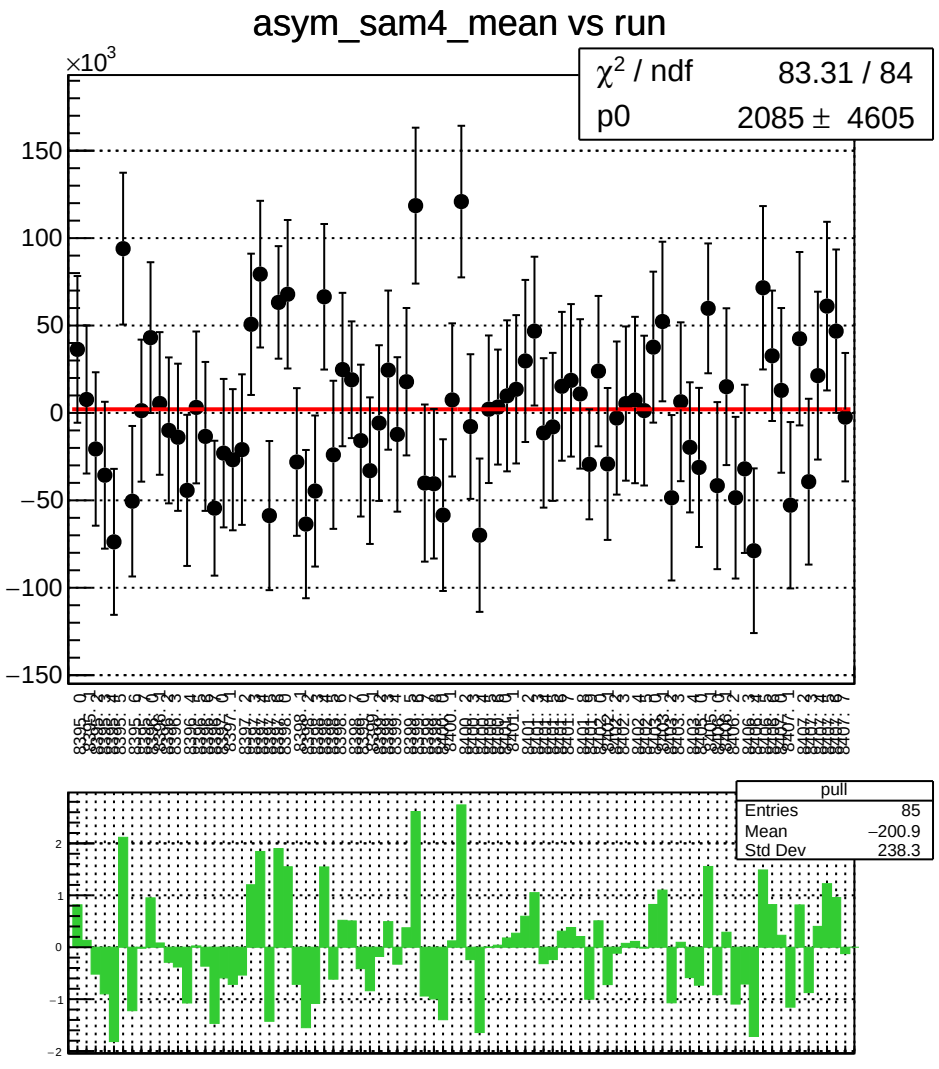

pull1D
Entries 85
Mean −0.007368
Std Dev 1.007
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

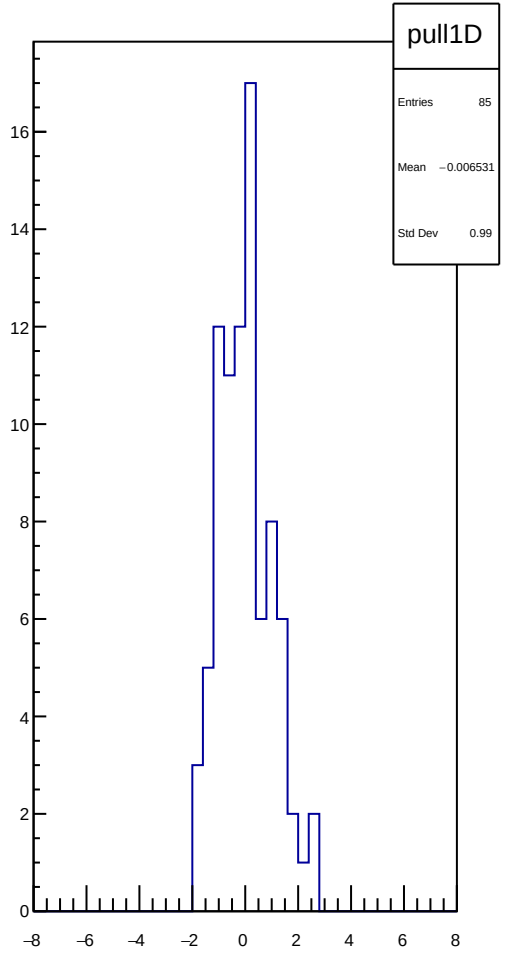

asym_sam2_rms vs run
χ² / ndf 9322 / 84
p0 4275 ± 3.346
5400
5200
5000
4800
4600
4400
4200
4000
3800

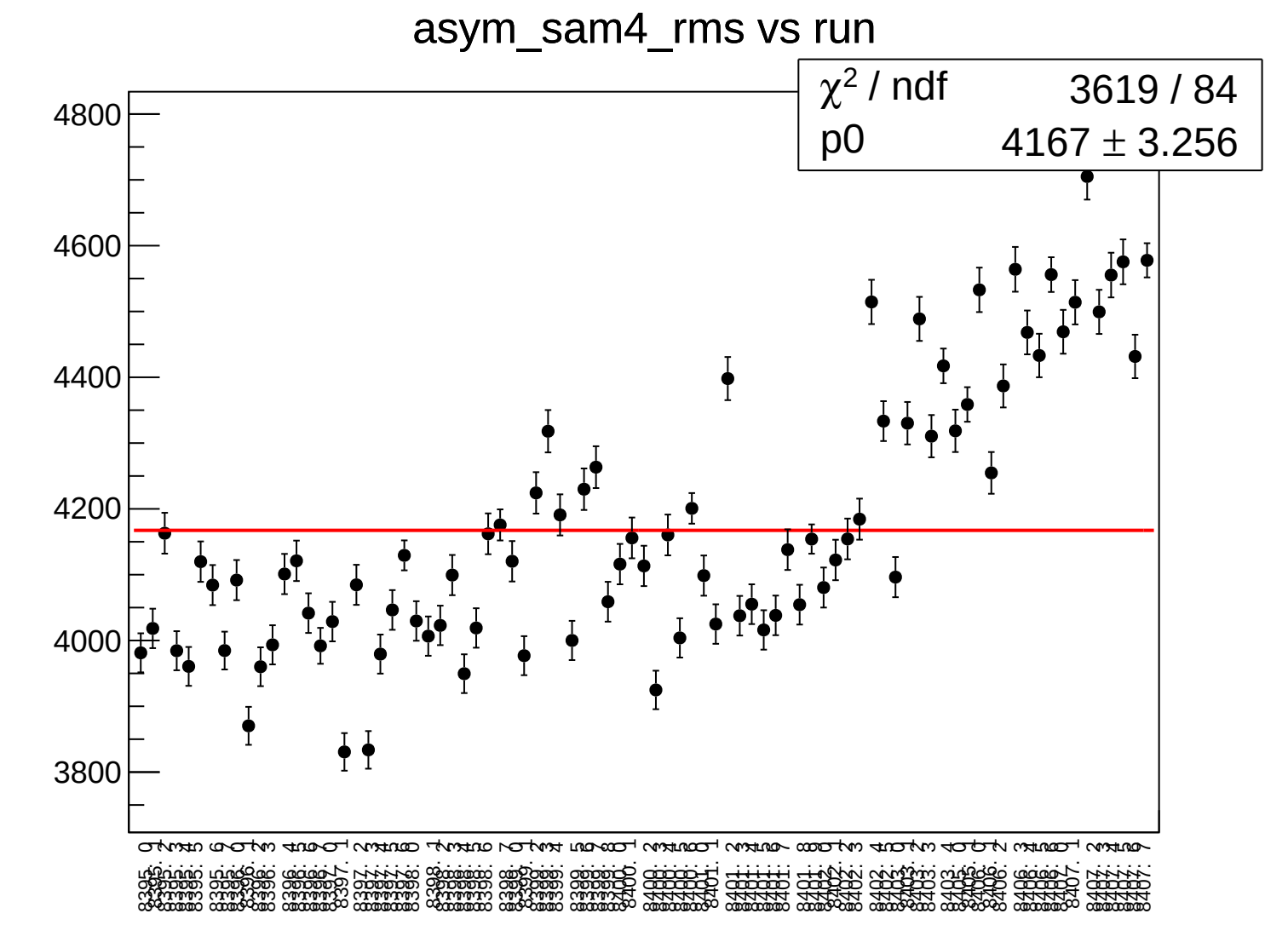

asym_sam3_mean vs run
×10^3
χ² / ndf 82.48 / 84
p0 439.5 ± 2854
pull
Entries 85
Mean −169.6
Std Dev 204.7

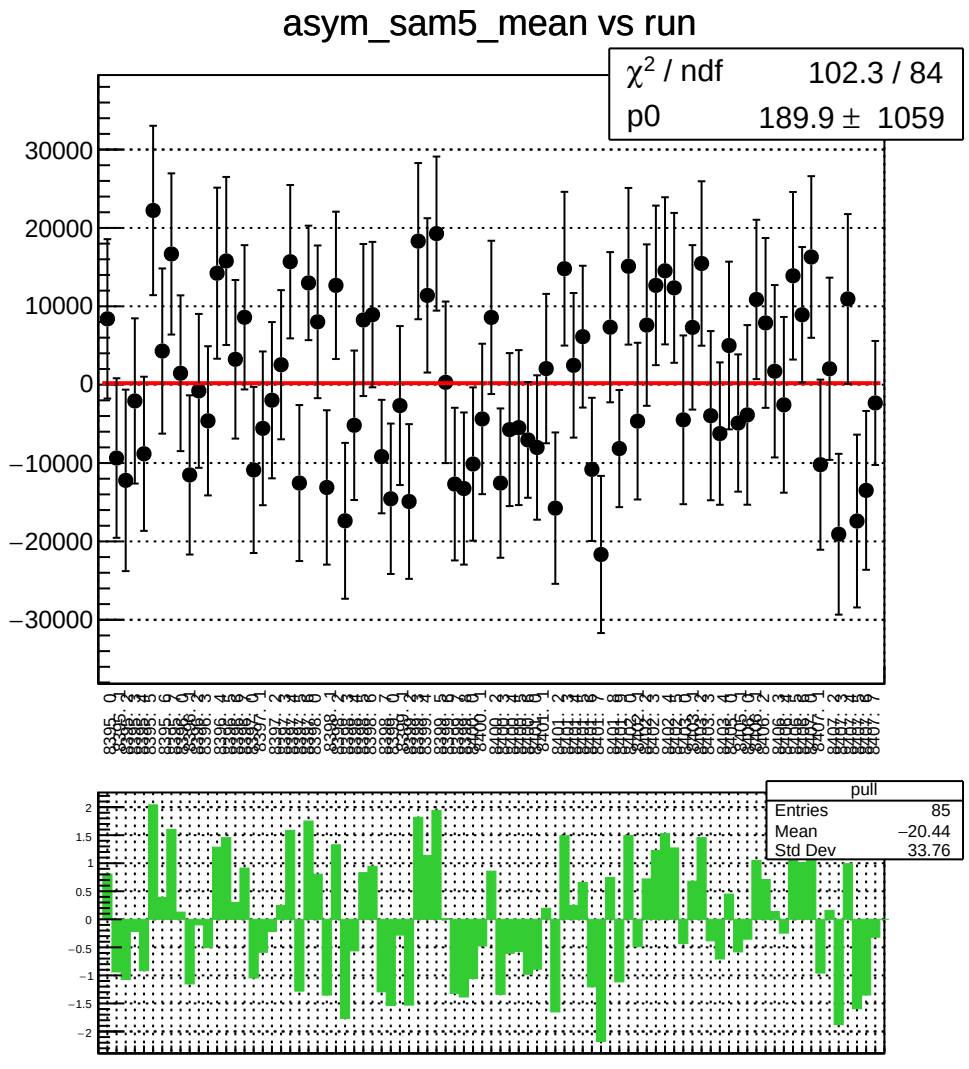

pull1D
Entries 85
Mean −0.008065
Std Dev 0.985

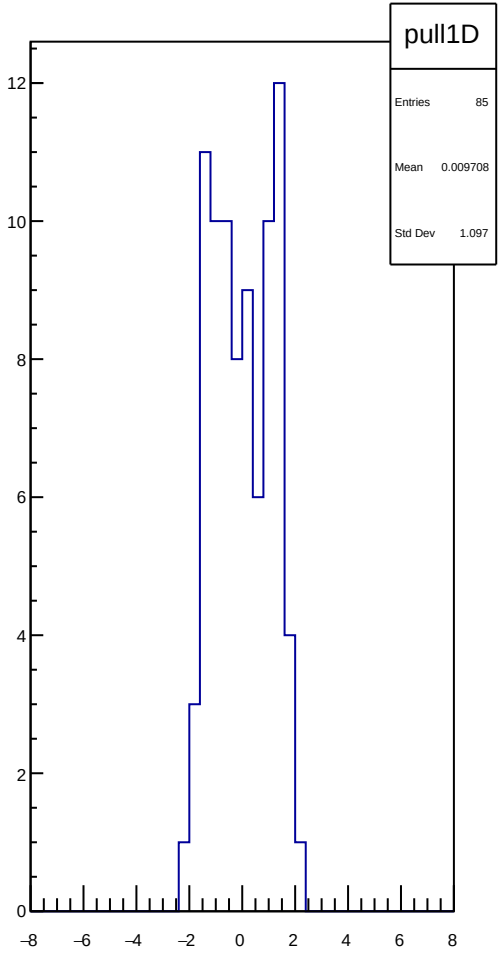

asym_sam3_rms vs run
χ² / ndf 7186 / 84
p0 2580 ± 2.018
3200
3100
3000
2900
2800
2700
2600
2500
2400
2300

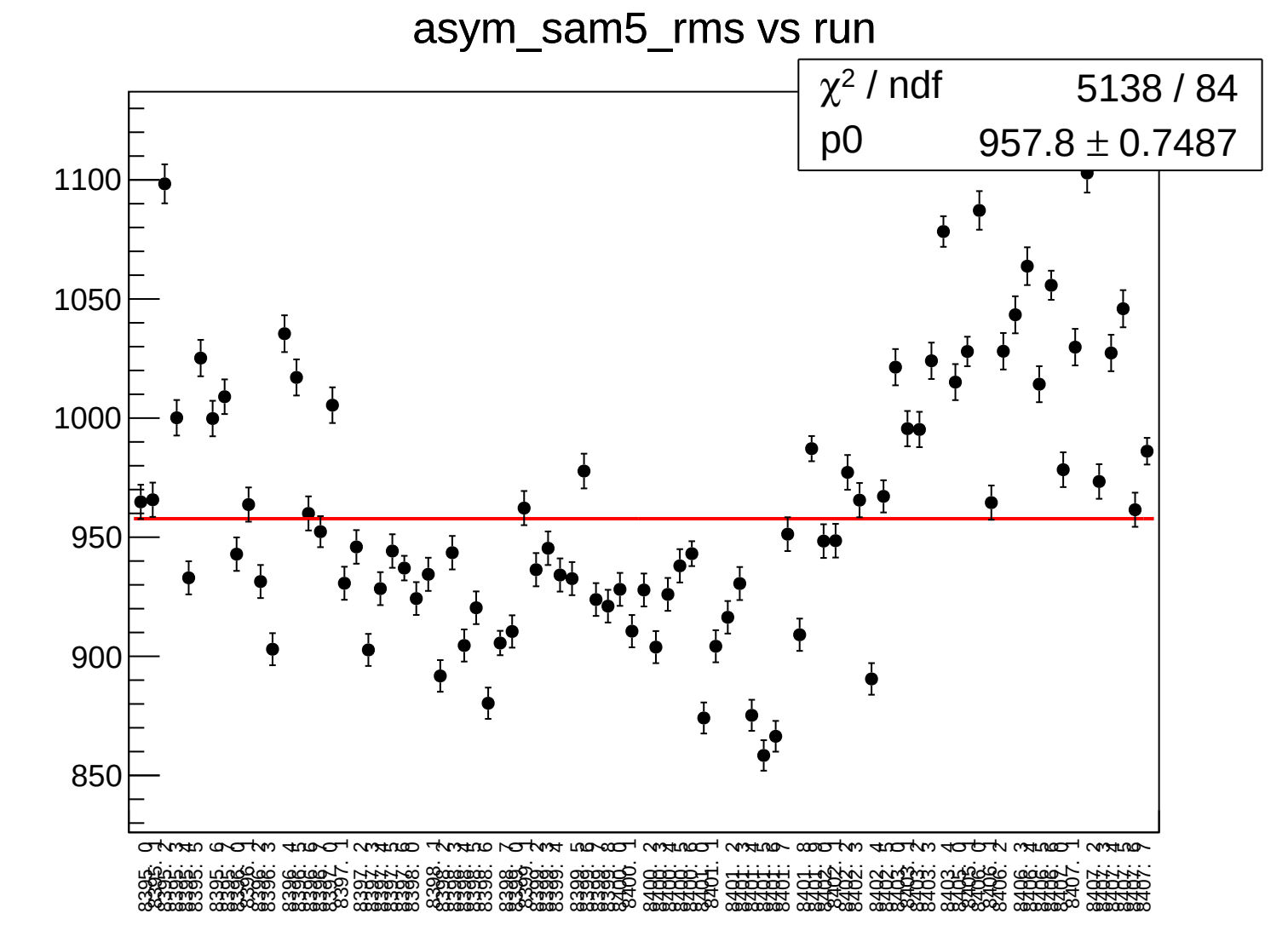

asym_sam4_mean vs run
χ^2 / ndf 83.31 / 84
p0 2085 ± 4605
×10^3
pull
Entries 85
Mean −200.9
Std Dev 238.3

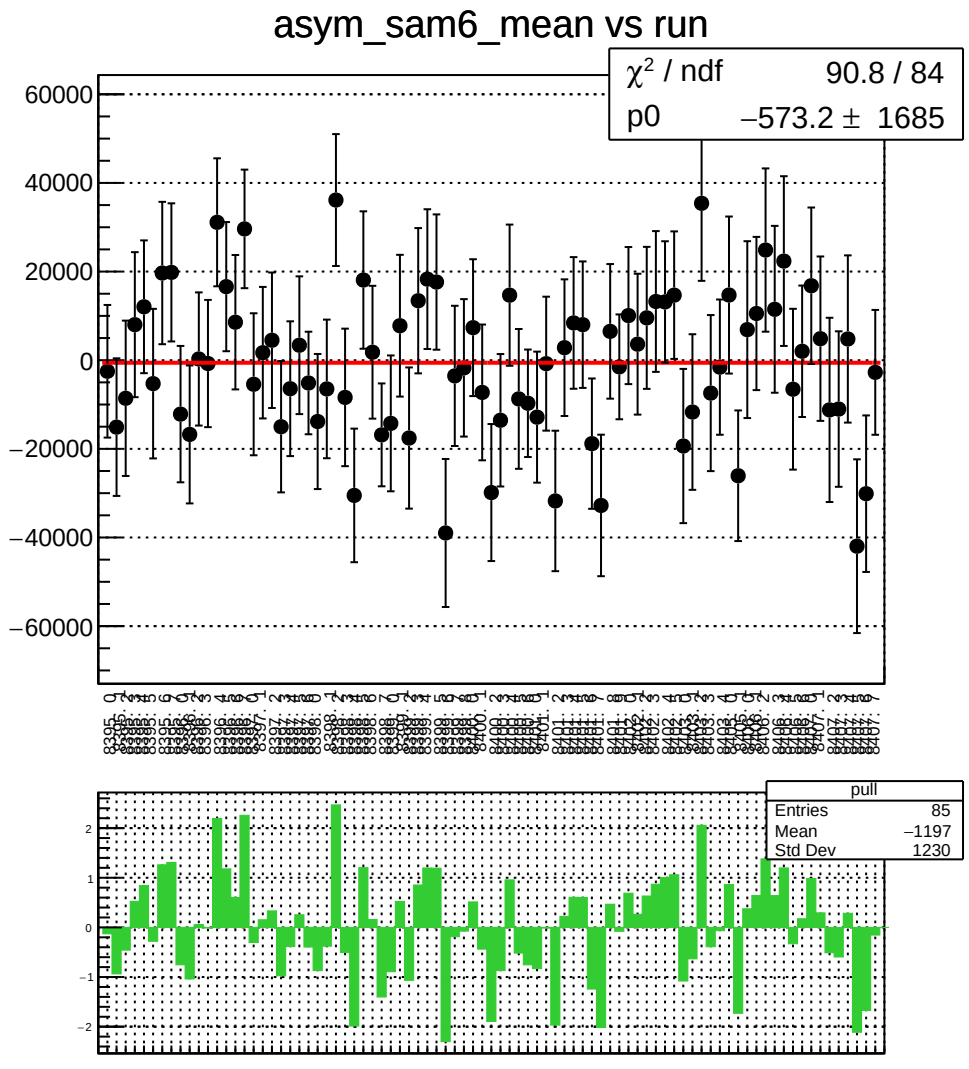

pull1D
Entries 85
Mean −0.006531
Std Dev 0.99

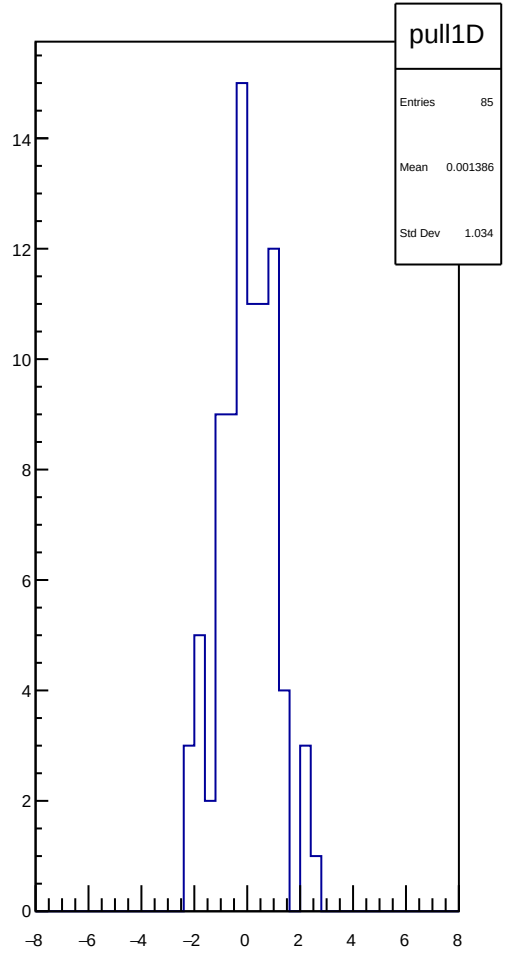

asym_sam4_rms vs run
χ² / ndf 3619 / 84
p0 4167 ± 3.256
4800
4600
4400
4200
4000
3800

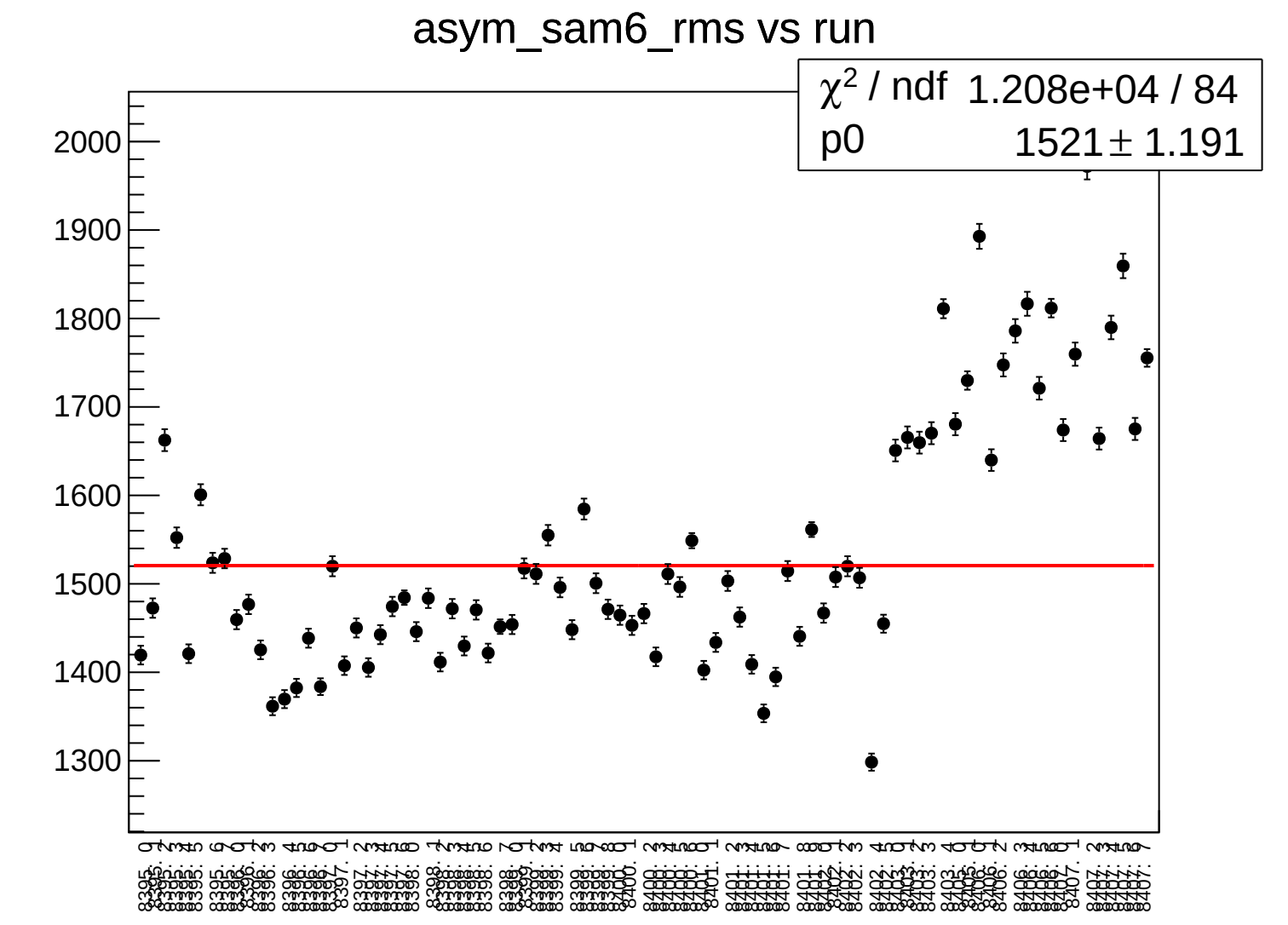

asym_sam5_mean vs run
χ² / ndf 102.3 / 84
p0 189.9 ± 1059
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −20.44
Std Dev 33.76
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

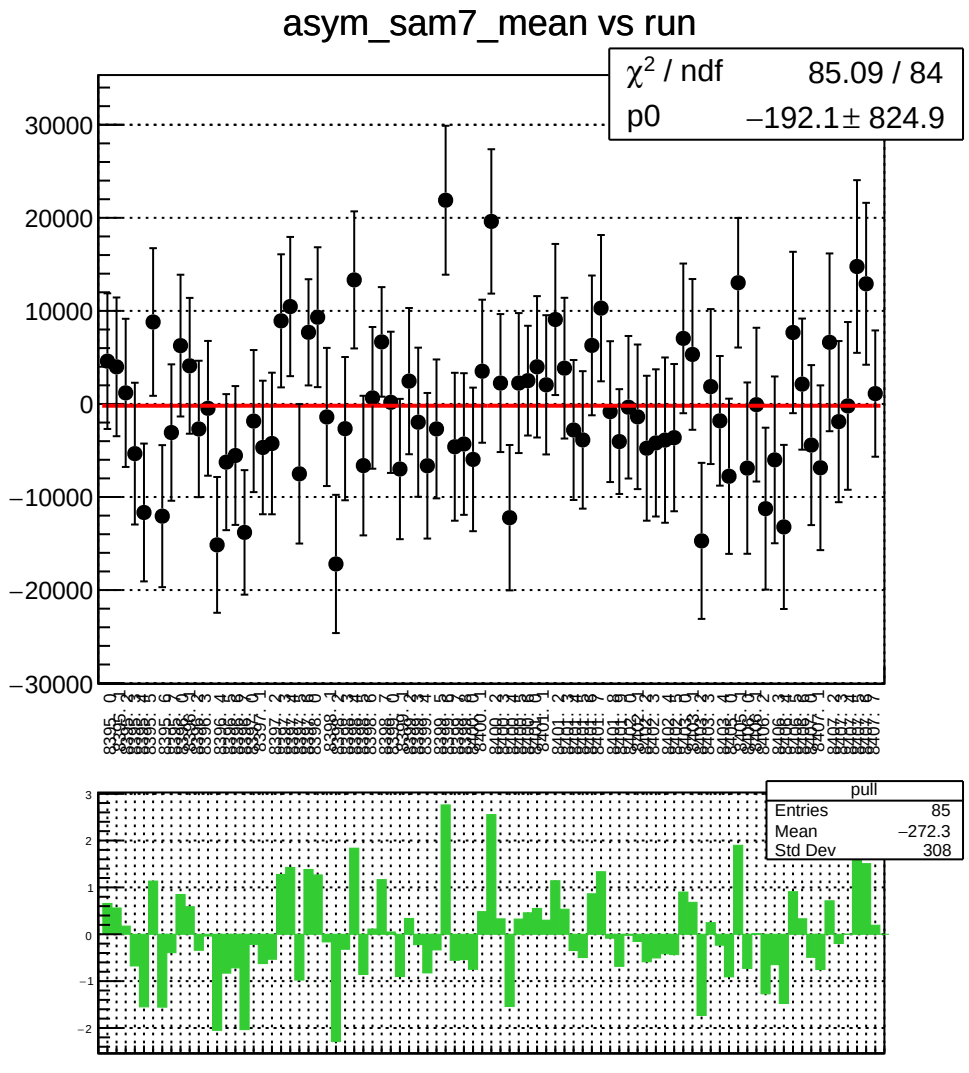

pull1D
Entries 85
Mean 0.009708
Std Dev 1.097
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

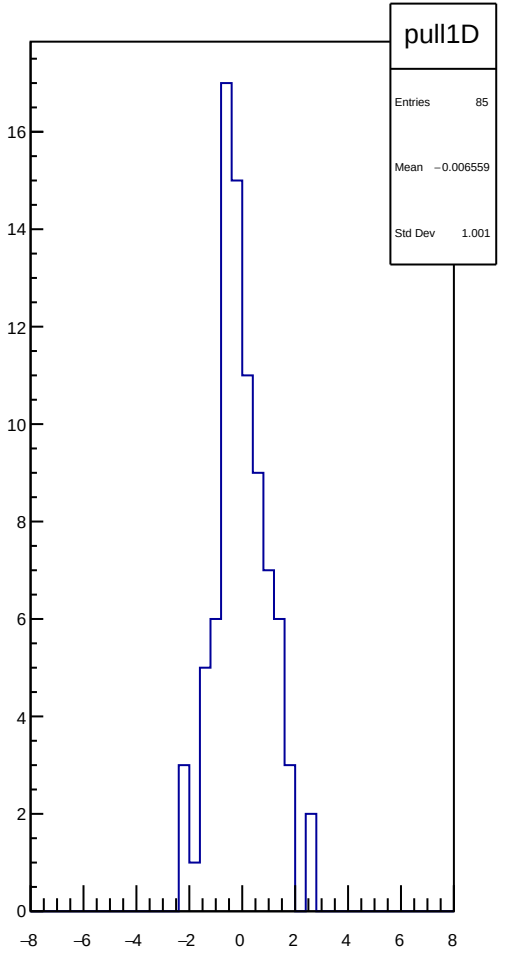

asym_sam5_rms vs run
χ² / ndf 5138 / 84
p0 957.8 ± 0.7487
1100
1050
1000
950
900
850

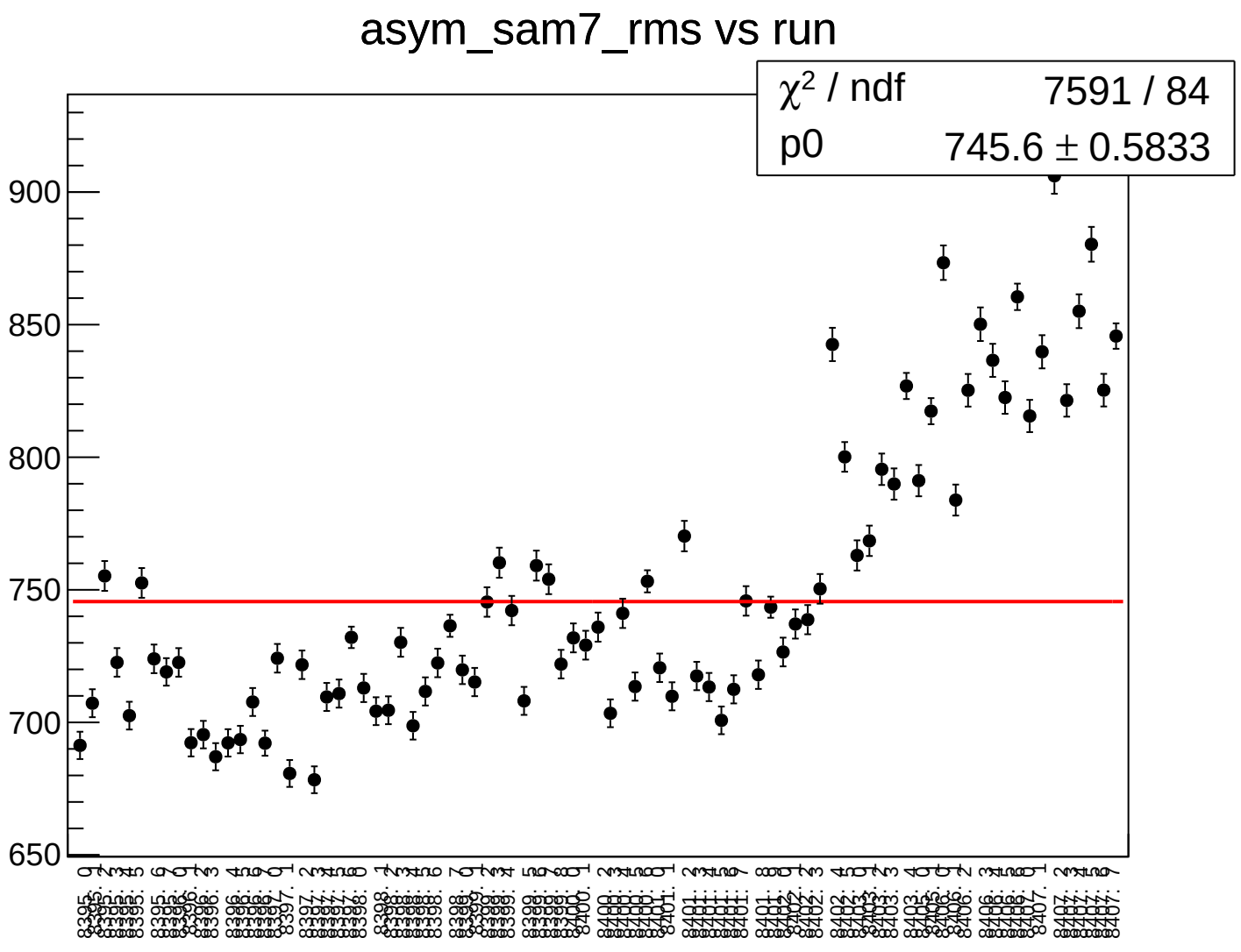

asym_sam6_mean vs run
χ² / ndf 90.8 / 84
p0 −573.2 ± 1685
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −1197
Std Dev 1230
2
1
0
−1
−2

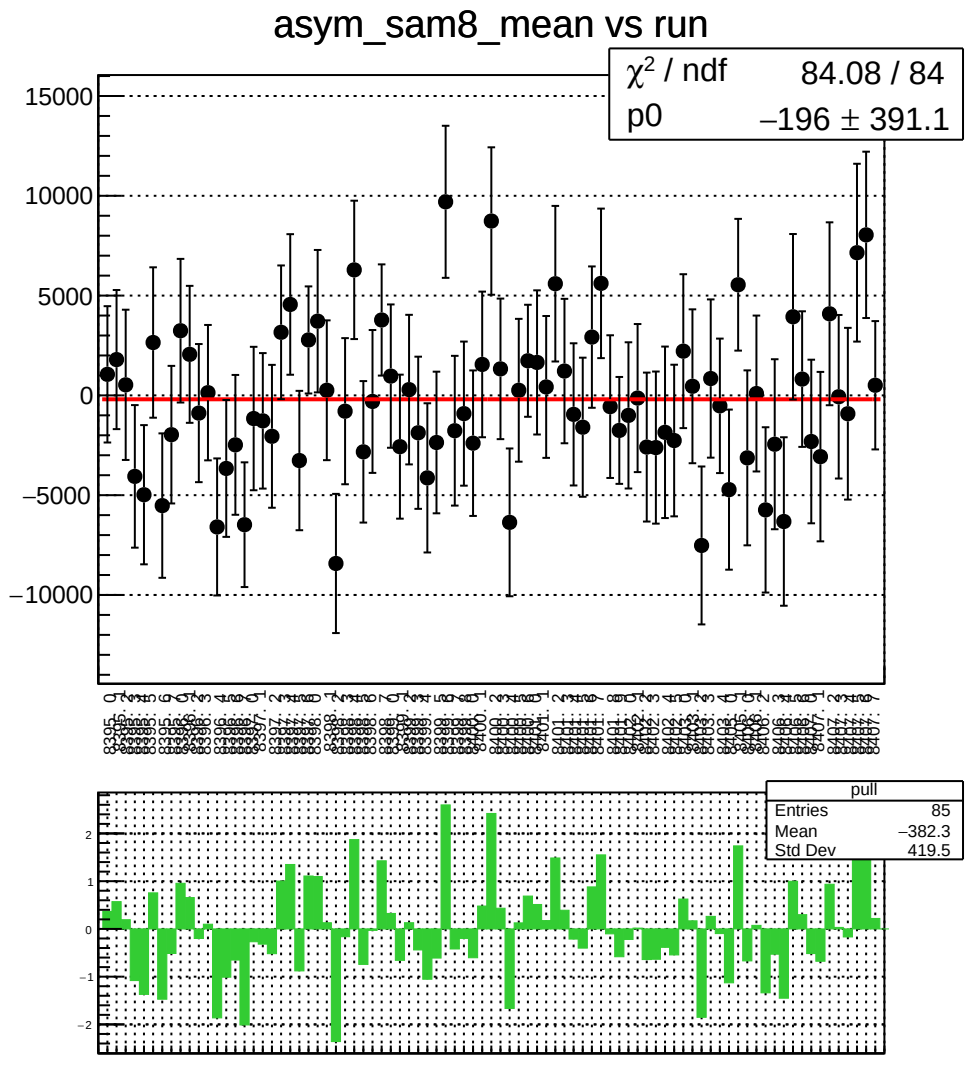

pull1D
Entries 85
Mean 0.001386
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

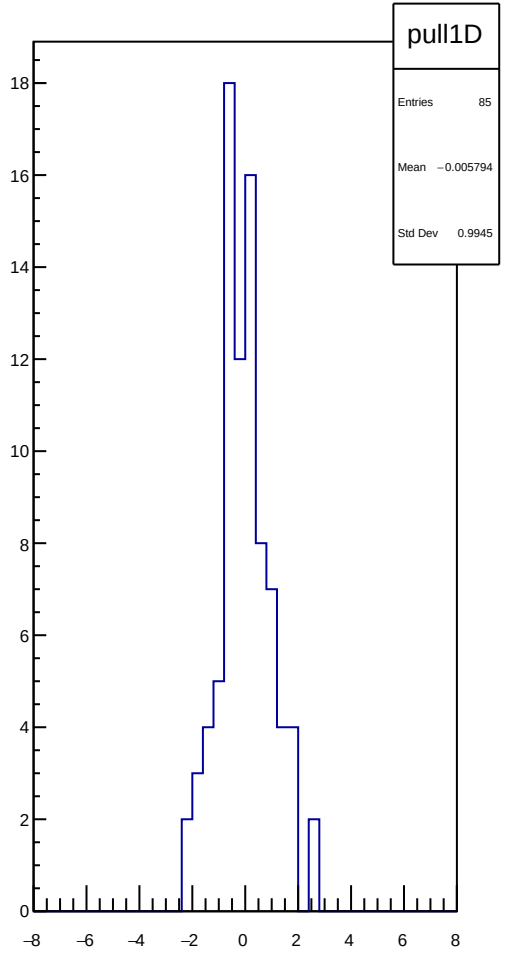

asym_sam6_rms vs run
χ² / ndf 1.208e+04 / 84
p0 1521 ± 1.191
2000
1900
1800
1700
1600
1500
1400
1300

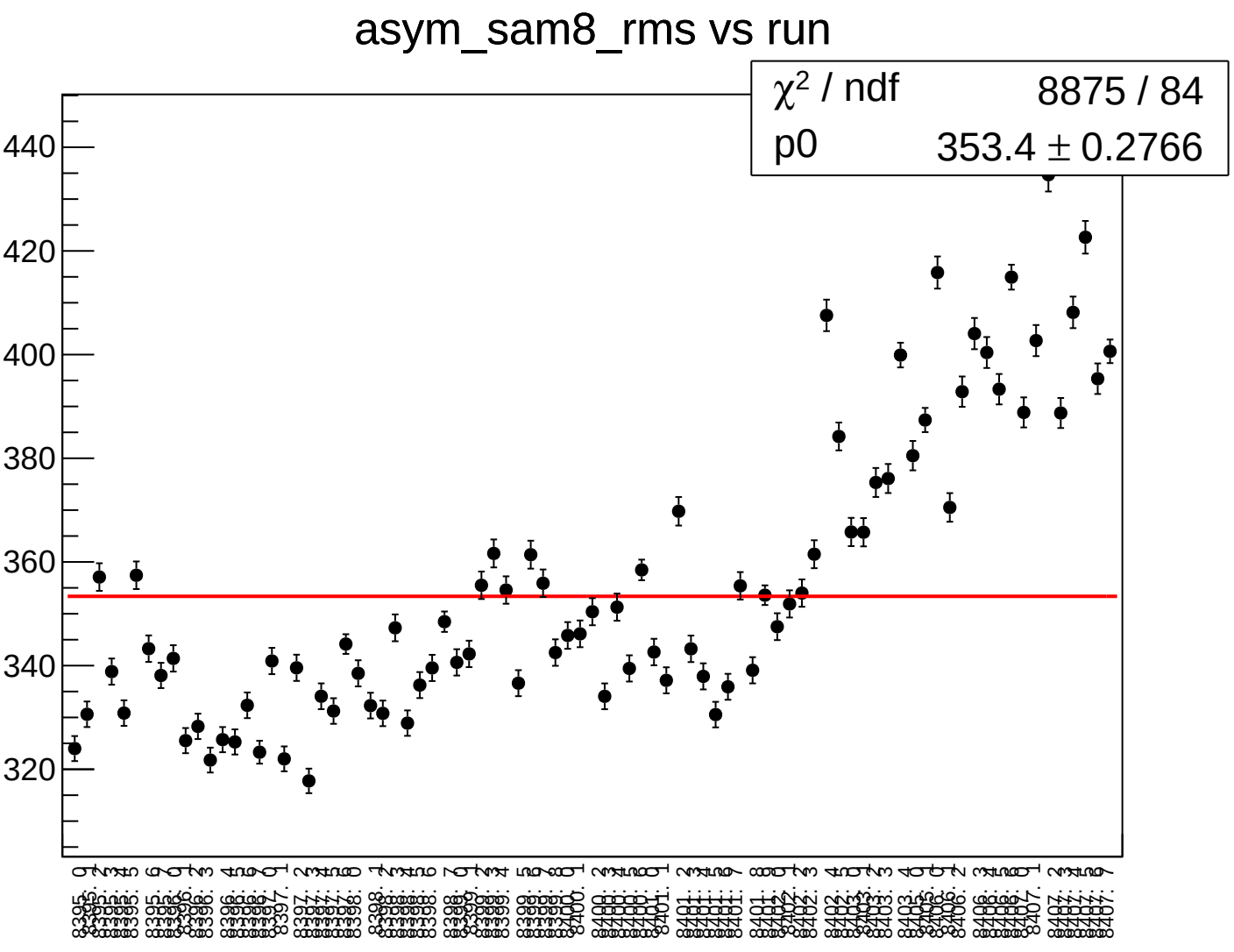

asym_sam7_mean vs run
χ² / ndf 85.09 / 84
p0 −192.1± 824.9
pull
Entries 85
Mean −272.3
Std Dev 308

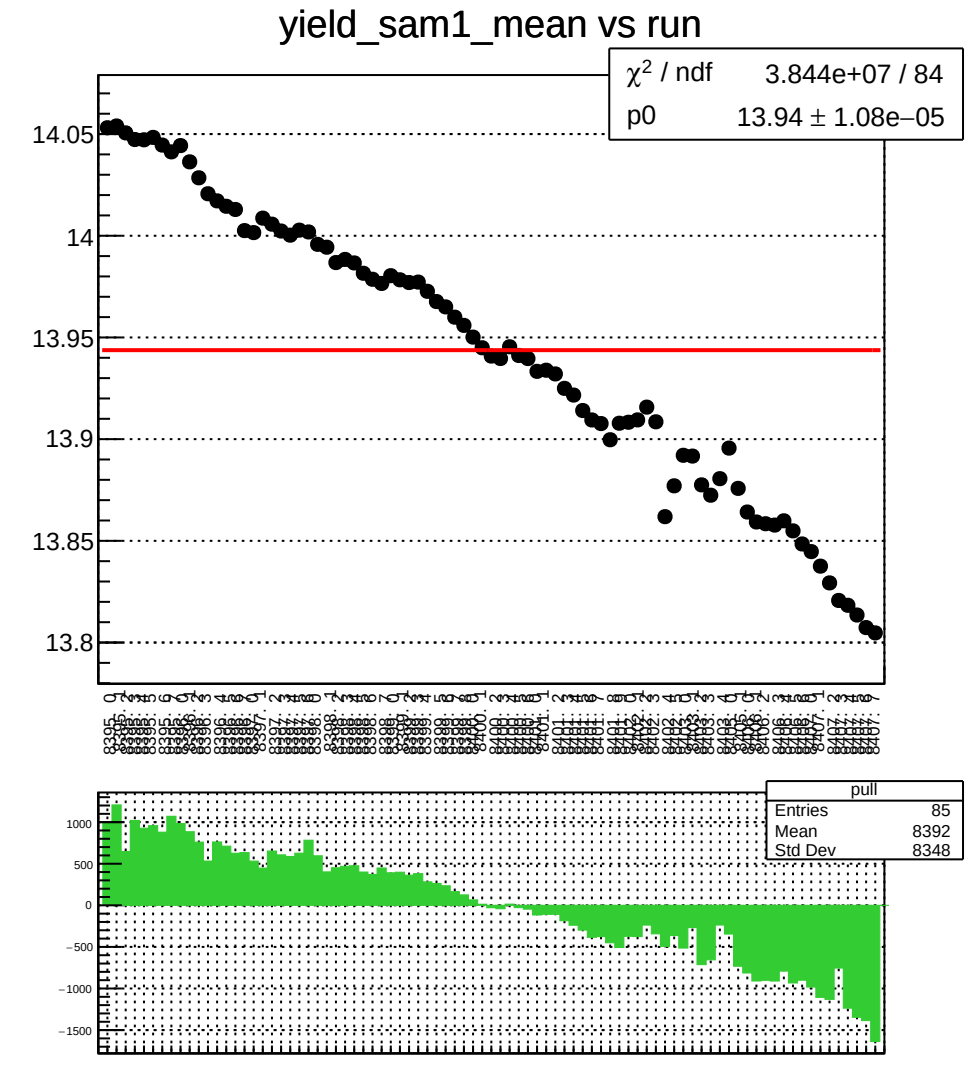

pull1D
Entries 85
Mean −0.006559
Std Dev 1.001

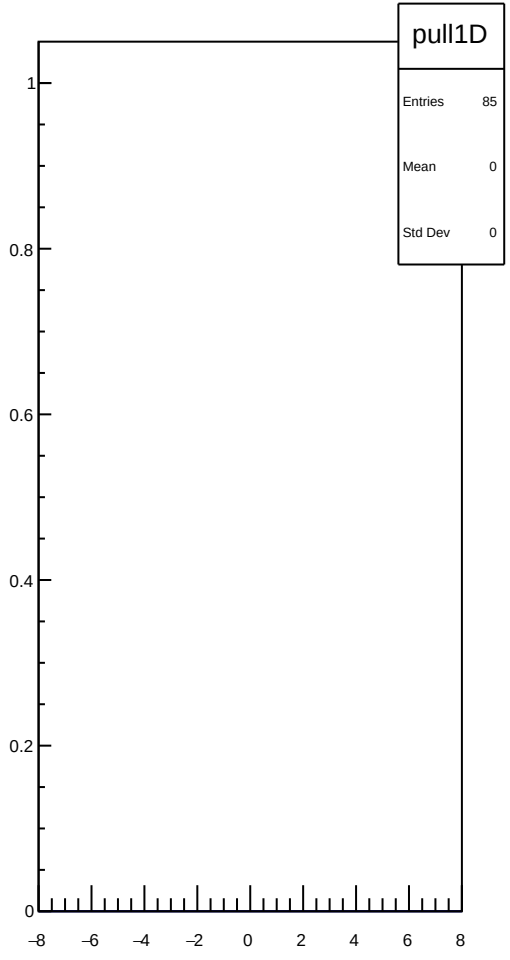

asym_sam7_rms vs run
χ² / ndf 7591 / 84
p0 745.6 ± 0.5833
900
850
800
750
700
650

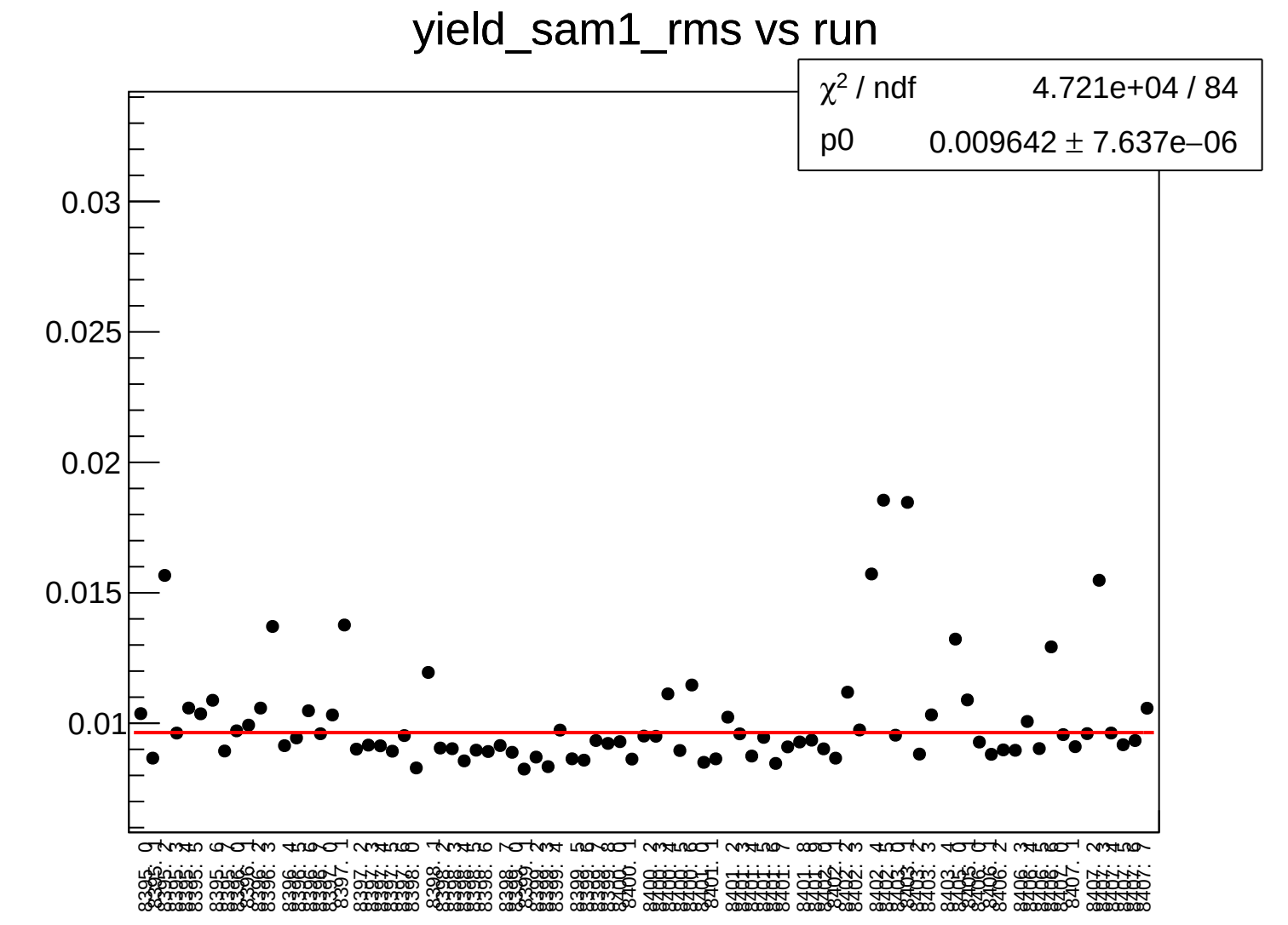

asym_sam8_mean vs run
χ² / ndf 84.08 / 84
p0 −196 ± 391.1
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −382.3
Std Dev 419.5
2
1
0
−1
−2

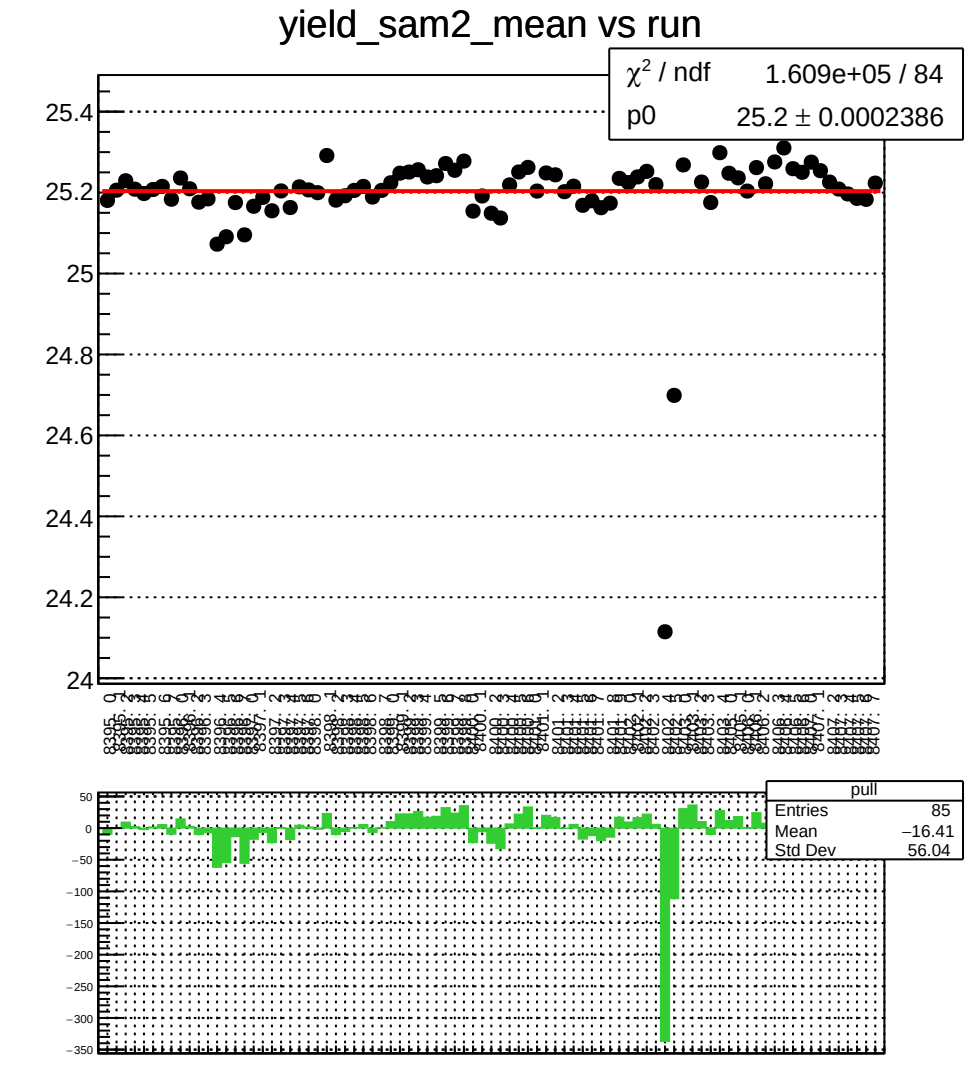

pull1D
Entries 85
Mean −0.005794
Std Dev 0.9945
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

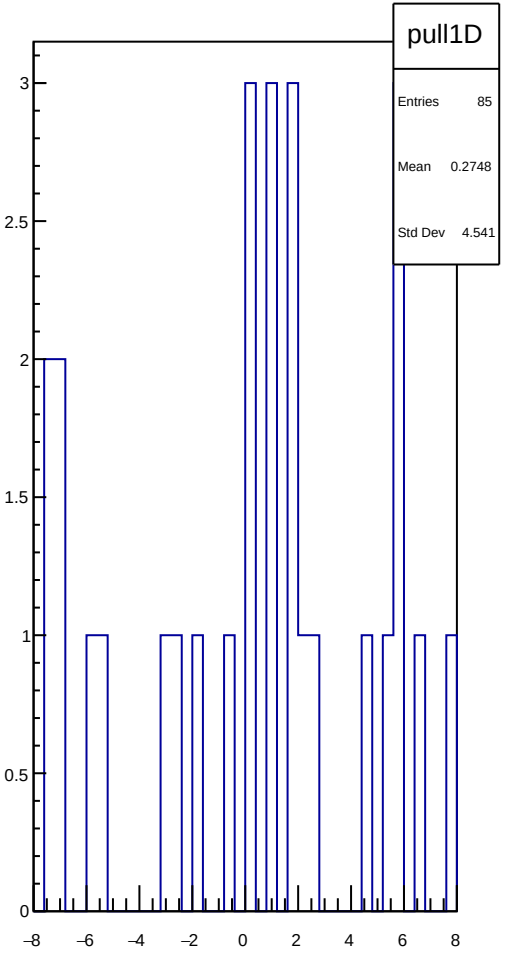

asym_sam8_rms vs run
χ² / ndf 8875 / 84
p0 353.4 ± 0.2766
440
420
400
380
360
340
320

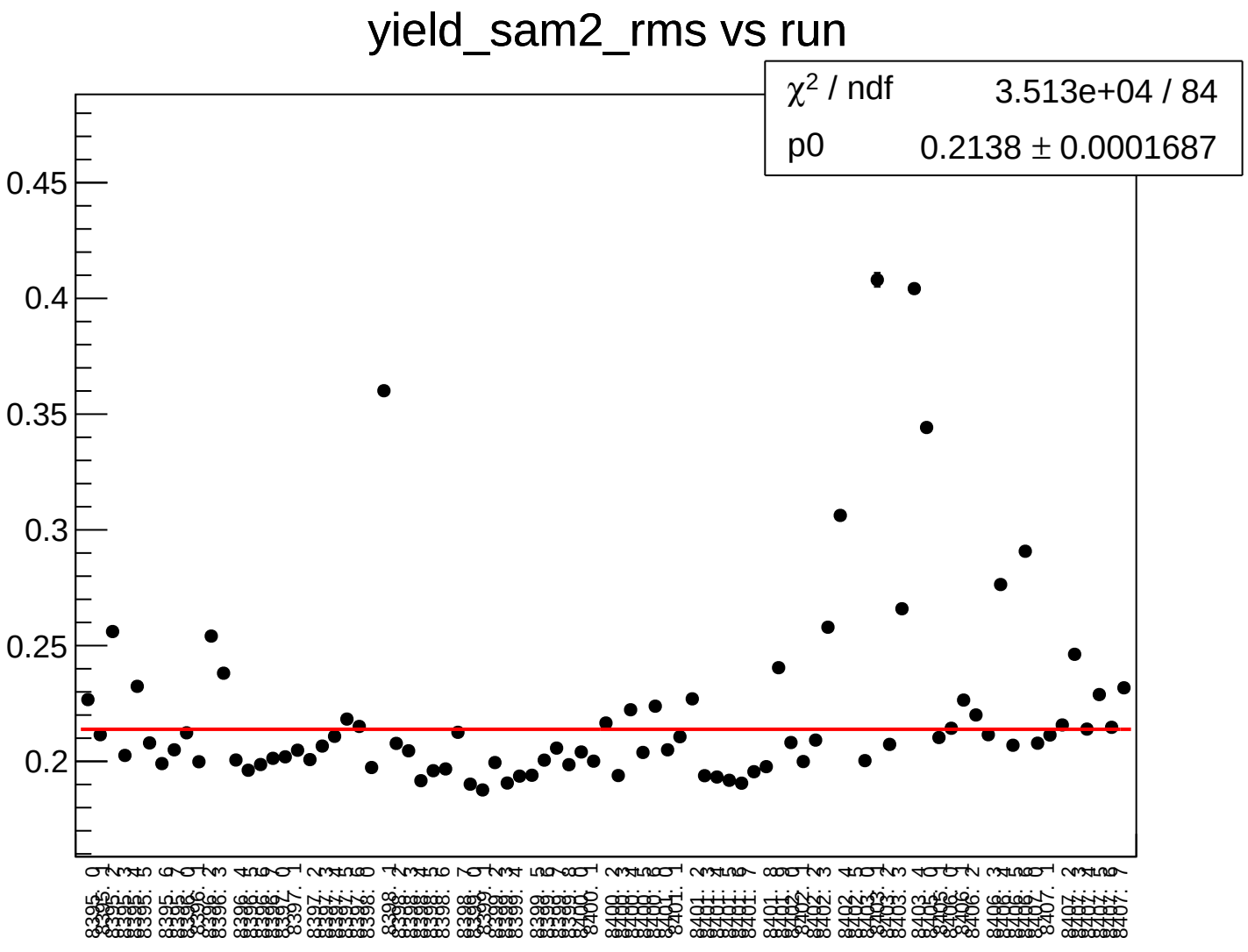

yield_sam1_mean vs run
χ² / ndf 3.844e+07 / 84
p0 13.94 ± 1.08e−05
14.05
14
13.95
13.9
13.85
13.8
pull
Entries 85
Mean 8392
Std Dev 8348
1000
500
0
−500
−1000
−1500

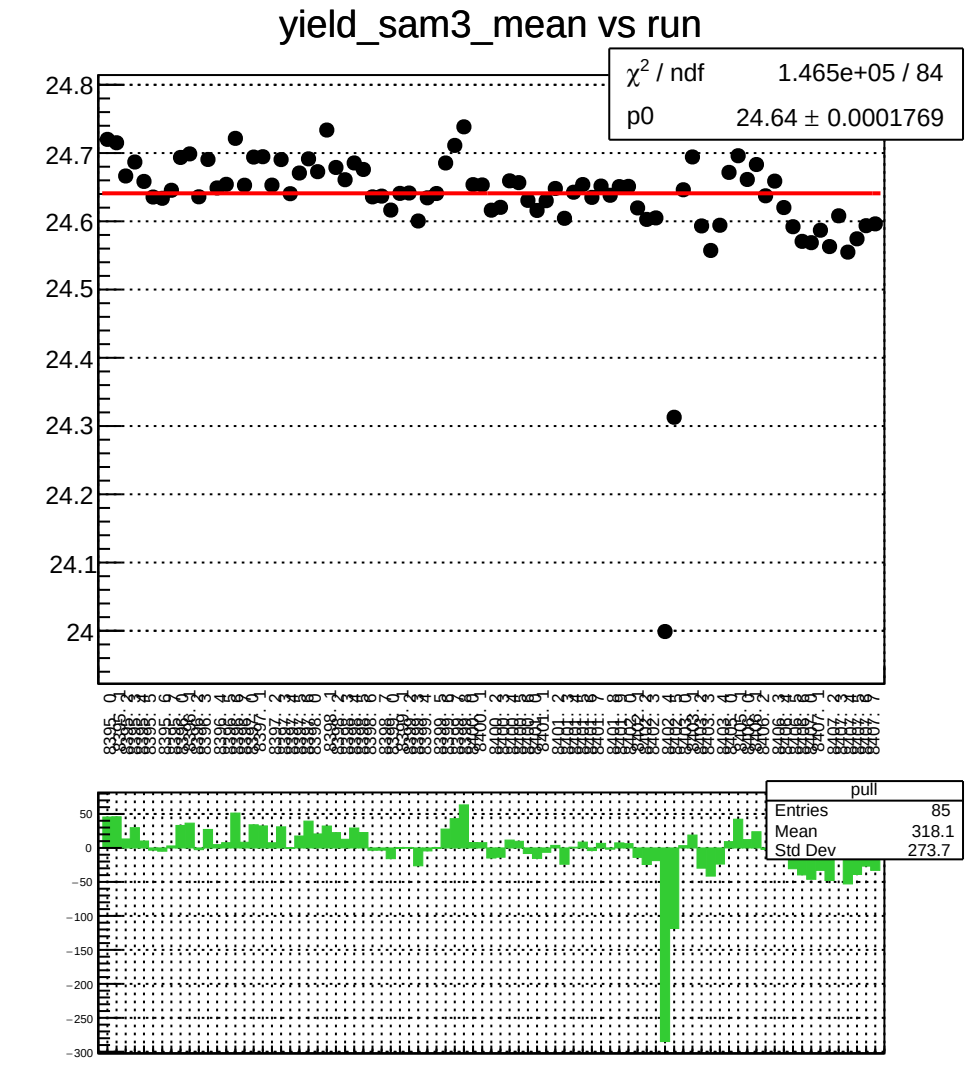

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

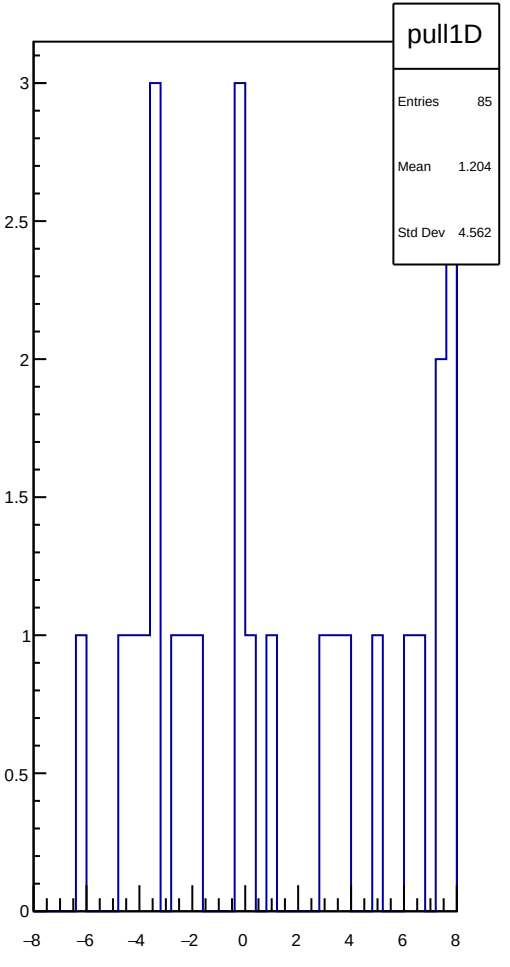

yield_sam1_rms vs run
χ² / ndf 4.721e+04 / 84
p0 0.009642 ± 7.637e−06
0.03
0.025
0.02
0.015
0.01

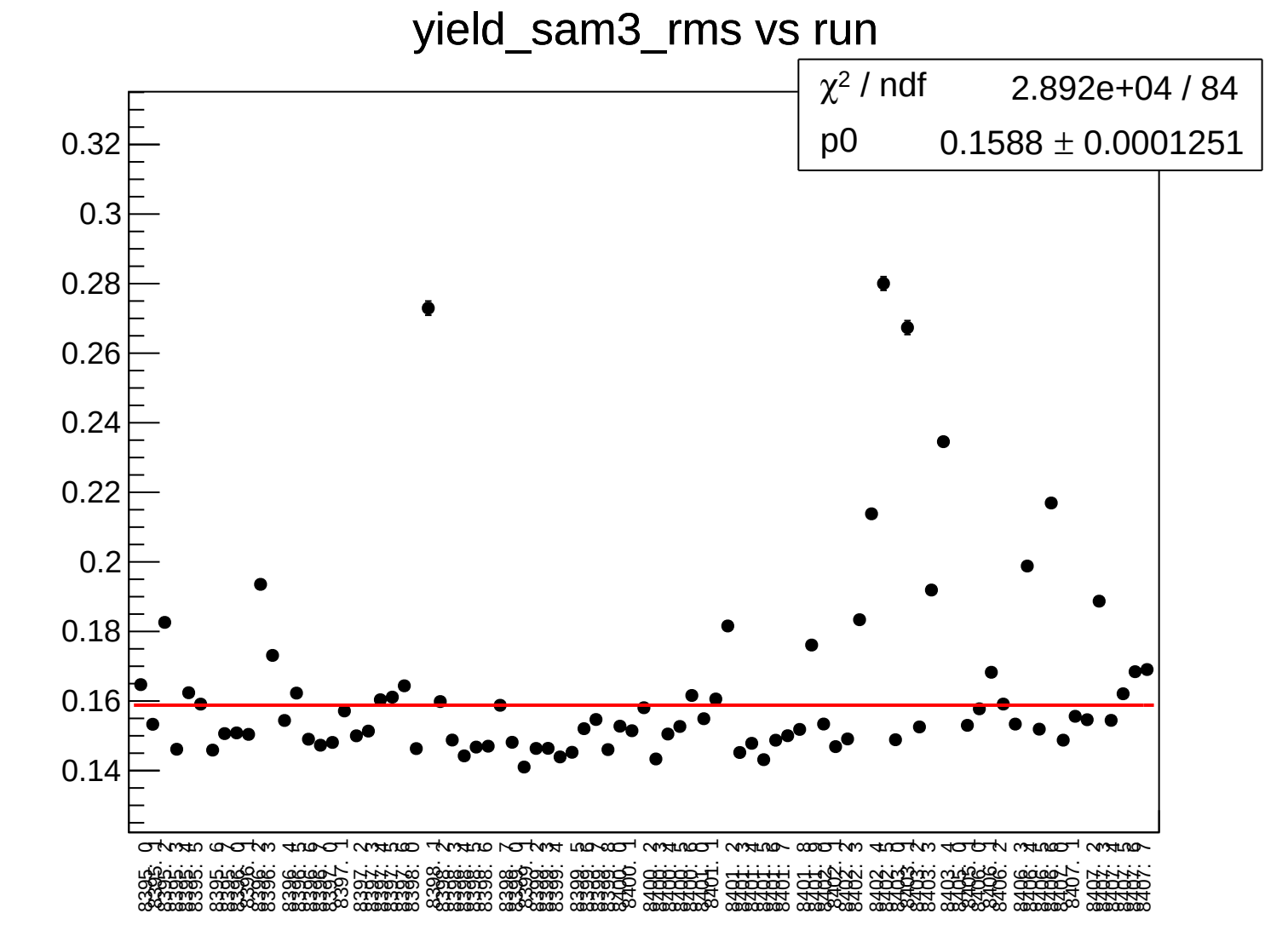

yield_sam2_mean vs run
χ² / ndf 1.609e+05 / 84
p0 25.2 ± 0.0002386
25.4
25.2
25
24.8
24.6
24.4
24.2
24
pull
Entries 85
Mean −16.41
Std Dev 56.04
50
0
−50
−100
−150
−200
−250
−300
−350

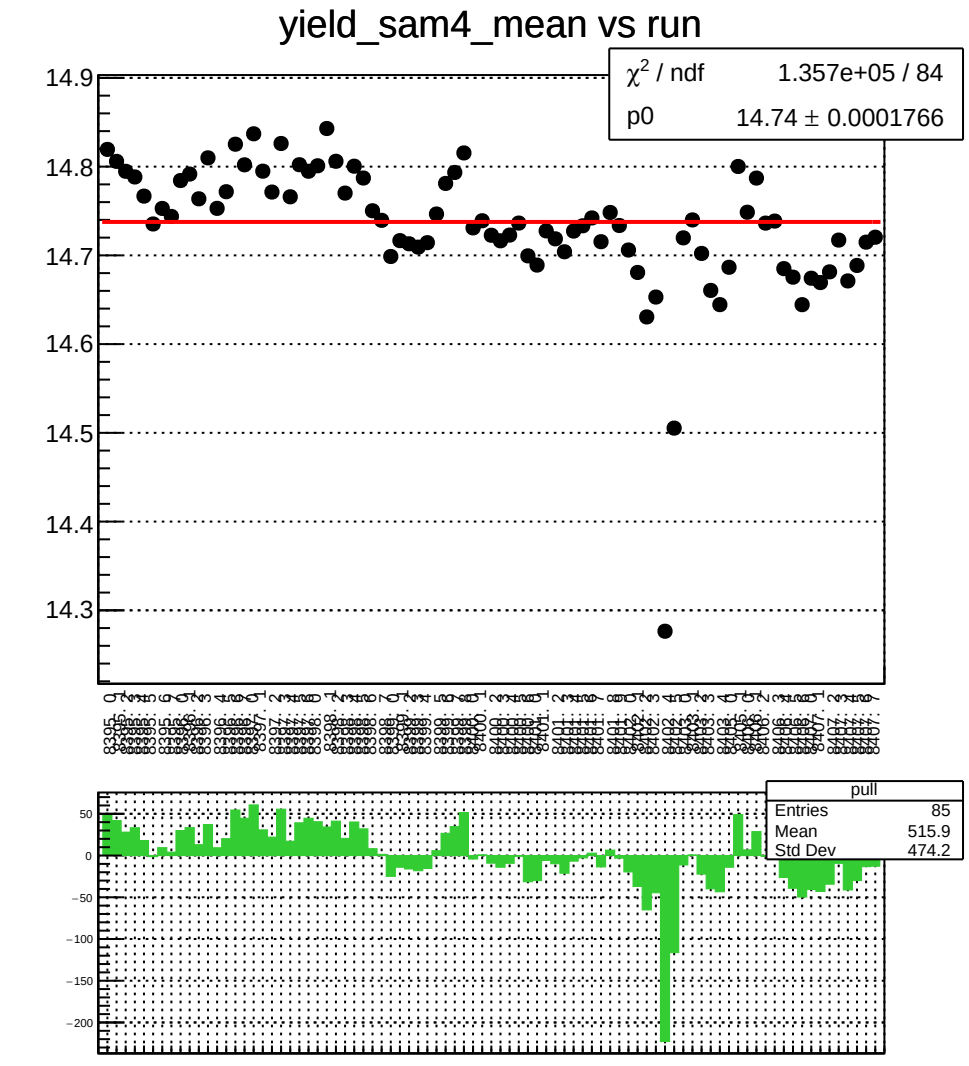

pull1D
Entries 85
Mean 0.2748
Std Dev 4.541
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

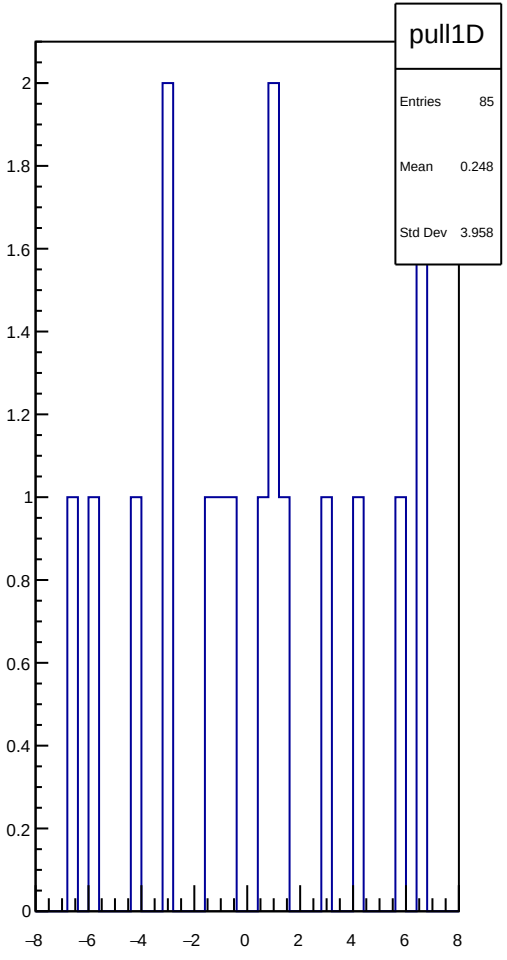

yield_sam2_rms vs run
χ² / ndf 3.513e+04 / 84
p0 0.2138 ± 0.0001687
0.45
0.4
0.35
0.3
0.25
0.2

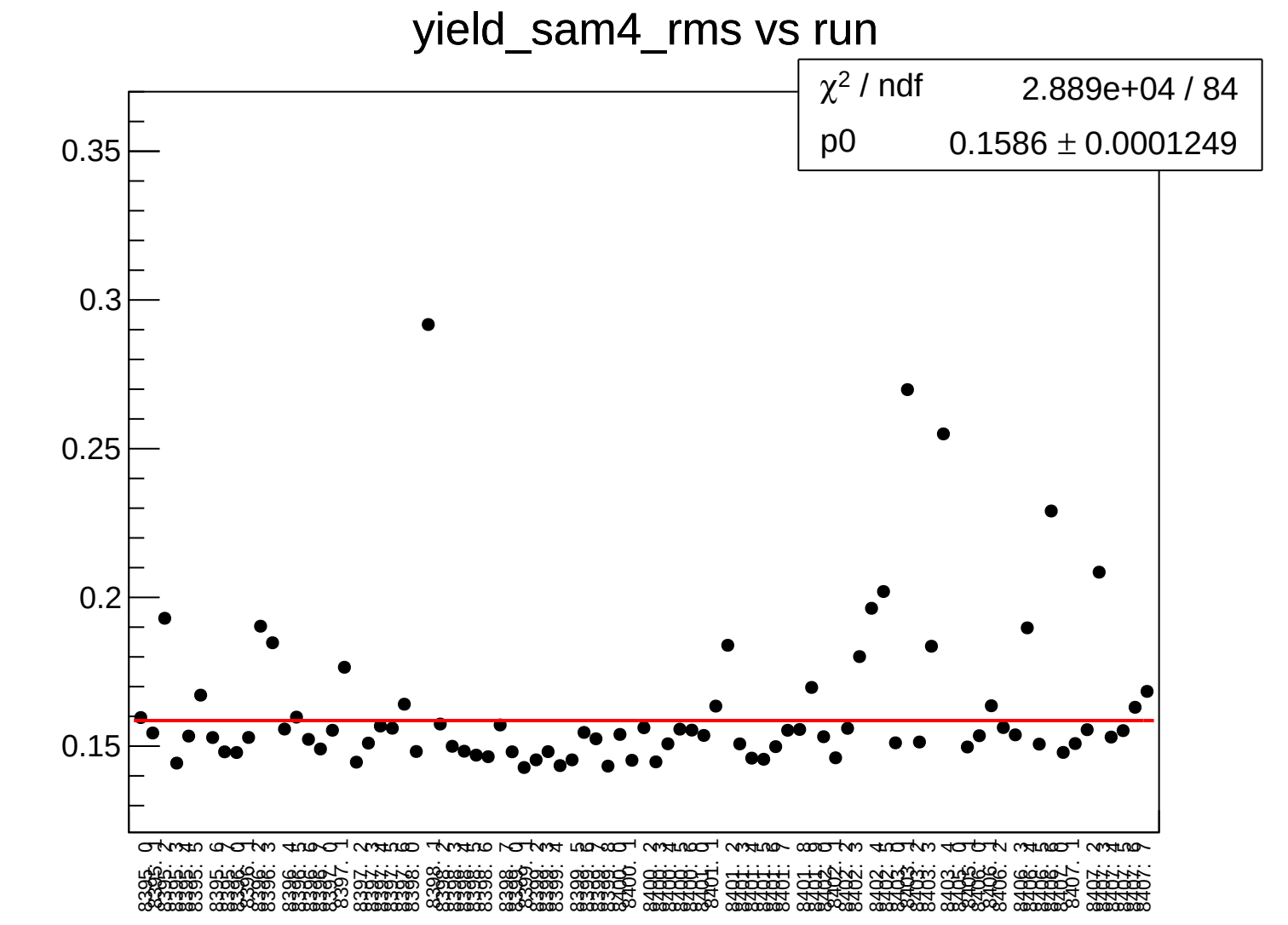

yield_sam3_mean vs run
χ² / ndf 1.465e+05 / 84
p0 24.64 ± 0.0001769
24.8
24.7
24.6
24.5
24.4
24.3
24.2
24.1
24
pull
Entries 85
Mean 318.1
Std Dev 273.7
50
0
−50
−100
−150
−200
−250
−300

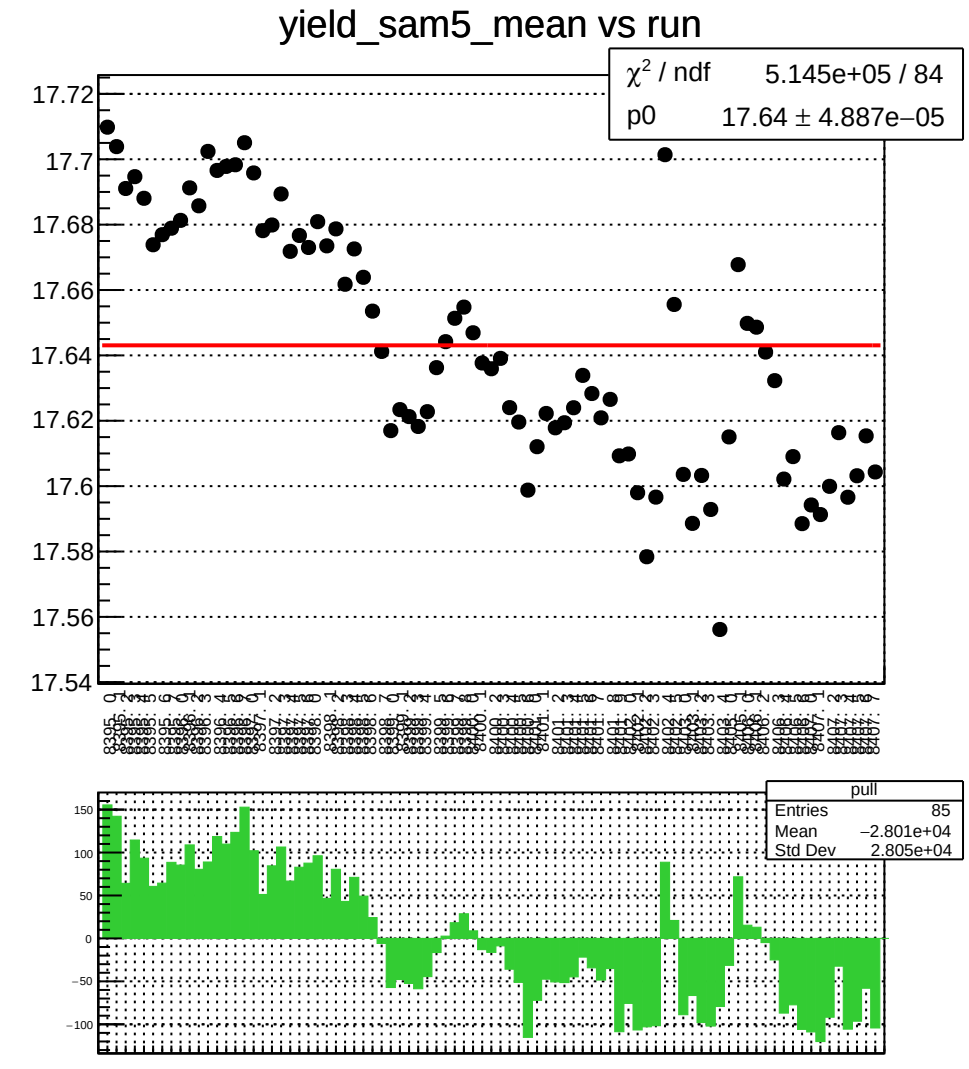

pull1D
Entries 85
Mean 1.204
Std Dev 4.562
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

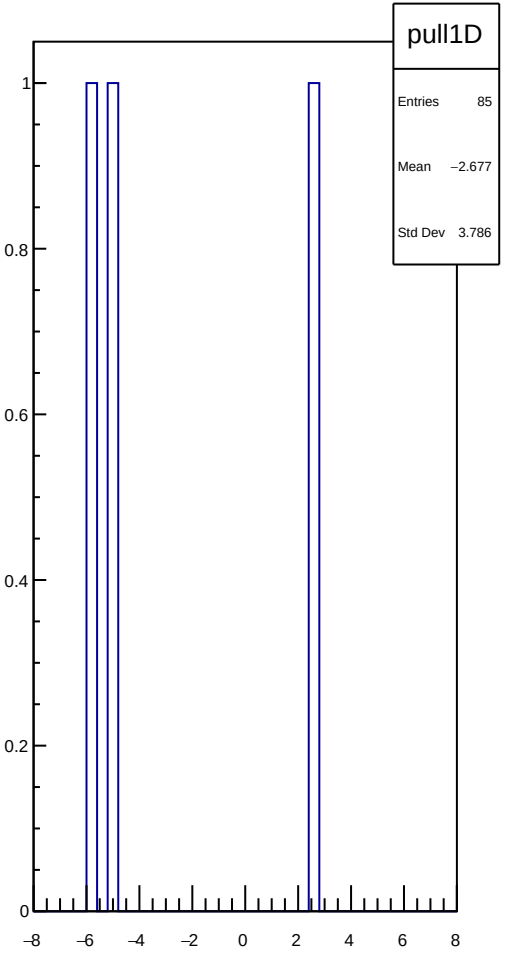

yield_sam3_rms vs run
χ² / ndf 2.892e+04 / 84
p0 0.1588 ± 0.0001251
0.32
0.3
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14

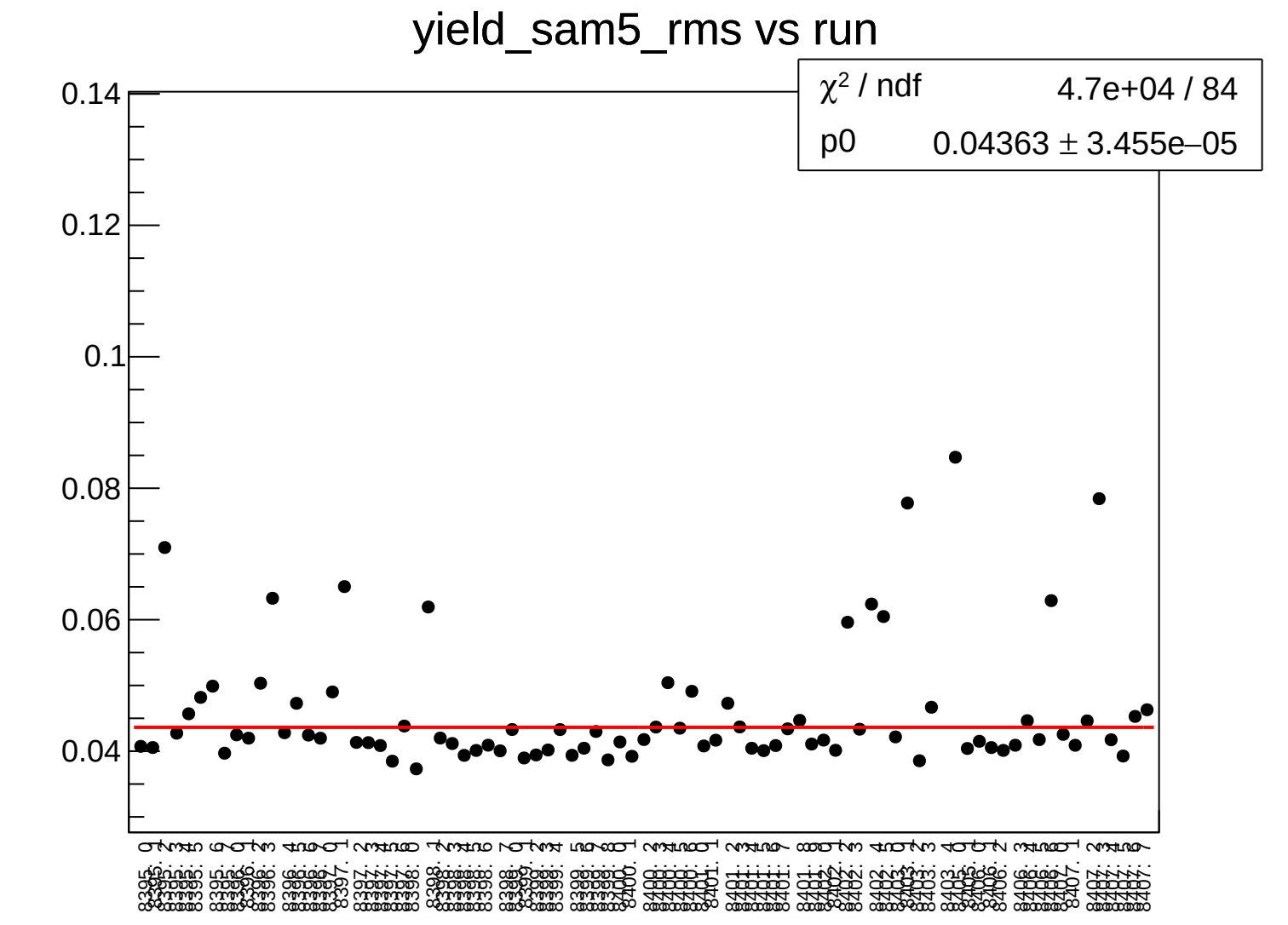

yield_sam4_mean vs run
χ² / ndf 1.357e+05 / 84
p0 14.74 ± 0.0001766
14.9
14.8
14.7
14.6
14.5
14.4
14.3
pull
Entries 85
Mean 515.9
Std Dev 474.2
50
0
−50
−100
−150
−200

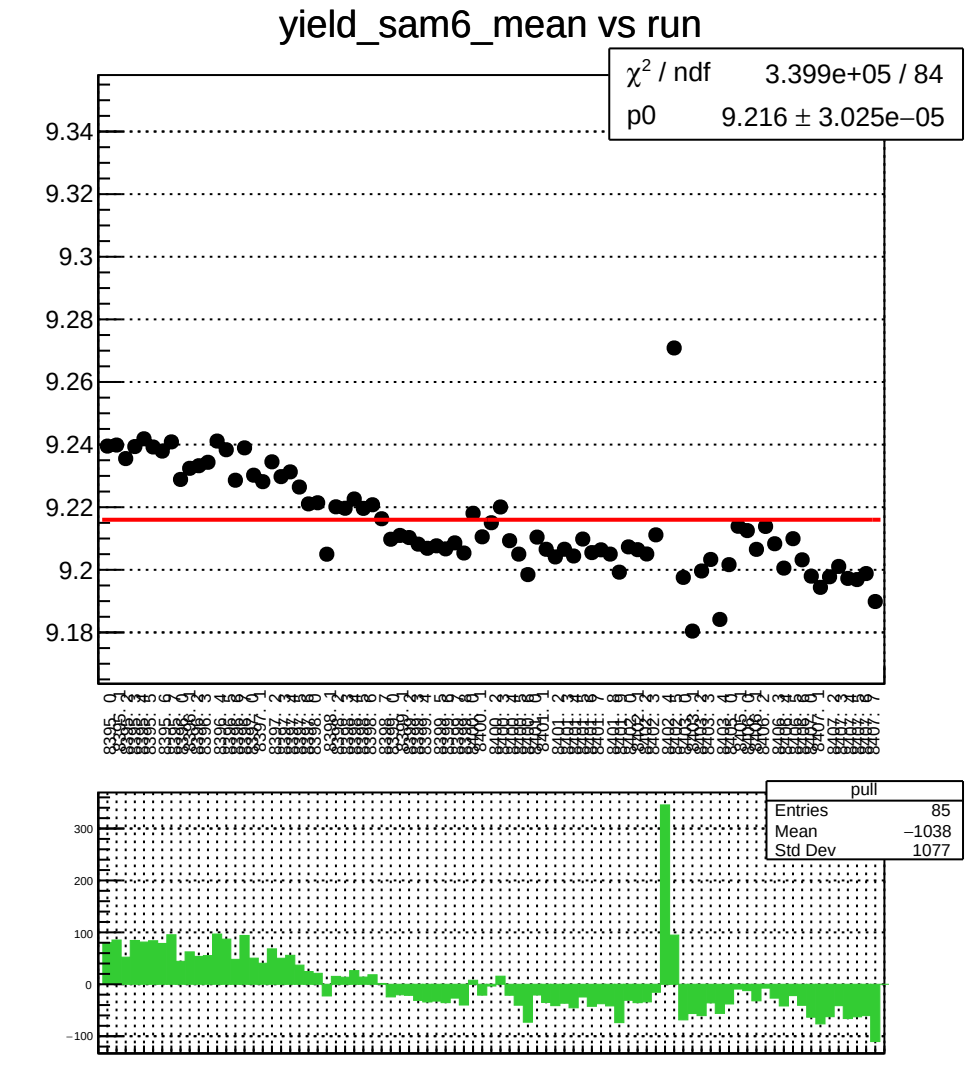

pull1D
Entries 85
Mean 0.248
Std Dev 3.958
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

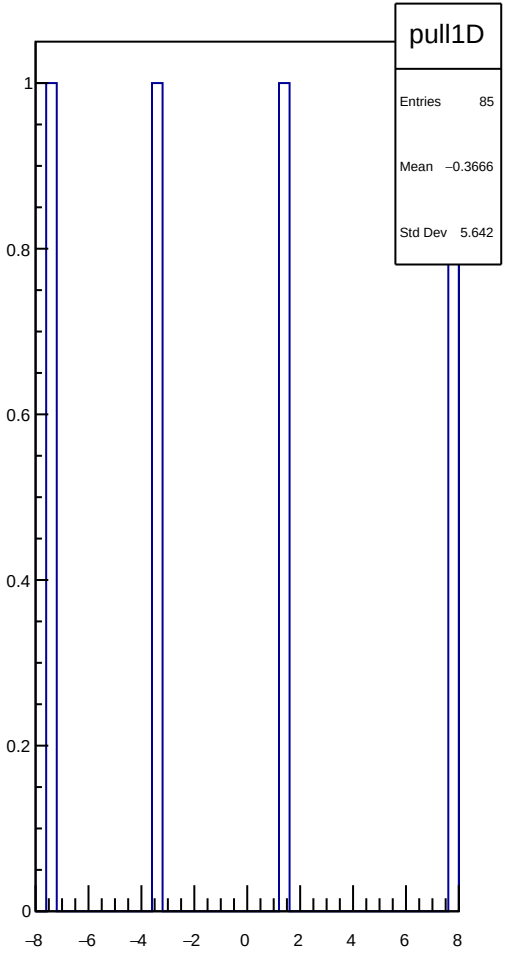

yield_sam4_rms vs run
χ² / ndf 2.889e+04 / 84
p0 0.1586 ± 0.0001249
0.35
0.3
0.25
0.2
0.15

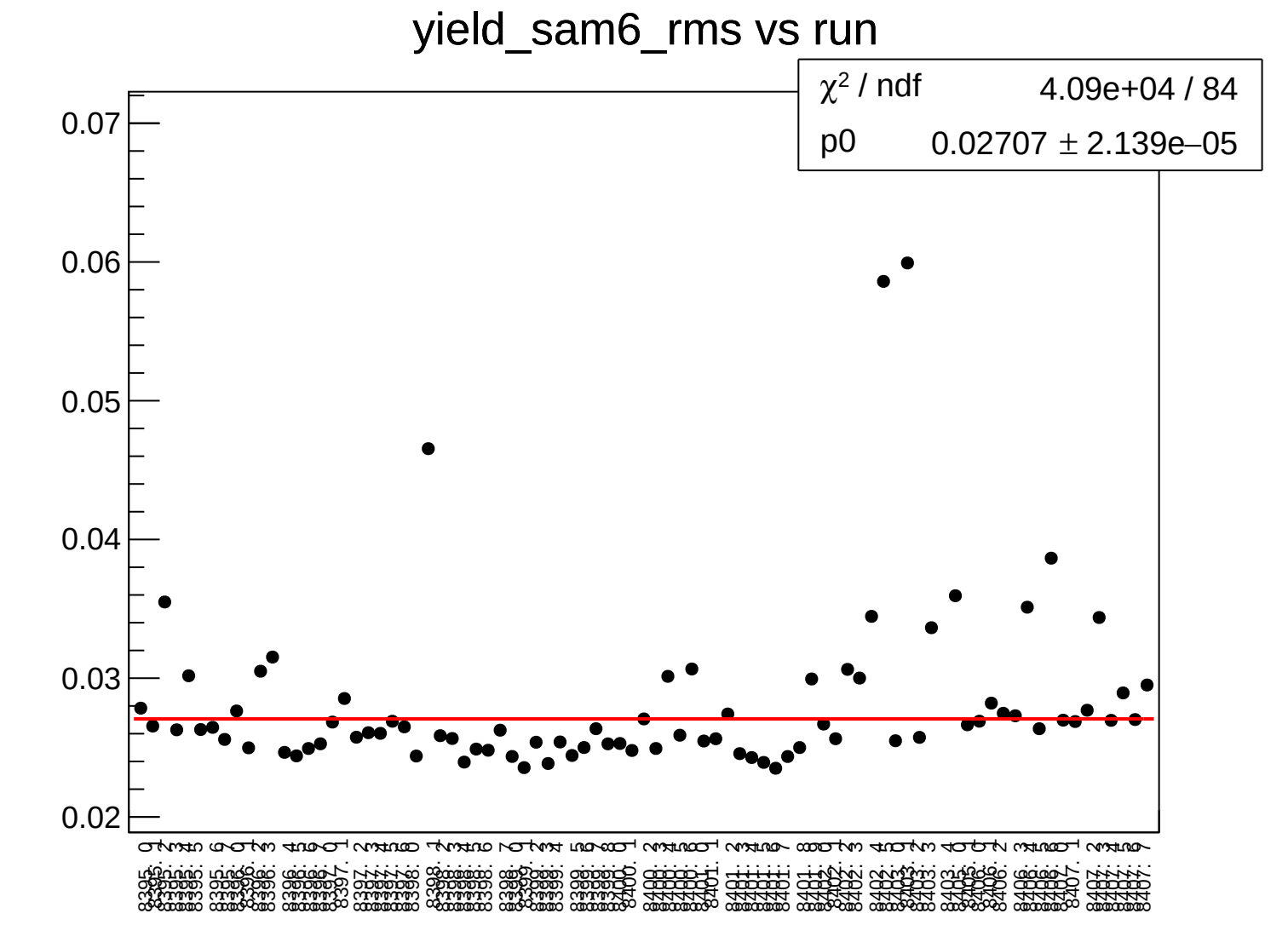

yield_sam5_mean vs run
χ² / ndf 5.145e+05 / 84
p0 17.64 ± 4.887e−05
17.72
17.7
17.68
17.66
17.64
17.62
17.6
17.58
17.56
17.54
pull
Entries 85
Mean −2.801e+04
Std Dev 2.805e+04
150
100
50
0
−50
−100

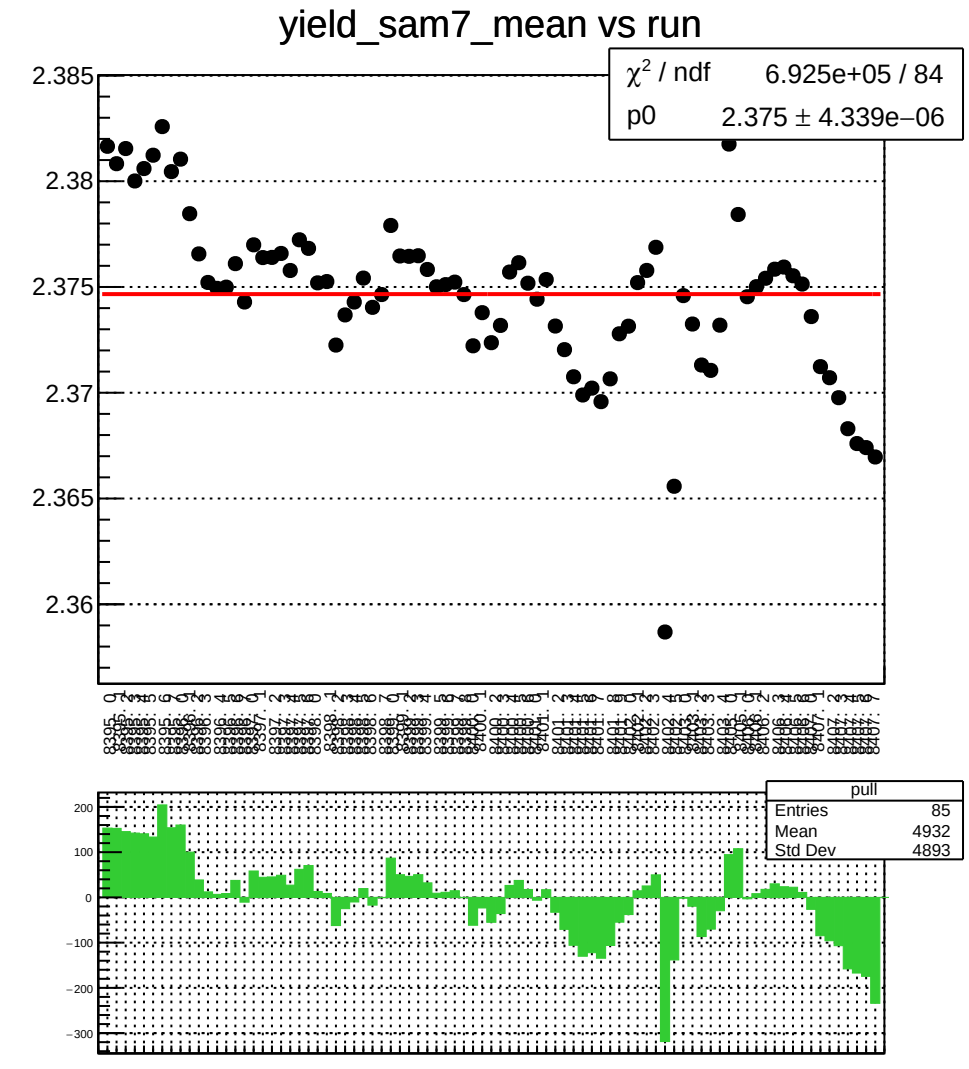

pull1D
Entries 85
Mean −2.677
Std Dev 3.786
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

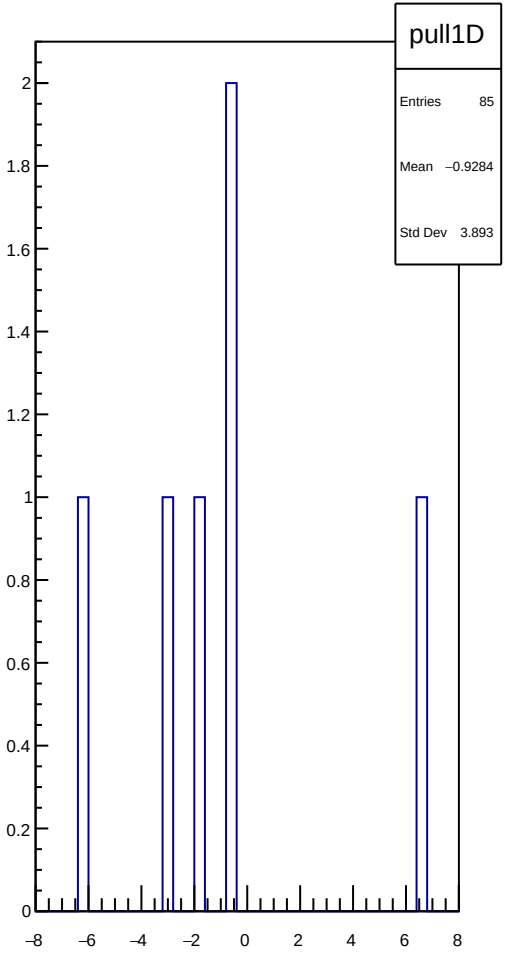

yield_sam5_rms vs run
χ² / ndf 4.7e+04 / 84
p0 0.04363 ± 3.455e−05
0.14
0.12
0.1
0.08
0.06
0.04

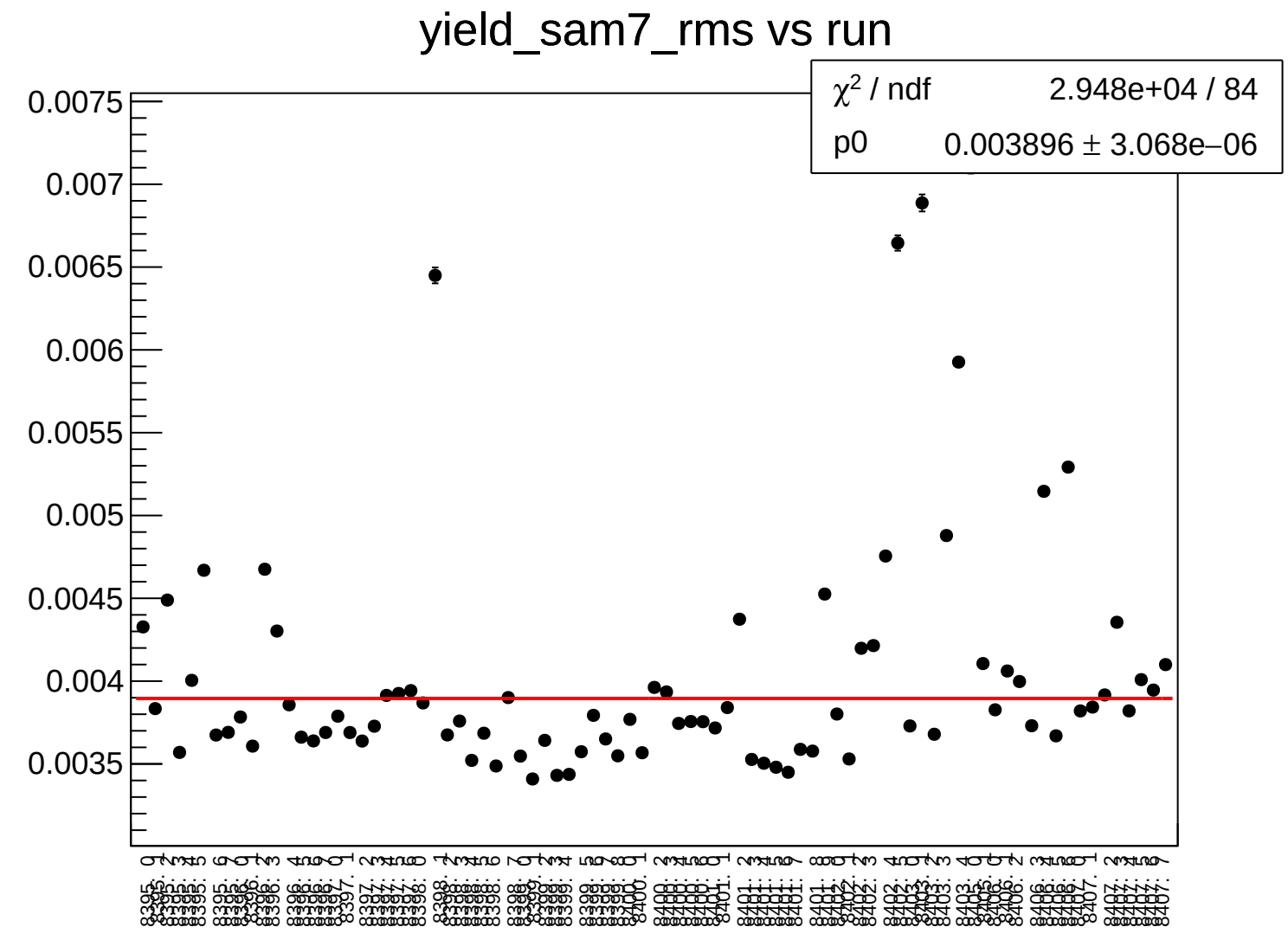

yield_sam6_mean vs run
χ² / ndf 3.399e+05 / 84
p0 9.216 ± 3.025e−05
9.34
9.32
9.3
9.28
9.26
9.24
9.22
9.2
9.18
pull
Entries 85
Mean −1038
Std Dev 1077
300
200
100
0
−100

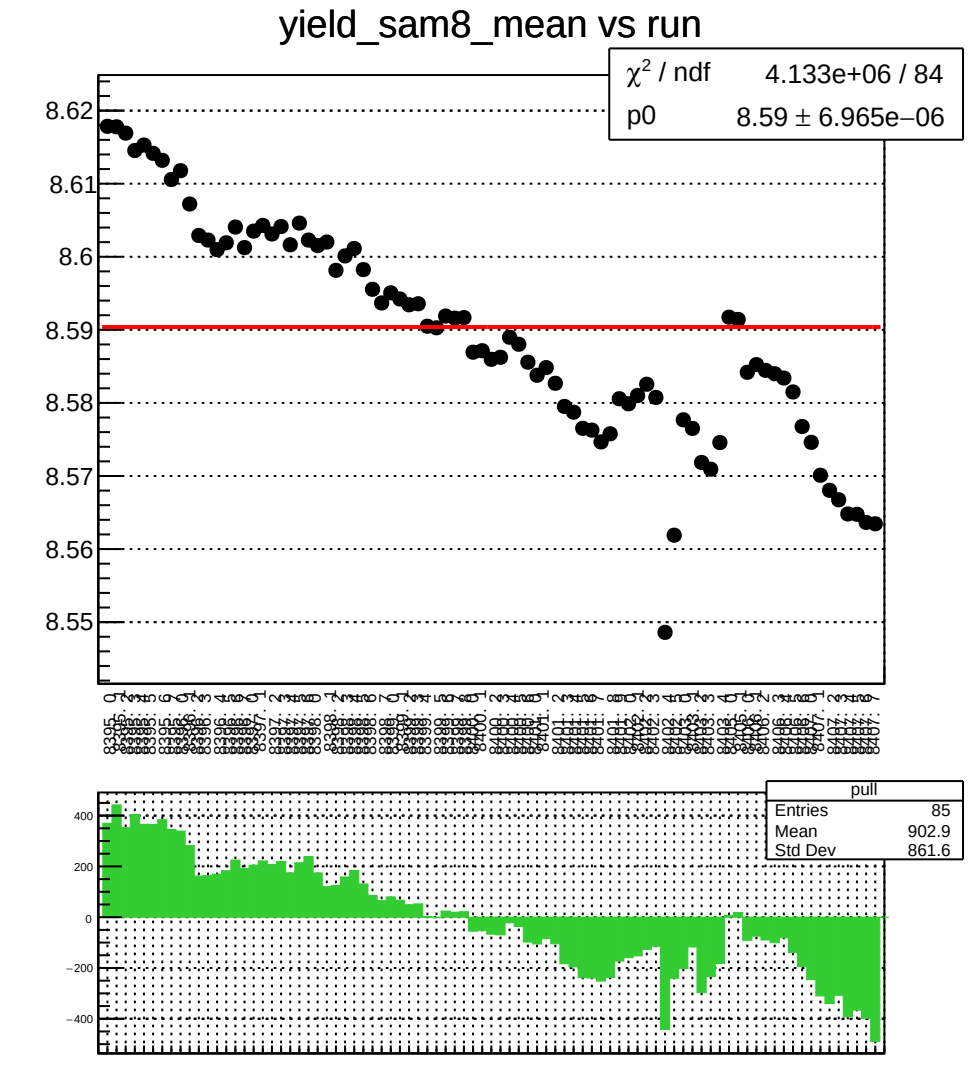

pull1D
Entries 85
Mean −0.3666
Std Dev 5.642
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

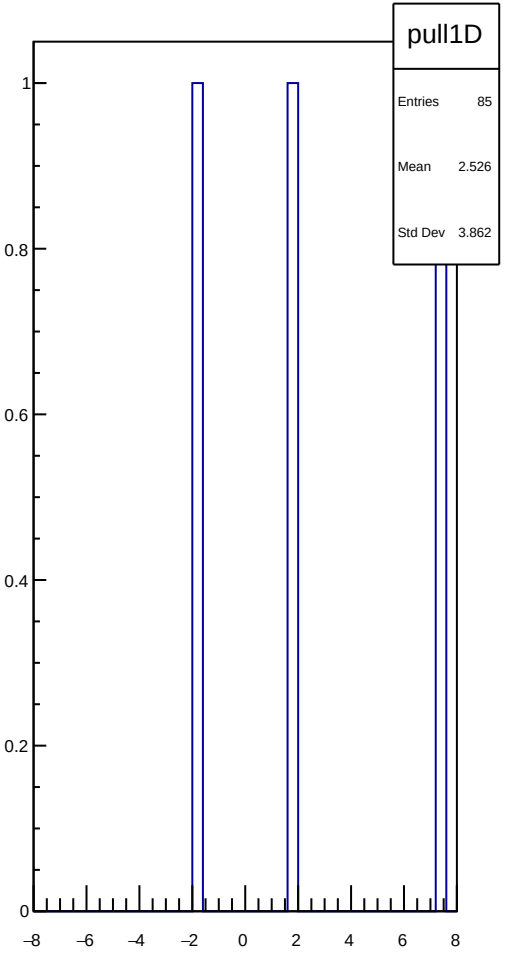

yield_sam6_rms vs run
χ² / ndf 4.09e+04 / 84
p0 0.02707 ± 2.139e–05
0.07
0.06
0.05
0.04
0.03
0.02

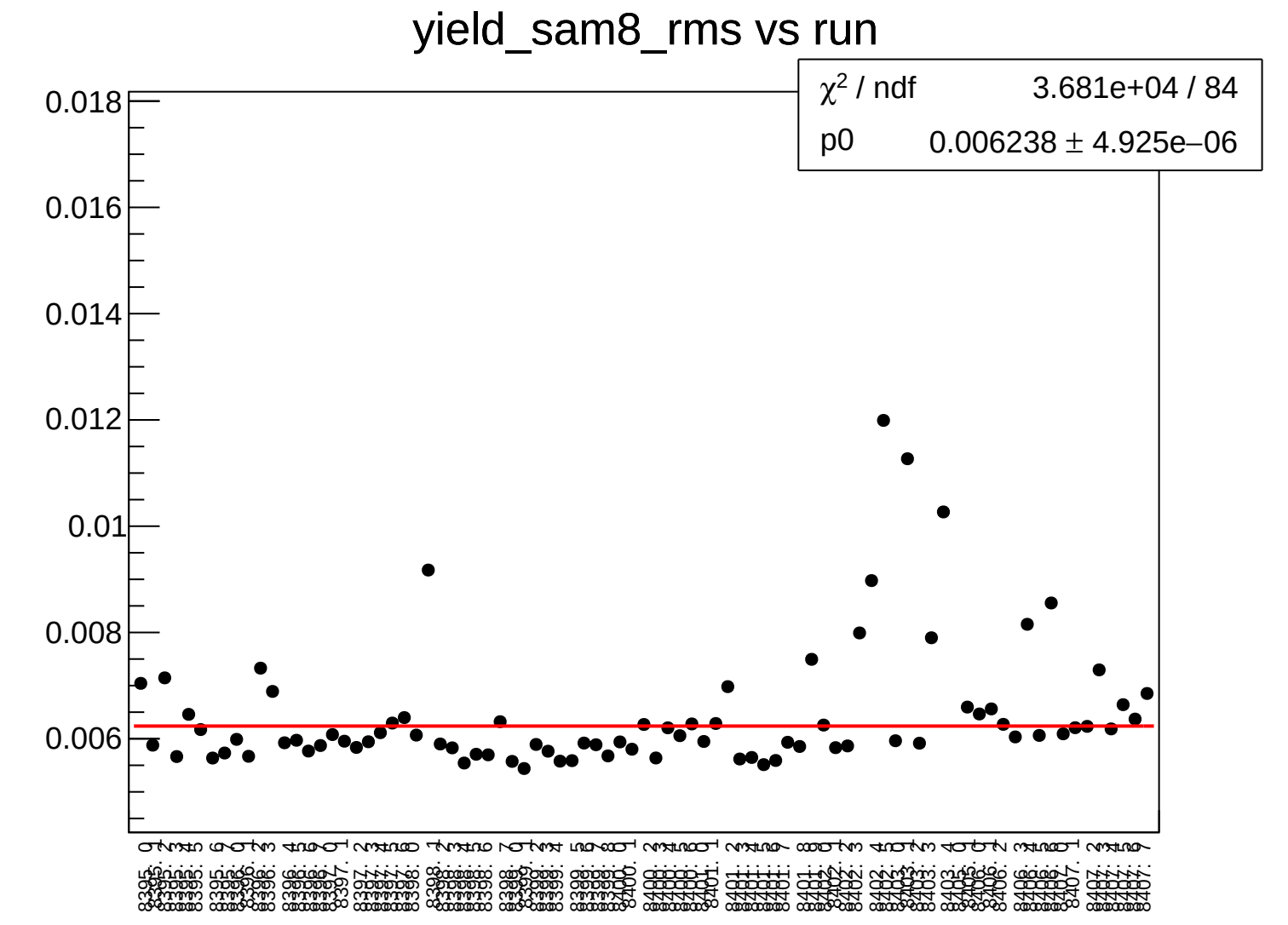

yield_sam7_mean vs run
χ² / ndf 6.925e+05 / 84
p0 2.375 ± 4.339e−06
2.385
2.38
2.375
2.37
2.365
2.36
pull
Entries 85
Mean 4932
Std Dev 4893
200
100
0
−100
−200
−300

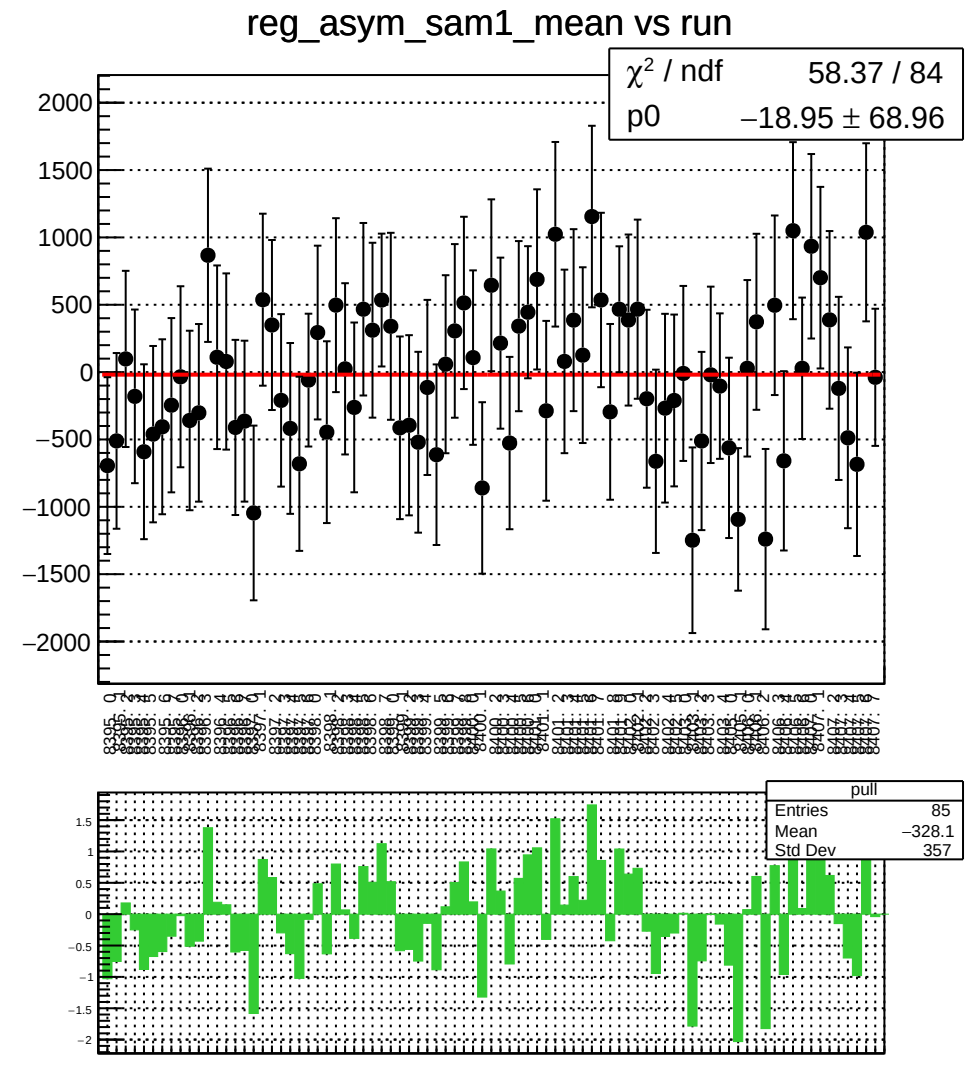

pull1D
Entries 85
Mean −0.9284
Std Dev 3.893
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

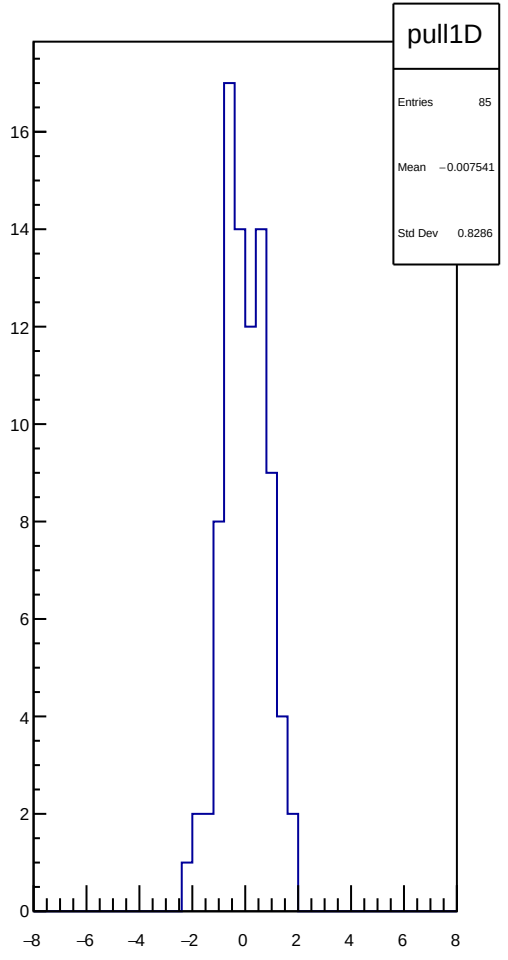

yield_sam7_rms vs run
χ^2 / ndf 2.948e+04 / 84
p0 0.003896 ± 3.068e−06
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035

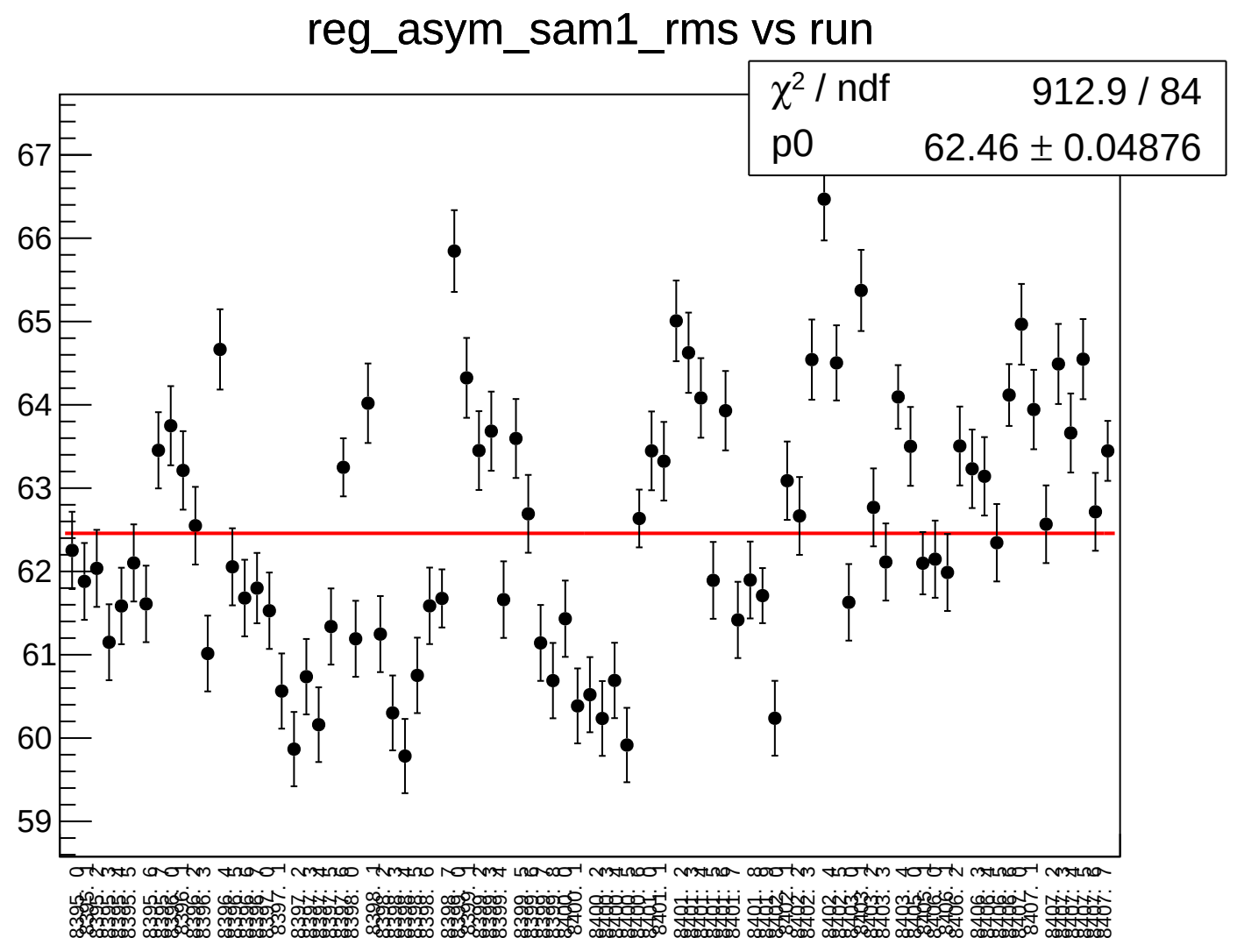

yield_sam8_mean vs run
χ² / ndf 4.133e+06 / 84
p0 8.59 ± 6.965e−06
8.62
8.61
8.6
8.59
8.58
8.57
8.56
8.55
pull
Entries 85
Mean 902.9
Std Dev 861.6
400
200
0
−200
−400

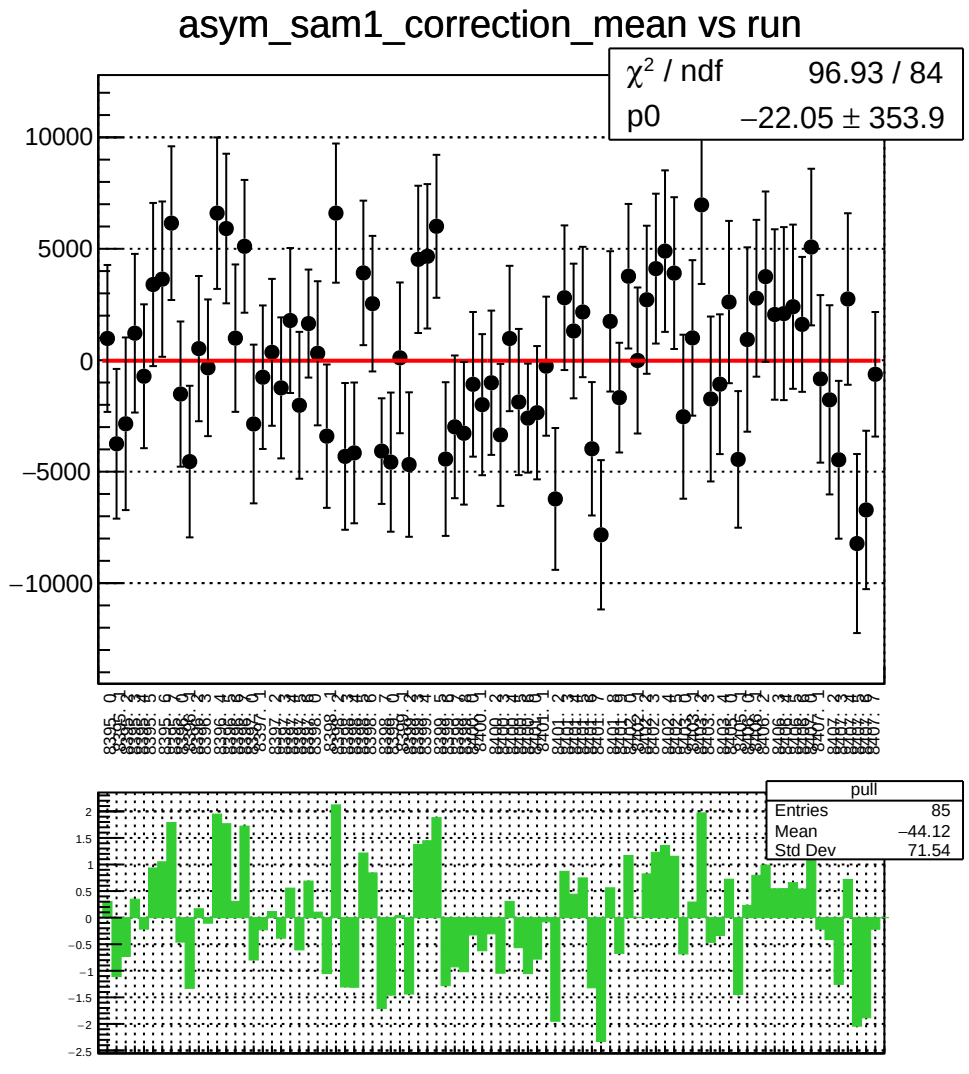

pull1D
Entries 85
Mean 2.526
Std Dev 3.862
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

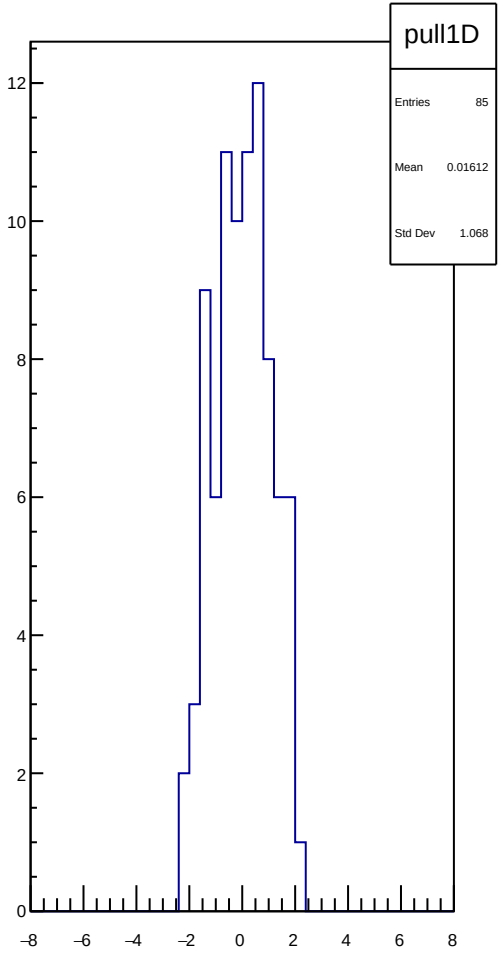

yield_sam8_rms vs run
χ² / ndf 3.681e+04 / 84
p0 0.006238 ± 4.925e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

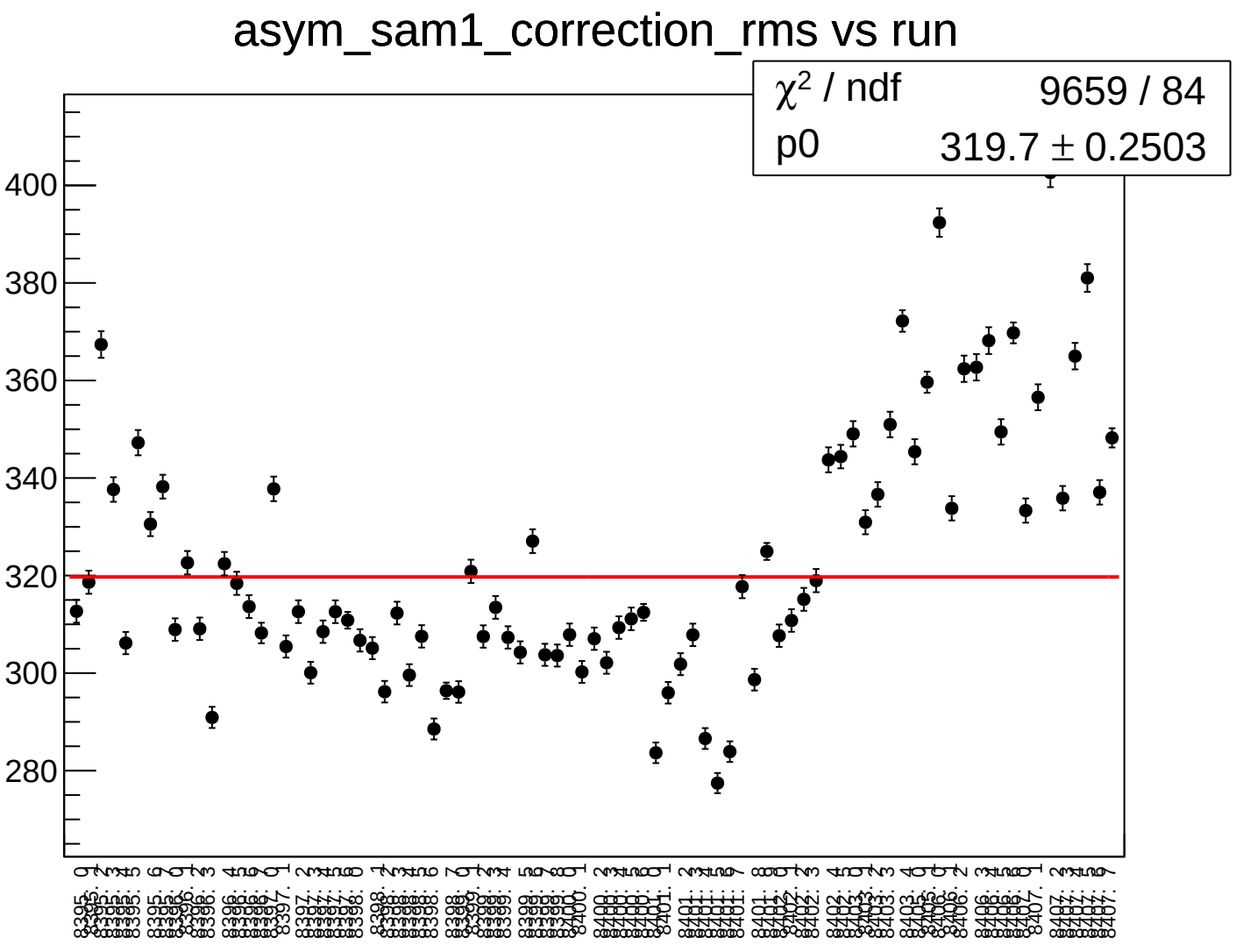

reg_asym_sam1_mean vs run
χ² / ndf 58.37 / 84
p0 −18.95 ± 68.96
pull
Entries 85
Mean −328.1
Std Dev 357

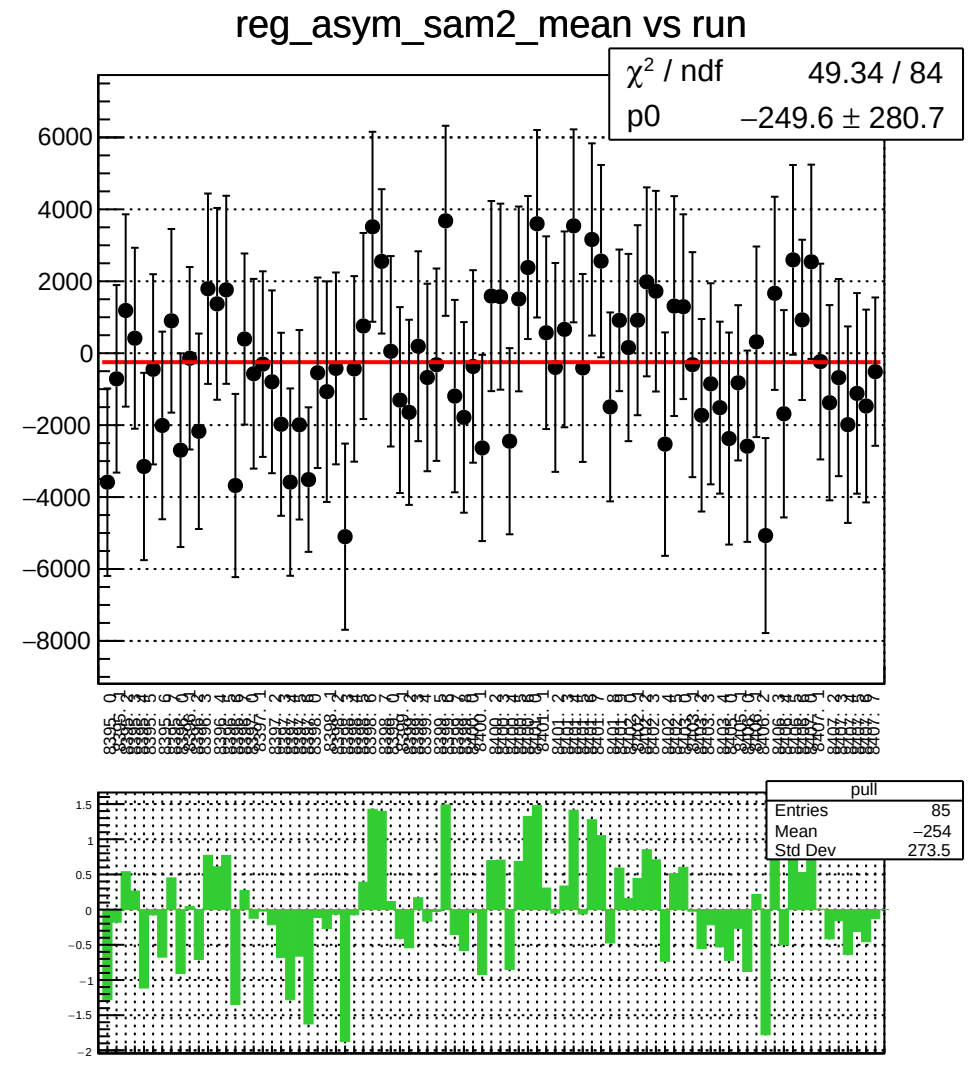

pull1D
Entries 85
Mean −0.007541
Std Dev 0.8286

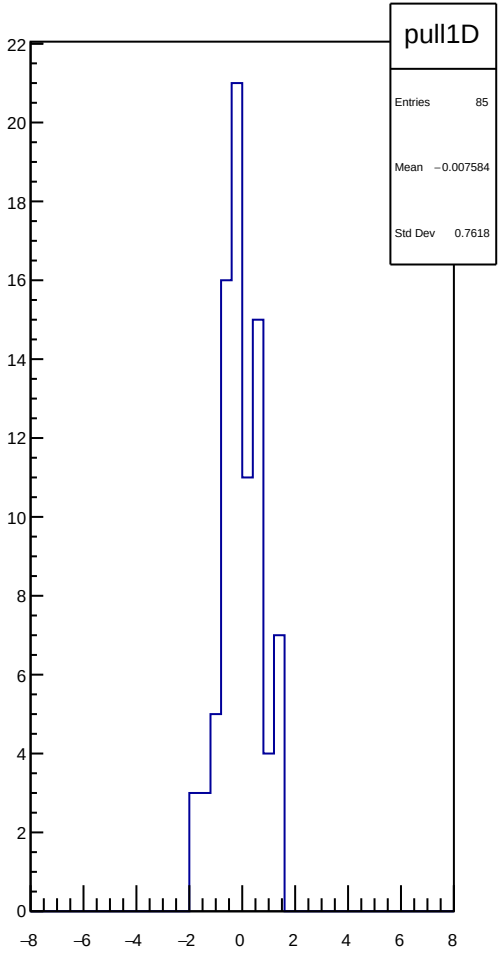

reg_asym_sam1_rms vs run
χ² / ndf 912.9 / 84
p0 62.46 ± 0.04876
67
66
65
64
63
62
61
60
59

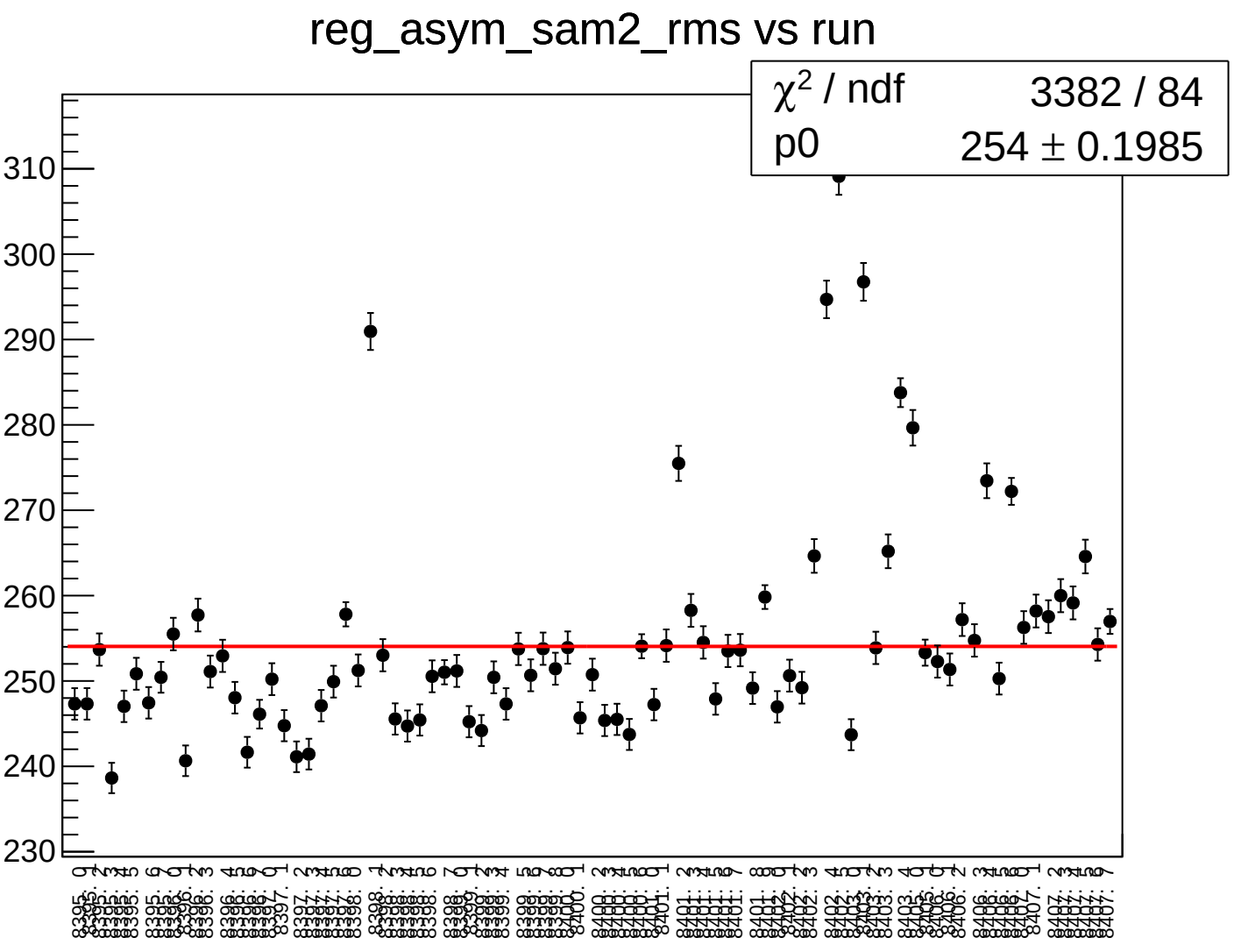

asym_sam1_correction_mean vs run
χ² / ndf 96.93 / 84
p0 −22.05 ± 353.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −44.12
Std Dev 71.54
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

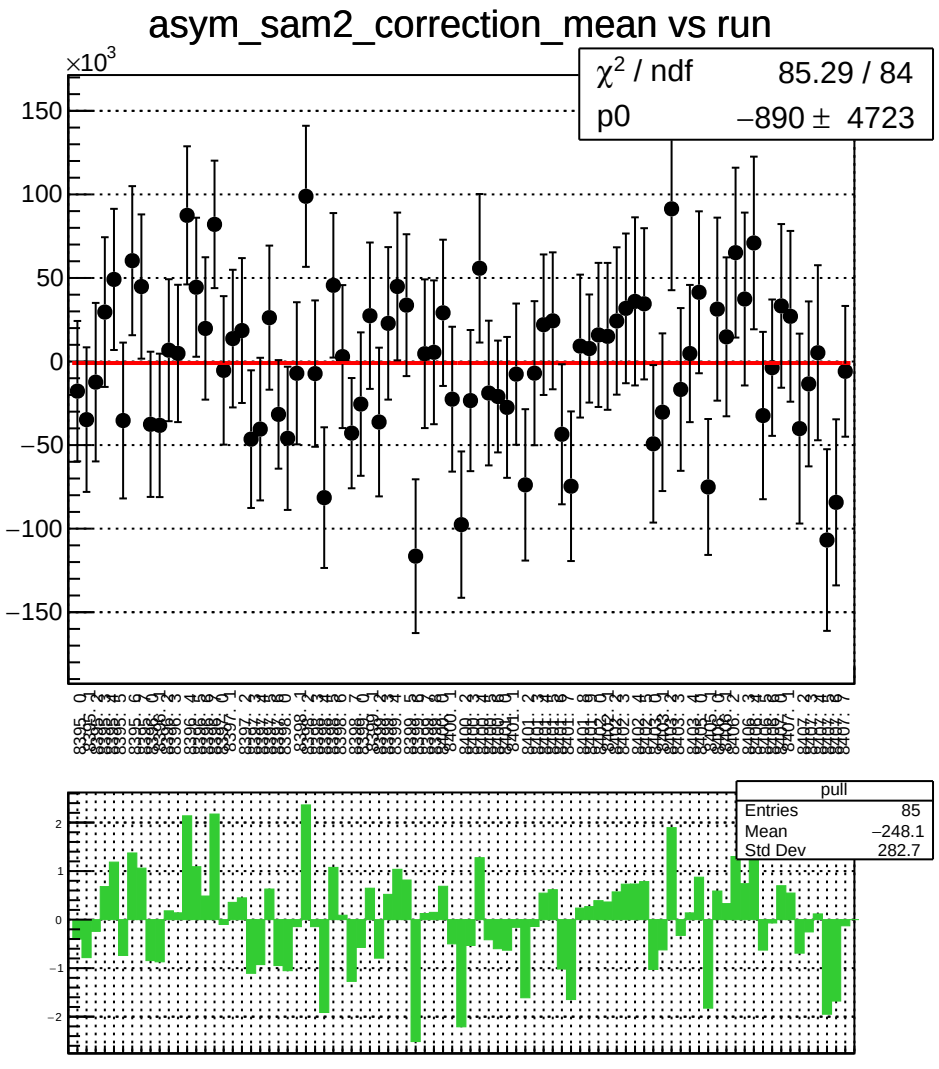

pull1D
Entries 85
Mean 0.01612
Std Dev 1.068
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

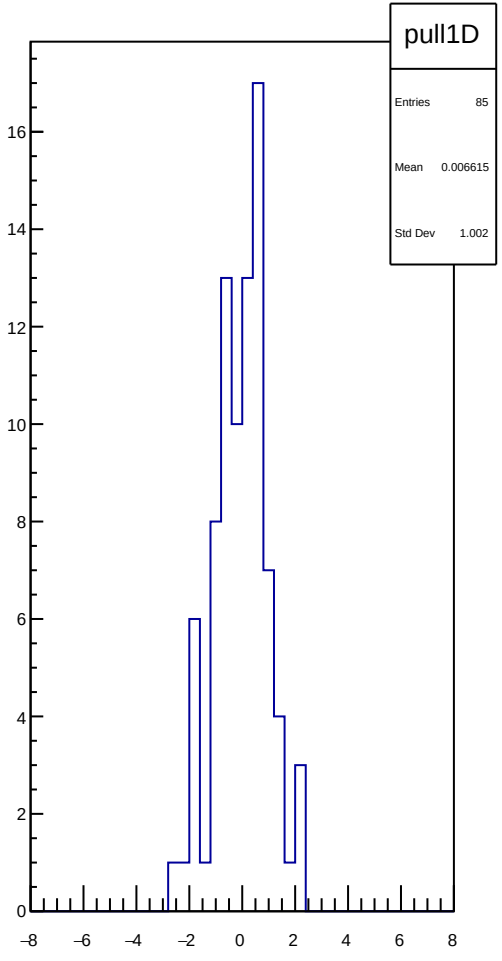

asym_sam1_correction_rms vs run
χ² / ndf 9659 / 84
p0 319.7 ± 0.2503
400
380
360
340
320
300
280

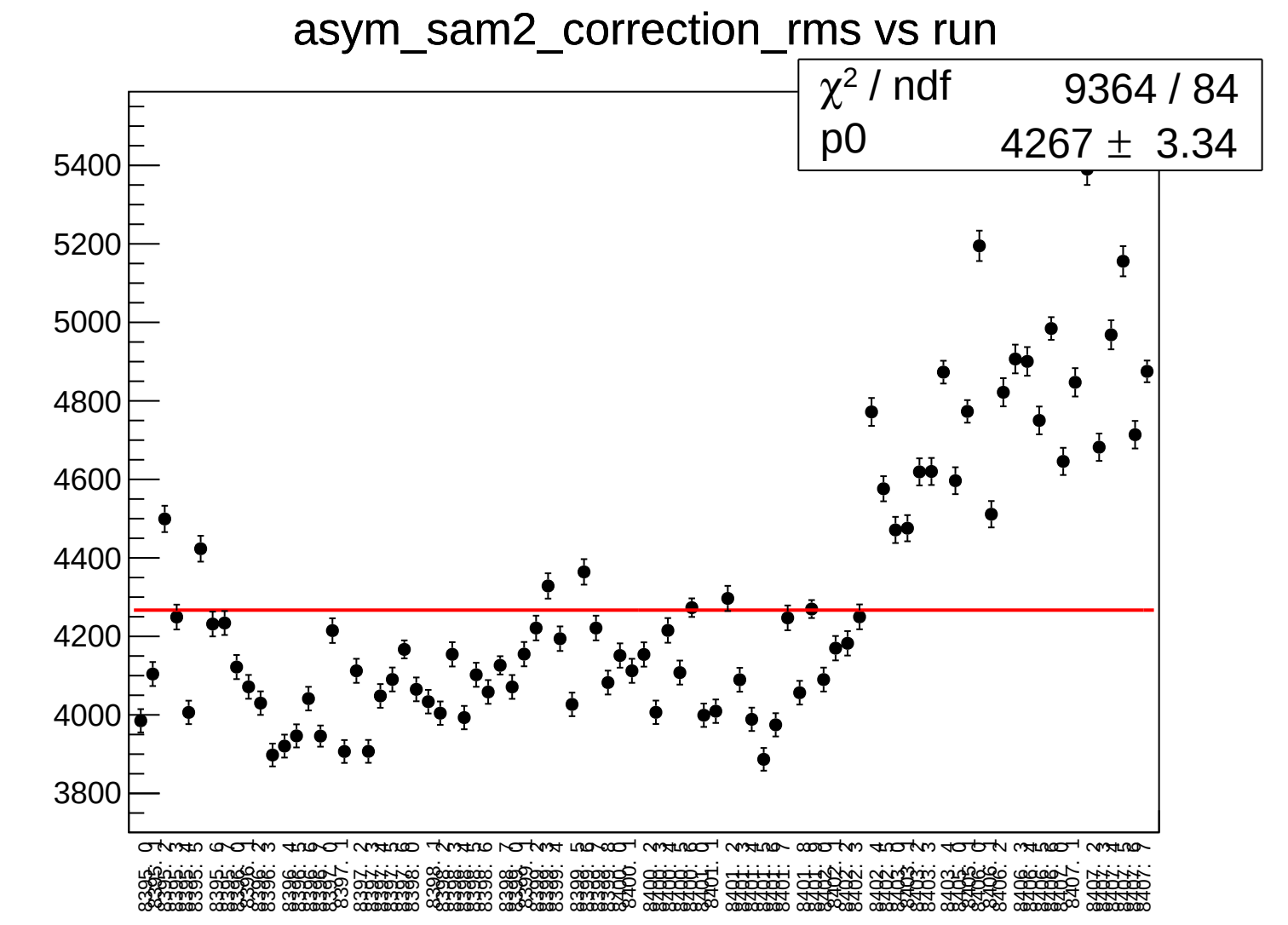

reg_asym_sam2_mean vs run
χ² / ndf 49.34 / 84
p0 −249.6 ± 280.7
pull
Entries 85
Mean −254
Std Dev 273.5

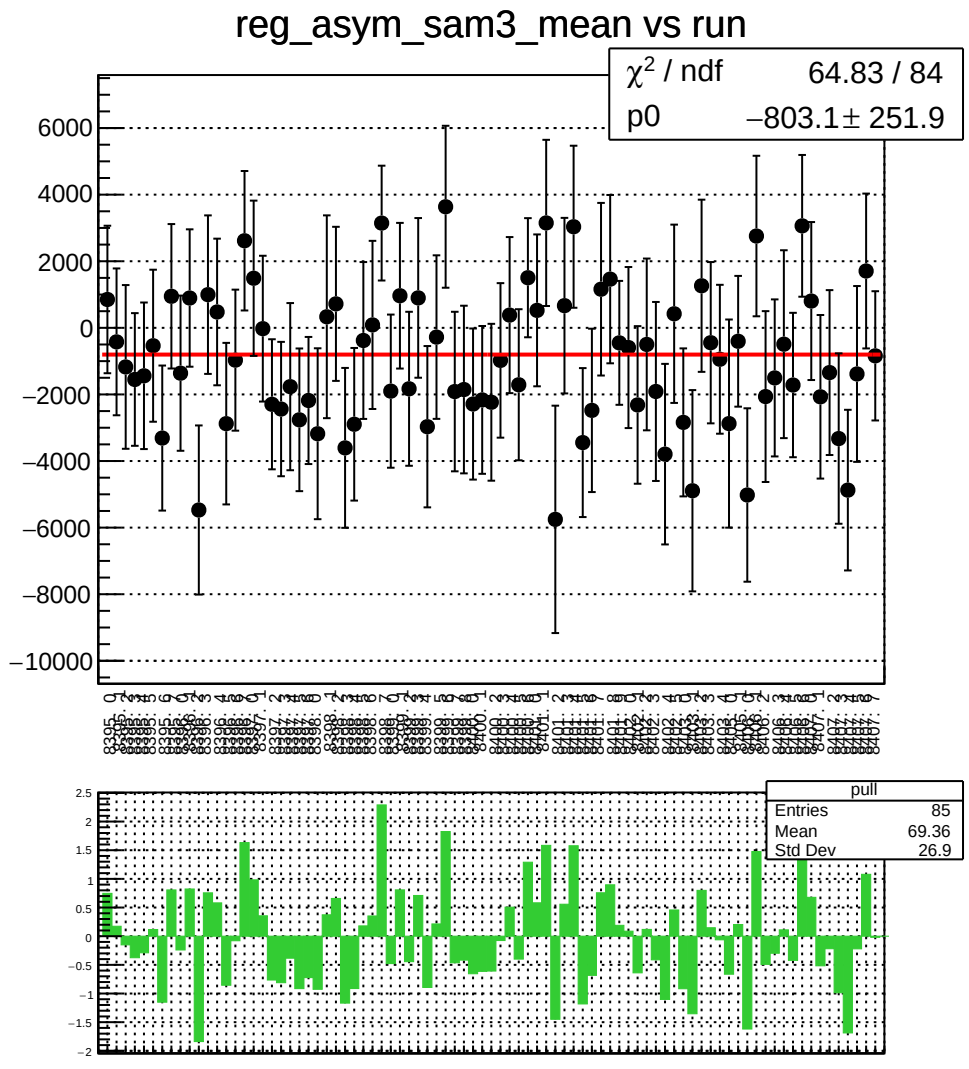

pull1D
Entries 85
Mean −0.007584
Std Dev 0.7618

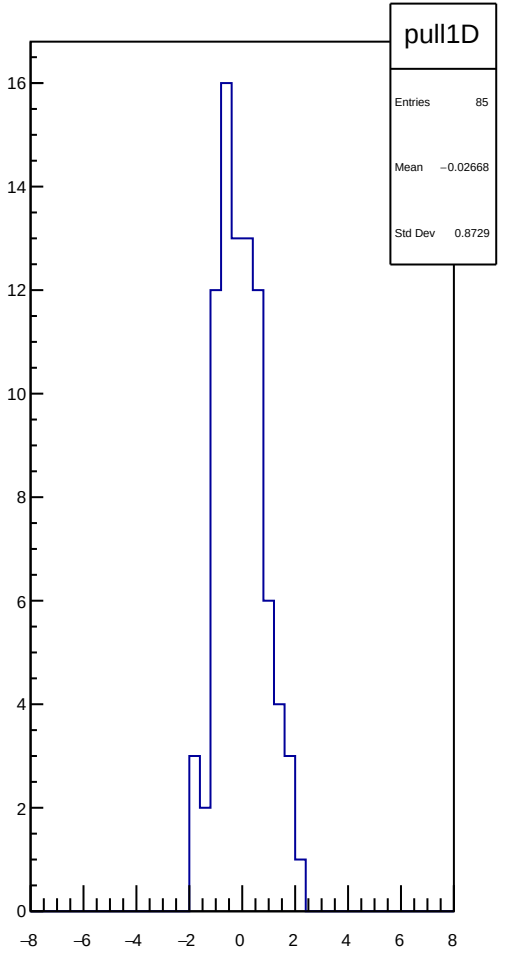

reg_asym_sam2_rms vs run
χ² / ndf 3382 / 84
p0 254 ± 0.1985
310
300
290
280
270
260
250
240
230

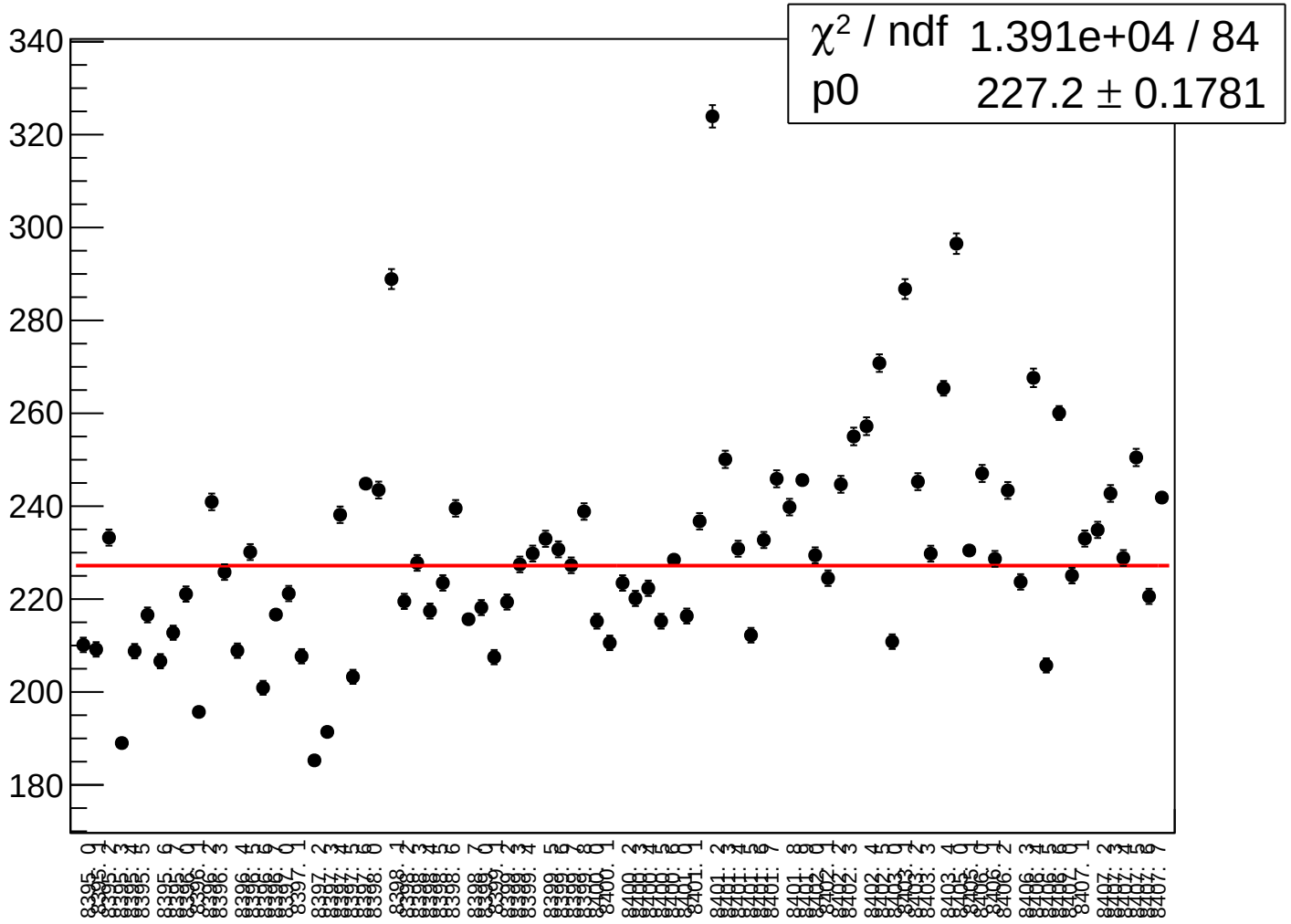

asym_sam2_correction_mean vs run
×10^3
χ^2 / ndf 85.29 / 84
p0 −890 ± 4723
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −248.1
Std Dev 282.7
2
1
0
−1
−2

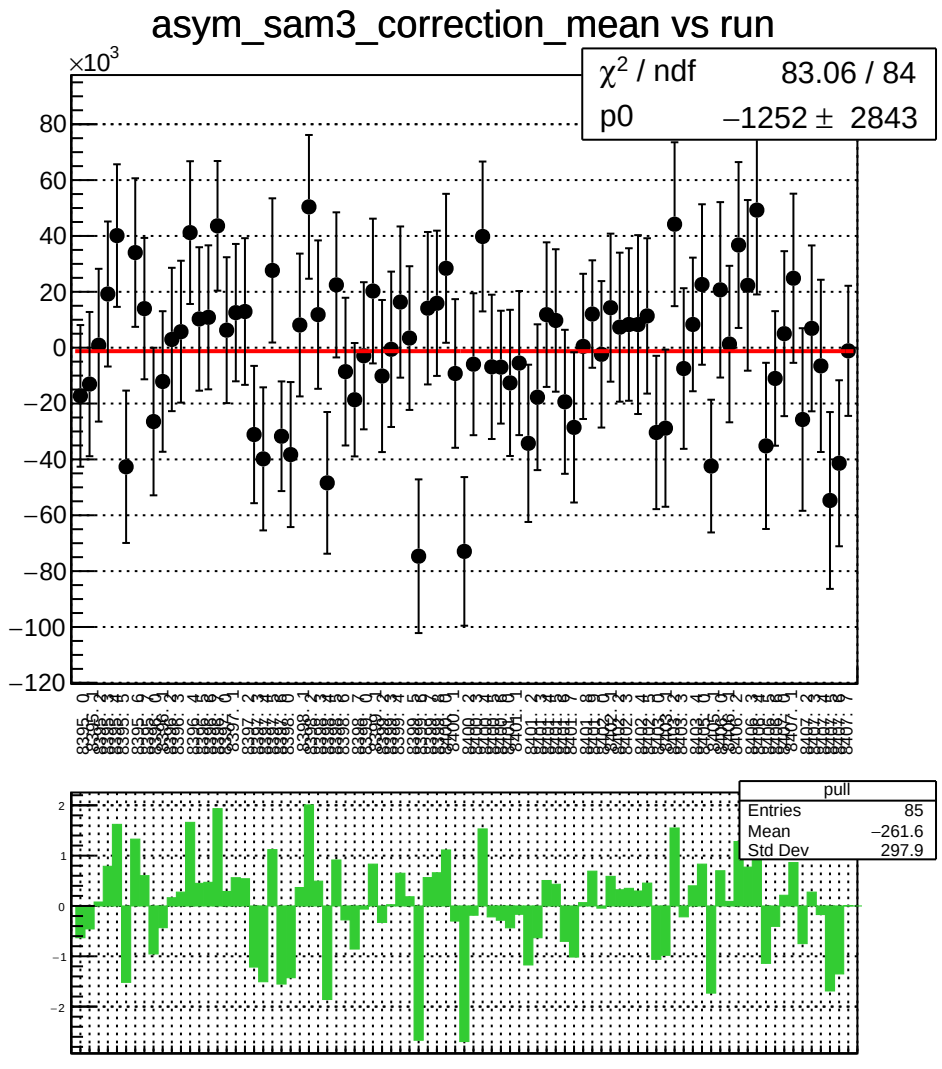

pull1D
Entries 85
Mean 0.006615
Std Dev 1.002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

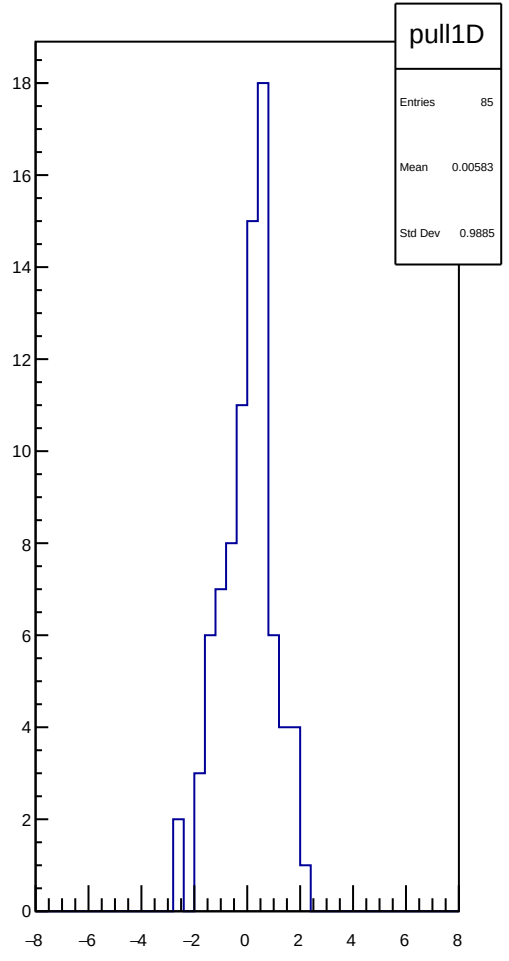

asym_sam2_correction_rms vs run
χ² / ndf 9364 / 84
p0 4267 ± 3.34
5400
5200
5000
4800
4600
4400
4200
4000
3800

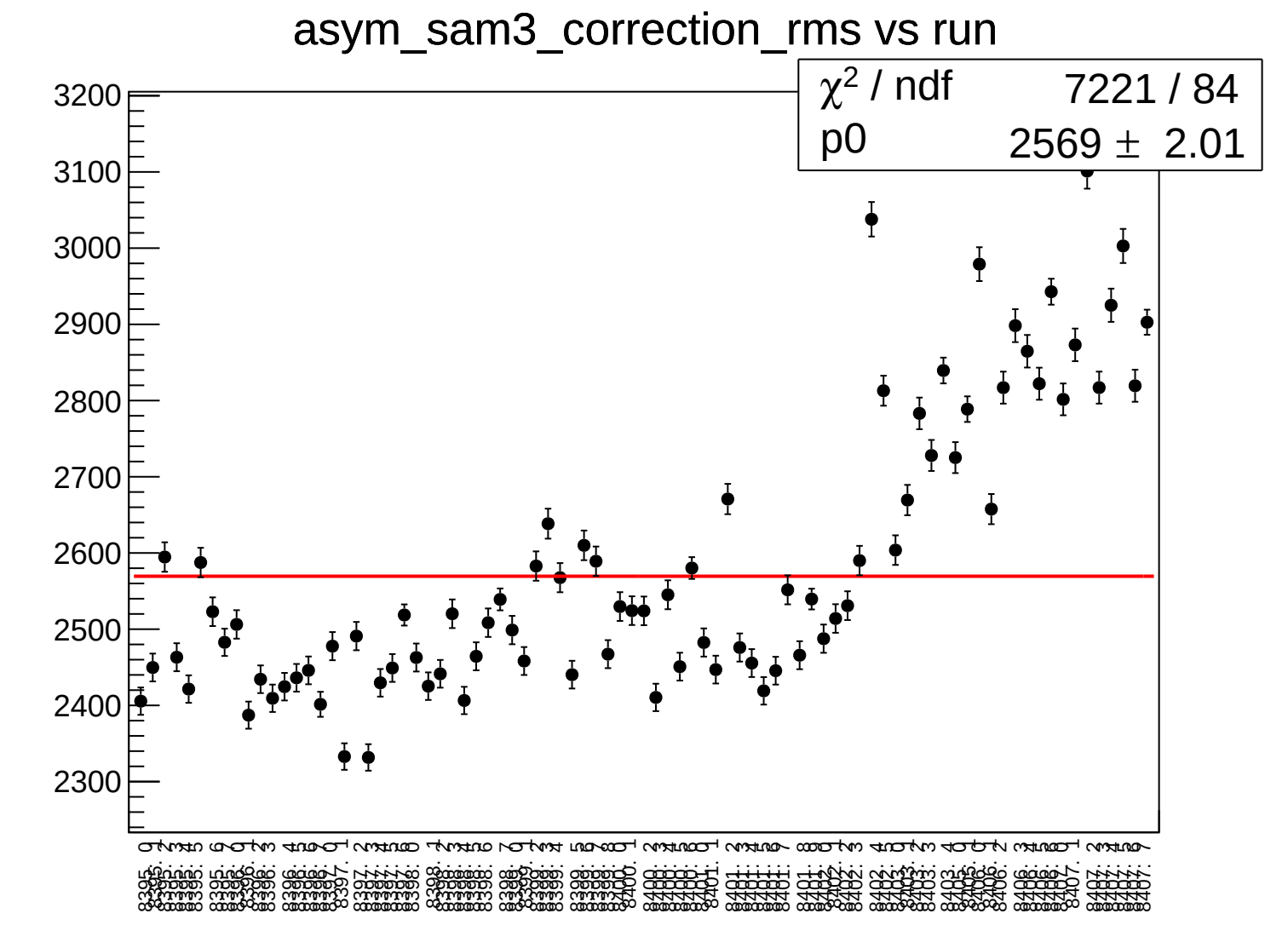

reg_asym_sam3_mean vs run
χ² / ndf 64.83 / 84
p0 −803.1± 251.9
pull
Entries 85
Mean 69.36
Std Dev 26.9

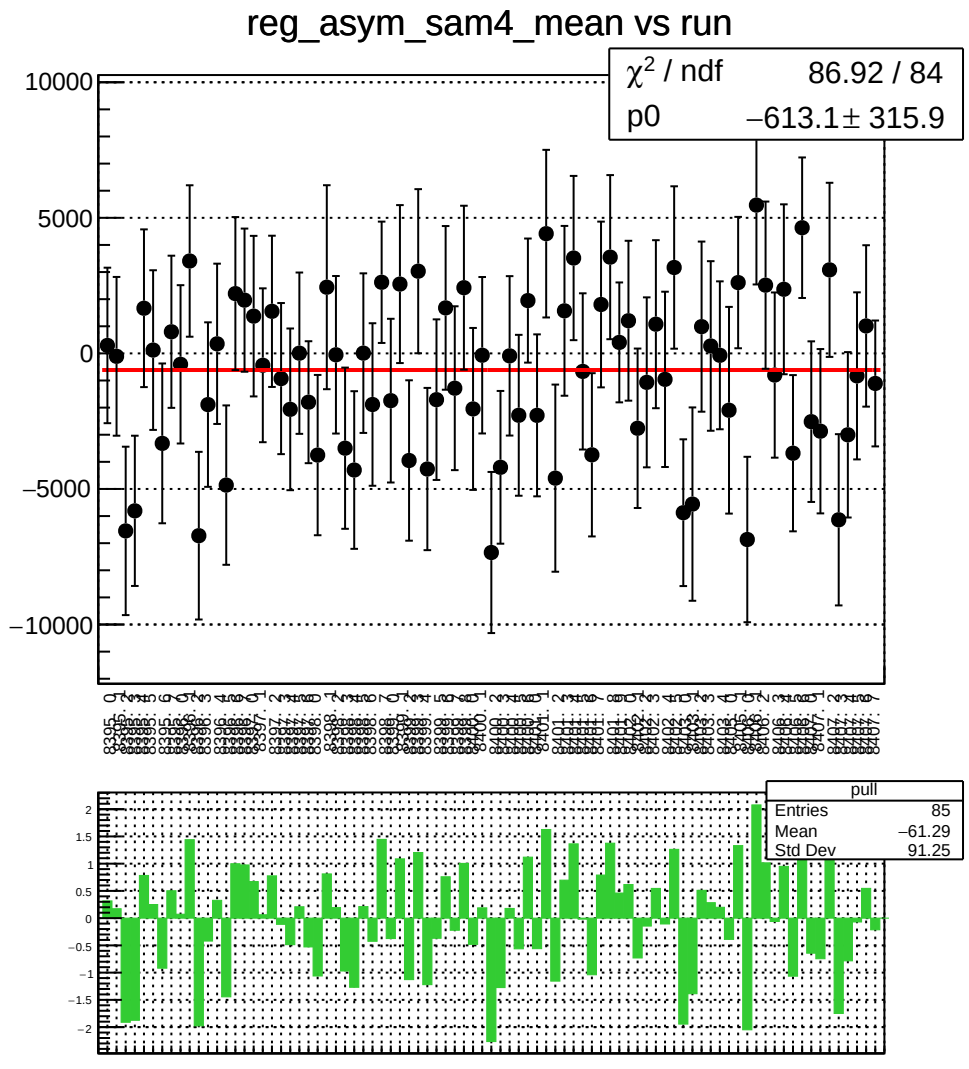

pull1D
Entries 85
Mean −0.02668
Std Dev 0.8729

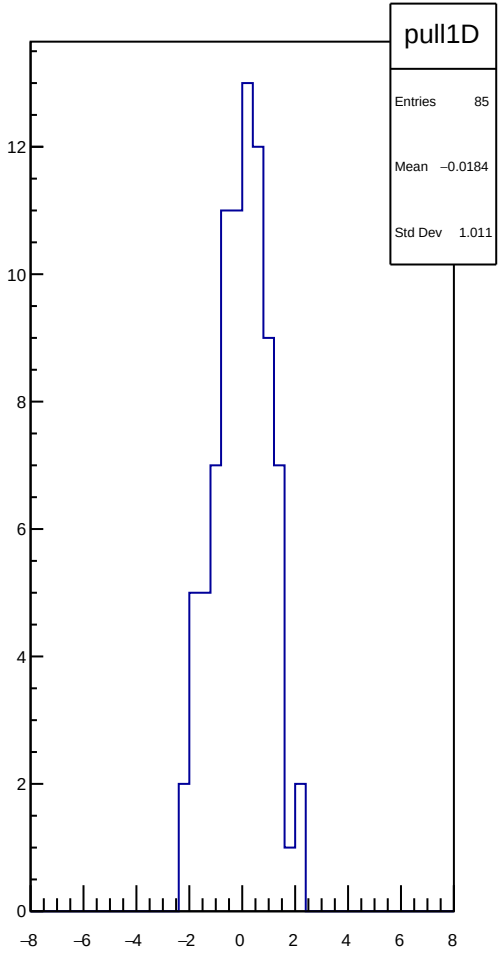

reg_asym_sam3_rms vs run
χ² / ndf 1.391e+04 / 84
p0 227.2 ± 0.1781
340
320
300
280
260
240
220
200
180

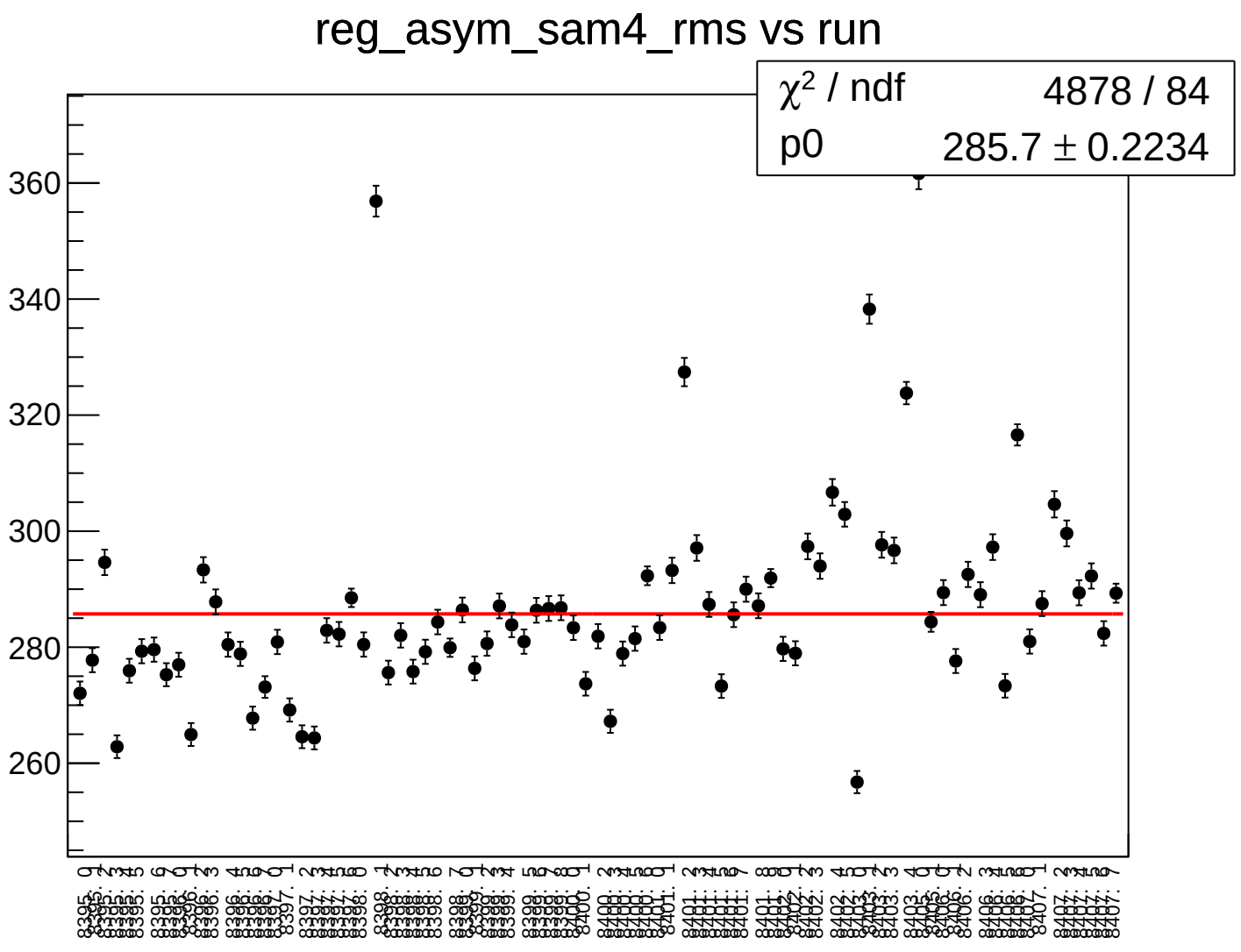

asym_sam3_correction_mean vs run
×10^3
χ² / ndf 83.06 / 84
p0 −1252 ± 2843
pull
Entries 85
Mean −261.6
Std Dev 297.9

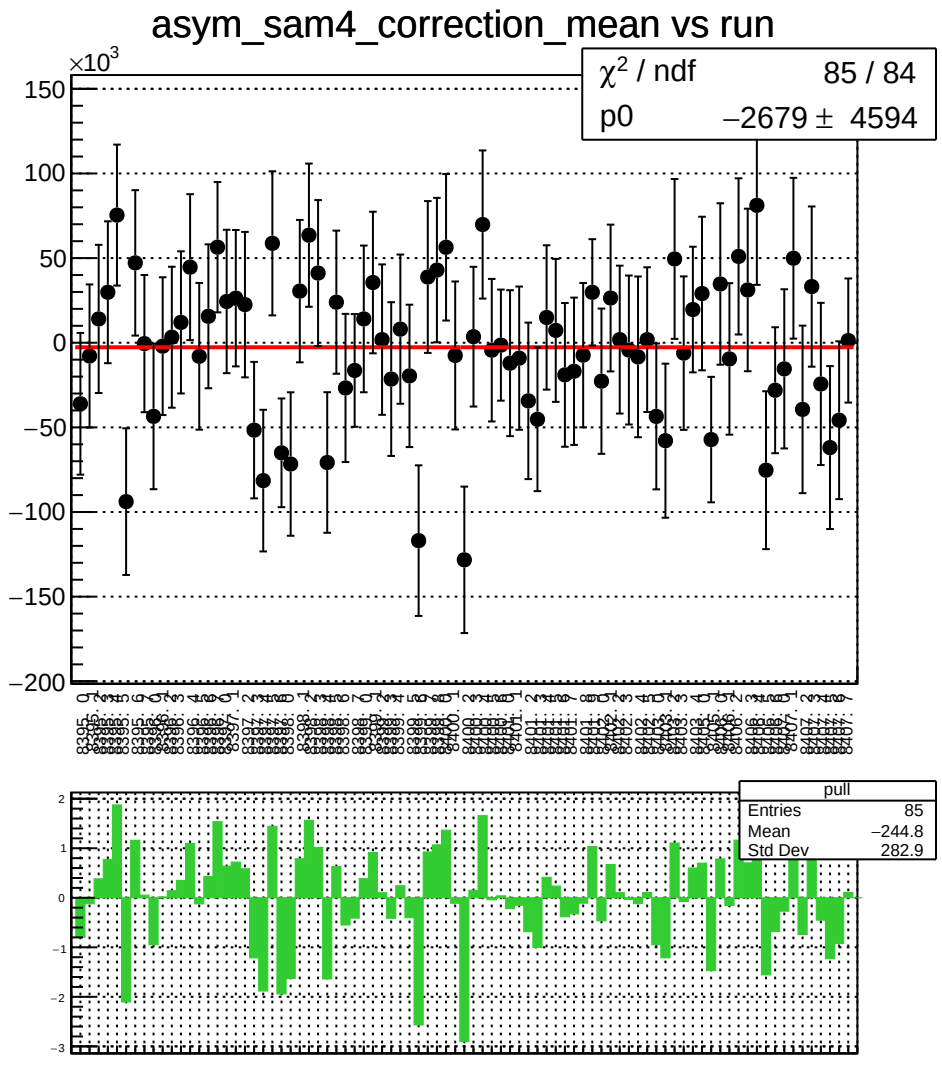

pull1D
Entries 85
Mean 0.00583
Std Dev 0.9885

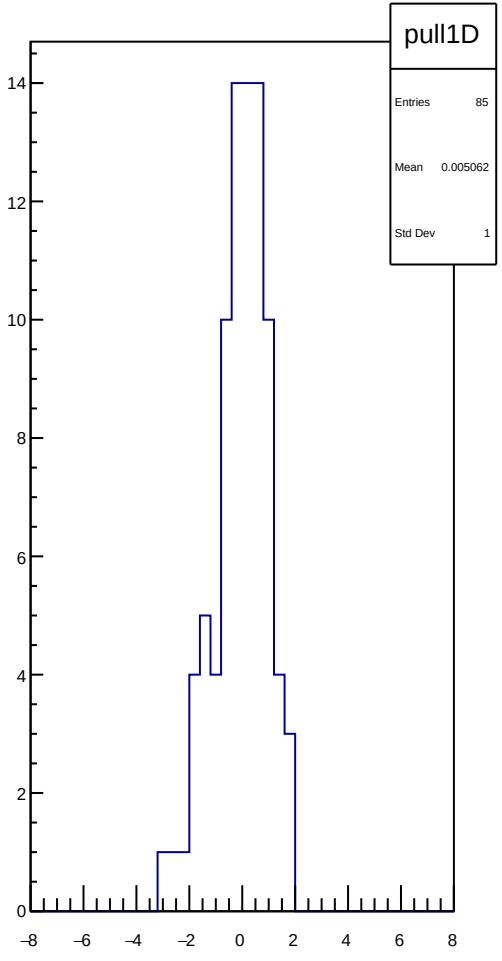

asym_sam3_correction_rms vs run
χ² / ndf 7221 / 84
p0 2569 ± 2.01
3200
3100
3000
2900
2800
2700
2600
2500
2400
2300

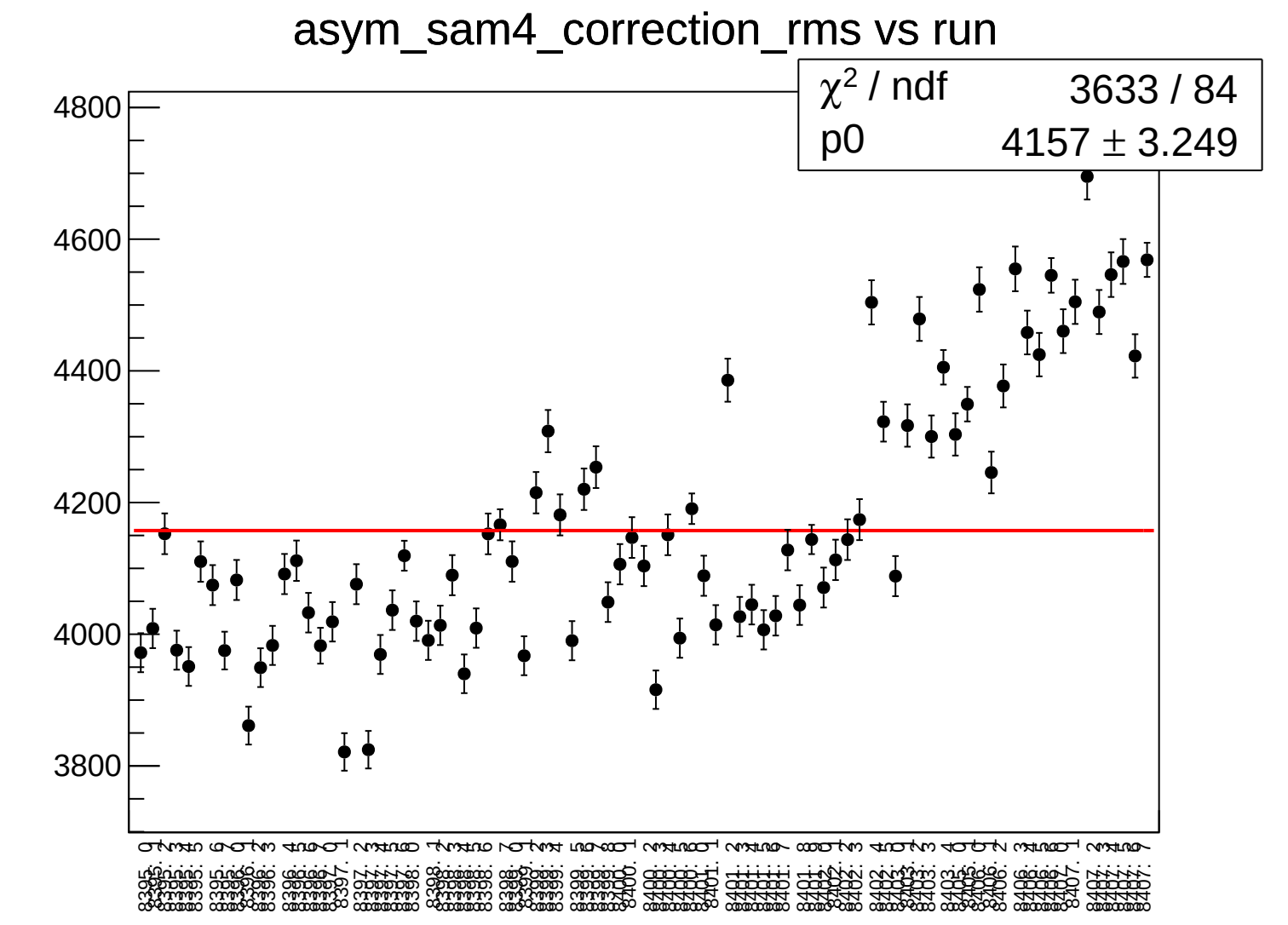

reg_asym_sam4_mean vs run
χ² / ndf 86.92 / 84
p0 −613.1 ± 315.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −61.29
Std Dev 91.25
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

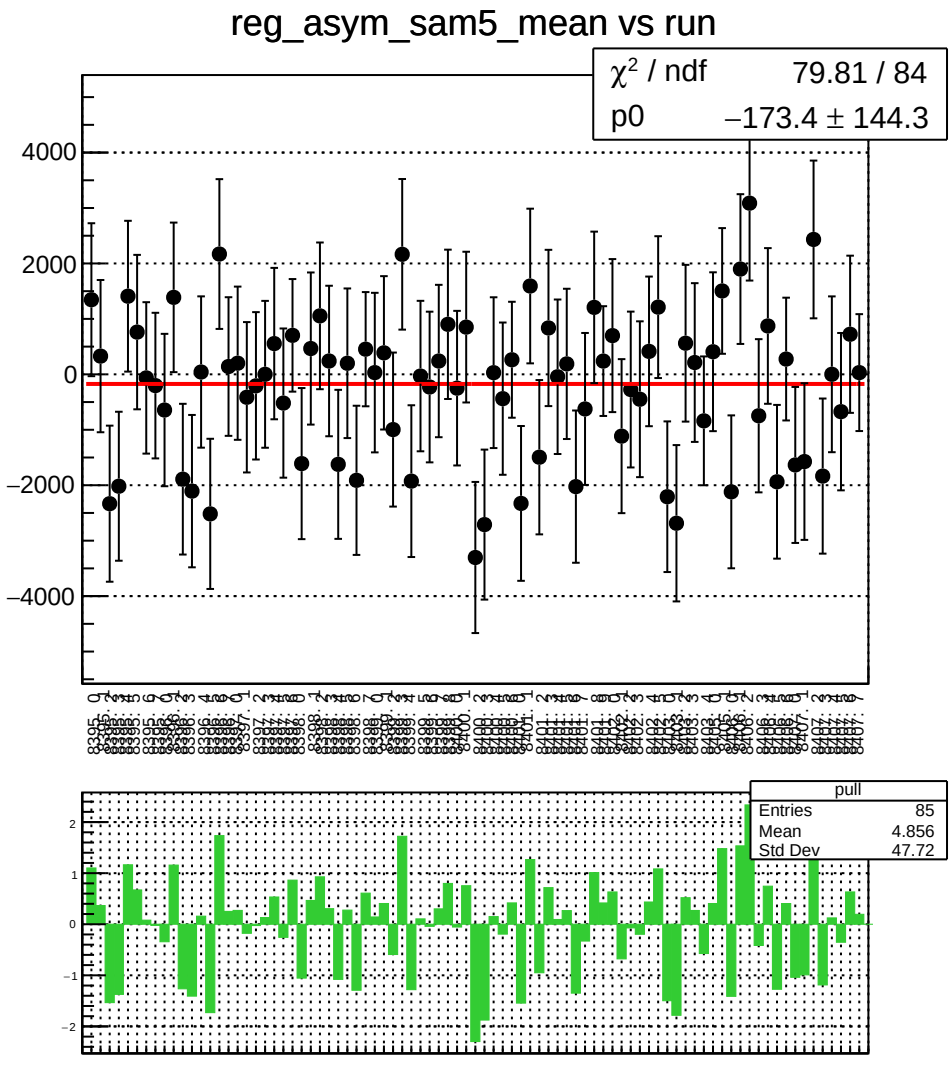

pull1D
Entries 85
Mean −0.0184
Std Dev 1.011
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

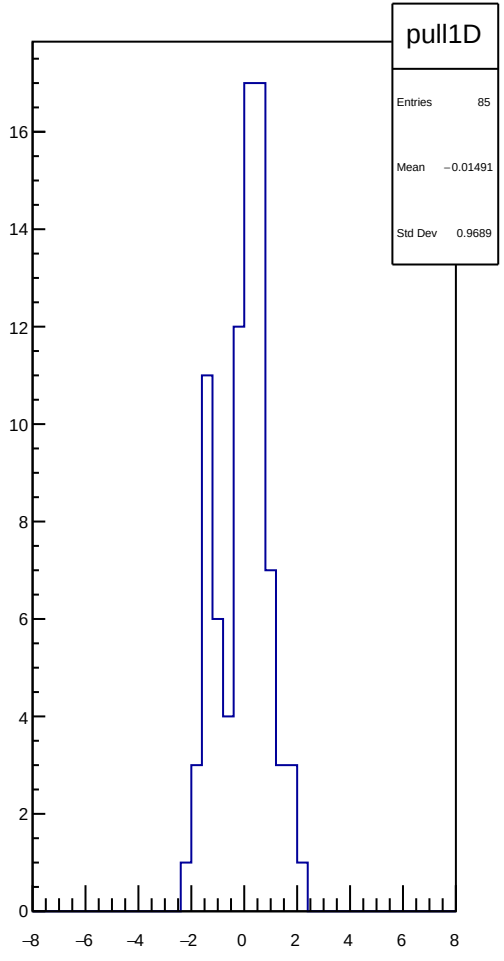

reg_asym_sam4_rms vs run
χ² / ndf 4878 / 84
p0 285.7 ± 0.2234
360
340
320
300
280
260

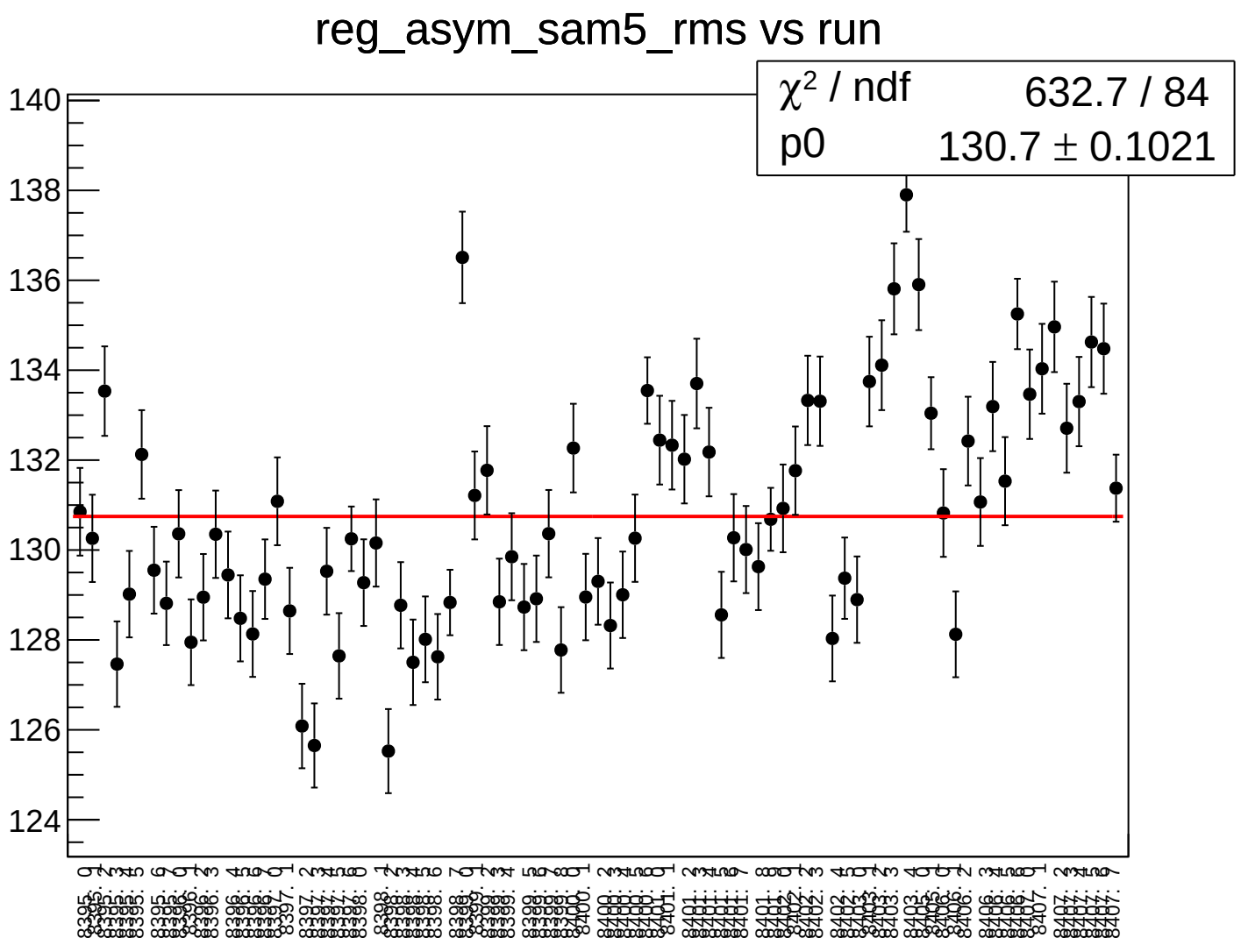

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 85 / 84
p0 −2679 ± 4594
pull
Entries 85
Mean −244.8
Std Dev 282.9

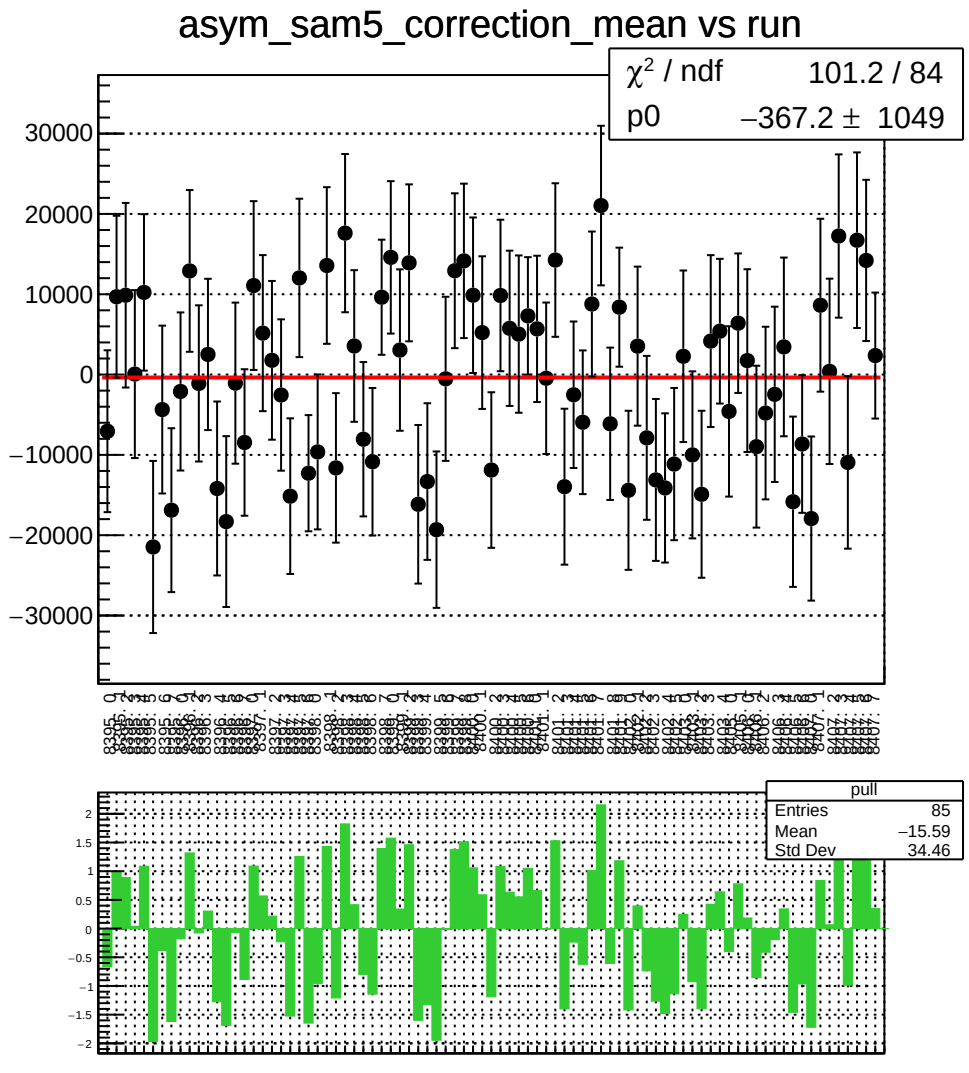

pull1D
Entries 85
Mean 0.005062
Std Dev 1

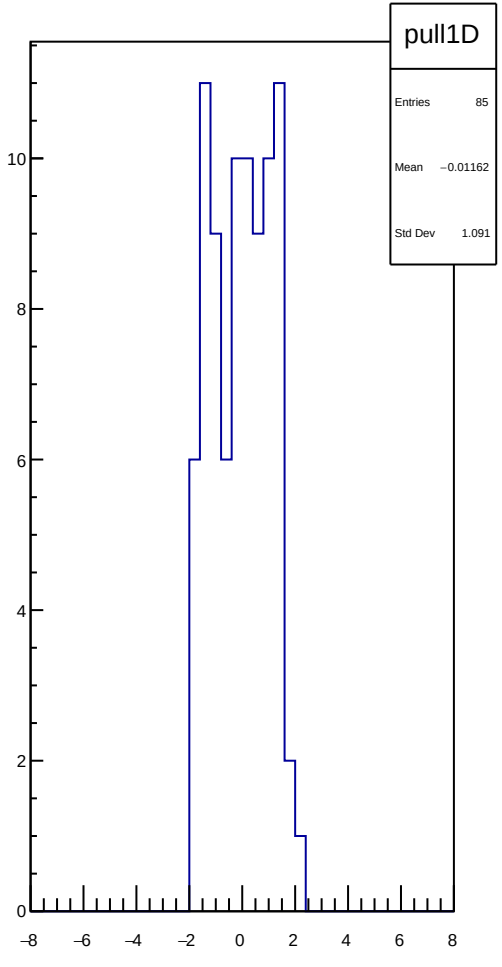

asym_sam4_correction_rms vs run
χ² / ndf 3633 / 84
p0 4157 ± 3.249
4800
4600
4400
4200
4000
3800

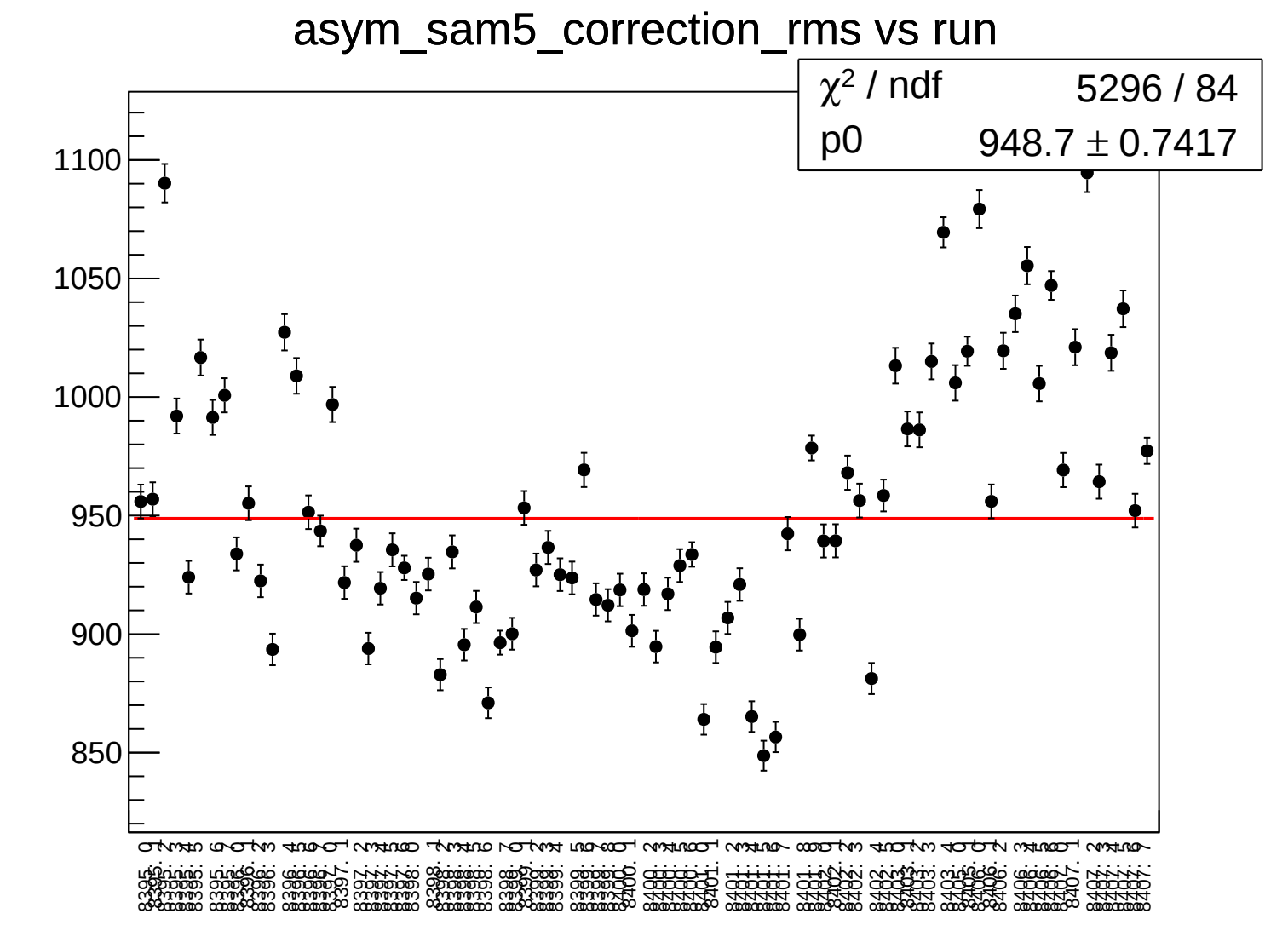

reg_asym_sam5_mean vs run
χ^2 / ndf 79.81 / 84
p0 −173.4 ± 144.3
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 4.856
Std Dev 47.72
2
1
0
−1
−2

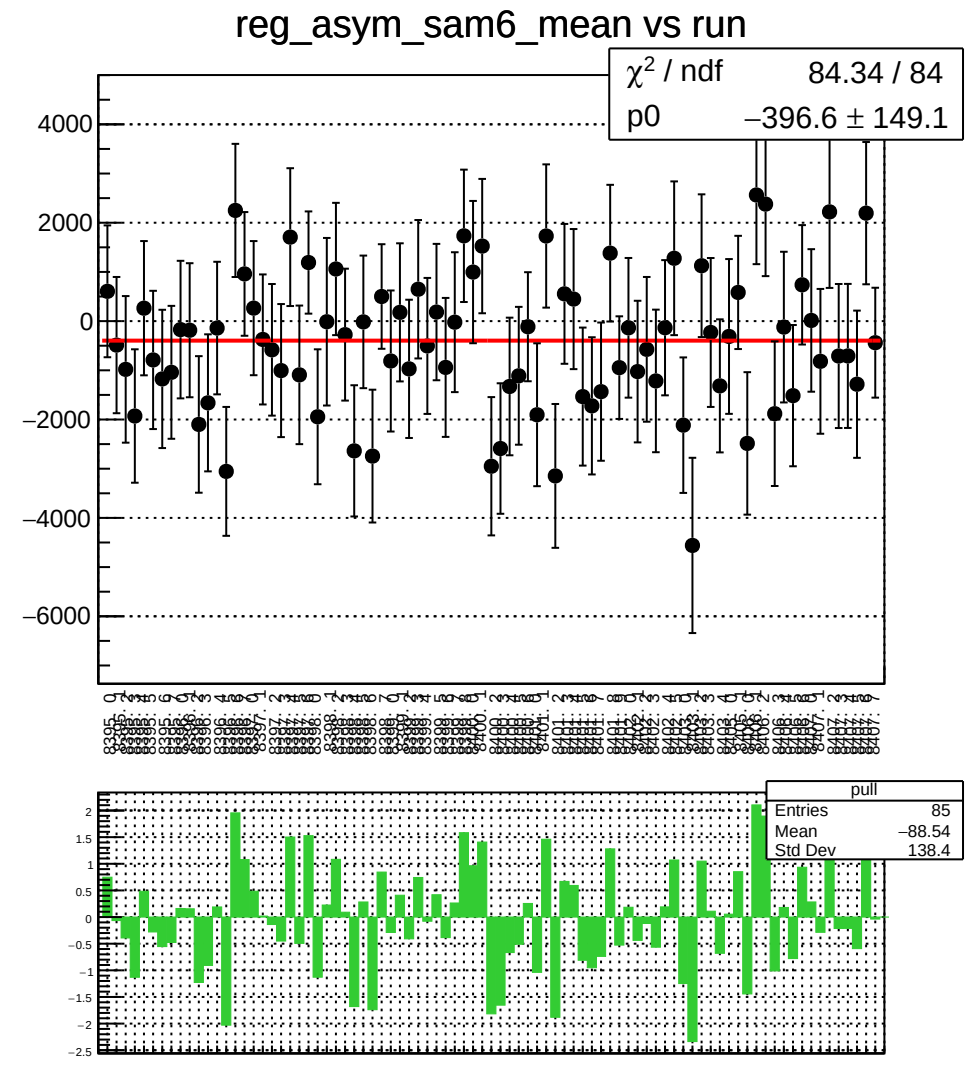

pull1D
Entries 85
Mean −0.01491
Std Dev 0.9689
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

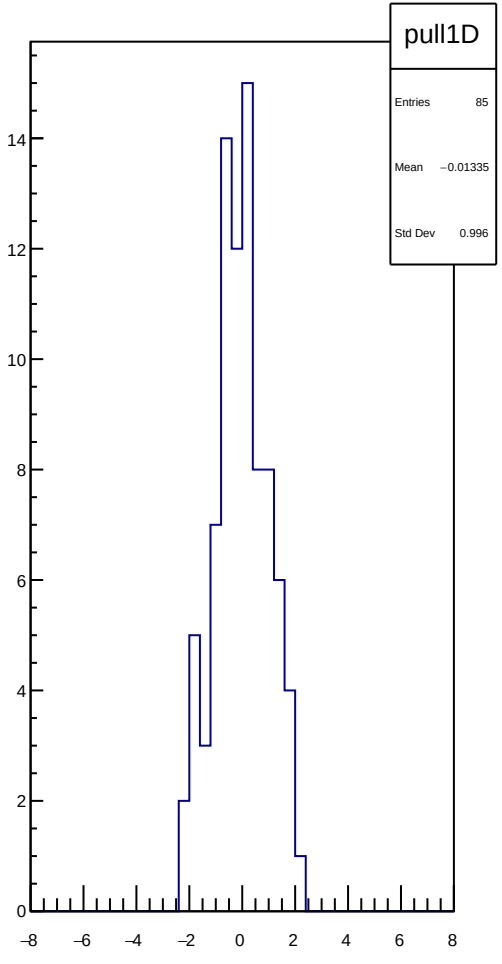

reg_asym_sam5_rms vs run
χ² / ndf 632.7 / 84
p0 130.7 ± 0.1021
140
138
136
134
132
130
128
126
124

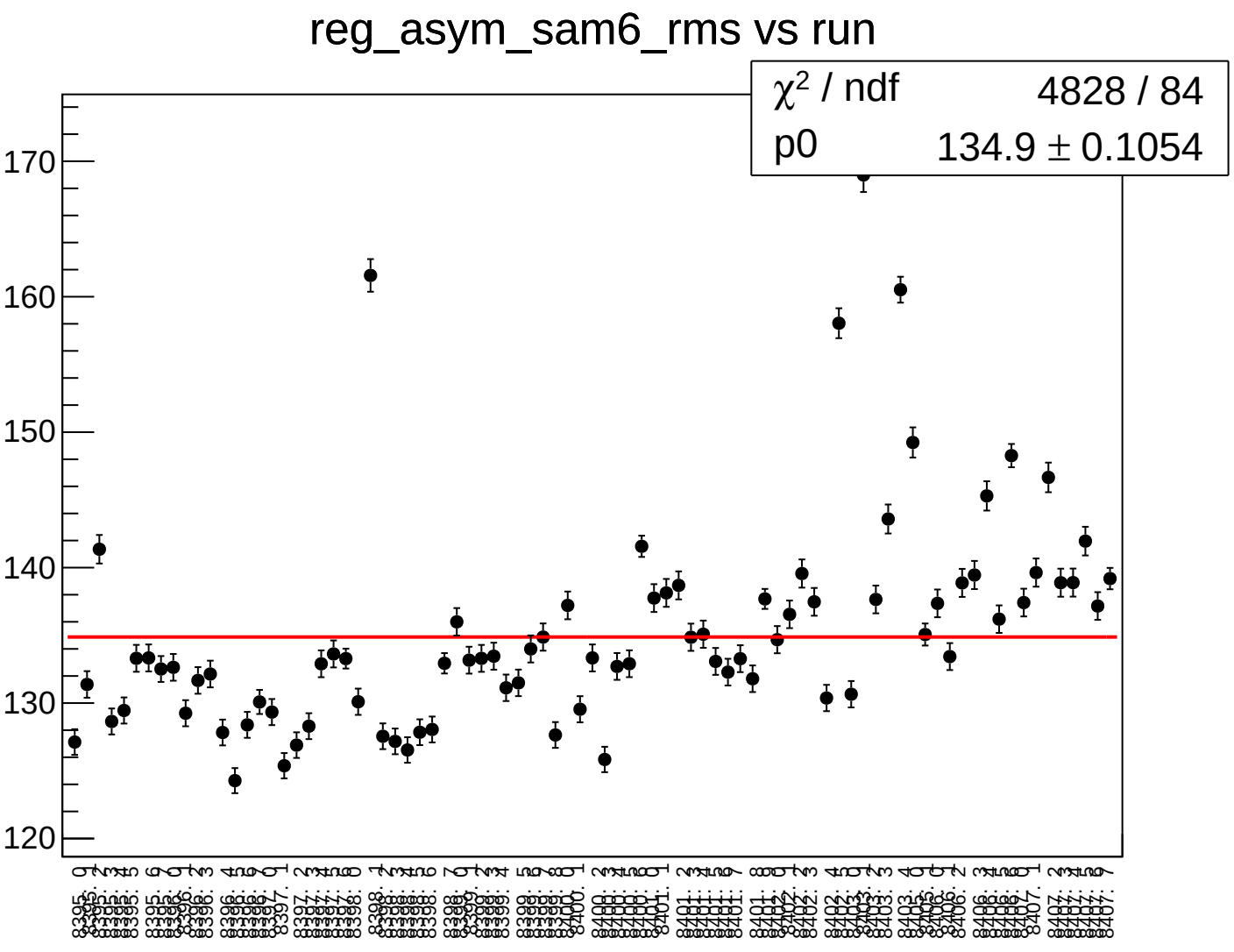

asym_sam5_correction_mean vs run
χ² / ndf 101.2 / 84
p0 −367.2 ± 1049
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −15.59
Std Dev 34.46
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

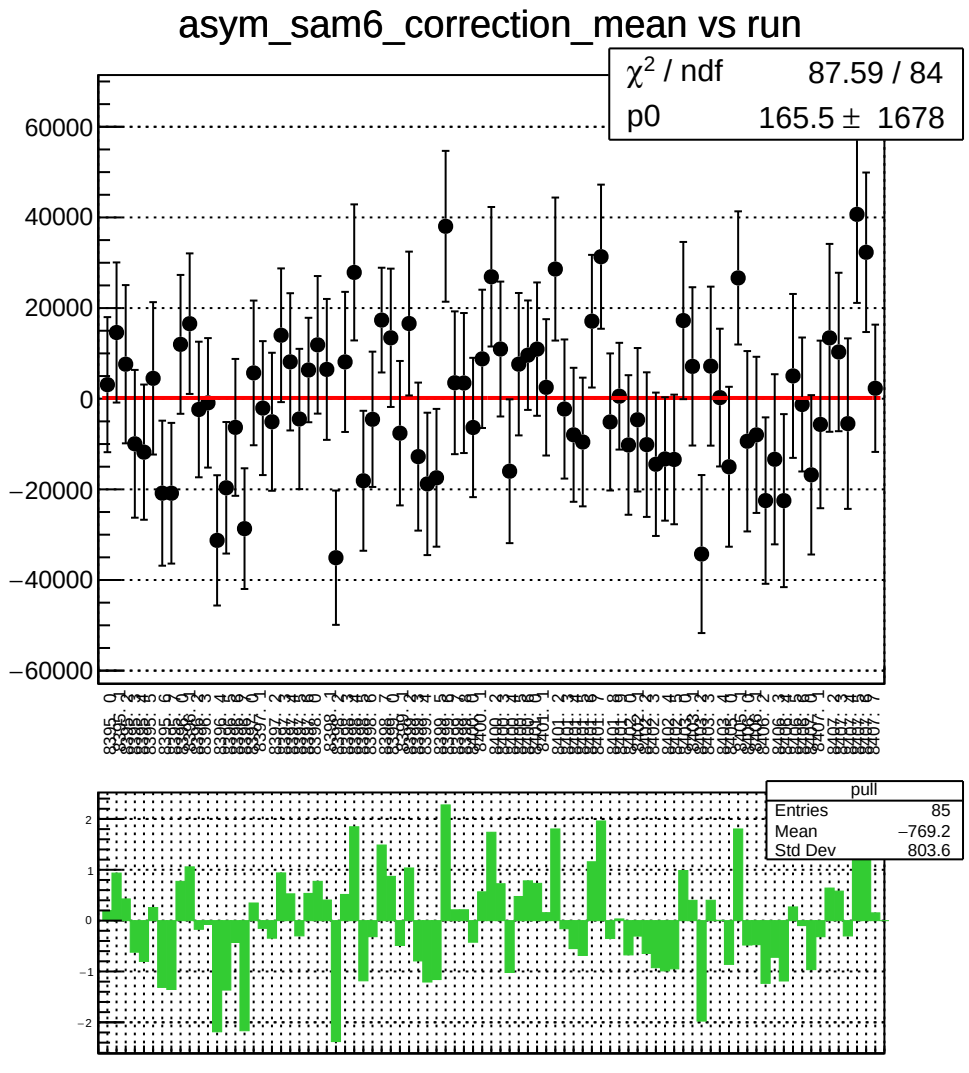

pull1D
Entries 85
Mean −0.01162
Std Dev 1.091
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

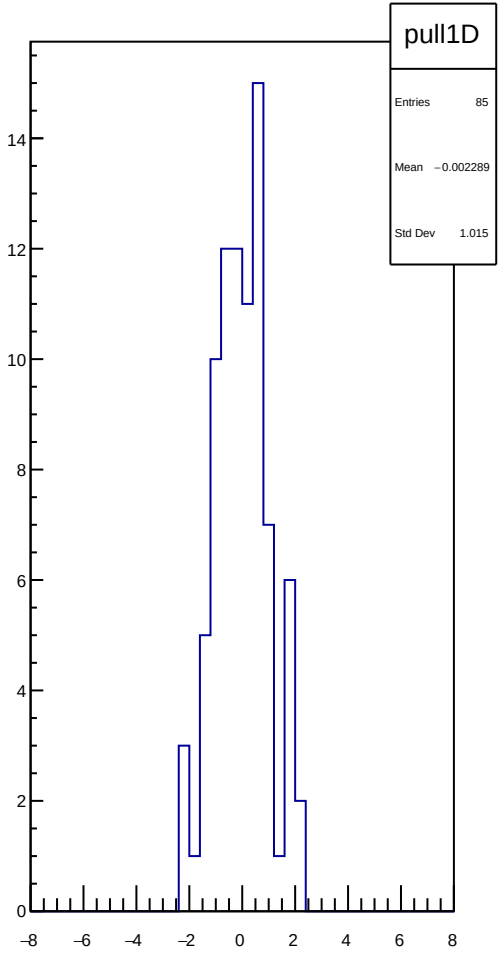

asym_sam5_correction_rms vs run
χ² / ndf 5296 / 84
p0 948.7 ± 0.7417
1100
1050
1000
950
900
850


reg_asym_sam6_mean vs run
χ² / ndf 84.34 / 84
p0 −396.6 ± 149.1
pull
Entries 85
Mean −88.54
Std Dev 138.4

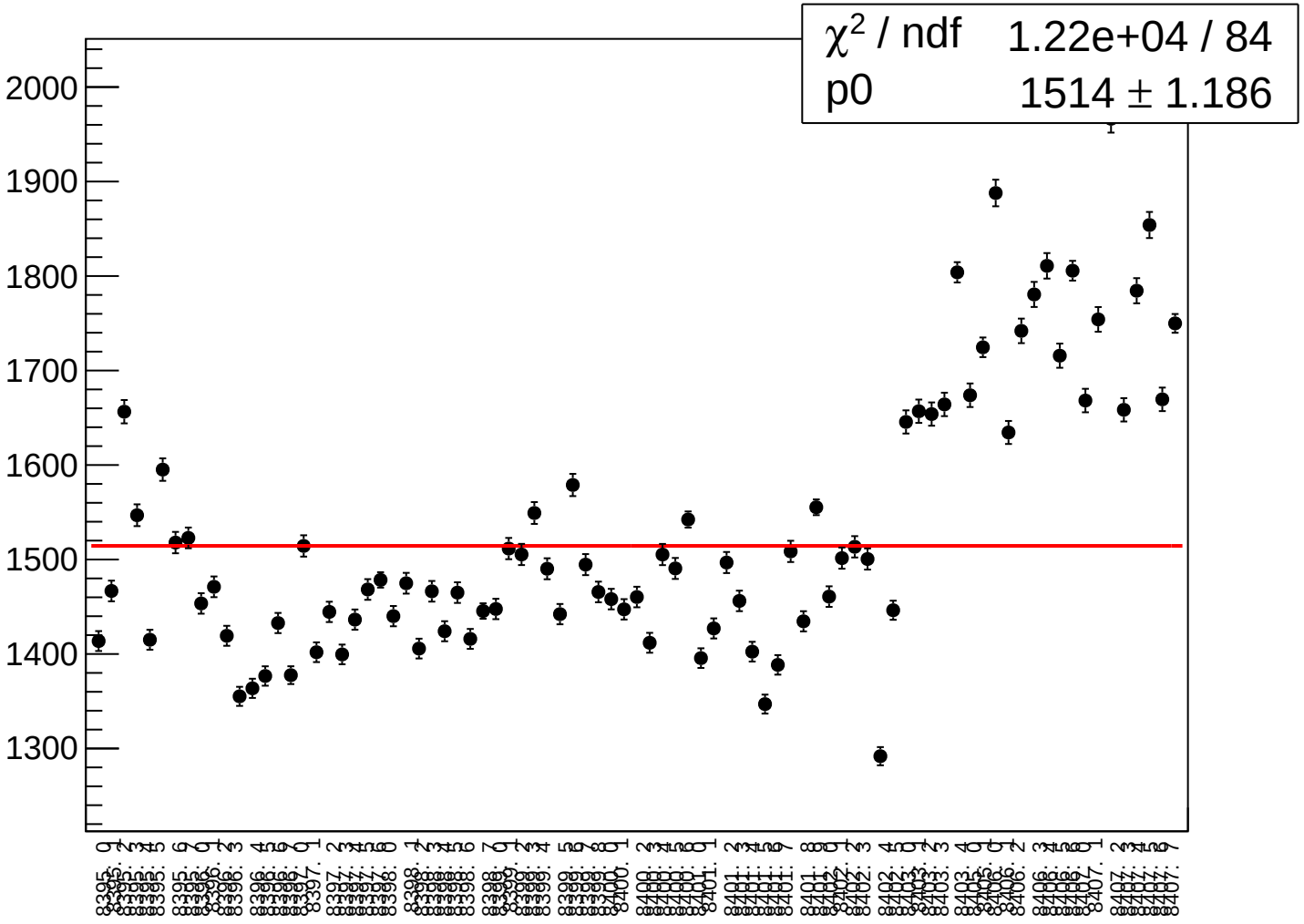

pull1D
Entries 85
Mean −0.01335
Std Dev 0.996

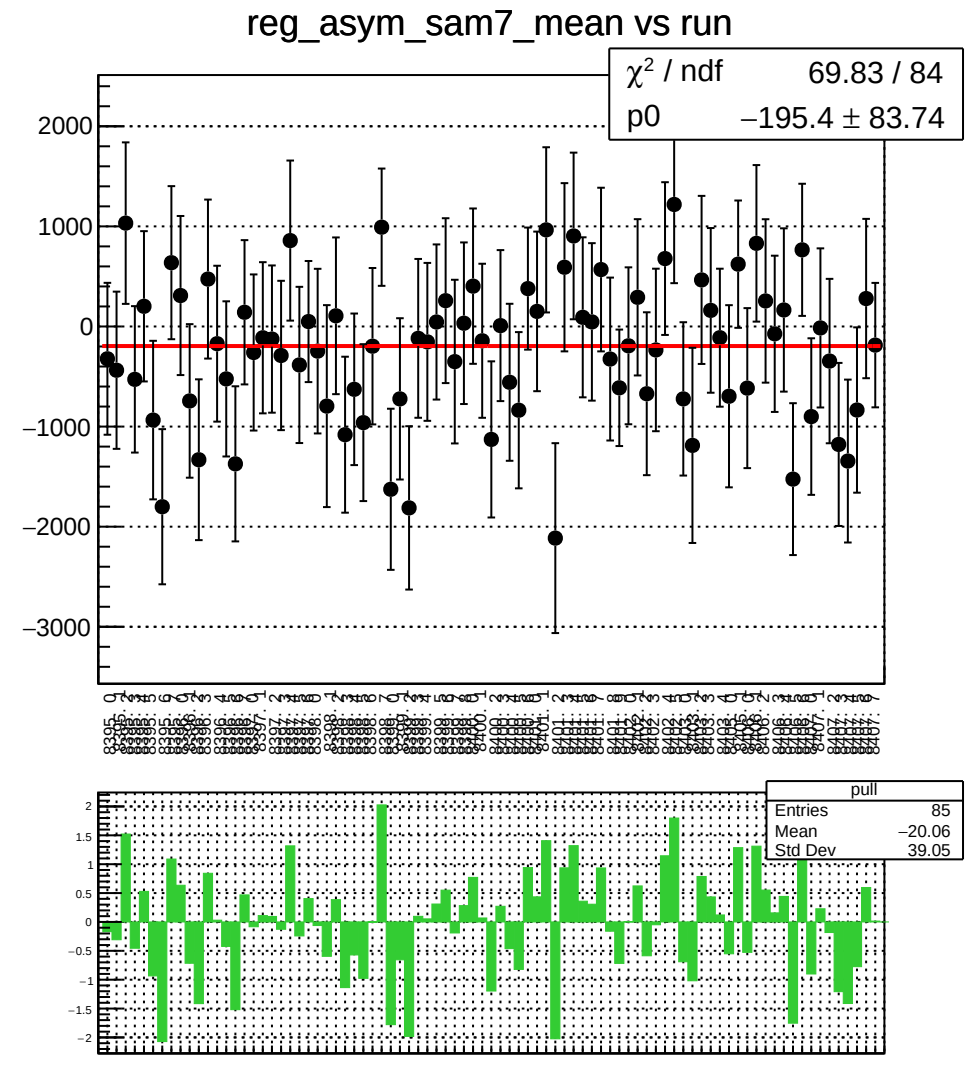

reg_asym_sam6_rms vs run
χ² / ndf 4828 / 84
p0 134.9 ± 0.1054
170
160
150
140
130
120

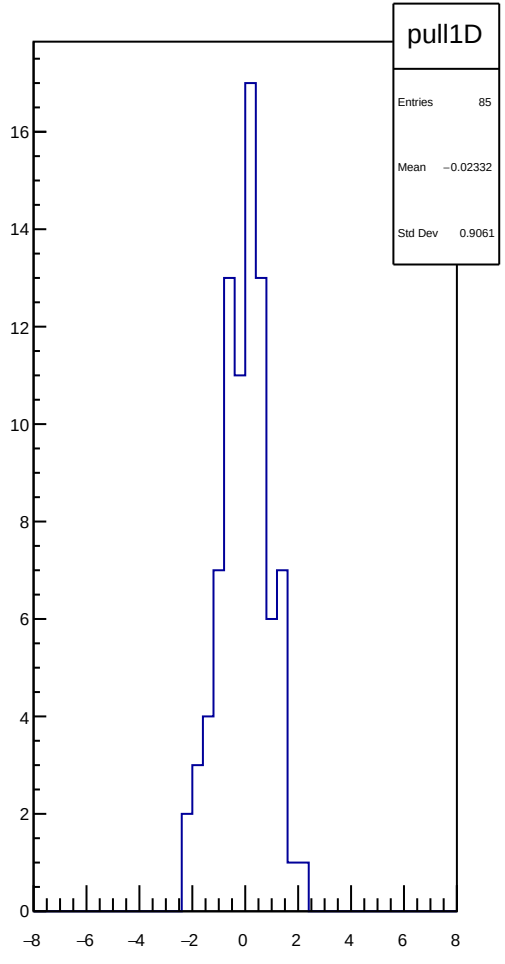

asym_sam6_correction_mean vs run
χ² / ndf 87.59 / 84
p0 165.5 ± 1678
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −769.2
Std Dev 803.6
2
1
0
−1
−2

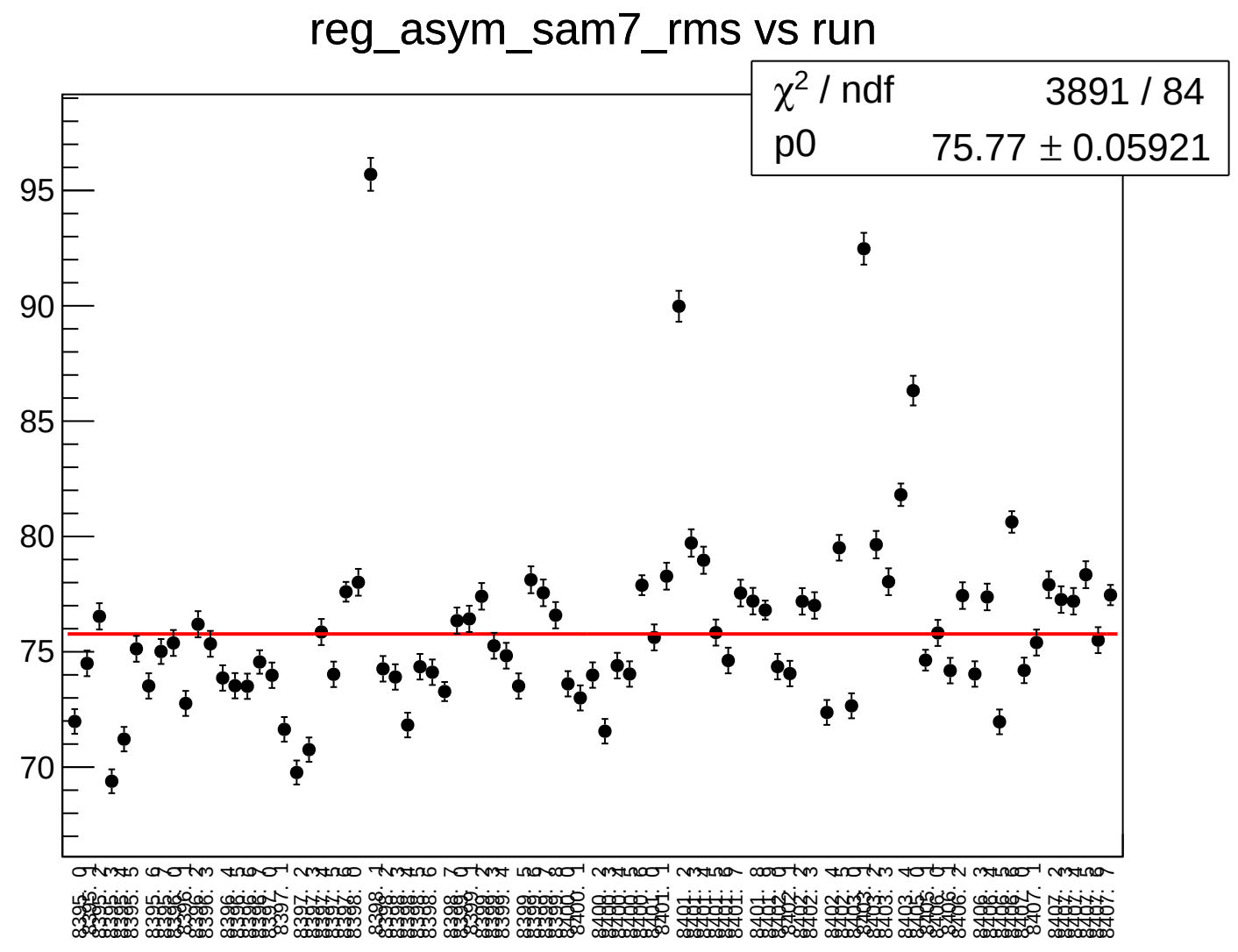

pull1D
Entries 85
Mean −0.002289
Std Dev 1.015
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

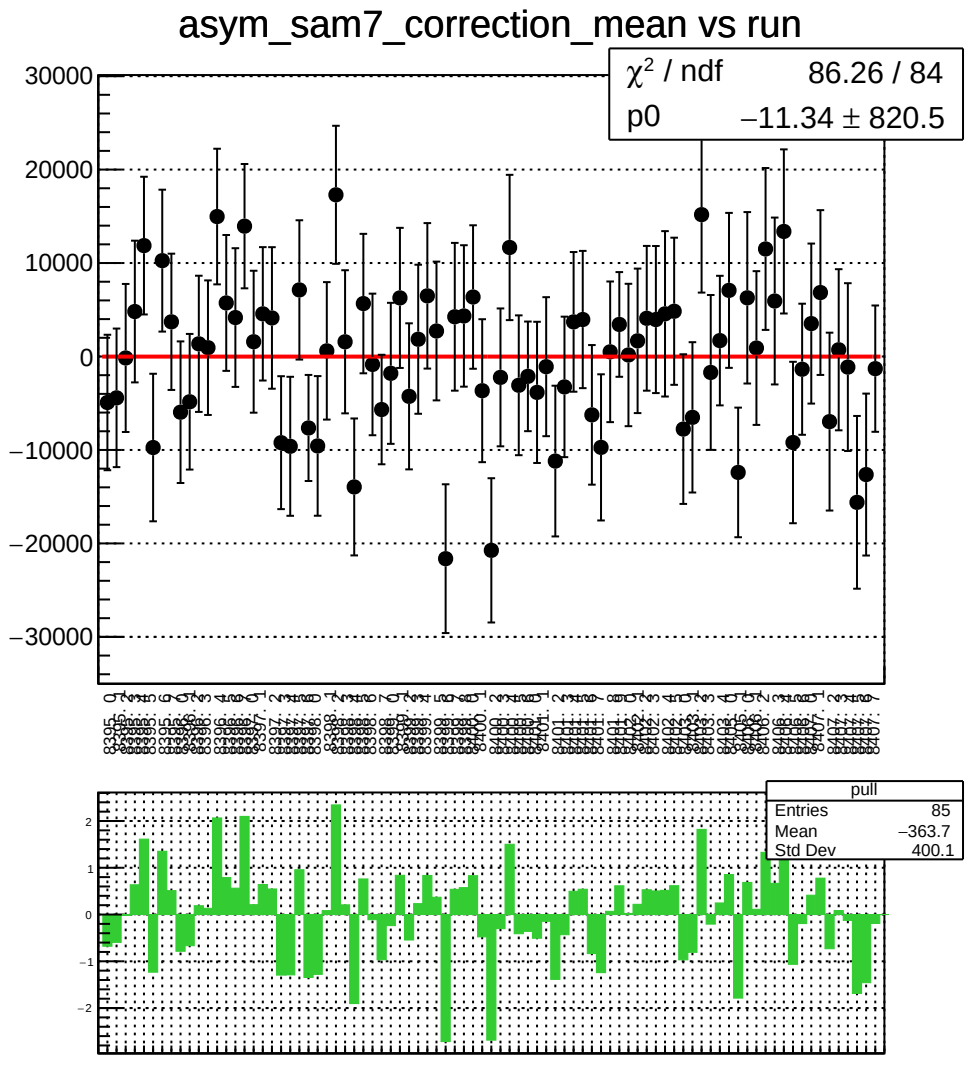
asym_sam6_correction_rms vs run

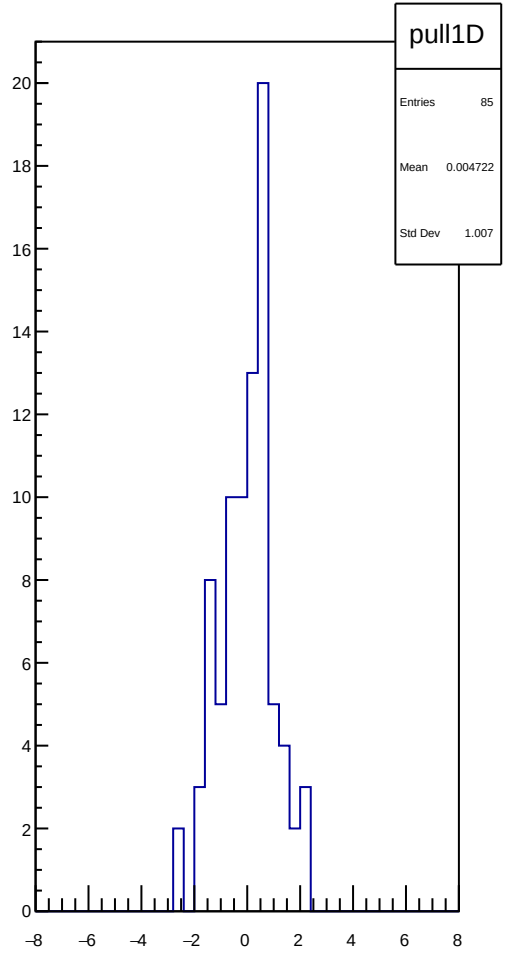


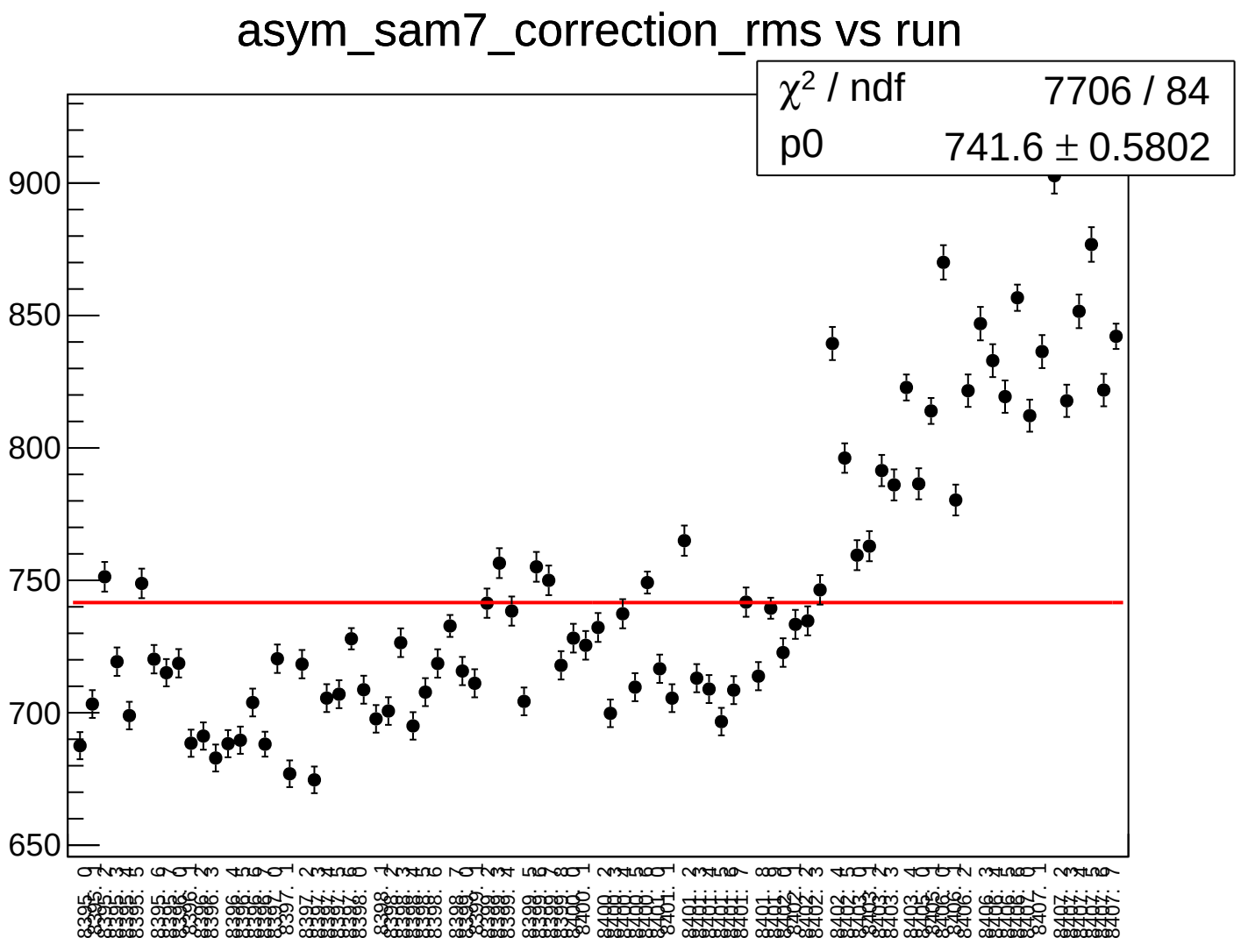

reg_asym_sam7_mean vs run
χ² / ndf 69.83 / 84
p0 −195.4 ± 83.74
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean −20.06
Std Dev 39.05
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

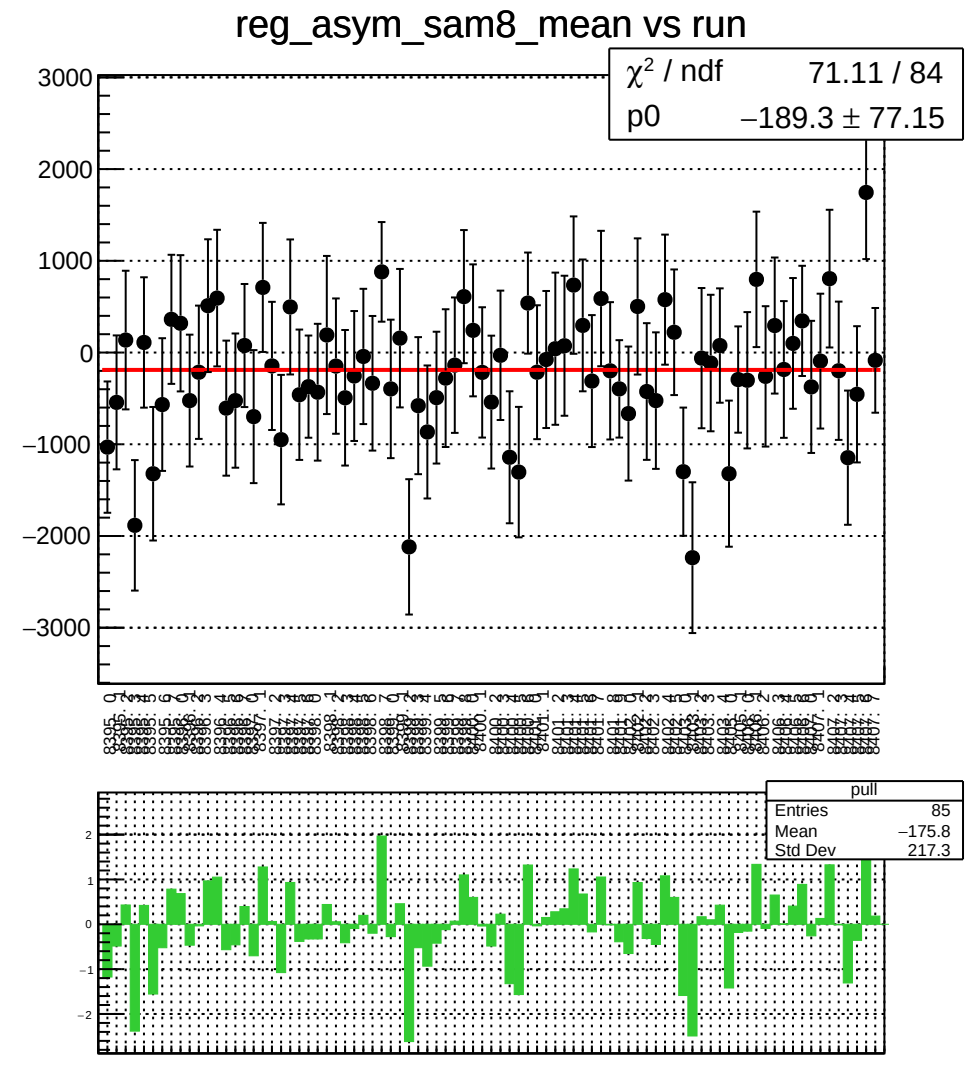

pull1D
Entries 85
Mean −0.02332
Std Dev 0.9061
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

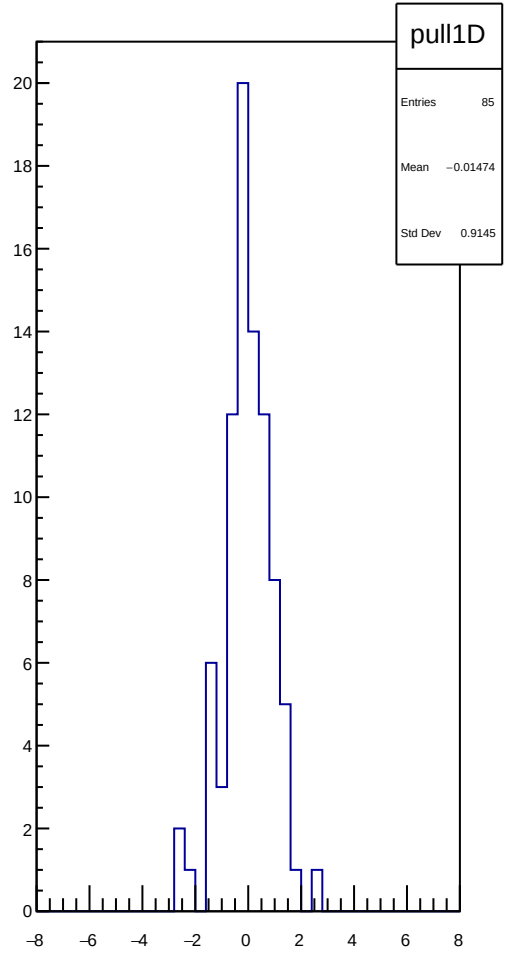

reg_asym_sam7_rms vs run
χ^2 / ndf 3891 / 84
p0 75.77 ± 0.05921
95
90
85
80
75
70

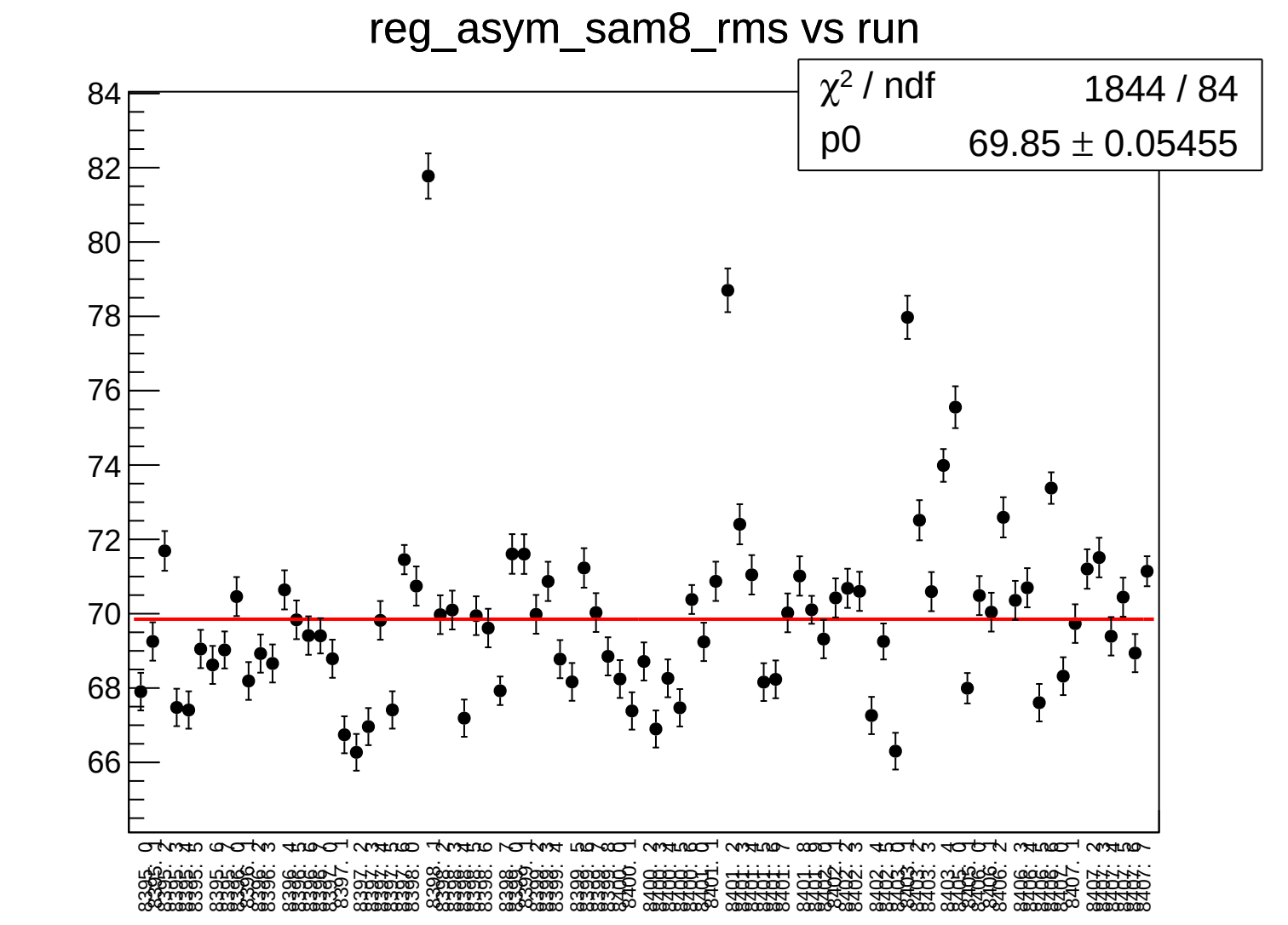

asym_sam7_correction_mean vs run
χ² / ndf 86.26 / 84
p0 −11.34 ± 820.5
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −363.7
Std Dev 400.1
2
1
0
−1
−2

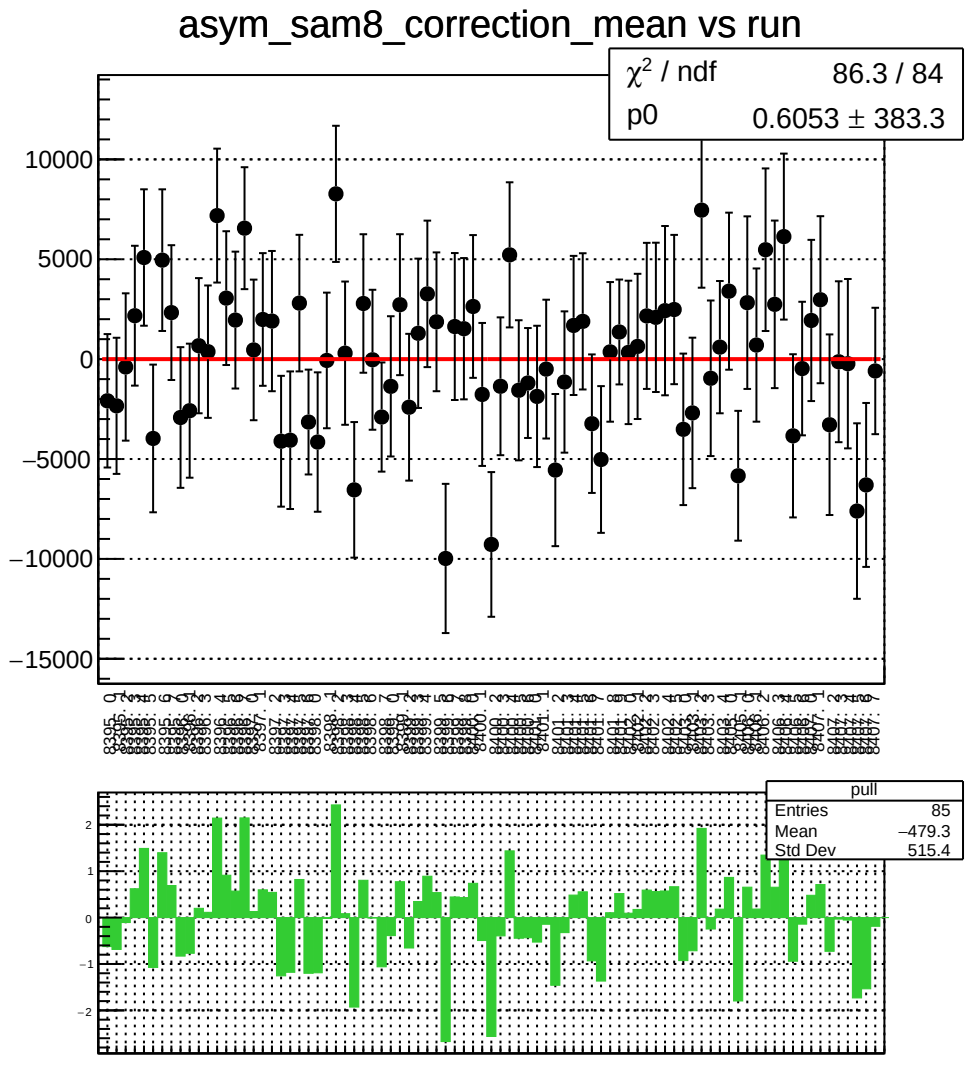

pull1D
Entries 85
Mean 0.004722
Std Dev 1.007
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

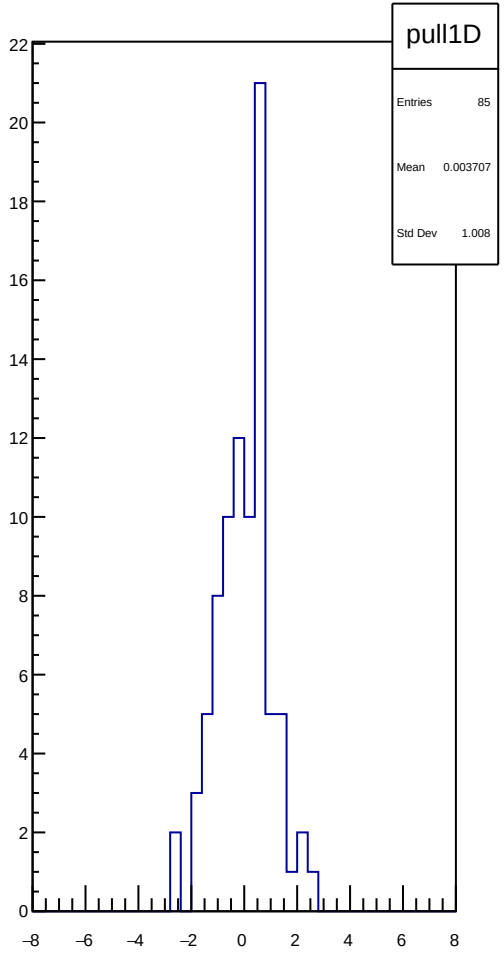

asym_sam7_correction_rms vs run
χ² / ndf 7706 / 84
p0 741.6 ± 0.5802
900
850
800
750
700
650

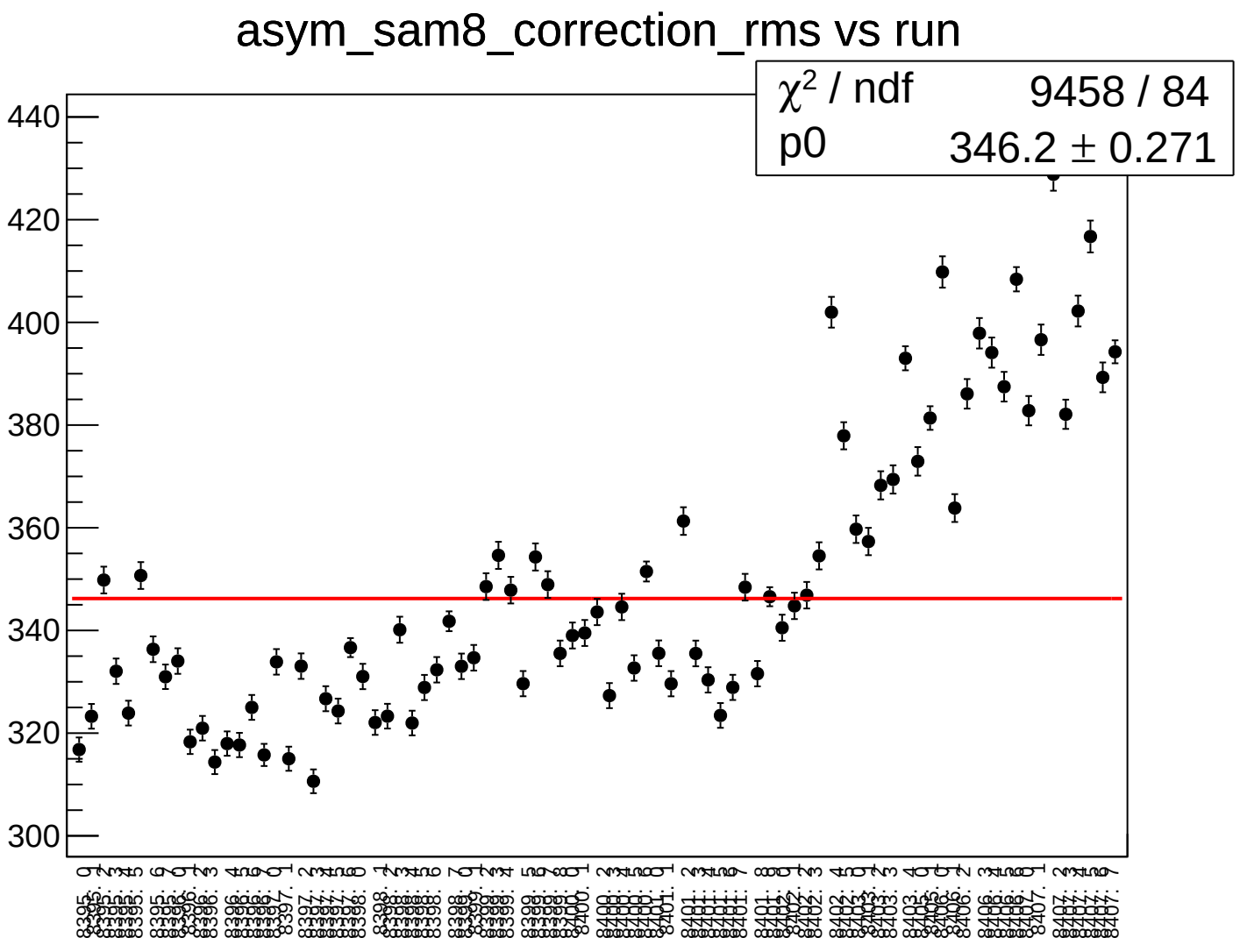

reg_asym_sam8_mean vs run
χ² / ndf 71.11 / 84
p0 −189.3 ± 77.15
pull
Entries 85
Mean −175.8
Std Dev 217.3

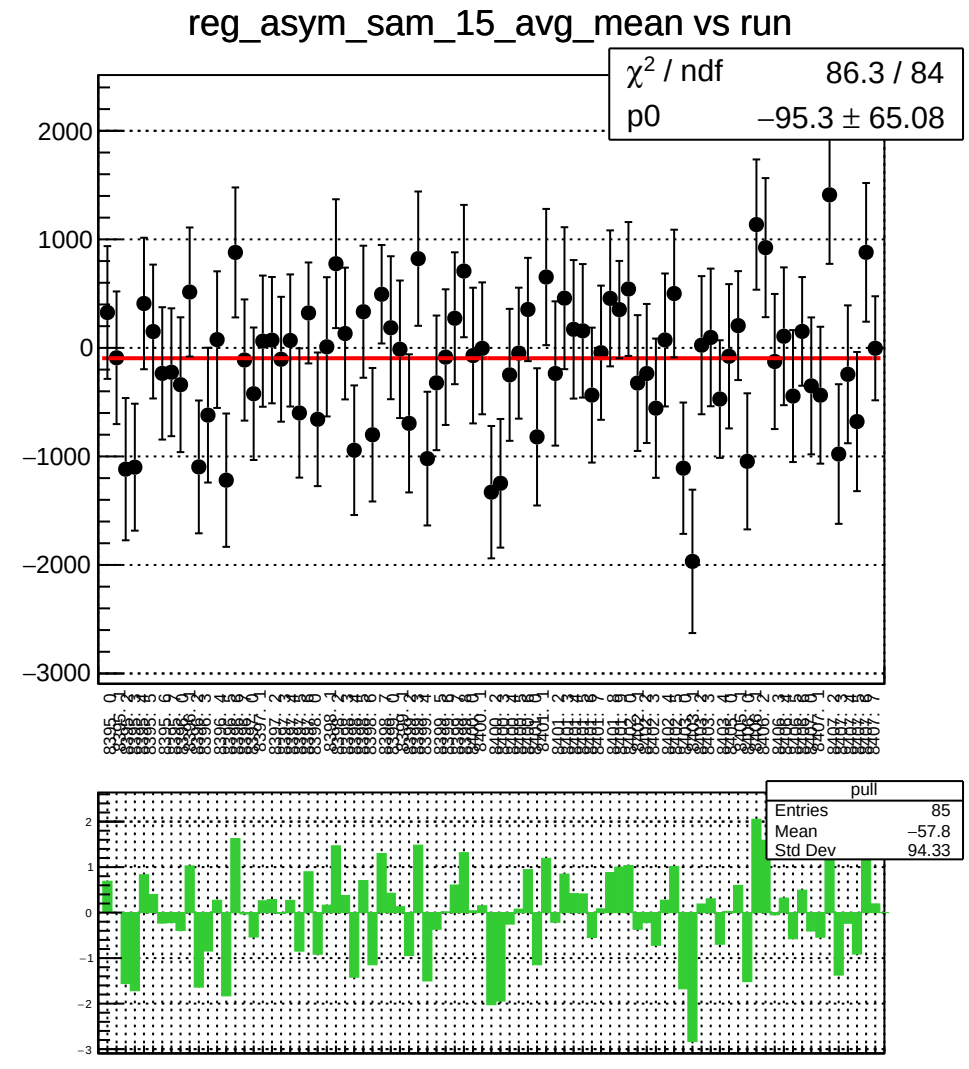

pull1D
Entries 85
Mean −0.01474
Std Dev 0.9145

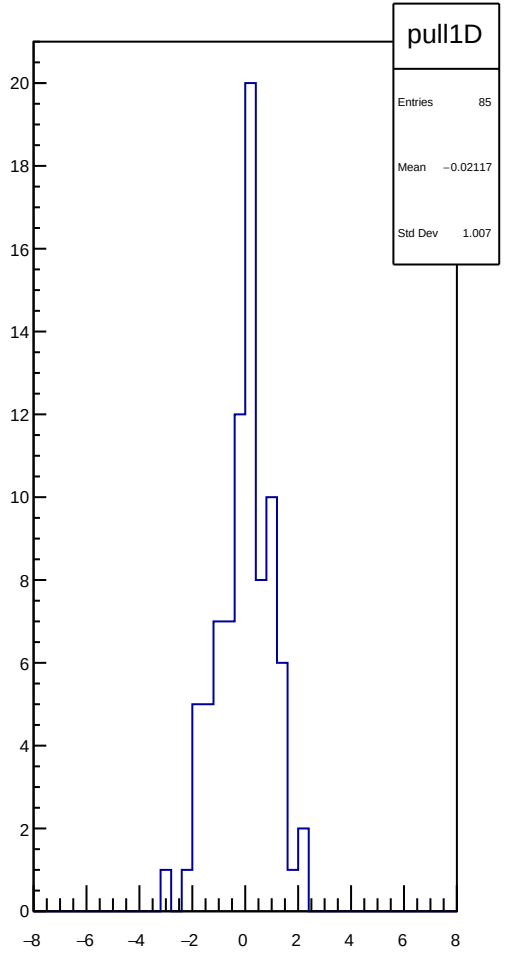

reg_asym_sam8_rms vs run
χ^2 / ndf 1844 / 84
p0 69.85 ± 0.05455
84
82
80
78
76
74
72
70
68
66

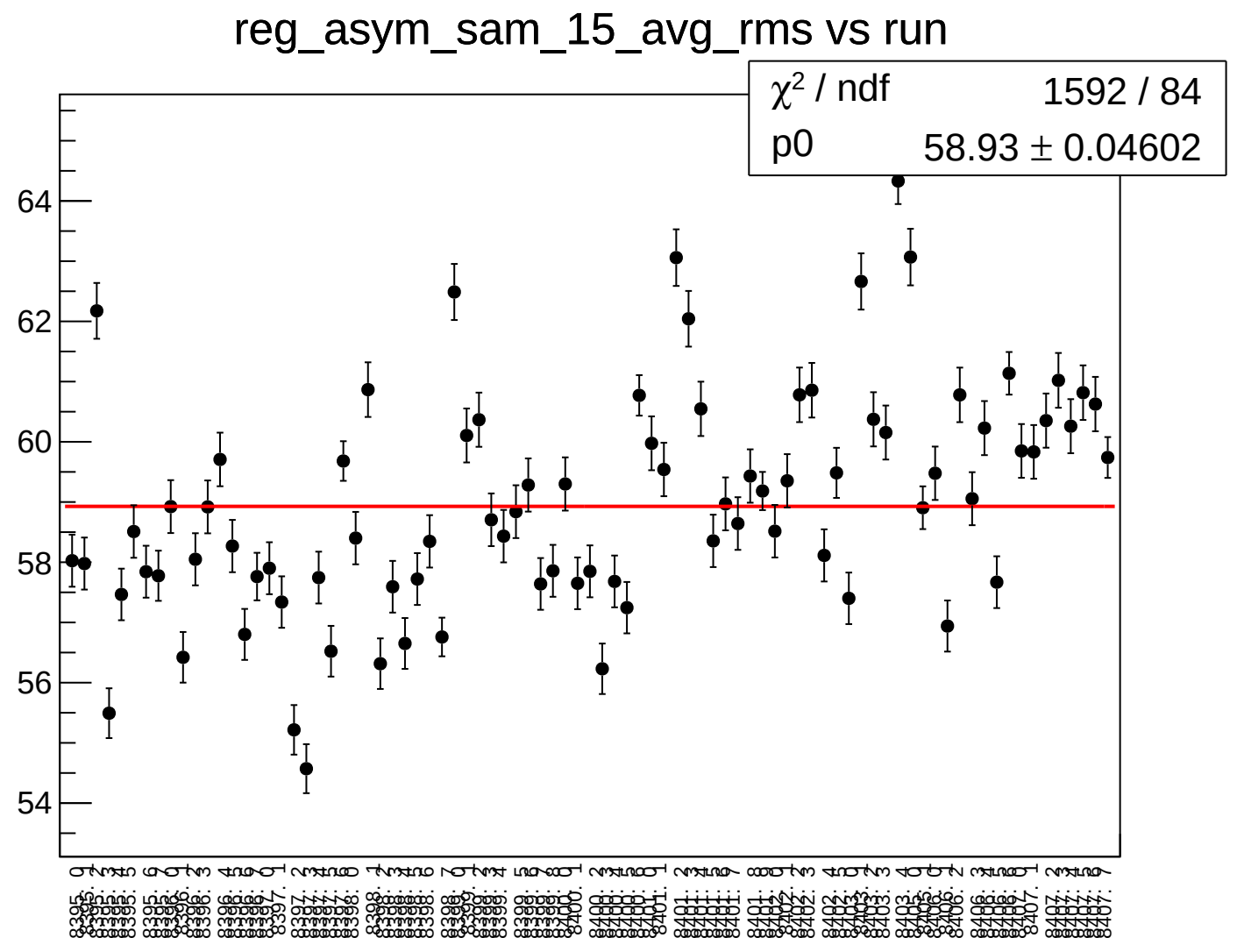

asym_sam8_correction_mean vs run
χ² / ndf 86.3 / 84
p0 0.6053 ± 383.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −479.3
Std Dev 515.4
2
1
0
−1
−2

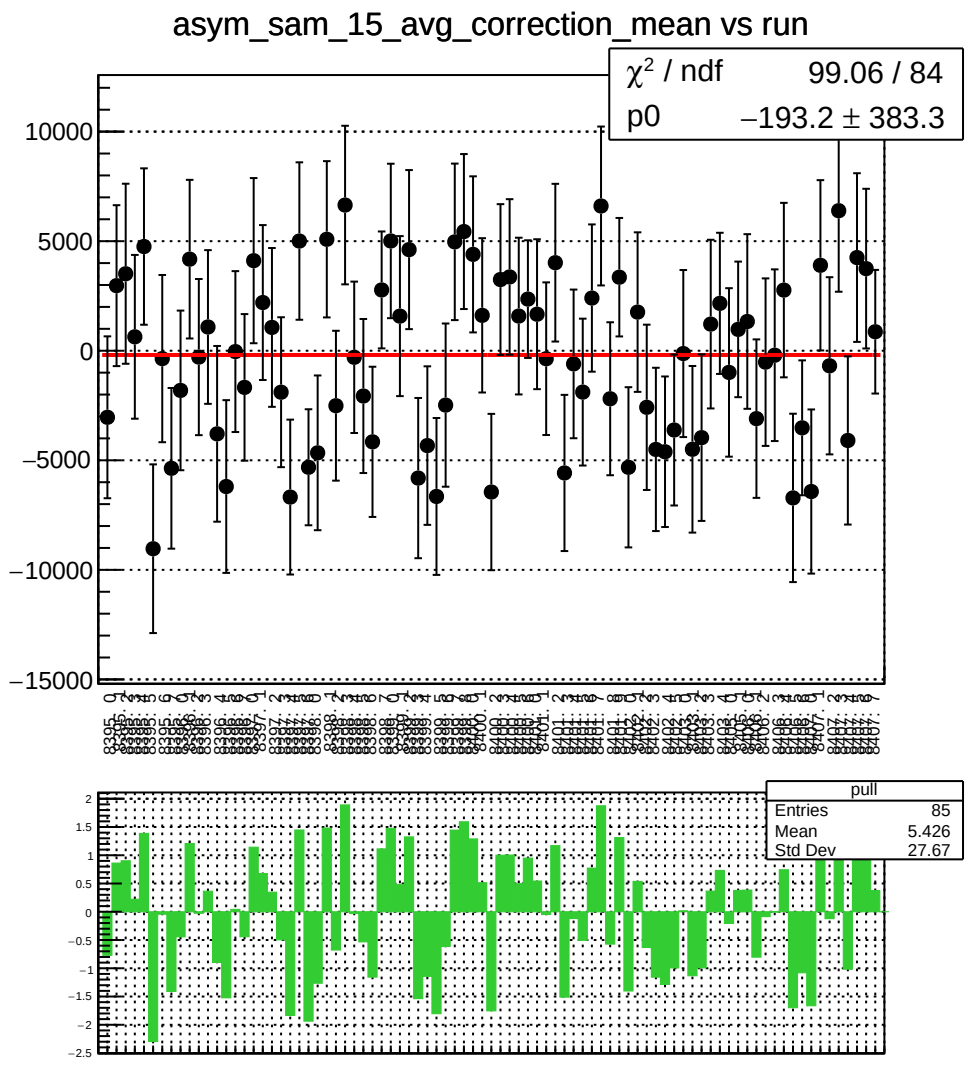

pull1D
Entries 85
Mean 0.003707
Std Dev 1.008
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

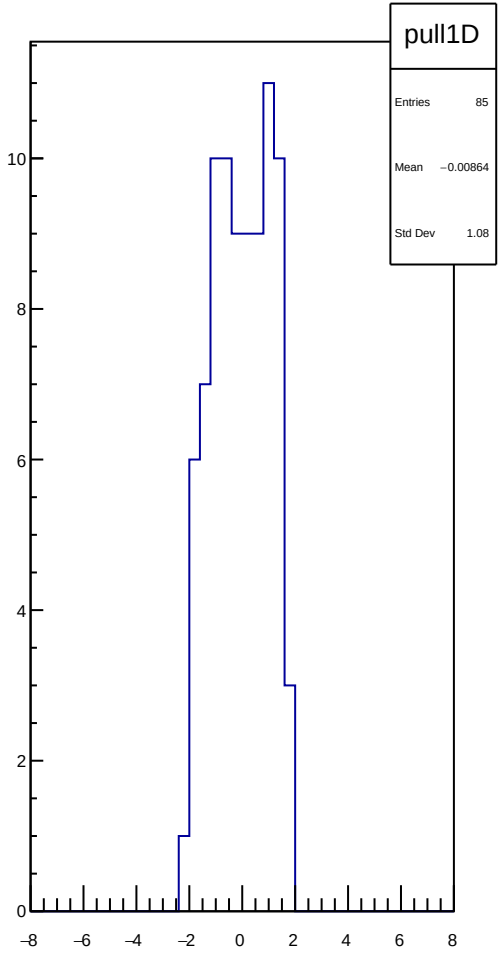

asym_sam8_correction_rms vs run
χ² / ndf 9458 / 84
p0 346.2 ± 0.271
440
420
400
380
360
340
320
300

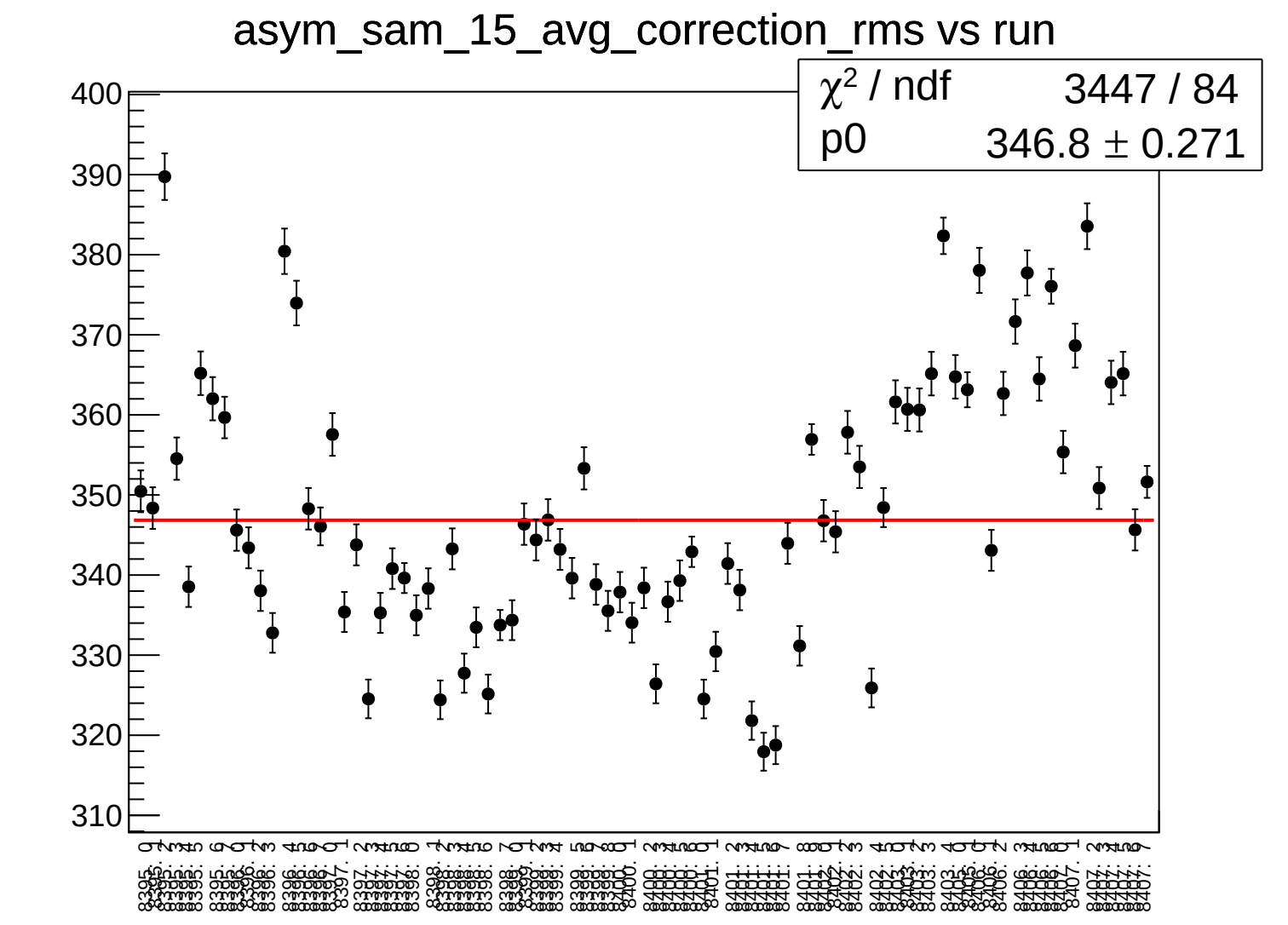

reg_asym_sam_15_avg_mean vs run
χ² / ndf 86.3 / 84
p0 −95.3 ± 65.08
pull
Entries 85
Mean −57.8
Std Dev 94.33

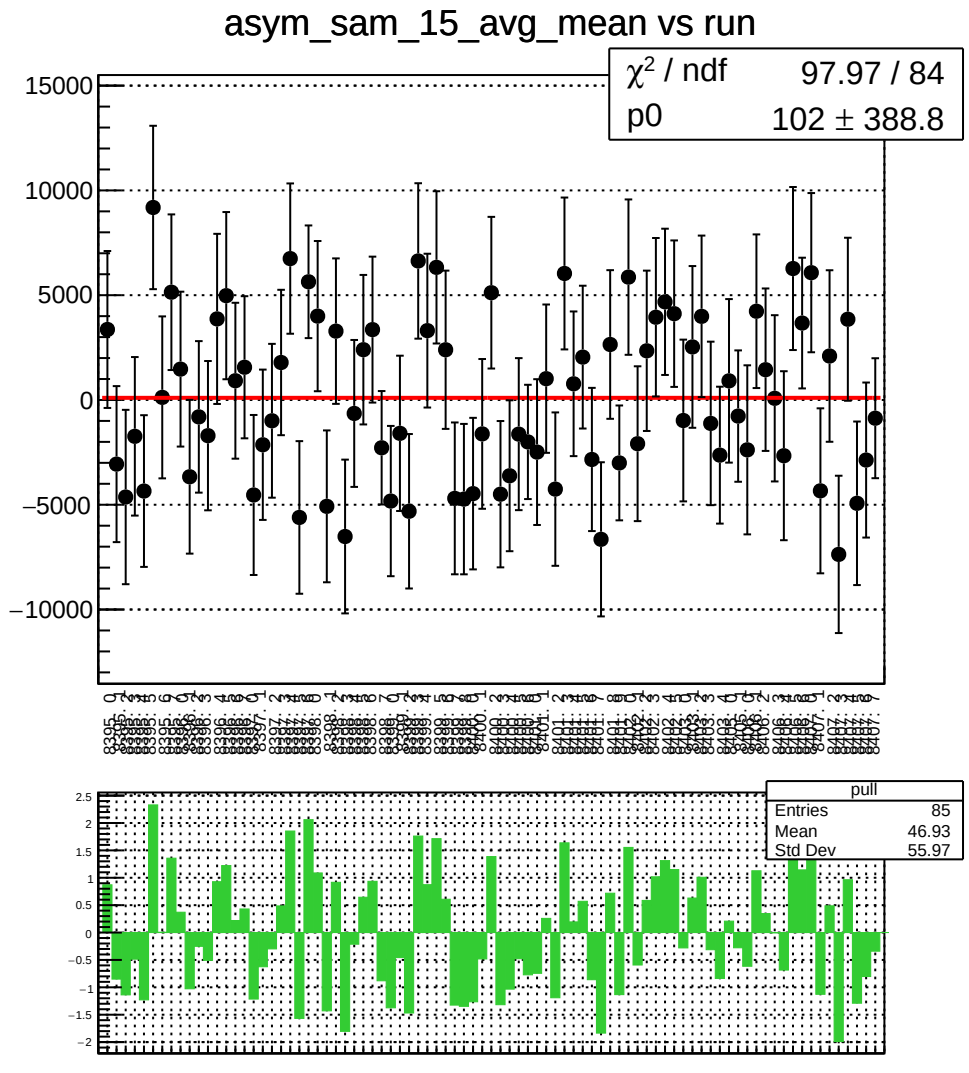

pull1D
Entries 85
Mean −0.02117
Std Dev 1.007

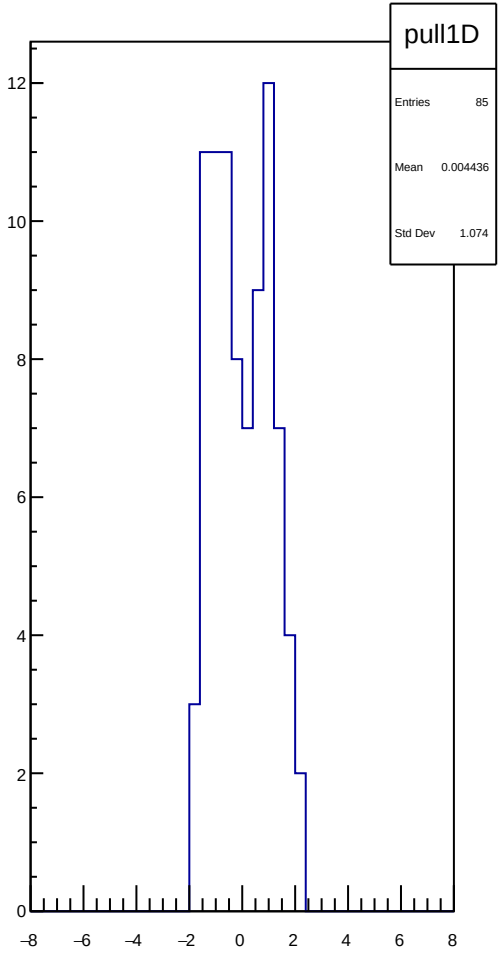

reg_asym_sam_15_avg_rms vs run
χ² / ndf 1592 / 84
p0 58.93 ± 0.04602
64
62
60
58
56
54

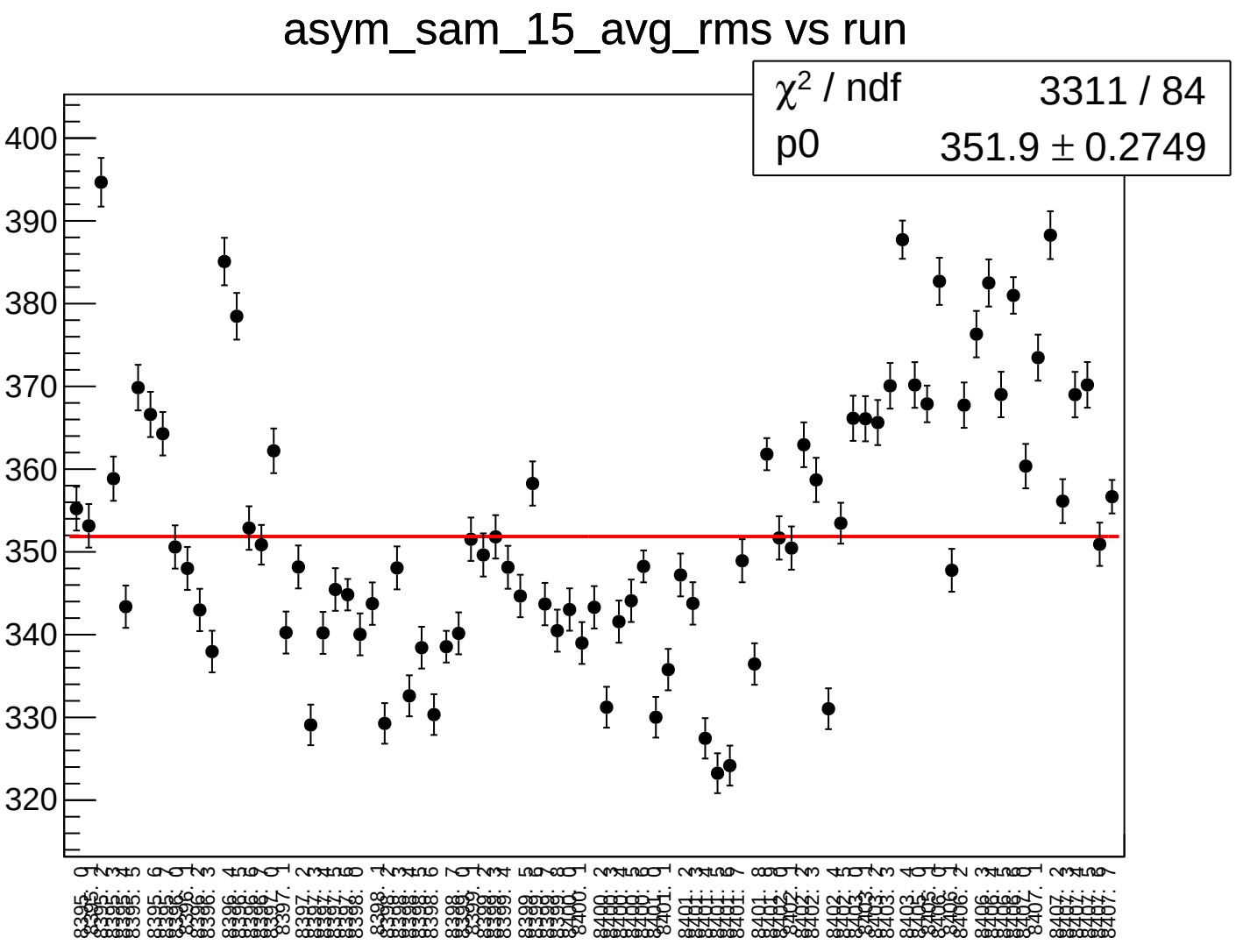

asym_sam_15_avg_correction_mean vs run
χ² / ndf 99.06 / 84
p0 −193.2 ± 383.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 5.426
Std Dev 27.67
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

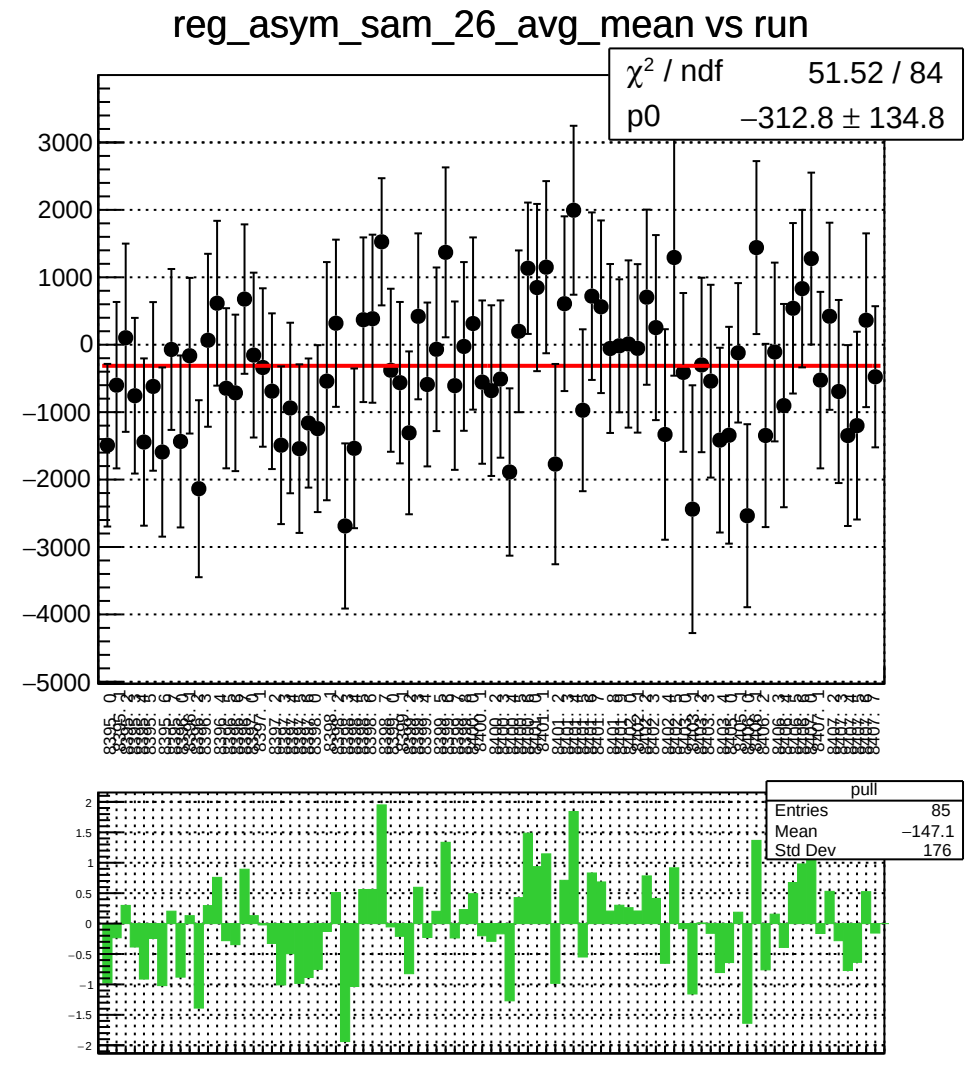

pull1D
Entries 85
Mean −0.00864
Std Dev 1.08
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

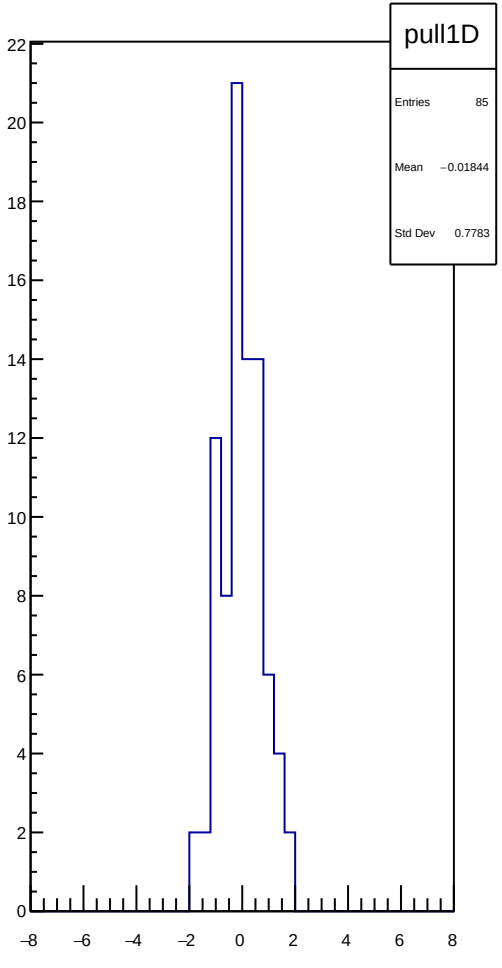

asym_sam_15_avg_correction_rms vs run
χ^2 / ndf 3447 / 84
p0 346.8 ± 0.271
400
390
380
370
360
350
340
330
320
310

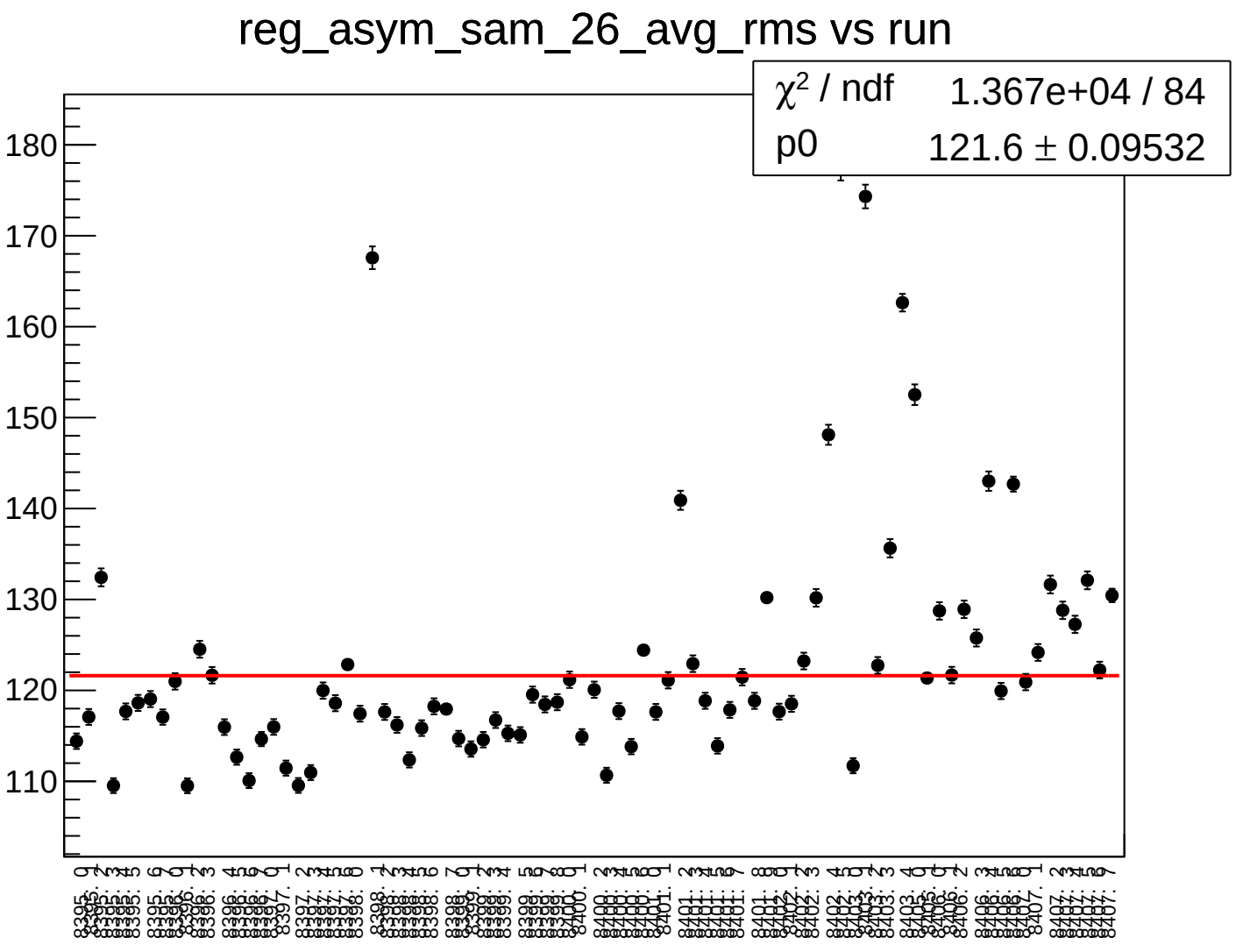

asym_sam_15_avg_mean vs run
χ² / ndf 97.97 / 84
p0 102 ± 388.8
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 46.93
Std Dev 55.97
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

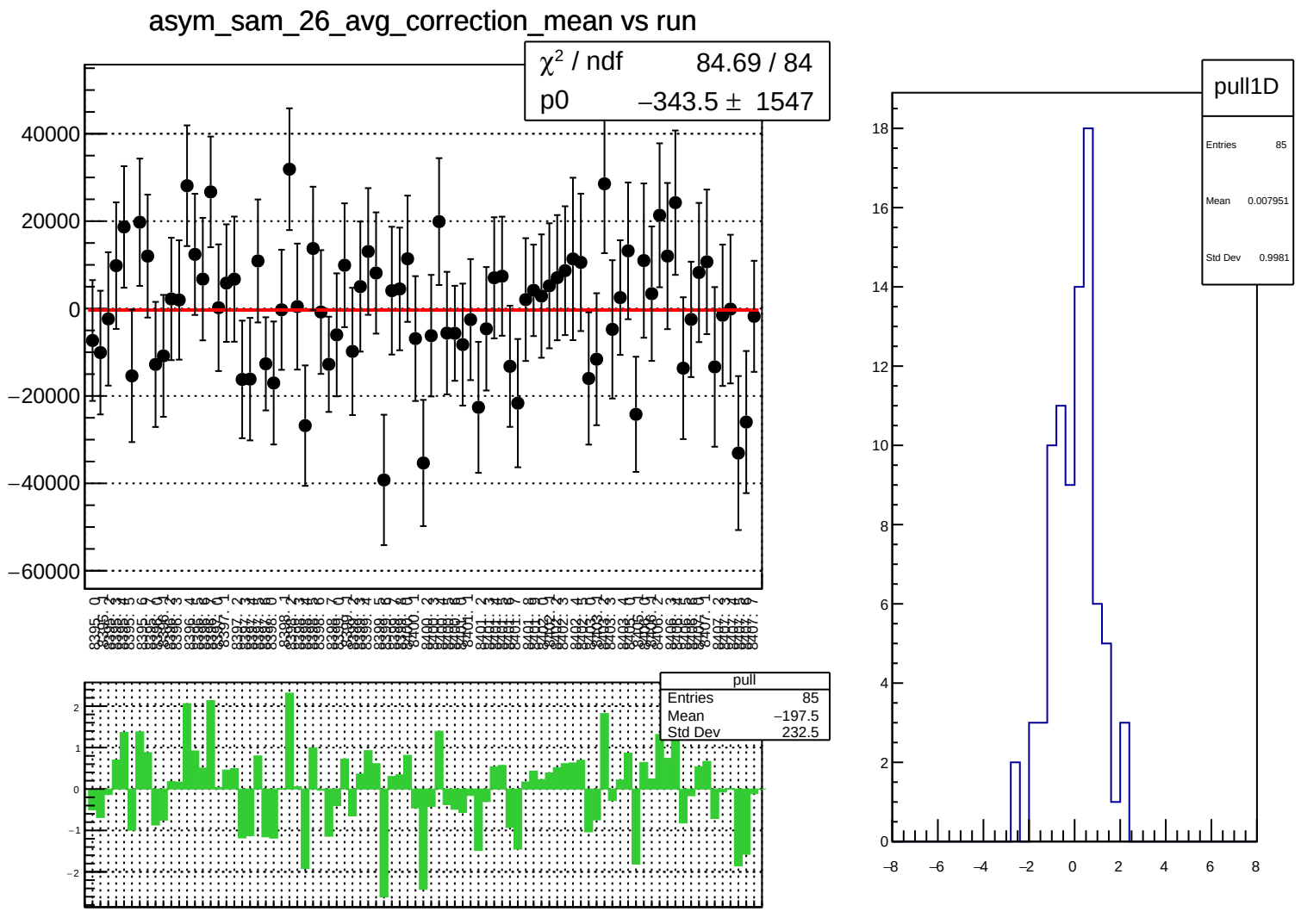

pull1D
Entries 85
Mean 0.004436
Std Dev 1.074
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

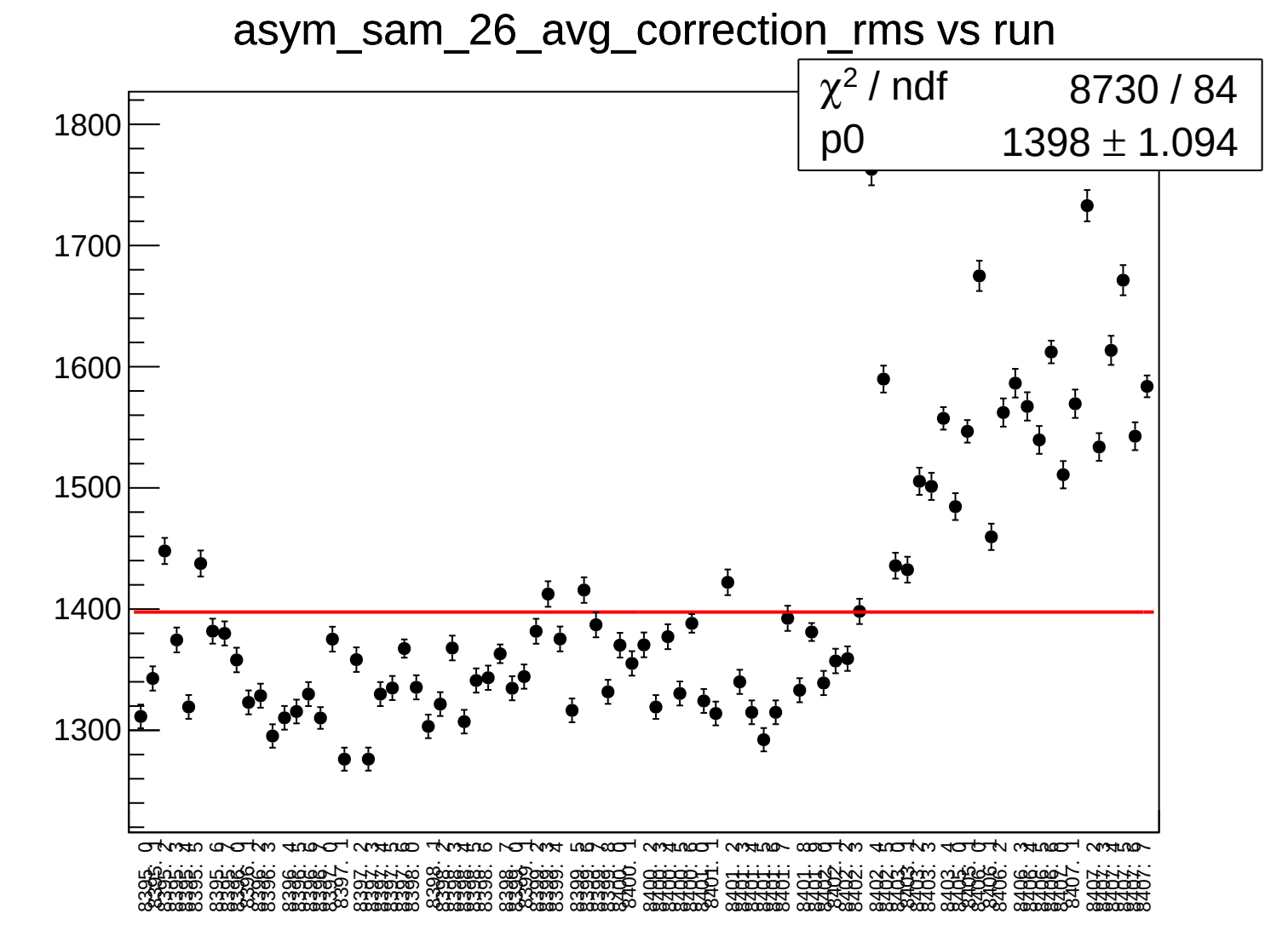

asym_sam_15_avg_rms vs run
χ² / ndf 3311 / 84
p0 351.9 ± 0.2749
400
390
380
370
360
350
340
330
320

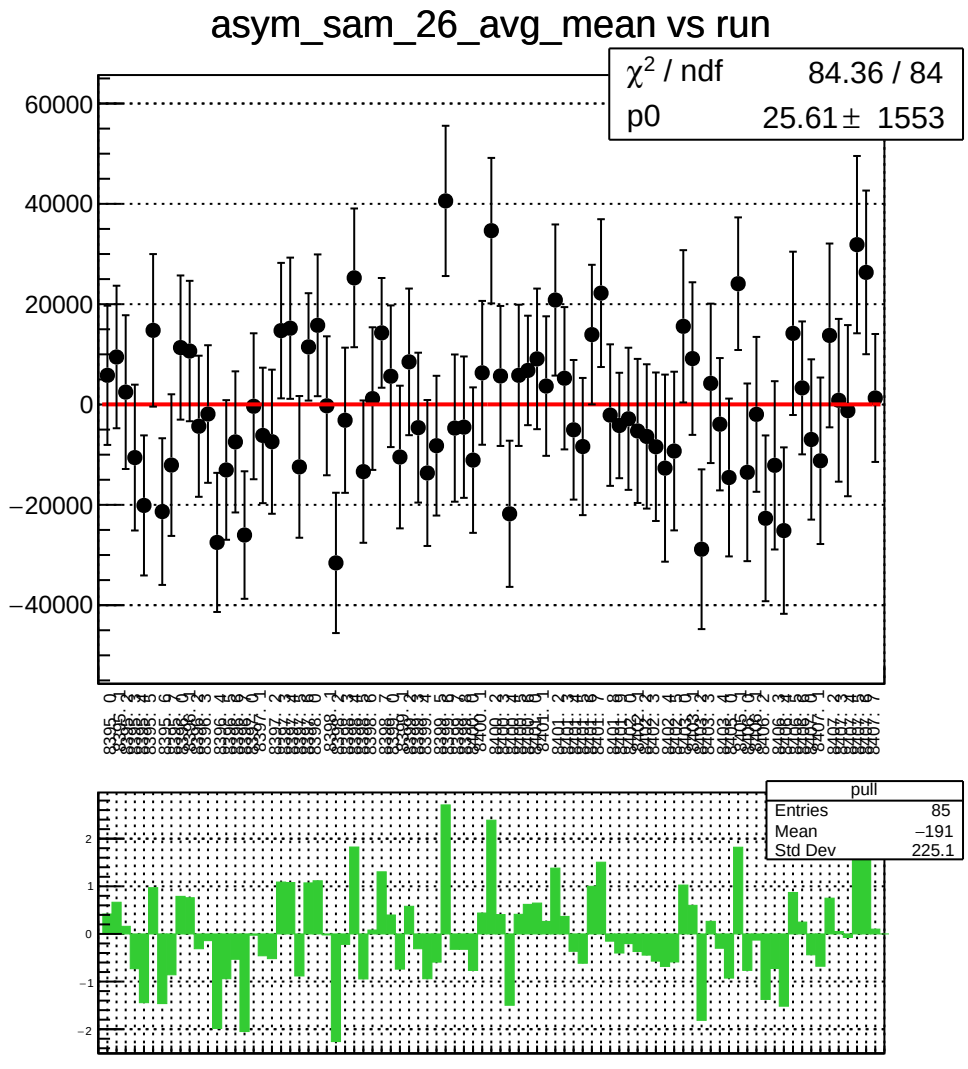

reg_asym_sam_26_avg_mean vs run
χ² / ndf 51.52 / 84
p0 −312.8 ± 134.8
pull
Entries 85
Mean −147.1
Std Dev 176

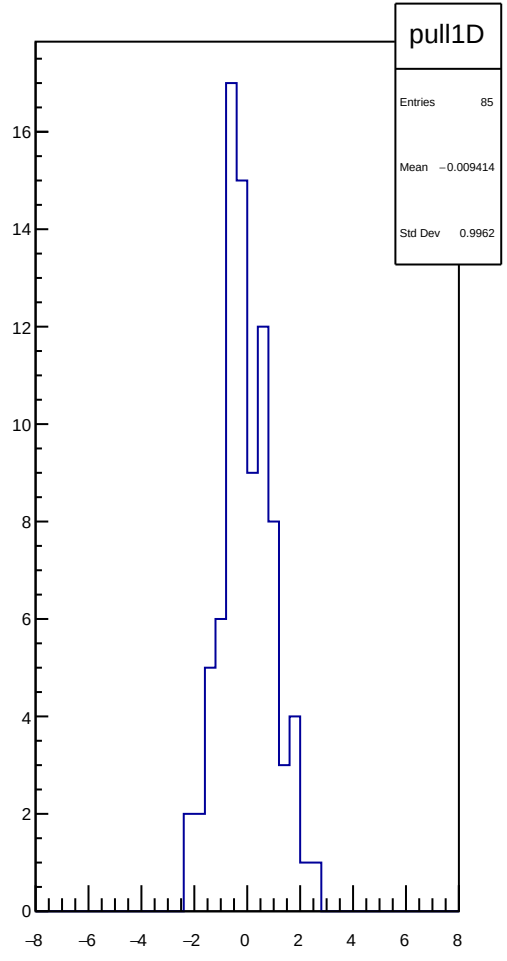

pull1D
Entries 85
Mean −0.01844
Std Dev 0.7783

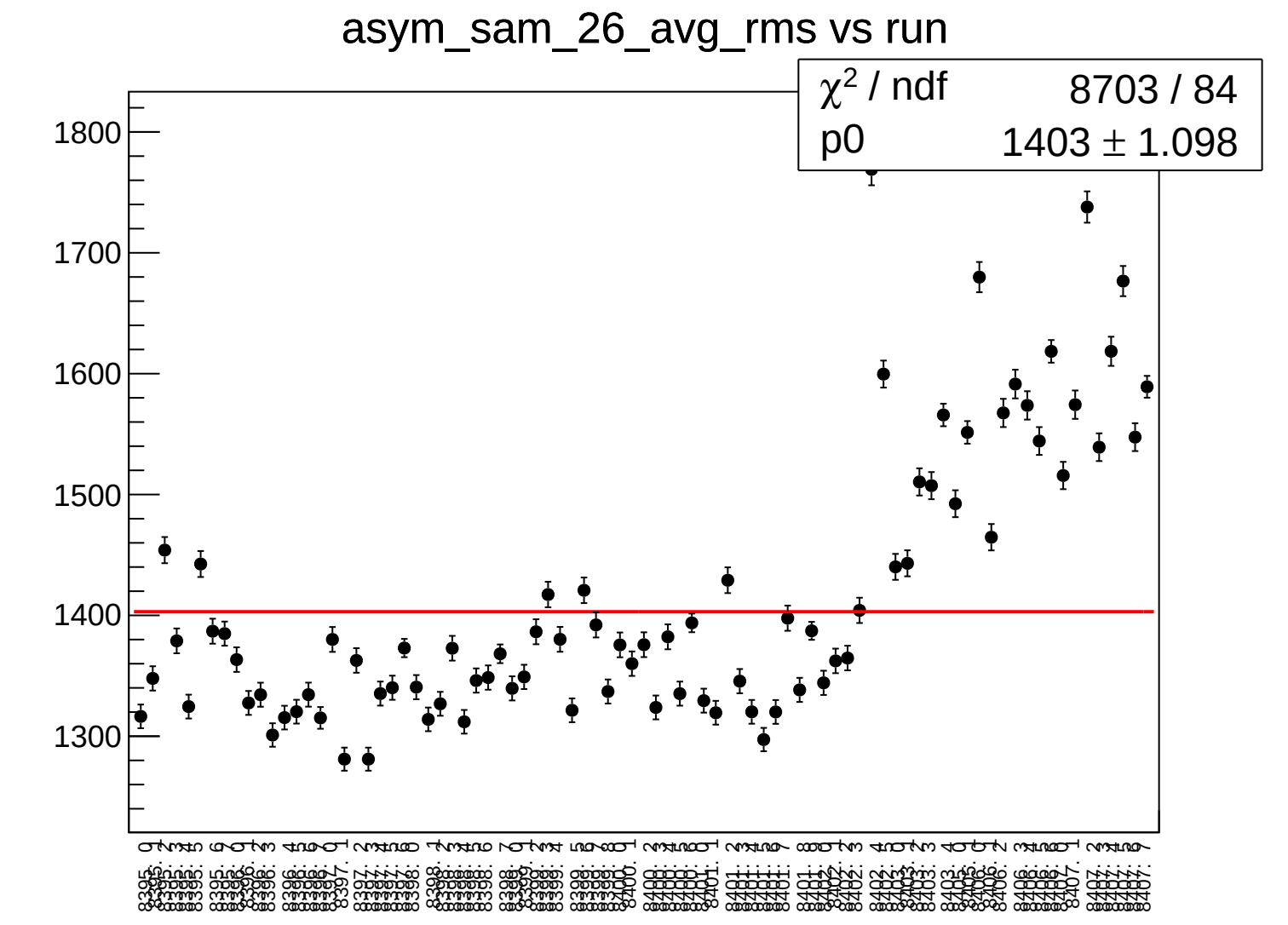

reg_asym_sam_26_avg_rms vs run
χ^2 / ndf 1.367e+04 / 84
p0 121.6 ± 0.09532
180
170
160
150
140
130
120
110

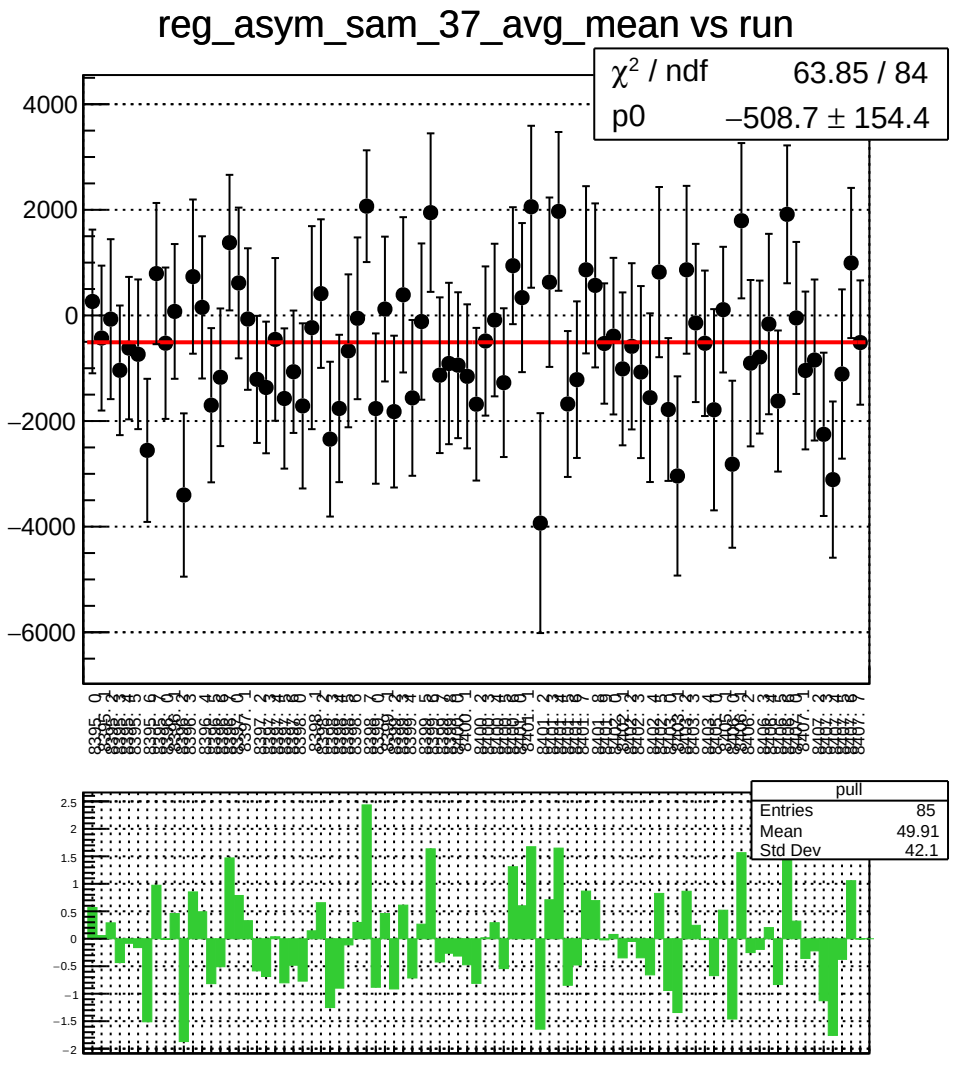

asym_sam_26_avg_correction_mean vs run
χ² / ndf 84.69 / 84
p0 −343.5 ± 1547
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −197.5
Std Dev 232.5
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.007951
Std Dev 0.9981
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

