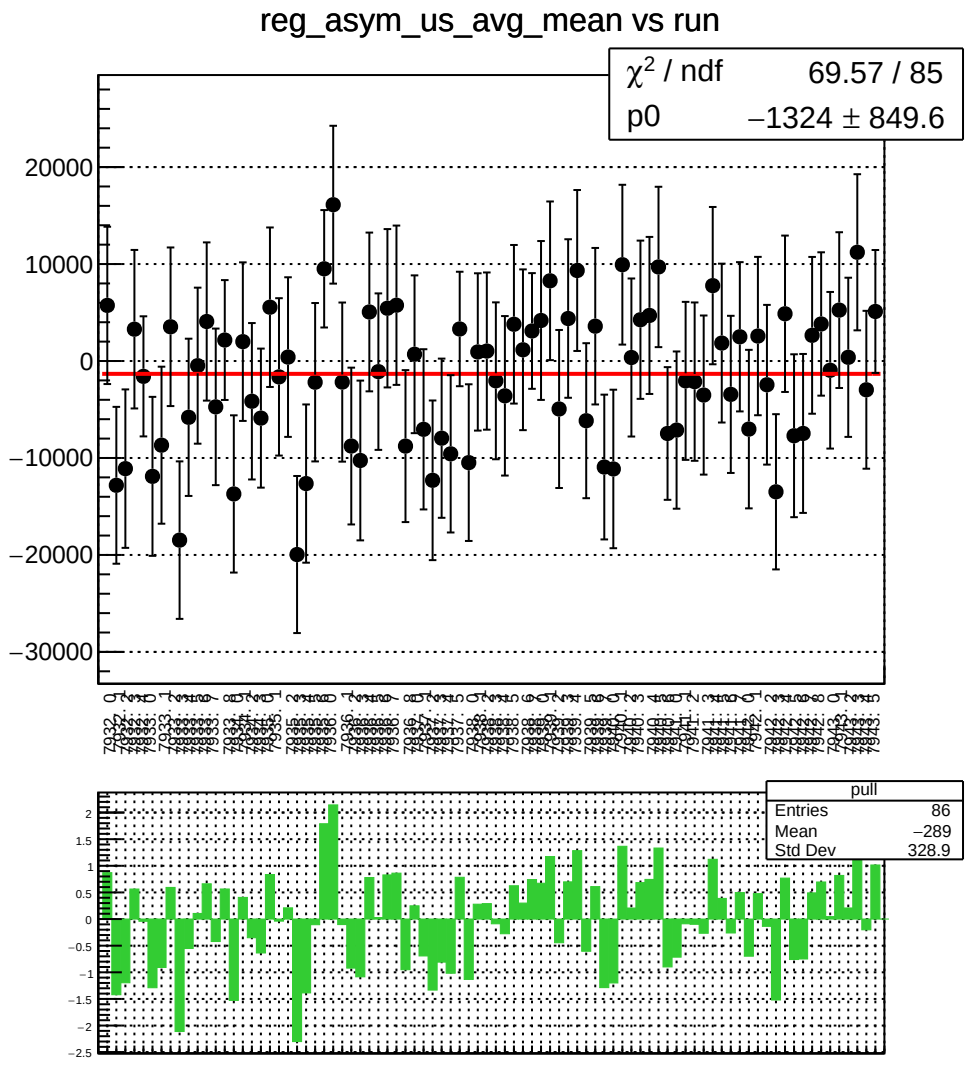
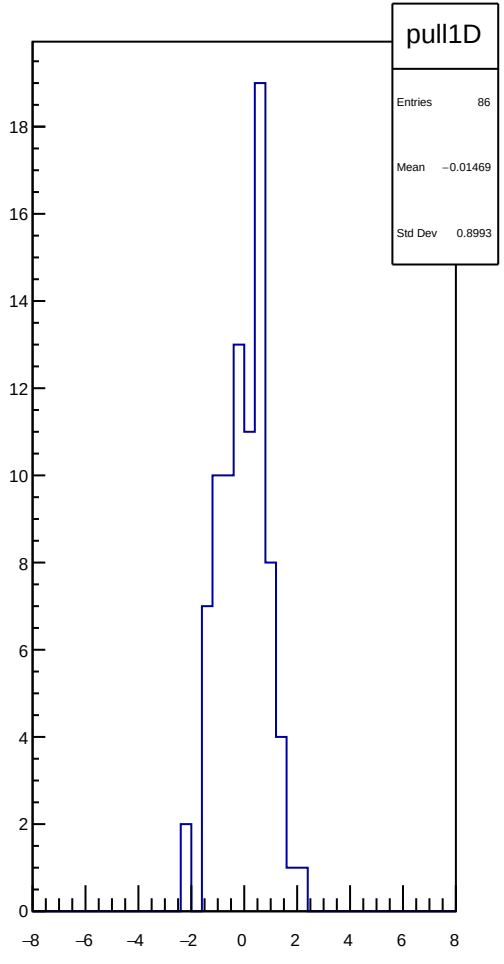
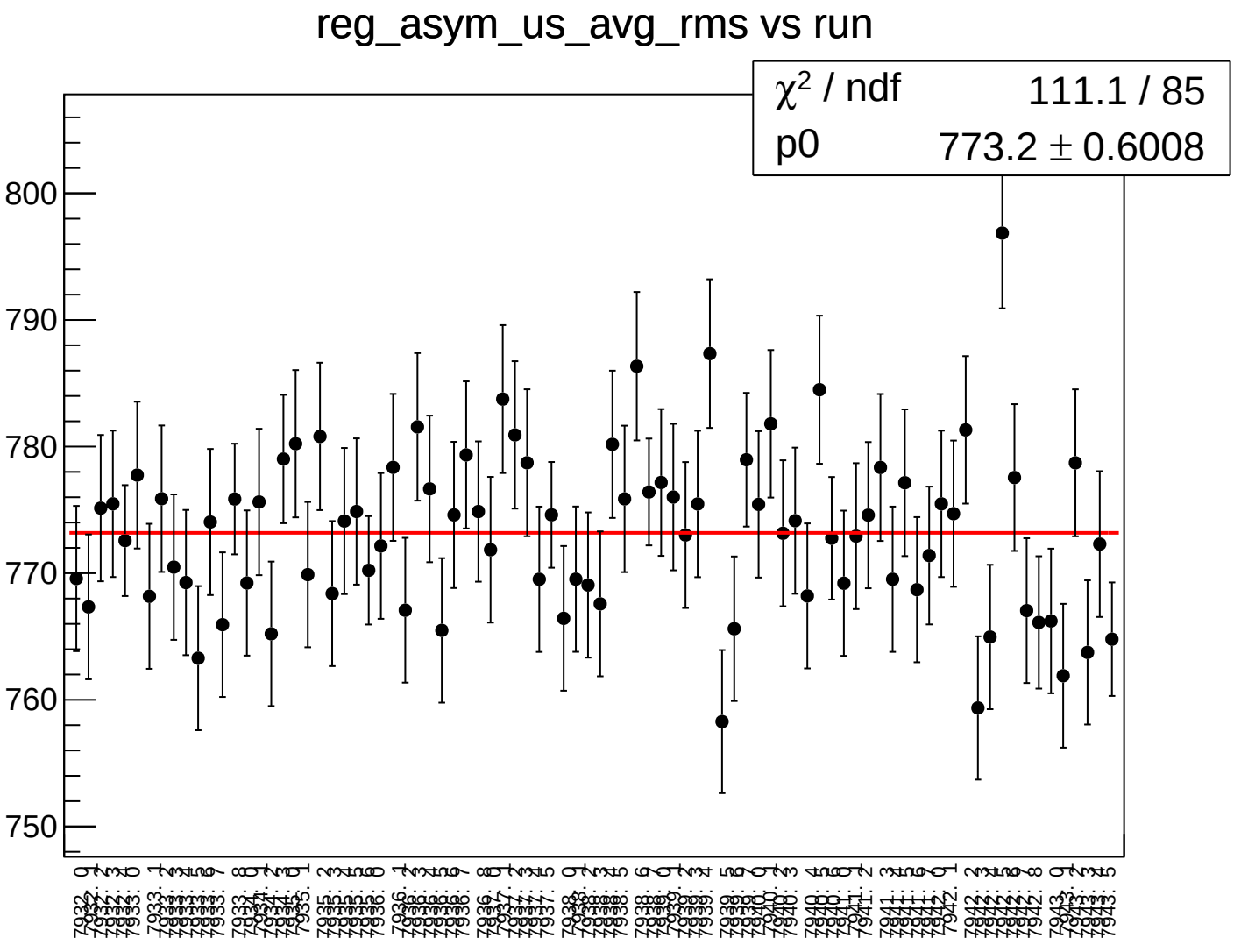
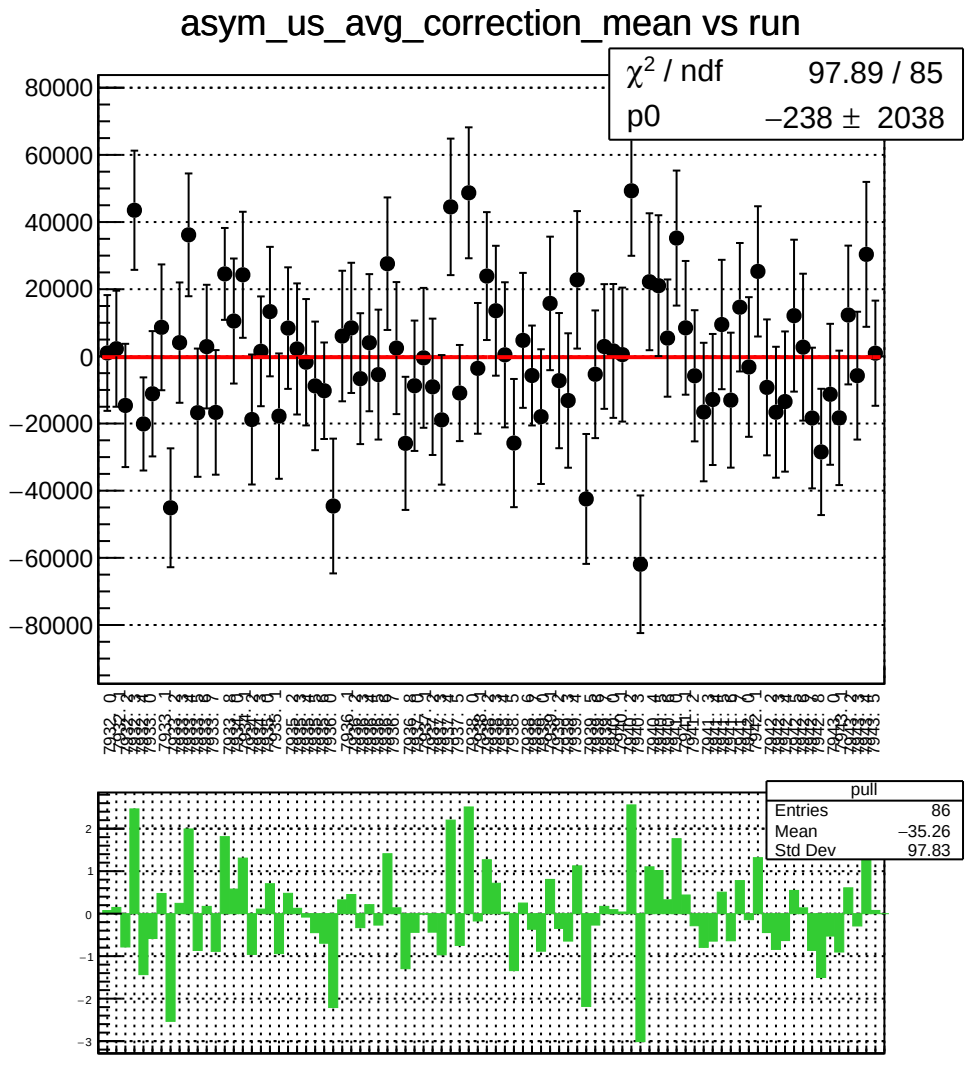
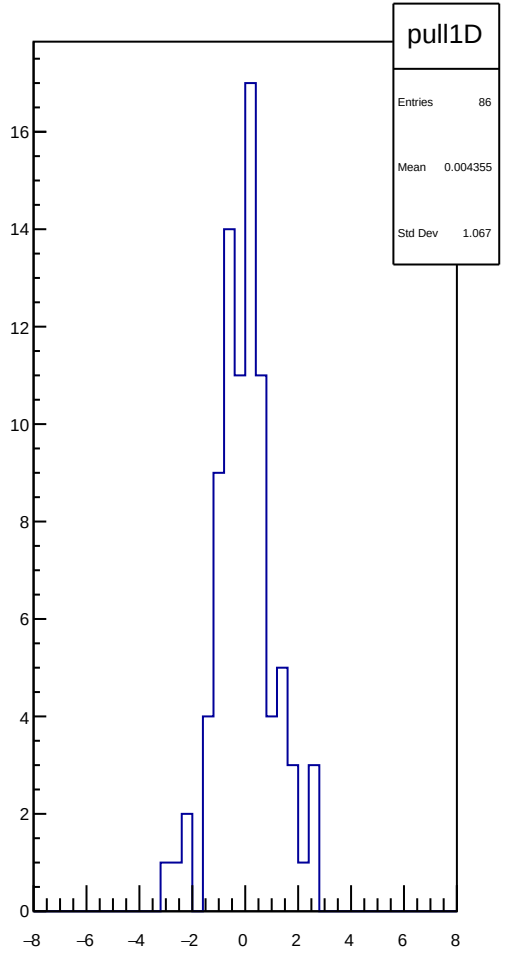
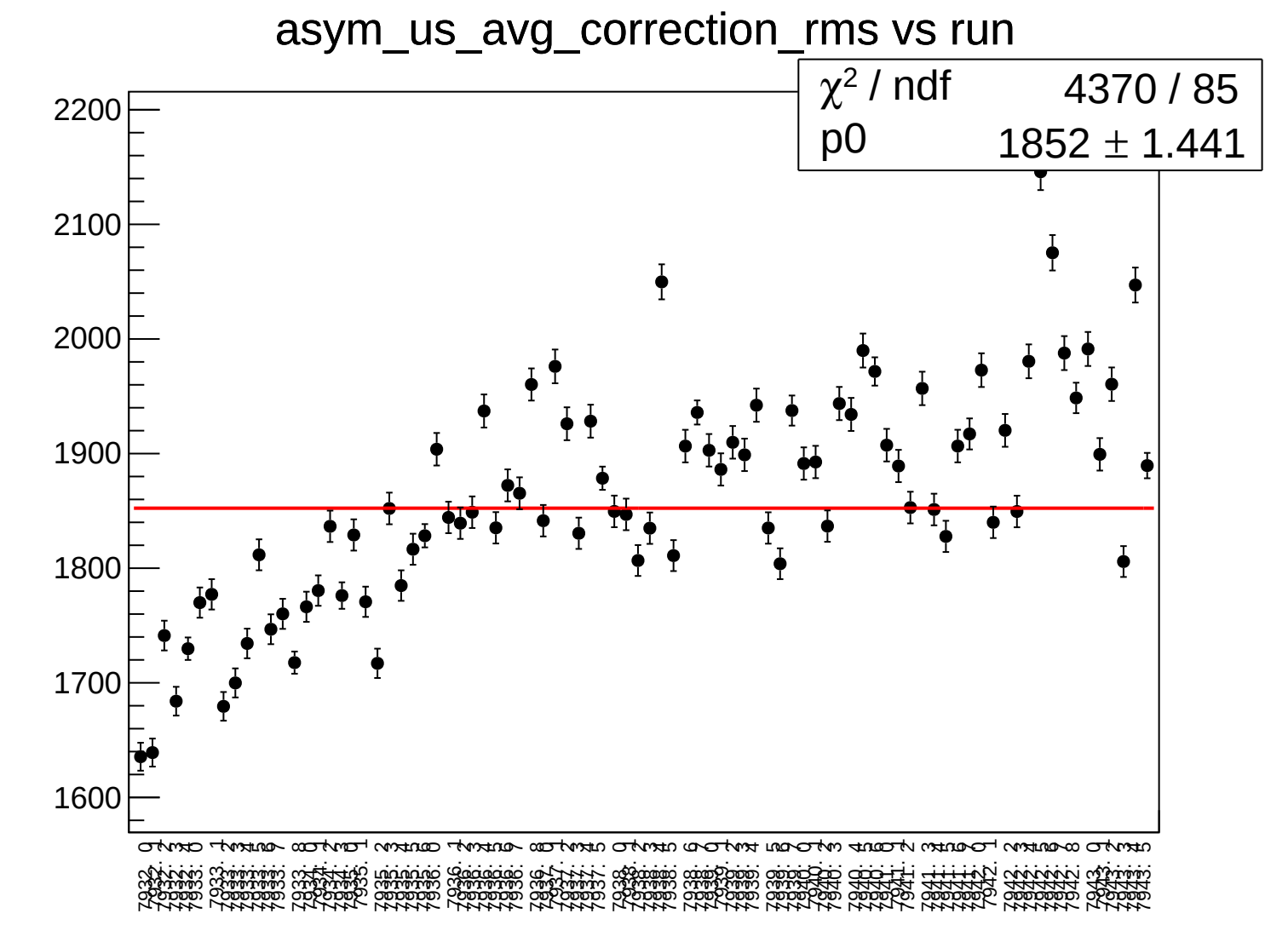

reg_asym_us_avg_mean vs run
χ² / ndf 69.57 / 85
p0 −1324 ± 849.6
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −289
Std Dev 328.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

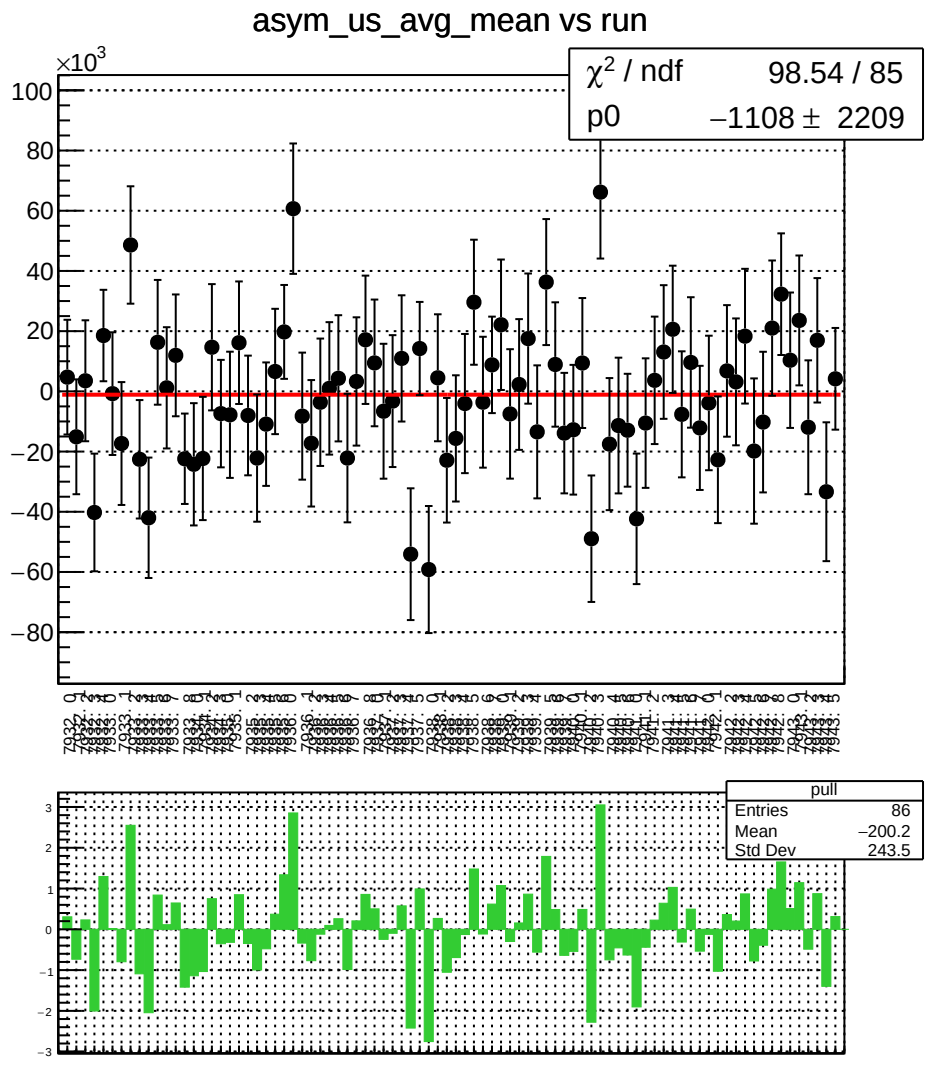

pull1D
Entries 86
Mean −0.01469
Std Dev 0.8993
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

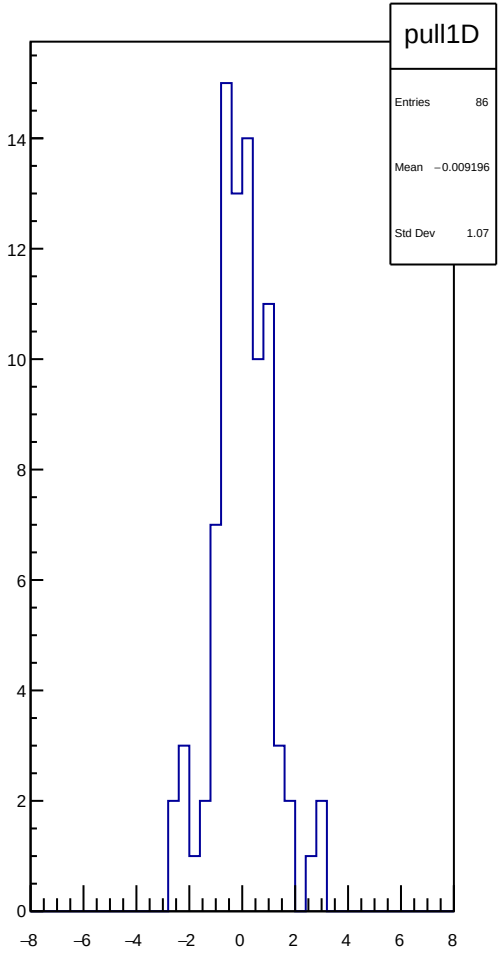

reg_asym_us_avg_rms vs run
χ^2 / ndf 111.1 / 85
p0 773.2 ± 0.6008
800
790
780
770
760
750

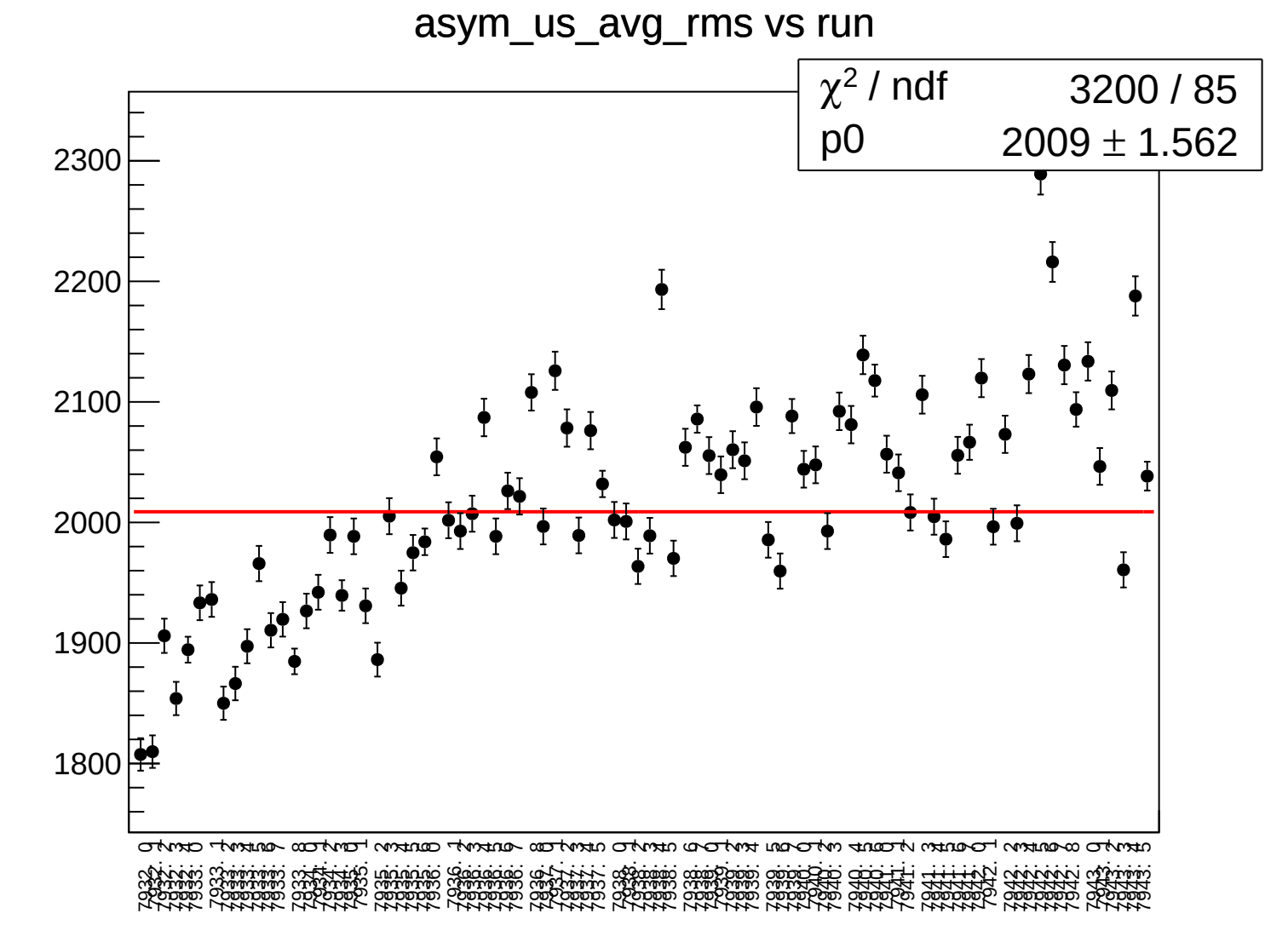

asym_us_avg_correction_mean vs run
χ² / ndf 97.89 / 85
p0 −238 ± 2038
pull
Entries 86
Mean −35.26
Std Dev 97.83

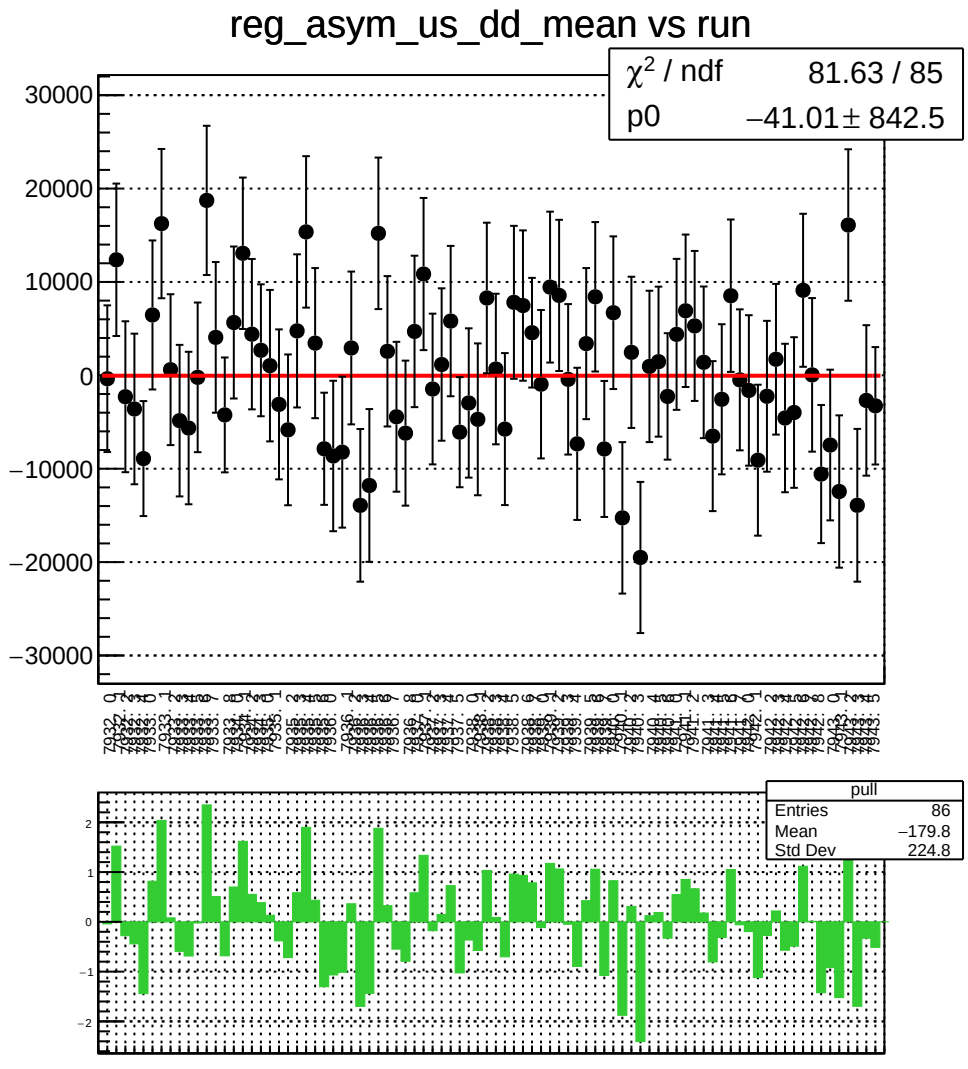

pull1D
Entries 86
Mean 0.004355
Std Dev 1.067

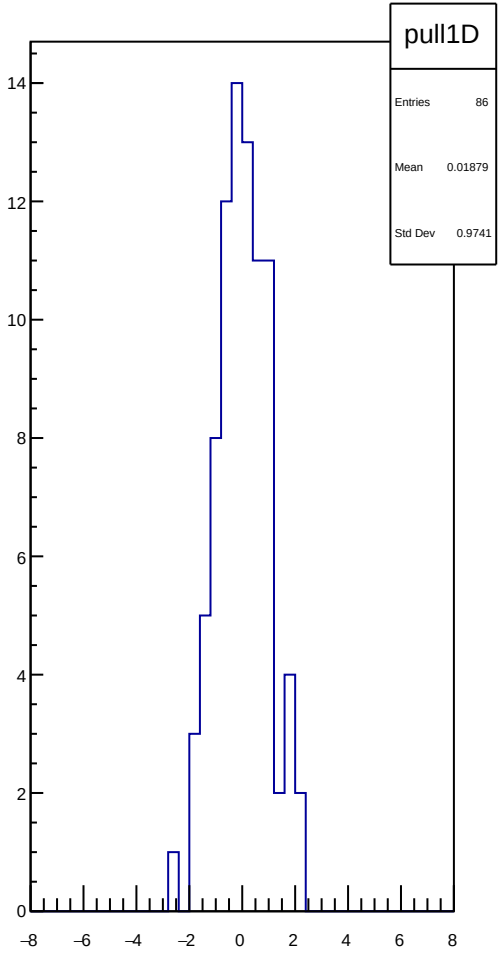

asym_us_avg_correction_rms vs run
χ² / ndf 4370 / 85
p0 1852 ± 1.441
2200
2100
2000
1900
1800
1700
1600

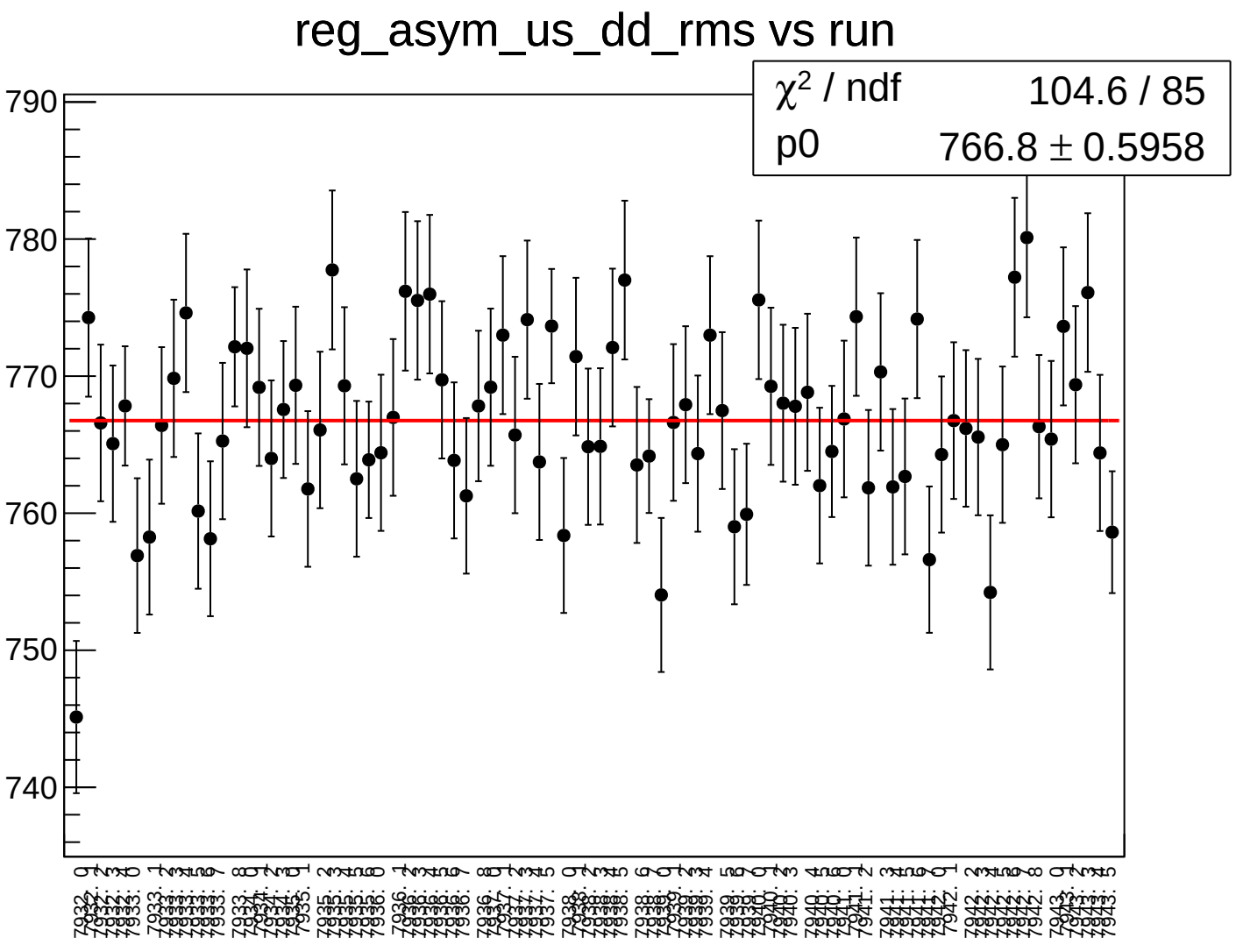

asym_us_avg_mean vs run
×10^3
χ² / ndf 98.54 / 85
p0 −1108 ± 2209
pull
Entries 86
Mean −200.2
Std Dev 243.5

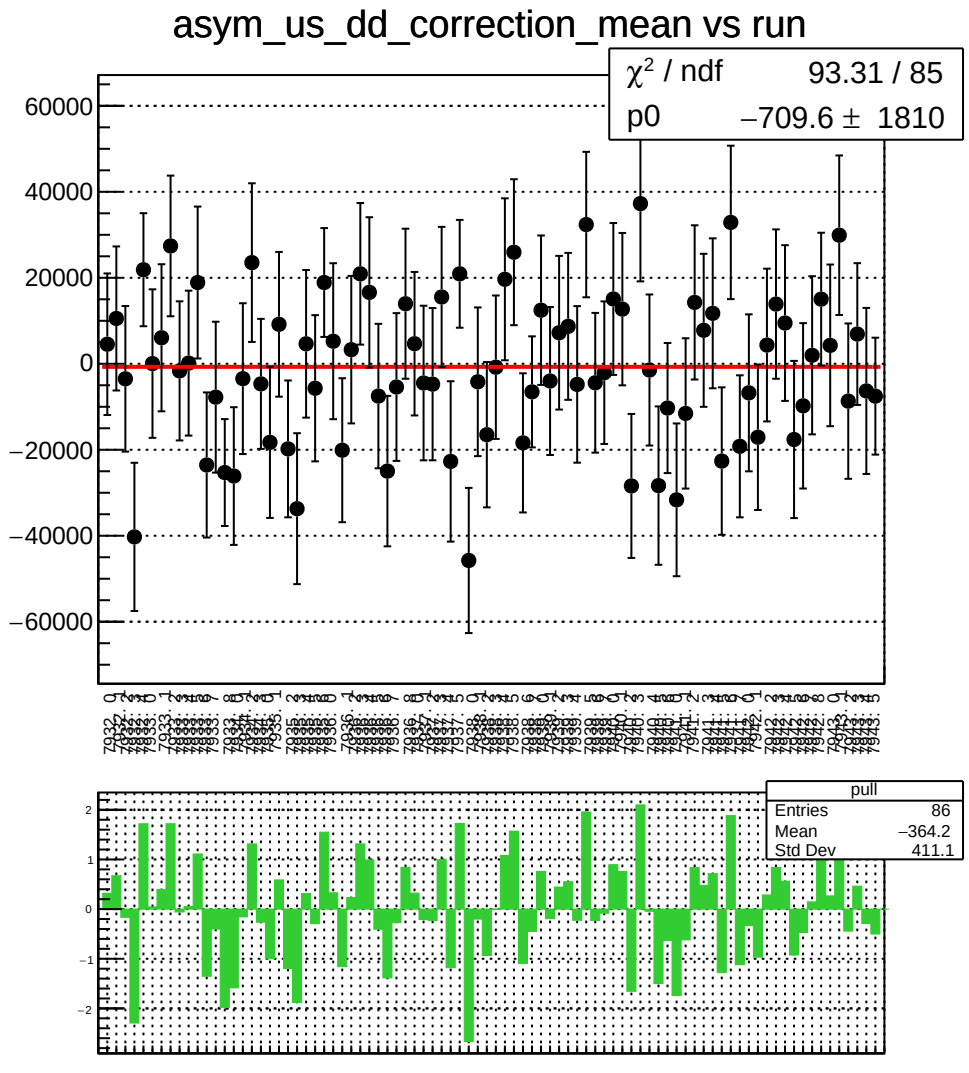

pull1D
Entries 86
Mean −0.009196
Std Dev 1.07

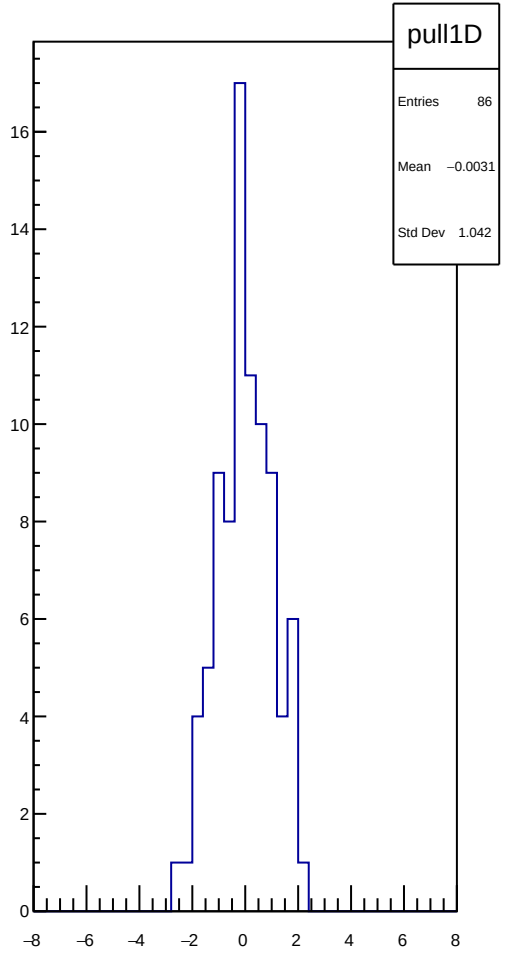

asym_us_avg_rms vs run
χ^2 / ndf 3200 / 85
p0 2009 ± 1.562
2300
2200
2100
2000
1900
1800

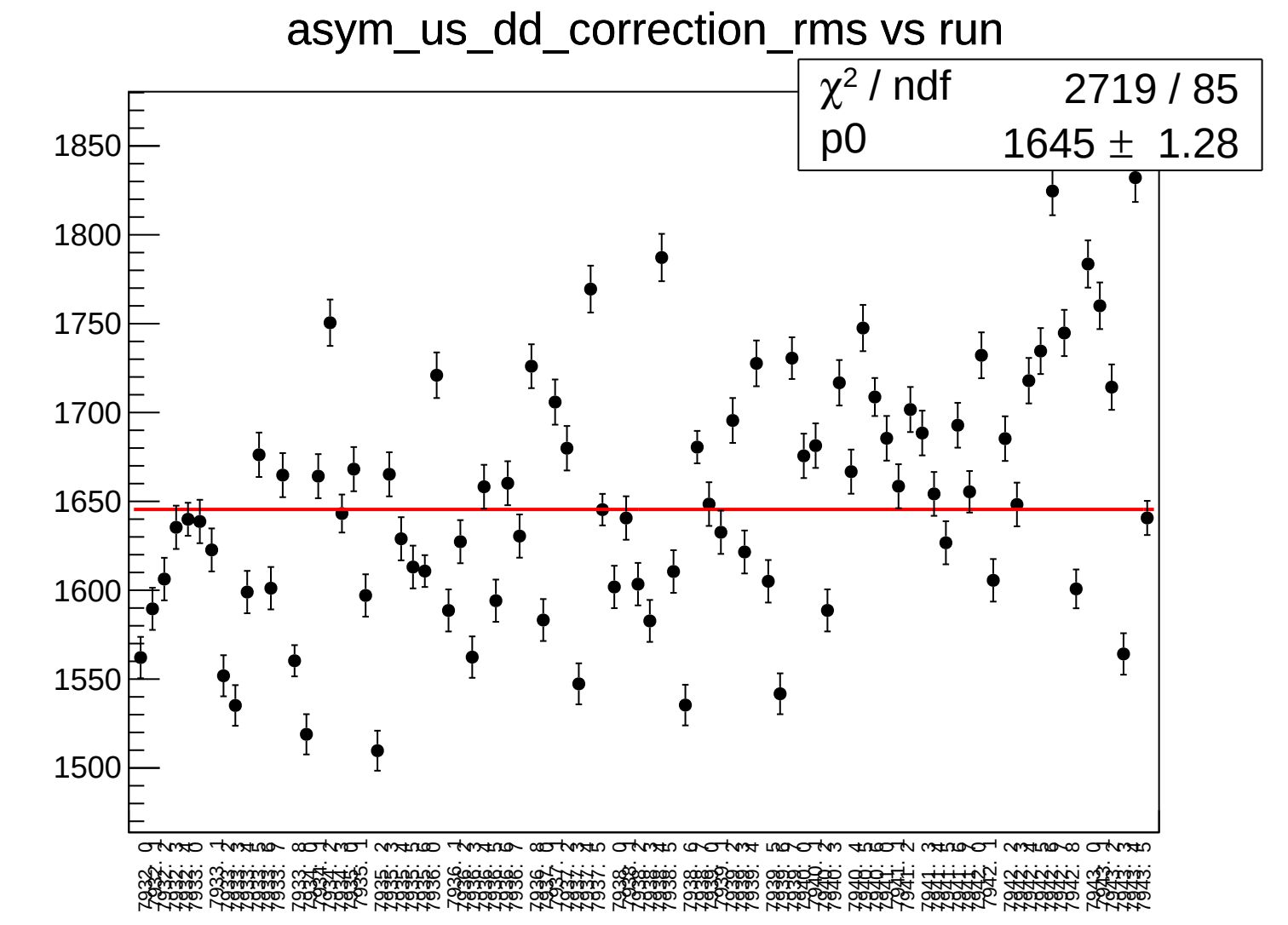

reg_asym_us_dd_mean vs run
χ² / ndf 81.63 / 85
p0 −41.01 ± 842.5
pull
Entries 86
Mean −179.8
Std Dev 224.8

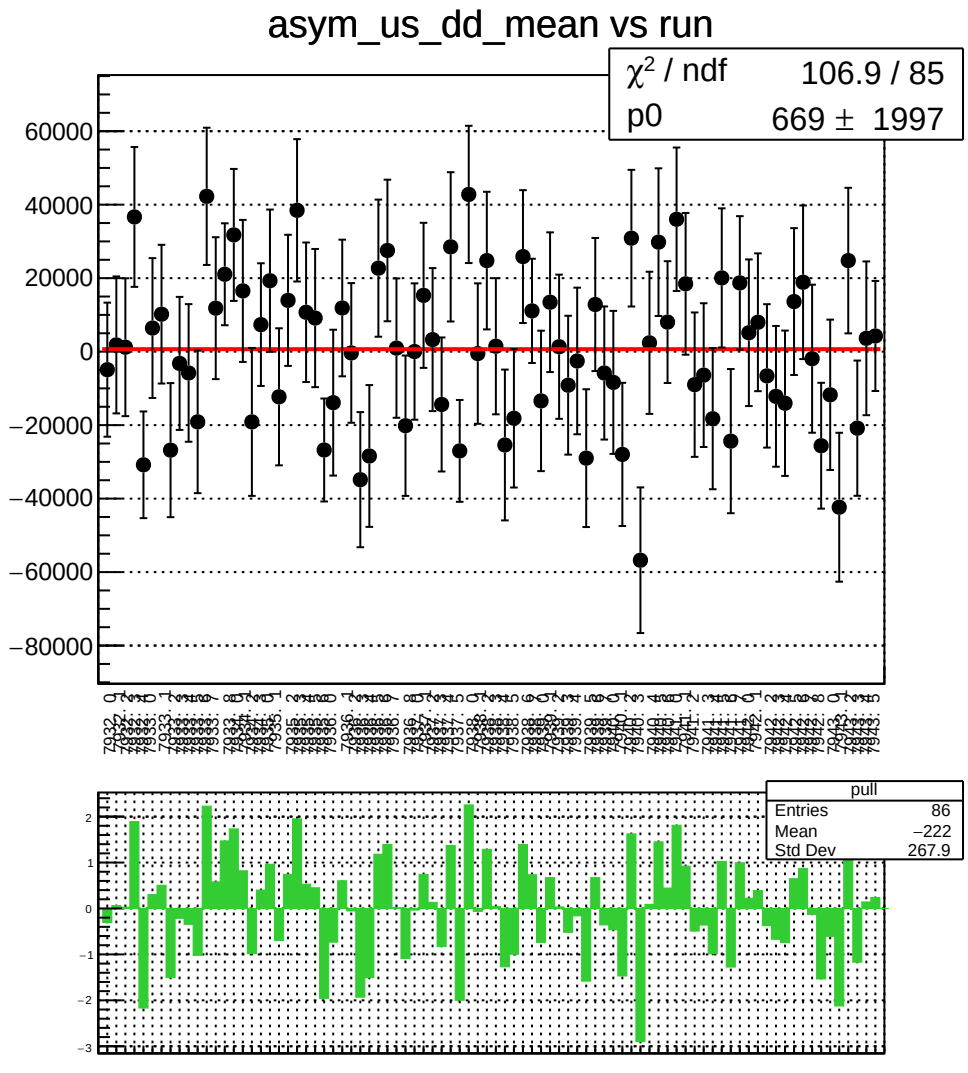

pull1D
Entries 86
Mean 0.01879
Std Dev 0.9741

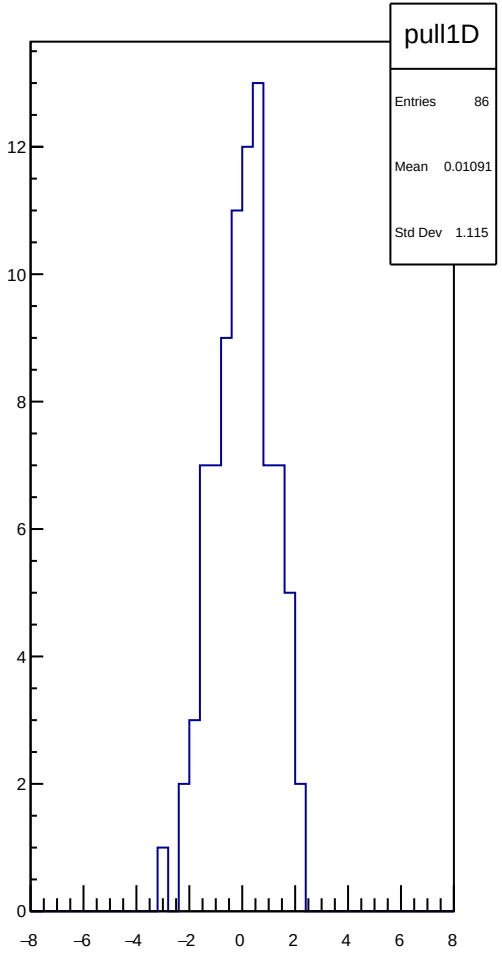

reg_asym_us_dd_rms vs run
χ² / ndf 104.6 / 85
p0 766.8 ± 0.5958
790
780
770
760
750
740

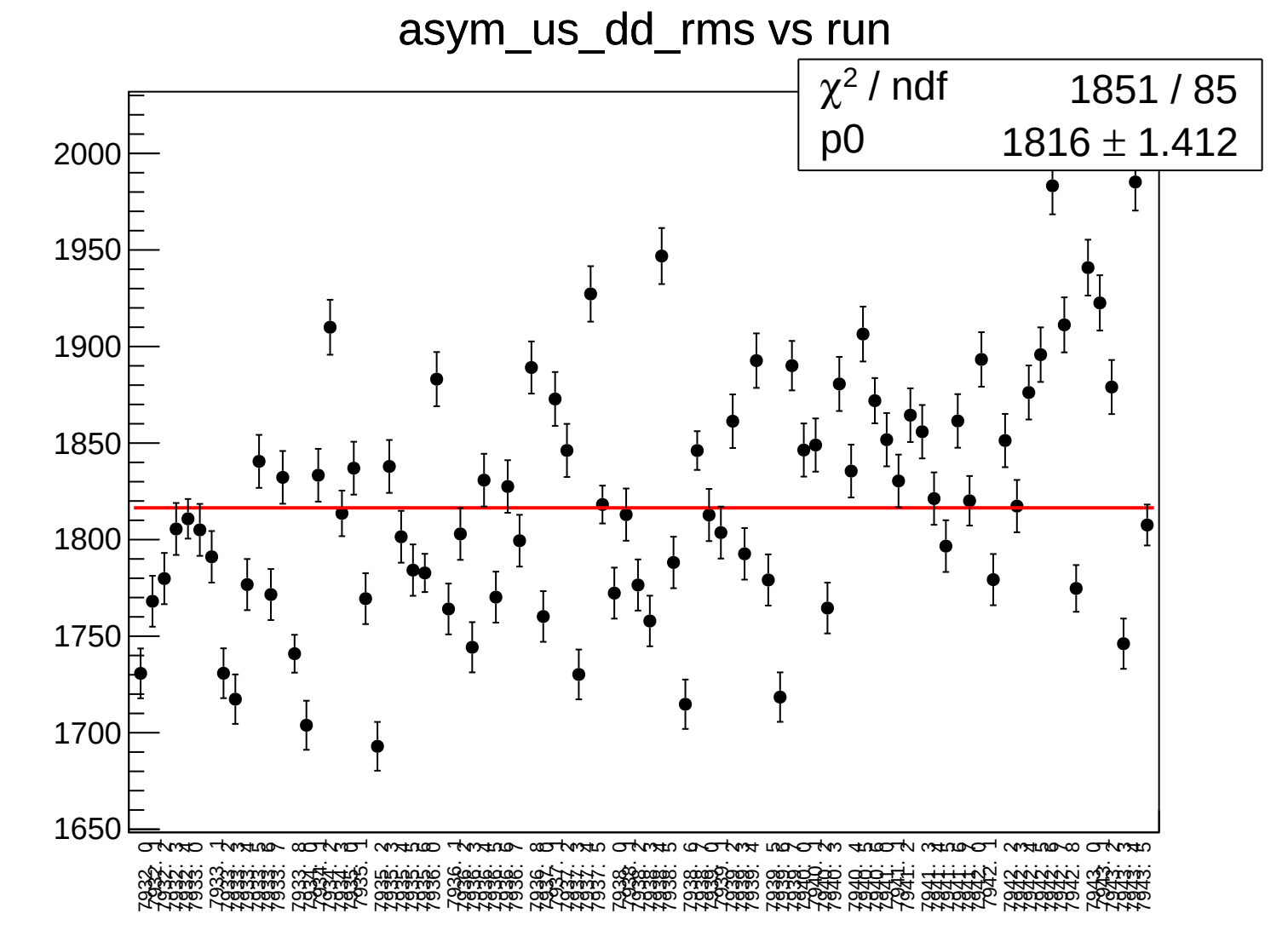

asym_us_dd_correction_mean vs run
χ² / ndf 93.31 / 85
p0 −709.6 ± 1810
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −364.2
Std Dev 411.1
2
1
0
−1
−2

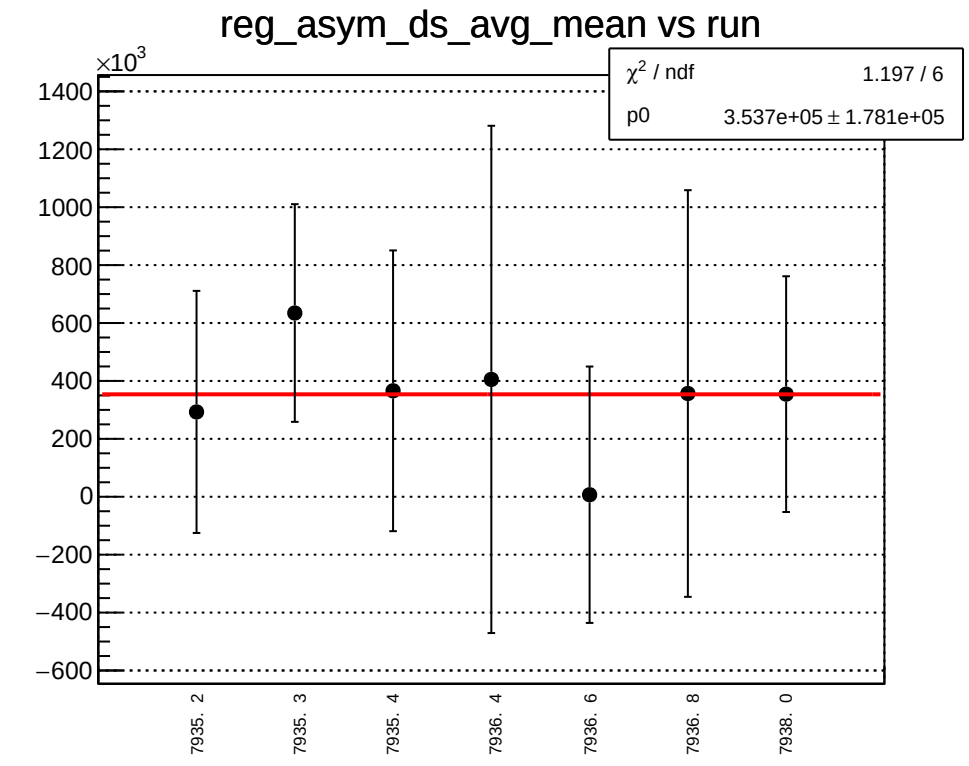

pull1D
Entries 86
Mean −0.0031
Std Dev 1.042
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

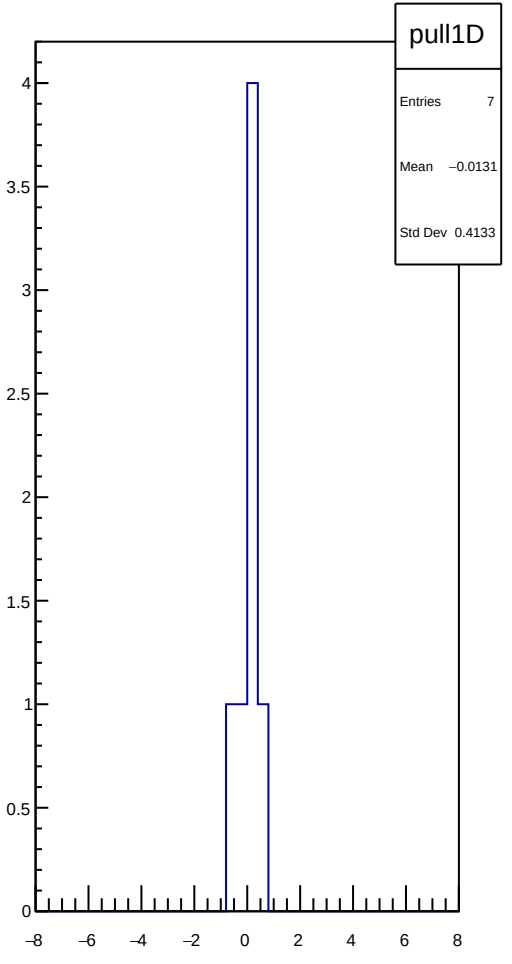

asym_us_dd_correction_rms vs run
χ² / ndf 2719 / 85
p0 1645 ± 1.28
1850
1800
1750
1700
1650
1600
1550
1500

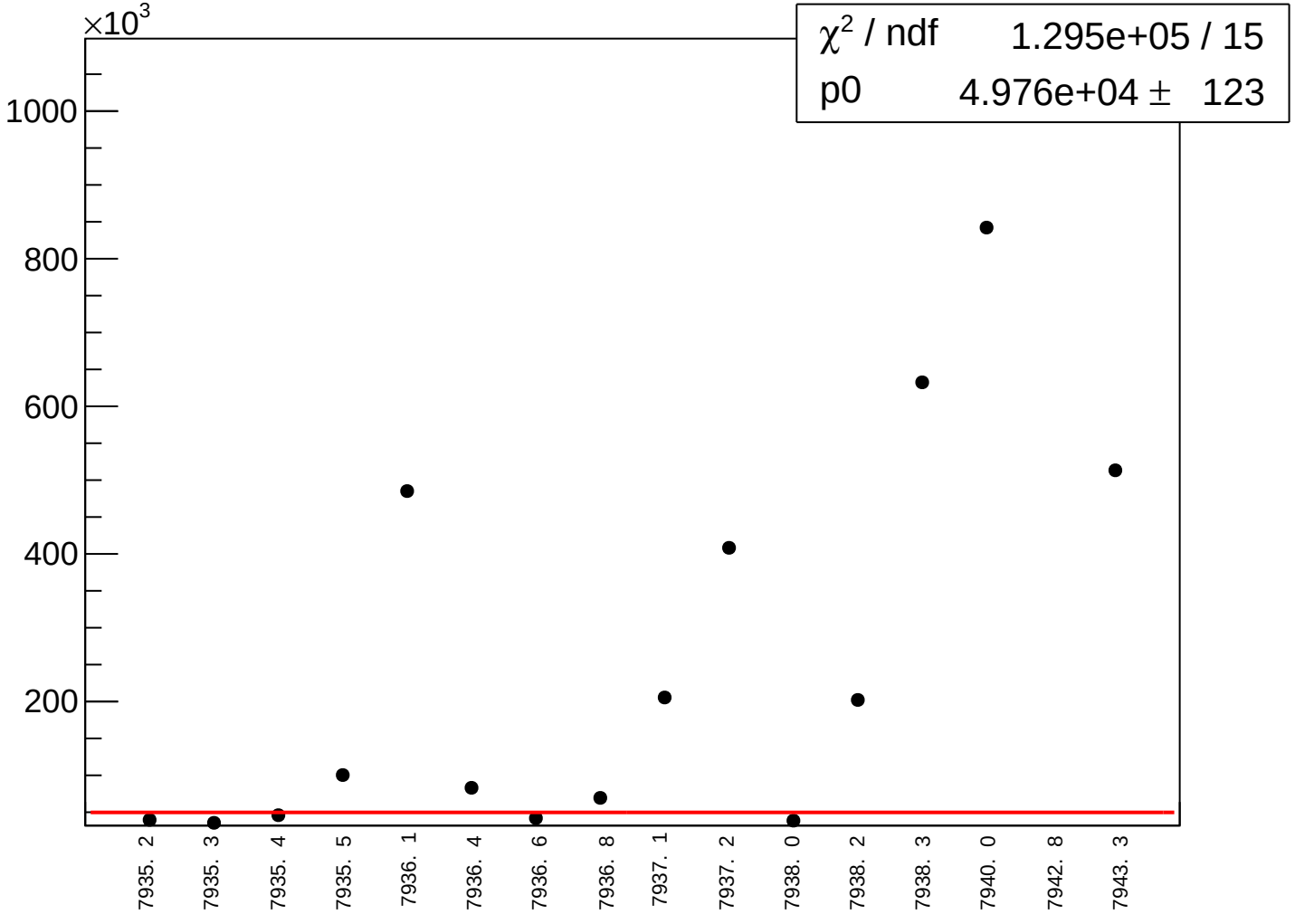

asym_us_dd_mean vs run
χ² / ndf 106.9 / 85
p0 669 ± 1997
pull
Entries 86
Mean −222
Std Dev 267.9

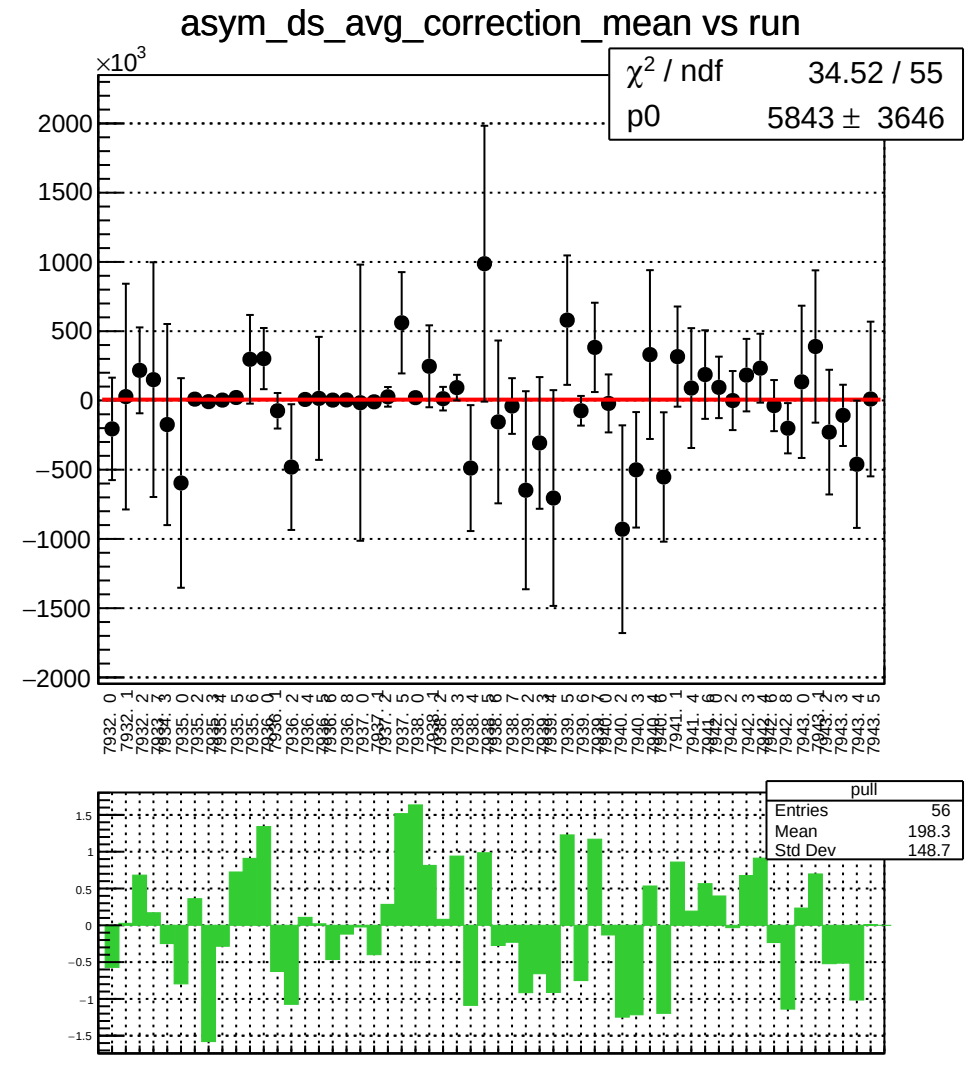

pull1D
Entries 86
Mean 0.01091
Std Dev 1.115

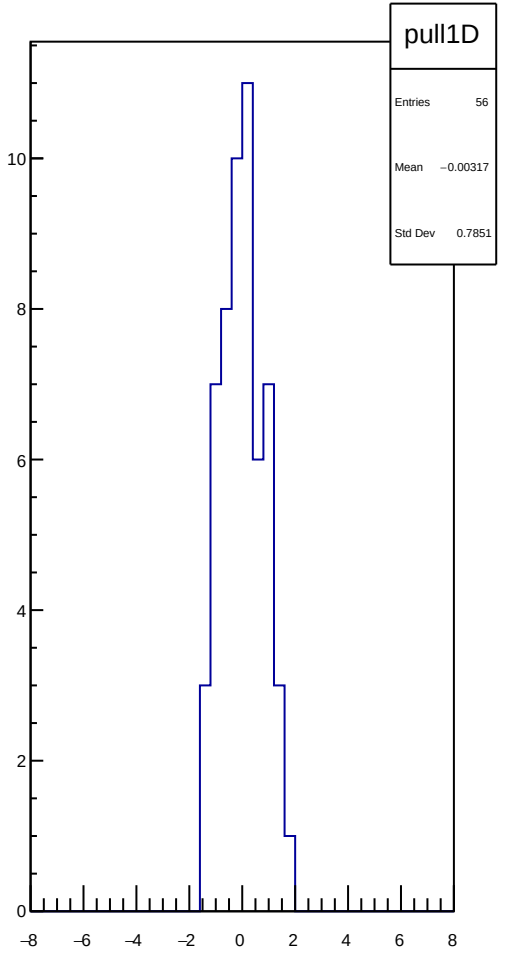

asym_us_dd_rms vs run
χ² / ndf 1851 / 85
p0 1816 ± 1.412
2000
1950
1900
1850
1800
1750
1700
1650

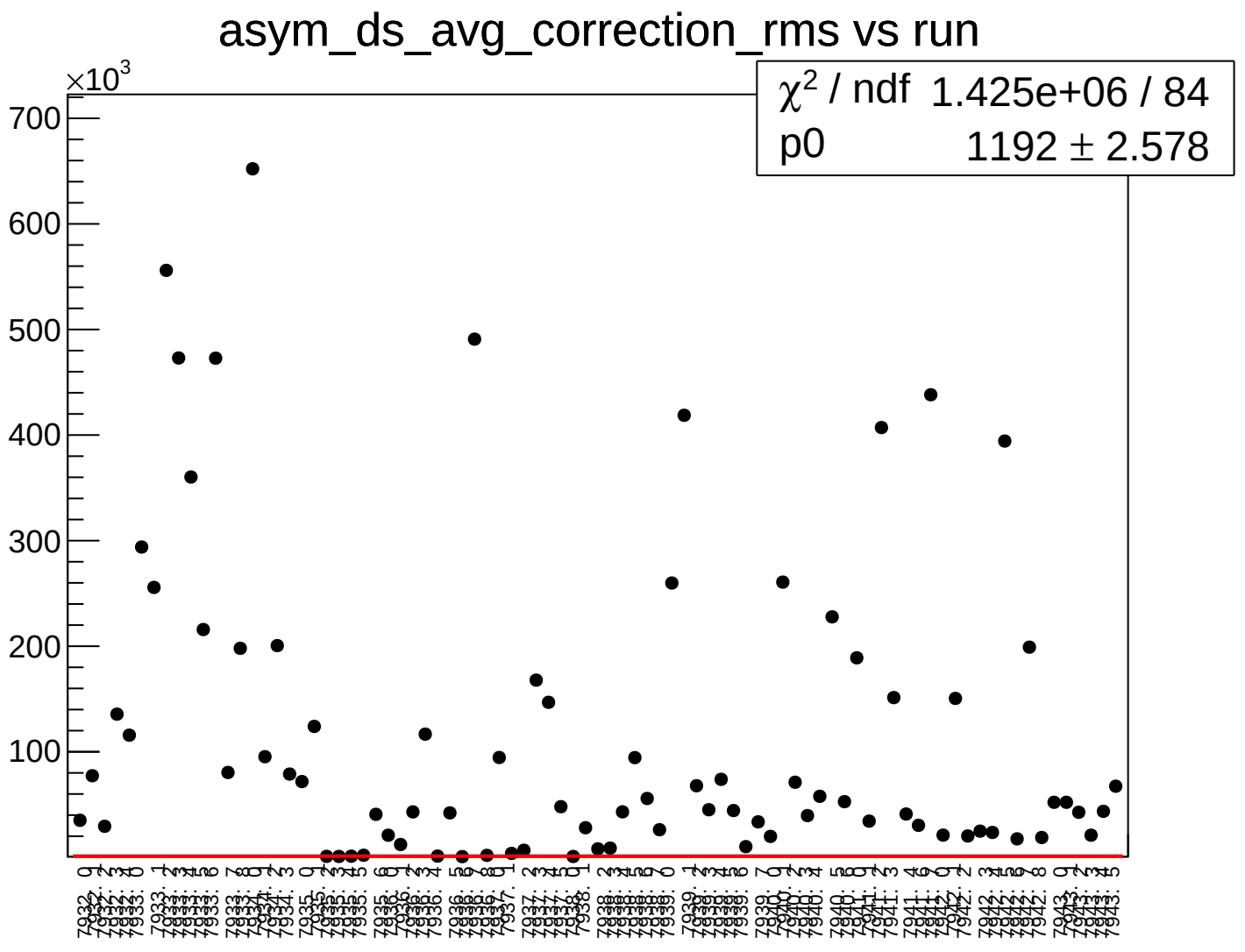

reg_asym_ds_avg_mean vs run
×10^3
χ² / ndf 1.197 / 6
p0 3.537e+05 ± 1.781e+05
1400
1200
1000
800
600
400
200
0
−200
−400
−600
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0
pull
Entries 7
Mean 23.71
Std Dev 20.46
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

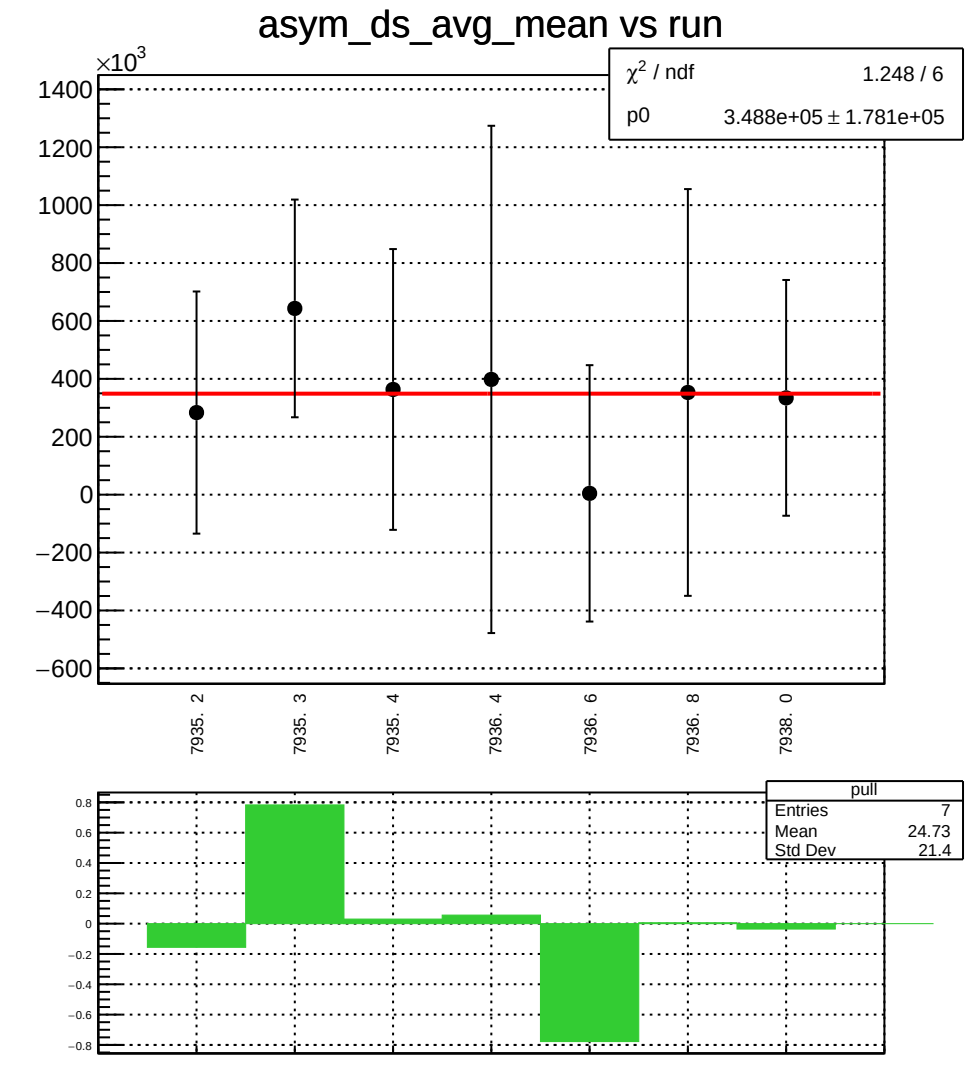

pull1D
Entries 7
Mean −0.0131
Std Dev 0.4133
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

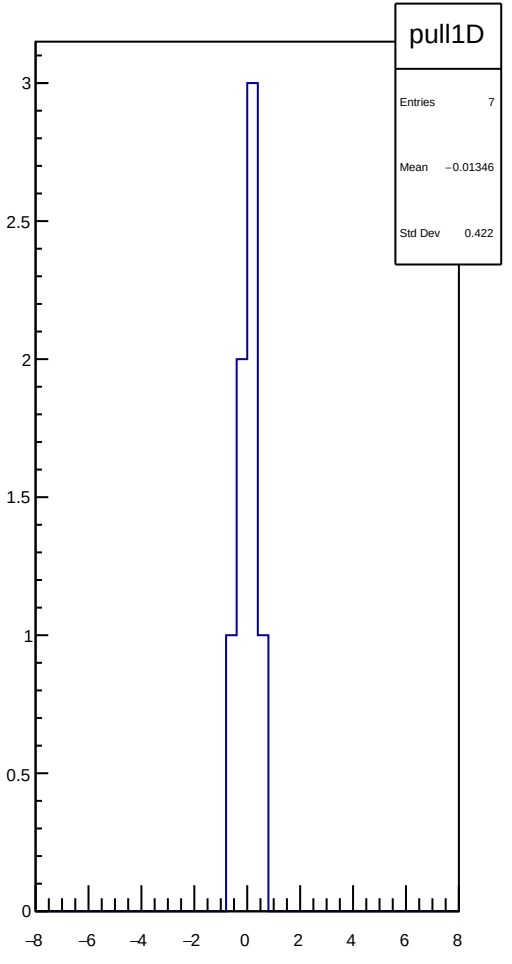

reg_asym_ds_avg_rms vs run
×10^3
χ^2 / ndf 1.295e+05 / 15
p0 4.976e+04 ± 123
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

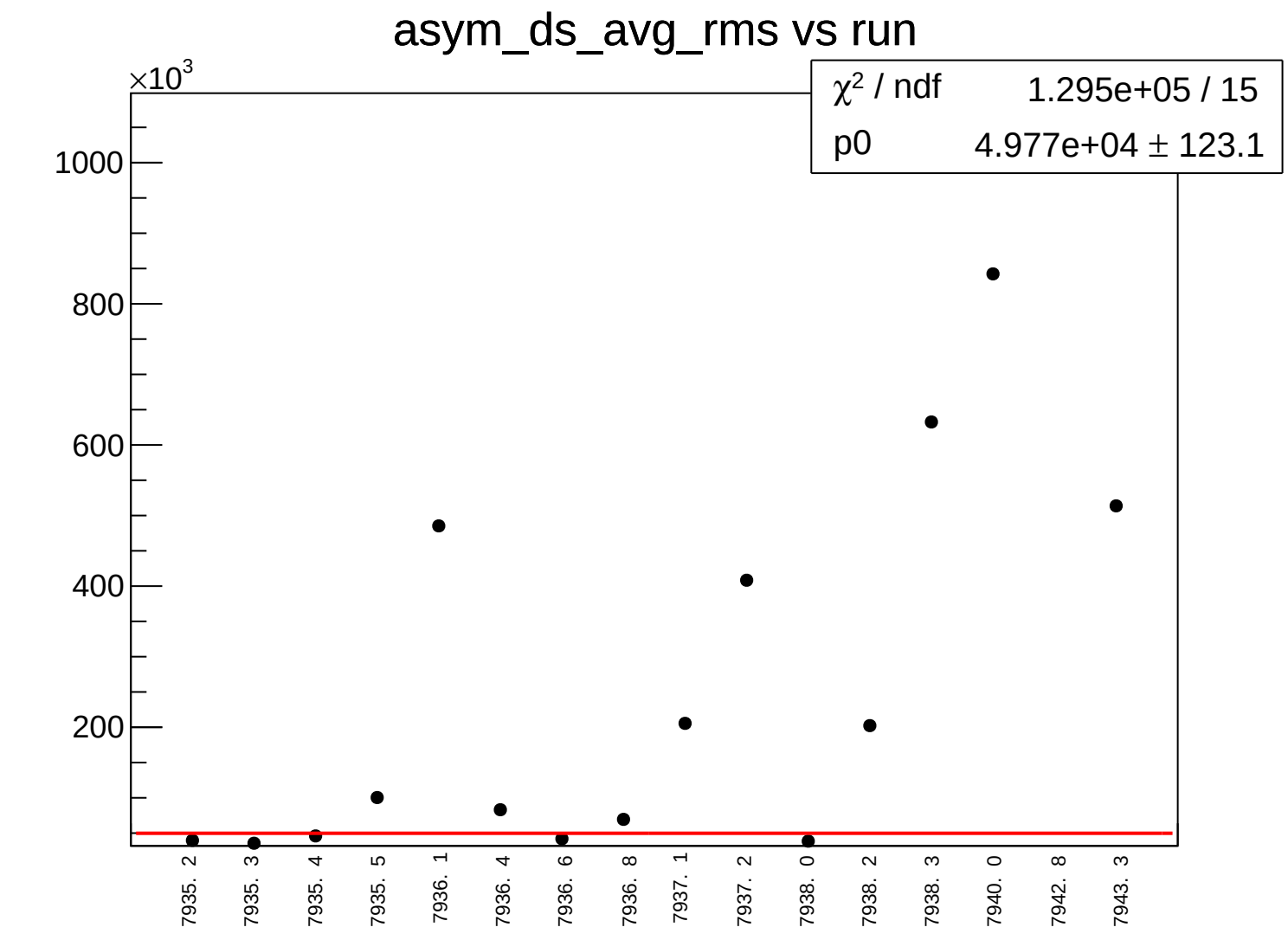

asym_ds_avg_correction_mean vs run
×10^3
χ^2 / ndf 34.52 / 55
p0 5843 ± 3646
pull
Entries 56
Mean 198.3
Std Dev 148.7

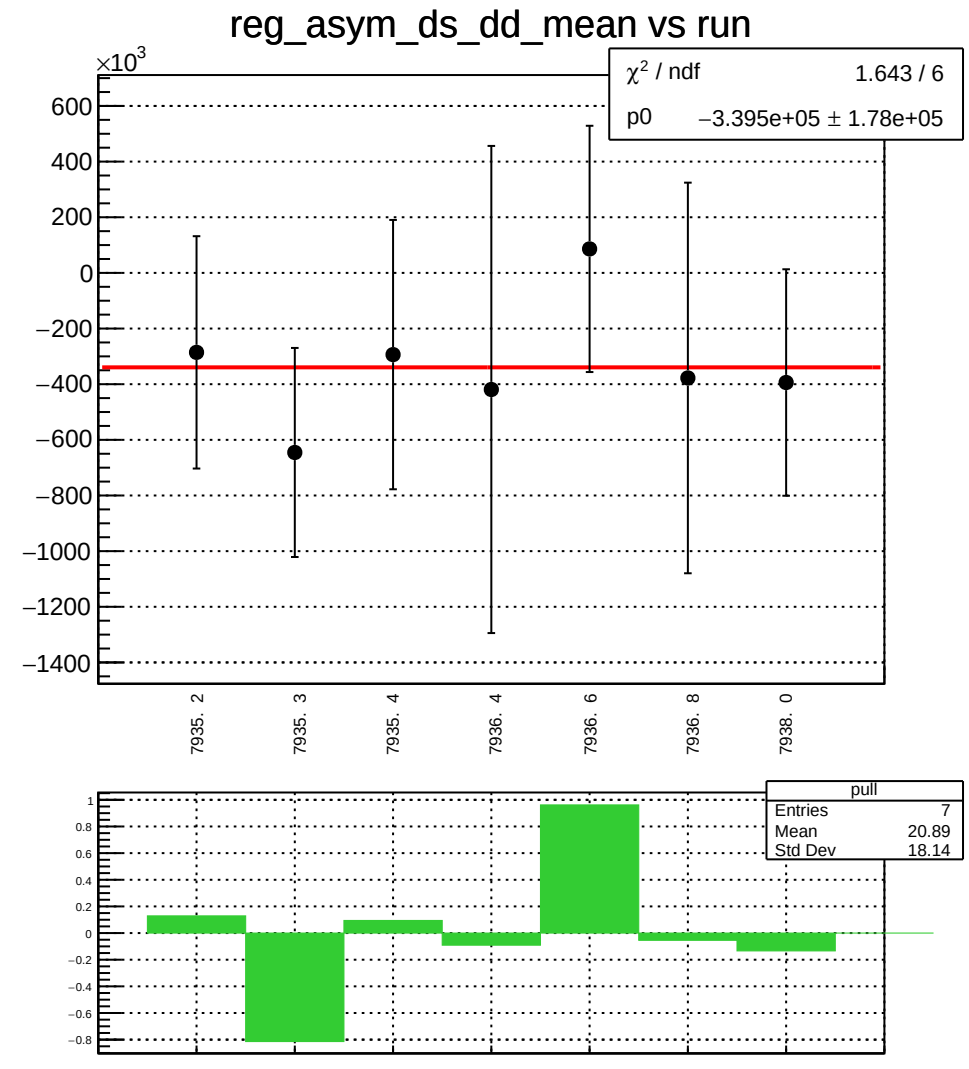

pull1D
Entries 56
Mean −0.00317
Std Dev 0.7851

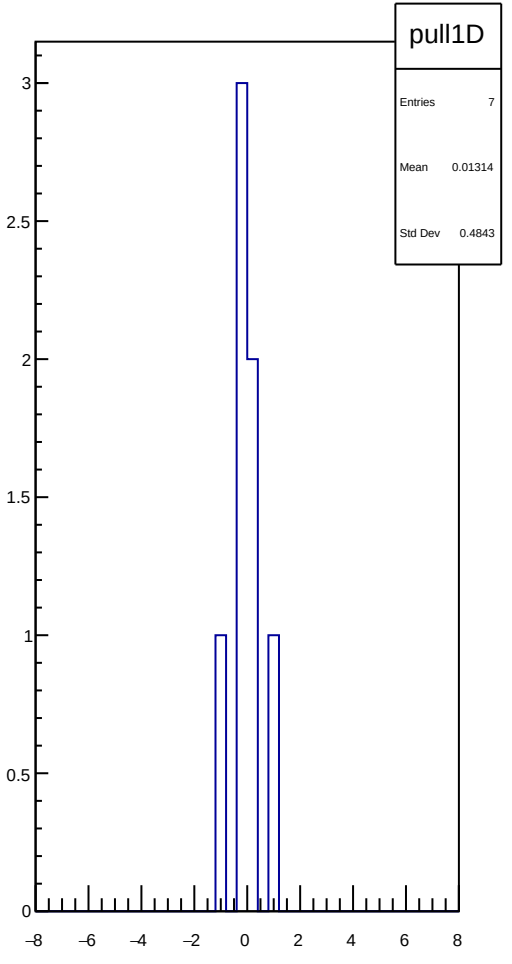

asym_ds_avg_correction_rms vs run
×10^3
700
600
500
400
300
200
100
χ² / ndf 1.425e+06 / 84
p0 1192 ± 2.578

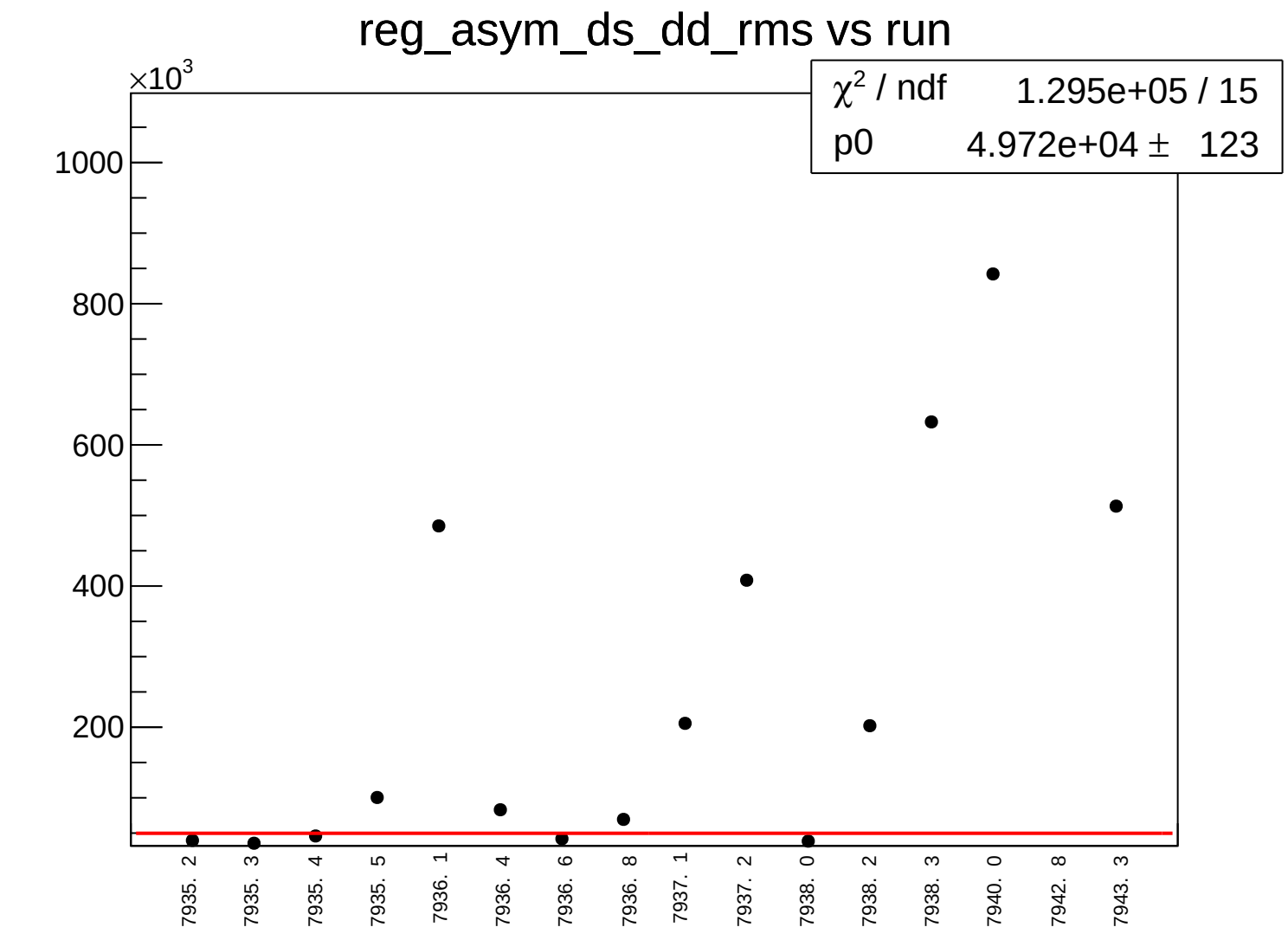

asym_ds_avg_mean vs run
×10^3
χ² / ndf 1.248 / 6
p0 3.488e+05 ± 1.781e+05
1400
1200
1000
800
600
400
200
0
−200
−400
−600
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0
pull
Entries 7
Mean 24.73
Std Dev 21.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

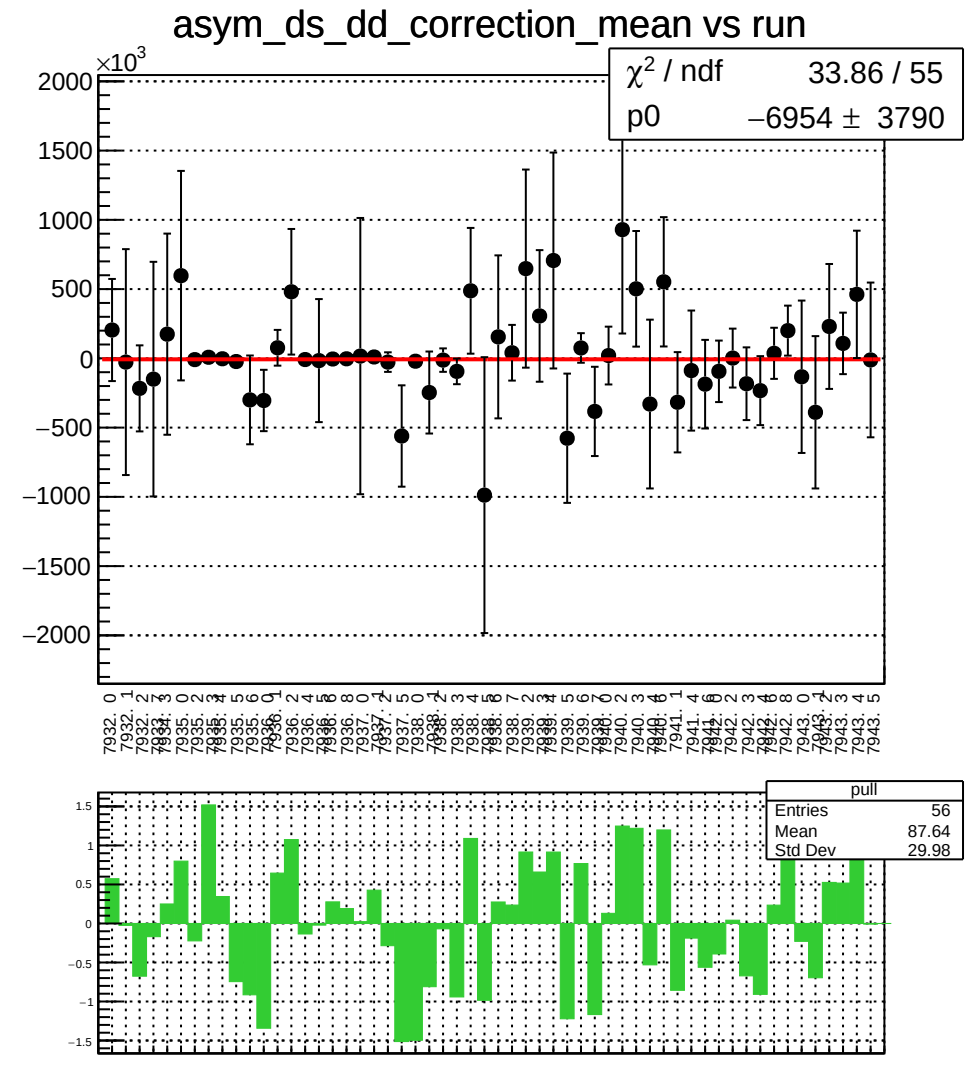

pull1D
Entries 7
Mean −0.01346
Std Dev 0.422
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

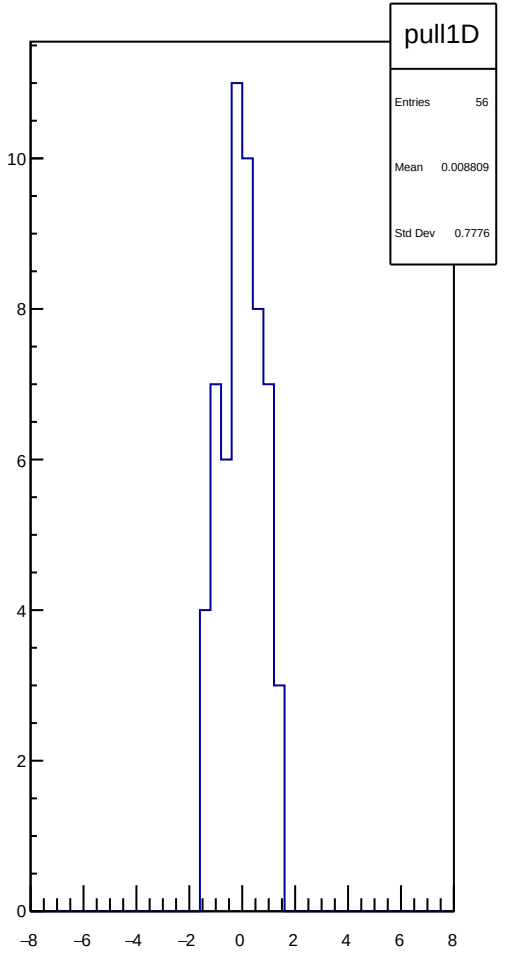

asym_ds_avg_rms vs run
×10^3
χ² / ndf 1.295e+05 / 15
p0 4.977e+04 ± 123.1
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

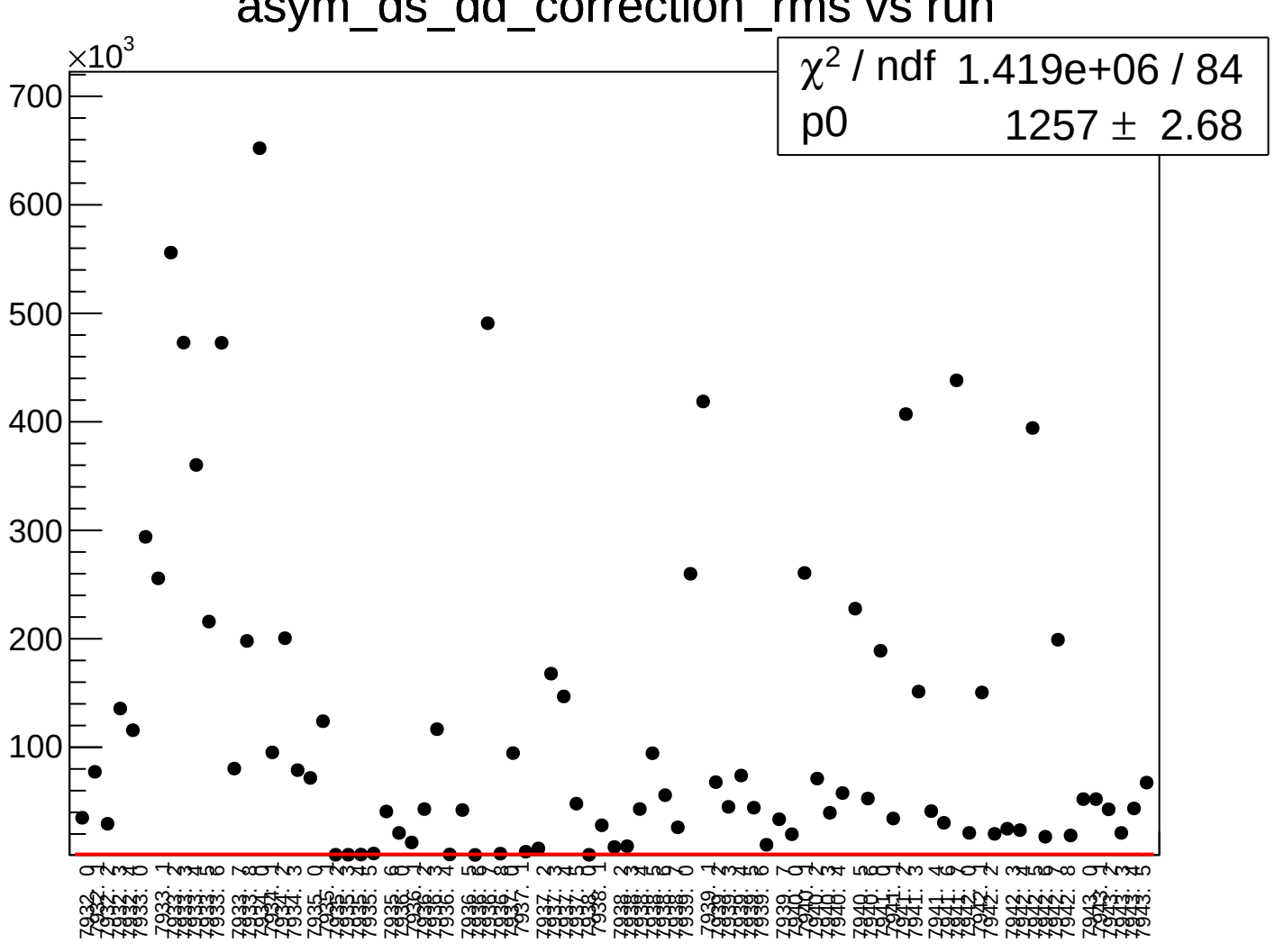

reg_asym_ds_dd_mean vs run
×10^3
χ² / ndf 1.643 / 6
p0 −3.395e+05 ± 1.78e+05
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0
pull
Entries 7
Mean 20.89
Std Dev 18.14
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

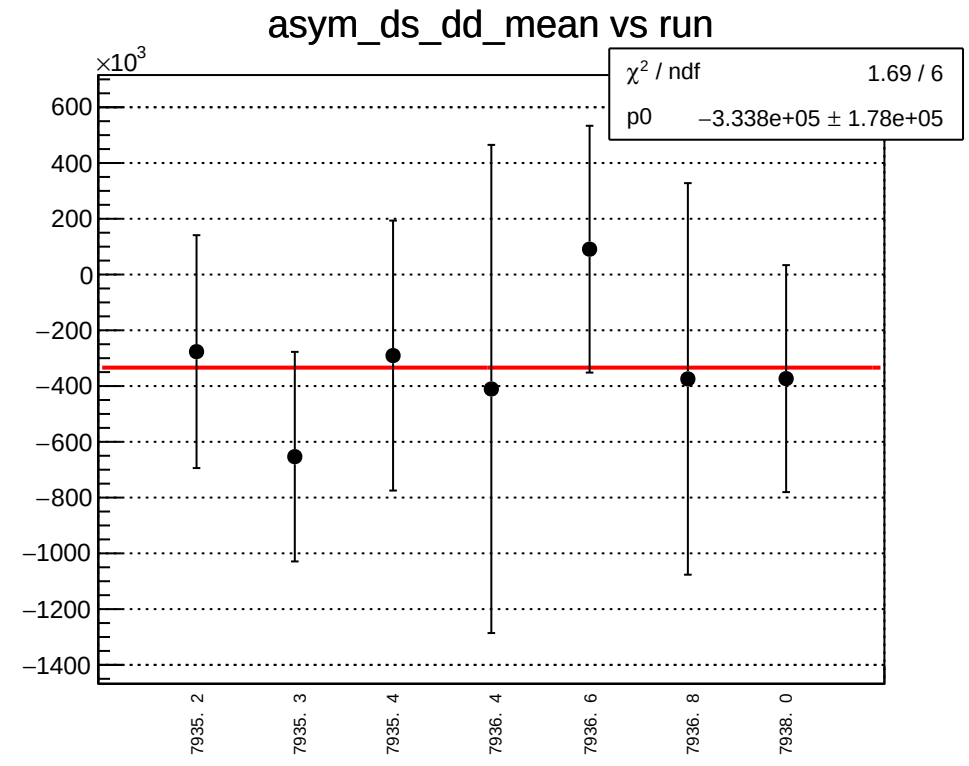

pull1D
Entries 7
Mean 0.01314
Std Dev 0.4843
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

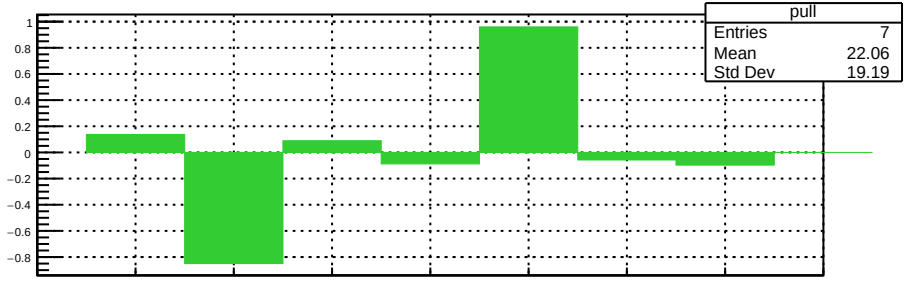

reg_asym_ds_dd_rms vs run
×10^3
χ^2 / ndf 1.295e+05 / 15
p0 4.972e+04 ± 123
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

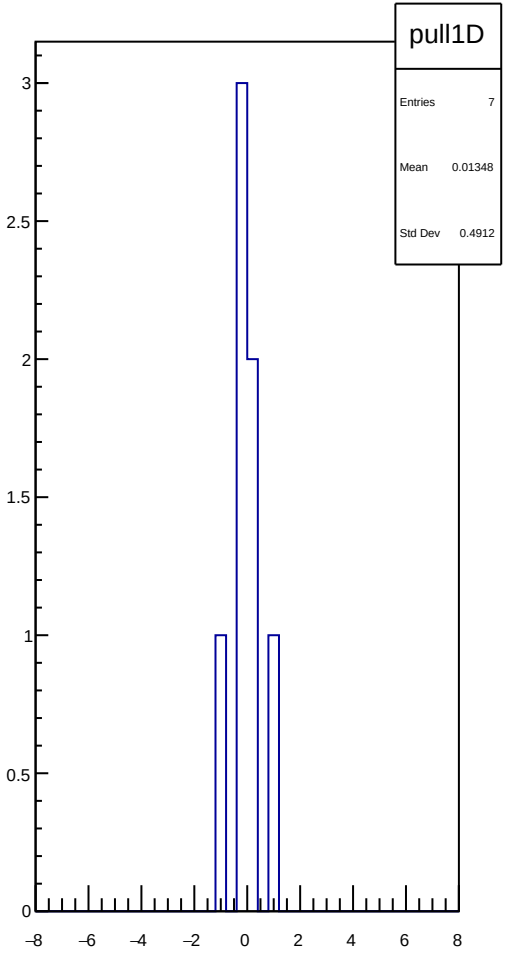

asym_ds_dd_correction_mean vs run
χ² / ndf 33.86 / 55
p0 −6954 ± 3790
pull
Entries 56
Mean 87.64
Std Dev 29.98

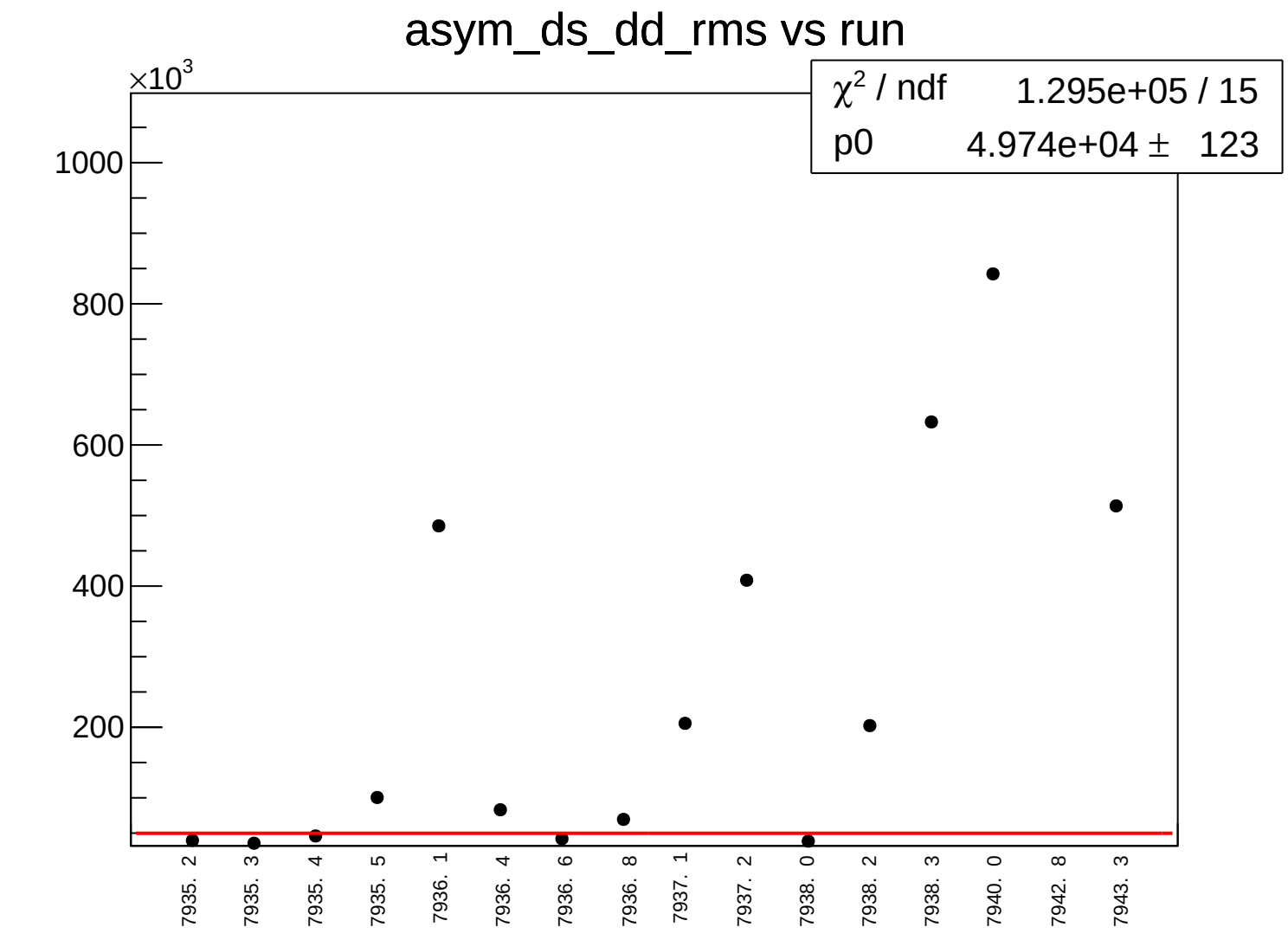

pull1D
Entries 56
Mean 0.008809
Std Dev 0.7776

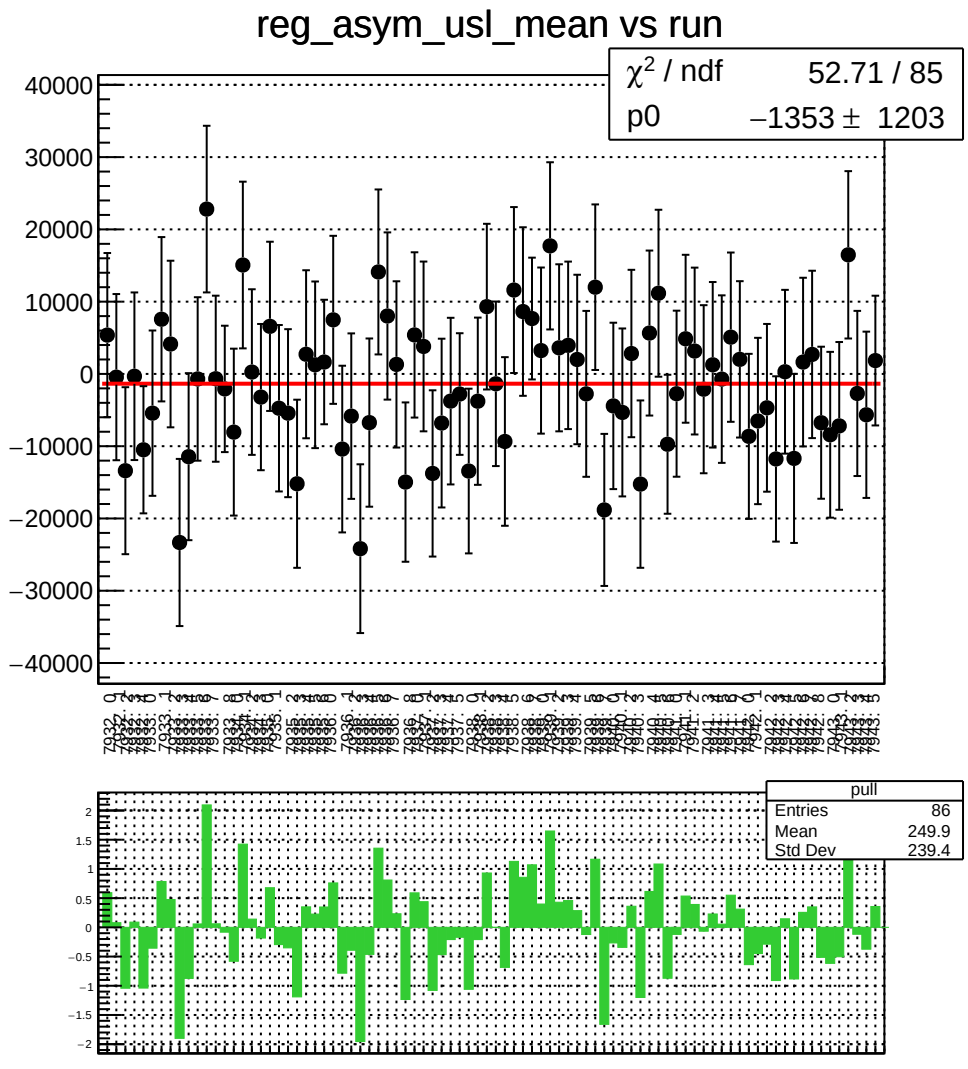

asym_ds_dd_correction_rms vs run
×10^3
χ^2 / ndf 1.419e+06 / 84
p0 1257 ± 2.68
700
600
500
400
300
200
100

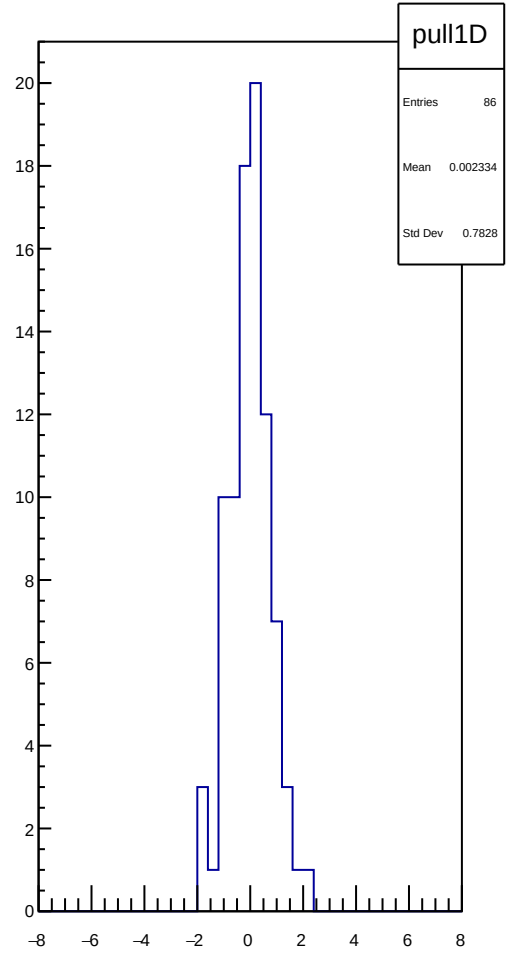

asym_ds_dd_mean vs run
×10^3
χ² / ndf 1.69 / 6
p0 −3.338e+05 ± 1.78e+05
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0

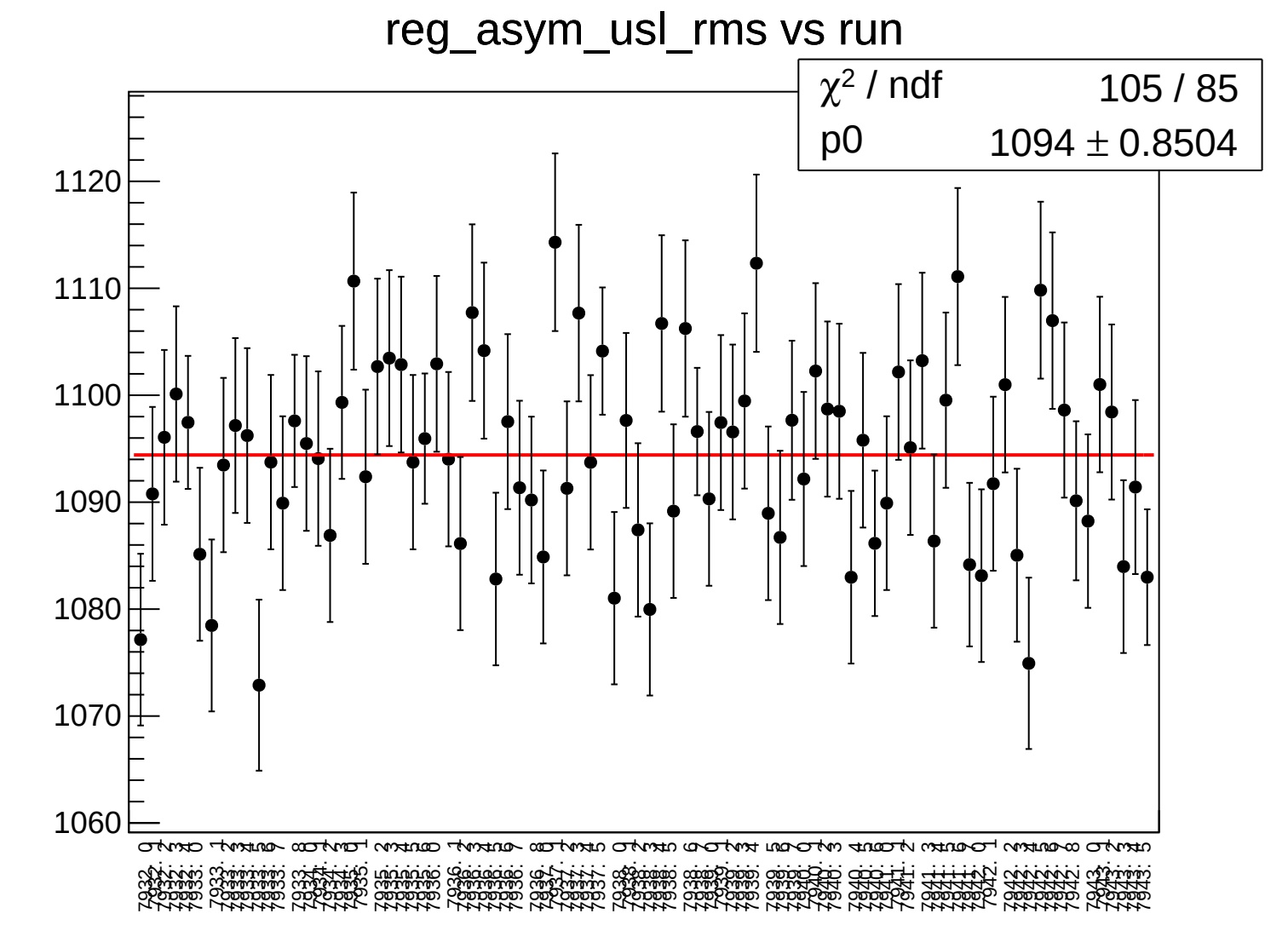

pull
Entries 7
Mean 22.06
Std Dev 19.19
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

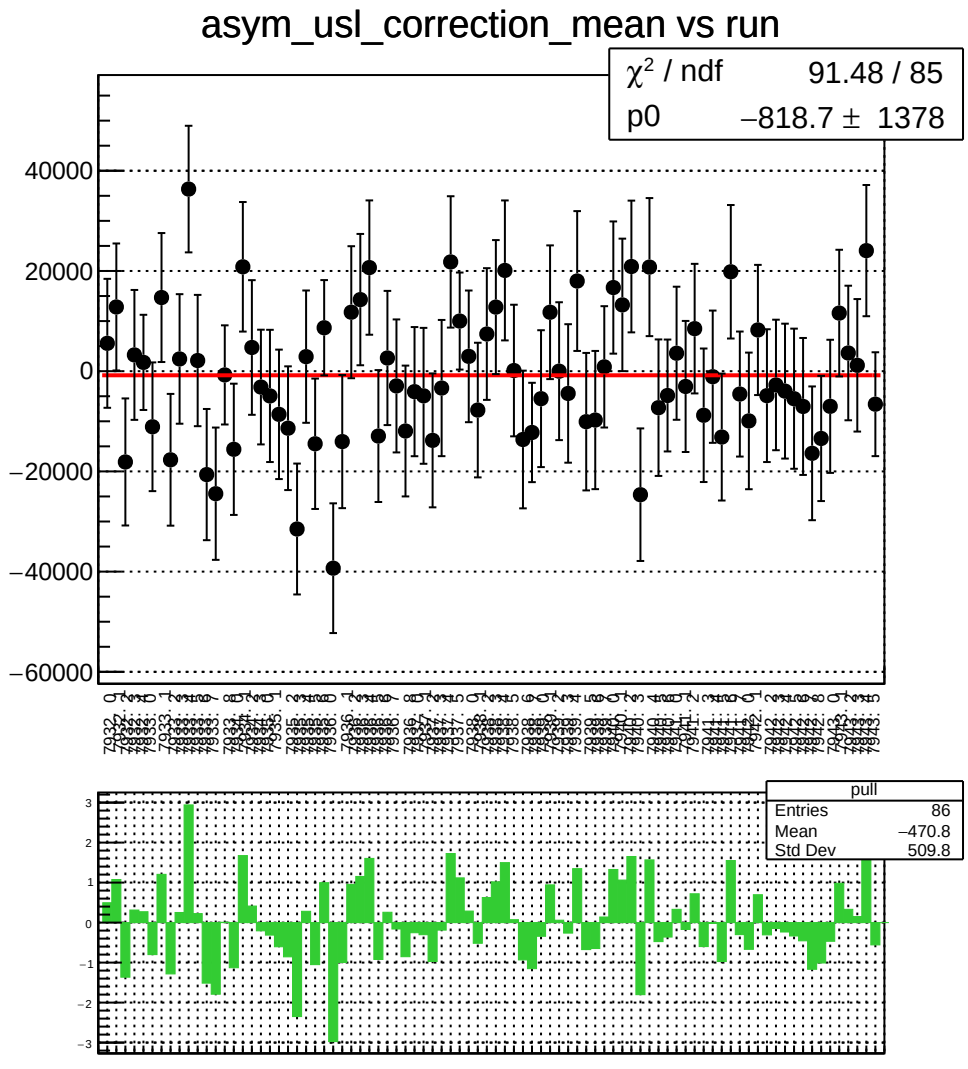

pull1D
Entries 7
Mean 0.01348
Std Dev 0.4912
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

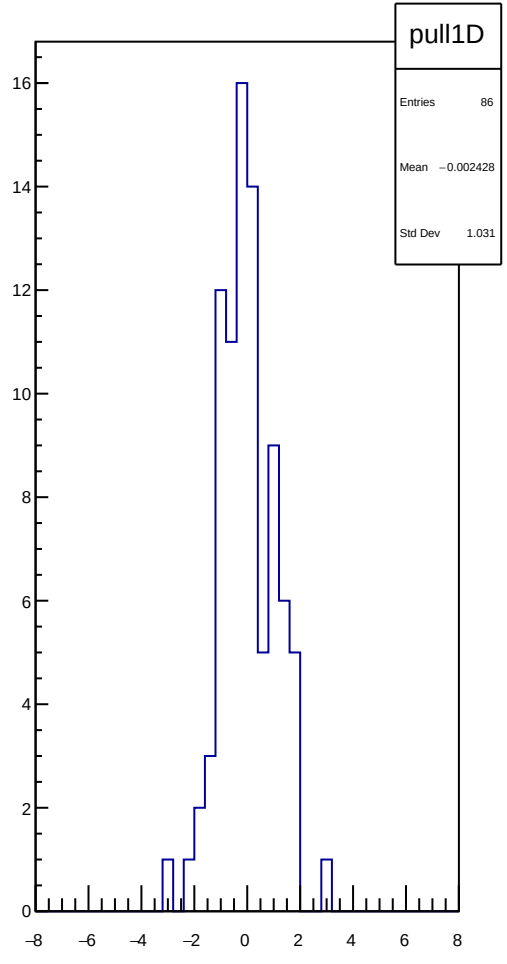

asym_ds_dd_rms vs run
×10^3
χ^2 / ndf 1.295e+05 / 15
p0 4.974e+04 ± 123
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

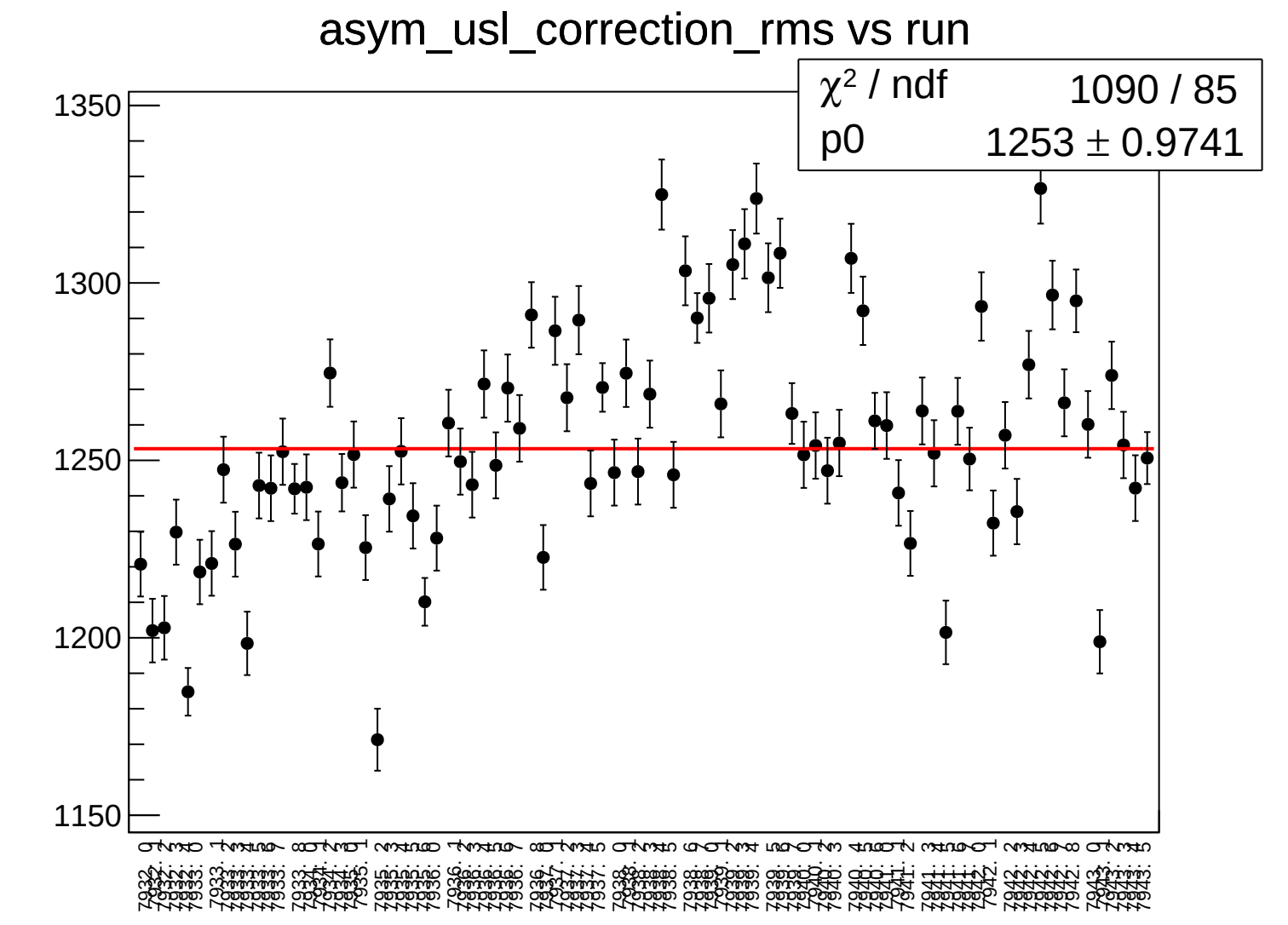

reg_asym_usl_mean vs run
χ² / ndf 52.71 / 85
p0 −1353 ± 1203
pull
Entries 86
Mean 249.9
Std Dev 239.4