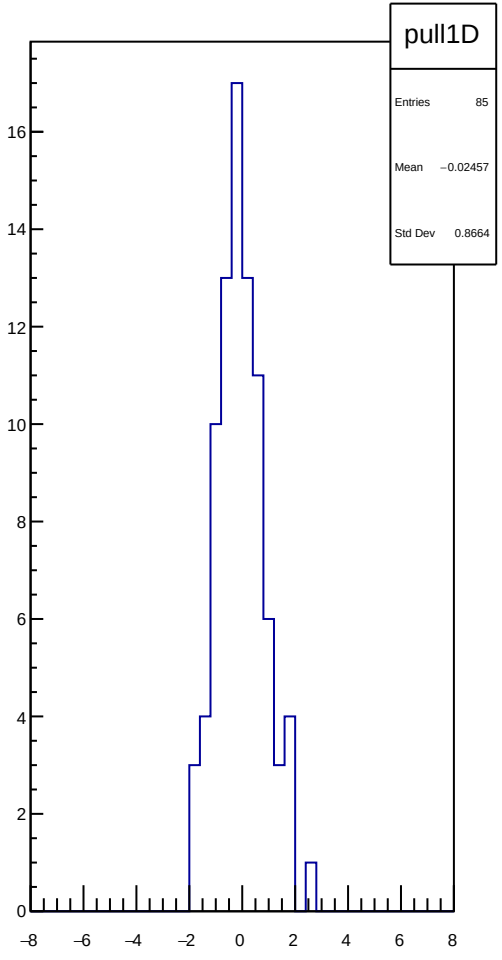

asym_sam_26_avg_correction_rms vs run
χ² / ndf 8730 / 84
p0 1398 ± 1.094
1800
1700
1600
1500
1400
1300

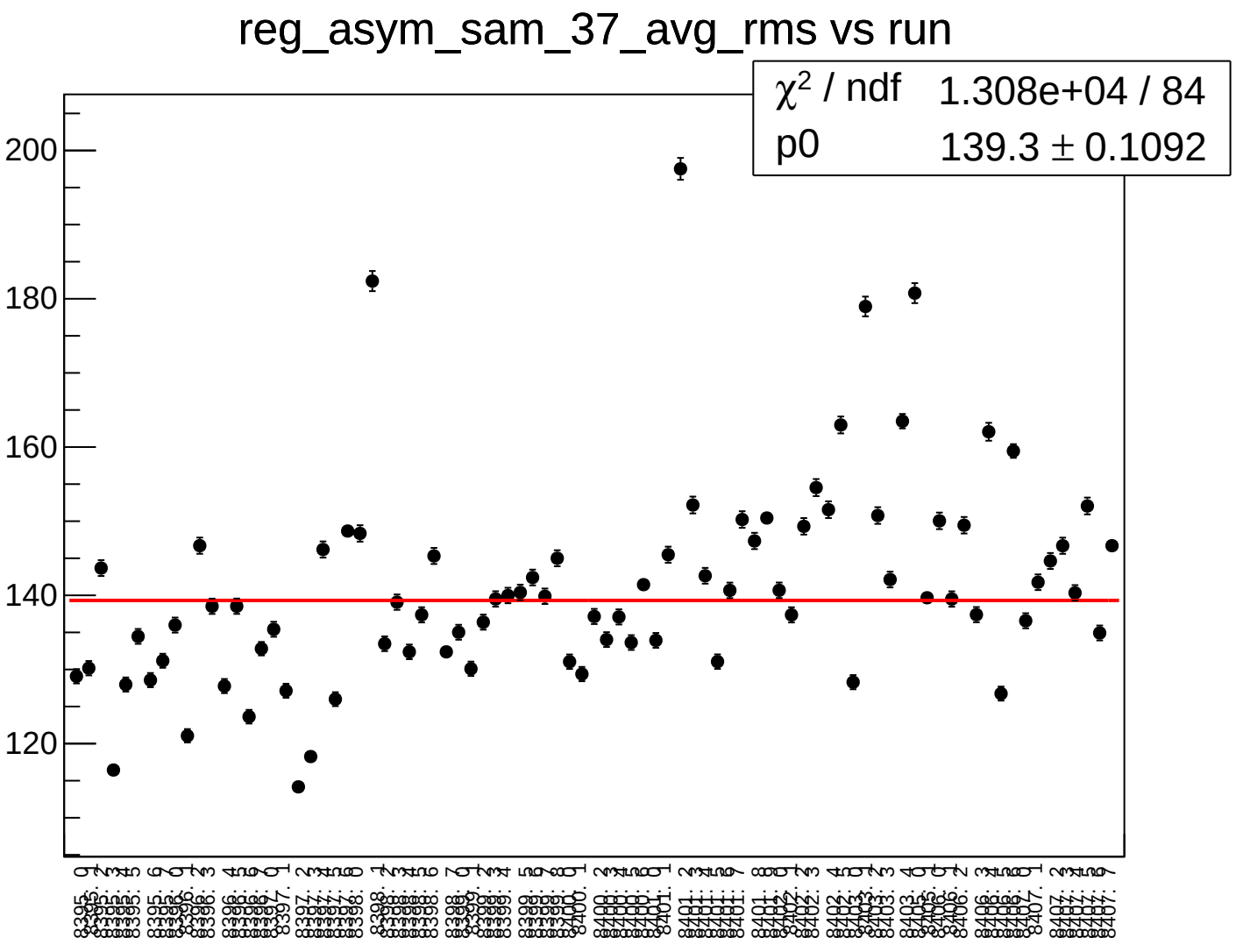

asym_sam_26_avg_mean vs run
χ² / ndf 84.36 / 84
p0 25.61 ± 1553
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −191
Std Dev 225.1
2
1
0
−1
−2

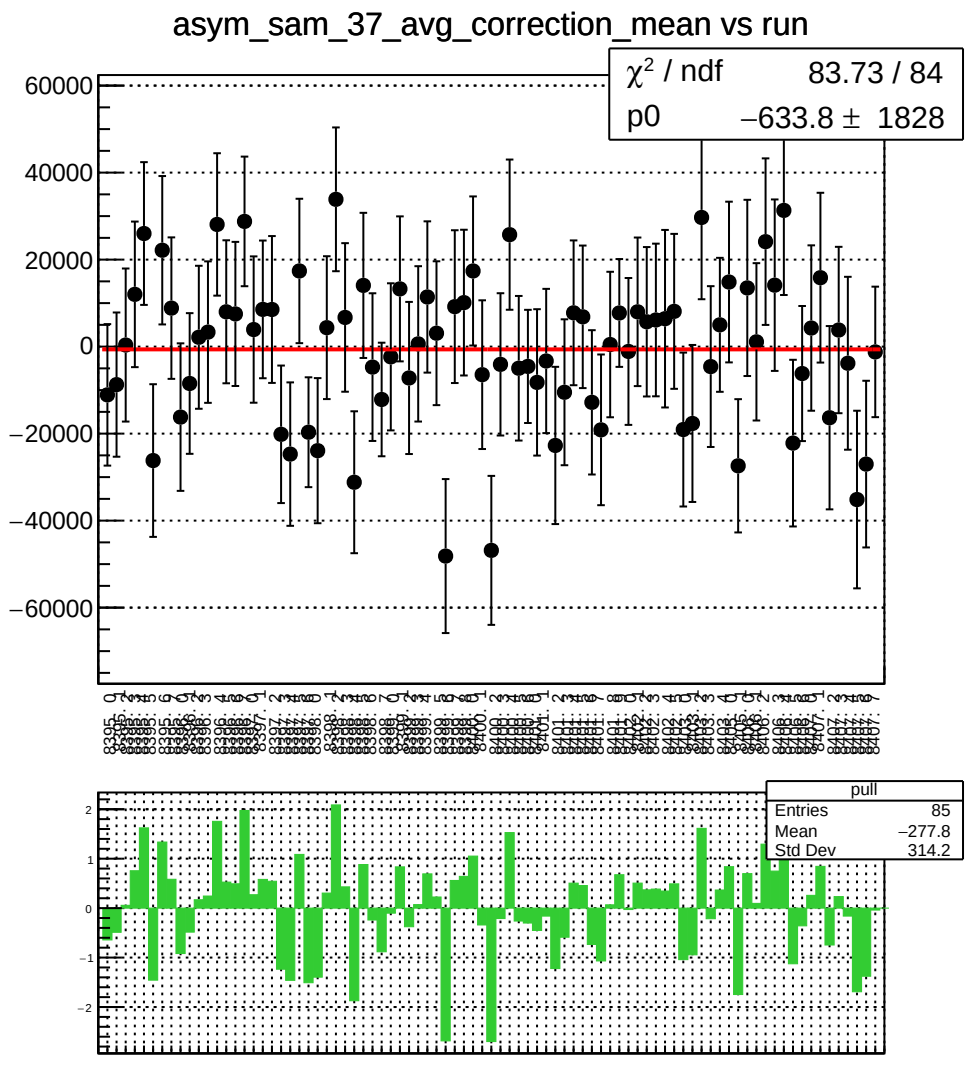

pull1D
Entries 85
Mean −0.009414
Std Dev 0.9962
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

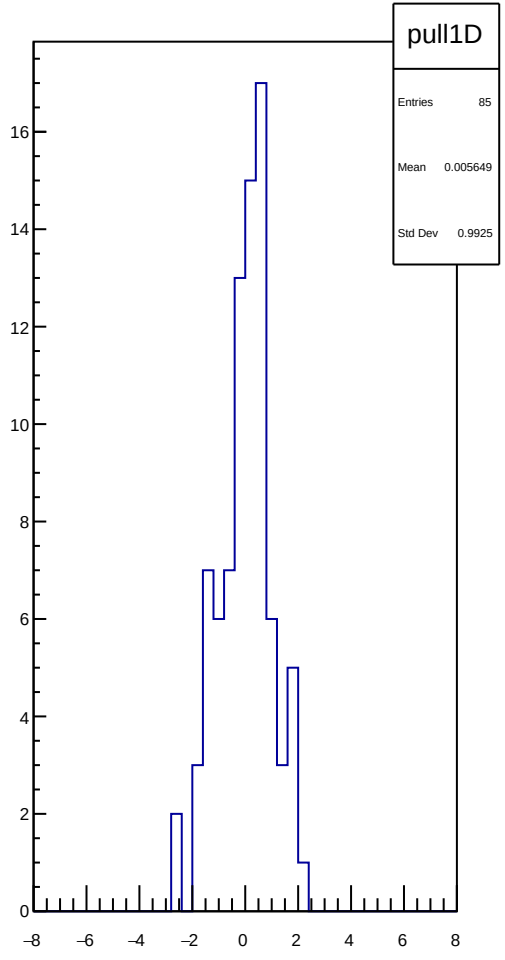

asym_sam_26_avg_rms vs run
χ² / ndf 8703 / 84
p0 1403 ± 1.098
1800
1700
1600
1500
1400
1300

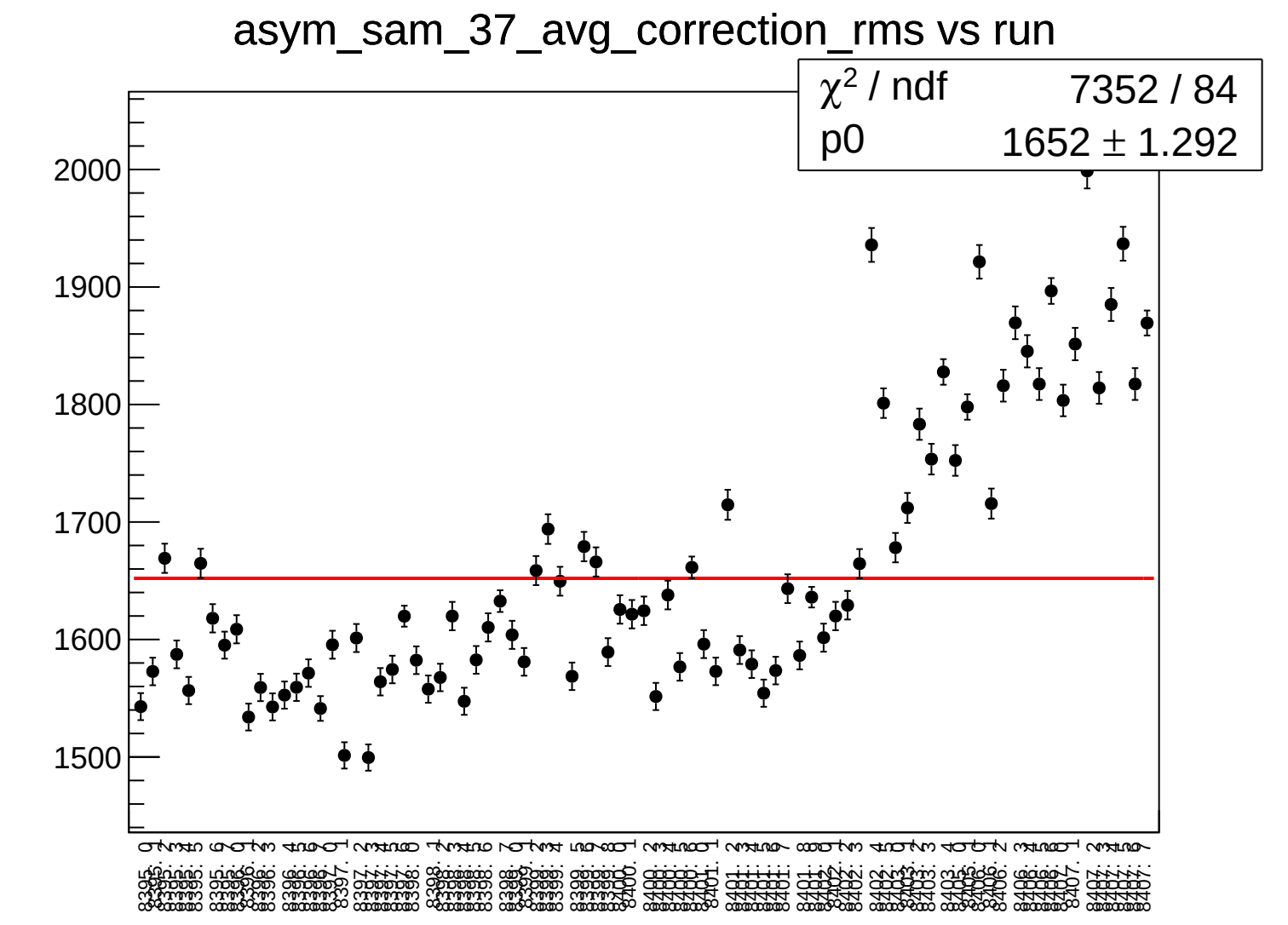

reg_asym_sam_37_avg_mean vs run
χ² / ndf 63.85 / 84
p0 −508.7 ± 154.4
pull
Entries 85
Mean 49.91
Std Dev 42.1

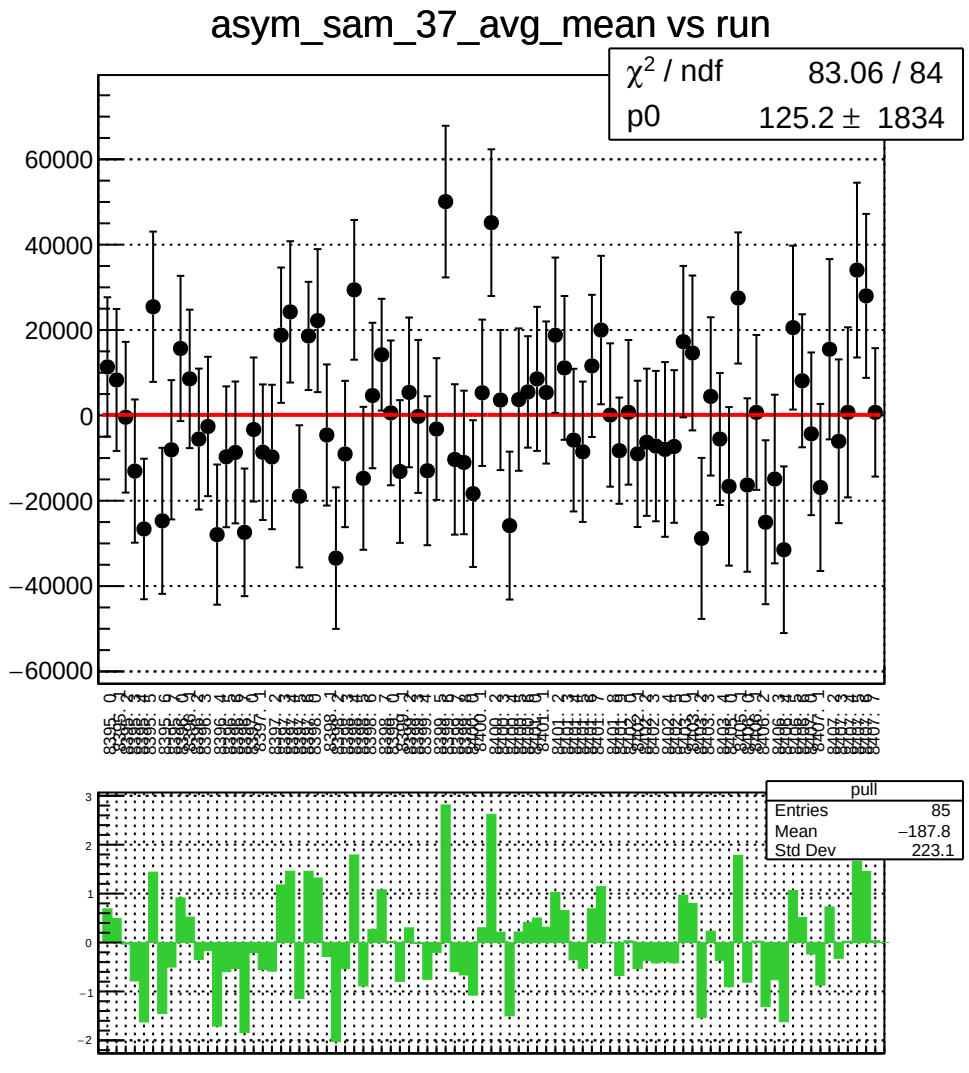

pull1D
Entries 85
Mean −0.02457
Std Dev 0.8664

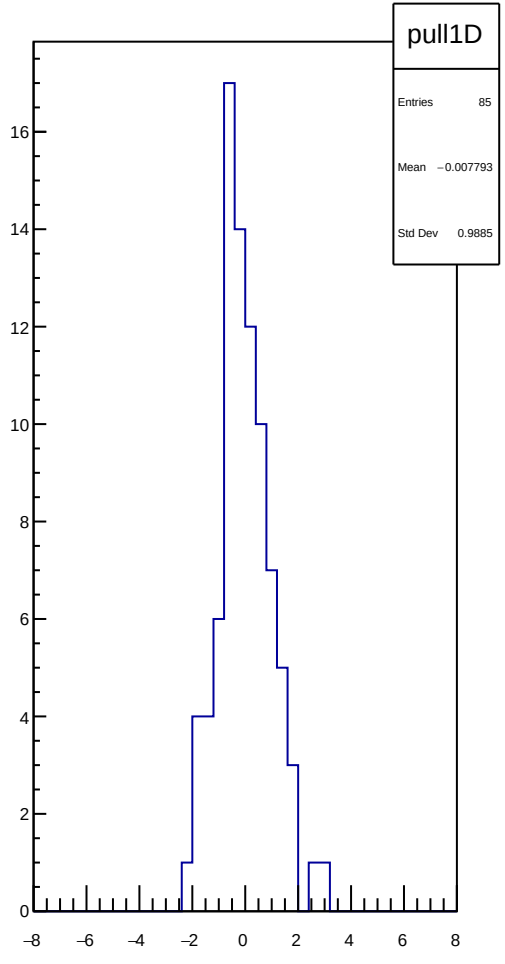

reg_asym_sam_37_avg_rms vs run
χ² / ndf 1.308e+04 / 84
p0 139.3 ± 0.1092
200
180
160
140
120

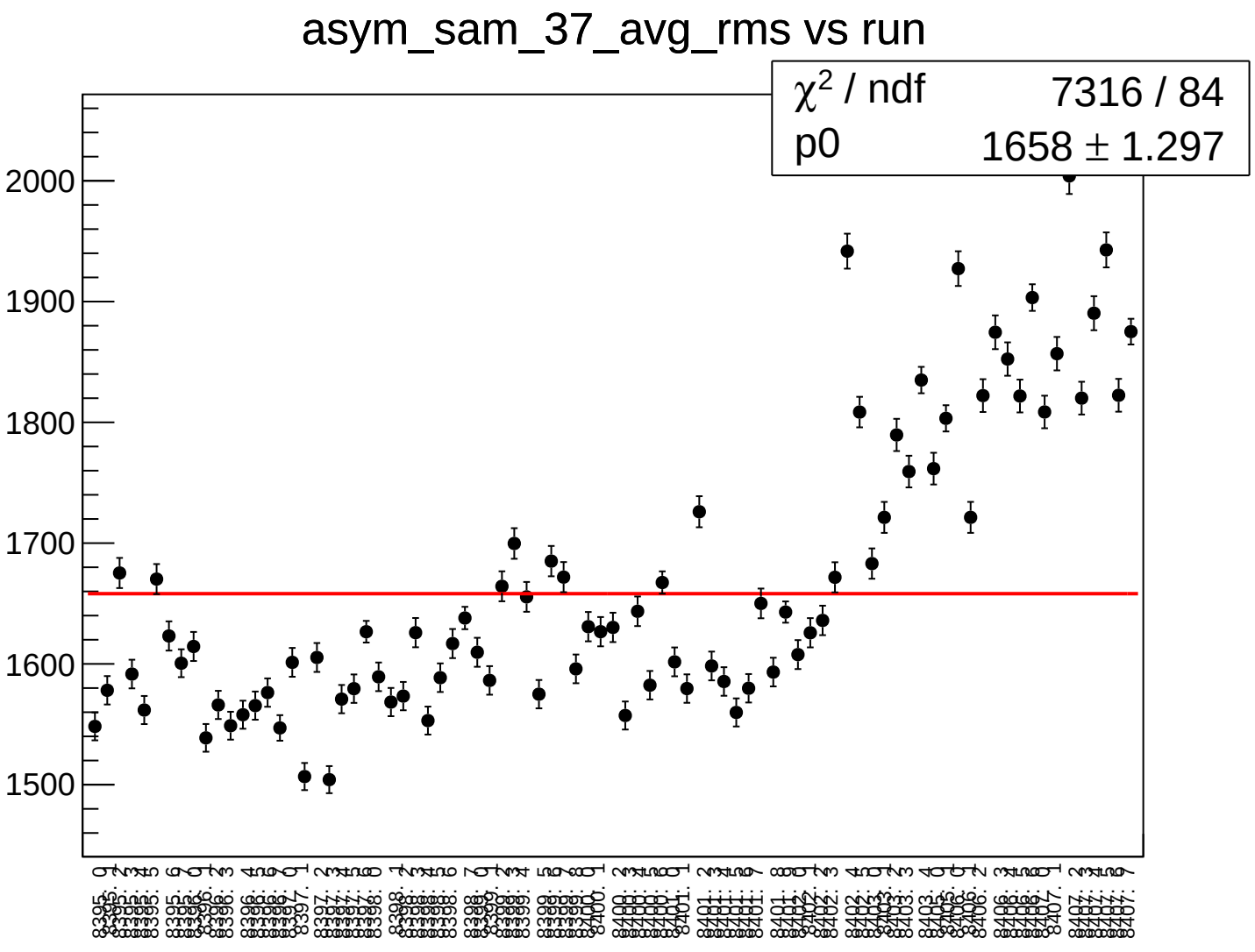

asym_sam_37_avg_correction_mean vs run
χ² / ndf 83.73 / 84
p0 −633.8 ± 1828
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −277.8
Std Dev 314.2
2
1
0
−1
−2

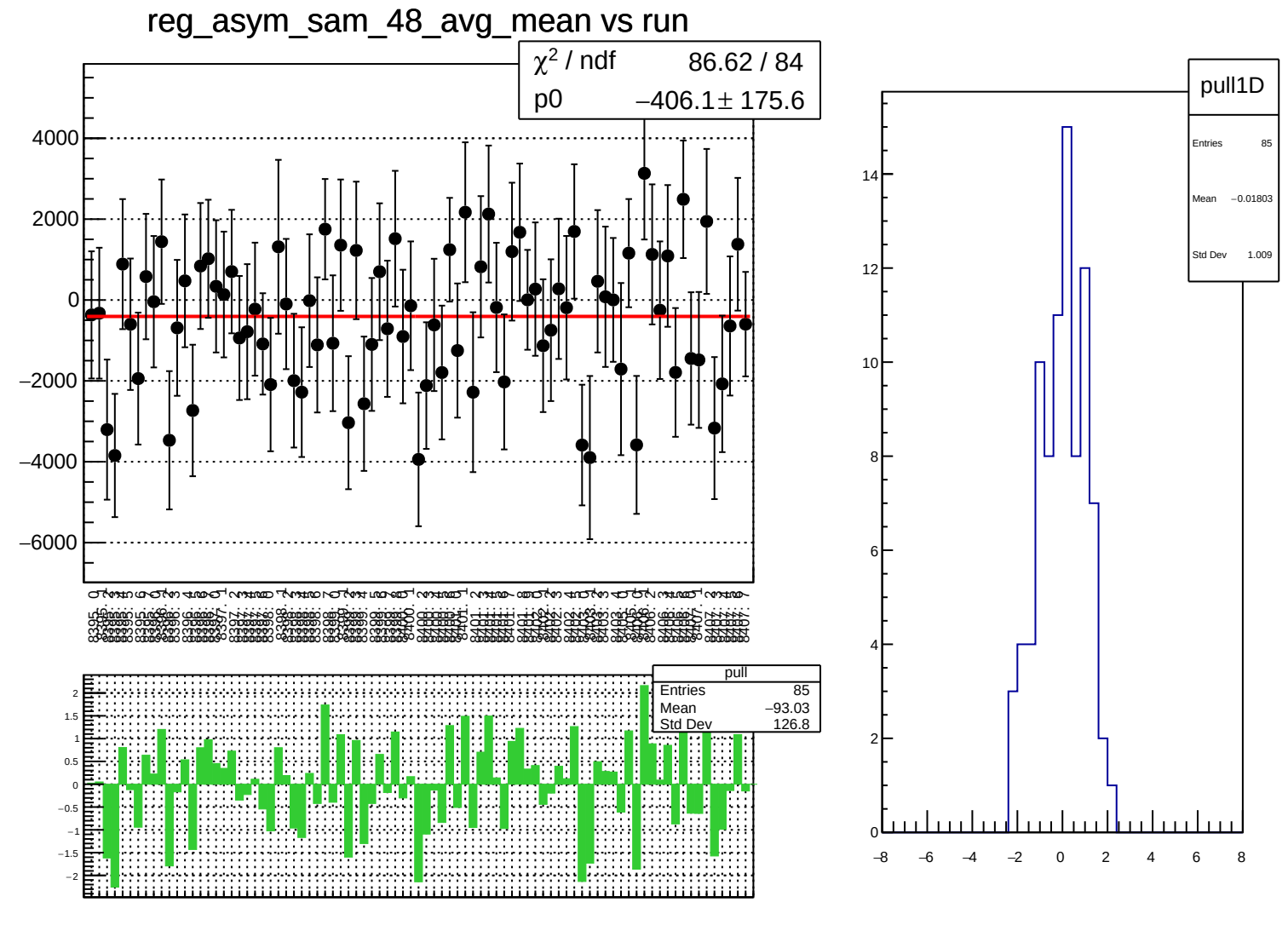

pull1D
Entries 85
Mean 0.005649
Std Dev 0.9925
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

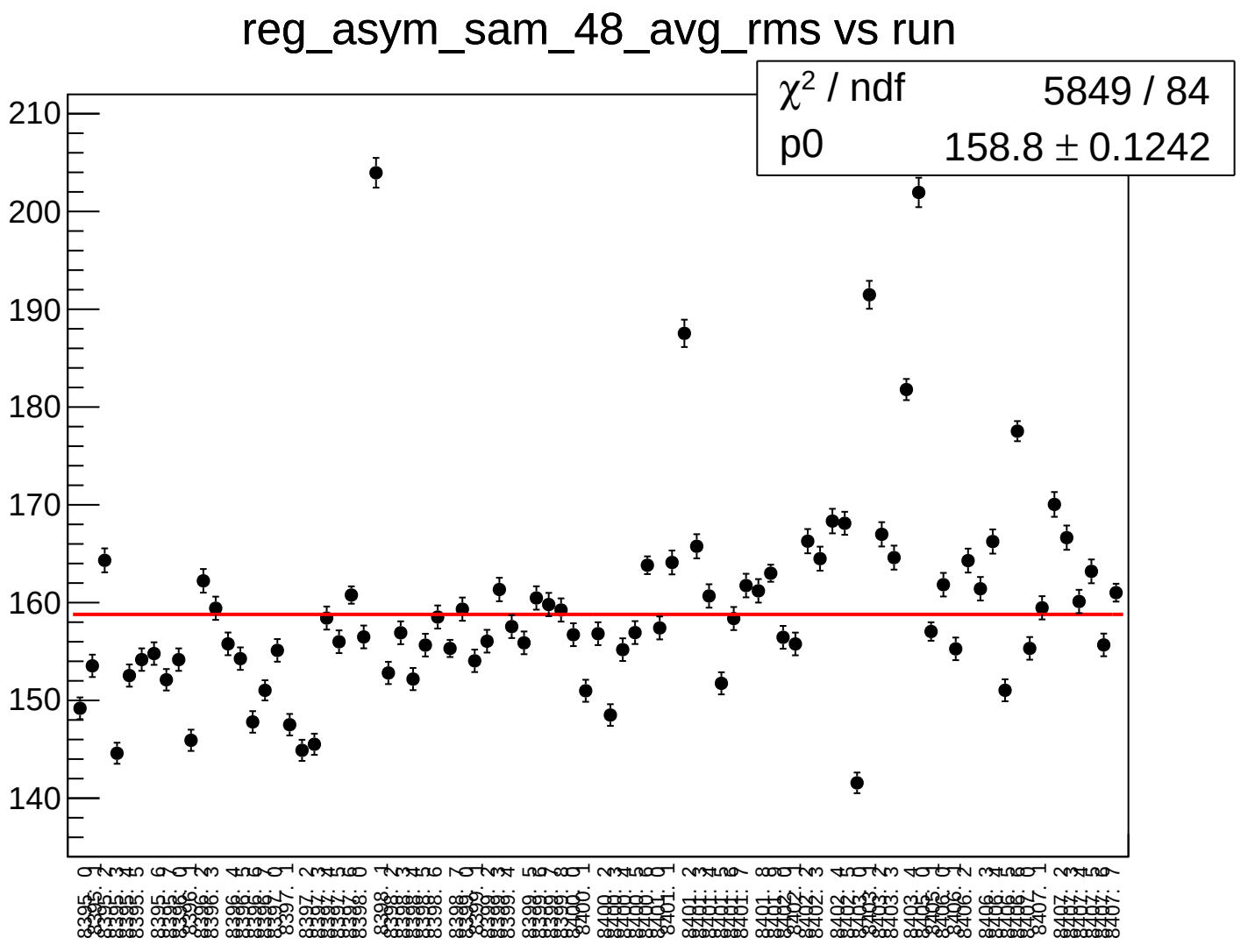

asym_sam_37_avg_correction_rms vs run
χ² / ndf 7352 / 84
p0 1652 ± 1.292
2000
1900
1800
1700
1600
1500

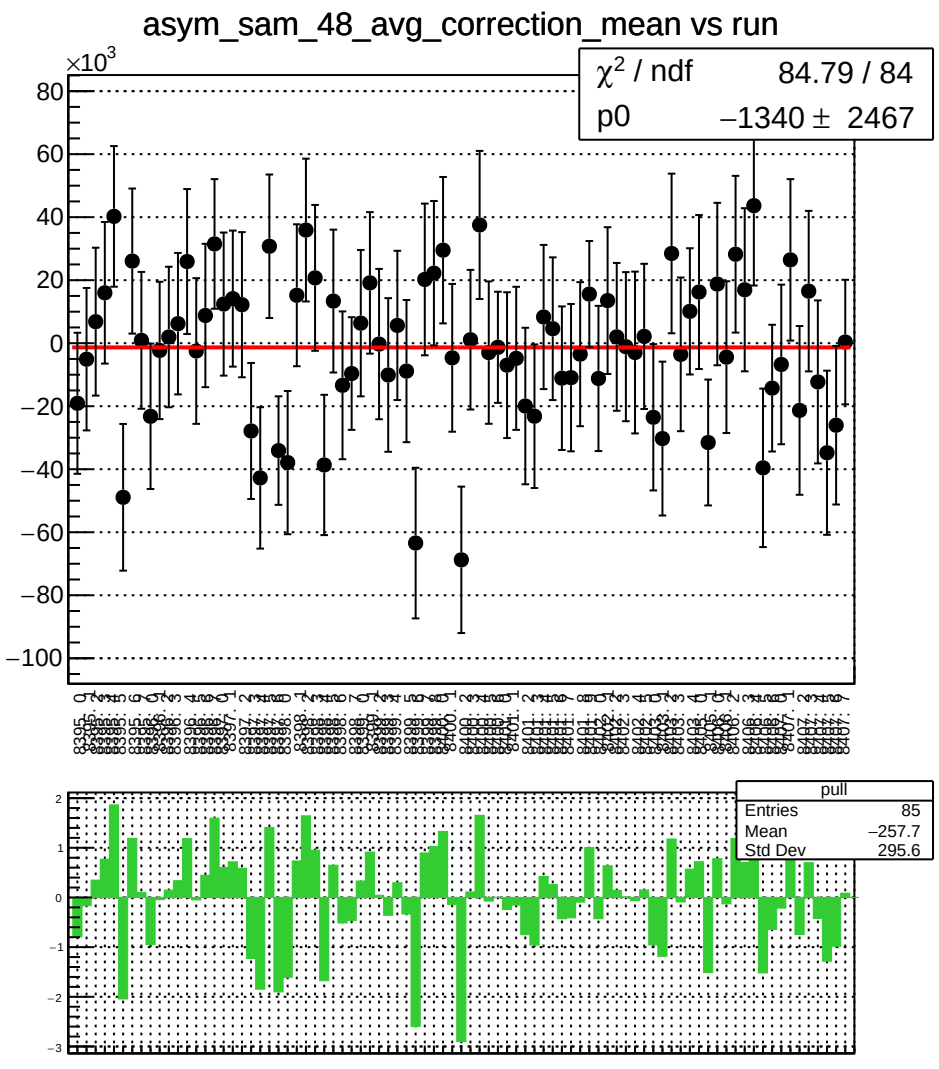

asym_sam_37_avg_mean vs run
χ² / ndf 83.06 / 84
p0 125.2 ± 1834
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −187.8
Std Dev 223.1
3
2
1
0
−1
−2

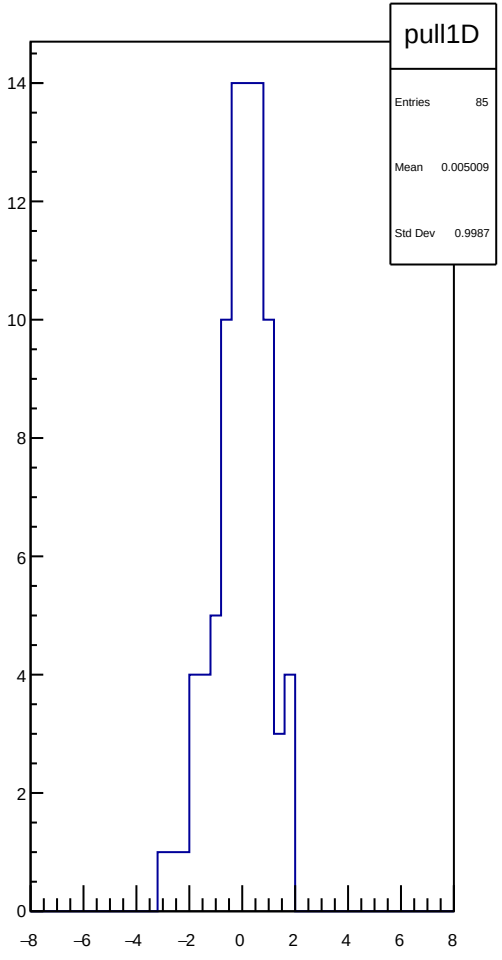

pull1D
Entries 85
Mean −0.007793
Std Dev 0.9885
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

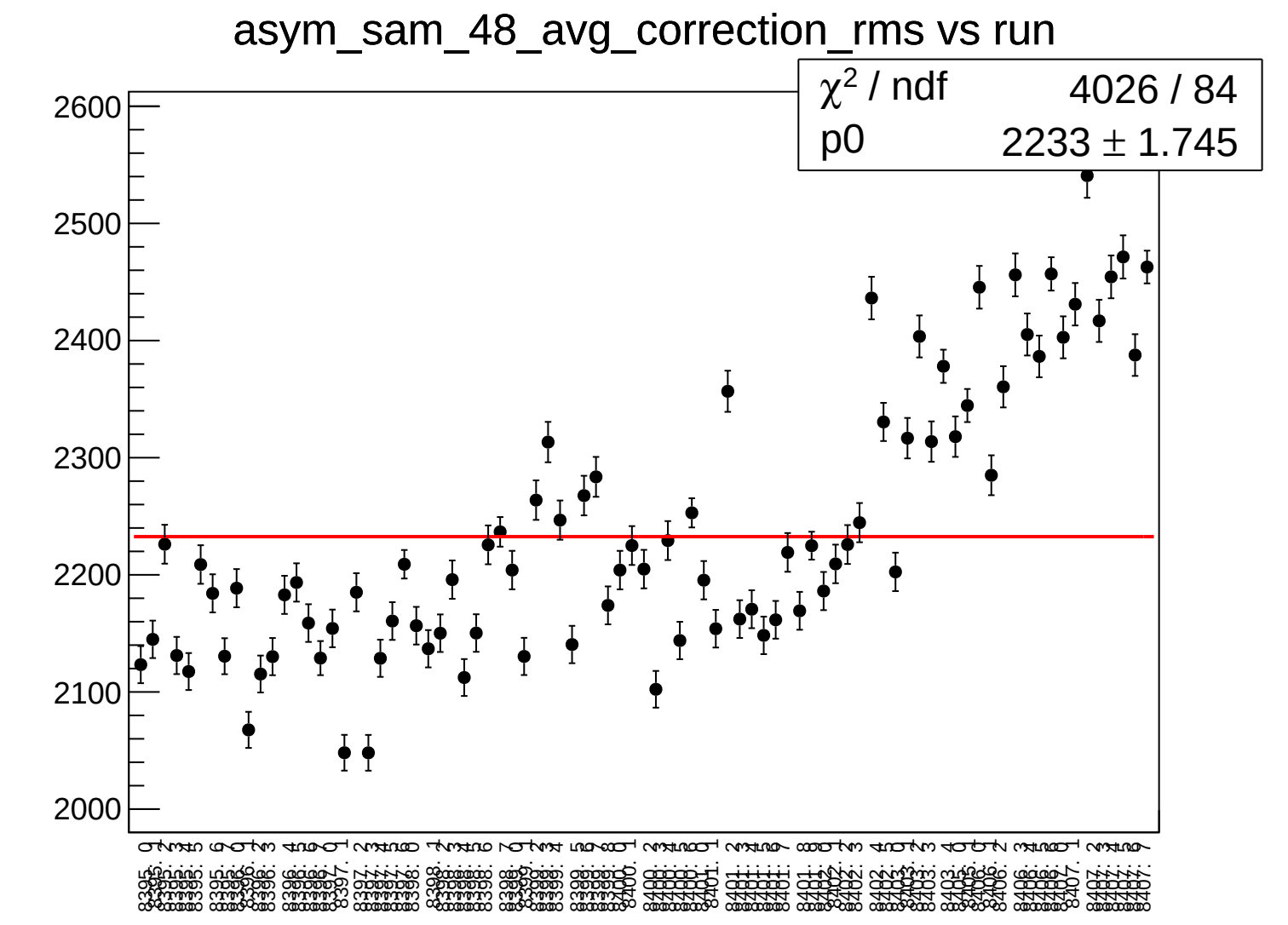

asym_sam_37_avg_rms vs run
χ² / ndf 7316 / 84
p0 1658 ± 1.297
2000
1900
1800
1700
1600
1500

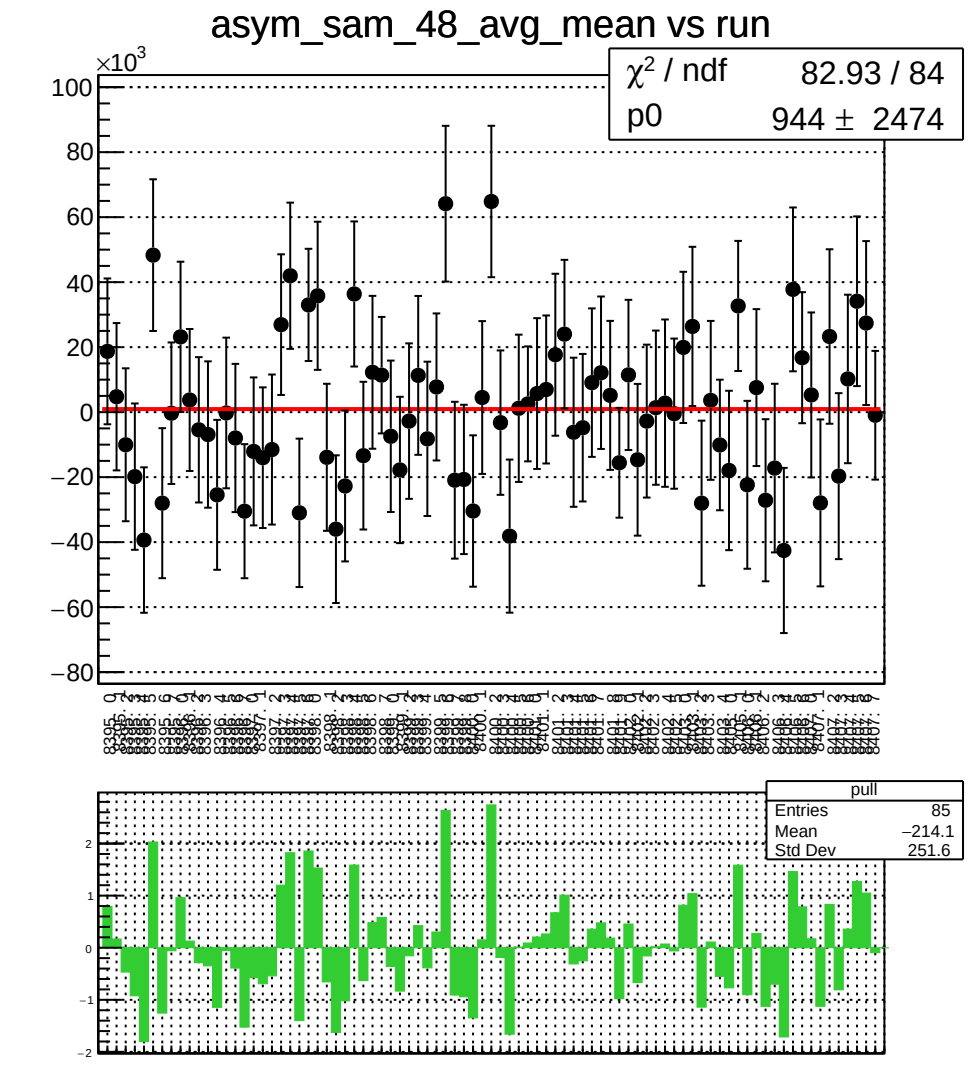

reg_asym_sam_48_avg_mean vs run
χ² / ndf 86.62 / 84
p0 −406.1± 175.6
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −93.03
Std Dev 126.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean −0.01803
Std Dev 1.009
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

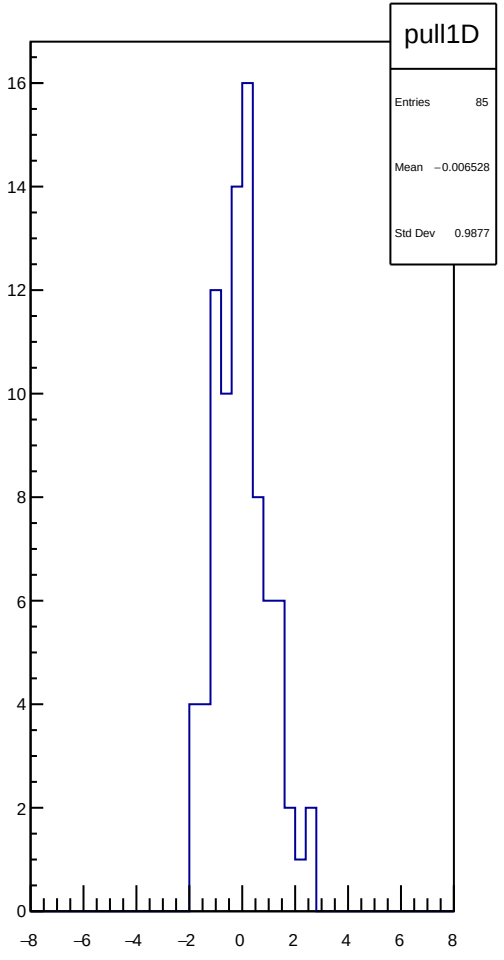

reg_asym_sam_48_avg_rms vs run
χ^2 / ndf 5849 / 84
p0 158.8 ± 0.1242
210
200
190
180
170
160
150
140

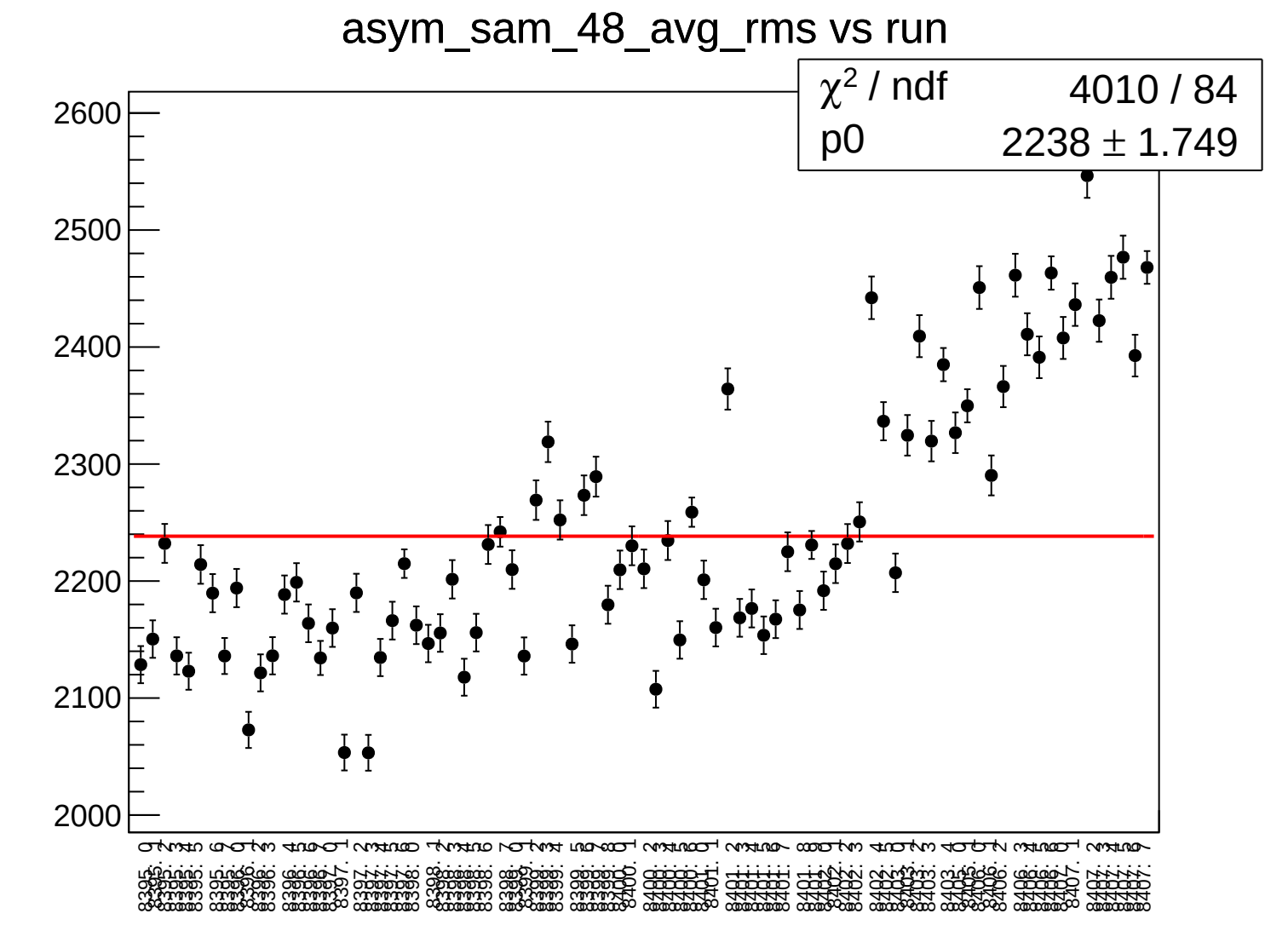

asym_sam_48_avg_correction_mean vs run
χ² / ndf 84.79 / 84
p0 −1340 ± 2467
×10³
pull
Entries 85
Mean −257.7
Std Dev 295.6

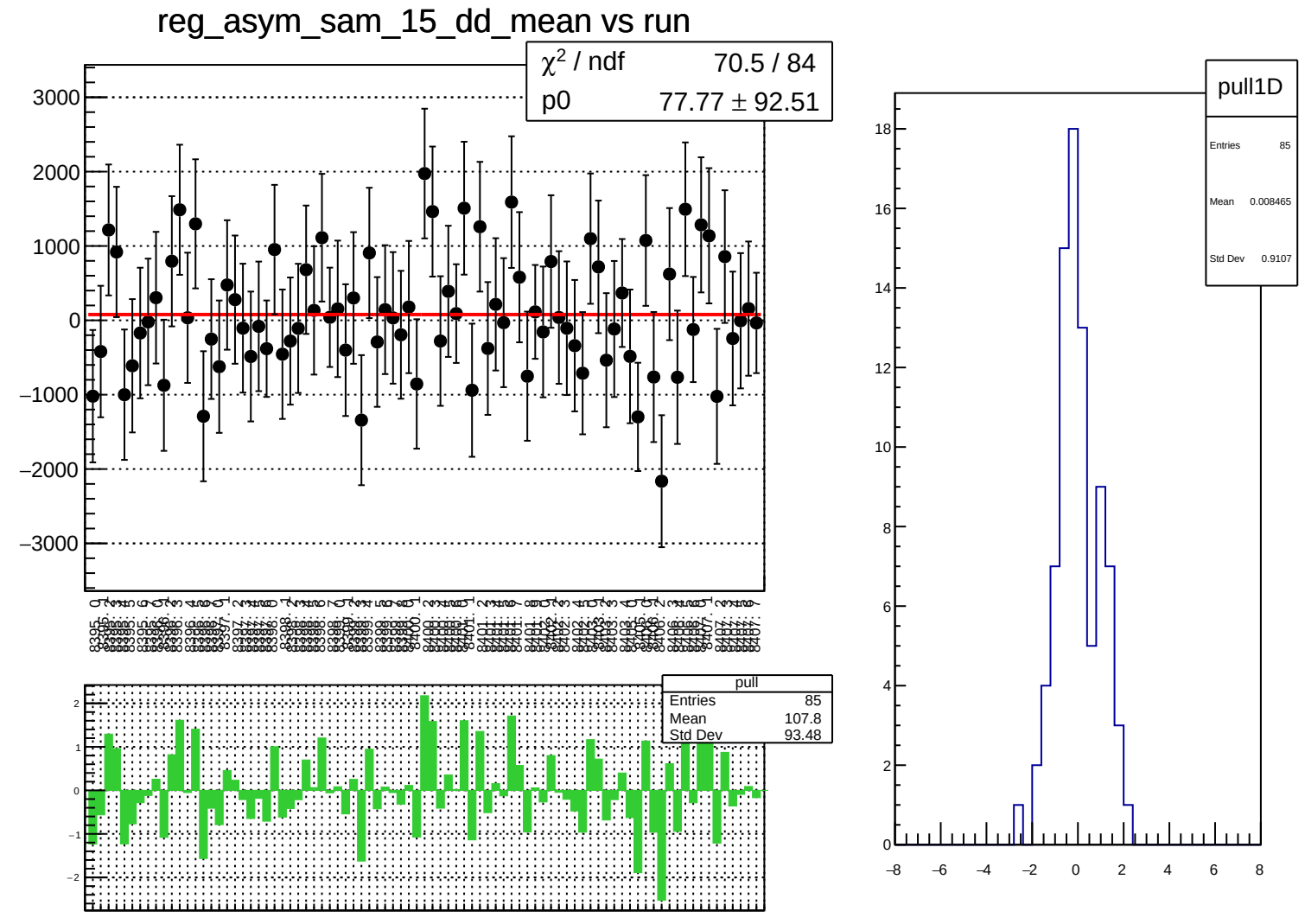

pull1D
Entries 85
Mean 0.005009
Std Dev 0.9987

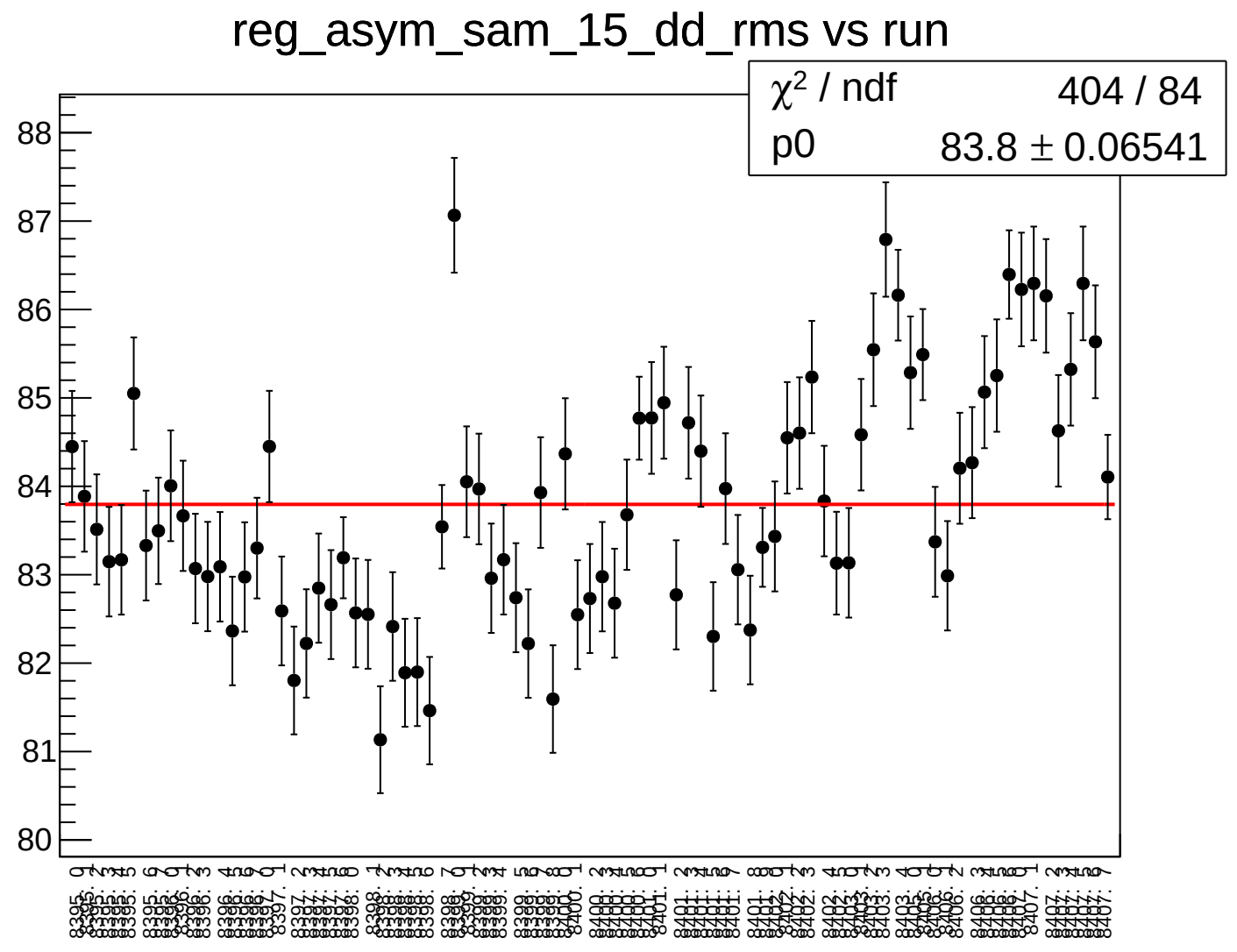

asym_sam_48_avg_correction_rms vs run
χ² / ndf 4026 / 84
p0 2233 ± 1.745
2600
2500
2400
2300
2200
2100
2000

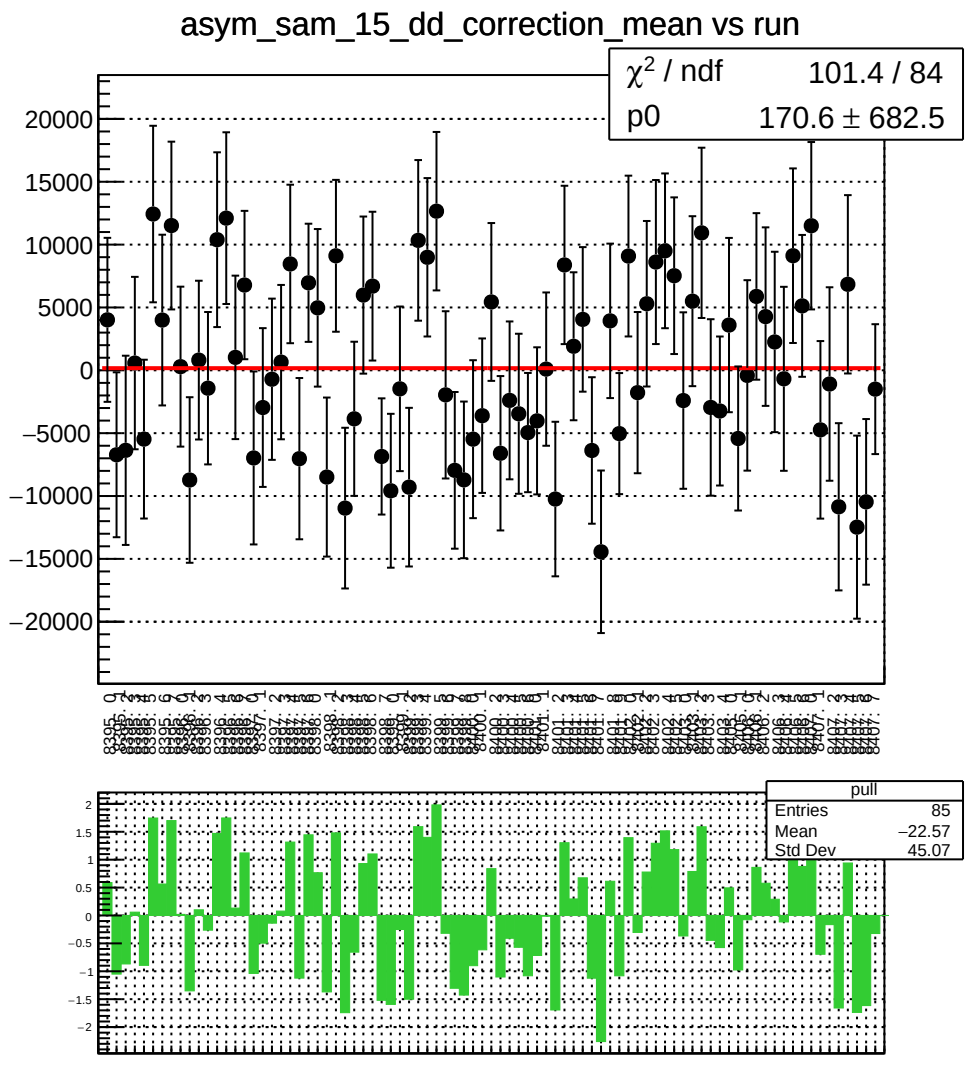

asym_sam_48_avg_mean vs run
×10^3
χ² / ndf 82.93 / 84
p0 944 ± 2474
pull
Entries 85
Mean −214.1
Std Dev 251.6

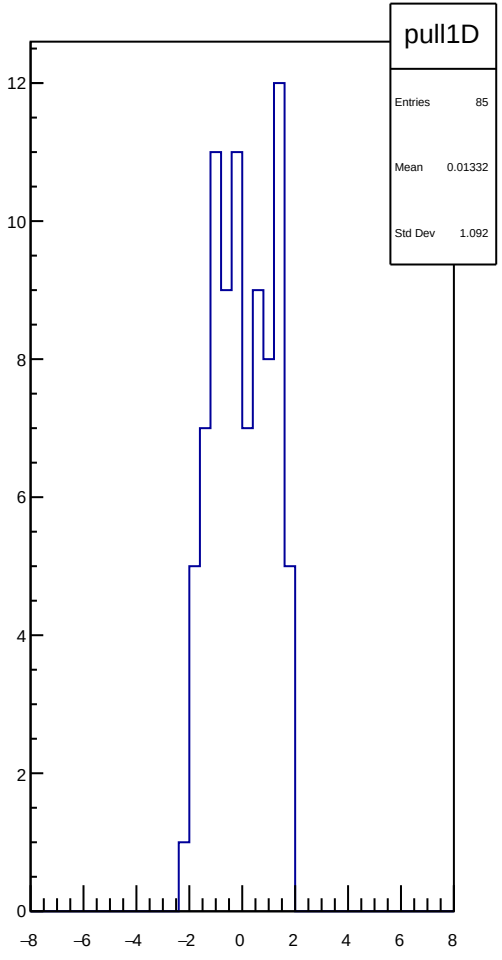

pull1D
Entries 85
Mean −0.006528
Std Dev 0.9877

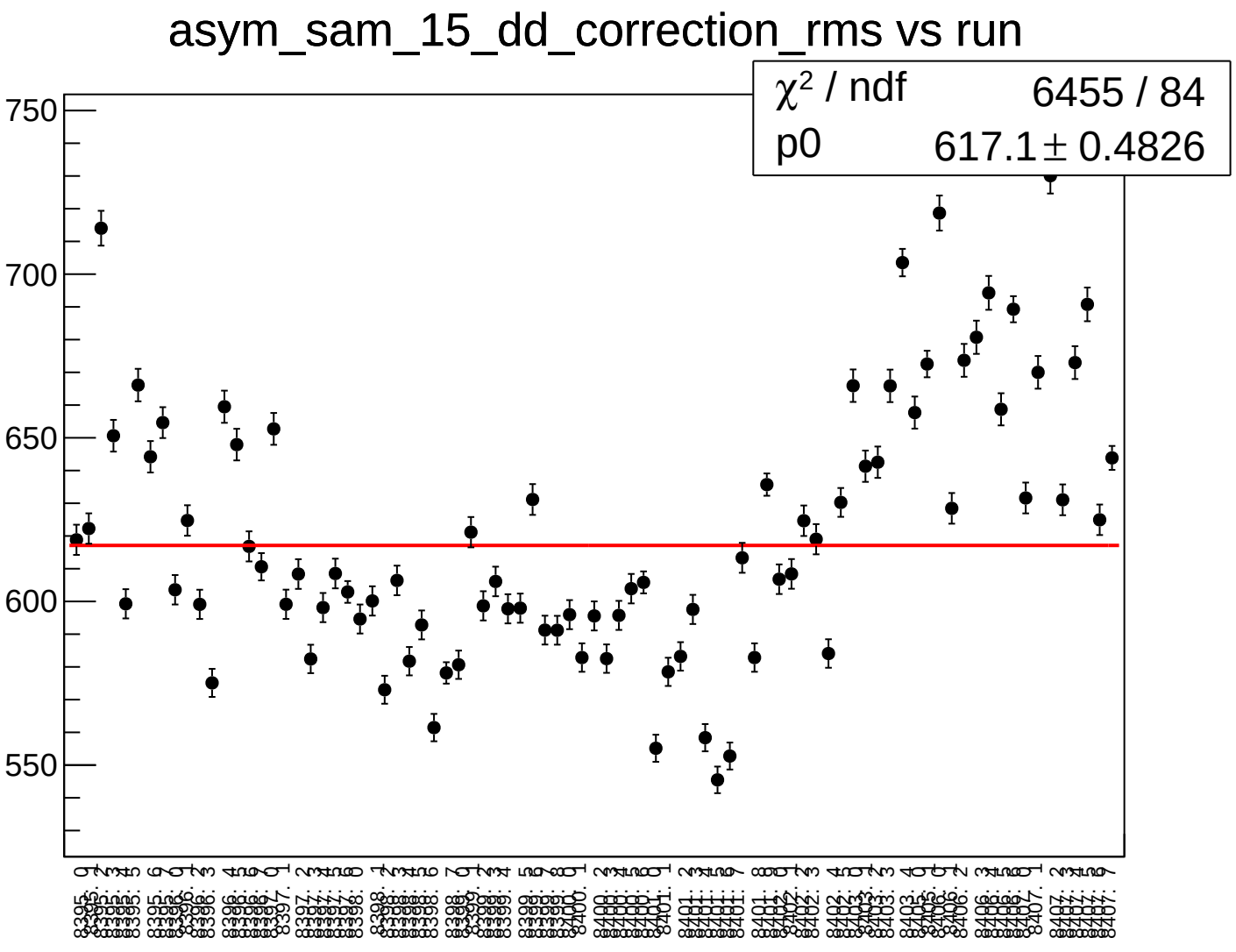

asym_sam_48_avg_rms vs run
χ^2 / ndf 4010 / 84
p0 2238 ± 1.749
2600
2500
2400
2300
2200
2100
2000

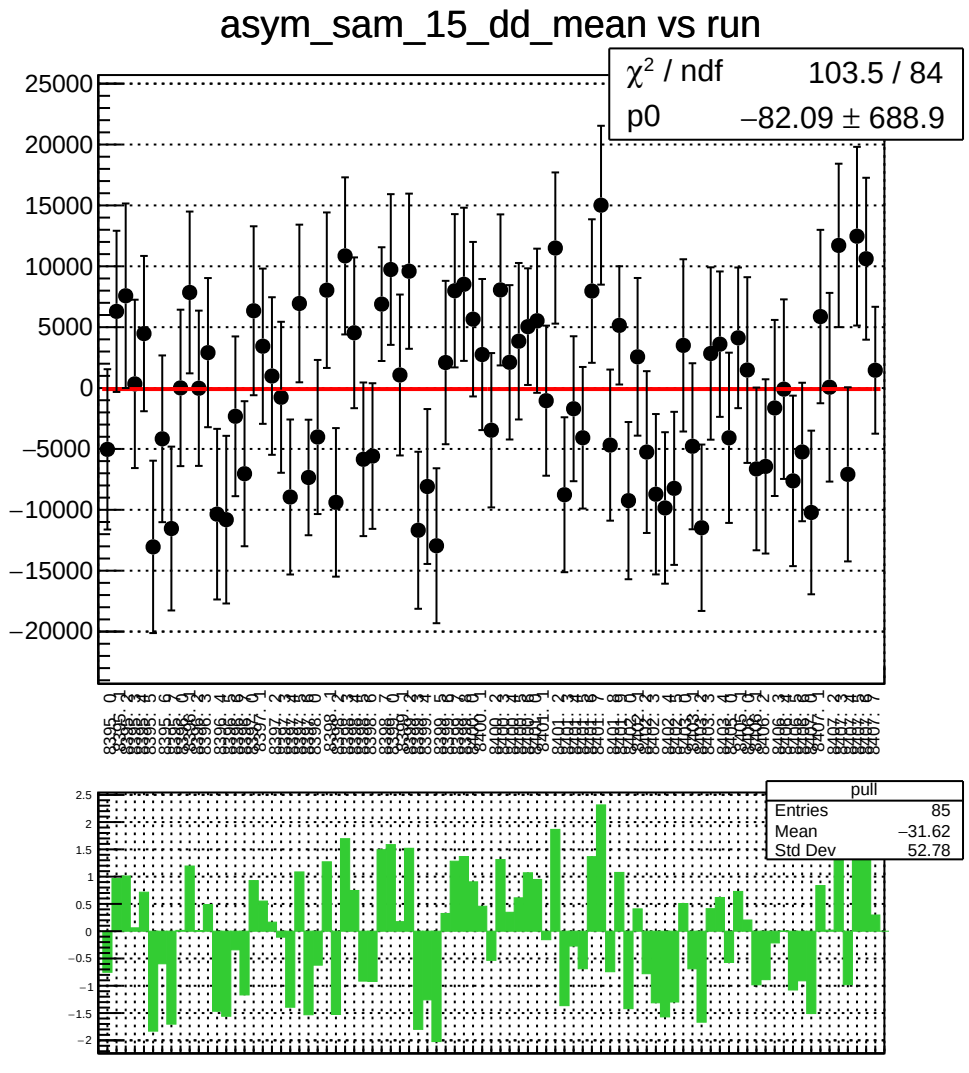

reg_asym_sam_15_dd_mean vs run
χ² / ndf 70.5 / 84
p0 77.77 ± 92.51
pull
Entries 85
Mean 107.8
Std Dev 93.48
pull1D
Entries 85
Mean 0.008465
Std Dev 0.9107

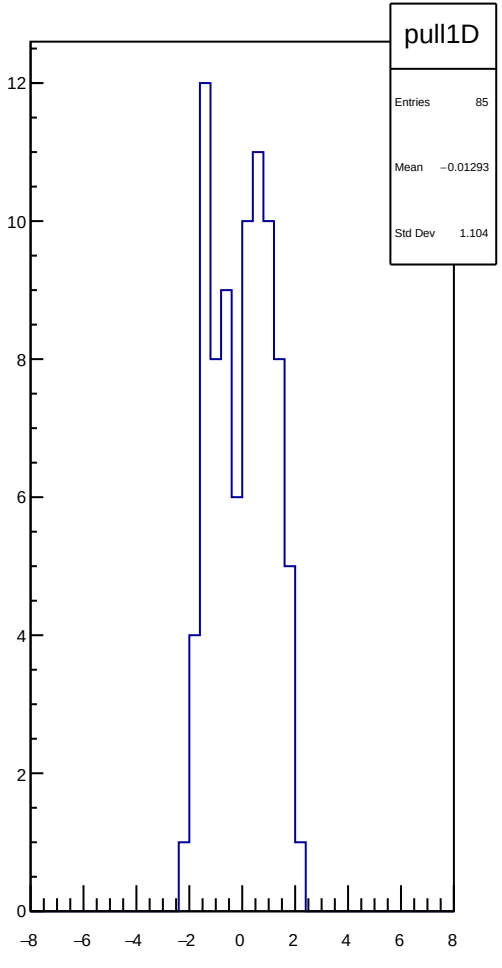

reg_asym_sam_15_dd_rms vs run
χ² / ndf 404 / 84
p0 83.8 ± 0.06541
88
87
86
85
84
83
82
81
80

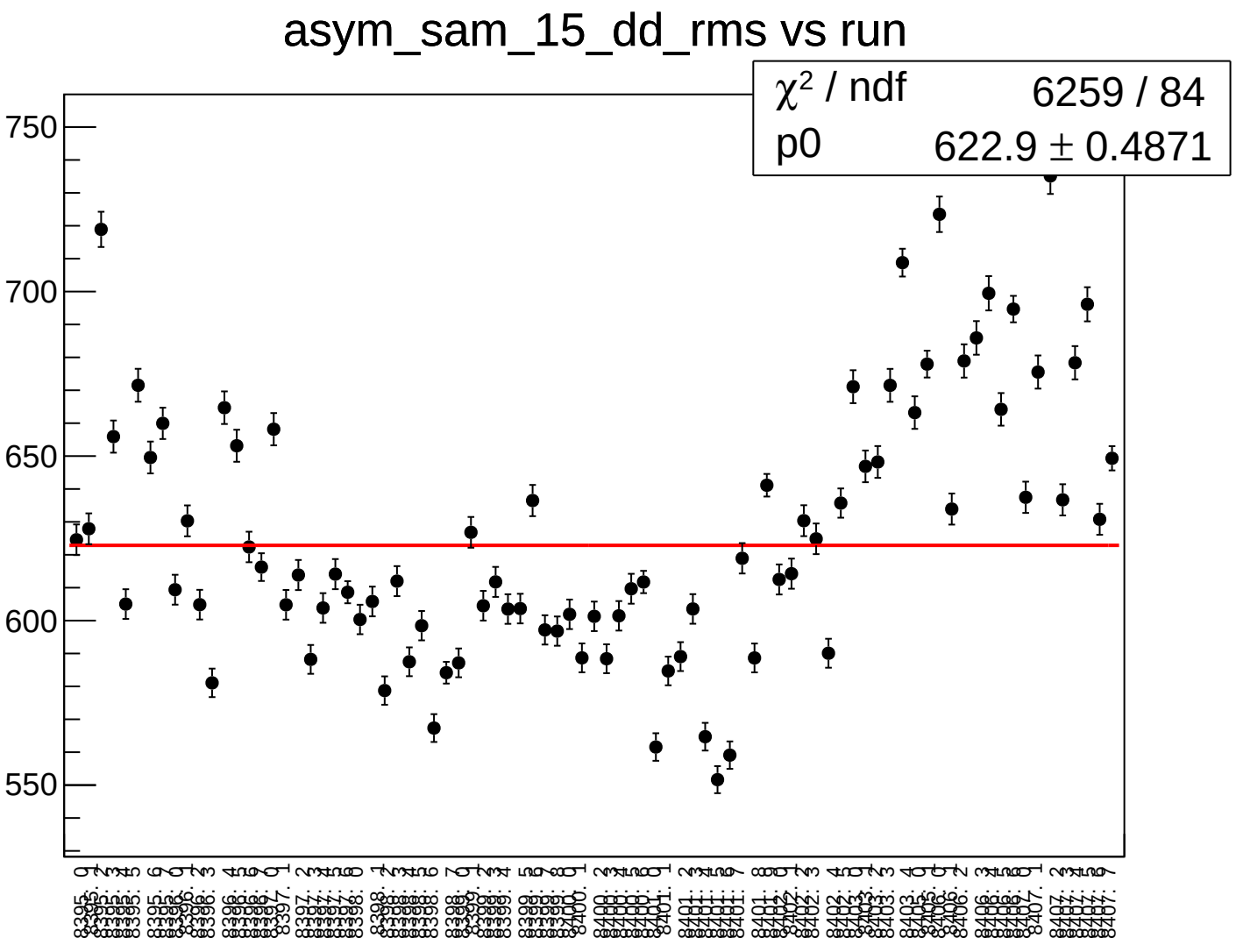

asym_sam_15_dd_correction_mean vs run
χ² / ndf 101.4 / 84
p0 170.6 ± 682.5
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 85
Mean −22.57
Std Dev 45.07
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

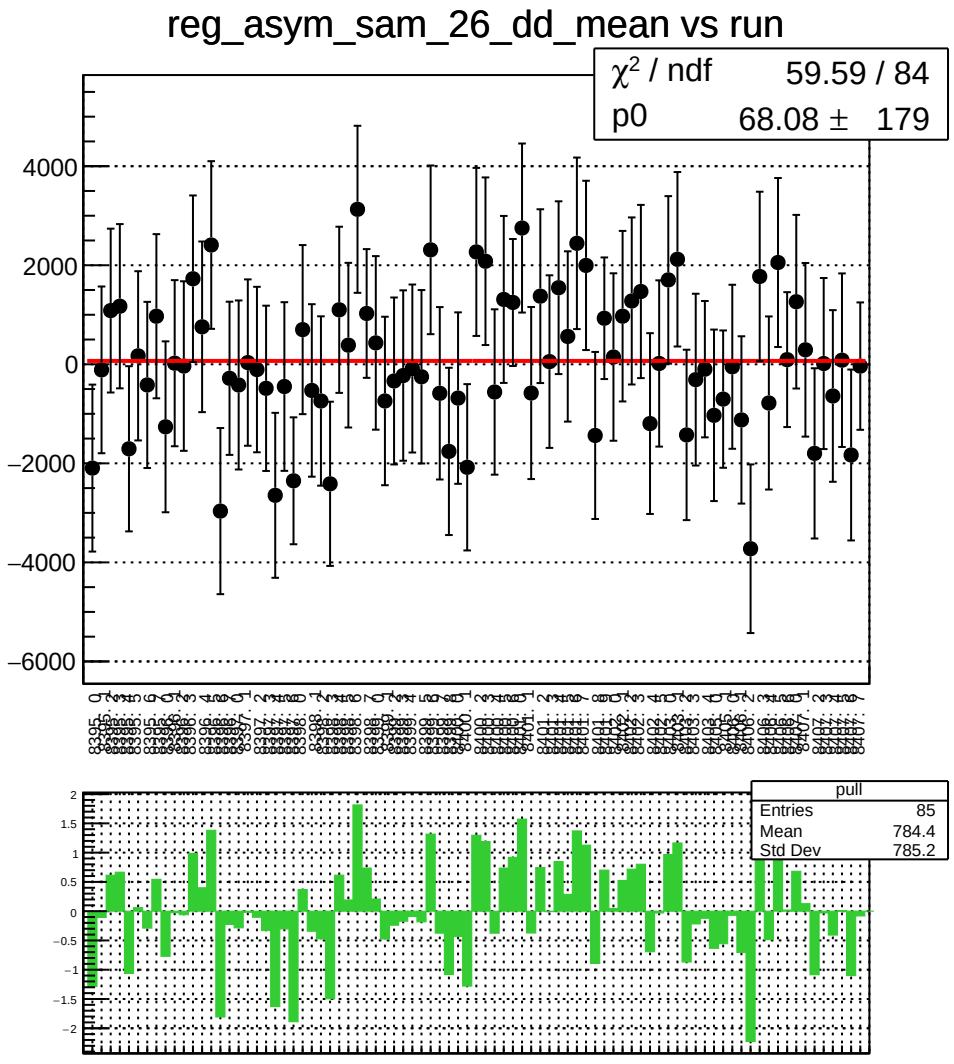

pull1D
Entries 85
Mean 0.01332
Std Dev 1.092
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

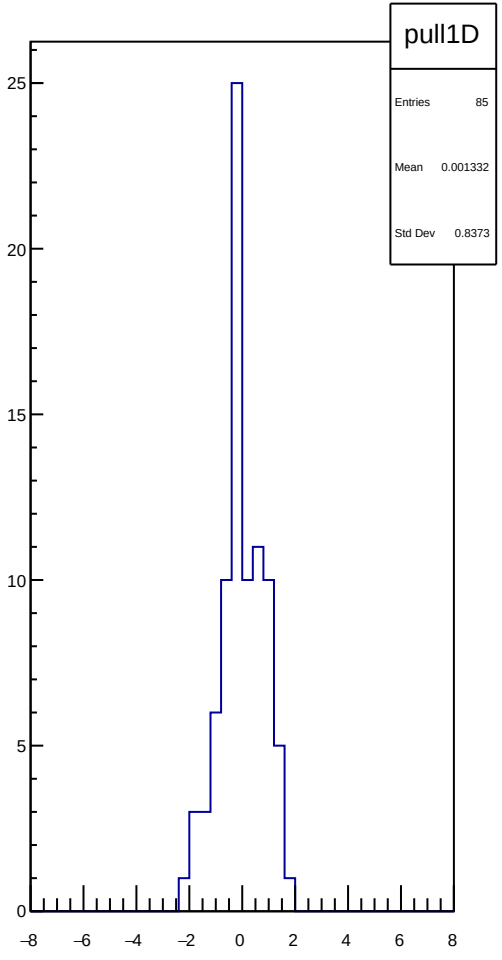

asym_sam_15_dd_correction_rms vs run
χ² / ndf 6455 / 84
p0 617.1 ± 0.4826
750
700
650
600
550

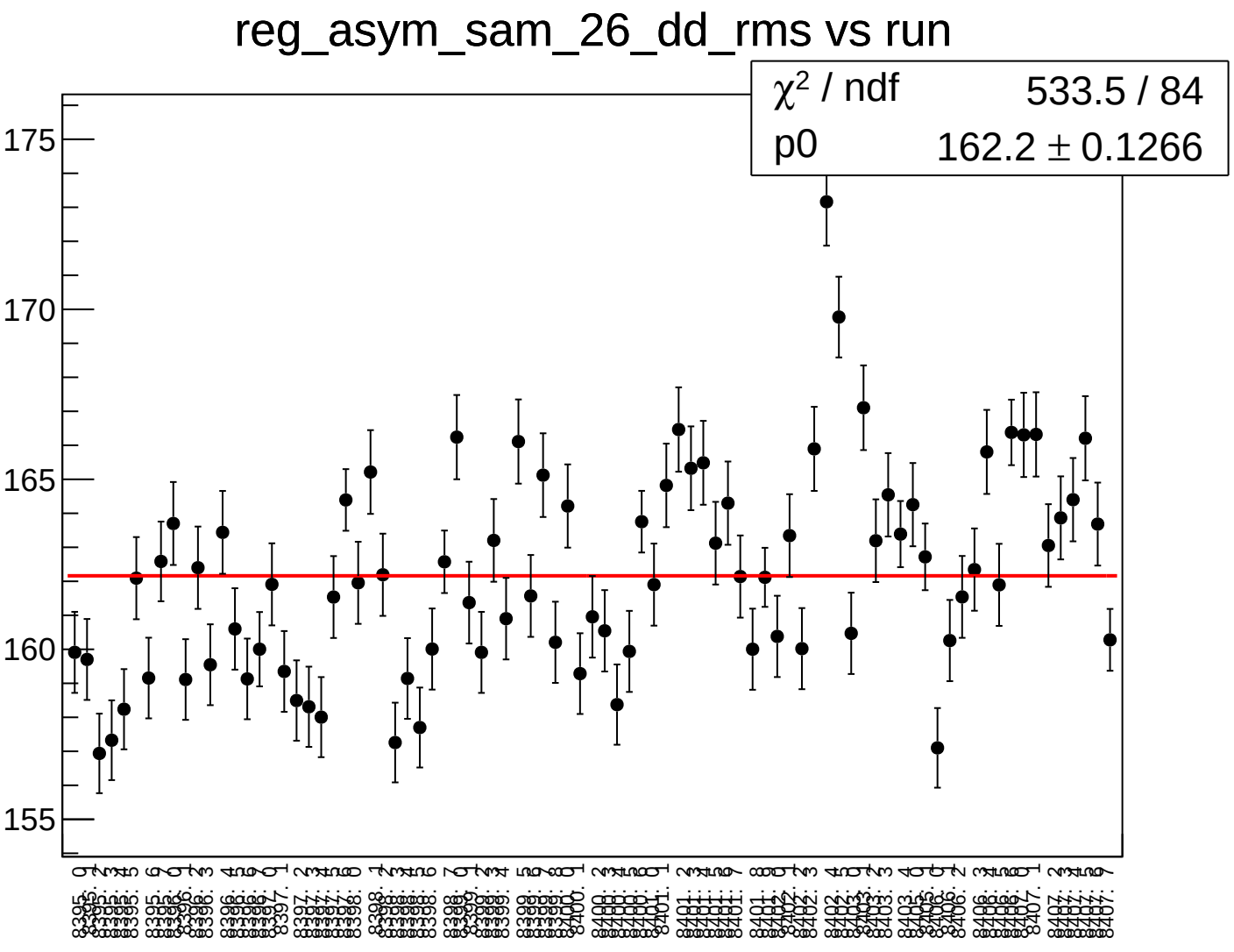

asym_sam_15_dd_mean vs run
χ² / ndf 103.5 / 84
p0 −82.09 ± 688.9
pull
Entries 85
Mean −31.62
Std Dev 52.78

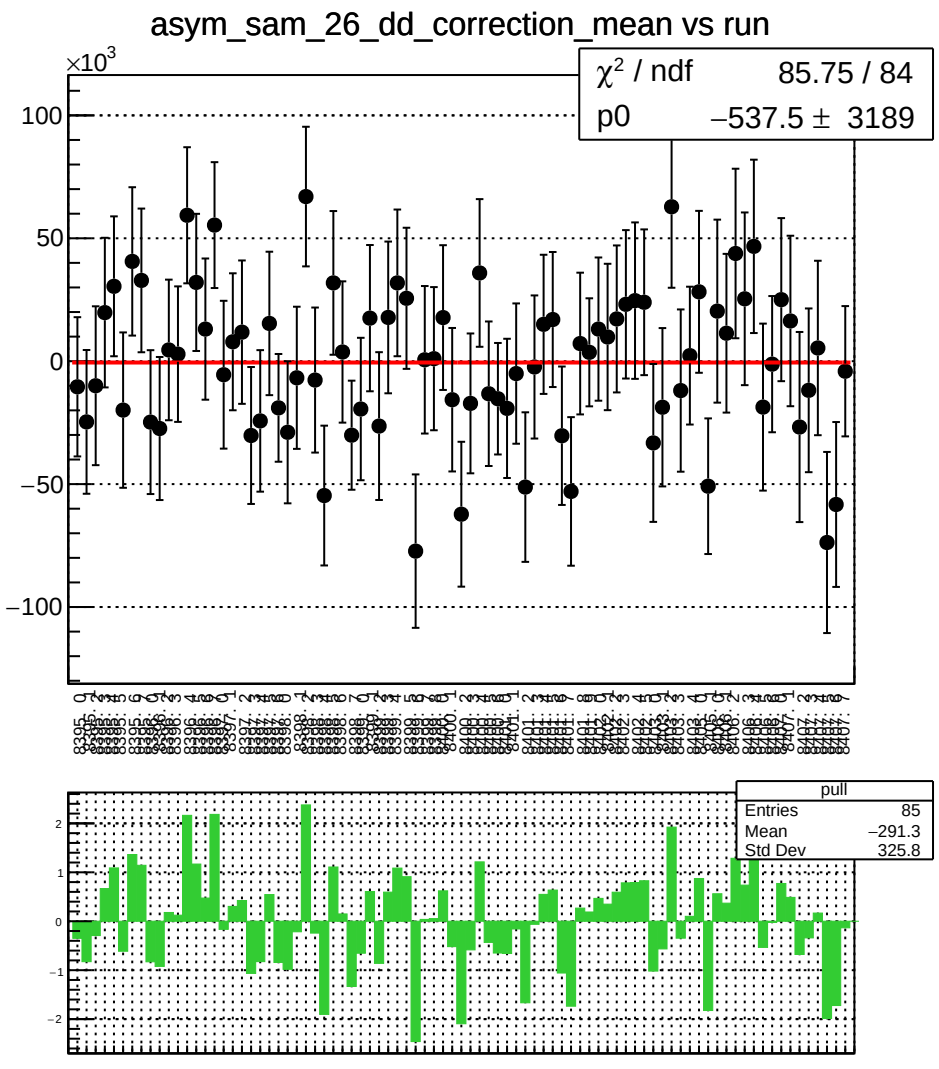

pull1D
Entries 85
Mean −0.01293
Std Dev 1.104

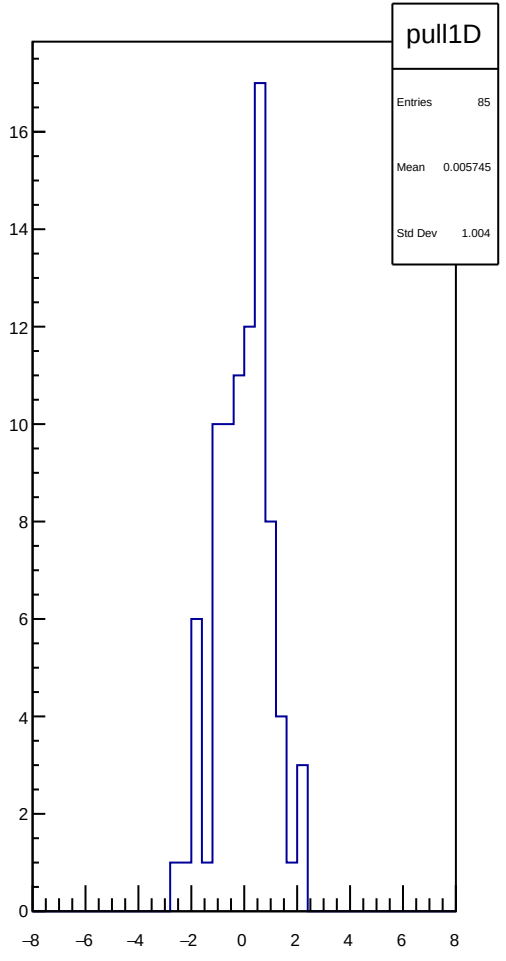

asym_sam_15_dd_rms vs run
χ² / ndf 6259 / 84
p0 622.9 ± 0.4871
750
700
650
600
550

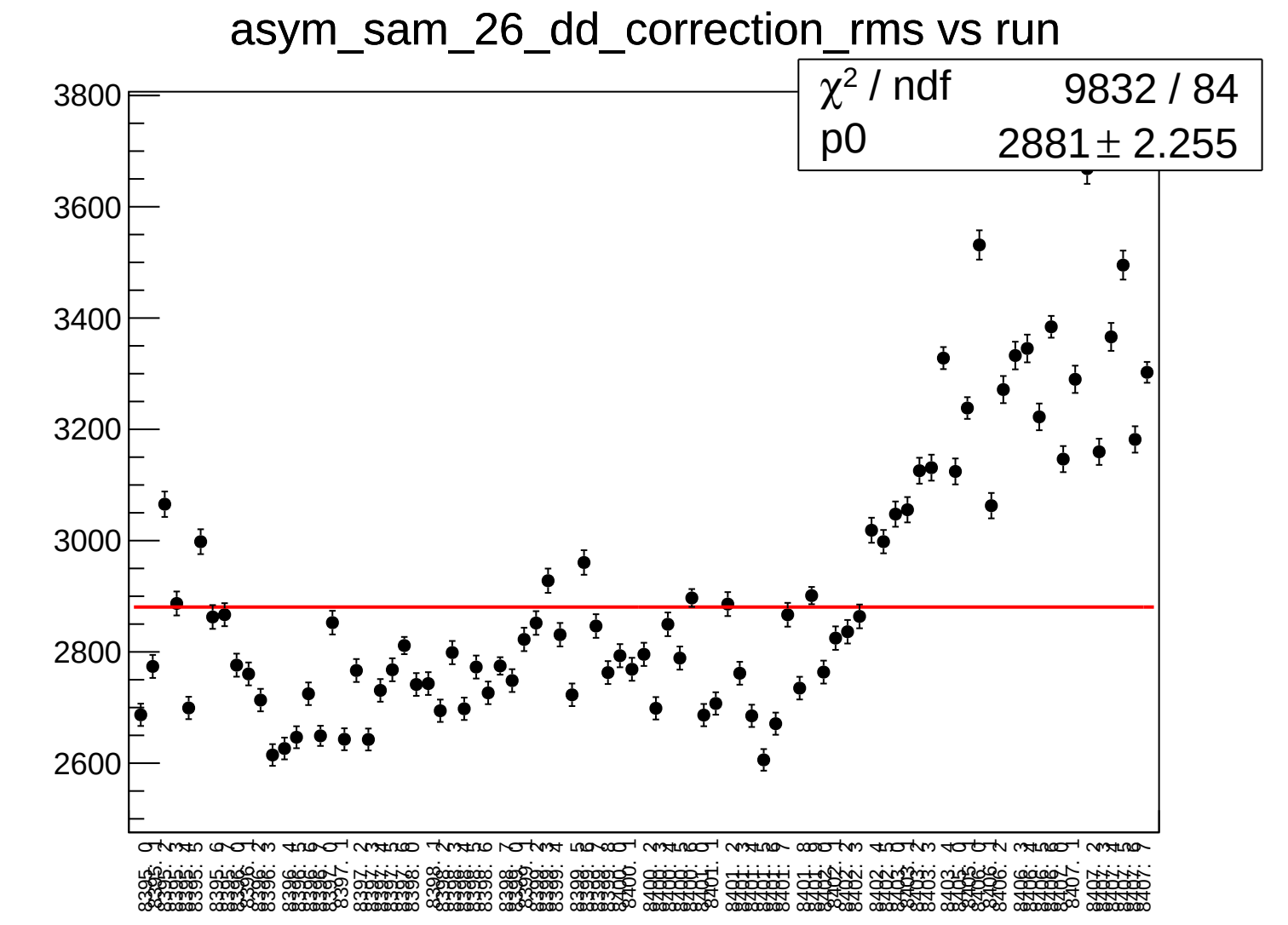

reg_asym_sam_26_dd_mean vs run
χ² / ndf 59.59 / 84
p0 68.08 ± 179
pull
Entries 85
Mean 784.4
Std Dev 785.2

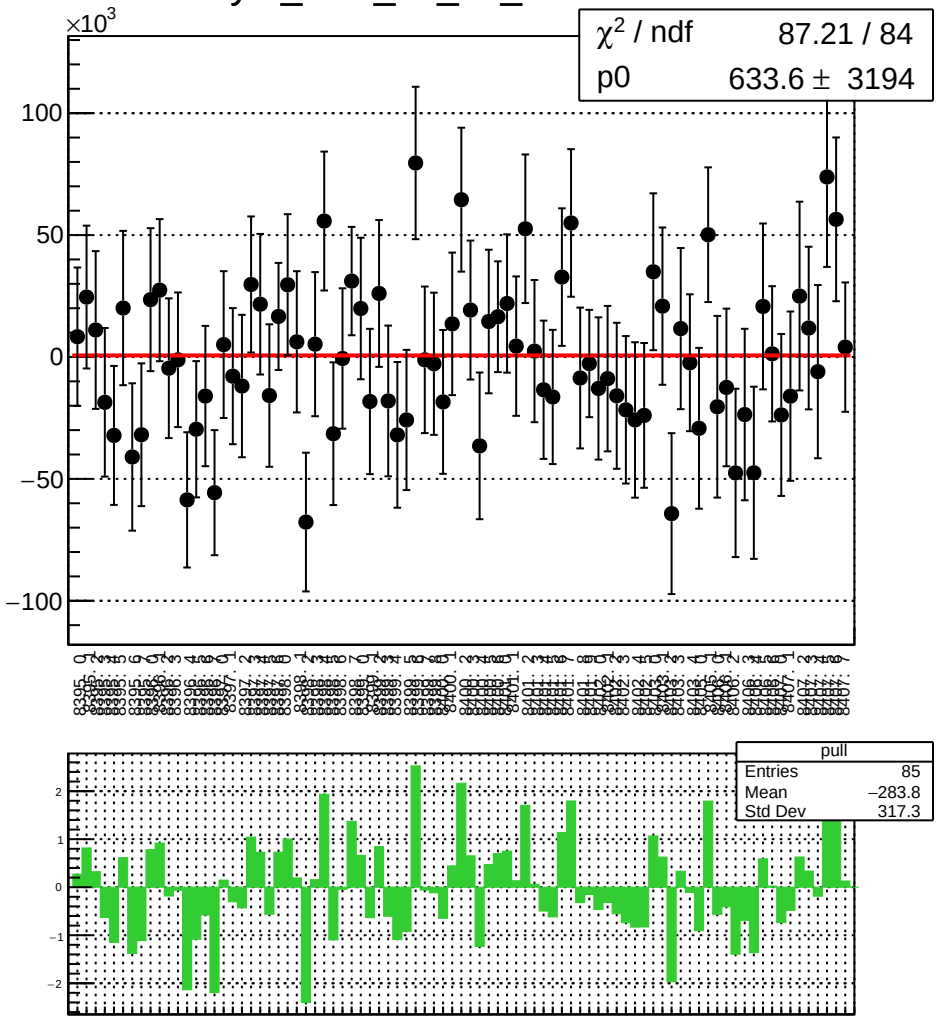

pull1D
Entries 85
Mean 0.001332
Std Dev 0.8373

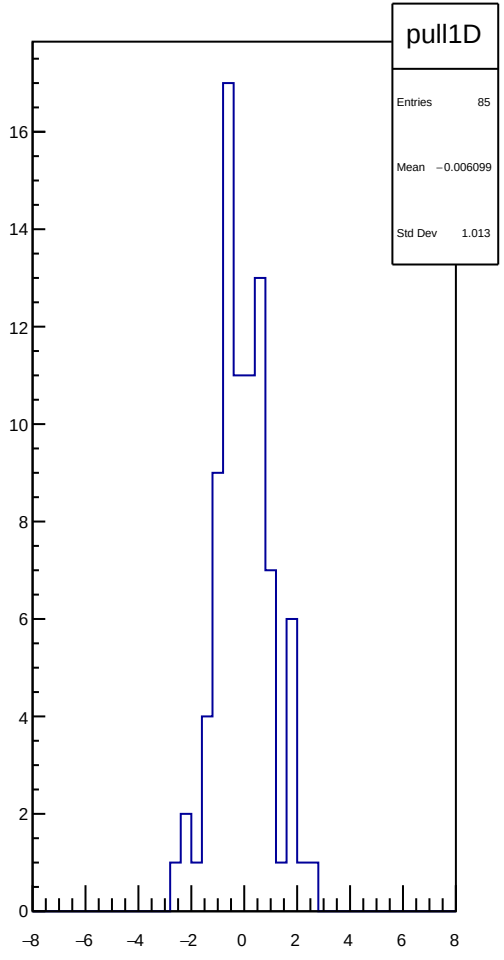

reg_asym_sam_26_dd_rms vs run
χ² / ndf 533.5 / 84
p0 162.2 ± 0.1266
175
170
165
160
155

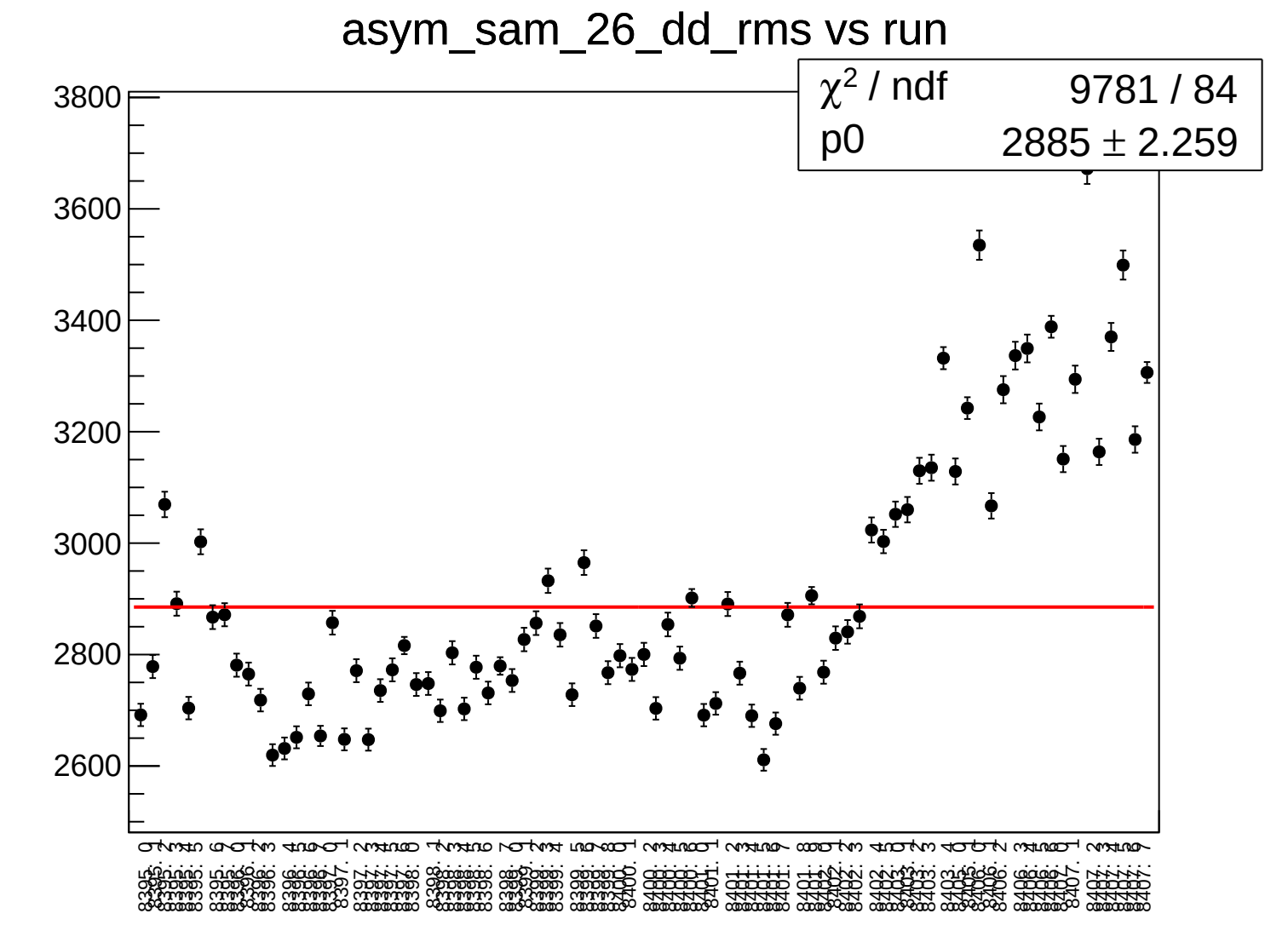

asym_sam_26_dd_correction_mean vs run
×10^3
χ² / ndf 85.75 / 84
p0 −537.5 ± 3189
100
50
0
−50
−100
pull
Entries 85
Mean −291.3
Std Dev 325.8
2
1
0
−1
−2

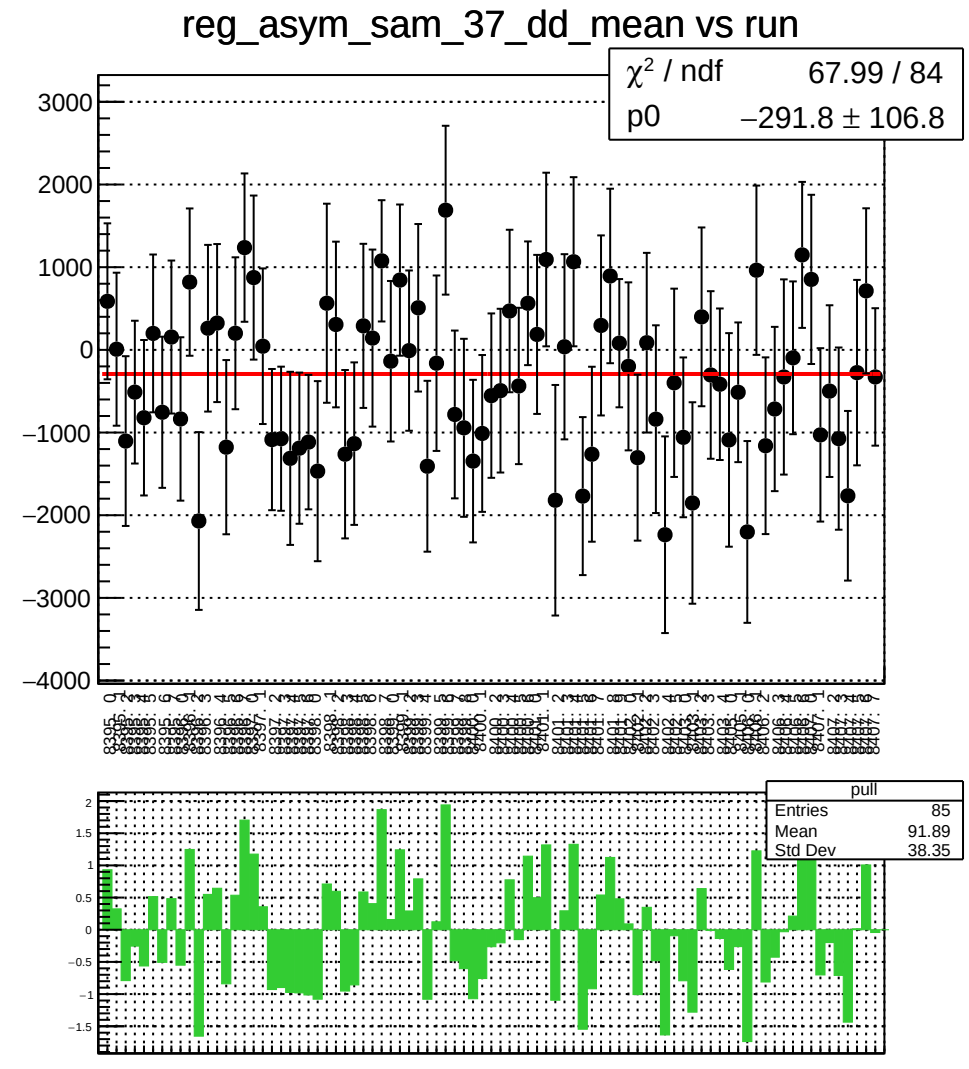

pull1D
Entries 85
Mean 0.005745
Std Dev 1.004
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

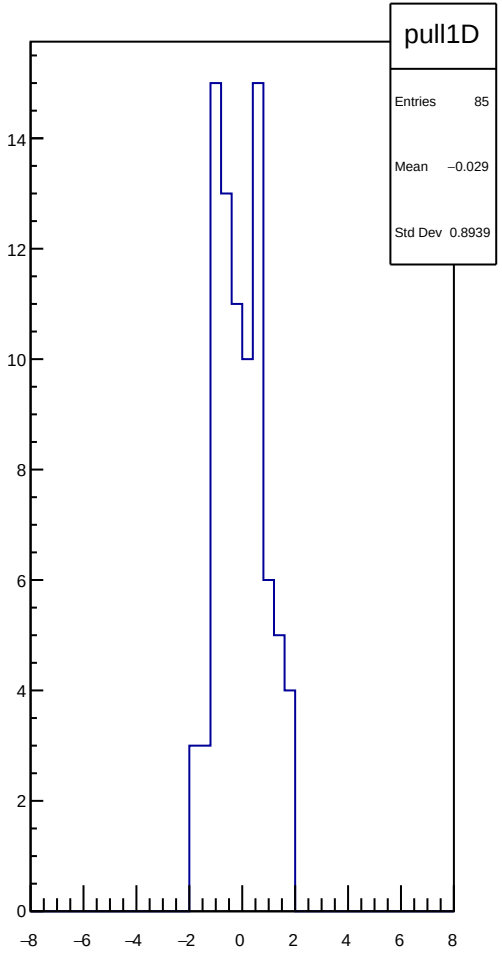

asym_sam_26_dd_correction_rms vs run
χ² / ndf 9832 / 84
p0 2881 ± 2.255
3800
3600
3400
3200
3000
2800
2600

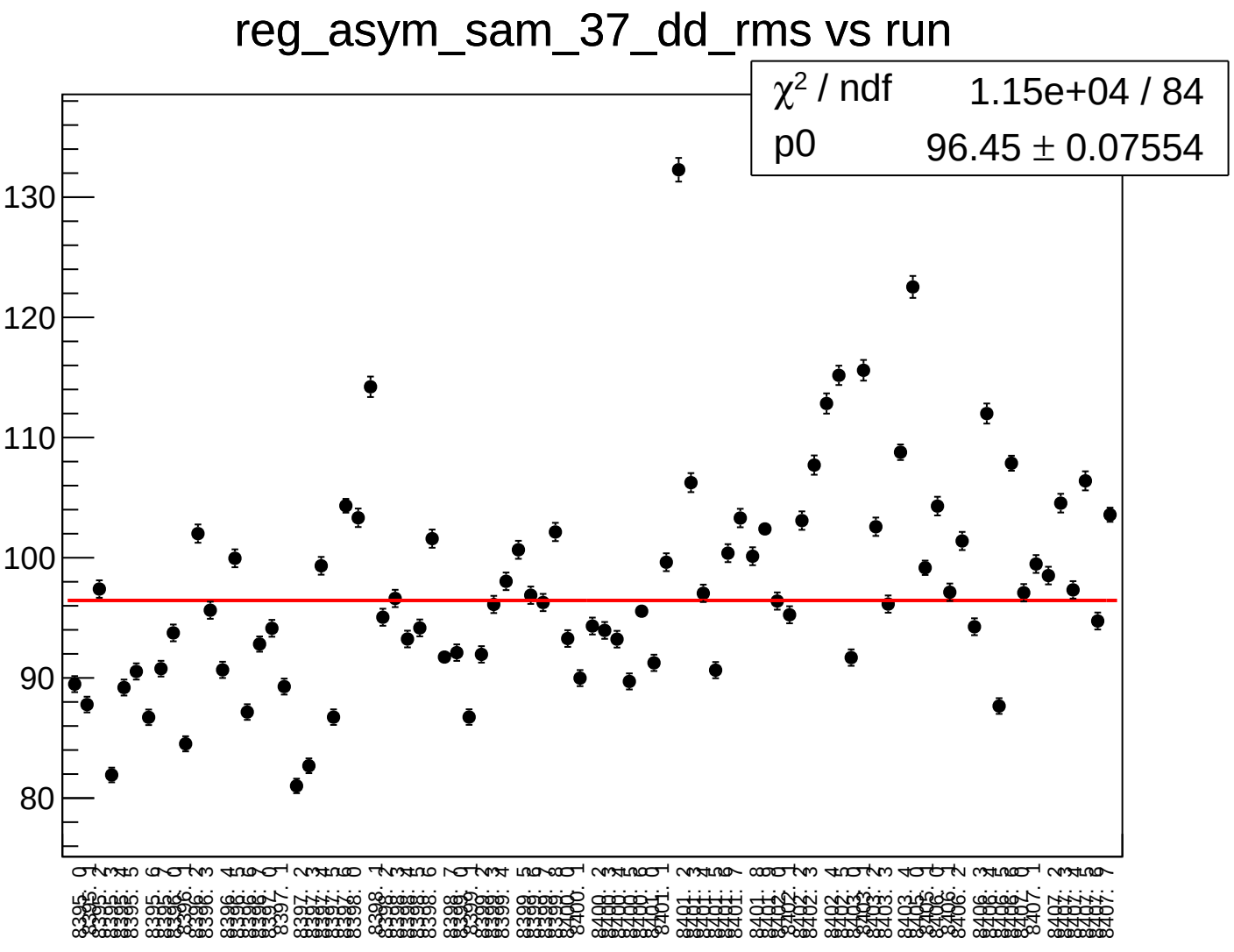

asym_sam_26_dd_mean vs run
×10^3
χ^2 / ndf 87.21 / 84
p0 633.6 ± 3194
100
50
0
−50
−100
pull
Entries 85
Mean −283.8
Std Dev 317.3
2
1
0
−1
−2

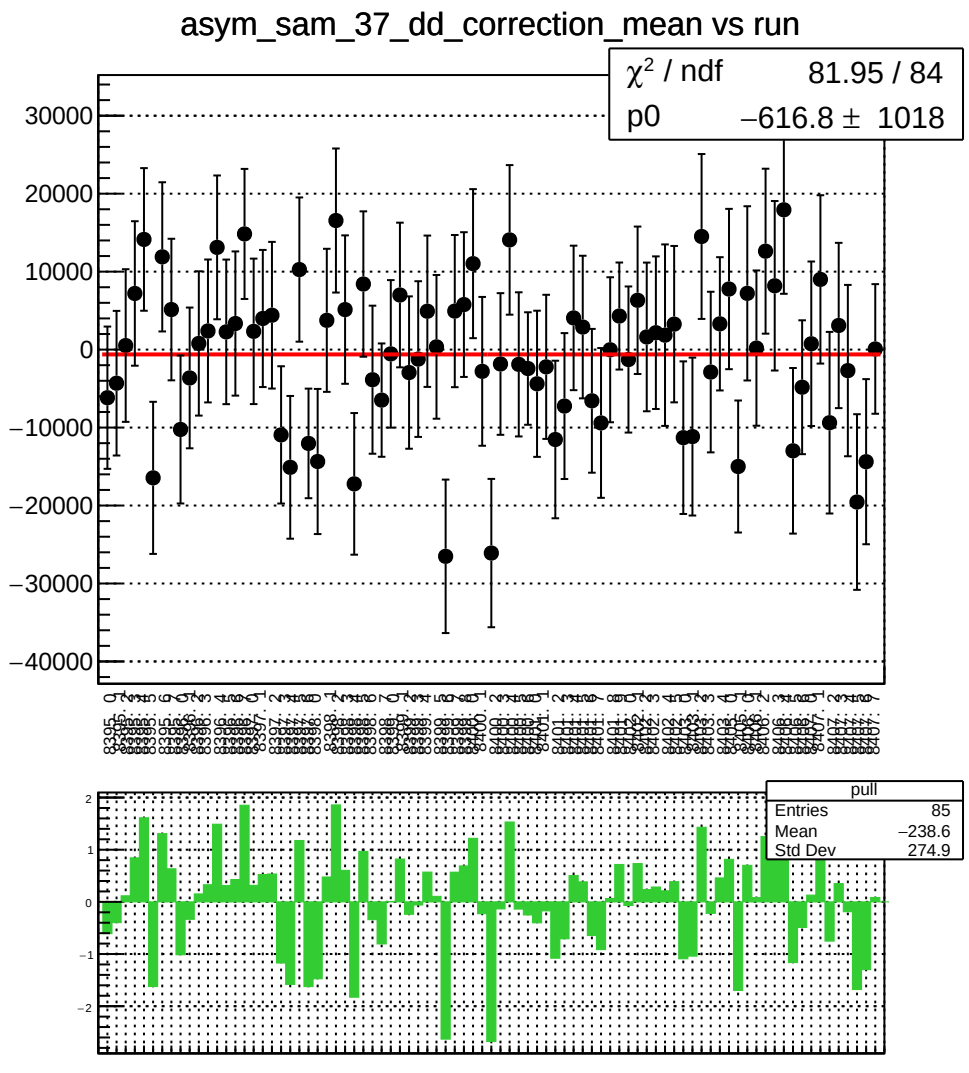

pull1D
Entries 85
Mean −0.006099
Std Dev 1.013
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

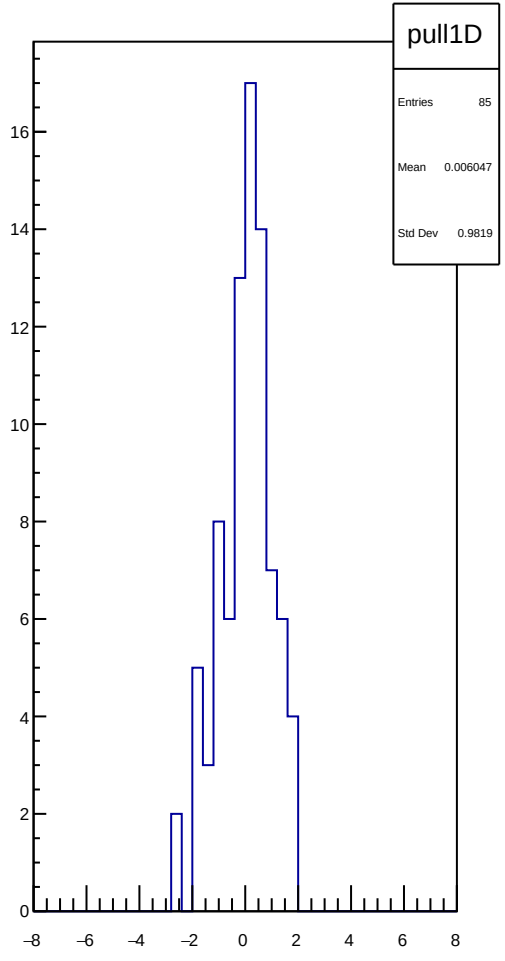

asym_sam_26_dd_rms vs run
χ² / ndf 9781 / 84
p0 2885 ± 2.259
3800
3600
3400
3200
3000
2800
2600

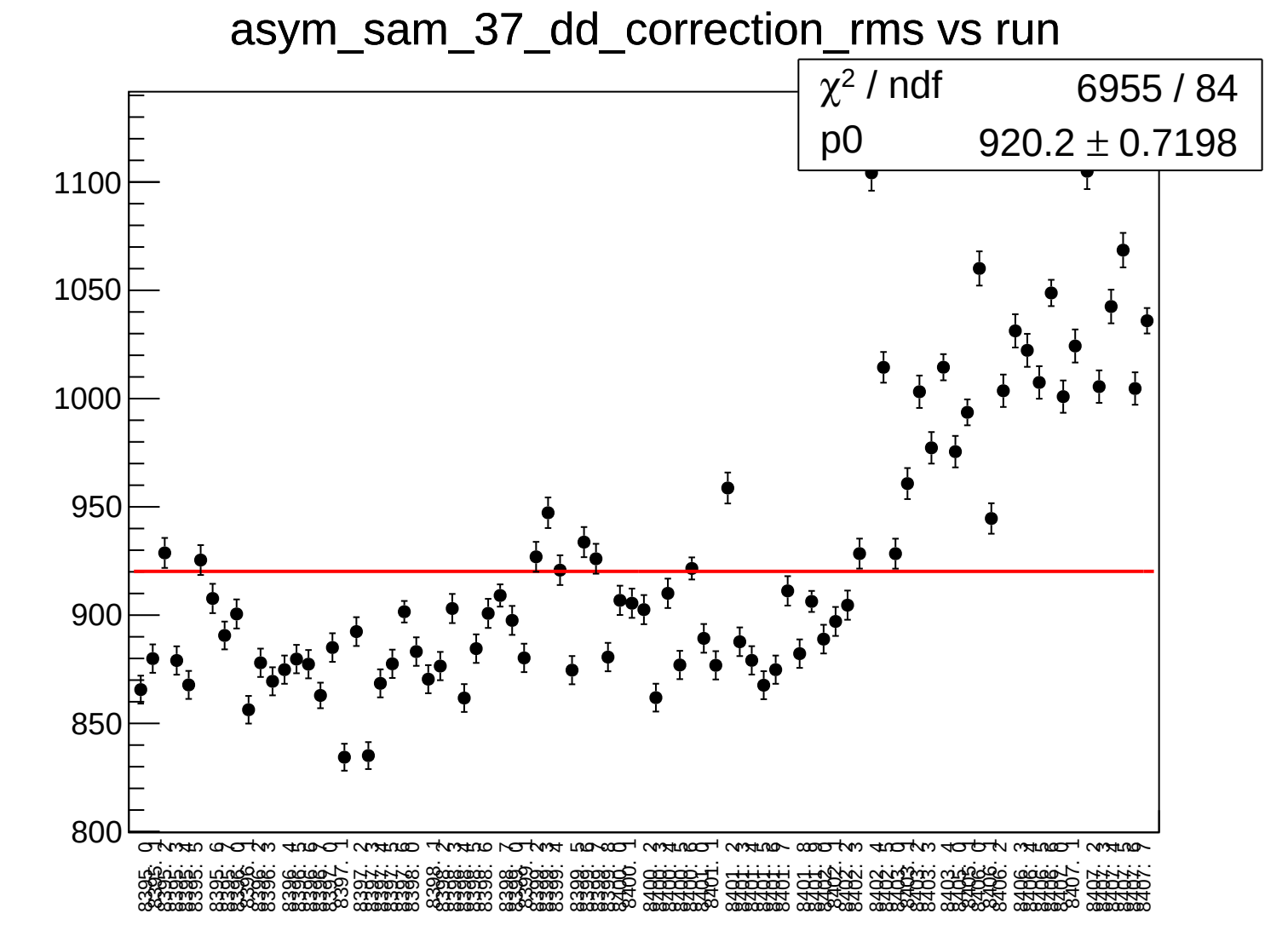

reg_asym_sam_37_dd_mean vs run
χ² / ndf 67.99 / 84
p0 −291.8 ± 106.8
pull
Entries 85
Mean 91.89
Std Dev 38.35

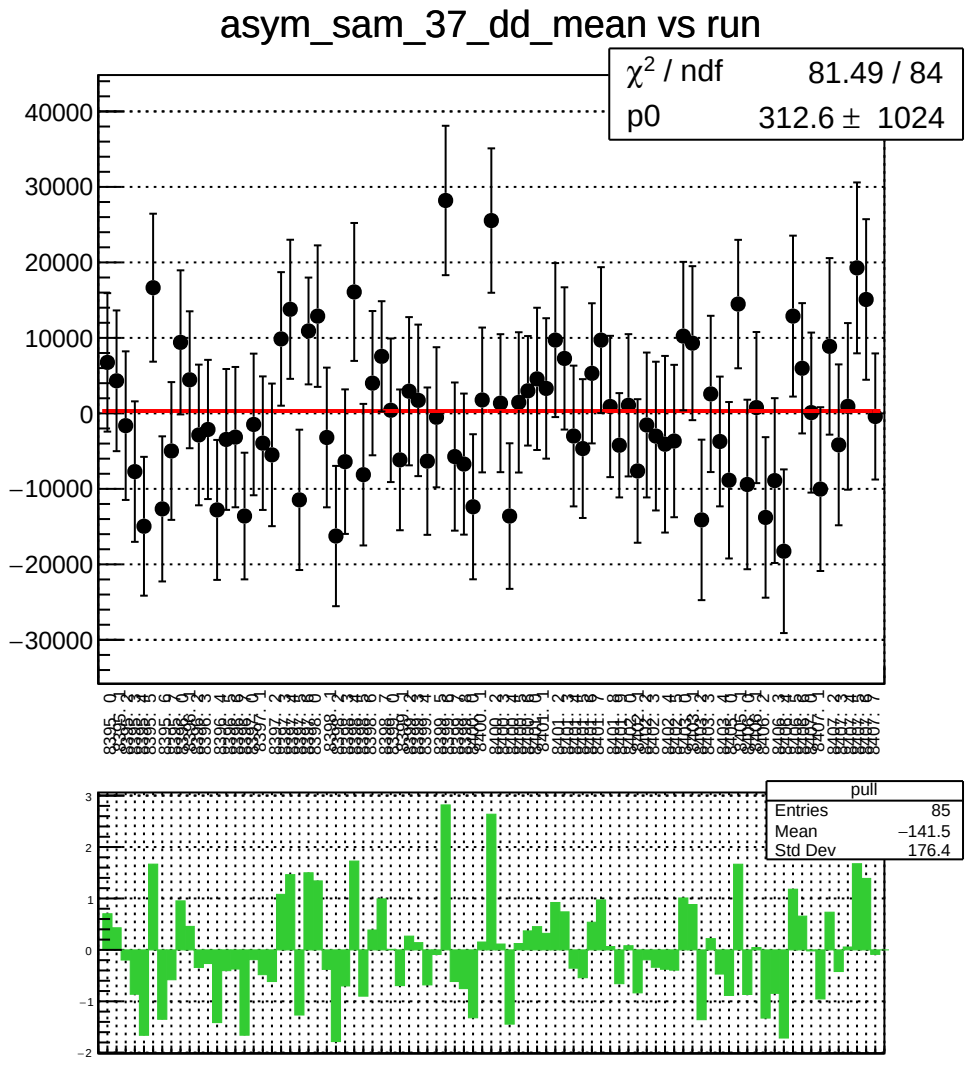

pull1D
Entries 85
Mean −0.029
Std Dev 0.8939

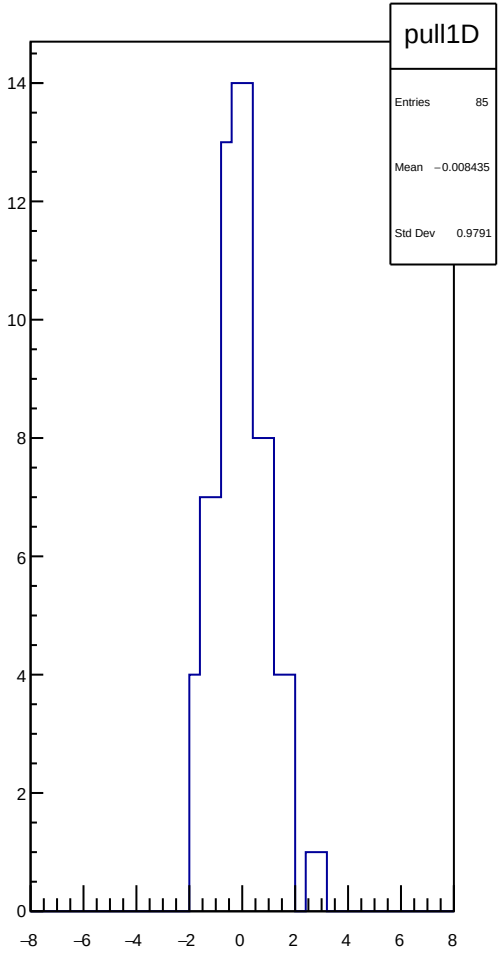

reg_asym_sam_37_dd_rms vs run
χ² / ndf 1.15e+04 / 84
p0 96.45 ± 0.07554
130
120
110
100
90
80

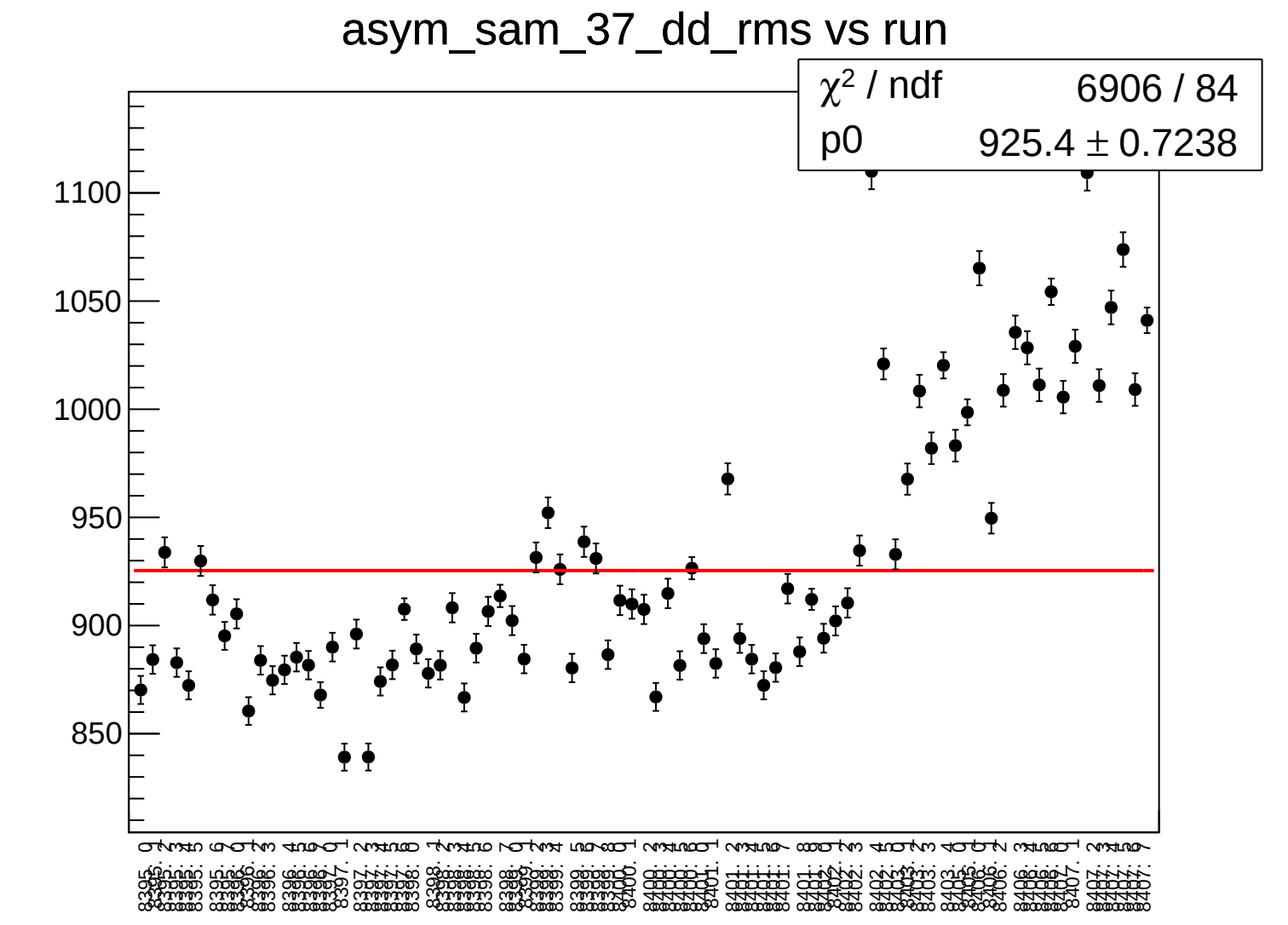

asym_sam_37_dd_correction_mean vs run
χ² / ndf 81.95 / 84
p0 −616.8 ± 1018
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −238.6
Std Dev 274.9
2
1
0
−1
−2

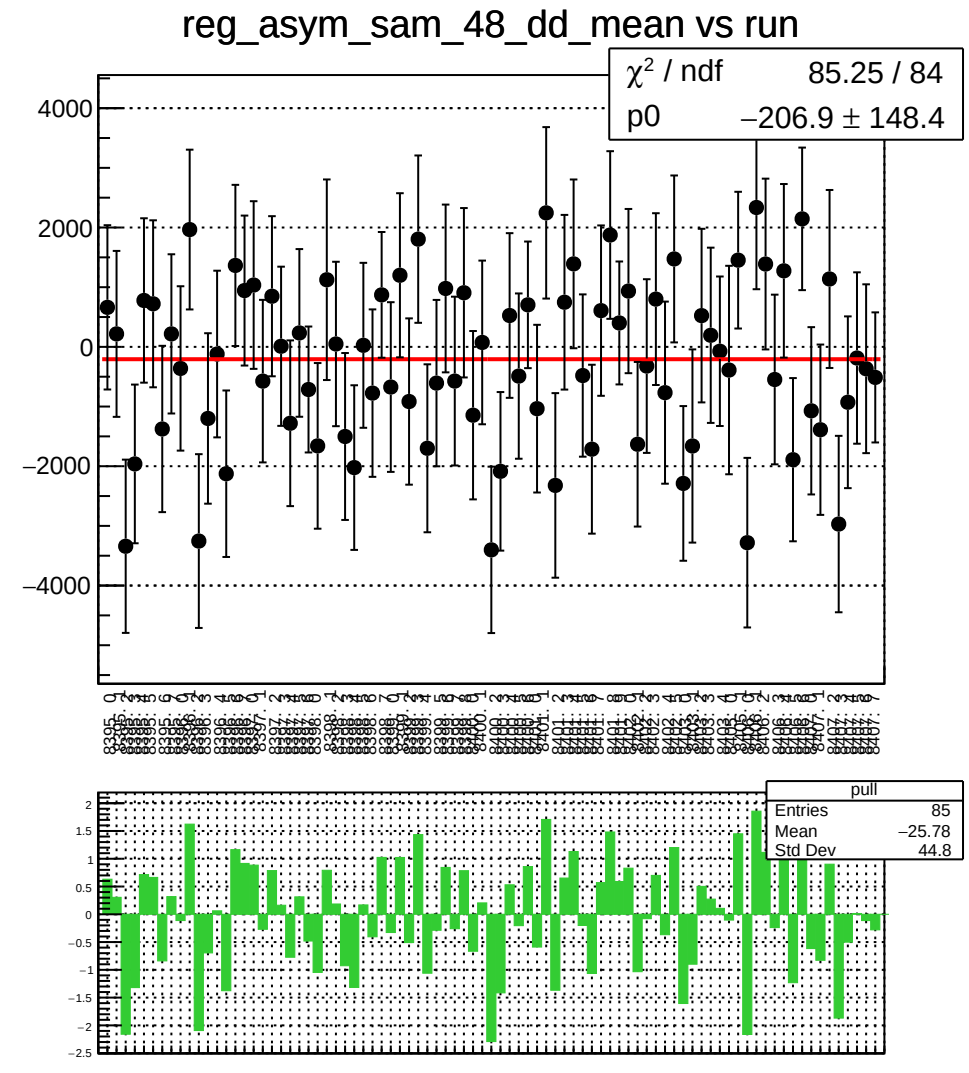

pull1D
Entries 85
Mean 0.006047
Std Dev 0.9819
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

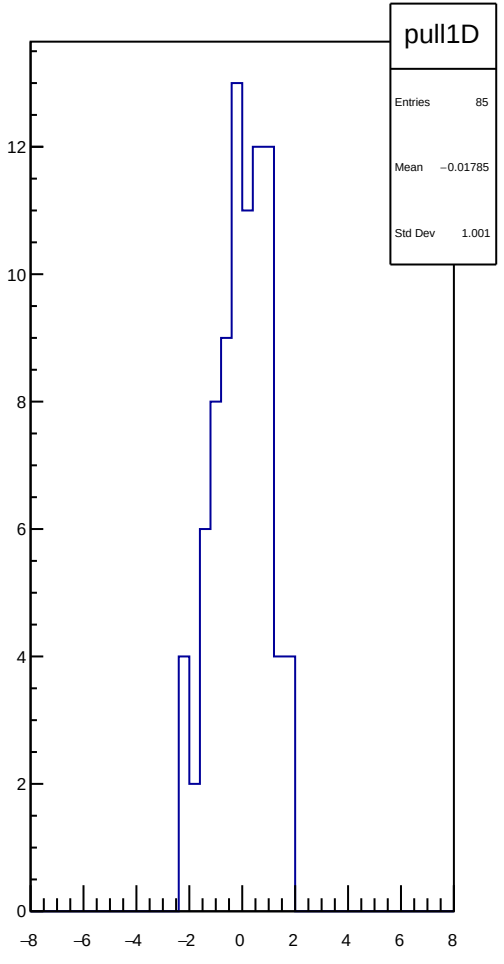

asym_sam_37_dd_correction_rms vs run
χ² / ndf 6955 / 84
p0 920.2 ± 0.7198
1100
1050
1000
950
900
850
800

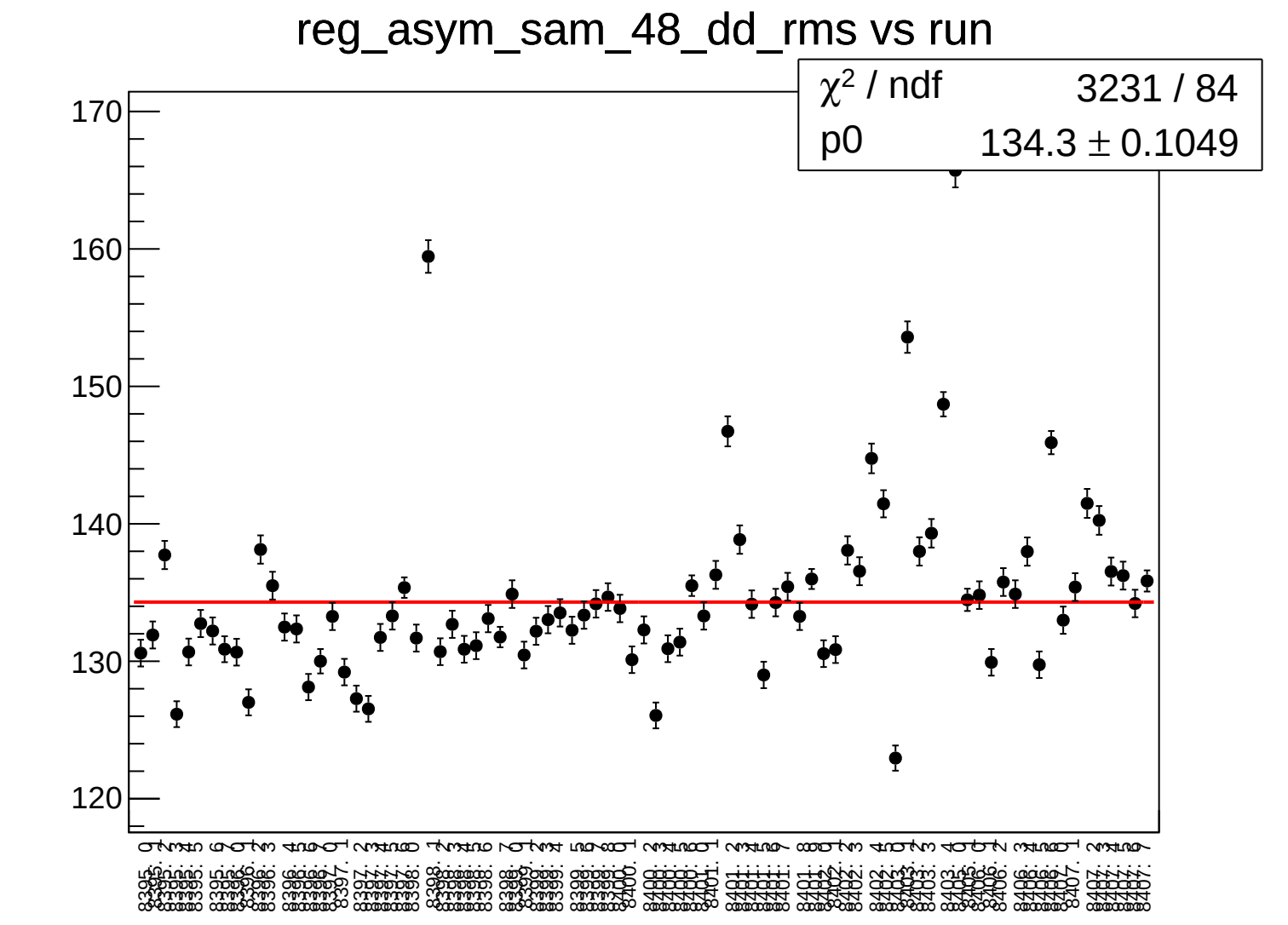

asym_sam_37_dd_mean vs run
χ² / ndf 81.49 / 84
p0 312.6 ± 1024
pull
Entries 85
Mean −141.5
Std Dev 176.4

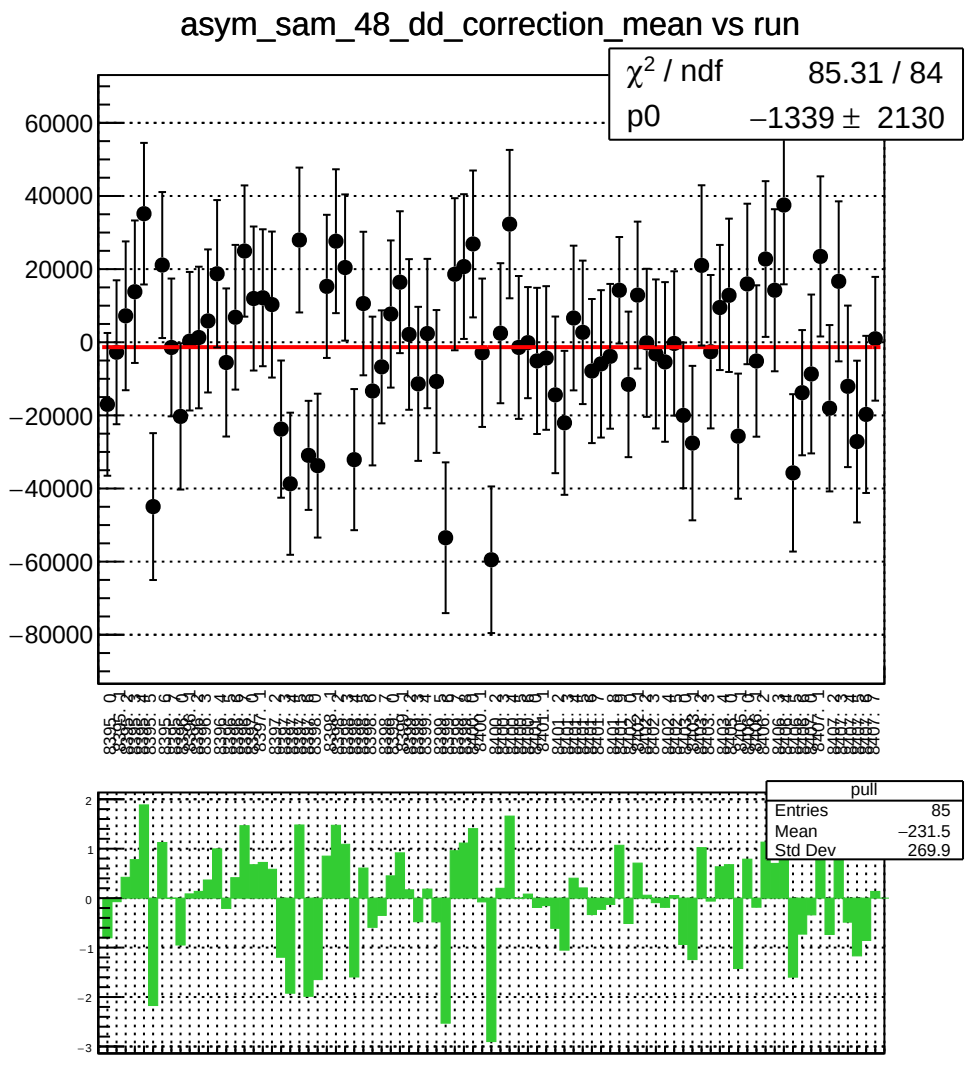

pull1D
Entries 85
Mean −0.008435
Std Dev 0.9791

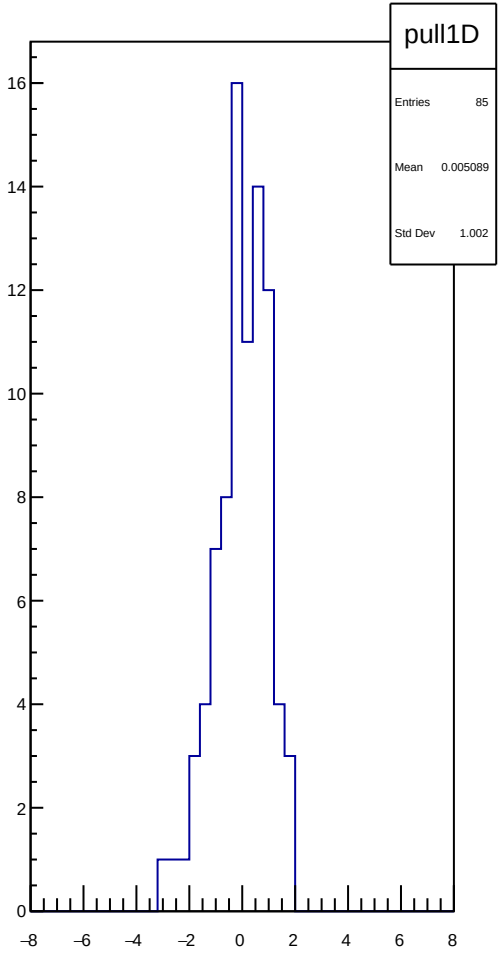

asym_sam_37_dd_rms vs run
χ² / ndf 6906 / 84
p0 925.4 ± 0.7238
1100
1050
1000
950
900
850

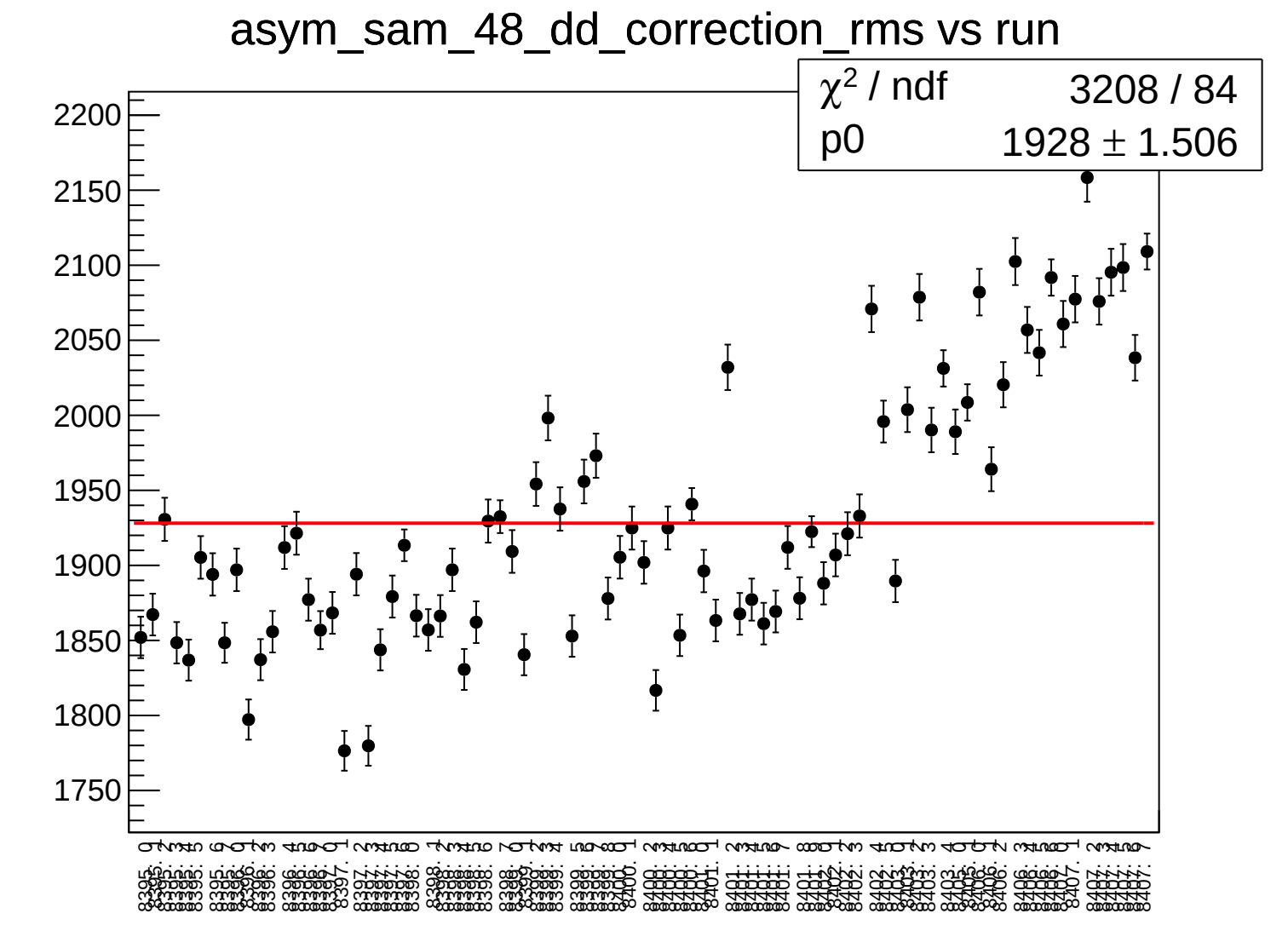

reg_asym_sam_48_dd_mean vs run
χ² / ndf 85.25 / 84
p0 −206.9 ± 148.4
4000
2000
0
−2000
−4000
pull
Entries 85
Mean −25.78
Std Dev 44.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

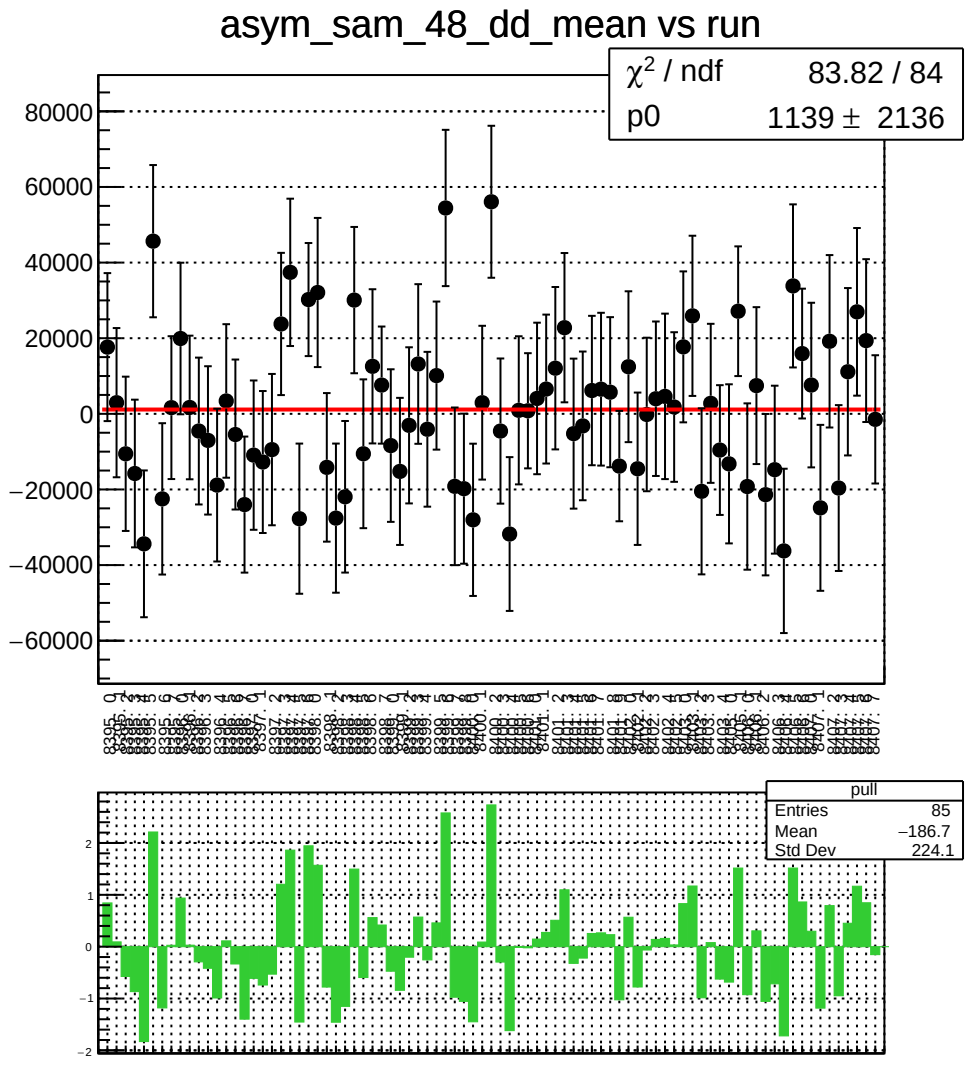

pull1D
Entries 85
Mean −0.01785
Std Dev 1.001
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

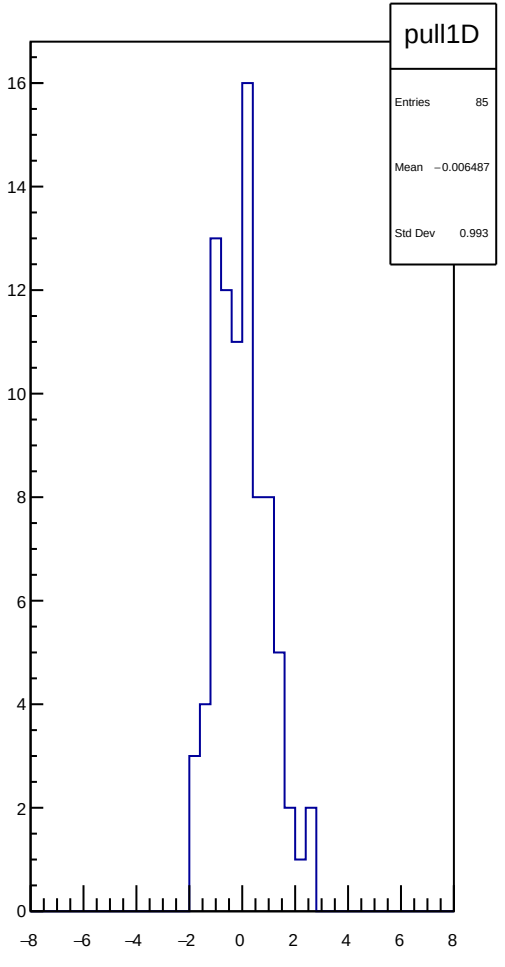

reg_asym_sam_48_dd_rms vs run
χ² / ndf 3231 / 84
p0 134.3 ± 0.1049
170
160
150
140
130
120

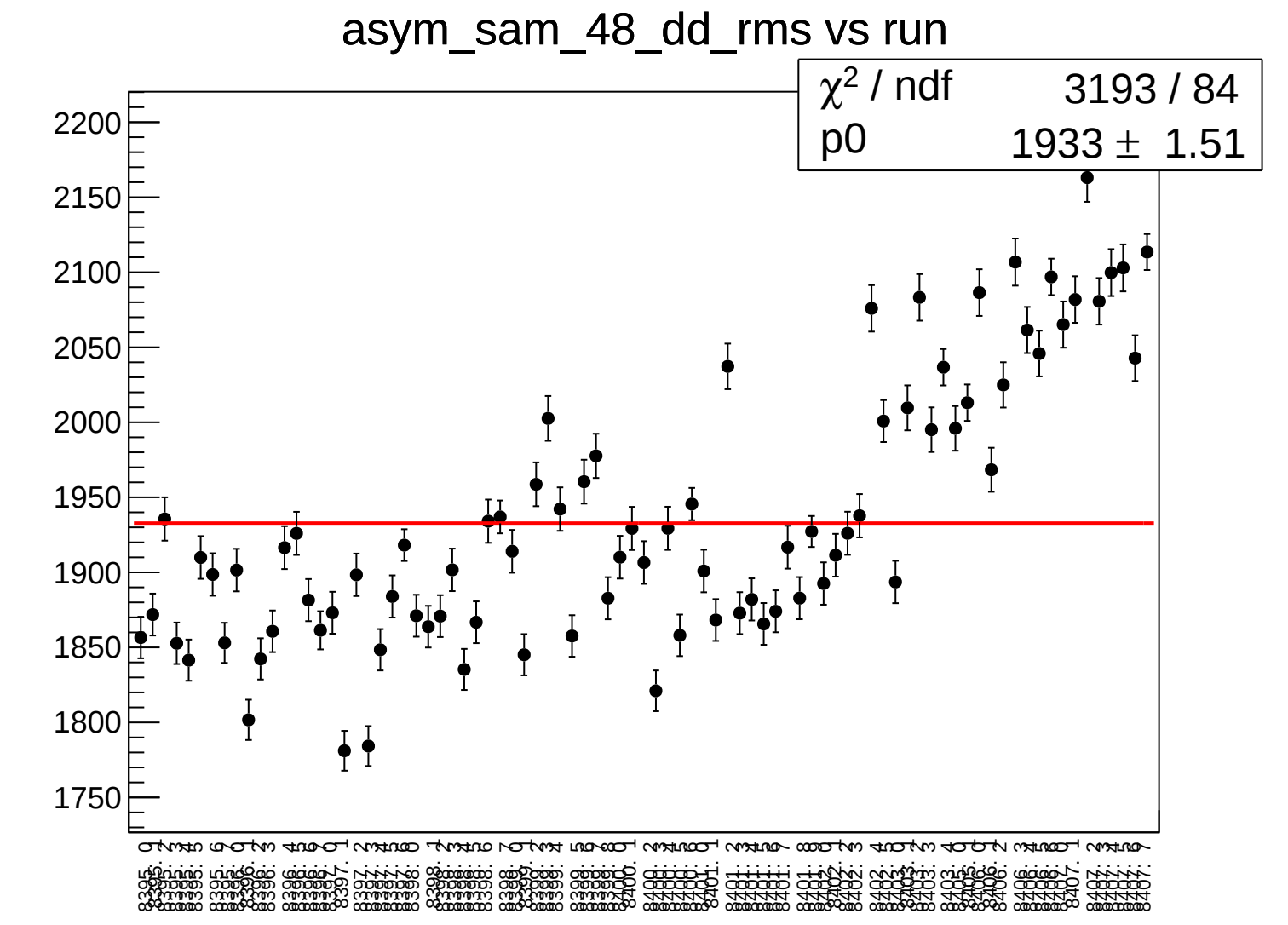

asym_sam_48_dd_correction_mean vs run
χ² / ndf 85.31 / 84
p0 −1339 ± 2130
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −231.5
Std Dev 269.9
2
1
0
−1
−2
−3

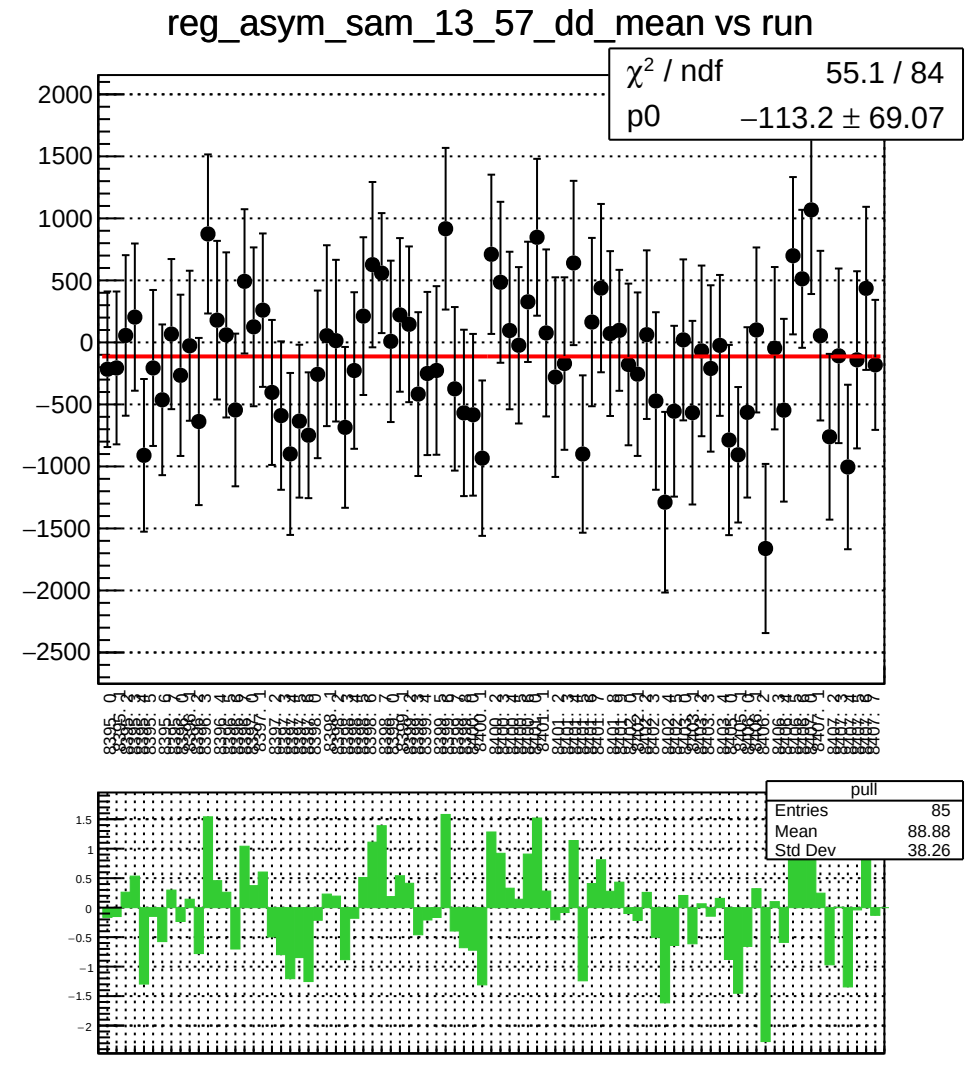

pull1D
Entries 85
Mean 0.005089
Std Dev 1.002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

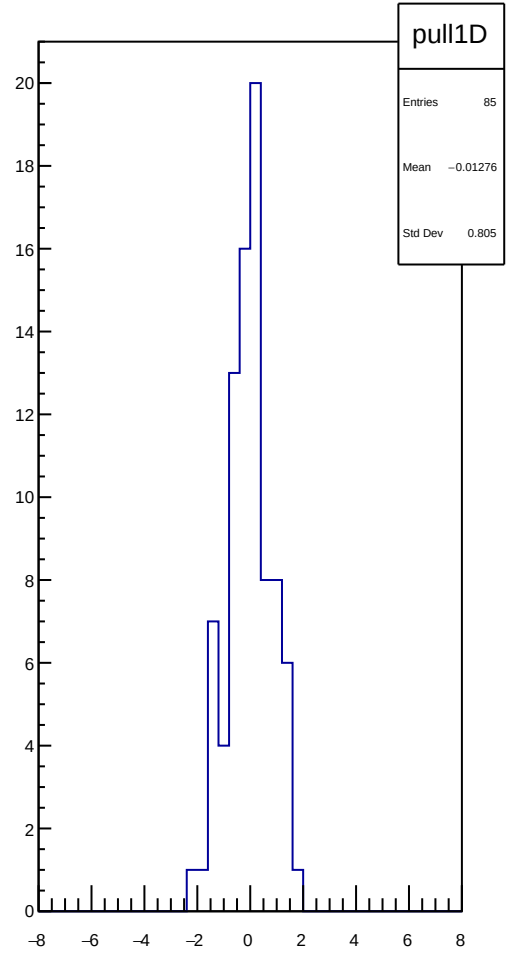

asym_sam_48_dd_correction_rms vs run
χ² / ndf 3208 / 84
p0 1928 ± 1.506
2200
2150
2100
2050
2000
1950
1900
1850
1800
1750

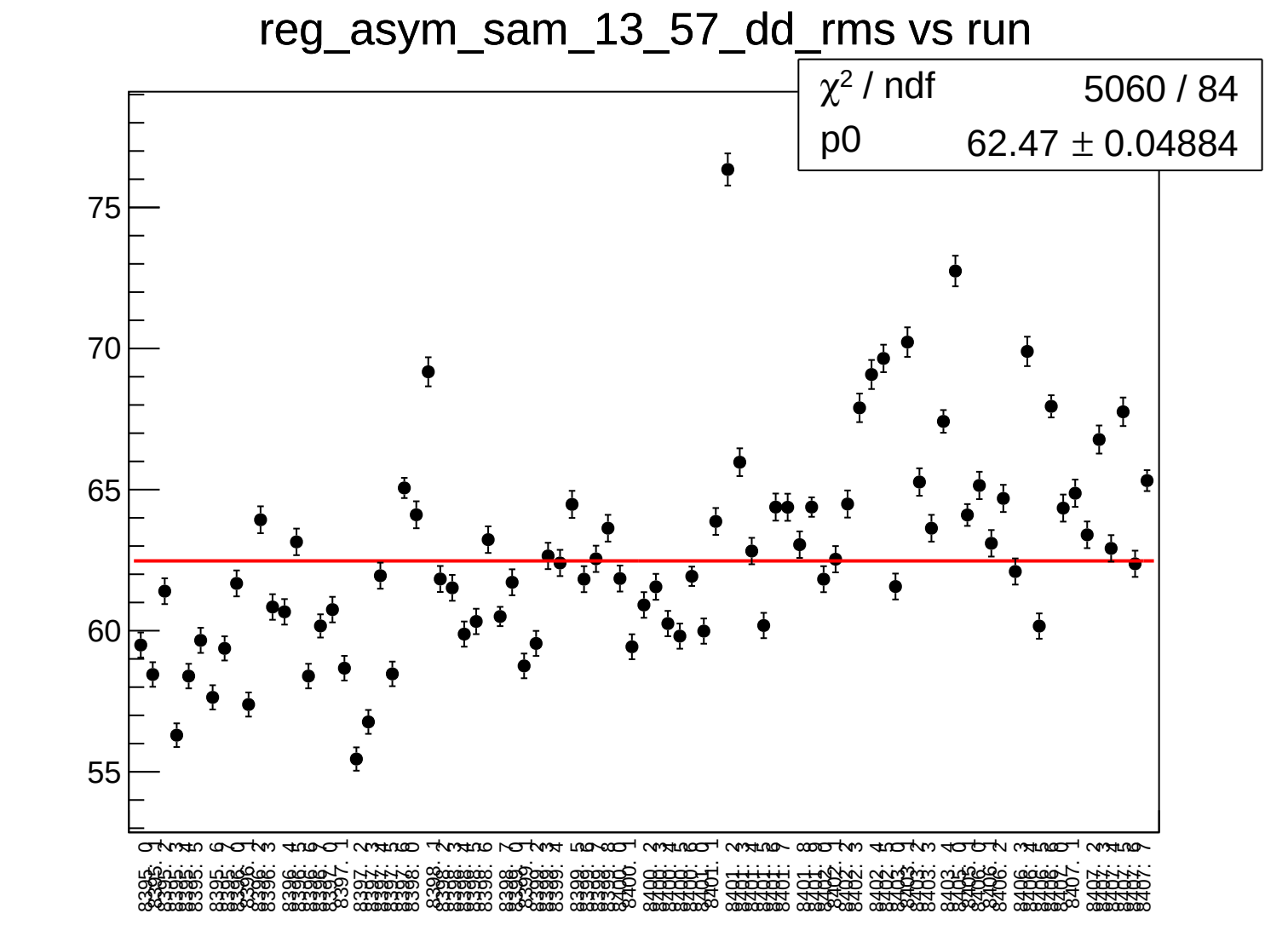

asym_sam_48_dd_mean vs run
χ² / ndf 83.82 / 84
p0 1139 ± 2136
pull
Entries 85
Mean −186.7
Std Dev 224.1

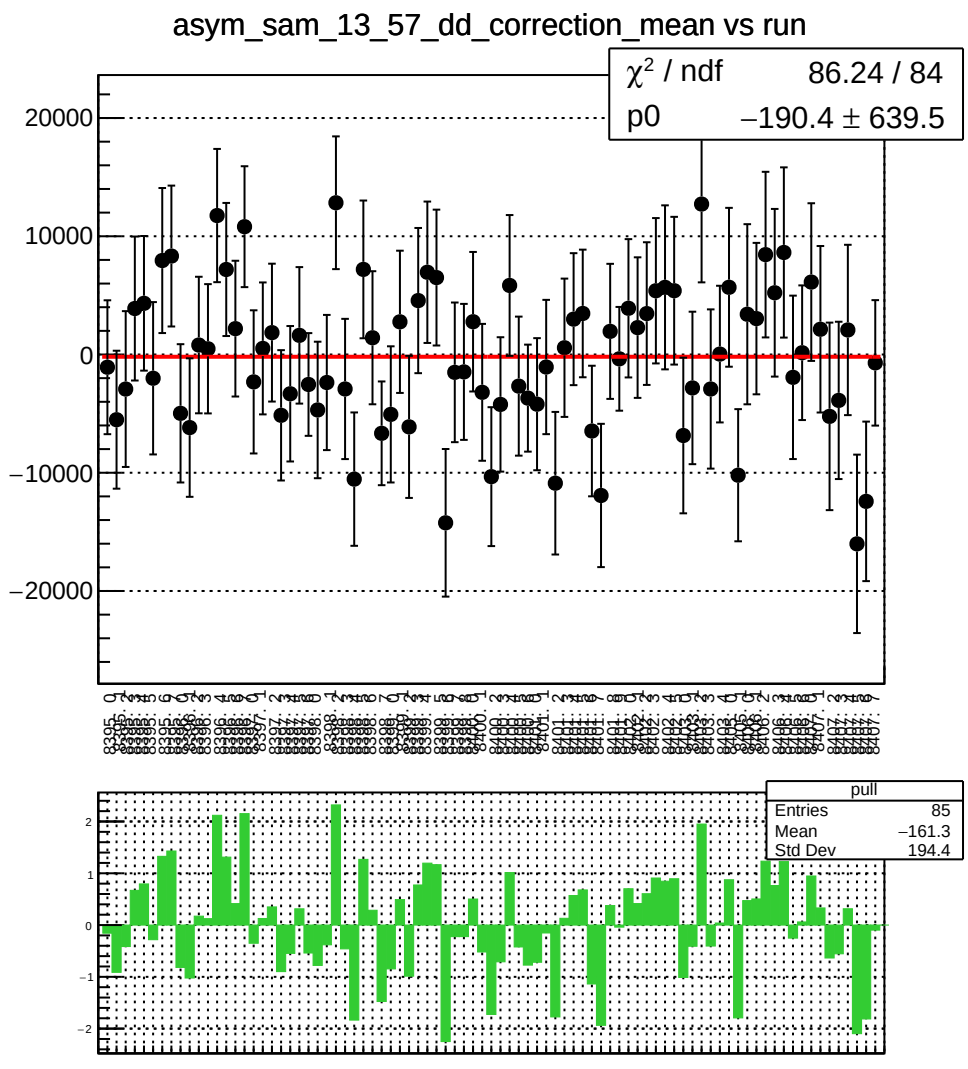

pull1D
Entries 85
Mean −0.006487
Std Dev 0.993

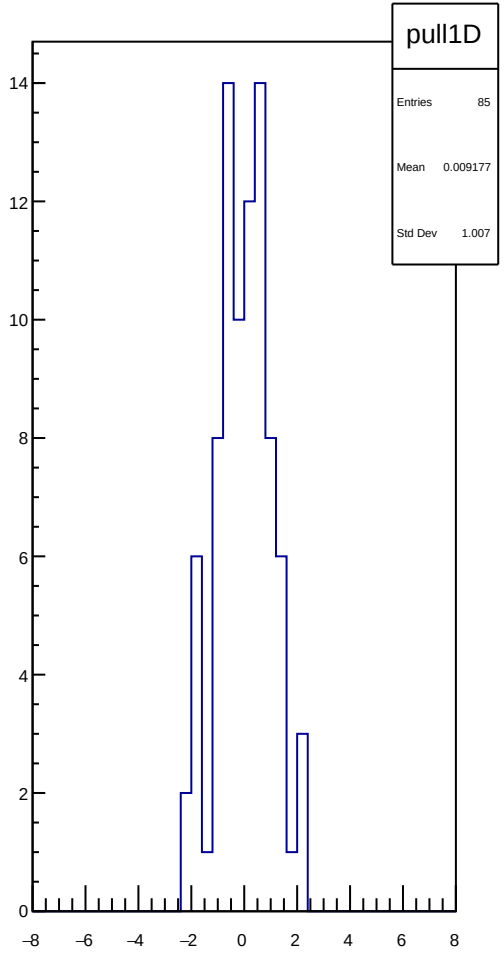

asym_sam_48_dd_rms vs run
χ² / ndf 3193 / 84
p0 1933 ± 1.51
2200
2150
2100
2050
2000
1950
1900
1850
1800
1750

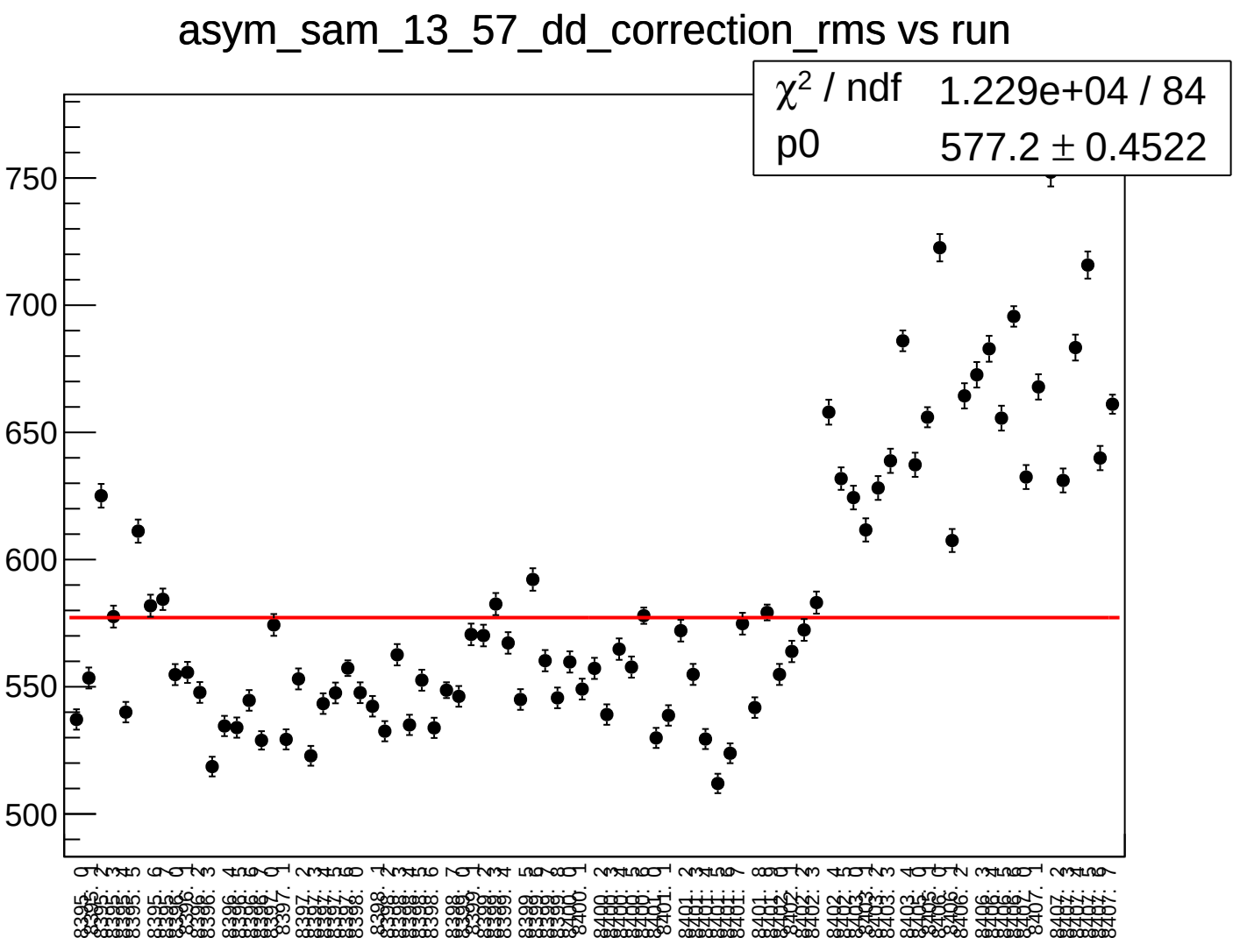

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 55.1 / 84
p0 −113.2 ± 69.07
pull
Entries 85
Mean 88.88
Std Dev 38.26

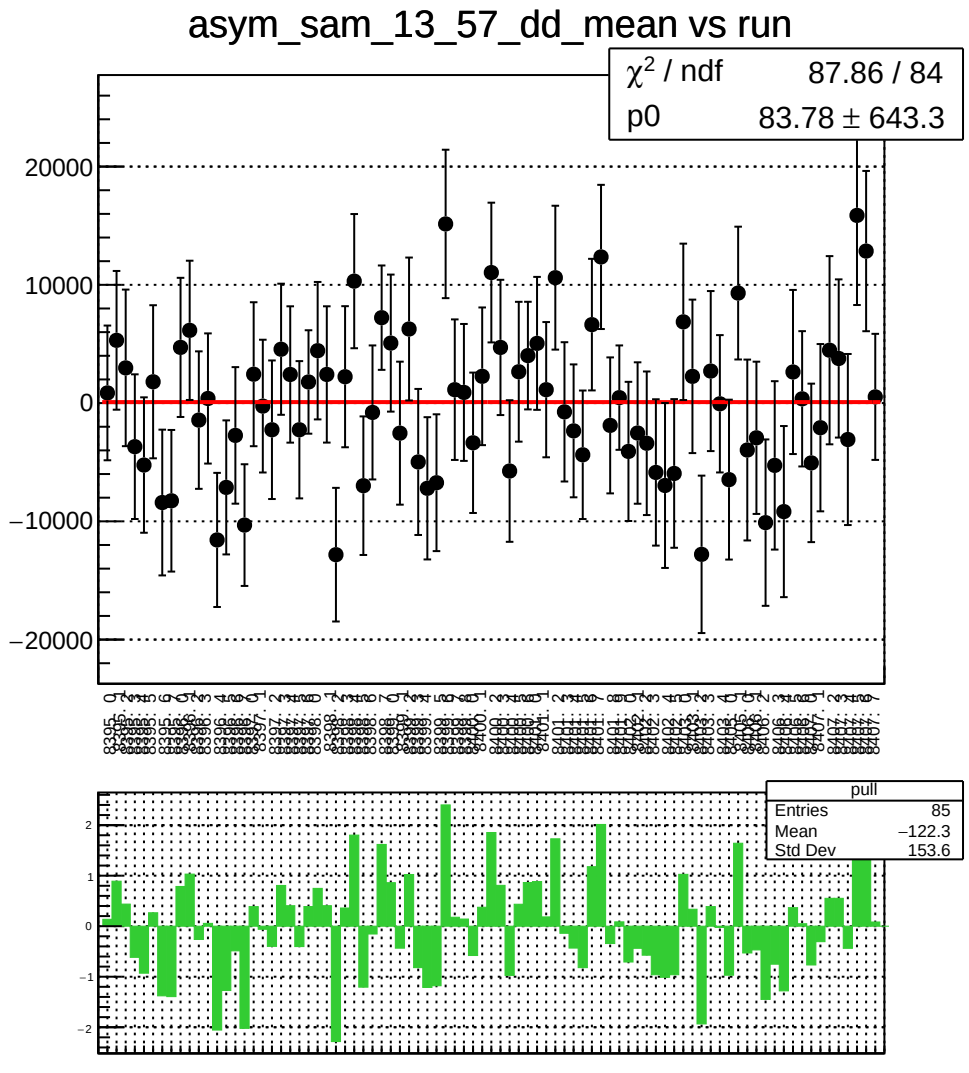

pull1D
Entries 85
Mean −0.01276
Std Dev 0.805

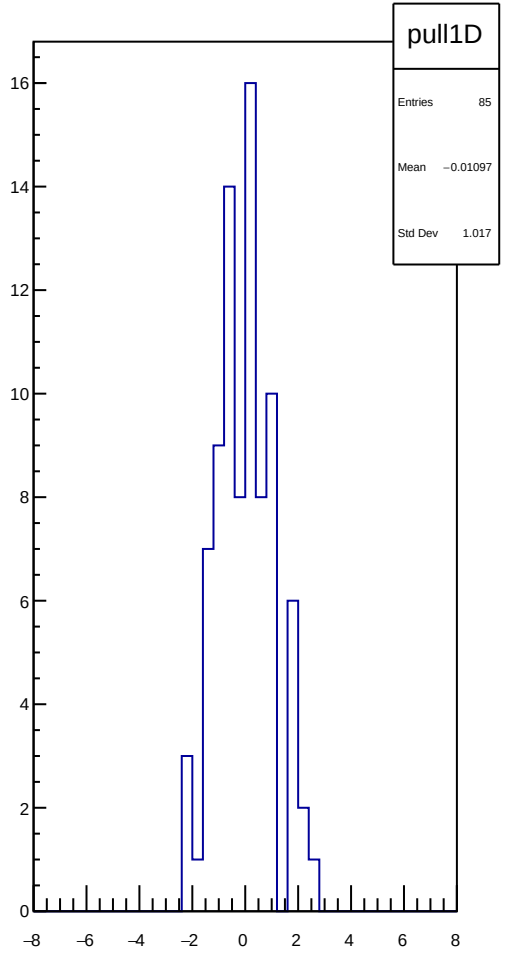

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 5060 / 84
p0 62.47 ± 0.04884
75
70
65
60
55

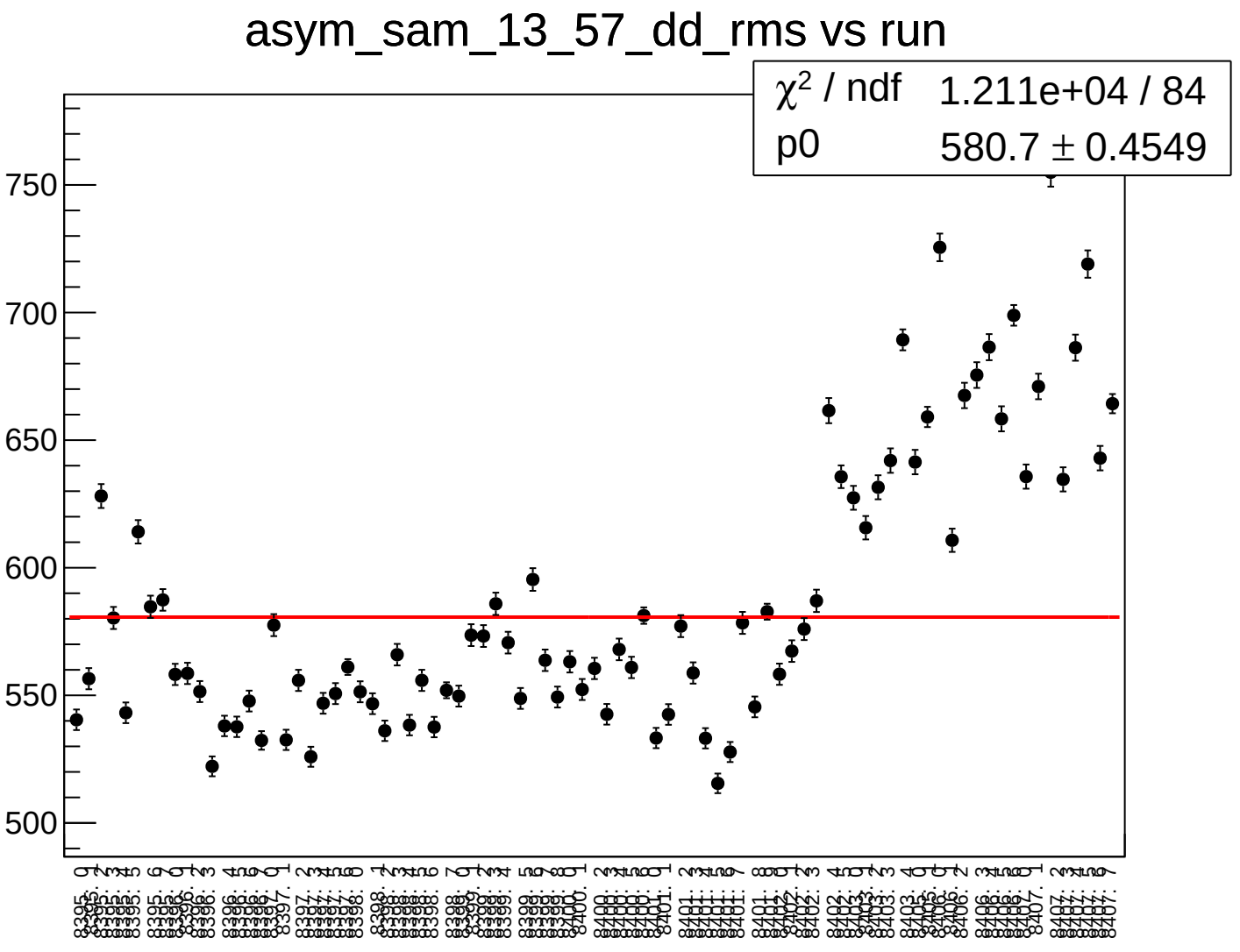

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 86.24 / 84
p0 −190.4 ± 639.5
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −161.3
Std Dev 194.4
2
1
0
−1
−2

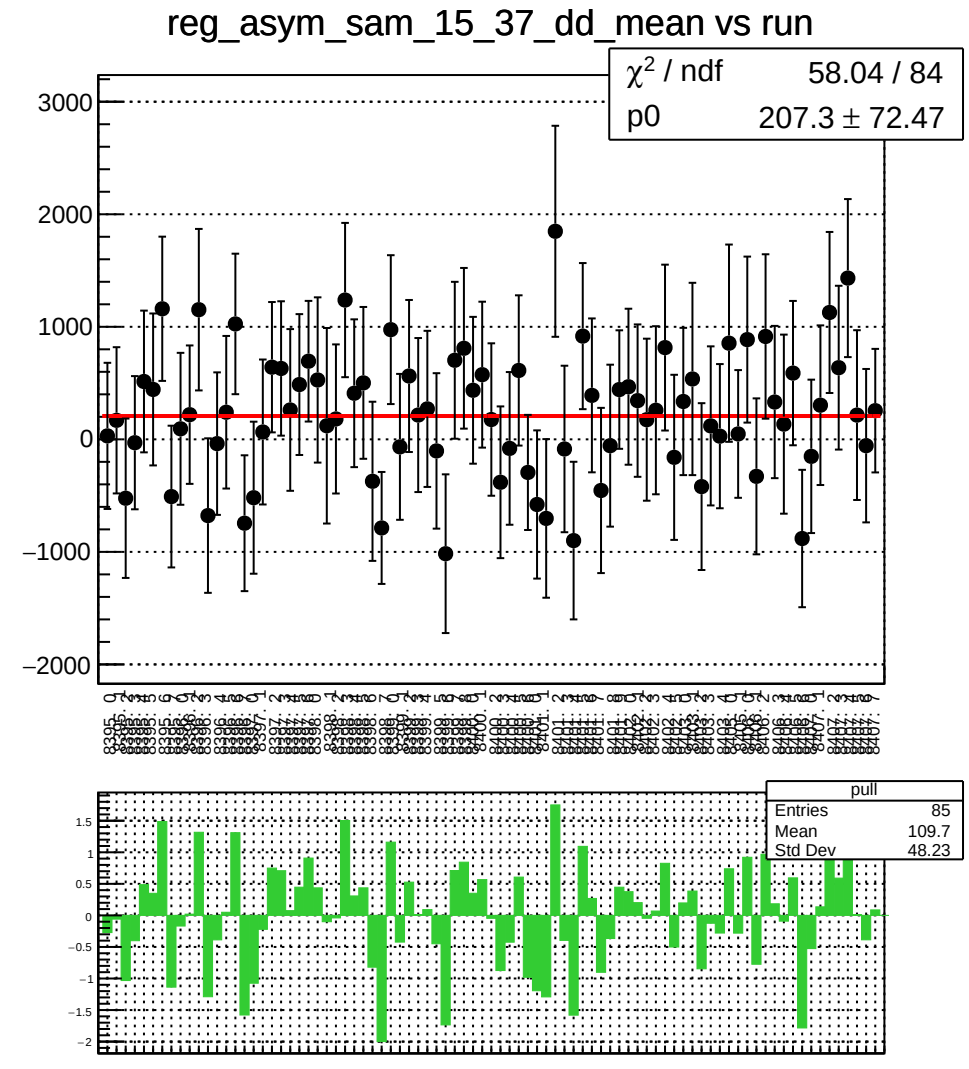

pull1D
Entries 85
Mean 0.009177
Std Dev 1.007
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

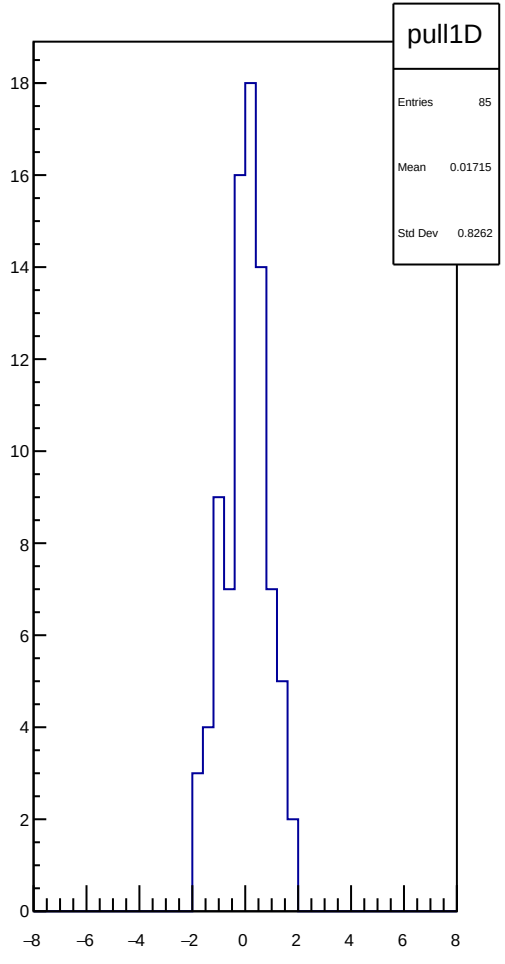

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 1.229e+04 / 84
p0 577.2 ± 0.4522
750
700
650
600
550
500

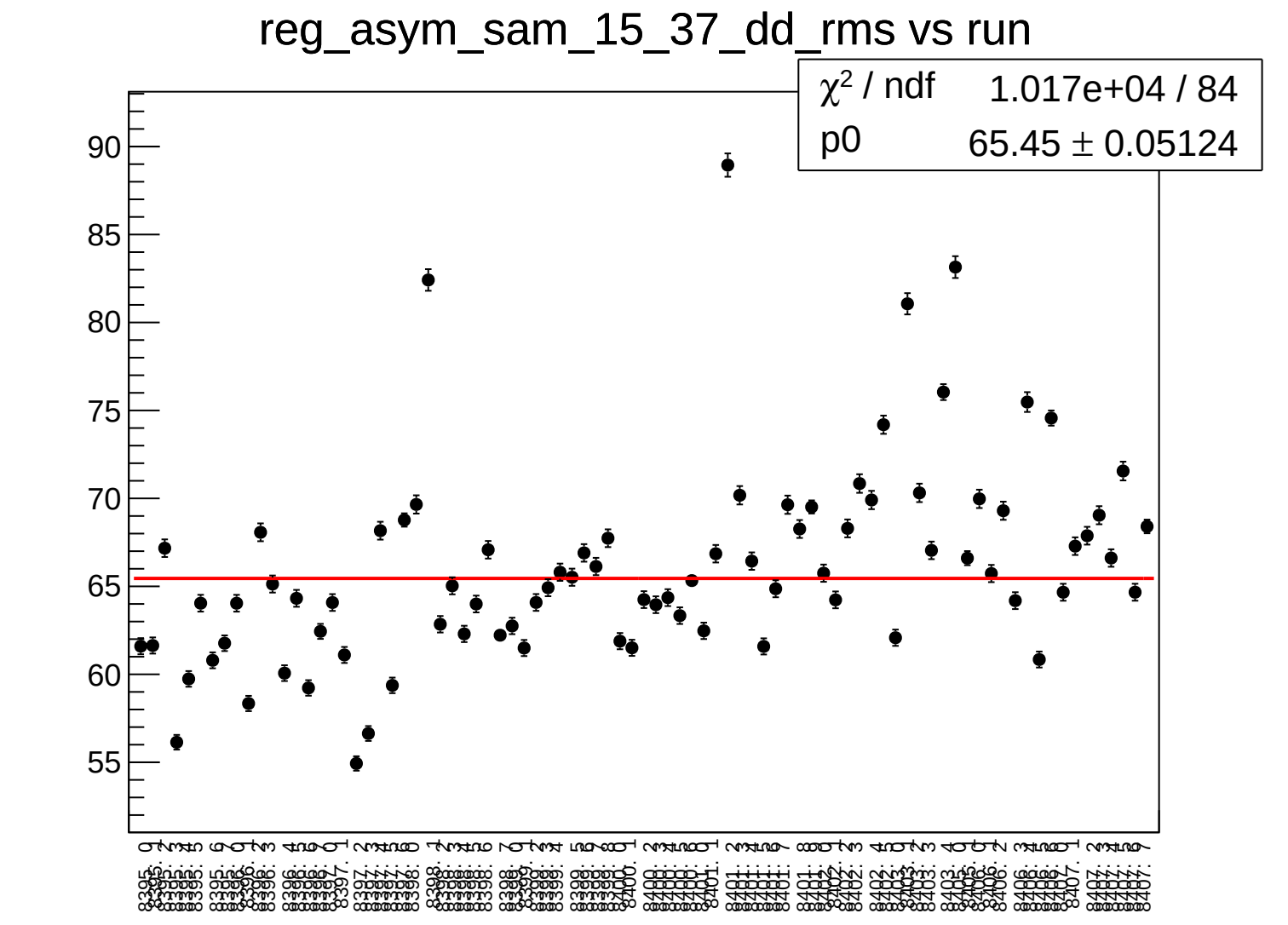

asym_sam_13_57_dd_mean vs run
χ² / ndf 87.86 / 84
p0 83.78 ± 643.3
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −122.3
Std Dev 153.6
2
1
0
−1
−2

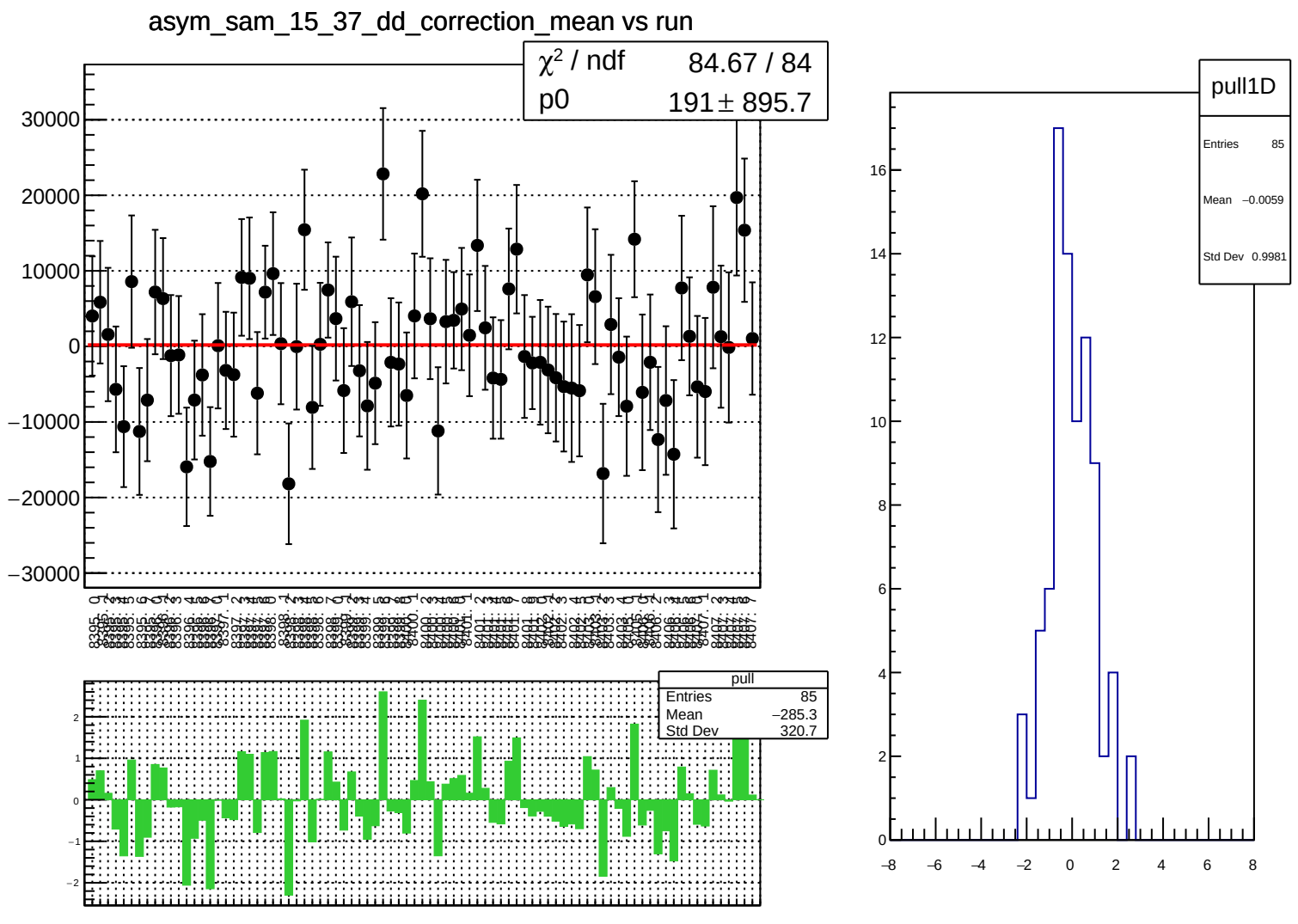

pull1D
Entries 85
Mean −0.01097
Std Dev 1.017
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

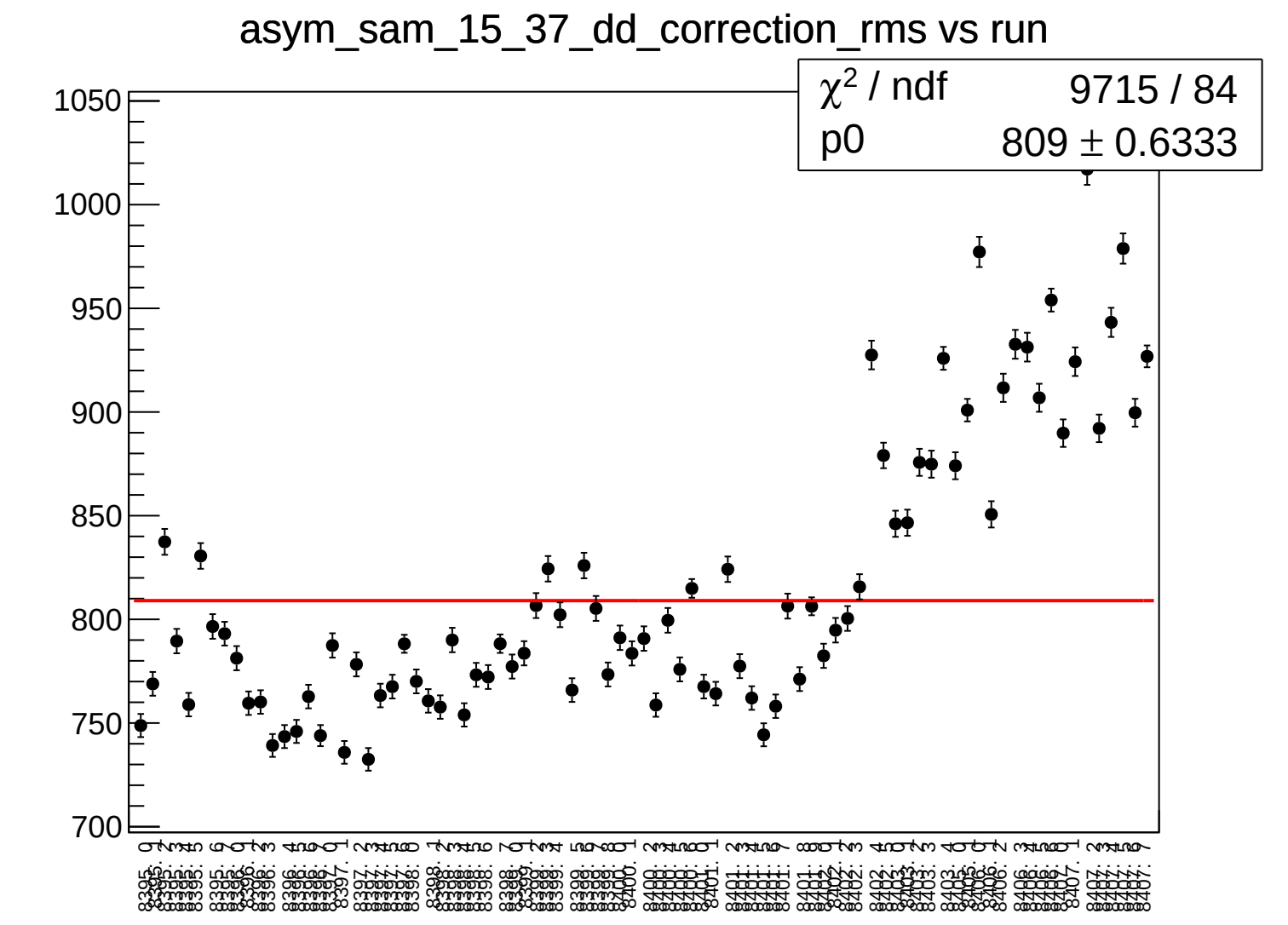

asym_sam_13_57_dd_rms vs run
χ² / ndf 1.211e+04 / 84
p0 580.7 ± 0.4549
750
700
650
600
550
500

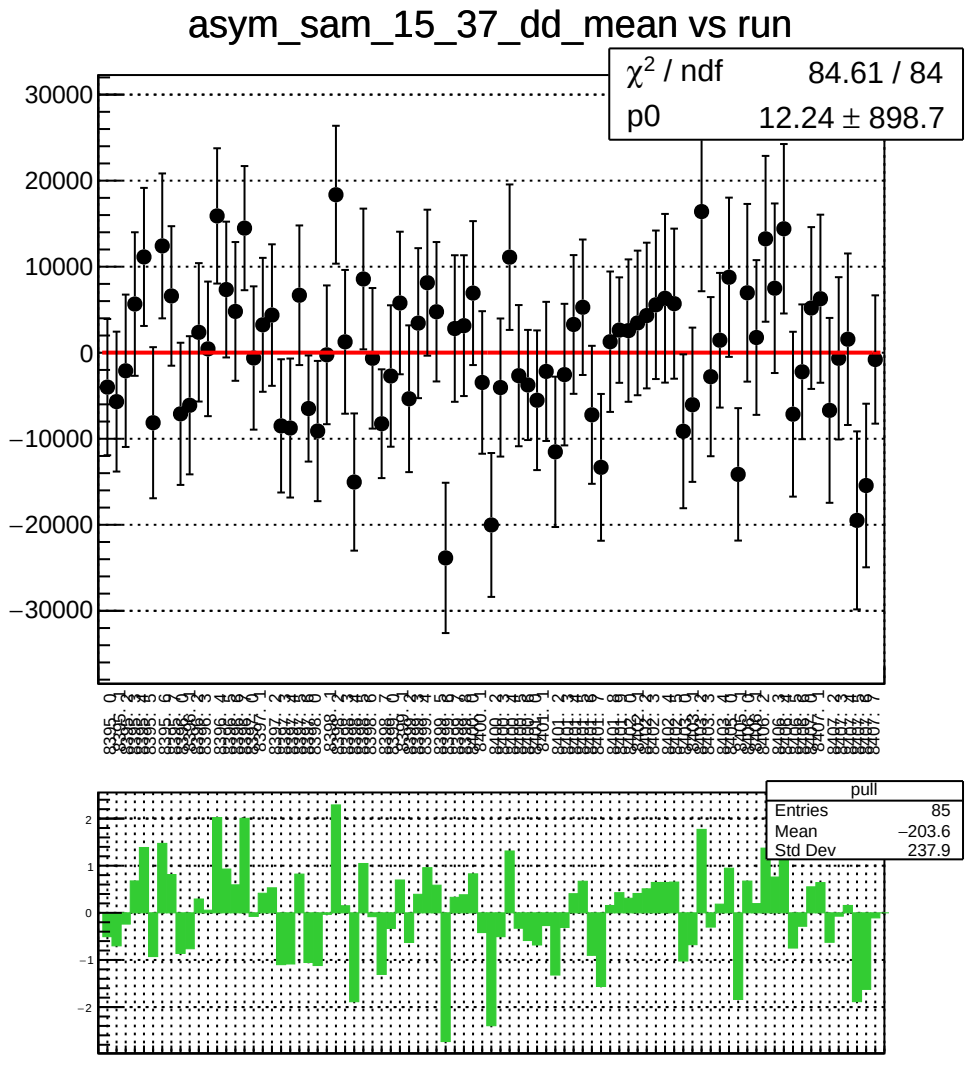

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 58.04 / 84
p0 207.3 ± 72.47
3000
2000
1000
0
−1000
−2000
pull
Entries 85
Mean 109.7
Std Dev 48.23
1.5
1
0.5
0
−0.5
−1
−1.5
−2

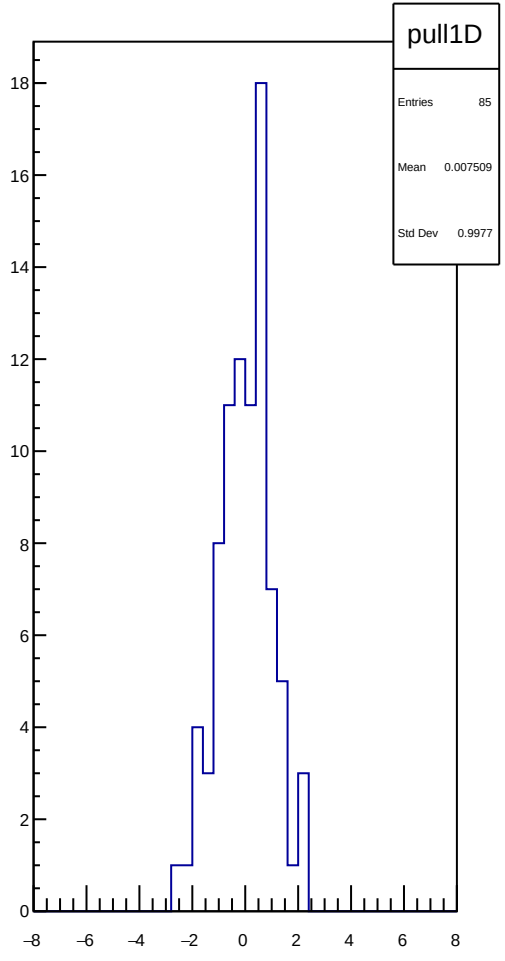

pull1D
Entries 85
Mean 0.01715
Std Dev 0.8262
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

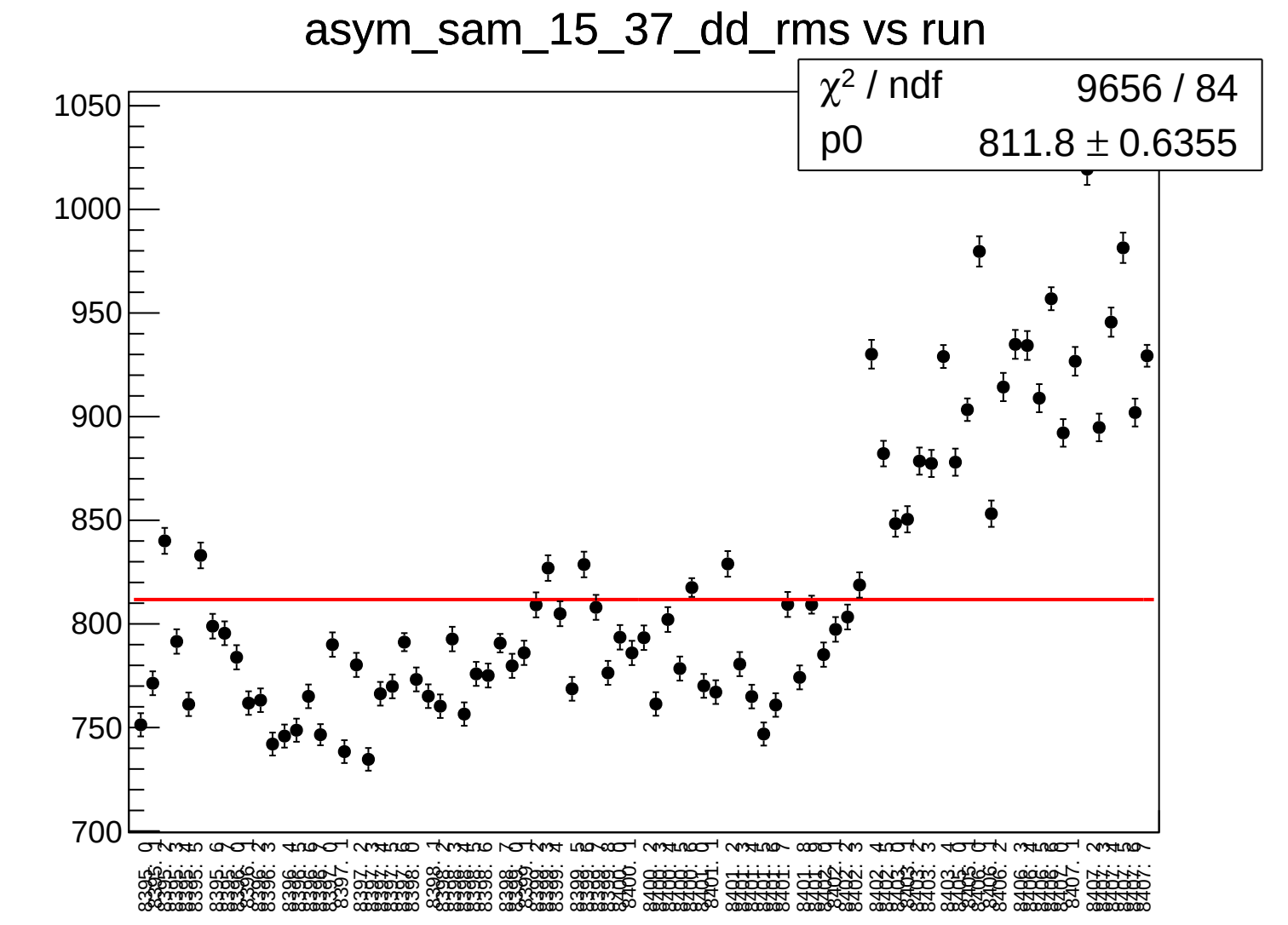

reg_asym_sam_15_37_dd_rms vs run
χ^2 / ndf 1.017e+04 / 84
p0 65.45 ± 0.05124
90
85
80
75
70
65
60
55

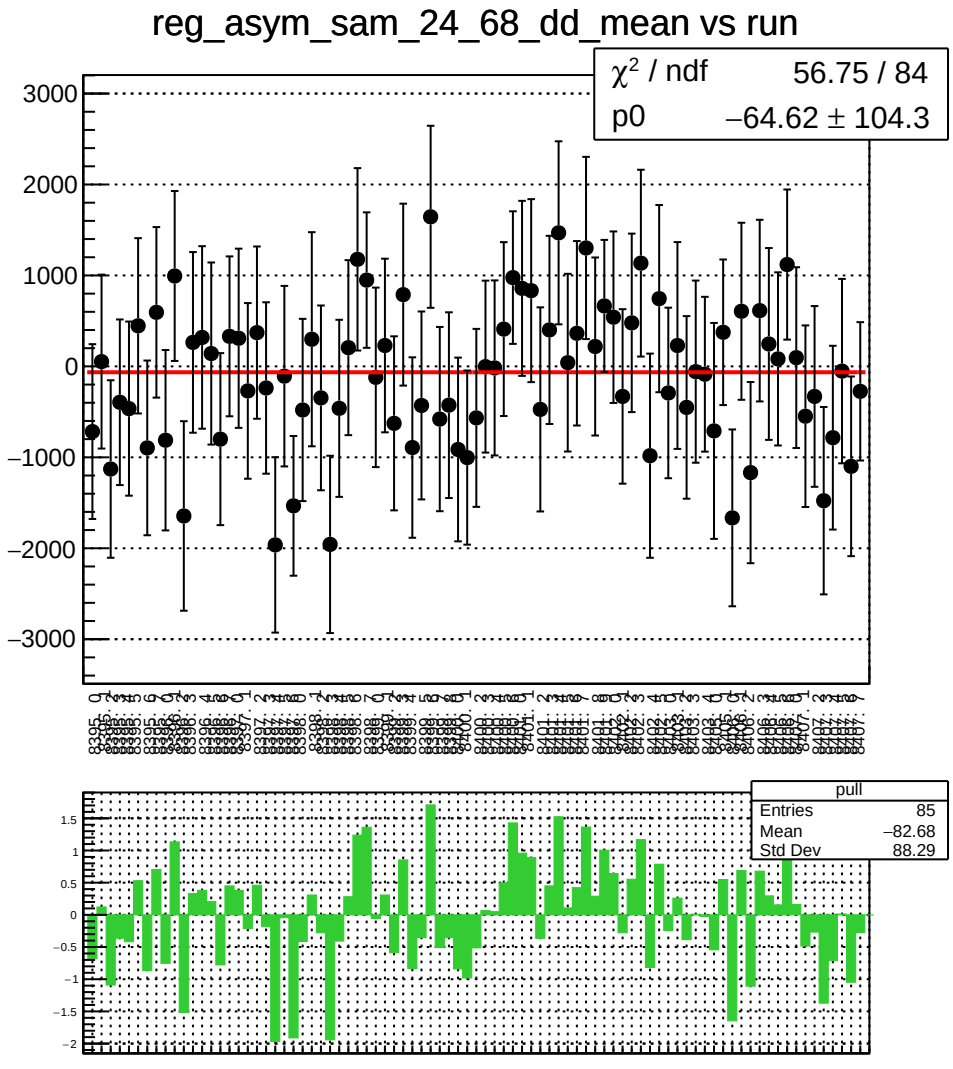

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 84.67 / 84
p0 191 ± 895.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −285.3
Std Dev 320.7
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.0059
Std Dev 0.9981
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

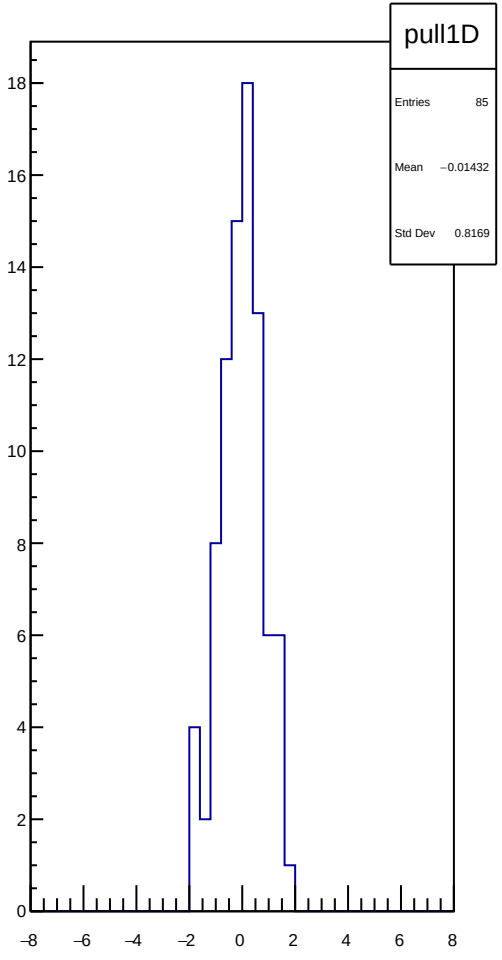

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 9715 / 84
p0 809 ± 0.6333
1050
1000
950
900
850
800
750
700

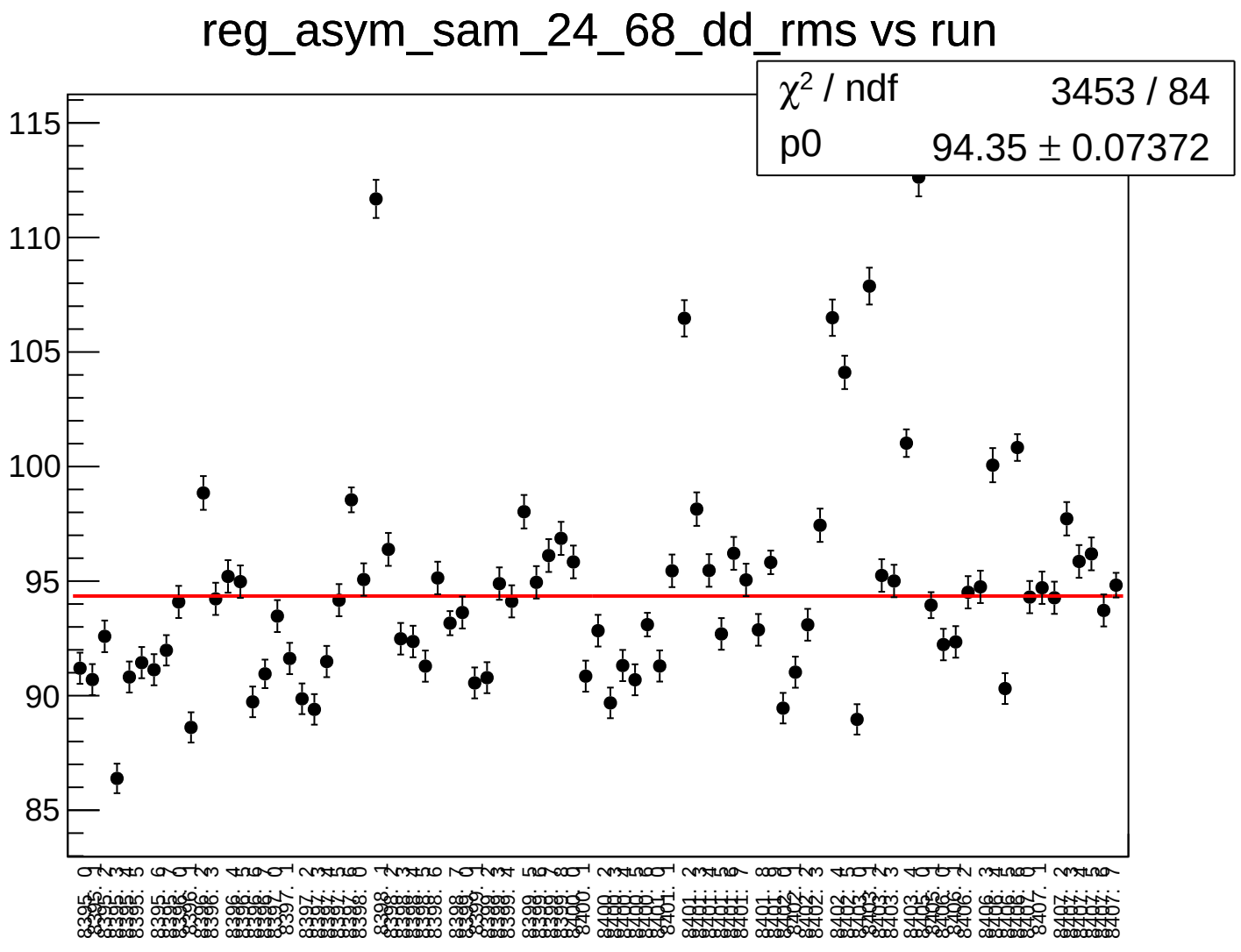

asym_sam_15_37_dd_mean vs run
χ² / ndf 84.61 / 84
p0 12.24 ± 898.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −203.6
Std Dev 237.9
2
1
0
−1
−2

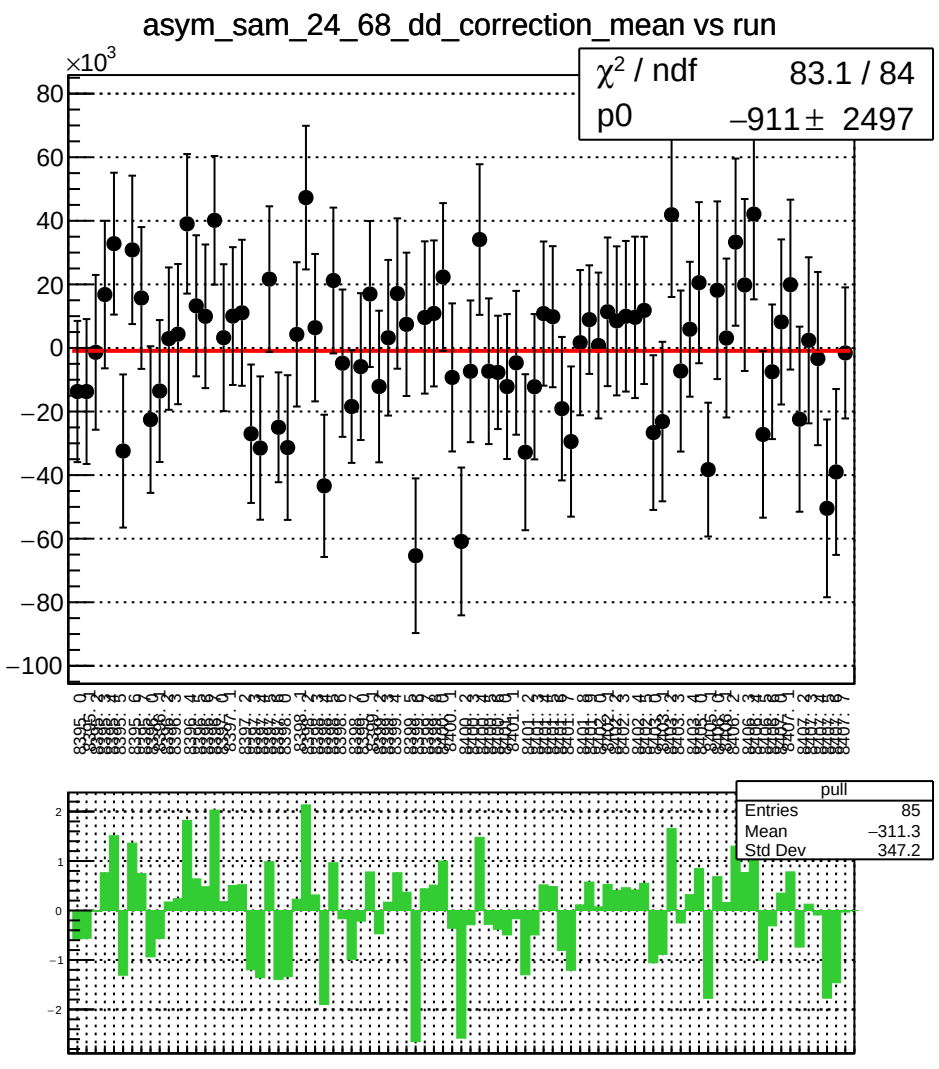

pull1D
Entries 85
Mean 0.007509
Std Dev 0.9977
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

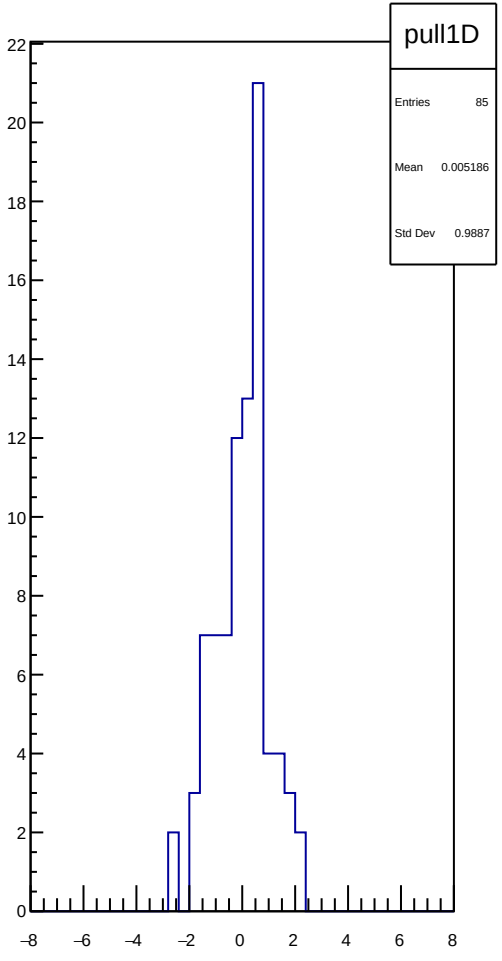

asym_sam_15_37_dd_rms vs run
χ² / ndf 9656 / 84
p0 811.8 ± 0.6355
1050
1000
950
900
850
800
750
700

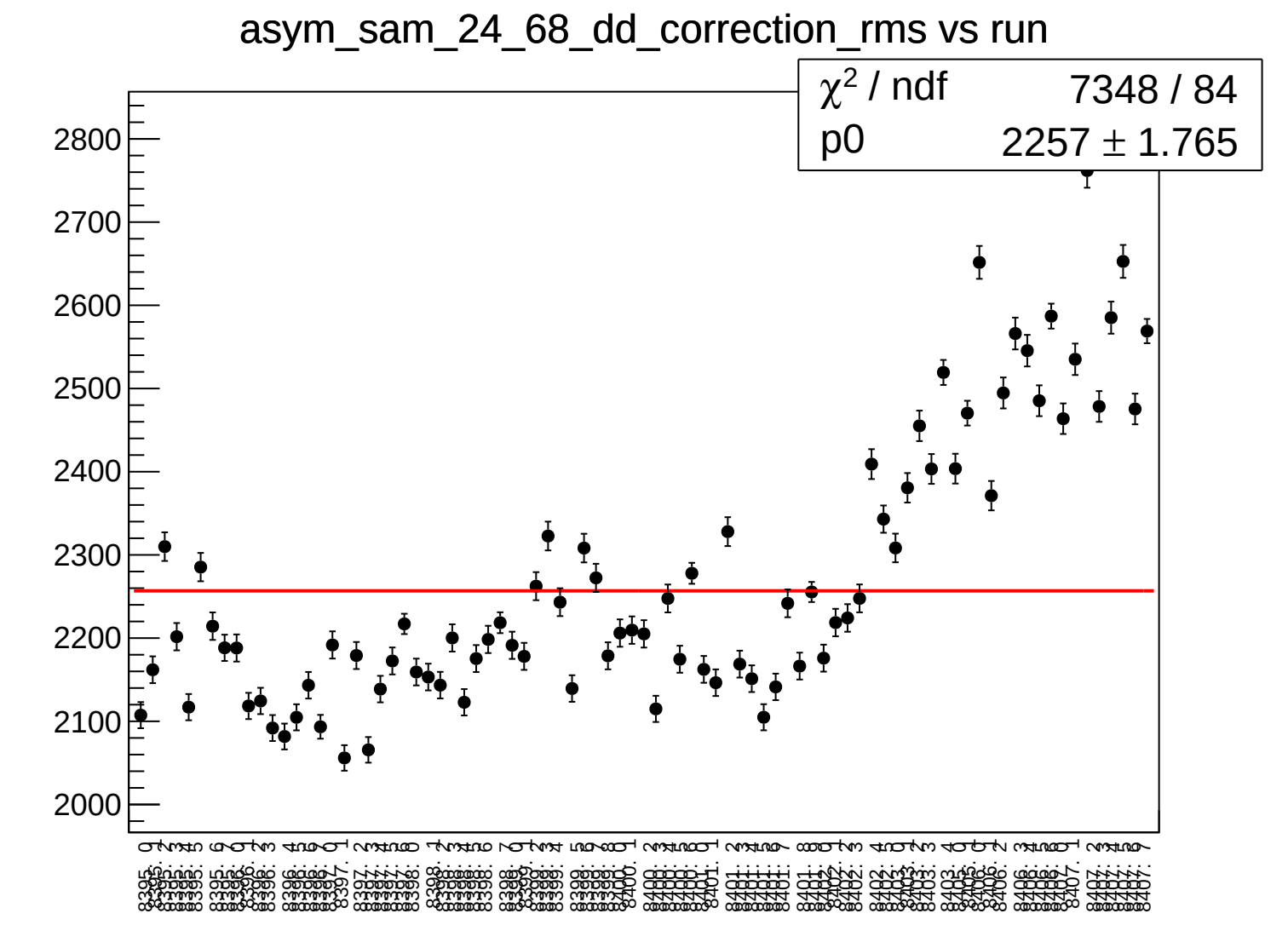

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 56.75 / 84
p0 −64.62 ± 104.3
pull
Entries 85
Mean −82.68
Std Dev 88.29

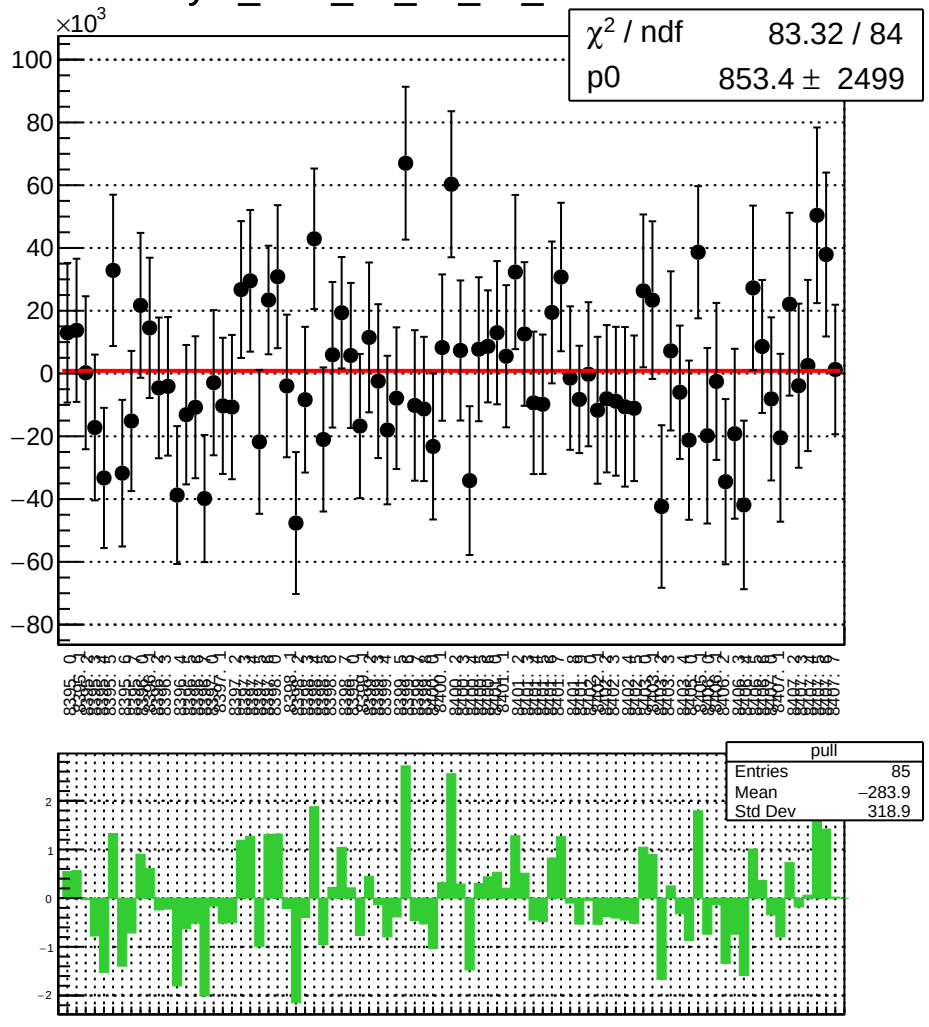

pull1D
Entries 85
Mean −0.01432
Std Dev 0.8169

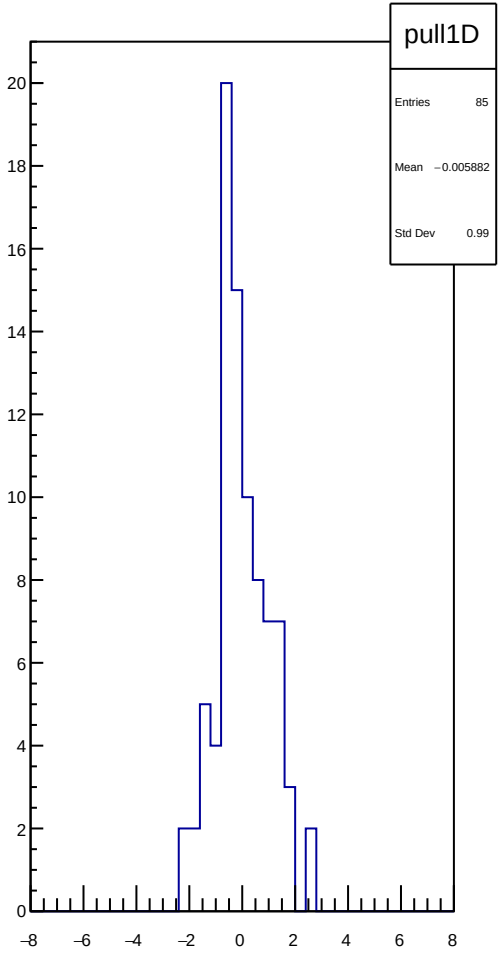

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 3453 / 84
p0 94.35 ± 0.07372
115
110
105
100
95
90
85

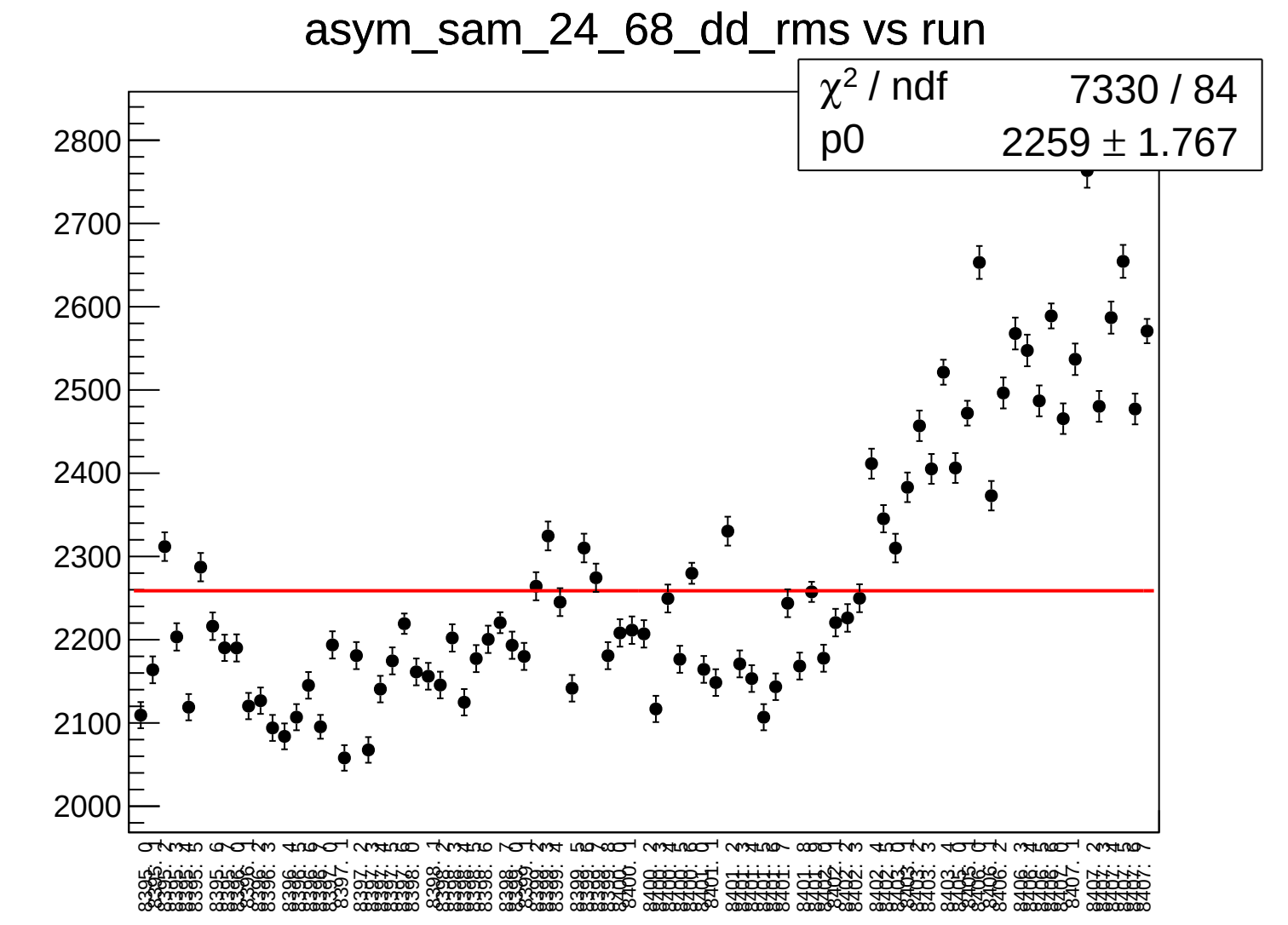

asym_sam_24_68_dd_correction_mean vs run
×10^3
χ^2 / ndf 83.1 / 84
p0 −911 ± 2497
pull
Entries 85
Mean −311.3
Std Dev 347.2

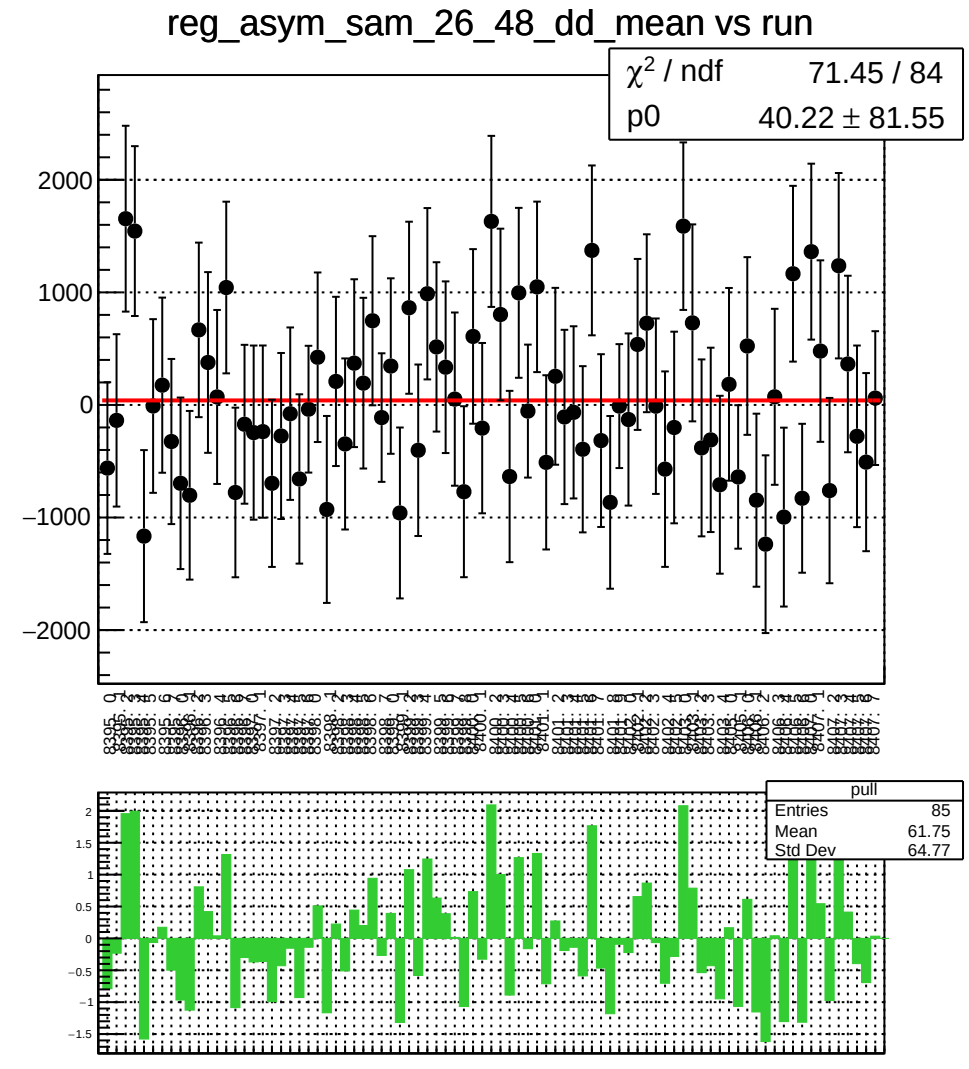

pull1D
Entries 85
Mean 0.005186
Std Dev 0.9887

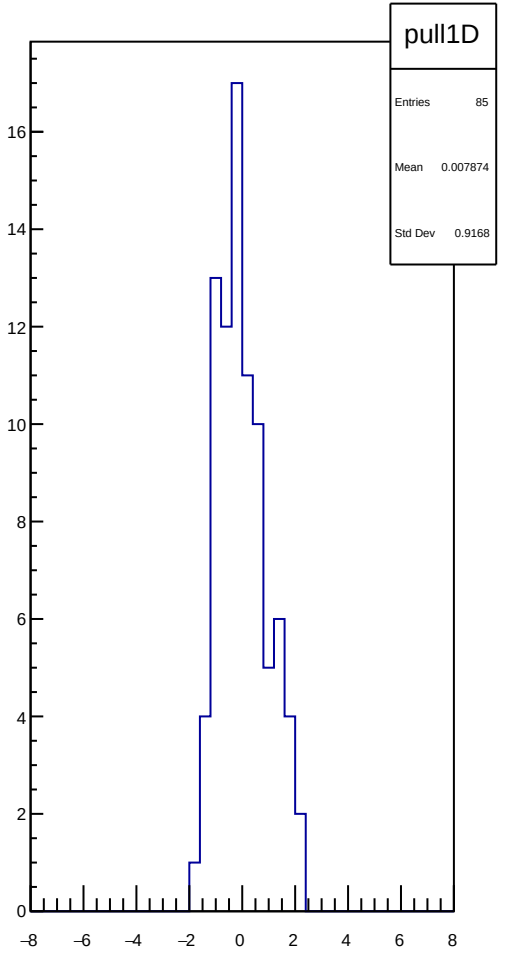

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 7348 / 84
p0 2257 ± 1.765
2800
2700
2600
2500
2400
2300
2200
2100
2000

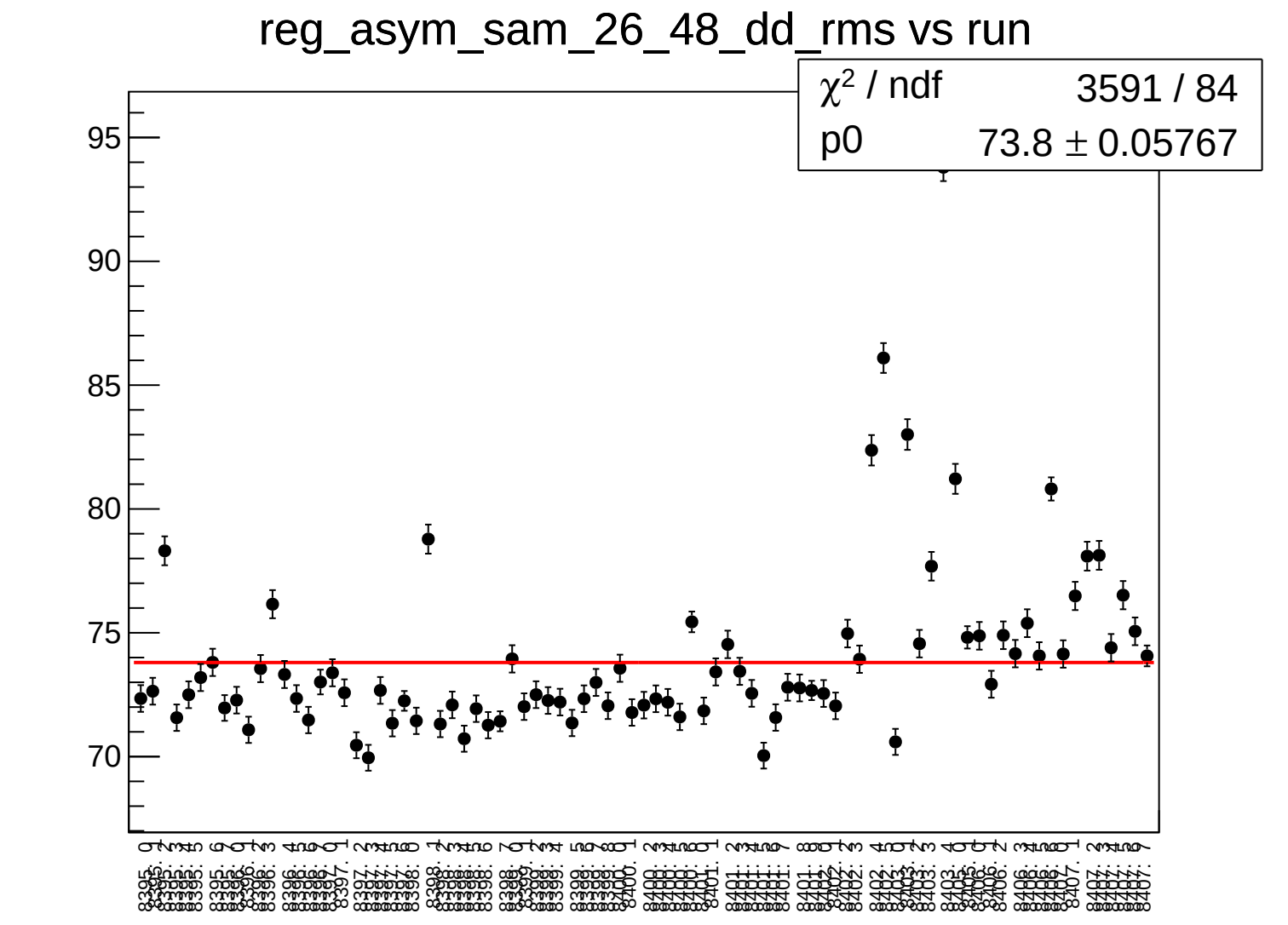

asym_sam_24_68_dd_mean vs run
×10^3
χ^2 / ndf 83.32 / 84
p0 853.4 ± 2499
pull
Entries 85
Mean −283.9
Std Dev 318.9

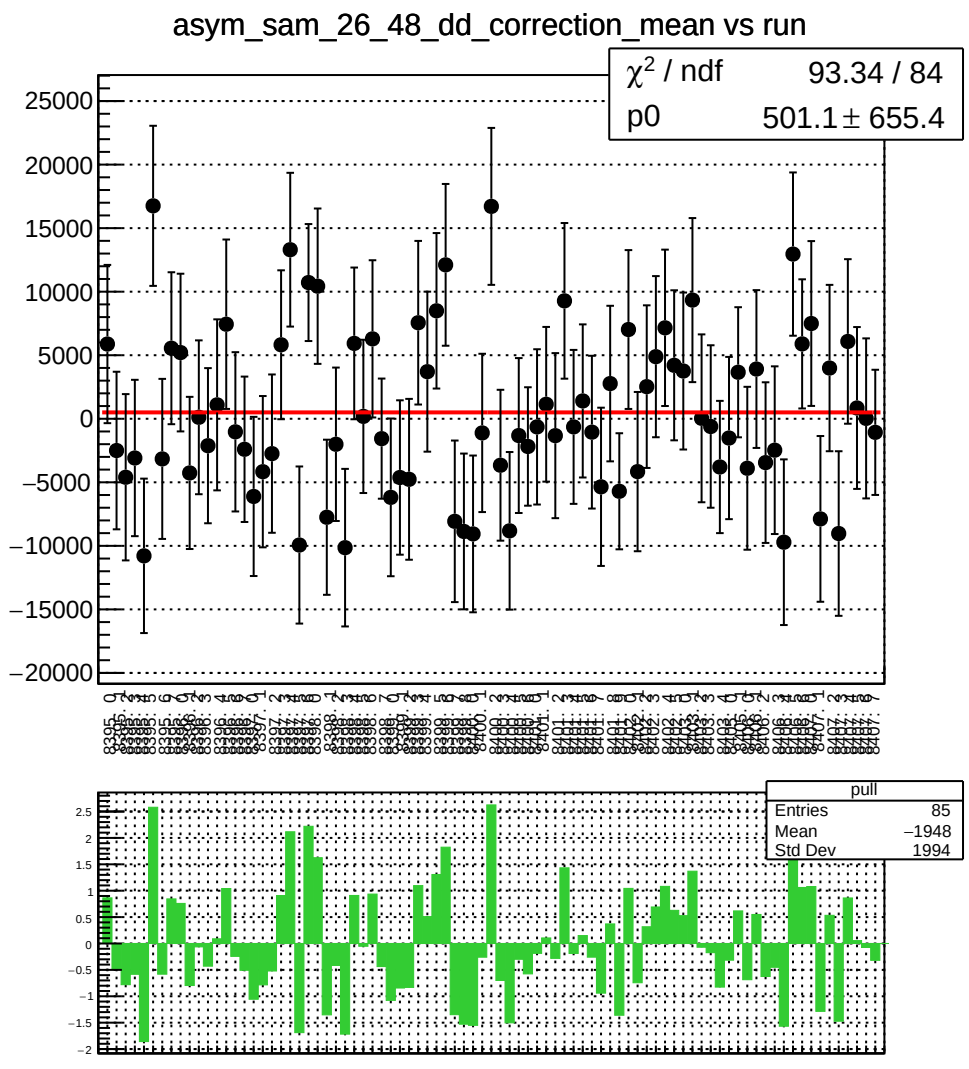

pull1D
Entries 85
Mean −0.005882
Std Dev 0.99

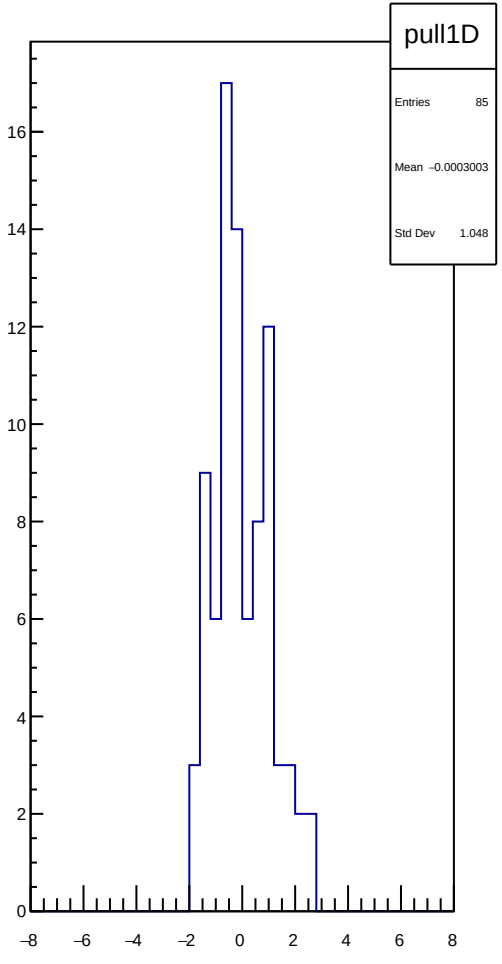

asym_sam_24_68_dd_rms vs run
χ² / ndf 7330 / 84
p0 2259 ± 1.767
2800
2700
2600
2500
2400
2300
2200
2100
2000

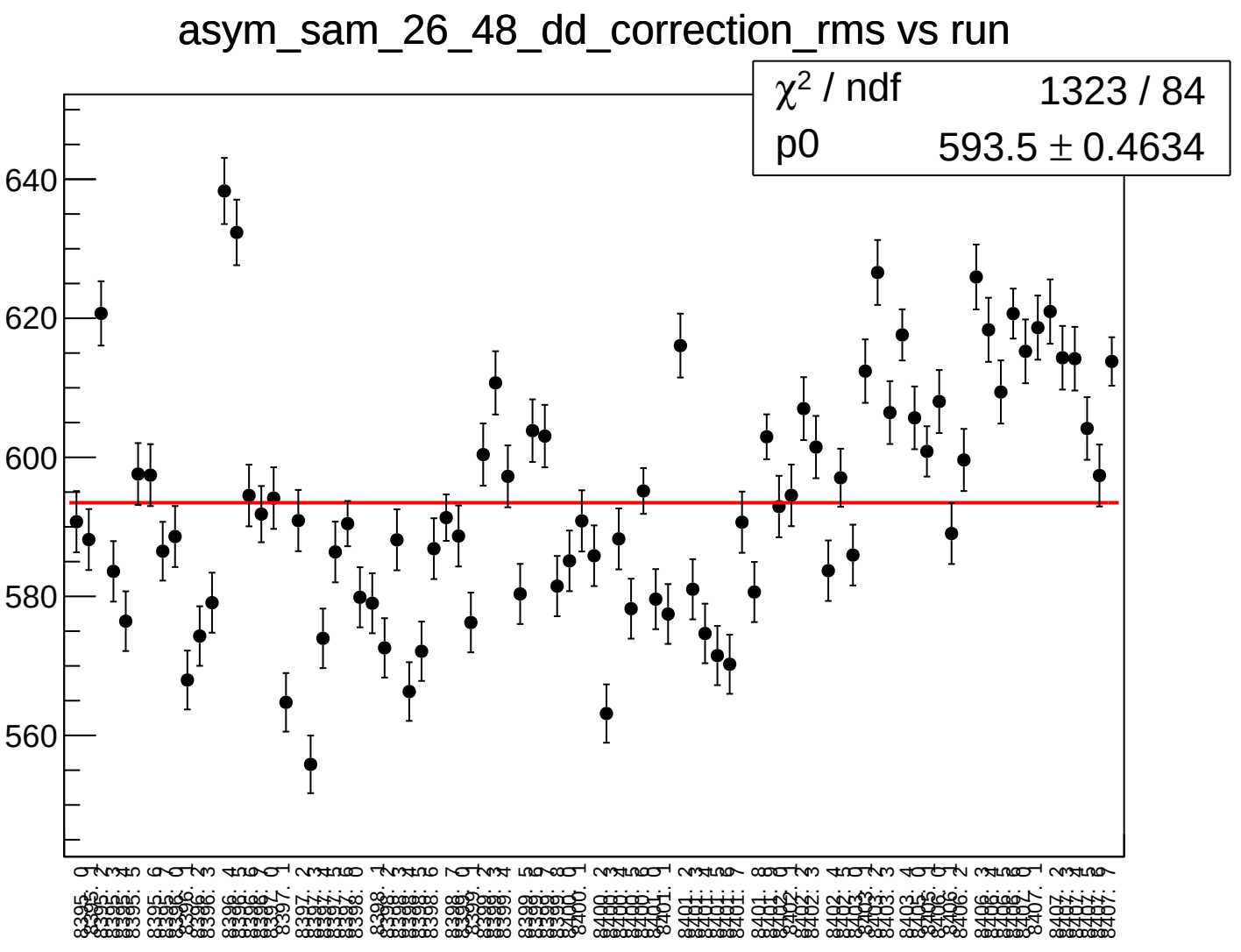

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 71.45 / 84
p0 40.22 ± 81.55
2000
1000
0
−1000
−2000
pull
Entries 85
Mean 61.75
Std Dev 64.77
2
1.5
1
0.5
0
−0.5
−1
−1.5

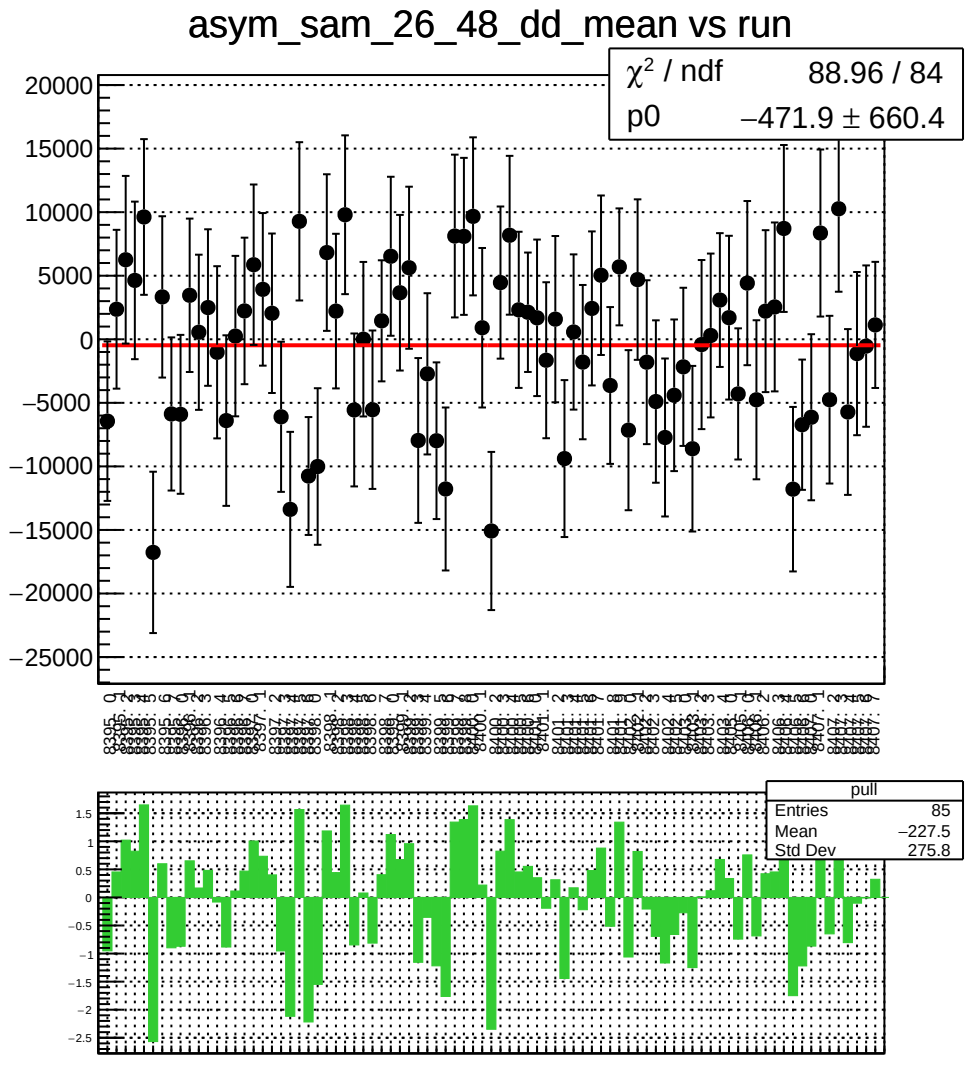

pull1D
Entries 85
Mean 0.007874
Std Dev 0.9168
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

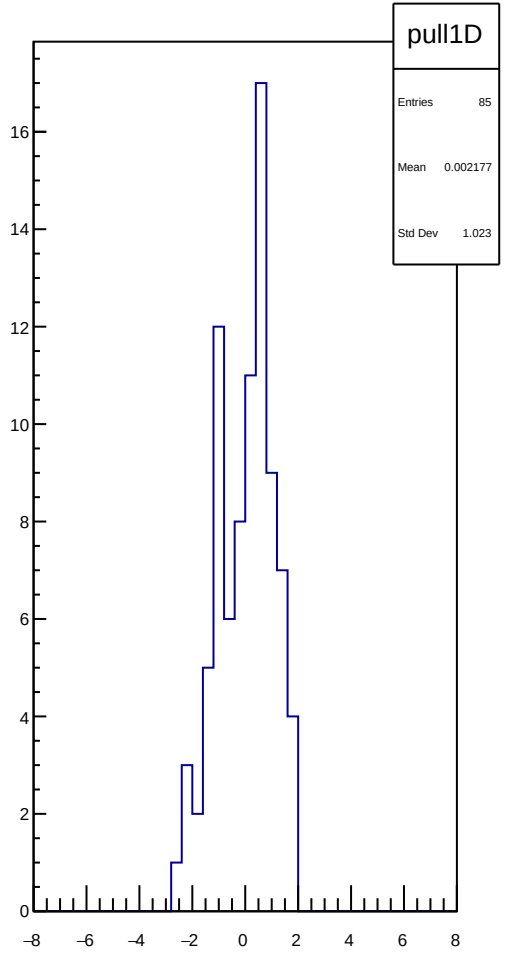

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 3591 / 84
p0 73.8 ± 0.05767
95
90
85
80
75
70

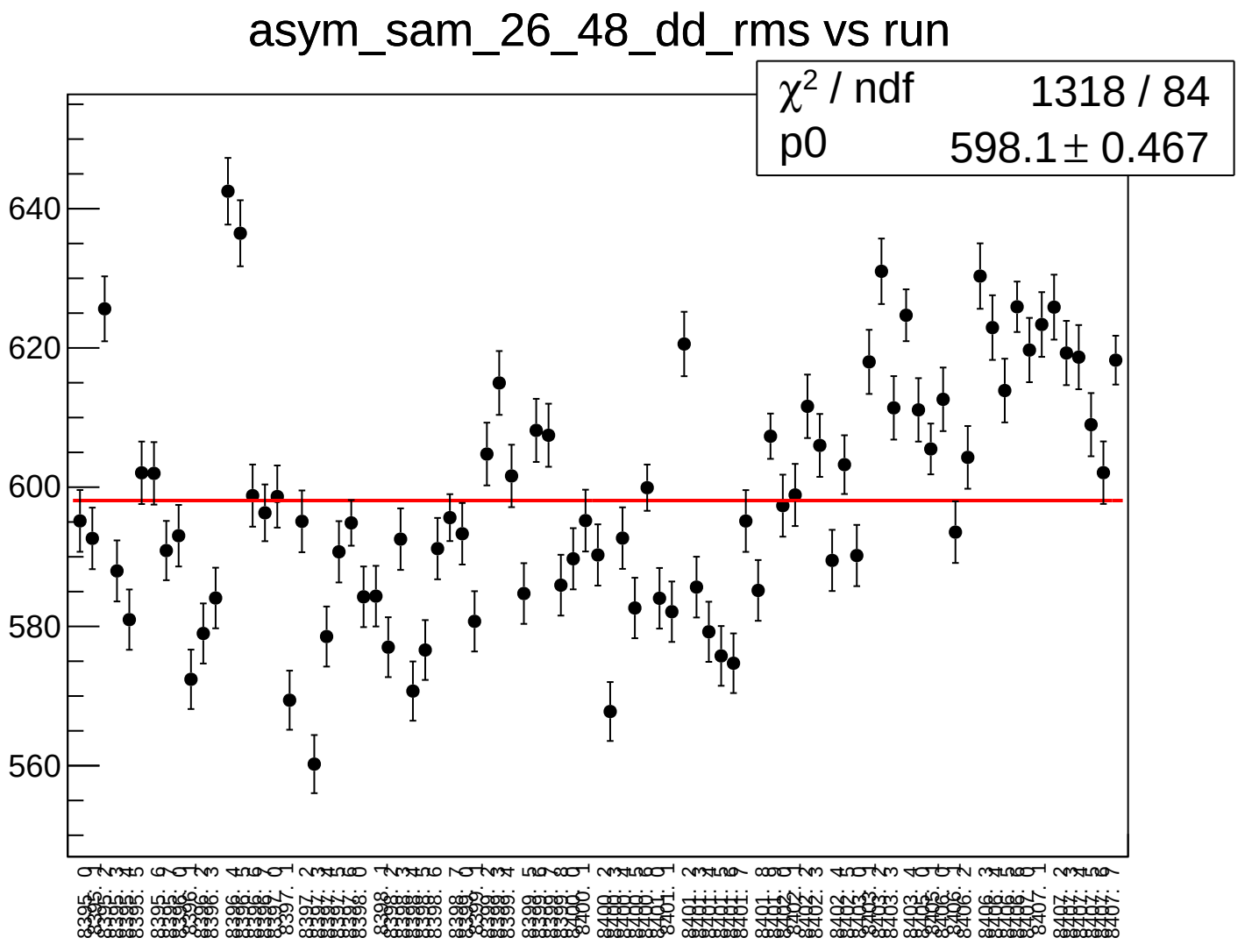

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 93.34 / 84
p0 501.1 ± 655.4
pull
Entries 85
Mean −1948
Std Dev 1994

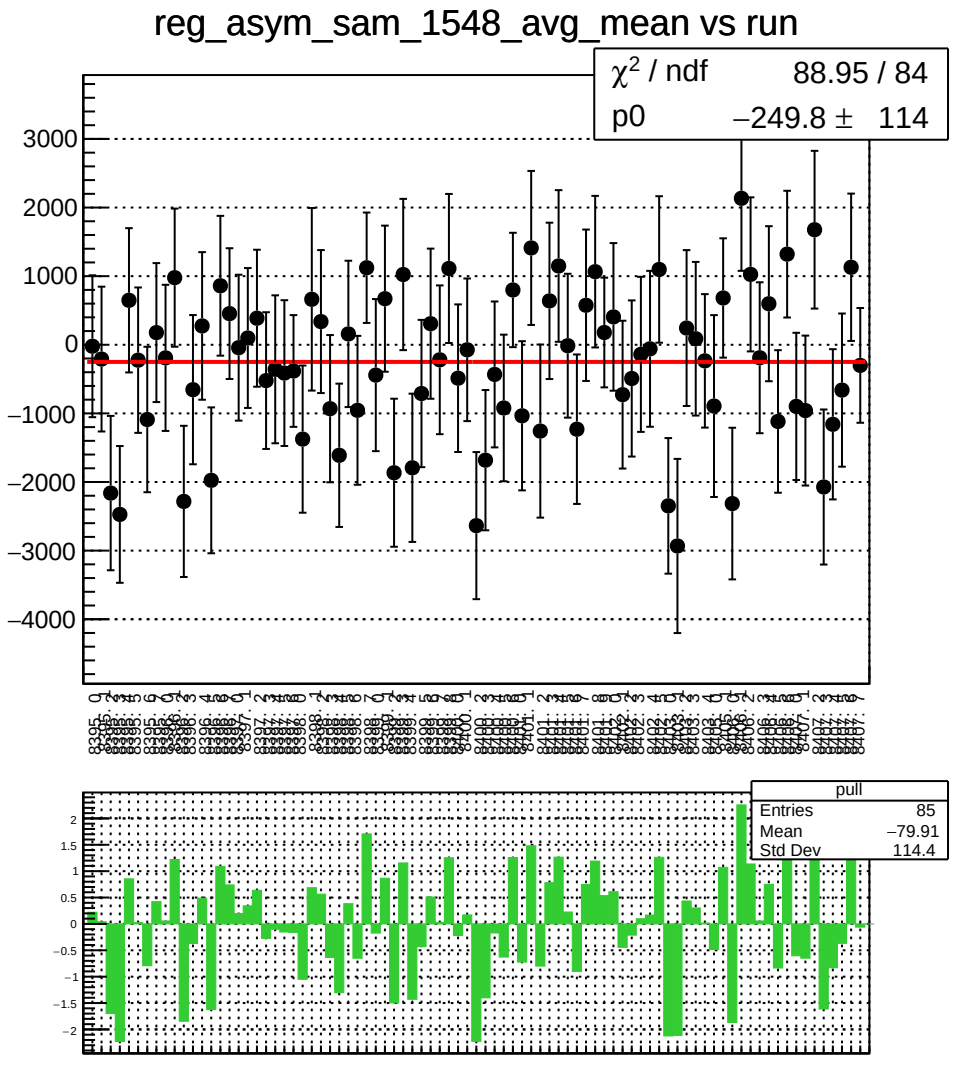

pull1D
Entries 85
Mean −0.0003003
Std Dev 1.048

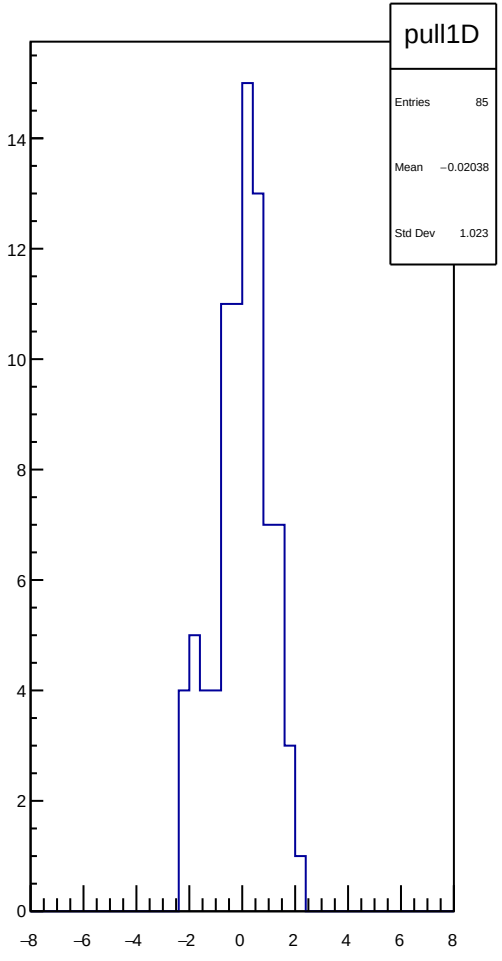

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 1323 / 84
p0 593.5 ± 0.4634
640
620
600
580
560

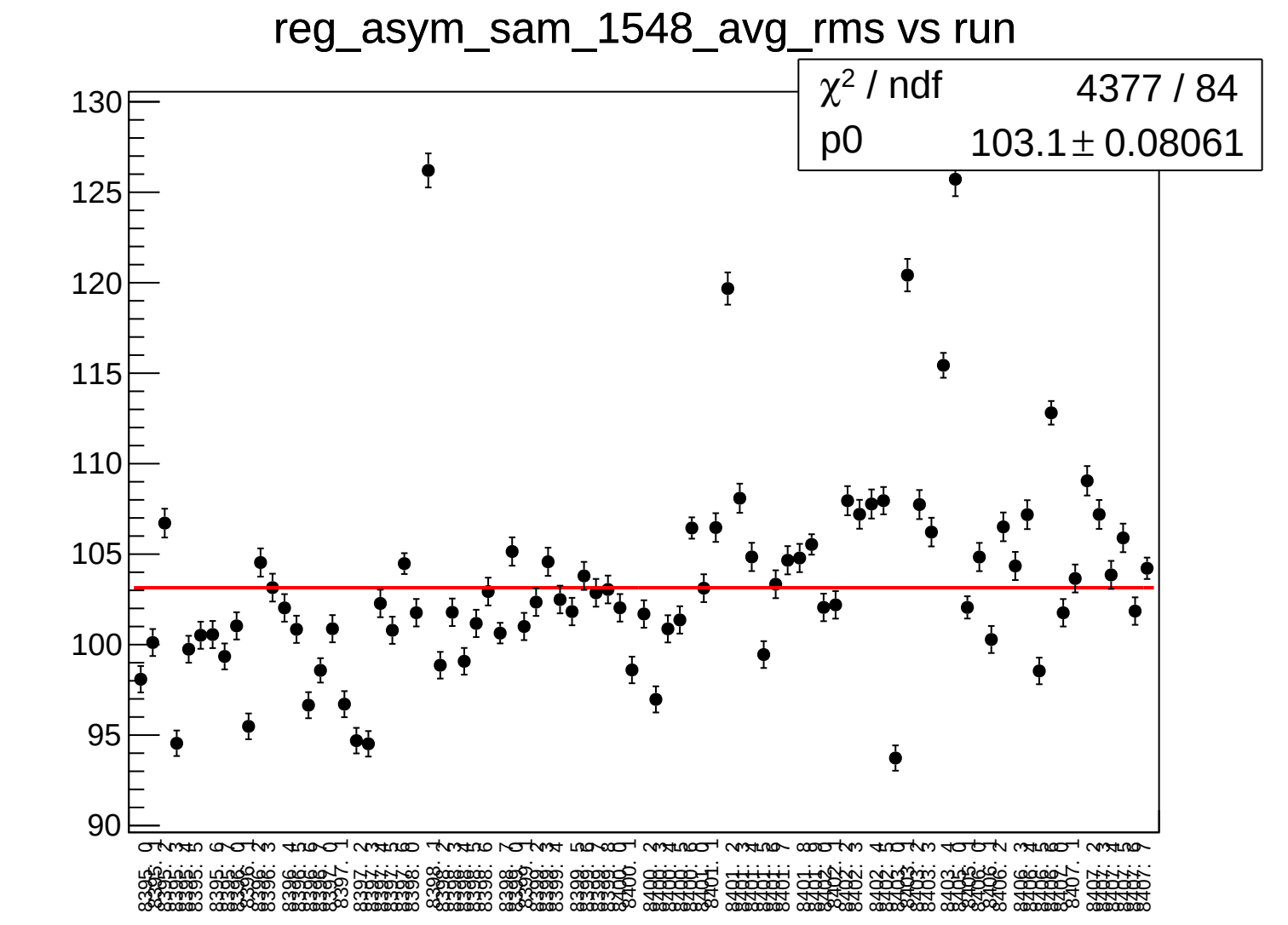

asym_sam_26_48_dd_mean vs run
χ² / ndf 88.96 / 84
p0 −471.9 ± 660.4
pull
Entries 85
Mean −227.5
Std Dev 275.8

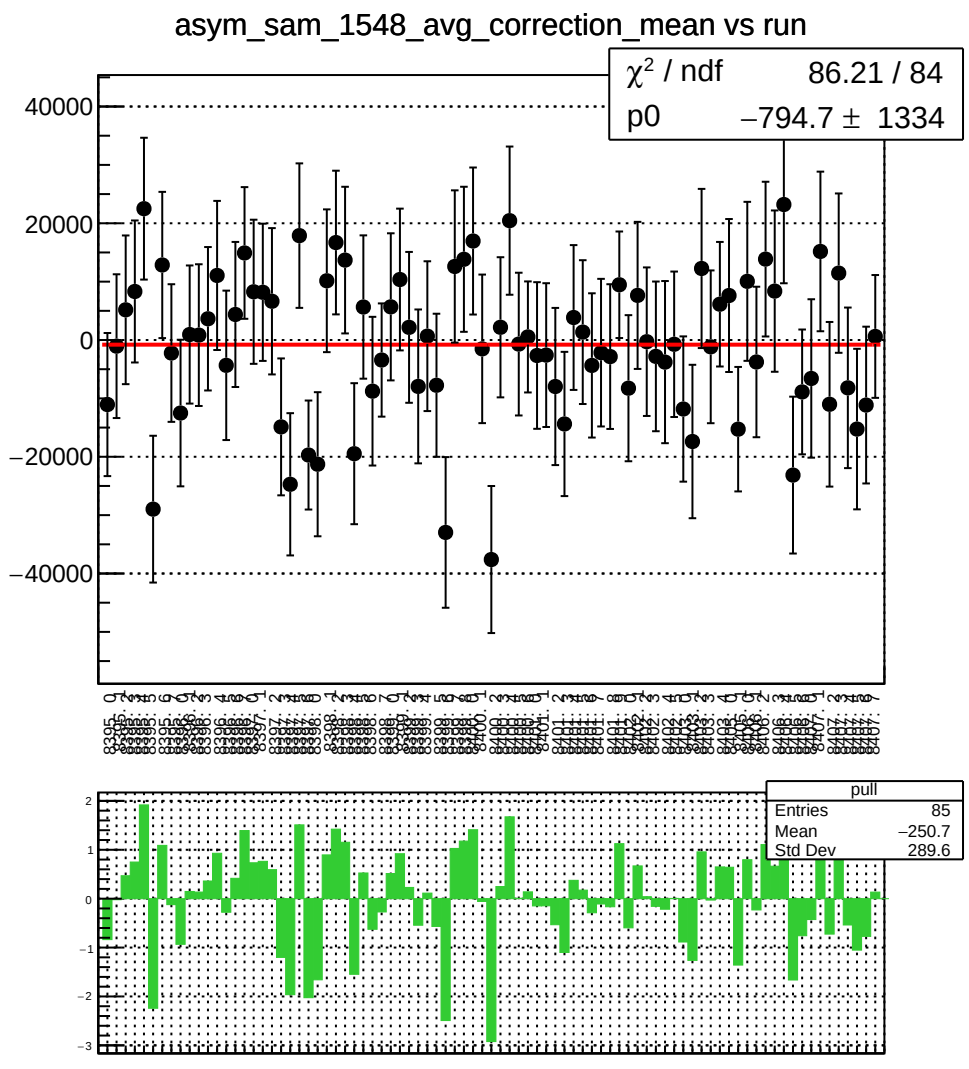

pull1D
Entries 85
Mean 0.002177
Std Dev 1.023

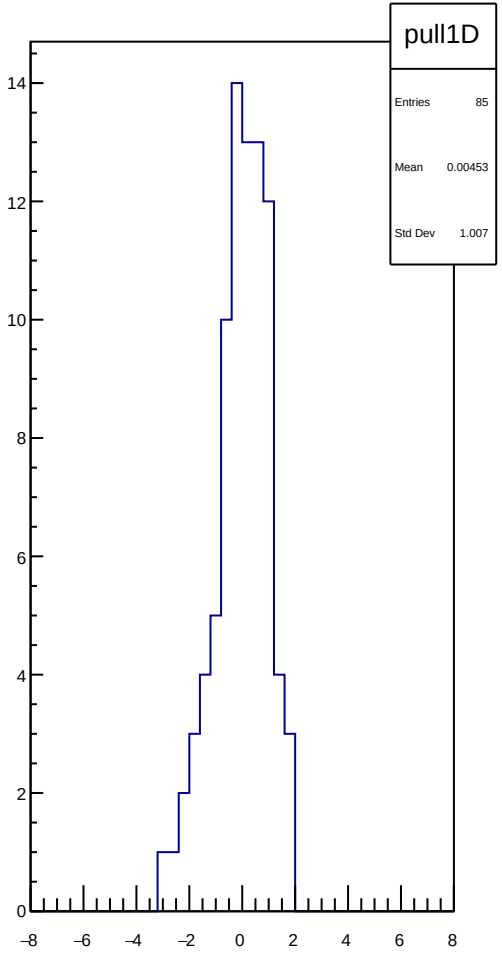

asym_sam_26_48_dd_rms vs run
χ² / ndf 1318 / 84
p0 598.1 ± 0.467
640
620
600
580
560

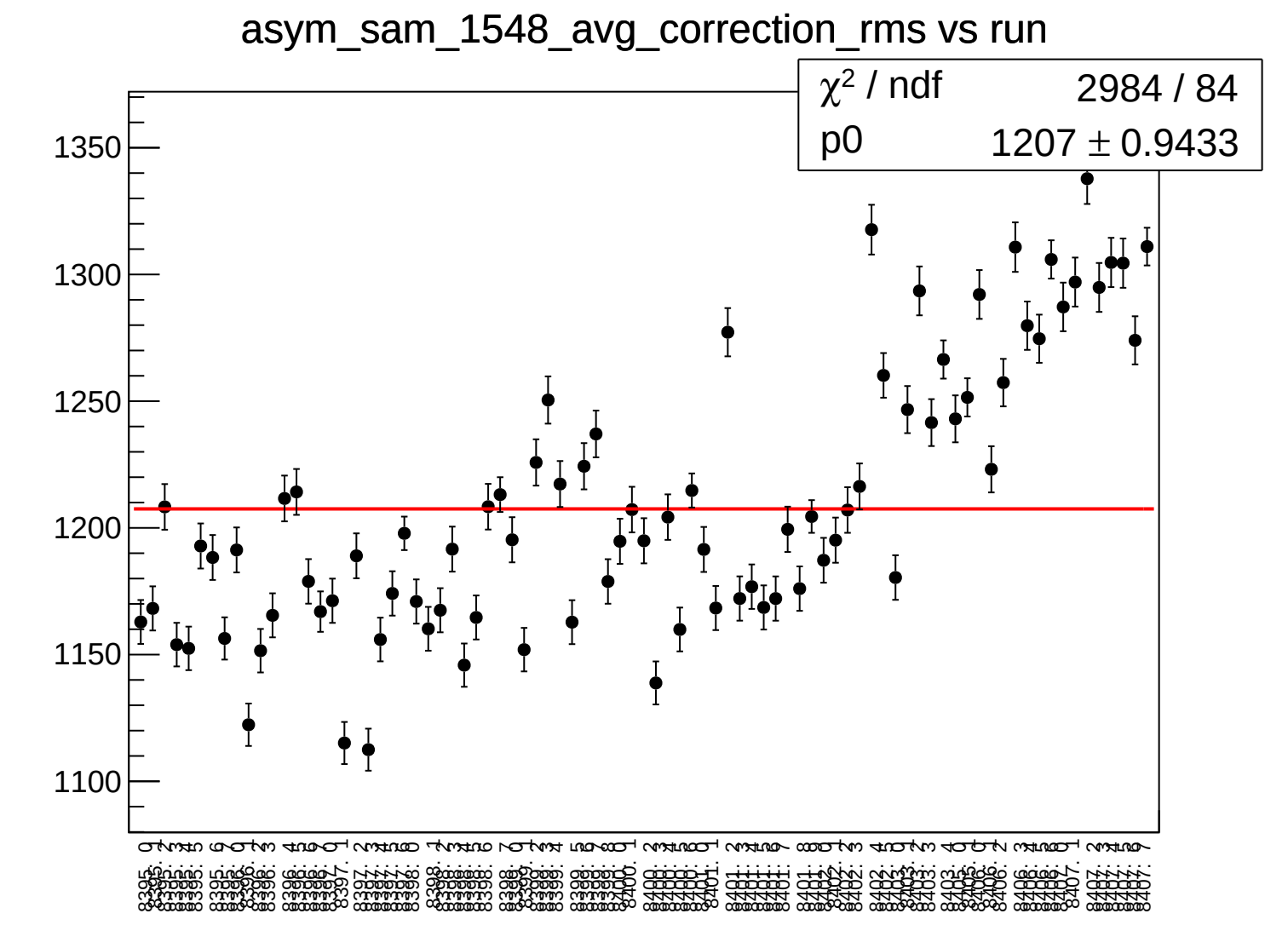

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 88.95 / 84
p0 −249.8 ± 114
pull
Entries 85
Mean −79.91
Std Dev 114.4

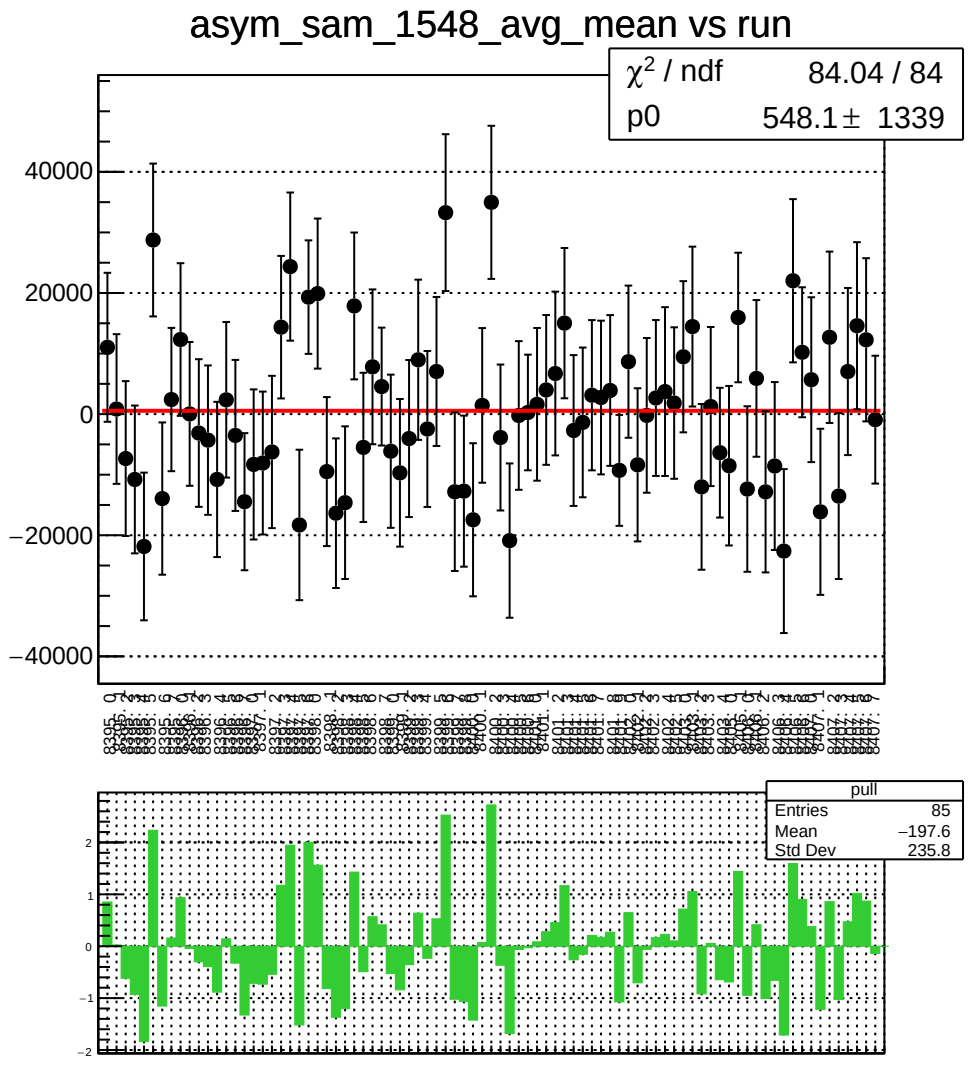

pull1D
Entries 85
Mean −0.02038
Std Dev 1.023

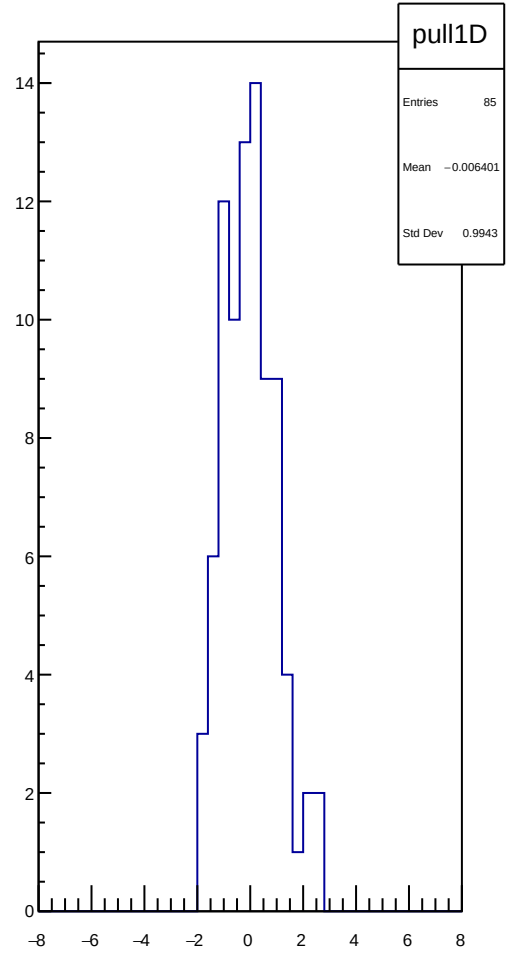

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 4377 / 84
p0 103.1 ± 0.08061
130
125
120
115
110
105
100
95
90

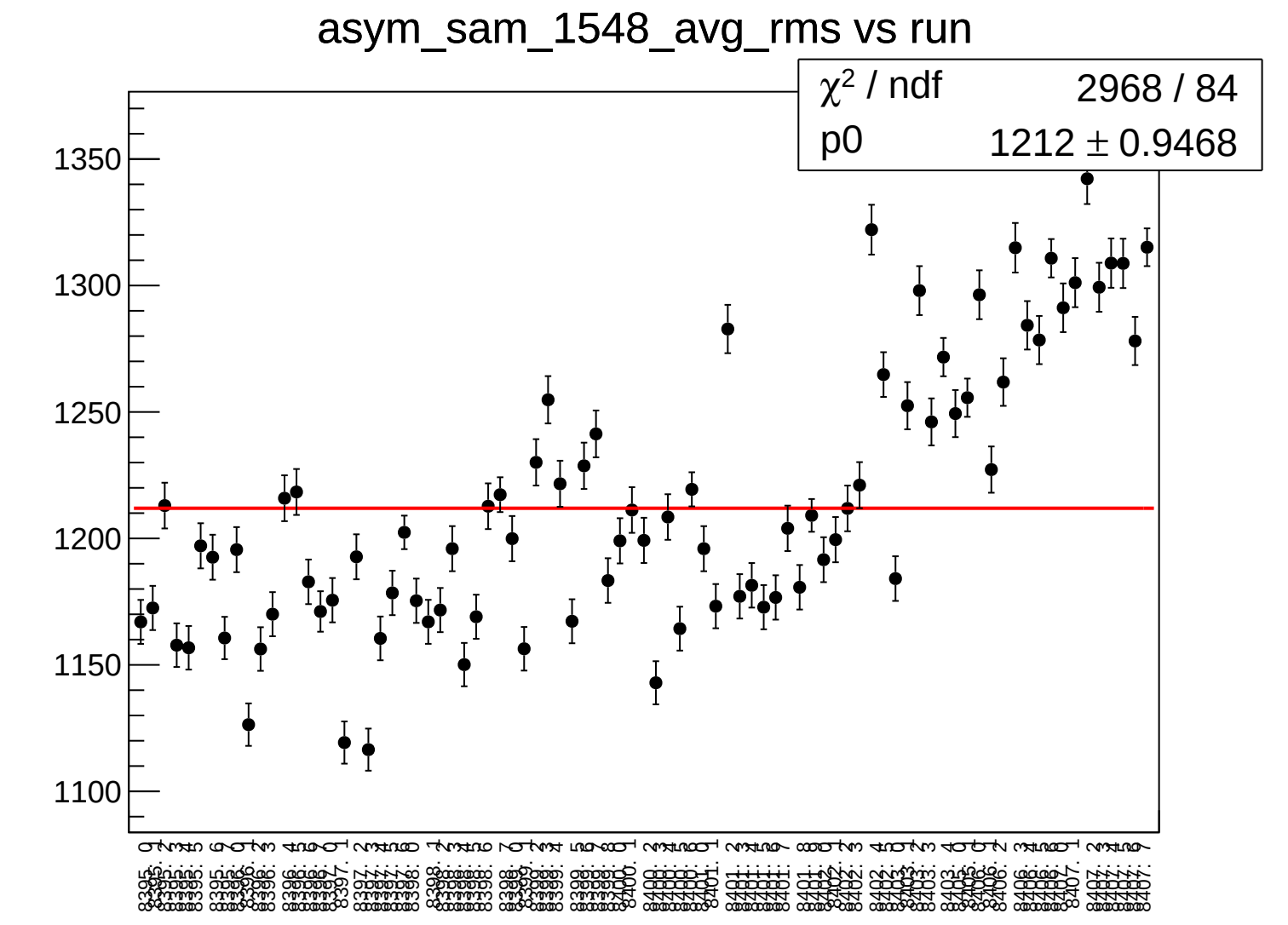

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 86.21 / 84
p0 −794.7 ± 1334
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −250.7
Std Dev 289.6
2
1
0
−1
−2
−3

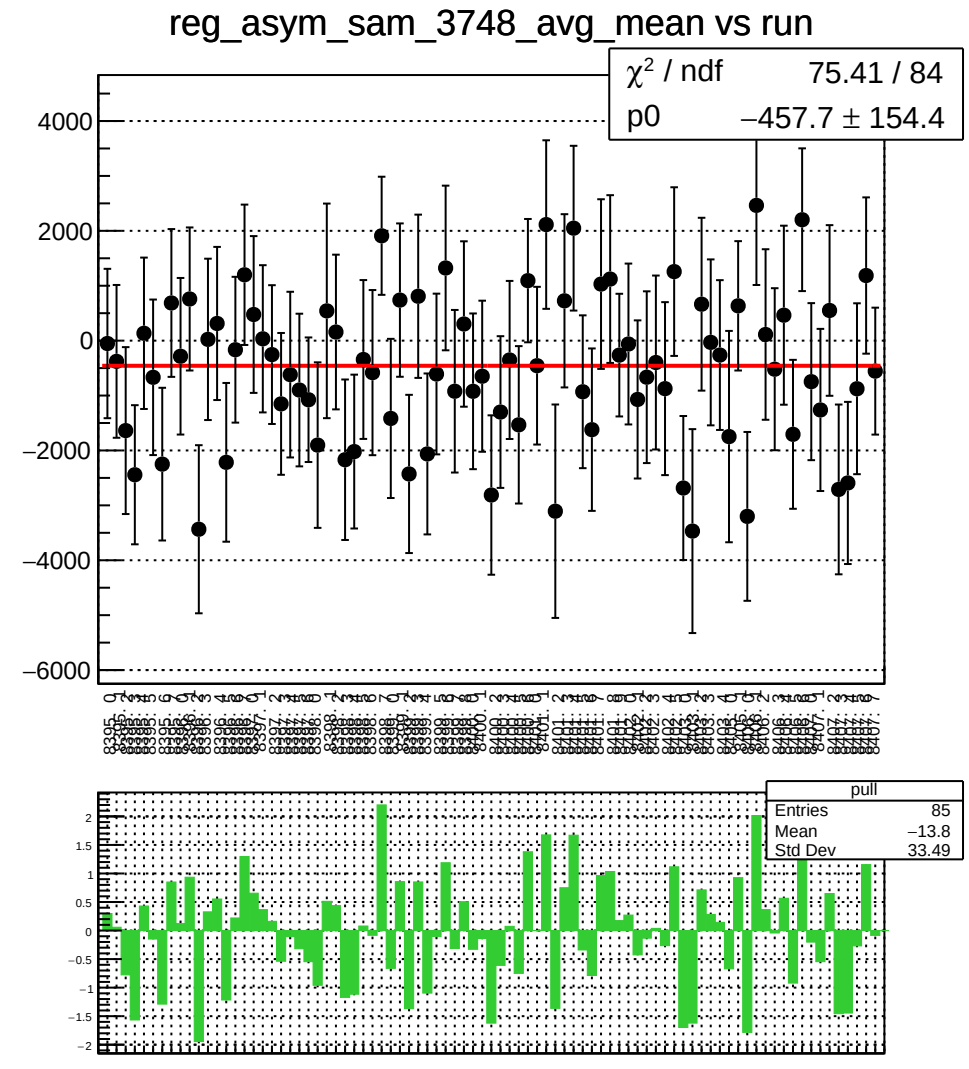

pull1D
Entries 85
Mean 0.00453
Std Dev 1.007
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

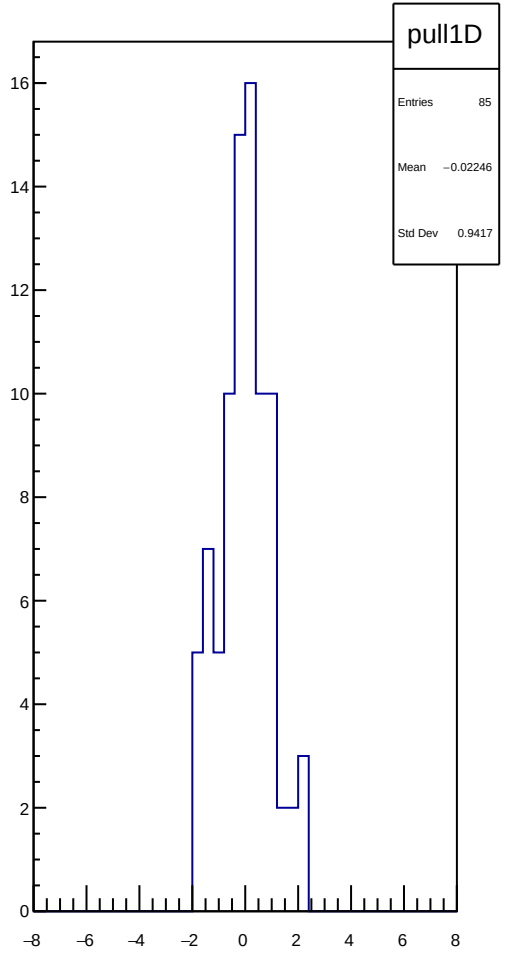

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 2984 / 84
p0 1207 ± 0.9433
1350
1300
1250
1200
1150
1100

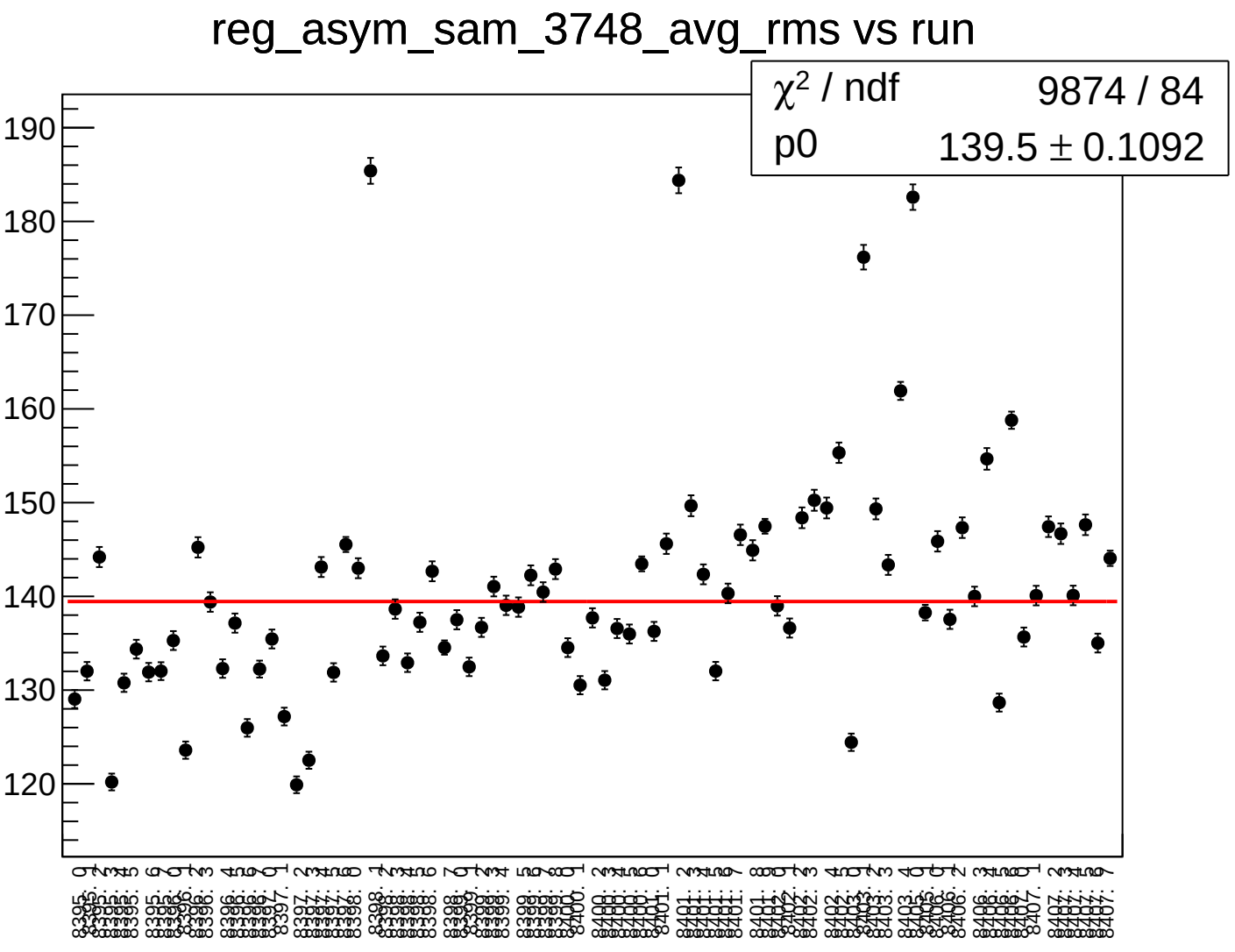

asym_sam_1548_avg_mean vs run
χ² / ndf 84.04 / 84
p0 548.1 ± 1339
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −197.6
Std Dev 235.8
2
1
0
−1
−2

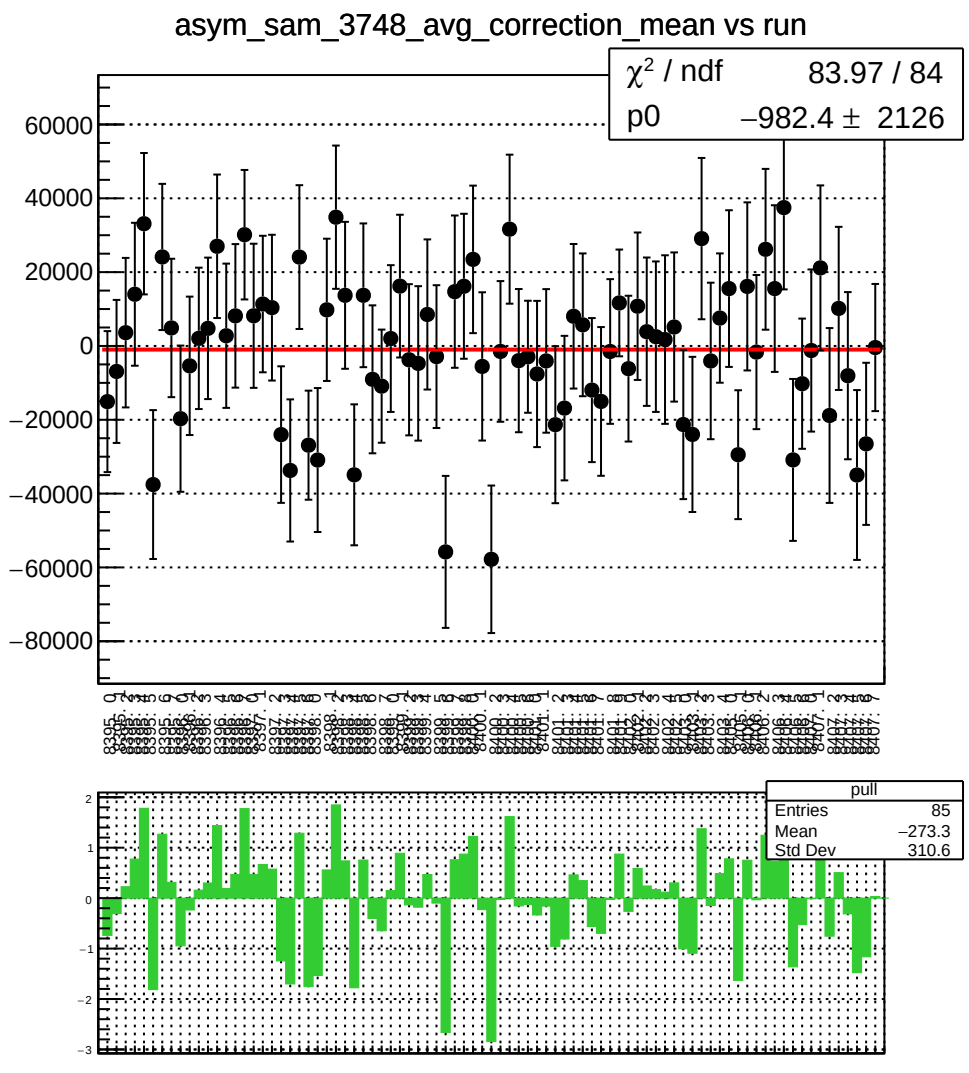

pull1D
Entries 85
Mean −0.006401
Std Dev 0.9943
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

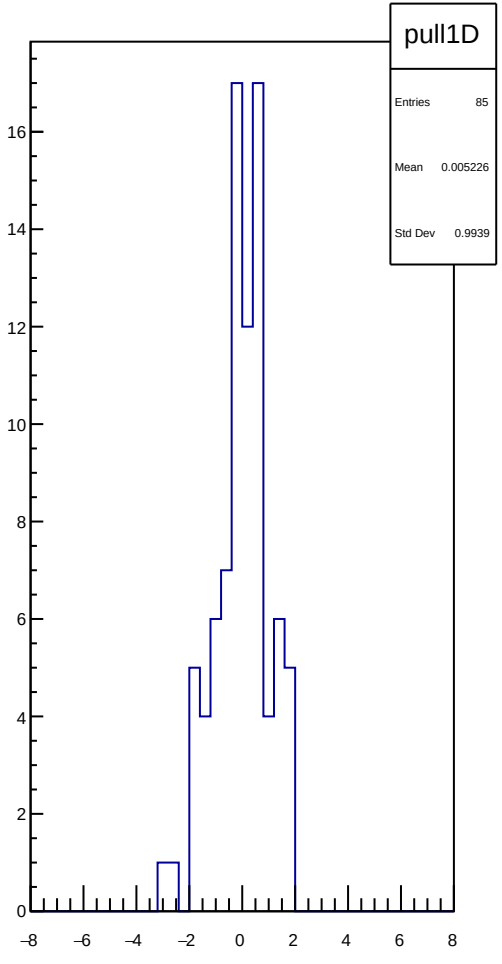

asym_sam_1548_avg_rms vs run
χ² / ndf 2968 / 84
p0 1212 ± 0.9468
1350
1300
1250
1200
1150
1100

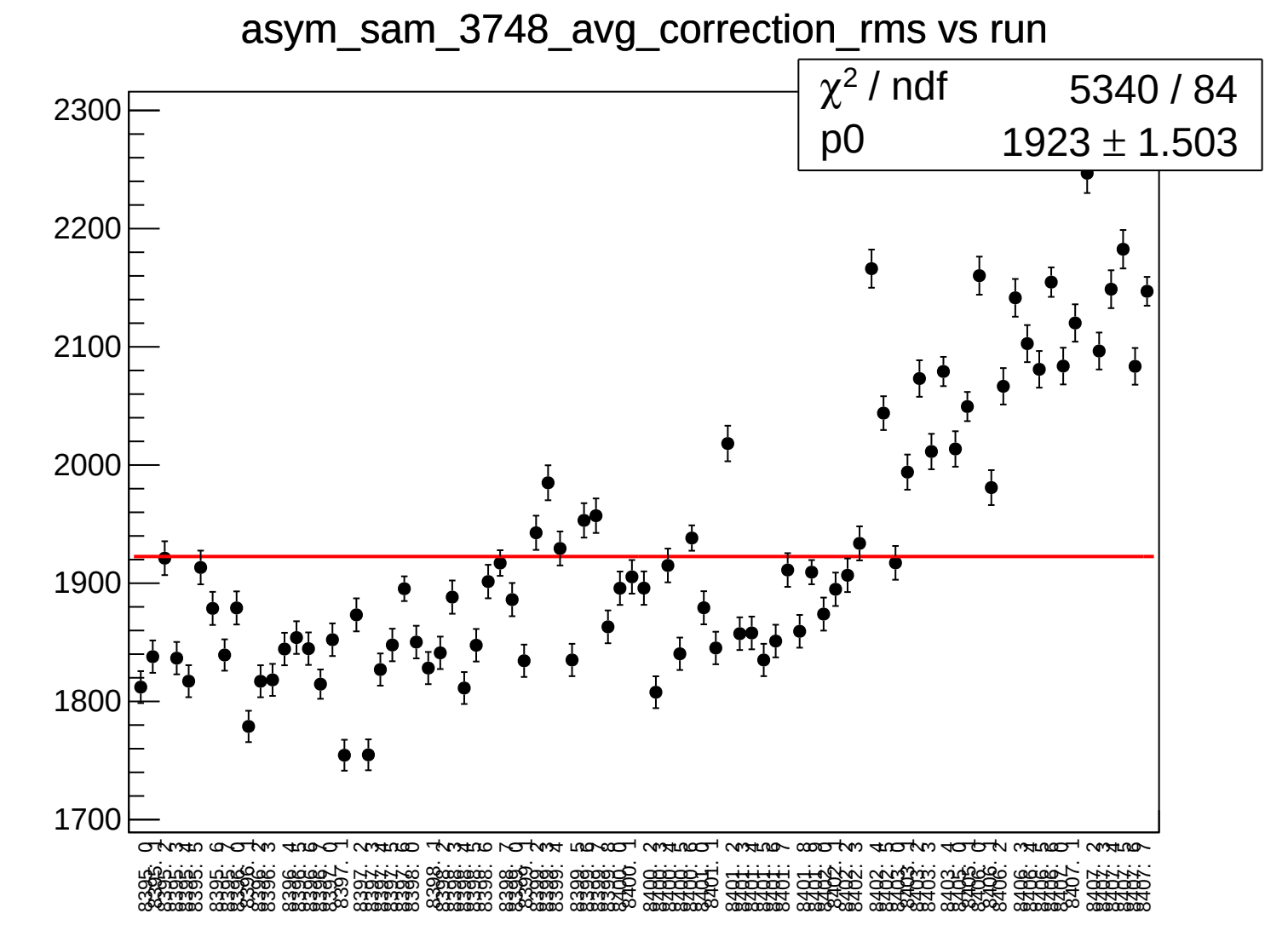

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 75.41 / 84
p0 −457.7 ± 154.4
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −13.8
Std Dev 33.49
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

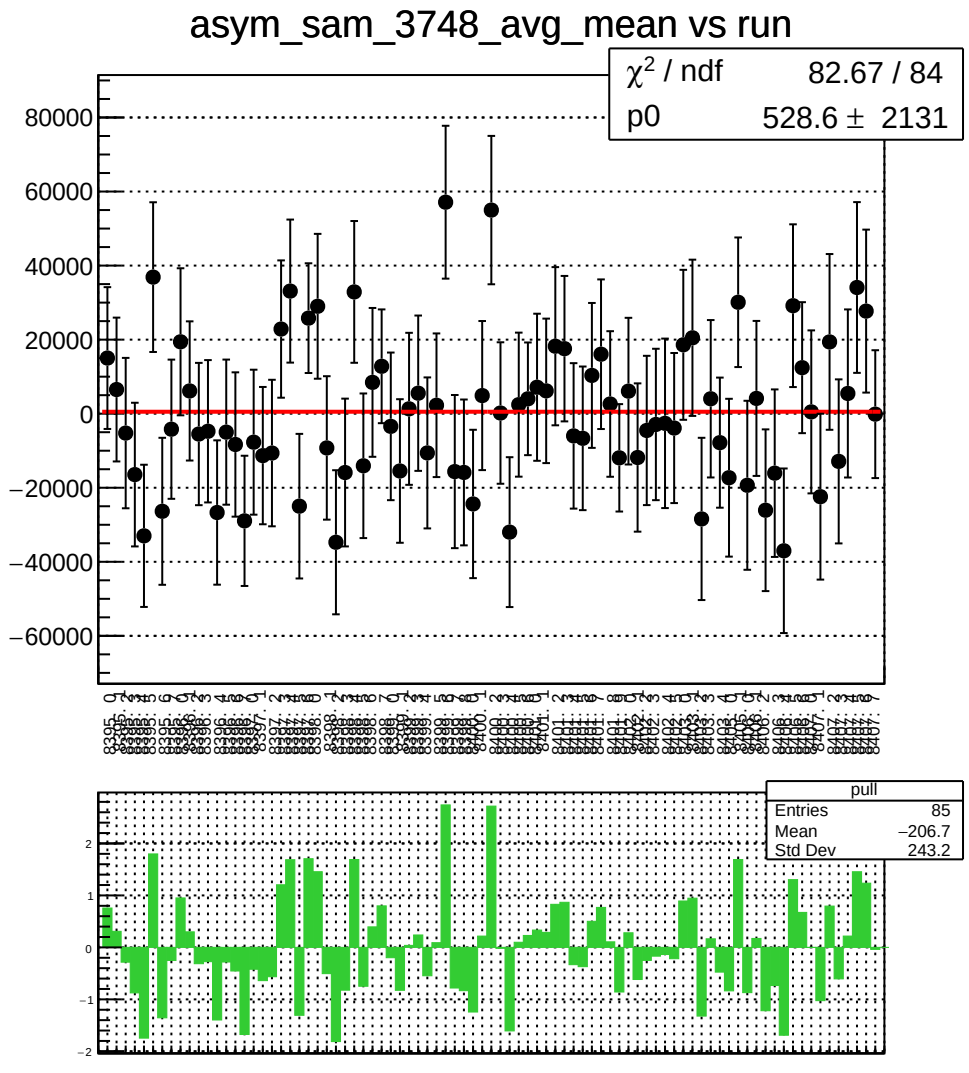

pull1D
Entries 85
Mean −0.02246
Std Dev 0.9417
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

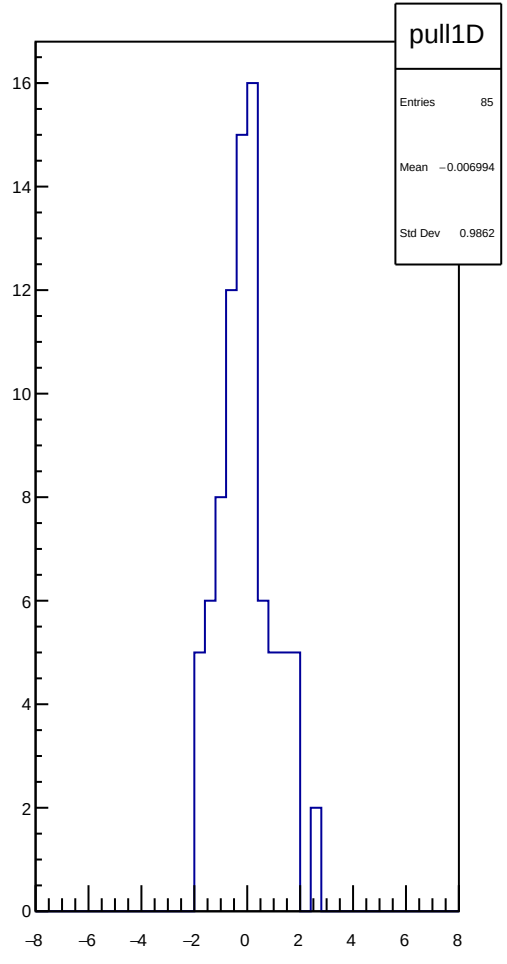

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 9874 / 84
p0 139.5 ± 0.1092
190
180
170
160
150
140
130
120

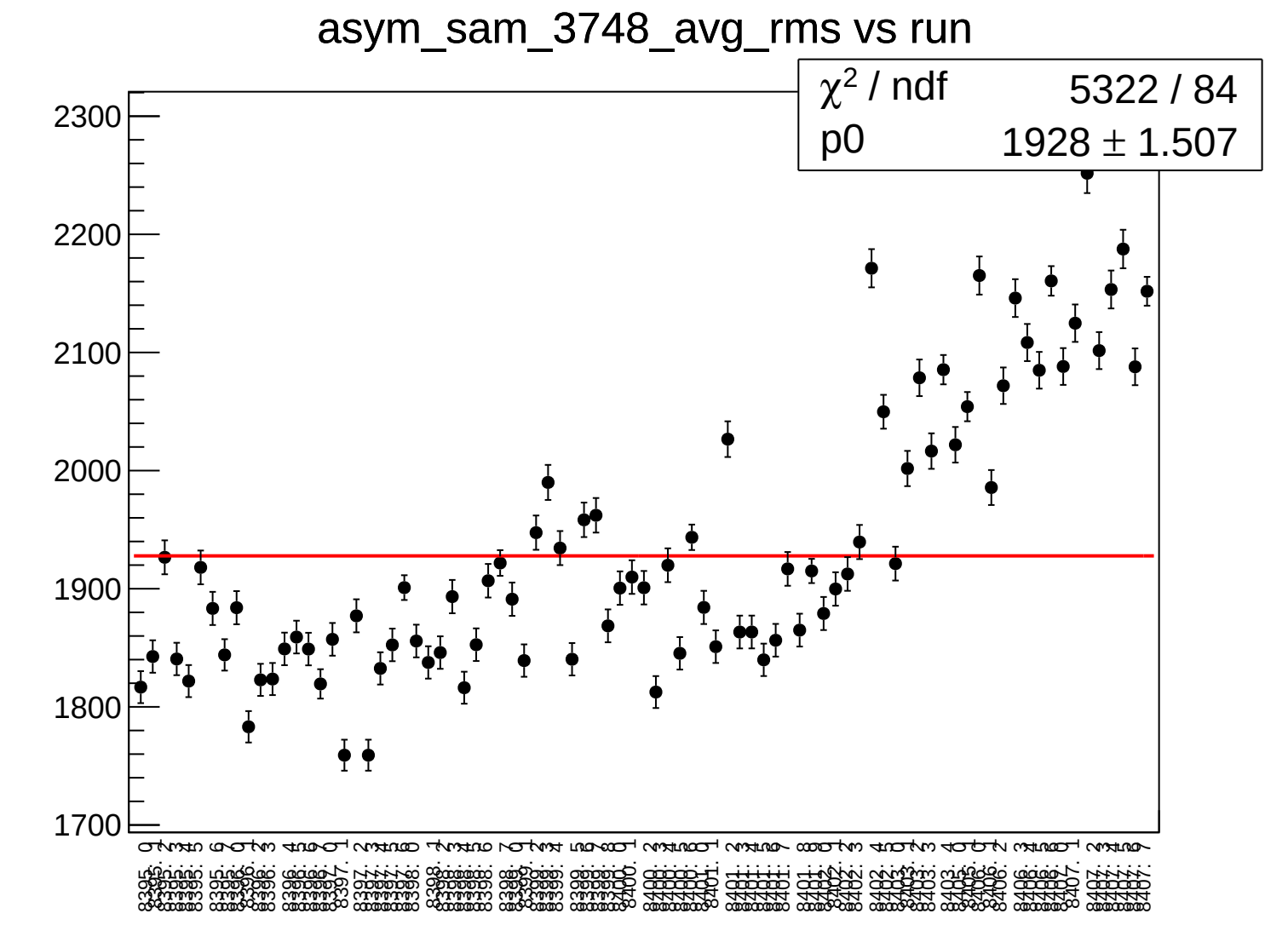

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 83.97 / 84
p0 −982.4 ± 2126
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −273.3
Std Dev 310.6
2
1
0
−1
−2
−3

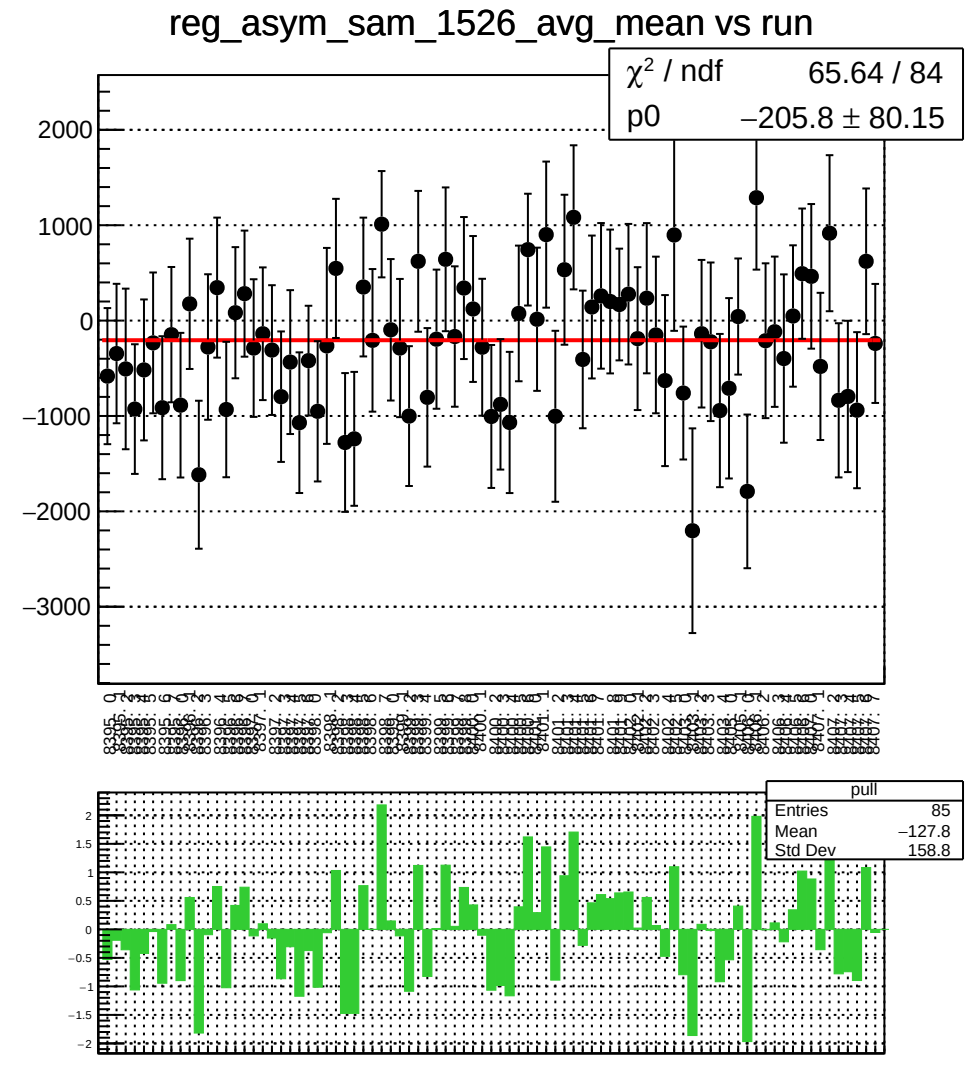

pull1D
Entries 85
Mean 0.005226
Std Dev 0.9939
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

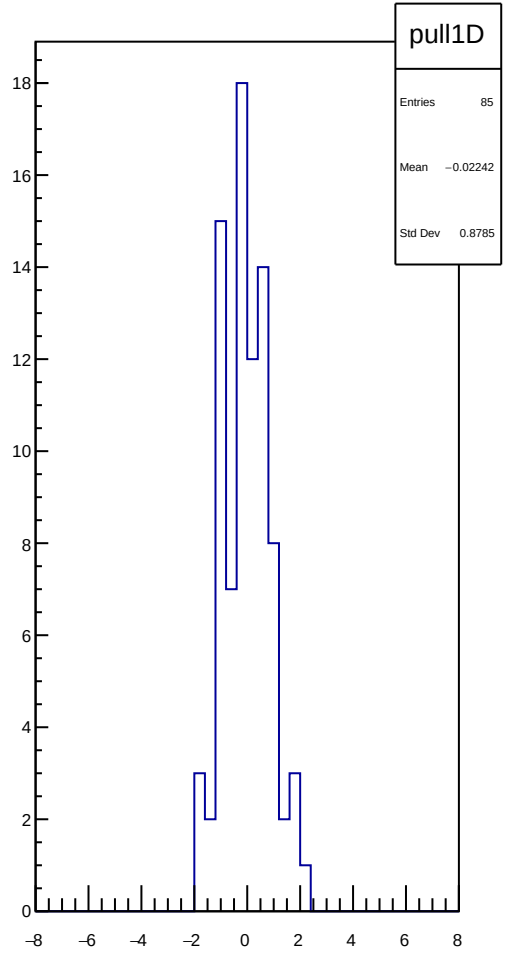

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 5340 / 84
p0 1923 ± 1.503
2300
2200
2100
2000
1900
1800
1700

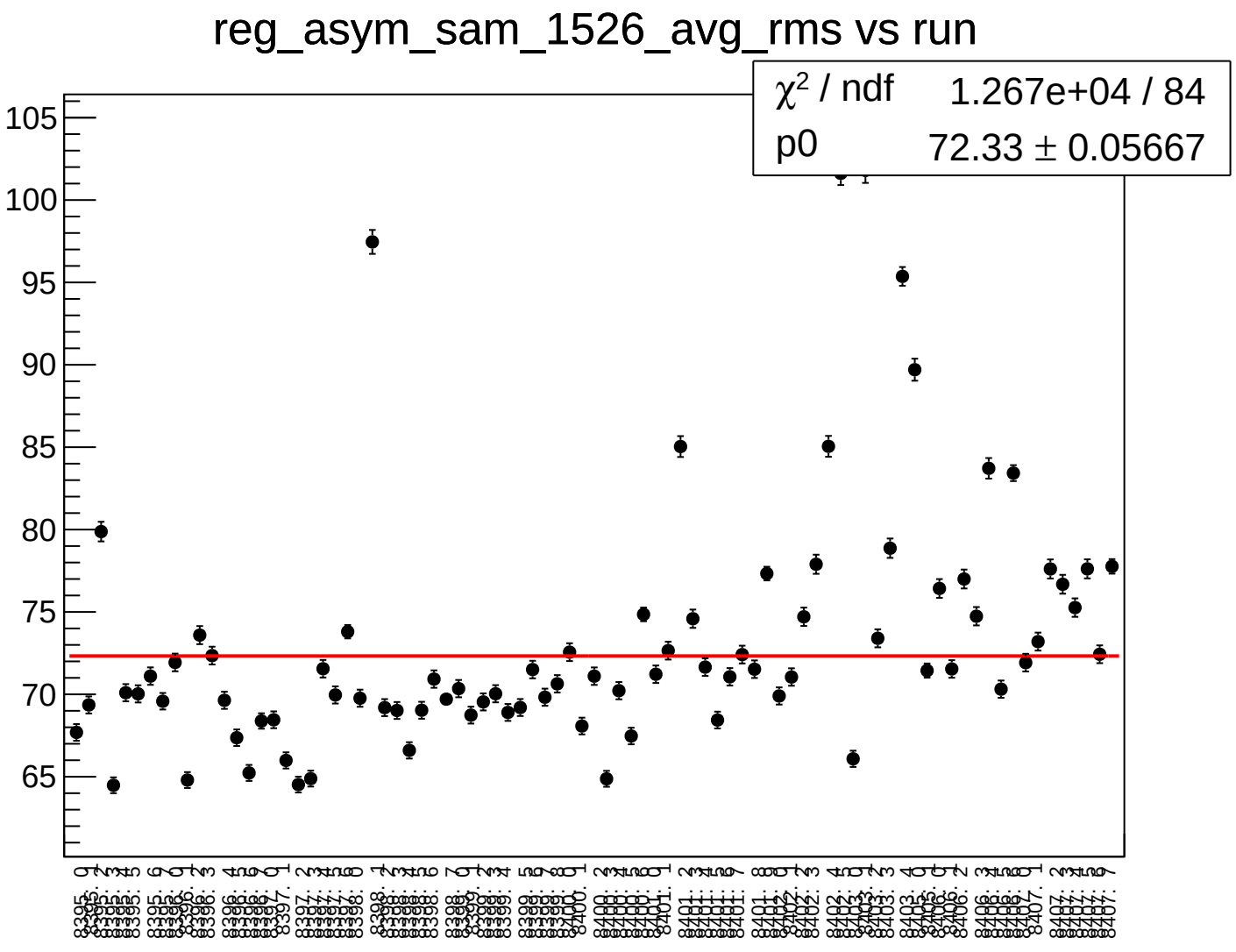

asym_sam_3748_avg_mean vs run
χ² / ndf 82.67 / 84
p0 528.6 ± 2131
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −206.7
Std Dev 243.2
2
1
0
−1
−2

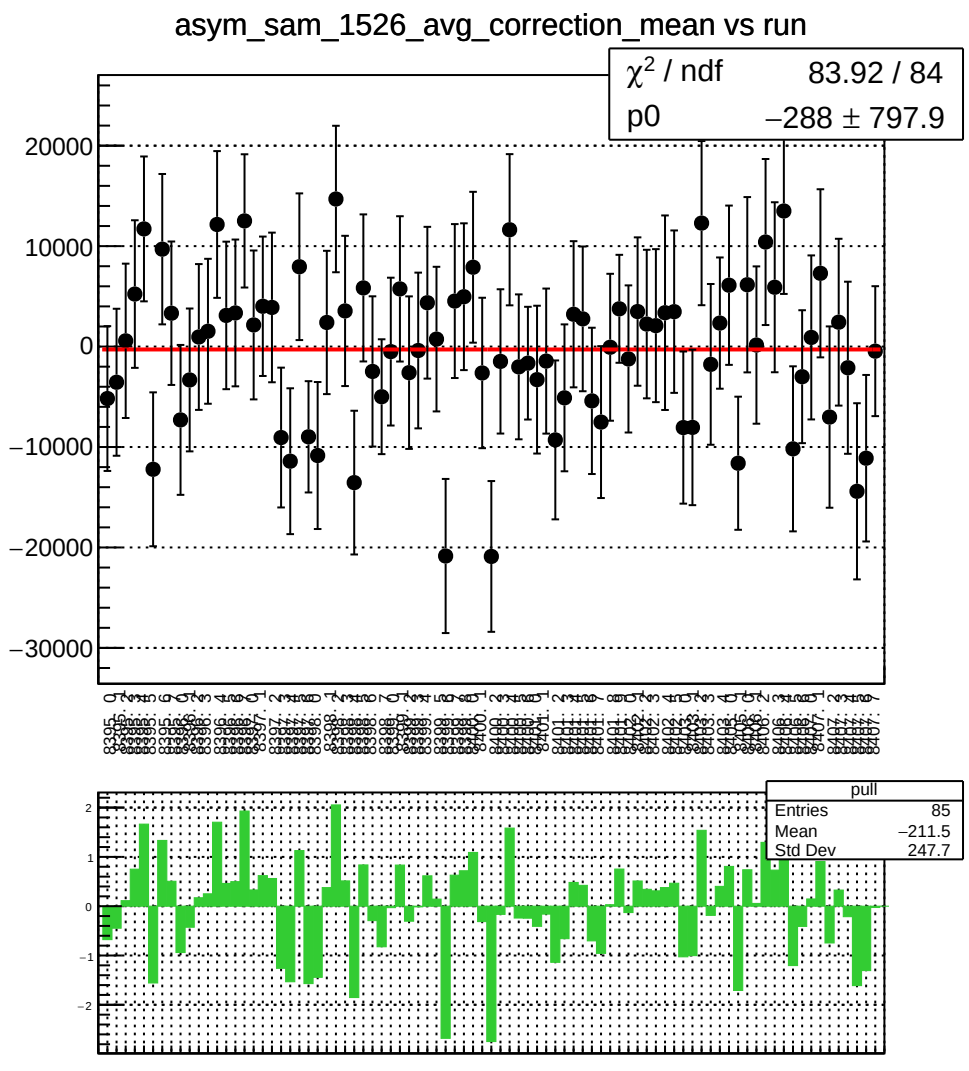

pull1D
Entries 85
Mean −0.006994
Std Dev 0.9862
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

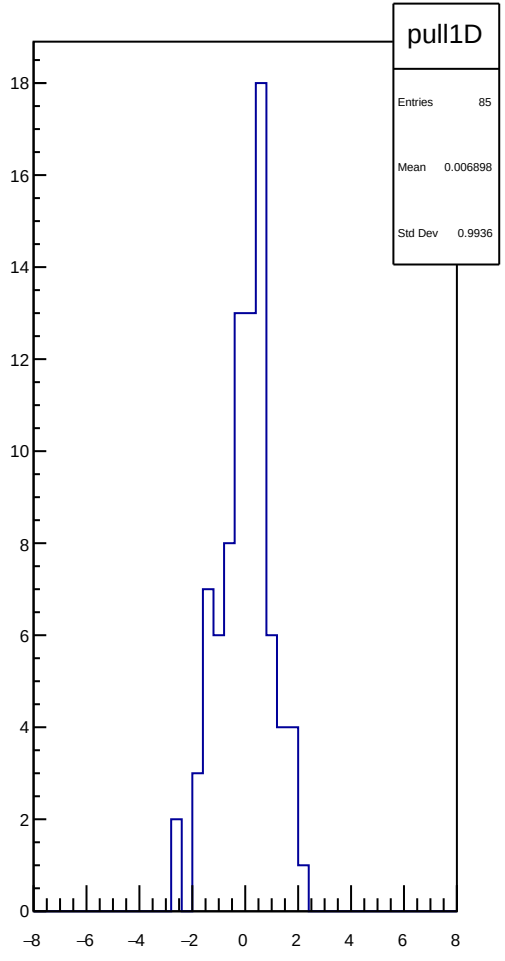

asym_sam_3748_avg_rms vs run
χ² / ndf 5322 / 84
p0 1928 ± 1.507
2300
2200
2100
2000
1900
1800
1700

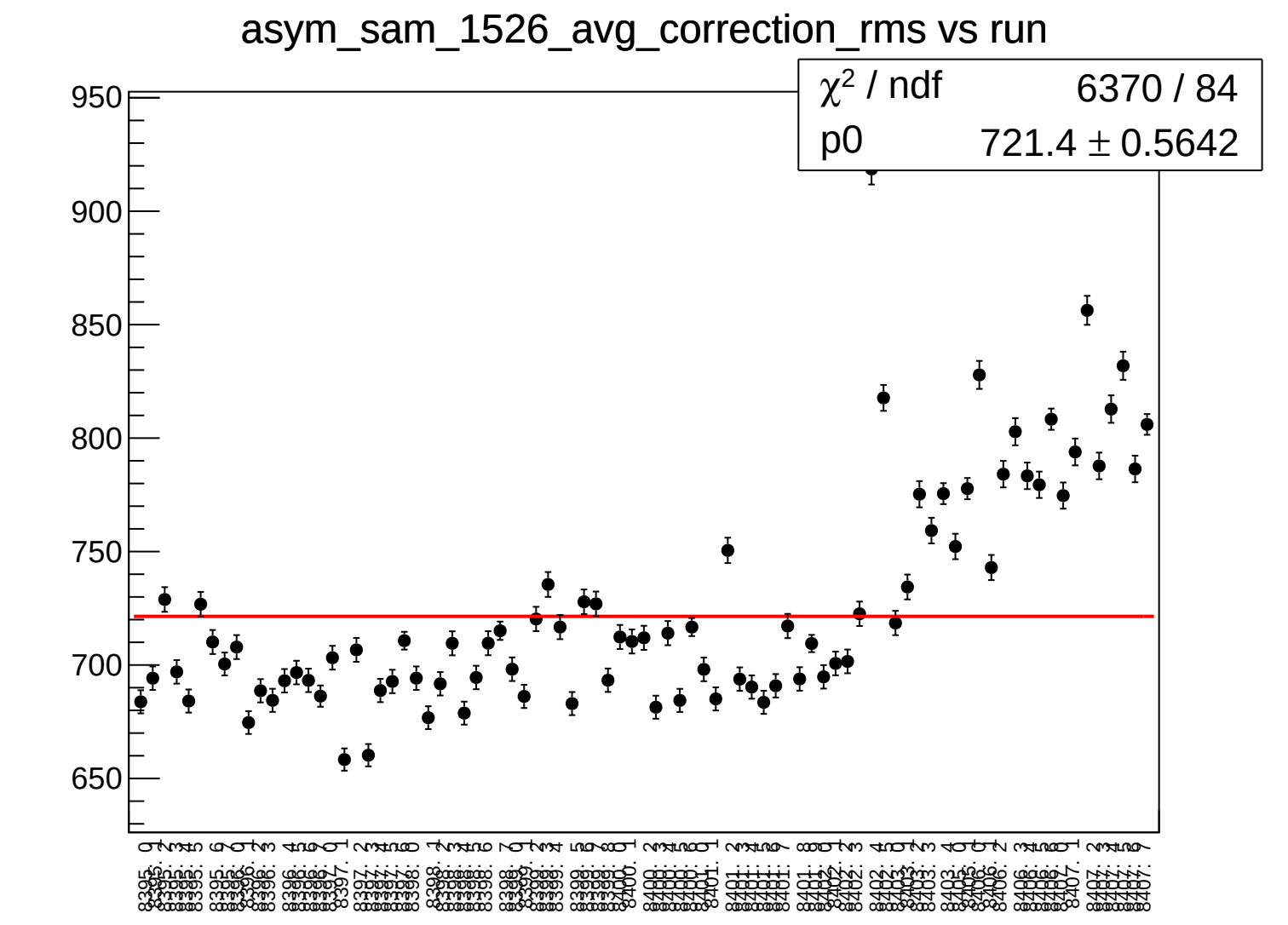

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 65.64 / 84
p0 −205.8 ± 80.15
pull
Entries 85
Mean −127.8
Std Dev 158.8

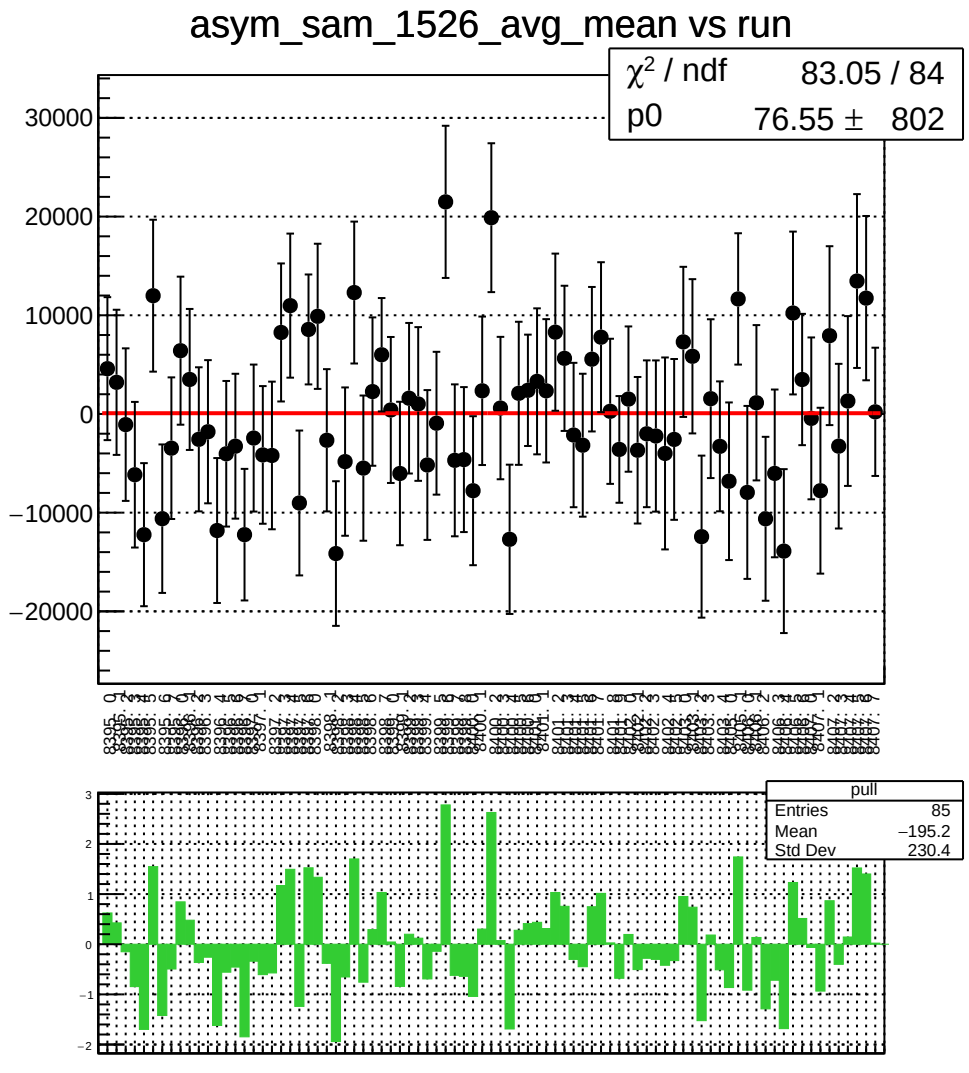

pull1D
Entries 85
Mean −0.02242
Std Dev 0.8785

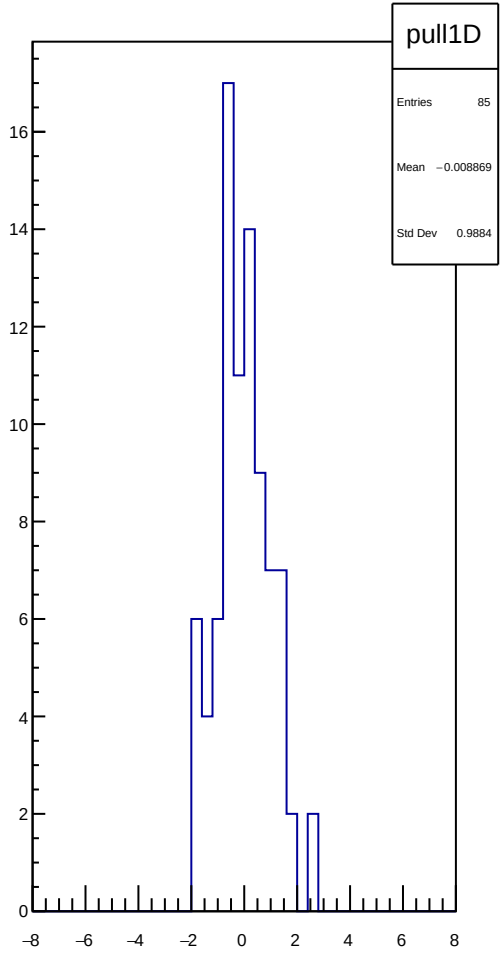

reg_asym_sam_1526_avg_rms vs run
χ² / ndf 1.267e+04 / 84
p0 72.33 ± 0.05667
105
100
95
90
85
80
75
70
65

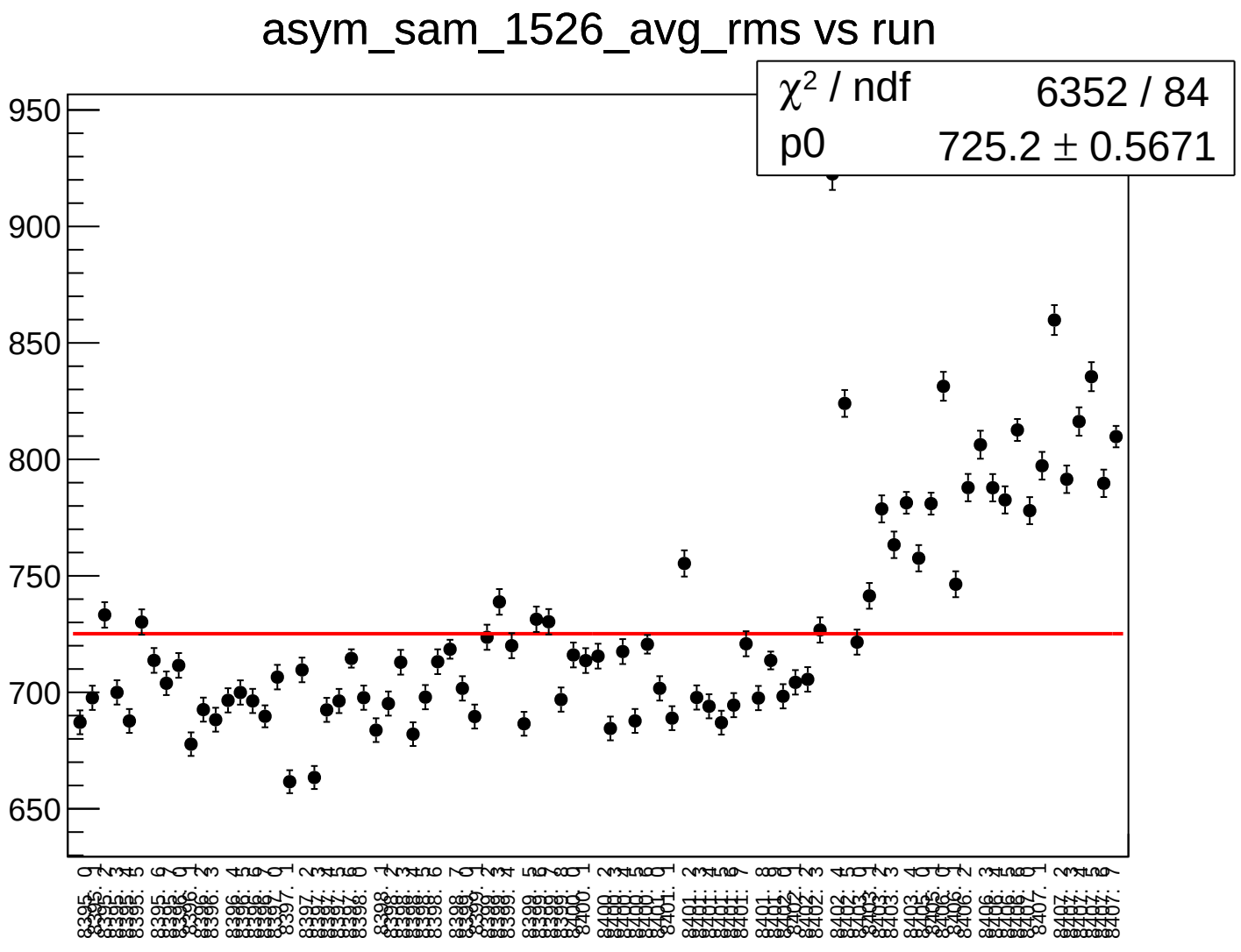

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 83.92 / 84
p0 −288 ± 797.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −211.5
Std Dev 247.7
2
1
0
−1
−2

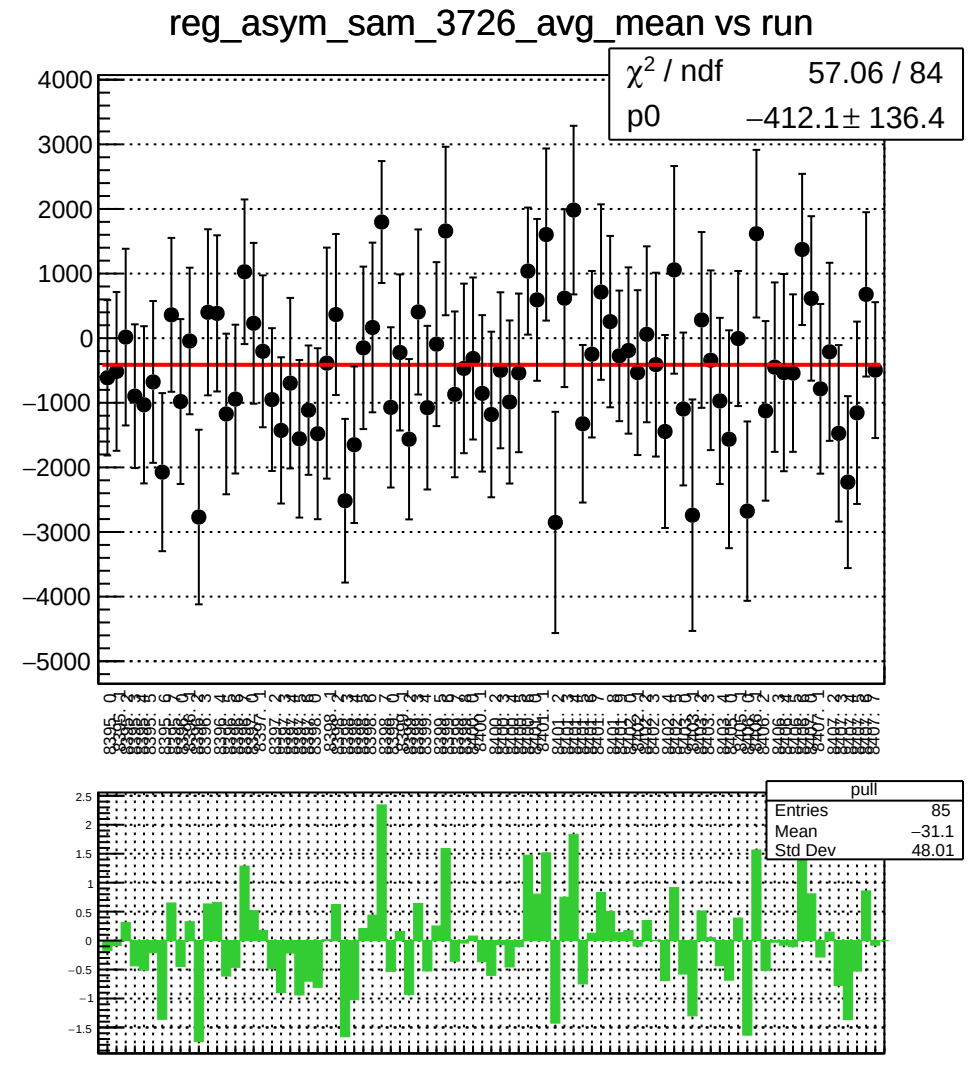

pull1D
Entries 85
Mean 0.006898
Std Dev 0.9936
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

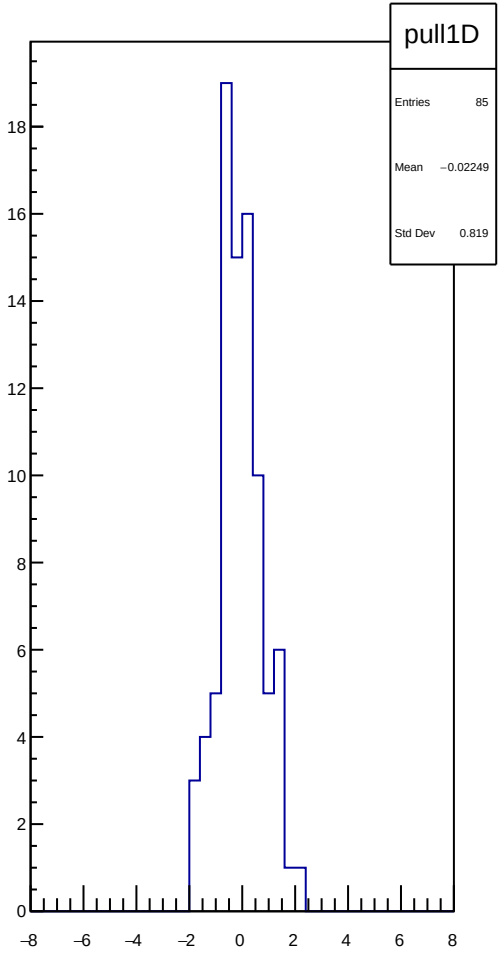

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 6370 / 84
p0 721.4 ± 0.5642
950
900
850
800
750
700
650

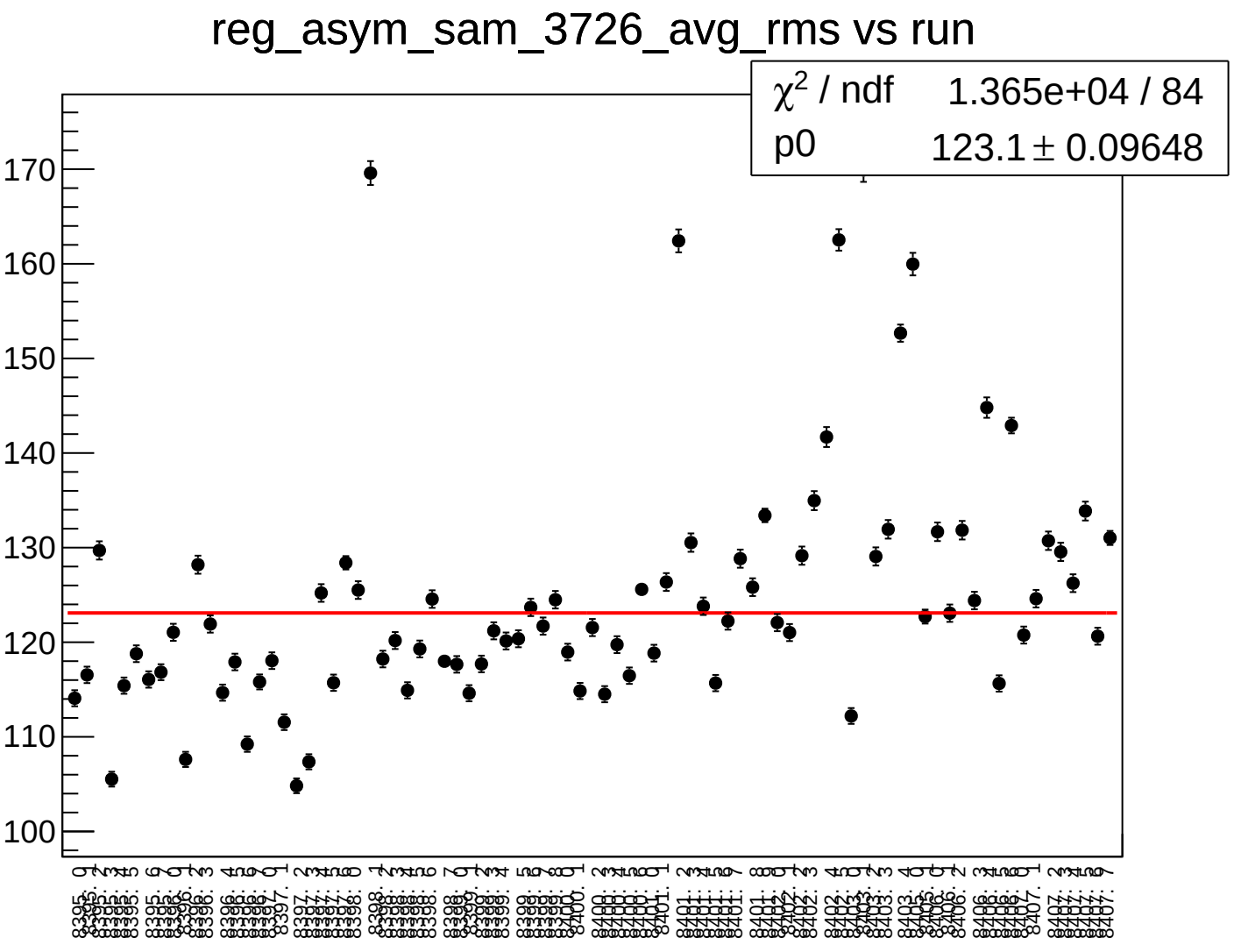

asym_sam_1526_avg_mean vs run
χ² / ndf 83.05 / 84
p0 76.55 ± 802
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −195.2
Std Dev 230.4
3
2
1
0
−1
−2

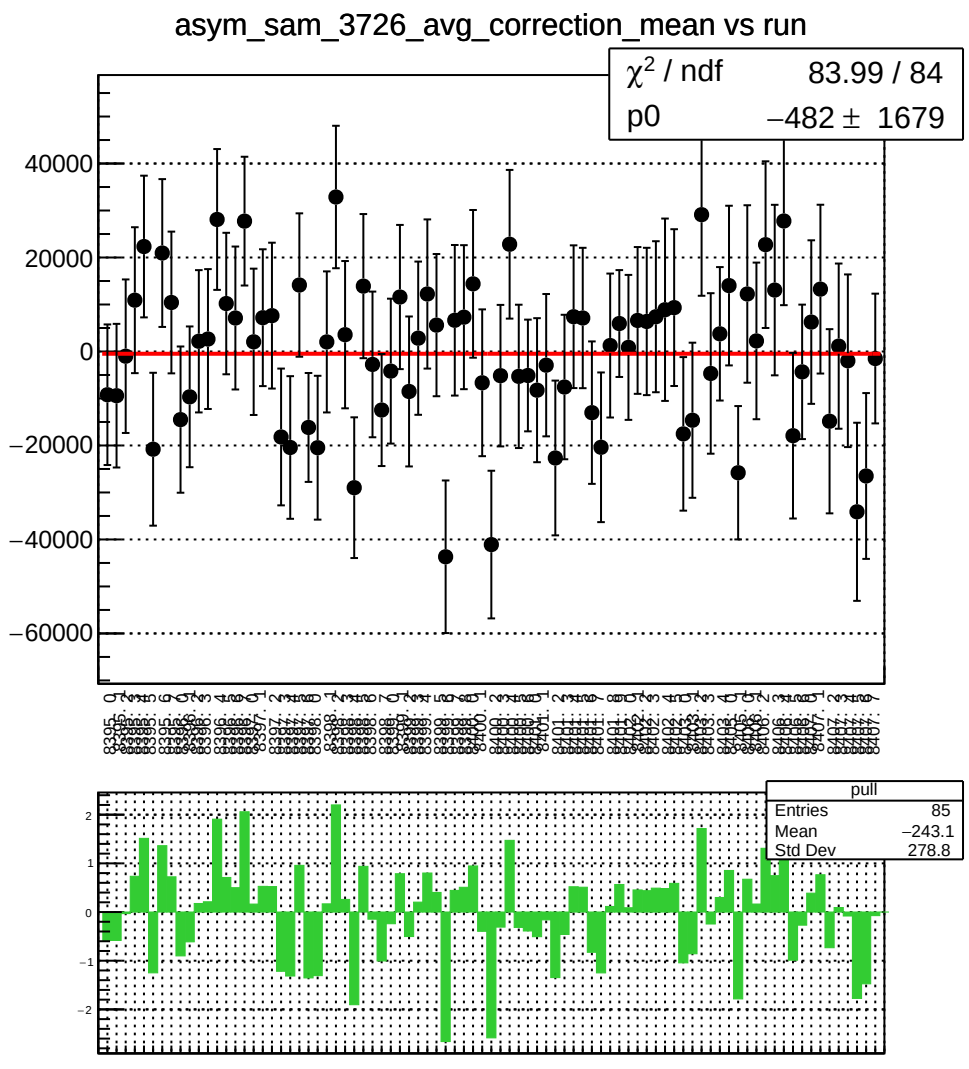

pull1D
Entries 85
Mean −0.008869
Std Dev 0.9884
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

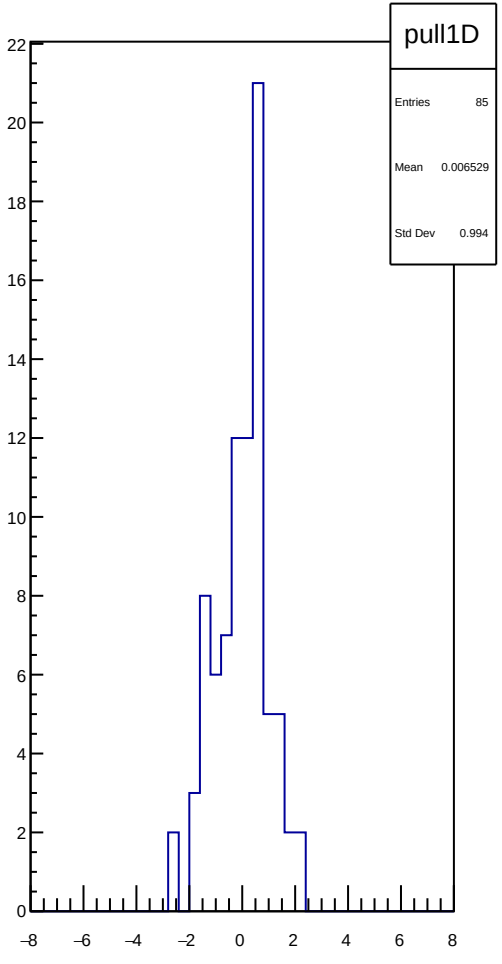

asym_sam_1526_avg_rms vs run
χ² / ndf 6352 / 84
p0 725.2 ± 0.5671
950
900
850
800
750
700
650

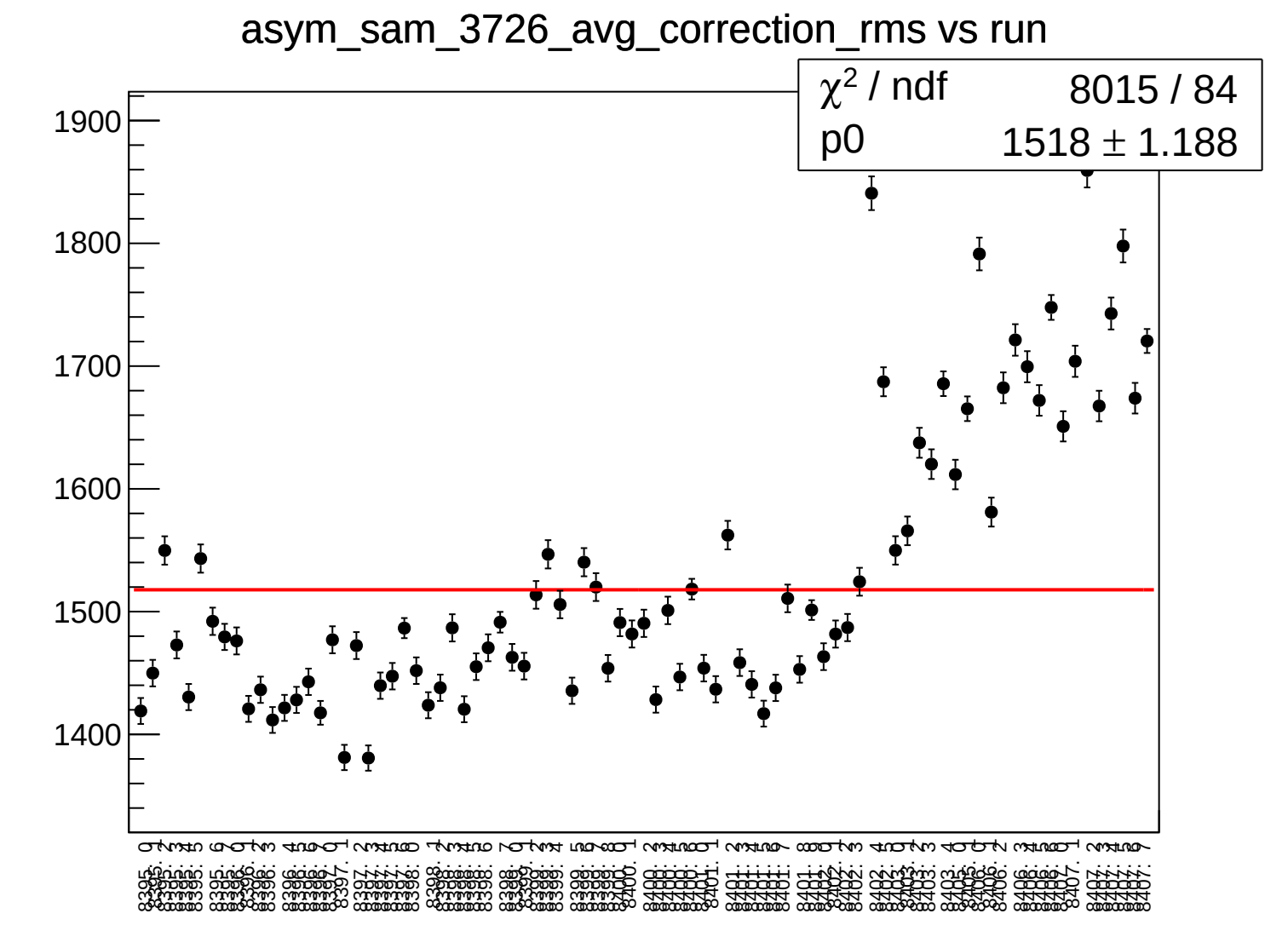

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 57.06 / 84
p0 −412.1± 136.4
pull
Entries 85
Mean −31.1
Std Dev 48.01

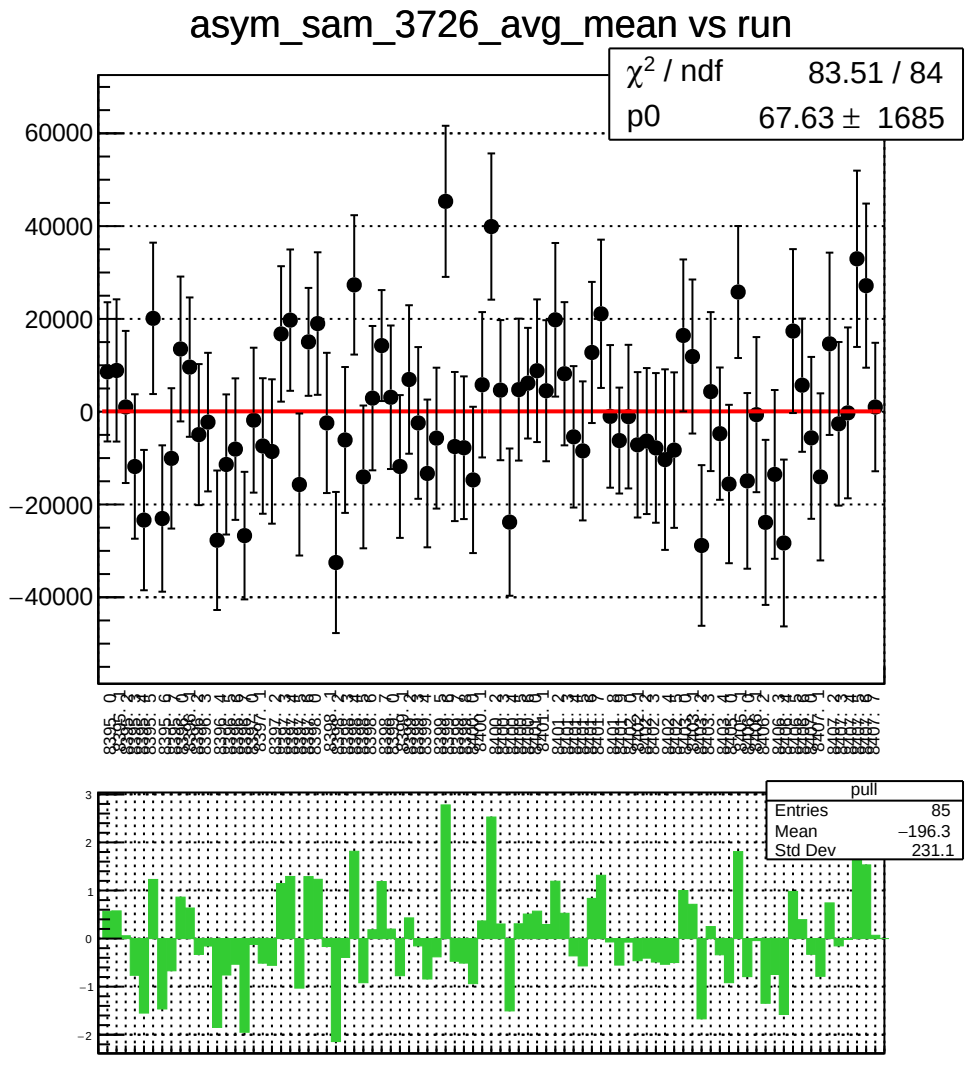

pull1D
Entries 85
Mean −0.02249
Std Dev 0.819

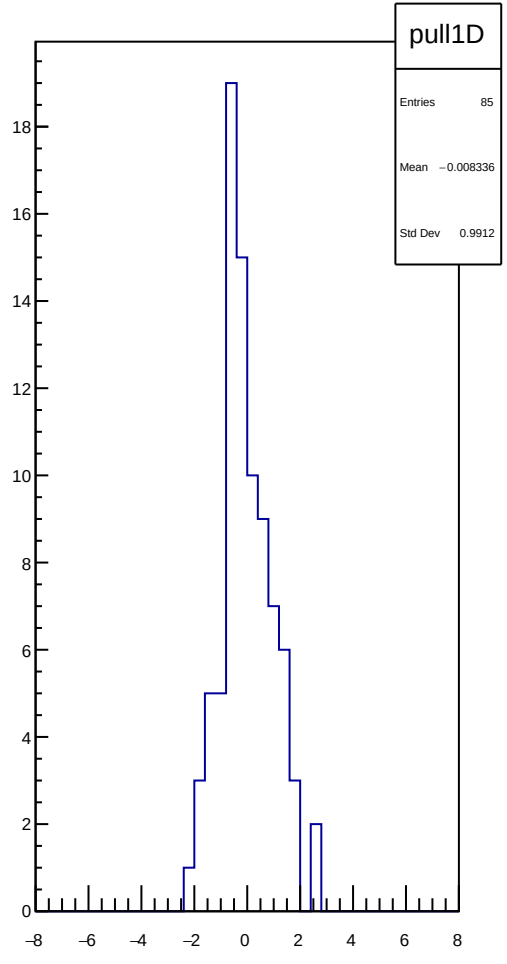

reg_asym_sam_3726_avg_rms vs run
χ^2 / ndf 1.365e+04 / 84
p0 123.1 ± 0.09648
170
160
150
140
130
120
110
100

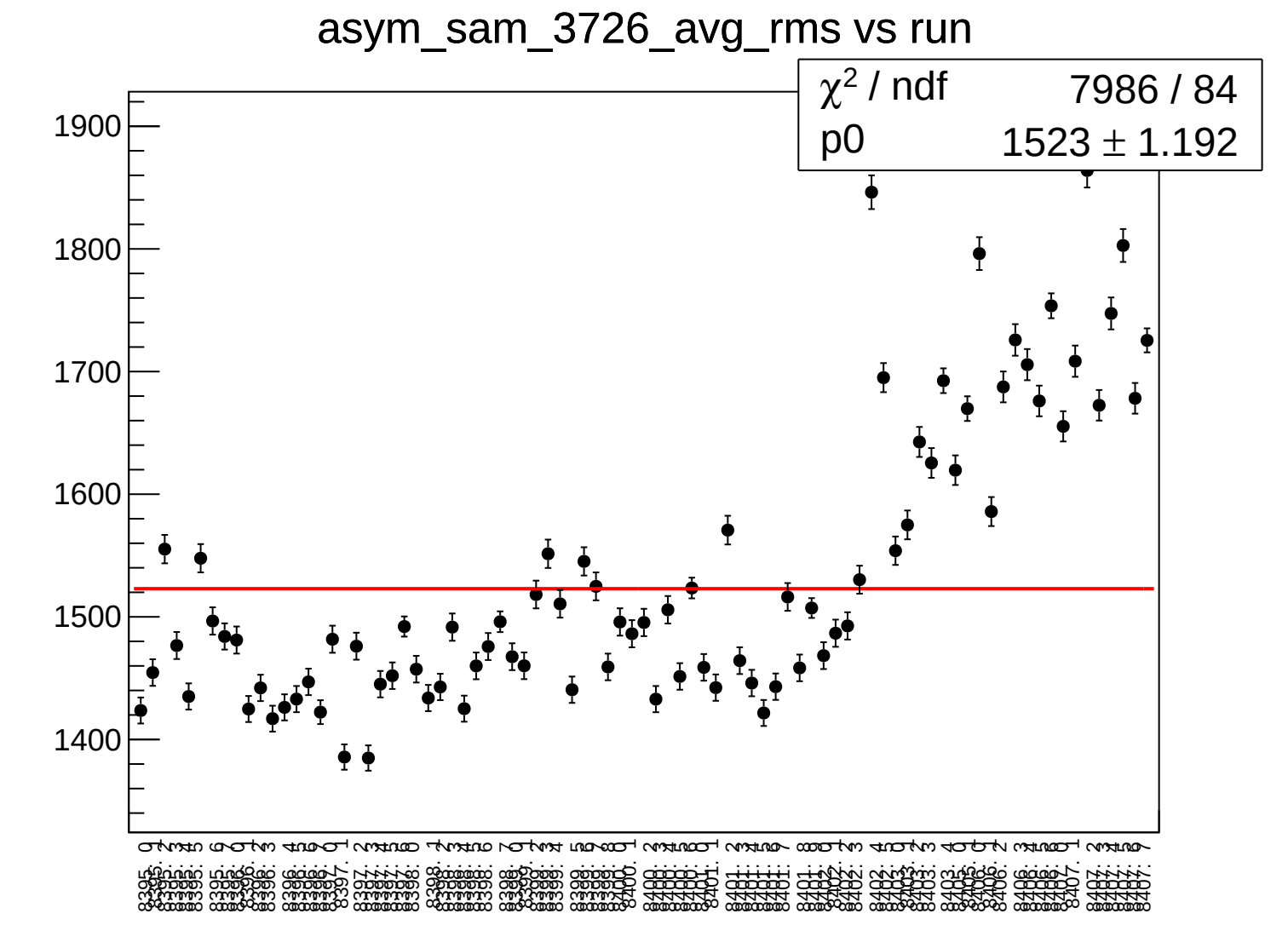

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 83.99 / 84
p0 −482 ± 1679
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −243.1
Std Dev 278.8
2
1
0
−1
−2

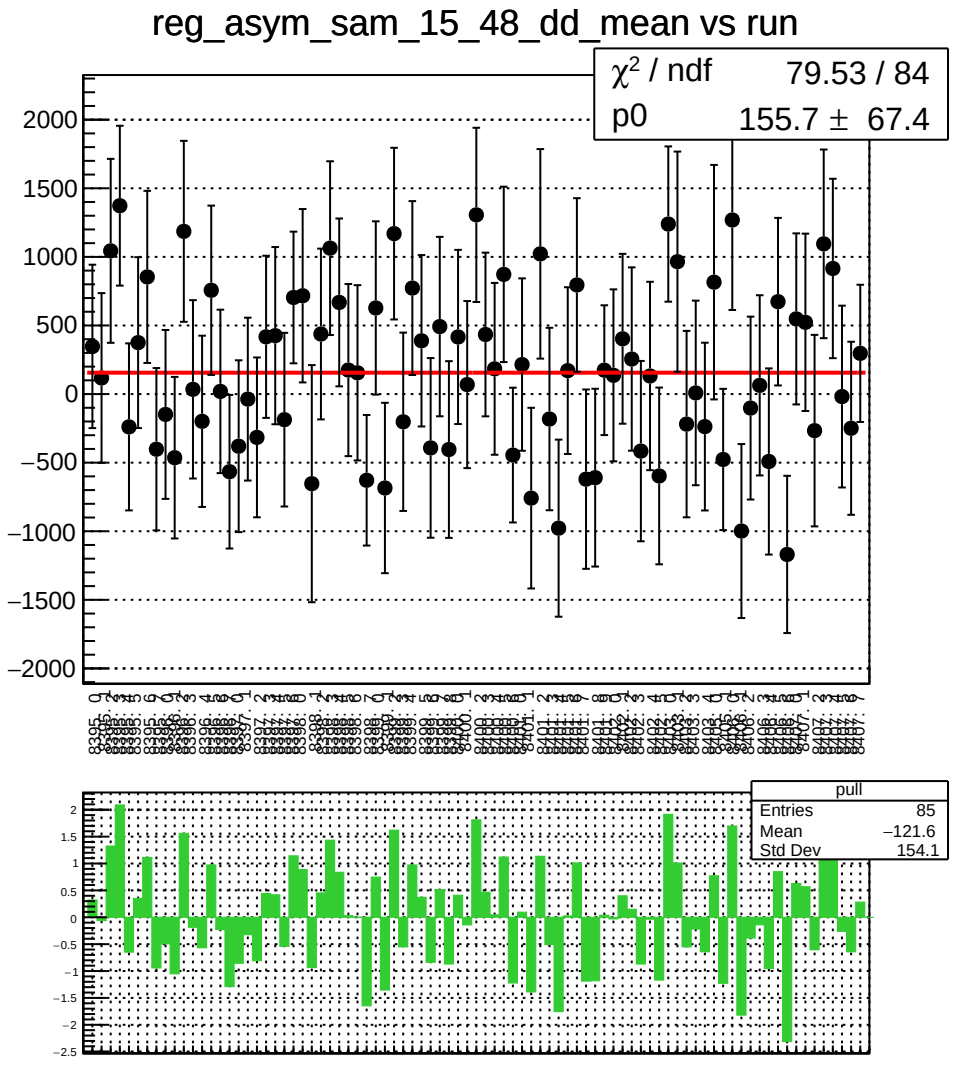

pull1D
Entries 85
Mean 0.006529
Std Dev 0.994
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

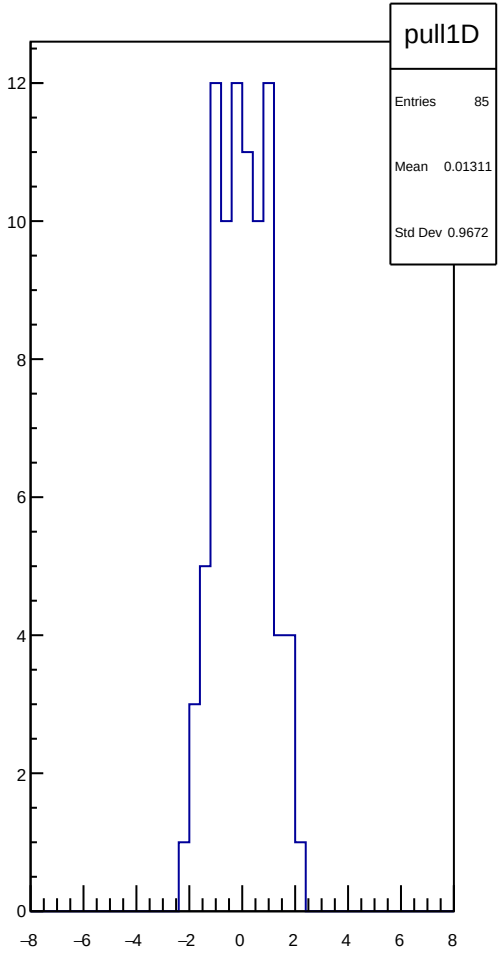

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 8015 / 84
p0 1518 ± 1.188
1900
1800
1700
1600
1500
1400

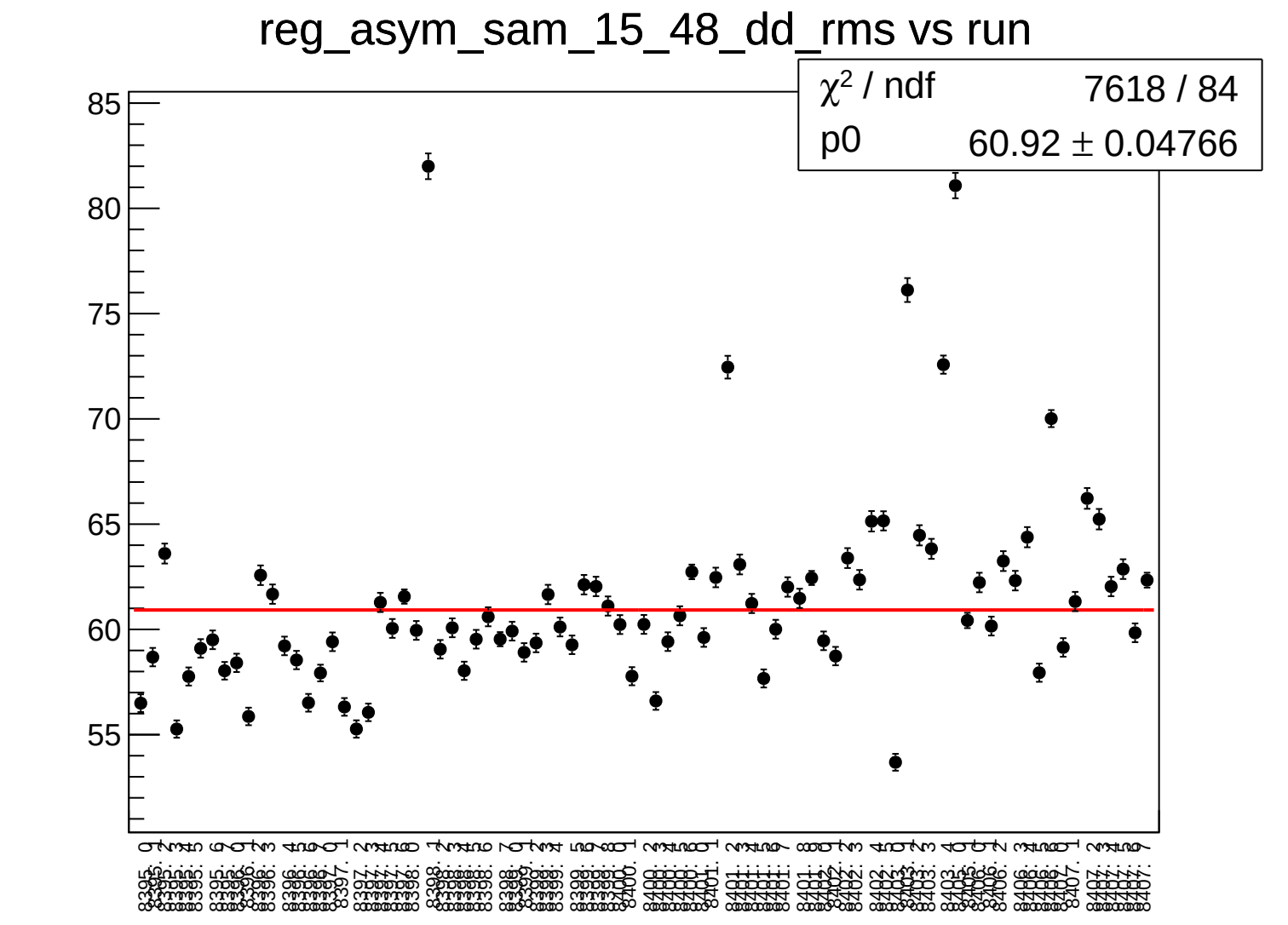

asym_sam_3726_avg_mean vs run
χ² / ndf 83.51 / 84
p0 67.63 ± 1685
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −196.3
Std Dev 231.1
3
2
1
0
−1
−2

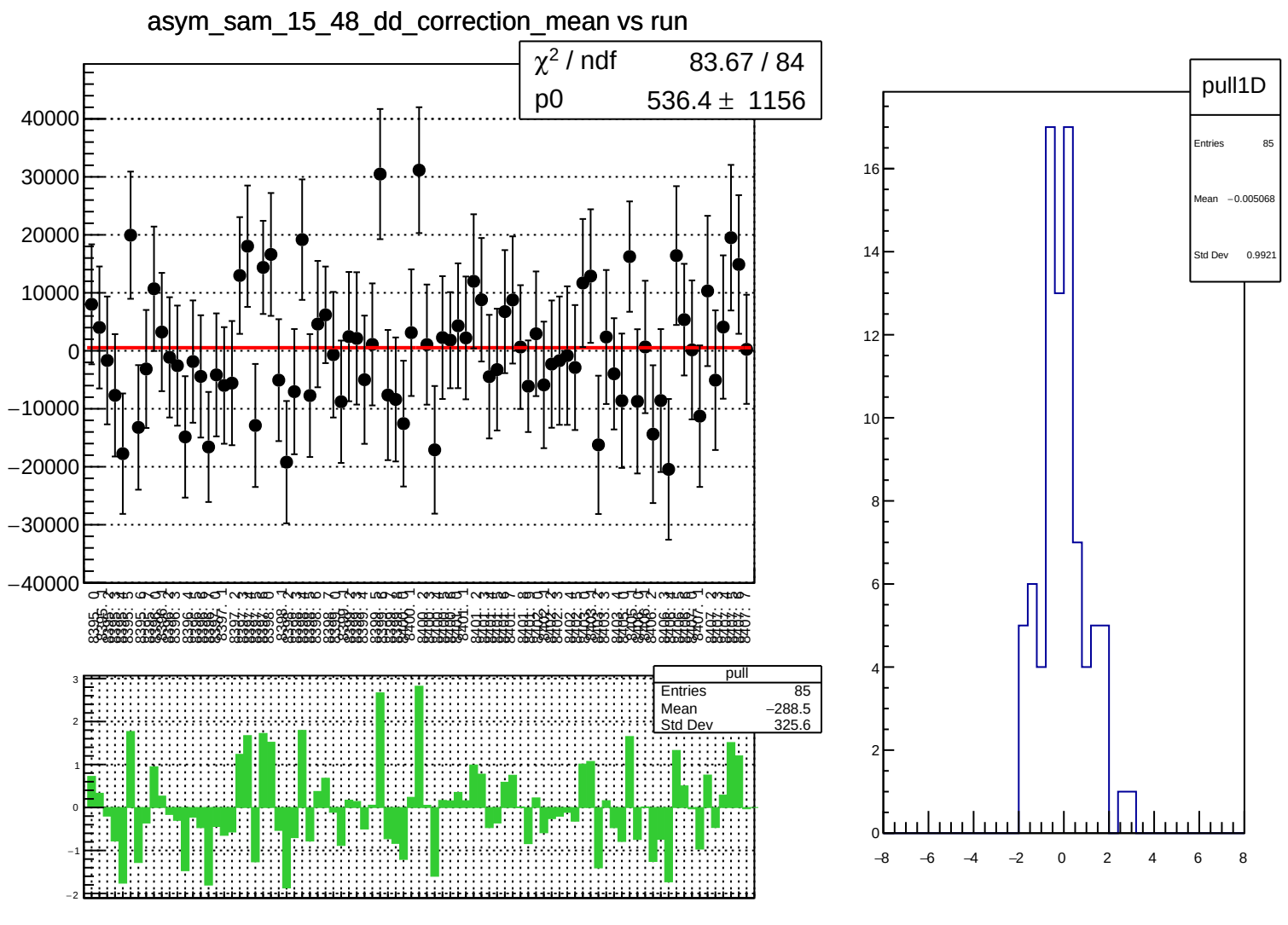

pull1D
Entries 85
Mean −0.008336
Std Dev 0.9912
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

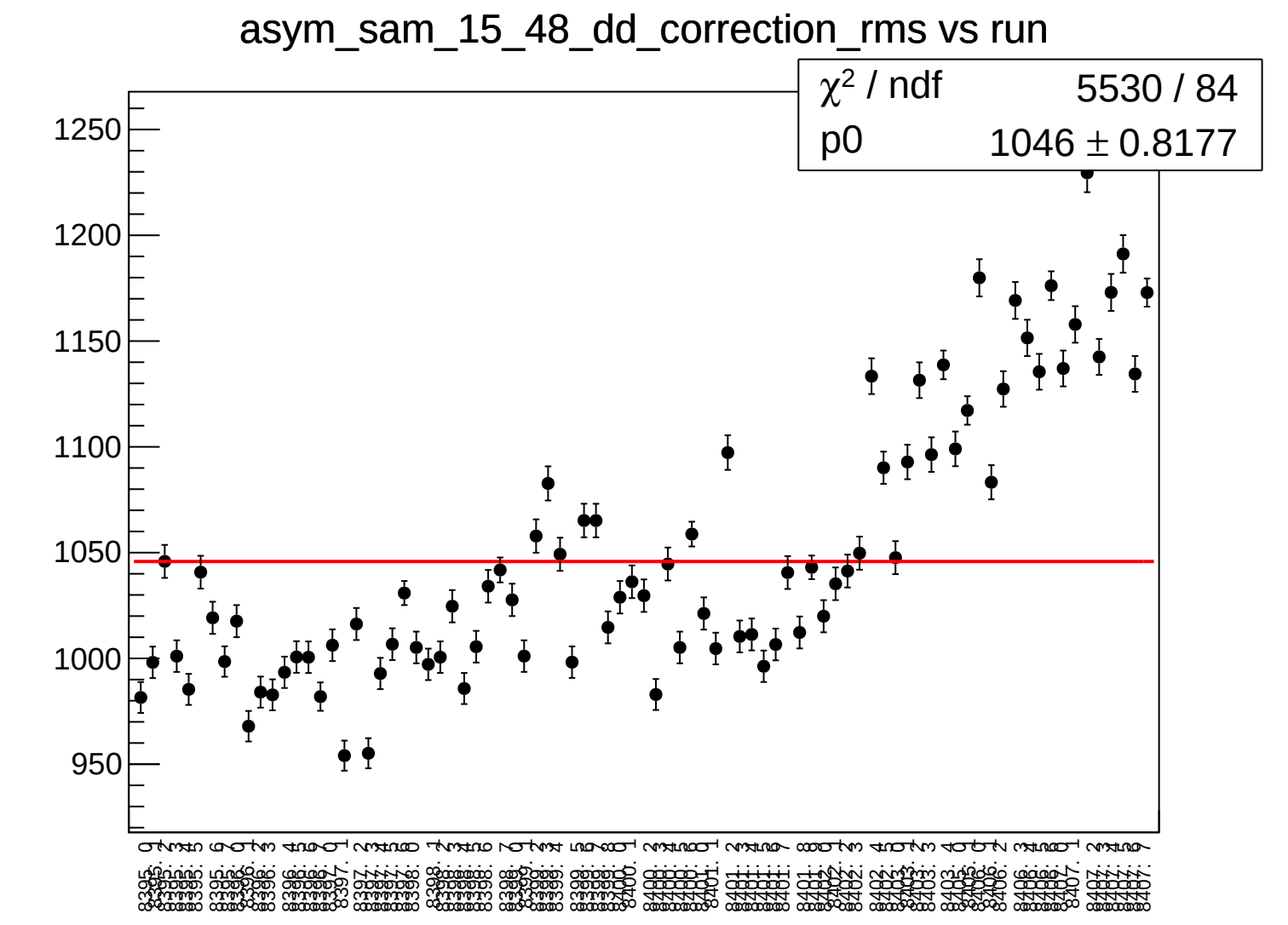

asym_sam_3726_avg_rms vs run
χ² / ndf 7986 / 84
p0 1523 ± 1.192
1900
1800
1700
1600
1500
1400

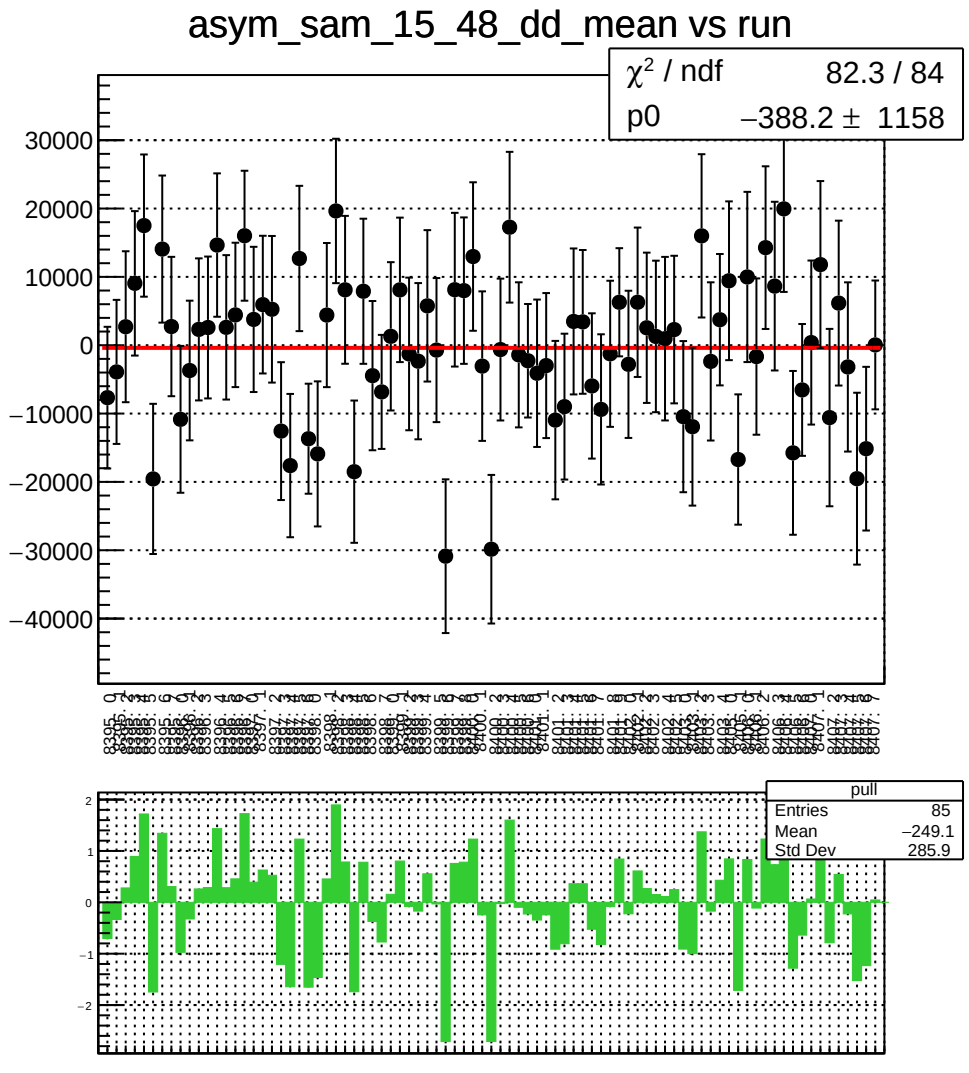

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 79.53 / 84
p0 155.7 ± 67.4
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 85
Mean −121.6
Std Dev 154.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

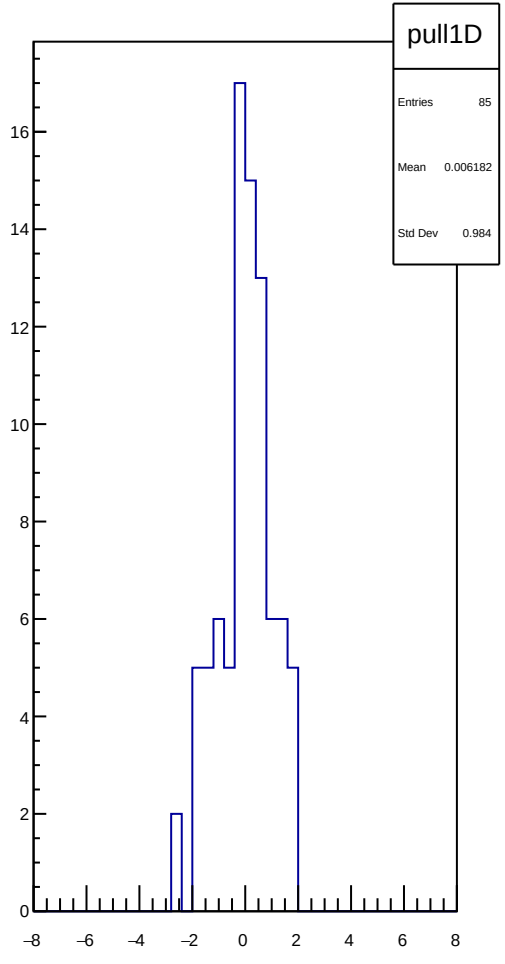

pull1D
Entries 85
Mean 0.01311
Std Dev 0.9672
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

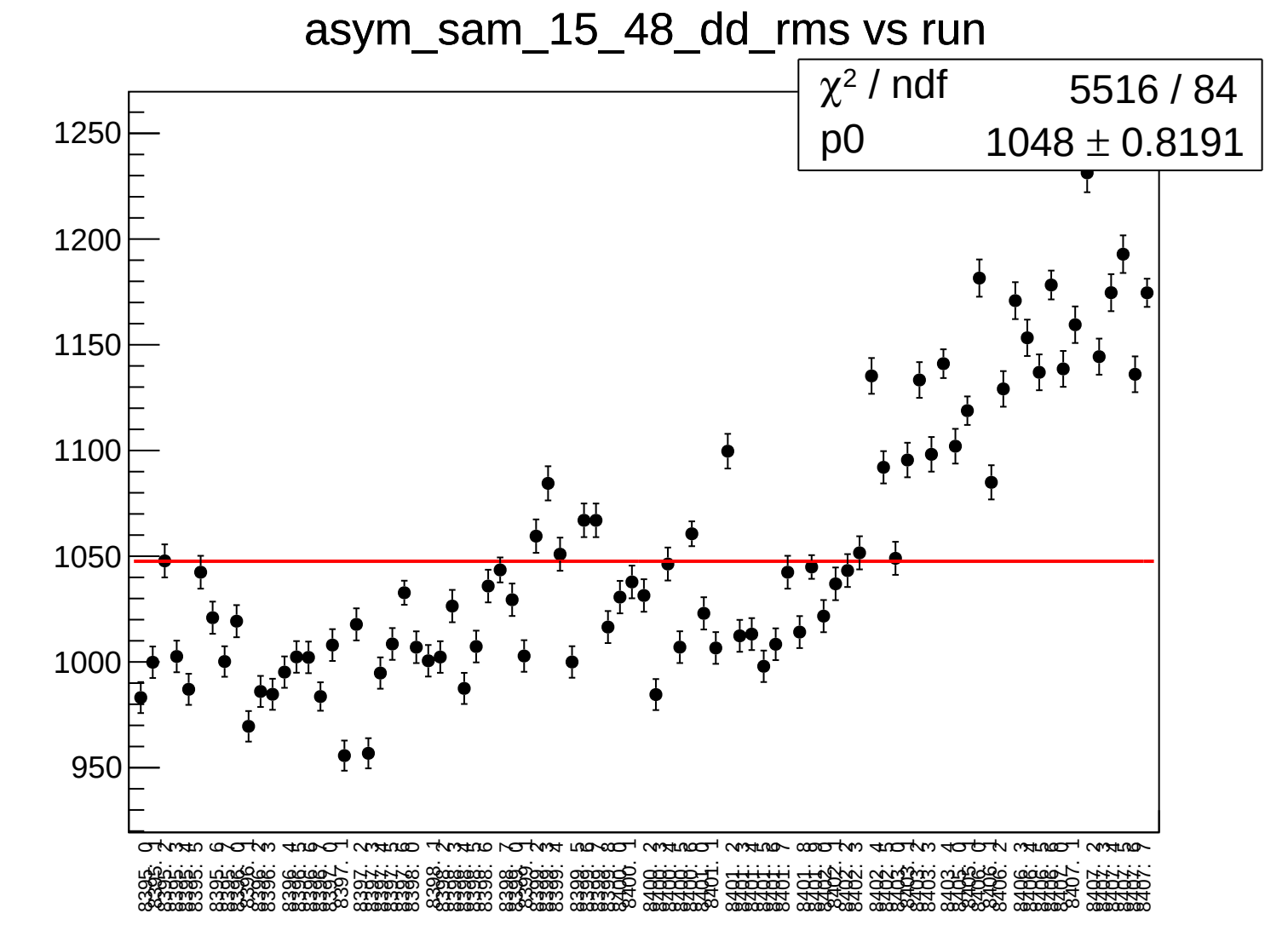

reg_asym_sam_15_48_dd_rms vs run
χ^2 / ndf 7618 / 84
p0 60.92 ± 0.04766
85
80
75
70
65
60
55

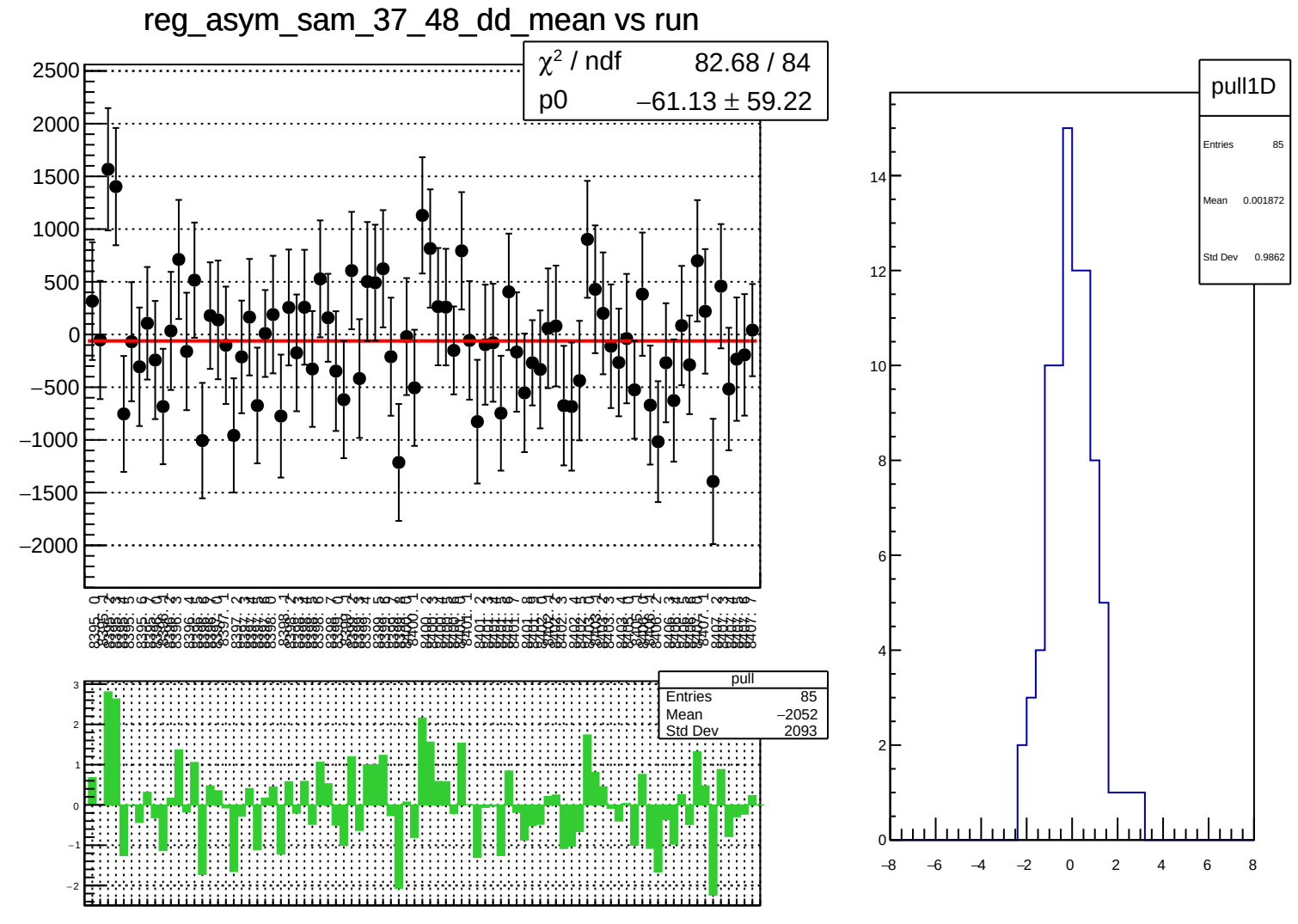

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 83.67 / 84
p0 536.4 ± 1156
pull
Entries 85
Mean −288.5
Std Dev 325.6
pull1D
Entries 85
Mean −0.005068
Std Dev 0.9921

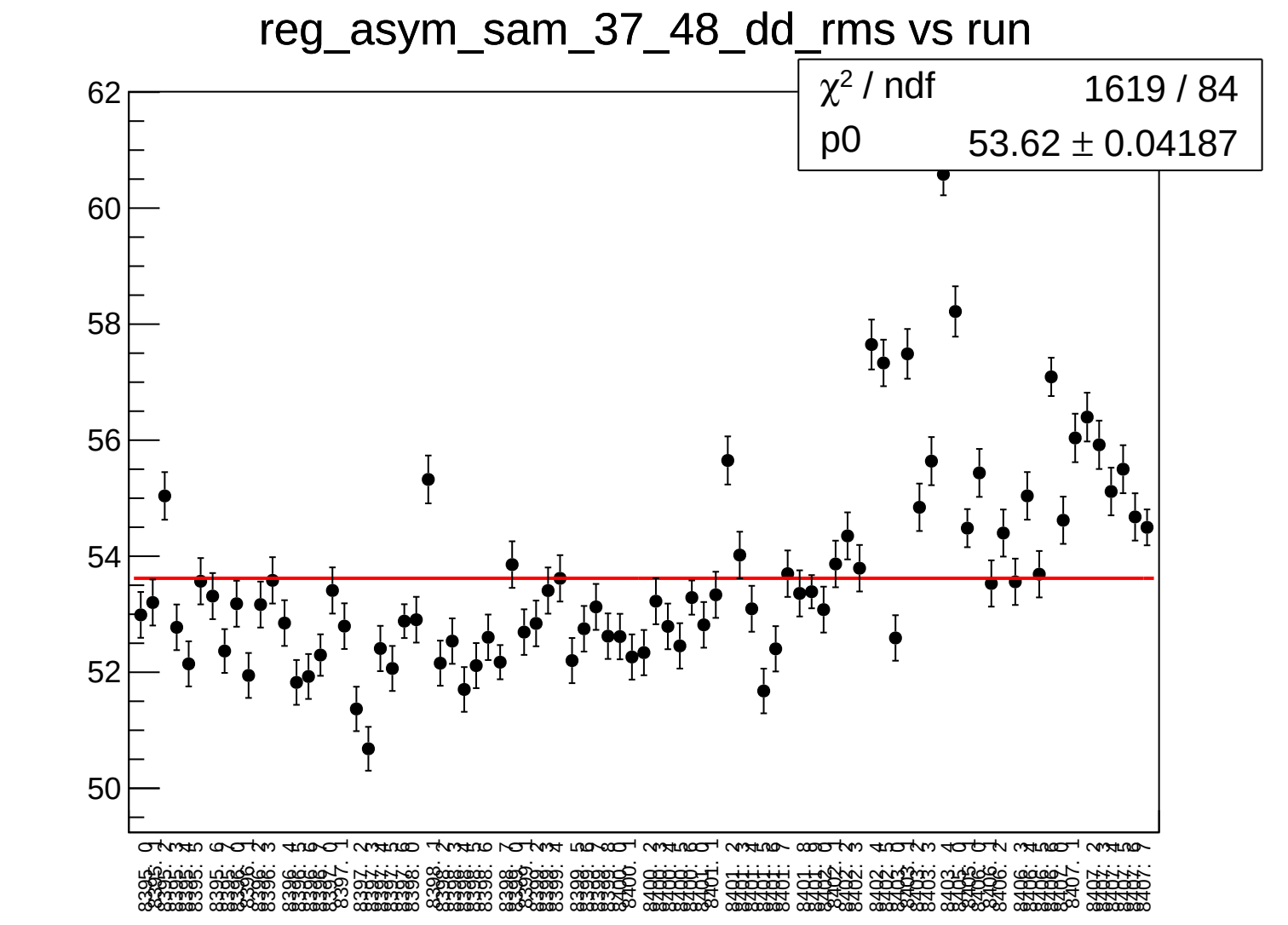

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 5530 / 84
p0 1046 ± 0.8177
1250
1200
1150
1100
1050
1000
950

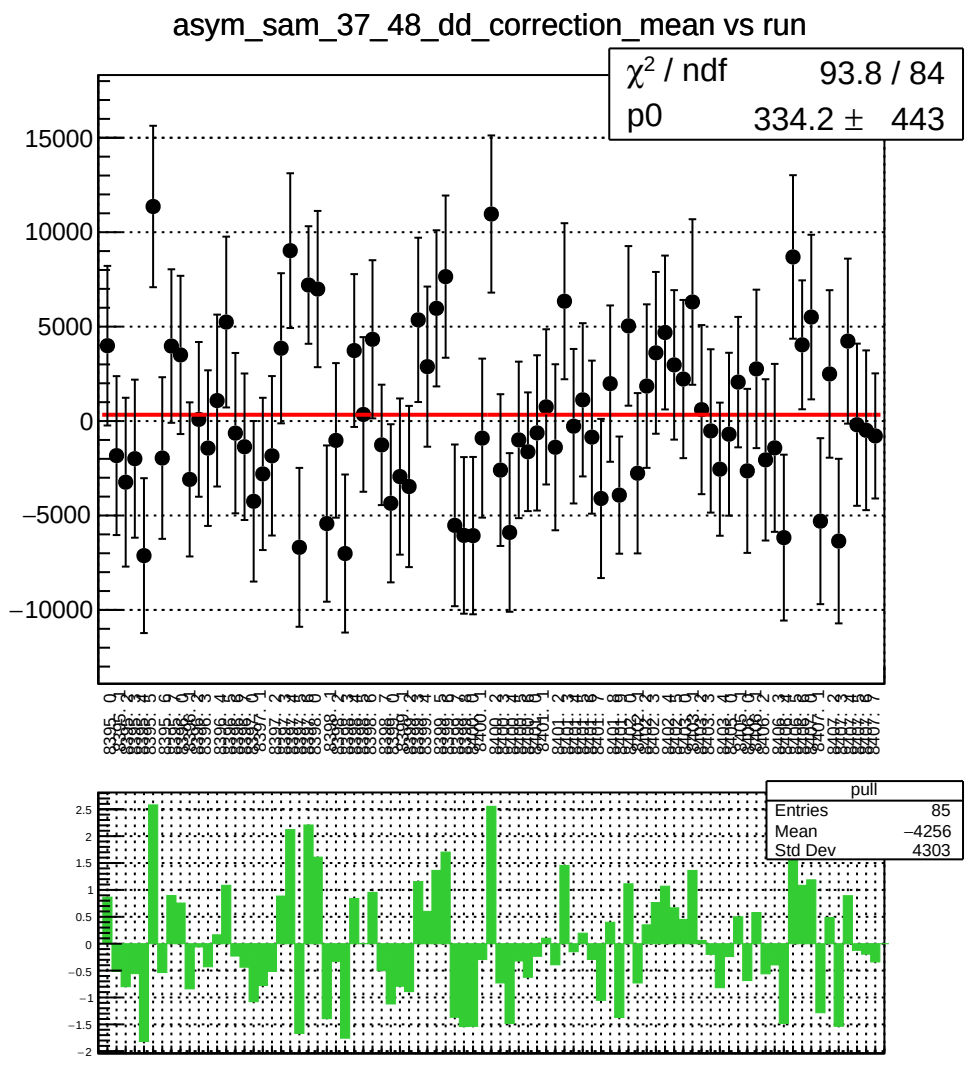

asym_sam_15_48_dd_mean vs run
χ² / ndf 82.3 / 84
p0 −388.2 ± 1158
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −249.1
Std Dev 285.9
2
1
0
−1
−2

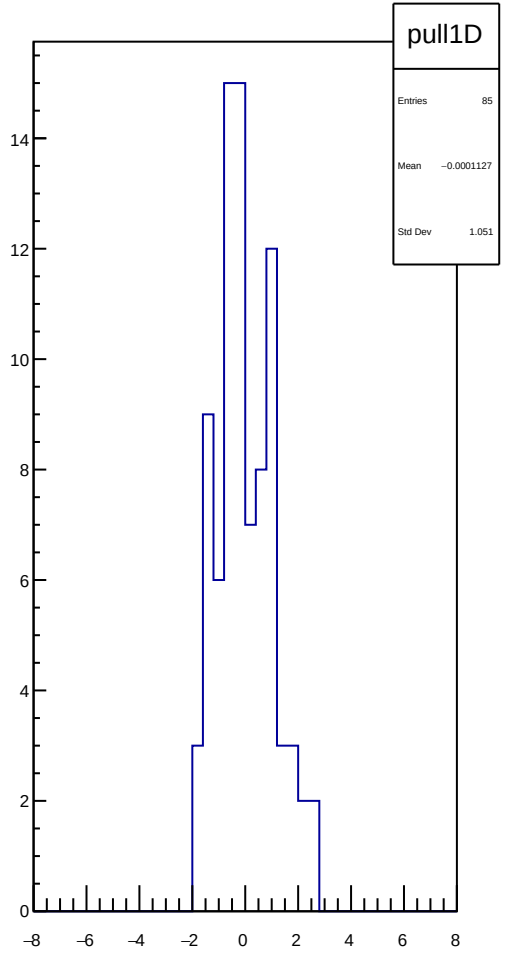

pull1D
Entries 85
Mean 0.006182
Std Dev 0.984
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

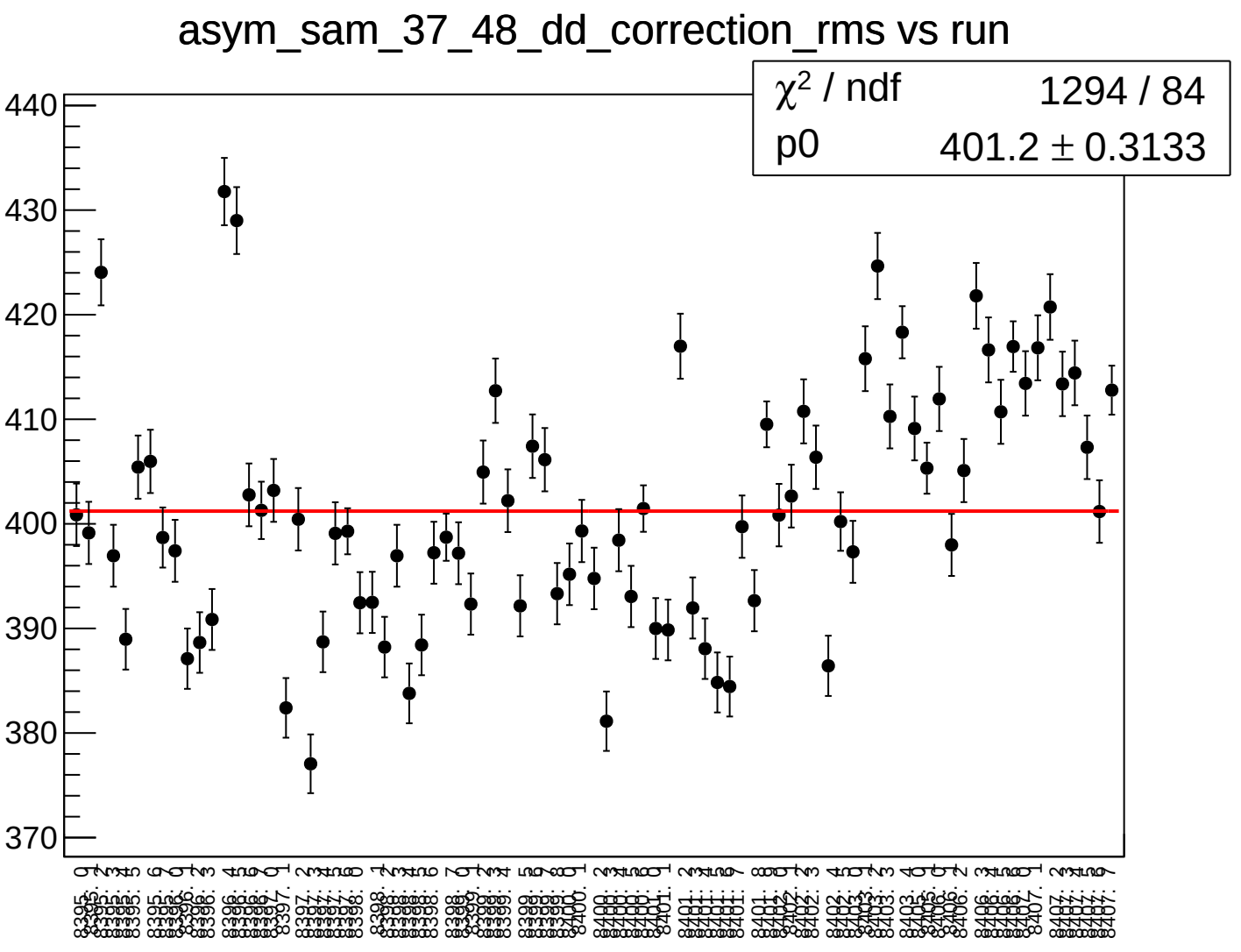

asym_sam_15_48_dd_rms vs run
χ² / ndf 5516 / 84
p0 1048 ± 0.8191
1250
1200
1150
1100
1050
1000
950

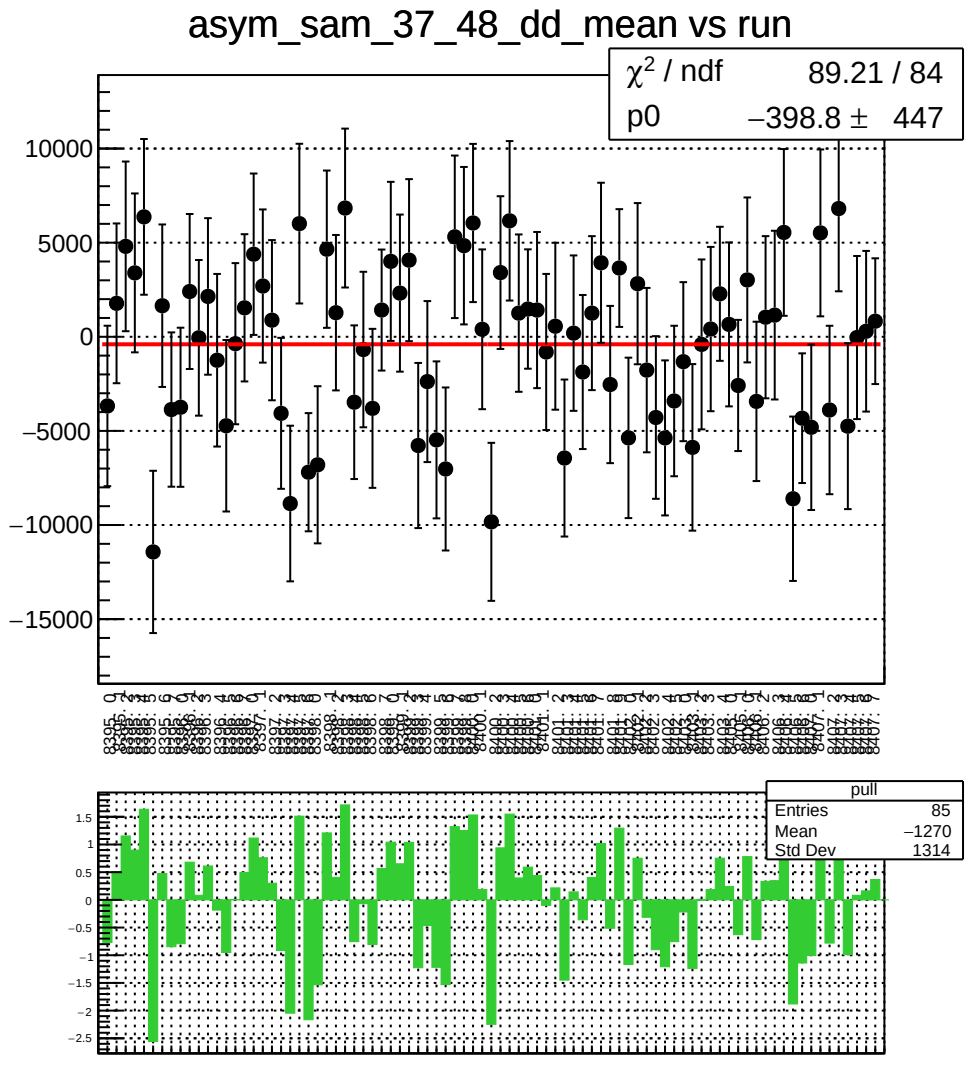

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 82.68 / 84
p0 −61.13 ± 59.22
pull
Entries 85
Mean −2052
Std Dev 2093
pull1D
Entries 85
Mean 0.001872
Std Dev 0.9862

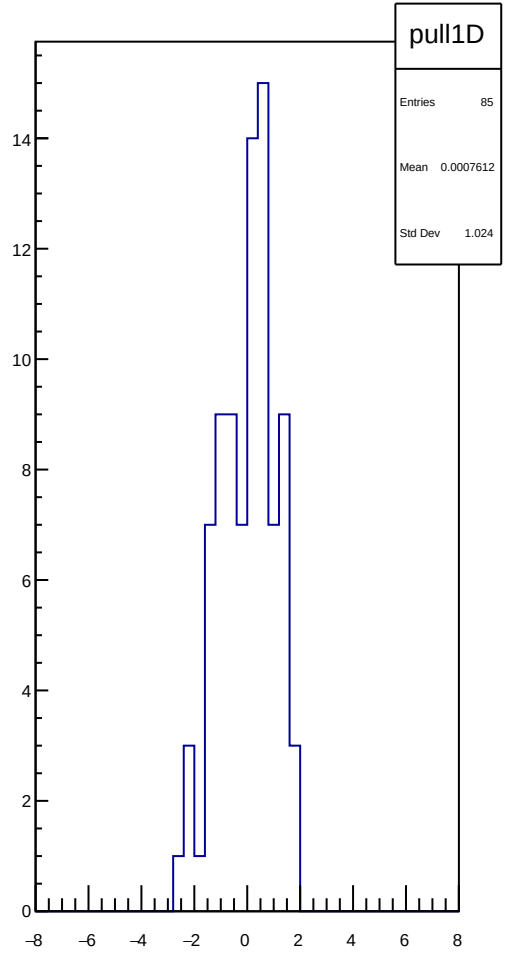

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 1619 / 84
p0 53.62 ± 0.04187
62
60
58
56
54
52
50

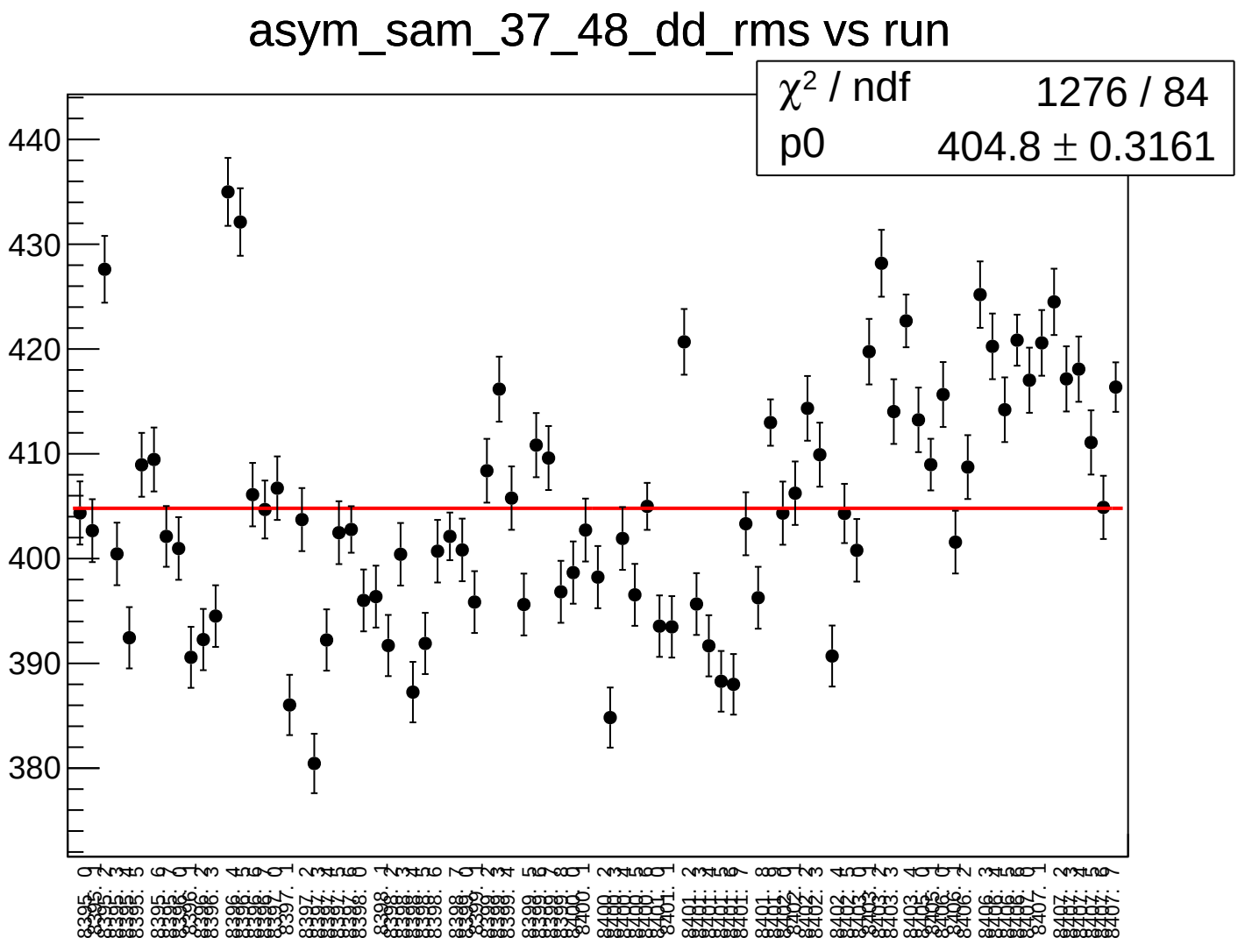

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 93.8 / 84
p0 334.2 ± 443
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −4256
Std Dev 4303
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

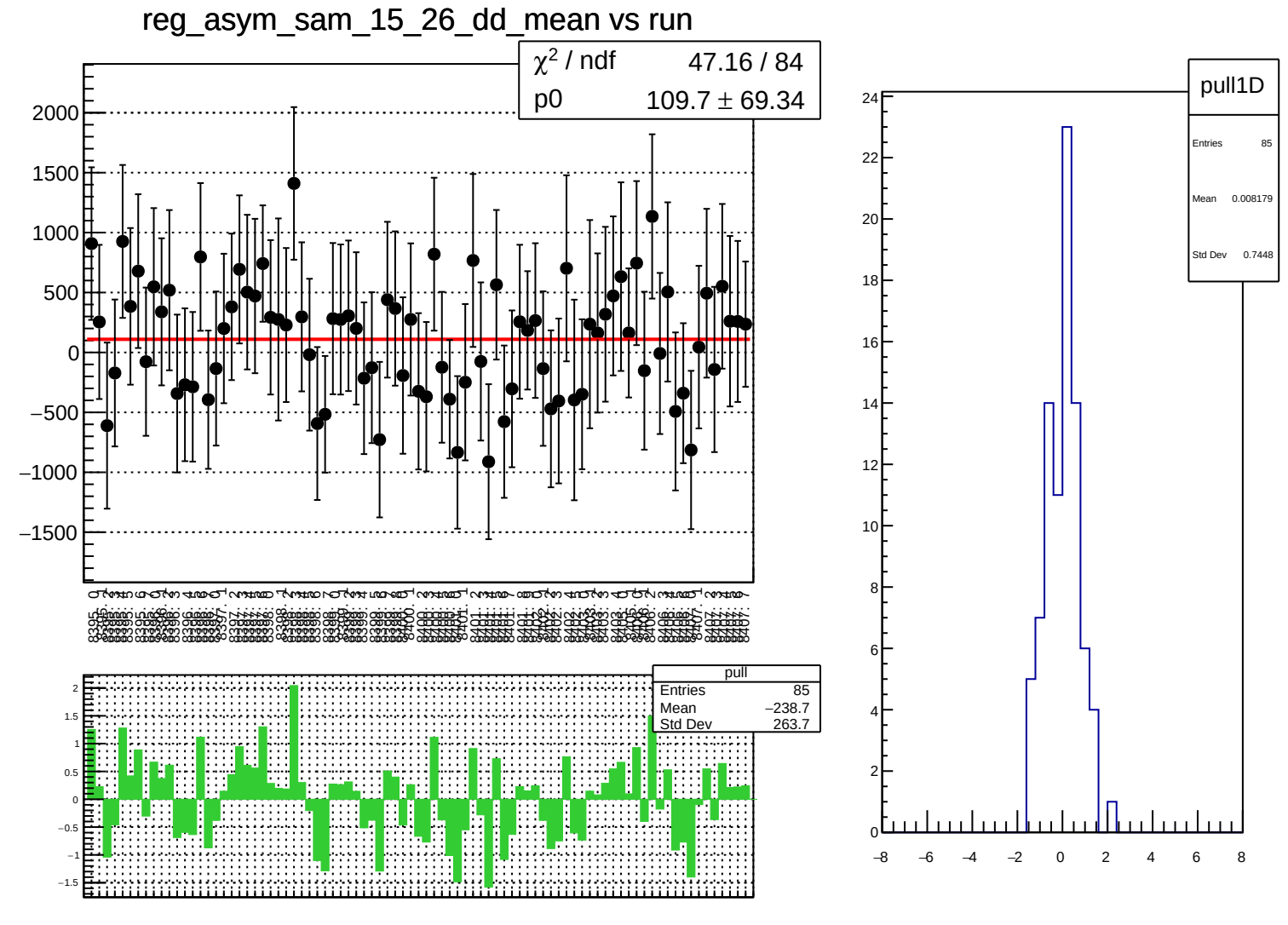

pull1D
Entries 85
Mean −0.0001127
Std Dev 1.051
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

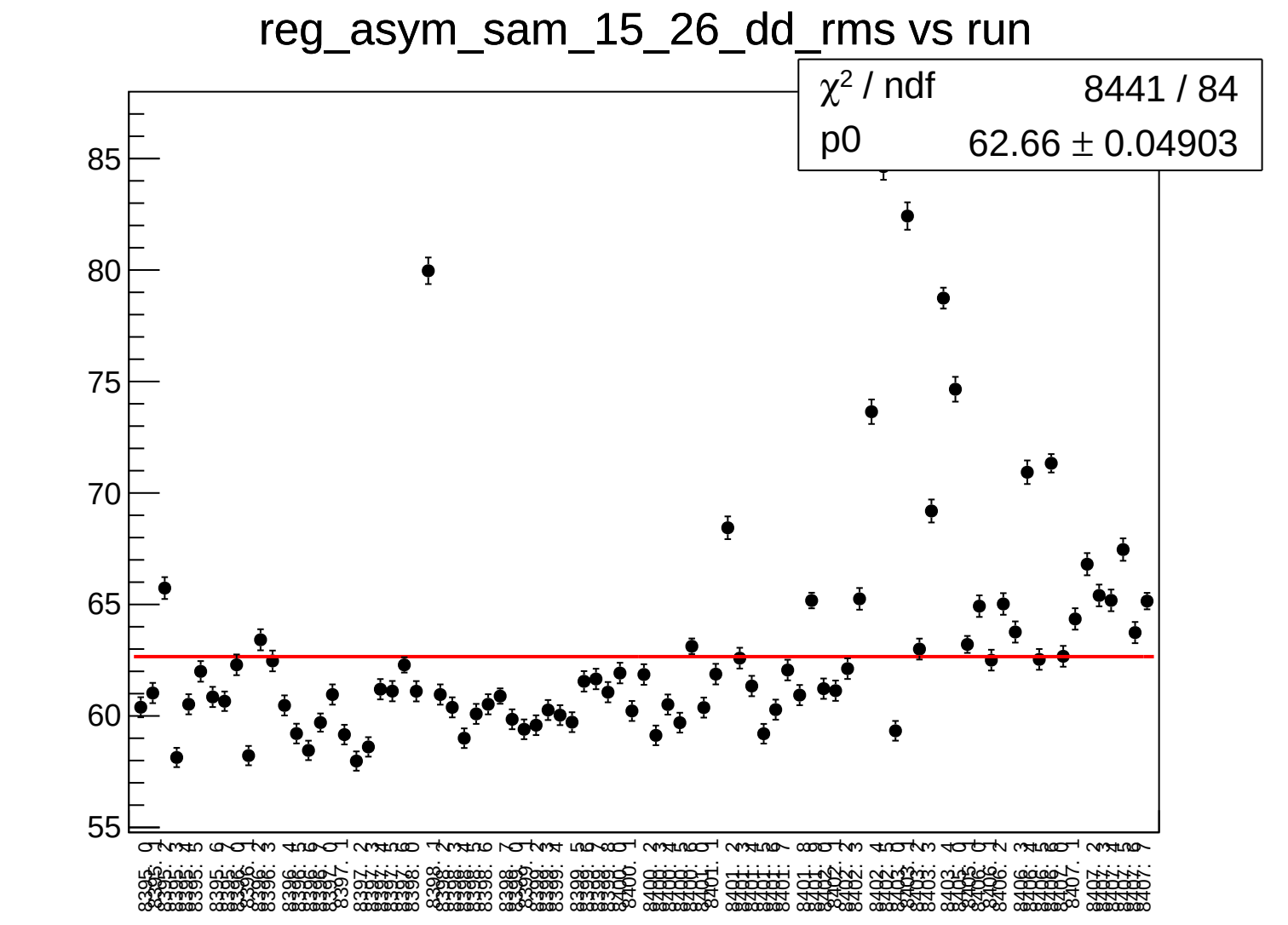

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 1294 / 84
p0 401.2 ± 0.3133
440
430
420
410
400
390
380
370

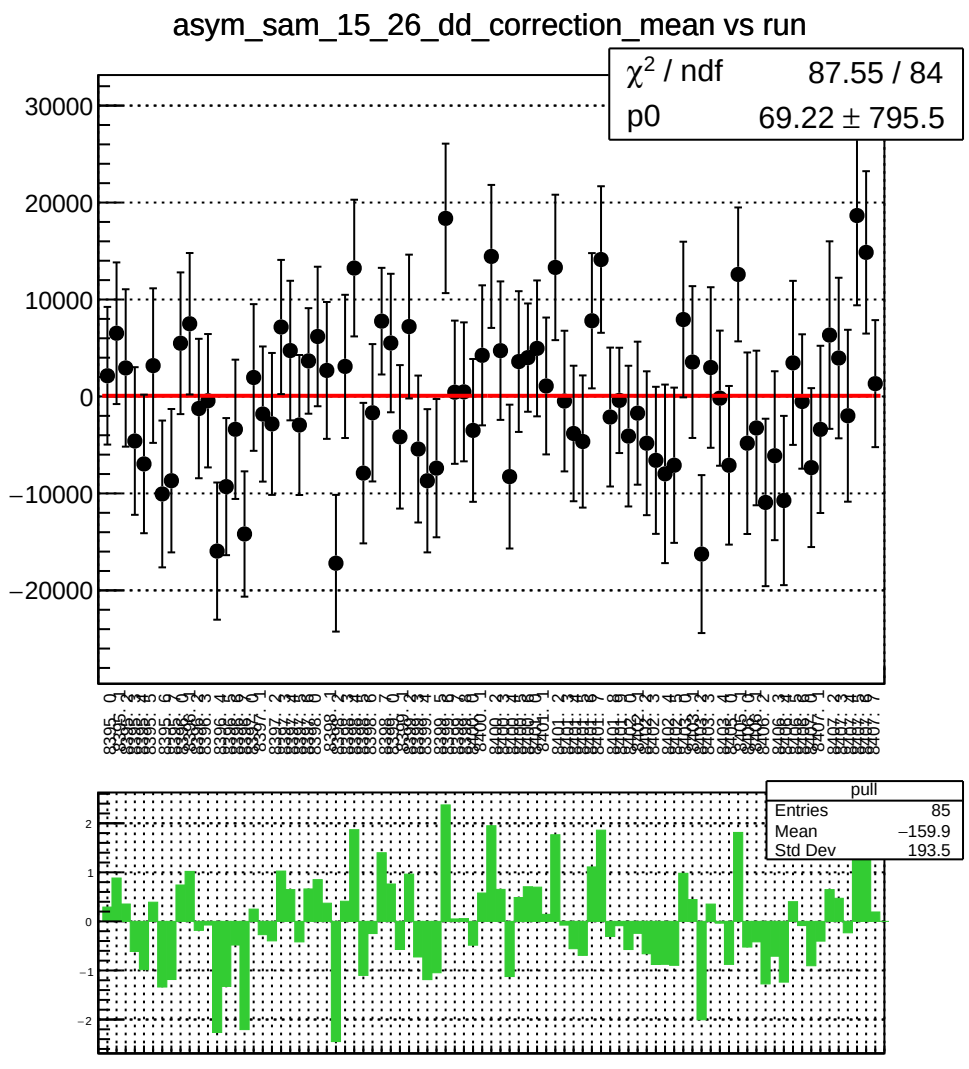

asym_sam_37_48_dd_mean vs run
χ² / ndf 89.21 / 84
p0 −398.8 ± 447
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −1270
Std Dev 1314
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

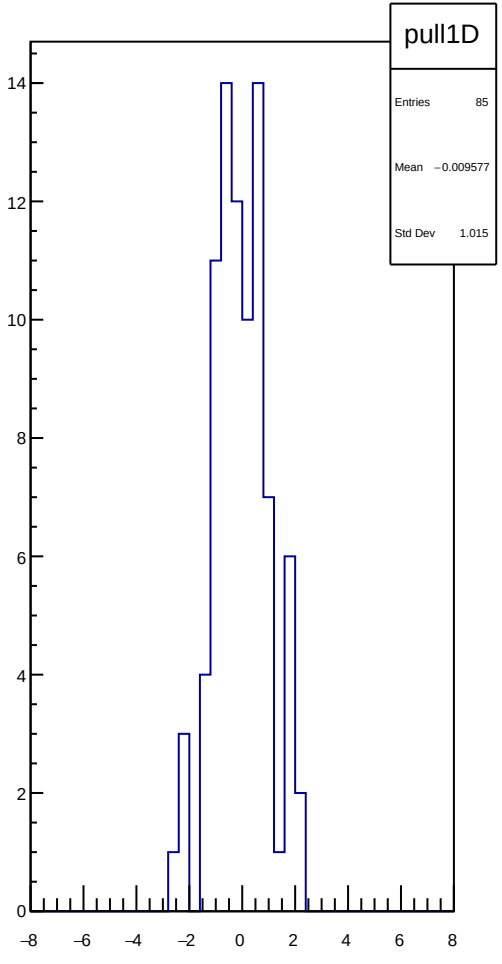

pull1D
Entries 85
Mean 0.0007612
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

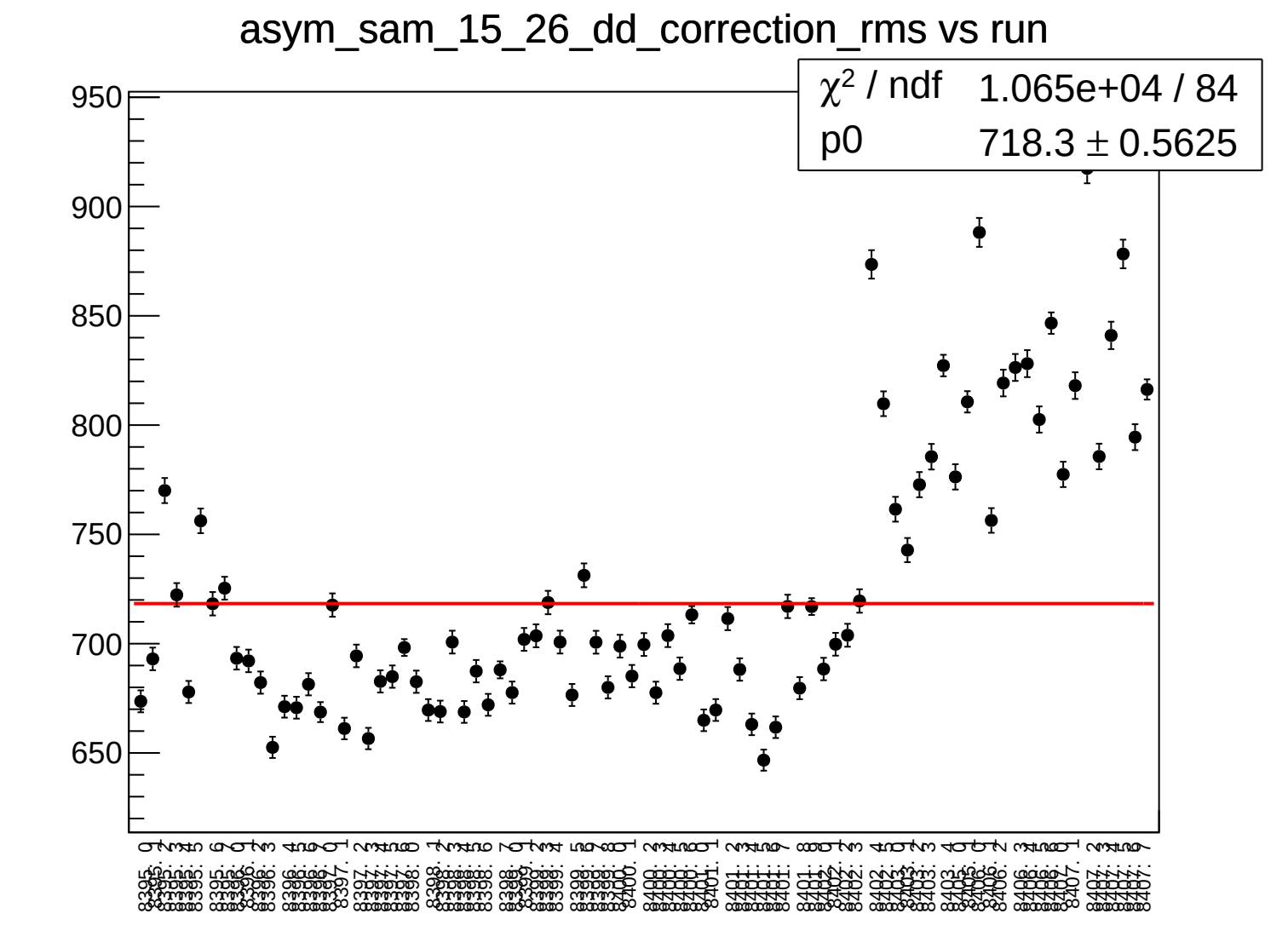

asym_sam_37_48_dd_rms vs run
χ² / ndf 1276 / 84
p0 404.8 ± 0.3161
440
430
420
410
400
390
380

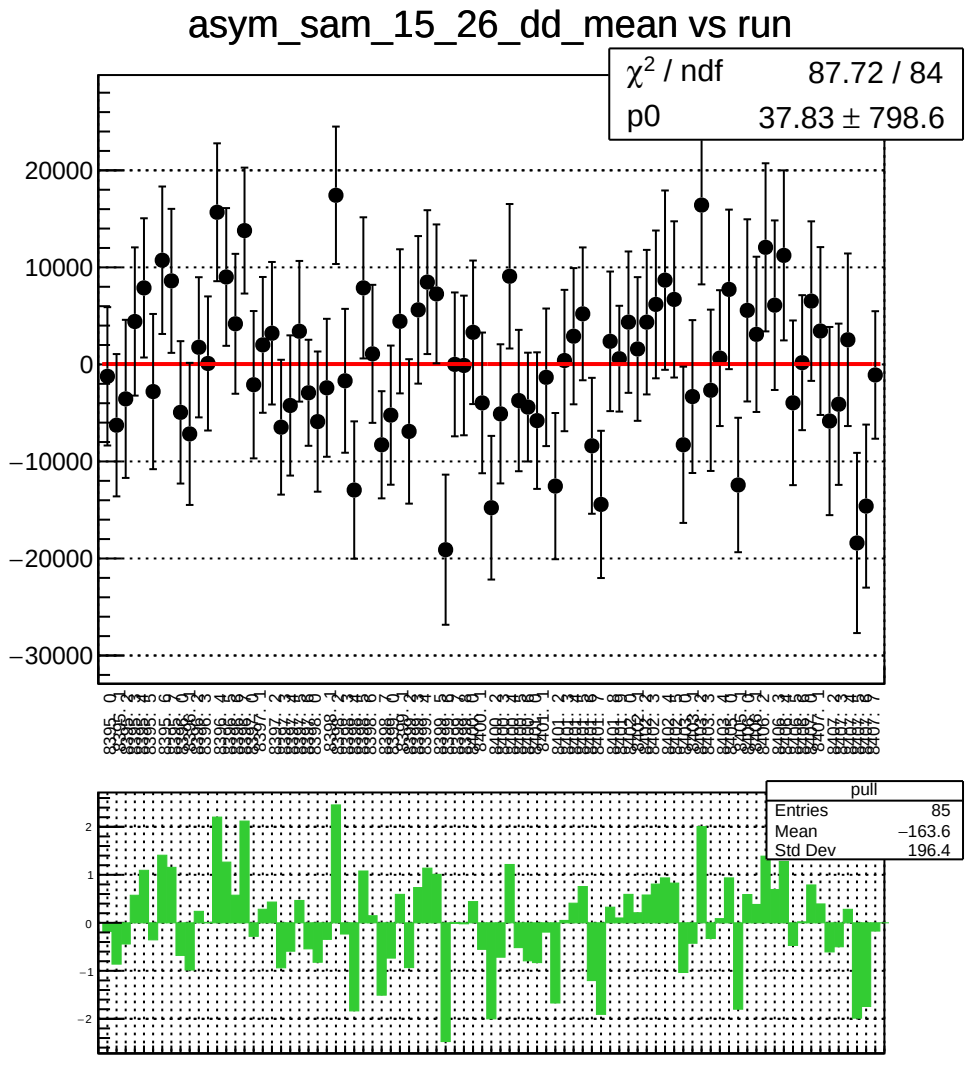

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 47.16 / 84
p0 109.7 ± 69.34
pull
Entries 85
Mean −238.7
Std Dev 263.7
pull1D
Entries 85
Mean 0.008179
Std Dev 0.7448

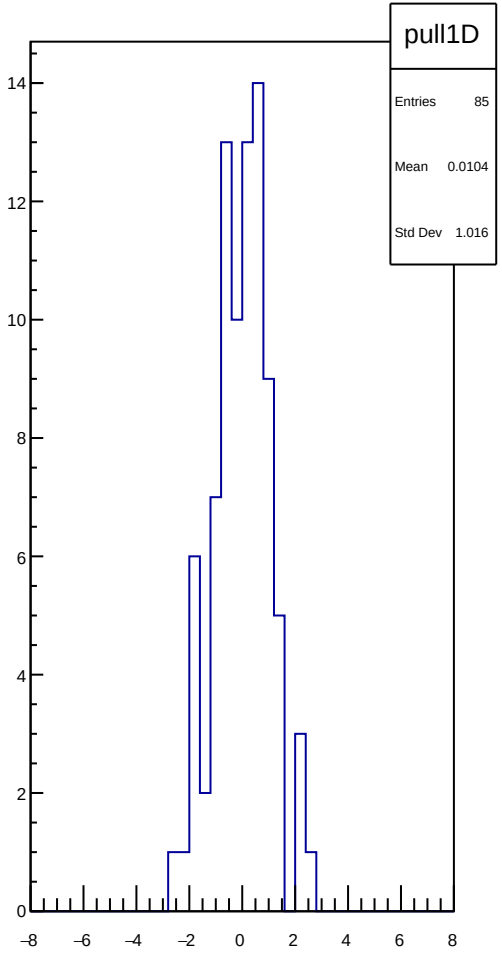

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 8441 / 84
p0 62.66 ± 0.04903
85
80
75
70
65
60
55

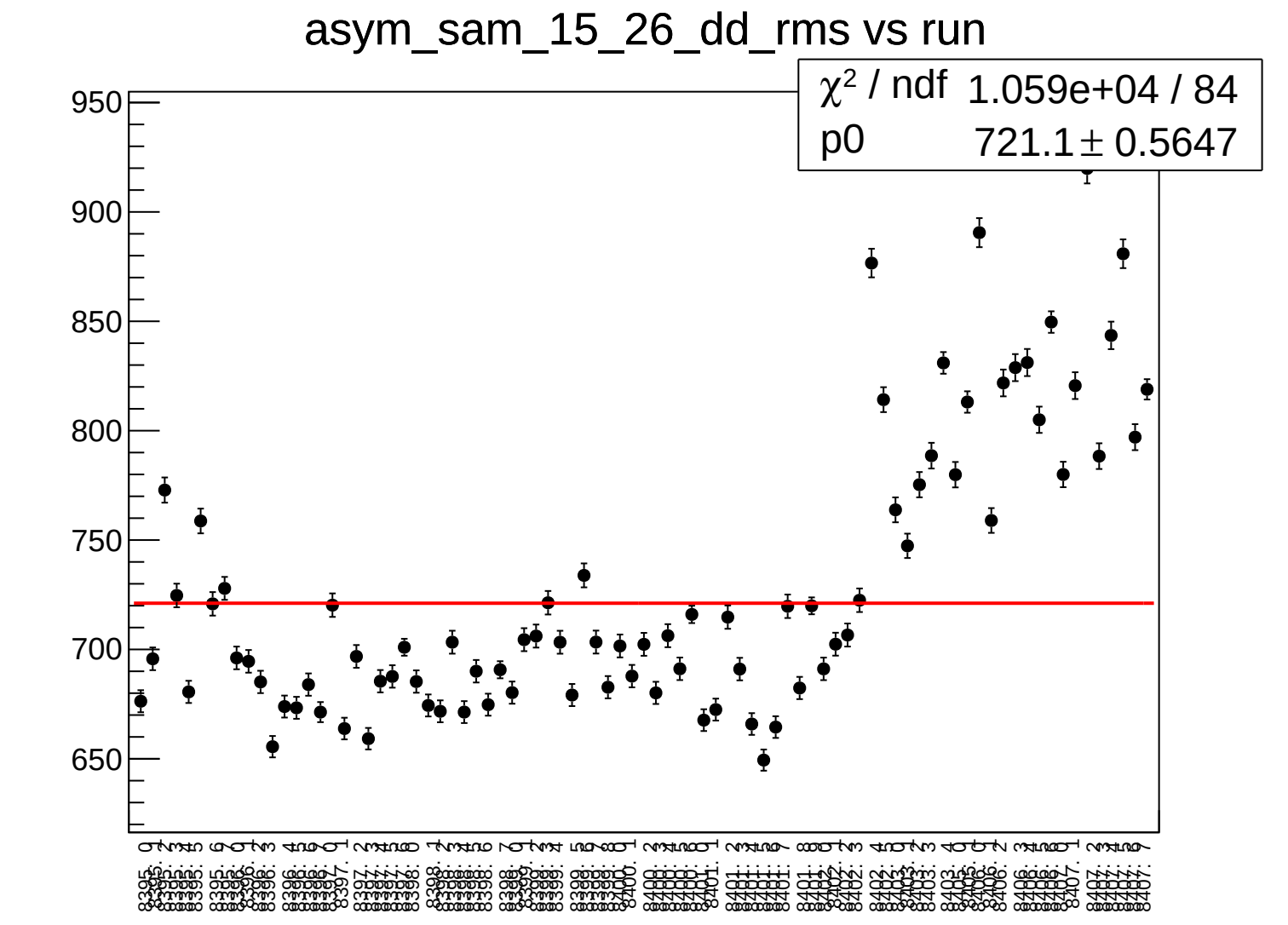

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 87.55 / 84
p0 69.22 ± 795.5
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −159.9
Std Dev 193.5
2
1
0
−1
−2

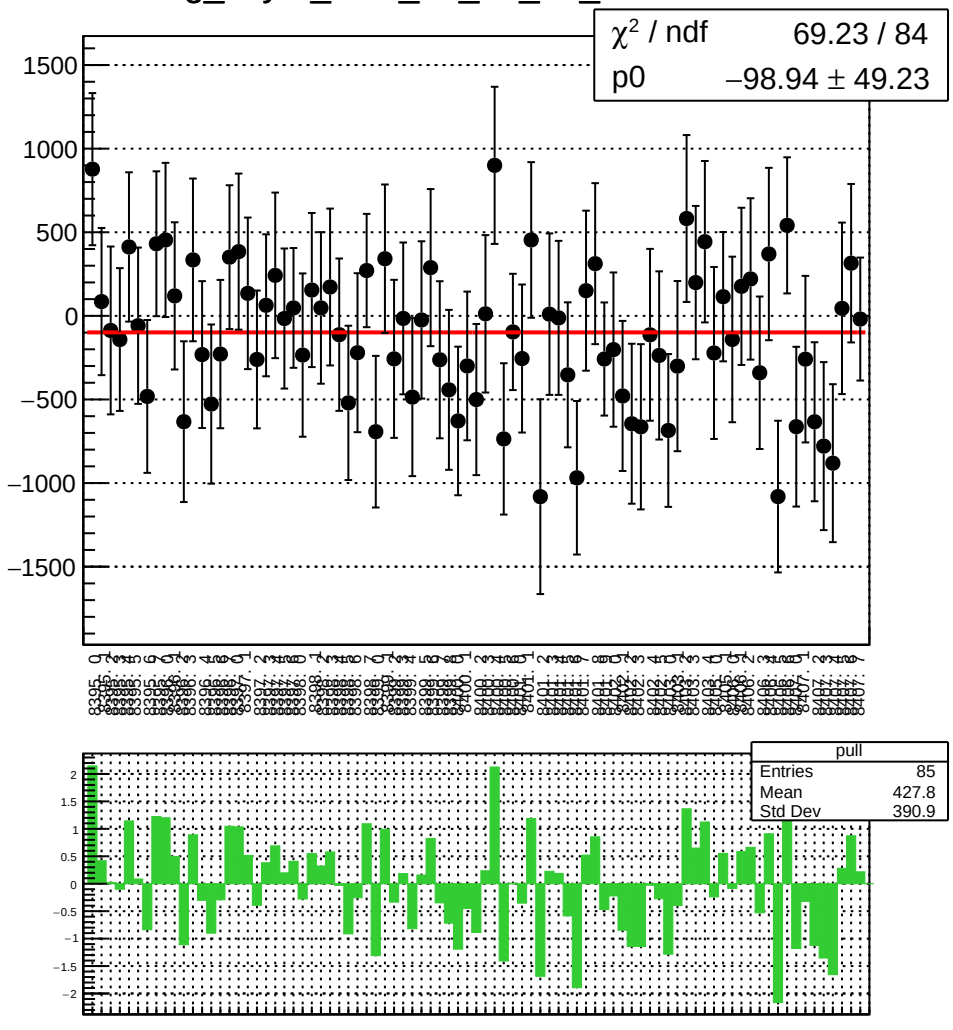

pull1D
Entries 85
Mean −0.009577
Std Dev 1.015
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

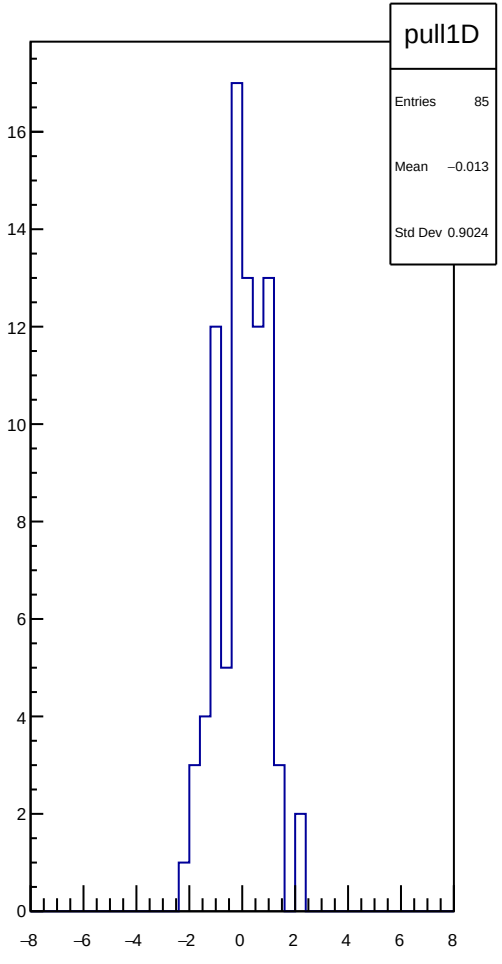

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 1.065e+04 / 84
p0 718.3 ± 0.5625
950
900
850
800
750
700
650

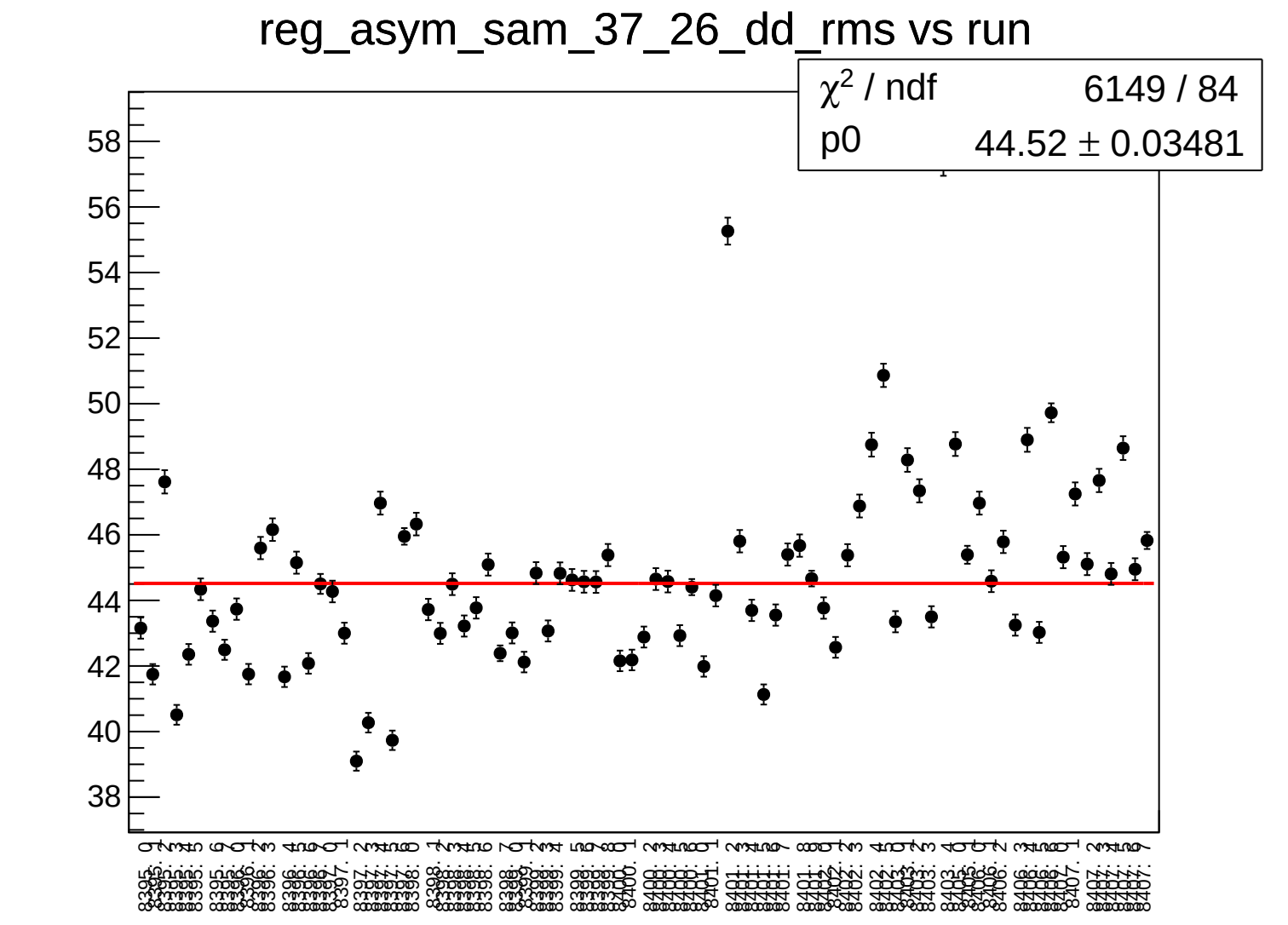

asym_sam_15_26_dd_mean vs run
χ² / ndf 87.72 / 84
p0 37.83 ± 798.6
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −163.6
Std Dev 196.4
2
1
0
−1
−2

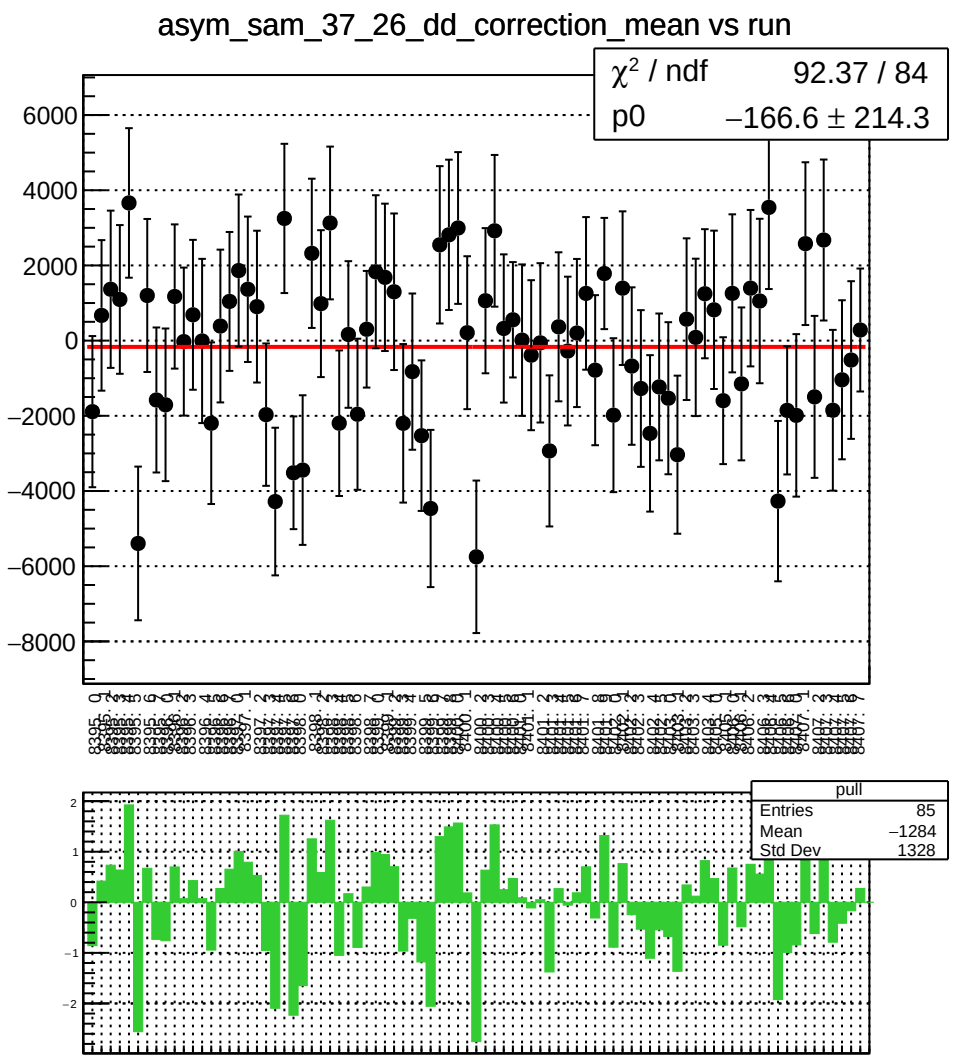

pull1D
Entries 85
Mean 0.0104
Std Dev 1.016
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

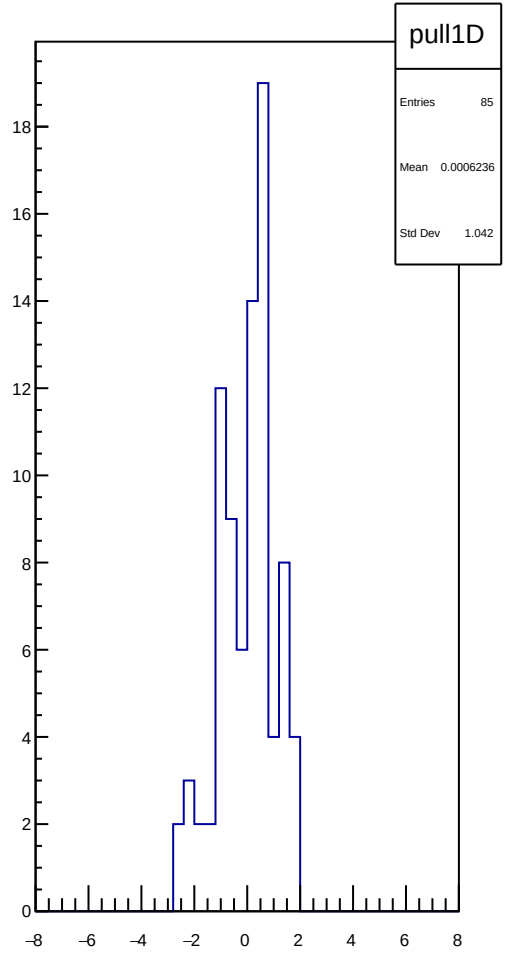

asym_sam_15_26_dd_rms vs run
χ² / ndf 1.059e+04 / 84
p0 721.1 ± 0.5647
950
900
850
800
750
700
650

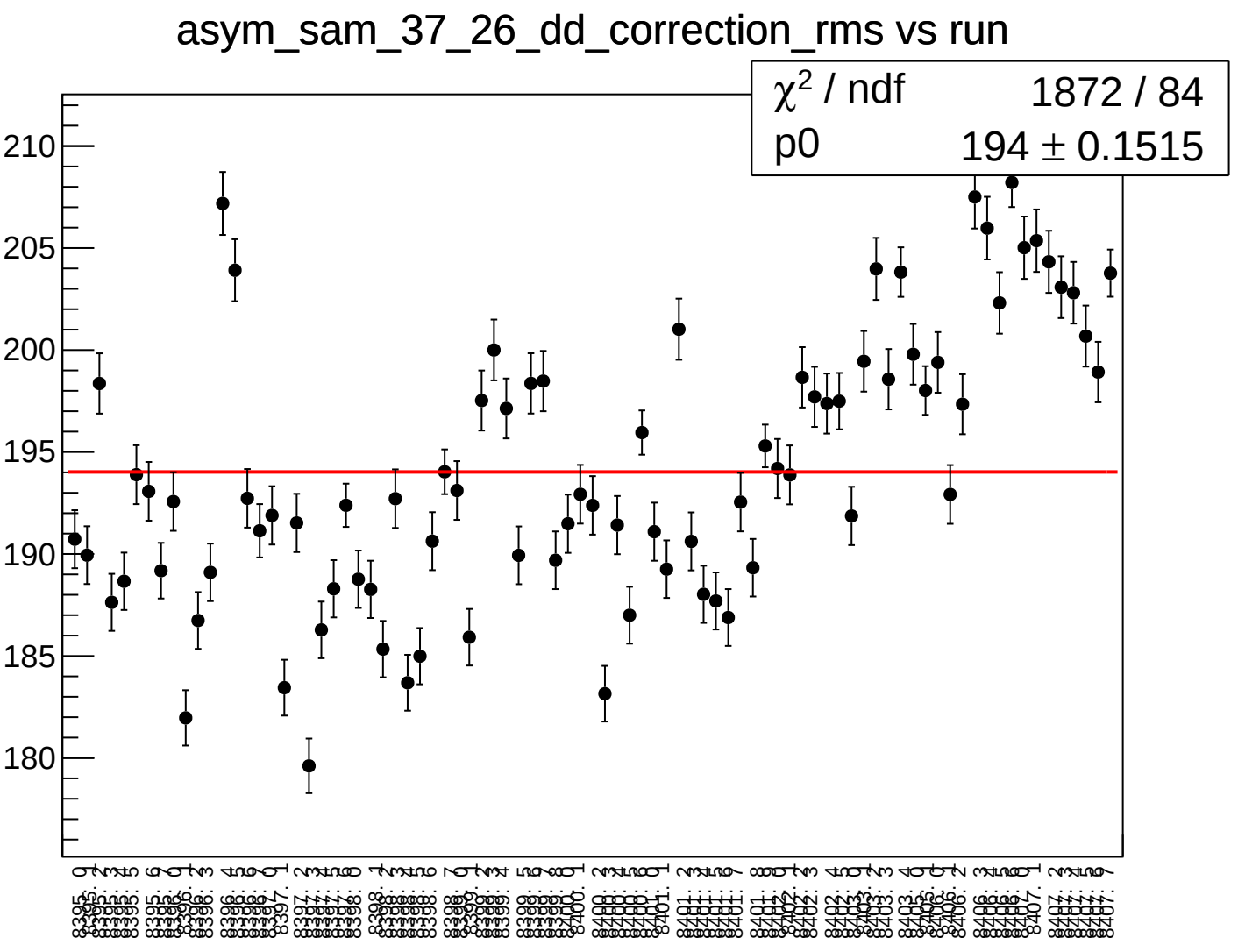

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 69.23 / 84
p0 −98.94 ± 49.23
pull
Entries 85
Mean 427.8
Std Dev 390.9

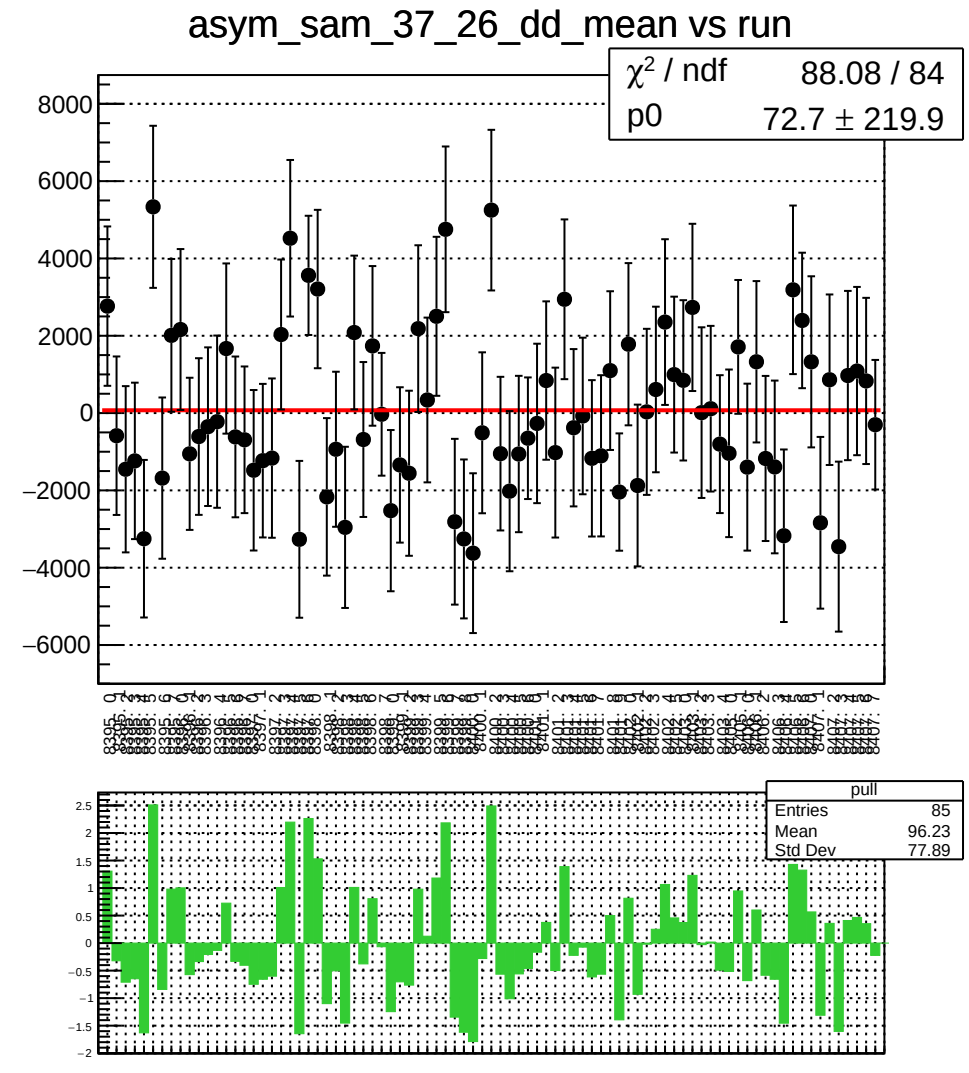

pull1D
Entries 85
Mean −0.013
Std Dev 0.9024

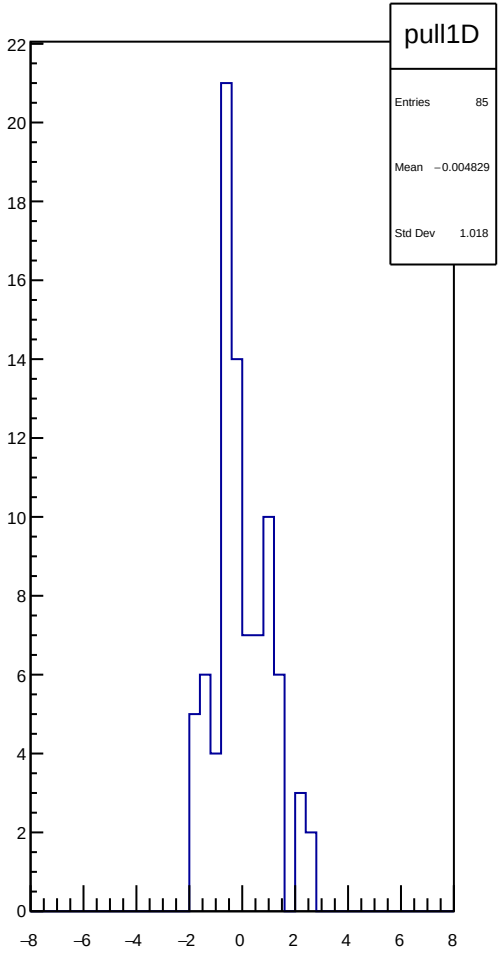

reg_asym_sam_37_26_dd_rms vs run
χ^2 / ndf 6149 / 84
p0 44.52 ± 0.03481
58
56
54
52
50
48
46
44
42
40
38

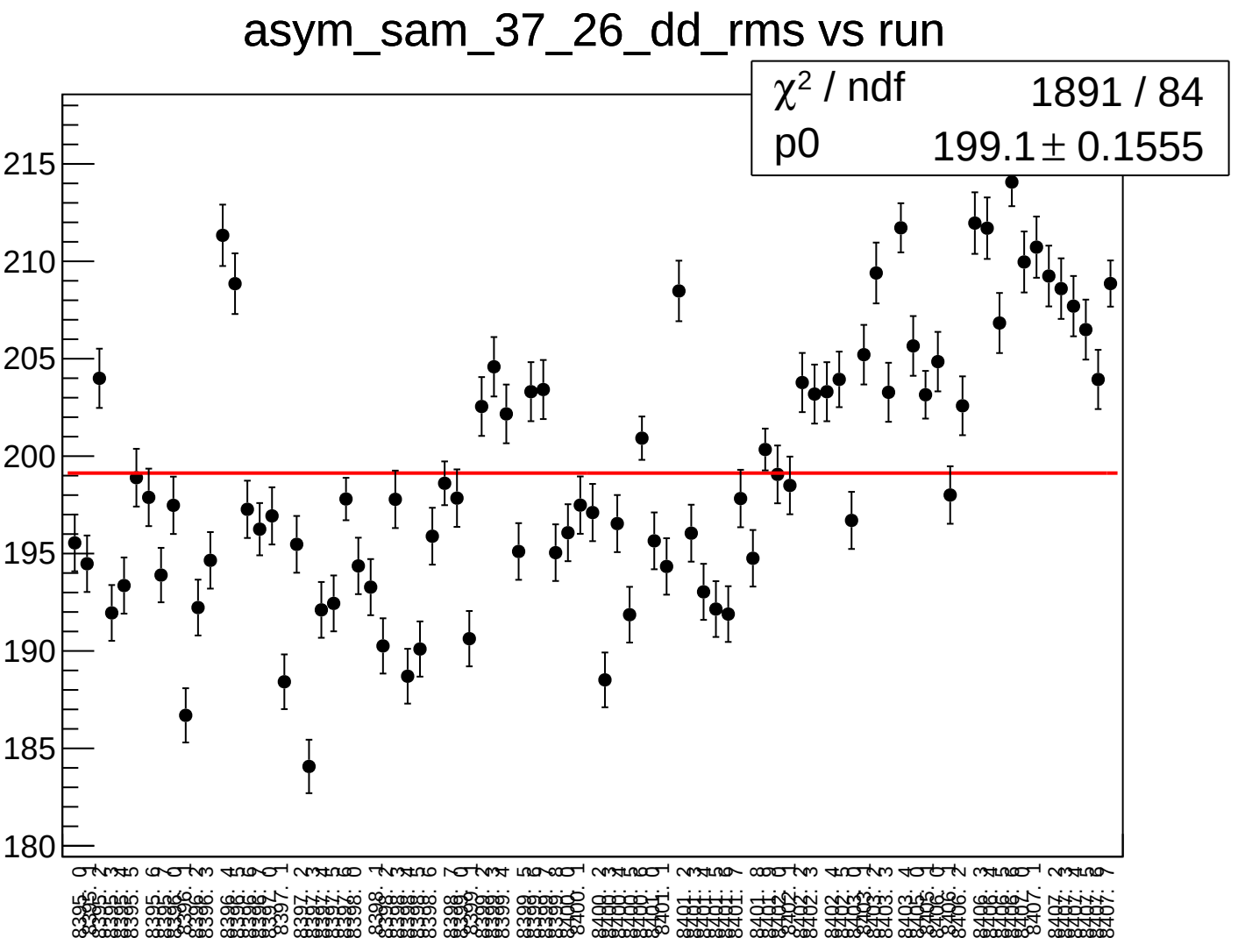

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 92.37 / 84
p0 −166.6 ± 214.3
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean −1284
Std Dev 1328
2
1
0
−1
−2

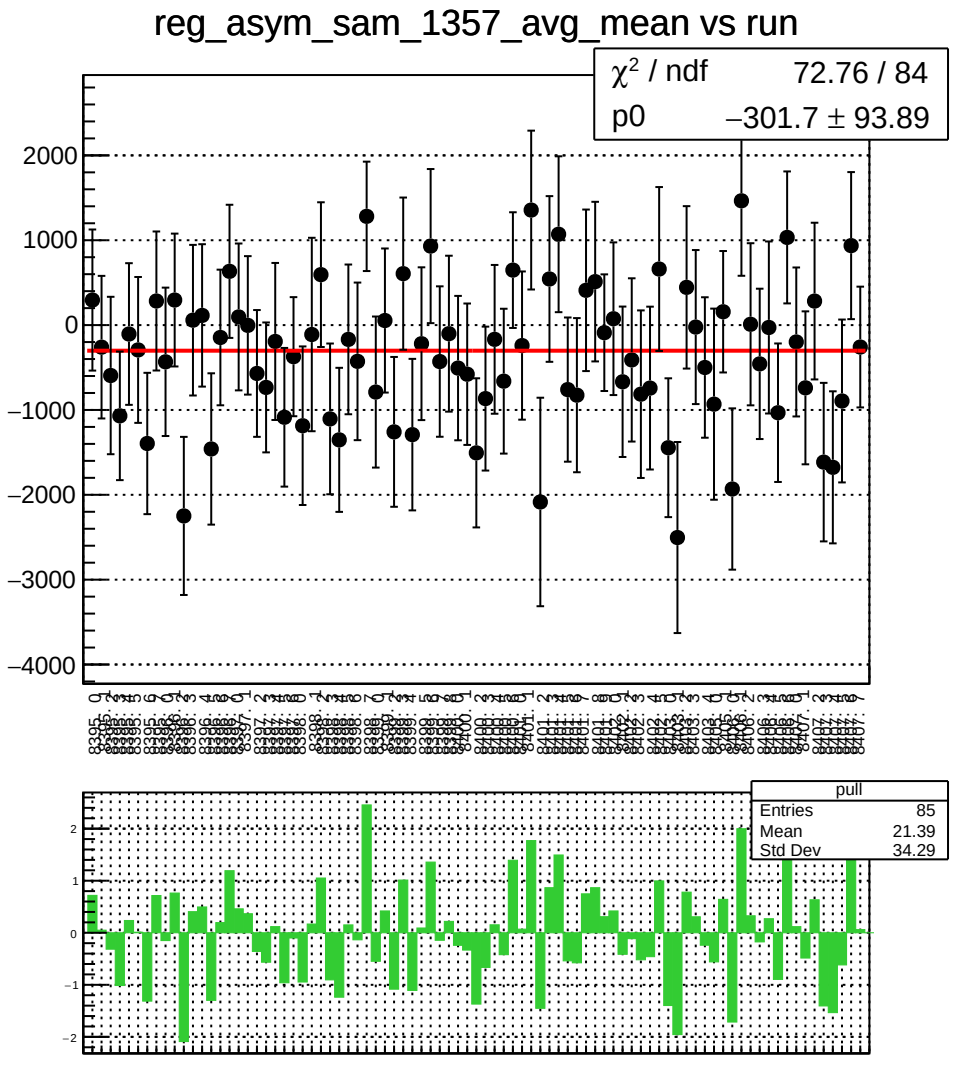

pull1D
Entries 85
Mean 0.0006236
Std Dev 1.042
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

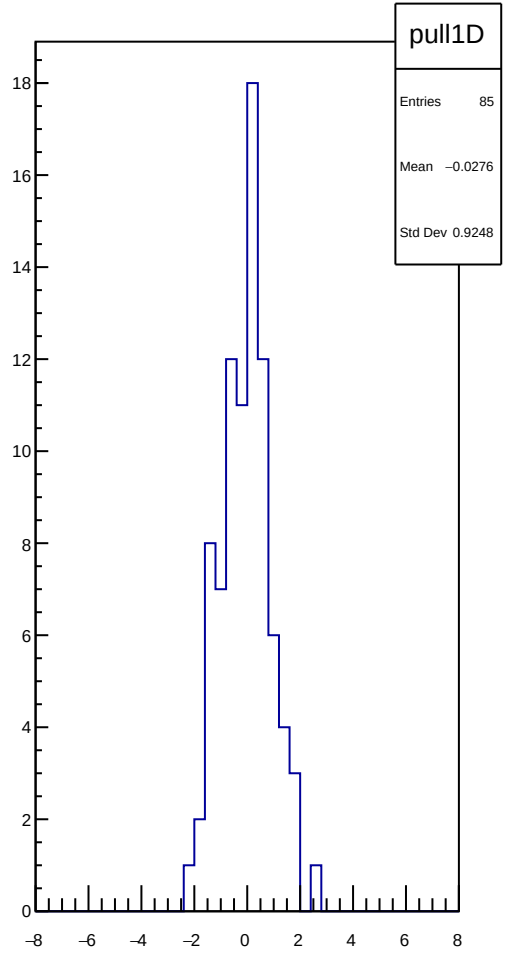

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 1872 / 84
p0 194 ± 0.1515
210
205
200
195
190
185
180

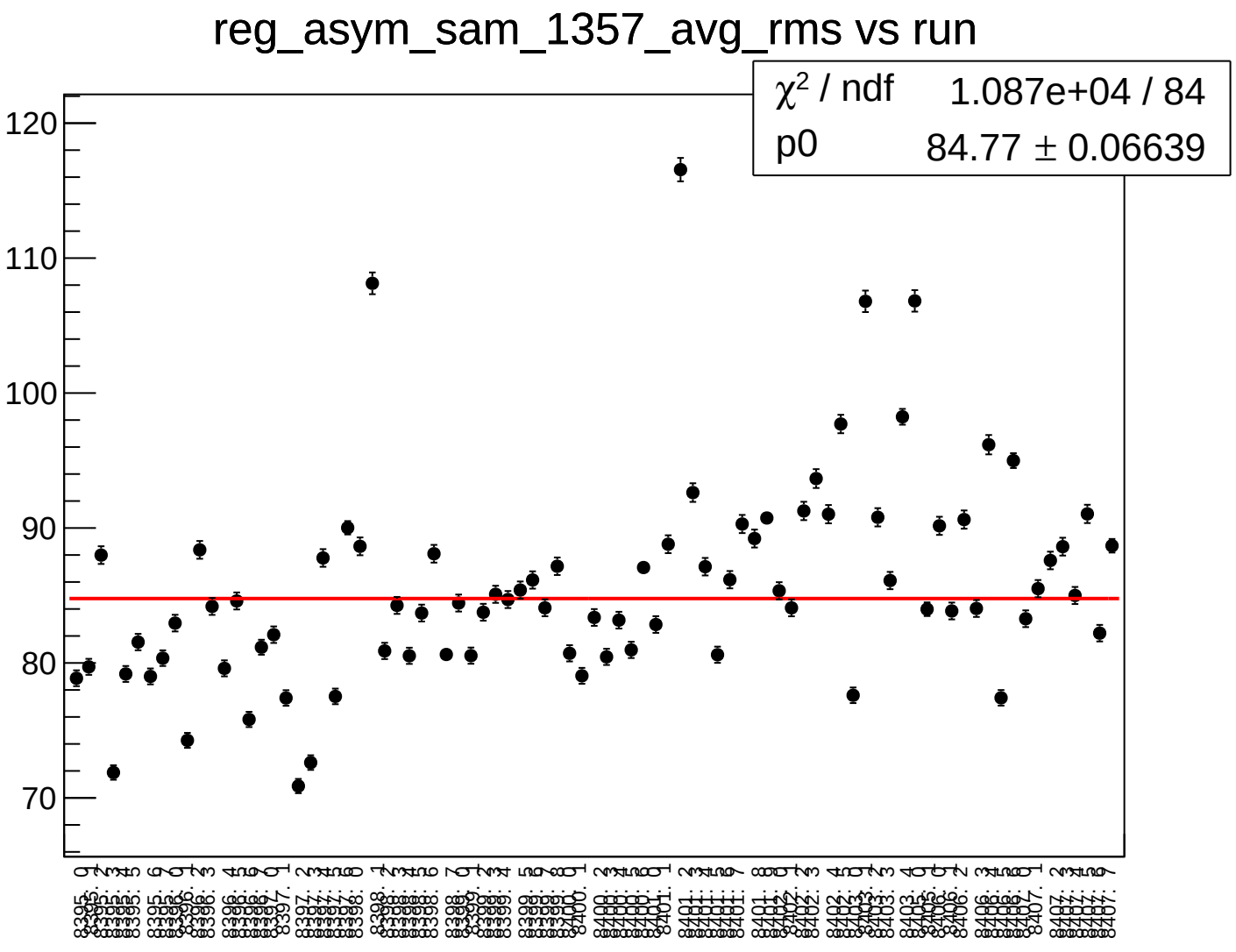

asym_sam_37_26_dd_mean vs run
χ² / ndf 88.08 / 84
p0 72.7 ± 219.9
pull
Entries 85
Mean 96.23
Std Dev 77.89

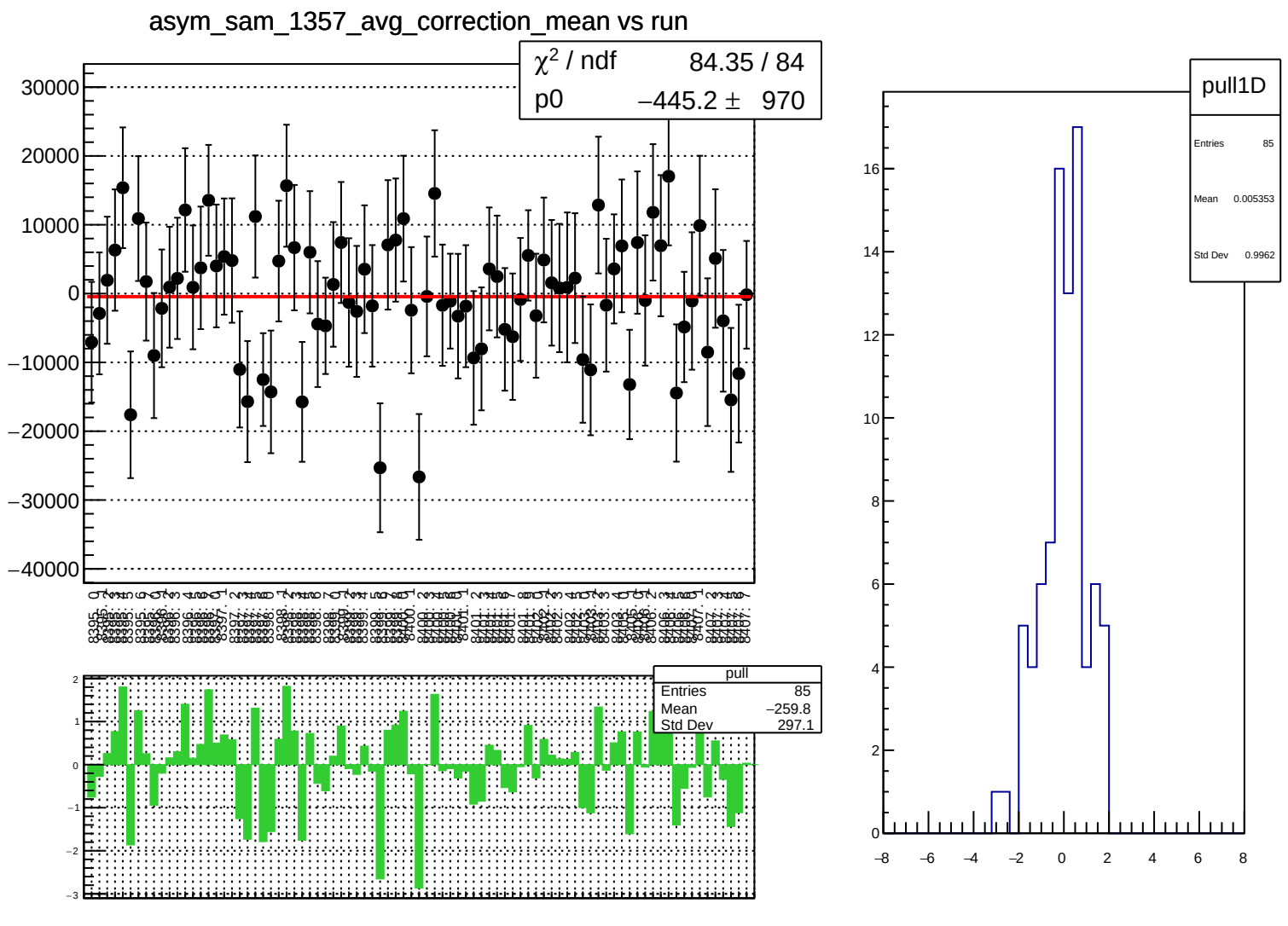

pull1D
Entries 85
Mean −0.004829
Std Dev 1.018

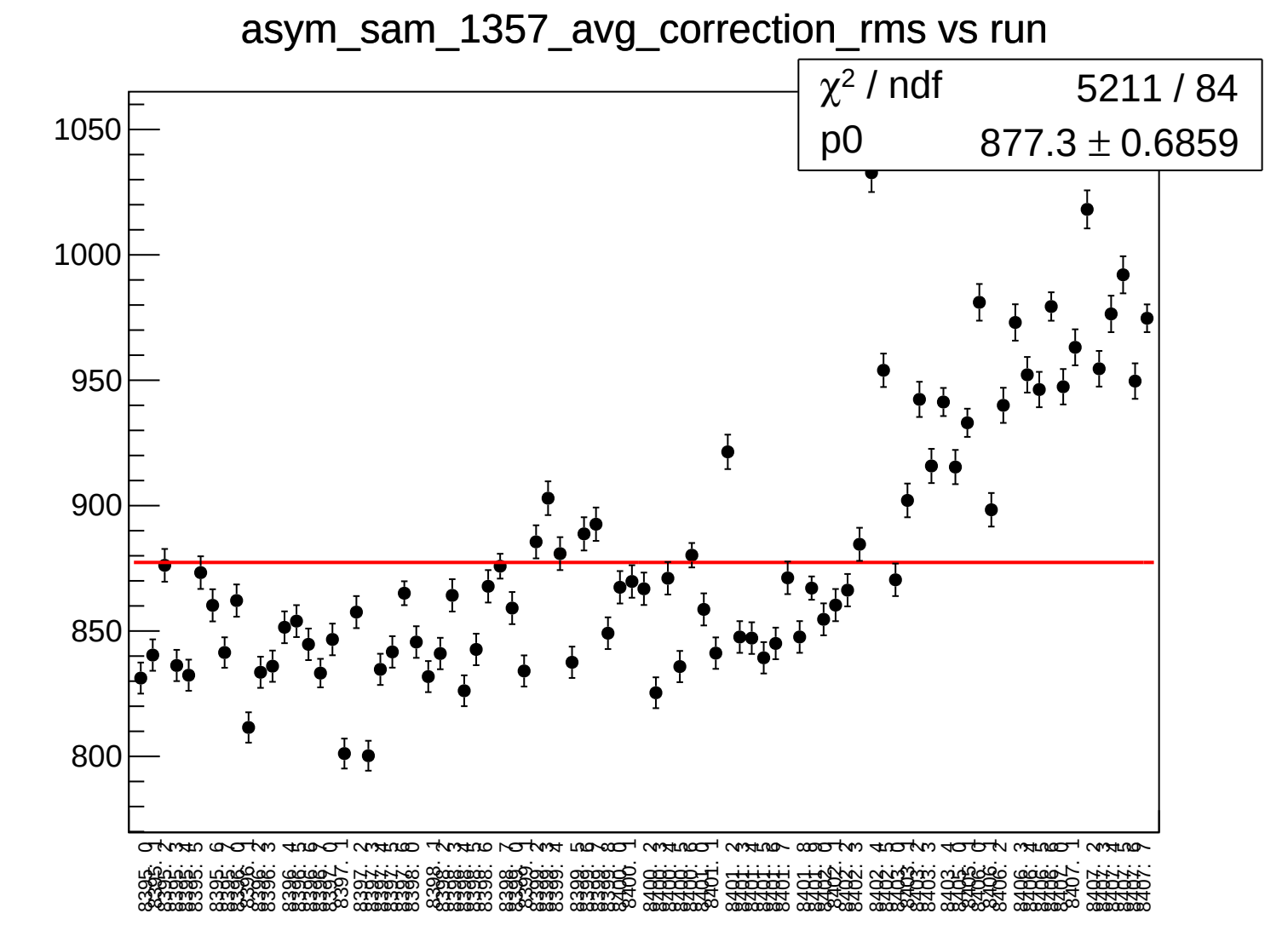

asym_sam_37_26_dd_rms vs run
χ² / ndf 1891 / 84
p0 199.1 ± 0.1555
215
210
205
200
195
190
185
180

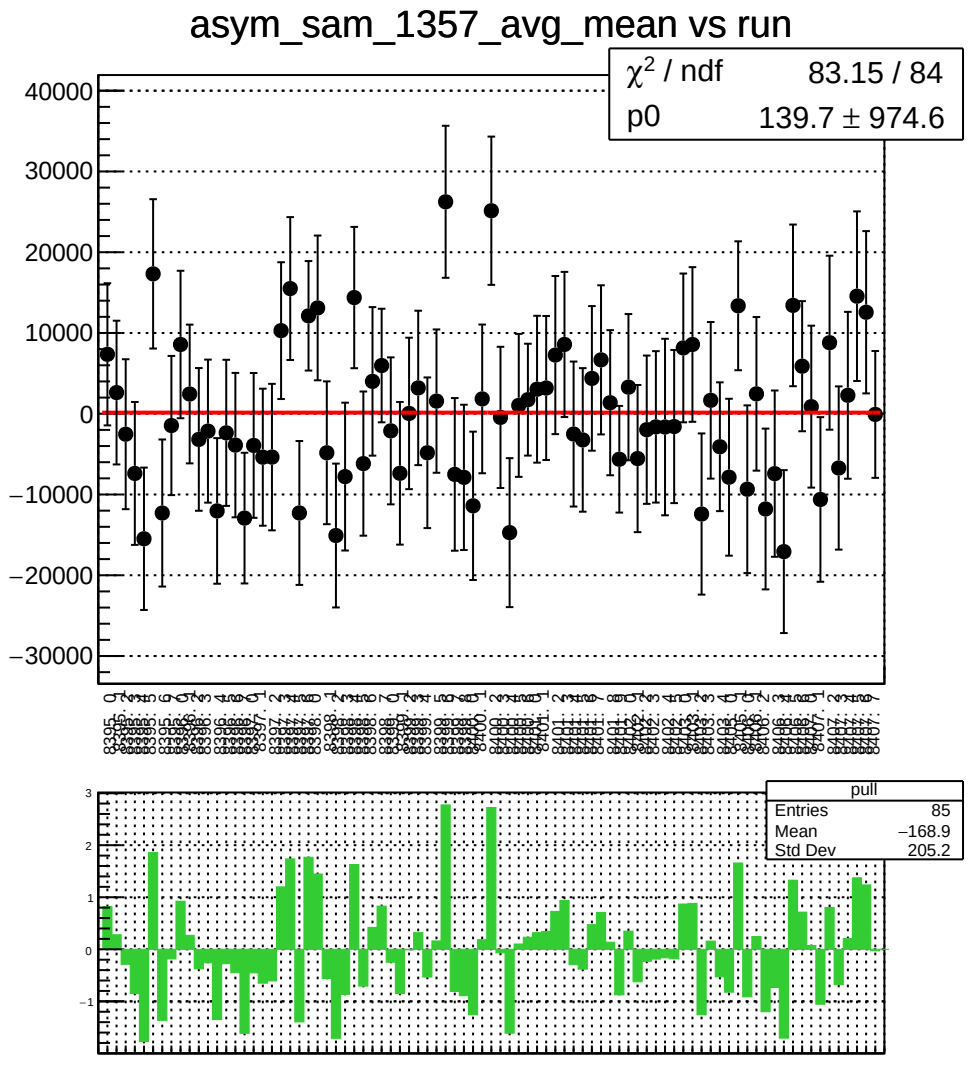

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 72.76 / 84
p0 −301.7 ± 93.89
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 85
Mean 21.39
Std Dev 34.29
2
1
0
−1
−2

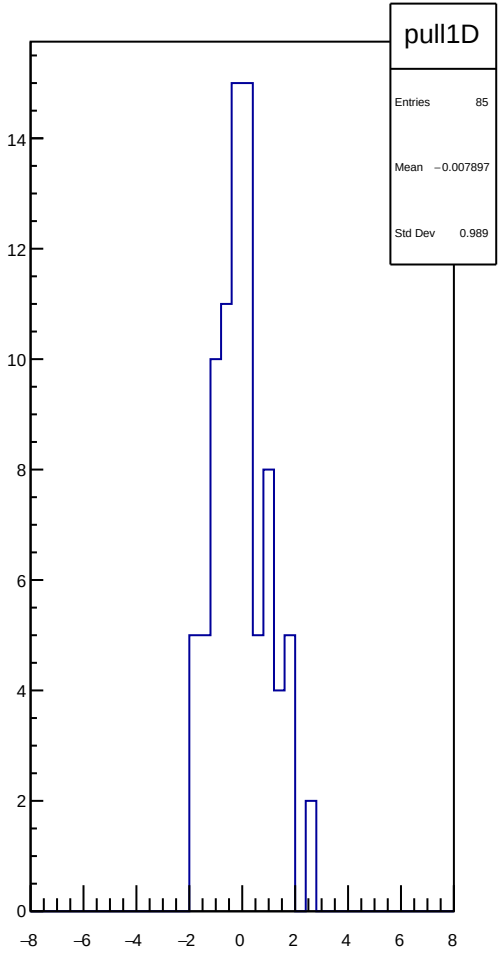

pull1D
Entries 85
Mean −0.0276
Std Dev 0.9248
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

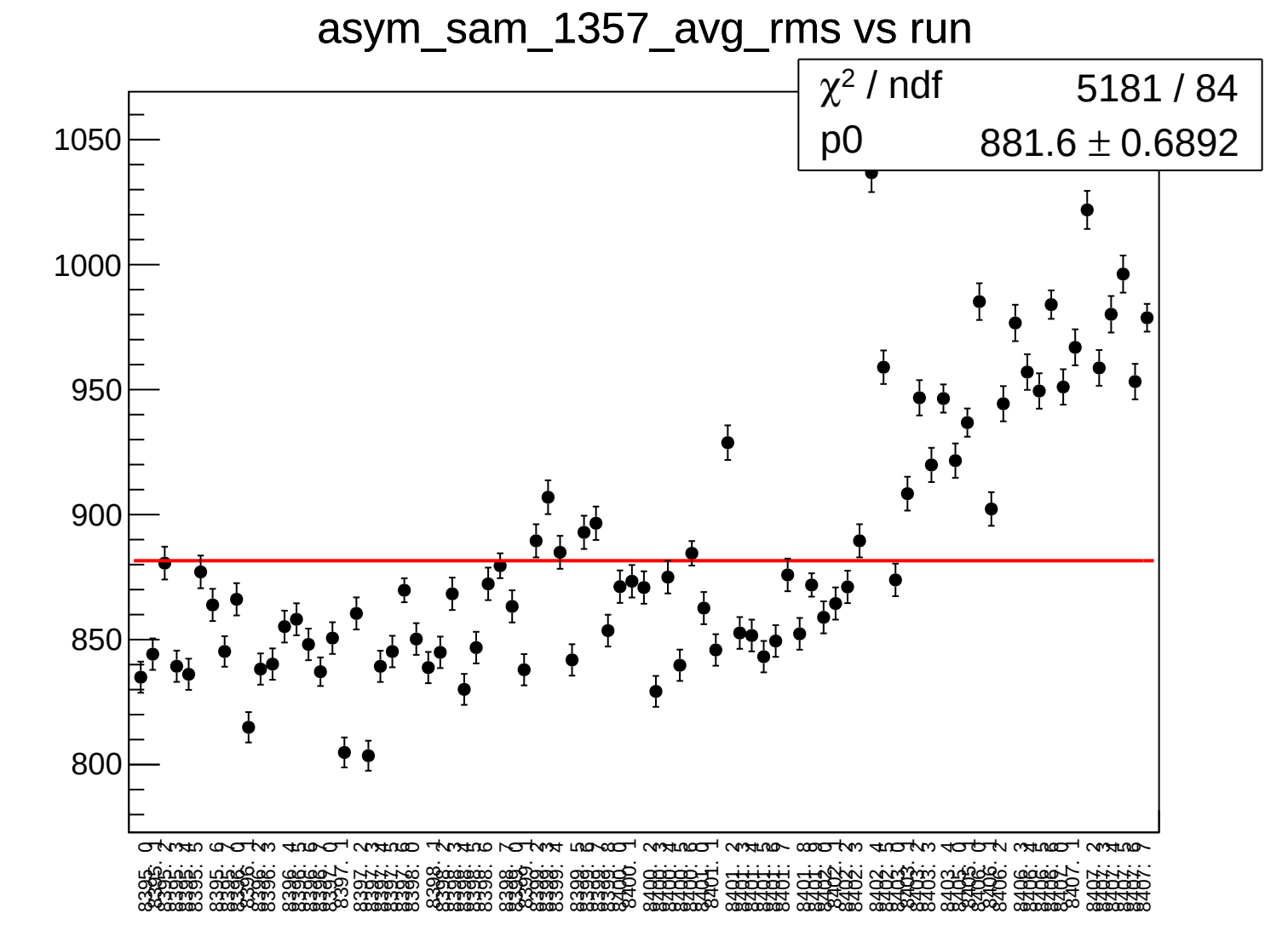

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 1.087e+04 / 84
p0 84.77 ± 0.06639
120
110
100
90
80
70

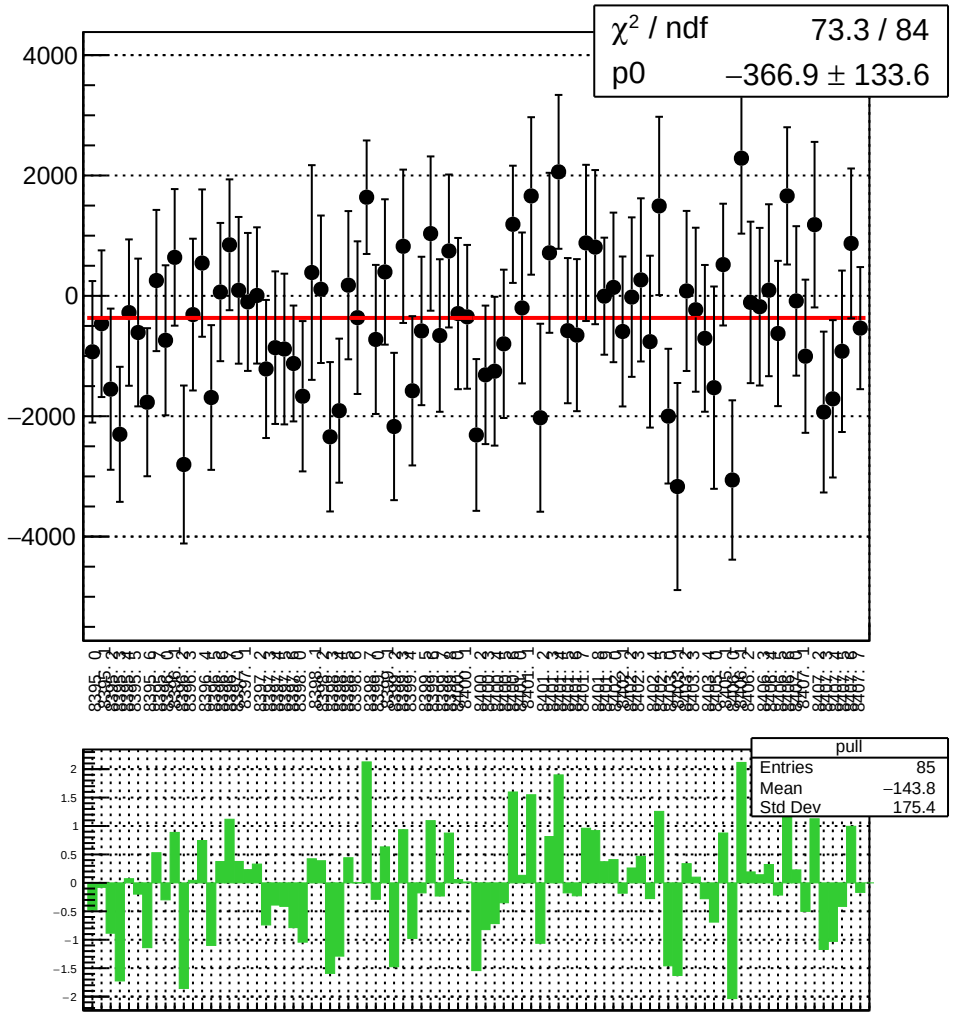

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 84.35 / 84
p0 −445.2 ± 970
pull
Entries 85
Mean −259.8
Std Dev 297.1
pull1D
Entries 85
Mean 0.005353
Std Dev 0.9962

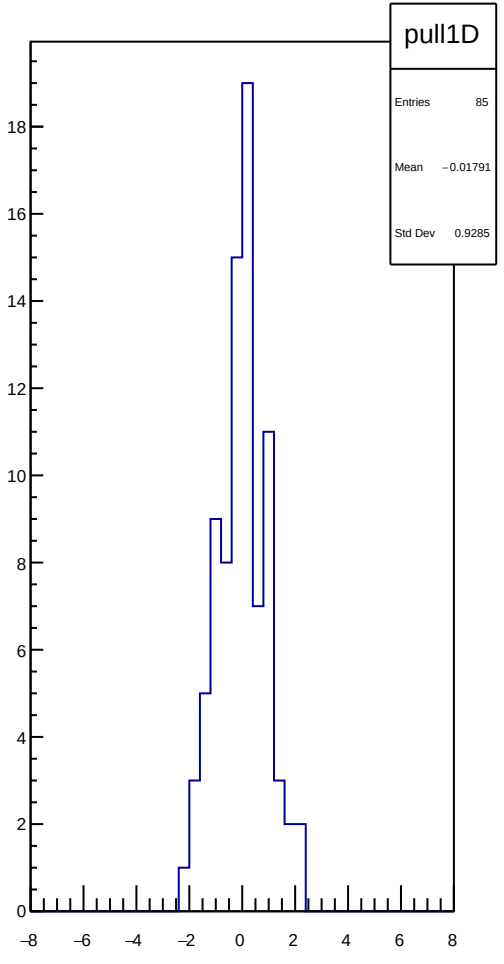

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 5211 / 84
p0 877.3 ± 0.6859
1050
1000
950
900
850
800

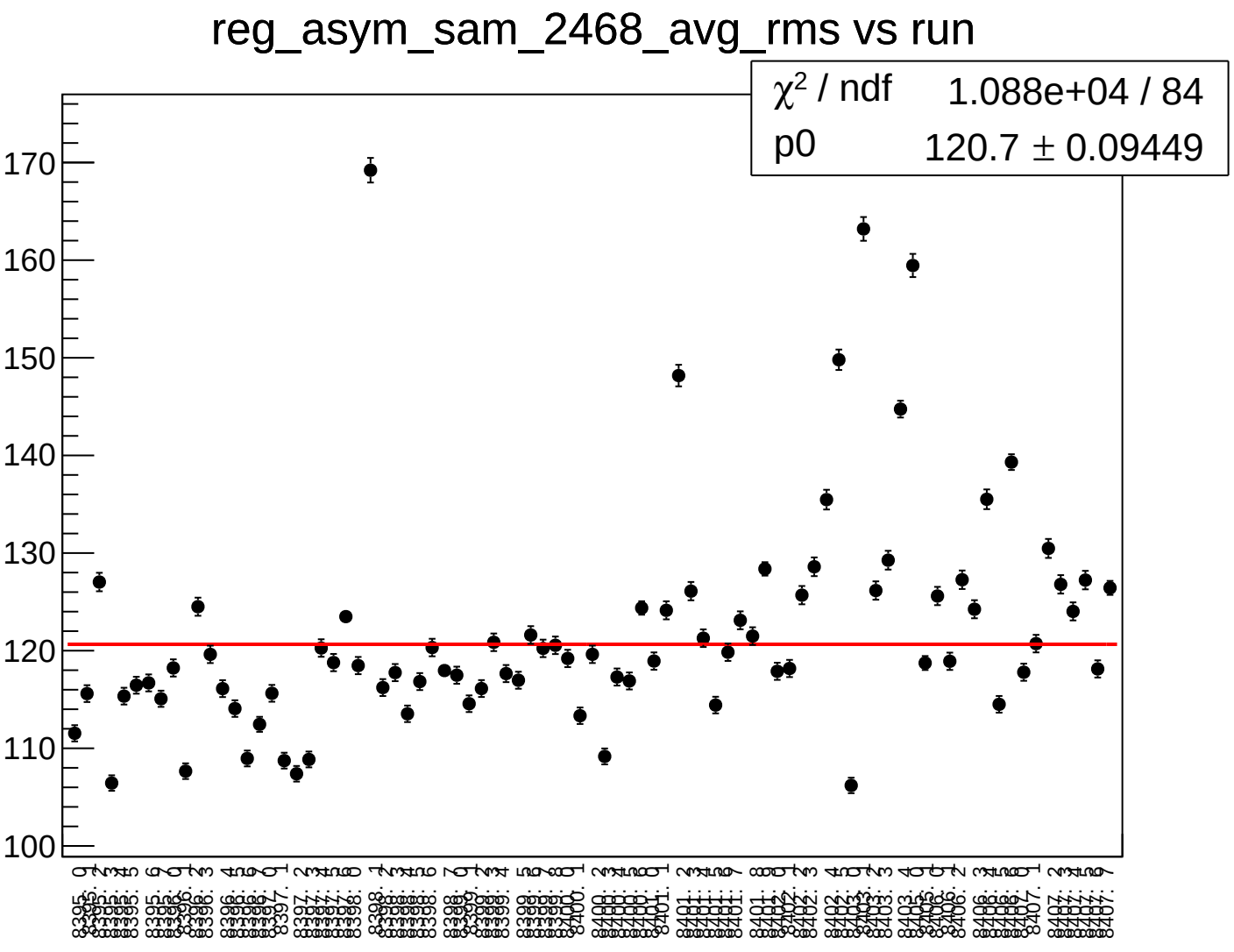

asym_sam_1357_avg_mean vs run
χ² / ndf 83.15 / 84
p0 139.7 ± 974.6
pull
Entries 85
Mean −168.9
Std Dev 205.2

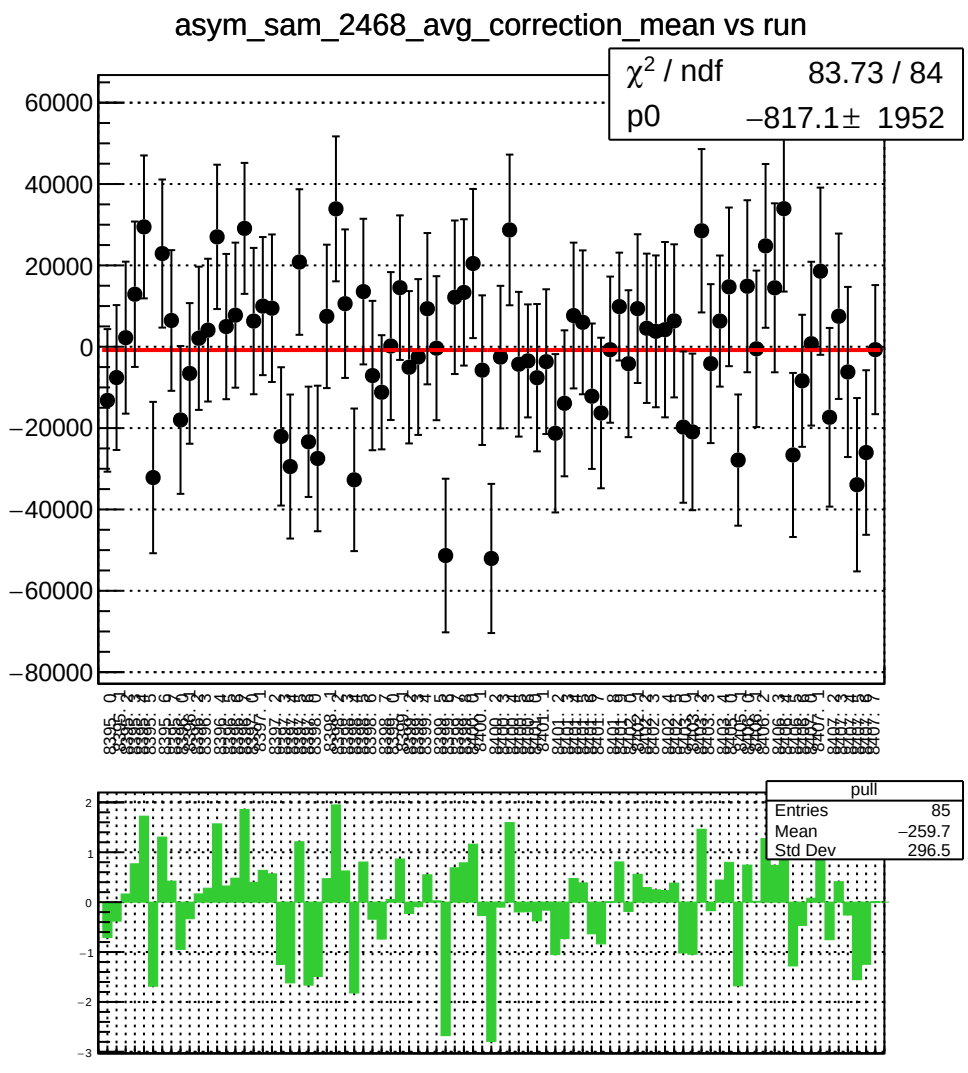

pull1D
Entries 85
Mean −0.007897
Std Dev 0.989

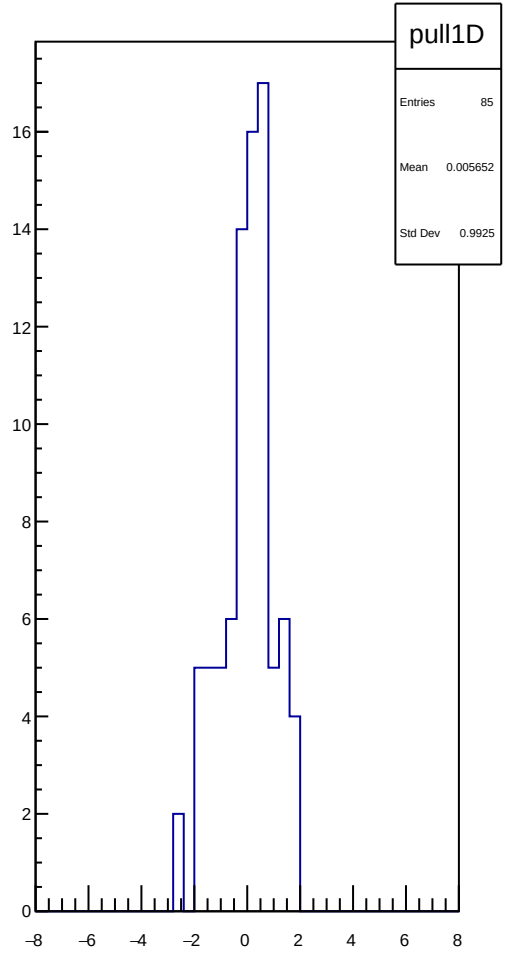

asym_sam_1357_avg_rms vs run
χ² / ndf 5181 / 84
p0 881.6 ± 0.6892
1050
1000
950
900
850
800

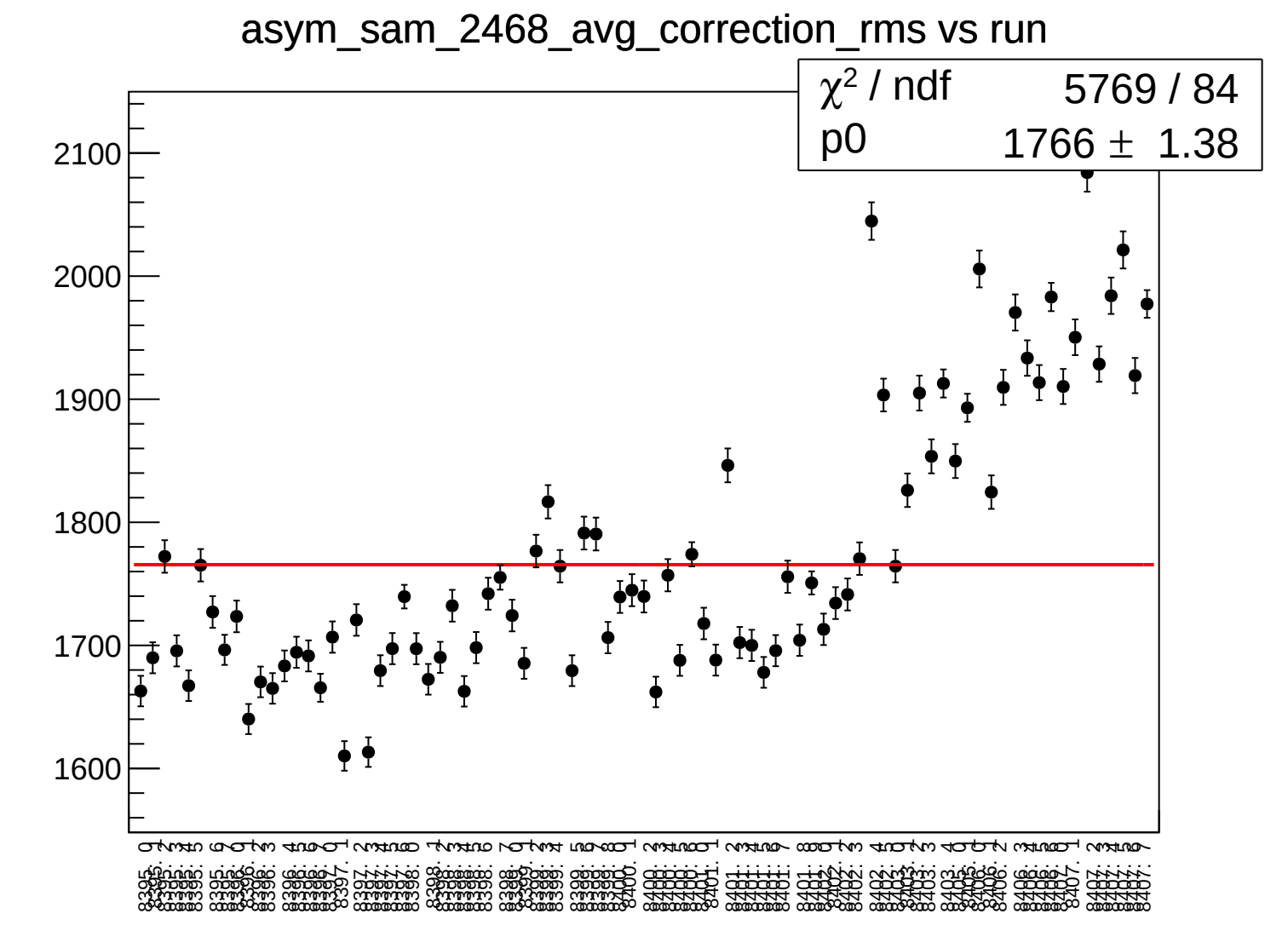

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 73.3 / 84
p0 −366.9 ± 133.6
4000
2000
0
−2000
−4000
pull
Entries 85
Mean −143.8
Std Dev 175.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

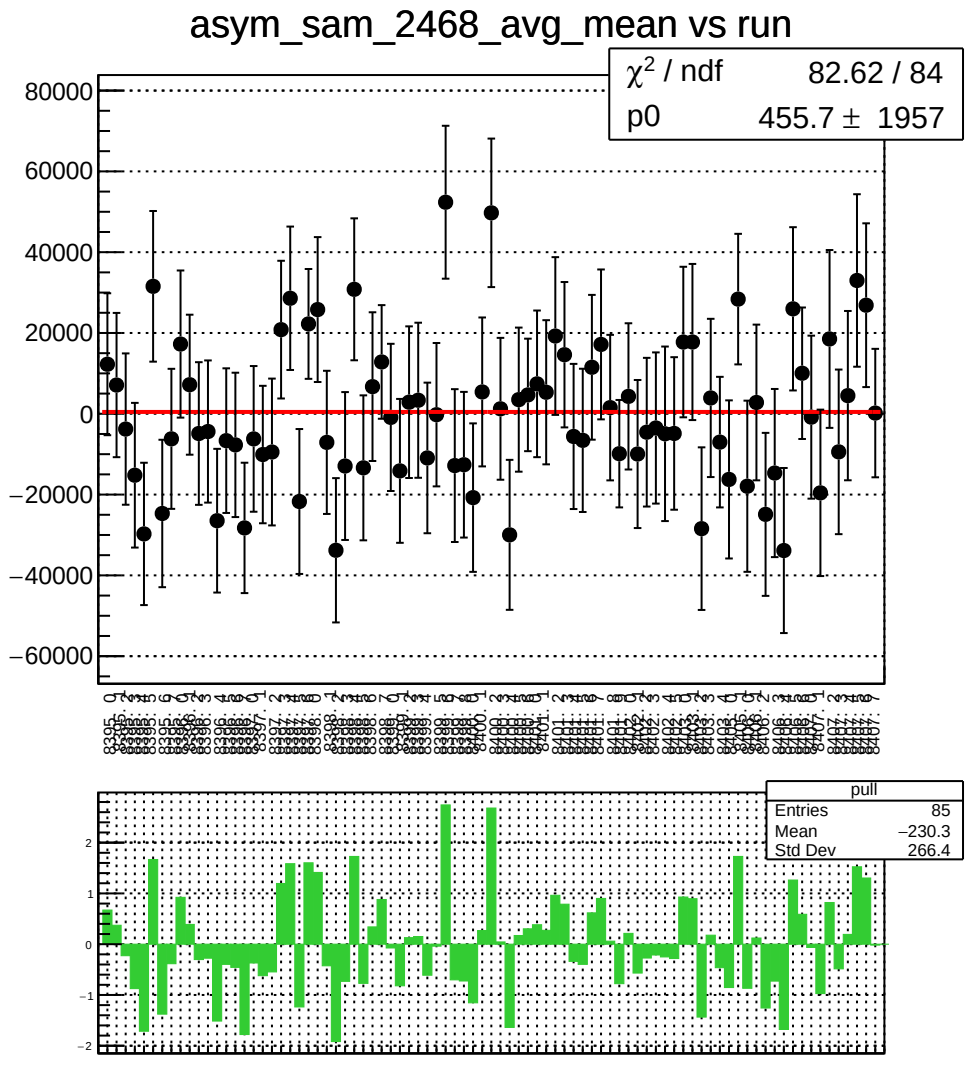

pull1D
Entries 85
Mean −0.01791
Std Dev 0.9285
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

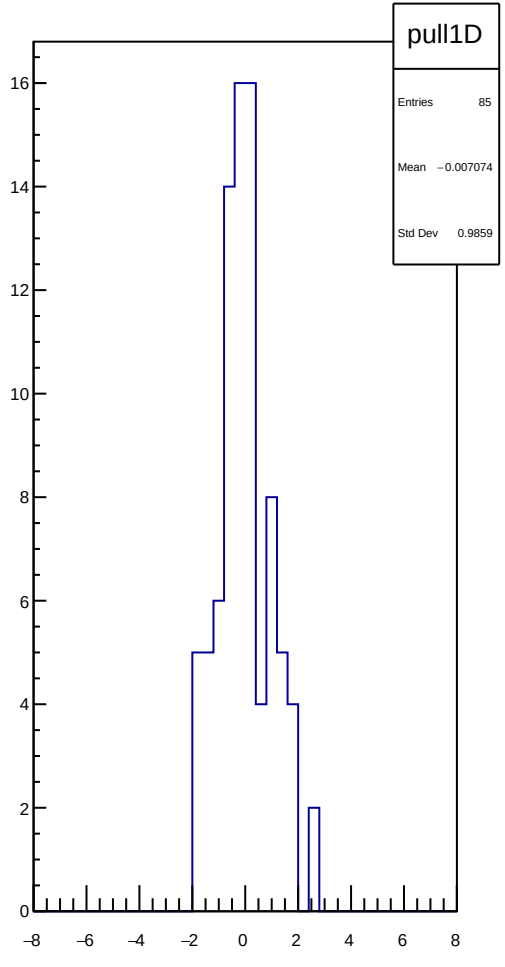

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 1.088e+04 / 84
p0 120.7 ± 0.09449
170
160
150
140
130
120
110
100

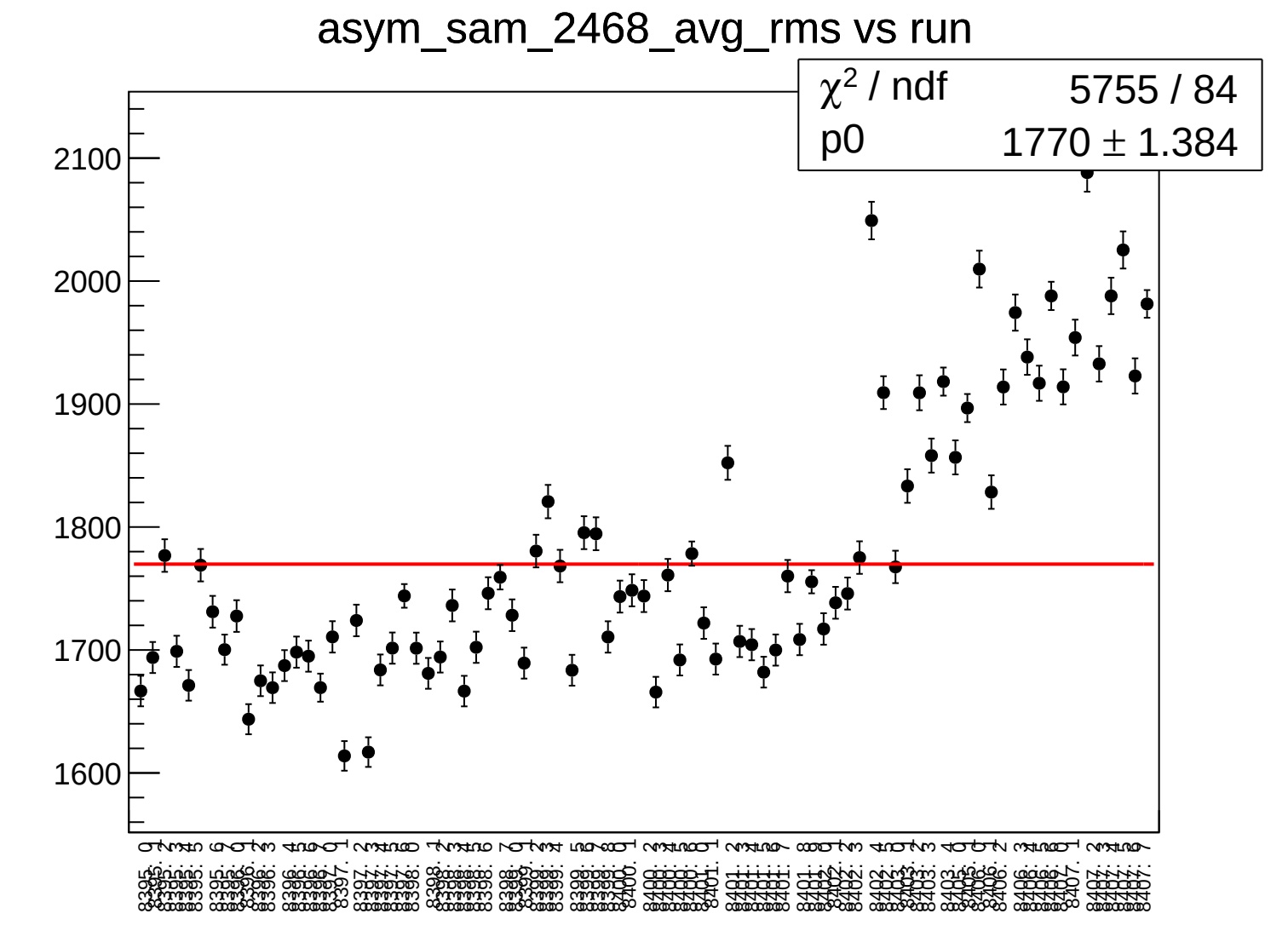

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 83.73 / 84
p0 −817.1± 1952
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −259.7
Std Dev 296.5
2
1
0
−1
−2
−3

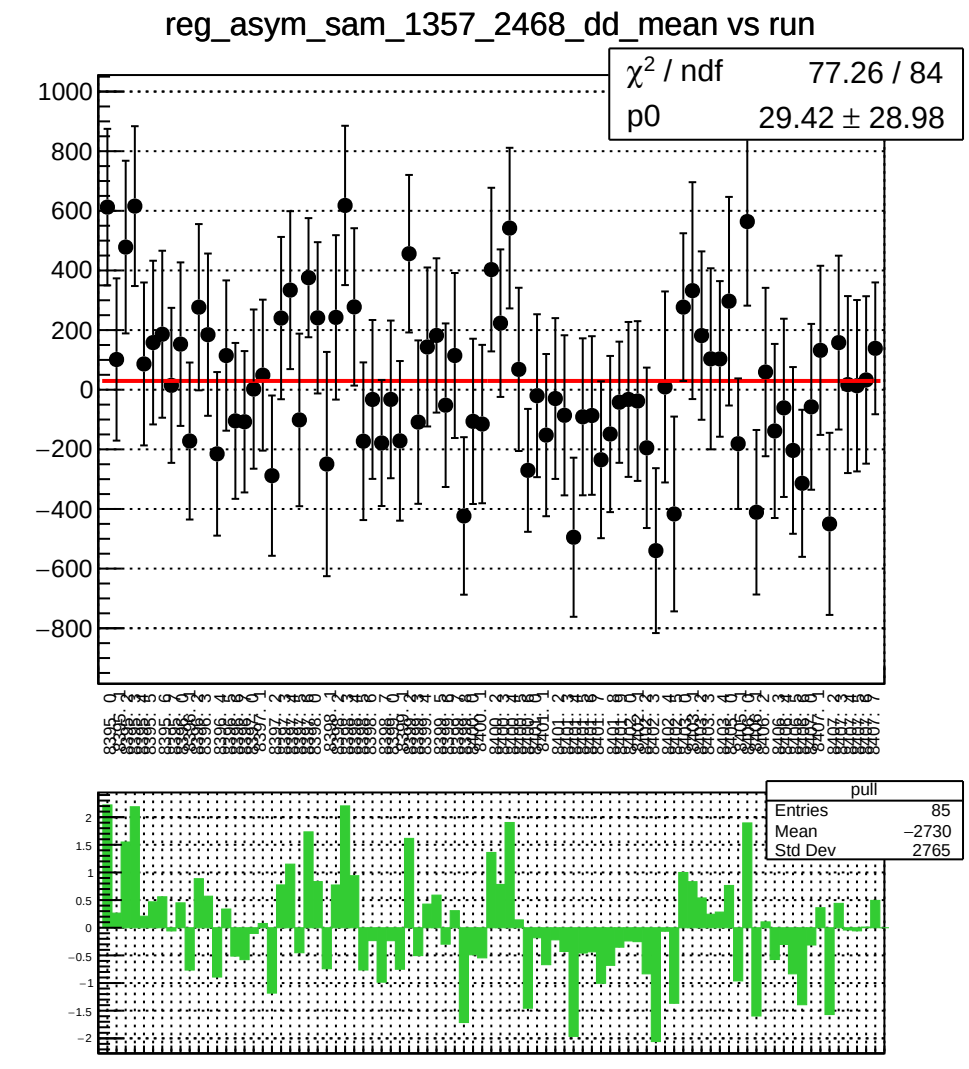

pull1D
Entries 85
Mean 0.005652
Std Dev 0.9925
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

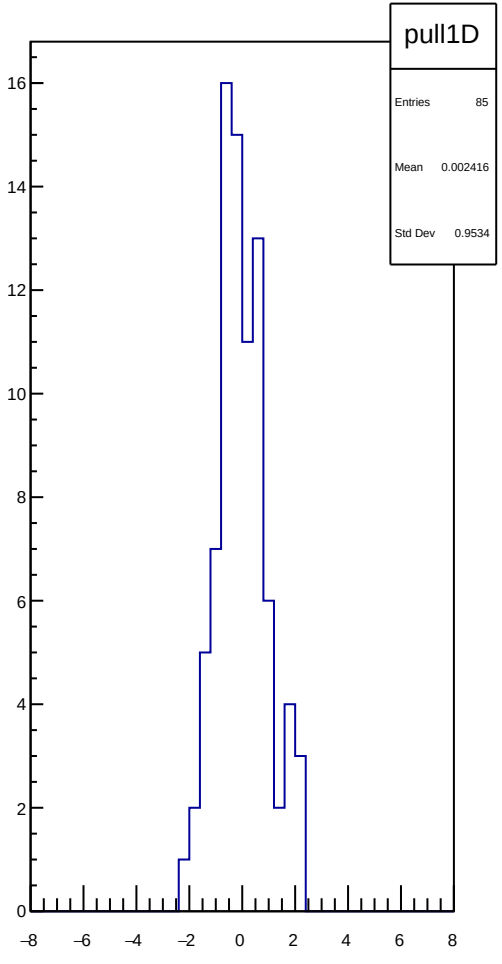

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 5769 / 84
p0 1766 ± 1.38
2100
2000
1900
1800
1700
1600

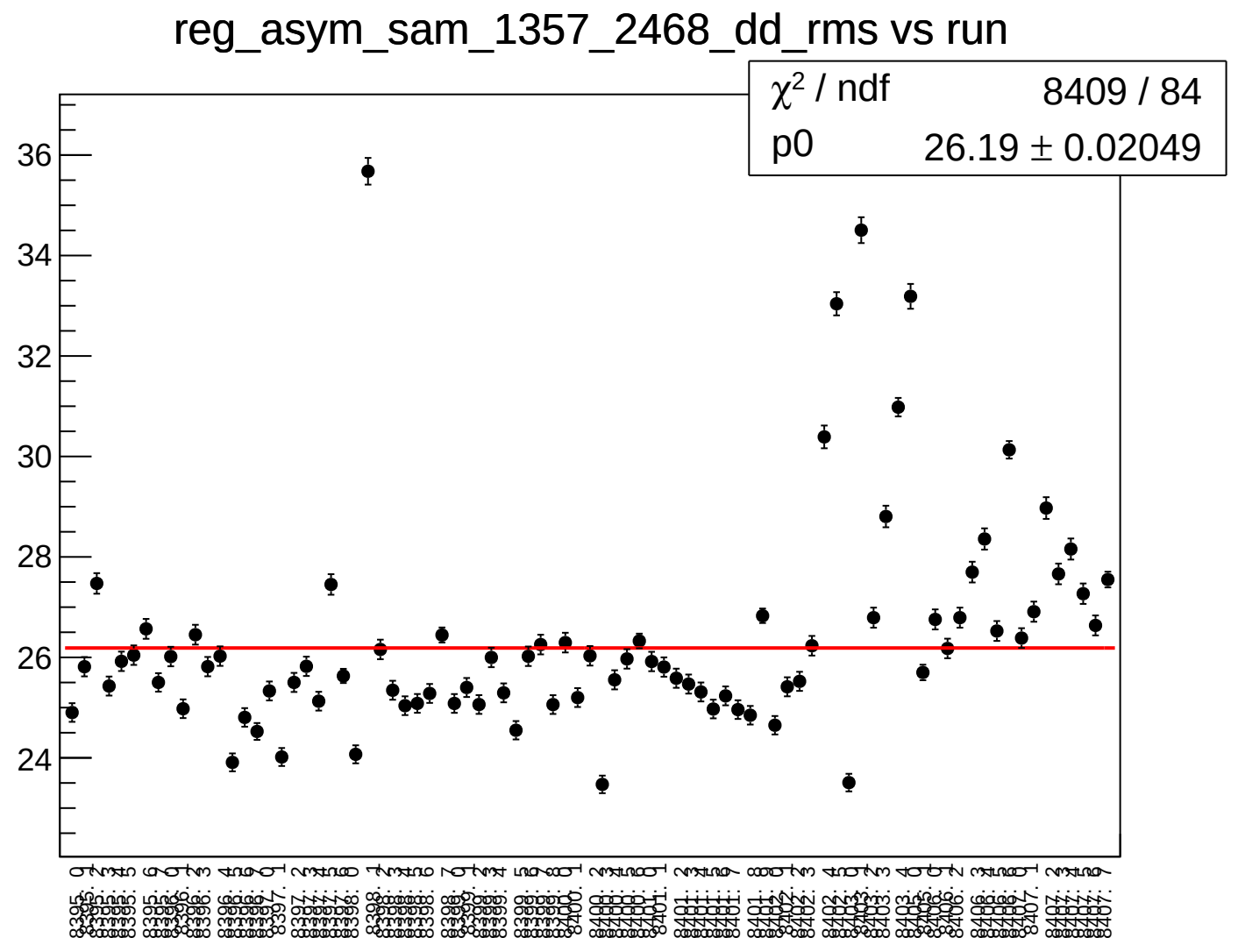

asym_sam_2468_avg_mean vs run
χ² / ndf 82.62 / 84
p0 455.7 ± 1957
pull
Entries 85
Mean −230.3
Std Dev 266.4

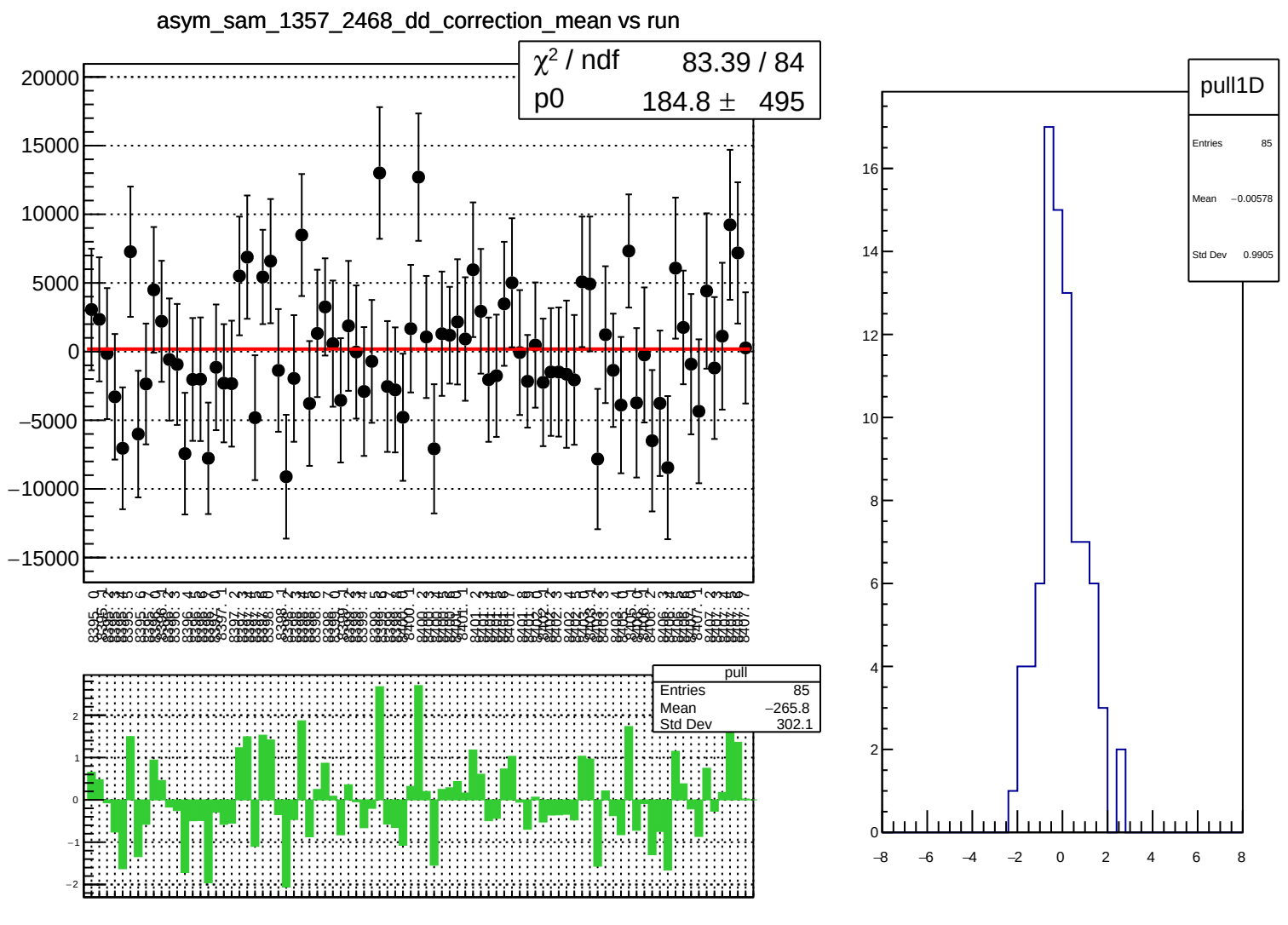

pull1D
Entries 85
Mean −0.007074
Std Dev 0.9859

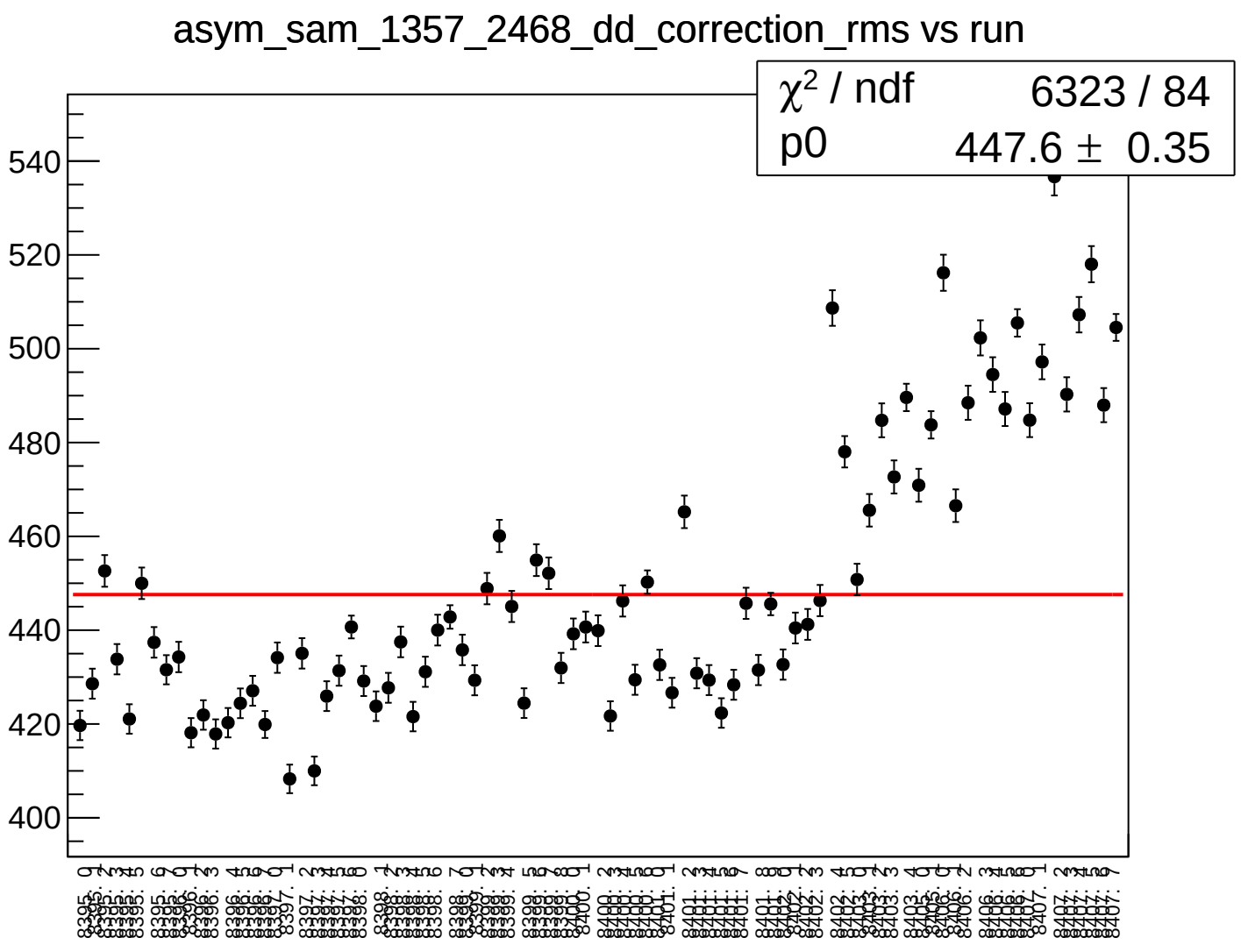

asym_sam_2468_avg_rms vs run
χ² / ndf 5755 / 84
p0 1770 ± 1.384
2100
2000
1900
1800
1700
1600

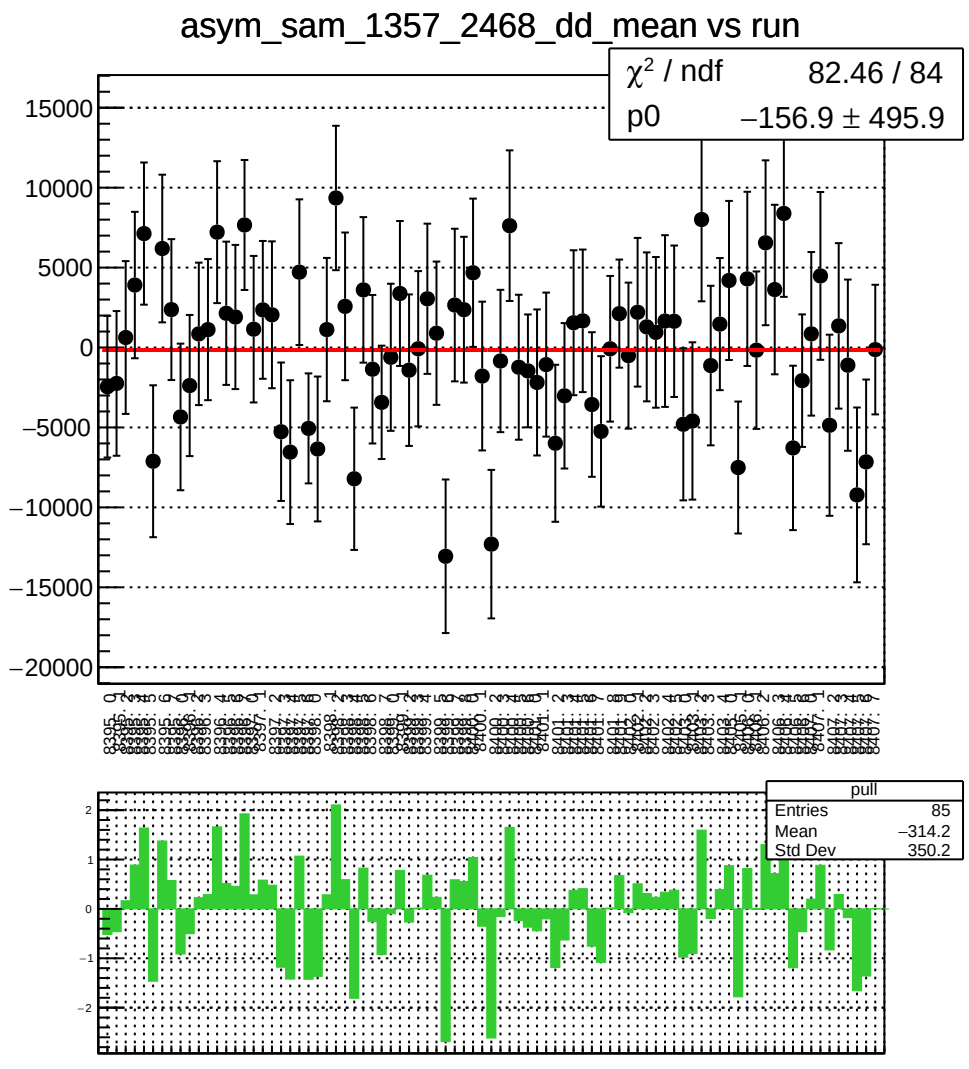

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 77.26 / 84
p0 29.42 ± 28.98
pull
Entries 85
Mean −2730
Std Dev 2765

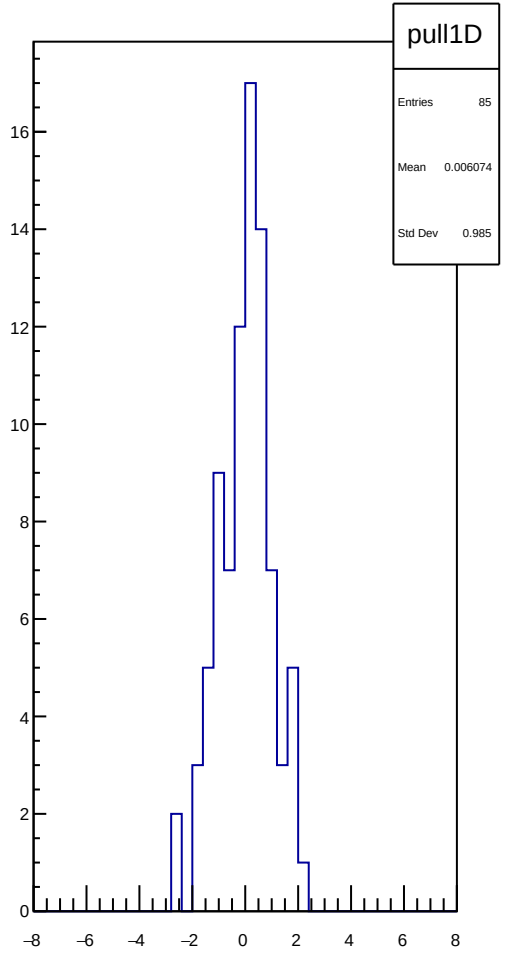

pull1D
Entries 85
Mean 0.002416
Std Dev 0.9534

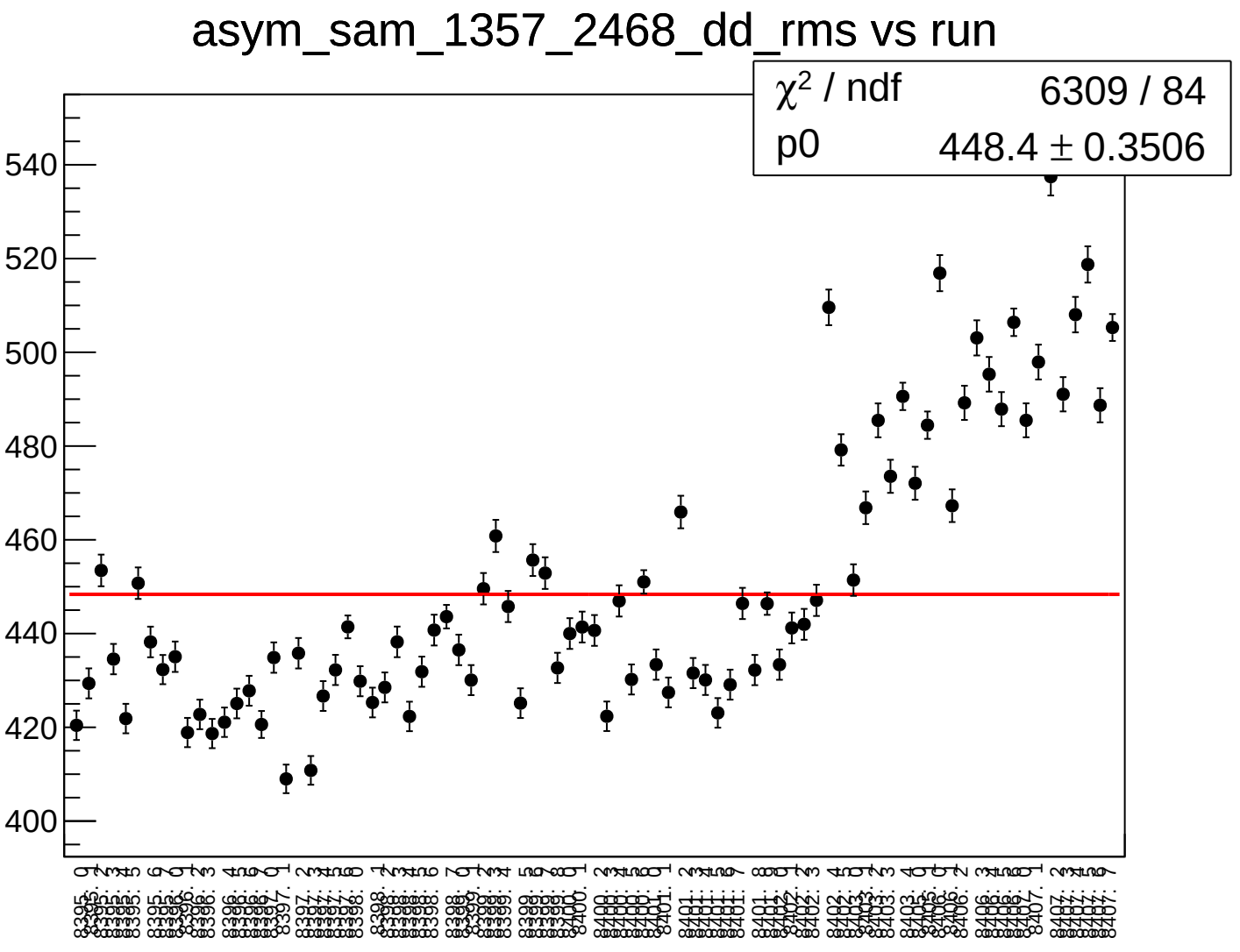

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 8409 / 84
p0 26.19 ± 0.02049
36
34
32
30
28
26
24

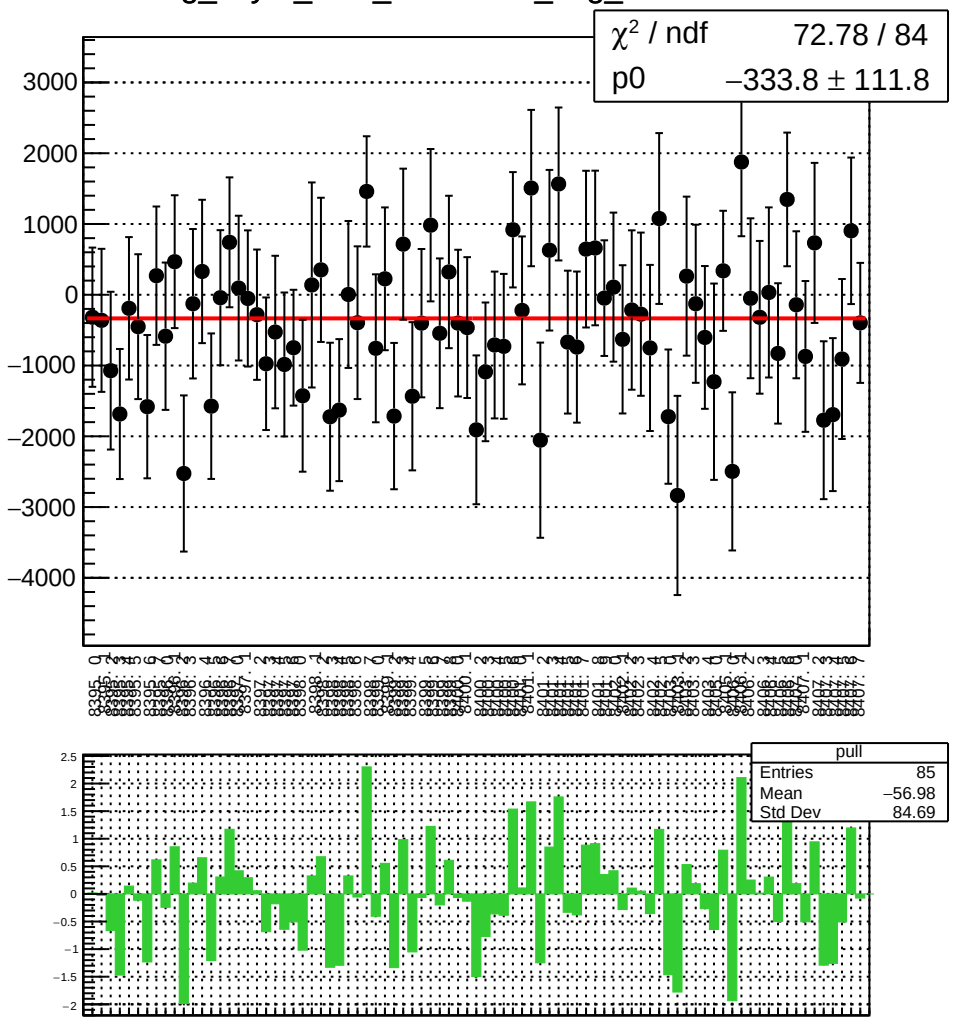

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 83.39 / 84
p0 184.8 ± 495
pull
Entries 85
Mean −265.8
Std Dev 302.1
pull1D
Entries 85
Mean −0.00578
Std Dev 0.9905

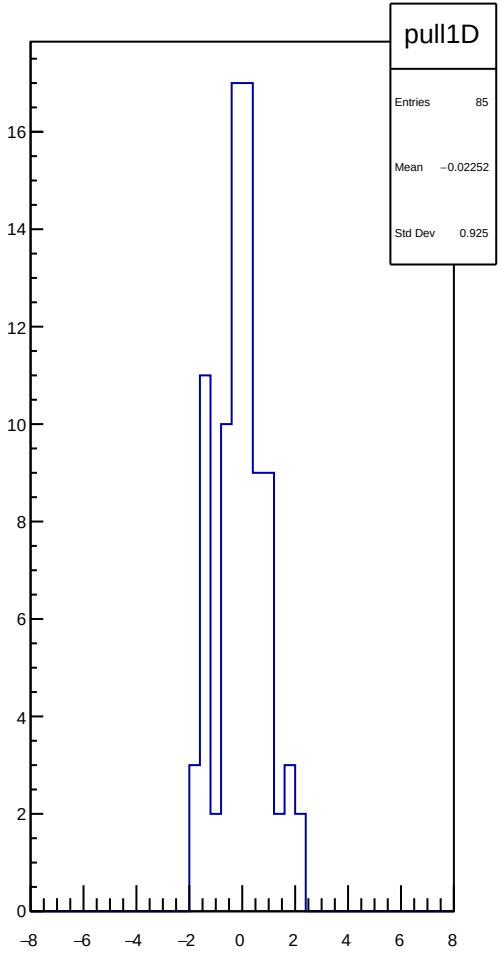

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 6323 / 84
p0 447.6 ± 0.35
540
520
500
480
460
440
420
400

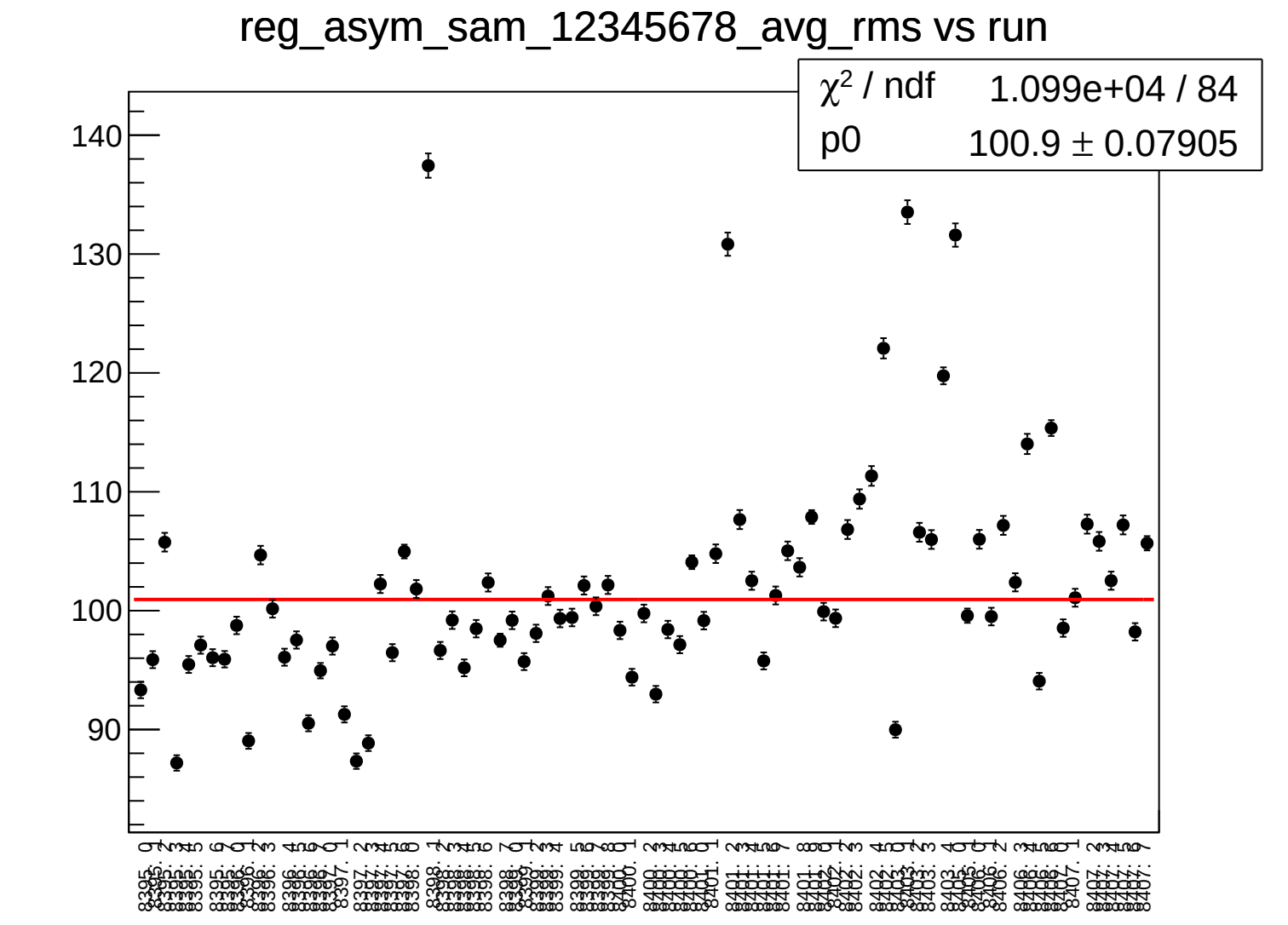

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 82.46 / 84
p0 −156.9 ± 495.9
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 85
Mean −314.2
Std Dev 350.2
2
1
0
−1
−2

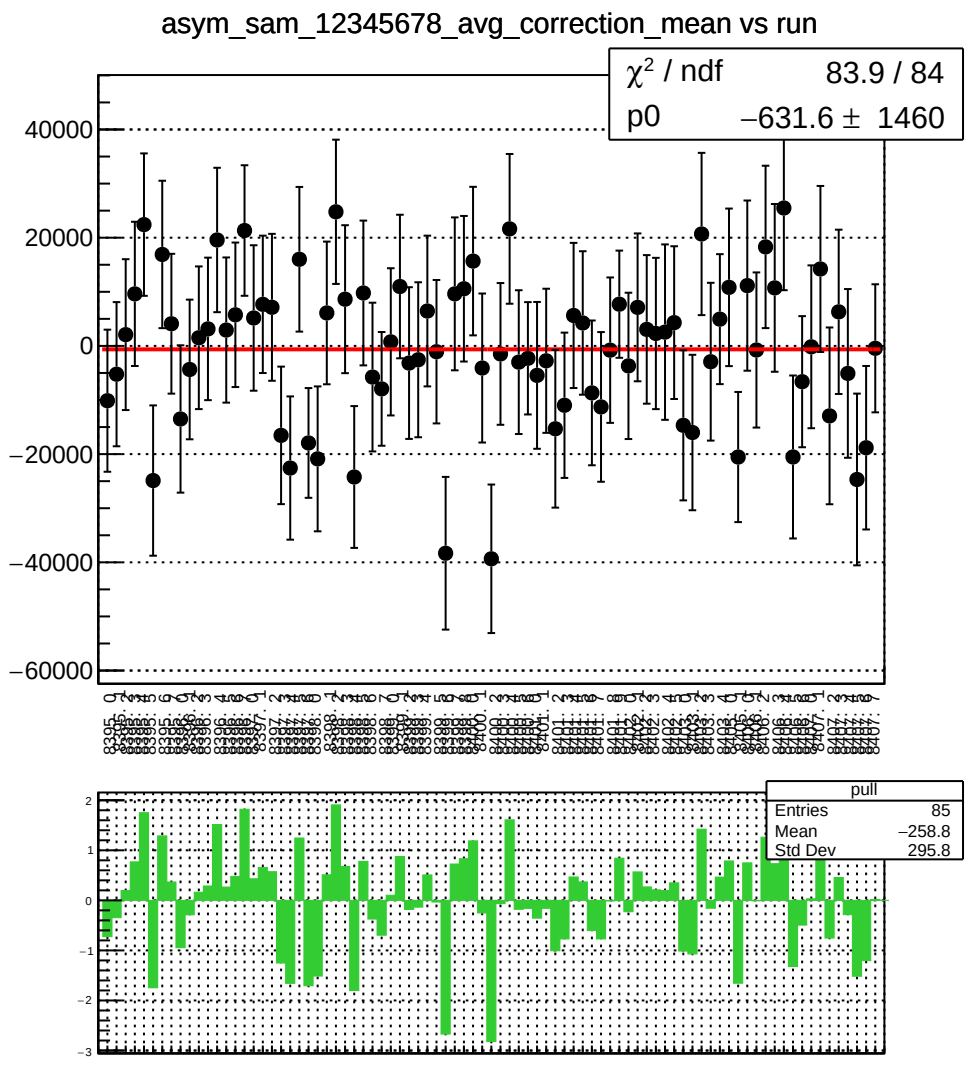

pull1D
Entries 85
Mean 0.006074
Std Dev 0.985
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

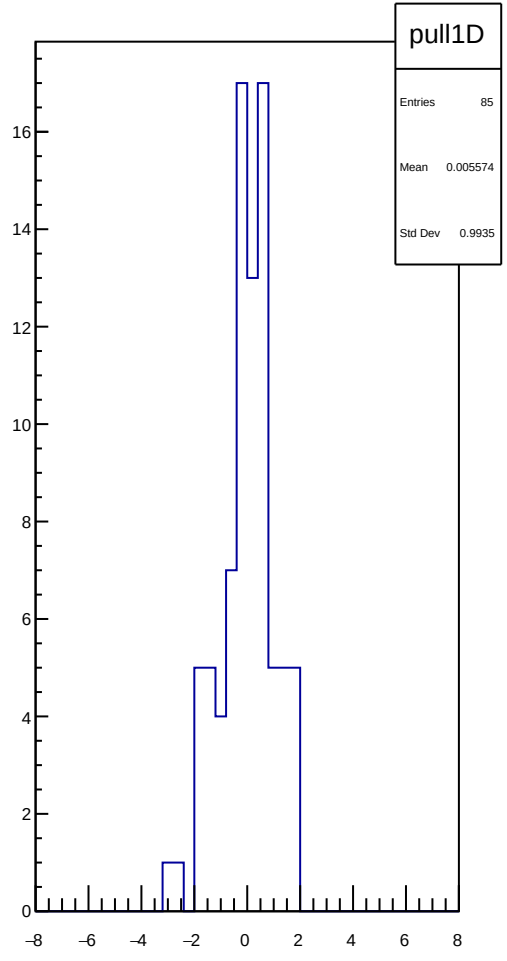

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 6309 / 84
p0 448.4 ± 0.3506
540
520
500
480
460
440
420
400

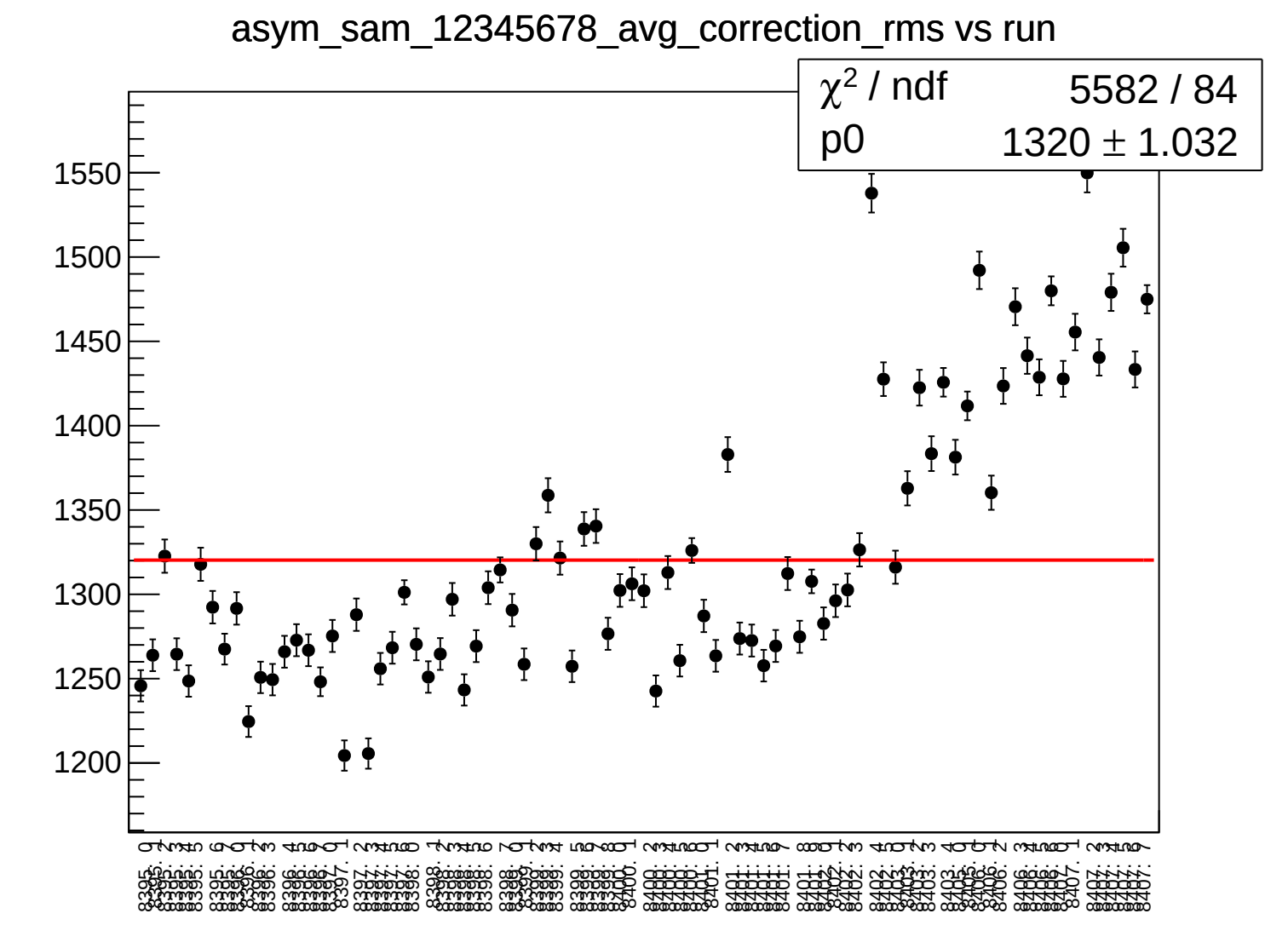

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 72.78 / 84
p0 −333.8 ± 111.8
pull
Entries 85
Mean −56.98
Std Dev 84.69

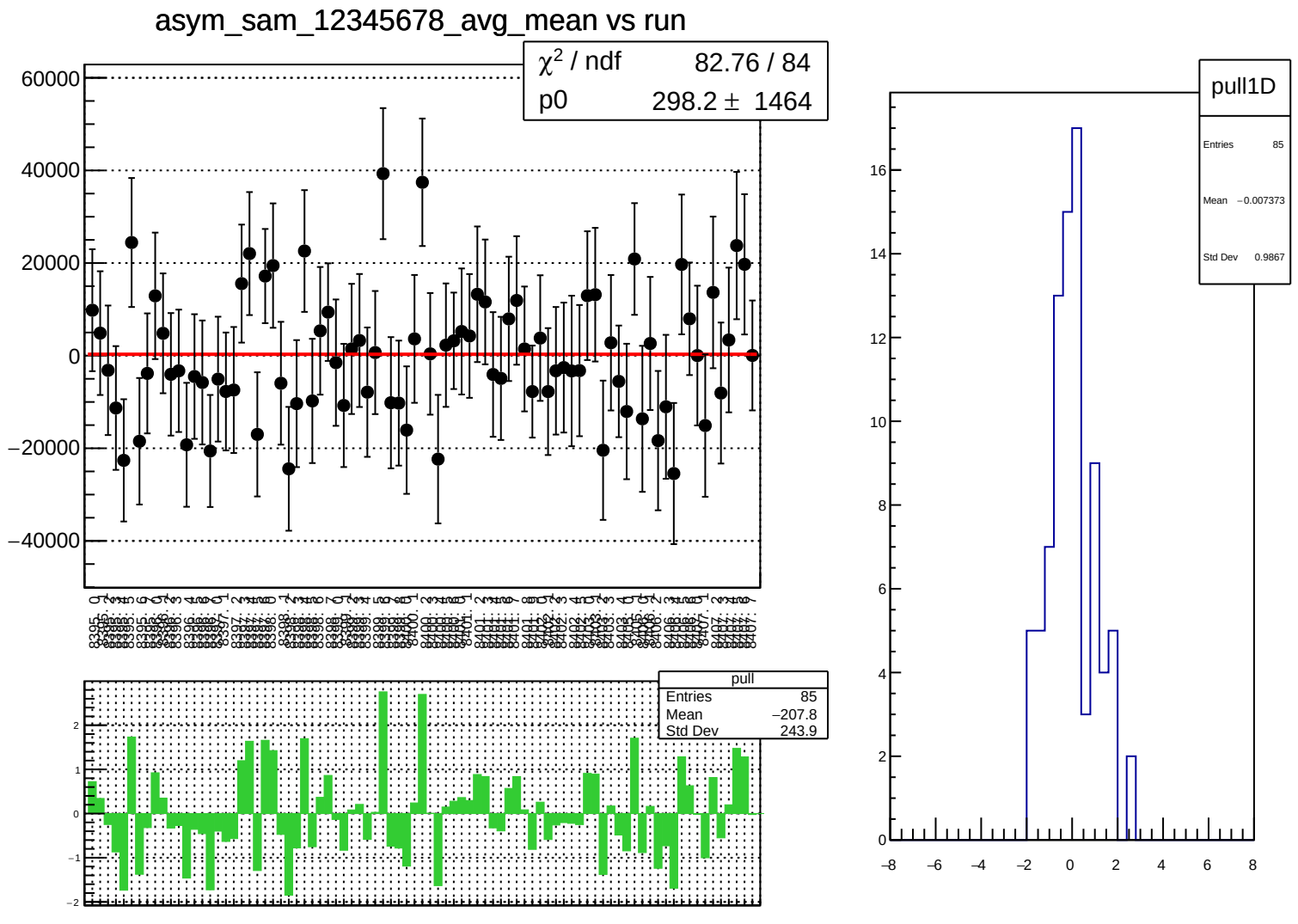

pull1D
Entries 85
Mean −0.02252
Std Dev 0.925

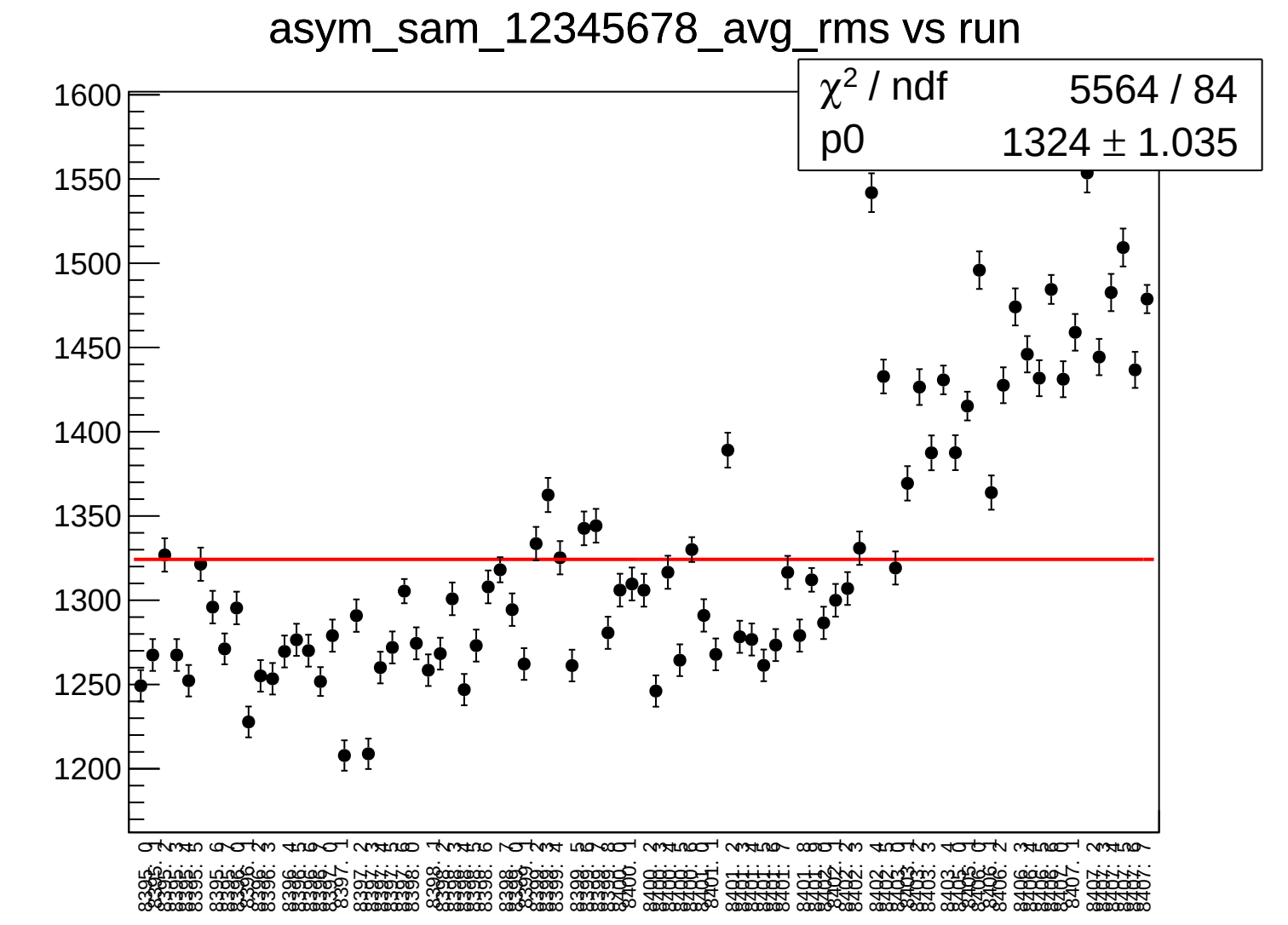

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 1.099e+04 / 84
p0 100.9 ± 0.07905
140
130
120
110
100
90

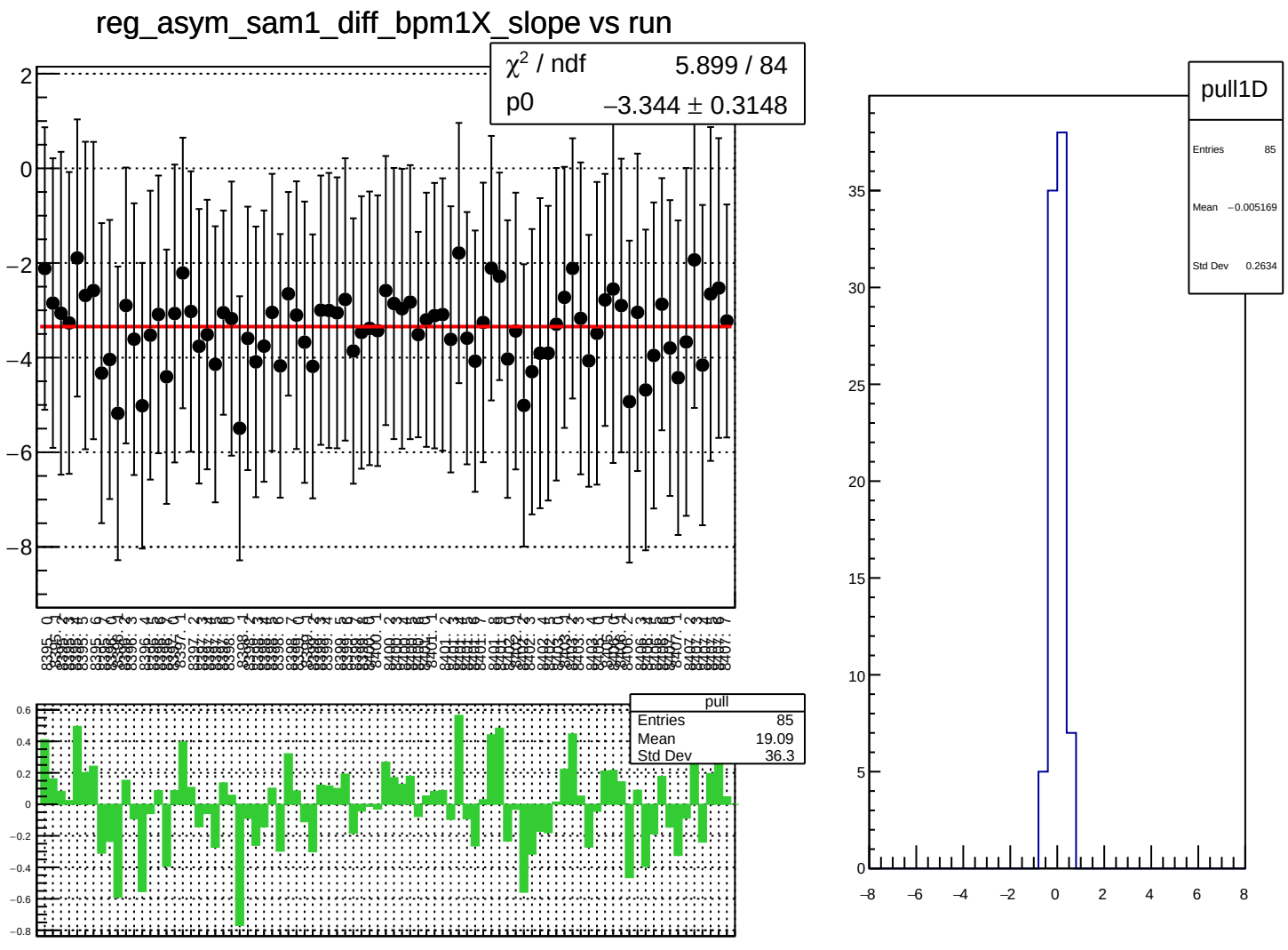

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 83.9 / 84
p0 −631.6 ± 1460
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −258.8
Std Dev 295.8
2
1
0
−1
−2
−3

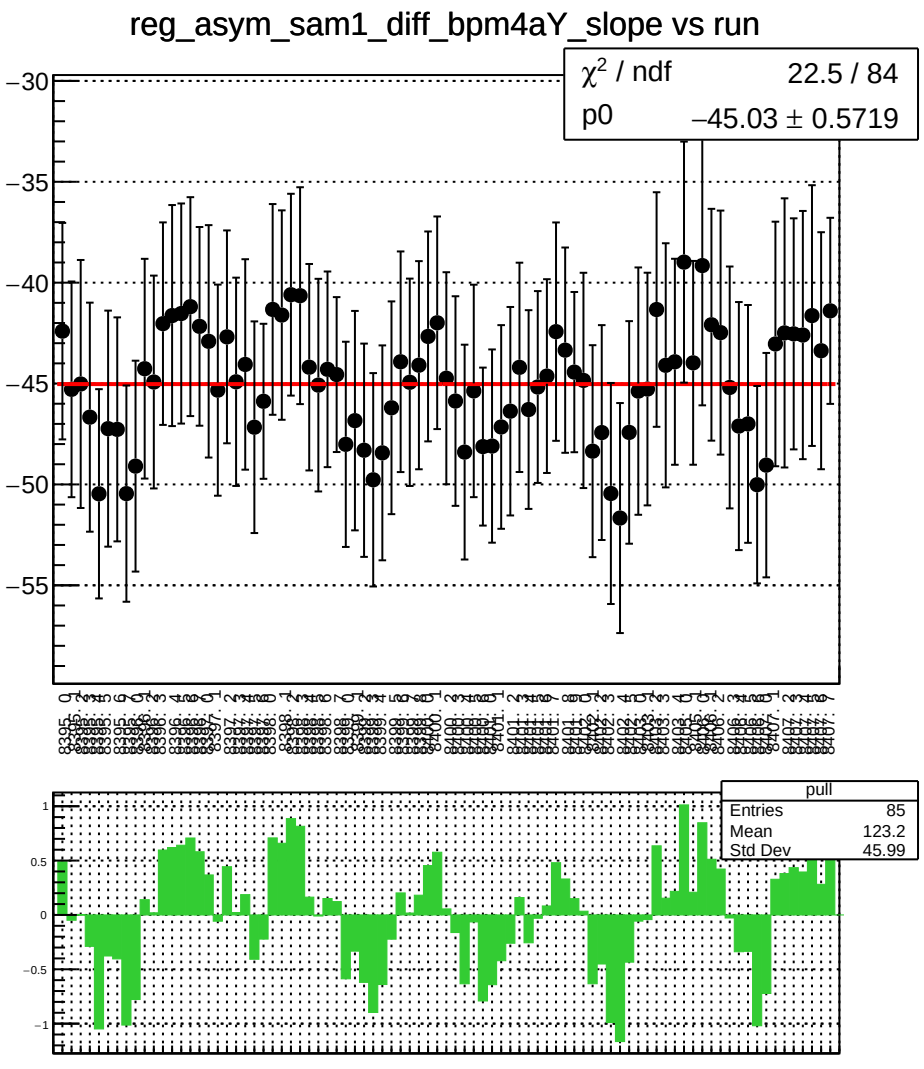

pull1D
Entries 85
Mean 0.005574
Std Dev 0.9935
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

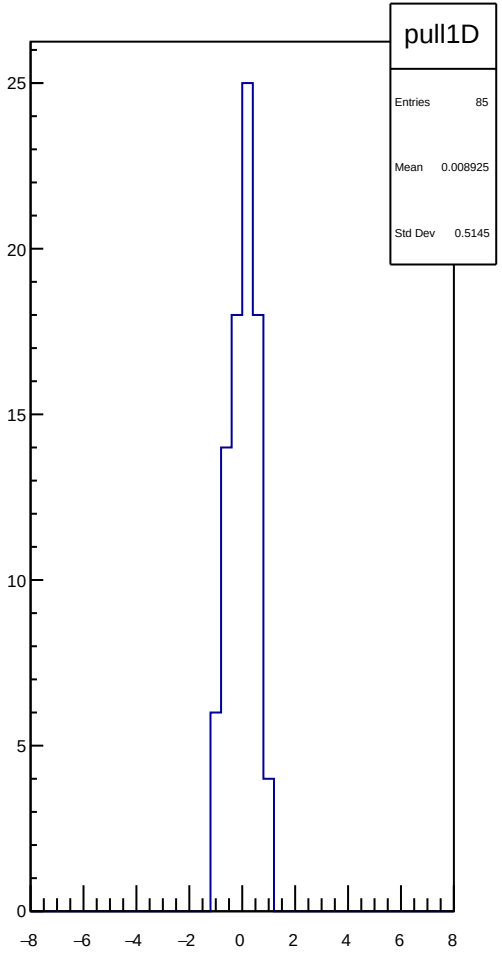

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 5582 / 84
p0 1320 ± 1.032
1550
1500
1450
1400
1350
1300
1250
1200

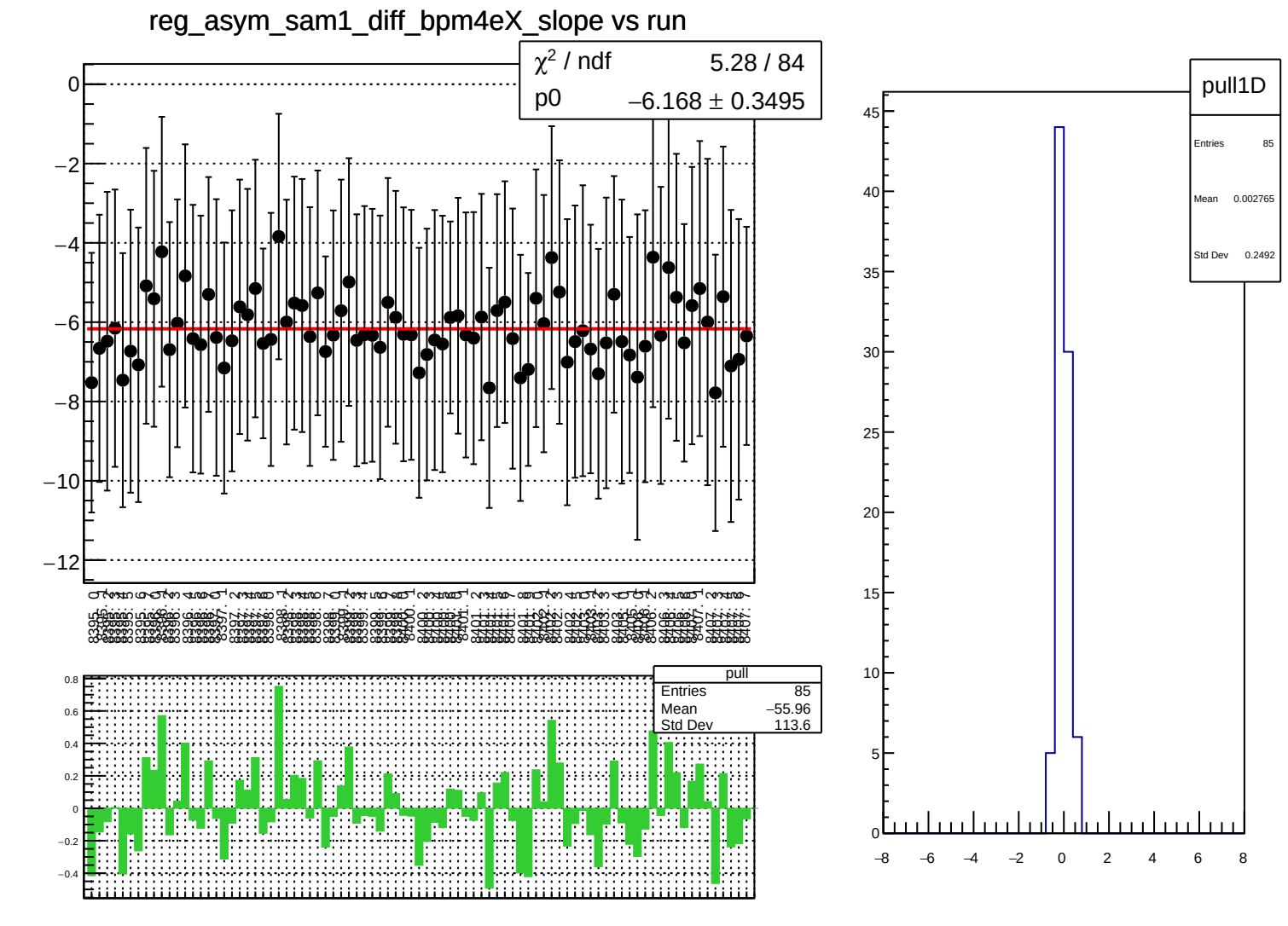

asym_sam_12345678_avg_mean vs run
χ² / ndf 82.76 / 84
p0 298.2 ± 1464
60000
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −207.8
Std Dev 243.9
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.007373
Std Dev 0.9867
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

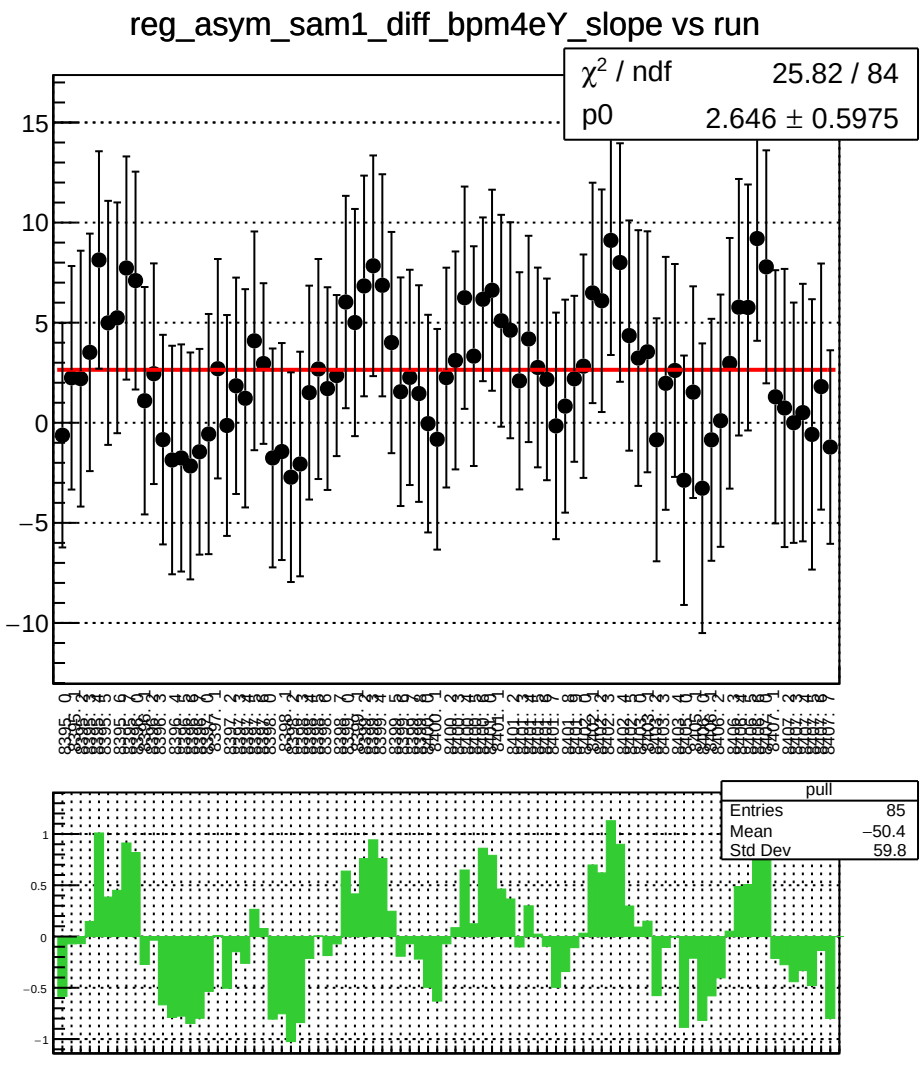

asym_sam_12345678_avg_rms vs run
χ² / ndf 5564 / 84
p0 1324 ± 1.035
1600
1550
1500
1450
1400
1350
1300
1250
1200

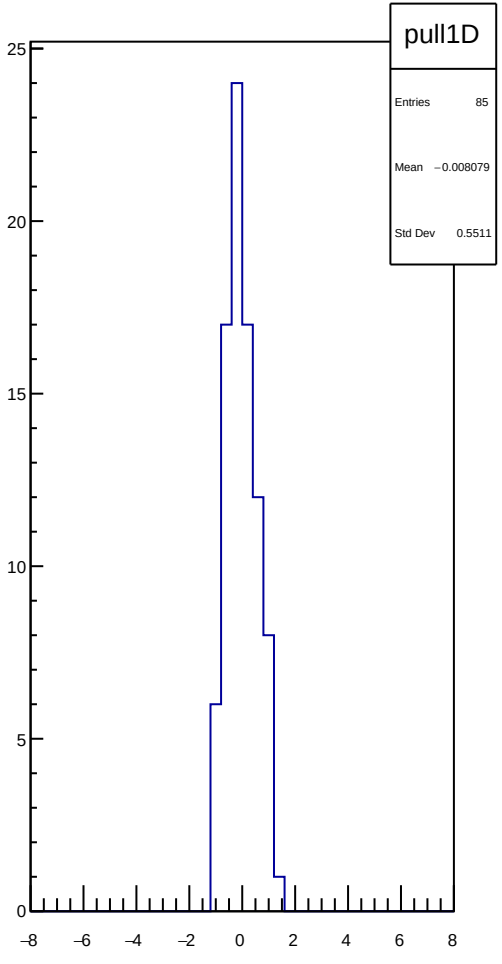

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 5.899 / 84
p0 −3.344 ± 0.3148
pull
Entries 85
Mean 19.09
Std Dev 36.3
pull1D
Entries 85
Mean −0.005169
Std Dev 0.2634

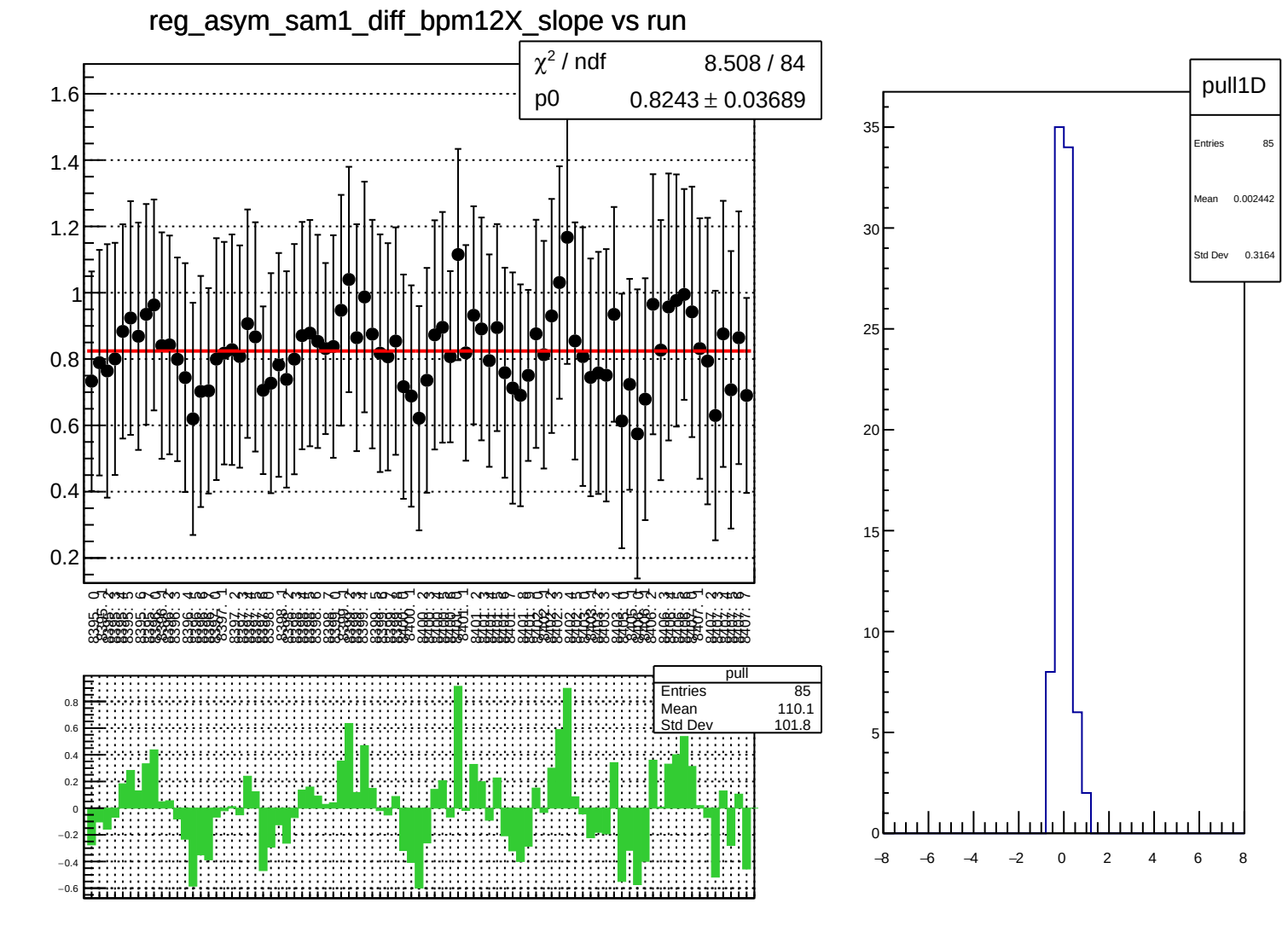

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 22.5 / 84
p0 −45.03 ± 0.5719
pull
Entries 85
Mean 123.2
Std Dev 45.99

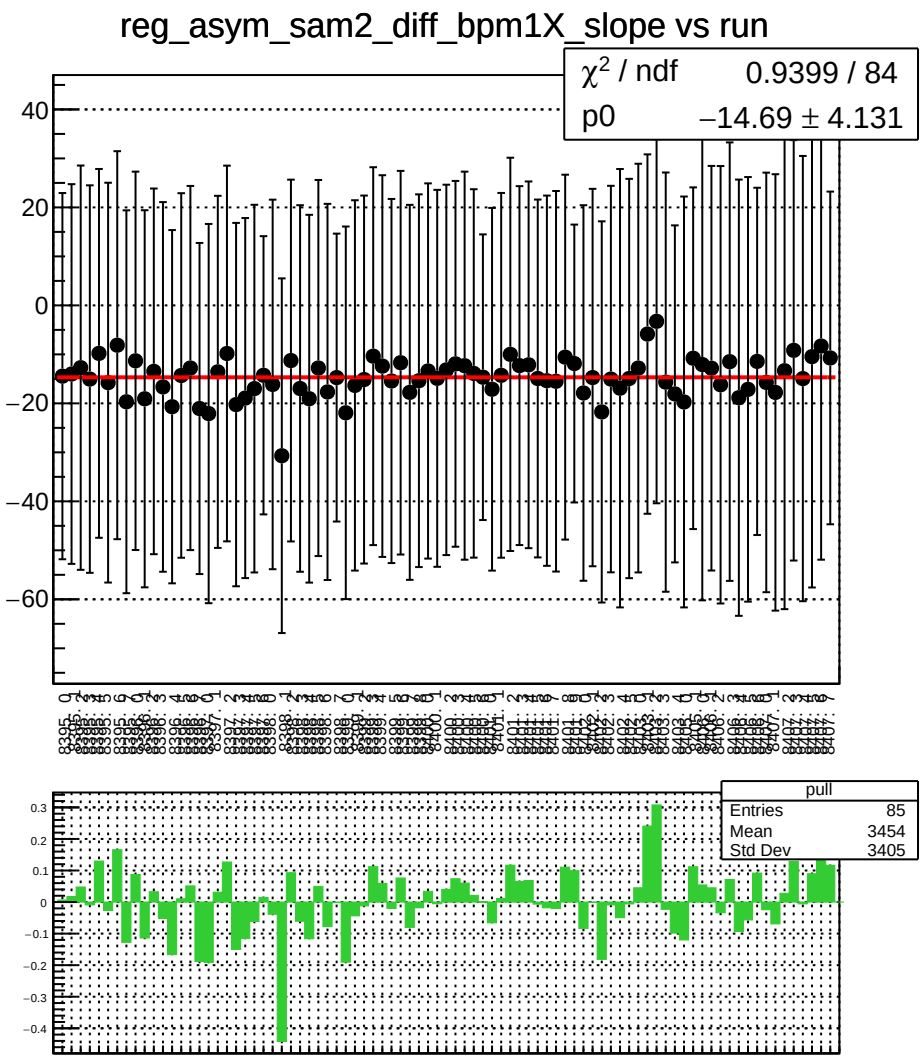

pull1D
Entries 85
Mean 0.008925
Std Dev 0.5145

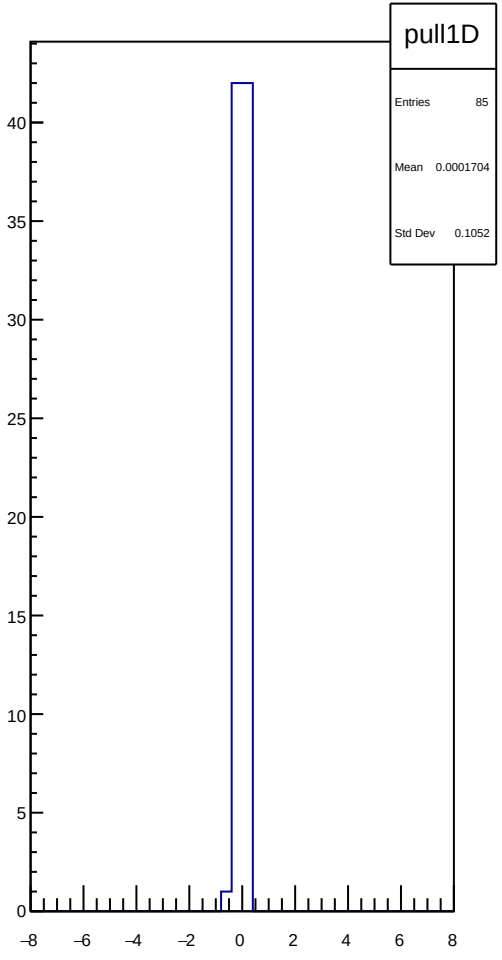

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 5.28 / 84
p0 −6.168 ± 0.3495
pull
Entries 85
Mean −55.96
Std Dev 113.6
pull1D
Entries 85
Mean 0.002765
Std Dev 0.2492

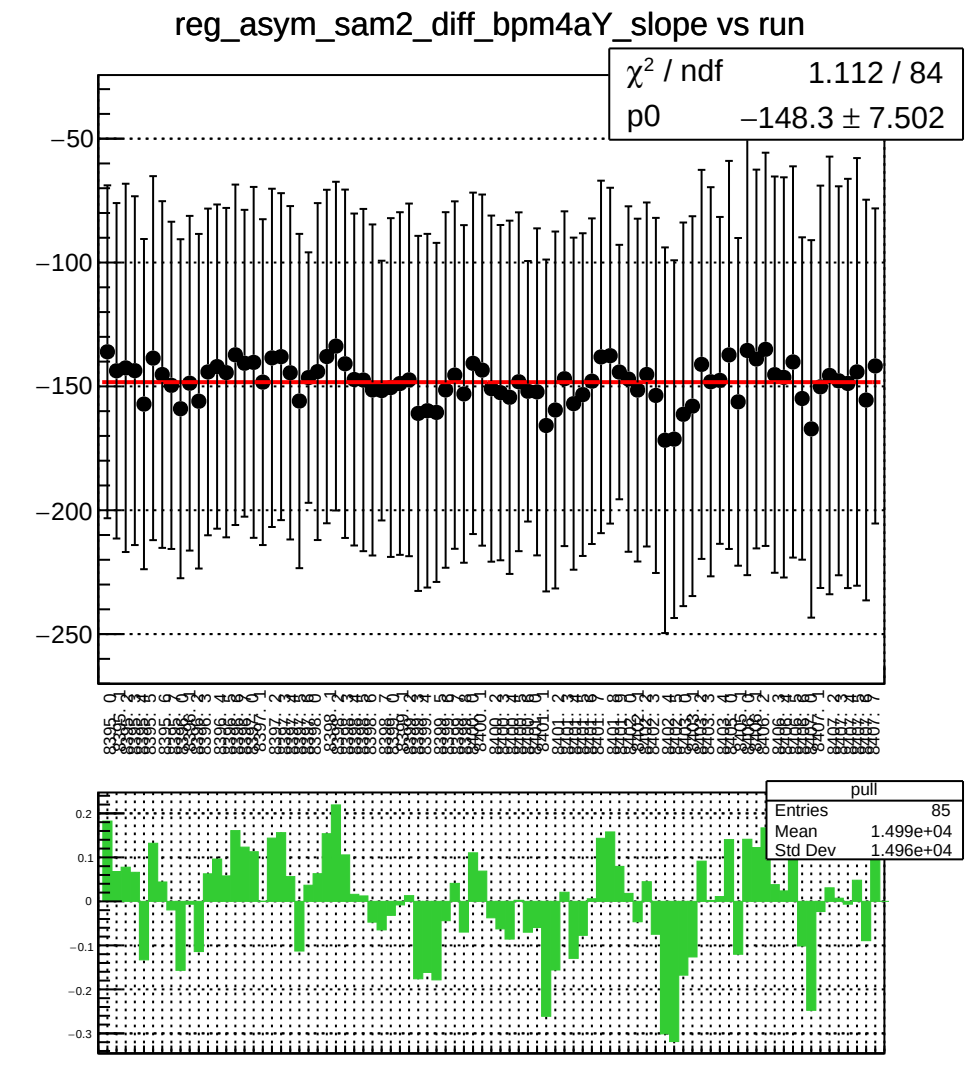

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 25.82 / 84
p0 2.646 ± 0.5975
pull
Entries 85
Mean −50.4
Std Dev 59.8

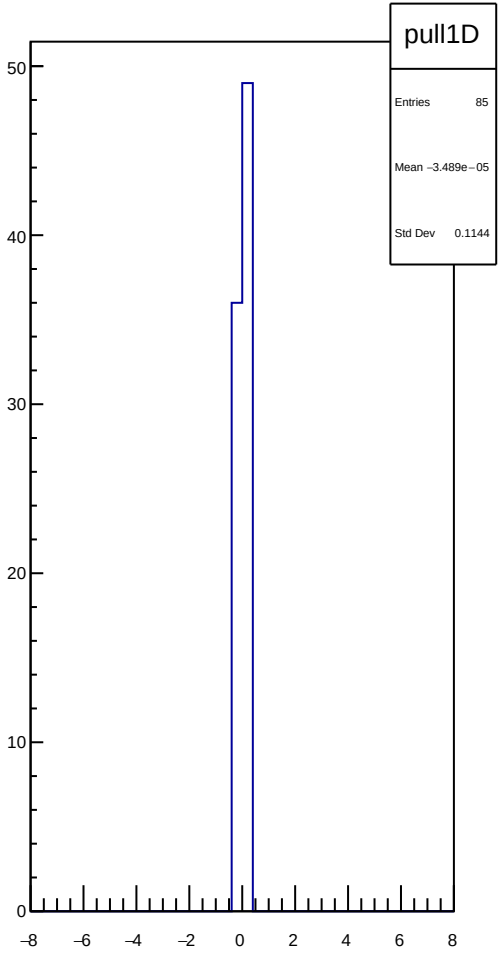

pull1D
Entries 85
Mean −0.008079
Std Dev 0.5511

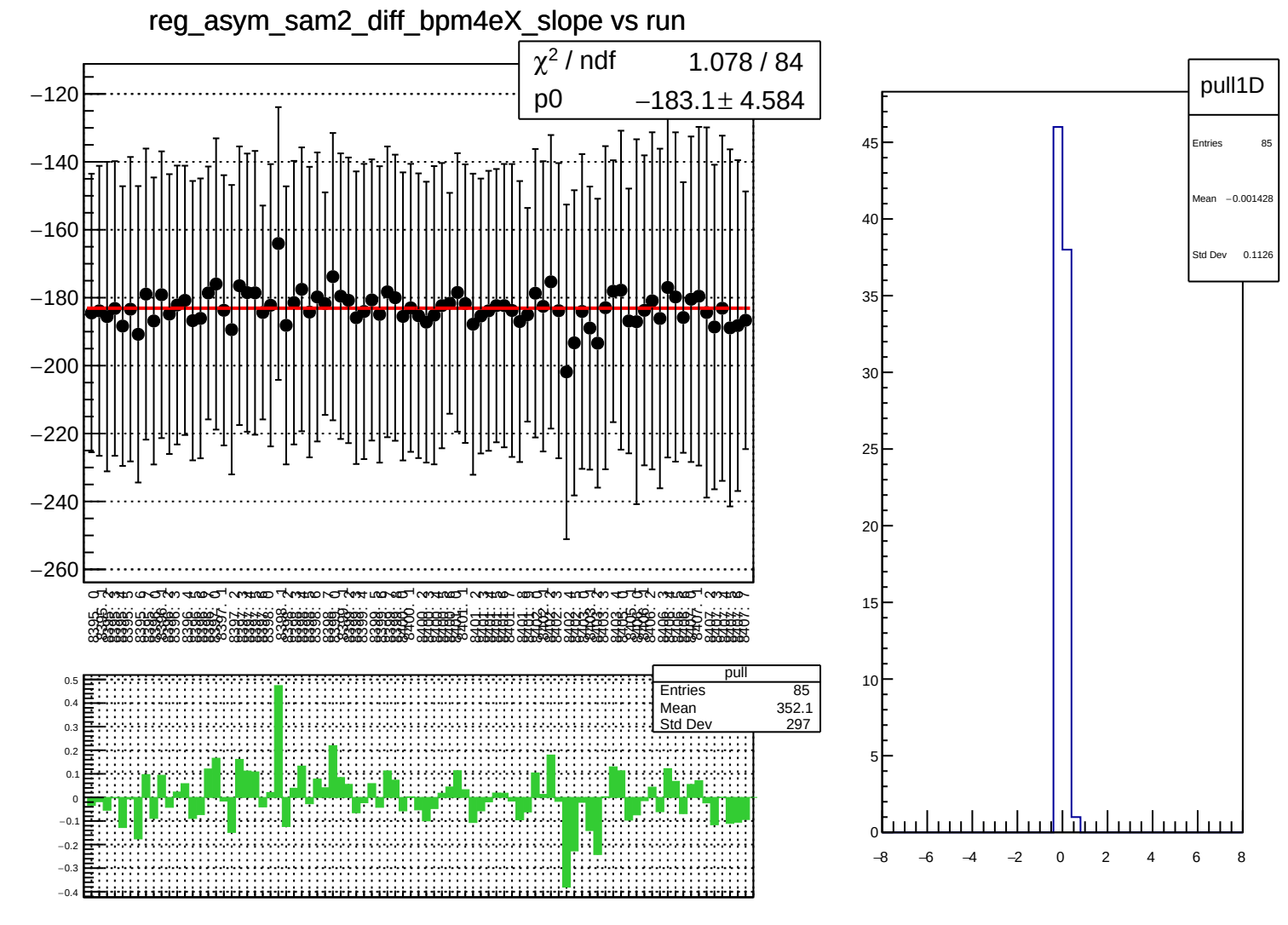

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 8.508 / 84
p0 0.8243 ± 0.03689
pull
Entries 85
Mean 110.1
Std Dev 101.8
pull1D
Entries 85
Mean 0.002442
Std Dev 0.3164

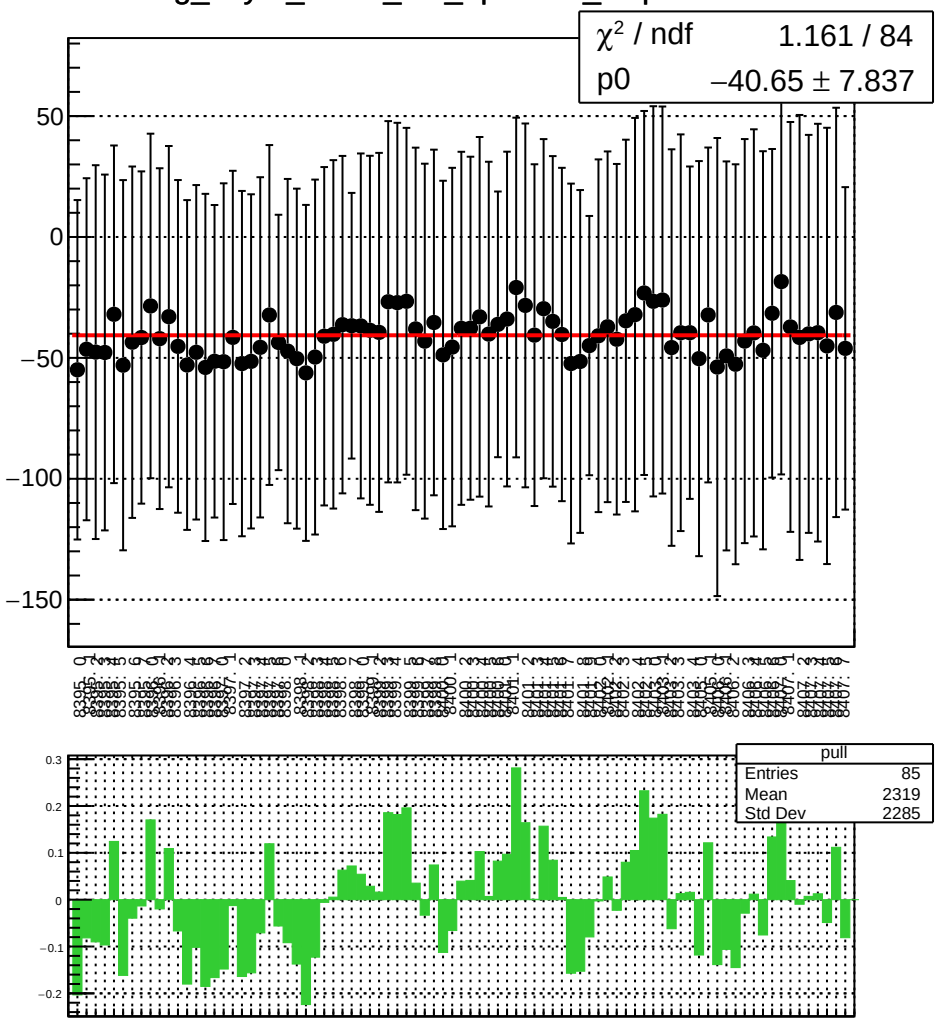

reg_asym_sam2_diff_bpm1X_slope vs run
χ^2 / ndf 0.9399 / 84
p0 −14.69 ± 4.131
pull
Entries 85
Mean 3454
Std Dev 3405

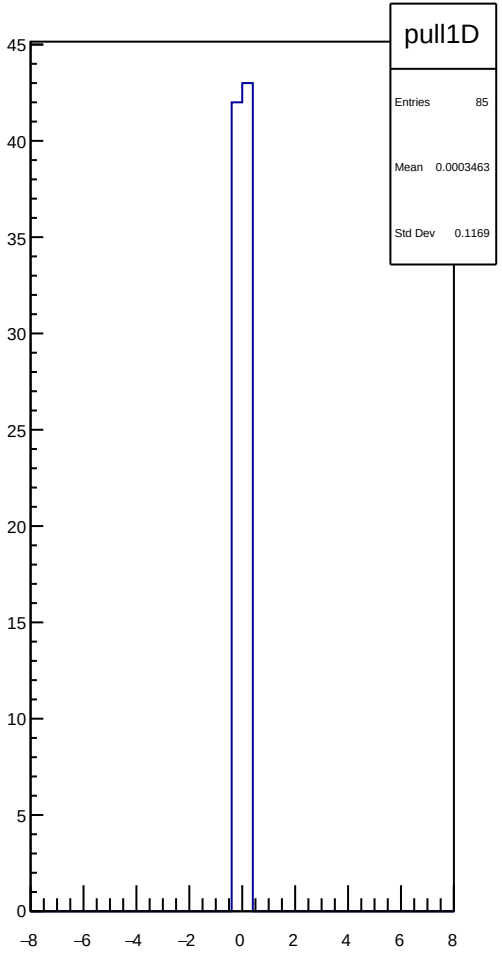

pull1D
Entries 85
Mean 0.0001704
Std Dev 0.1052

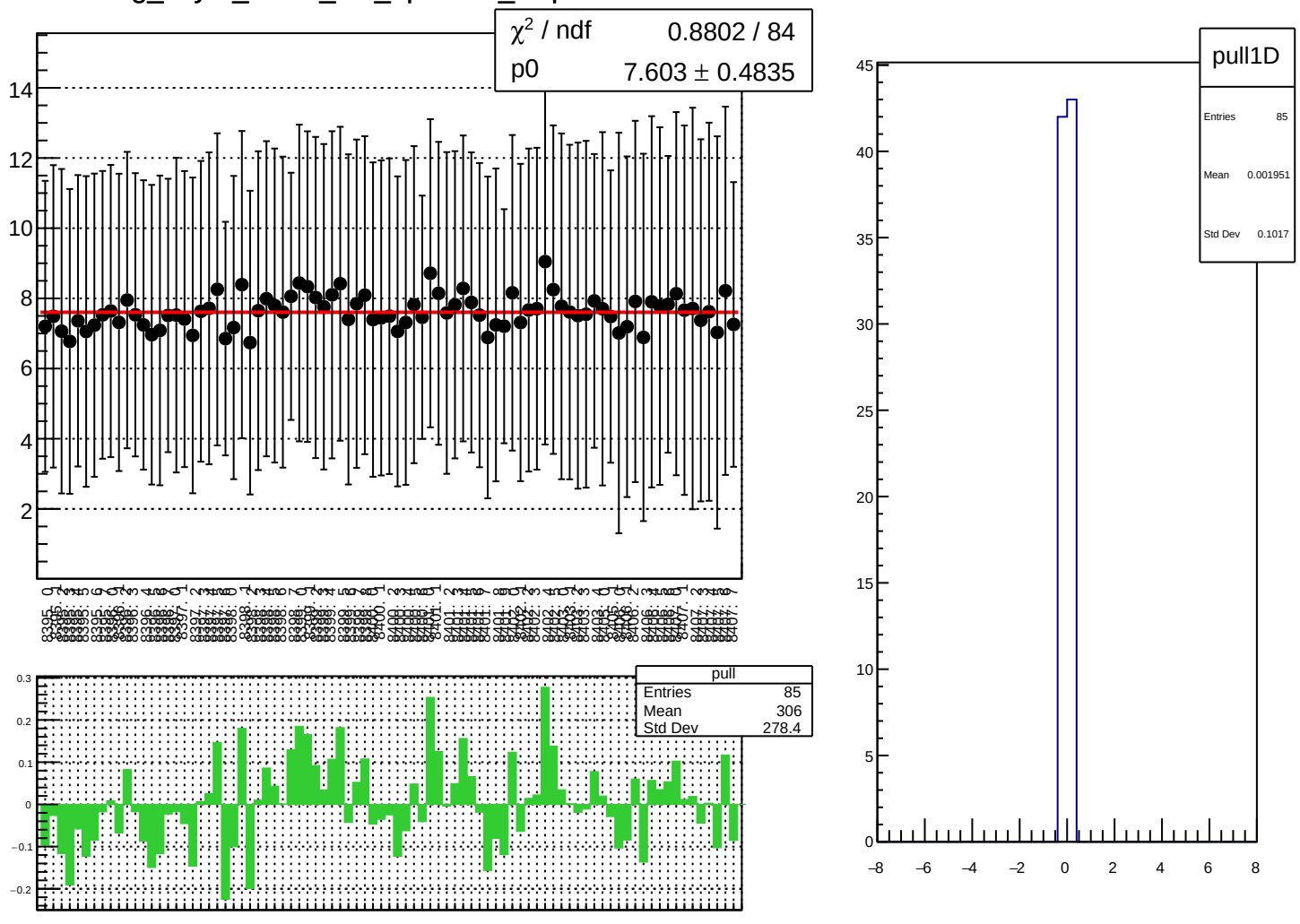

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 1.112 / 84
p0 −148.3 ± 7.502
−50
−100
−150
−200
−250
pull
Entries 85
Mean 1.499e+04
Std Dev 1.496e+04
0.2
0.1
0
−0.1
−0.2
−0.3

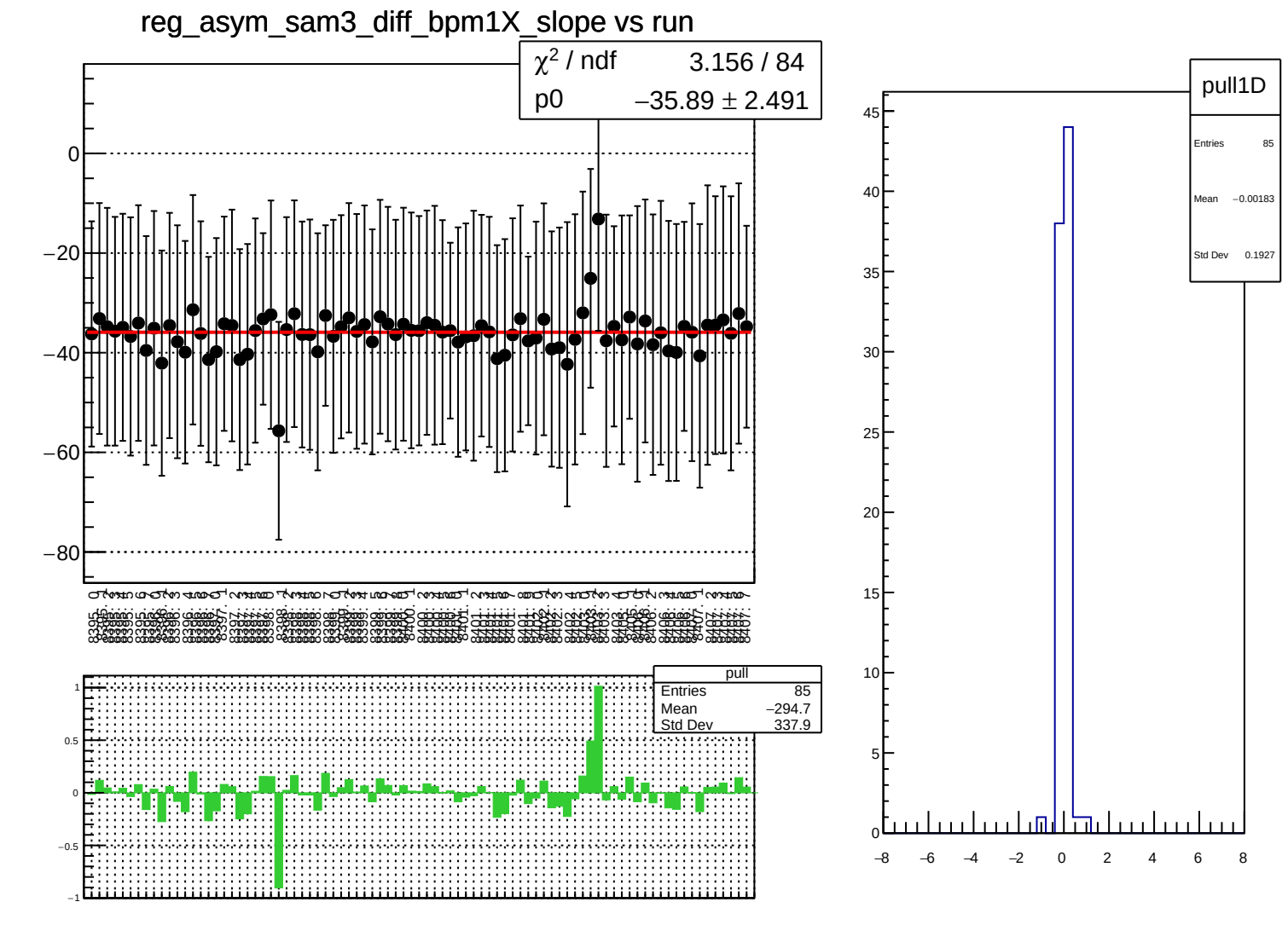

pull1D
Entries 85
Mean −3.489e−05
Std Dev 0.1144
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

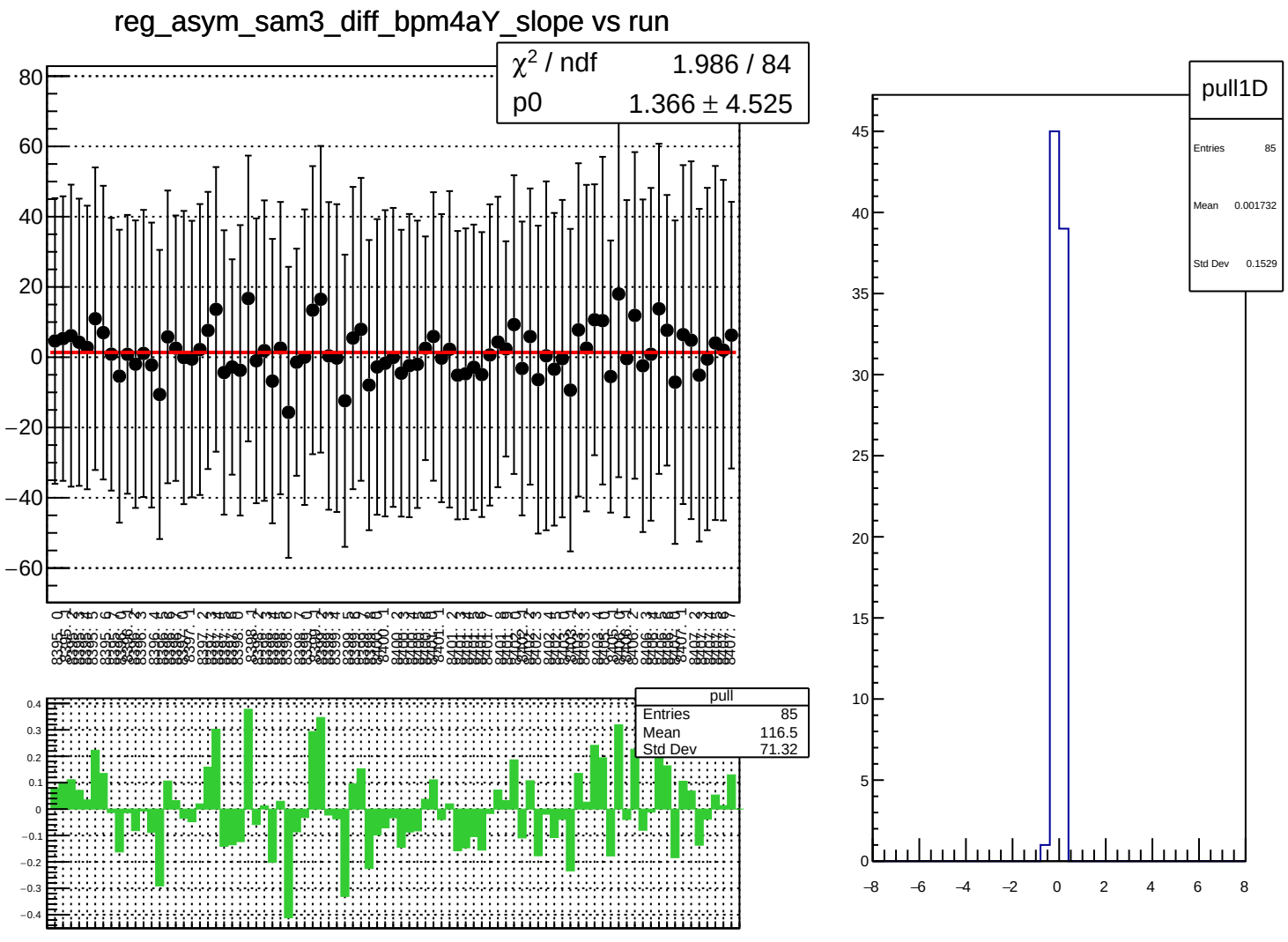

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 1.078 / 84
p0 −183.1± 4.584
pull
Entries 85
Mean 352.1
Std Dev 297
pull1D
Entries 85
Mean −0.001428
Std Dev 0.1126

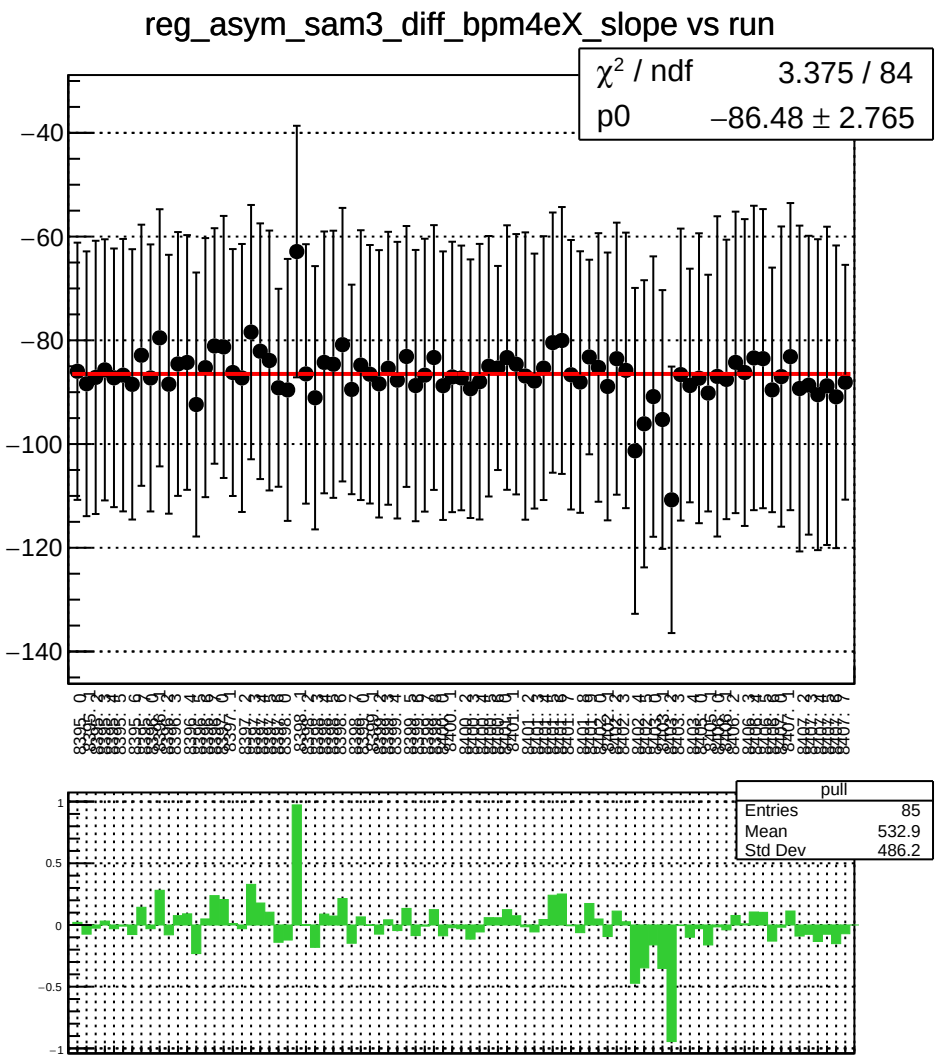

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 1.161 / 84
p0 −40.65 ± 7.837
pull
Entries 85
Mean 2319
Std Dev 2285