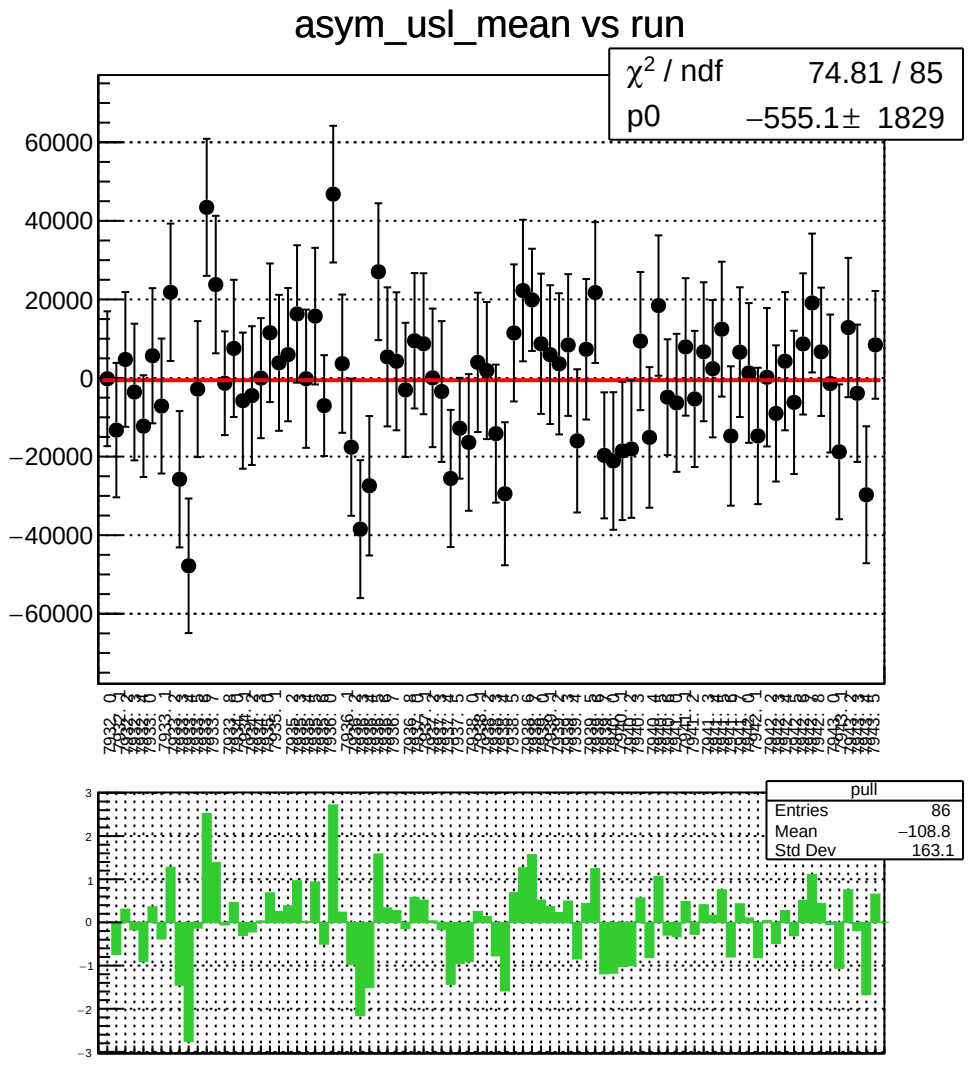

pull1D
Entries 86
Mean 0.002334
Std Dev 0.7828

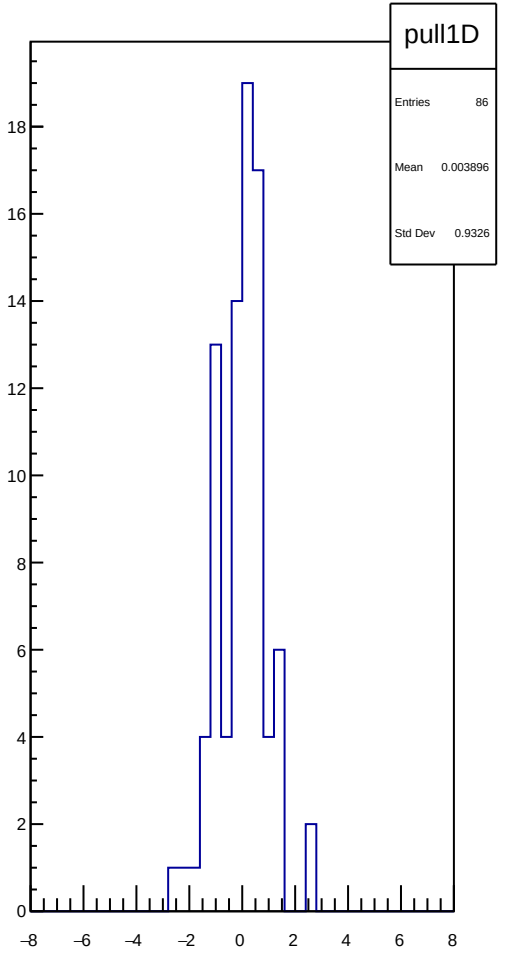

reg_asym_usl_rms vs run
χ² / ndf 105 / 85
p0 1094 ± 0.8504
1120
1110
1100
1090
1080
1070
1060

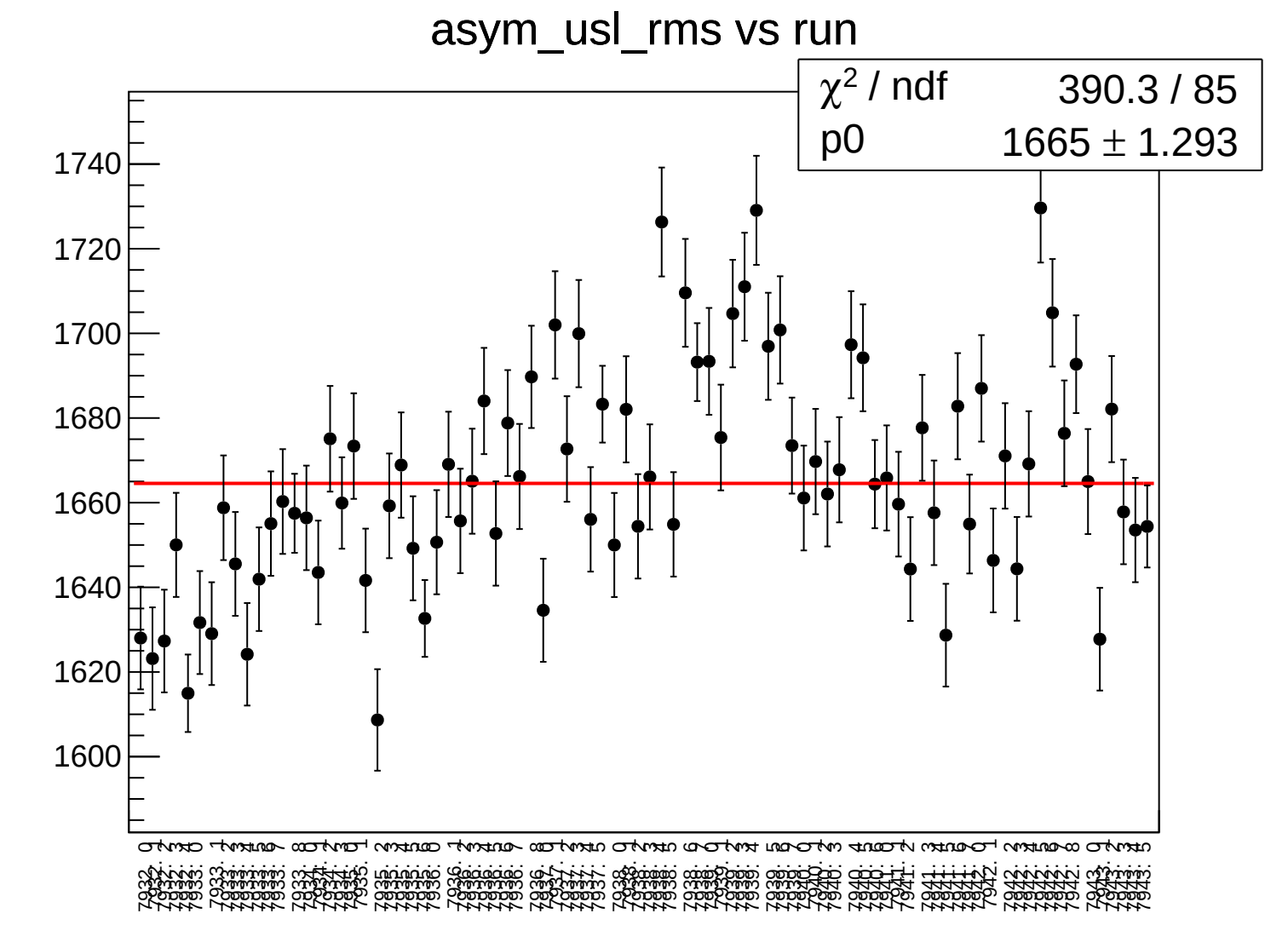

asym_usl_correction_mean vs run
χ² / ndf 91.48 / 85
p0 −818.7 ± 1378
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −470.8
Std Dev 509.8
3
2
1
0
−1
−2
−3

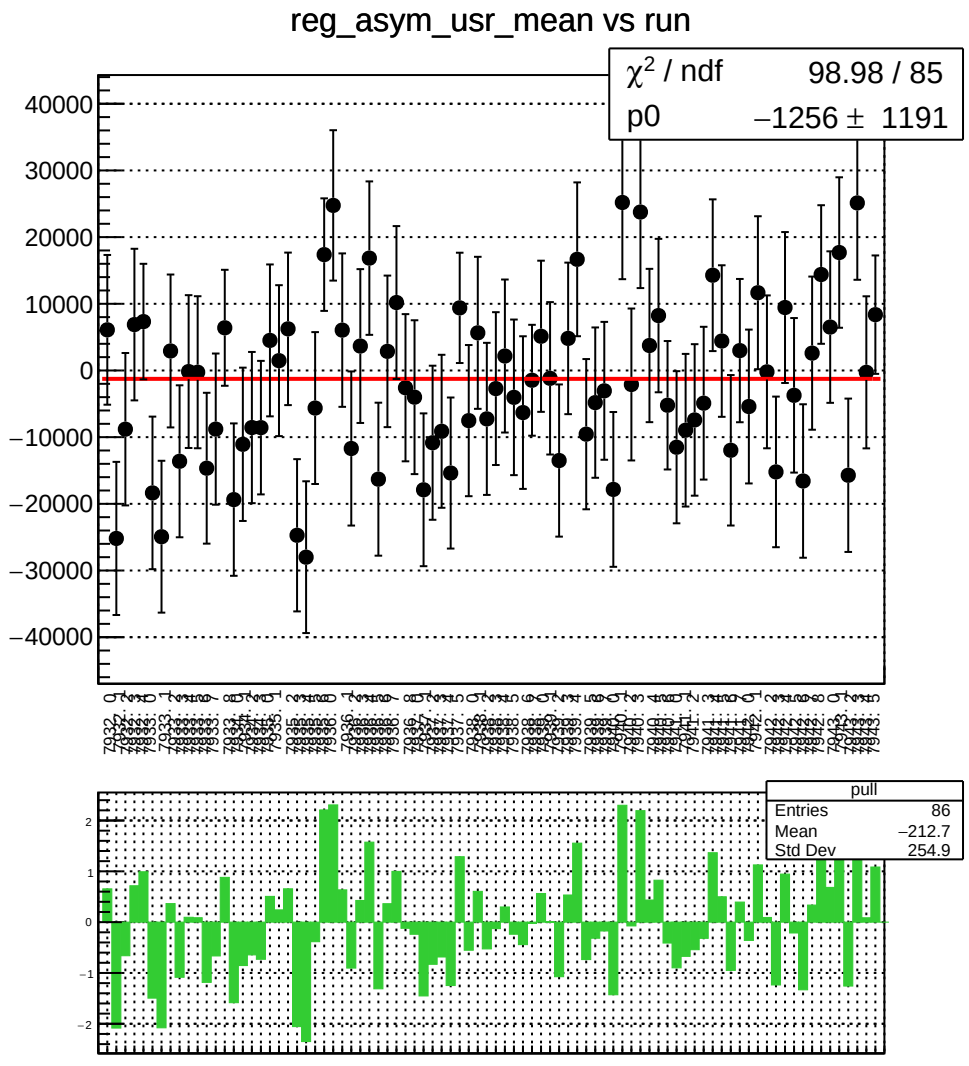

pull1D
Entries 86
Mean −0.002428
Std Dev 1.031
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

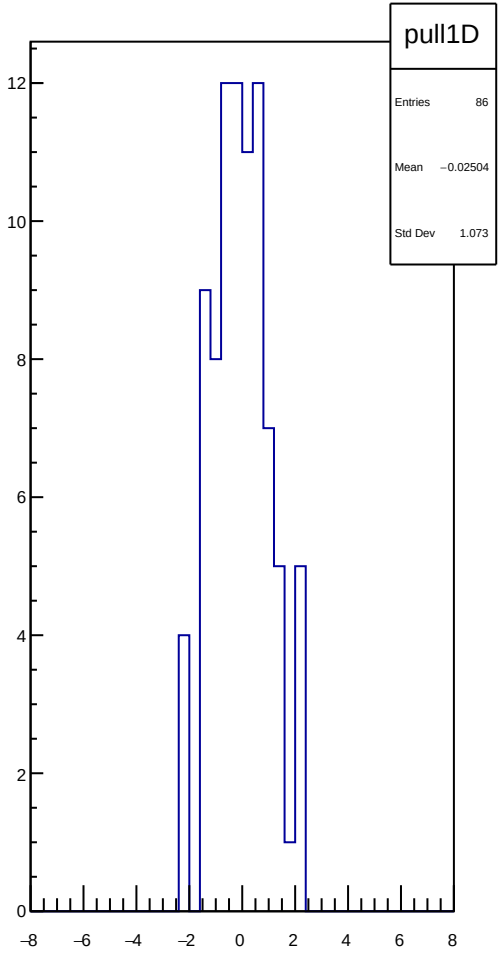

asym_usl_correction_rms vs run
χ² / ndf 1090 / 85
p0 1253 ± 0.9741
1350
1300
1250
1200
1150

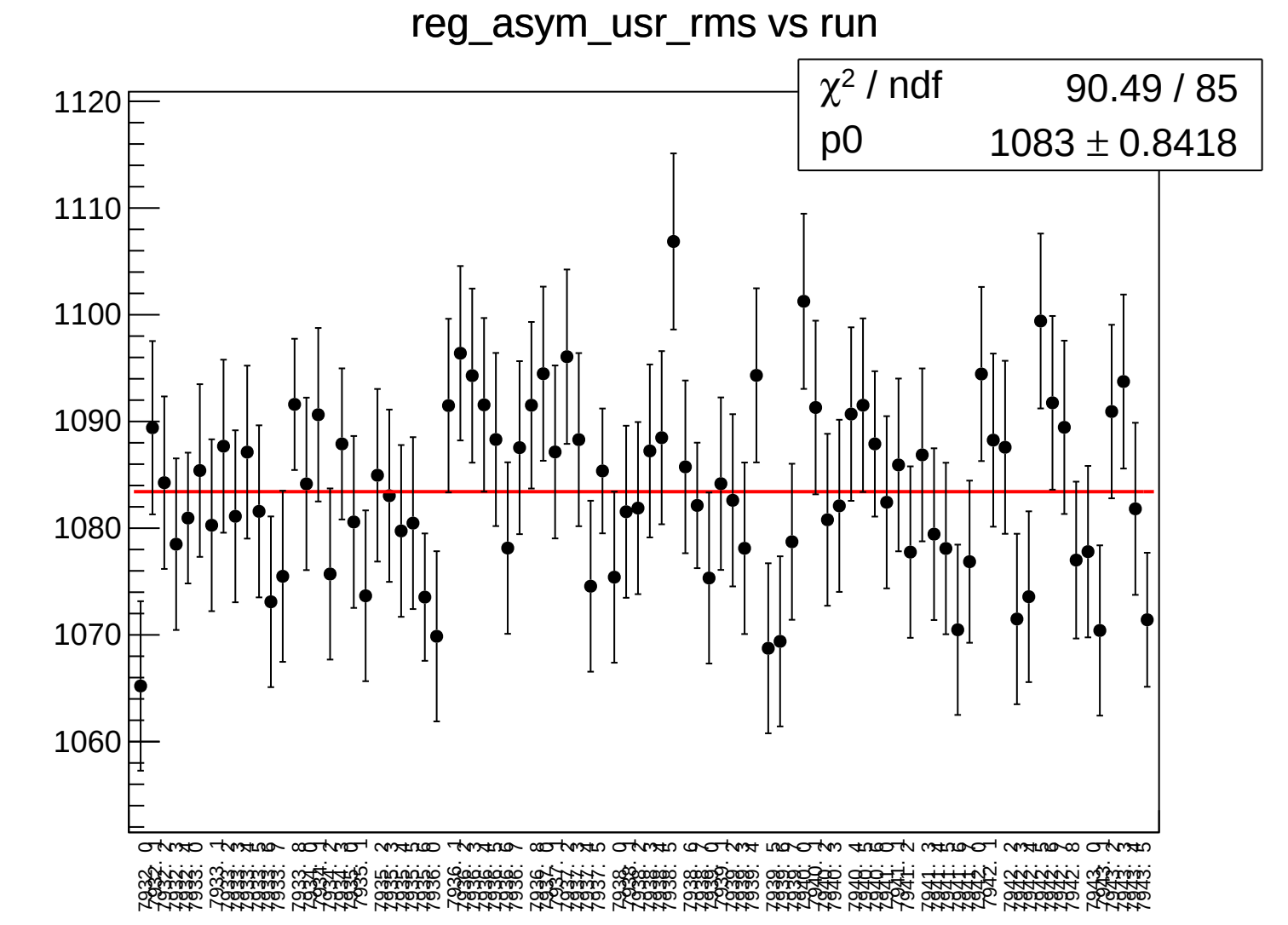

asym_usl_mean vs run
χ² / ndf 74.81 / 85
p0 −555.1± 1829
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −108.8
Std Dev 163.1
3
2
1
0
−1
−2
−3

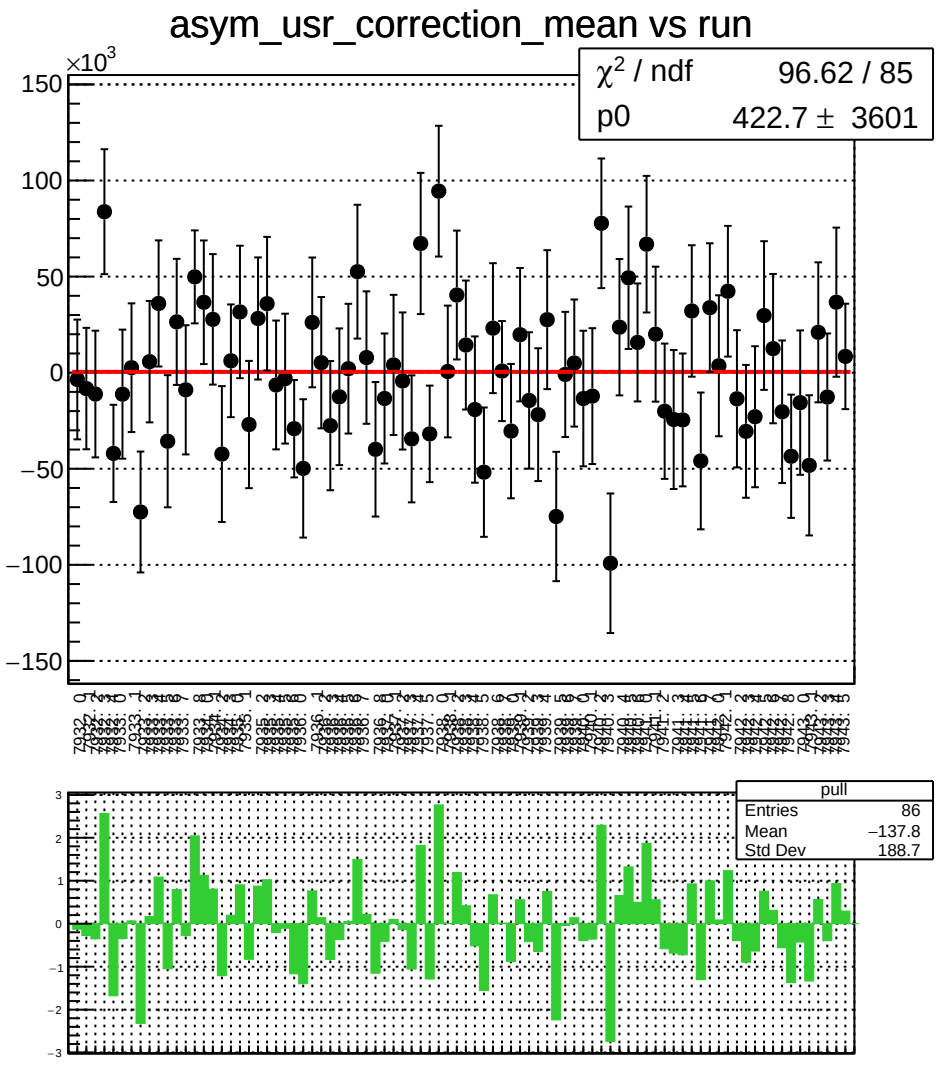

pull1D
Entries 86
Mean 0.003896
Std Dev 0.9326
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

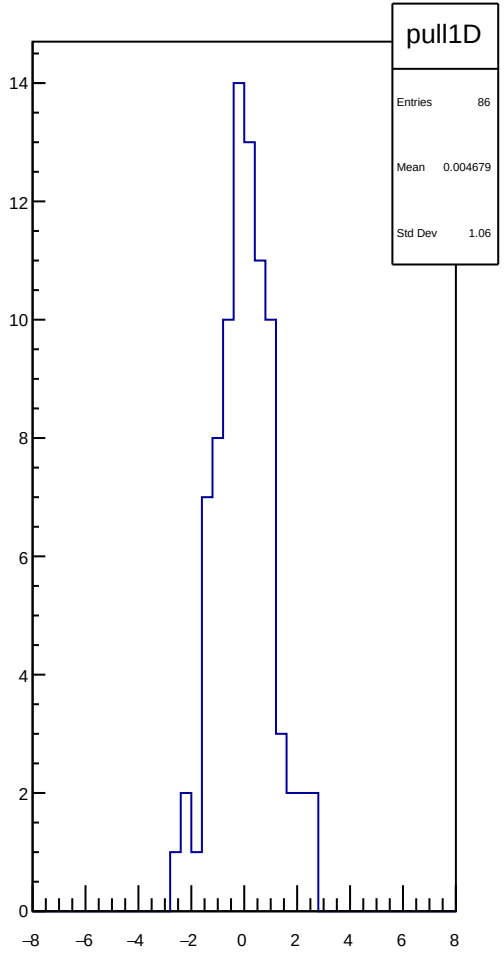

asym_usl_rms vs run
χ² / ndf 390.3 / 85
p0 1665 ± 1.293
1740
1720
1700
1680
1660
1640
1620
1600

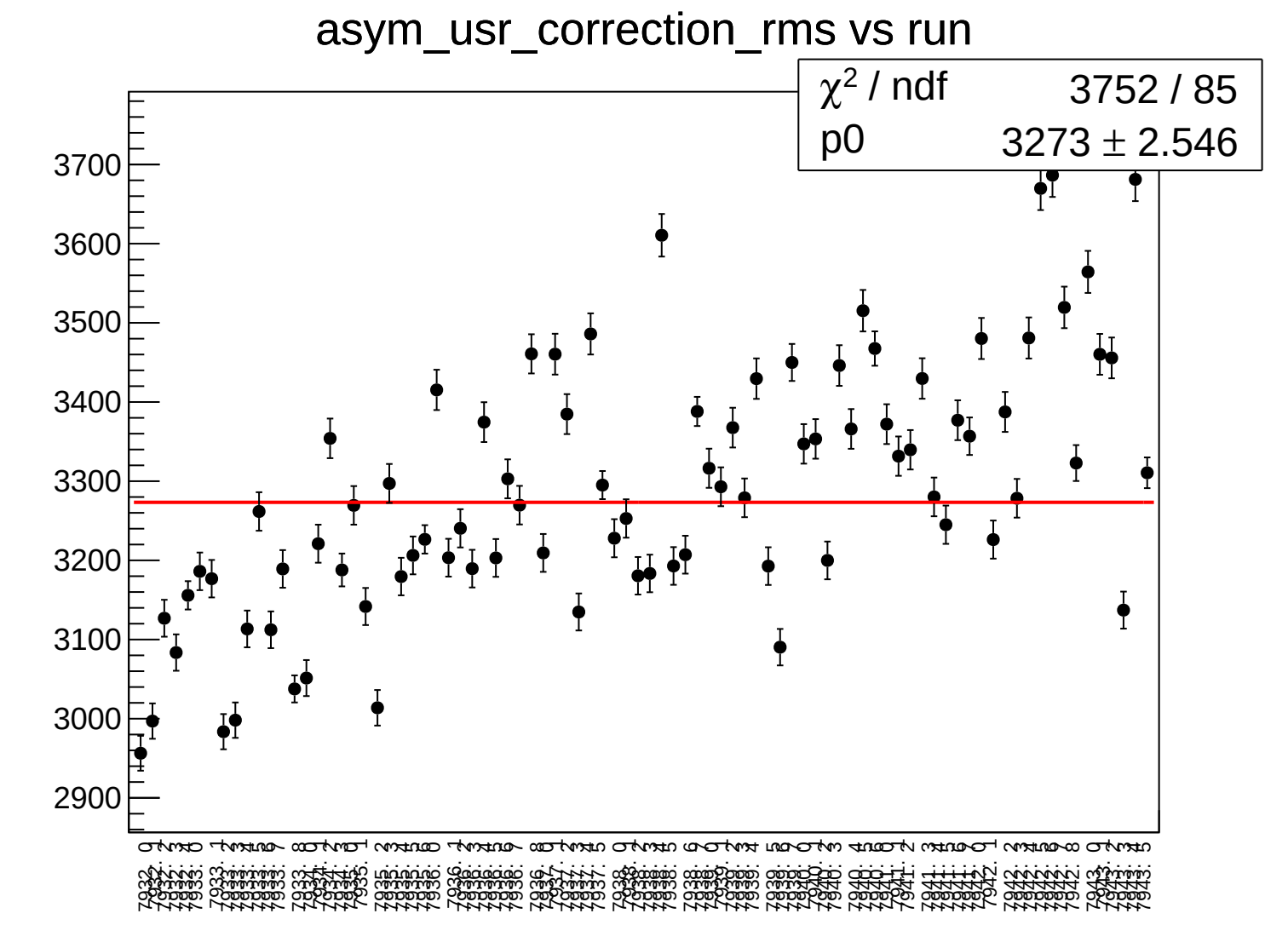

reg_asym_usr_mean vs run
χ² / ndf 98.98 / 85
p0 −1256 ± 1191
pull
Entries 86
Mean −212.7
Std Dev 254.9

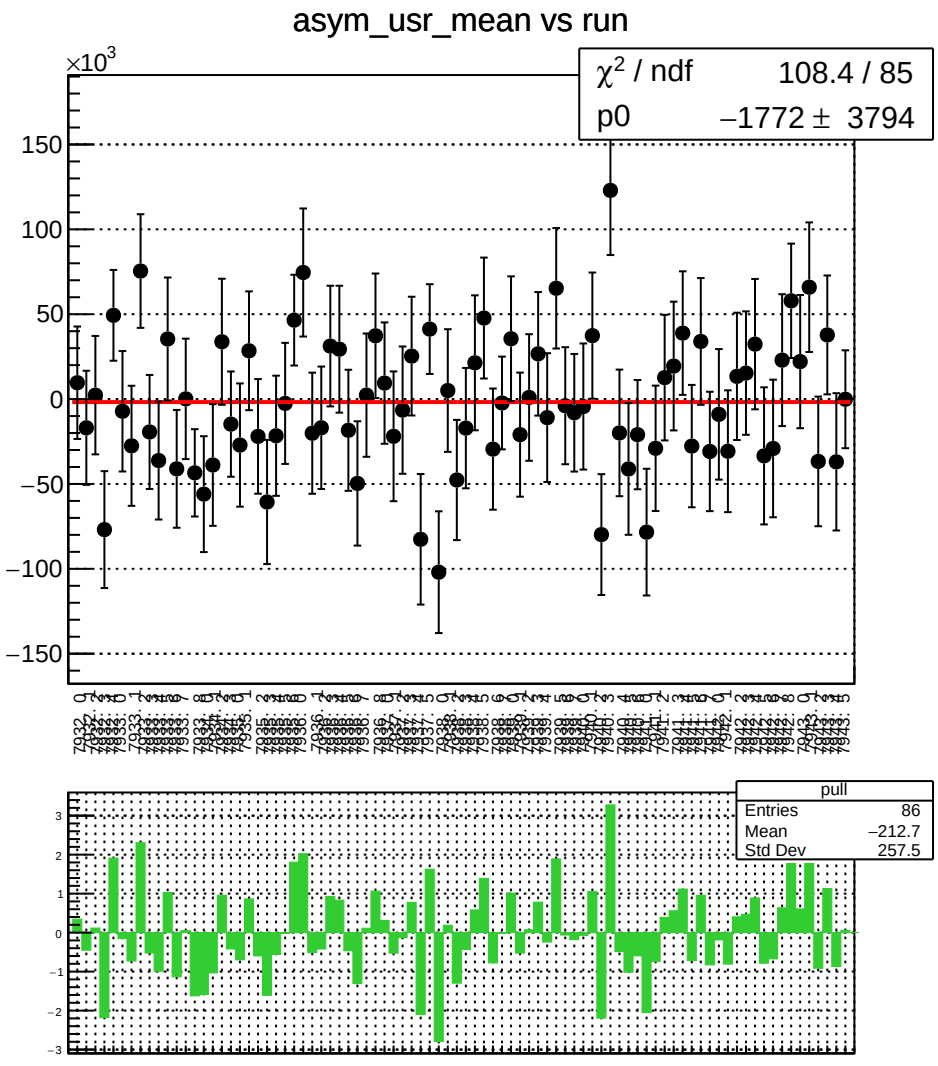

pull1D
Entries 86
Mean −0.02504
Std Dev 1.073

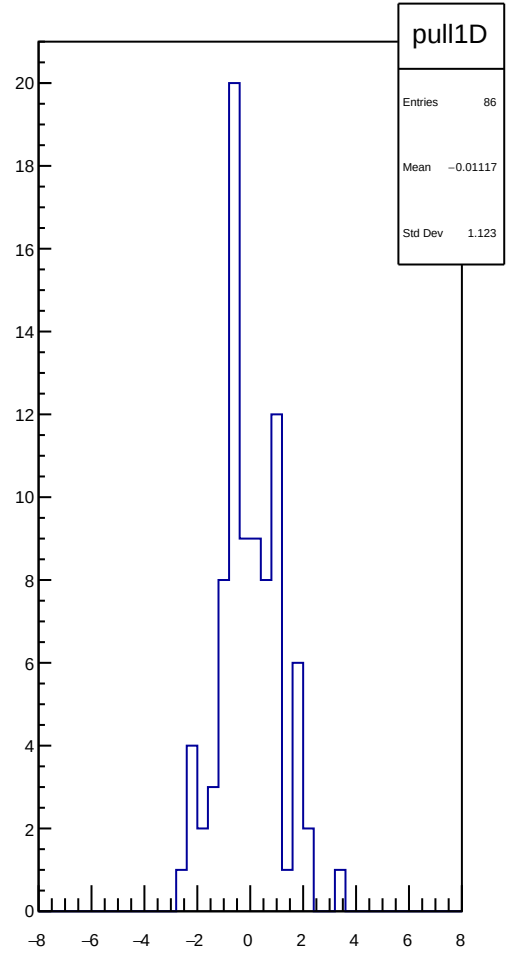

reg_asym_usr_rms vs run
χ² / ndf 90.49 / 85
p0 1083 ± 0.8418
1120
1110
1100
1090
1080
1070
1060

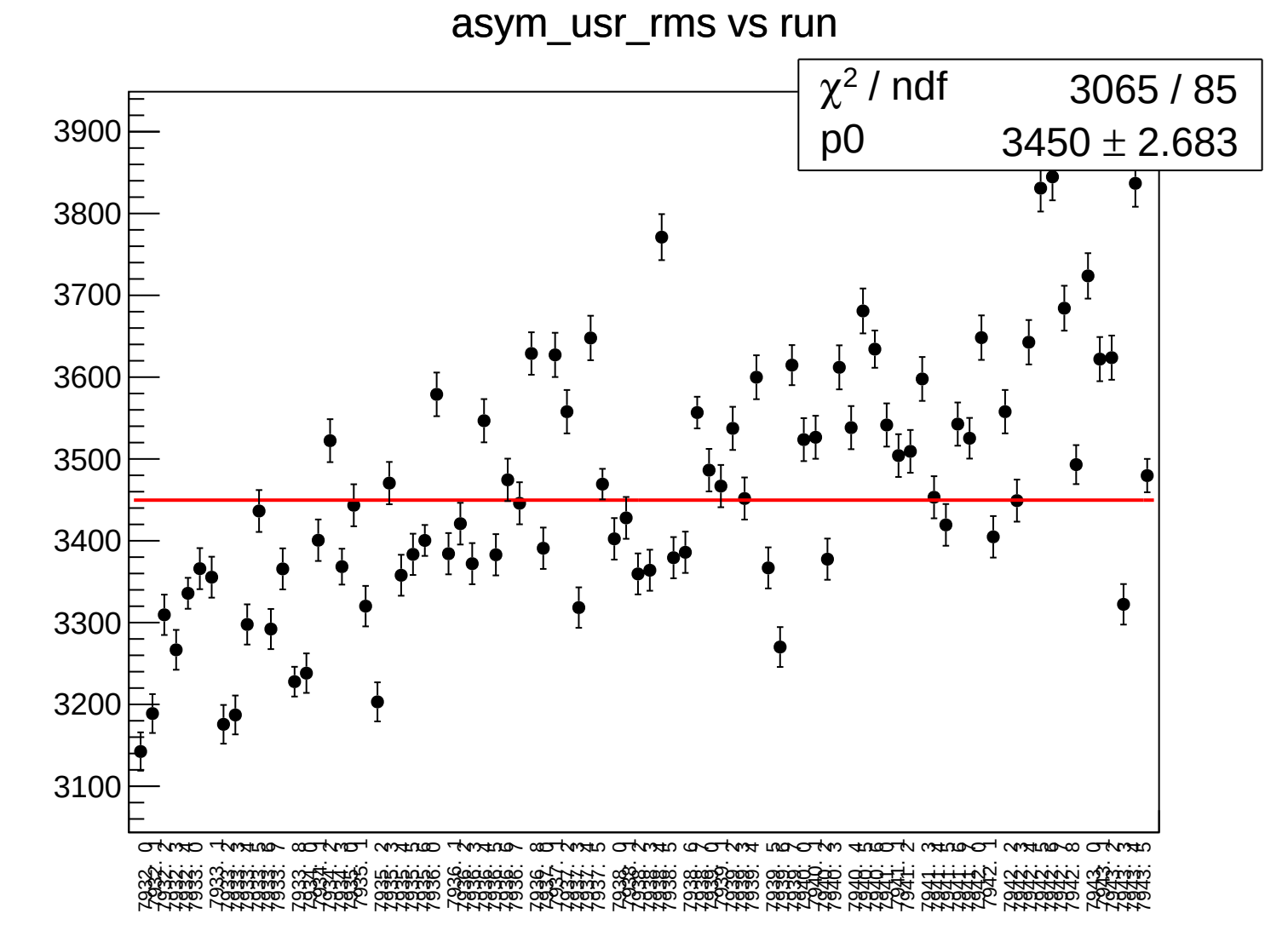

asym_usr_correction_mean vs run
×10^3
χ² / ndf 96.62 / 85
p0 422.7 ± 3601
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −137.8
Std Dev 188.7
3
2
1
0
−1
−2
−3

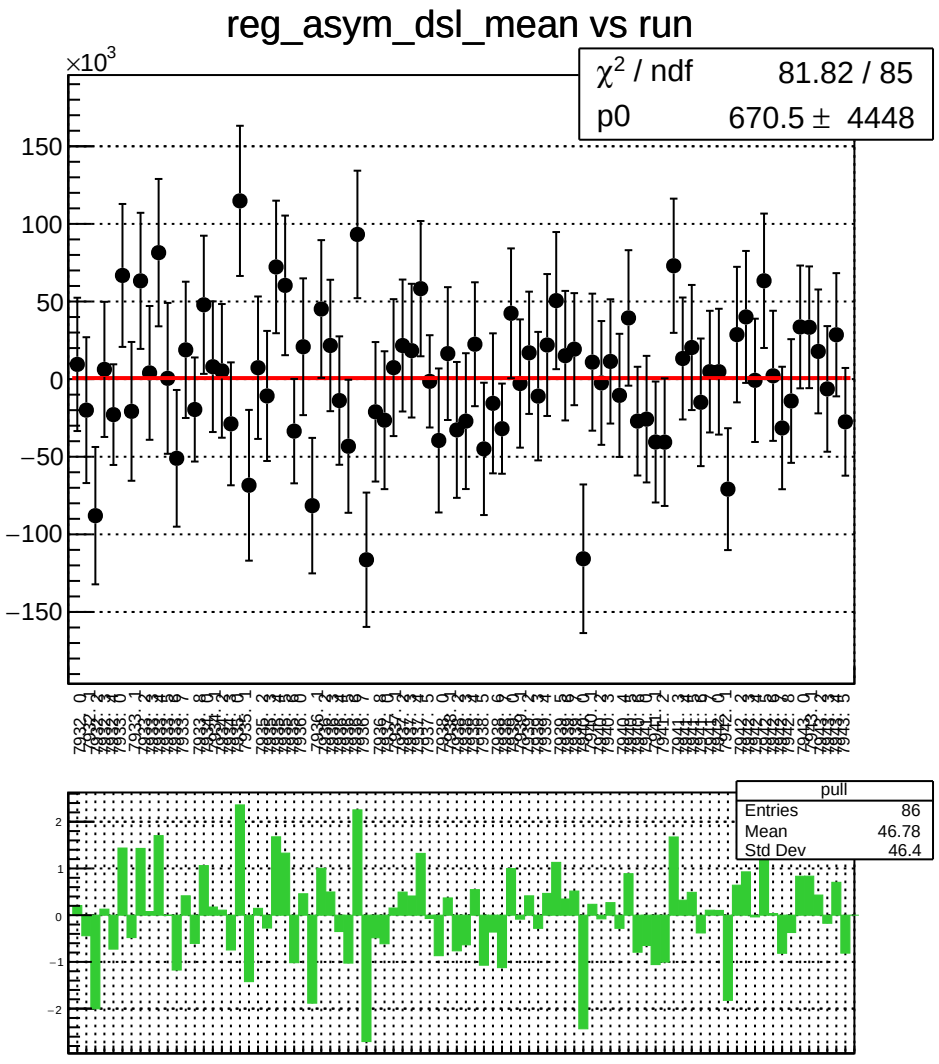

pull1D
Entries 86
Mean 0.004679
Std Dev 1.06
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

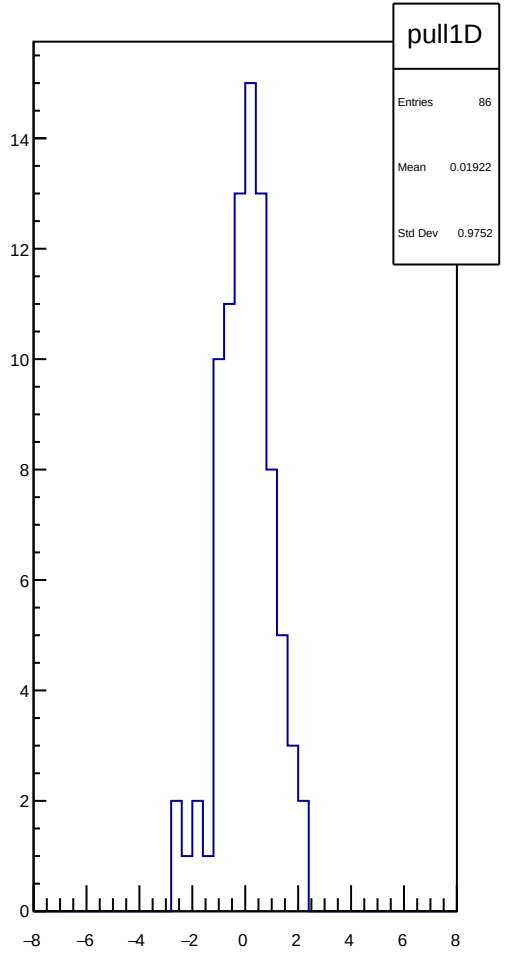

asym_usr_correction_rms vs run
χ² / ndf 3752 / 85
p0 3273 ± 2.546
3700
3600
3500
3400
3300
3200
3100
3000
2900

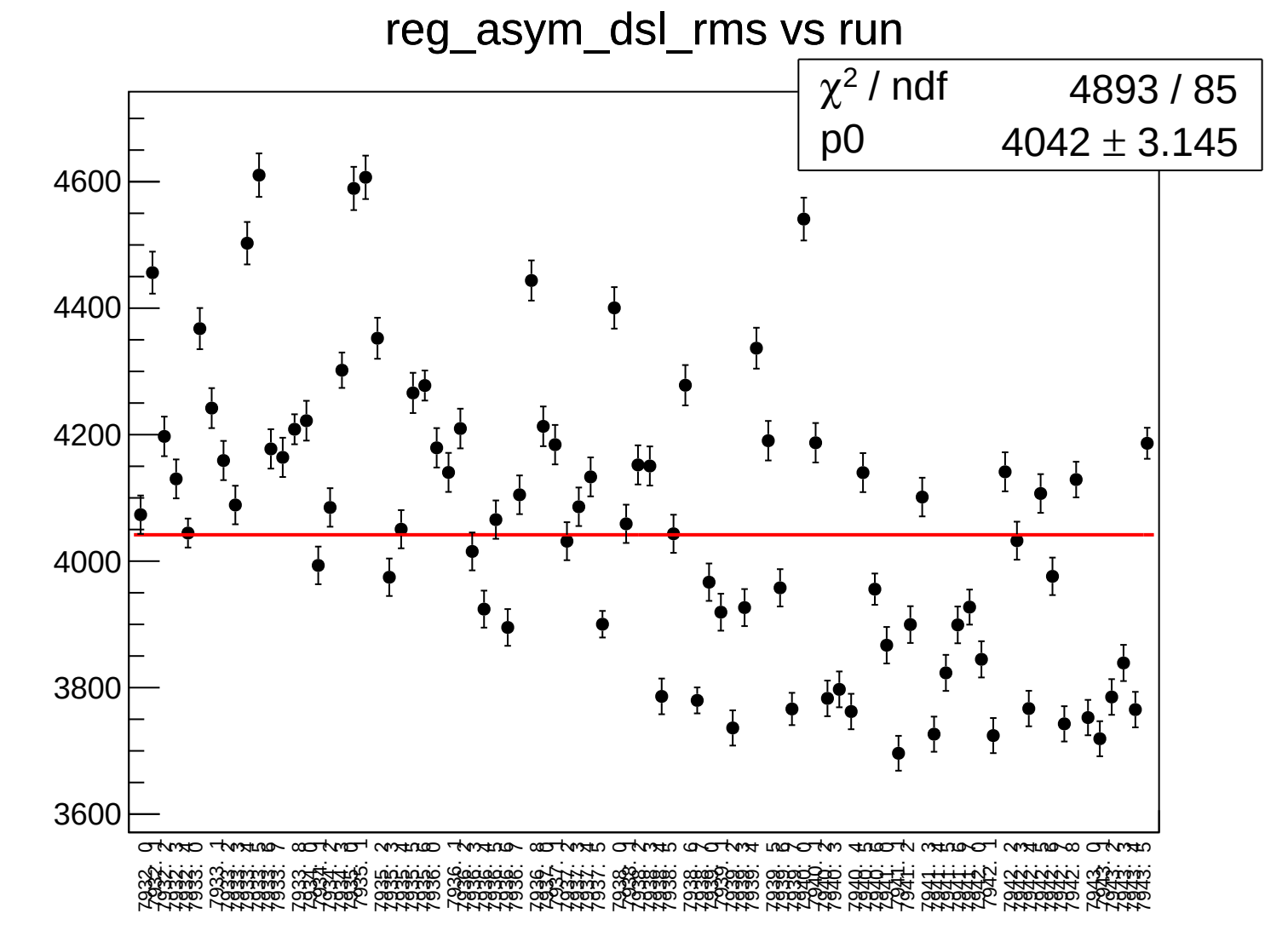

asym_usr_mean vs run
×10^3
χ² / ndf 108.4 / 85
p0 −1772 ± 3794
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −212.7
Std Dev 257.5
3
2
1
0
−1
−2
−3

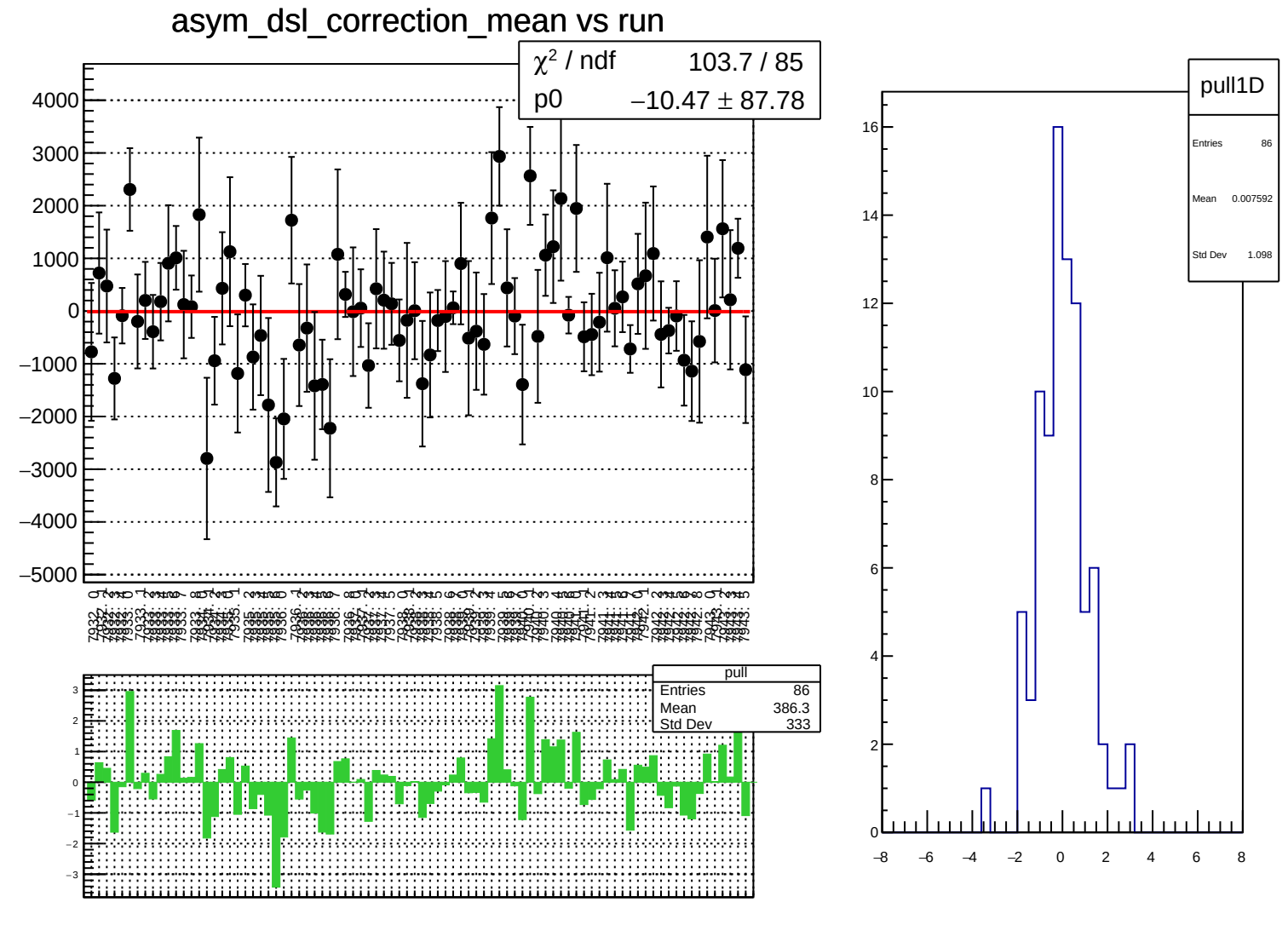

pull1D
Entries 86
Mean −0.01117
Std Dev 1.123
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

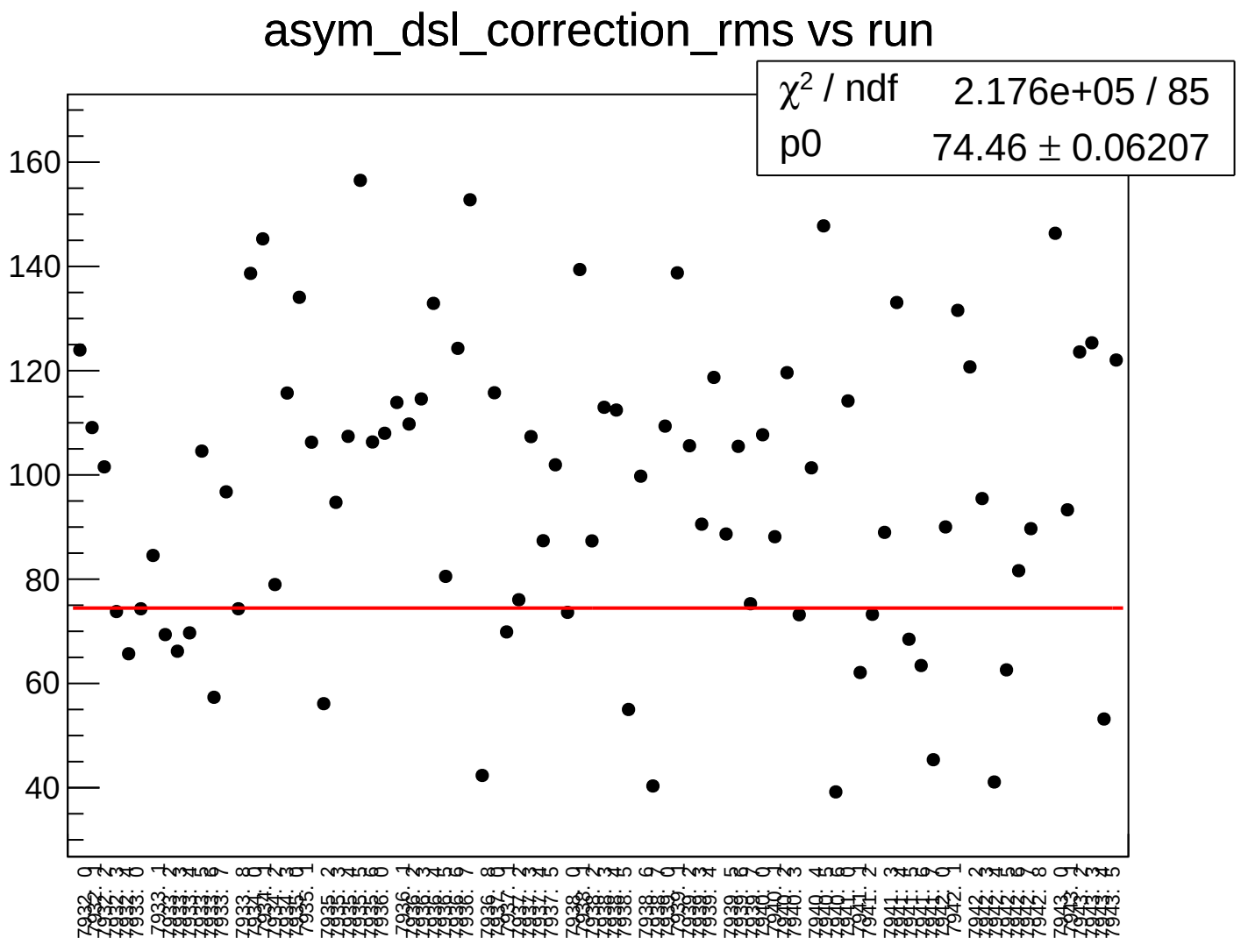

asym_usr_rms vs run
χ² / ndf 3065 / 85
p0 3450 ± 2.683
3900
3800
3700
3600
3500
3400
3300
3200
3100

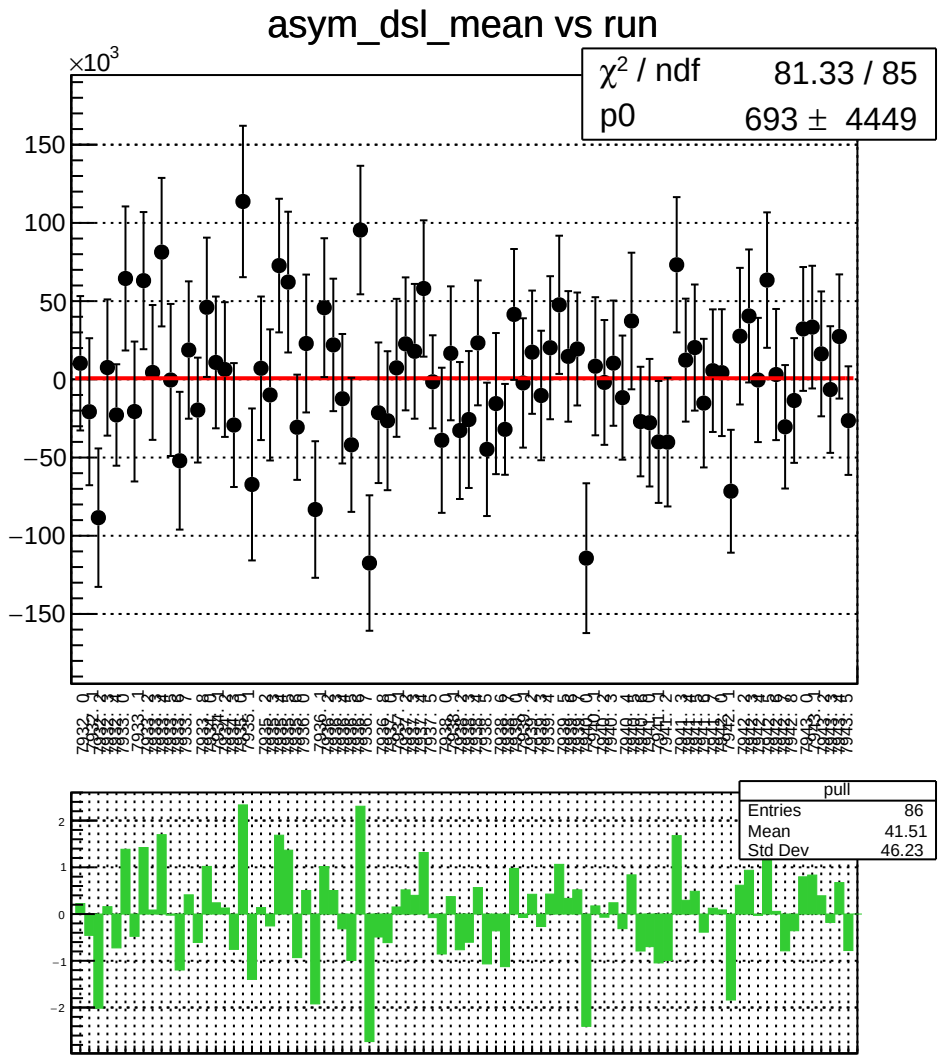

reg_asym_dsl_mean vs run
×10^3
χ^2 / ndf 81.82 / 85
p0 670.5 ± 4448
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 46.78
Std Dev 46.4
2
1
0
−1
−2

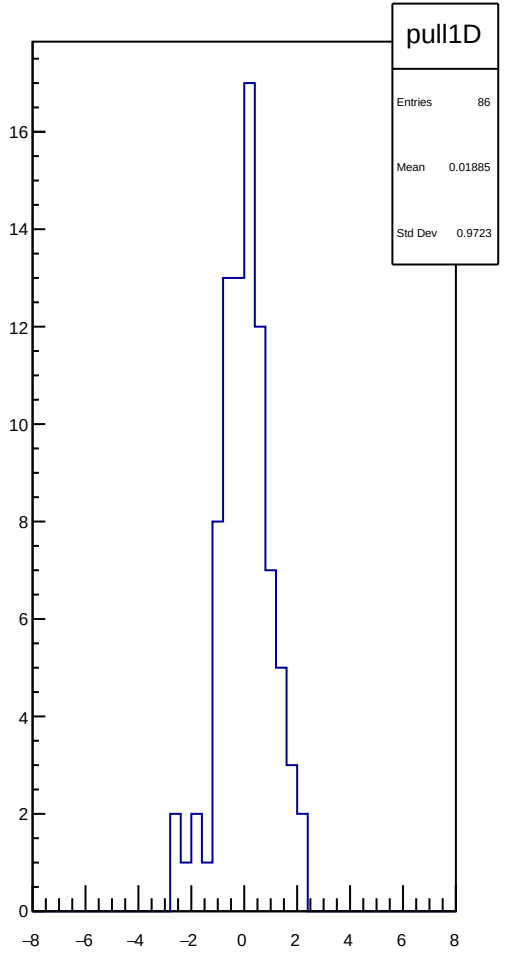

pull1D
Entries 86
Mean 0.01922
Std Dev 0.9752
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

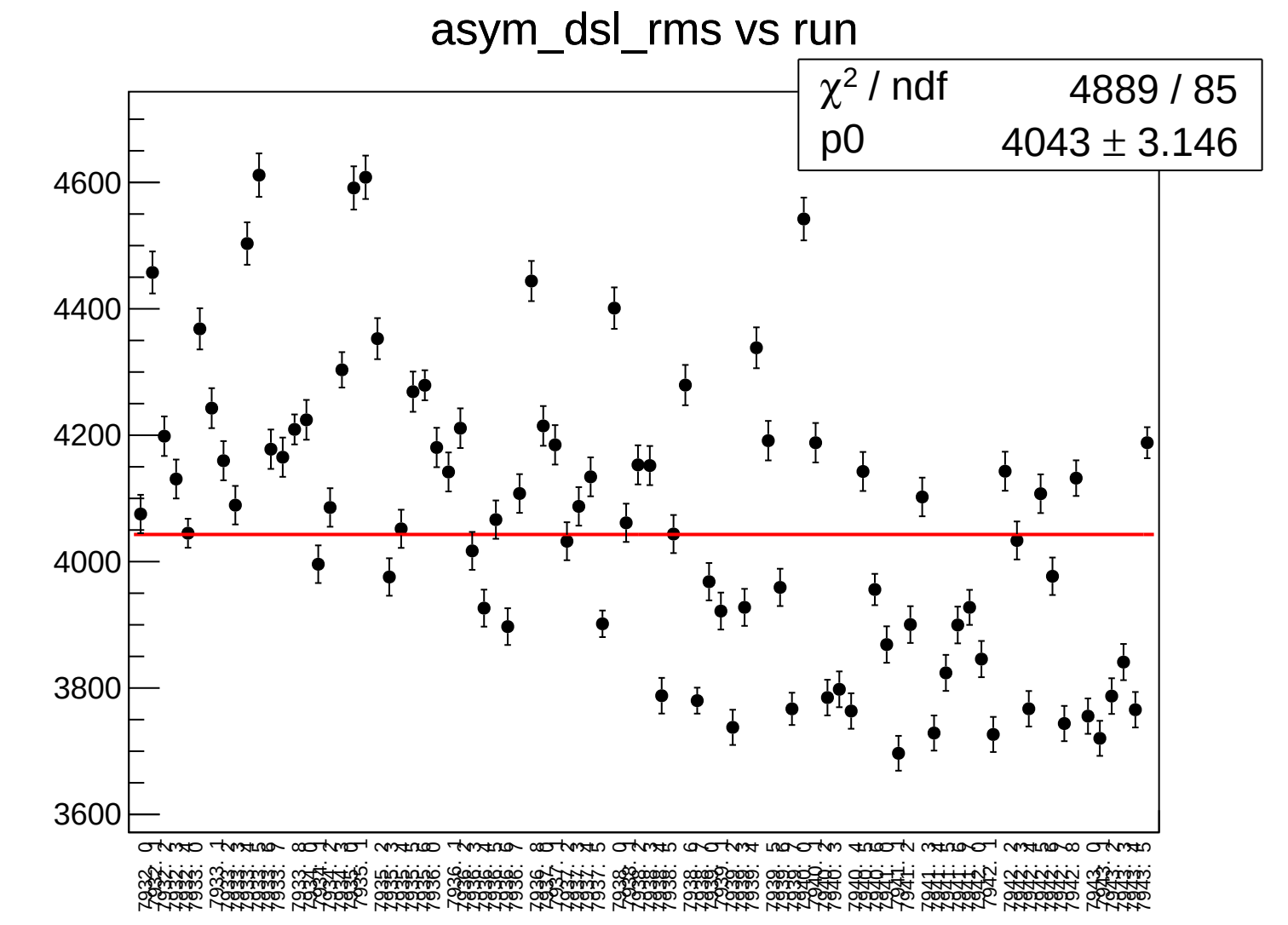

reg_asym_dsl_rms vs run
χ² / ndf 4893 / 85
p0 4042 ± 3.145
4600
4400
4200
4000
3800
3600

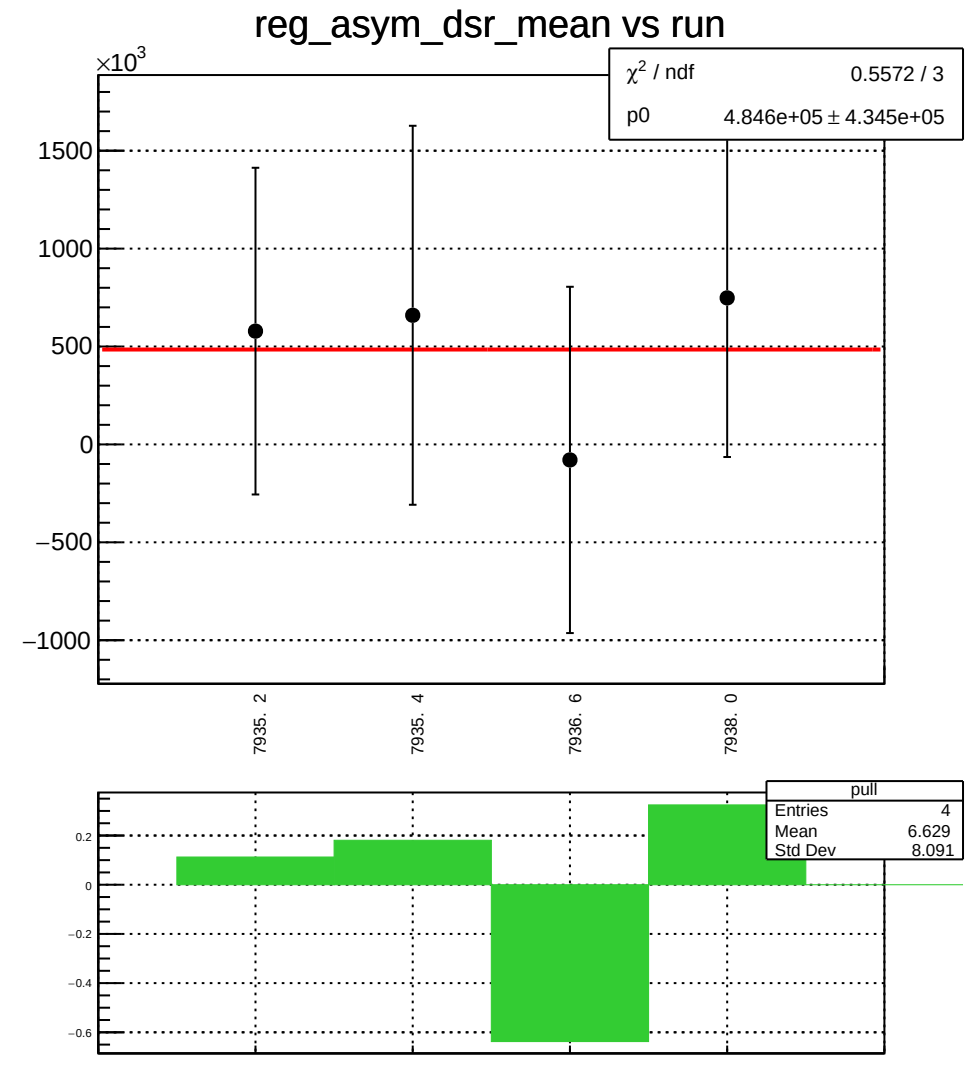

asym_dsl_correction_mean vs run
χ² / ndf 103.7 / 85
p0 −10.47 ± 87.78
pull
Entries 86
Mean 386.3
Std Dev 333
pull1D
Entries 86
Mean 0.007592
Std Dev 1.098

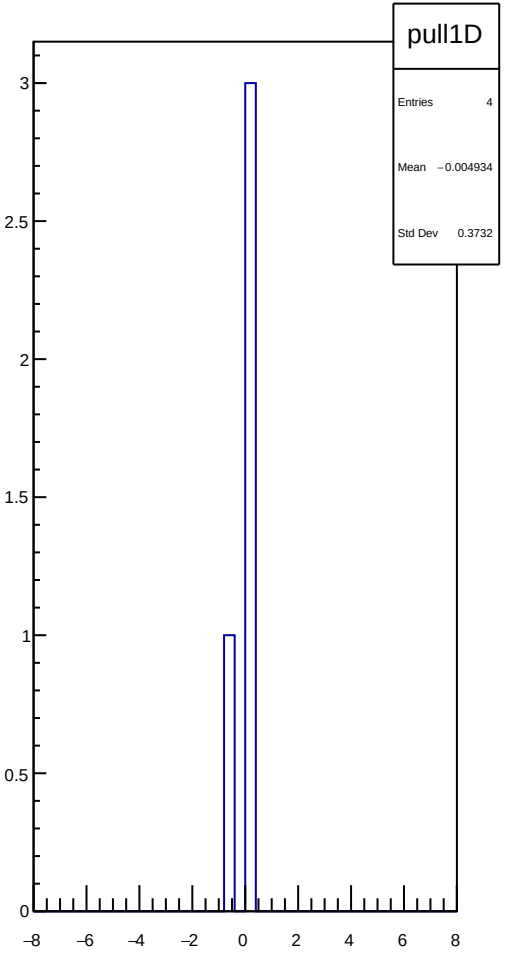

asym_dsl_correction_rms vs run
χ² / ndf 2.176e+05 / 85
p0 74.46 ± 0.06207
160
140
120
100
80
60
40

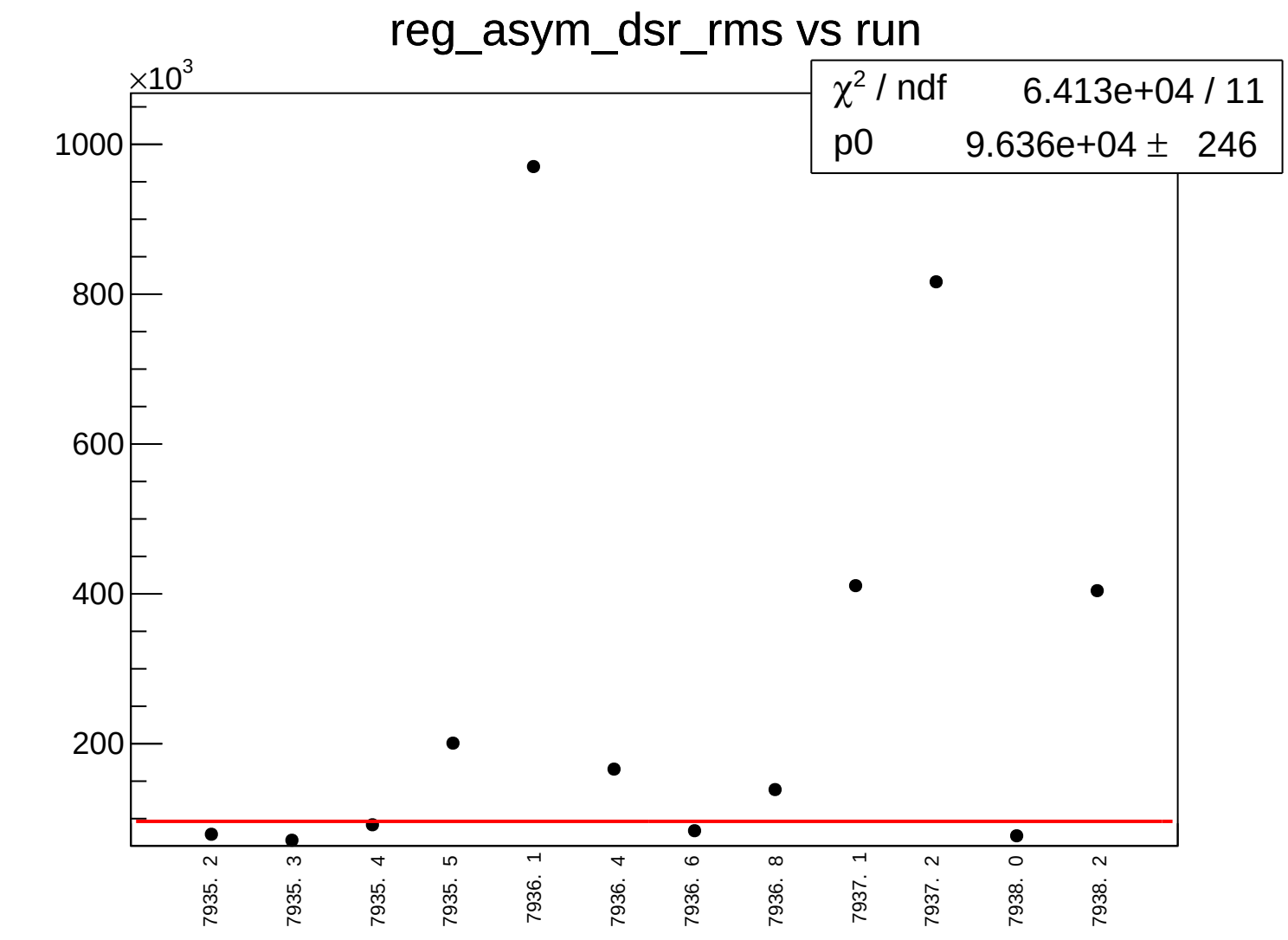

asym_dsl_mean vs run
×10^3
χ² / ndf 81.33 / 85
p0 693 ± 4449
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 41.51
Std Dev 46.23
2
1
0
−1
−2

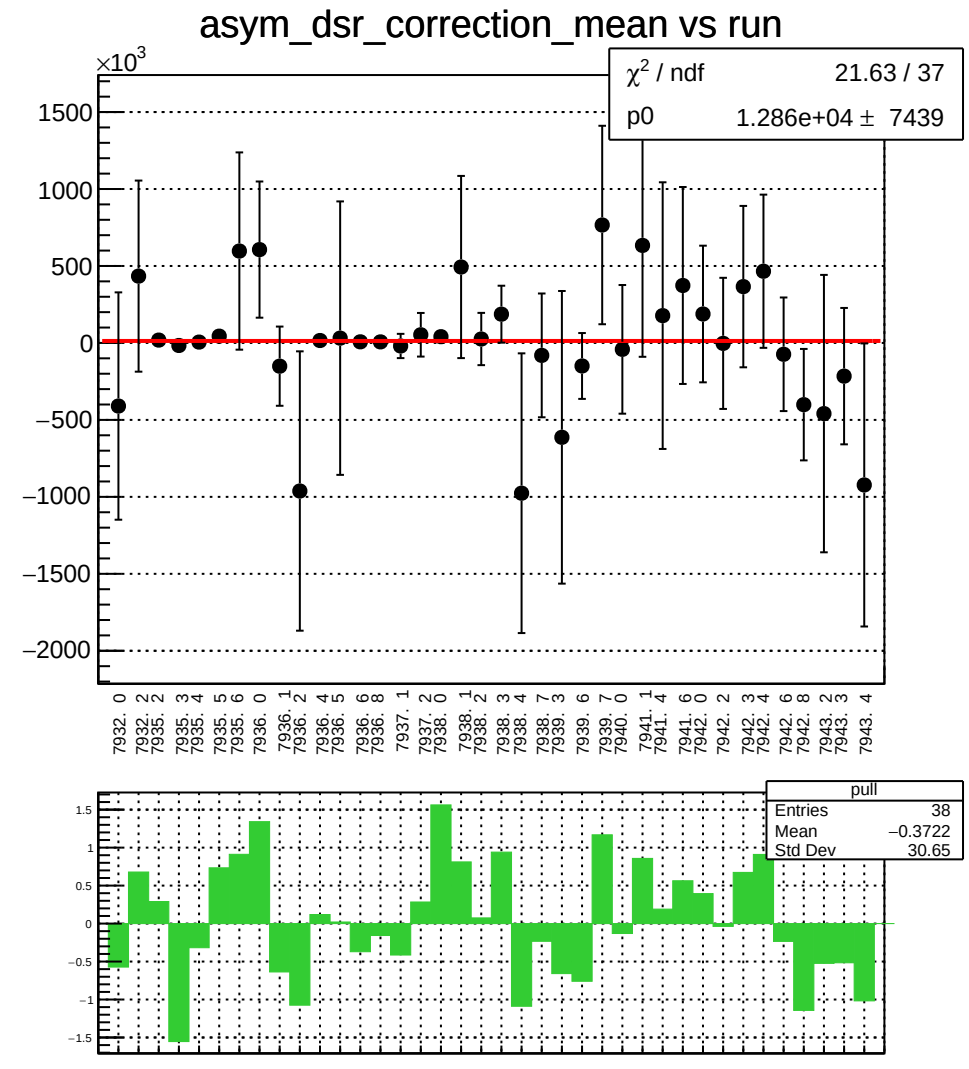

pull1D
Entries 86
Mean 0.01885
Std Dev 0.9723
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

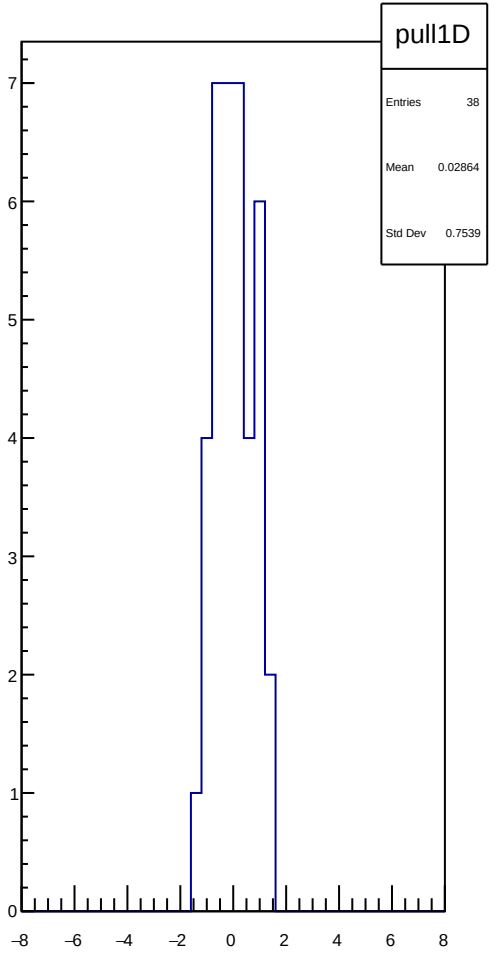

asym_dsl_rms vs run
χ² / ndf 4889 / 85
p0 4043 ± 3.146
4600
4400
4200
4000
3800
3600

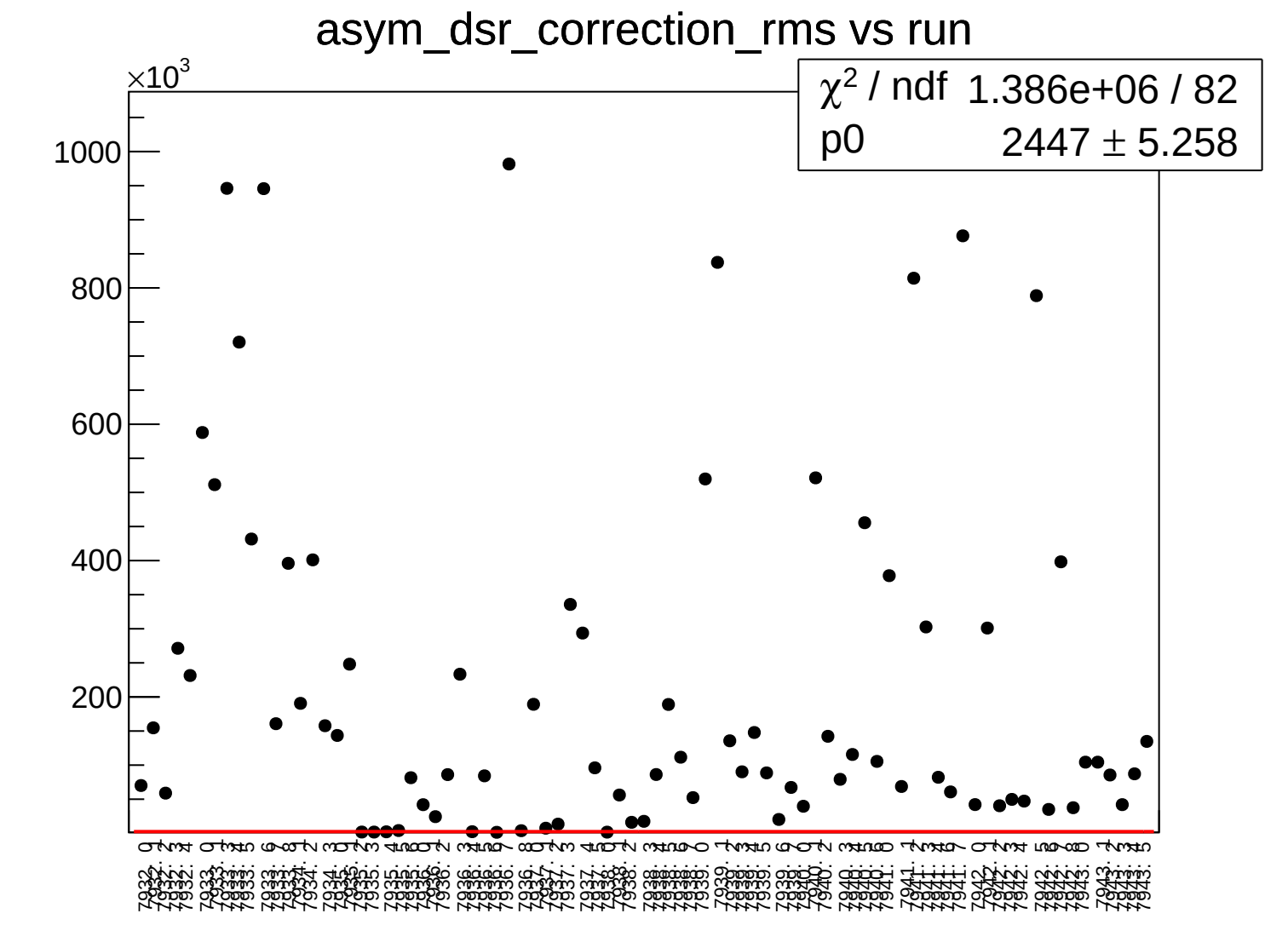

reg_asym_dsr_mean vs run
×10^3
χ² / ndf 0.5572 / 3
p0 4.846e+05 ± 4.345e+05
1500
1000
500
0
−500
−1000
7935. 2
7935. 4
7936. 6
7938. 0
pull
Entries 4
Mean 6.629
Std Dev 8.091
0.2
0
−0.2
−0.4
−0.6

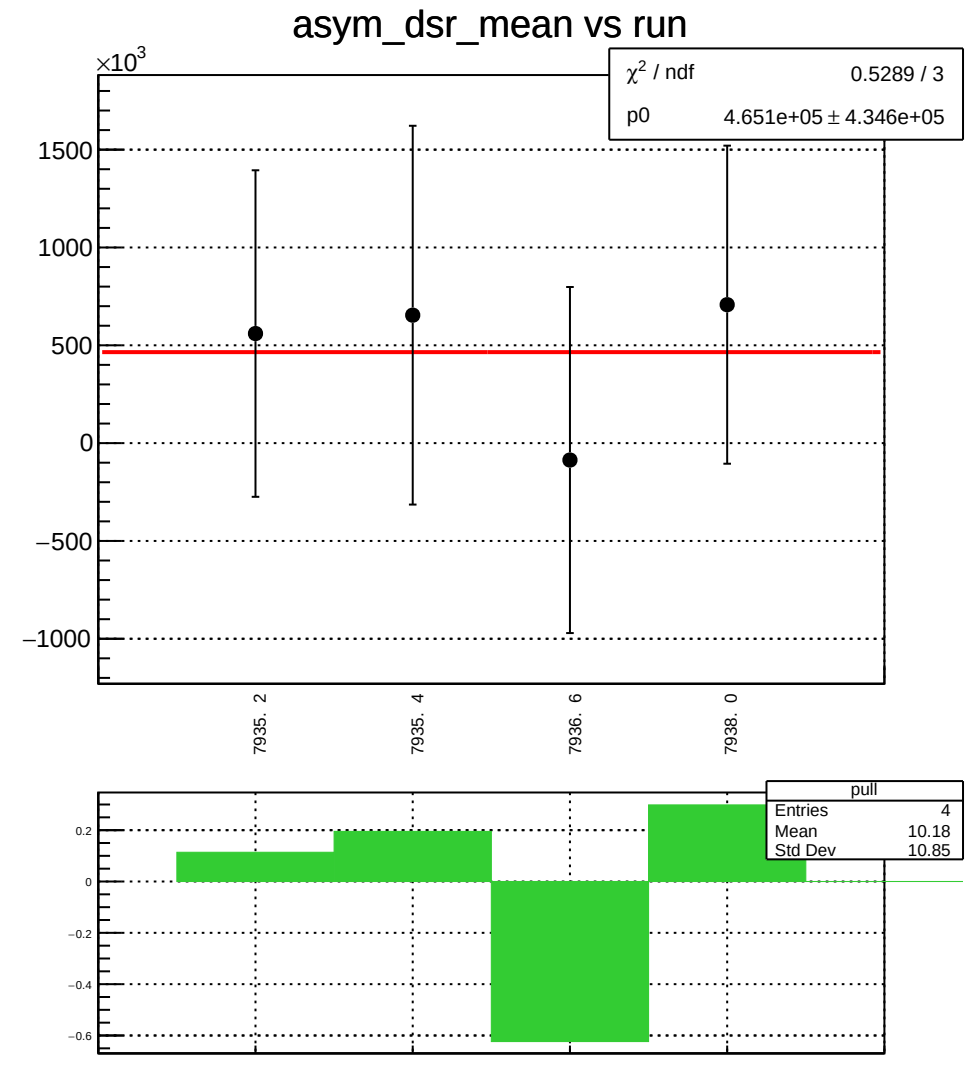

pull1D
Entries 4
Mean −0.004934
Std Dev 0.3732
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

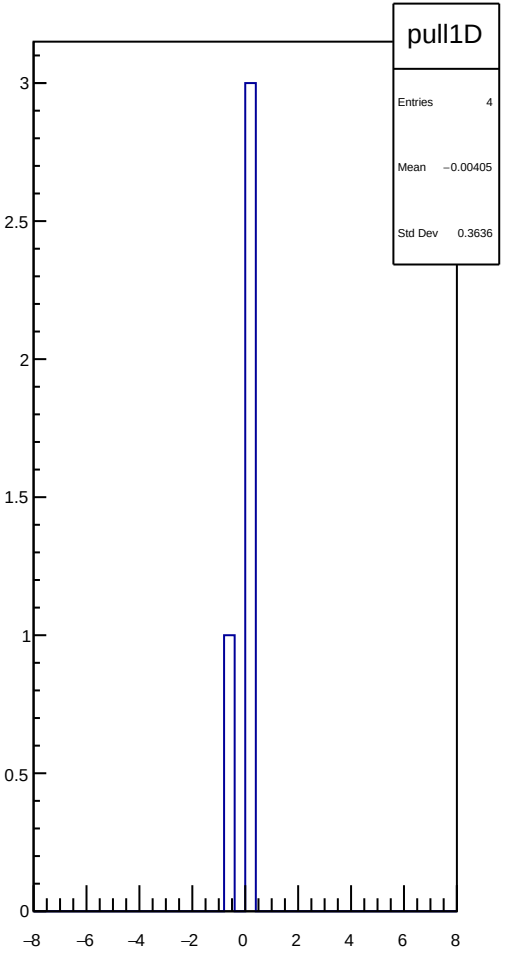

reg_asym_dsr_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 6.413e+04 / 11
p0 9.636e+04 ± 246
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2

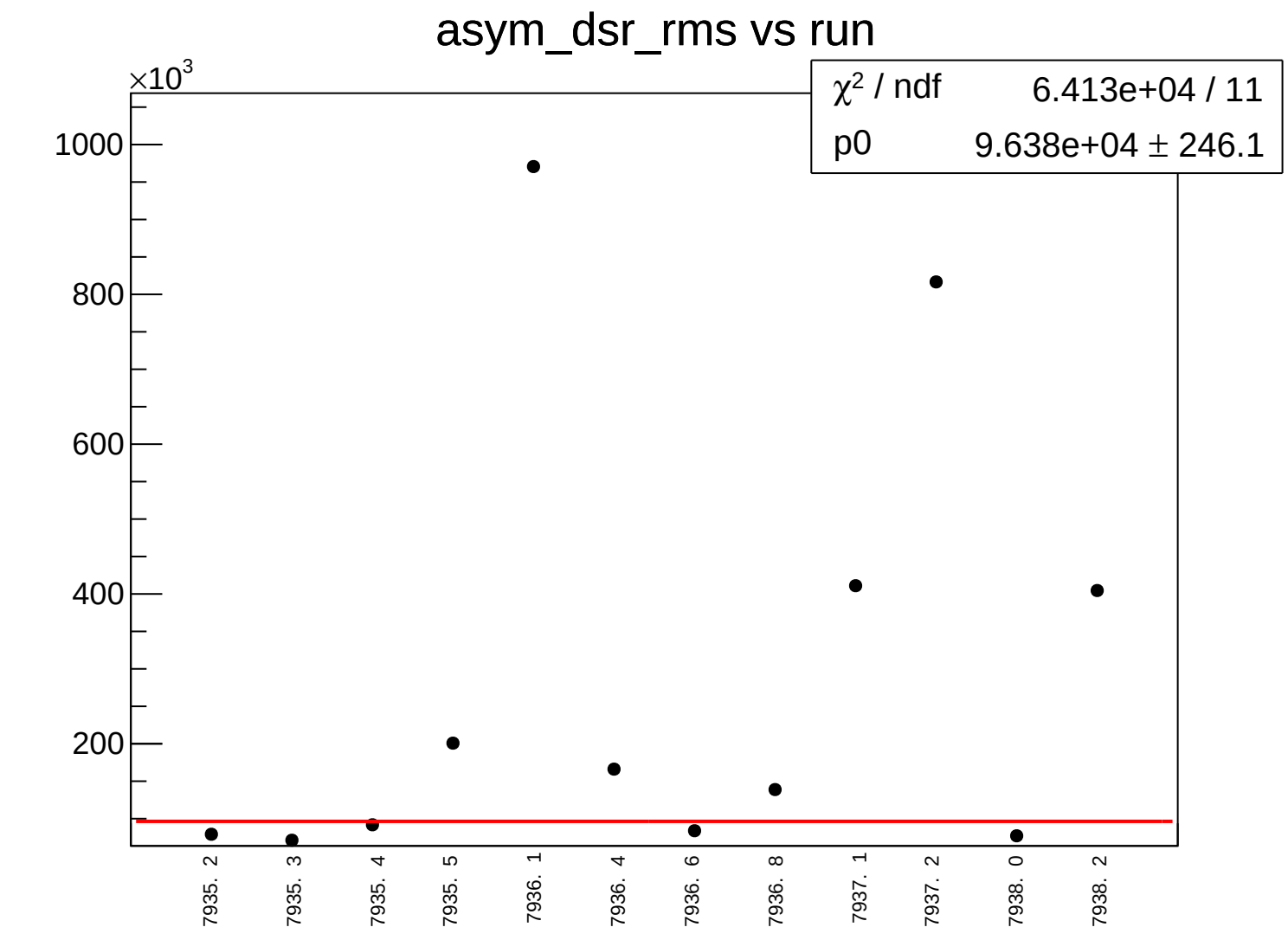

asym_dsr_correction_mean vs run
×10^3
χ² / ndf 21.63 / 37
p0 1.286e+04 ± 7439
1500
1000
500
0
−500
−1000
−1500
−2000
7932. 0
7932. 2
7935. 2
7935. 4
7935. 5
7935. 6
7936. 0
7936. 1
7936. 2
7936. 4
7936. 5
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 1
7938. 2
7938. 3
7938. 4
7938. 7
7939. 3
7939. 6
7939. 7
7940. 0
7941. 1
7941. 4
7941. 6
7942. 0
7942. 2
7942. 3
7942. 4
7942. 6
7942. 8
7943. 2
7943. 3
7943. 4
pull
Entries 38
Mean −0.3722
Std Dev 30.65
1.5
1
0.5
0
−0.5
−1
−1.5

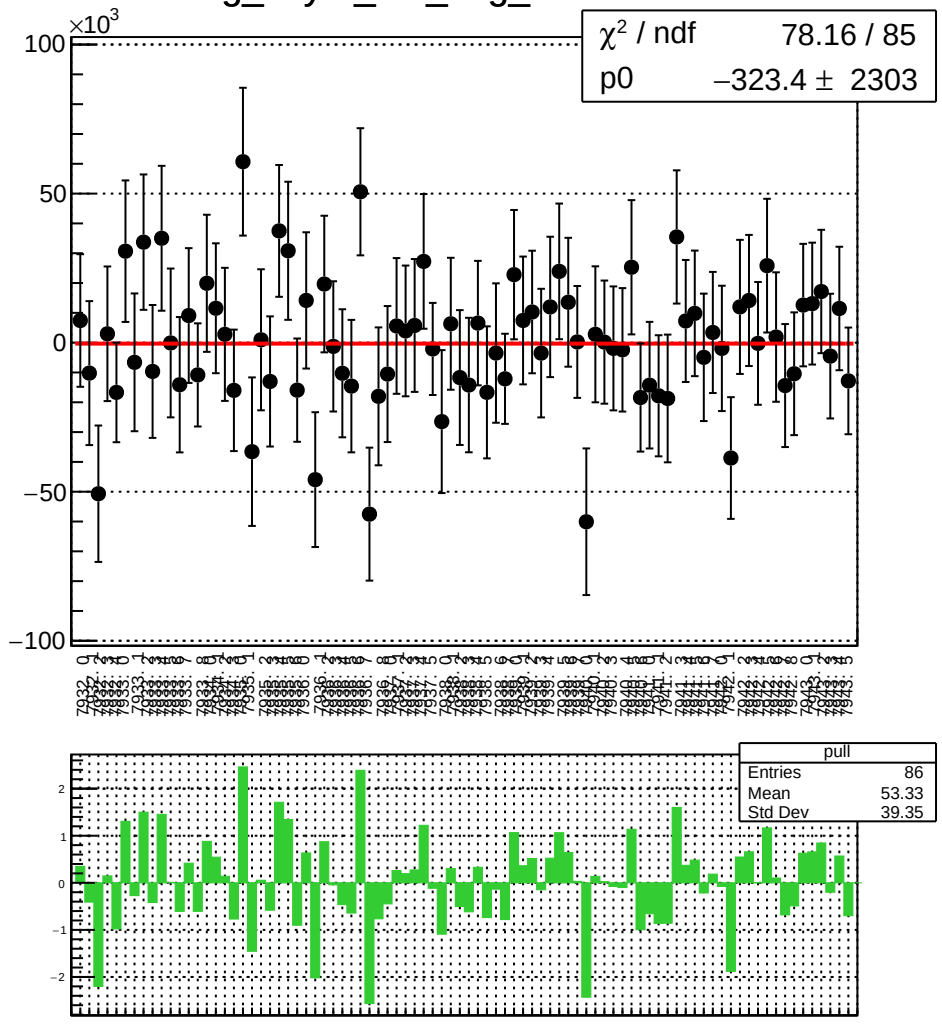

pull1D
Entries 38
Mean 0.02864
Std Dev 0.7539
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

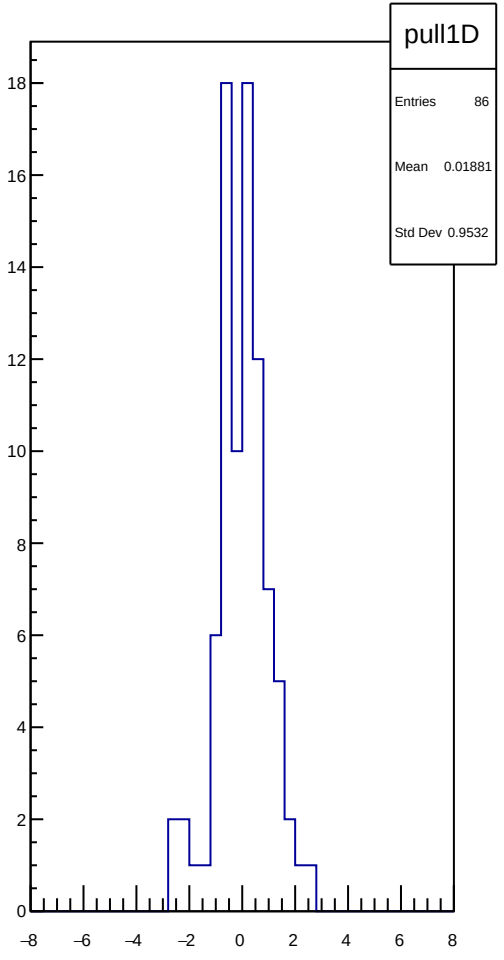

asym_dsr_correction_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.386e+06 / 82
p0 2447 ± 5.258

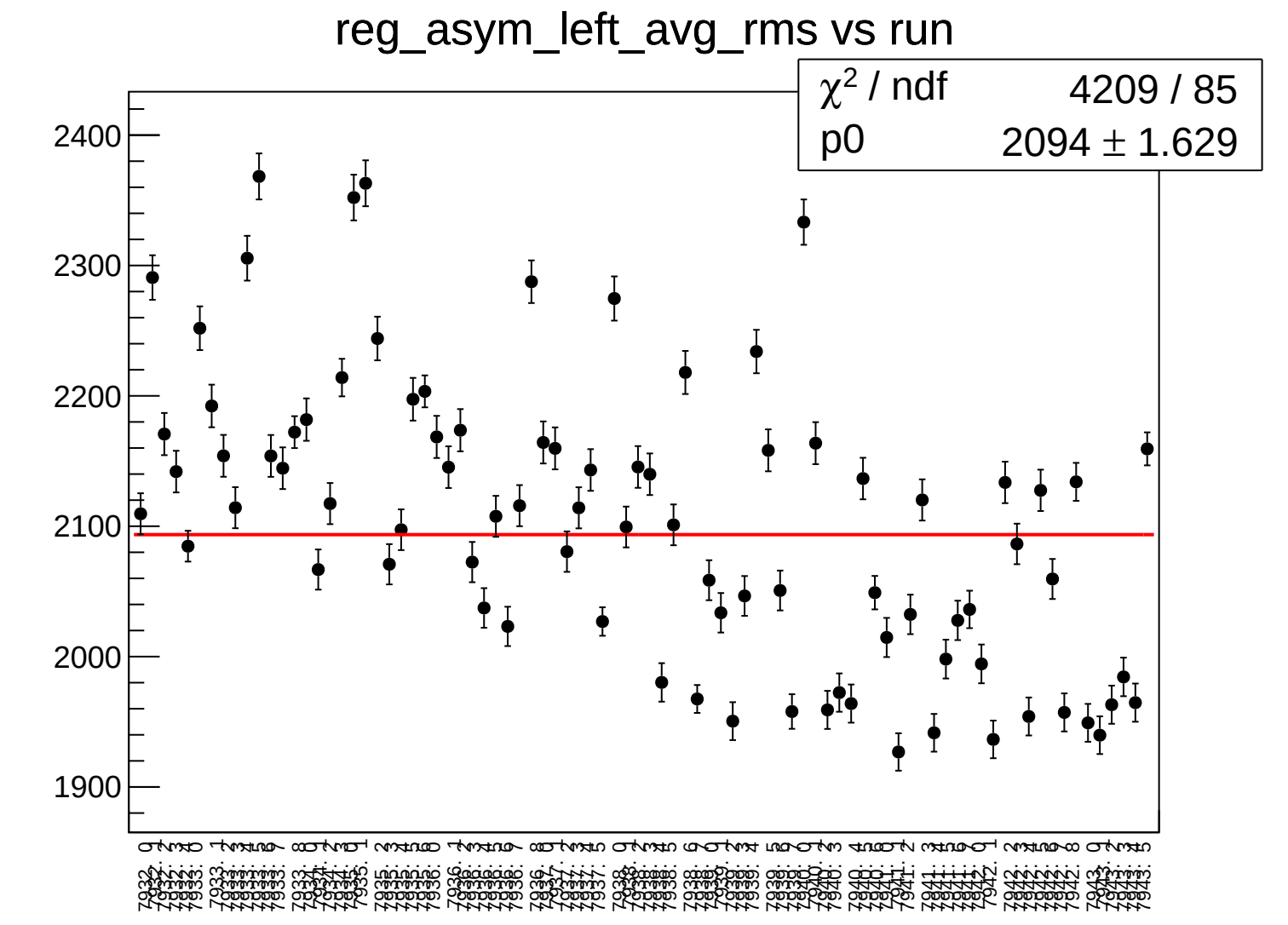

asym_dsr_mean vs run
×10^3
χ² / ndf 0.5289 / 3
p0 4.651e+05 ± 4.346e+05
1500
1000
500
0
−500
−1000
7935. 2
7935. 4
7936. 6
7938. 0
pull
Entries 4
Mean 10.18
Std Dev 10.85
0.2
0
−0.2
−0.4
−0.6

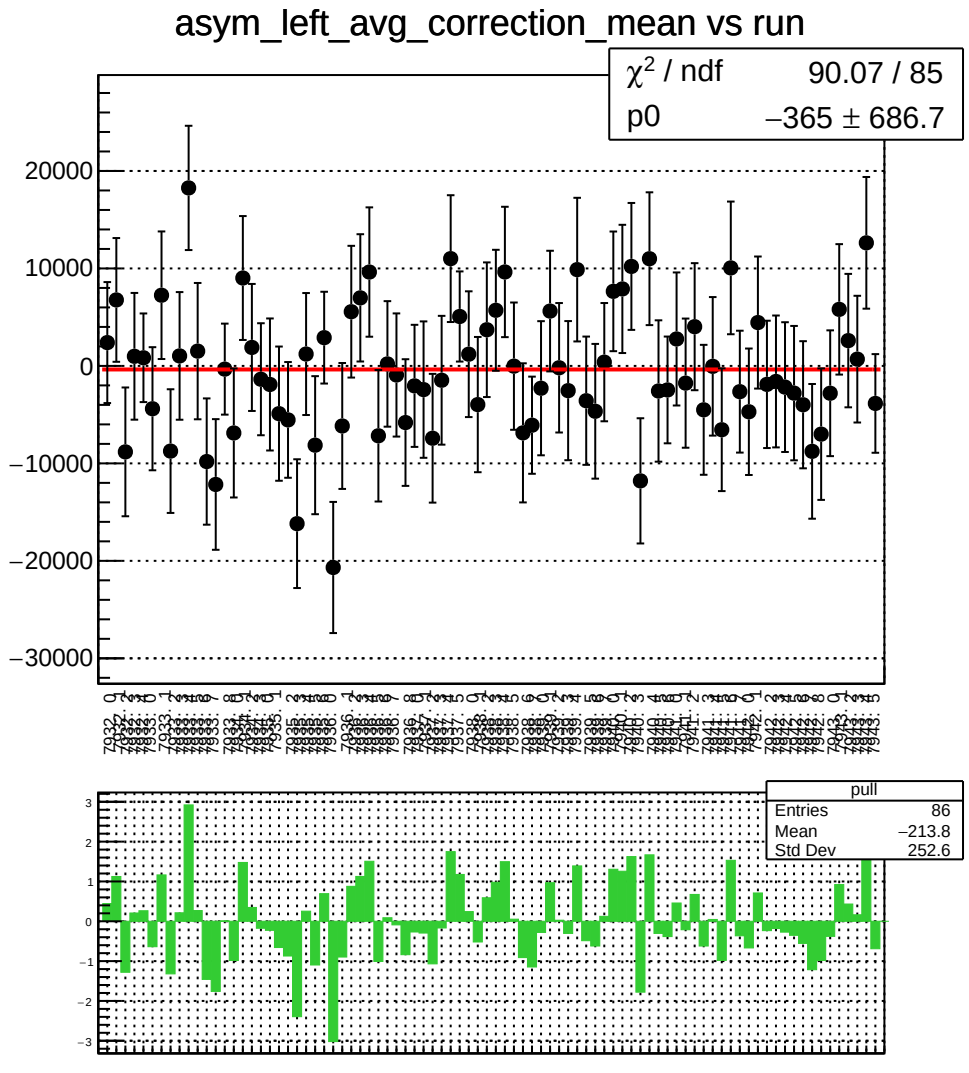

pull1D
Entries 4
Mean −0.00405
Std Dev 0.3636
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

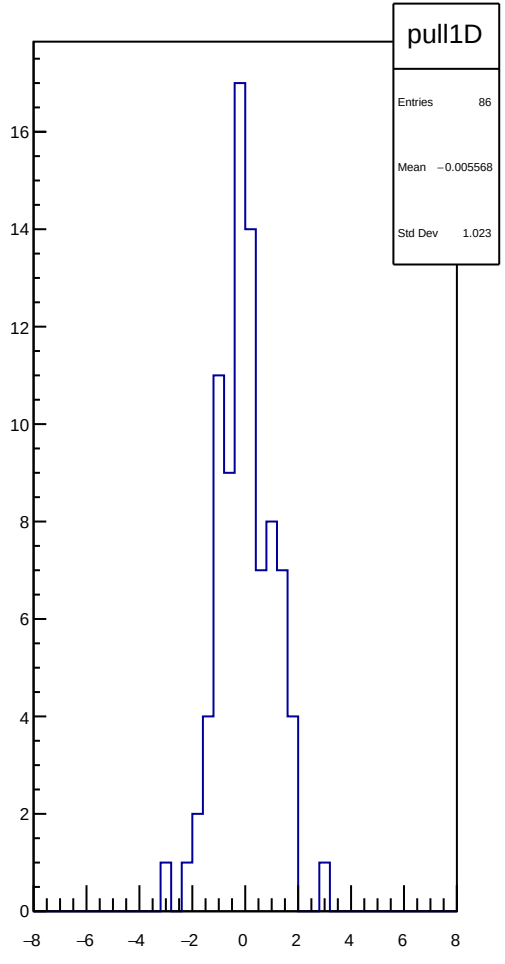

asym_dsr_rms vs run
×10^3
χ² / ndf 6.413e+04 / 11
p0 9.638e+04 ± 246.1
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2

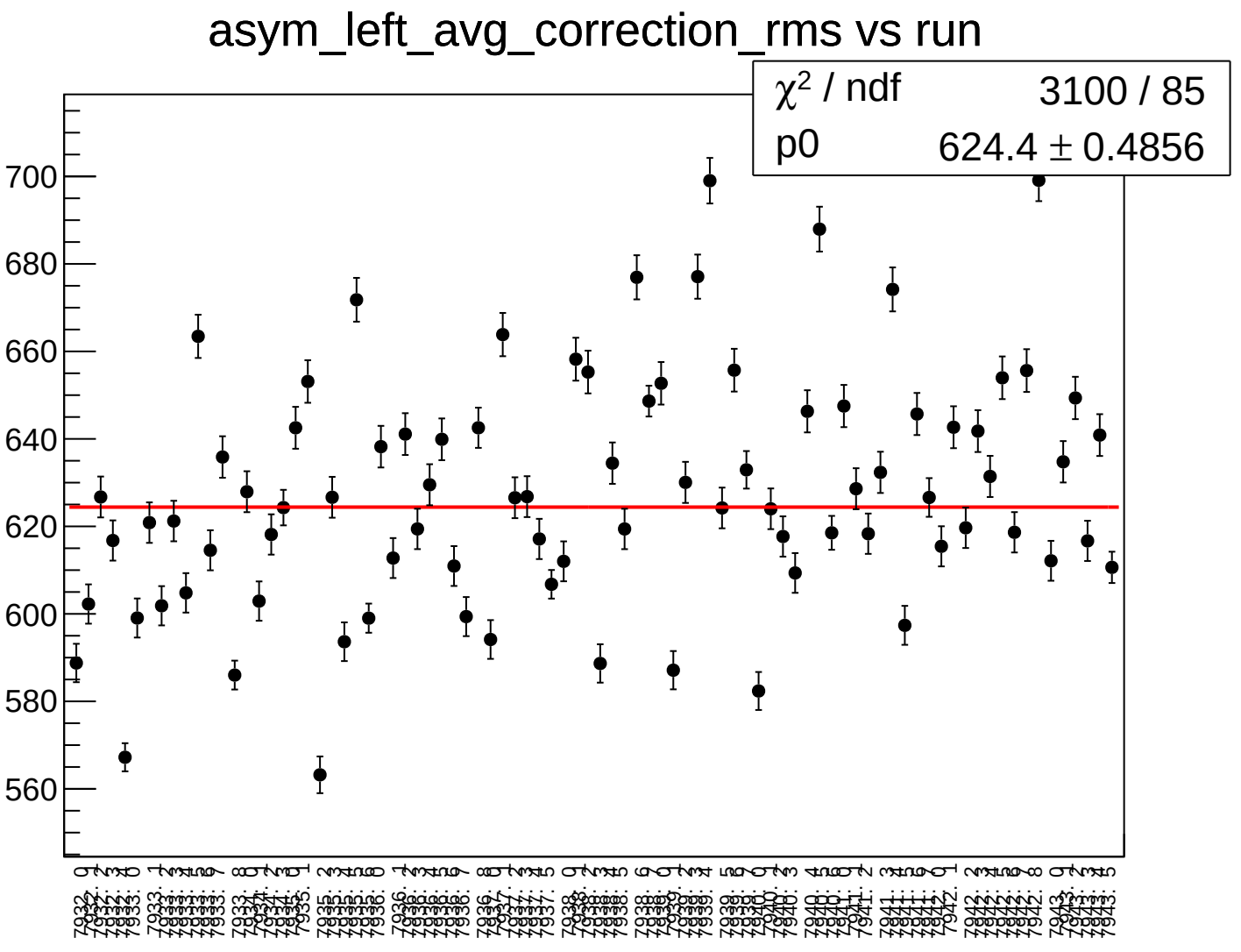

reg_asym_left_avg_mean vs run
×10^3
χ² / ndf 78.16 / 85
p0 −323.4 ± 2303
pull
Entries 86
Mean 53.33
Std Dev 39.35

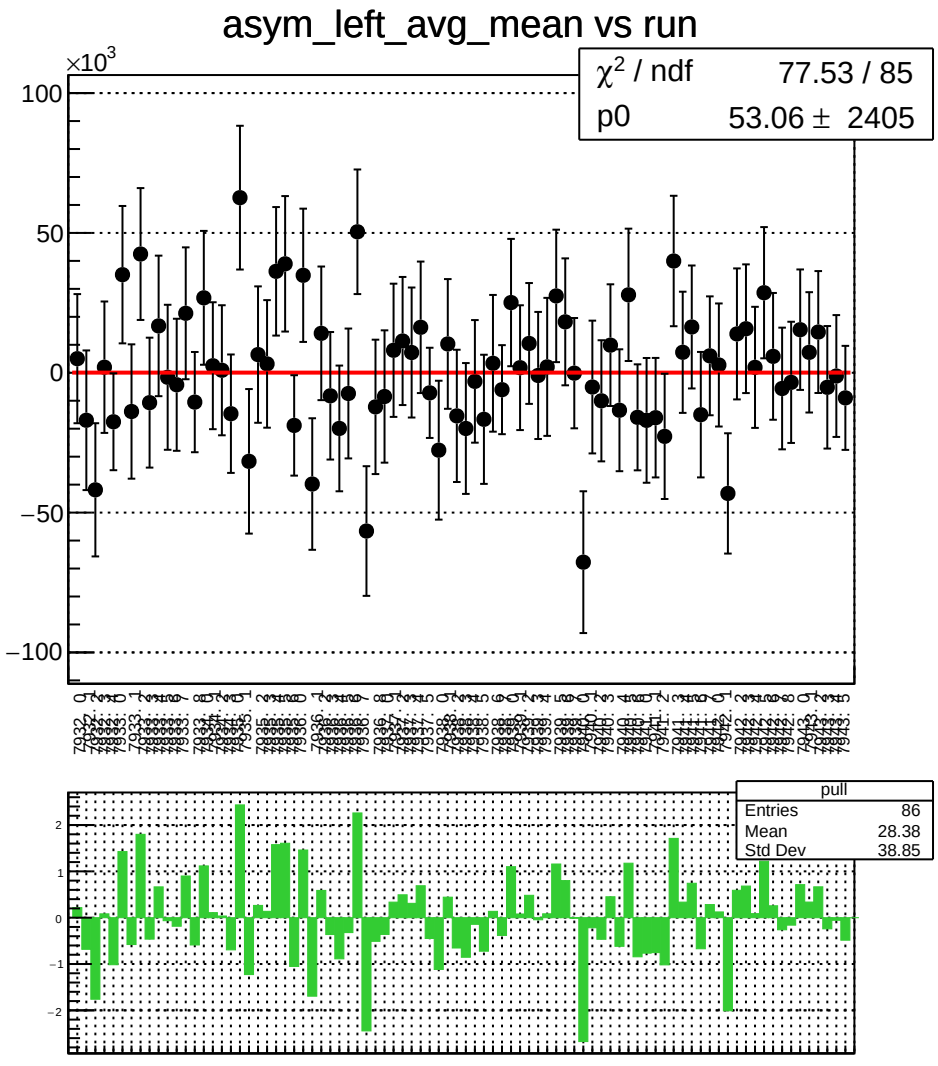

pull1D
Entries 86
Mean 0.01881
Std Dev 0.9532

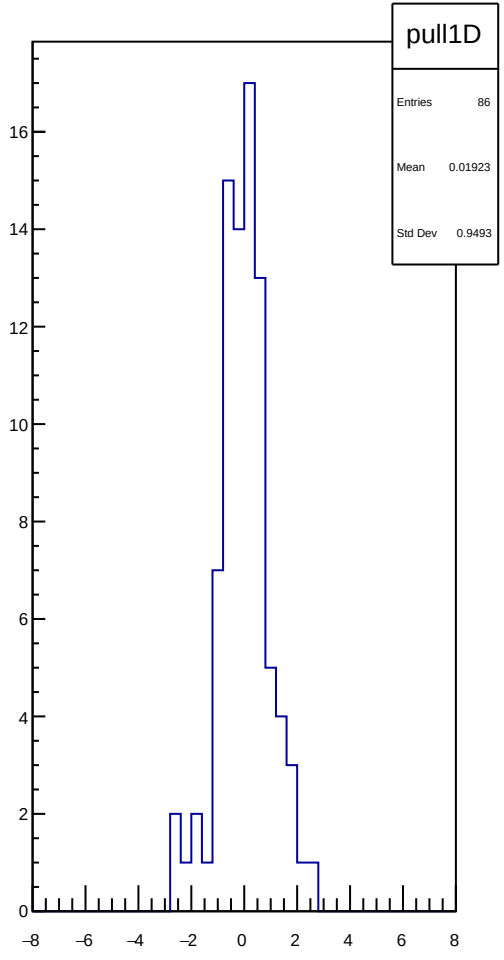

reg_asym_left_avg_rms vs run
χ² / ndf 4209 / 85
p0 2094 ± 1.629
2400
2300
2200
2100
2000
1900

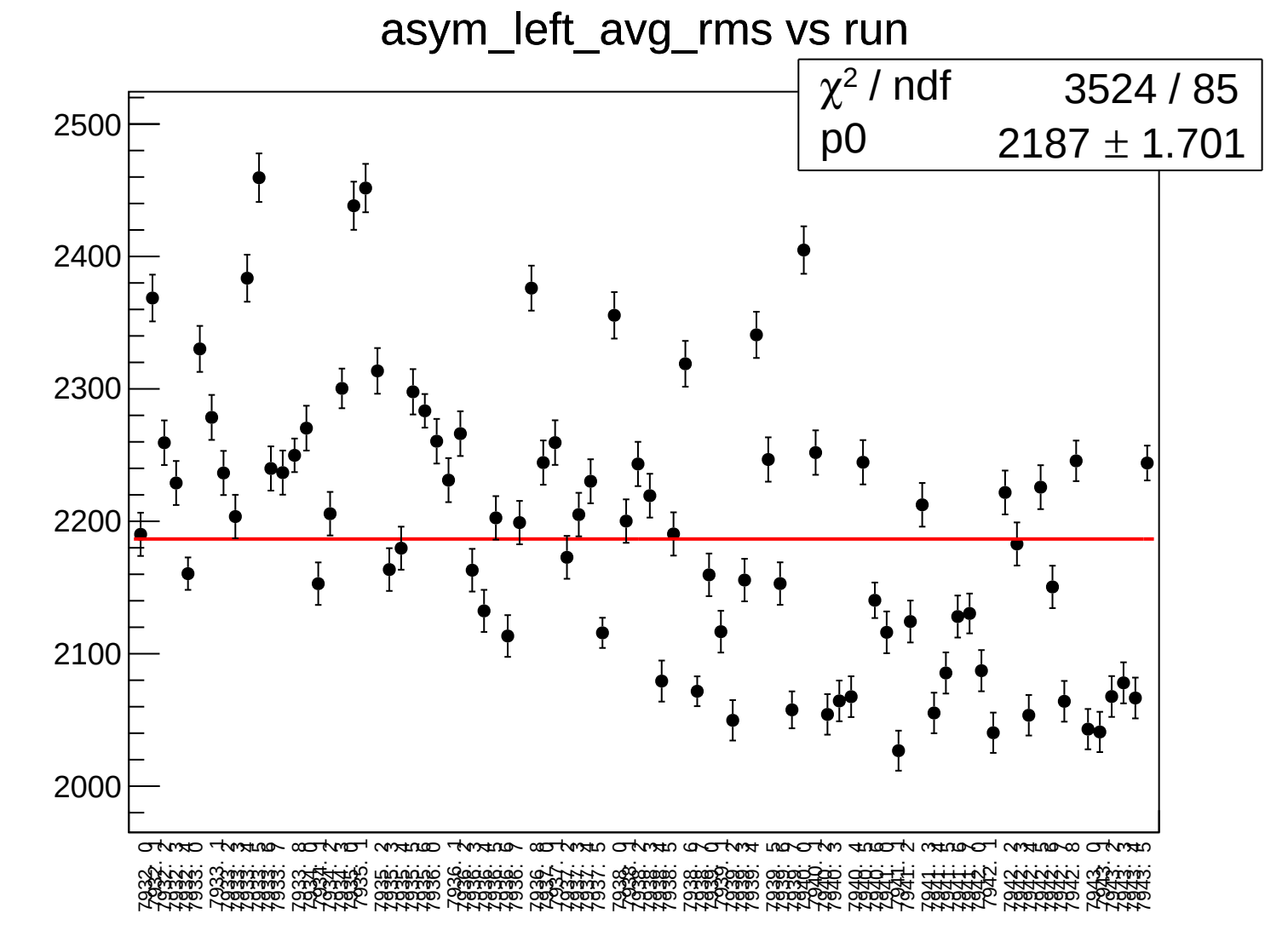

asym_left_avg_correction_mean vs run
χ² / ndf 90.07 / 85
p0 −365 ± 686.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −213.8
Std Dev 252.6
3
2
1
0
−1
−2
−3

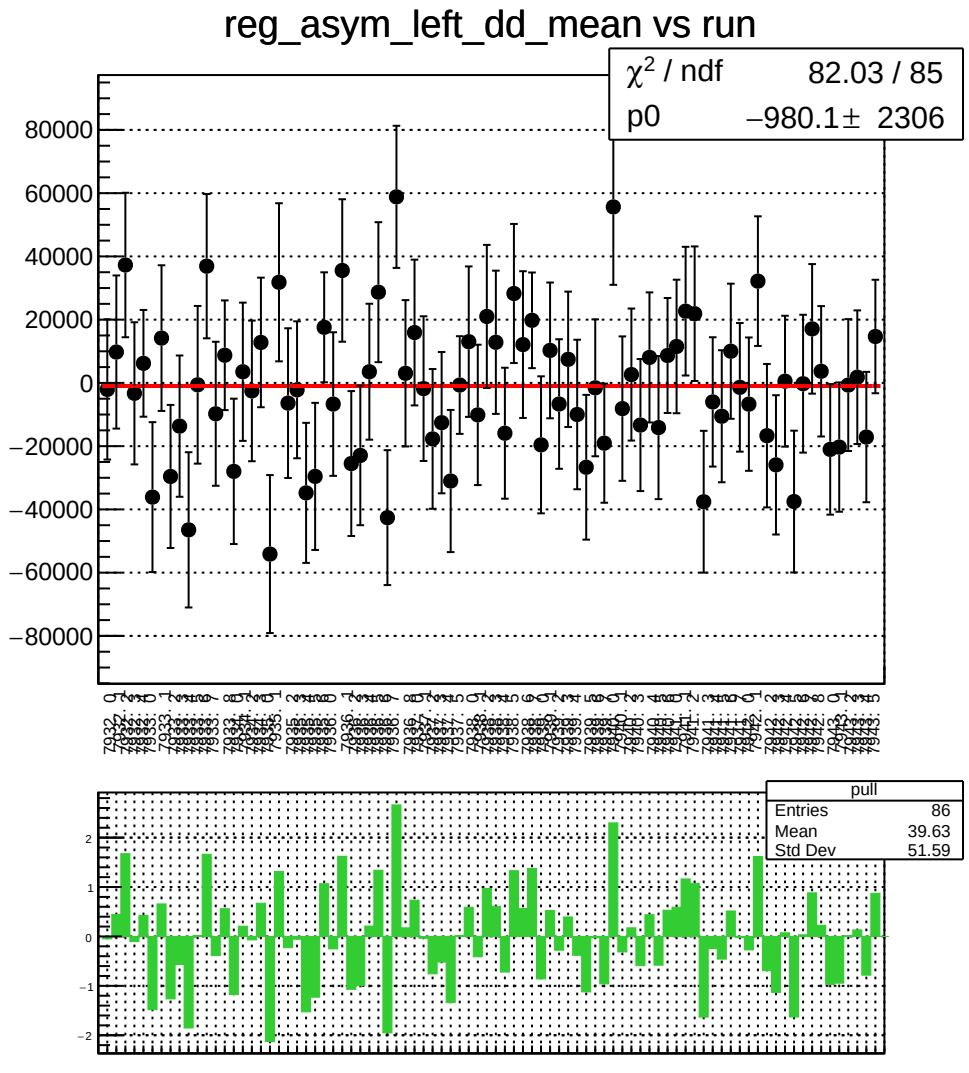

pull1D
Entries 86
Mean −0.005568
Std Dev 1.023
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

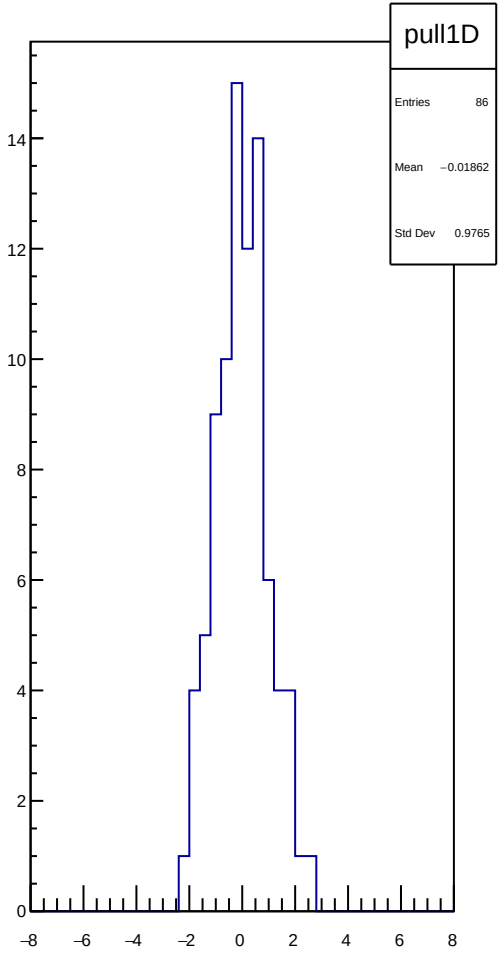

asym_left_avg_correction_rms vs run
χ² / ndf 3100 / 85
p0 624.4 ± 0.4856
700
680
660
640
620
600
580
560

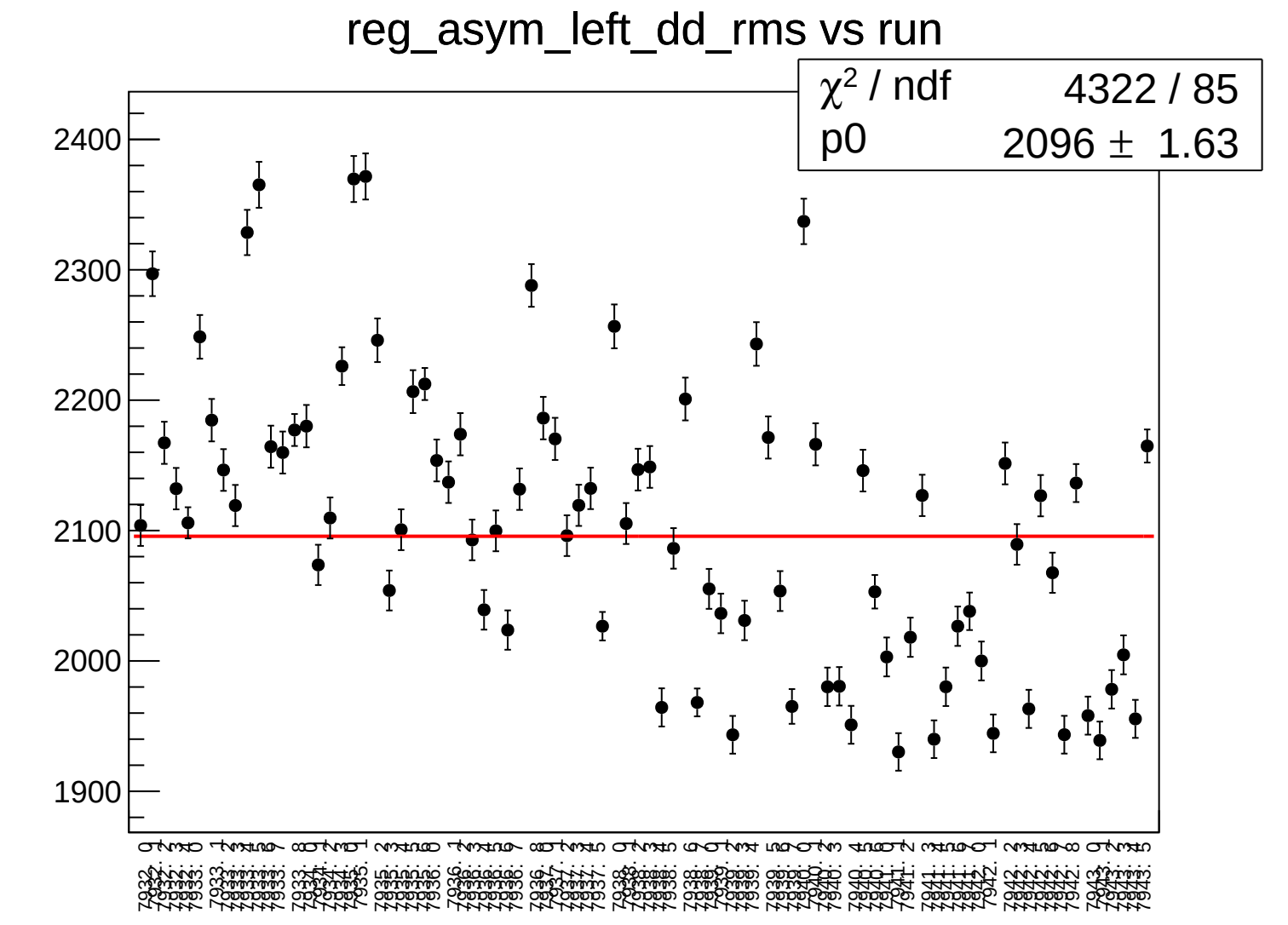

asym_left_avg_mean vs run
×10^3
χ² / ndf 77.53 / 85
p0 53.06 ± 2405
100
50
0
−50
−100
pull
Entries 86
Mean 28.38
Std Dev 38.85
2
1
0
−1
−2