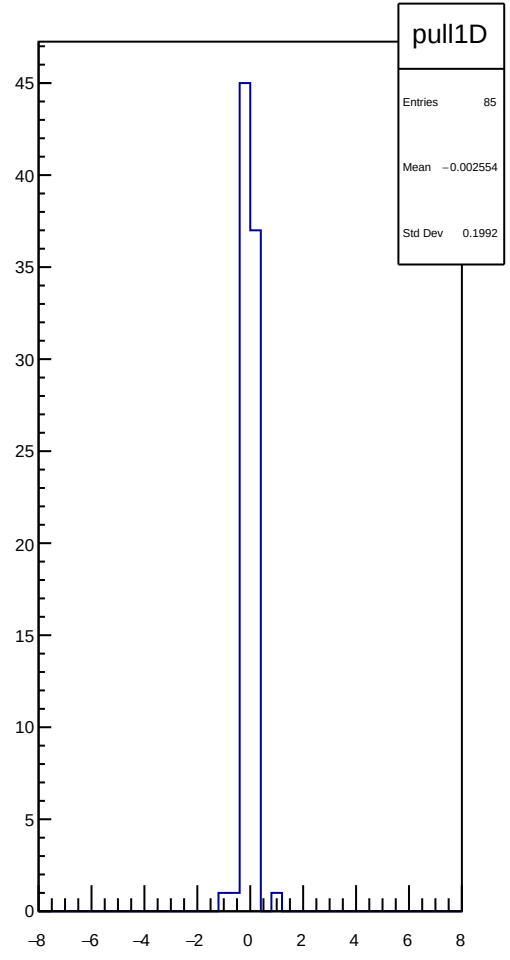

pull1D
Entries 85
Mean 0.0003463
Std Dev 0.1169

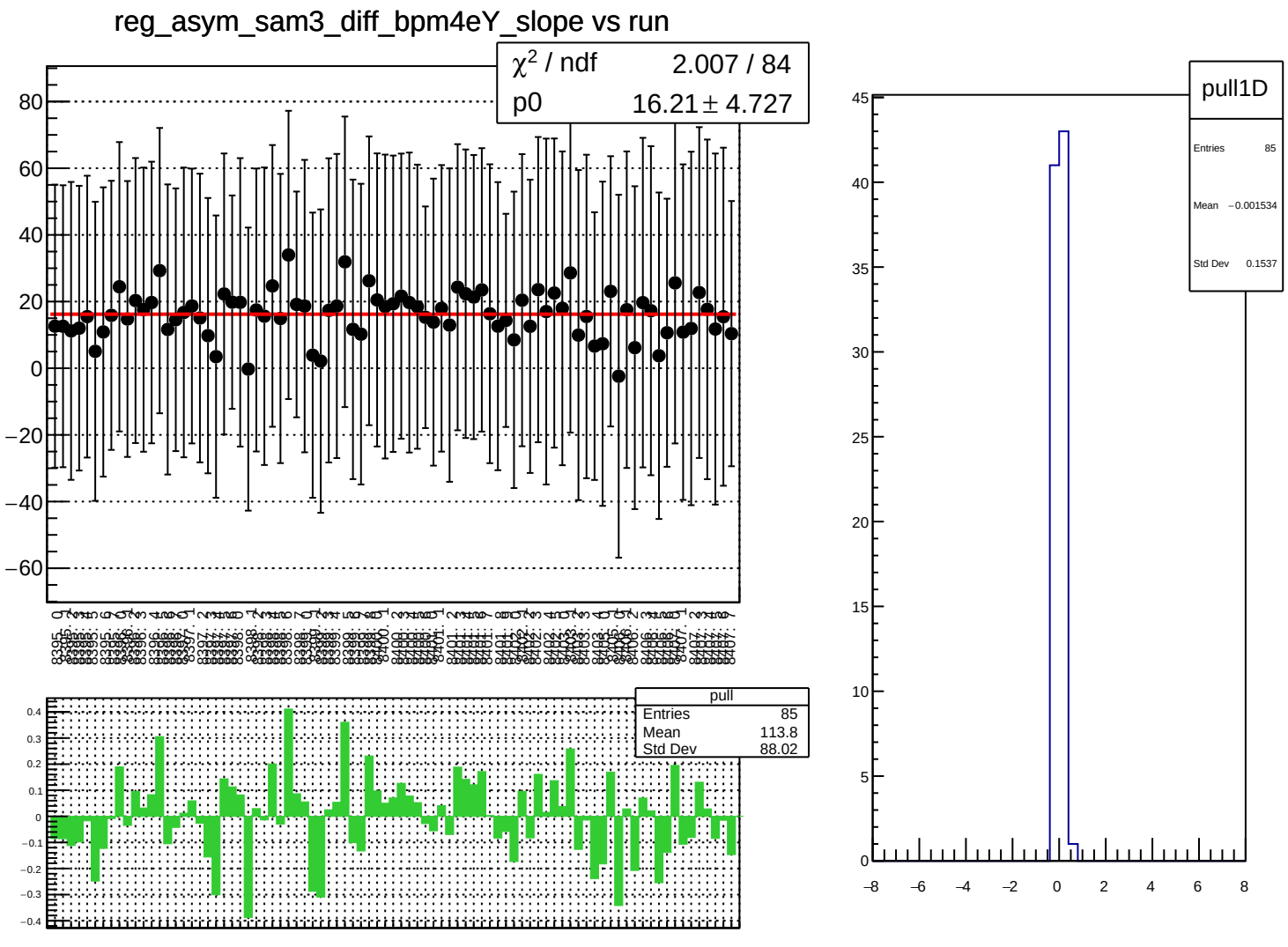

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 0.8802 / 84
p0 7.603 ± 0.4835
pull
Entries 85
Mean 306
Std Dev 278.4
pull1D
Entries 85
Mean 0.001951
Std Dev 0.1017

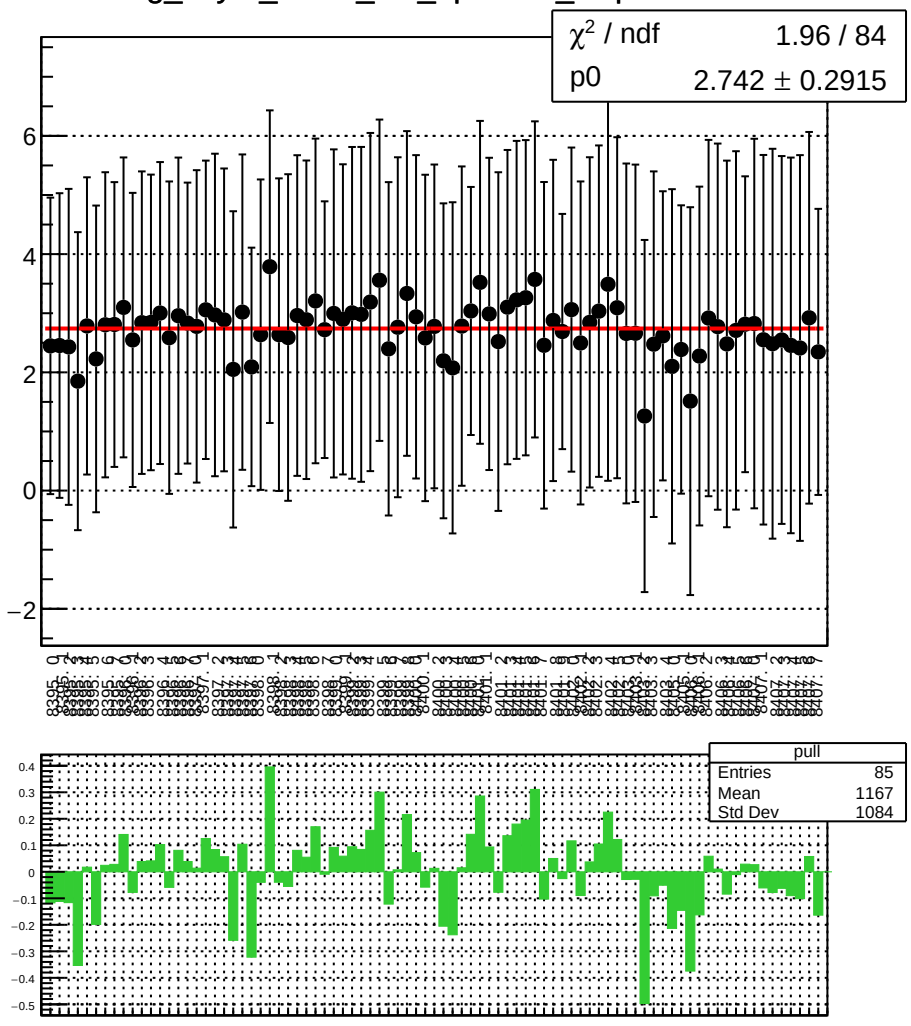

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 3.156 / 84
p0 −35.89 ± 2.491
pull
Entries 85
Mean −294.7
Std Dev 337.9
pull1D
Entries 85
Mean −0.00183
Std Dev 0.1927

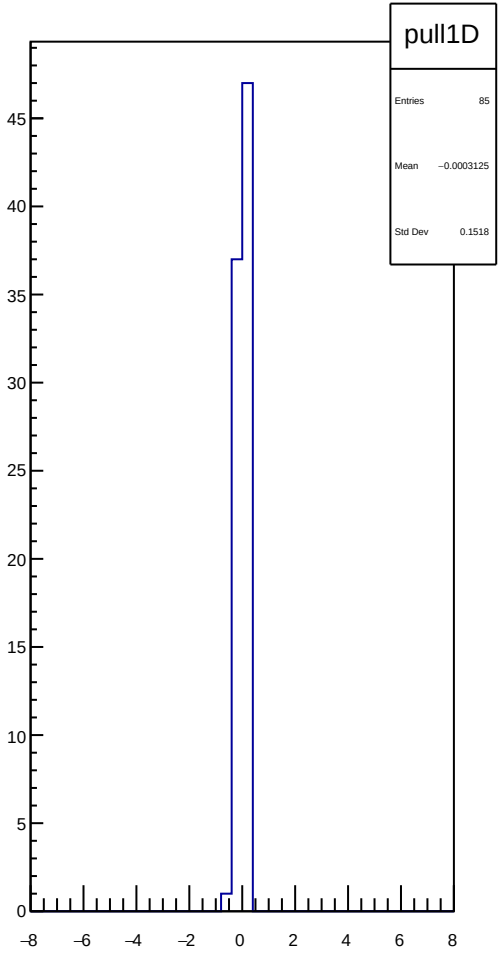

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 1.986 / 84
p0 1.366 ± 4.525
pull
Entries 85
Mean 116.5
Std Dev 71.32
pull1D
Entries 85
Mean 0.001732
Std Dev 0.1529

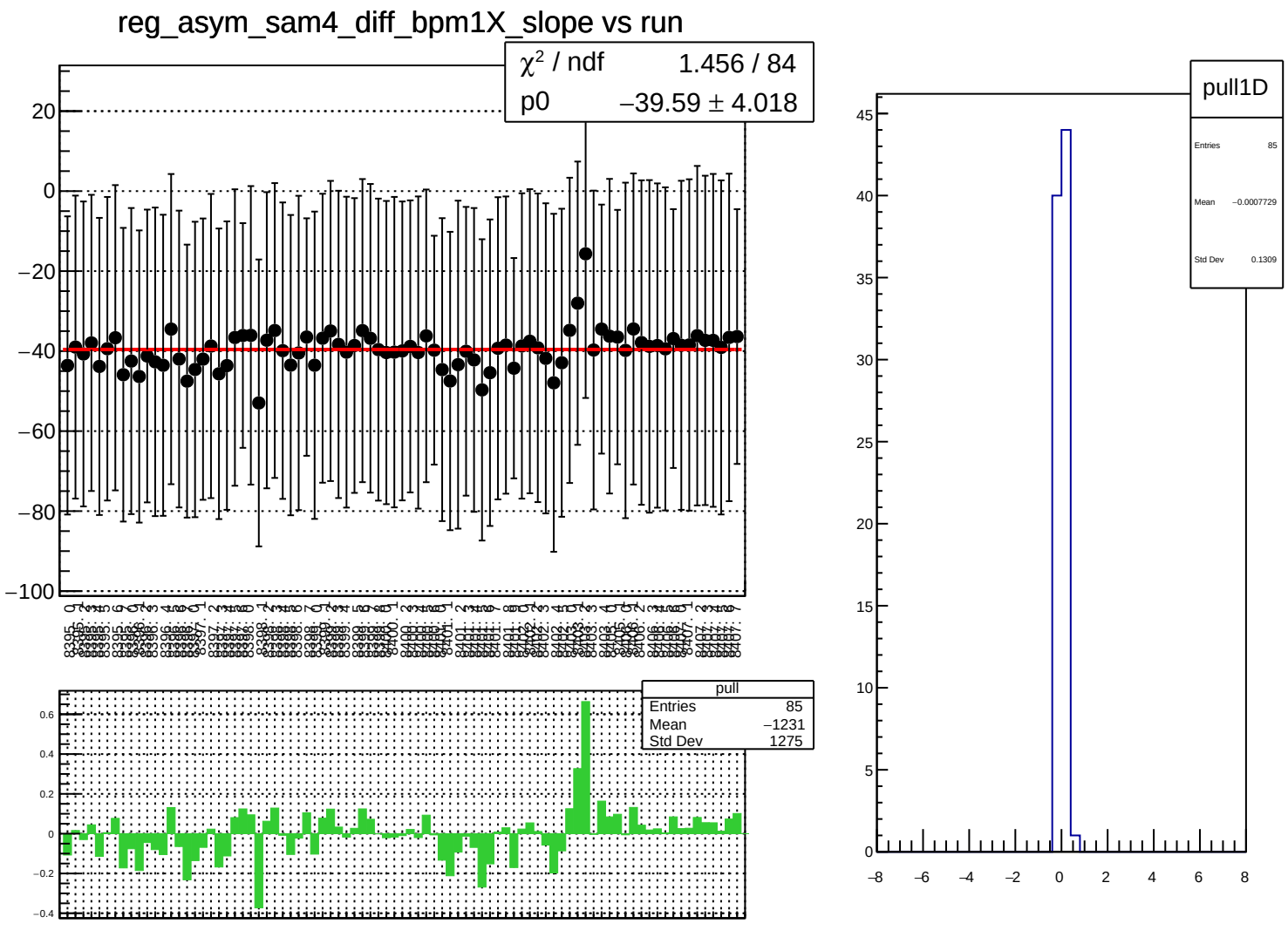

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 3.375 / 84
p0 −86.48 ± 2.765
pull
Entries 85
Mean 532.9
Std Dev 486.2

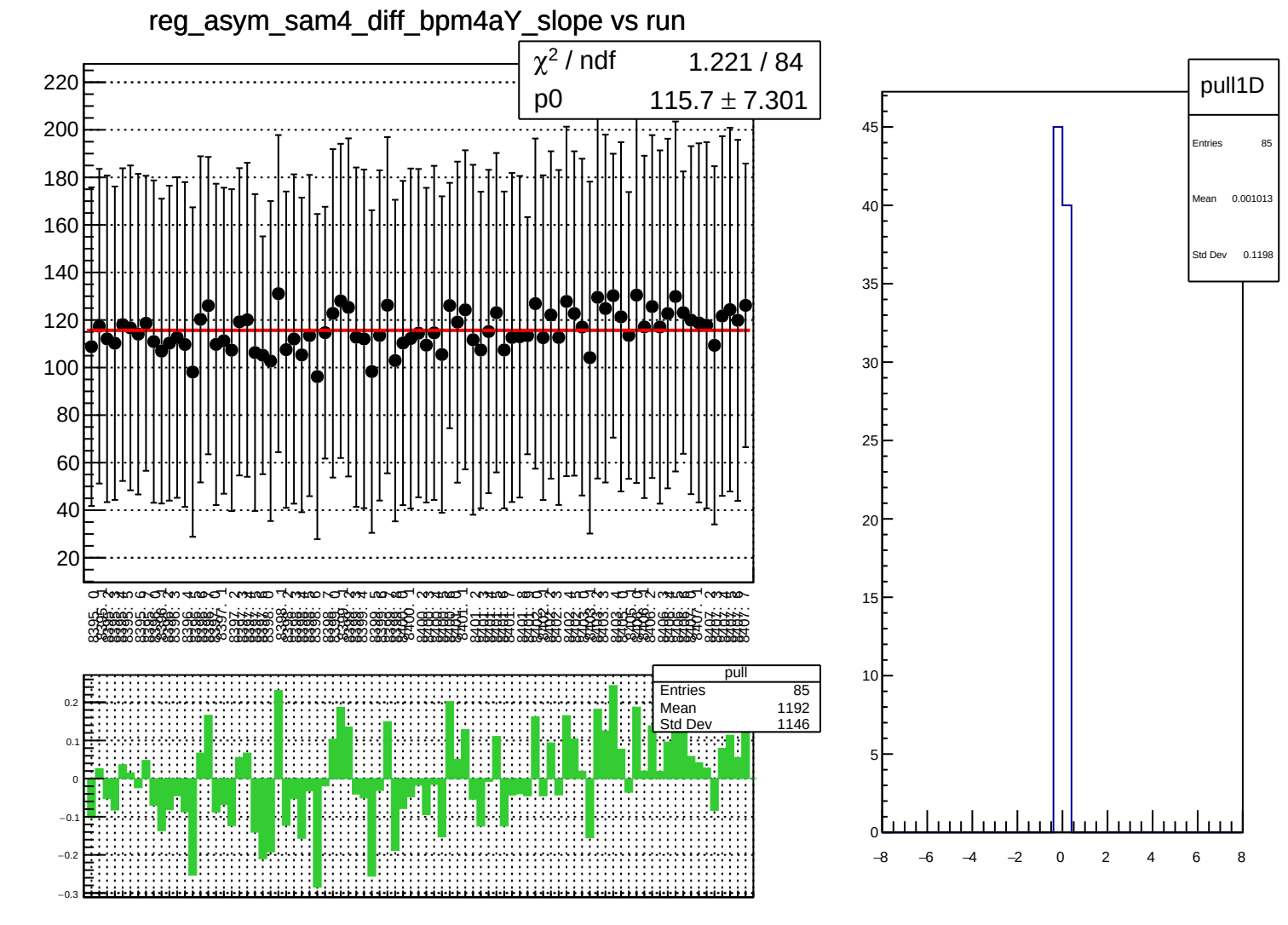

pull1D
Entries 85
Mean −0.002554
Std Dev 0.1992

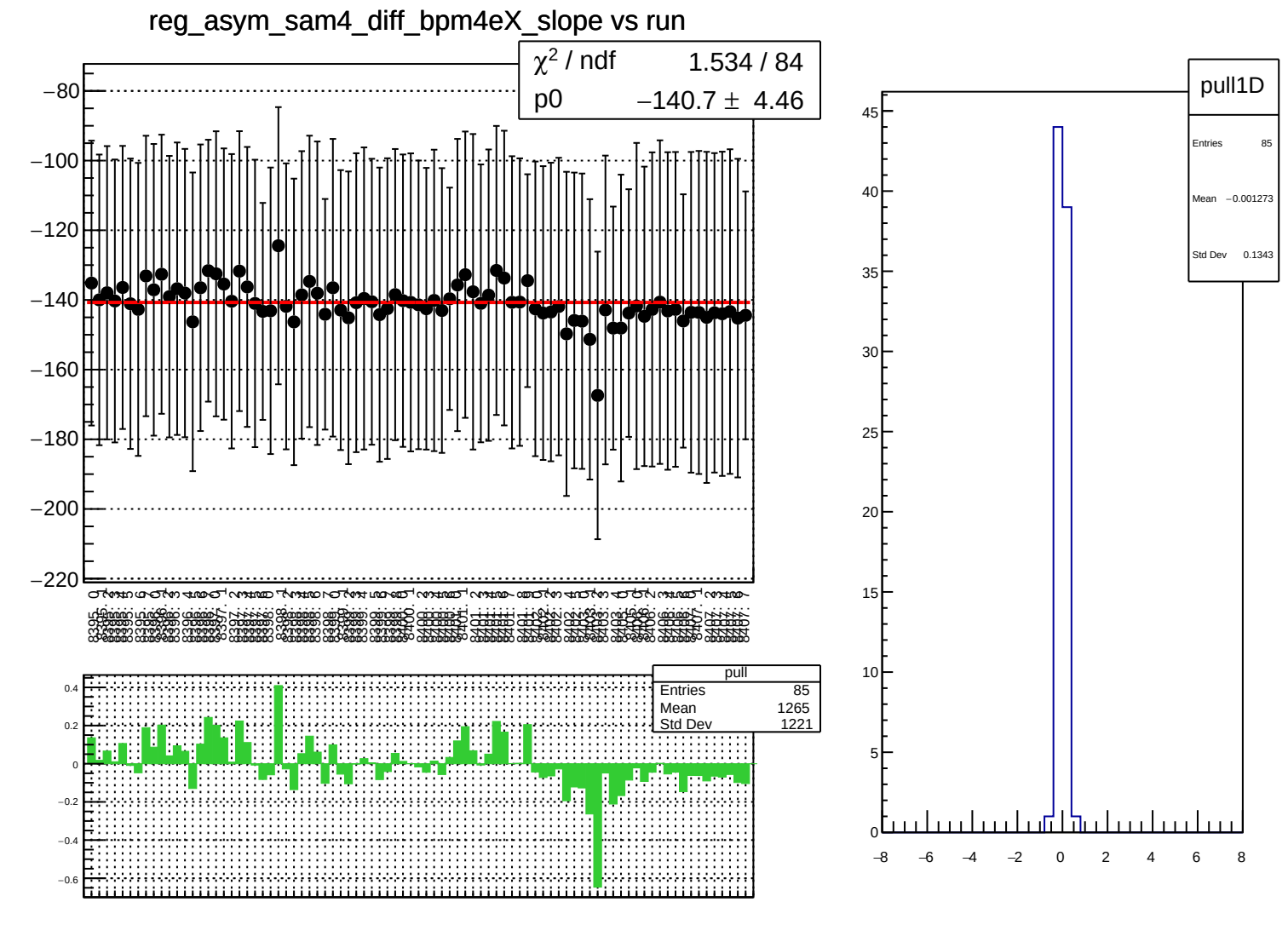

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 2.007 / 84
p0 16.21 ± 4.727
pull
Entries 85
Mean 113.8
Std Dev 88.02
pull1D
Entries 85
Mean −0.001534
Std Dev 0.1537

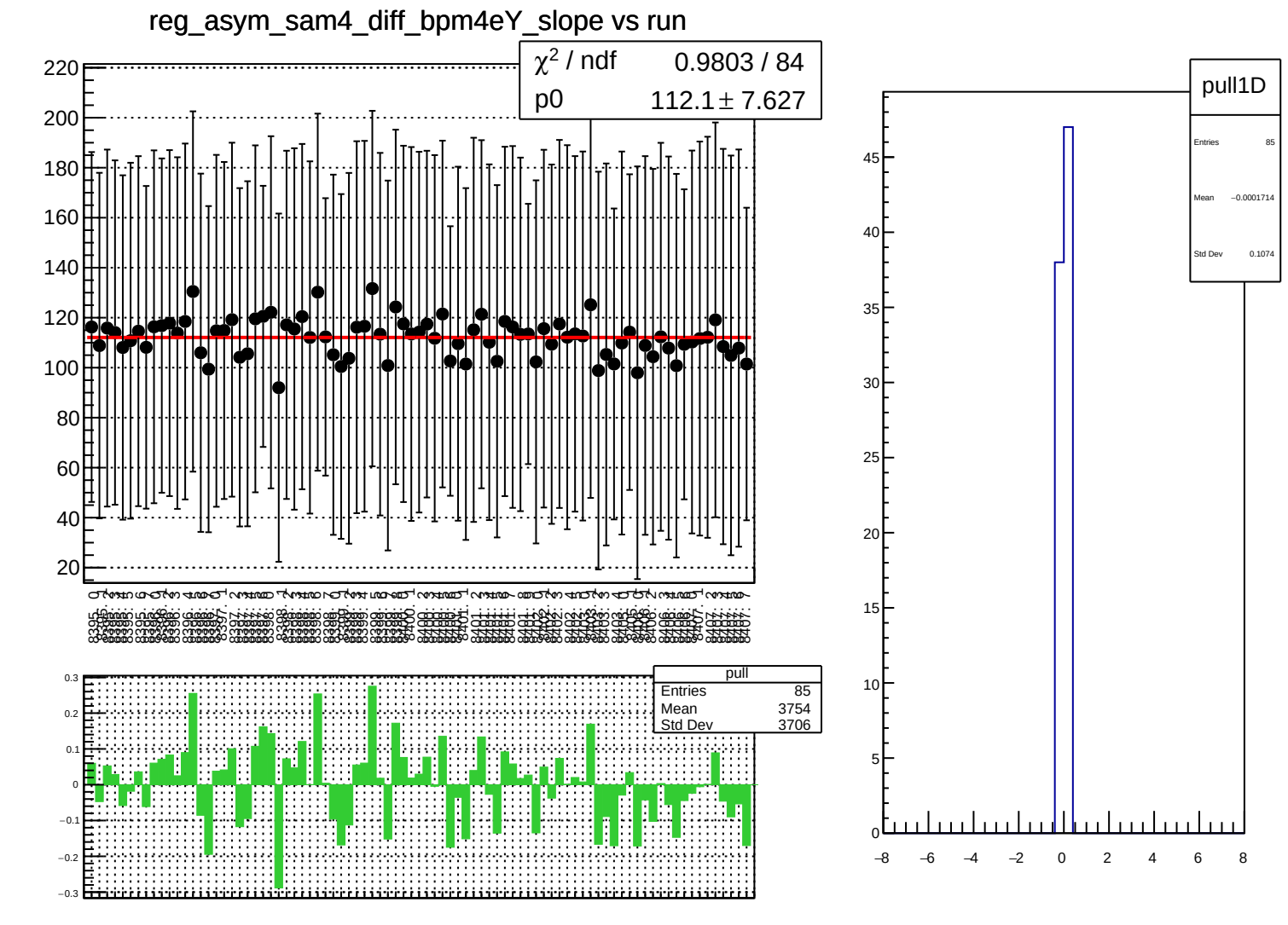

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 1.96 / 84
p0 2.742 ± 0.2915
pull
Entries 85
Mean 1167
Std Dev 1084

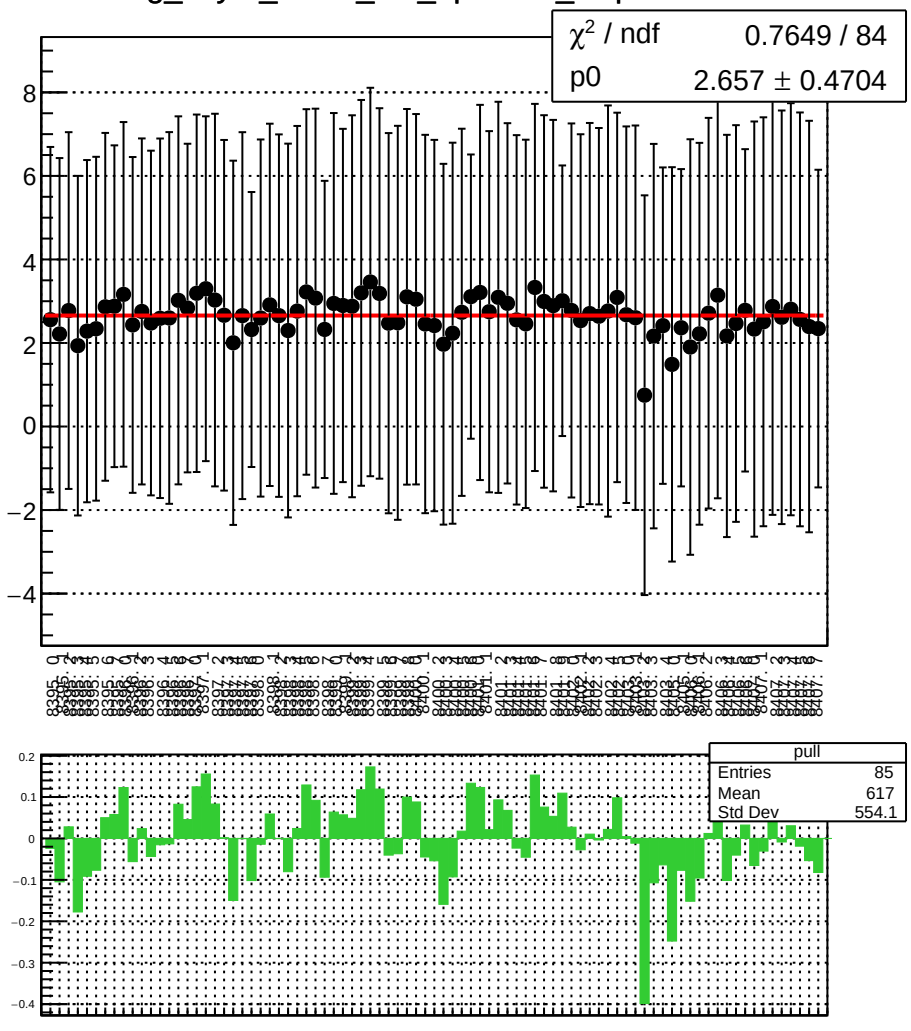

pull1D
Entries 85
Mean −0.0003125
Std Dev 0.1518

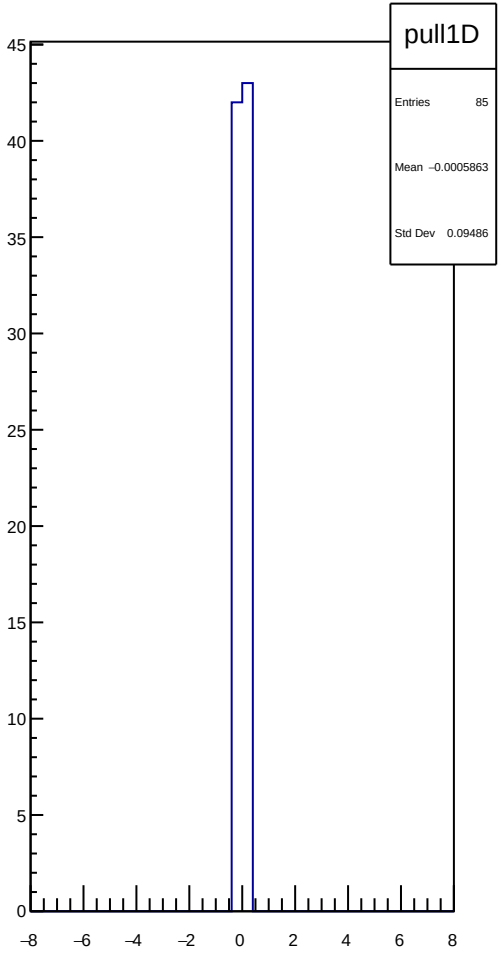

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 1.456 / 84
p0 −39.59 ± 4.018
pull
Entries 85
Mean −1231
Std Dev 1275
pull1D
Entries 85
Mean −0.0007729
Std Dev 0.1309

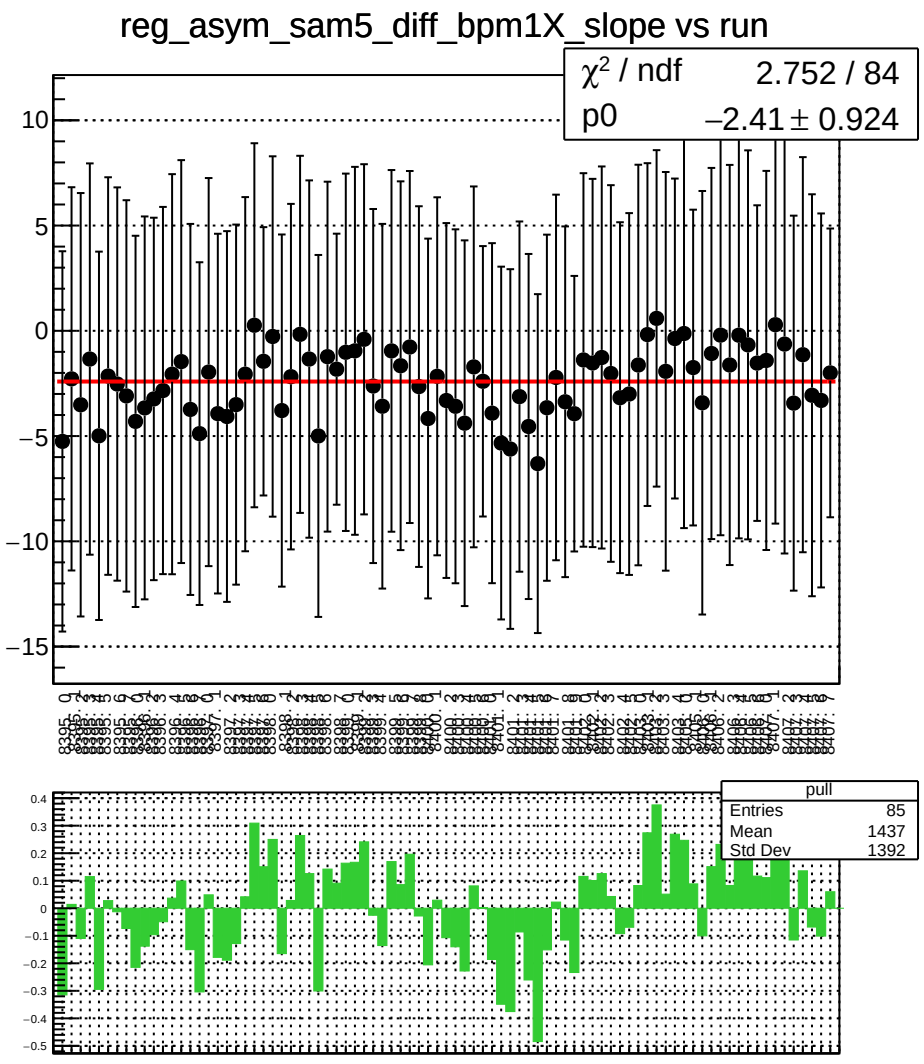

reg_asym_sam4_diff_bpm4aY_slope vs run
χ^2 / ndf 1.221 / 84
p0 115.7 ± 7.301
pull
Entries 85
Mean 1192
Std Dev 1146
pull1D
Entries 85
Mean 0.001013
Std Dev 0.1198

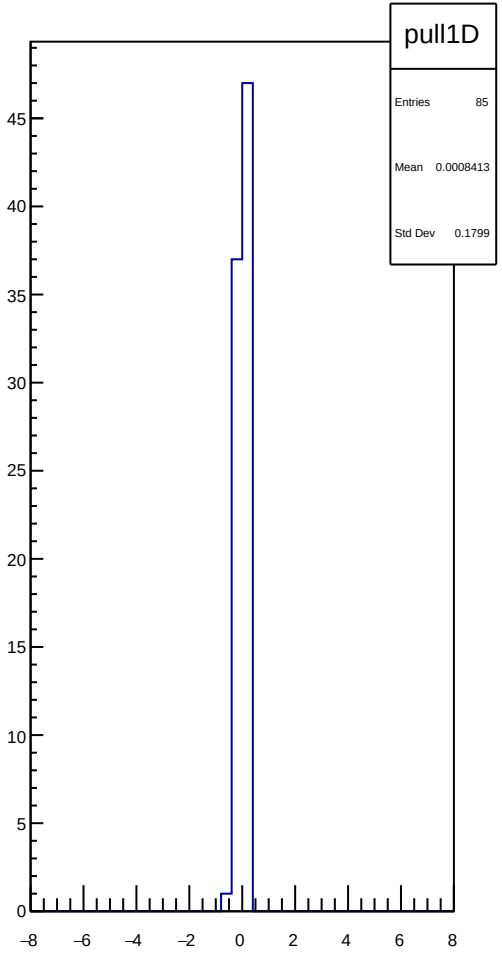

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 1.534 / 84
p0 −140.7 ± 4.46
pull
Entries 85
Mean 1265
Std Dev 1221
pull1D
Entries 85
Mean −0.001273
Std Dev 0.1343

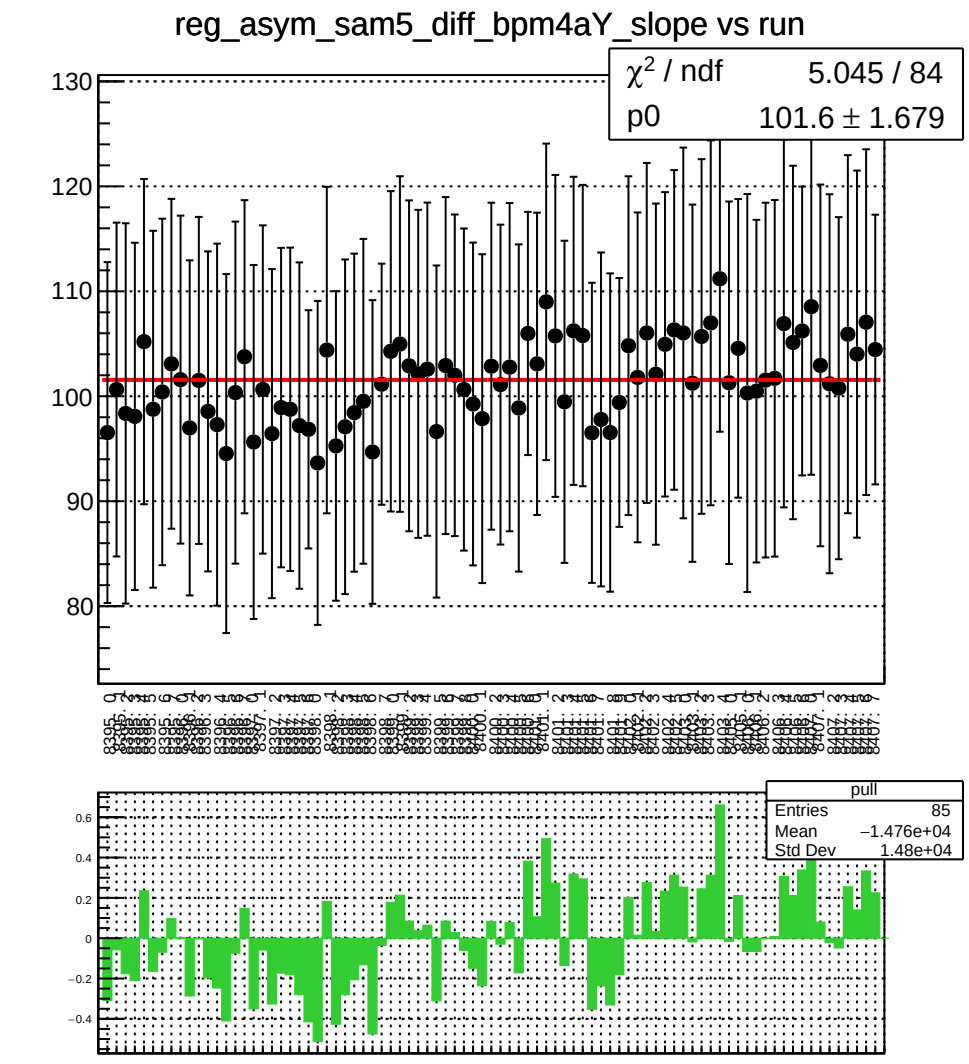

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 0.9803 / 84
p0 112.1 ± 7.627
pull
Entries 85
Mean 3754
Std Dev 3706
pull1D
Entries 85
Mean −0.0001714
Std Dev 0.1074

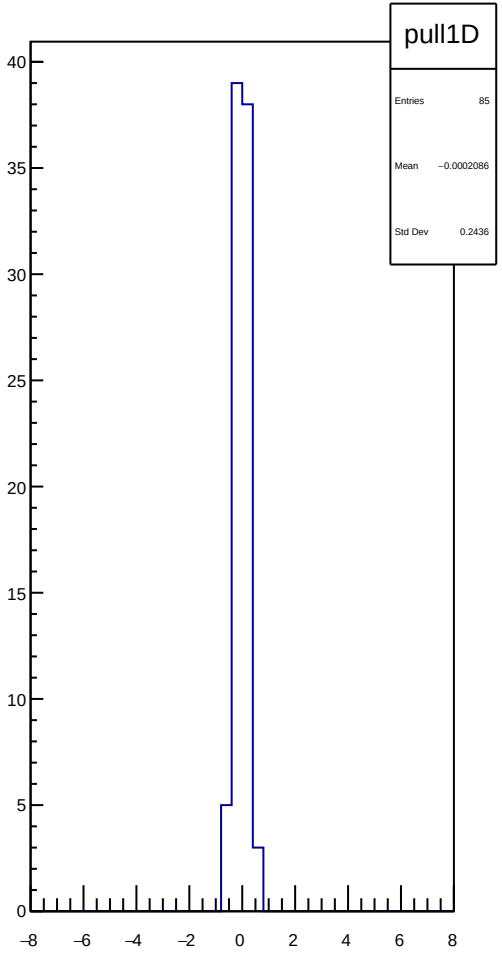

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 0.7649 / 84
p0 2.657 ± 0.4704
pull
Entries 85
Mean 617
Std Dev 554.1

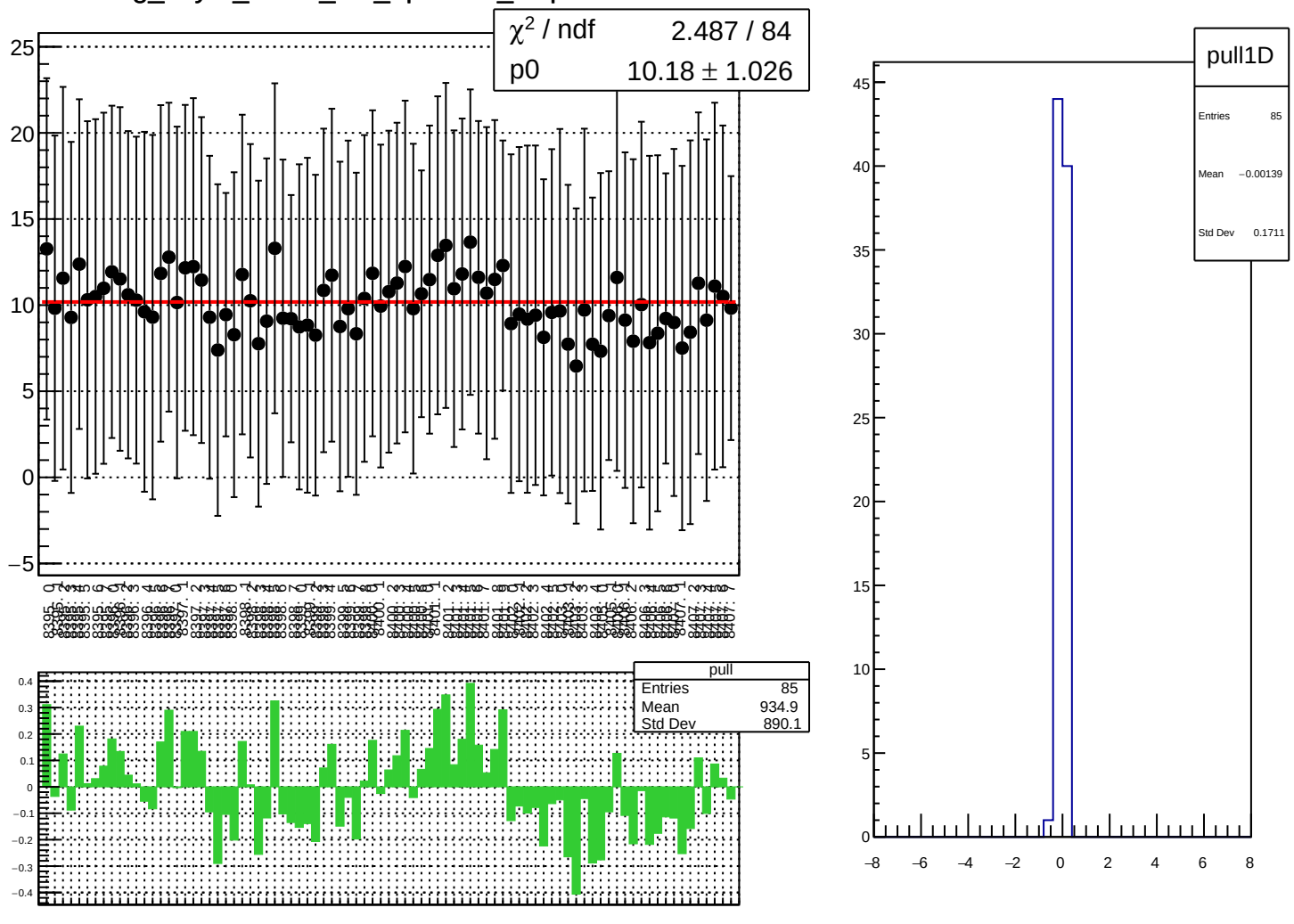

pull1D
Entries 85
Mean −0.0005863
Std Dev 0.09486

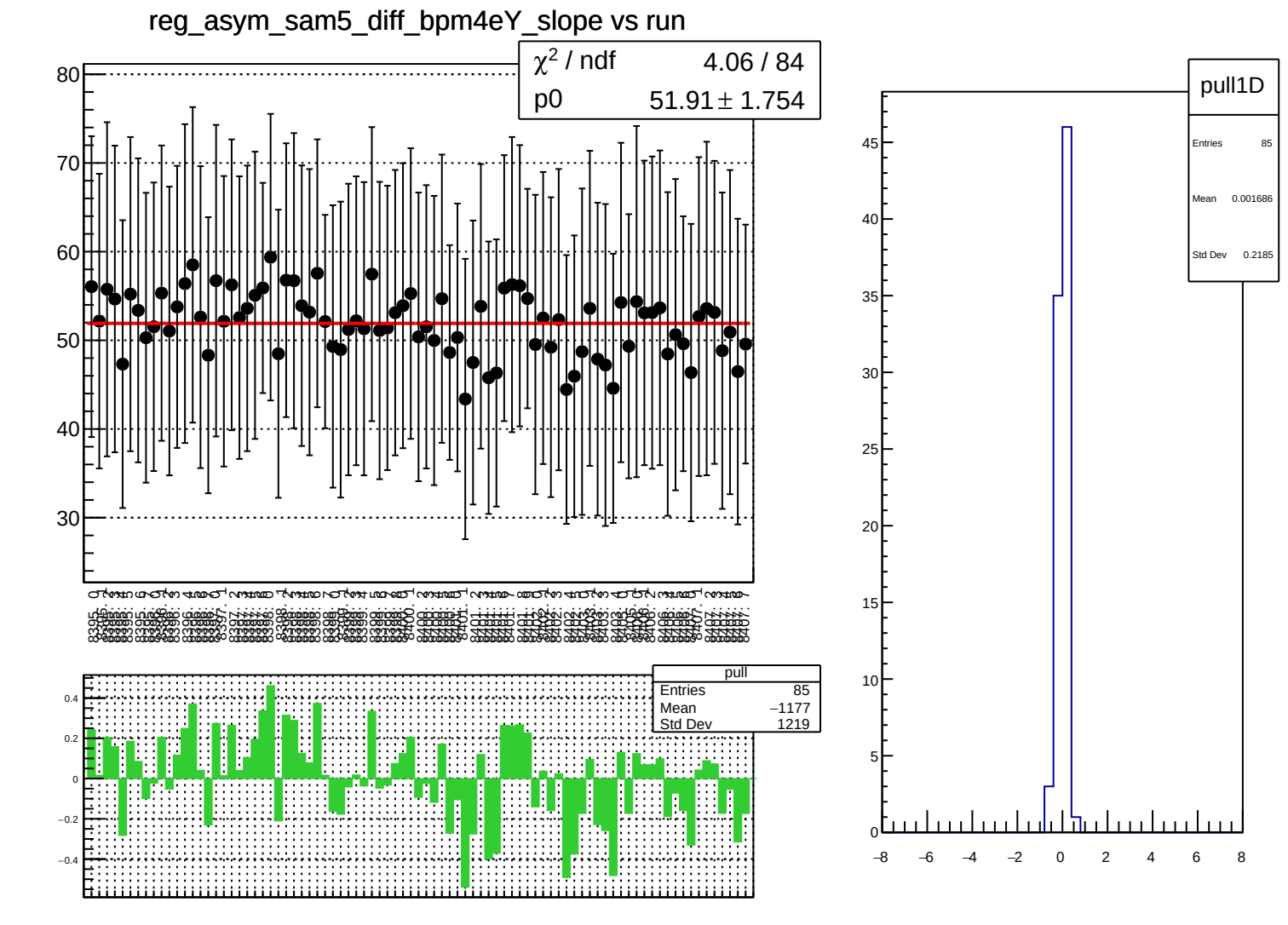

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 2.752 / 84
p0 −2.41 ± 0.924
pull
Entries 85
Mean 1437
Std Dev 1392

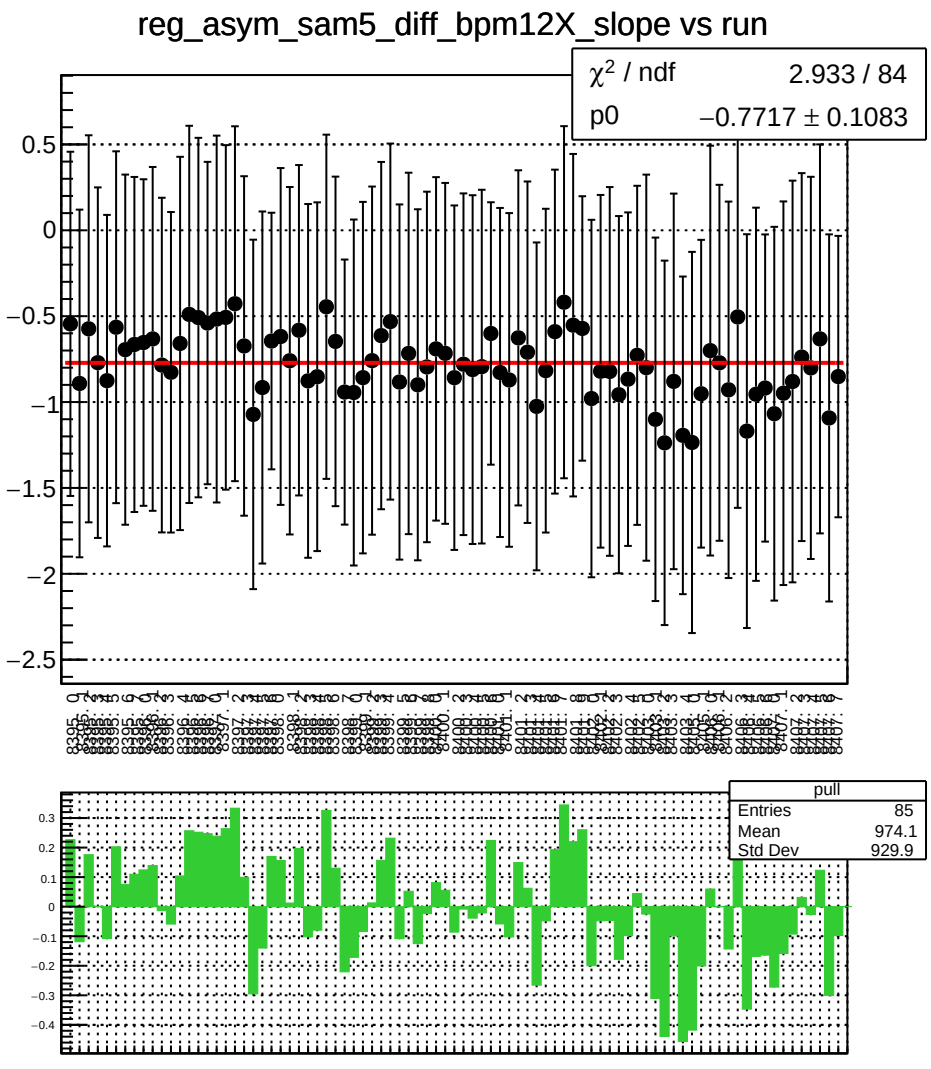

pull1D
Entries 85
Mean 0.0008413
Std Dev 0.1799

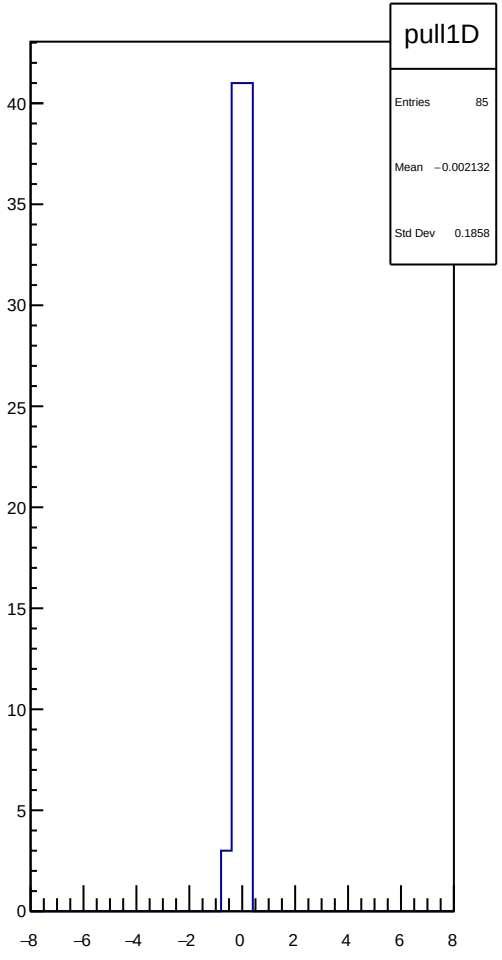

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 5.045 / 84
p0 101.6 ± 1.679
pull
Entries 85
Mean −1.476e+04
Std Dev 1.48e+04

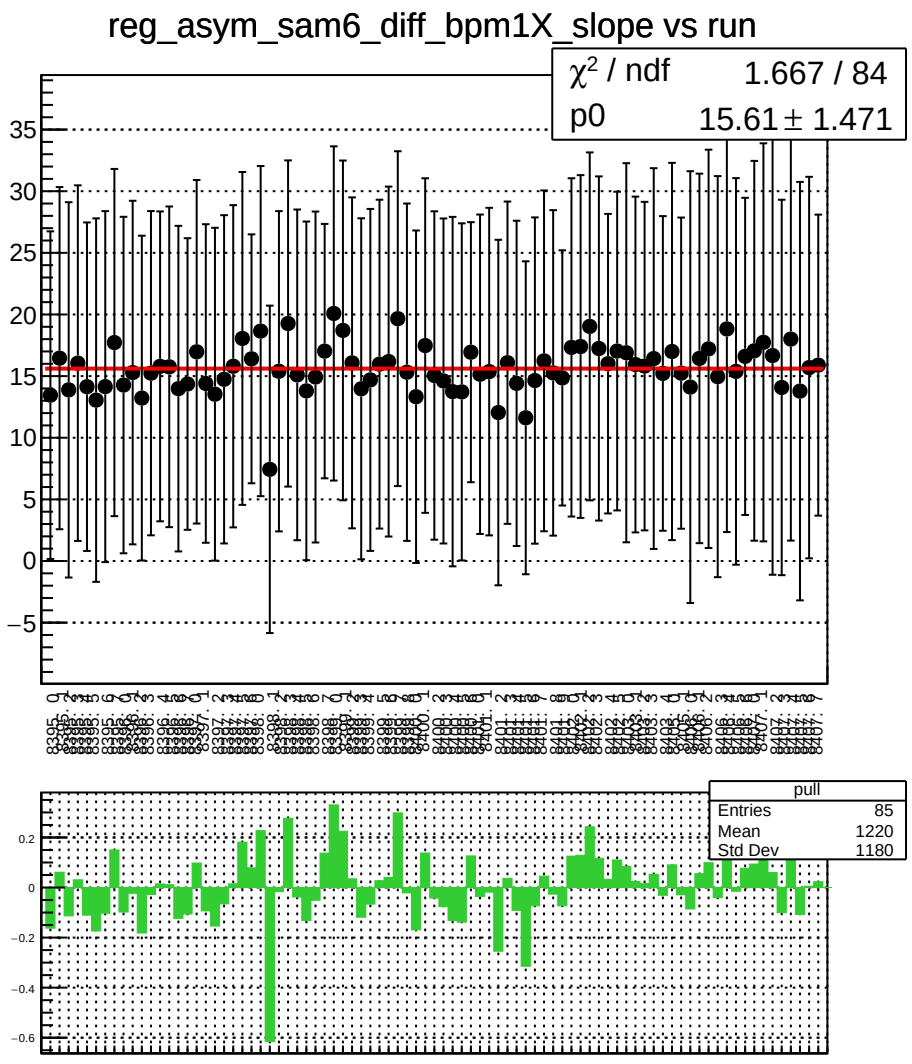

pull1D
Entries 85
Mean −0.0002086
Std Dev 0.2436

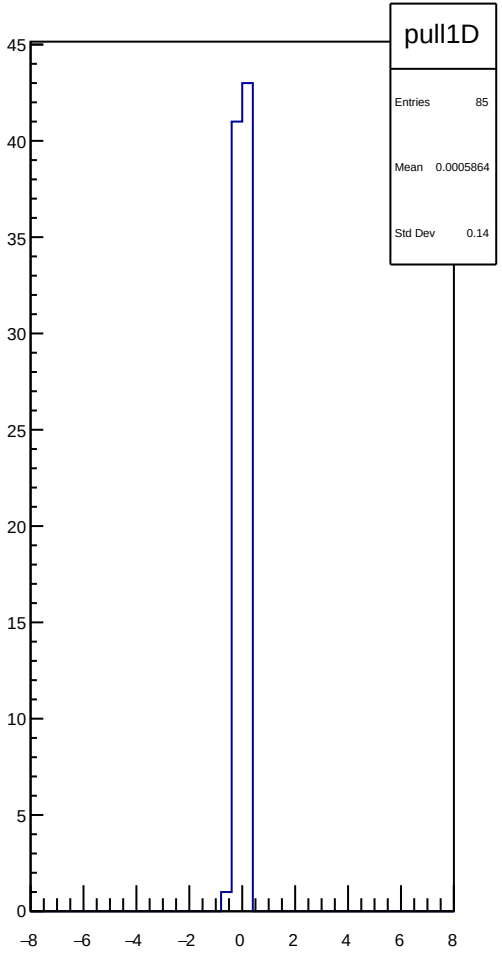

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 2.487 / 84
p0 10.18 ± 1.026
pull
Entries 85
Mean 934.9
Std Dev 890.1
pull1D
Entries 85
Mean −0.00139
Std Dev 0.1711

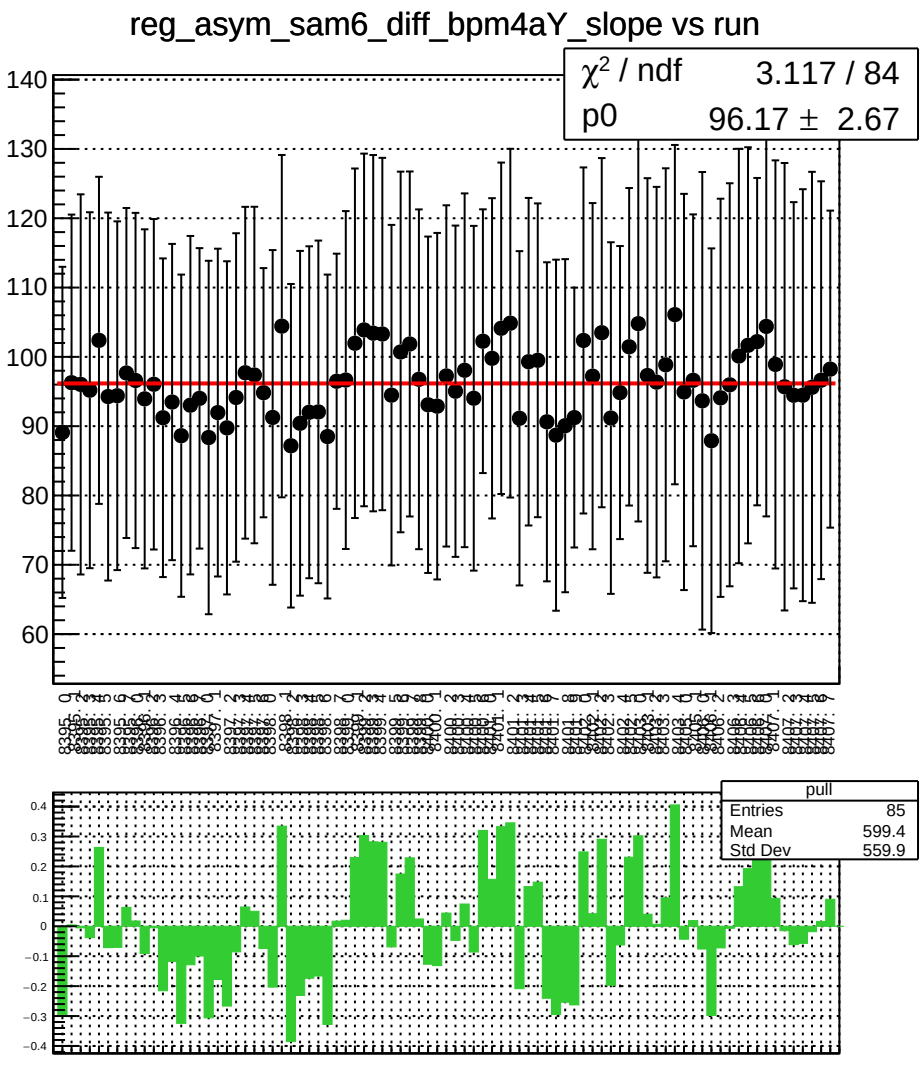

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 4.06 / 84
p0 51.91 ± 1.754
pull
Entries 85
Mean −1177
Std Dev 1219
pull1D
Entries 85
Mean 0.001686
Std Dev 0.2185

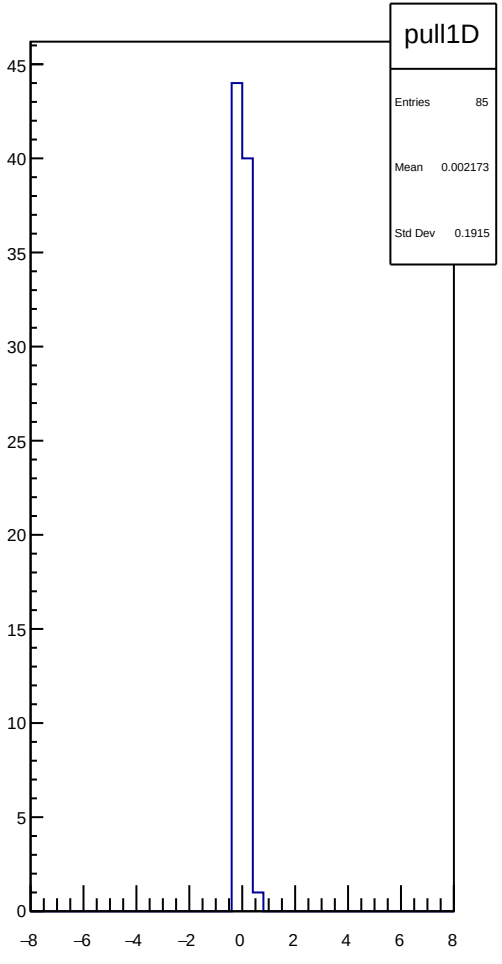

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 2.933 / 84
p0 −0.7717 ± 0.1083
pull
Entries 85
Mean 974.1
Std Dev 929.9

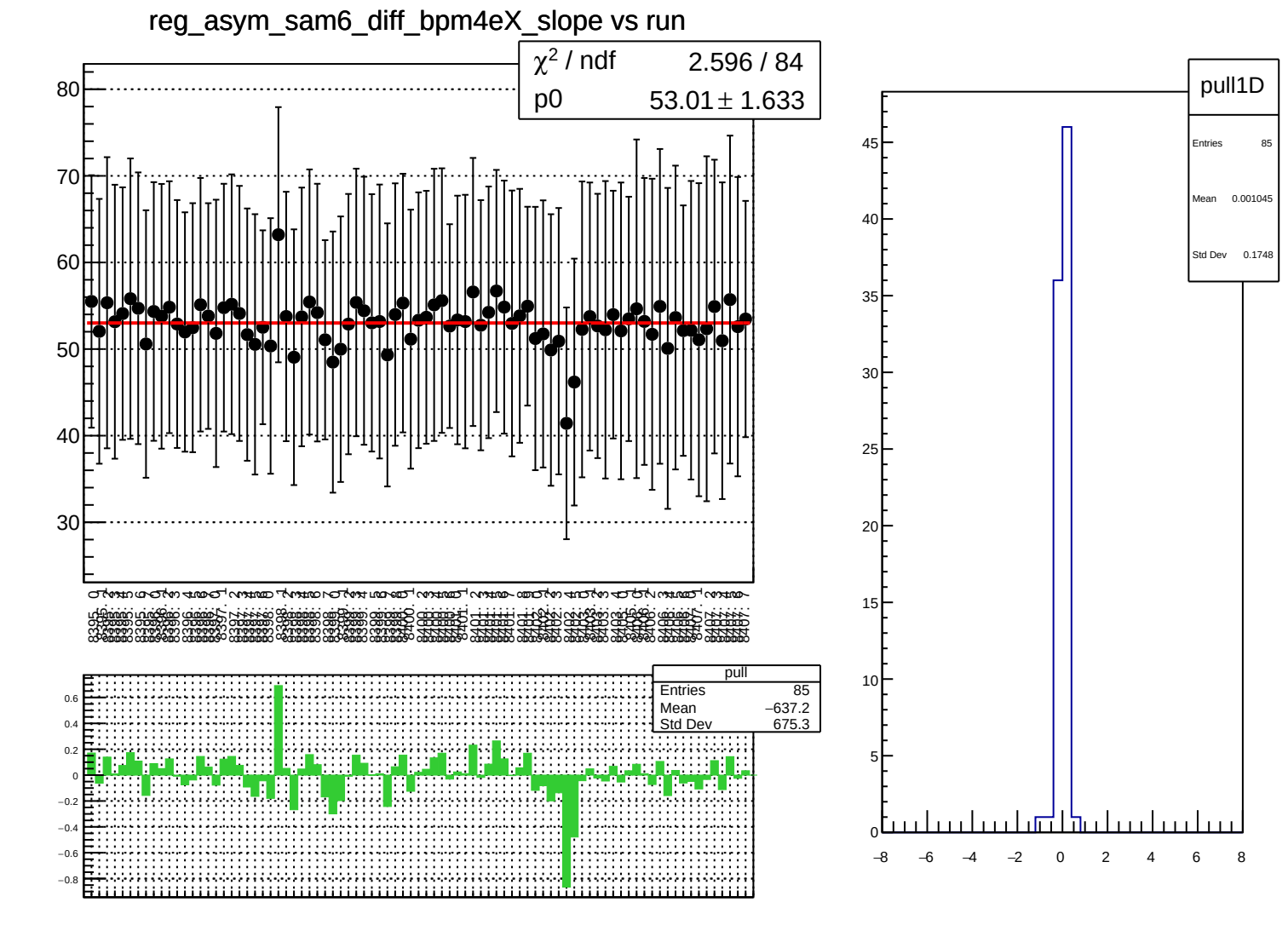

pull1D
Entries 85
Mean −0.002132
Std Dev 0.1858

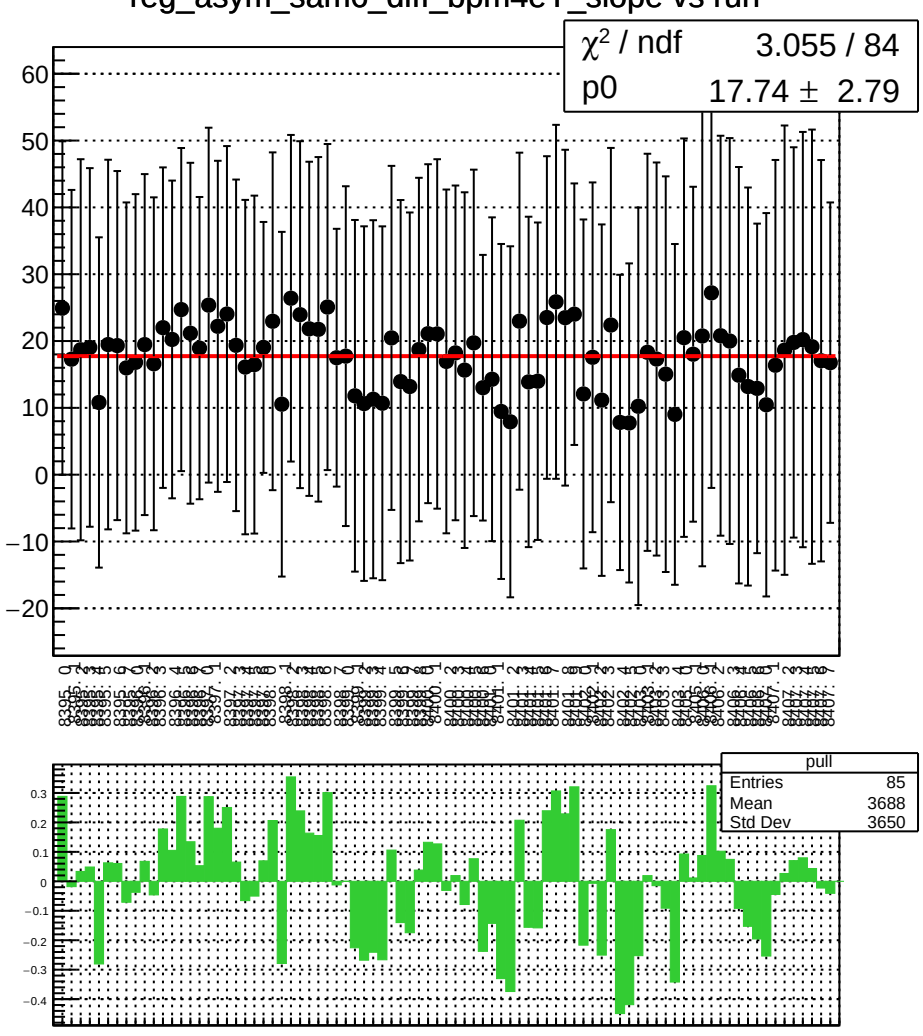

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 1.667 / 84
p0 15.61 ± 1.471
pull
Entries 85
Mean 1220
Std Dev 1180

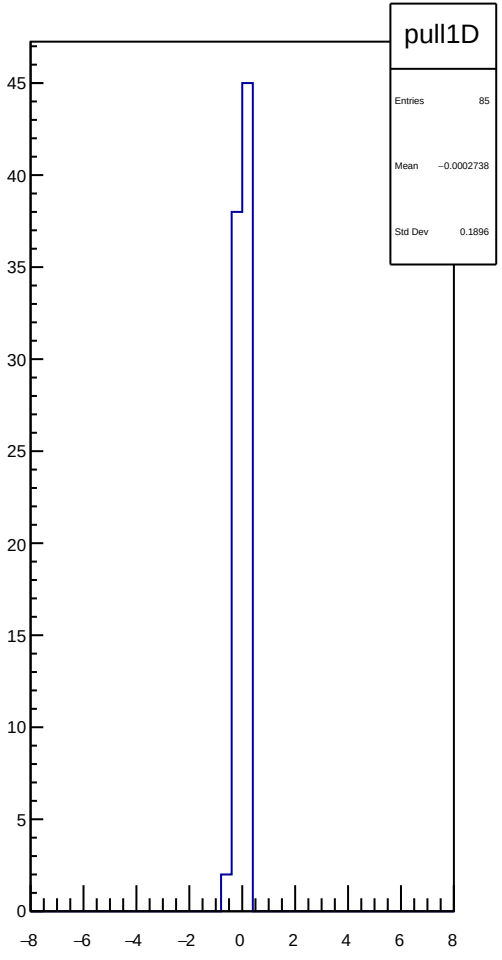

pull1D
Entries 85
Mean 0.0005864
Std Dev 0.14

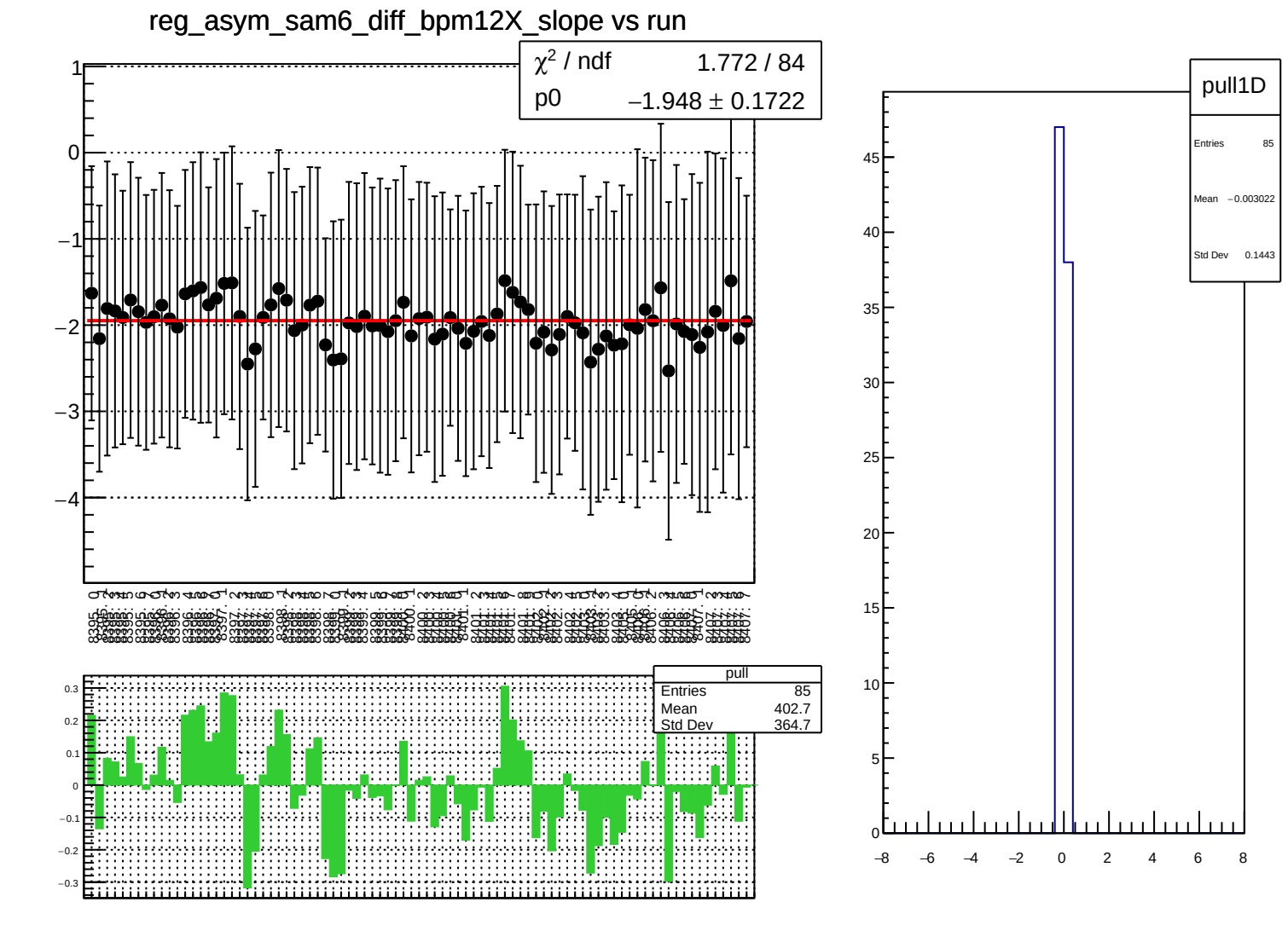

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 3.117 / 84
p0 96.17 ± 2.67
pull
Entries 85
Mean 599.4
Std Dev 559.9

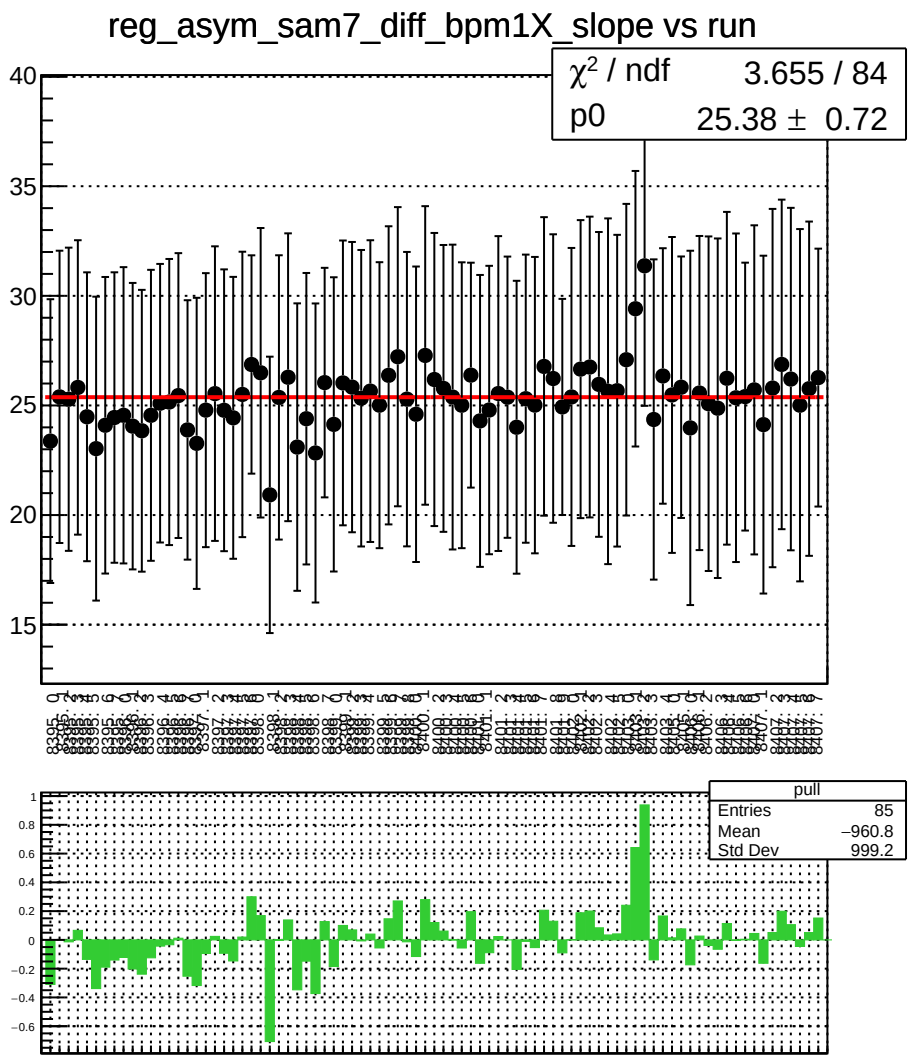

pull1D
Entries 85
Mean 0.002173
Std Dev 0.1915

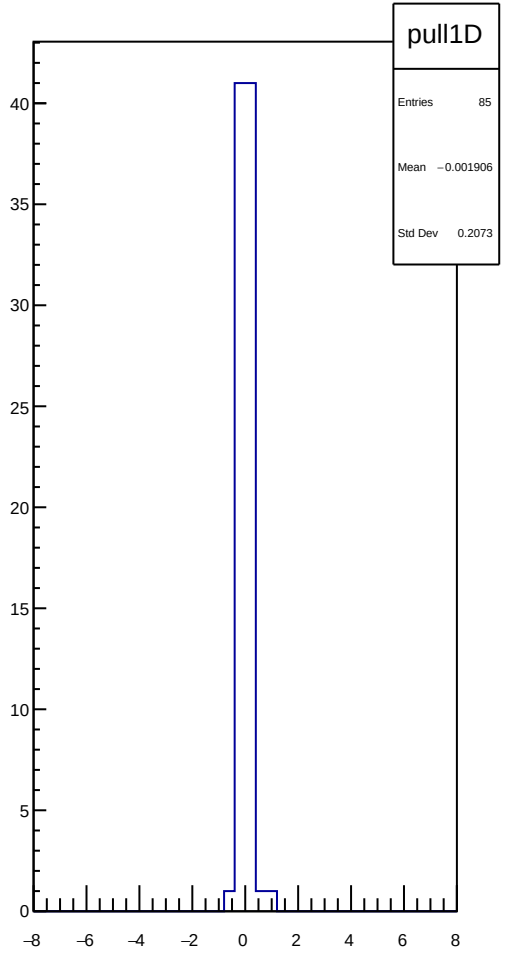

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 2.596 / 84
p0 53.01 ± 1.633
pull
Entries 85
Mean −637.2
Std Dev 675.3
pull1D
Entries 85
Mean 0.001045
Std Dev 0.1748

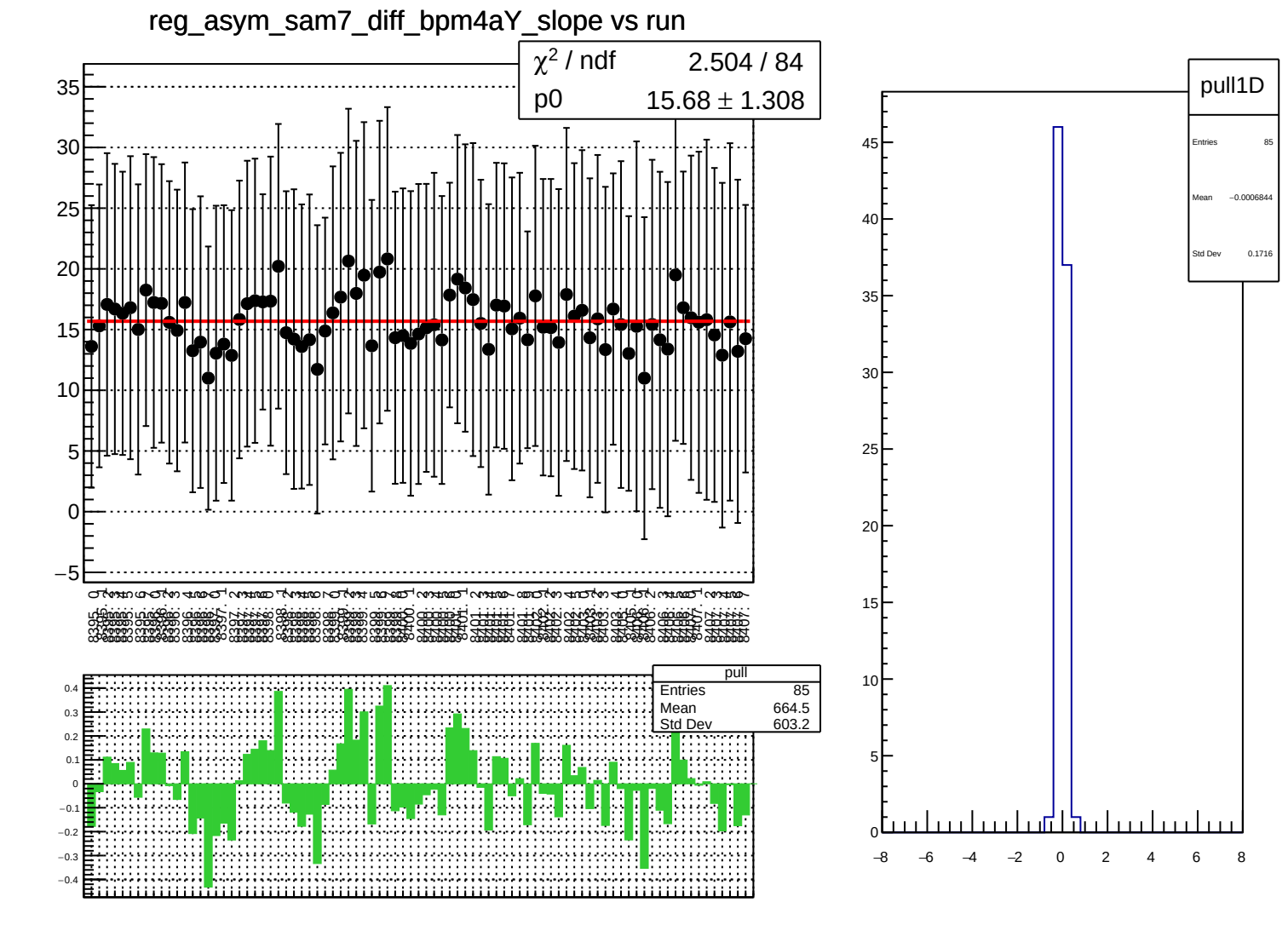

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 3.055 / 84
p0 17.74 ± 2.79
pull
Entries 85
Mean 3688
Std Dev 3650

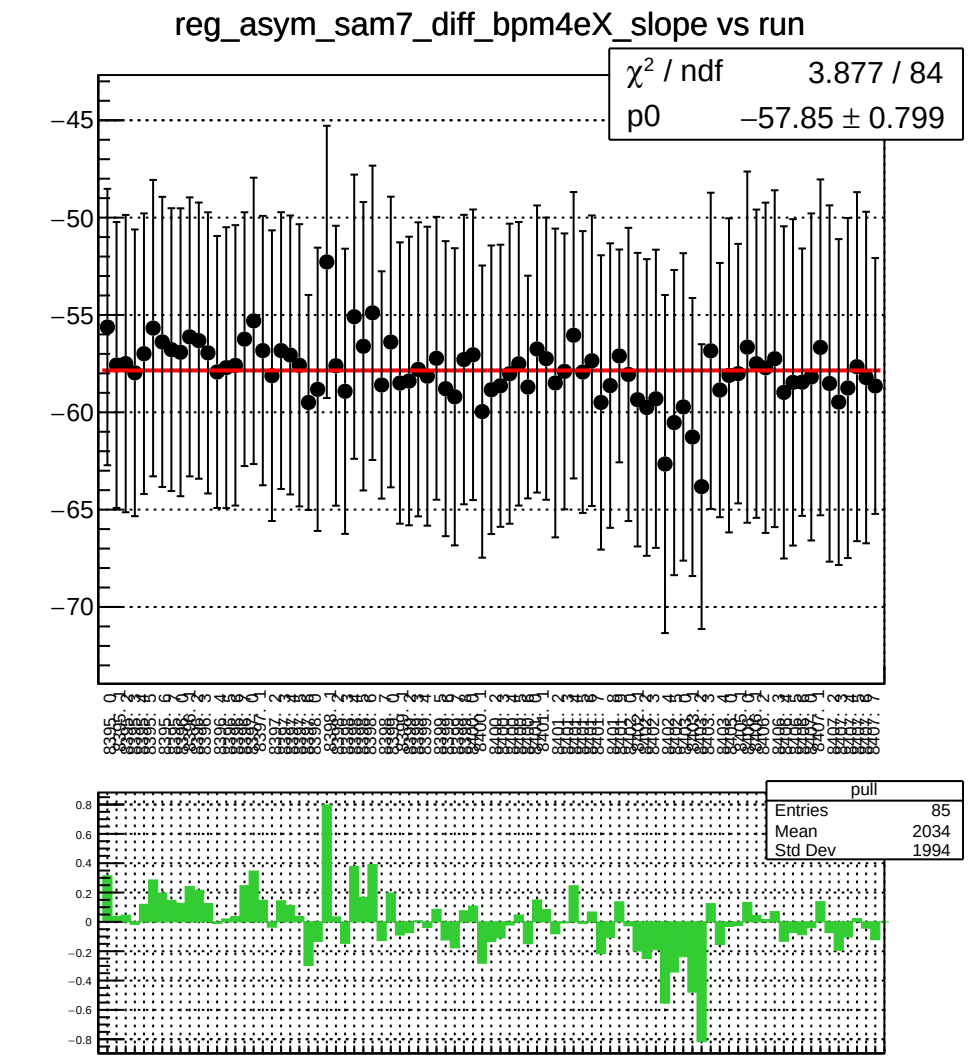

pull1D
Entries 85
Mean −0.0002738
Std Dev 0.1896

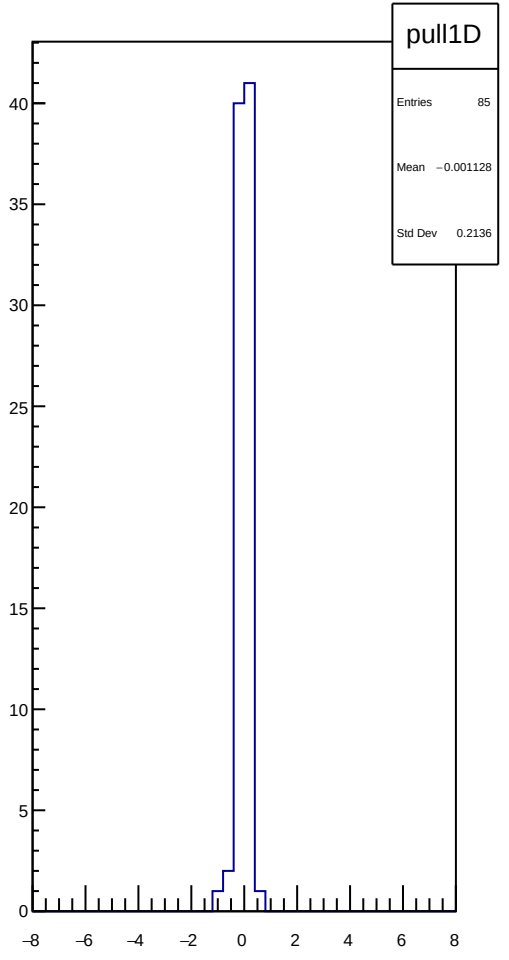

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 1.772 / 84
p0 −1.948 ± 0.1722
pull
Entries 85
Mean 402.7
Std Dev 364.7
pull1D
Entries 85
Mean −0.003022
Std Dev 0.1443

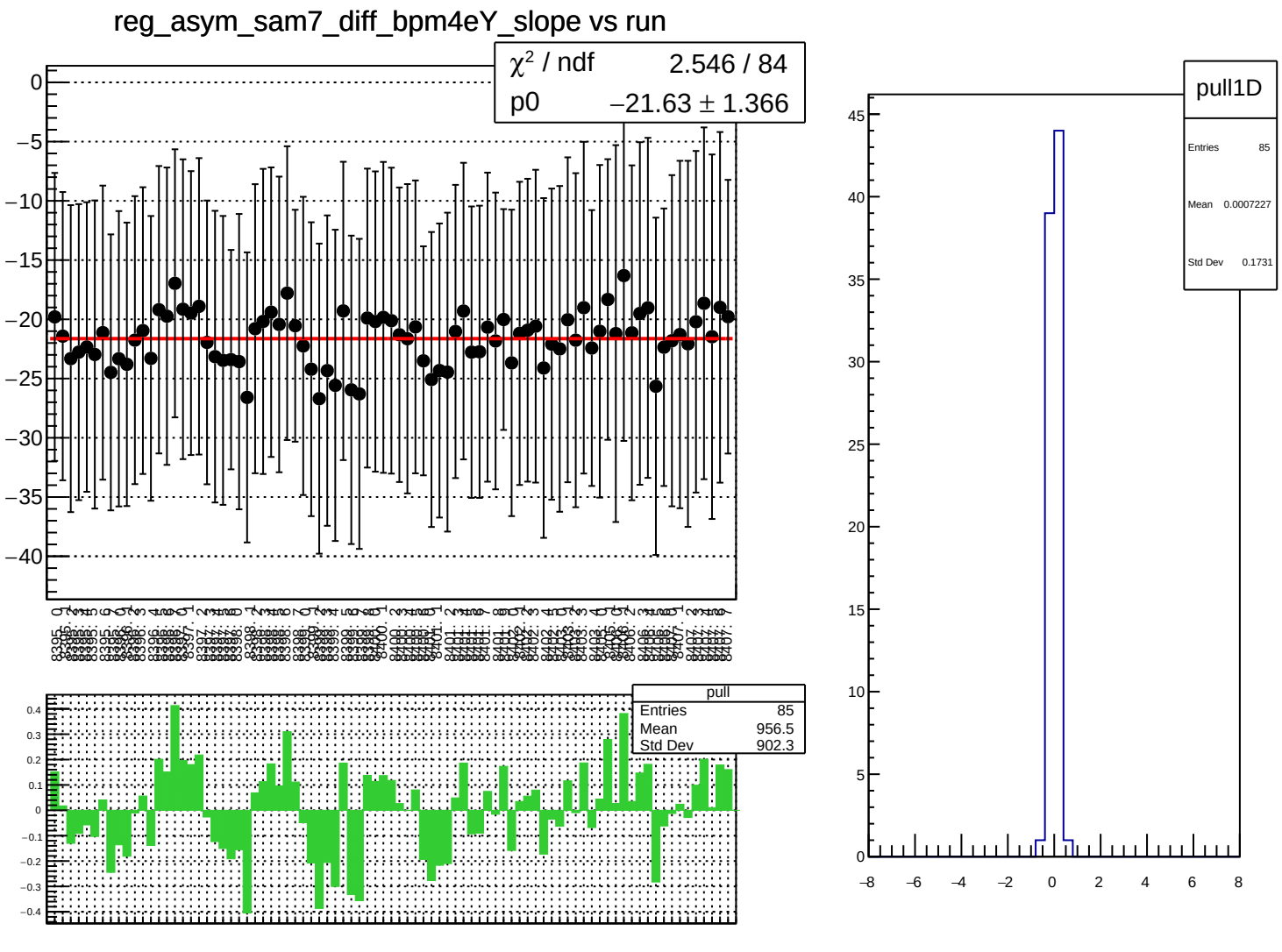

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 3.655 / 84
p0 25.38 ± 0.72
pull
Entries 85
Mean −960.8
Std Dev 999.2

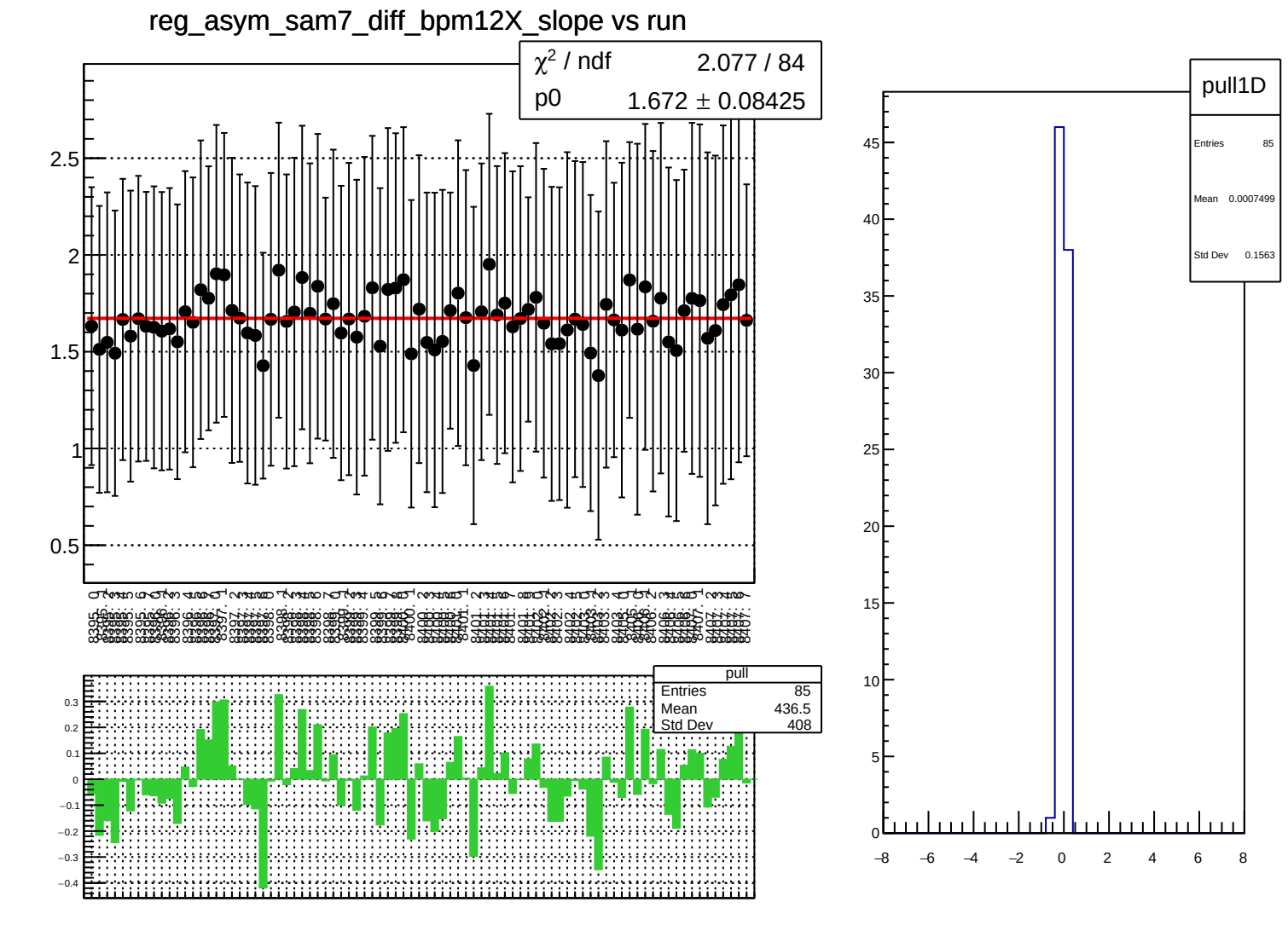

pull1D
Entries 85
Mean −0.001906
Std Dev 0.2073

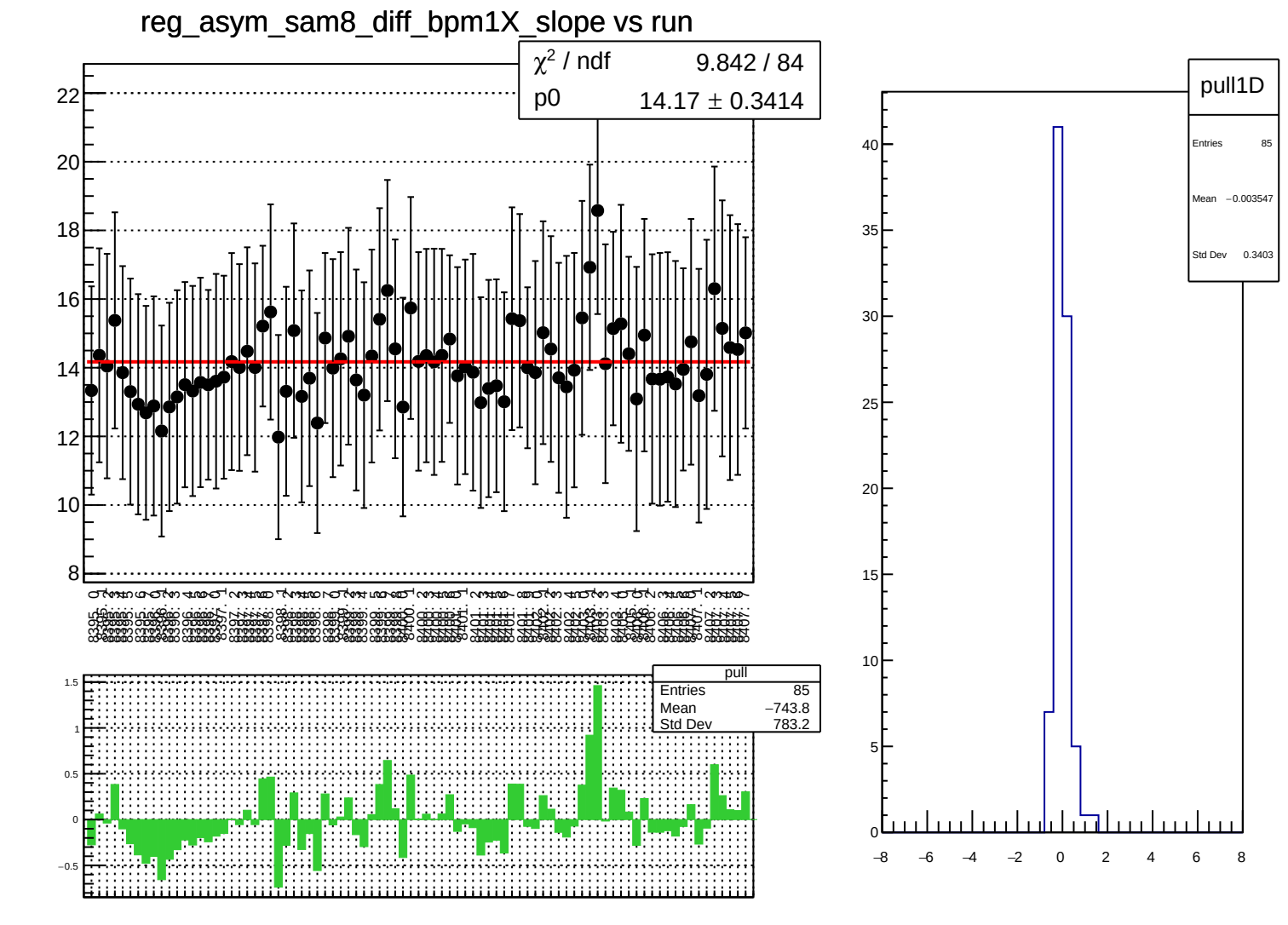

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 2.504 / 84
p0 15.68 ± 1.308
pull
Entries 85
Mean 664.5
Std Dev 603.2
pull1D
Entries 85
Mean −0.0006844
Std Dev 0.1716

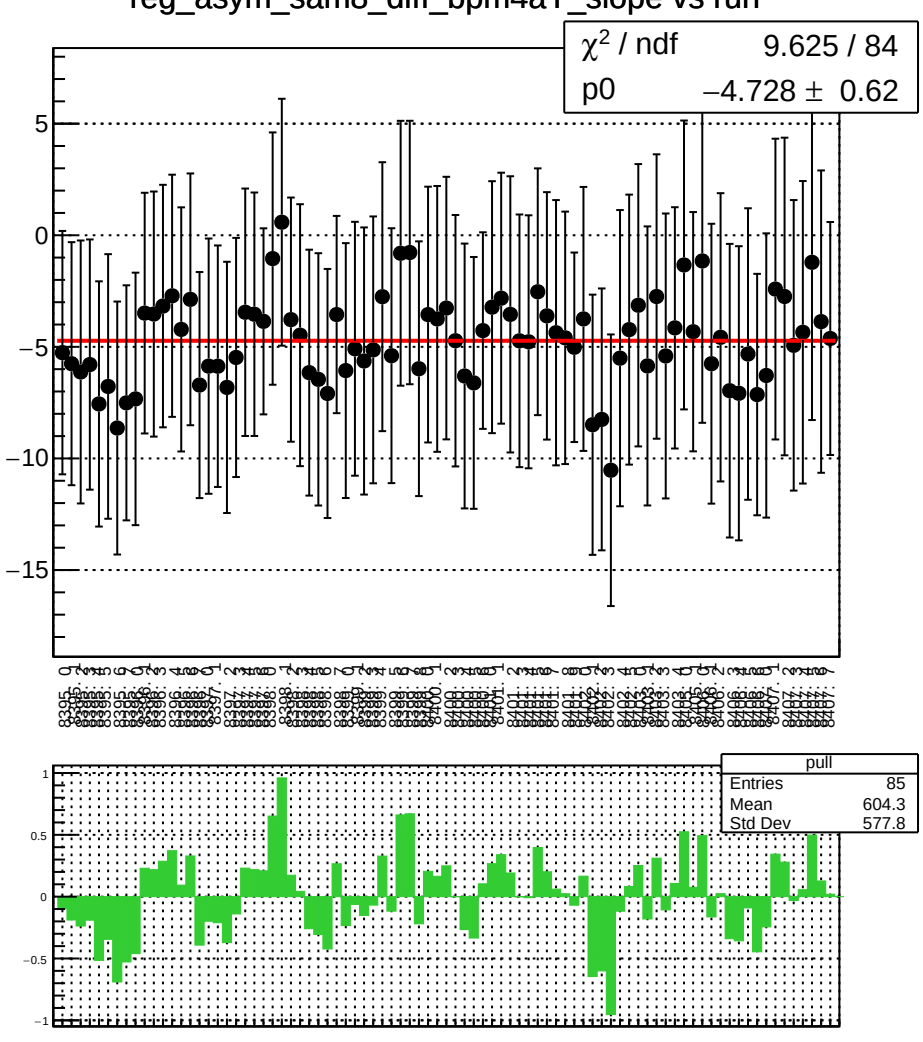

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 3.877 / 84
p0 −57.85 ± 0.799
−45
−50
−55
−60
−65
−70
pull
Entries 85
Mean 2034
Std Dev 1994
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

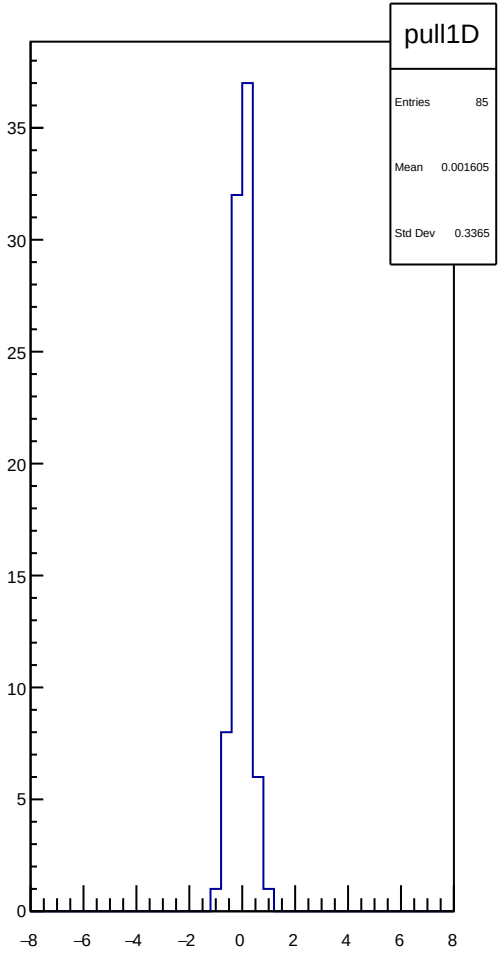

pull1D
Entries 85
Mean −0.001128
Std Dev 0.2136
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

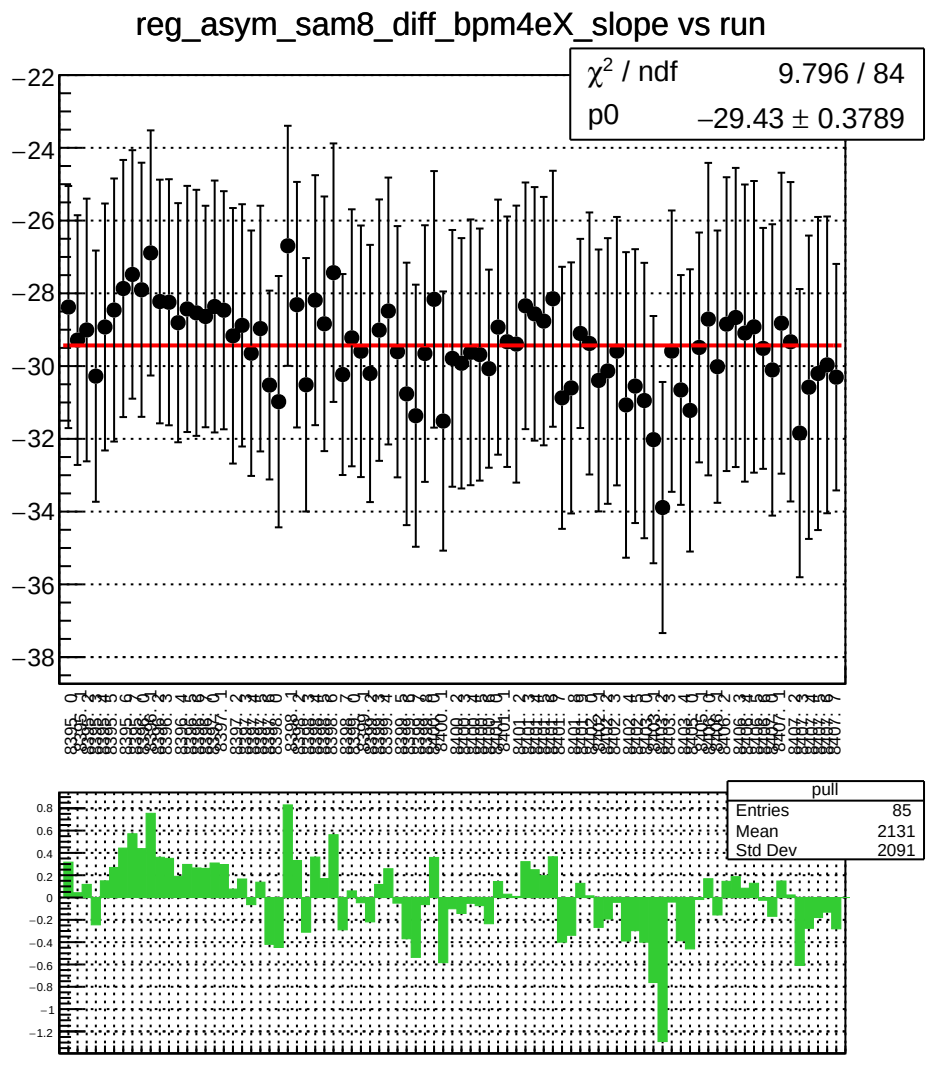

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 2.546 / 84
p0 −21.63 ± 1.366
pull
Entries 85
Mean 956.5
Std Dev 902.3
pull1D
Entries 85
Mean 0.0007227
Std Dev 0.1731

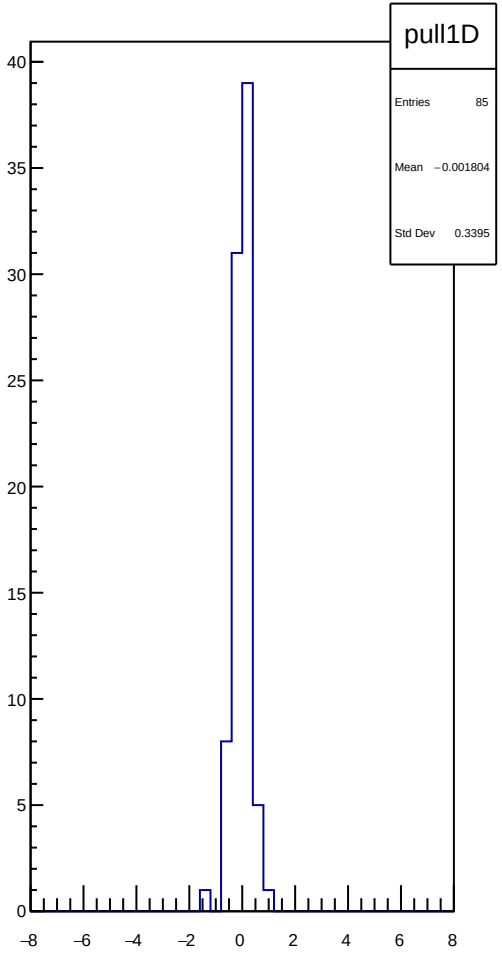

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 2.077 / 84
p0 1.672 ± 0.08425
pull
Entries 85
Mean 436.5
Std Dev 408
pull1D
Entries 85
Mean 0.0007499
Std Dev 0.1563

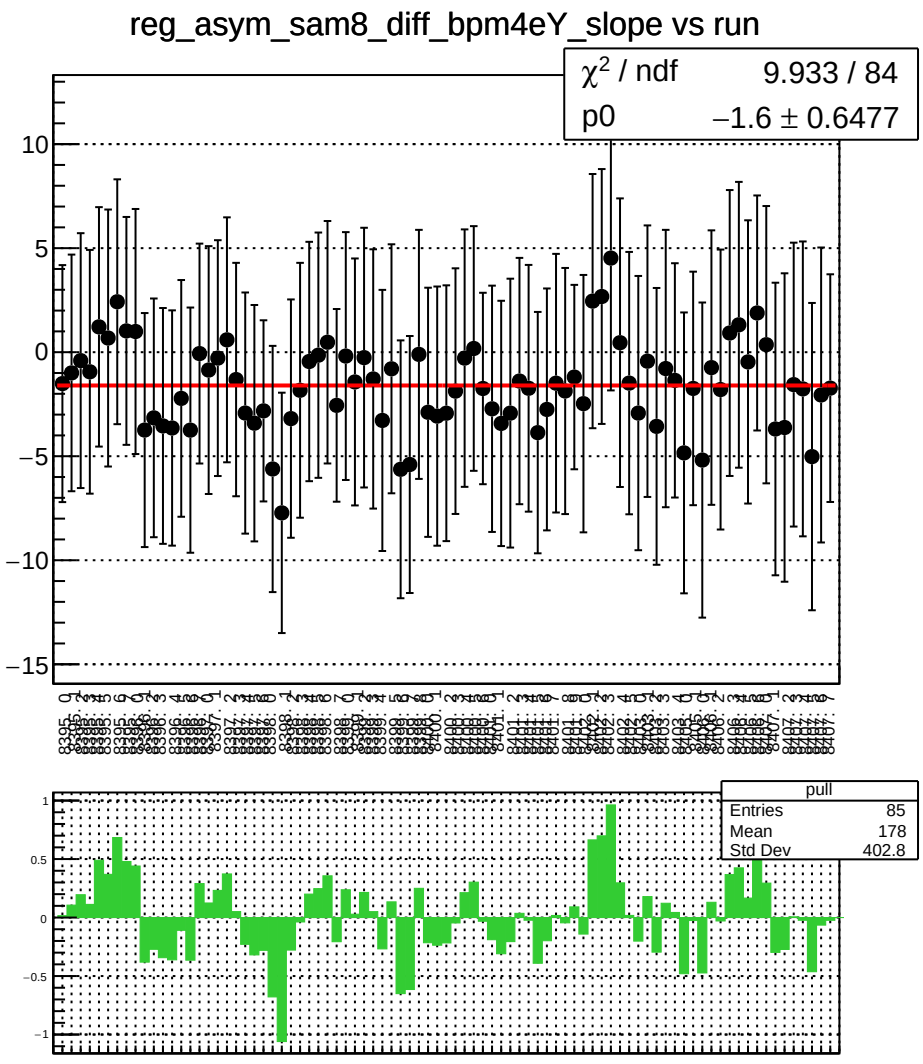

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 9.842 / 84
p0 14.17 ± 0.3414
pull
Entries 85
Mean −743.8
Std Dev 783.2
pull1D
Entries 85
Mean −0.003547
Std Dev 0.3403

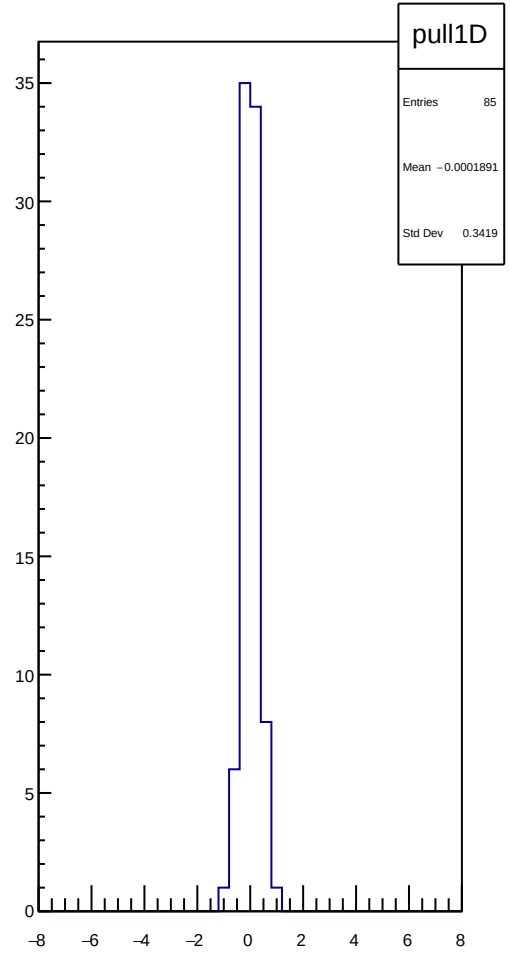

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 9.625 / 84
p0 −4.728 ± 0.62
pull
Entries 85
Mean 604.3
Std Dev 577.8

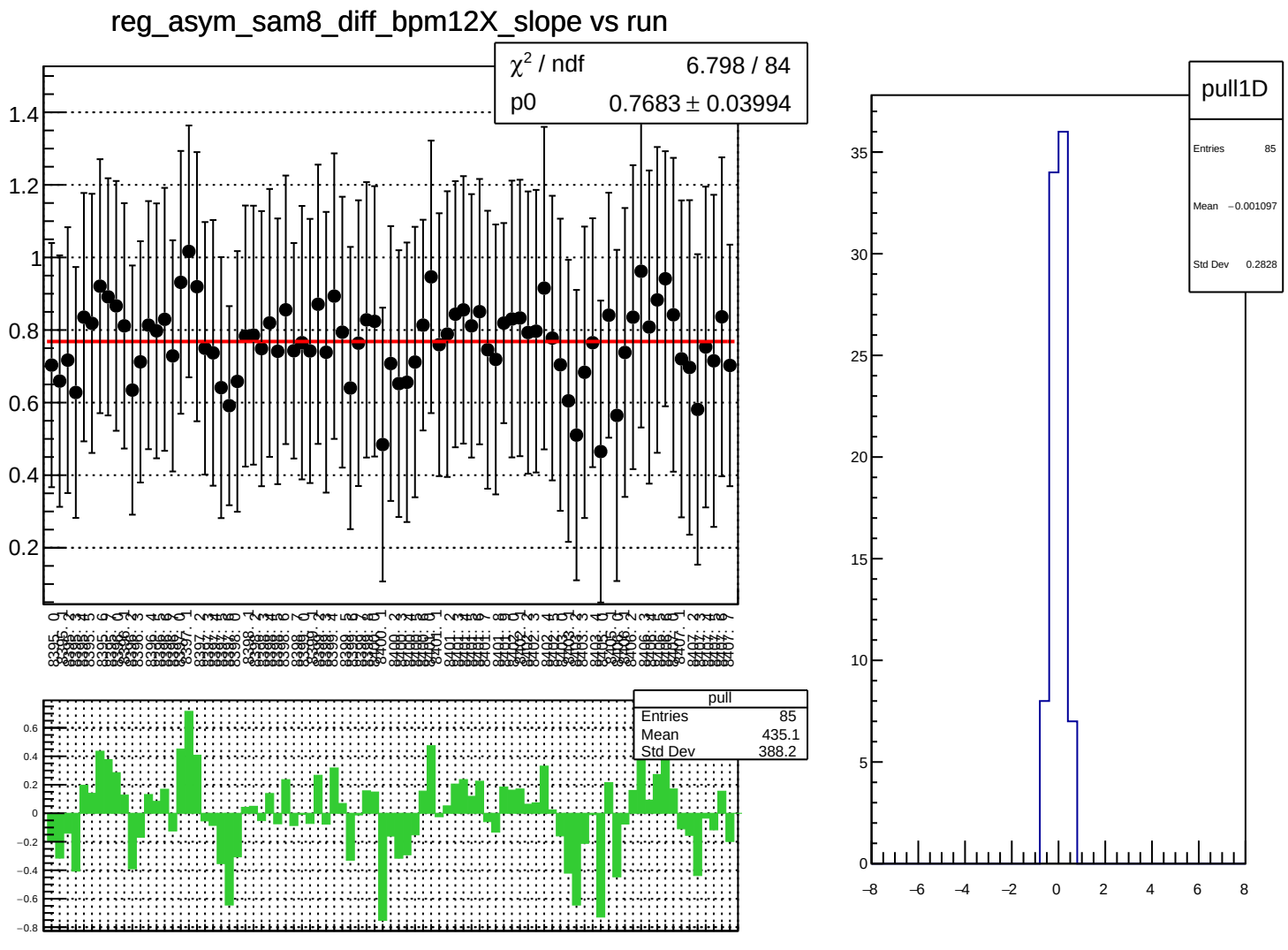

pull1D
Entries 85
Mean 0.001605
Std Dev 0.3365

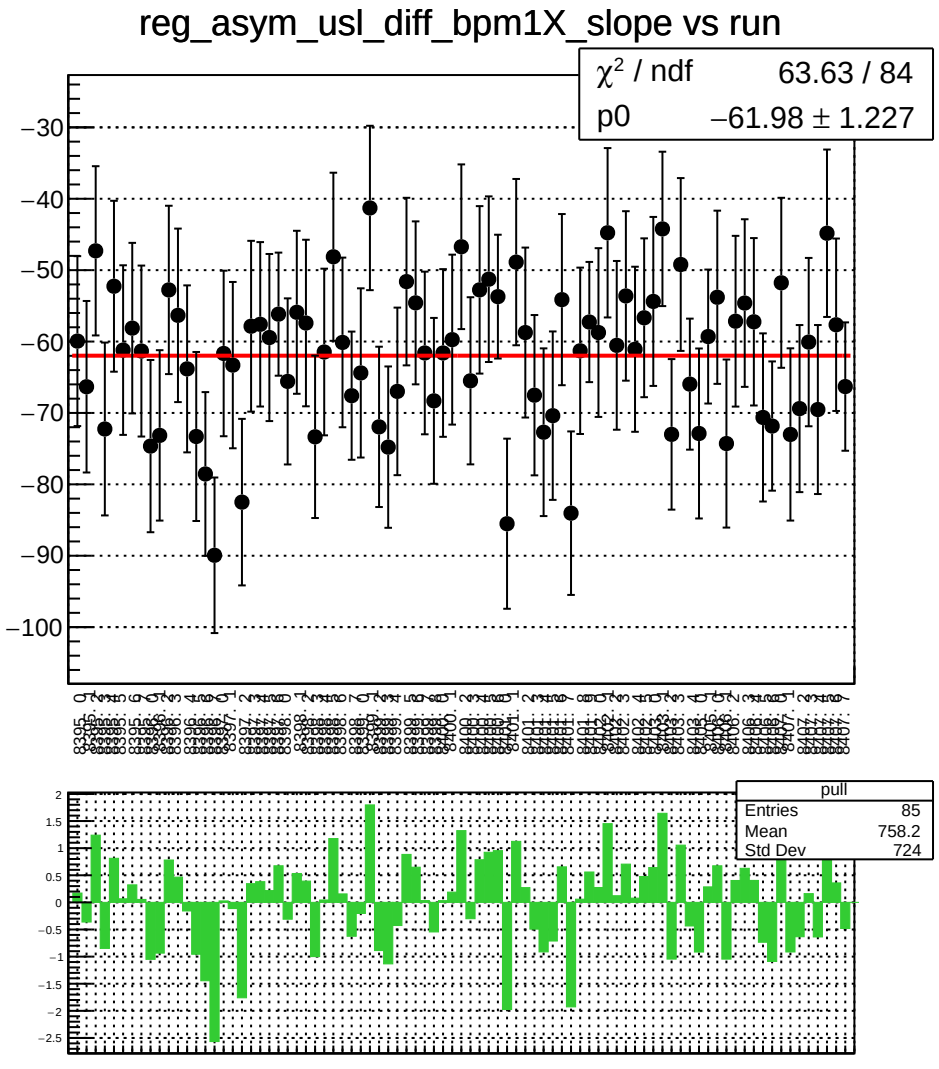

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 9.796 / 84
p0 −29.43 ± 0.3789
pull
Entries 85
Mean 2131
Std Dev 2091

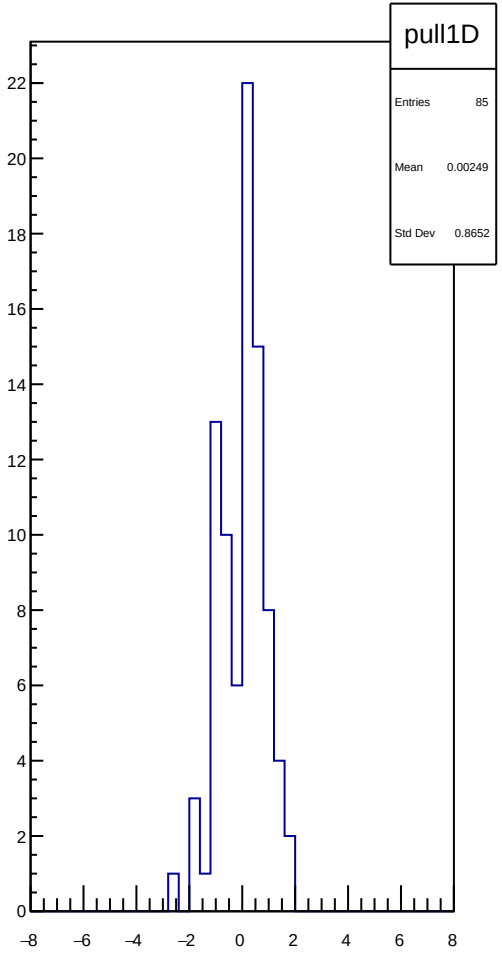

pull1D
Entries 85
Mean −0.001804
Std Dev 0.3395

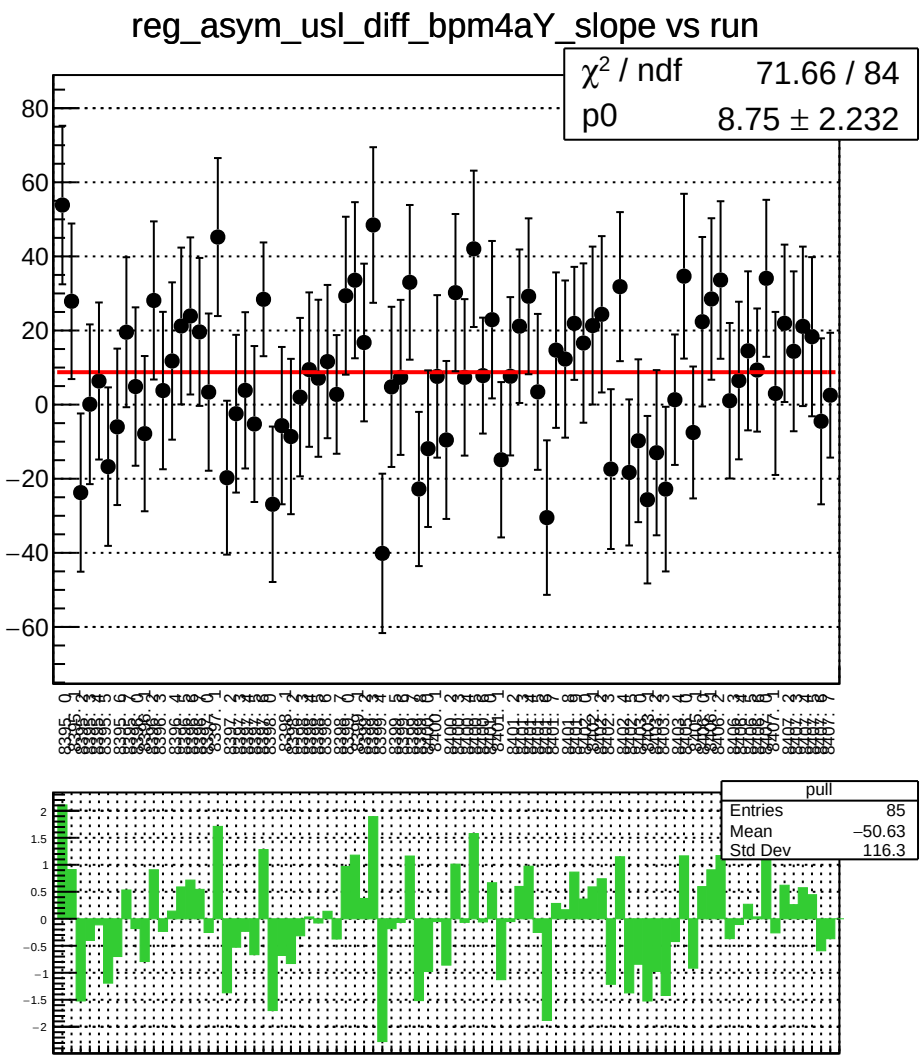

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 9.933 / 84
p0 −1.6 ± 0.6477
pull
Entries 85
Mean 178
Std Dev 402.8

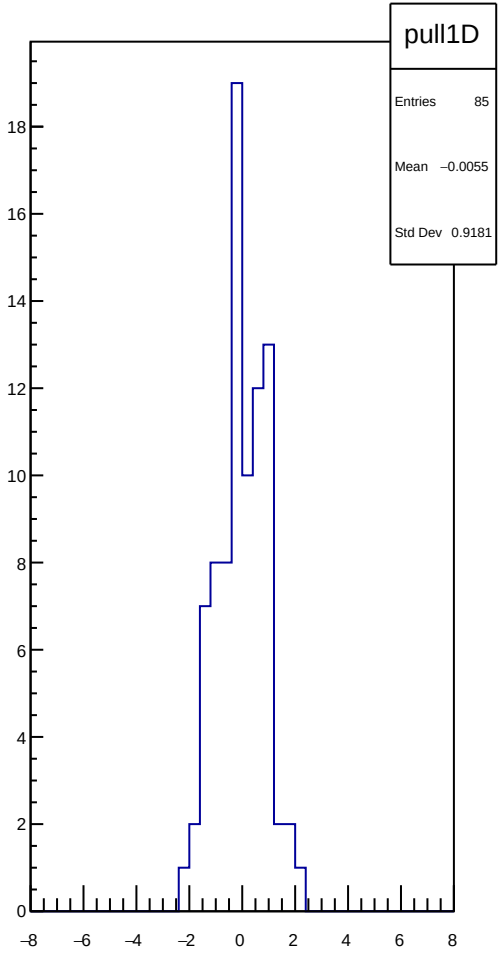

pull1D
Entries 85
Mean −0.0001891
Std Dev 0.3419

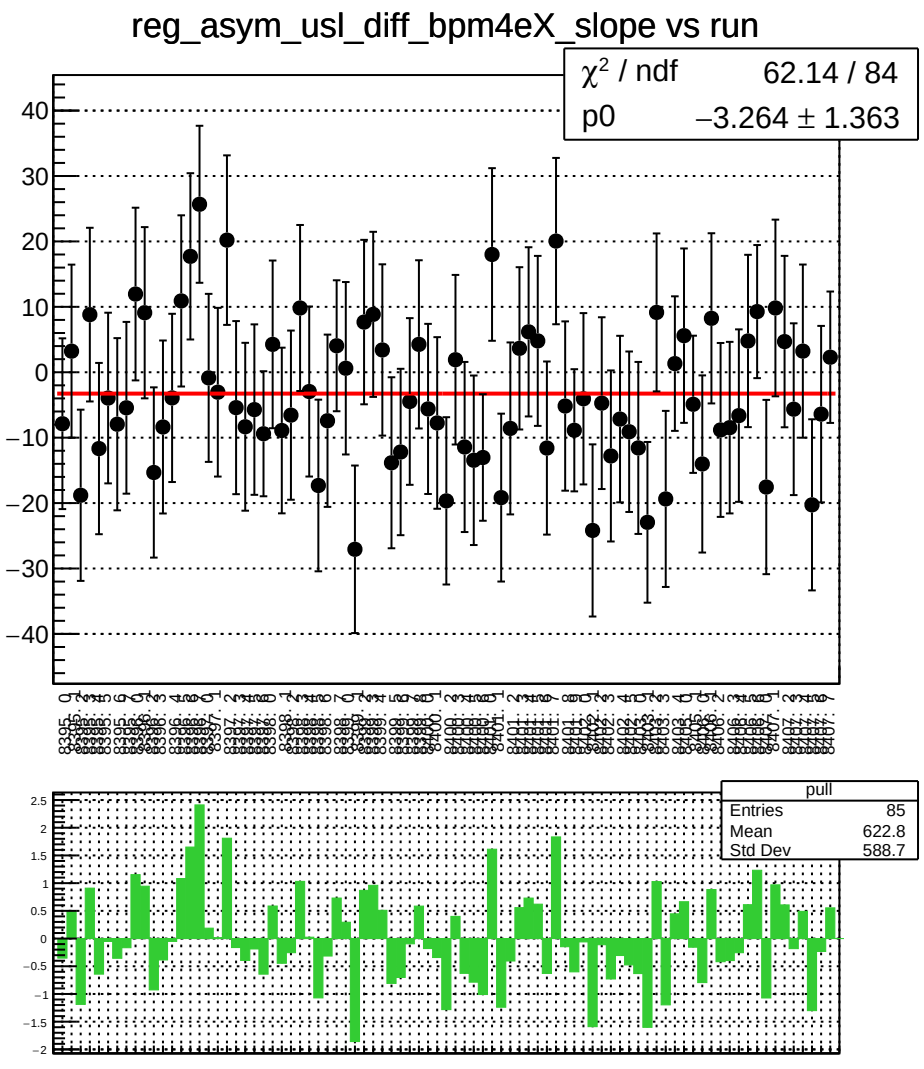

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 6.798 / 84
p0 0.7683 ± 0.03994
pull
Entries 85
Mean 435.1
Std Dev 388.2
pull1D
Entries 85
Mean −0.001097
Std Dev 0.2828

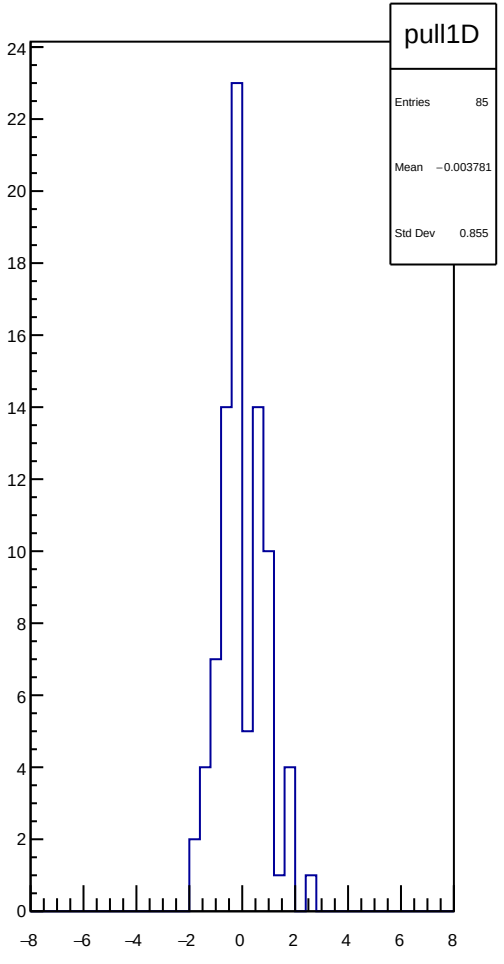

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 63.63 / 84
p0 −61.98 ± 1.227
pull
Entries 85
Mean 758.2
Std Dev 724

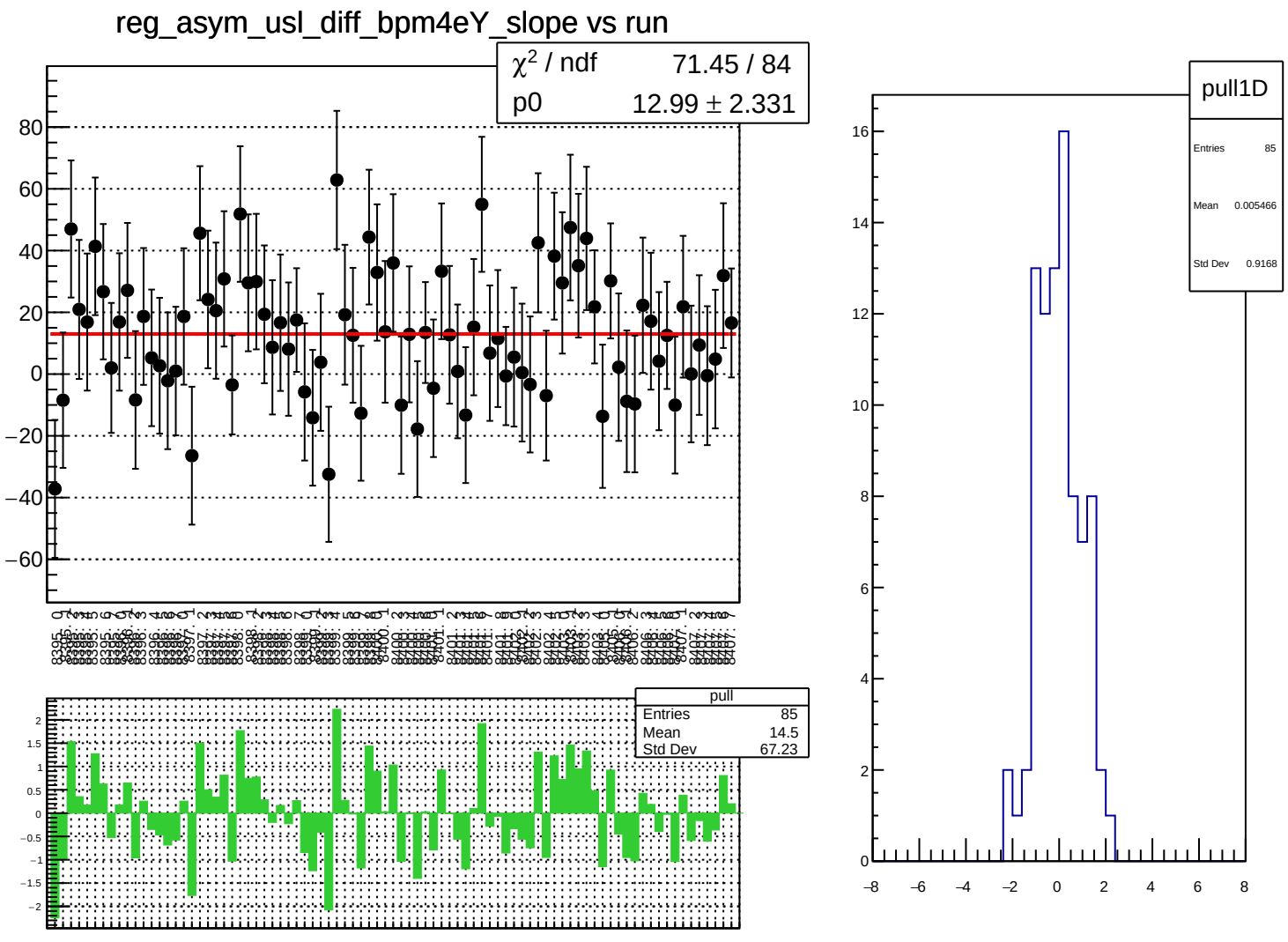

pull1D
Entries 85
Mean 0.00249
Std Dev 0.8652

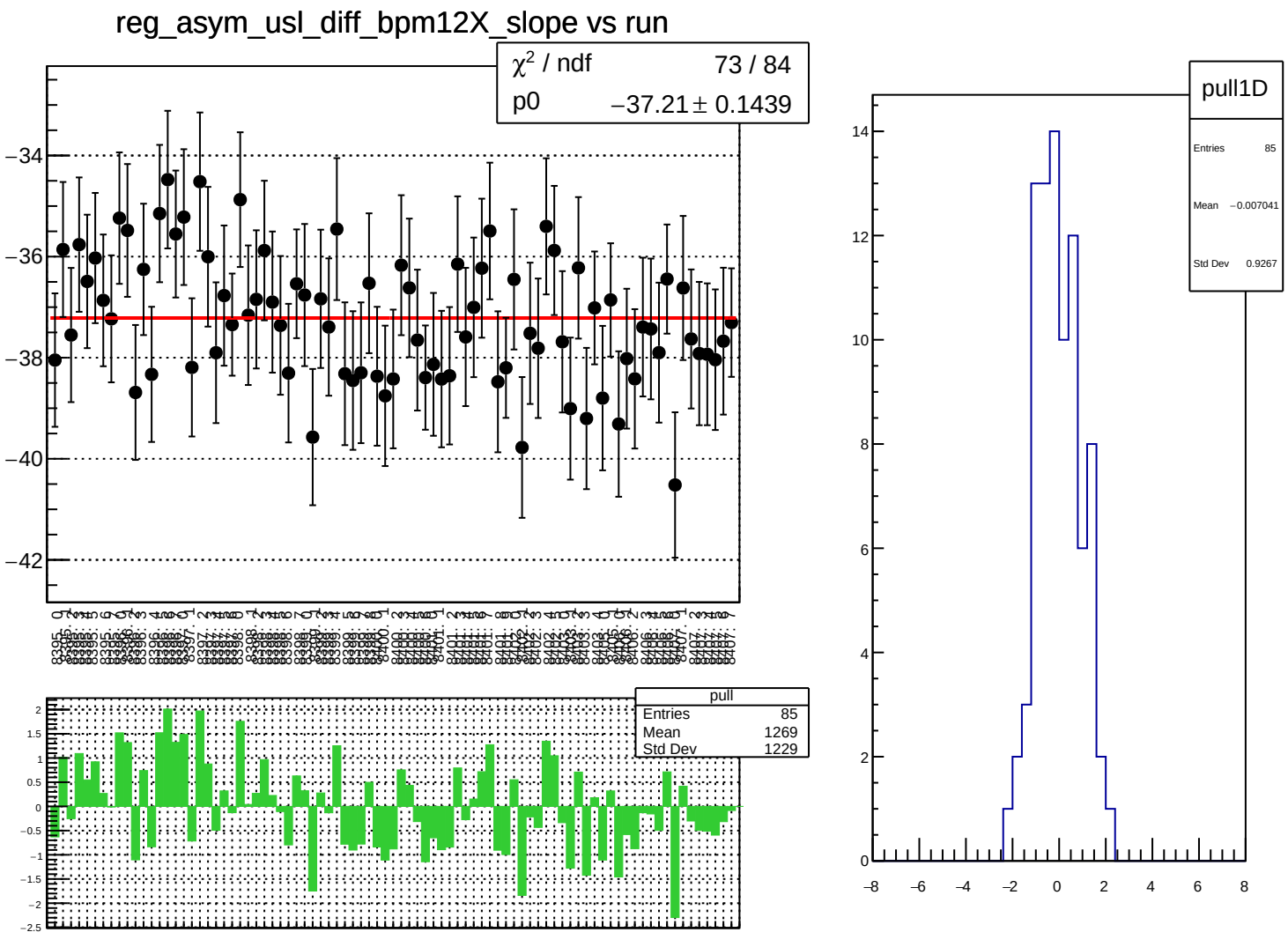

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 71.66 / 84
p0 8.75 ± 2.232
pull
Entries 85
Mean −50.63
Std Dev 116.3

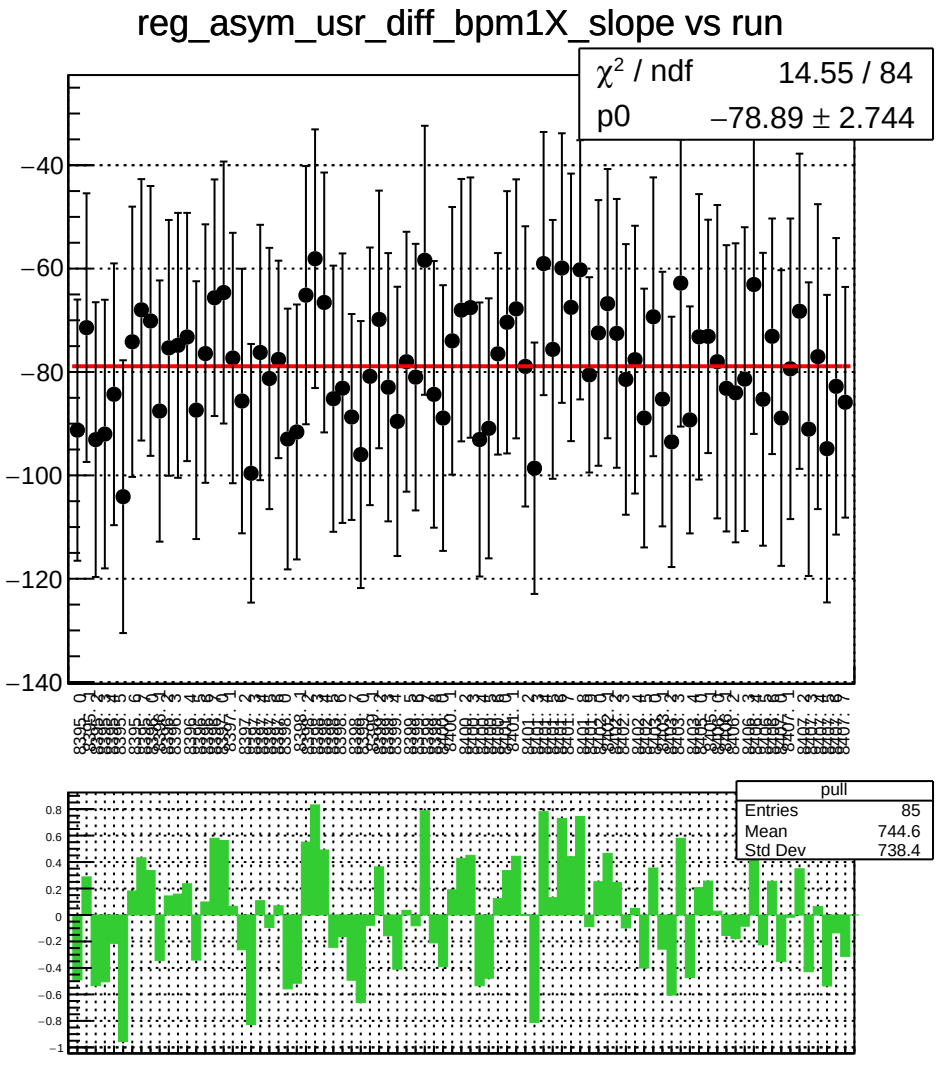

pull1D
Entries 85
Mean −0.0055
Std Dev 0.9181

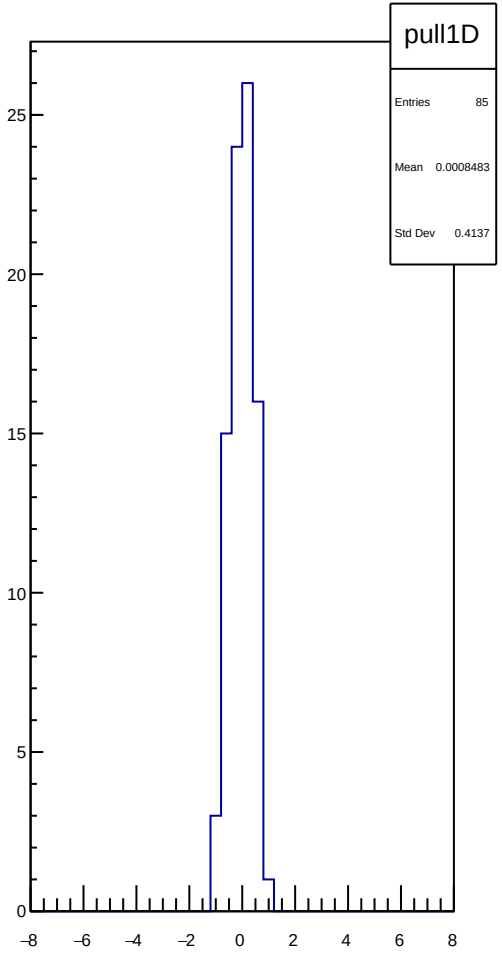

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 62.14 / 84
p0 −3.264 ± 1.363
pull
Entries 85
Mean 622.8
Std Dev 588.7

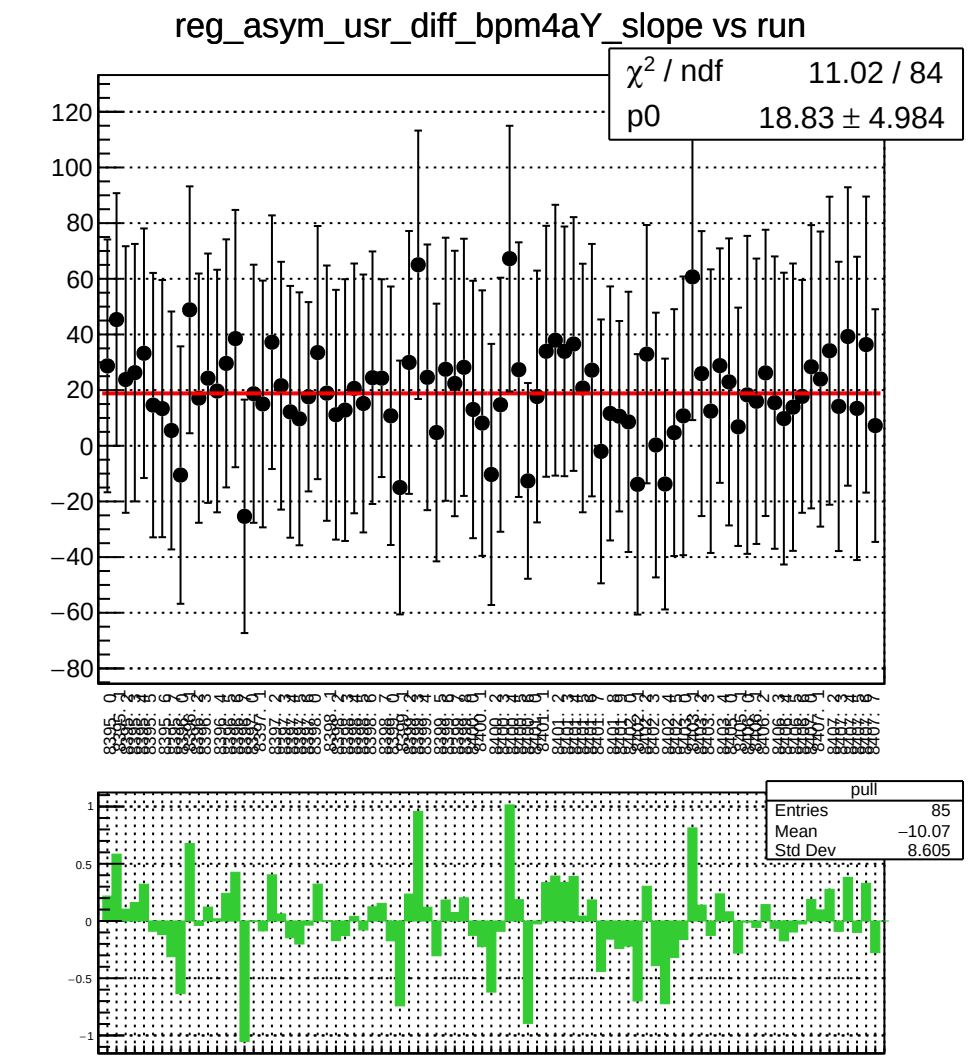

pull1D
Entries 85
Mean −0.003781
Std Dev 0.855

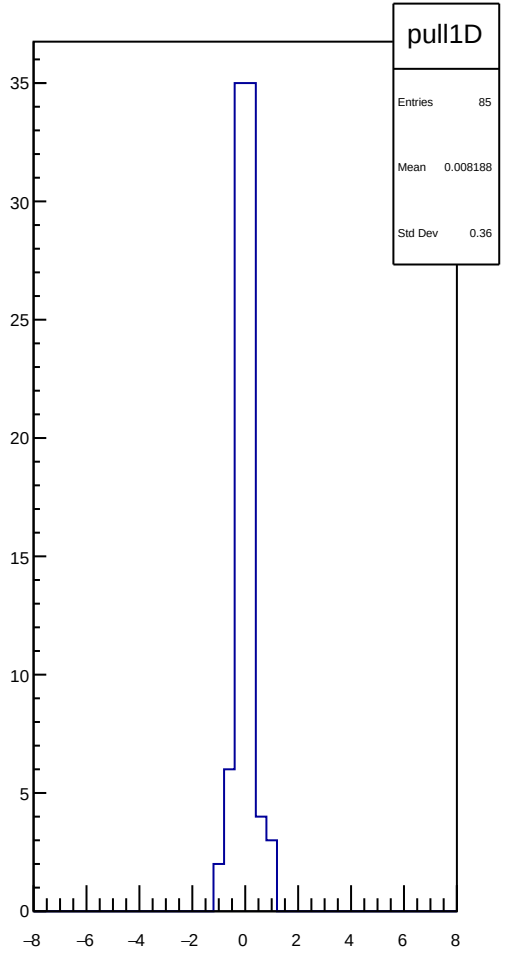

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 71.45 / 84
p0 12.99 ± 2.331
pull
Entries 85
Mean 14.5
Std Dev 67.23
pull1D
Entries 85
Mean 0.005466
Std Dev 0.9168

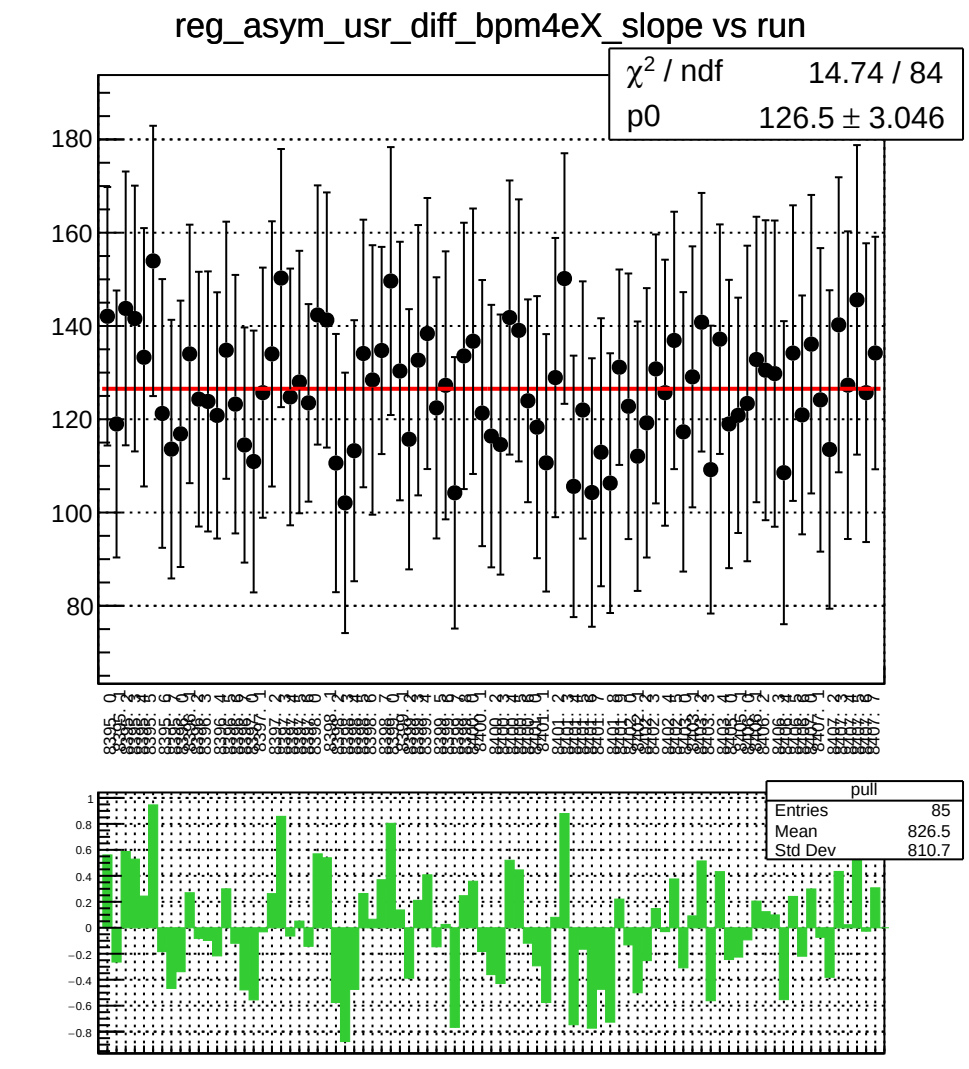

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 73 / 84
p0 −37.21 ± 0.1439
−34
−36
−38
−40
−42
pull
Entries 85
Mean 1269
Std Dev 1229
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 85
Mean −0.007041
Std Dev 0.9267
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

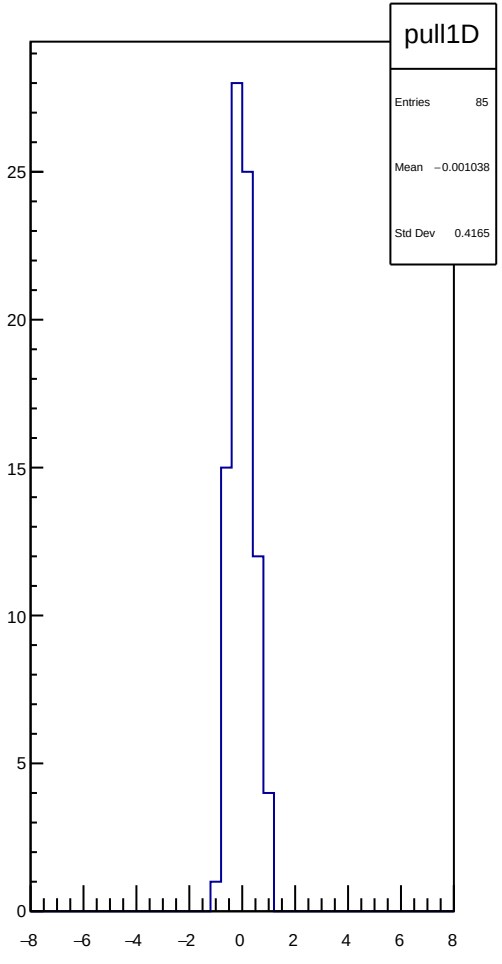

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 14.55 / 84
p0 −78.89 ± 2.744
pull
Entries 85
Mean 744.6
Std Dev 738.4

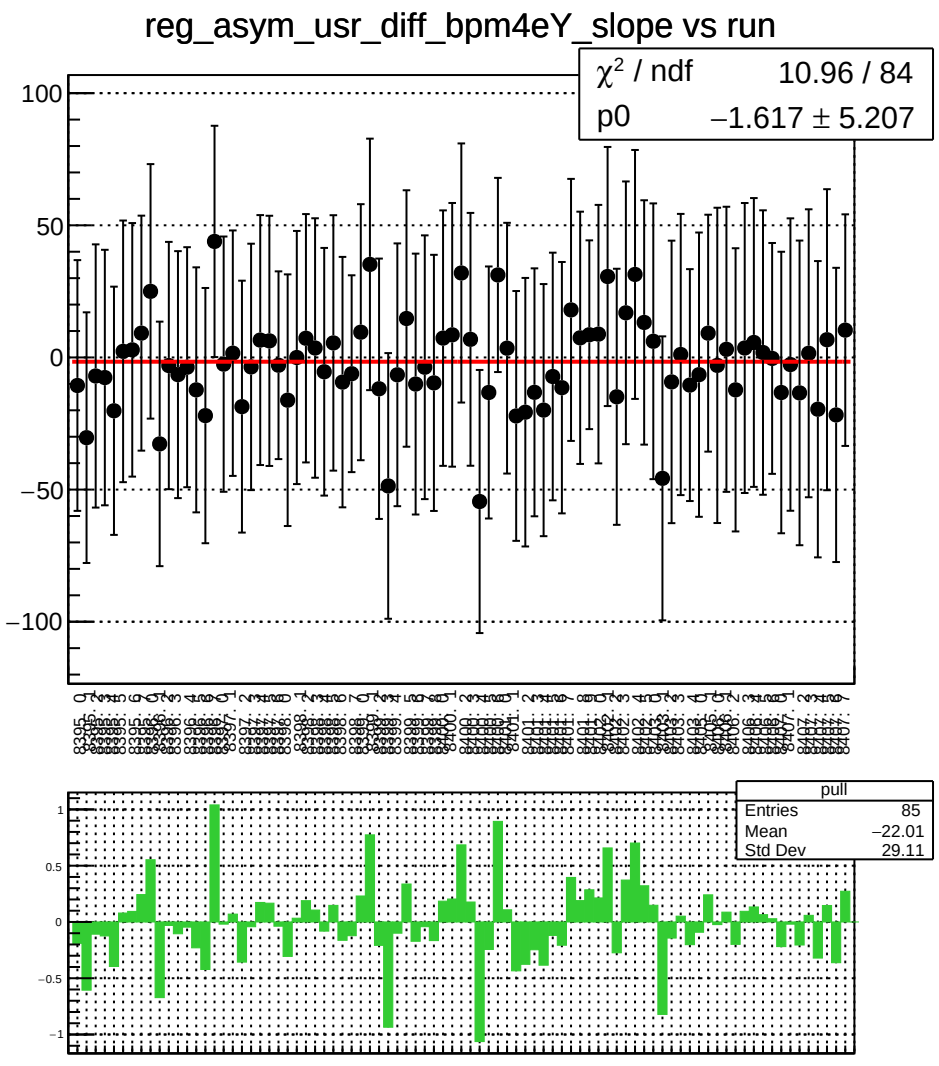

pull1D
Entries 85
Mean 0.0008483
Std Dev 0.4137

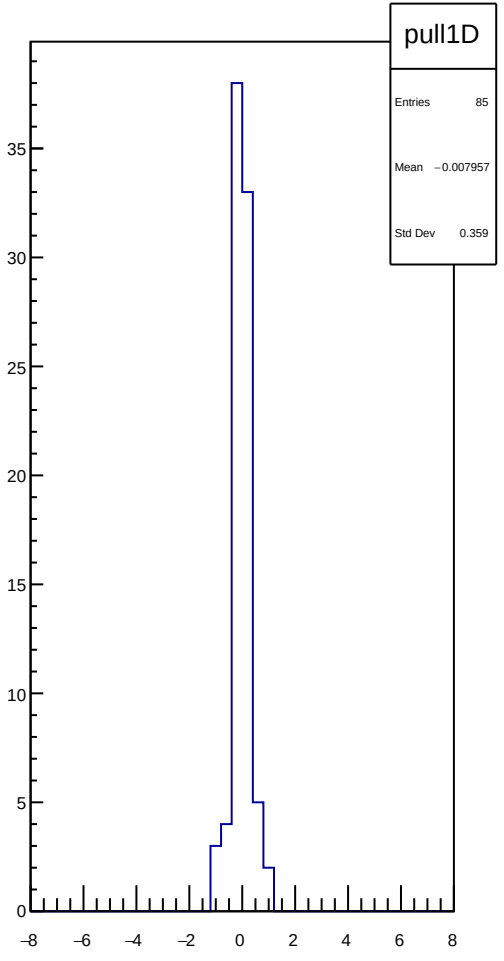

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 11.02 / 84
p0 18.83 ± 4.984
pull
Entries 85
Mean −10.07
Std Dev 8.605

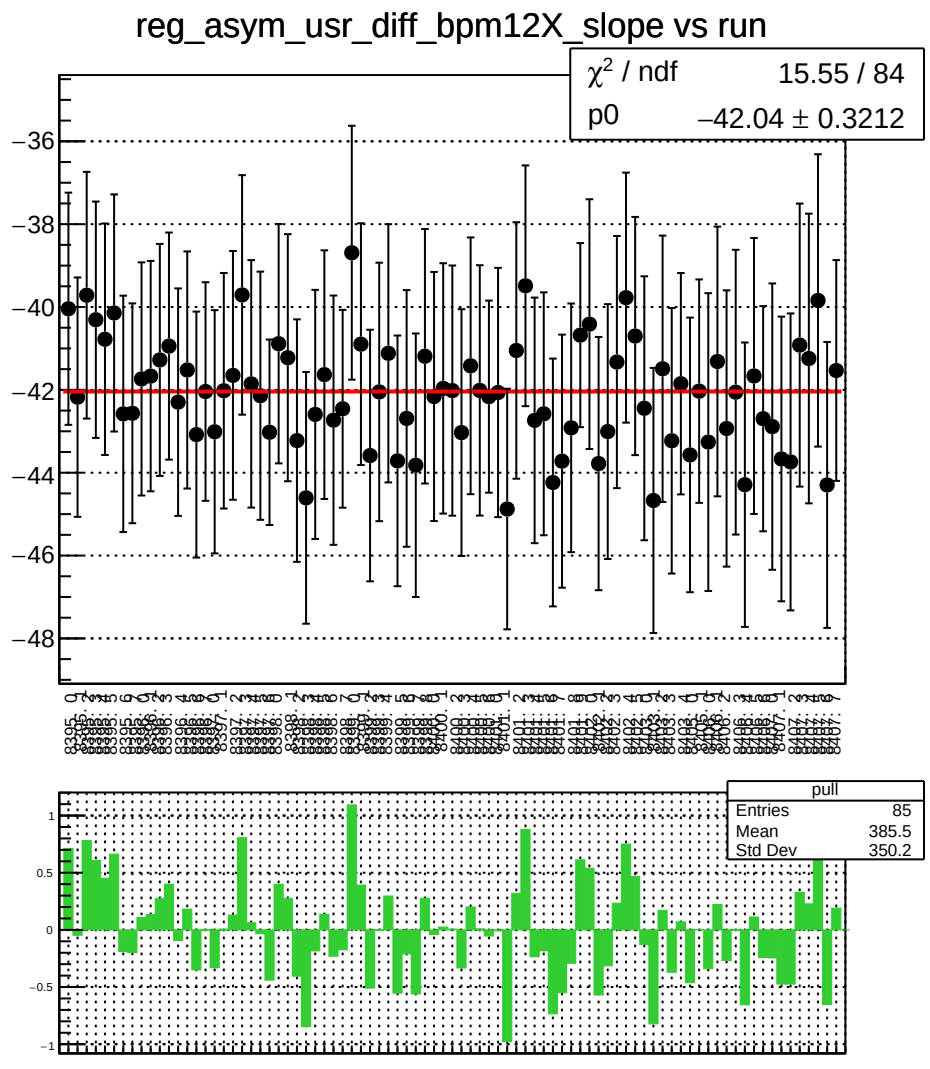

pull1D
Entries 85
Mean 0.008188
Std Dev 0.36

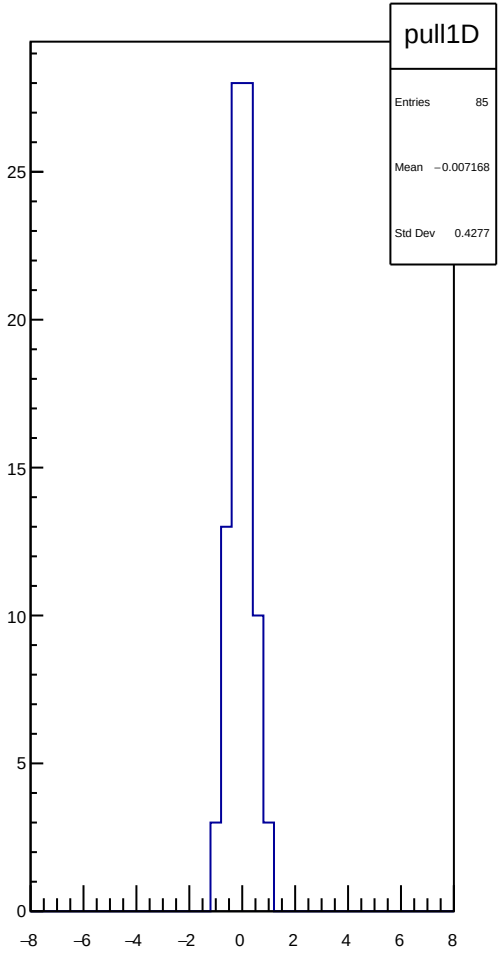

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 14.74 / 84
p0 126.5 ± 3.046
pull
Entries 85
Mean 826.5
Std Dev 810.7

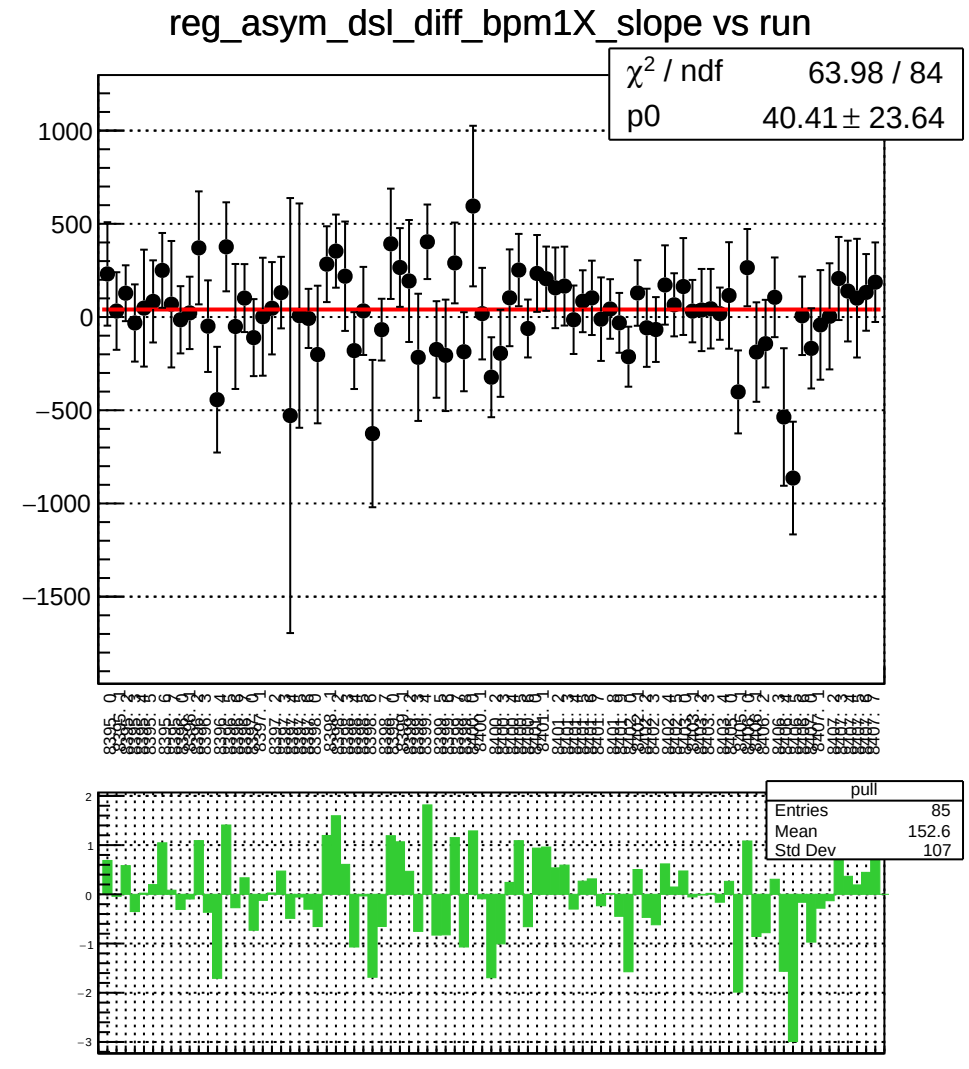

pull1D
Entries 85
Mean −0.001038
Std Dev 0.4165

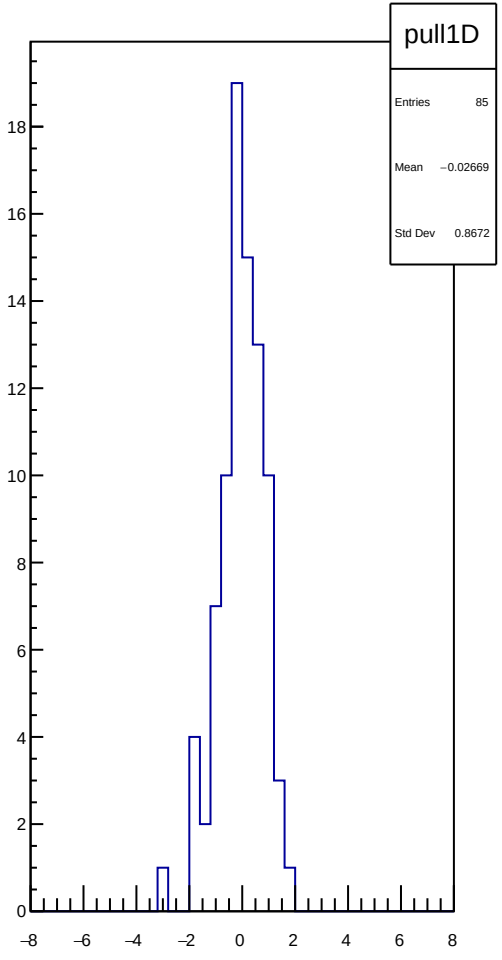

reg_asym_usr_diff_bpm4eY_slope vs run
χ^2 / ndf 10.96 / 84
p0 −1.617 ± 5.207
pull
Entries 85
Mean −22.01
Std Dev 29.11

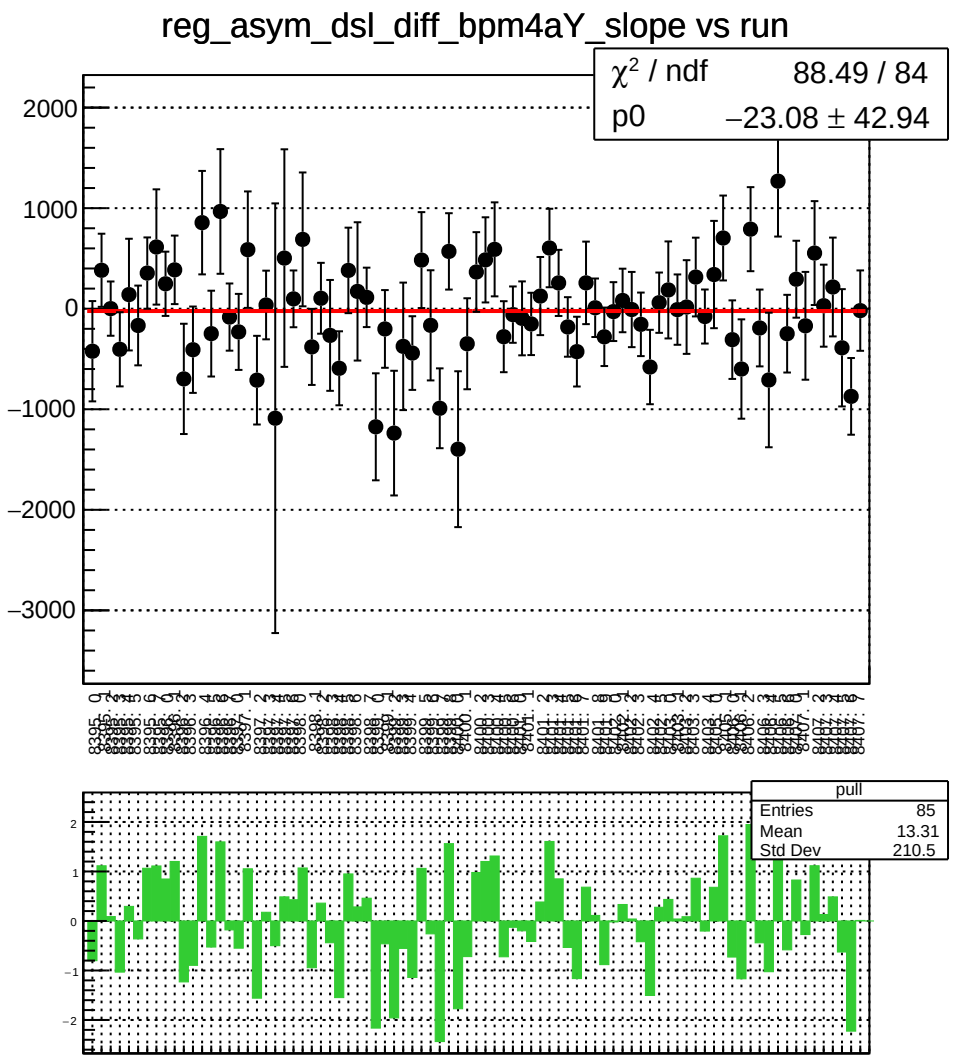

pull1D
Entries 85
Mean −0.007957
Std Dev 0.359

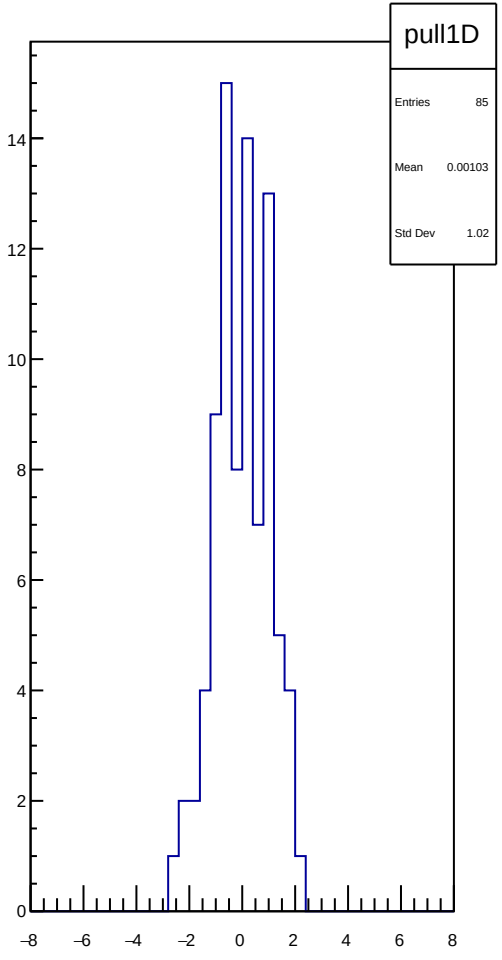

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 15.55 / 84
p0 −42.04 ± 0.3212
pull
Entries 85
Mean 385.5
Std Dev 350.2

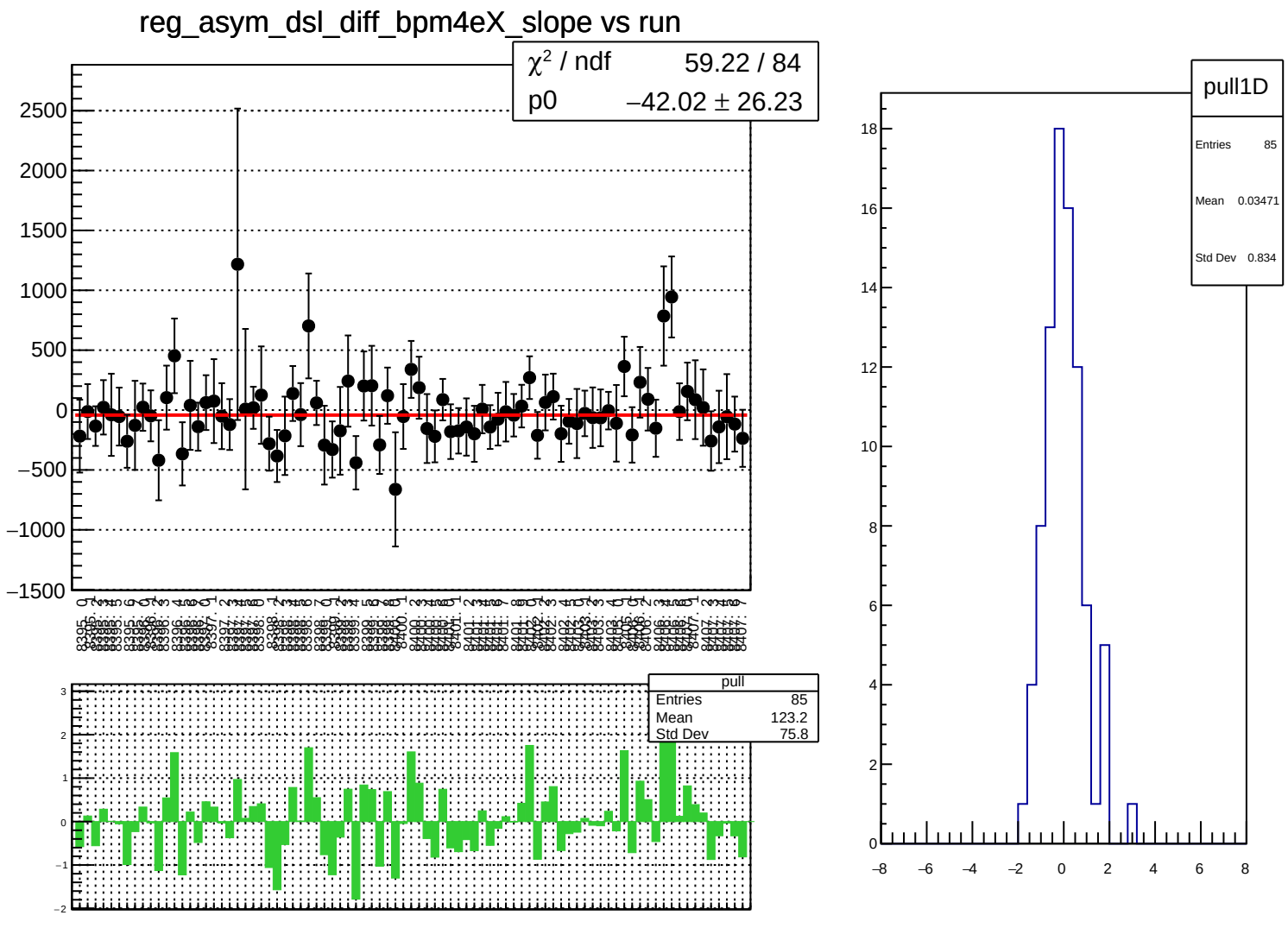

pull1D
Entries 85
Mean −0.007168
Std Dev 0.4277

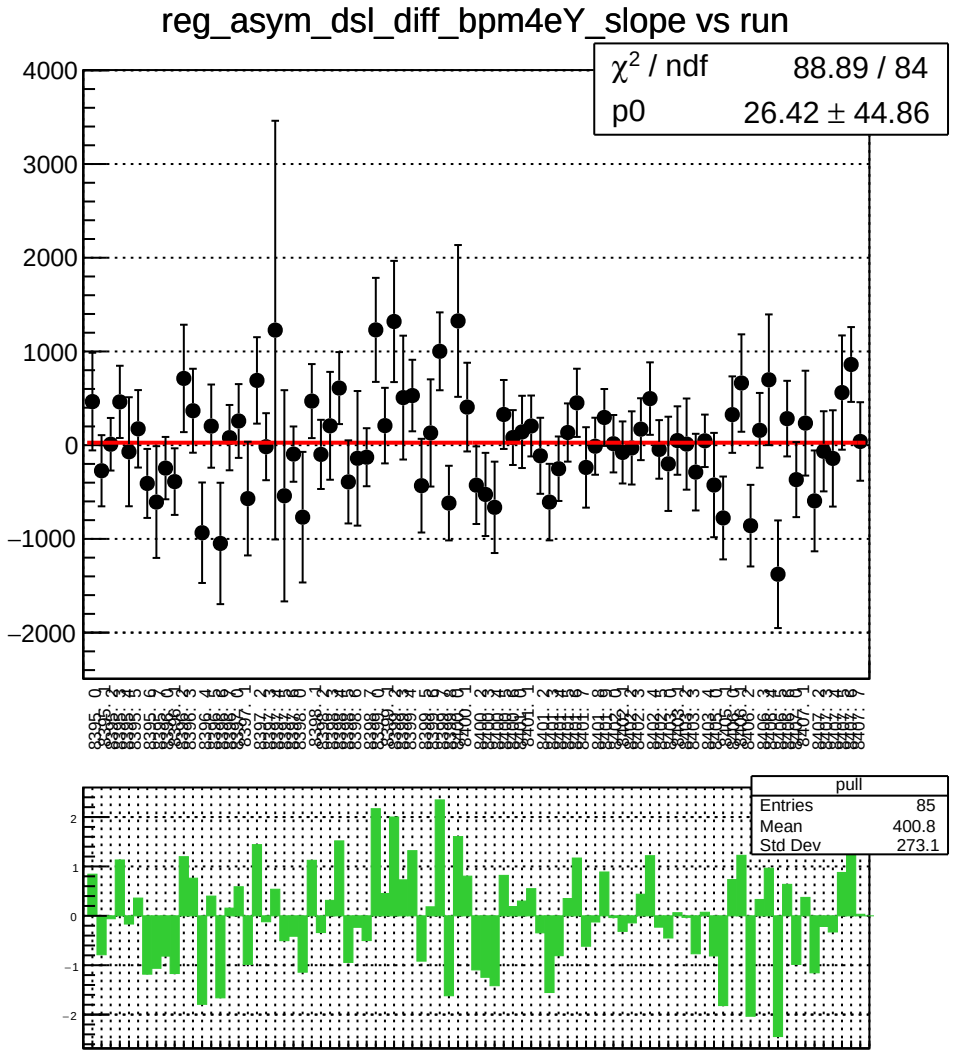

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 63.98 / 84
p0 40.41 ± 23.64
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 152.6
Std Dev 107
2
1
0
−1
−2
−3

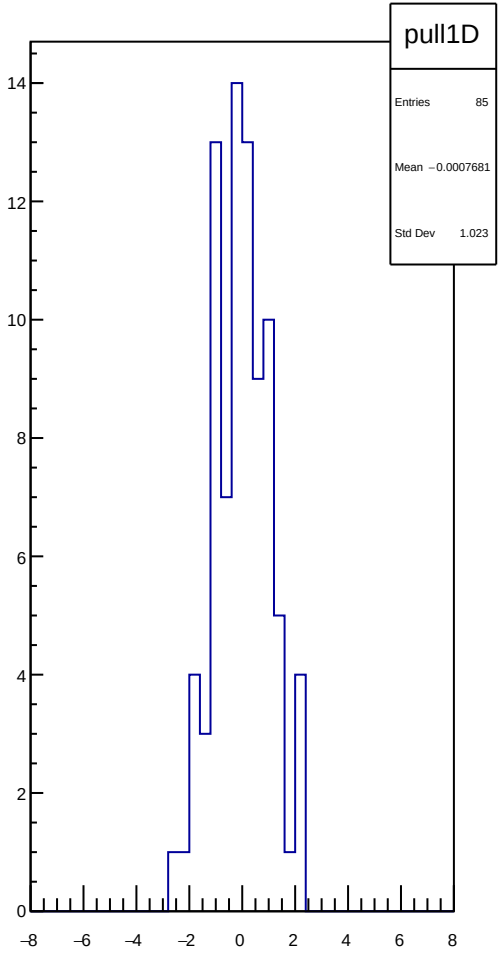

pull1D
Entries 85
Mean −0.02669
Std Dev 0.8672
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

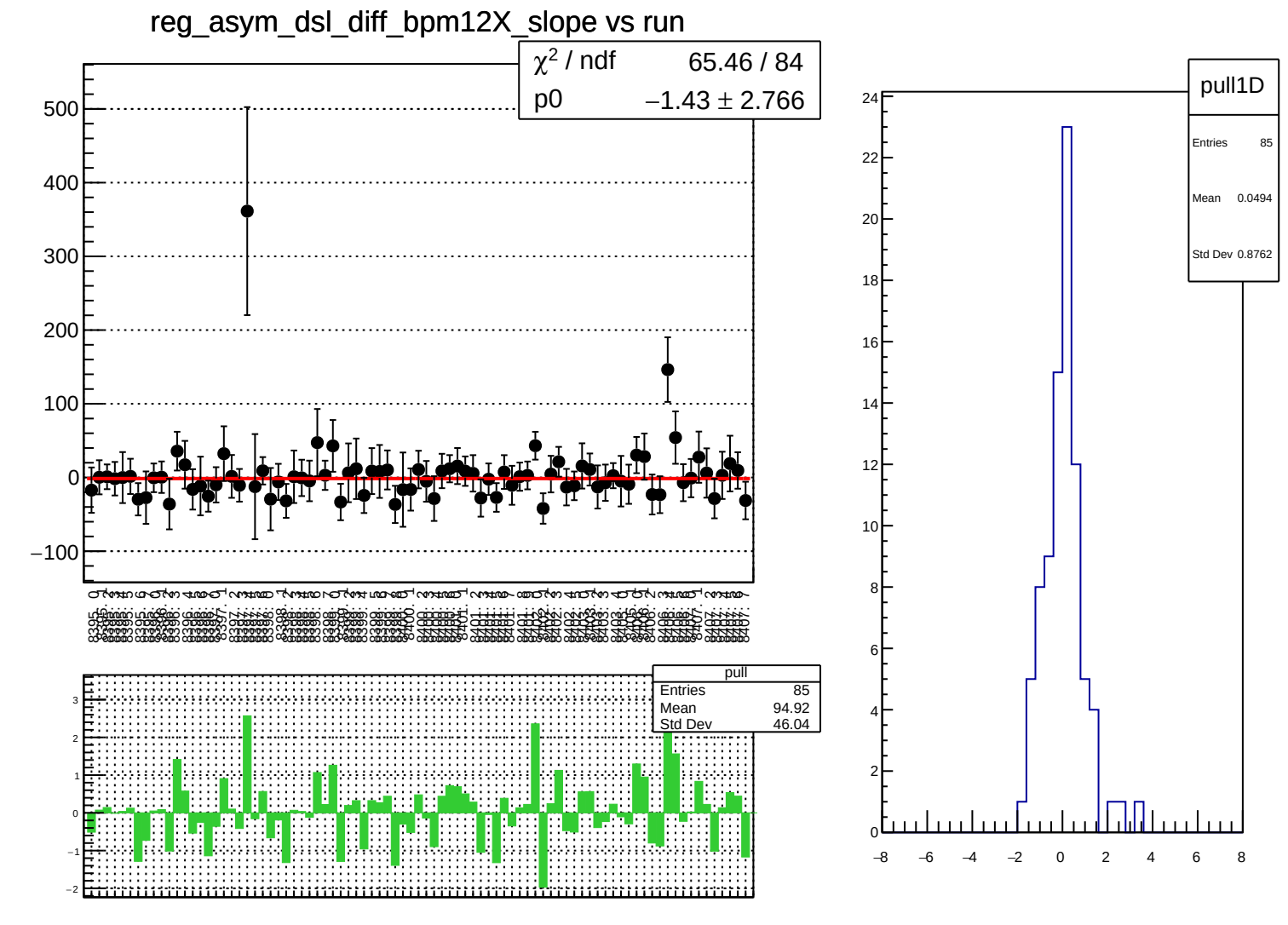

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 88.49 / 84
p0 −23.08 ± 42.94
pull
Entries 85
Mean 13.31
Std Dev 210.5

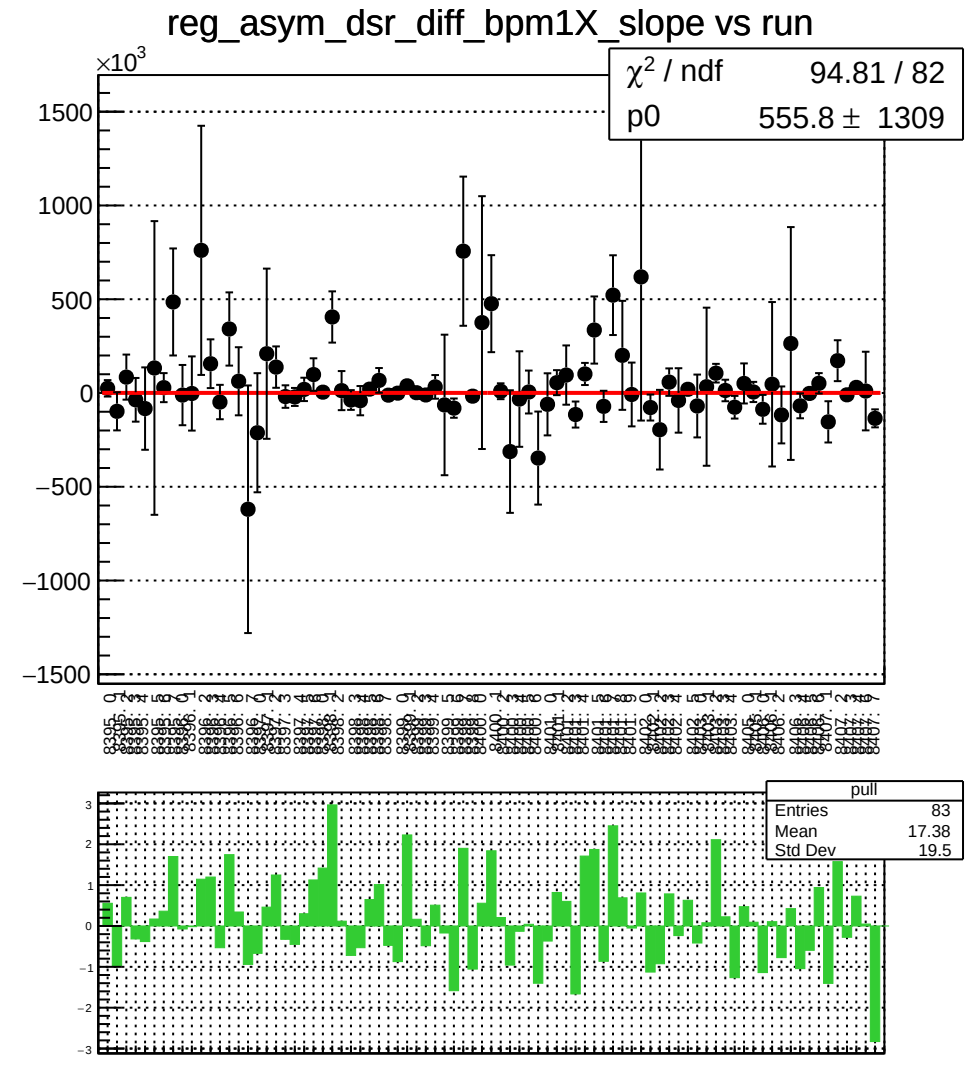

pull1D
Entries 85
Mean 0.00103
Std Dev 1.02

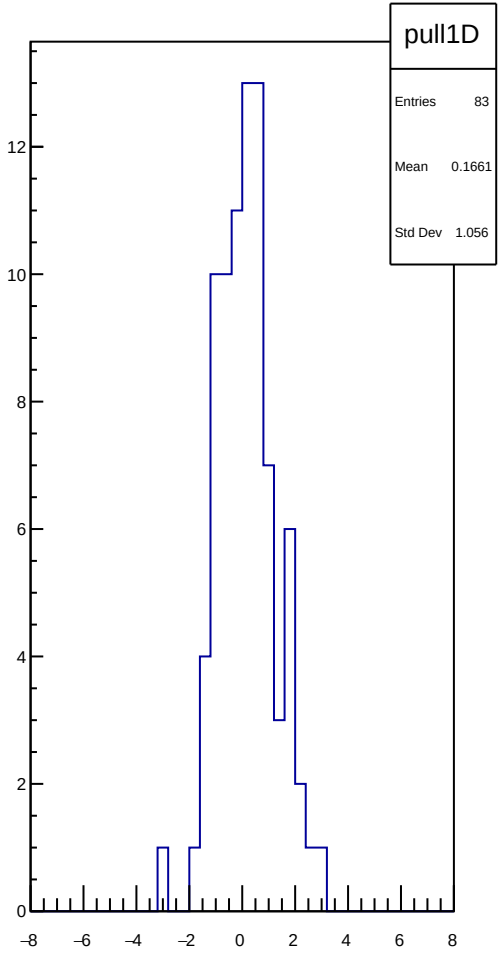

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 59.22 / 84
p0 −42.02 ± 26.23
pull
Entries 85
Mean 123.2
Std Dev 75.8
pull1D
Entries 85
Mean 0.03471
Std Dev 0.834

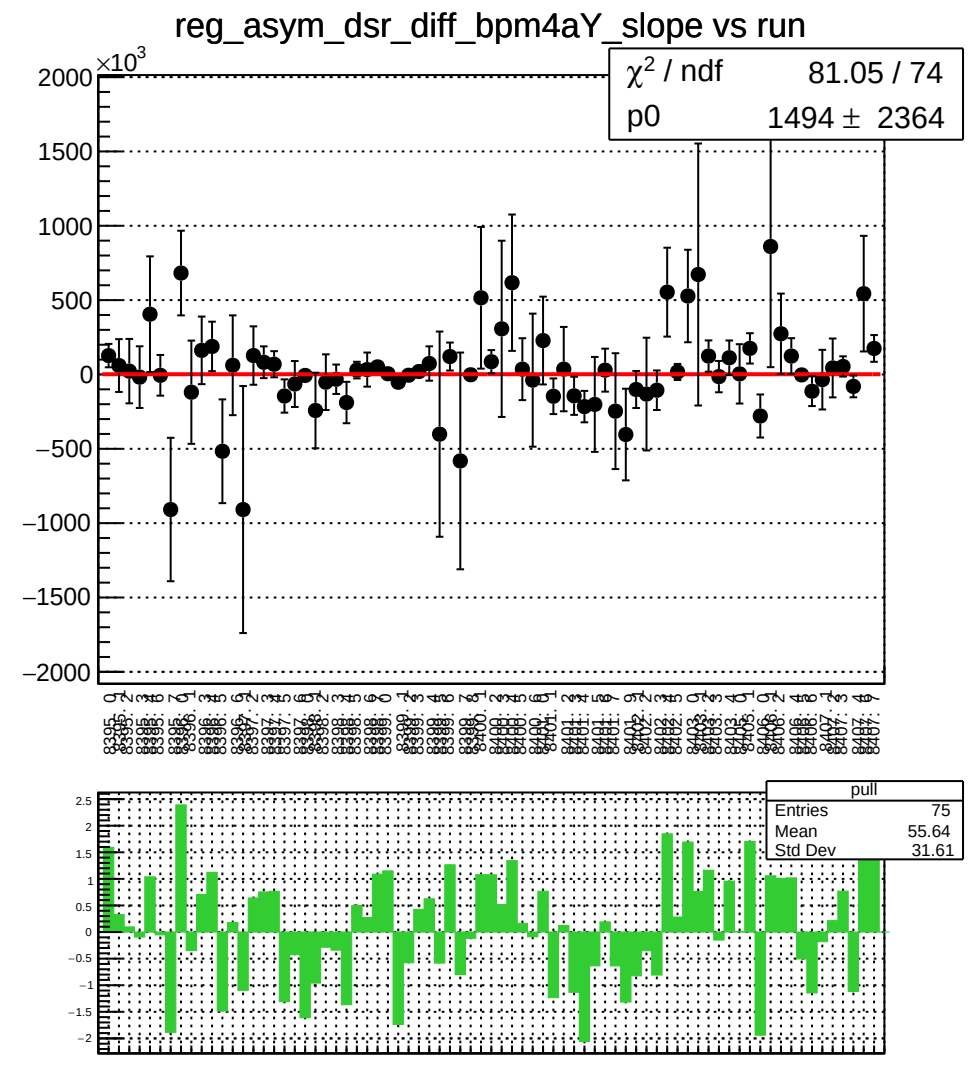

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 88.89 / 84
p0 26.42 ± 44.86
pull
Entries 85
Mean 400.8
Std Dev 273.1

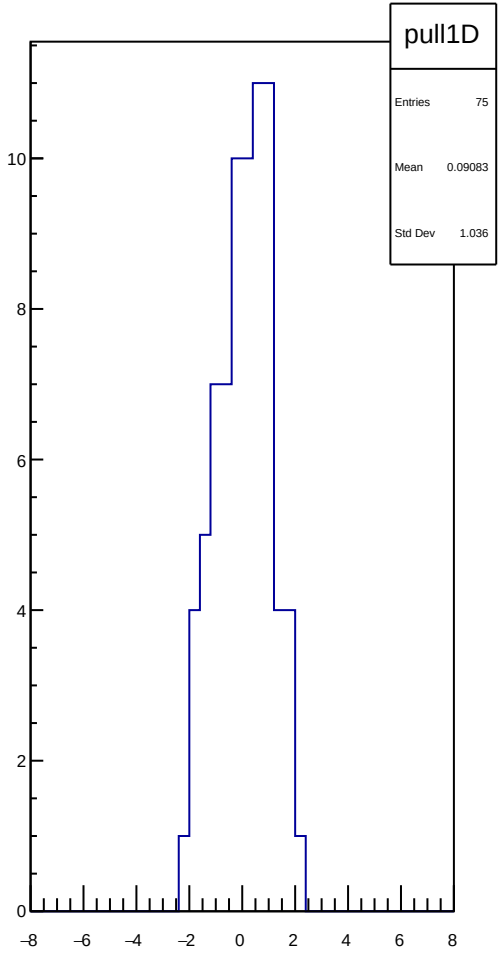

pull1D
Entries 85
Mean −0.0007681
Std Dev 1.023

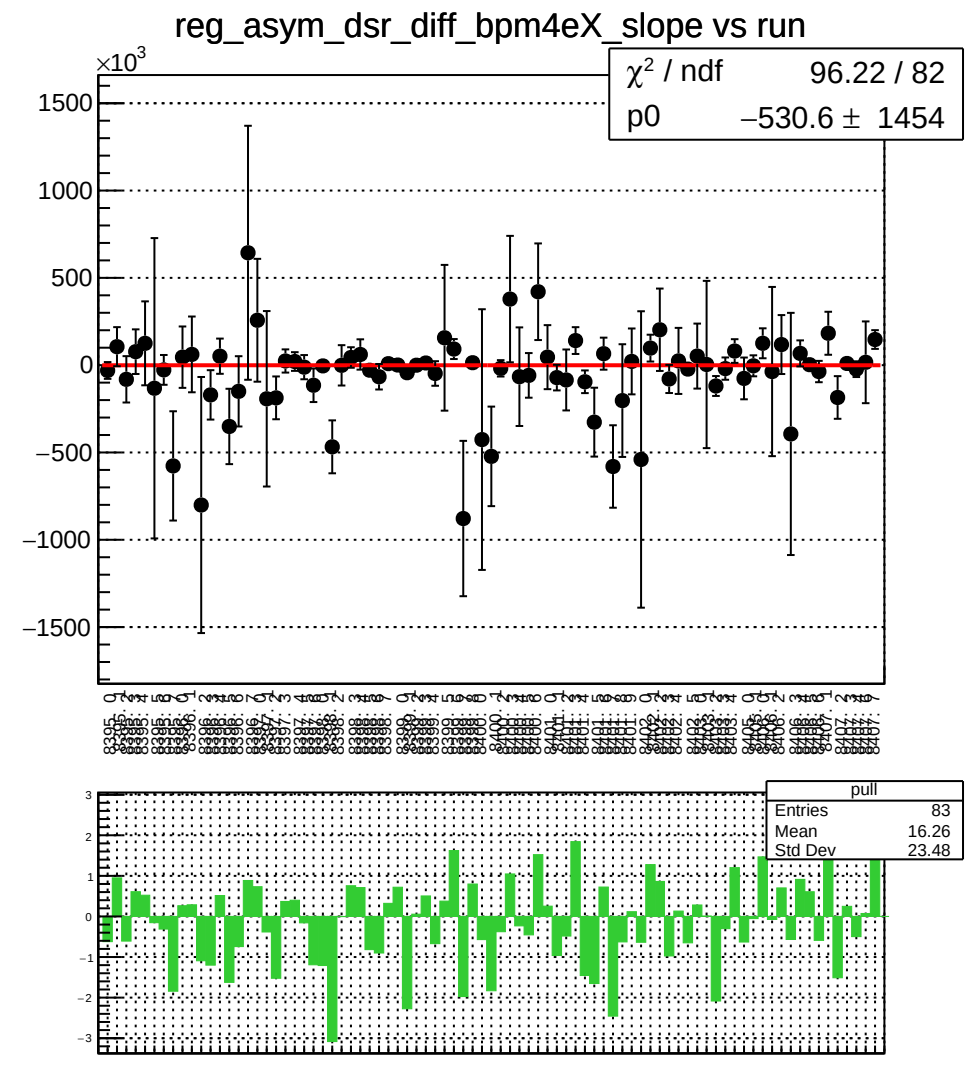

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 65.46 / 84
p0 −1.43 ± 2.766
pull
Entries 85
Mean 94.92
Std Dev 46.04
pull1D
Entries 85
Mean 0.0494
Std Dev 0.8762

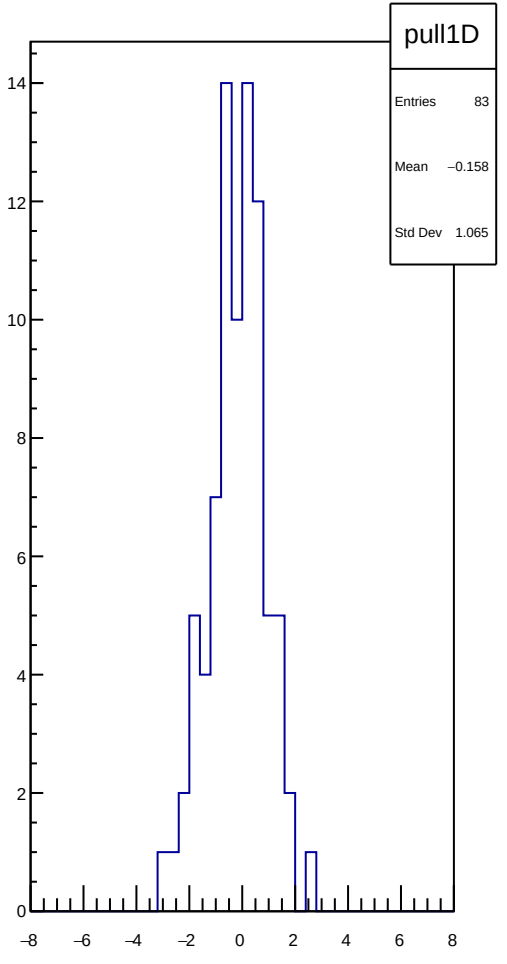

reg_asym_dsr_diff_bpm1X_slope vs run
×10^3
χ² / ndf 94.81 / 82
p0 555.8 ± 1309
1500
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean 17.38
Std Dev 19.5
3
2
1
0
−1
−2
−3

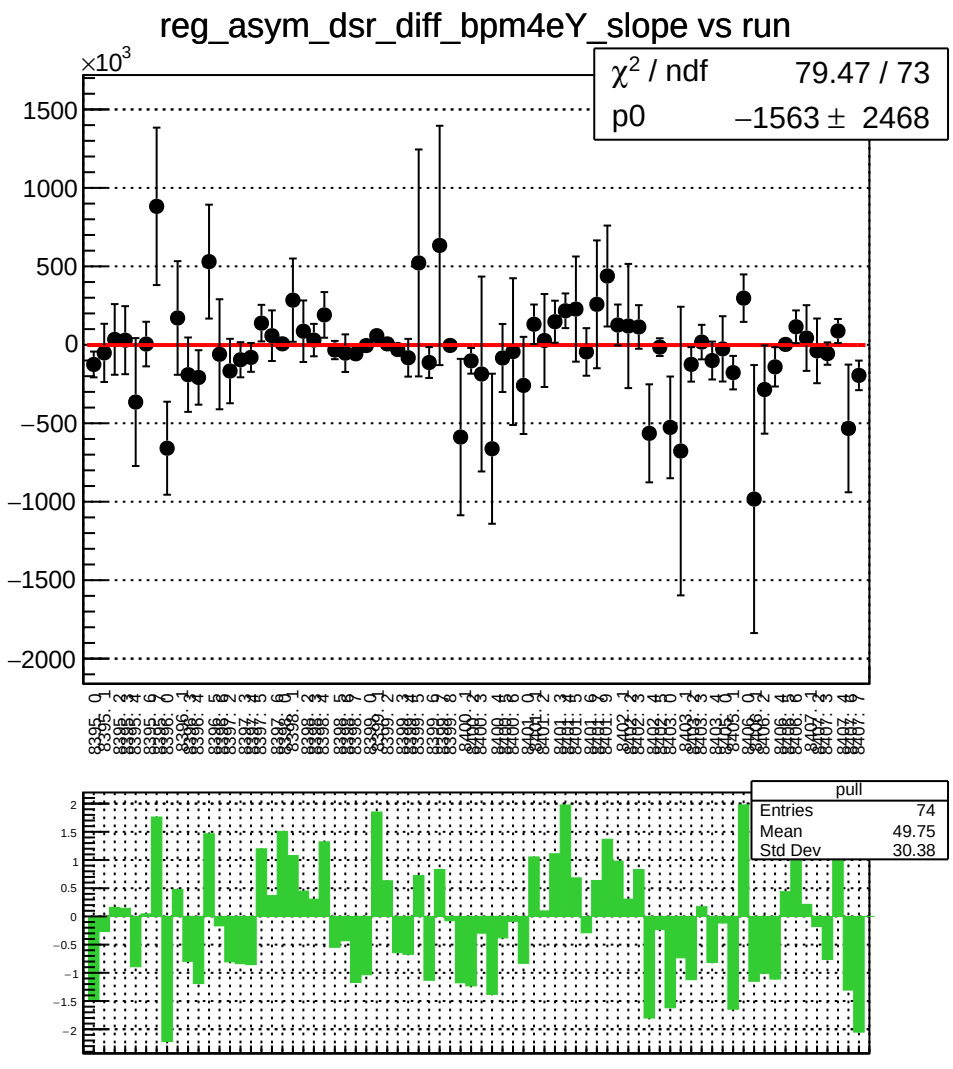

pull1D
Entries 83
Mean 0.1661
Std Dev 1.056
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

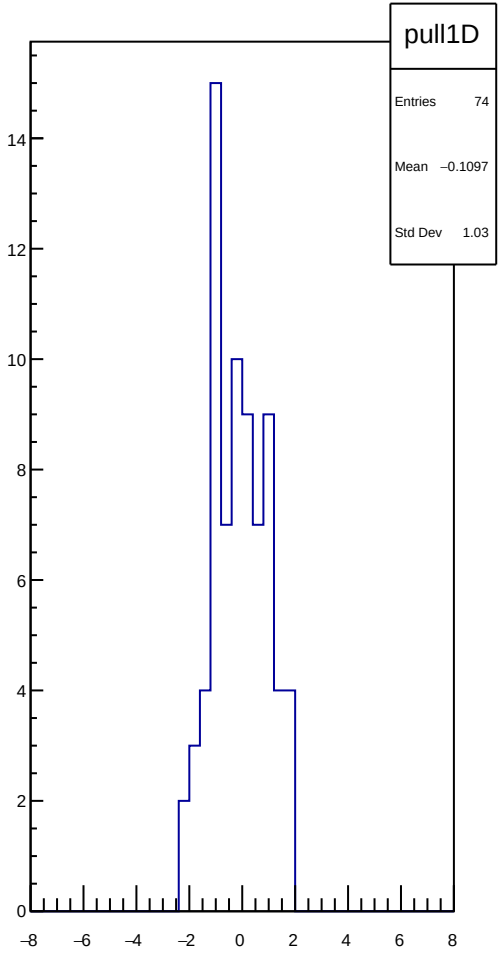

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 81.05 / 74
p0 1494 ± 2364
×10³
pull
Entries 75
Mean 55.64
Std Dev 31.61

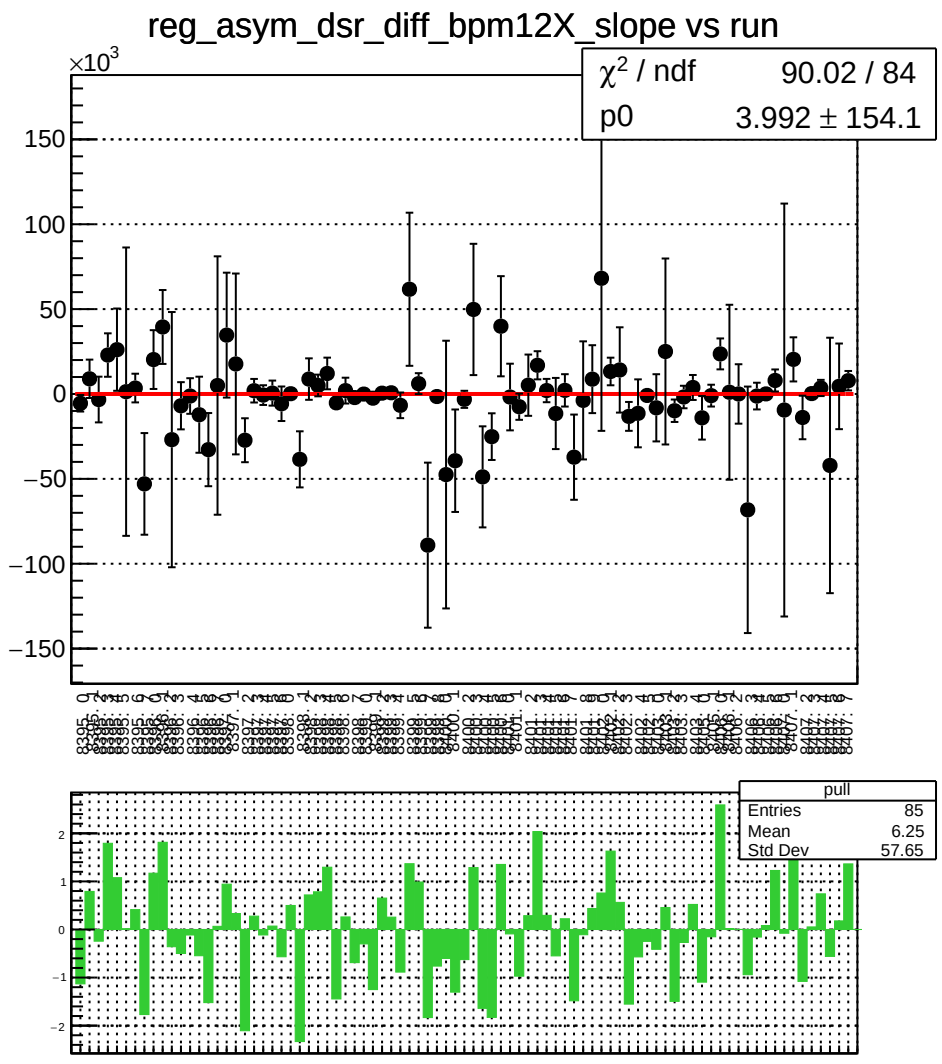

pull1D
Entries 75
Mean 0.09083
Std Dev 1.036

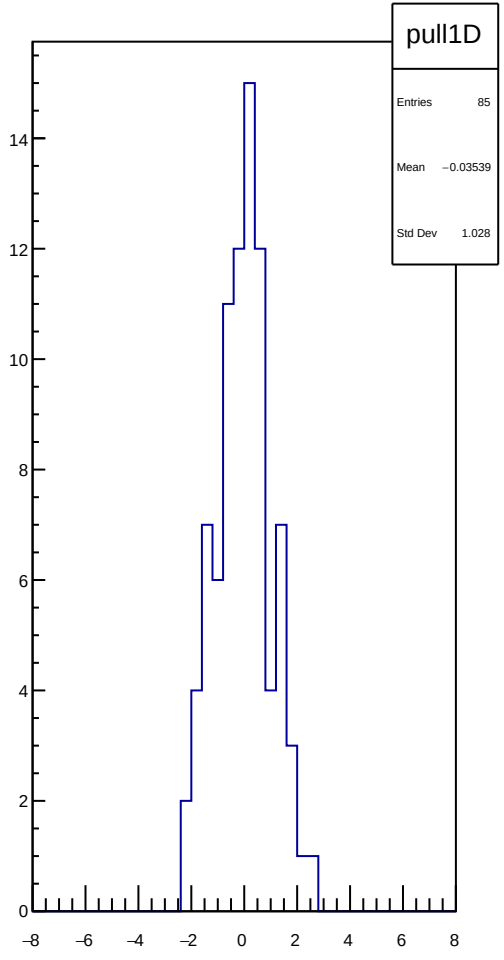

reg_asym_dsr_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 96.22 / 82
p0 −530.6 ± 1454
1500
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean 16.26
Std Dev 23.48
3
2
1
0
−1
−2
−3

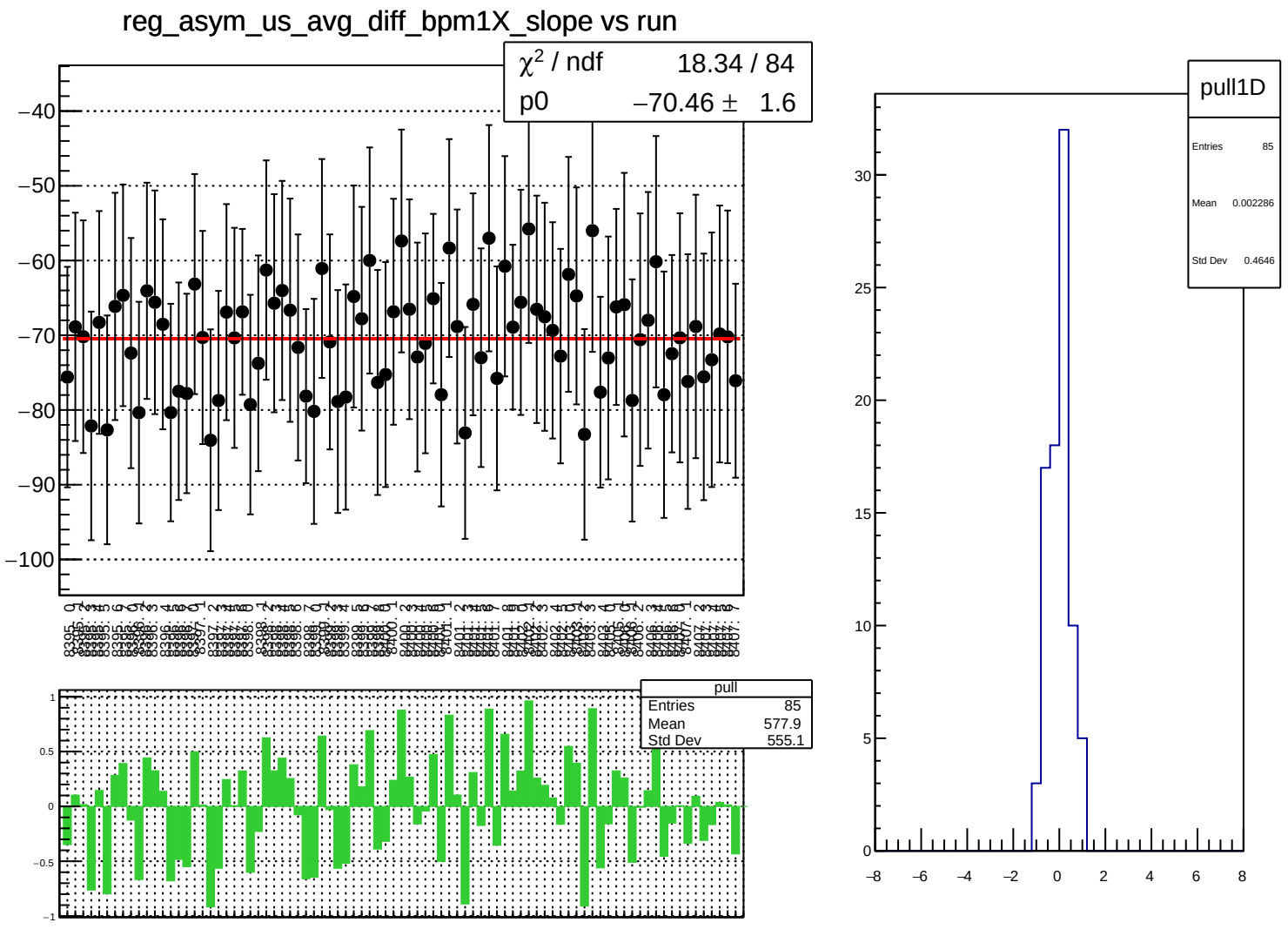

pull1D
Entries 83
Mean −0.158
Std Dev 1.065
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

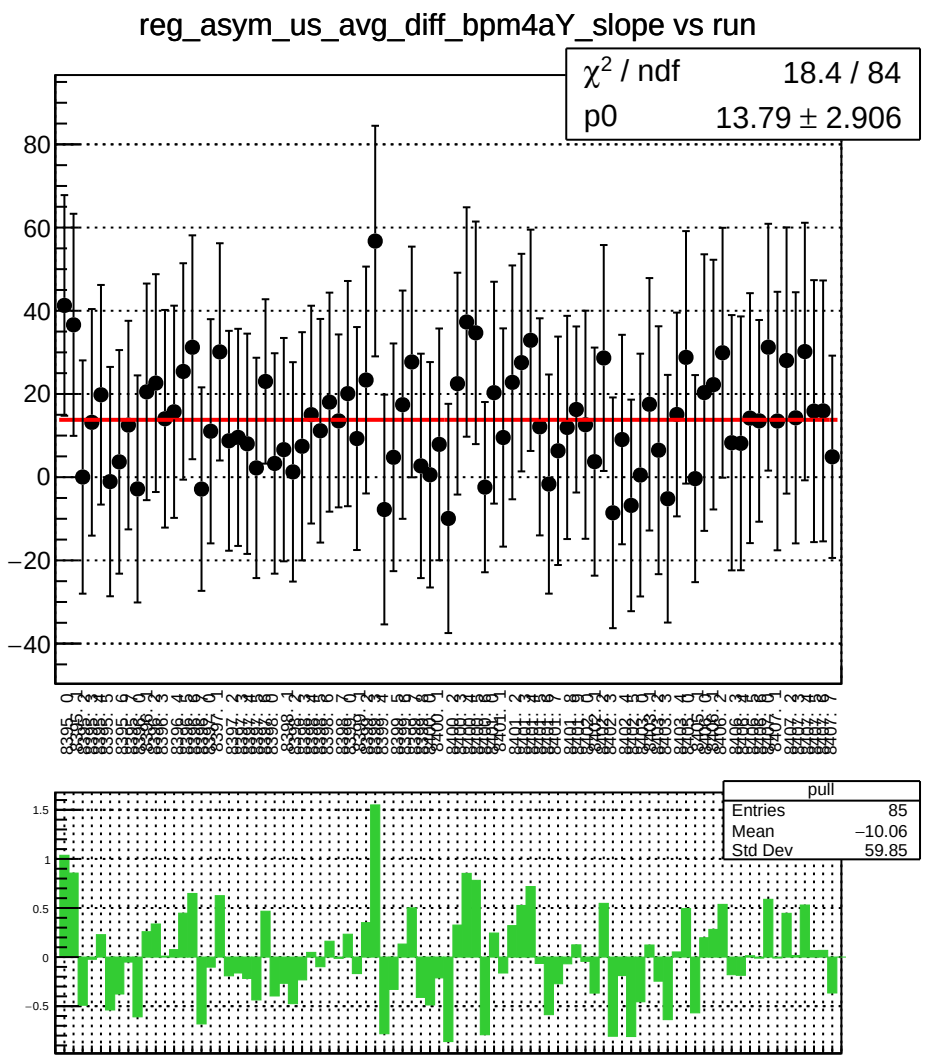

reg_asym_dsr_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 79.47 / 73
p0 −1563 ± 2468
pull
Entries 74
Mean 49.75
Std Dev 30.38

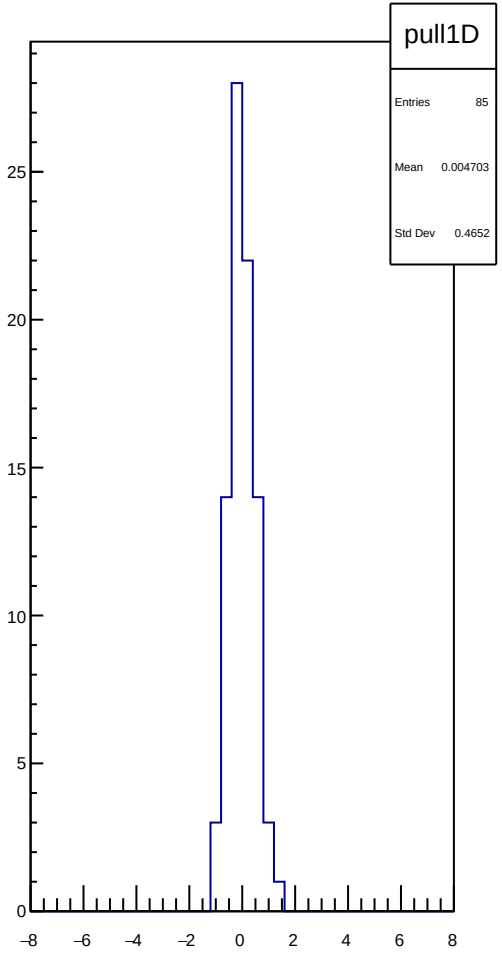

pull1D
Entries 74
Mean −0.1097
Std Dev 1.03

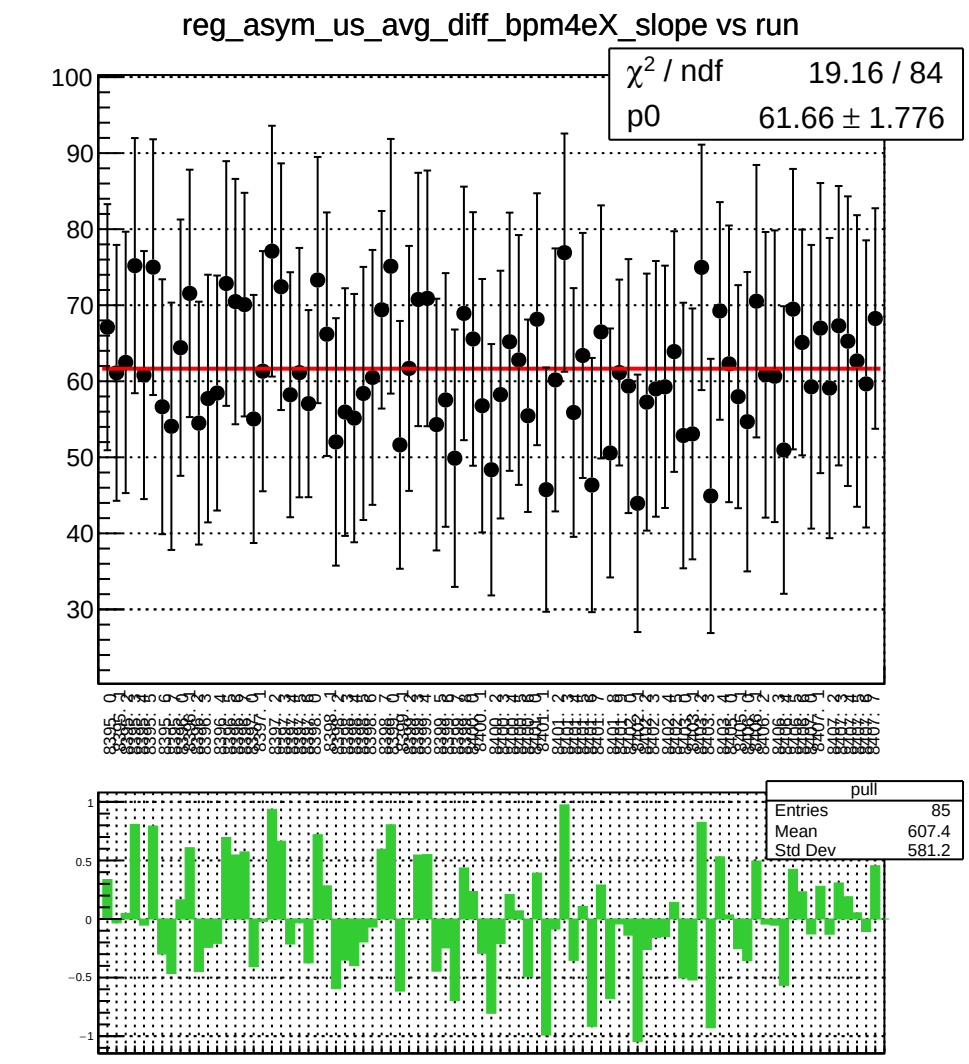

reg_asym_dsr_diff_bpm12X_slope vs run
×10^3
χ^2 / ndf 90.02 / 84
p0 3.992 ± 154.1
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 6.25
Std Dev 57.65
2
1
0
−1
−2

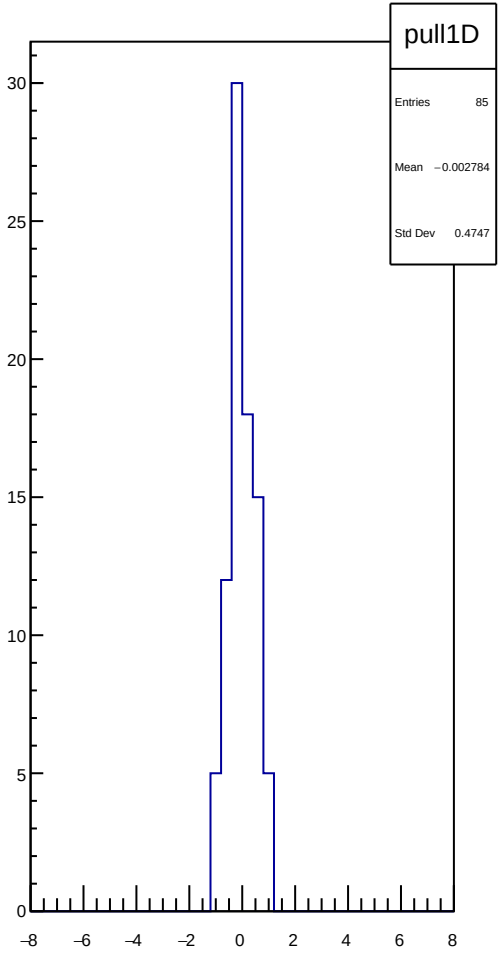

pull1D
Entries 85
Mean −0.03539
Std Dev 1.028
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

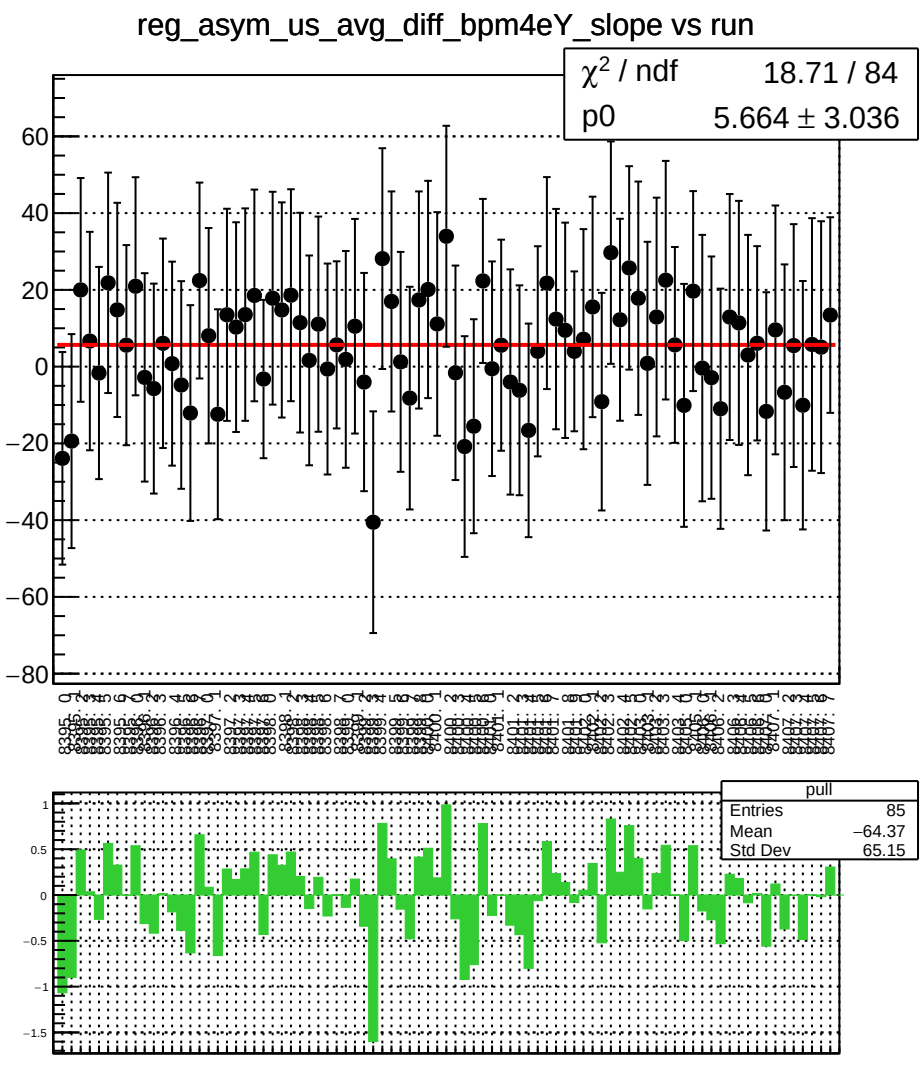

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 18.34 / 84
p0 −70.46 ± 1.6
−40
−50
−60
−70
−80
−90
−100
pull
Entries 85
Mean 577.9
Std Dev 555.1
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean 0.002286
Std Dev 0.4646
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

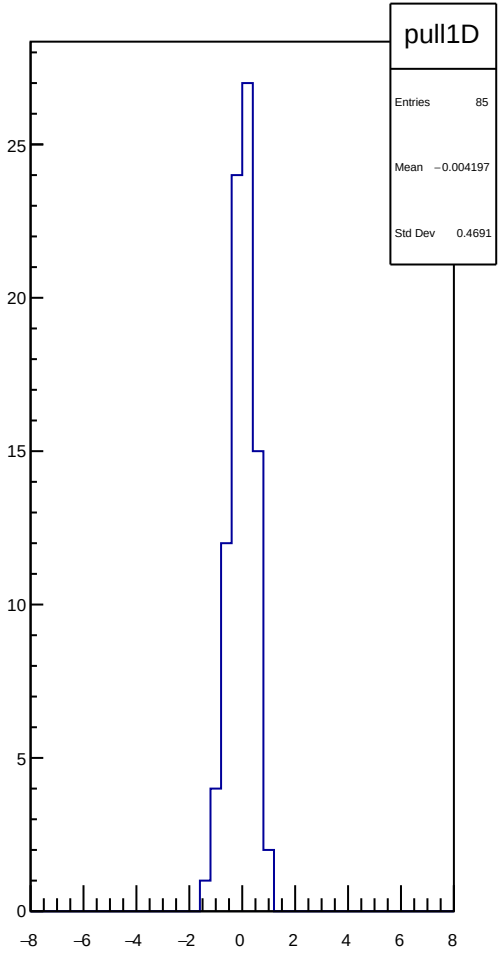

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 18.4 / 84
p0 13.79 ± 2.906
pull
Entries 85
Mean −10.06
Std Dev 59.85

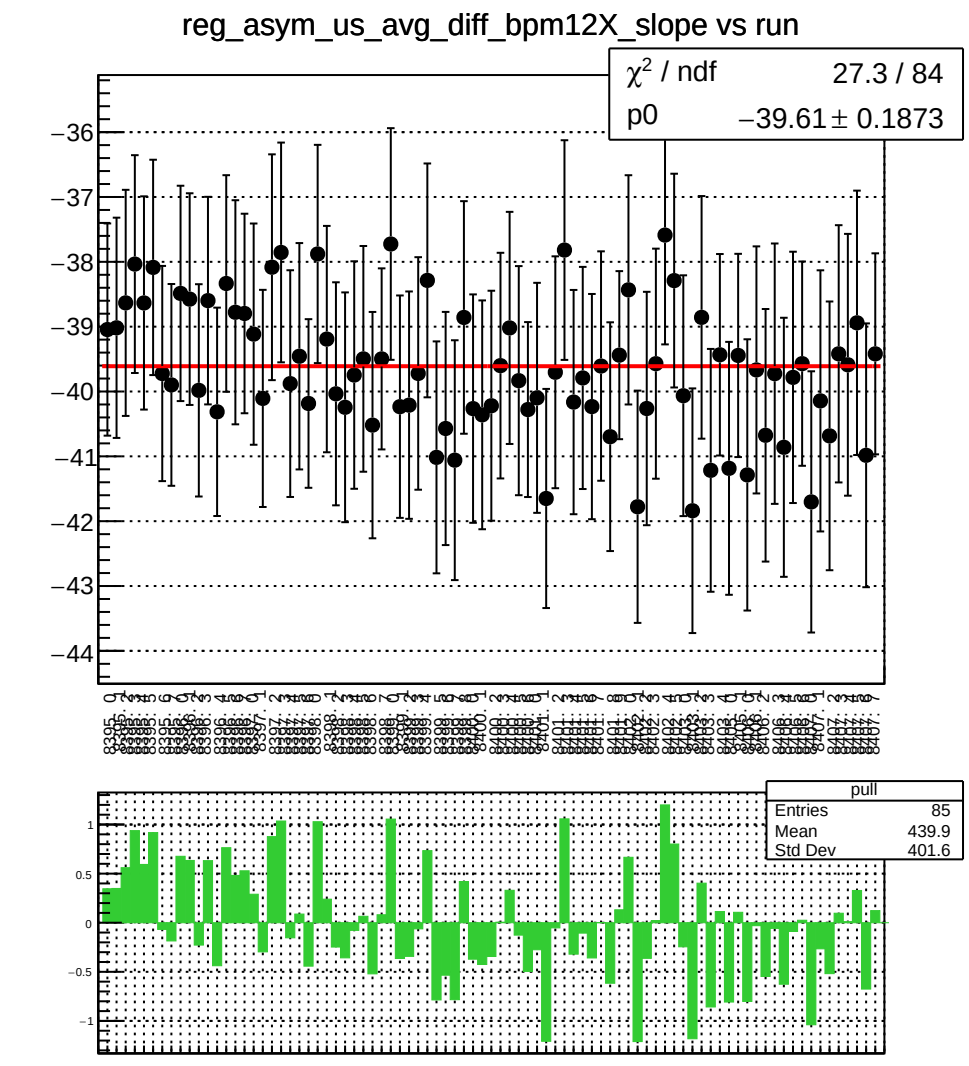

pull1D
Entries 85
Mean 0.004703
Std Dev 0.4652

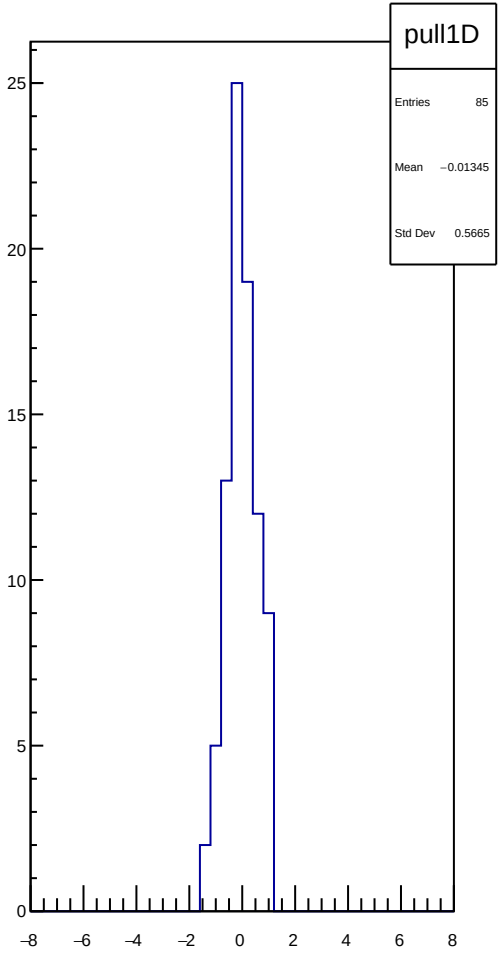

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ^2 / ndf 19.16 / 84
p0 61.66 ± 1.776
pull
Entries 85
Mean 607.4
Std Dev 581.2

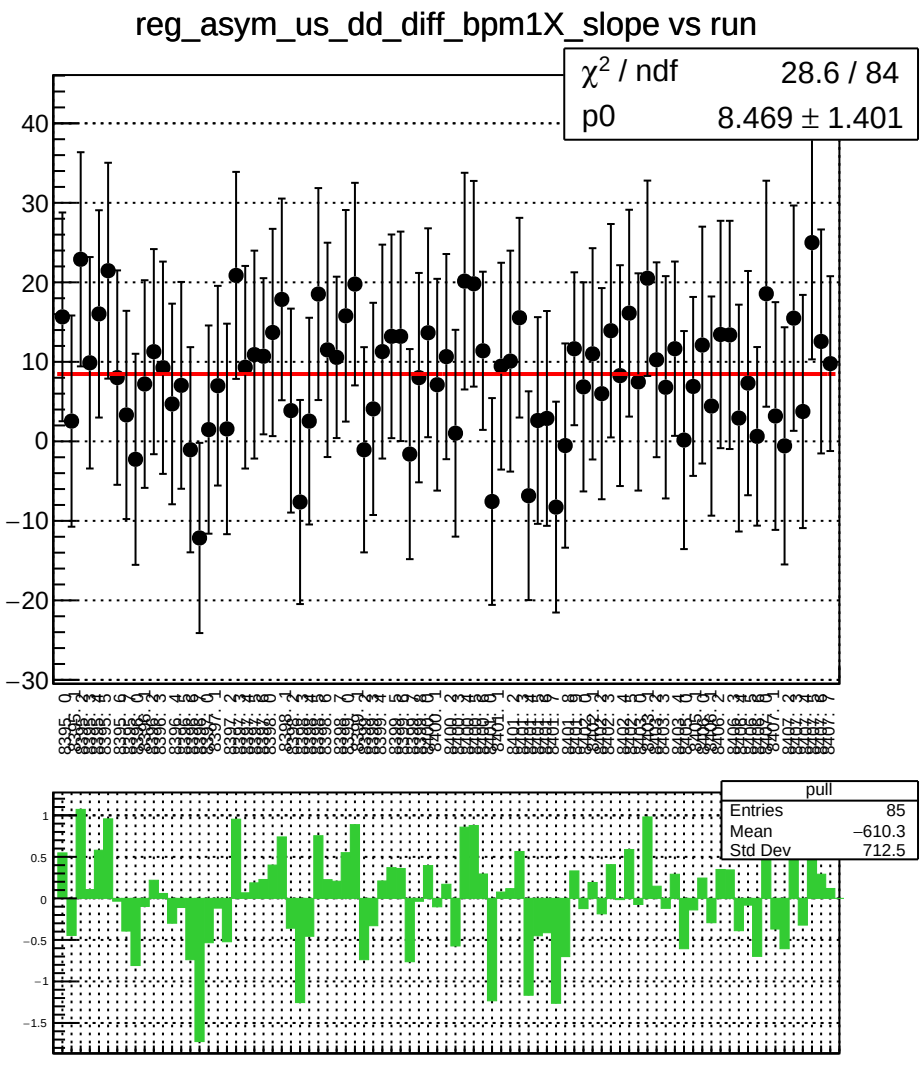

pull1D
Entries 85
Mean −0.002784
Std Dev 0.4747

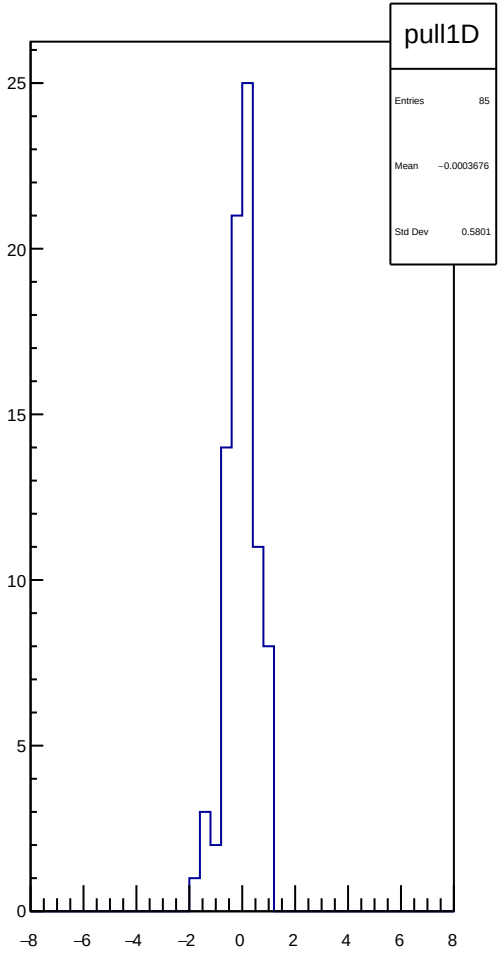

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 18.71 / 84
p0 5.664 ± 3.036
pull
Entries 85
Mean −64.37
Std Dev 65.15

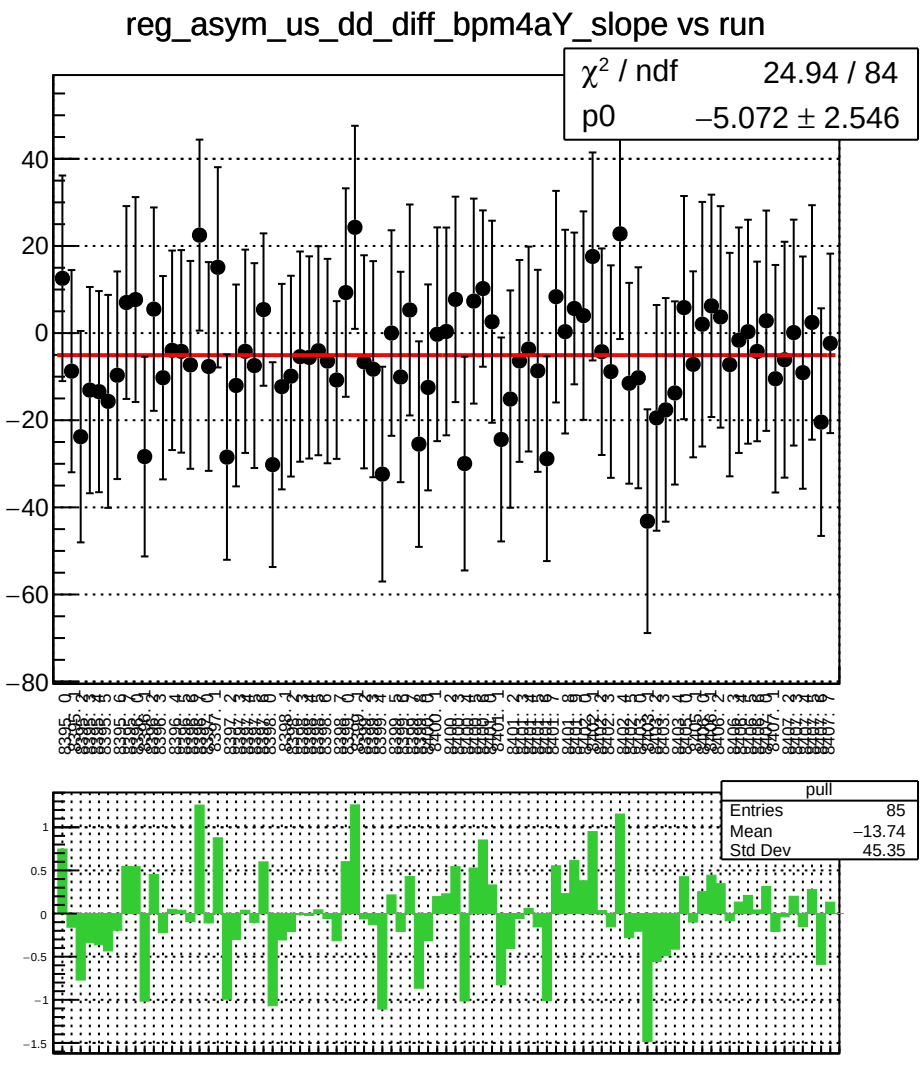

pull1D
Entries 85
Mean −0.004197
Std Dev 0.4691

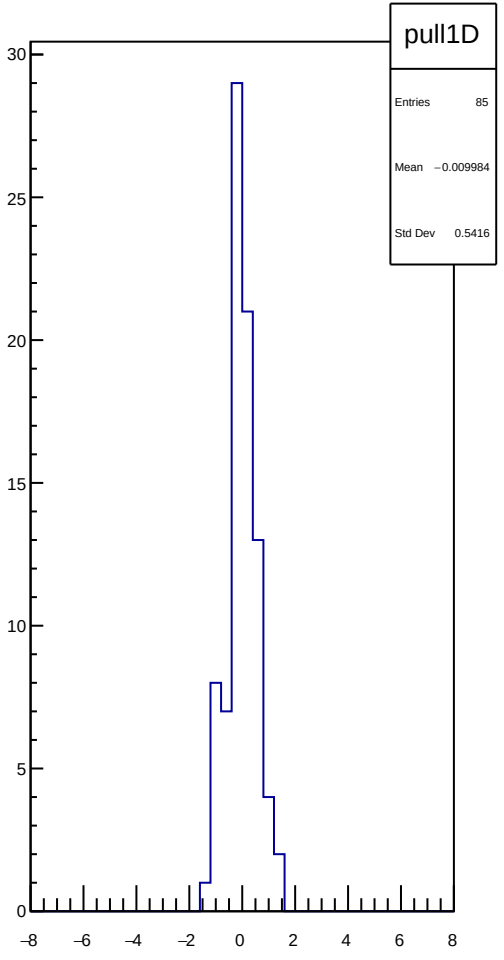

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 27.3 / 84
p0 −39.61 ± 0.1873
pull
Entries 85
Mean 439.9
Std Dev 401.6

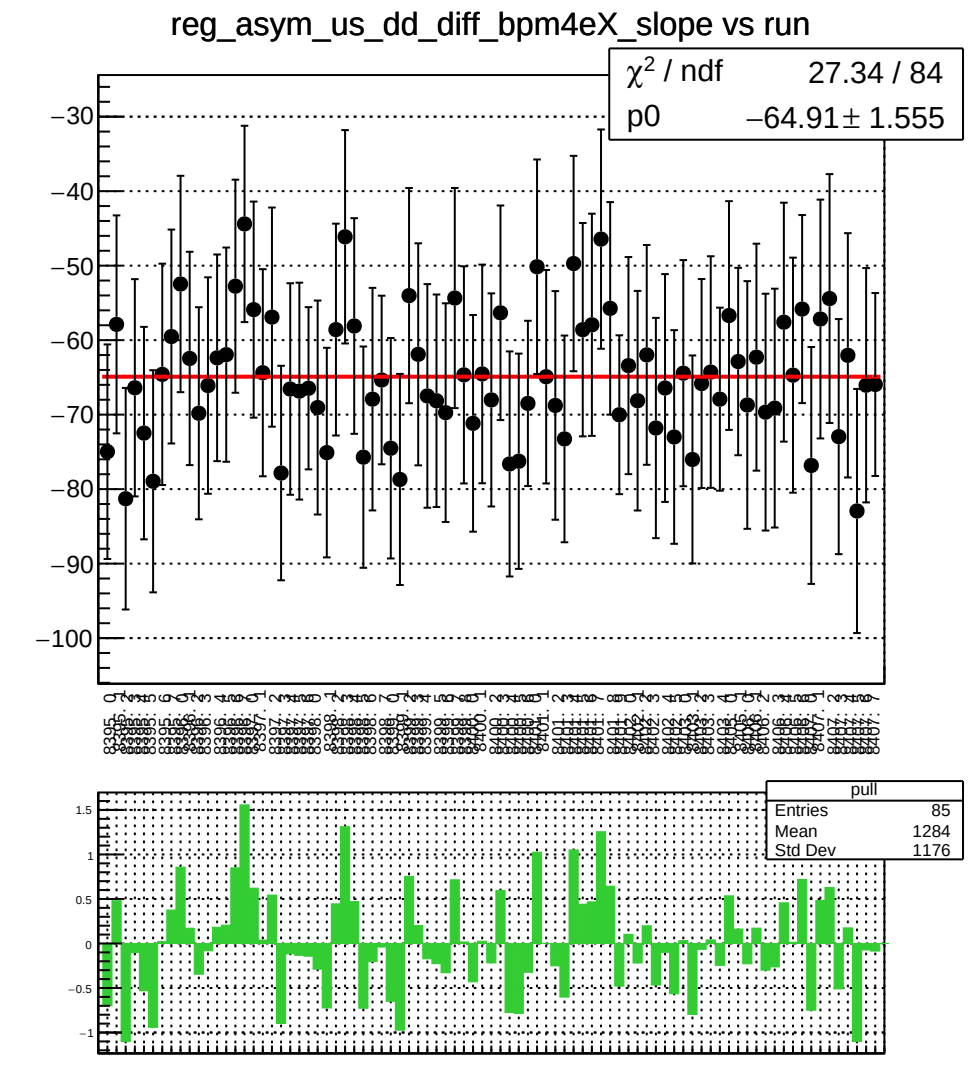

pull1D
Entries 85
Mean −0.01345
Std Dev 0.5665

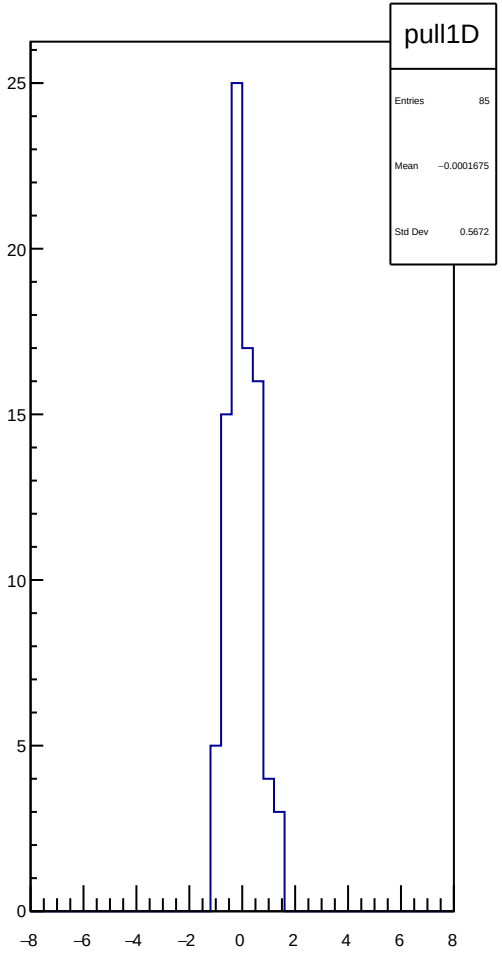

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 28.6 / 84
p0 8.469 ± 1.401
pull
Entries 85
Mean −610.3
Std Dev 712.5

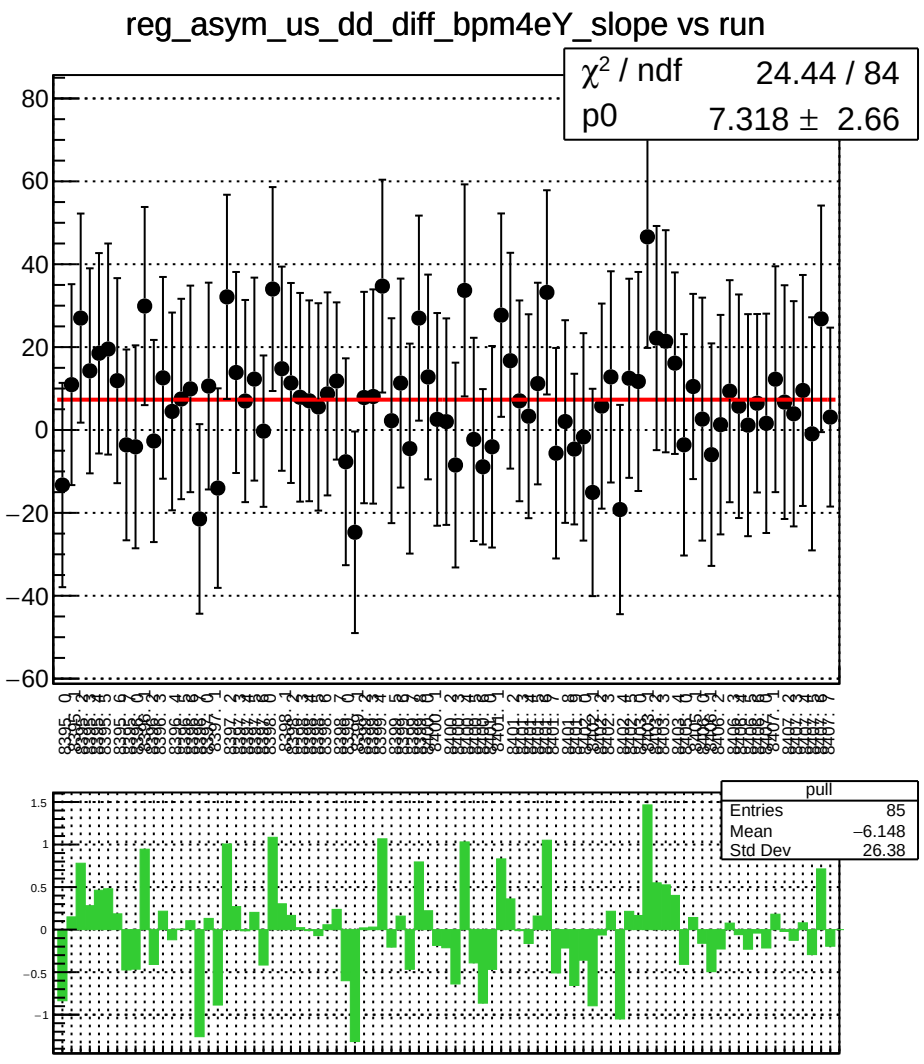

pull1D
Entries 85
Mean −0.0003676
Std Dev 0.5801

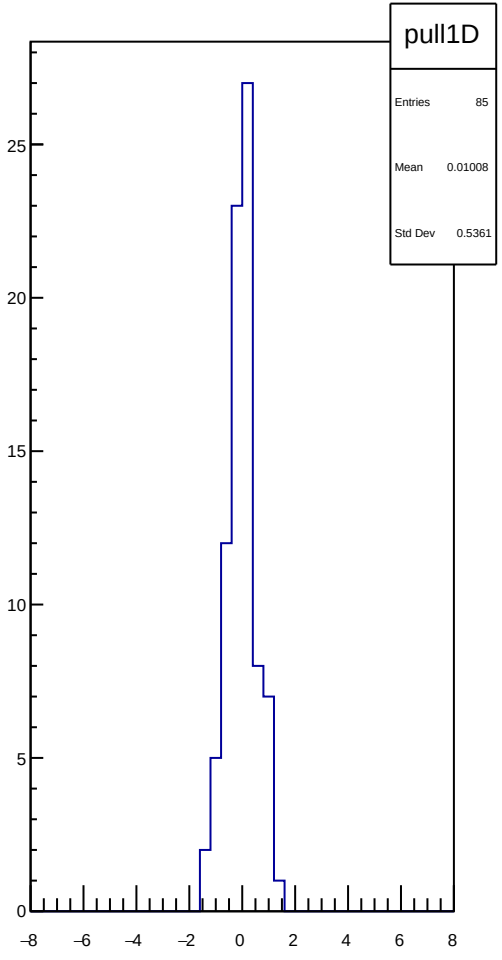

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 24.94 / 84
p0 −5.072 ± 2.546
pull
Entries 85
Mean −13.74
Std Dev 45.35

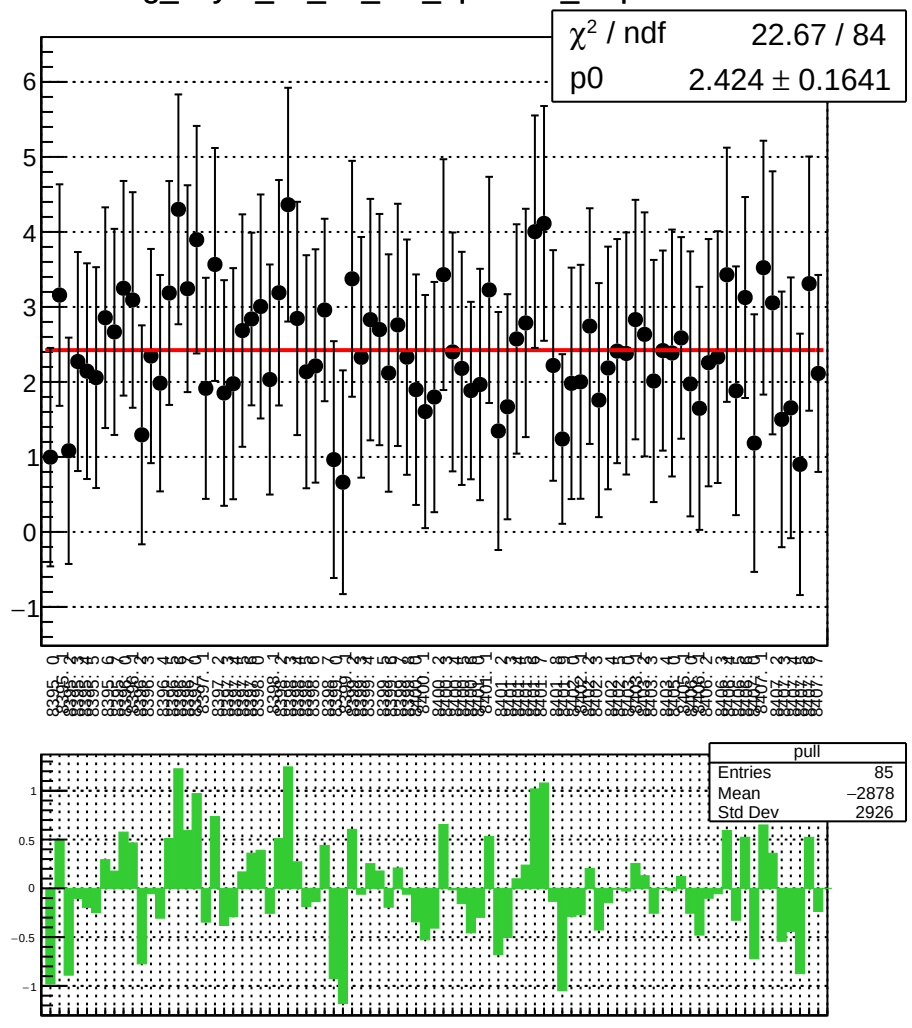

pull1D
Entries 85
Mean −0.009984
Std Dev 0.5416

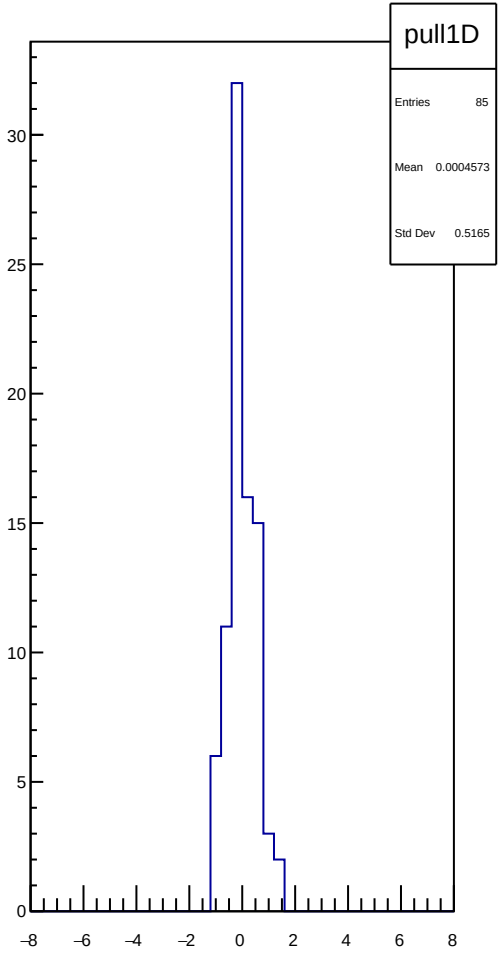

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 27.34 / 84
p0 −64.91 ± 1.555
pull
Entries 85
Mean 1284
Std Dev 1176

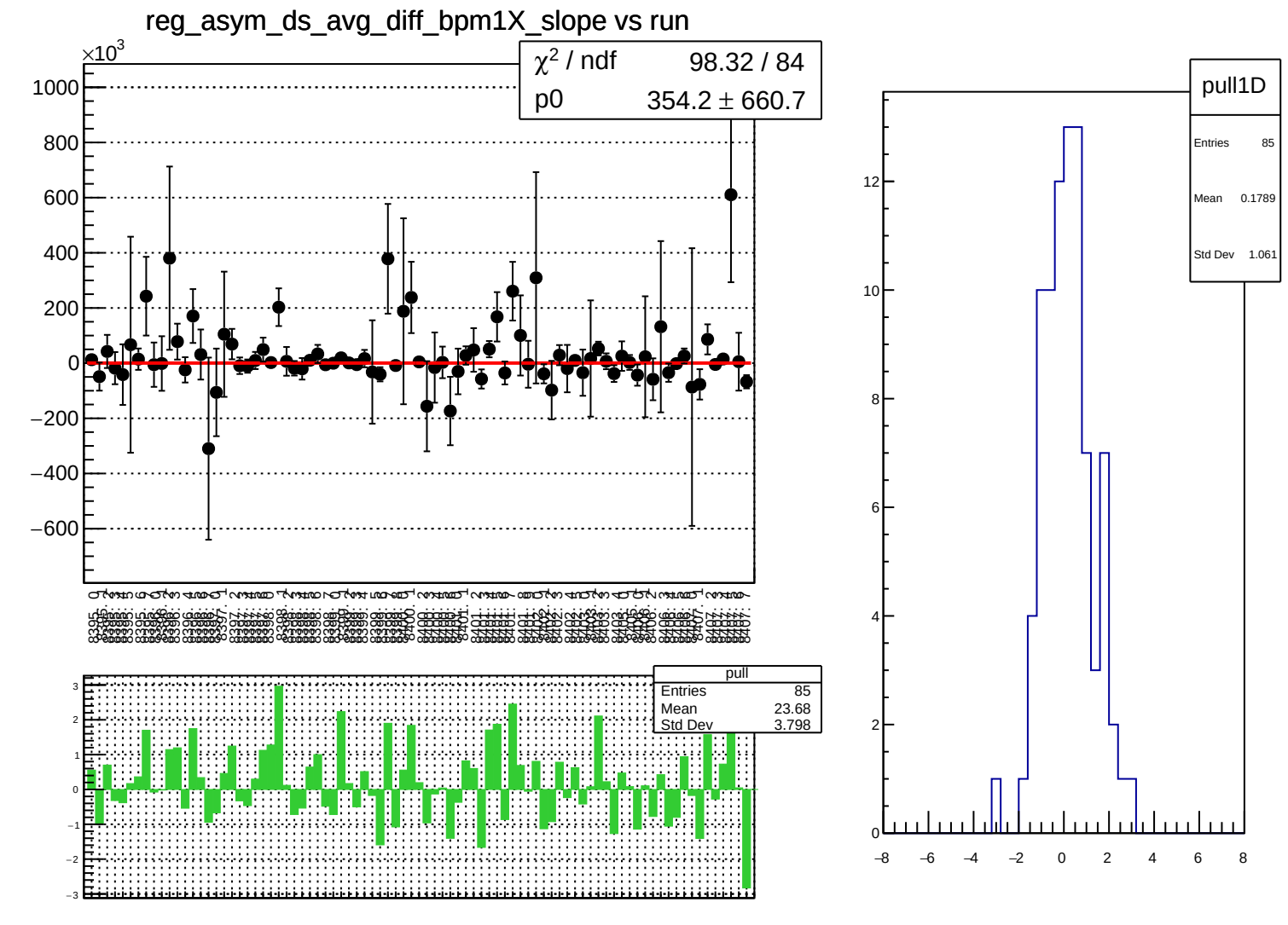

pull1D
Entries 85
Mean −0.0001675
Std Dev 0.5672

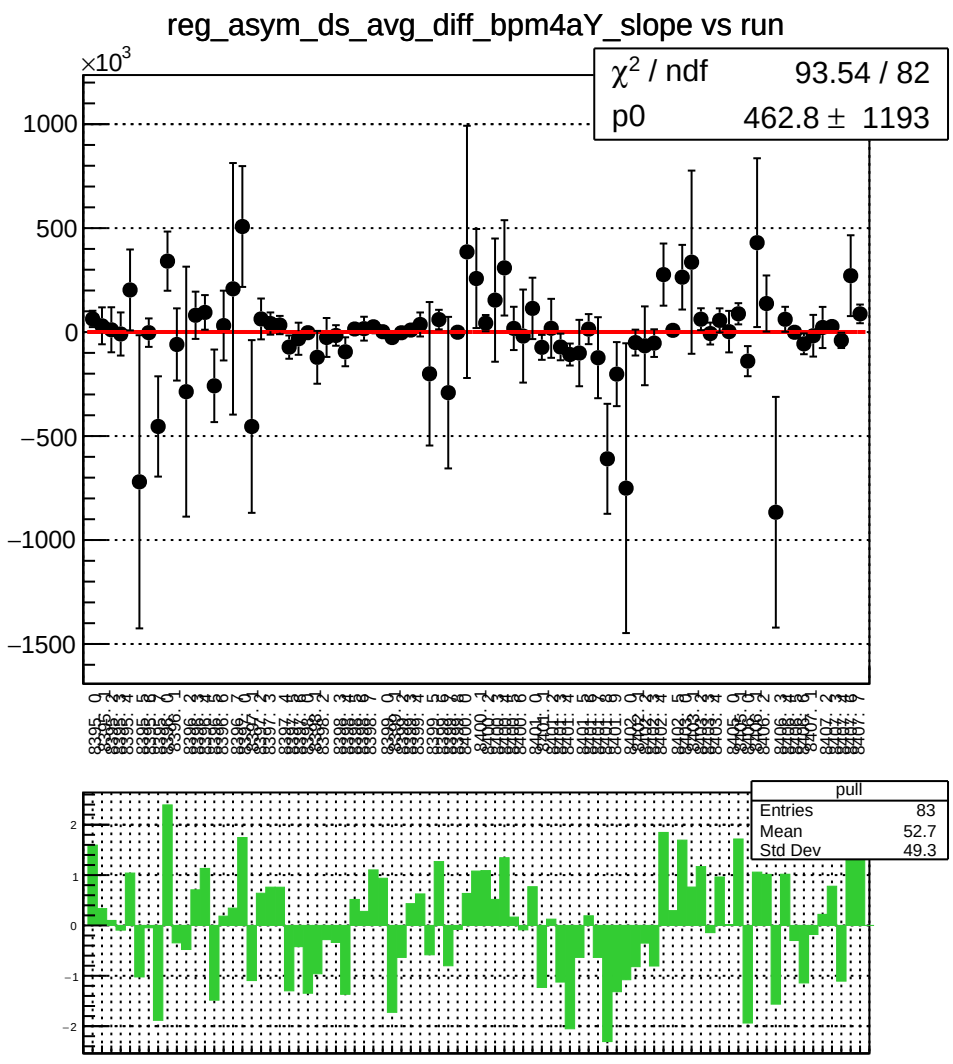

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 24.44 / 84
p0 7.318 ± 2.66
pull
Entries 85
Mean −6.148
Std Dev 26.38

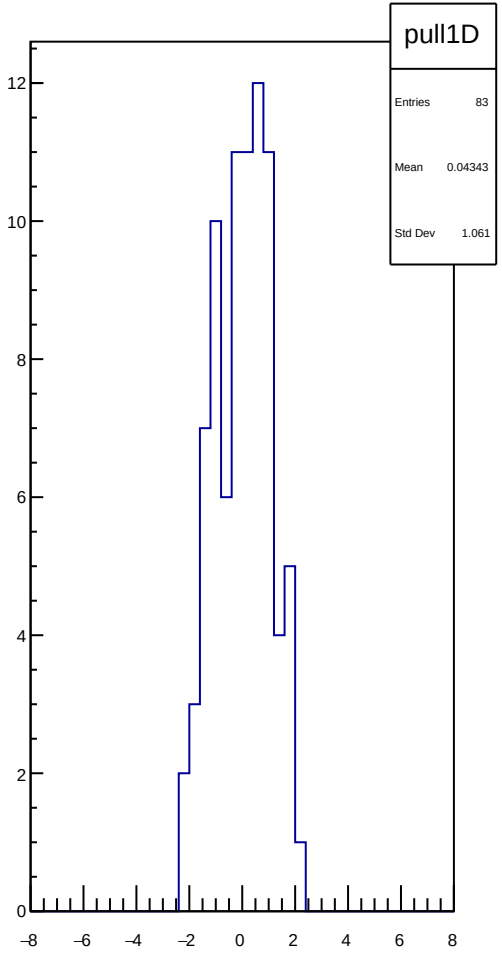

pull1D
Entries 85
Mean 0.01008
Std Dev 0.5361

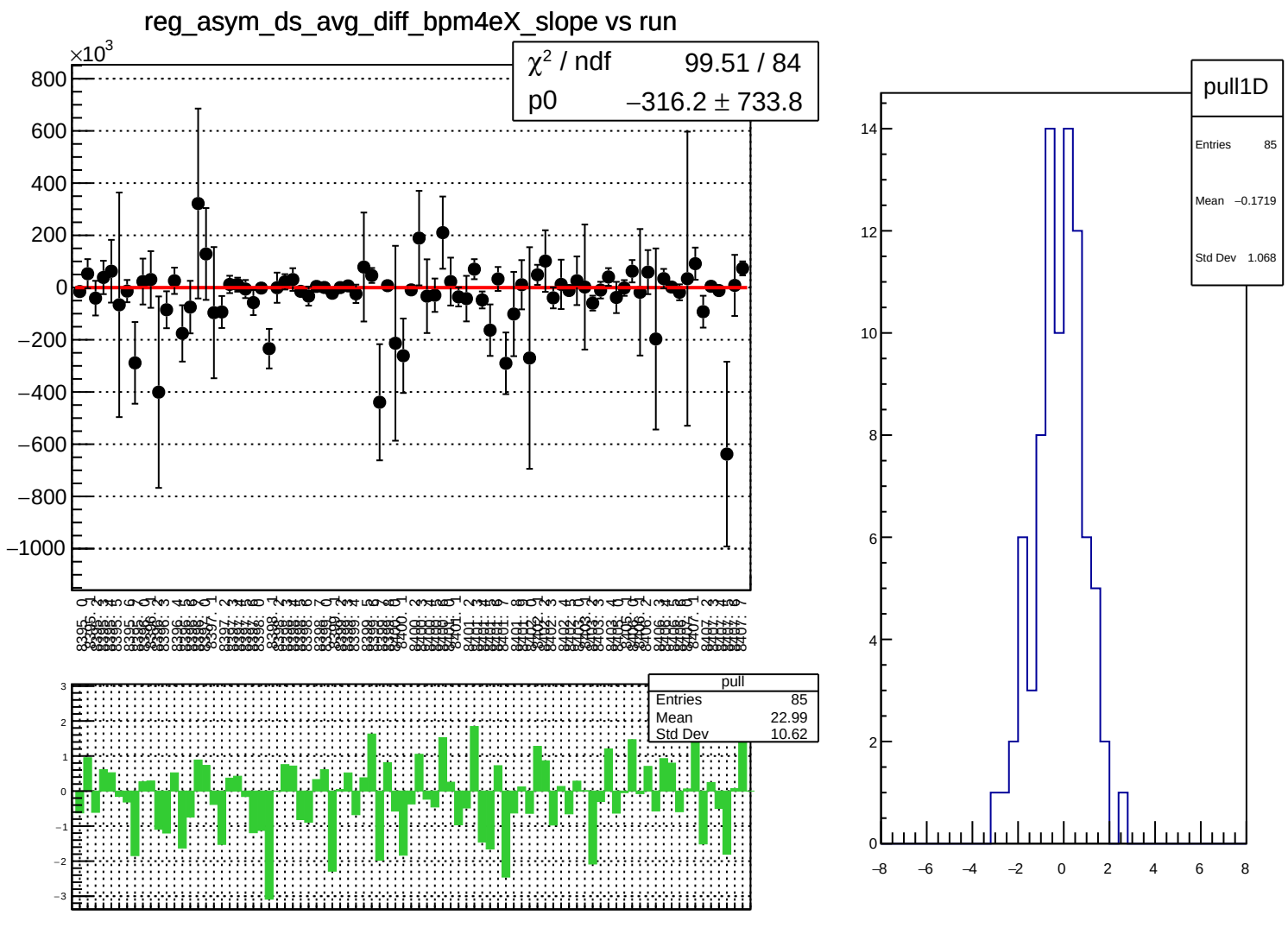

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 22.67 / 84
p0 2.424 ± 0.1641
pull
Entries 85
Mean −2878
Std Dev 2926

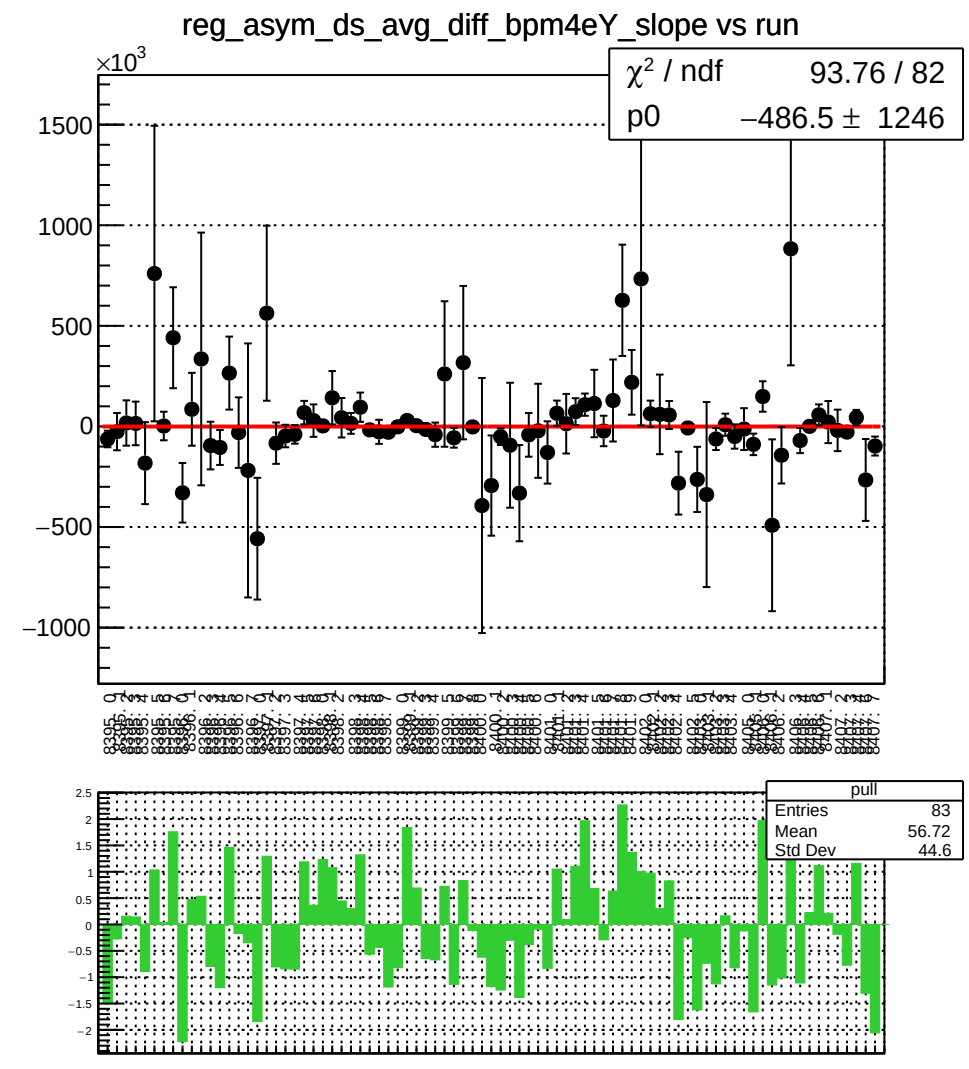

pull1D
Entries 85
Mean 0.0004573
Std Dev 0.5165

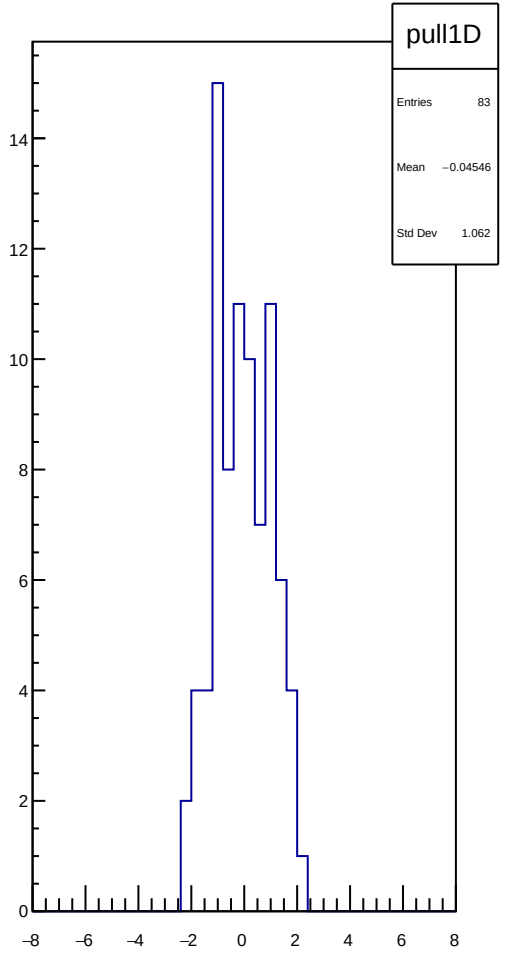

reg_asym_ds_avg_diff_bpm1X_slope vs run
×10^3
χ^2 / ndf 98.32 / 84
p0 354.2 ± 660.7
1000
800
600
400
200
0
−200
−400
−600
pull
Entries 85
Mean 23.68
Std Dev 3.798
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean 0.1789
Std Dev 1.061
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

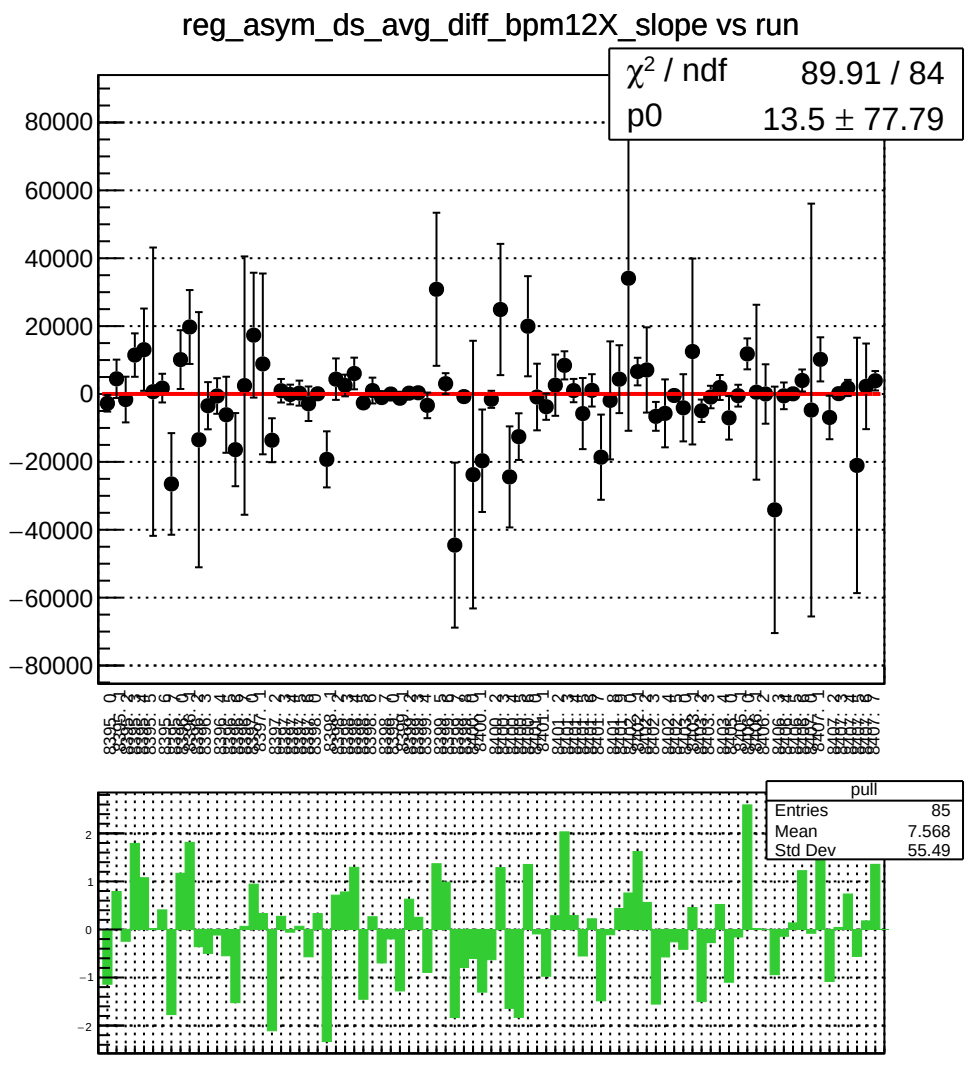

reg_asym_ds_avg_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 93.54 / 82
p0 462.8 ± 1193
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean 52.7
Std Dev 49.3
2
1
0
−1
−2

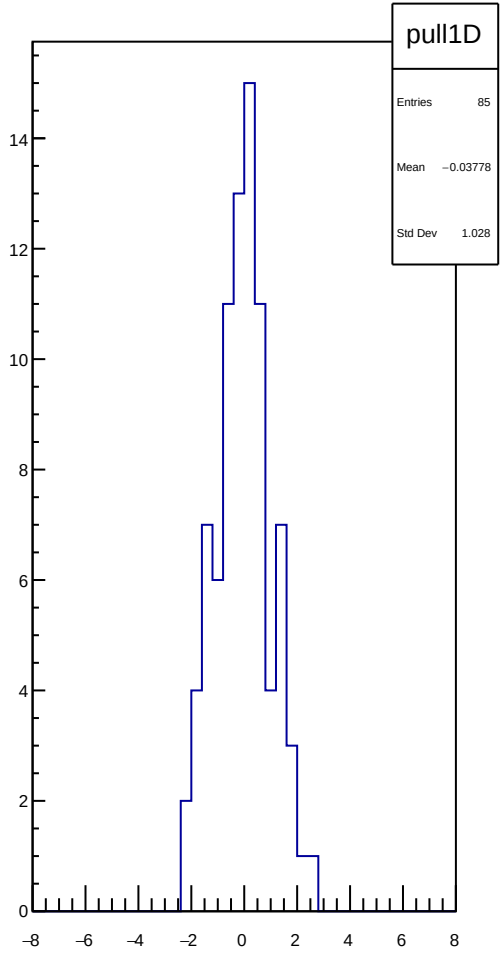

pull1D
Entries 83
Mean 0.04343
Std Dev 1.061
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

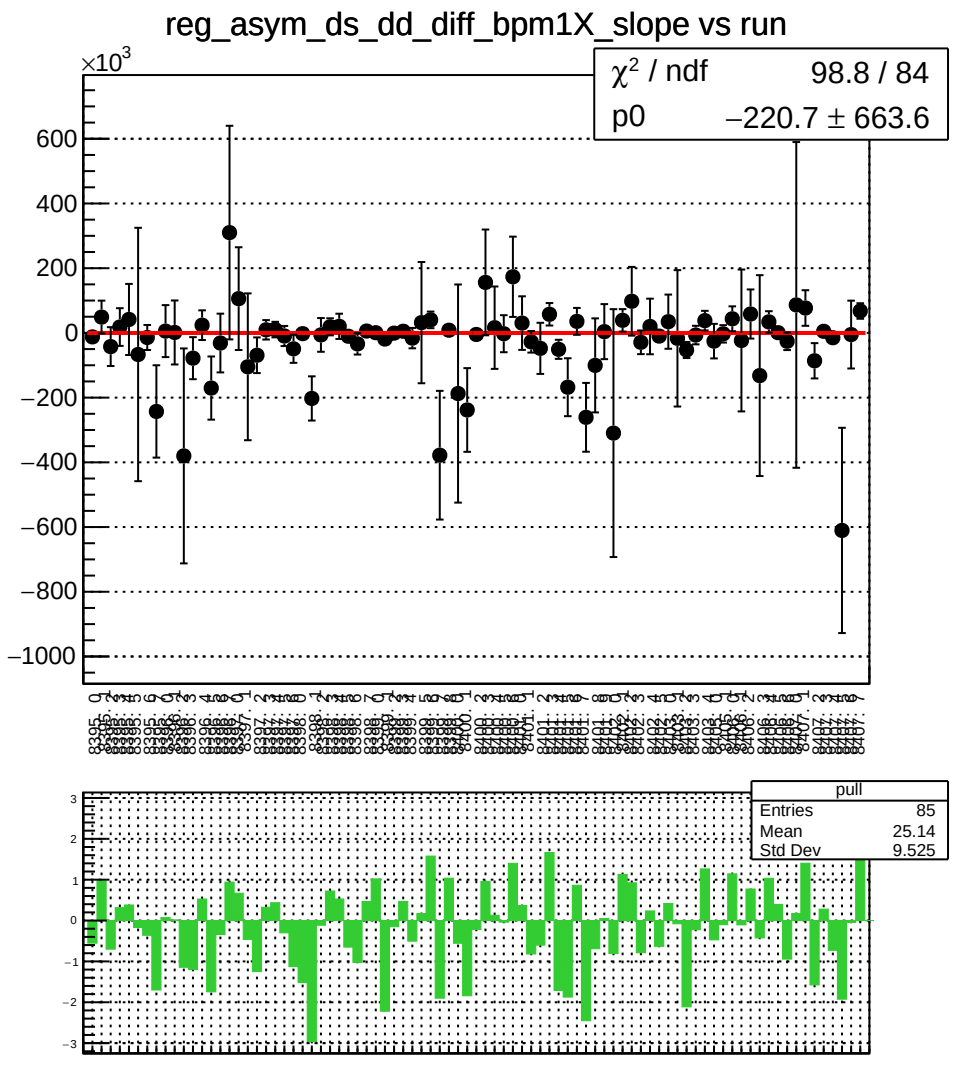

reg_asym_ds_avg_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 99.51 / 84
p0 −316.2 ± 733.8
pull
Entries 85
Mean 22.99
Std Dev 10.62
pull1D
Entries 85
Mean −0.1719
Std Dev 1.068

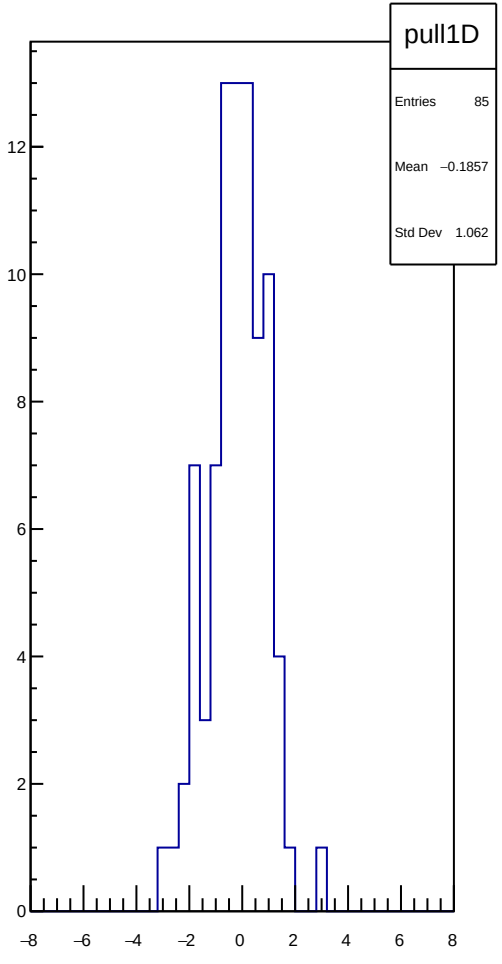

reg_asym_ds_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 93.76 / 82
p0 −486.5 ± 1246
1500
1000
500
0
−500
−1000
pull
Entries 83
Mean 56.72
Std Dev 44.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

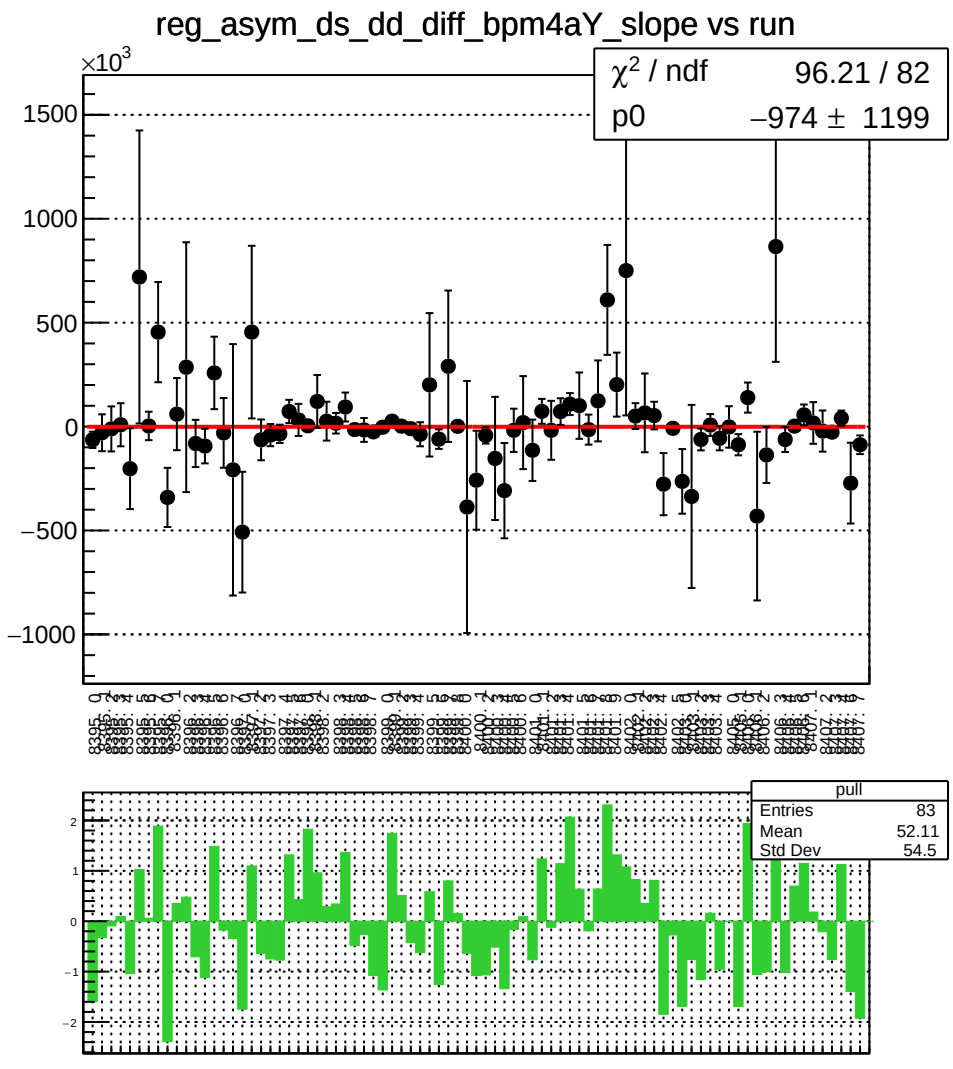

pull1D
Entries 83
Mean −0.04546
Std Dev 1.062
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

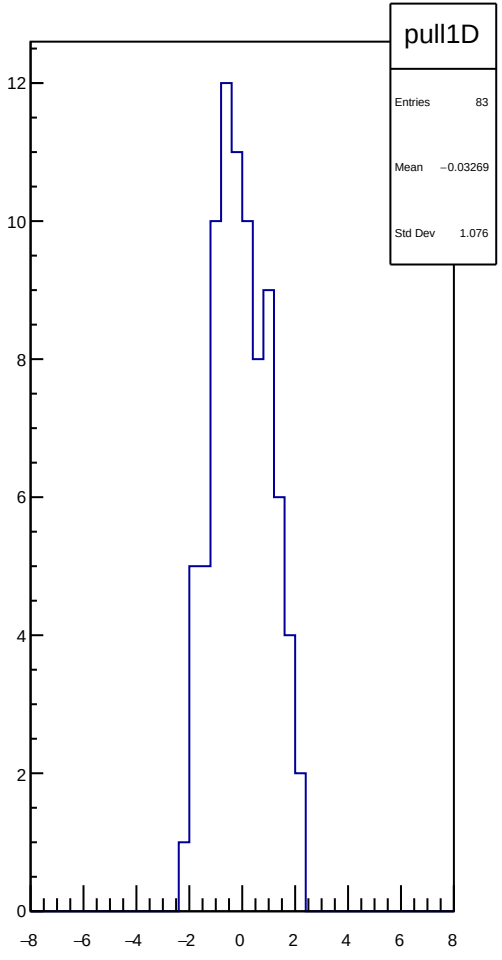

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 89.91 / 84
p0 13.5 ± 77.79
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 7.568
Std Dev 55.49
2
1
0
−1
−2

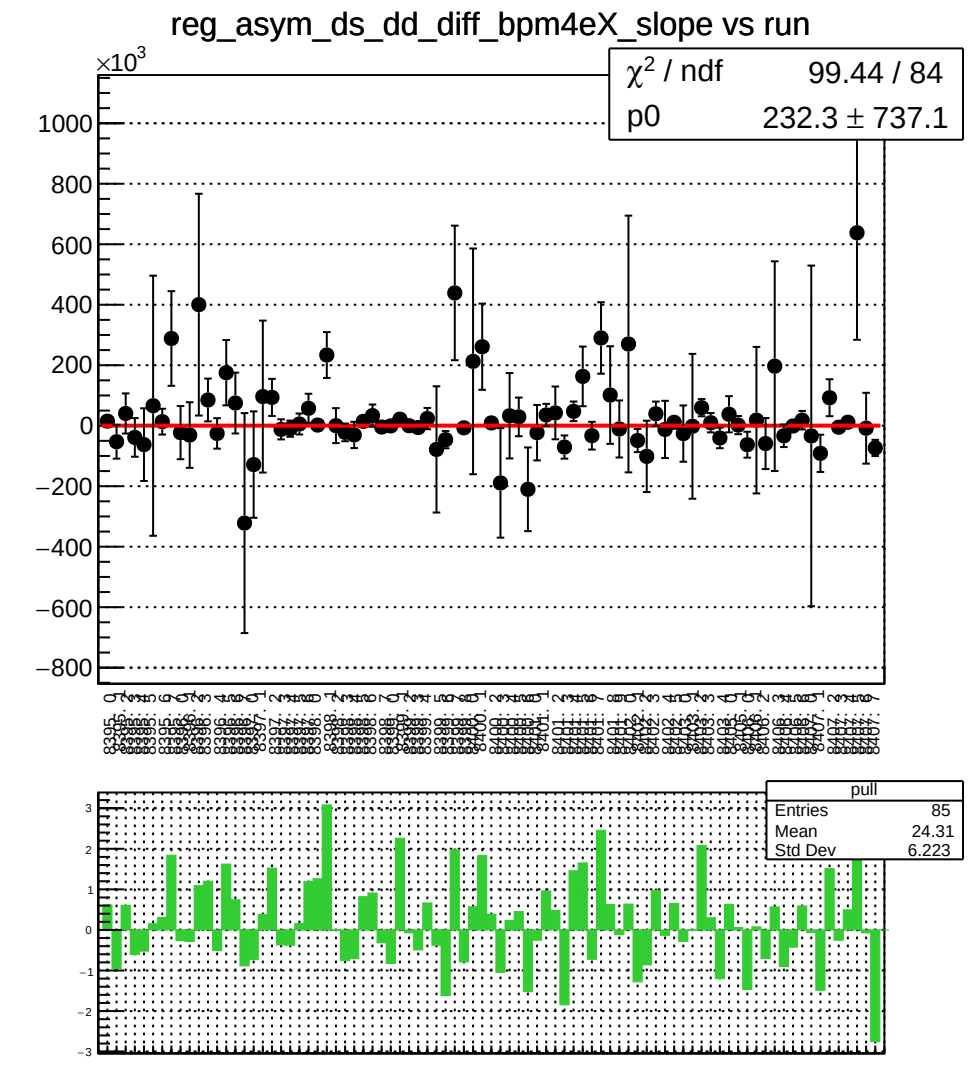

pull1D
Entries 85
Mean −0.03778
Std Dev 1.028
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

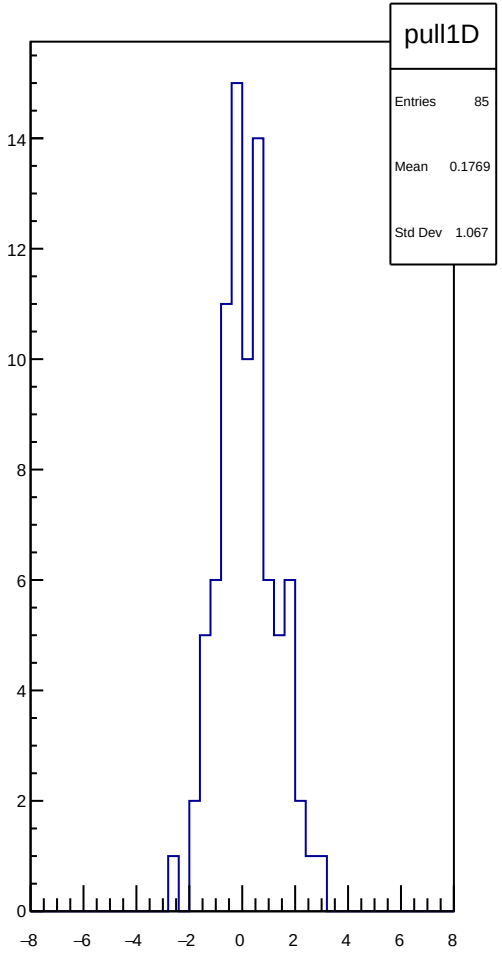

reg_asym_ds_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 98.8 / 84
p0 −220.7 ± 663.6
600
400
200
0
−200
−400
−600
−800
−1000
pull
Entries 85
Mean 25.14
Std Dev 9.525
3
2
1
0
−1
−2
−3

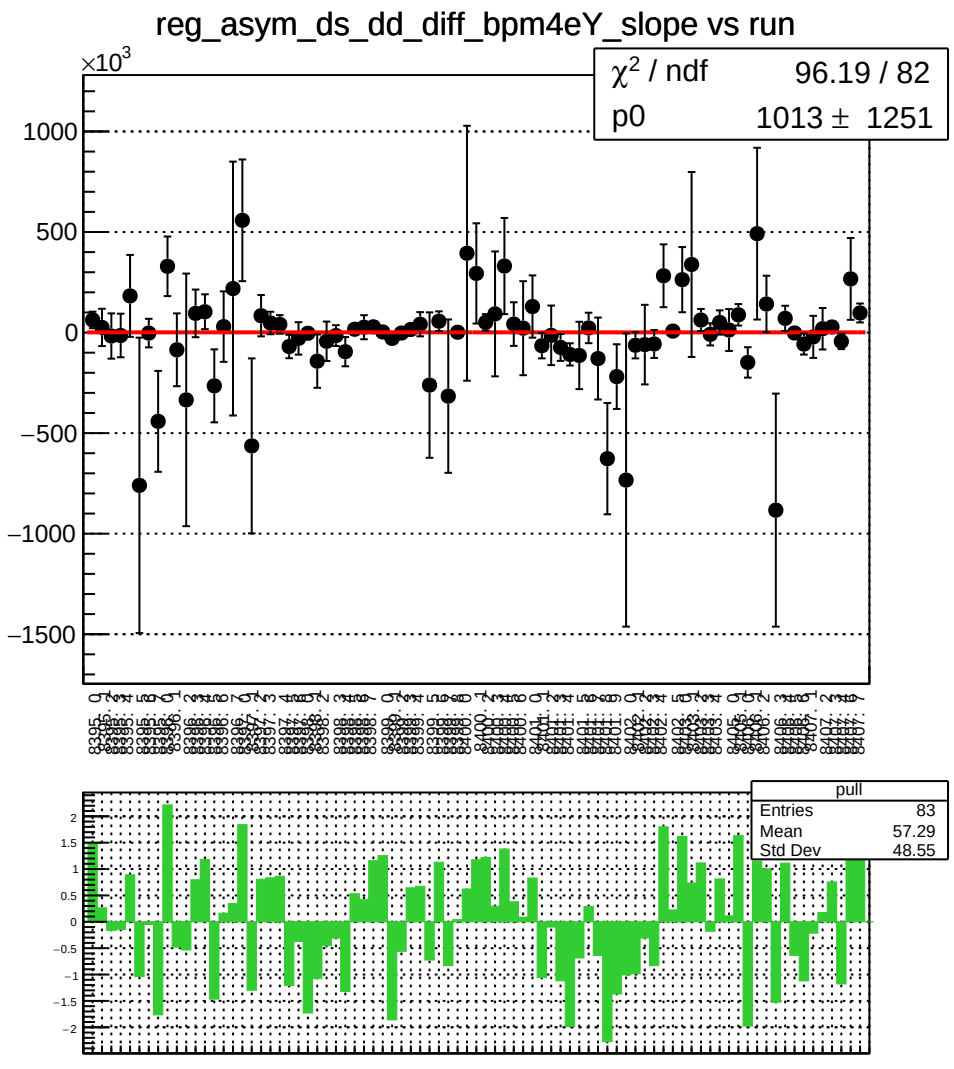

pull1D
Entries 85
Mean −0.1857
Std Dev 1.062
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

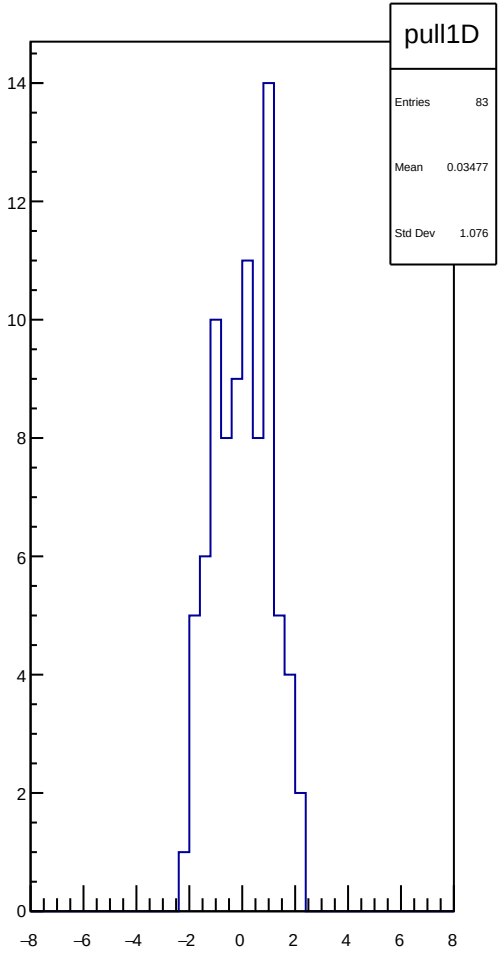

reg_asym_ds_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 96.21 / 82
p0 −974 ± 1199
pull
Entries 83
Mean 52.11
Std Dev 54.5

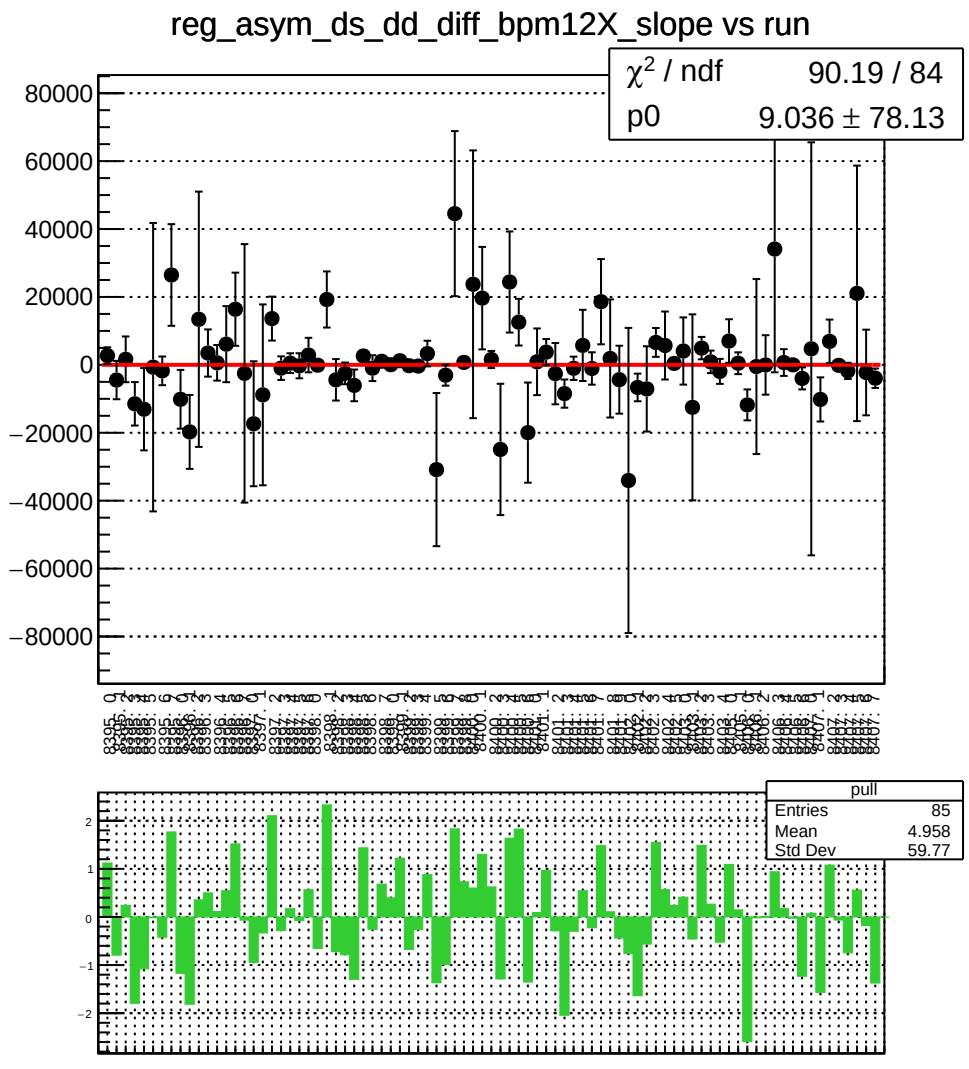

pull1D
Entries 83
Mean −0.03269
Std Dev 1.076

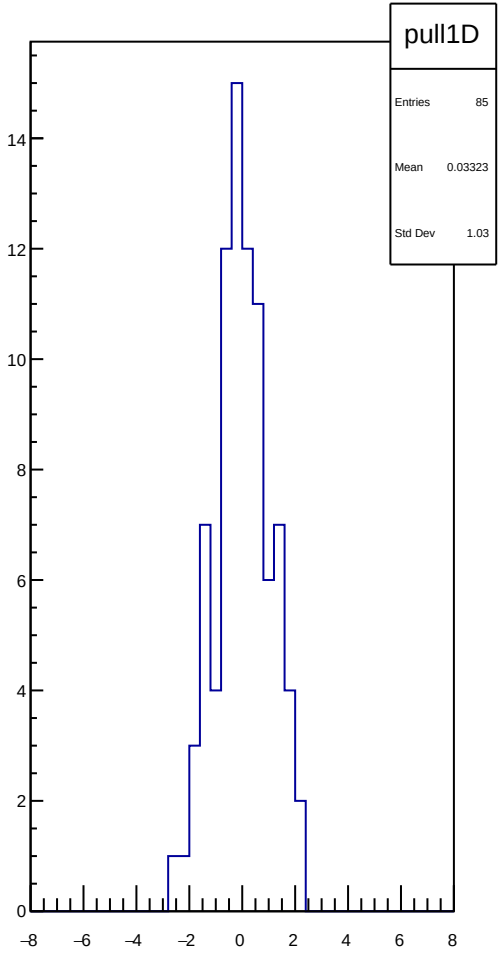

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 99.44 / 84
p0 232.3 ± 737.1
×10³
pull
Entries 85
Mean 24.31
Std Dev 6.223

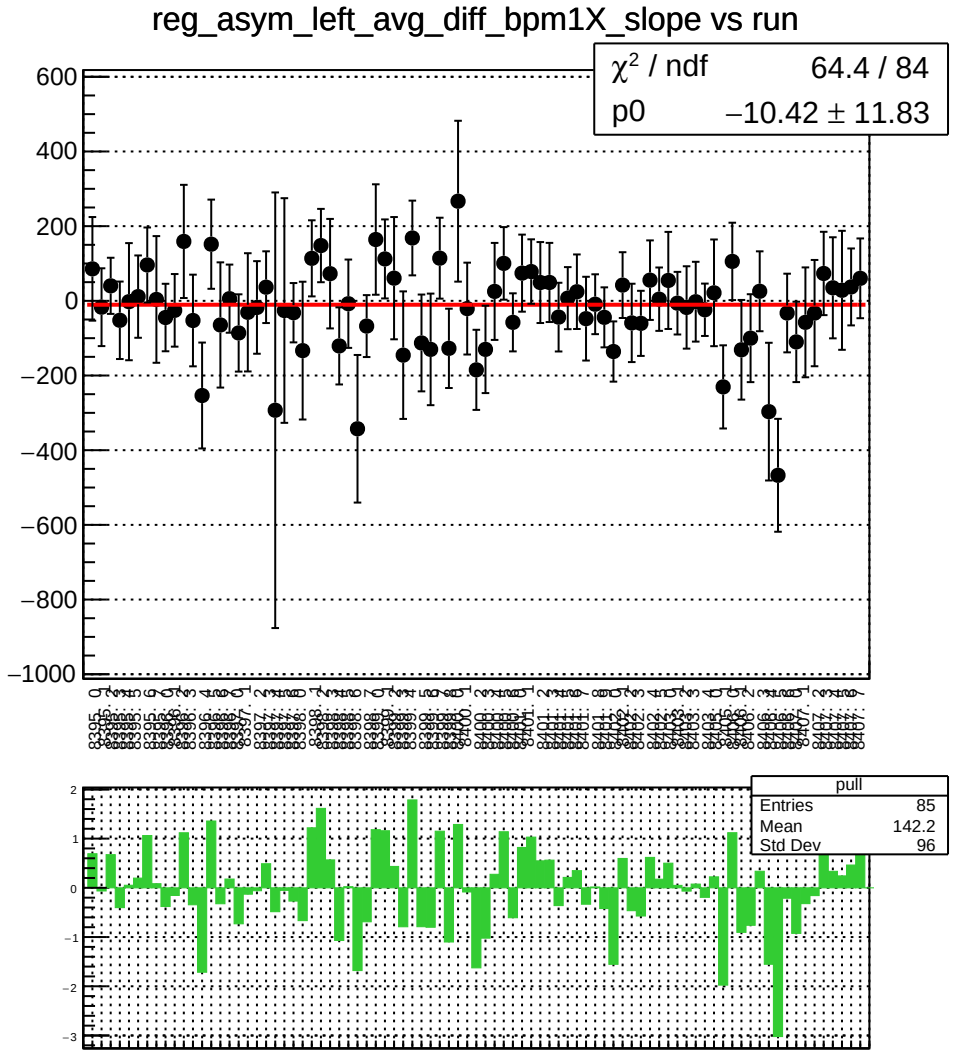

pull1D
Entries 85
Mean 0.1769
Std Dev 1.067

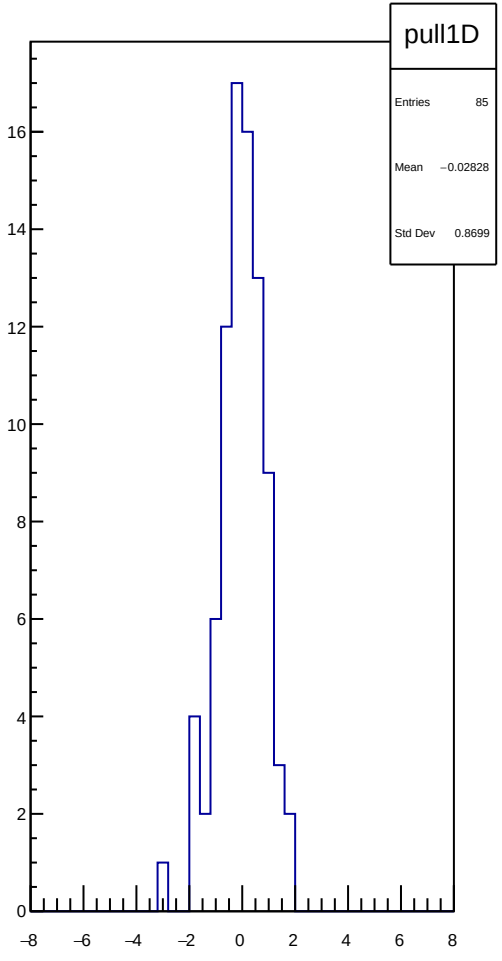

reg_asym_ds_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 96.19 / 82
p0 1013 ± 1251
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean 57.29
Std Dev 48.55
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