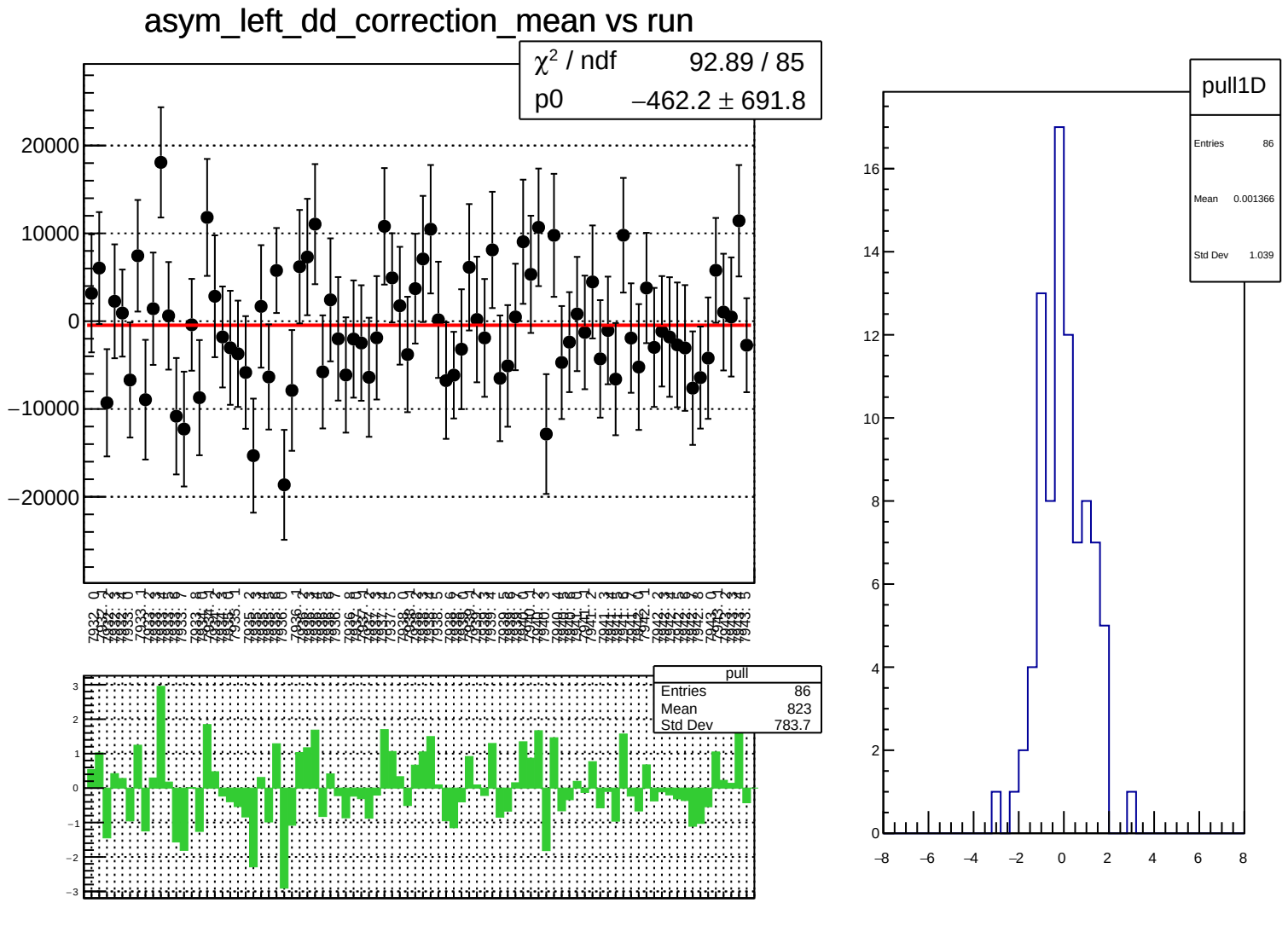

pull1D
Entries 86
Mean 0.01923
Std Dev 0.9493
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

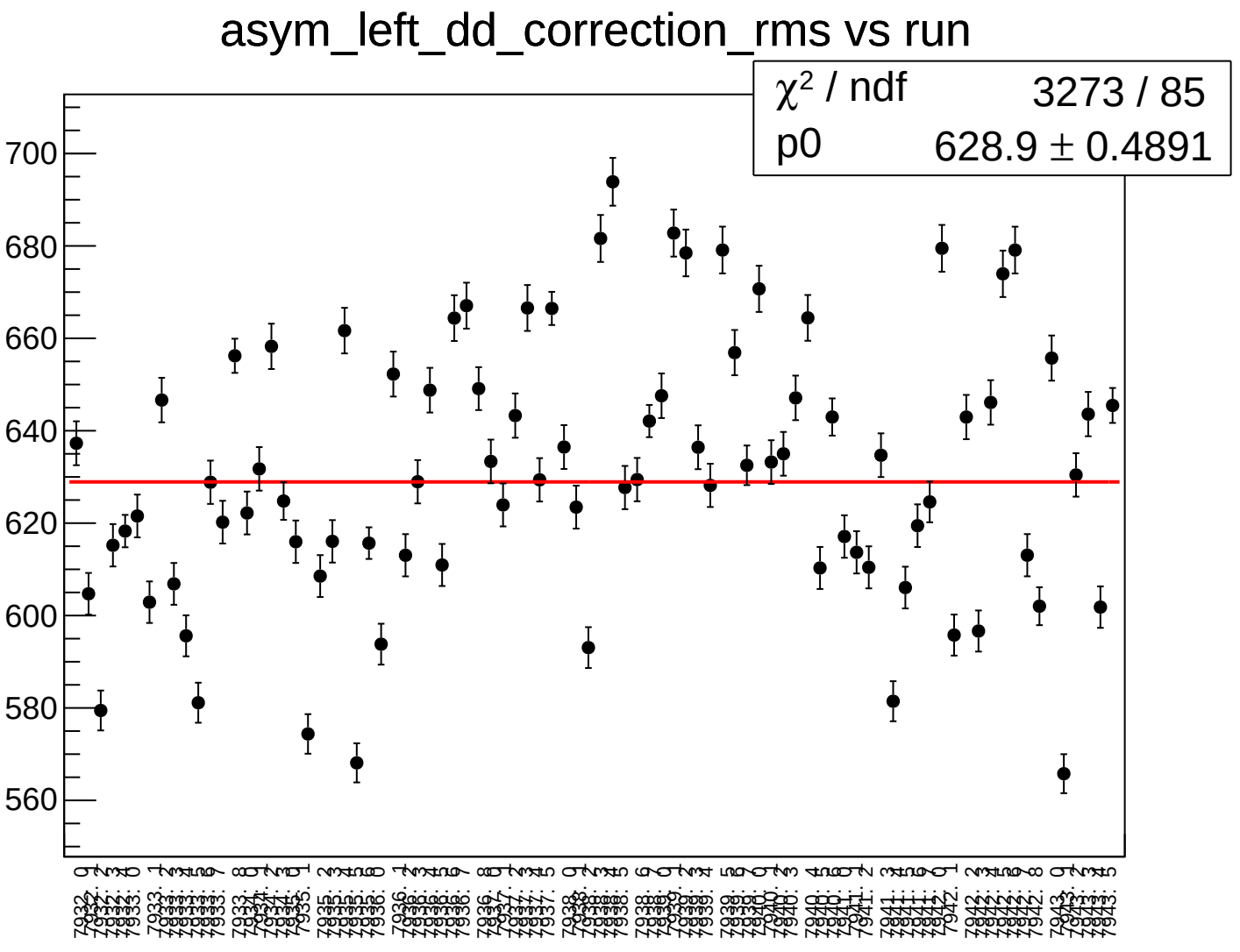

asym_left_avg_rms vs run
χ² / ndf 3524 / 85
p0 2187 ± 1.701
2500
2400
2300
2200
2100
2000

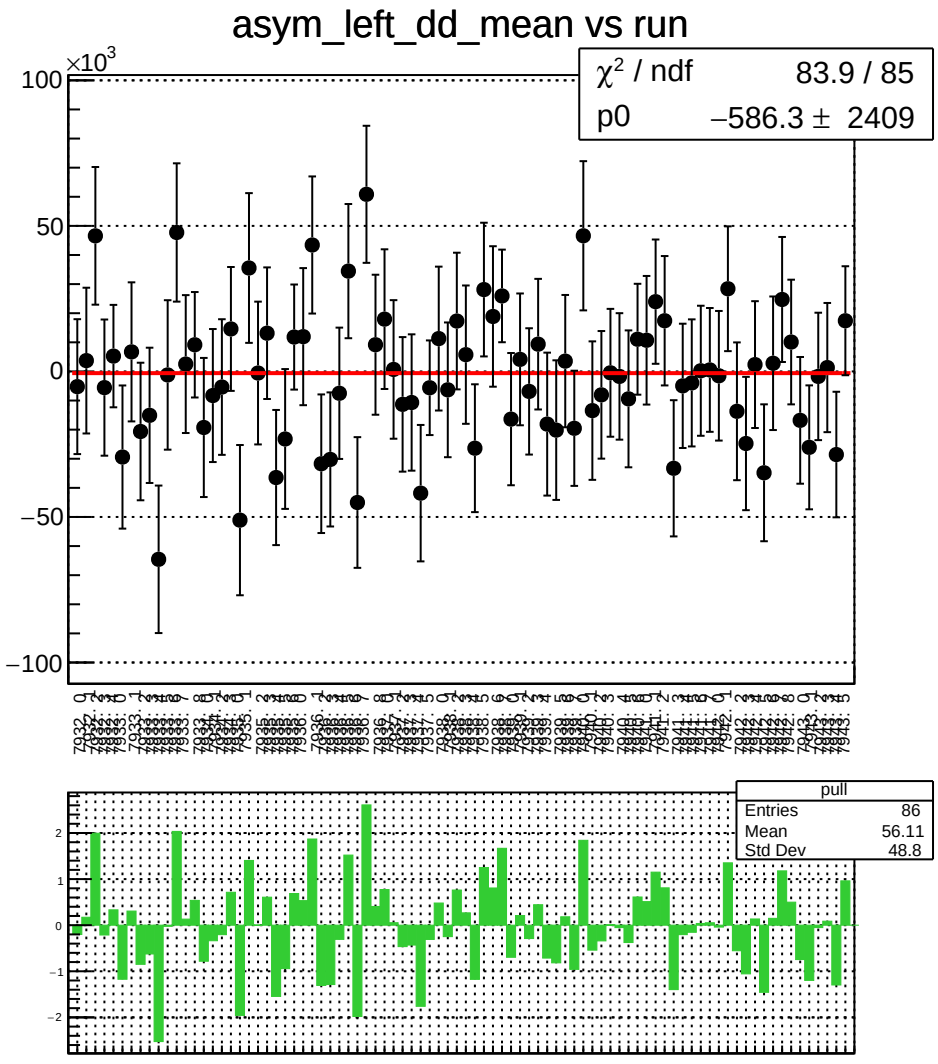

reg_asym_left_dd_mean vs run
χ^2 / ndf 82.03 / 85
p0 −980.1± 2306
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 86
Mean 39.63
Std Dev 51.59
2
1
0
−1
−2

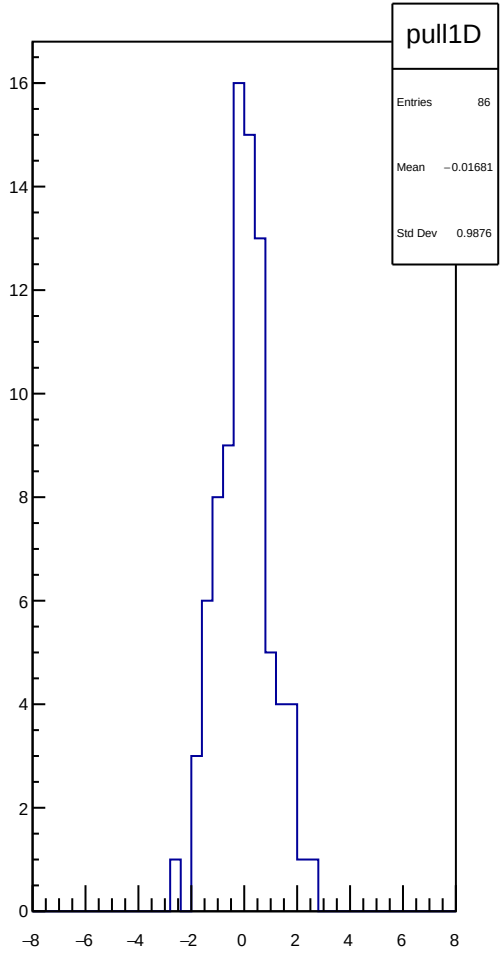

pull1D
Entries 86
Mean −0.01862
Std Dev 0.9765
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

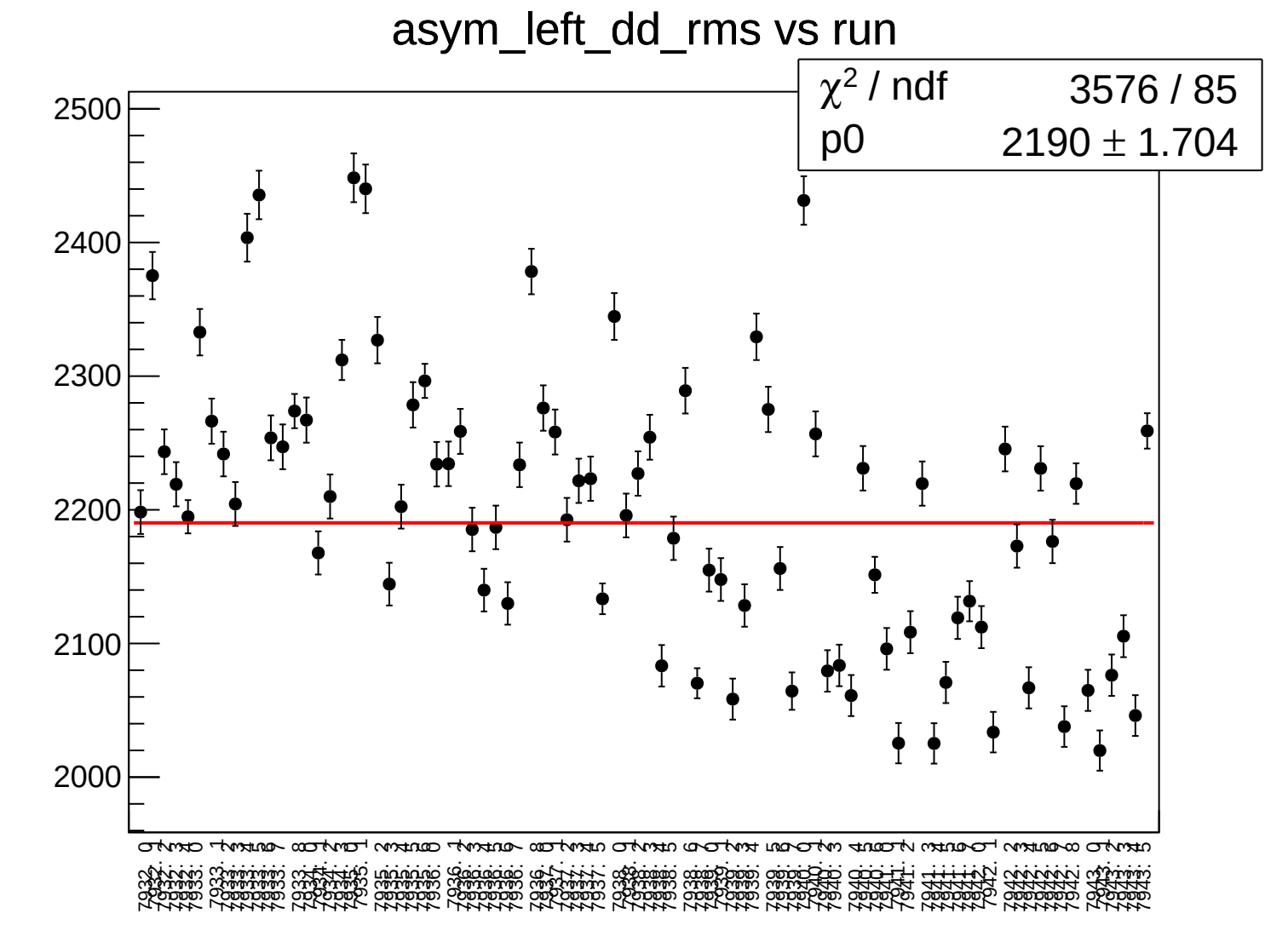

reg_asym_left_dd_rms vs run
χ² / ndf 4322 / 85
p0 2096 ± 1.63
2400
2300
2200
2100
2000
1900

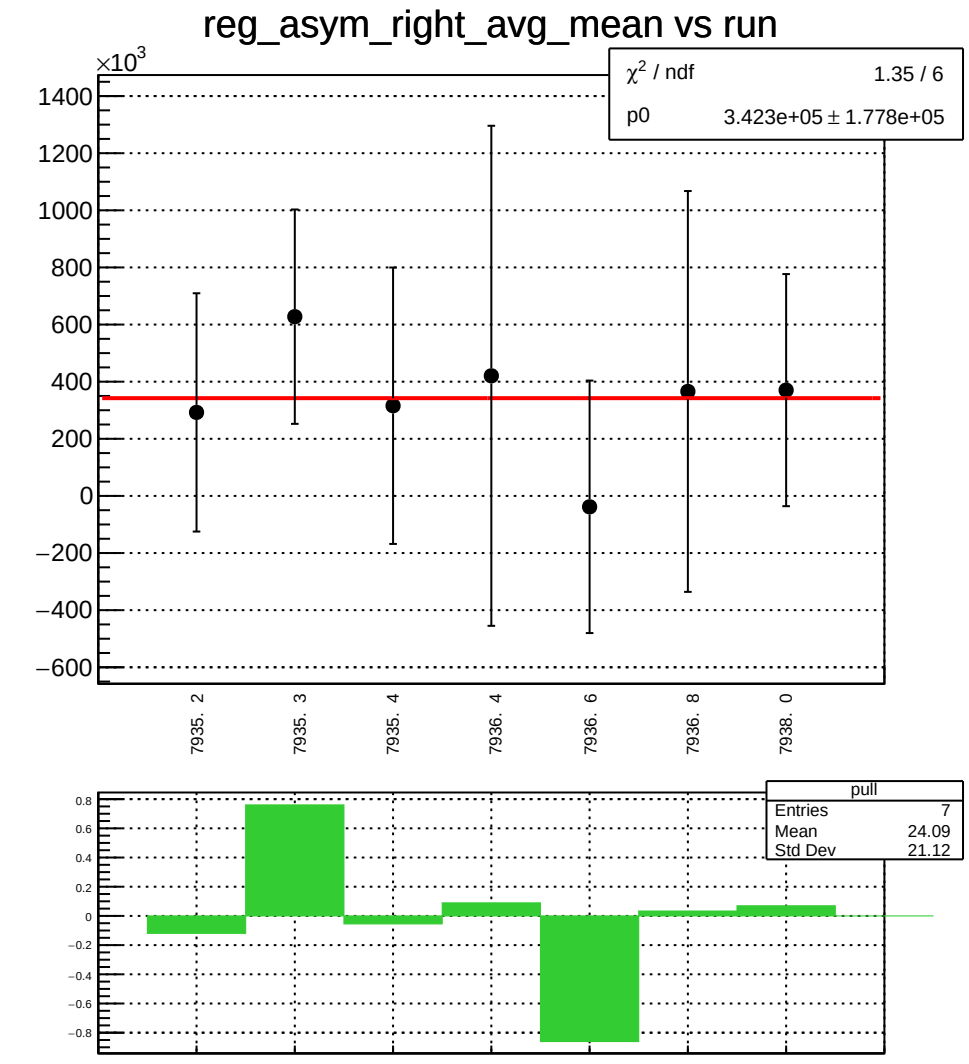

asym_left_dd_correction_mean vs run
χ² / ndf 92.89 / 85
p0 −462.2 ± 691.8
20000
10000
0
−10000
−20000
pull
Entries 86
Mean 823
Std Dev 783.7
3
2
1
0
−1
−2
−3
pull1D
Entries 86
Mean 0.001366
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

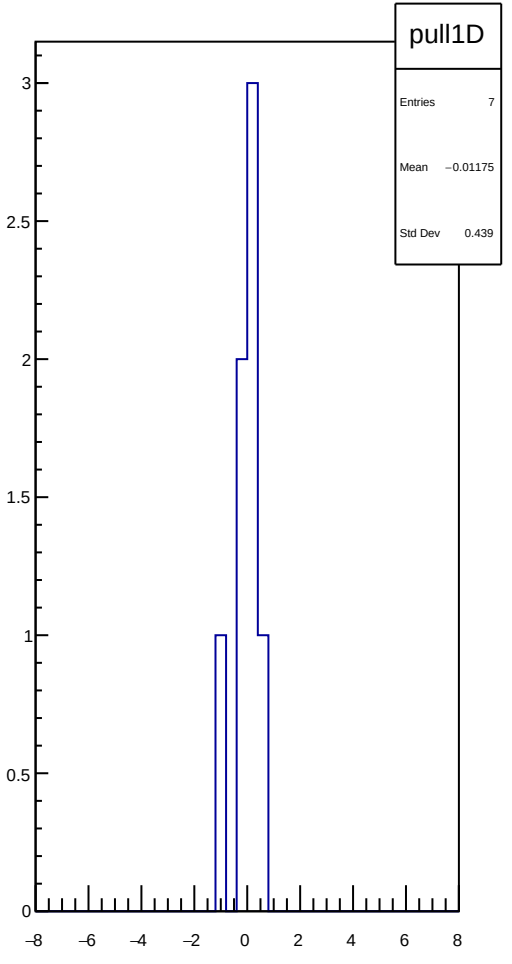

asym_left_dd_correction_rms vs run
χ² / ndf 3273 / 85
p0 628.9 ± 0.4891
700
680
660
640
620
600
580
560

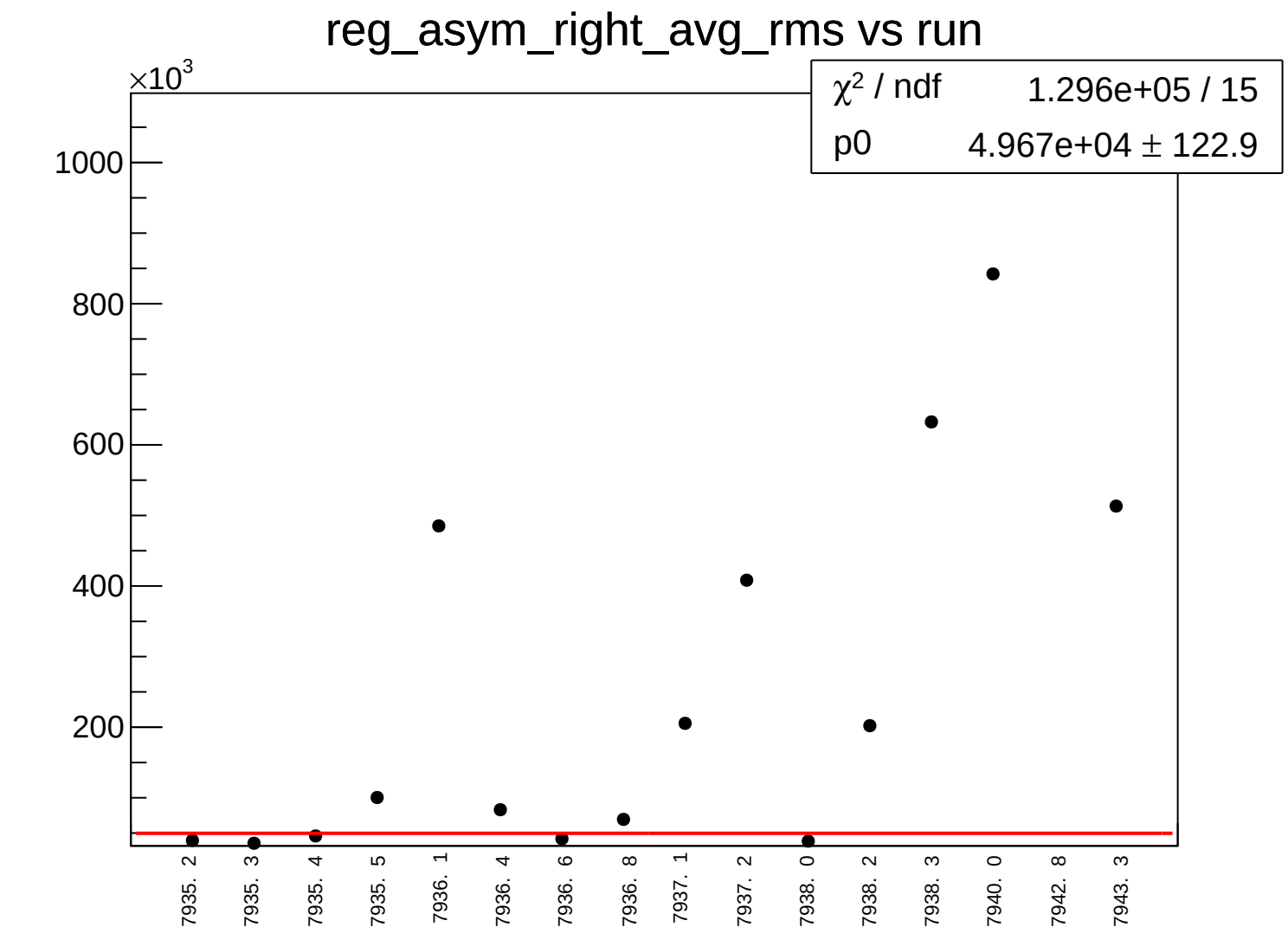

asym_left_dd_mean vs run
×10^3
100
50
0
−50
−100
χ² / ndf 83.9 / 85
p0 −586.3 ± 2409
pull
Entries 86
Mean 56.11
Std Dev 48.8
2
1
0
−1
−2

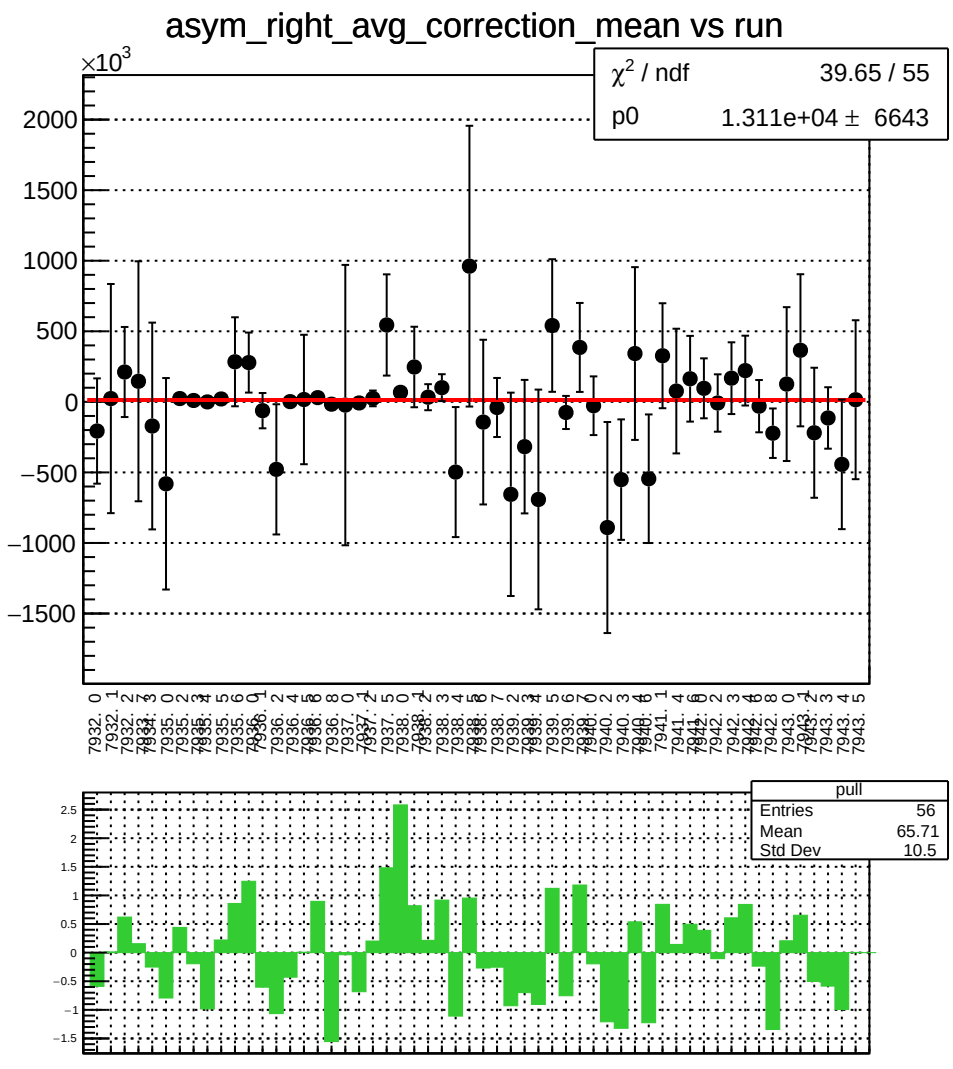

pull1D
Entries 86
Mean −0.01681
Std Dev 0.9876
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

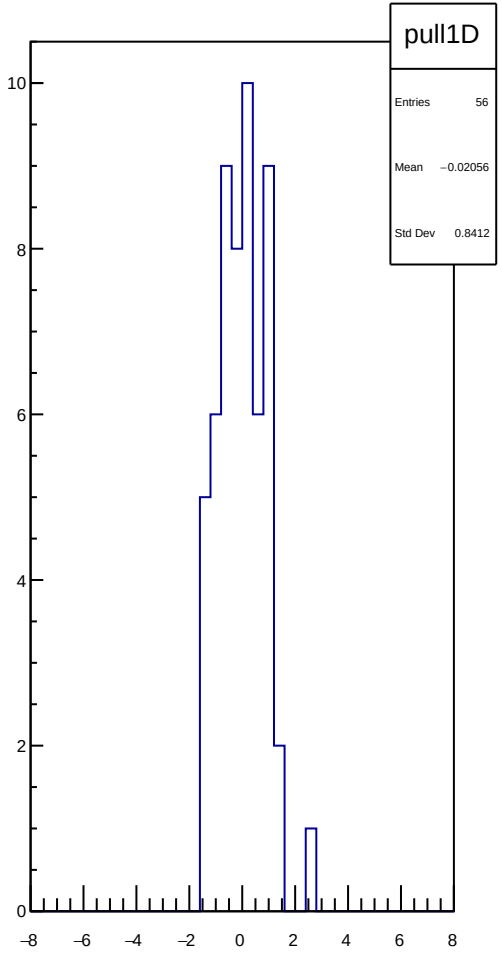

asym_left_dd_rms vs run
χ² / ndf 3576 / 85
p0 2190 ± 1.704
2500
2400
2300
2200
2100
2000

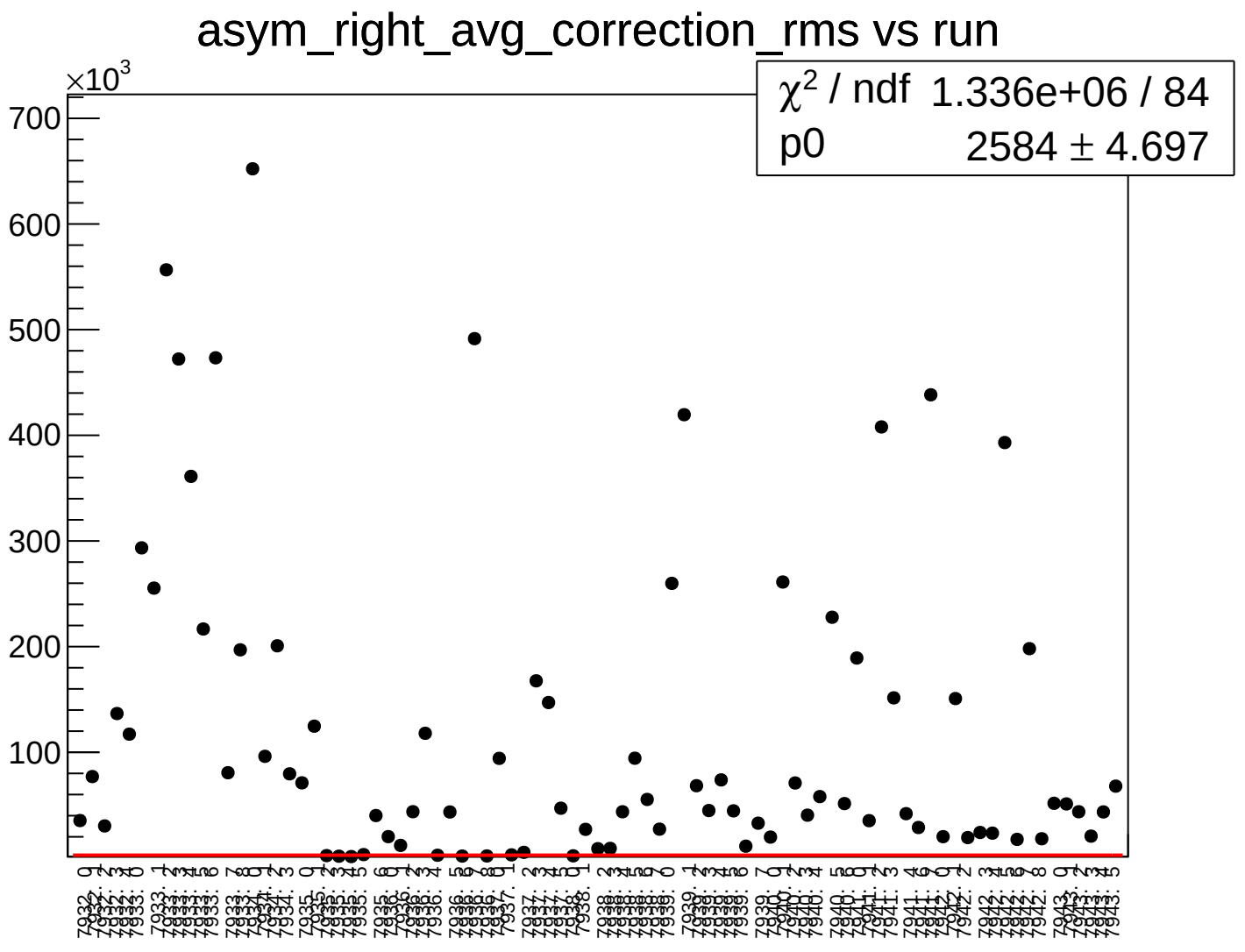

reg_asym_right_avg_mean vs run
×10^3
χ² / ndf 1.35 / 6
p0 3.423e+05 ± 1.778e+05
1400
1200
1000
800
600
400
200
0
−200
−400
−600
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0
pull
Entries 7
Mean 24.09
Std Dev 21.12
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

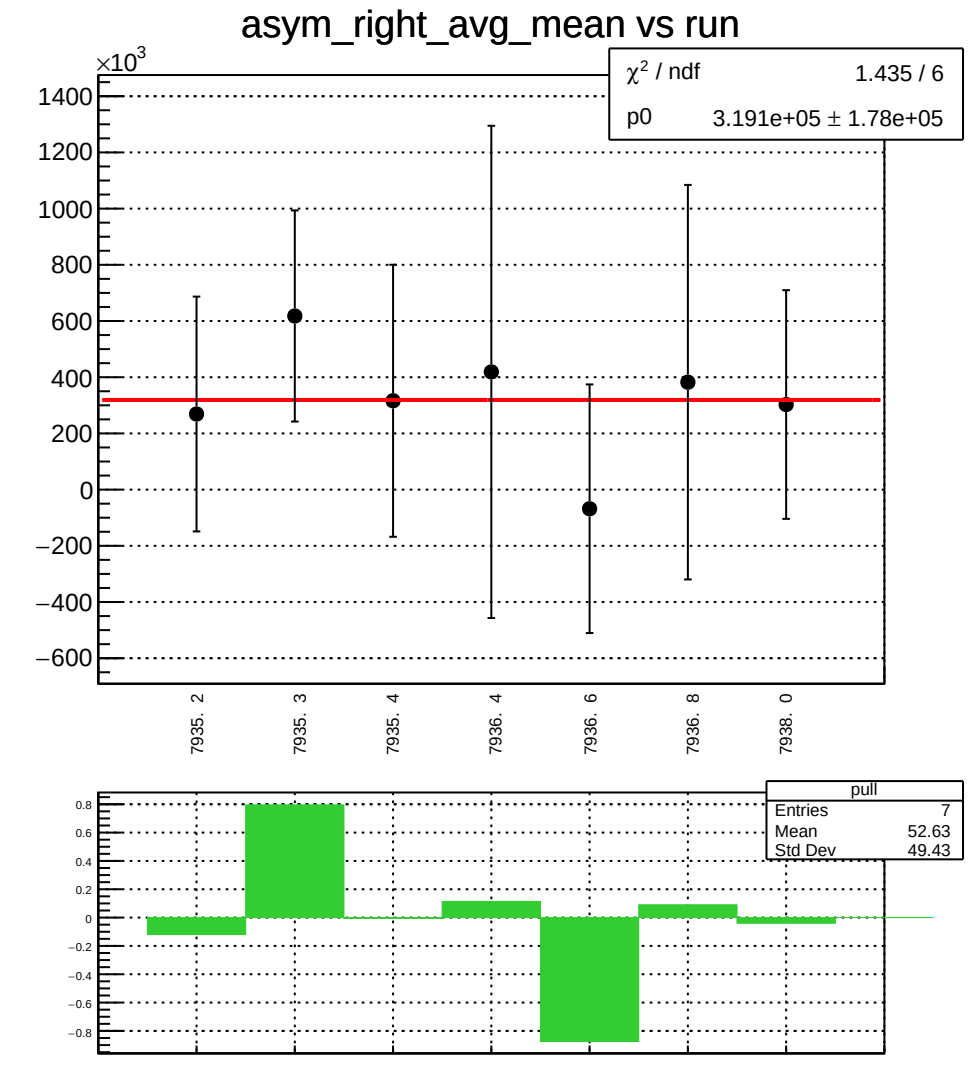

pull1D
Entries 7
Mean −0.01175
Std Dev 0.439
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

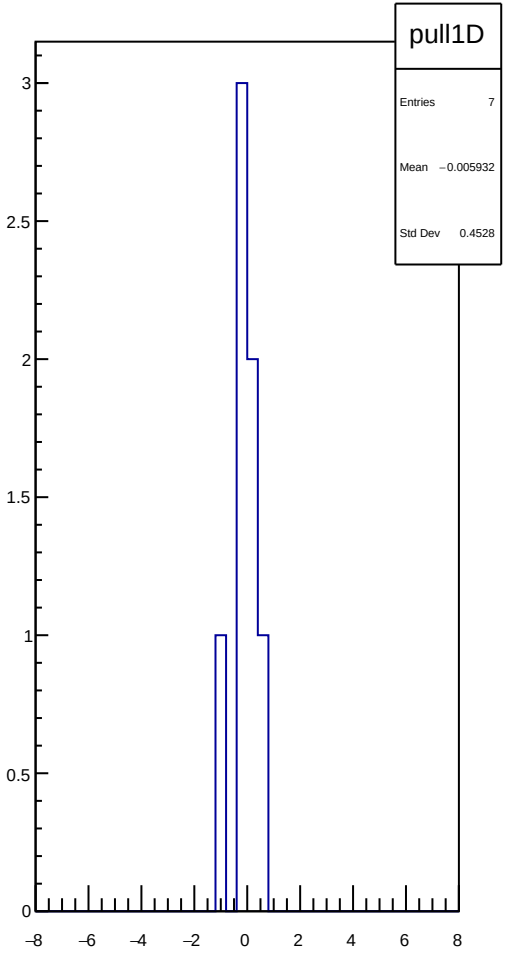

reg_asym_right_avg_rms vs run
×10^3
χ² / ndf 1.296e+05 / 15
p0 4.967e+04 ± 122.9
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

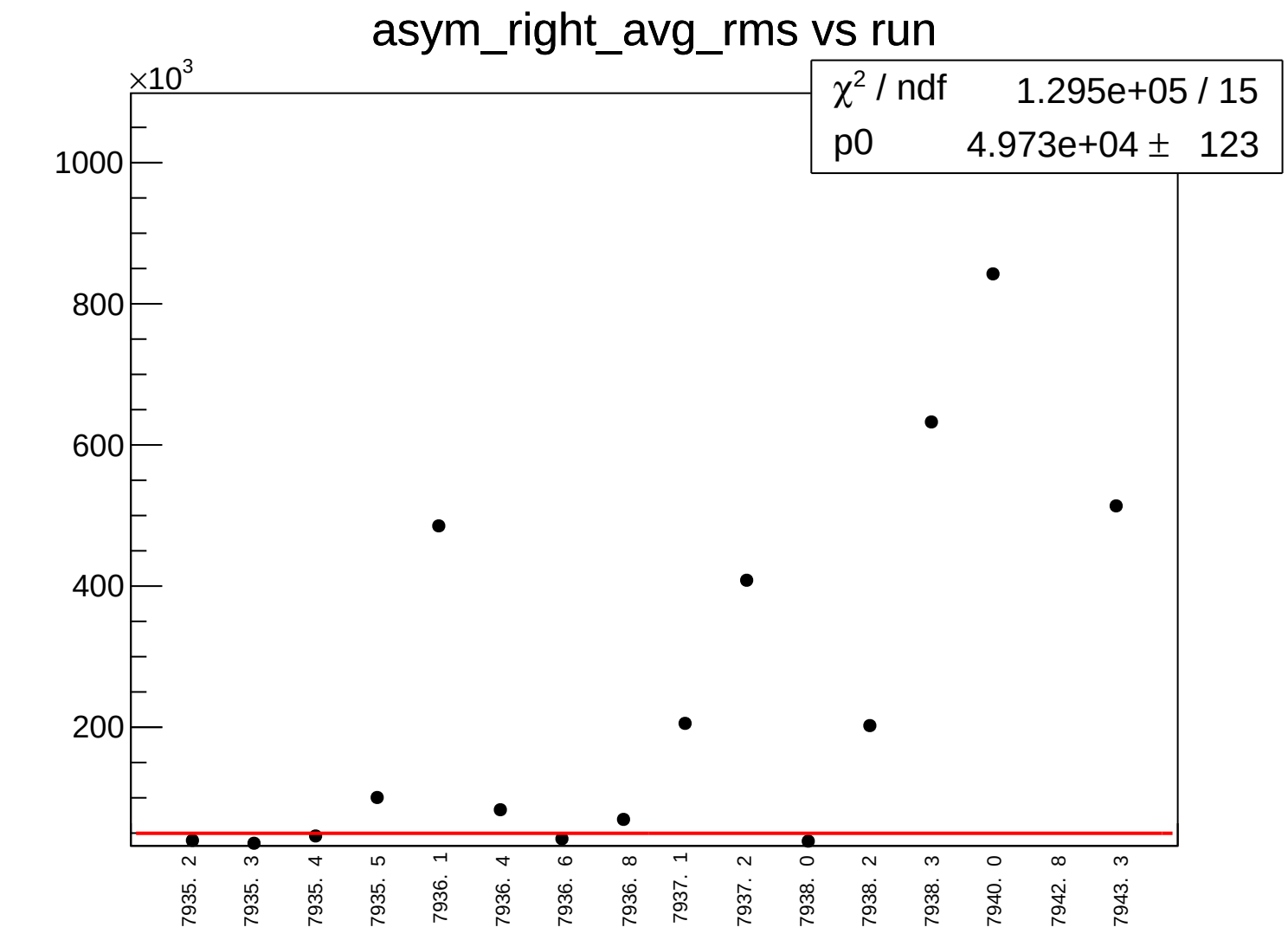

asym_right_avg_correction_mean vs run
×10^3
χ² / ndf 39.65 / 55
p0 1.311e+04 ± 6643
pull
Entries 56
Mean 65.71
Std Dev 10.5

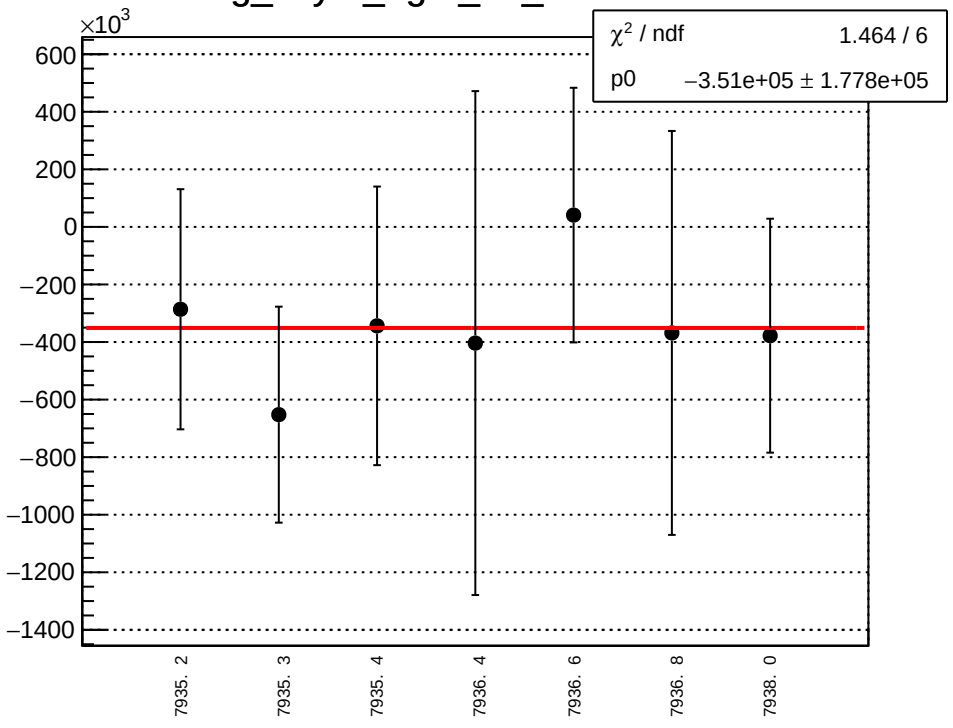

pull1D
Entries 56
Mean −0.02056
Std Dev 0.8412

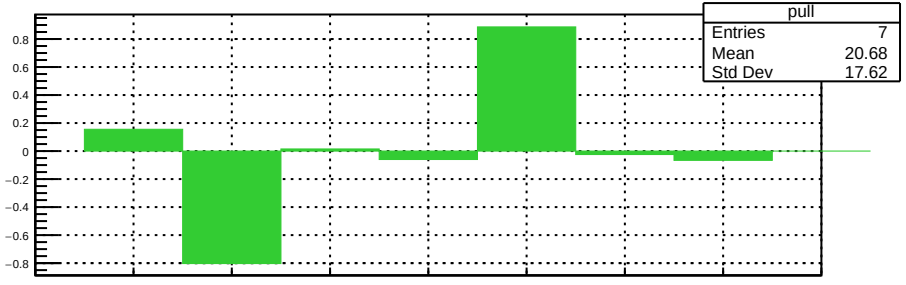

asym_right_avg_correction_rms vs run
×10^3
χ^2 / ndf 1.336e+06 / 84
p0 2584 ± 4.697
700
600
500
400
300
200
100

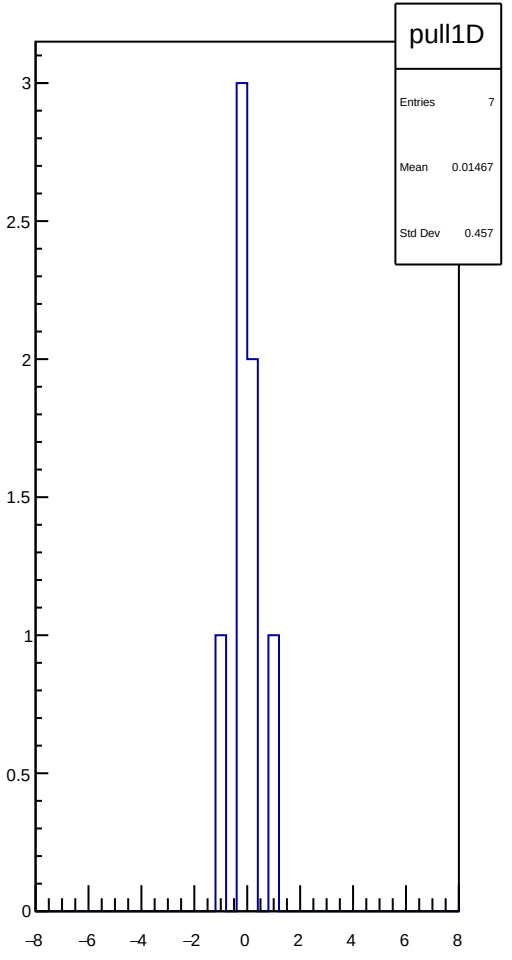

asym_right_avg_mean vs run
×10^3
χ² / ndf 1.435 / 6
p0 3.191e+05 ± 1.78e+05
1400
1200
1000
800
600
400
200
0
−200
−400
−600
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0
pull
Entries 7
Mean 52.63
Std Dev 49.43
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

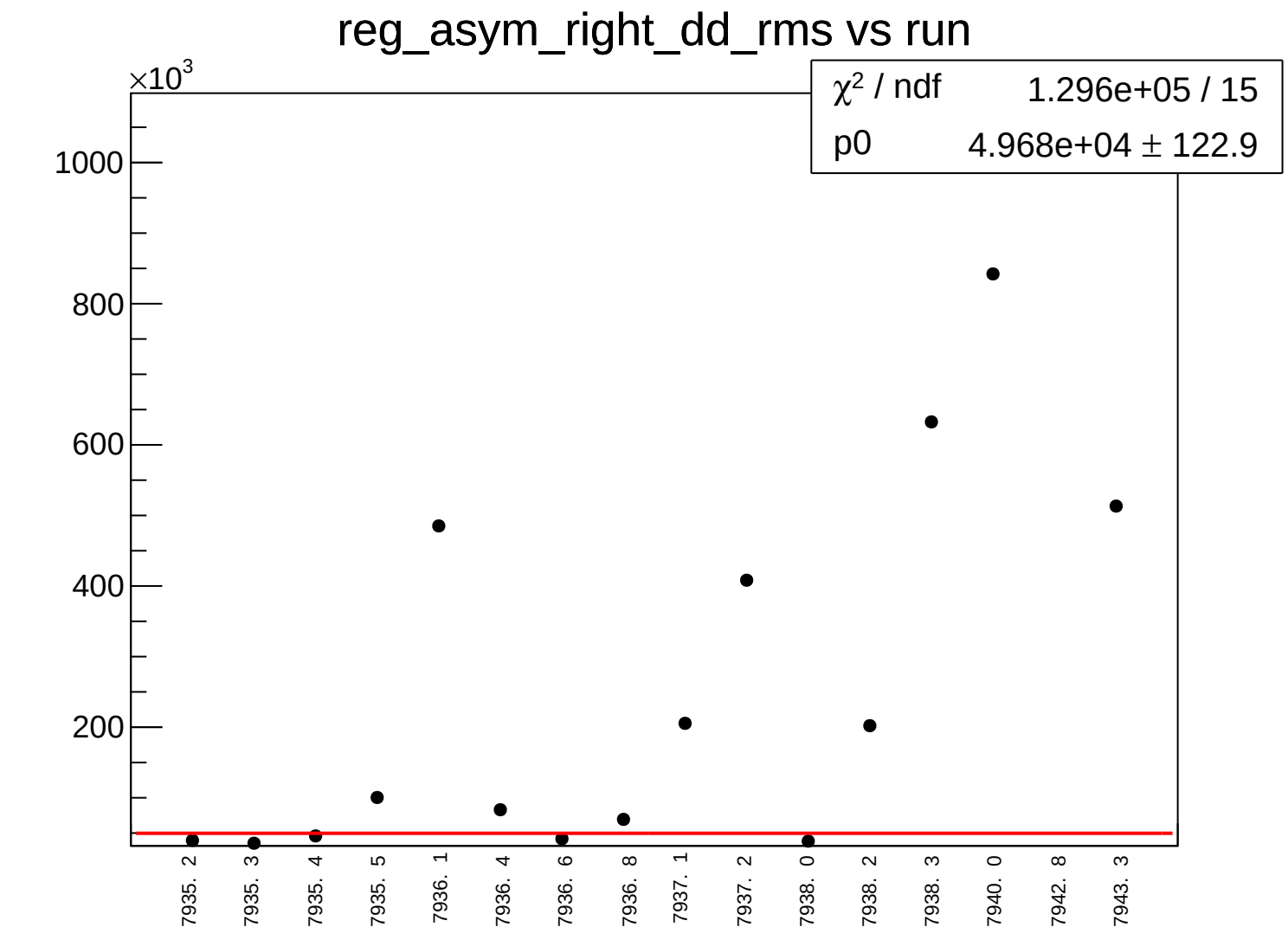

pull1D
Entries 7
Mean −0.005932
Std Dev 0.4528
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

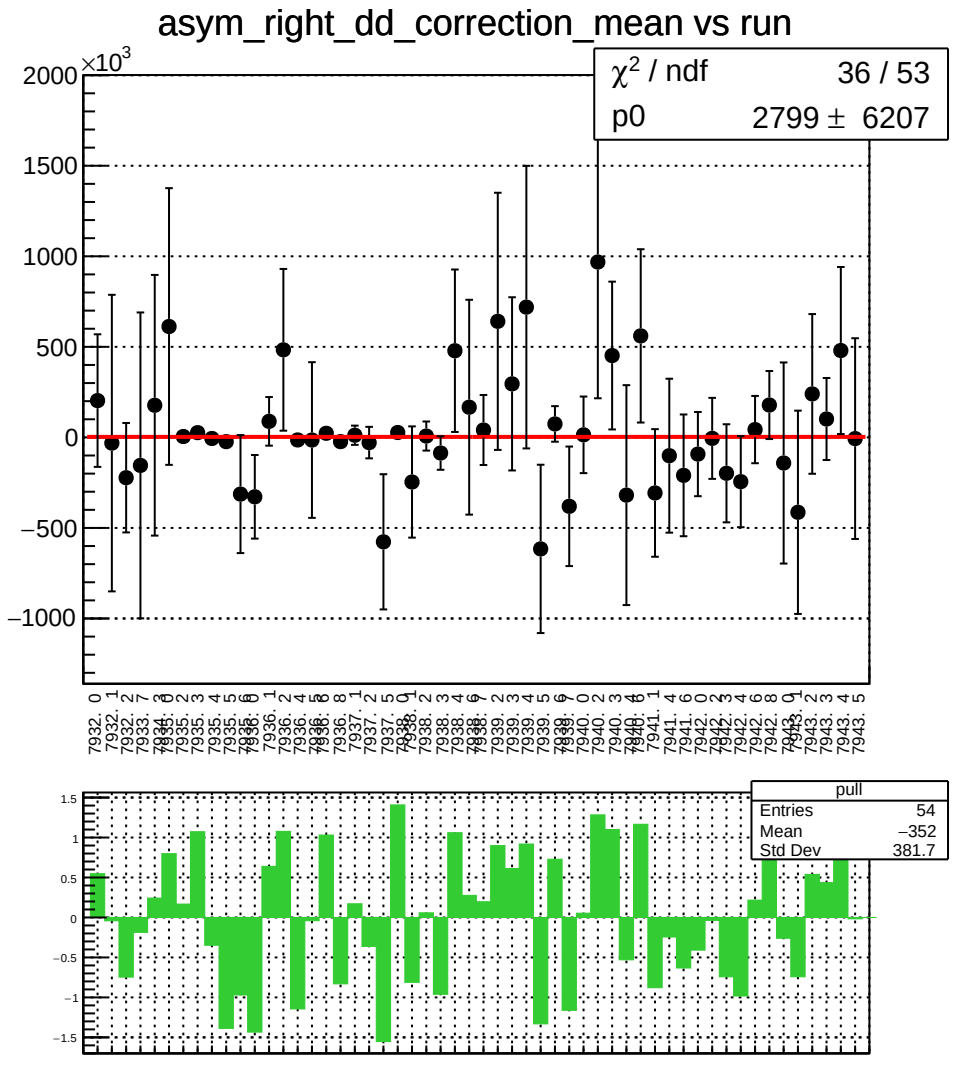

asym_right_avg_rms vs run
×10^3
χ^2 / ndf 1.295e+05 / 15
p0 4.973e+04 ± 123
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

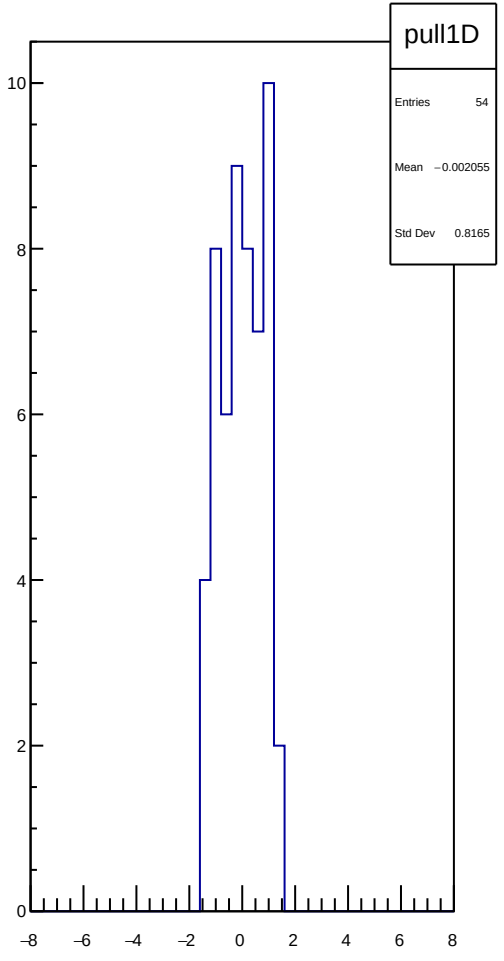

reg_asym_right_dd_mean vs run
×10^3
χ² / ndf 1.464 / 6
p0 −3.51e+05 ± 1.778e+05
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0

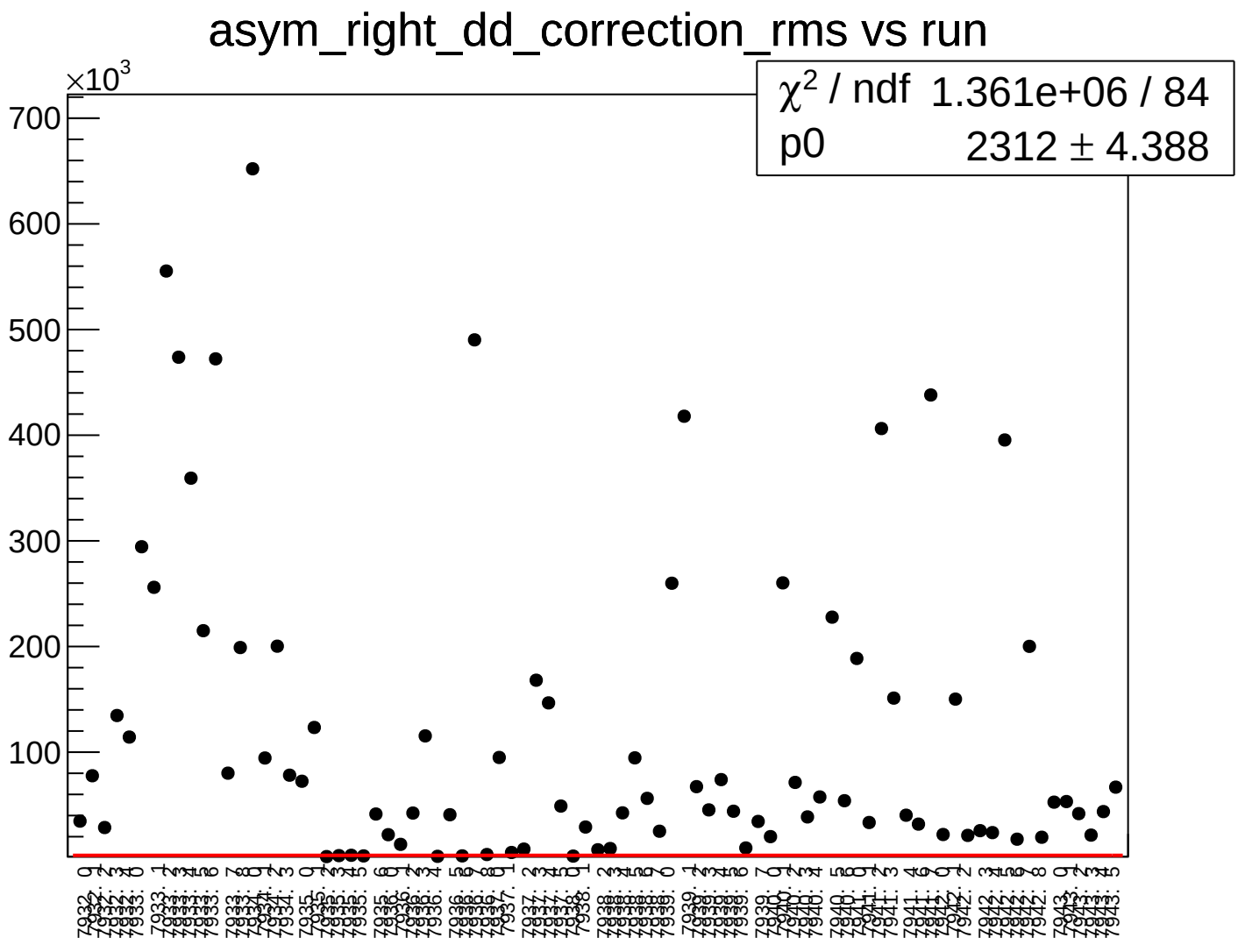

pull
Entries 7
Mean 20.68
Std Dev 17.62
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

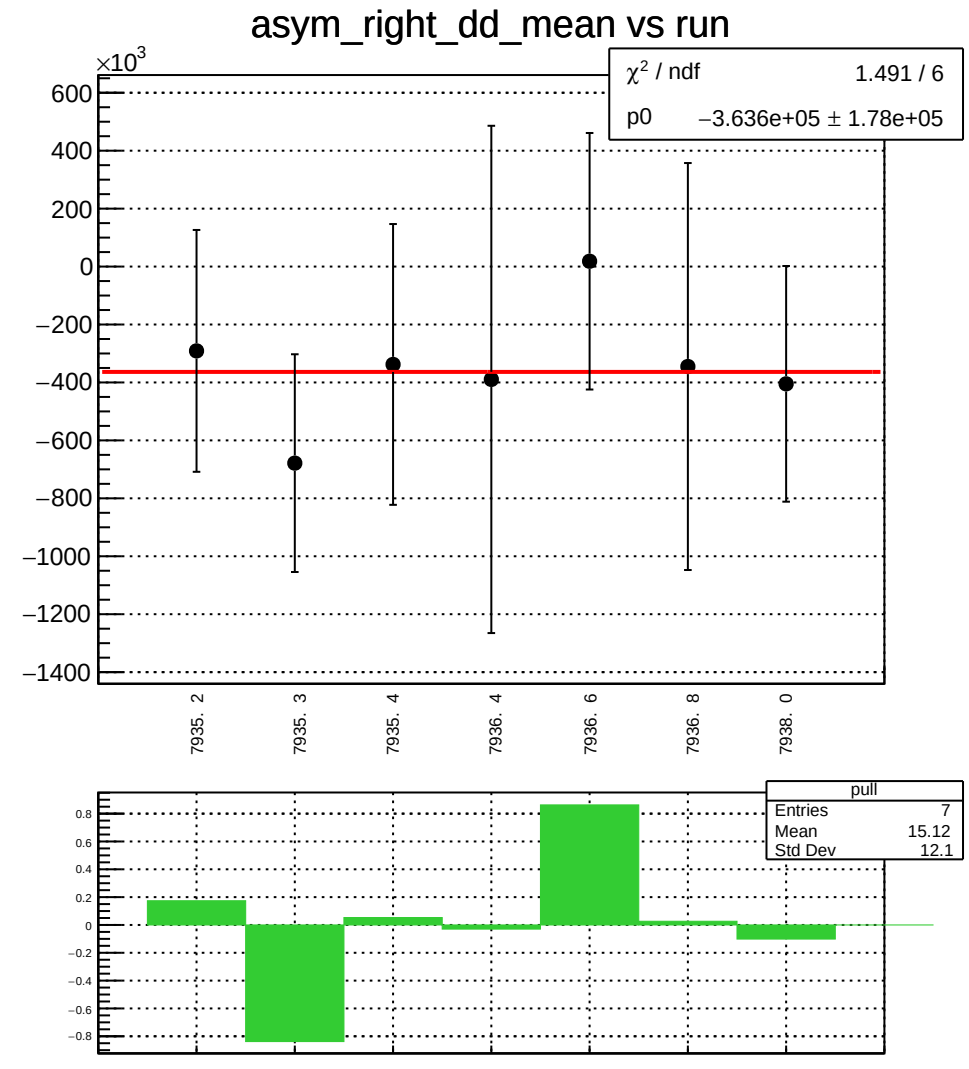

pull1D
Entries 7
Mean 0.01467
Std Dev 0.457
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

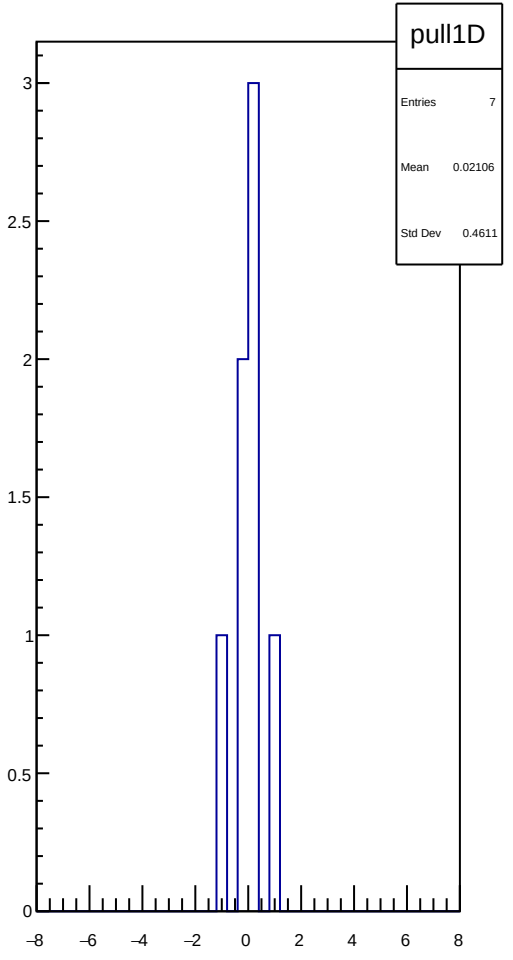

reg_asym_right_dd_rms vs run
×10^3
χ^2 / ndf 1.296e+05 / 15
p0 4.968e+04 ± 122.9
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

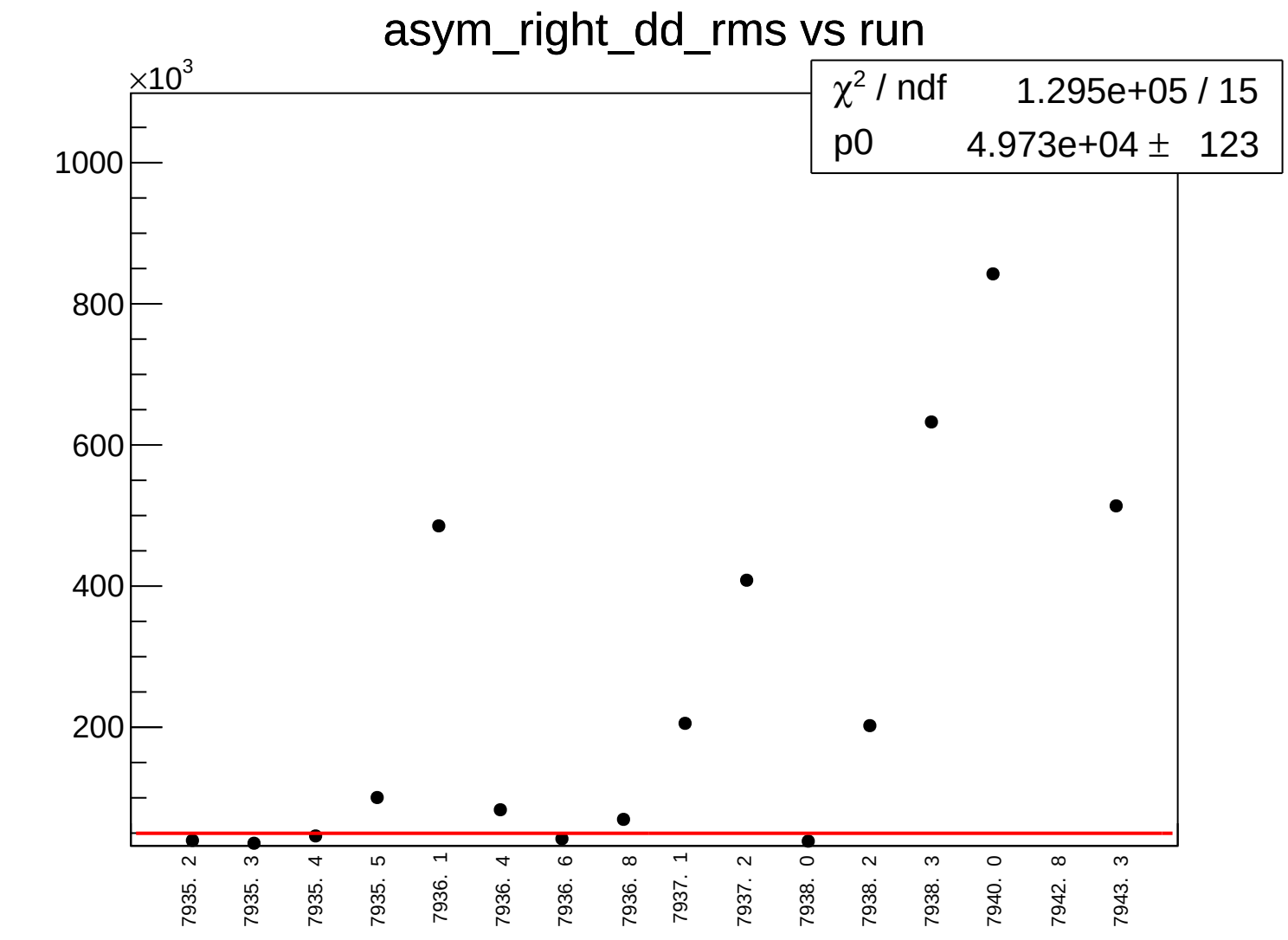

asym_right_dd_correction_mean vs run
χ² / ndf 36 / 53
p0 2799 ± 6207
×10³
2000
1500
1000
500
0
−500
−1000
pull
Entries 54
Mean −352
Std Dev 381.7
1.5
1
0.5
0
−0.5
−1
−1.5

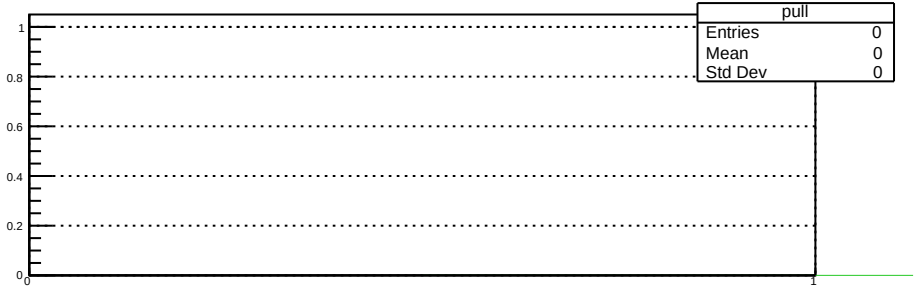

pull1D
Entries 54
Mean −0.002055
Std Dev 0.8165
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

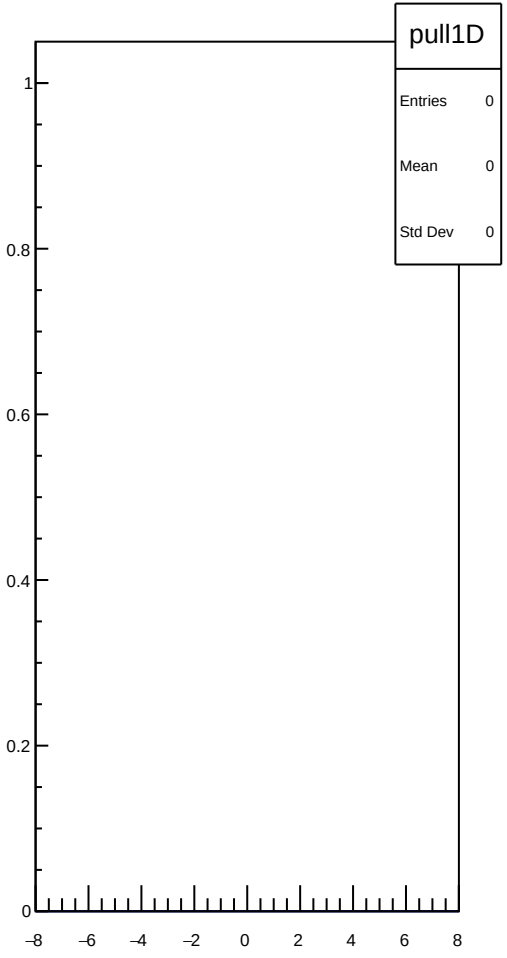

asym_right_dd_correction_rms vs run
×10^3
700
600
500
400
300
200
100
χ² / ndf 1.361e+06 / 84
p0 2312 ± 4.388

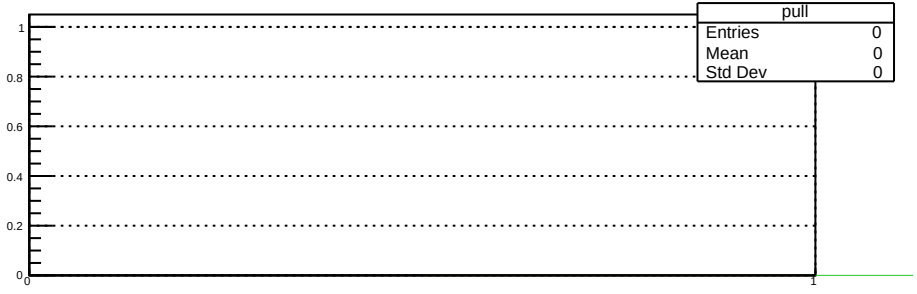

asym_right_dd_mean vs run
×10^3
χ² / ndf 1.491 / 6
p0 −3.636e+05 ± 1.78e+05
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
7935. 2
7935. 3
7935. 4
7936. 4
7936. 6
7936. 8
7938. 0
pull
Entries 7
Mean 15.12
Std Dev 12.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

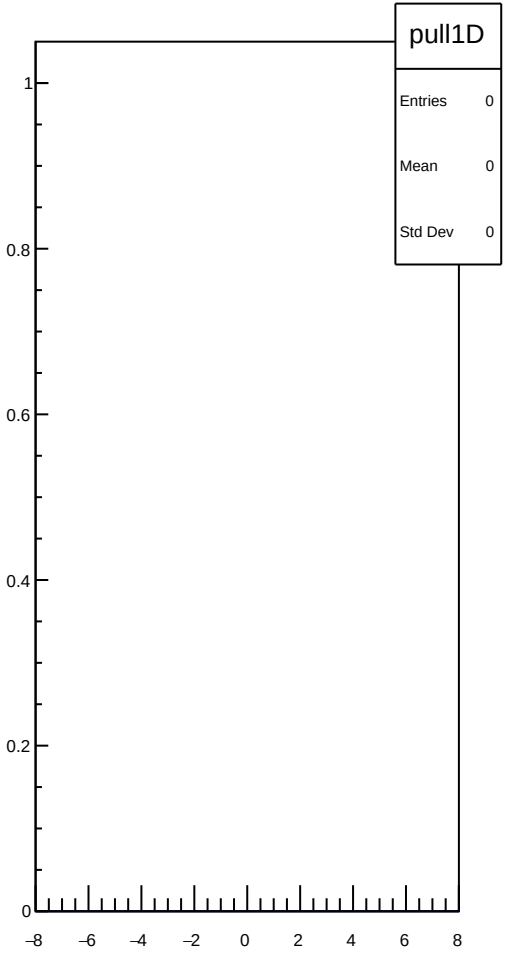

pull1D
Entries 7
Mean 0.02106
Std Dev 0.4611
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

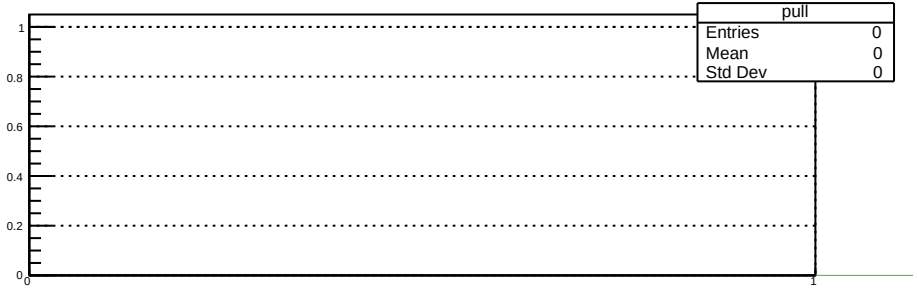

asym_right_dd_rms vs run
×10^3
χ^2 / ndf 1.295e+05 / 15
p0 4.973e+04 ± 123
1000
800
600
400
200
7935. 2
7935. 3
7935. 4
7935. 5
7936. 1
7936. 4
7936. 6
7936. 8
7937. 1
7937. 2
7938. 0
7938. 2
7938. 3
7940. 0
7942. 8
7943. 3

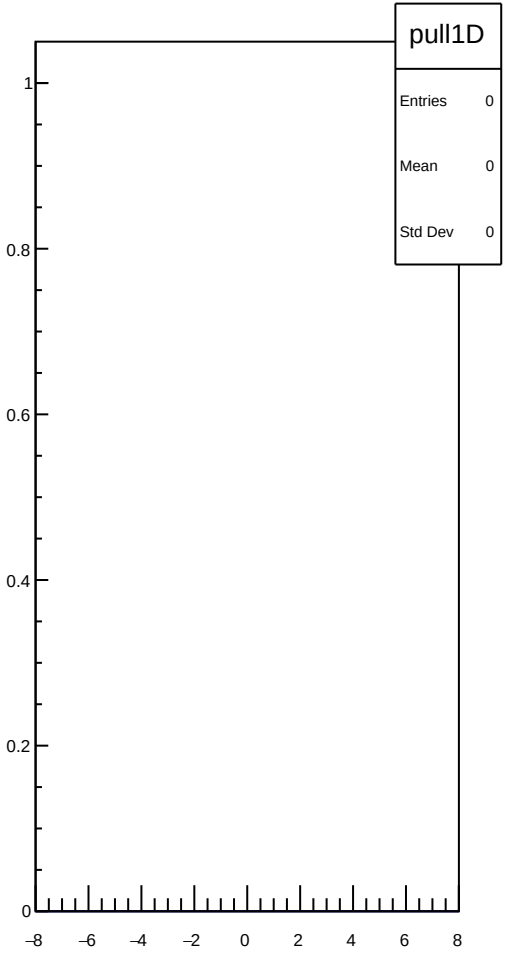

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

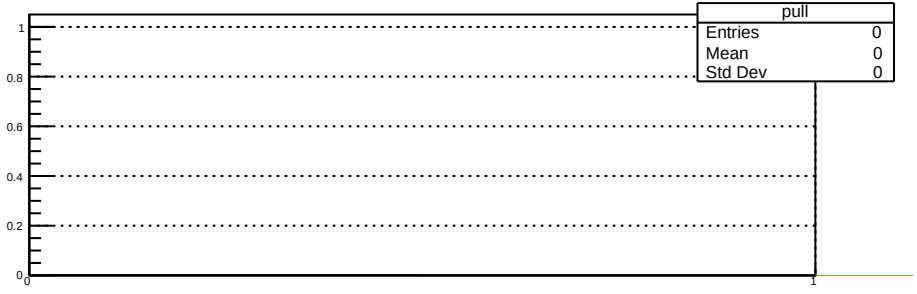

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

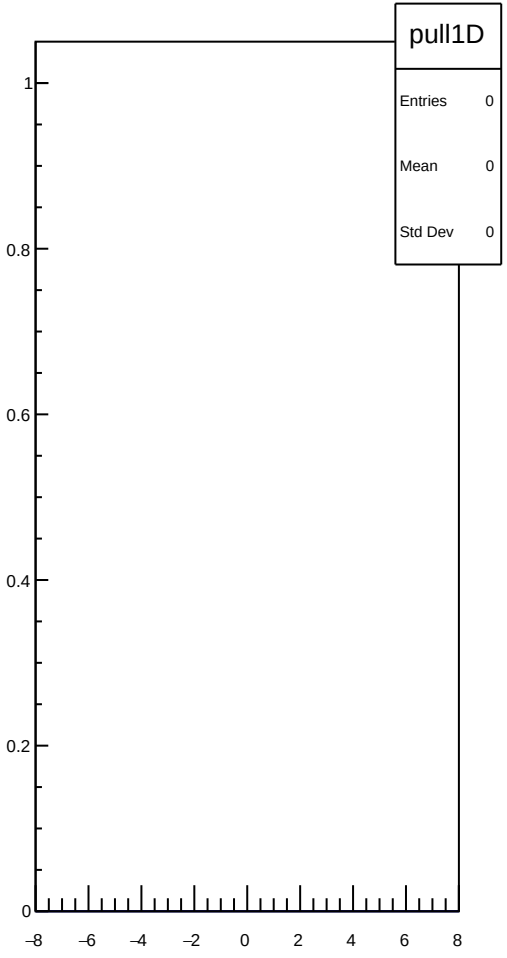

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

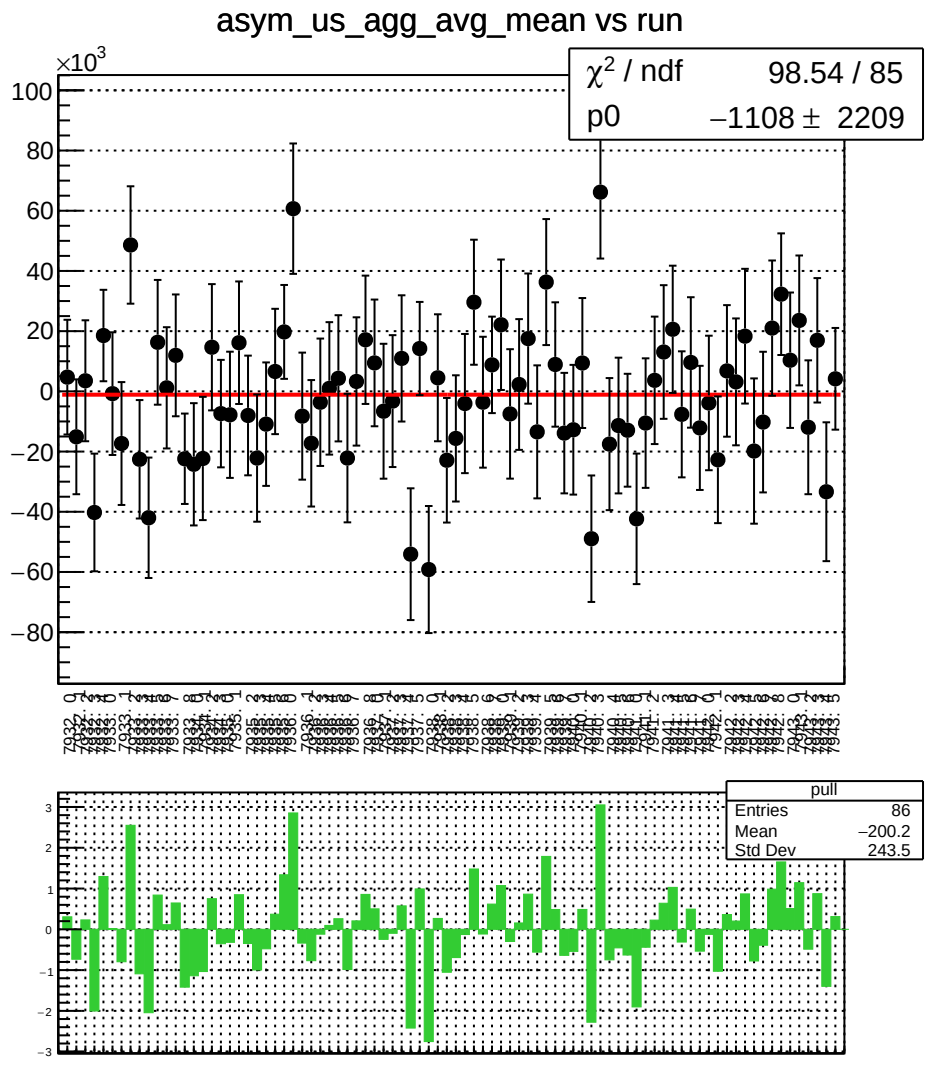

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

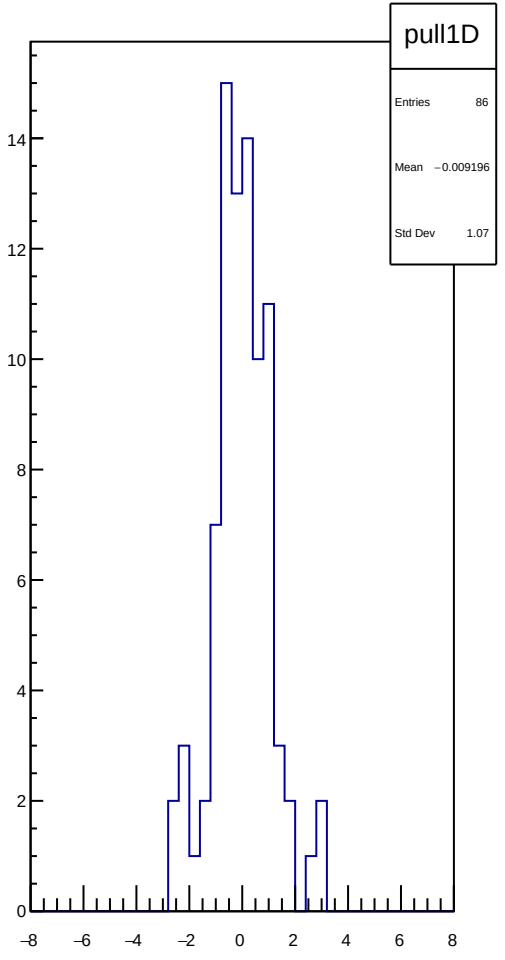

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

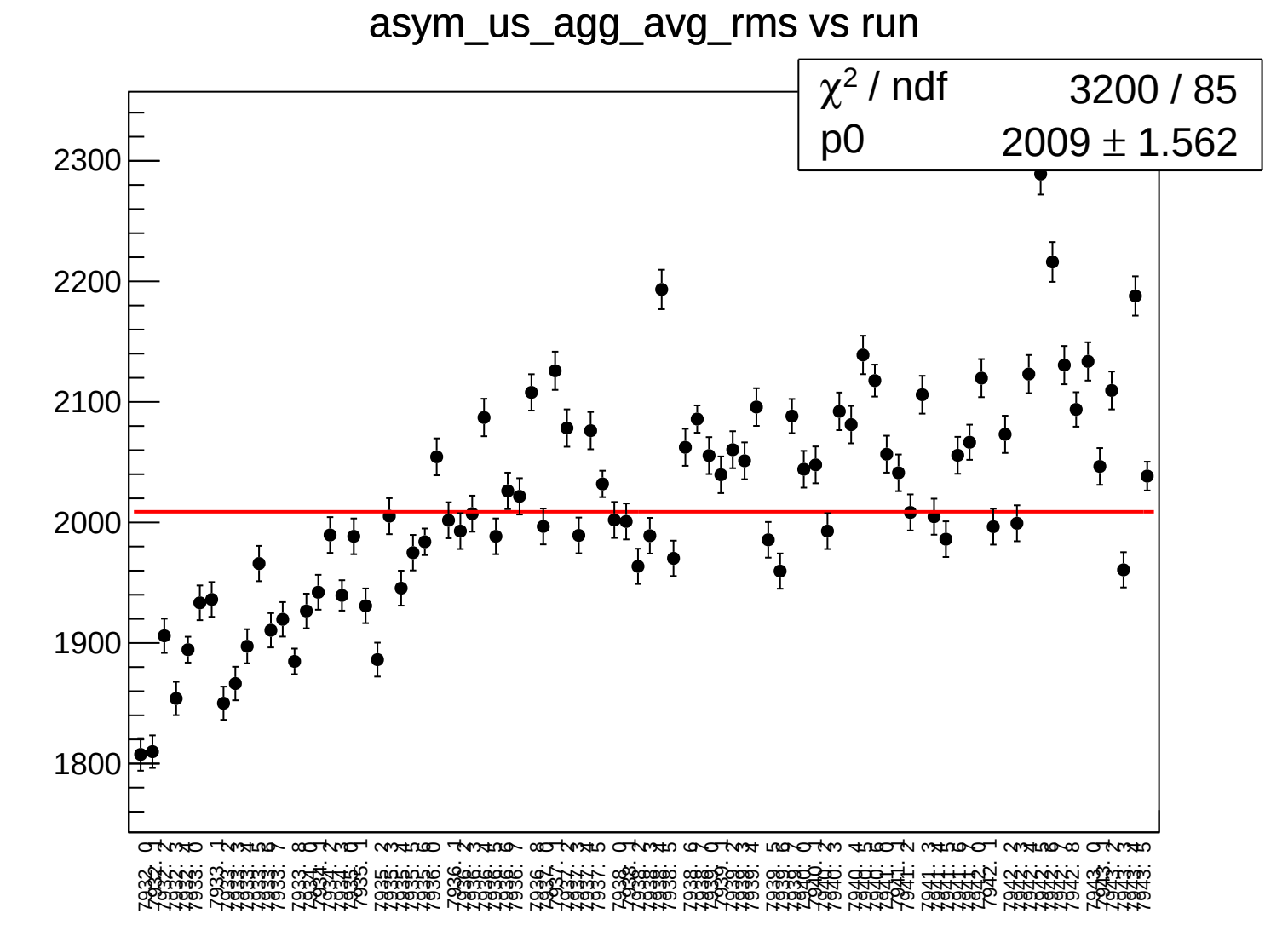

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

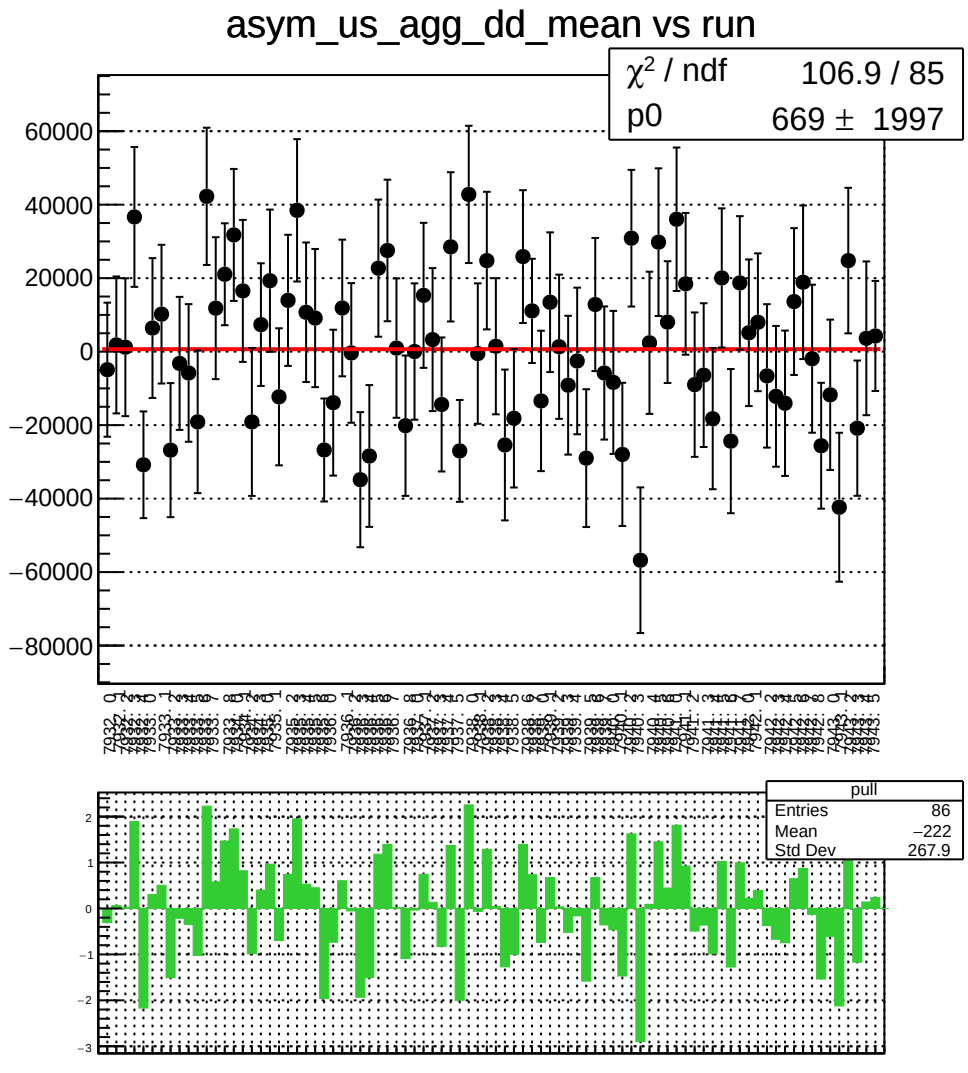

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

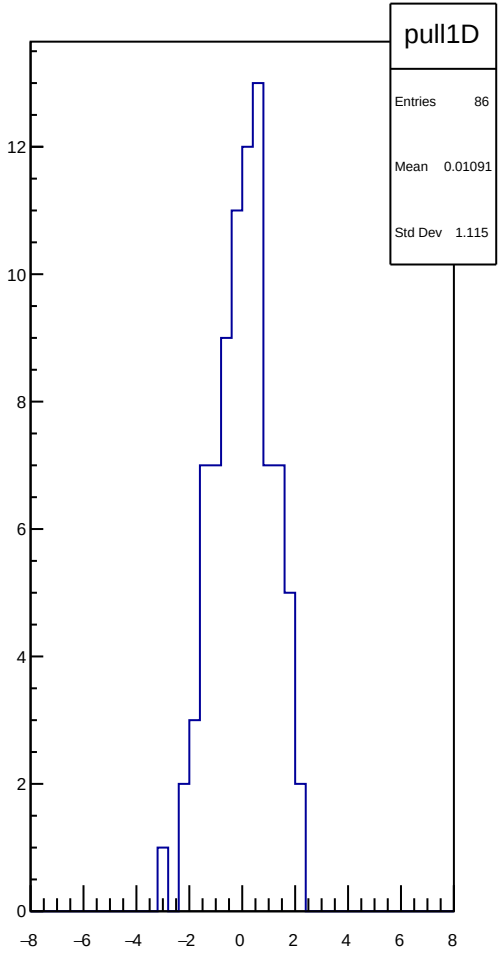

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

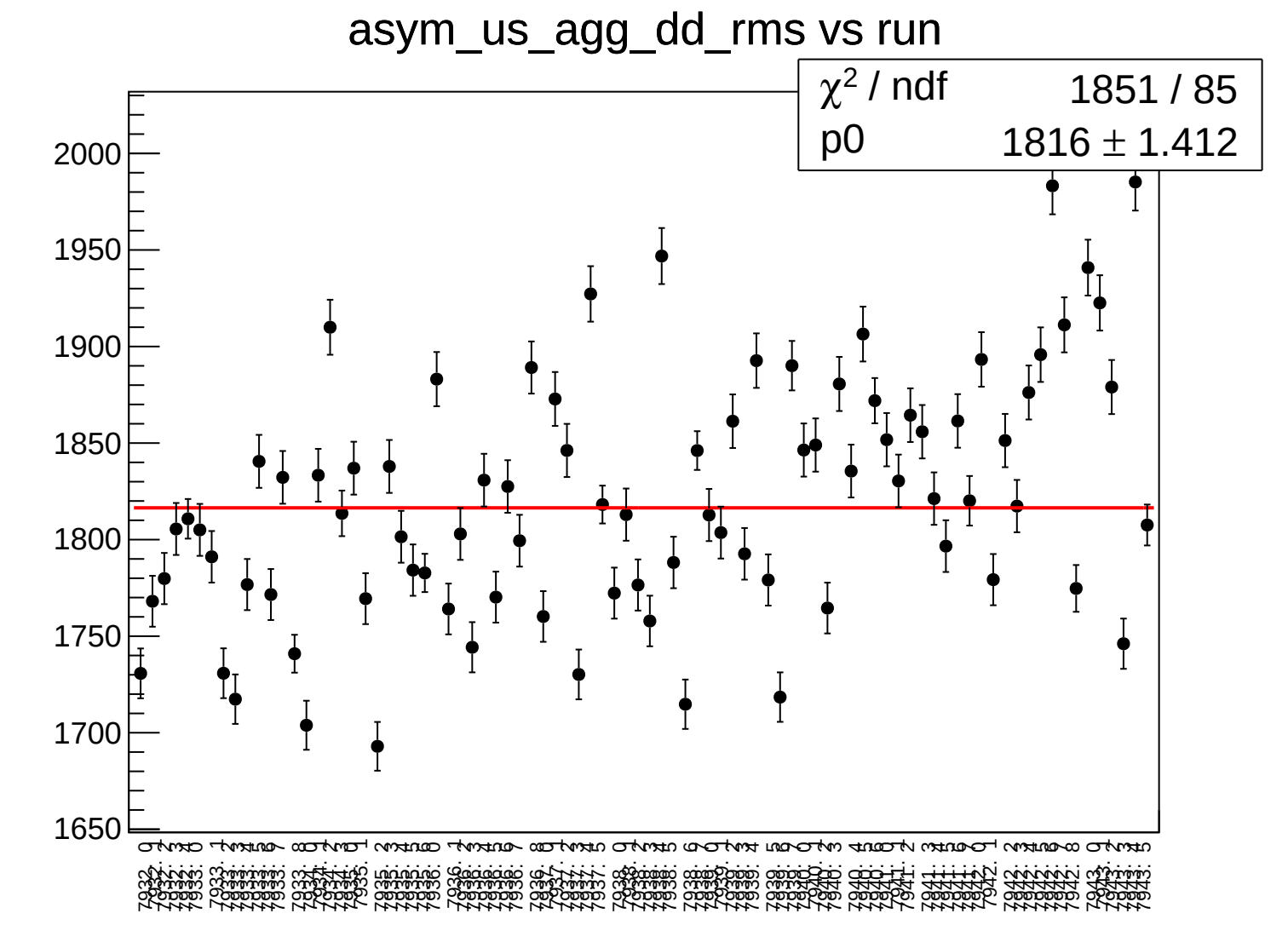

asym_us_agg_avg_mean vs run
×10^3
χ² / ndf 98.54 / 85
p0 −1108 ± 2209
pull
Entries 86
Mean −200.2
Std Dev 243.5

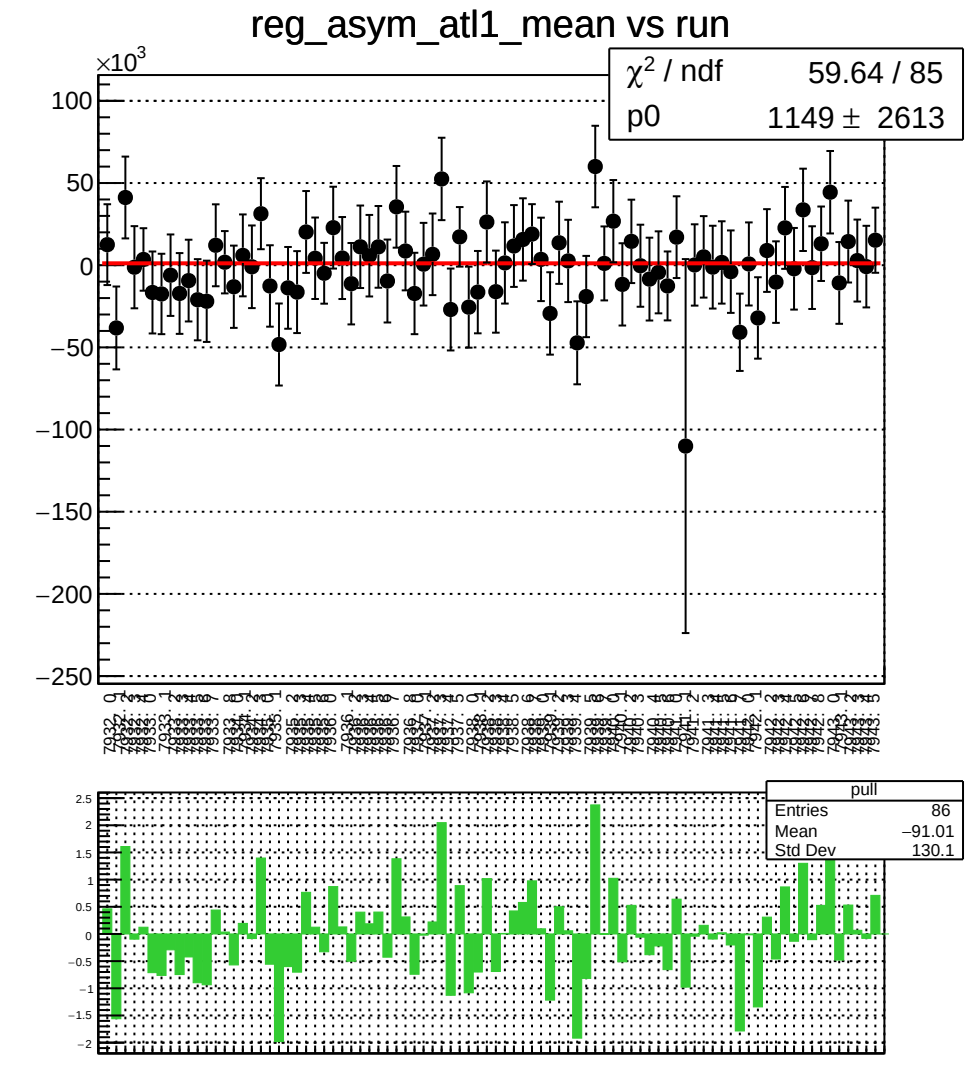

pull1D
Entries 86
Mean −0.009196
Std Dev 1.07

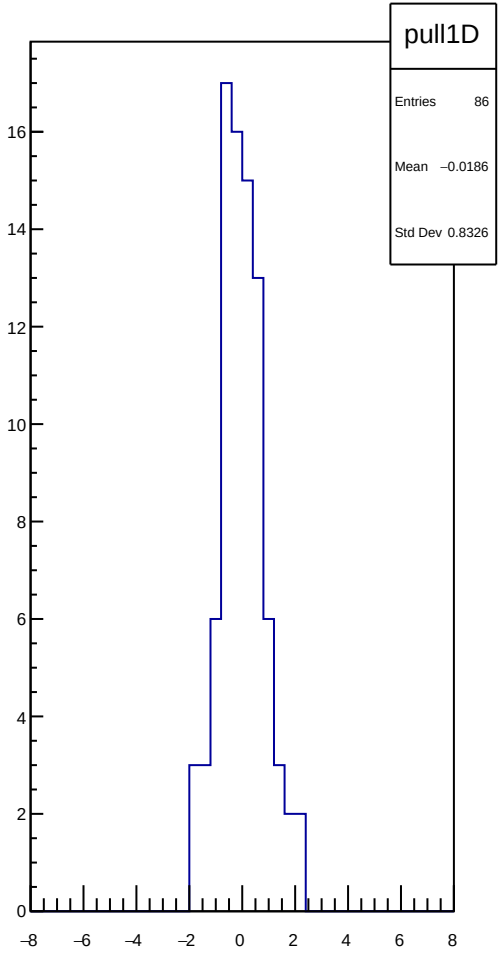

asym_us_agg_avg_rms vs run
χ² / ndf 3200 / 85
p0 2009 ± 1.562
2300
2200
2100
2000
1900
1800

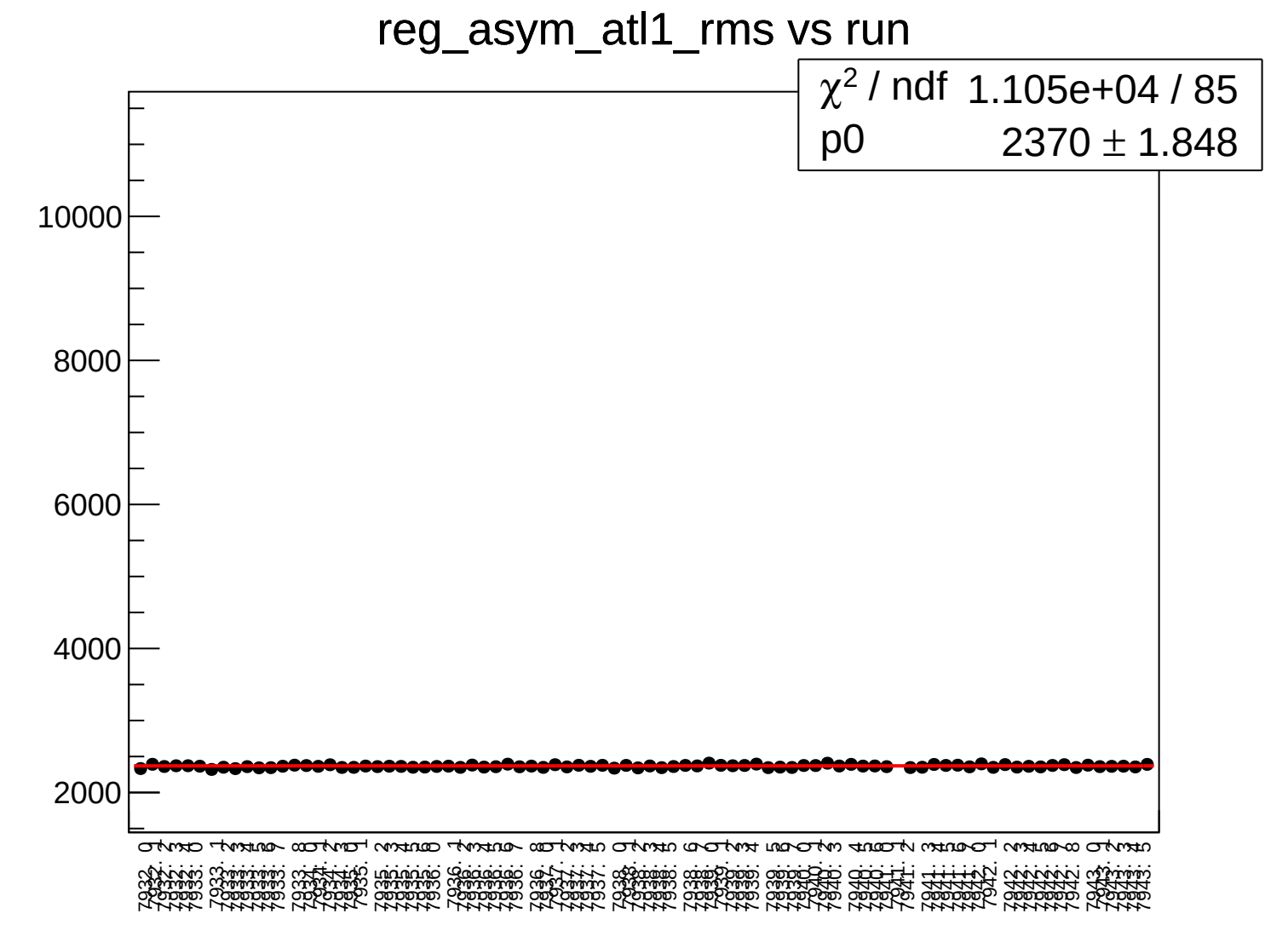

asym_us_agg_dd_mean vs run
χ² / ndf 106.9 / 85
p0 669 ± 1997
pull
Entries 86
Mean −222
Std Dev 267.9

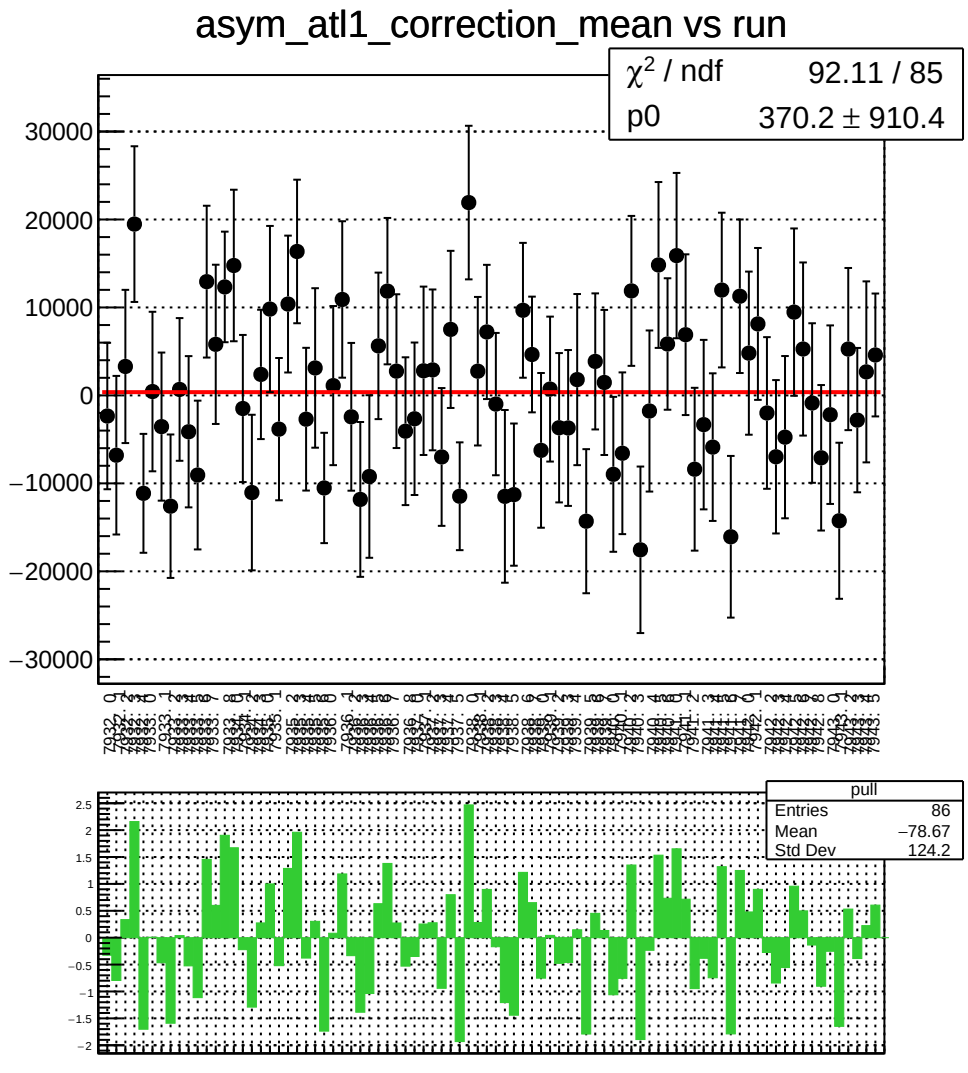

pull1D
Entries 86
Mean 0.01091
Std Dev 1.115

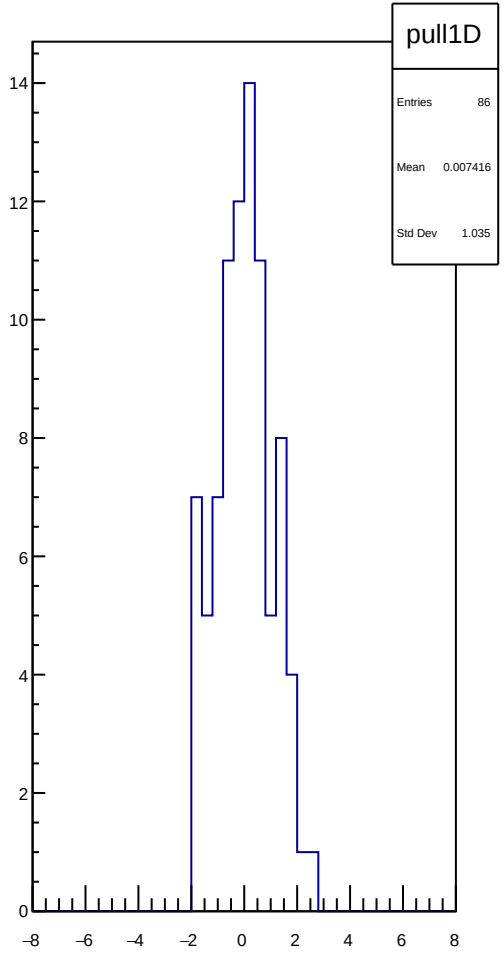

asym_us_agg_dd_rms vs run
χ² / ndf 1851 / 85
p0 1816 ± 1.412
2000
1950
1900
1850
1800
1750
1700
1650

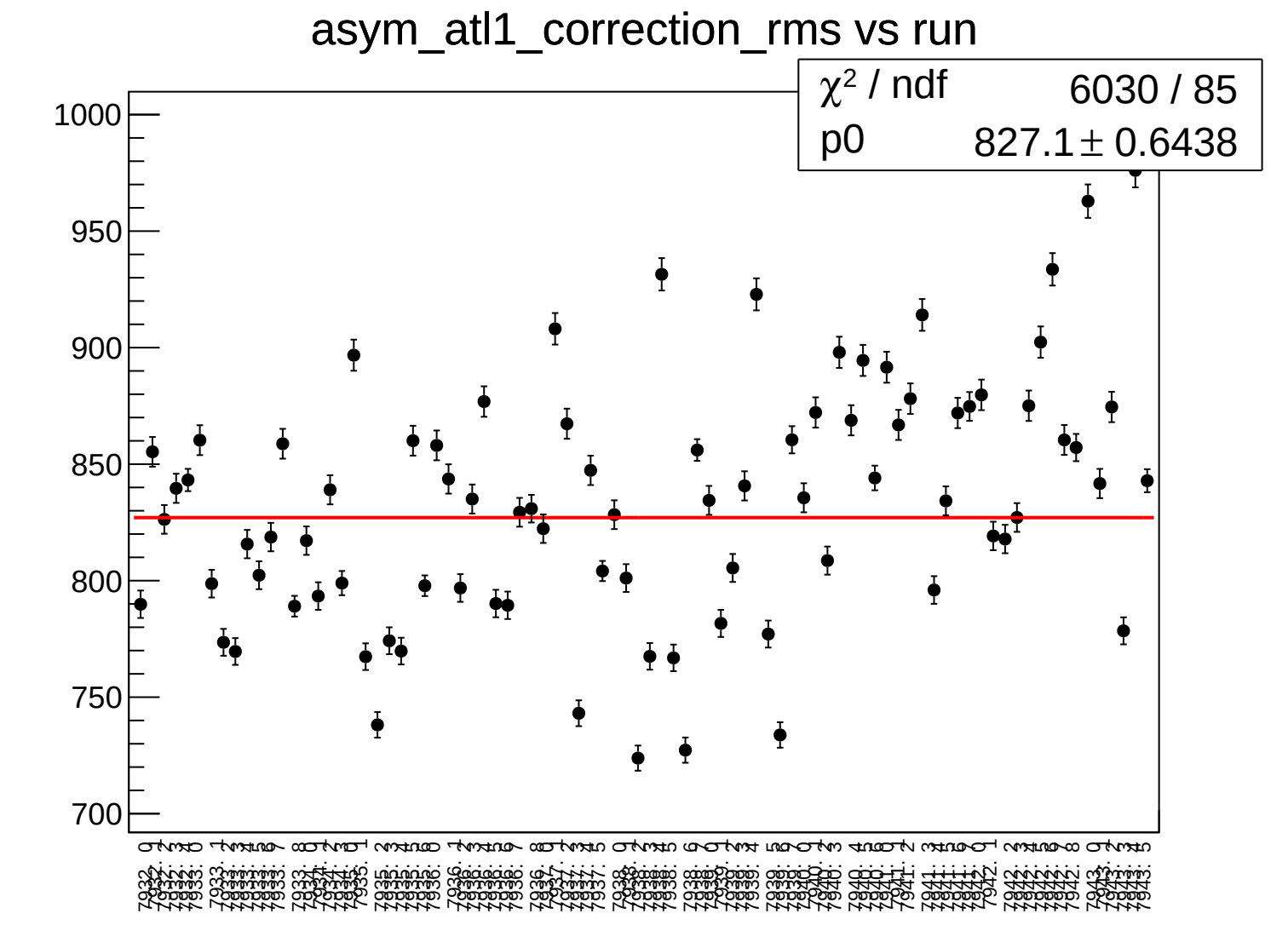

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 59.64 / 85
p0 1149 ± 2613
pull
Entries 86
Mean −91.01
Std Dev 130.1

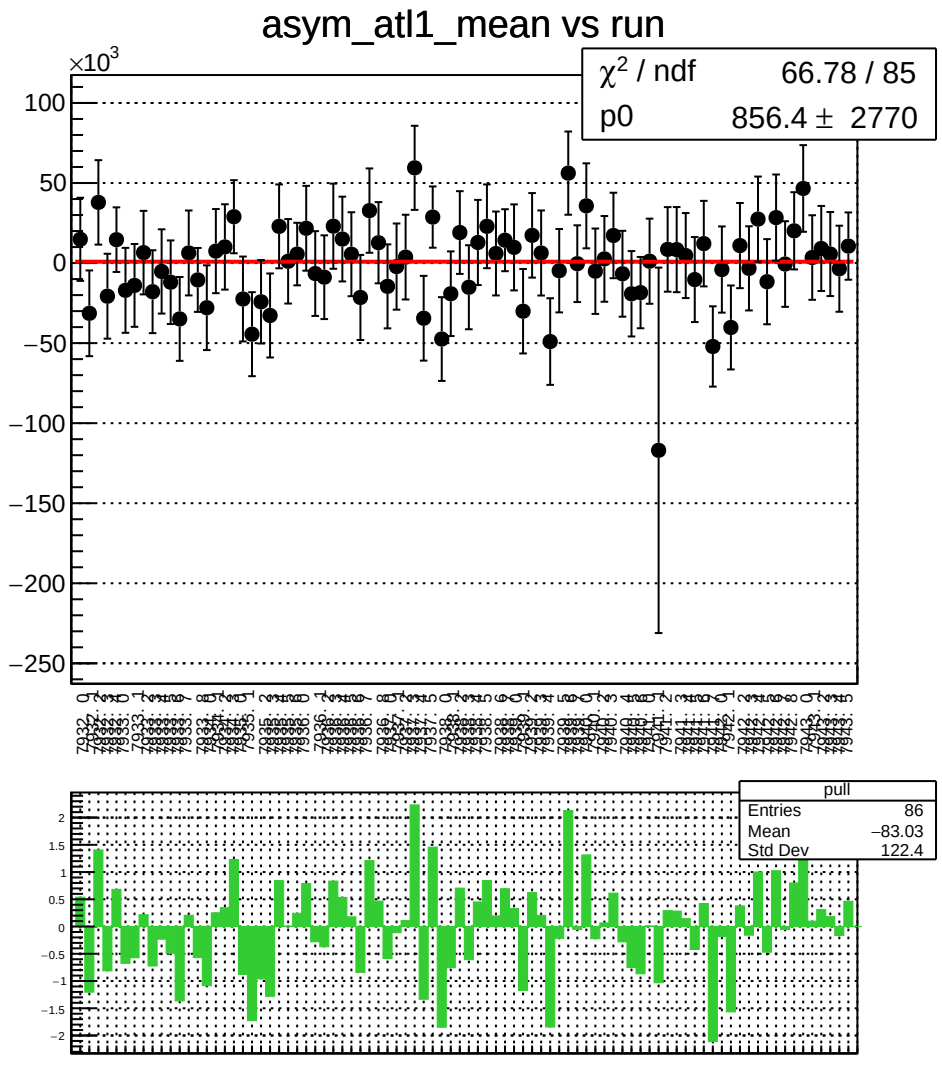

pull1D
Entries 86
Mean −0.0186
Std Dev 0.8326

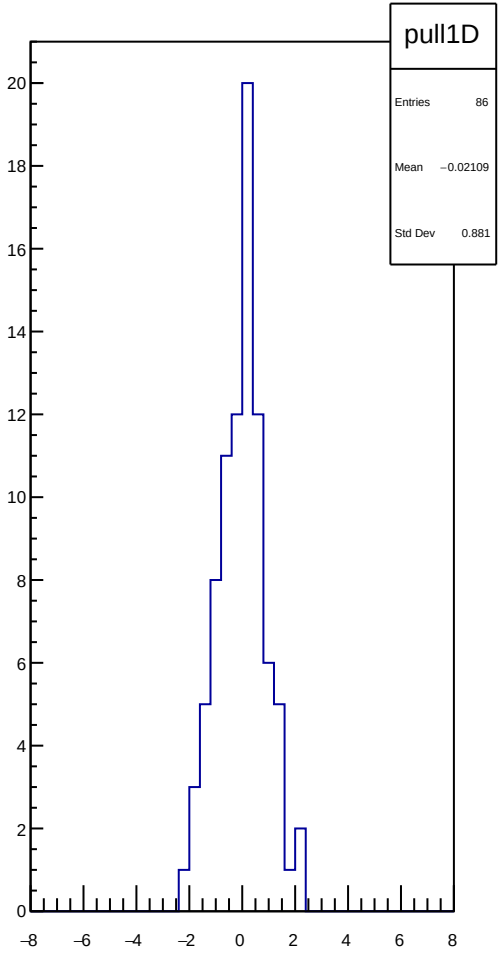

reg_asym_atl1_rms vs run
χ^2 / ndf 1.105e+04 / 85
p0 2370 ± 1.848
10000
8000
6000
4000
2000

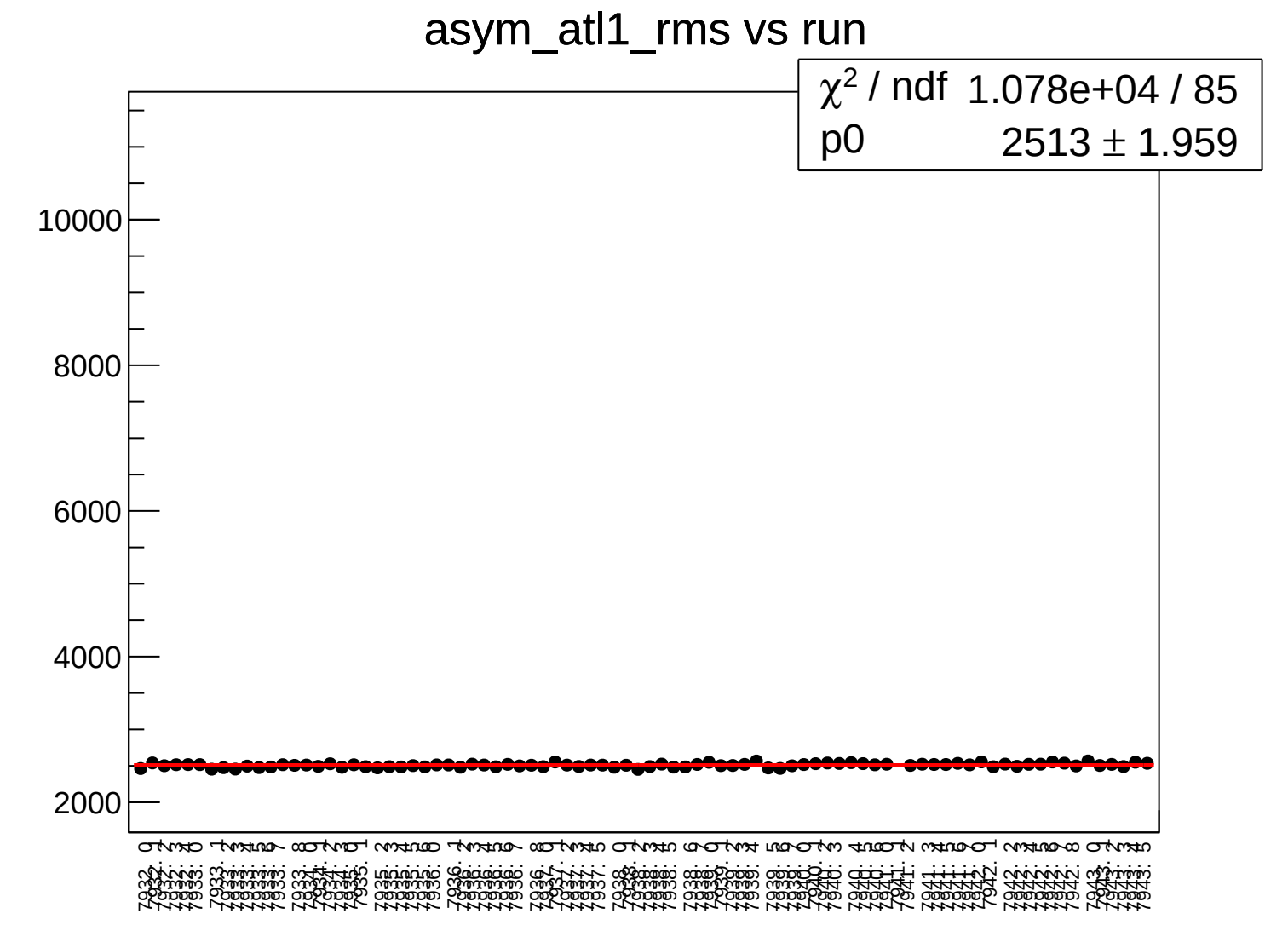

asym_atl1_correction_mean vs run
χ² / ndf 92.11 / 85
p0 370.2 ± 910.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −78.67
Std Dev 124.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