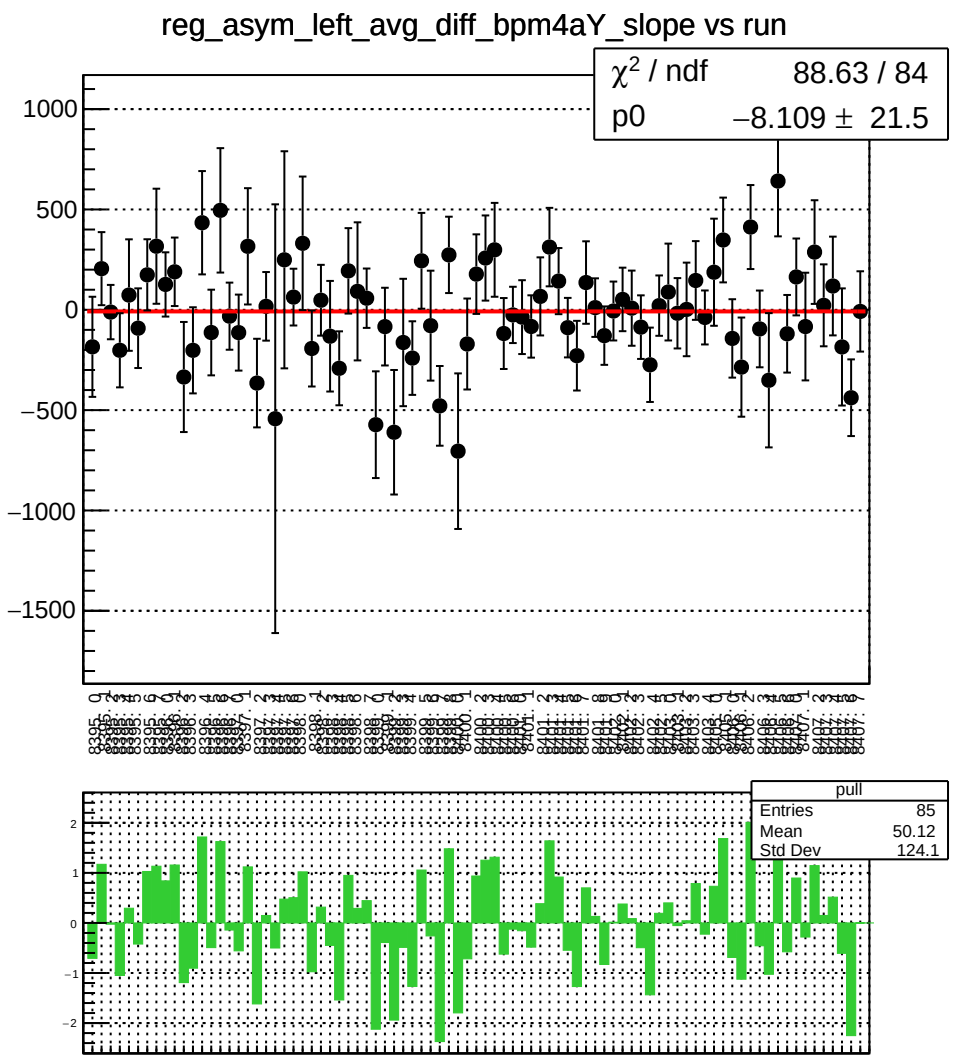

pull1D
Entries 83
Mean 0.03477
Std Dev 1.076
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

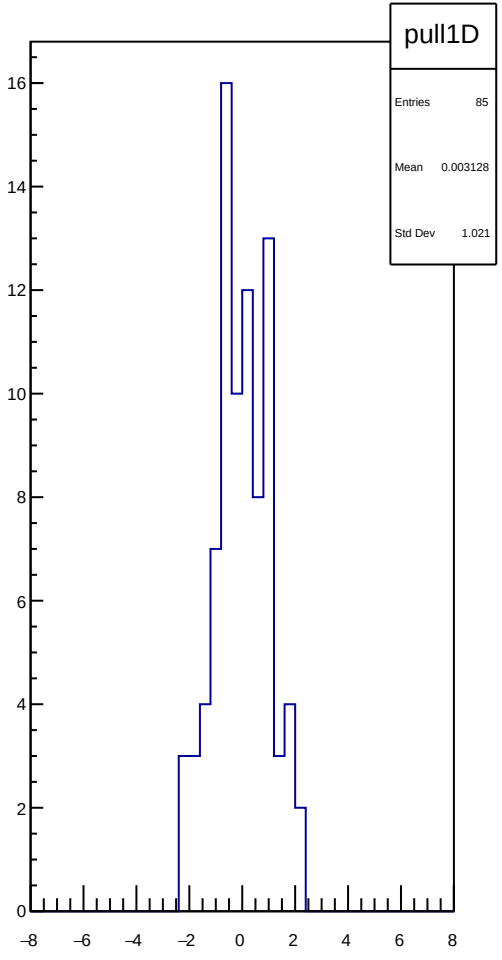

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 90.19 / 84
p0 9.036 ± 78.13
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 4.958
Std Dev 59.77
2
1
0
−1
−2

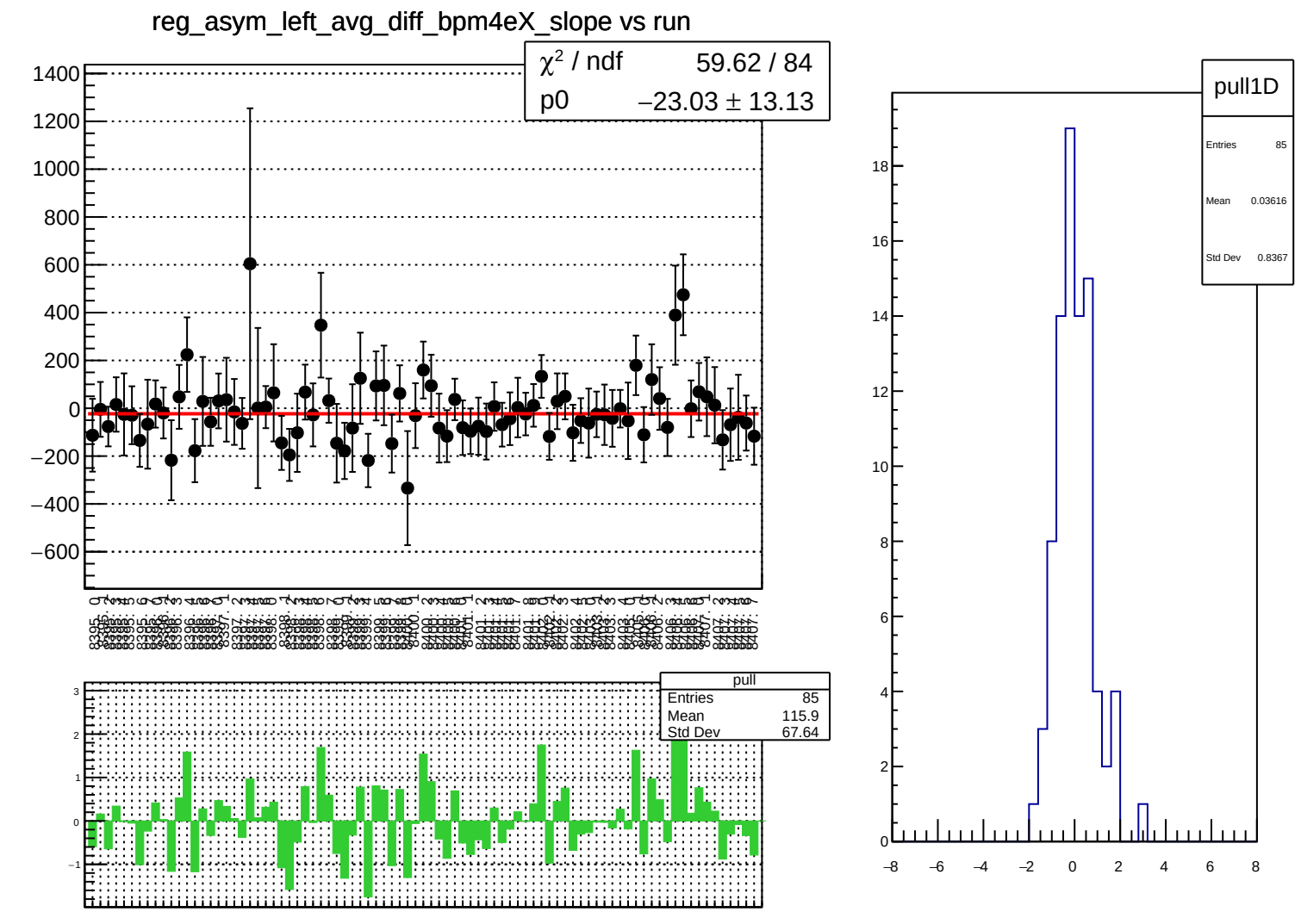

pull1D
Entries 85
Mean 0.03323
Std Dev 1.03
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

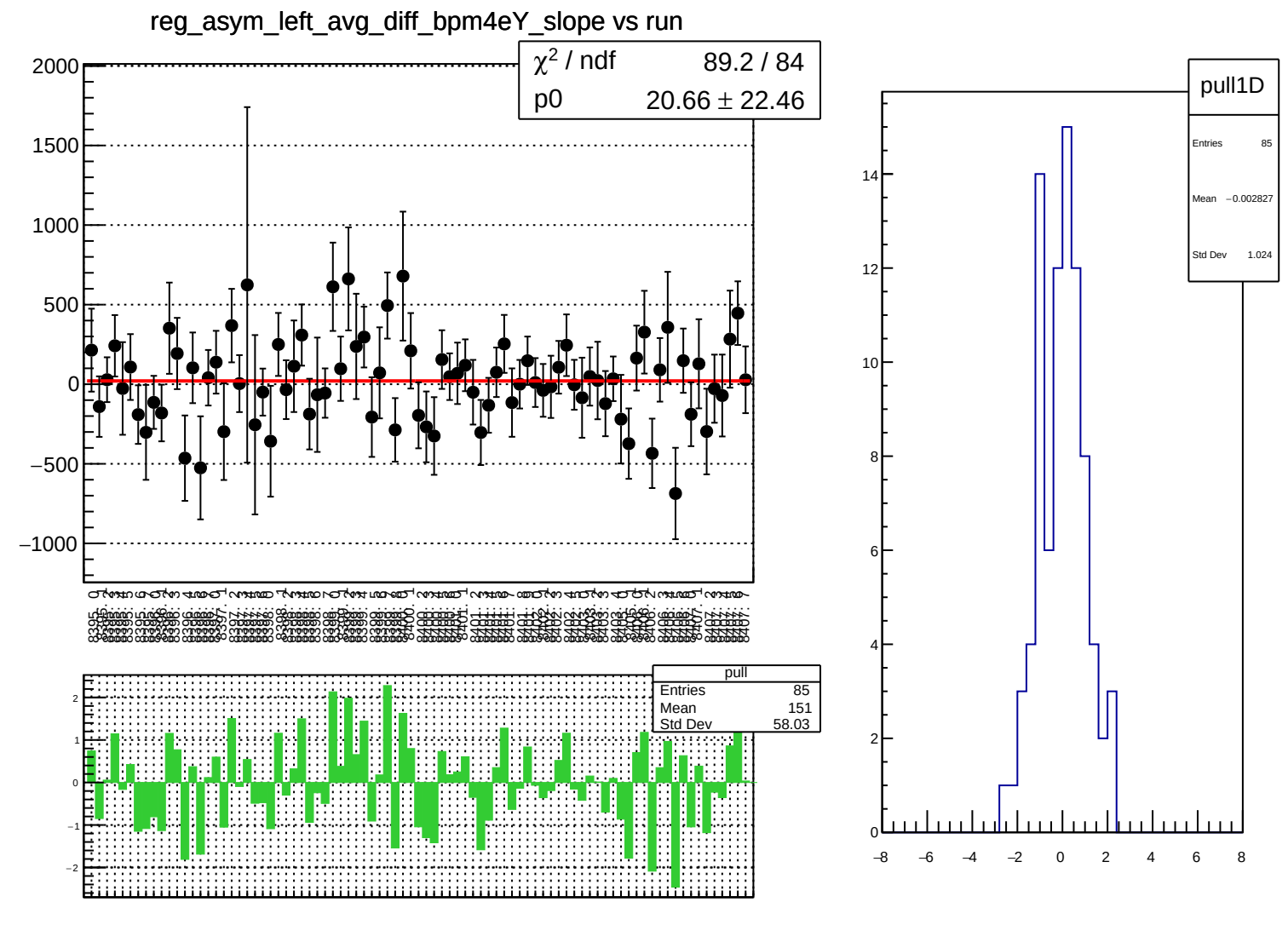

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 64.4 / 84
p0 −10.42 ± 11.83
pull
Entries 85
Mean 142.2
Std Dev 96

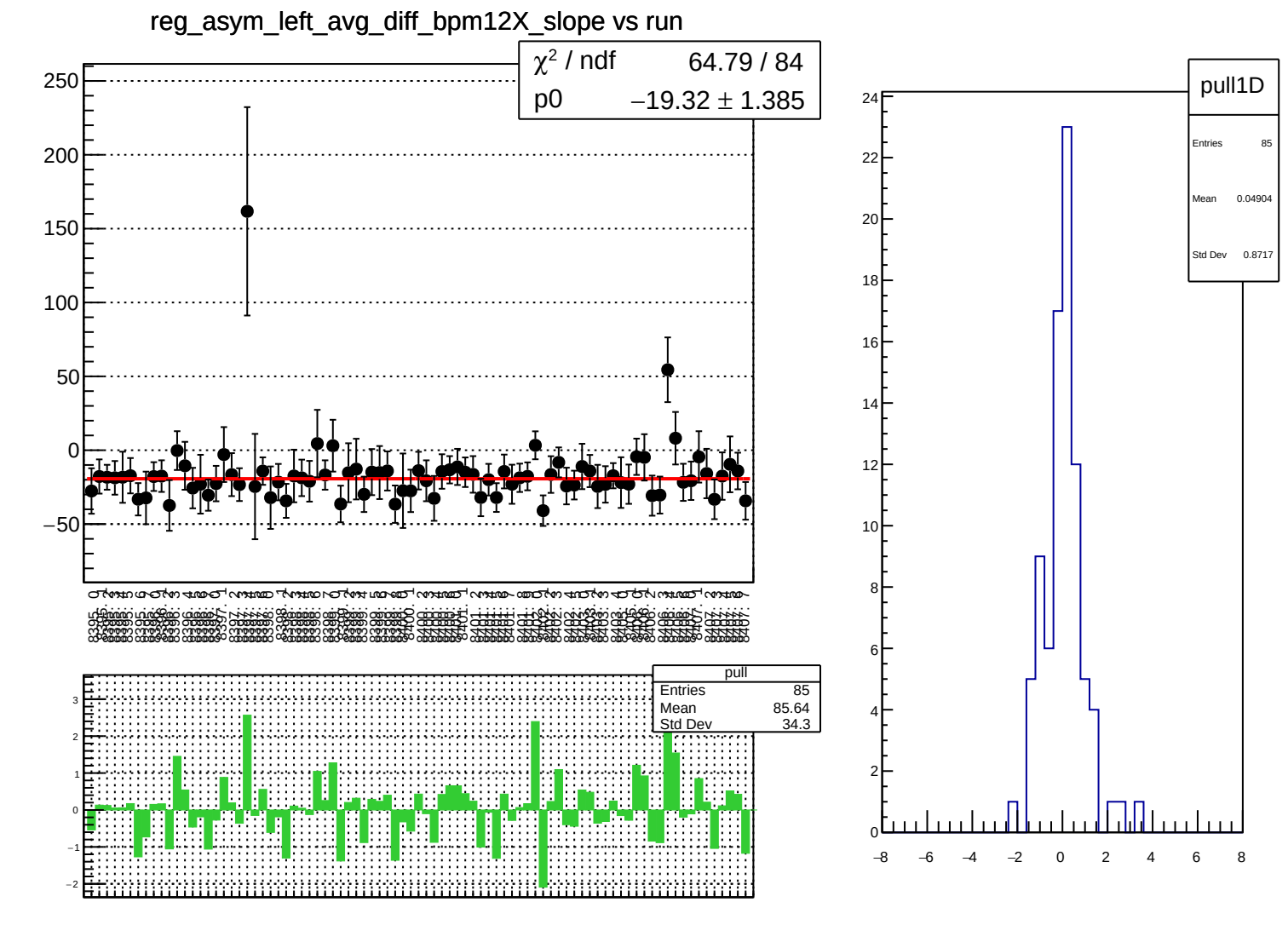

pull1D
Entries 85
Mean −0.02828
Std Dev 0.8699

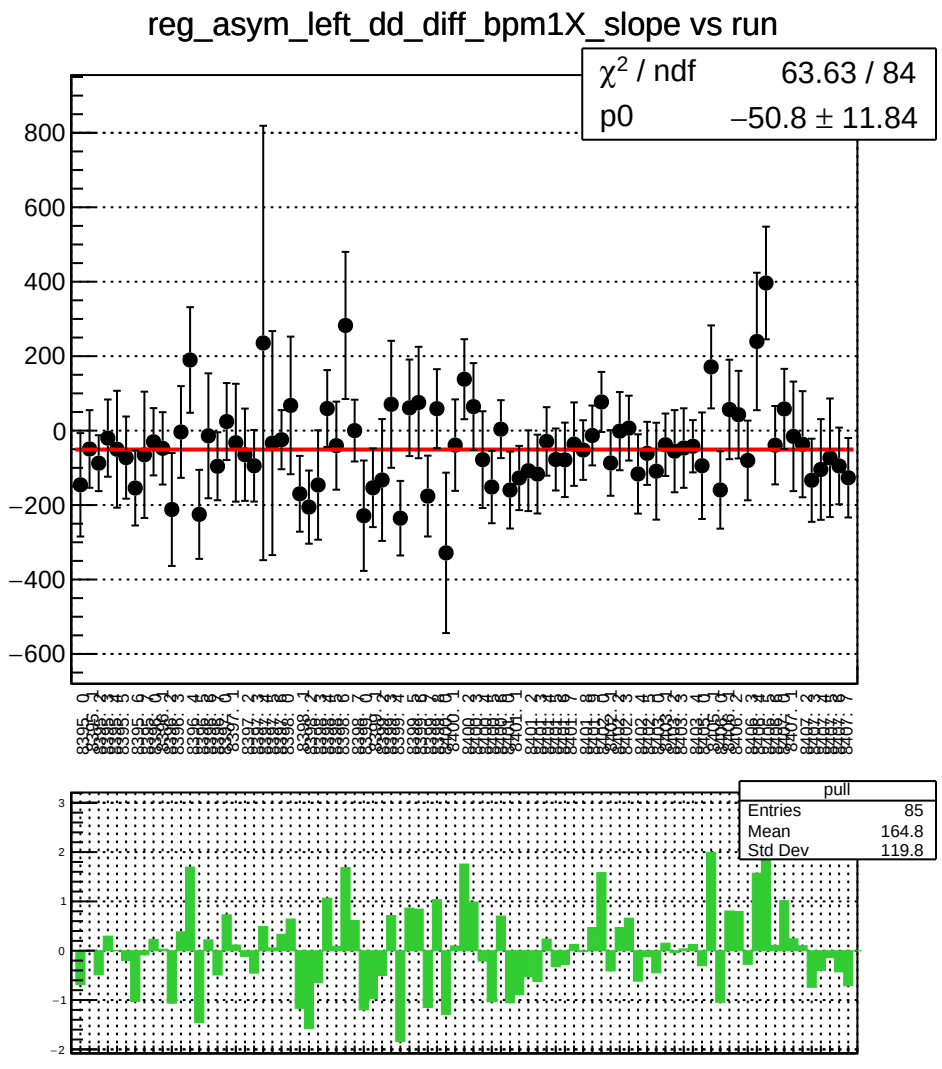

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 88.63 / 84
p0 −8.109 ± 21.5
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 50.12
Std Dev 124.1
2
1
0
−1
−2

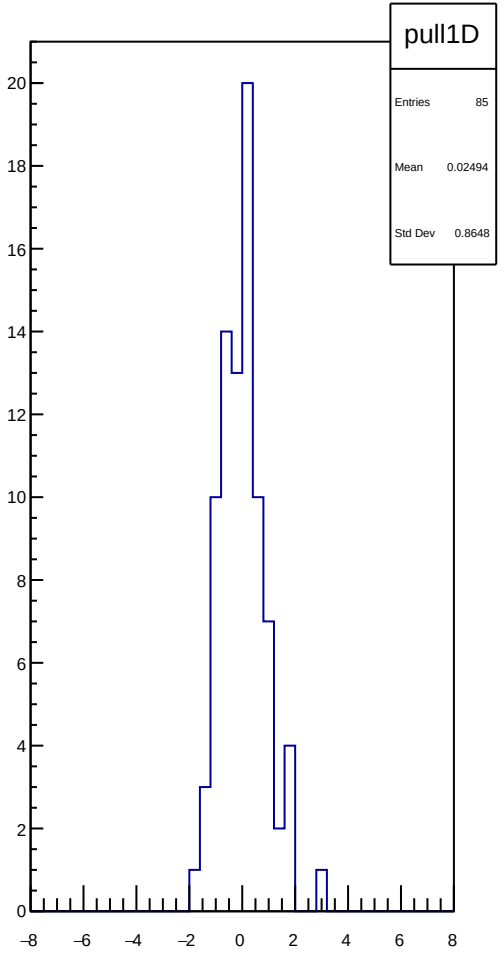

pull1D
Entries 85
Mean 0.003128
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

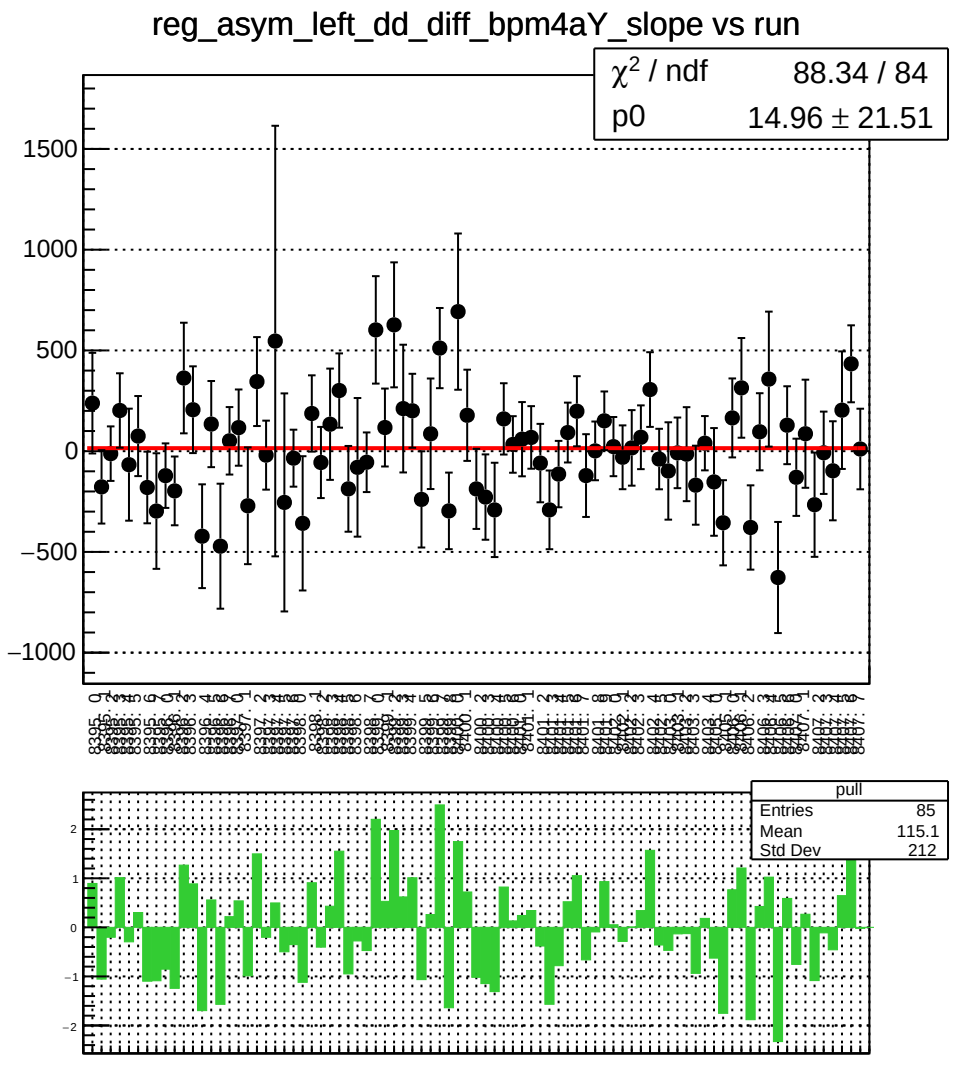

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 59.62 / 84
p0 −23.03 ± 13.13
pull
Entries 85
Mean 115.9
Std Dev 67.64
pull1D
Entries 85
Mean 0.03616
Std Dev 0.8367

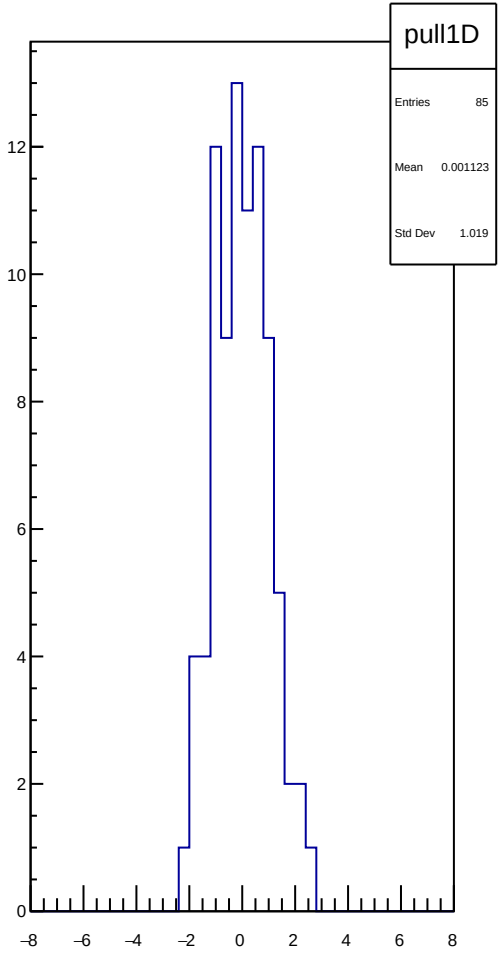

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 89.2 / 84
p0 20.66 ± 22.46
pull
Entries 85
Mean 151
Std Dev 58.03
pull1D
Entries 85
Mean −0.002827
Std Dev 1.024

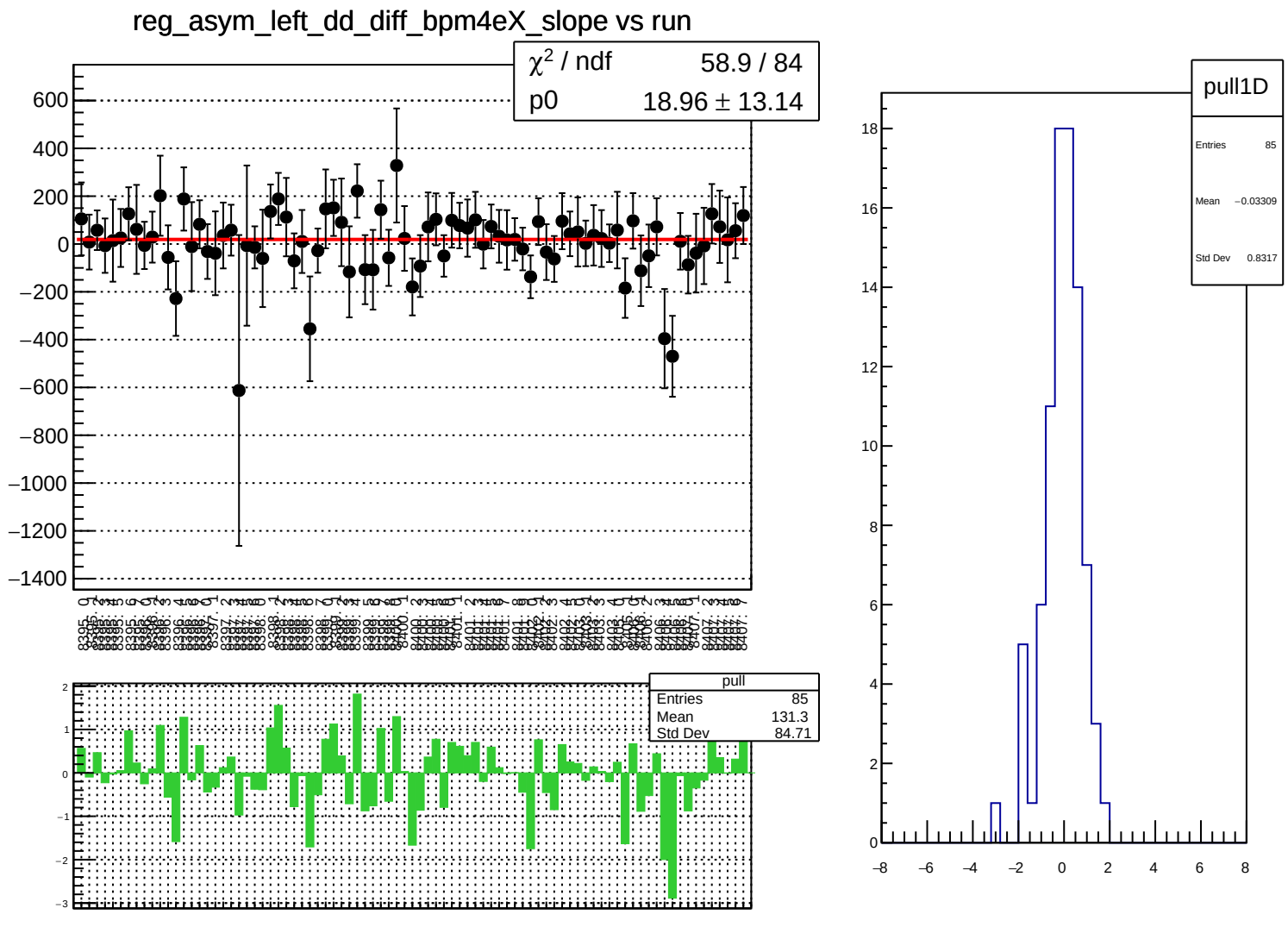

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 64.79 / 84
p0 −19.32 ± 1.385
pull
Entries 85
Mean 85.64
Std Dev 34.3
pull1D
Entries 85
Mean 0.04904
Std Dev 0.8717

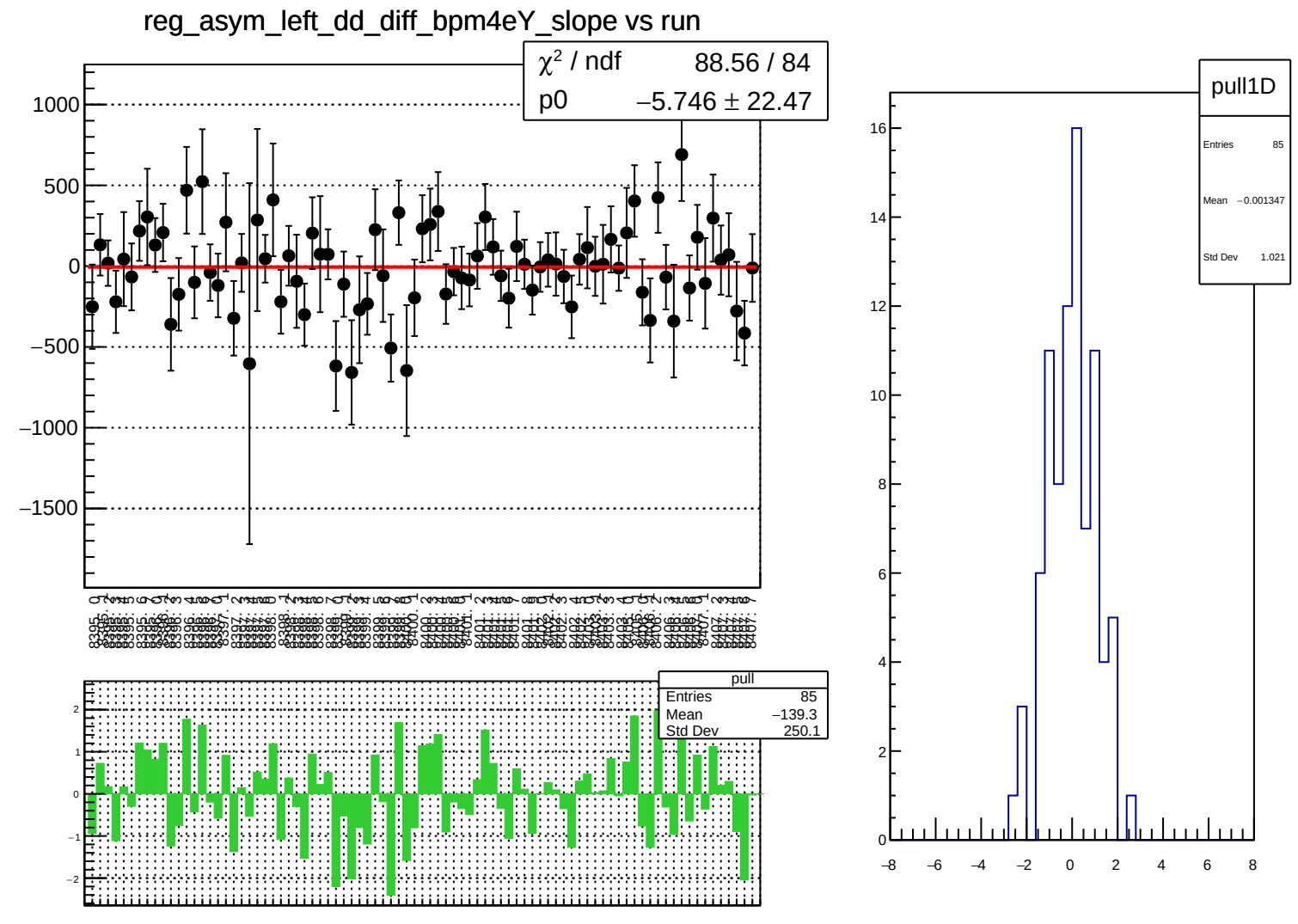

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 63.63 / 84
p0 −50.8 ± 11.84
pull
Entries 85
Mean 164.8
Std Dev 119.8

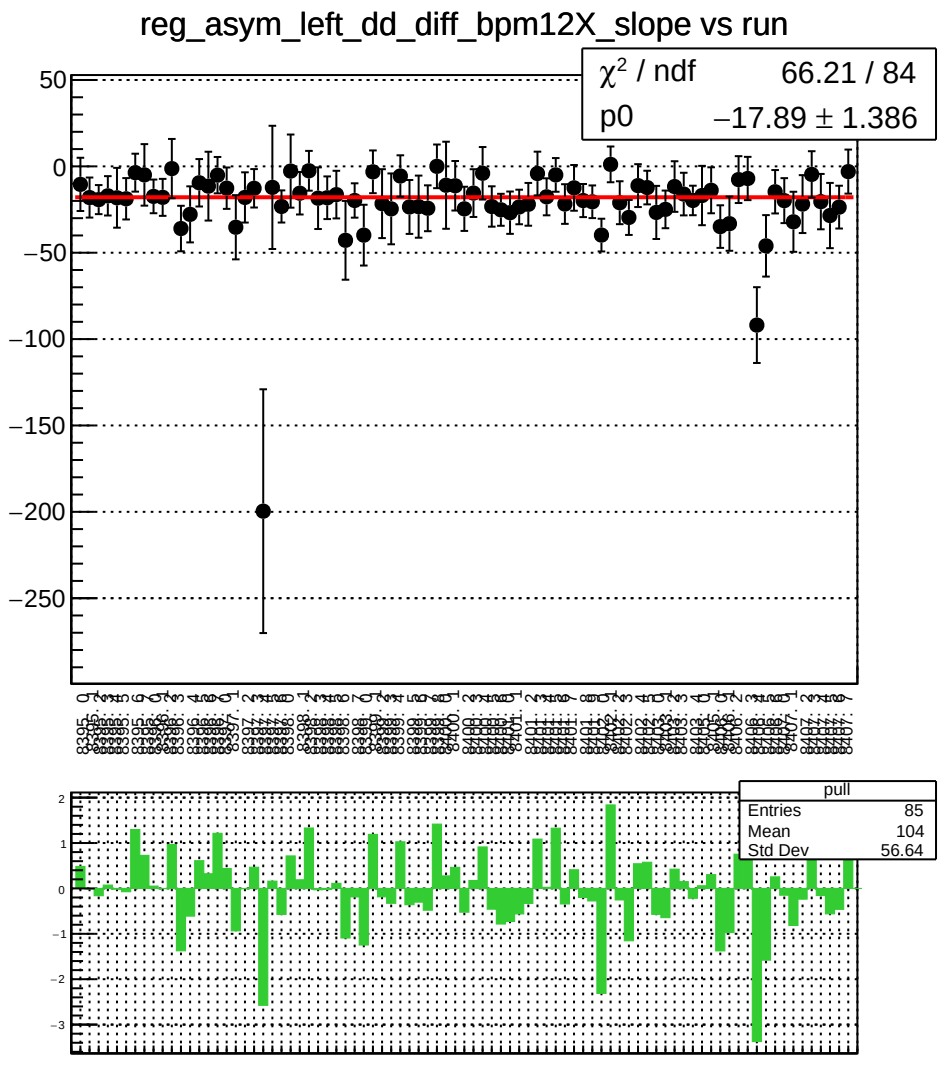

pull1D
Entries 85
Mean 0.02494
Std Dev 0.8648

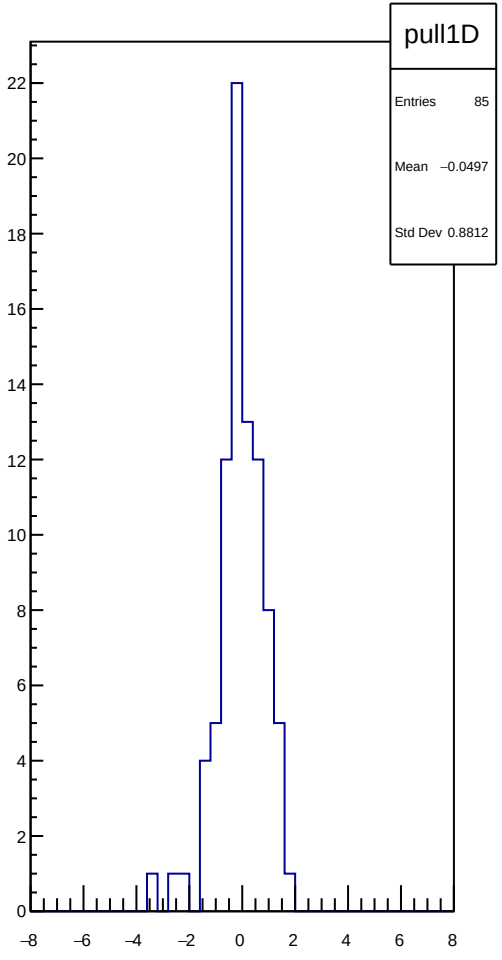

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 88.34 / 84
p0 14.96 ± 21.51
1500
1000
500
0
−500
−1000
pull
Entries 85
Mean 115.1
Std Dev 212
2
1
0
−1
−2

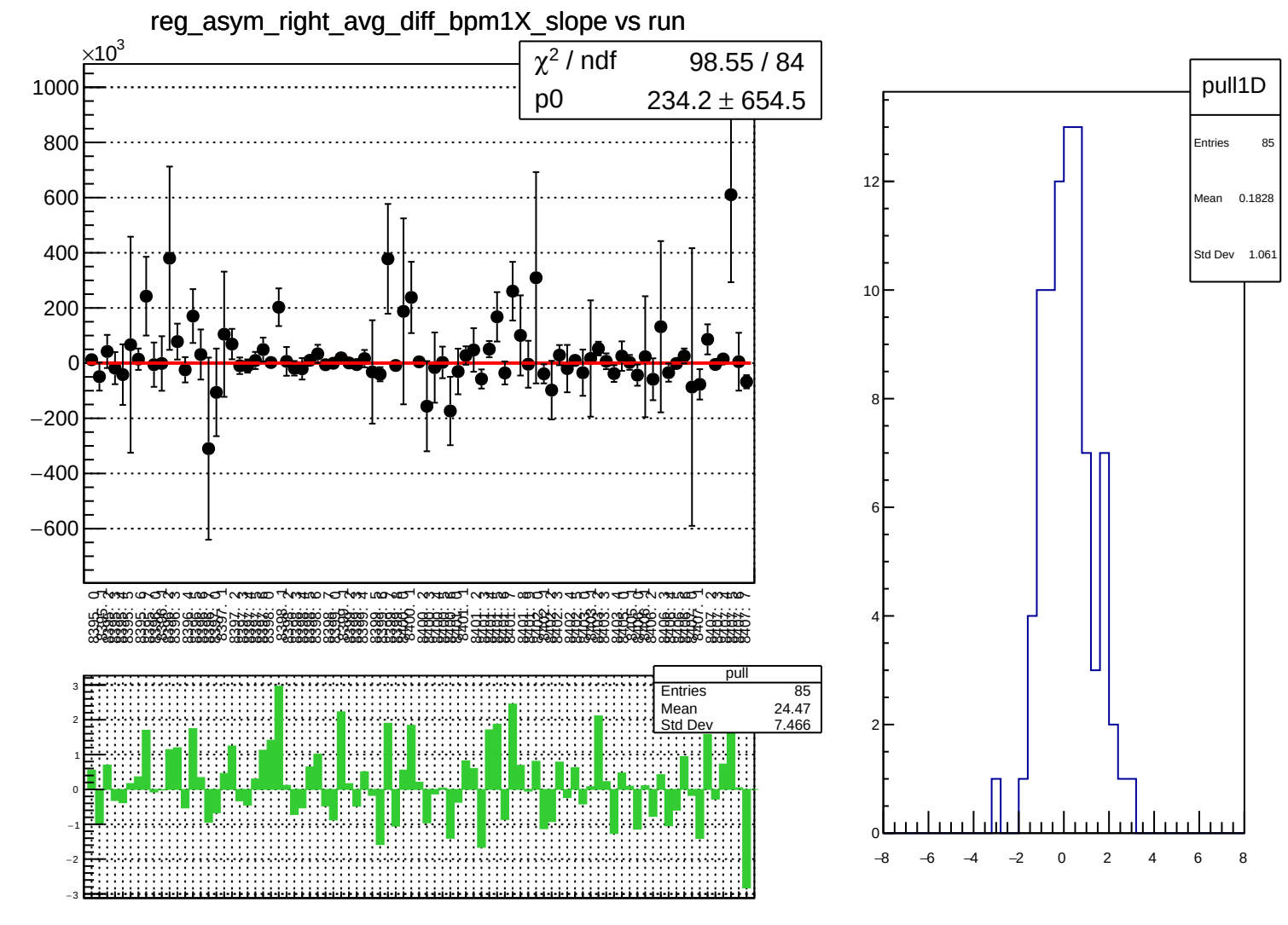

pull1D
Entries 85
Mean 0.001123
Std Dev 1.019
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

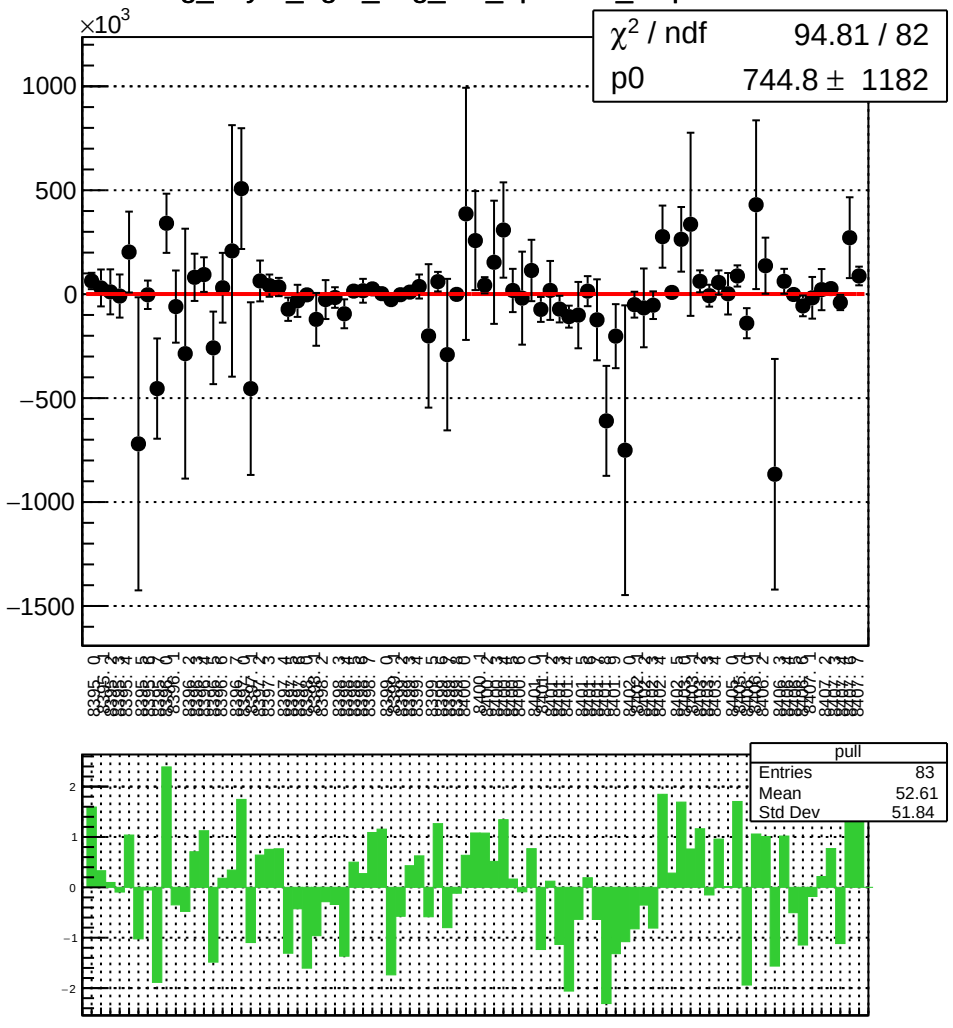

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 58.9 / 84
p0 18.96 ± 13.14
pull
Entries 85
Mean 131.3
Std Dev 84.71
pull1D
Entries 85
Mean −0.03309
Std Dev 0.8317

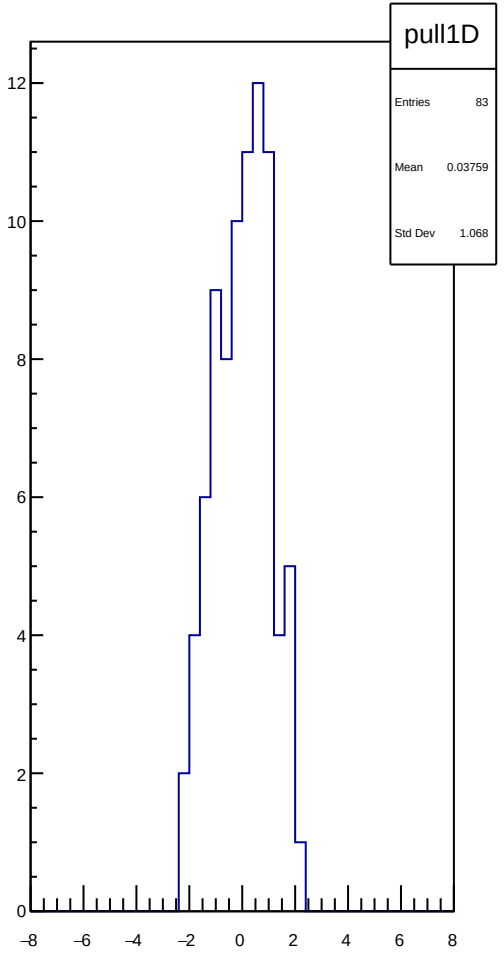

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 88.56 / 84
p0 −5.746 ± 22.47
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −139.3
Std Dev 250.1
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.001347
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

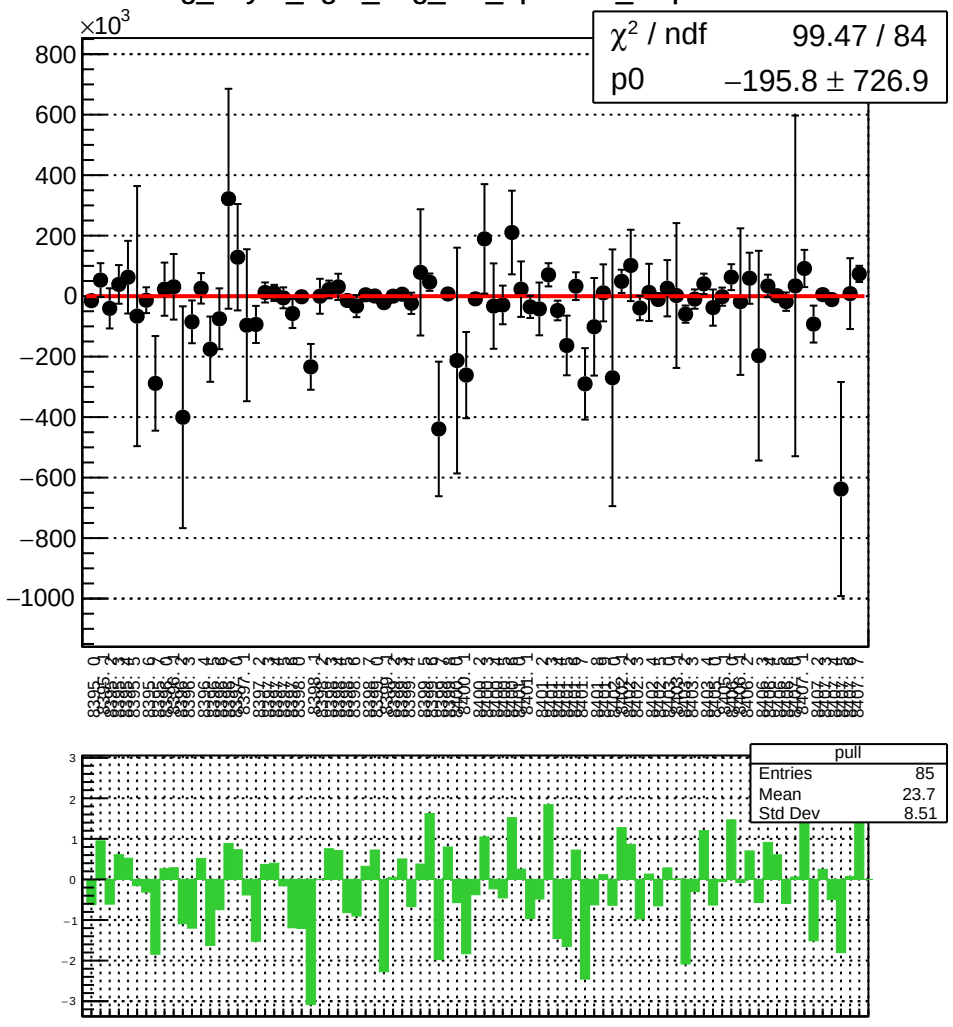

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 66.21 / 84
p0 −17.89 ± 1.386
pull
Entries 85
Mean 104
Std Dev 56.64

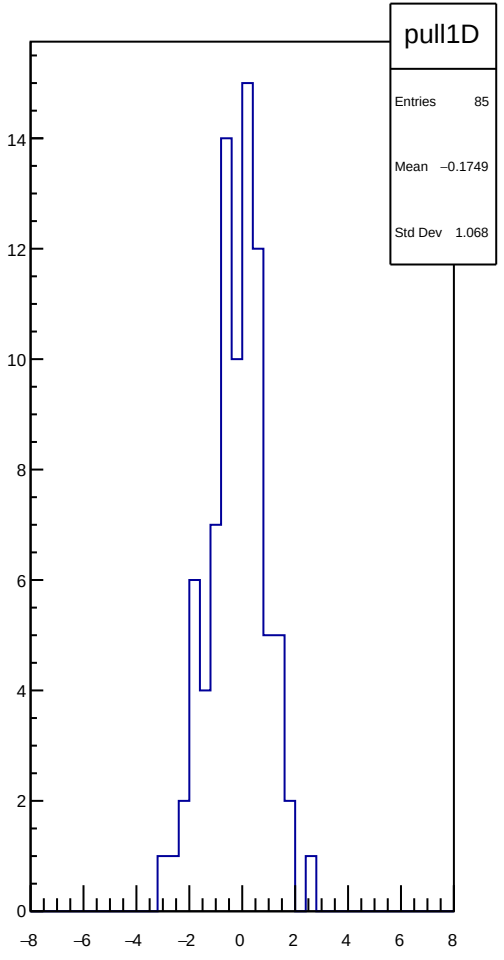

pull1D
Entries 85
Mean −0.0497
Std Dev 0.8812

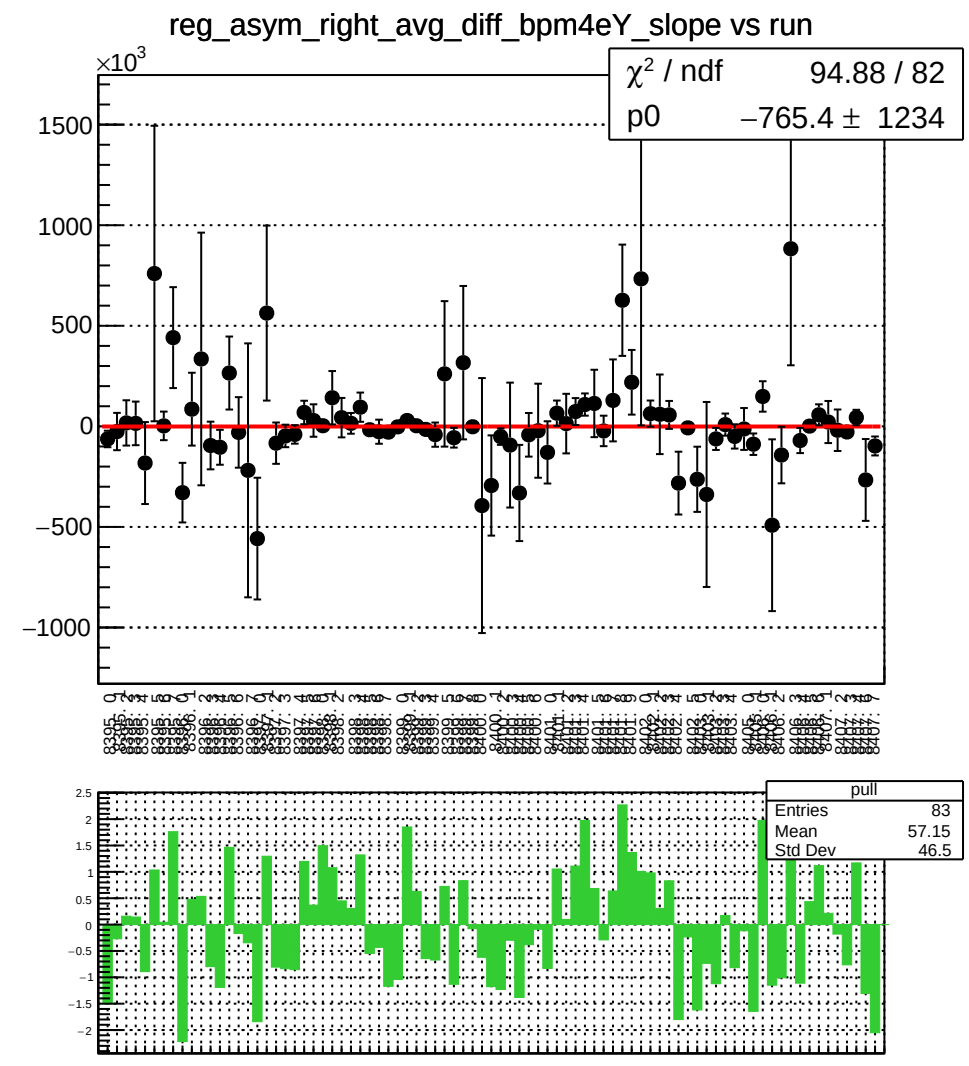

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 98.55 / 84
p0 234.2 ± 654.5
×10³
pull
Entries 85
Mean 24.47
Std Dev 7.466
pull1D
Entries 85
Mean 0.1828
Std Dev 1.061

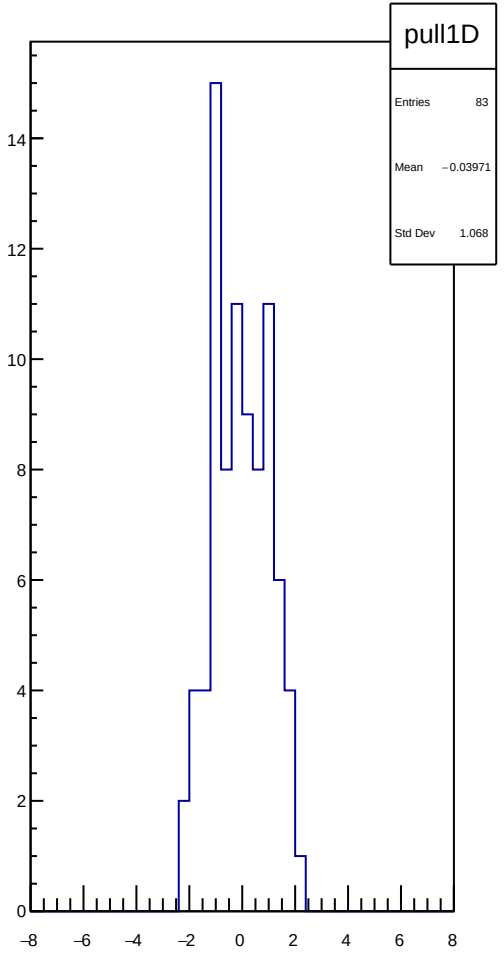

reg_asym_right_avg_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 94.81 / 82
p0 744.8 ± 1182
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean 52.61
Std Dev 51.84
2
1
0
−1
−2

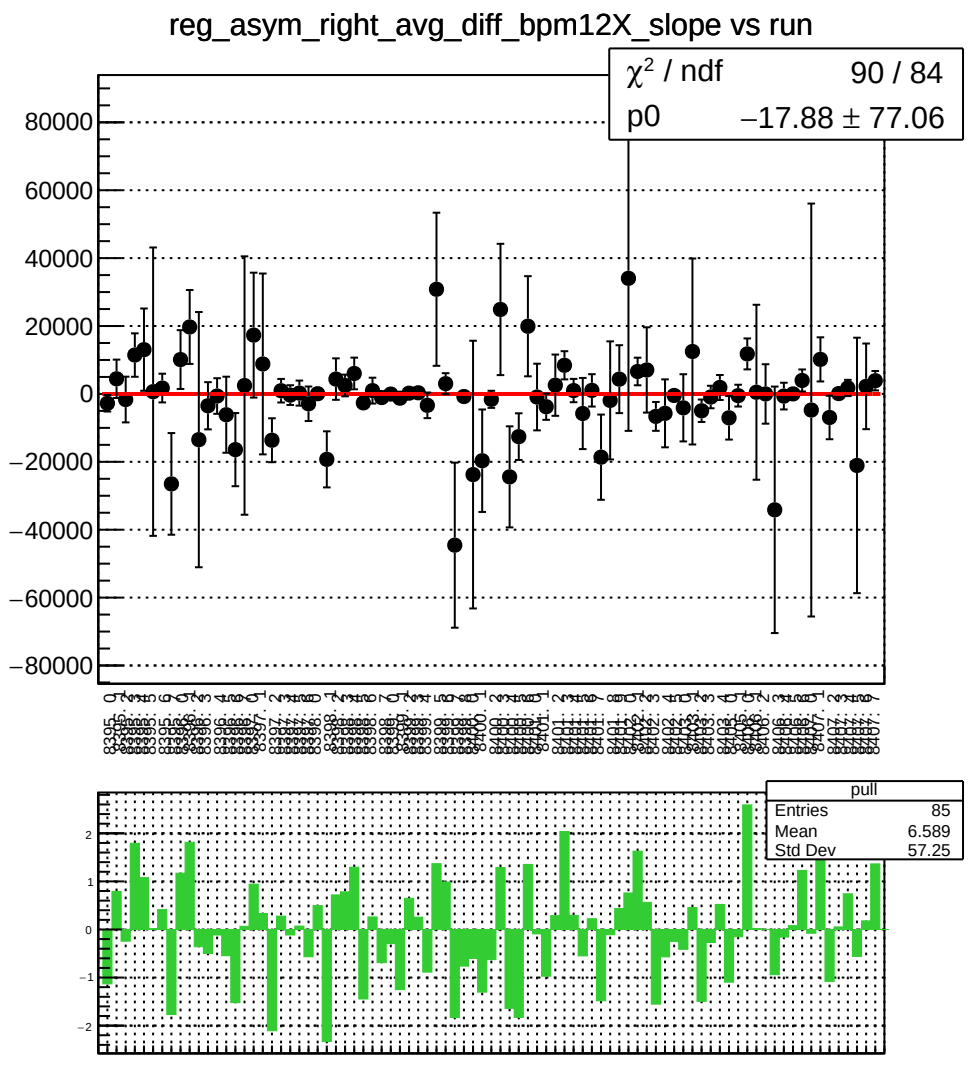

pull1D
Entries 83
Mean 0.03759
Std Dev 1.068
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

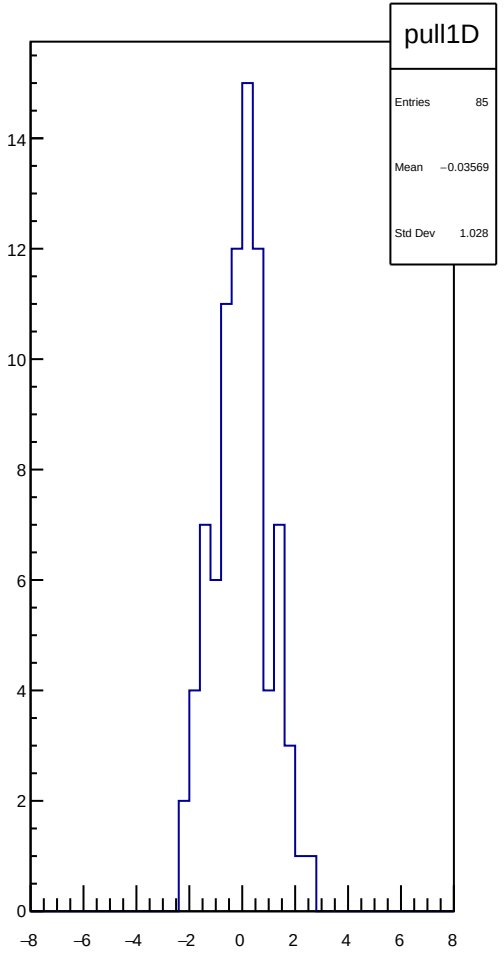

reg_asym_right_avg_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 99.47 / 84
p0 −195.8 ± 726.9
pull
Entries 85
Mean 23.7
Std Dev 8.51

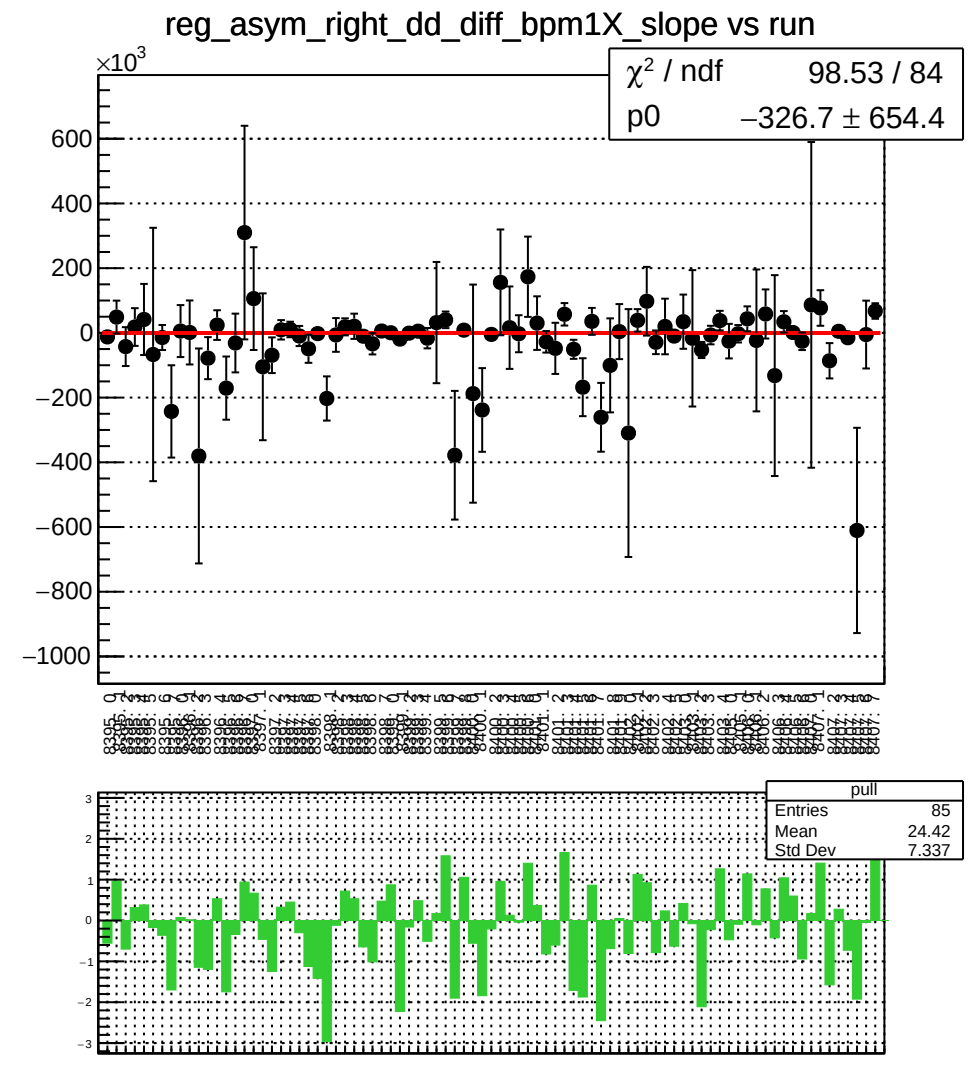

pull1D
Entries 85
Mean −0.1749
Std Dev 1.068

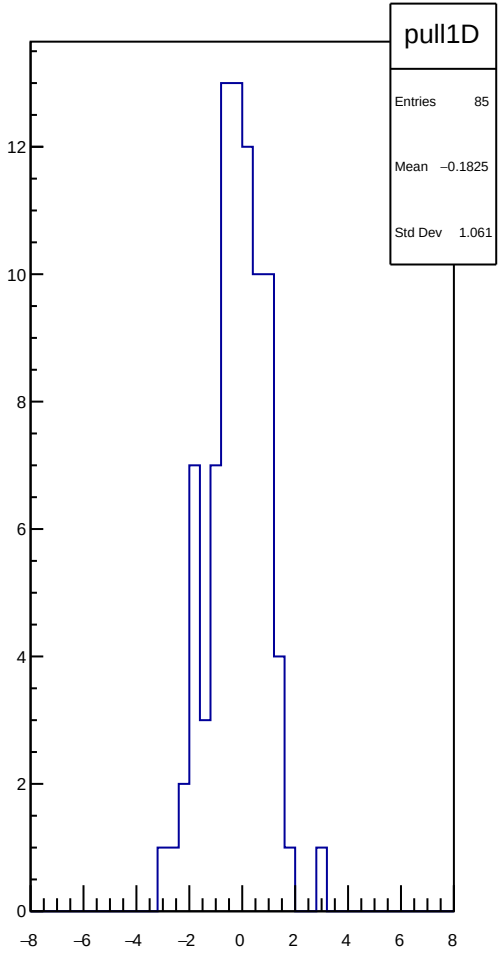

reg_asym_right_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 94.88 / 82
p0 −765.4 ± 1234
1500
1000
500
0
−500
−1000
pull
Entries 83
Mean 57.15
Std Dev 46.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

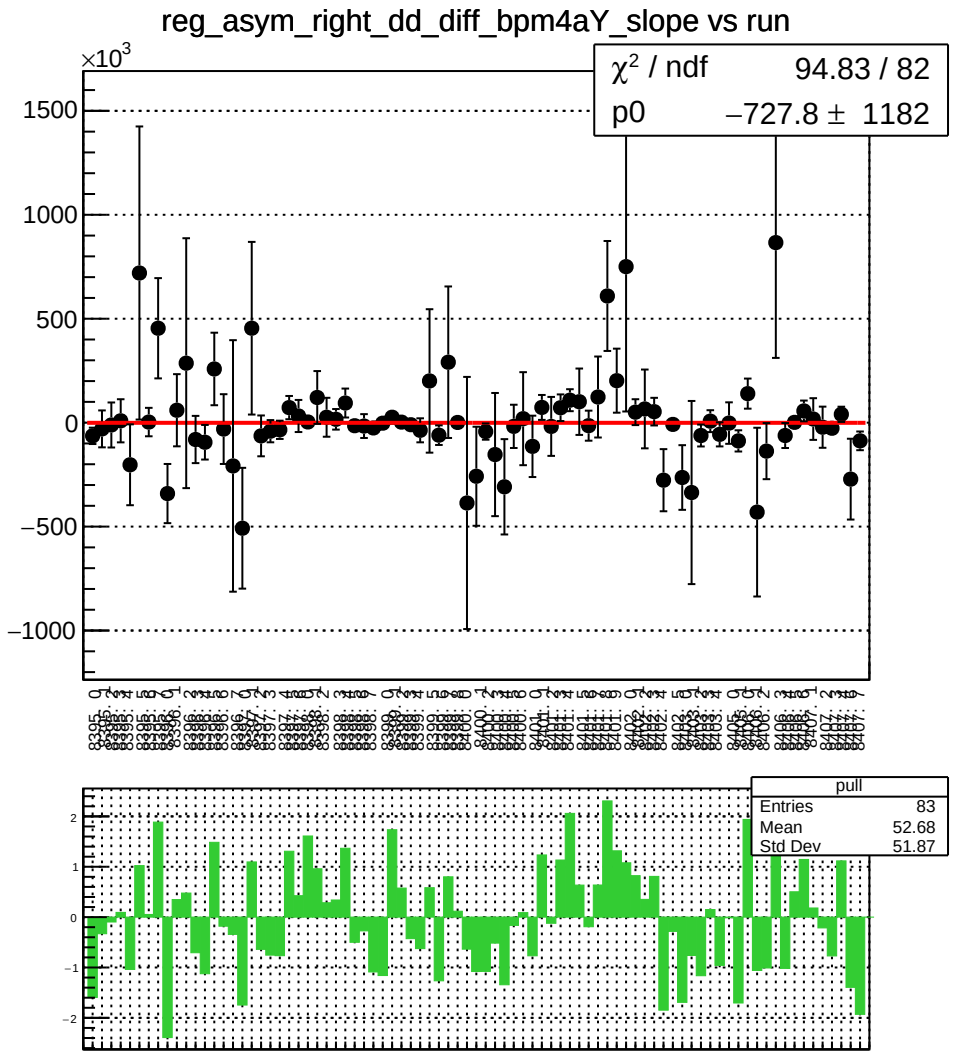

pull1D
Entries 83
Mean −0.03971
Std Dev 1.068
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

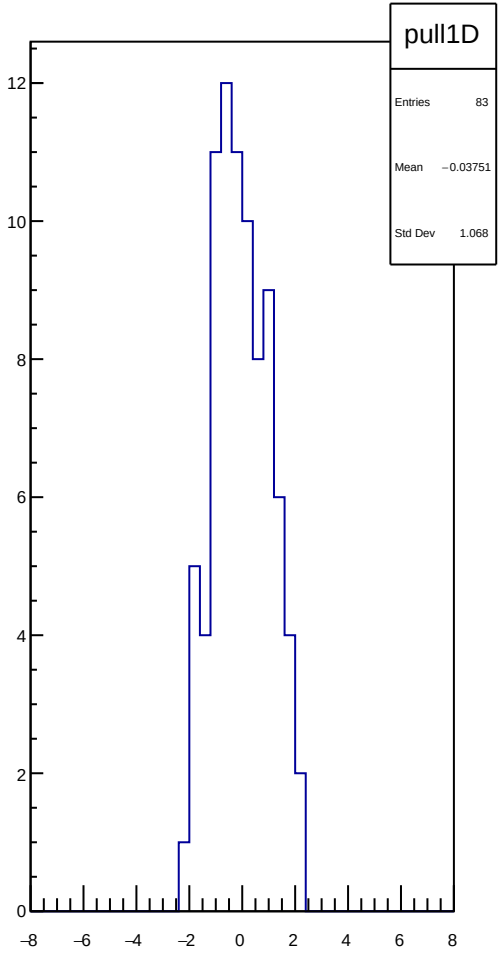

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 90 / 84
p0 −17.88 ± 77.06
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 6.589
Std Dev 57.25
2
1
0
−1
−2

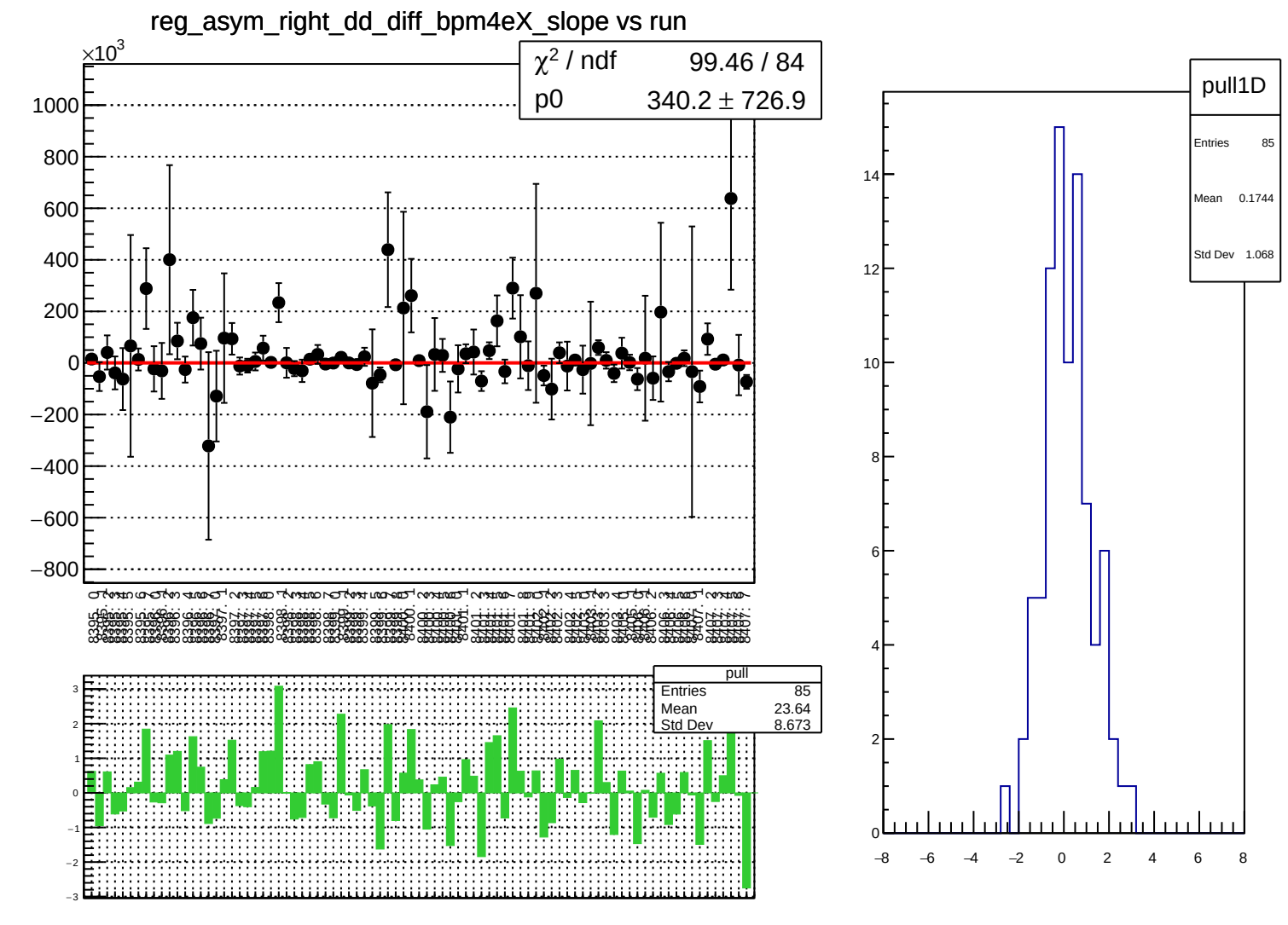

pull1D
Entries 85
Mean −0.03569
Std Dev 1.028
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

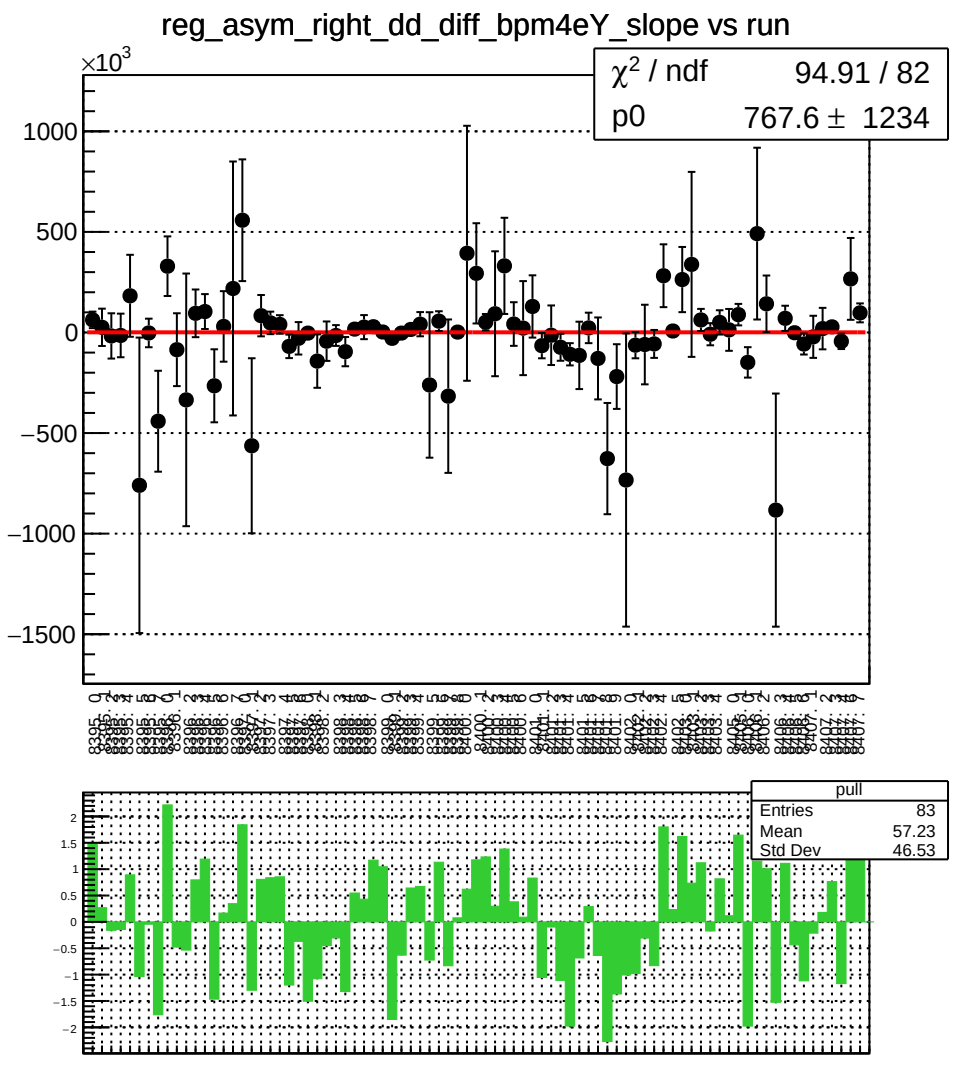

reg_asym_right_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 98.53 / 84
p0 −326.7 ± 654.4
600
400
200
0
−200
−400
−600
−800
−1000
pull
Entries 85
Mean 24.42
Std Dev 7.337
3
2
1
0
−1
−2
−3

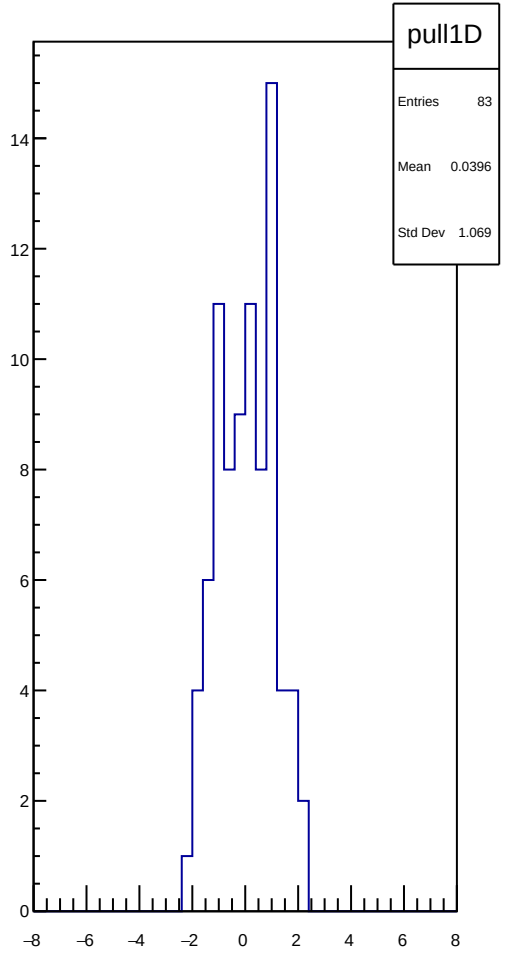

pull1D
Entries 85
Mean −0.1825
Std Dev 1.061
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

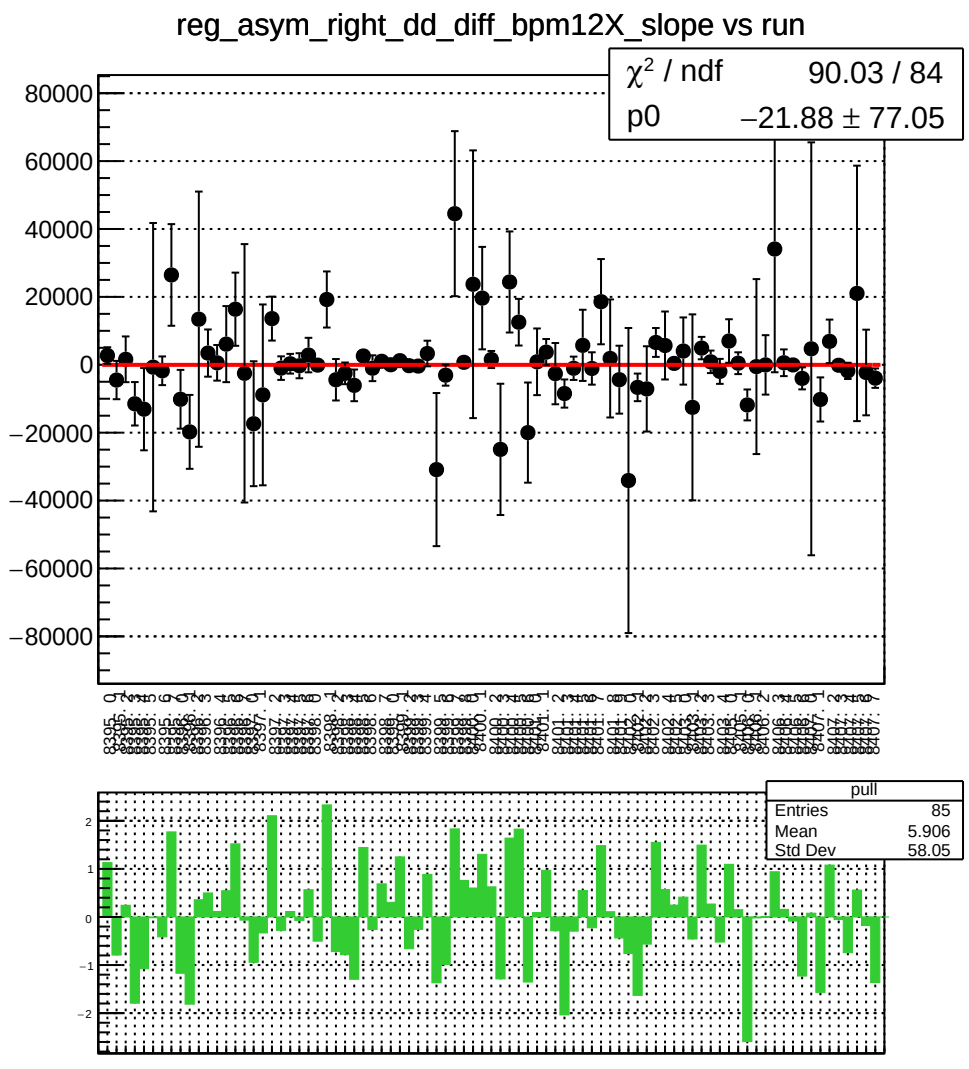

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 94.83 / 82
p0 −727.8 ± 1182
×10³
1500
1000
500
0
−500
−1000
pull
Entries 83
Mean 52.68
Std Dev 51.87
2
1
0
−1
−2

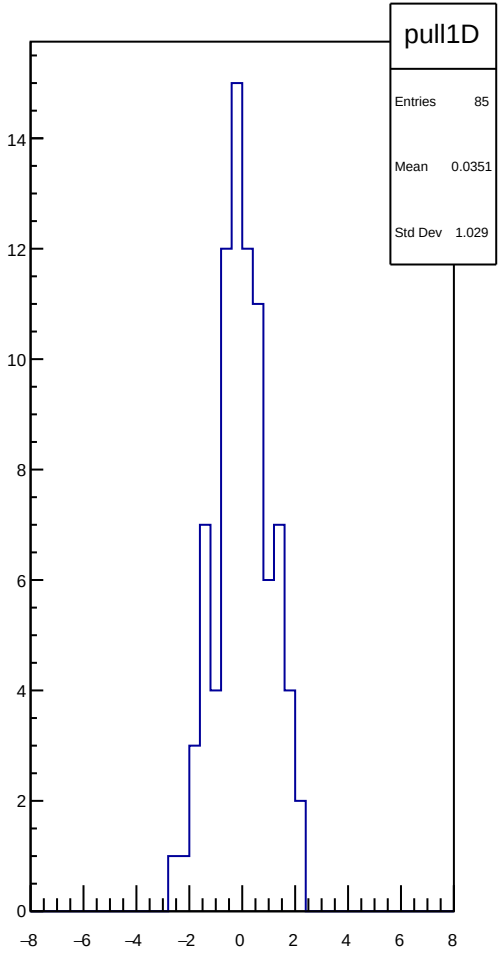

pull1D
Entries 83
Mean −0.03751
Std Dev 1.068
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

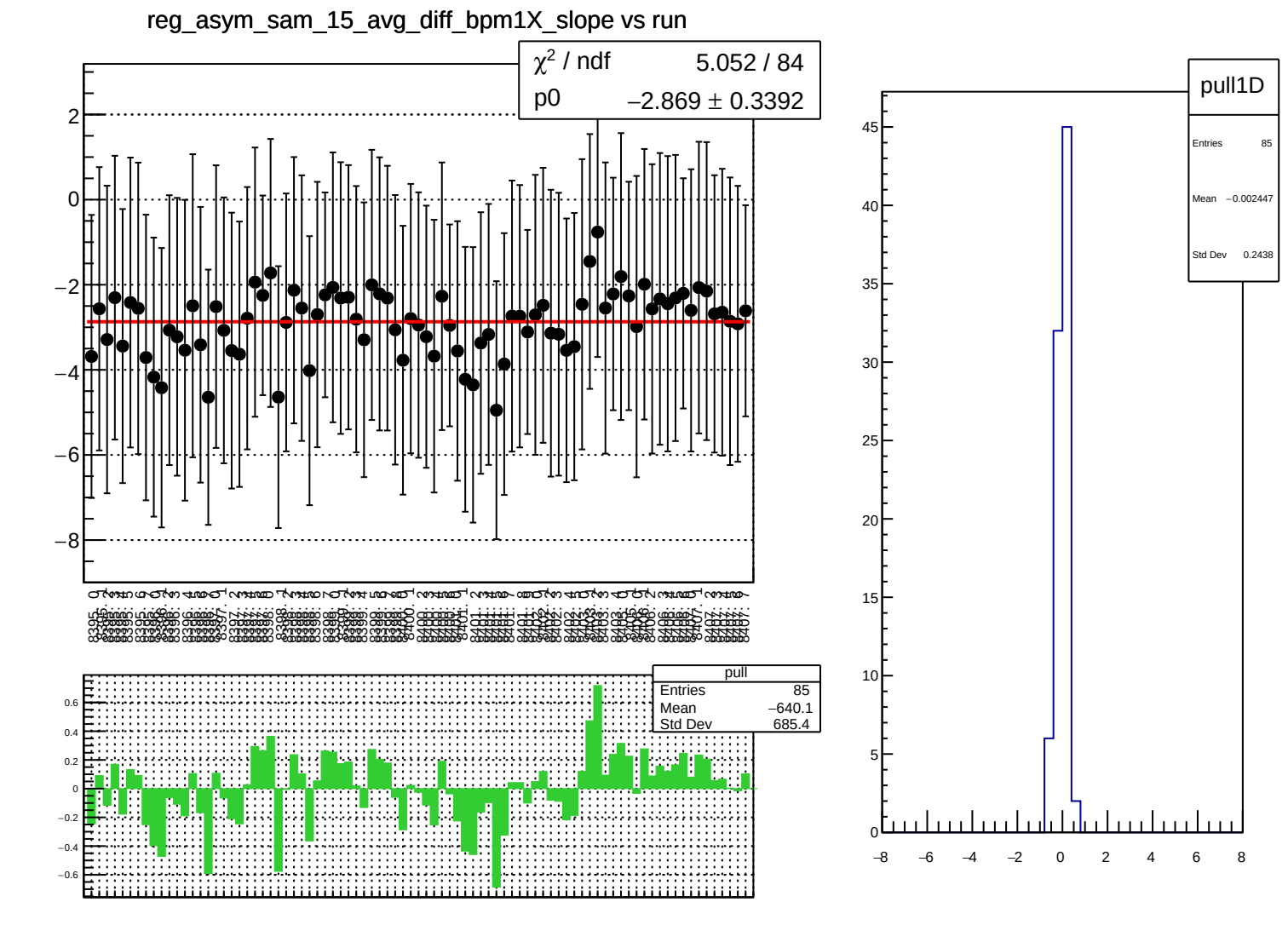

reg_asym_right_dd_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 99.46 / 84
p0 340.2 ± 726.9
pull
Entries 85
Mean 23.64
Std Dev 8.673
pull1D
Entries 85
Mean 0.1744
Std Dev 1.068

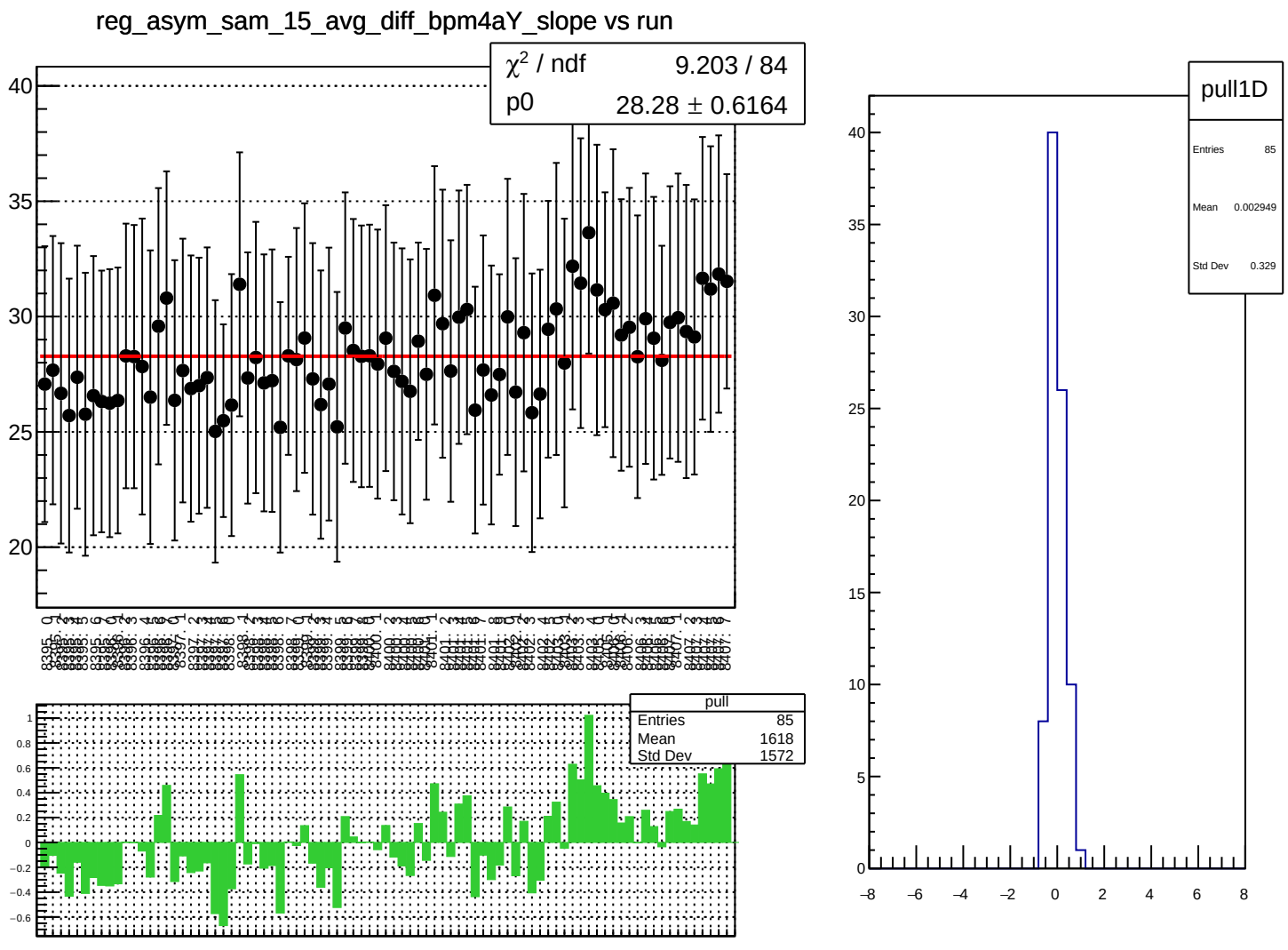

reg_asym_right_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 94.91 / 82
p0 767.6 ± 1234
1000
500
0
−500
−1000
−1500
pull
Entries 83
Mean 57.23
Std Dev 46.53
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

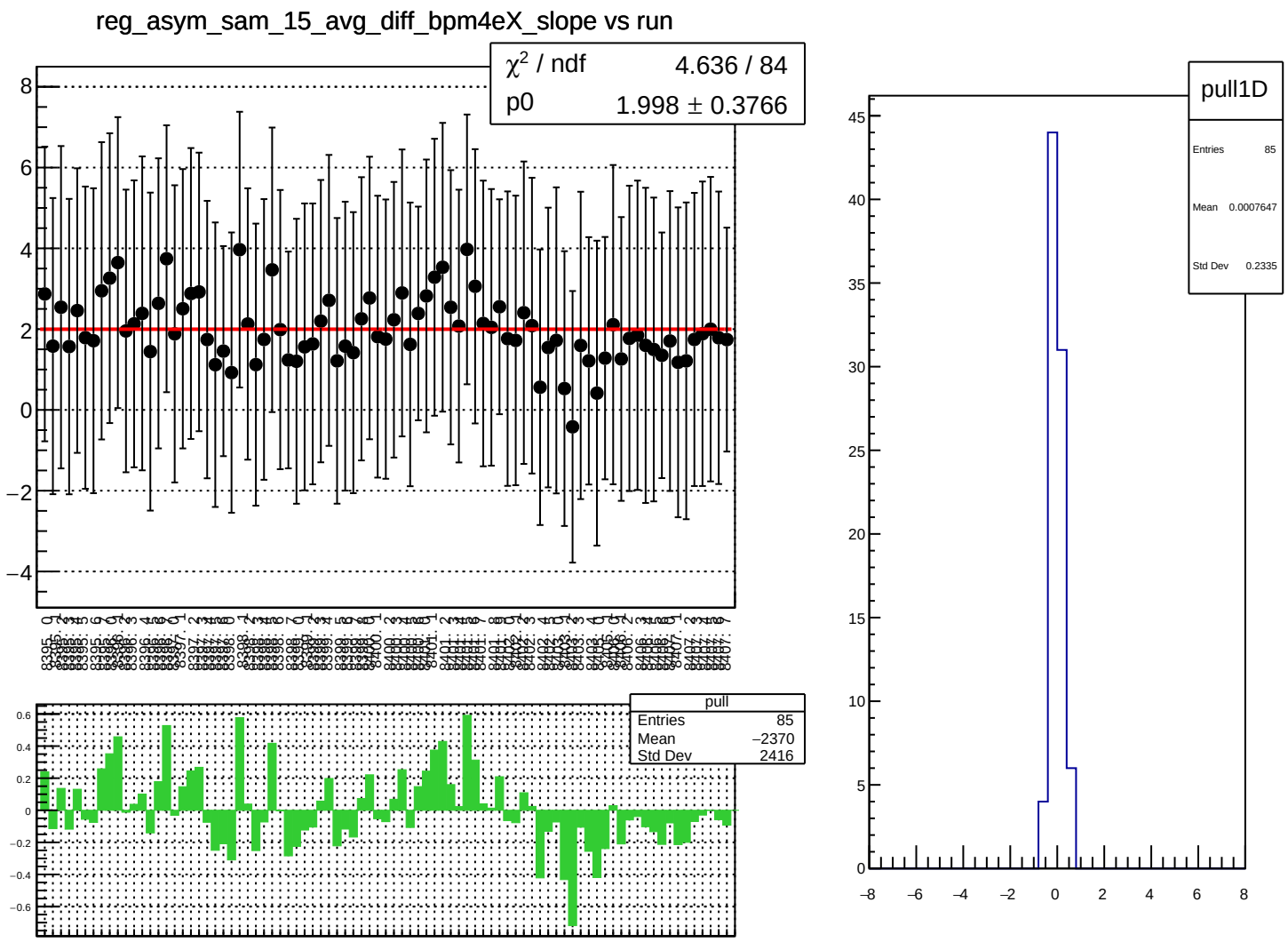

pull1D
Entries 83
Mean 0.0396
Std Dev 1.069
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

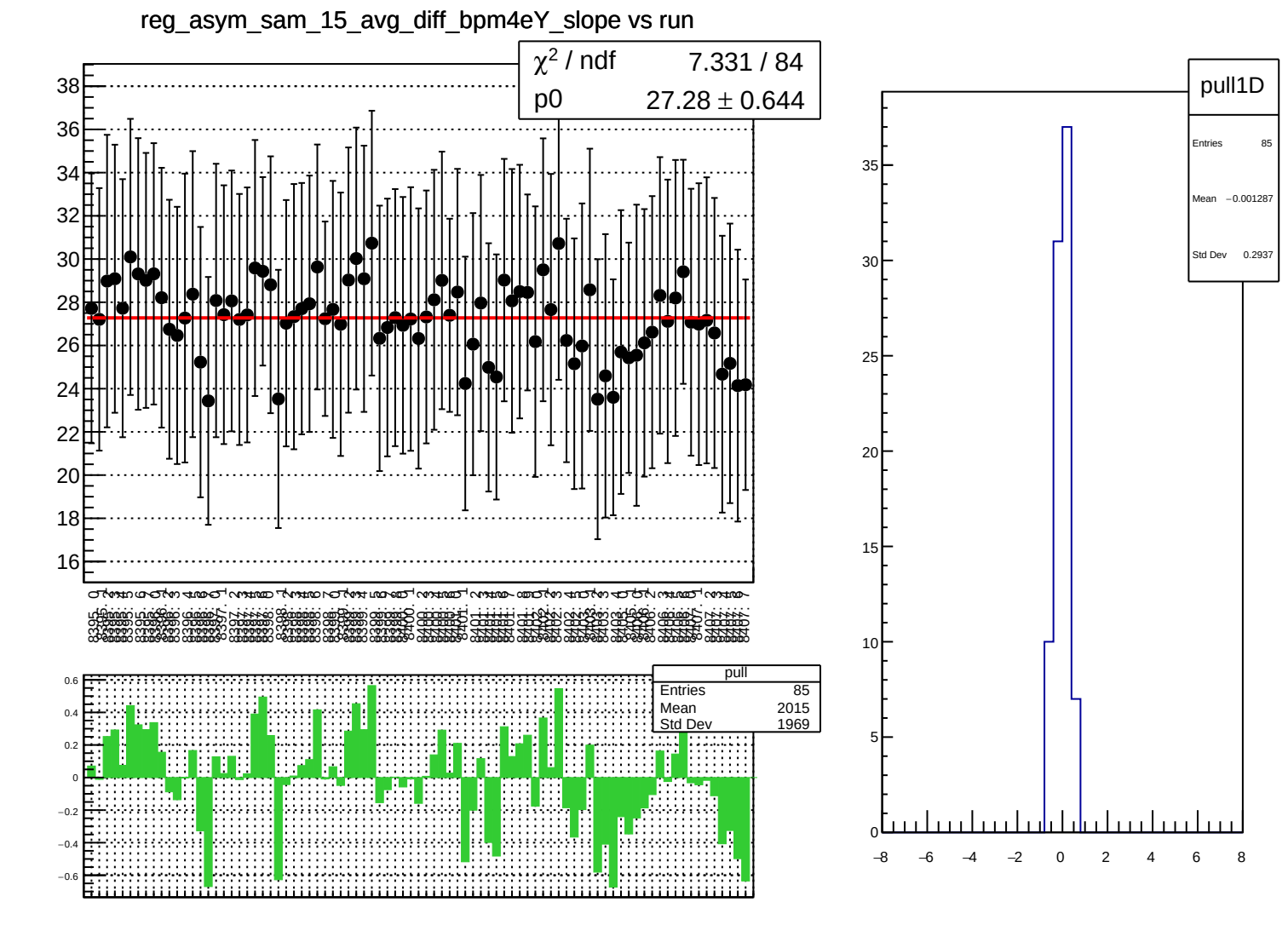

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 90.03 / 84
p0 −21.88 ± 77.05
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 5.906
Std Dev 58.05
2
1
0
−1
−2

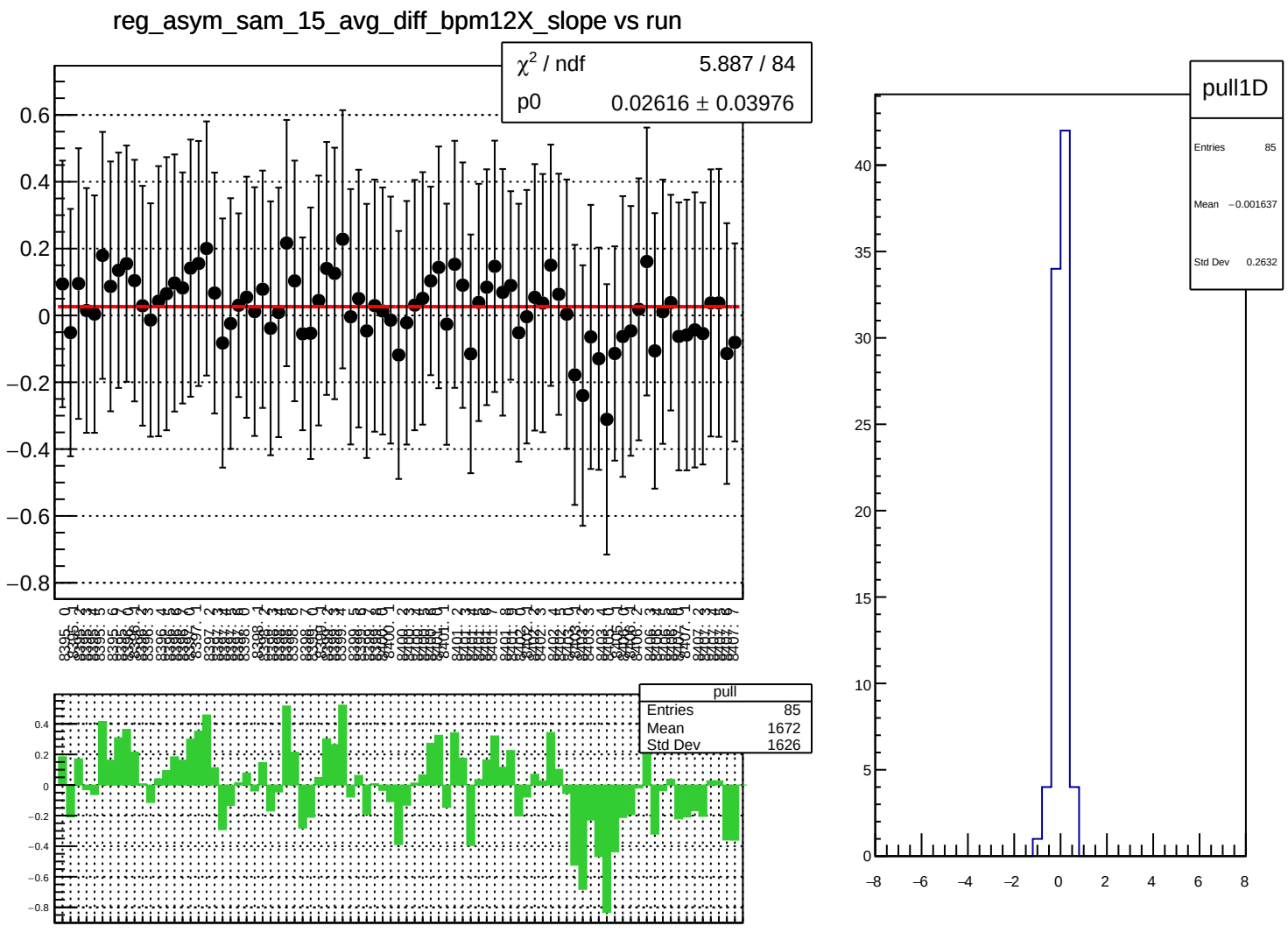

pull1D
Entries 85
Mean 0.0351
Std Dev 1.029
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

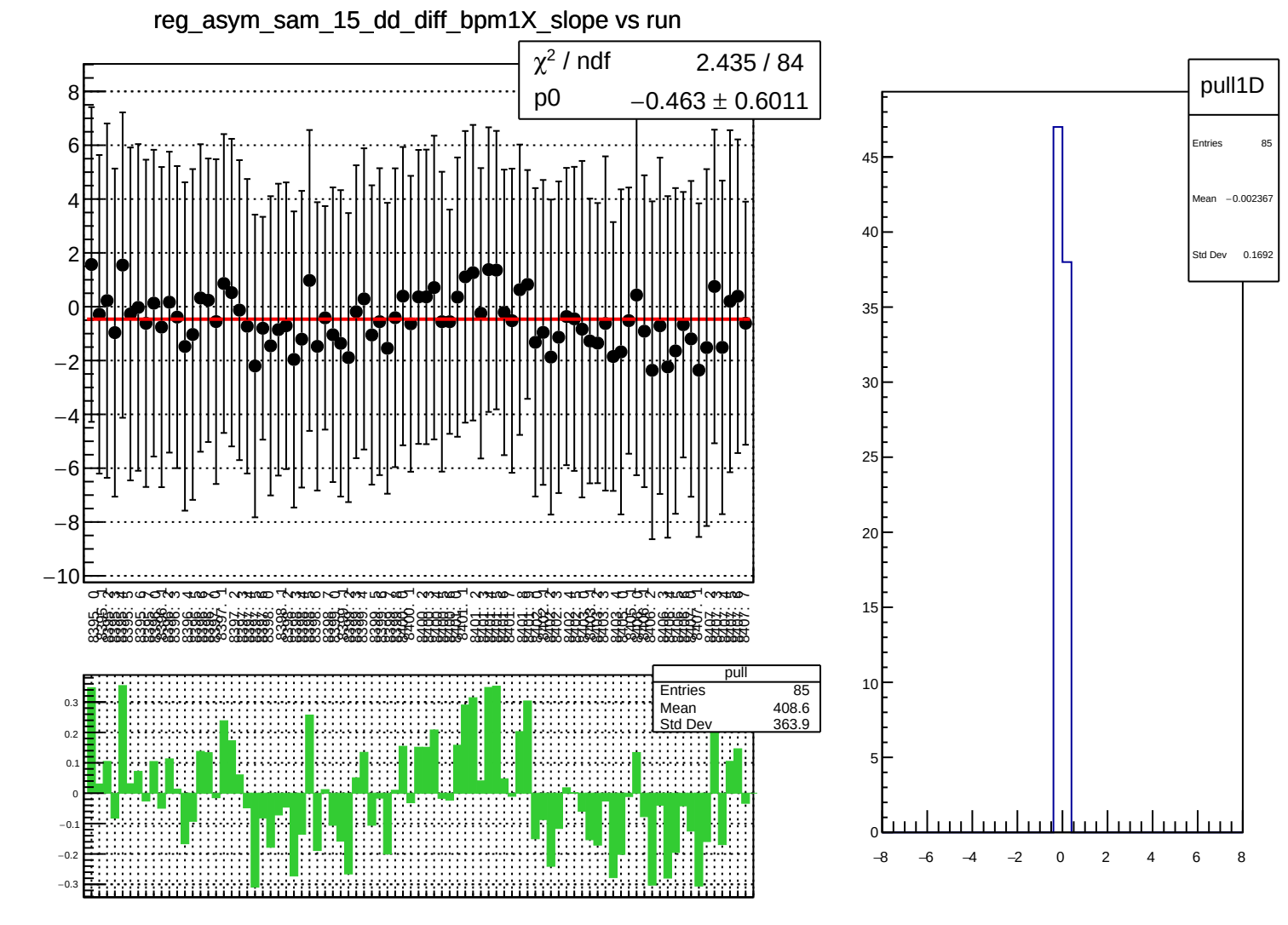

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 5.052 / 84
p0 −2.869 ± 0.3392
pull
Entries 85
Mean −640.1
Std Dev 685.4
pull1D
Entries 85
Mean −0.002447
Std Dev 0.2438

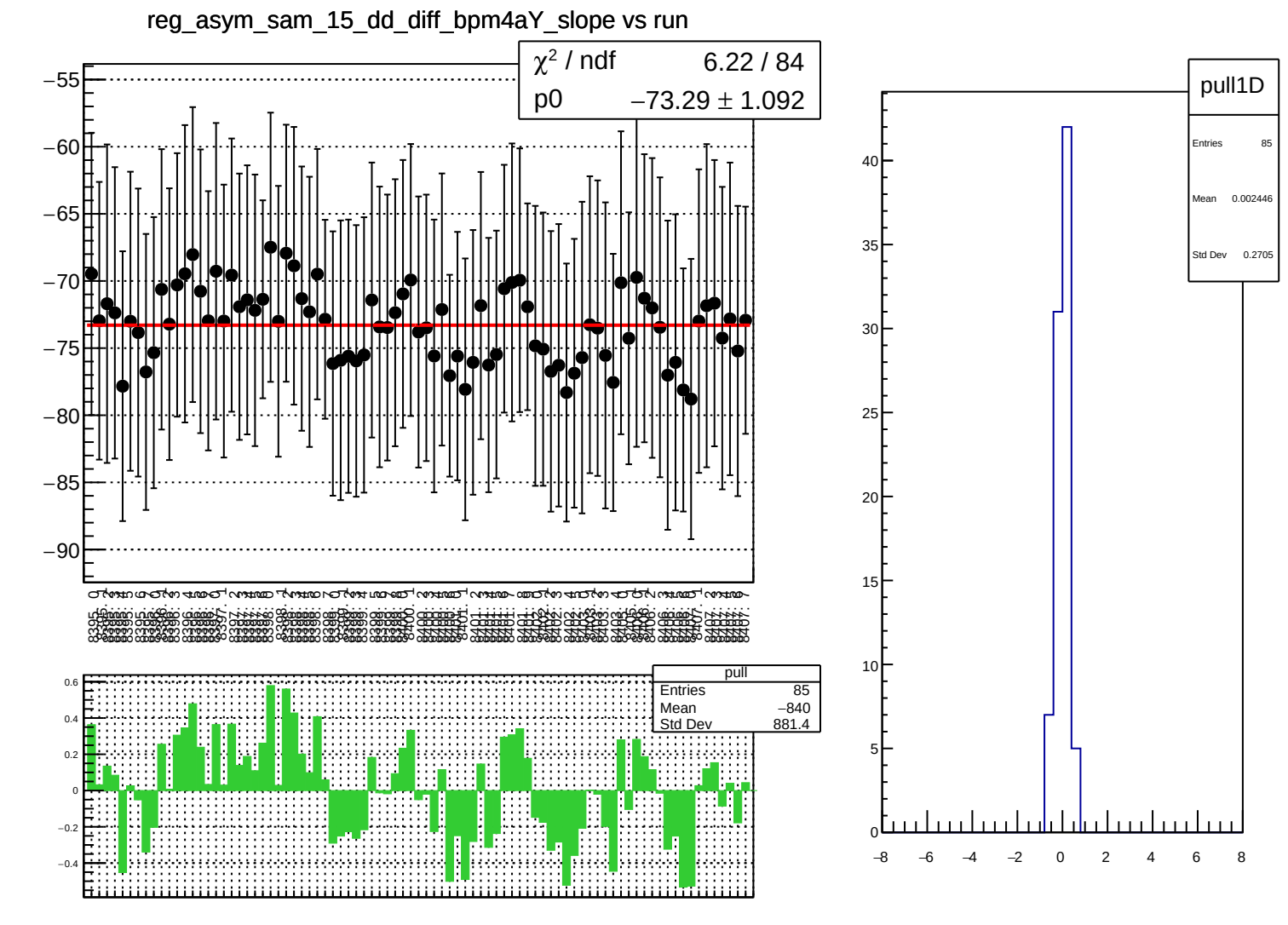

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.203 / 84
p0 28.28 ± 0.6164
pull
Entries 85
Mean 1618
Std Dev 1572
pull1D
Entries 85
Mean 0.002949
Std Dev 0.329

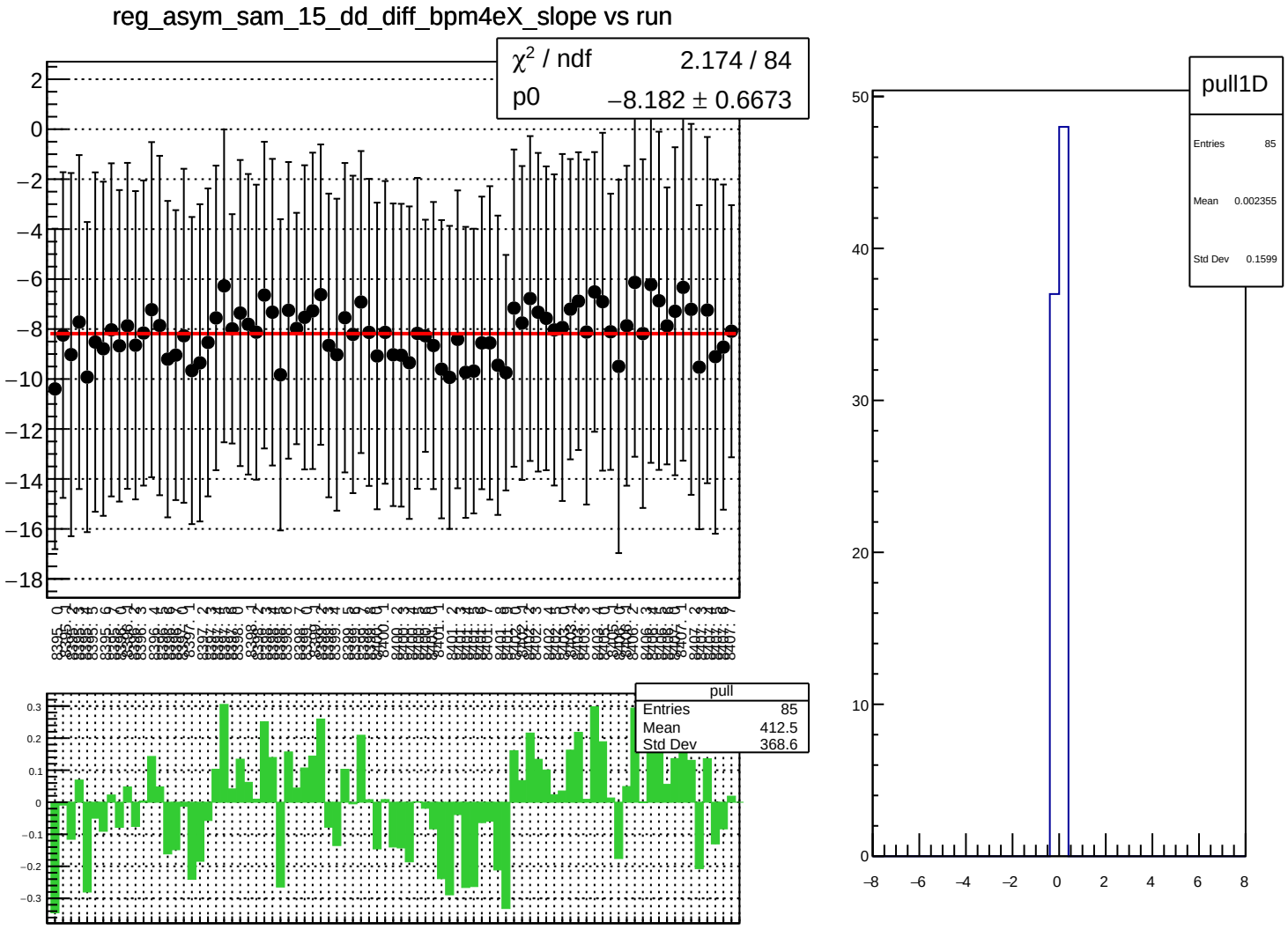

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.636 / 84
p0 1.998 ± 0.3766
pull
Entries 85
Mean −2370
Std Dev 2416
pull1D
Entries 85
Mean 0.0007647
Std Dev 0.2335

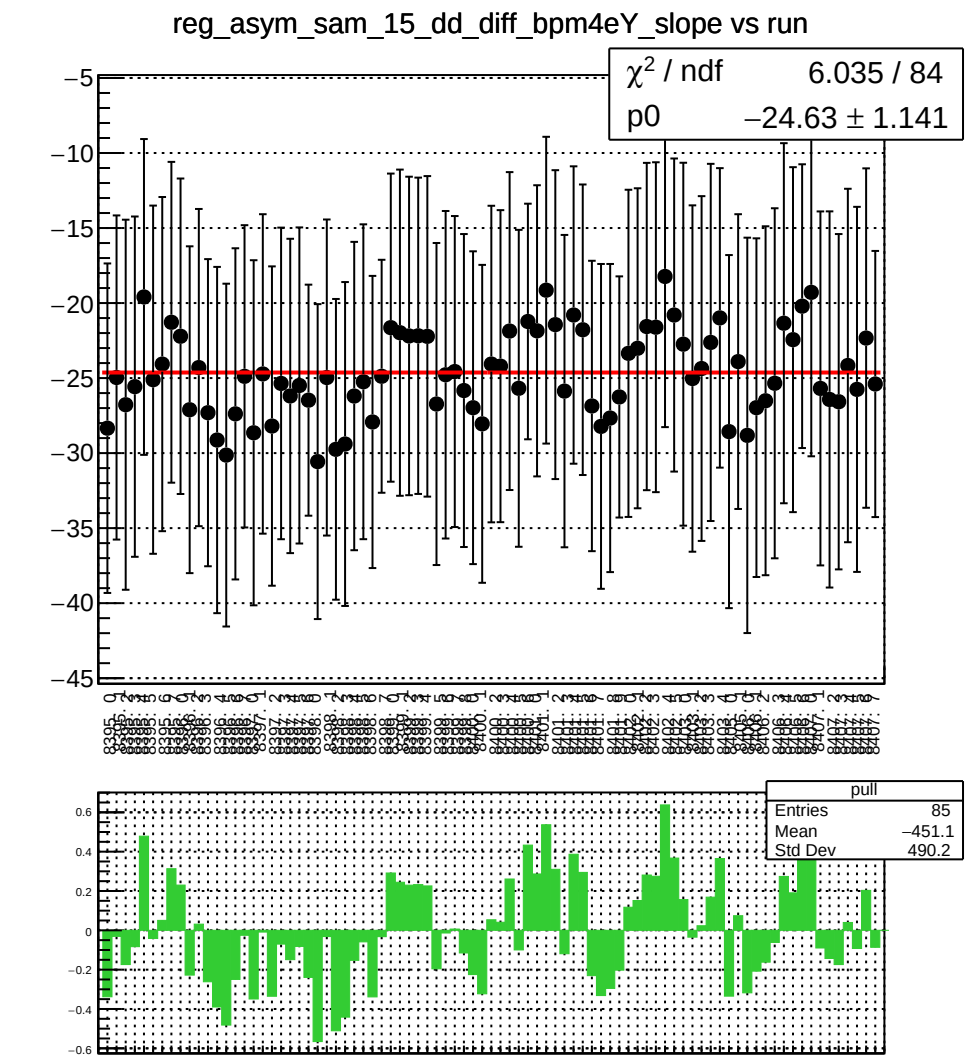

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.331 / 84
p0 27.28 ± 0.644
pull
Entries 85
Mean 2015
Std Dev 1969
pull1D
Entries 85
Mean −0.001287
Std Dev 0.2937

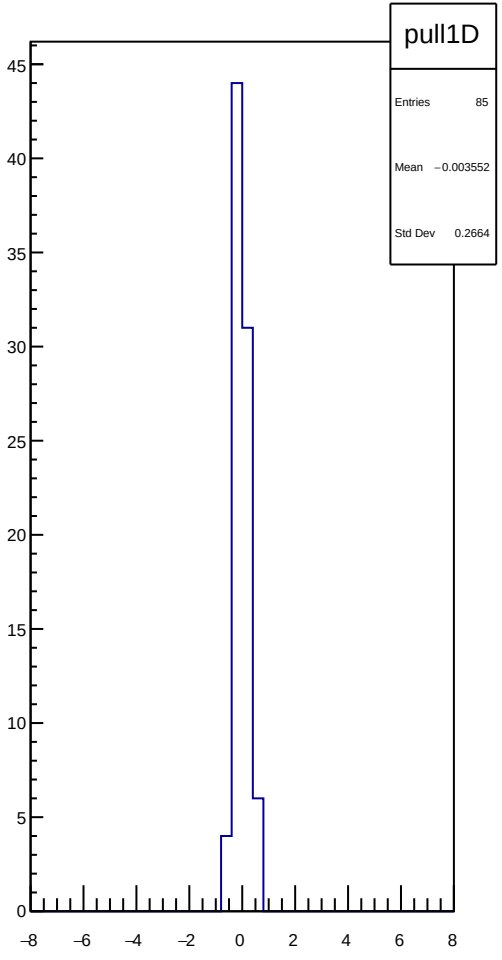

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 5.887 / 84
p0 0.02616 ± 0.03976
pull
Entries 85
Mean 1672
Std Dev 1626
pull1D
Entries 85
Mean −0.001637
Std Dev 0.2632

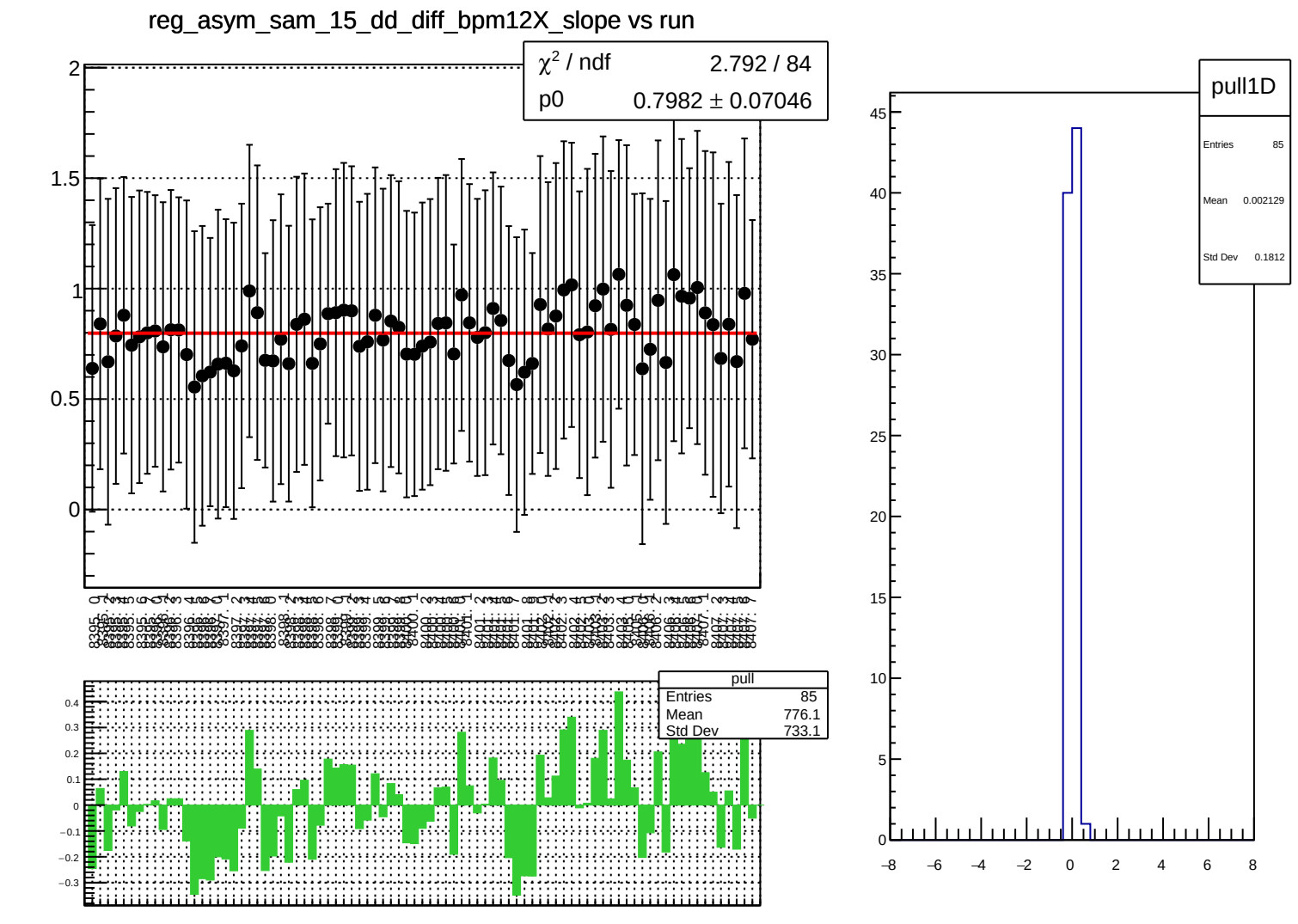

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 2.435 / 84
p0 −0.463 ± 0.6011
pull
Entries 85
Mean 408.6
Std Dev 363.9
pull1D
Entries 85
Mean −0.002367
Std Dev 0.1692

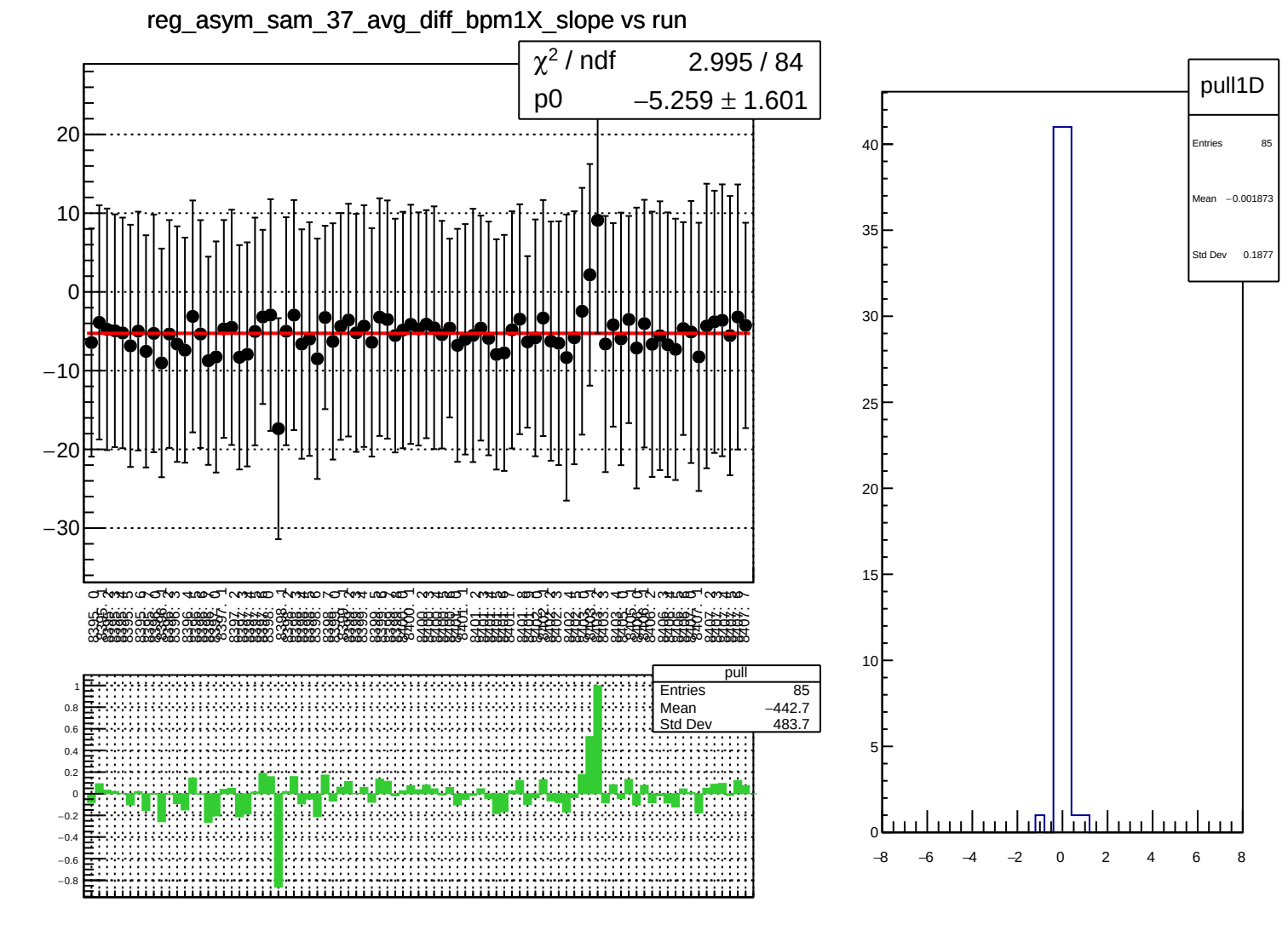

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.22 / 84
p0 −73.29 ± 1.092
pull
Entries 85
Mean −840
Std Dev 881.4
pull1D
Entries 85
Mean 0.002446
Std Dev 0.2705

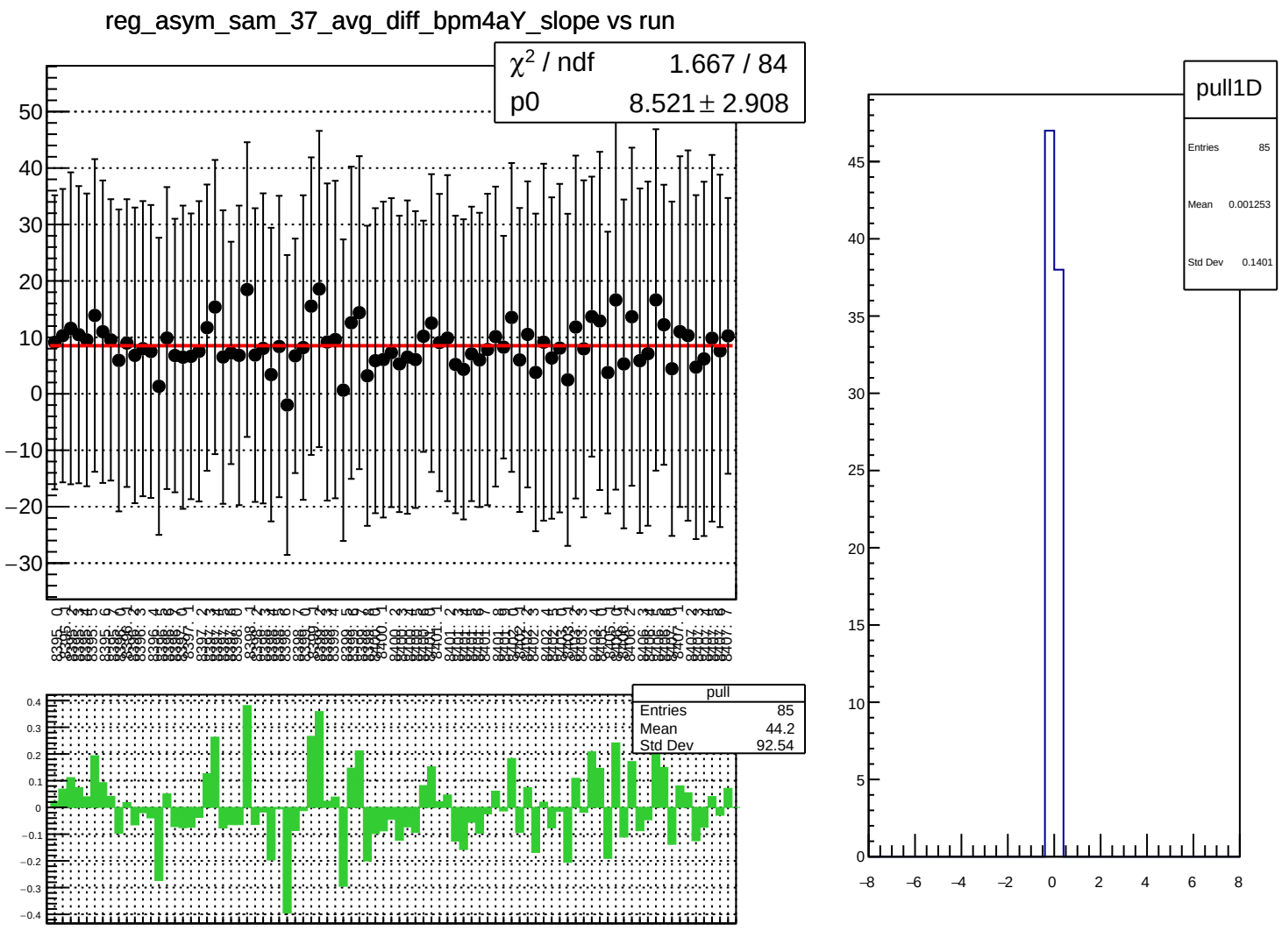

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.174 / 84
p0 −8.182 ± 0.6673
pull
Entries 85
Mean 412.5
Std Dev 368.6
pull1D
Entries 85
Mean 0.002355
Std Dev 0.1599

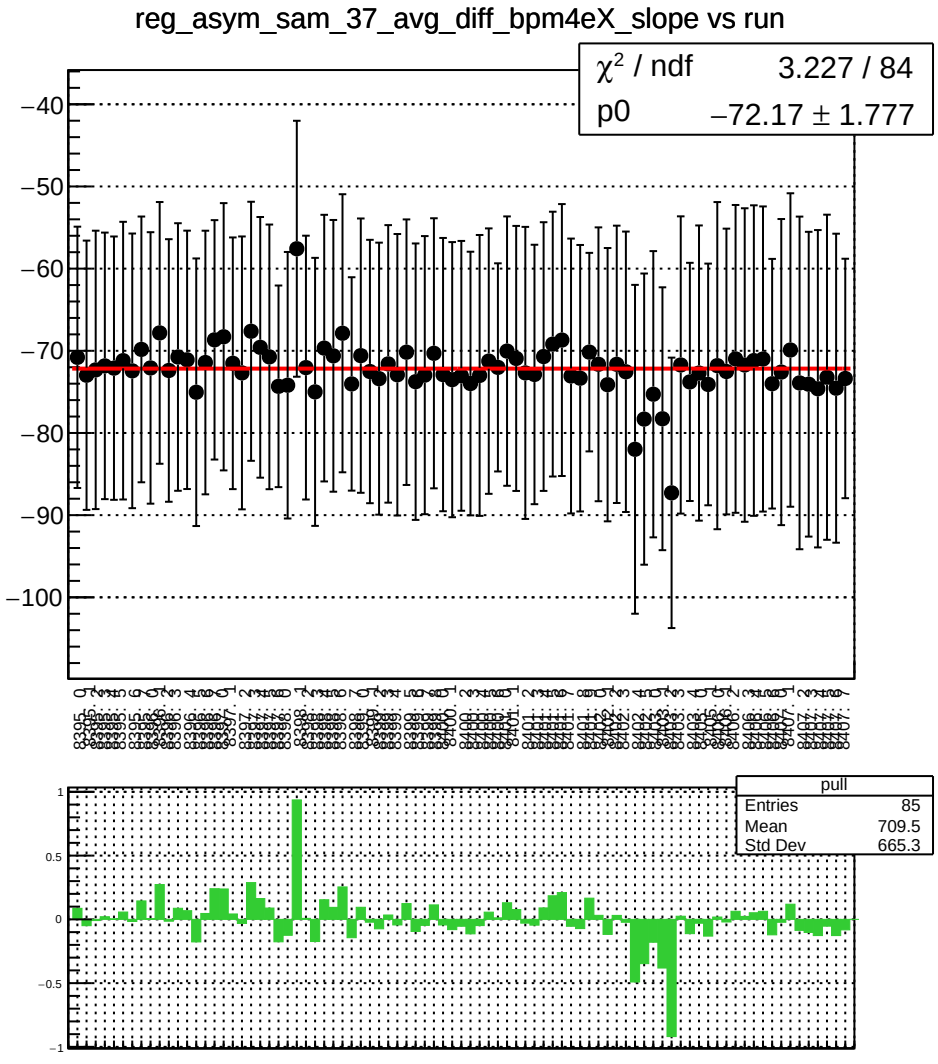

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.035 / 84
p0 −24.63 ± 1.141
pull
Entries 85
Mean −451.1
Std Dev 490.2

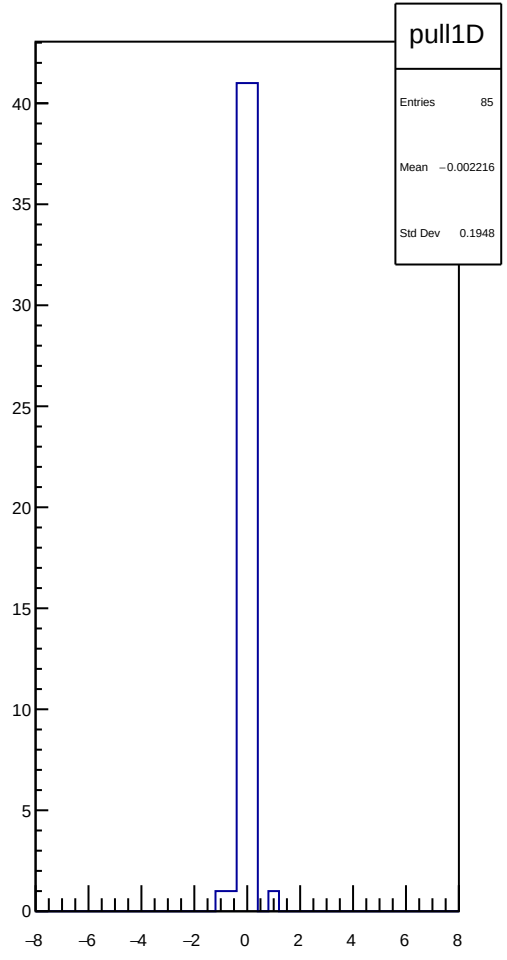

pull1D
Entries 85
Mean −0.003552
Std Dev 0.2664

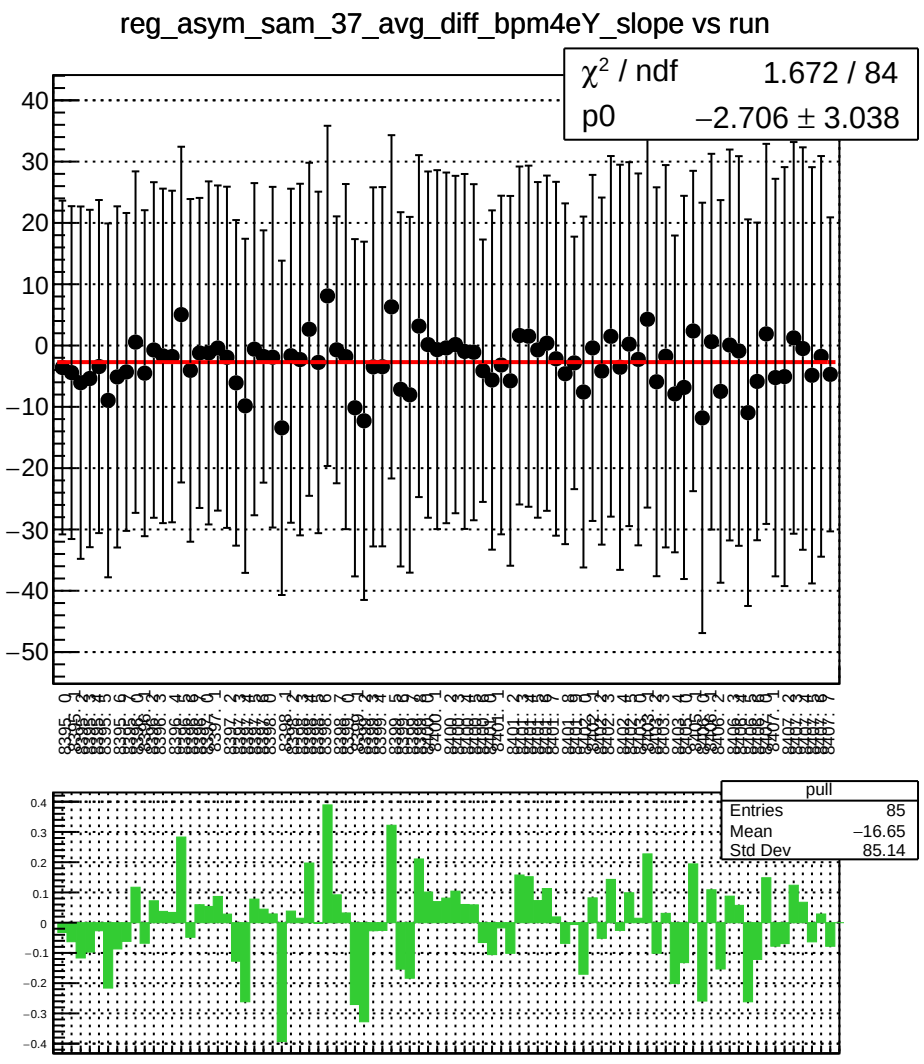

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 2.792 / 84
p0 0.7982 ± 0.07046
pull
Entries 85
Mean 776.1
Std Dev 733.1
pull1D
Entries 85
Mean 0.002129
Std Dev 0.1812

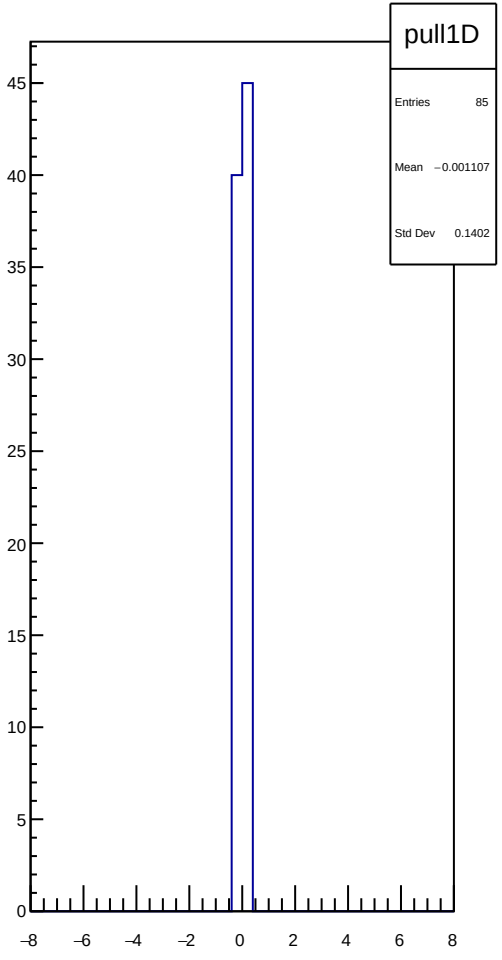

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 2.995 / 84
p0 −5.259 ± 1.601
pull
Entries 85
Mean −442.7
Std Dev 483.7
pull1D
Entries 85
Mean −0.001873
Std Dev 0.1877

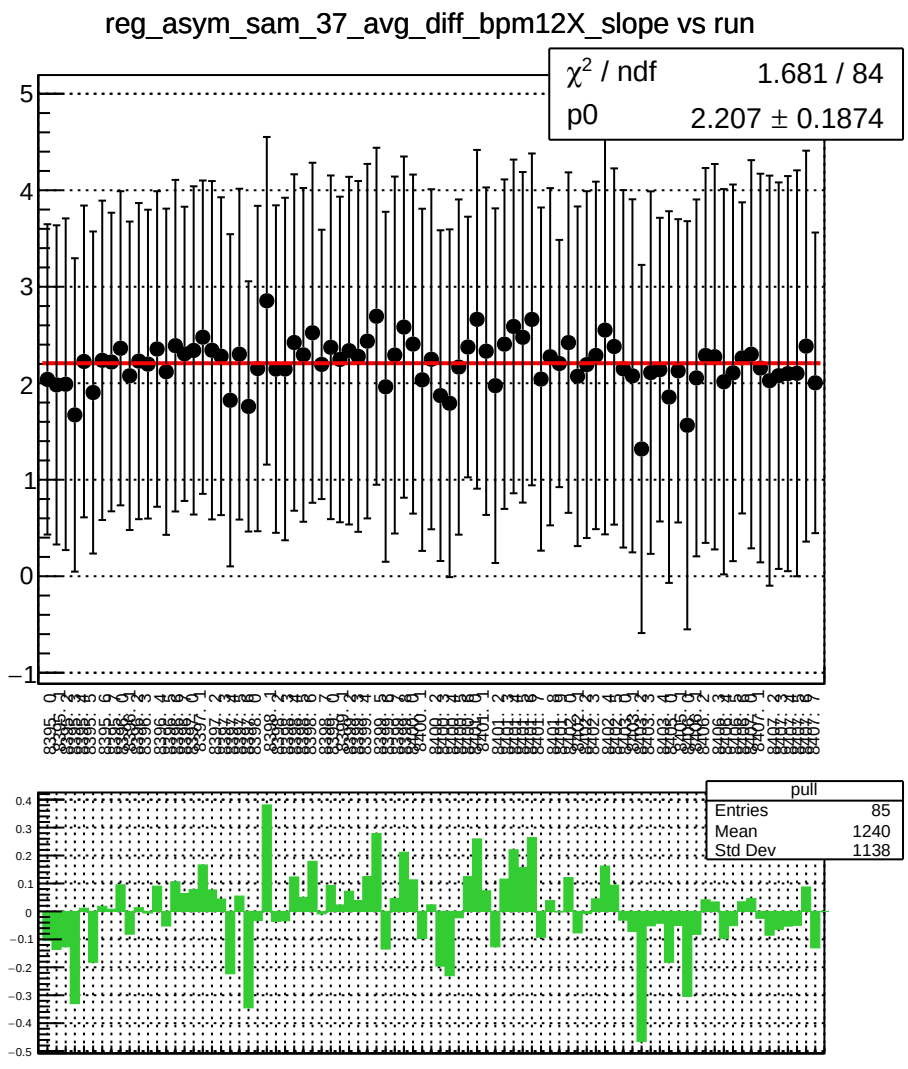

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.667 / 84
p0 8.521 ± 2.908
pull
Entries 85
Mean 44.2
Std Dev 92.54
pull1D
Entries 85
Mean 0.001253
Std Dev 0.1401

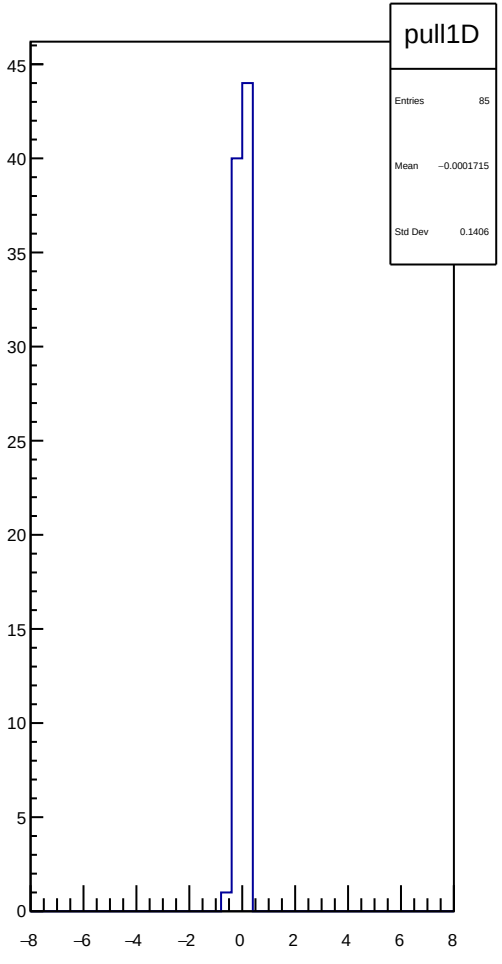

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.227 / 84
p0 −72.17 ± 1.777
pull
Entries 85
Mean 709.5
Std Dev 665.3

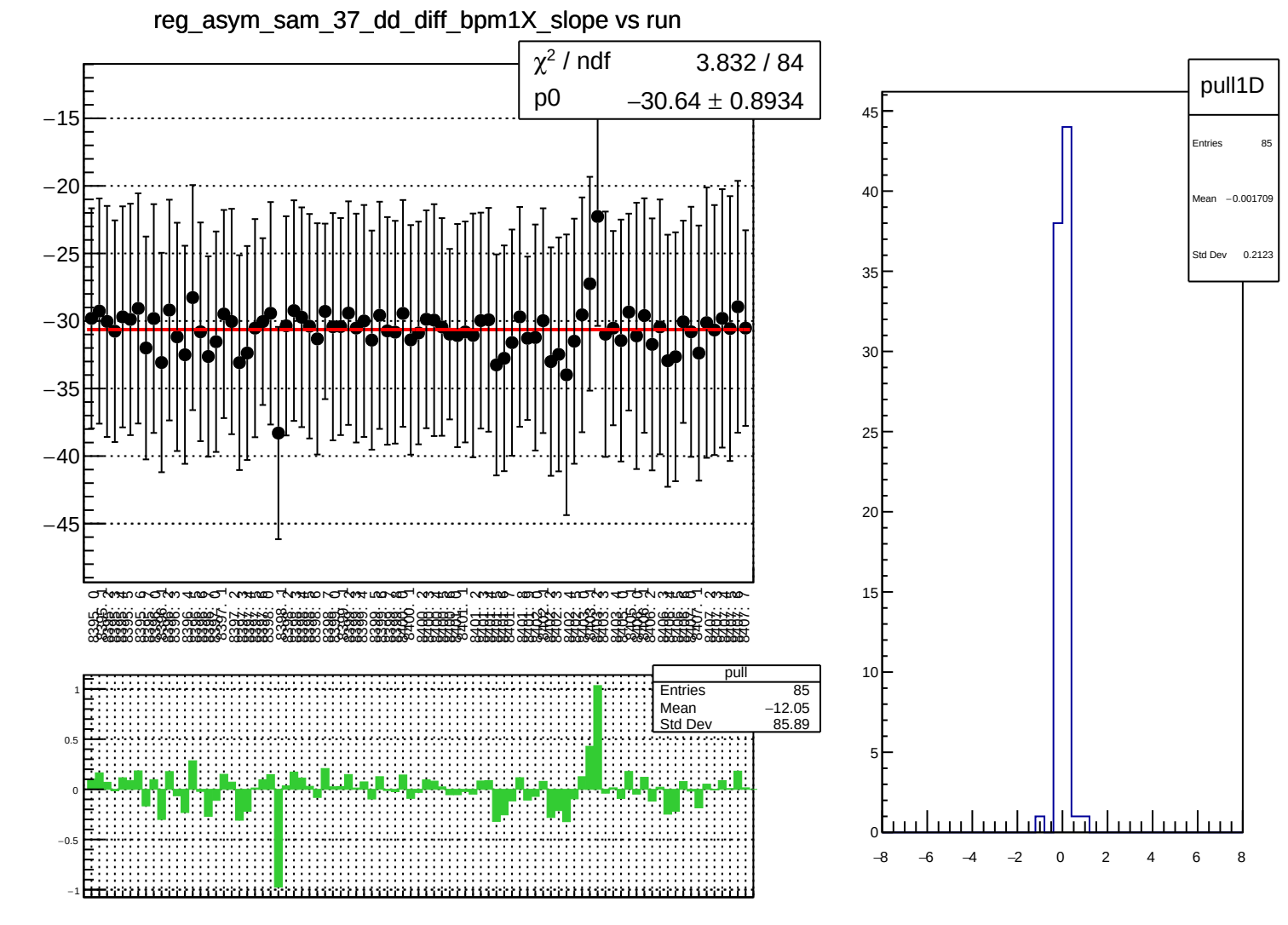

pull1D
Entries 85
Mean −0.002216
Std Dev 0.1948

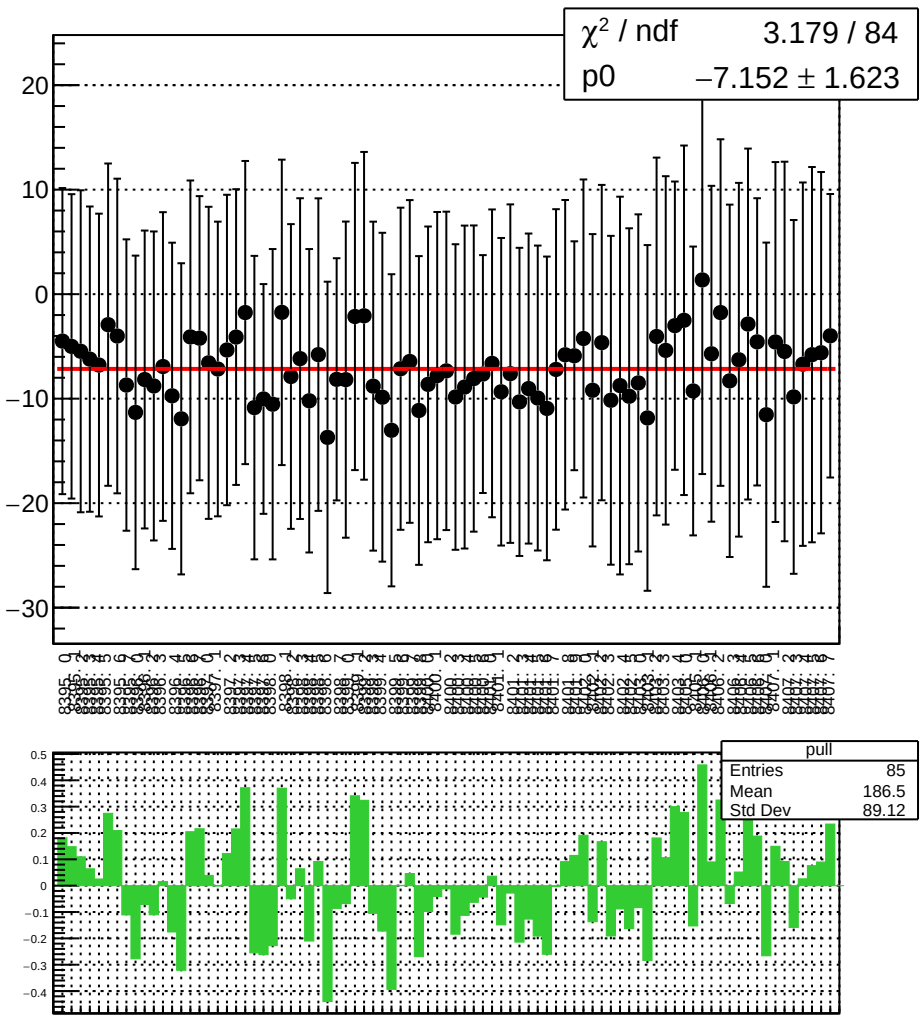

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.672 / 84
p0 −2.706 ± 3.038
pull
Entries 85
Mean −16.65
Std Dev 85.14

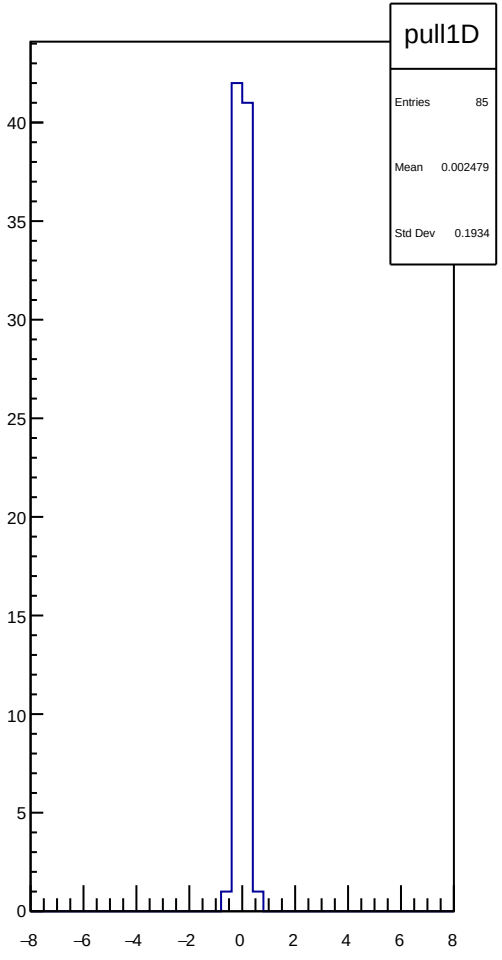

pull1D
Entries 85
Mean −0.001107
Std Dev 0.1402

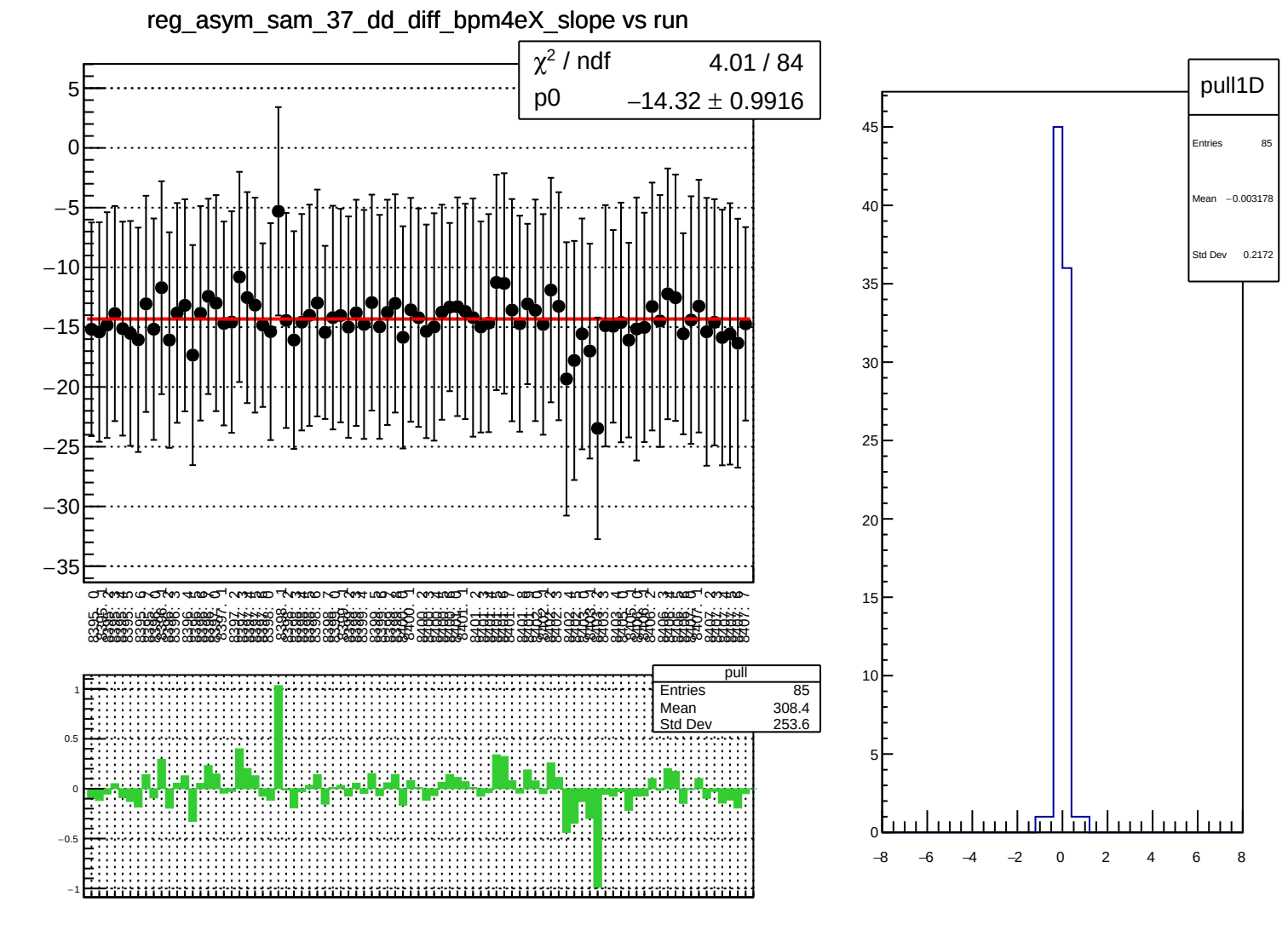

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 1.681 / 84
p0 2.207 ± 0.1874
pull
Entries 85
Mean 1240
Std Dev 1138

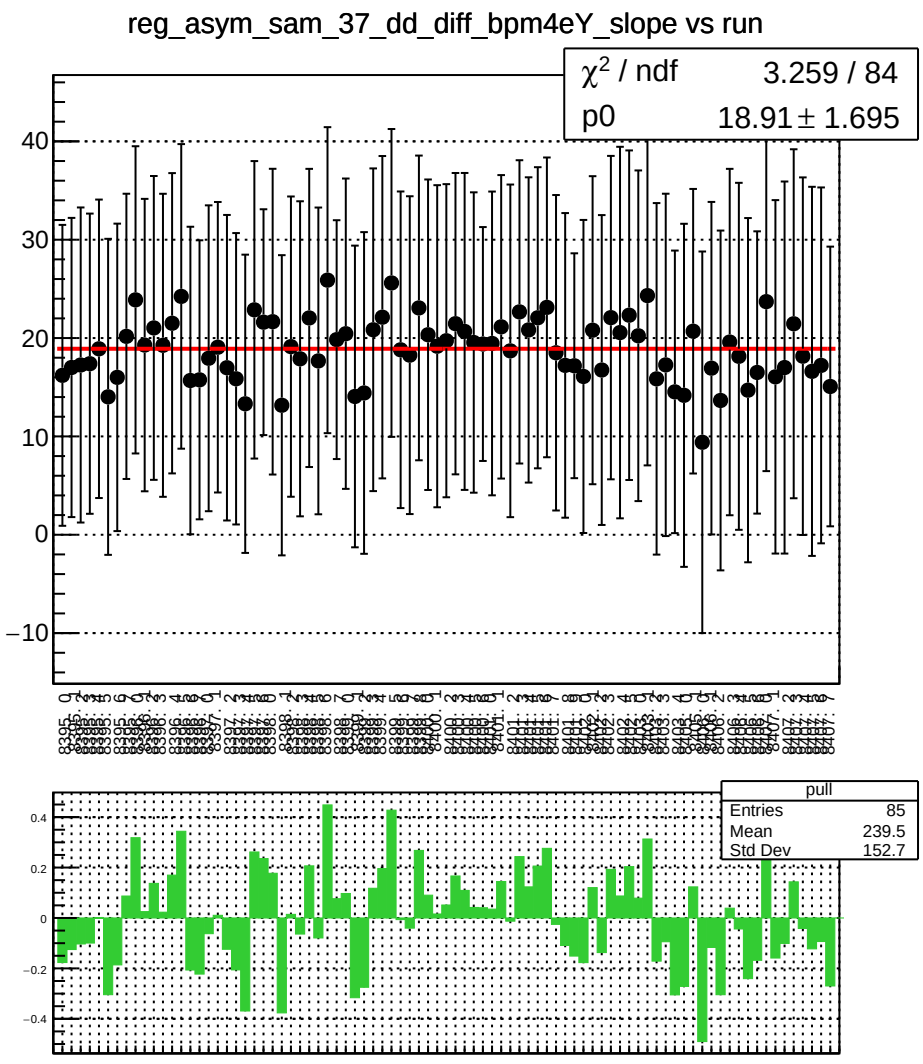

pull1D
Entries 85
Mean −0.0001715
Std Dev 0.1406

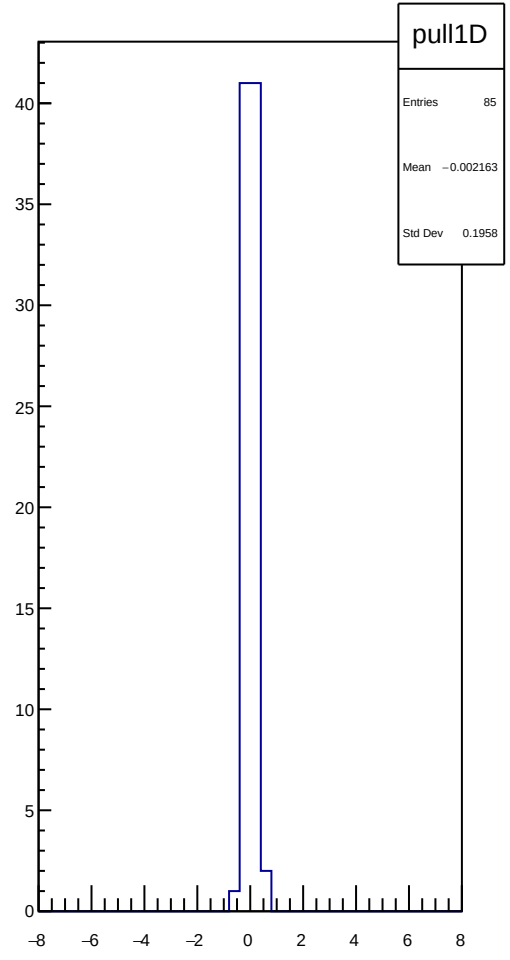

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 3.832 / 84
p0 −30.64 ± 0.8934
pull
Entries 85
Mean −12.05
Std Dev 85.89
pull1D
Entries 85
Mean −0.001709
Std Dev 0.2123

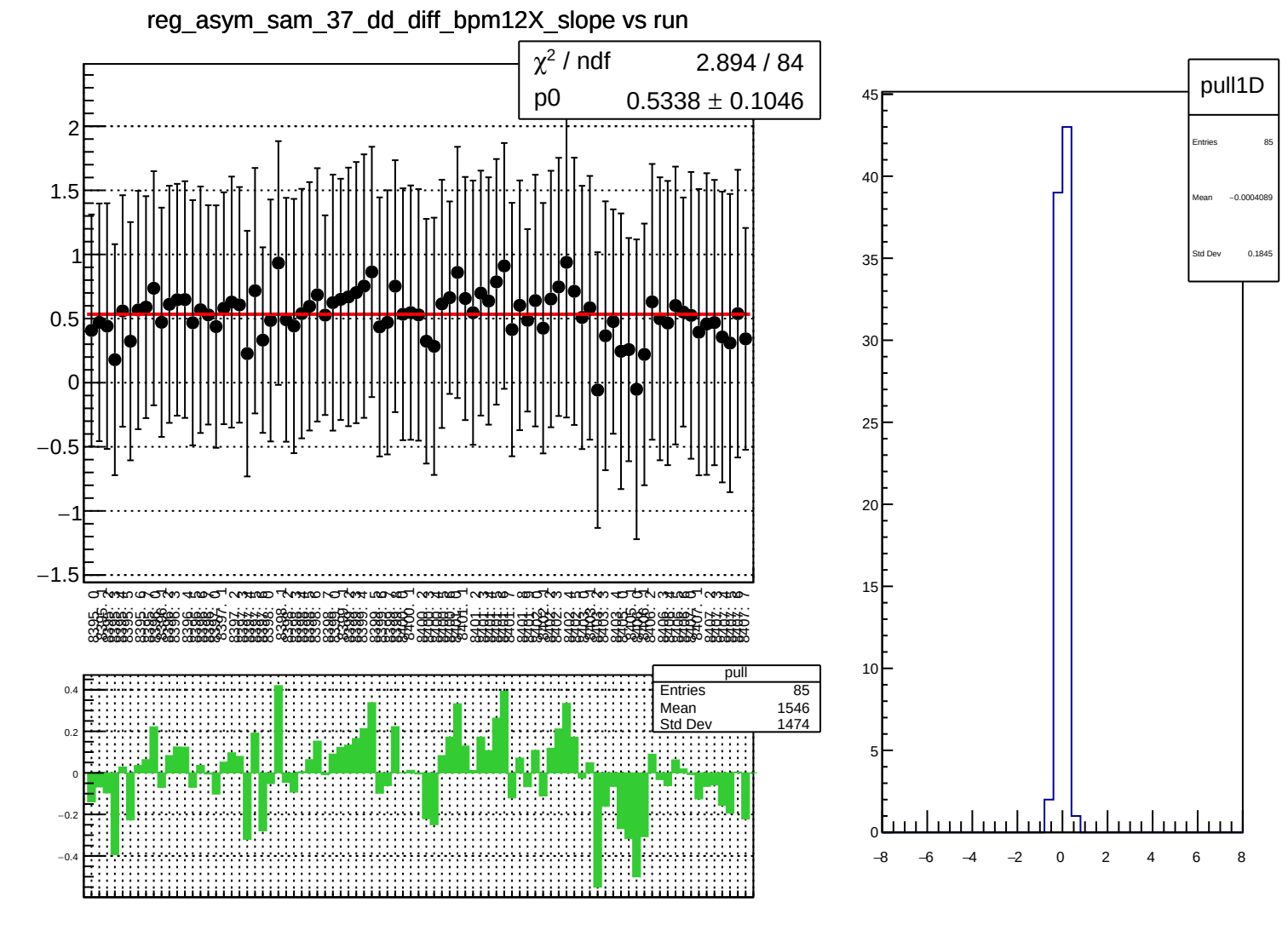

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.179 / 84
p0 −7.152 ± 1.623
pull
Entries 85
Mean 186.5
Std Dev 89.12

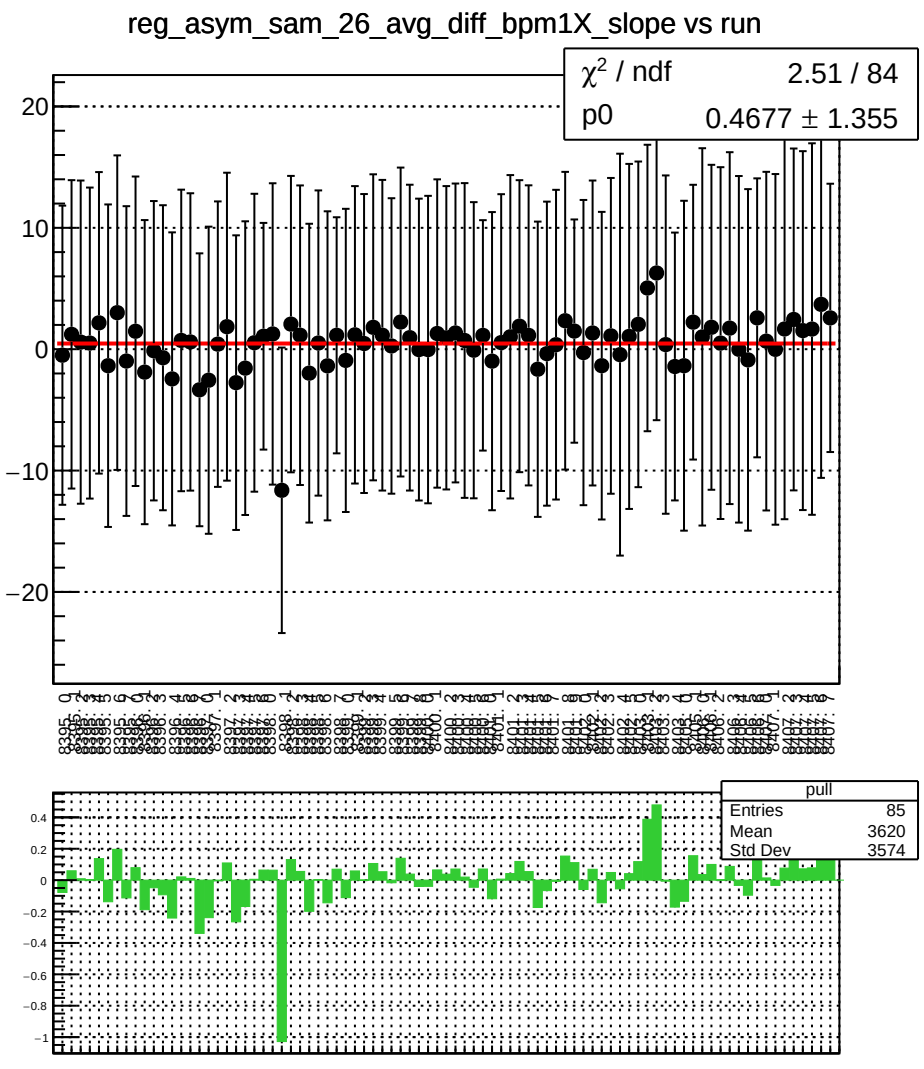

pull1D
Entries 85
Mean 0.002479
Std Dev 0.1934

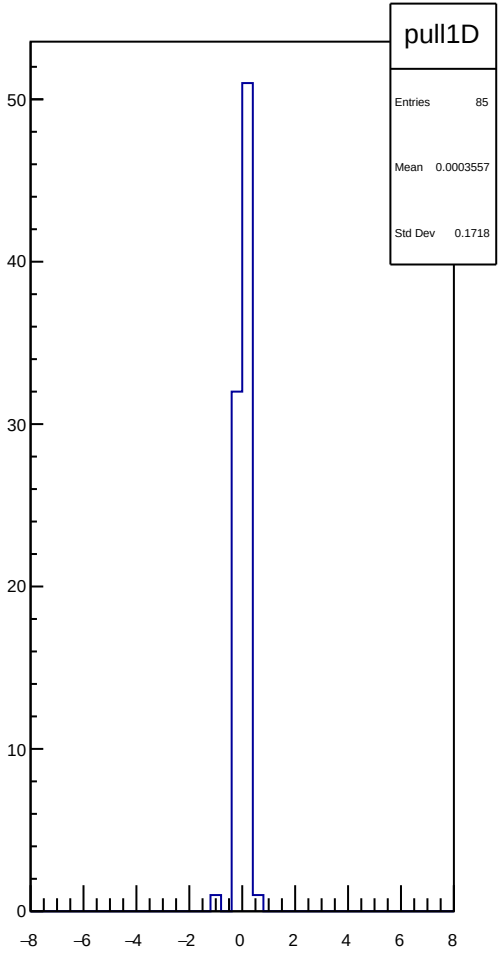

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.01 / 84
p0 −14.32 ± 0.9916
pull
Entries 85
Mean 308.4
Std Dev 253.6
pull1D
Entries 85
Mean −0.003178
Std Dev 0.2172

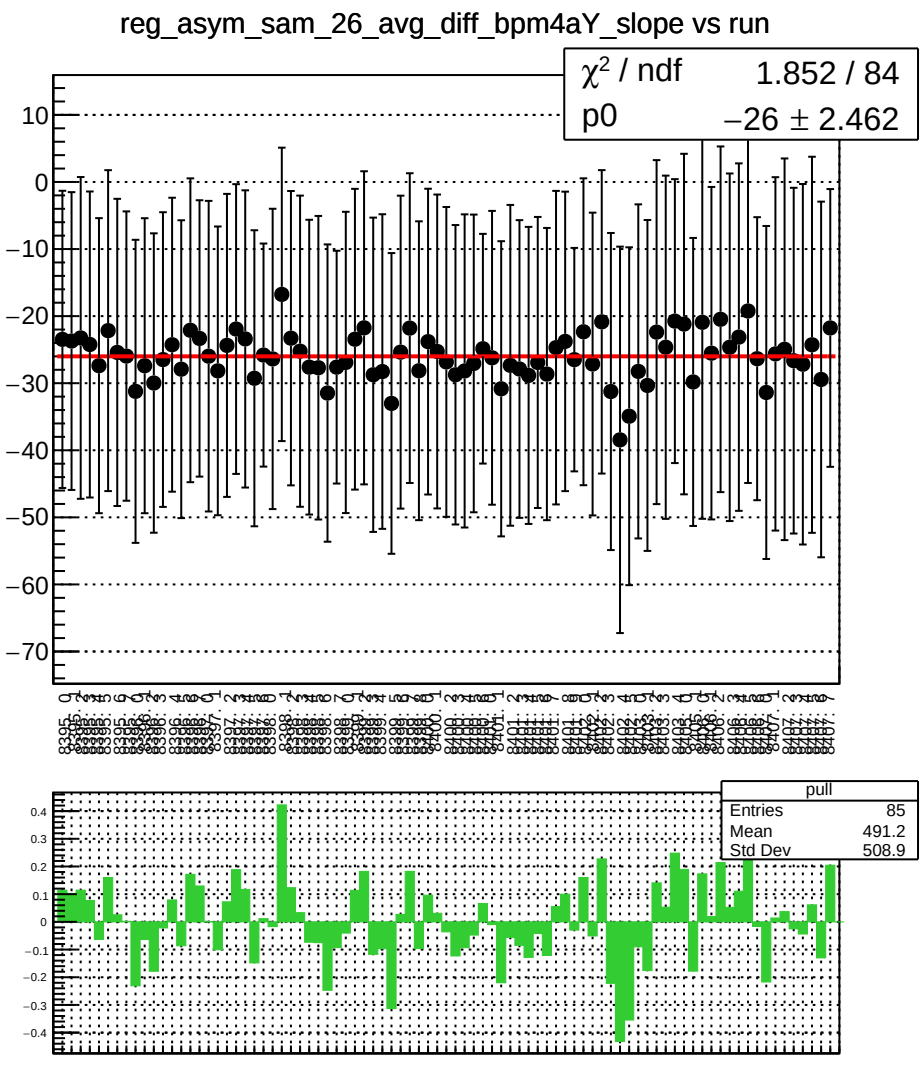

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.259 / 84
p0 18.91 ± 1.695
pull
Entries 85
Mean 239.5
Std Dev 152.7

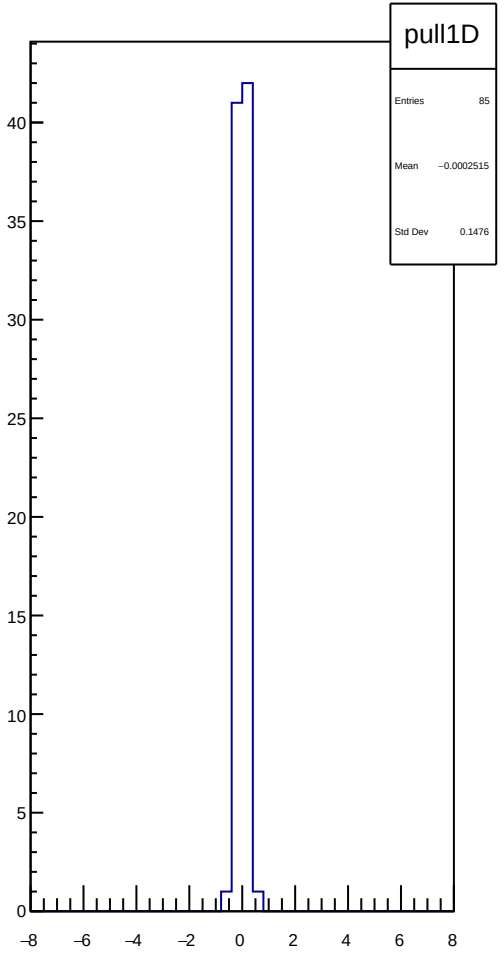

pull1D
Entries 85
Mean −0.002163
Std Dev 0.1958

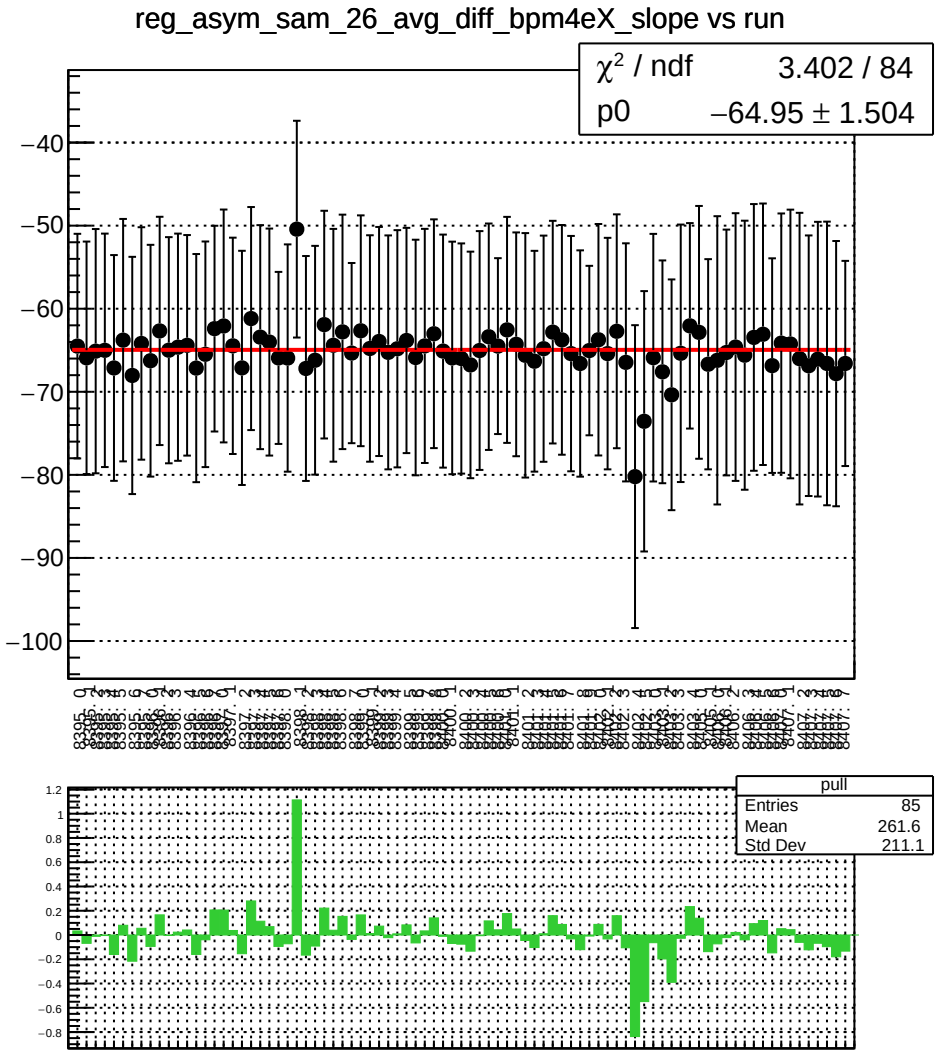

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 2.894 / 84
p0 0.5338 ± 0.1046
pull
Entries 85
Mean 1546
Std Dev 1474
pull1D
Entries 85
Mean −0.0004089
Std Dev 0.1845

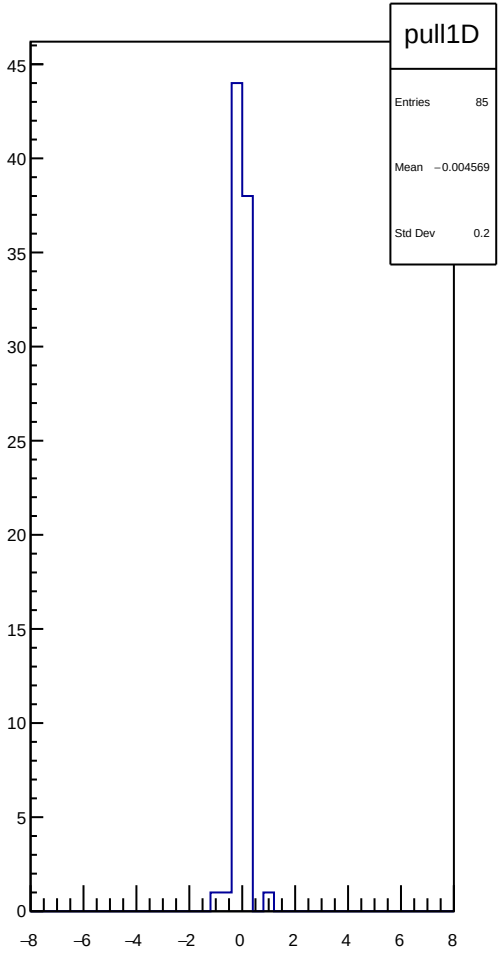

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 2.51 / 84
p0 0.4677 ± 1.355
pull
Entries 85
Mean 3620
Std Dev 3574


pull1D
Entries 85
Mean 0.0003557
Std Dev 0.1718

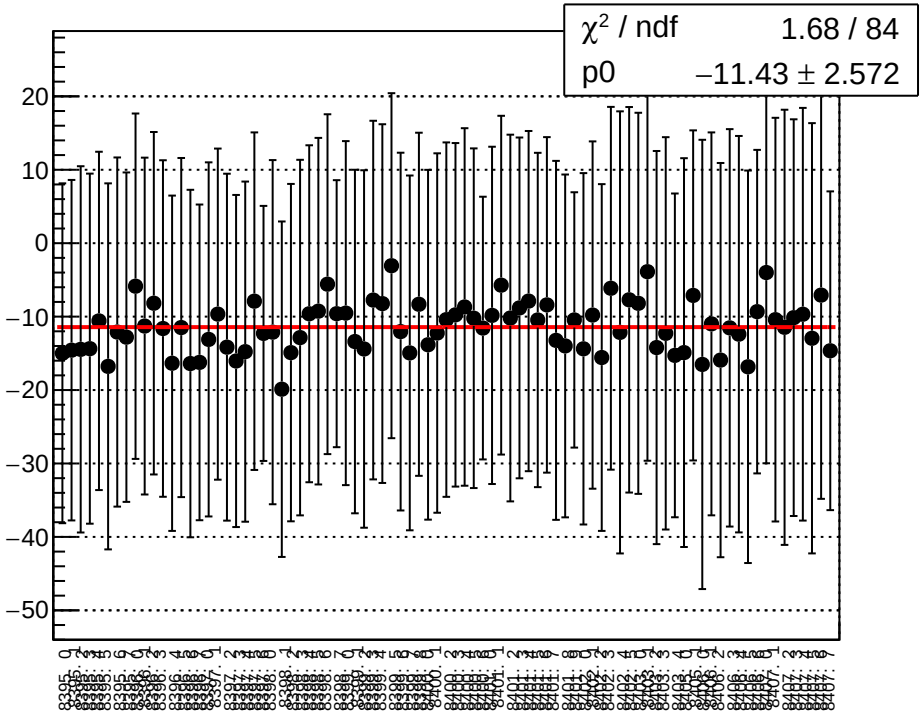

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.852 / 84
p0 −26 ± 2.462
pull
Entries 85
Mean 491.2
Std Dev 508.9

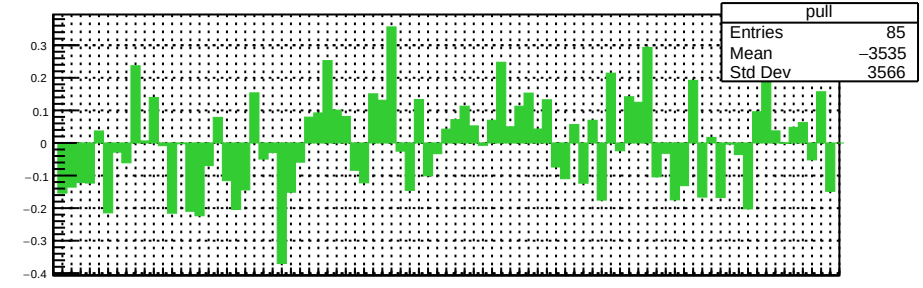

pull1D
Entries 85
Mean −0.0002515
Std Dev 0.1476

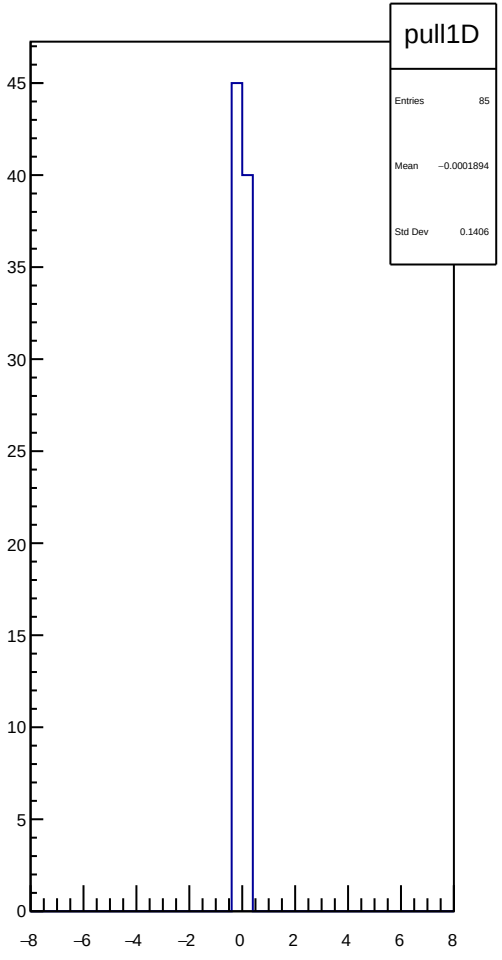

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.402 / 84
p0 −64.95 ± 1.504
pull
Entries 85
Mean 261.6
Std Dev 211.1

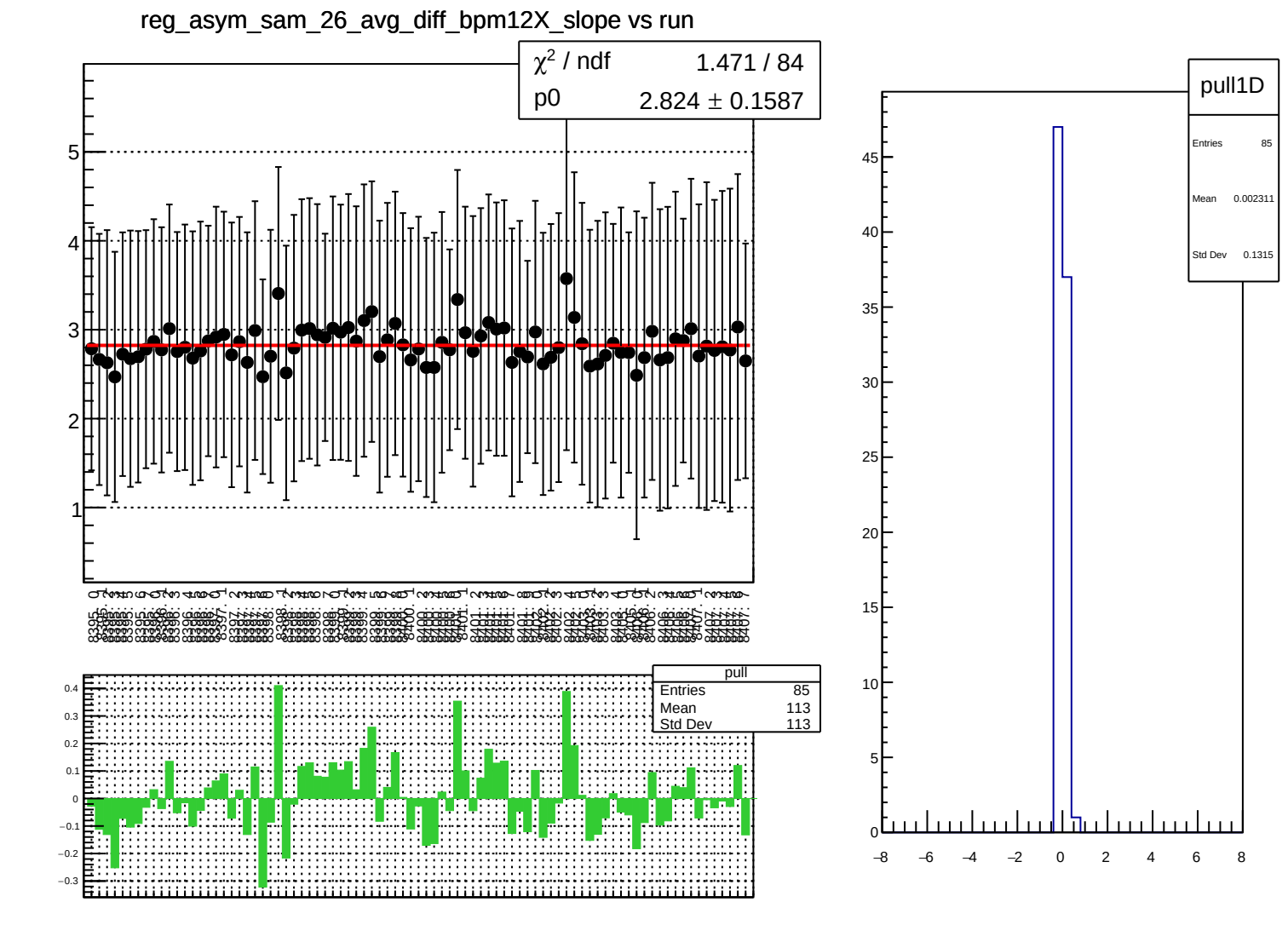

pull1D
Entries 85
Mean −0.004569
Std Dev 0.2

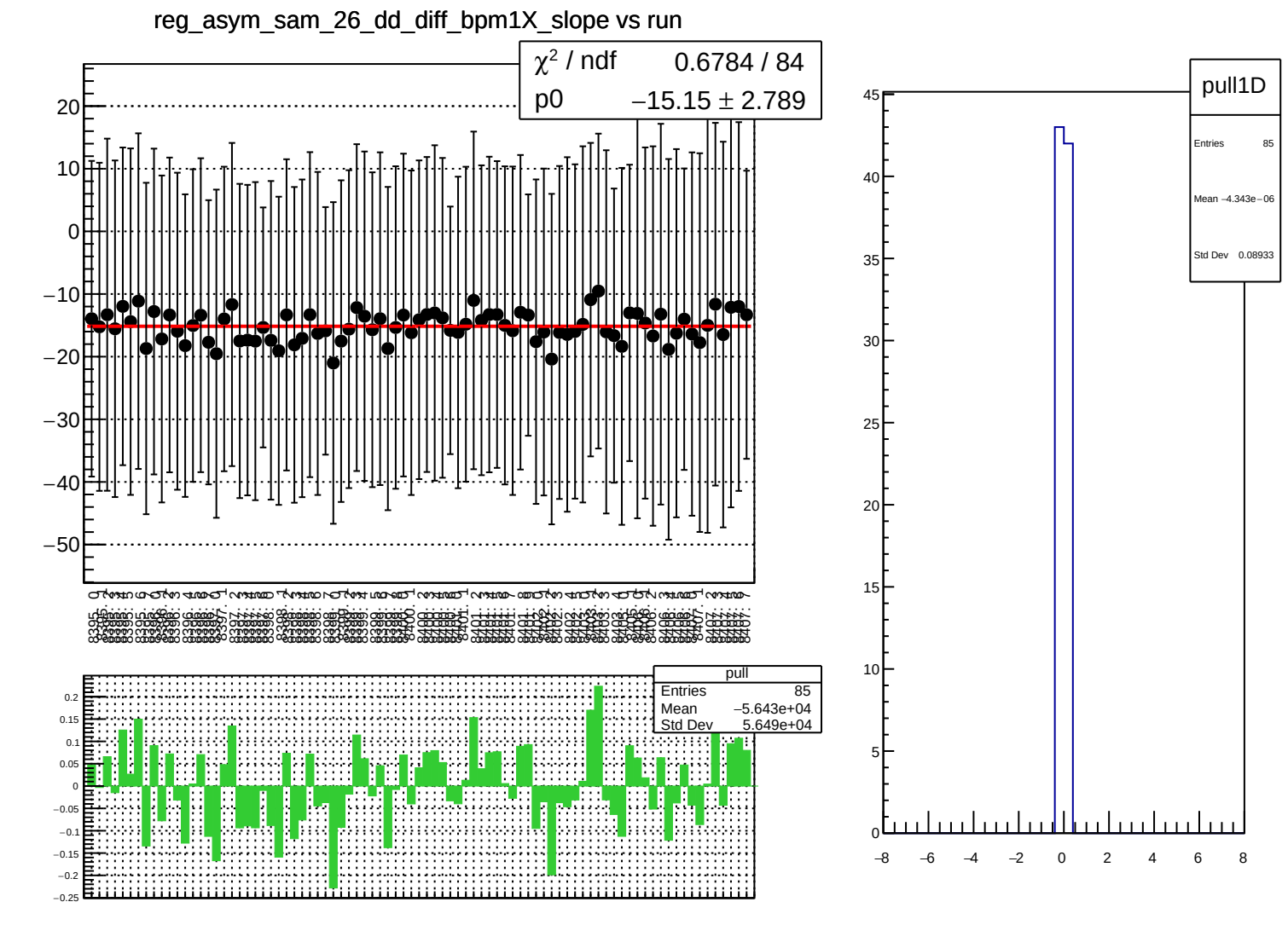
reg_asym_sam_26_avg_diff_bpm4eY_slope vs run

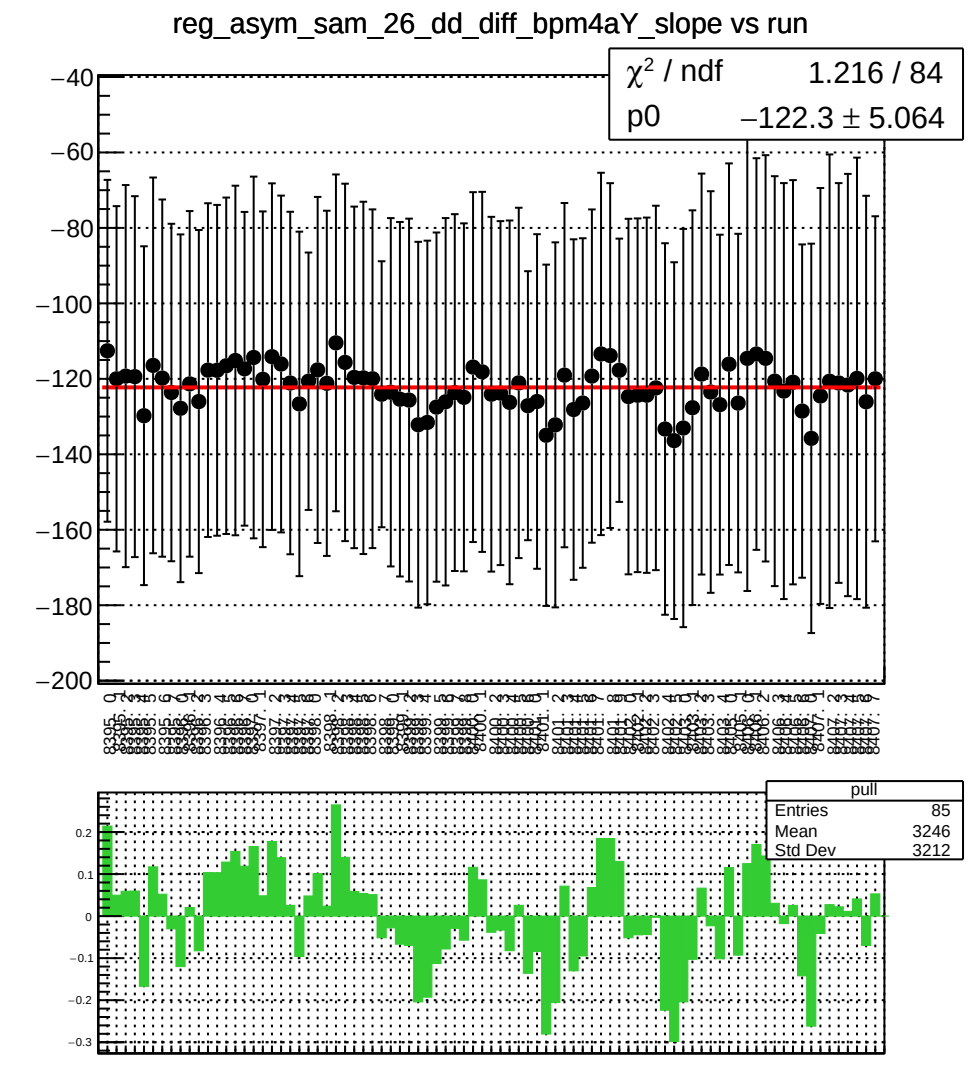


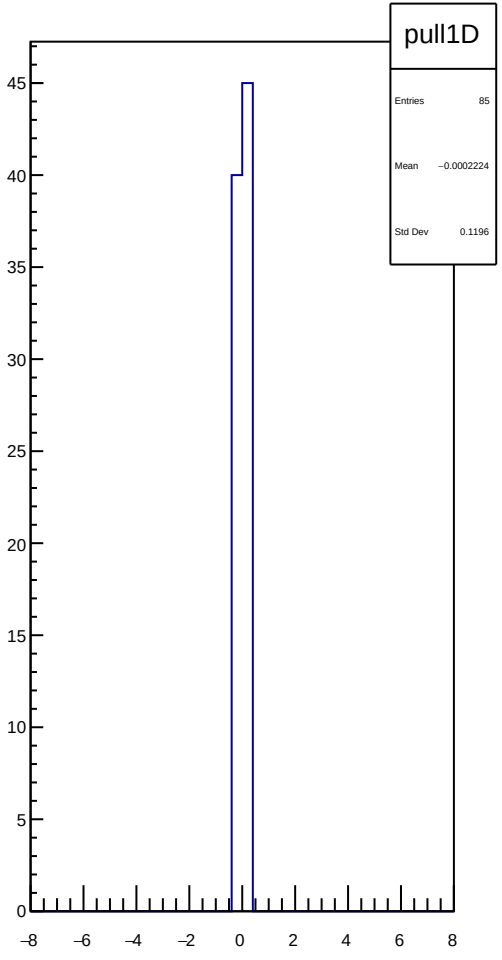


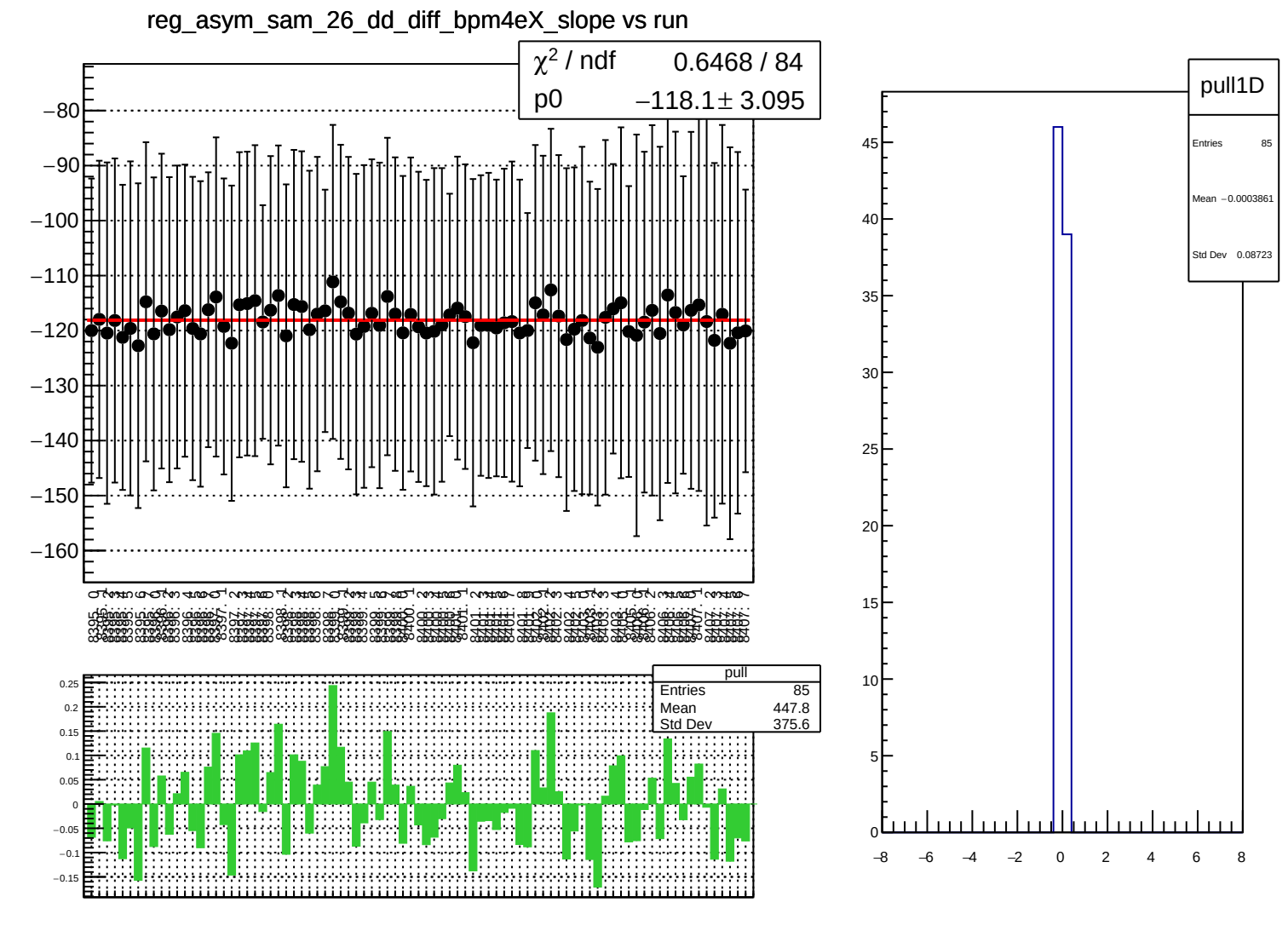


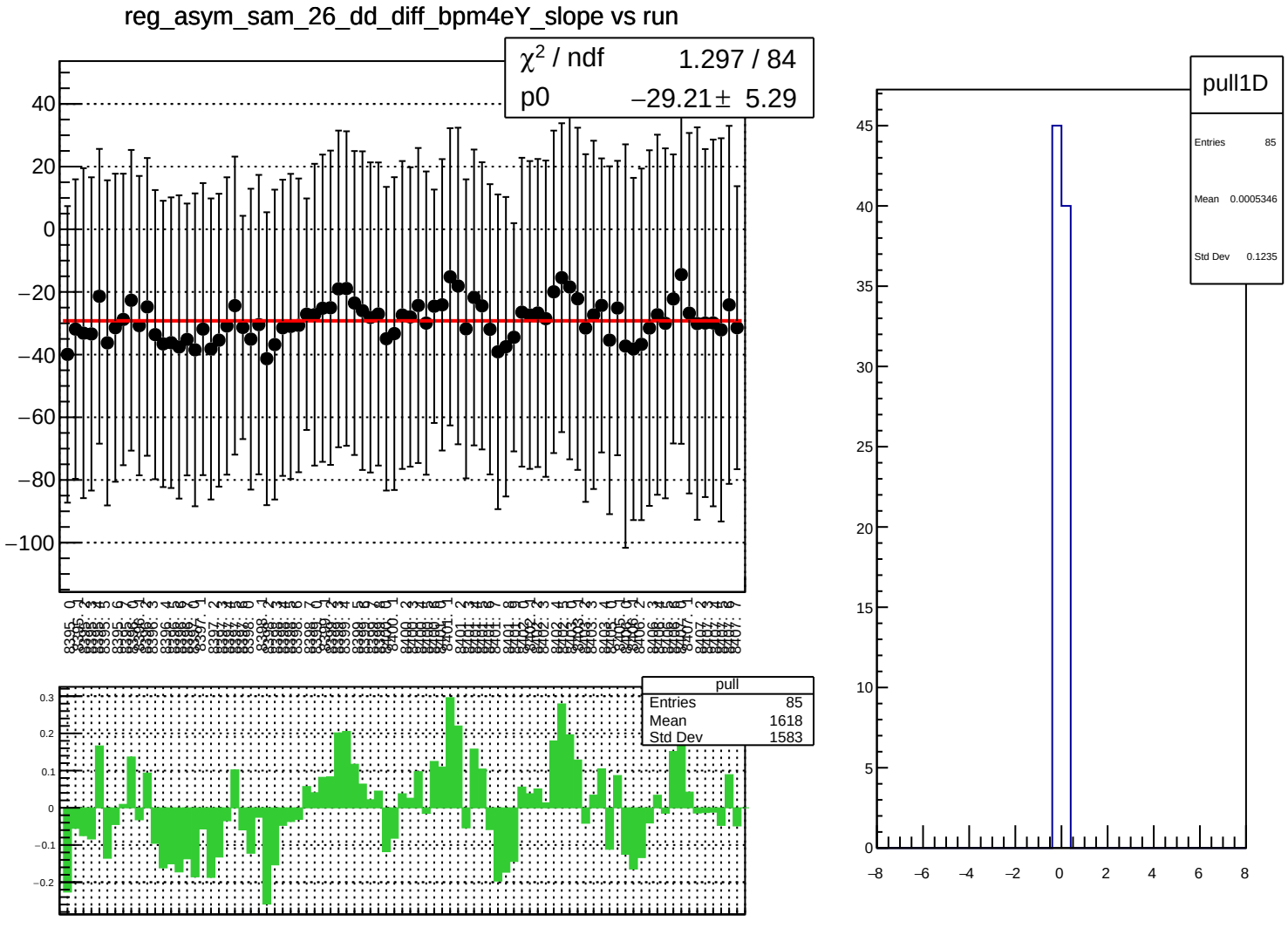

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 1.471 / 84
p0 2.824 ± 0.1587
pull
Entries 85
Mean 113
Std Dev 113
pull1D
Entries 85
Mean 0.002311
Std Dev 0.1315

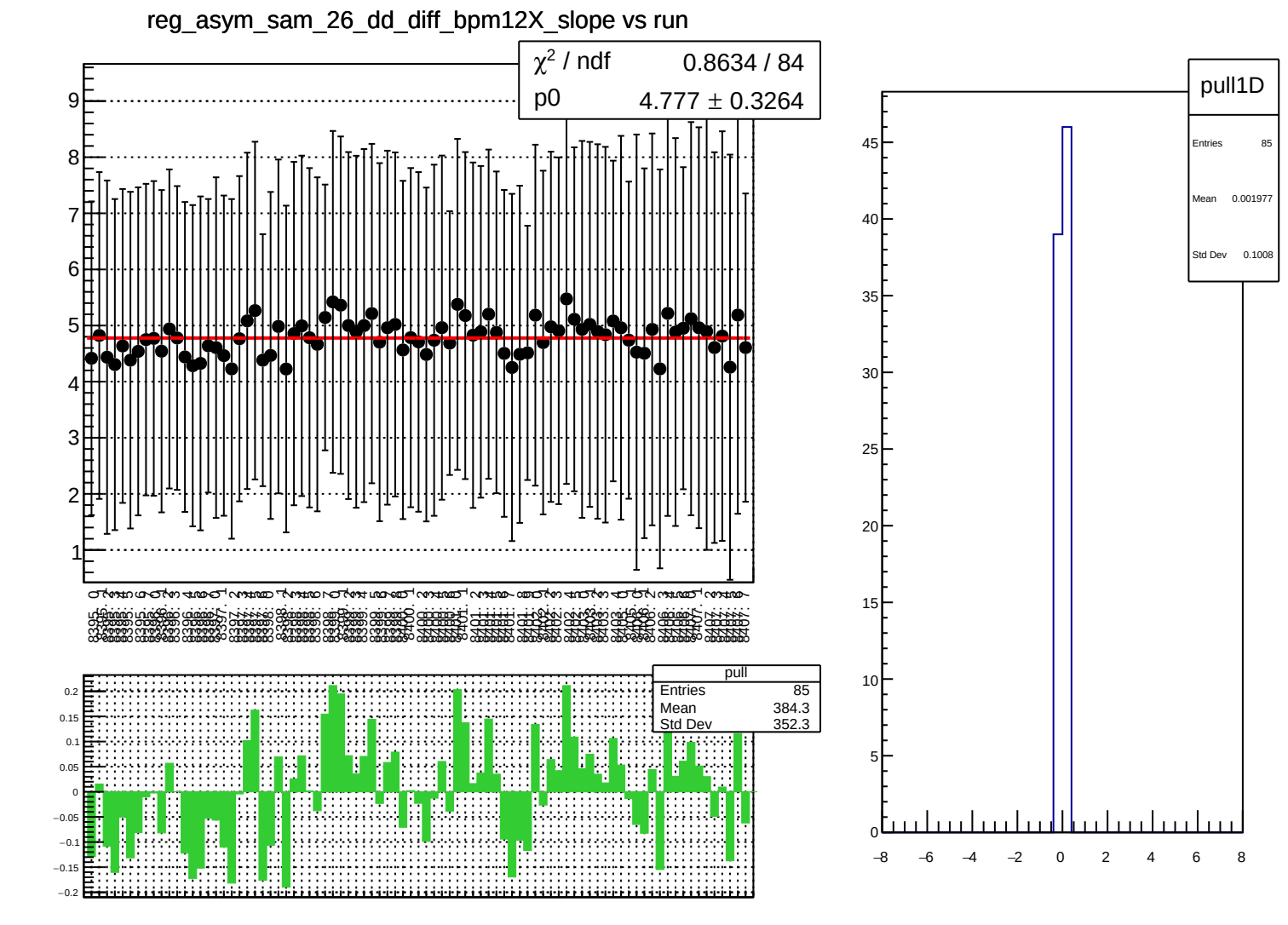

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 0.6784 / 84
p0 −15.15 ± 2.789
pull
Entries 85
Mean −5.643e+04
Std Dev 5.649e+04
pull1D
Entries 85
Mean −4.343e−06
Std Dev 0.08933

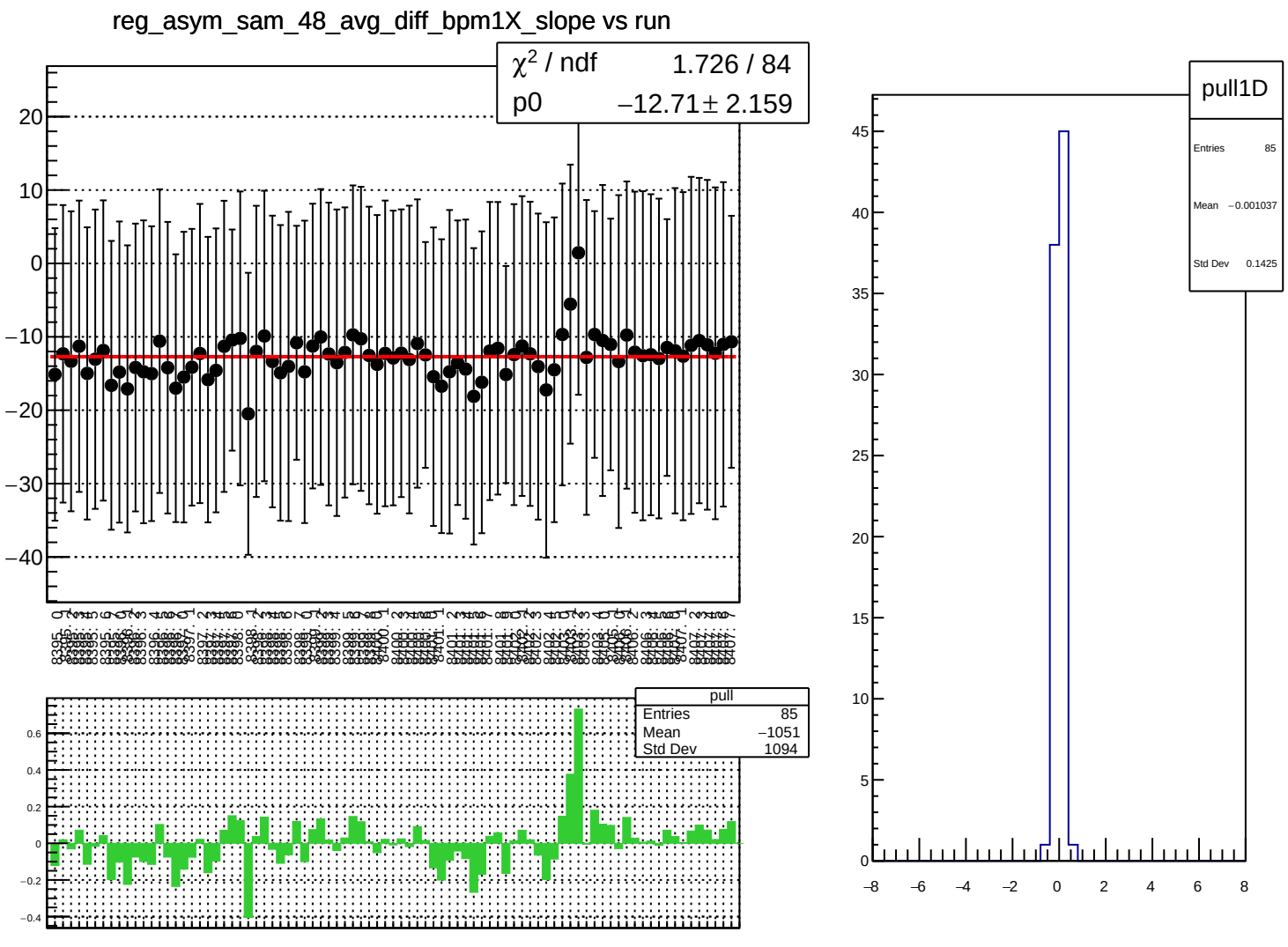

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.216 / 84
p0 −122.3 ± 5.064
pull
Entries 85
Mean 3246
Std Dev 3212

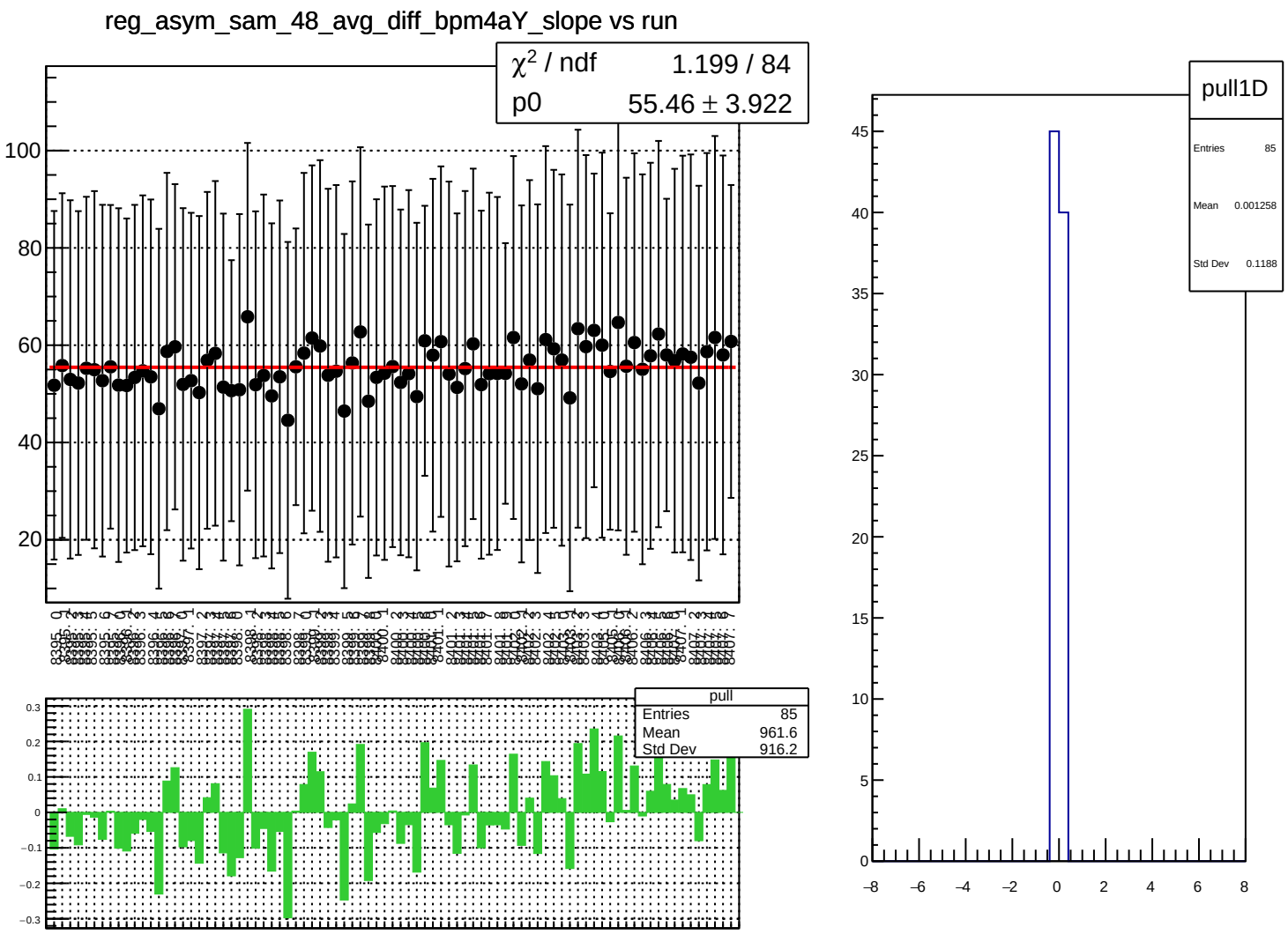

pull1D
Entries 85
Mean −0.0002224
Std Dev 0.1196

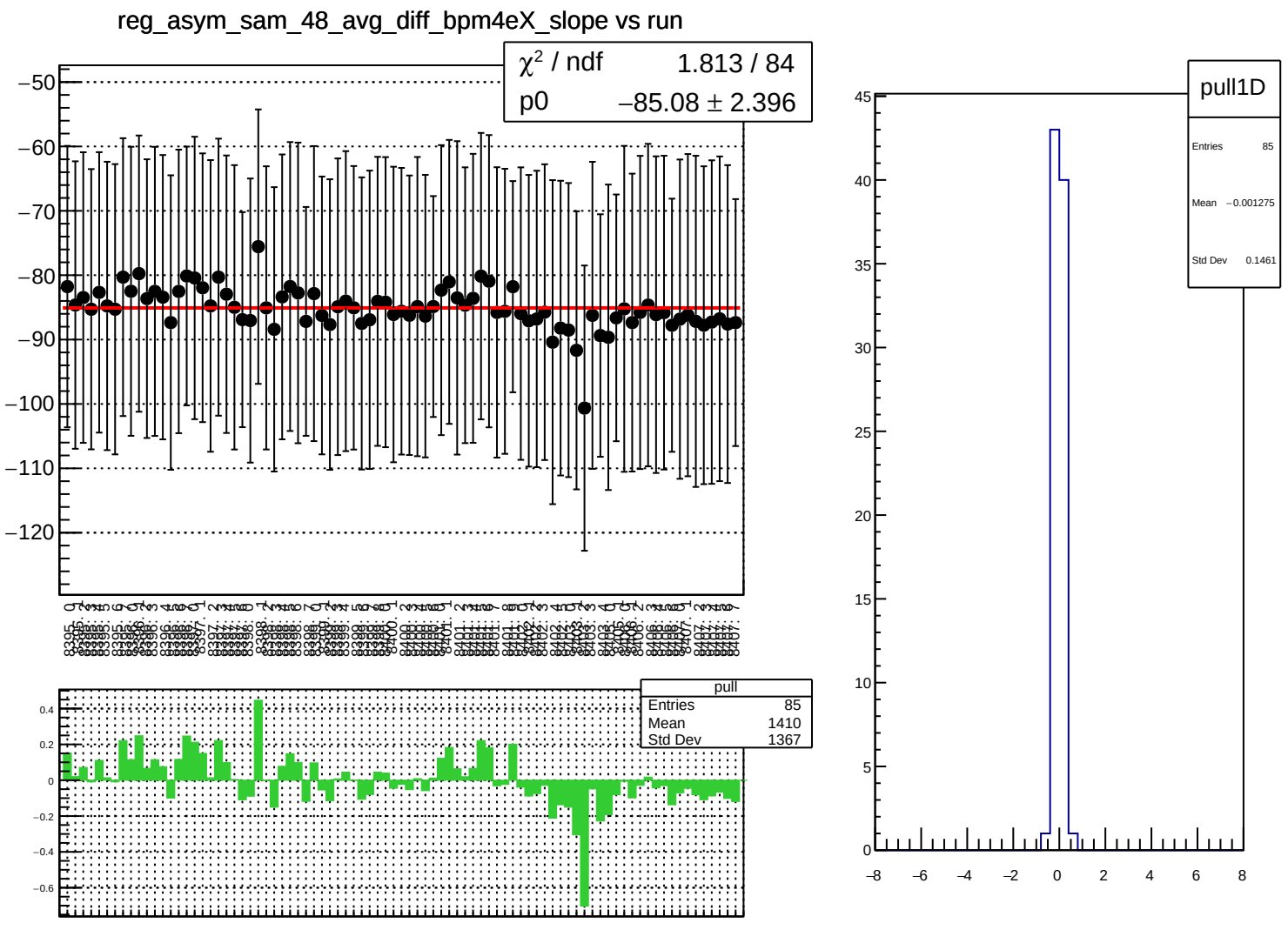

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.6468 / 84
p0 −118.1± 3.095
pull
Entries 85
Mean 447.8
Std Dev 375.6
pull1D
Entries 85
Mean −0.0003861
Std Dev 0.08723

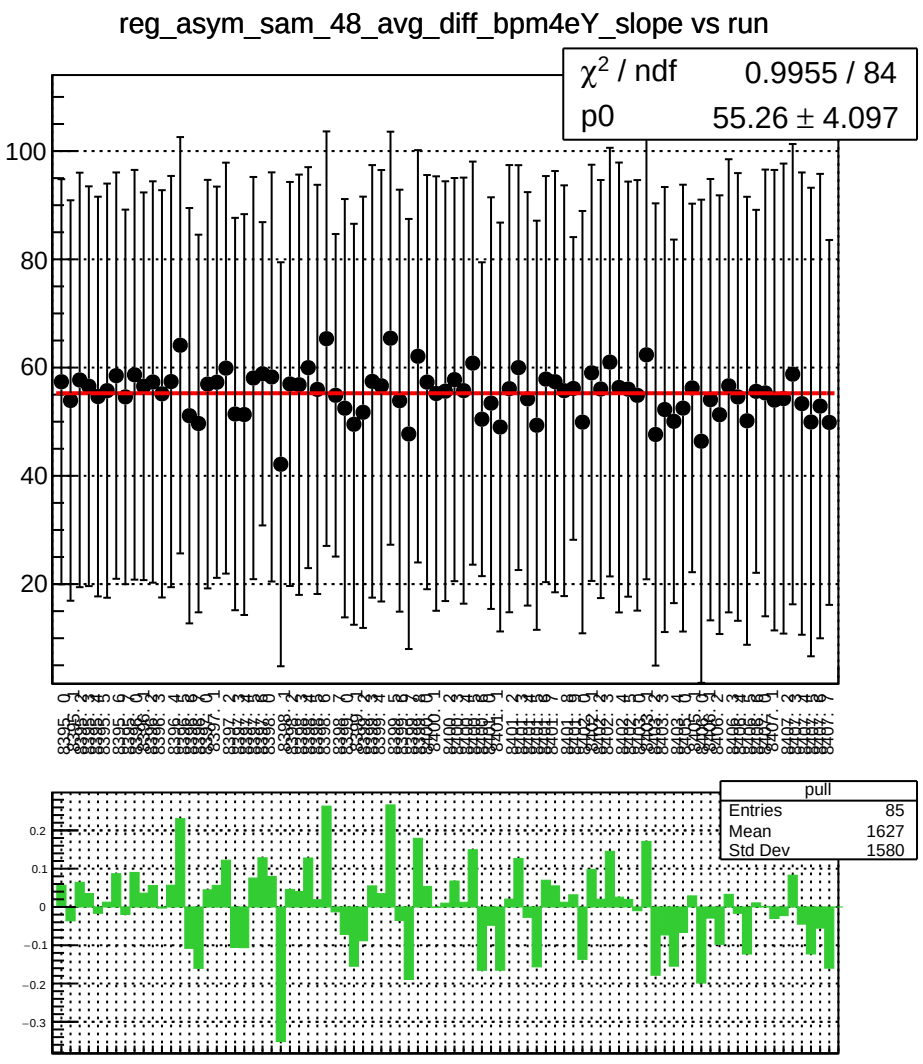

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.297 / 84
p0 −29.21± 5.29
pull
Entries 85
Mean 1618
Std Dev 1583
pull1D
Entries 85
Mean 0.0005346
Std Dev 0.1235

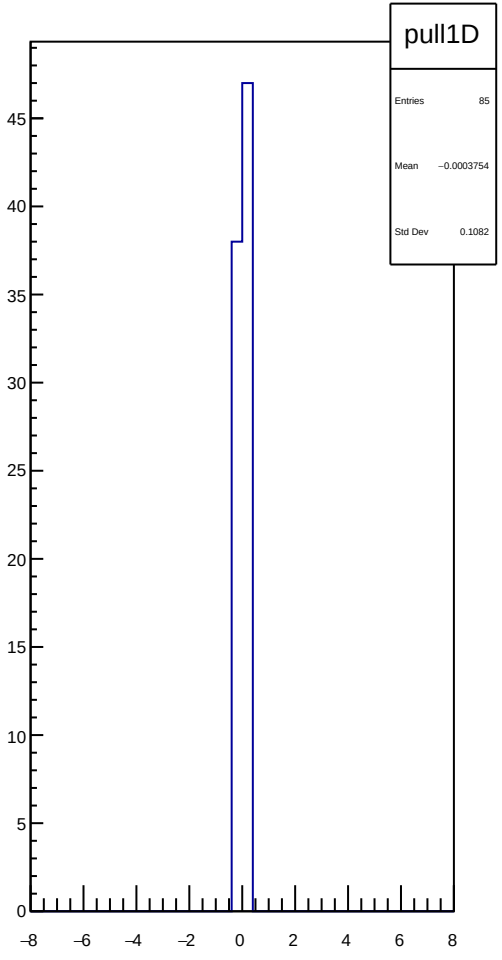

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 0.8634 / 84
p0 4.777 ± 0.3264
pull
Entries 85
Mean 384.3
Std Dev 352.3
pull1D
Entries 85
Mean 0.001977
Std Dev 0.1008

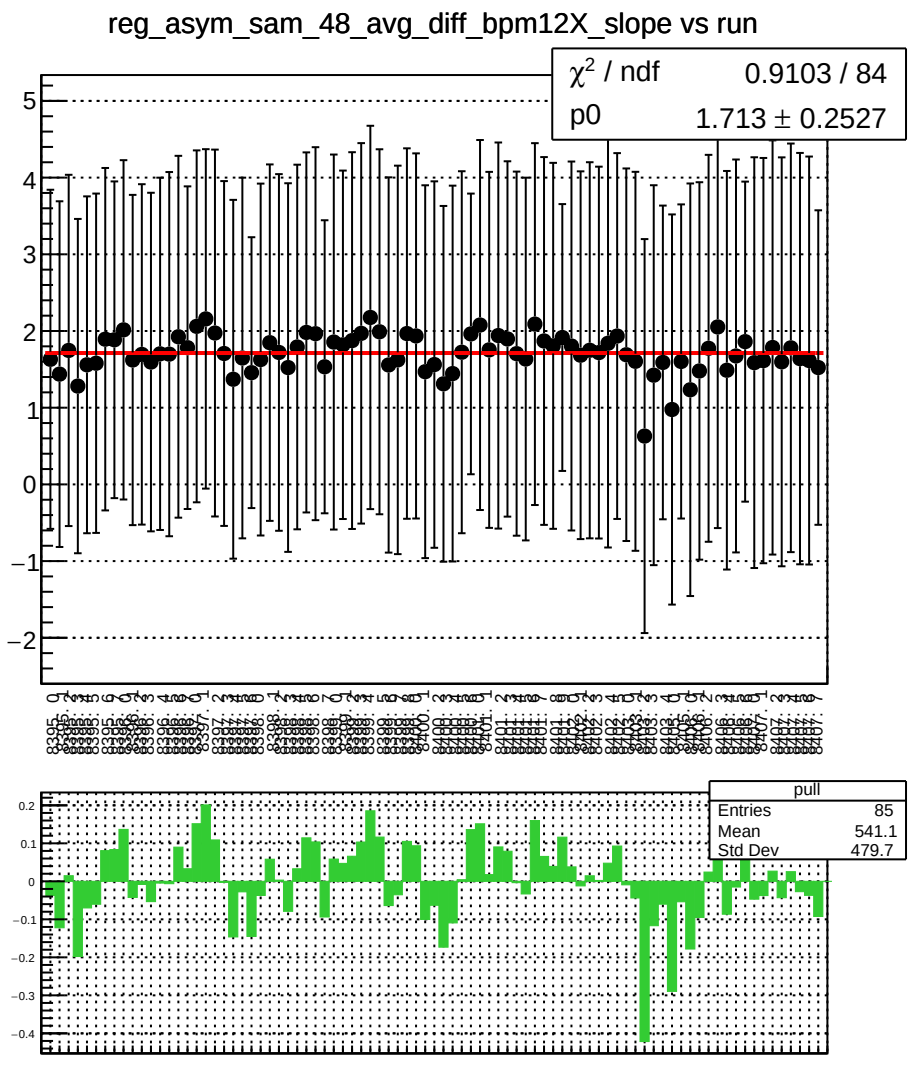

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 1.726 / 84
p0 −12.71± 2.159
pull
Entries 85
Mean −1051
Std Dev 1094
pull1D
Entries 85
Mean −0.001037
Std Dev 0.1425

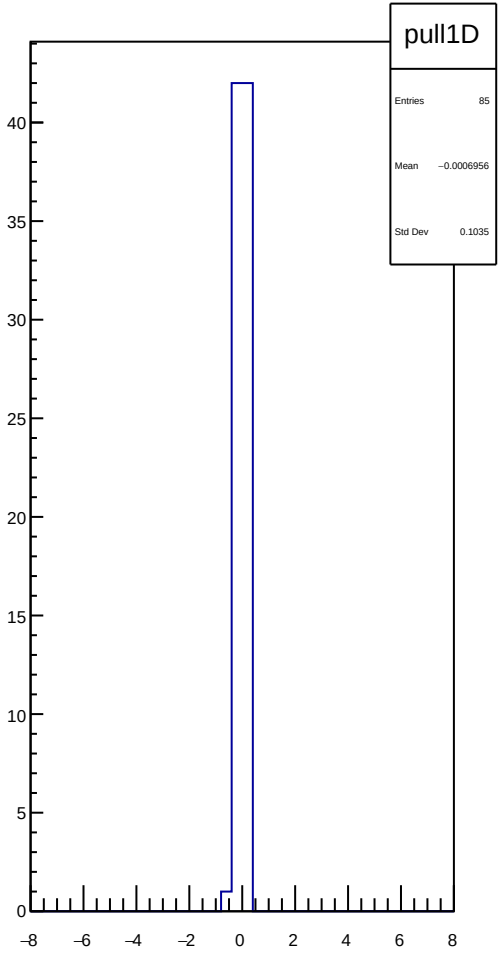

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.199 / 84
p0 55.46 ± 3.922
pull
Entries 85
Mean 961.6
Std Dev 916.2
pull1D
Entries 85
Mean 0.001258
Std Dev 0.1188

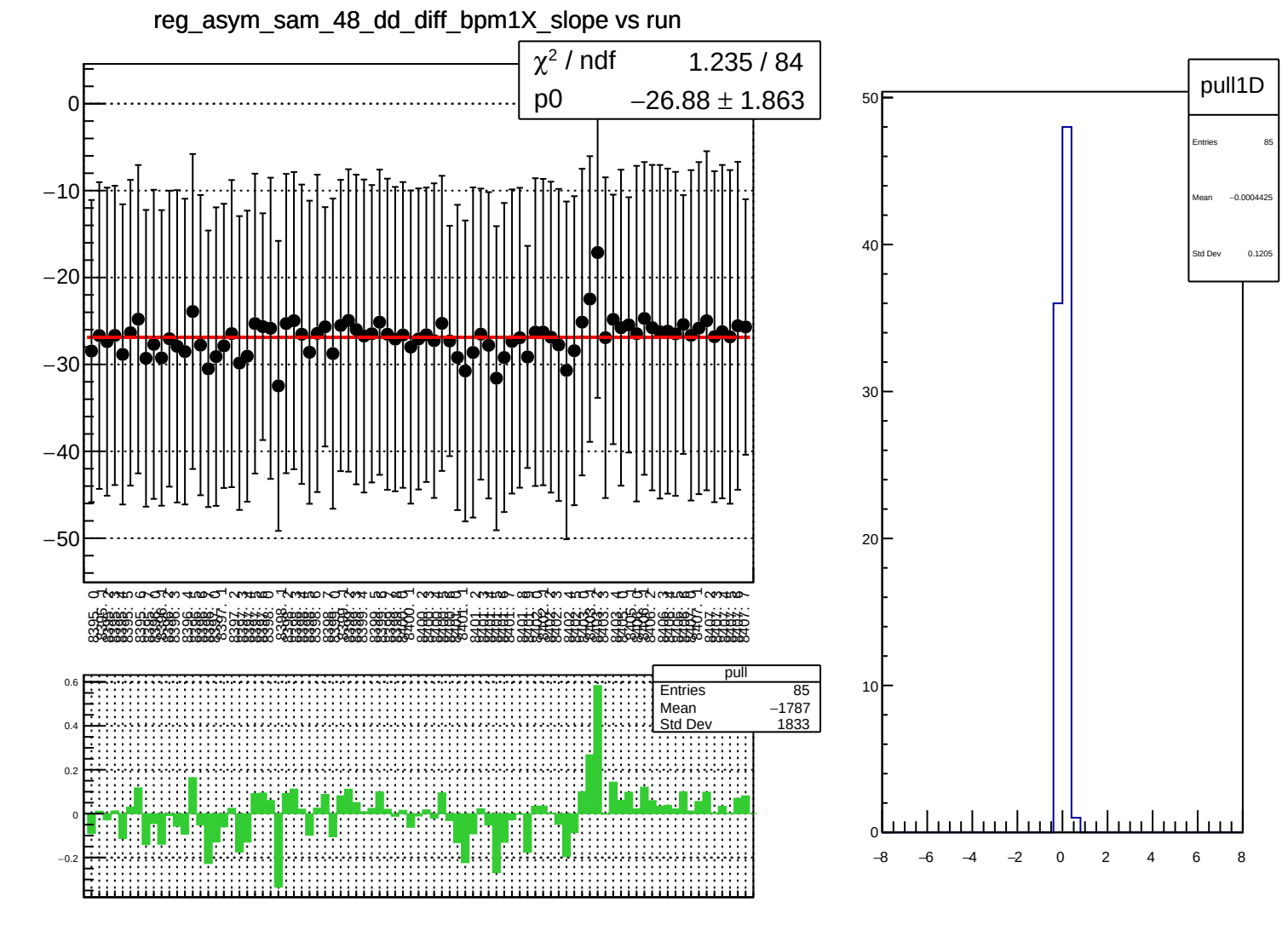

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.813 / 84
p0 −85.08 ± 2.396
pull
Entries 85
Mean 1410
Std Dev 1367
pull1D
Entries 85
Mean −0.001275
Std Dev 0.1461

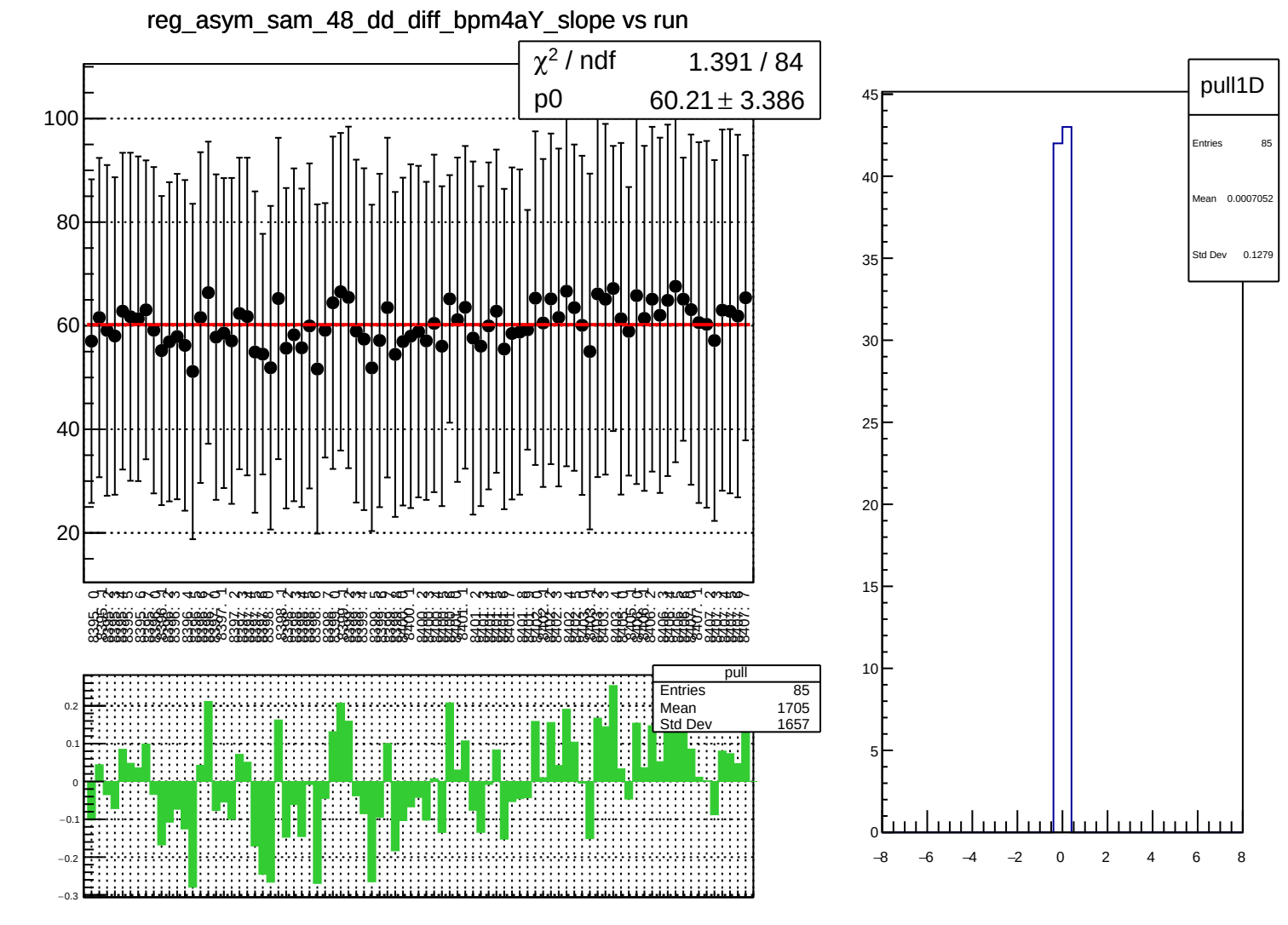

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.9955 / 84
p0 55.26 ± 4.097
pull
Entries 85
Mean 1627
Std Dev 1580

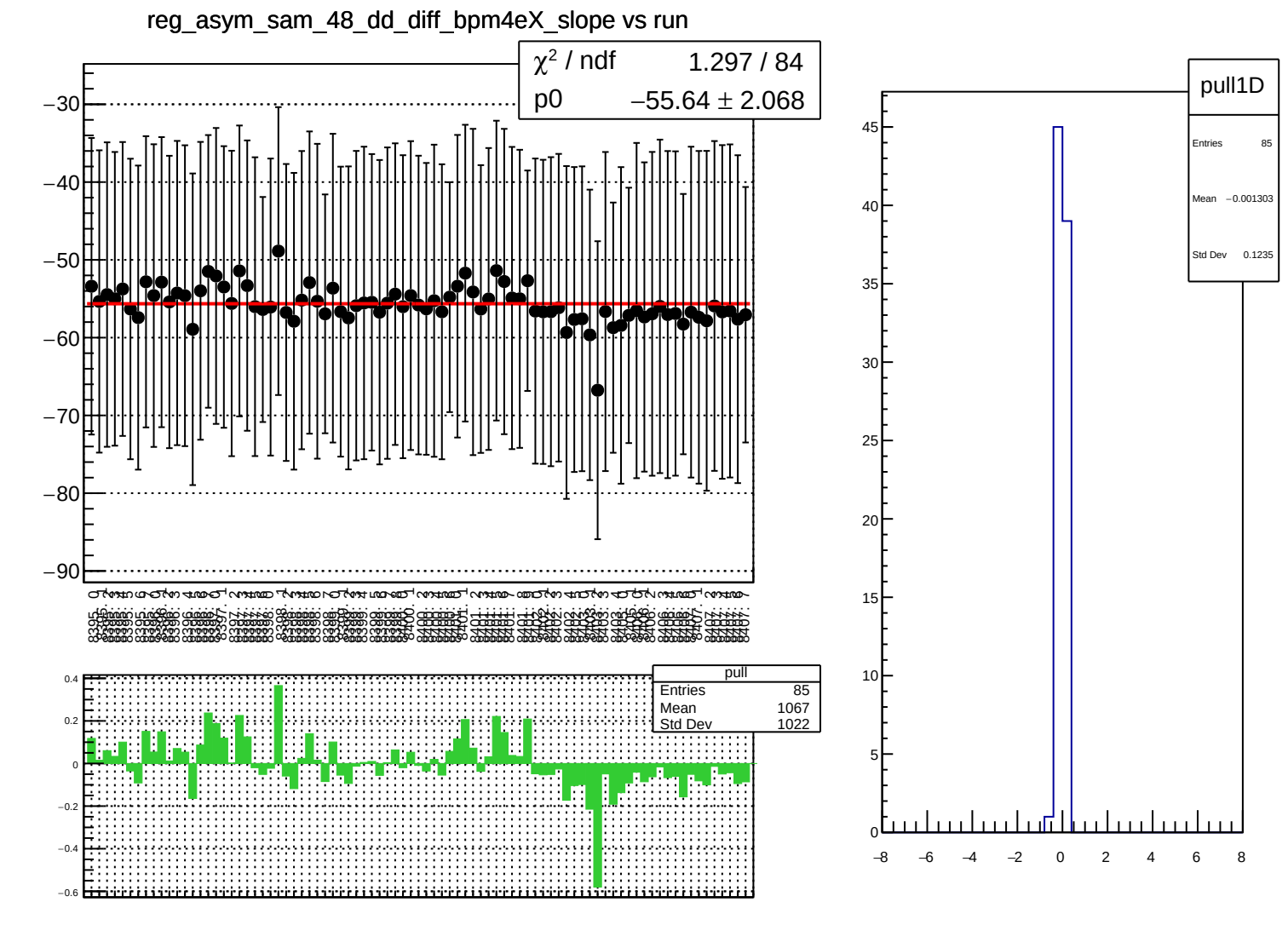

pull1D
Entries 85
Mean −0.0003754
Std Dev 0.1082

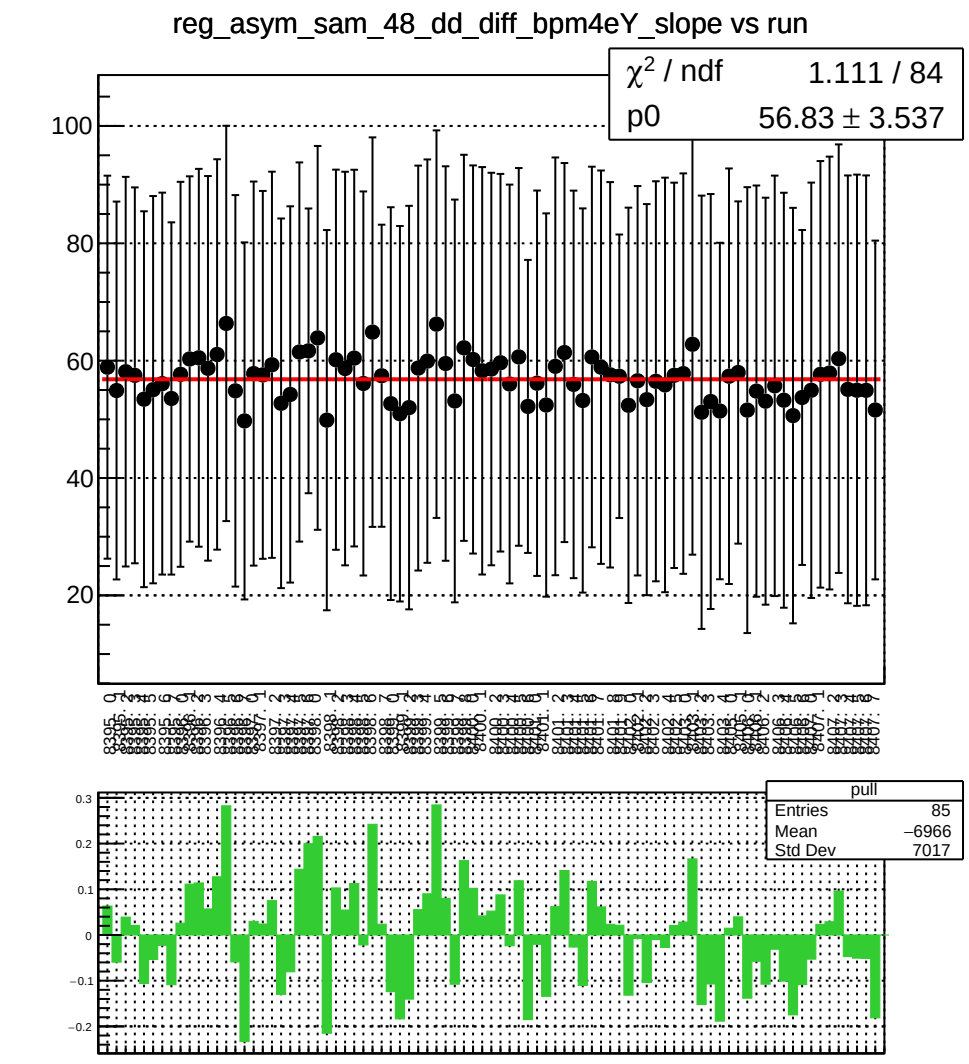

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 0.9103 / 84
p0 1.713 ± 0.2527
pull
Entries 85
Mean 541.1
Std Dev 479.7

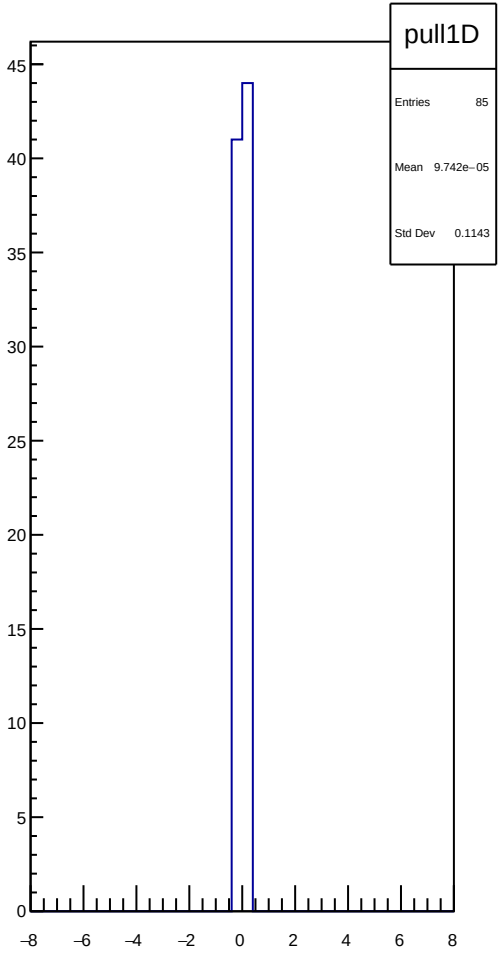

pull1D
Entries 85
Mean −0.0006956
Std Dev 0.1035

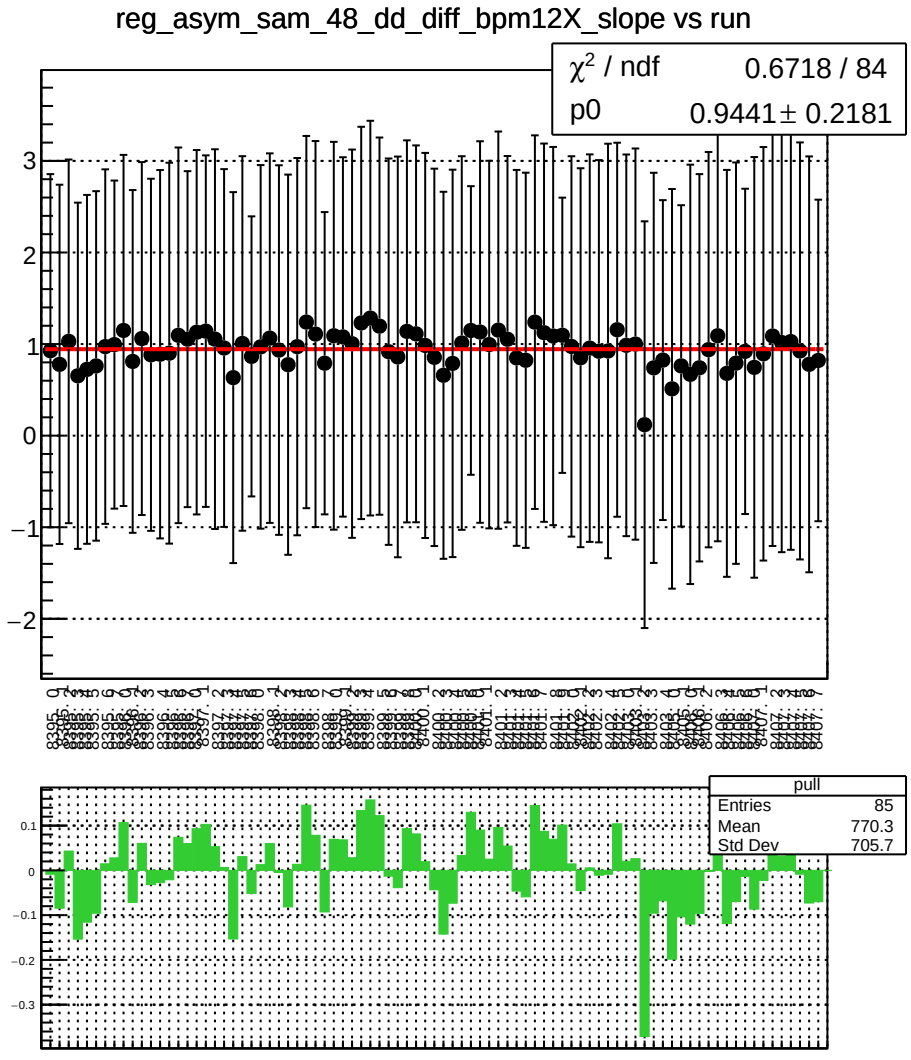

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.235 / 84
p0 −26.88 ± 1.863
pull
Entries 85
Mean −1787
Std Dev 1833
pull1D
Entries 85
Mean −0.0004425
Std Dev 0.1205

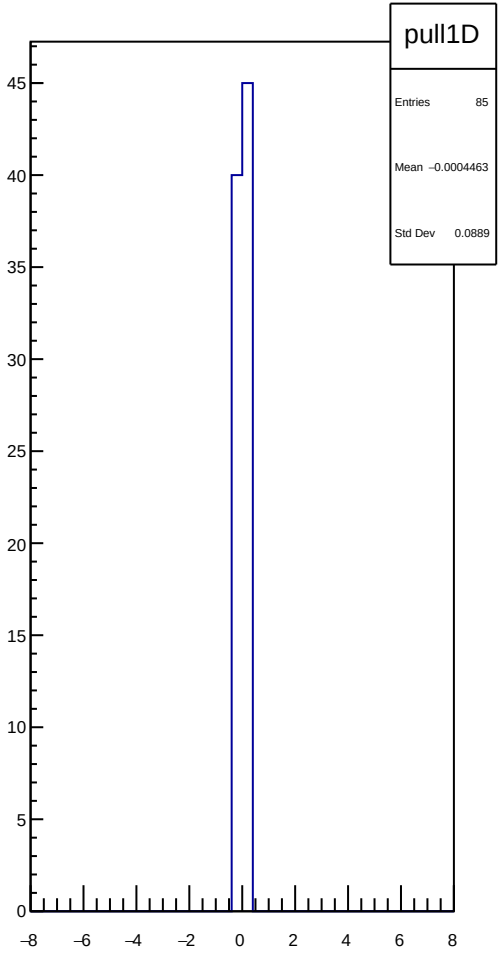

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.391 / 84
p0 60.21 ± 3.386
pull
Entries 85
Mean 1705
Std Dev 1657
pull1D
Entries 85
Mean 0.0007052
Std Dev 0.1279

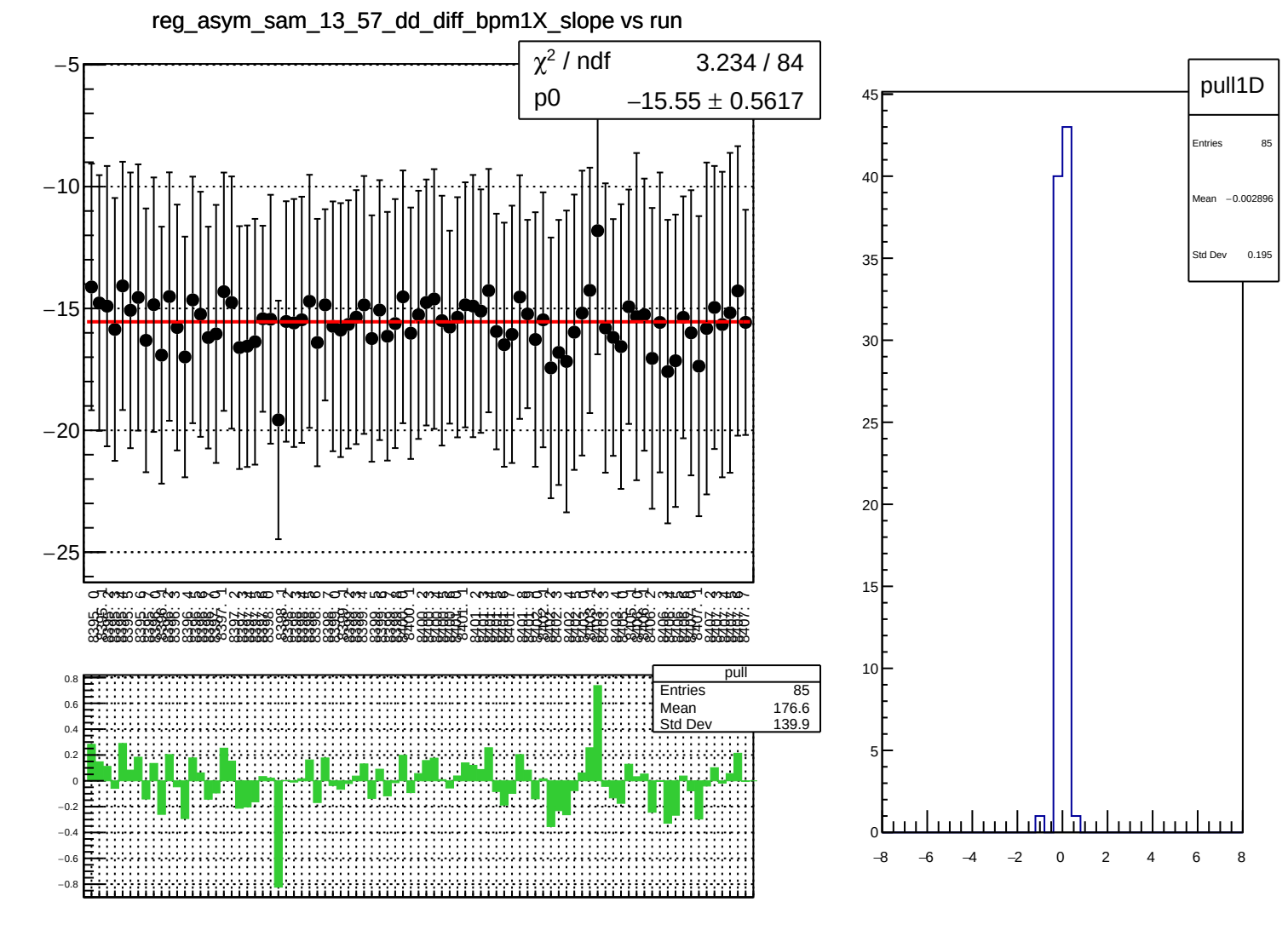

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.297 / 84
p0 −55.64 ± 2.068
pull
Entries 85
Mean 1067
Std Dev 1022
pull1D
Entries 85
Mean −0.001303
Std Dev 0.1235

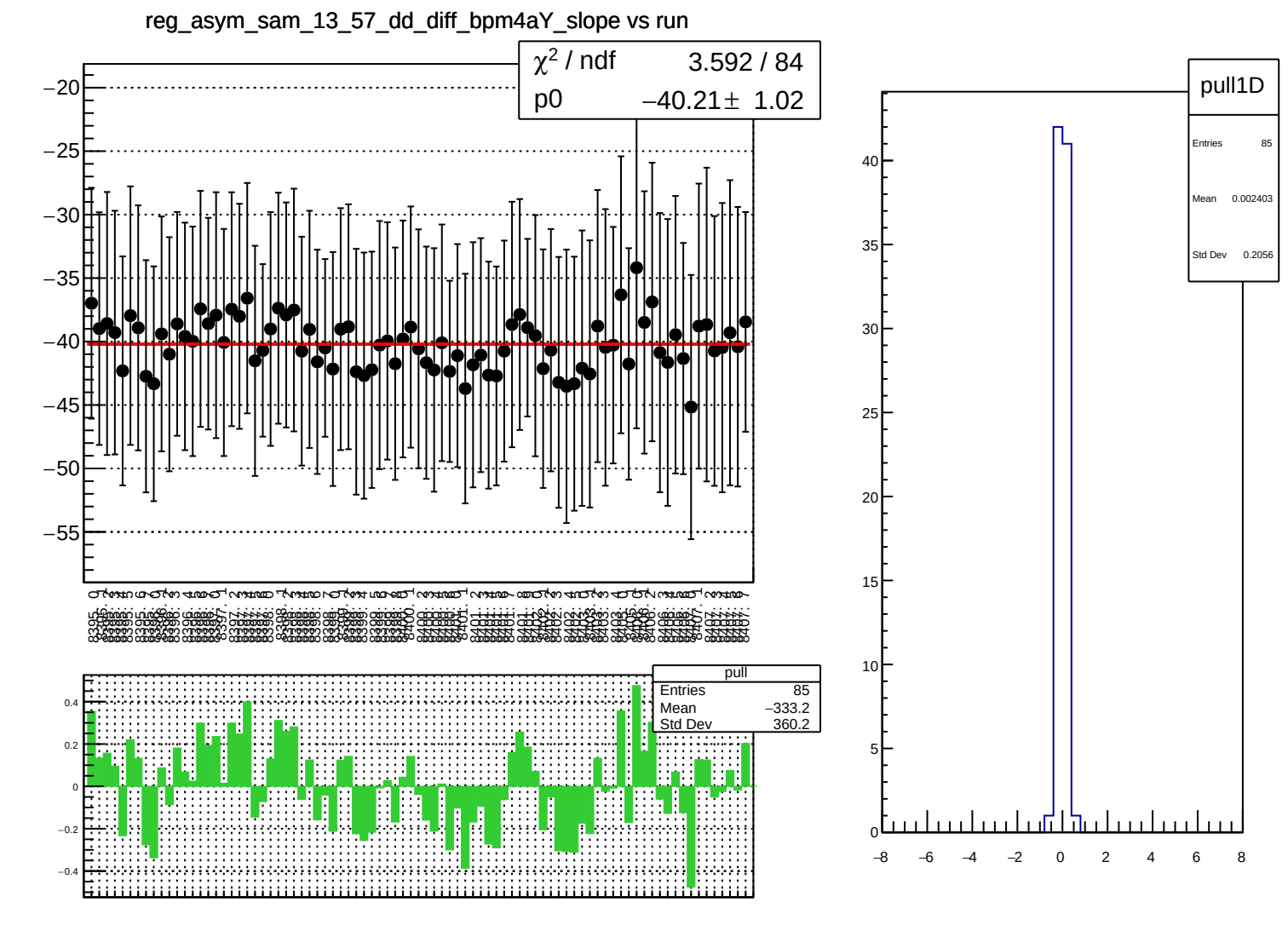

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.111 / 84
p0 56.83 ± 3.537
pull
Entries 85
Mean −6966
Std Dev 7017

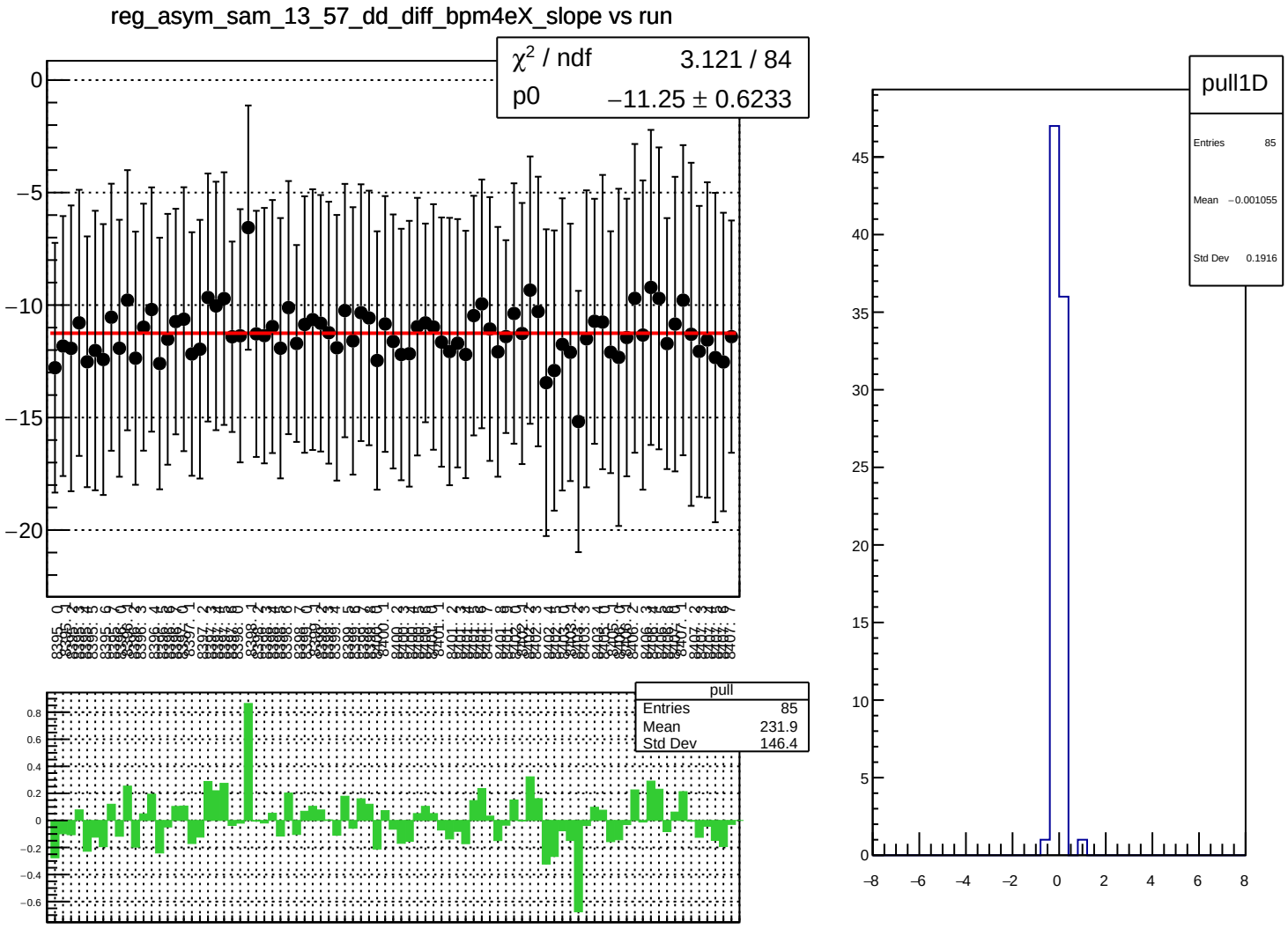

pull1D
Entries 85
Mean 9.742e−05
Std Dev 0.1143

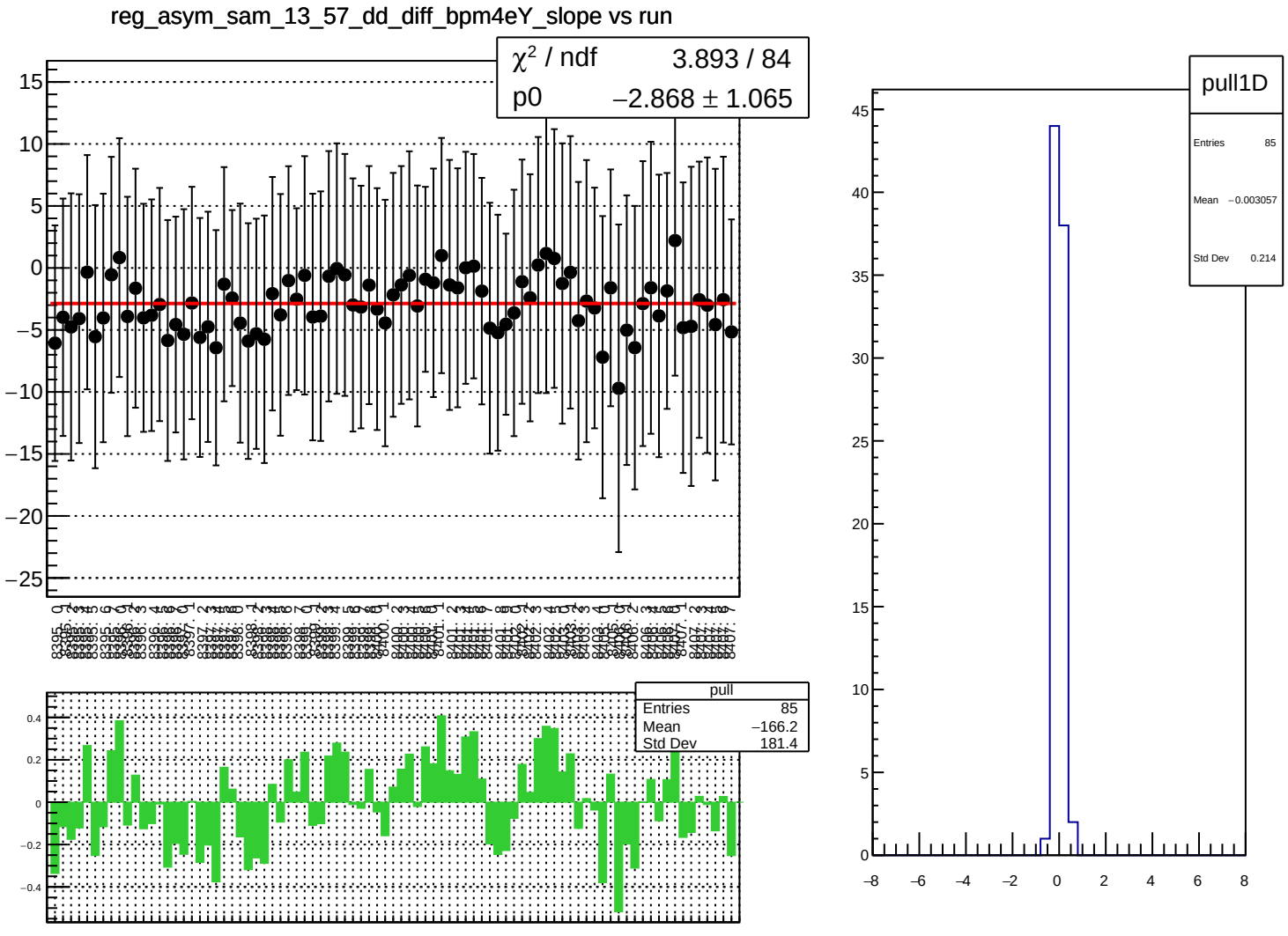

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 0.6718 / 84
p0 0.9441± 0.2181
pull
Entries 85
Mean 770.3
Std Dev 705.7

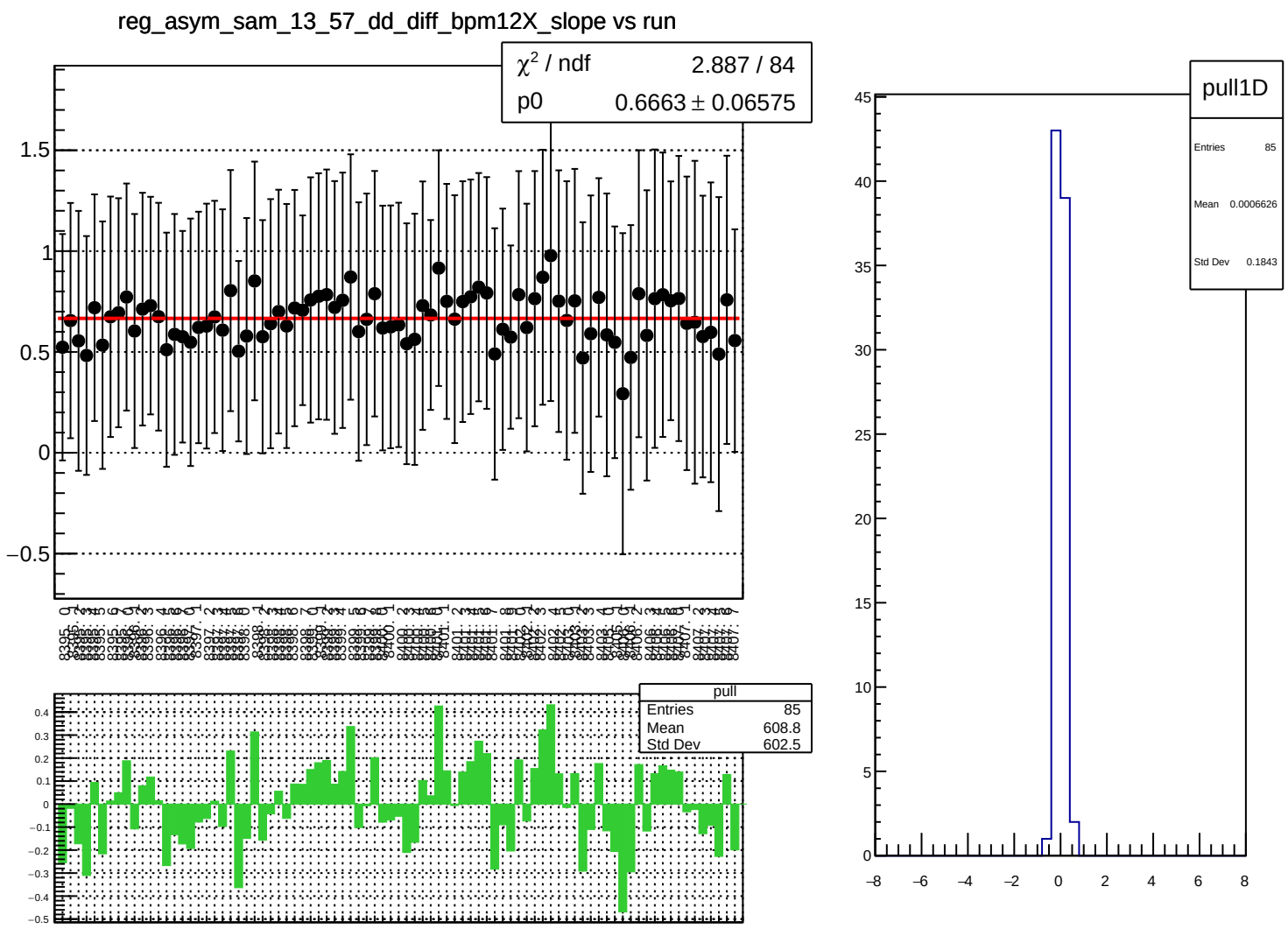

pull1D
Entries 85
Mean −0.0004463
Std Dev 0.0889

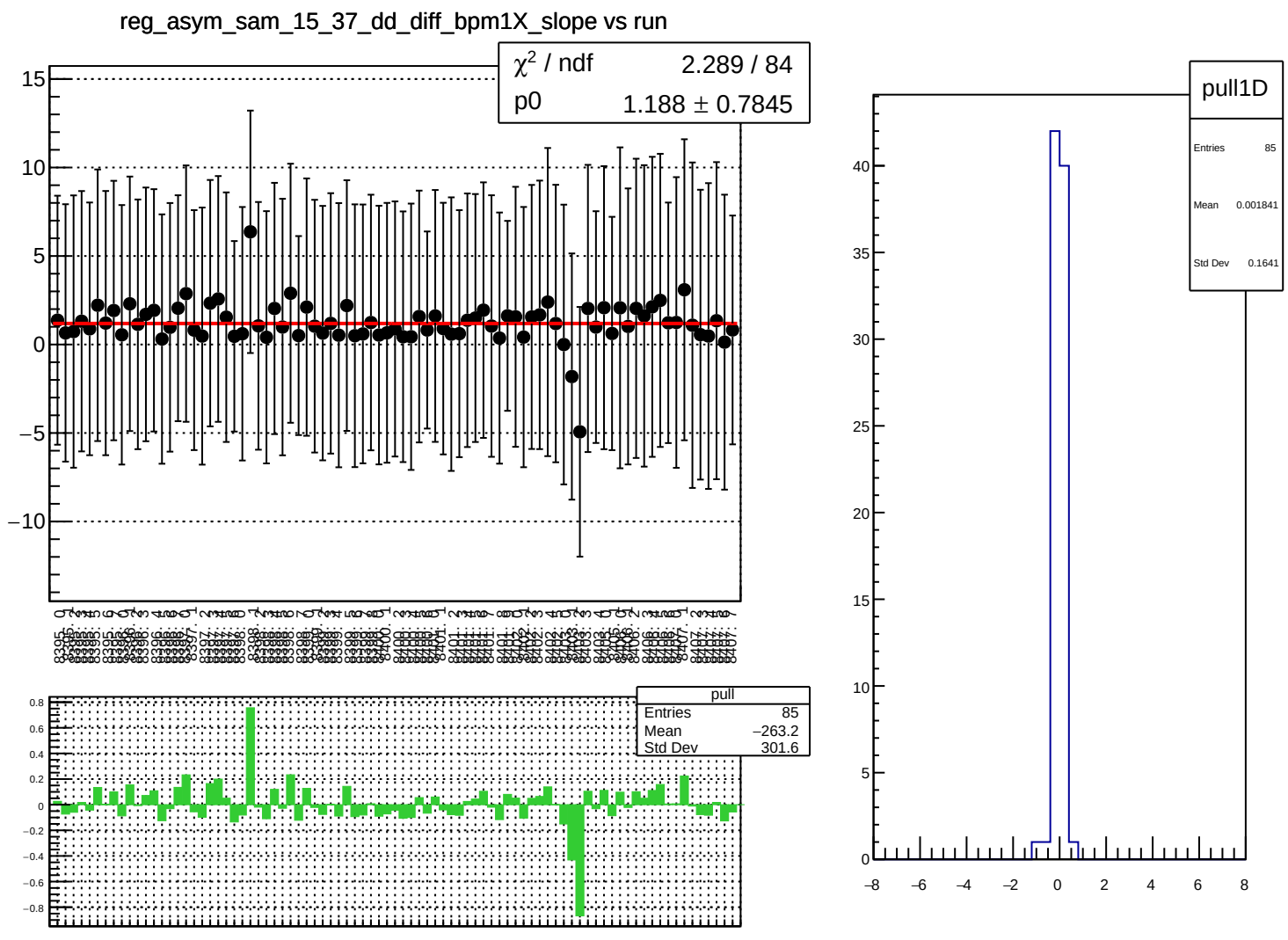

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 3.234 / 84
p0 −15.55 ± 0.5617
pull
Entries 85
Mean 176.6
Std Dev 139.9
pull1D
Entries 85
Mean −0.002896
Std Dev 0.195

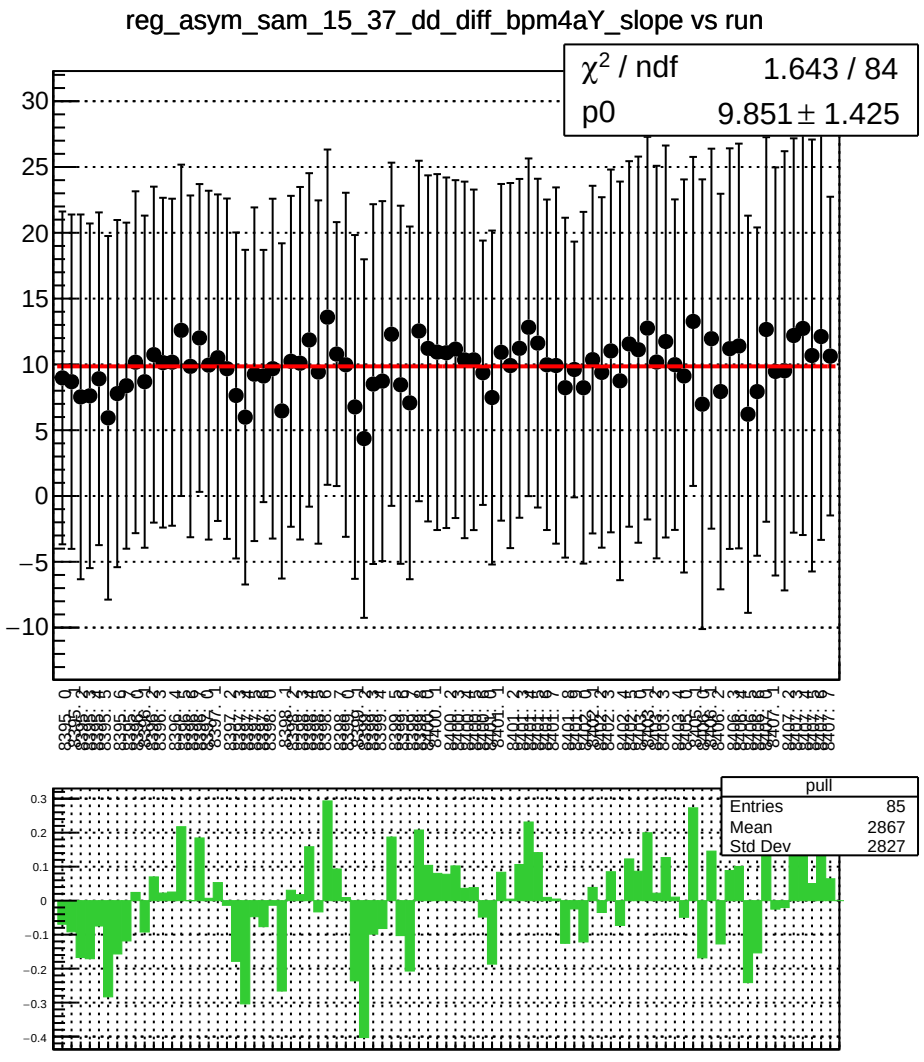

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.592 / 84
p0 −40.21 ± 1.02
pull
Entries 85
Mean −333.2
Std Dev 360.2
pull1D
Entries 85
Mean 0.002403
Std Dev 0.2056

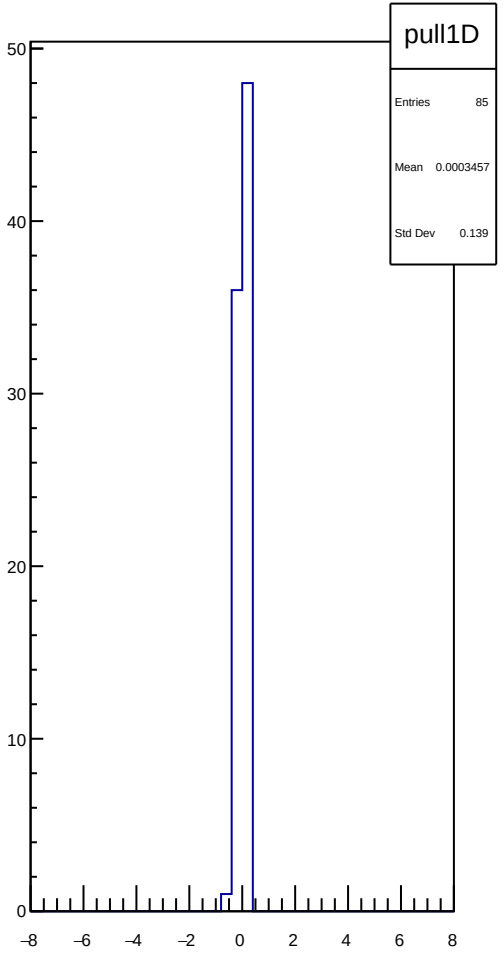

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.121 / 84
p0 −11.25 ± 0.6233
pull
Entries 85
Mean 231.9
Std Dev 146.4
pull1D
Entries 85
Mean −0.001055
Std Dev 0.1916

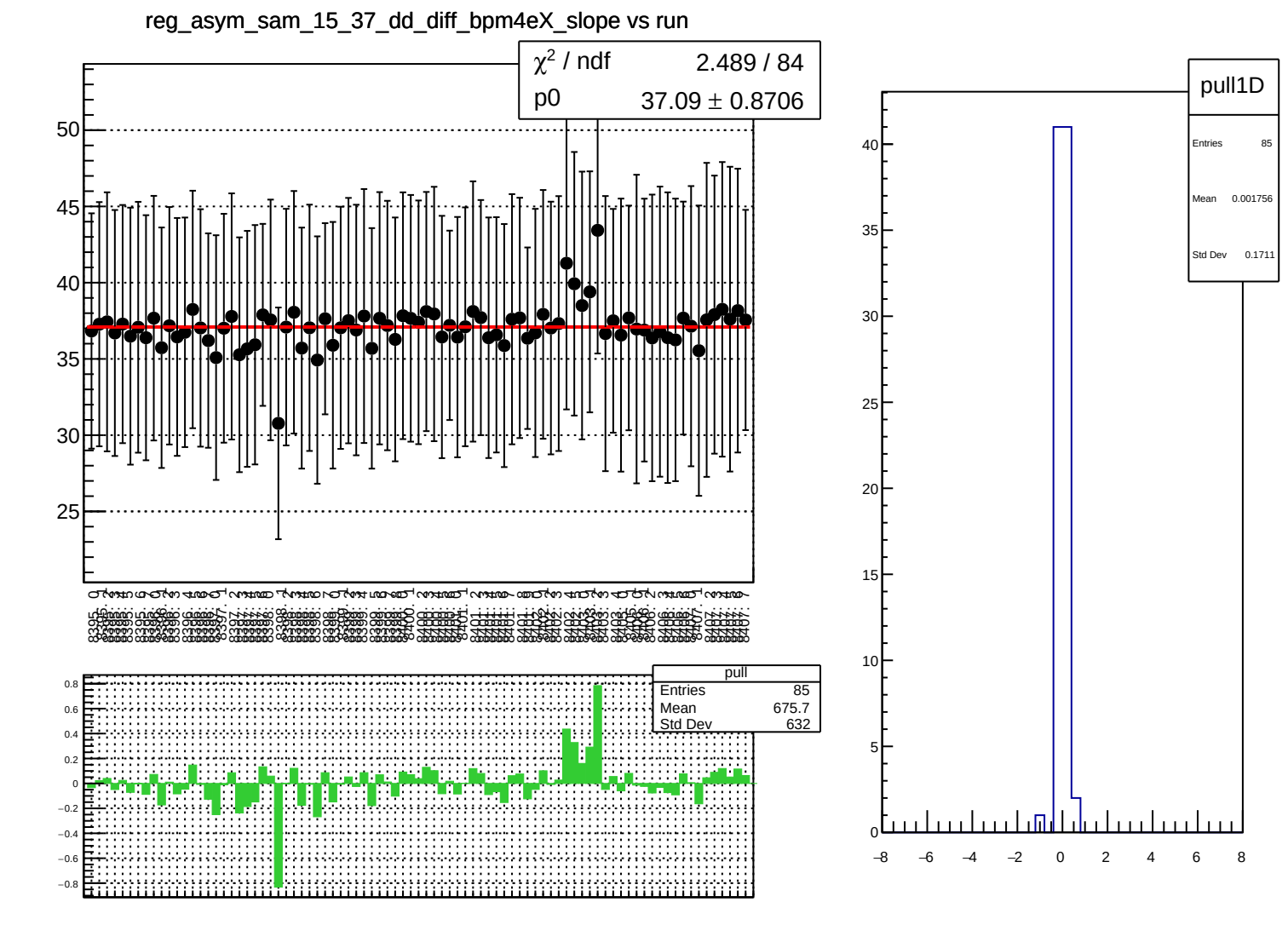

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.893 / 84
p0 −2.868 ± 1.065
pull
Entries 85
Mean −166.2
Std Dev 181.4
pull1D
Entries 85
Mean −0.003057
Std Dev 0.214

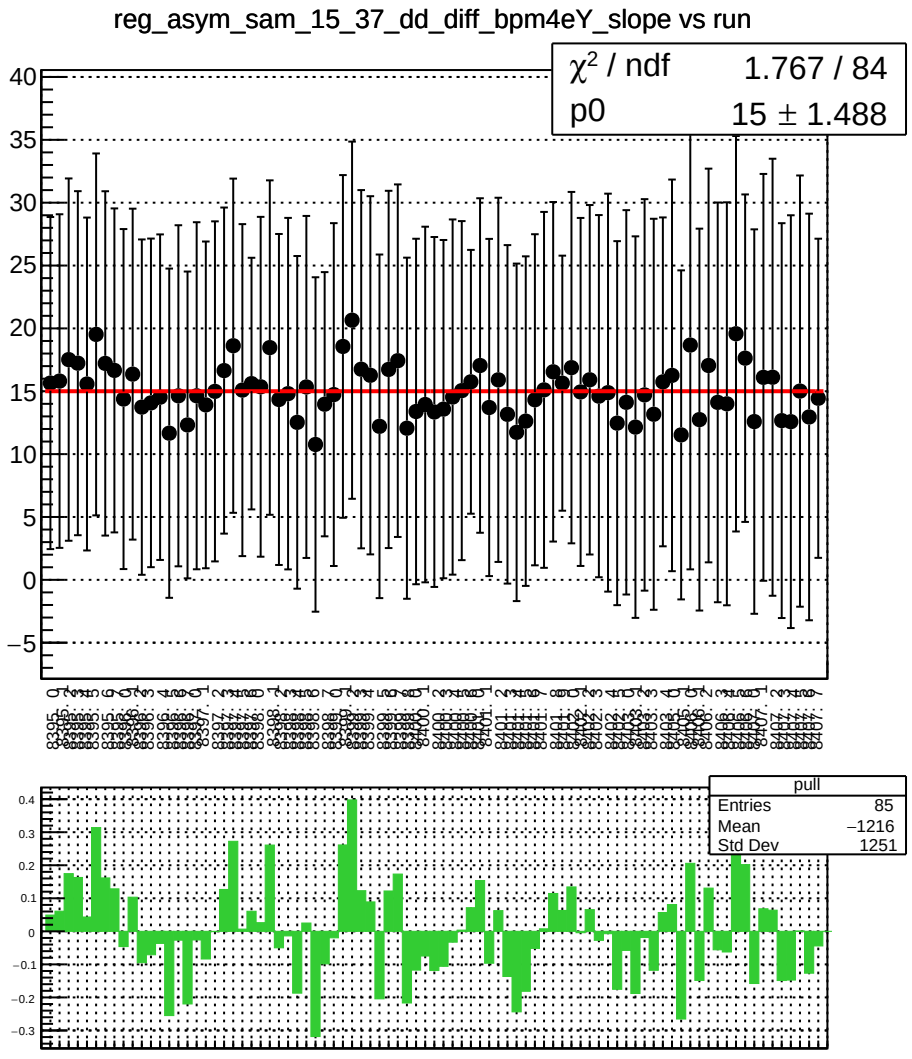

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 2.887 / 84
p0 0.6663 ± 0.06575
pull
Entries 85
Mean 608.8
Std Dev 602.5
pull1D
Entries 85
Mean 0.0006626
Std Dev 0.1843

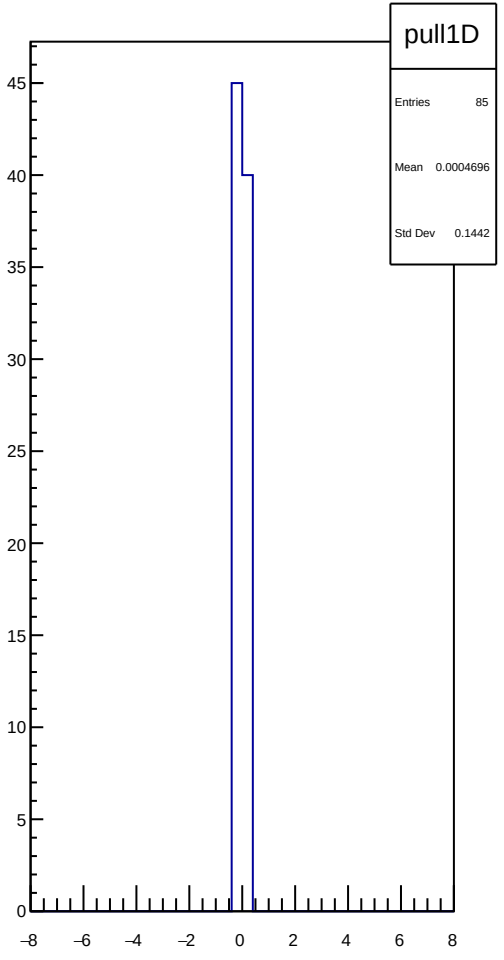

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 2.289 / 84
p0 1.188 ± 0.7845
pull
Entries 85
Mean −263.2
Std Dev 301.6
pull1D
Entries 85
Mean 0.001841
Std Dev 0.1641

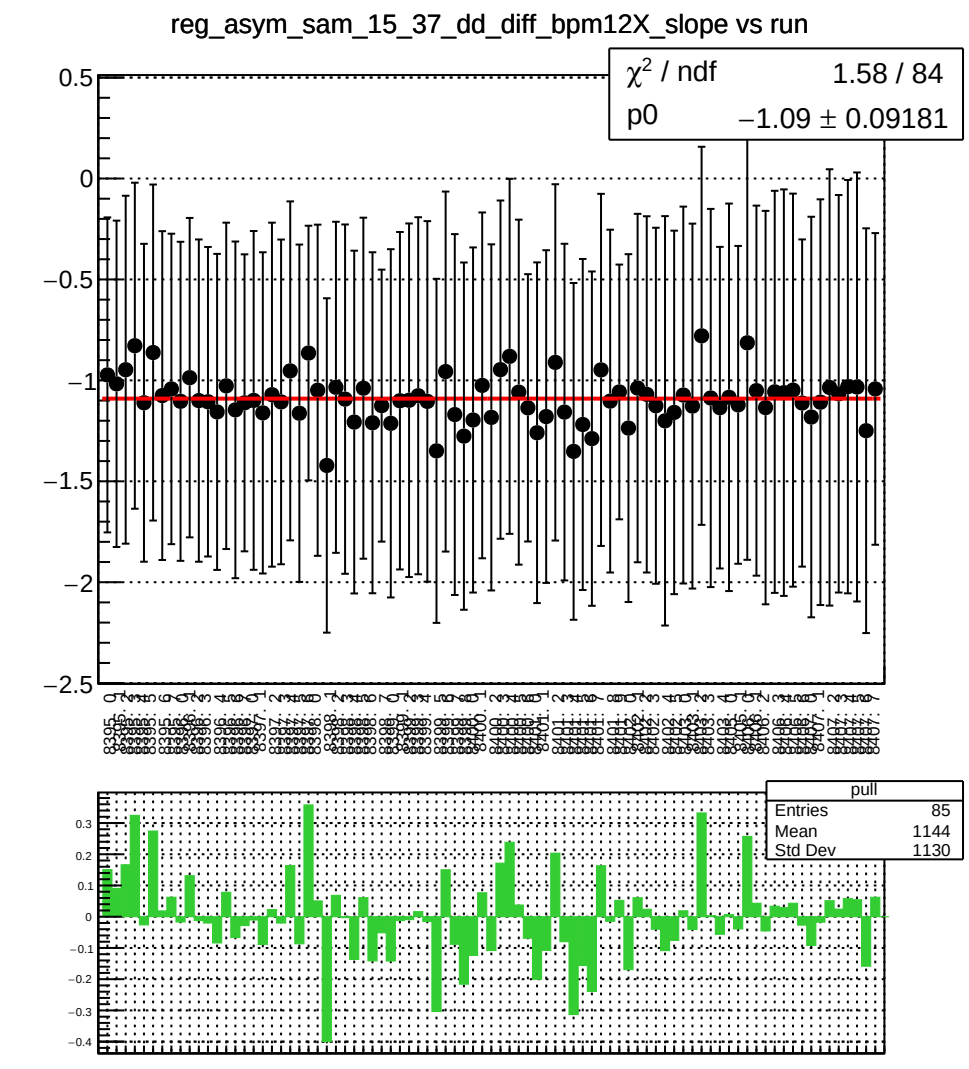

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.643 / 84
p0 9.851 ± 1.425
pull
Entries 85
Mean 2867
Std Dev 2827

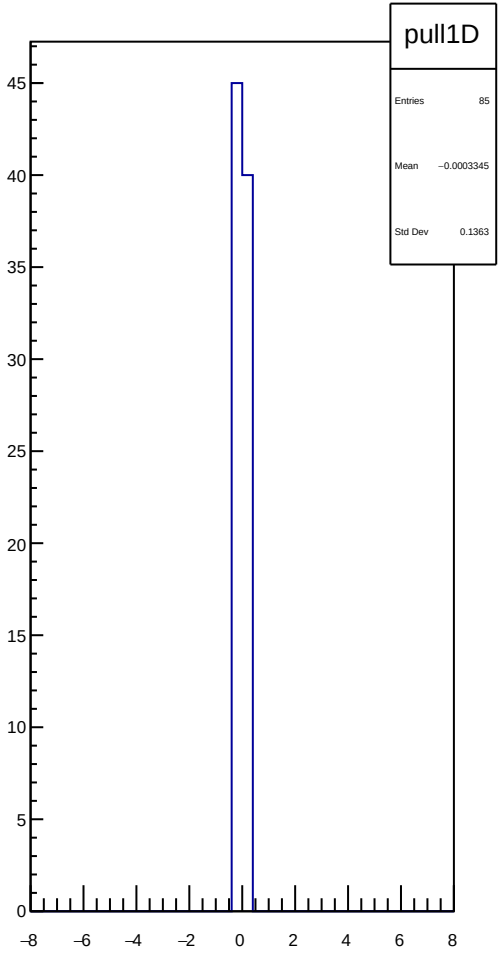

pull1D
Entries 85
Mean 0.0003457
Std Dev 0.139

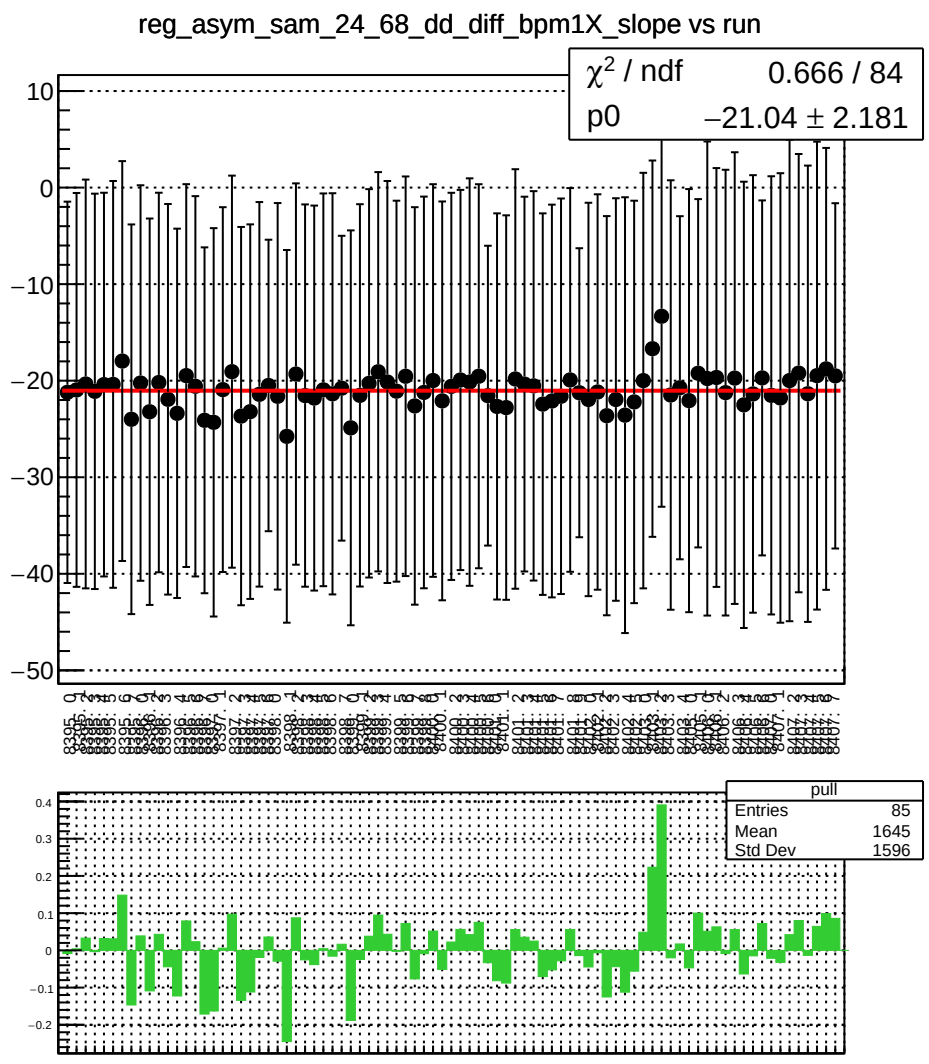

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.489 / 84
p0 37.09 ± 0.8706
pull
Entries 85
Mean 675.7
Std Dev 632
pull1D
Entries 85
Mean 0.001756
Std Dev 0.1711

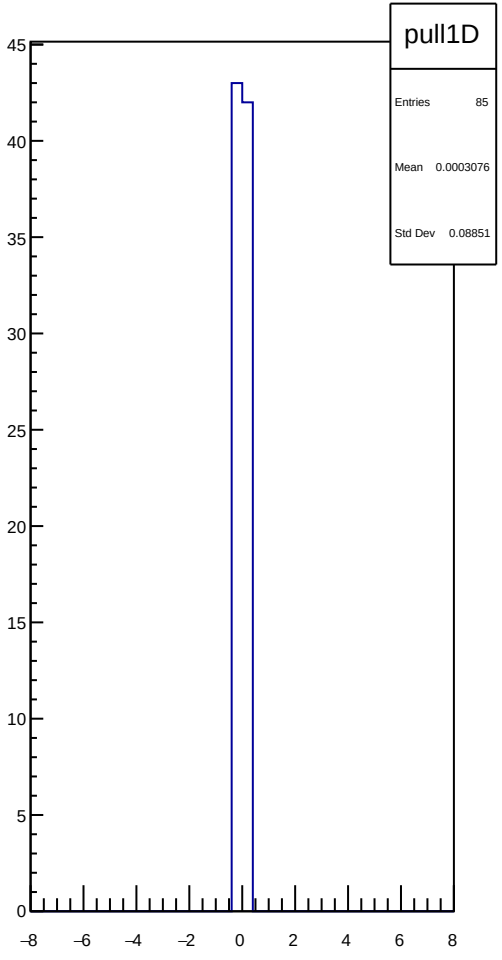

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.767 / 84
p0 15 ± 1.488
pull
Entries 85
Mean −1216
Std Dev 1251

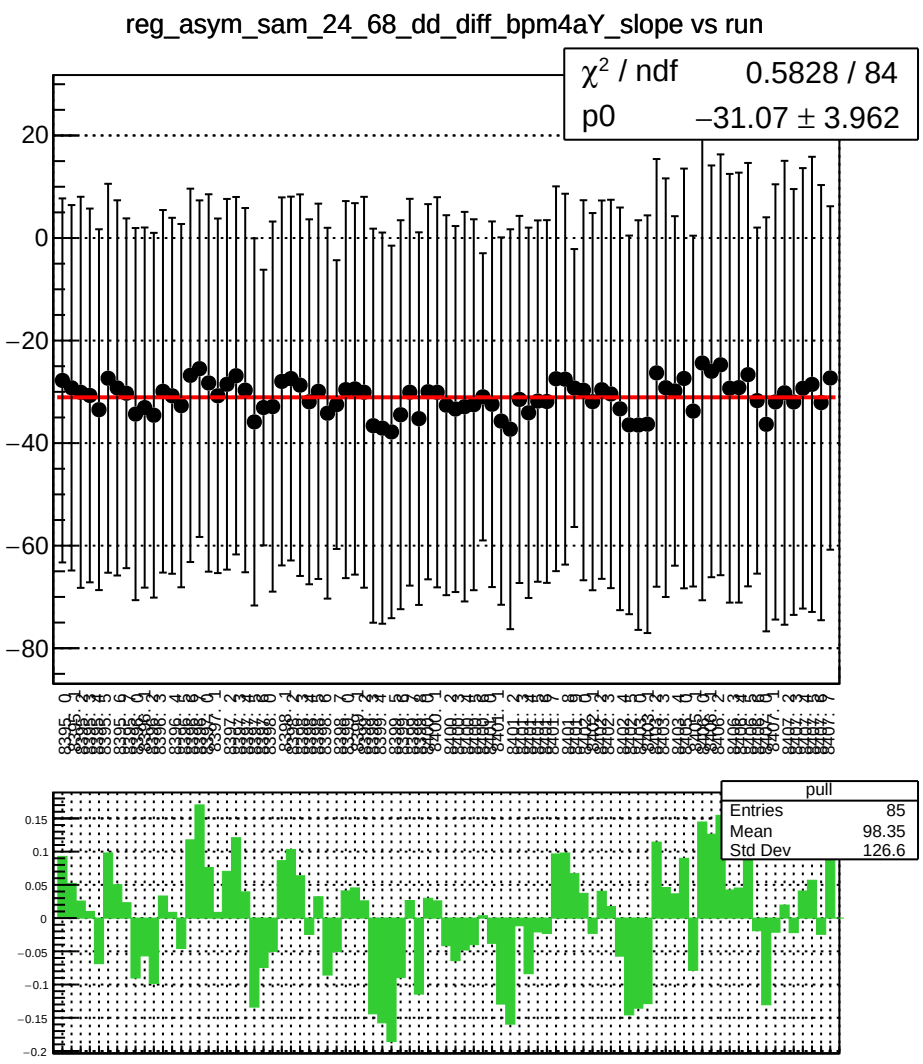

pull1D
Entries 85
Mean 0.0004696
Std Dev 0.1442

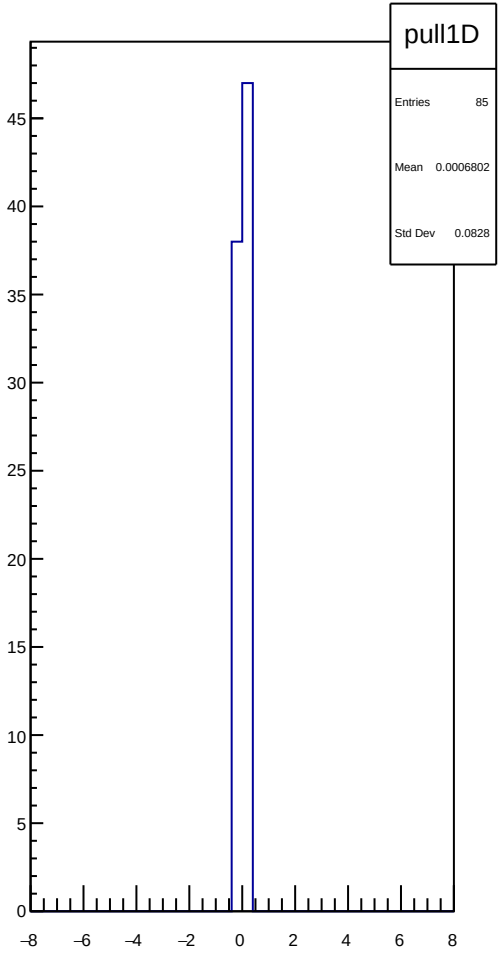

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 1.58 / 84
p0 −1.09 ± 0.09181
pull
Entries 85
Mean 1144
Std Dev 1130

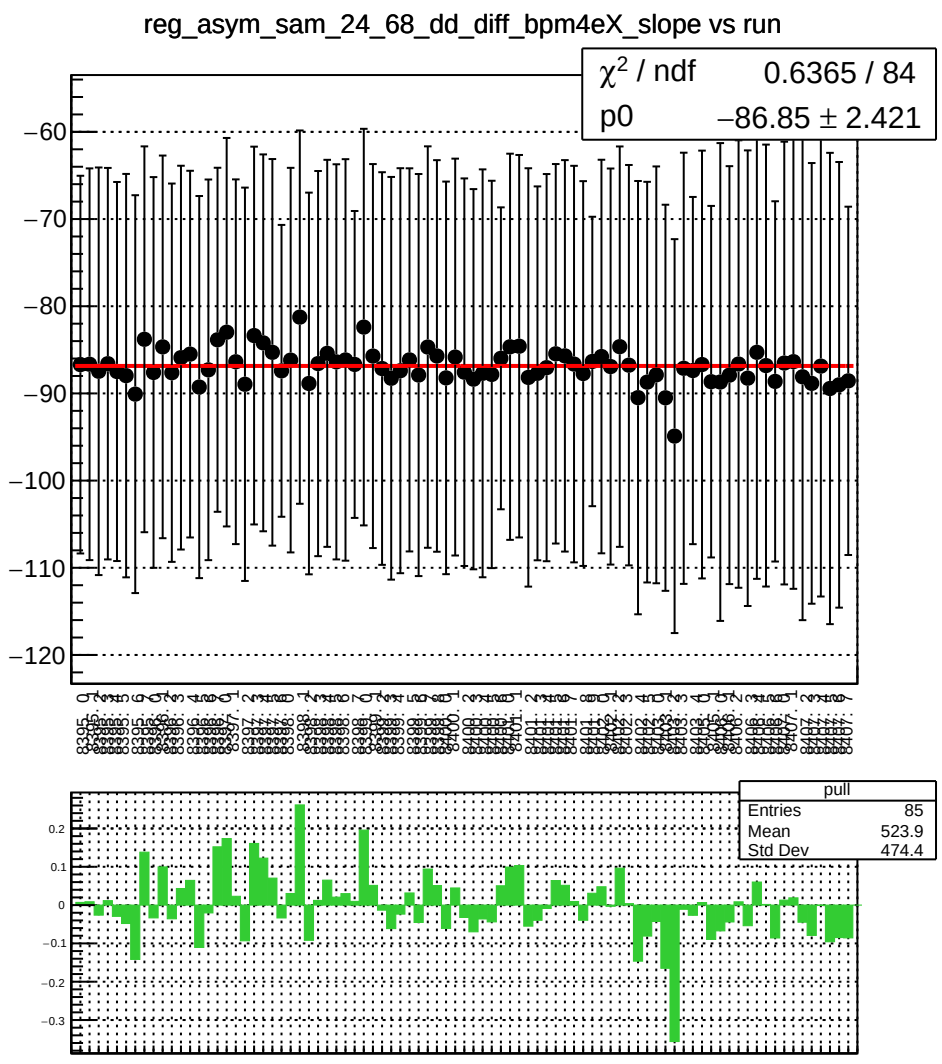

pull1D
Entries 85
Mean −0.0003345
Std Dev 0.1363

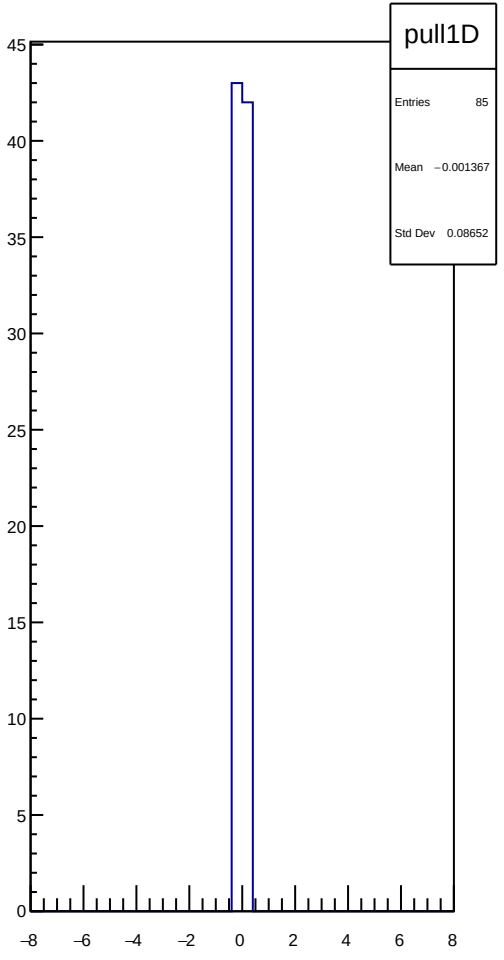

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 0.666 / 84
p0 −21.04 ± 2.181
pull
Entries 85
Mean 1645
Std Dev 1596

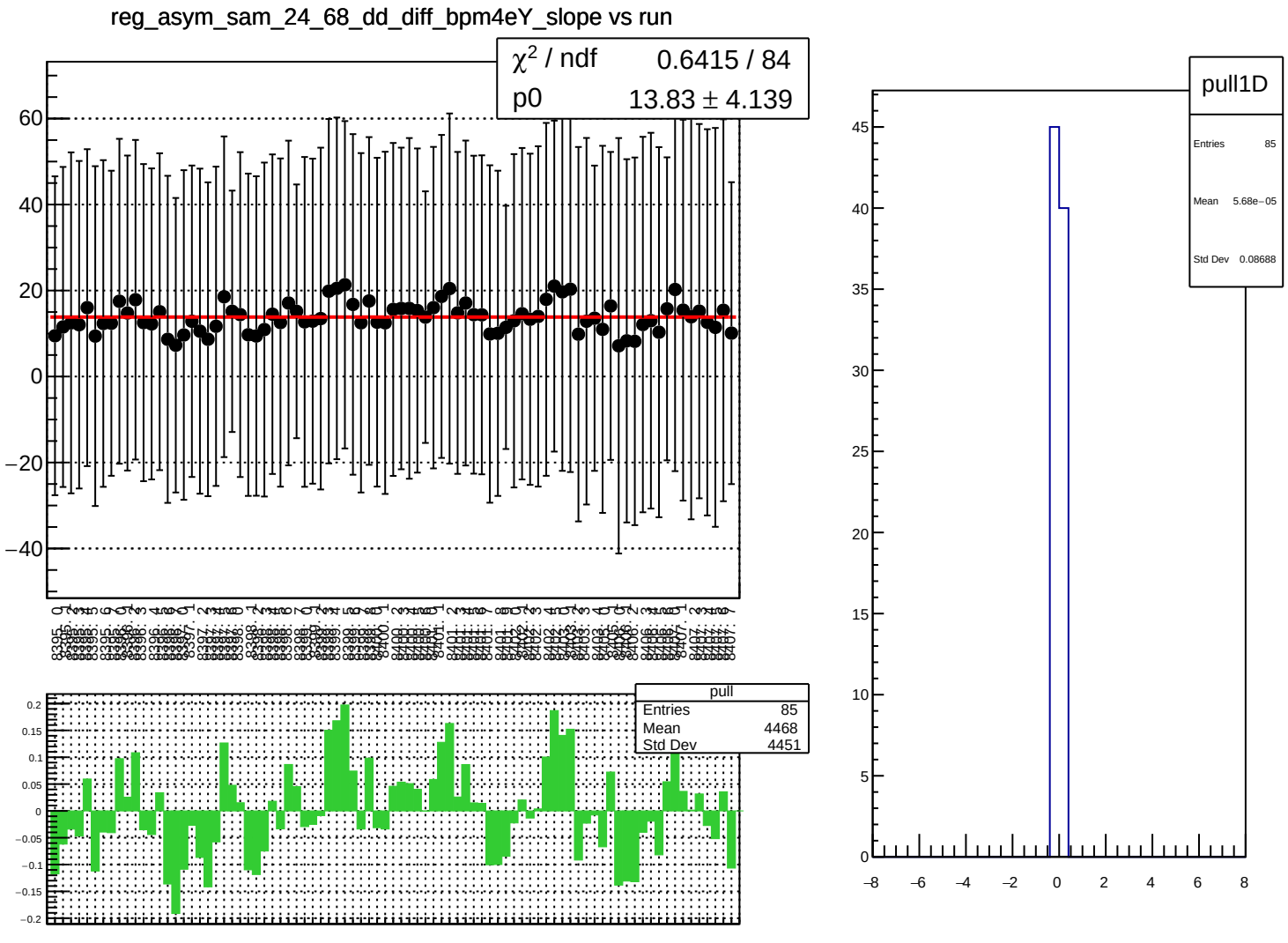

pull1D
Entries 85
Mean 0.0003076
Std Dev 0.08851

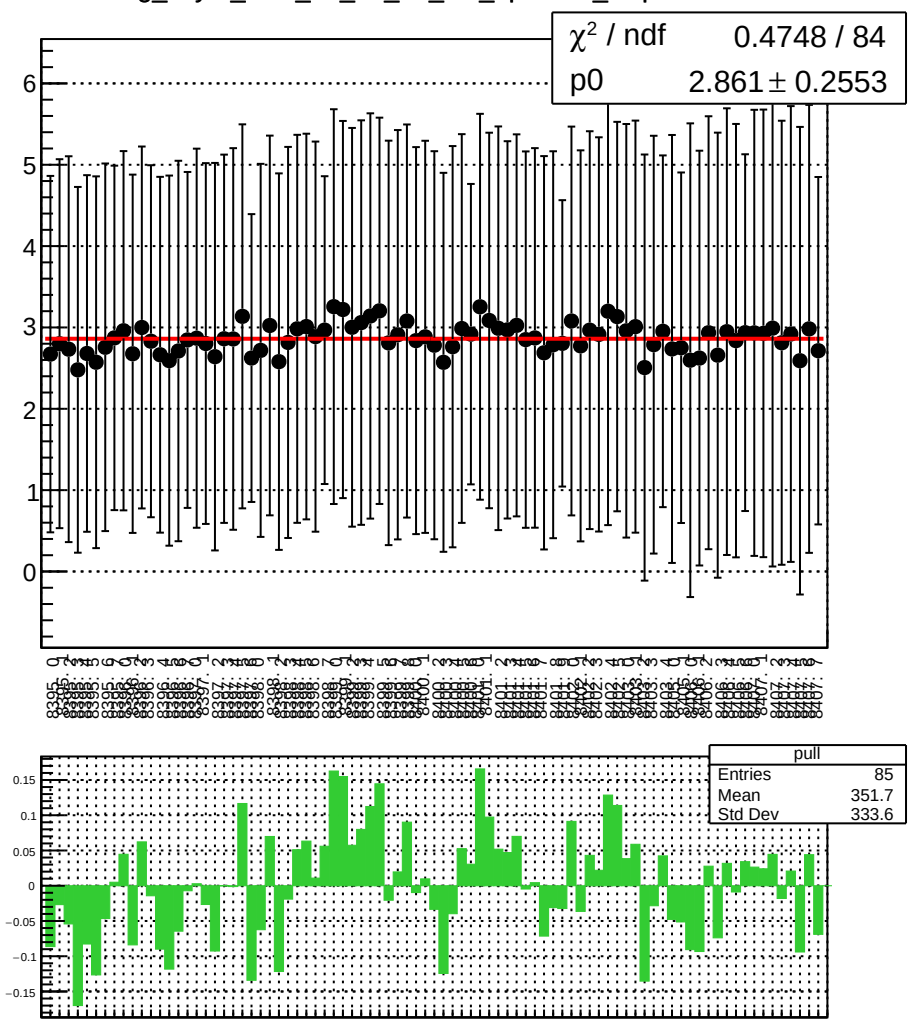

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.5828 / 84
p0 −31.07 ± 3.962
pull
Entries 85
Mean 98.35
Std Dev 126.6

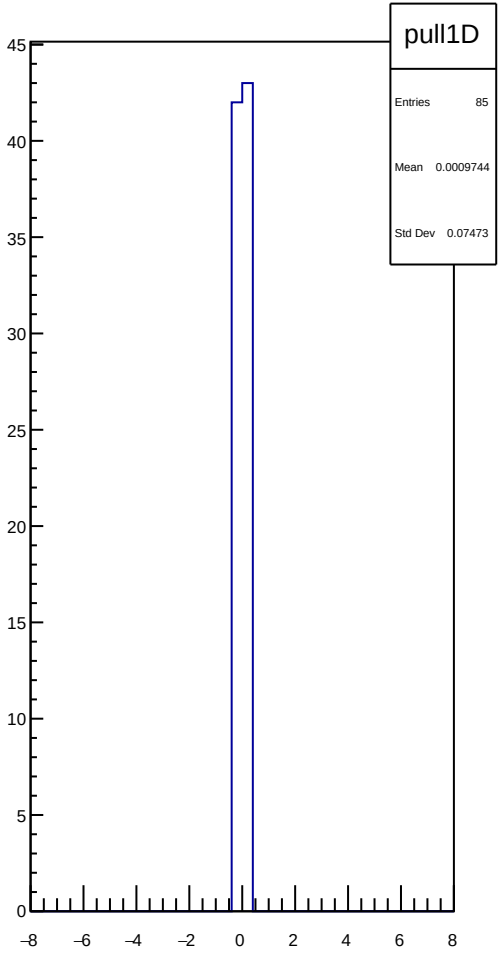

pull1D
Entries 85
Mean 0.0006802
Std Dev 0.0828

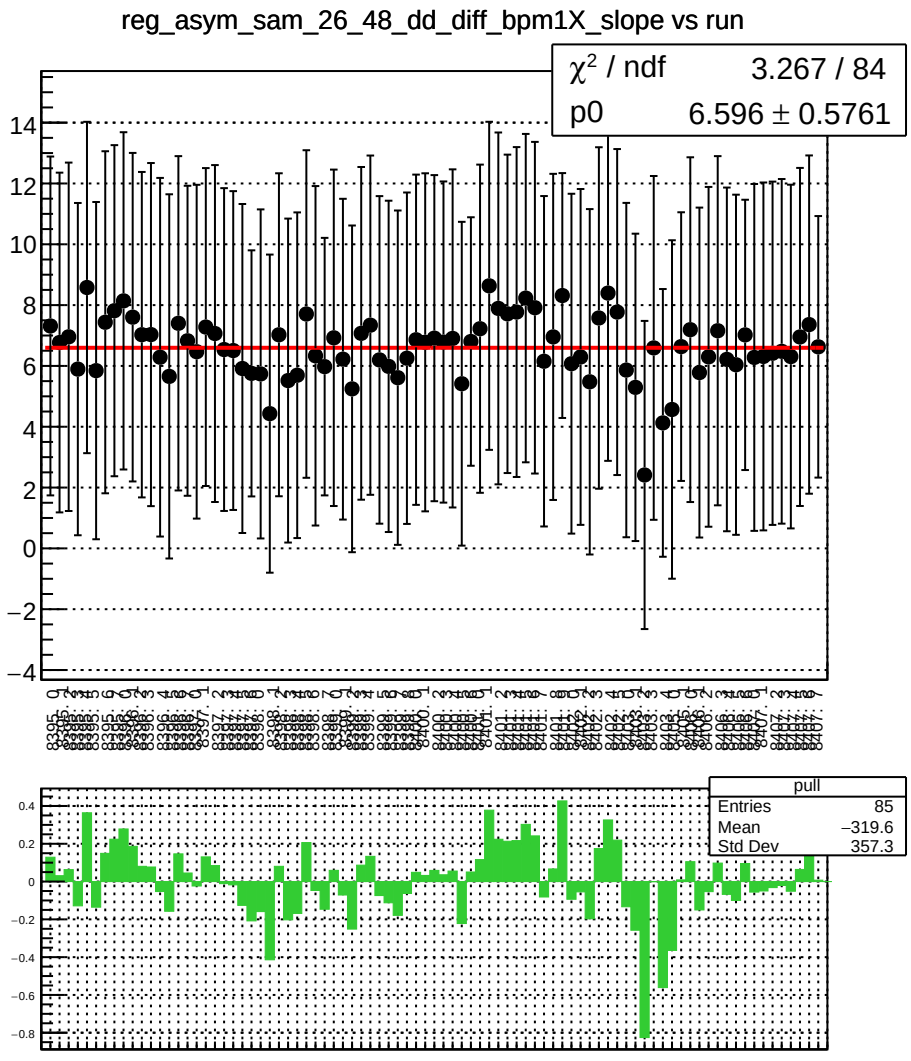

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.6365 / 84
p0 −86.85 ± 2.421
pull
Entries 85
Mean 523.9
Std Dev 474.4

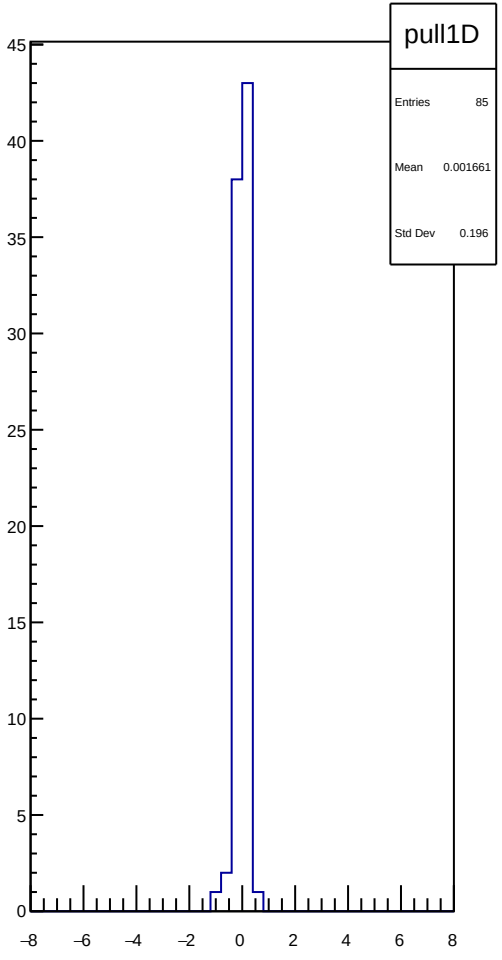

pull1D
Entries 85
Mean −0.001367
Std Dev 0.08652

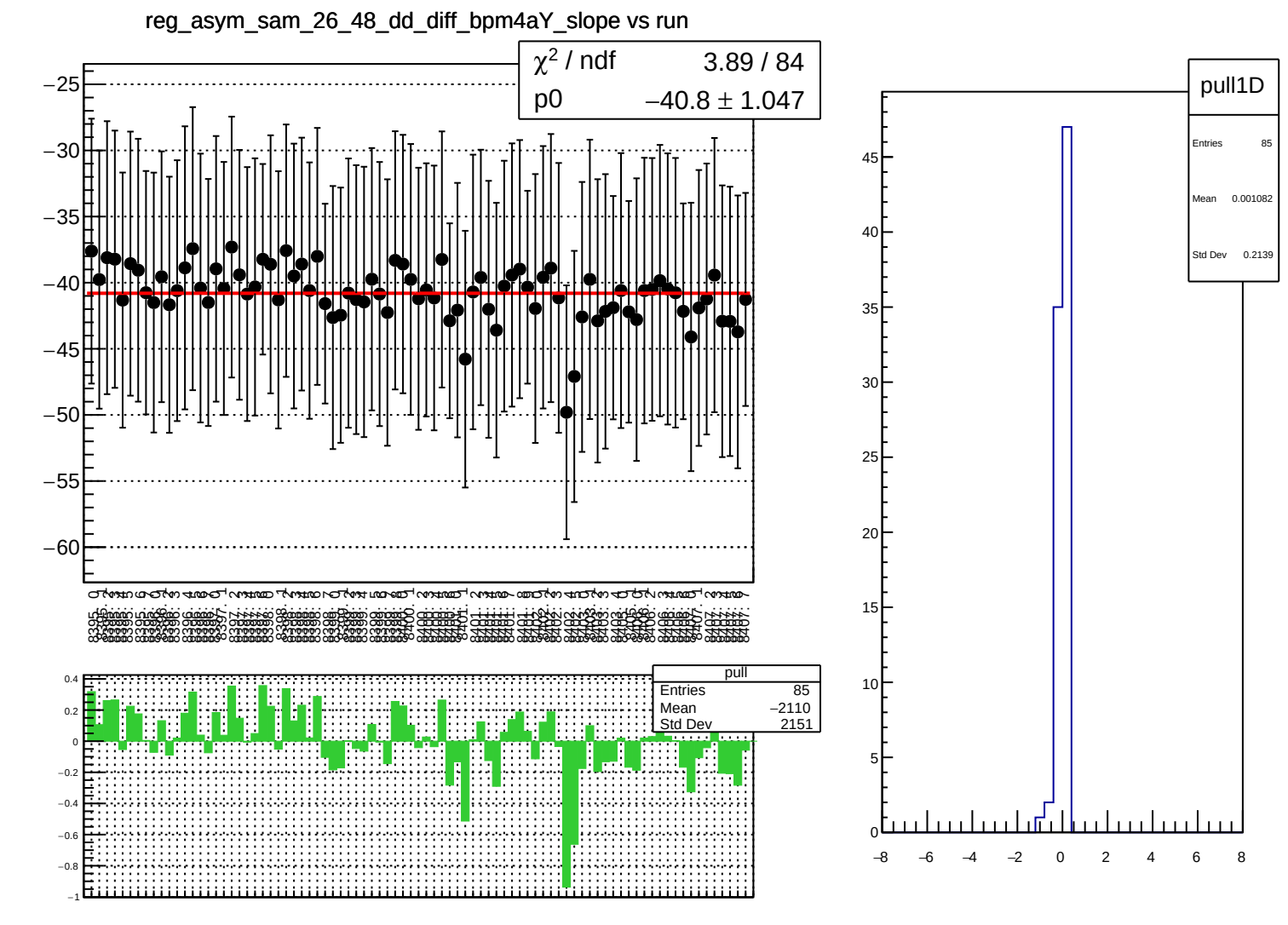

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.6415 / 84
p0 13.83 ± 4.139
pull
Entries 85
Mean 4468
Std Dev 4451
pull1D
Entries 85
Mean 5.68e−05
Std Dev 0.08688

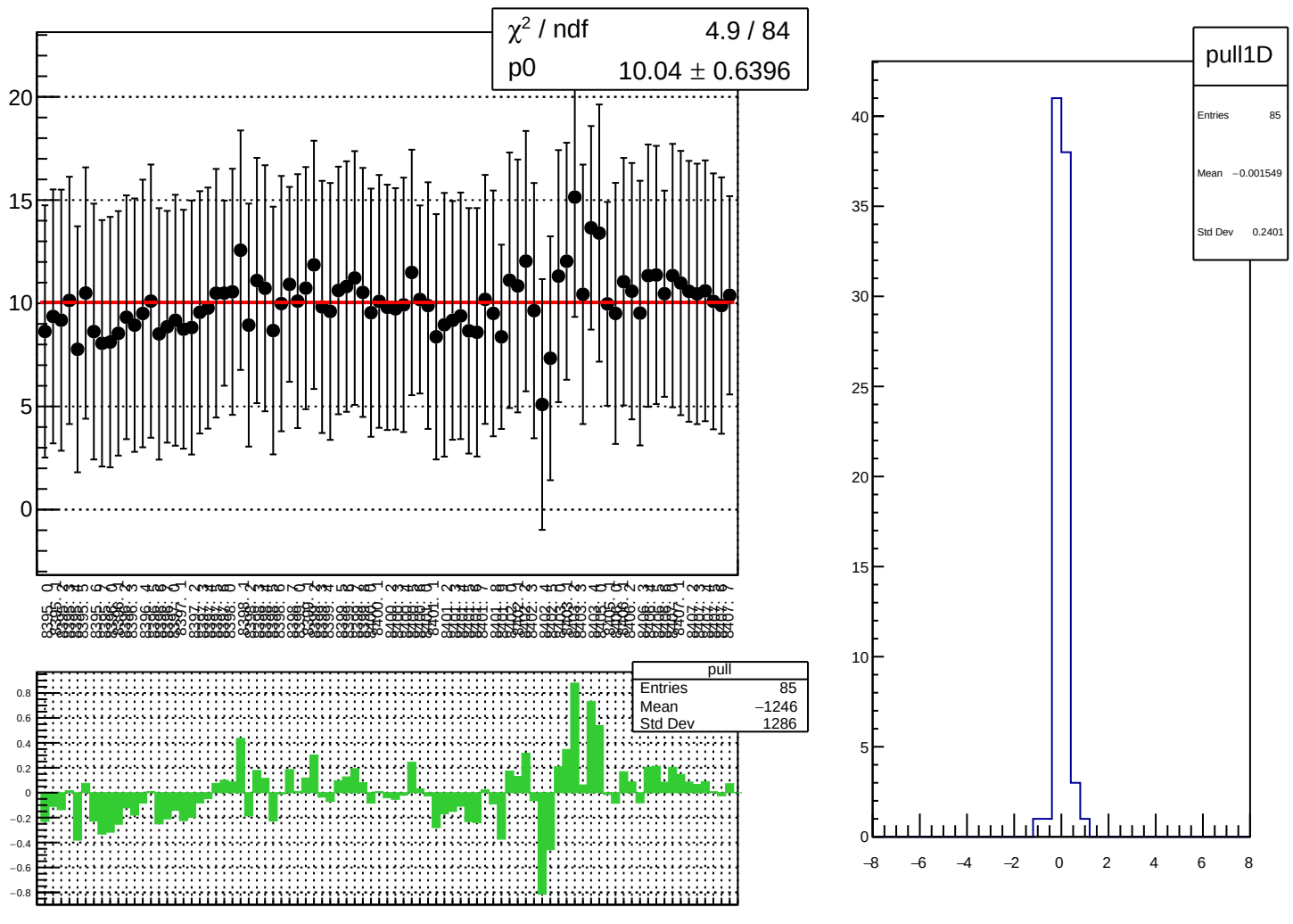

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 0.4748 / 84
p0 2.861 ± 0.2553
pull
Entries 85
Mean 351.7
Std Dev 333.6

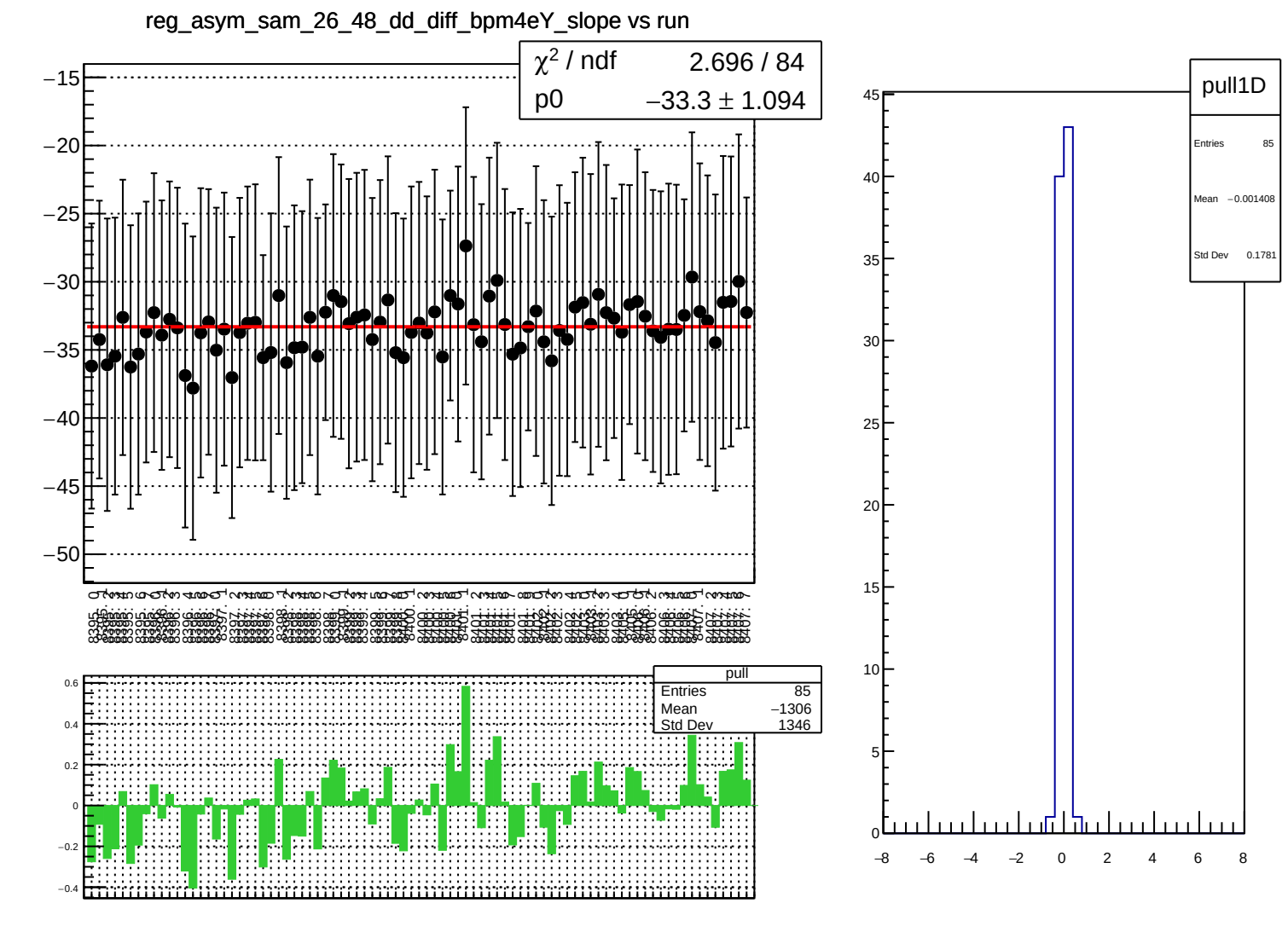

pull1D
Entries 85
Mean 0.0009744
Std Dev 0.07473

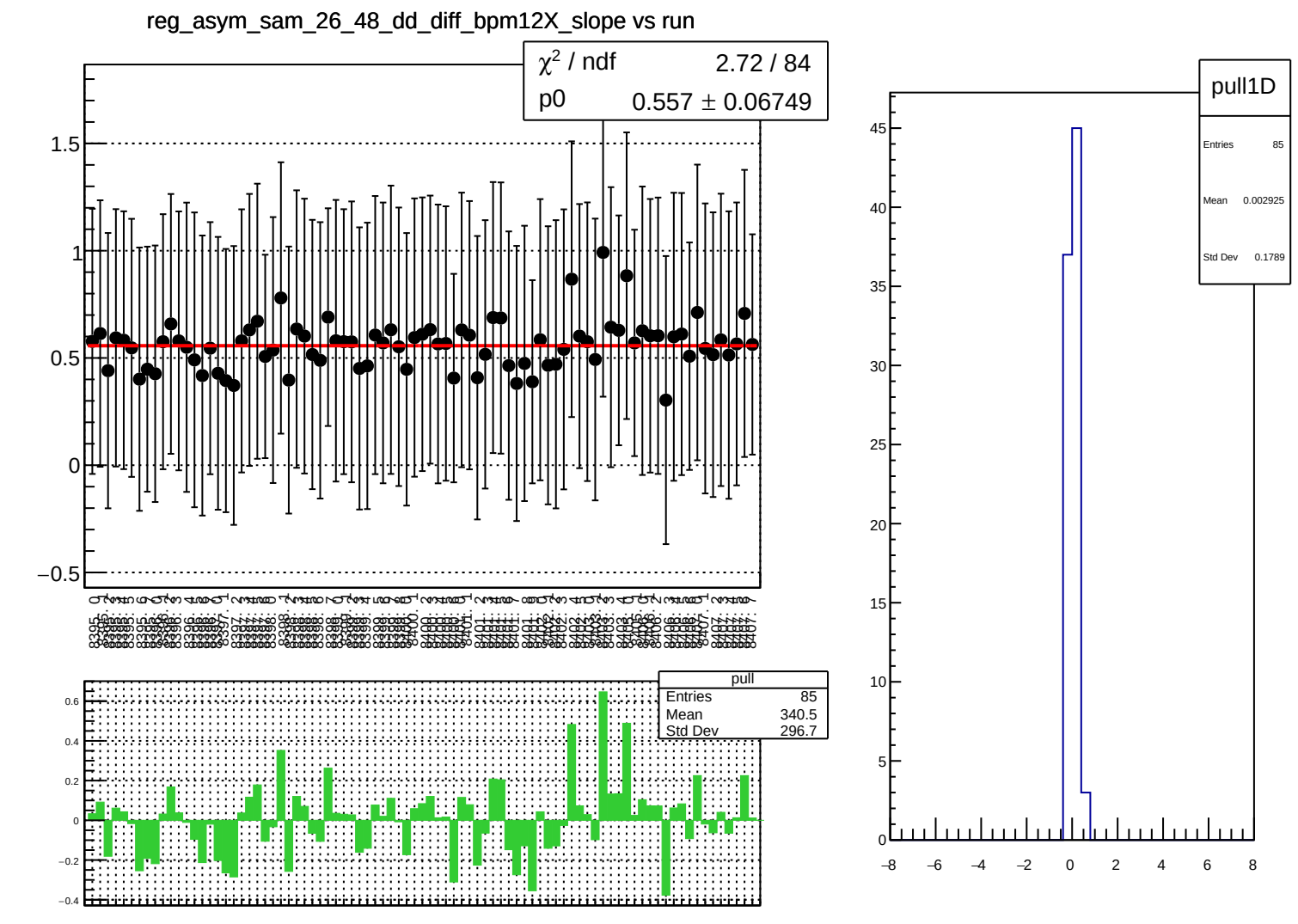

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 3.267 / 84
p0 6.596 ± 0.5761
pull
Entries 85
Mean −319.6
Std Dev 357.3

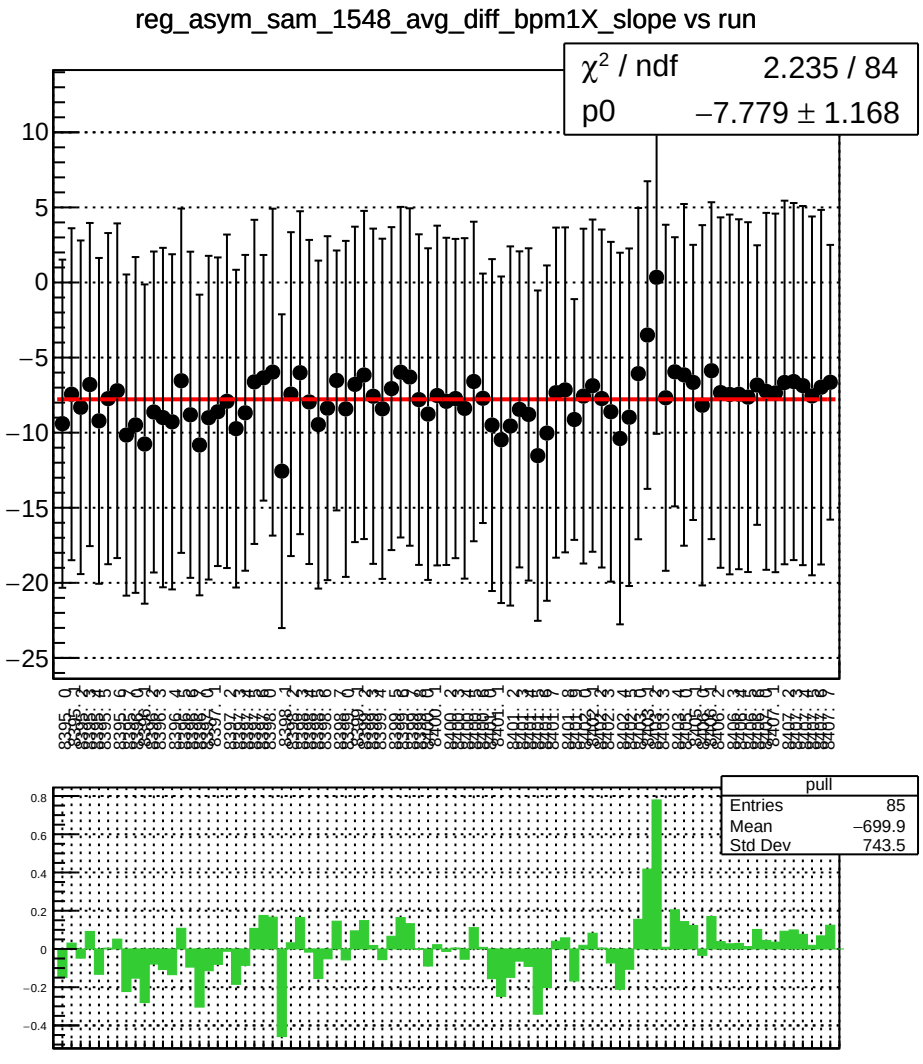

pull1D
Entries 85
Mean 0.001661
Std Dev 0.196

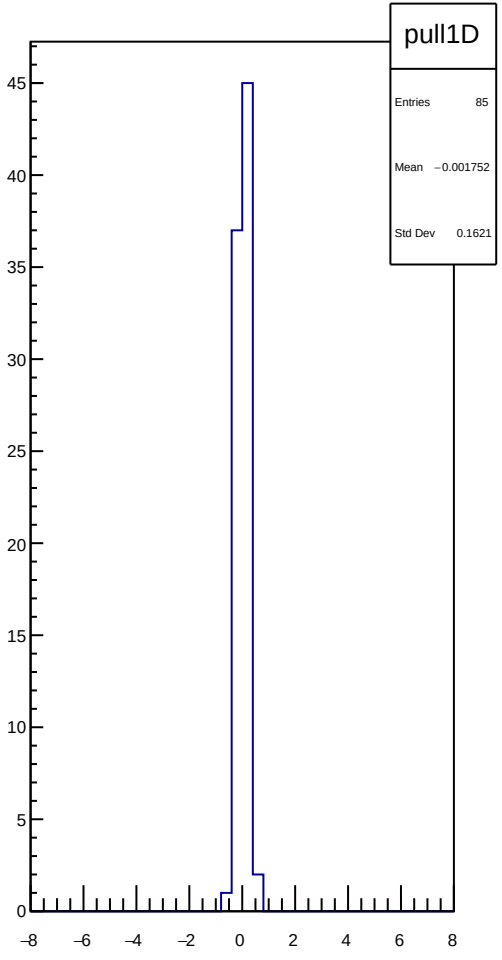

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.89 / 84
p0 −40.8 ± 1.047
pull
Entries 85
Mean −2110
Std Dev 2151
pull1D
Entries 85
Mean 0.001082
Std Dev 0.2139

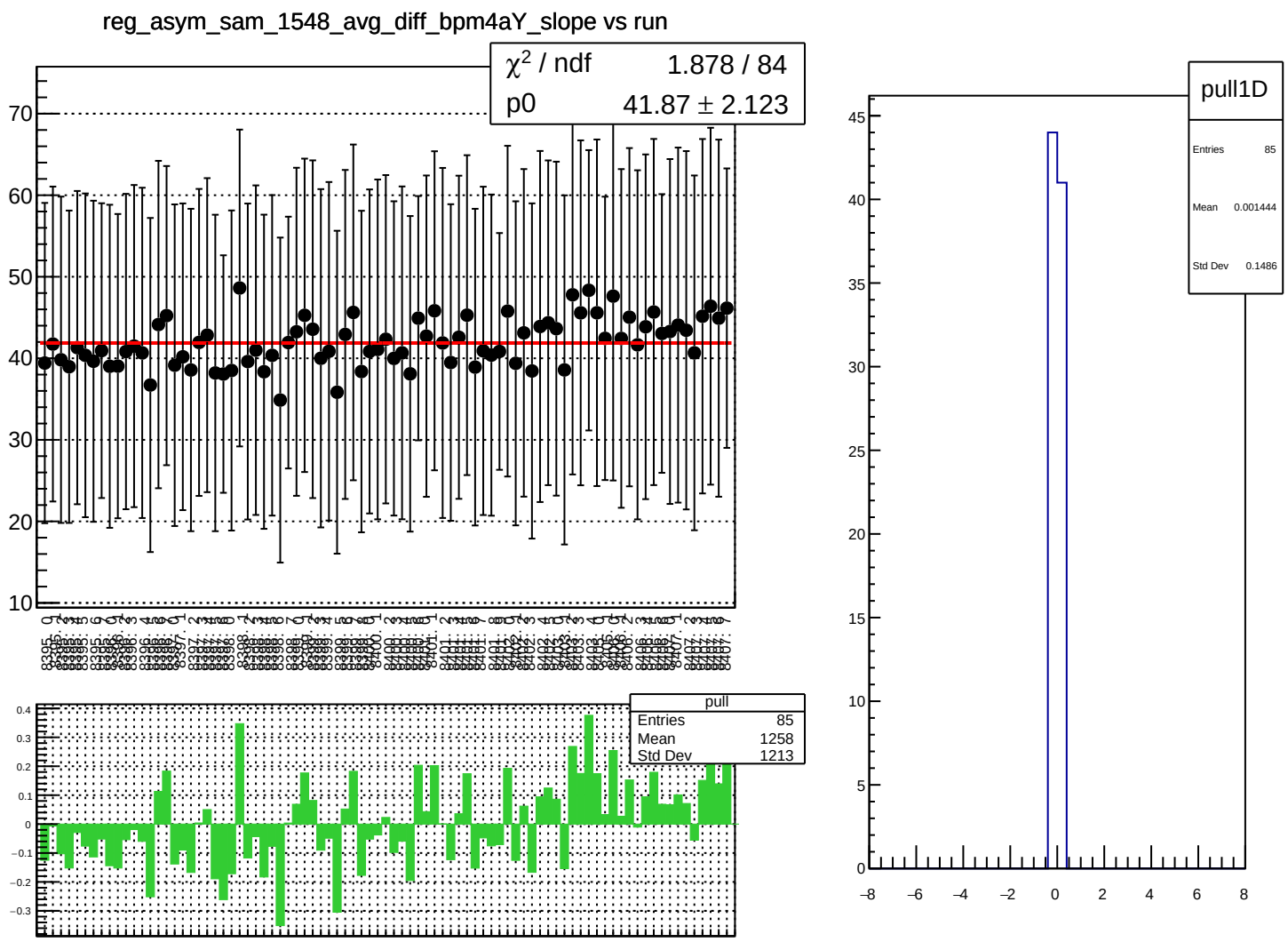

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.9 / 84
p0 10.04 ± 0.6396
pull
Entries 85
Mean −1246
Std Dev 1286
pull1D
Entries 85
Mean −0.001549
Std Dev 0.2401

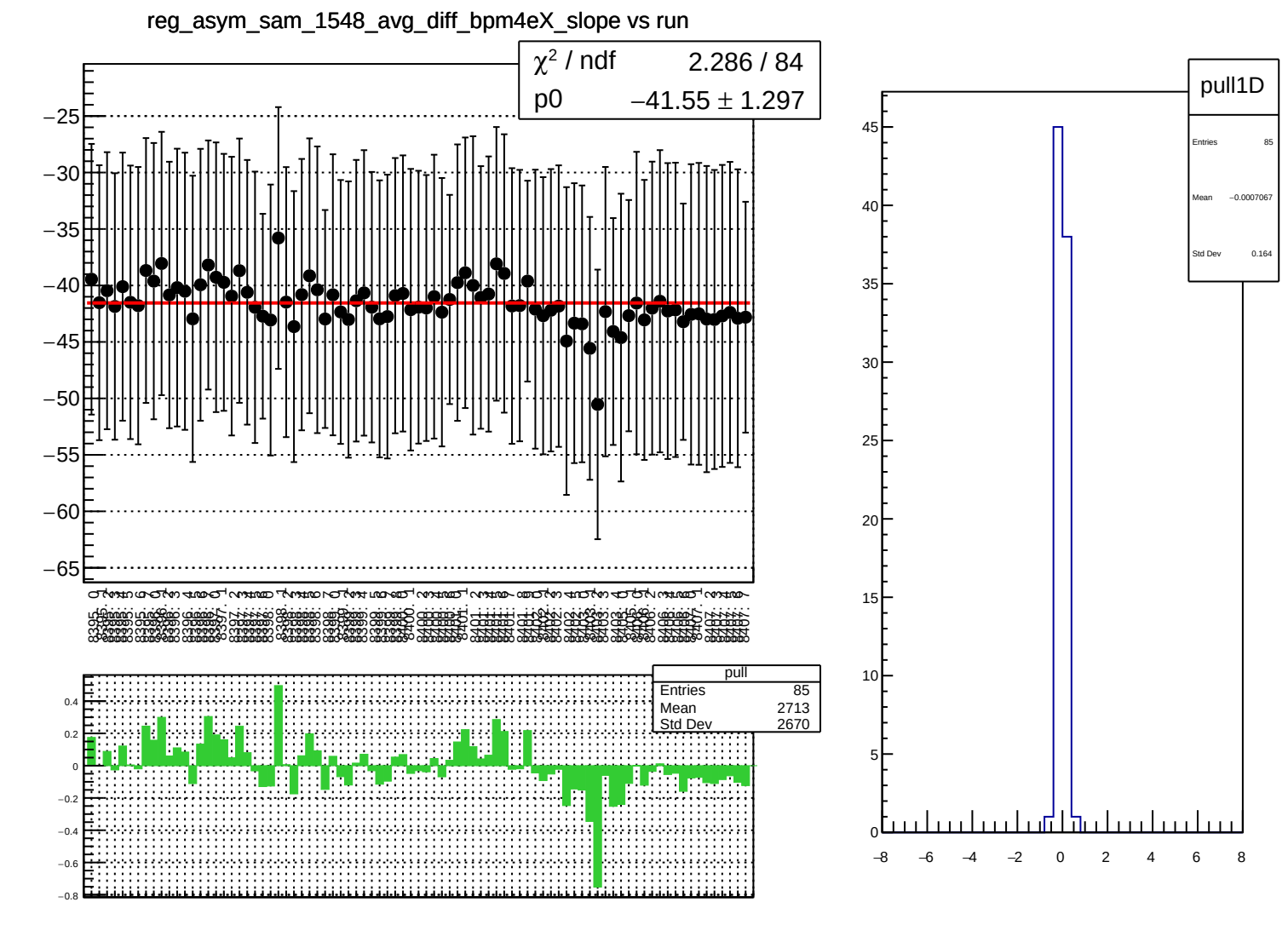

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.696 / 84
p0 −33.3 ± 1.094
pull
Entries 85
Mean −1306
Std Dev 1346
pull1D
Entries 85
Mean −0.001408
Std Dev 0.1781

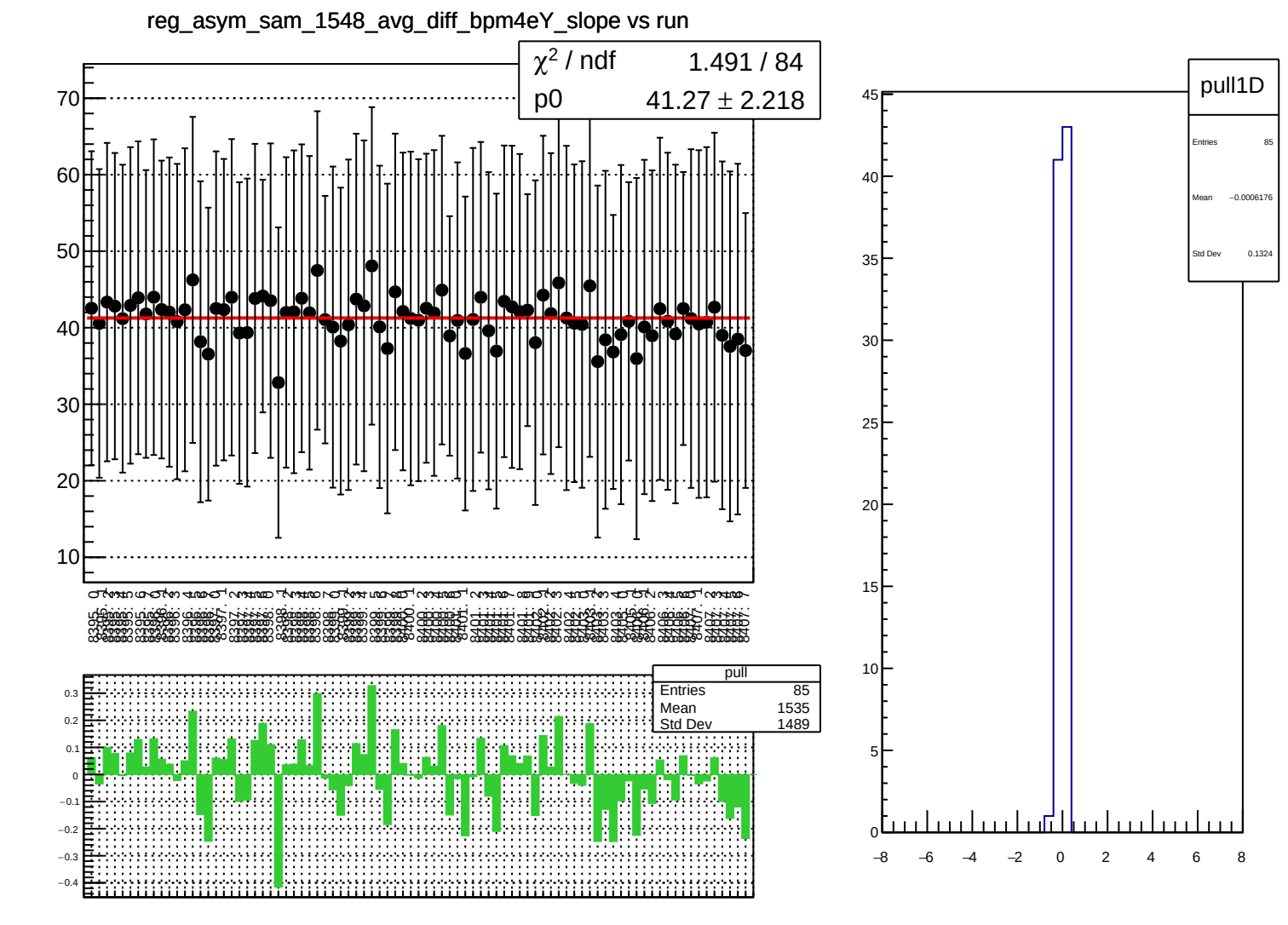

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 2.72 / 84
p0 0.557 ± 0.06749
pull
Entries 85
Mean 340.5
Std Dev 296.7
pull1D
Entries 85
Mean 0.002925
Std Dev 0.1789

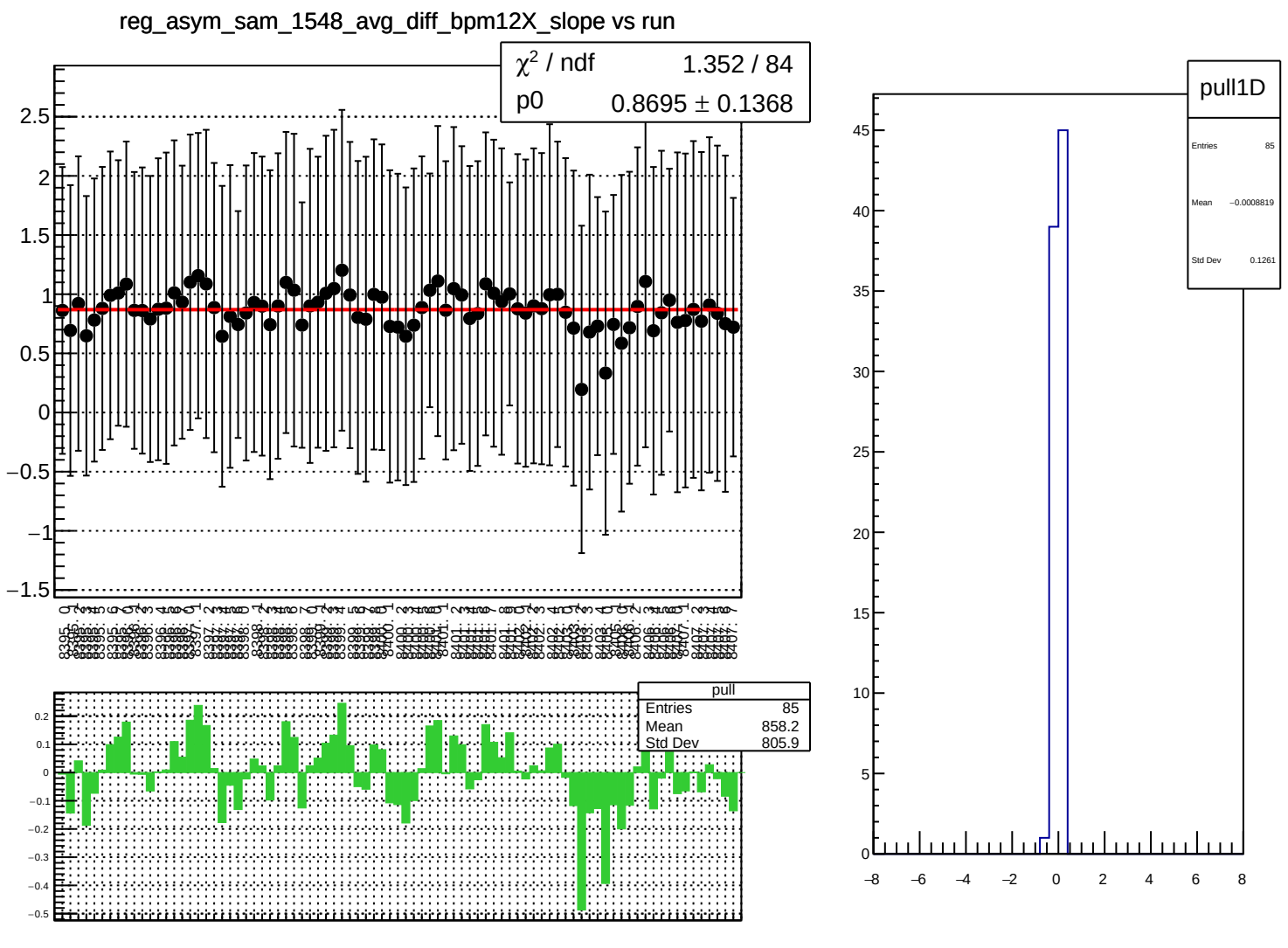

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 2.235 / 84
p0 −7.779 ± 1.168
pull
Entries 85
Mean −699.9
Std Dev 743.5

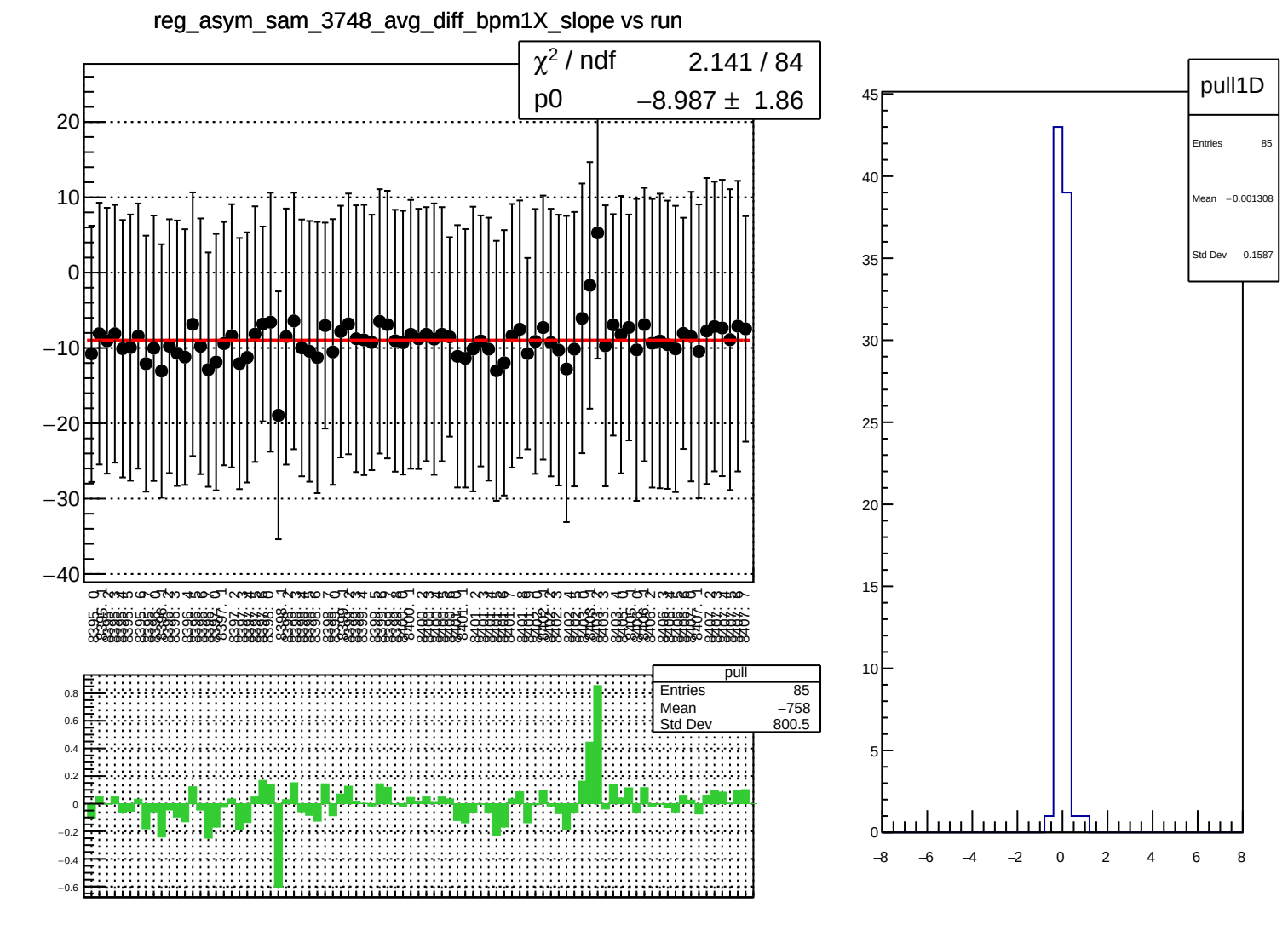

pull1D
Entries 85
Mean −0.001752
Std Dev 0.1621

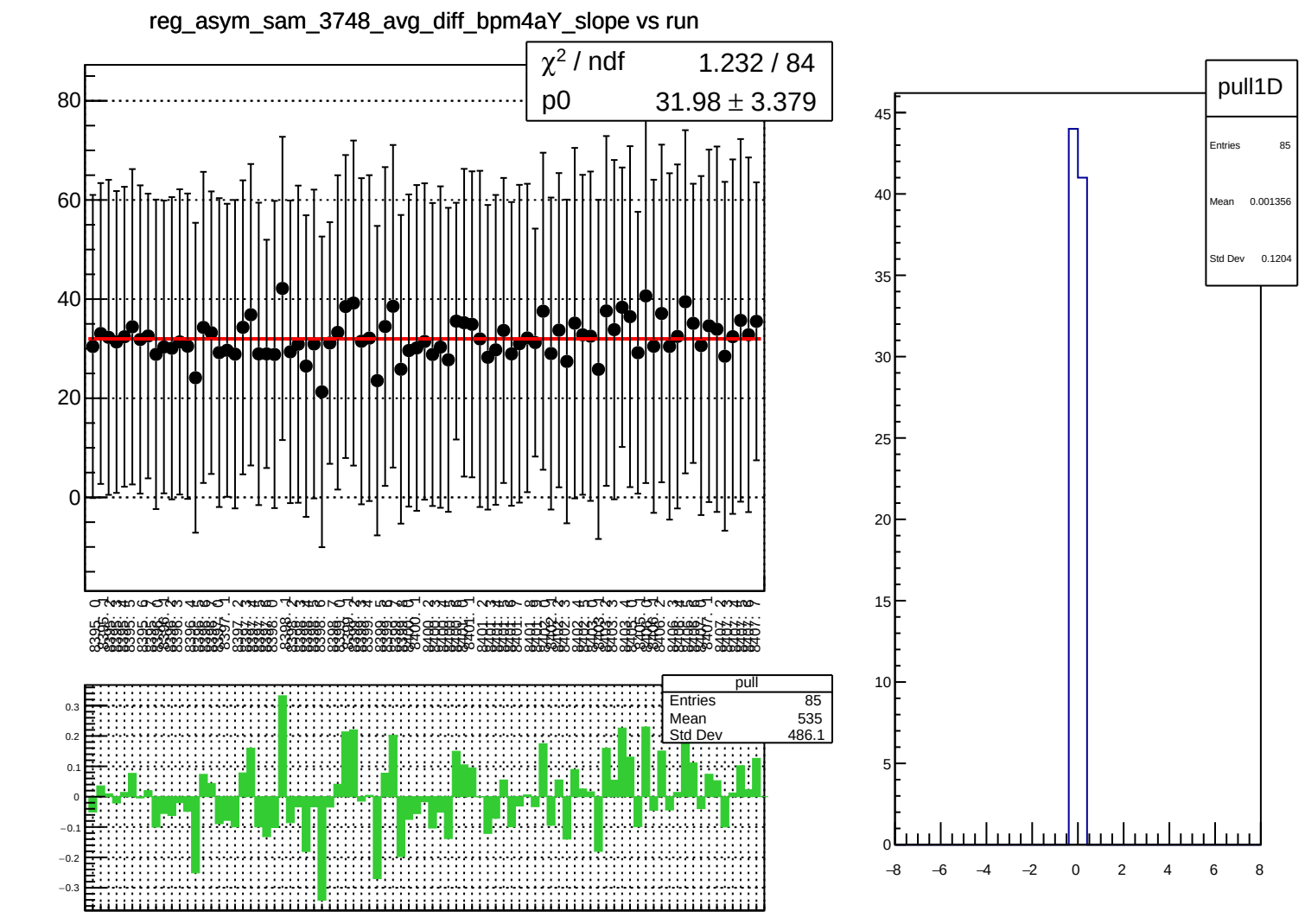

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.878 / 84
p0 41.87 ± 2.123
pull
Entries 85
Mean 1258
Std Dev 1213
pull1D
Entries 85
Mean 0.001444
Std Dev 0.1486

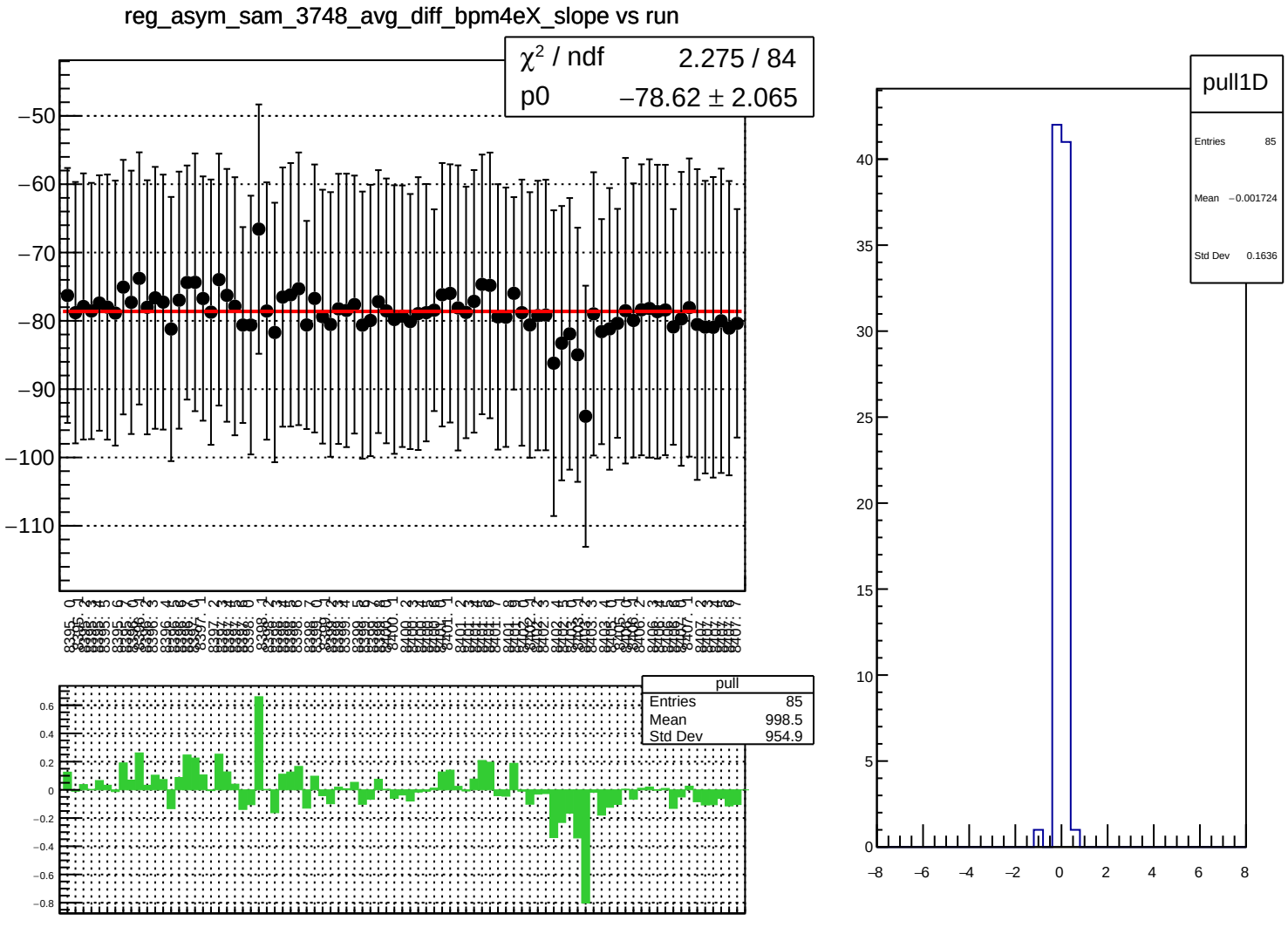

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.286 / 84
p0 −41.55 ± 1.297
pull
Entries 85
Mean 2713
Std Dev 2670
pull1D
Entries 85
Mean −0.0007067
Std Dev 0.164

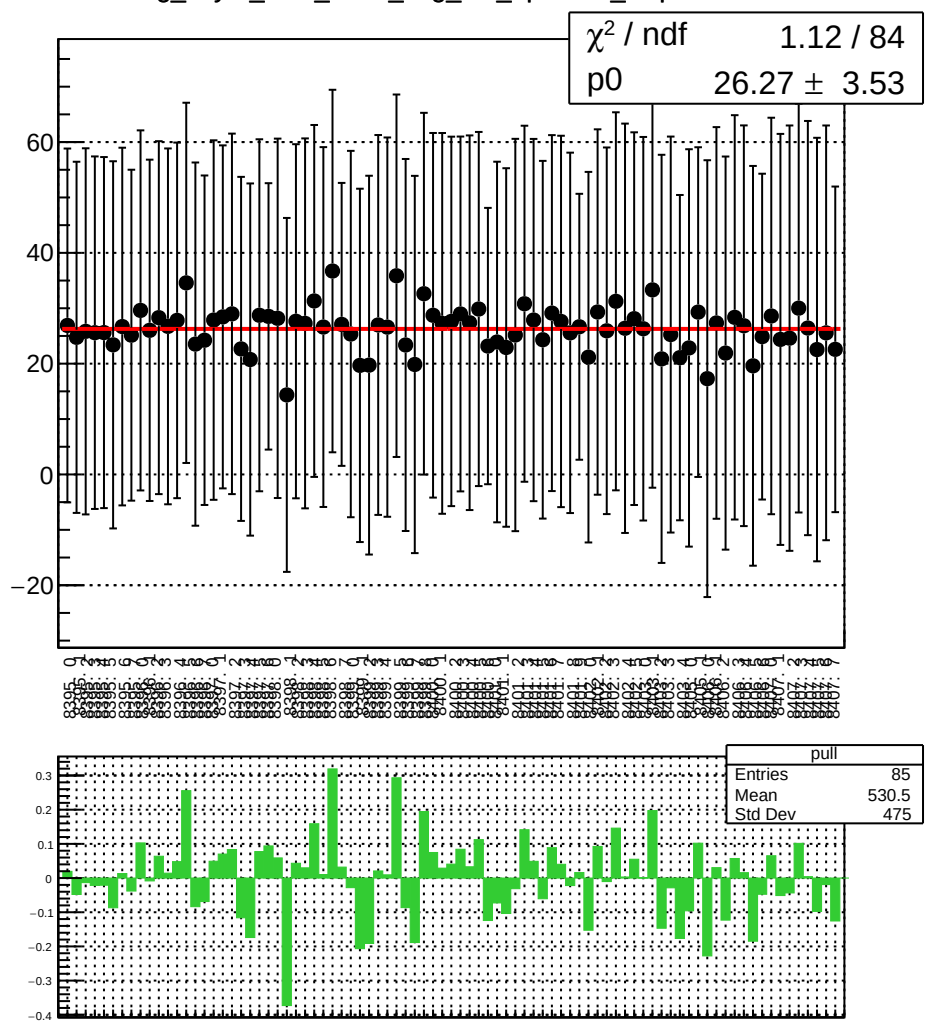

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.491 / 84
p0 41.27 ± 2.218
pull
Entries 85
Mean 1535
Std Dev 1489
pull1D
Entries 85
Mean −0.0006176
Std Dev 0.1324

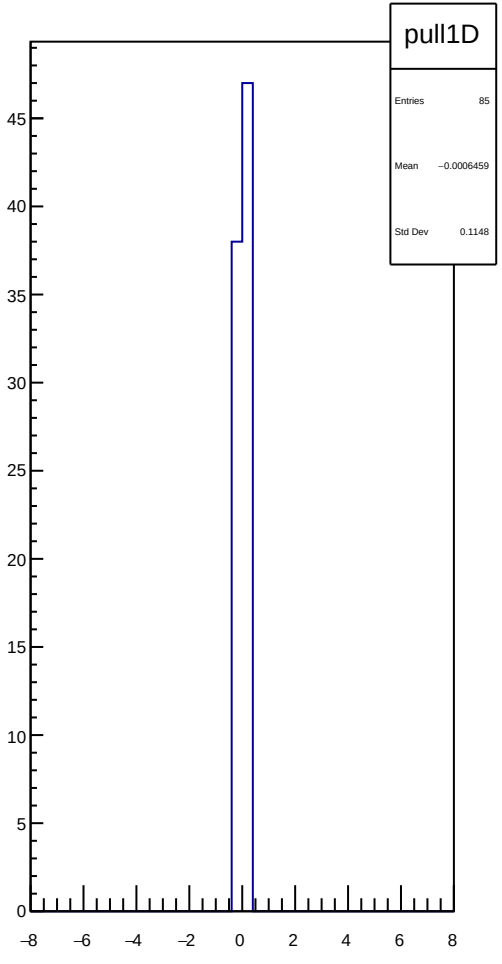

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 1.352 / 84
p0 0.8695 ± 0.1368
pull
Entries 85
Mean 858.2
Std Dev 805.9
pull1D
Entries 85
Mean −0.0008819
Std Dev 0.1261

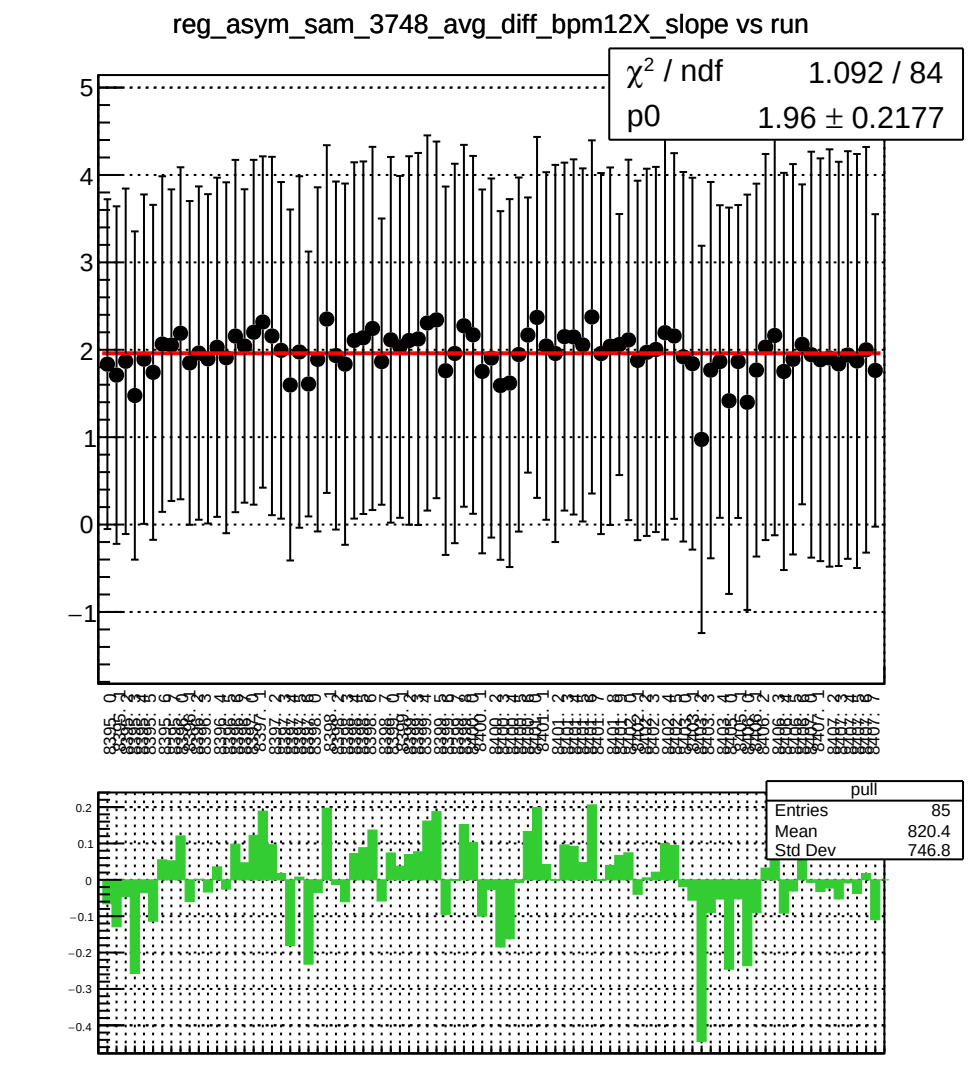

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 2.141 / 84
p0 −8.987 ± 1.86
pull
Entries 85
Mean −758
Std Dev 800.5
pull1D
Entries 85
Mean −0.001308
Std Dev 0.1587

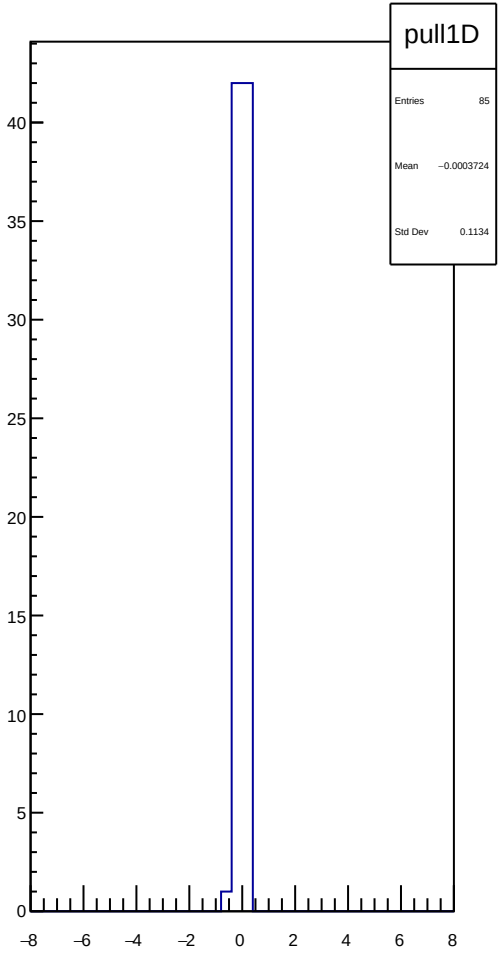

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.232 / 84
p0 31.98 ± 3.379
pull
Entries 85
Mean 535
Std Dev 486.1
pull1D
Entries 85
Mean 0.001356
Std Dev 0.1204

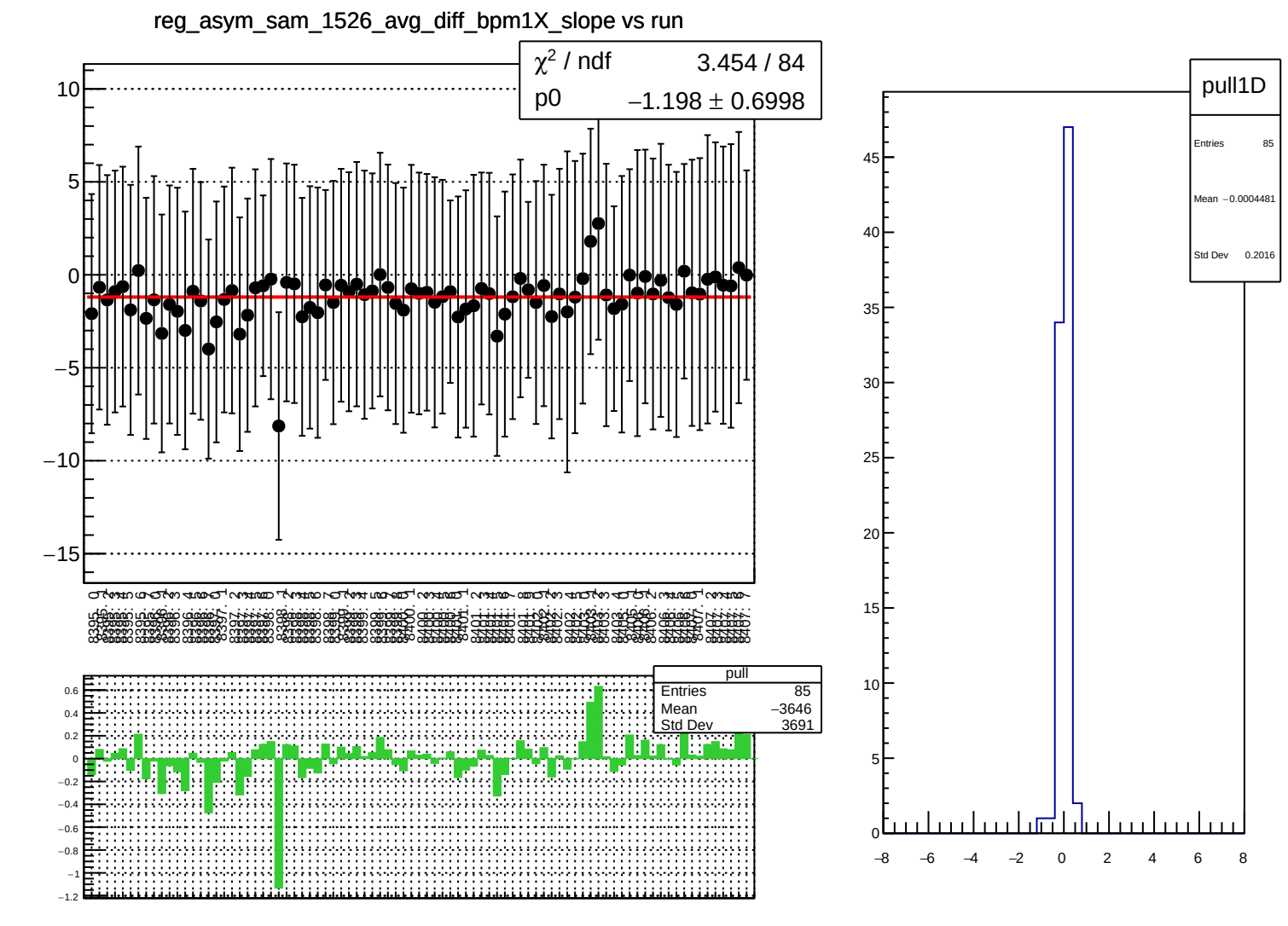

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.275 / 84
p0 −78.62 ± 2.065
pull
Entries 85
Mean 998.5
Std Dev 954.9
pull1D
Entries 85
Mean −0.001724
Std Dev 0.1636

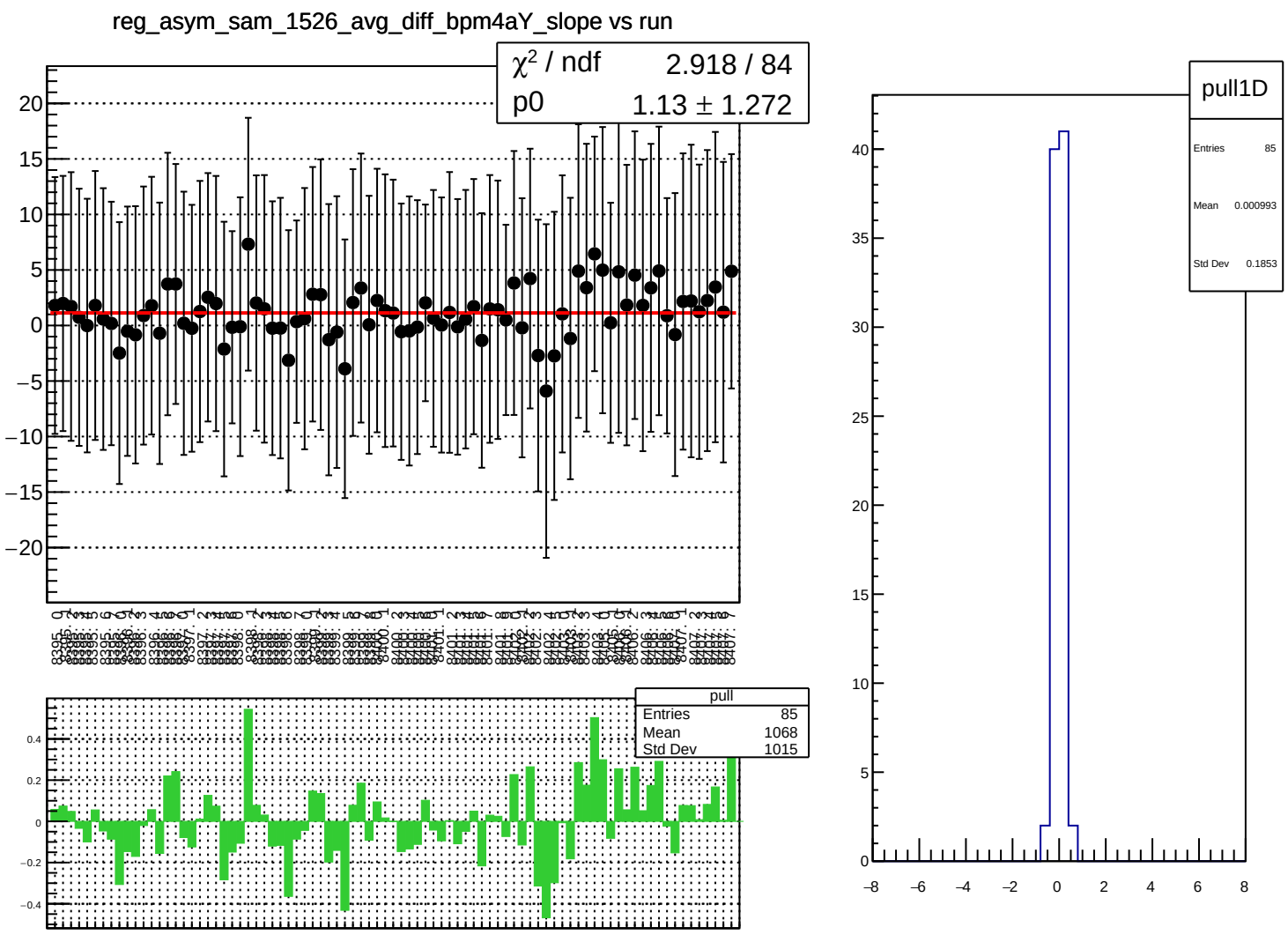

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.12 / 84
p0 26.27 ± 3.53
pull
Entries 85
Mean 530.5
Std Dev 475

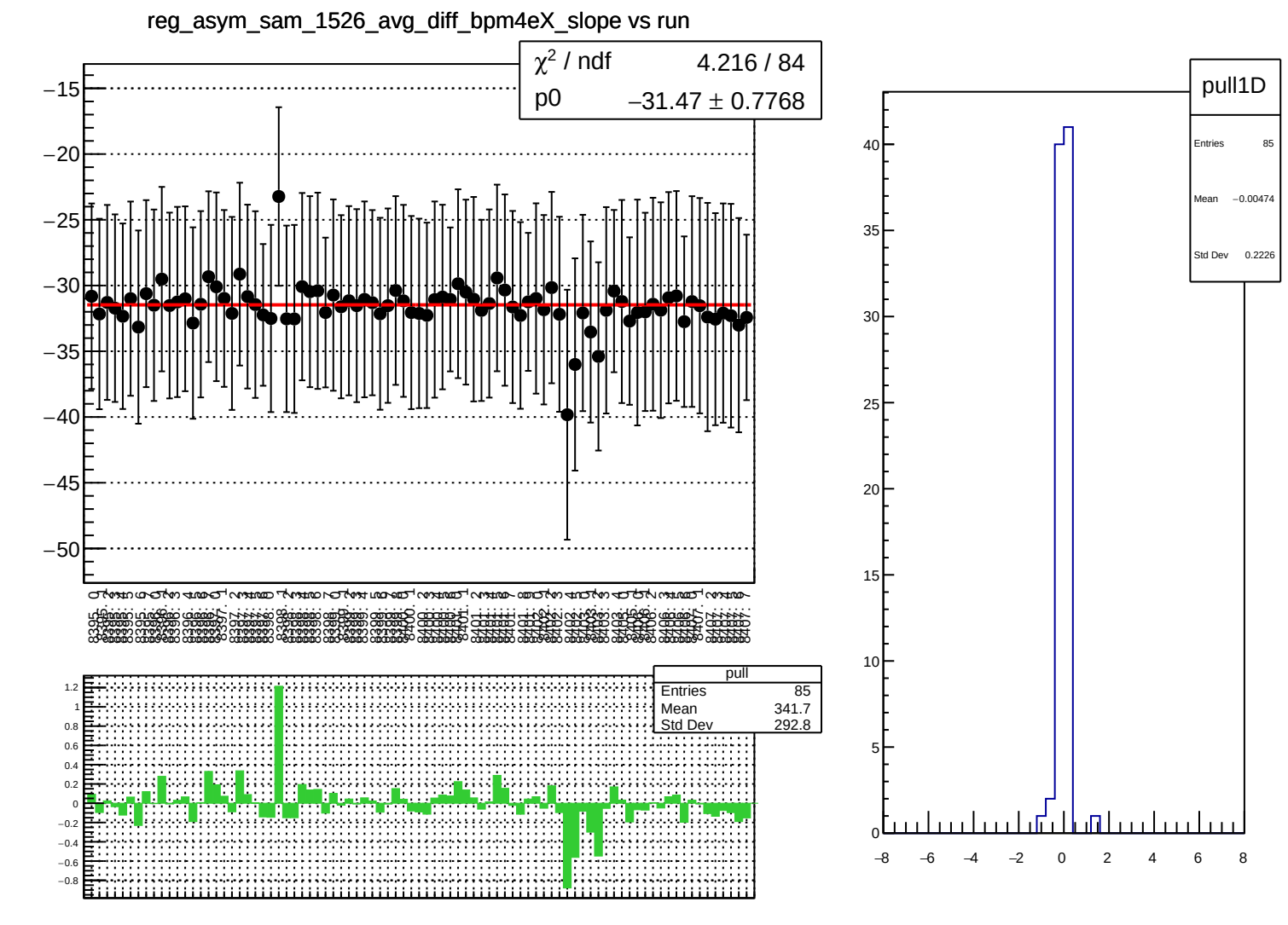

pull1D
Entries 85
Mean −0.0006459
Std Dev 0.1148

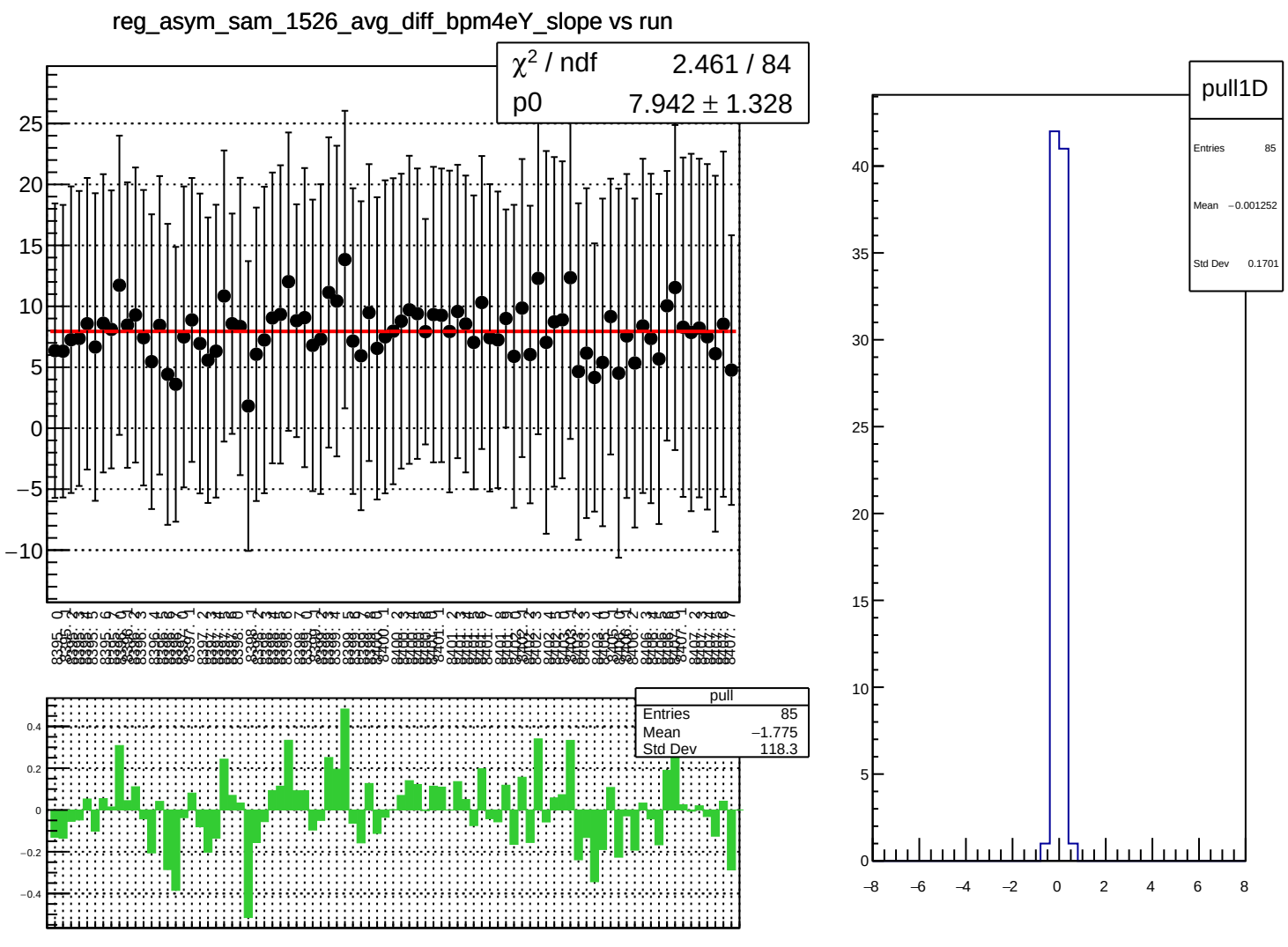

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 1.092 / 84
p0 1.96 ± 0.2177
pull
Entries 85
Mean 820.4
Std Dev 746.8

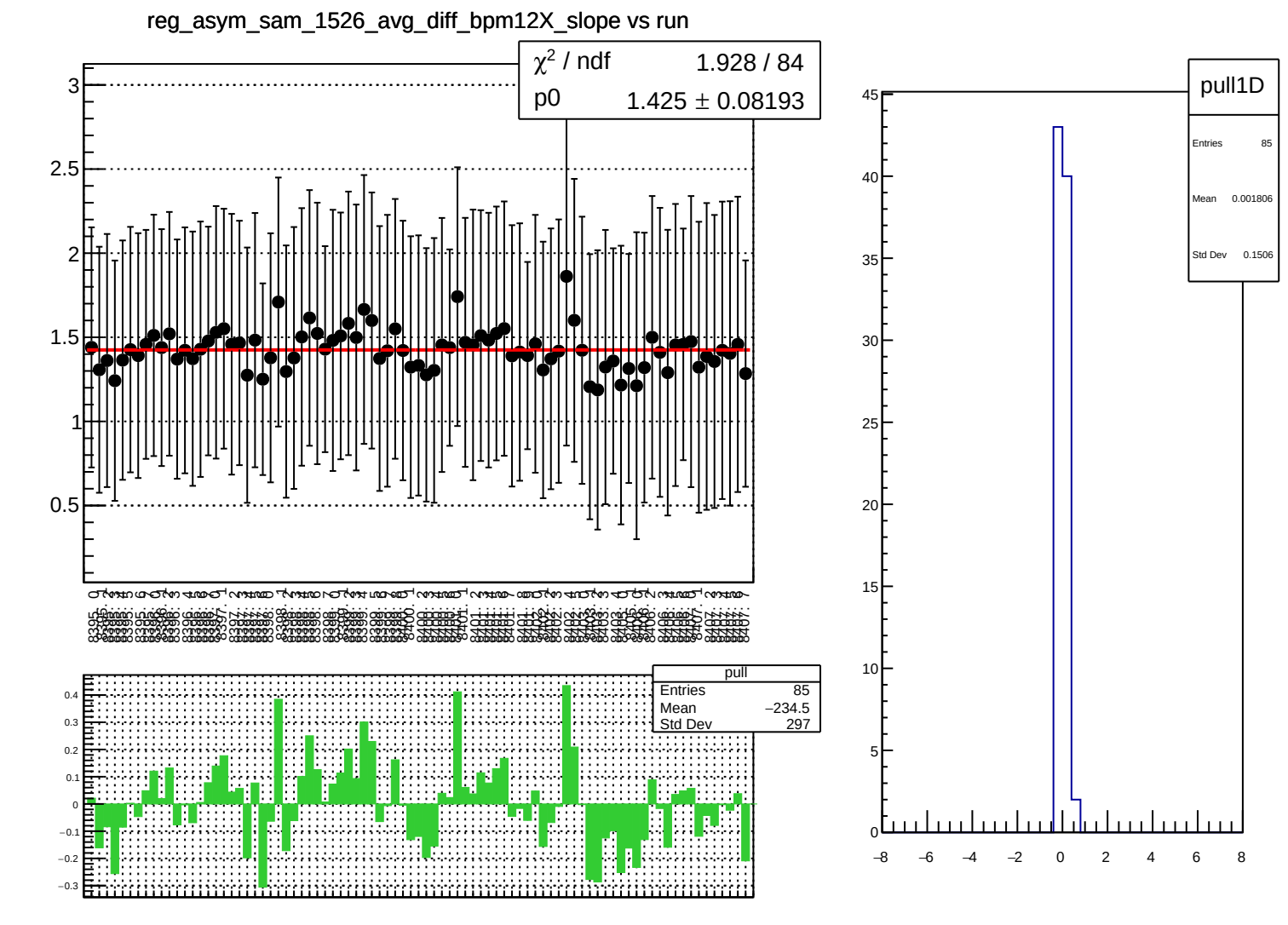

pull1D
Entries 85
Mean −0.0003724
Std Dev 0.1134

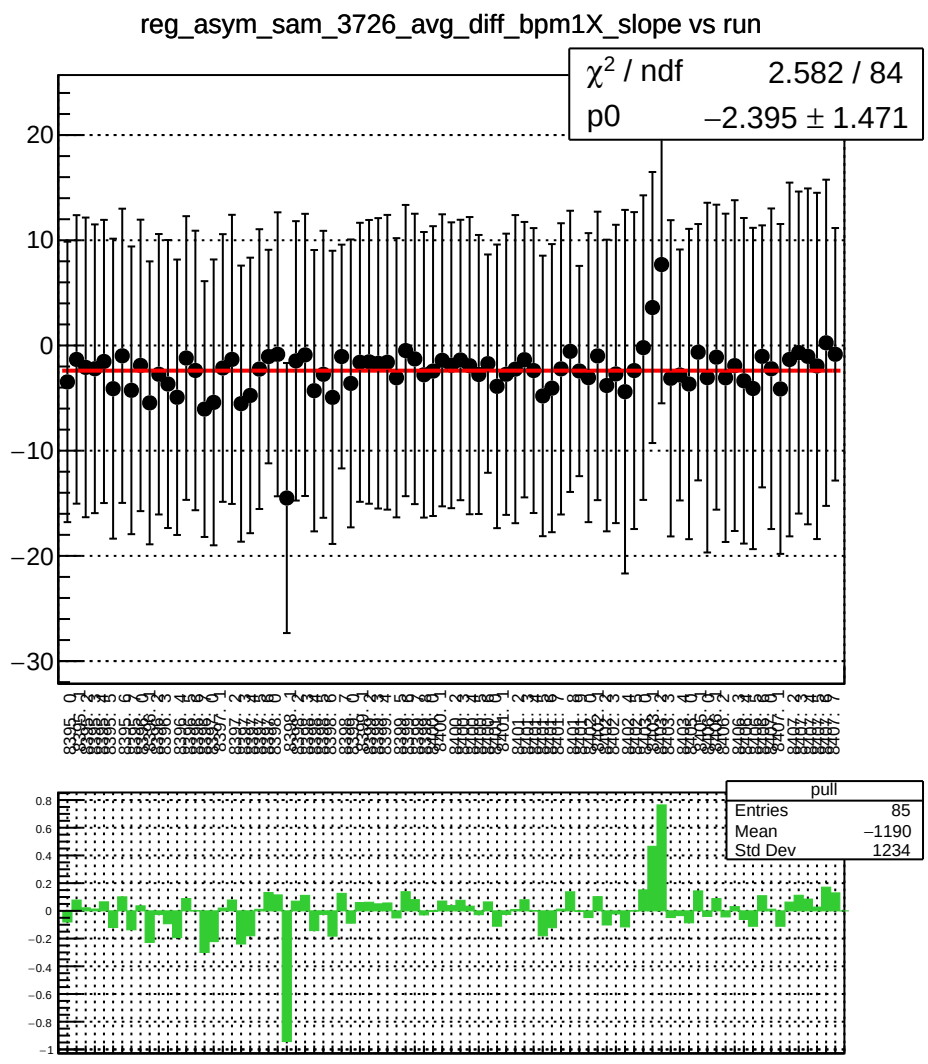

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 3.454 / 84
p0 −1.198 ± 0.6998
pull
Entries 85
Mean −3646
Std Dev 3691
pull1D
Entries 85
Mean −0.0004481
Std Dev 0.2016

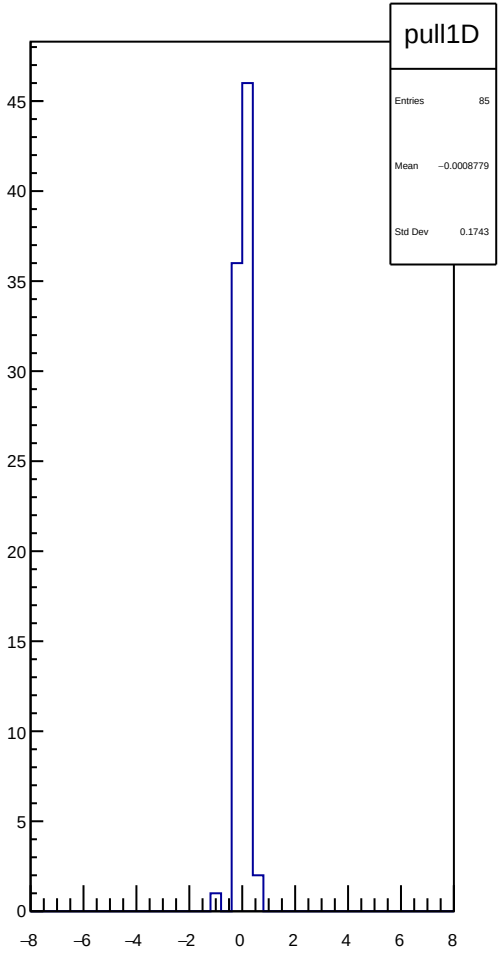

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.918 / 84
p0 1.13 ± 1.272
pull
Entries 85
Mean 1068
Std Dev 1015
pull1D
Entries 85
Mean 0.000993
Std Dev 0.1853

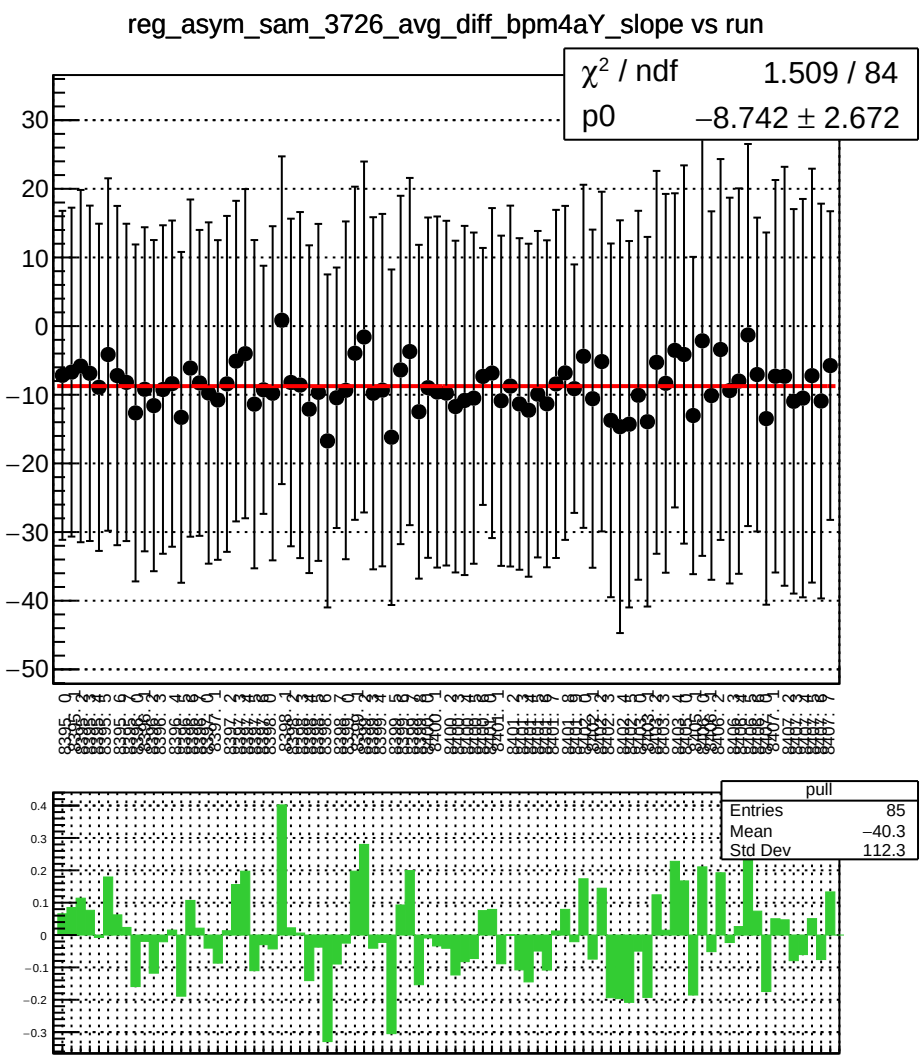

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.216 / 84
p0 −31.47 ± 0.7768
pull
Entries 85
Mean 341.7
Std Dev 292.8
pull1D
Entries 85
Mean −0.00474
Std Dev 0.2226

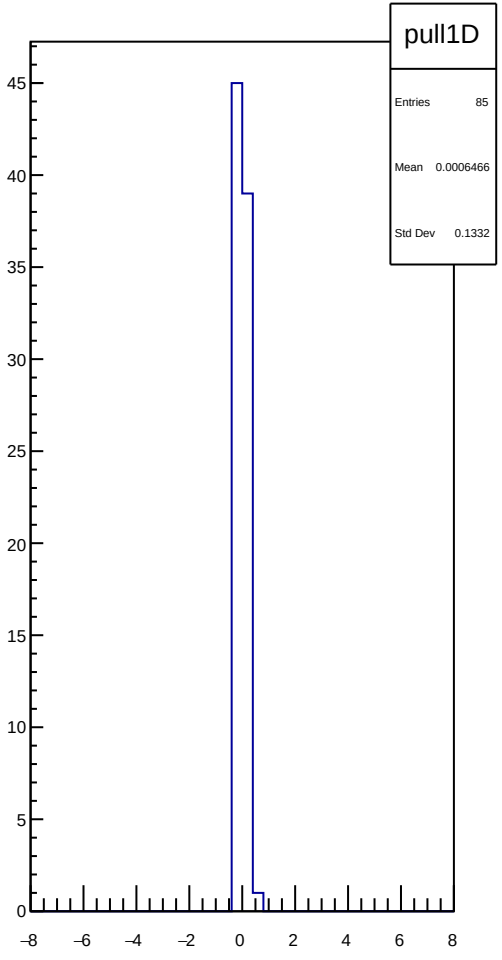

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.461 / 84
p0 7.942 ± 1.328
pull
Entries 85
Mean −1.775
Std Dev 118.3
pull1D
Entries 85
Mean −0.001252
Std Dev 0.1701

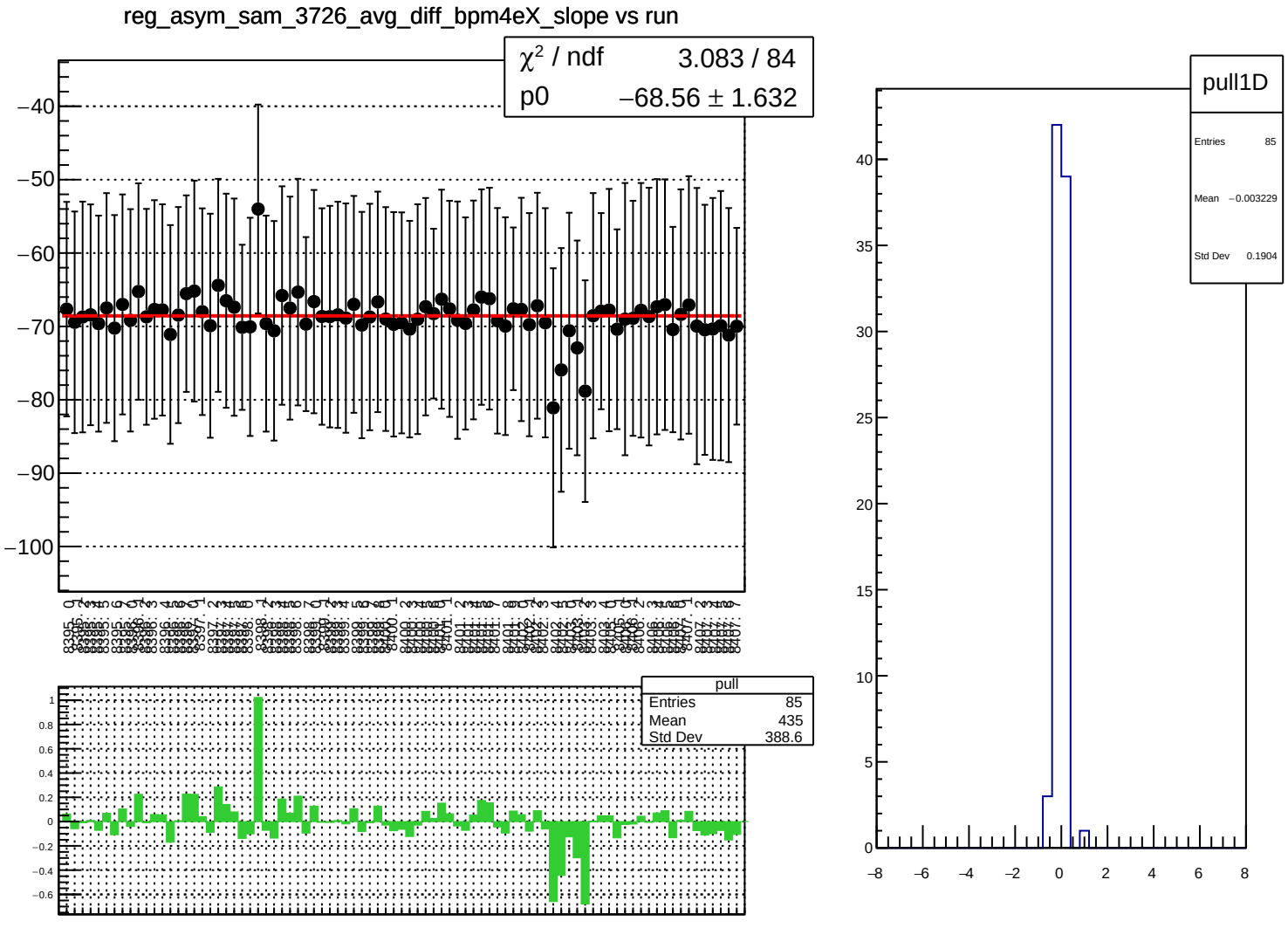

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 1.928 / 84
p0 1.425 ± 0.08193
pull
Entries 85
Mean −234.5
Std Dev 297
pull1D
Entries 85
Mean 0.001806
Std Dev 0.1506

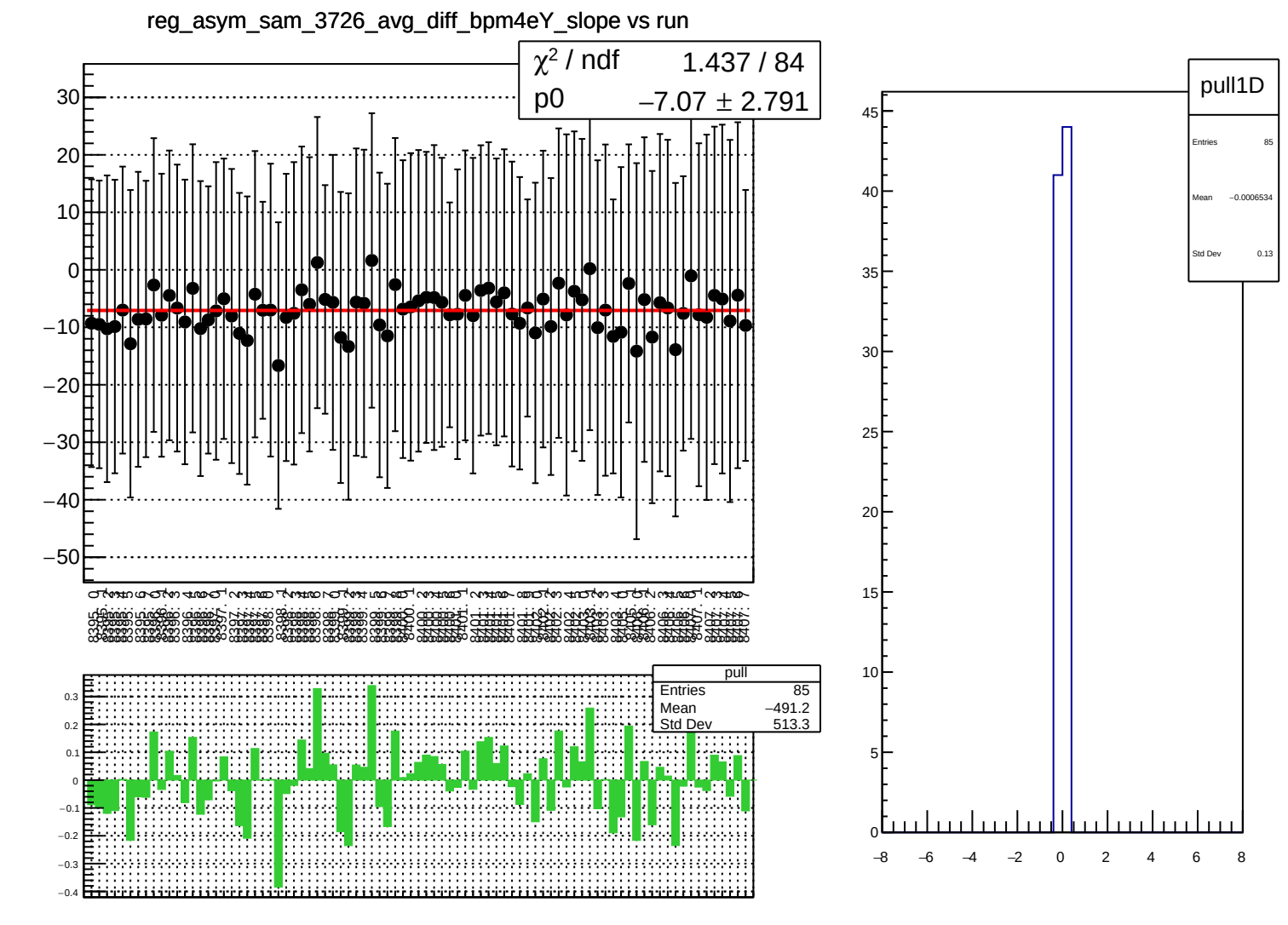

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 2.582 / 84
p0 −2.395 ± 1.471
pull
Entries 85
Mean −1190
Std Dev 1234

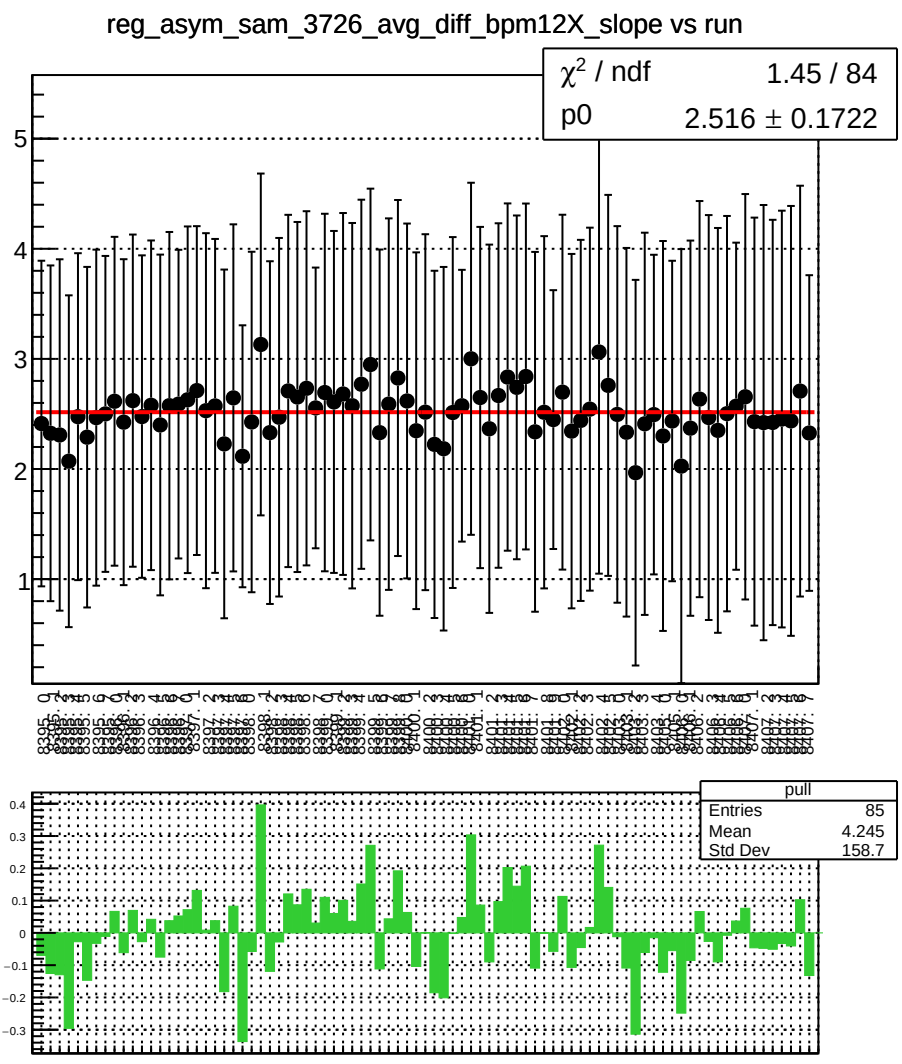

pull1D
Entries 85
Mean −0.0008779
Std Dev 0.1743

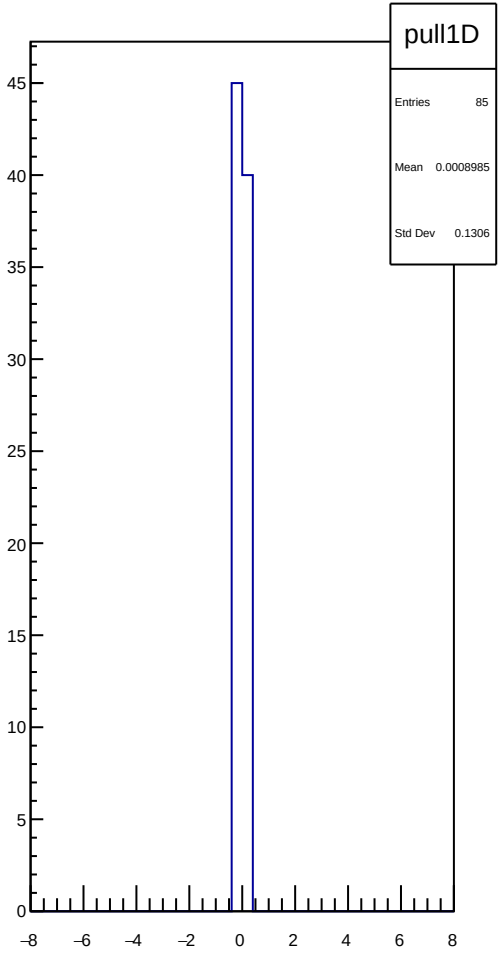

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.509 / 84
p0 −8.742 ± 2.672
pull
Entries 85
Mean −40.3
Std Dev 112.3

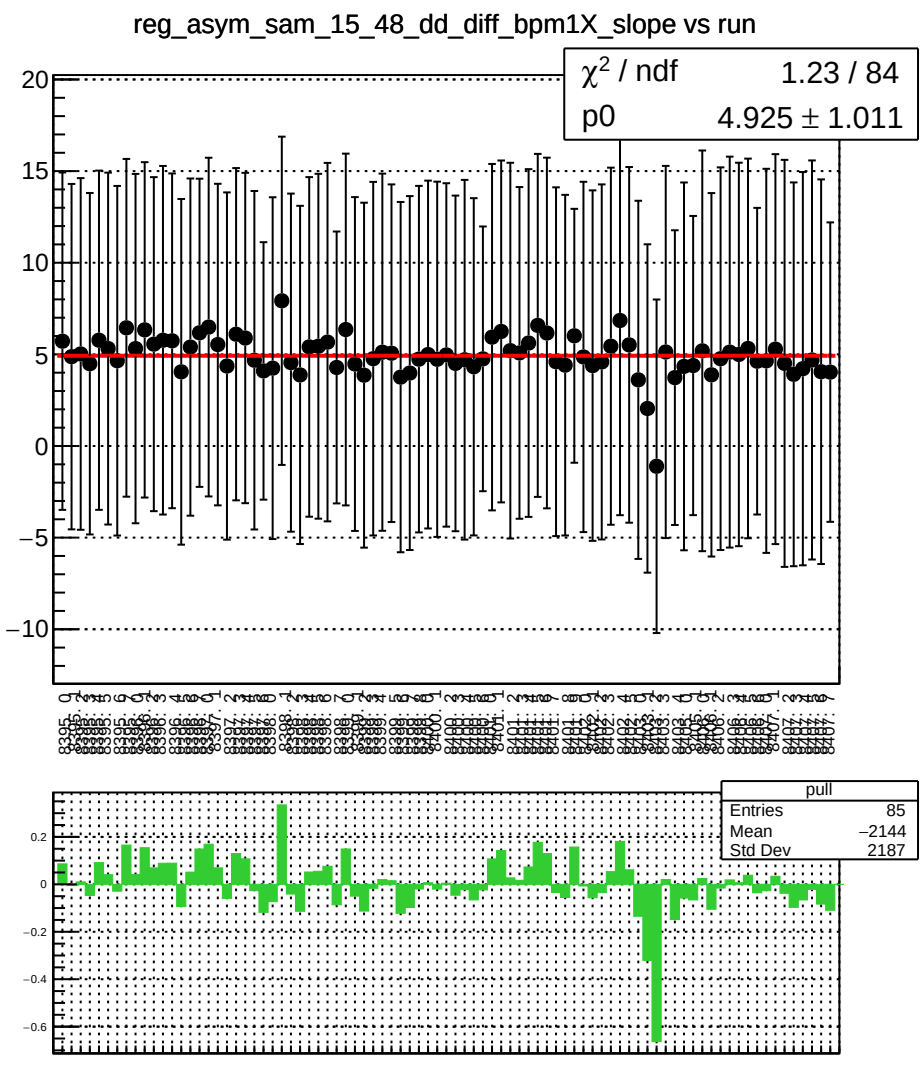

pull1D
Entries 85
Mean 0.0006466
Std Dev 0.1332

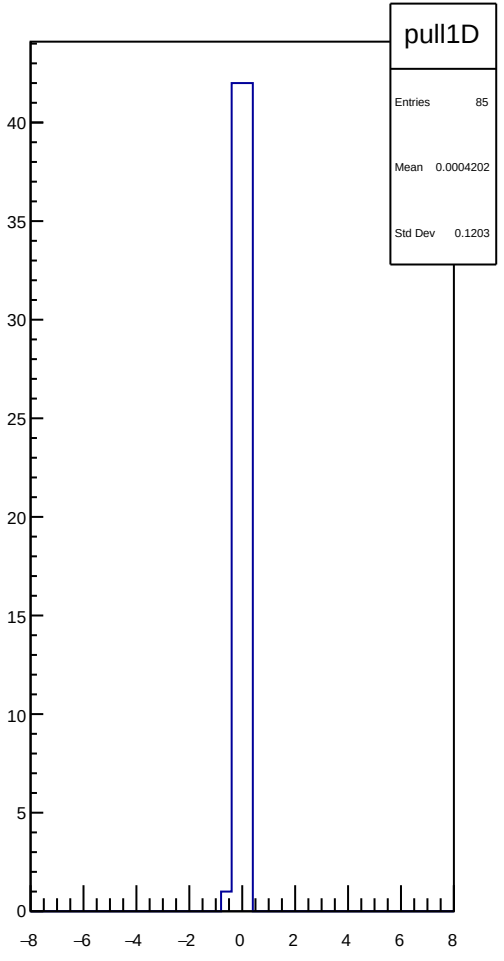

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.083 / 84
p0 −68.56 ± 1.632
pull
Entries 85
Mean 435
Std Dev 388.6
pull1D
Entries 85
Mean −0.003229
Std Dev 0.1904

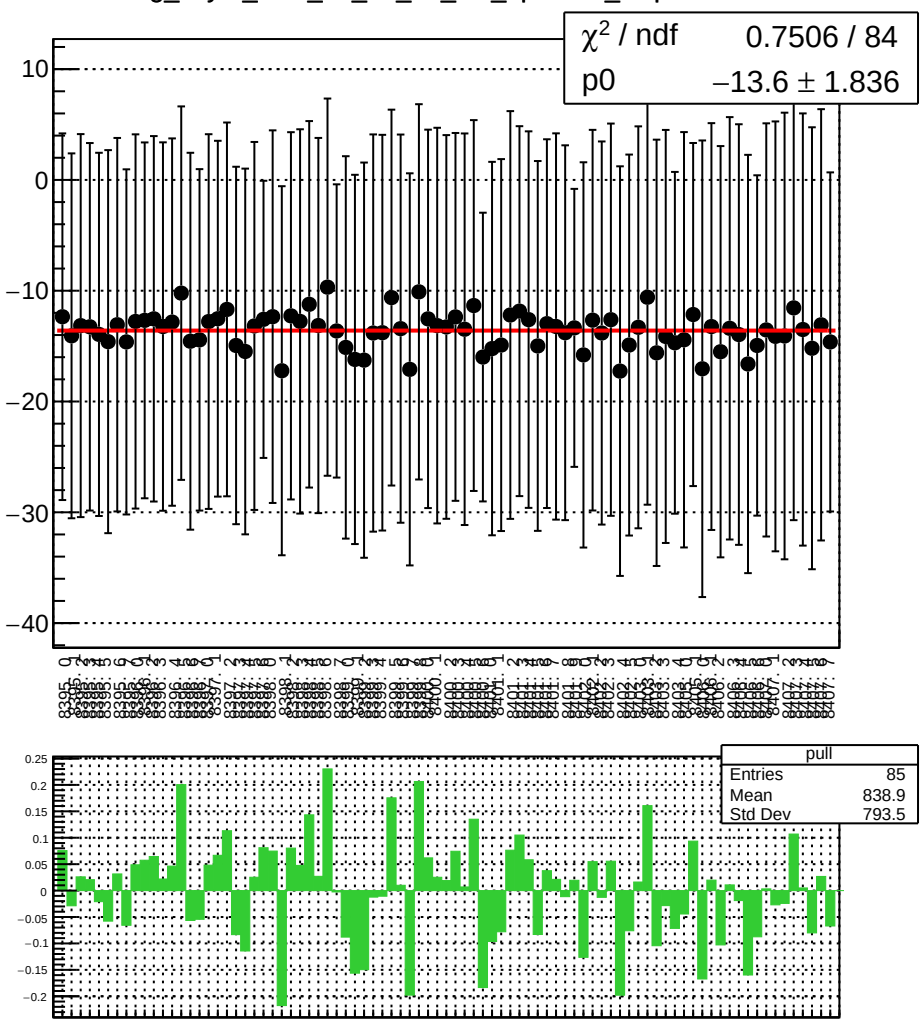

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.437 / 84
p0 −7.07 ± 2.791
pull
Entries 85
Mean −491.2
Std Dev 513.3
pull1D
Entries 85
Mean −0.0006534
Std Dev 0.13

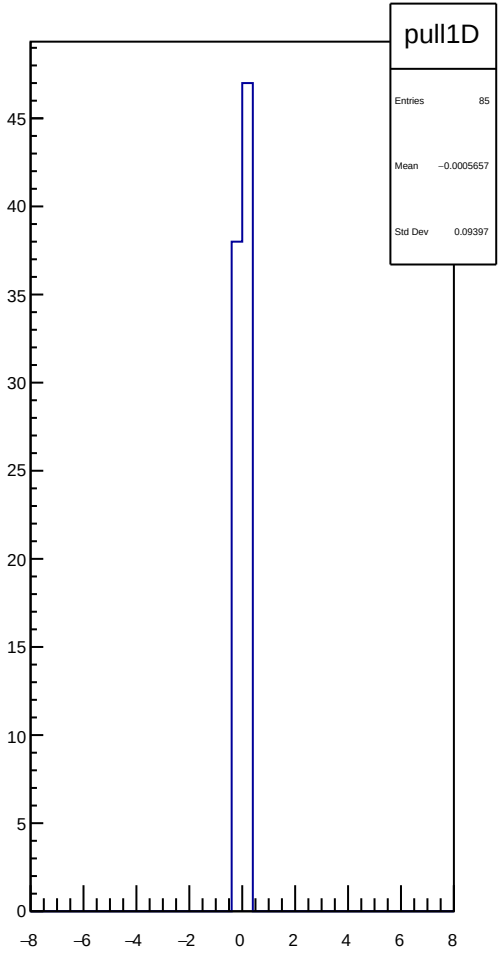

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 1.45 / 84
p0 2.516 ± 0.1722
pull
Entries 85
Mean 4.245
Std Dev 158.7

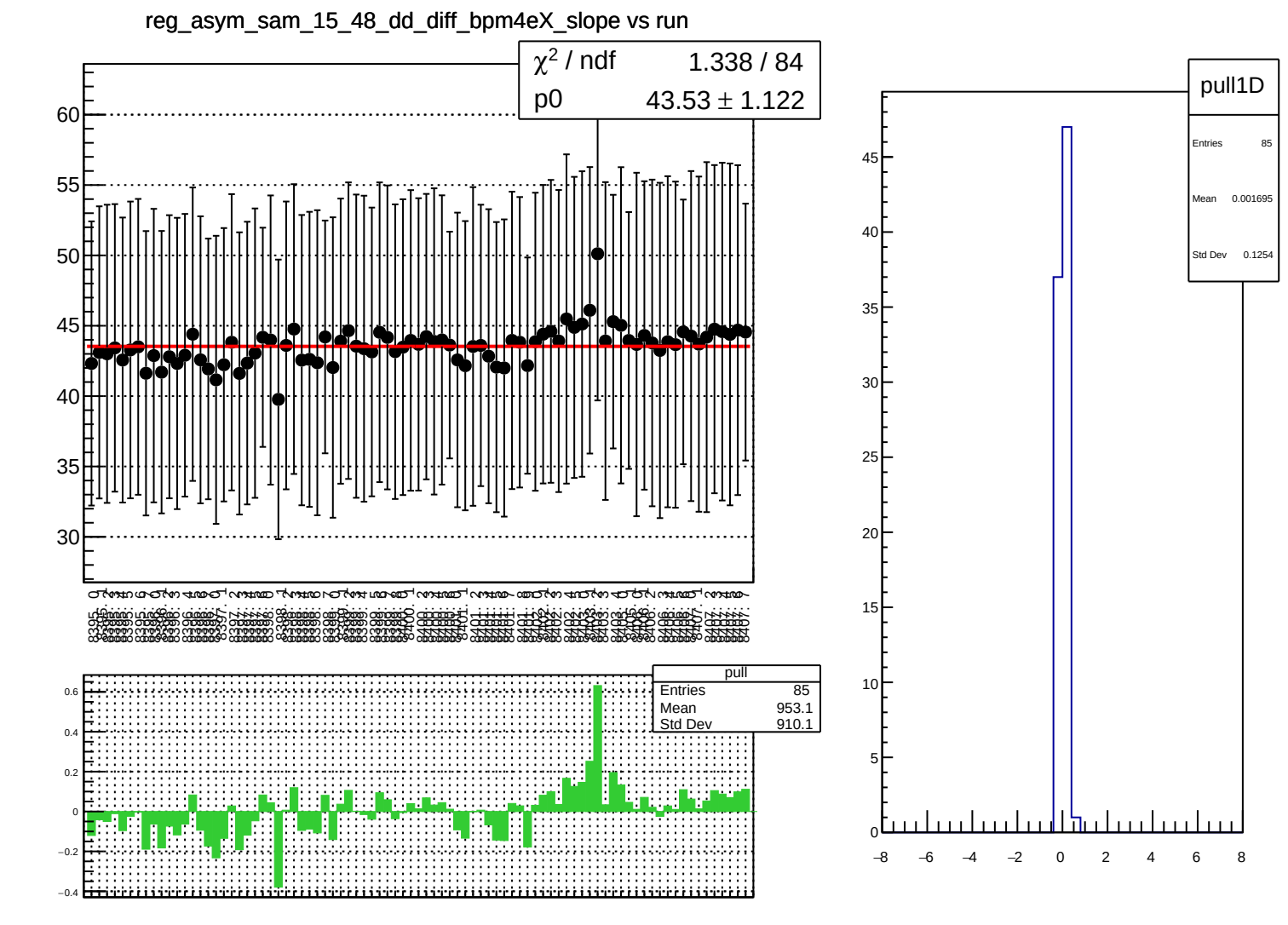

pull1D
Entries 85
Mean 0.0008985
Std Dev 0.1306

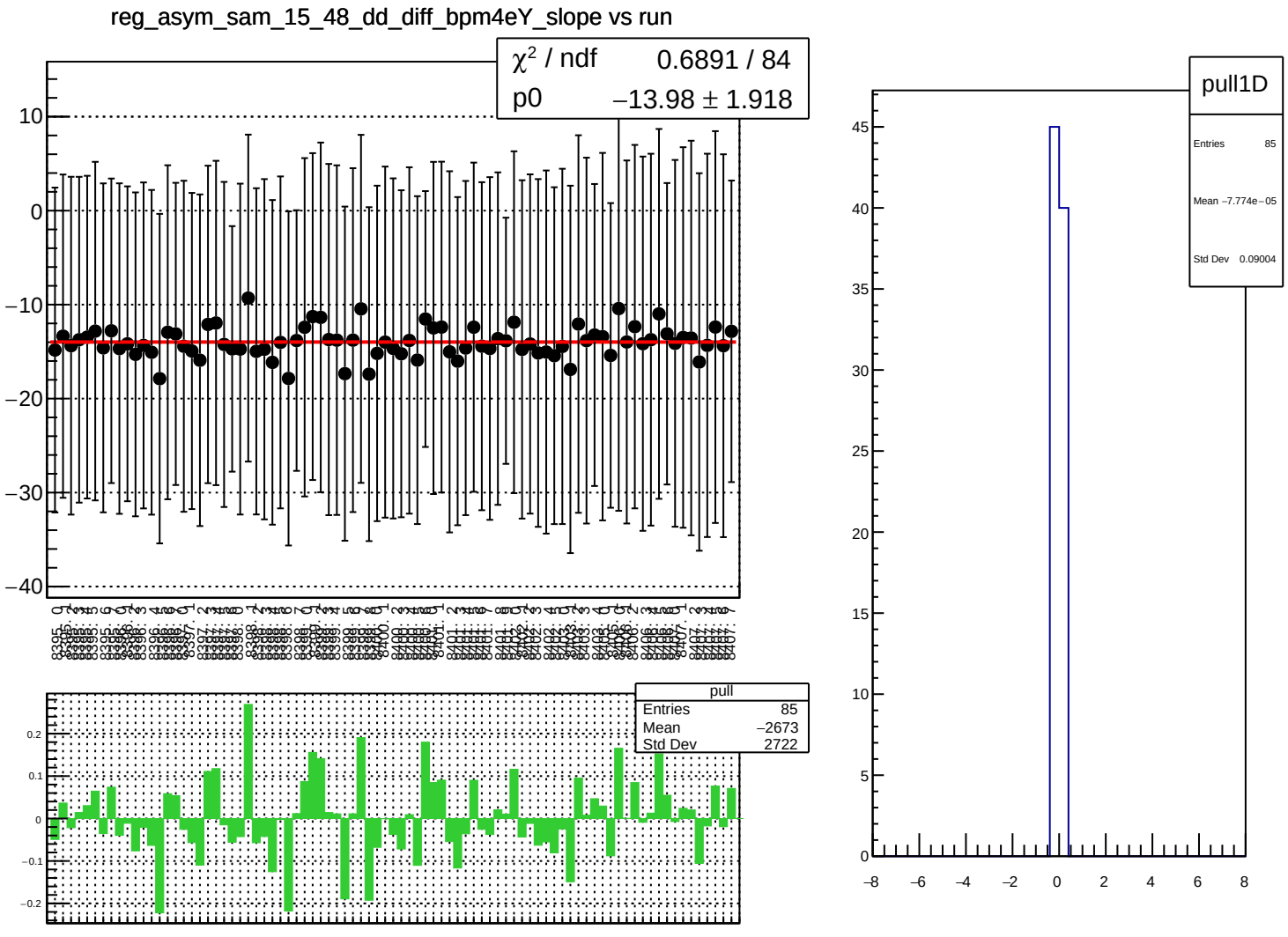

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.23 / 84
p0 4.925 ± 1.011
pull
Entries 85
Mean −2144
Std Dev 2187

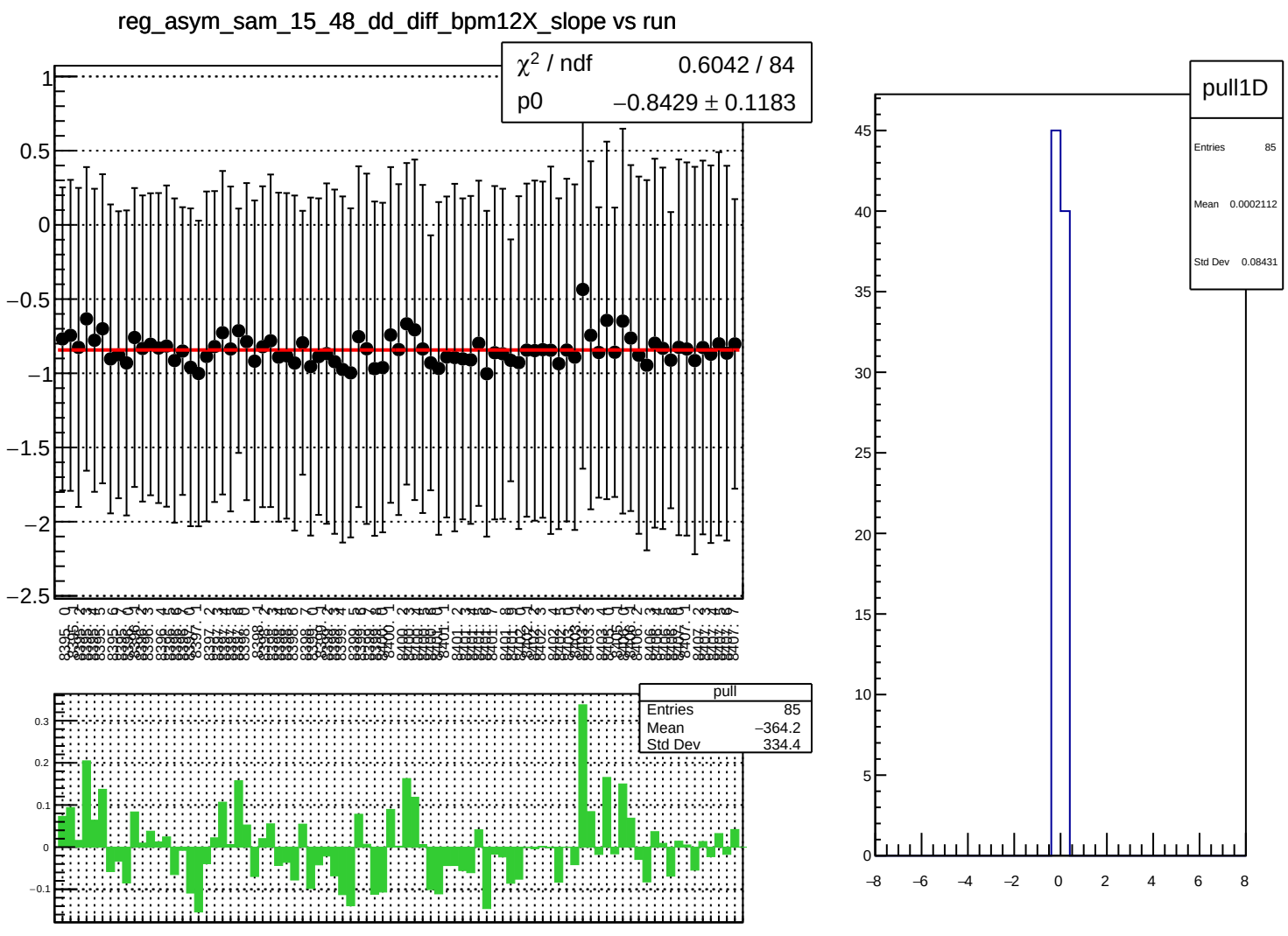

pull1D
Entries 85
Mean 0.0004202
Std Dev 0.1203

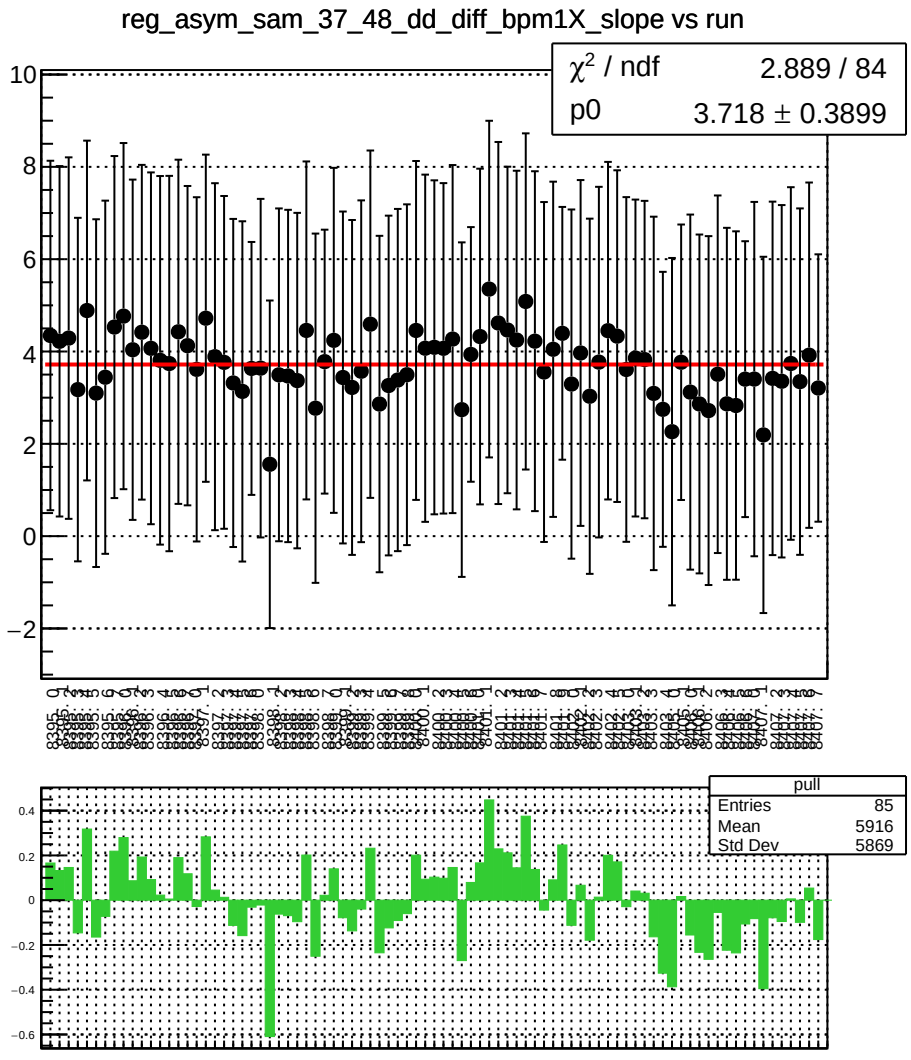

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.7506 / 84
p0 −13.6 ± 1.836
pull
Entries 85
Mean 838.9
Std Dev 793.5

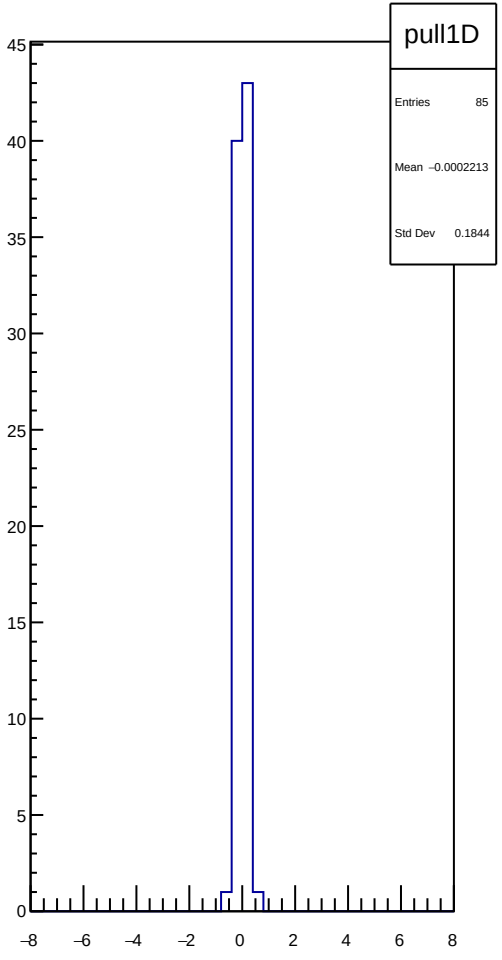

pull1D
Entries 85
Mean −0.0005657
Std Dev 0.09397

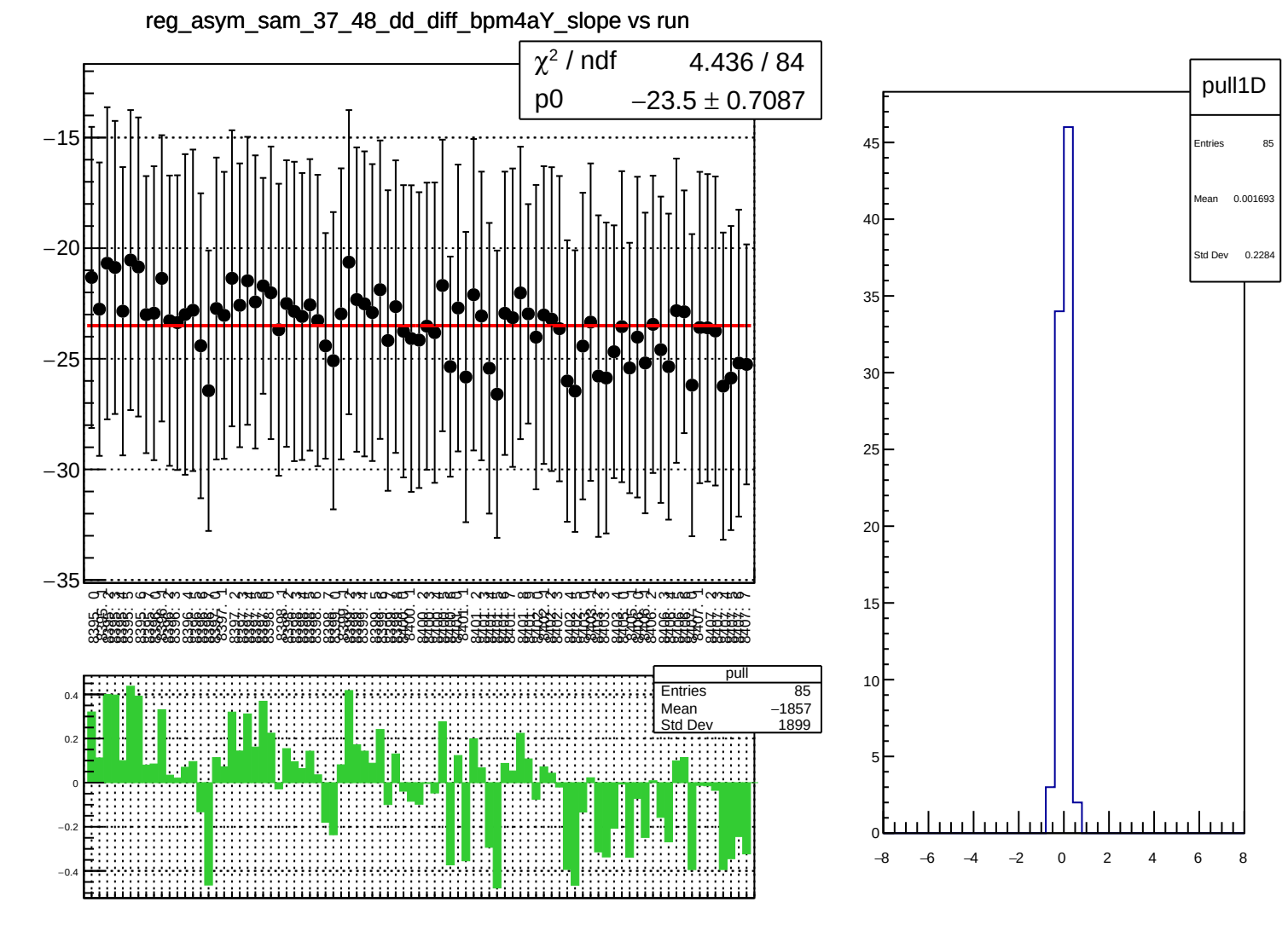

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.338 / 84
p0 43.53 ± 1.122
pull
Entries 85
Mean 953.1
Std Dev 910.1
pull1D
Entries 85
Mean 0.001695
Std Dev 0.1254

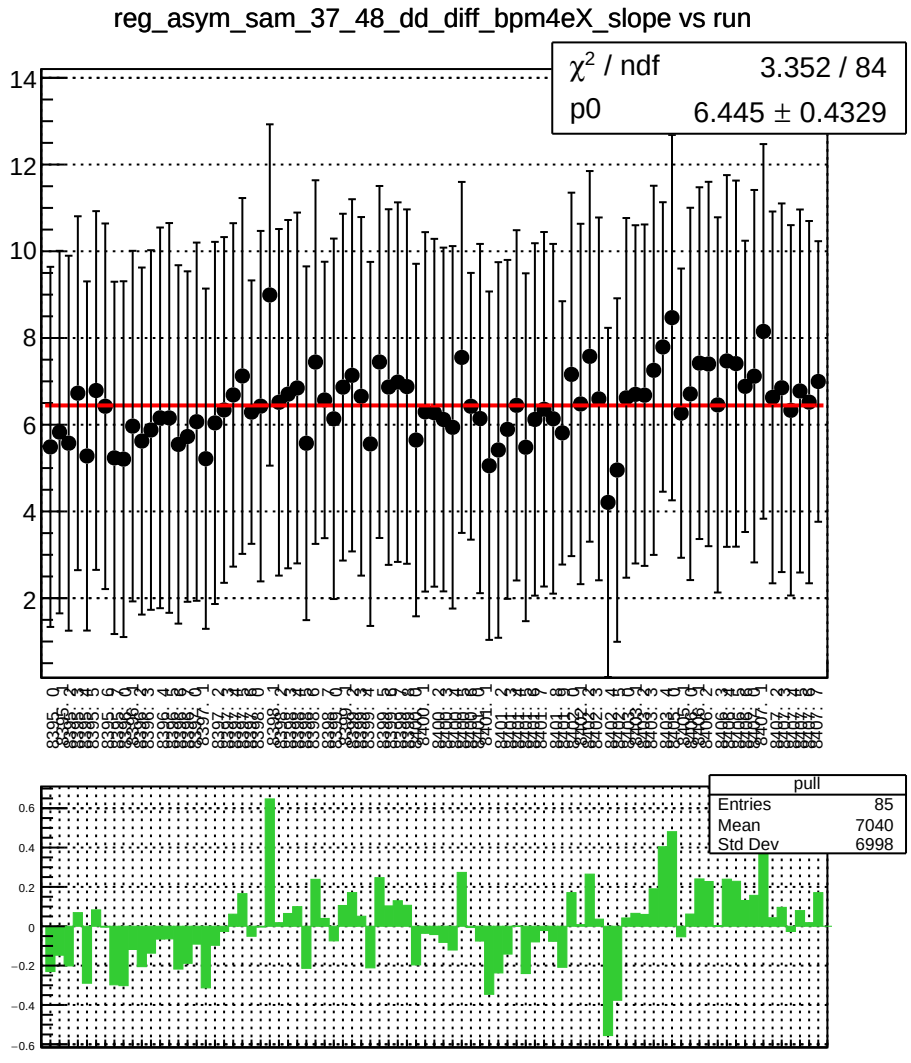

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.6891 / 84
p0 −13.98 ± 1.918
pull
Entries 85
Mean −2673
Std Dev 2722
pull1D
Entries 85
Mean −7.774e−05
Std Dev 0.09004

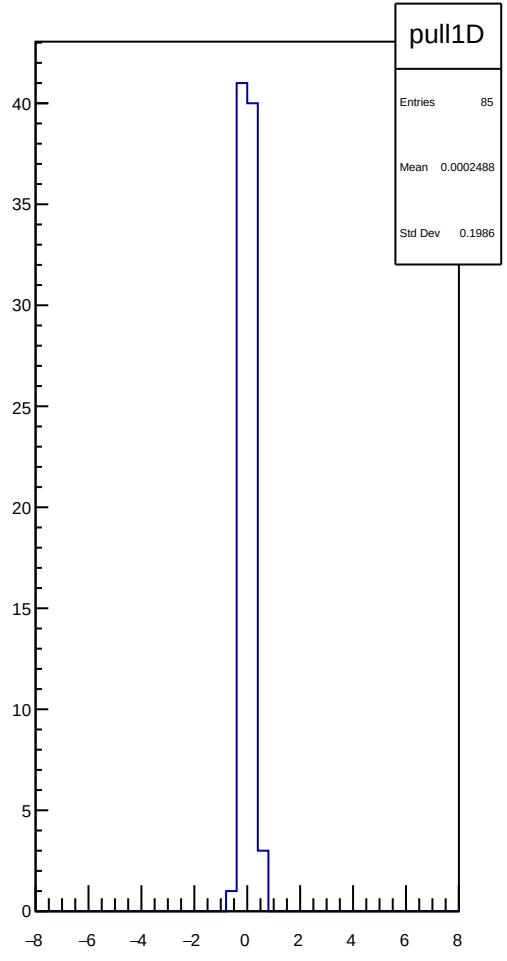

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 0.6042 / 84
p0 −0.8429 ± 0.1183
pull
Entries 85
Mean −364.2
Std Dev 334.4
pull1D
Entries 85
Mean 0.0002112
Std Dev 0.08431

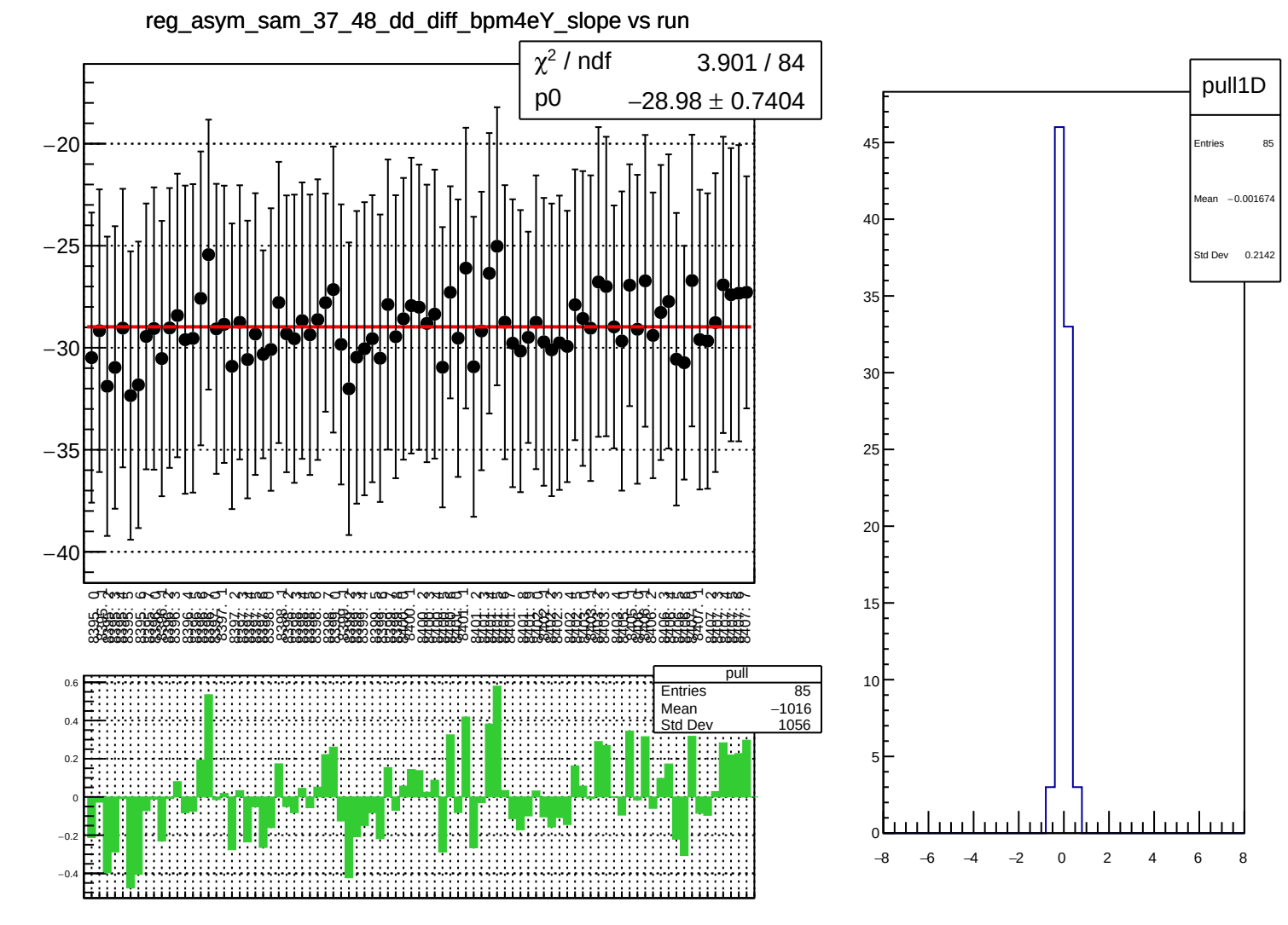

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 2.889 / 84
p0 3.718 ± 0.3899
pull
Entries 85
Mean 5916
Std Dev 5869

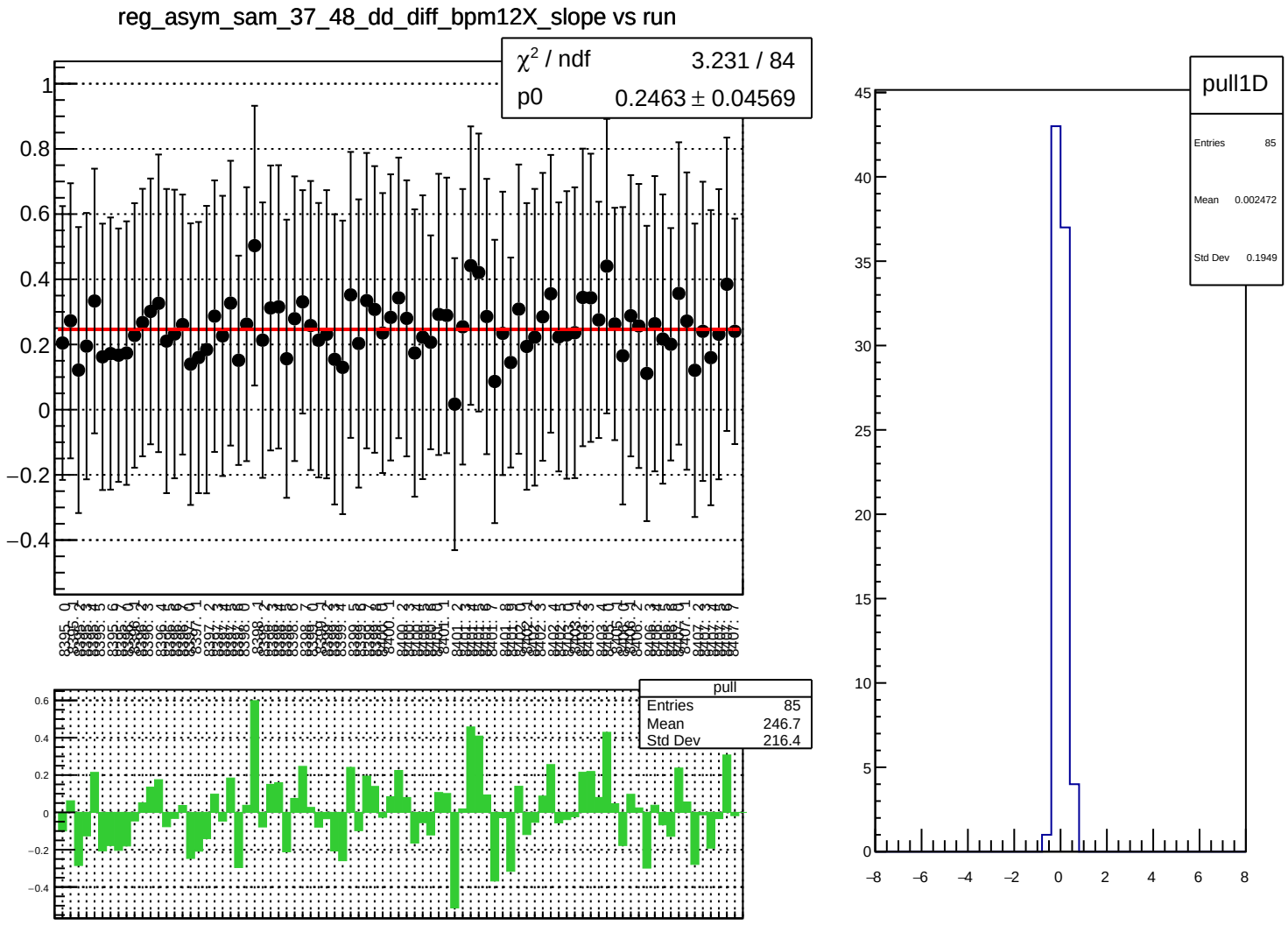

pull1D
Entries 85
Mean −0.0002213
Std Dev 0.1844

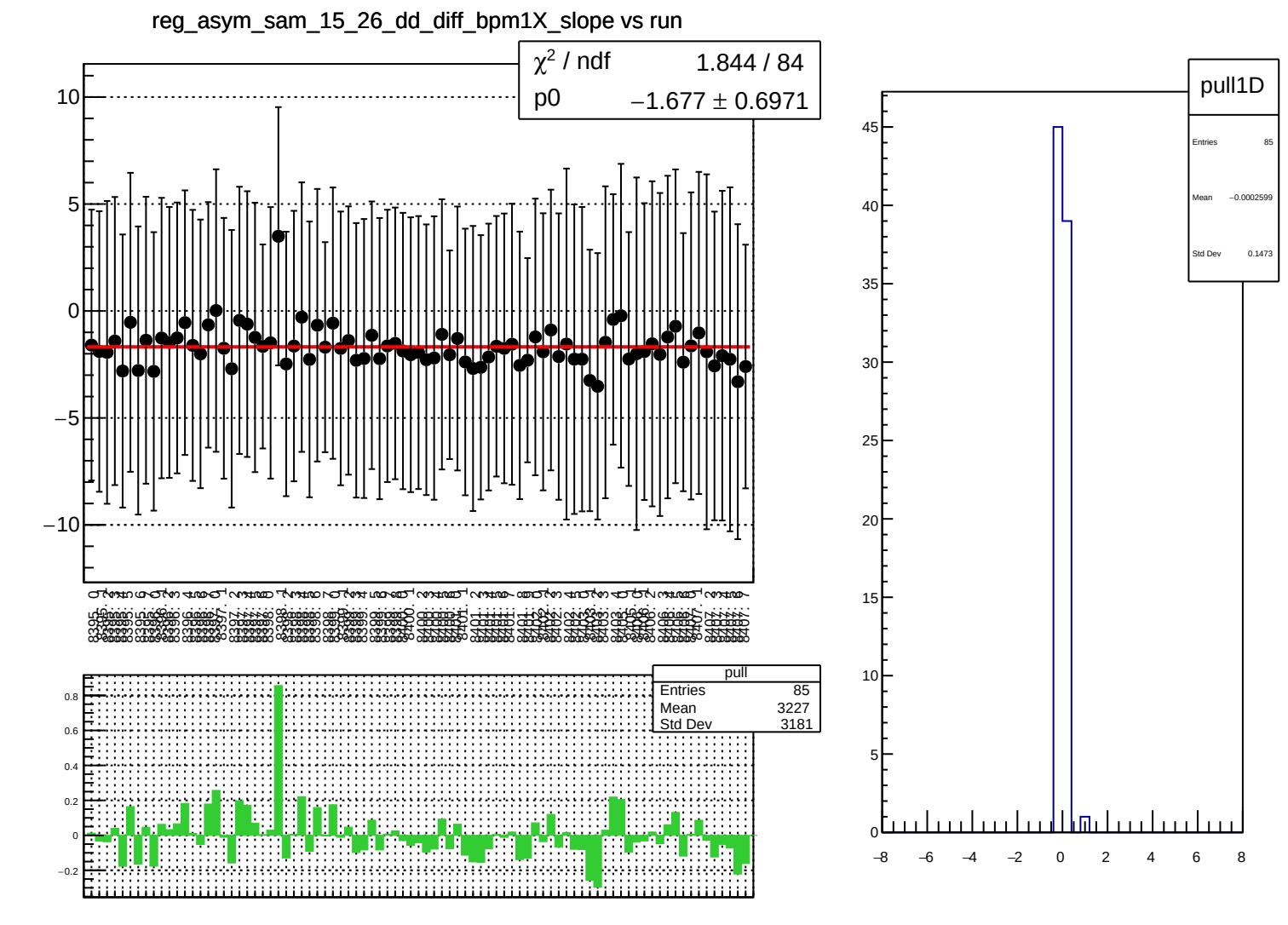

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.436 / 84
p0 −23.5 ± 0.7087
pull
Entries 85
Mean −1857
Std Dev 1899
pull1D
Entries 85
Mean 0.001693
Std Dev 0.2284

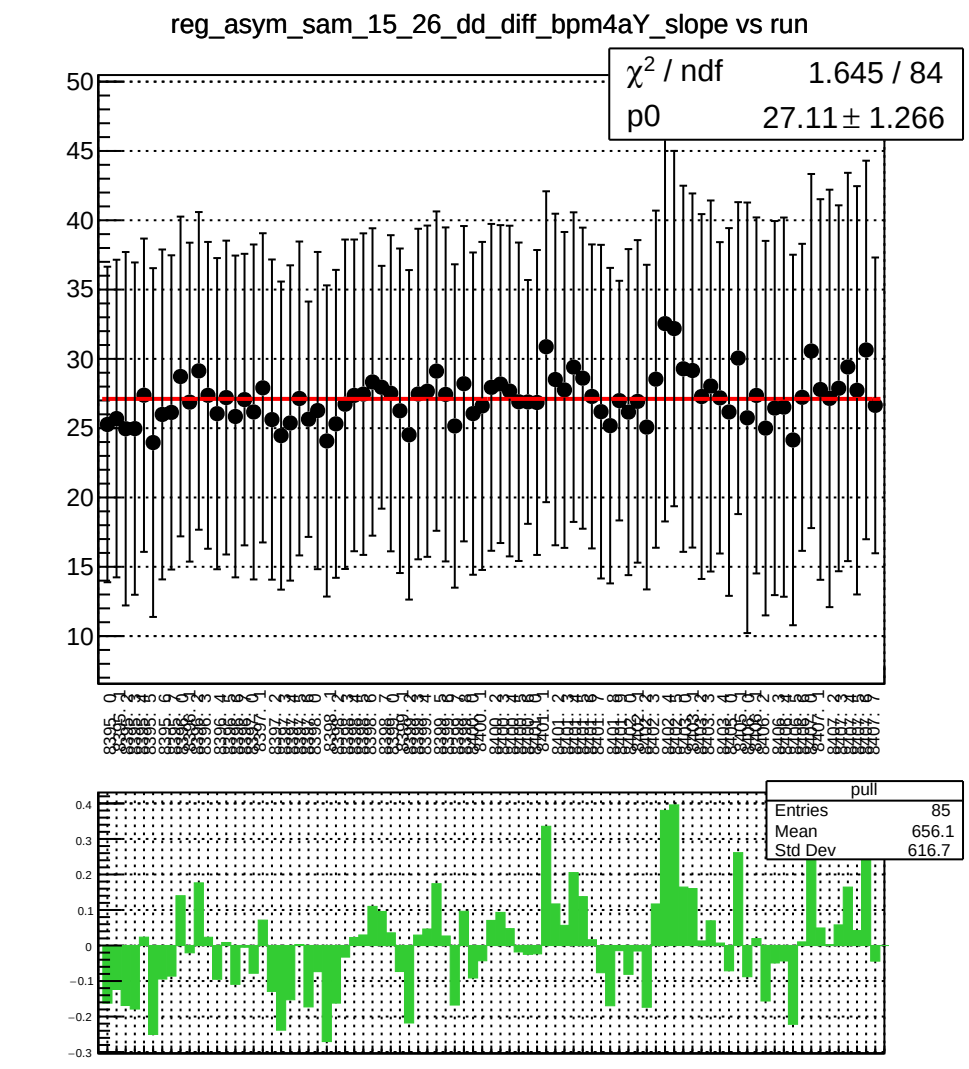

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.352 / 84
p0 6.445 ± 0.4329
pull
Entries 85
Mean 7040
Std Dev 6998

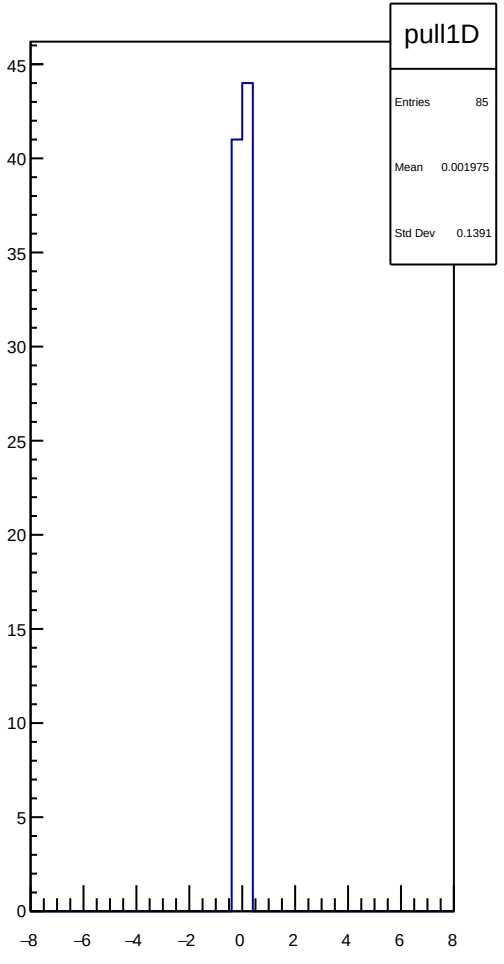

pull1D
Entries 85
Mean 0.0002488
Std Dev 0.1986

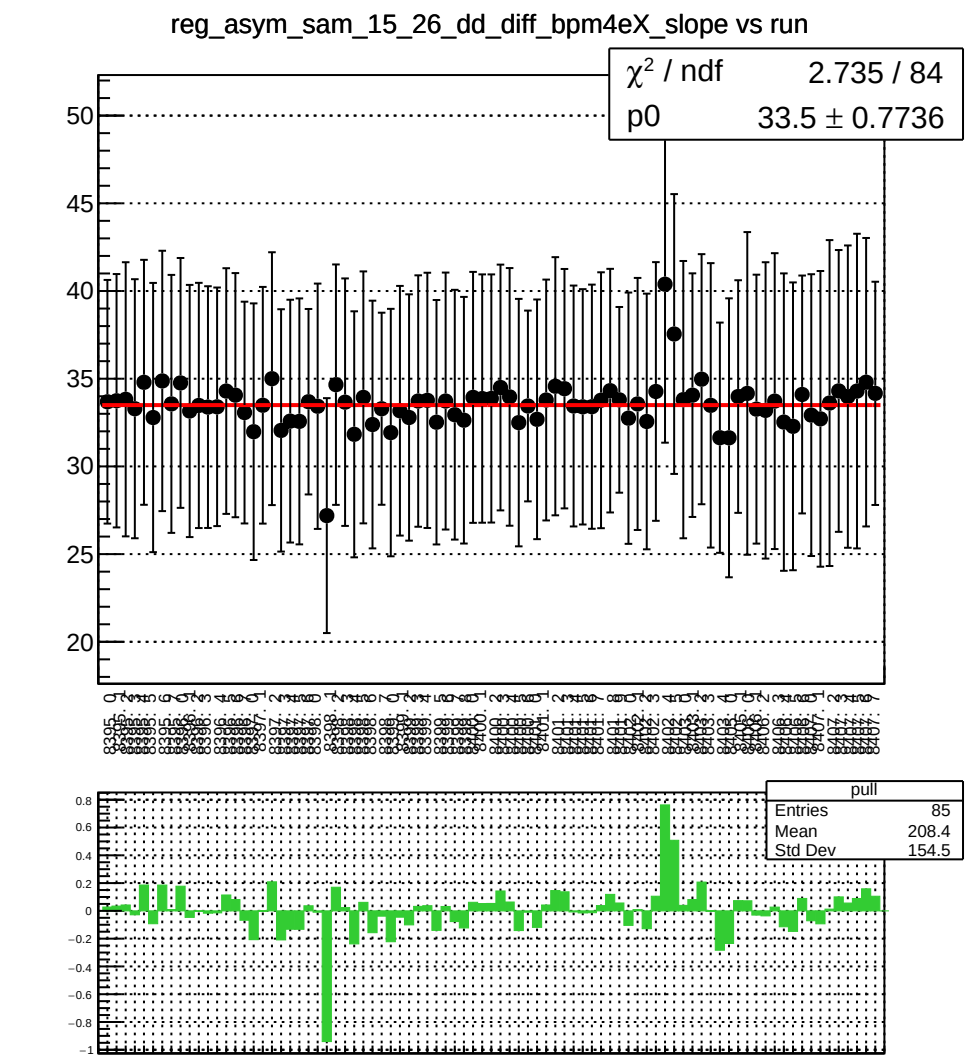

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.901 / 84
p0 −28.98 ± 0.7404
pull
Entries 85
Mean −1016
Std Dev 1056
pull1D
Entries 85
Mean −0.001674
Std Dev 0.2142

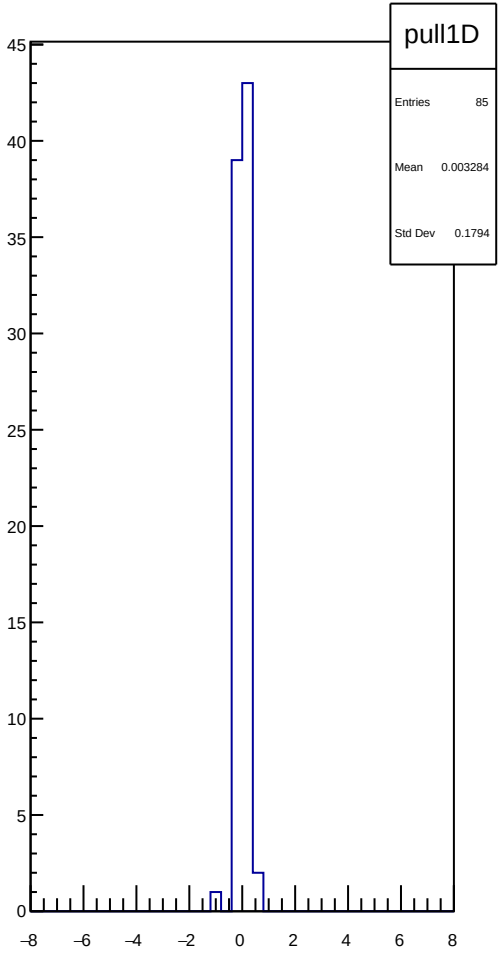

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 3.231 / 84
p0 0.2463 ± 0.04569
pull
Entries 85
Mean 246.7
Std Dev 216.4
pull1D
Entries 85
Mean 0.002472
Std Dev 0.1949

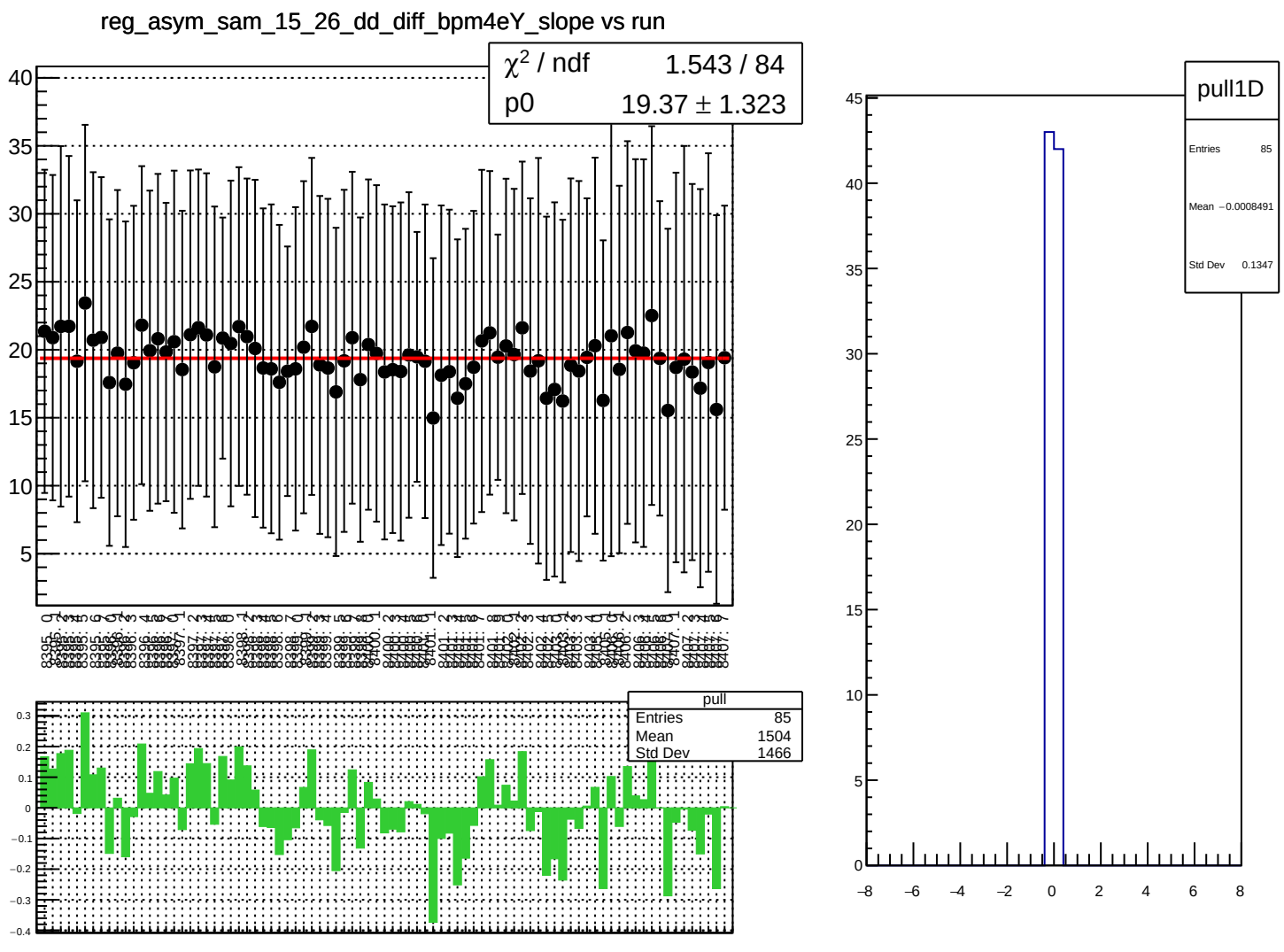

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 1.844 / 84
p0 −1.677 ± 0.6971
pull
Entries 85
Mean 3227
Std Dev 3181
pull1D
Entries 85
Mean −0.0002599
Std Dev 0.1473

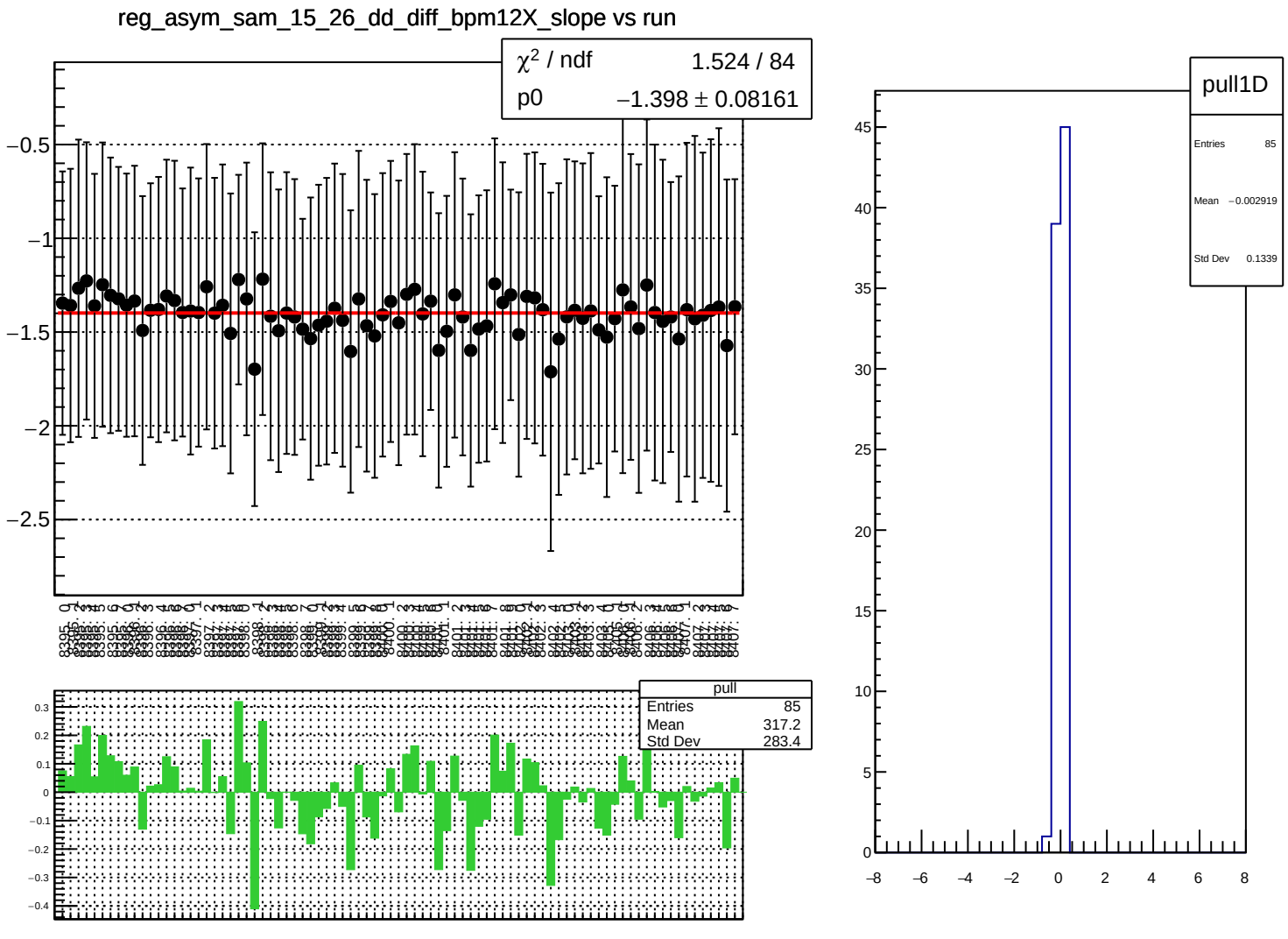

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.645 / 84
p0 27.11 ± 1.266
pull
Entries 85
Mean 656.1
Std Dev 616.7

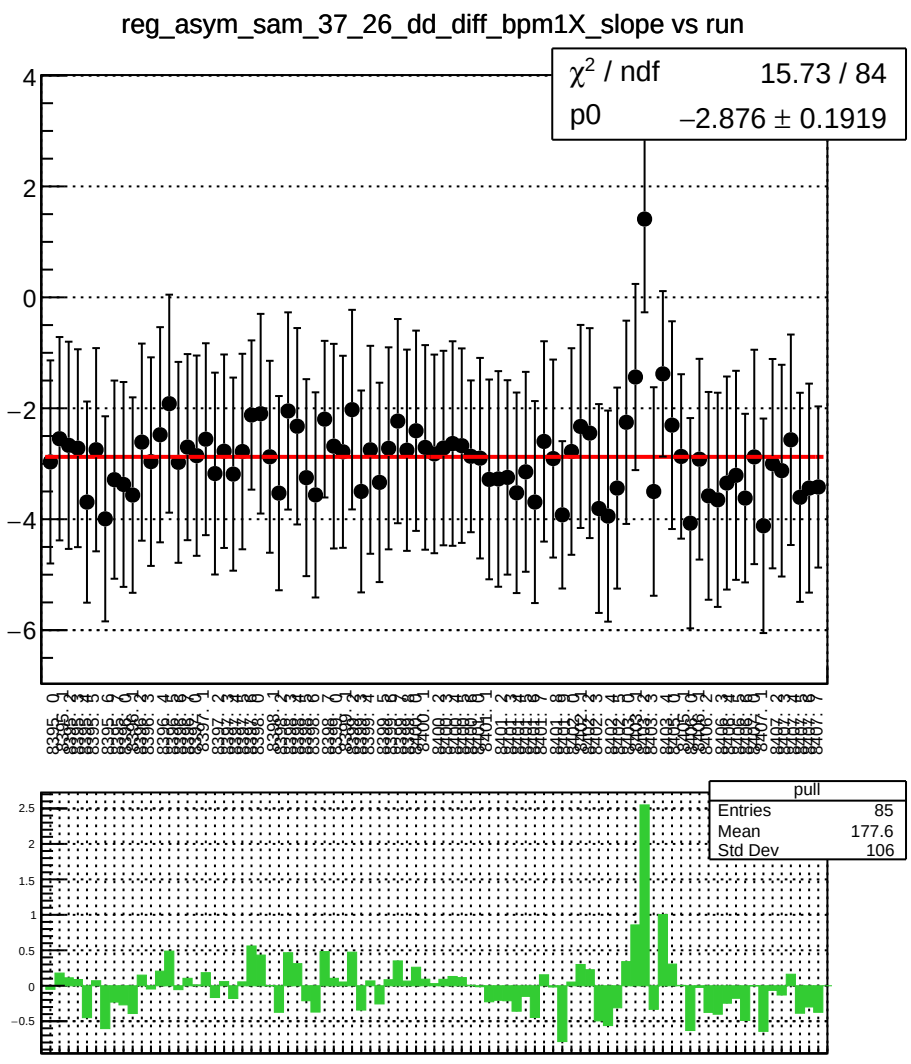

pull1D
Entries 85
Mean 0.001975
Std Dev 0.1391

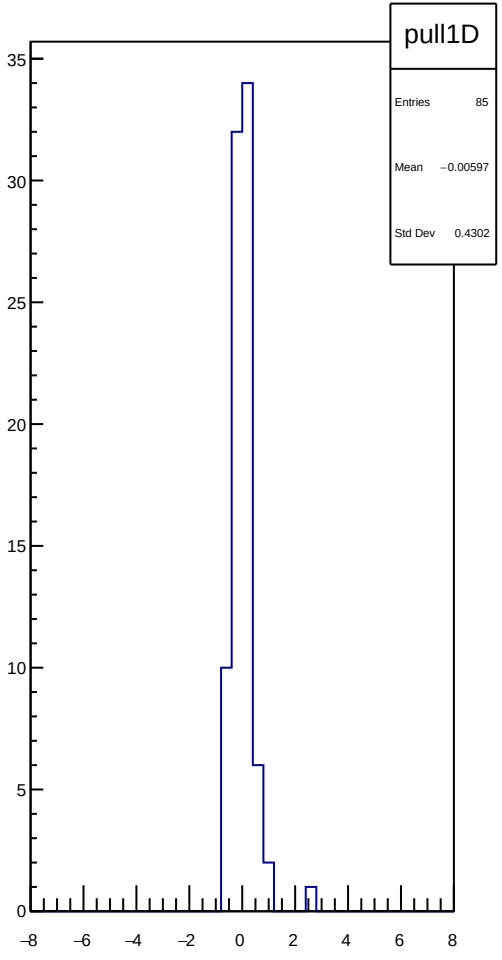

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.735 / 84
p0 33.5 ± 0.7736
pull
Entries 85
Mean 208.4
Std Dev 154.5

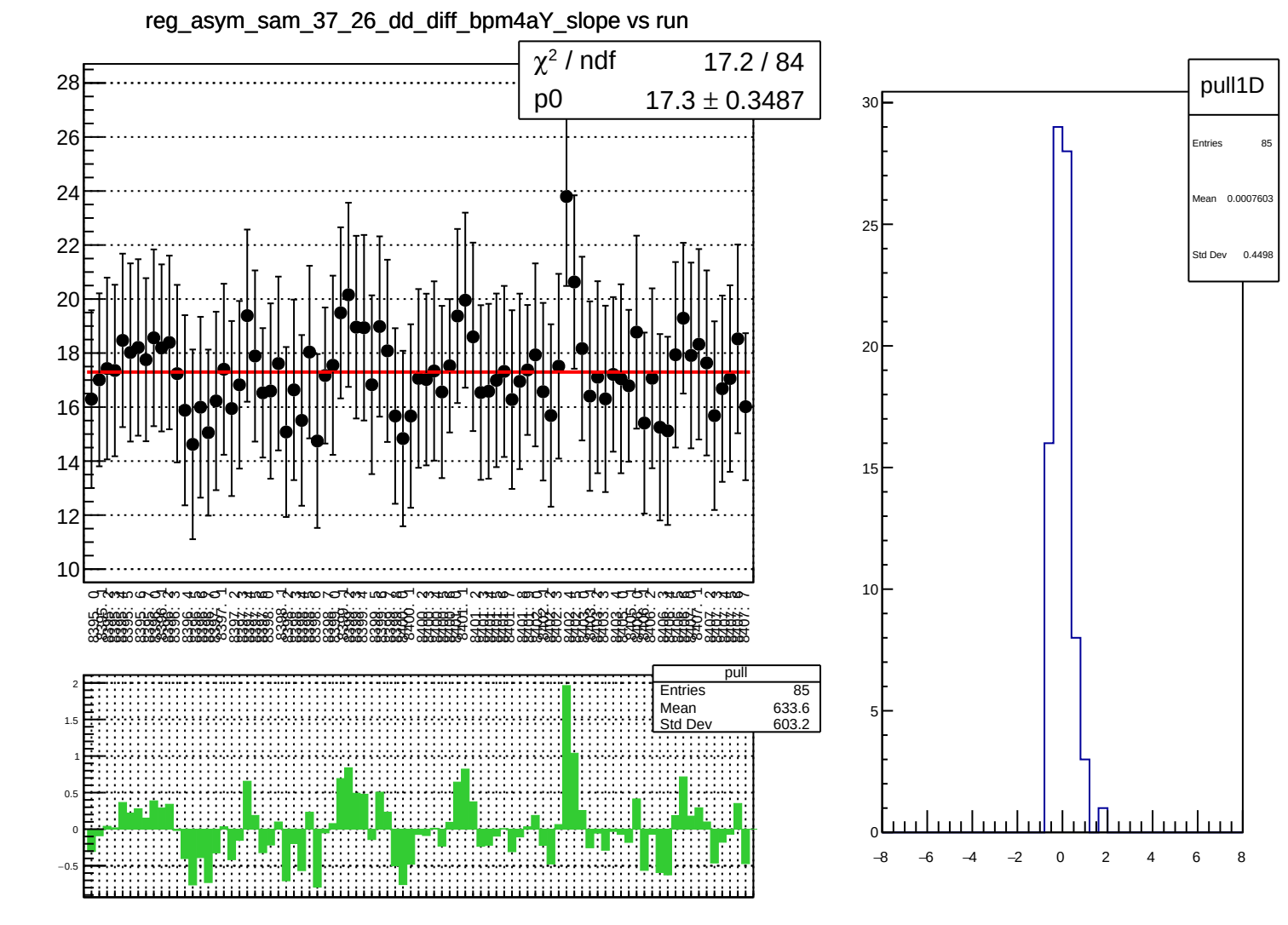

pull1D
Entries 85
Mean 0.003284
Std Dev 0.1794

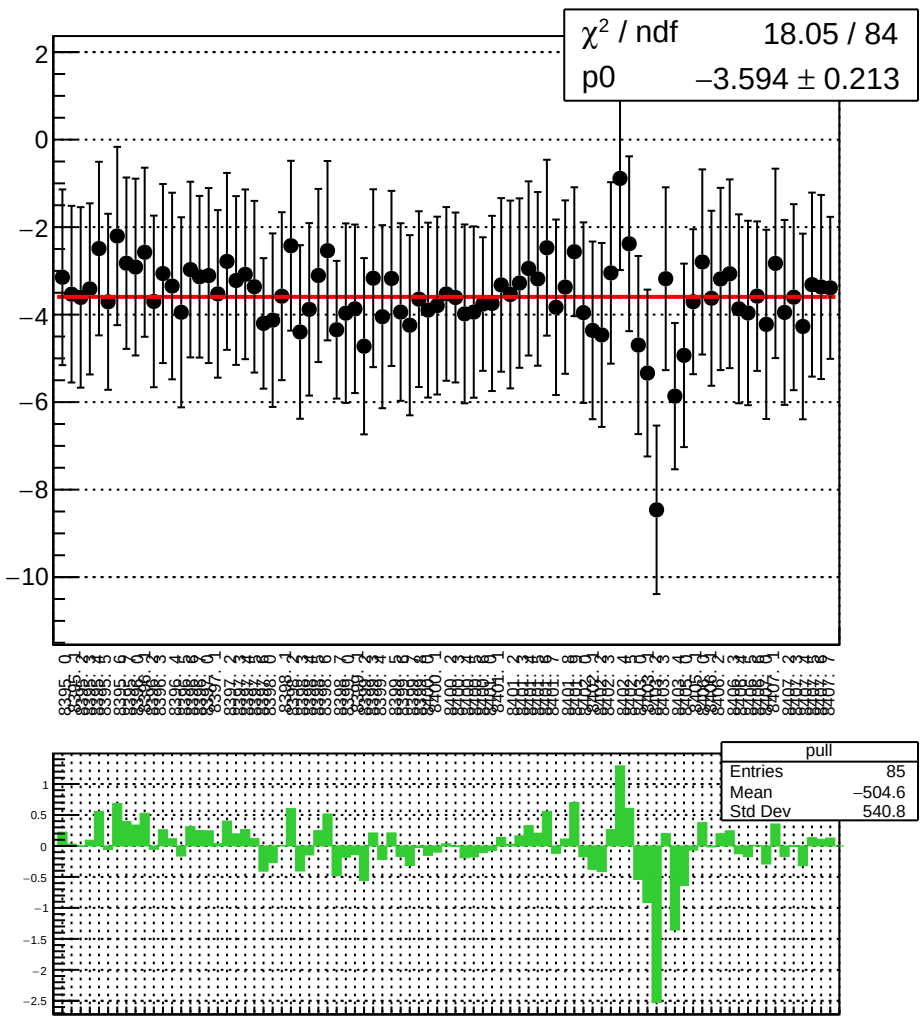

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.543 / 84
p0 19.37 ± 1.323
pull
Entries 85
Mean 1504
Std Dev 1466
pull1D
Entries 85
Mean −0.0008491
Std Dev 0.1347

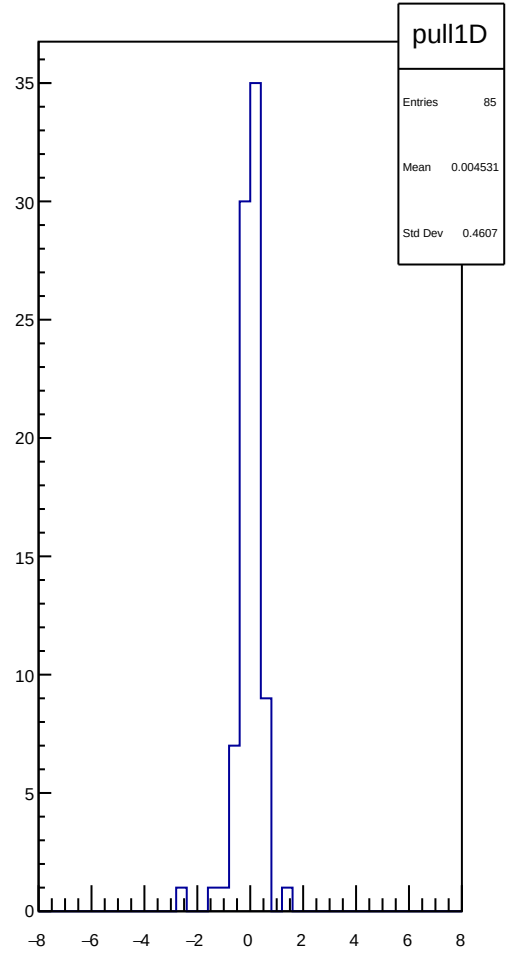

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 1.524 / 84
p0 −1.398 ± 0.08161
pull
Entries 85
Mean 317.2
Std Dev 283.4
pull1D
Entries 85
Mean −0.002919
Std Dev 0.1339

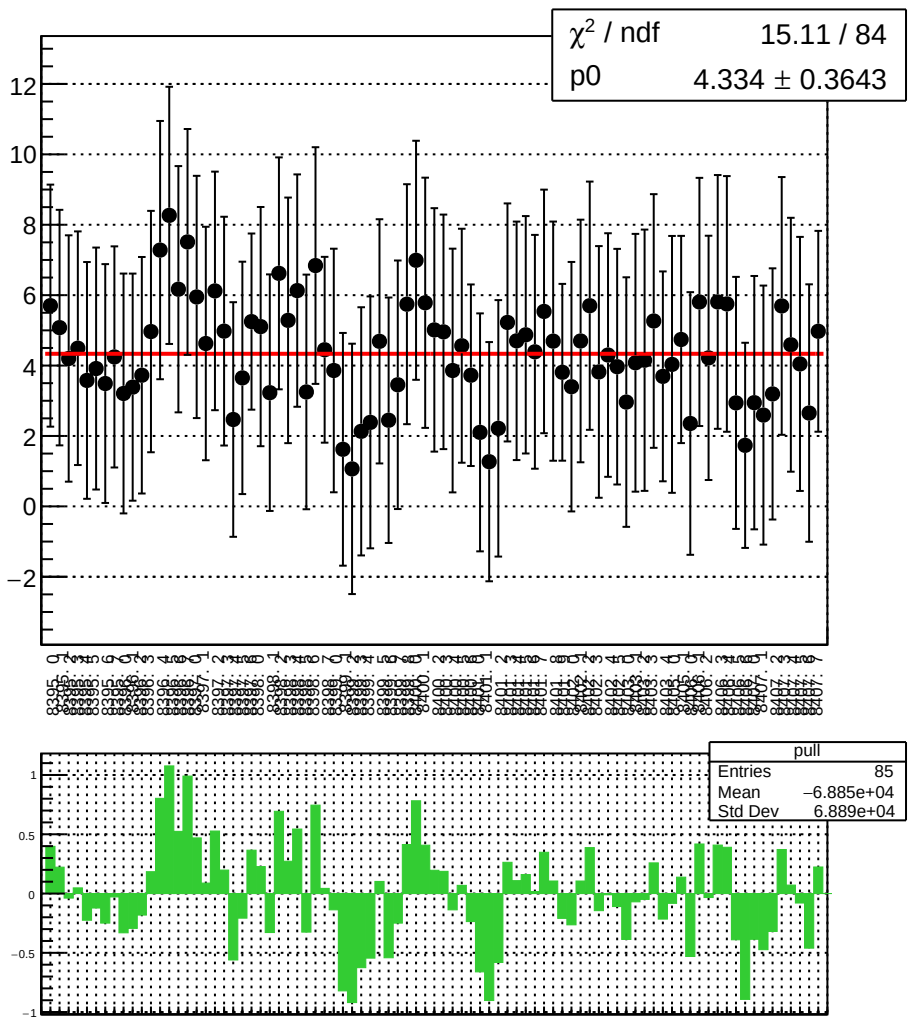

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 15.73 / 84
p0 −2.876 ± 0.1919
pull
Entries 85
Mean 177.6
Std Dev 106

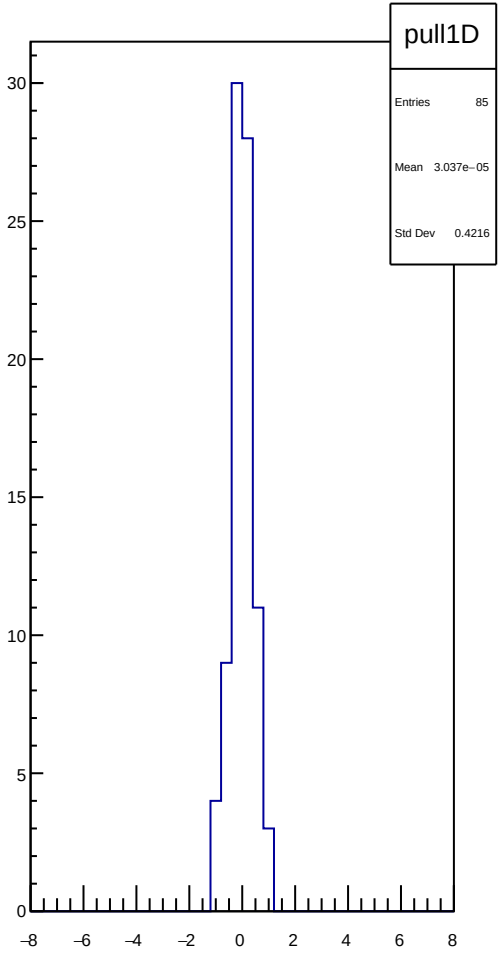

pull1D
Entries 85
Mean −0.00597
Std Dev 0.4302

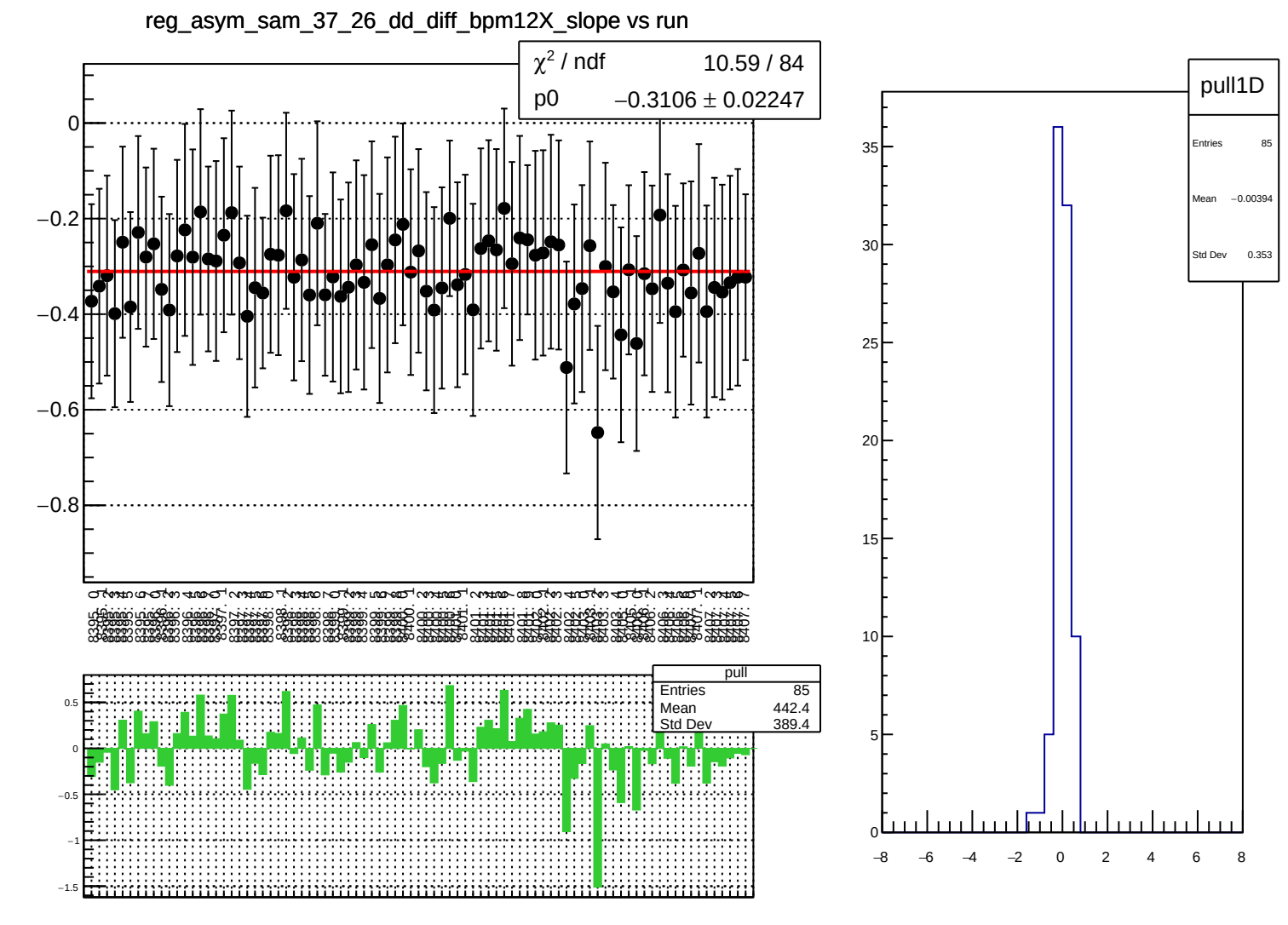

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 17.2 / 84
p0 17.3 ± 0.3487
pull
Entries 85
Mean 633.6
Std Dev 603.2
pull1D
Entries 85
Mean 0.0007603
Std Dev 0.4498

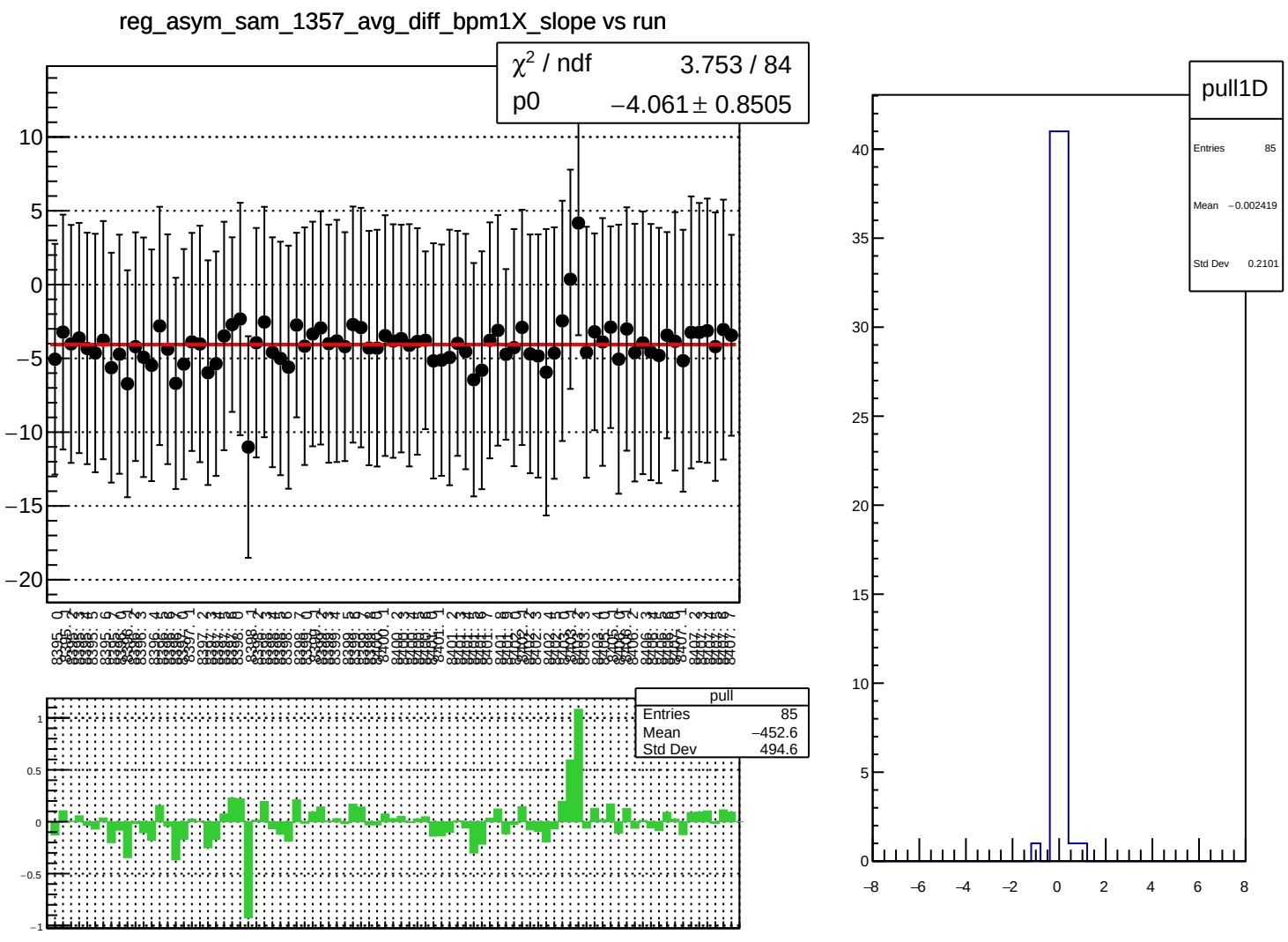

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.05 / 84
p0 −3.594 ± 0.213
pull
Entries 85
Mean −504.6
Std Dev 540.8

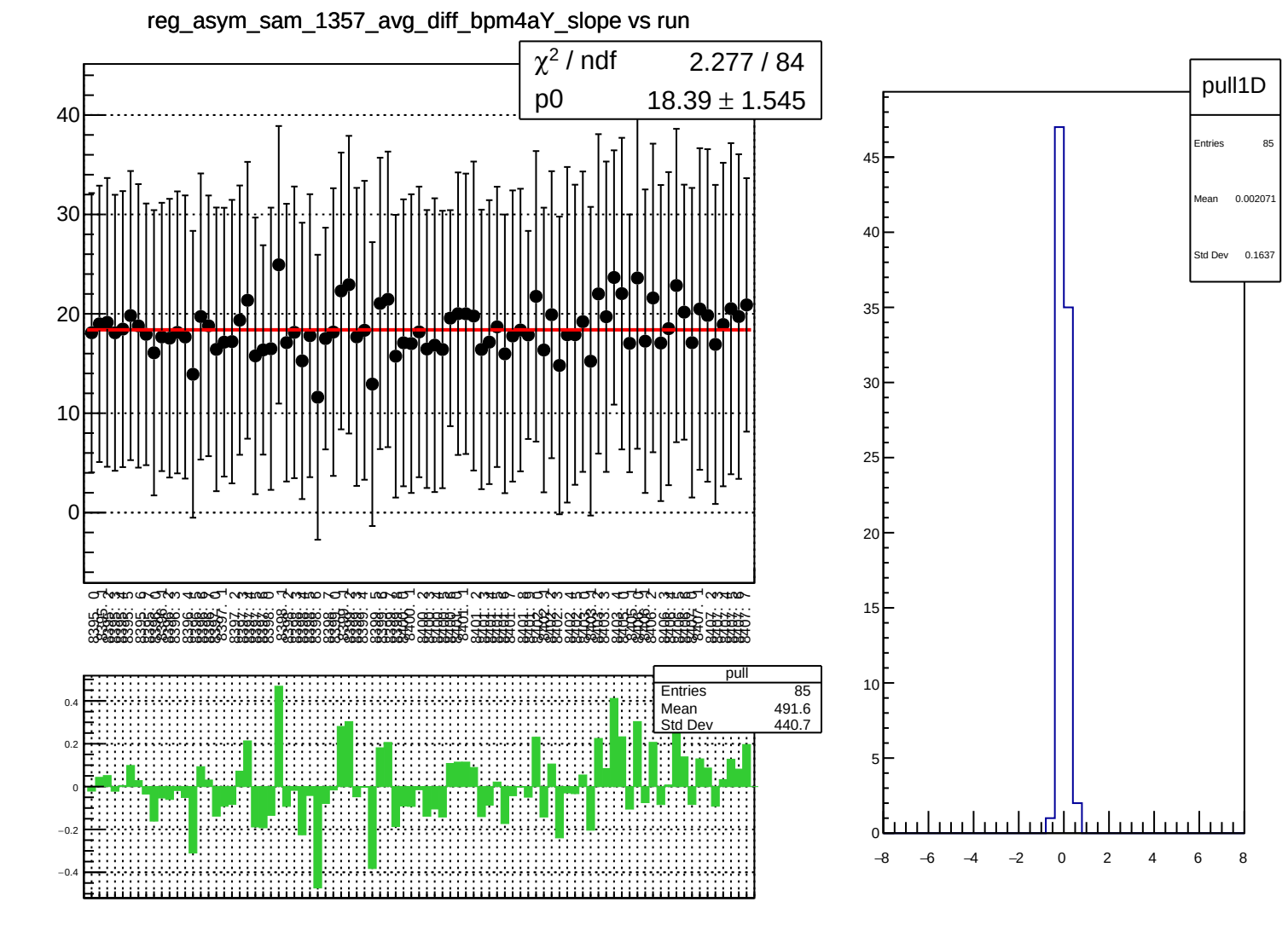

pull1D
Entries 85
Mean 0.004531
Std Dev 0.4607

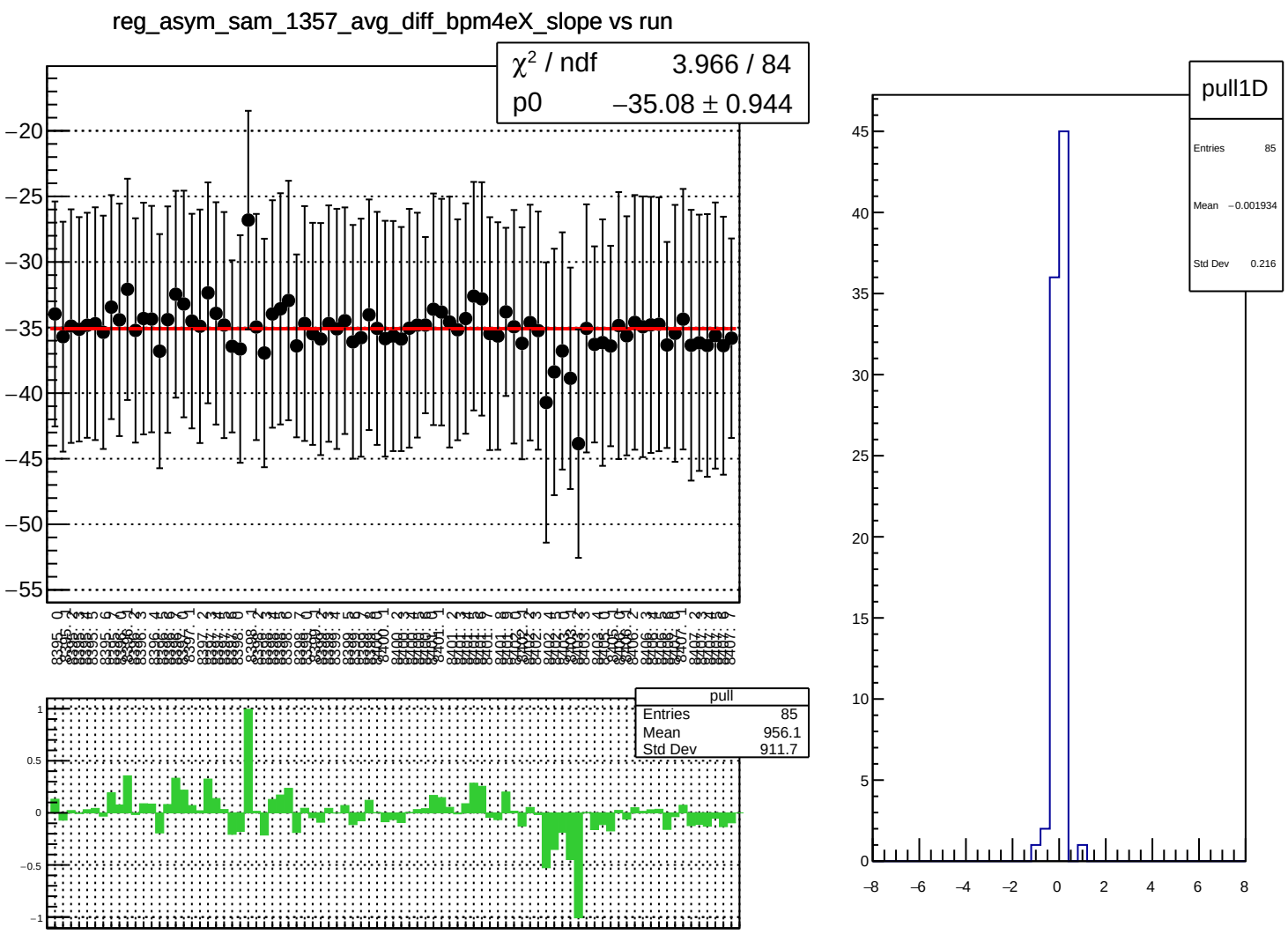

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 15.11 / 84
p0 4.334 ± 0.3643
pull
Entries 85
Mean −6.885e+04
Std Dev 6.889e+04

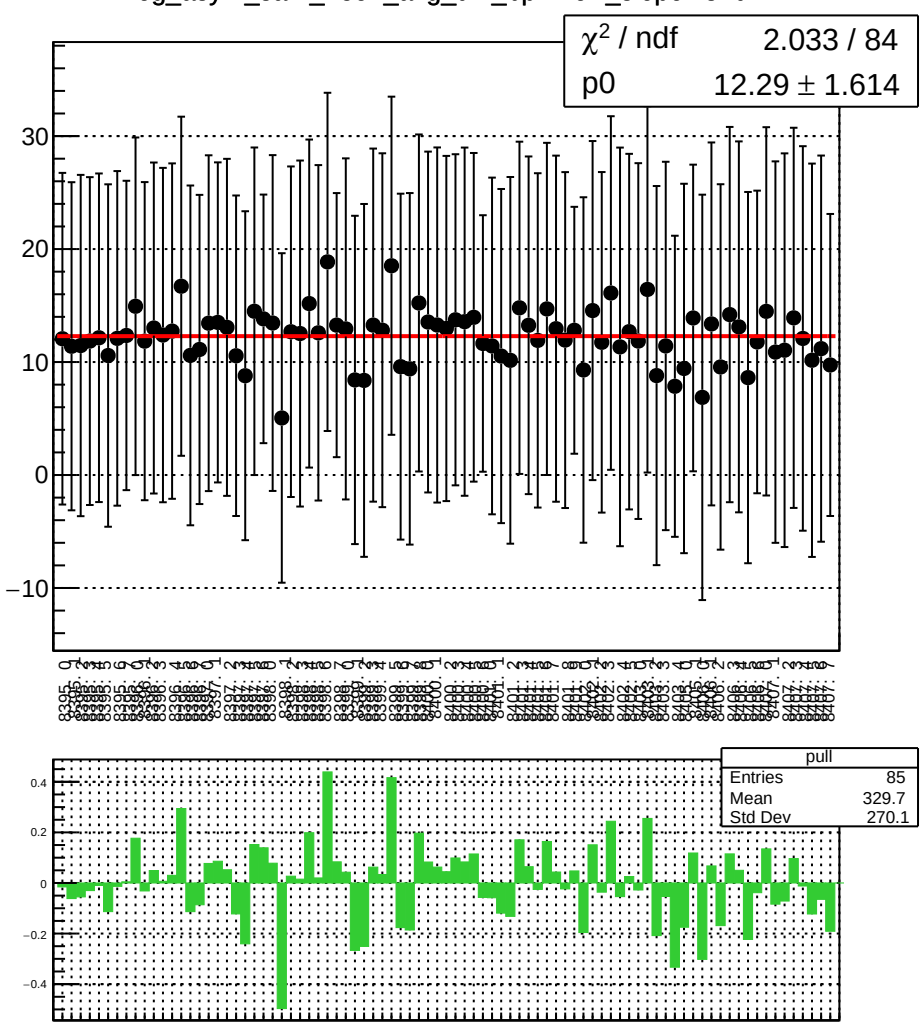

pull1D
Entries 85
Mean 3.037e−05
Std Dev 0.4216

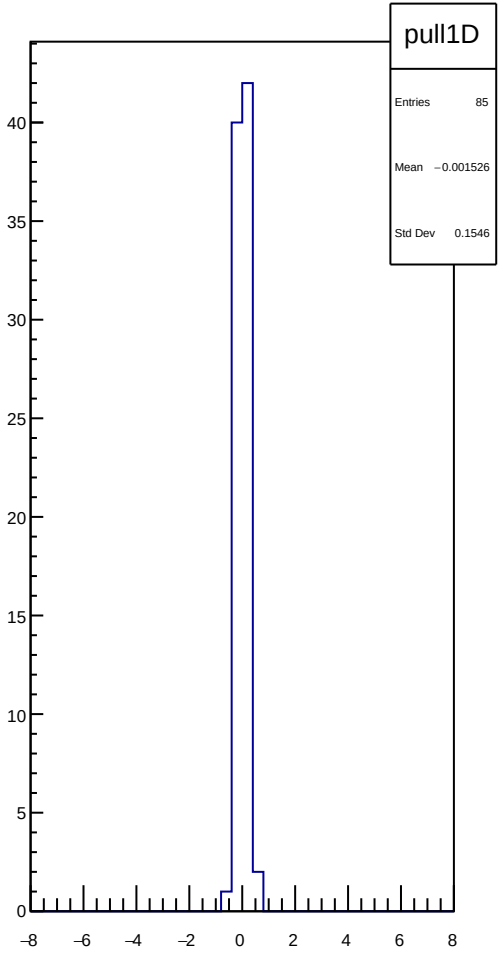

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 10.59 / 84
p0 −0.3106 ± 0.02247
pull
Entries 85
Mean 442.4
Std Dev 389.4
pull1D
Entries 85
Mean −0.00394
Std Dev 0.353

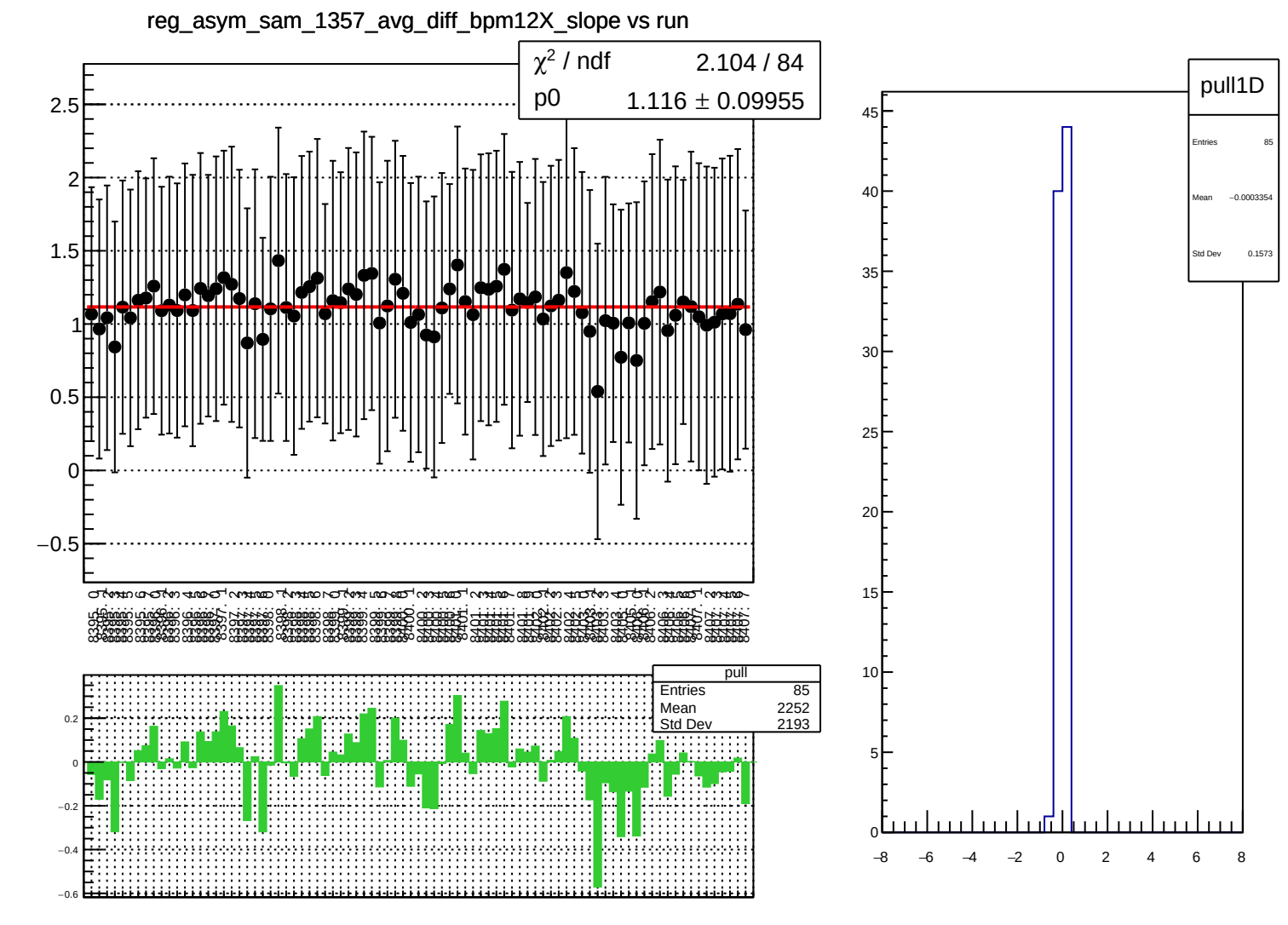

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 3.753 / 84
p0 −4.061 ± 0.8505
pull
Entries 85
Mean −452.6
Std Dev 494.6
pull1D
Entries 85
Mean −0.002419
Std Dev 0.2101

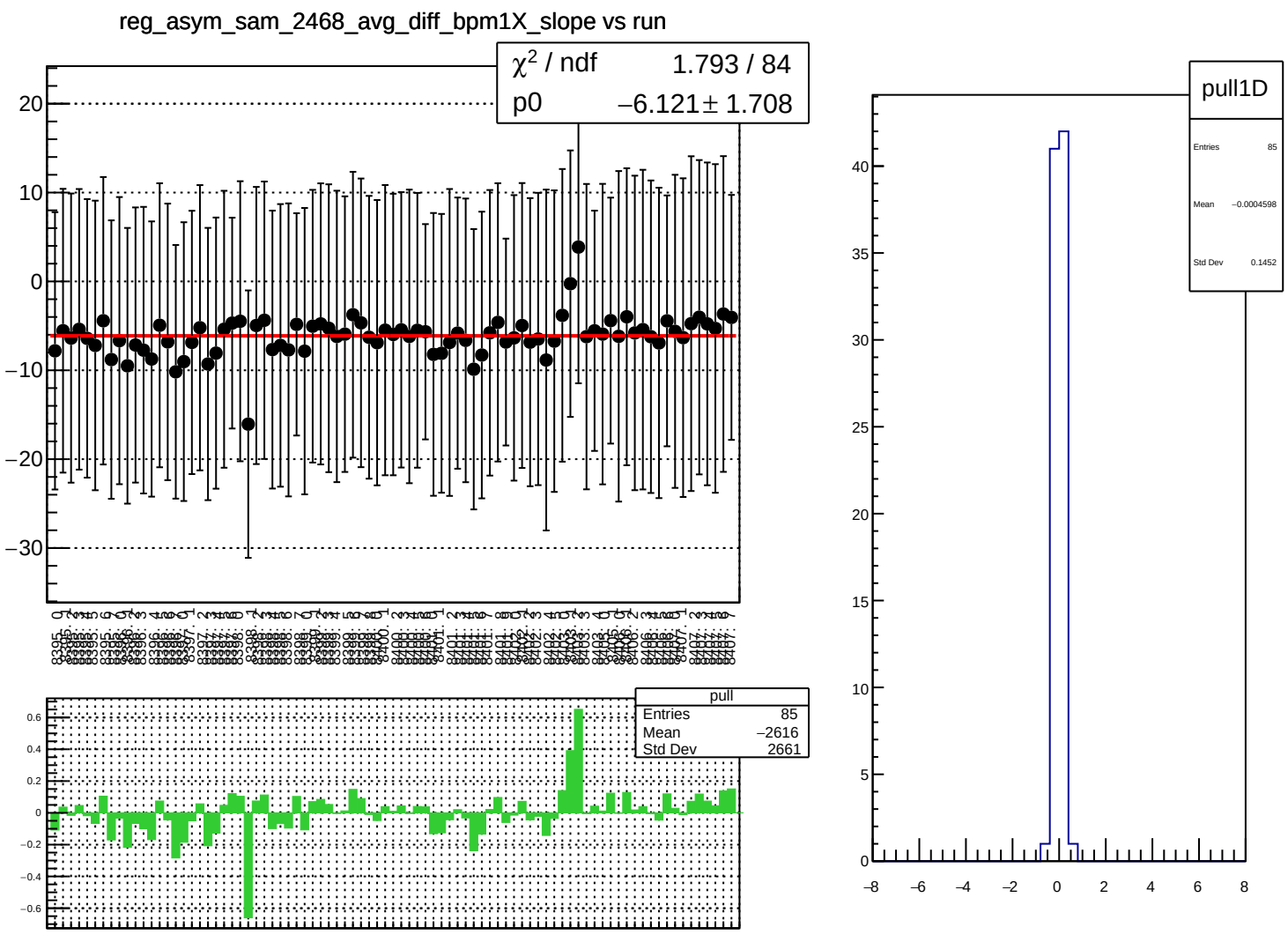

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.277 / 84
p0 18.39 ± 1.545
pull
Entries 85
Mean 491.6
Std Dev 440.7
pull1D
Entries 85
Mean 0.002071
Std Dev 0.1637

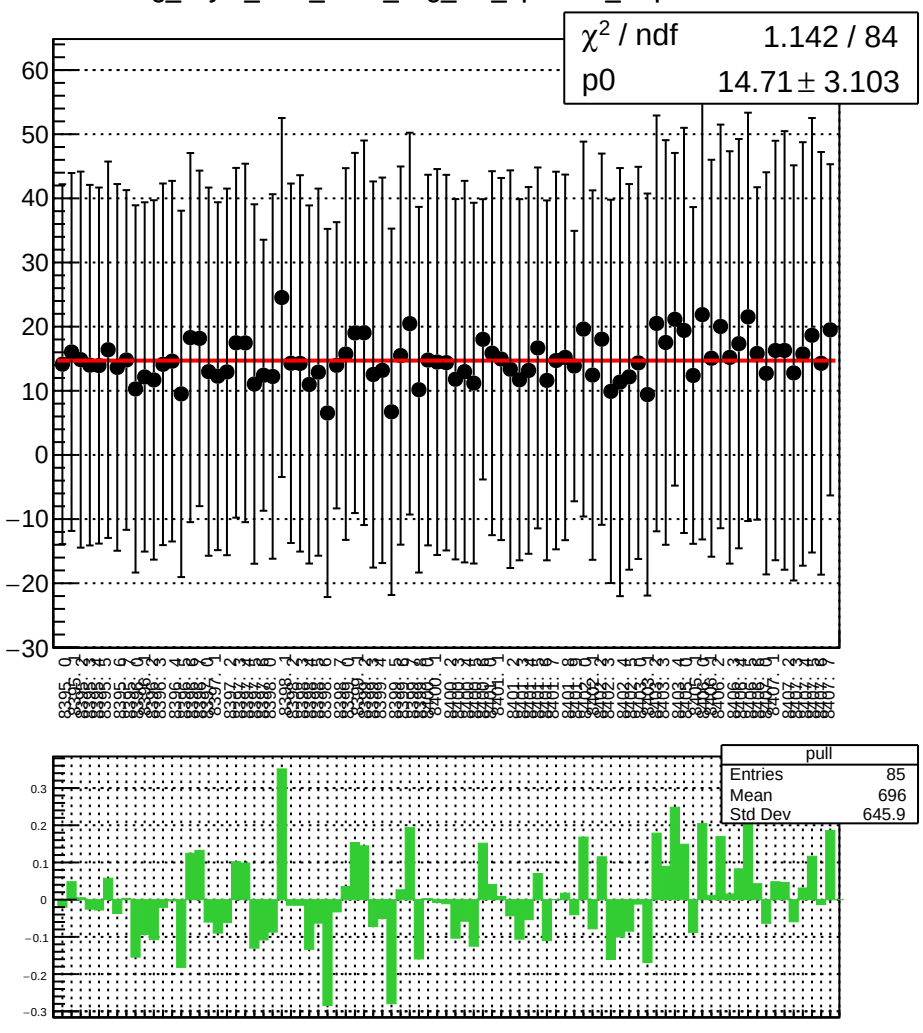

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.966 / 84
p0 −35.08 ± 0.944
pull
Entries 85
Mean 956.1
Std Dev 911.7
pull1D
Entries 85
Mean −0.001934
Std Dev 0.216

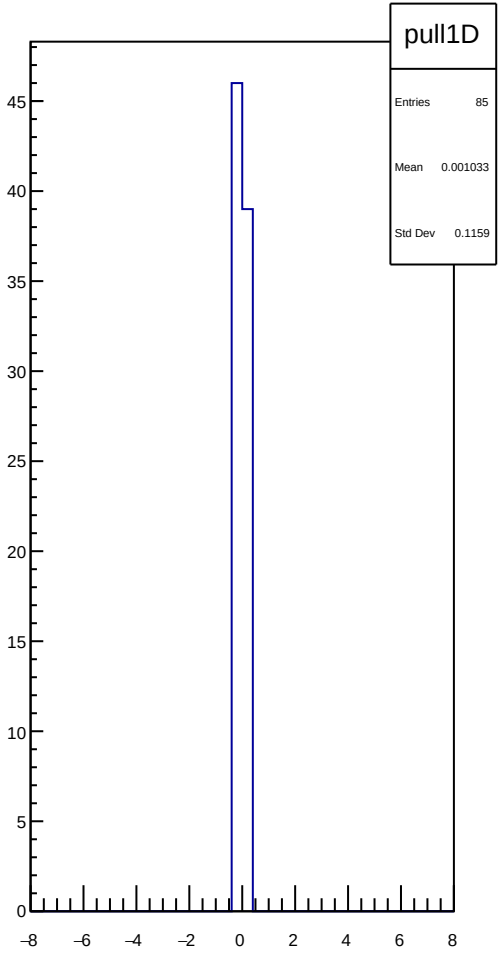

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.033 / 84
p0 12.29 ± 1.614
pull
Entries 85
Mean 329.7
Std Dev 270.1

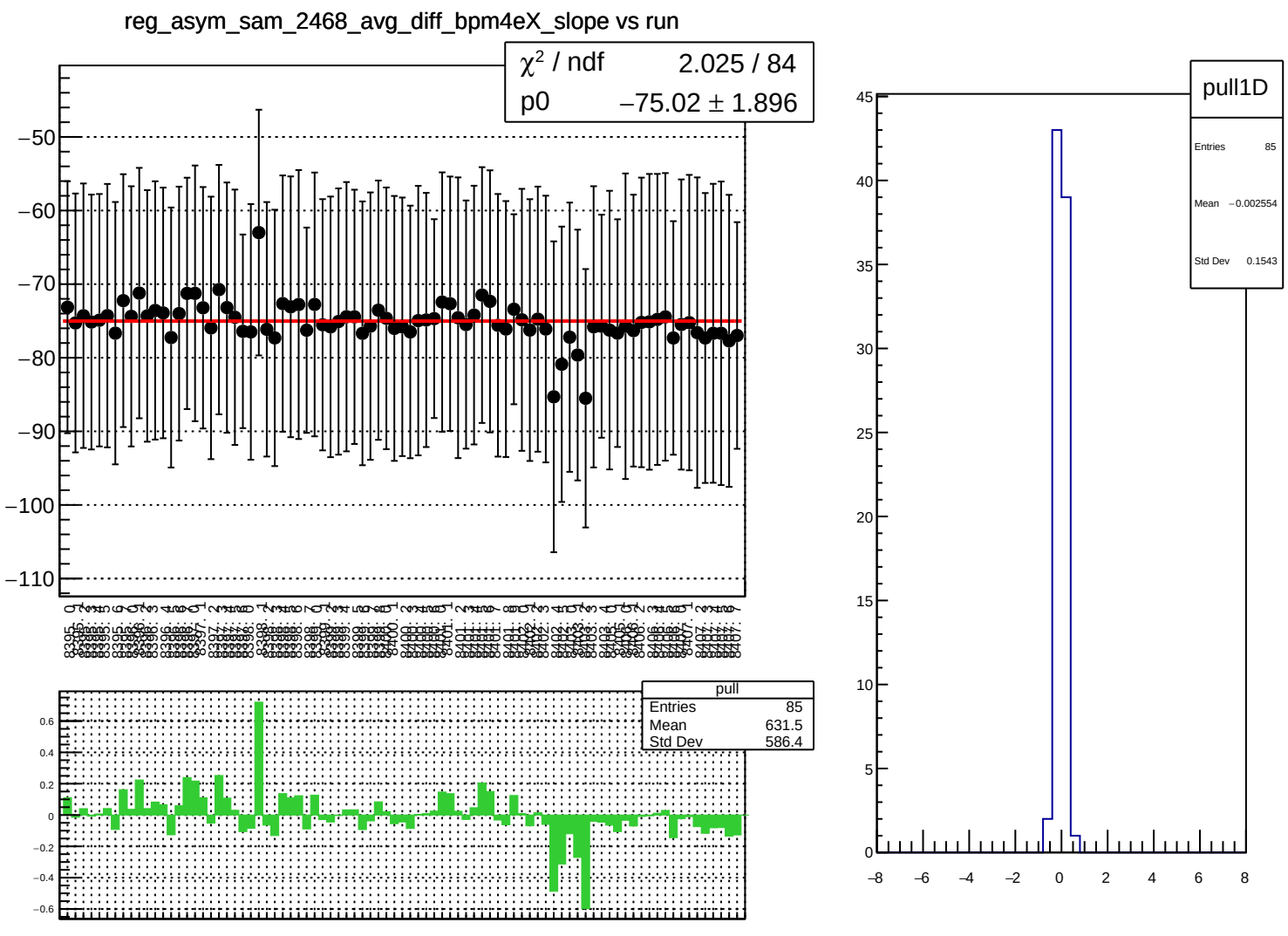

pull1D
Entries 85
Mean −0.001526
Std Dev 0.1546

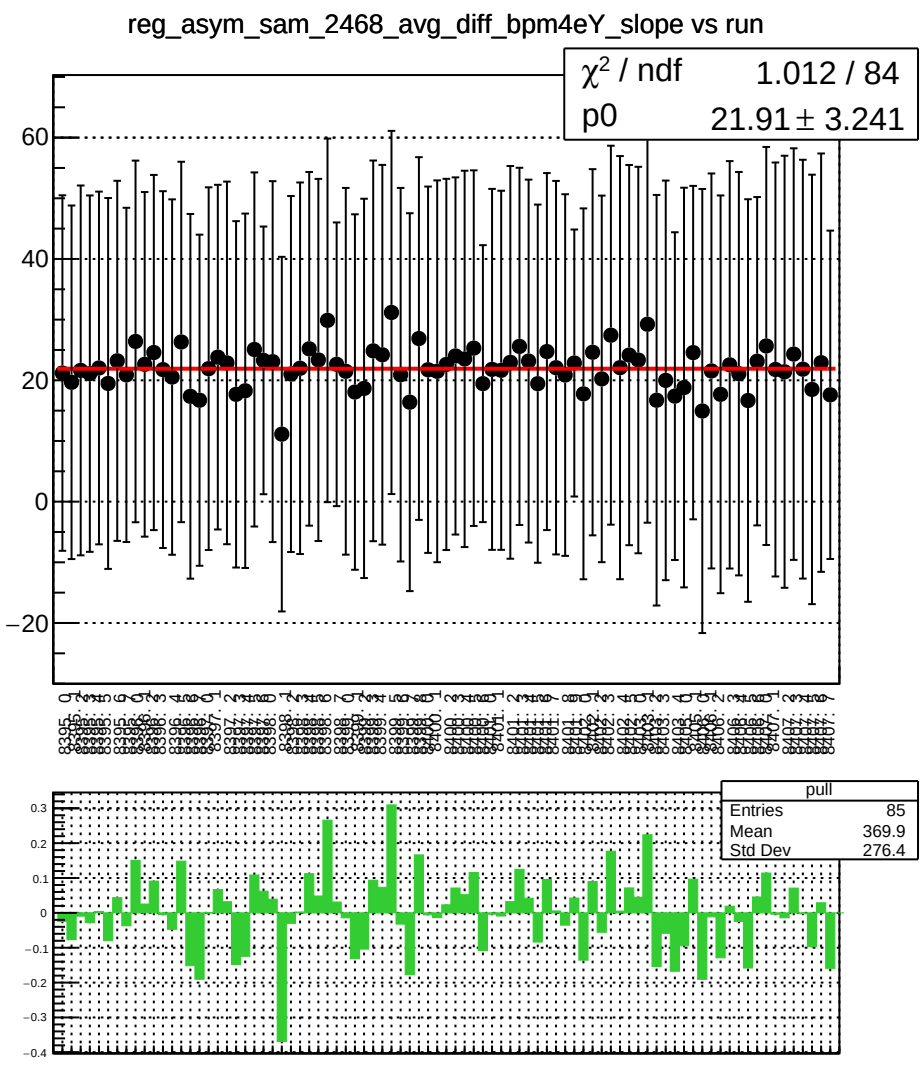

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 2.104 / 84
p0 1.116 ± 0.09955
pull
Entries 85
Mean 2252
Std Dev 2193
pull1D
Entries 85
Mean −0.0003354
Std Dev 0.1573

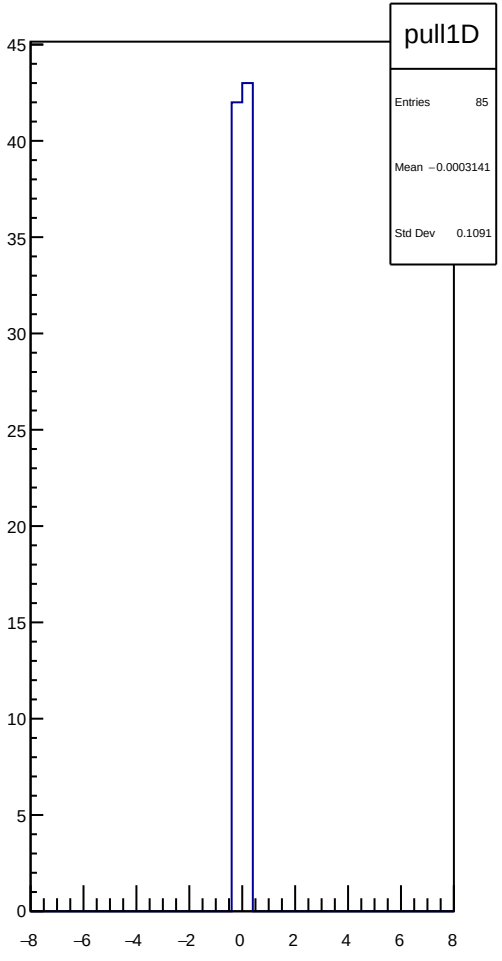

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 1.793 / 84
p0 −6.121 ± 1.708
pull
Entries 85
Mean −2616
Std Dev 2661
pull1D
Entries 85
Mean −0.0004598
Std Dev 0.1452

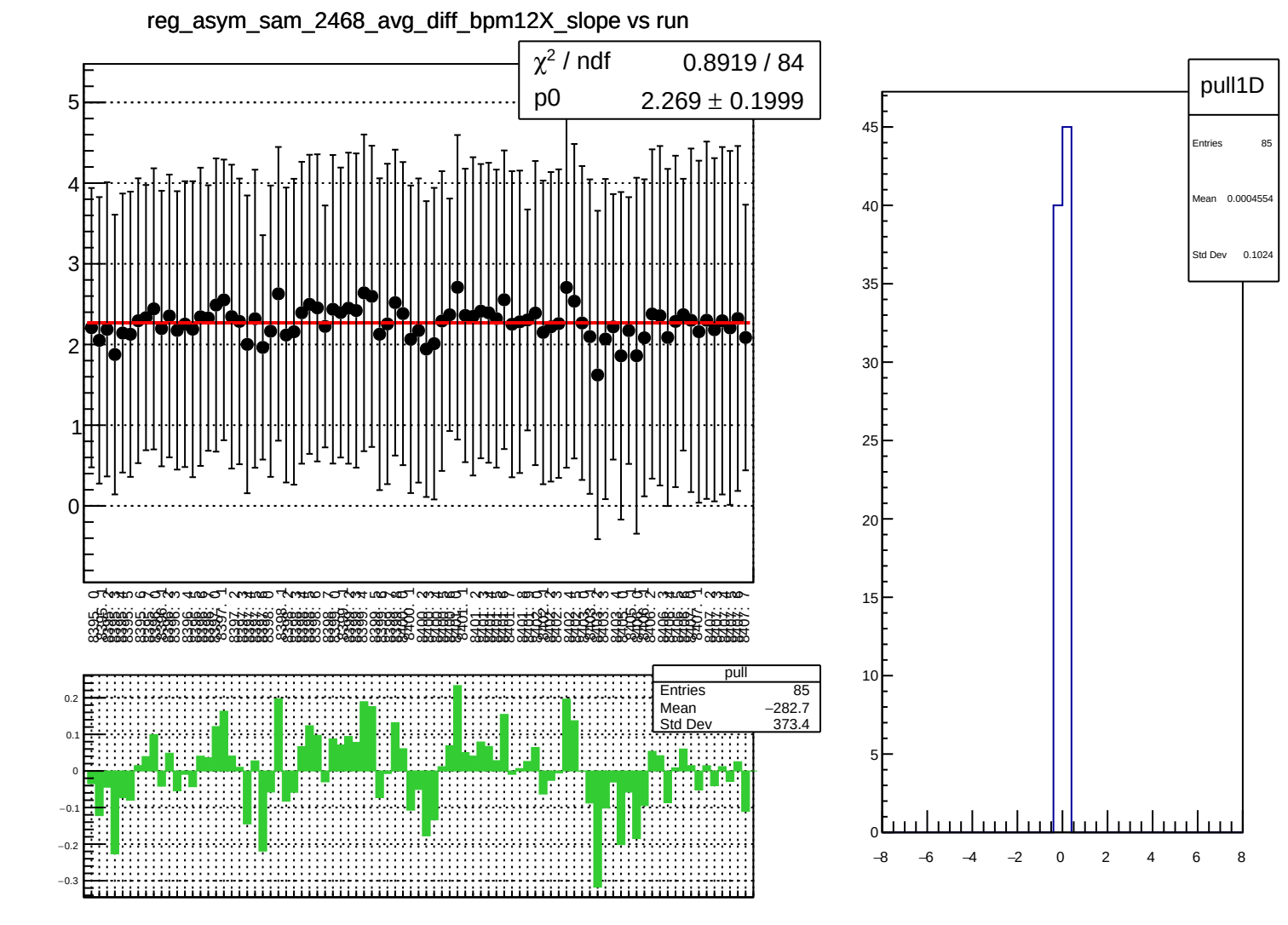

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.142 / 84
p0 14.71 ± 3.103
pull
Entries 85
Mean 696
Std Dev 645.9

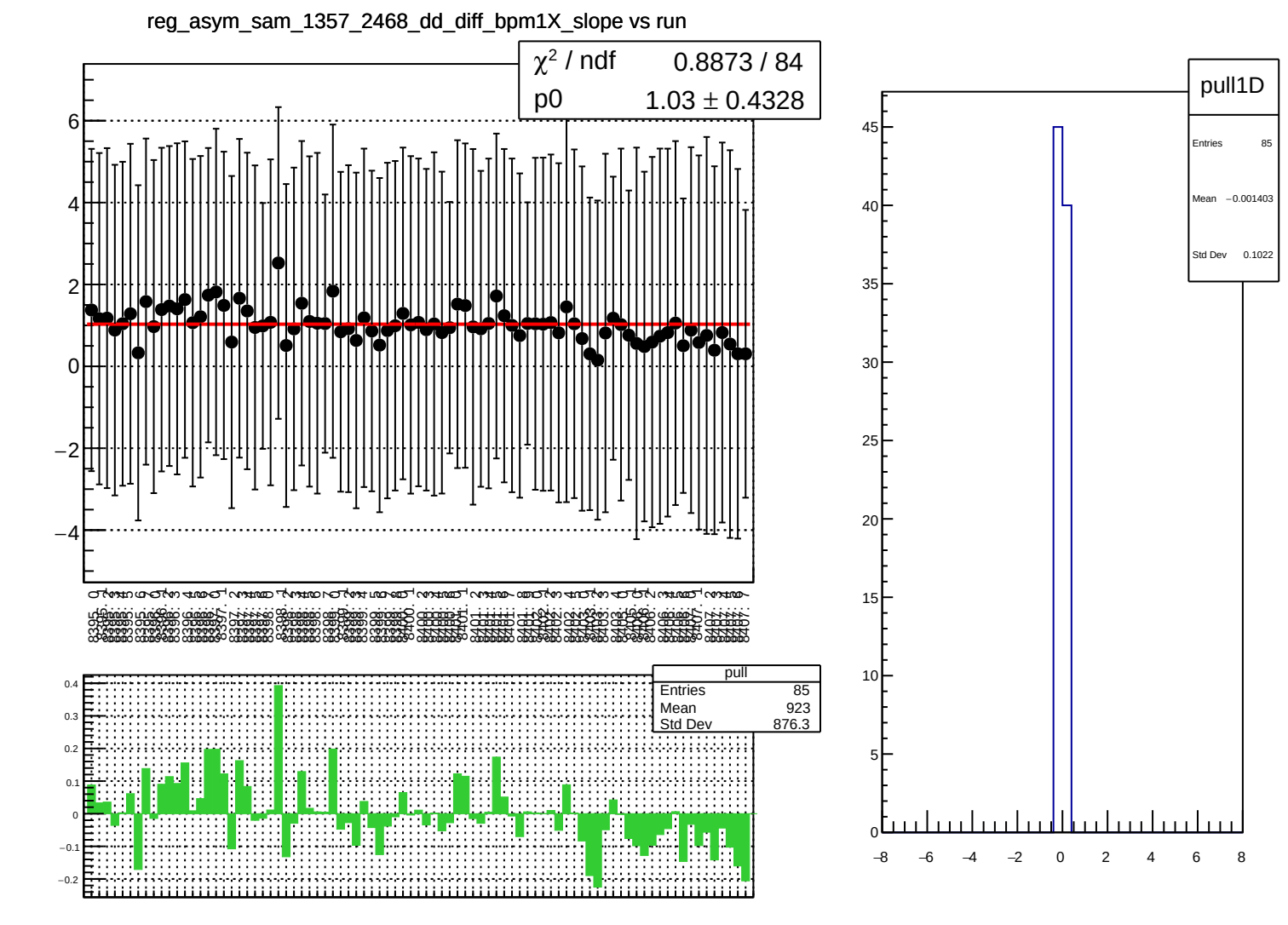

pull1D
Entries 85
Mean 0.001033
Std Dev 0.1159

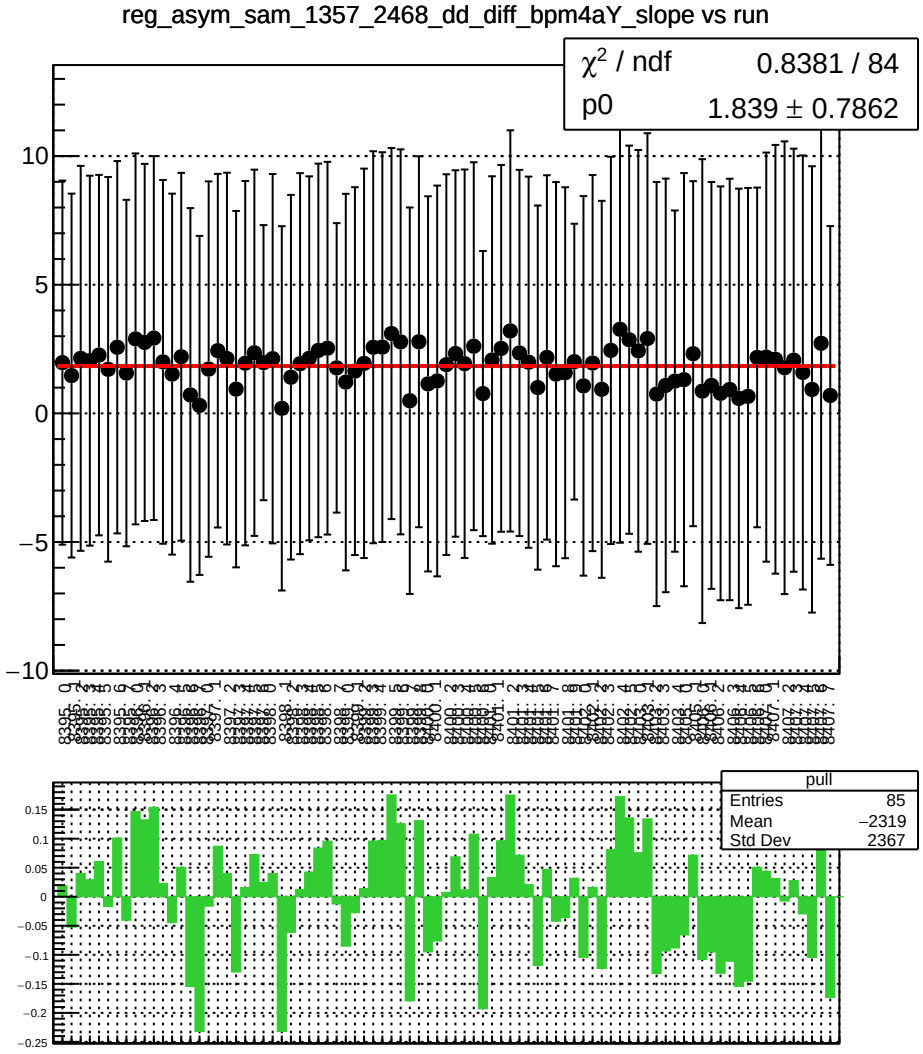

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.025 / 84
p0 −75.02 ± 1.896
pull
Entries 85
Mean 631.5
Std Dev 586.4
pull1D
Entries 85
Mean −0.002554
Std Dev 0.1543

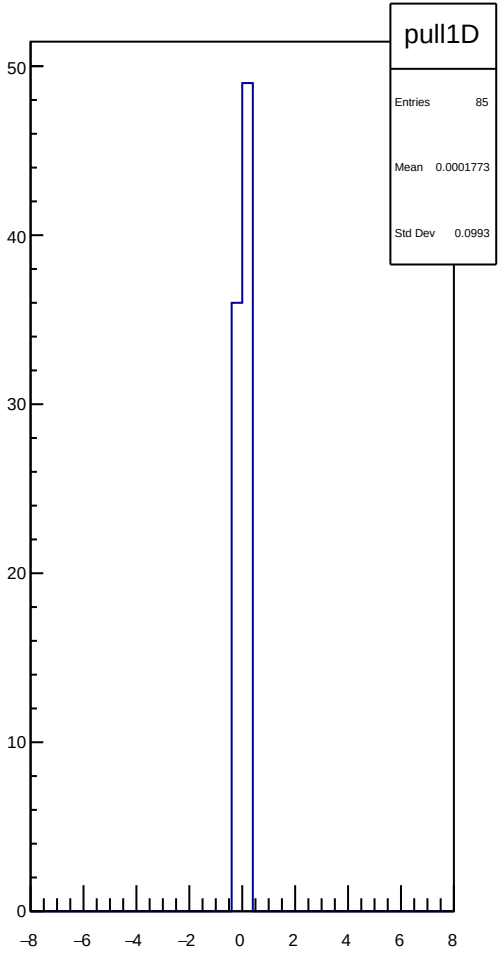

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.012 / 84
p0 21.91 ± 3.241
pull
Entries 85
Mean 369.9
Std Dev 276.4

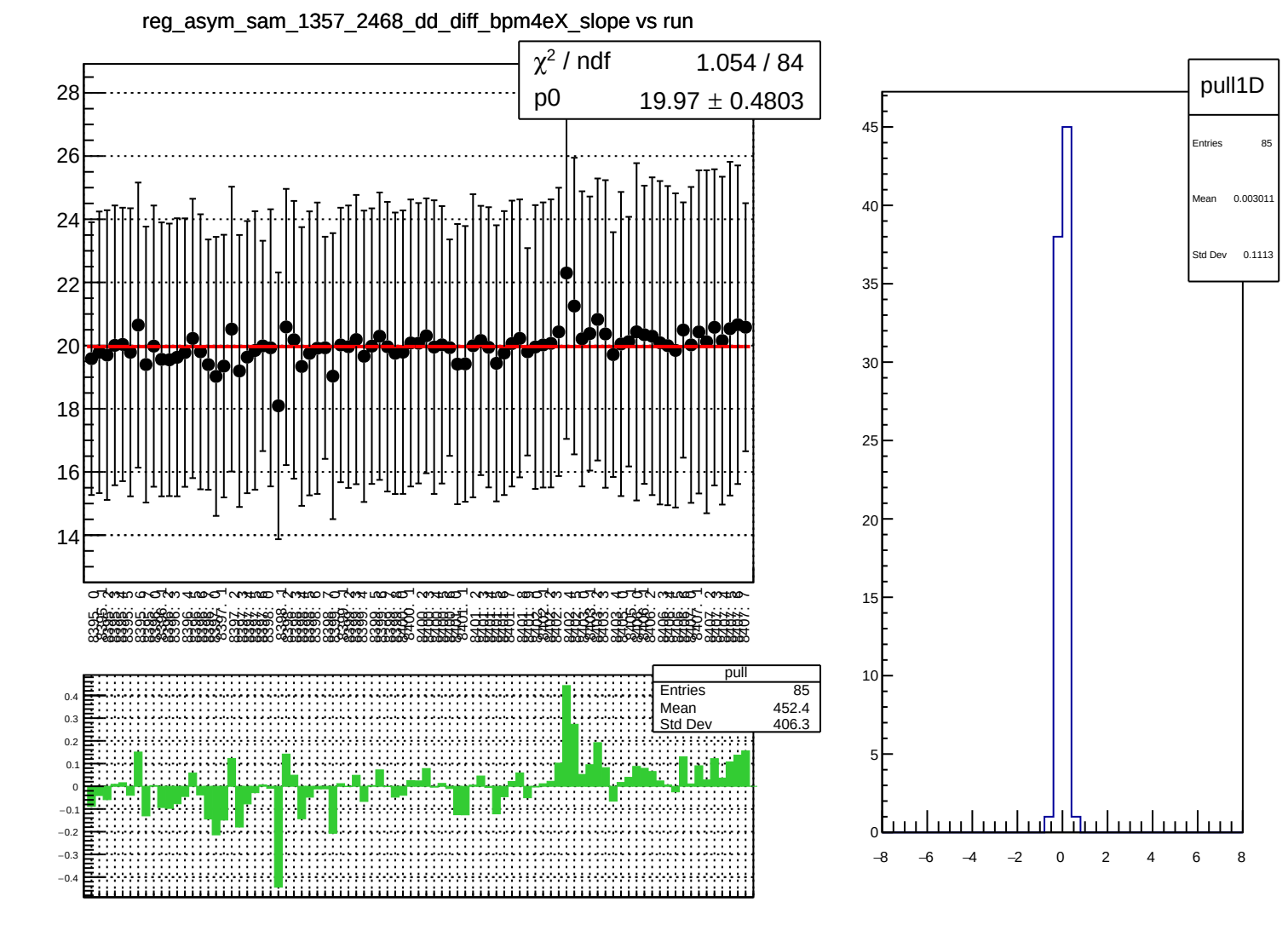

pull1D
Entries 85
Mean −0.0003141
Std Dev 0.1091

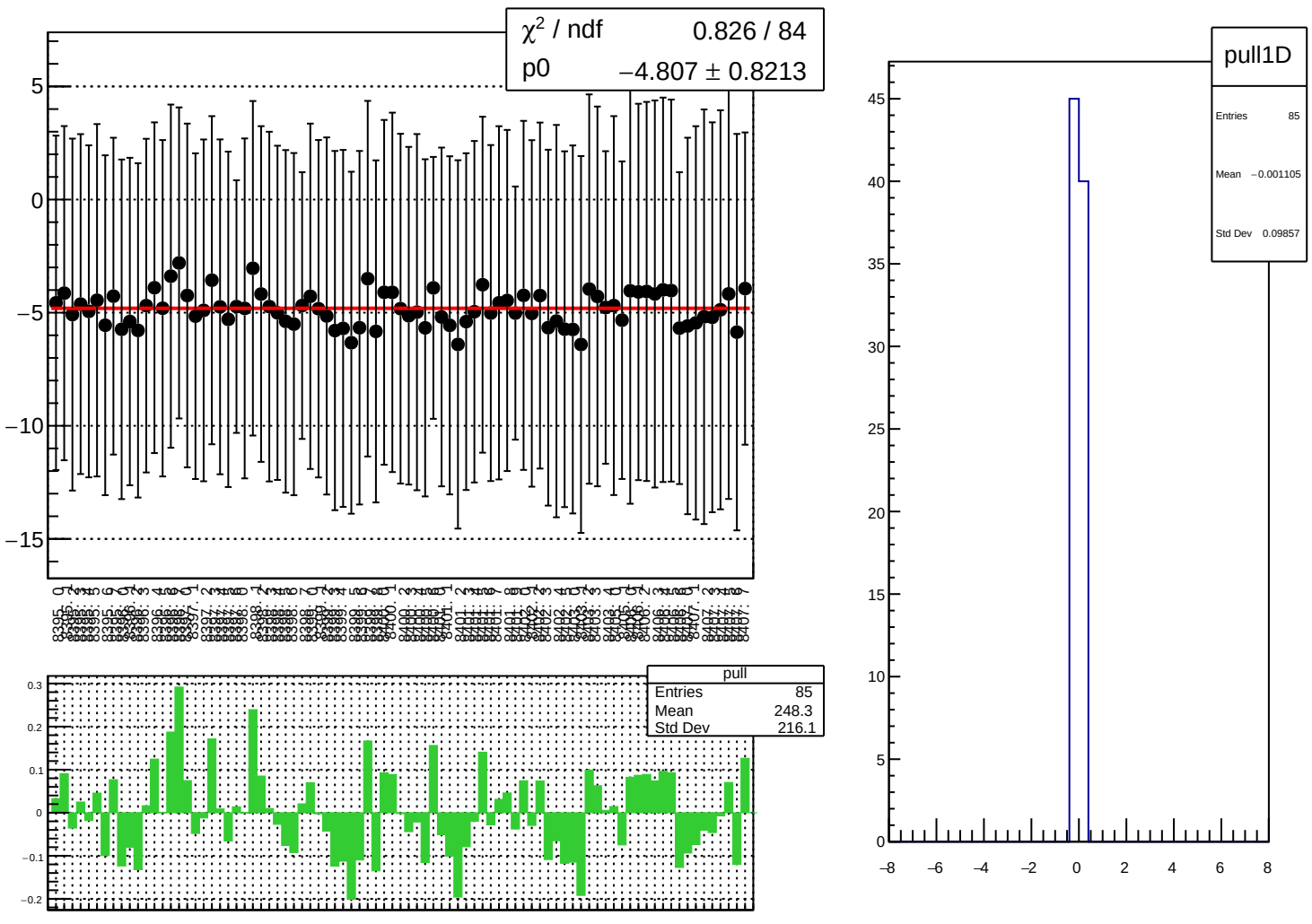

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 0.8919 / 84
p0 2.269 ± 0.1999
pull
Entries 85
Mean −282.7
Std Dev 373.4
pull1D
Entries 85
Mean 0.0004554
Std Dev 0.1024

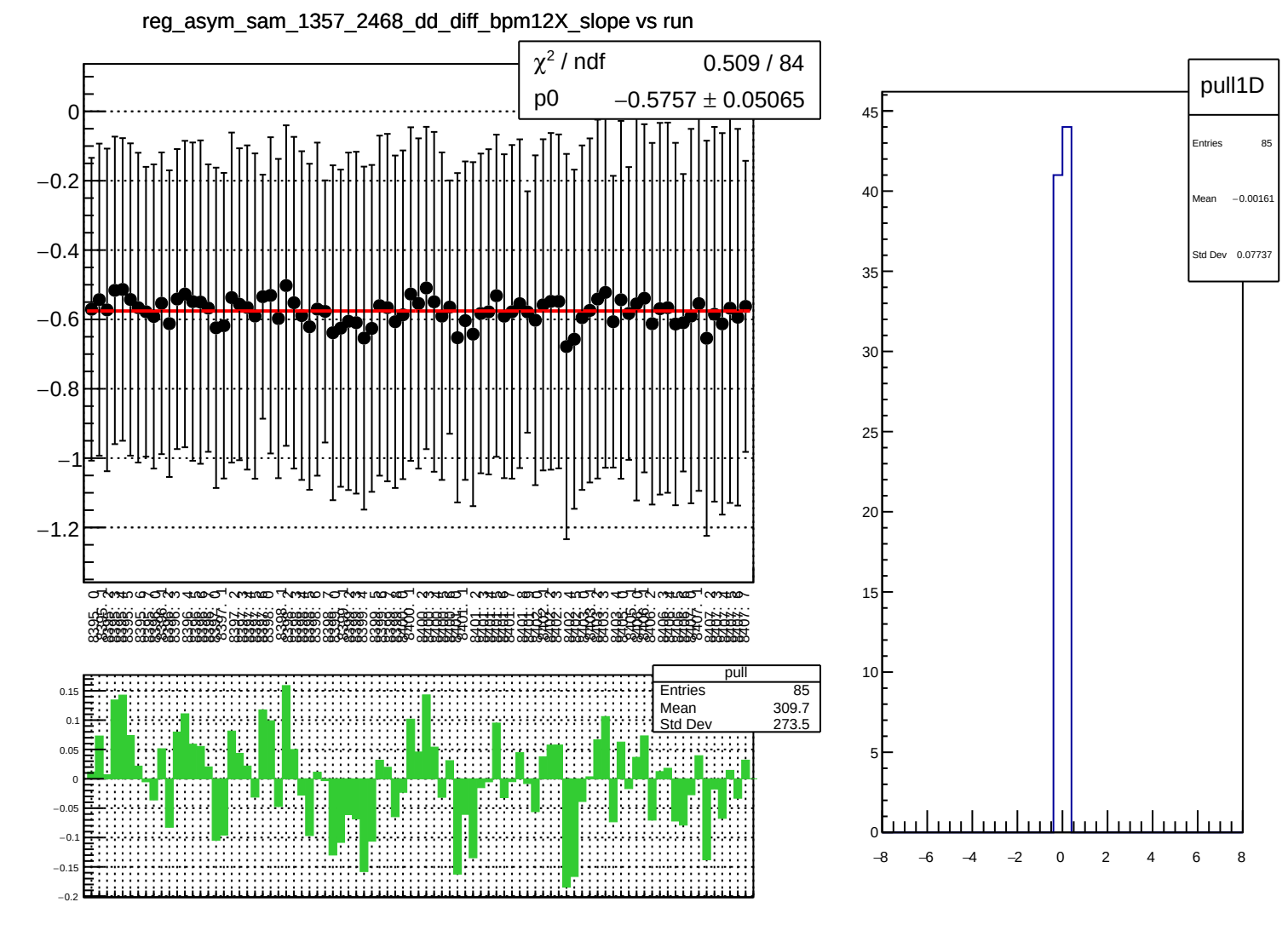

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 0.8873 / 84
p0 1.03 ± 0.4328
pull
Entries 85
Mean 923
Std Dev 876.3
pull1D
Entries 85
Mean −0.001403
Std Dev 0.1022

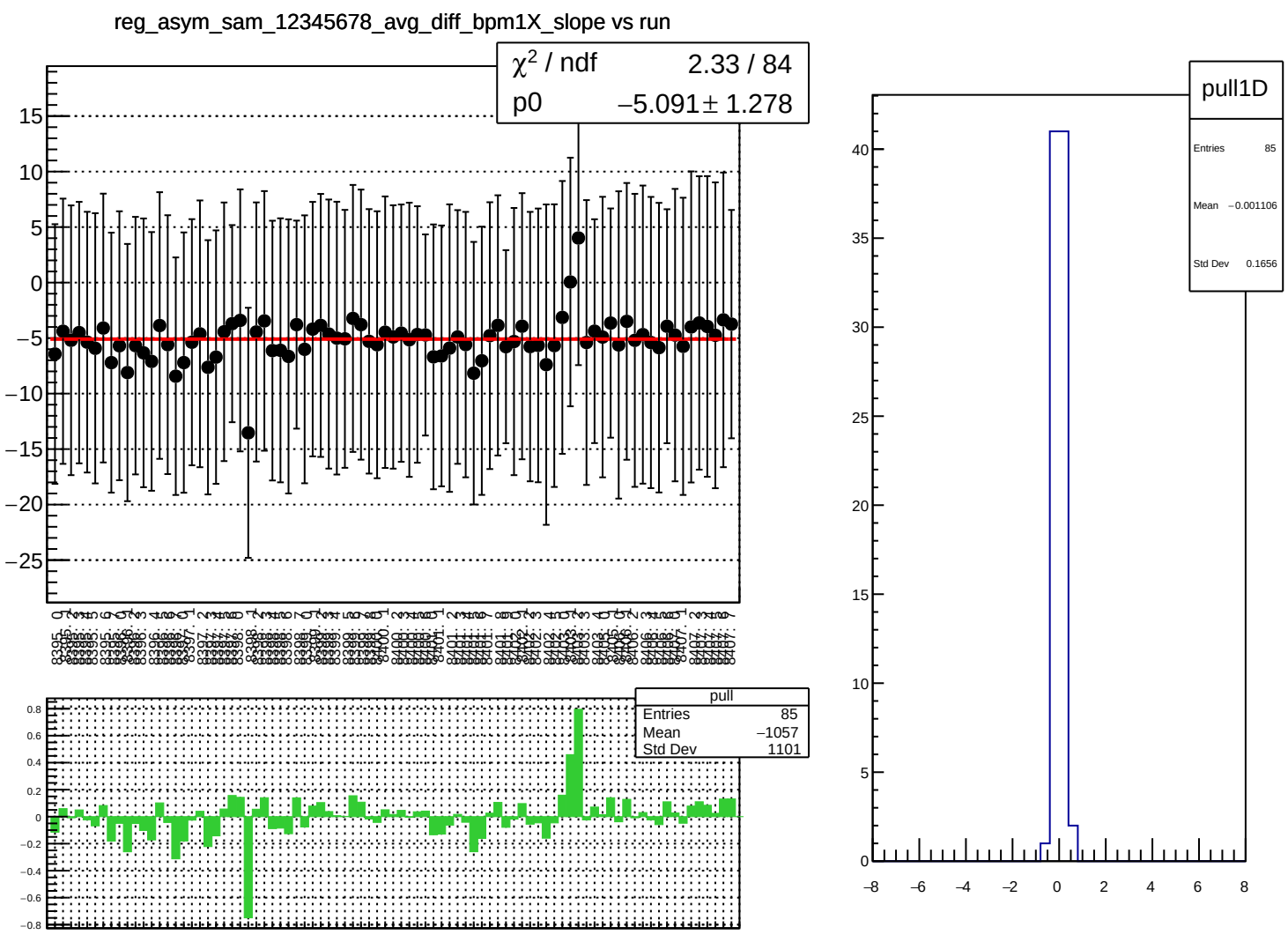

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.8381 / 84
p0 1.839 ± 0.7862
pull
Entries 85
Mean −2319
Std Dev 2367

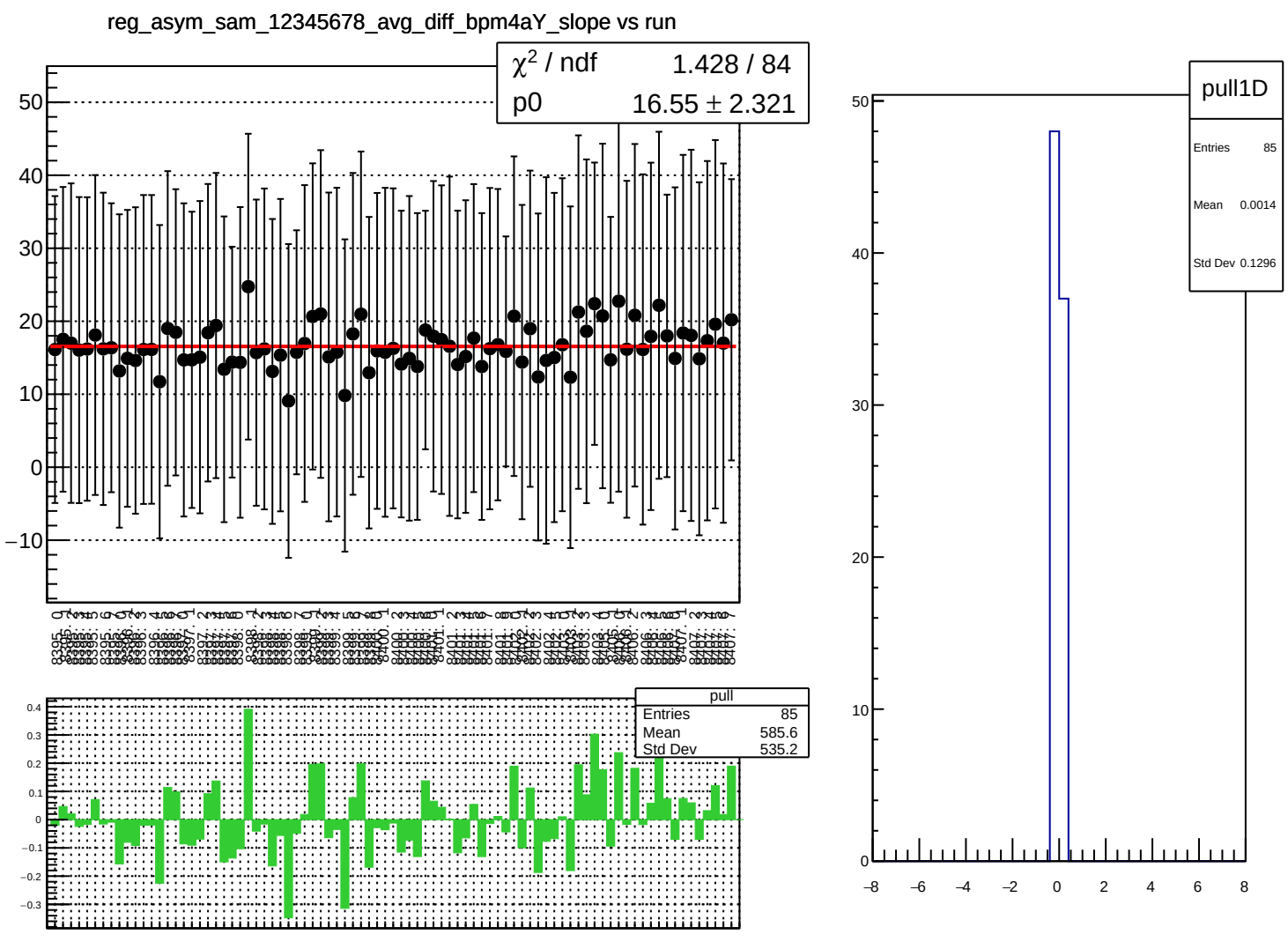

pull1D
Entries 85
Mean 0.0001773
Std Dev 0.0993

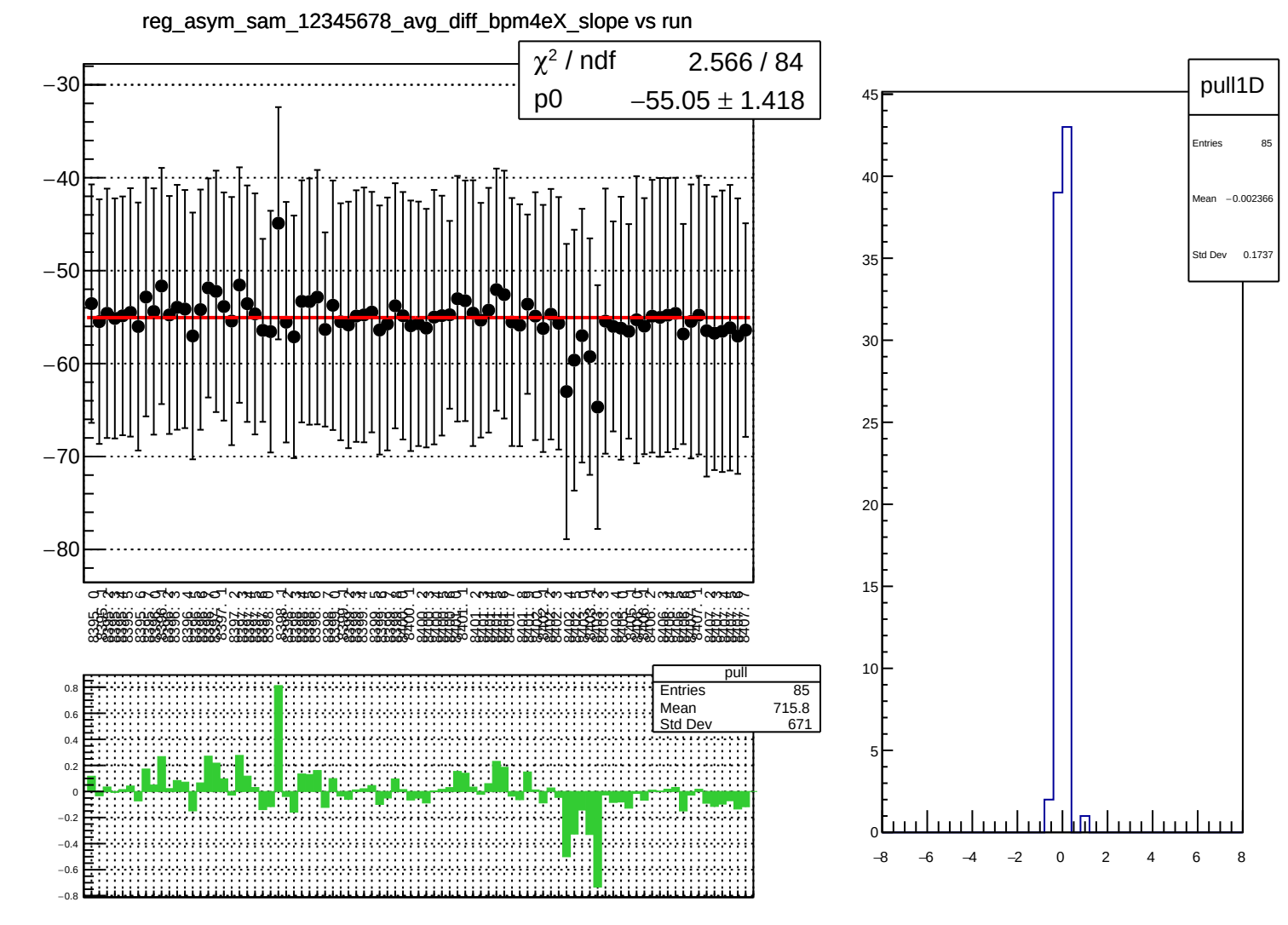

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.054 / 84
p0 19.97 ± 0.4803
pull
Entries 85
Mean 452.4
Std Dev 406.3
pull1D
Entries 85
Mean 0.003011
Std Dev 0.1113

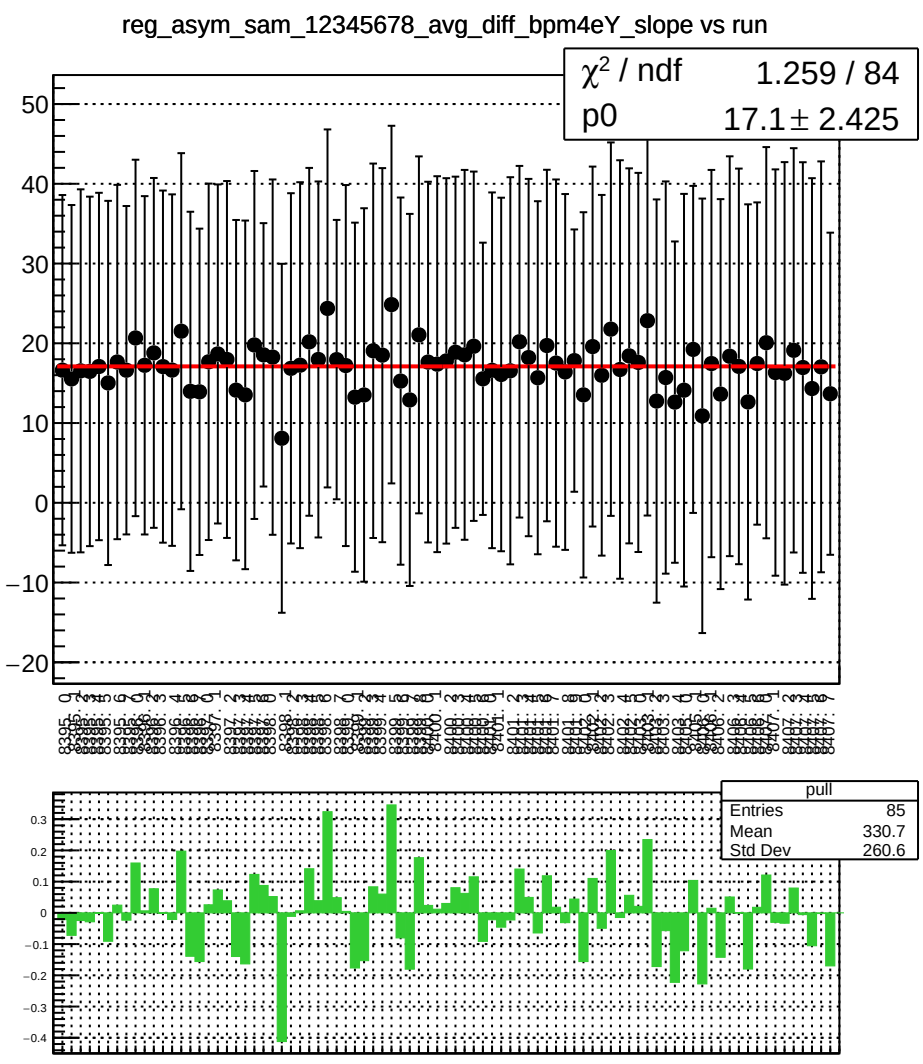

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.826 / 84
p0 −4.807 ± 0.8213
pull
Entries 85
Mean 248.3
Std Dev 216.1
pull1D
Entries 85
Mean −0.001105
Std Dev 0.09857

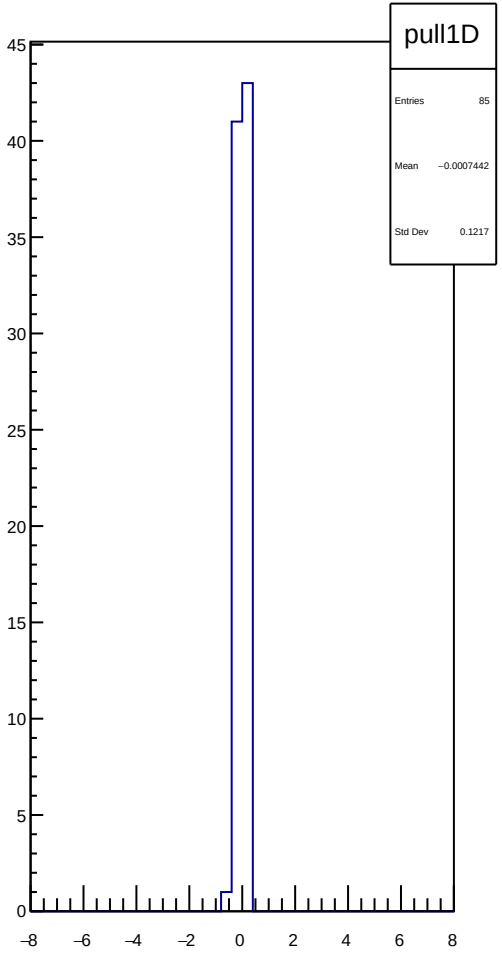

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 0.509 / 84
p0 −0.5757 ± 0.05065
pull
Entries 85
Mean 309.7
Std Dev 273.5
pull1D
Entries 85
Mean −0.00161
Std Dev 0.07737

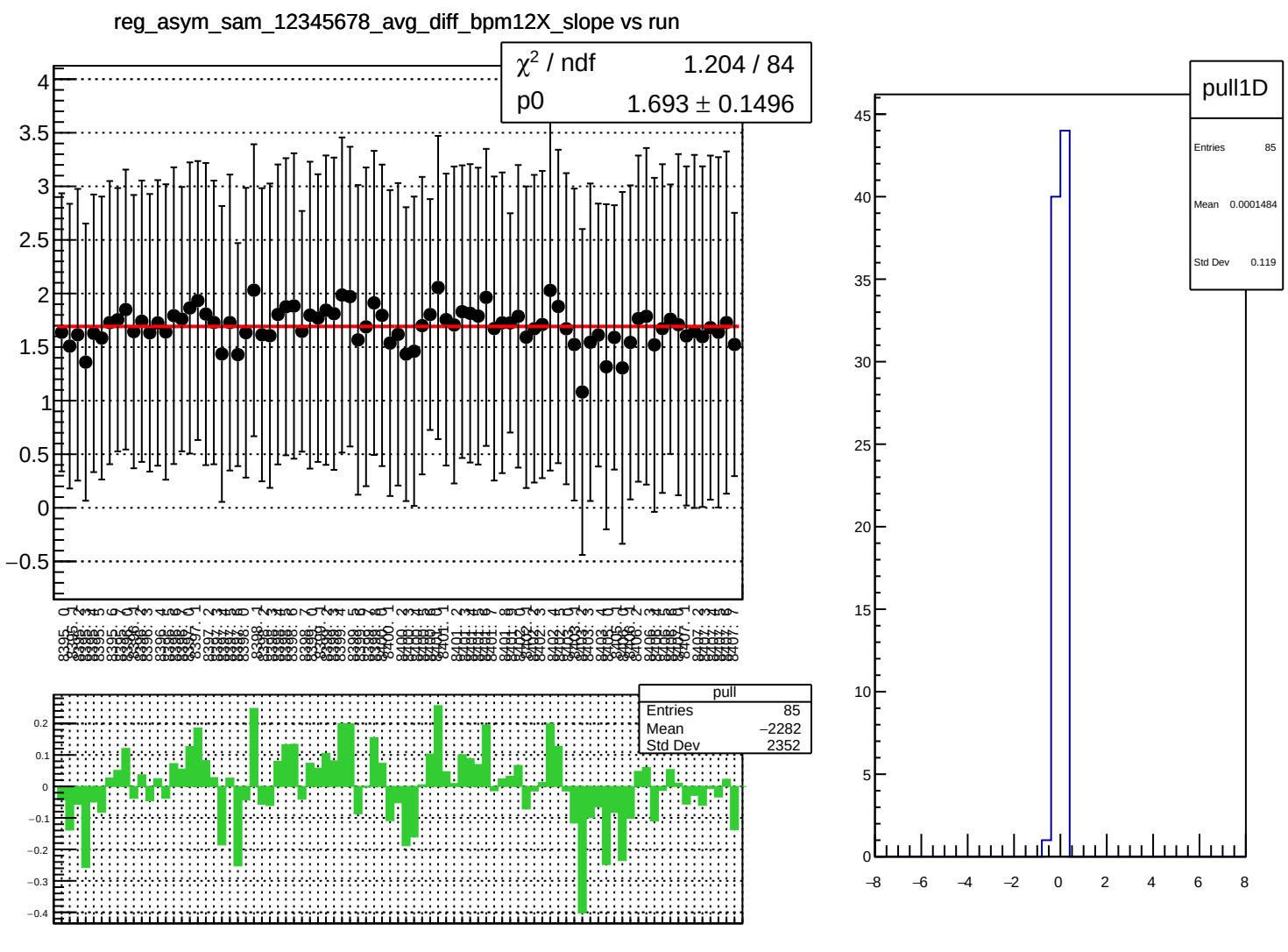

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 2.33 / 84
p0 −5.091 ± 1.278
pull
Entries 85
Mean −1057
Std Dev 1101
pull1D
Entries 85
Mean −0.001106
Std Dev 0.1656

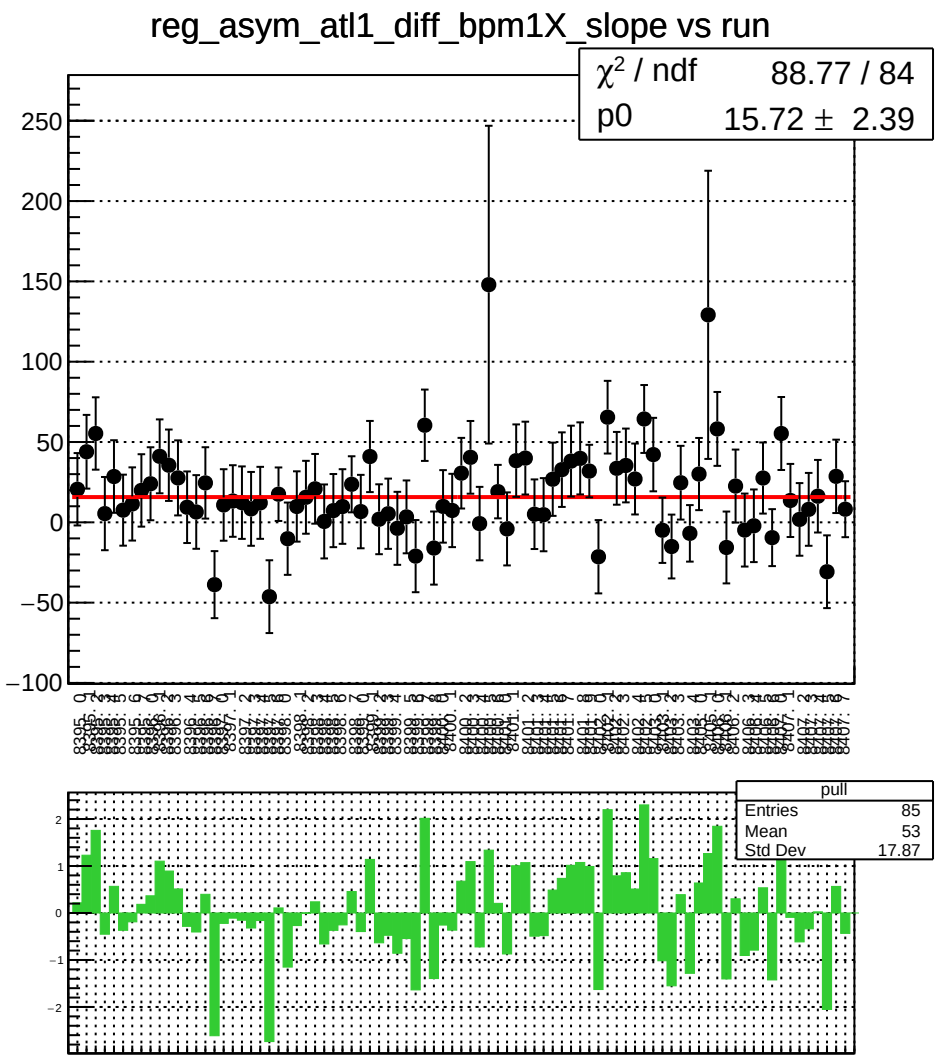

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.428 / 84
p0 16.55 ± 2.321
pull
Entries 85
Mean 585.6
Std Dev 535.2
pull1D
Entries 85
Mean 0.0014
Std Dev 0.1296

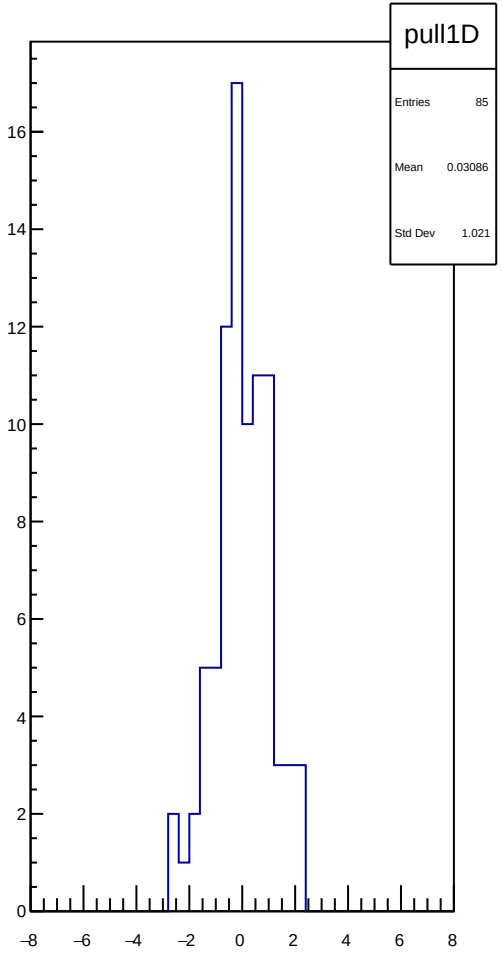

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.566 / 84
p0 −55.05 ± 1.418
pull
Entries 85
Mean 715.8
Std Dev 671
pull1D
Entries 85
Mean −0.002366
Std Dev 0.1737

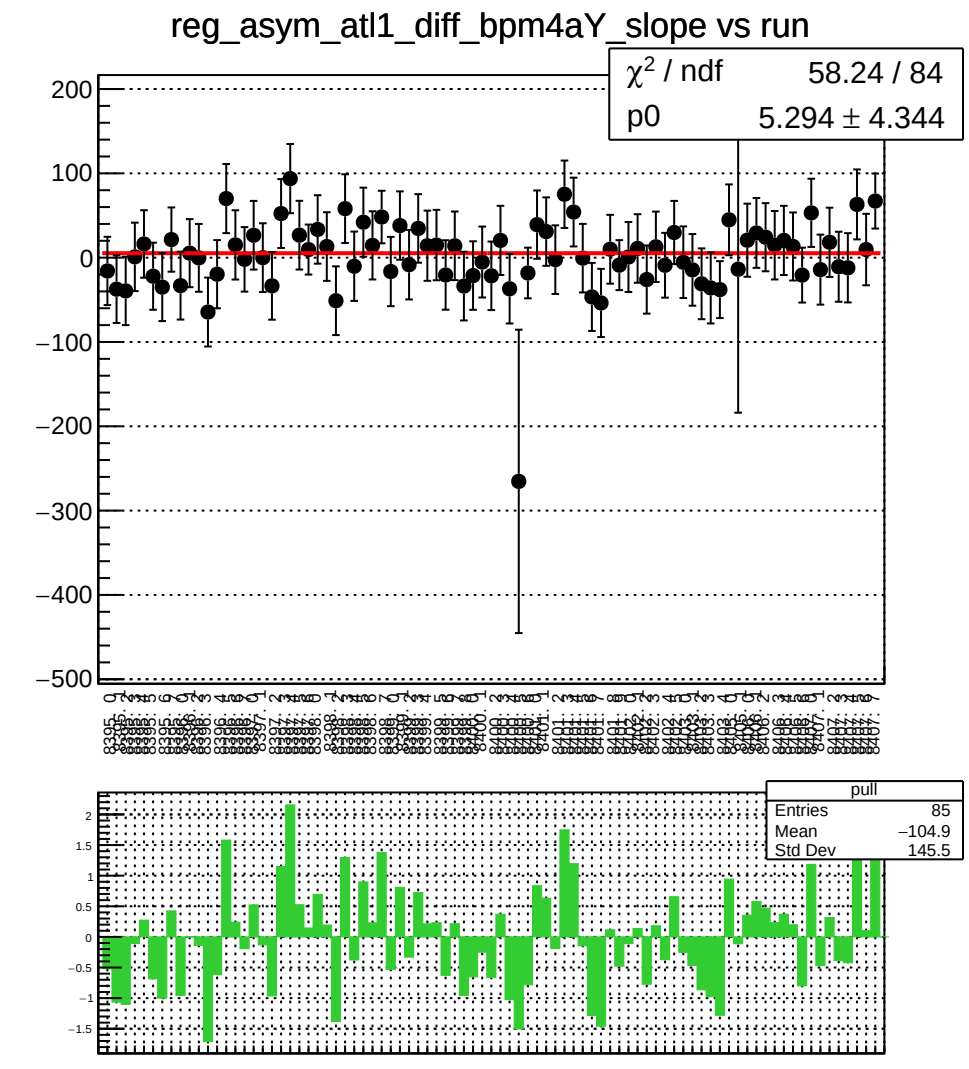

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.259 / 84
p0 17.1 ± 2.425
pull
Entries 85
Mean 330.7
Std Dev 260.6

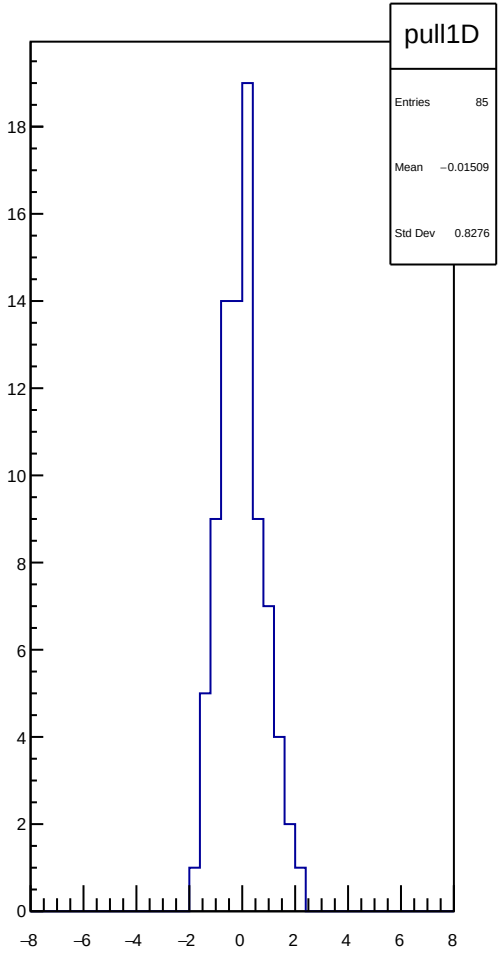

pull1D
Entries 85
Mean −0.0007442
Std Dev 0.1217

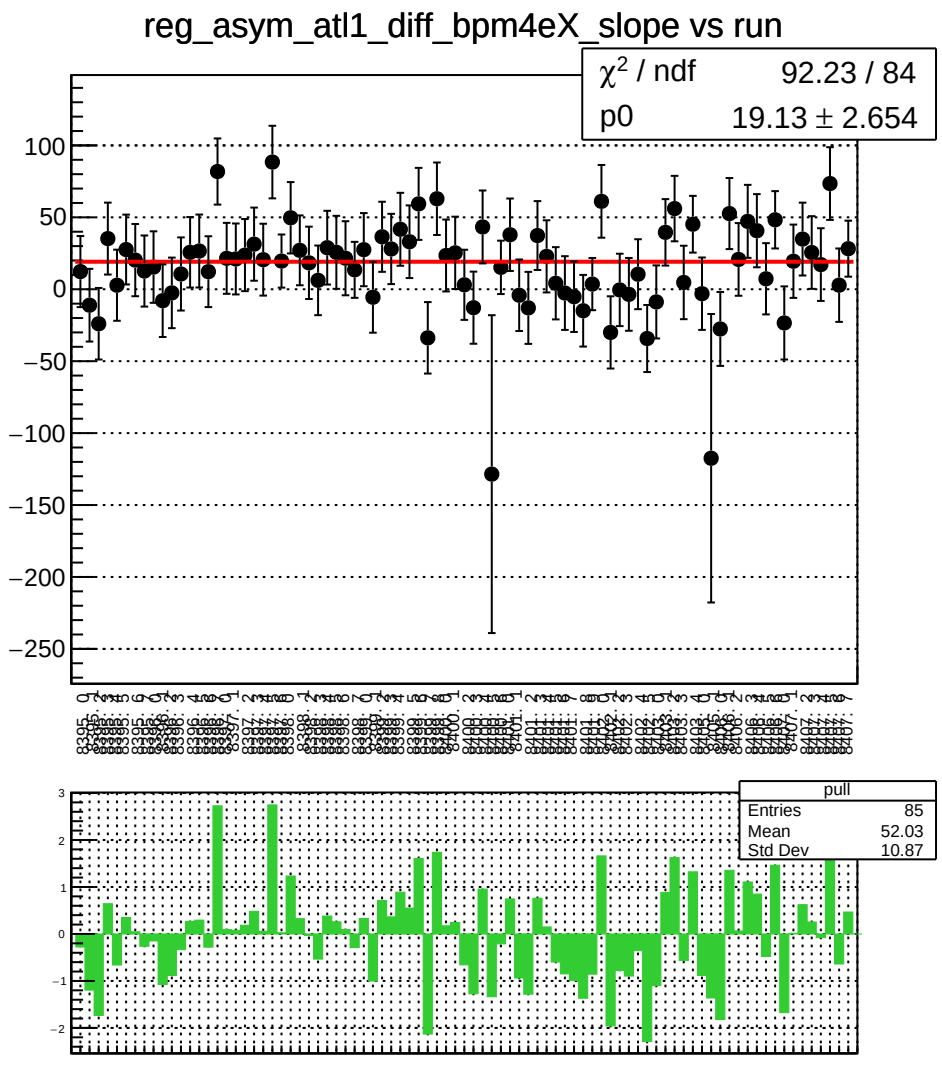

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 1.204 / 84
p0 1.693 ± 0.1496
pull
Entries 85
Mean −2282
Std Dev 2352
pull1D
Entries 85
Mean 0.0001484
Std Dev 0.119

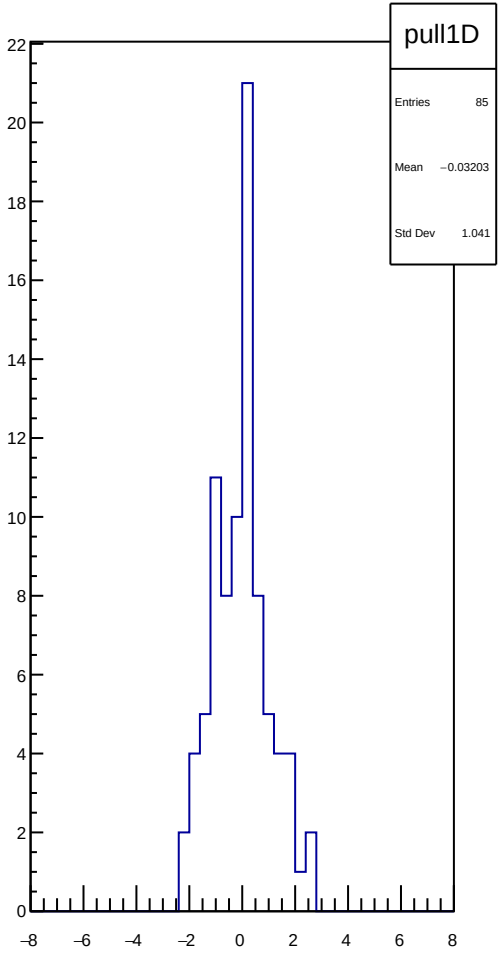

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 88.77 / 84
p0 15.72 ± 2.39
pull
Entries 85
Mean 53
Std Dev 17.87

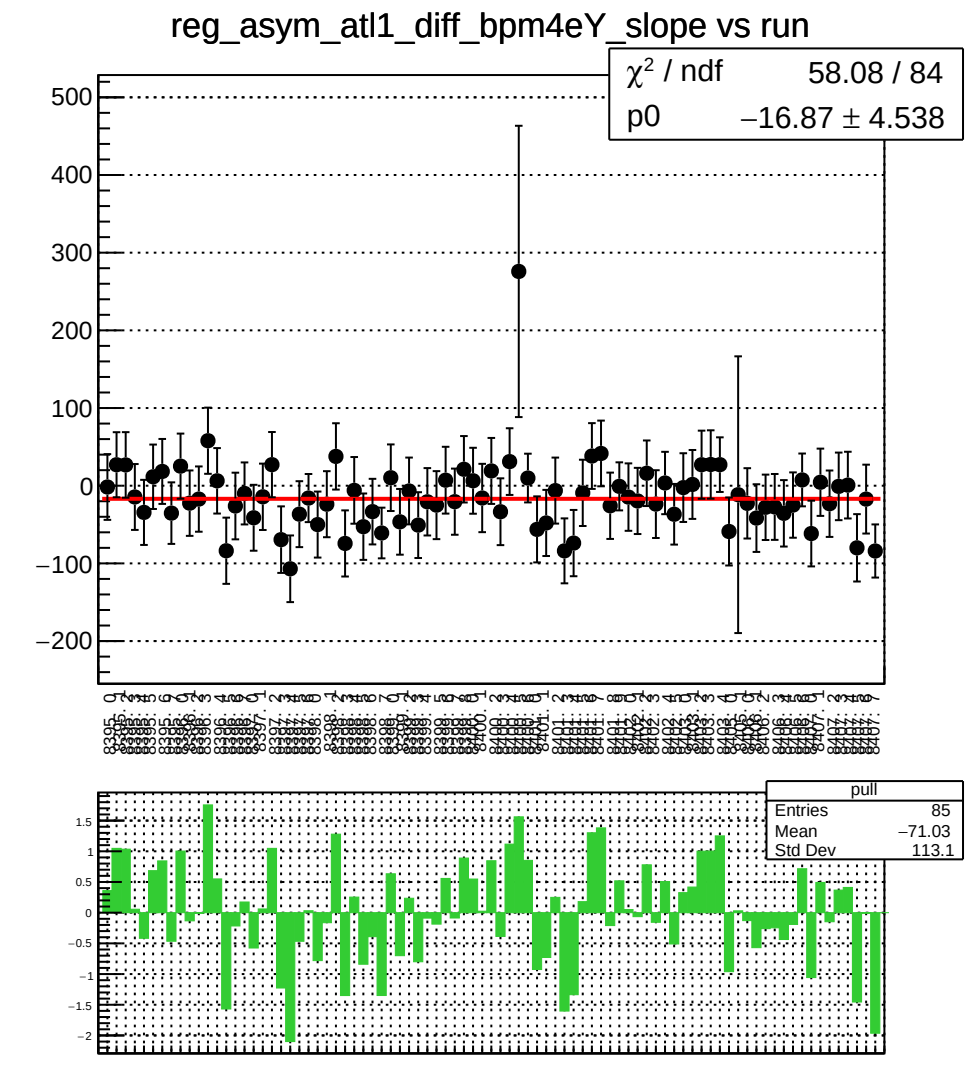

pull1D
Entries 85
Mean 0.03086
Std Dev 1.021

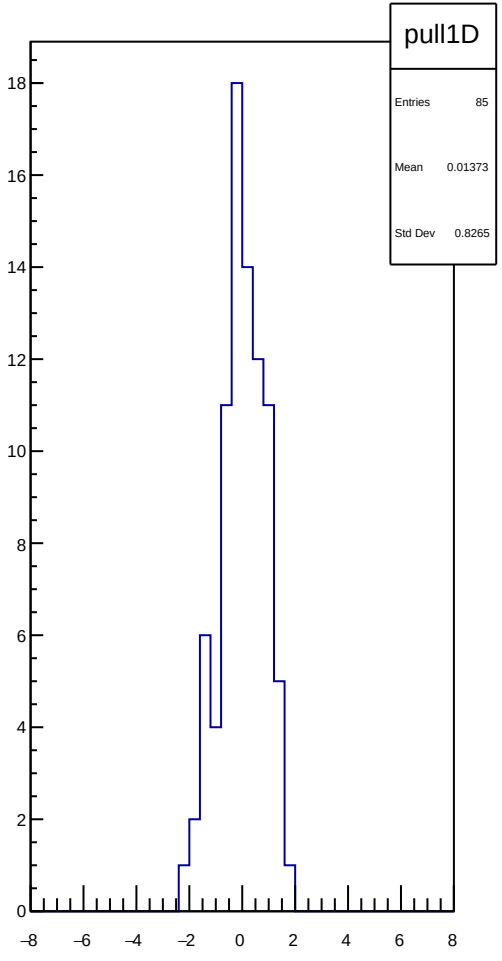

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 58.24 / 84
p0 5.294 ± 4.344
pull
Entries 85
Mean −104.9
Std Dev 145.5

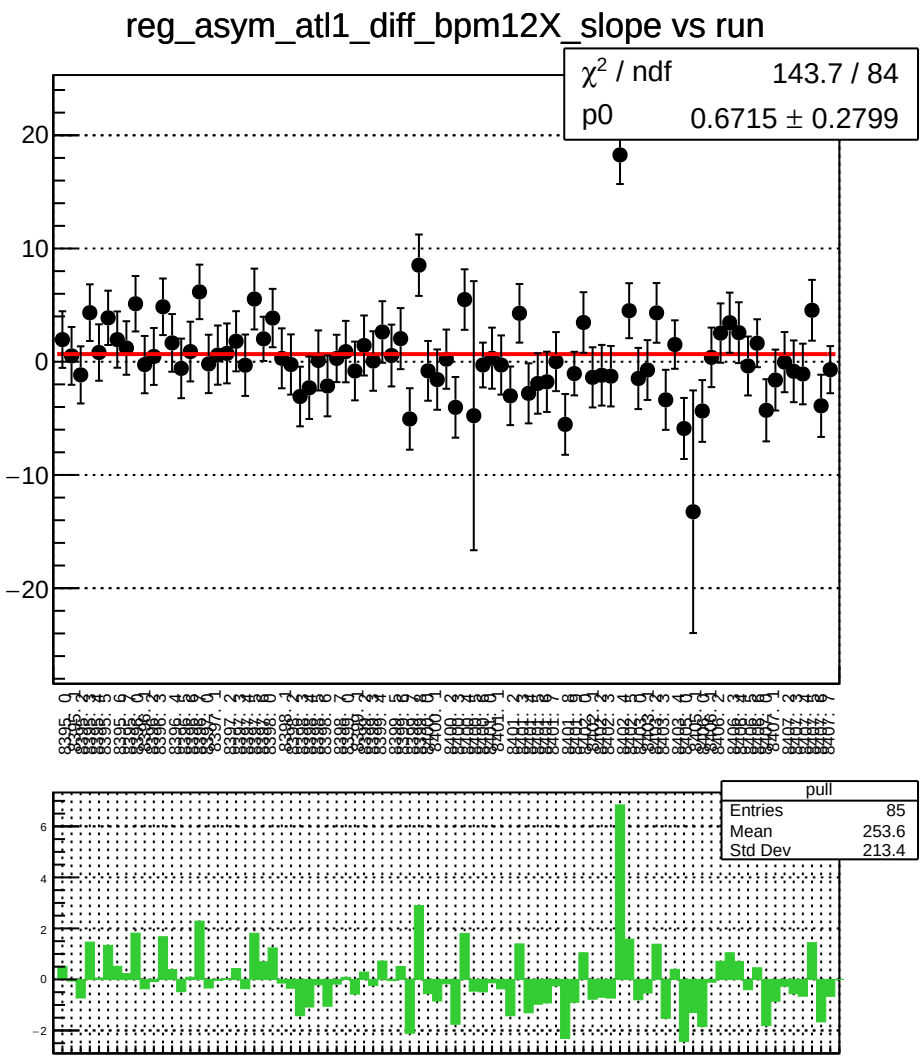

pull1D
Entries 85
Mean −0.01509
Std Dev 0.8276

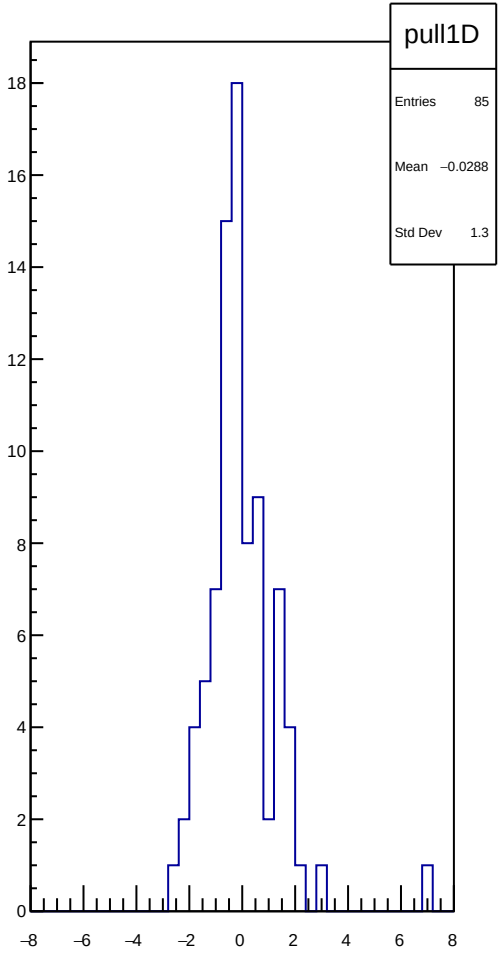

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 92.23 / 84
p0 19.13 ± 2.654
pull
Entries 85
Mean 52.03
Std Dev 10.87

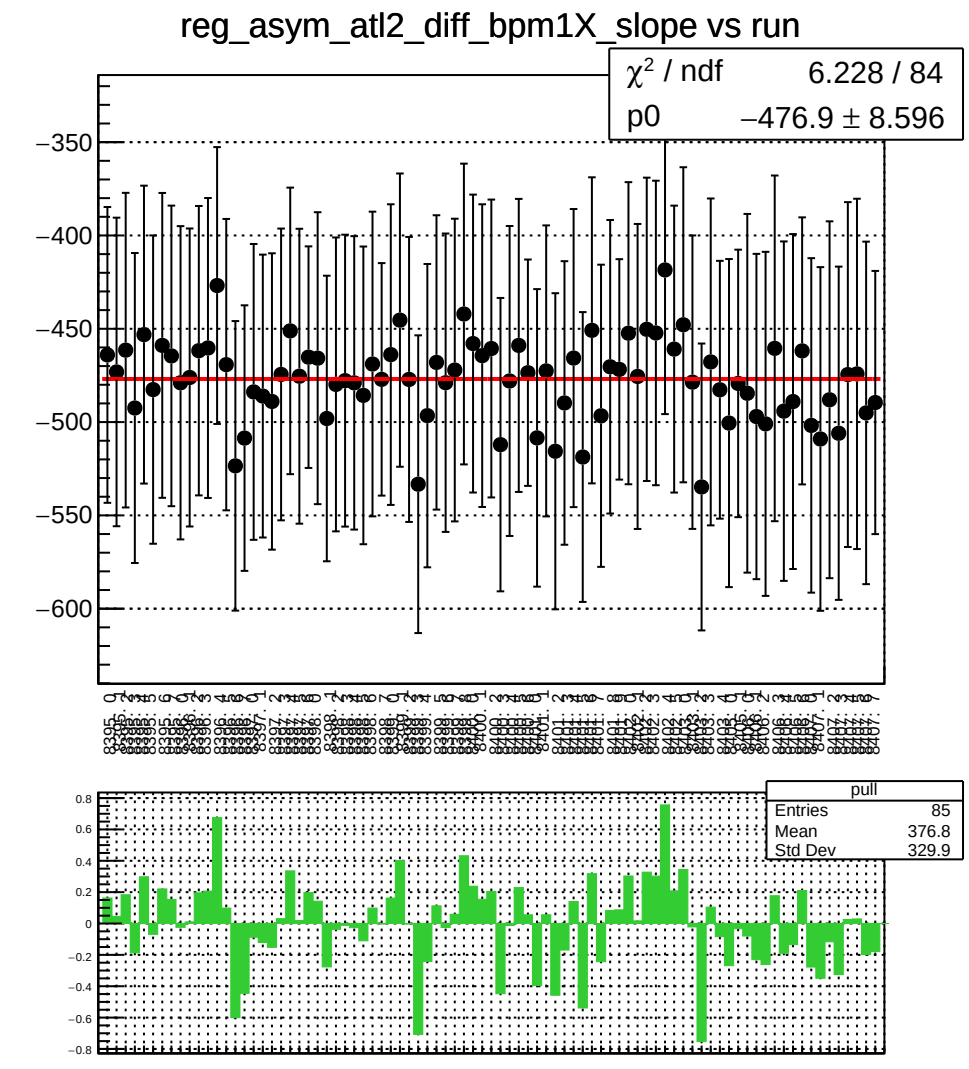

pull1D
Entries 85
Mean −0.03203
Std Dev 1.041

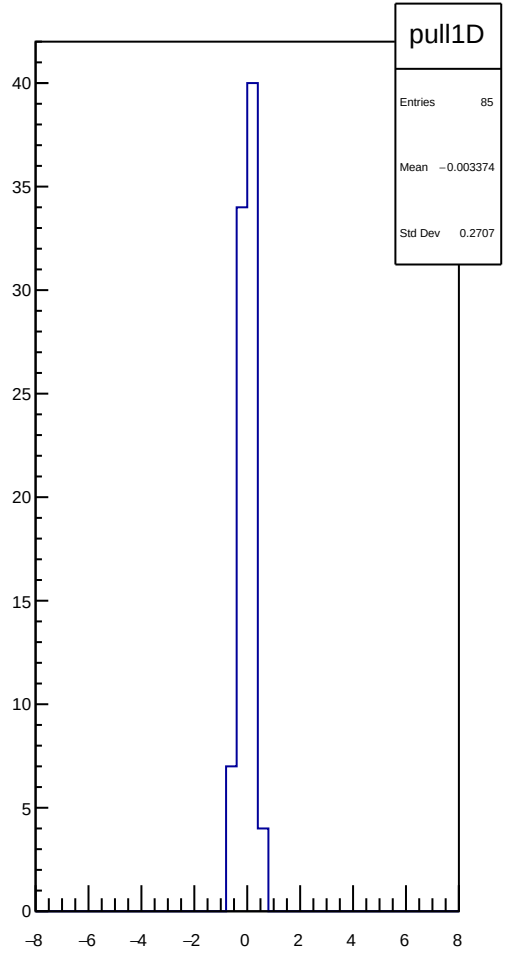

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 58.08 / 84
p0 −16.87 ± 4.538
pull
Entries 85
Mean −71.03
Std Dev 113.1