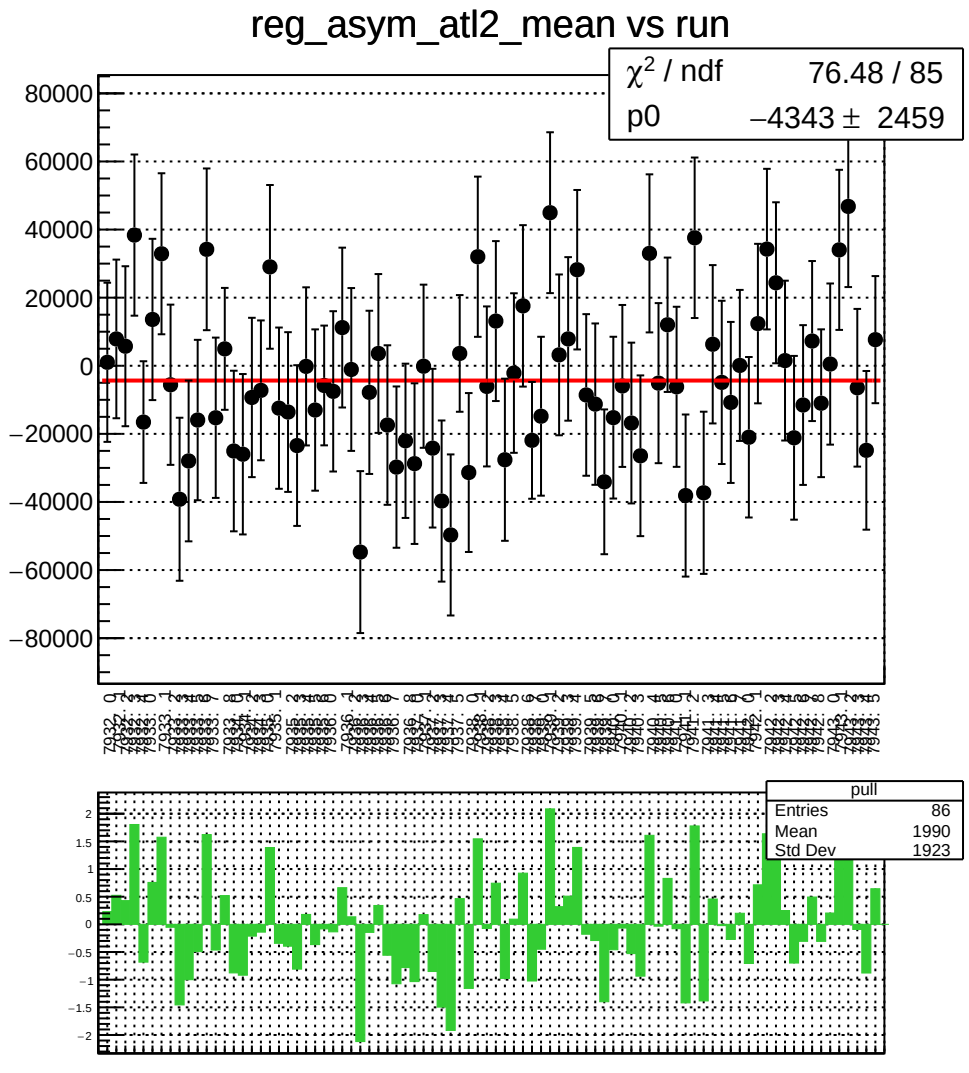

pull1D
Entries 86
Mean 0.007416
Std Dev 1.035
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

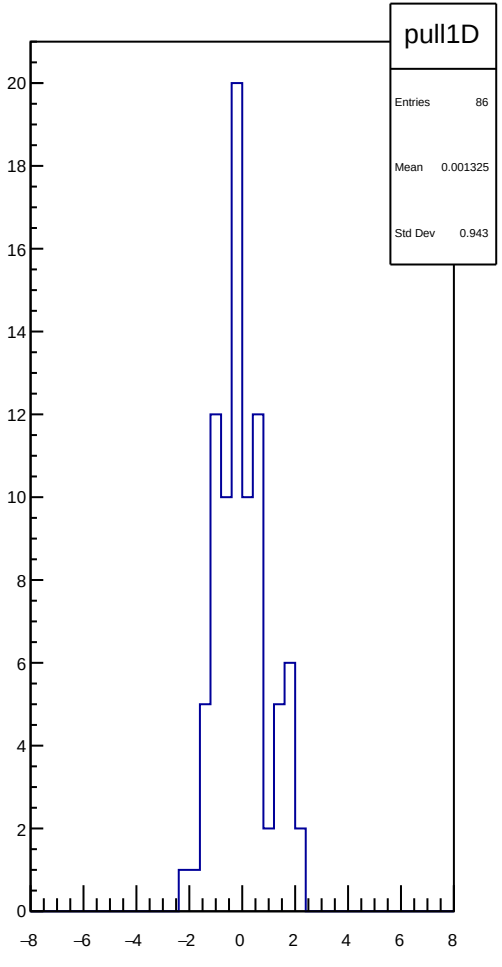

asym_atl1_correction_rms vs run
χ² / ndf 6030 / 85
p0 827.1 ± 0.6438
1000
950
900
850
800
750
700

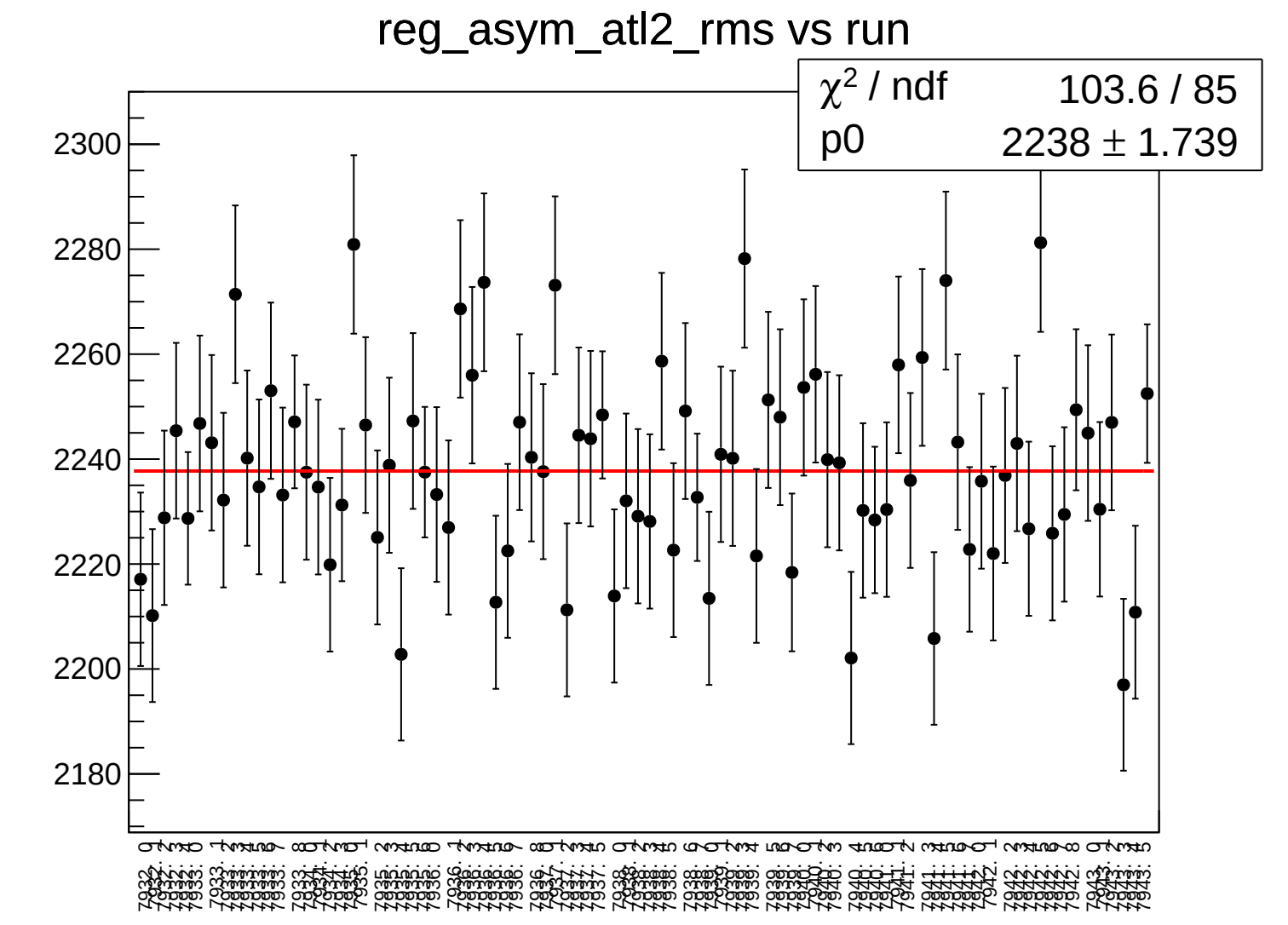

asym_atl1_mean vs run
χ² / ndf 66.78 / 85
p0 856.4 ± 2770
pull
Entries 86
Mean −83.03
Std Dev 122.4

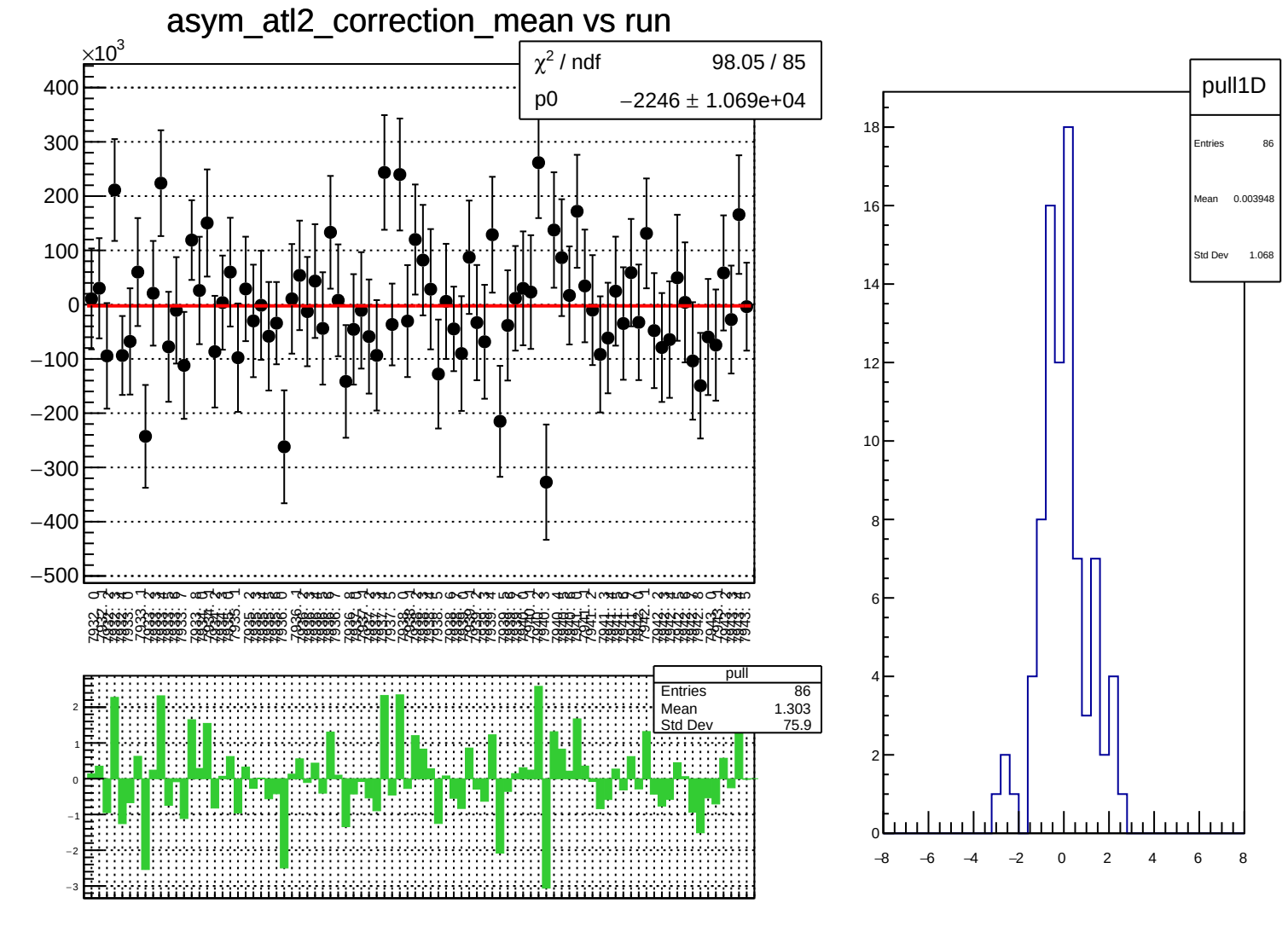

pull1D
Entries 86
Mean −0.02109
Std Dev 0.881

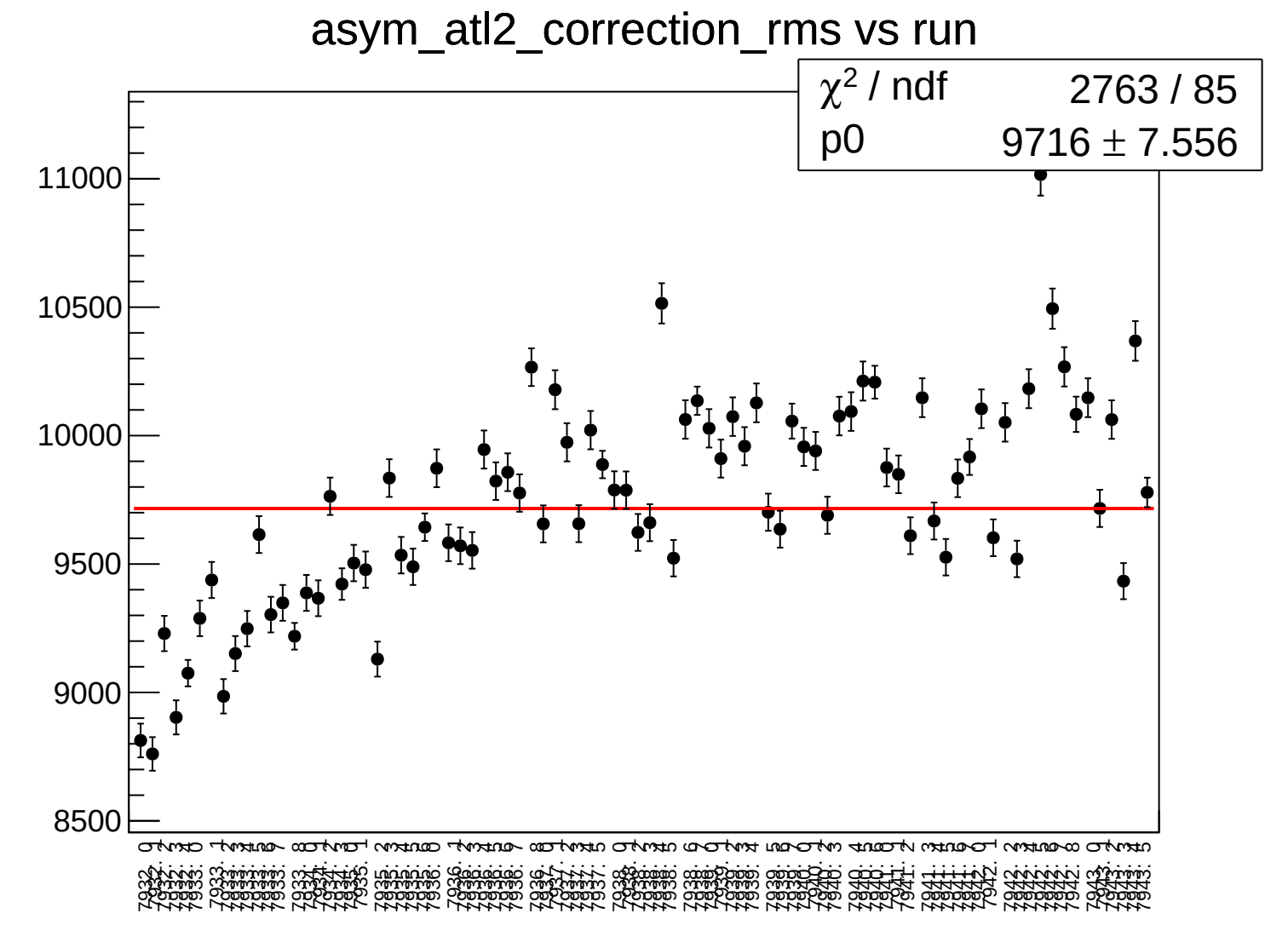

asym_atl1_rms vs run
χ² / ndf 1.078e+04 / 85
p0 2513 ± 1.959
10000
8000
6000
4000
2000

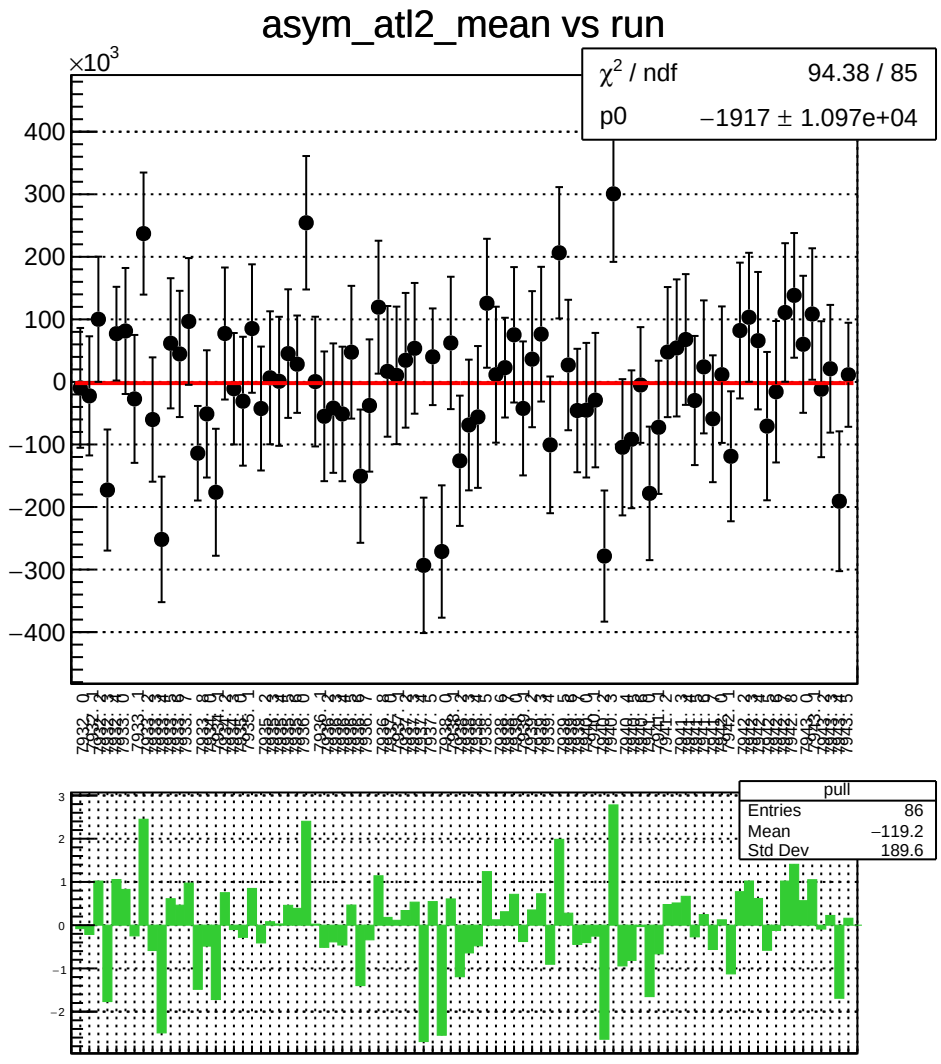

reg_asym_atl2_mean vs run
χ^2 / ndf 76.48 / 85
p0 −4343 ± 2459
pull
Entries 86
Mean 1990
Std Dev 1923

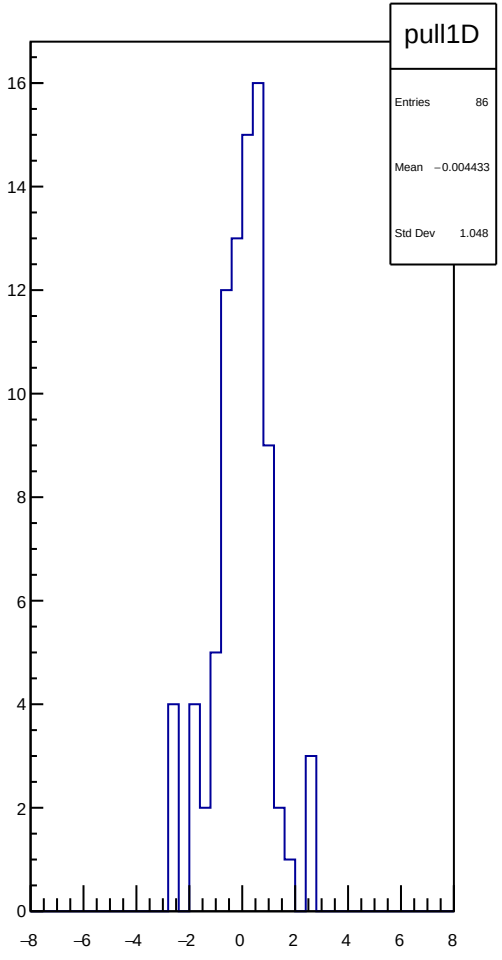

pull1D
Entries 86
Mean 0.001325
Std Dev 0.943

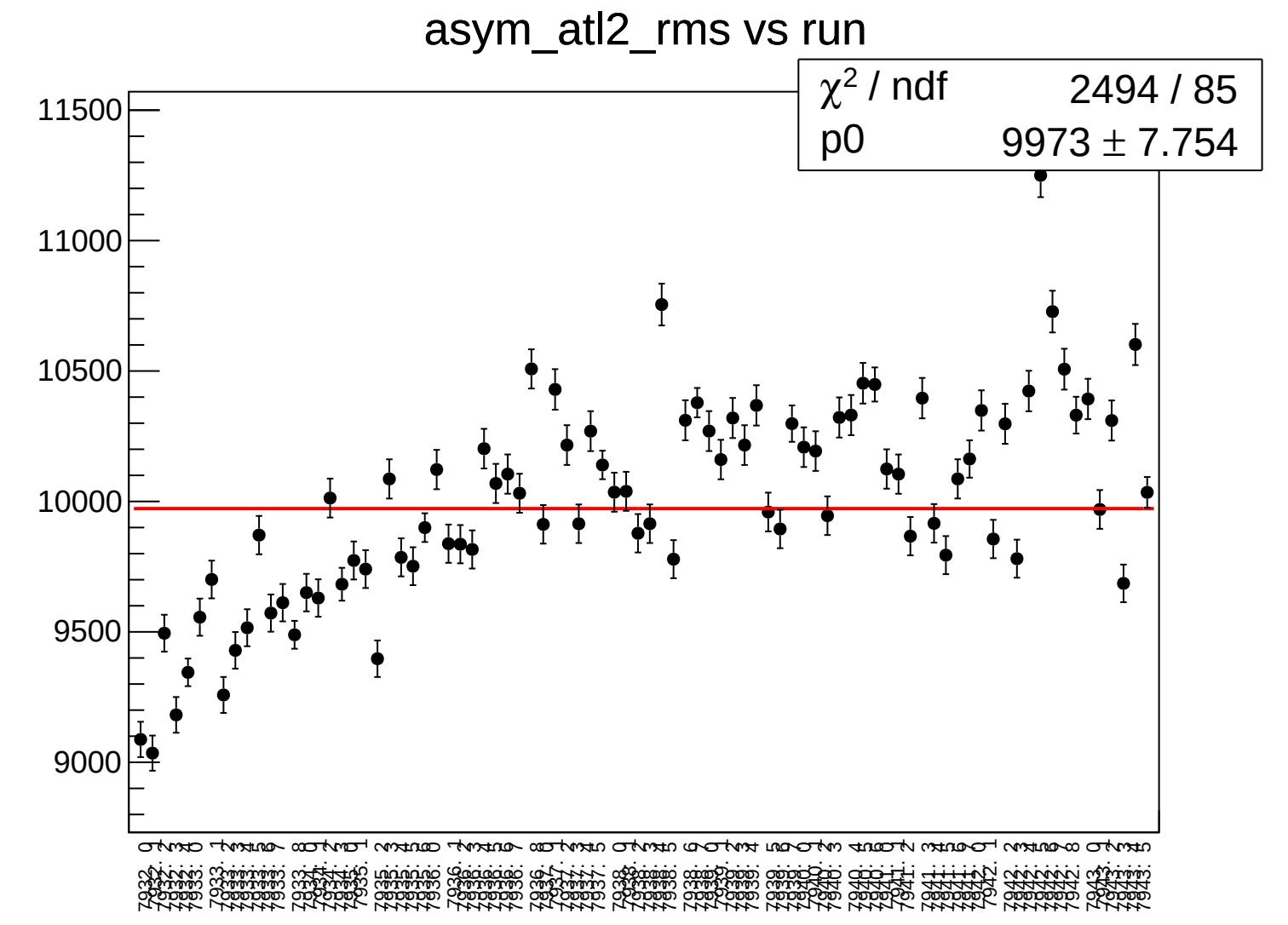

reg_asym_atl2_rms vs run
χ^2 / ndf 103.6 / 85
p0 2238 ± 1.739
2300
2280
2260
2240
2220
2200
2180

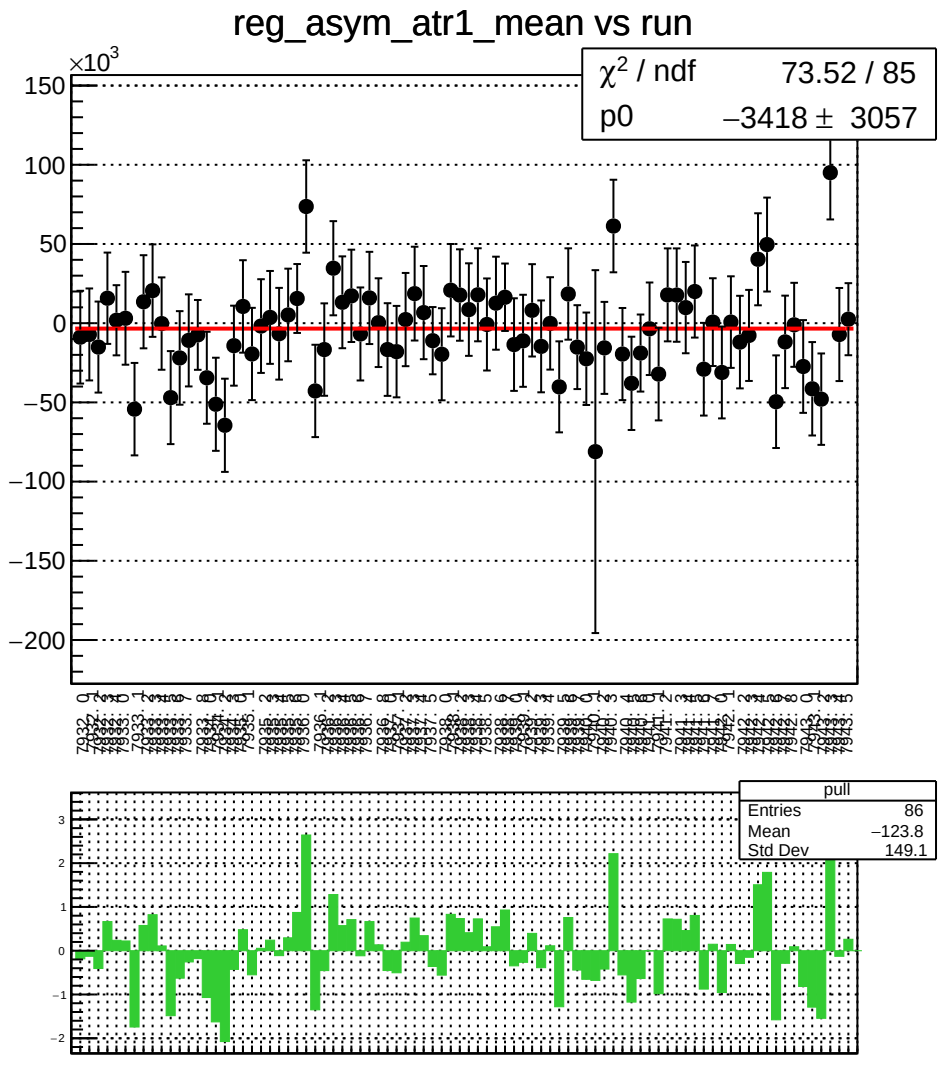

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 98.05 / 85
p0 −2246 ± 1.069e+04
pull
Entries 86
Mean 1.303
Std Dev 75.9
pull1D
Entries 86
Mean 0.003948
Std Dev 1.068

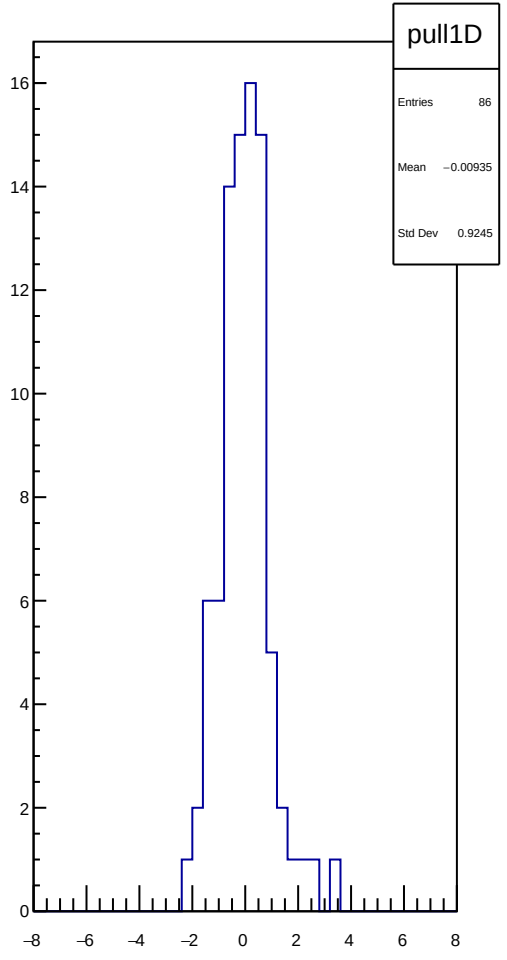

asym_atl2_correction_rms vs run
χ² / ndf 2763 / 85
p0 9716 ± 7.556
11000
10500
10000
9500
9000
8500

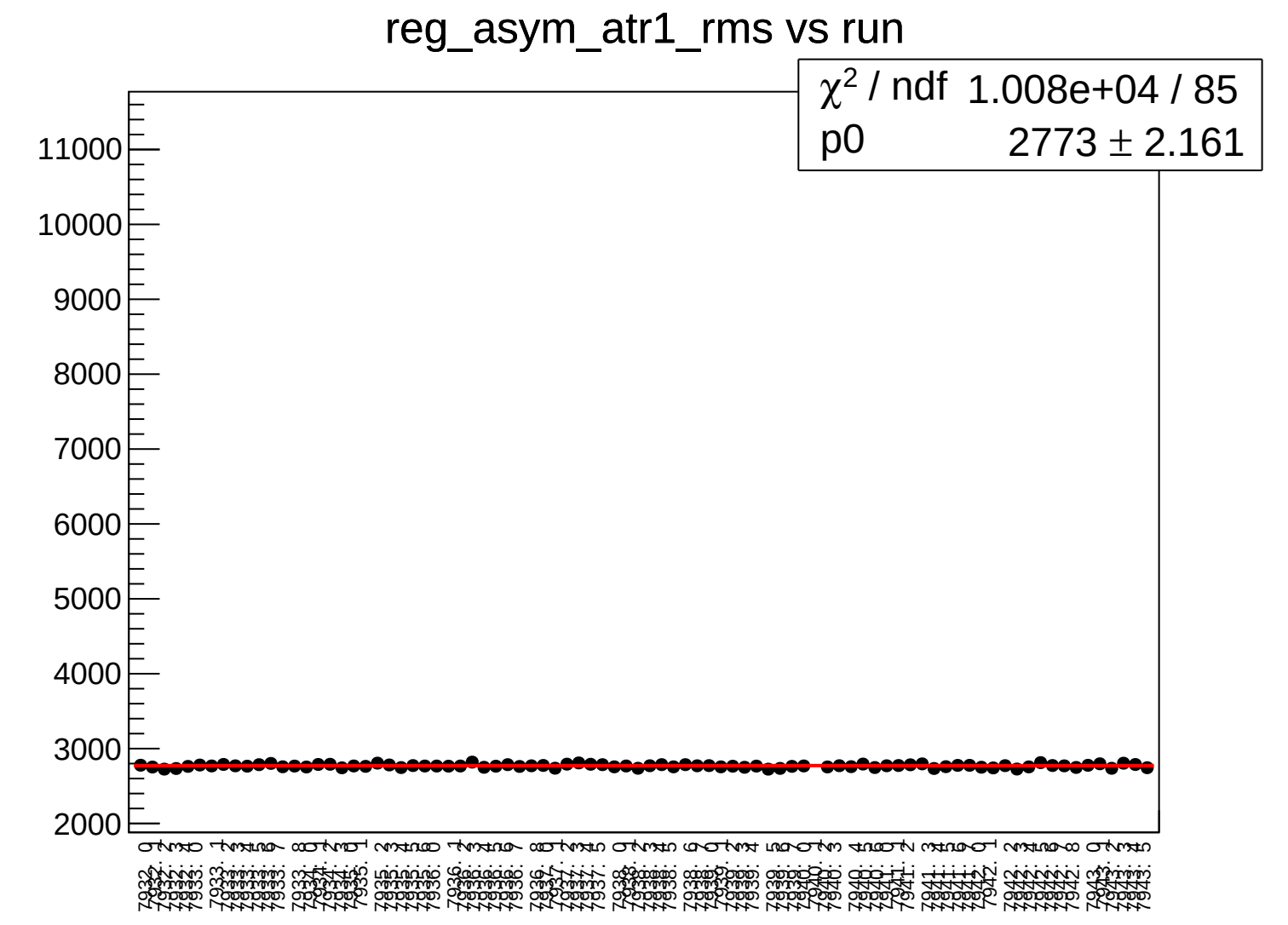

asym_atl2_mean vs run
×10^3
χ² / ndf 94.38 / 85
p0 −1917 ± 1.097e+04
pull
Entries 86
Mean −119.2
Std Dev 189.6

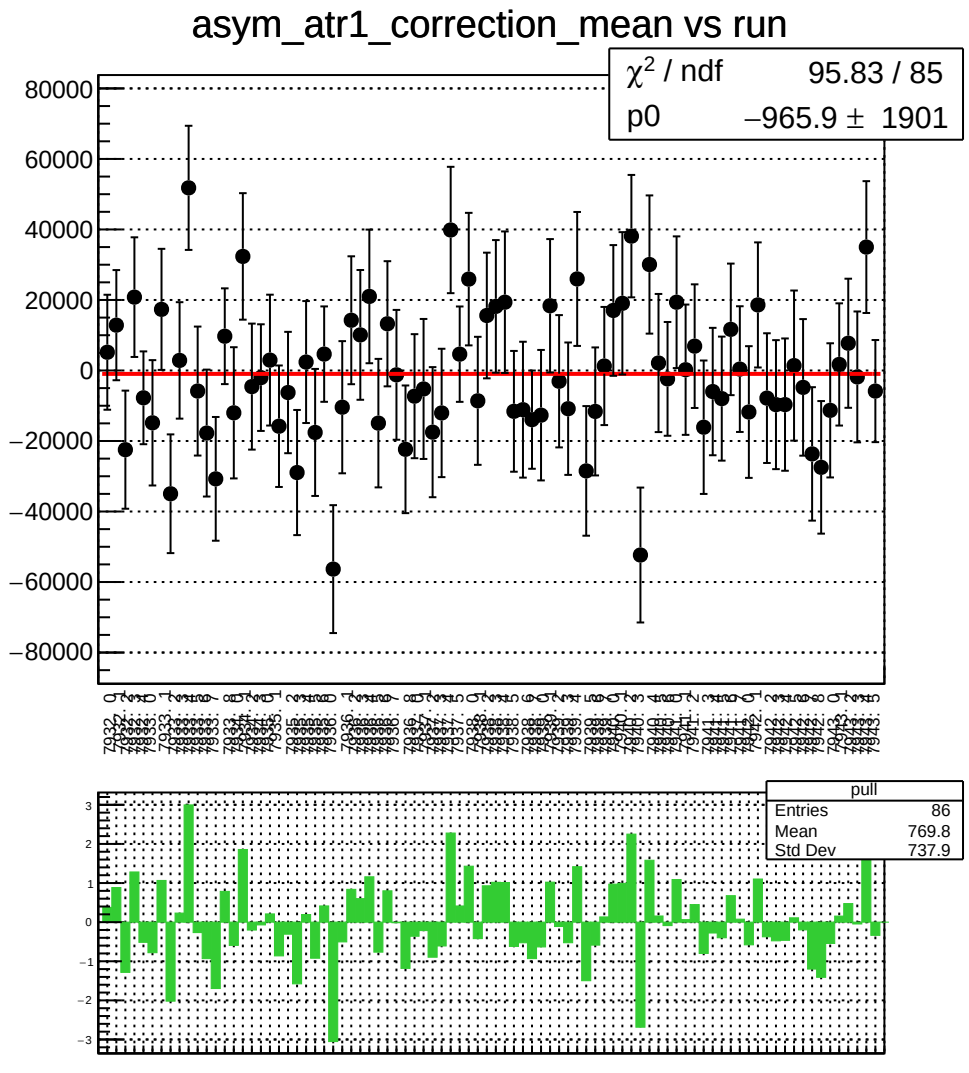

pull1D
Entries 86
Mean −0.004433
Std Dev 1.048

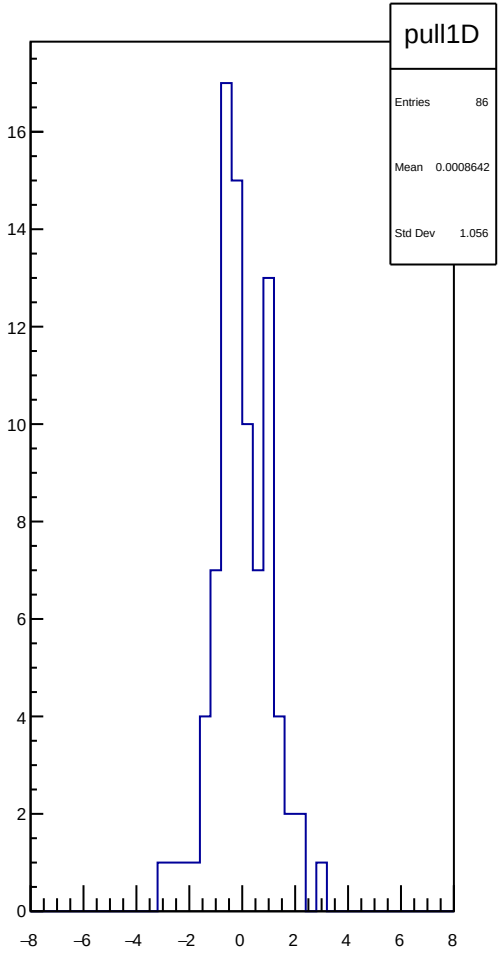

asym_atl2_rms vs run
χ^2 / ndf 2494 / 85
p0 9973 ± 7.754
11500
11000
10500
10000
9500
9000

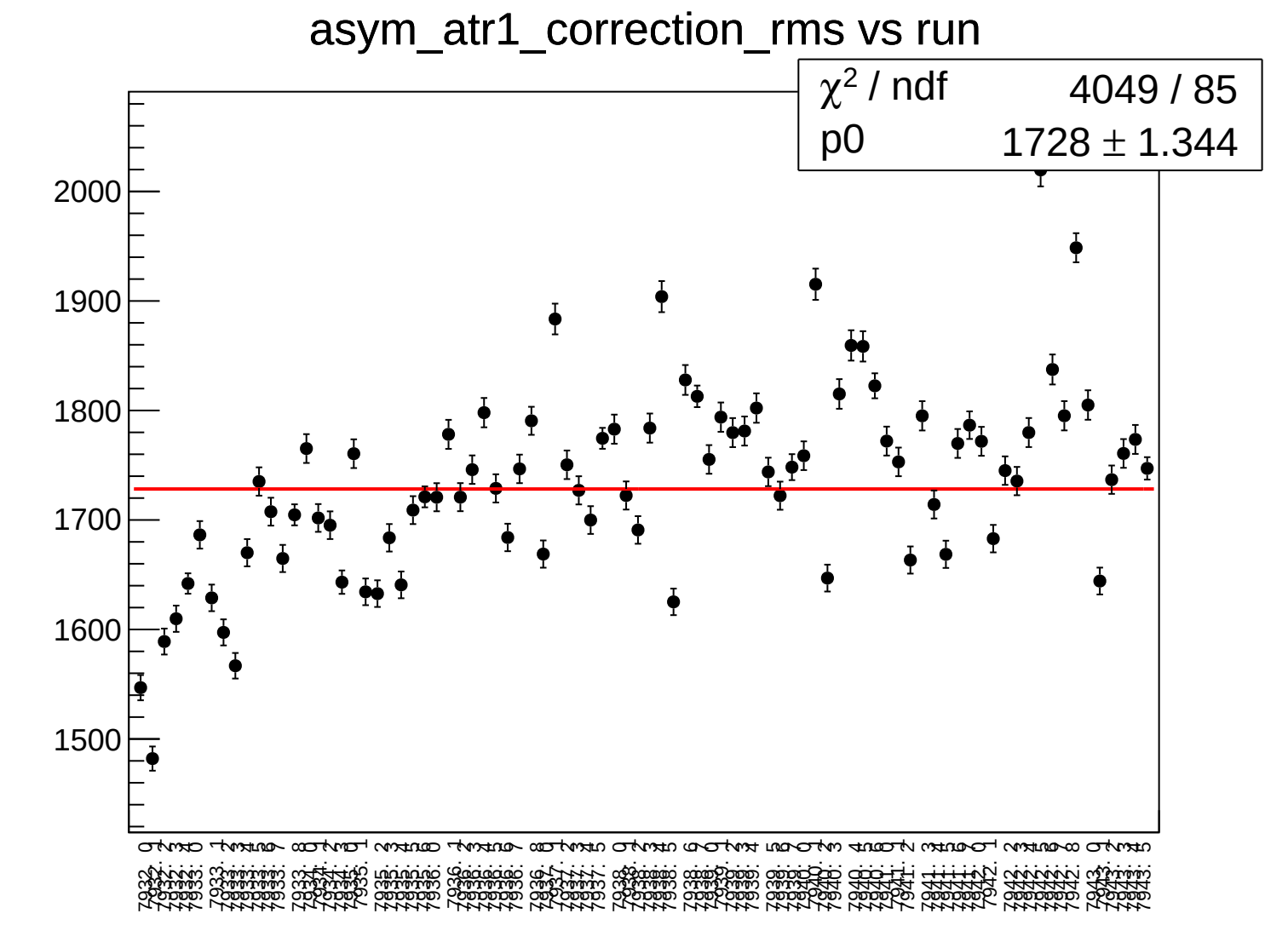

reg_asym_atr1_mean vs run
×10^3
χ^2 / ndf 73.52 / 85
p0 −3418 ± 3057
150
100
50
0
−50
−100
−150
−200
pull
Entries 86
Mean −123.8
Std Dev 149.1
3
2
1
0
−1
−2

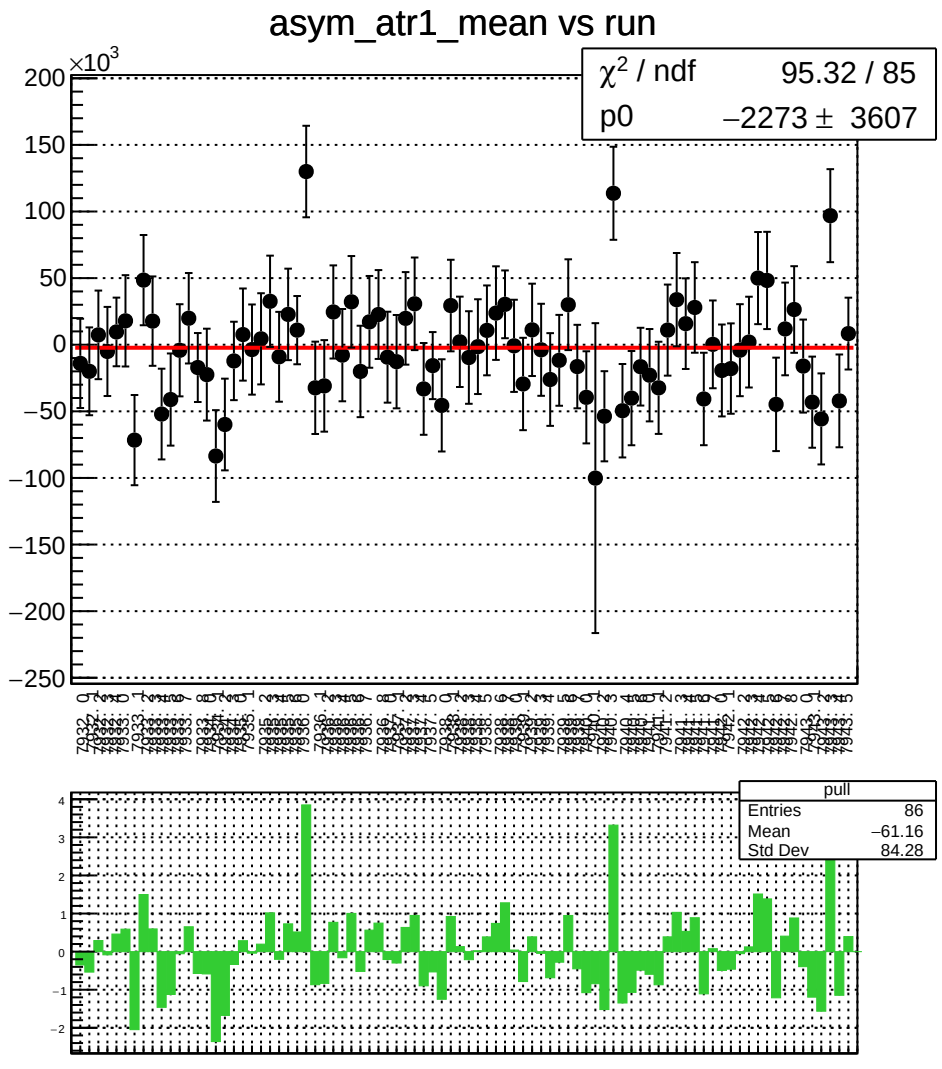

pull1D
Entries 86
Mean −0.00935
Std Dev 0.9245
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

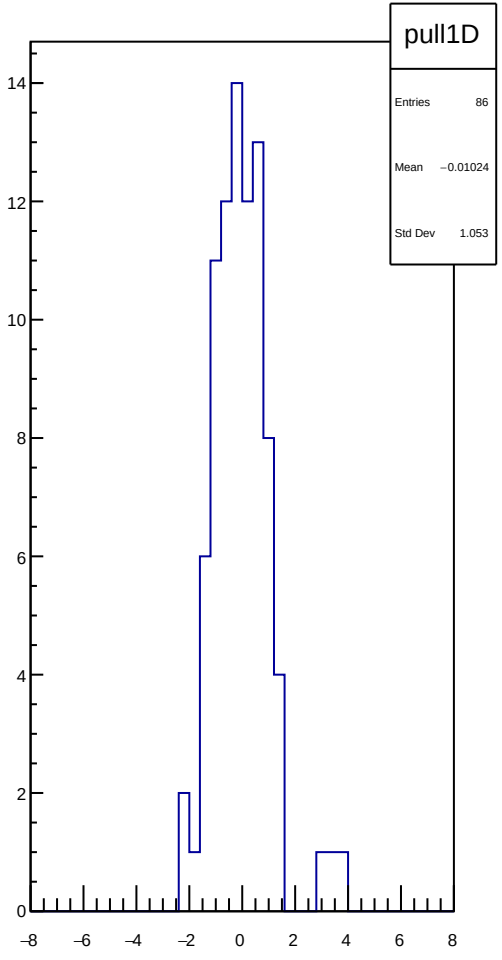

reg_asym_atr1_rms vs run
χ^2 / ndf 1.008e+04 / 85
p0 2773 ± 2.161
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

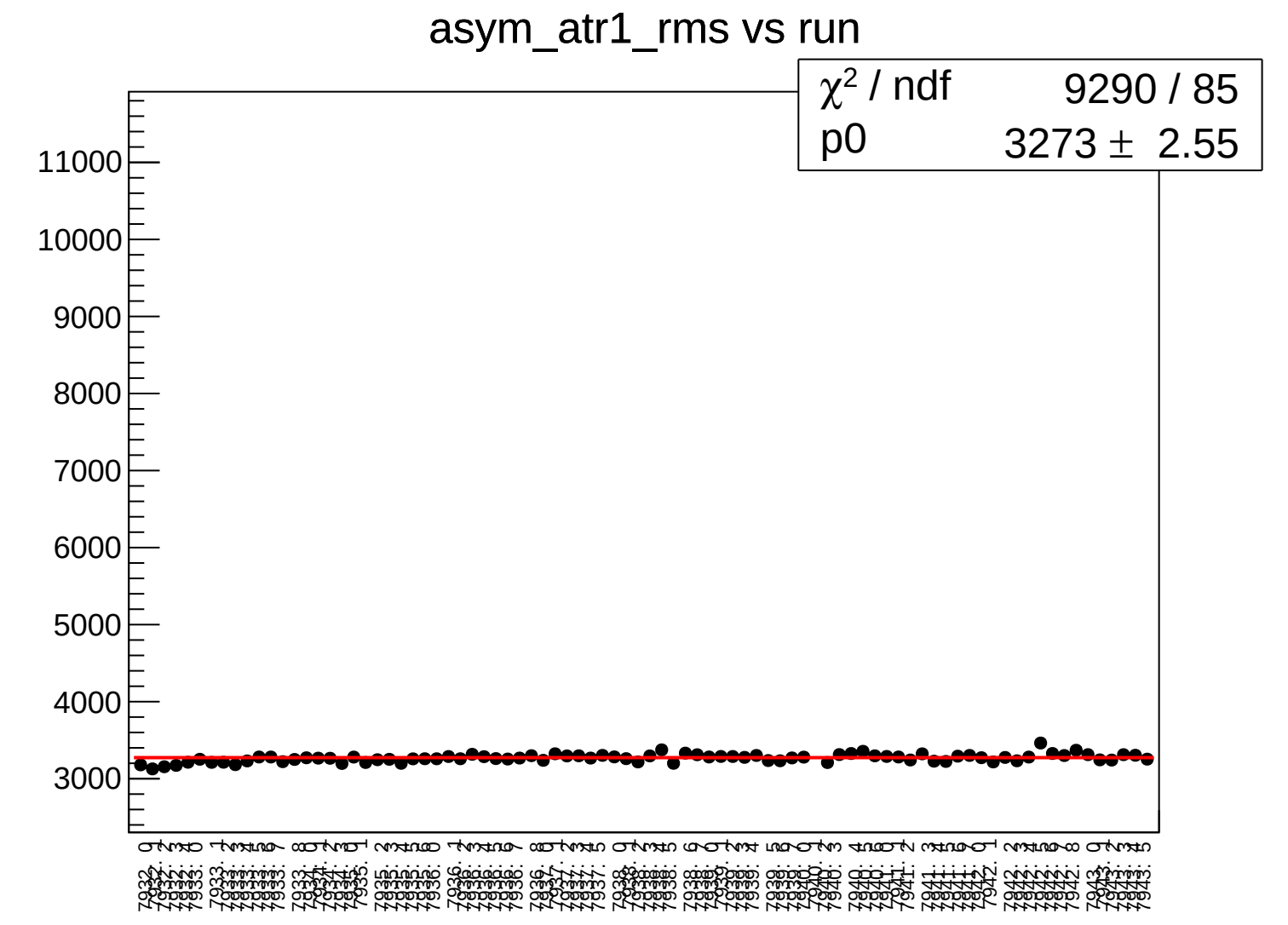

asym_atr1_correction_mean vs run
χ² / ndf 95.83 / 85
p0 −965.9 ± 1901
pull
Entries 86
Mean 769.8
Std Dev 737.9

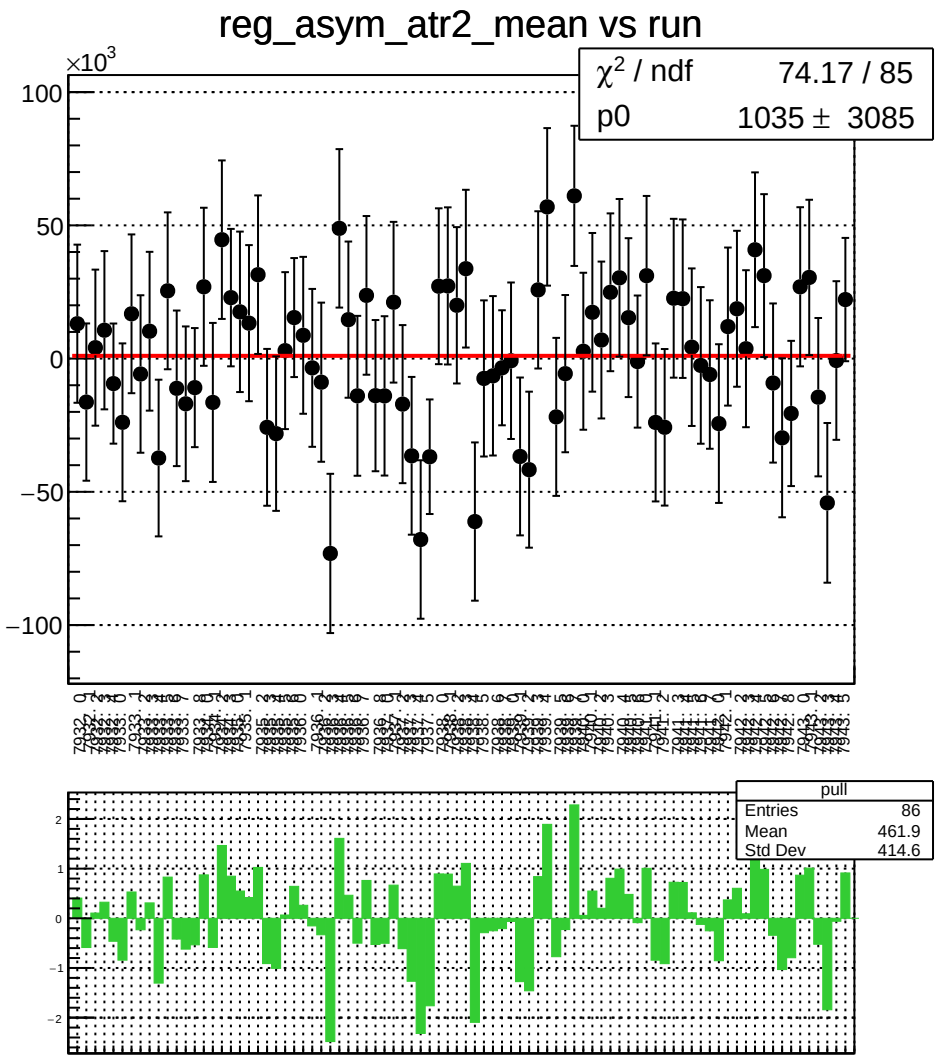

pull1D
Entries 86
Mean 0.0008642
Std Dev 1.056

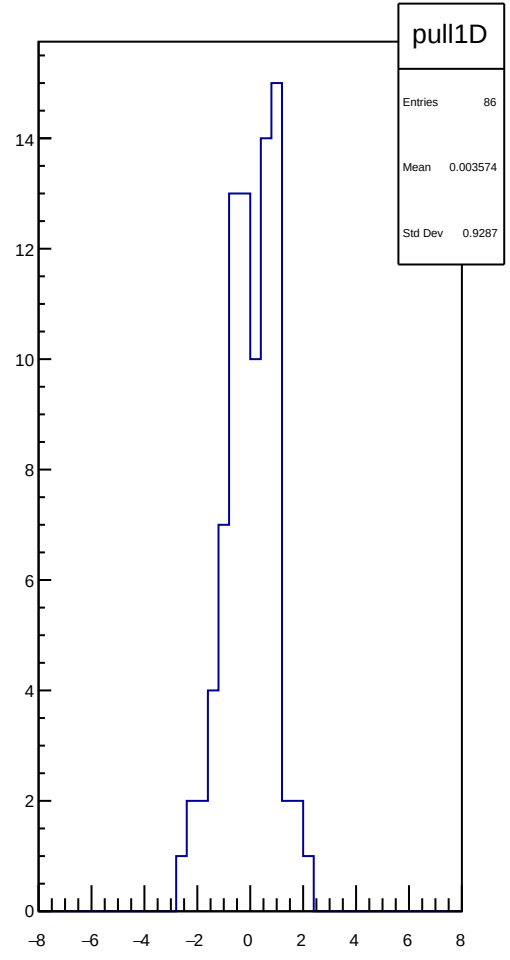

asym_atr1_correction_rms vs run
χ² / ndf 4049 / 85
p0 1728 ± 1.344
2000
1900
1800
1700
1600
1500

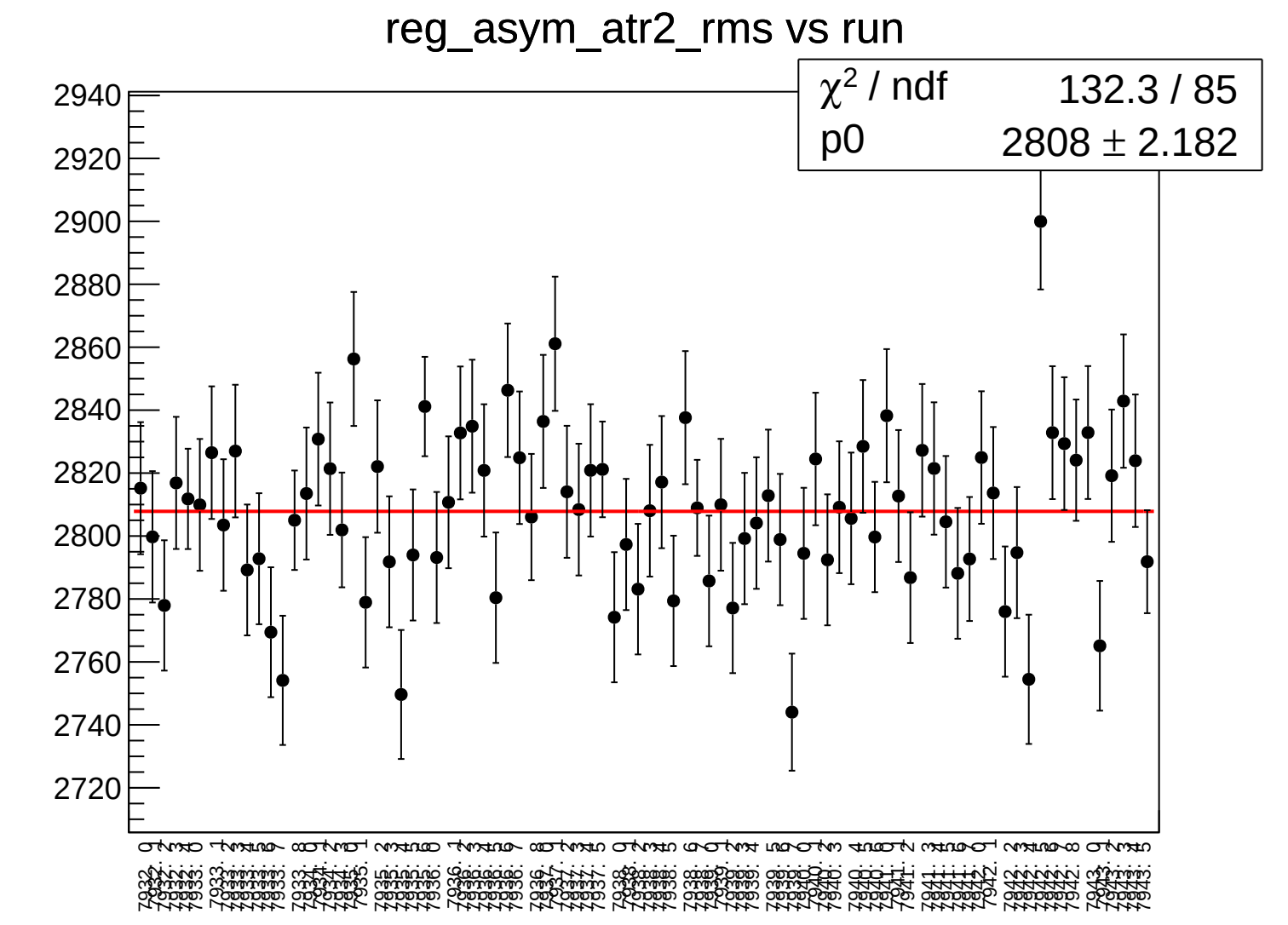

asym_atr1_mean vs run
×10^3
χ² / ndf 95.32 / 85
p0 −2273 ± 3607
pull
Entries 86
Mean −61.16
Std Dev 84.28

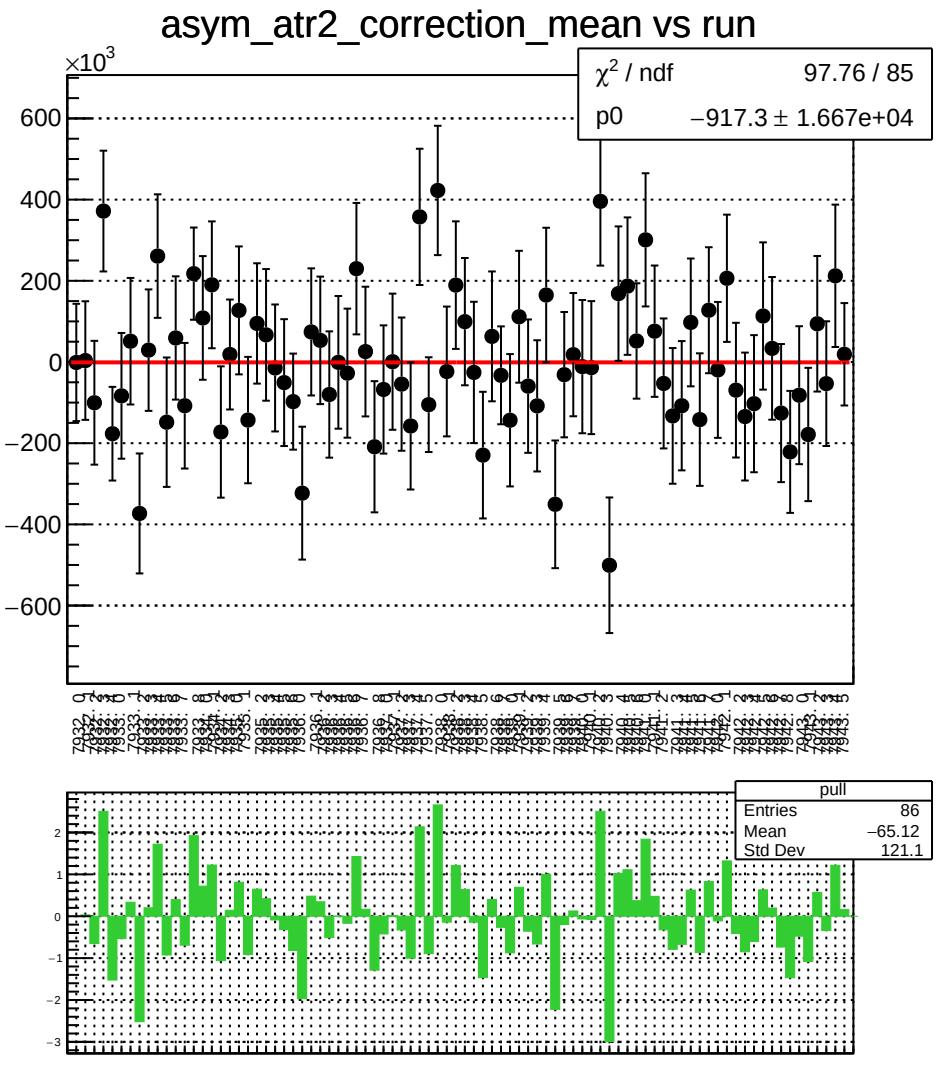

pull1D
Entries 86
Mean −0.01024
Std Dev 1.053

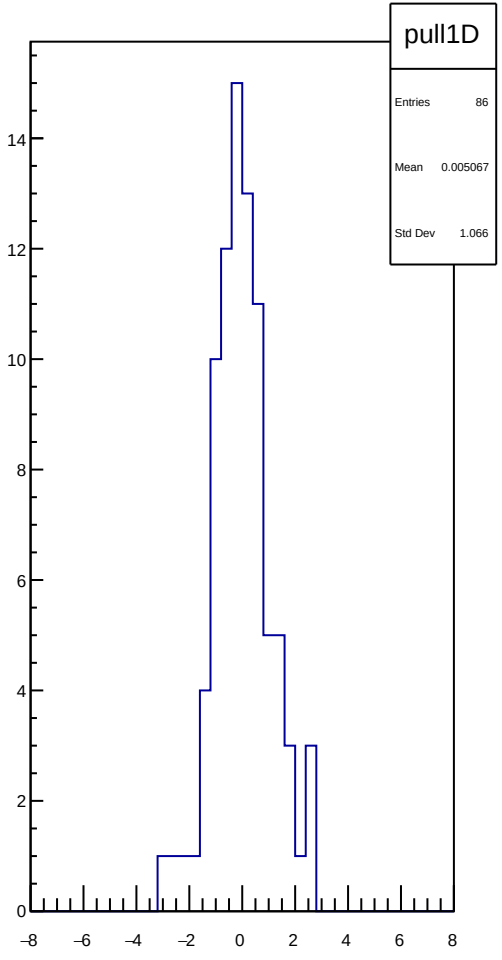

asym_atr1_rms vs run
χ^2 / ndf 9290 / 85
p0 3273 ± 2.55
11000
10000
9000
8000
7000
6000
5000
4000
3000

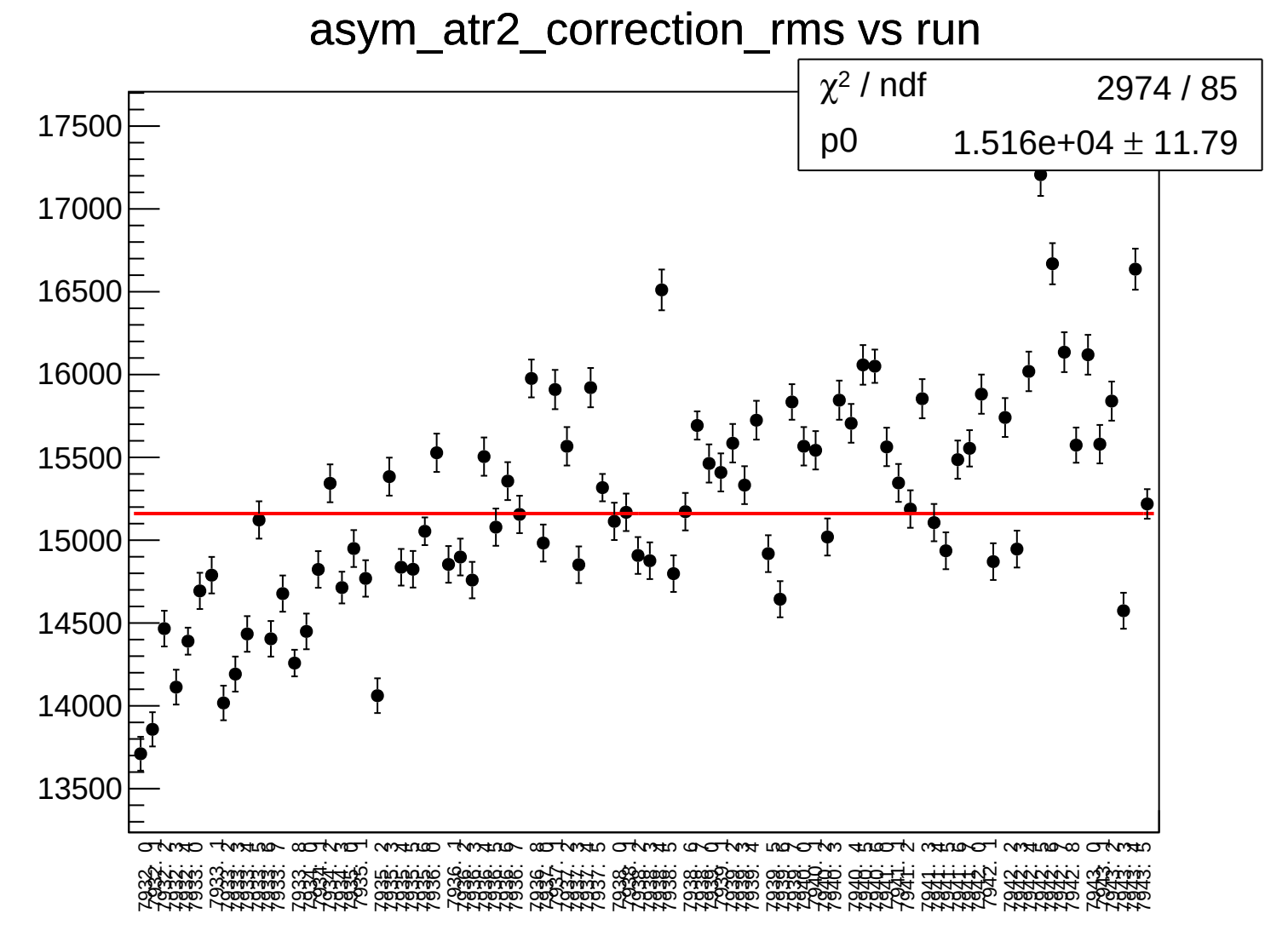

reg_asym_atr2_mean vs run
×10^3
χ² / ndf 74.17 / 85
p0 1035 ± 3085
100
50
0
−50
−100
pull
Entries 86
Mean 461.9
Std Dev 414.6
2
1
0
−1
−2

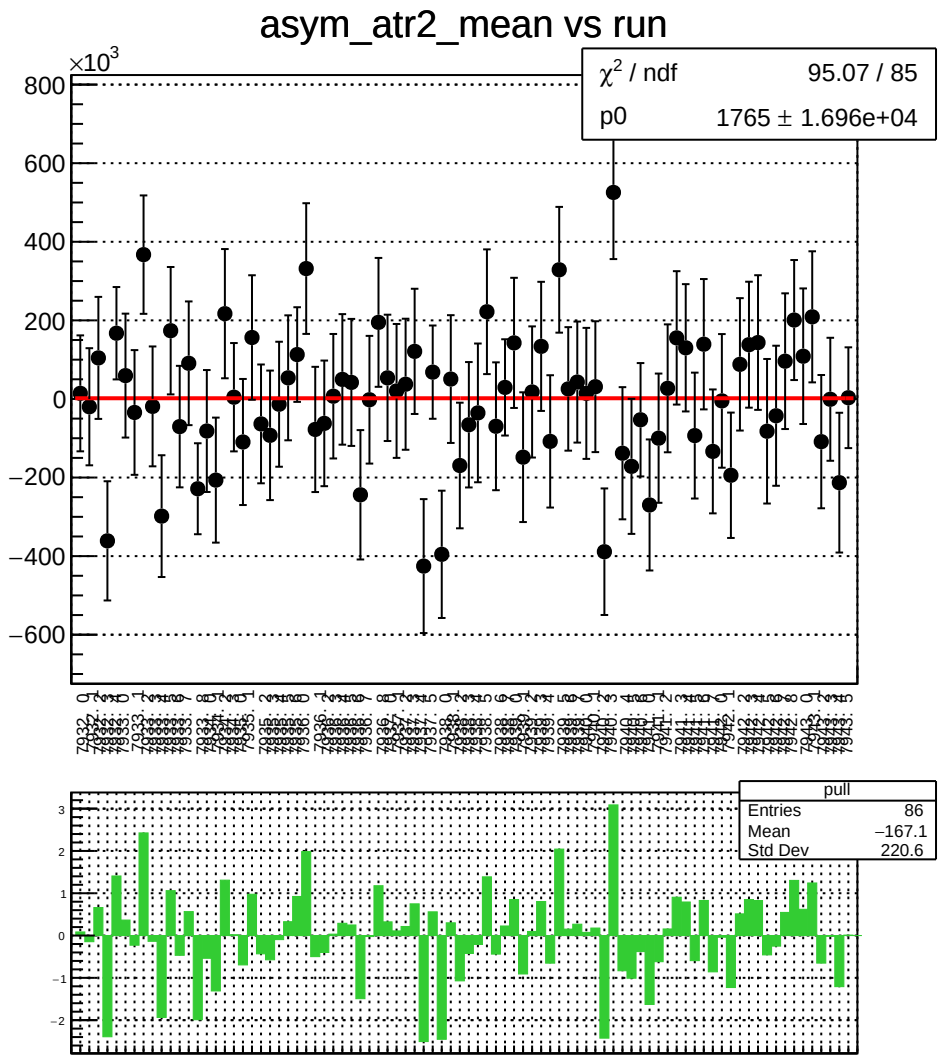

pull1D
Entries 86
Mean 0.003574
Std Dev 0.9287
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

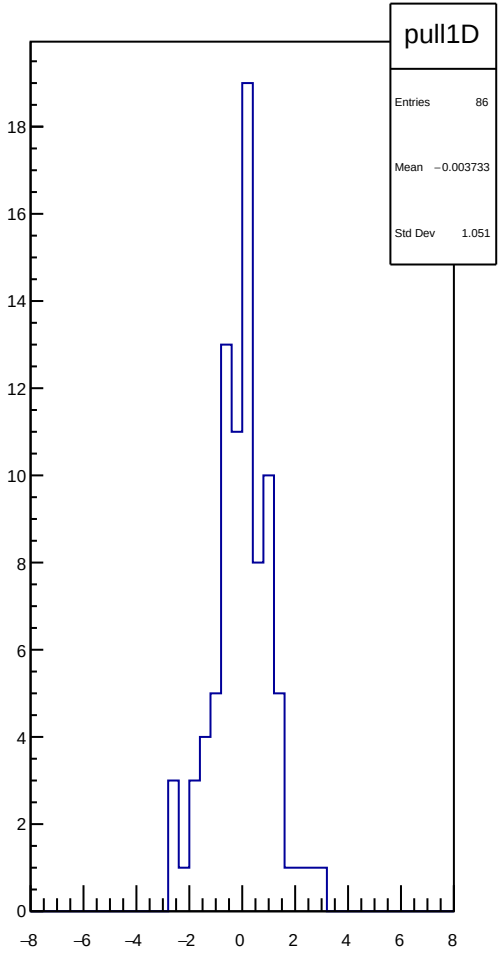

reg_asym_atr2_rms vs run
χ² / ndf 132.3 / 85
p0 2808 ± 2.182
2940
2920
2900
2880
2860
2840
2820
2800
2780
2760
2740
2720

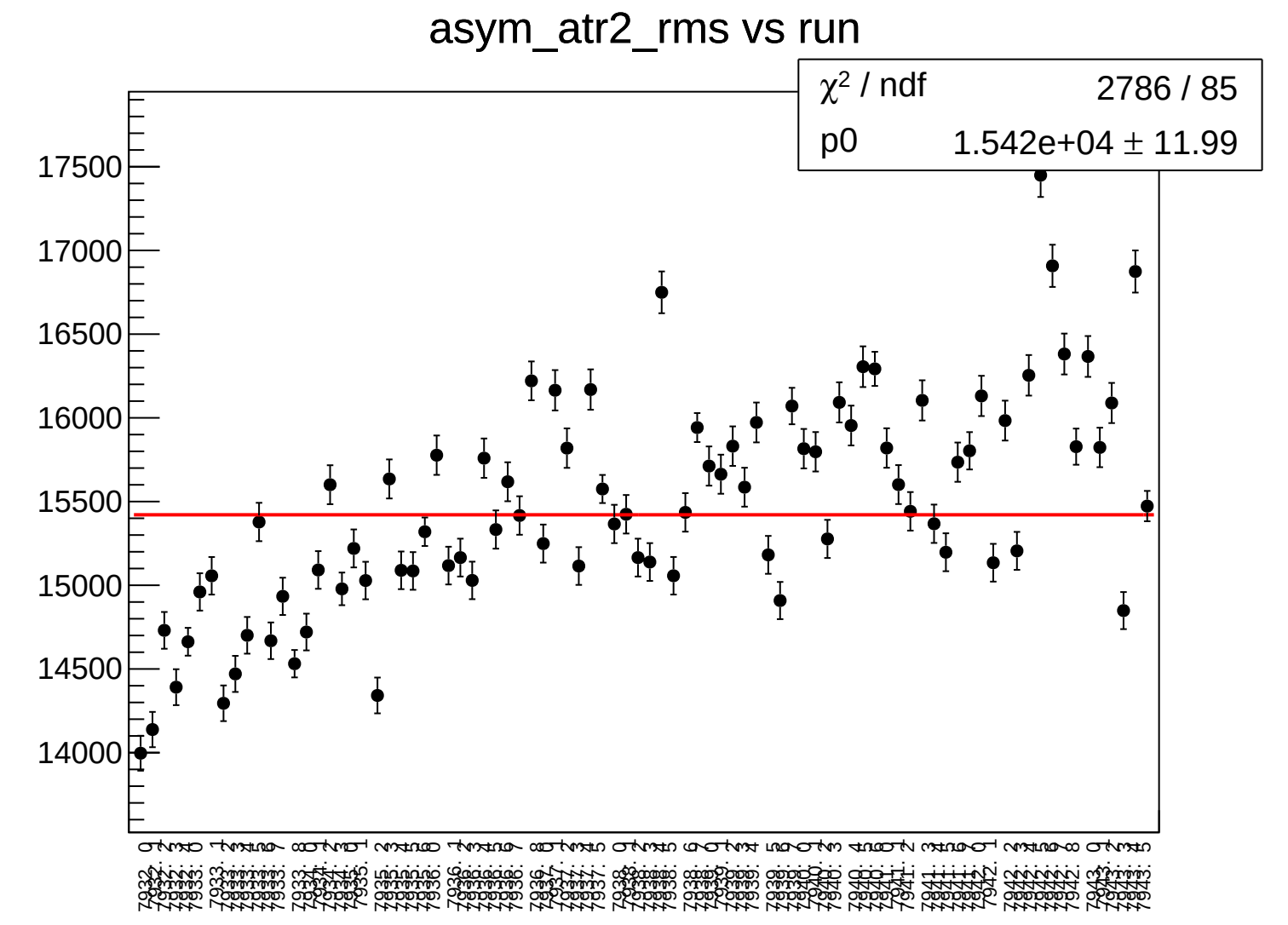

asym_atr2_correction_mean vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 97.76 / 85
p0 −917.3 ± 1.667e+04
pull
Entries 86
Mean −65.12
Std Dev 121.1
2
1
0
−1
−2
−3

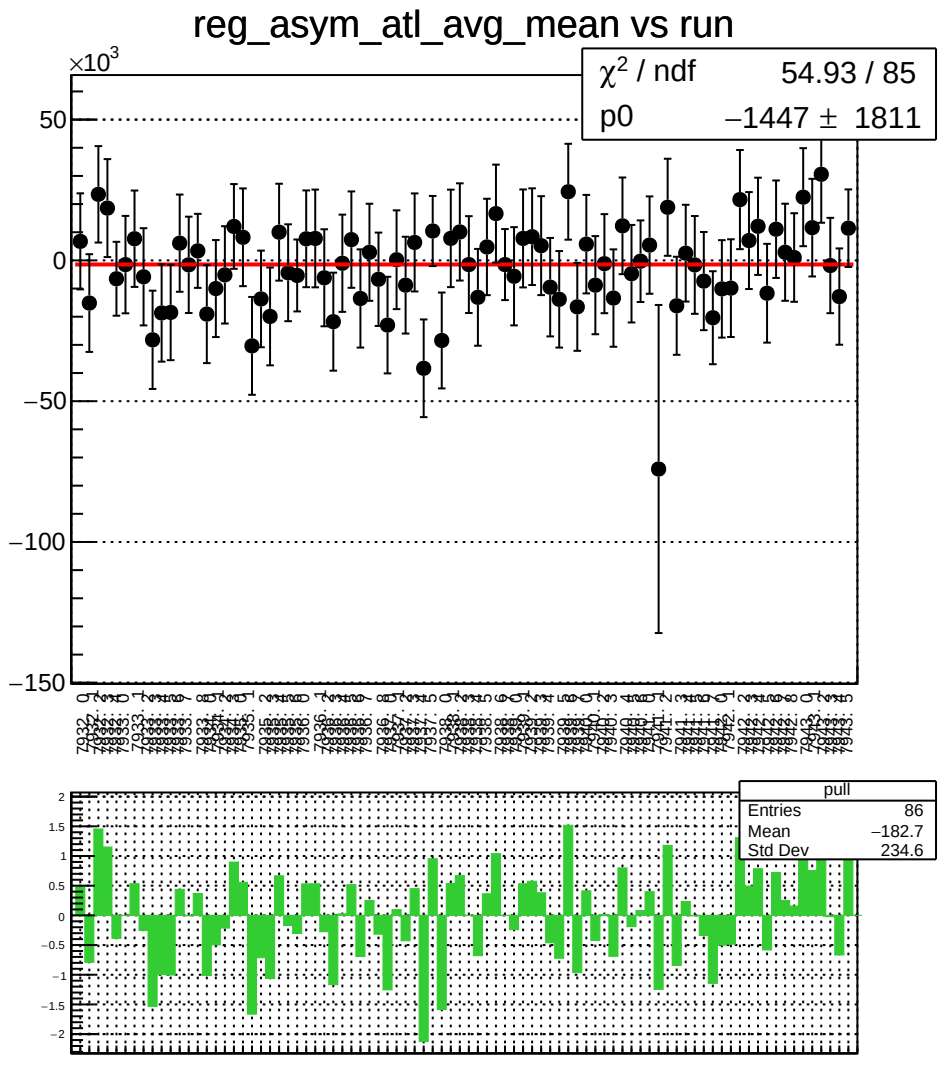

pull1D
Entries 86
Mean 0.005067
Std Dev 1.066
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

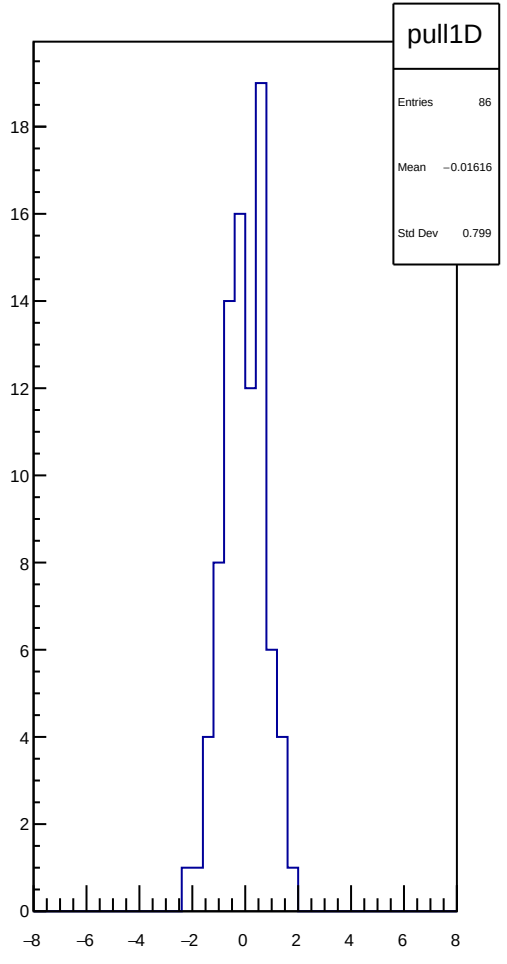

asym_atr2_correction_rms vs run
χ² / ndf 2974 / 85
p0 1.516e+04 ± 11.79
17500
17000
16500
16000
15500
15000
14500
14000
13500

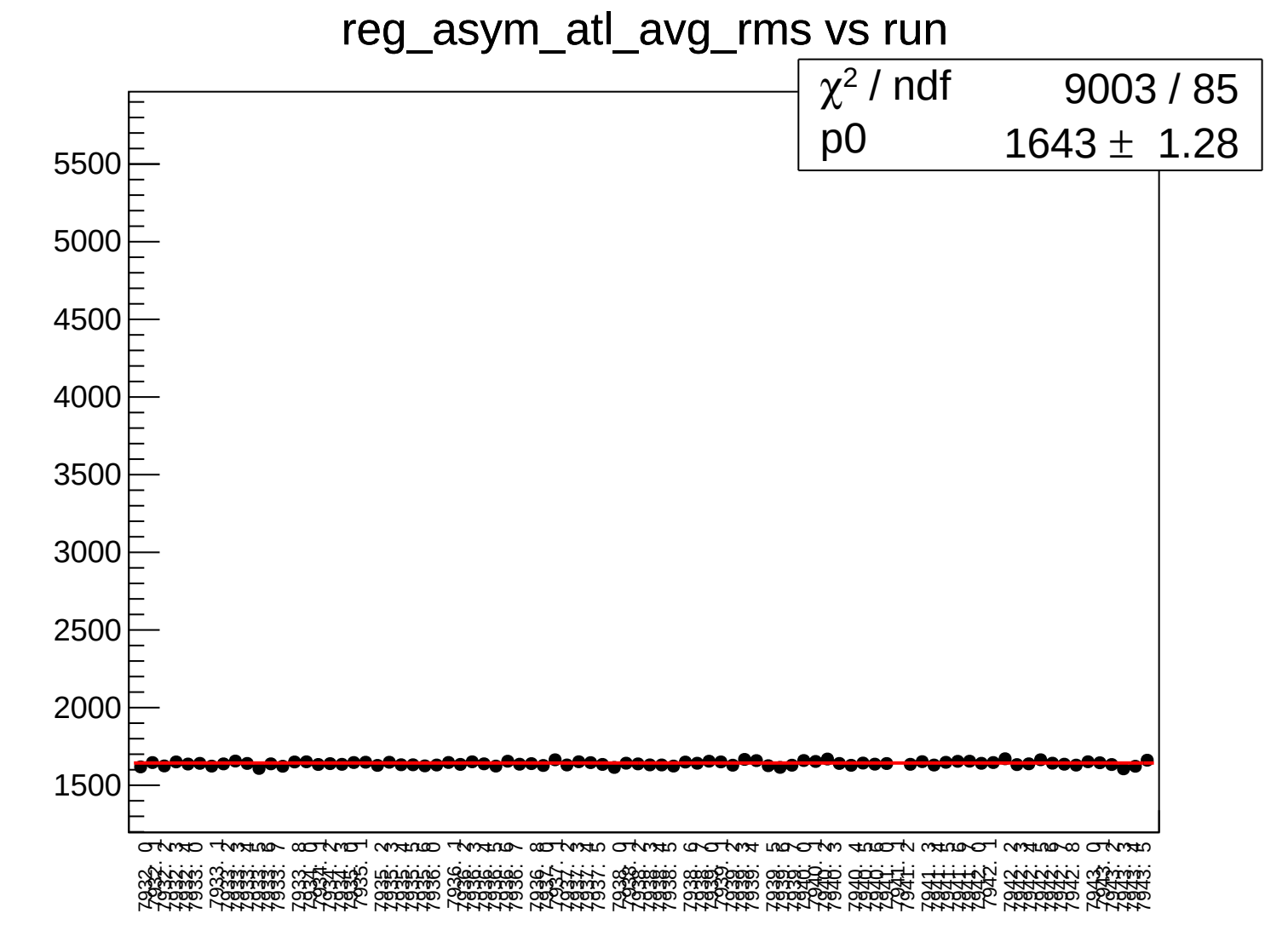

asym_atr2_mean vs run
×10^3
800
600
400
200
0
−200
−400
−600
χ² / ndf 95.07 / 85
p0 1765 ± 1.696e+04
pull
Entries 86
Mean −167.1
Std Dev 220.6
3
2
1
0
−1
−2

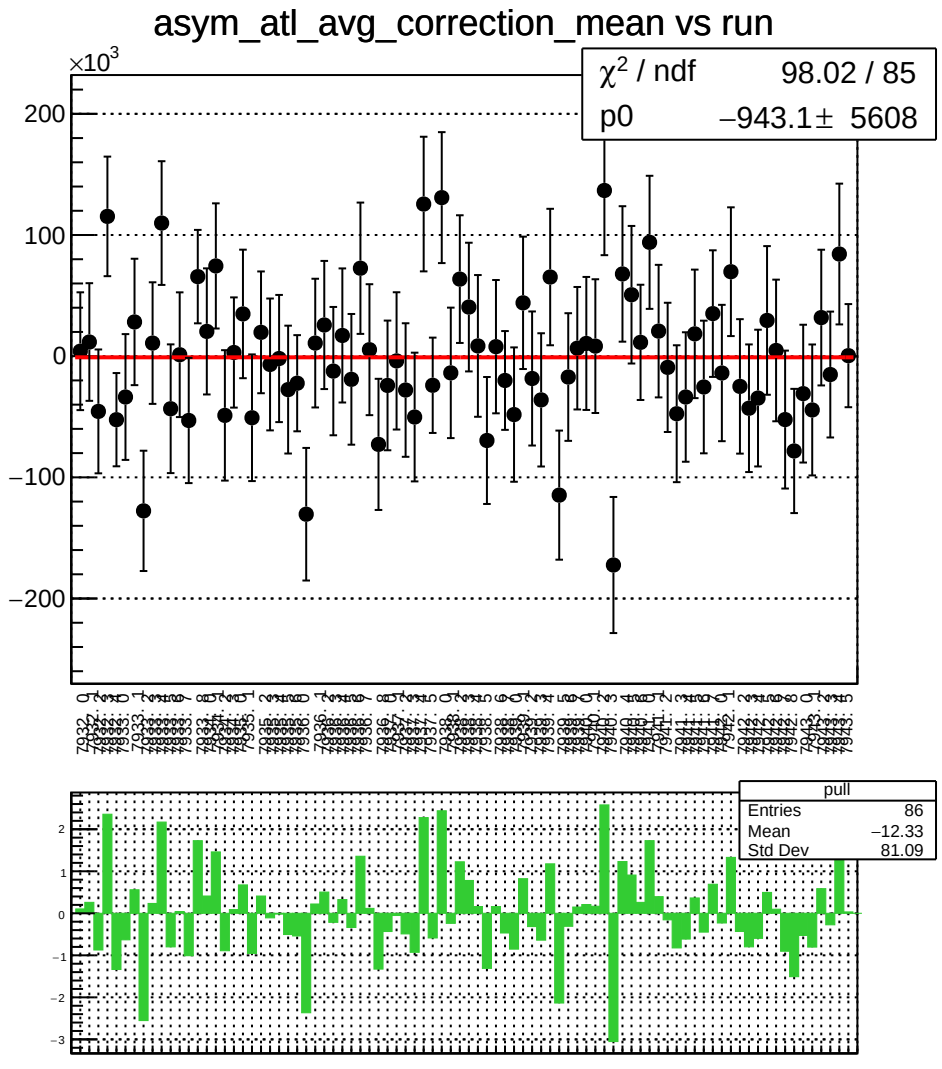

pull1D
Entries 86
Mean −0.003733
Std Dev 1.051
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

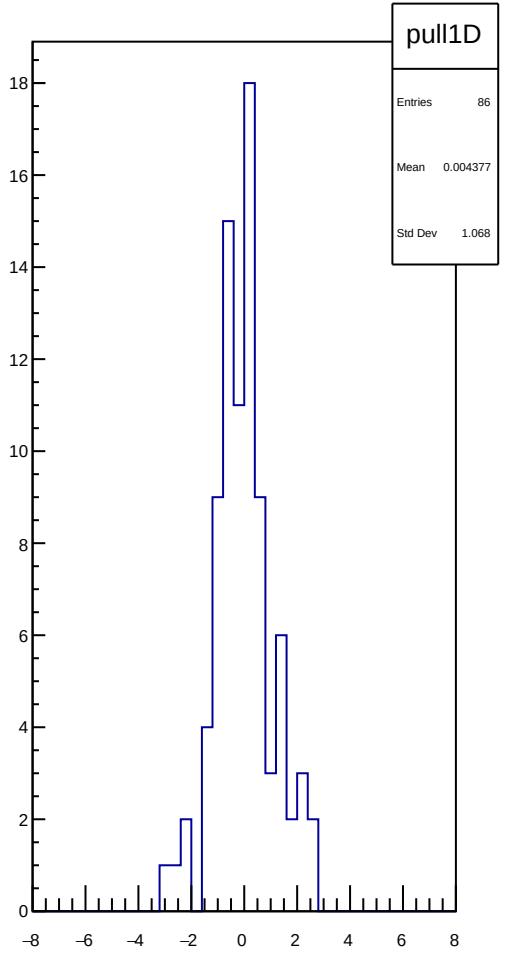

asym_atr2_rms vs run
χ² / ndf 2786 / 85
p0 1.542e+04 ± 11.99
17500
17000
16500
16000
15500
15000
14500
14000

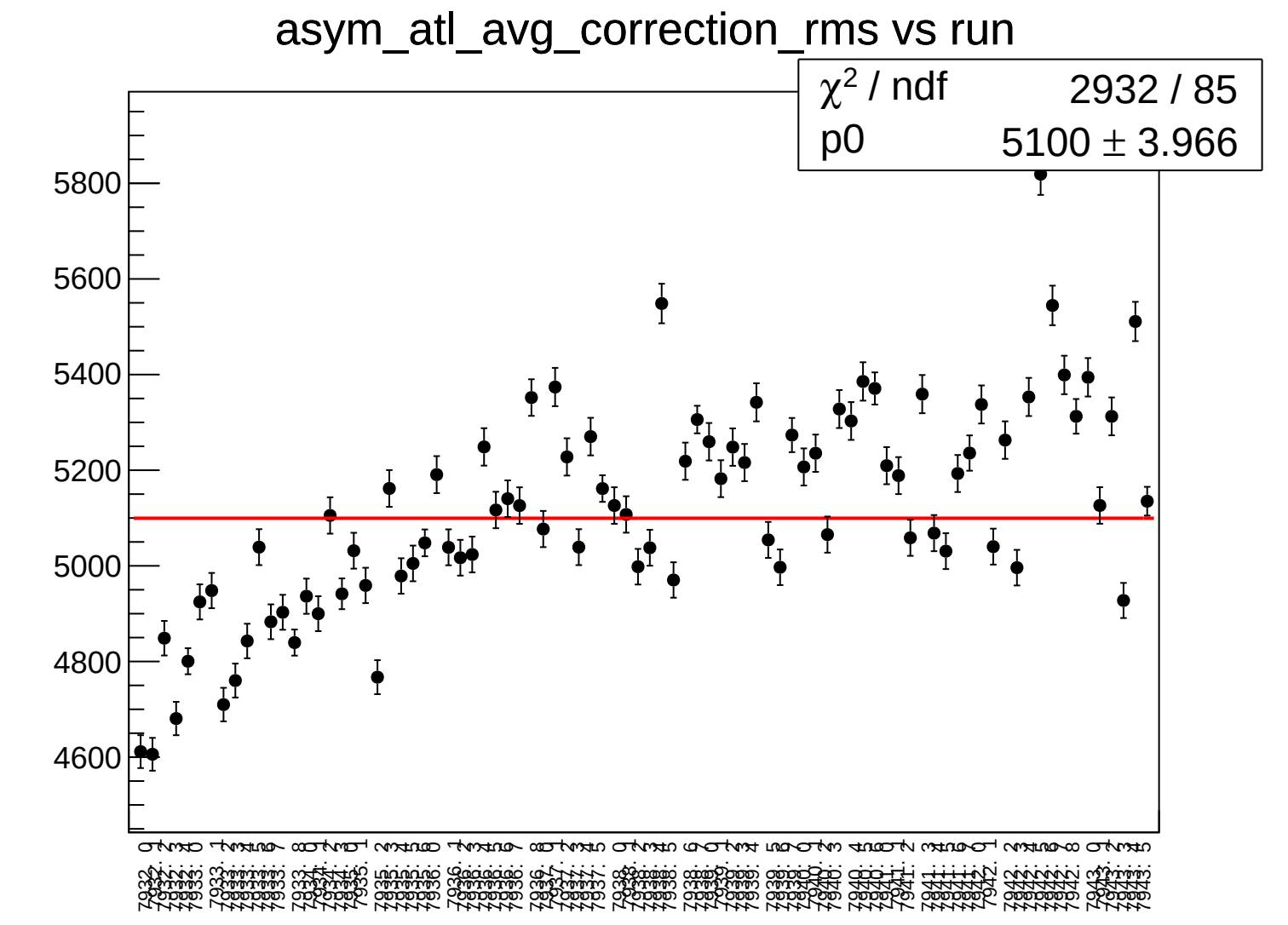

reg_asym_atl_avg_mean vs run
×10^3
χ² / ndf 54.93 / 85
p0 −1447 ± 1811
50
0
−50
−100
−150
pull
Entries 86
Mean −182.7
Std Dev 234.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

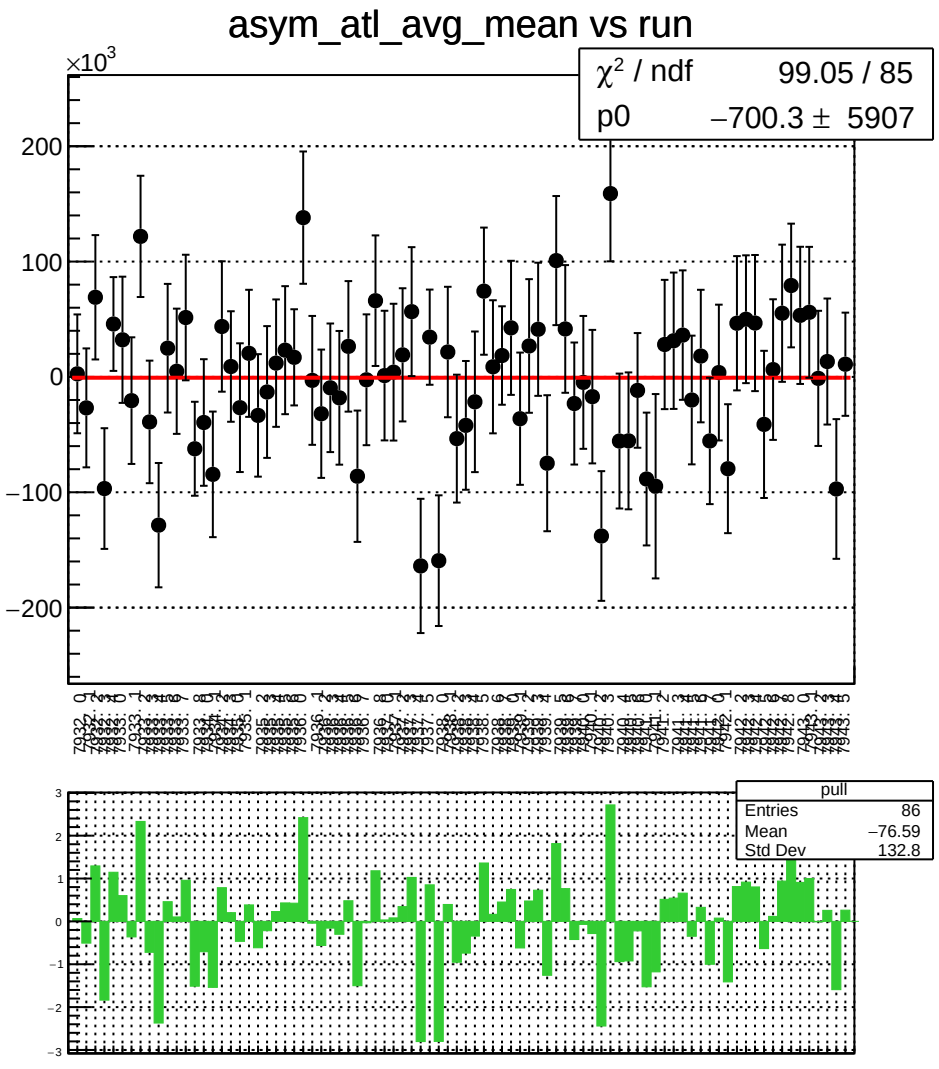

pull1D
Entries 86
Mean −0.01616
Std Dev 0.799
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

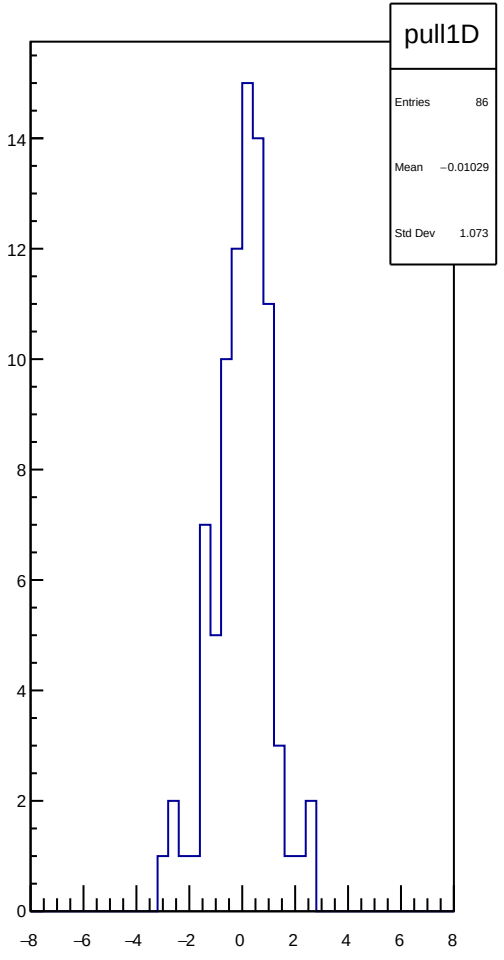

reg_asym_atl_avg_rms vs run
χ^2 / ndf 9003 / 85
p0 1643 ± 1.28
5500
5000
4500
4000
3500
3000
2500
2000
1500

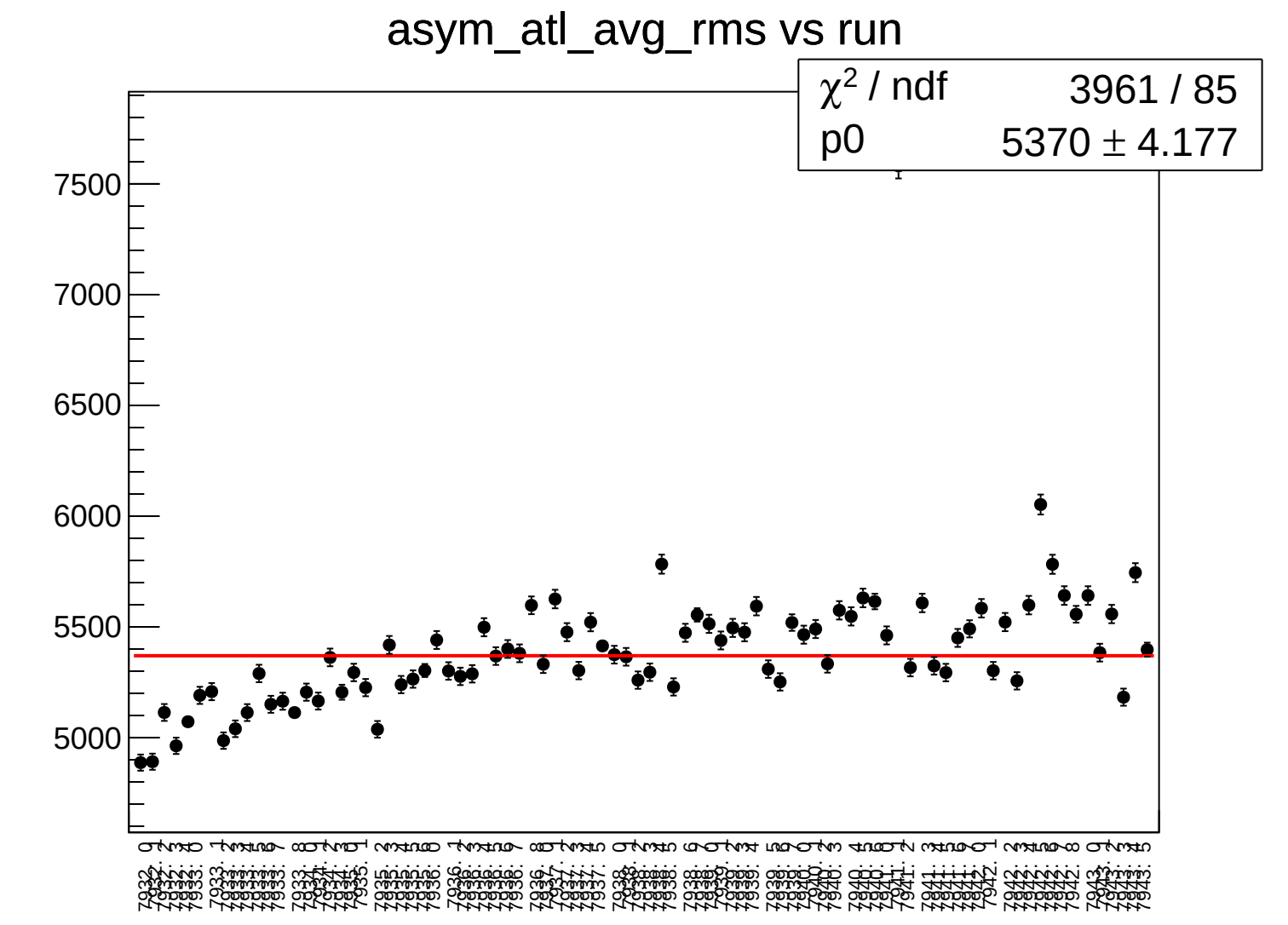

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 98.02 / 85
p0 −943.1± 5608
pull
Entries 86
Mean −12.33
Std Dev 81.09

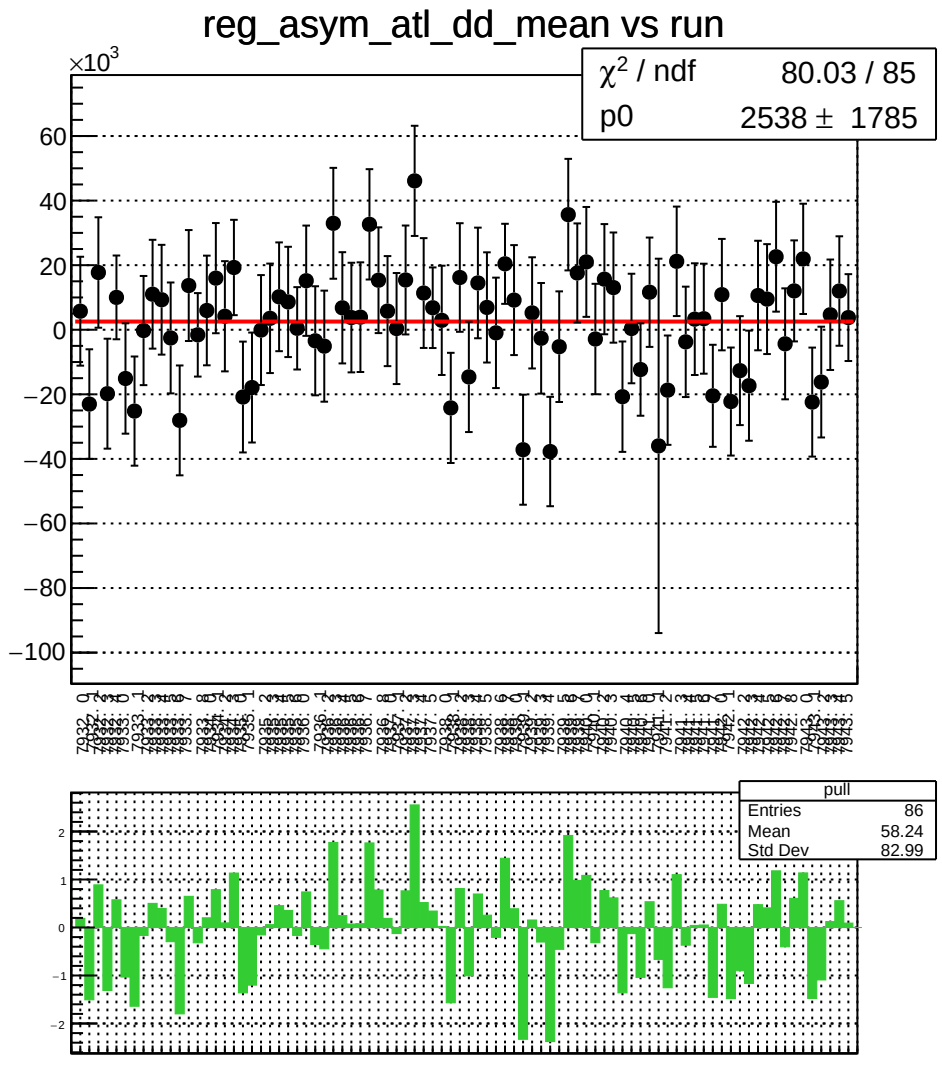

pull1D
Entries 86
Mean 0.004377
Std Dev 1.068

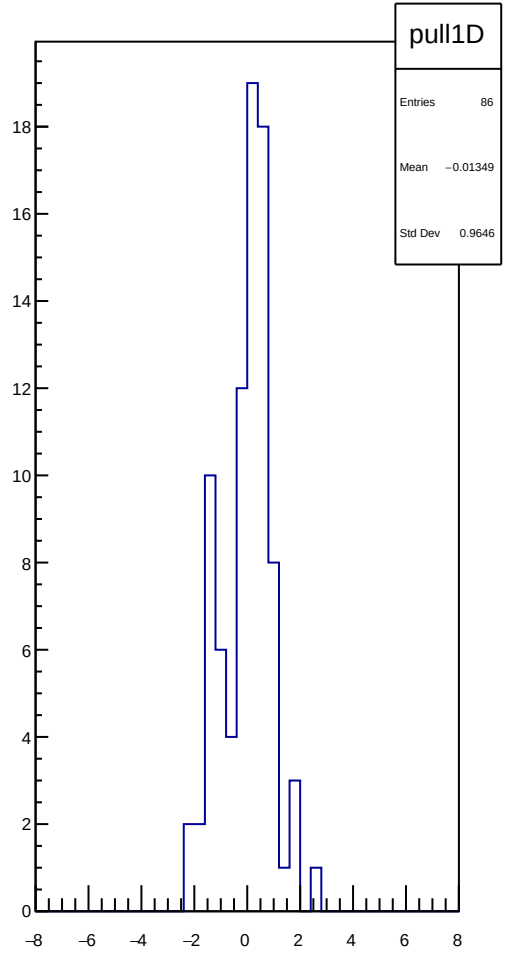

asym_atl_avg_correction_rms vs run
χ² / ndf 2932 / 85
p0 5100 ± 3.966
5800
5600
5400
5200
5000
4800
4600

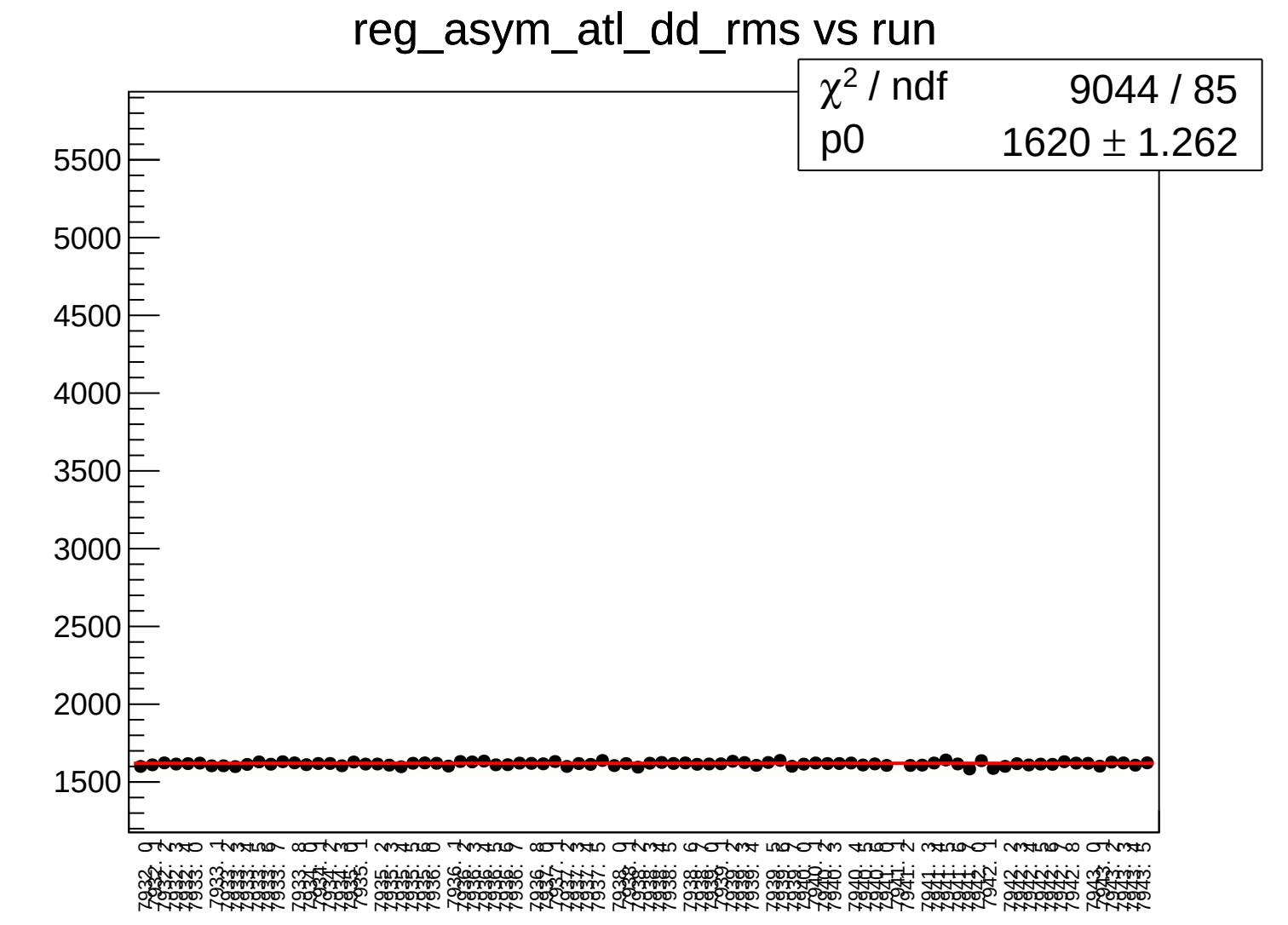

asym_atl_avg_mean vs run
×10^3
χ² / ndf 99.05 / 85
p0 −700.3 ± 5907
200
100
0
−100
−200
pull
Entries 86
Mean −76.59
Std Dev 132.8
3
2
1
0
−1
−2
−3

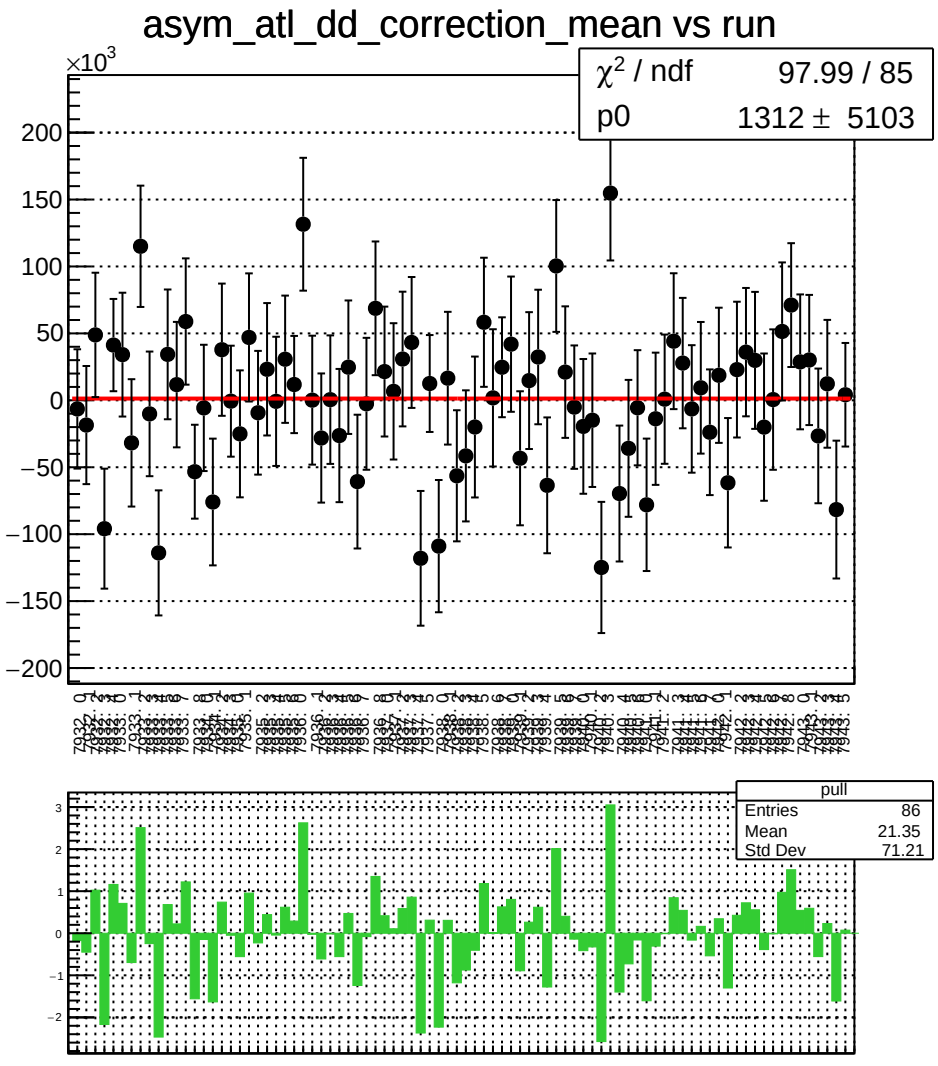

pull1D
Entries 86
Mean −0.01029
Std Dev 1.073
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

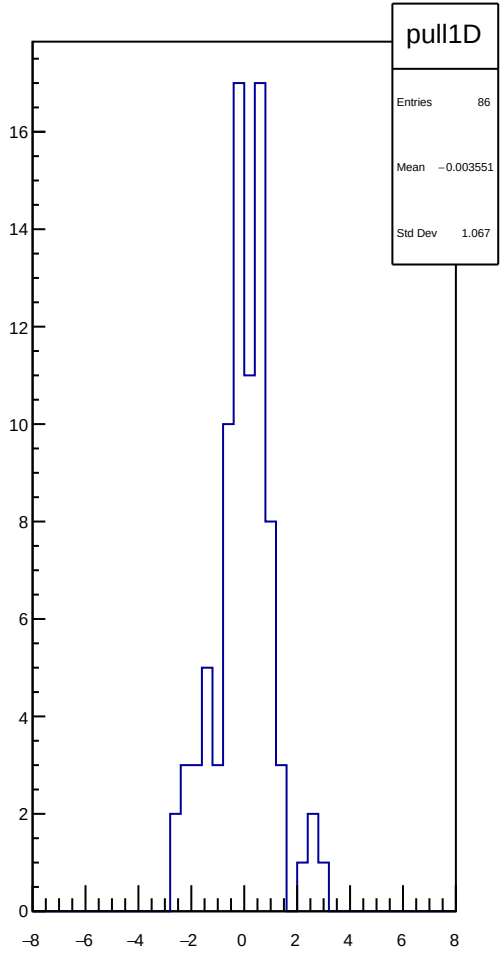

asym_atl_avg_rms vs run
χ^2 / ndf 3961 / 85
p0 5370 ± 4.177
7500
7000
6500
6000
5500
5000

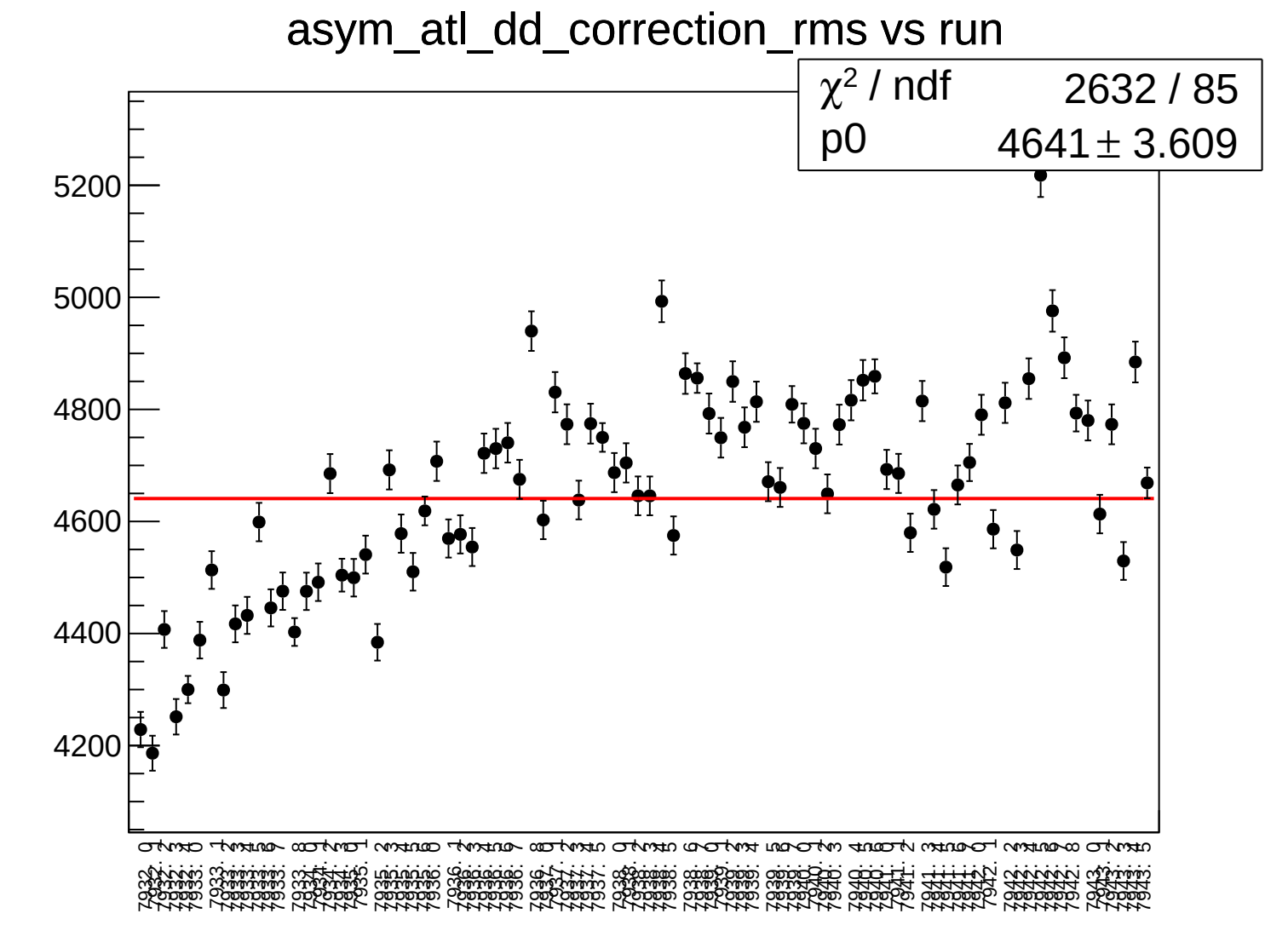

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 80.03 / 85
p0 2538 ± 1785
pull
Entries 86
Mean 58.24
Std Dev 82.99

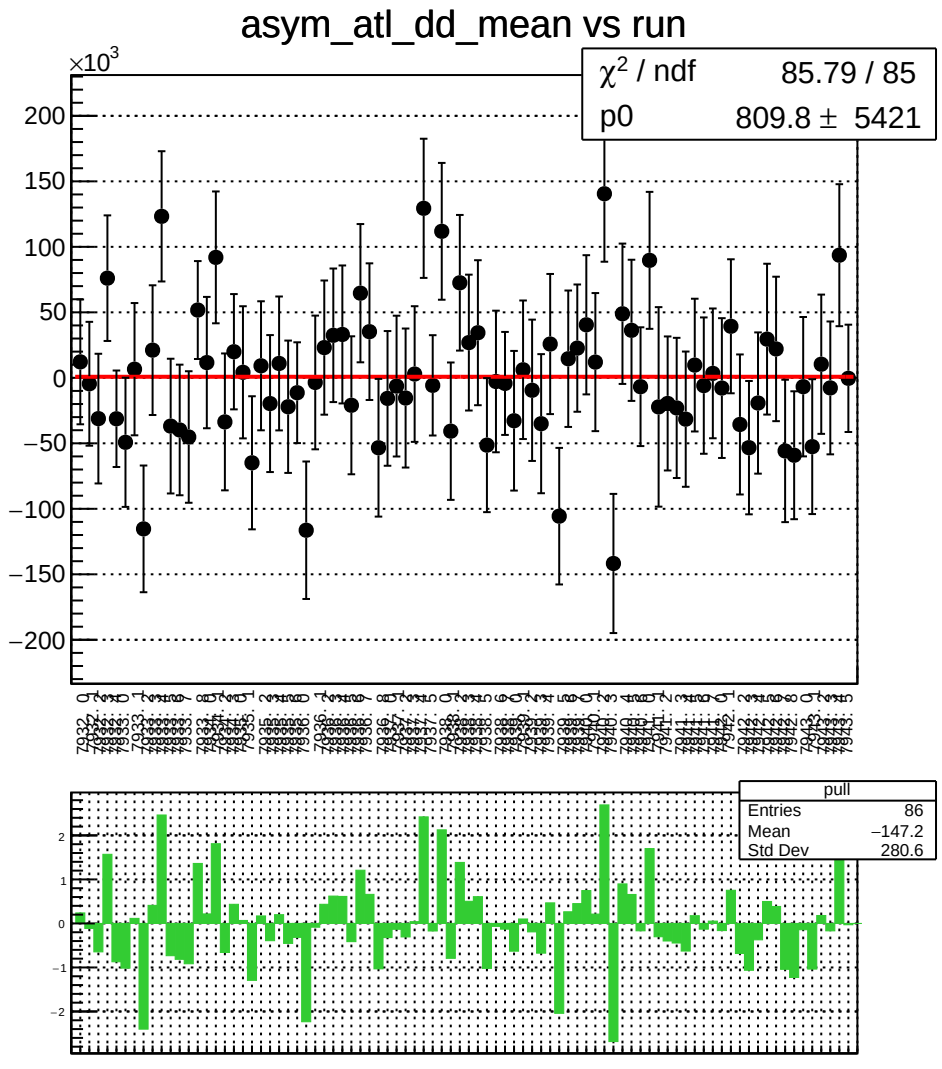

pull1D
Entries 86
Mean −0.01349
Std Dev 0.9646

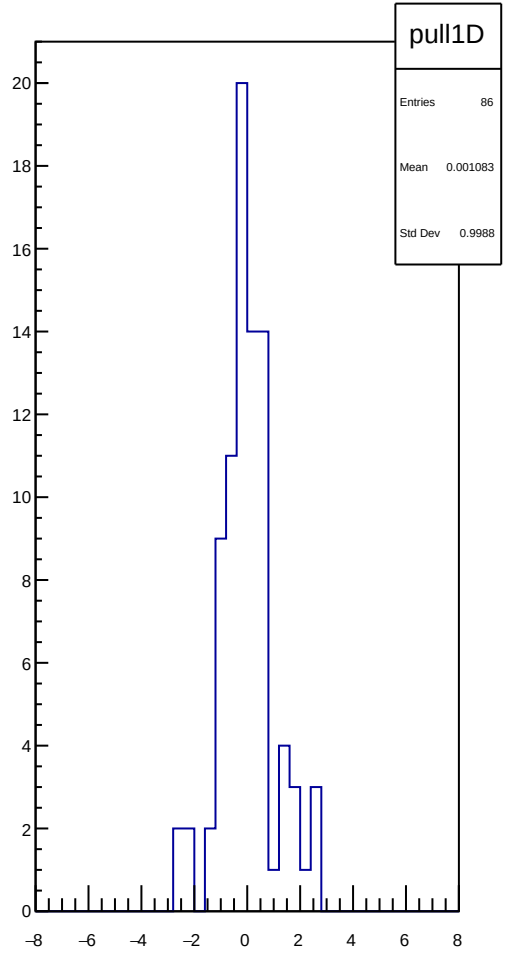

reg_asym_atl_dd_rms vs run
χ^2 / ndf 9044 / 85
p0 1620 ± 1.262
5500
5000
4500
4000
3500
3000
2500
2000
1500

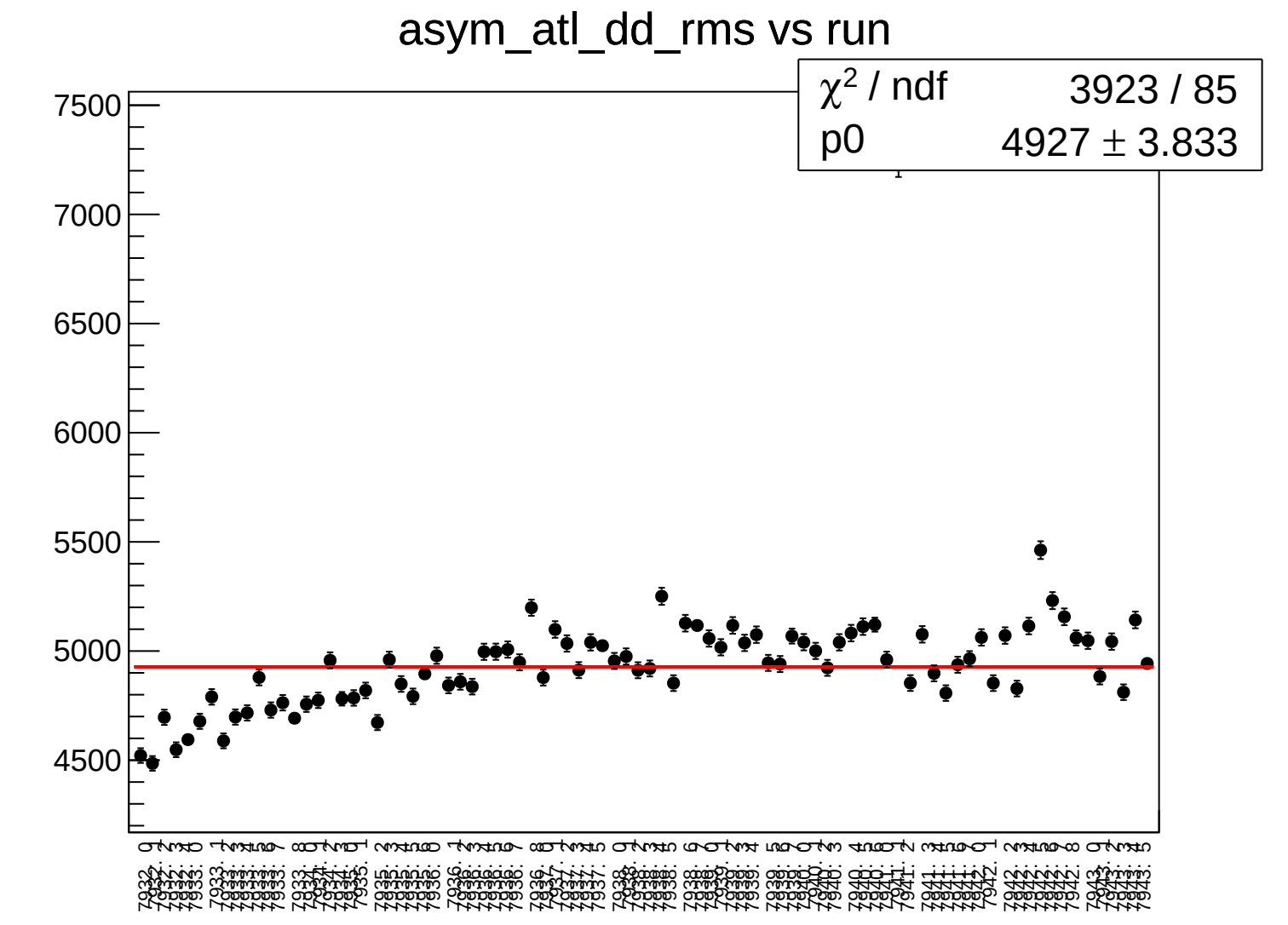

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 97.99 / 85
p0 1312 ± 5103
pull
Entries 86
Mean 21.35
Std Dev 71.21

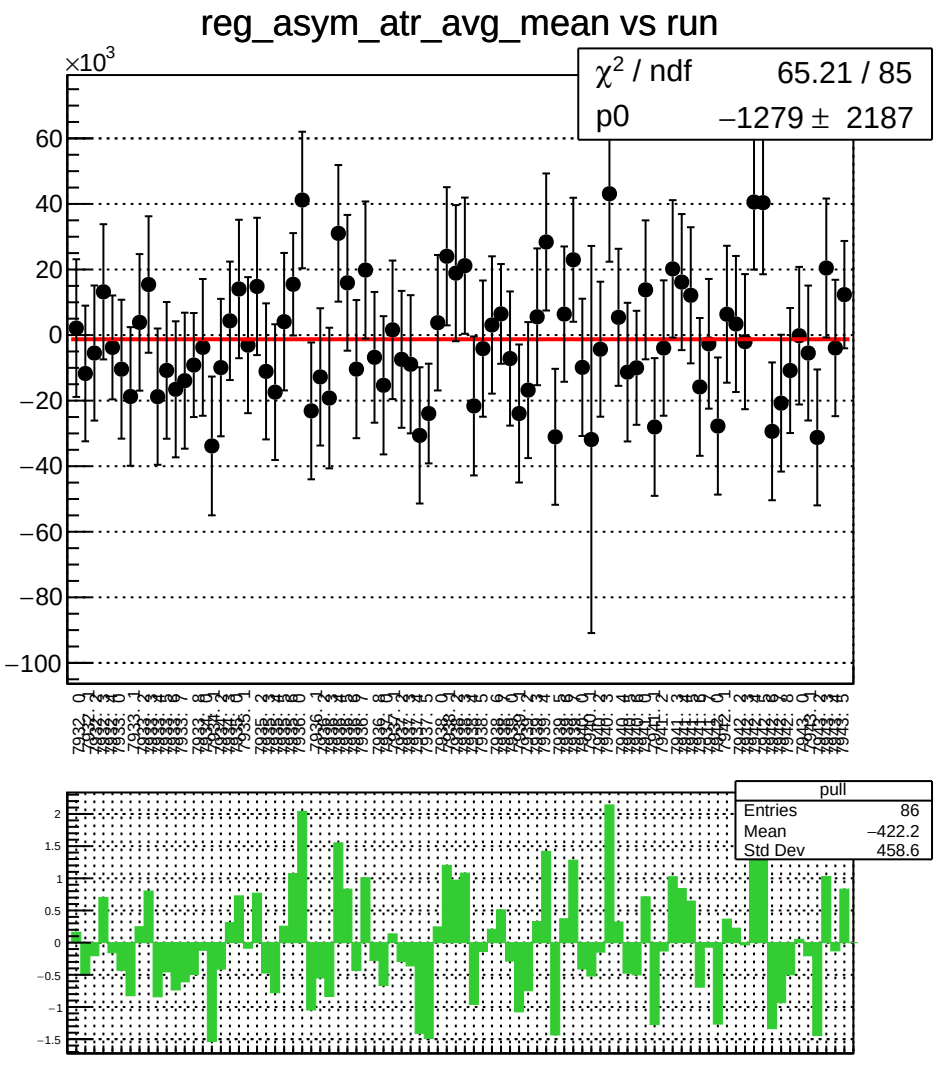

pull1D
Entries 86
Mean −0.003551
Std Dev 1.067

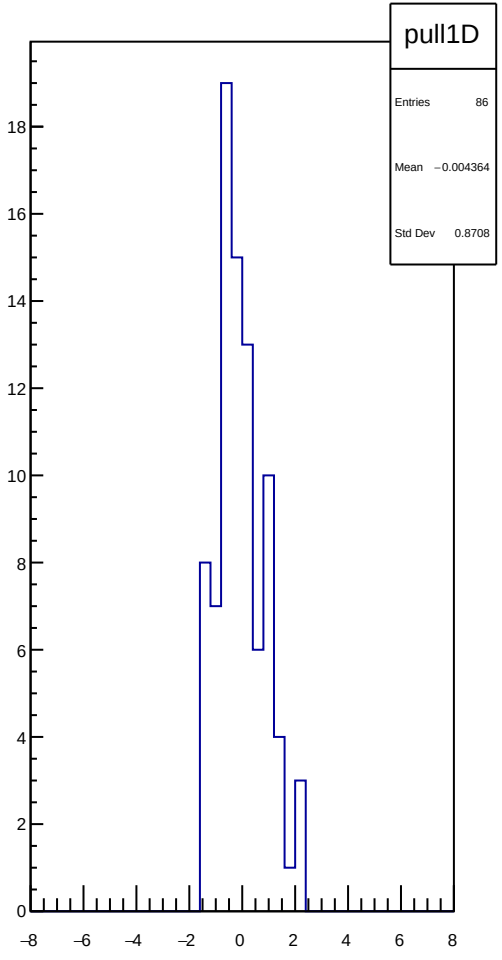

asym_atl_dd_correction_rms vs run
χ² / ndf 2632 / 85
p0 4641 ± 3.609
5200
5000
4800
4600
4400
4200

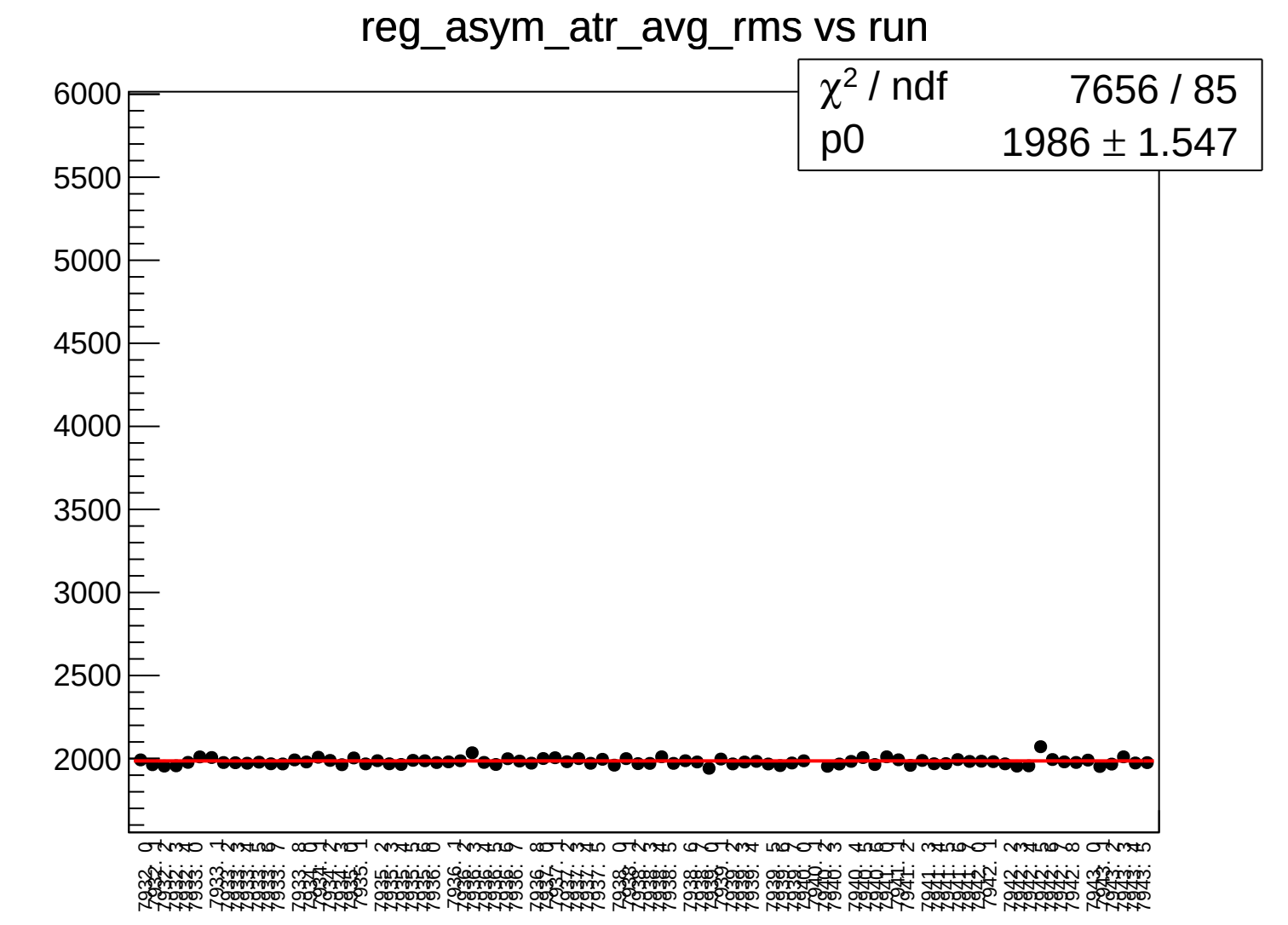

asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 85.79 / 85
p0 809.8 ± 5421
pull
Entries 86
Mean −147.2
Std Dev 280.6

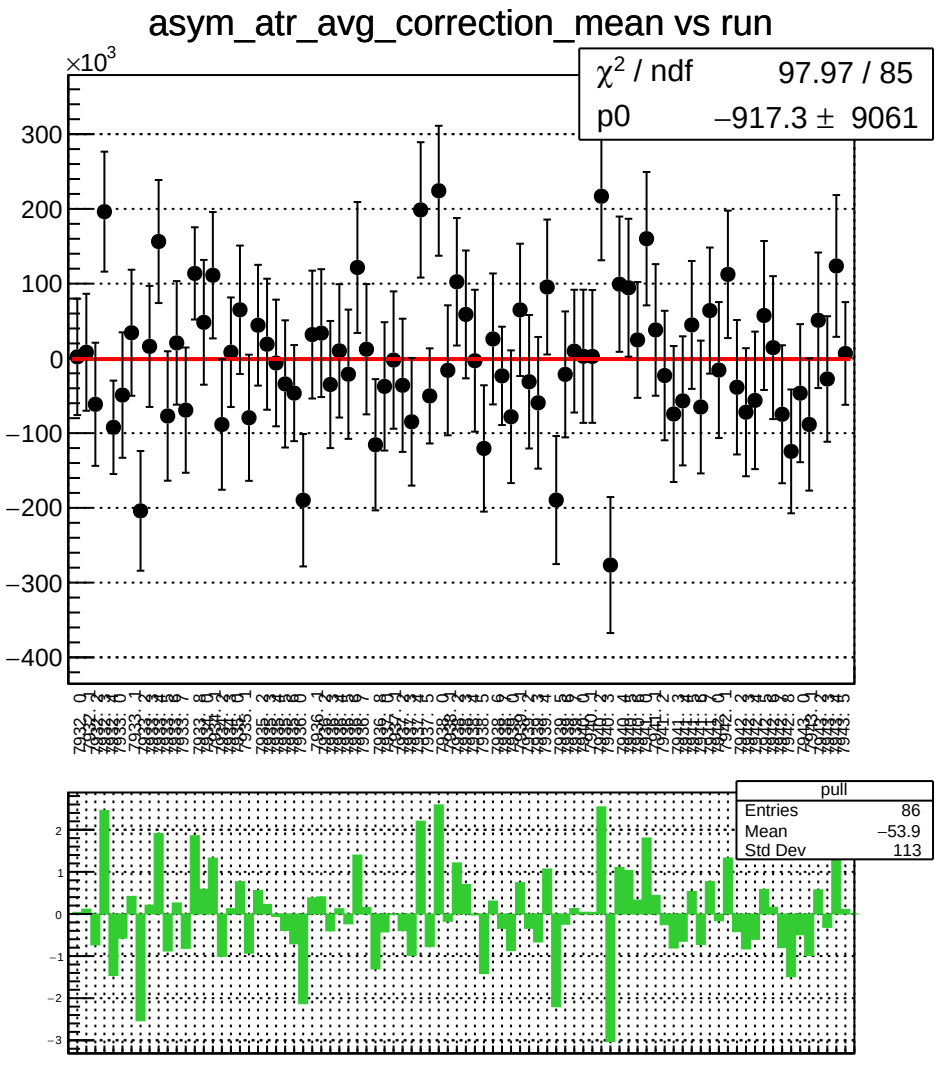

pull1D
Entries 86
Mean 0.001083
Std Dev 0.9988

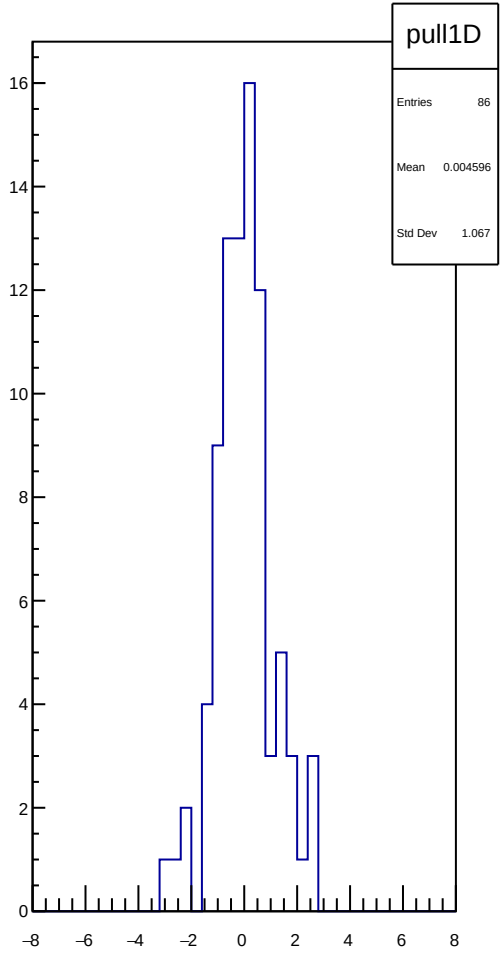

asym_atl_dd_rms vs run
χ² / ndf 3923 / 85
p0 4927 ± 3.833
7500
7000
6500
6000
5500
5000
4500

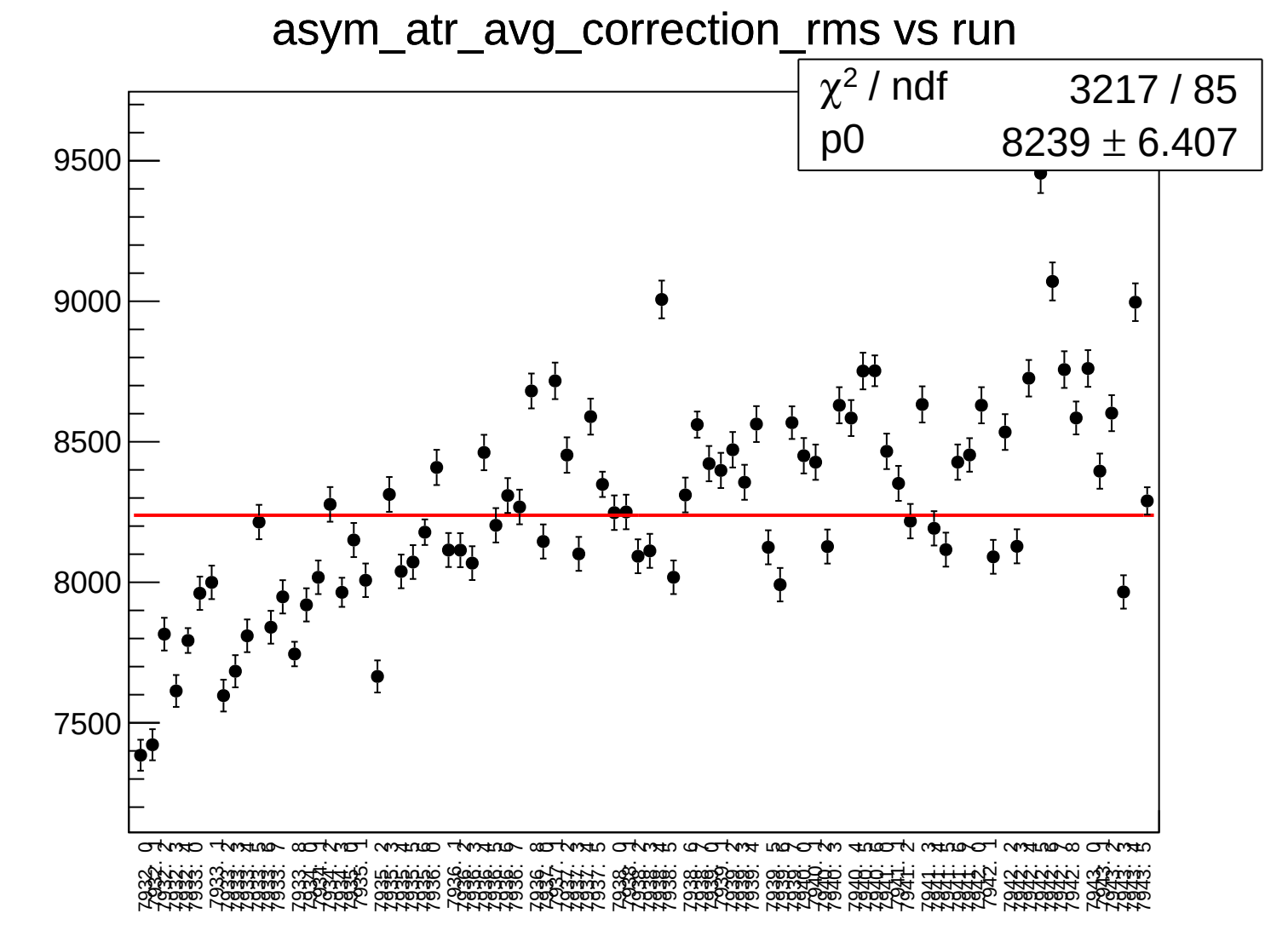

reg_asym_atr_avg_mean vs run
×10^3
χ² / ndf 65.21 / 85
p0 −1279 ± 2187
pull
Entries 86
Mean −422.2
Std Dev 458.6

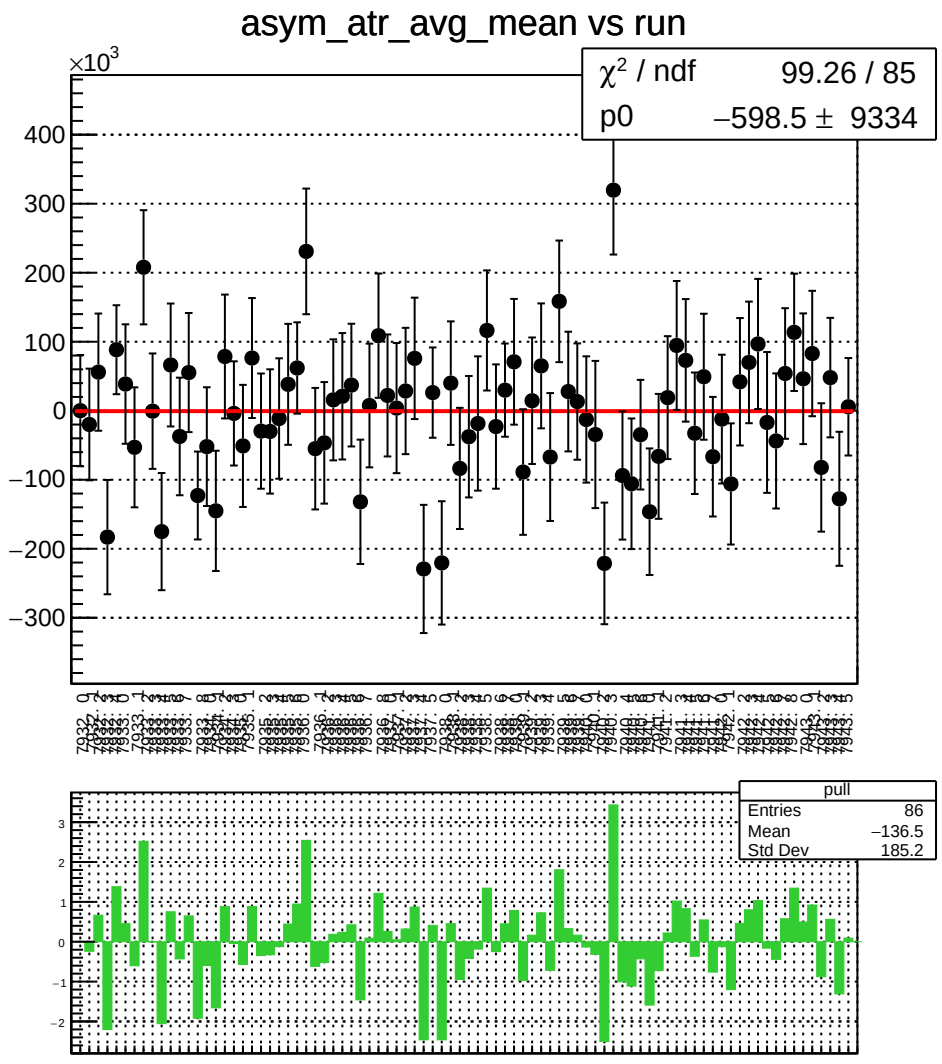

pull1D
Entries 86
Mean −0.004364
Std Dev 0.8708

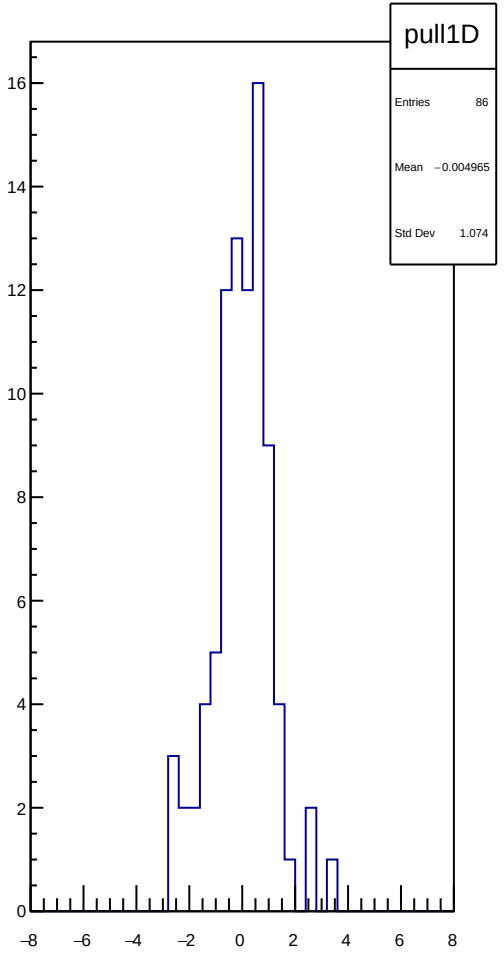

reg_asym_atr_avg_rms vs run
χ^2 / ndf 7656 / 85
p0 1986 ± 1.547
6000
5500
5000
4500
4000
3500
3000
2500
2000

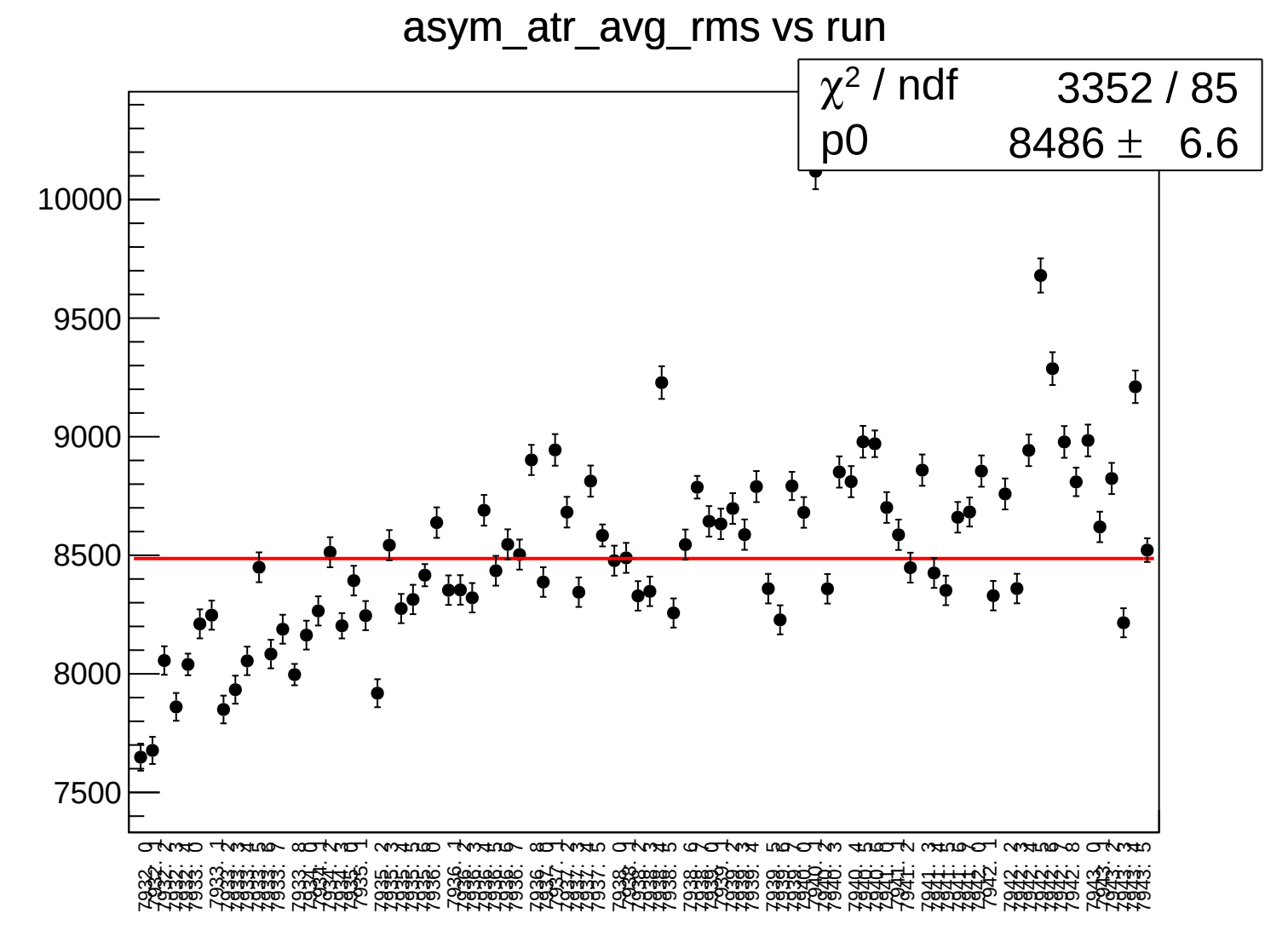

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 97.97 / 85
p0 −917.3 ± 9061
pull
Entries 86
Mean −53.9
Std Dev 113

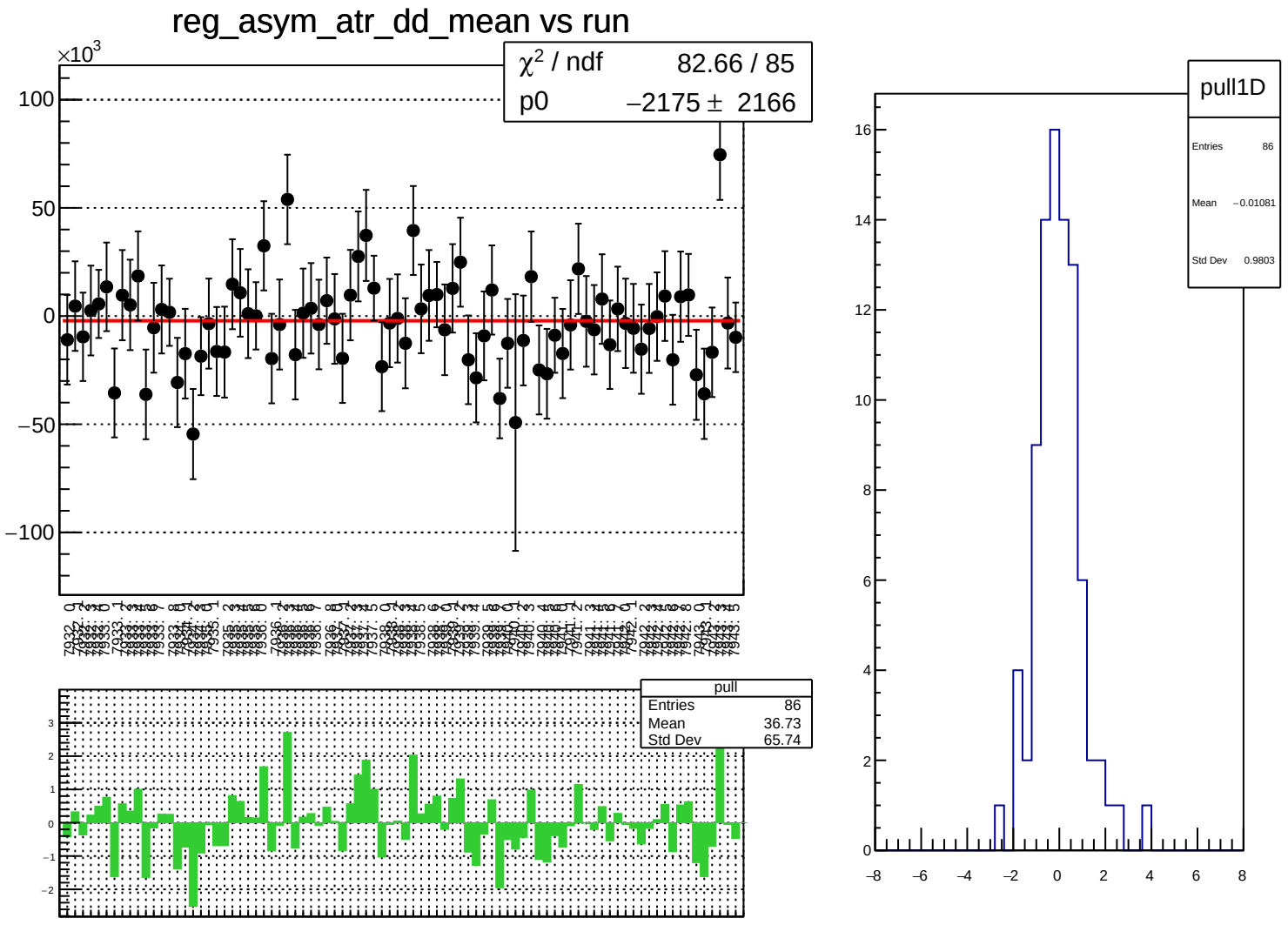

pull1D
Entries 86
Mean 0.004596
Std Dev 1.067

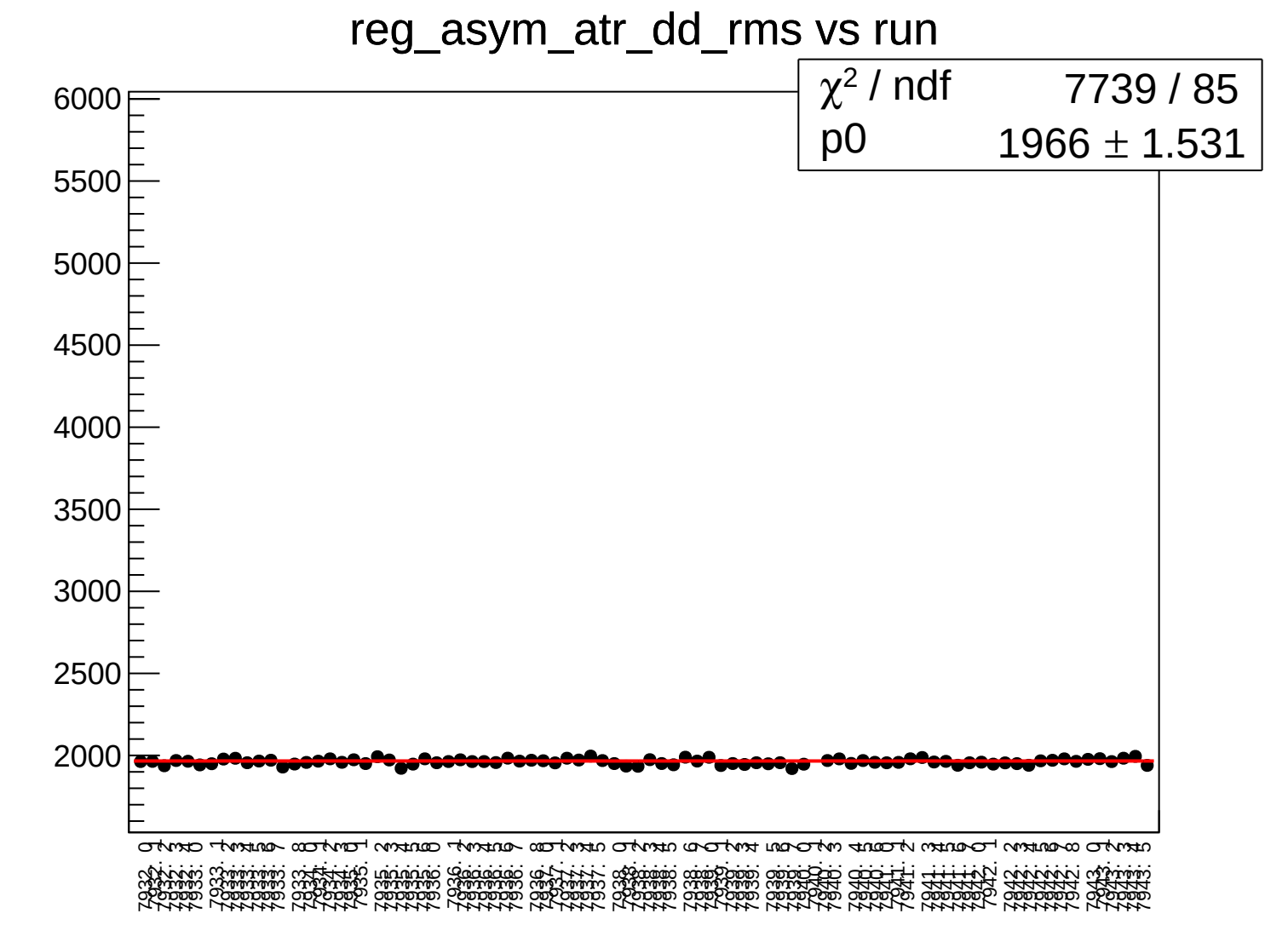

asym_atr_avg_correction_rms vs run
χ² / ndf 3217 / 85
p0 8239 ± 6.407
9500
9000
8500
8000
7500

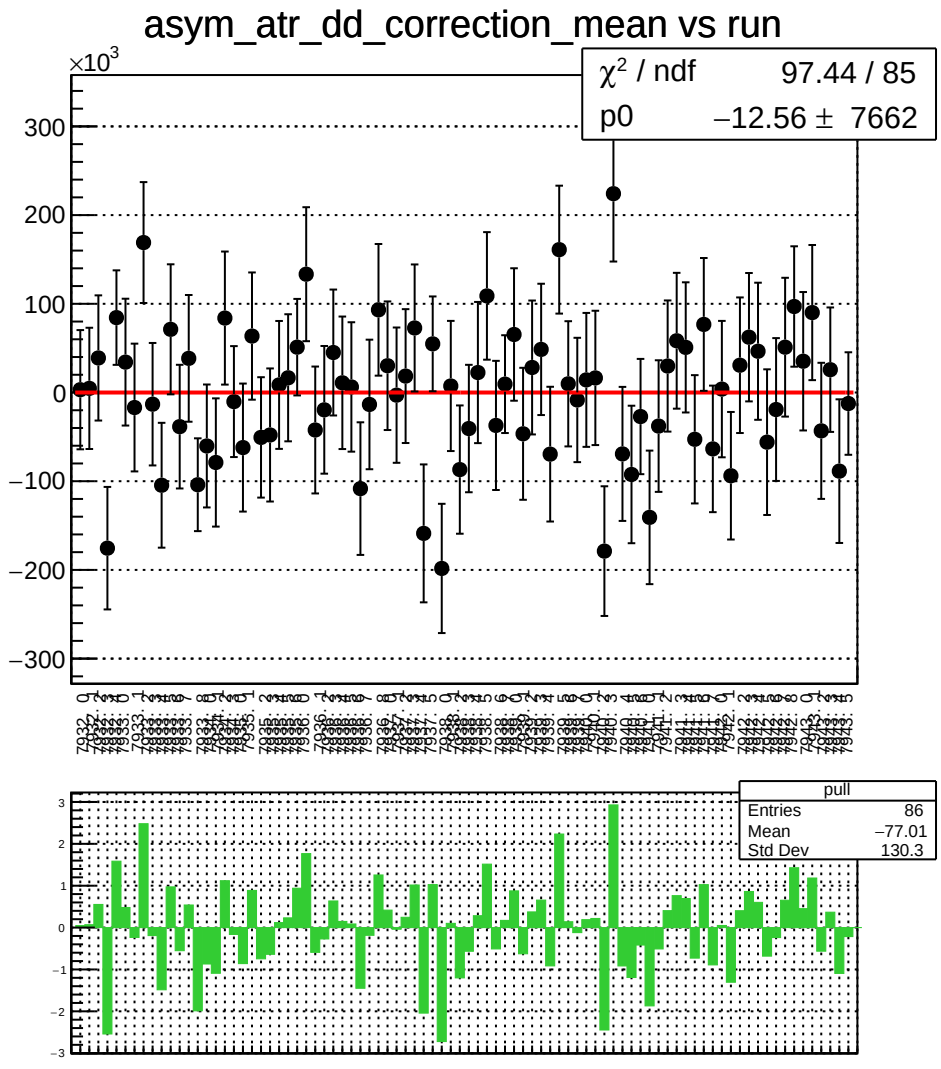

asym_atr_avg_mean vs run
×10^3
χ² / ndf 99.26 / 85
p0 −598.5 ± 9334
pull
Entries 86
Mean −136.5
Std Dev 185.2

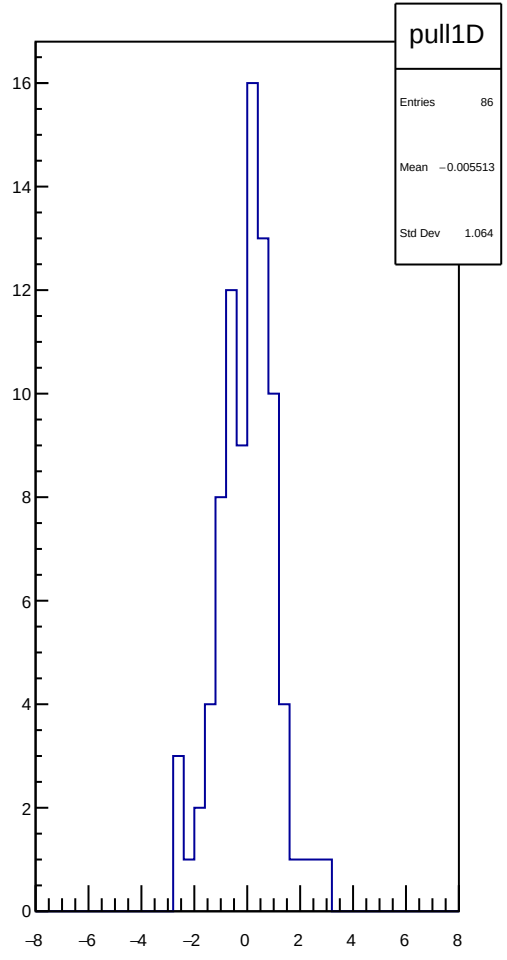

pull1D
Entries 86
Mean −0.004965
Std Dev 1.074

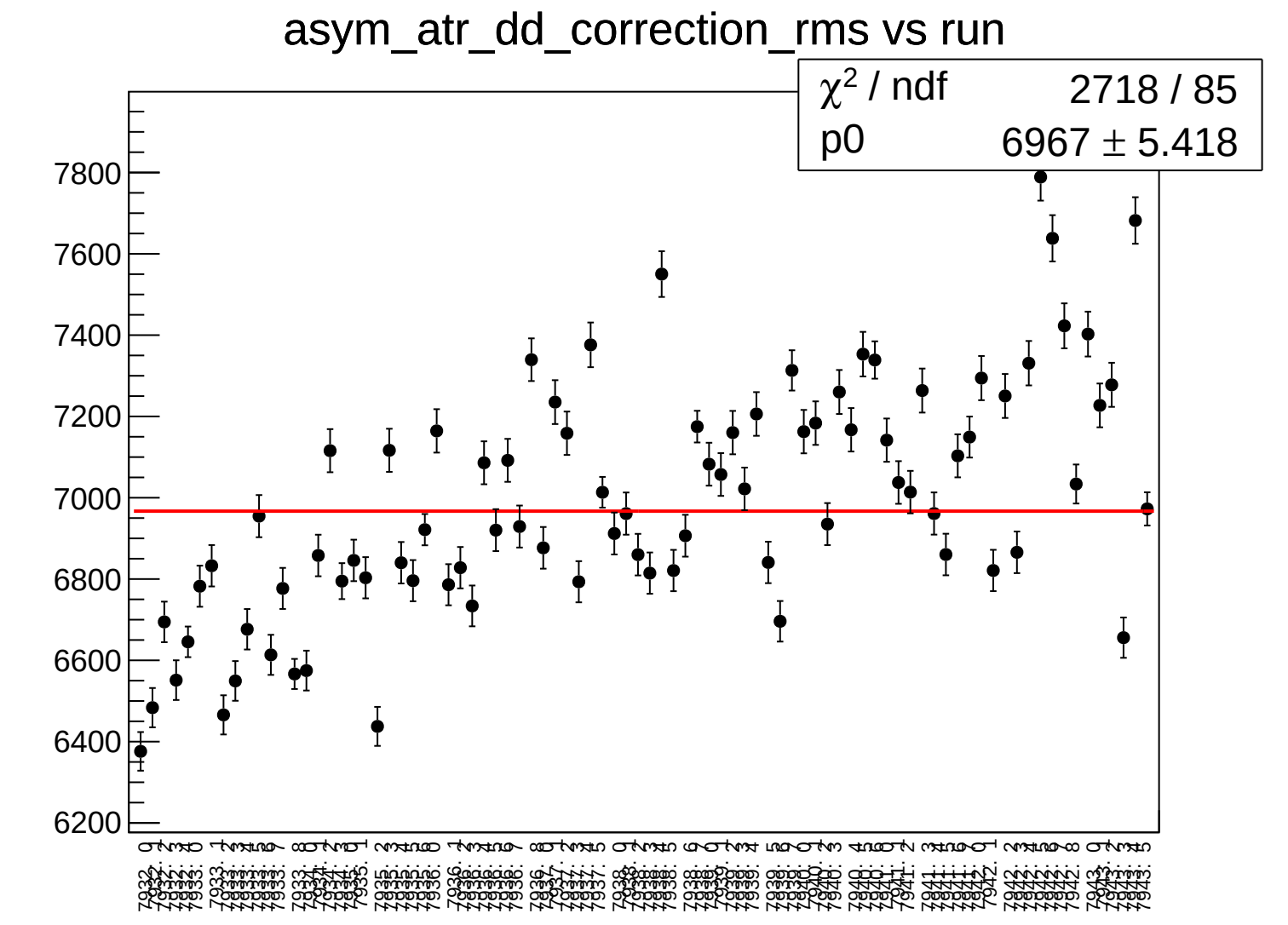

asym_atr_avg_rms vs run
χ² / ndf 3352 / 85
p0 8486 ± 6.6
10000
9500
9000
8500
8000
7500

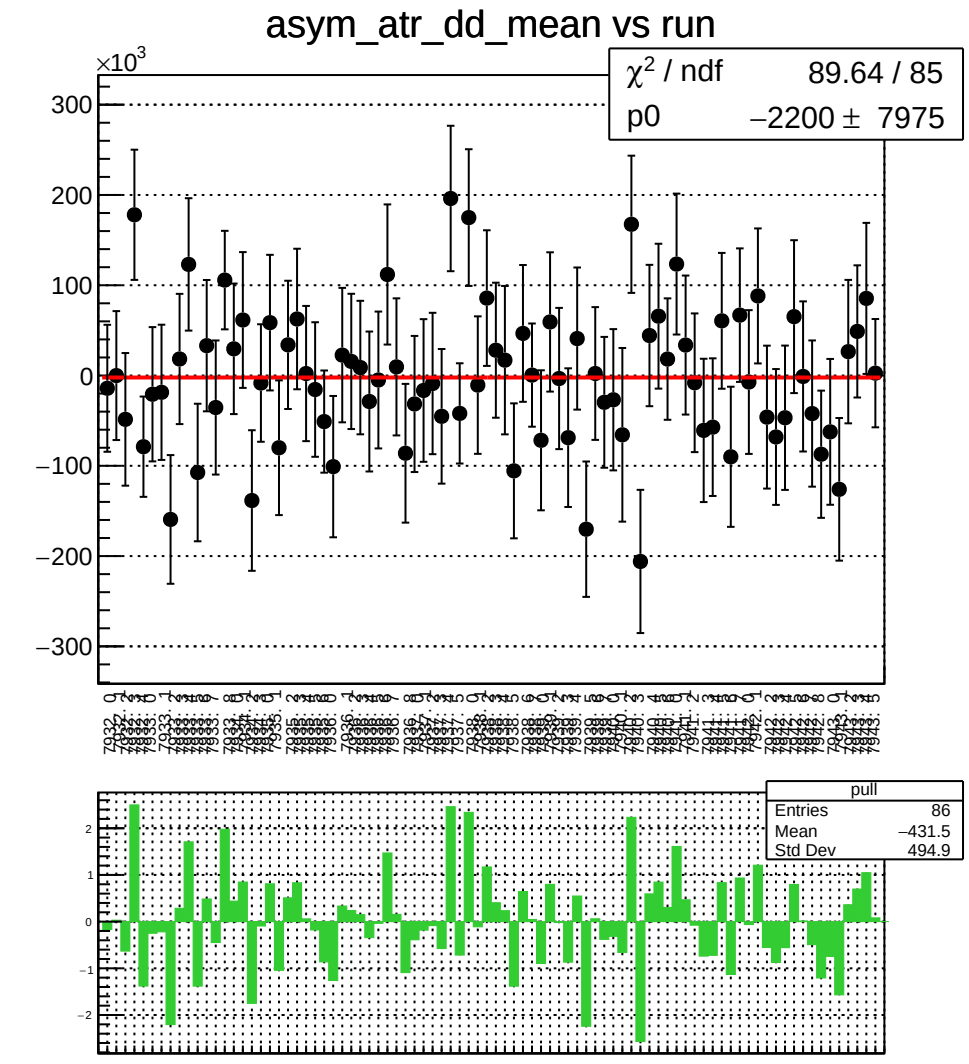

reg_asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 82.66 / 85
p0 −2175 ± 2166
pull
Entries 86
Mean 36.73
Std Dev 65.74
pull1D
Entries 86
Mean −0.01081
Std Dev 0.9803

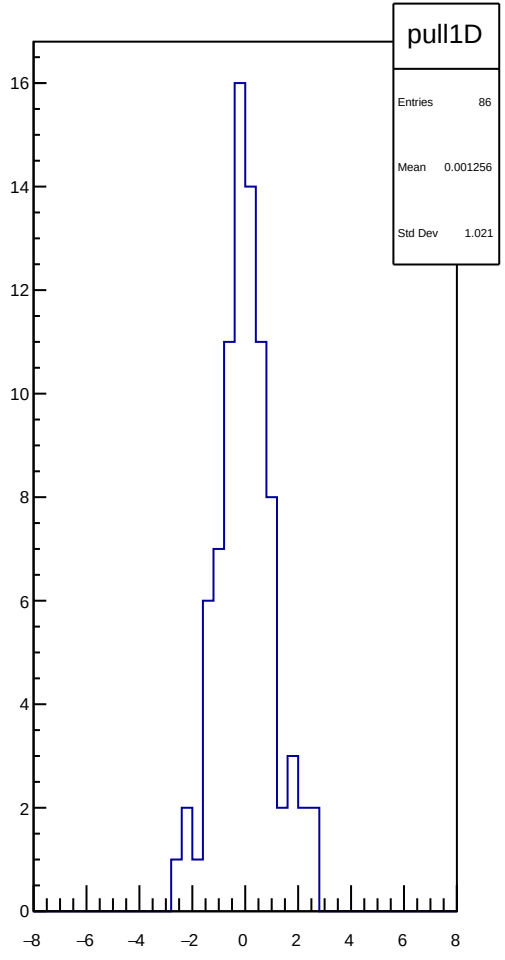

reg_asym_atr_dd_rms vs run
χ^2 / ndf 7739 / 85
p0 1966 ± 1.531
6000
5500
5000
4500
4000
3500
3000
2500
2000

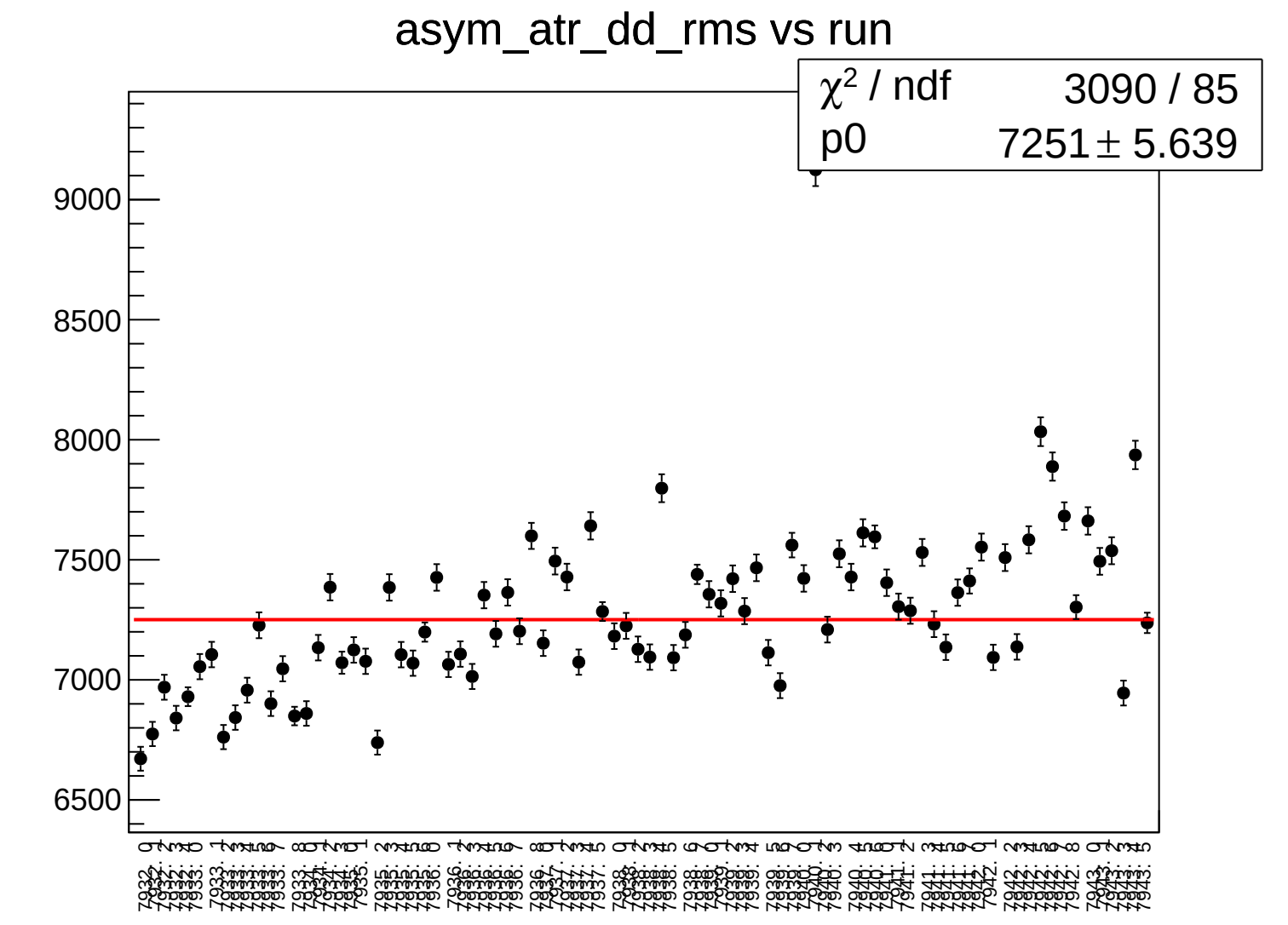

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 97.44 / 85
p0 −12.56 ± 7662
pull
Entries 86
Mean −77.01
Std Dev 130.3

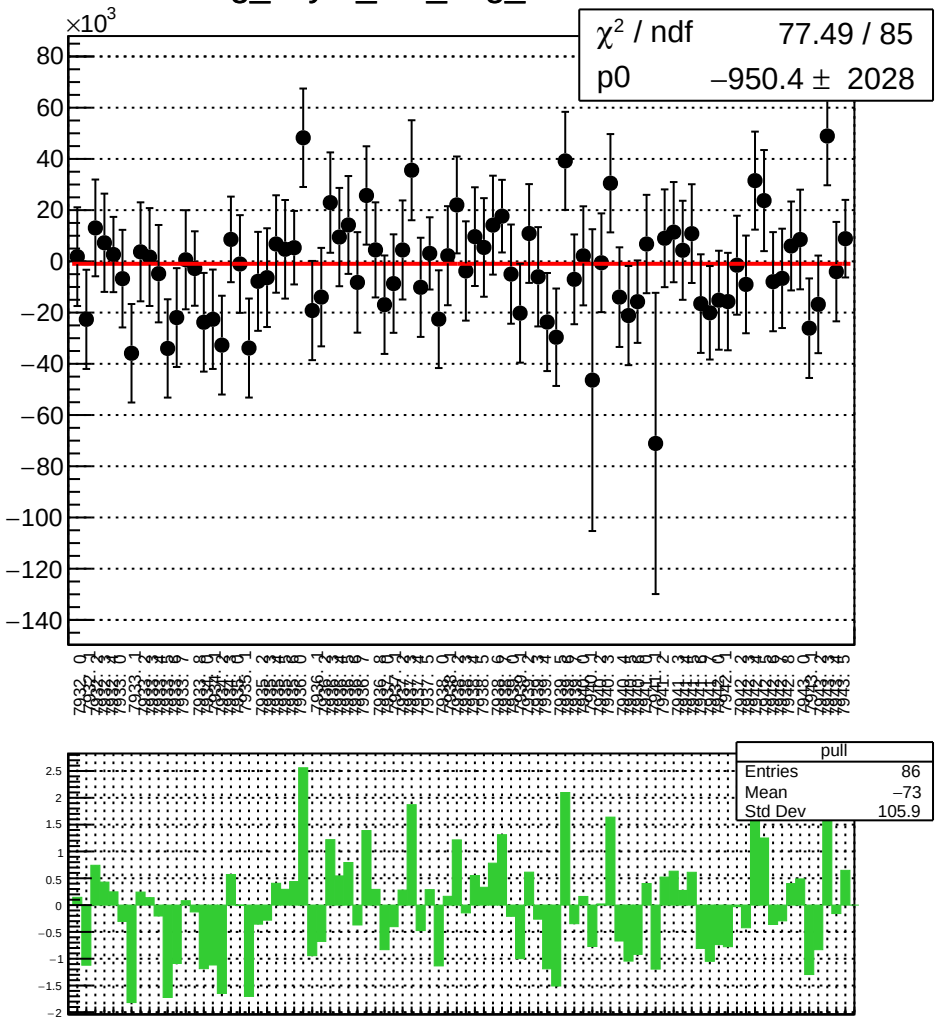

pull1D
Entries 86
Mean −0.005513
Std Dev 1.064

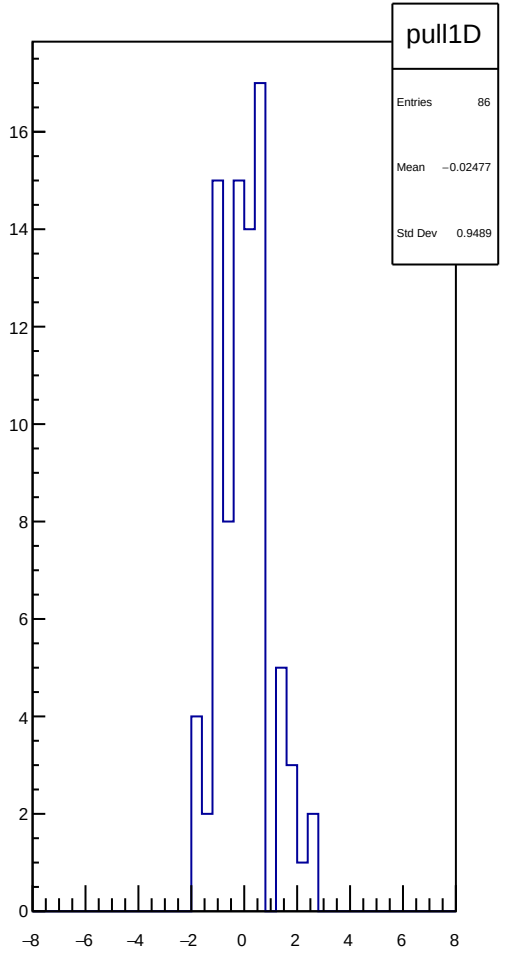

asym_atr_dd_correction_rms vs run
χ^2 / ndf 2718 / 85
p0 6967 ± 5.418
7800
7600
7400
7200
7000
6800
6600
6400
6200

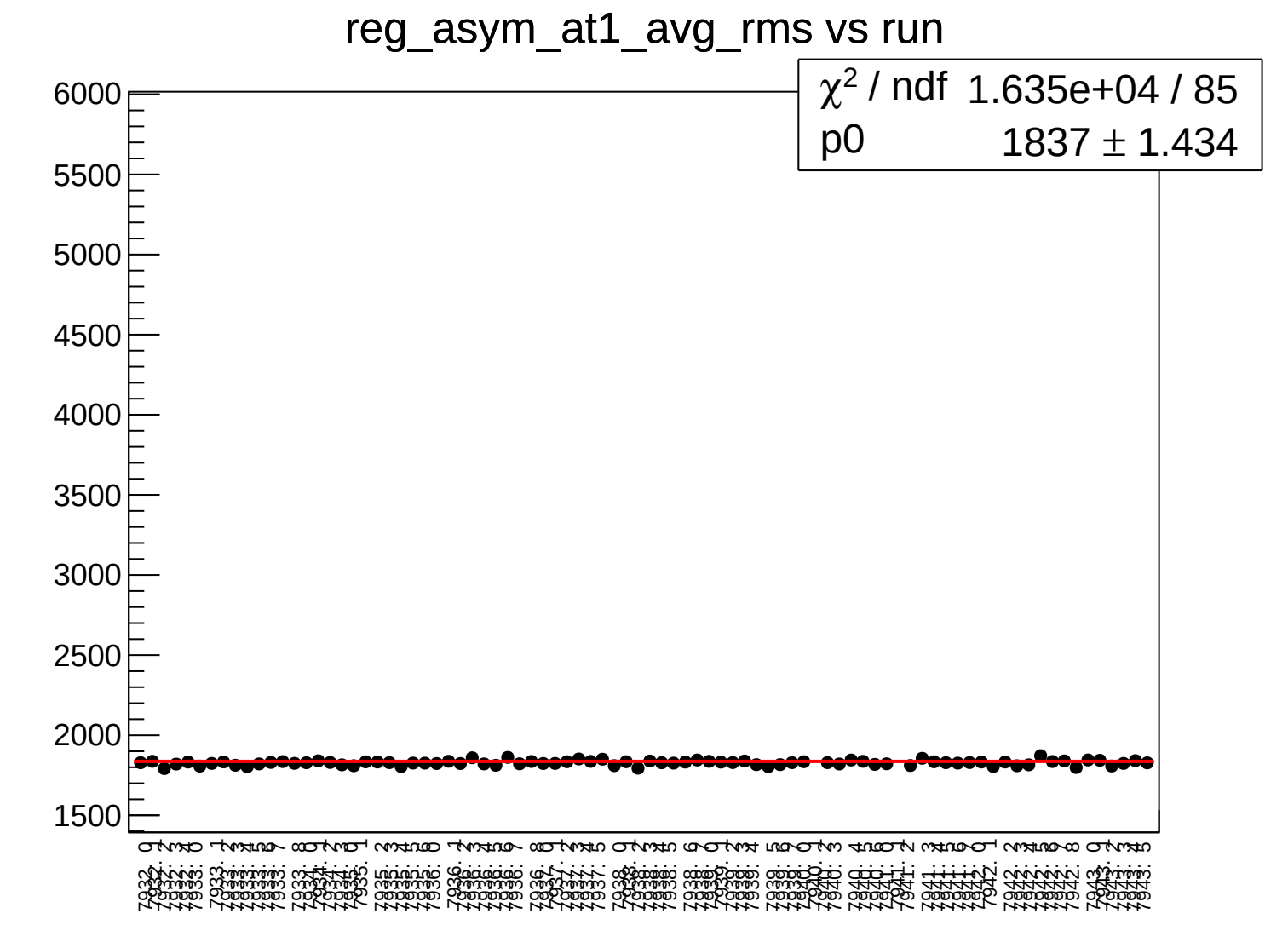

asym_atr_dd_mean vs run
×10^3
χ² / ndf 89.64 / 85
p0 −2200 ± 7975
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −431.5
Std Dev 494.9
2
1
0
−1
−2

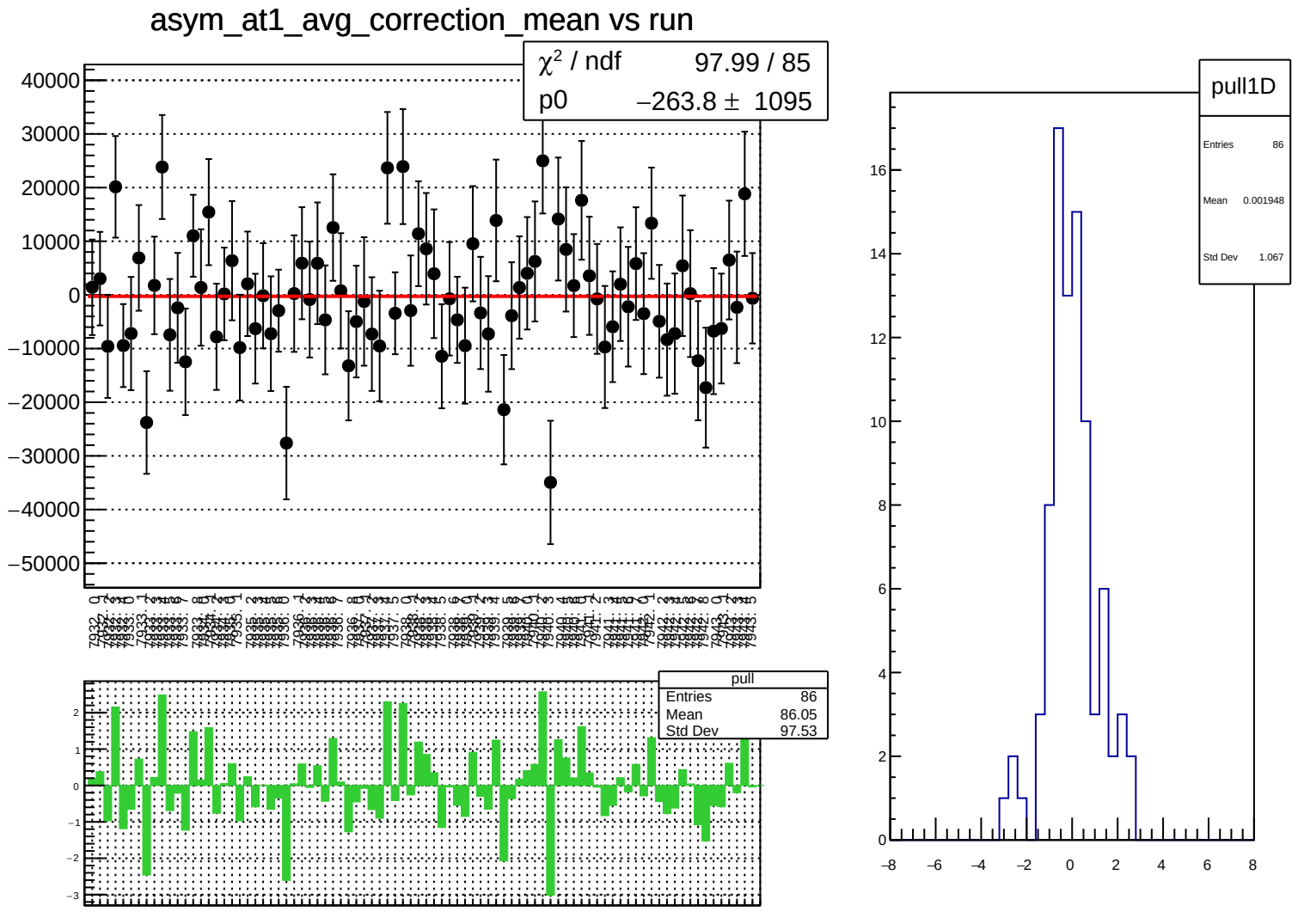

pull1D
Entries 86
Mean 0.001256
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

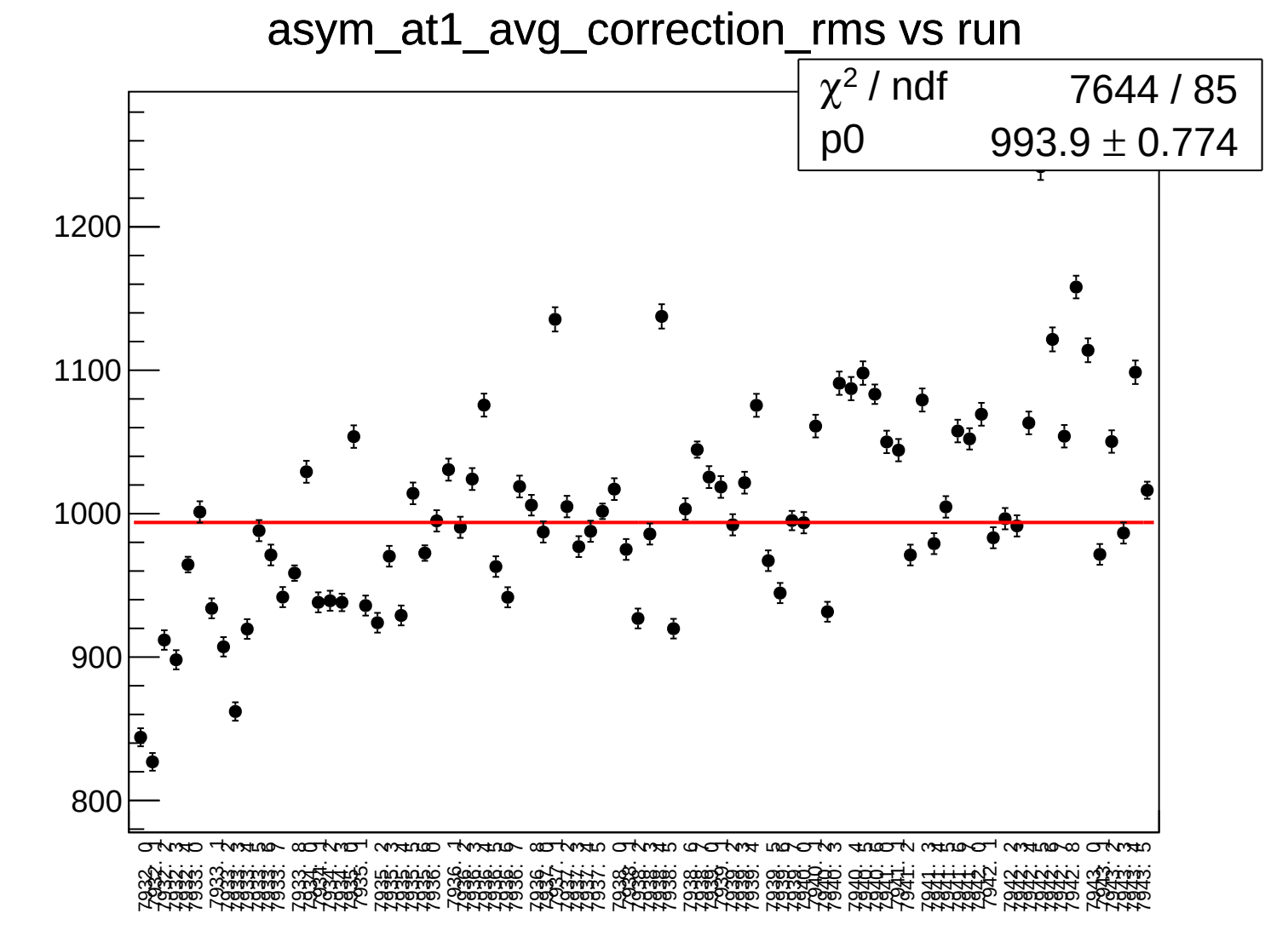

asym_atr_dd_rms vs run
χ^2 / ndf 3090 / 85
p0 7251 ± 5.639
9000
8500
8000
7500
7000
6500

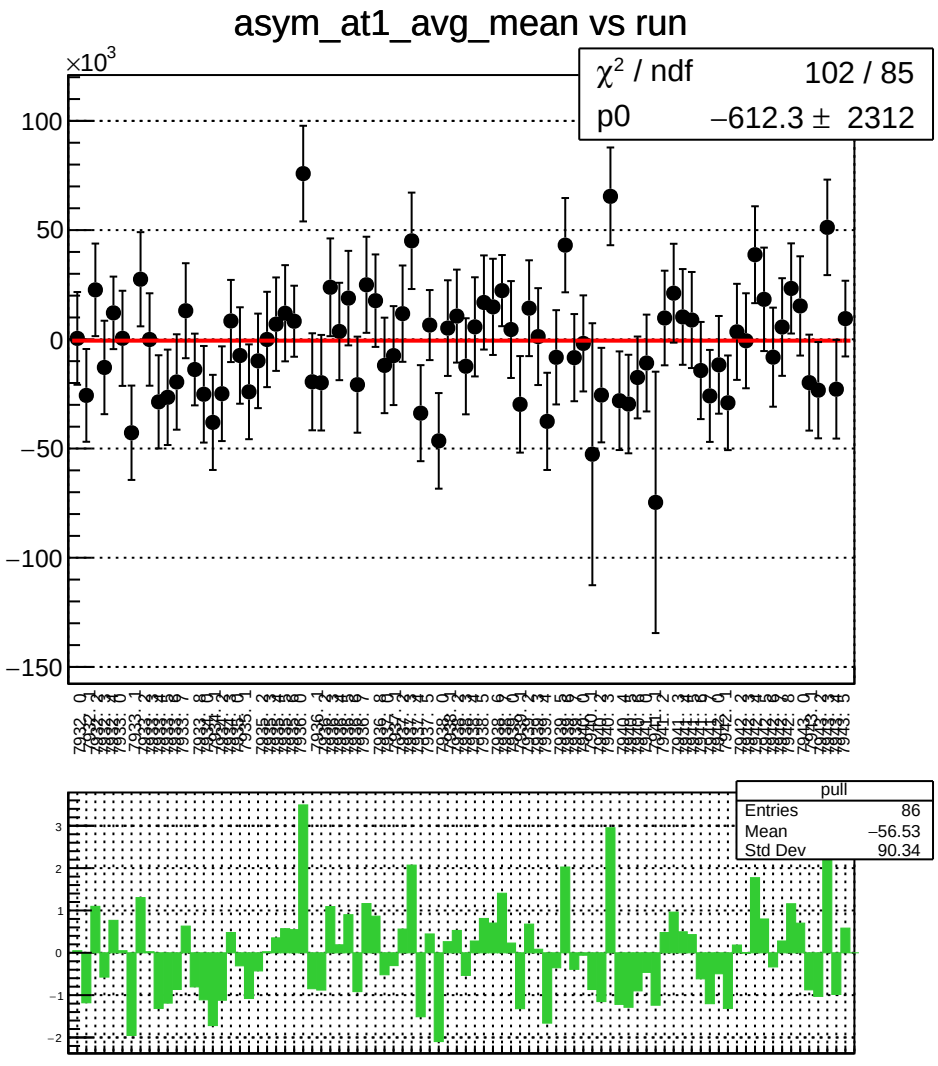

reg_asym_at1_avg_mean vs run
×10^3
χ² / ndf 77.49 / 85
p0 −950.4 ± 2028
pull
Entries 86
Mean −73
Std Dev 105.9

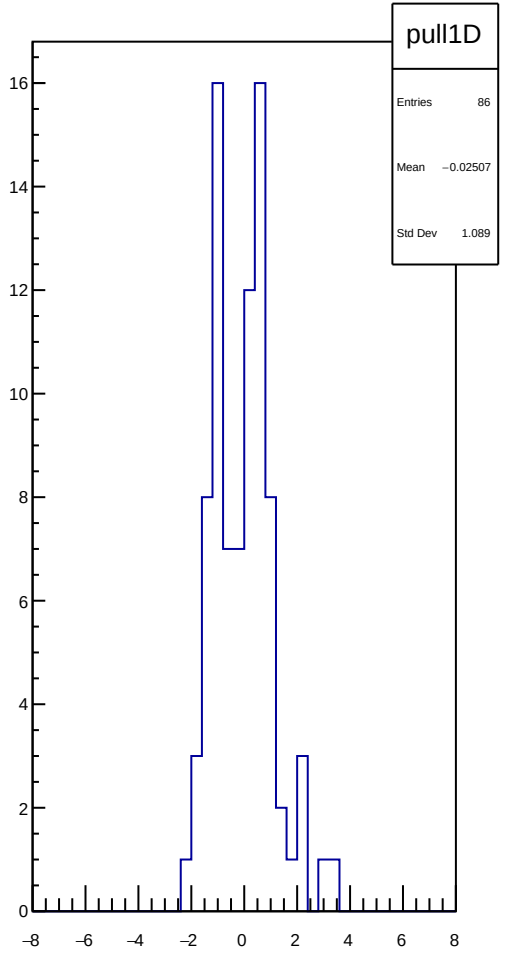

pull1D
Entries 86
Mean −0.02477
Std Dev 0.9489

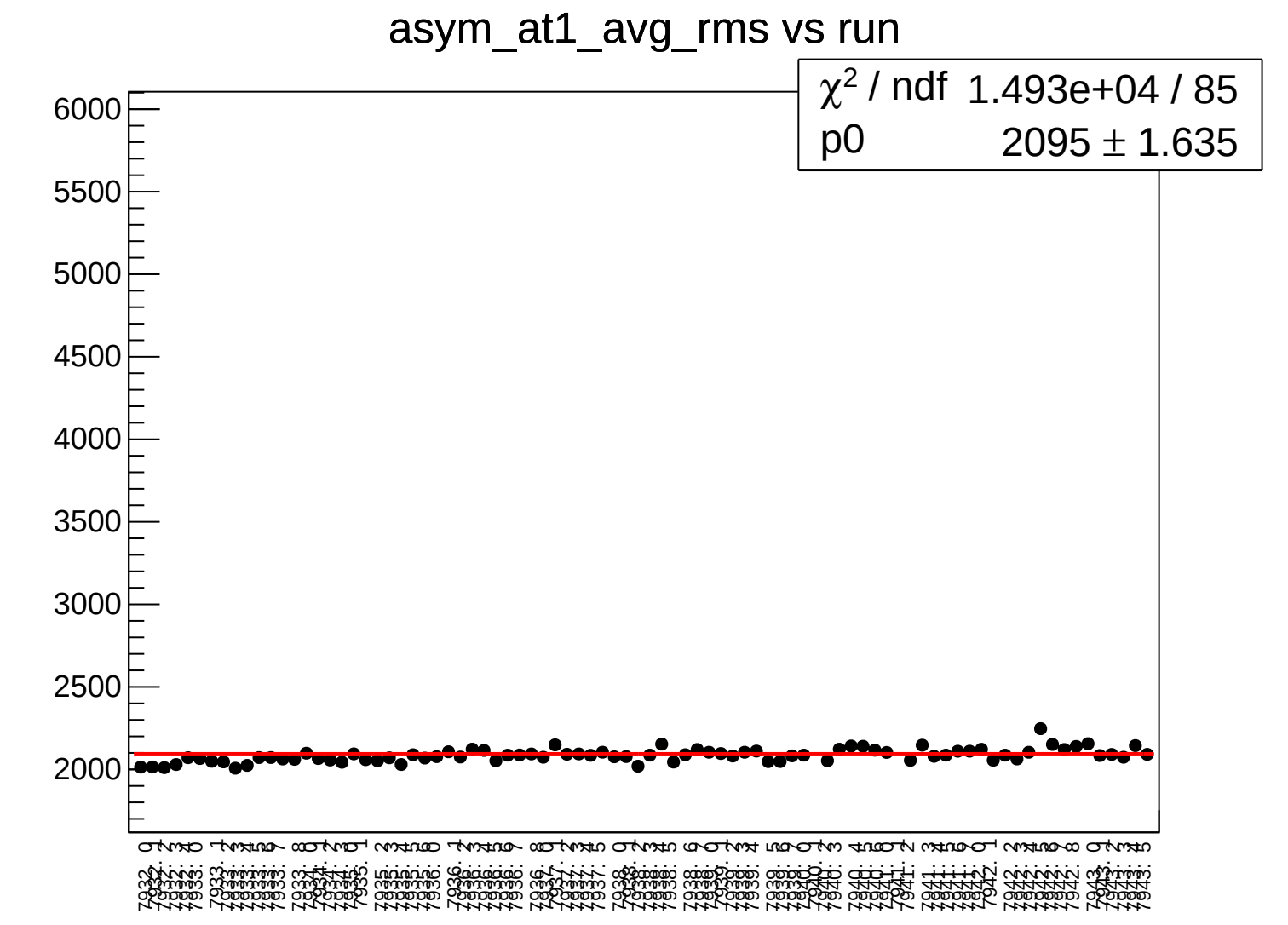

reg_asym_at1_avg_rms vs run
χ² / ndf 1.635e+04 / 85
p0 1837 ± 1.434
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

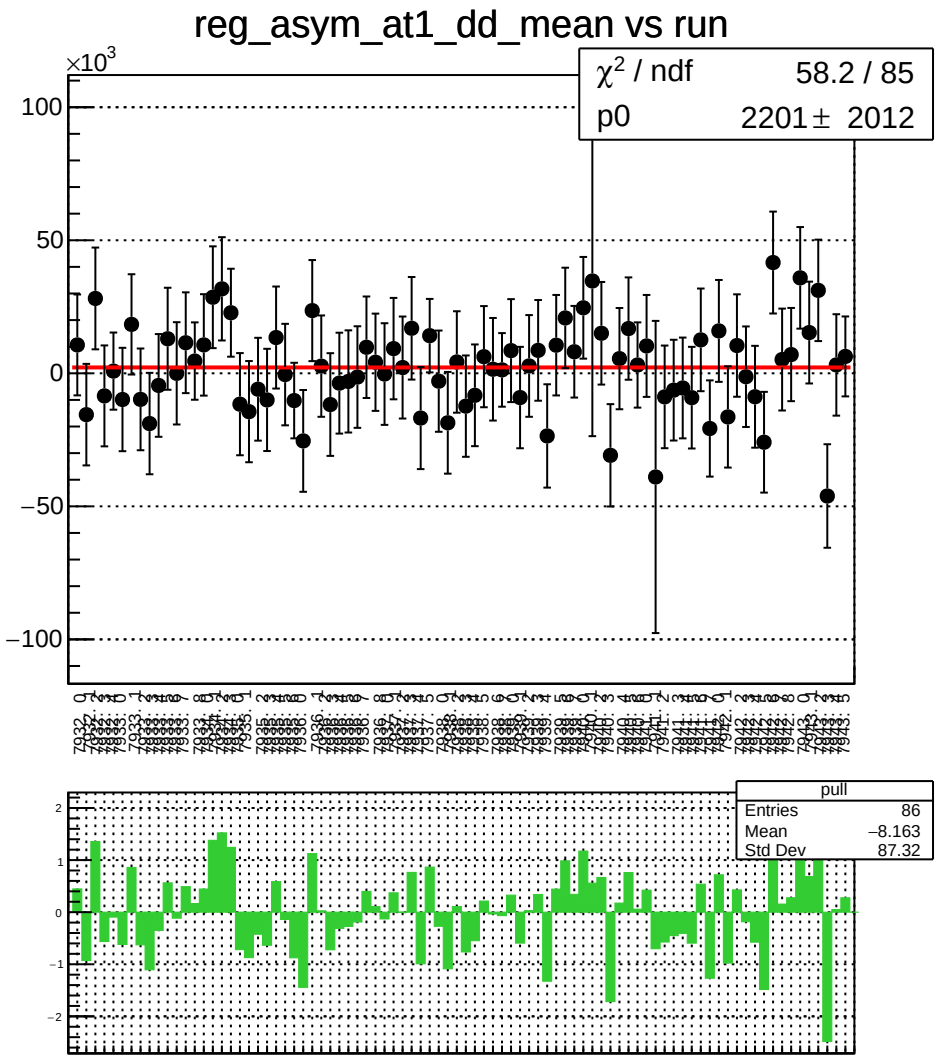

asym_at1_avg_correction_mean vs run
χ² / ndf 97.99 / 85
p0 −263.8 ± 1095
pull
Entries 86
Mean 86.05
Std Dev 97.53
pull1D
Entries 86
Mean 0.001948
Std Dev 1.067

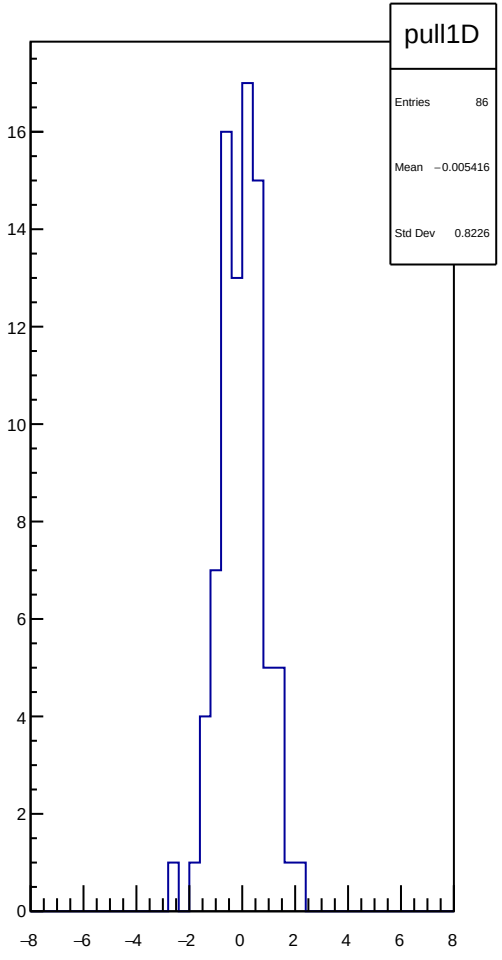

asym_at1_avg_correction_rms vs run
χ² / ndf 7644 / 85
p0 993.9 ± 0.774
1200
1100
1000
900
800

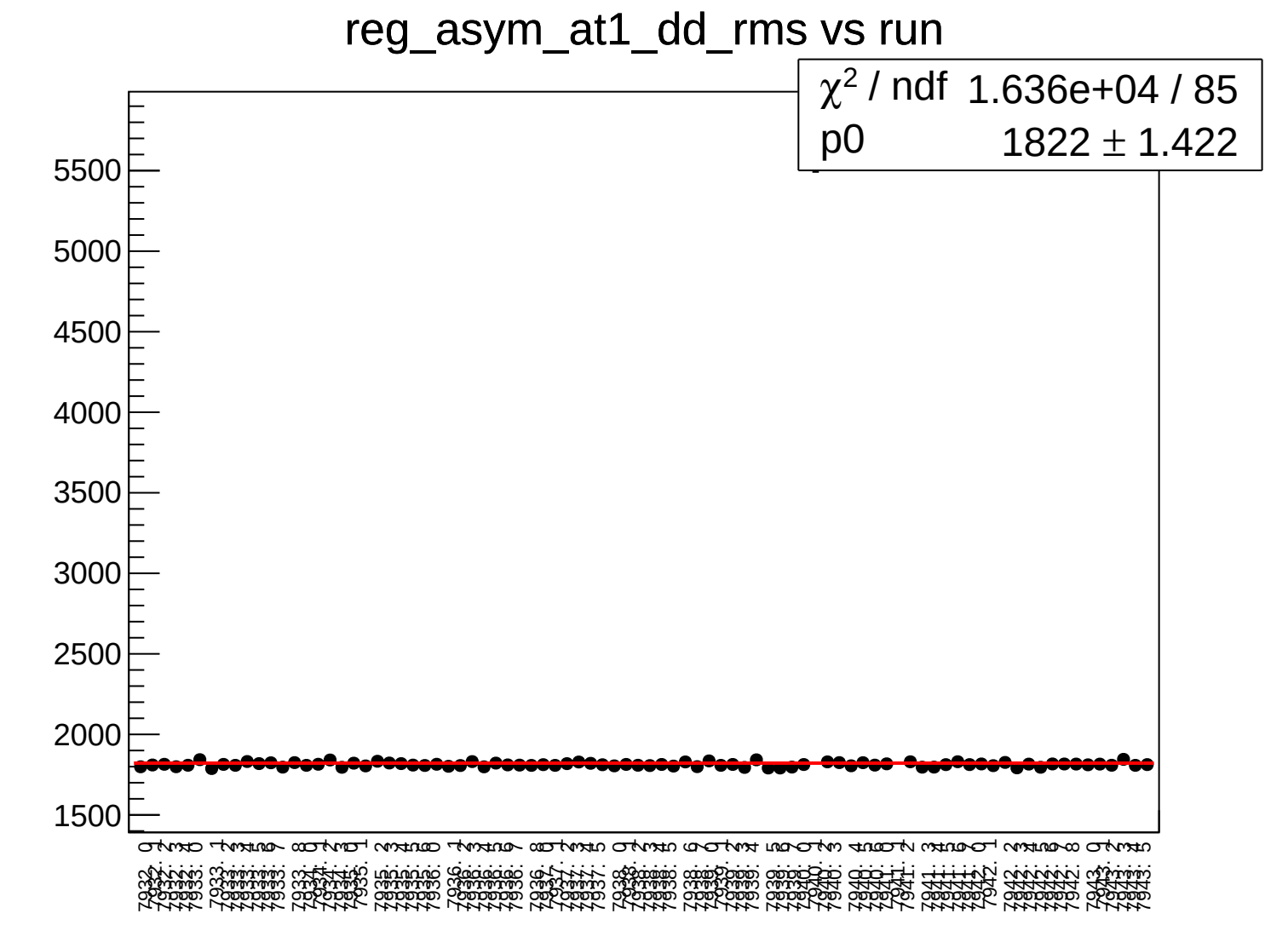

asym_at1_avg_mean vs run
×10^3
χ² / ndf 102 / 85
p0 −612.3 ± 2312
100
50
0
−50
−100
−150
pull
Entries 86
Mean −56.53
Std Dev 90.34
3
2
1
0
−1
−2

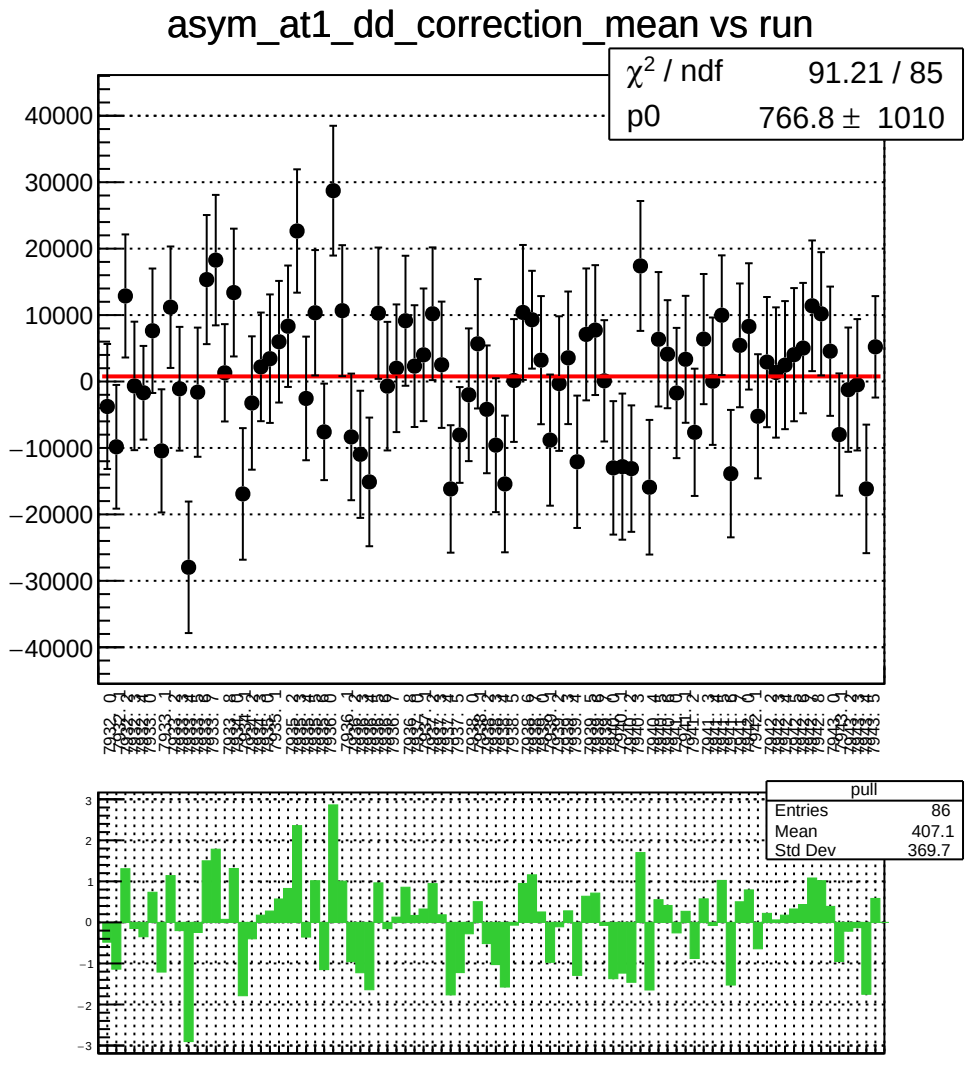

pull1D
Entries 86
Mean −0.02507
Std Dev 1.089
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

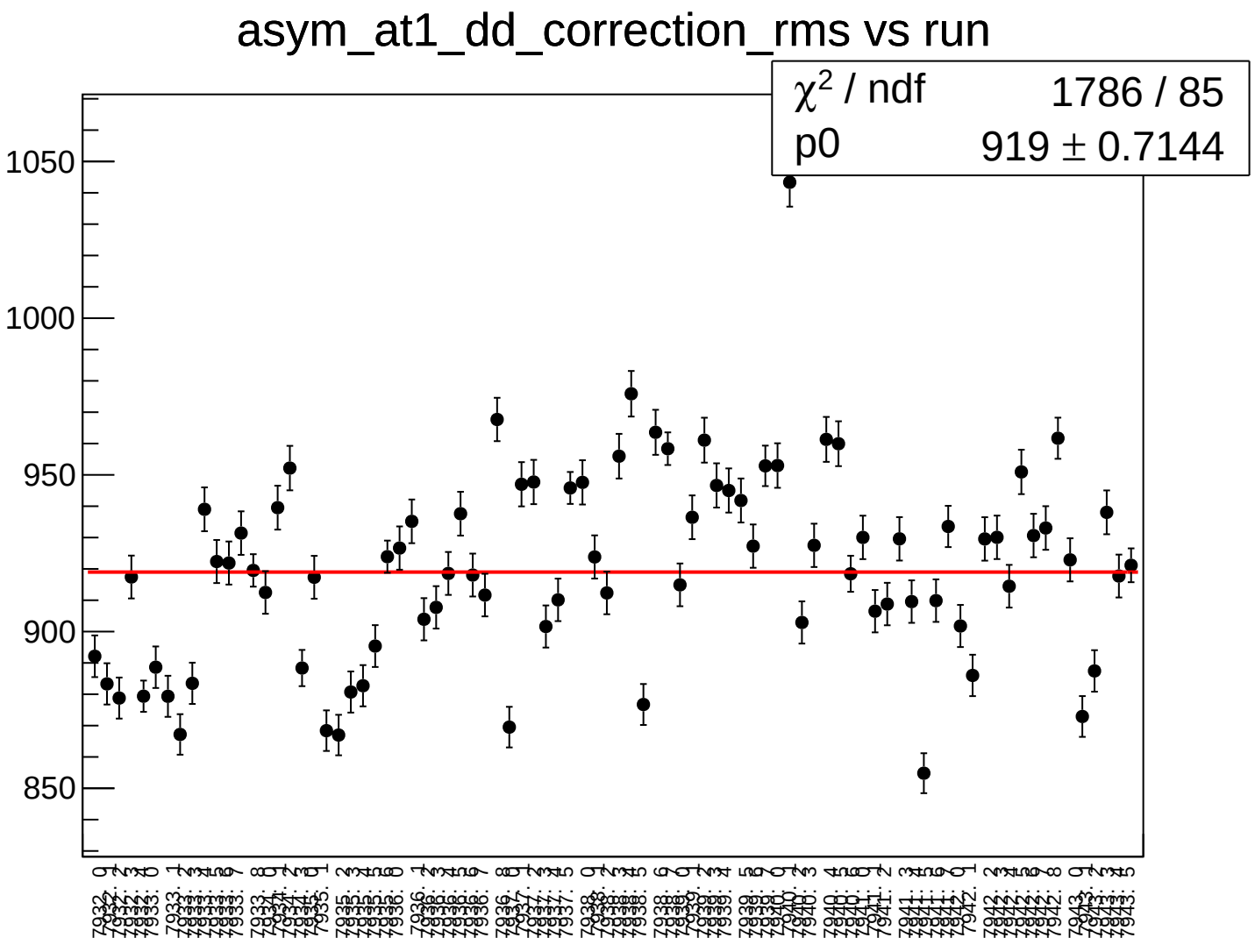

asym_at1_avg_rms vs run
χ² / ndf 1.493e+04 / 85
p0 2095 ± 1.635
6000
5500
5000
4500
4000
3500
3000
2500
2000

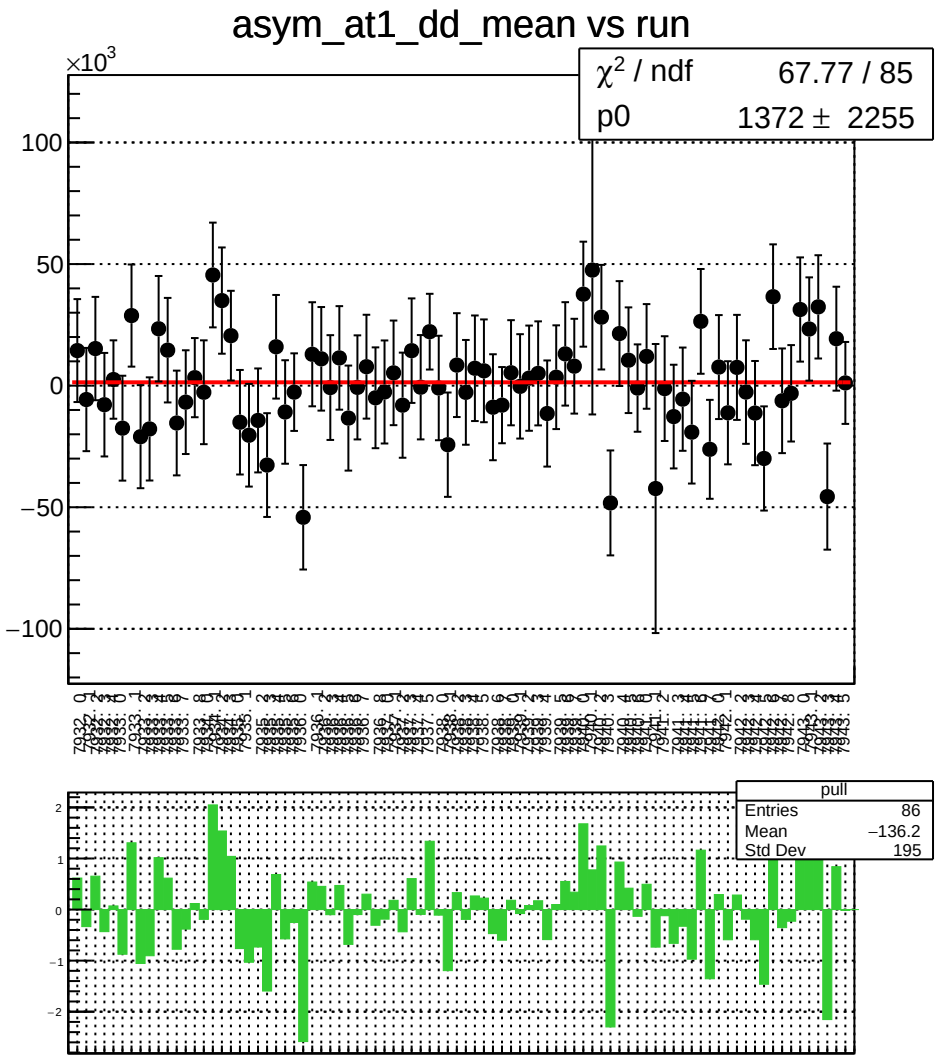

reg_asym_at1_dd_mean vs run
×10^3
χ^2 / ndf 58.2 / 85
p0 2201 ± 2012
100
50
0
−50
−100
pull
Entries 86
Mean −8.163
Std Dev 87.32
2
1
0
−1
−2

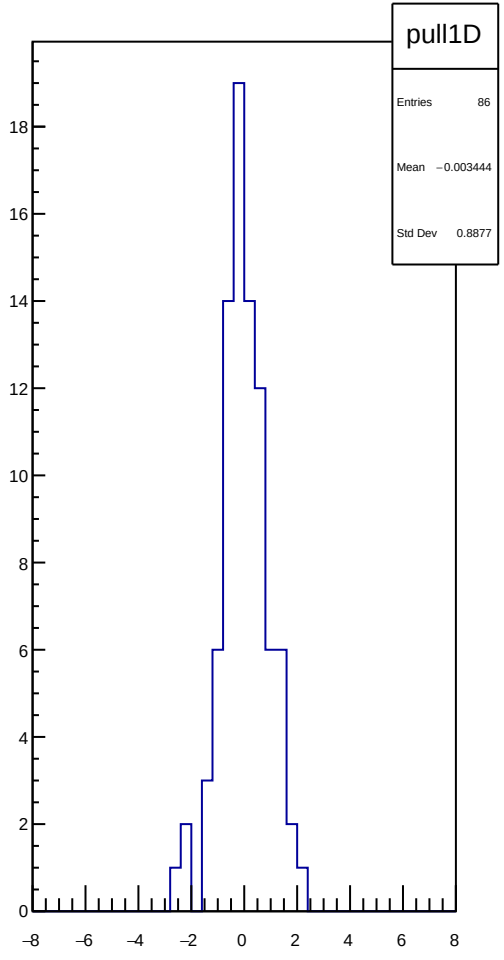

pull1D
Entries 86
Mean −0.005416
Std Dev 0.8226
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

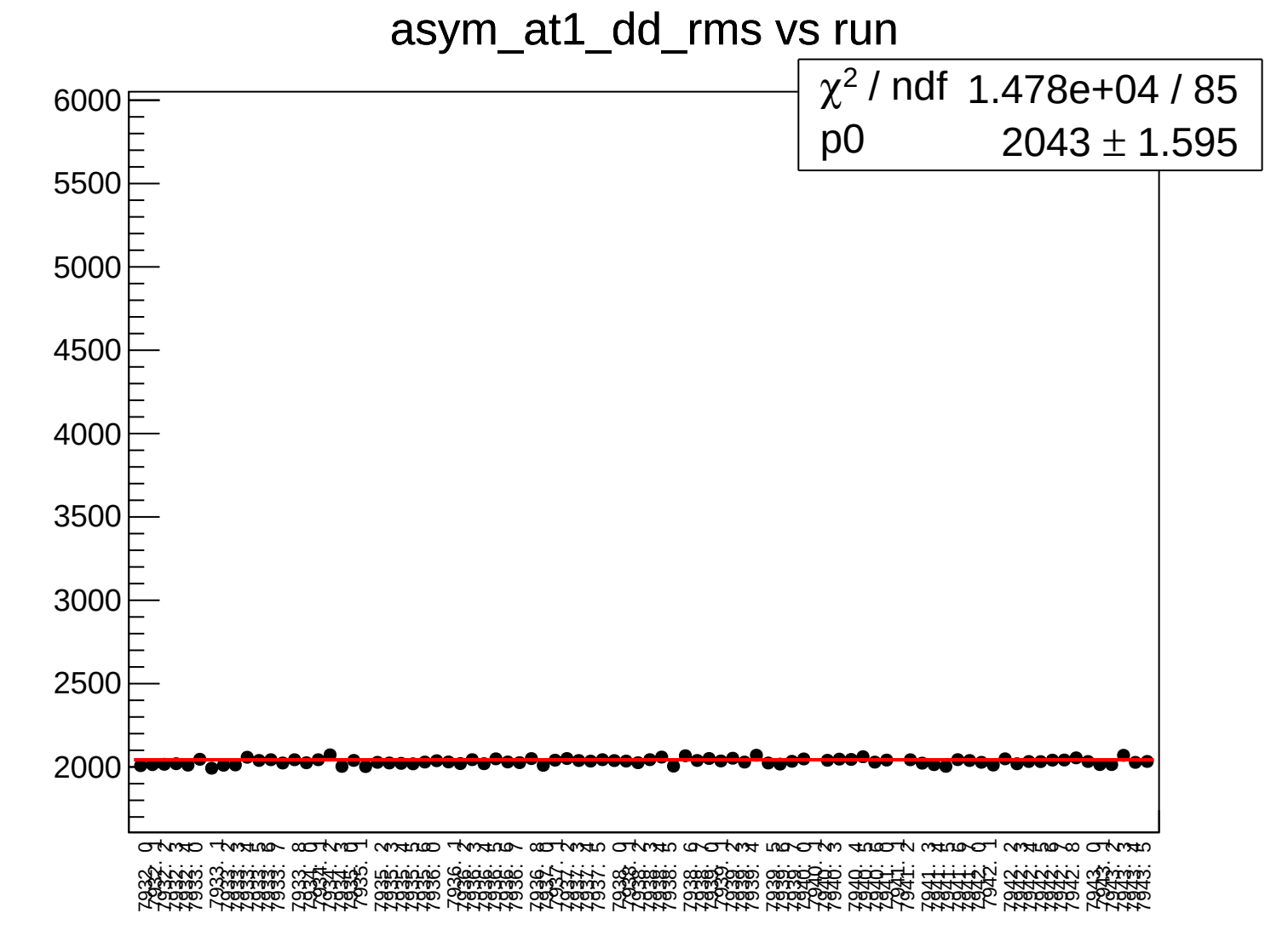

reg_asym_at1_dd_rms vs run
χ^2 / ndf 1.636e+04 / 85
p0 1822 ± 1.422
5500
5000
4500
4000
3500
3000
2500
2000
1500

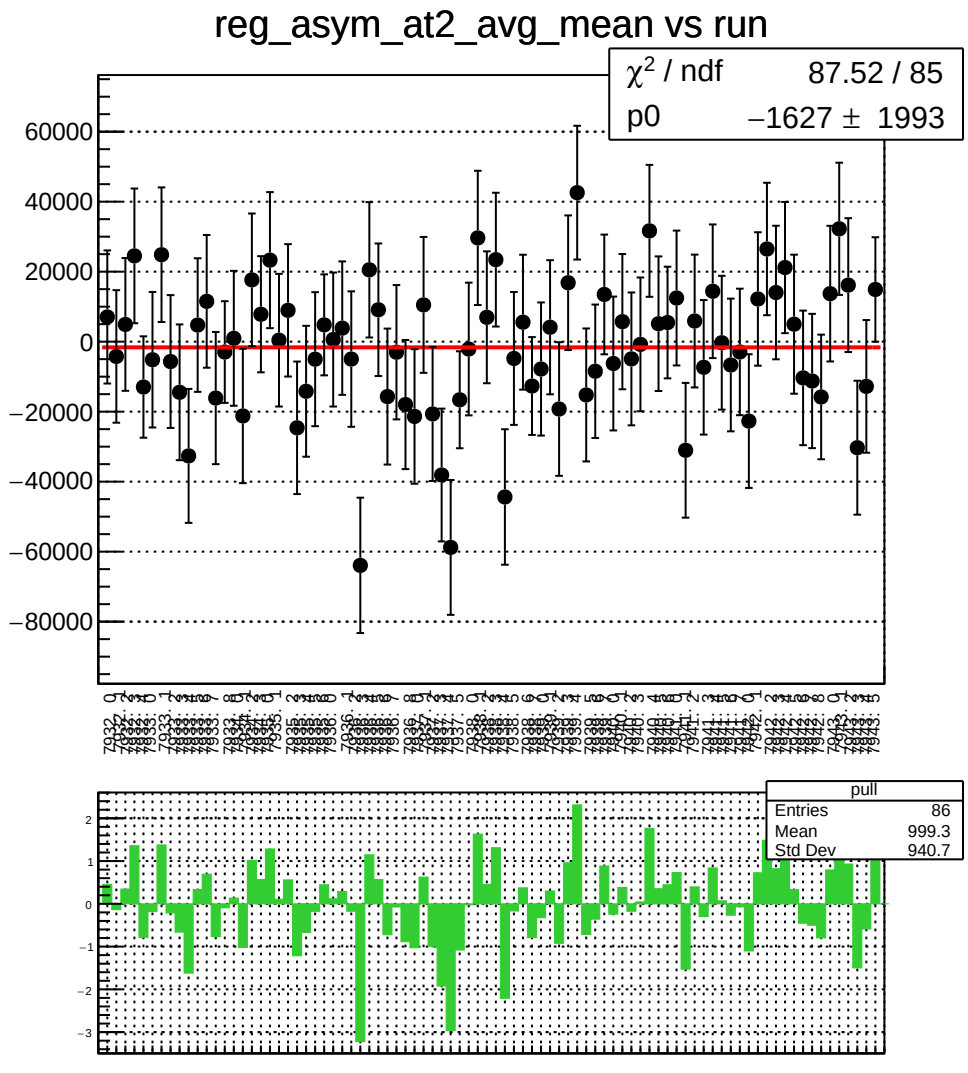

asym_at1_dd_correction_mean vs run
χ² / ndf 91.21 / 85
p0 766.8 ± 1010
pull
Entries 86
Mean 407.1
Std Dev 369.7
pull1D
Entries 86
Mean −0.002702
Std Dev 1.03

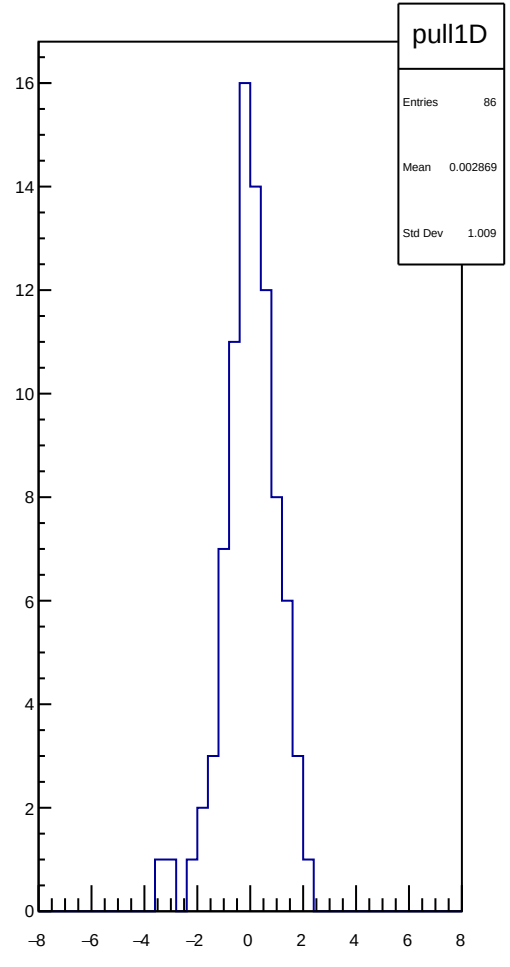

asym_at1_dd_correction_rms vs run
χ^2 / ndf 1786 / 85
p0 919 ± 0.7144
1050
1000
950
900
850

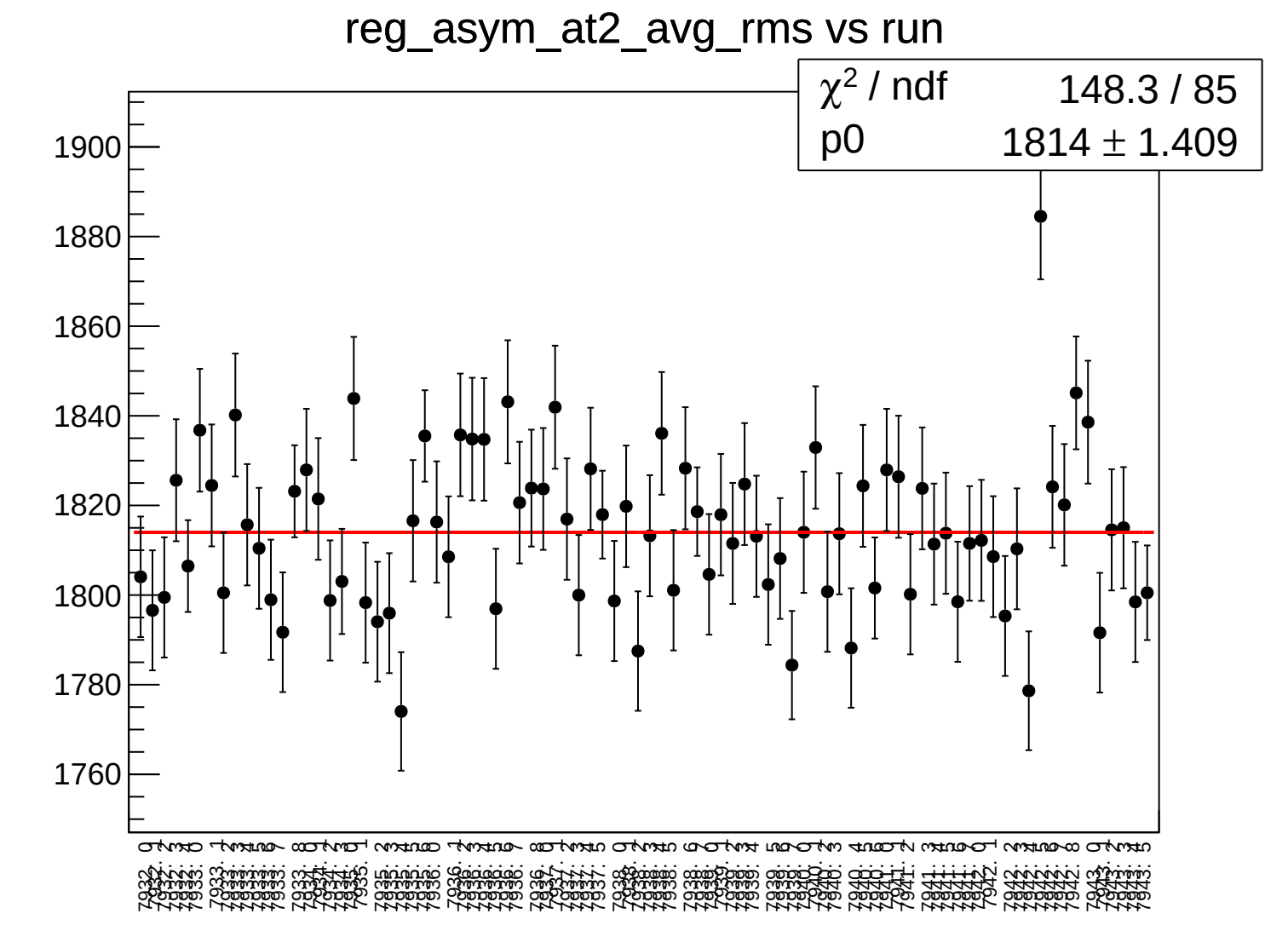

asym_at1_dd_mean vs run
×10^3
χ² / ndf 67.77 / 85
p0 1372 ± 2255
100
50
0
−50
−100
pull
Entries 86
Mean −136.2
Std Dev 195
2
1
0
−1
−2

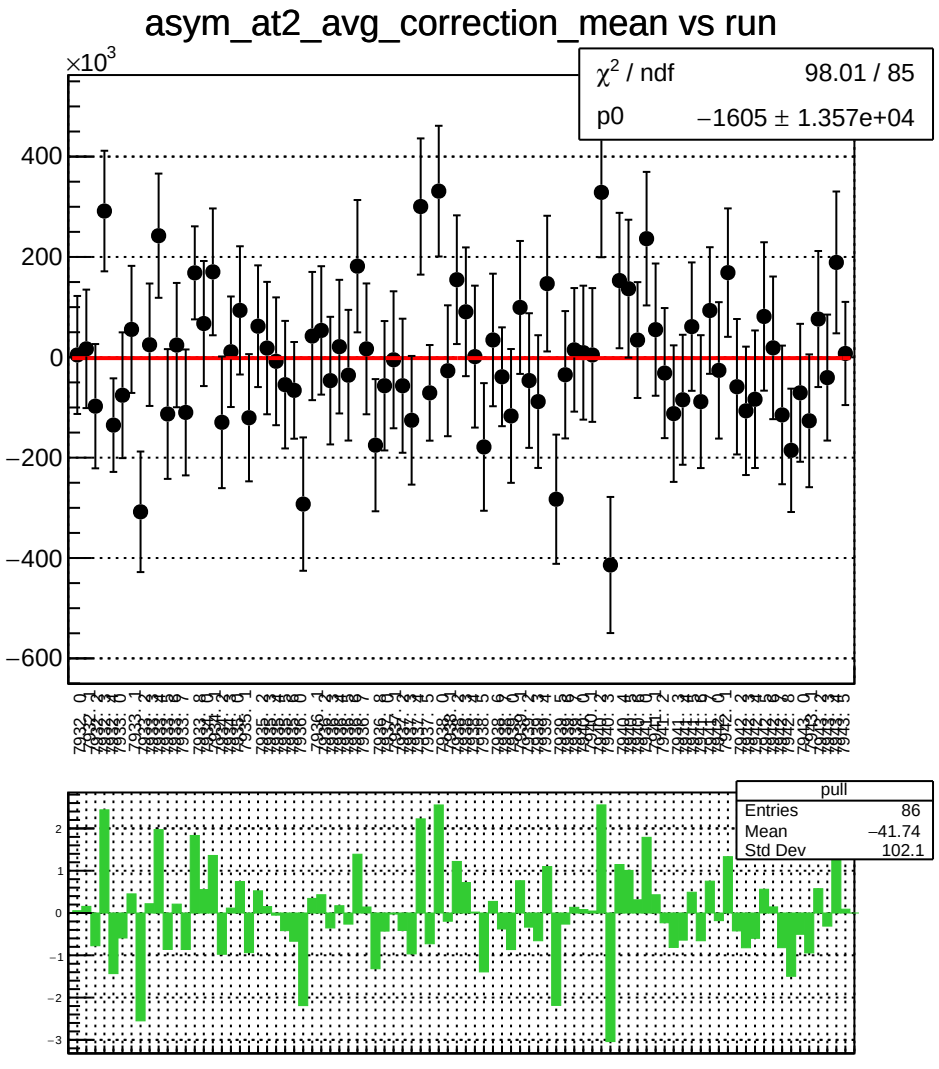

pull1D
Entries 86
Mean −0.003444
Std Dev 0.8877
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

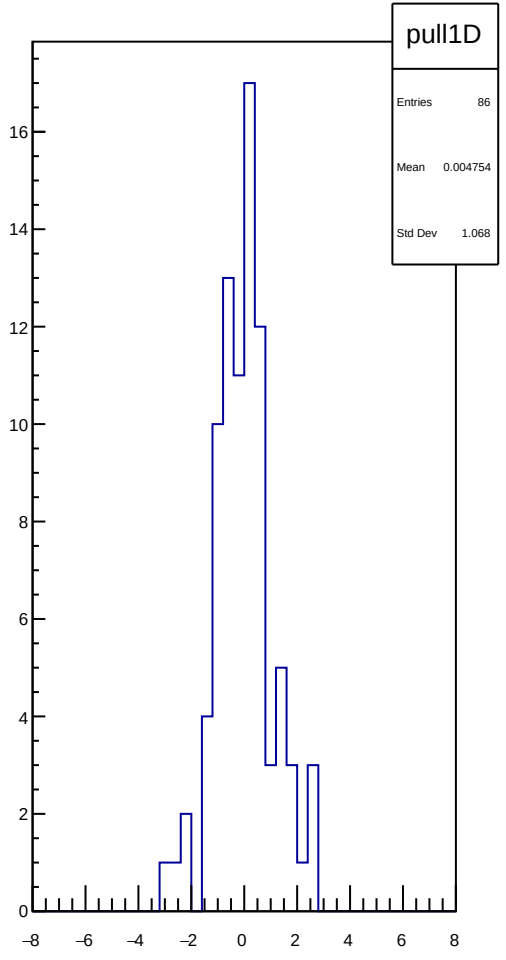

asym_at1_dd_rms vs run
χ^2 / ndf 1.478e+04 / 85
p0 2043 ± 1.595
6000
5500
5000
4500
4000
3500
3000
2500
2000