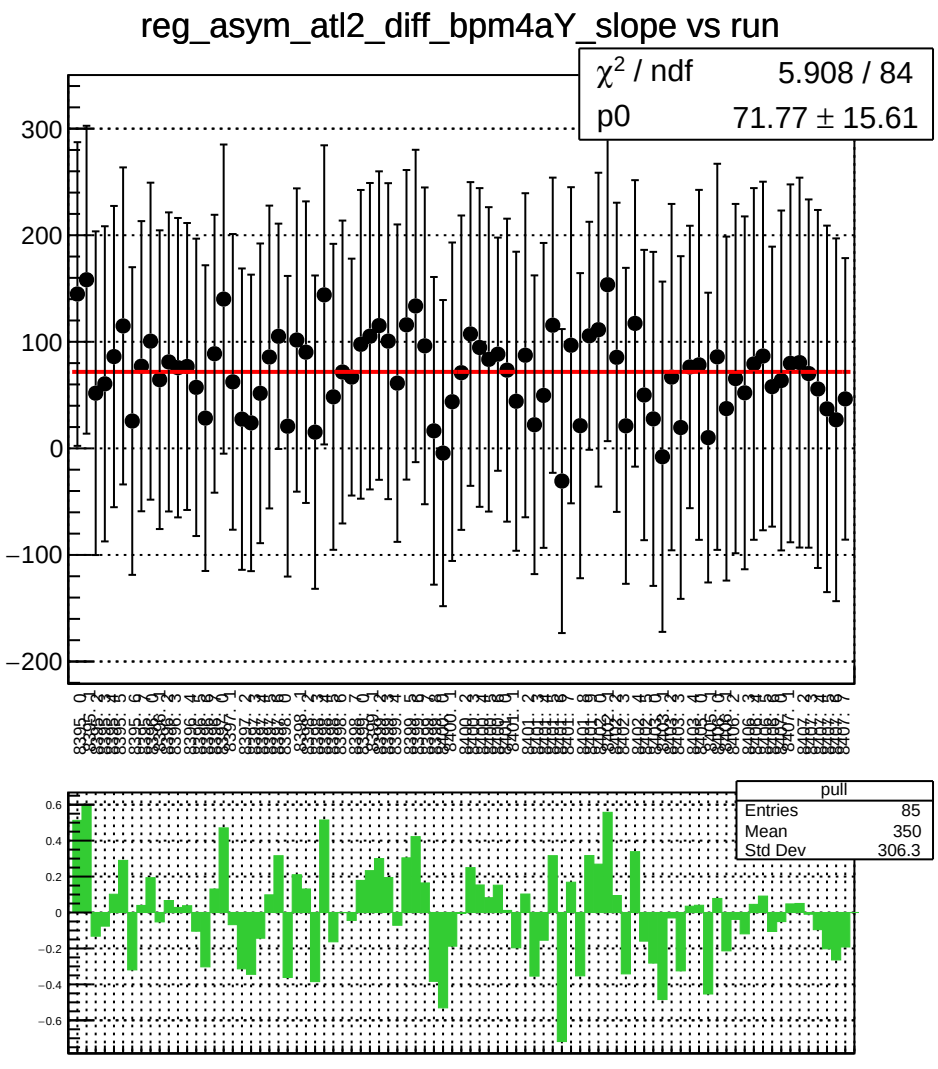

pull1D
Entries 85
Mean 0.01373
Std Dev 0.8265

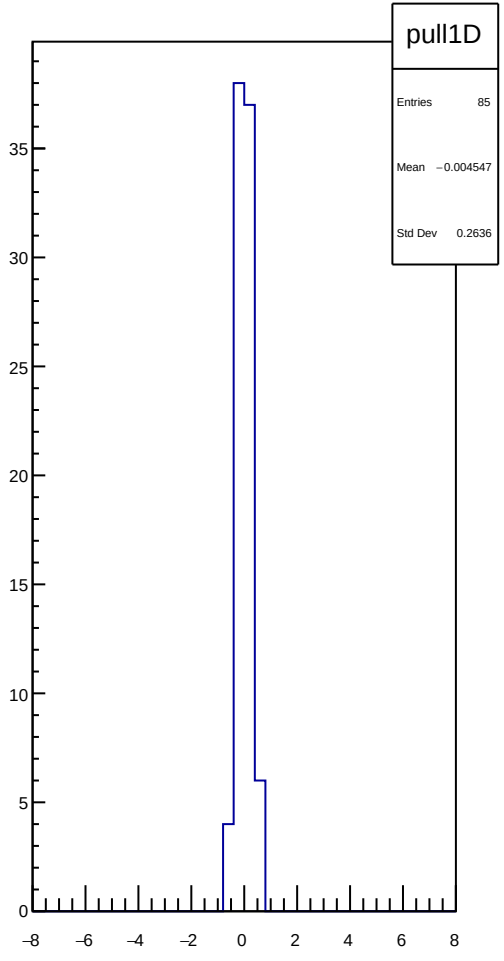

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 143.7 / 84
p0 0.6715 ± 0.2799
pull
Entries 85
Mean 253.6
Std Dev 213.4

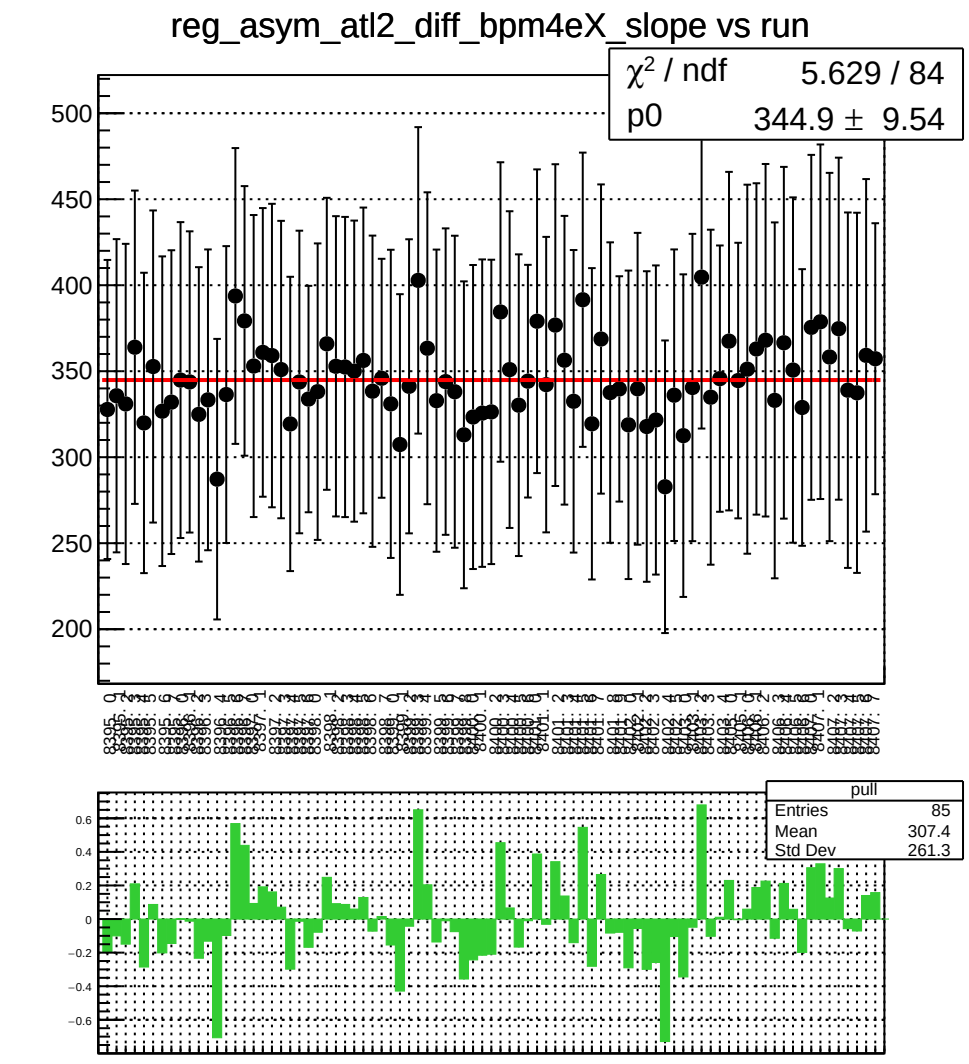

pull1D
Entries 85
Mean −0.0288
Std Dev 1.3

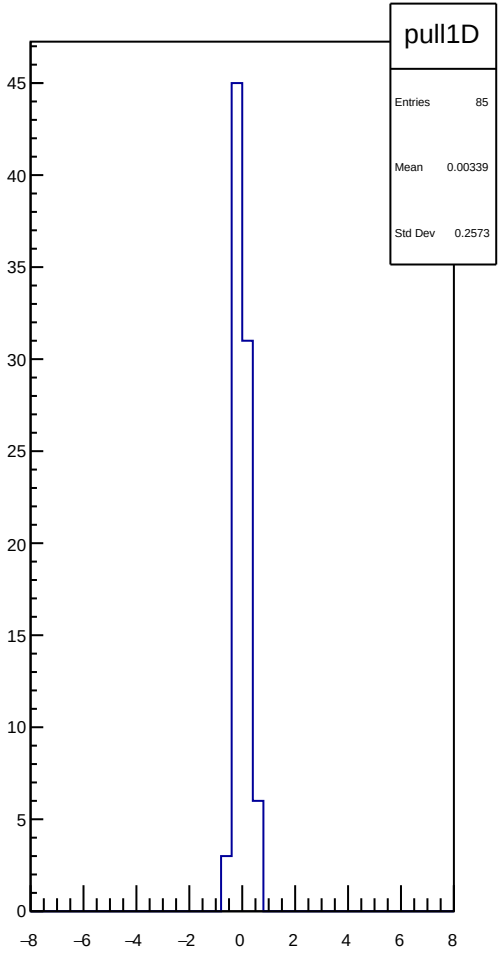

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 6.228 / 84
p0 −476.9 ± 8.596
−350
−400
−450
−500
−550
−600
pull
Entries 85
Mean 376.8
Std Dev 329.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

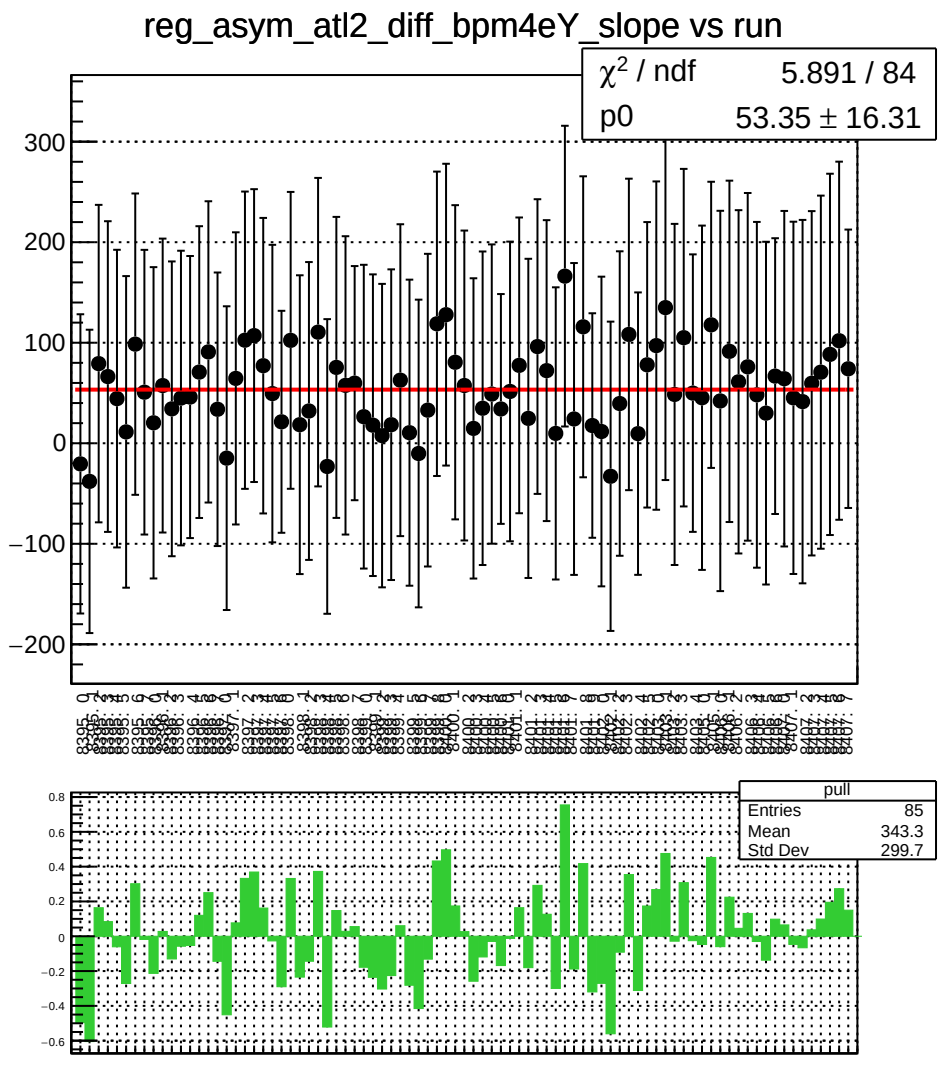

pull1D
Entries 85
Mean −0.003374
Std Dev 0.2707
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

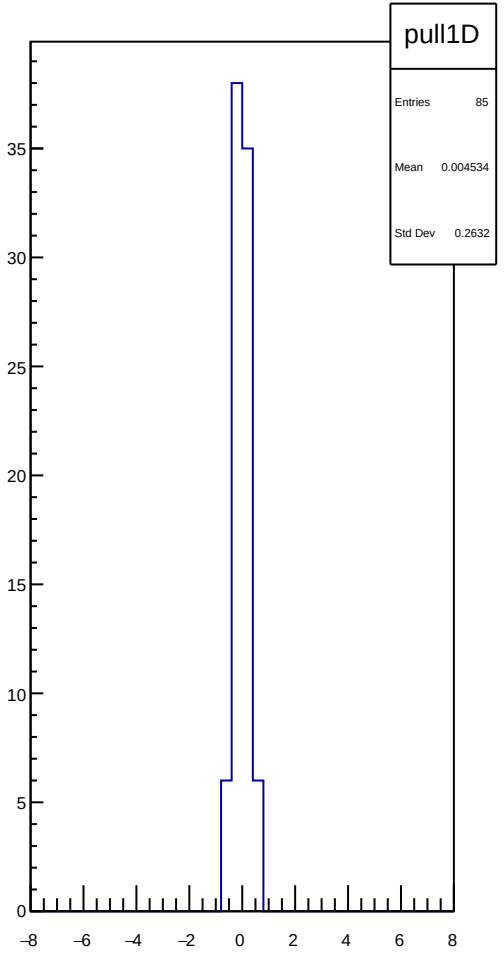

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 5.908 / 84
p0 71.77 ± 15.61
300
200
100
0
−100
−200
pull
Entries 85
Mean 350
Std Dev 306.3
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

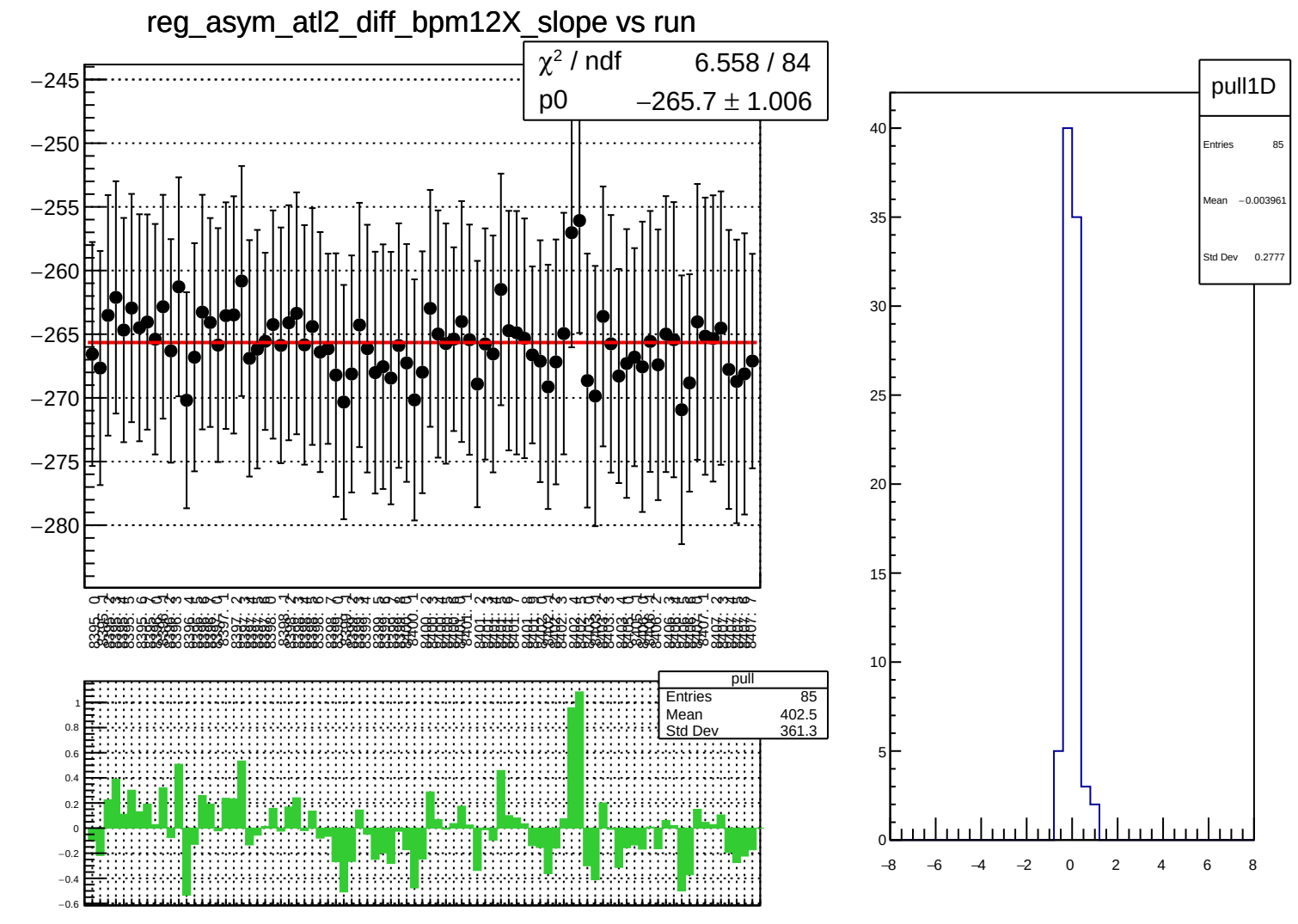

pull1D
Entries 85
Mean −0.004547
Std Dev 0.2636
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

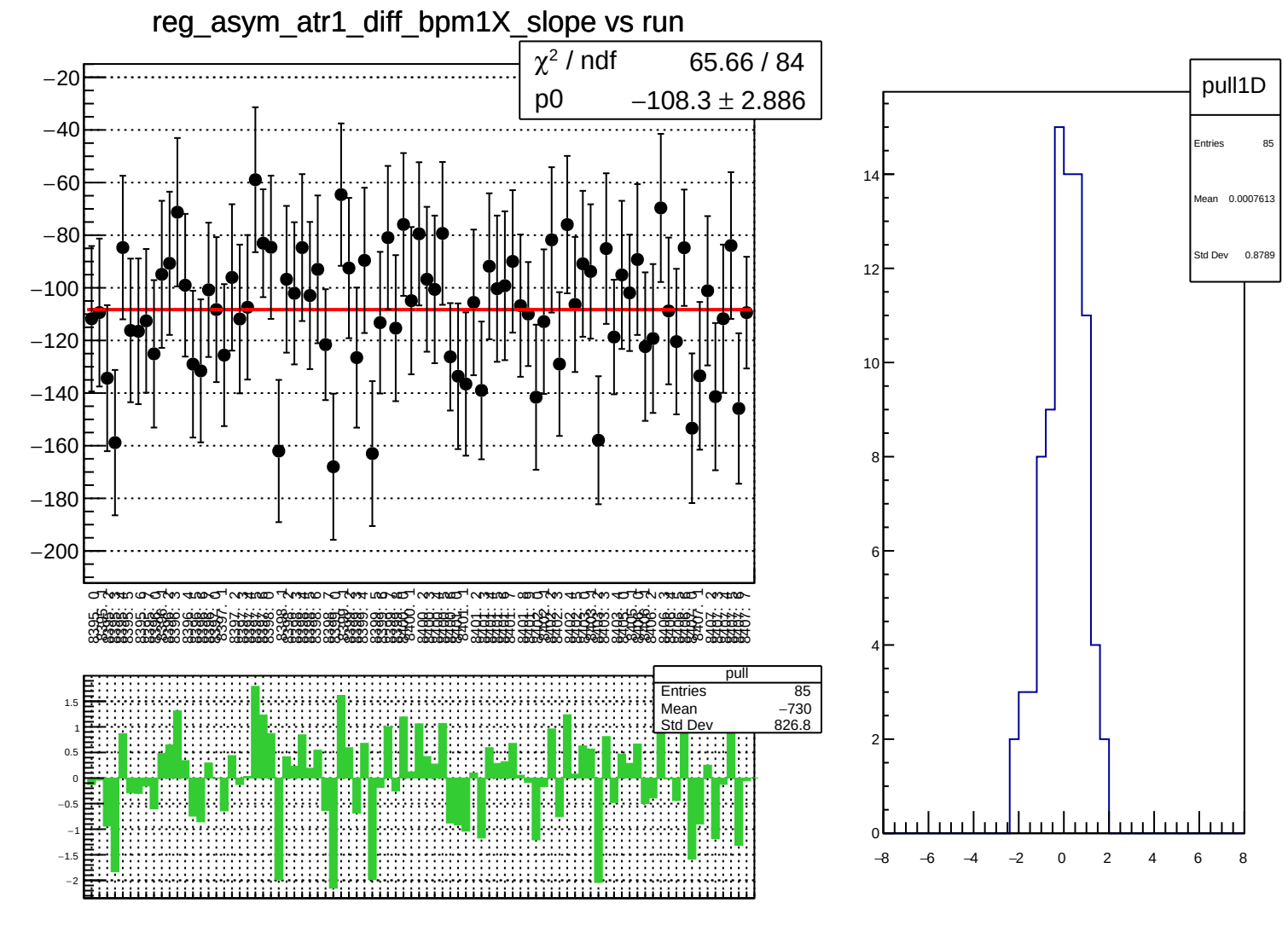

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 5.629 / 84
p0 344.9 ± 9.54
pull
Entries 85
Mean 307.4
Std Dev 261.3

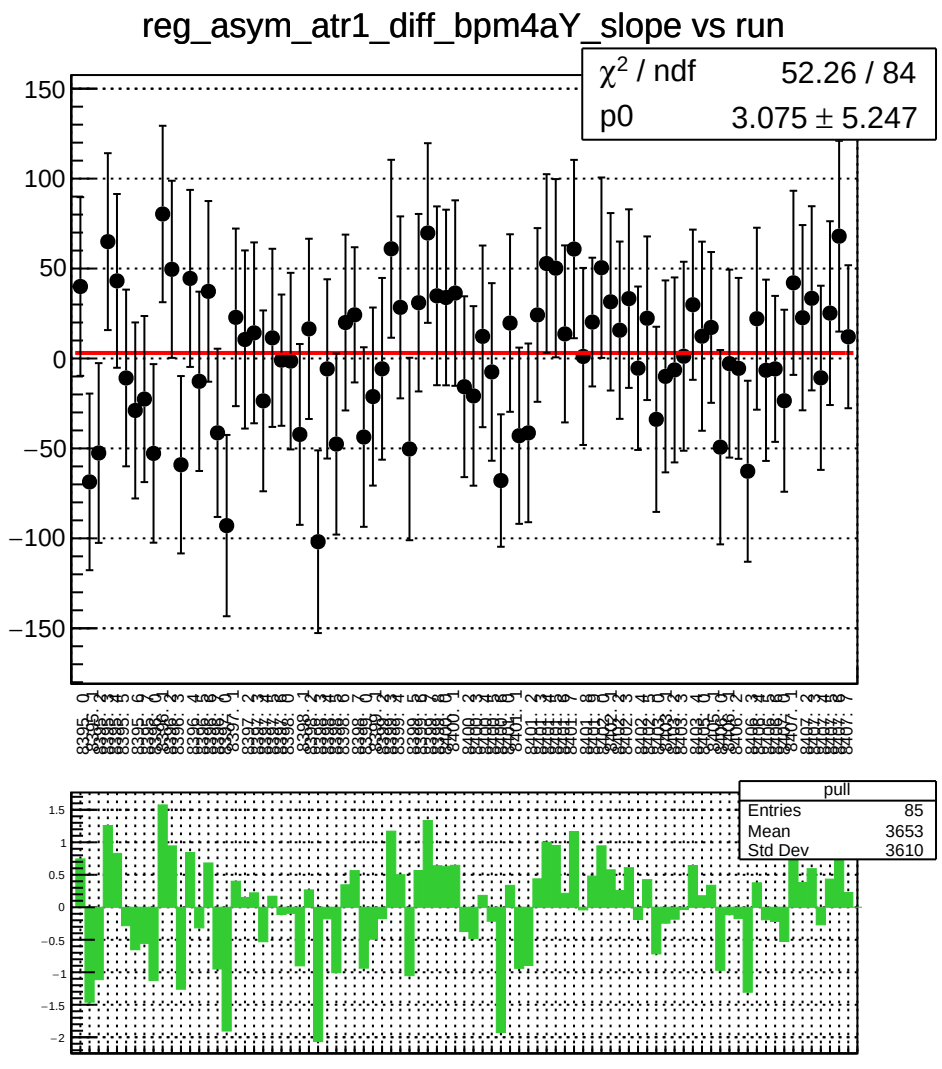

pull1D
Entries 85
Mean 0.00339
Std Dev 0.2573

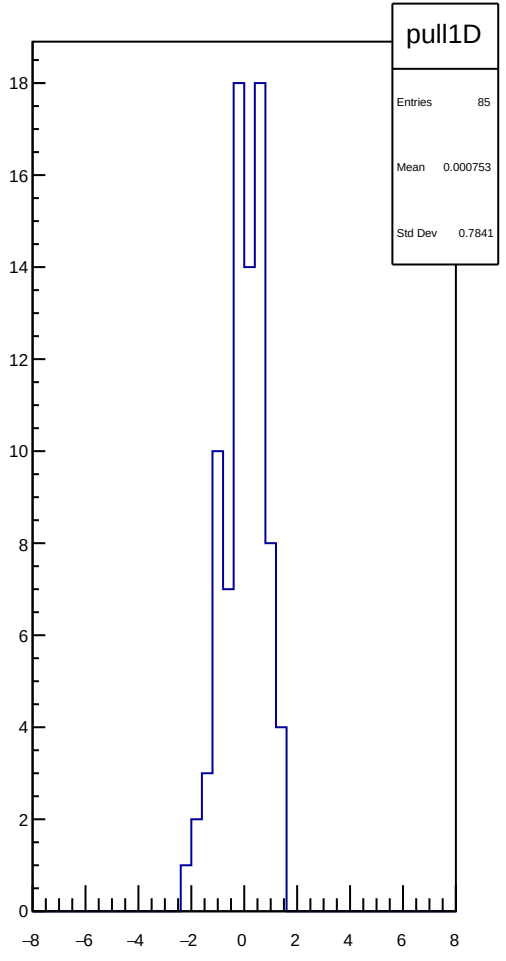

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 5.891 / 84
p0 53.35 ± 16.31
300
200
100
0
−100
−200
pull
Entries 85
Mean 343.3
Std Dev 299.7
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

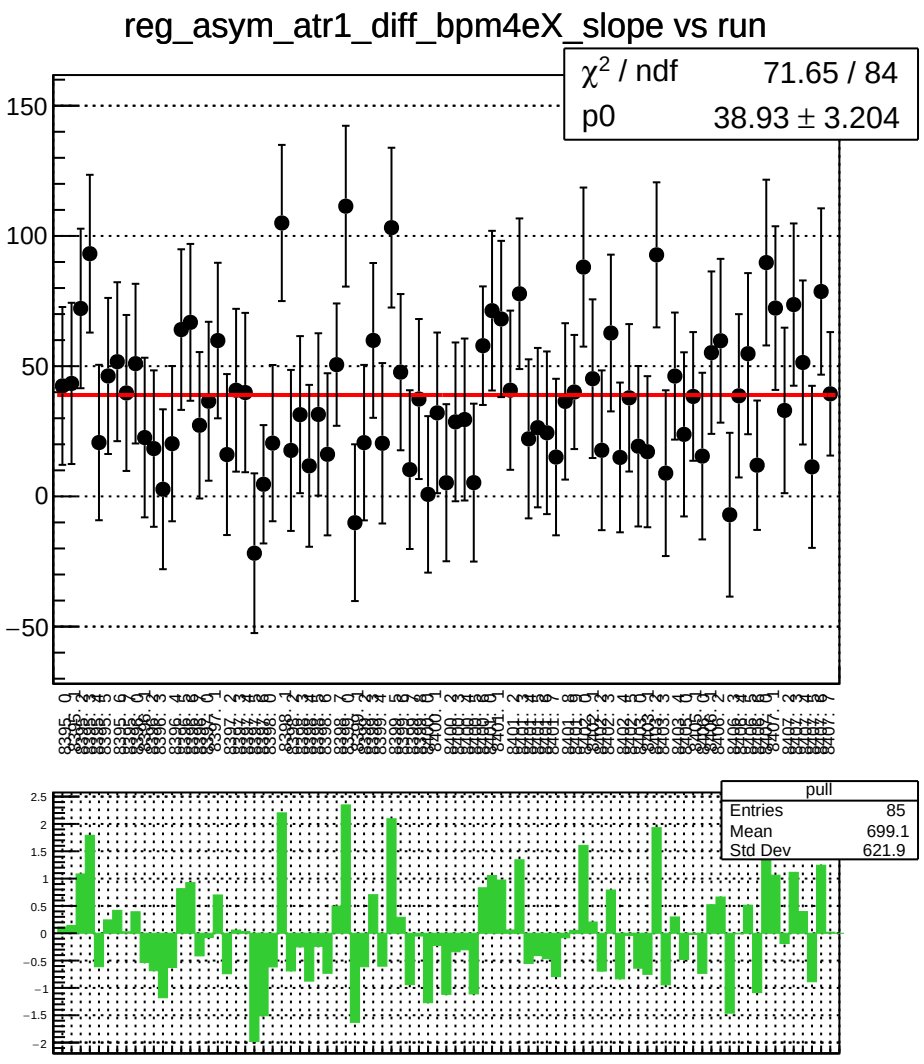

pull1D
Entries 85
Mean 0.004534
Std Dev 0.2632
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

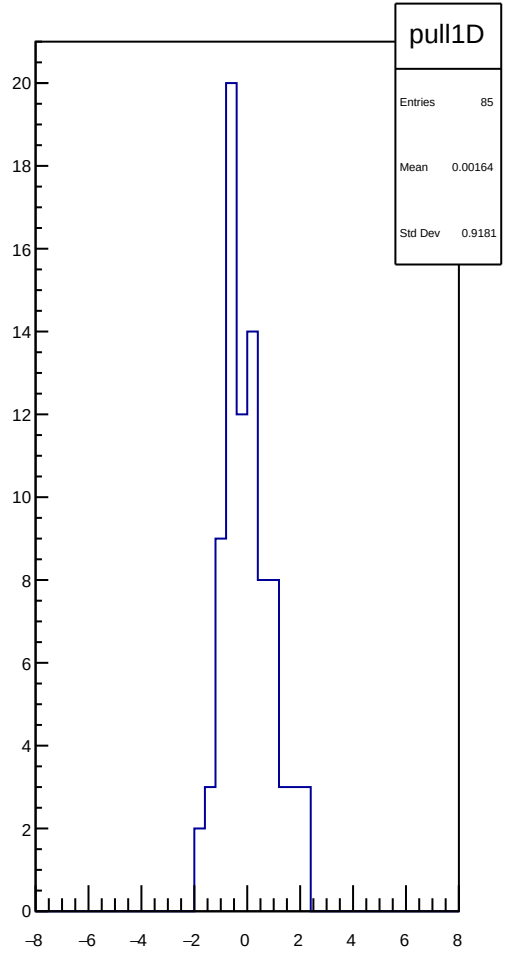

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 6.558 / 84
p0 −265.7 ± 1.006
pull
Entries 85
Mean 402.5
Std Dev 361.3
pull1D
Entries 85
Mean −0.003961
Std Dev 0.2777

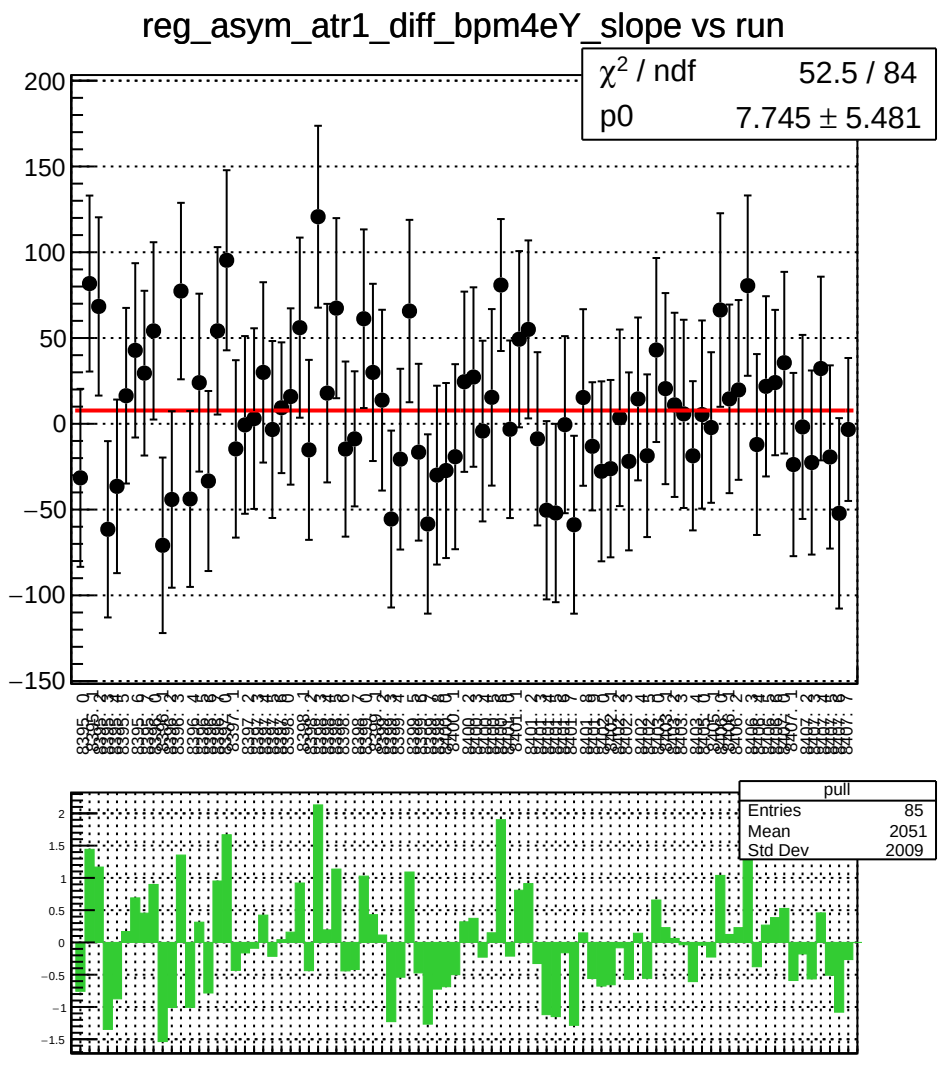

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 65.66 / 84
p0 −108.3 ± 2.886
pull
Entries 85
Mean −730
Std Dev 826.8
pull1D
Entries 85
Mean 0.0007613
Std Dev 0.8789

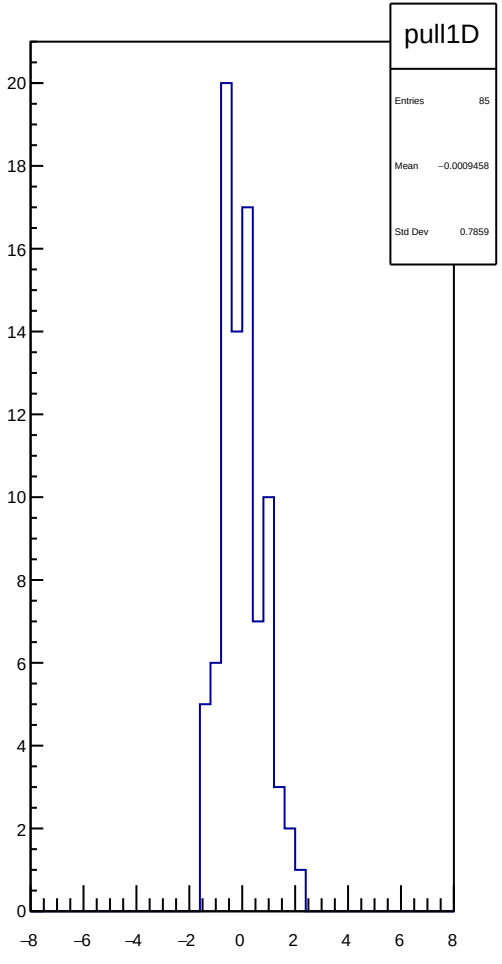

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 52.26 / 84
p0 3.075 ± 5.247
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 3653
Std Dev 3610
1.5
1
0.5
0
−0.5
−1
−1.5
−2

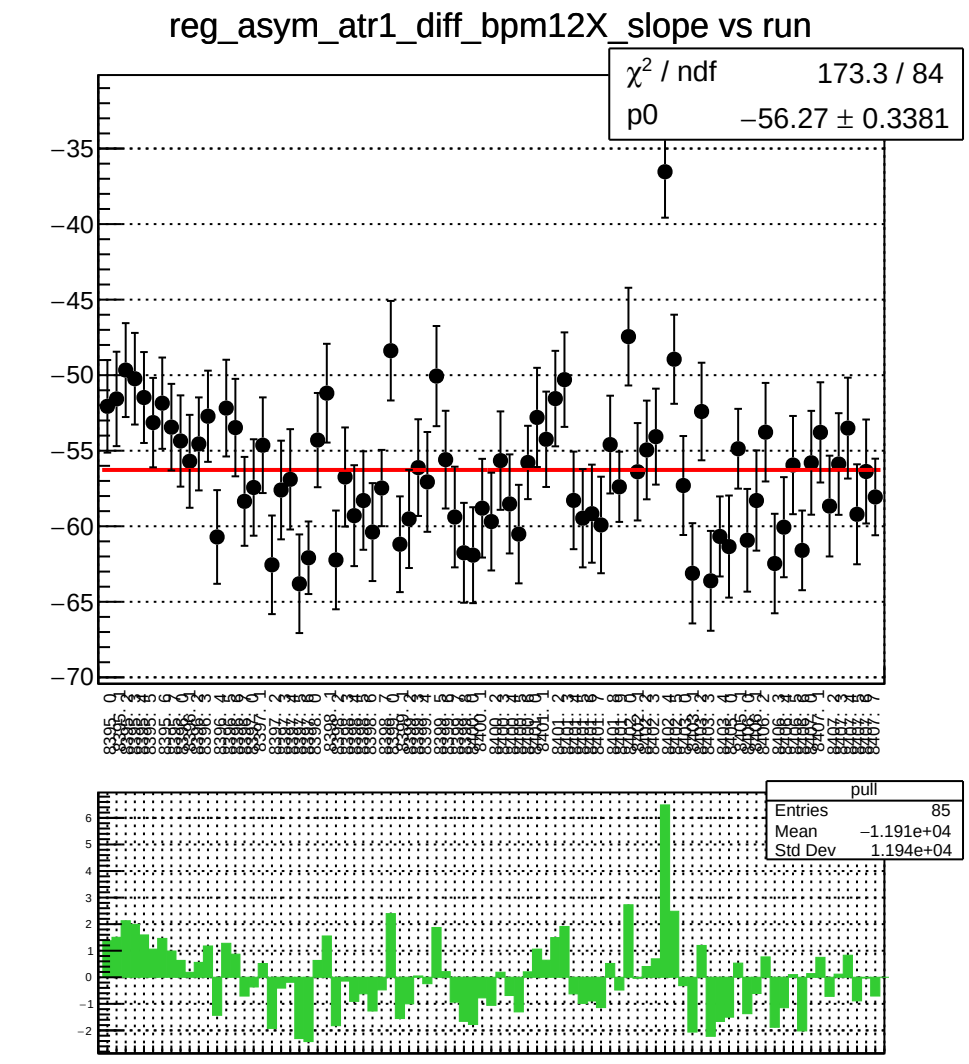

pull1D
Entries 85
Mean 0.000753
Std Dev 0.7841
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

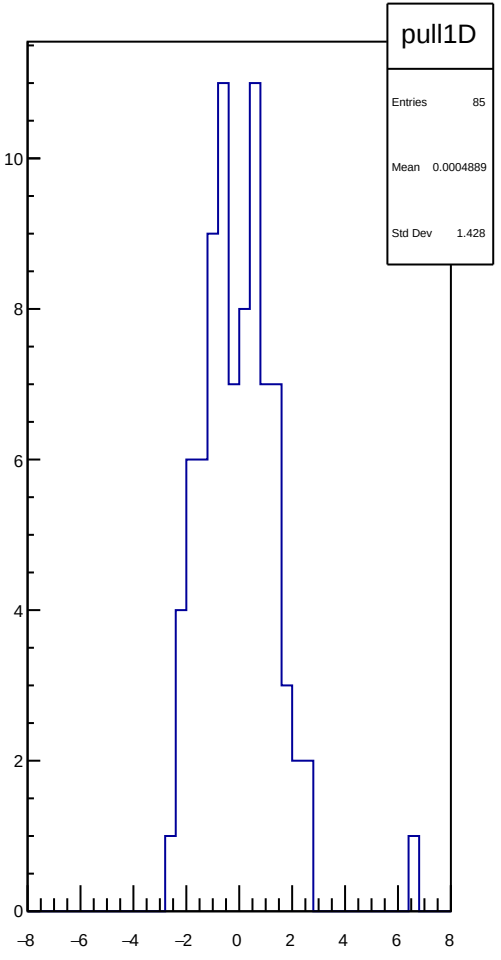

reg_asym_atr1_diff_bpm4eX_slope vs run
χ^2 / ndf 71.65 / 84
p0 38.93 ± 3.204
150
100
50
0
−50
pull
Entries 85
Mean 699.1
Std Dev 621.9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

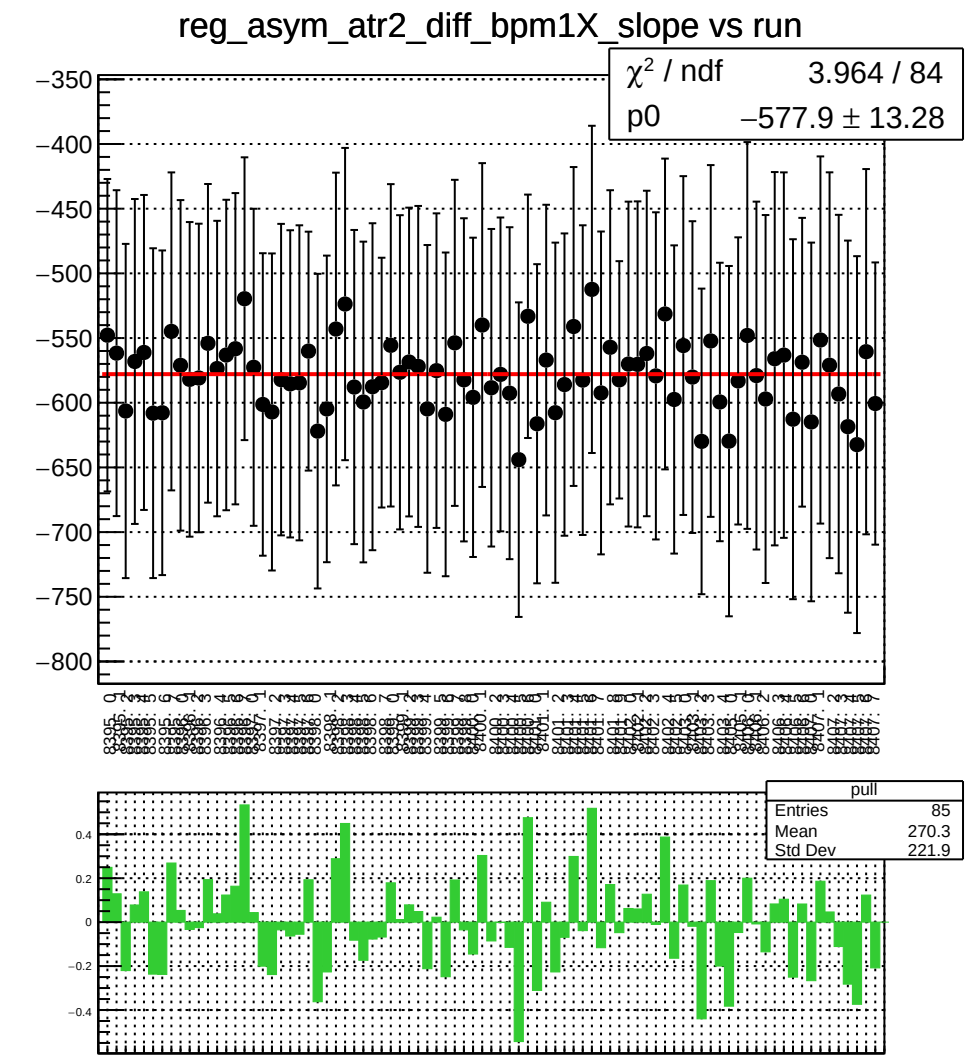

pull1D
Entries 85
Mean 0.00164
Std Dev 0.9181
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

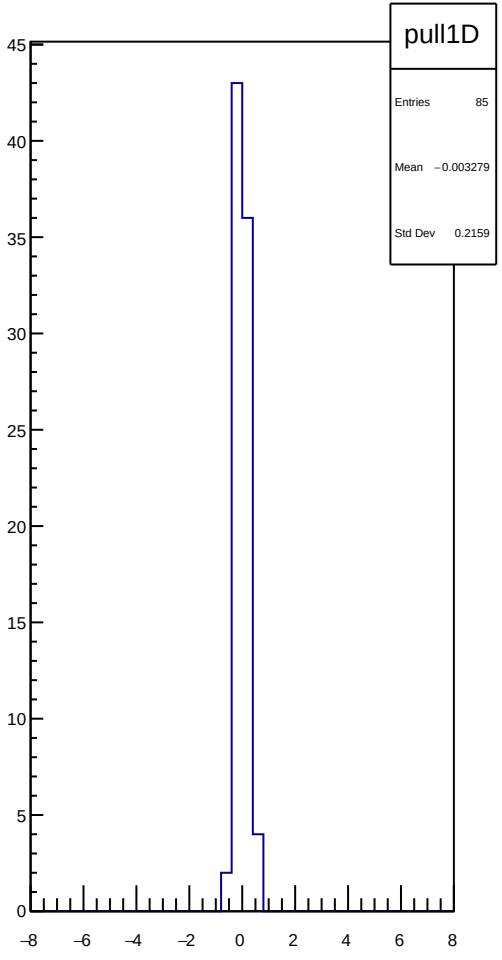

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 52.5 / 84
p0 7.745 ± 5.481
pull
Entries 85
Mean 2051
Std Dev 2009

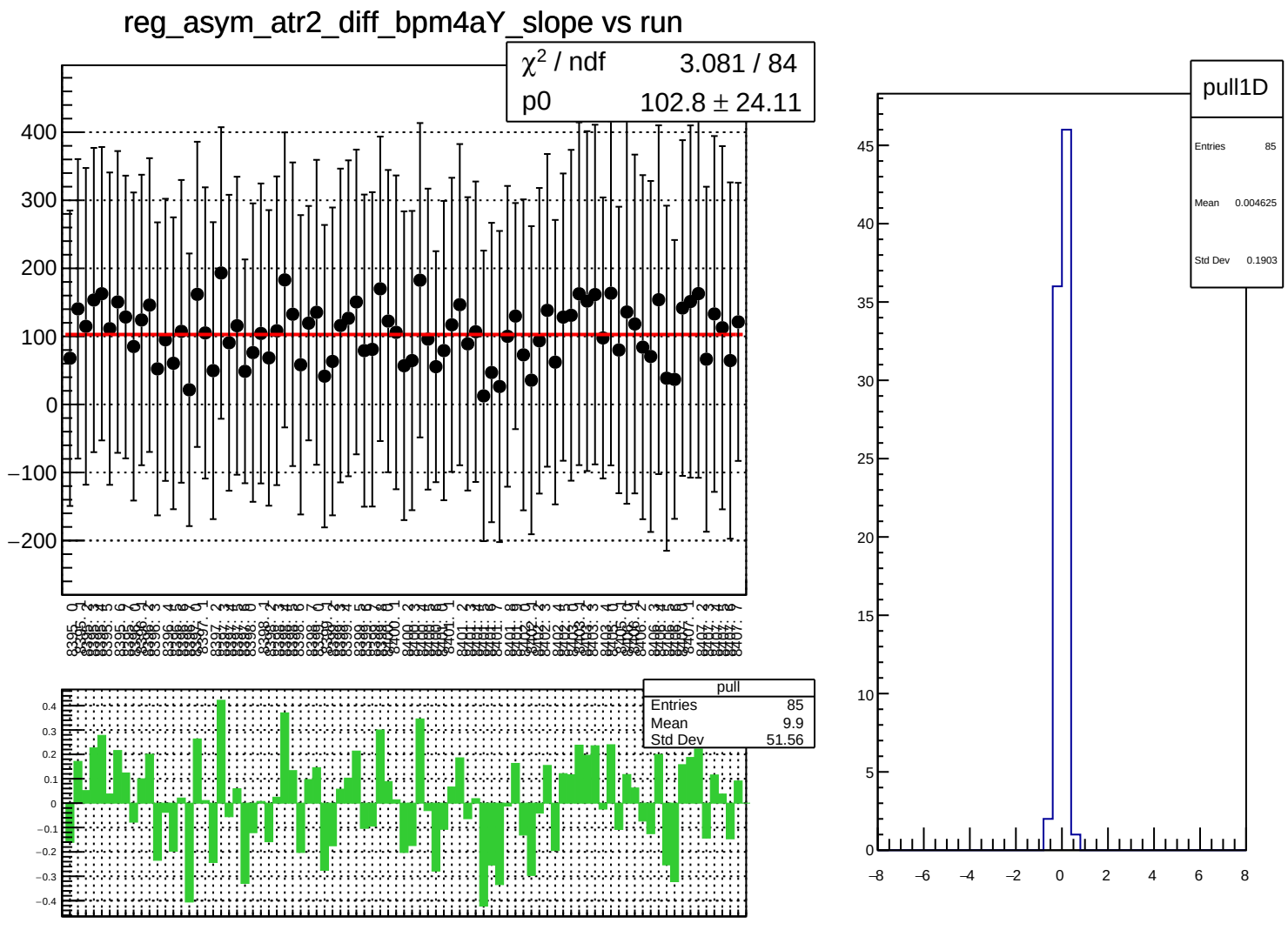

pull1D
Entries 85
Mean −0.0009458
Std Dev 0.7859

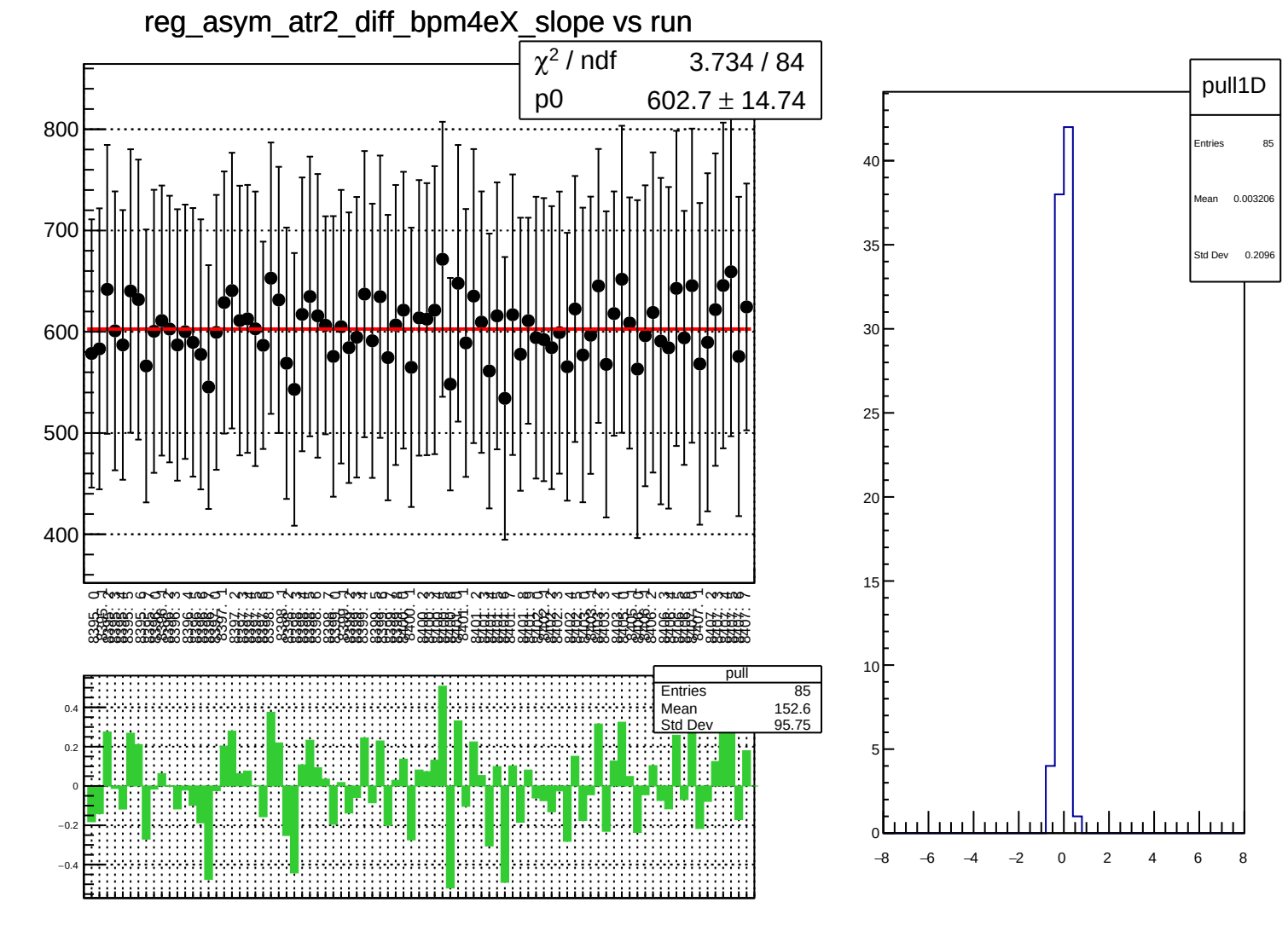

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 173.3 / 84
p0 −56.27 ± 0.3381
pull
Entries 85
Mean −1.191e+04
Std Dev 1.194e+04

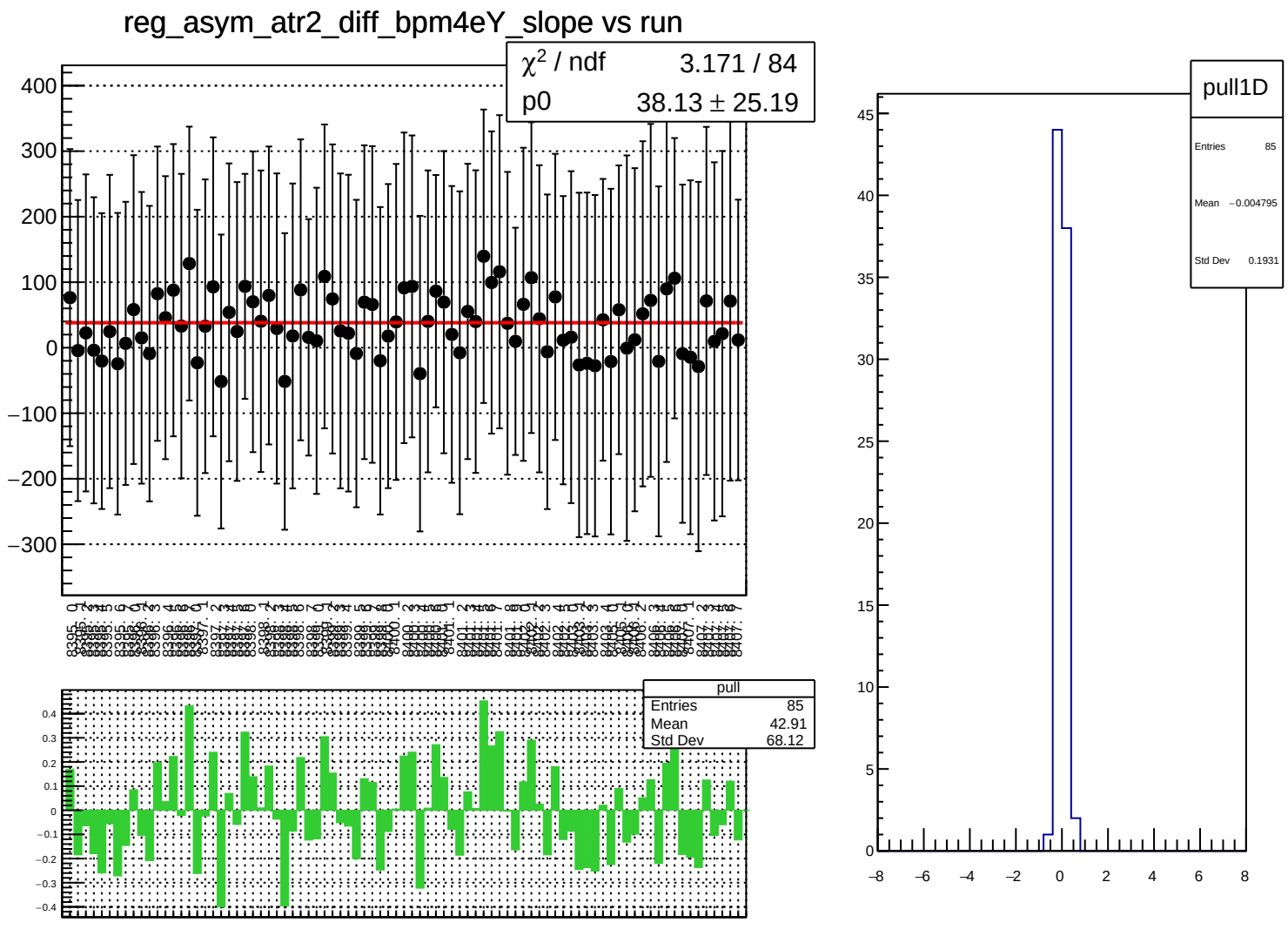

pull1D
Entries 85
Mean 0.0004889
Std Dev 1.428

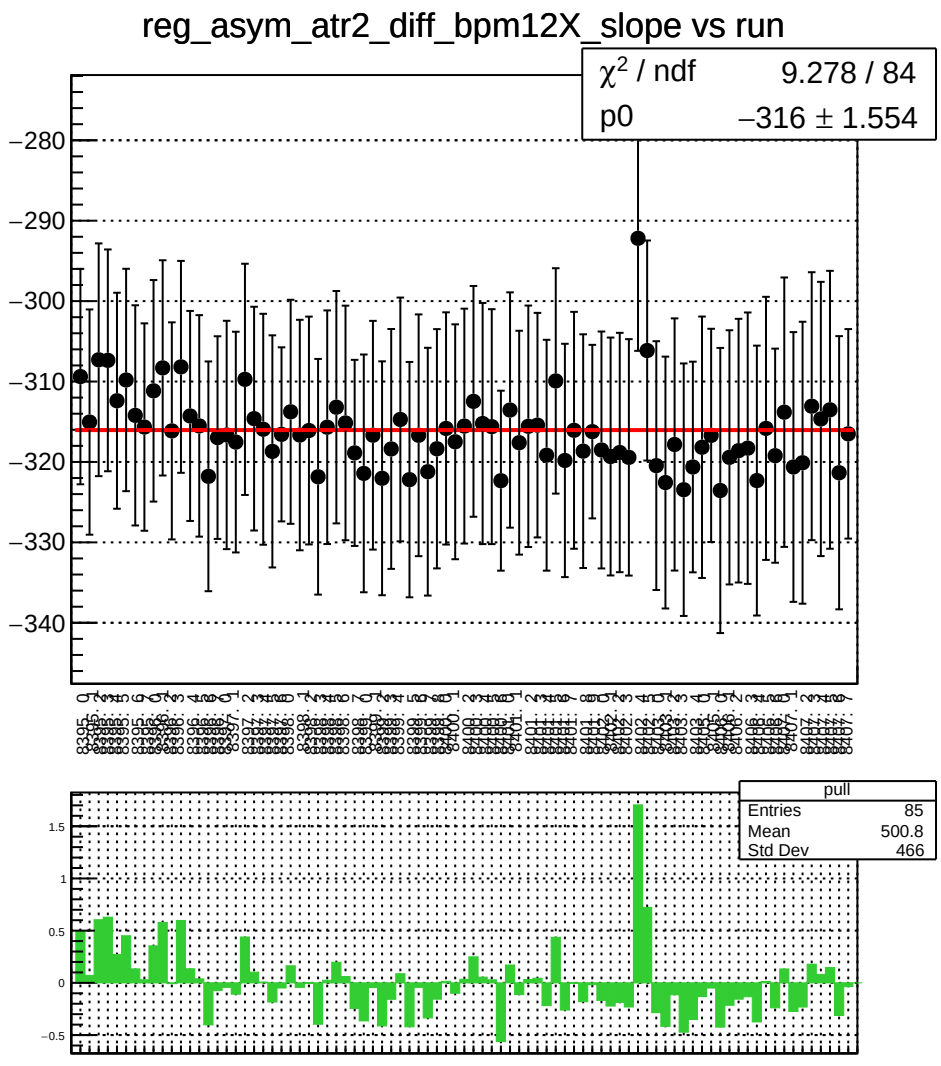

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 3.964 / 84
p0 −577.9 ± 13.28
pull
Entries 85
Mean 270.3
Std Dev 221.9

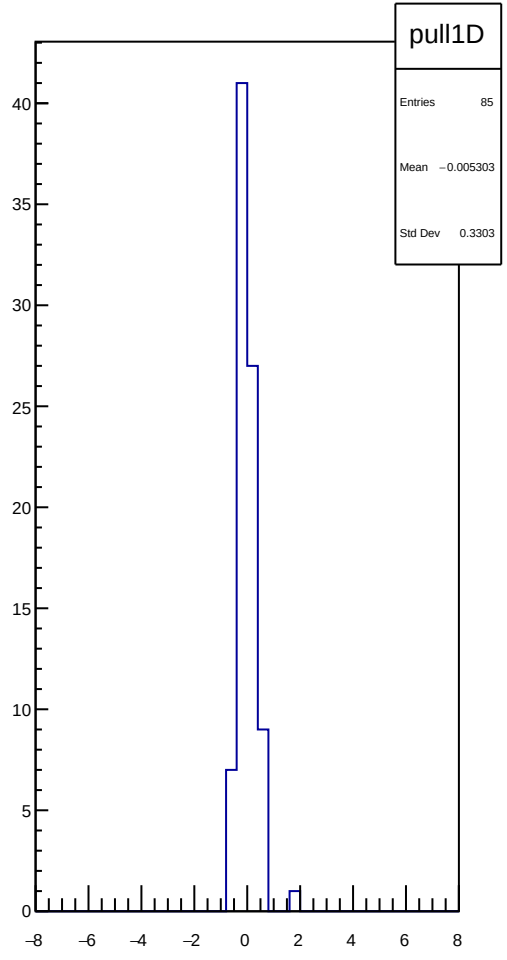

pull1D
Entries 85
Mean −0.003279
Std Dev 0.2159

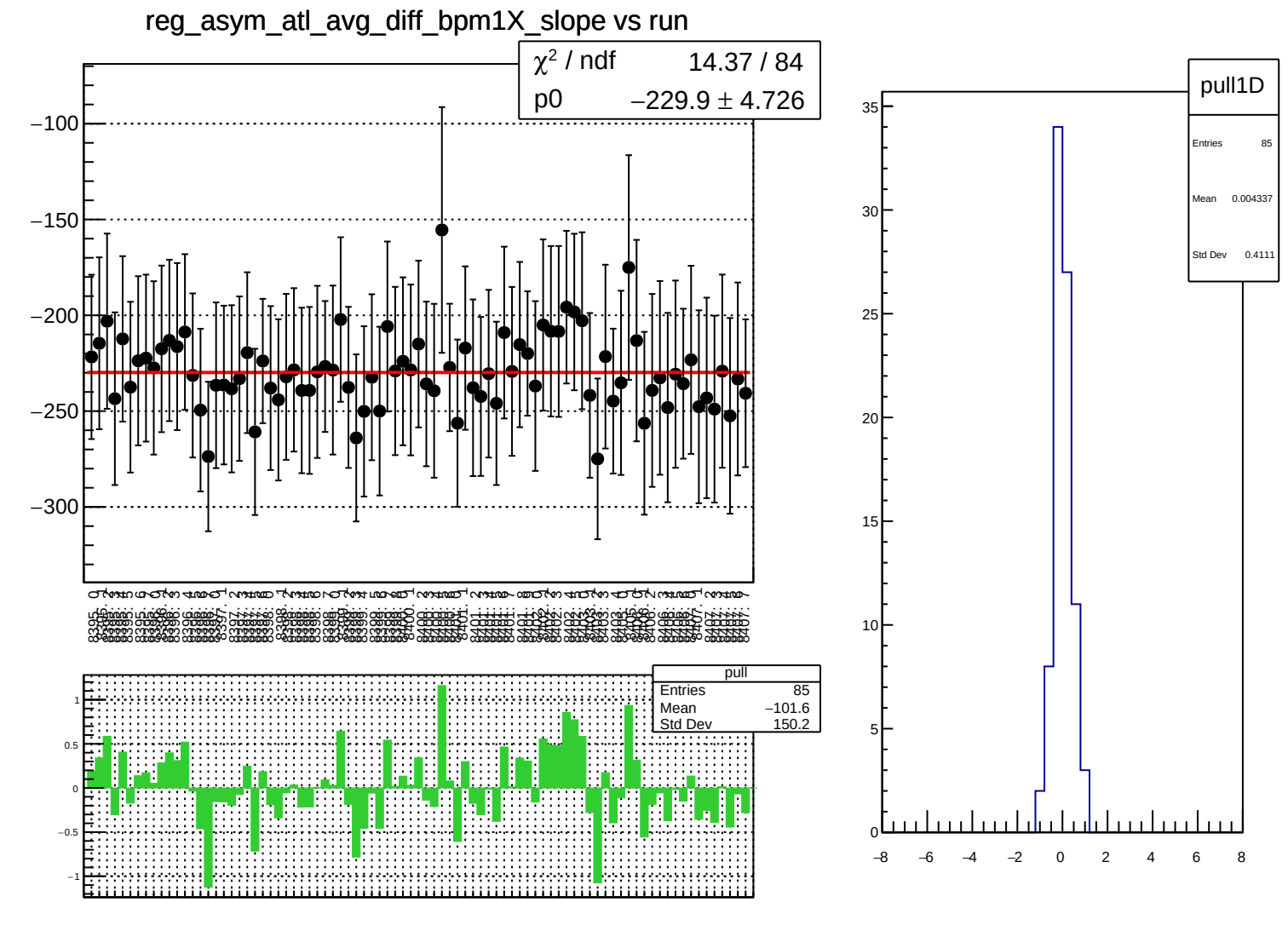

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 3.081 / 84
p0 102.8 ± 24.11
pull
Entries 85
Mean 9.9
Std Dev 51.56
pull1D
Entries 85
Mean 0.004625
Std Dev 0.1903

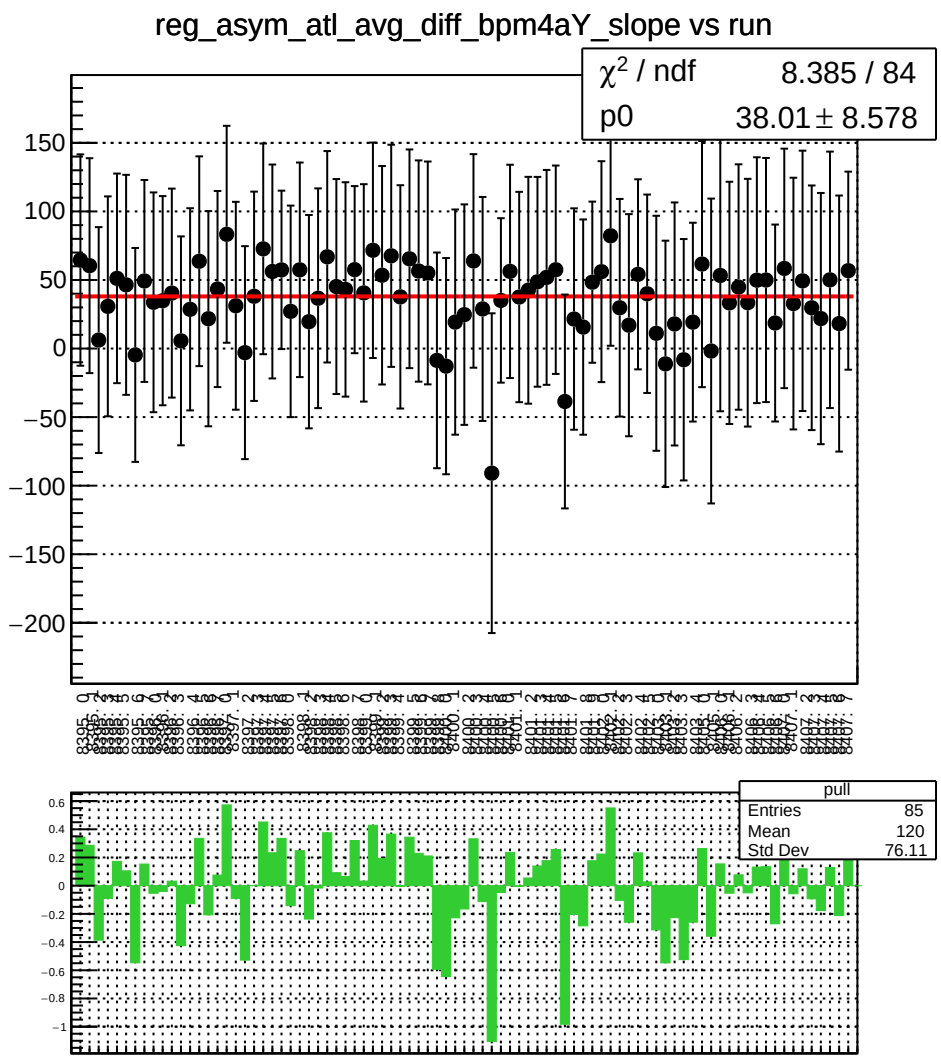

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 3.734 / 84
p0 602.7 ± 14.74
800
700
600
500
400
pull
Entries 85
Mean 152.6
Std Dev 95.75
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 85
Mean 0.003206
Std Dev 0.2096
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

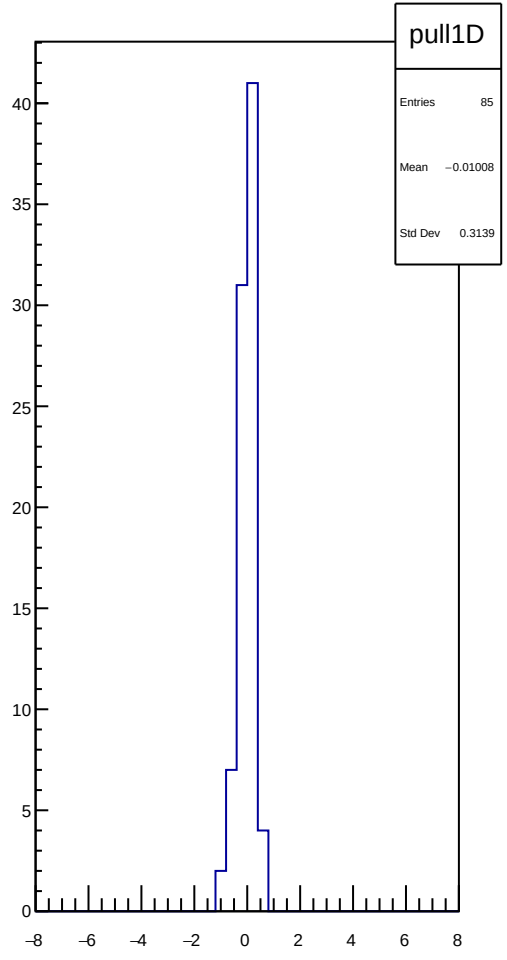

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 3.171 / 84
p0 38.13 ± 25.19
pull
Entries 85
Mean 42.91
Std Dev 68.12
pull1D
Entries 85
Mean −0.004795
Std Dev 0.1931

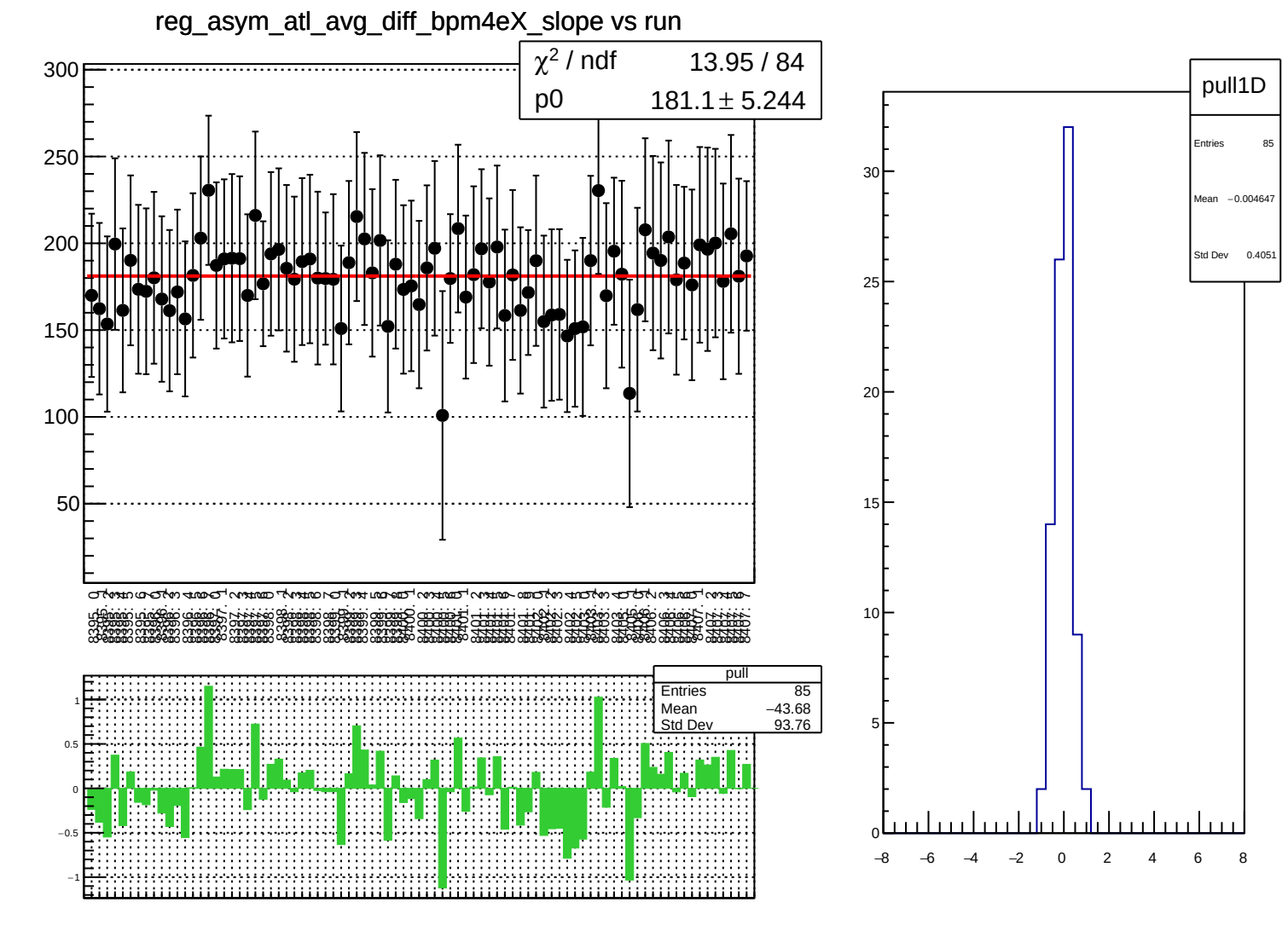

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 9.278 / 84
p0 −316 ± 1.554
pull
Entries 85
Mean 500.8
Std Dev 466

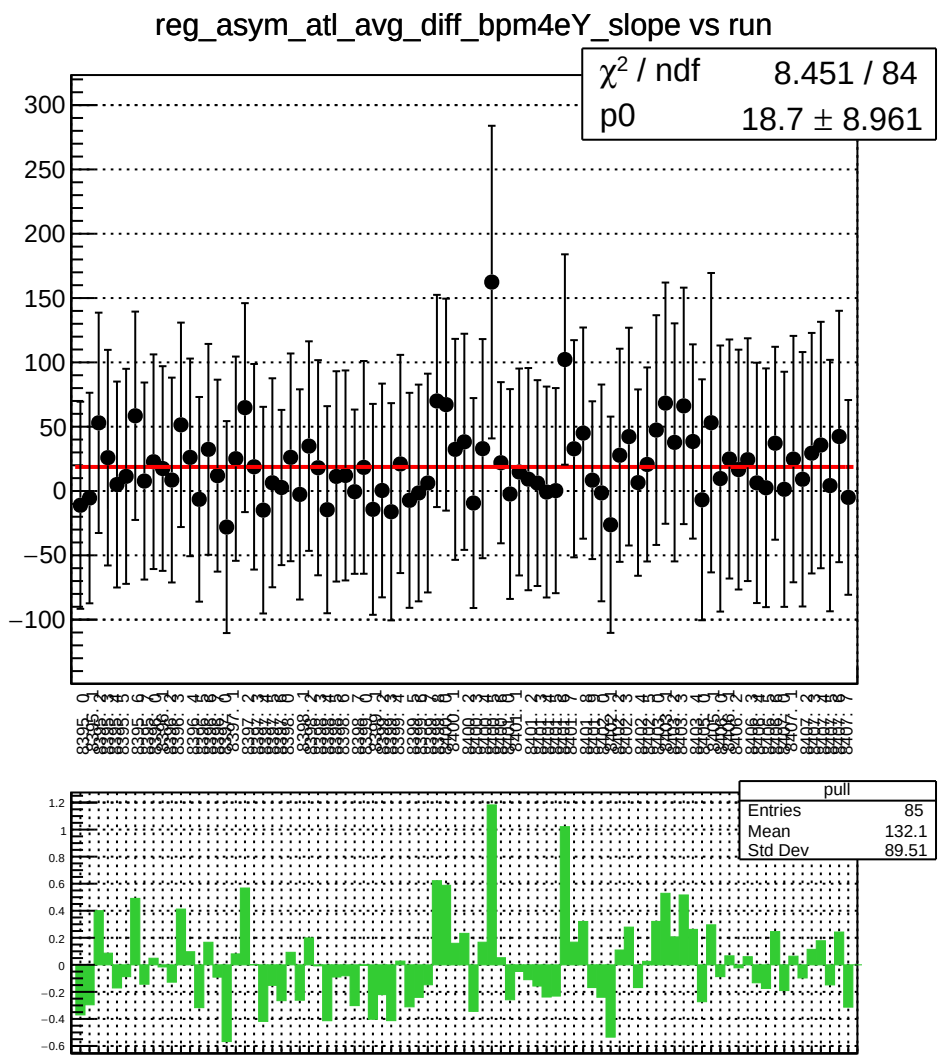

pull1D
Entries 85
Mean −0.005303
Std Dev 0.3303

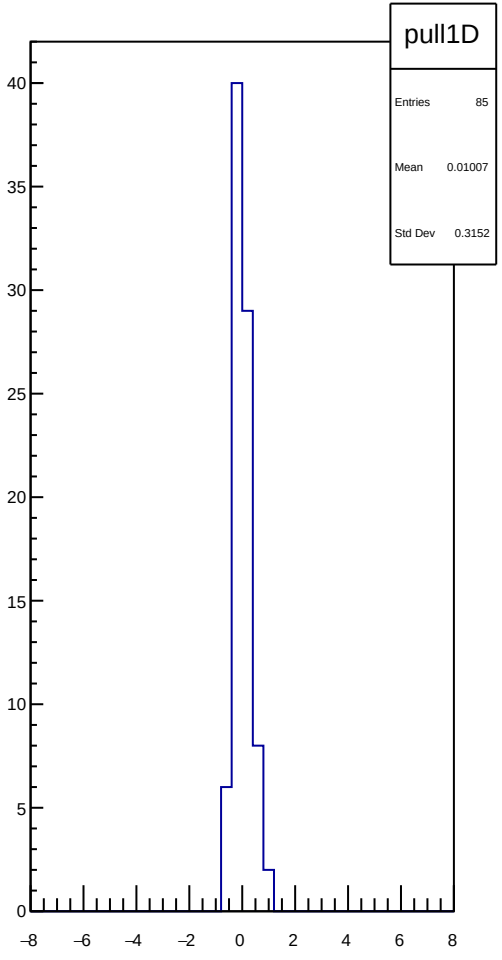

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 14.37 / 84
p0 −229.9 ± 4.726
pull
Entries 85
Mean −101.6
Std Dev 150.2
pull1D
Entries 85
Mean 0.004337
Std Dev 0.4111

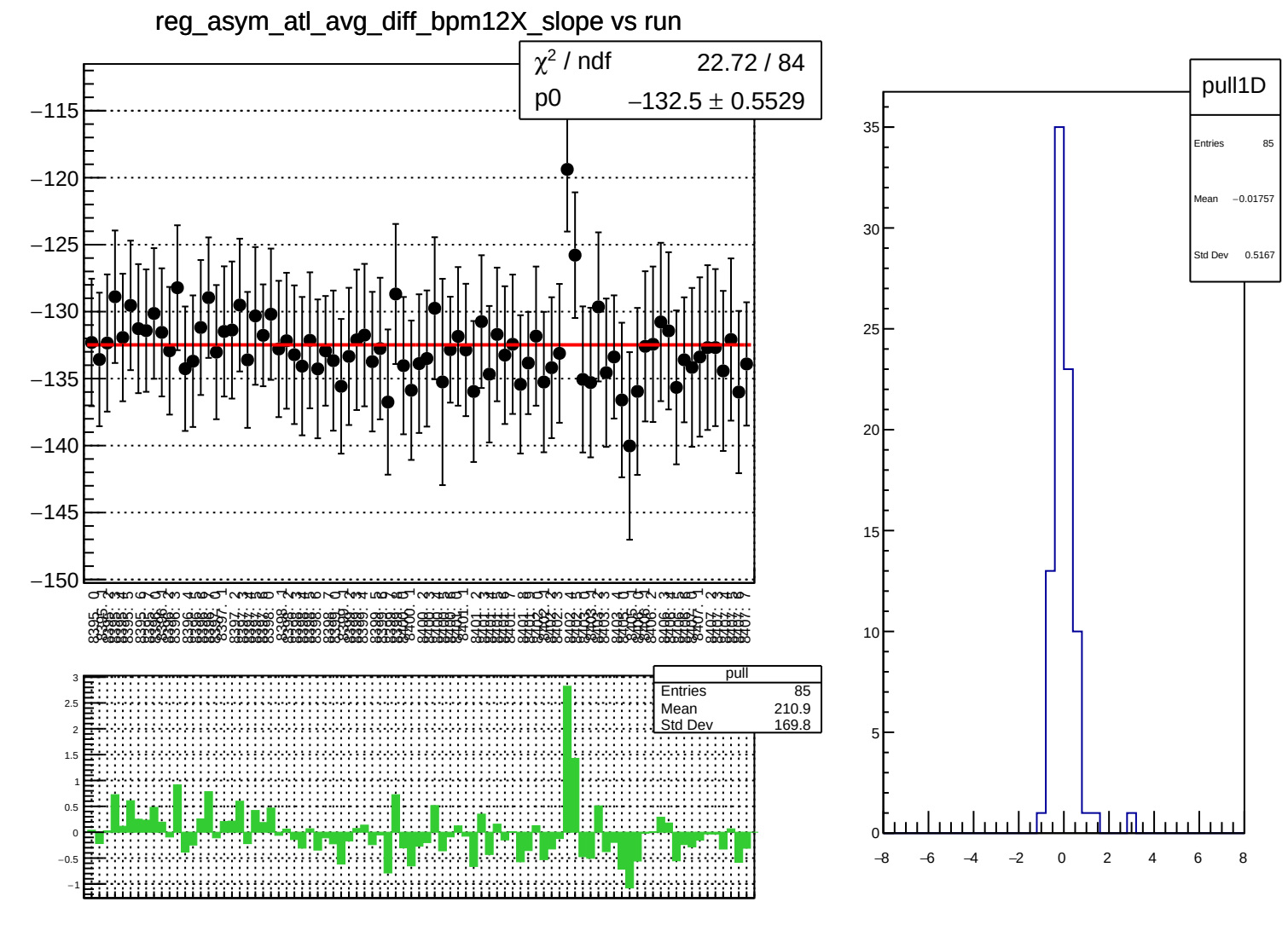

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.385 / 84
p0 38.01 ± 8.578
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 120
Std Dev 76.11
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

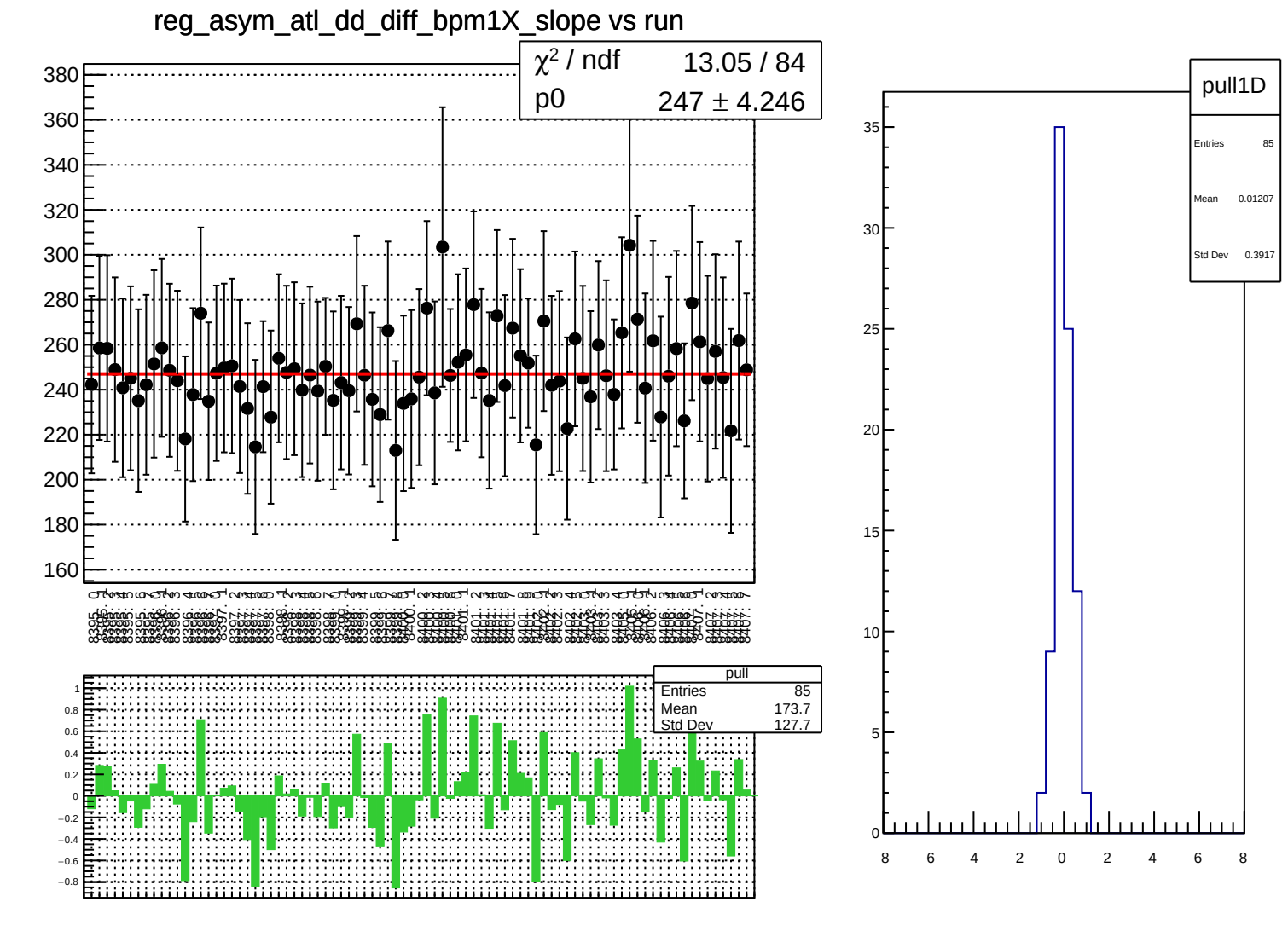

pull1D
Entries 85
Mean −0.01008
Std Dev 0.3139
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

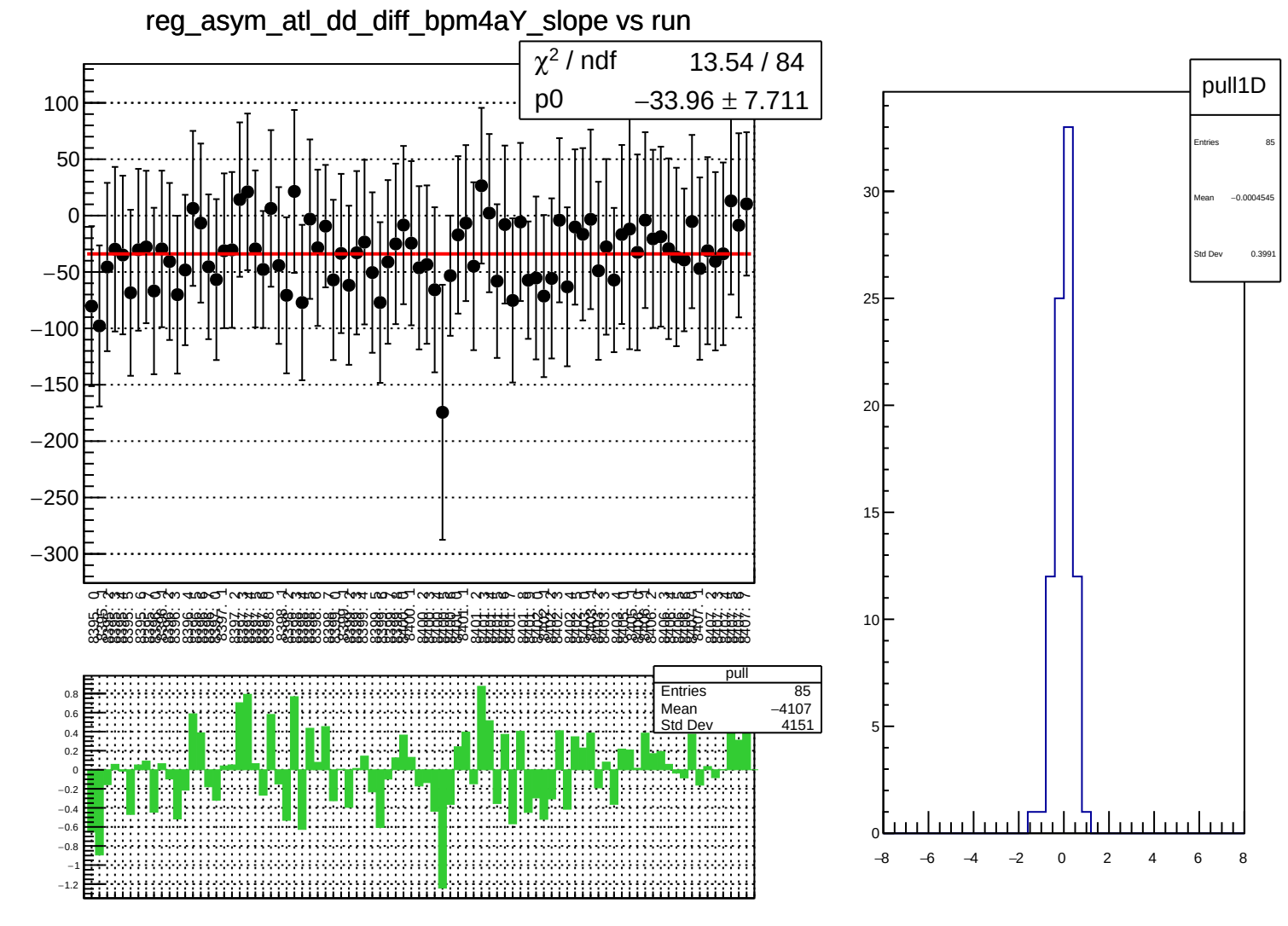

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 13.95 / 84
p0 181.1 ± 5.244
300
250
200
150
100
50
pull
Entries 85
Mean −43.68
Std Dev 93.76
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.004647
Std Dev 0.4051
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

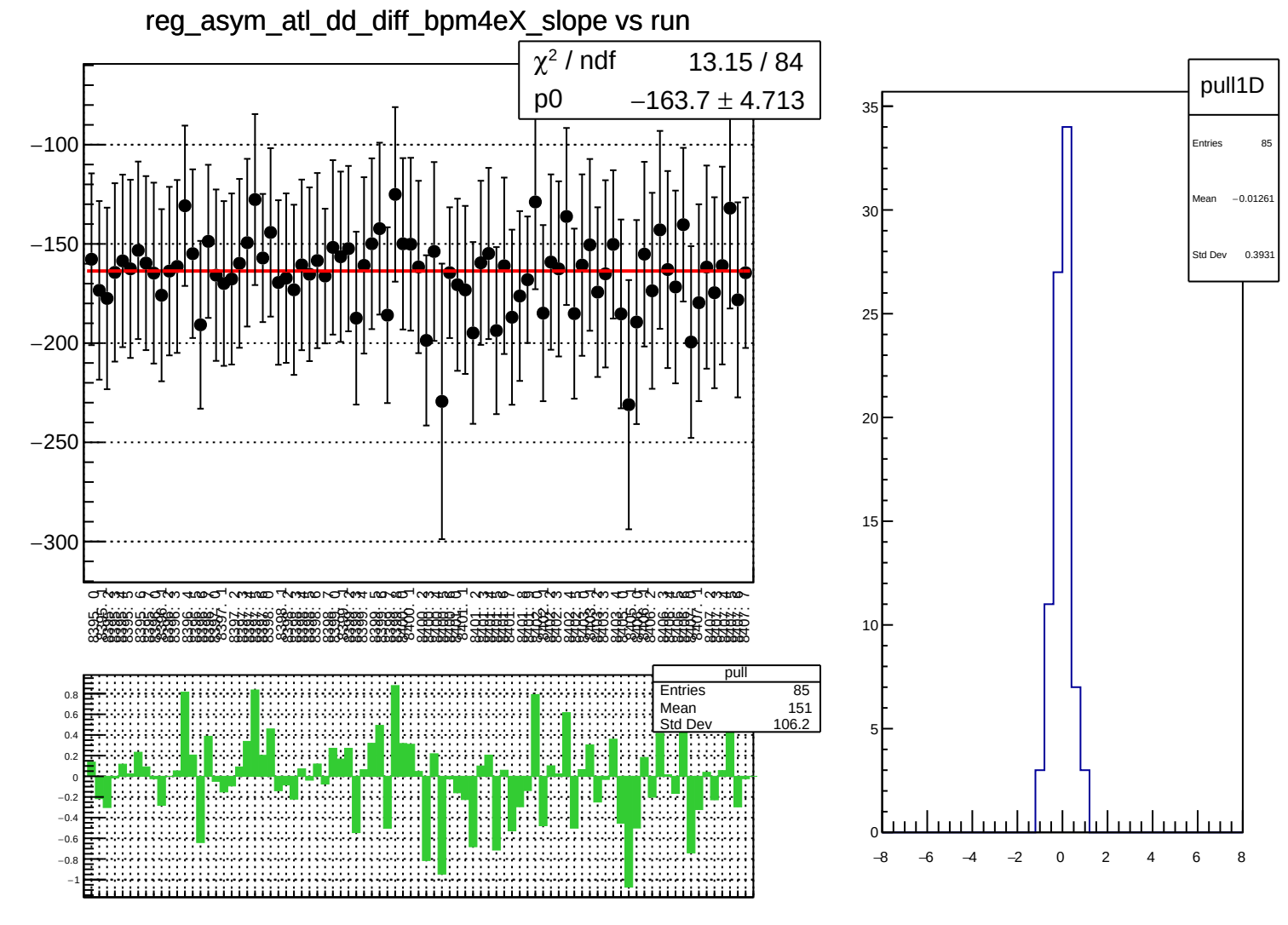

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.451 / 84
p0 18.7 ± 8.961
pull
Entries 85
Mean 132.1
Std Dev 89.51

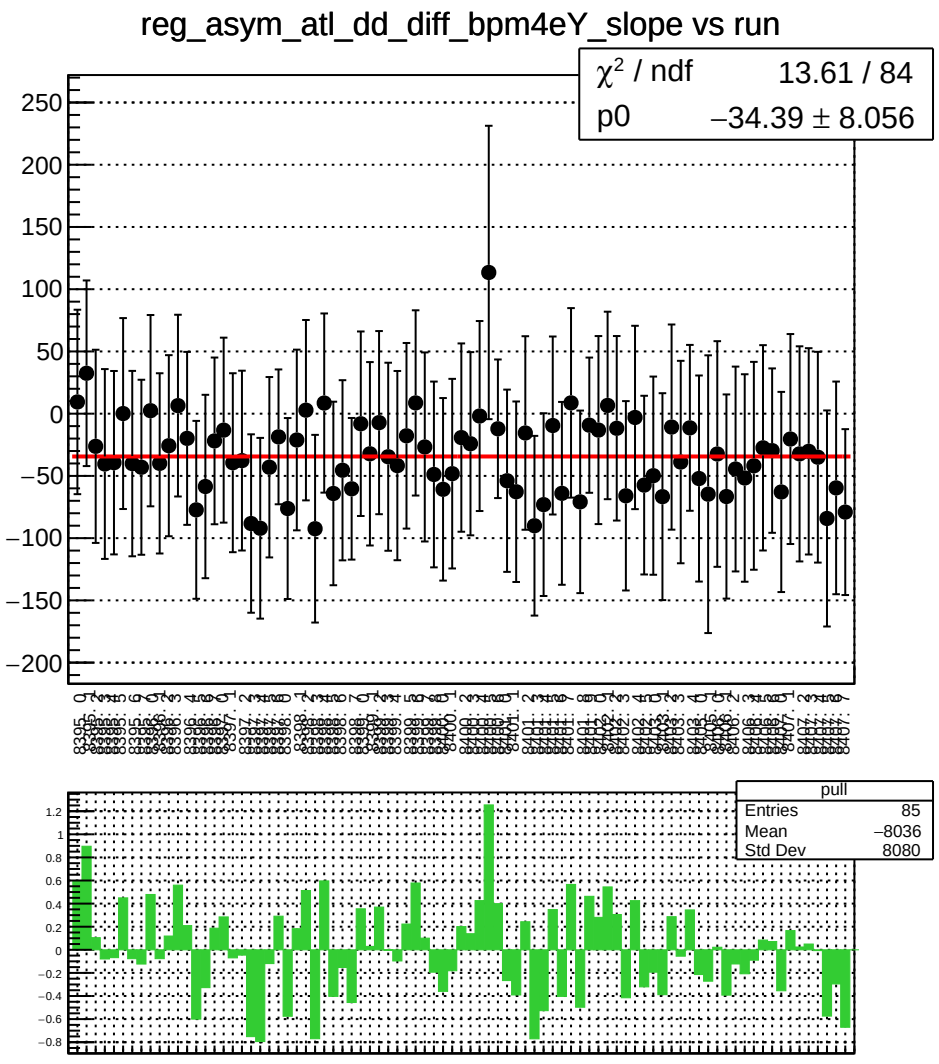

pull1D
Entries 85
Mean 0.01007
Std Dev 0.3152

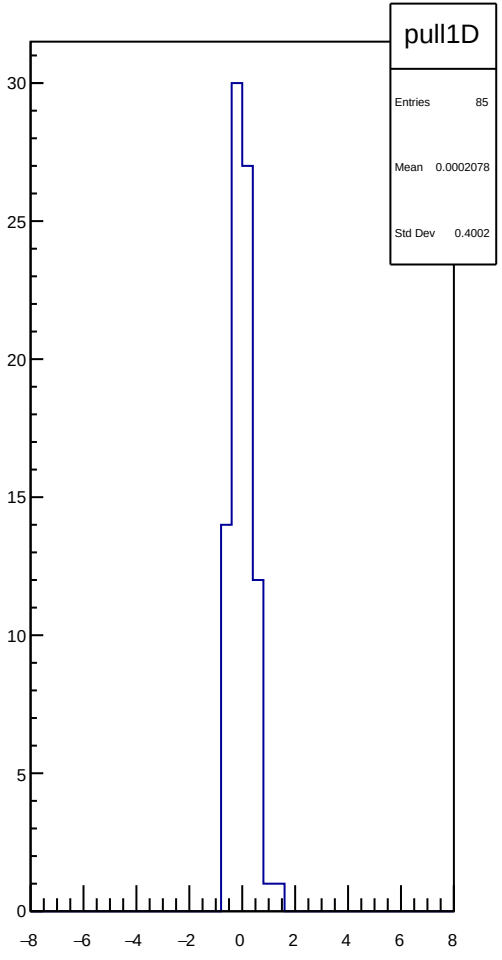

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 22.72 / 84
p0 −132.5 ± 0.5529
pull
Entries 85
Mean 210.9
Std Dev 169.8
pull1D
Entries 85
Mean −0.01757
Std Dev 0.5167

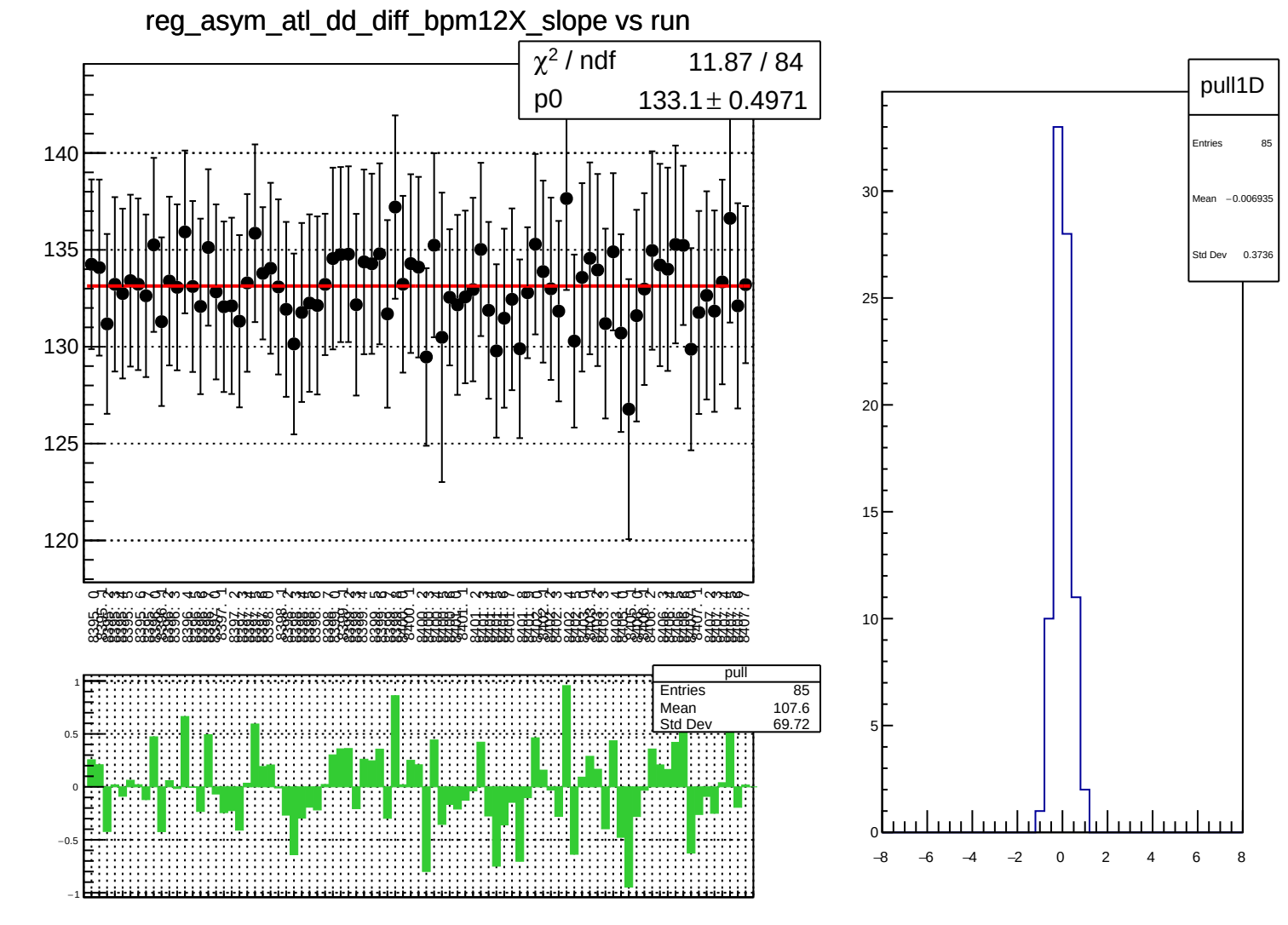

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 13.05 / 84
p0 247 ± 4.246
pull
Entries 85
Mean 173.7
Std Dev 127.7
pull1D
Entries 85
Mean 0.01207
Std Dev 0.3917

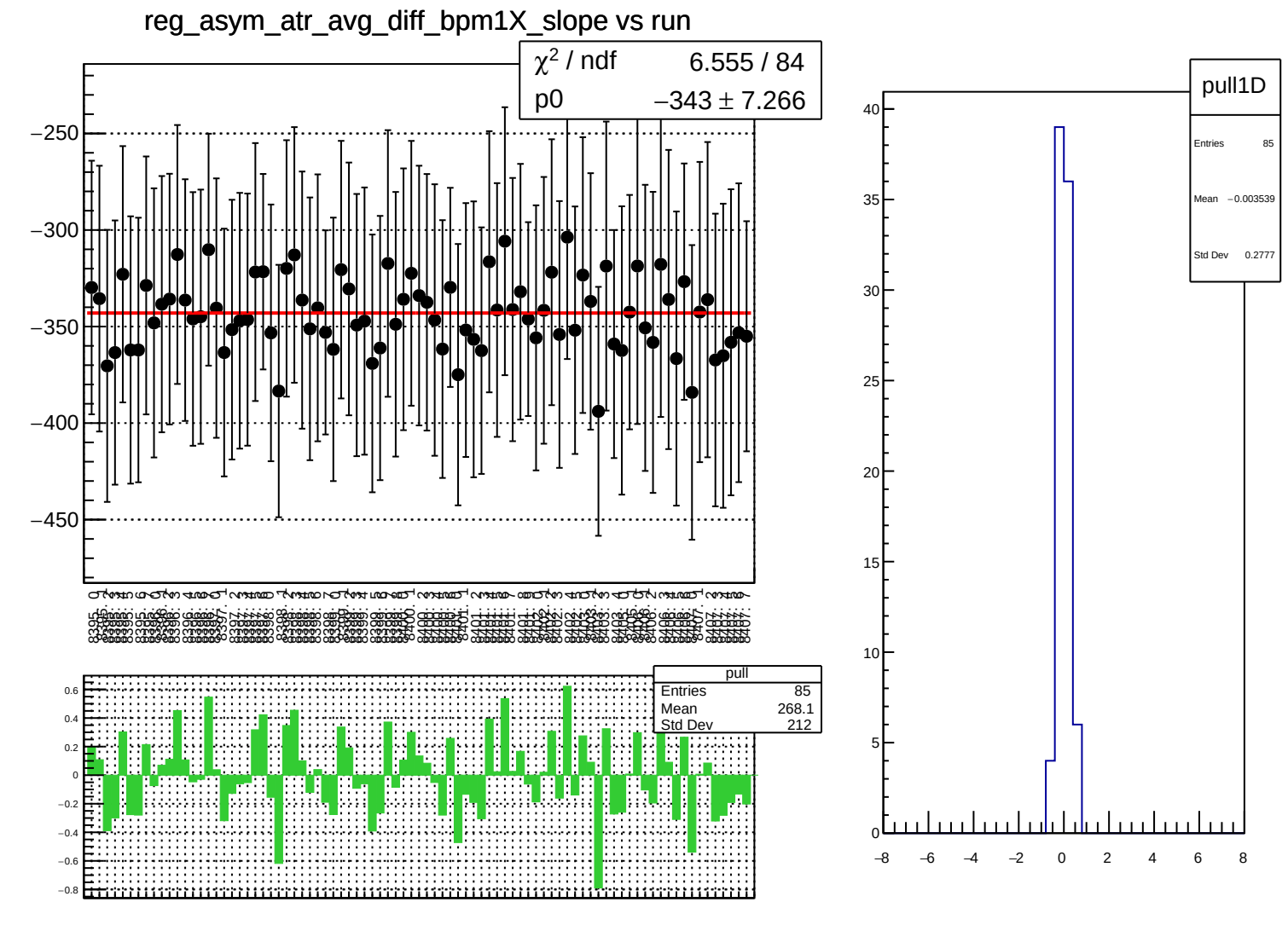

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.54 / 84
p0 −33.96 ± 7.711
pull
Entries 85
Mean −4107
Std Dev 4151
pull1D
Entries 85
Mean −0.0004545
Std Dev 0.3991

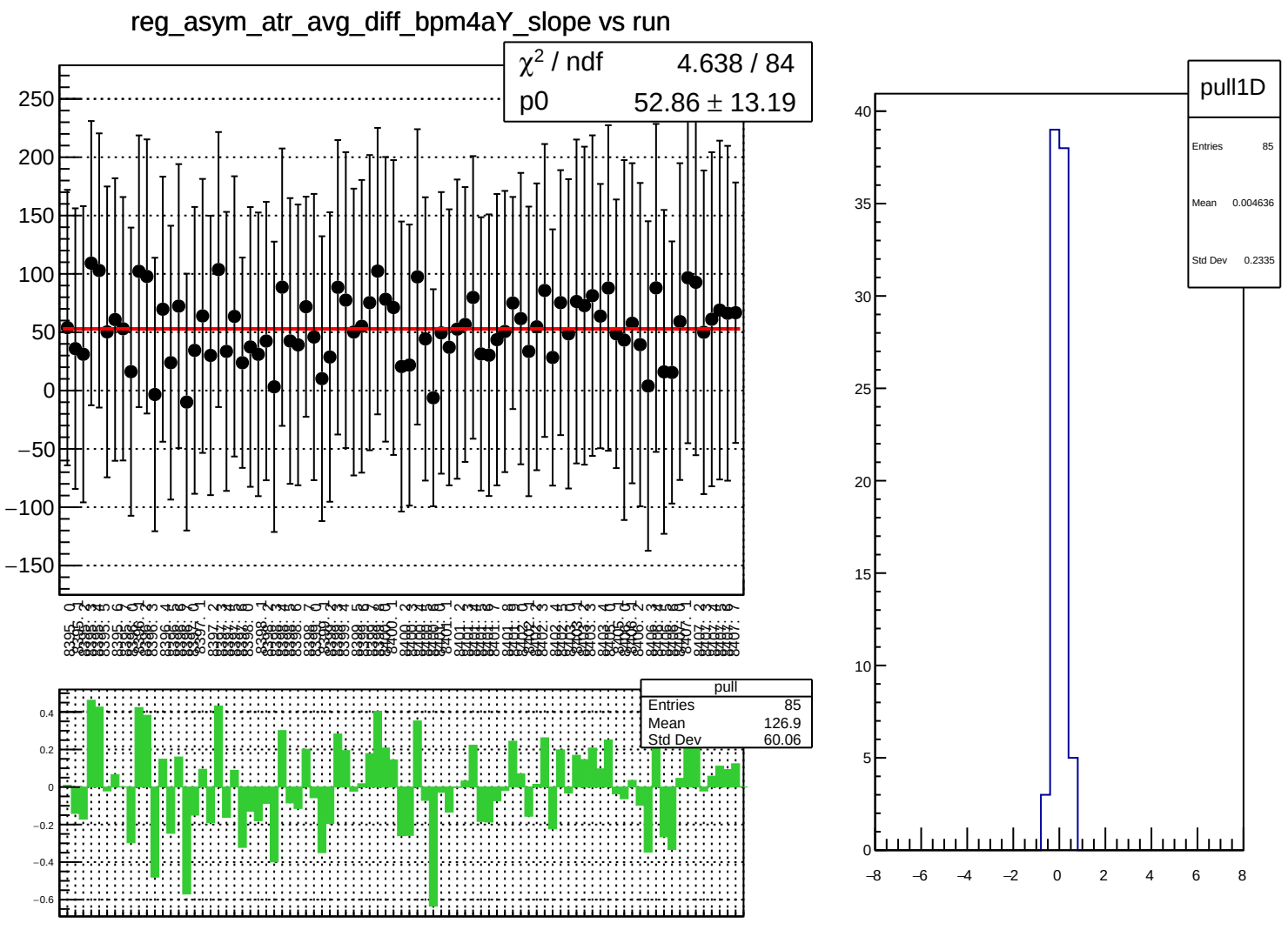

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 13.15 / 84
p0 −163.7 ± 4.713
−100
−150
−200
−250
−300
pull
Entries 85
Mean 151
Std Dev 106.2
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean −0.01261
Std Dev 0.3931
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

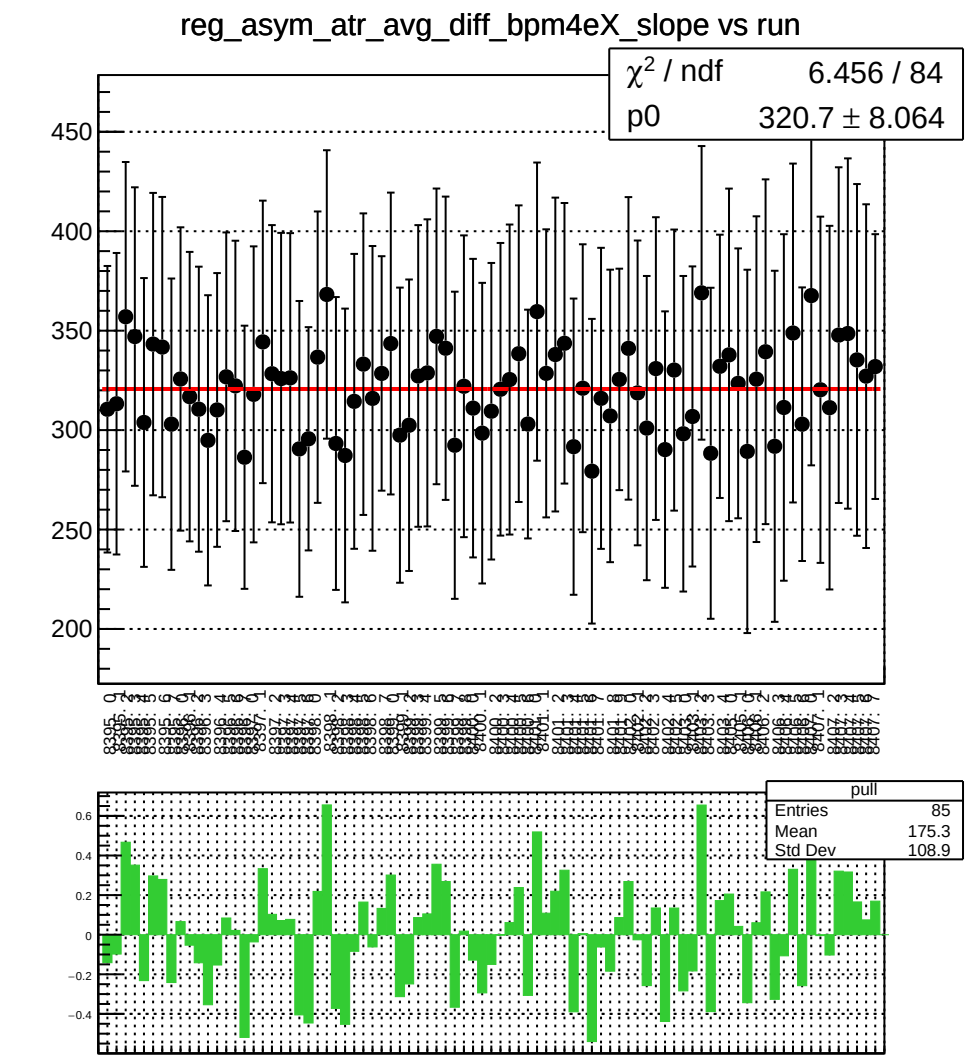

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 13.61 / 84
p0 −34.39 ± 8.056
pull
Entries 85
Mean −8036
Std Dev 8080

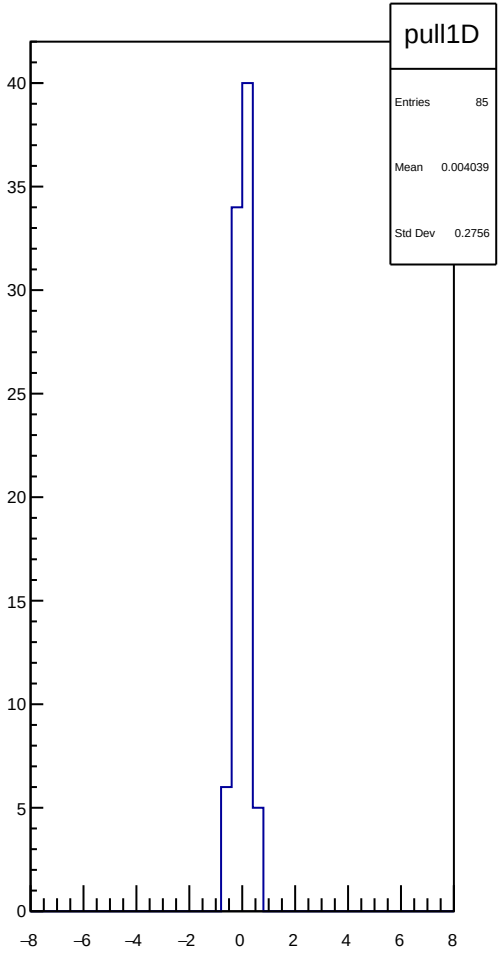

pull1D
Entries 85
Mean 0.0002078
Std Dev 0.4002

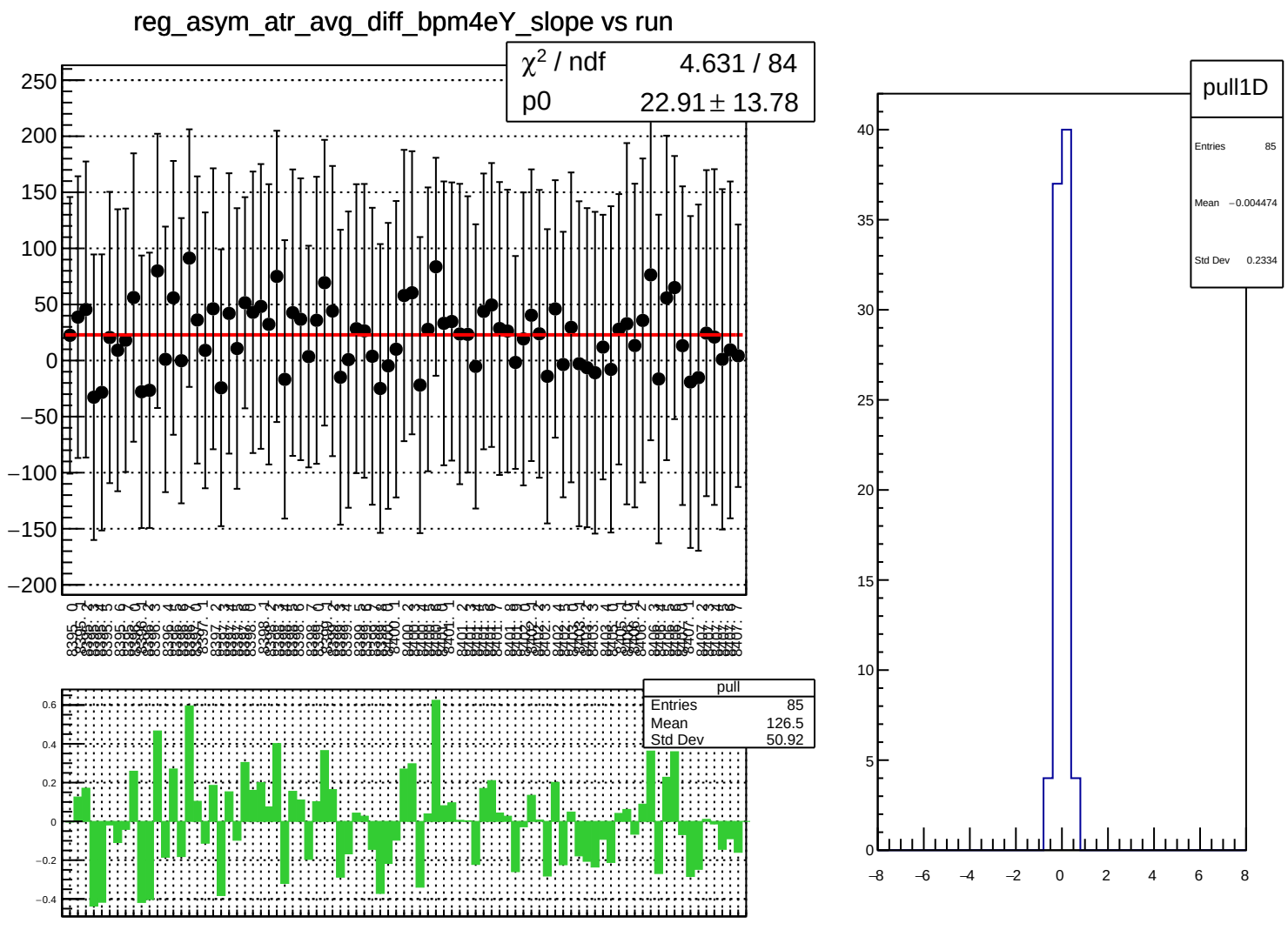

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 11.87 / 84
p0 133.1 ± 0.4971
140
135
130
125
120
pull
Entries 85
Mean 107.6
Std Dev 69.72
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.006935
Std Dev 0.3736
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

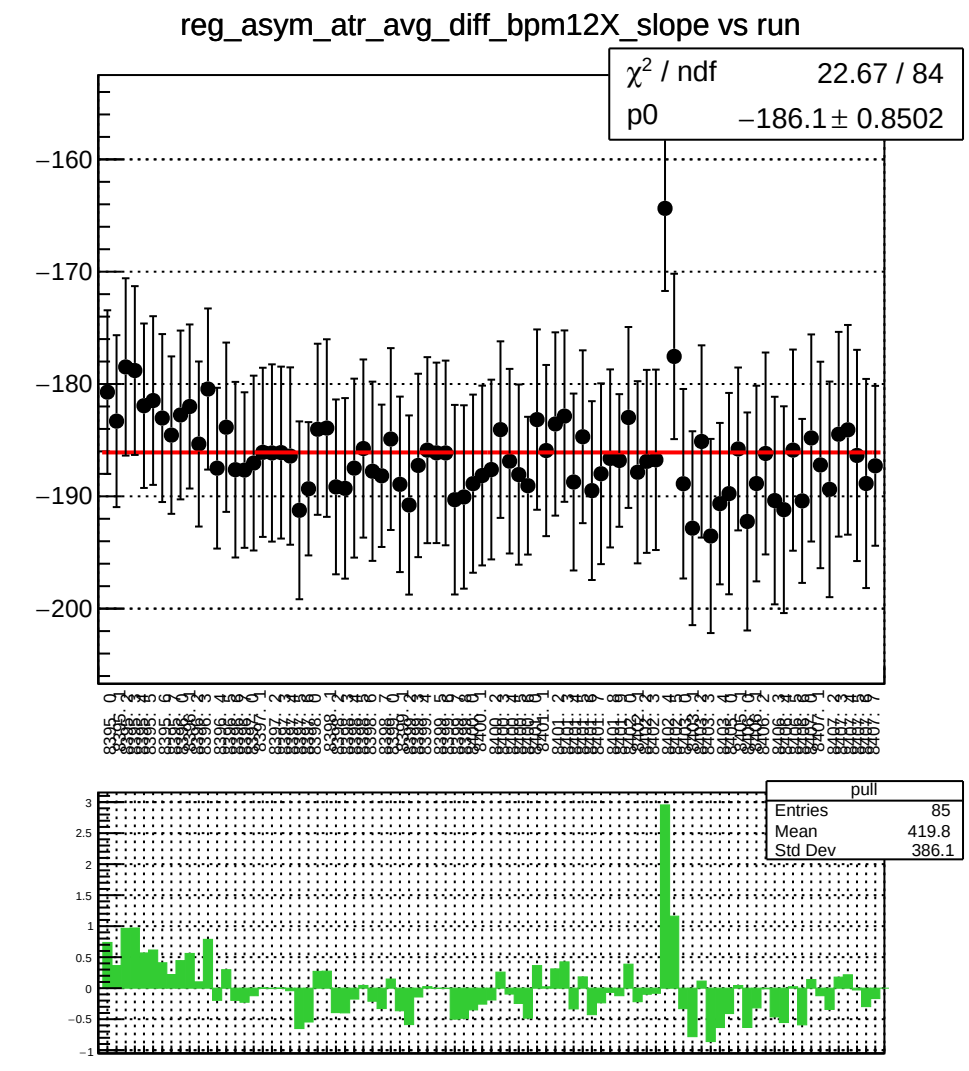

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 6.555 / 84
p0 −343 ± 7.266
−250
−300
−350
−400
−450
pull
Entries 85
Mean 268.1
Std Dev 212
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean −0.003539
Std Dev 0.2777
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

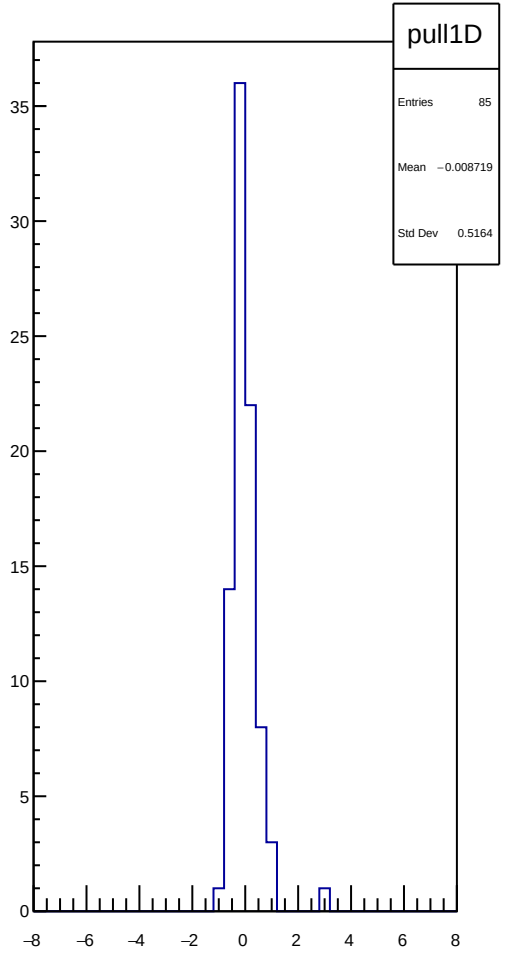

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.638 / 84
p0 52.86 ± 13.19
pull
Entries 85
Mean 126.9
Std Dev 60.06
pull1D
Entries 85
Mean 0.004636
Std Dev 0.2335

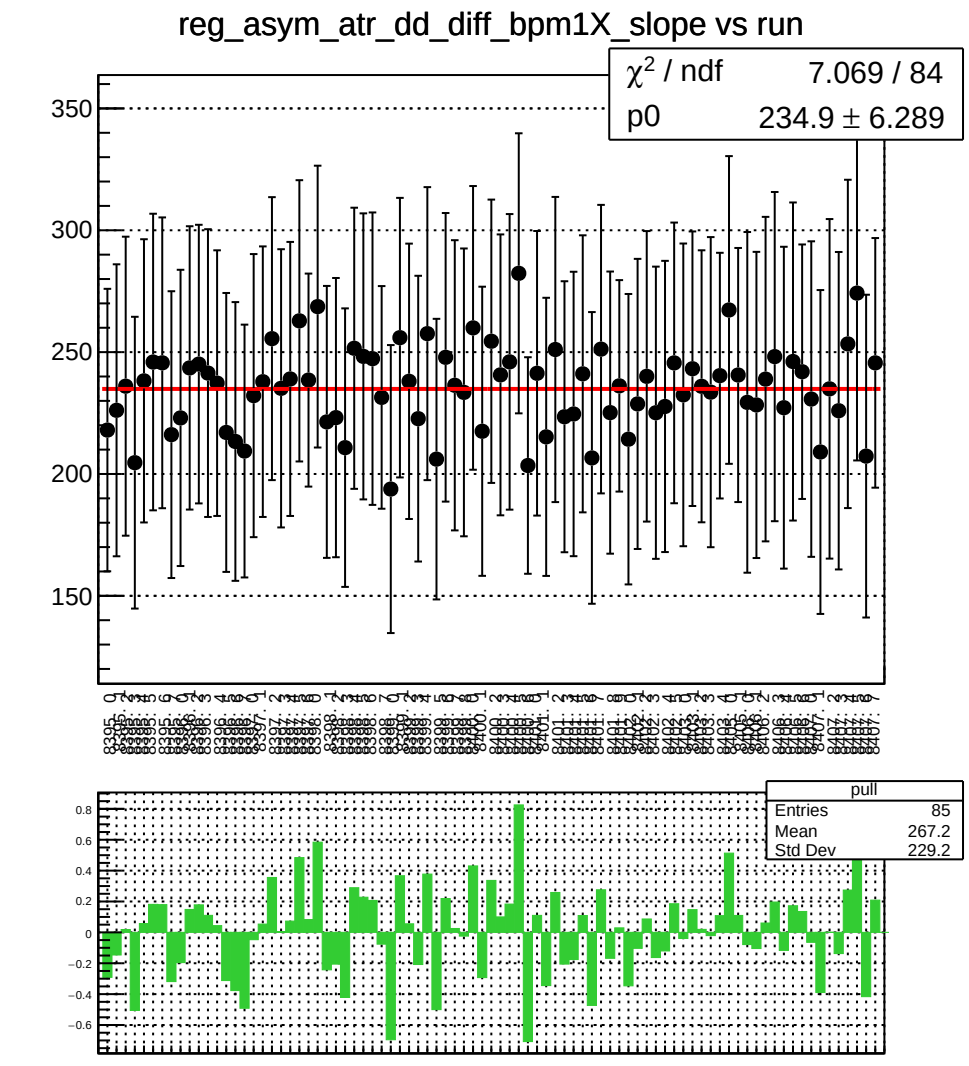

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.456 / 84
p0 320.7 ± 8.064
pull
Entries 85
Mean 175.3
Std Dev 108.9

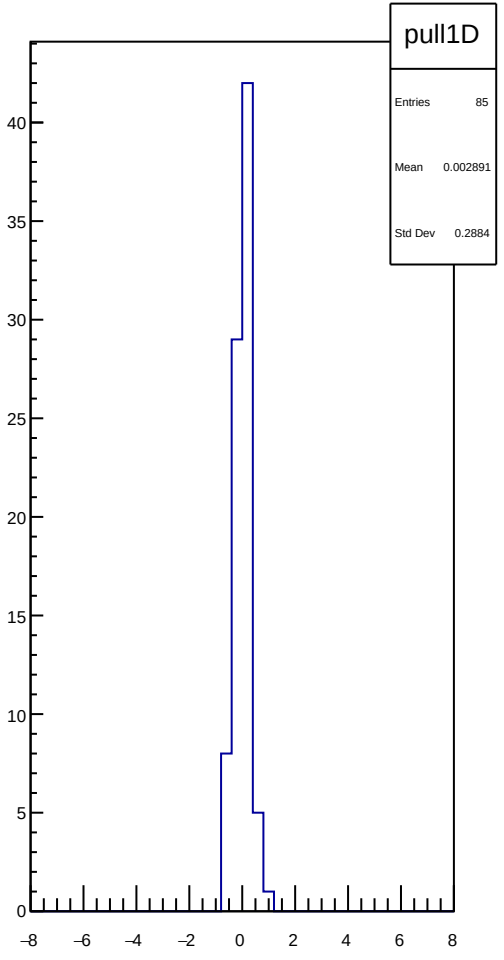

pull1D
Entries 85
Mean 0.004039
Std Dev 0.2756

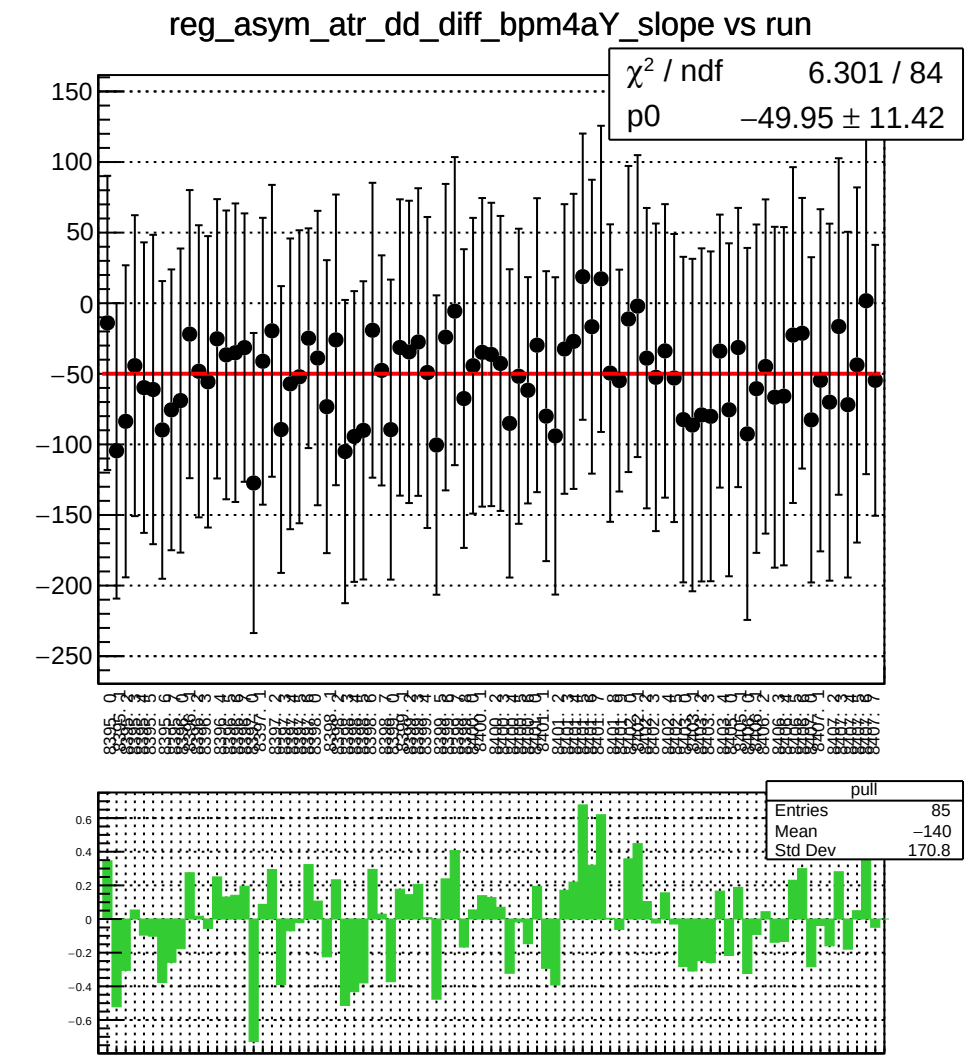

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.631 / 84
p0 22.91 ± 13.78
pull
Entries 85
Mean 126.5
Std Dev 50.92
pull1D
Entries 85
Mean −0.004474
Std Dev 0.2334

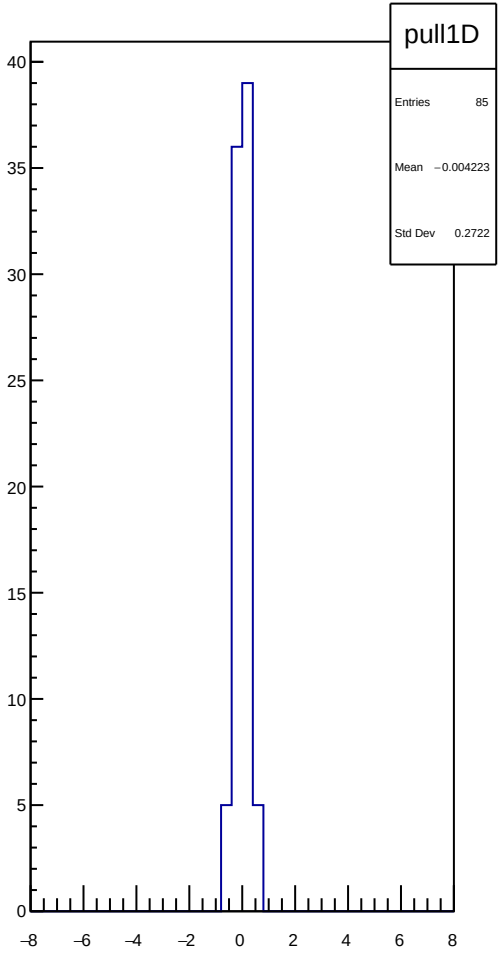

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 22.67 / 84
p0 −186.1 ± 0.8502
−160
−170
−180
−190
−200
pull
Entries 85
Mean 419.8
Std Dev 386.1
3
2.5
2
1.5
1
0.5
0
−0.5
−1

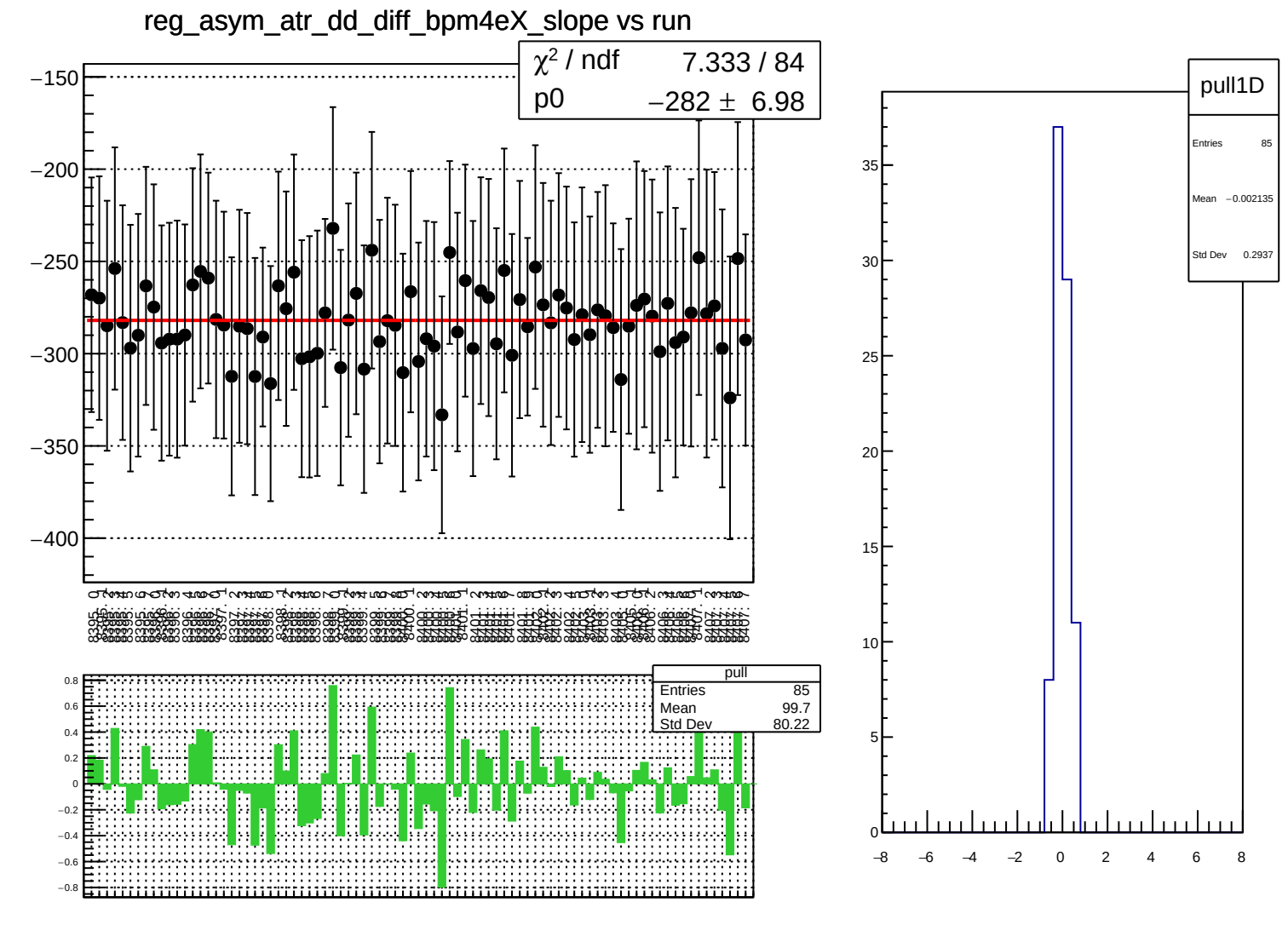

pull1D
Entries 85
Mean −0.008719
Std Dev 0.5164
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

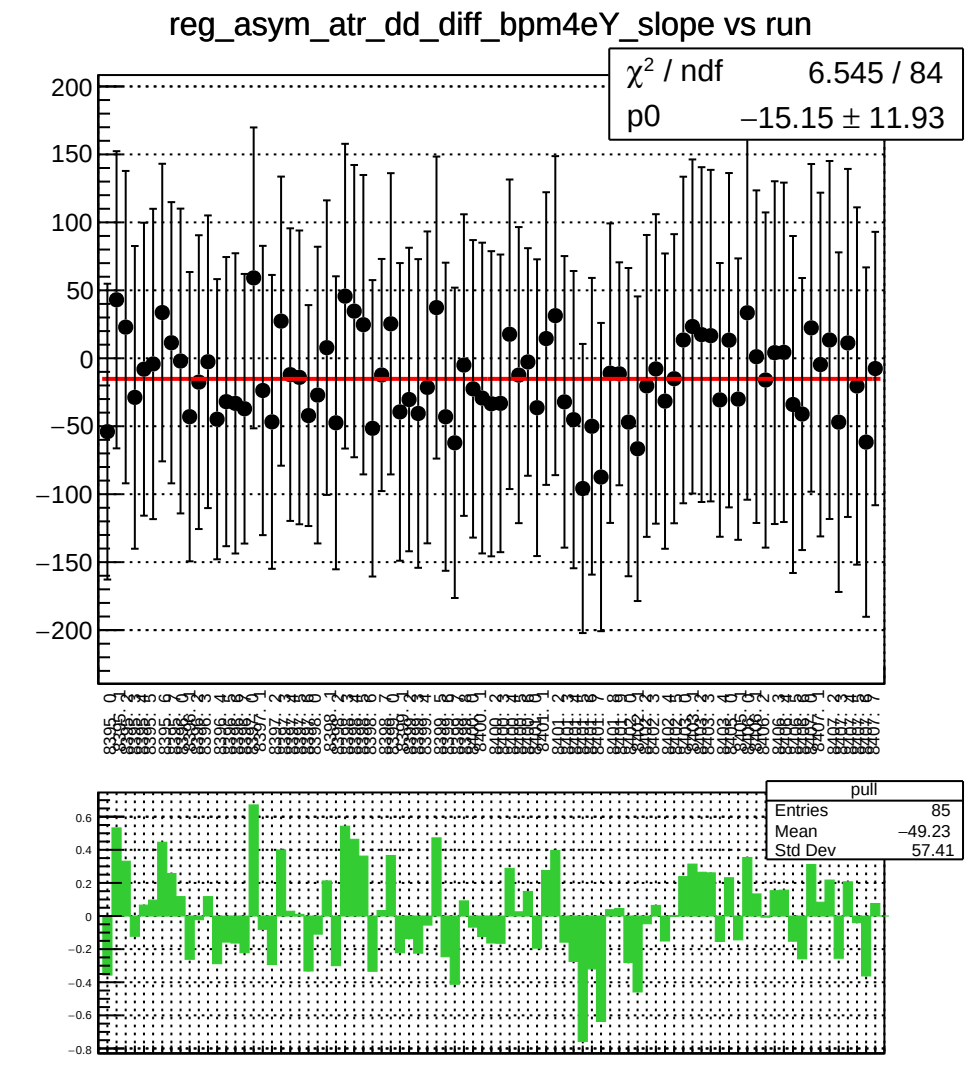

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 7.069 / 84
p0 234.9 ± 6.289
pull
Entries 85
Mean 267.2
Std Dev 229.2

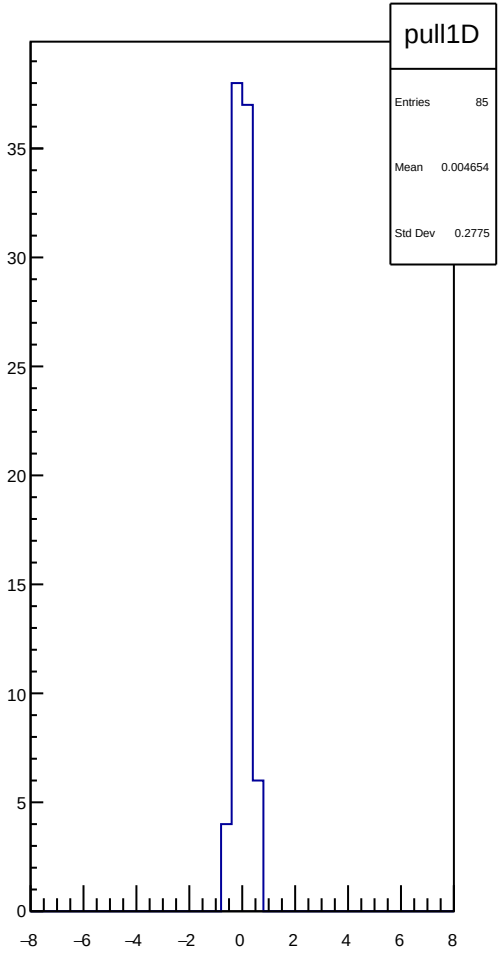

pull1D
Entries 85
Mean 0.002891
Std Dev 0.2884

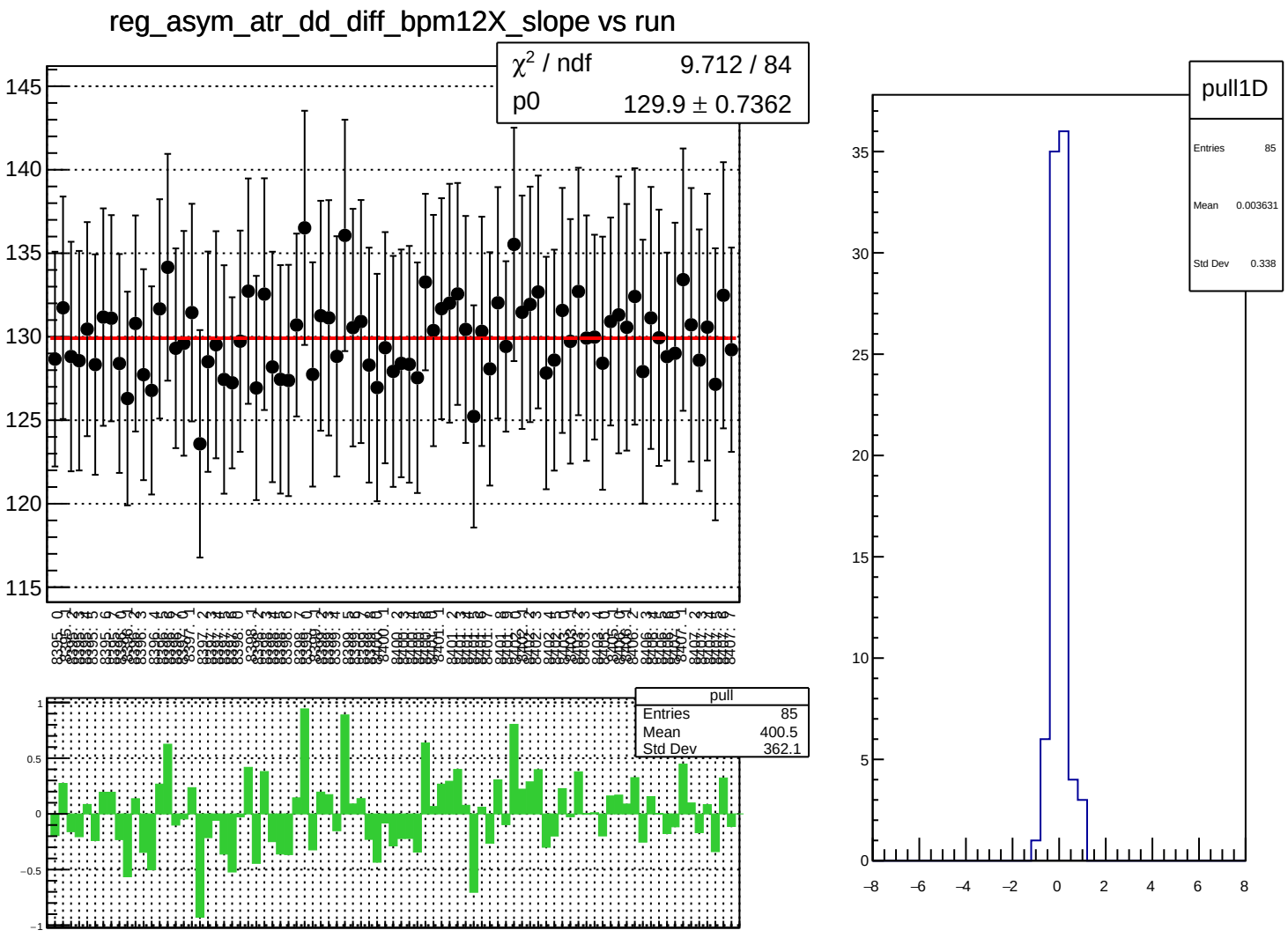

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.301 / 84
p0 −49.95 ± 11.42
pull
Entries 85
Mean −140
Std Dev 170.8

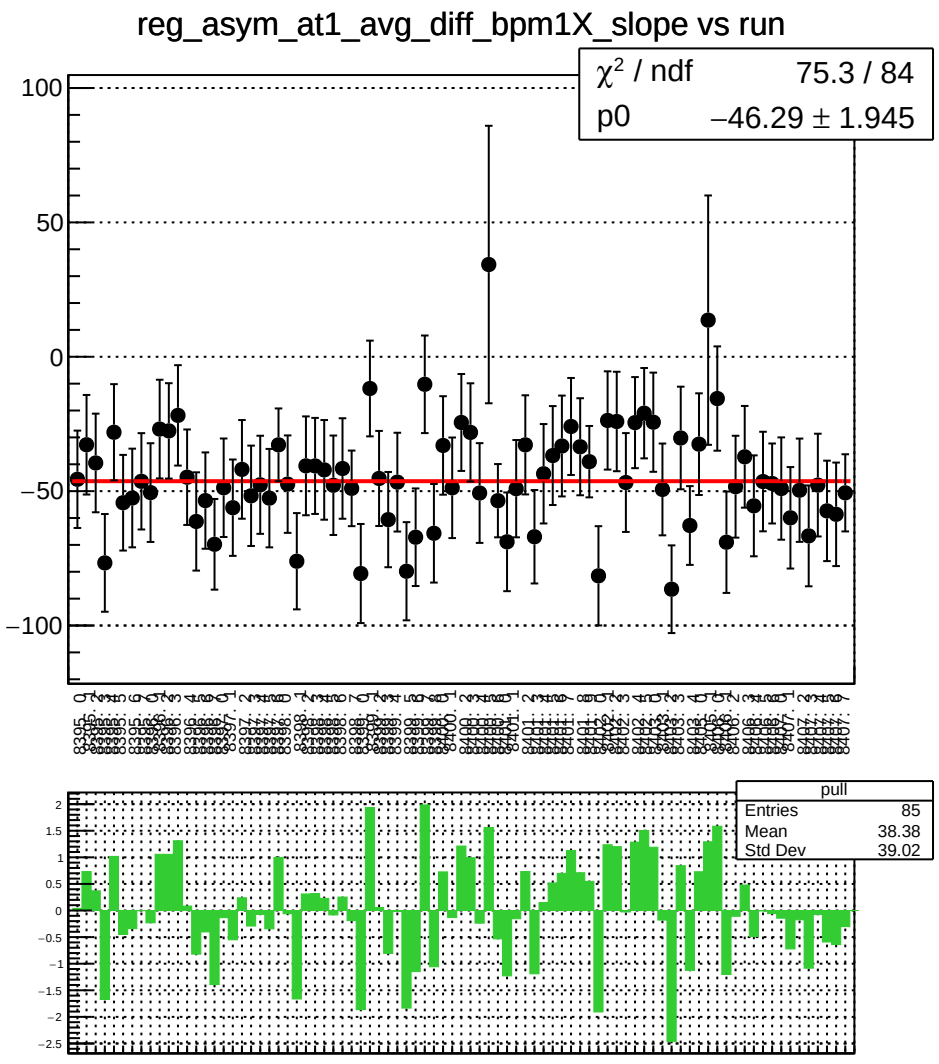

pull1D
Entries 85
Mean −0.004223
Std Dev 0.2722

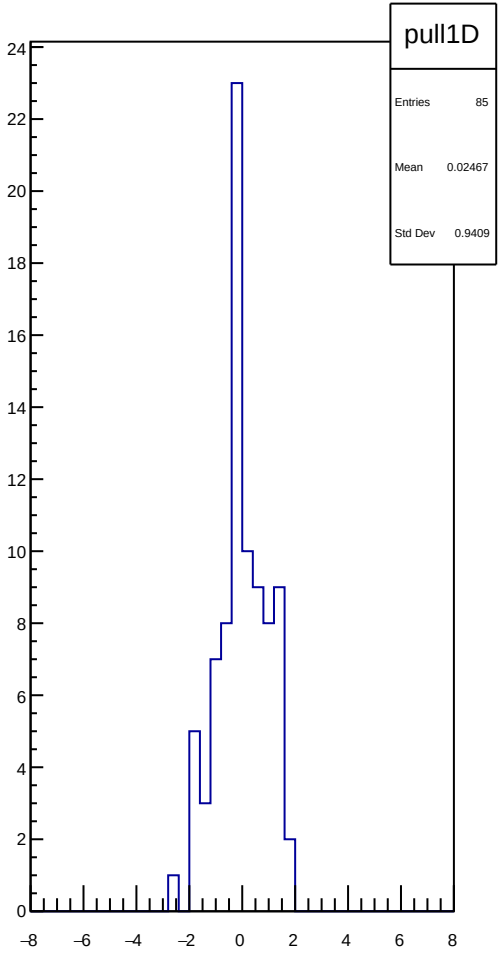

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 7.333 / 84
p0 −282 ± 6.98
−150
−200
−250
−300
−350
−400
pull
Entries 85
Mean 99.7
Std Dev 80.22
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean −0.002135
Std Dev 0.2937
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

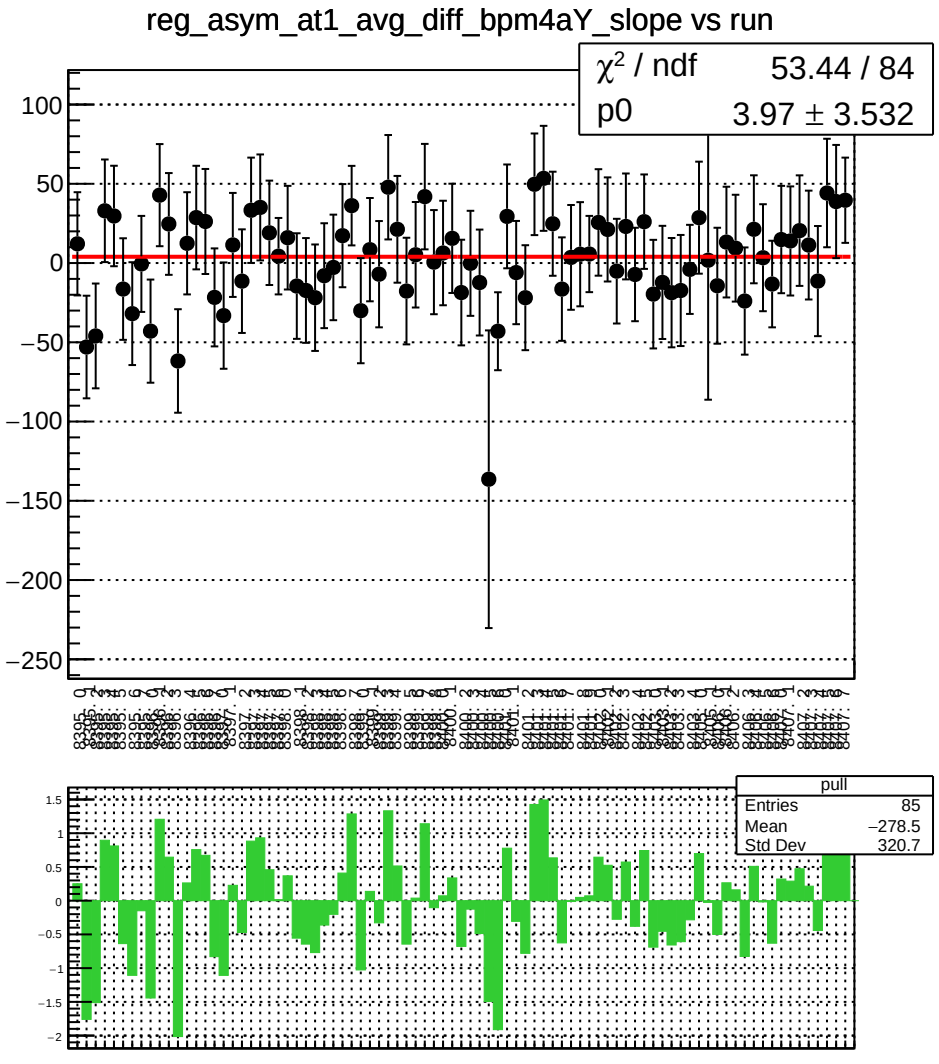

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.545 / 84
p0 −15.15 ± 11.93
pull
Entries 85
Mean −49.23
Std Dev 57.41

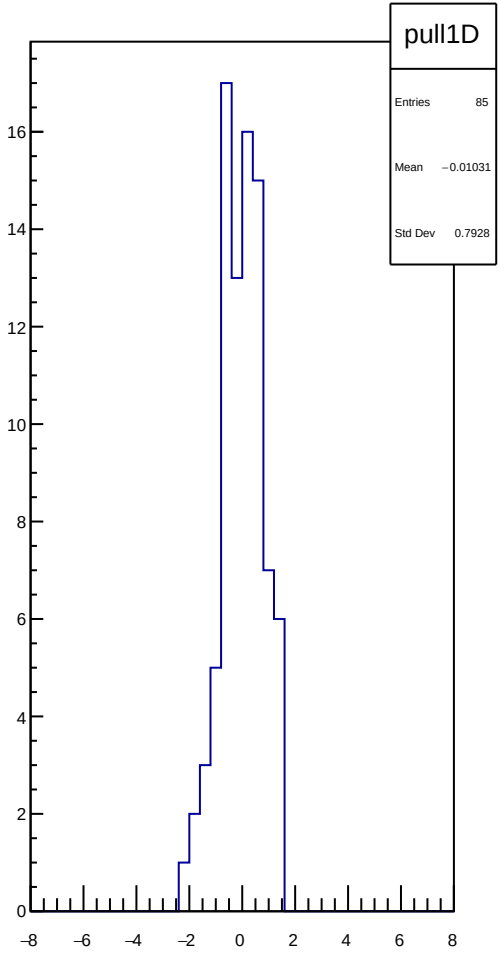

pull1D
Entries 85
Mean 0.004654
Std Dev 0.2775

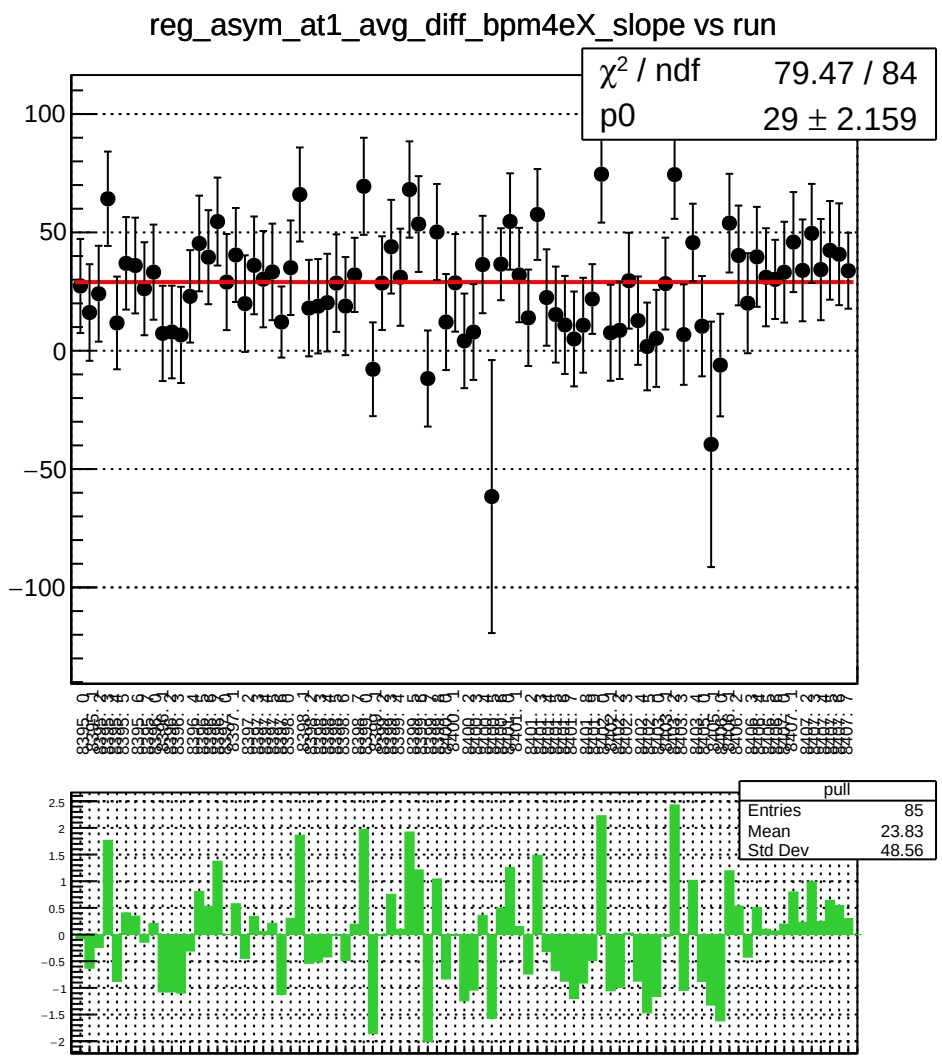

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 9.712 / 84
p0 129.9 ± 0.7362
145
140
135
130
125
120
115
pull
Entries 85
Mean 400.5
Std Dev 362.1
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean 0.003631
Std Dev 0.338
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

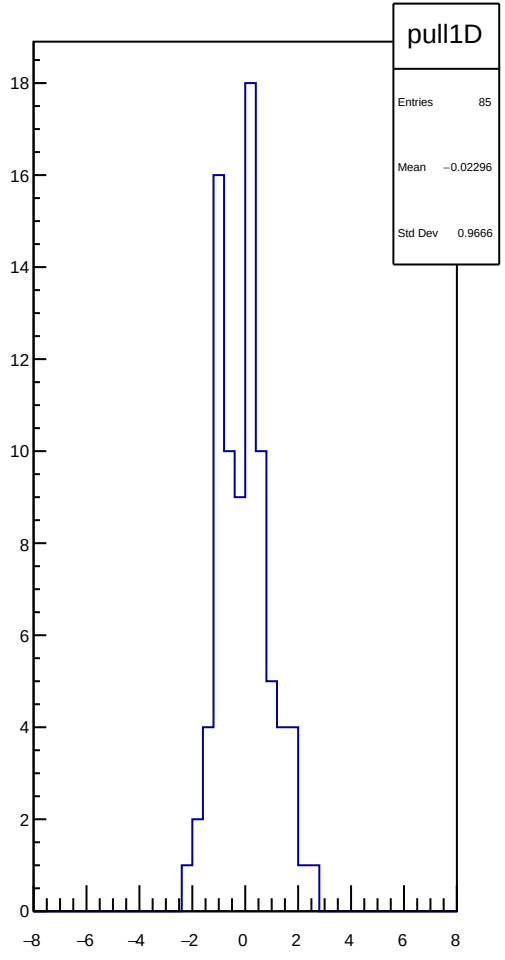

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 75.3 / 84
p0 −46.29 ± 1.945
pull
Entries 85
Mean 38.38
Std Dev 39.02

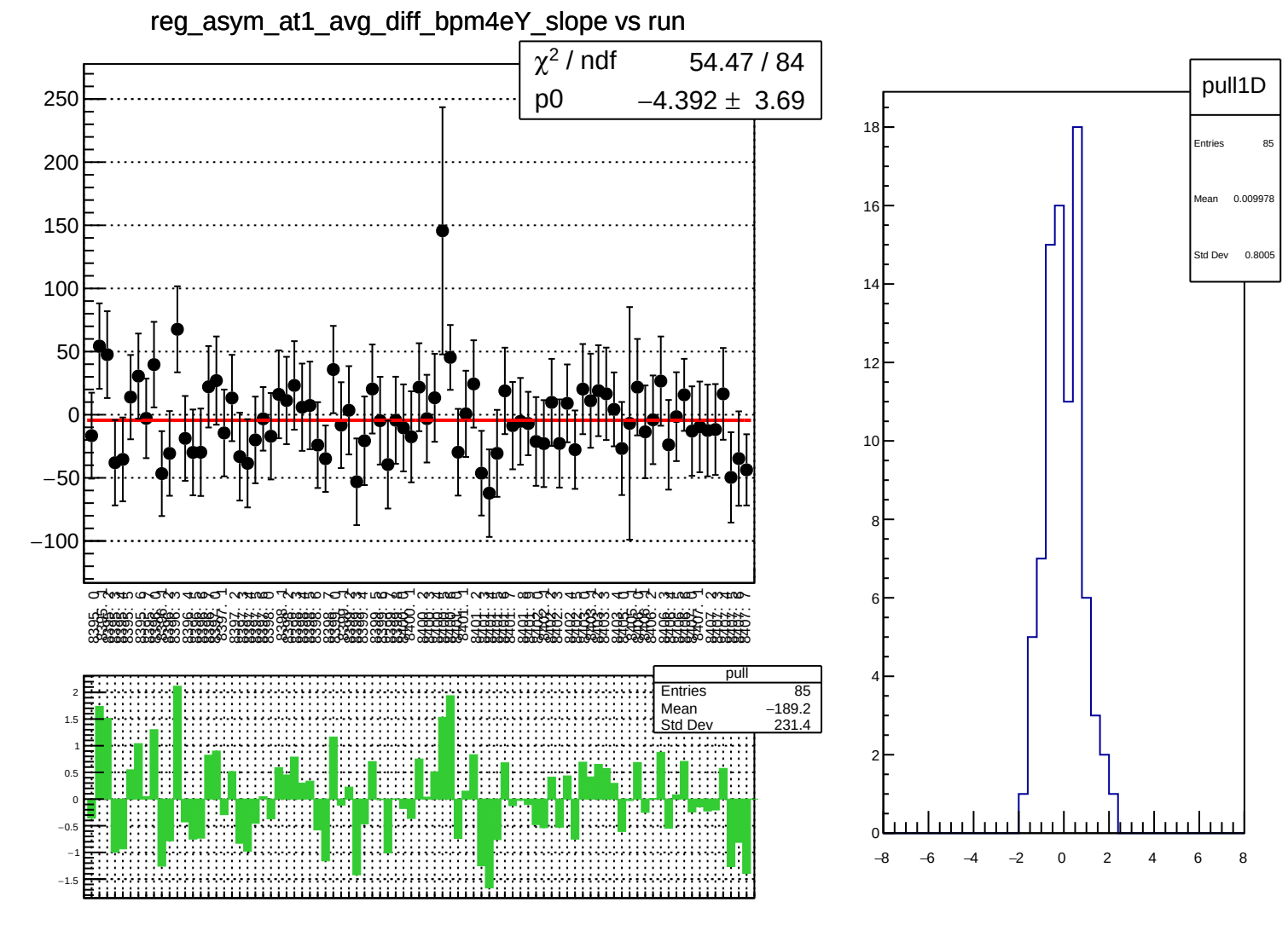

pull1D
Entries 85
Mean 0.02467
Std Dev 0.9409

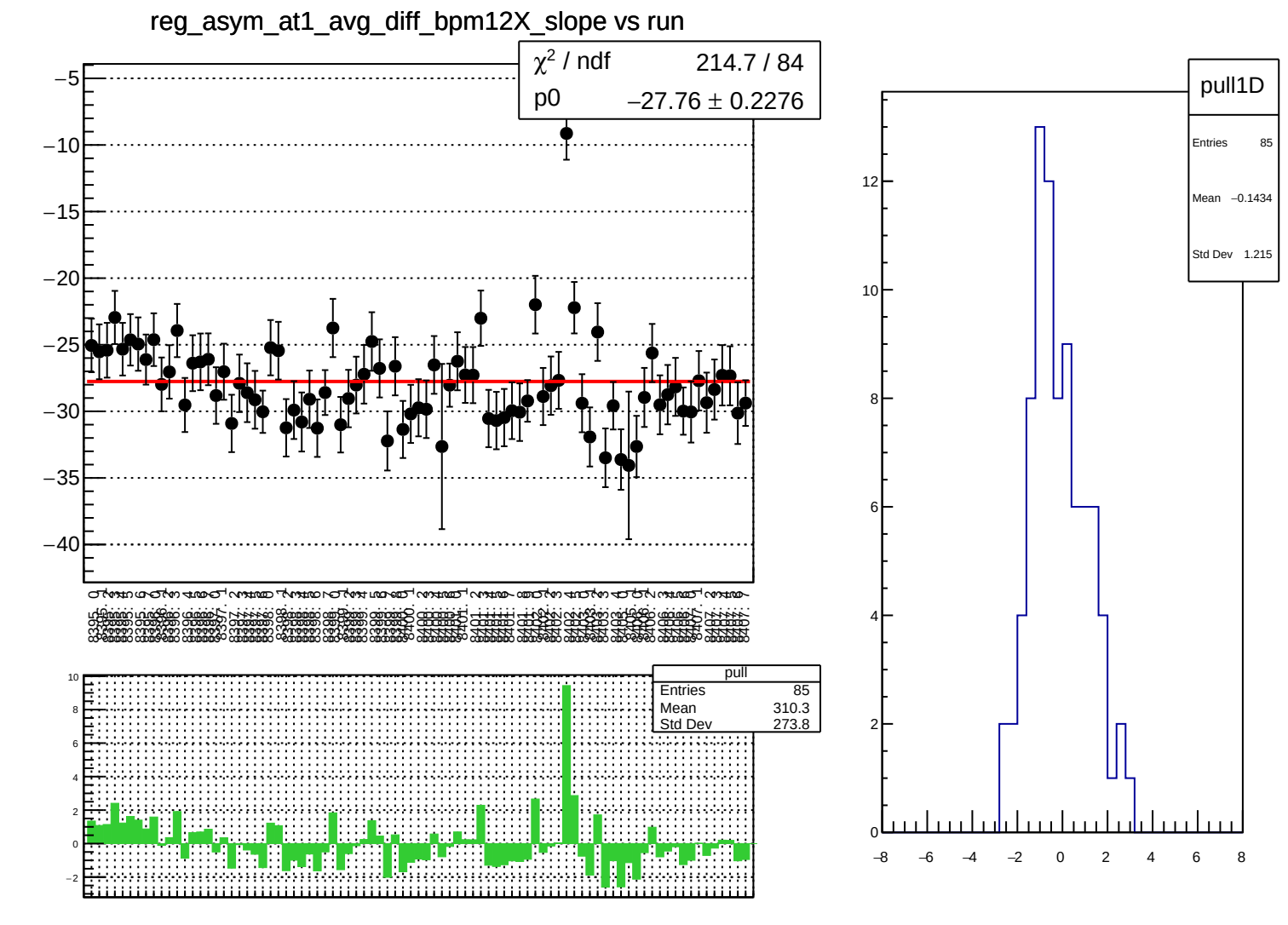

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 53.44 / 84
p0 3.97 ± 3.532
pull
Entries 85
Mean −278.5
Std Dev 320.7

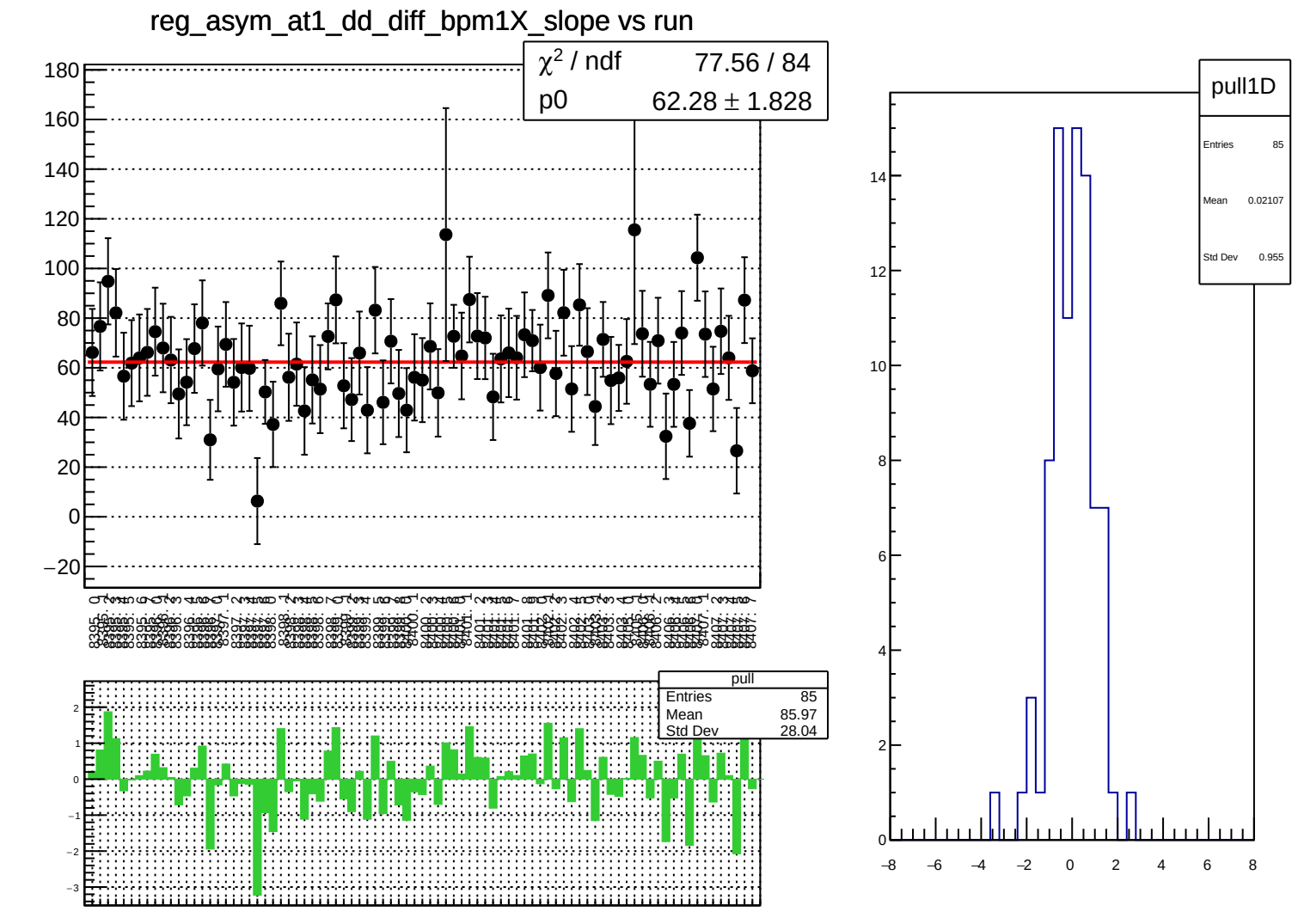

pull1D
Entries 85
Mean −0.01031
Std Dev 0.7928

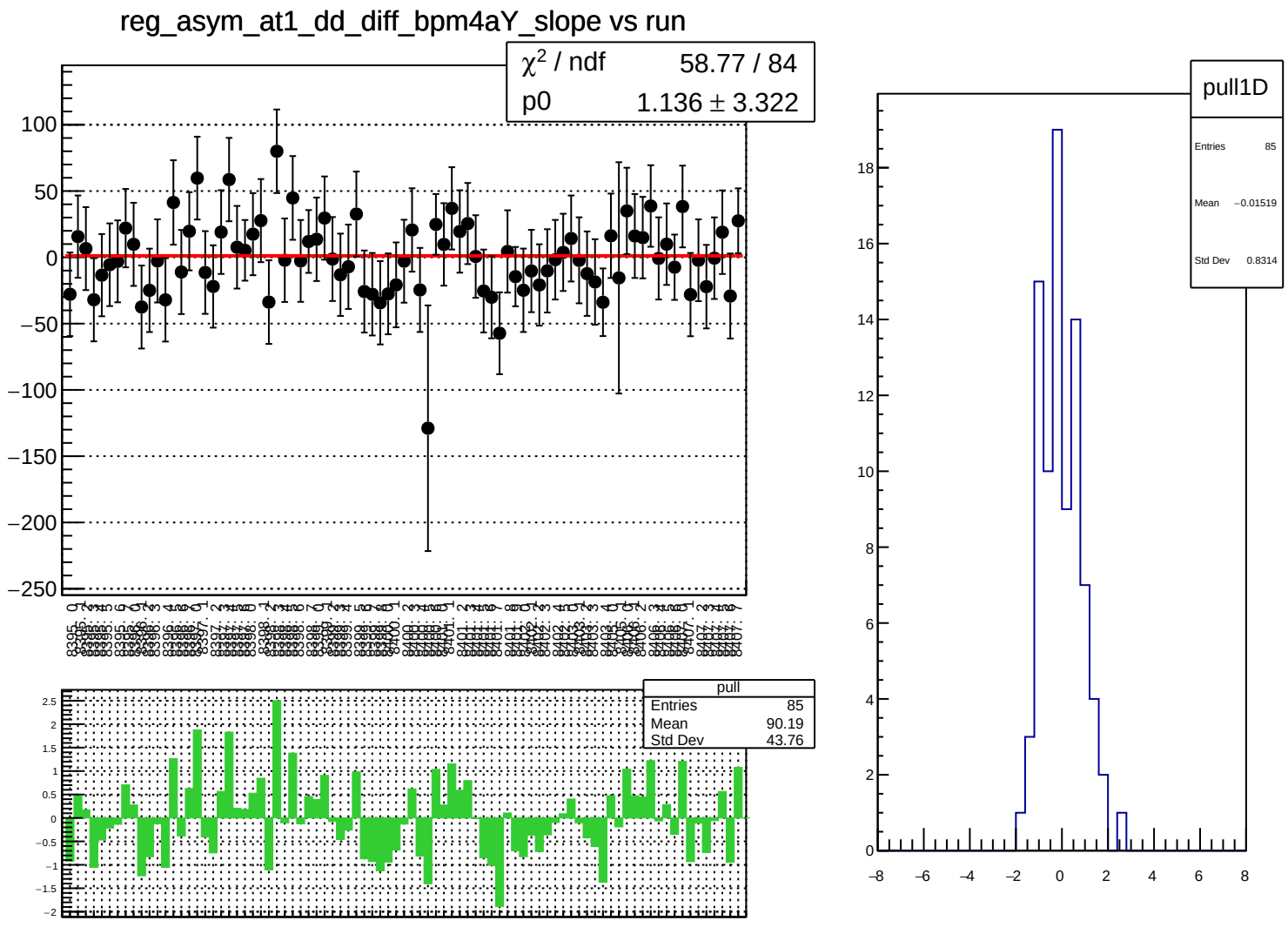

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 79.47 / 84
p0 29 ± 2.159
100
50
0
−50
−100
pull
Entries 85
Mean 23.83
Std Dev 48.56
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

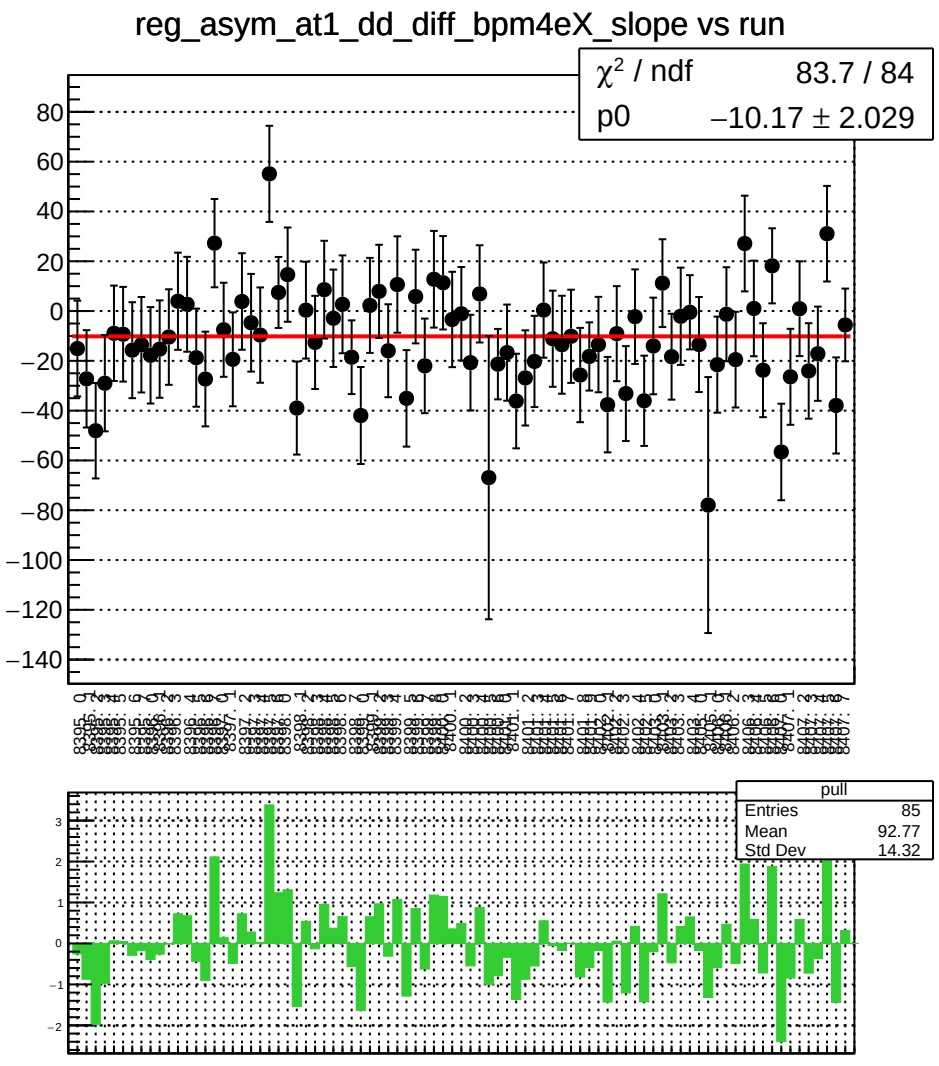

pull1D
Entries 85
Mean −0.02296
Std Dev 0.9666
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

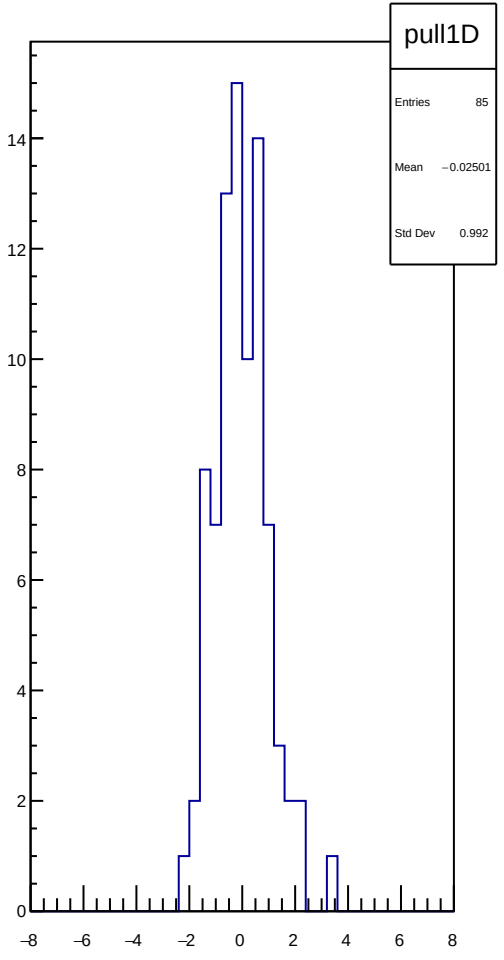

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 54.47 / 84
p0 −4.392 ± 3.69
pull
Entries 85
Mean −189.2
Std Dev 231.4
pull1D
Entries 85
Mean 0.009978
Std Dev 0.8005

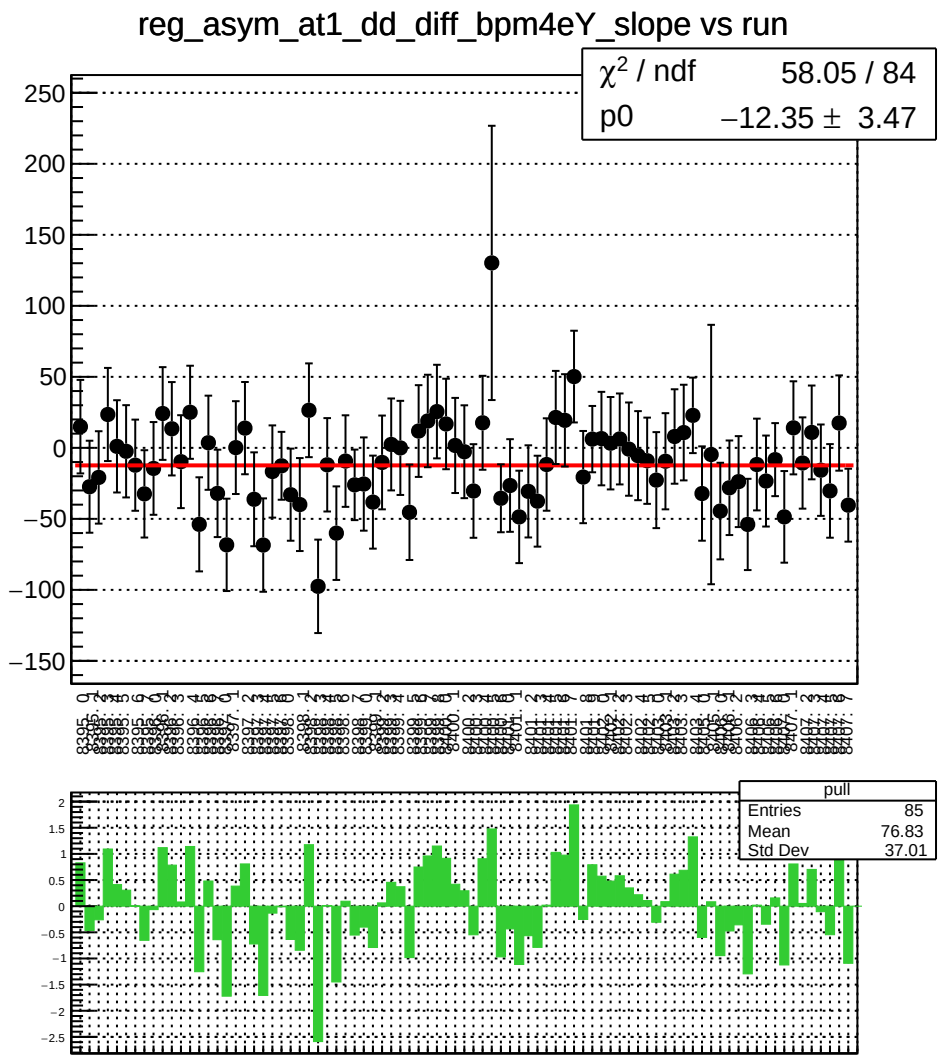

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 214.7 / 84
p0 −27.76 ± 0.2276
pull
Entries 85
Mean 310.3
Std Dev 273.8
pull1D
Entries 85
Mean −0.1434
Std Dev 1.215

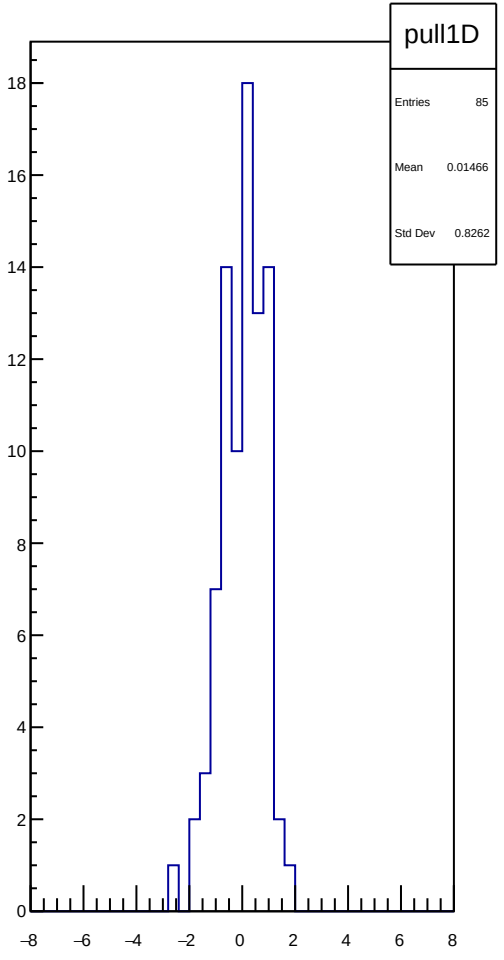

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 77.56 / 84
p0 62.28 ± 1.828
pull
Entries 85
Mean 85.97
Std Dev 28.04
pull1D
Entries 85
Mean 0.02107
Std Dev 0.955

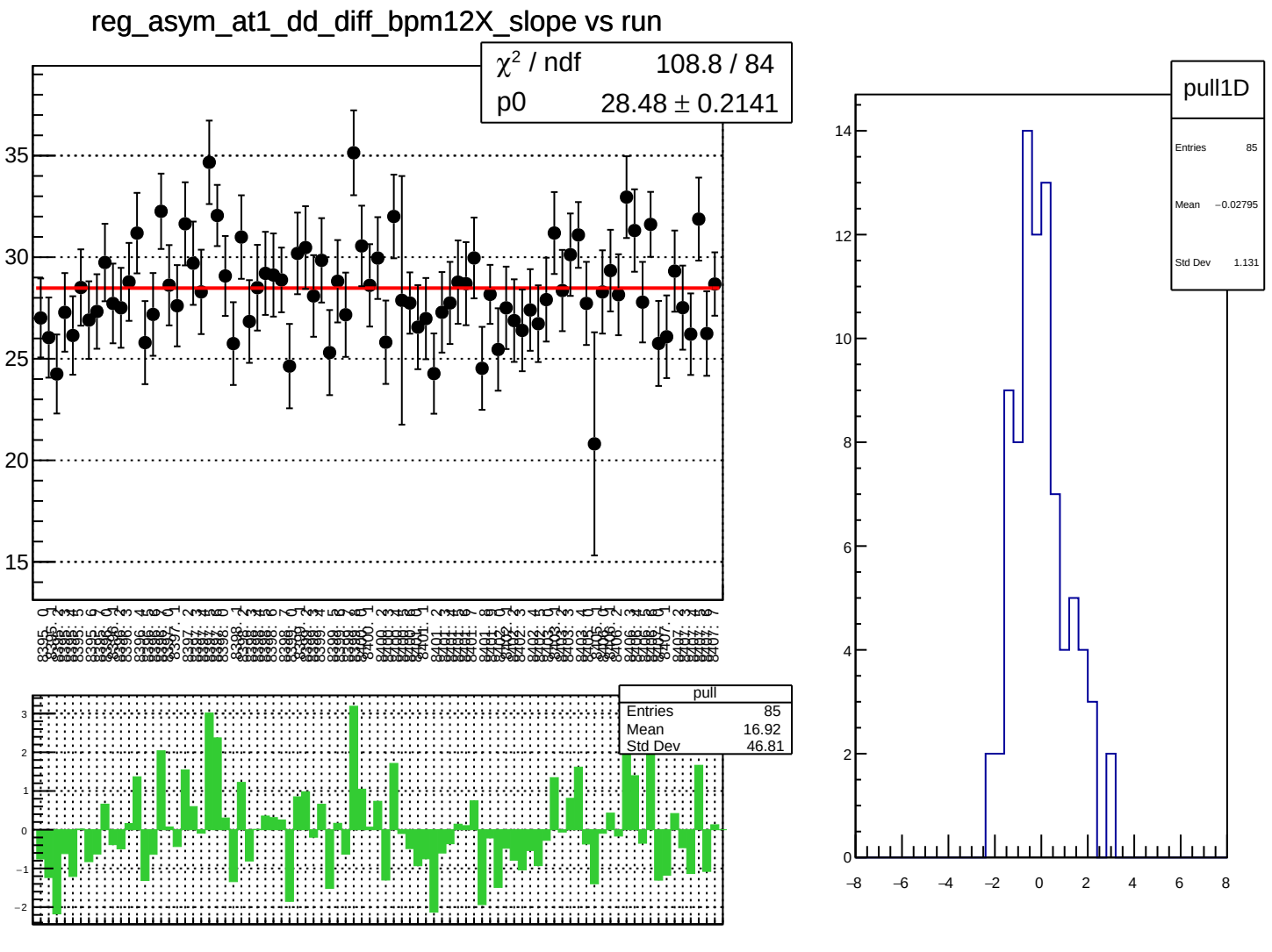

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 58.77 / 84
p0 1.136 ± 3.322
pull
Entries 85
Mean 90.19
Std Dev 43.76
pull1D
Entries 85
Mean −0.01519
Std Dev 0.8314

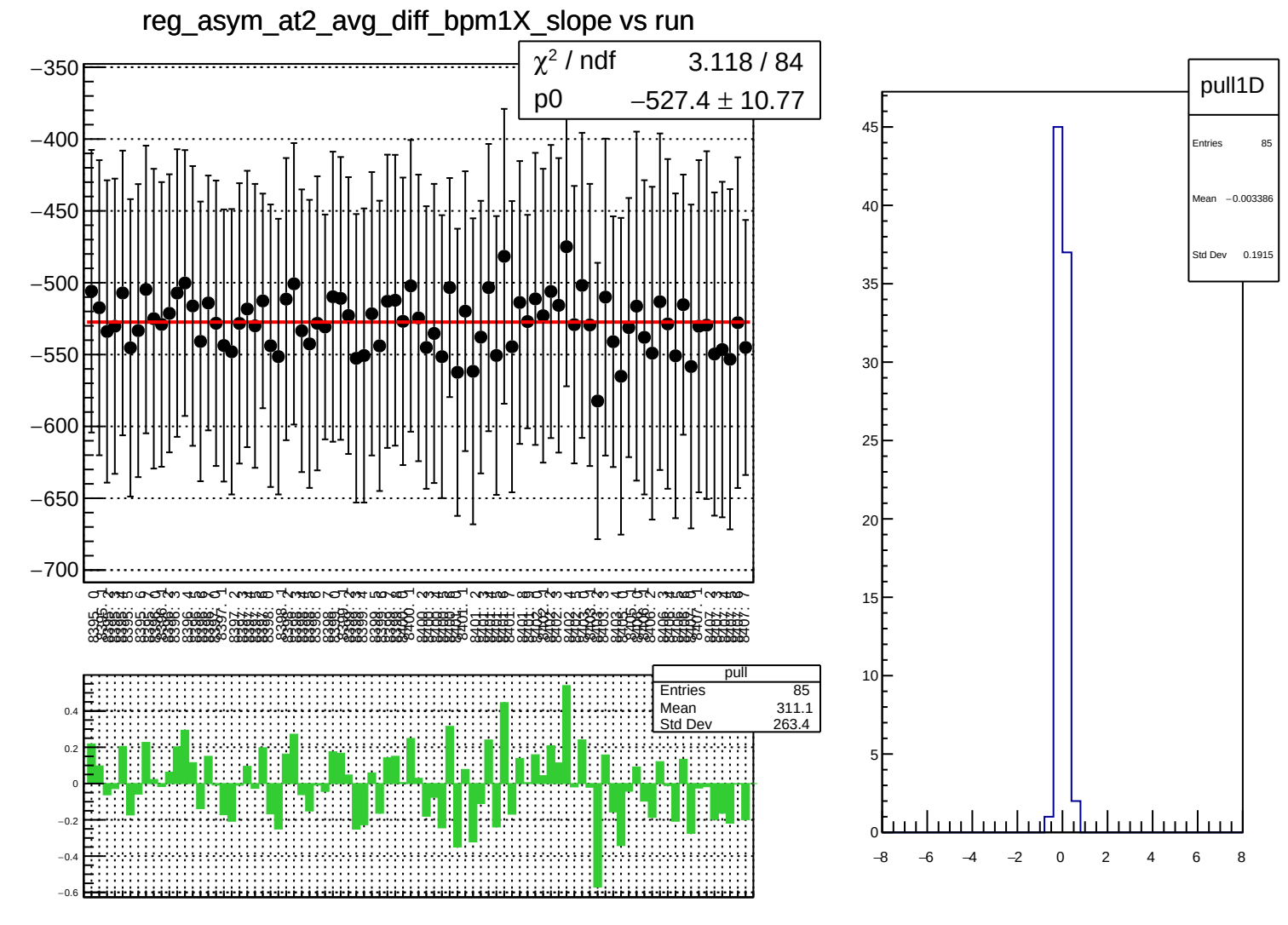

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 83.7 / 84
p0 −10.17 ± 2.029
pull
Entries 85
Mean 92.77
Std Dev 14.32

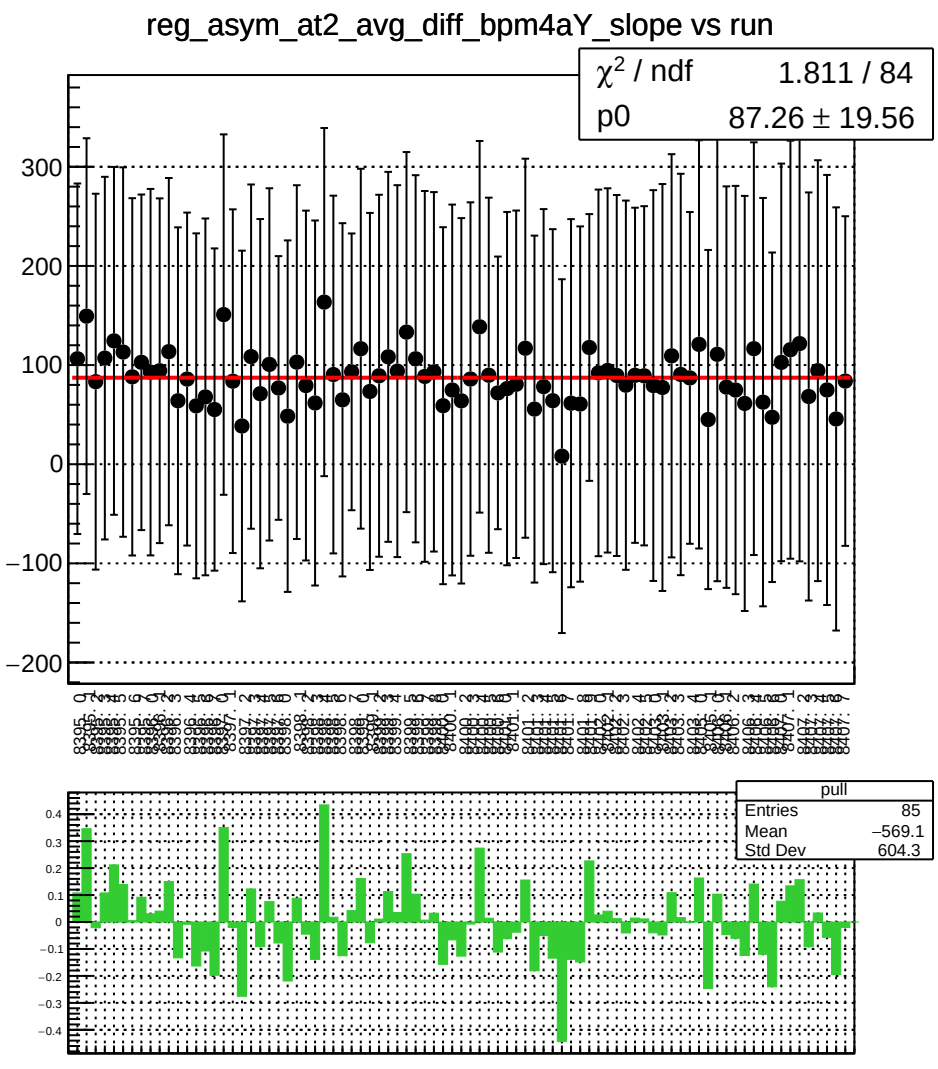

pull1D
Entries 85
Mean −0.02501
Std Dev 0.992

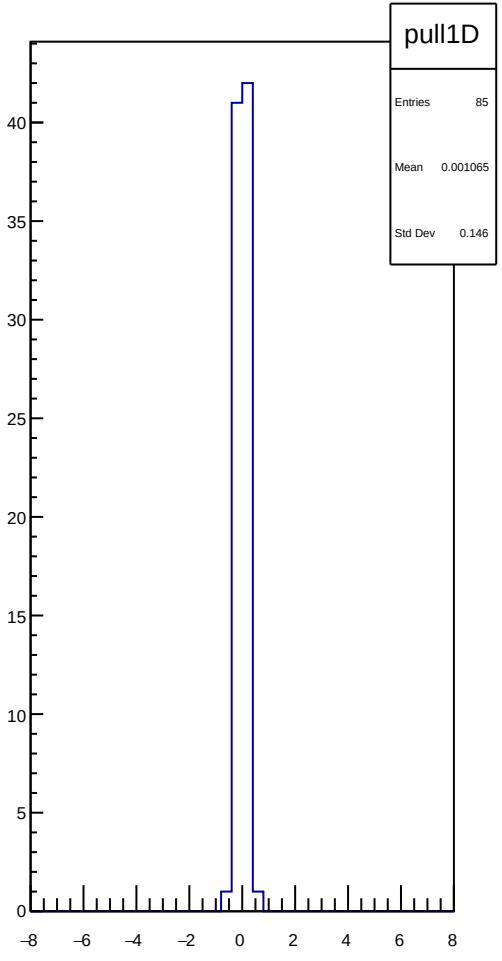

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 58.05 / 84
p0 −12.35 ± 3.47
pull
Entries 85
Mean 76.83
Std Dev 37.01

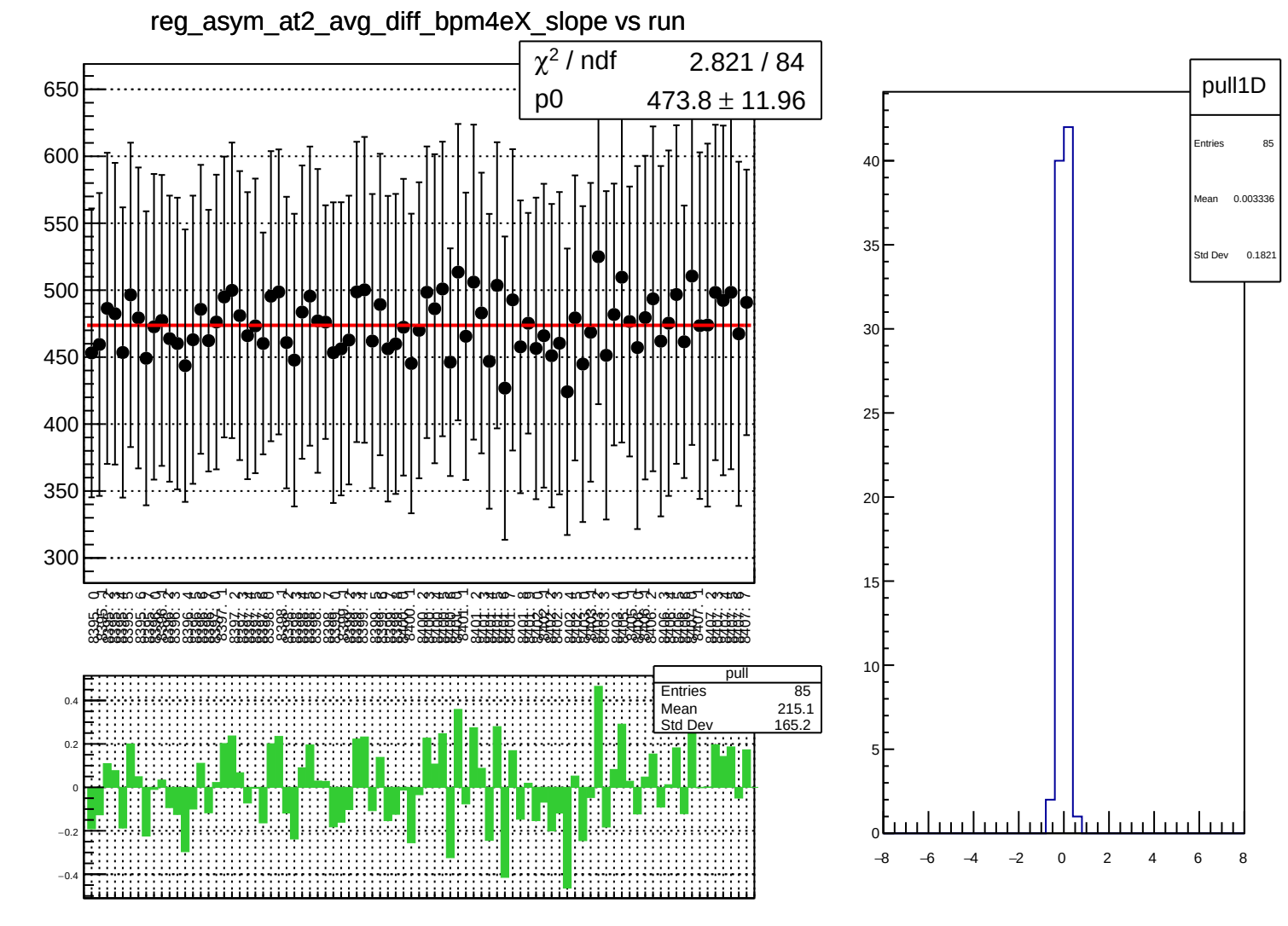

pull1D
Entries 85
Mean 0.01466
Std Dev 0.8262

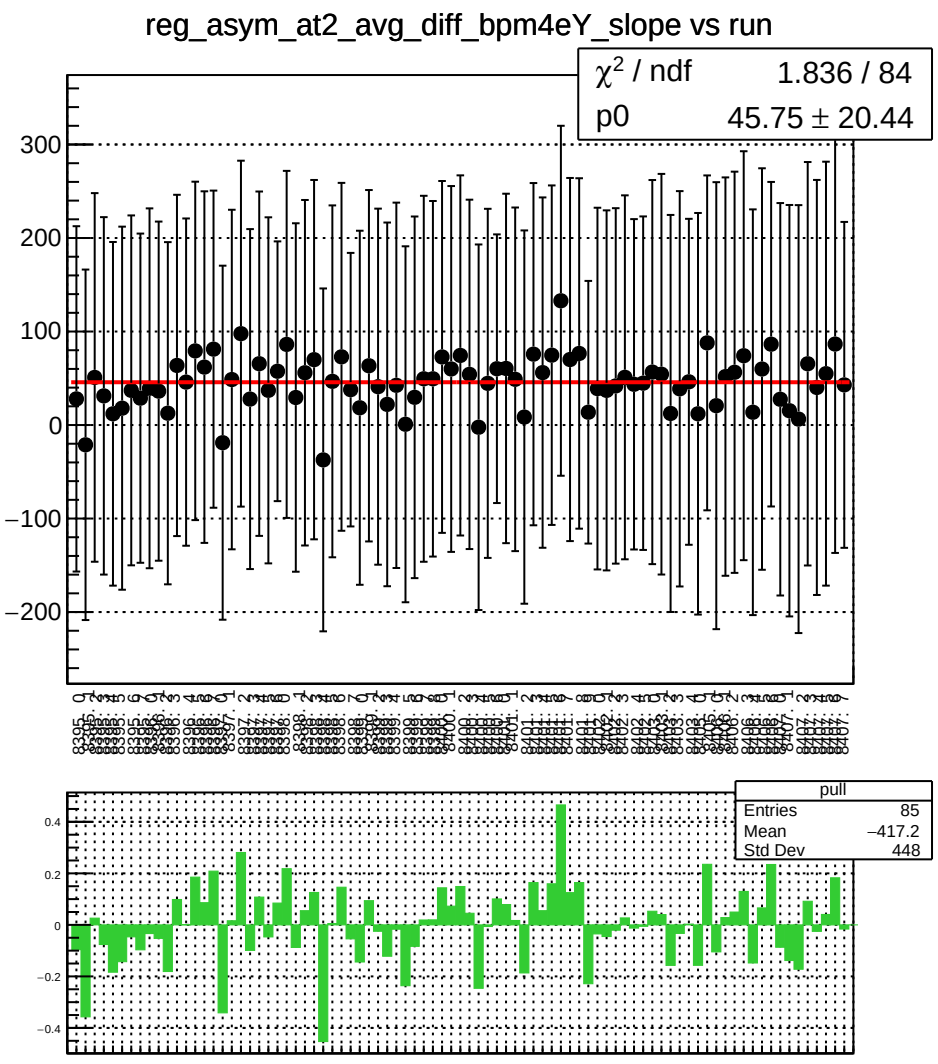

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 108.8 / 84
p0 28.48 ± 0.2141
pull
Entries 85
Mean 16.92
Std Dev 46.81
pull1D
Entries 85
Mean −0.02795
Std Dev 1.131

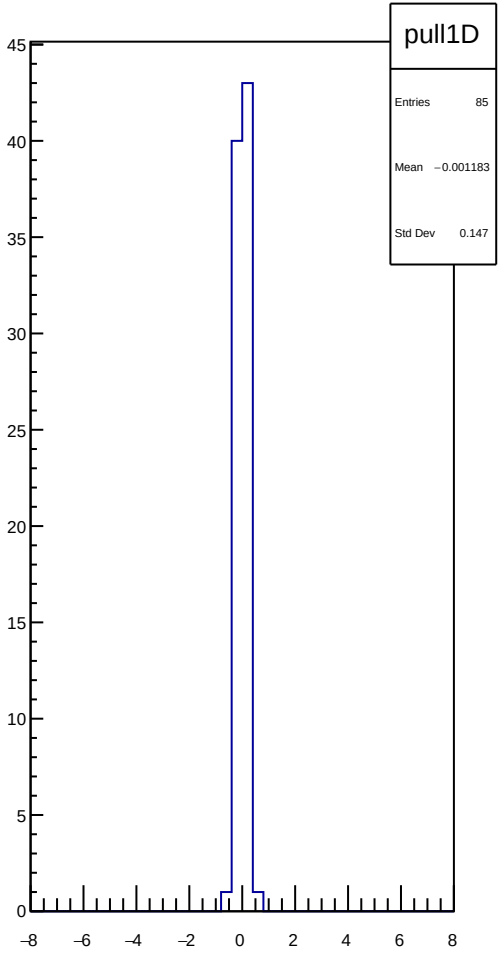

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 3.118 / 84
p0 −527.4 ± 10.77
pull
Entries 85
Mean 311.1
Std Dev 263.4
pull1D
Entries 85
Mean −0.003386
Std Dev 0.1915

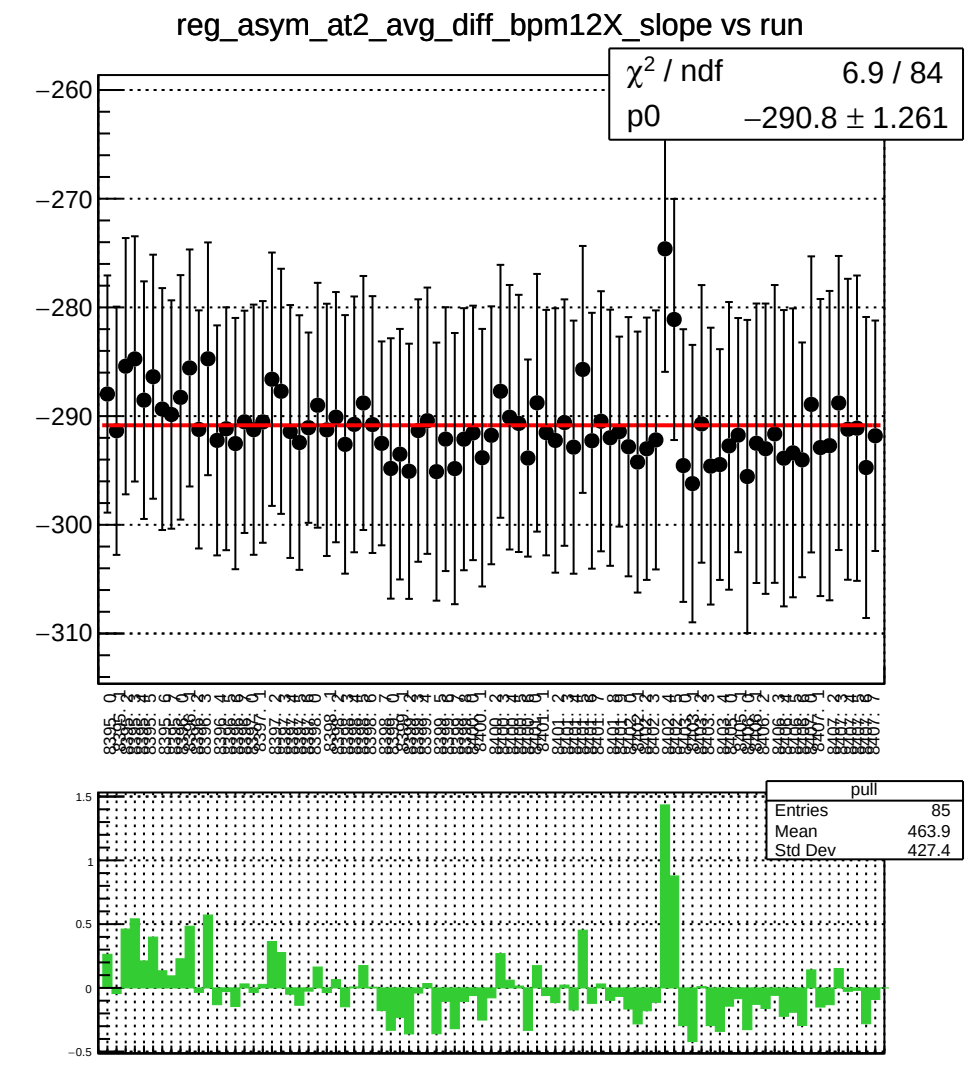

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.811 / 84
p0 87.26 ± 19.56
pull
Entries 85
Mean −569.1
Std Dev 604.3

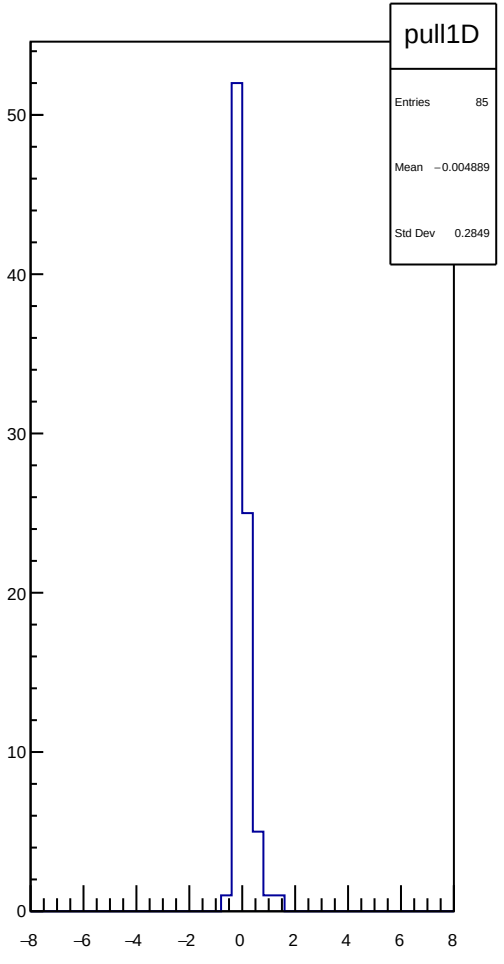

pull1D
Entries 85
Mean 0.001065
Std Dev 0.146

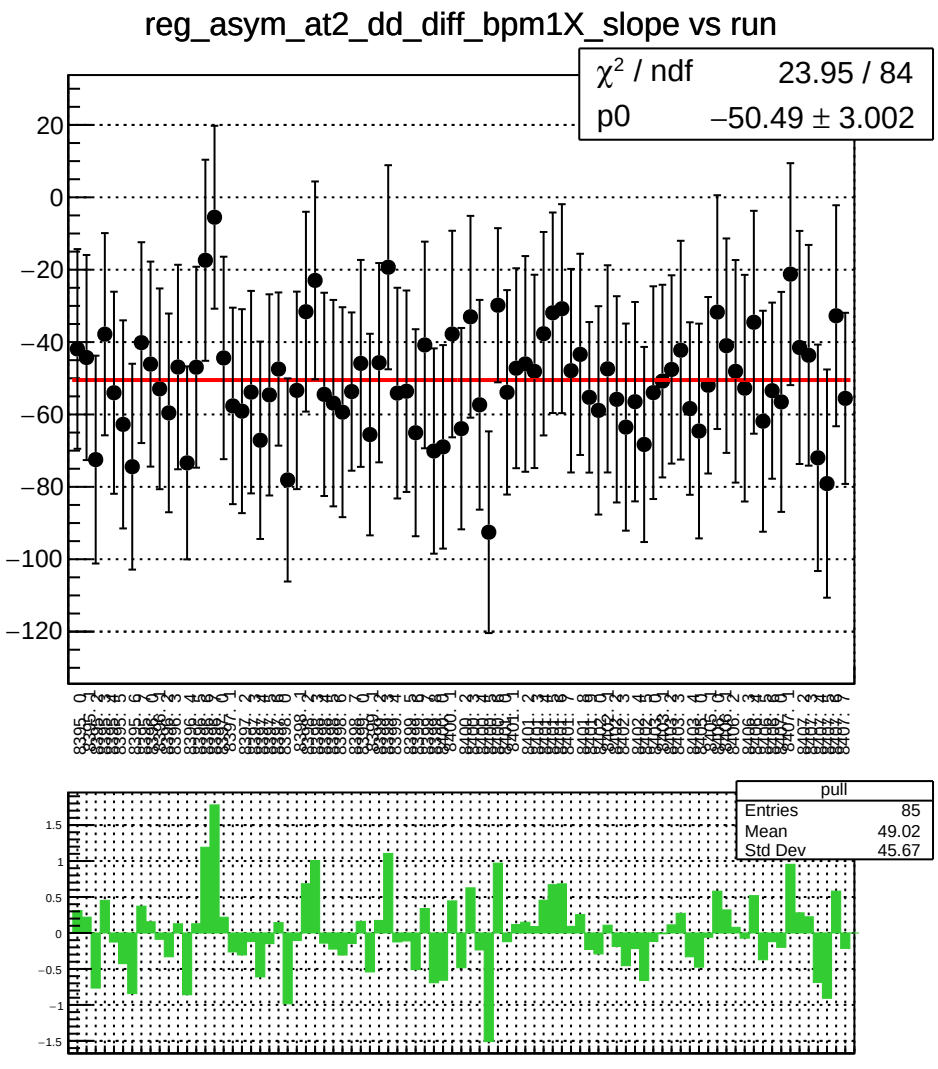

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.821 / 84
p0 473.8 ± 11.96
650
600
550
500
450
400
350
300
pull
Entries 85
Mean 215.1
Std Dev 165.2
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 85
Mean 0.003336
Std Dev 0.1821
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

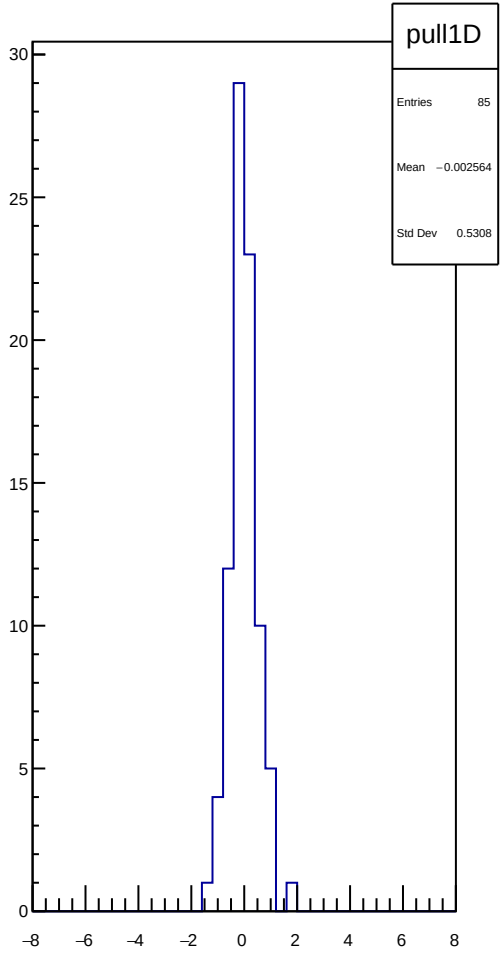

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.836 / 84
p0 45.75 ± 20.44
300
200
100
0
−100
−200
pull
Entries 85
Mean −417.2
Std Dev 448
0.4
0.2
0
−0.2
−0.4

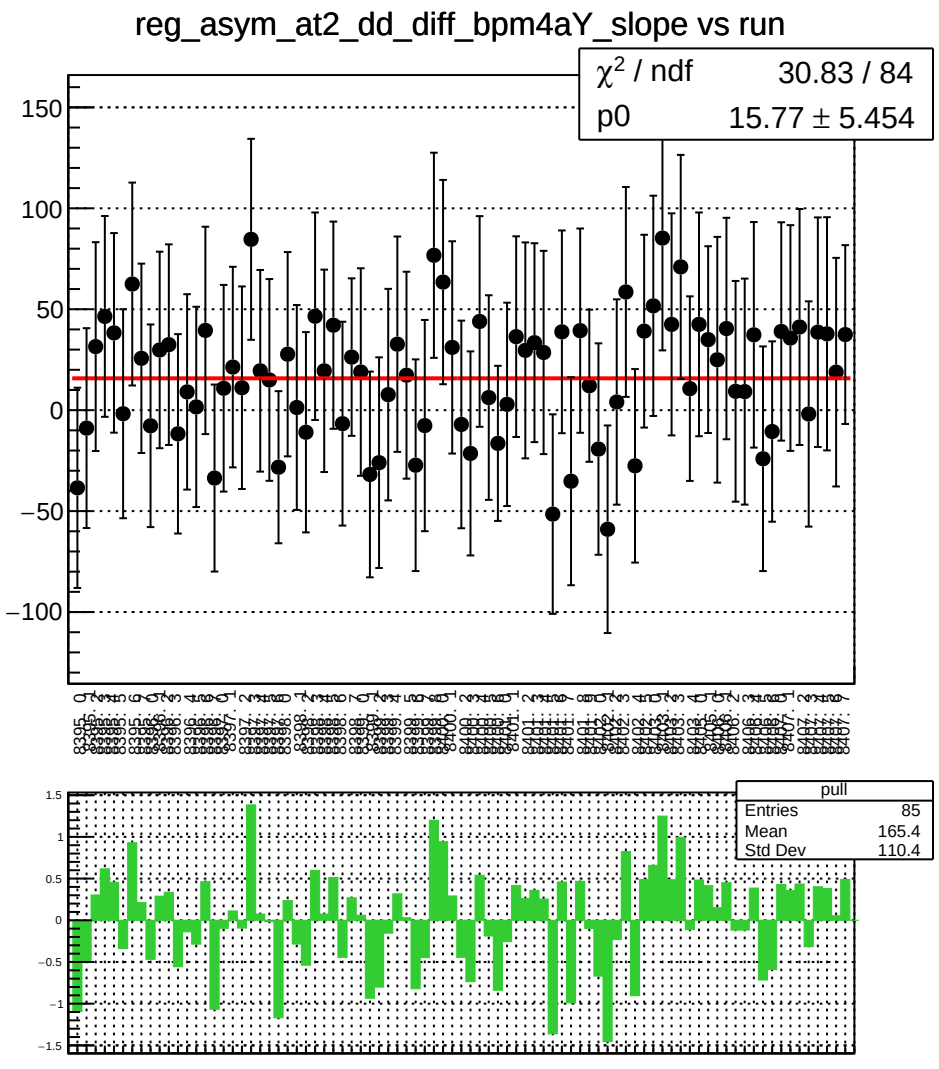

pull1D
Entries 85
Mean −0.001183
Std Dev 0.147
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

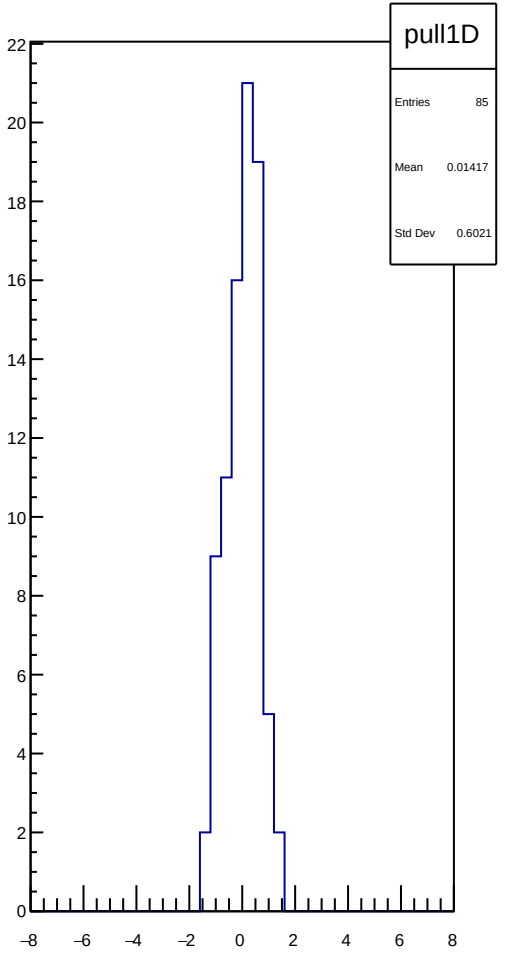

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 6.9 / 84
p0 −290.8 ± 1.261
−260
−270
−280
−290
−300
−310
pull
Entries 85
Mean 463.9
Std Dev 427.4
1.5
1
0.5
0
−0.5

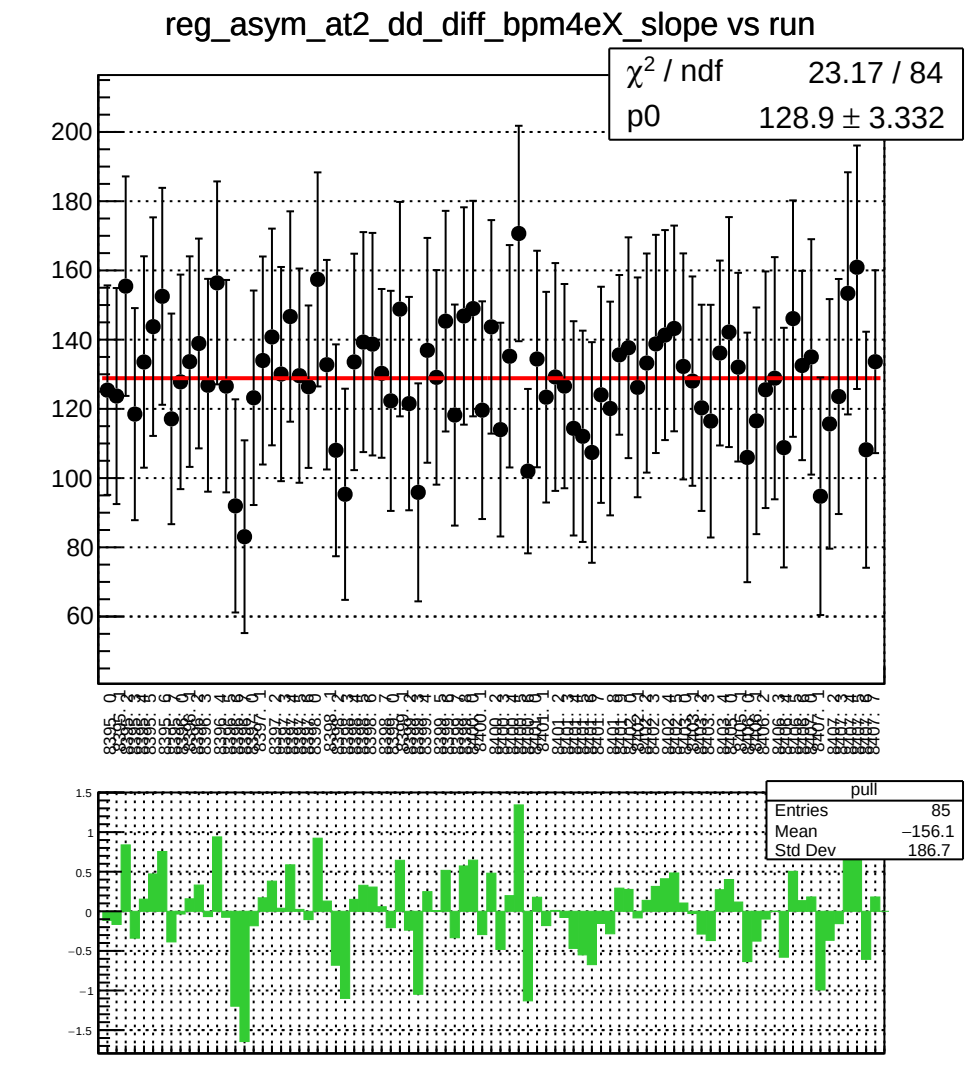

pull1D
Entries 85
Mean −0.004889
Std Dev 0.2849
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

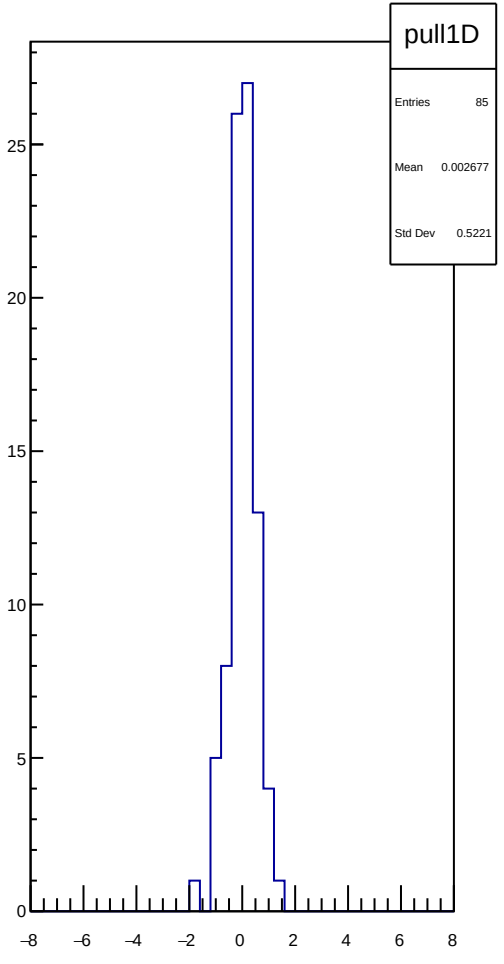

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 23.95 / 84
p0 −50.49 ± 3.002
pull
Entries 85
Mean 49.02
Std Dev 45.67

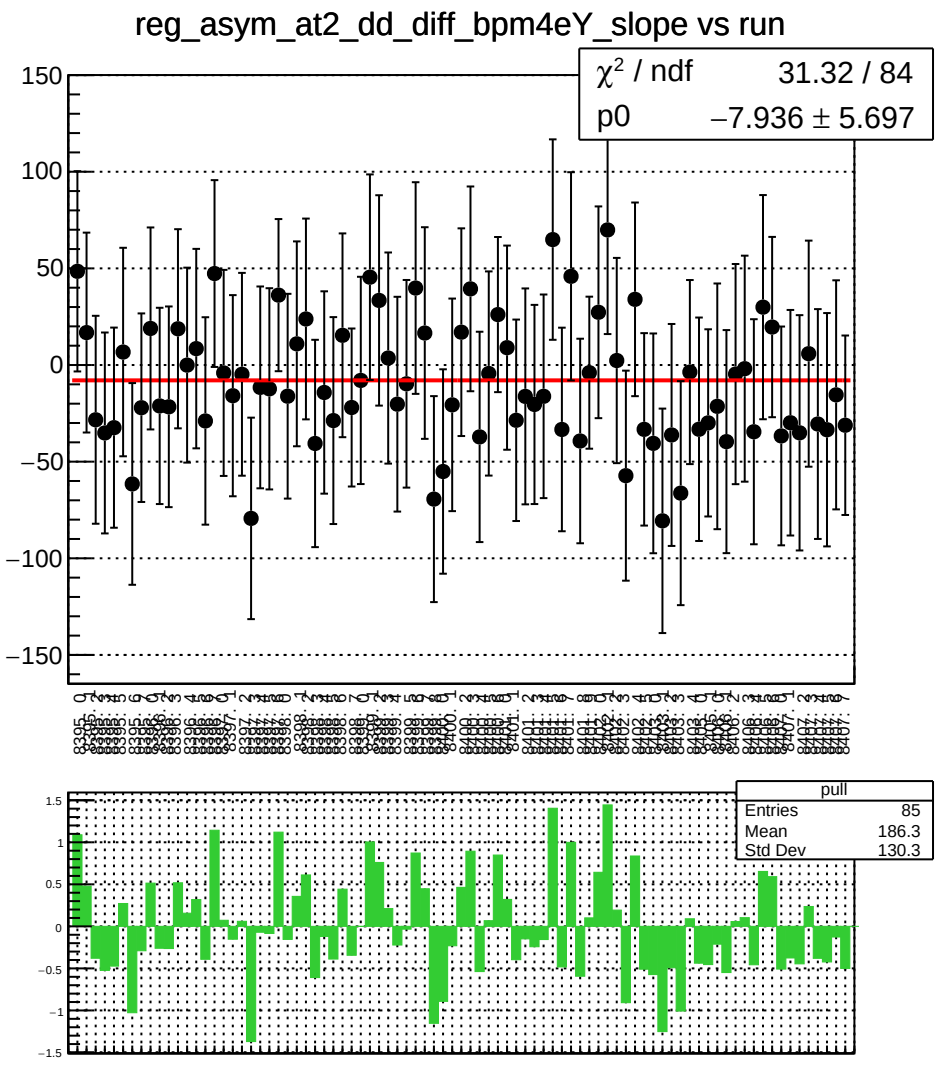

pull1D
Entries 85
Mean −0.002564
Std Dev 0.5308

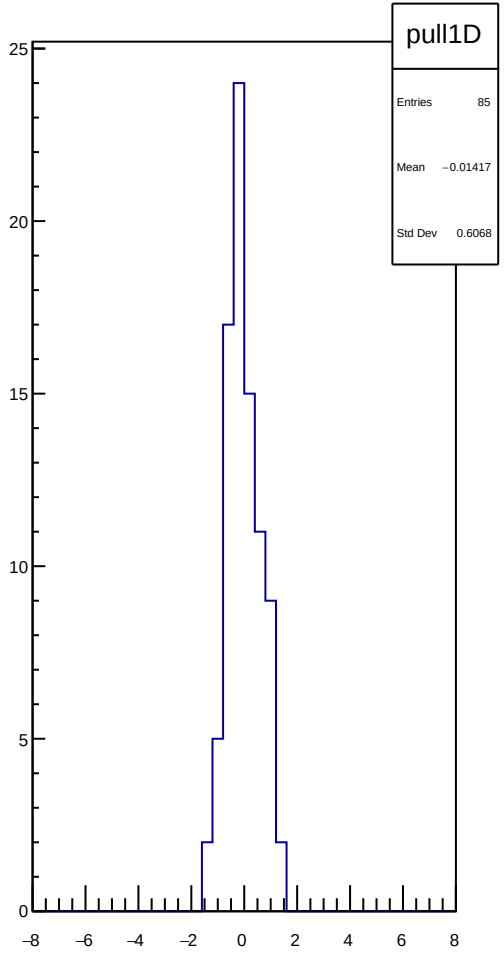

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 30.83 / 84
p0 15.77 ± 5.454
pull
Entries 85
Mean 165.4
Std Dev 110.4

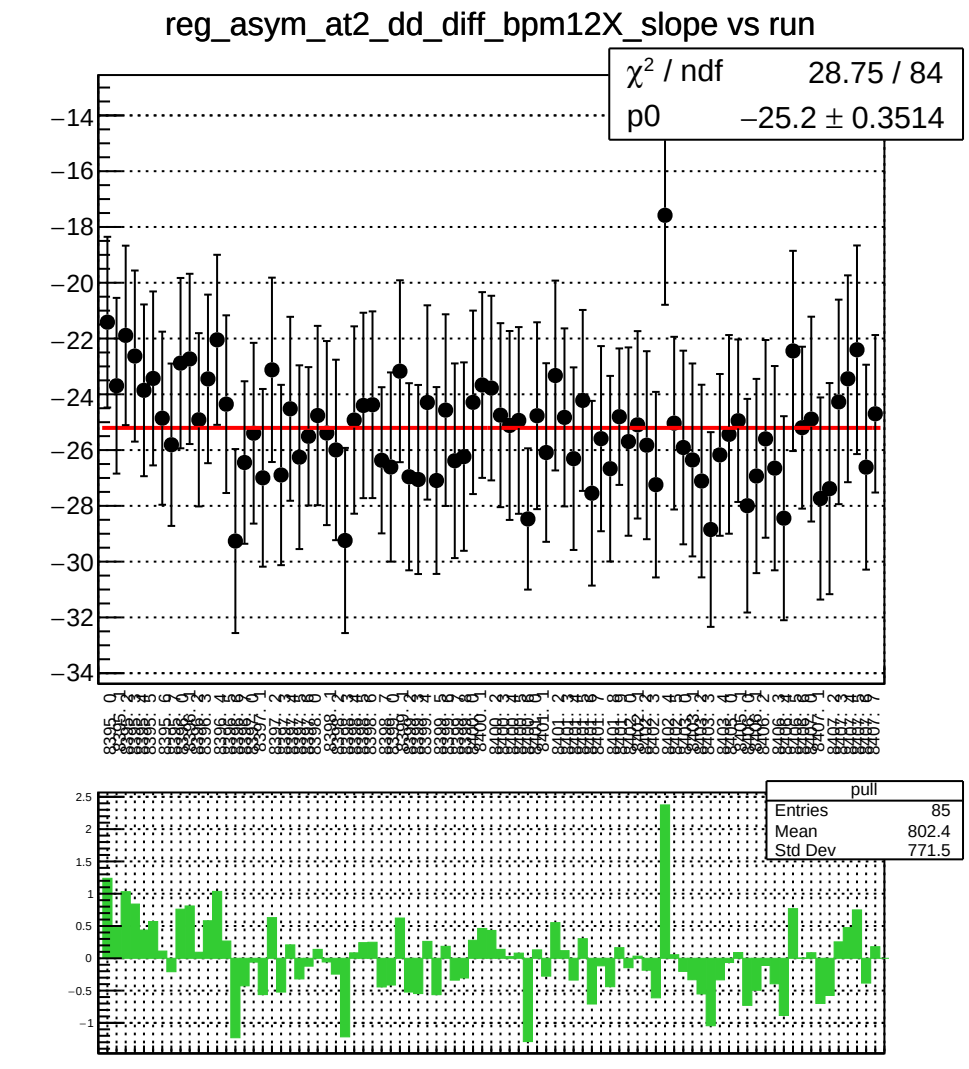

pull1D
Entries 85
Mean 0.01417
Std Dev 0.6021

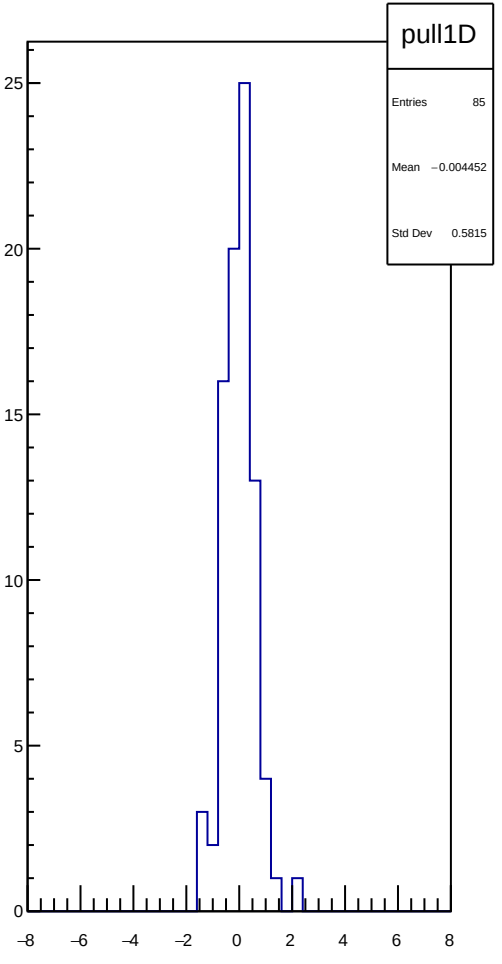

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.17 / 84
p0 128.9 ± 3.332
pull
Entries 85
Mean −156.1
Std Dev 186.7

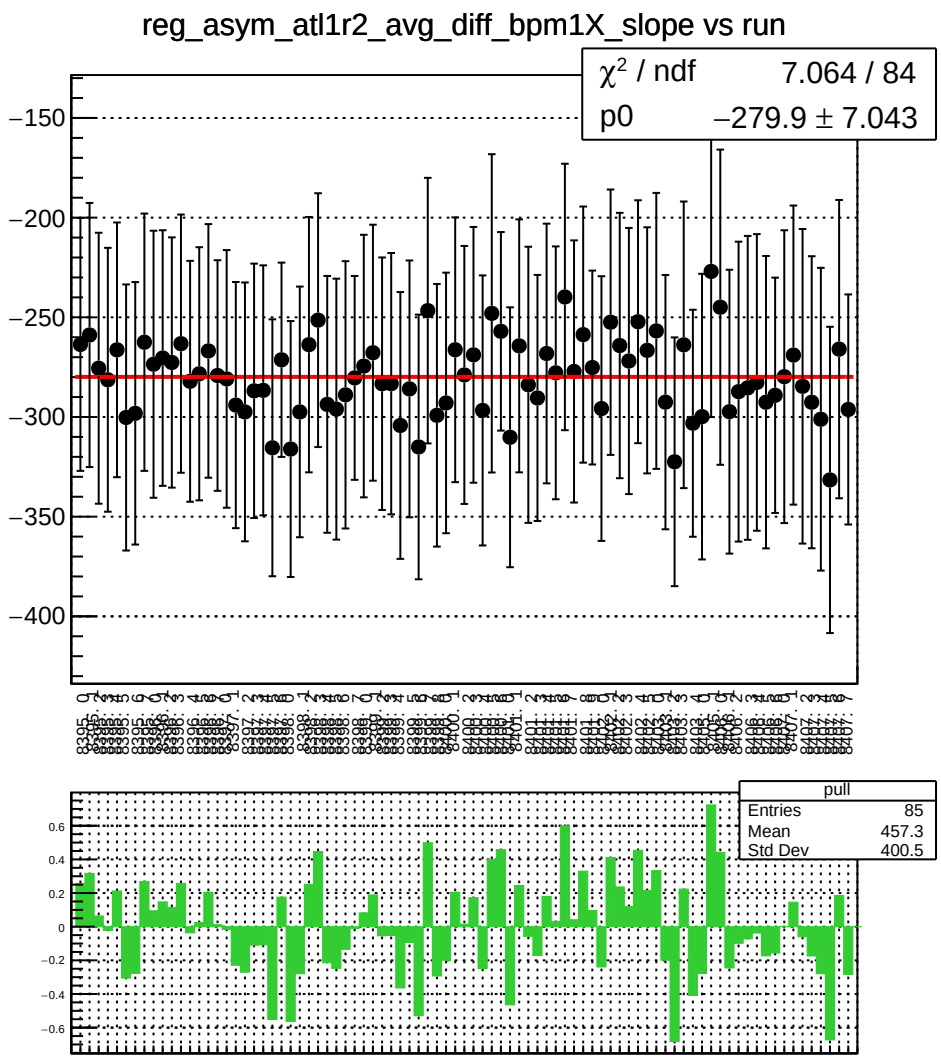

pull1D
Entries 85
Mean 0.002677
Std Dev 0.5221

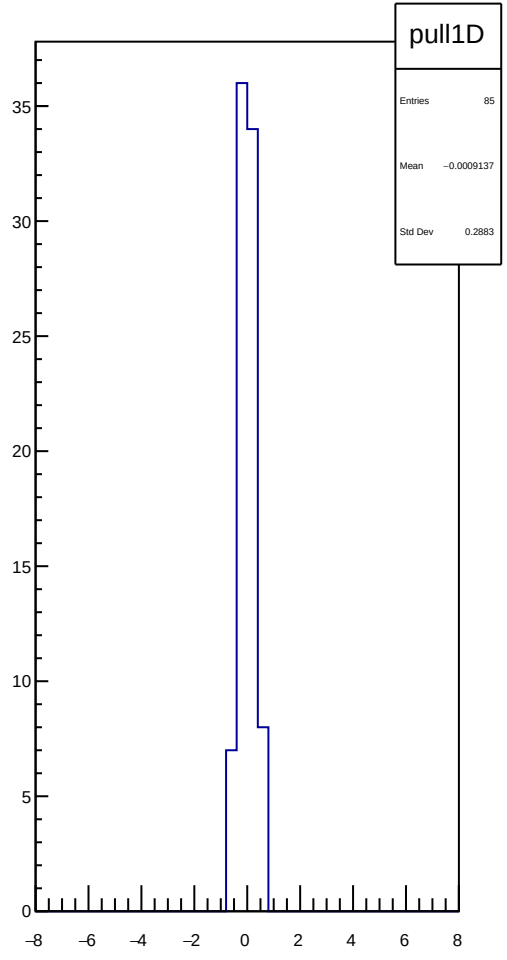

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 31.32 / 84
p0 −7.936 ± 5.697
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 186.3
Std Dev 130.3
1.5
1
0.5
0
−0.5
−1
−1.5

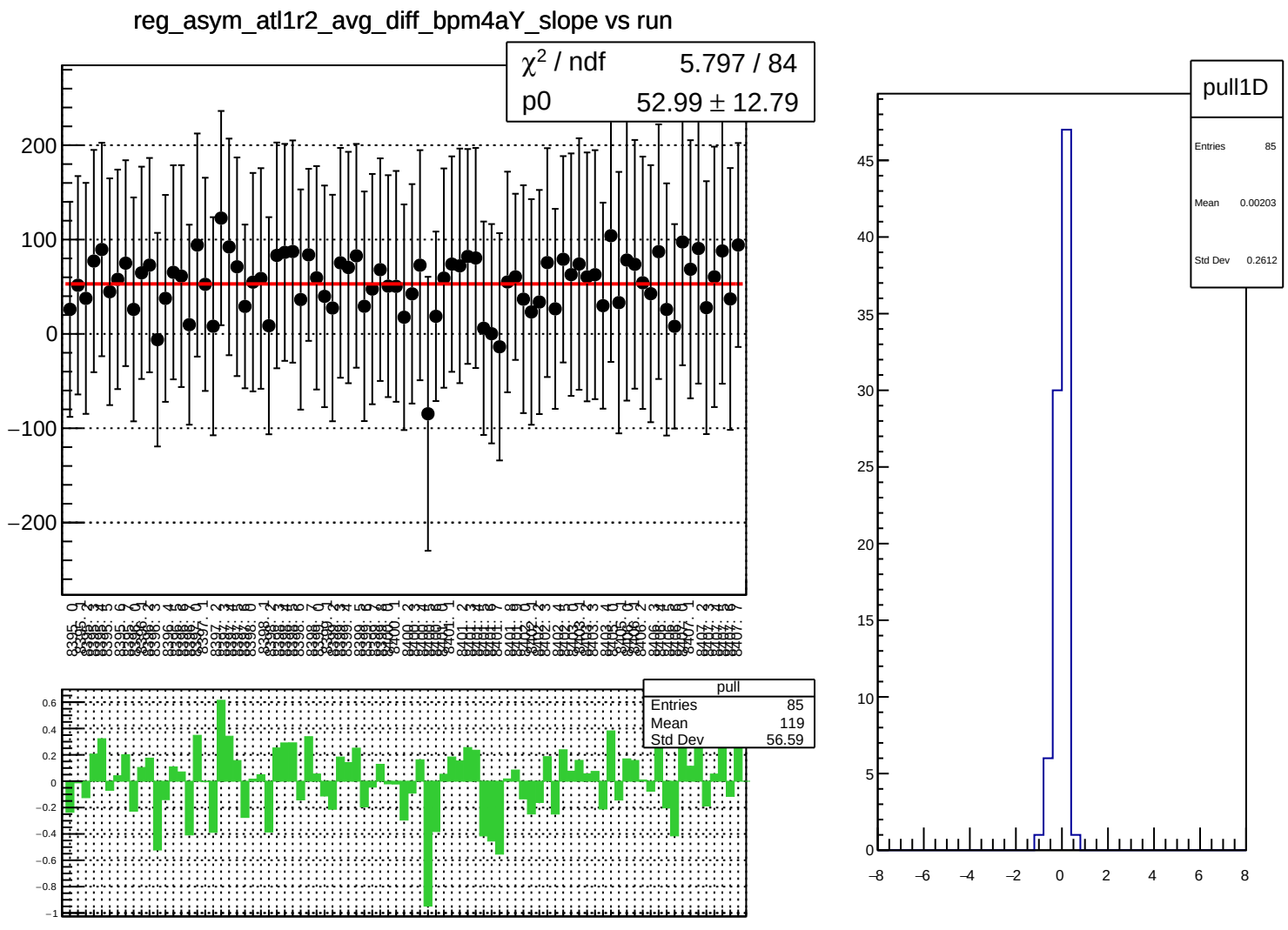

pull1D
Entries 85
Mean −0.01417
Std Dev 0.6068
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

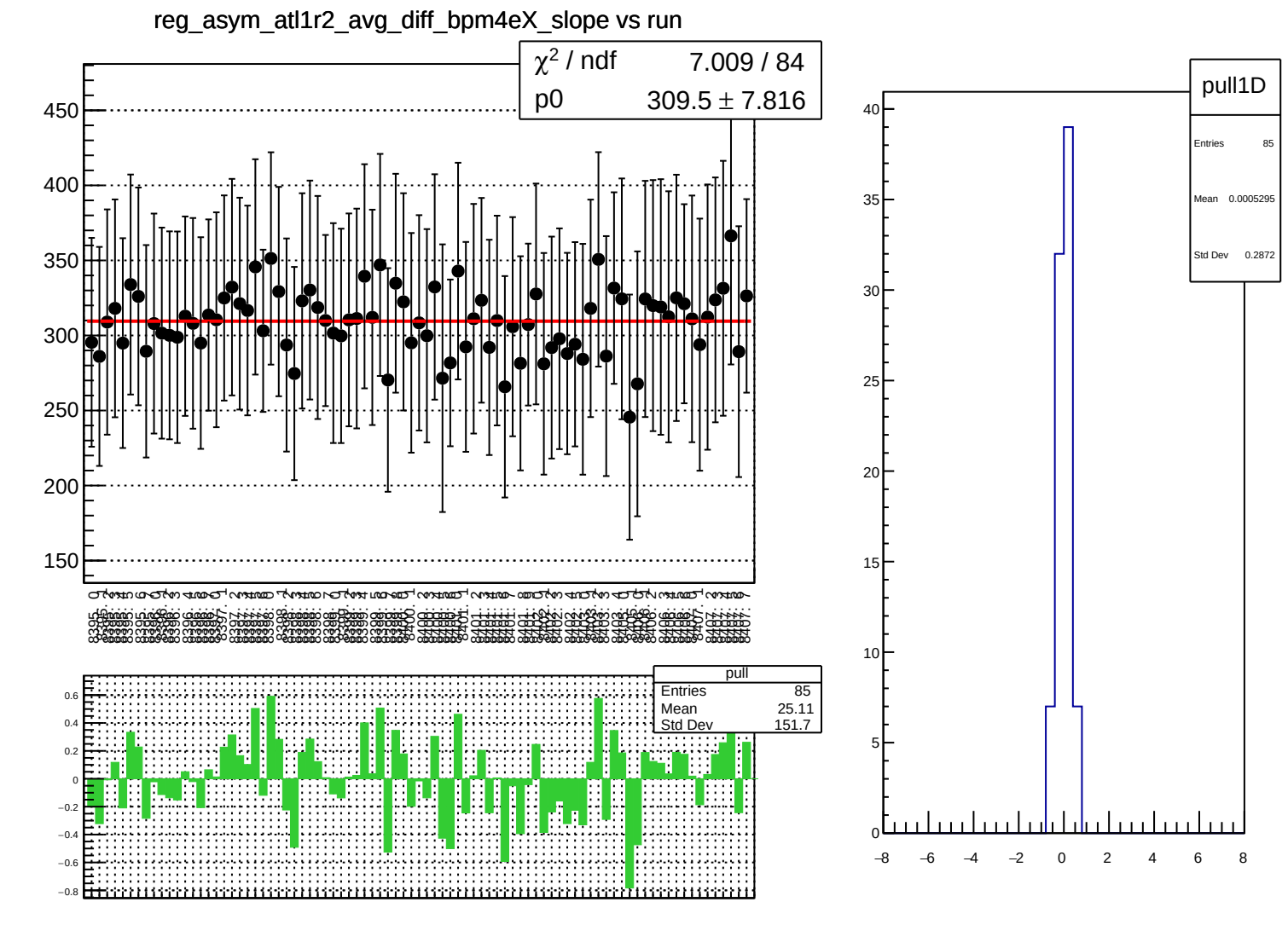

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 28.75 / 84
p0 −25.2 ± 0.3514
pull
Entries 85
Mean 802.4
Std Dev 771.5

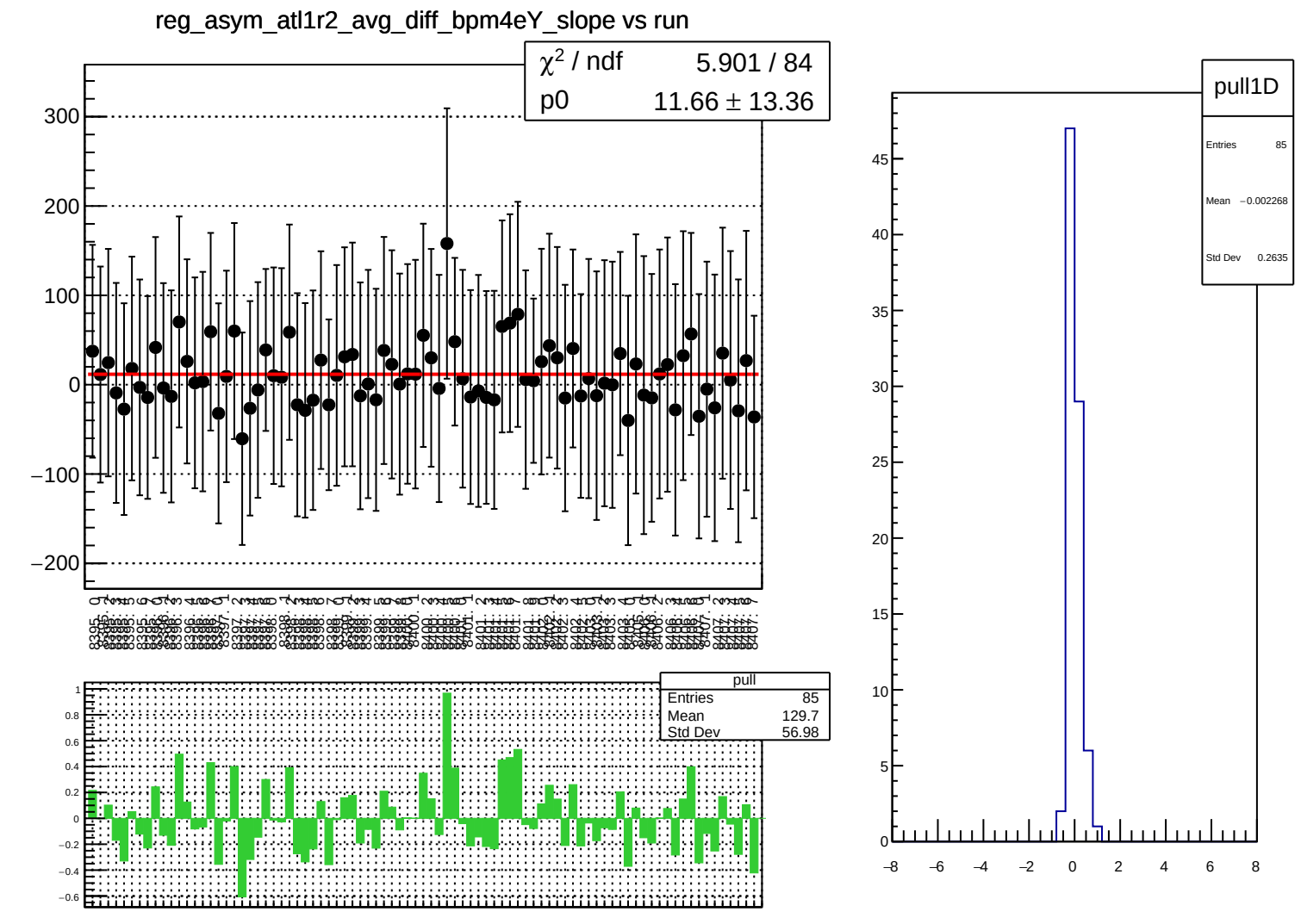

pull1D
Entries 85
Mean −0.004452
Std Dev 0.5815

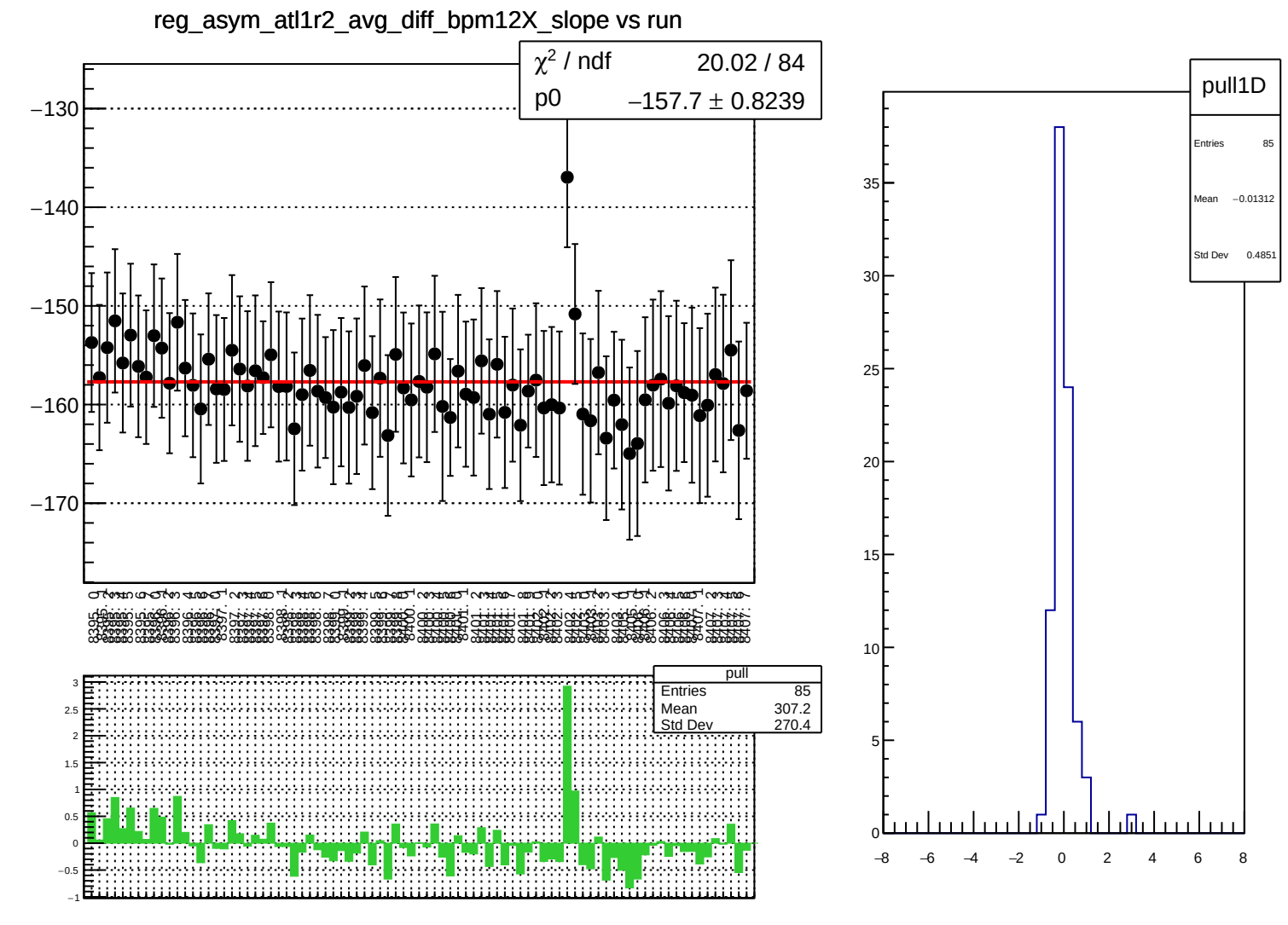

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 7.064 / 84
p0 −279.9 ± 7.043
−150
−200
−250
−300
−350
−400
pull
Entries 85
Mean 457.3
Std Dev 400.5
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

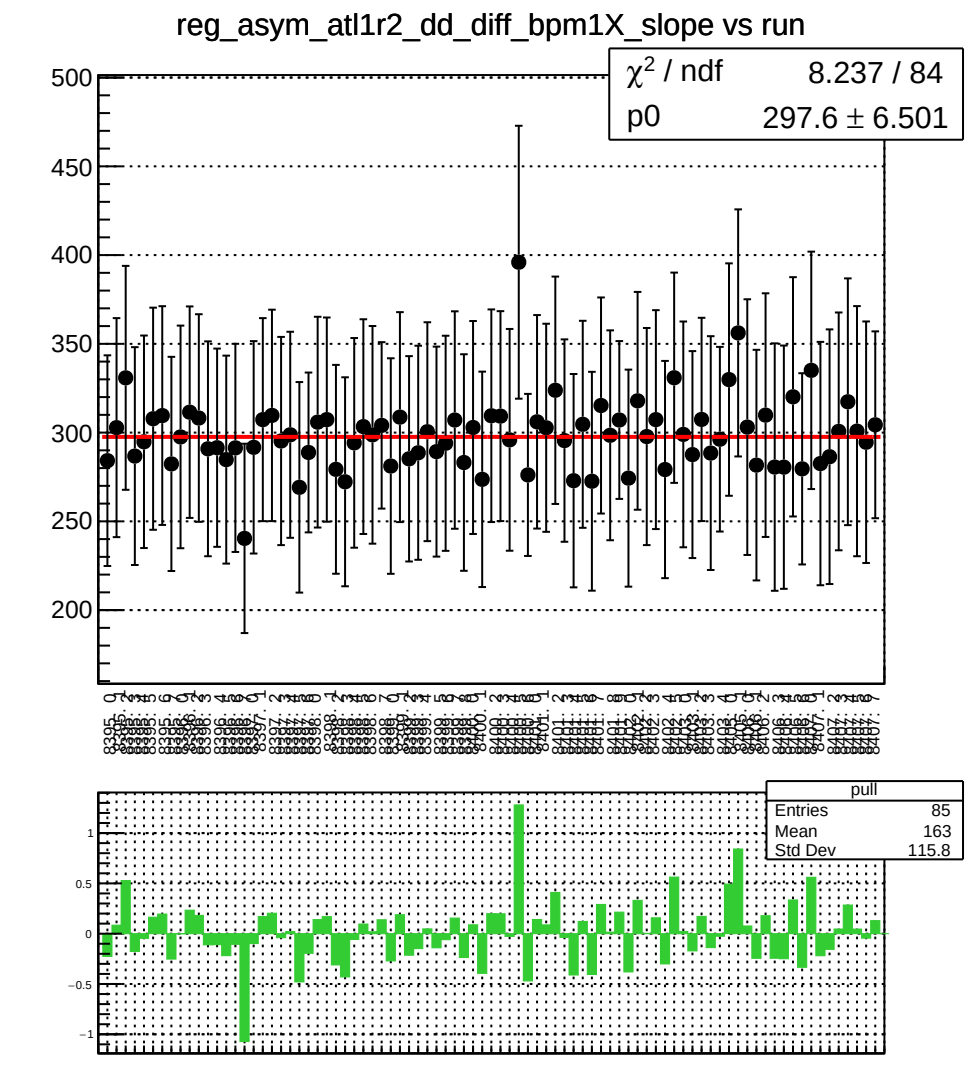

pull1D
Entries 85
Mean −0.0009137
Std Dev 0.2883
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

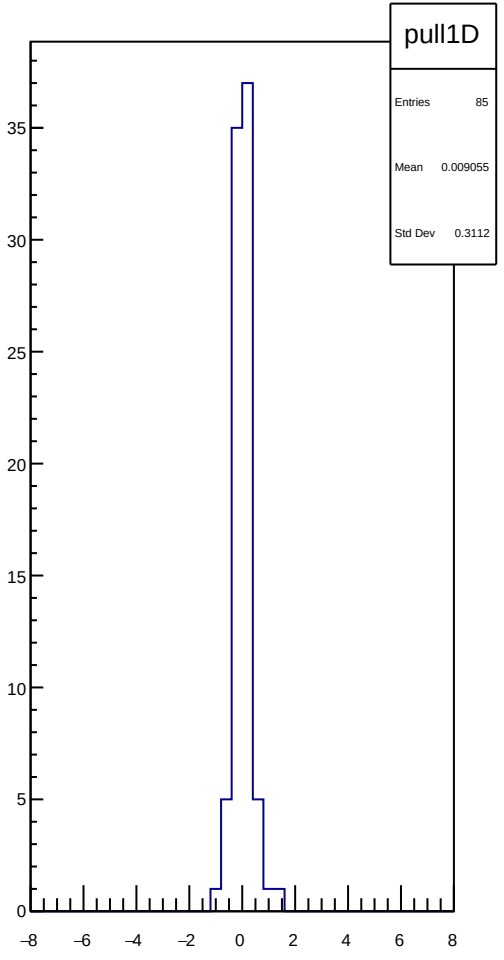

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.797 / 84
p0 52.99 ± 12.79
200
100
0
−100
−200
pull
Entries 85
Mean 119
Std Dev 56.59
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean 0.00203
Std Dev 0.2612
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

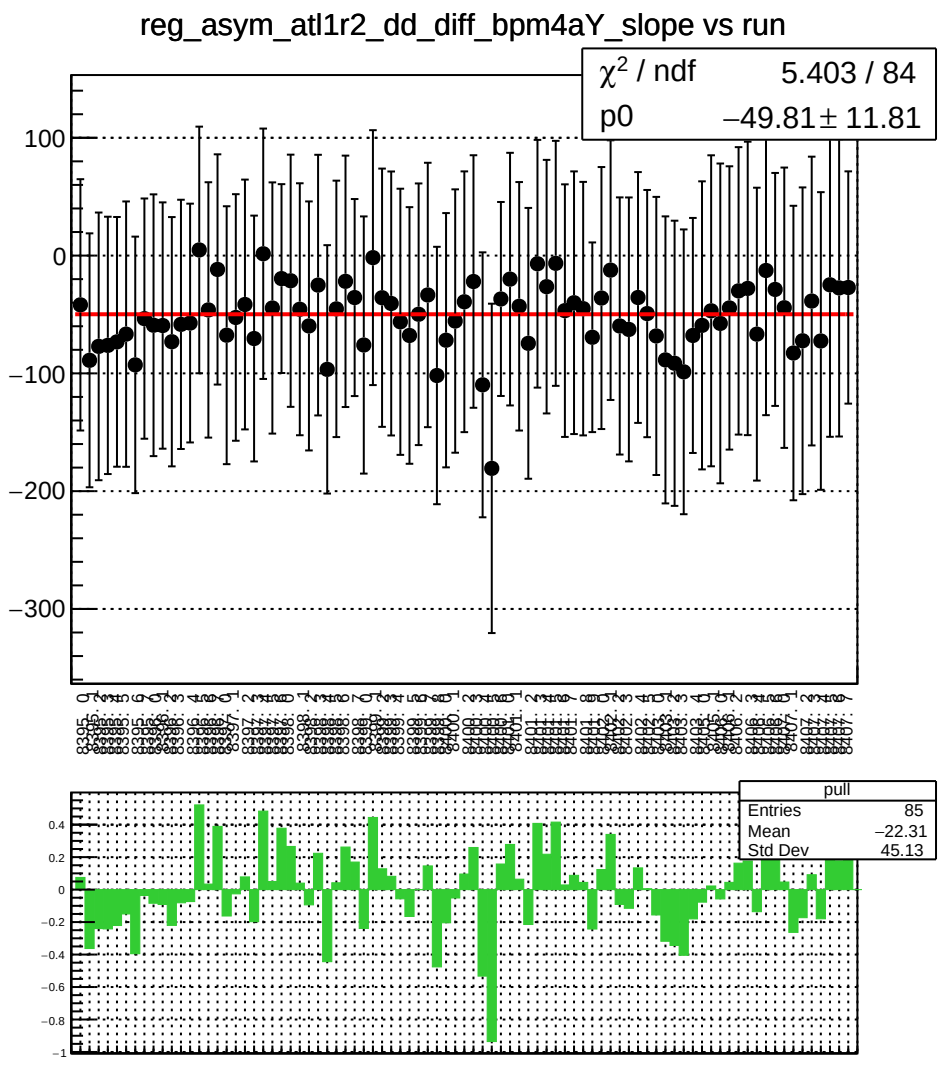

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.009 / 84
p0 309.5 ± 7.816
pull
Entries 85
Mean 25.11
Std Dev 151.7
pull1D
Entries 85
Mean 0.0005295
Std Dev 0.2872

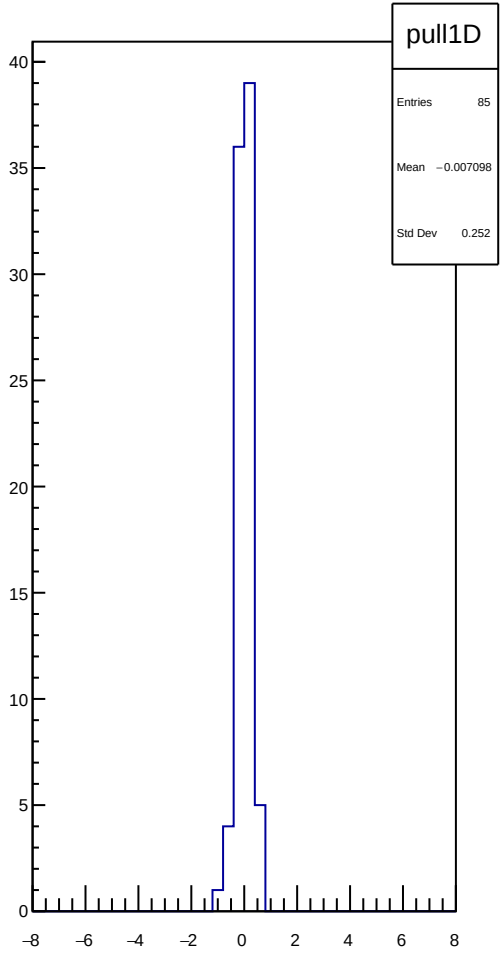

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.901 / 84
p0 11.66 ± 13.36
300
200
100
0
−100
−200
pull
Entries 85
Mean 129.7
Std Dev 56.98
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 85
Mean −0.002268
Std Dev 0.2635
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

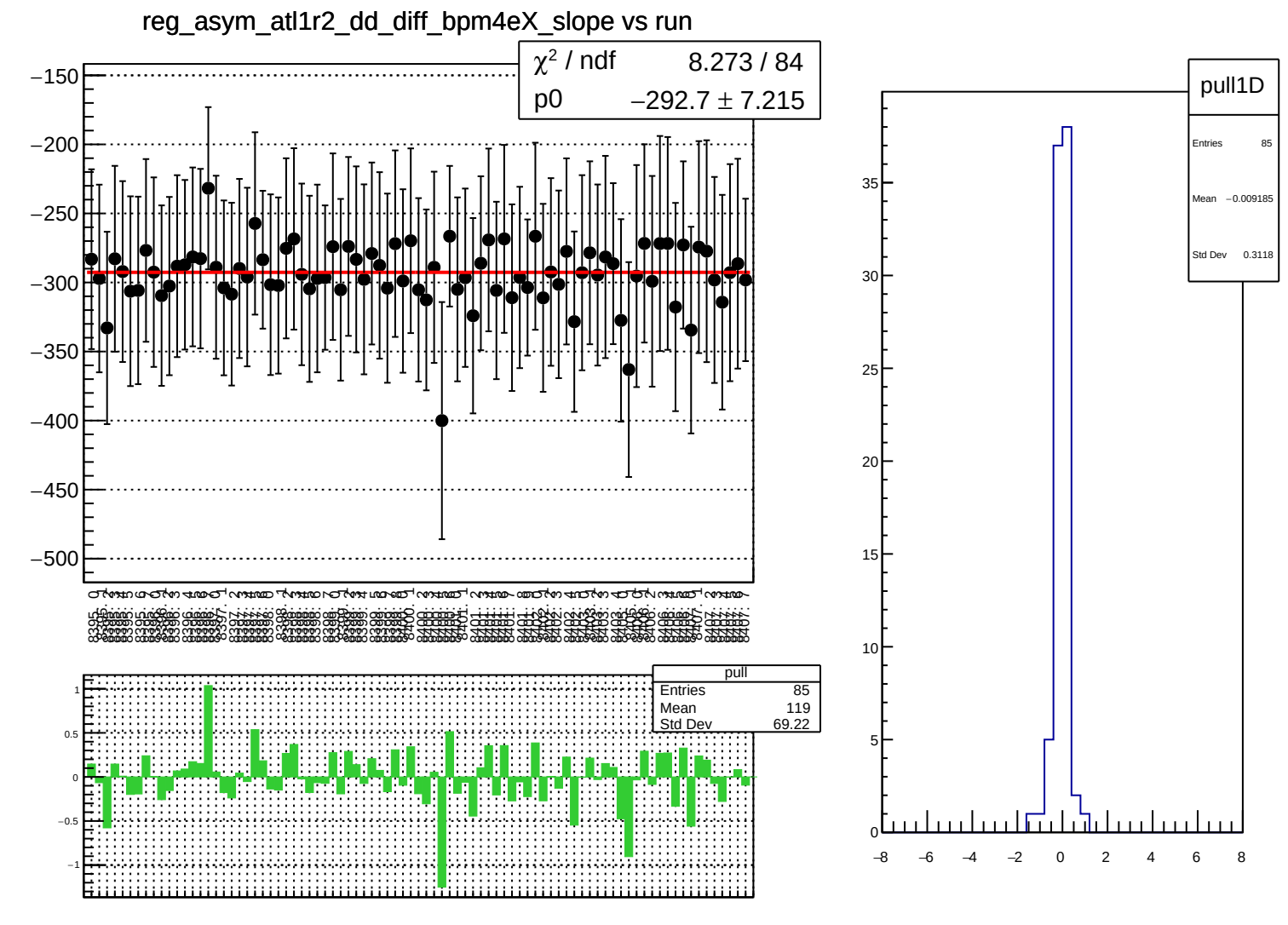

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 20.02 / 84
p0 −157.7 ± 0.8239
−130
−140
−150
−160
−170
pull
Entries 85
Mean 307.2
Std Dev 270.4
3
2.5
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.01312
Std Dev 0.4851
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

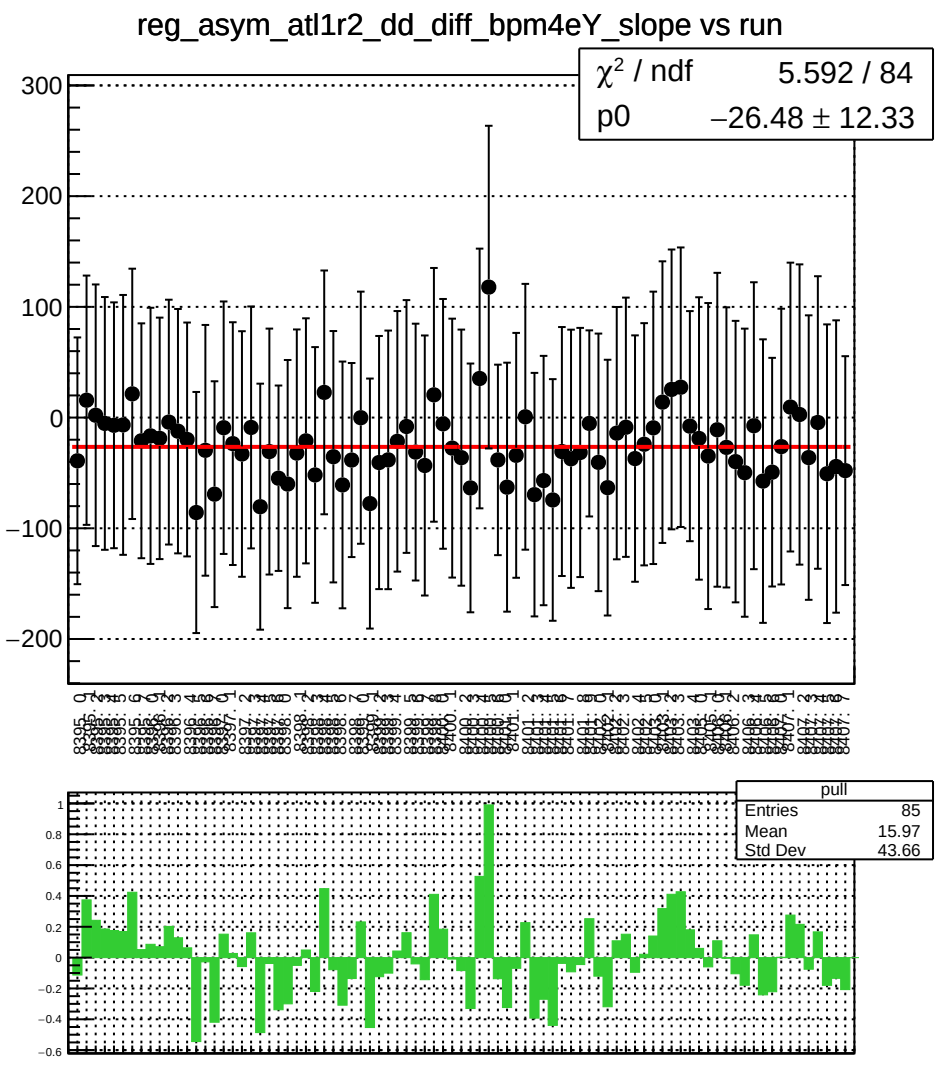

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 8.237 / 84
p0 297.6 ± 6.501
pull
Entries 85
Mean 163
Std Dev 115.8

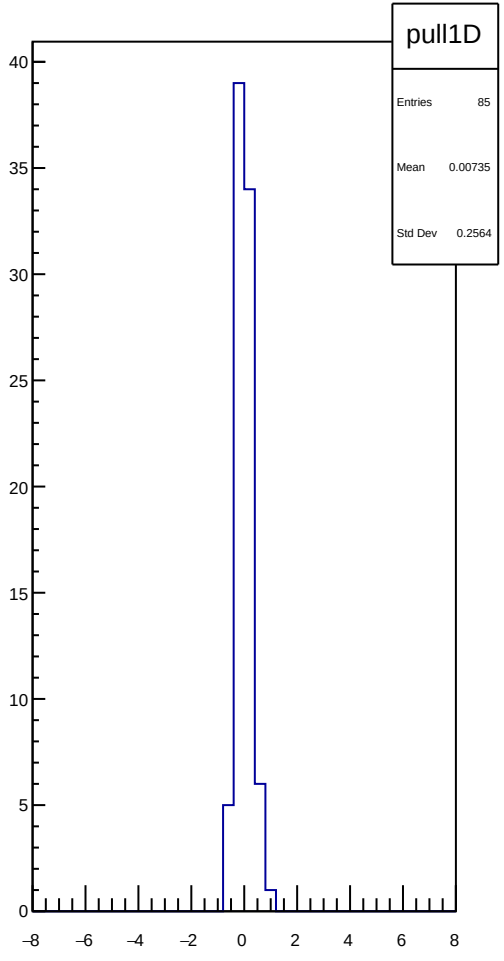

pull1D
Entries 85
Mean 0.009055
Std Dev 0.3112

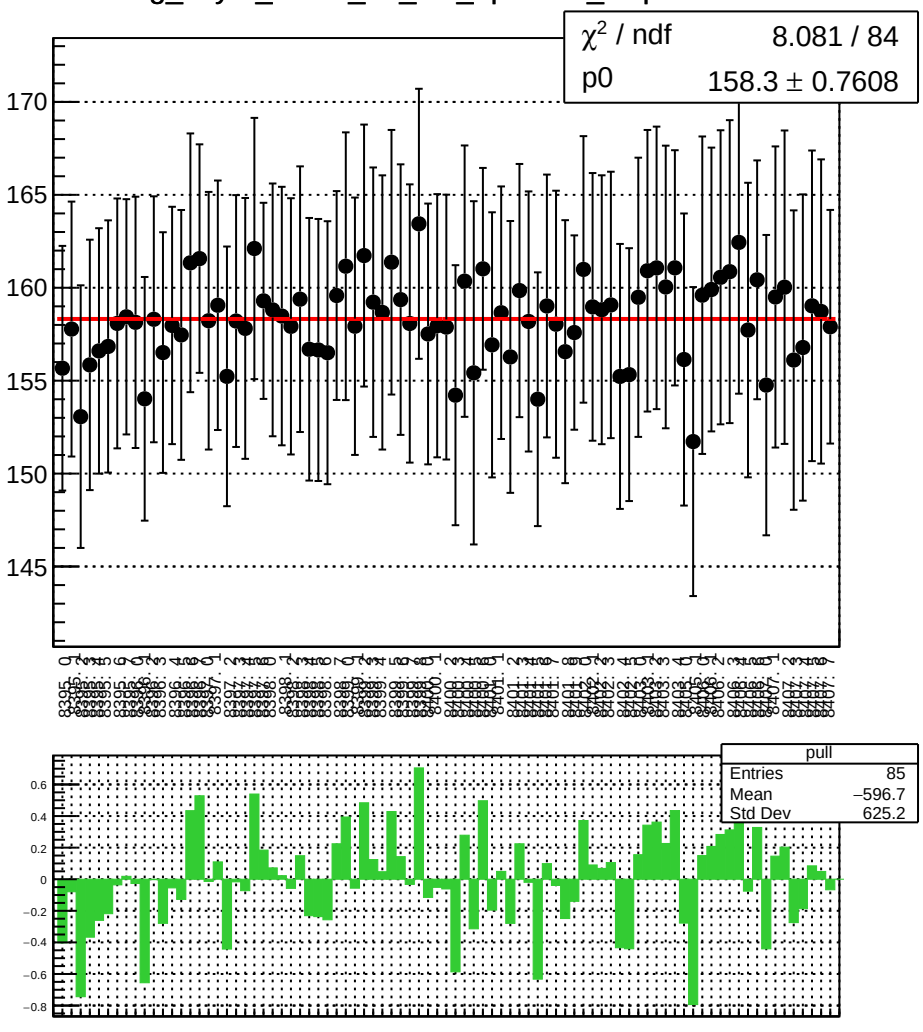

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.403 / 84
p0 −49.81 ± 11.81
100
0
−100
−200
−300
pull
Entries 85
Mean −22.31
Std Dev 45.13
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

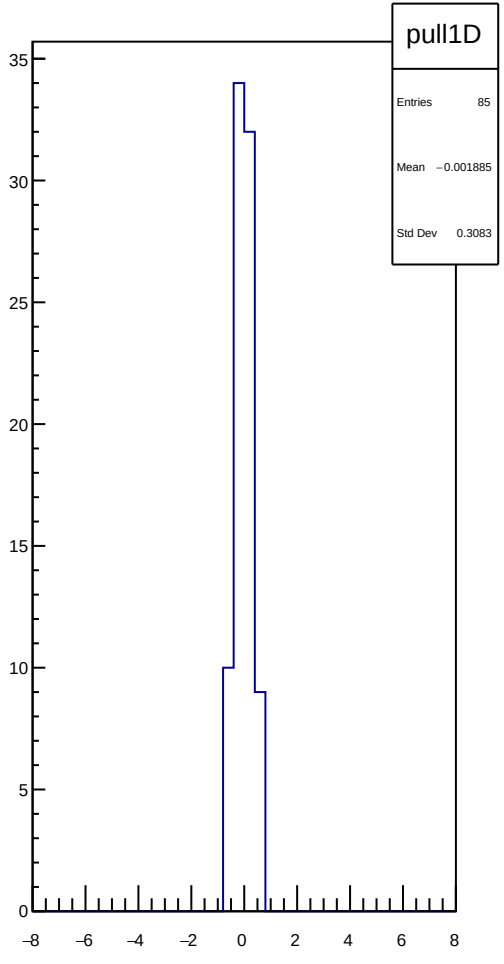

pull1D
Entries 85
Mean −0.007098
Std Dev 0.252
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

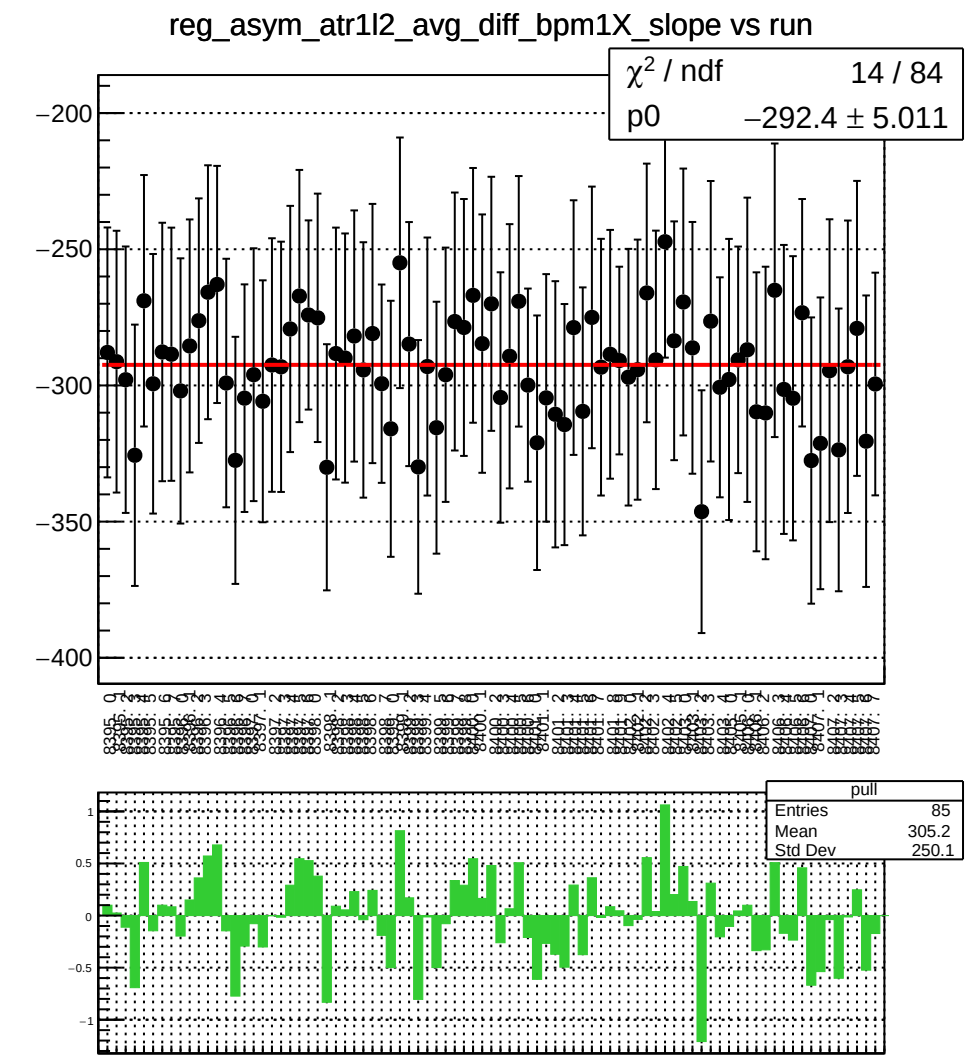

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 8.273 / 84
p0 −292.7 ± 7.215
−150
−200
−250
−300
−350
−400
−450
−500
pull
Entries 85
Mean 119
Std Dev 69.22
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.009185
Std Dev 0.3118
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

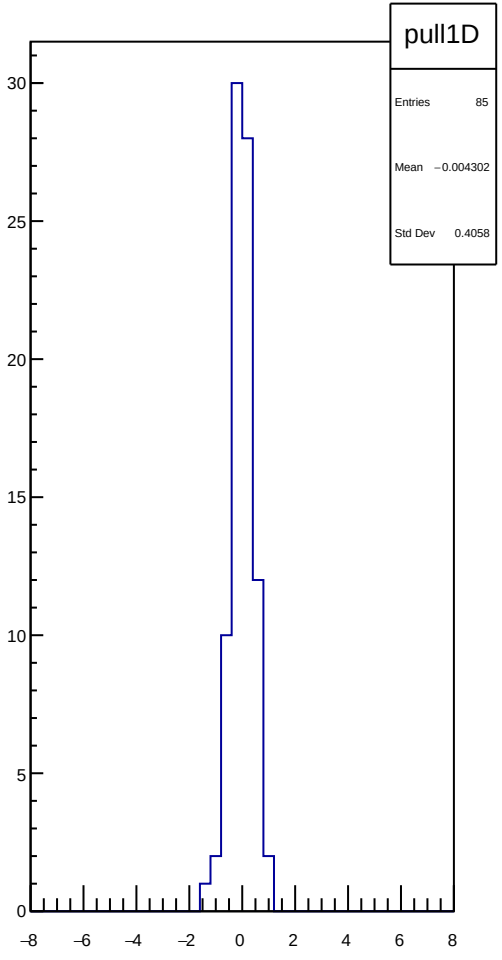

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.592 / 84
p0 −26.48 ± 12.33
300
200
100
0
−100
−200
pull
Entries 85
Mean 15.97
Std Dev 43.66
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

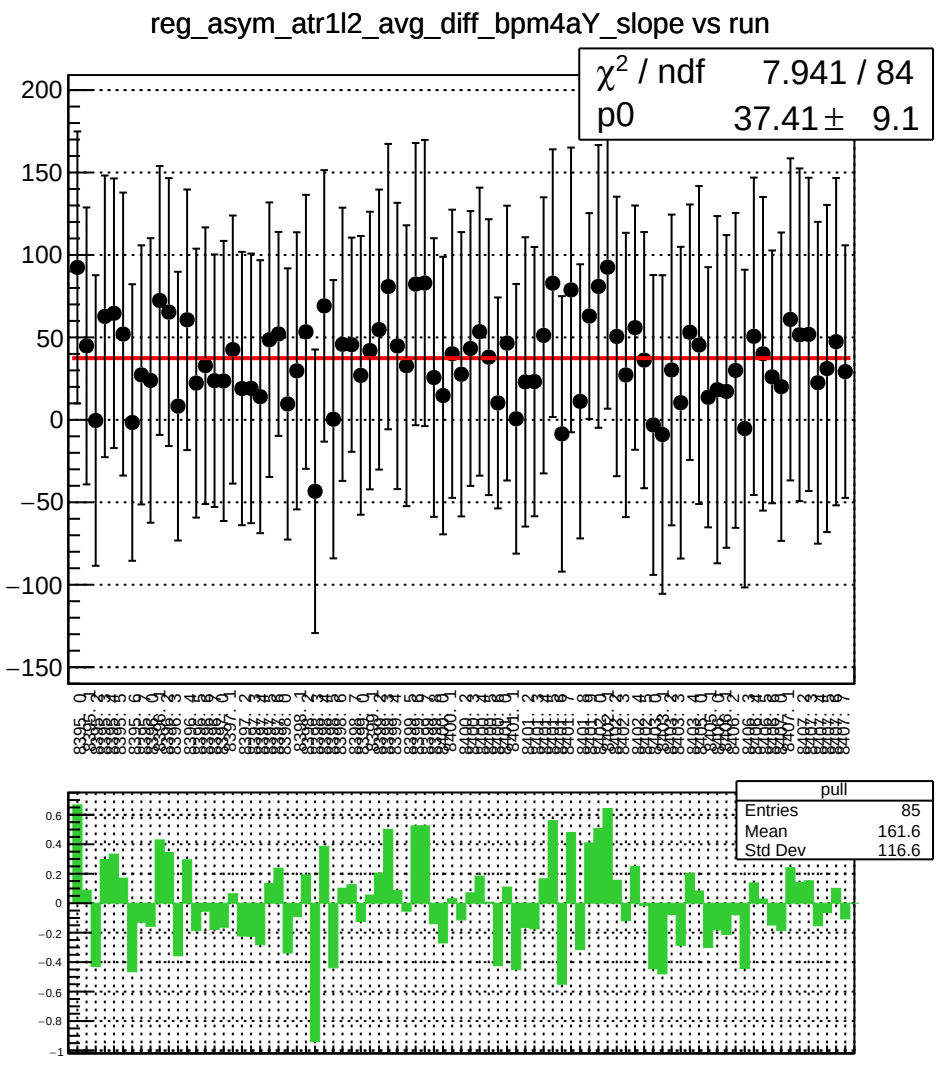

pull1D
Entries 85
Mean 0.00735
Std Dev 0.2564
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

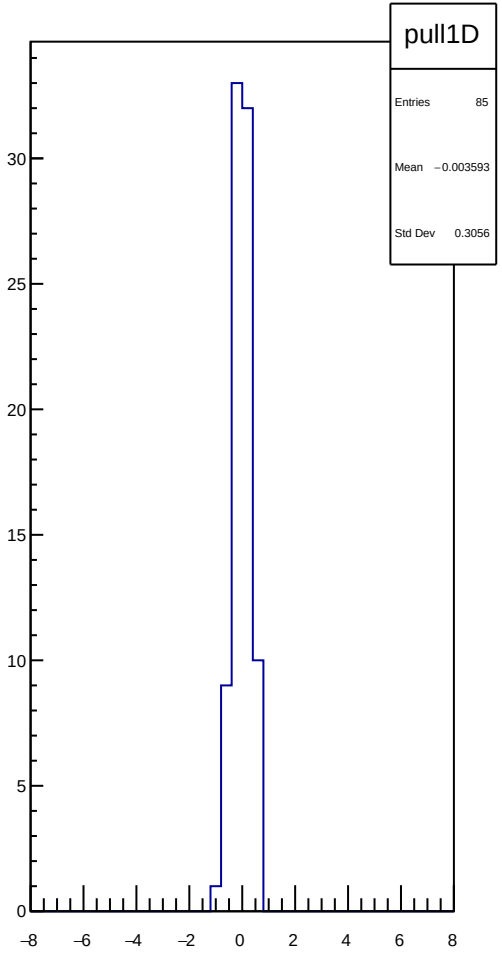

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 8.081 / 84
p0 158.3 ± 0.7608
170
165
160
155
150
145
pull
Entries 85
Mean −596.7
Std Dev 625.2
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

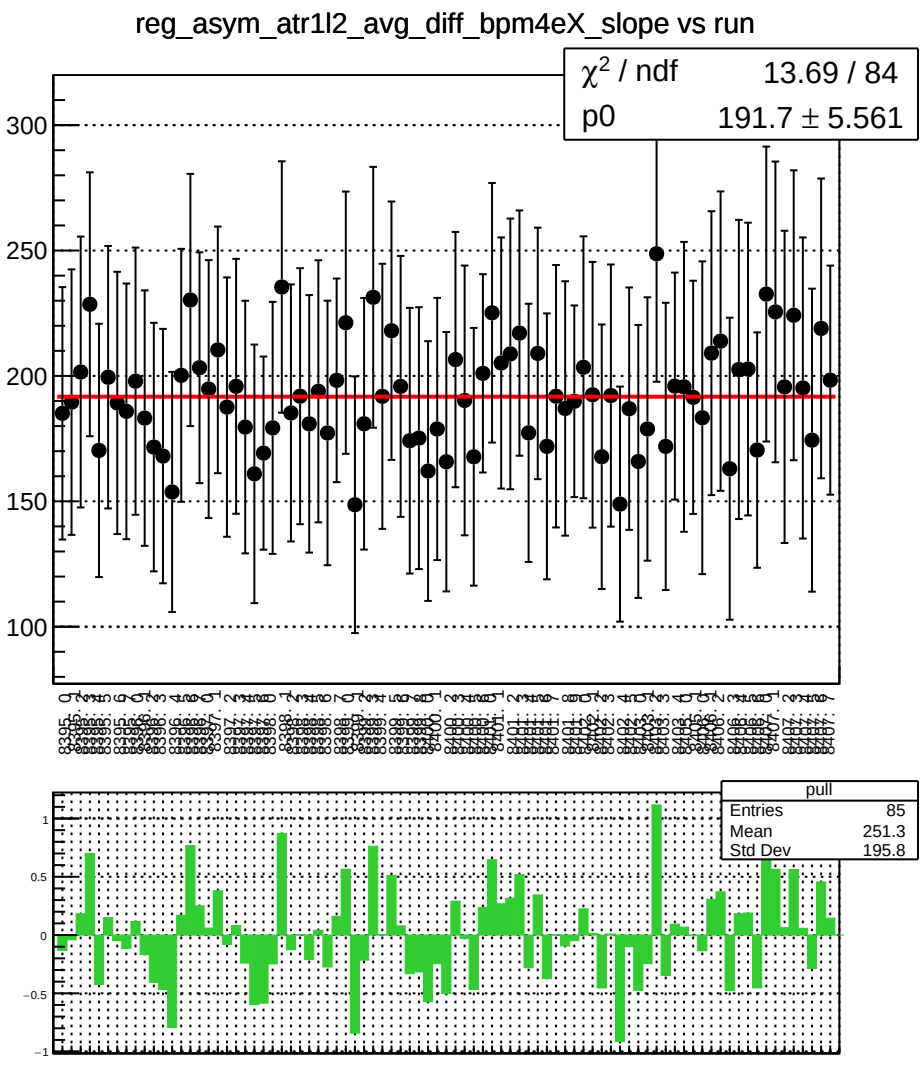

pull1D
Entries 85
Mean −0.001885
Std Dev 0.3083
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

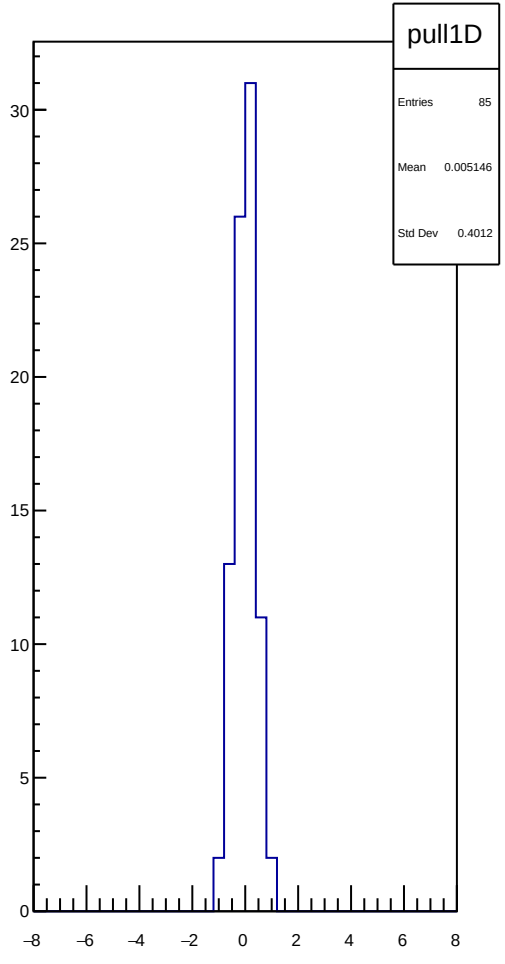

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 14 / 84
p0 −292.4 ± 5.011
−200
−250
−300
−350
−400
pull
Entries 85
Mean 305.2
Std Dev 250.1
1
0.5
0
−0.5
−1

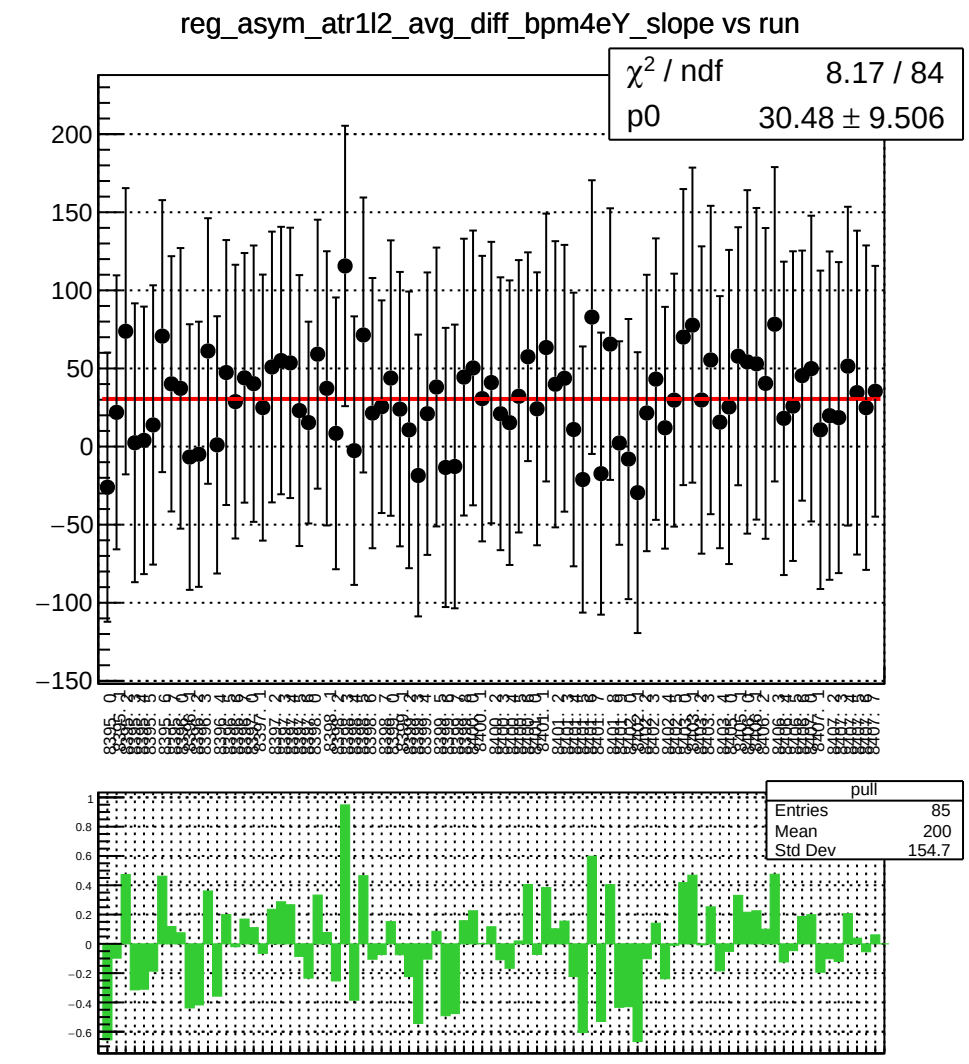

pull1D
Entries 85
Mean −0.004302
Std Dev 0.4058
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

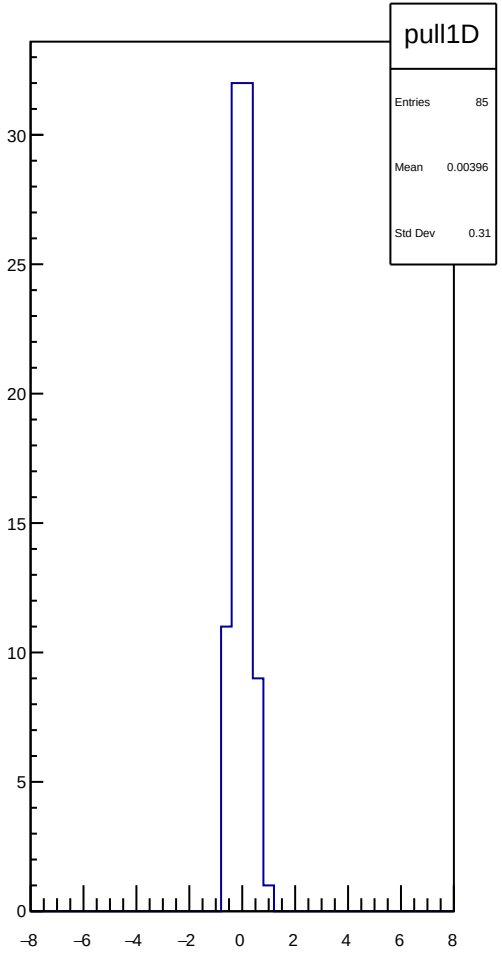

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.941 / 84
p0 37.41 ± 9.1
pull
Entries 85
Mean 161.6
Std Dev 116.6

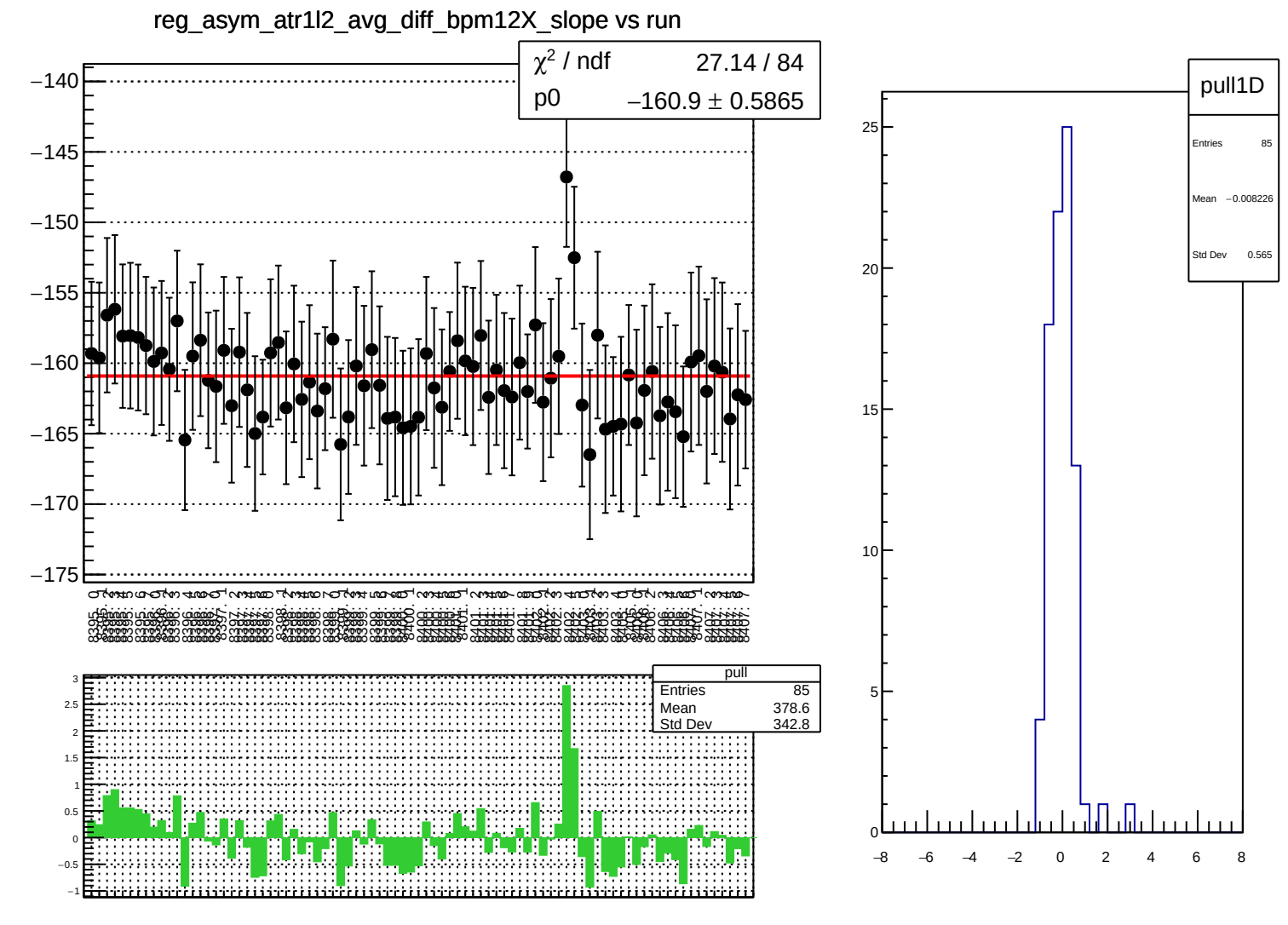

pull1D
Entries 85
Mean −0.003593
Std Dev 0.3056

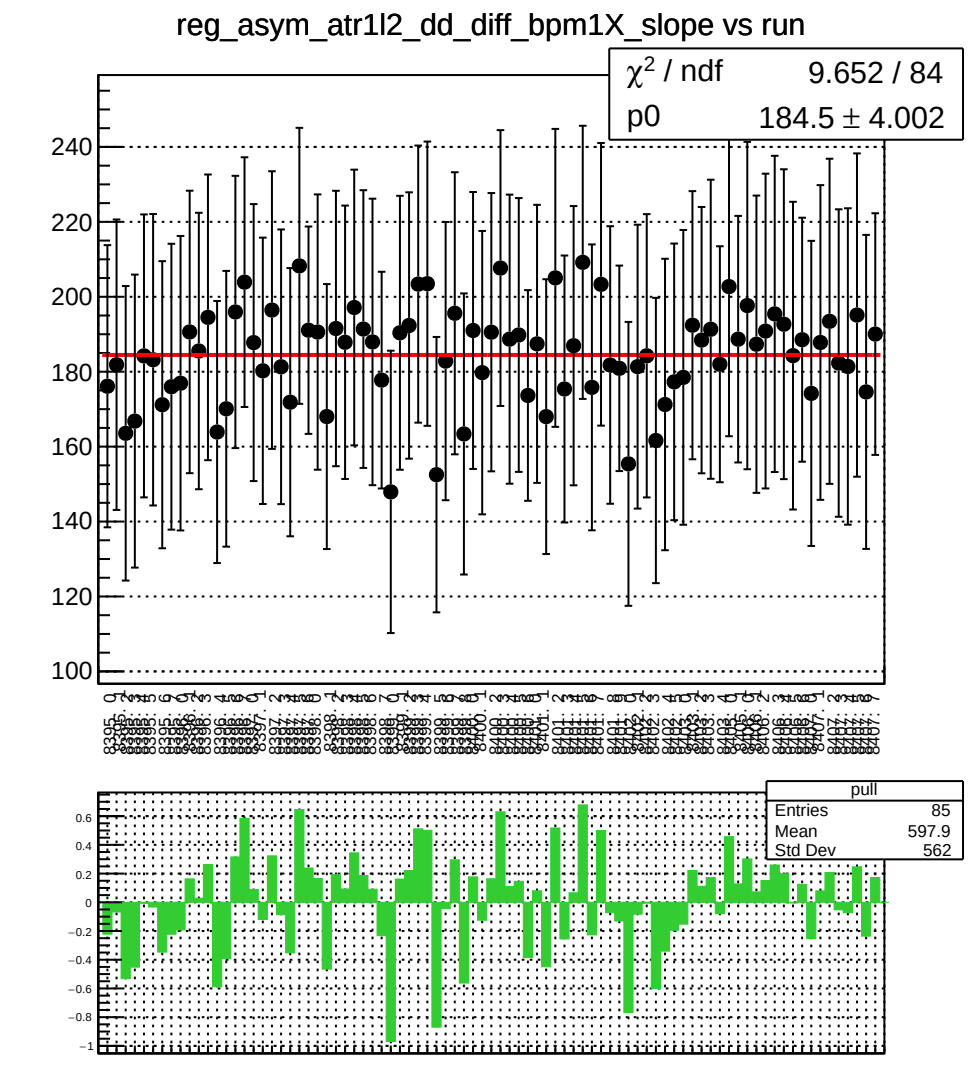

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 13.69 / 84
p0 191.7 ± 5.561
300
250
200
150
100
pull
Entries 85
Mean 251.3
Std Dev 195.8
1
0.5
0
−0.5
−1

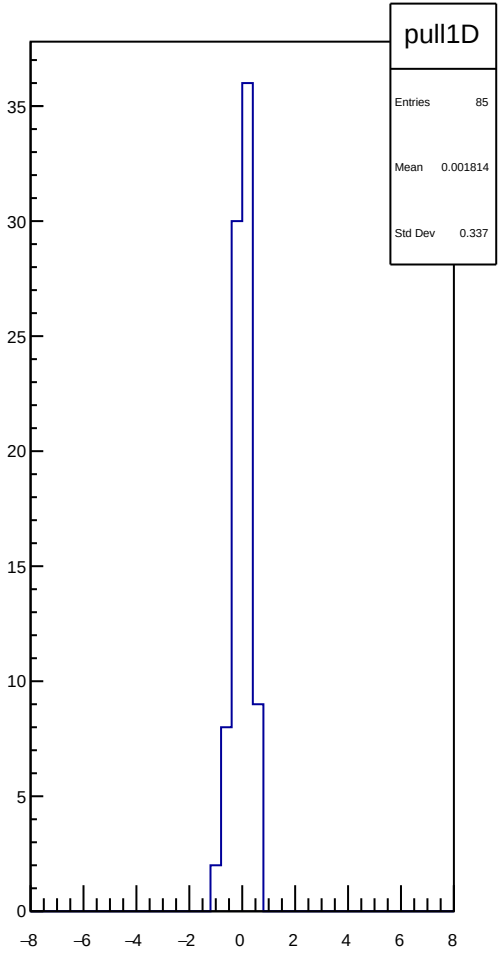

pull1D
Entries 85
Mean 0.005146
Std Dev 0.4012
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