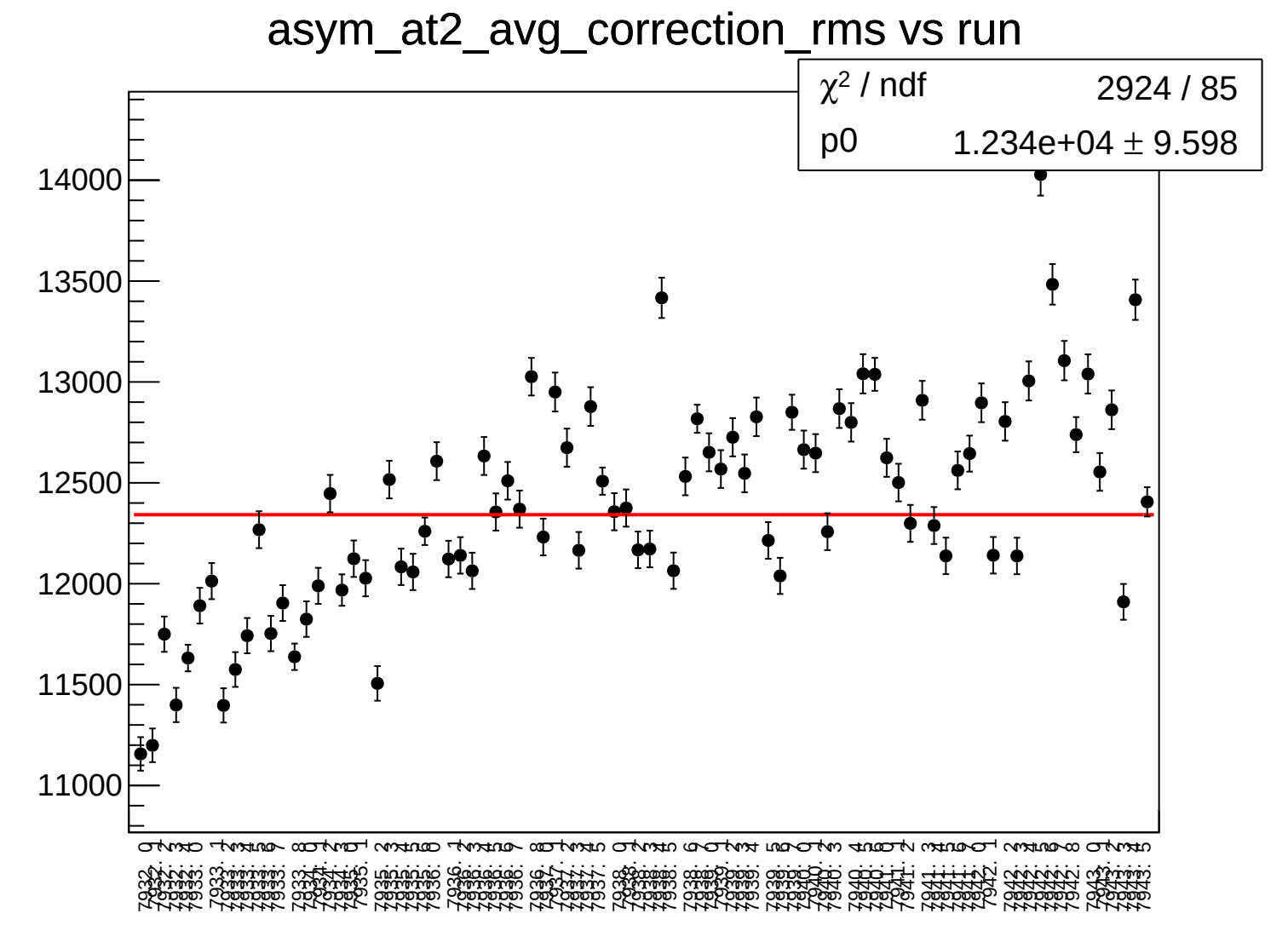

reg_asym_at2_avg_mean vs run
χ² / ndf 87.52 / 85
p0 −1627 ± 1993
pull
Entries 86
Mean 999.3
Std Dev 940.7

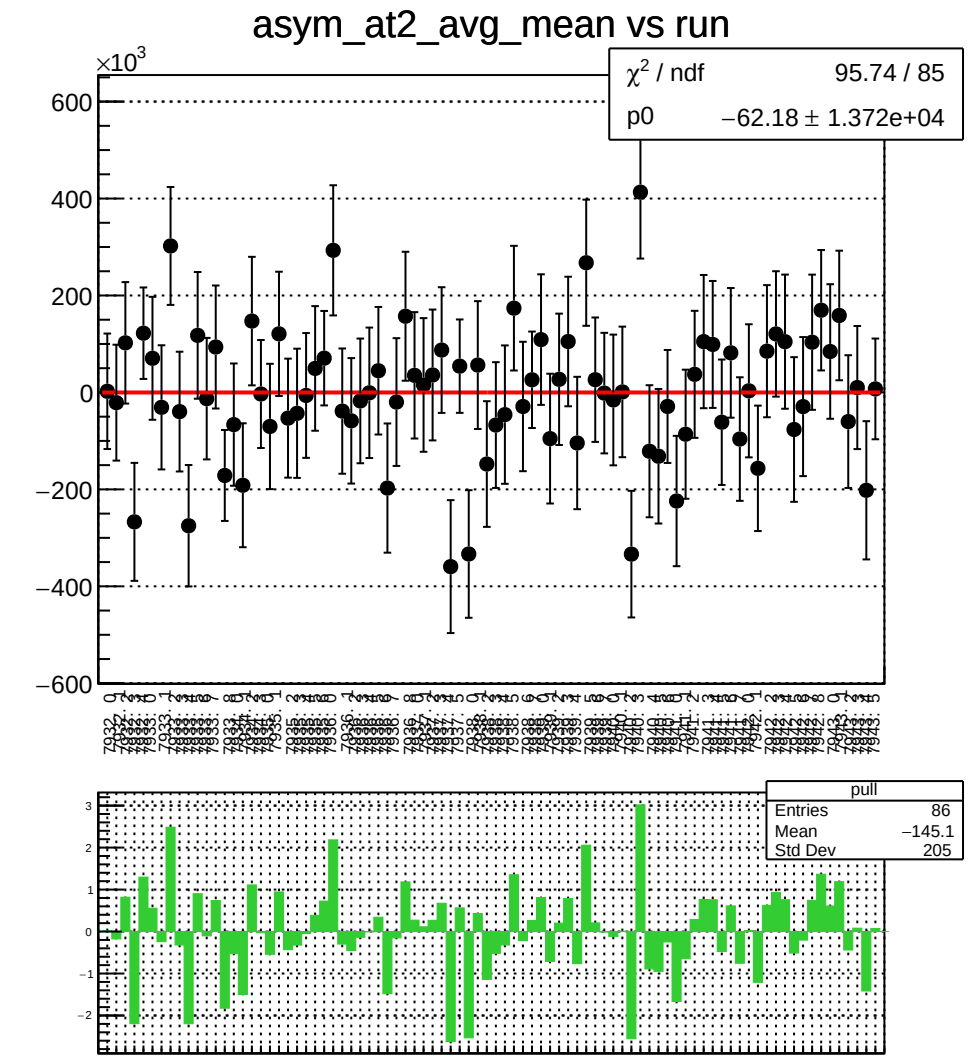

pull1D
Entries 86
Mean 0.002869
Std Dev 1.009

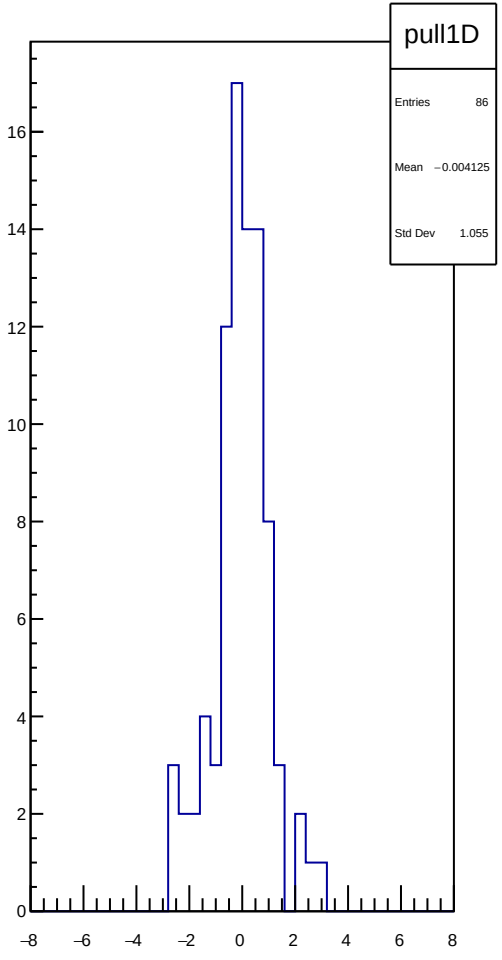

reg_asym_at2_avg_rms vs run
χ^2 / ndf 148.3 / 85
p0 1814 ± 1.409
1900
1880
1860
1840
1820
1800
1780
1760

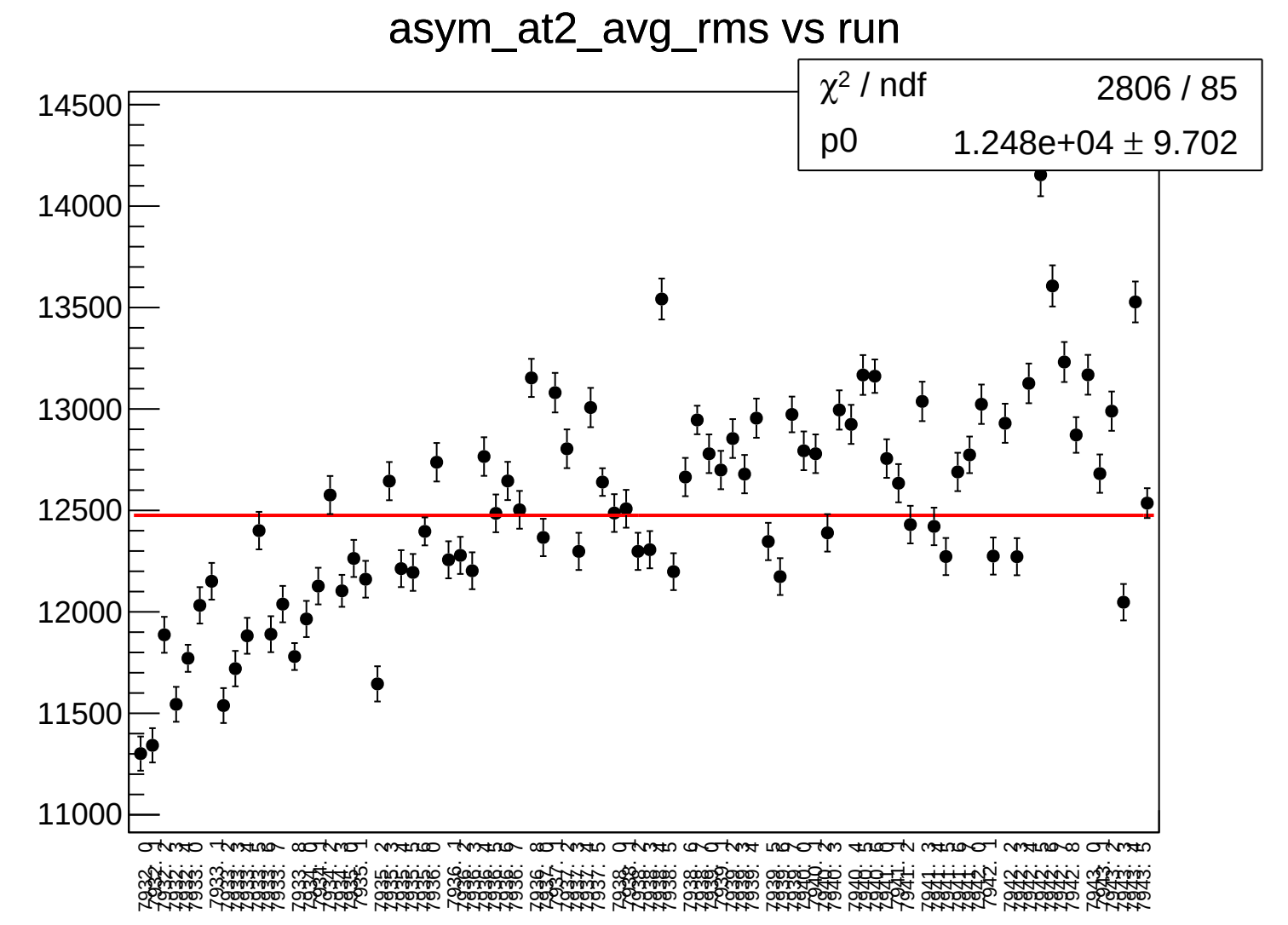

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 98.01 / 85
p0 −1605 ± 1.357e+04
400
200
0
−200
−400
−600
pull
Entries 86
Mean −41.74
Std Dev 102.1
2
1
0
−1
−2
−3

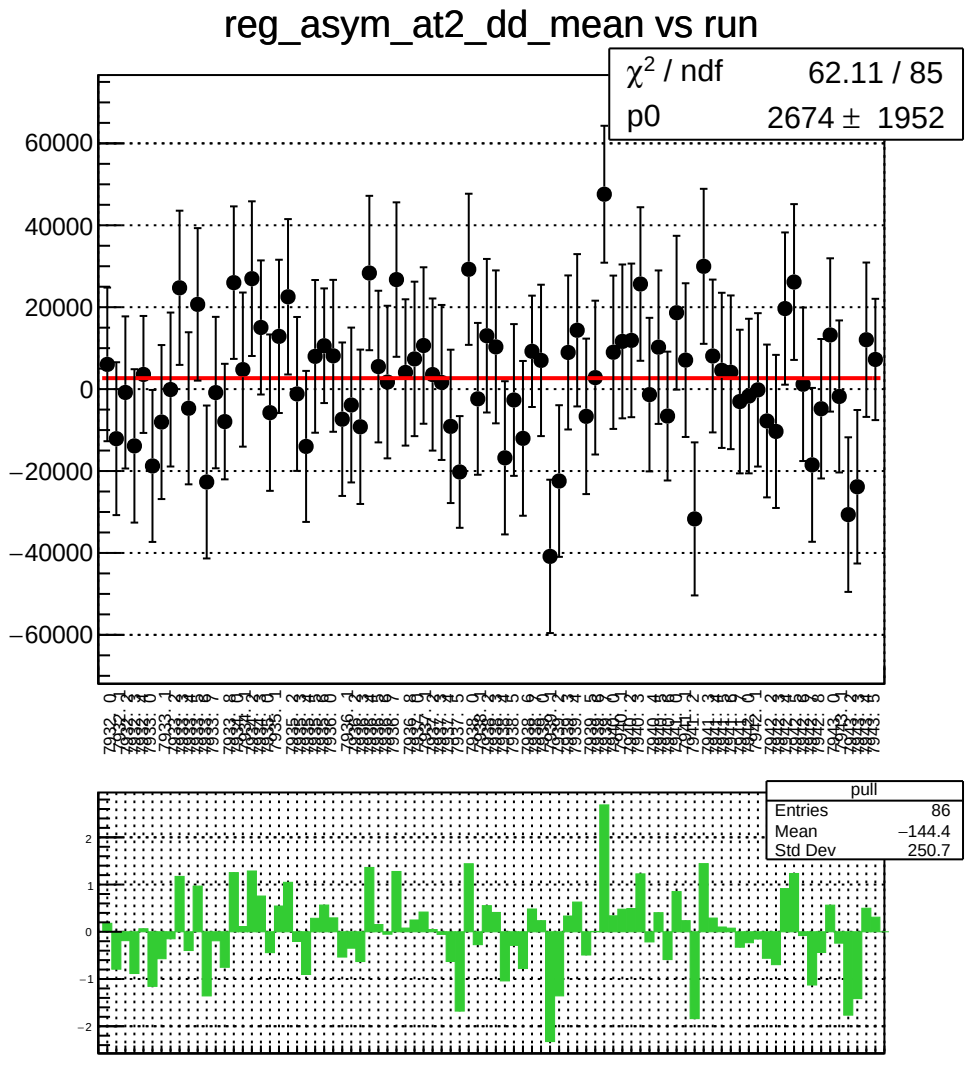

pull1D
Entries 86
Mean 0.004754
Std Dev 1.068
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

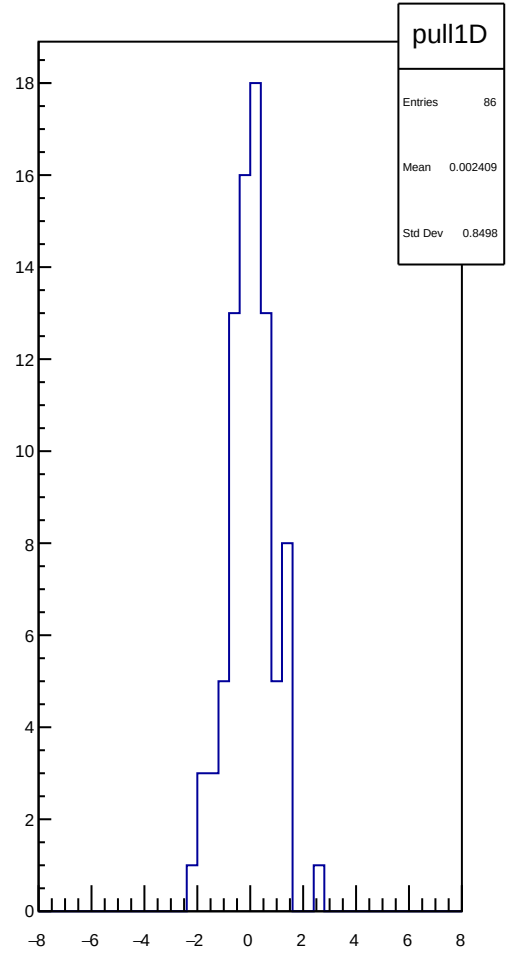

asym_at2_avg_correction_rms vs run
χ² / ndf 2924 / 85
p0 1.234e+04 ± 9.598
14000
13500
13000
12500
12000
11500
11000

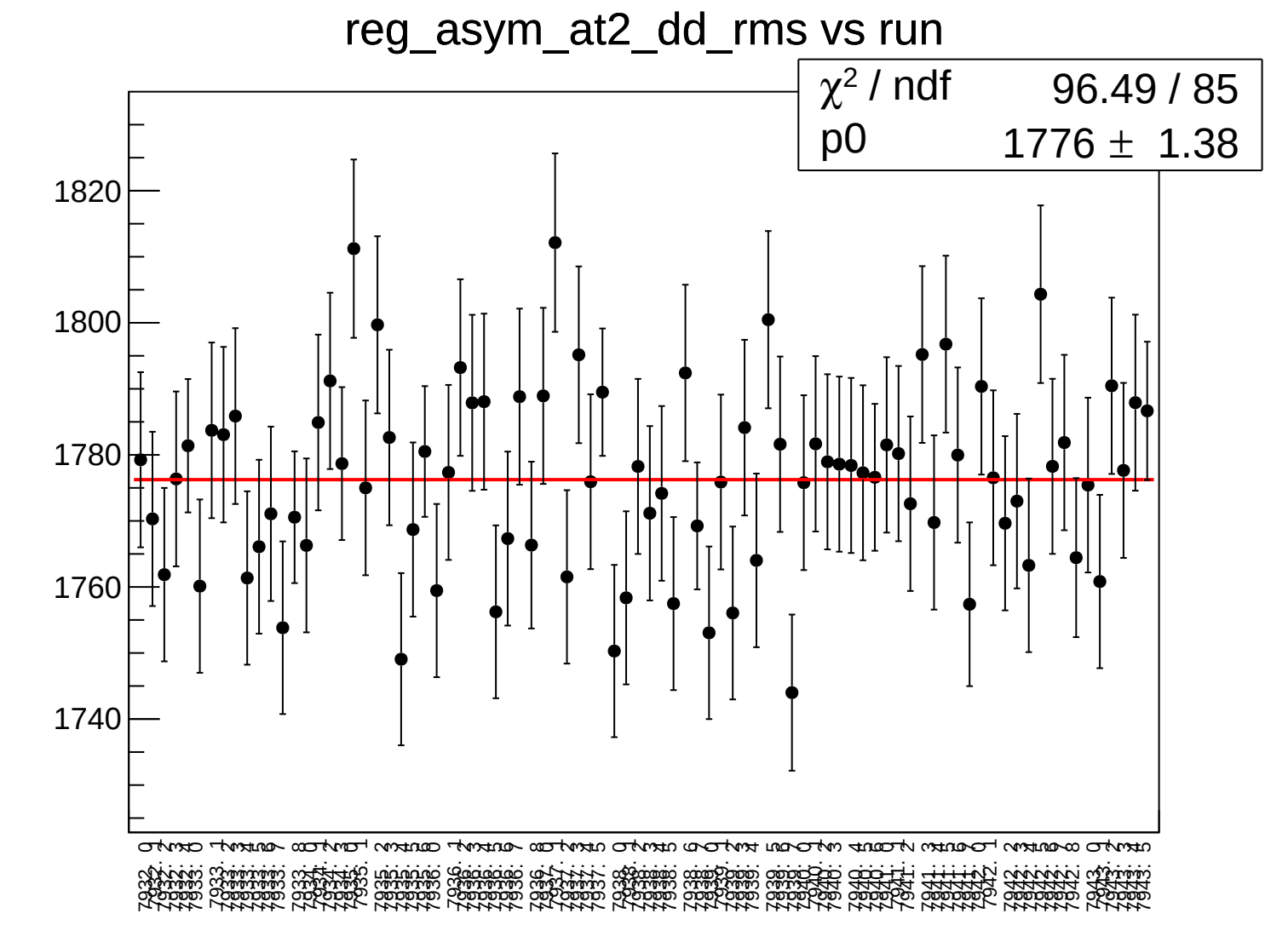

asym_at2_avg_mean vs run
×10^3
χ² / ndf 95.74 / 85
p0 −62.18 ± 1.372e+04
pull
Entries 86
Mean −145.1
Std Dev 205

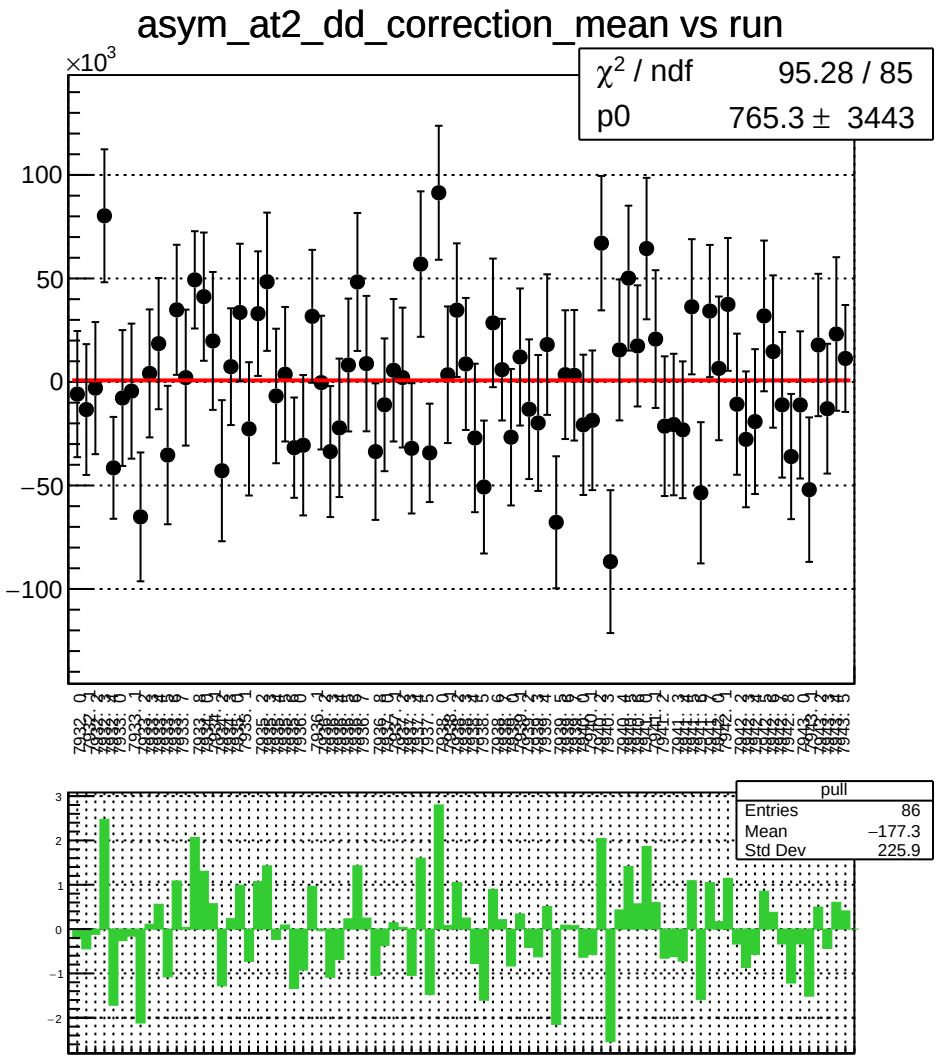

pull1D
Entries 86
Mean −0.004125
Std Dev 1.055

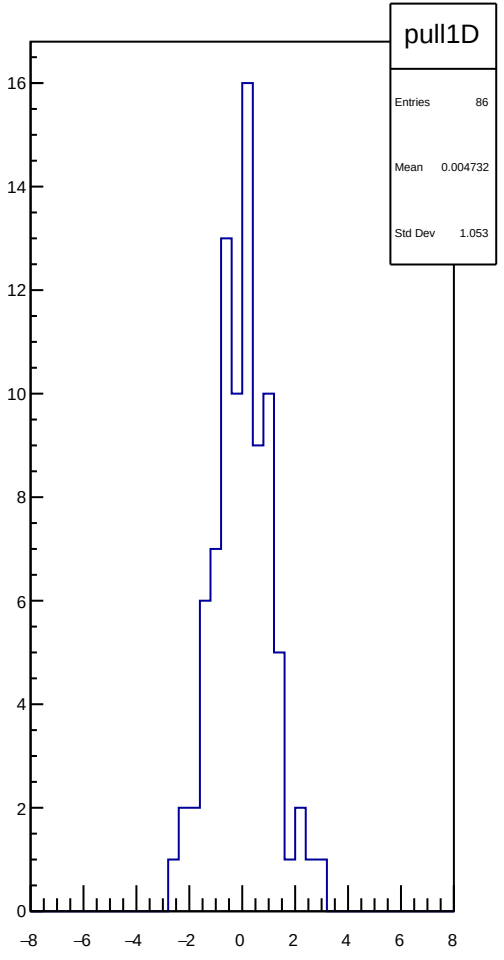

asym_at2_avg_rms vs run
χ² / ndf 2806 / 85
p0 1.248e+04 ± 9.702
14500
14000
13500
13000
12500
12000
11500
11000

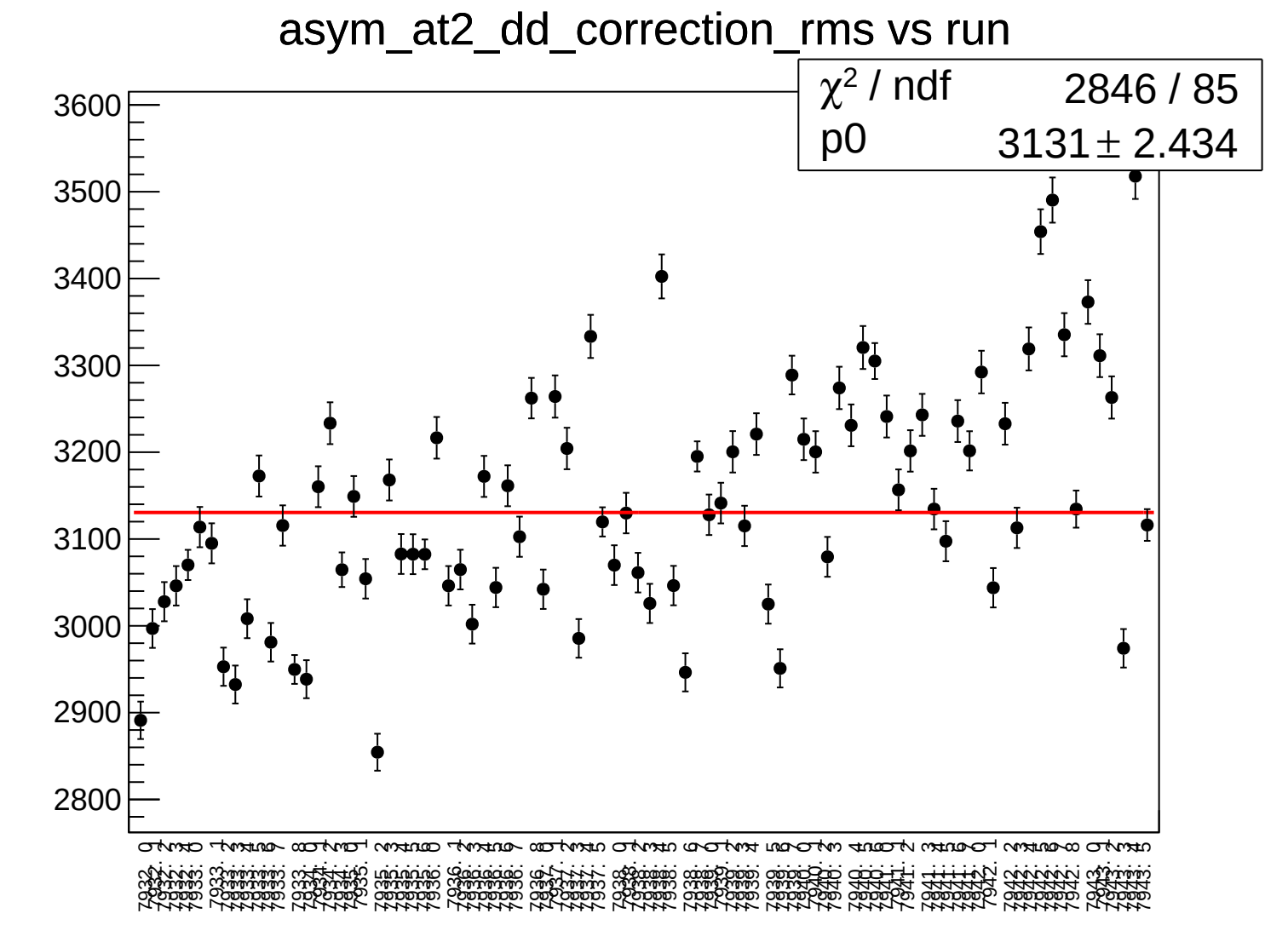

reg_asym_at2_dd_mean vs run
χ² / ndf 62.11 / 85
p0 2674 ± 1952
pull
Entries 86
Mean −144.4
Std Dev 250.7

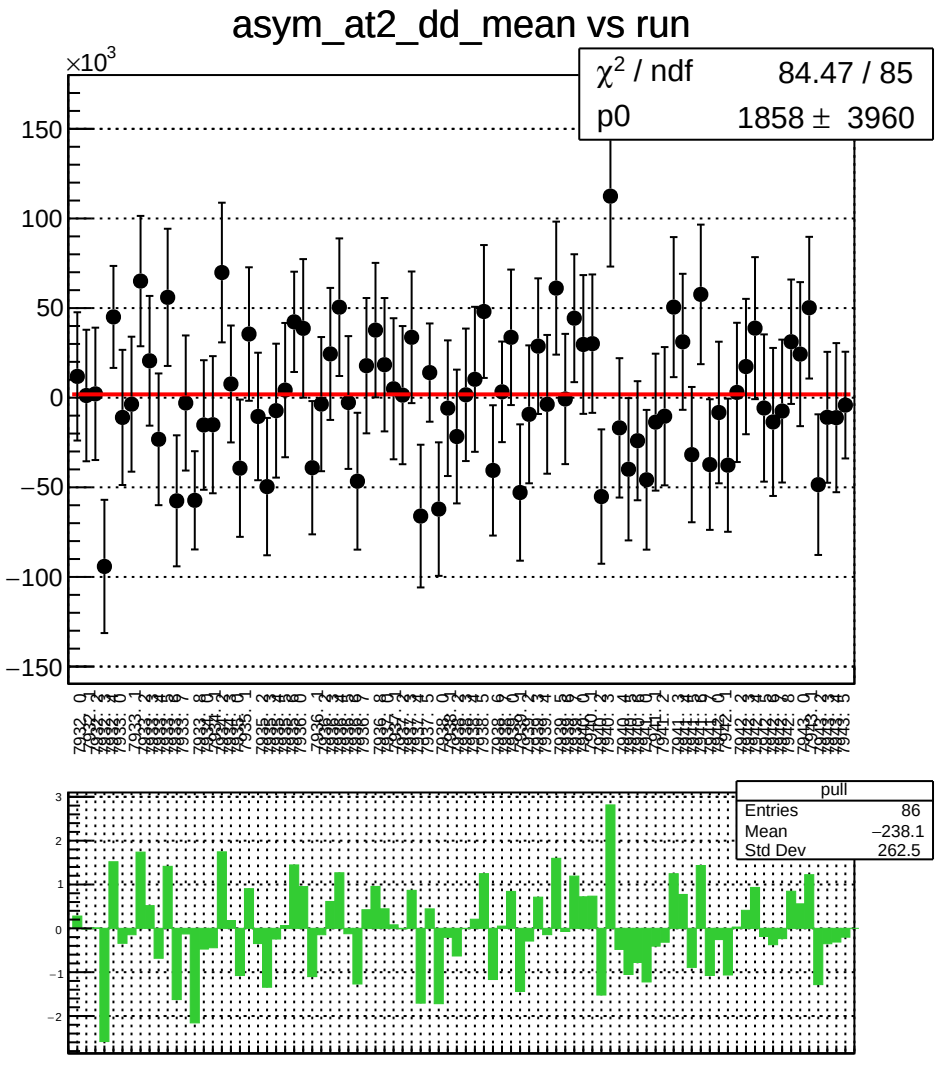

pull1D
Entries 86
Mean 0.002409
Std Dev 0.8498

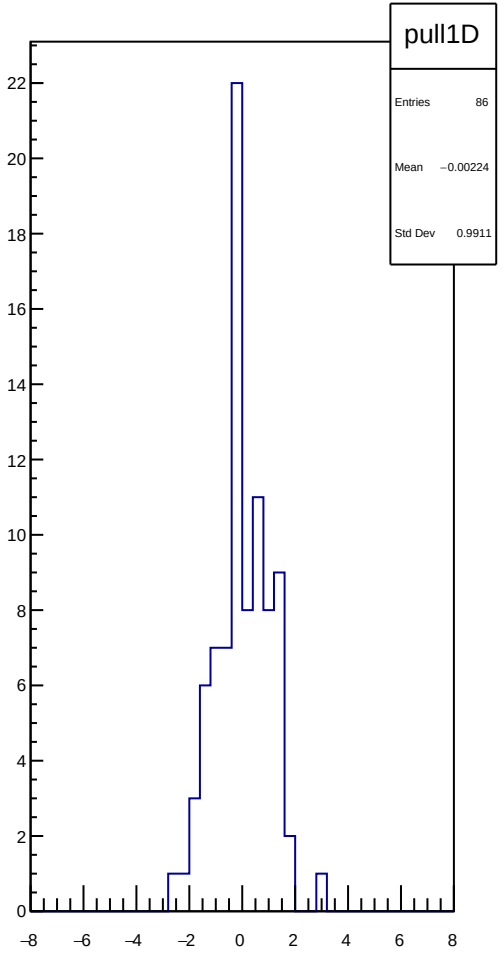

reg_asym_at2_dd_rms vs run
χ² / ndf 96.49 / 85
p0 1776 ± 1.38
1820
1800
1780
1760
1740

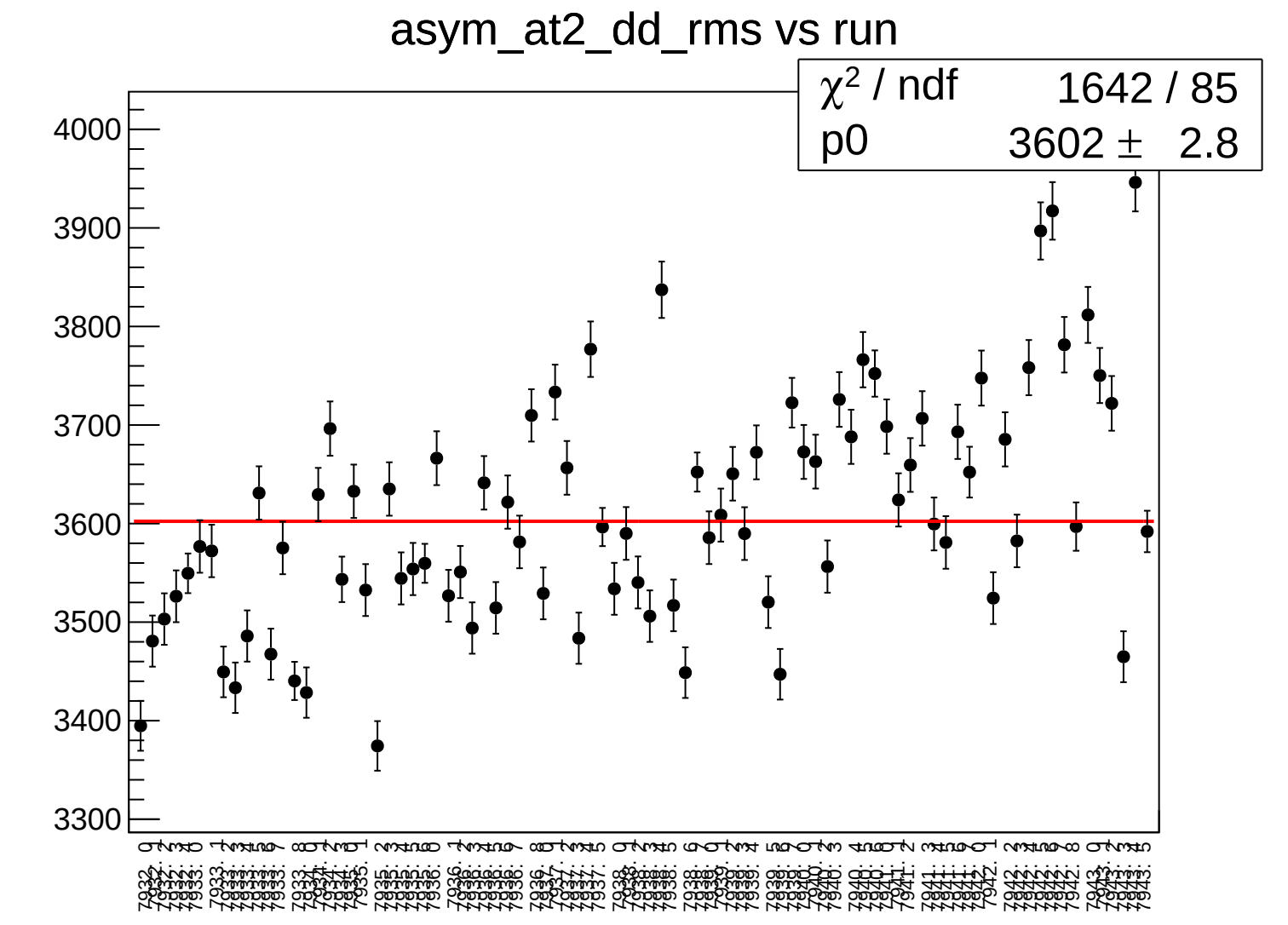

asym_at2_dd_correction_mean vs run
χ² / ndf 95.28 / 85
p0 765.3 ± 3443
pull
Entries 86
Mean −177.3
Std Dev 225.9

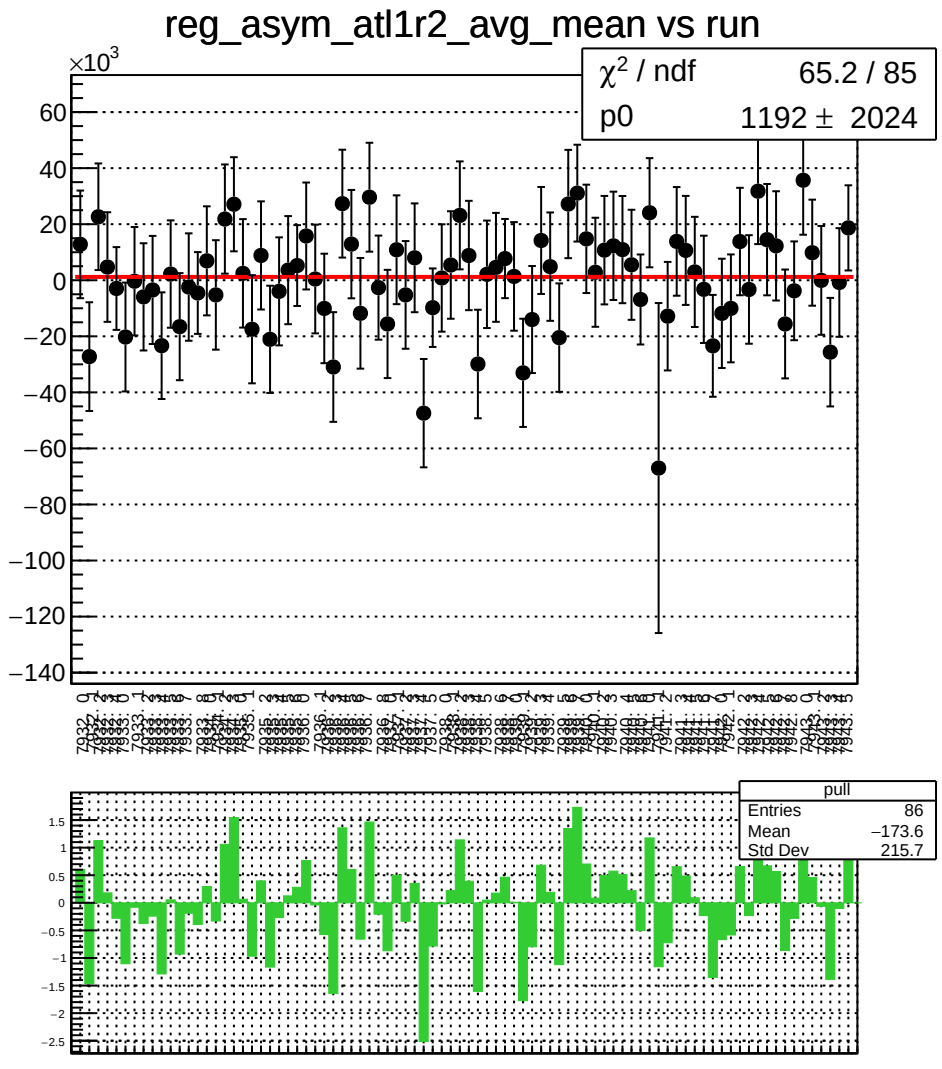

pull1D
Entries 86
Mean 0.004732
Std Dev 1.053

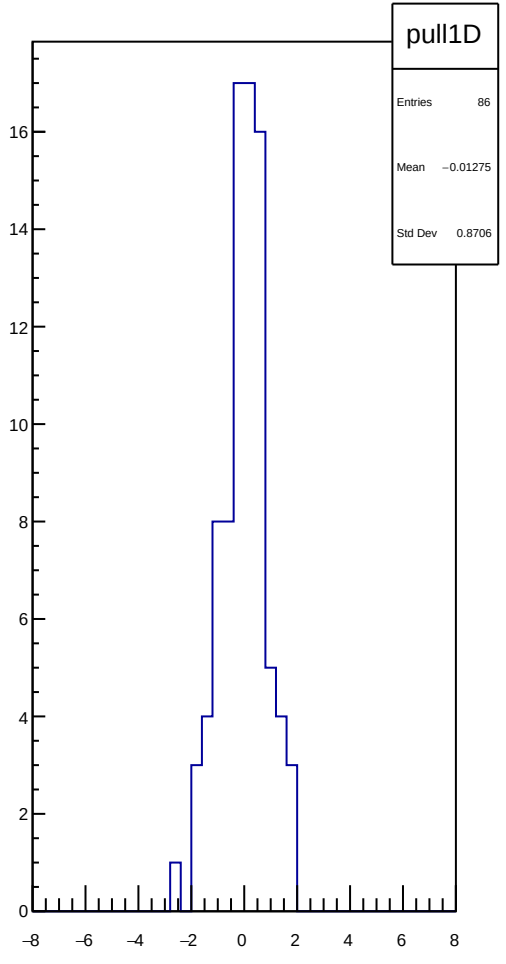

asym_at2_dd_correction_rms vs run
χ² / ndf 2846 / 85
p0 3131 ± 2.434
3600
3500
3400
3300
3200
3100
3000
2900
2800

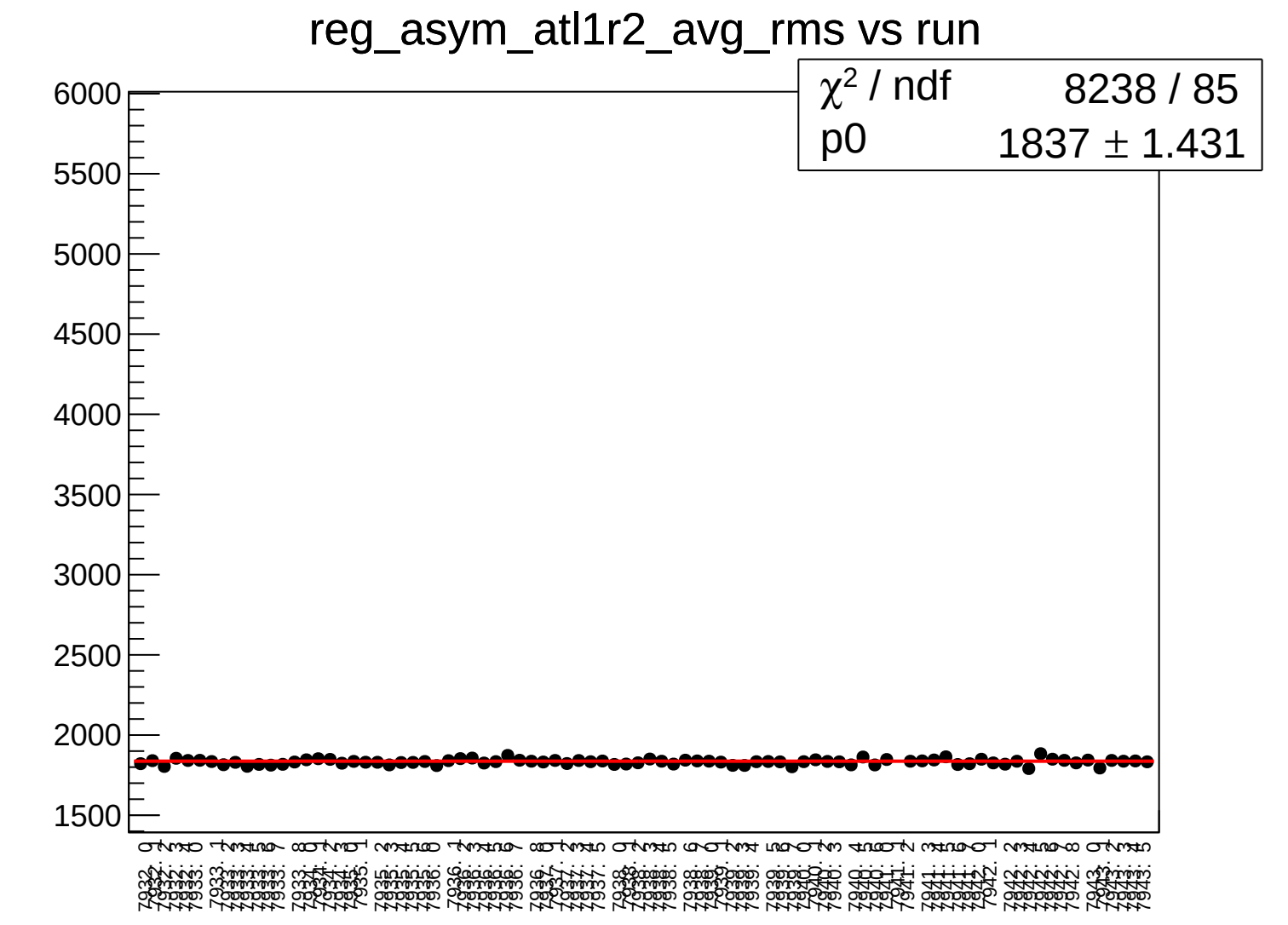

asym_at2_dd_mean vs run
×10^3
χ² / ndf 84.47 / 85
p0 1858 ± 3960
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −238.1
Std Dev 262.5
3
2
1
0
−1
−2

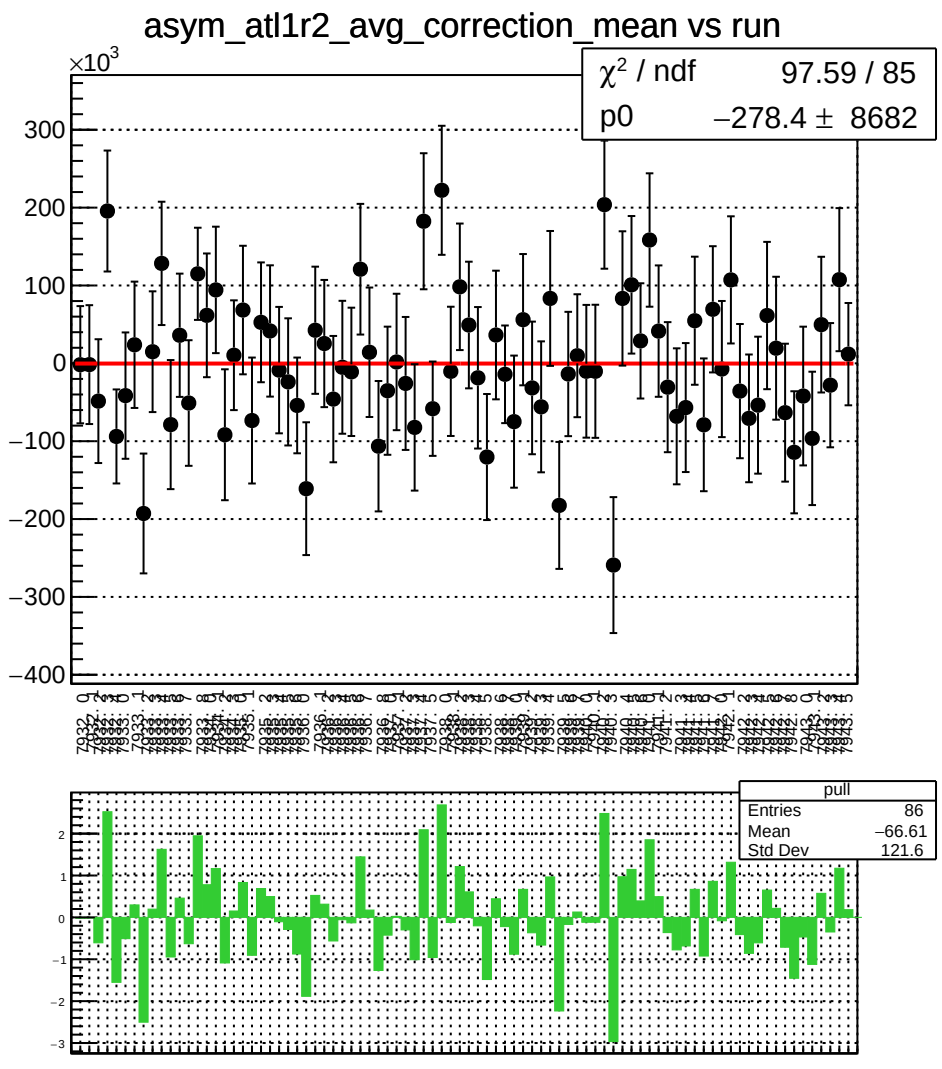

pull1D
Entries 86
Mean −0.00224
Std Dev 0.9911
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

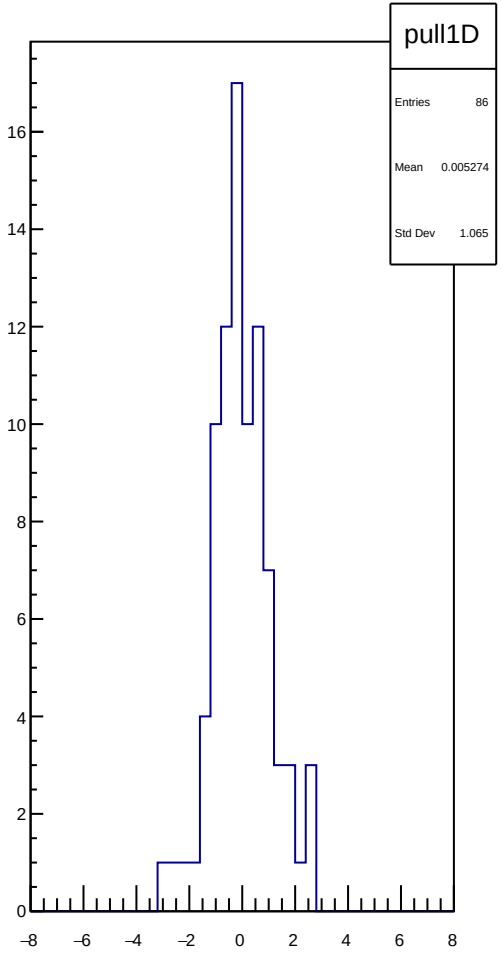

asym_at2_dd_rms vs run
χ² / ndf 1642 / 85
p0 3602 ± 2.8
4000
3900
3800
3700
3600
3500
3400
3300

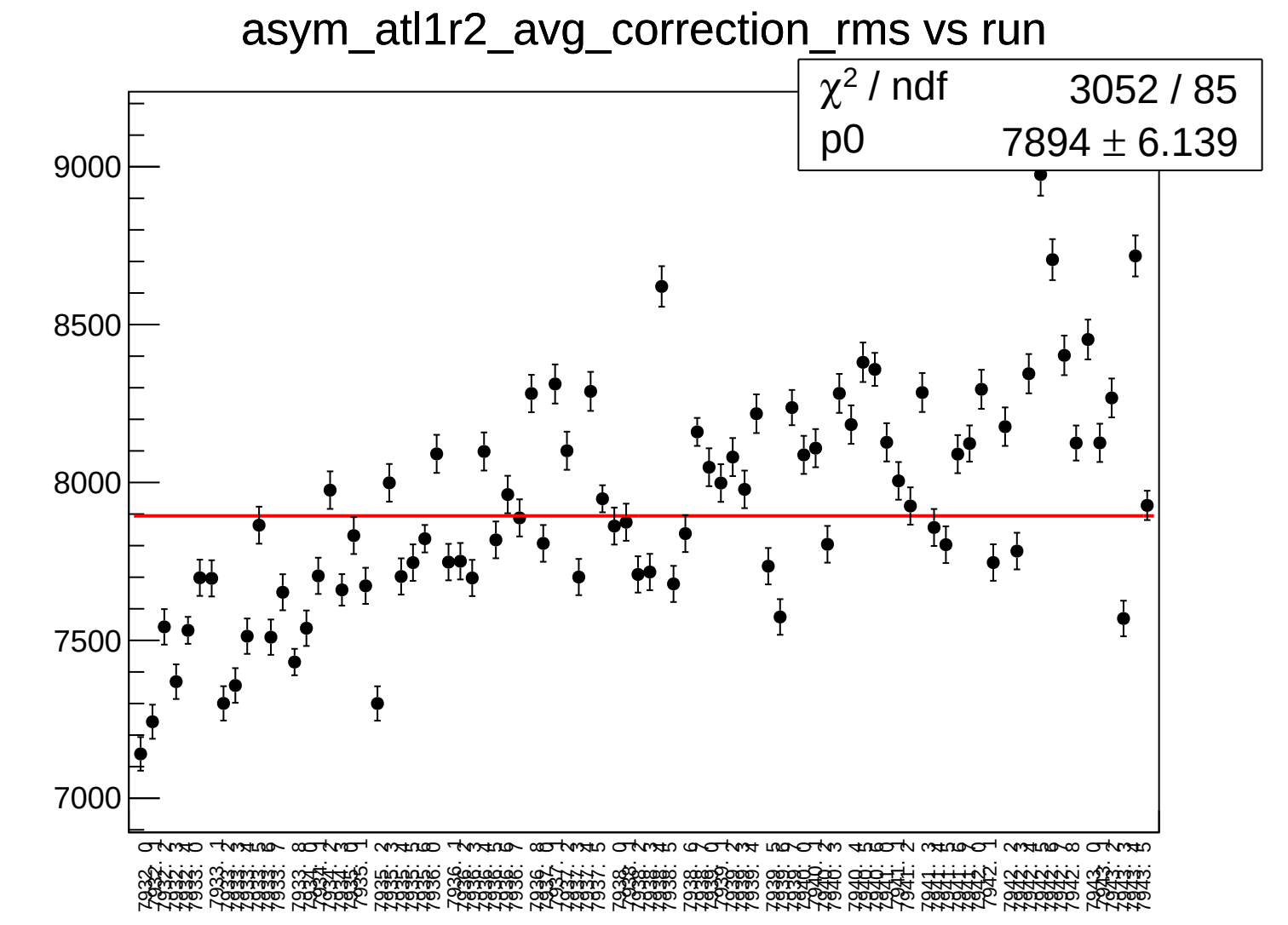

reg_asym_atl1r2_avg_mean vs run
×10^3
χ^2 / ndf 65.2 / 85
p0 1192 ± 2024
pull
Entries 86
Mean −173.6
Std Dev 215.7

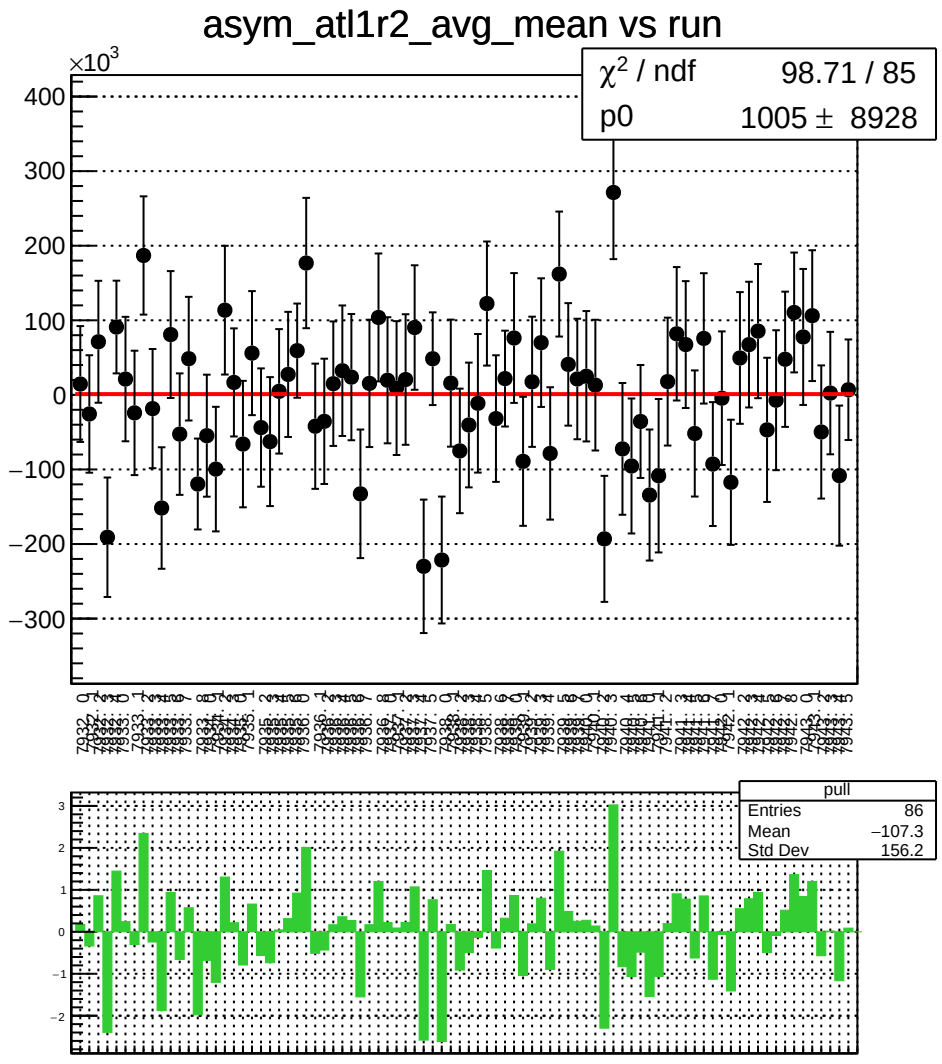

pull1D
Entries 86
Mean −0.01275
Std Dev 0.8706

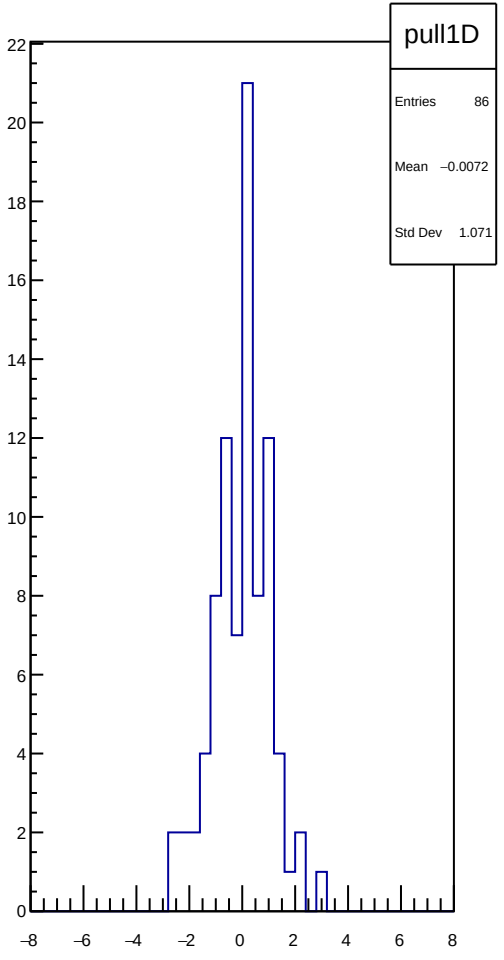

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 8238 / 85
p0 1837 ± 1.431
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

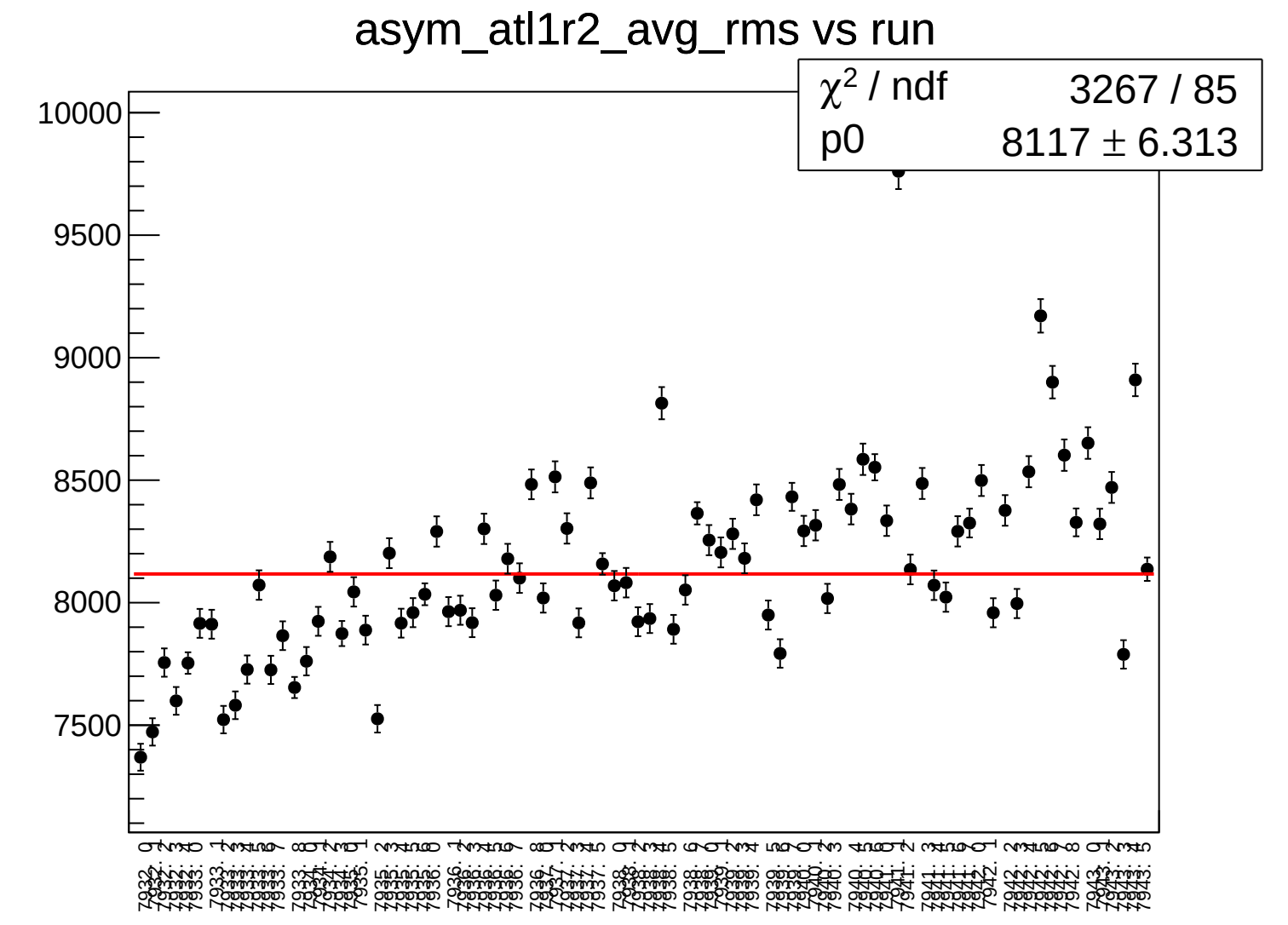

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 97.59 / 85
p0 −278.4 ± 8682
pull
Entries 86
Mean −66.61
Std Dev 121.6

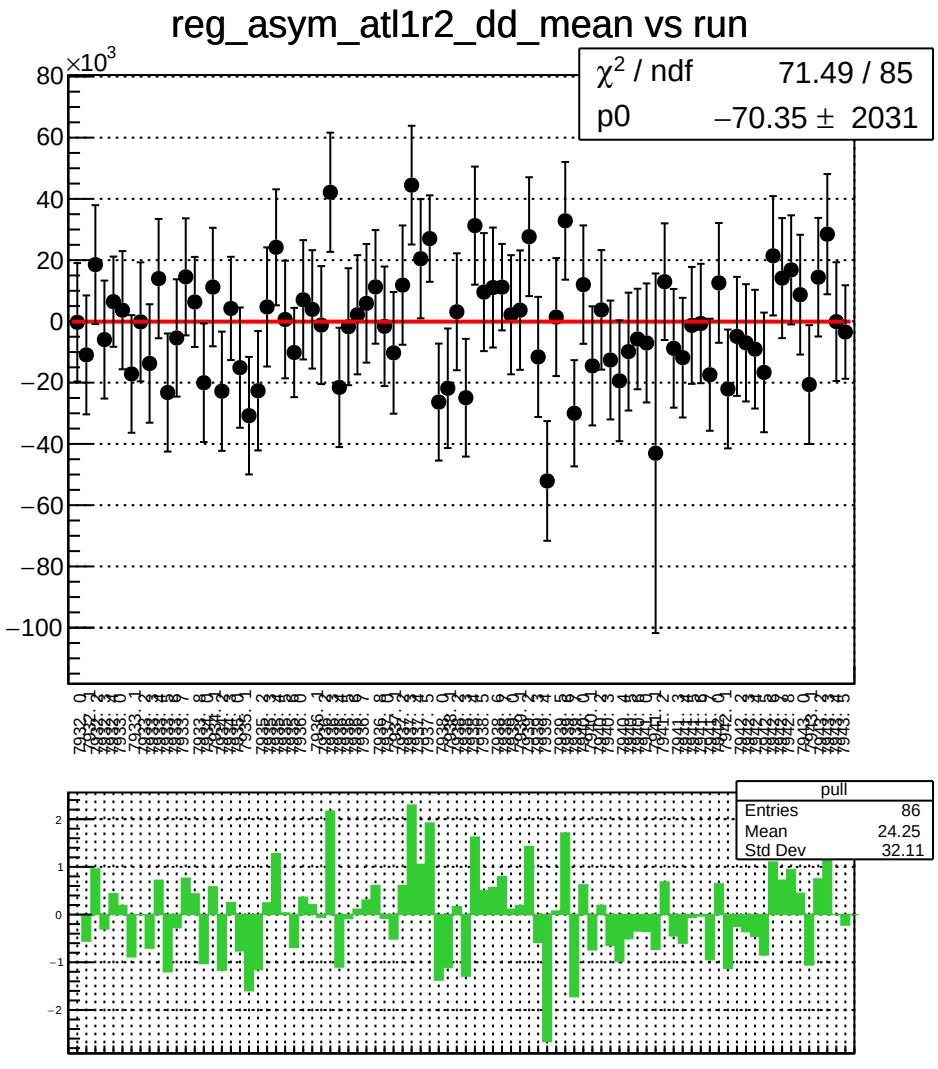

pull1D
Entries 86
Mean 0.005274
Std Dev 1.065

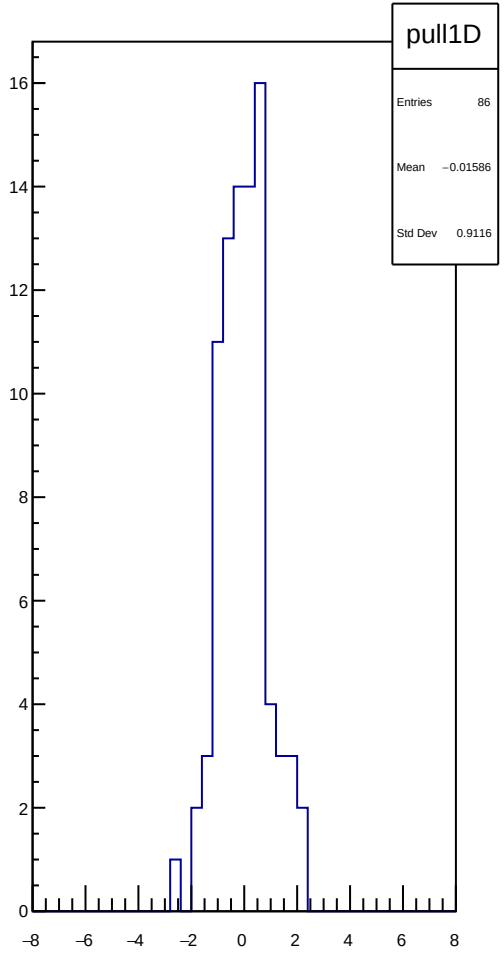

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 3052 / 85
p0 7894 ± 6.139
9000
8500
8000
7500
7000

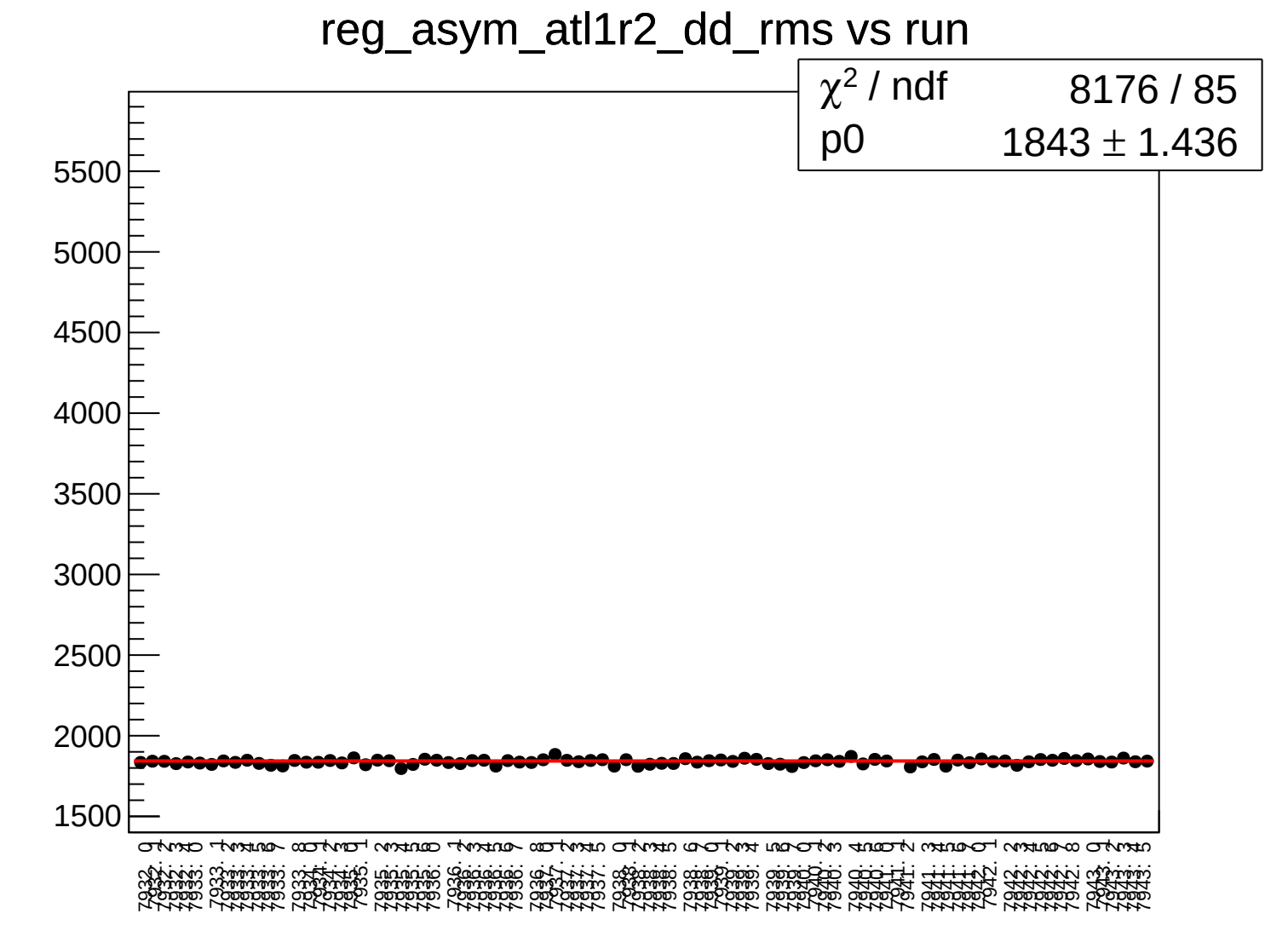

asym_atl1r2_avg_mean vs run
×10^3
χ^2 / ndf 98.71 / 85
p0 1005 ± 8928
pull
Entries 86
Mean −107.3
Std Dev 156.2

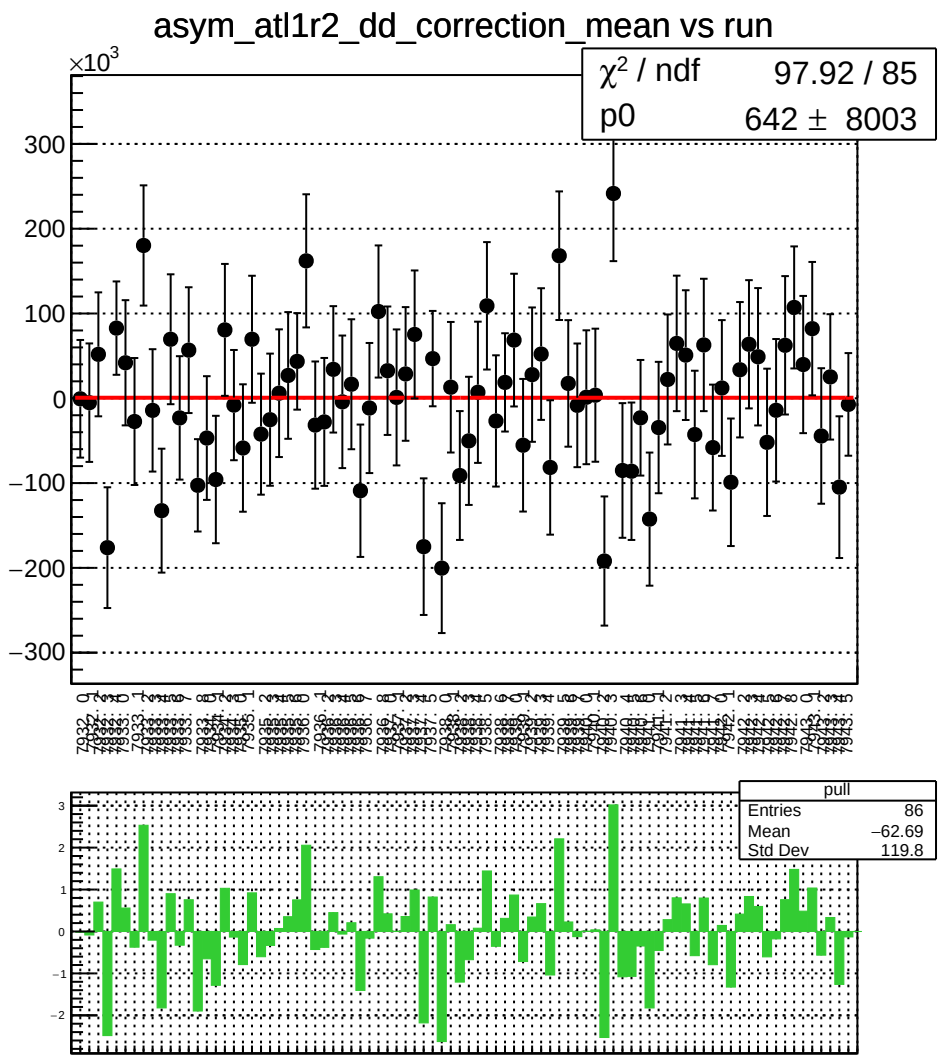

pull1D
Entries 86
Mean −0.0072
Std Dev 1.071

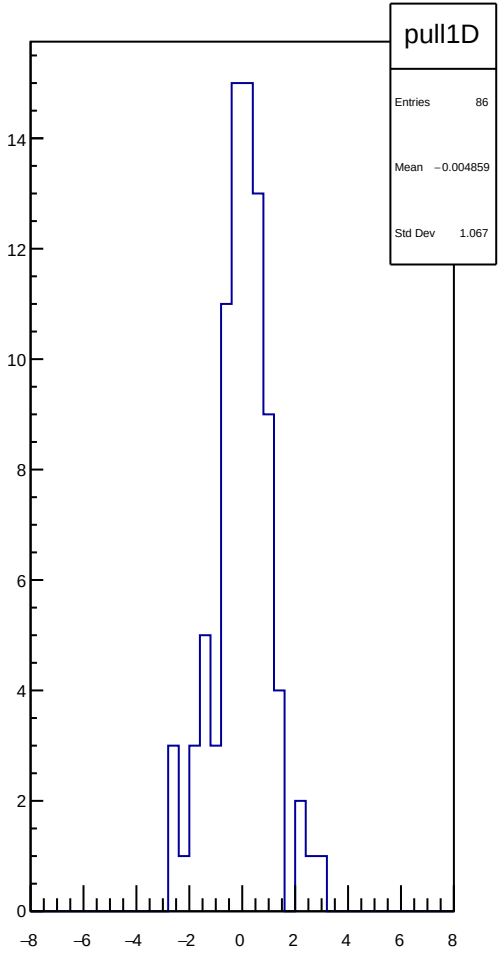

asym_atl1r2_avg_rms vs run
χ^2 / ndf 3267 / 85
p0 8117 ± 6.313
10000
9500
9000
8500
8000
7500

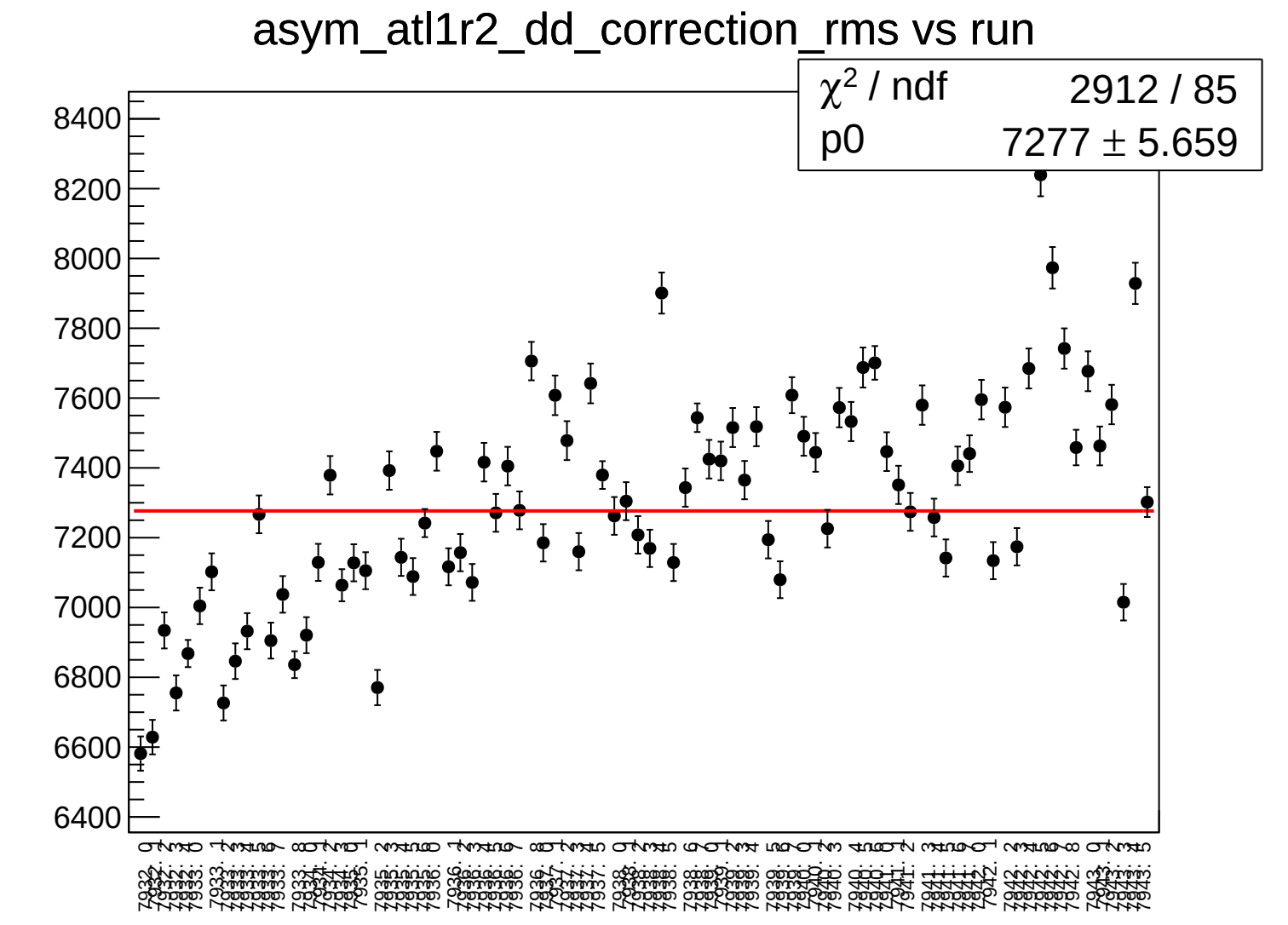

reg_asym_atl1r2_dd_mean vs run
χ² / ndf 71.49 / 85
p0 −70.35 ± 2031
pull
Entries 86
Mean 24.25
Std Dev 32.11

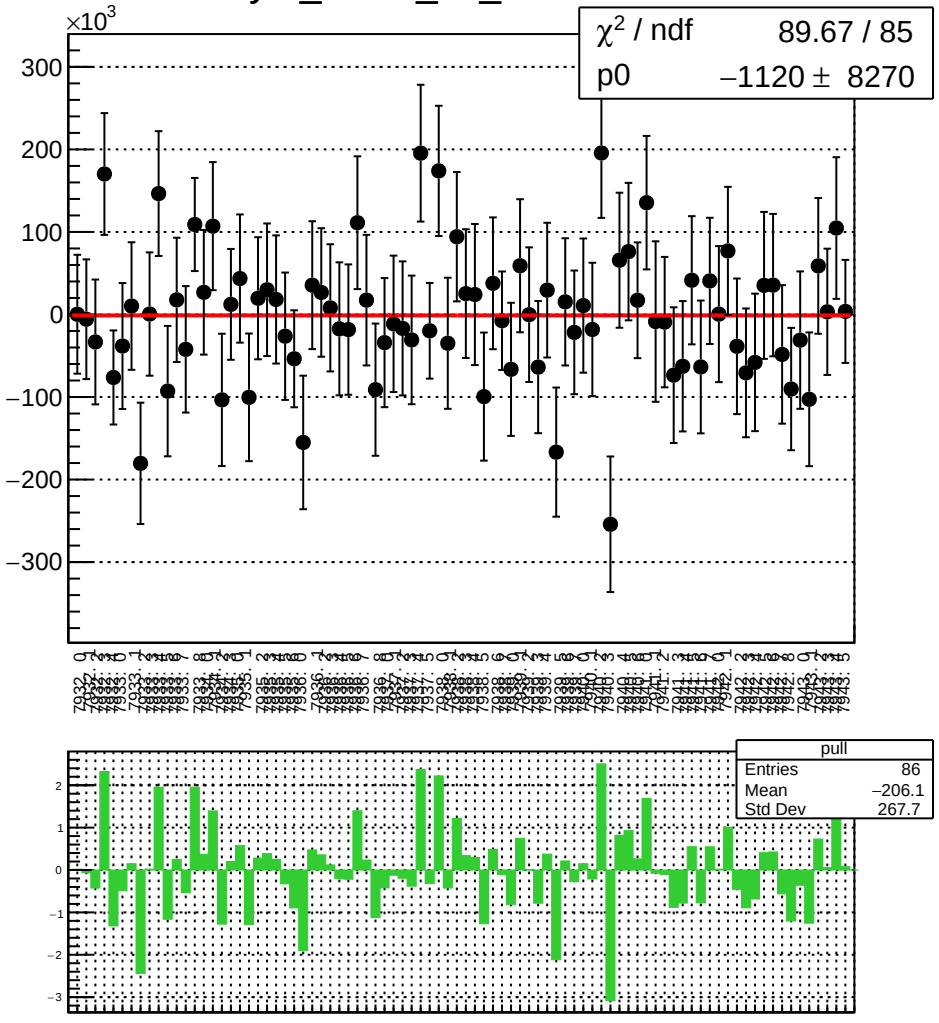

pull1D
Entries 86
Mean −0.01586
Std Dev 0.9116

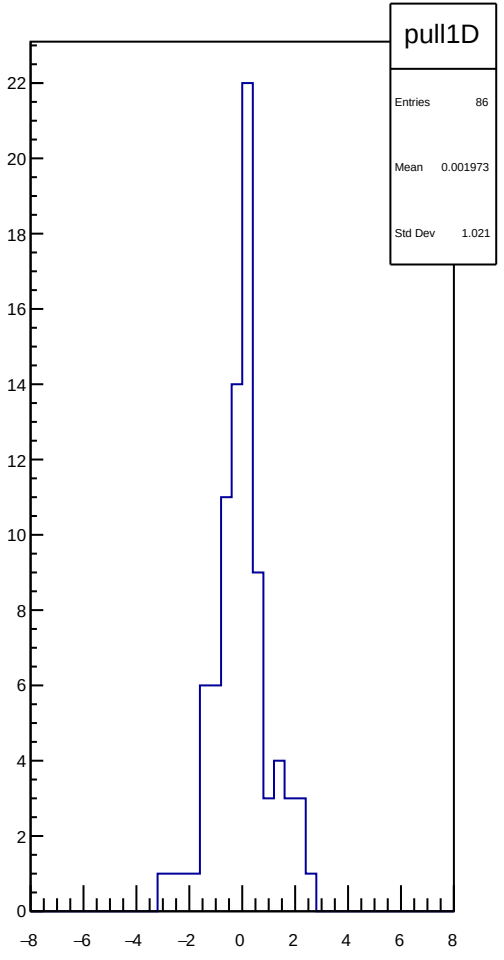

reg_asym_atl1r2_dd_rms vs run
χ^2 / ndf 8176 / 85
p0 1843 ± 1.436
5500
5000
4500
4000
3500
3000
2500
2000
1500

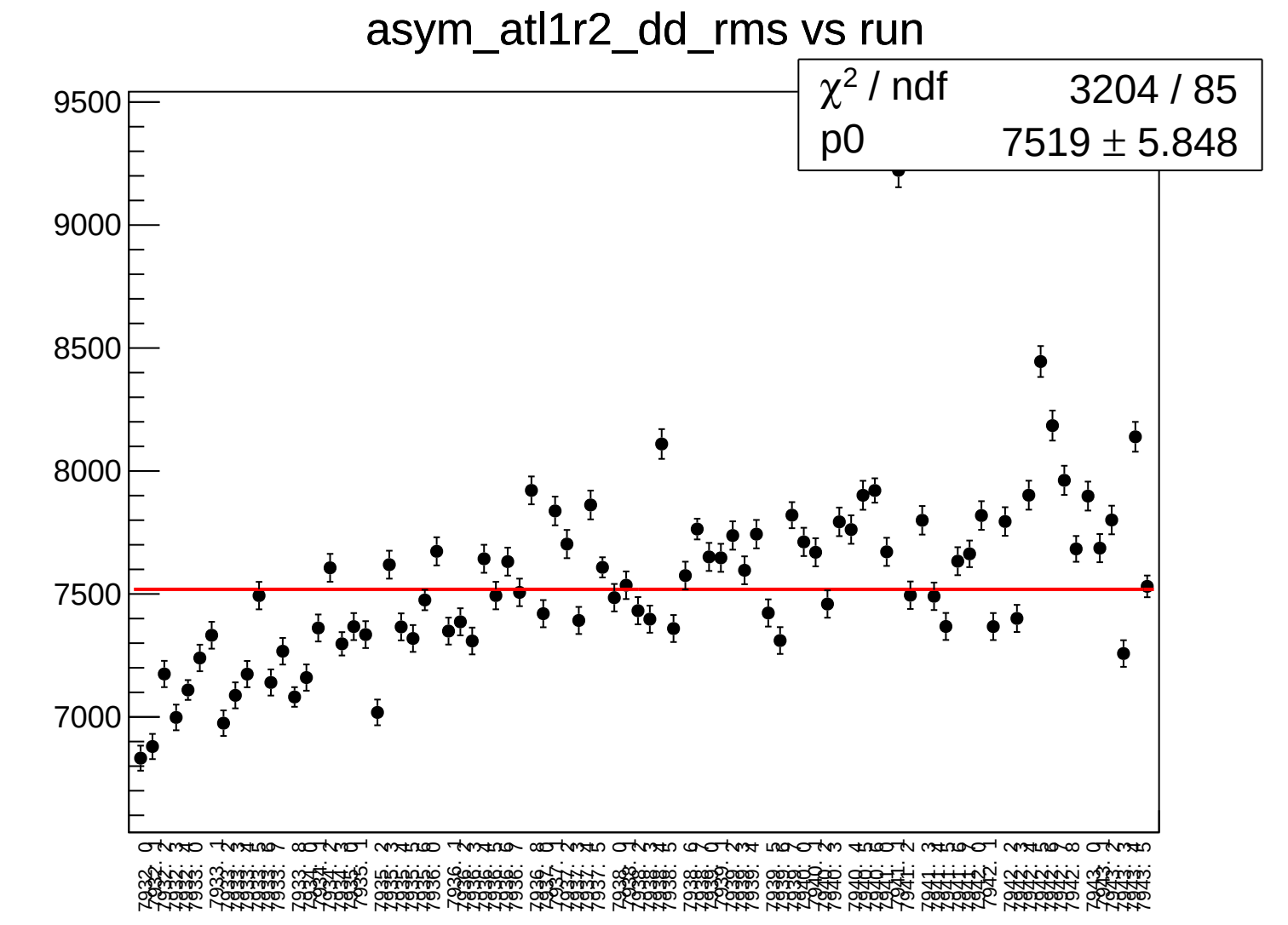

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 97.92 / 85
p0 642 ± 8003
pull
Entries 86
Mean −62.69
Std Dev 119.8

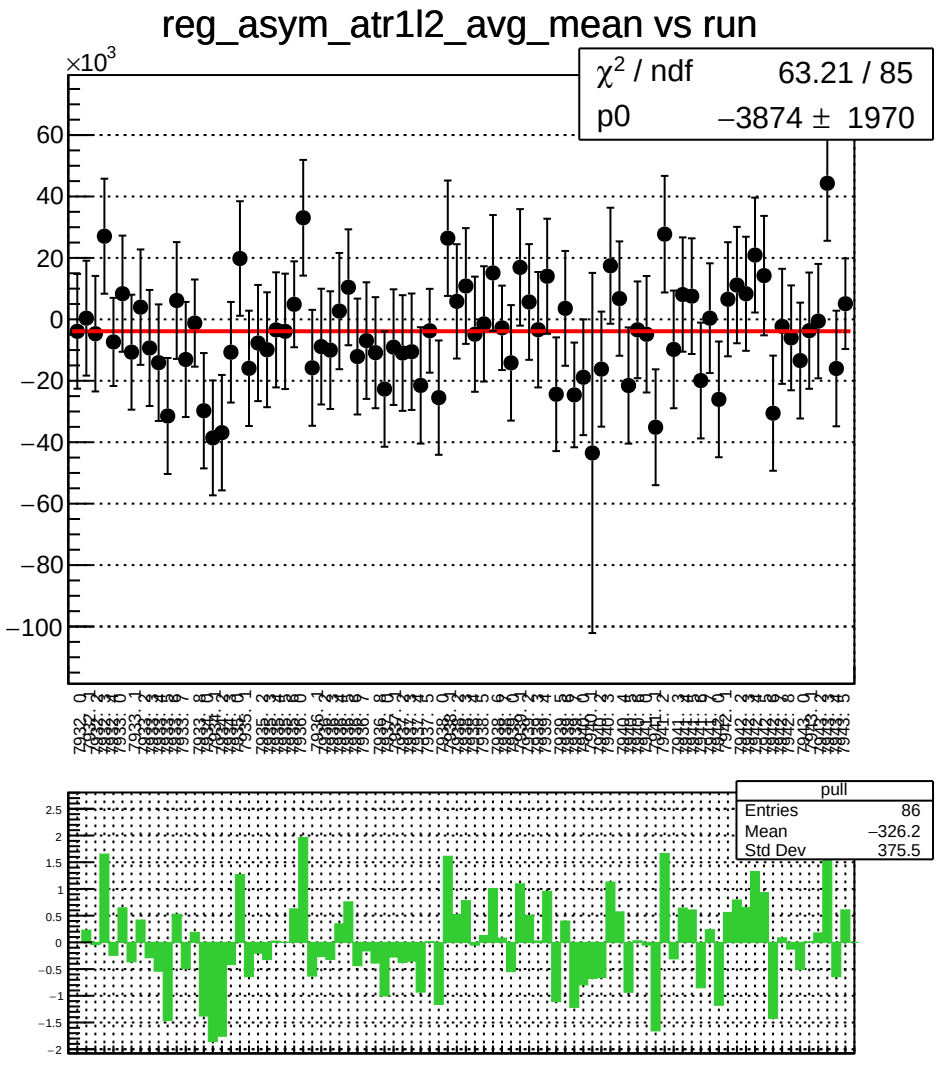

pull1D
Entries 86
Mean −0.004859
Std Dev 1.067

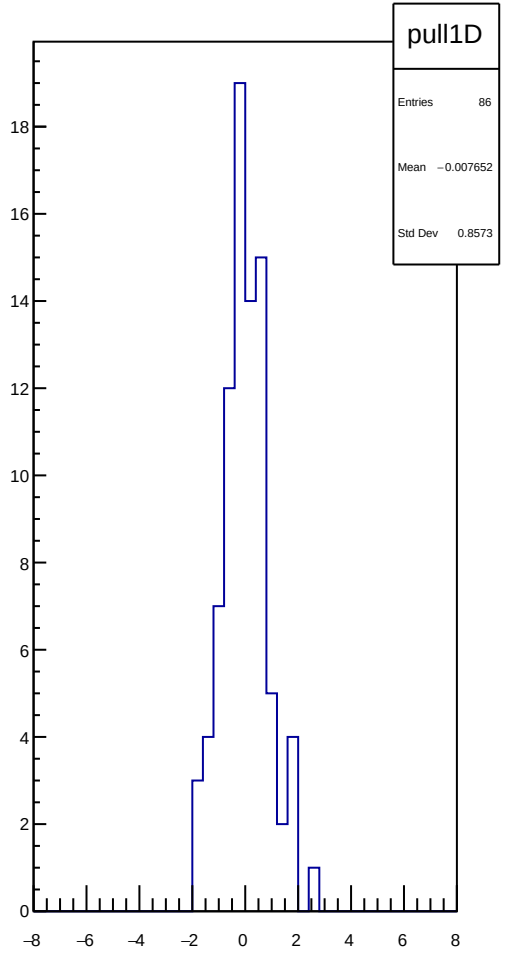

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 2912 / 85
p0 7277 ± 5.659
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400

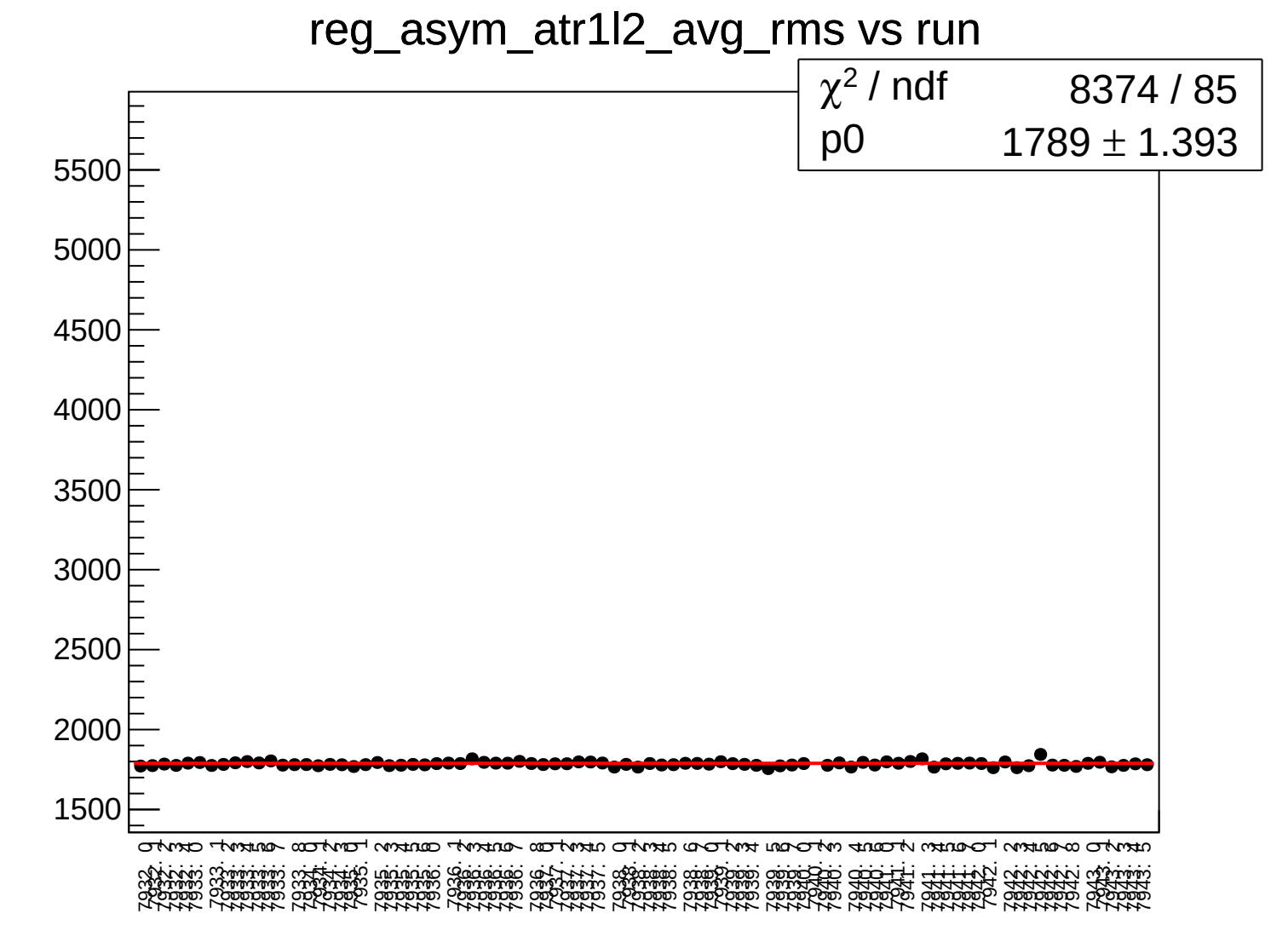

asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 89.67 / 85
p0 −1120 ± 8270
pull
Entries 86
Mean −206.1
Std Dev 267.7

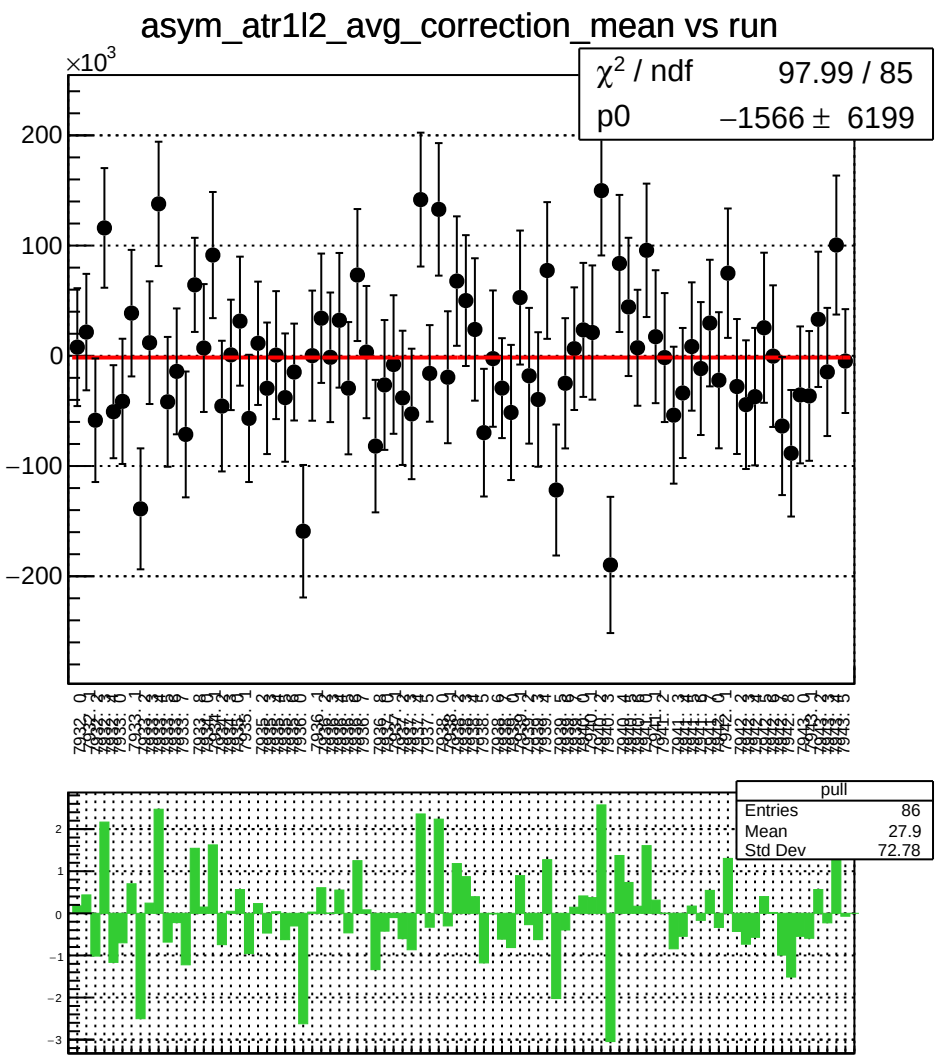

pull1D
Entries 86
Mean 0.001973
Std Dev 1.021

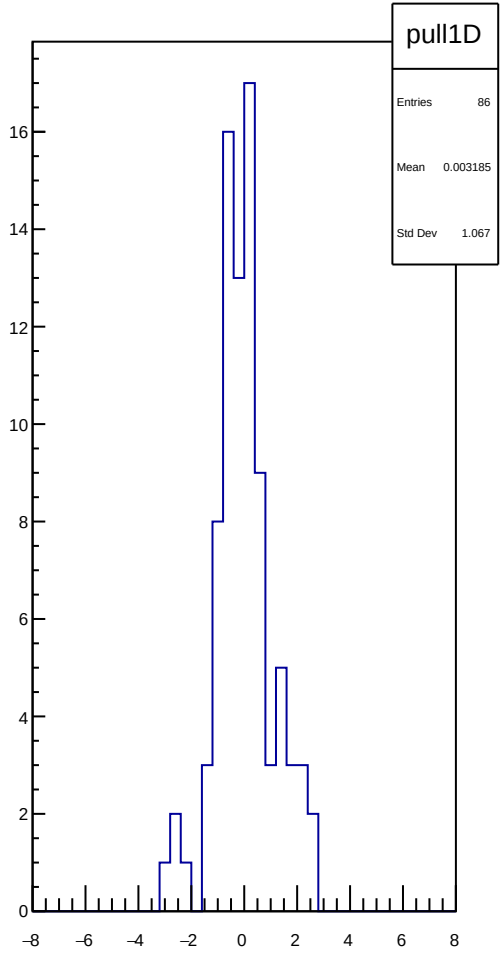

asym_atl1r2_dd_rms vs run
χ^2 / ndf 3204 / 85
p0 7519 ± 5.848
9500
9000
8500
8000
7500
7000

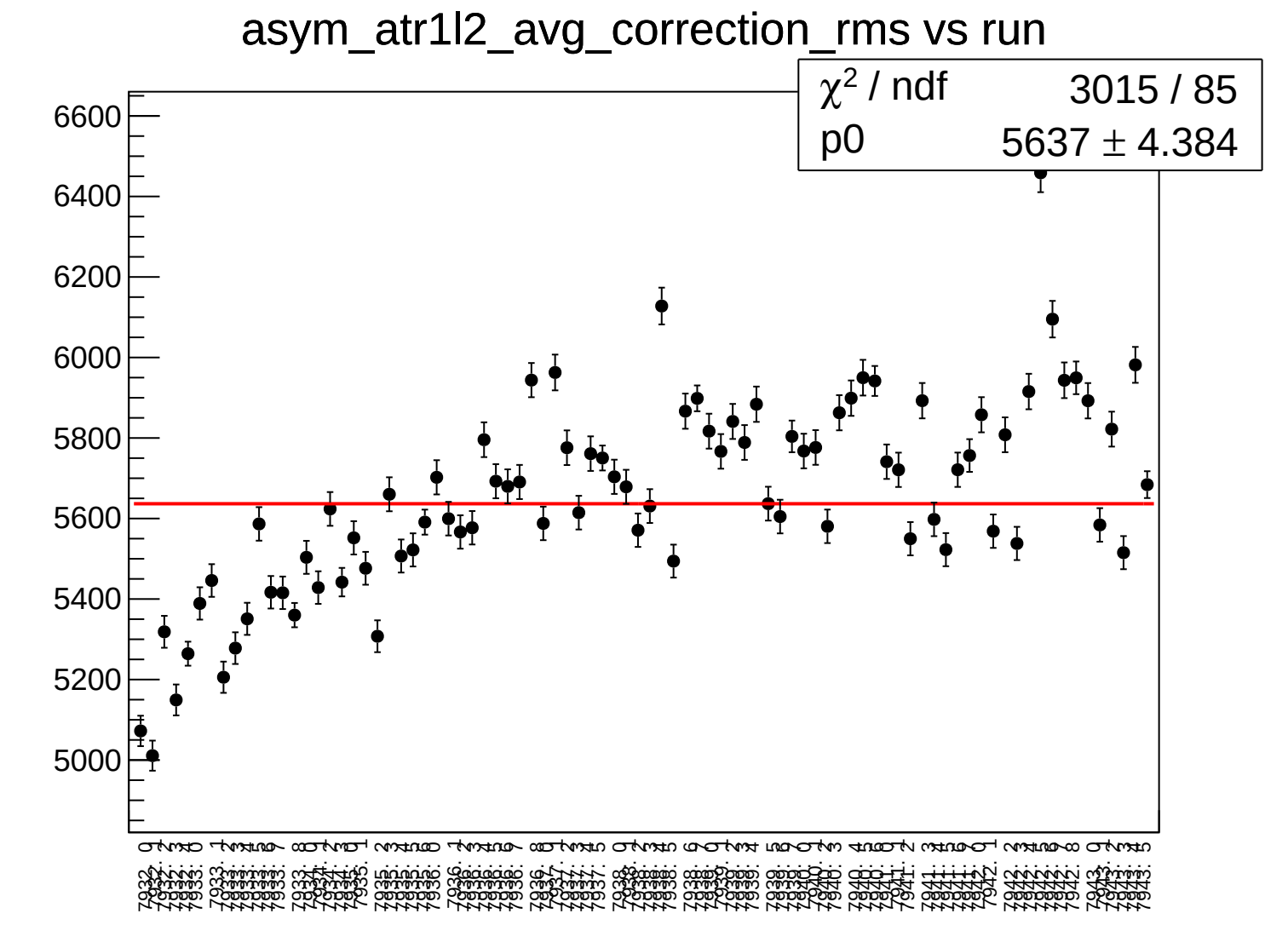

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 63.21 / 85
p0 −3874 ± 1970
×10³
pull
Entries 86
Mean −326.2
Std Dev 375.5

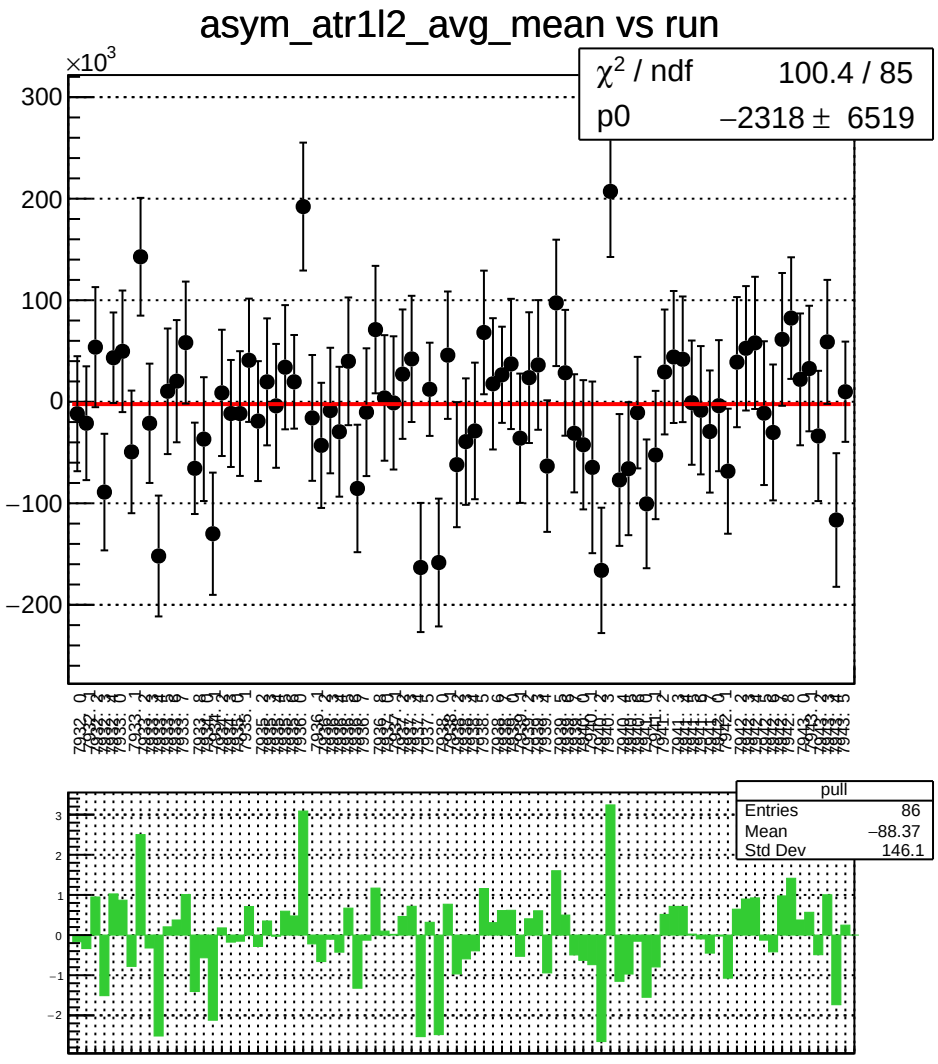

pull1D
Entries 86
Mean −0.007652
Std Dev 0.8573

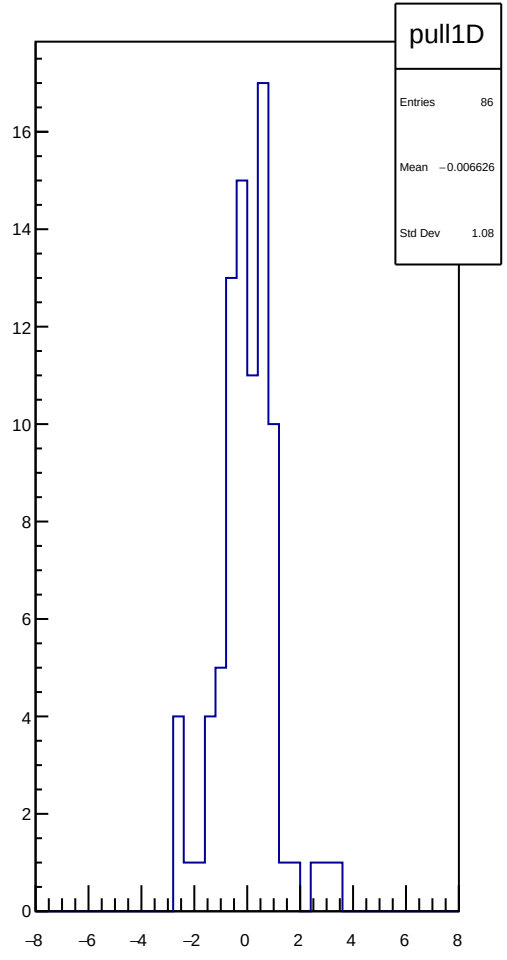

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 8374 / 85
p0 1789 ± 1.393
5500
5000
4500
4000
3500
3000
2500
2000
1500

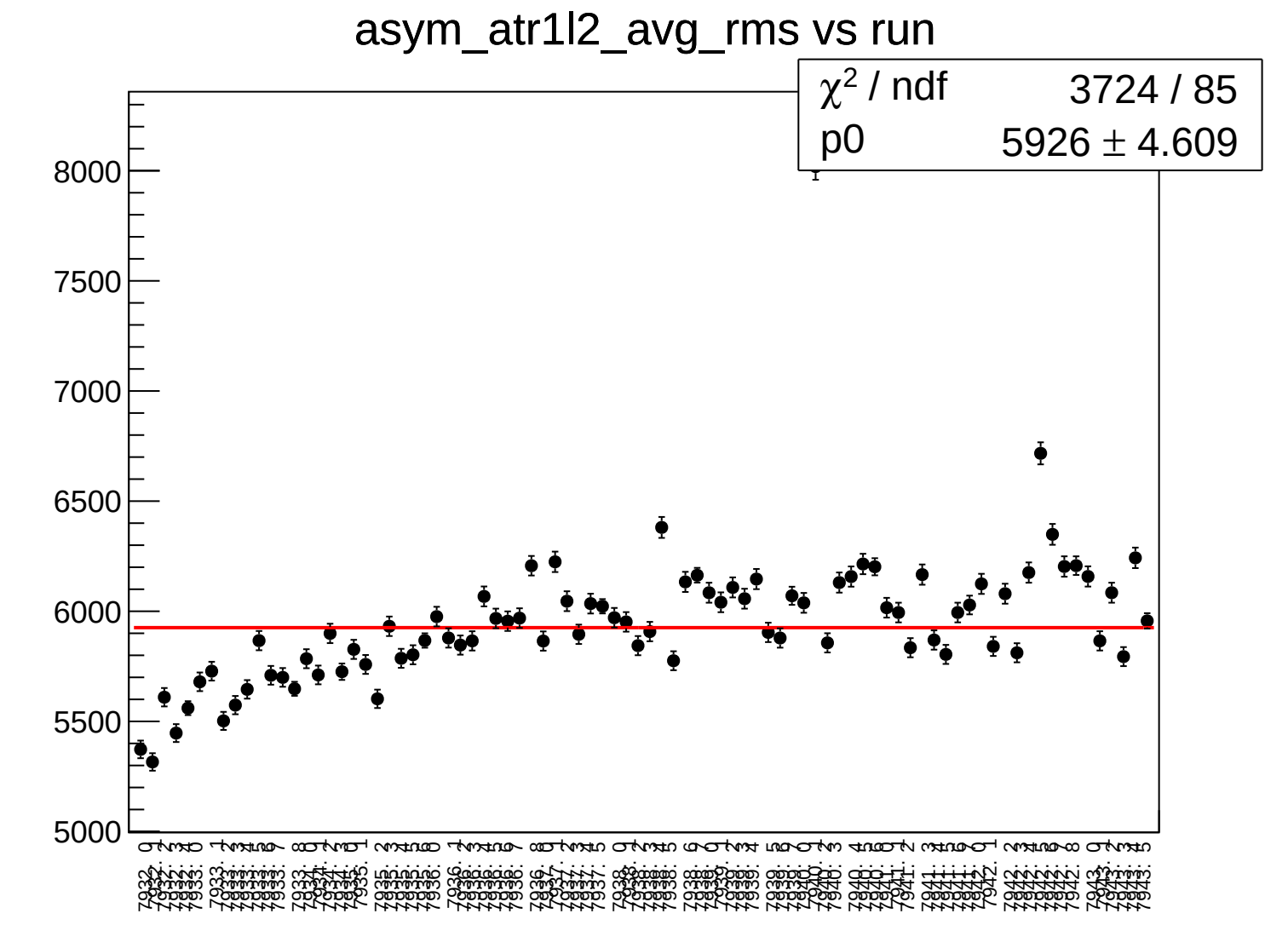

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 97.99 / 85
p0 −1566 ± 6199
200
100
0
−100
−200
pull
Entries 86
Mean 27.9
Std Dev 72.78
2
1
0
−1
−2
−3

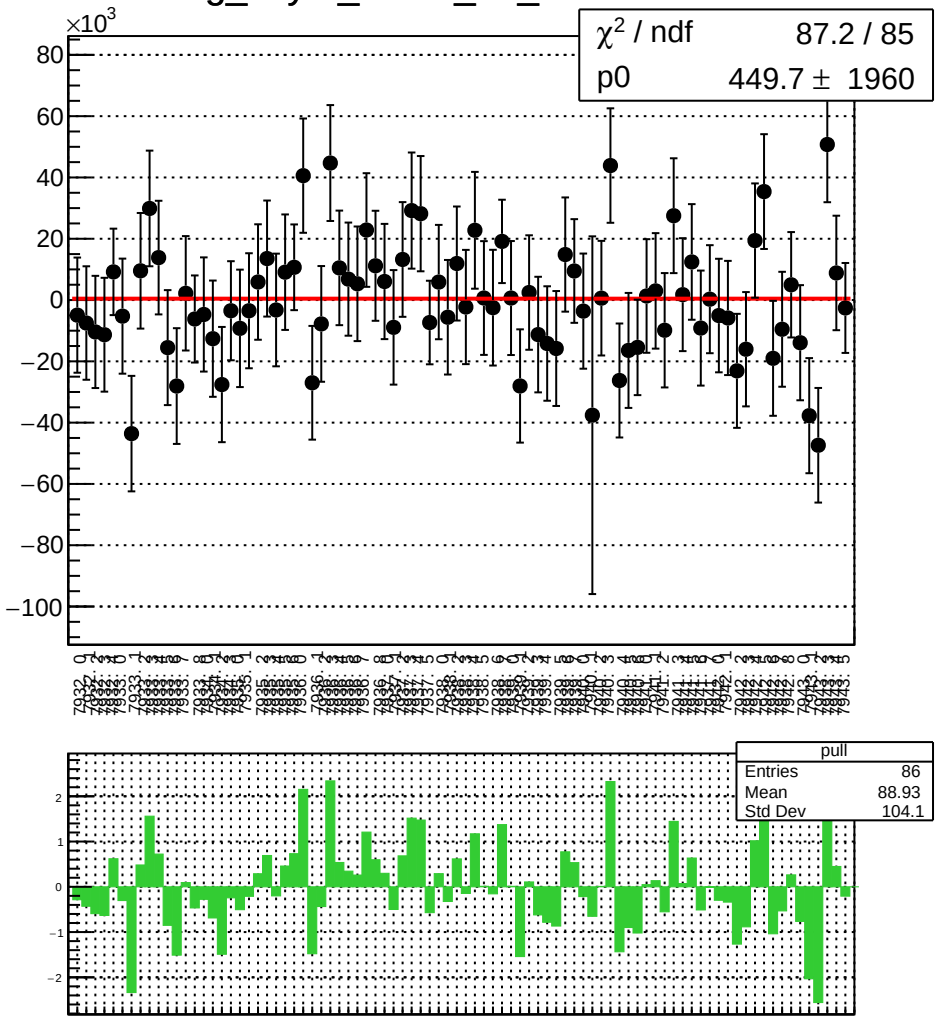

pull1D
Entries 86
Mean 0.003185
Std Dev 1.067
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

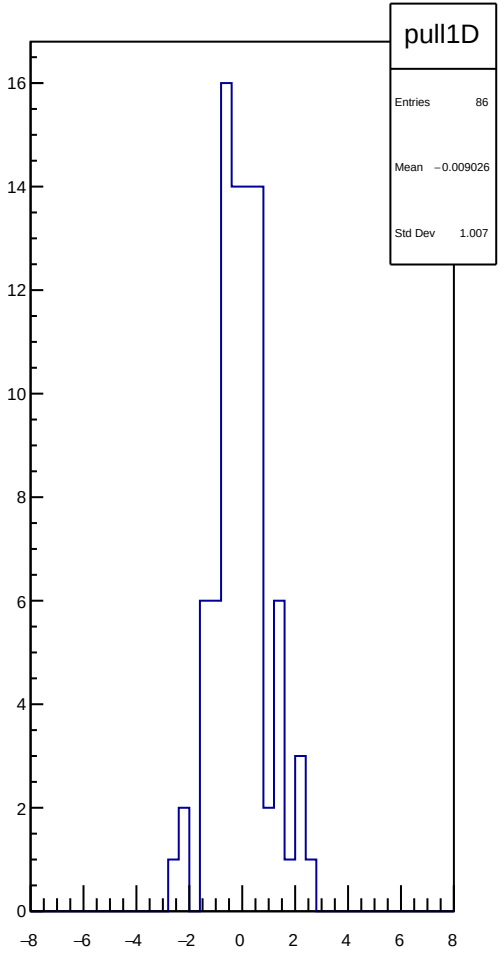

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 3015 / 85
p0 5637 ± 4.384
6600
6400
6200
6000
5800
5600
5400
5200
5000

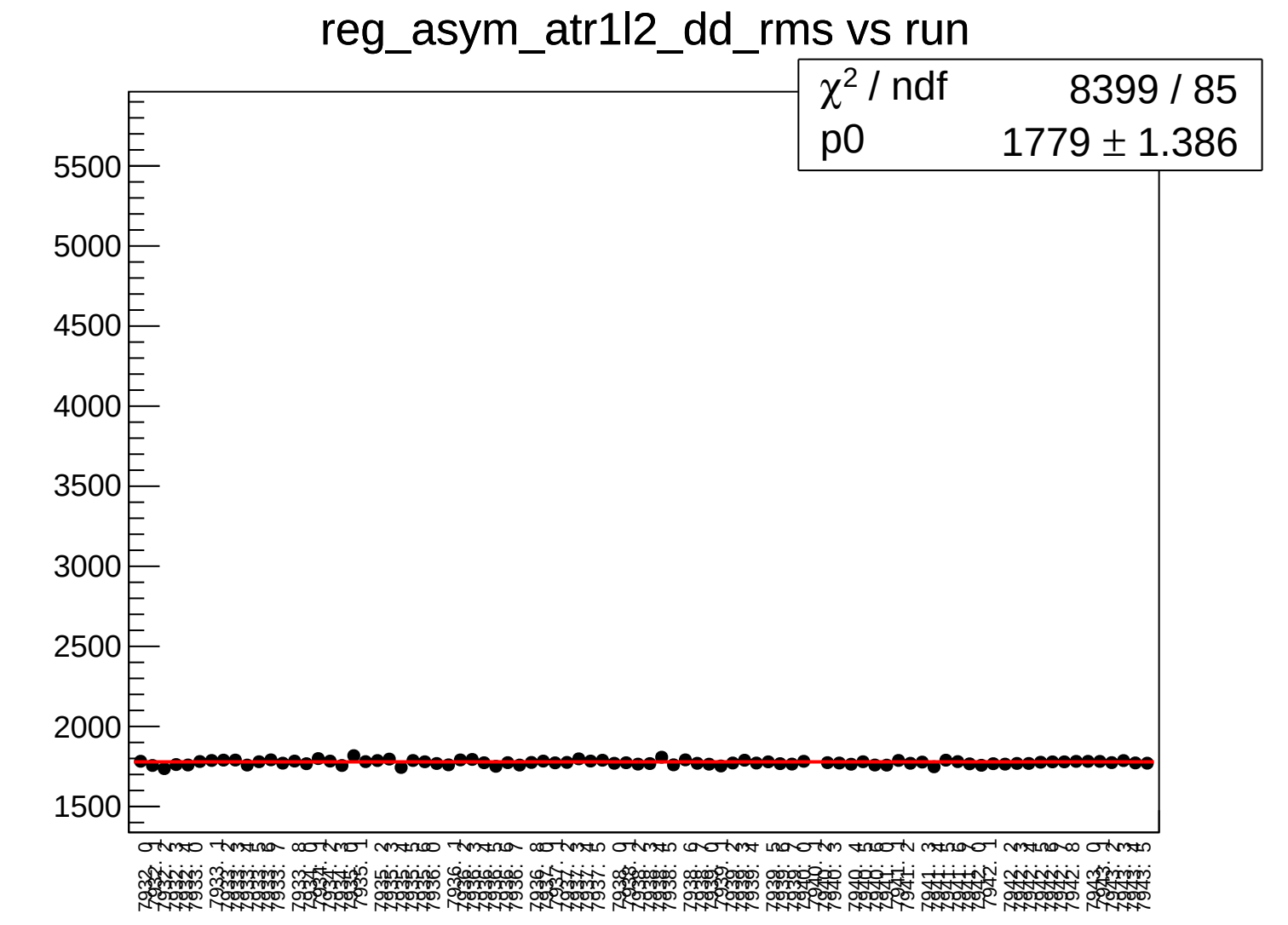

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 100.4 / 85
p0 −2318 ± 6519
300
200
100
0
−100
−200
pull
Entries 86
Mean −88.37
Std Dev 146.1
3
2
1
0
−1
−2