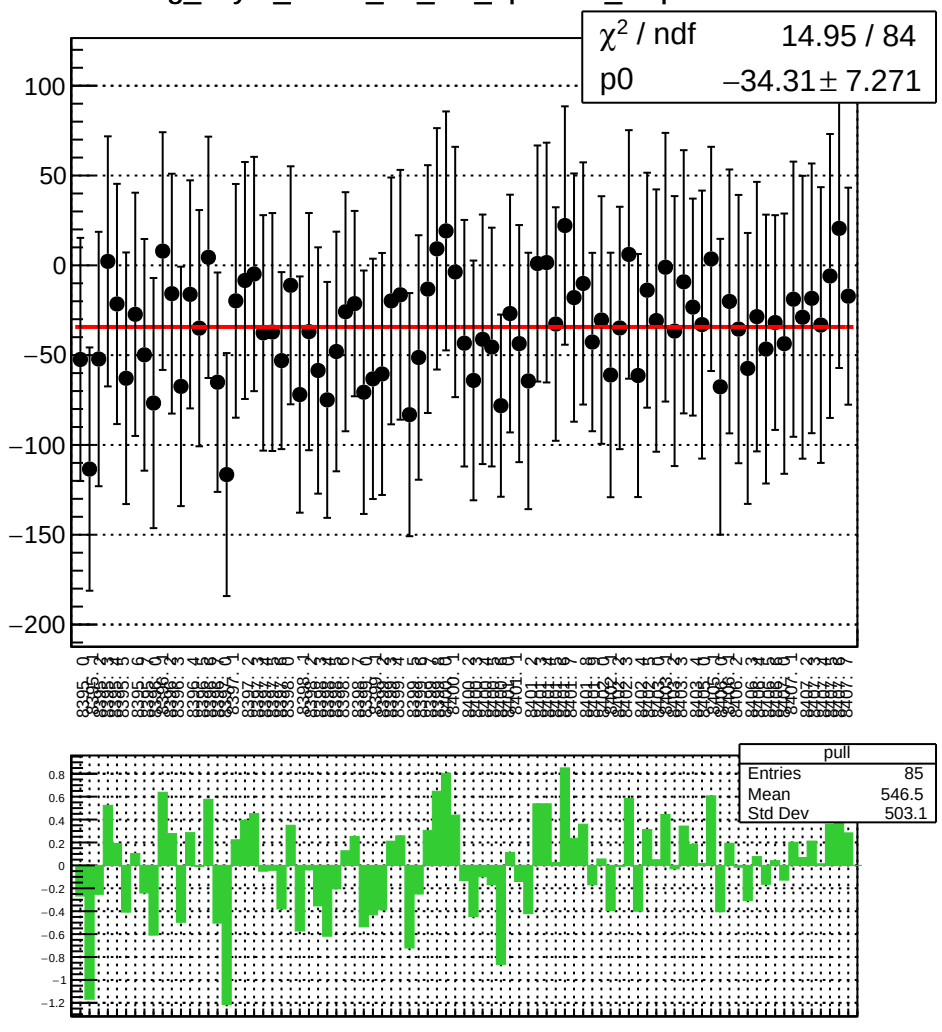

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.17 / 84
p0 30.48 ± 9.506
pull
Entries 85
Mean 200
Std Dev 154.7

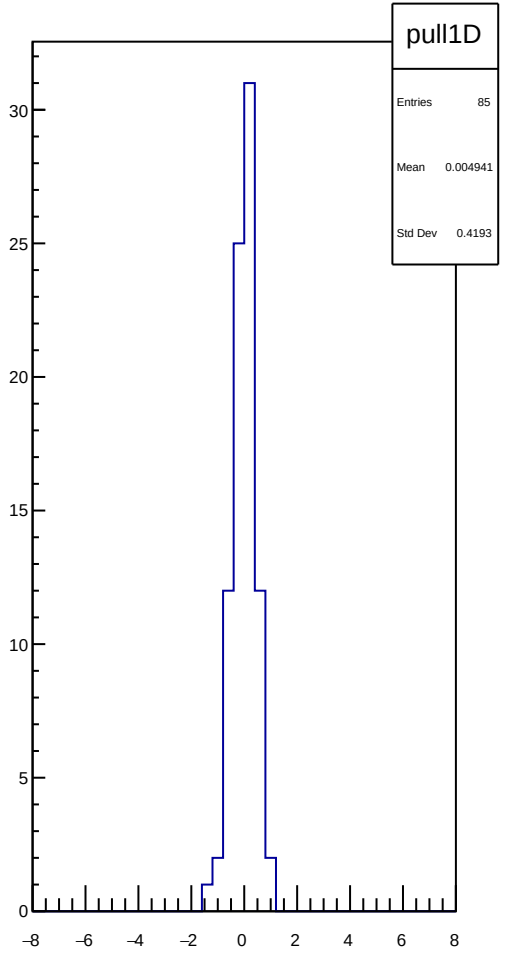

pull1D
Entries 85
Mean 0.00396
Std Dev 0.31

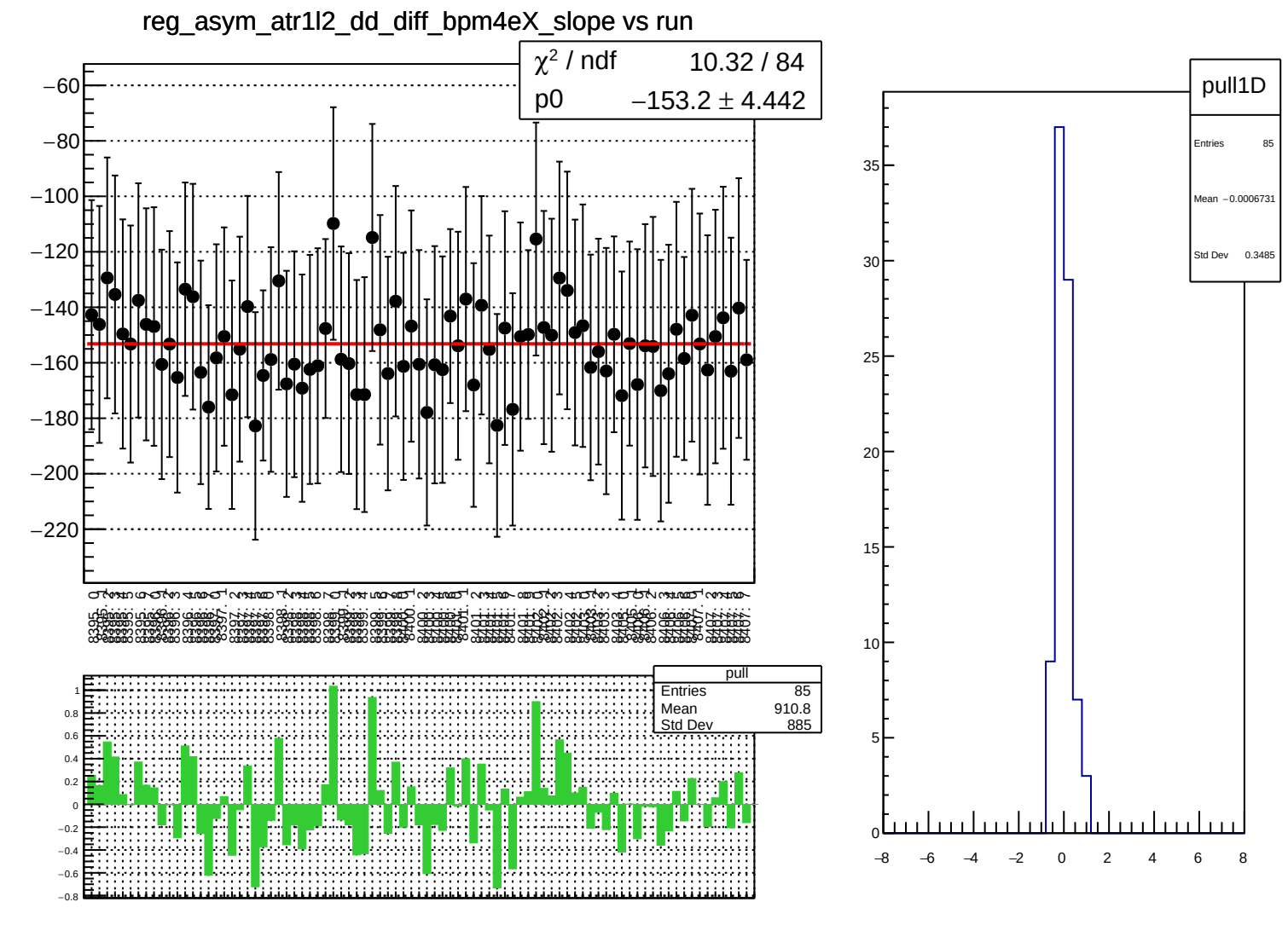

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 27.14 / 84
p0 −160.9 ± 0.5865
pull
Entries 85
Mean 378.6
Std Dev 342.8
pull1D
Entries 85
Mean −0.008226
Std Dev 0.565

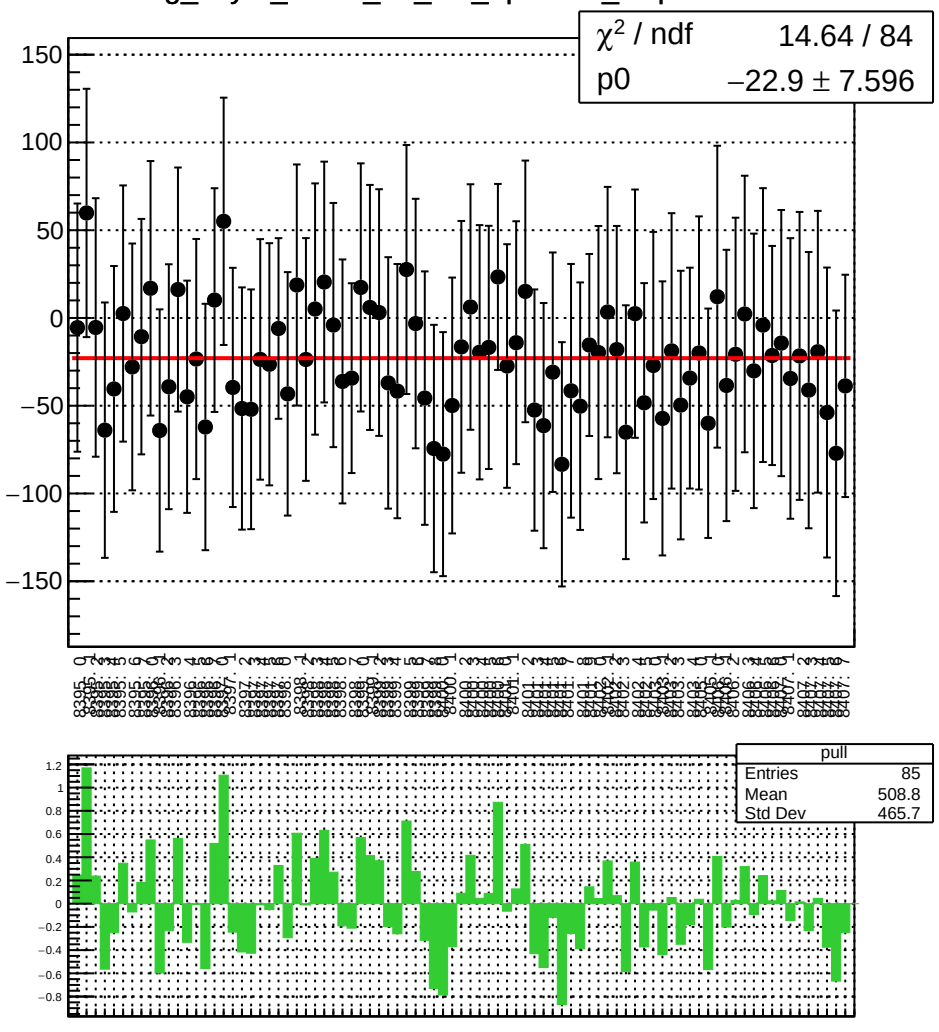

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 9.652 / 84
p0 184.5 ± 4.002
pull
Entries 85
Mean 597.9
Std Dev 562

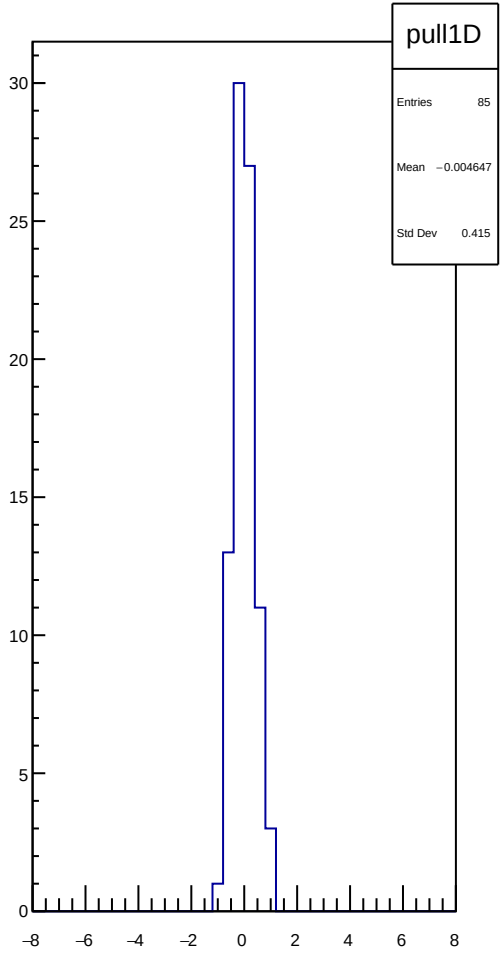

pull1D
Entries 85
Mean 0.001814
Std Dev 0.337

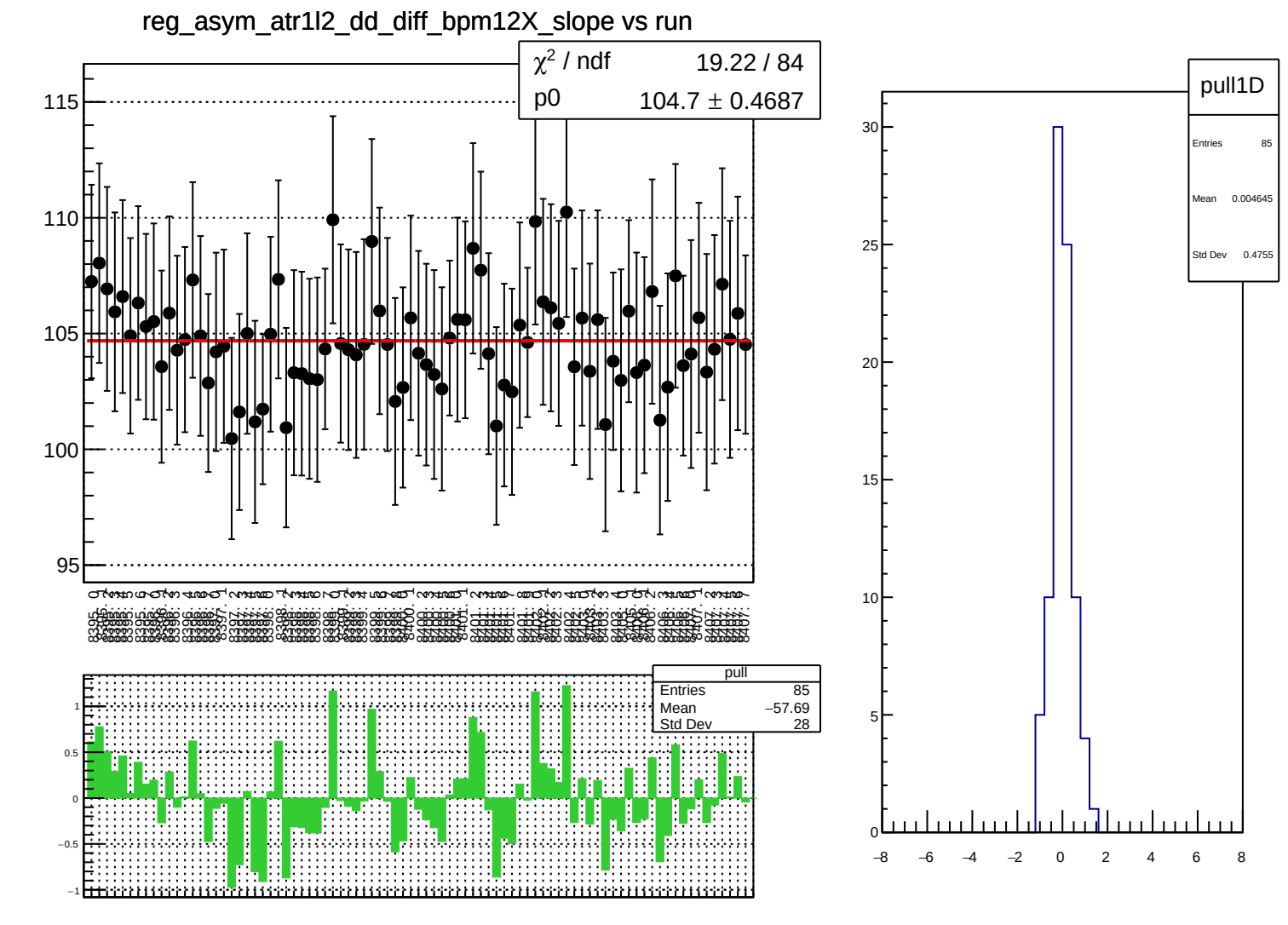

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 14.95 / 84
p0 −34.31 ± 7.271
pull
Entries 85
Mean 546.5
Std Dev 503.1

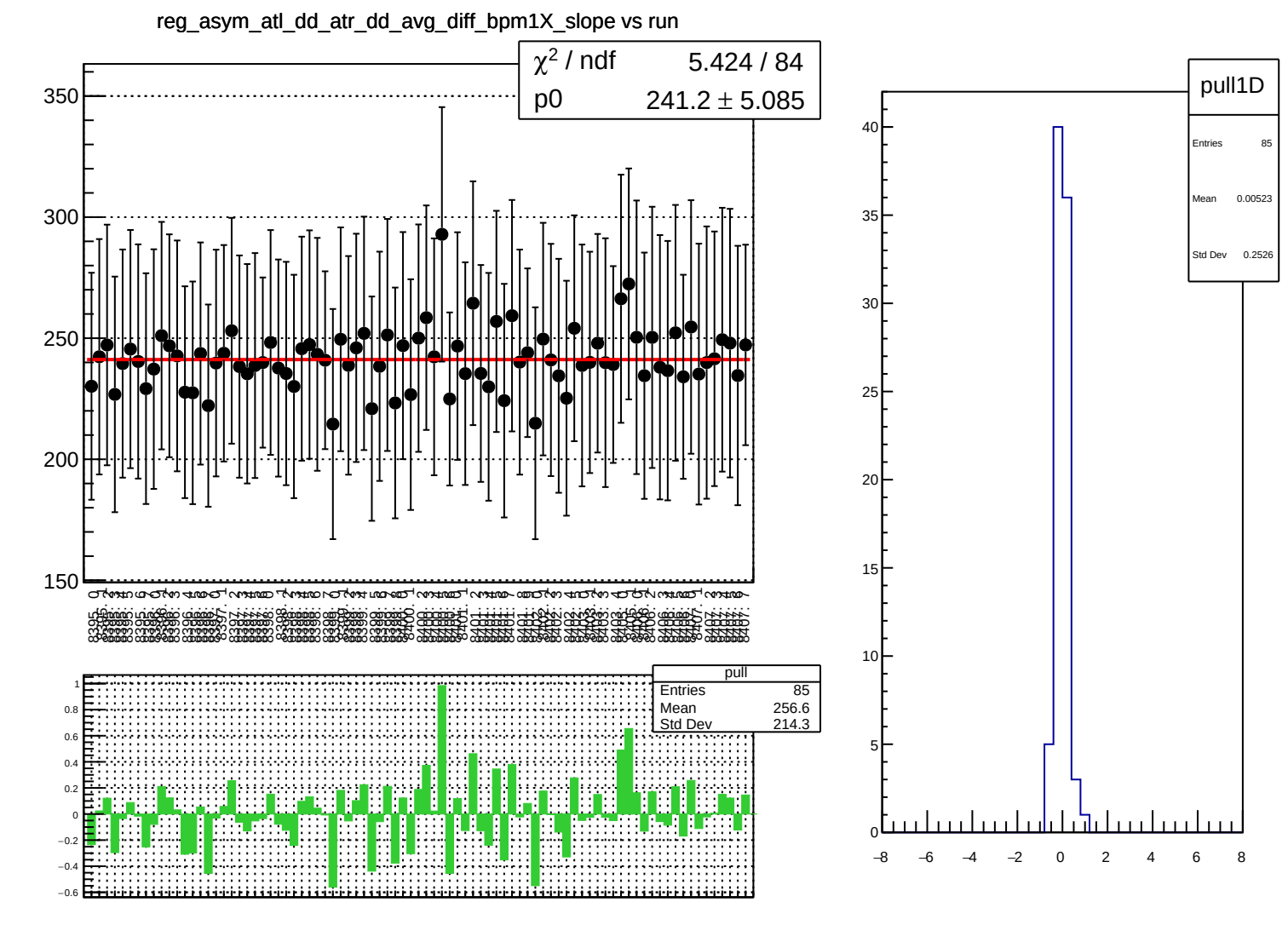

pull1D
Entries 85
Mean 0.004941
Std Dev 0.4193

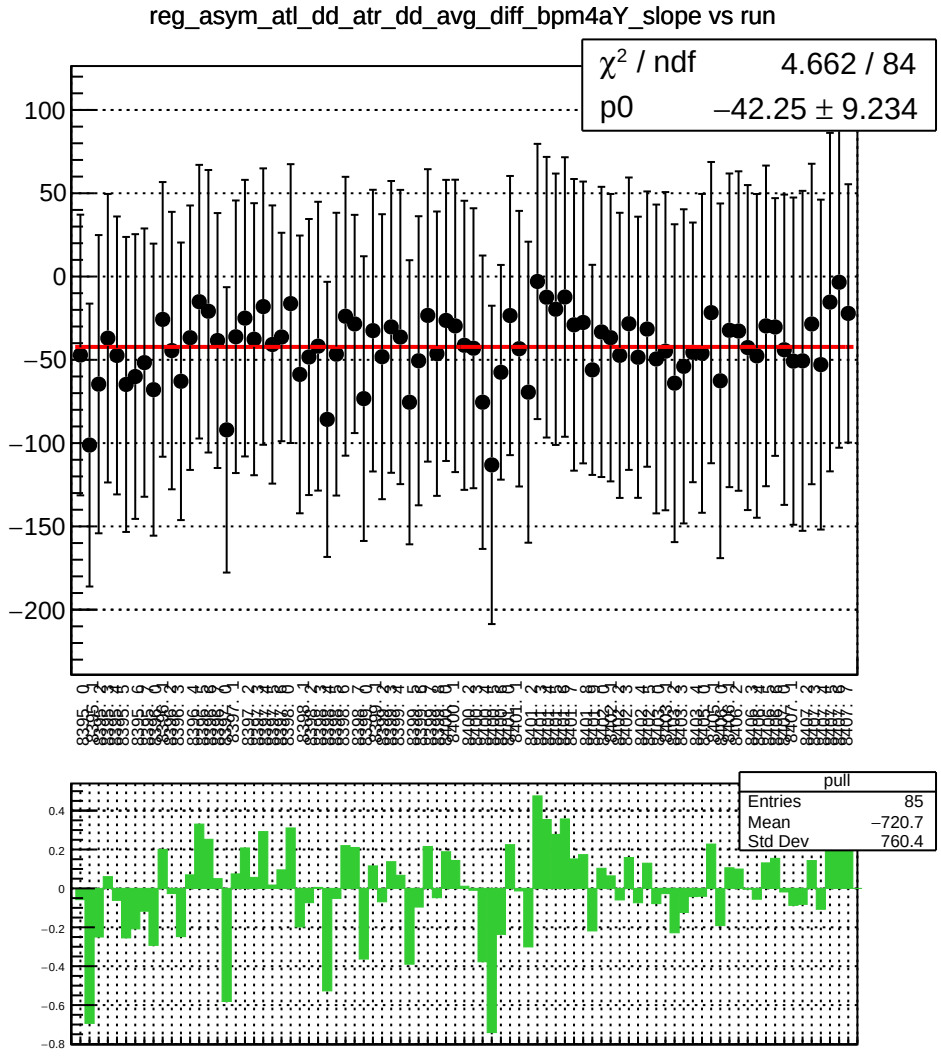

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 10.32 / 84
p0 −153.2 ± 4.442
pull
Entries 85
Mean 910.8
Std Dev 885
pull1D
Entries 85
Mean −0.0006731
Std Dev 0.3485

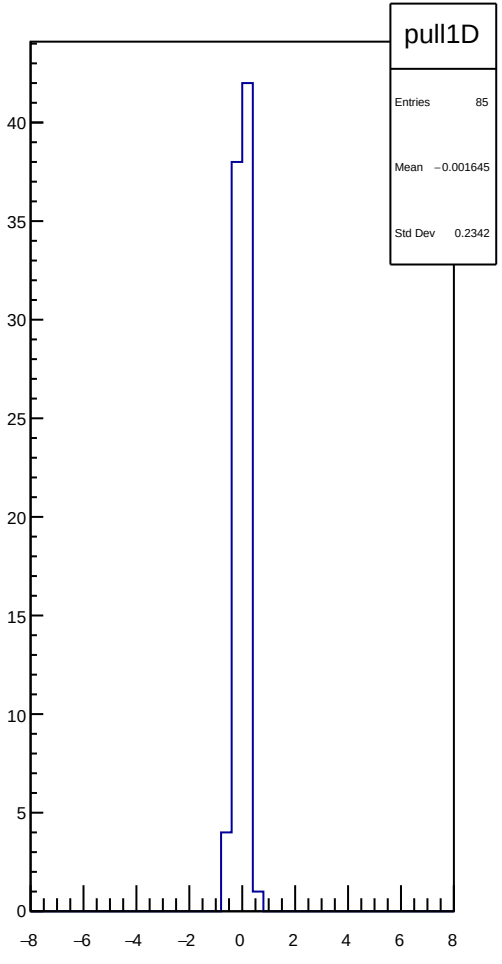

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.64 / 84
p0 −22.9 ± 7.596
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 508.8
Std Dev 465.7
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

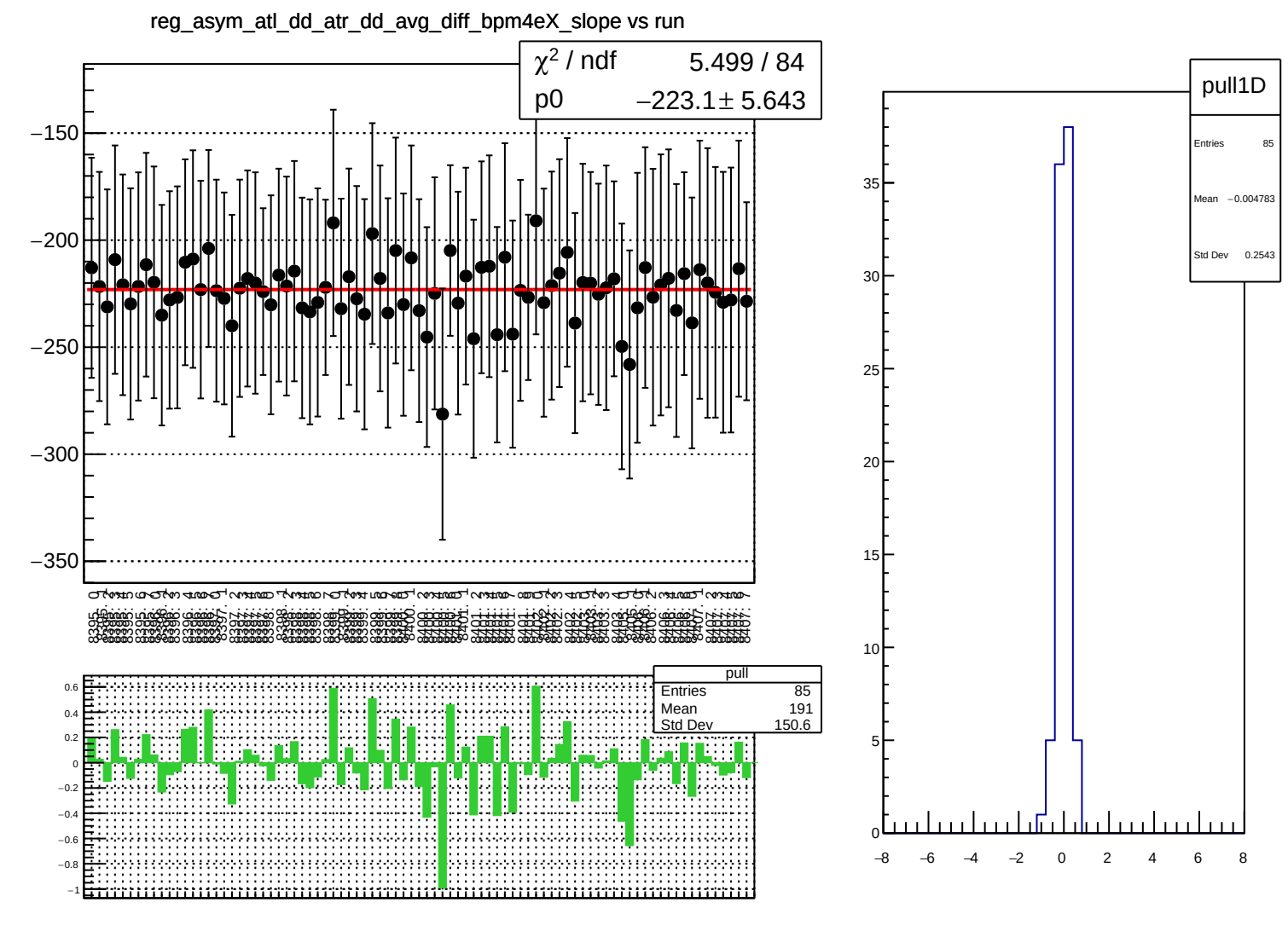

pull1D
Entries 85
Mean −0.004647
Std Dev 0.415
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

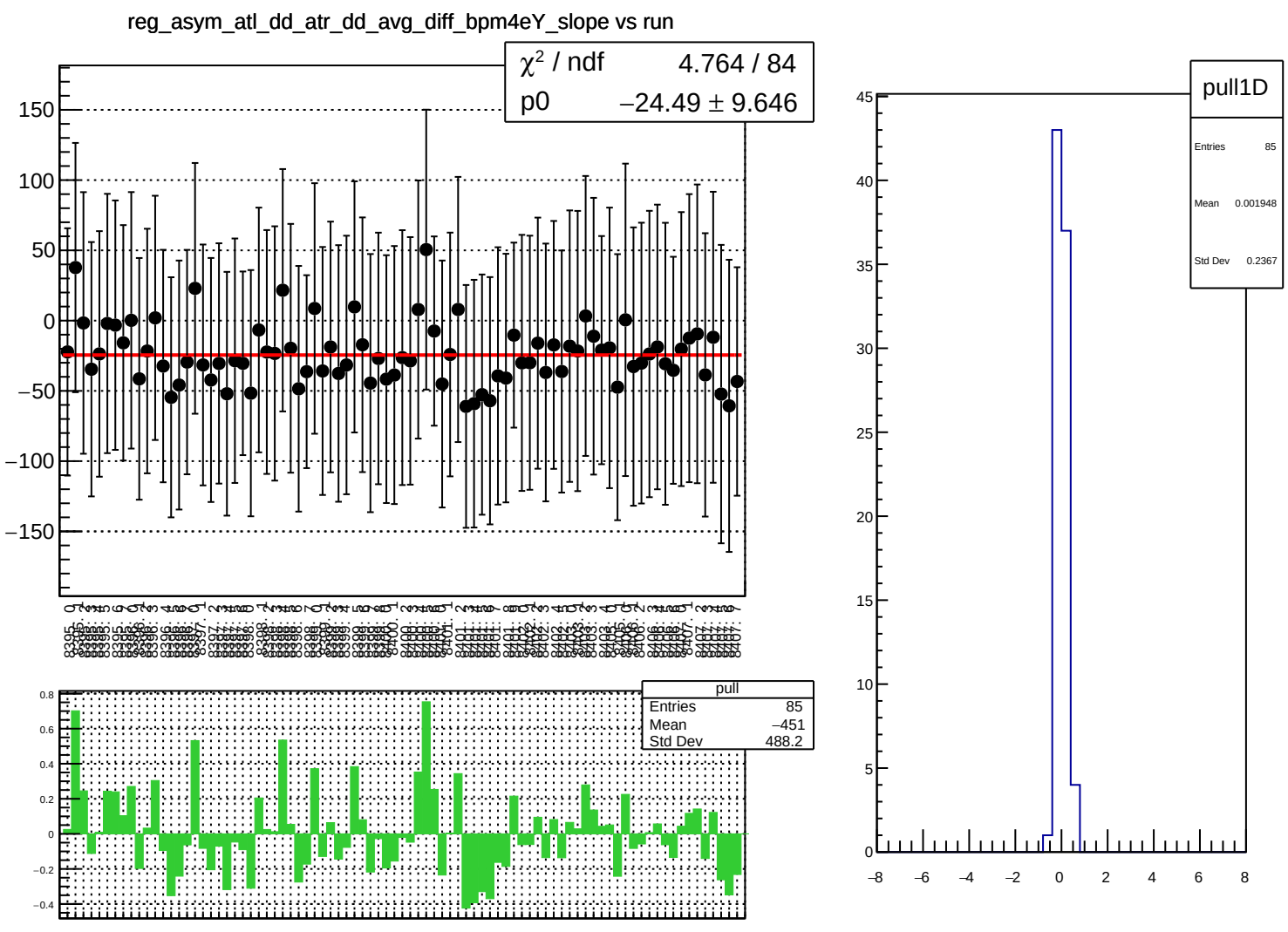

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 19.22 / 84
p0 104.7 ± 0.4687
115
110
105
100
95
pull
Entries 85
Mean −57.69
Std Dev 28
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean 0.004645
Std Dev 0.4755
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

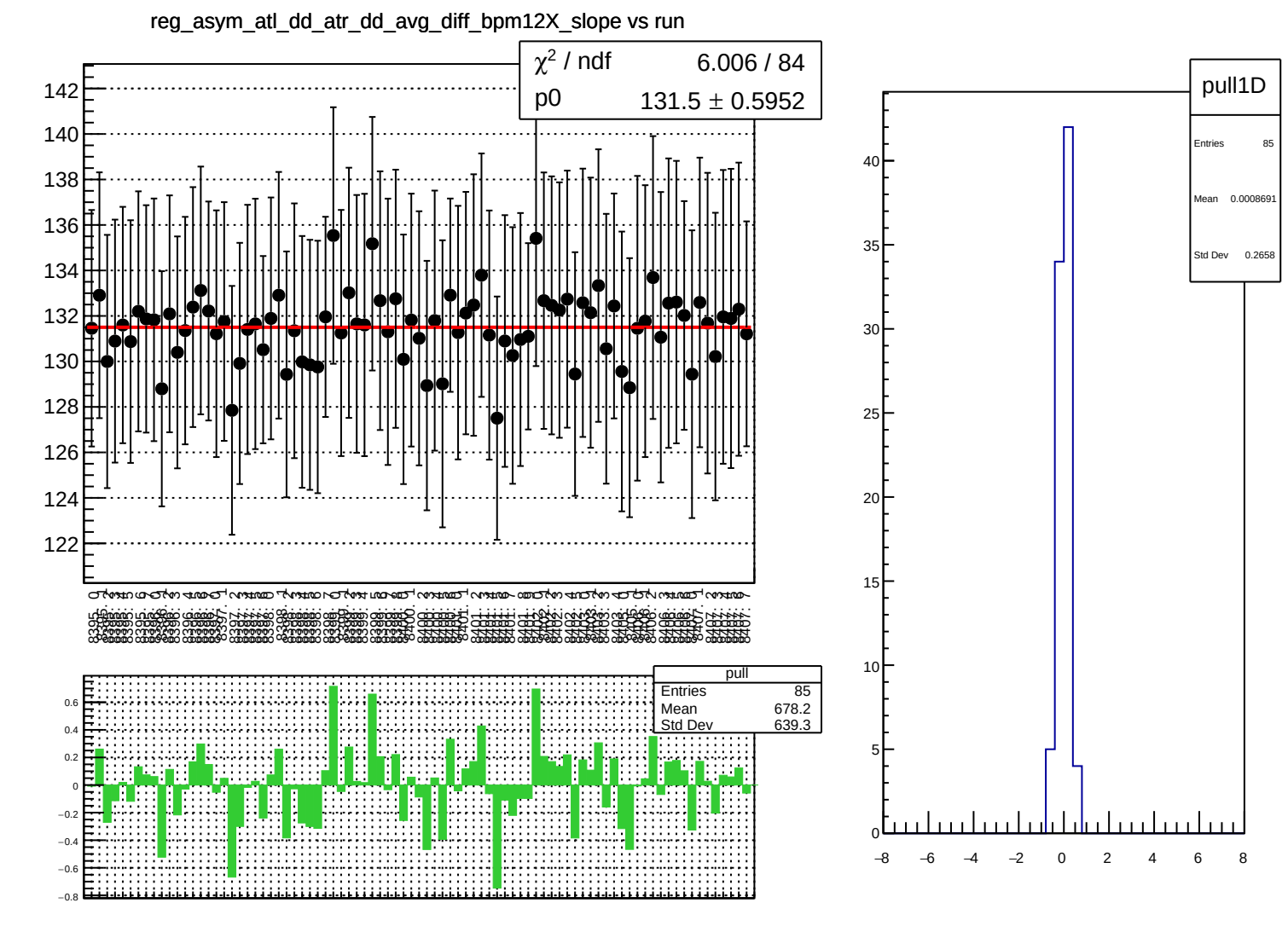

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 5.424 / 84
p0 241.2 ± 5.085
350
300
250
200
150
pull
Entries 85
Mean 256.6
Std Dev 214.3
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 85
Mean 0.00523
Std Dev 0.2526
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

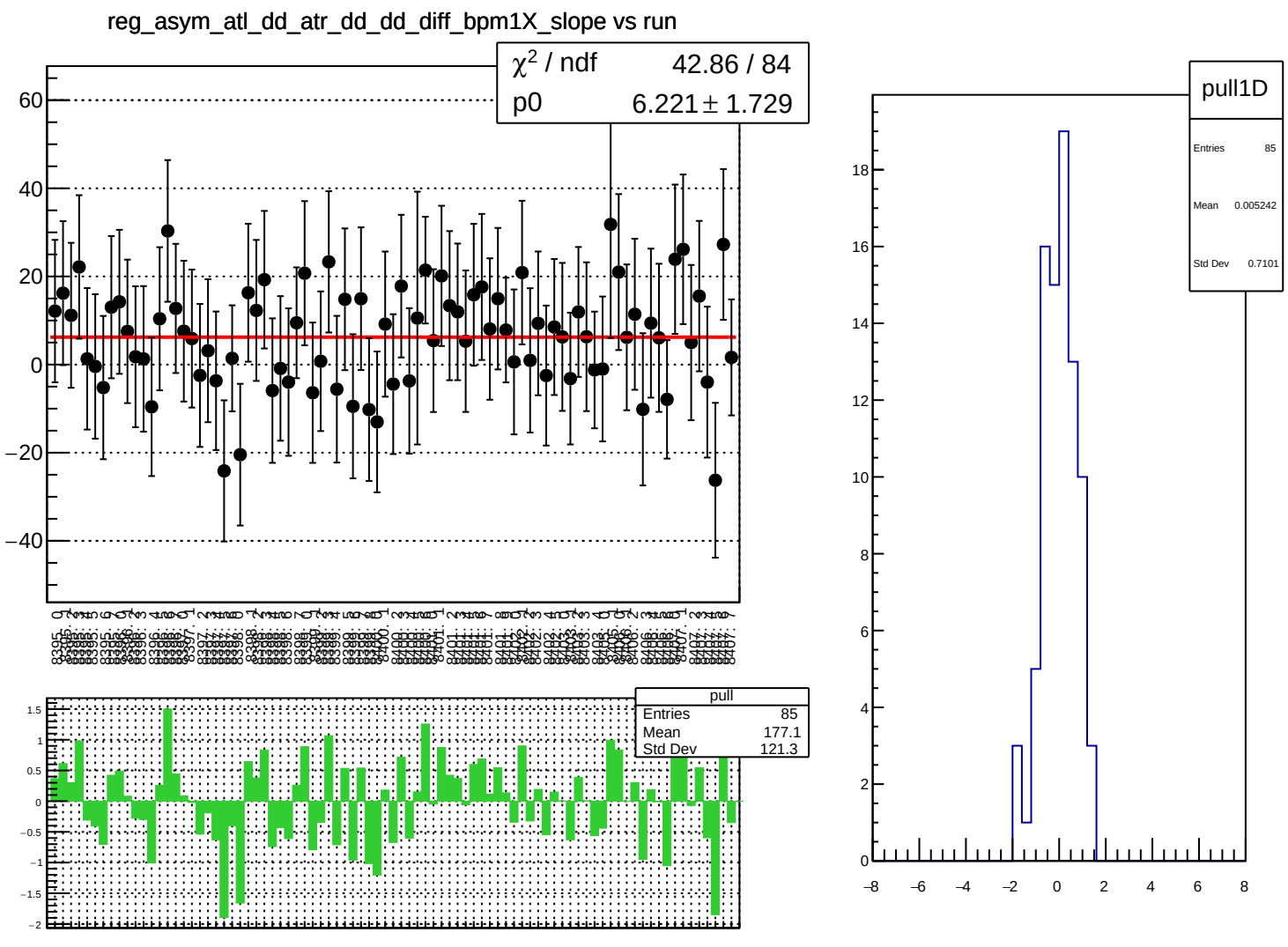

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.662 / 84
p0 −42.25 ± 9.234
pull
Entries 85
Mean −720.7
Std Dev 760.4

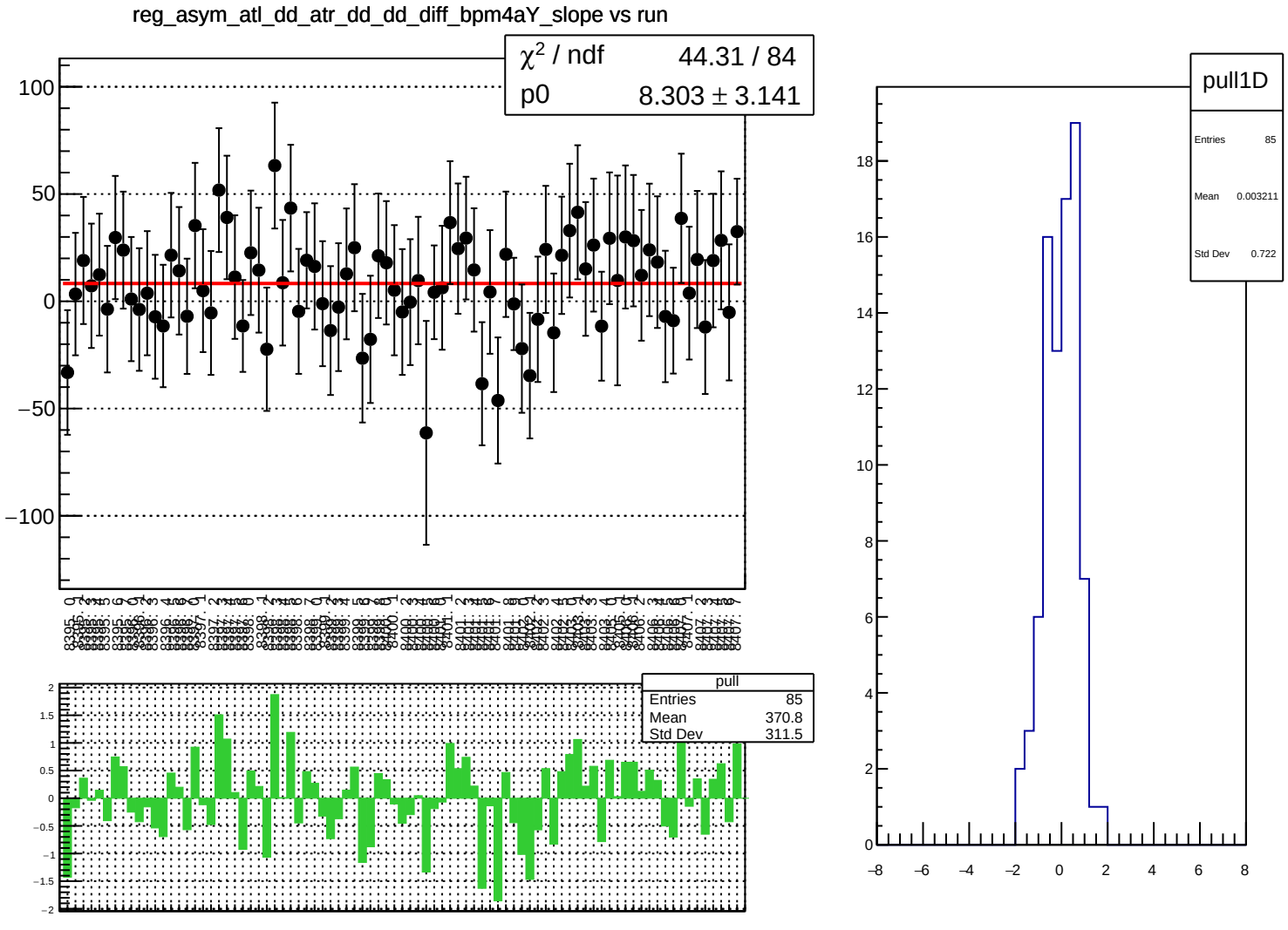

pull1D
Entries 85
Mean −0.001645
Std Dev 0.2342

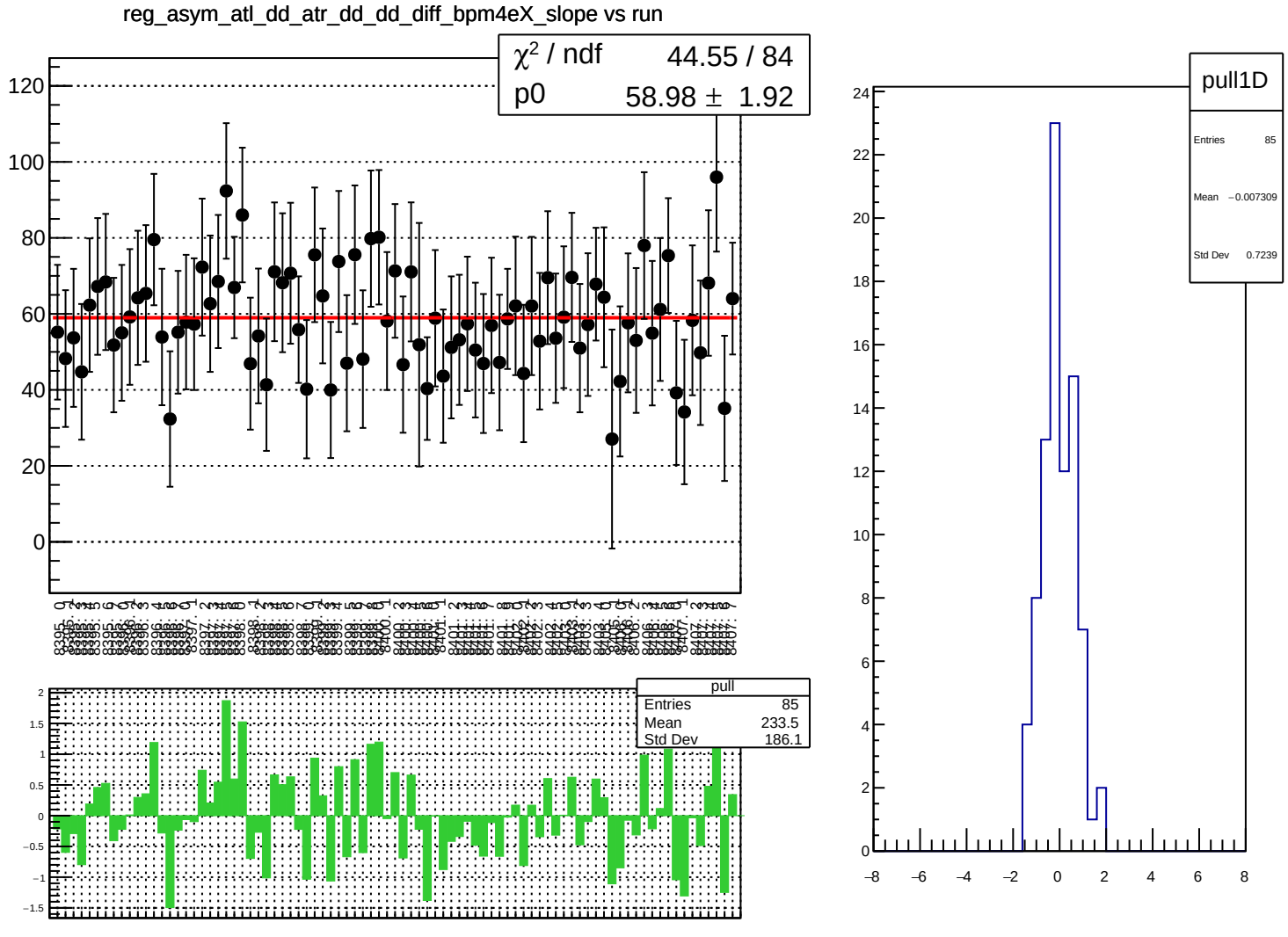

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 5.499 / 84
p0 −223.1 ± 5.643
−150
−200
−250
−300
−350
pull
Entries 85
Mean 191
Std Dev 150.6
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean −0.004783
Std Dev 0.2543
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

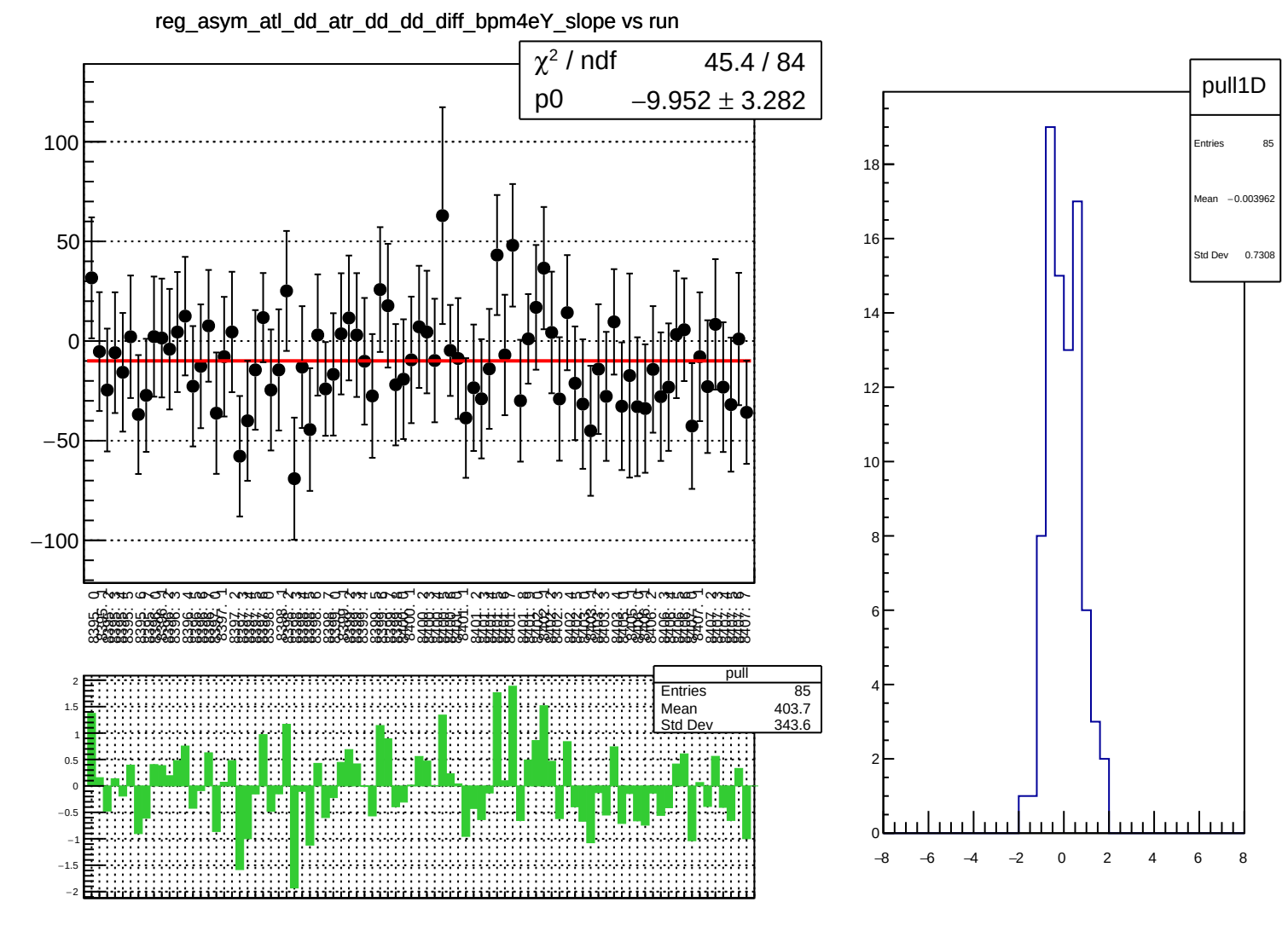

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.764 / 84
p0 −24.49 ± 9.646
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −451
Std Dev 488.2
0.8
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 85
Mean 0.001948
Std Dev 0.2367
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

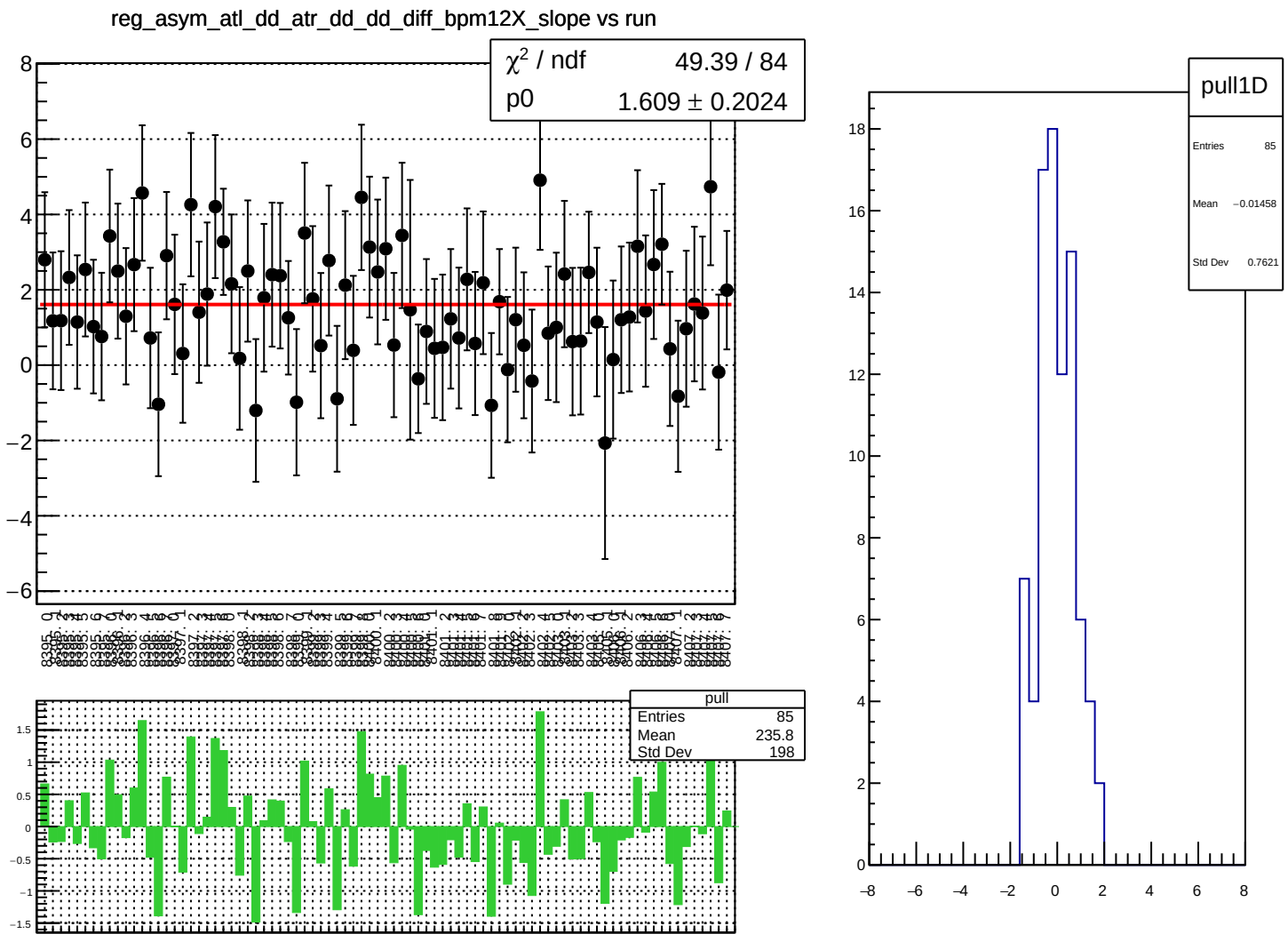

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 6.006 / 84
p0 131.5 ± 0.5952
pull
Entries 85
Mean 678.2
Std Dev 639.3
pull1D
Entries 85
Mean 0.0008691
Std Dev 0.2658

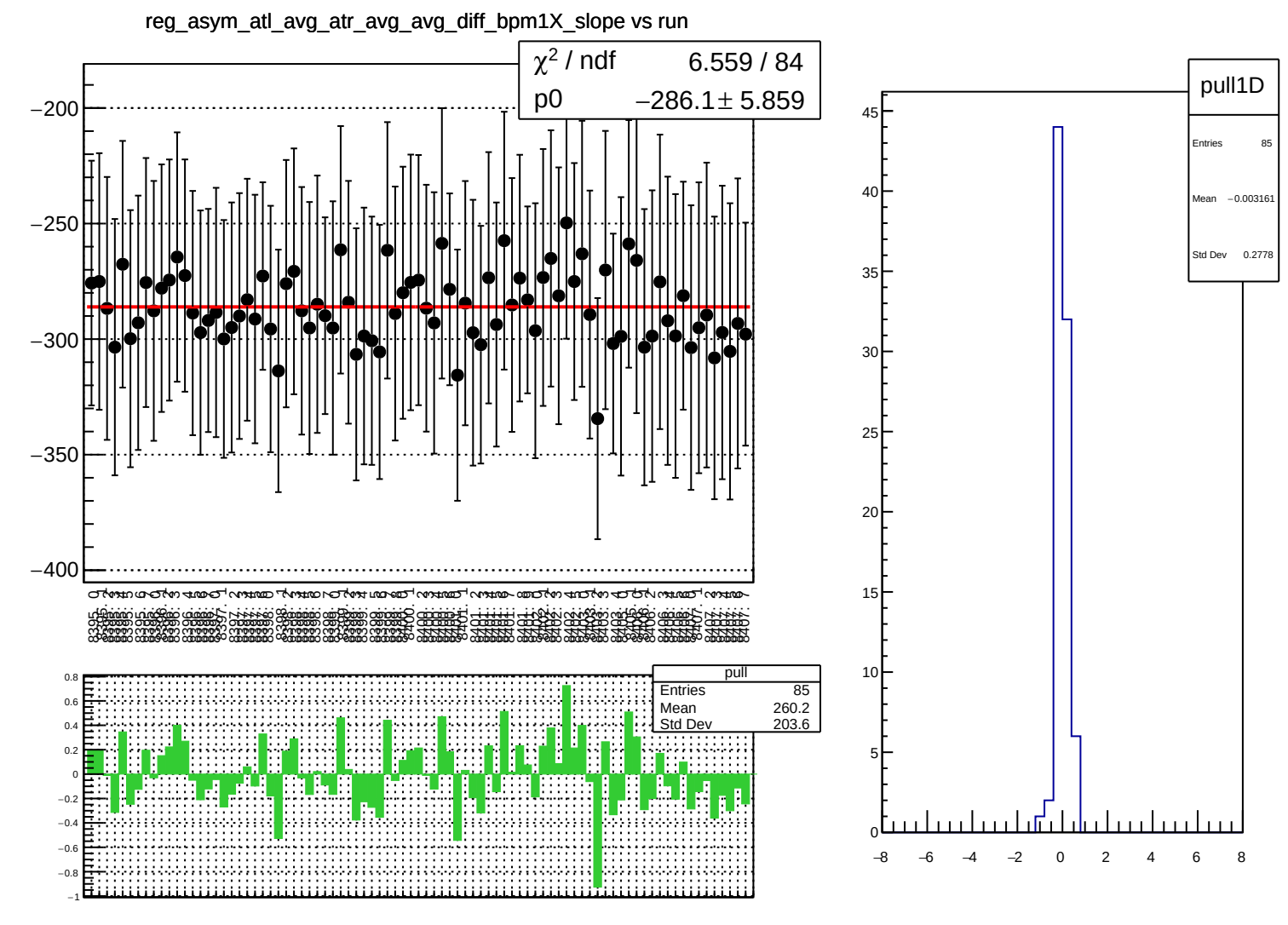

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 42.86 / 84
p0 6.221 ± 1.729
pull
Entries 85
Mean 177.1
Std Dev 121.3
pull1D
Entries 85
Mean 0.005242
Std Dev 0.7101

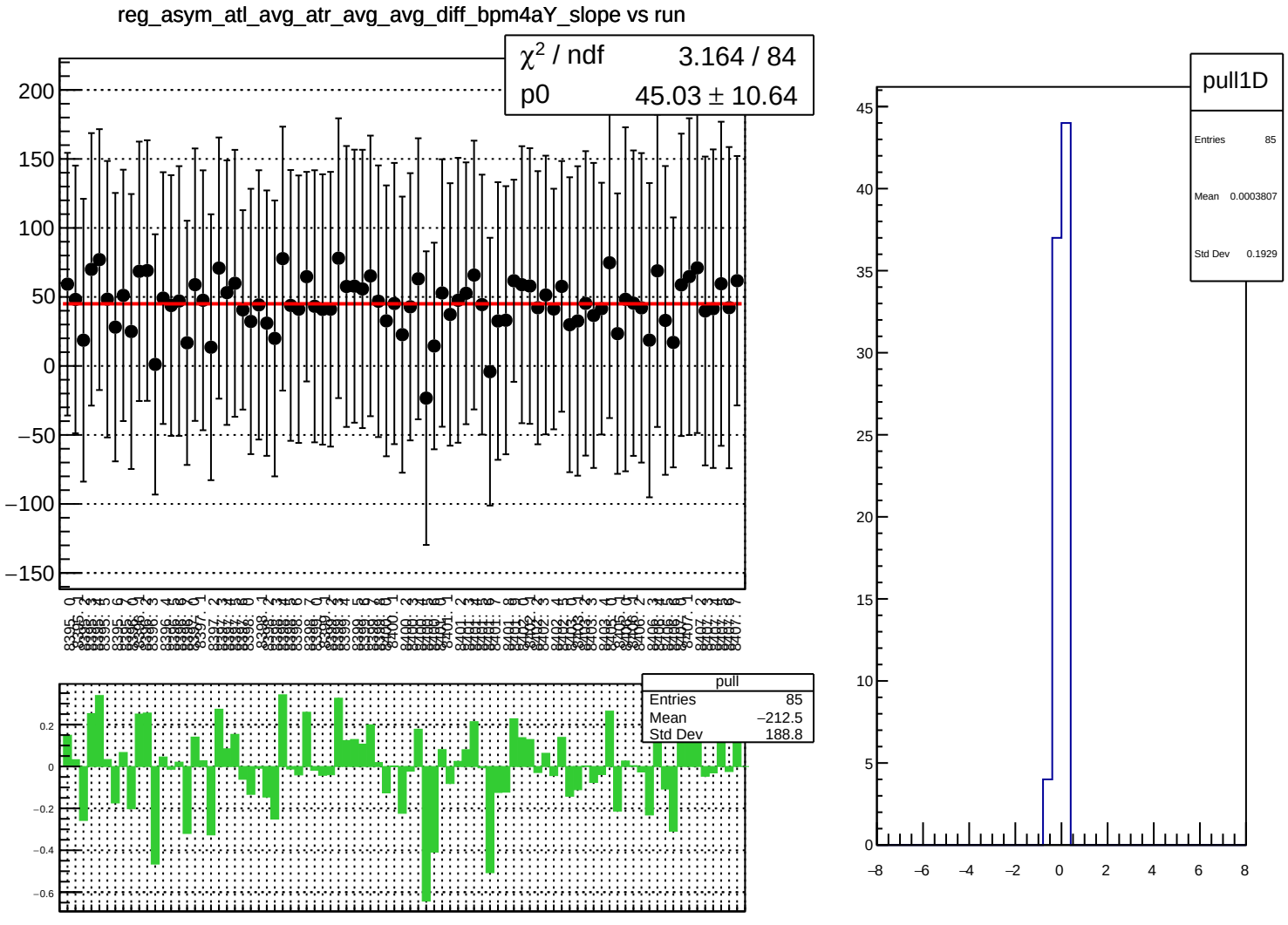

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 44.31 / 84
p0 8.303 ± 3.141
100
50
0
−50
−100
pull
Entries 85
Mean 370.8
Std Dev 311.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.003211
Std Dev 0.722
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

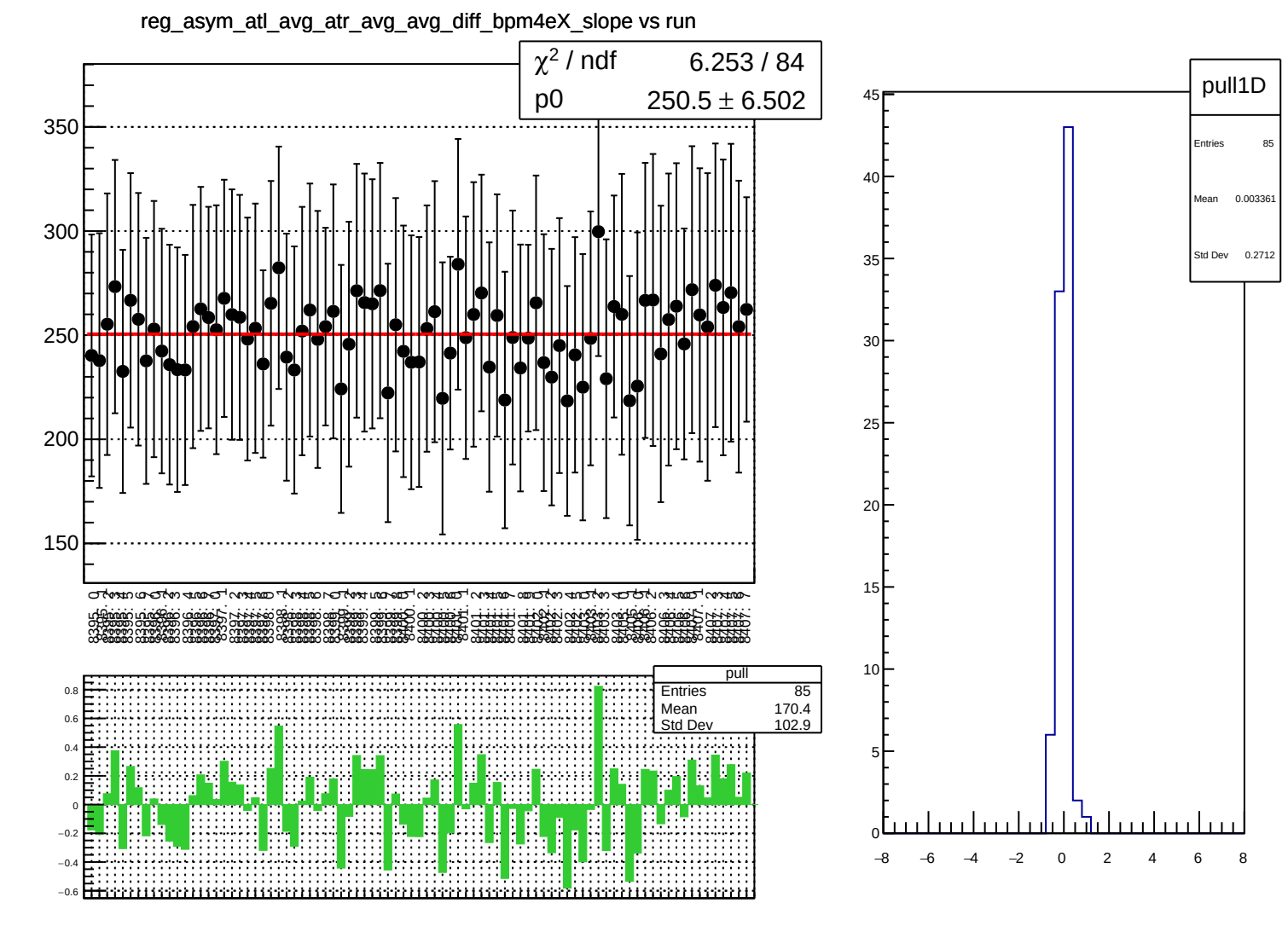

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 44.55 / 84
p0 58.98 ± 1.92
pull
Entries 85
Mean 233.5
Std Dev 186.1
pull1D
Entries 85
Mean −0.007309
Std Dev 0.7239

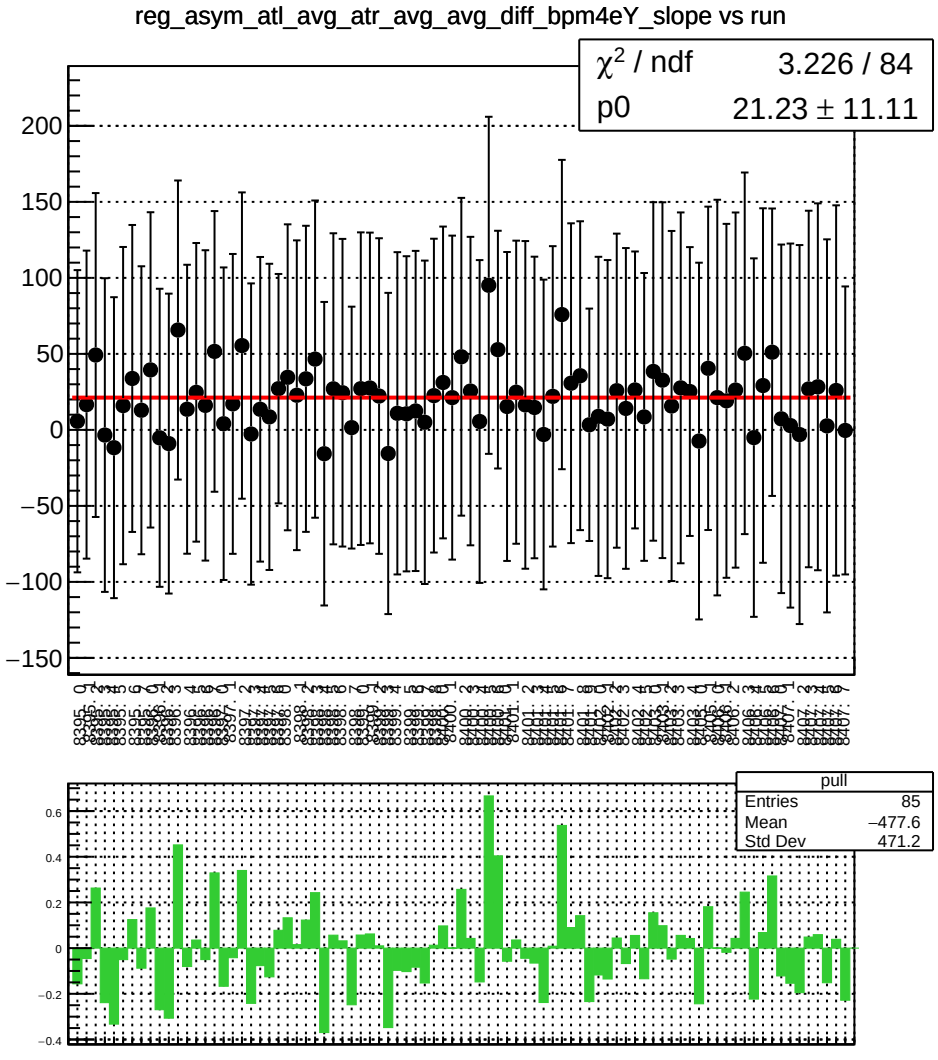

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 45.4 / 84
p0 −9.952 ± 3.282
100
50
0
−50
−100
pull
Entries 85
Mean 403.7
Std Dev 343.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean −0.003962
Std Dev 0.7308
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

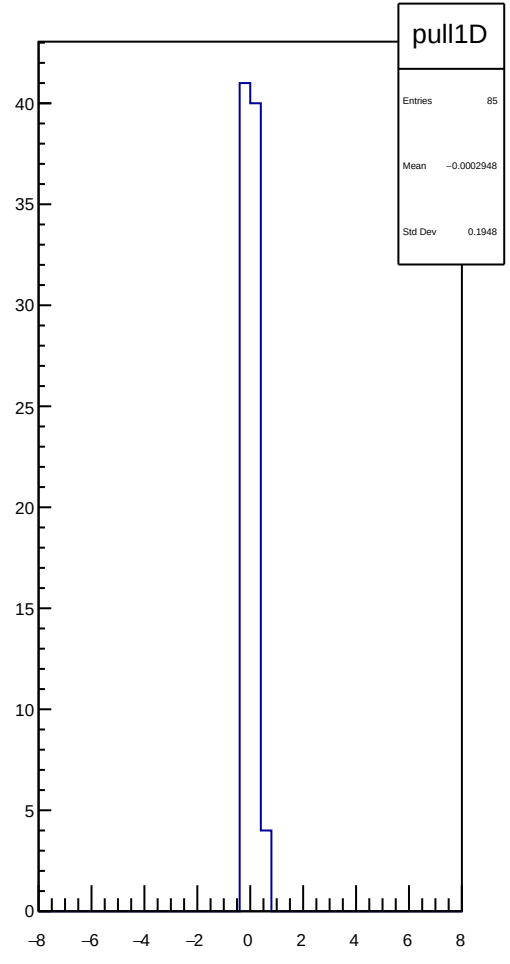

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 49.39 / 84
p0 1.609 ± 0.2024
pull
Entries 85
Mean 235.8
Std Dev 198
pull1D
Entries 85
Mean −0.01458
Std Dev 0.7621

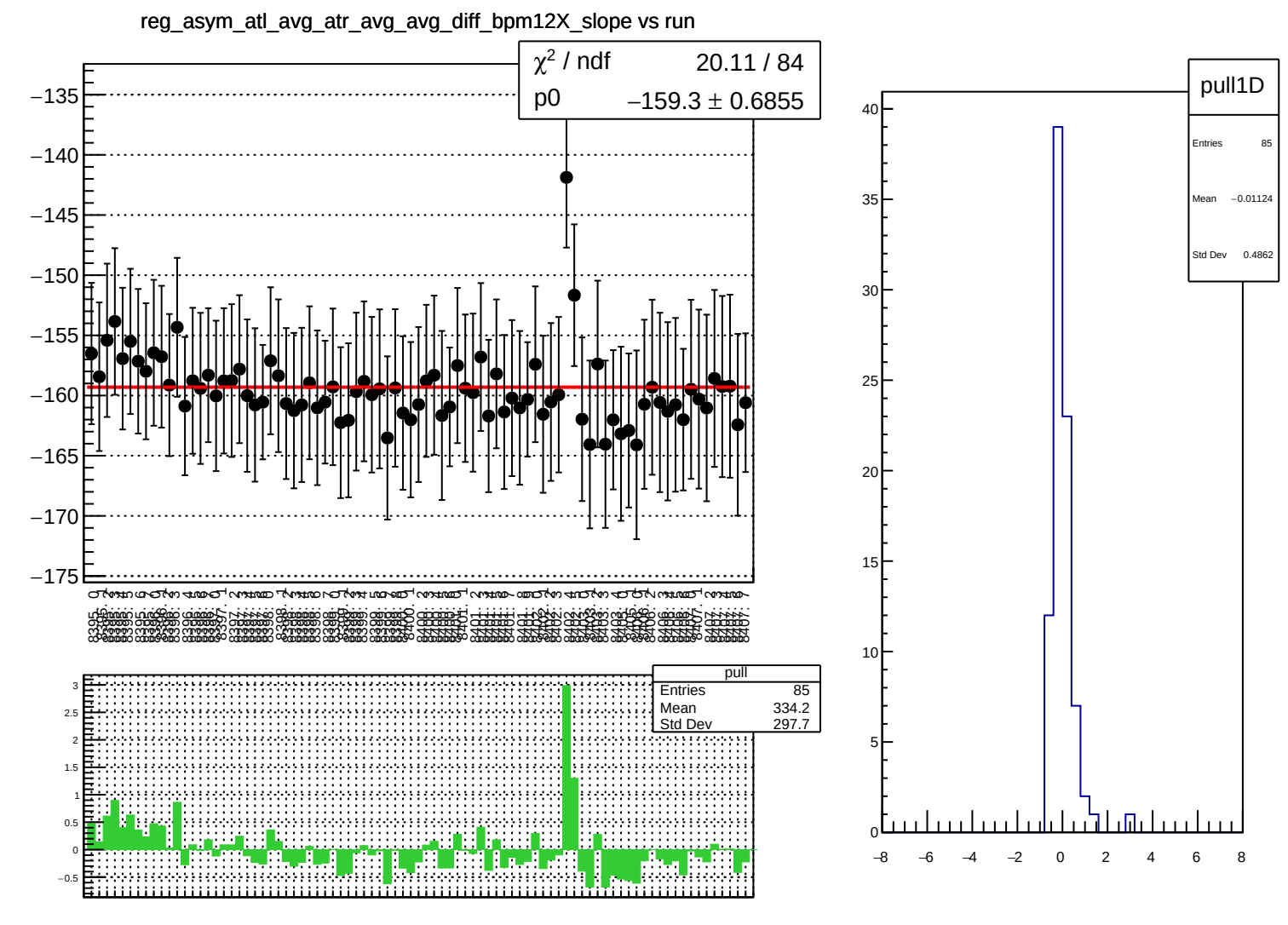

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 6.559 / 84
p0 −286.1 ± 5.859
−200
−250
−300
−350
−400
pull
Entries 85
Mean 260.2
Std Dev 203.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean −0.003161
Std Dev 0.2778
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

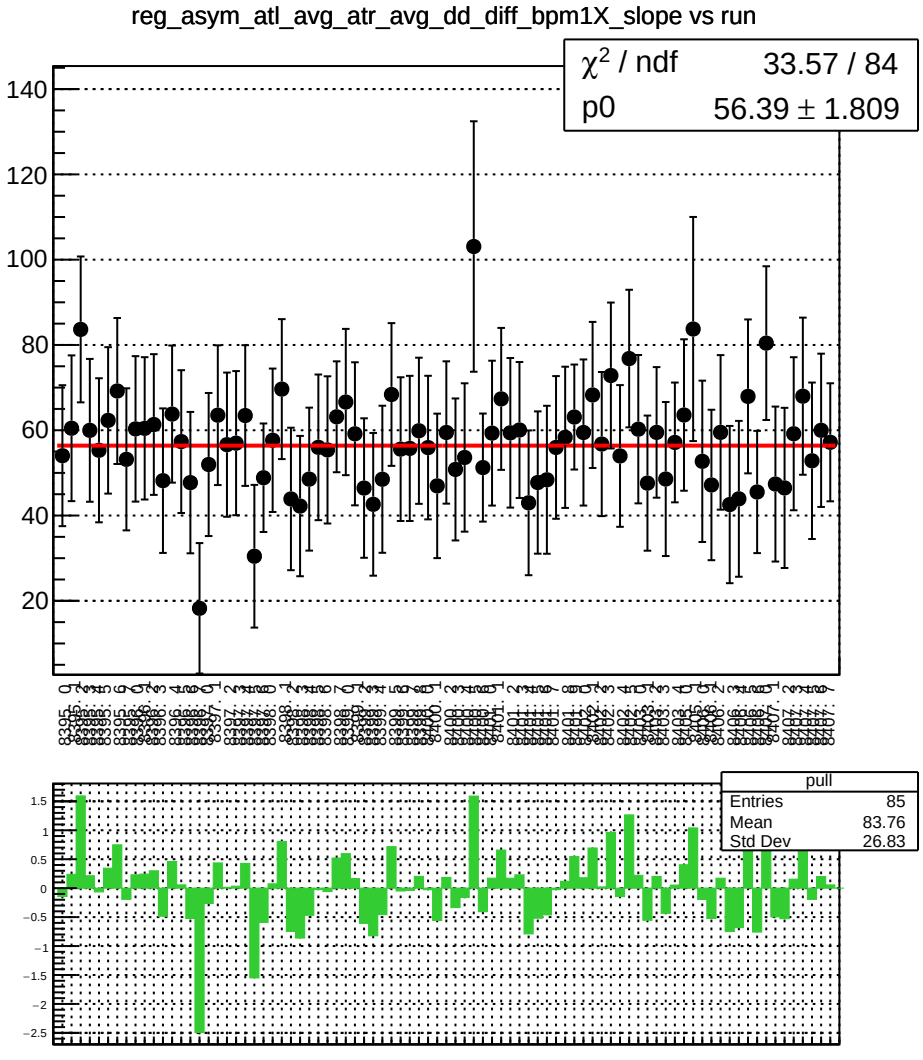

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.164 / 84
p0 45.03 ± 10.64
pull
Entries 85
Mean −212.5
Std Dev 188.8
pull1D
Entries 85
Mean 0.0003807
Std Dev 0.1929

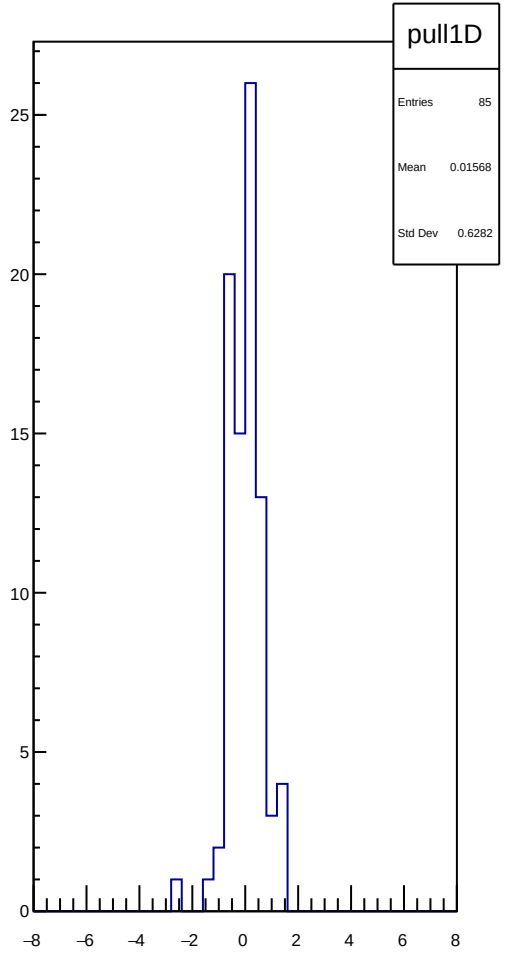

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.253 / 84
p0 250.5 ± 6.502
350
300
250
200
150
pull
Entries 85
Mean 170.4
Std Dev 102.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 85
Mean 0.003361
Std Dev 0.2712
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

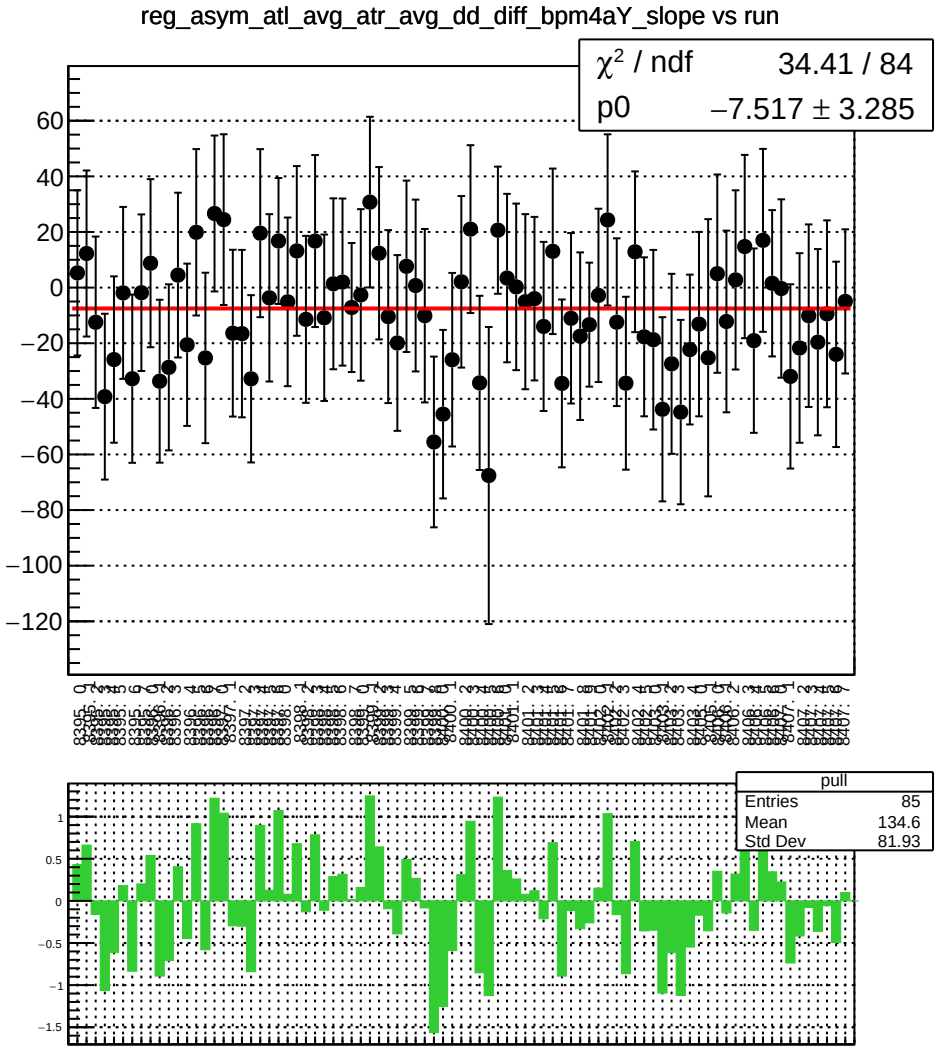

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.226 / 84
p0 21.23 ± 11.11
pull
Entries 85
Mean −477.6
Std Dev 471.2

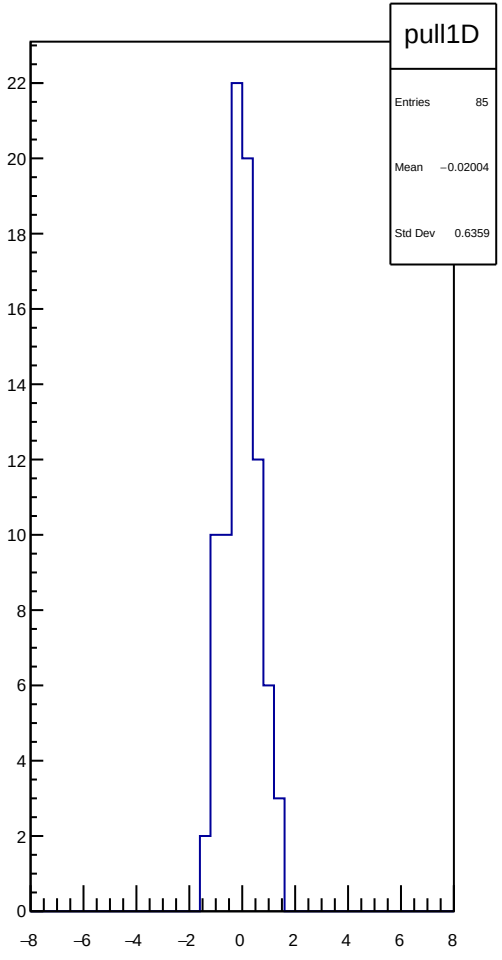

pull1D
Entries 85
Mean −0.0002948
Std Dev 0.1948

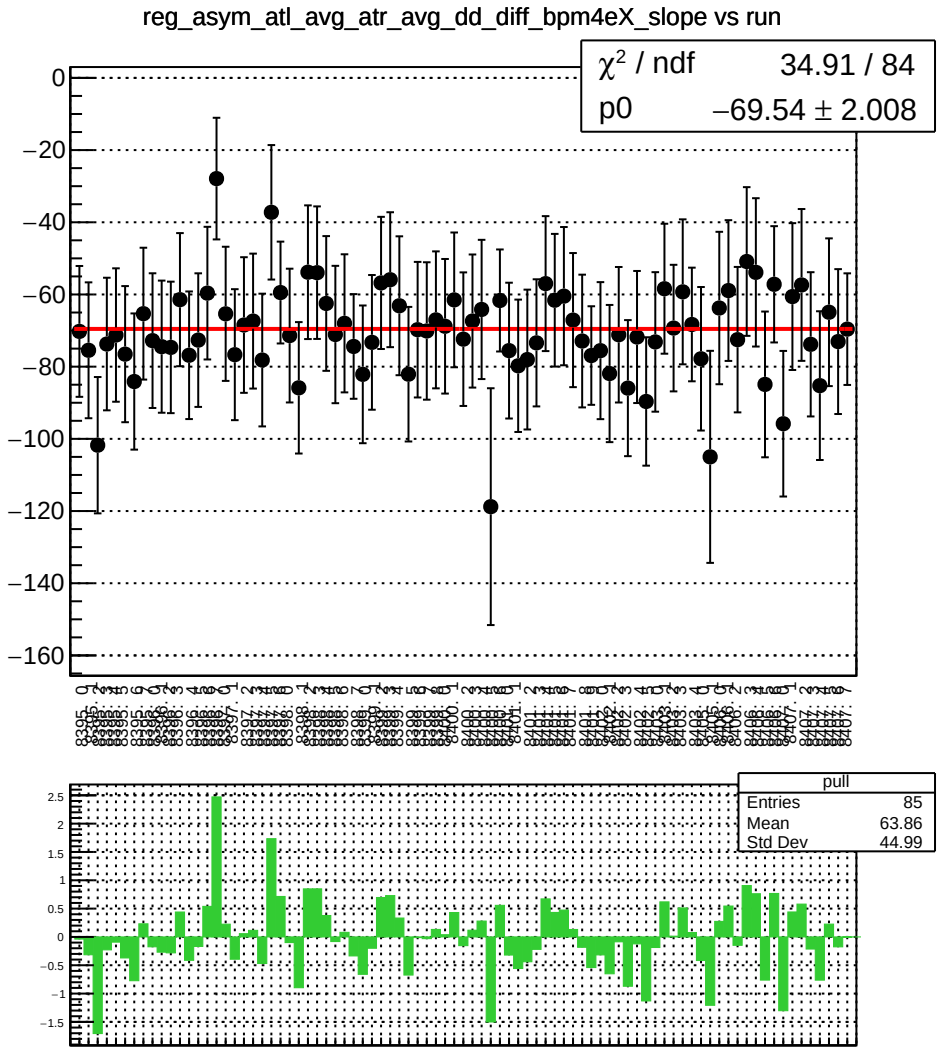

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 20.11 / 84
p0 −159.3 ± 0.6855
pull
Entries 85
Mean 334.2
Std Dev 297.7
pull1D
Entries 85
Mean −0.01124
Std Dev 0.4862

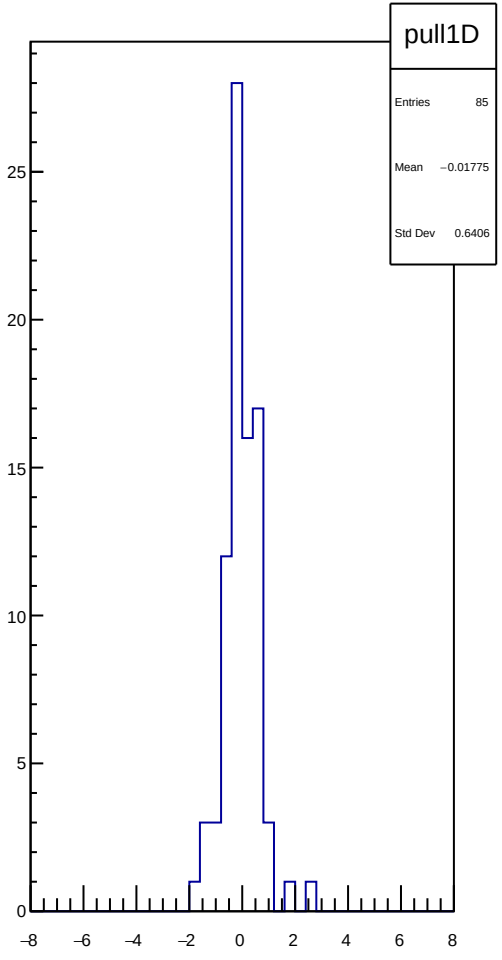

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 33.57 / 84
p0 56.39 ± 1.809
pull
Entries 85
Mean 83.76
Std Dev 26.83

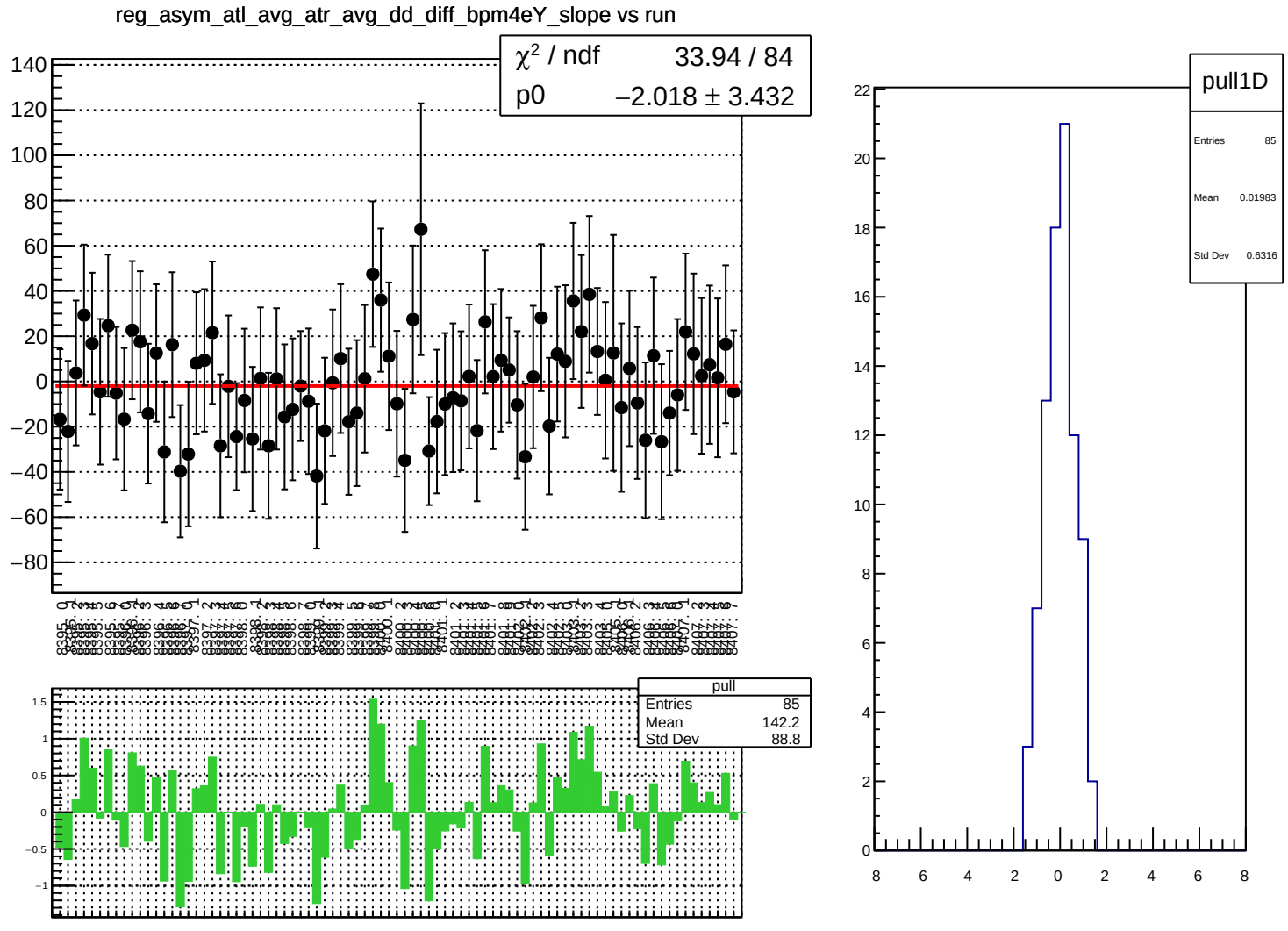

pull1D
Entries 85
Mean 0.01568
Std Dev 0.6282

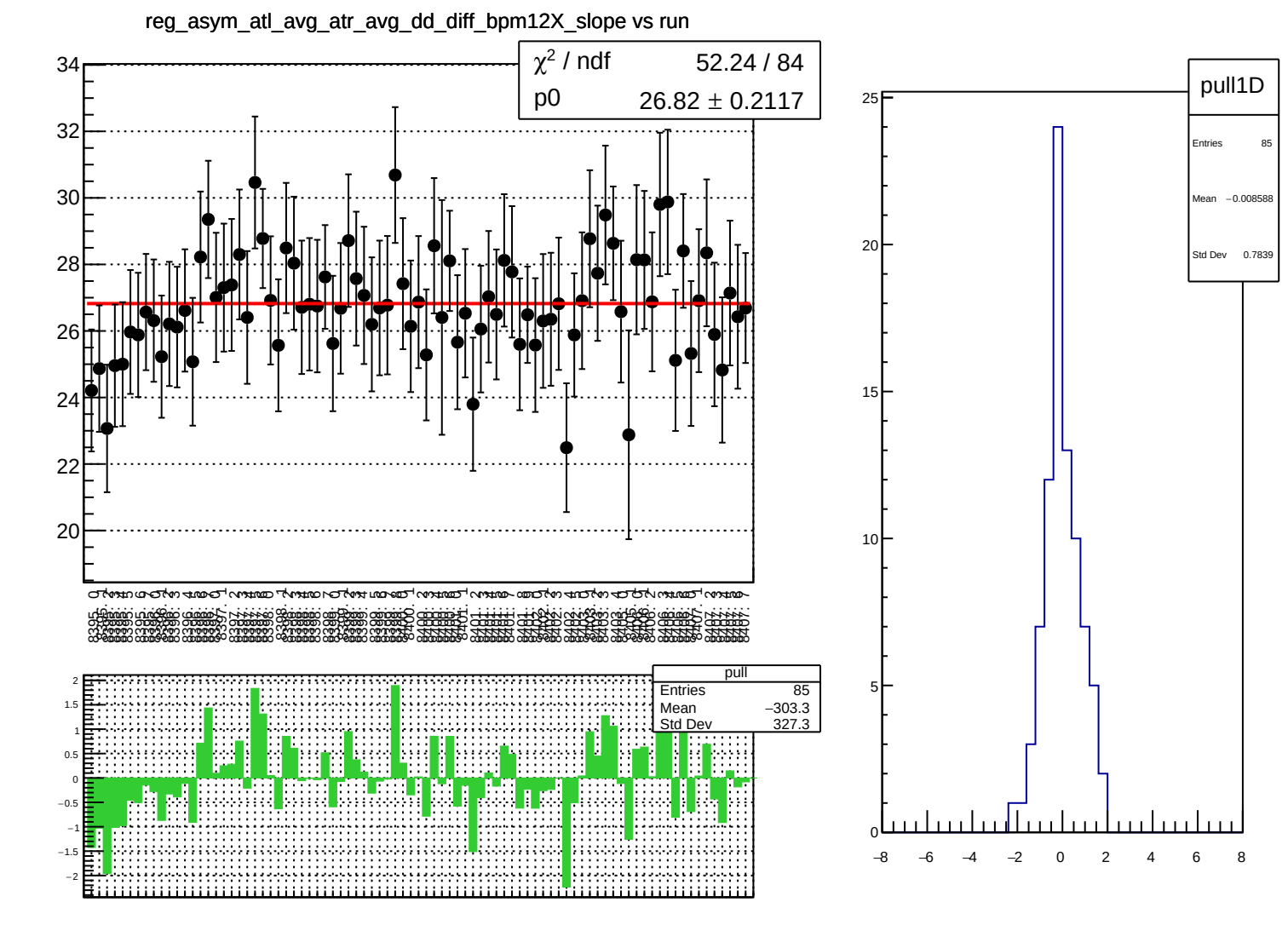

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 34.41 / 84
p0 −7.517 ± 3.285
pull
Entries 85
Mean 134.6
Std Dev 81.93

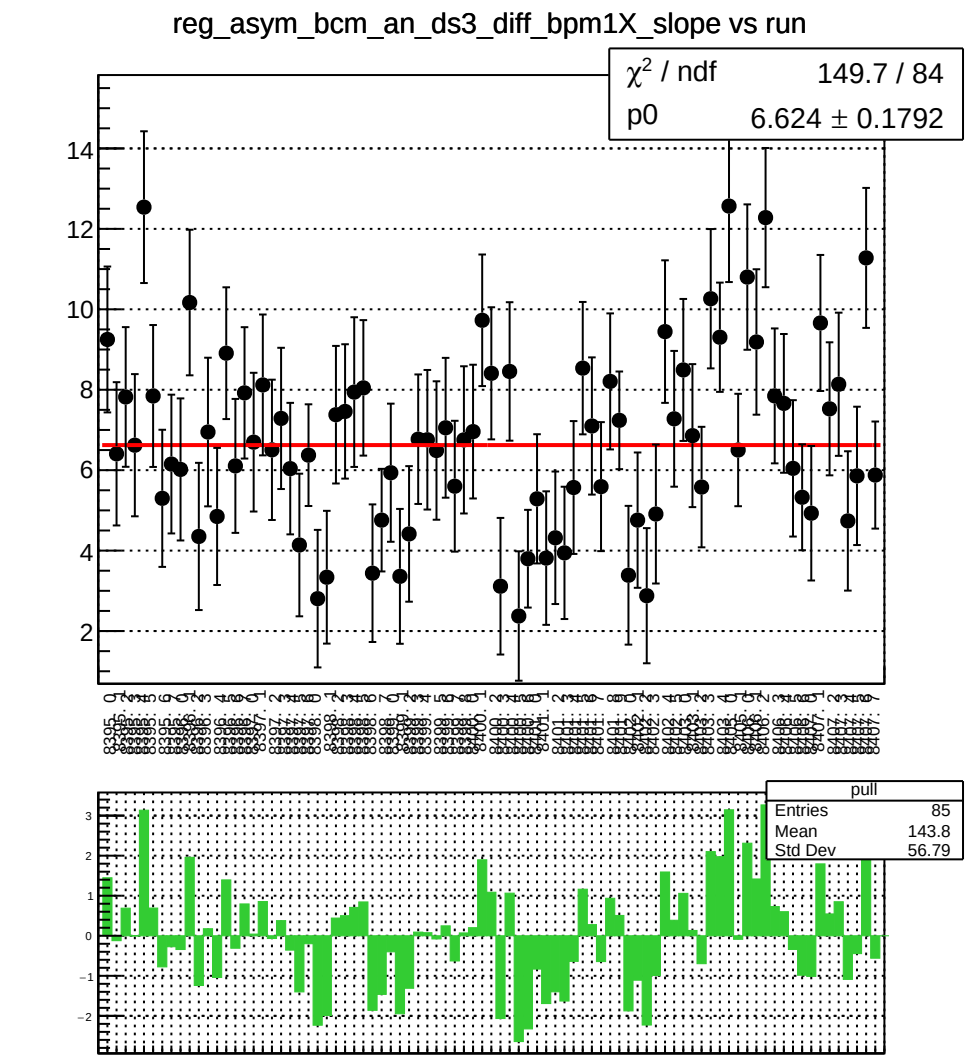

pull1D
Entries 85
Mean −0.02004
Std Dev 0.6359

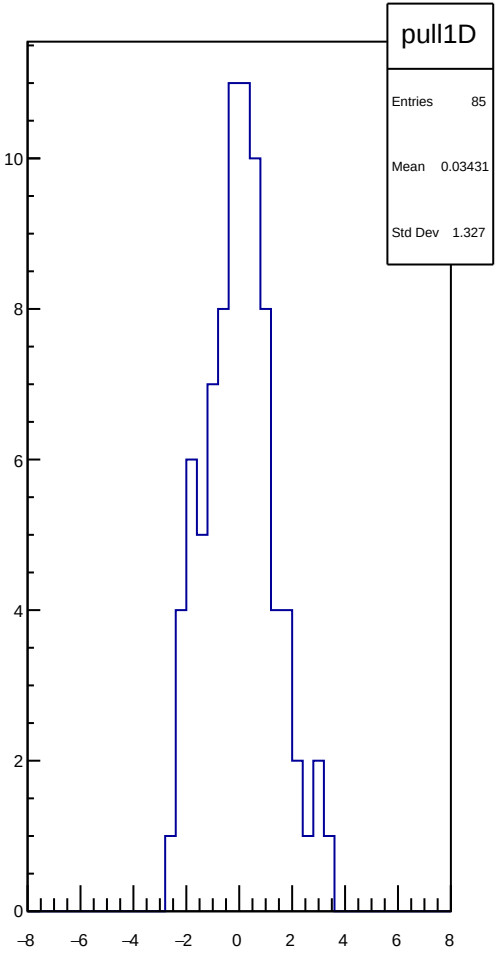

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 34.91 / 84
p0 −69.54 ± 2.008
pull
Entries 85
Mean 63.86
Std Dev 44.99

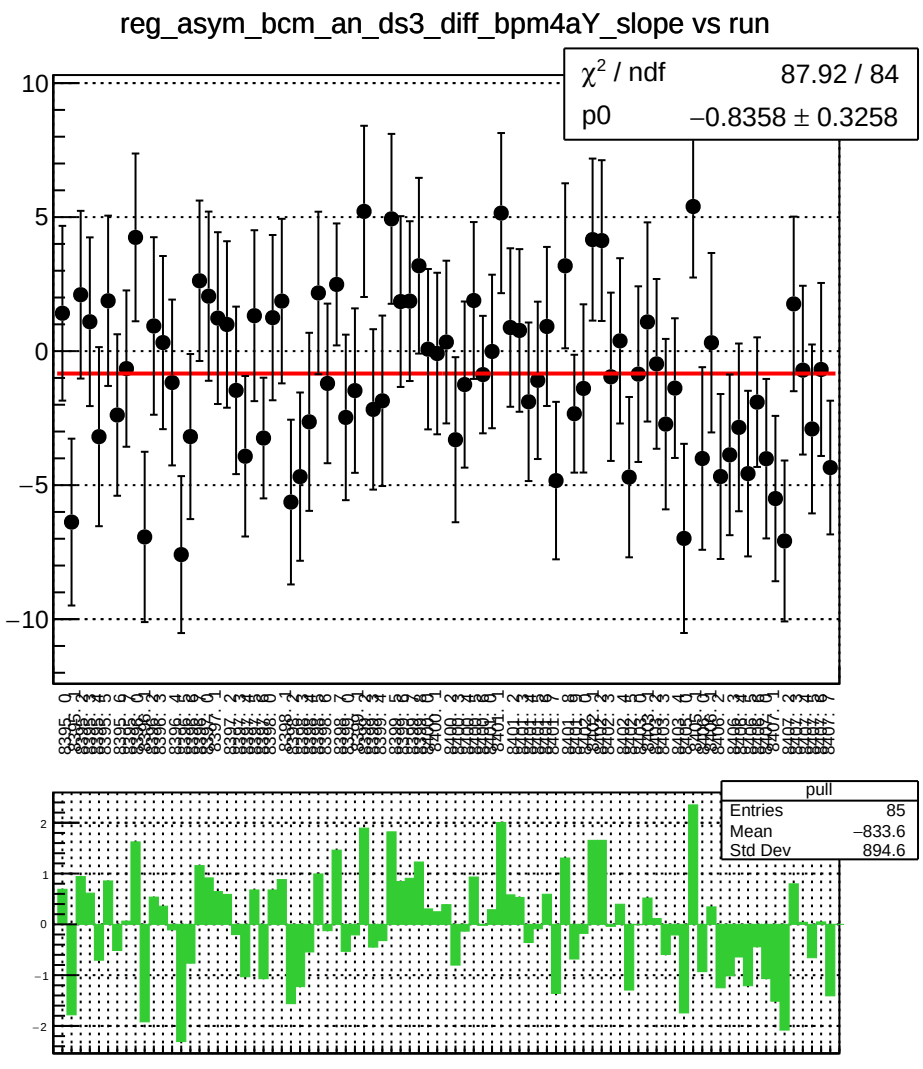

pull1D
Entries 85
Mean −0.01775
Std Dev 0.6406

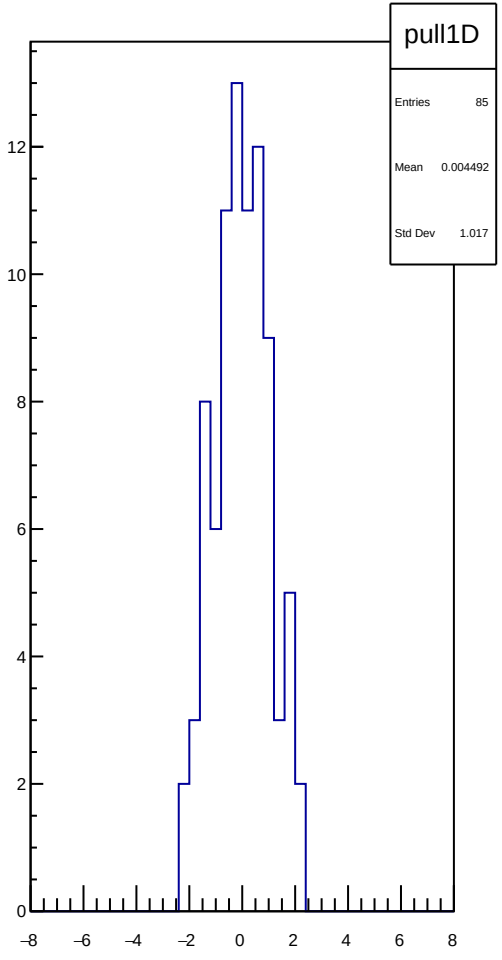

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 33.94 / 84
p0 −2.018 ± 3.432
pull
Entries 85
Mean 142.2
Std Dev 88.8
pull1D
Entries 85
Mean 0.01983
Std Dev 0.6316

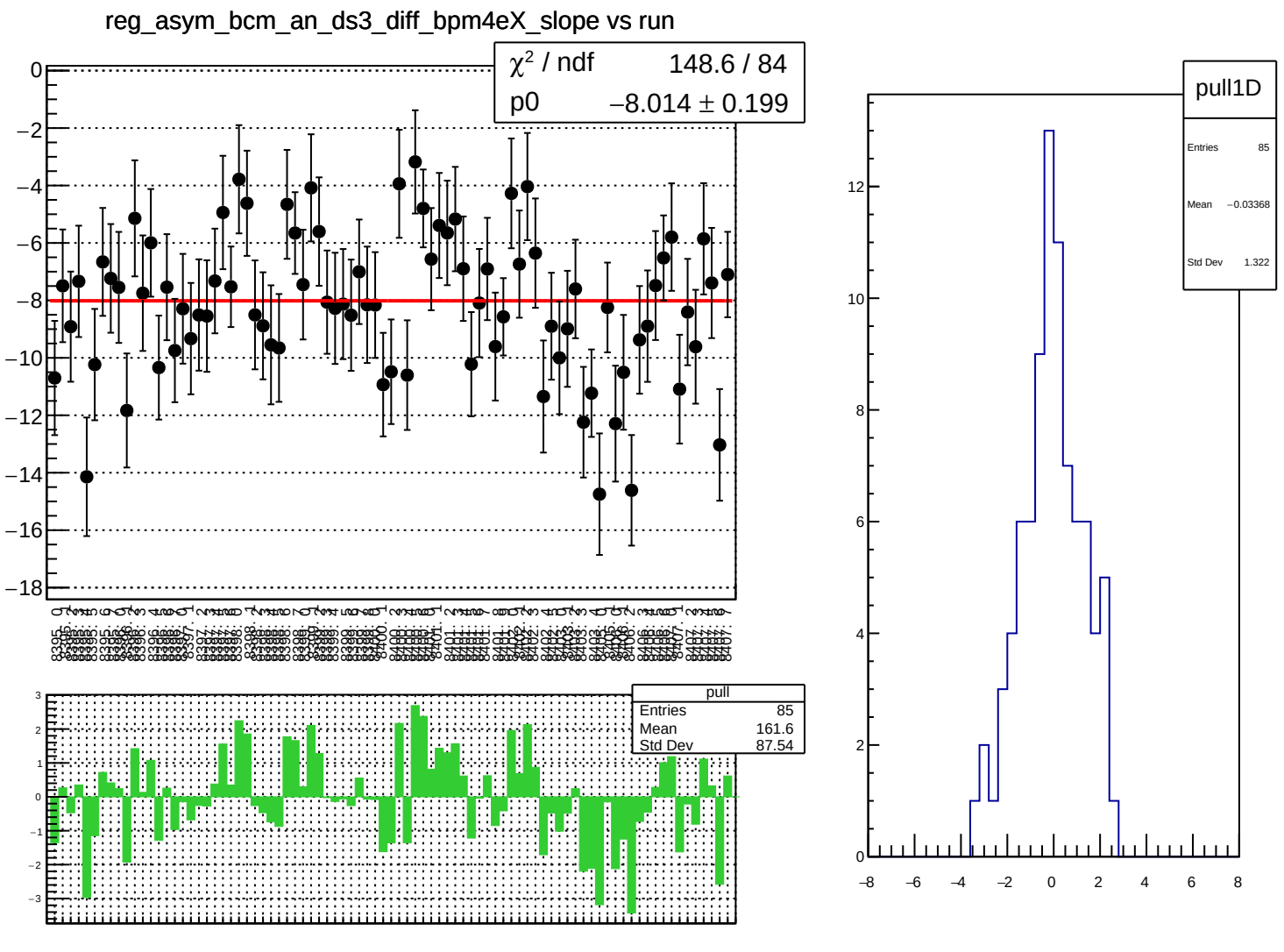

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 52.24 / 84
p0 26.82 ± 0.2117
pull
Entries 85
Mean −303.3
Std Dev 327.3
pull1D
Entries 85
Mean −0.008588
Std Dev 0.7839

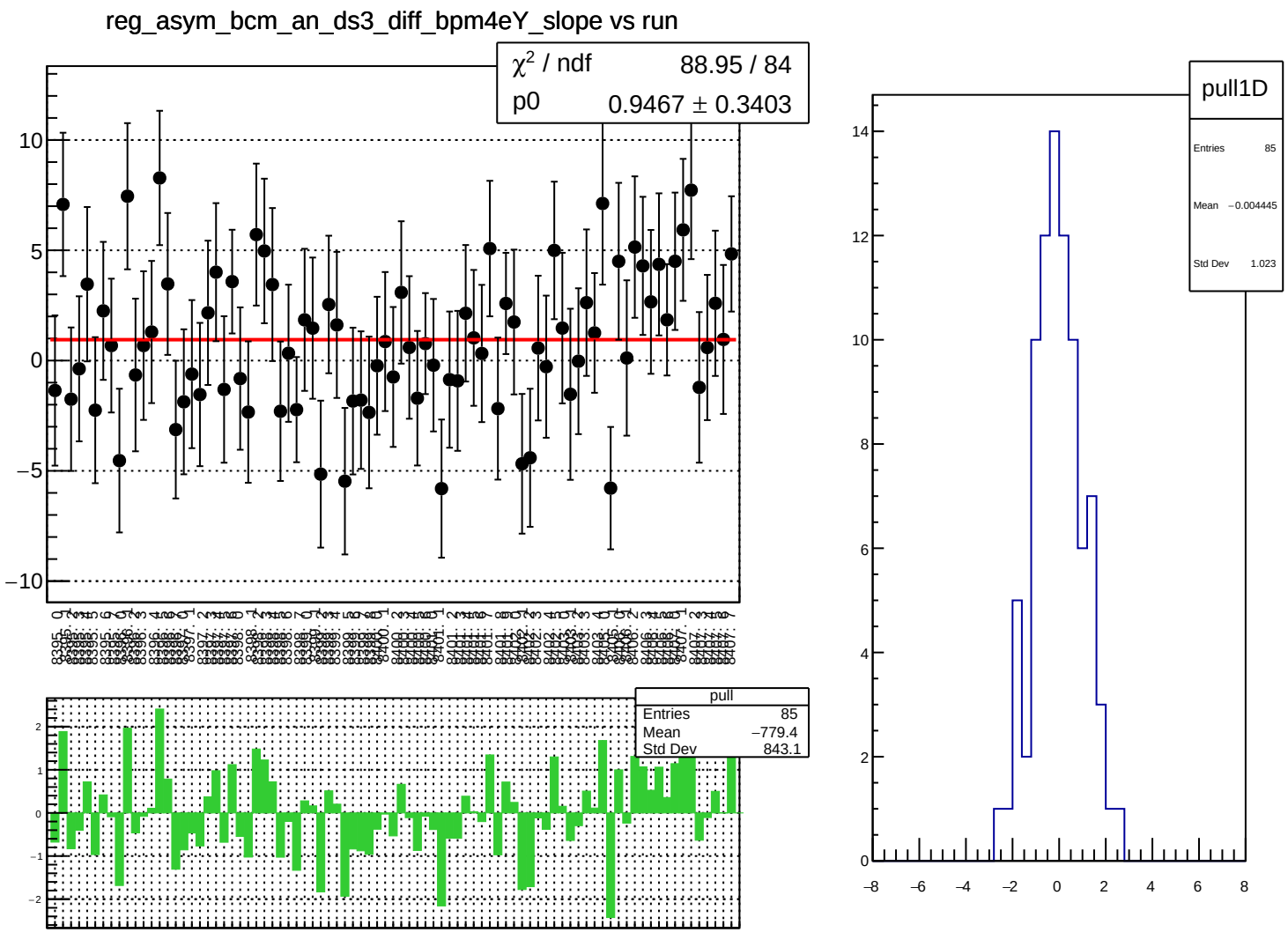

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 149.7 / 84
p0 6.624 ± 0.1792
pull
Entries 85
Mean 143.8
Std Dev 56.79

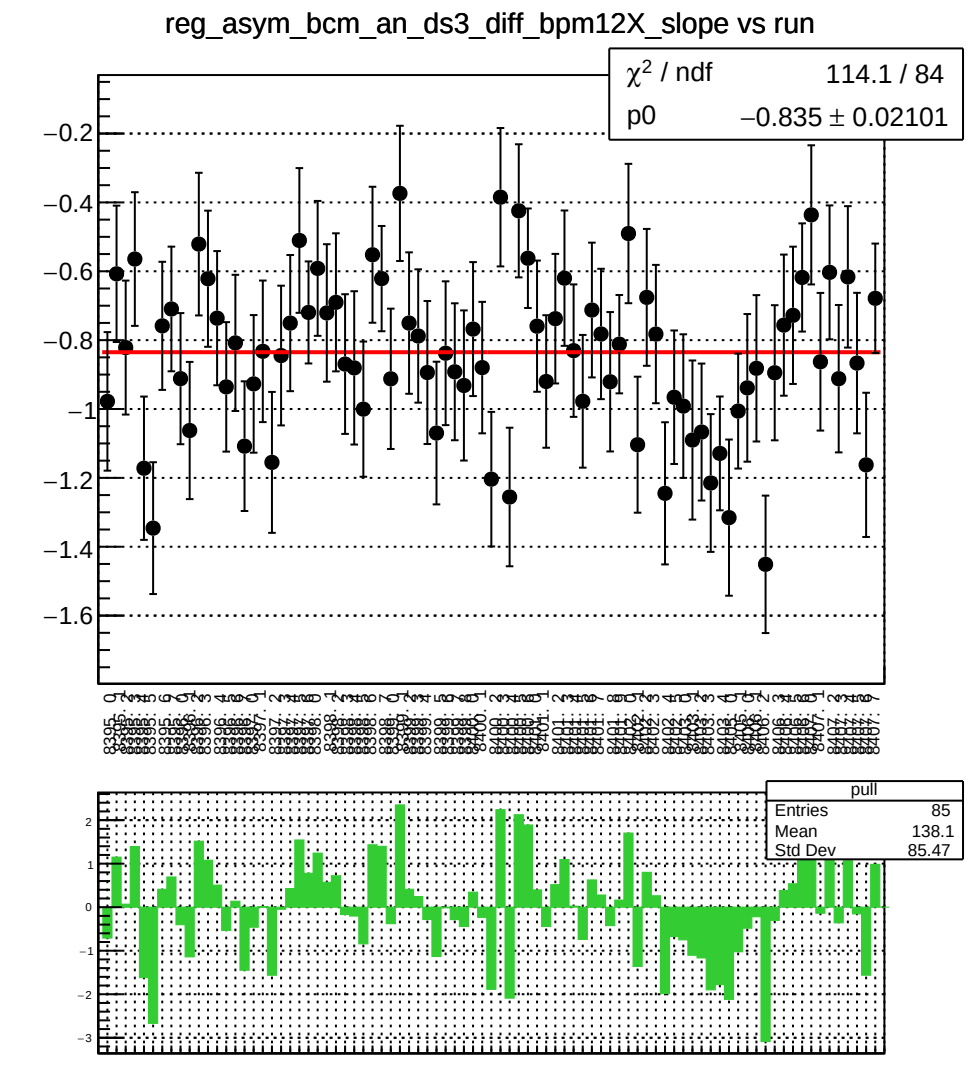

pull1D
Entries 85
Mean 0.03431
Std Dev 1.327

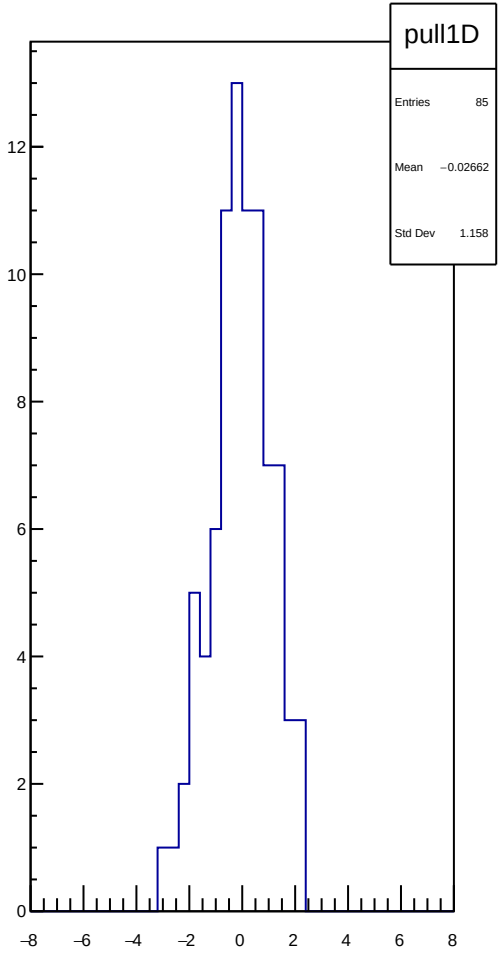

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 87.92 / 84
p0 −0.8358 ± 0.3258
pull
Entries 85
Mean −833.6
Std Dev 894.6

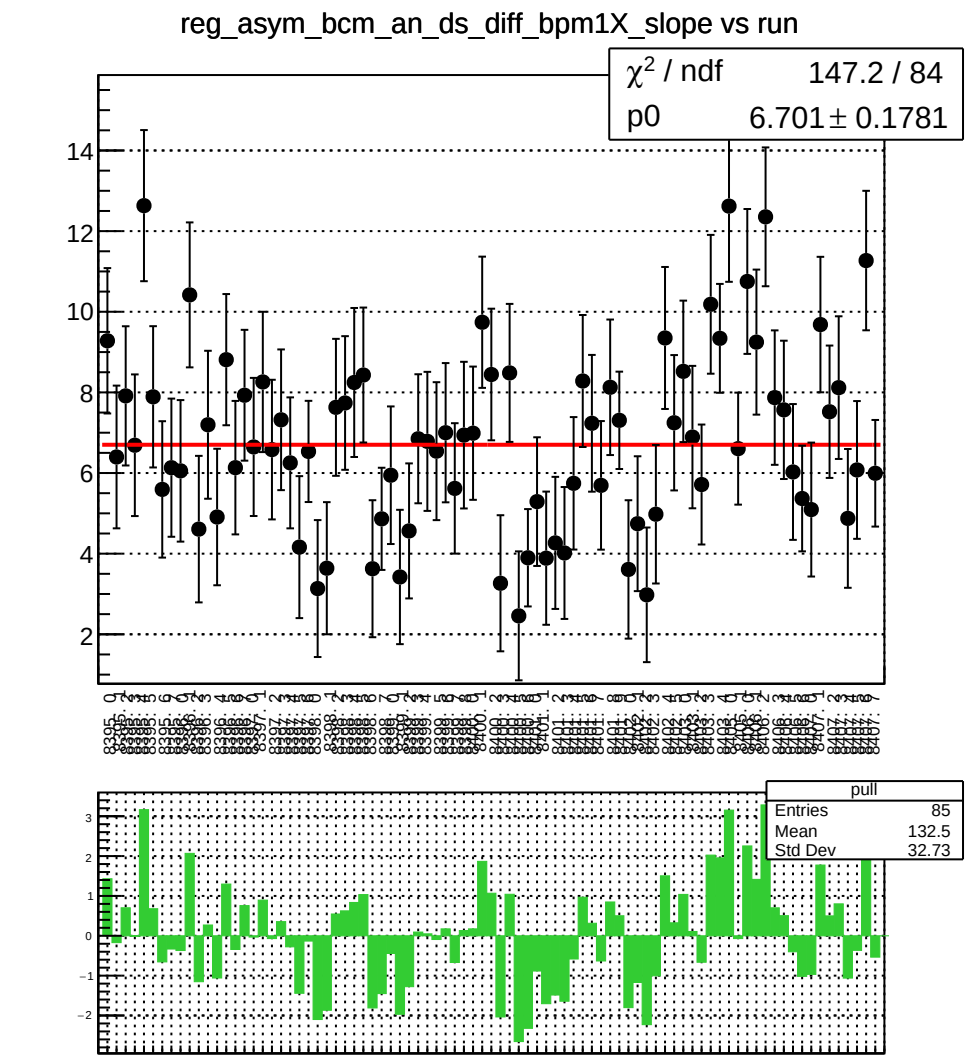

pull1D
Entries 85
Mean 0.004492
Std Dev 1.017

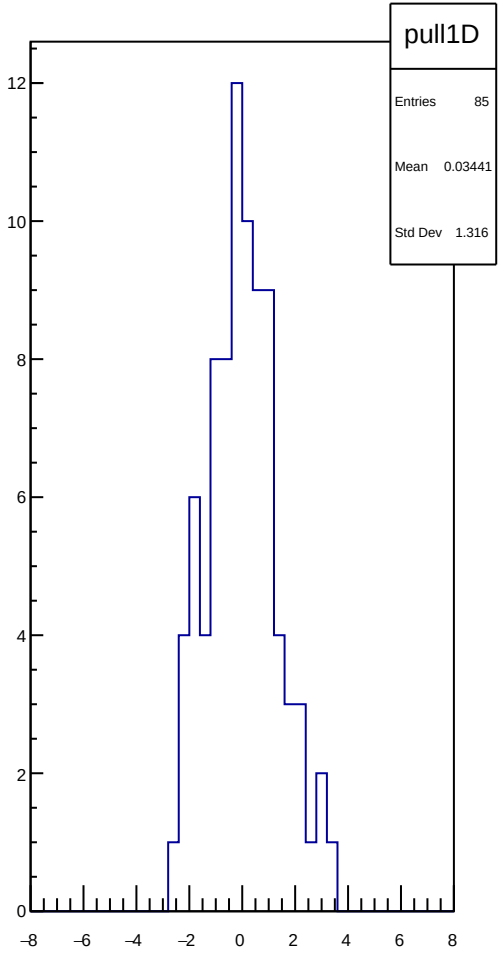

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 148.6 / 84
p0 −8.014 ± 0.199
pull
Entries 85
Mean 161.6
Std Dev 87.54
pull1D
Entries 85
Mean −0.03368
Std Dev 1.322

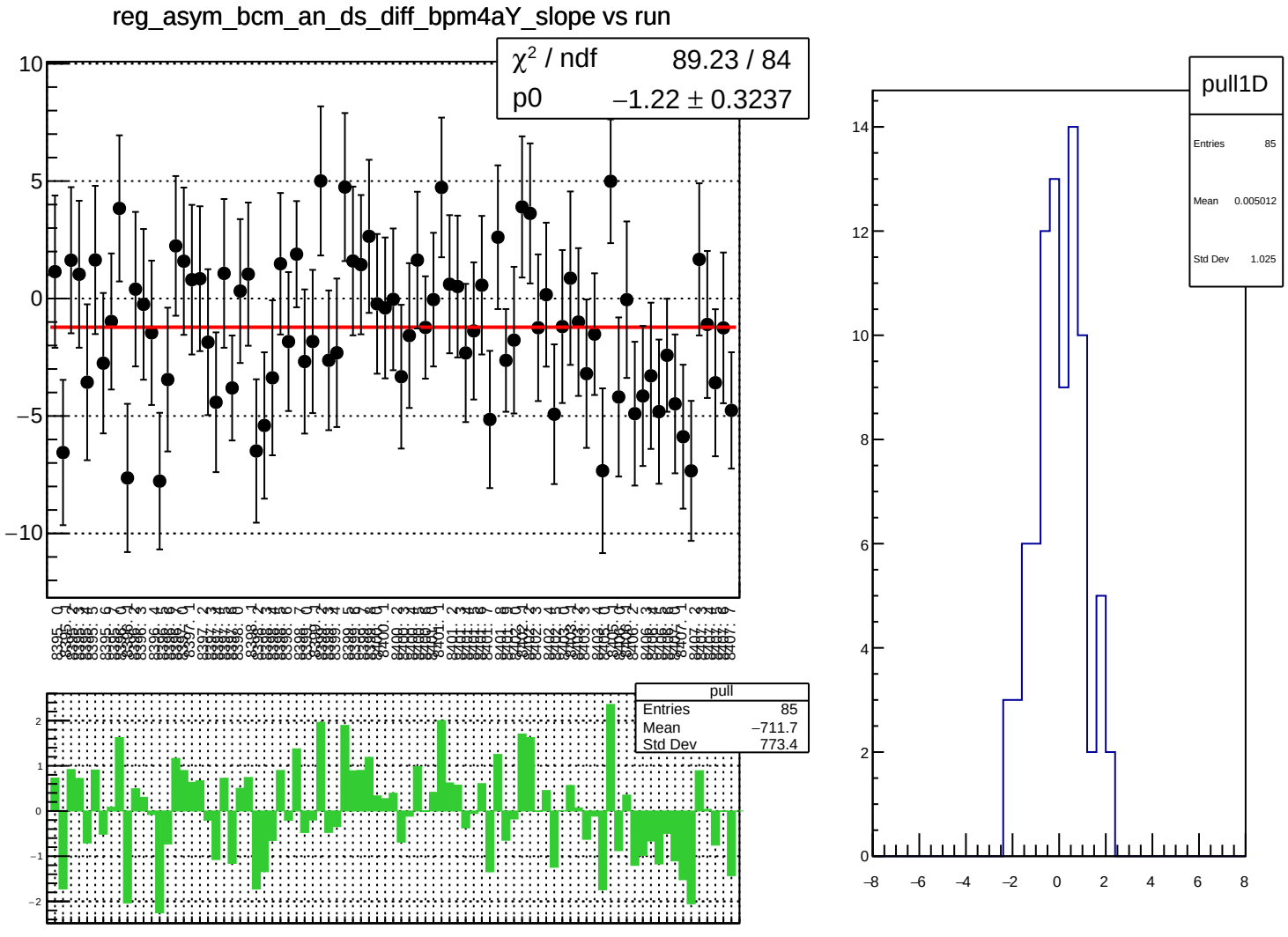

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 88.95 / 84
p0 0.9467 ± 0.3403
pull
Entries 85
Mean −779.4
Std Dev 843.1
pull1D
Entries 85
Mean −0.004445
Std Dev 1.023

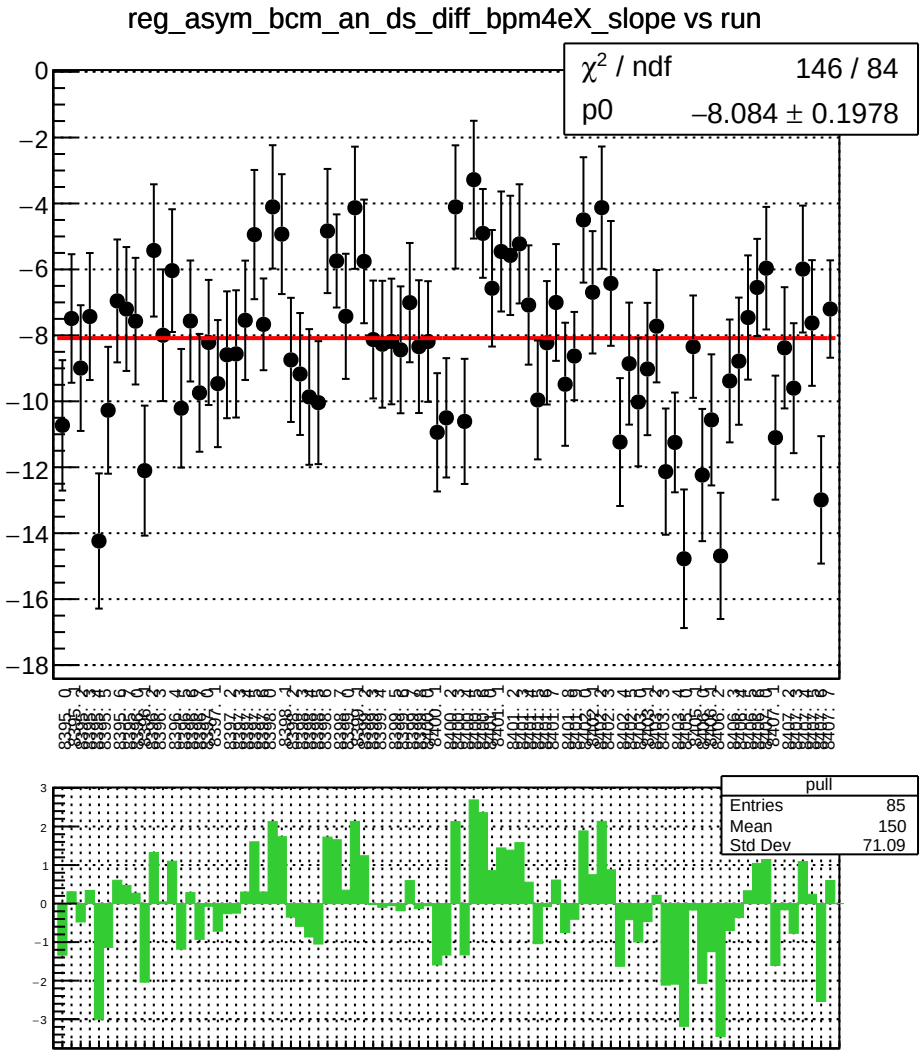

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 114.1 / 84
p0 −0.835 ± 0.02101
pull
Entries 85
Mean 138.1
Std Dev 85.47

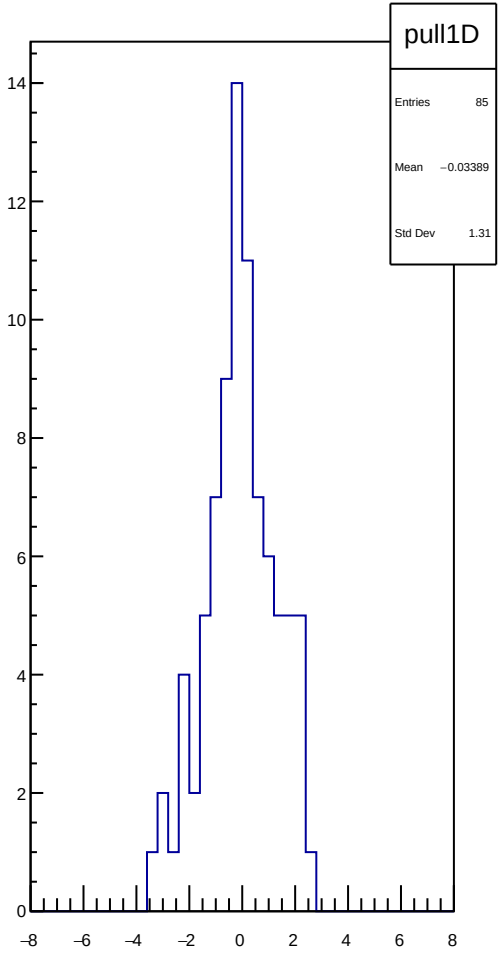

pull1D
Entries 85
Mean −0.02662
Std Dev 1.158

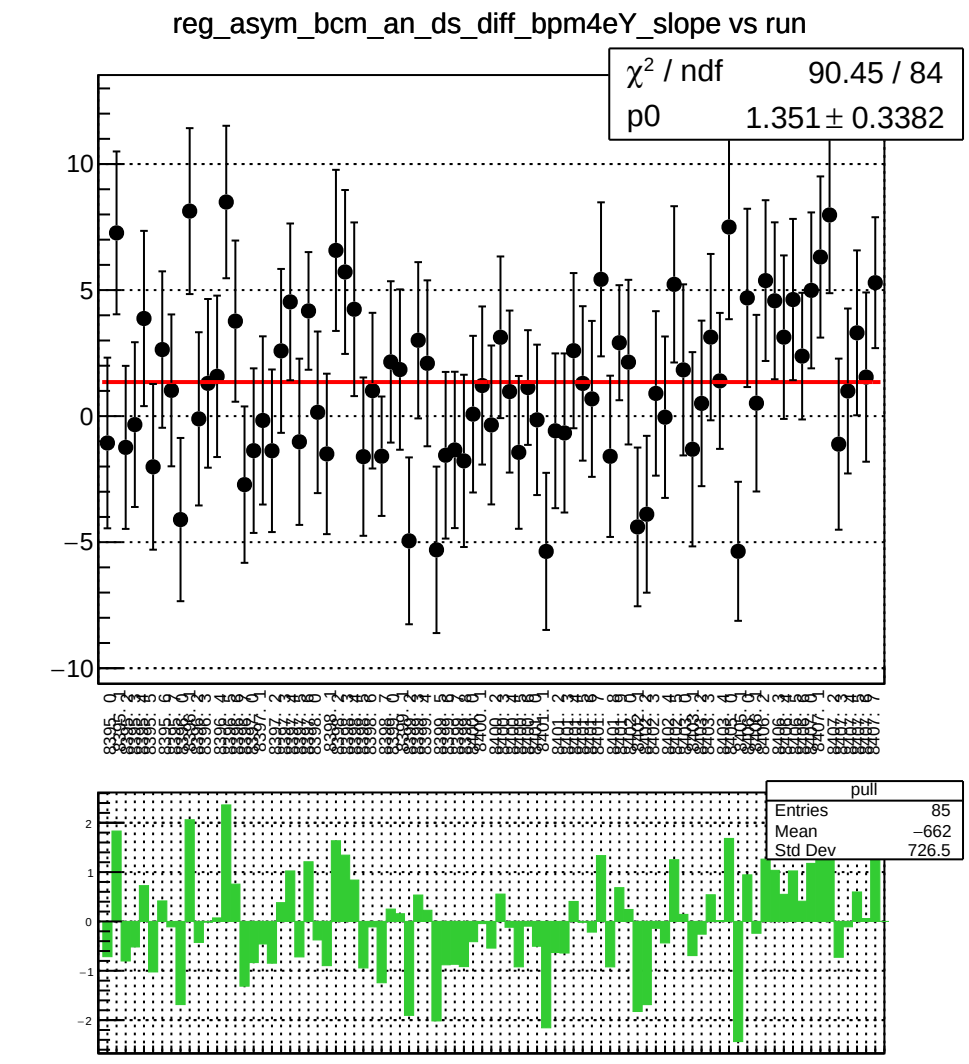

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 147.2 / 84
p0 6.701 ± 0.1781
pull
Entries 85
Mean 132.5
Std Dev 32.73

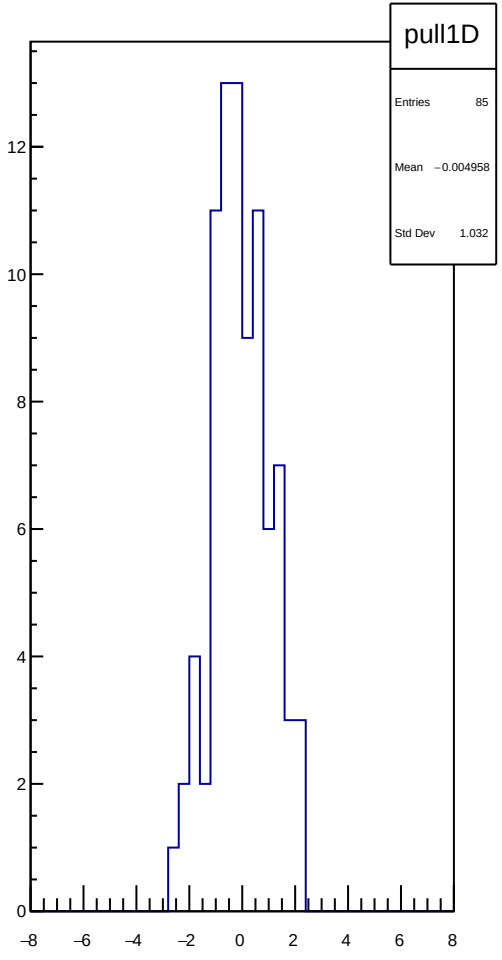

pull1D
Entries 85
Mean 0.03441
Std Dev 1.316

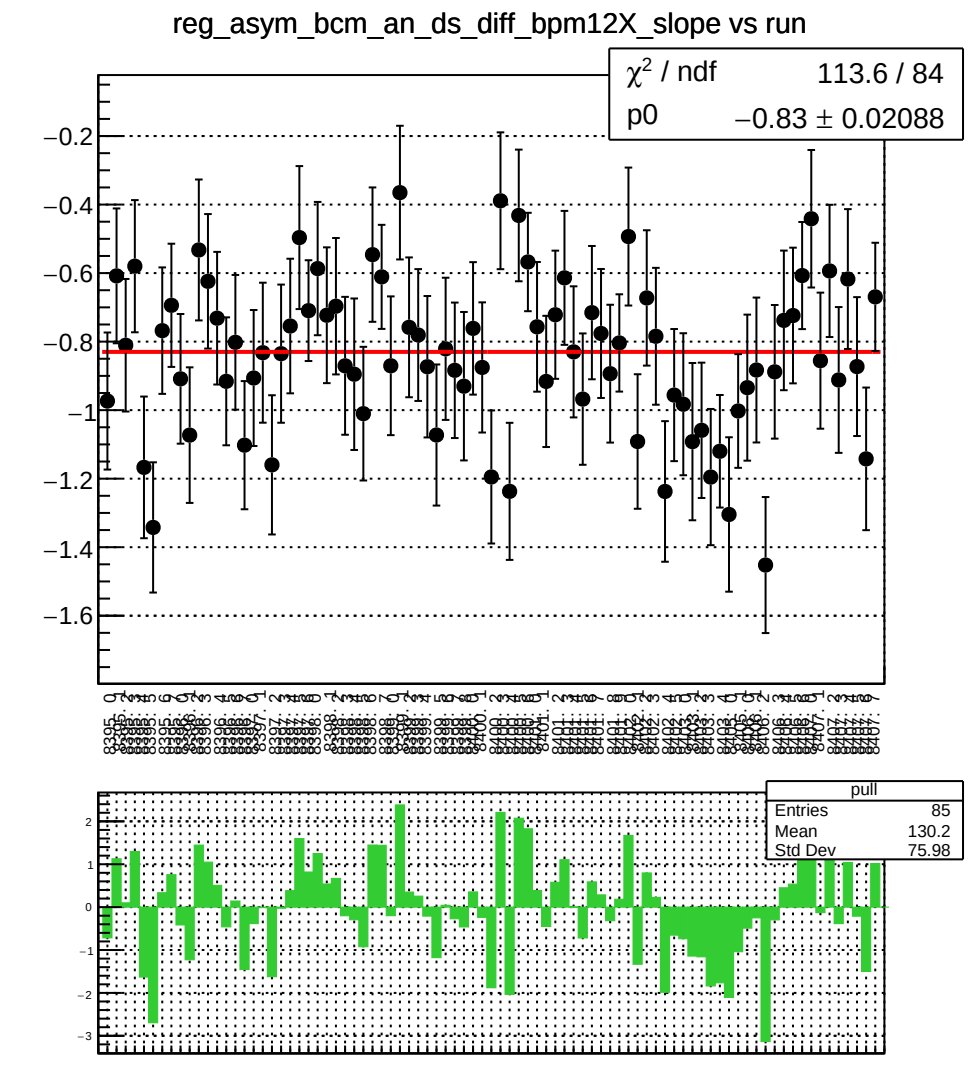

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 89.23 / 84
p0 −1.22 ± 0.3237
pull
Entries 85
Mean −711.7
Std Dev 773.4
pull1D
Entries 85
Mean 0.005012
Std Dev 1.025

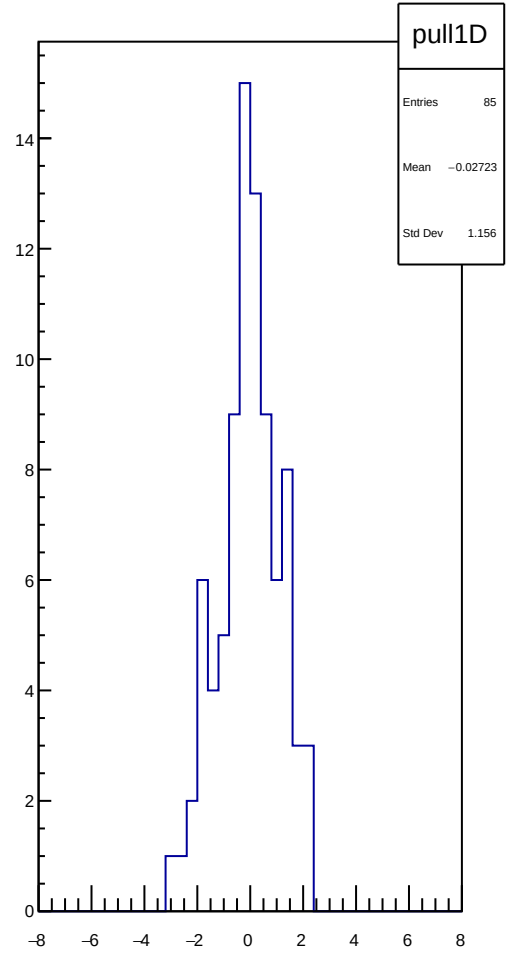

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 146 / 84
p0 −8.084 ± 0.1978
pull
Entries 85
Mean 150
Std Dev 71.09

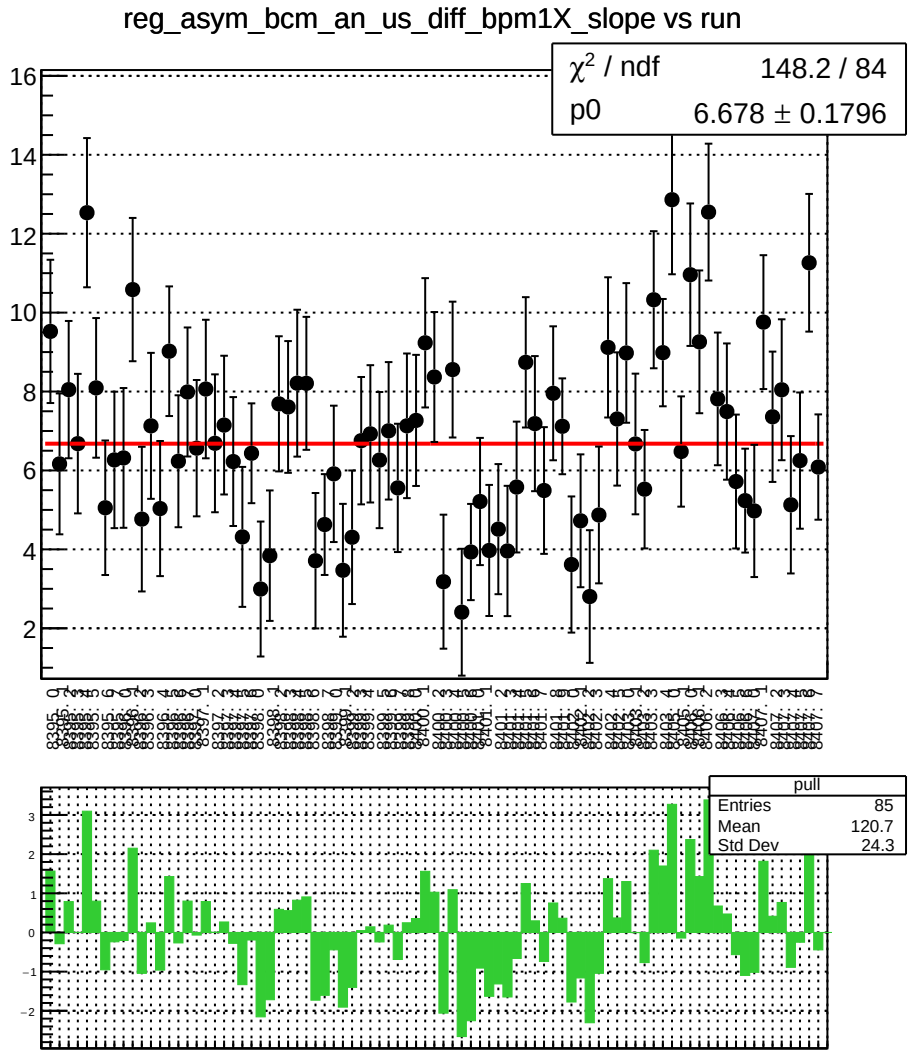

pull1D
Entries 85
Mean −0.03389
Std Dev 1.31

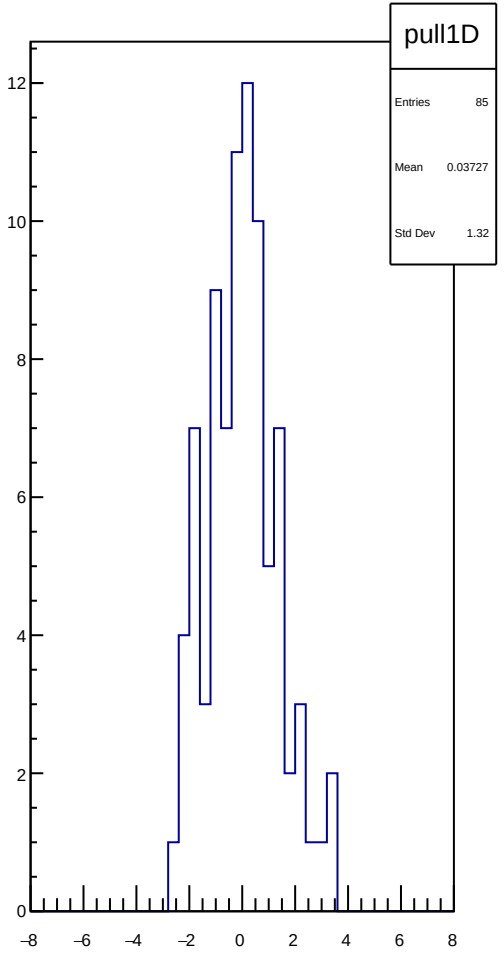

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 90.45 / 84
p0 1.351 ± 0.3382
pull
Entries 85
Mean −662
Std Dev 726.5

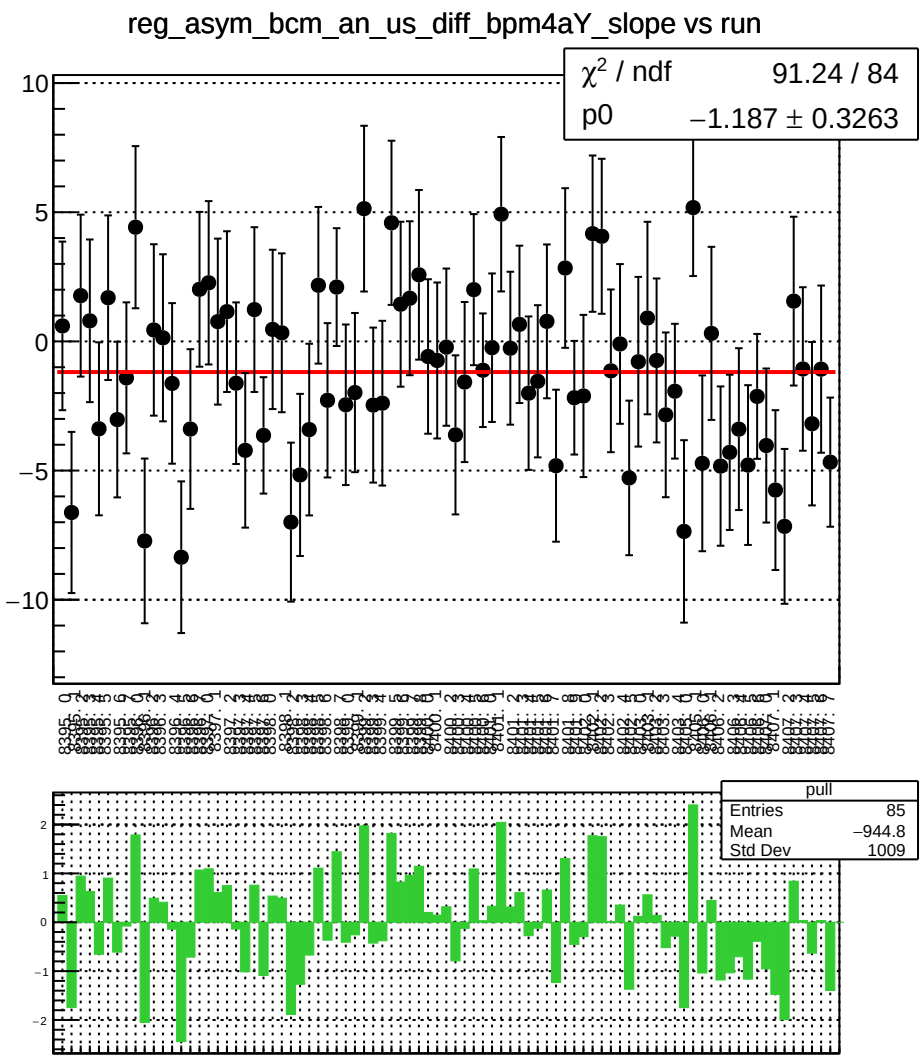

pull1D
Entries 85
Mean −0.004958
Std Dev 1.032

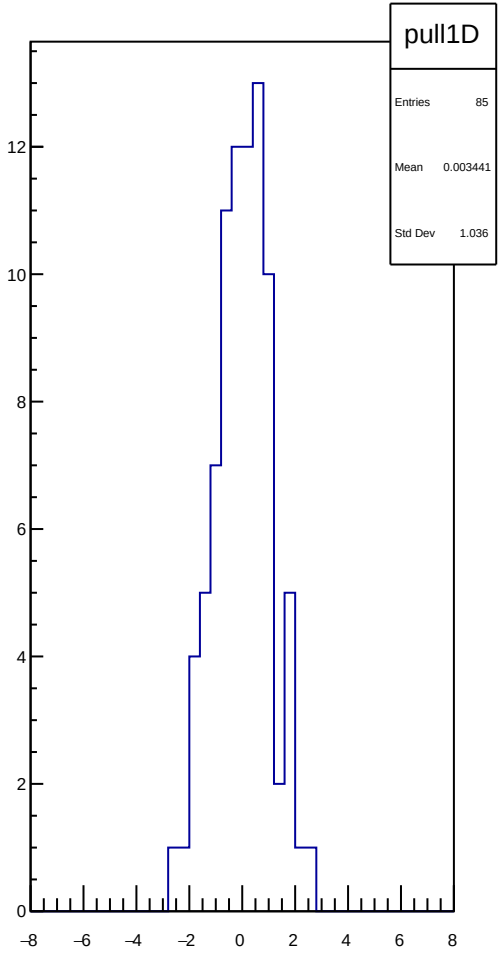

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 113.6 / 84
p0 −0.83 ± 0.02088
pull
Entries 85
Mean 130.2
Std Dev 75.98

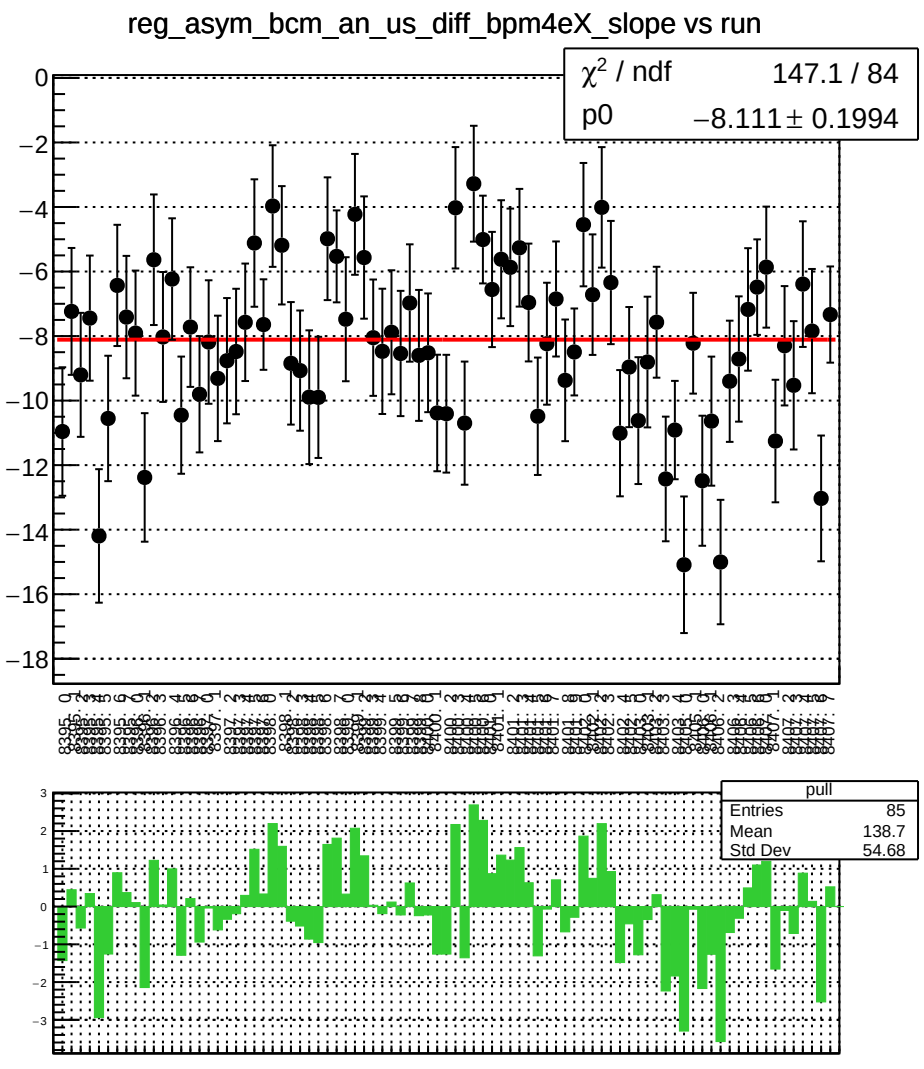

pull1D
Entries 85
Mean −0.02723
Std Dev 1.156

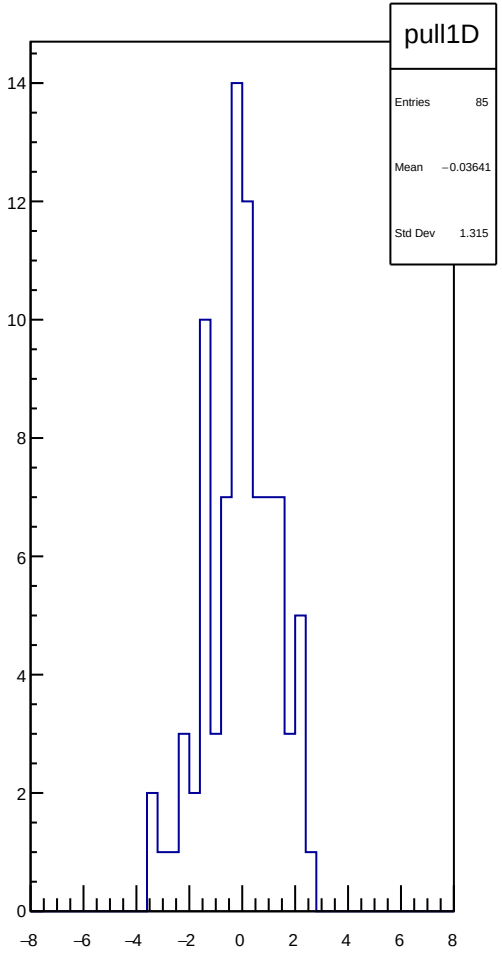

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 148.2 / 84
p0 6.678 ± 0.1796
pull
Entries 85
Mean 120.7
Std Dev 24.3

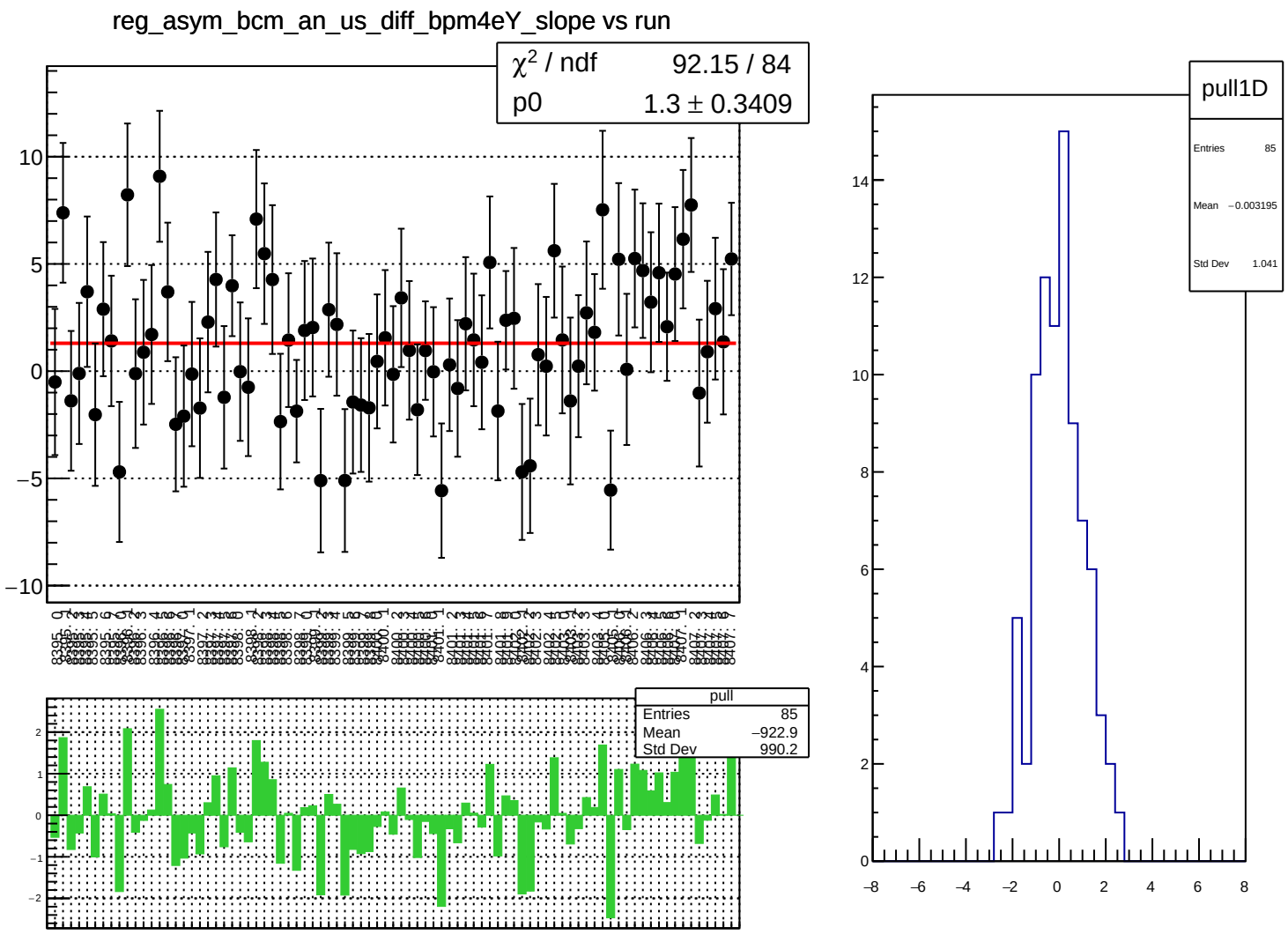

pull1D
Entries 85
Mean 0.03727
Std Dev 1.32

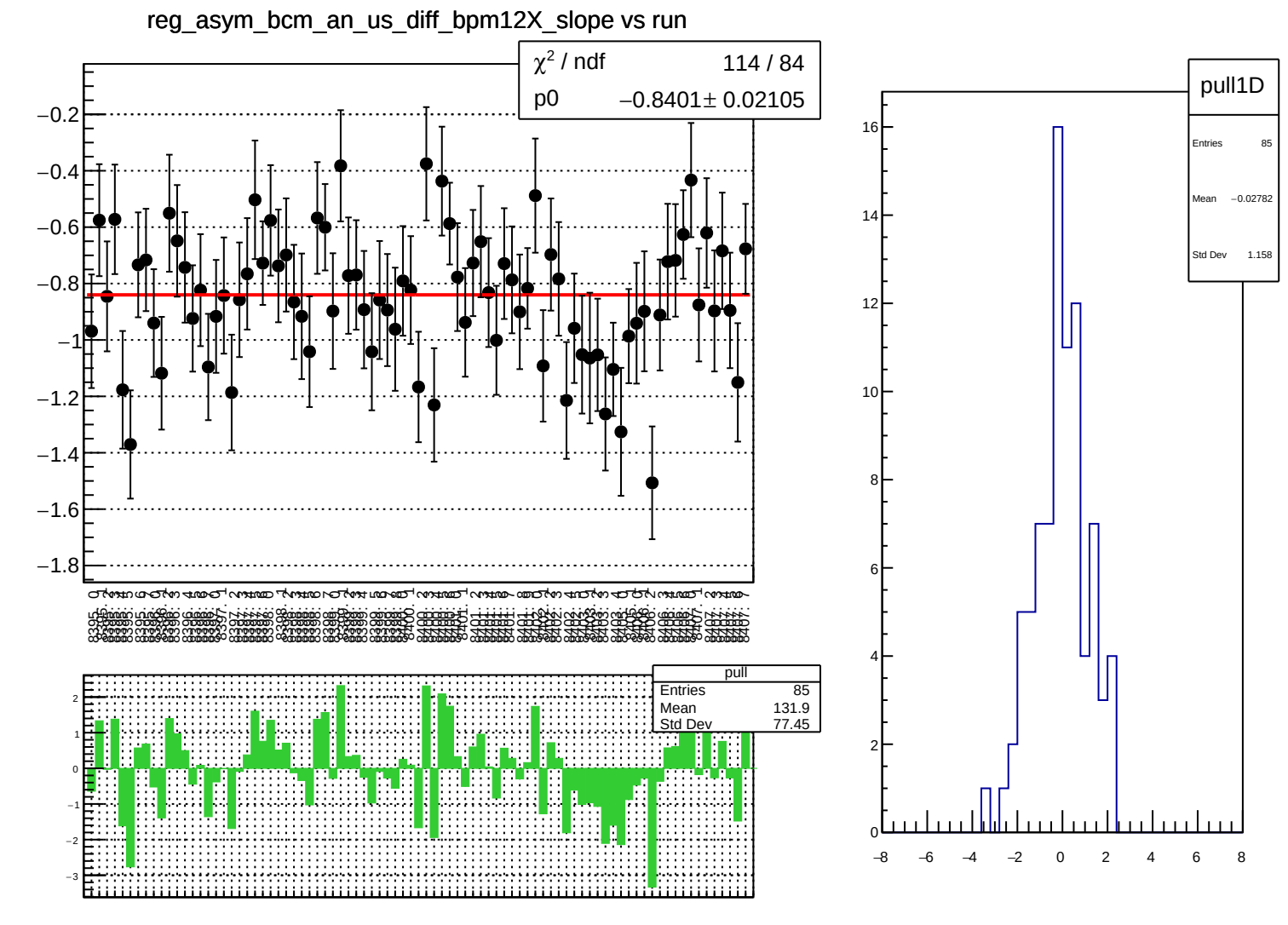

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 91.24 / 84
p0 −1.187 ± 0.3263
pull
Entries 85
Mean −944.8
Std Dev 1009

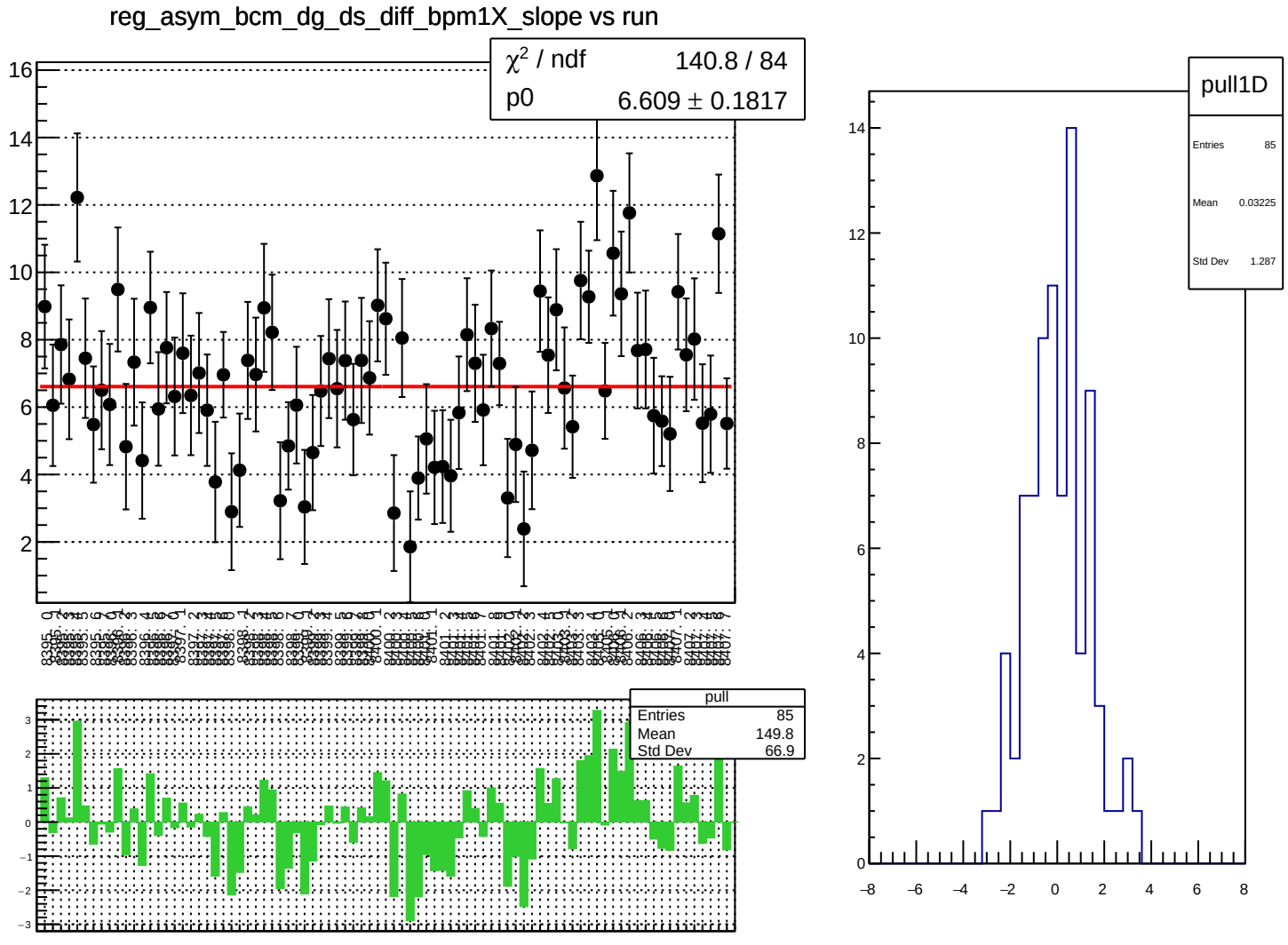

pull1D
Entries 85
Mean 0.003441
Std Dev 1.036

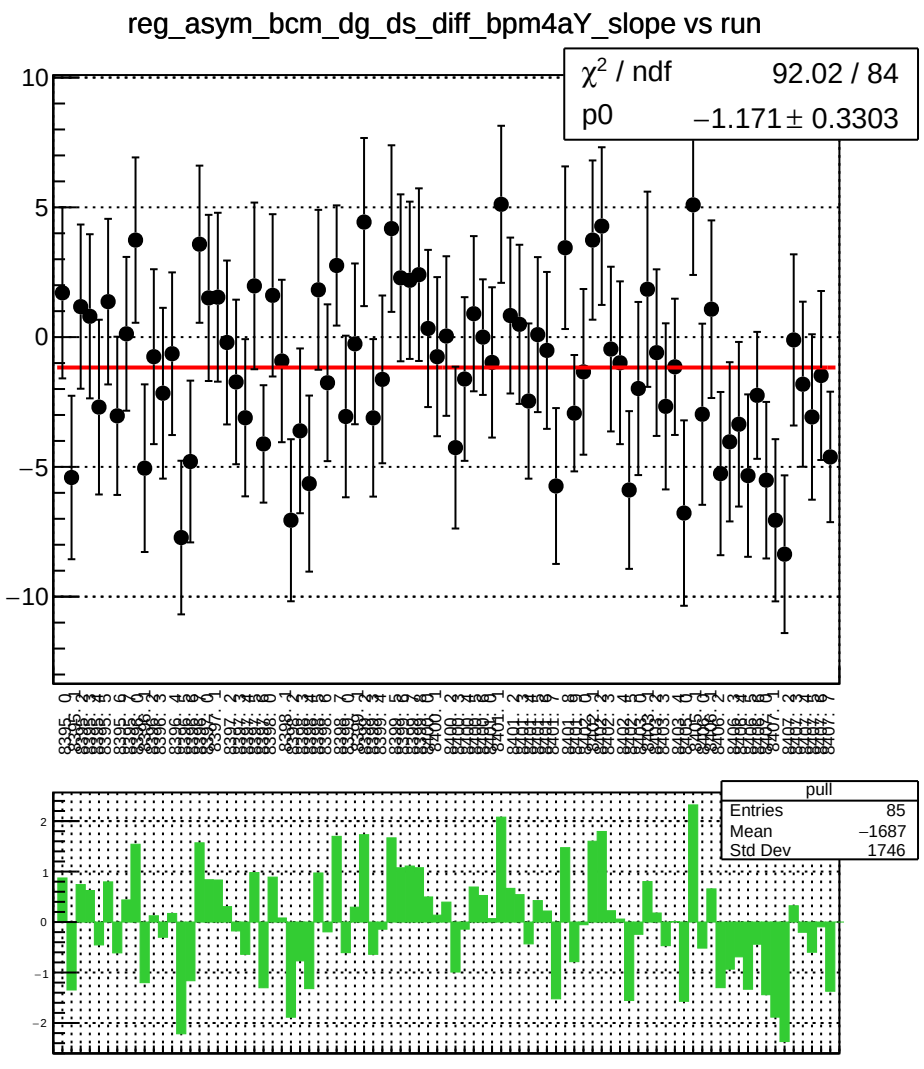

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 147.1 / 84
p0 −8.111 ± 0.1994
pull
Entries 85
Mean 138.7
Std Dev 54.68

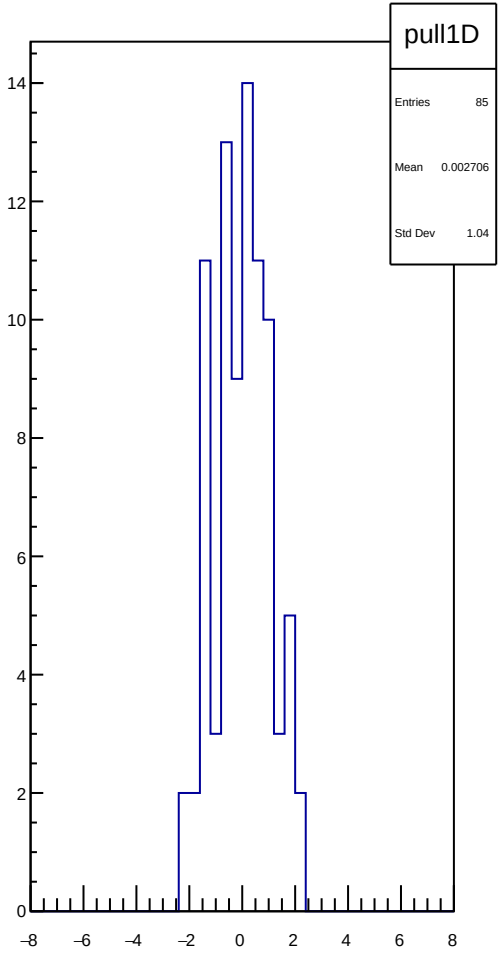

pull1D
Entries 85
Mean −0.03641
Std Dev 1.315

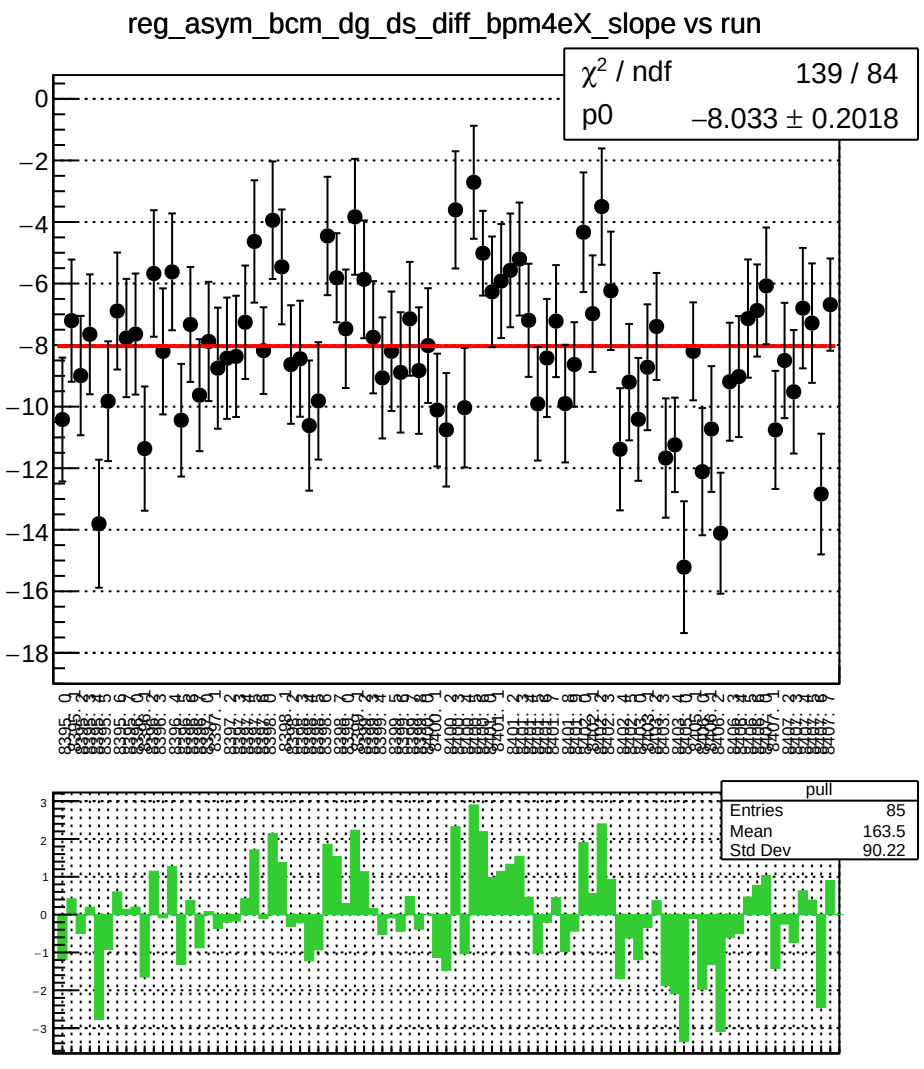

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 92.15 / 84
p0 1.3 ± 0.3409
pull
Entries 85
Mean −922.9
Std Dev 990.2
pull1D
Entries 85
Mean −0.003195
Std Dev 1.041

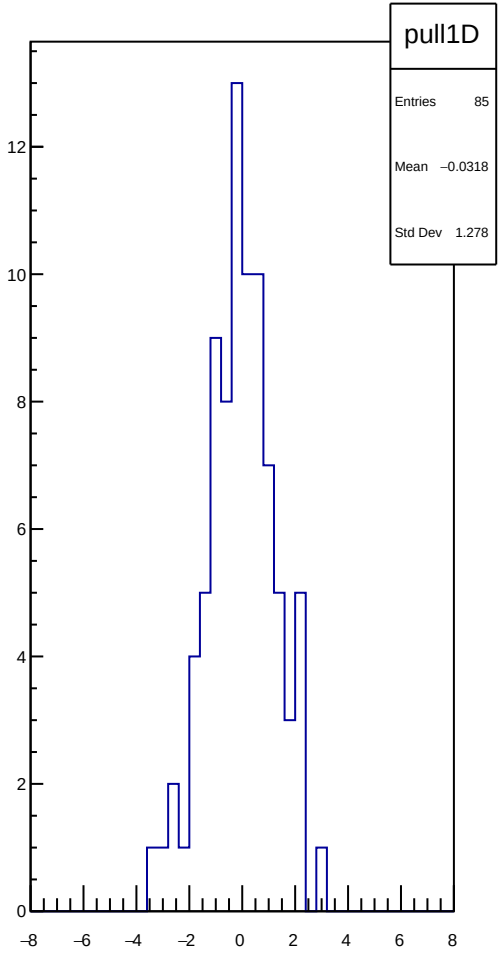

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 114 / 84
p0 −0.8401± 0.02105
pull
Entries 85
Mean 131.9
Std Dev 77.45
pull1D
Entries 85
Mean −0.02782
Std Dev 1.158

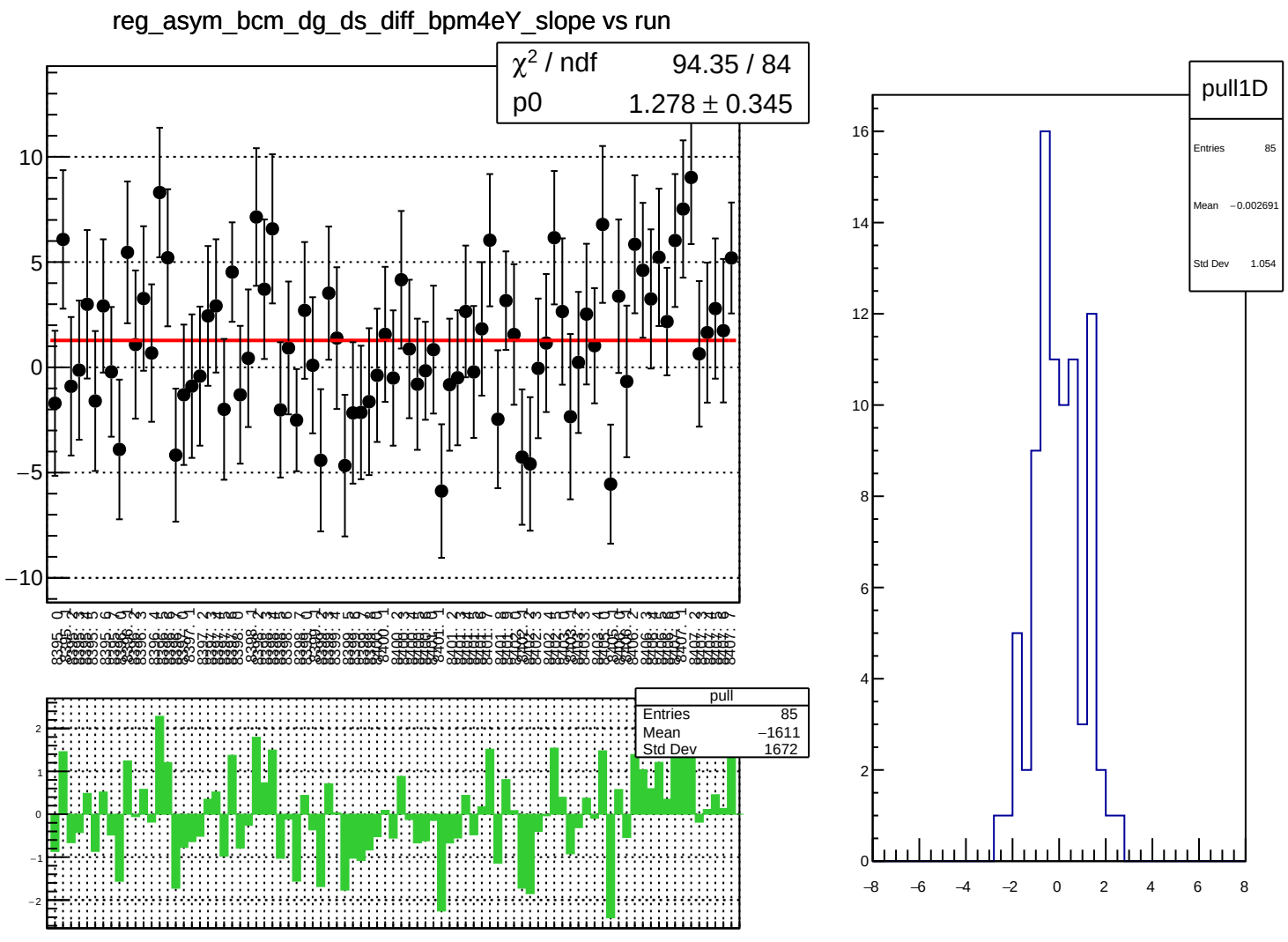

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 140.8 / 84
p0 6.609 ± 0.1817
pull
Entries 85
Mean 149.8
Std Dev 66.9
pull1D
Entries 85
Mean 0.03225
Std Dev 1.287

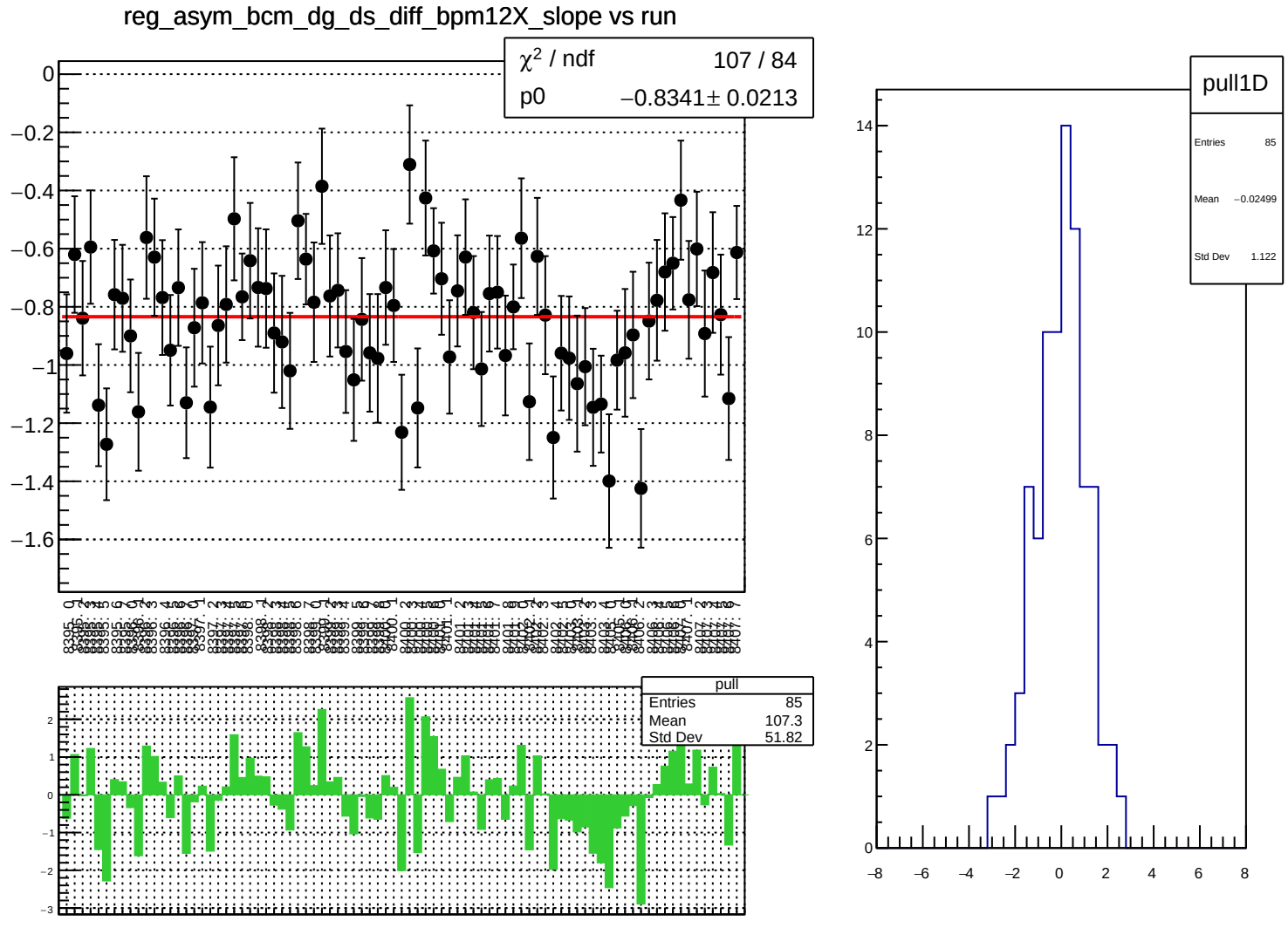

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 92.02 / 84
p0 −1.171 ± 0.3303
pull
Entries 85
Mean −1687
Std Dev 1746

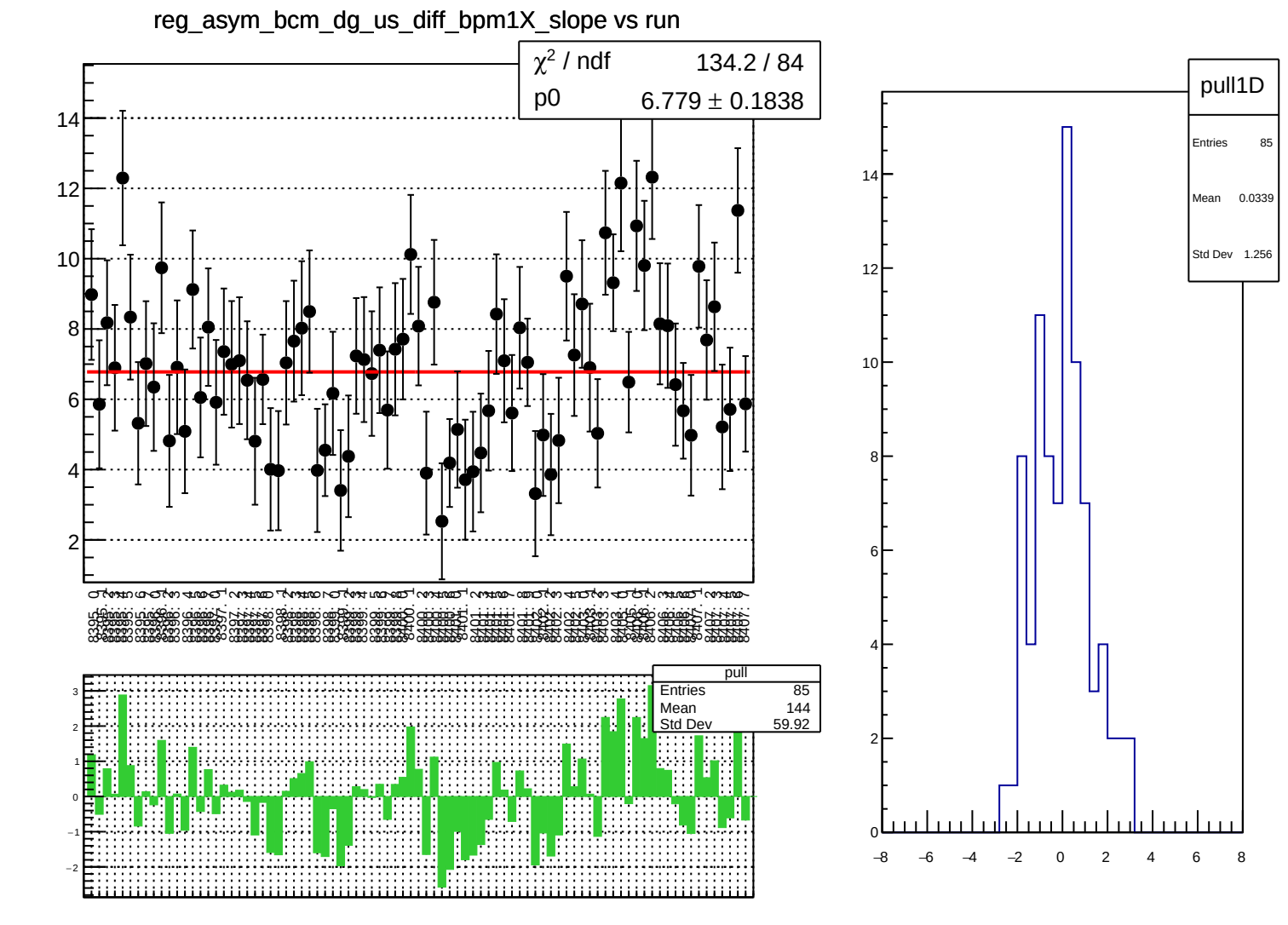

pull1D
Entries 85
Mean 0.002706
Std Dev 1.04

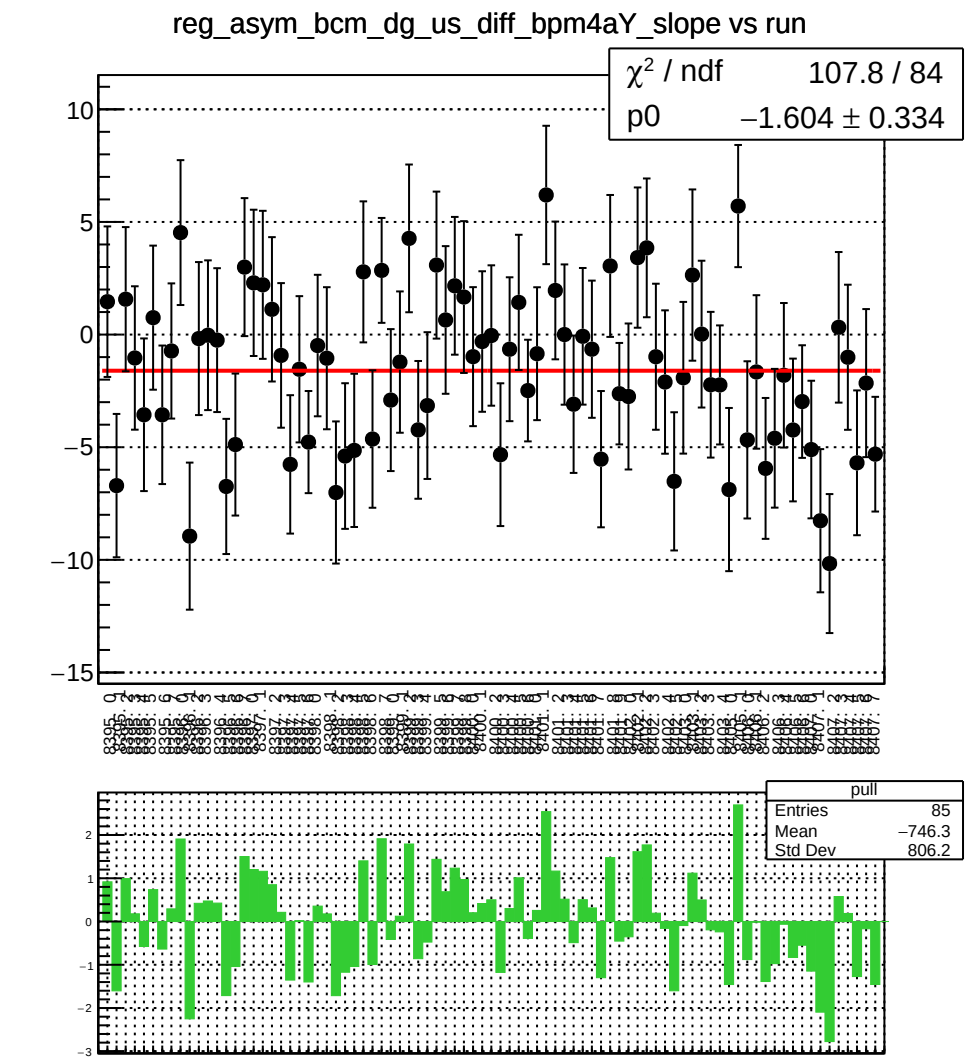

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 139 / 84
p0 −8.033 ± 0.2018
pull
Entries 85
Mean 163.5
Std Dev 90.22

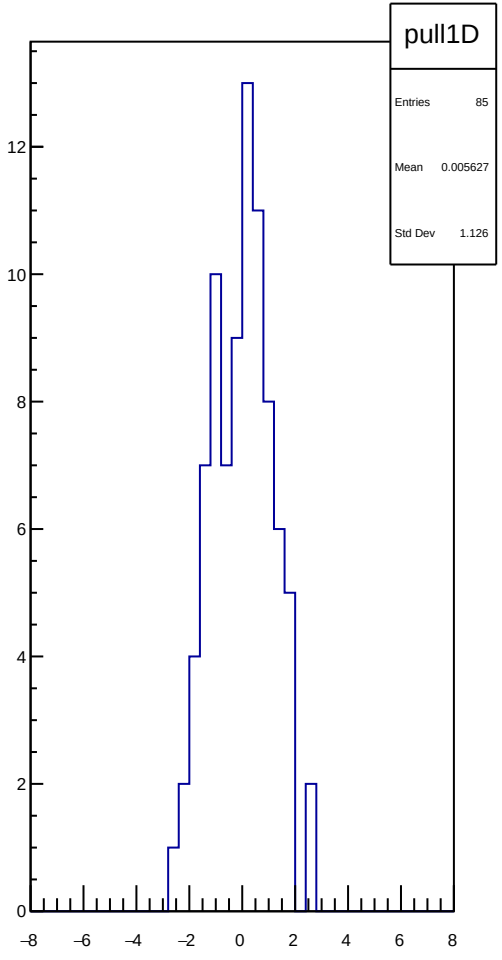

pull1D
Entries 85
Mean −0.0318
Std Dev 1.278

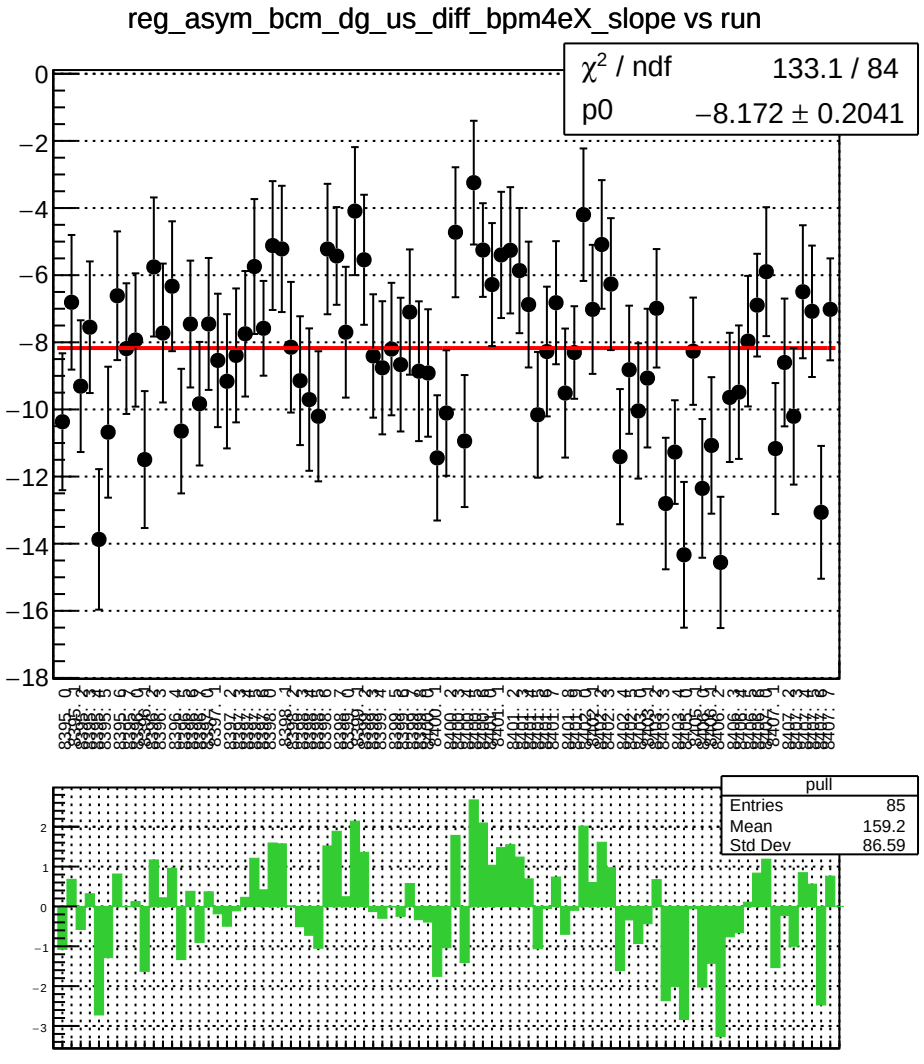

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 94.35 / 84
p0 1.278 ± 0.345
pull
Entries 85
Mean −1611
Std Dev 1672
pull1D
Entries 85
Mean −0.002691
Std Dev 1.054

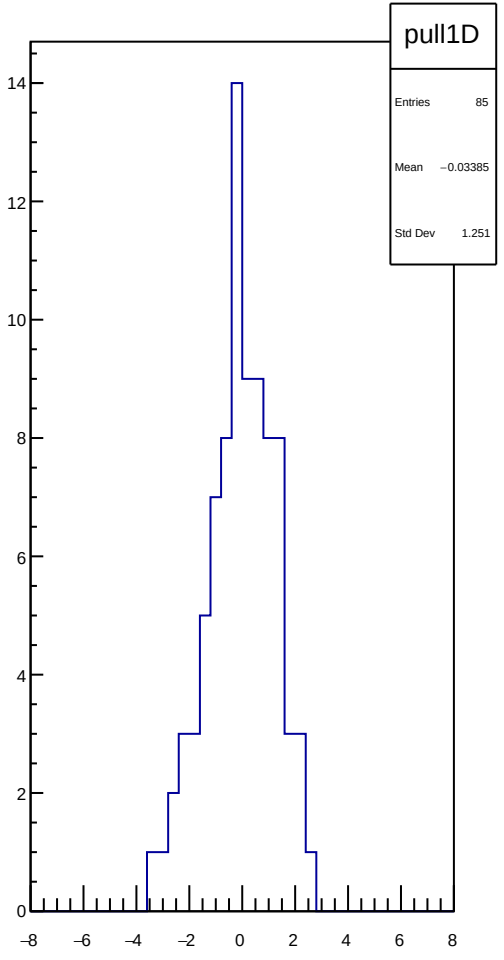

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 107 / 84
p0 −0.8341± 0.0213
pull
Entries 85
Mean 107.3
Std Dev 51.82
pull1D
Entries 85
Mean −0.02499
Std Dev 1.122

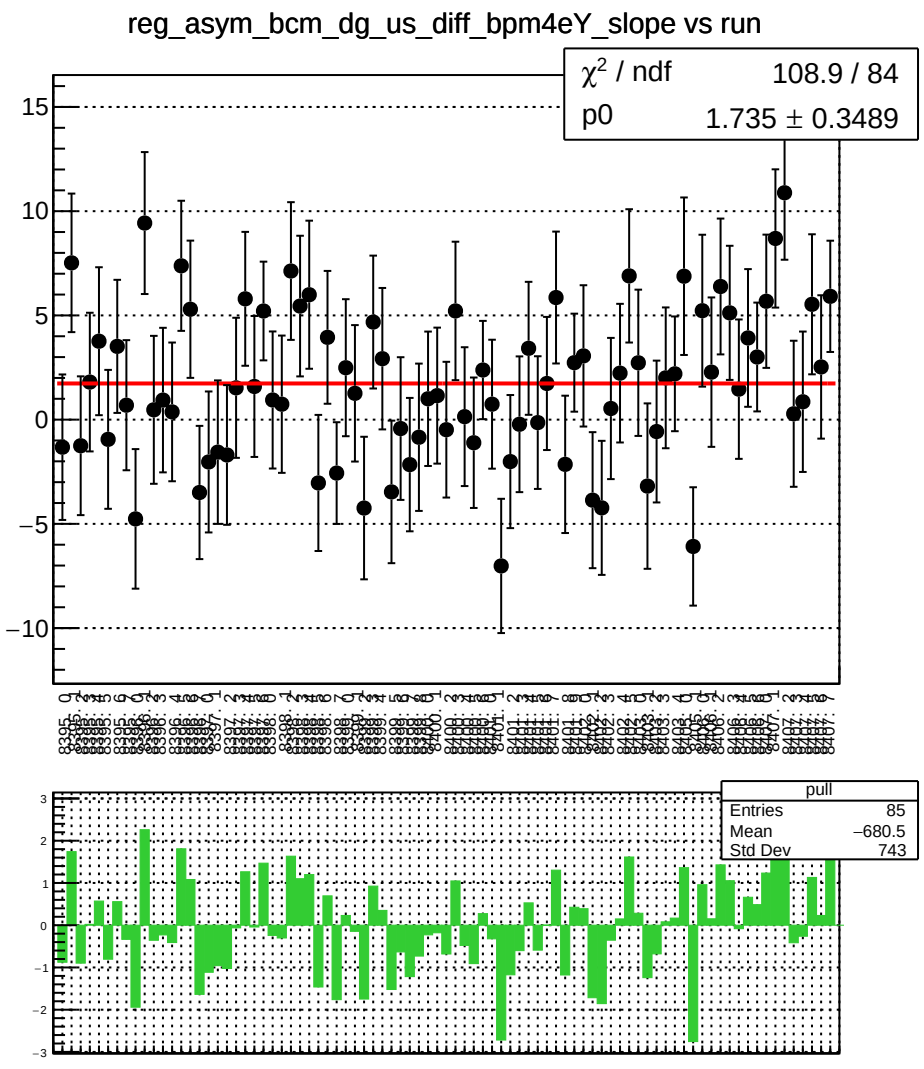

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 134.2 / 84
p0 6.779 ± 0.1838
pull
Entries 85
Mean 144
Std Dev 59.92
pull1D
Entries 85
Mean 0.0339
Std Dev 1.256

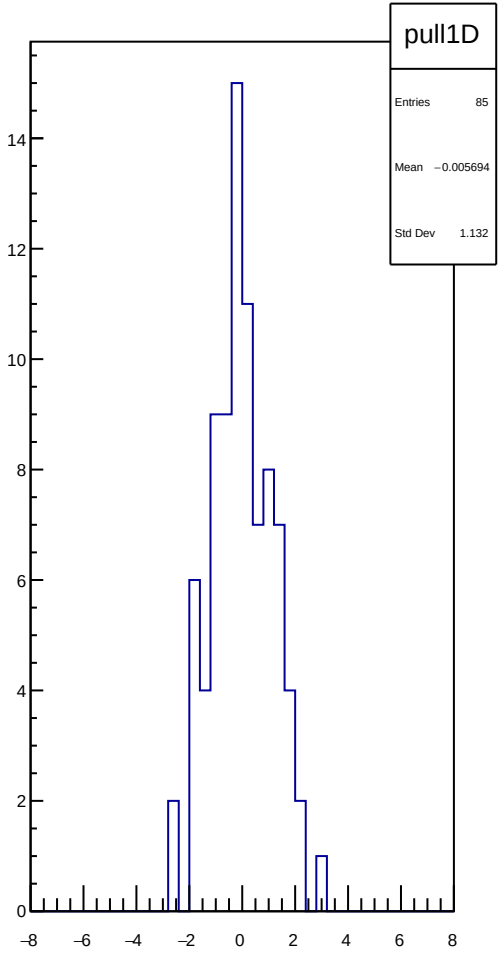

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 107.8 / 84
p0 −1.604 ± 0.334
pull
Entries 85
Mean −746.3
Std Dev 806.2

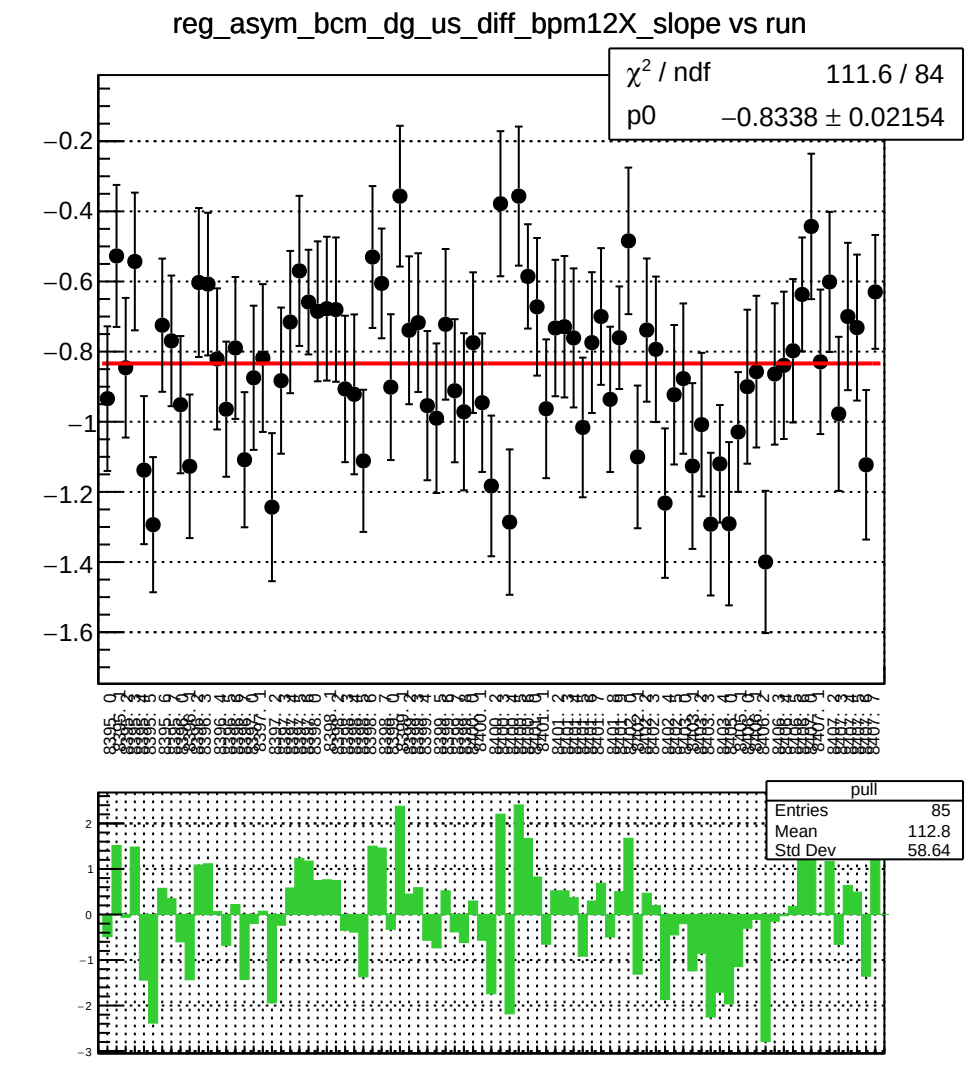

pull1D
Entries 85
Mean 0.005627
Std Dev 1.126

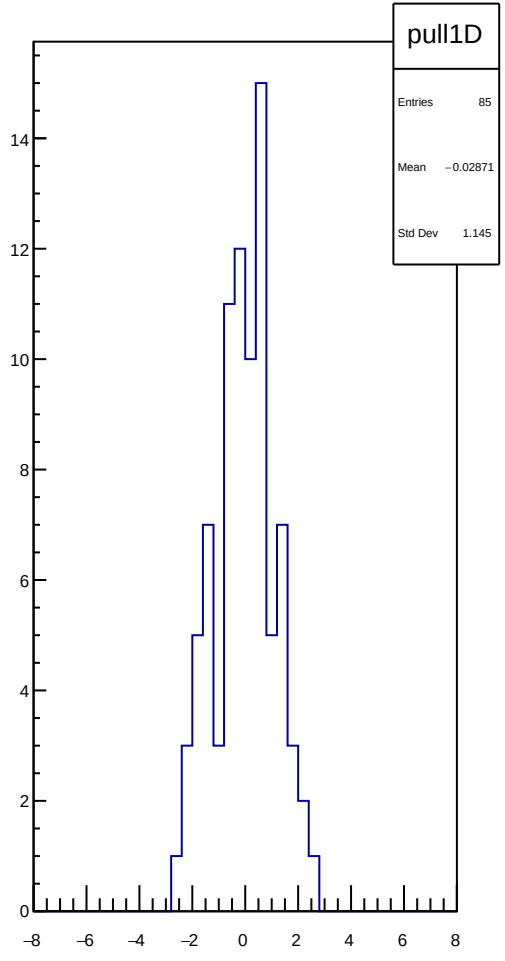

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 133.1 / 84
p0 −8.172 ± 0.2041
pull
Entries 85
Mean 159.2
Std Dev 86.59

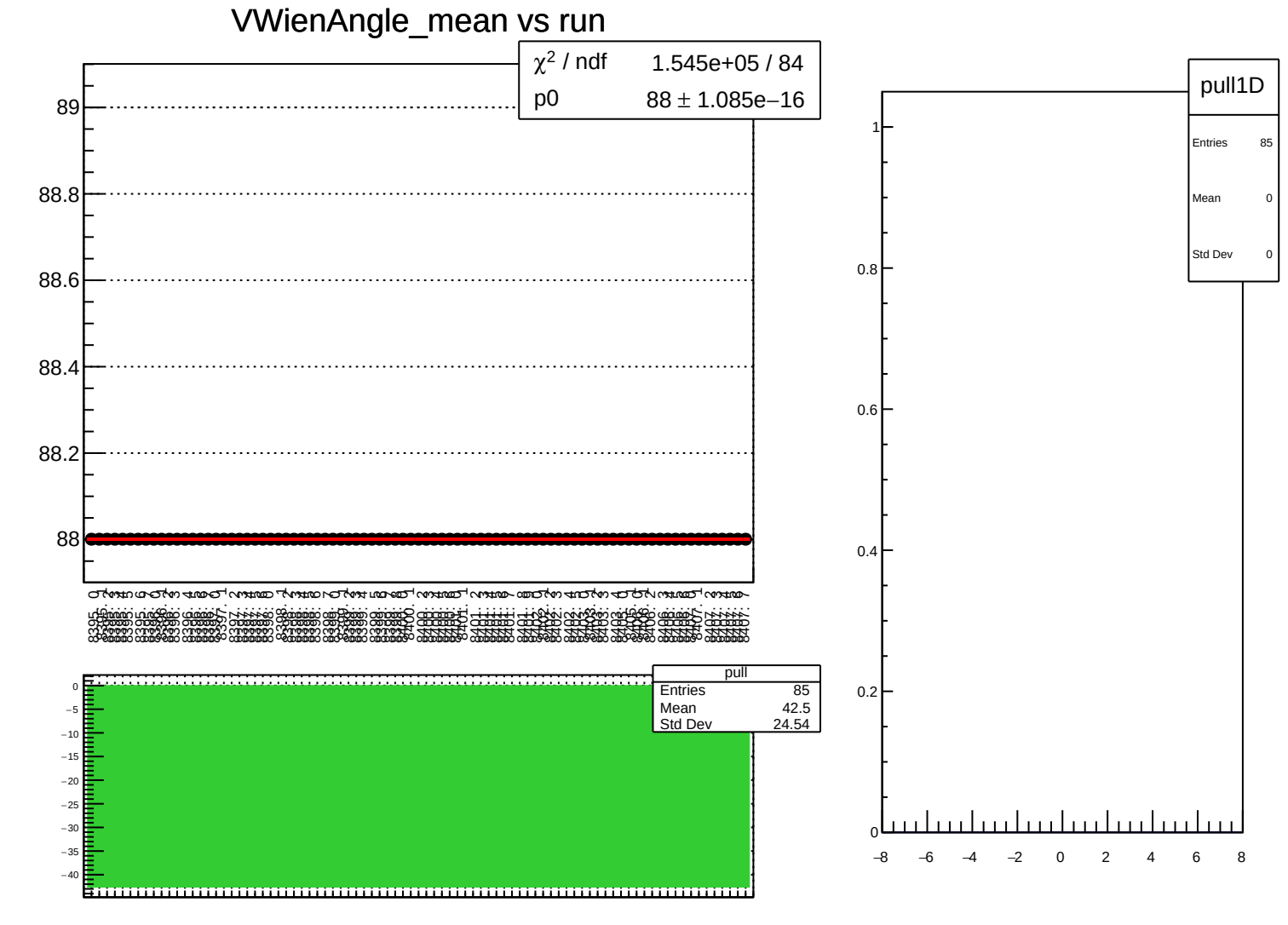

pull1D
Entries 85
Mean −0.03385
Std Dev 1.251

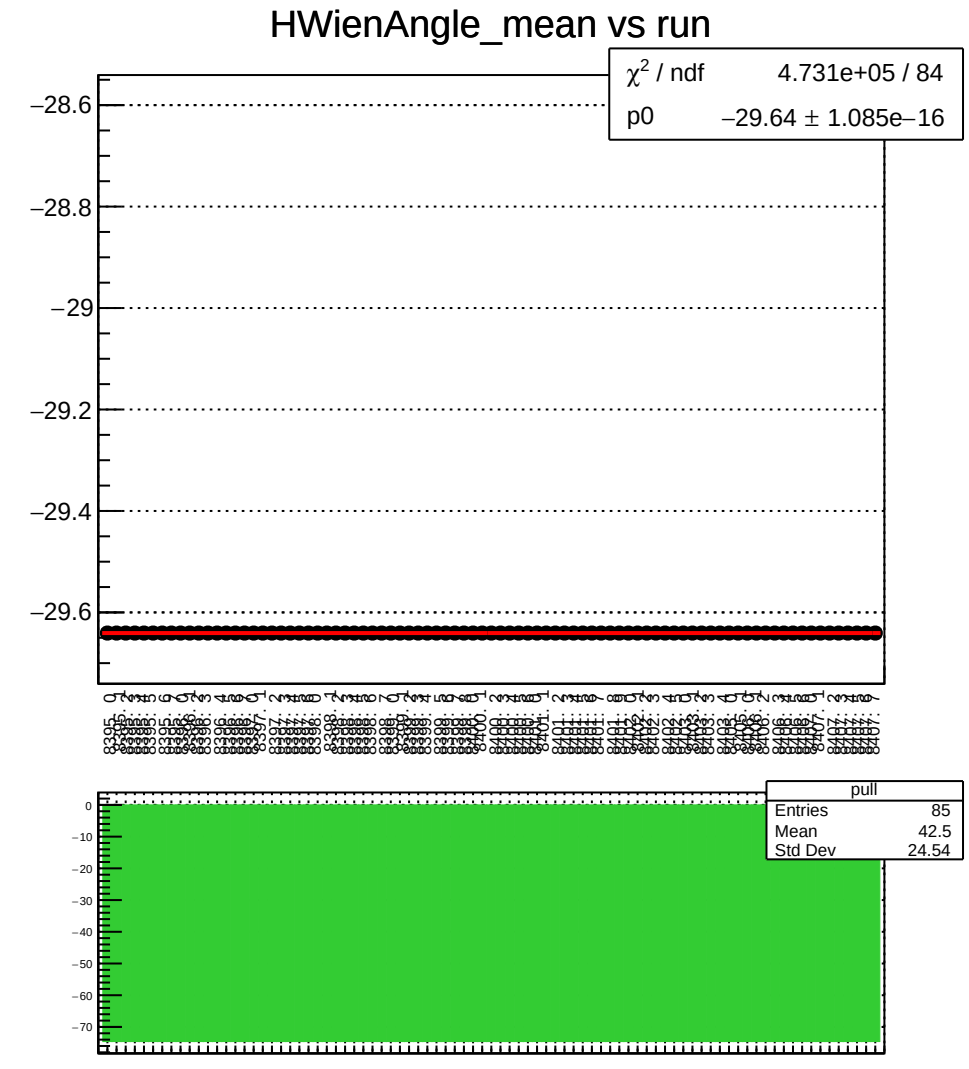

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 108.9 / 84
p0 1.735 ± 0.3489
pull
Entries 85
Mean −680.5
Std Dev 743

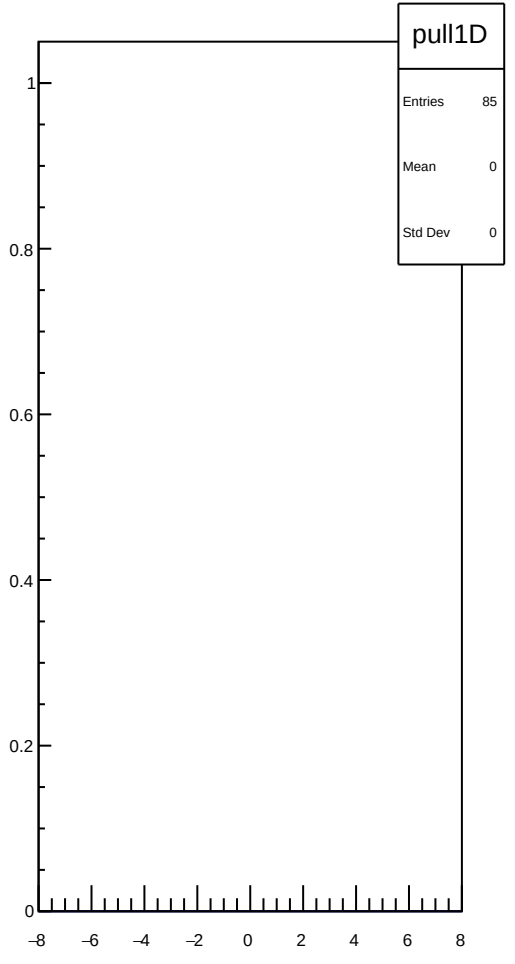

pull1D
Entries 85
Mean −0.005694
Std Dev 1.132

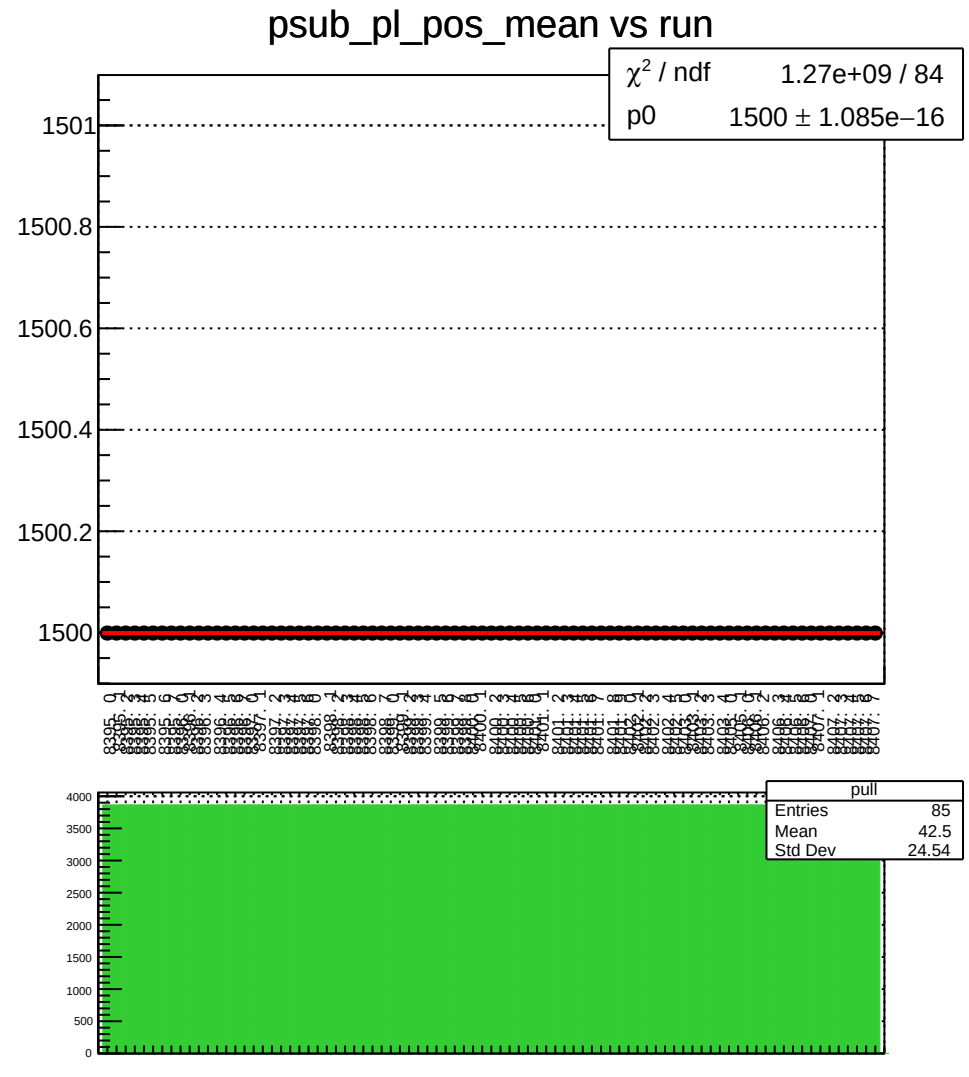

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 111.6 / 84
p0 −0.8338 ± 0.02154
pull
Entries 85
Mean 112.8
Std Dev 58.64

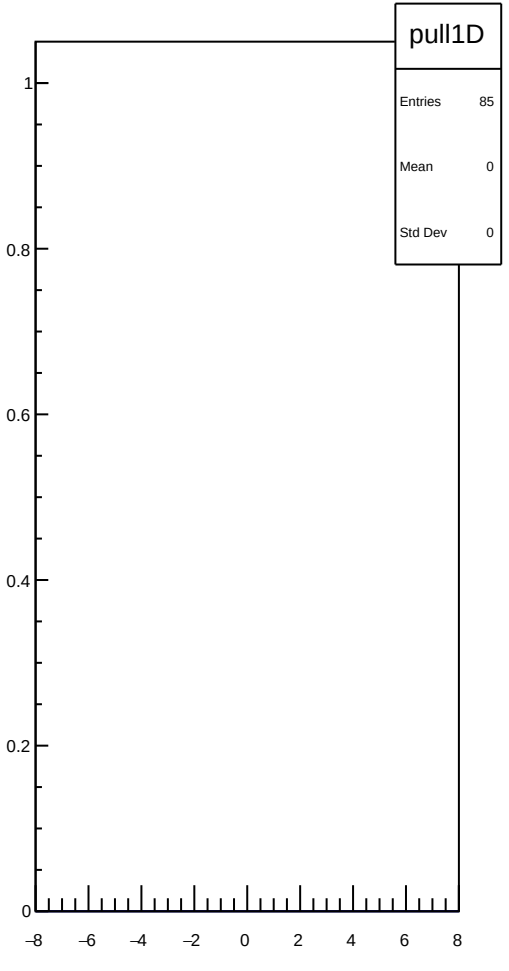

pull1D
Entries 85
Mean −0.02871
Std Dev 1.145

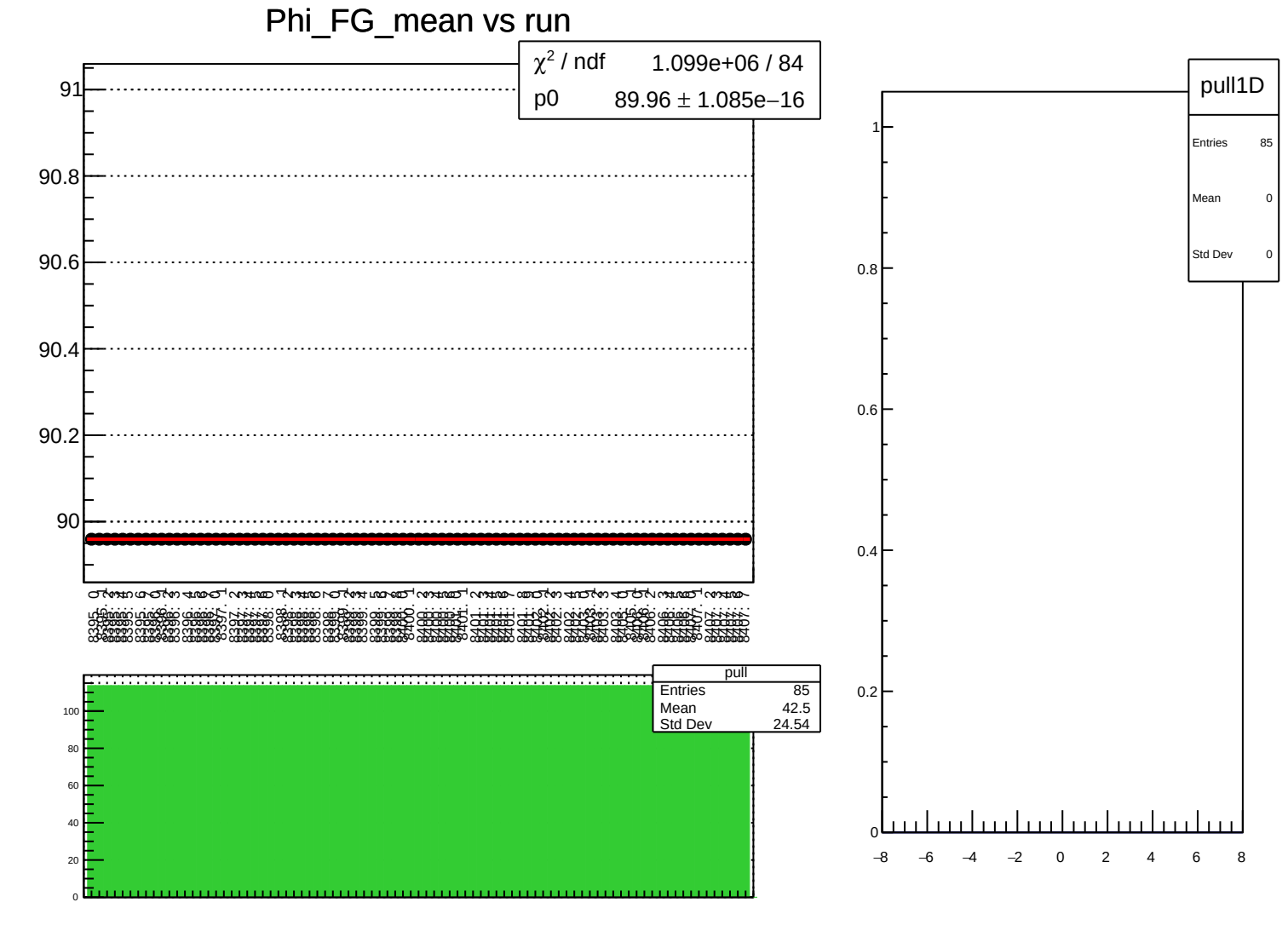

VWienAngle_mean vs run
χ² / ndf 1.545e+05 / 84
p0 88 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−5
−10
−15
−20
−25
−30
−35
−40
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

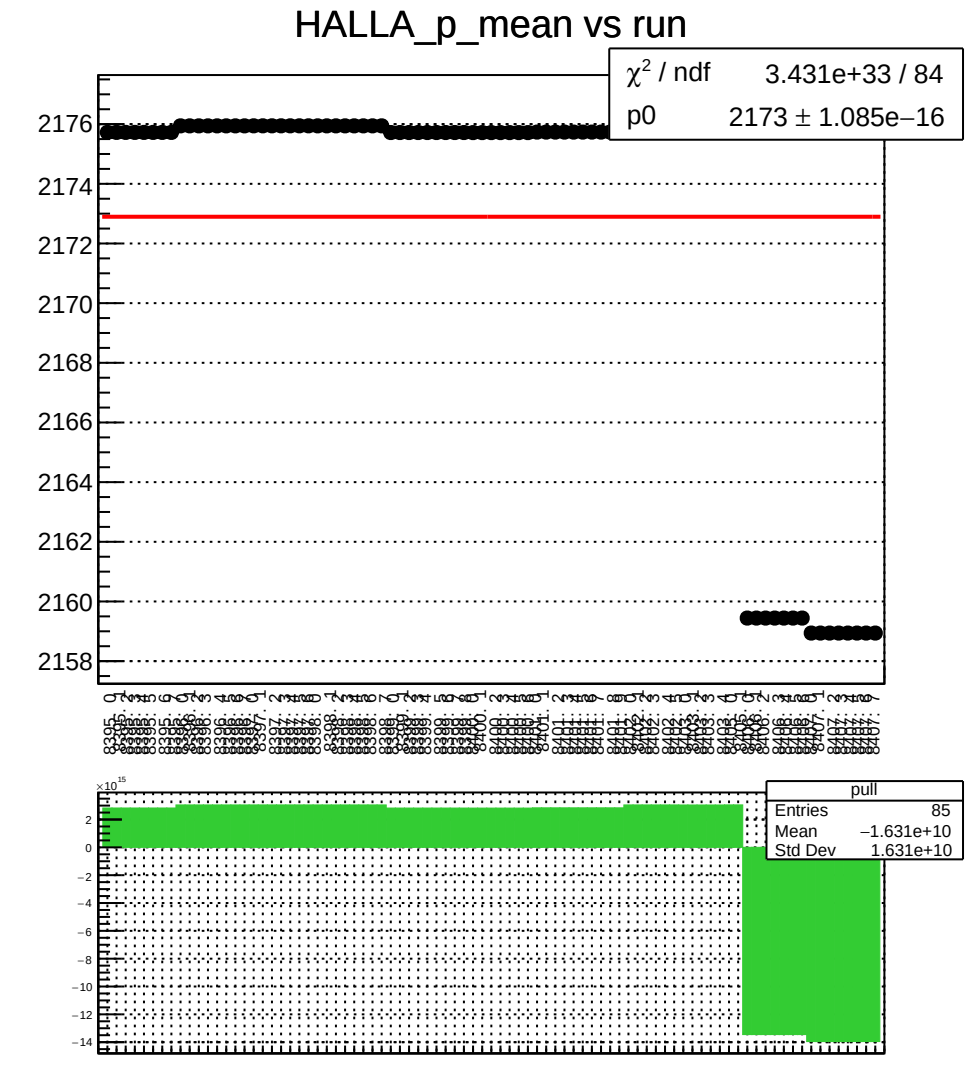

HWienAngle_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70

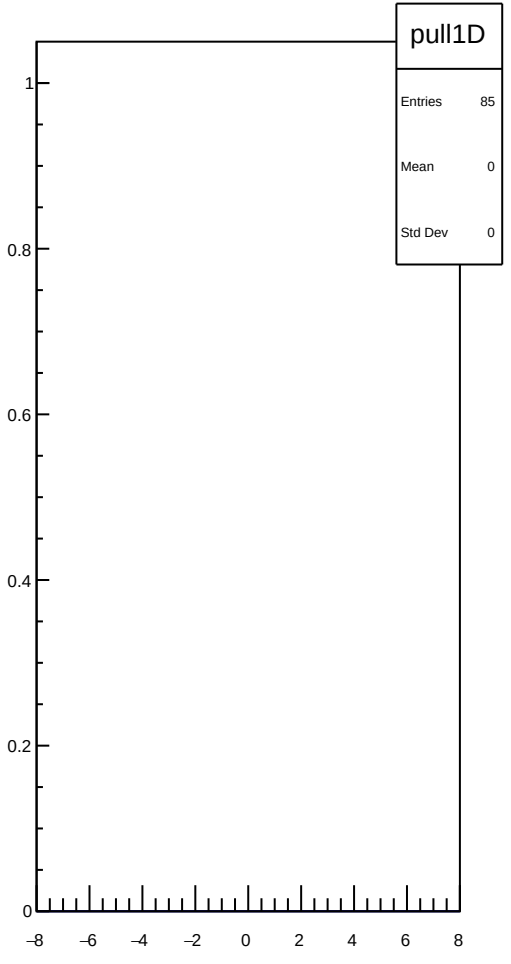

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

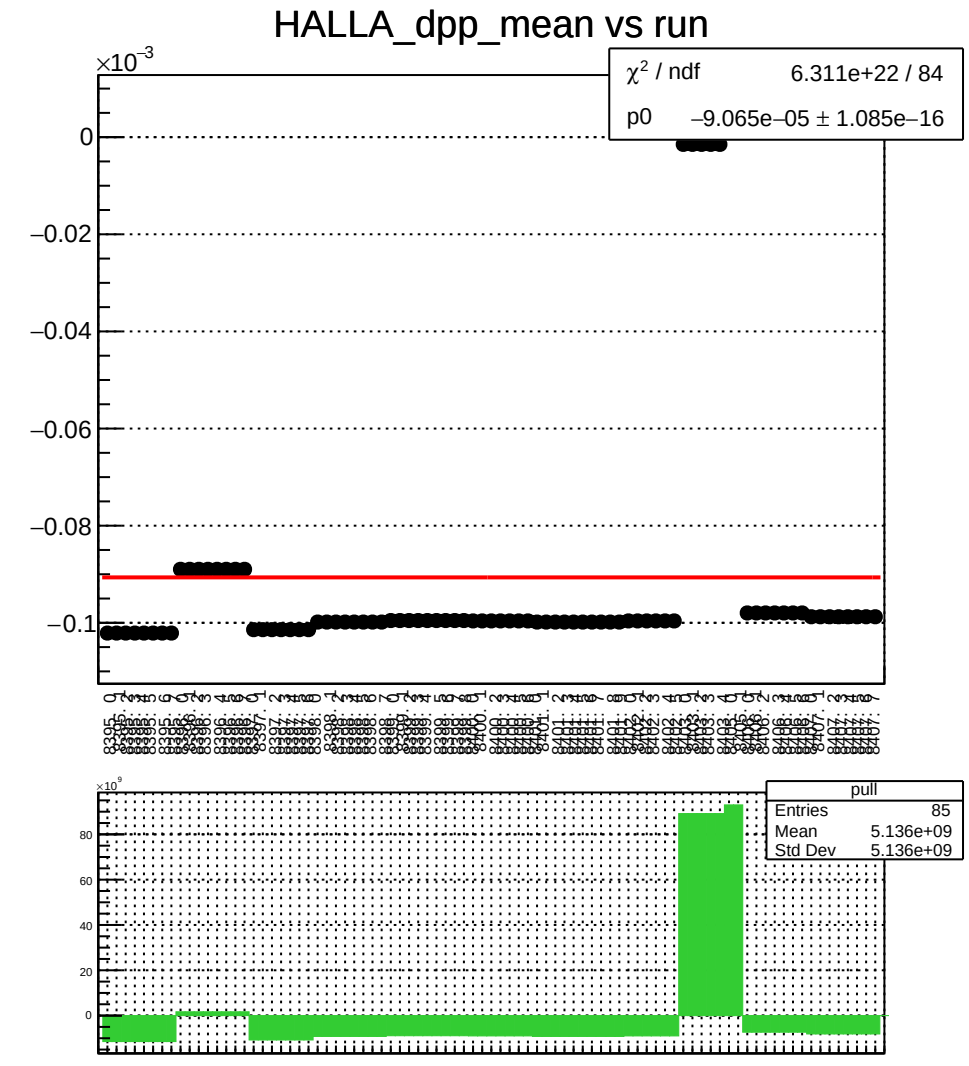

psub_pl_pos_mean vs run
χ² / ndf 1.27e+09 / 84
p0 1500 ± 1.085e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 85
Mean 42.5
Std Dev 24.54
4000
3500
3000
2500
2000
1500
1000
500
0

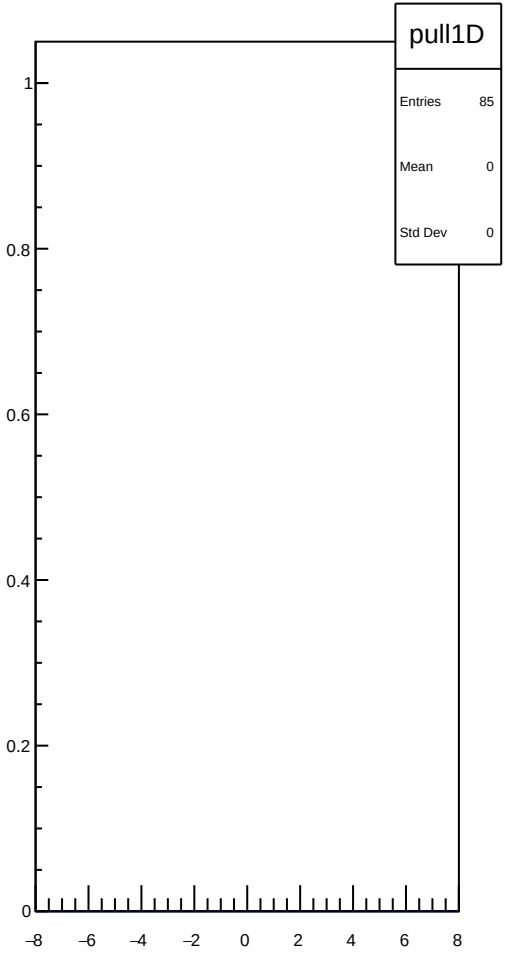

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

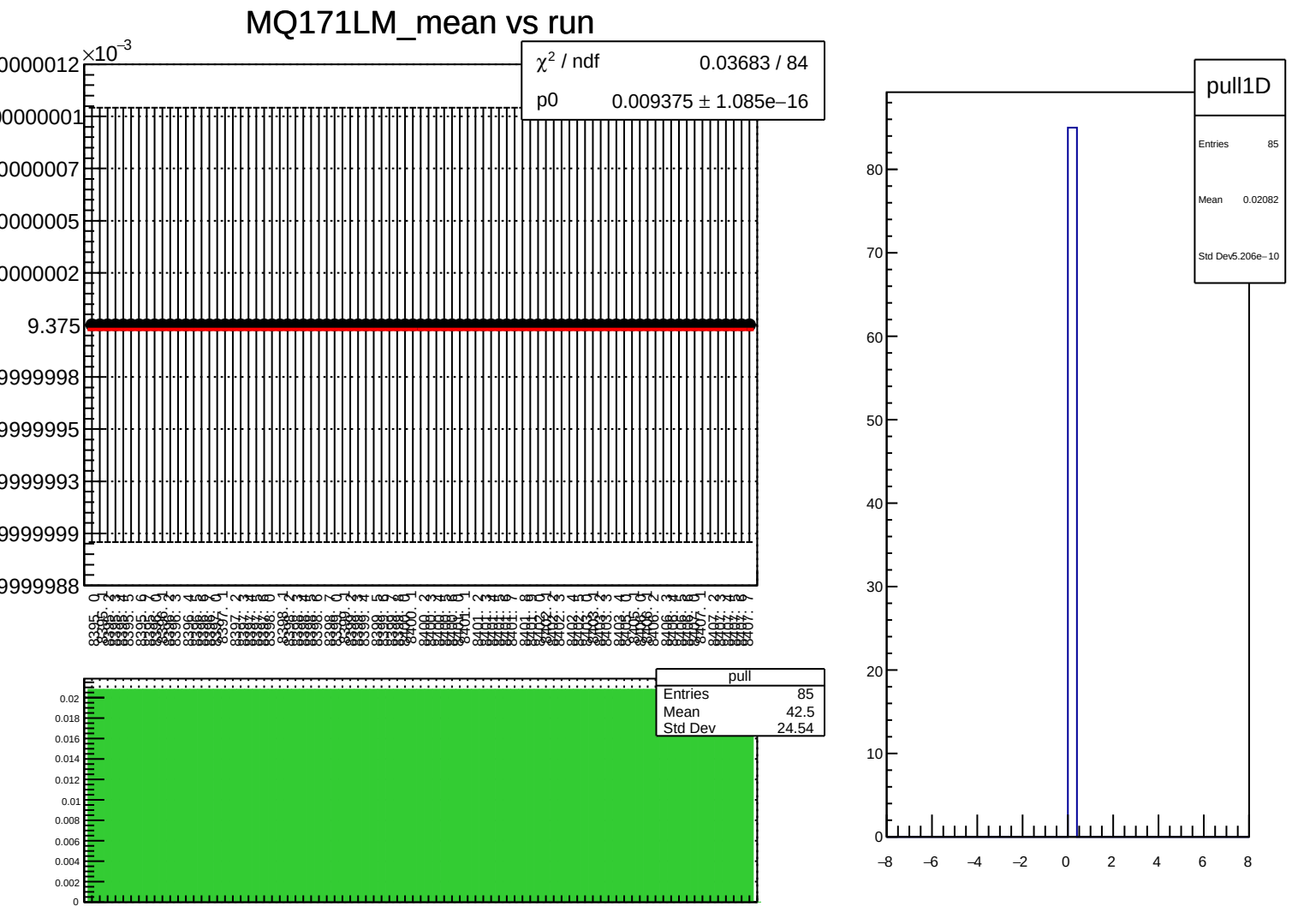

Phi_FG_mean vs run
χ² / ndf 1.099e+06 / 84
p0 89.96 ± 1.085e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 85
Mean 42.5
Std Dev 24.54
100
80
60
40
20
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

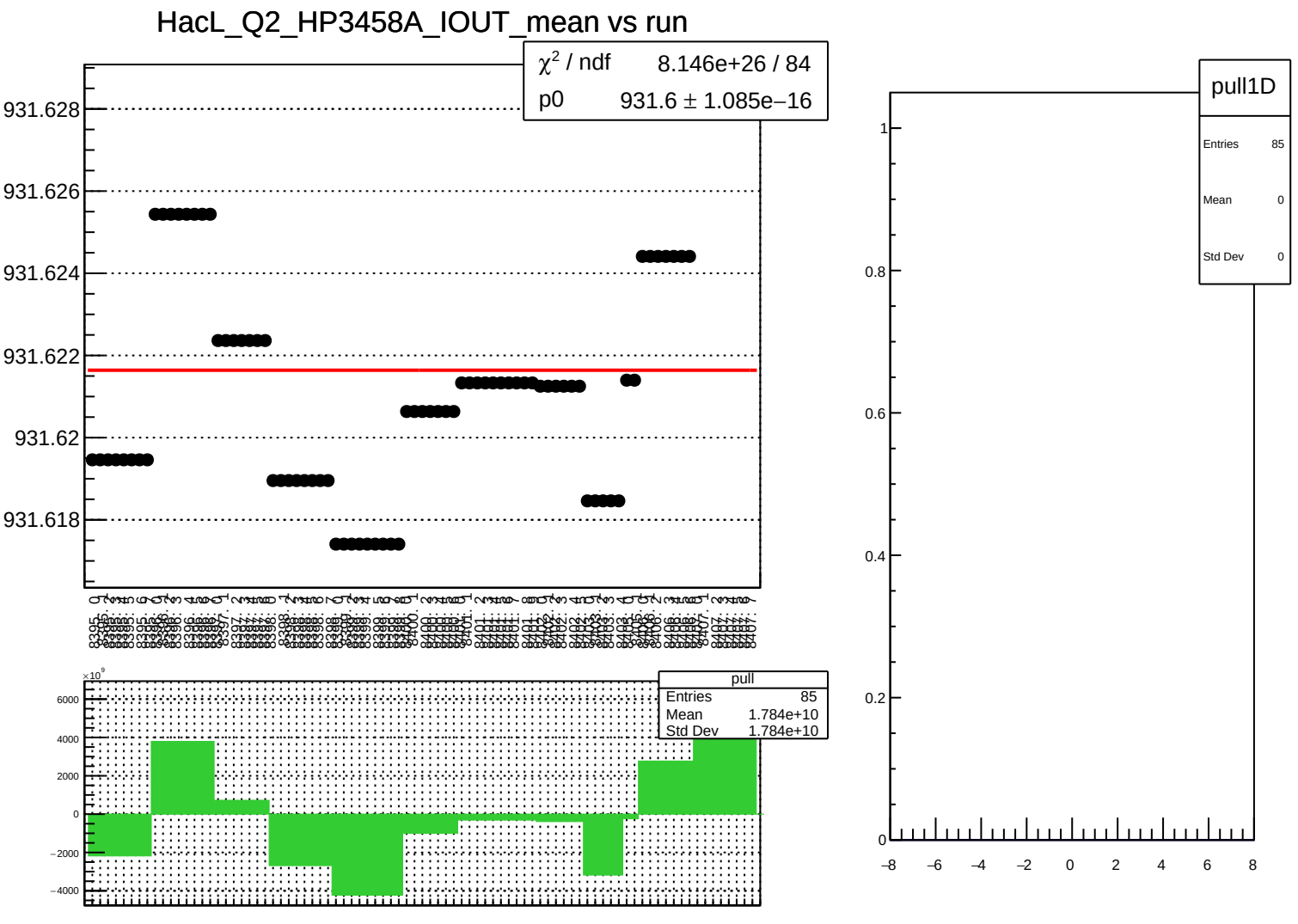

HALLA_p_mean vs run
χ² / ndf 3.431e+33 / 84
p0 2173 ± 1.085e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 85
Mean −1.631e+10
Std Dev 1.631e+10
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14

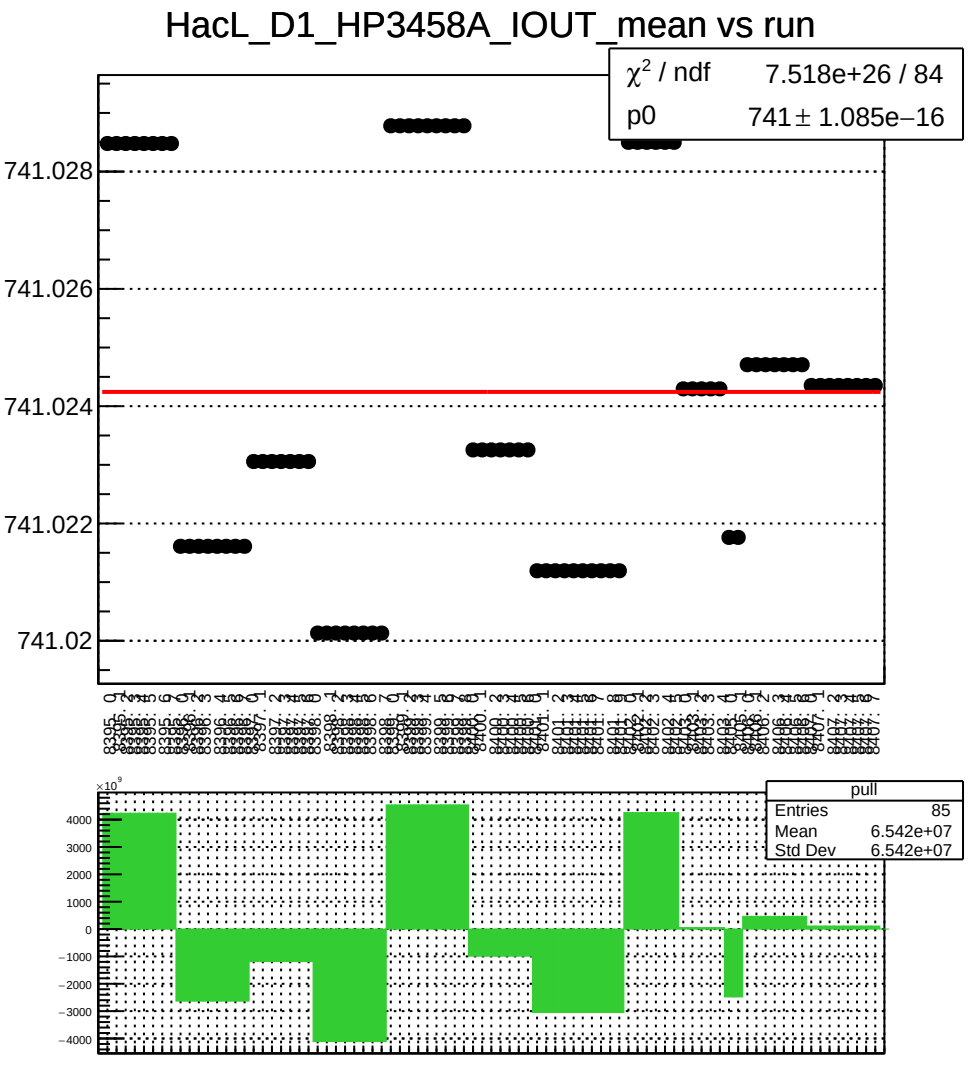

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

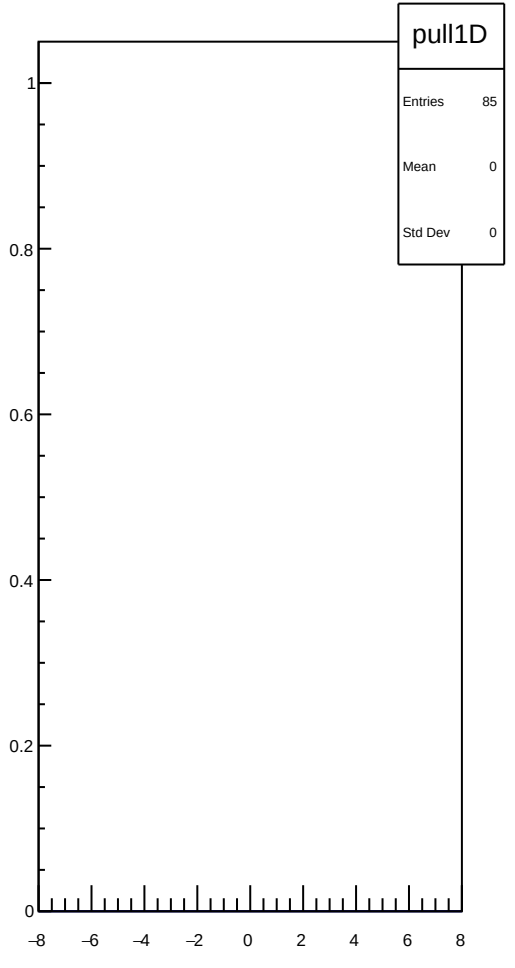

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 6.311e+22 / 84
p0 −9.065e−05 ± 1.085e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
×10⁹
pull
Entries 85
Mean 5.136e+09
Std Dev 5.136e+09
80
60
40
20
0

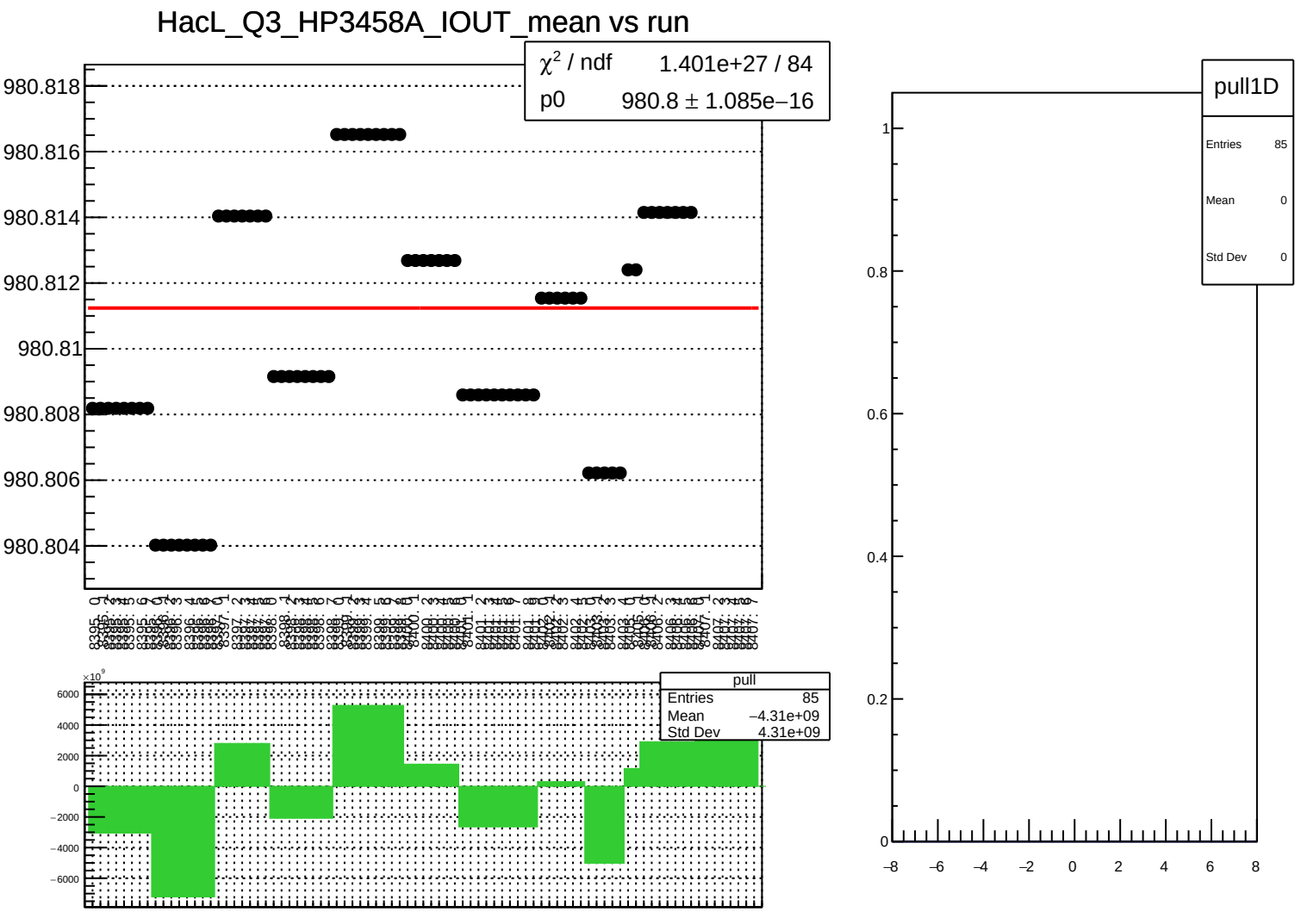

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

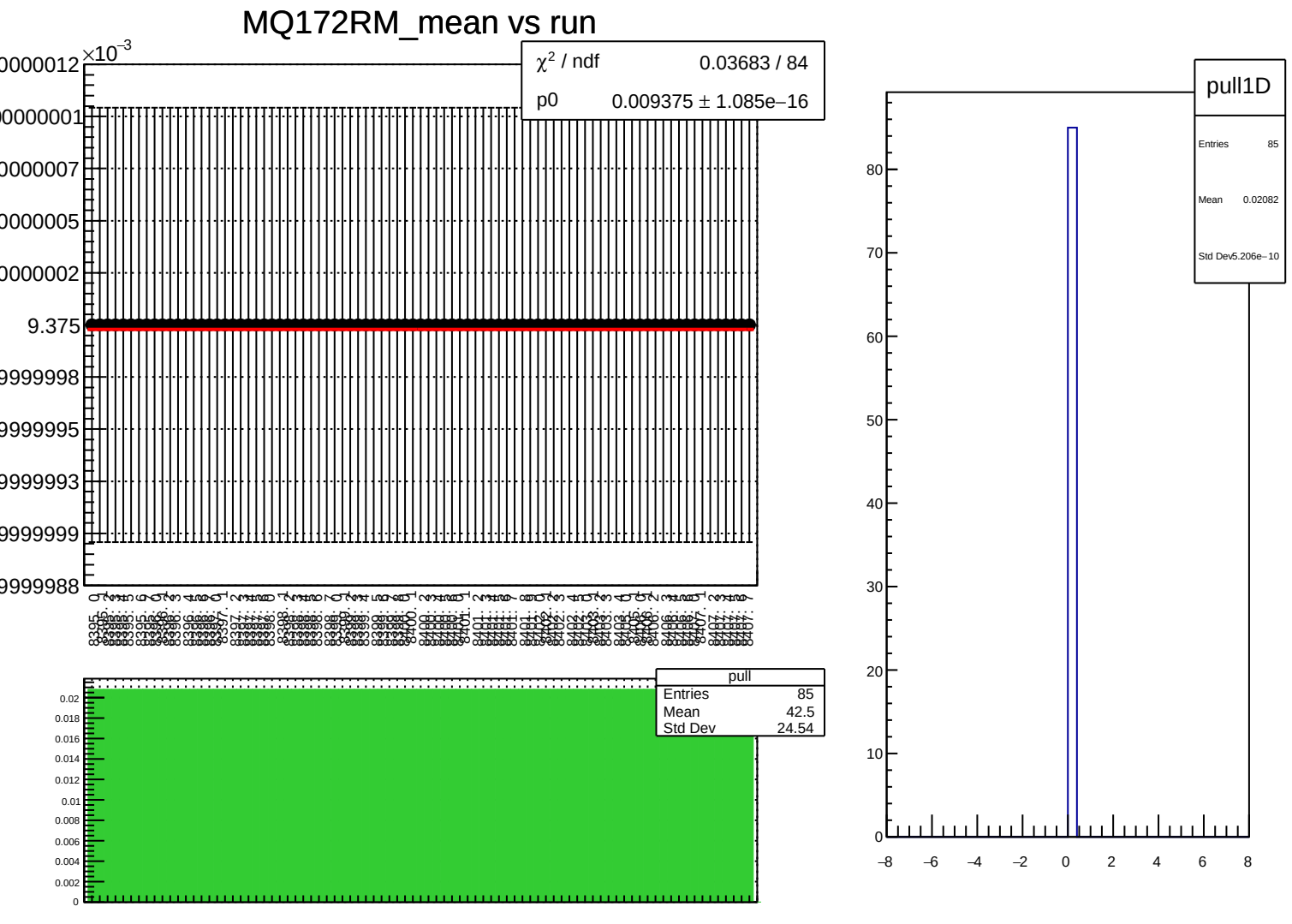

MQ171LM_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54
pull1D
Entries 85
Mean 0.02082
Std Dev5.206e−10

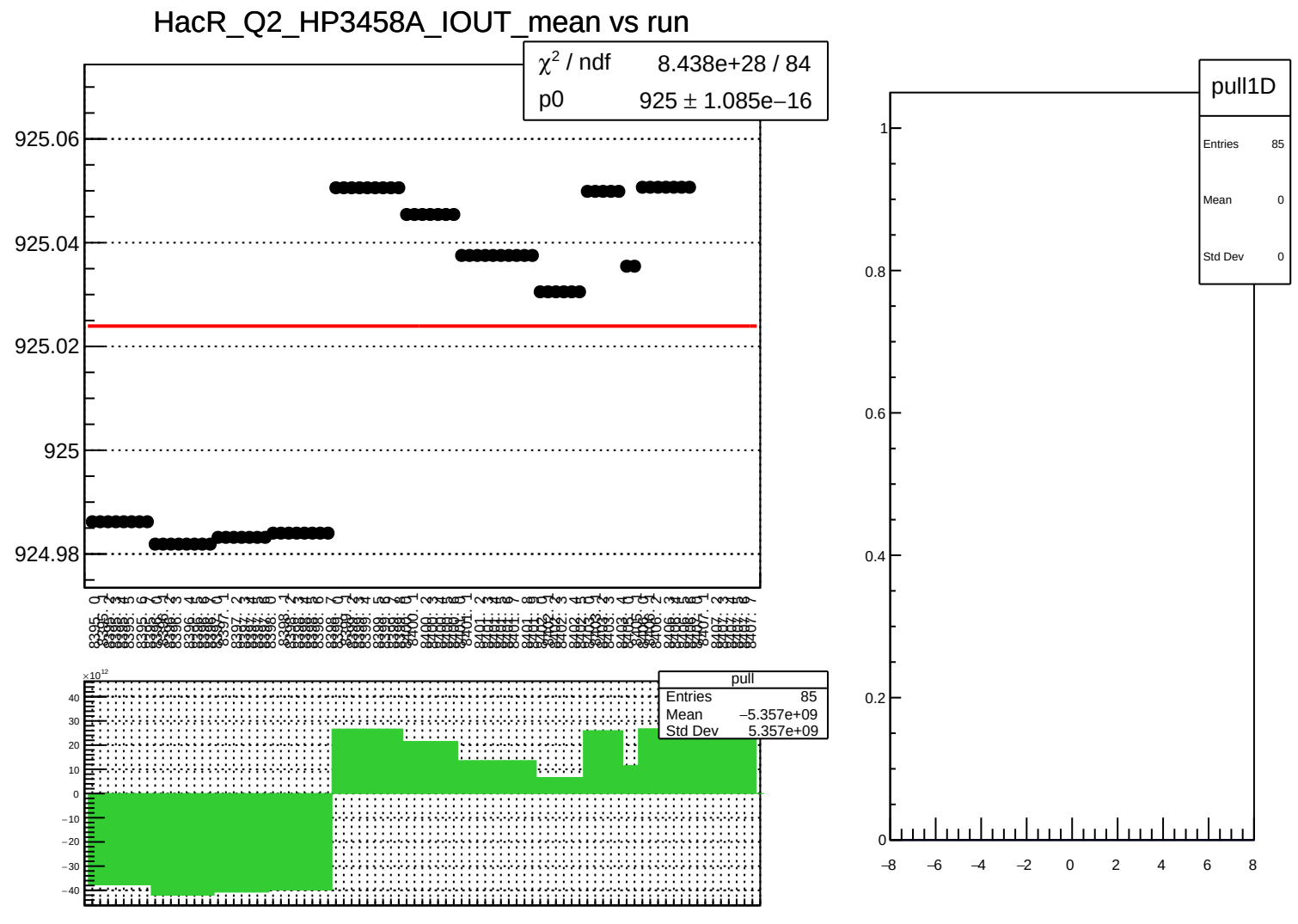

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 8.146e+26 / 84
p0 931.6 ± 1.085e−16
931.628
931.626
931.624
931.622
931.62
931.618
pull
Entries 85
Mean 1.784e+10
Std Dev 1.784e+10
×10⁹
6000
4000
2000
0
−2000
−4000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

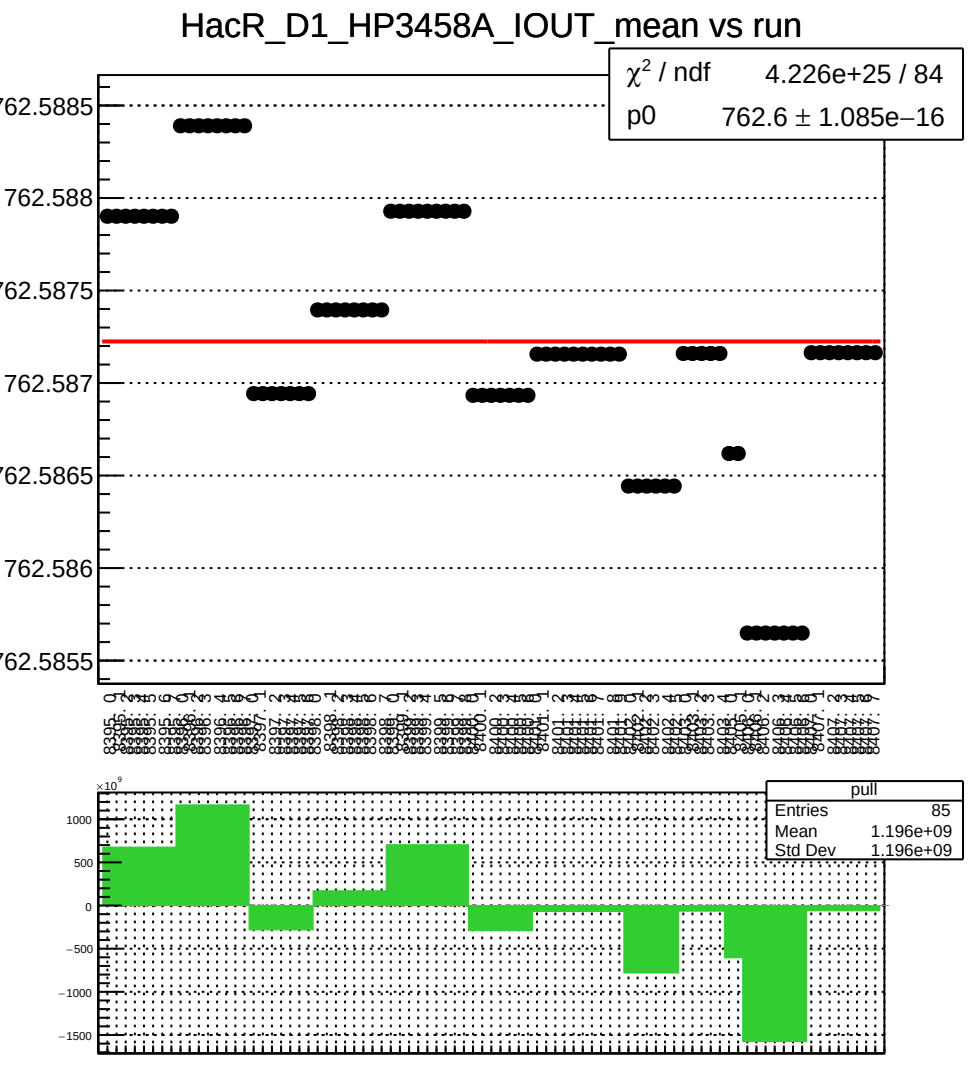

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 7.518e+26 / 84
p0 741 ± 1.085e−16
741.028
741.026
741.024
741.022
741.02
×10⁹
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 85
Mean 6.542e+07
Std Dev 6.542e+07

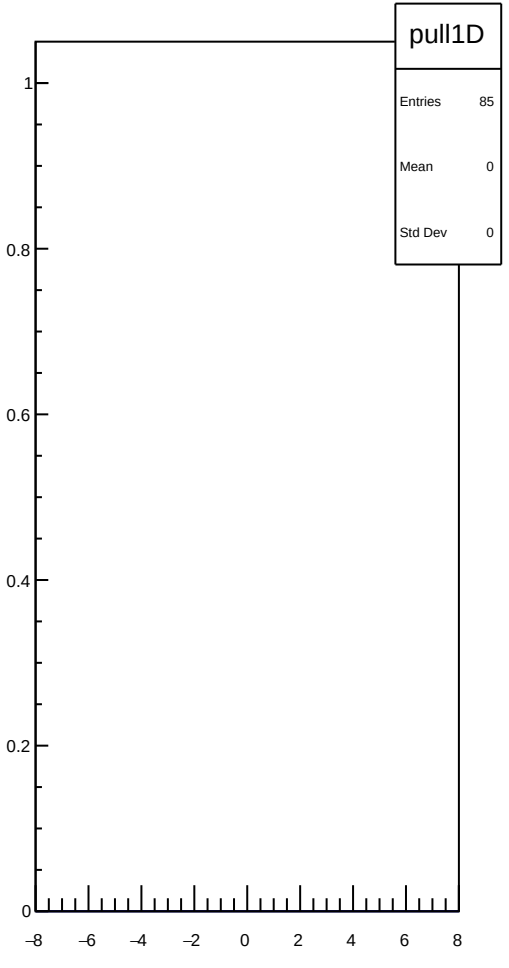

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

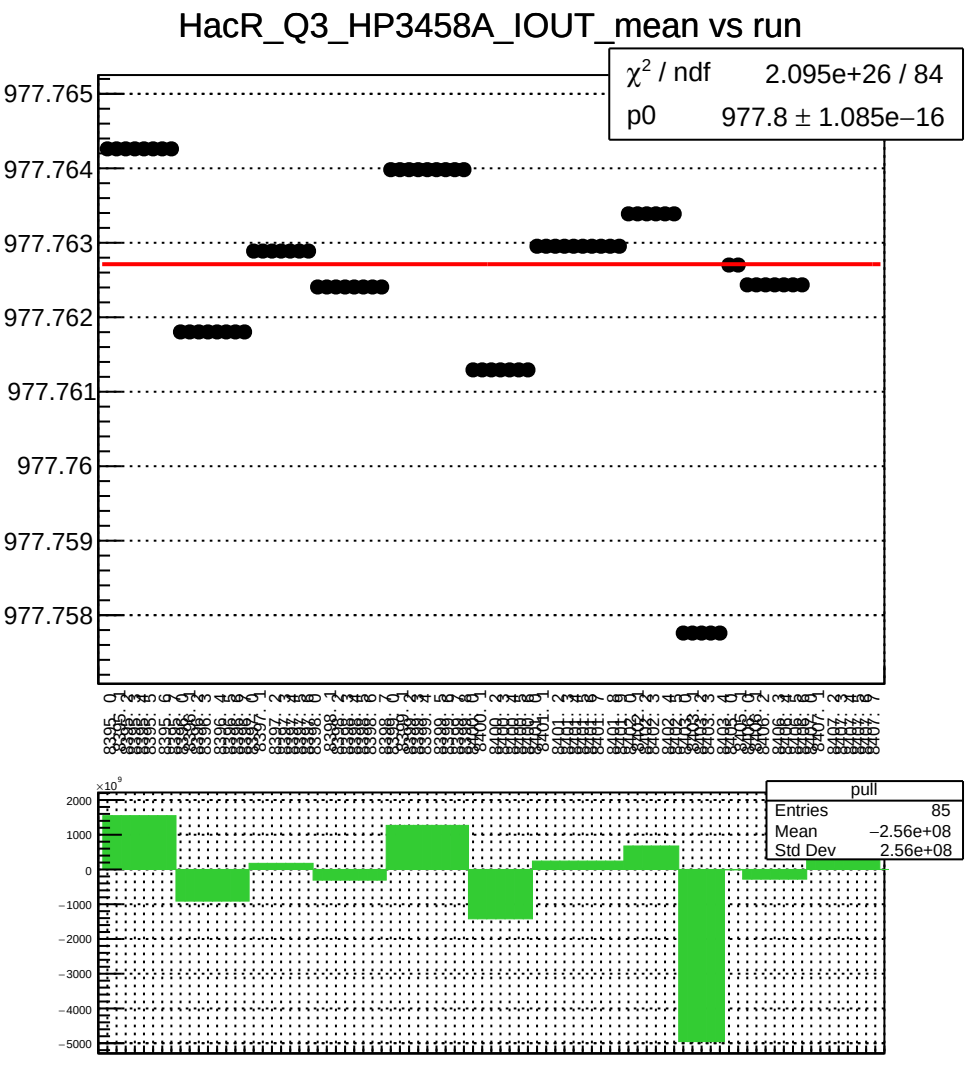

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.401e+27 / 84
p0 980.8 ± 1.085e−16
980.818
980.816
980.814
980.812
980.81
980.808
980.806
980.804
×10⁹
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −4.31e+09
Std Dev 4.31e+09
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

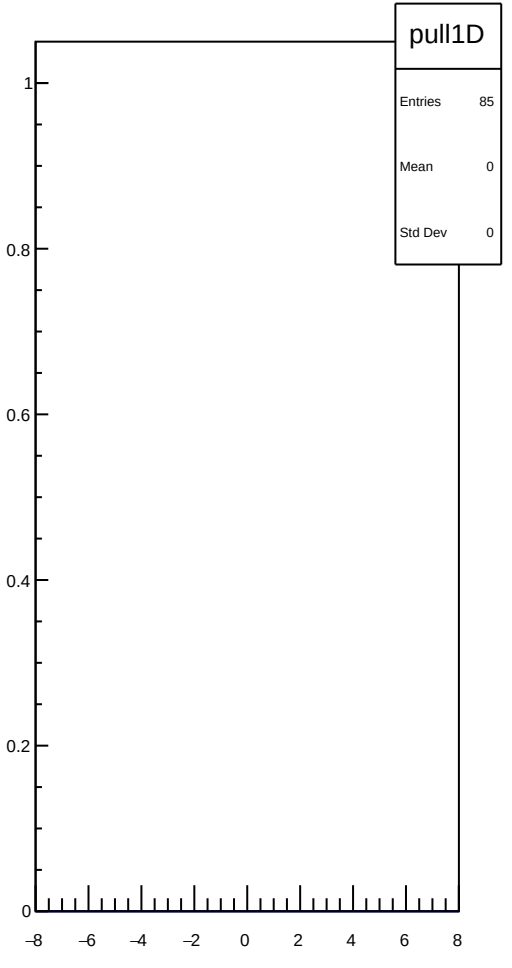

MQ172RM_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
9.375
pull
Entries 85
Mean 42.5
Std Dev 24.54
pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

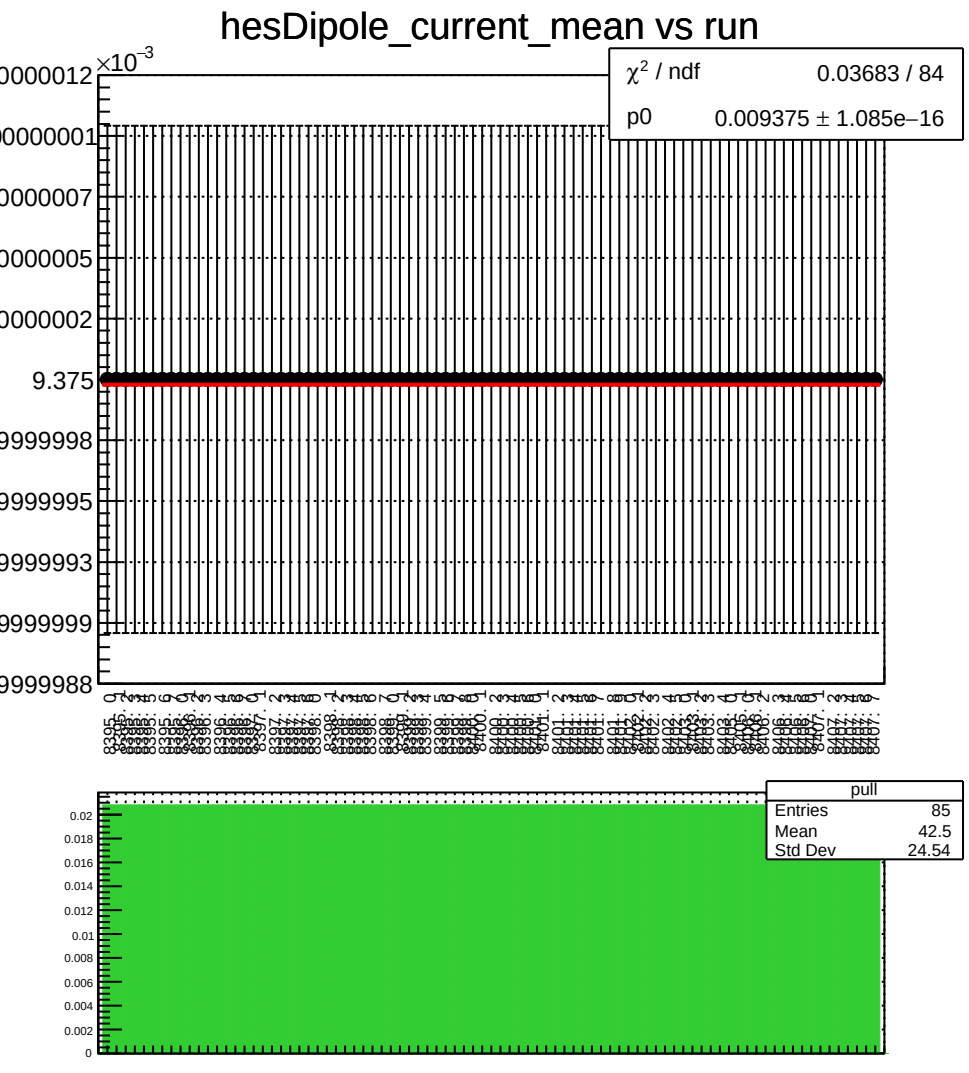

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 8.438e+28 / 84
p0 925 ± 1.085e−16
925.06
925.04
925.02
925
924.98
pull
Entries 85
Mean −5.357e+09
Std Dev 5.357e+09
×10¹²
40
30
20
10
0
−10
−20
−30
−40
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

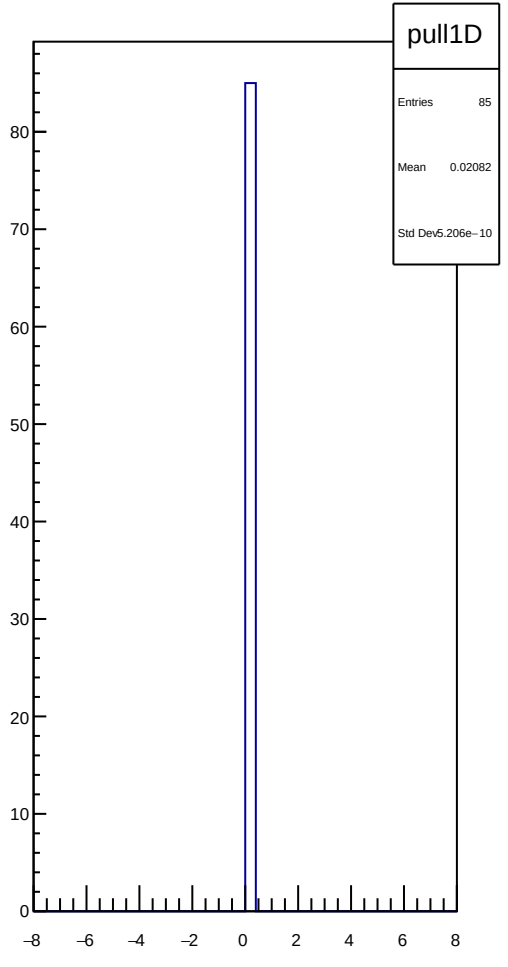

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 4.226e+25 / 84
p0 762.6 ± 1.085e−16
762.5885
762.588
762.5875
762.587
762.5865
762.586
762.5855
pull
Entries 85
Mean 1.196e+09
Std Dev 1.196e+09
×10⁹
1000
500
0
−500
−1000
−1500

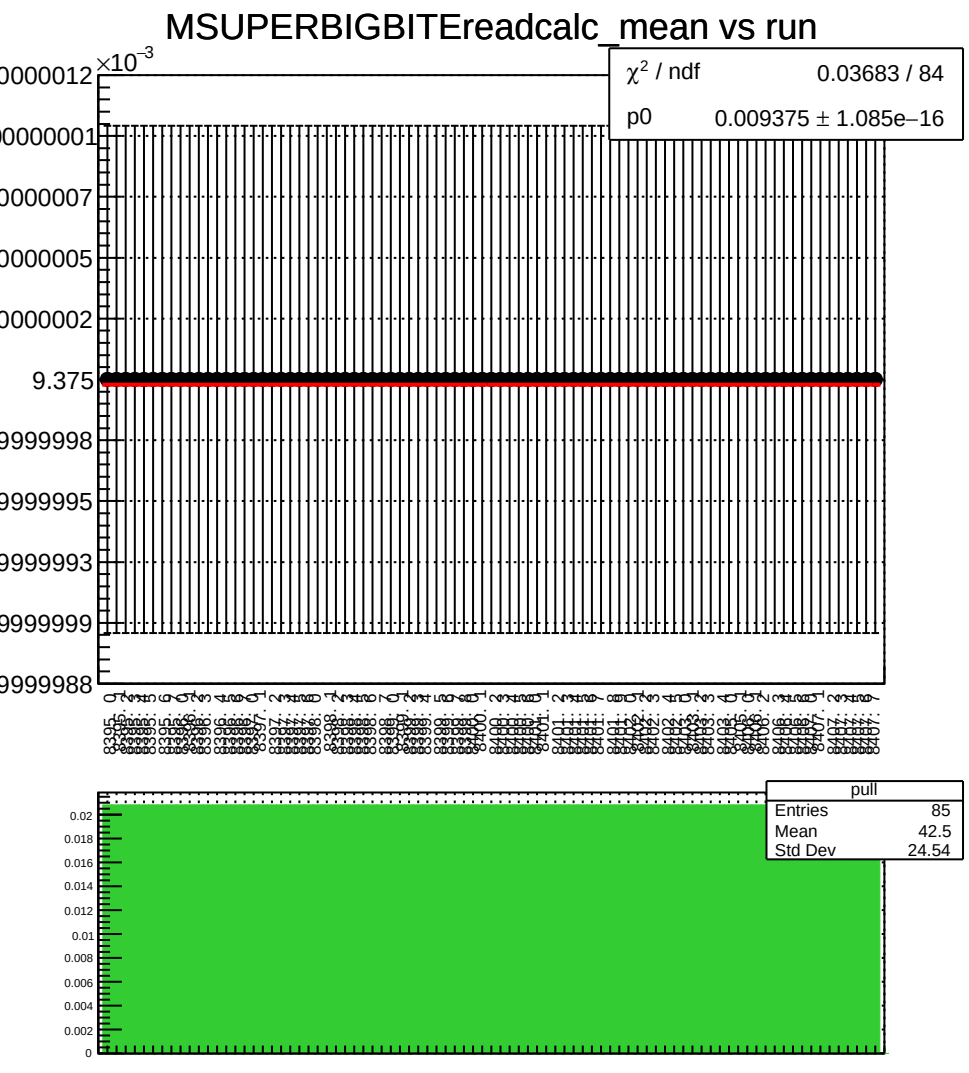

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

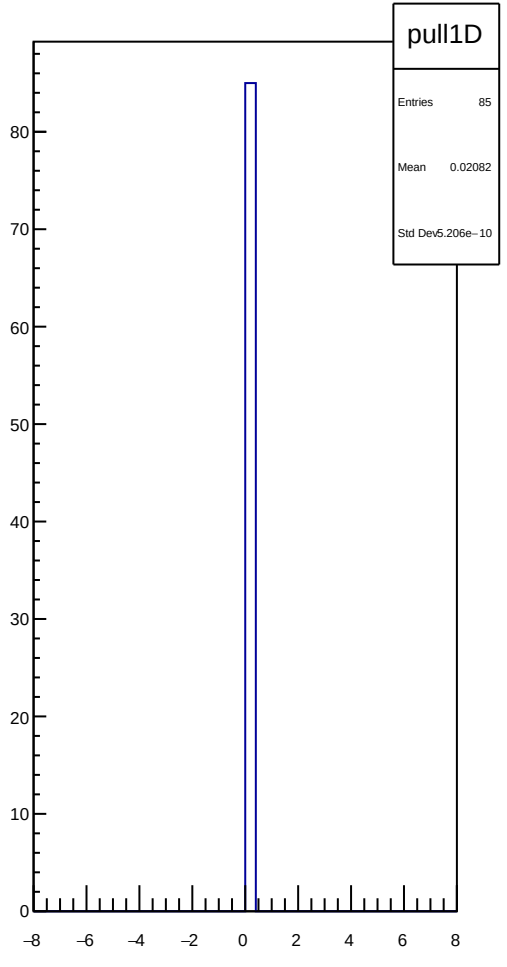

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.095e+26 / 84
p0 977.8 ± 1.085e−16
977.765
977.764
977.763
977.762
977.761
977.76
977.759
977.758
×10⁹
2000
1000
0
−1000
−2000
−3000
−4000
−5000
pull
Entries 85
Mean −2.56e+08
Std Dev 2.56e+08

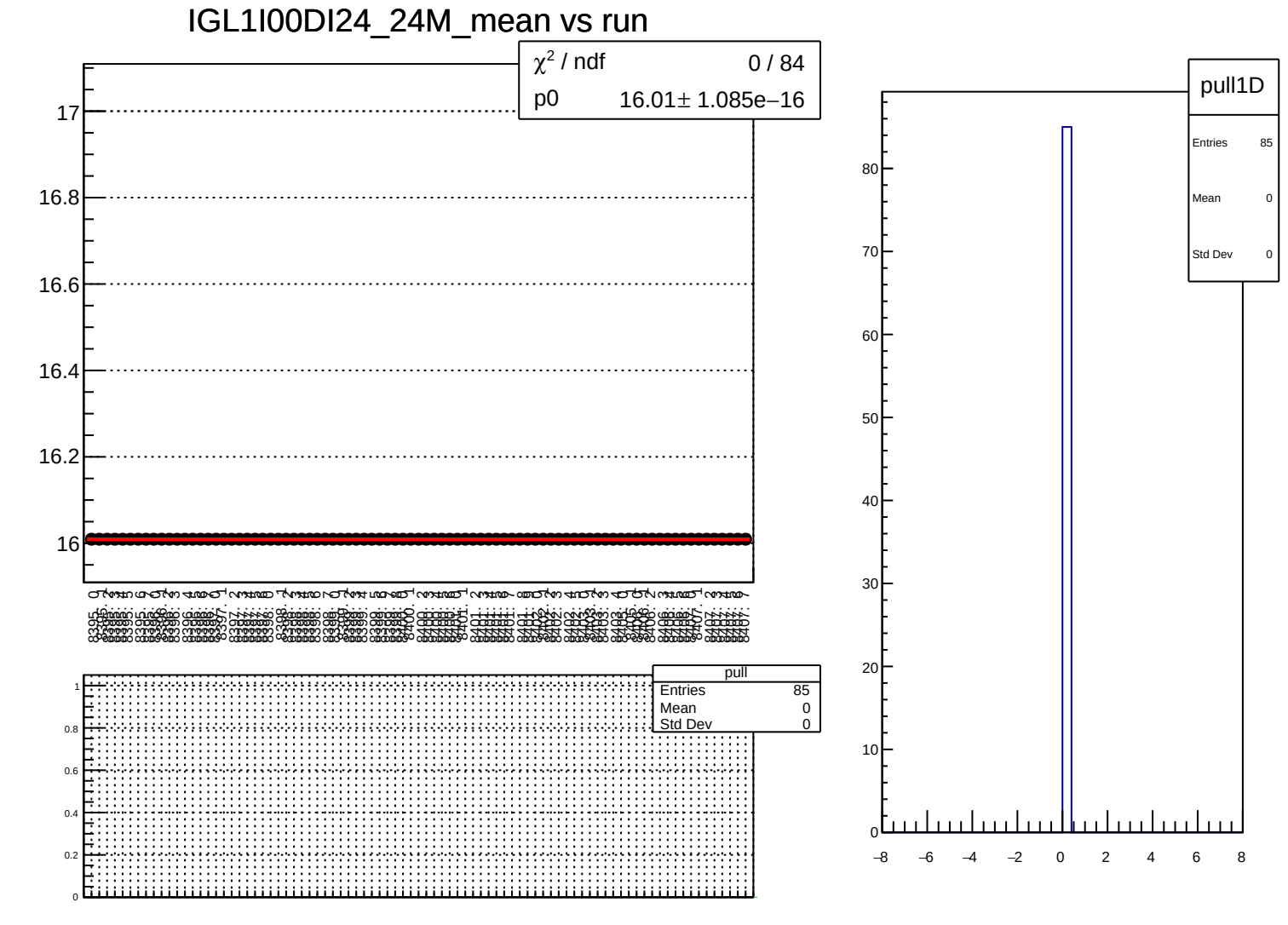

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

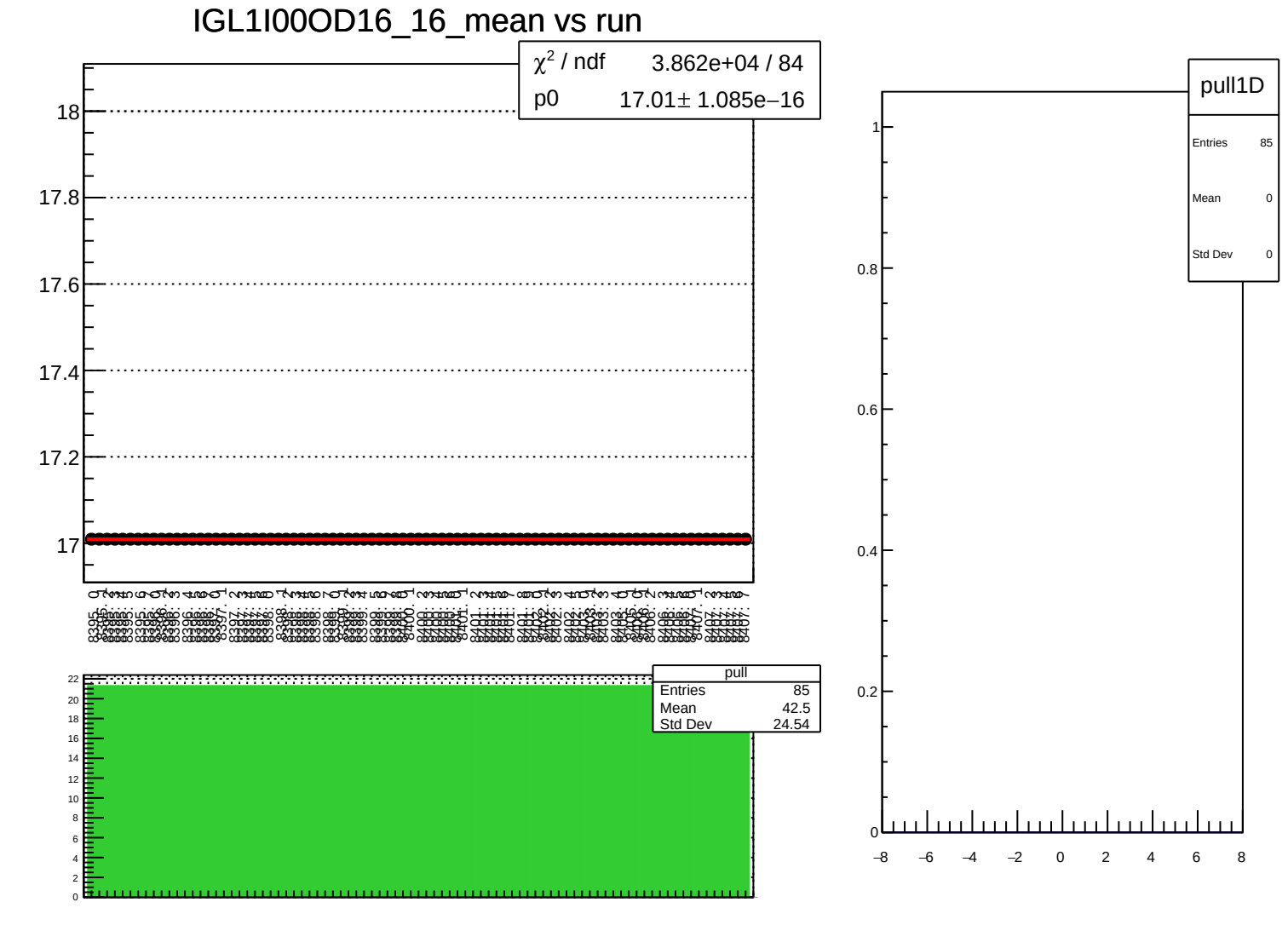

hesDipole_current_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54

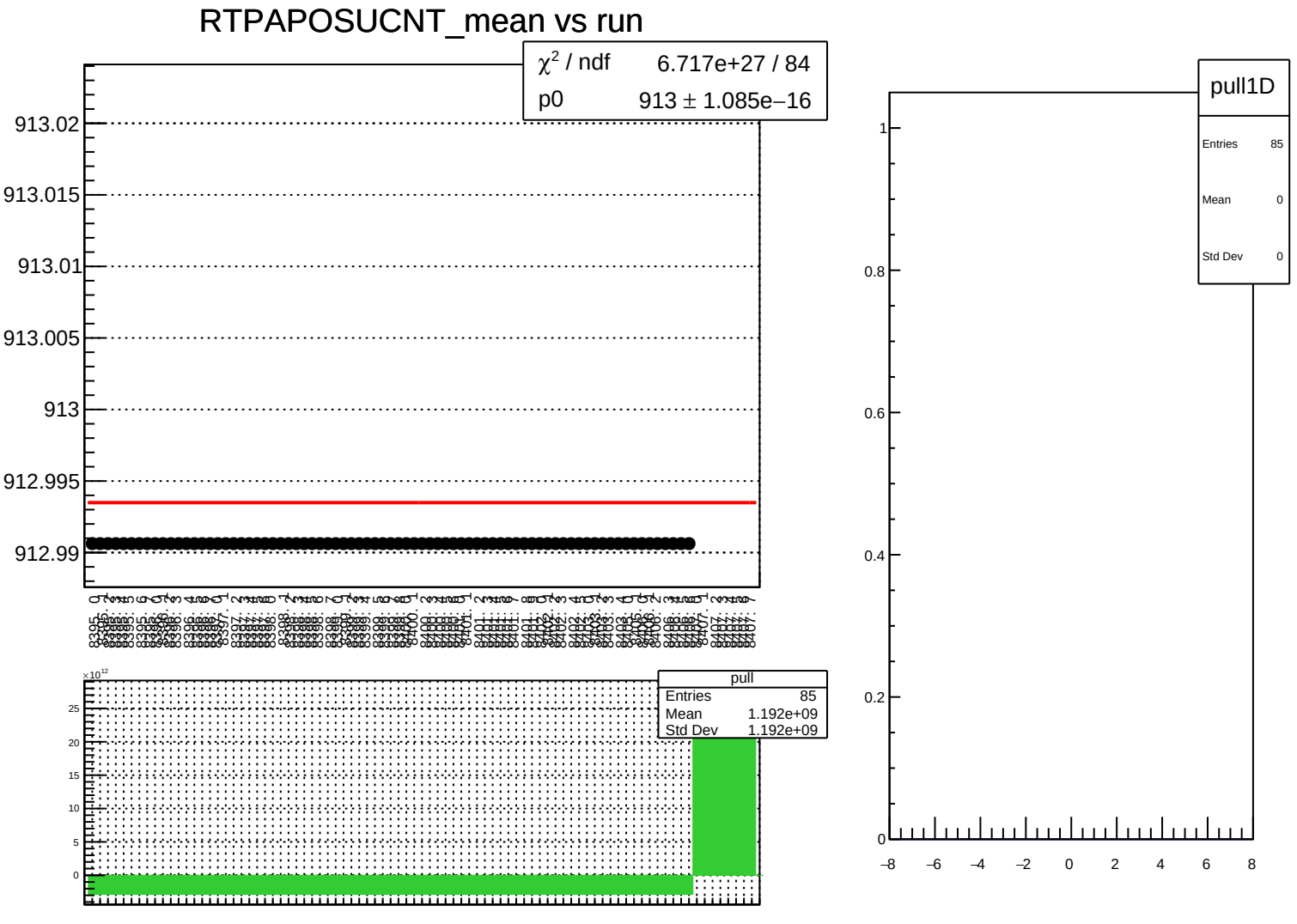

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

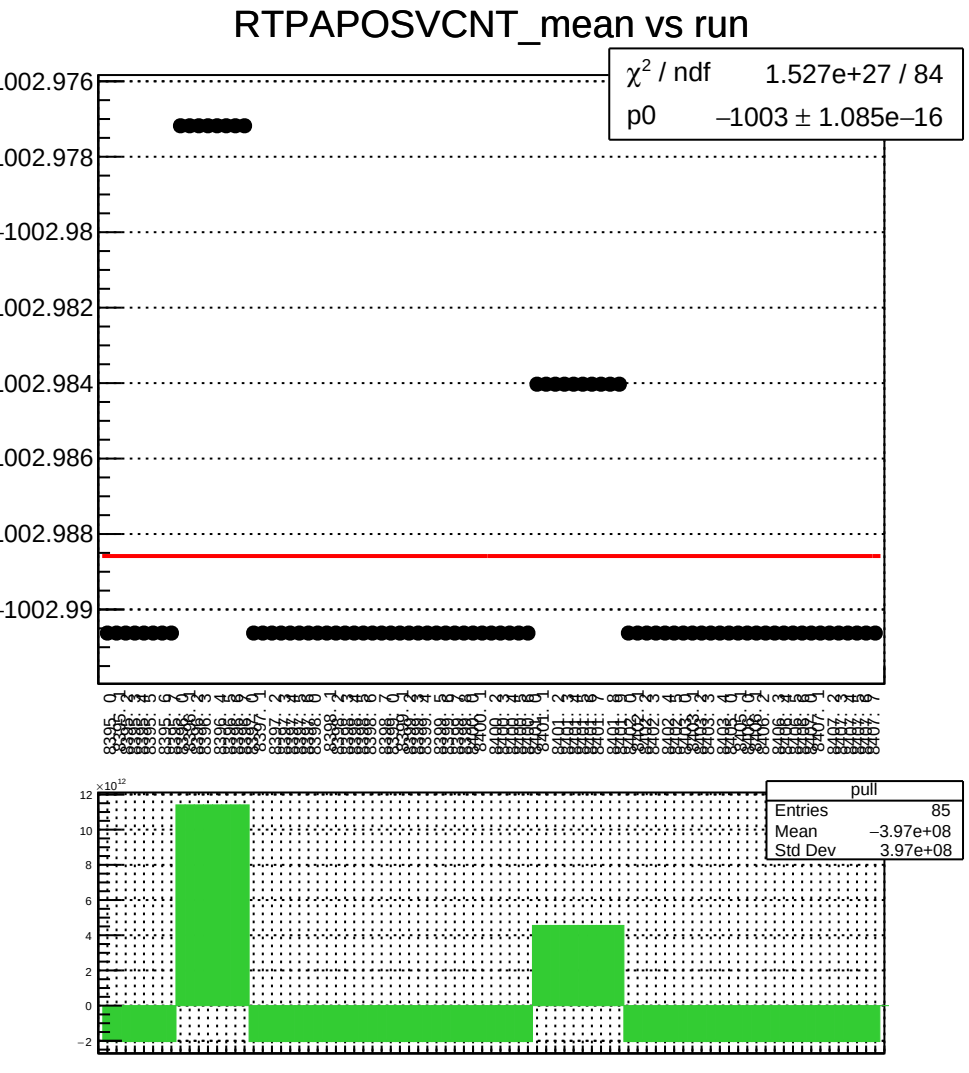

MSUPERBIGBITEreadcalc_mean vs run
×10⁻³
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
9.375
pull
Entries 85
Mean 42.5
Std Dev 24.54

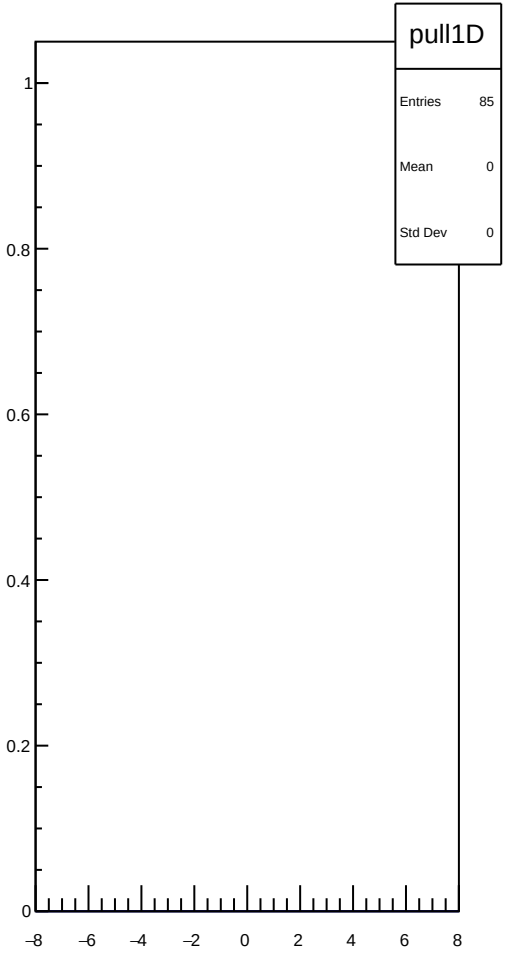

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

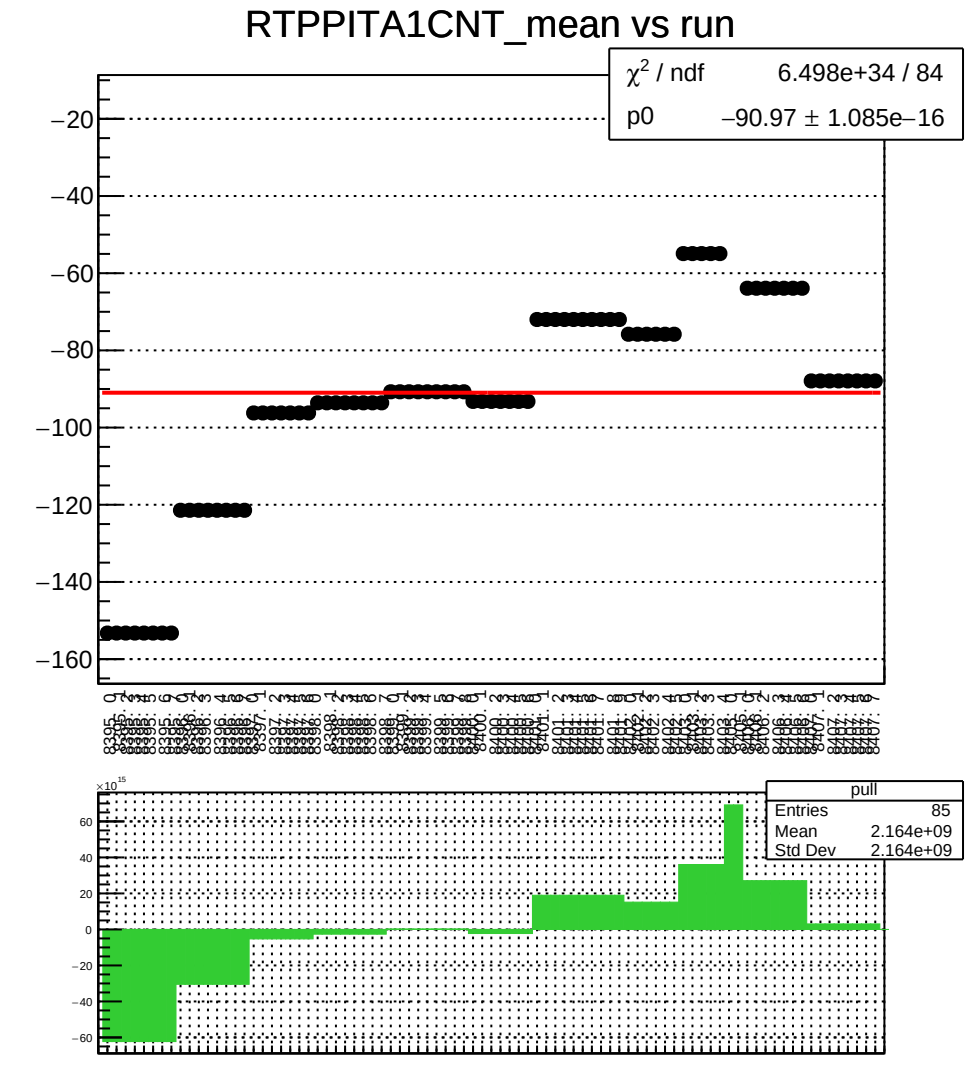

IGL1I00DI24_24M_mean vs run
χ² / ndf 0 / 84
p0 16.01± 1.085e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 85
Mean 0
Std Dev 0
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

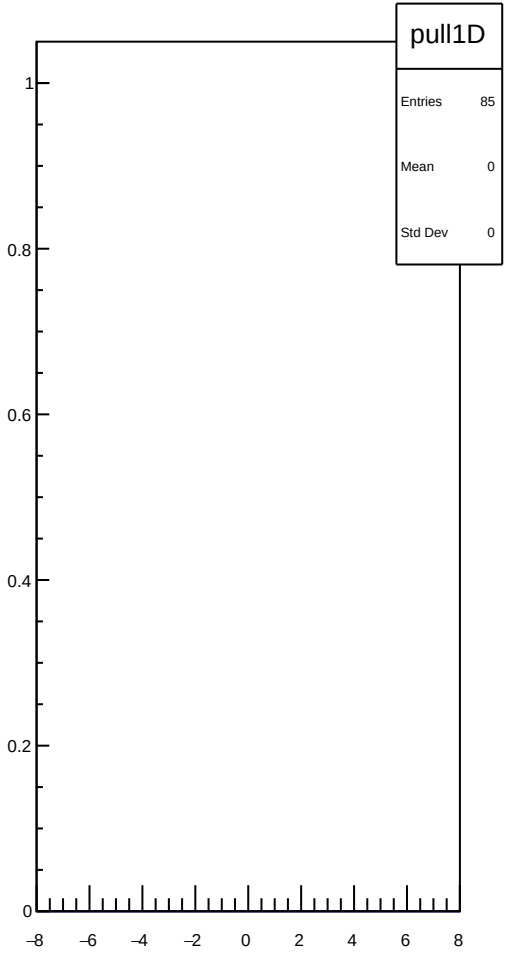

IGL1I00OD16_16_mean vs run
χ² / ndf 3.862e+04 / 84
p0 17.01± 1.085e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 85
Mean 42.5
Std Dev 24.54
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

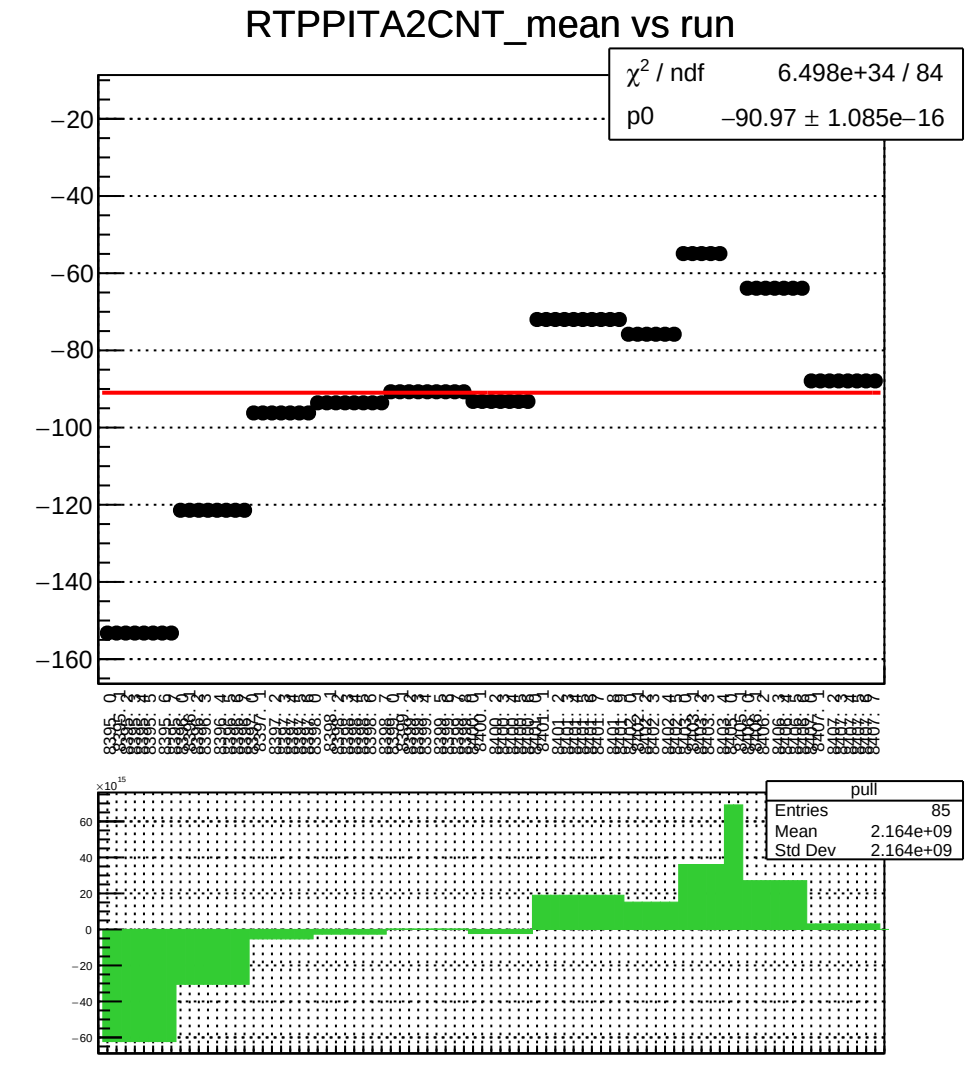

RTPAPOSUCNT_mean vs run
χ² / ndf 6.717e+27 / 84
p0 913 ± 1.085e−16
913.02
913.015
913.01
913.005
913
912.995
912.99
pull
Entries 85
Mean 1.192e+09
Std Dev 1.192e+09
pull1D
Entries 85
Mean 0
Std Dev 0

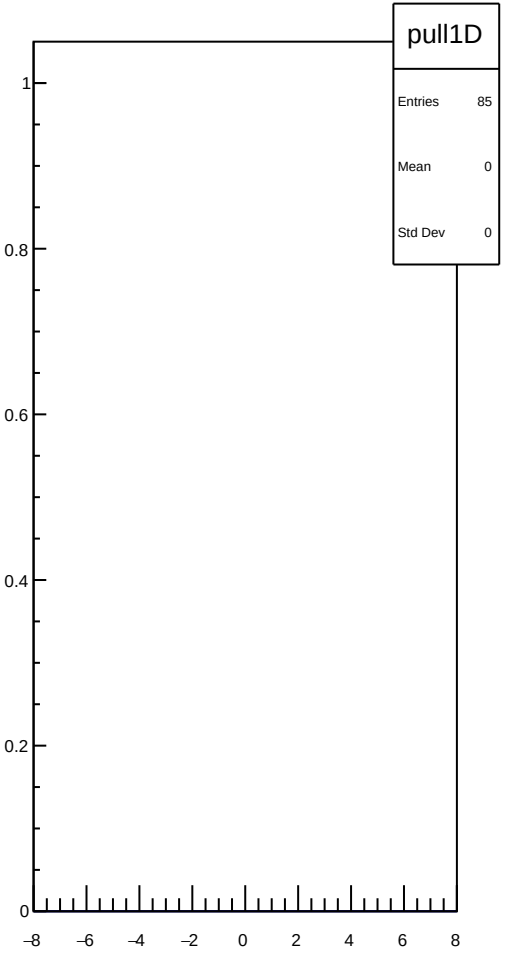

RTPAPOSVCNT_mean vs run
χ² / ndf 1.527e+27 / 84
p0 –1003 ± 1.085e–16
-1002.976
-1002.978
-1002.98
-1002.982
-1002.984
-1002.986
-1002.988
-1002.99
pull
Entries 85
Mean –3.97e+08
Std Dev 3.97e+08
×10¹²
12
10
8
6
4
2
0
–2


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 6.498e+34 / 84
p0 −90.97 ± 1.085e−16
pull
Entries 85
Mean 2.164e+09
Std Dev 2.164e+09


pull1D
Entries 85
Mean 0
Std Dev 0


RTPPITA2CNT_mean vs run
χ² / ndf 6.498e+34 / 84
p0 −90.97 ± 1.085e−16
pull
Entries 85
Mean 2.164e+09
Std Dev 2.164e+09


pull1D
Entries 85
Mean 0
Std Dev 0