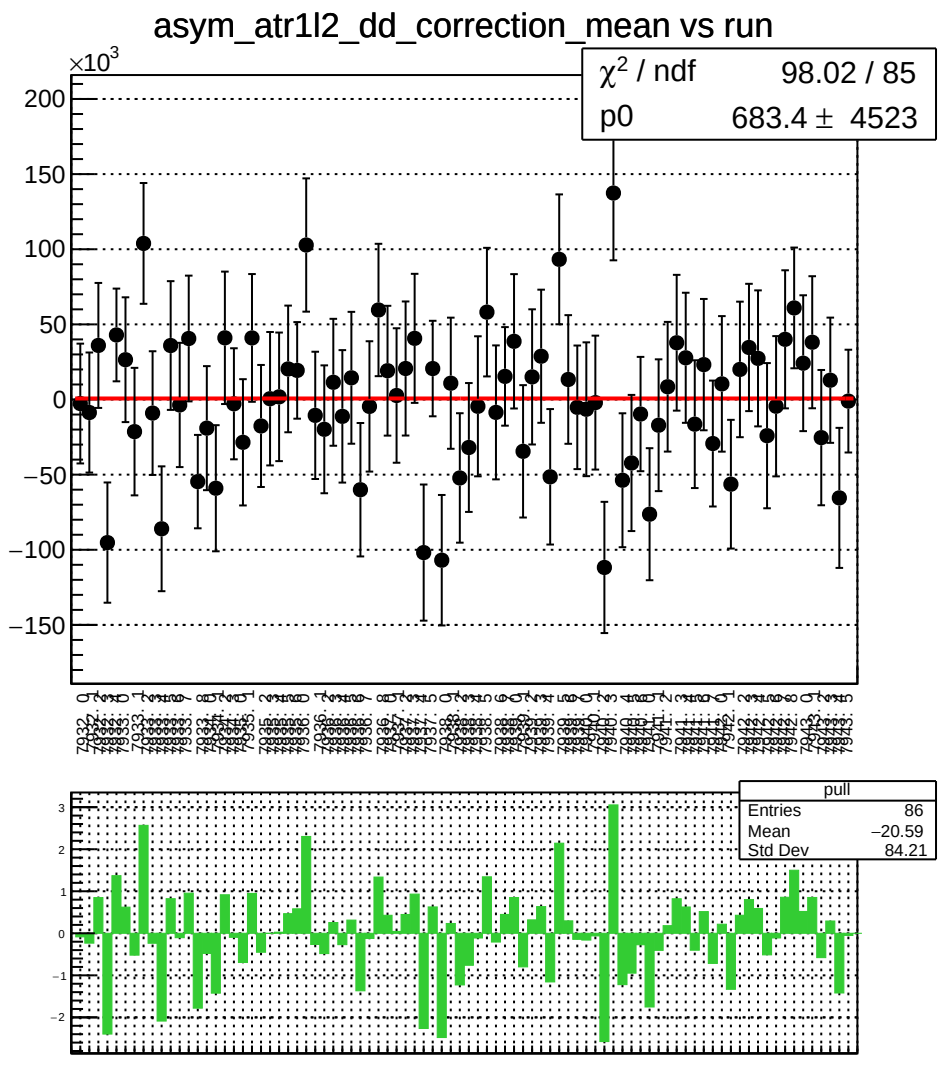

pull1D
Entries 86
Mean −0.006626
Std Dev 1.08
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

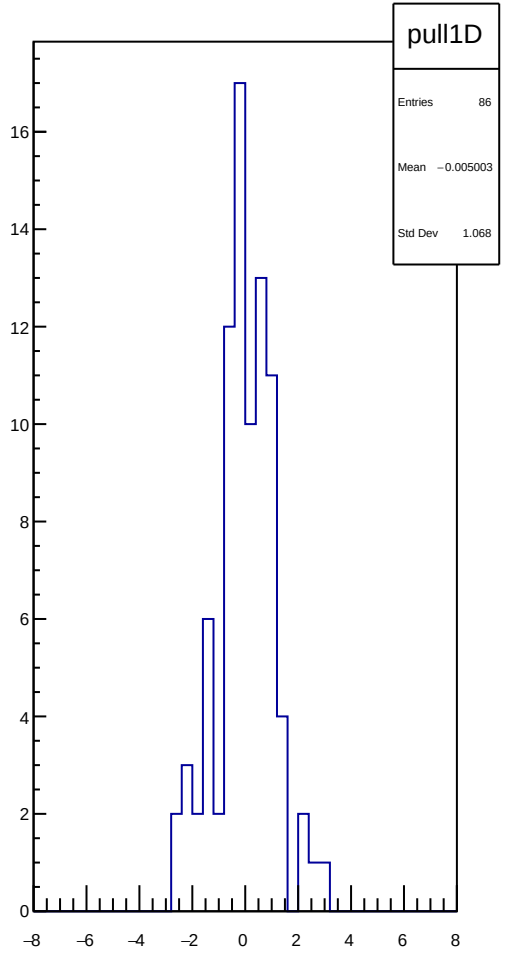

asym_atr1l2_avg_rms vs run
χ² / ndf 3724 / 85
p0 5926 ± 4.609
8000
7500
7000
6500
6000
5500
5000

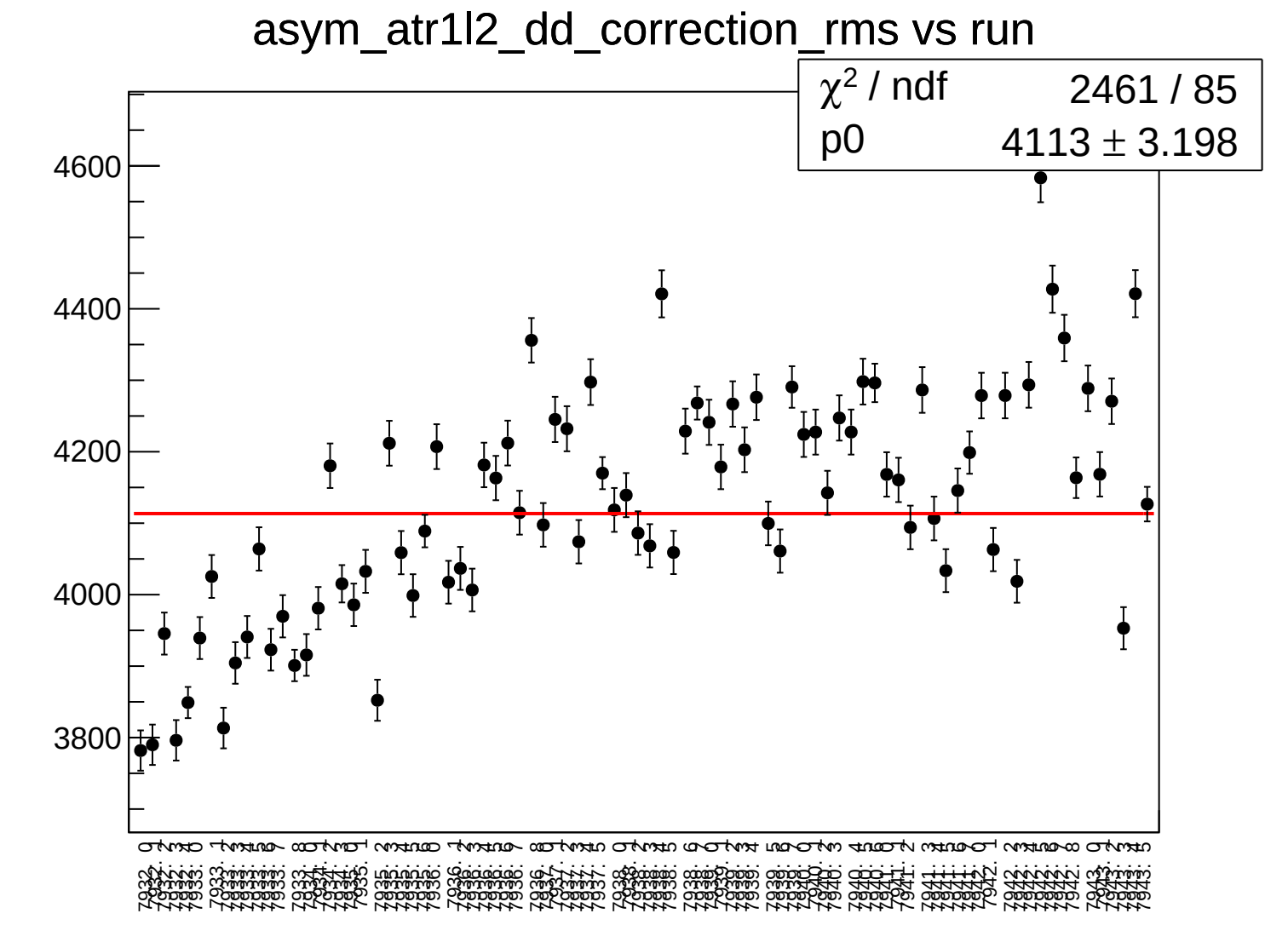

reg_asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 87.2 / 85
p0 449.7 ± 1960
pull
Entries 86
Mean 88.93
Std Dev 104.1

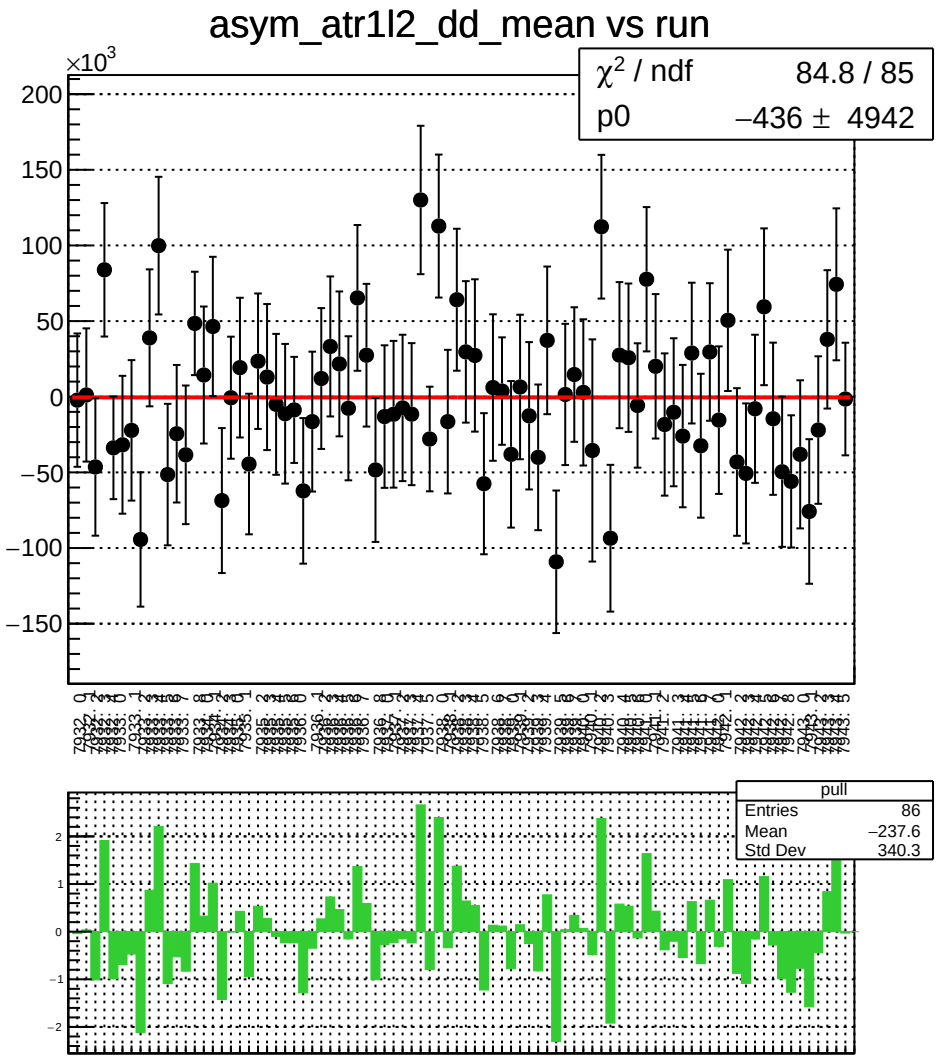

pull1D
Entries 86
Mean −0.009026
Std Dev 1.007

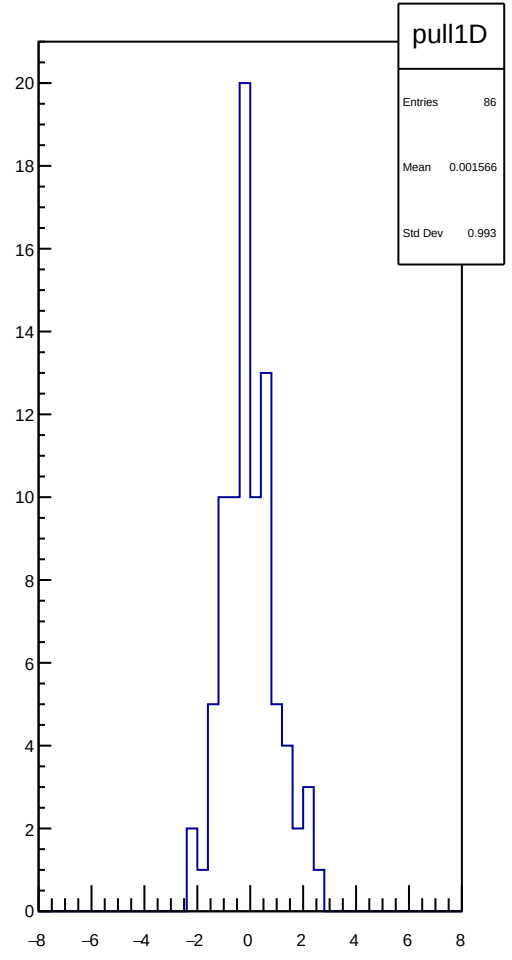

reg_asym_atr1l2_dd_rms vs run
χ^2 / ndf 8399 / 85
p0 1779 ± 1.386
5500
5000
4500
4000
3500
3000
2500
2000
1500

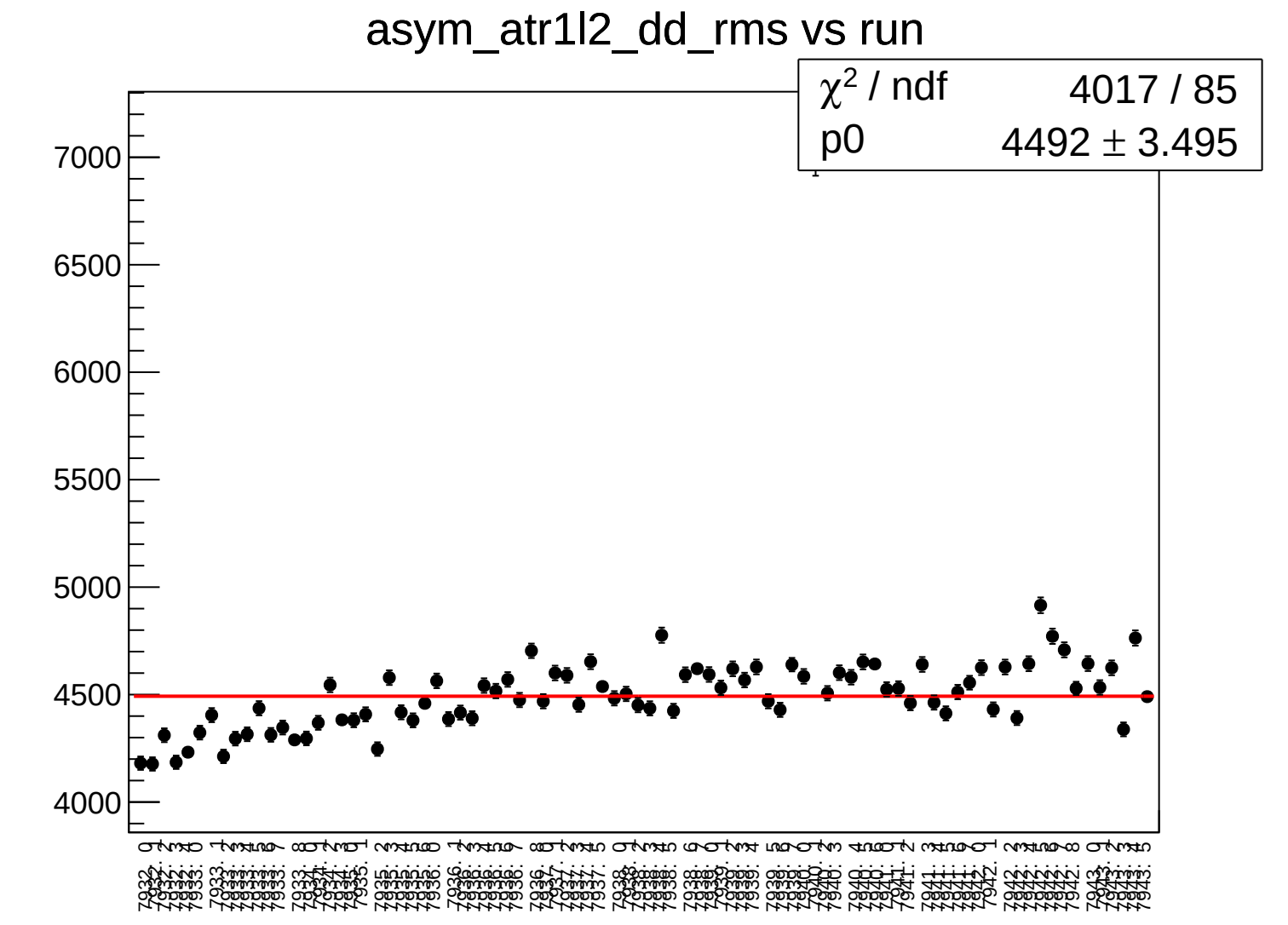

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 98.02 / 85
p0 683.4 ± 4523
200
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −20.59
Std Dev 84.21
3
2
1
0
−1
−2

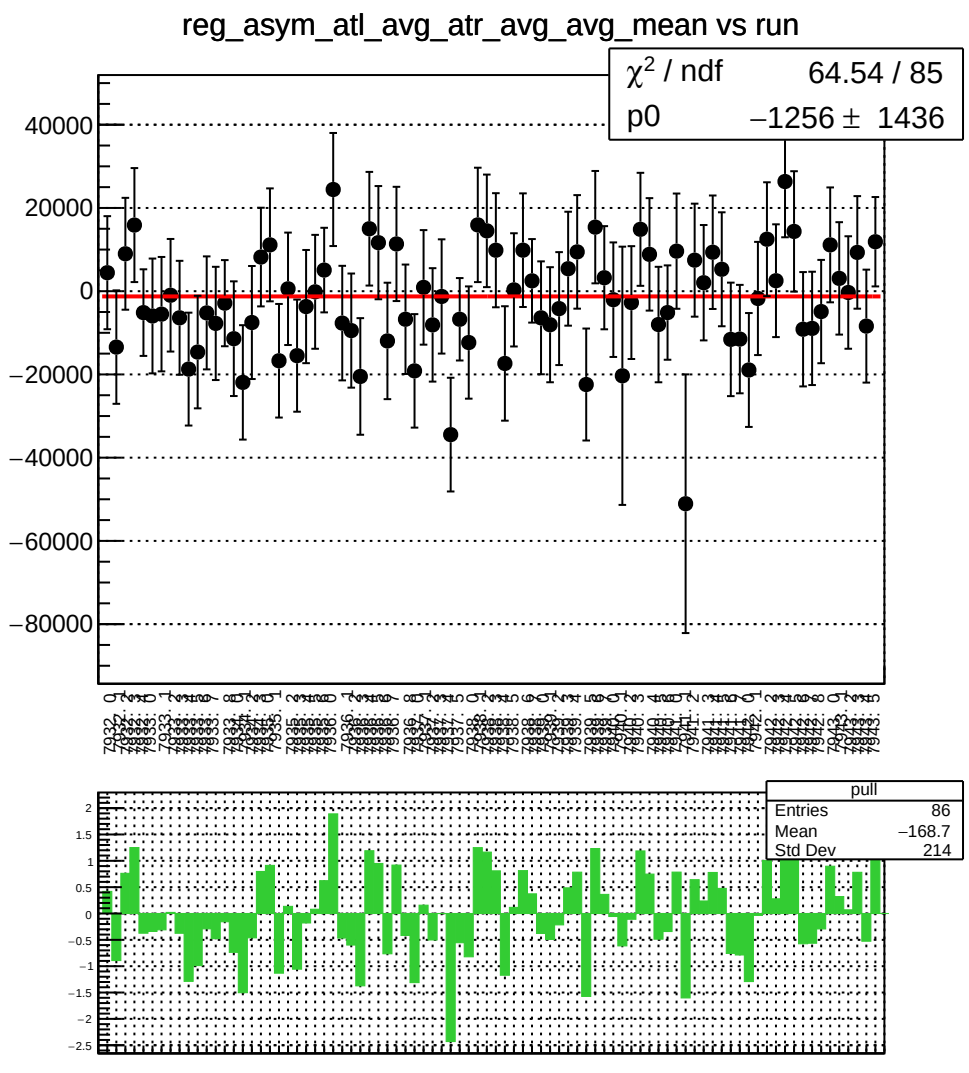

pull1D
Entries 86
Mean −0.005003
Std Dev 1.068
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

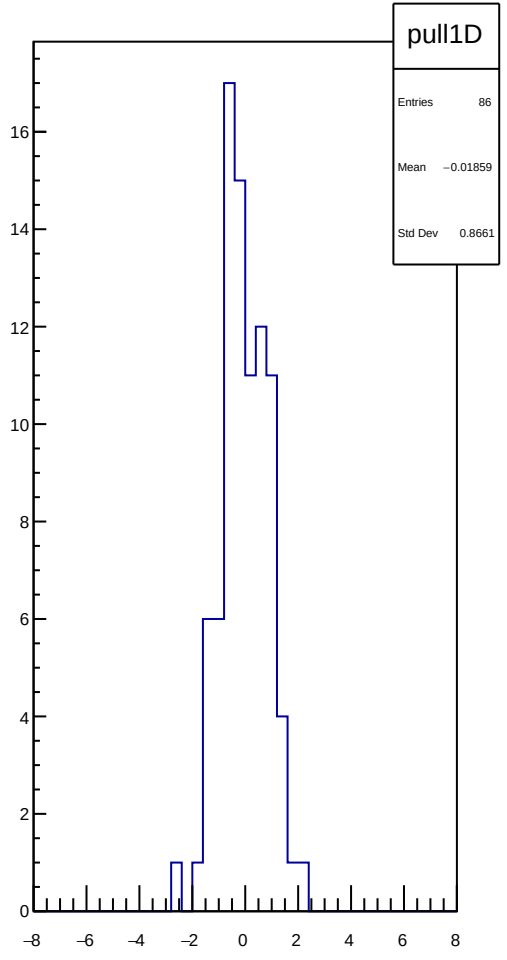

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 2461 / 85
p0 4113 ± 3.198
4600
4400
4200
4000
3800

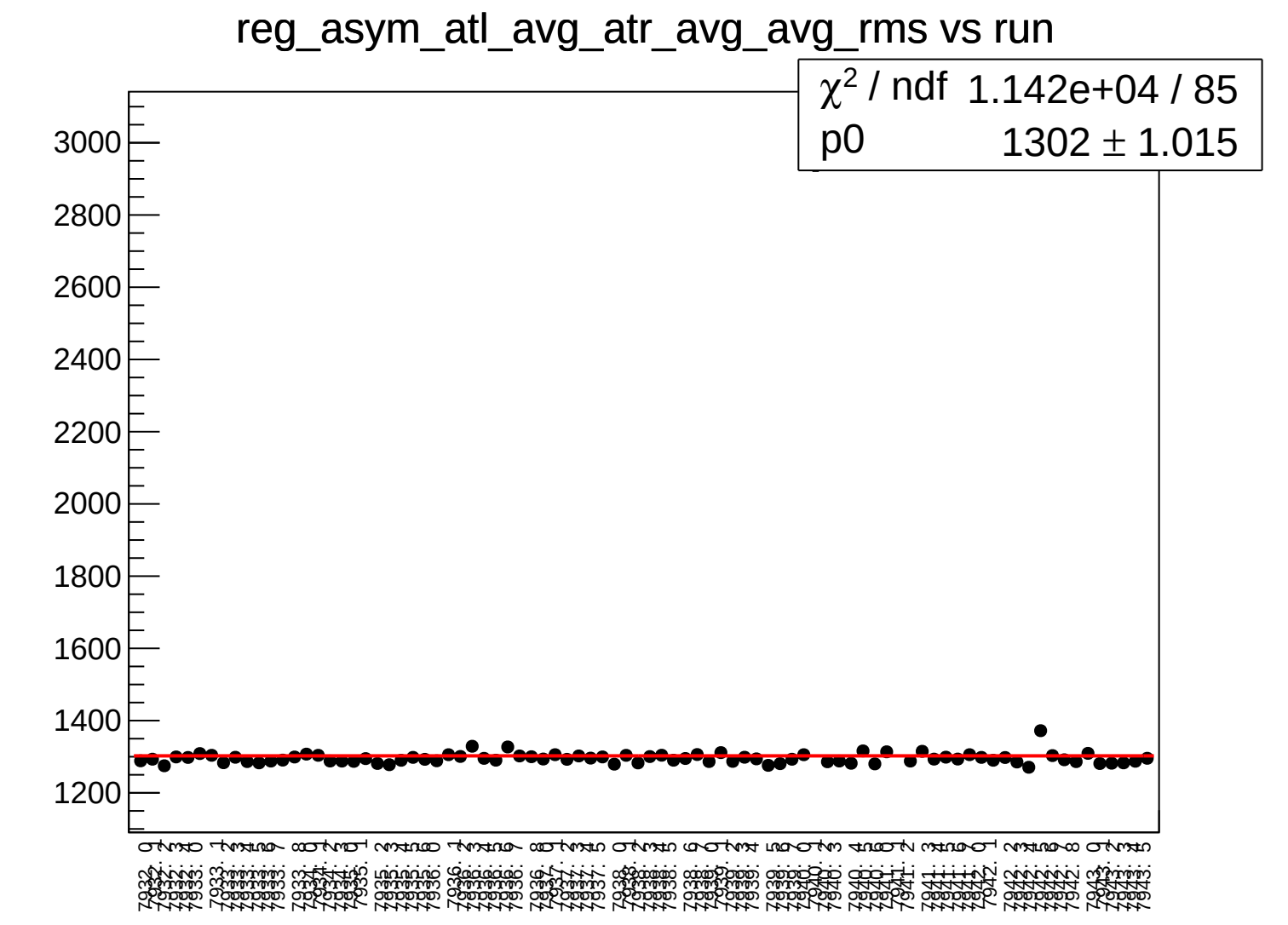

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 84.8 / 85
p0 −436 ± 4942
pull
Entries 86
Mean −237.6
Std Dev 340.3

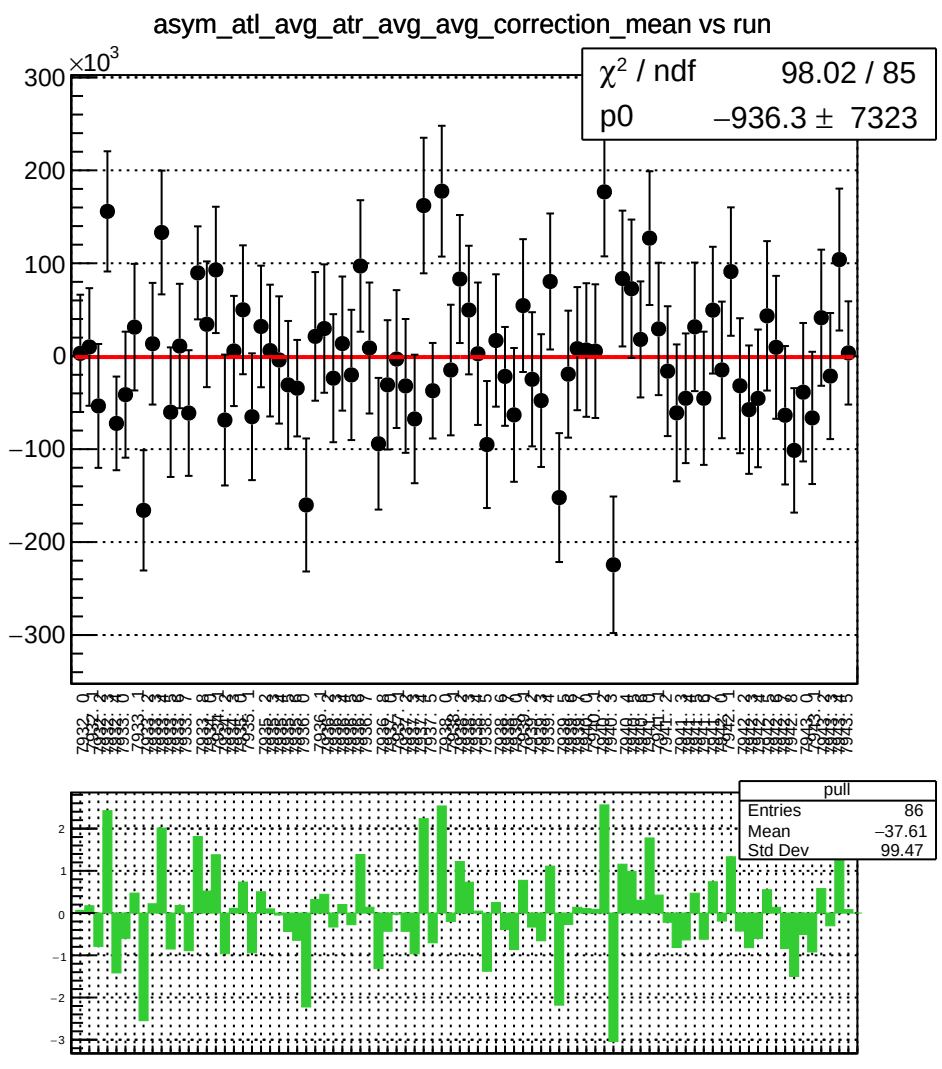

pull1D
Entries 86
Mean 0.001566
Std Dev 0.993

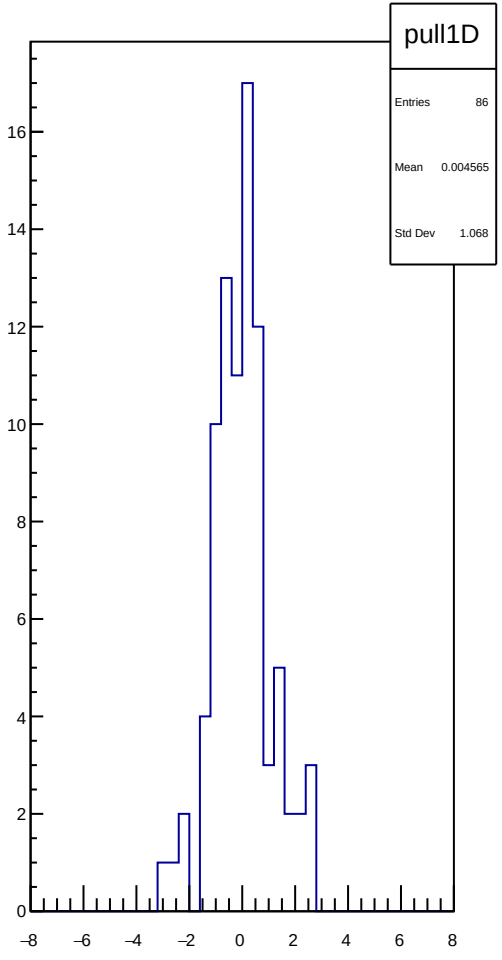

asym_atr1l2_dd_rms vs run
χ² / ndf 4017 / 85
p0 4492 ± 3.495
7000
6500
6000
5500
5000
4500
4000

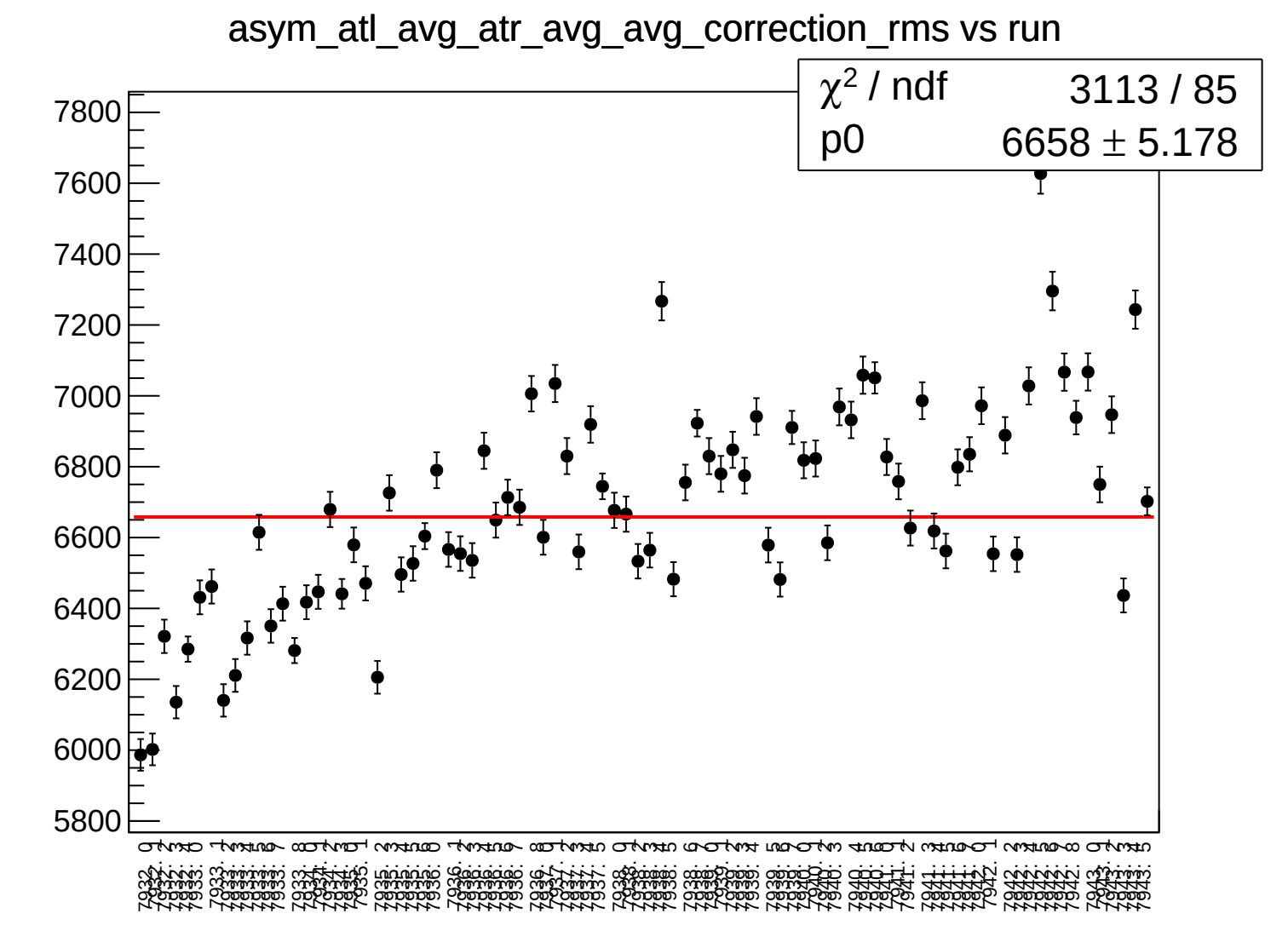

reg_asym_atl_avg_atr_avg_avg_mean vs run
χ² / ndf 64.54 / 85
p0 −1256 ± 1436
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 86
Mean −168.7
Std Dev 214
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

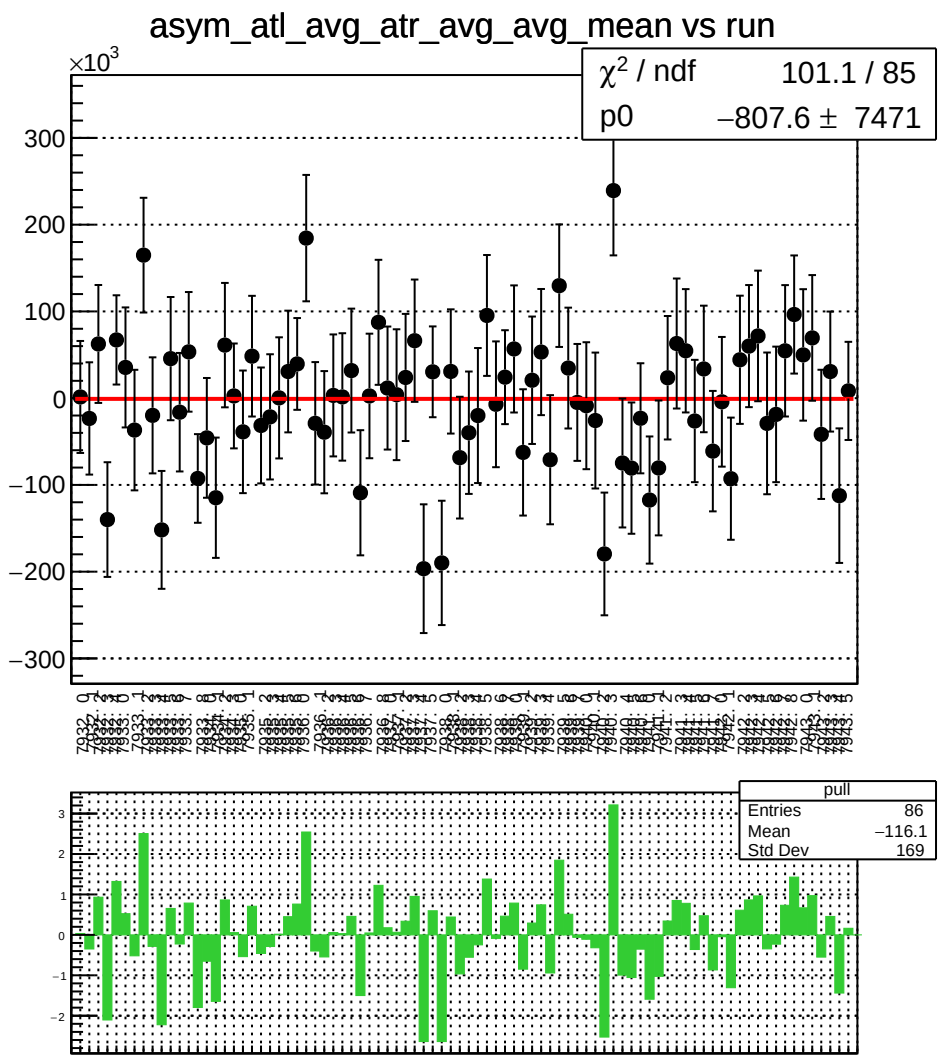

pull1D
Entries 86
Mean −0.01859
Std Dev 0.8661
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

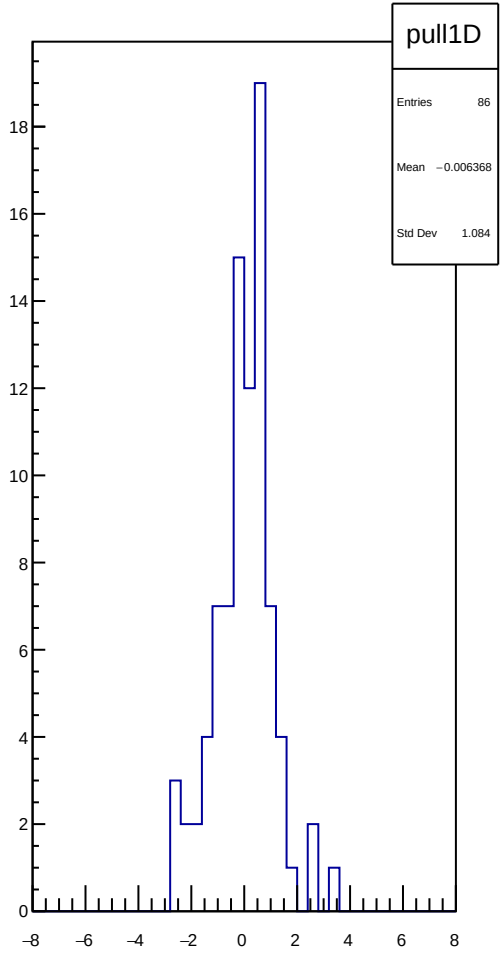

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.142e+04 / 85
p0 1302 ± 1.015
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

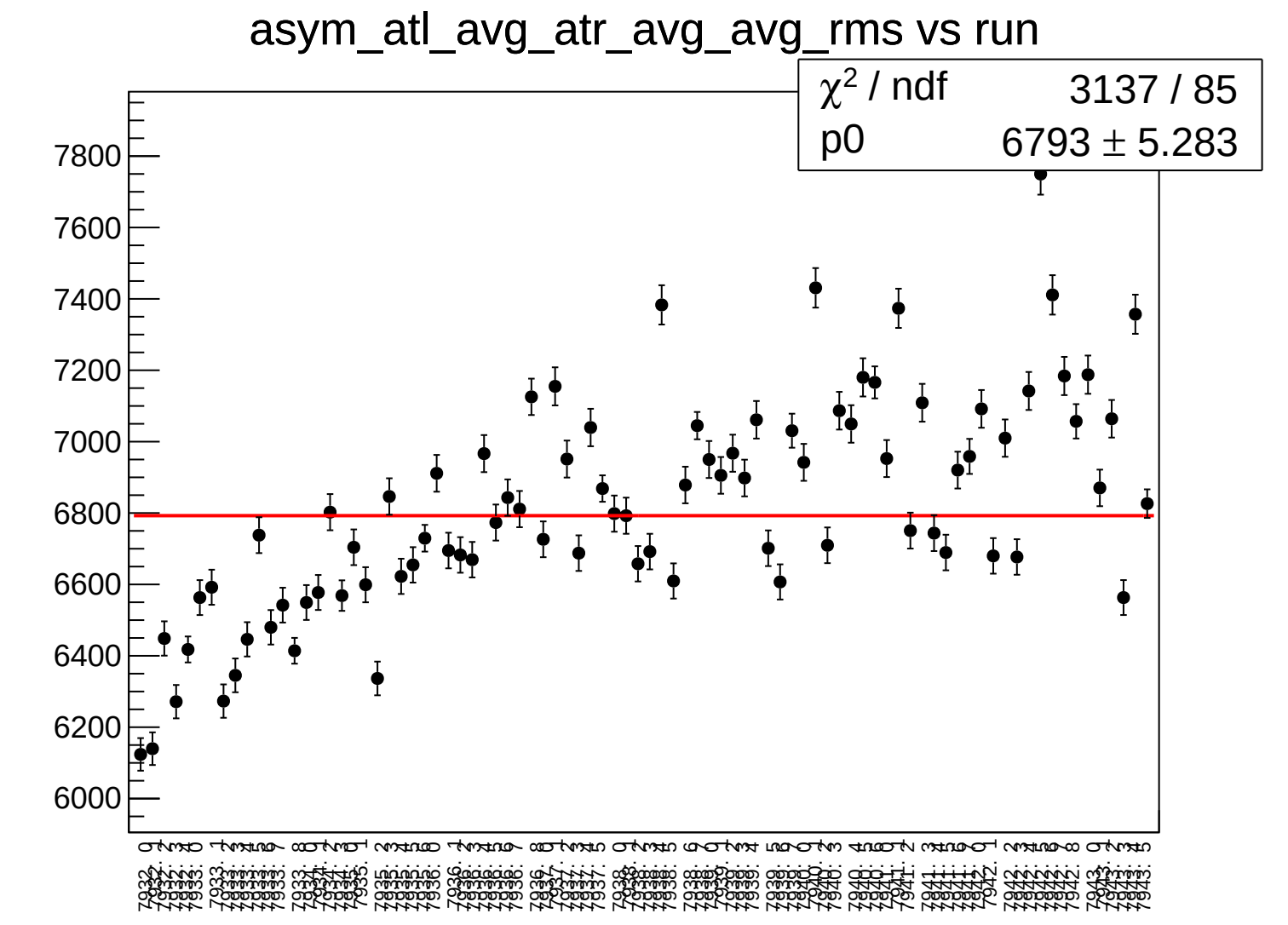

asym_atl_avg_atr_avg_avg_correction_mean vs run
×10^3
χ² / ndf 98.02 / 85
p0 −936.3 ± 7323
pull
Entries 86
Mean −37.61
Std Dev 99.47

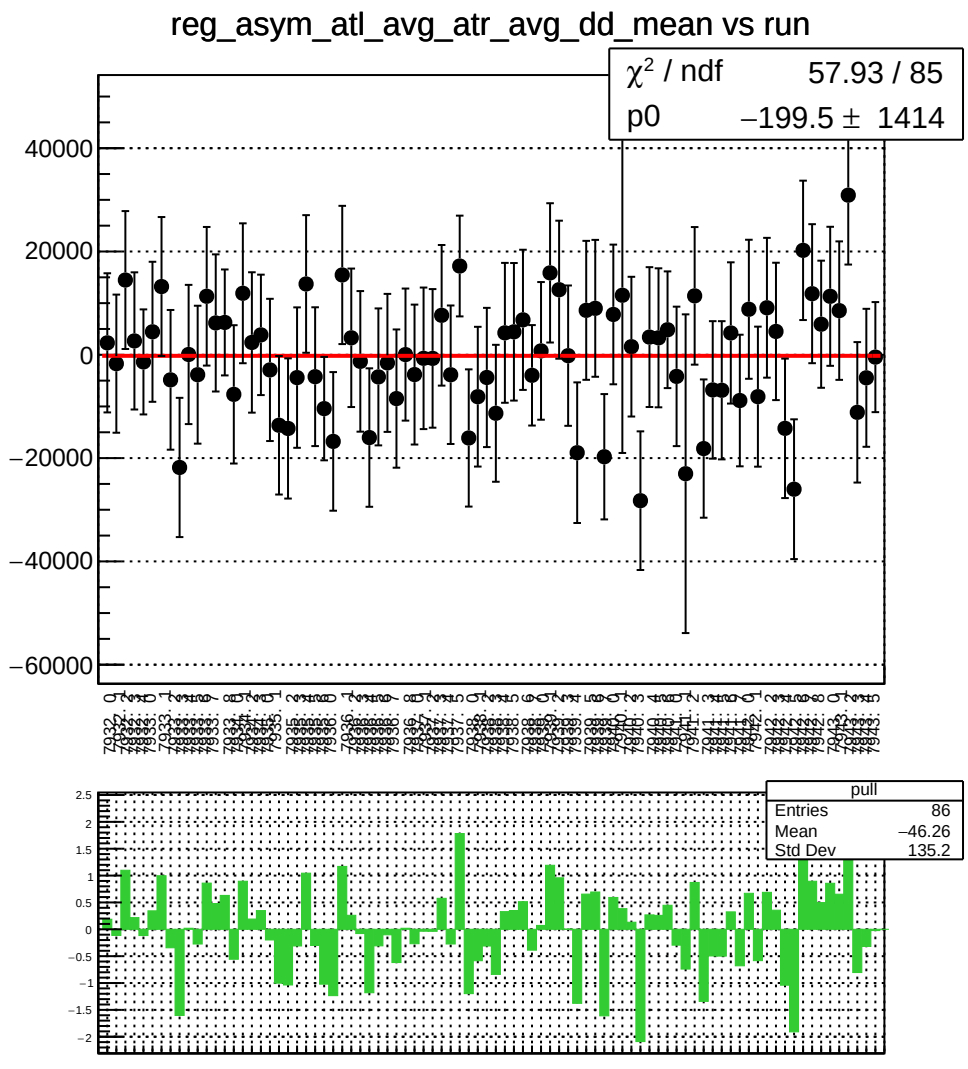

pull1D
Entries 86
Mean 0.004565
Std Dev 1.068

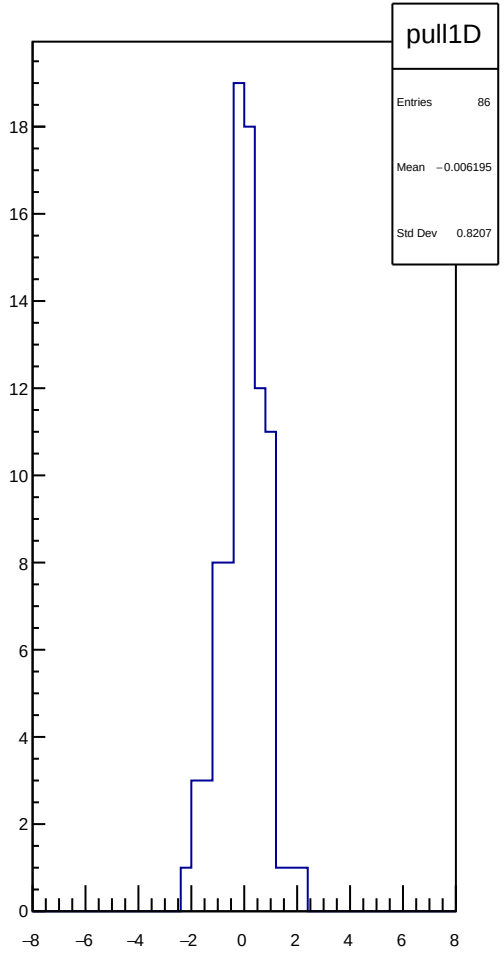

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 3113 / 85
p0 6658 ± 5.178
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800

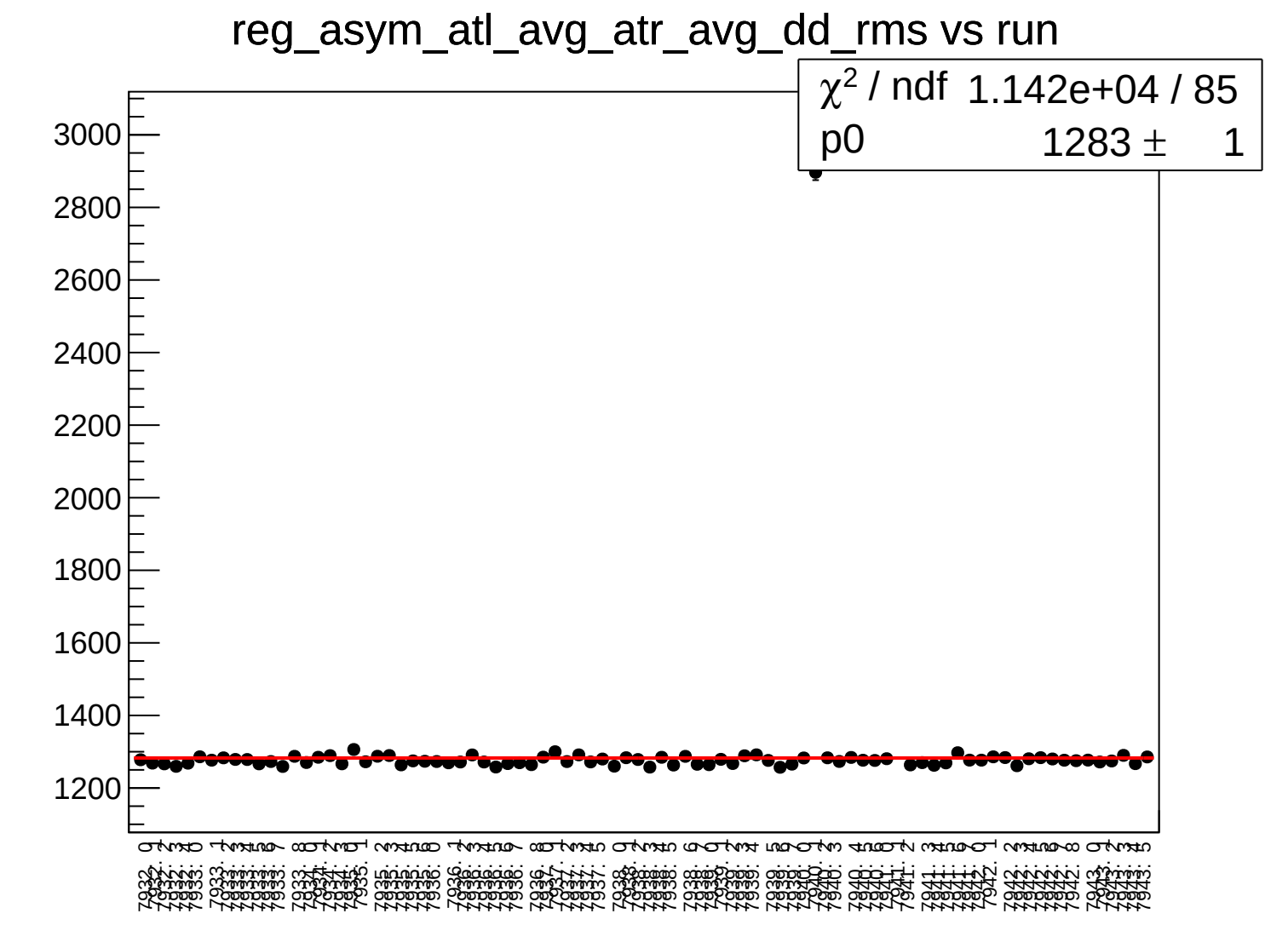

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 101.1 / 85
p0 −807.6 ± 7471
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −116.1
Std Dev 169
3
2
1
0
−1
−2

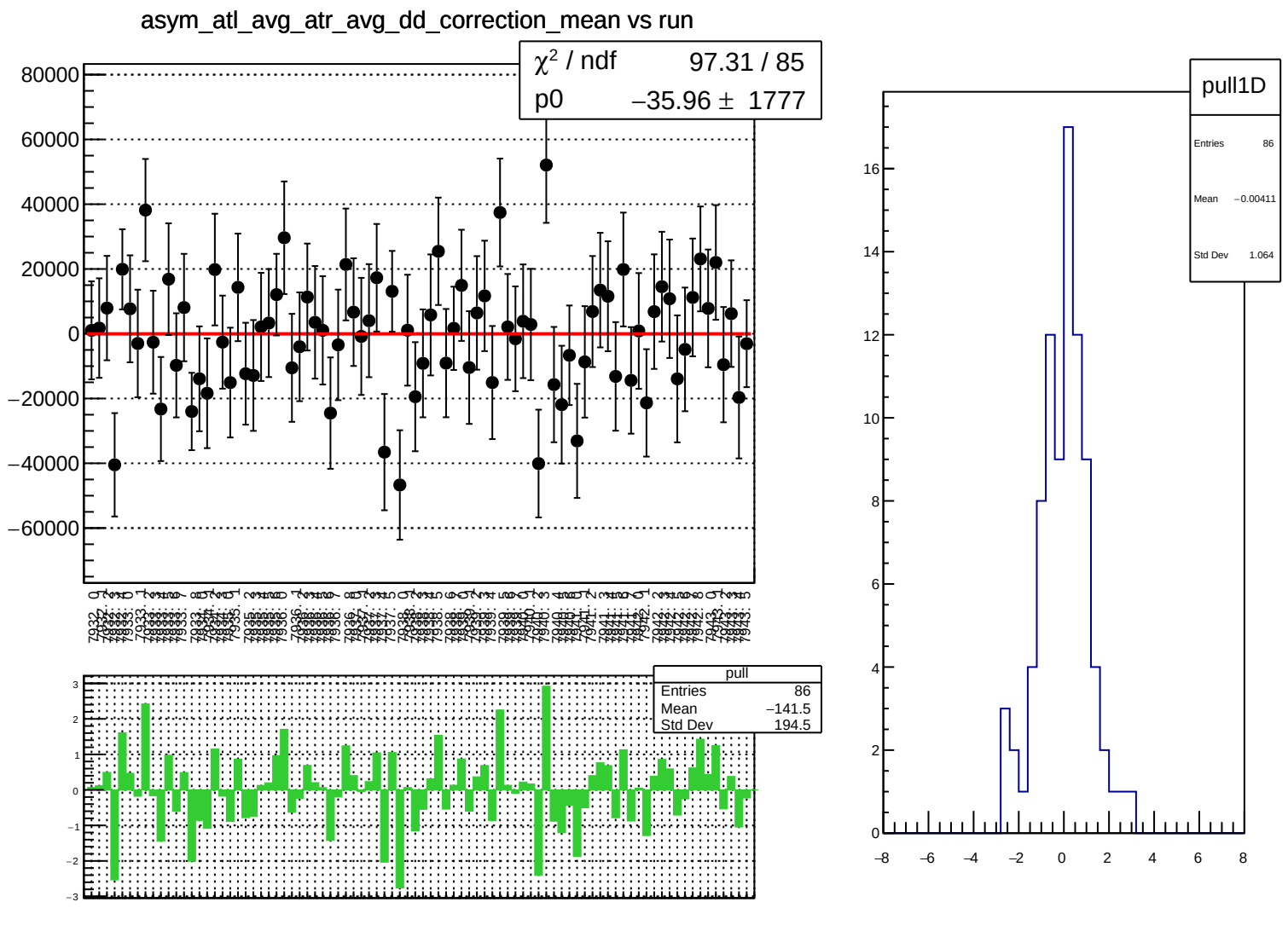

pull1D
Entries 86
Mean −0.006368
Std Dev 1.084
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

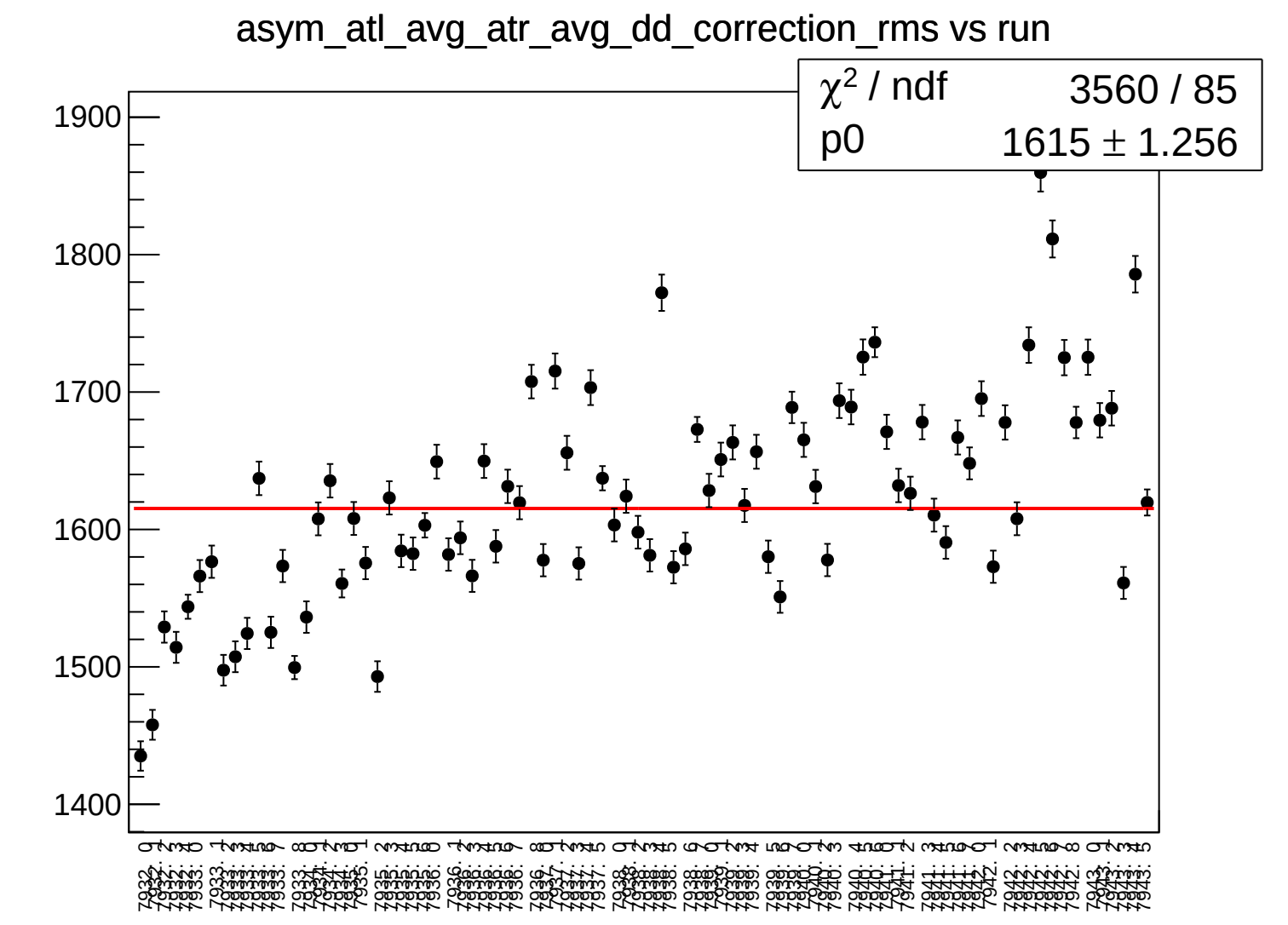

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 3137 / 85
p0 6793 ± 5.283
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

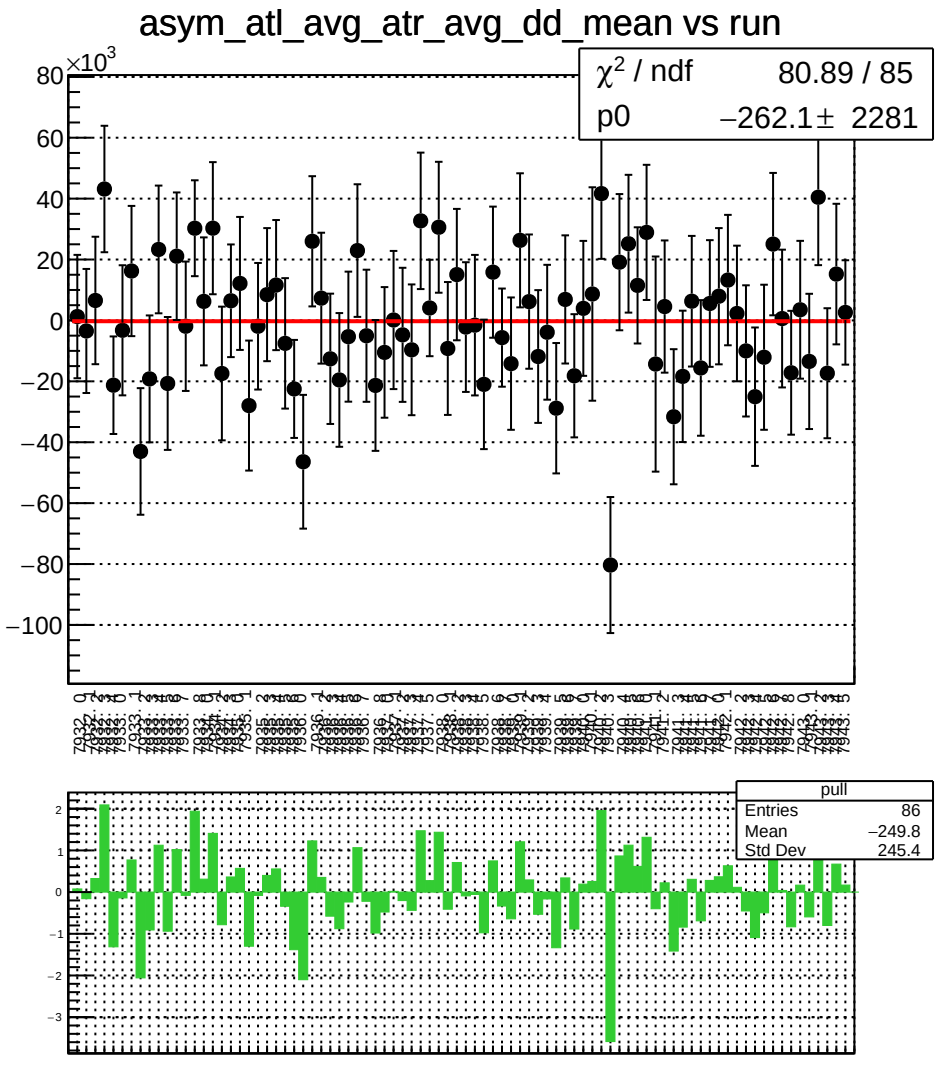

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 57.93 / 85
p0 −199.5 ± 1414
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −46.26
Std Dev 135.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

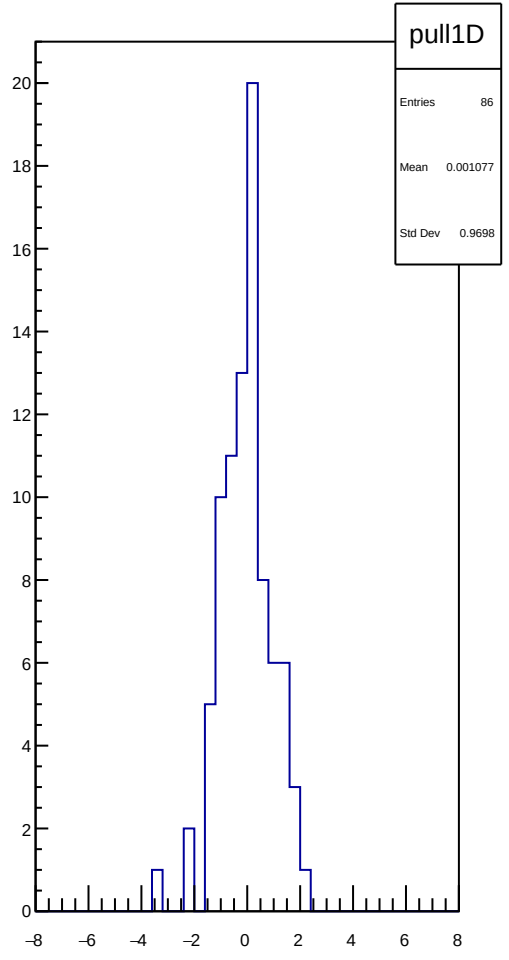

pull1D
Entries 86
Mean −0.006195
Std Dev 0.8207
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

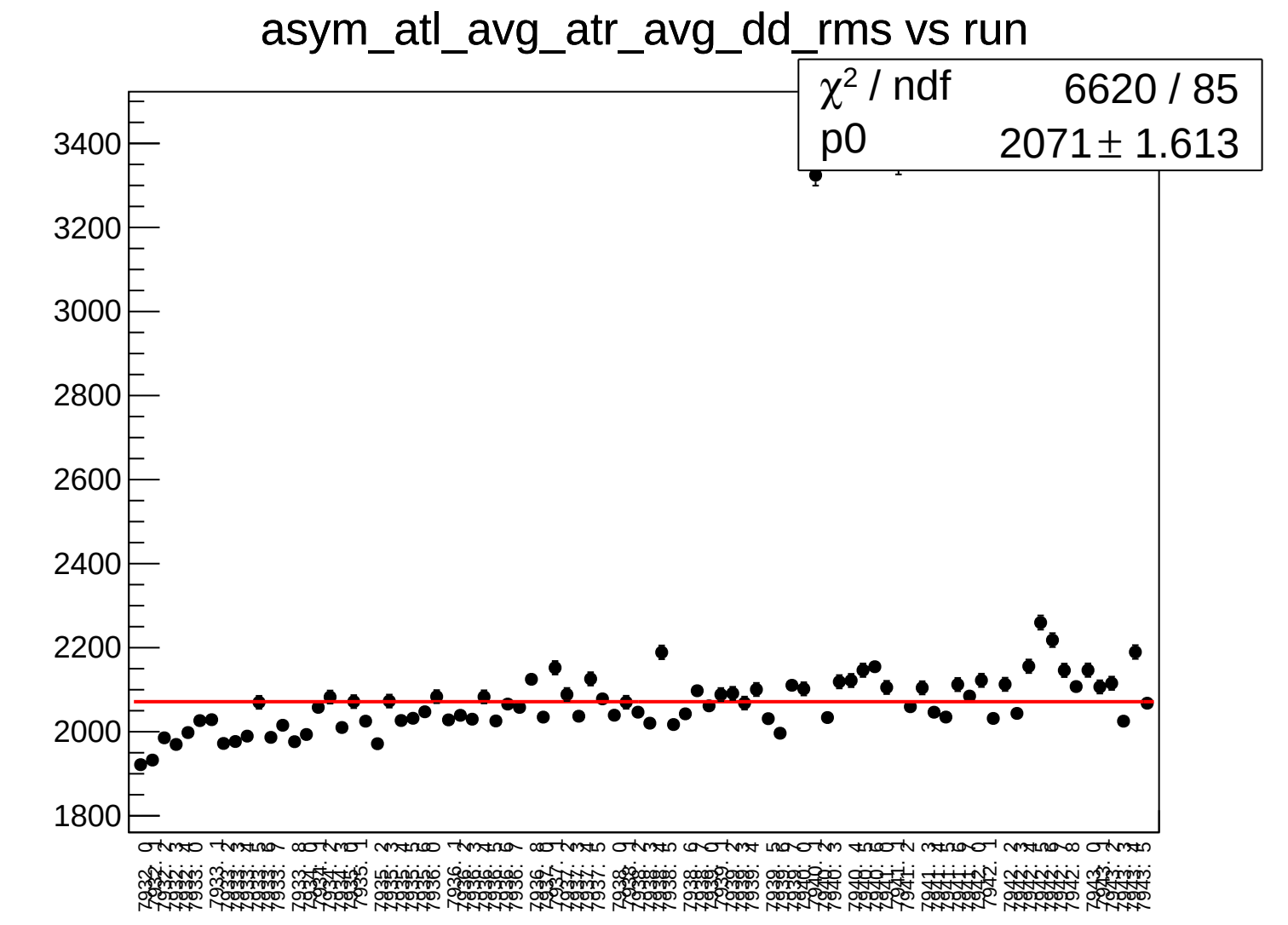

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.142e+04 / 85
p0 1283 ± 1
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

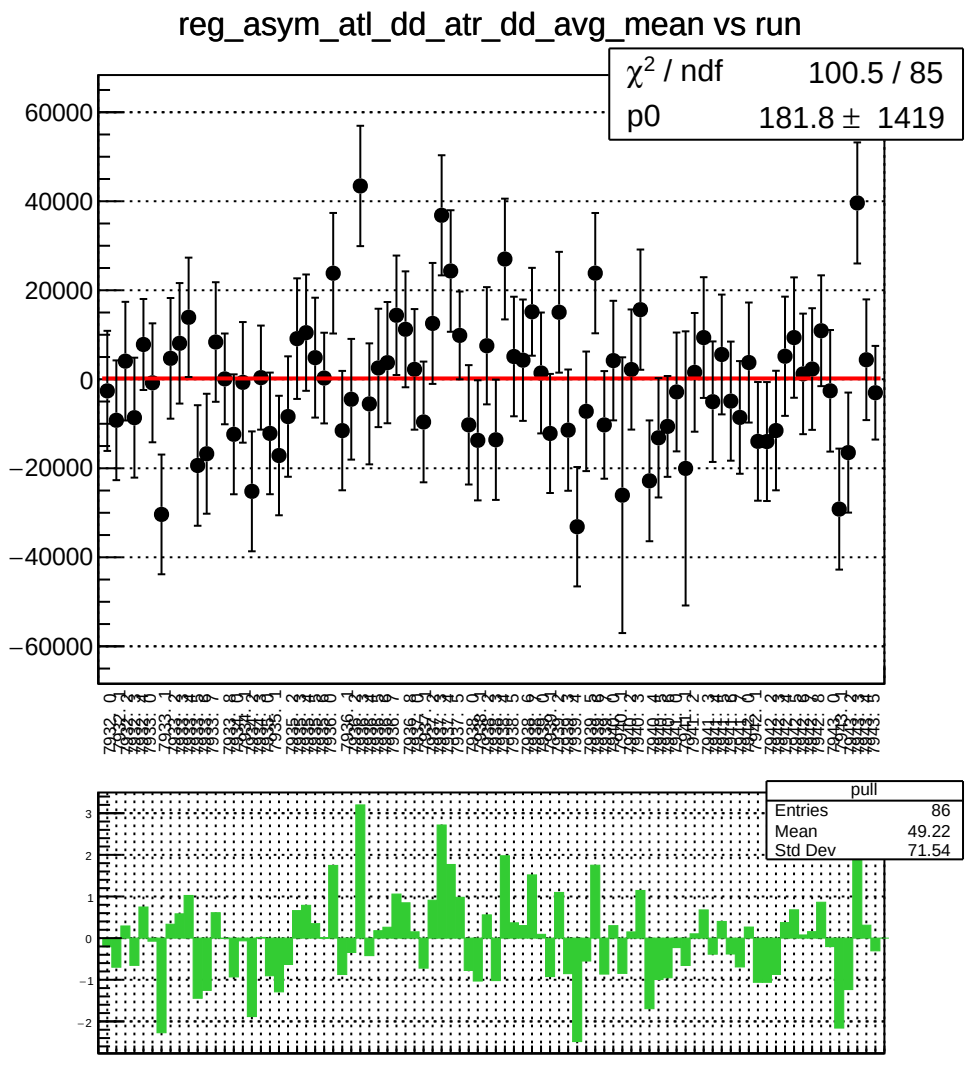

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 97.31 / 85
p0 −35.96 ± 1777
pull
Entries 86
Mean −141.5
Std Dev 194.5
pull1D
Entries 86
Mean −0.00411
Std Dev 1.064

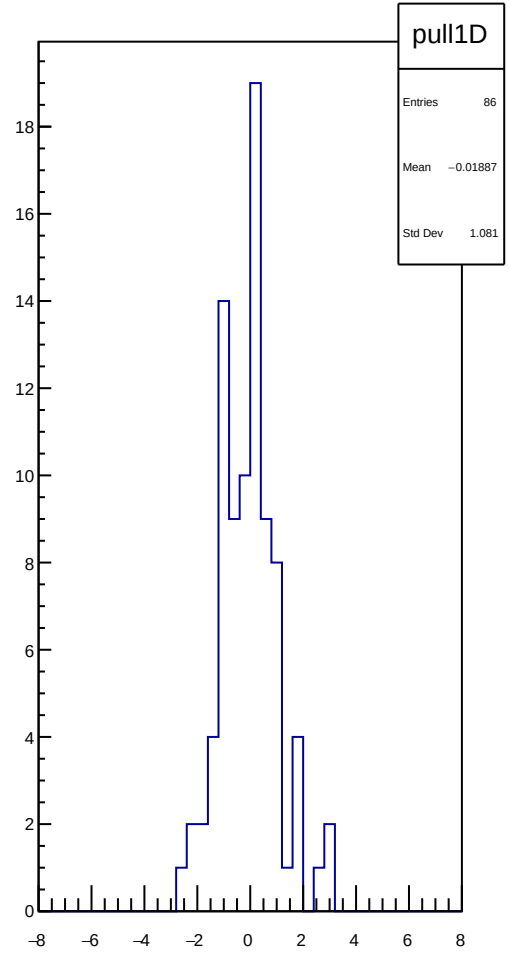

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ^2 / ndf 3560 / 85
p0 1615 ± 1.256
1900
1800
1700
1600
1500
1400

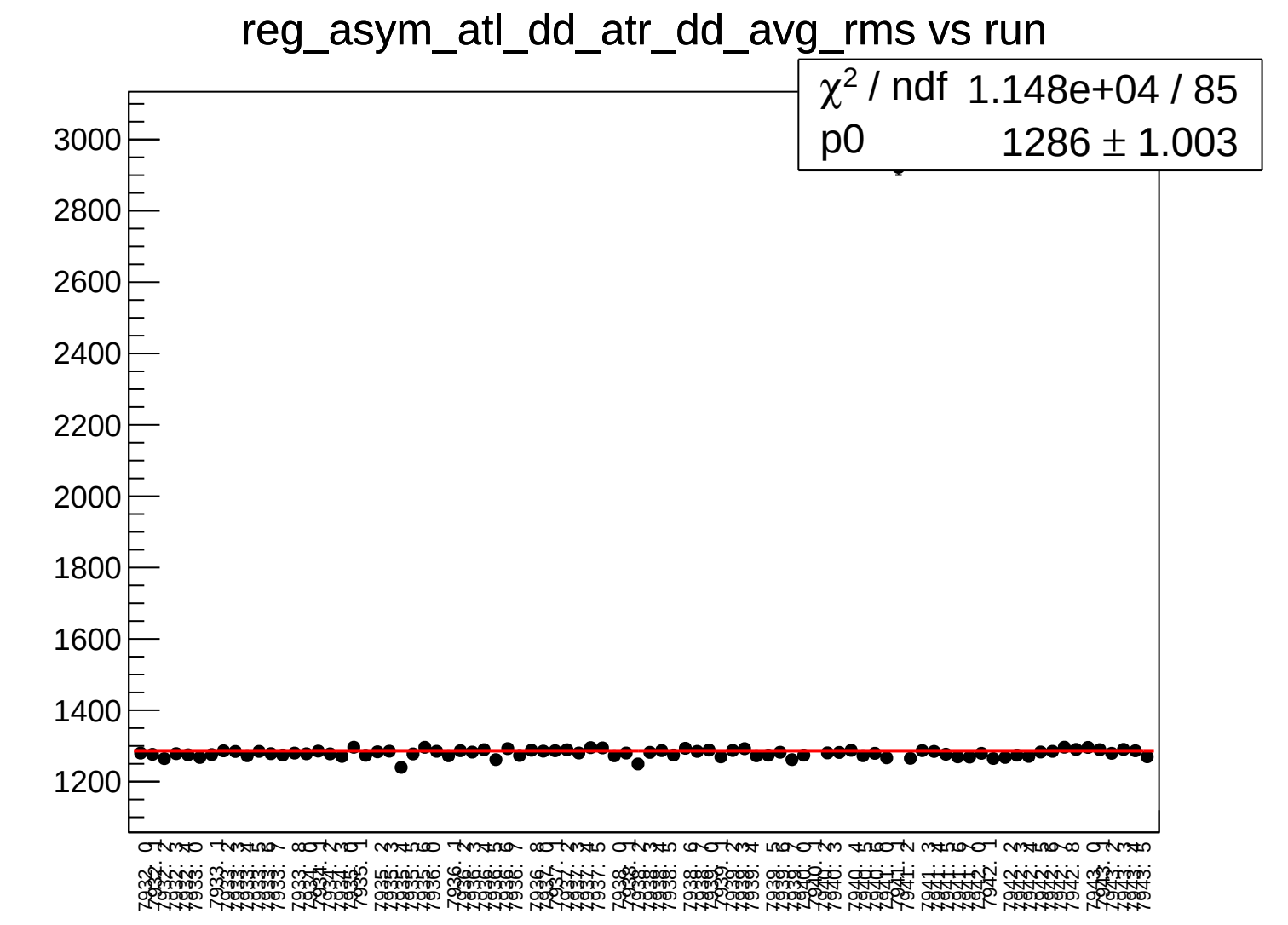

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 80.89 / 85
p0 −262.1± 2281
×10³
pull
Entries 86
Mean −249.8
Std Dev 245.4

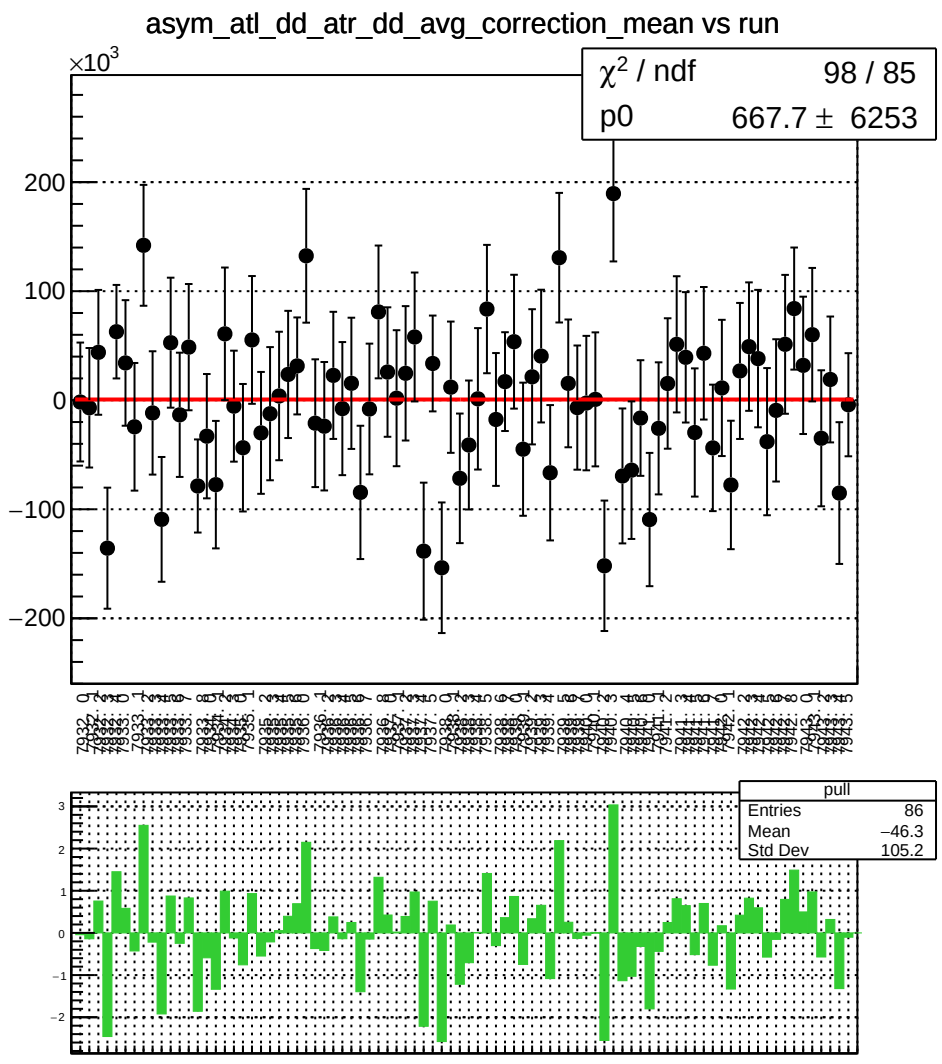

pull1D
Entries 86
Mean 0.001077
Std Dev 0.9698

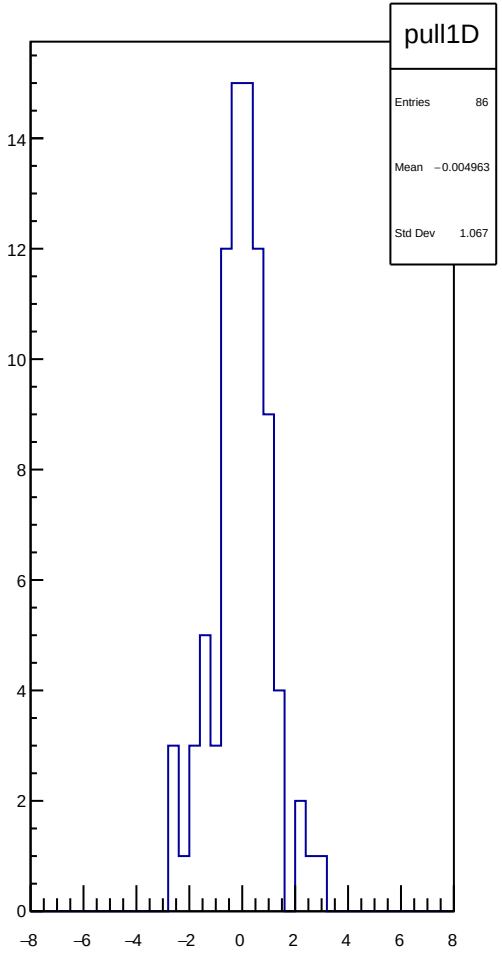

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 6620 / 85
p0 2071 ± 1.613
3400
3200
3000
2800
2600
2400
2200
2000
1800

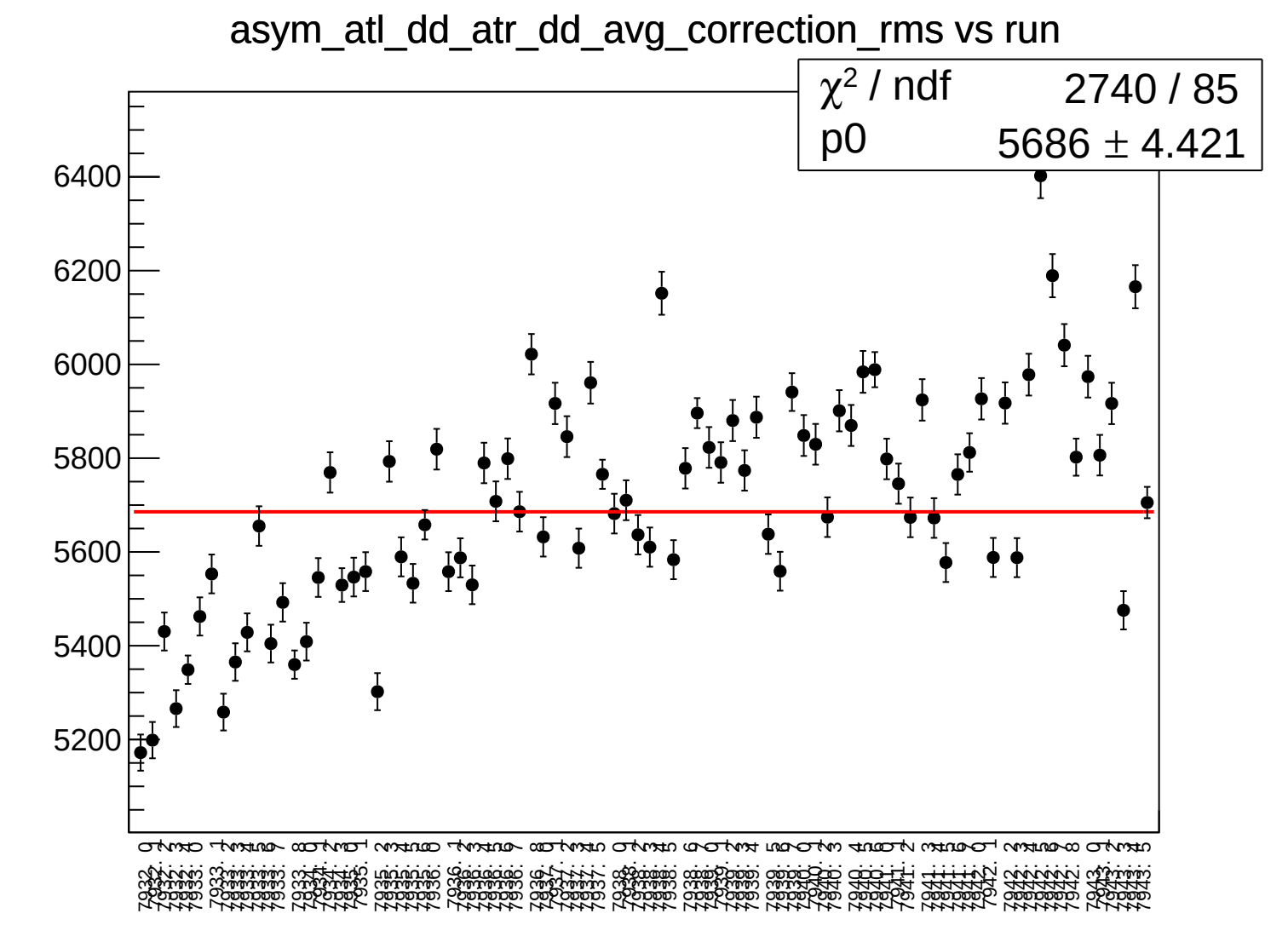

reg_asym_atl_dd_atr_dd_avg_mean vs run
χ² / ndf 100.5 / 85
p0 181.8 ± 1419
pull
Entries 86
Mean 49.22
Std Dev 71.54

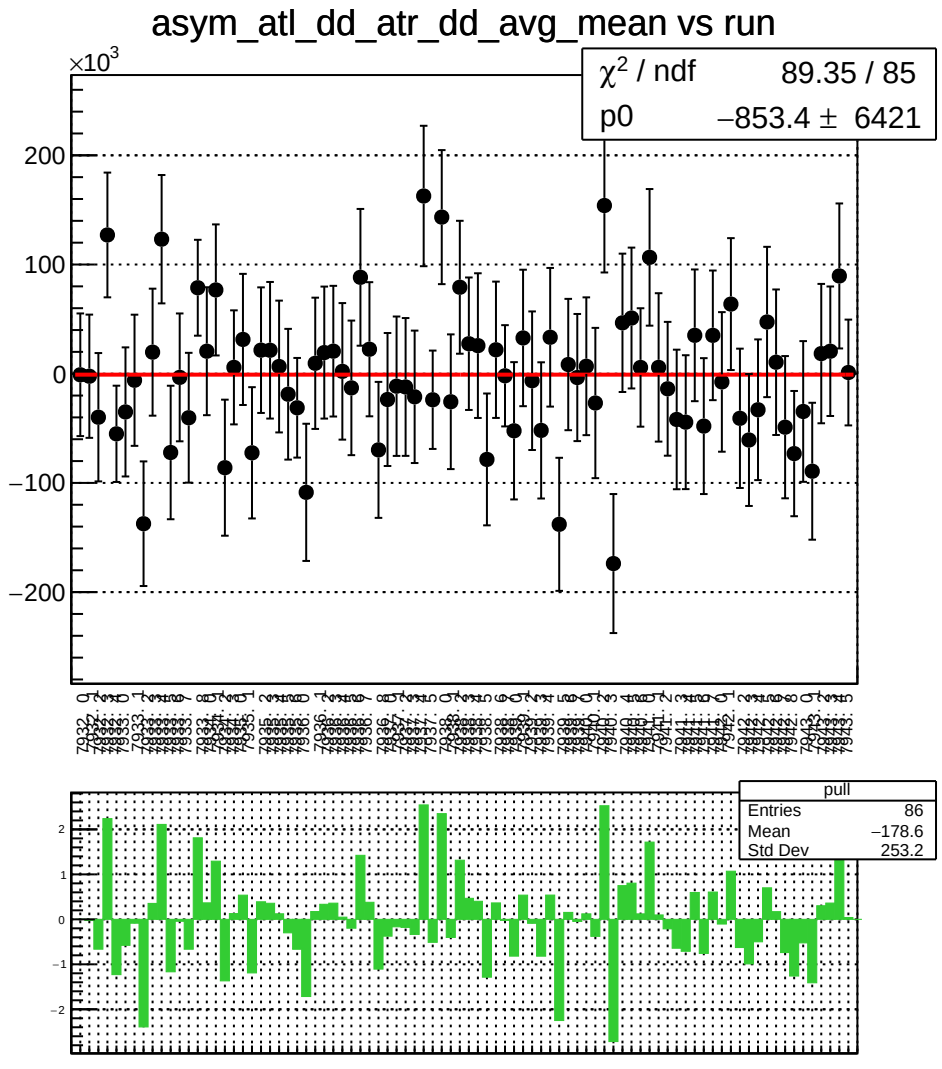

pull1D
Entries 86
Mean −0.01887
Std Dev 1.081

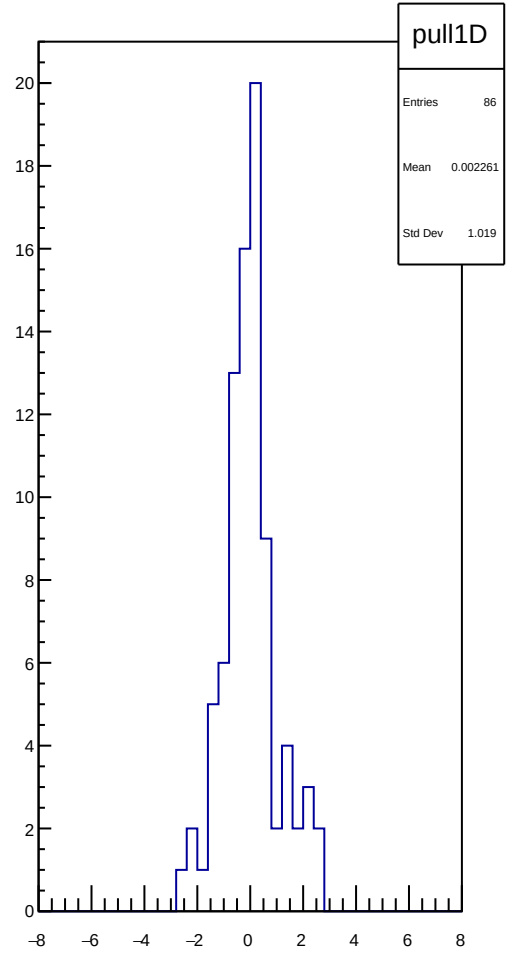

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 1.148e+04 / 85
p0 1286 ± 1.003
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

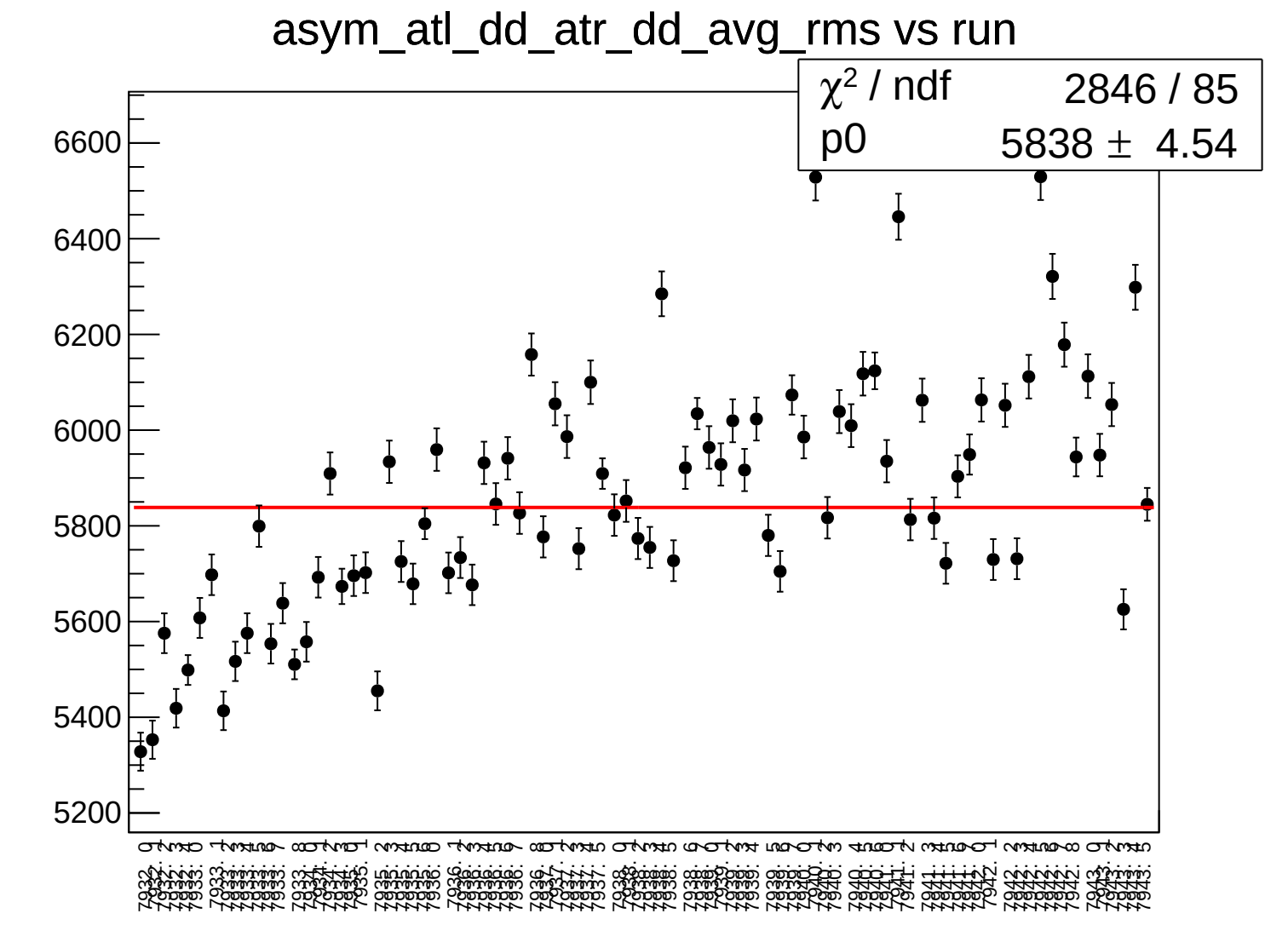

asym_atl_dd_atr_dd_avg_correction_mean vs run
×10^3
χ² / ndf 98 / 85
p0 667.7 ± 6253
200
100
0
−100
−200
pull
Entries 86
Mean −46.3
Std Dev 105.2
3
2
1
0
−1
−2

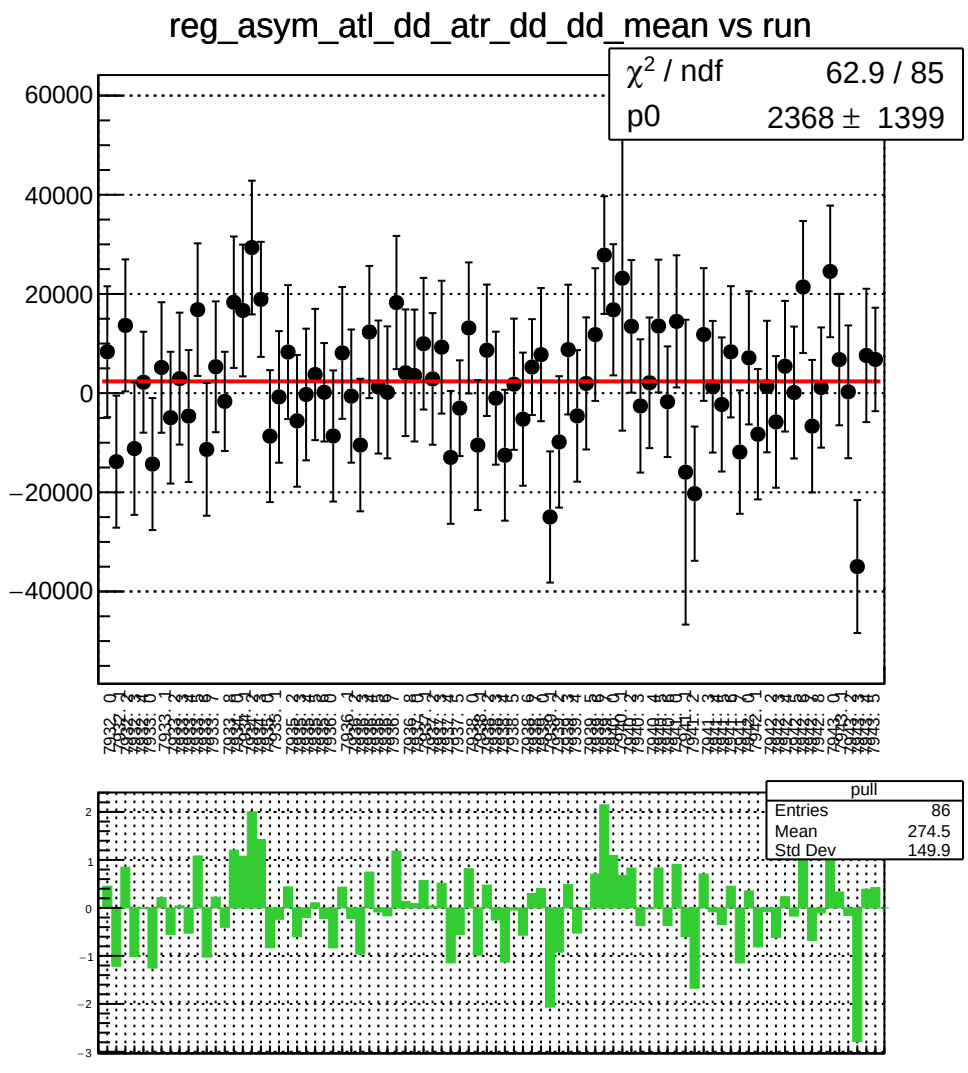

pull1D
Entries 86
Mean −0.004963
Std Dev 1.067
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

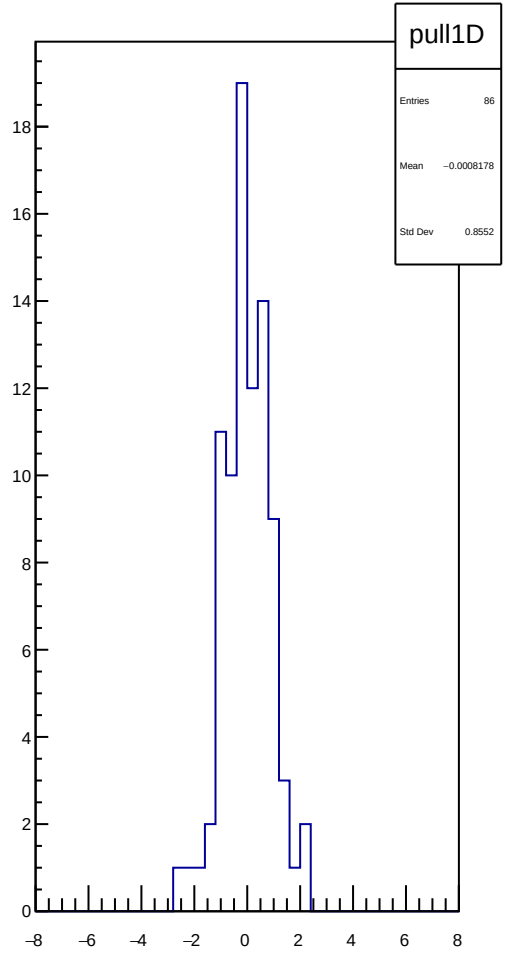

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 2740 / 85
p0 5686 ± 4.421
6400
6200
6000
5800
5600
5400
5200

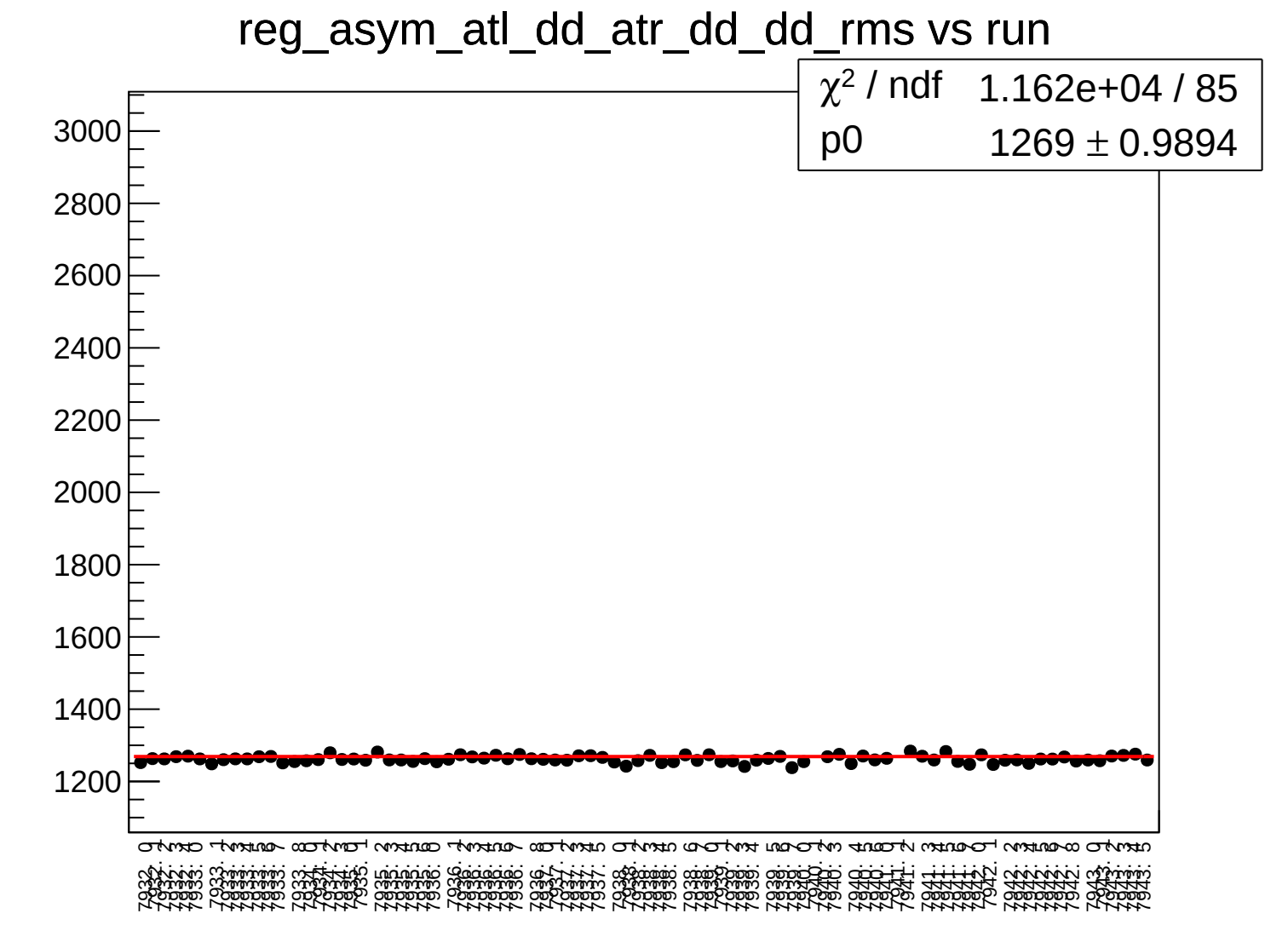

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 89.35 / 85
p0 −853.4 ± 6421
200
100
0
−100
−200
pull
Entries 86
Mean −178.6
Std Dev 253.2
2
1
0
−1
−2

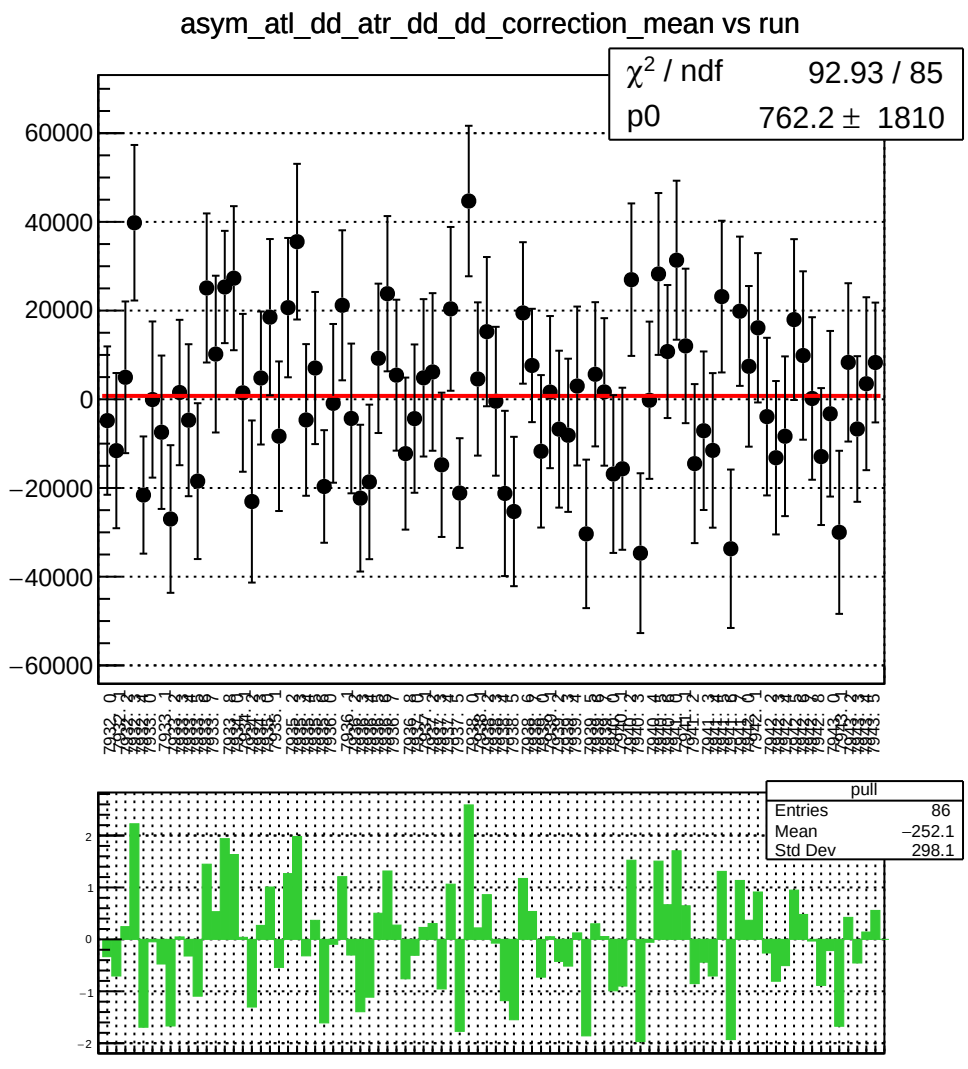

pull1D
Entries 86
Mean 0.002261
Std Dev 1.019
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

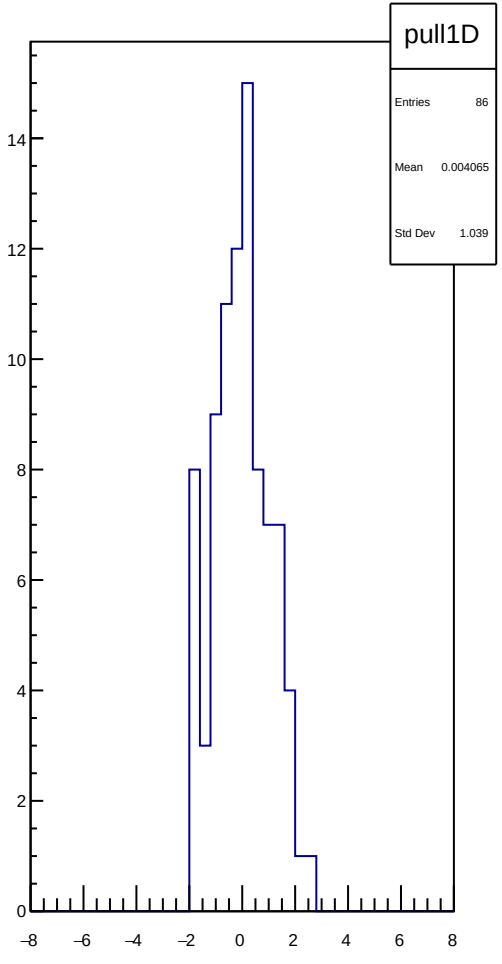

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 2846 / 85
p0 5838 ± 4.54
6600
6400
6200
6000
5800
5600
5400
5200

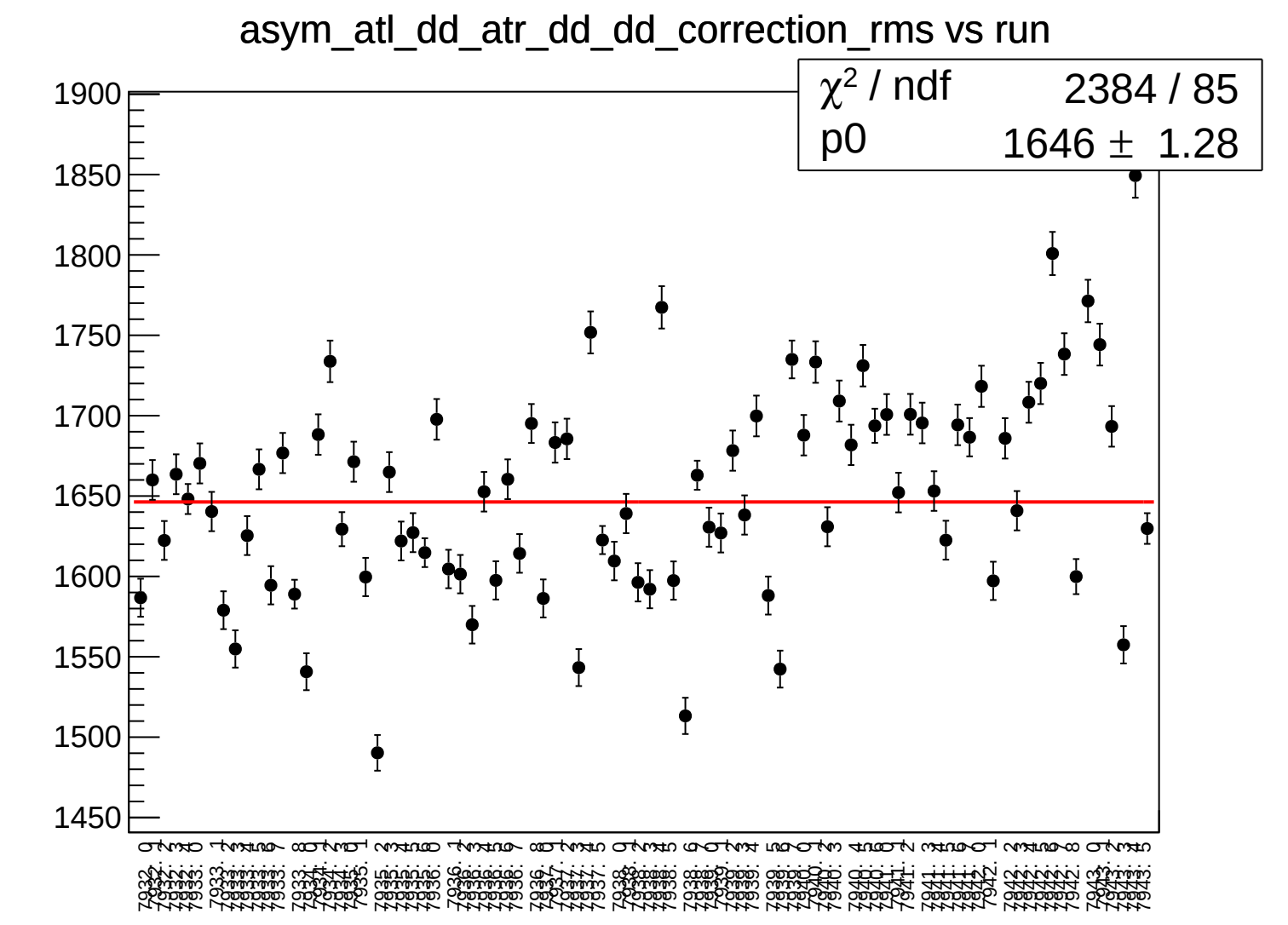

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 62.9 / 85
p0 2368 ± 1399
60000
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 274.5
Std Dev 149.9
2
1
0
−1
−2
−3

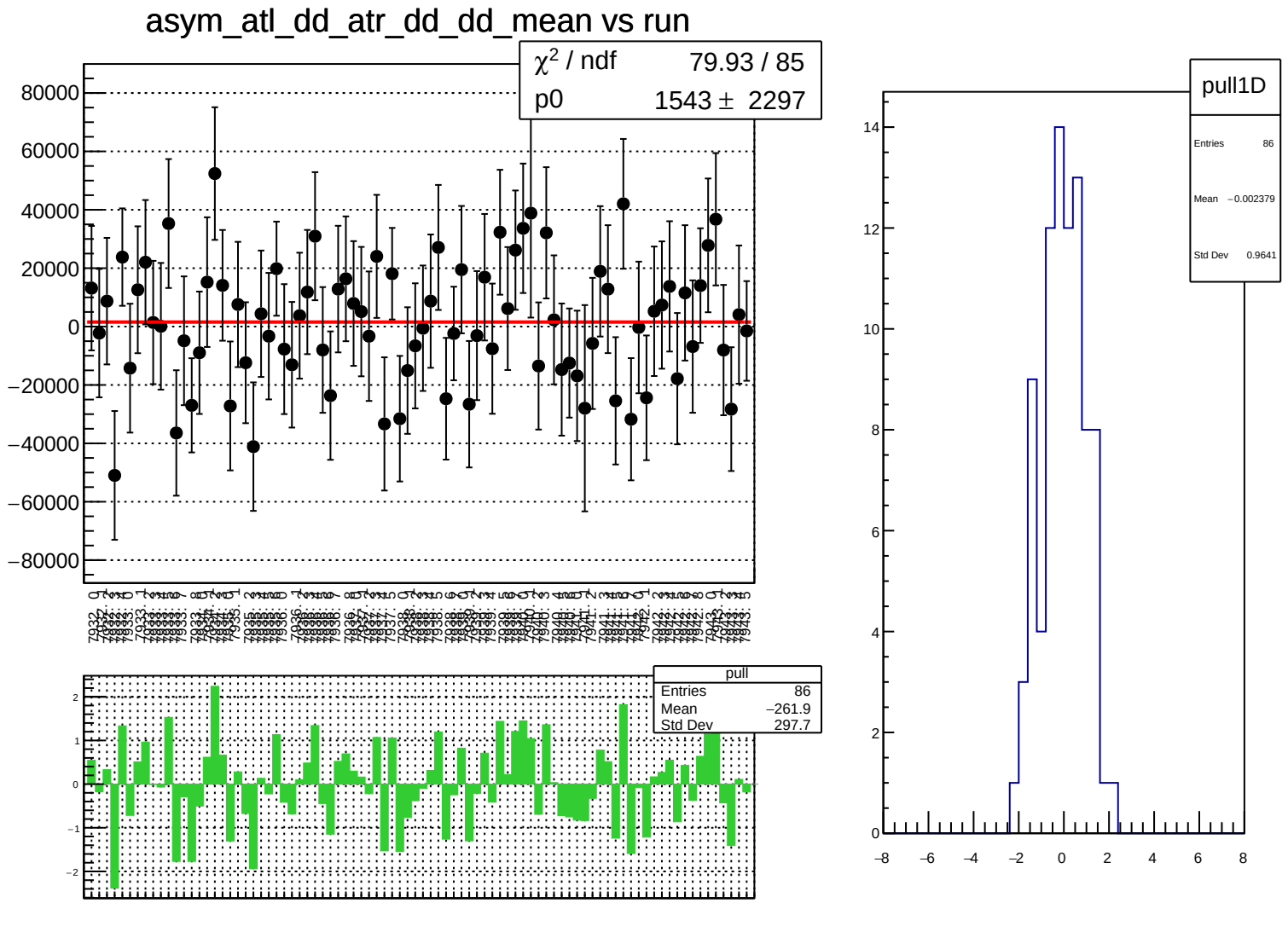

pull1D
Entries 86
Mean −0.0008178
Std Dev 0.8552
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

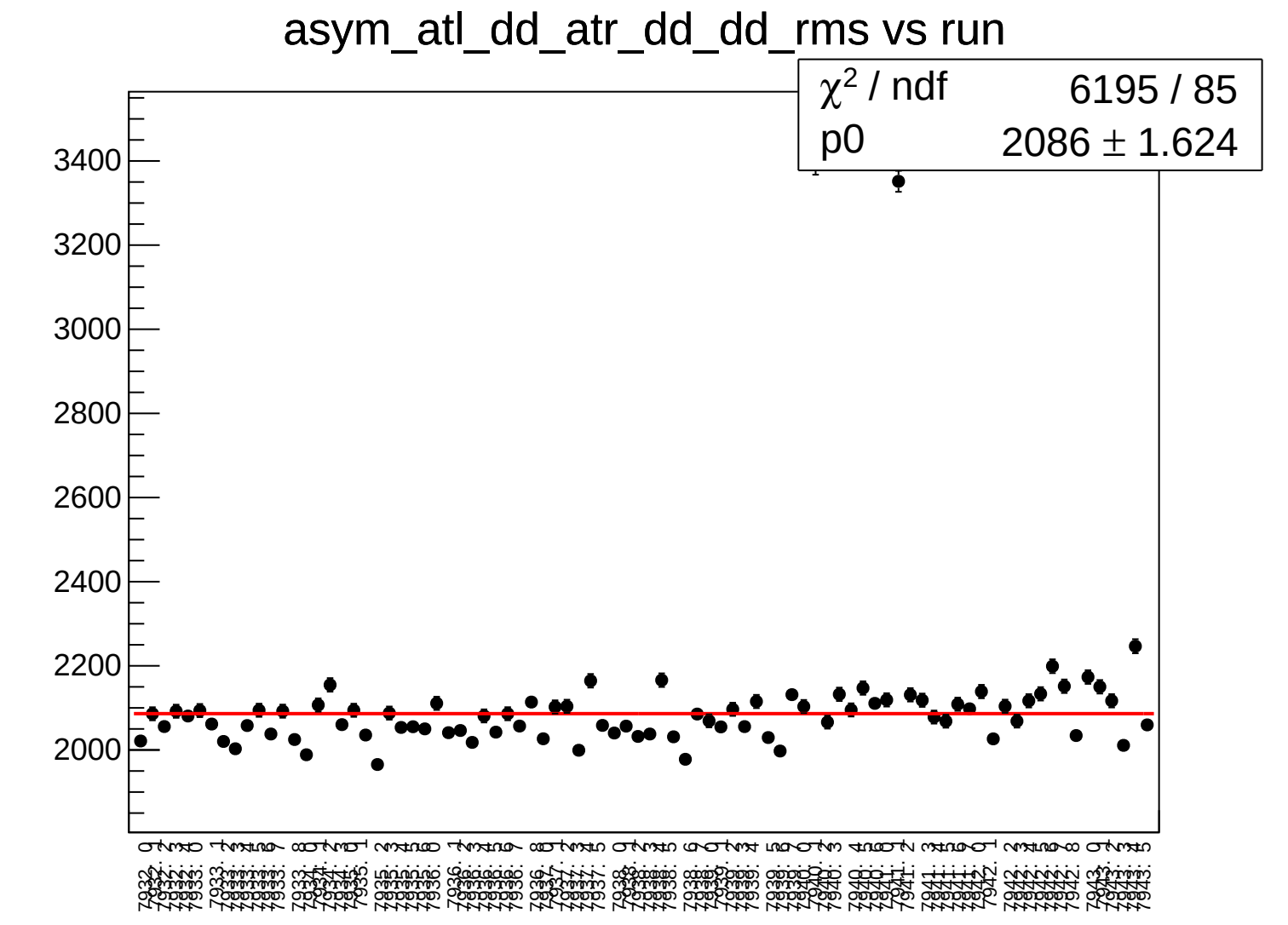

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.162e+04 / 85
p0 1269 ± 0.9894
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

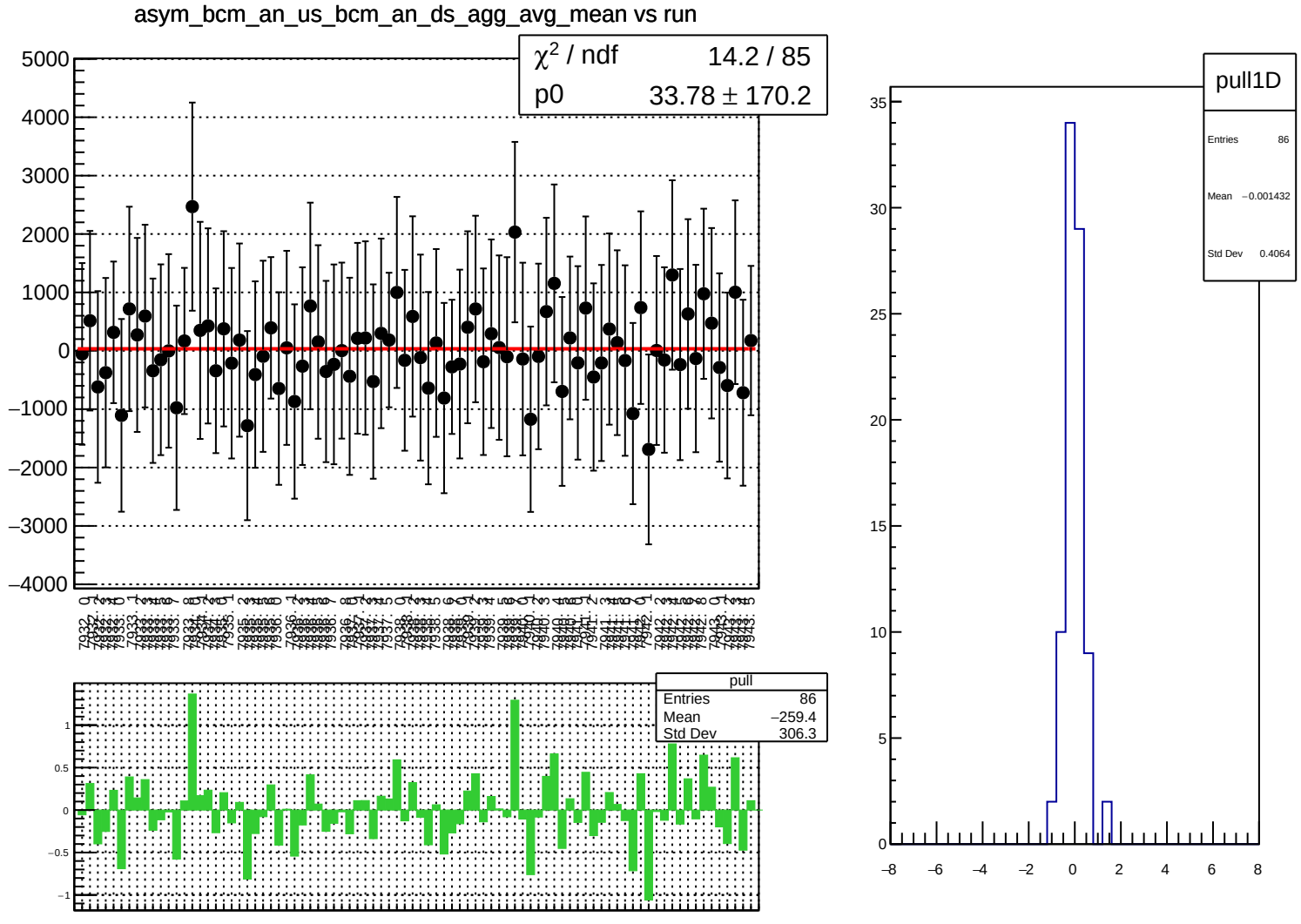

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 92.93 / 85
p0 762.2 ± 1810
pull
Entries 86
Mean −252.1
Std Dev 298.1

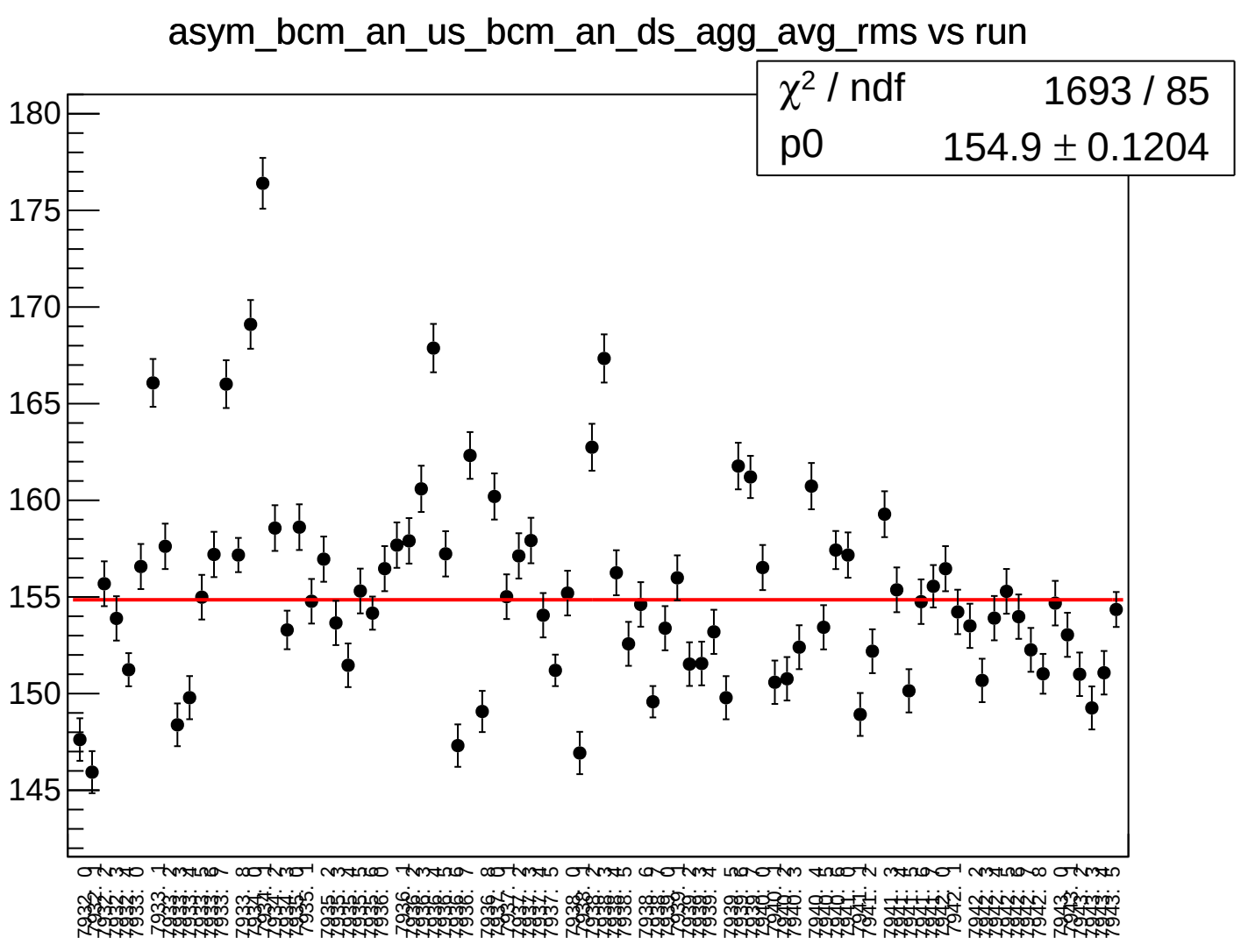

pull1D
Entries 86
Mean 0.004065
Std Dev 1.039

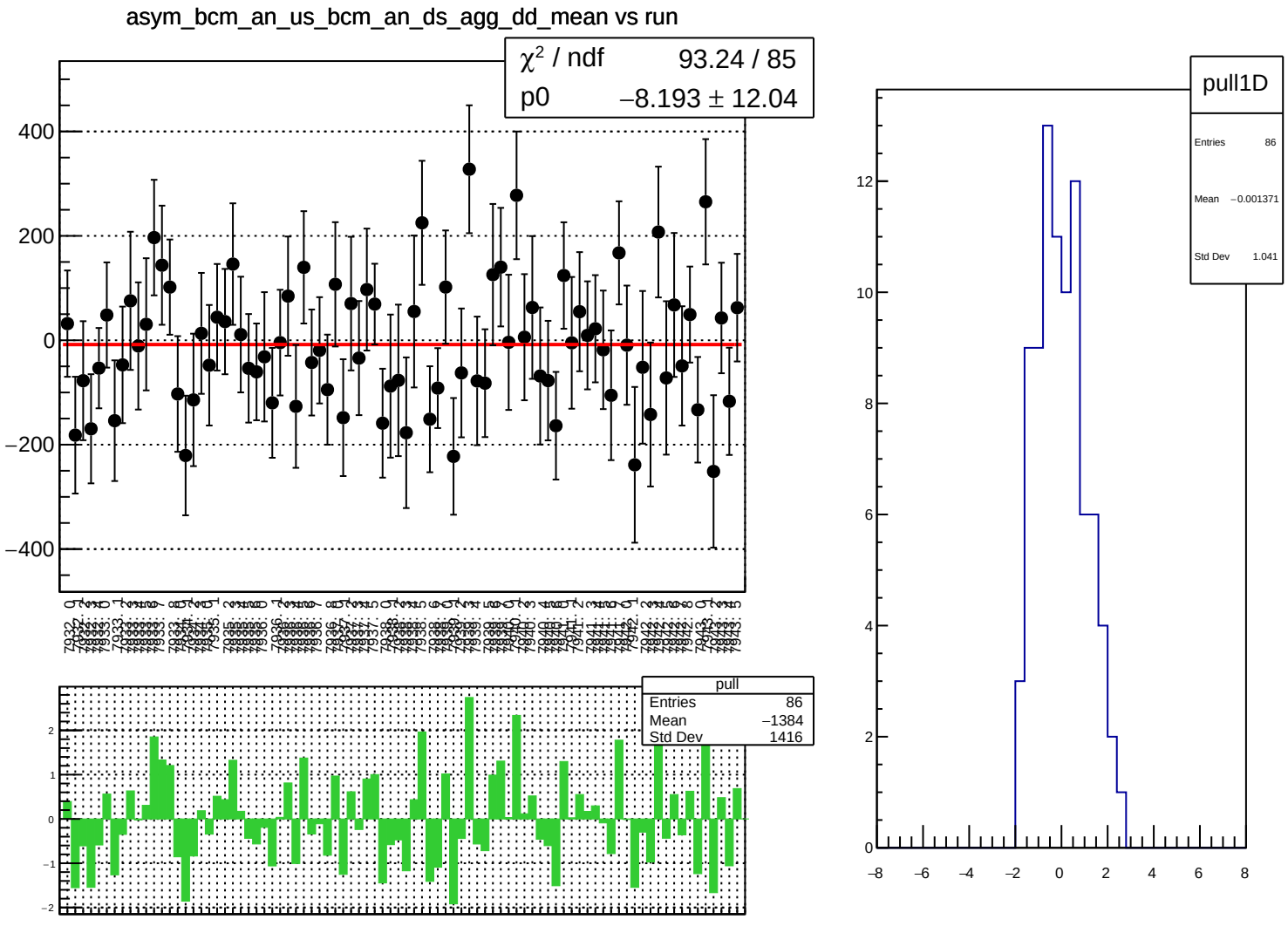

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 2384 / 85
p0 1646 ± 1.28
1900
1850
1800
1750
1700
1650
1600
1550
1500
1450

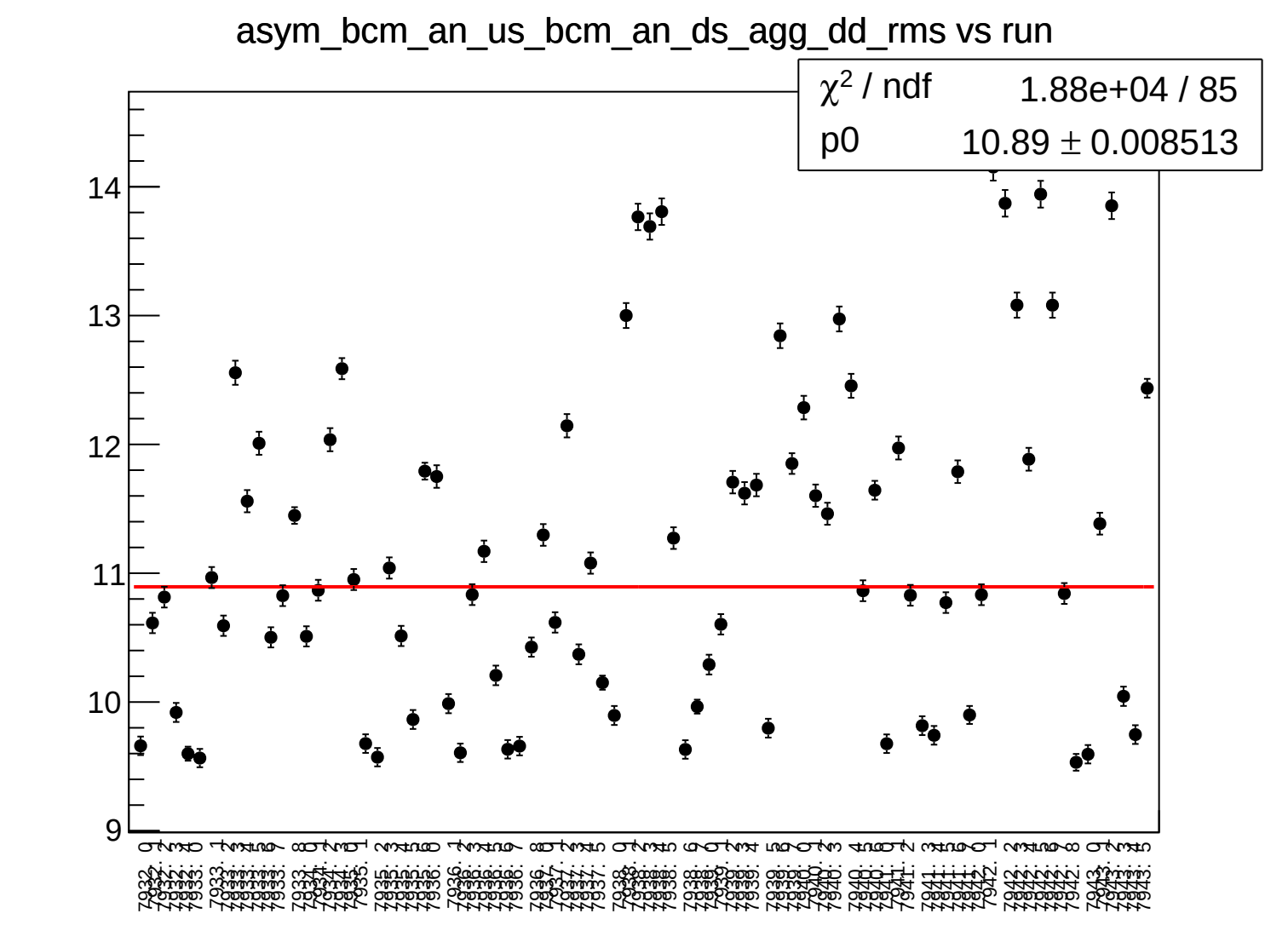

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 79.93 / 85
p0 1543 ± 2297
pull
Entries 86
Mean −261.9
Std Dev 297.7
pull1D
Entries 86
Mean −0.002379
Std Dev 0.9641

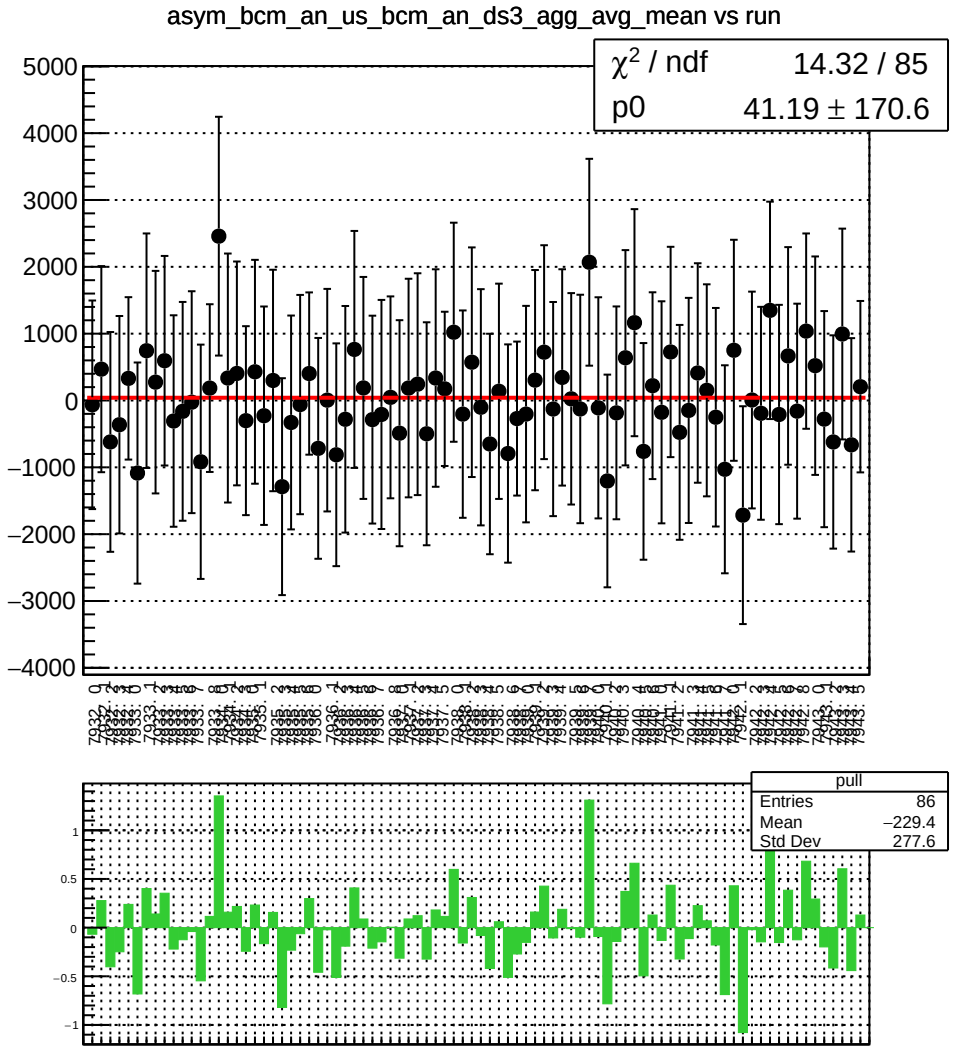

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 6195 / 85
p0 2086 ± 1.624
3400
3200
3000
2800
2600
2400
2200
2000

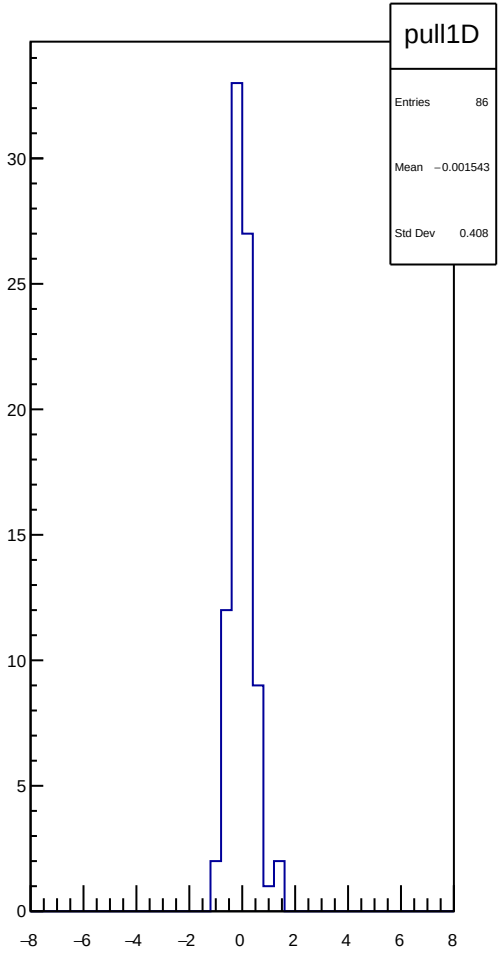

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.2 / 85
p0 33.78 ± 170.2
pull
Entries 86
Mean −259.4
Std Dev 306.3
pull1D
Entries 86
Mean −0.001432
Std Dev 0.4064

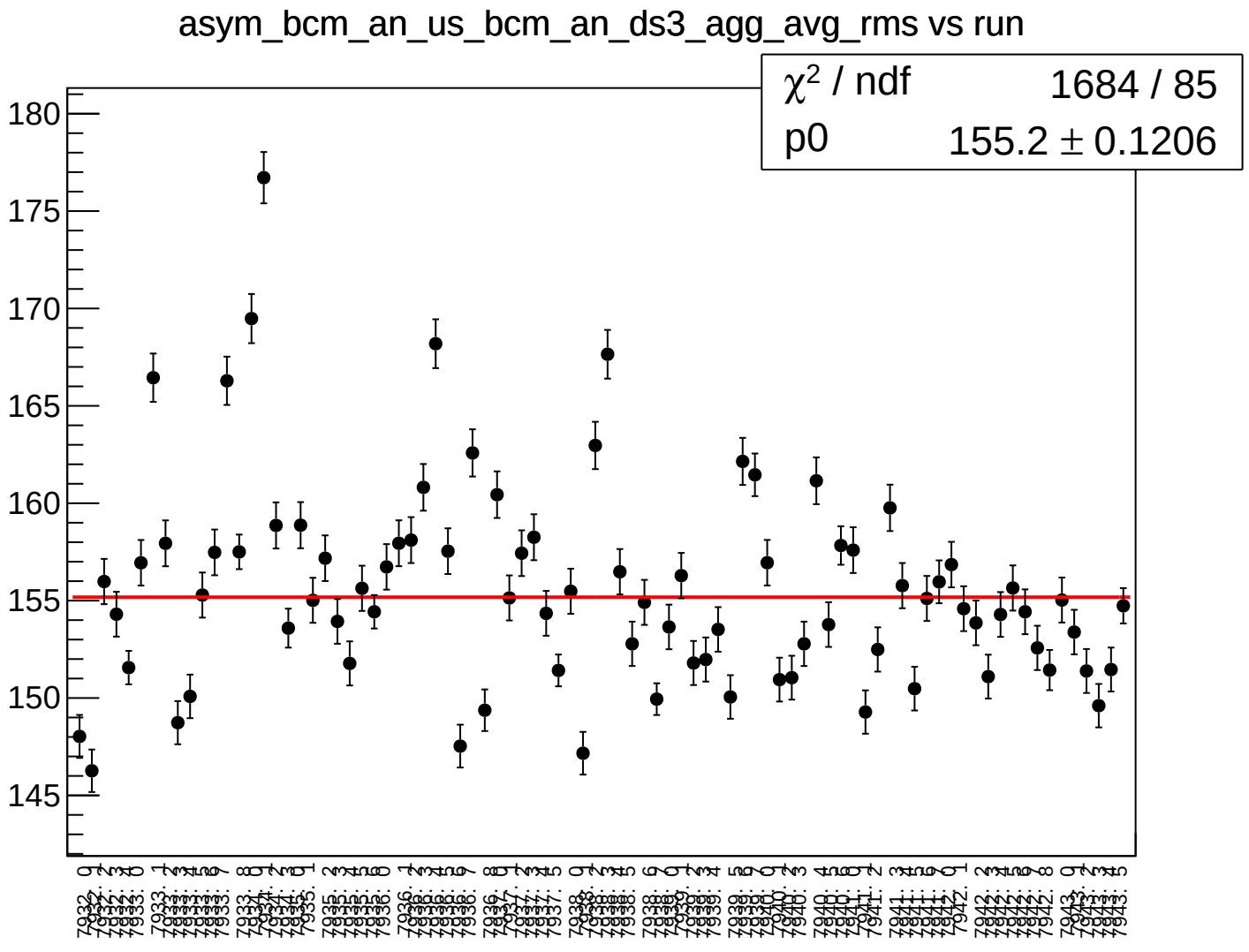

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1693 / 85
p0 154.9 ± 0.1204
180
175
170
165
160
155
150
145

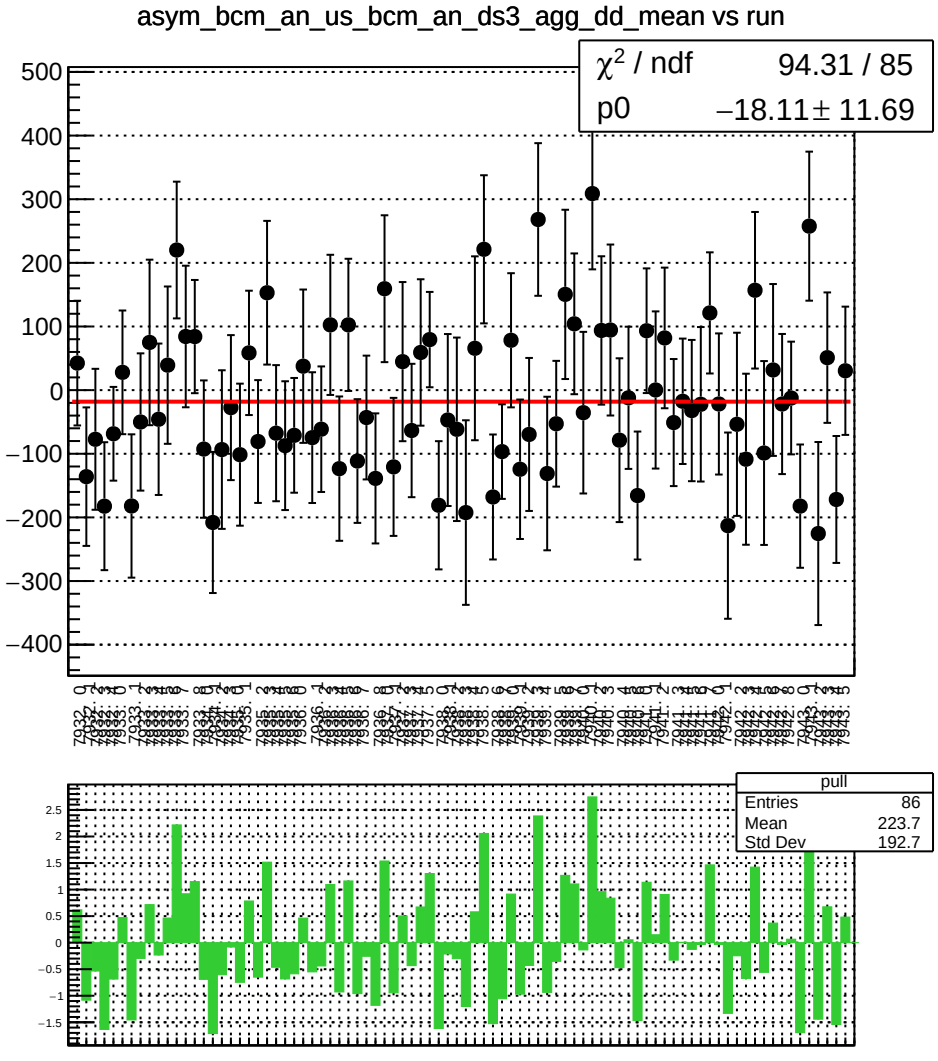

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 93.24 / 85
p0 −8.193 ± 12.04
400
200
0
−200
−400
pull
Entries 86
Mean −1384
Std Dev 1416
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.001371
Std Dev 1.041
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

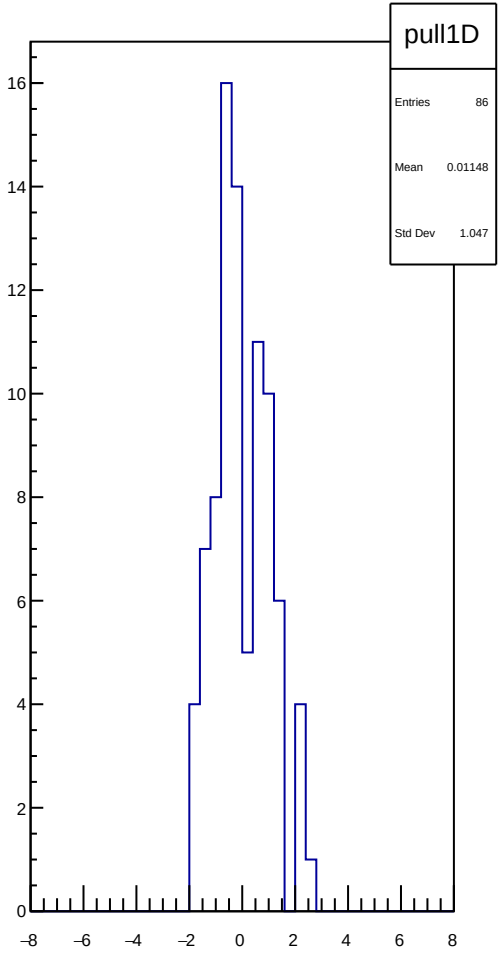

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.88e+04 / 85
p0 10.89 ± 0.008513
14
13
12
11
10
9

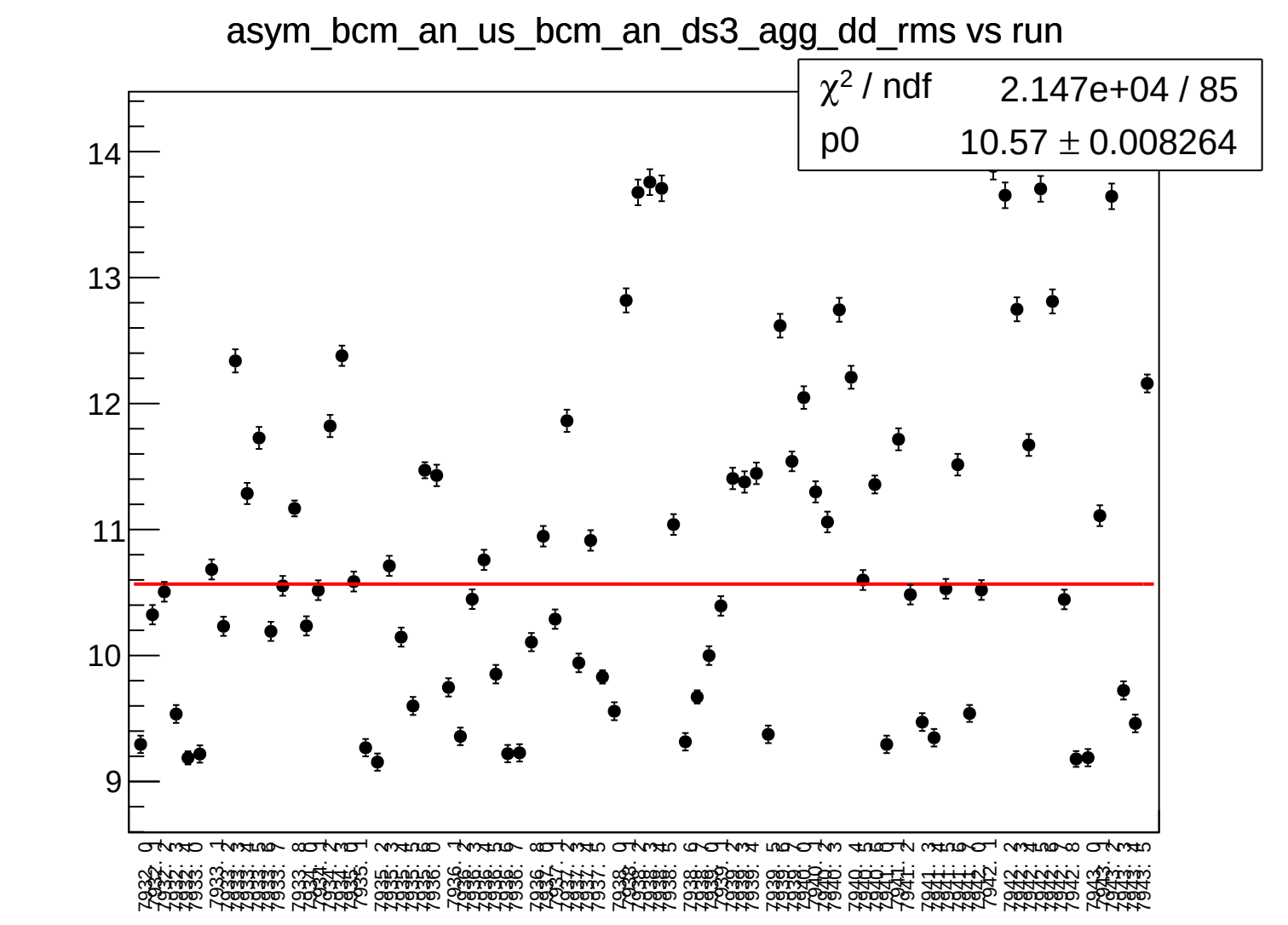

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.32 / 85
p0 41.19 ± 170.6
pull
Entries 86
Mean −229.4
Std Dev 277.6

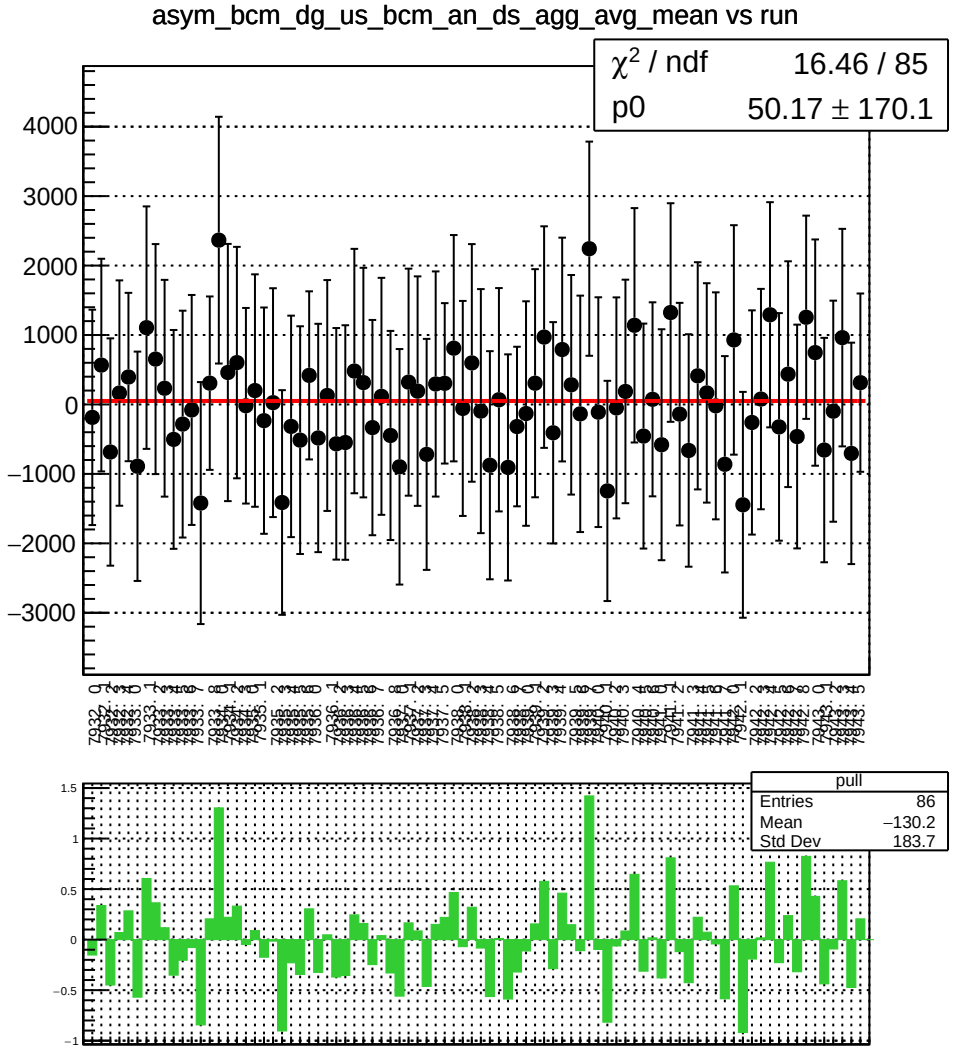

pull1D
Entries 86
Mean −0.001543
Std Dev 0.408

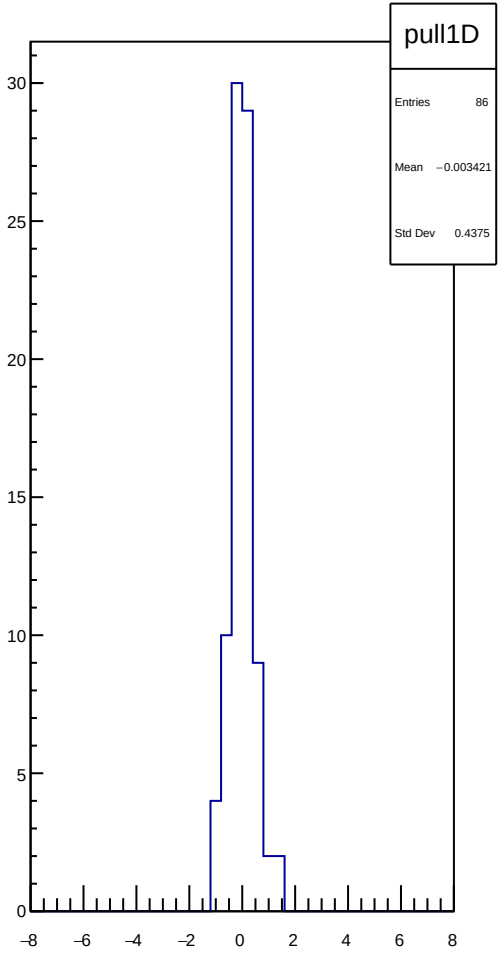

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1684 / 85
p0 155.2 ± 0.1206
180
175
170
165
160
155
150
145

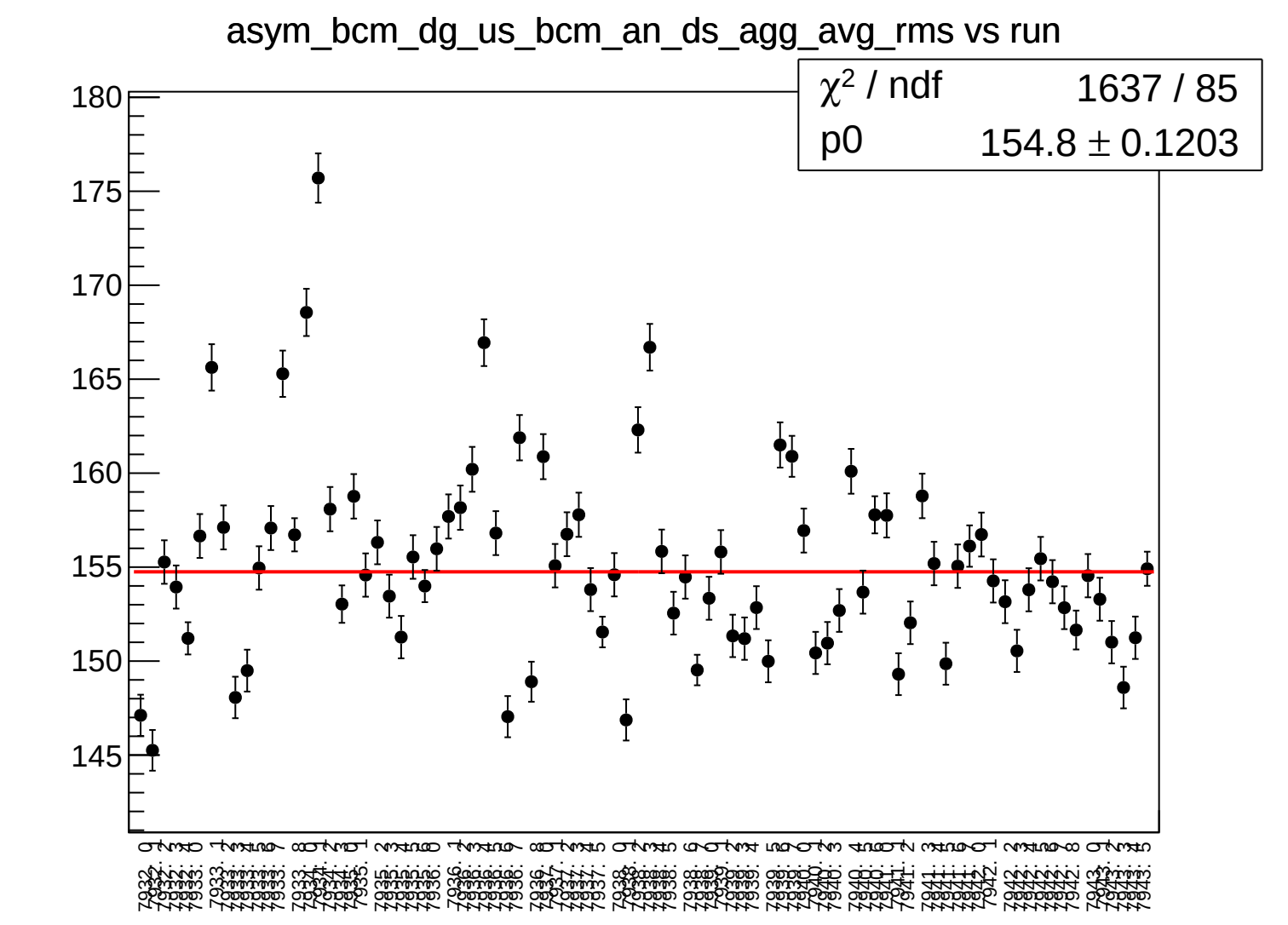

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 94.31 / 85
p0 −18.11± 11.69
pull
Entries 86
Mean 223.7
Std Dev 192.7

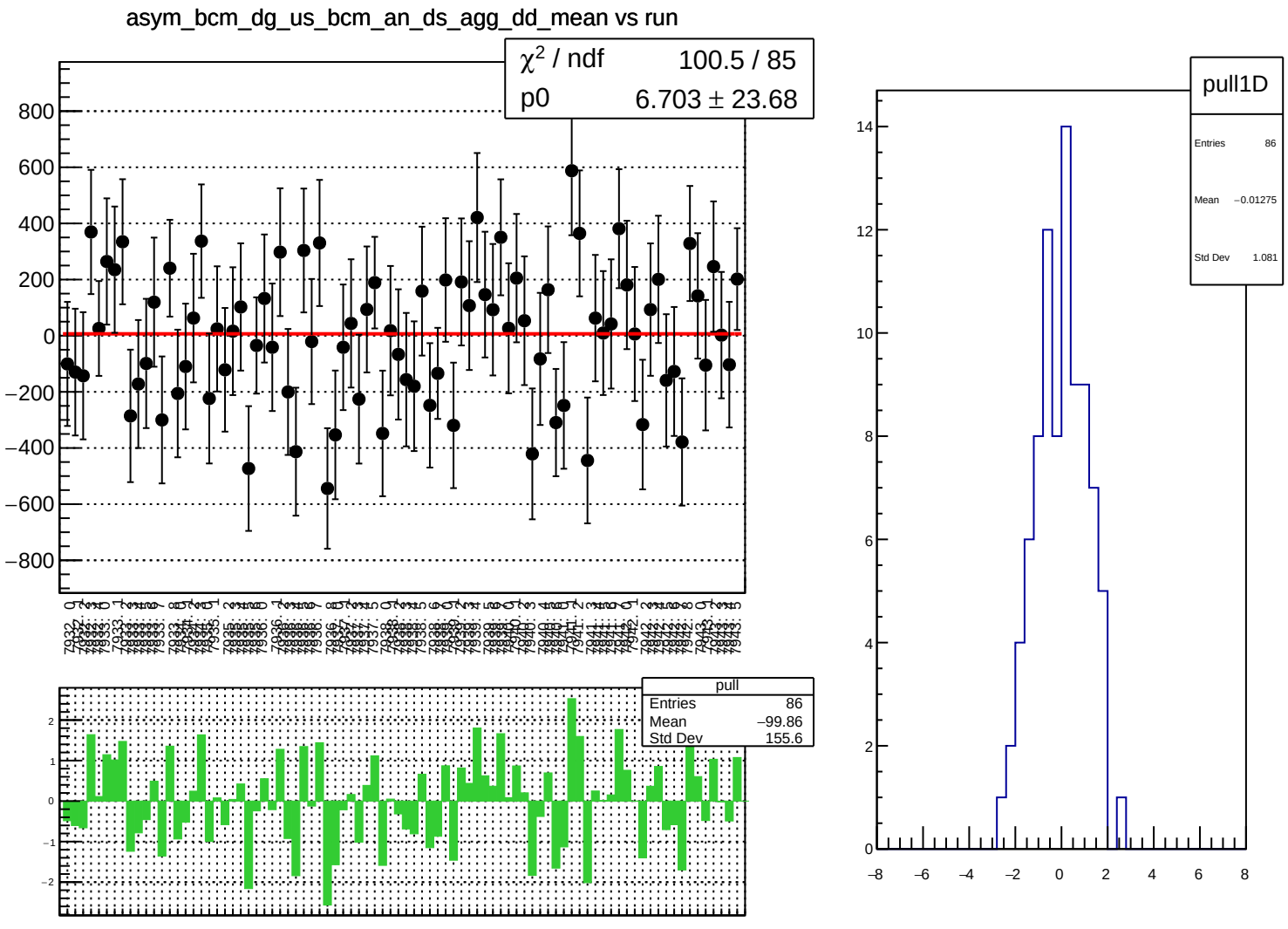

pull1D
Entries 86
Mean 0.01148
Std Dev 1.047

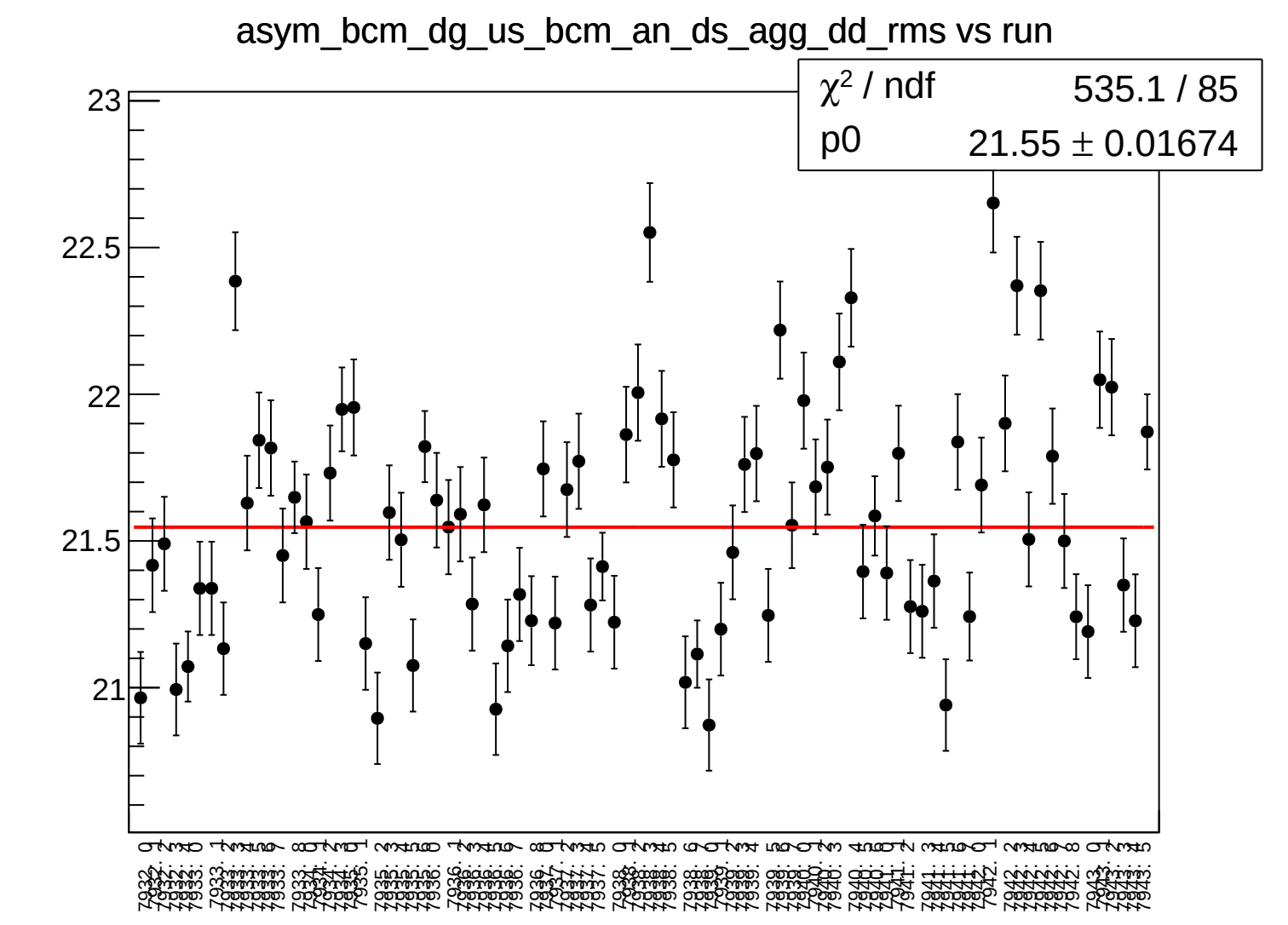

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.147e+04 / 85
p0 10.57 ± 0.008264
14
13
12
11
10
9

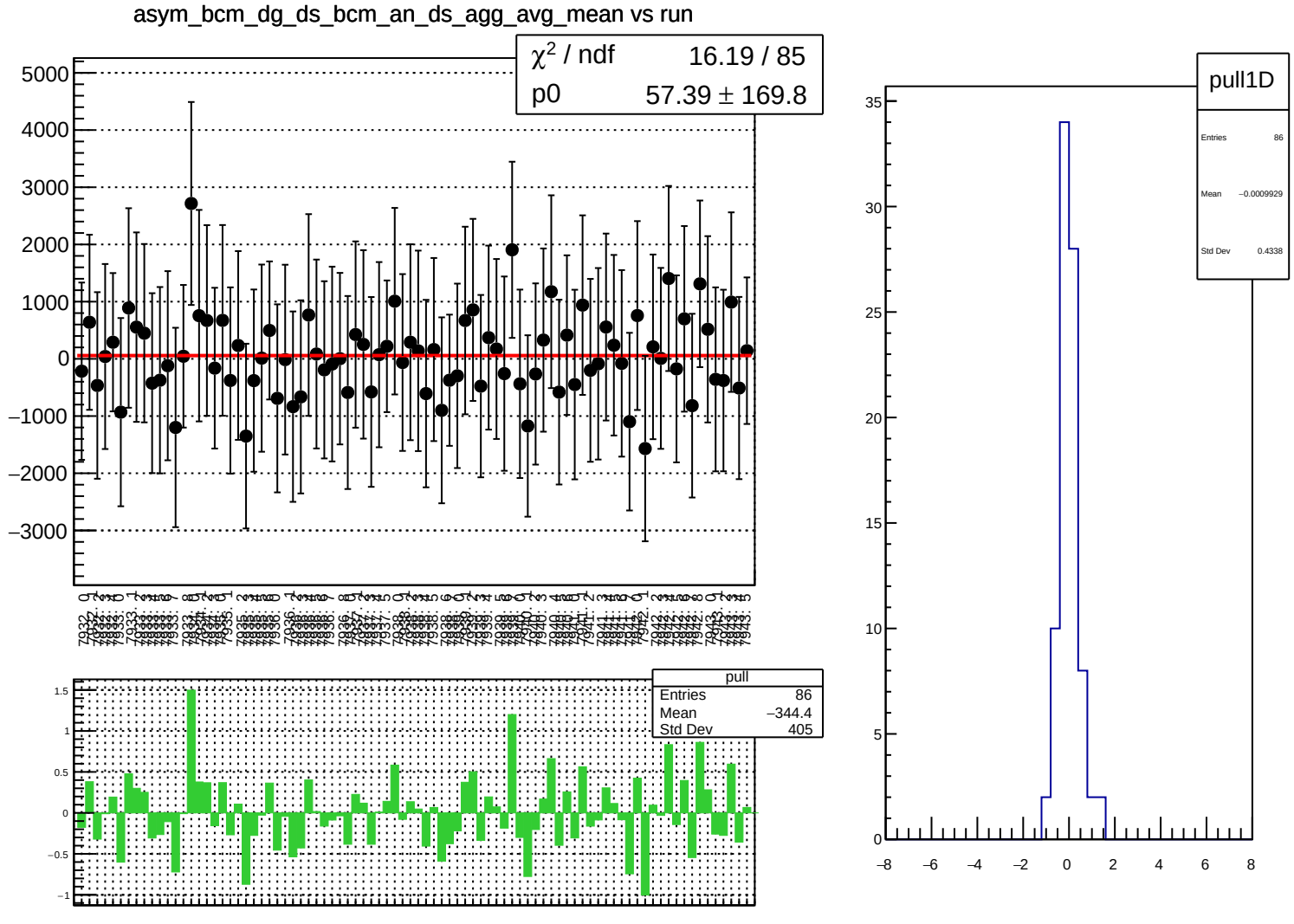

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.46 / 85
p0 50.17 ± 170.1
pull
Entries 86
Mean −130.2
Std Dev 183.7

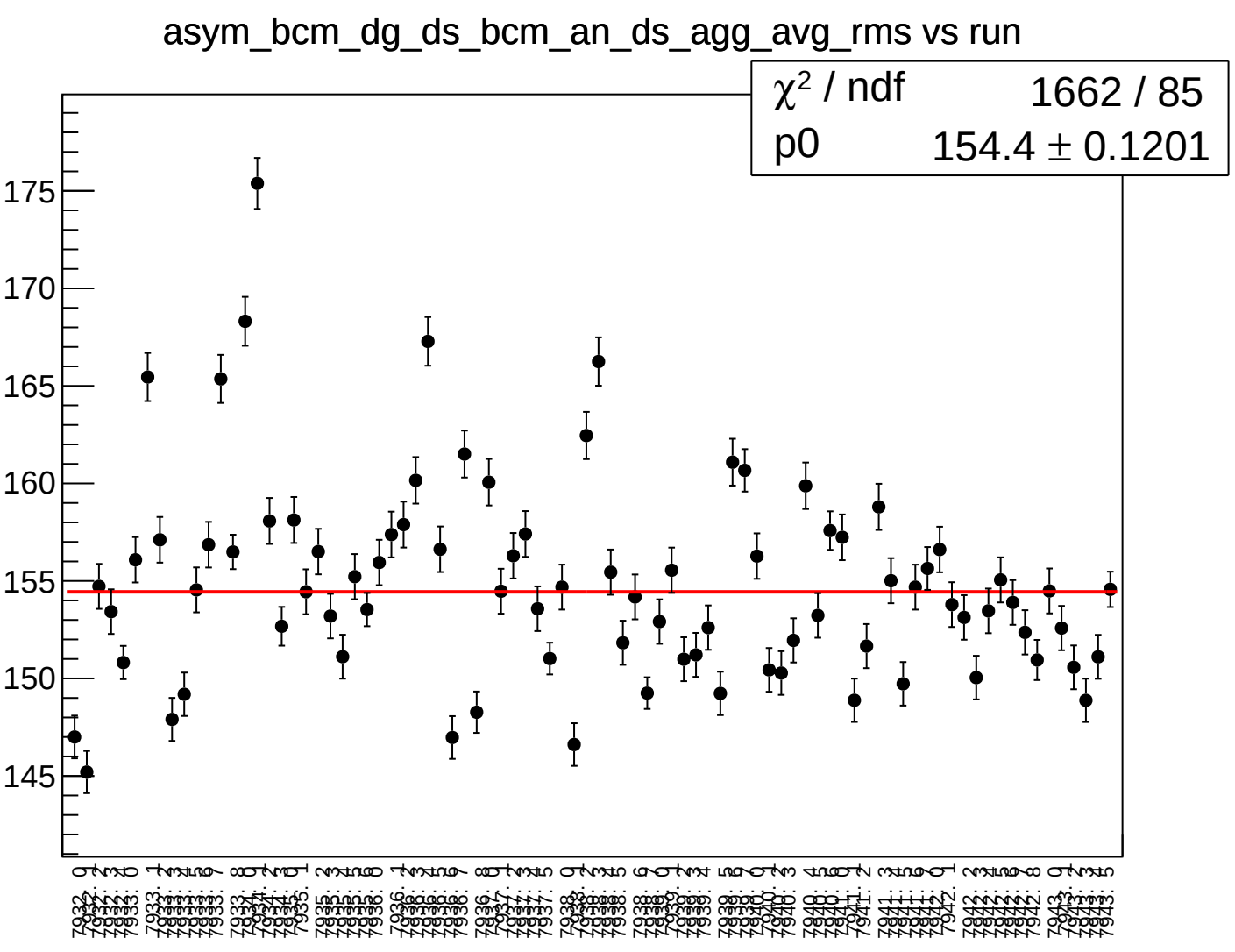

pull1D
Entries 86
Mean −0.003421
Std Dev 0.4375

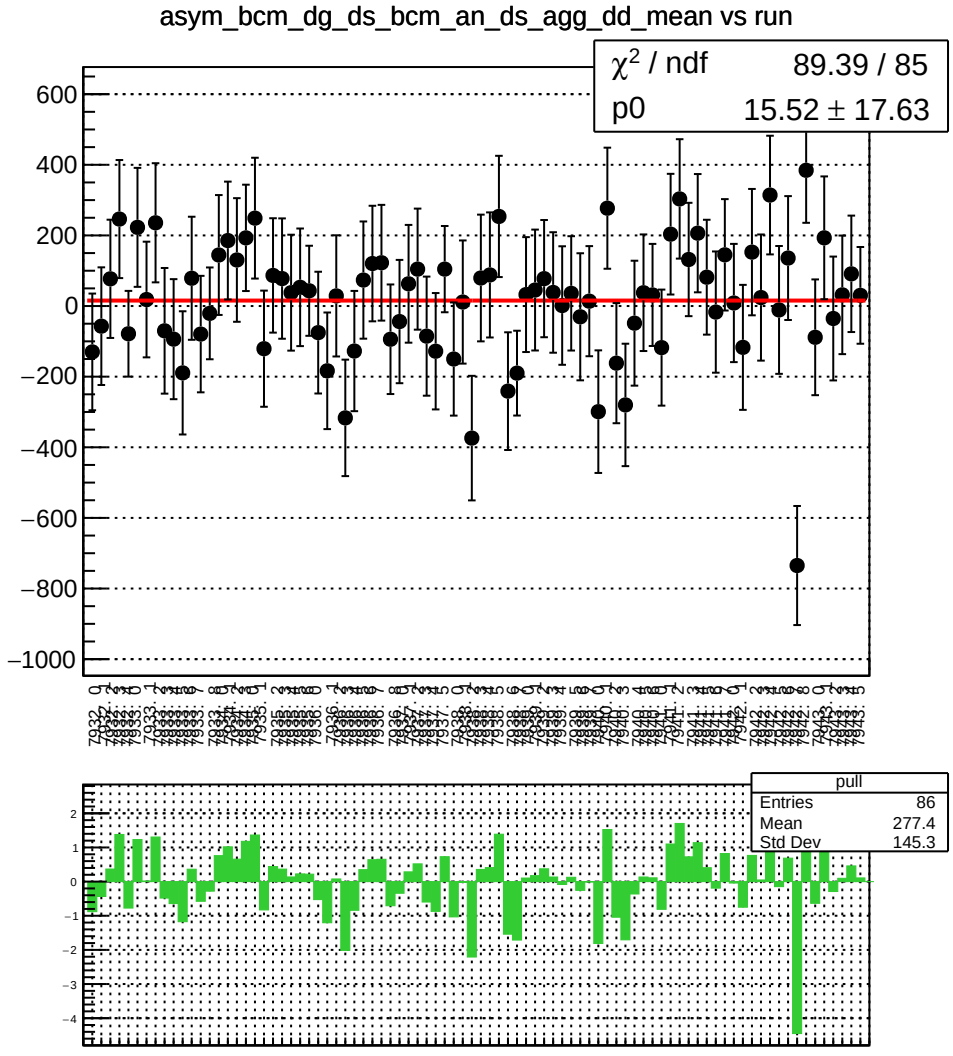

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1637 / 85
p0 154.8 ± 0.1203
180
175
170
165
160
155
150
145

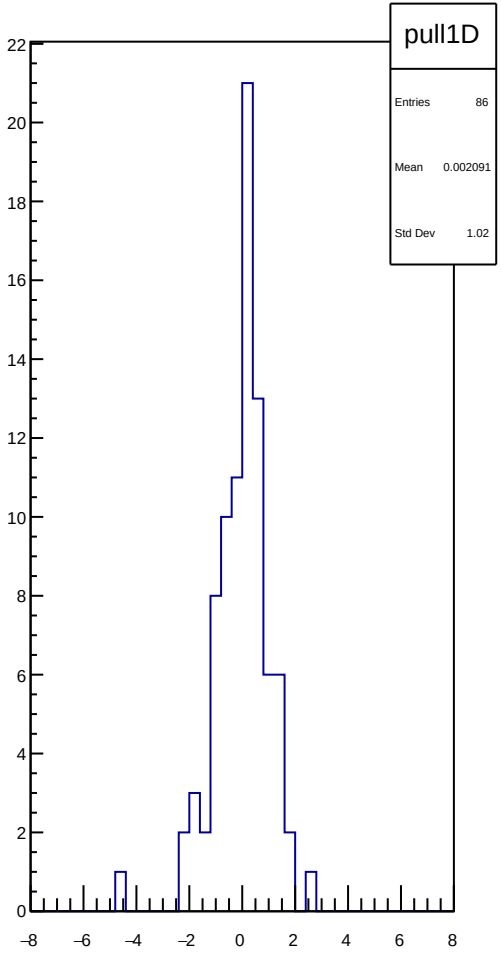

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 100.5 / 85
p0 6.703 ± 23.68
pull
Entries 86
Mean −99.86
Std Dev 155.6
pull1D
Entries 86
Mean −0.01275
Std Dev 1.081

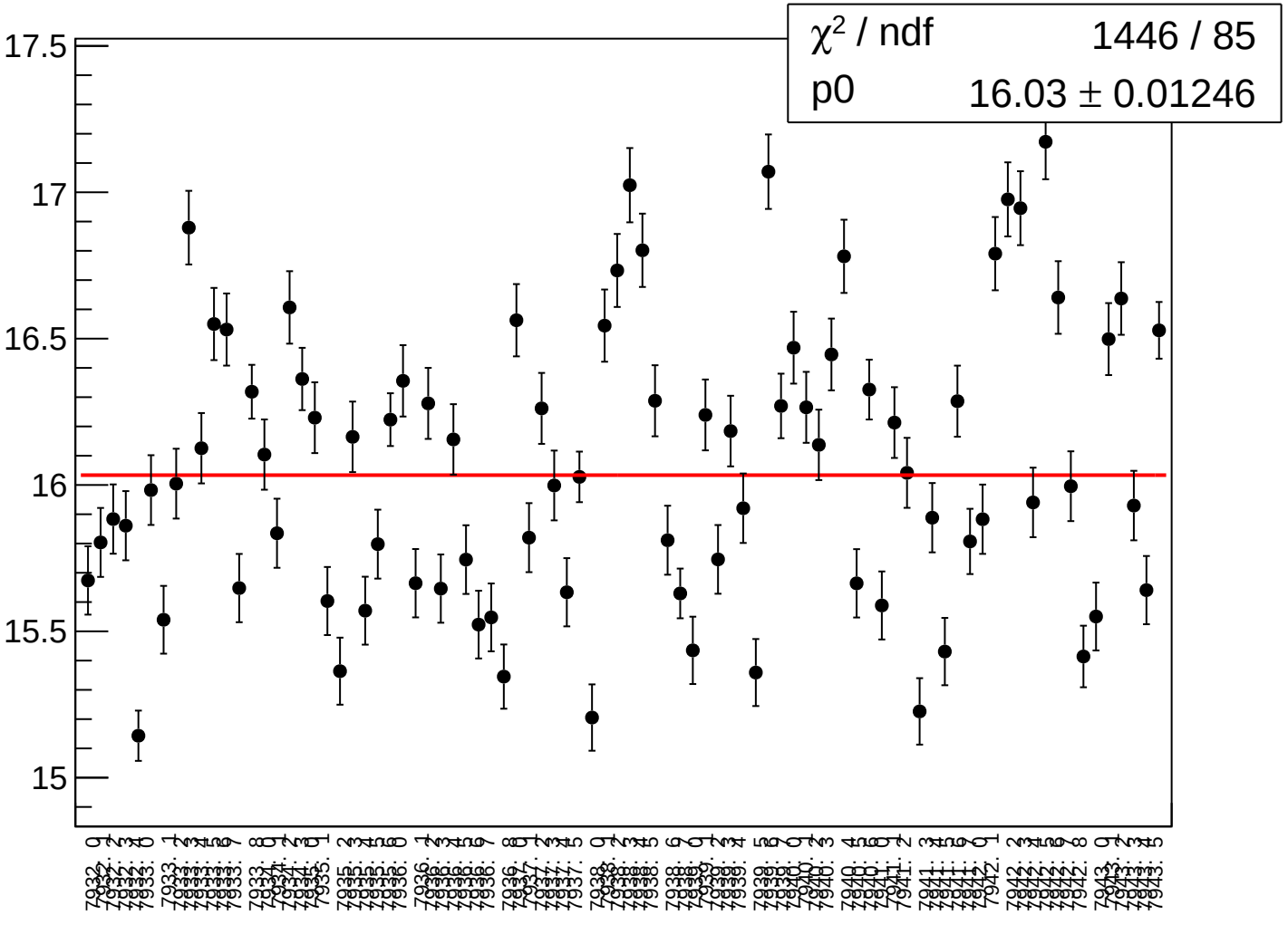

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 535.1 / 85
p0 21.55 ± 0.01674
23
22.5
22
21.5
21

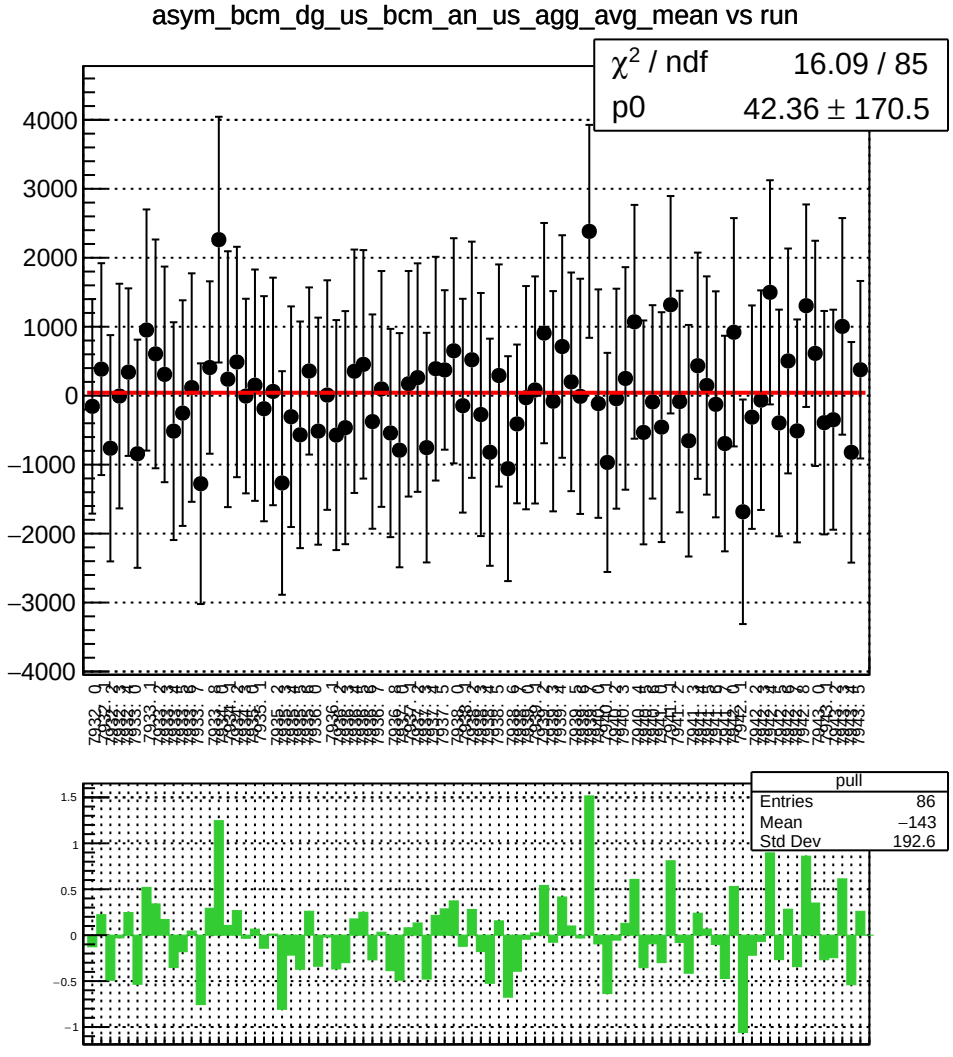

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.19 / 85
p0 57.39 ± 169.8
pull
Entries 86
Mean −344.4
Std Dev 405
pull1D
Entries 86
Mean −0.0009929
Std Dev 0.4338

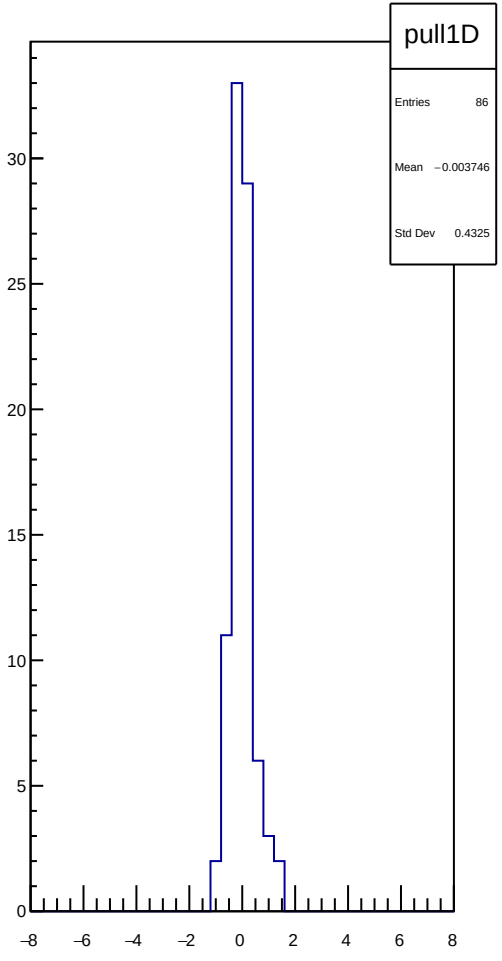

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1662 / 85
p0 154.4 ± 0.1201
175
170
165
160
155
150
145

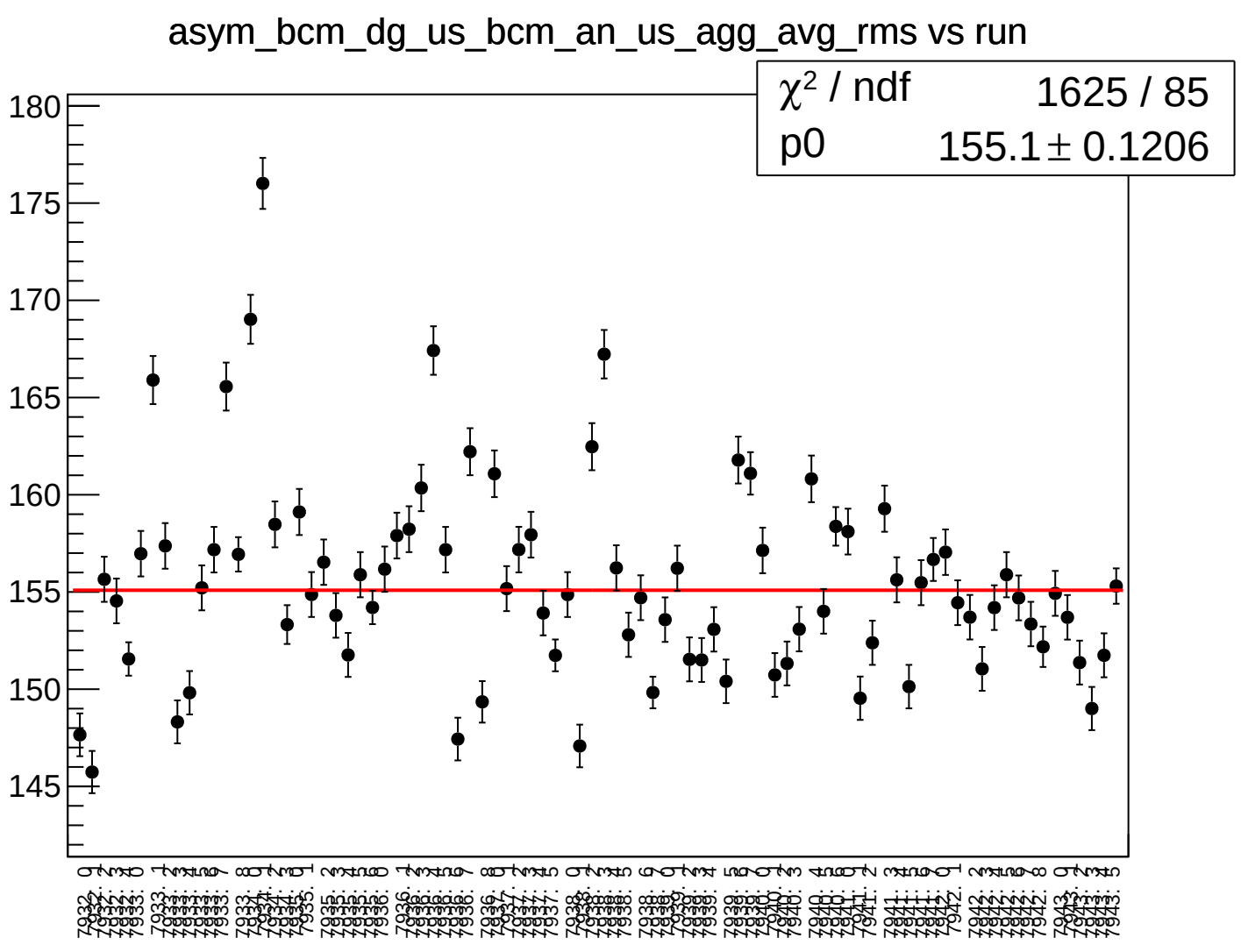

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 89.39 / 85
p0 15.52 ± 17.63
pull
Entries 86
Mean 277.4
Std Dev 145.3

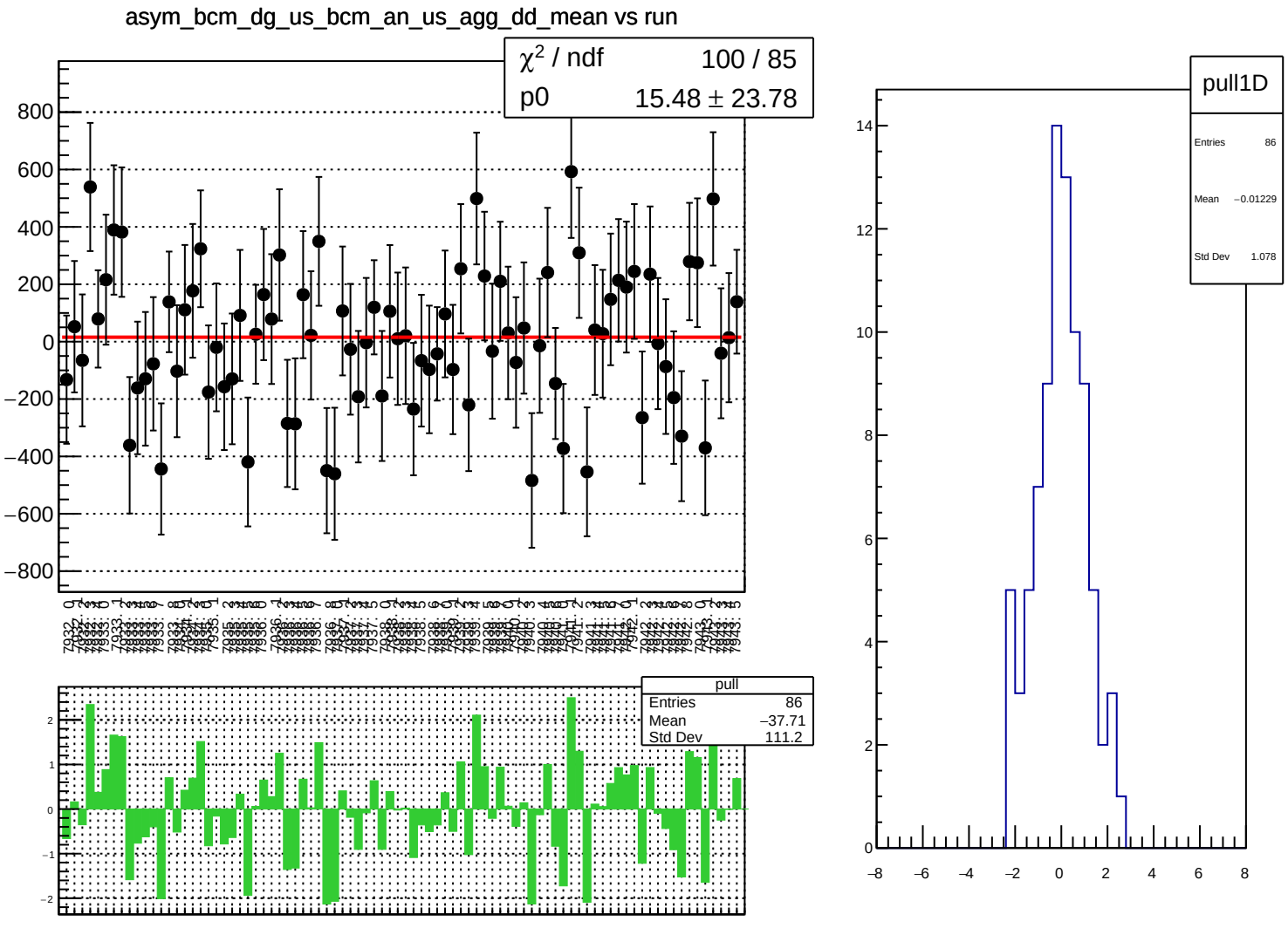

pull1D
Entries 86
Mean 0.002091
Std Dev 1.02

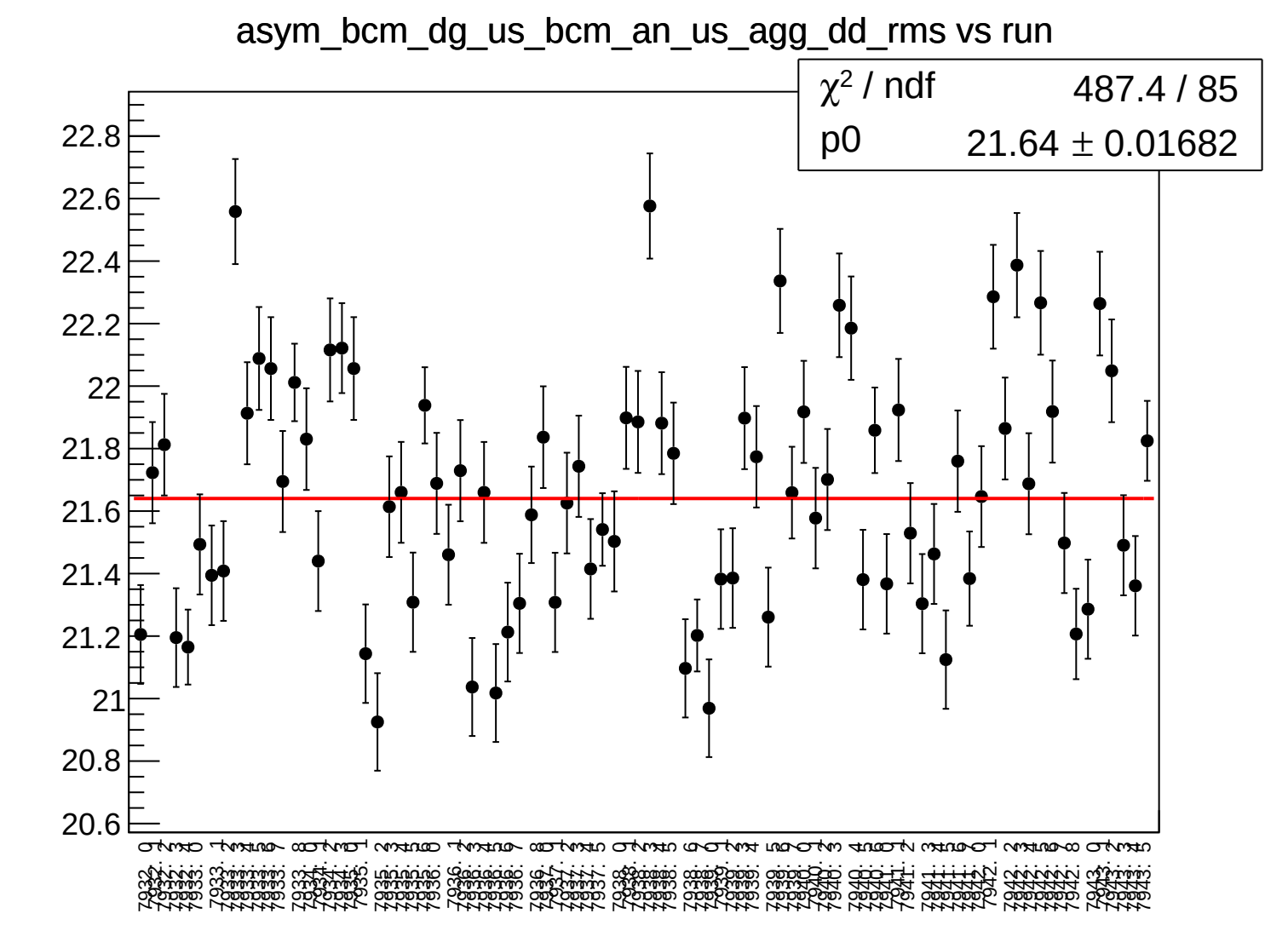

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1446 / 85
p0 16.03 ± 0.01246
17.5
17
16.5
16
15.5
15

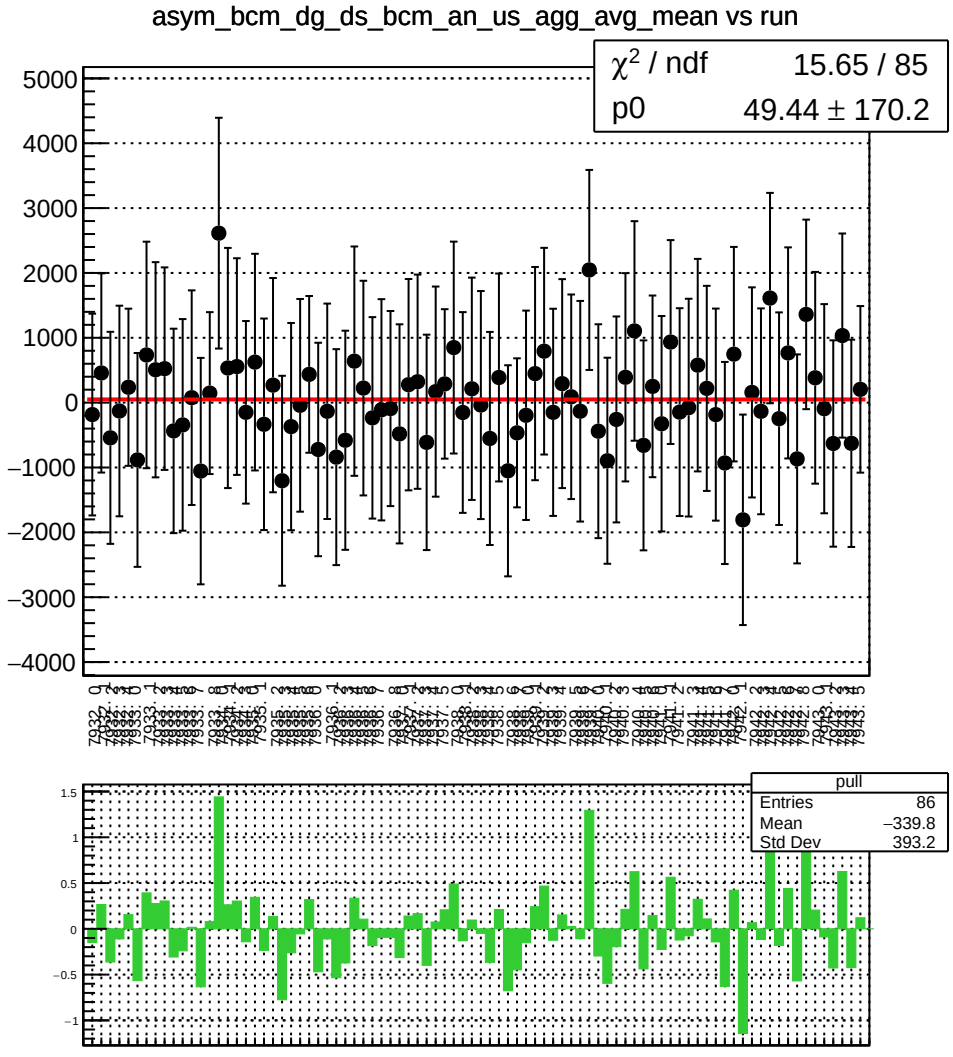

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.09 / 85
p0 42.36 ± 170.5
pull
Entries 86
Mean −143
Std Dev 192.6

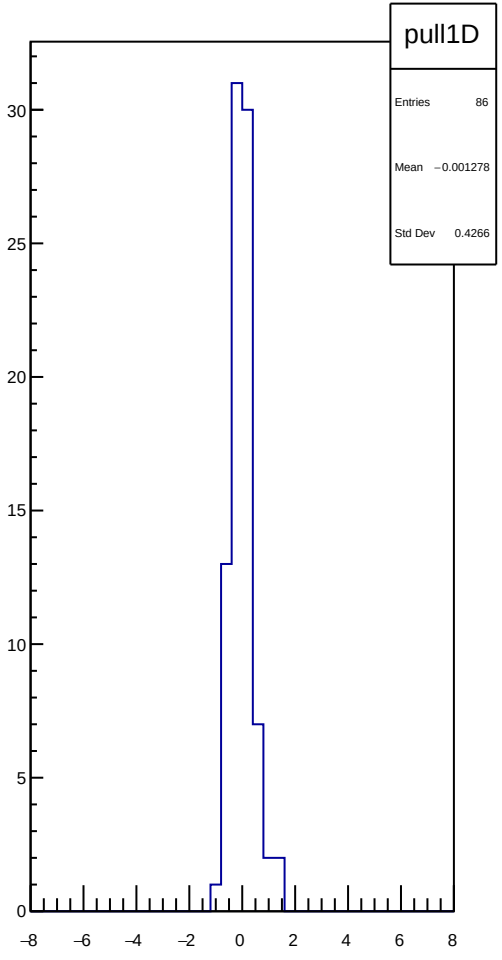

pull1D
Entries 86
Mean −0.003746
Std Dev 0.4325

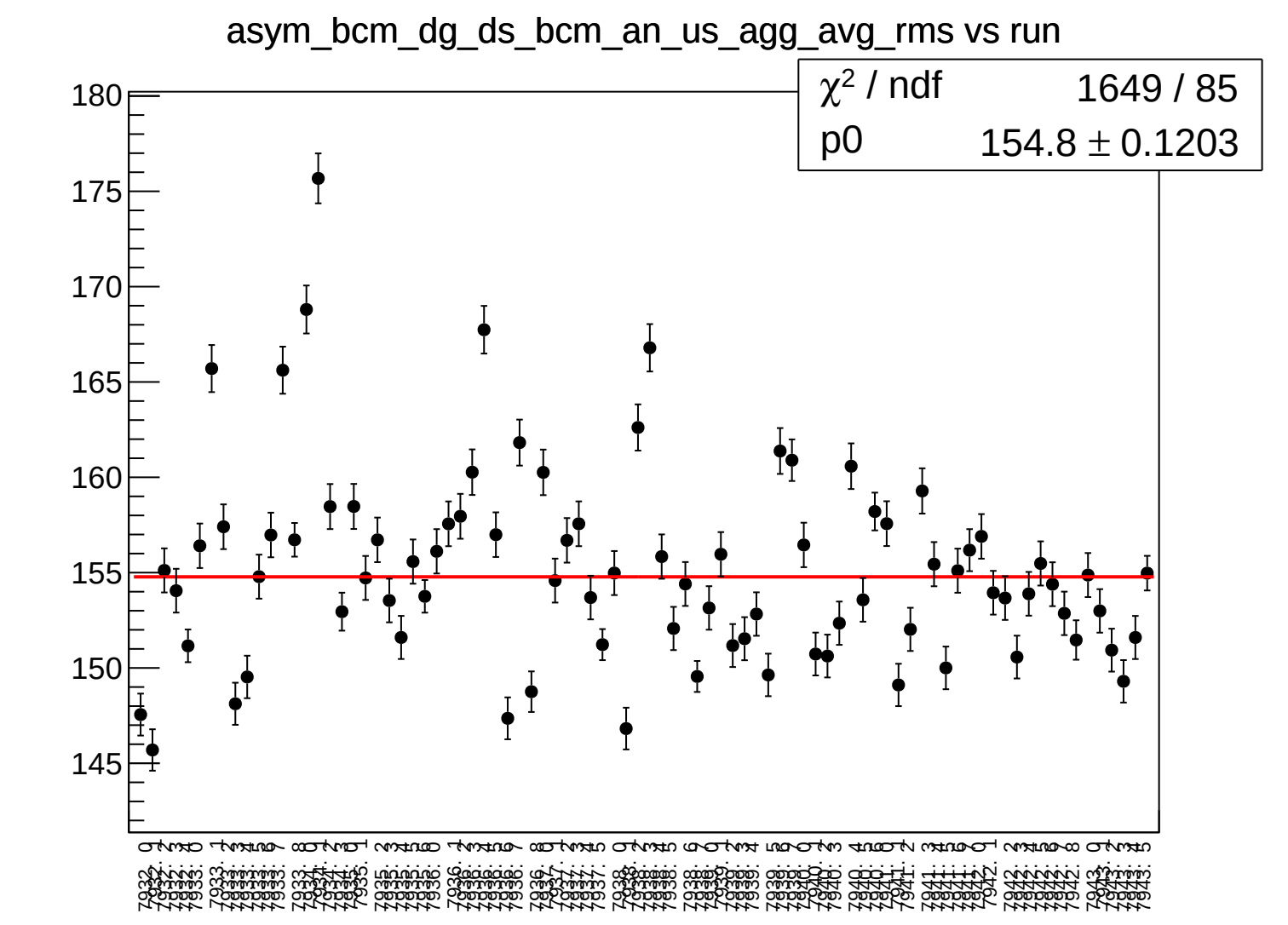

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1625 / 85
p0 155.1 ± 0.1206
180
175
170
165
160
155
150
145

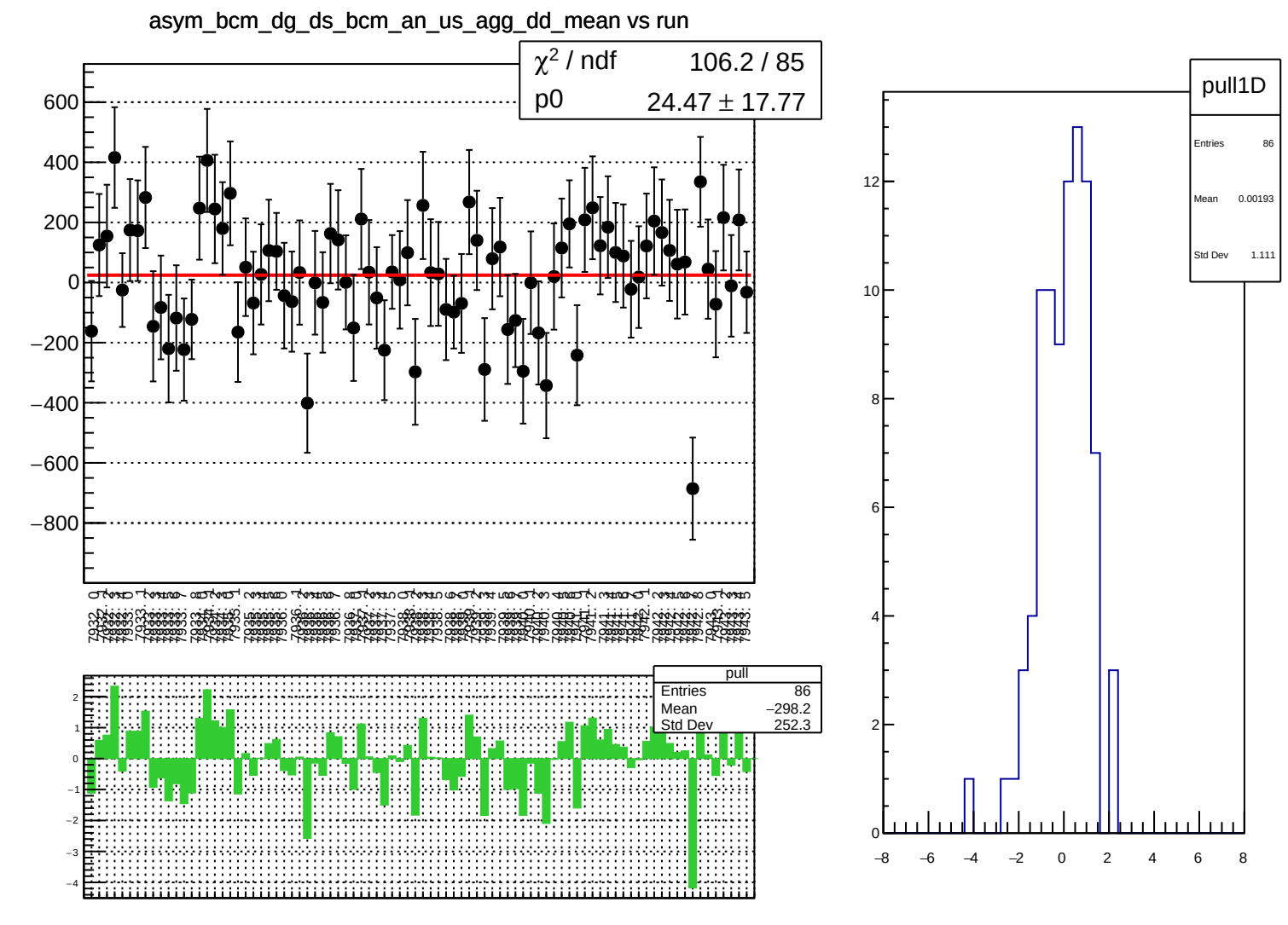

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 100 / 85
p0 15.48 ± 23.78
pull
Entries 86
Mean −37.71
Std Dev 111.2
pull1D
Entries 86
Mean −0.01229
Std Dev 1.078

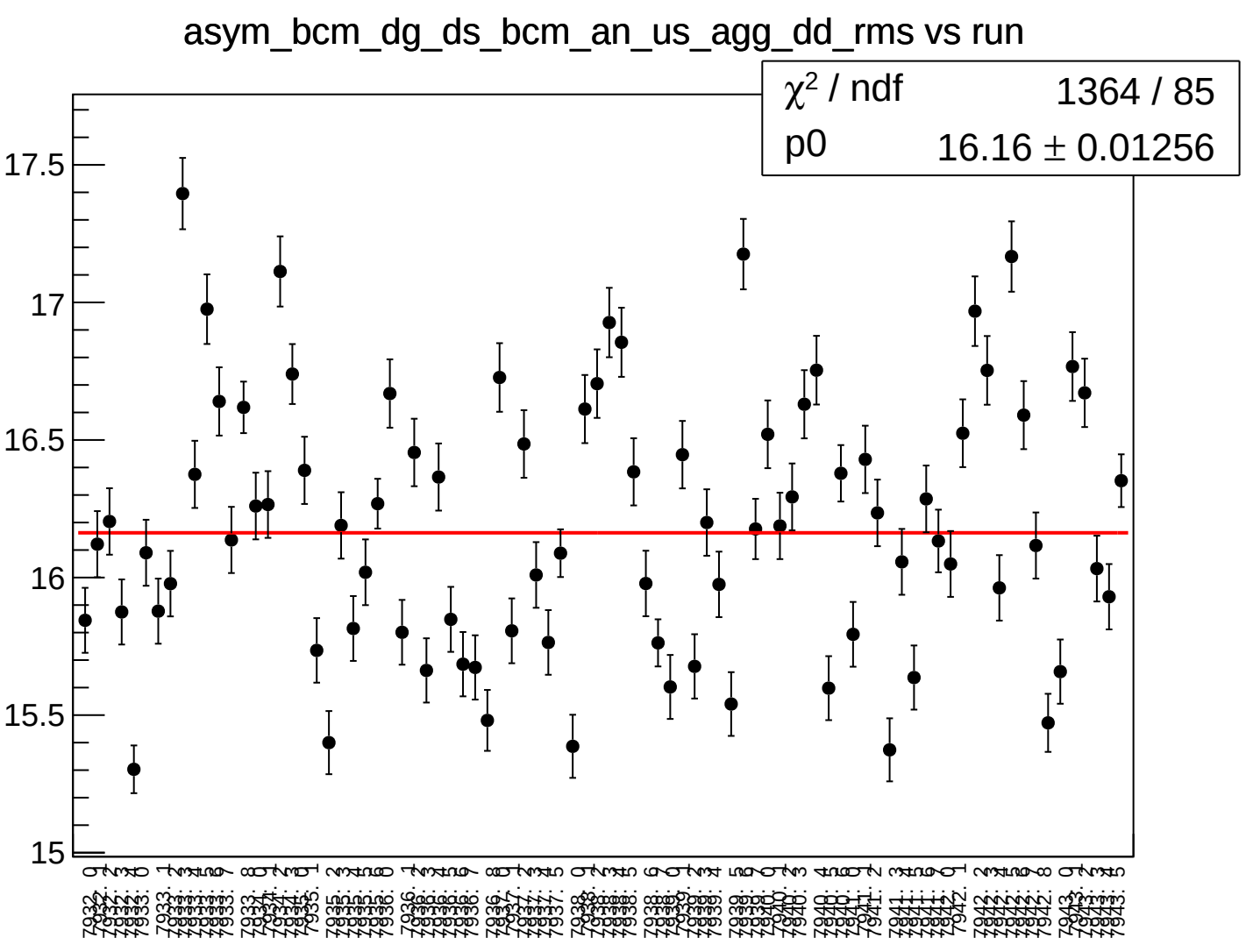

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 487.4 / 85
p0 21.64 ± 0.01682
22.8
22.6
22.4
22.2
22
21.8
21.6
21.4
21.2
21
20.8
20.6

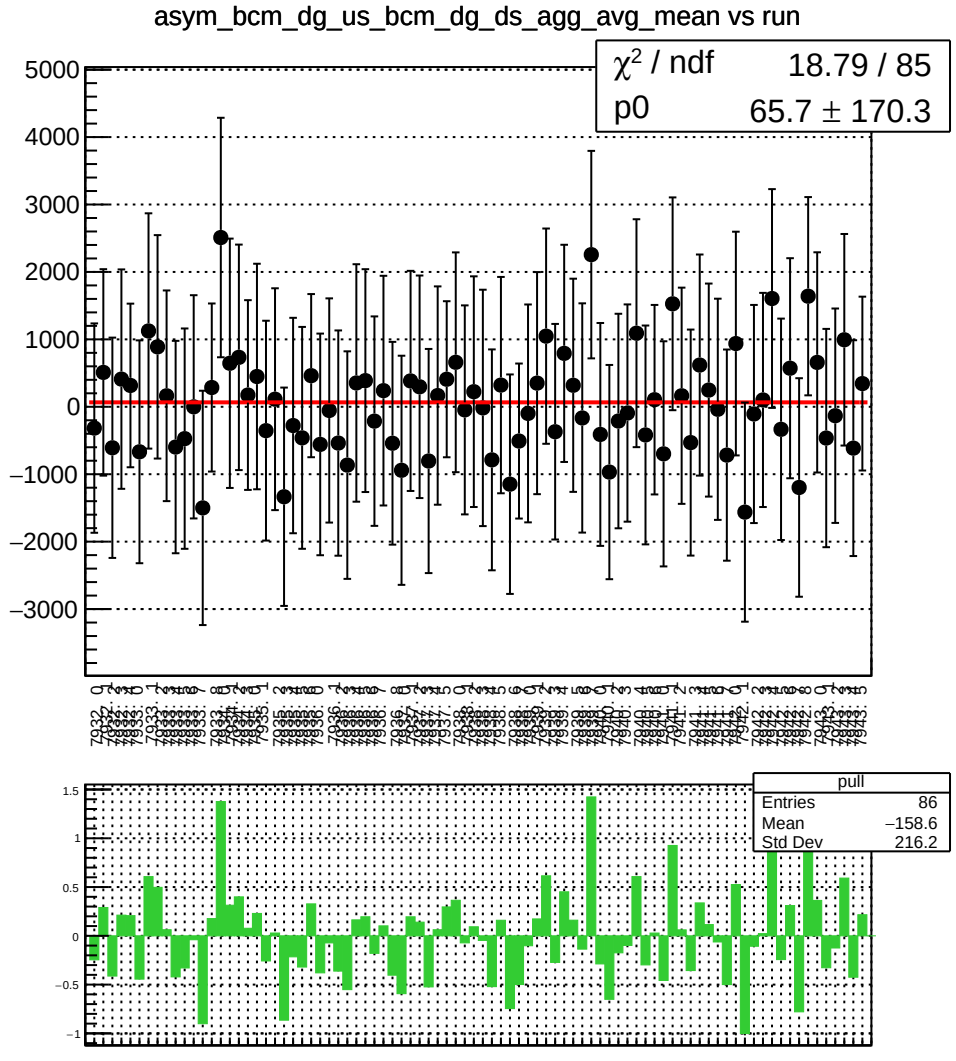

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.65 / 85
p0 49.44 ± 170.2
pull
Entries 86
Mean −339.8
Std Dev 393.2

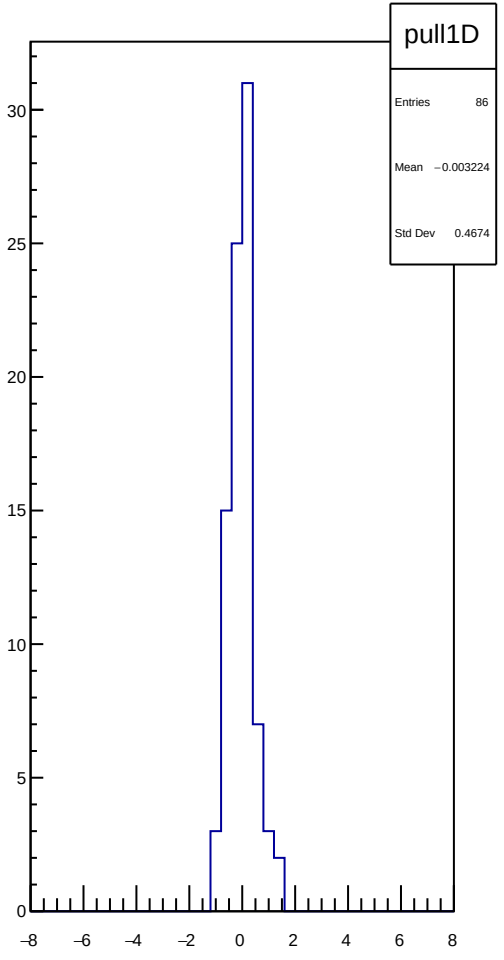

pull1D
Entries 86
Mean −0.001278
Std Dev 0.4266

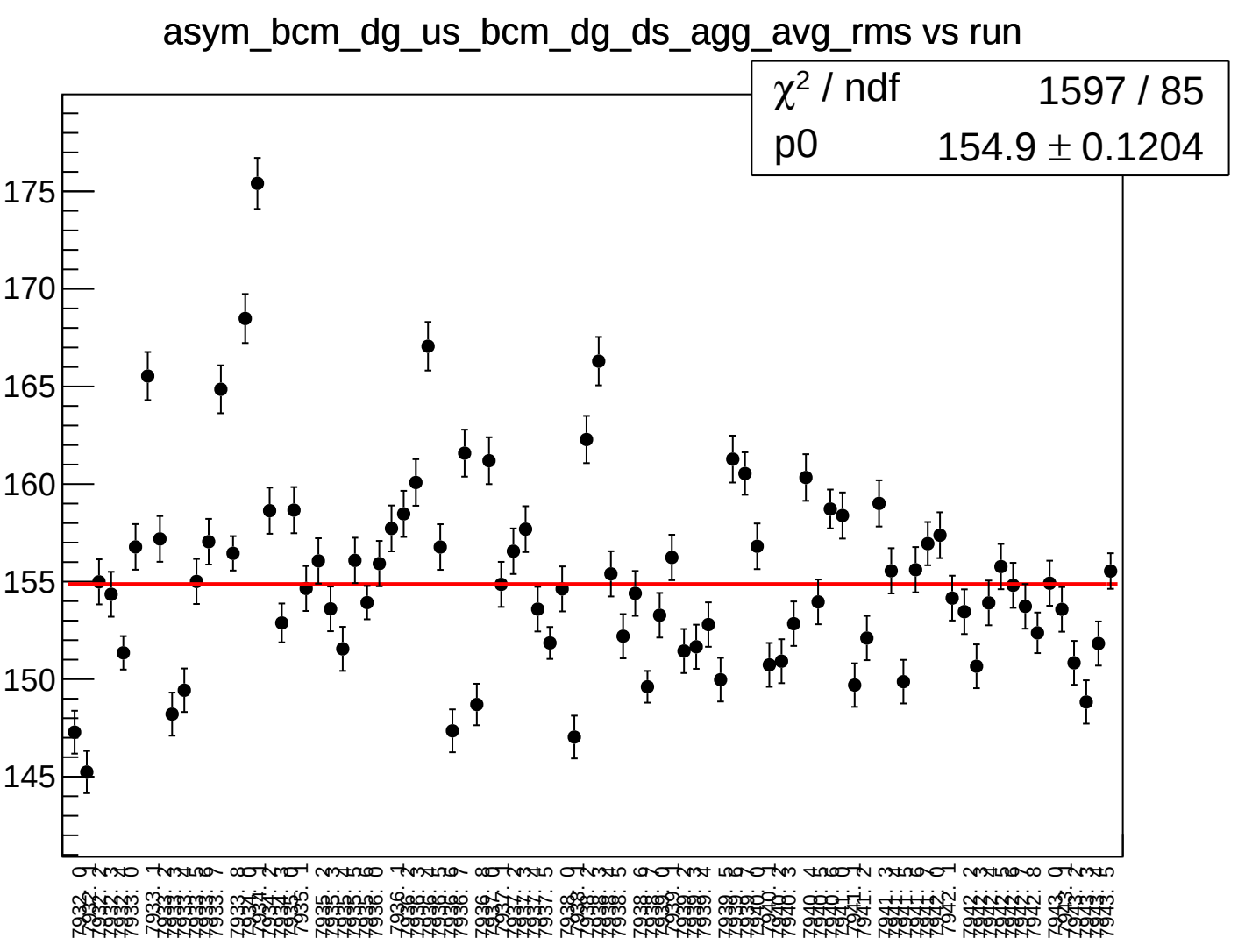

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1649 / 85
p0 154.8 ± 0.1203
180
175
170
165
160
155
150
145

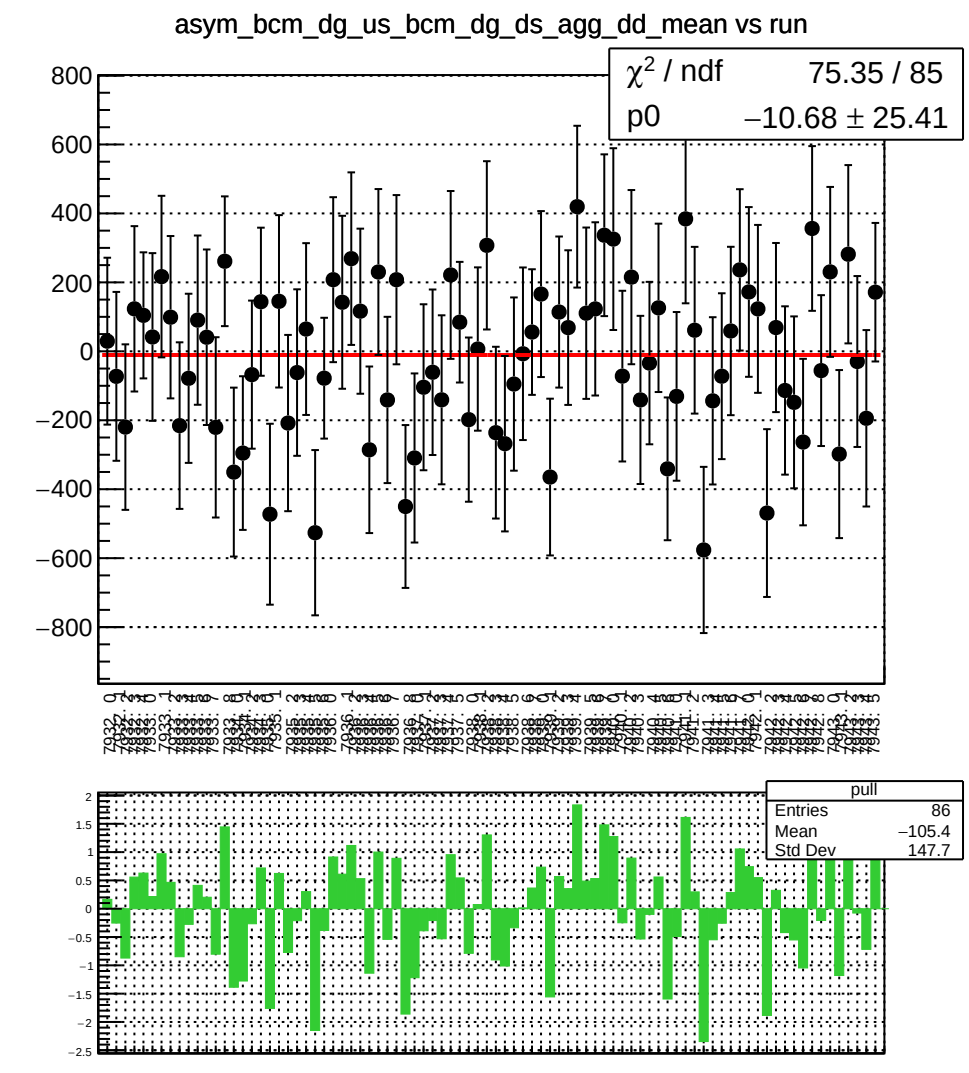

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 106.2 / 85
p0 24.47 ± 17.77
pull
Entries 86
Mean −298.2
Std Dev 252.3
pull1D
Entries 86
Mean 0.00193
Std Dev 1.111

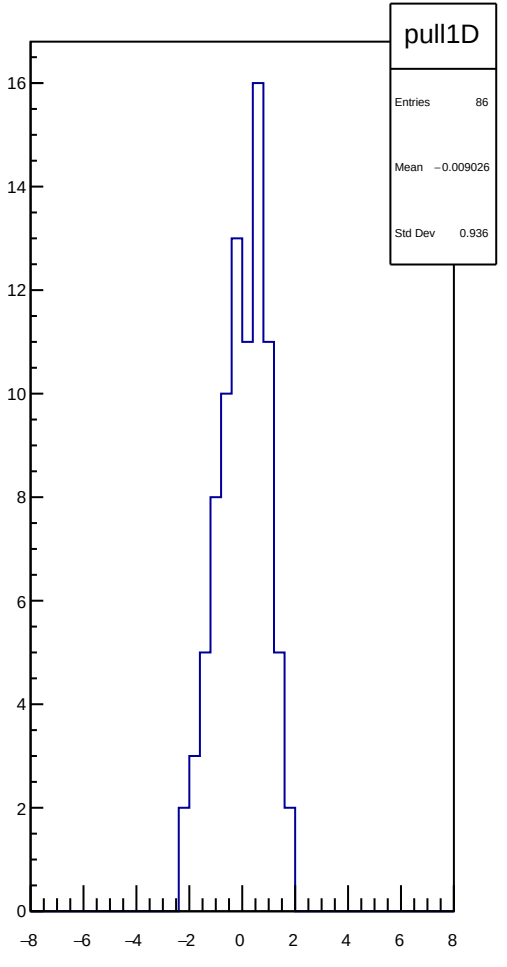

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1364 / 85
p0 16.16 ± 0.01256
17.5
17
16.5
16
15.5
15

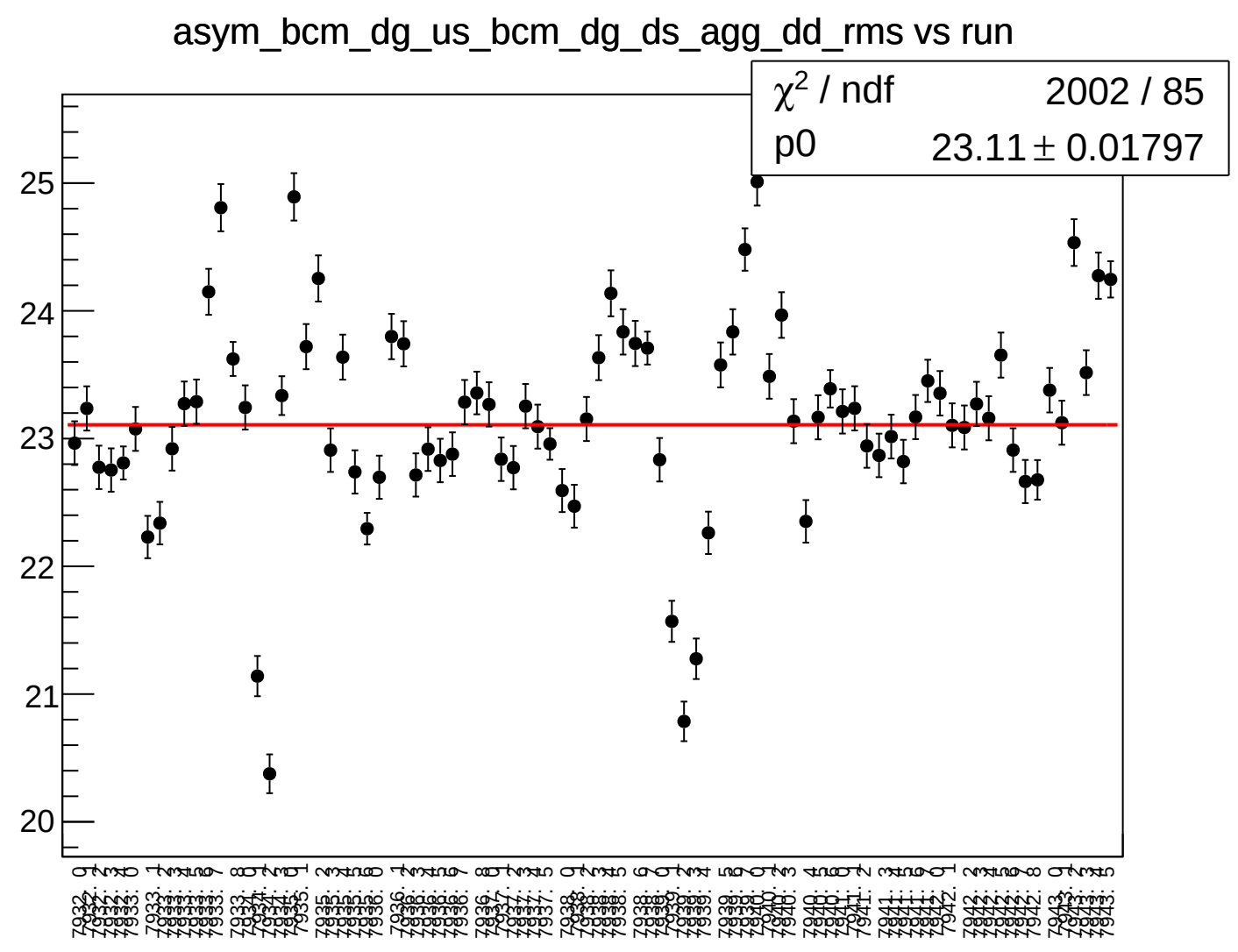

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.79 / 85
p0 65.7 ± 170.3
pull
Entries 86
Mean −158.6
Std Dev 216.2

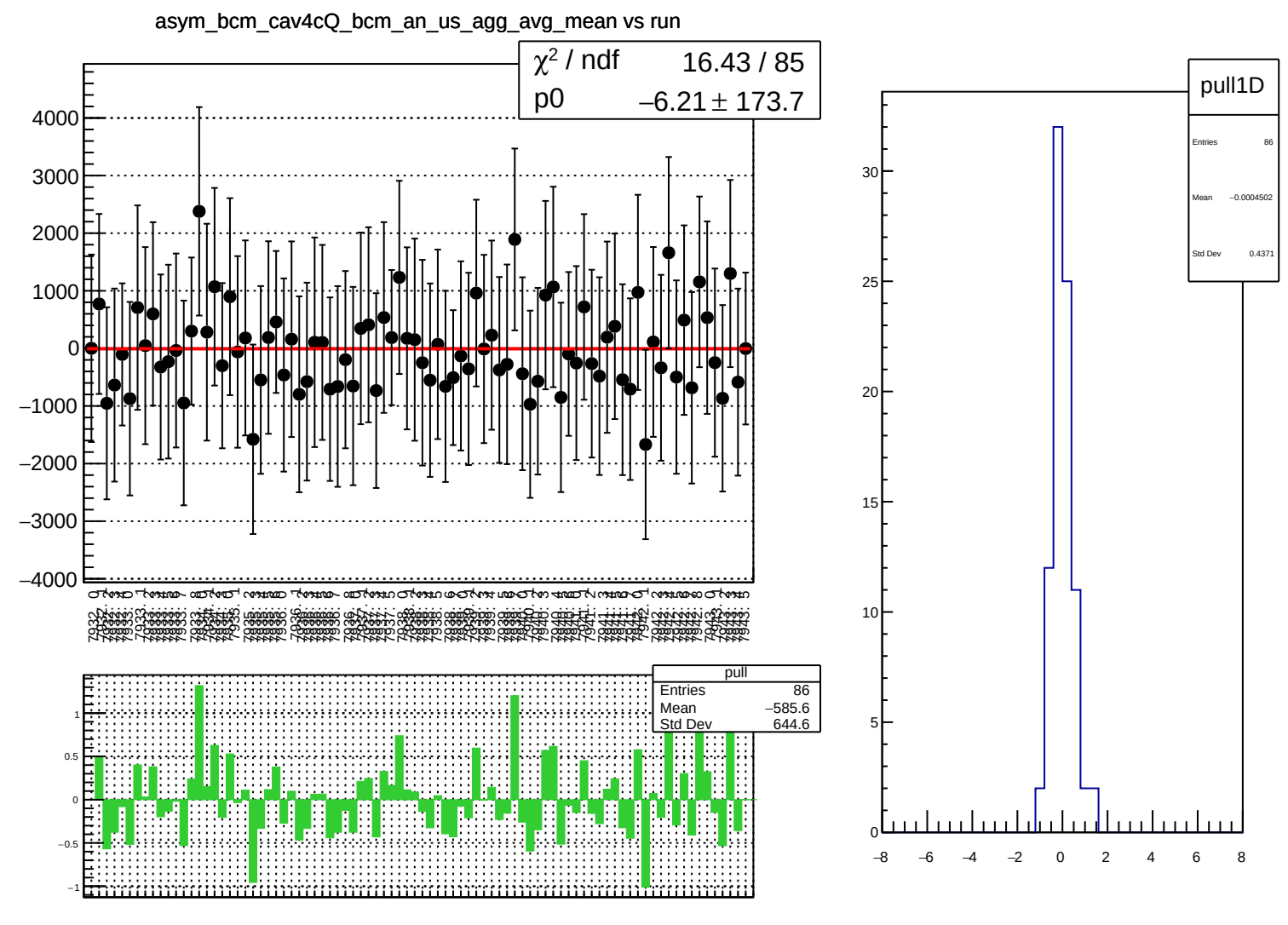

pull1D
Entries 86
Mean −0.003224
Std Dev 0.4674

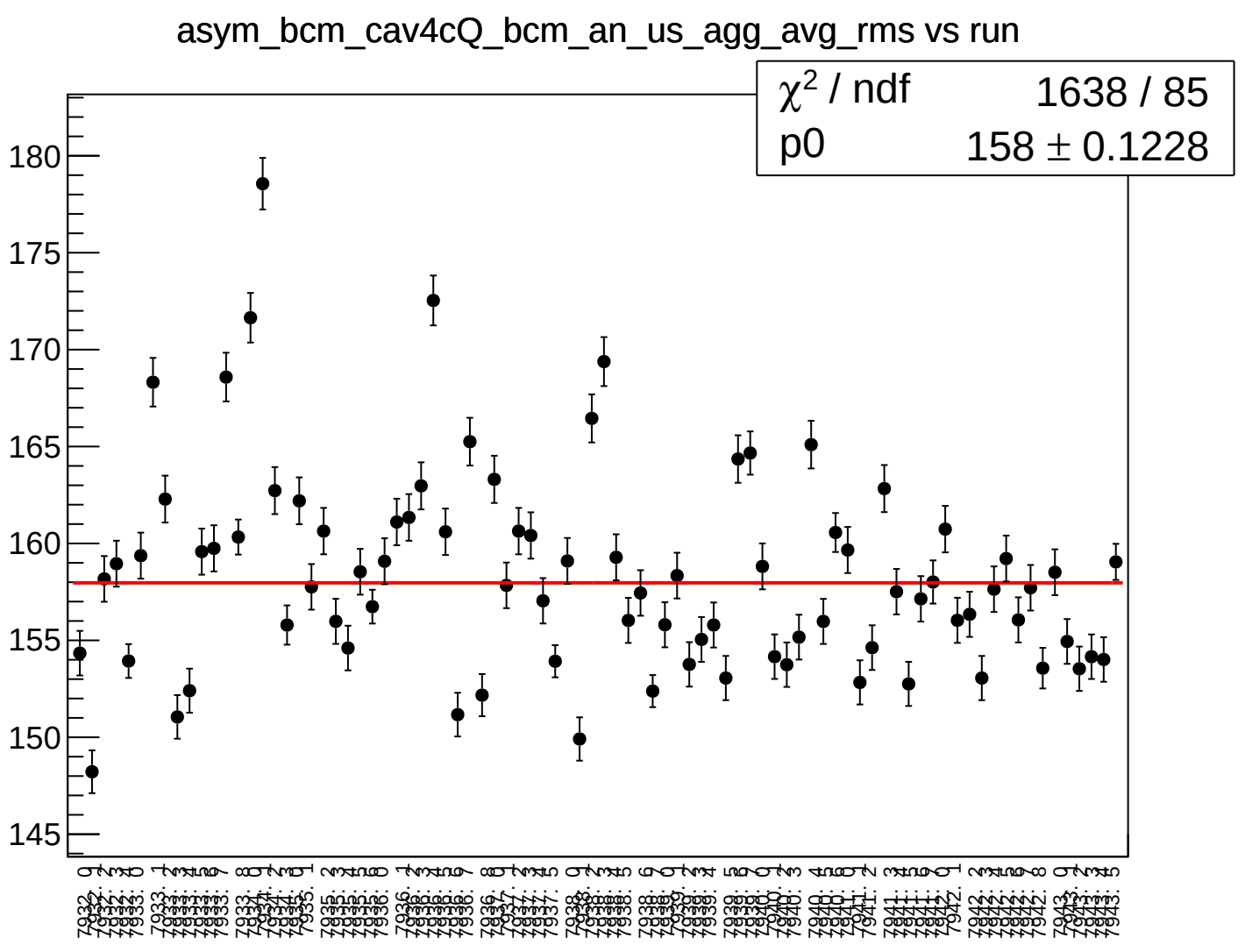

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1597 / 85
p0 154.9 ± 0.1204
175
170
165
160
155
150
145

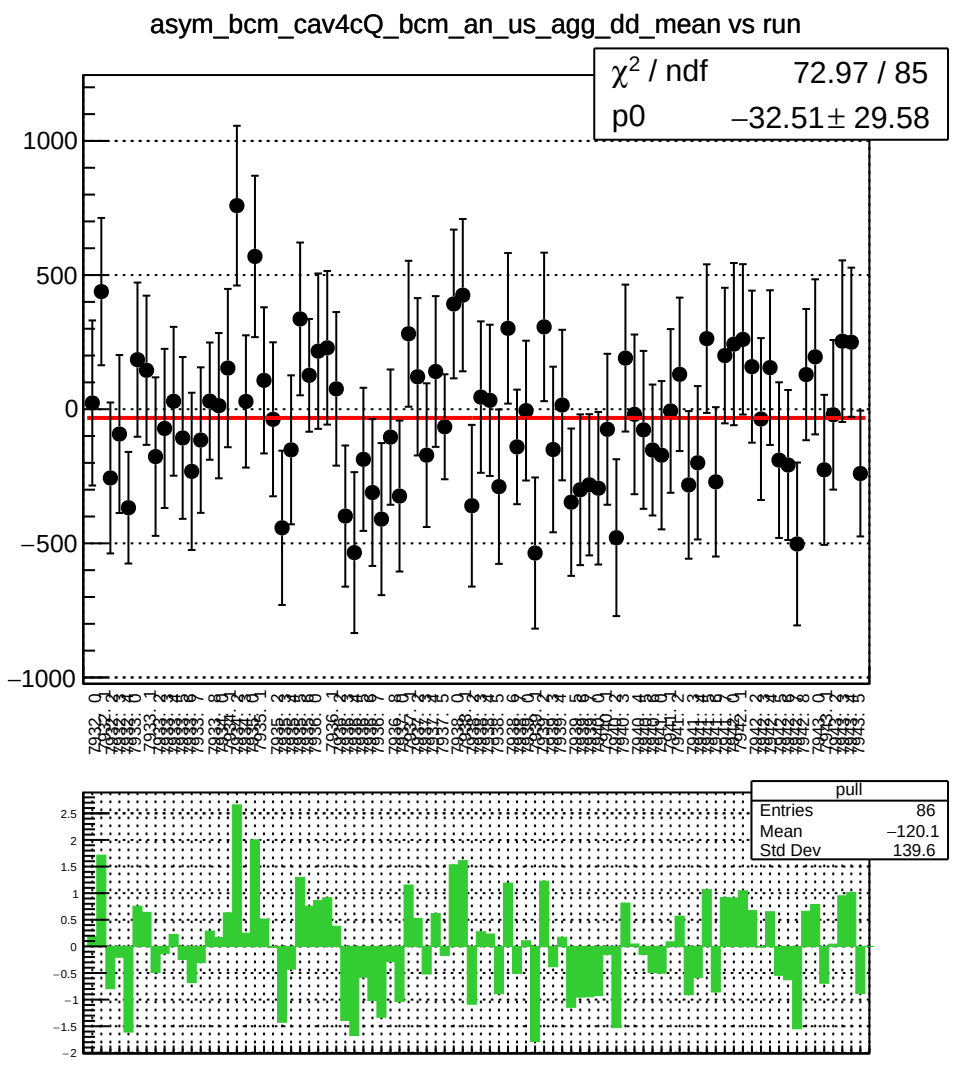

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 75.35 / 85
p0 −10.68 ± 25.41
pull
Entries 86
Mean −105.4
Std Dev 147.7

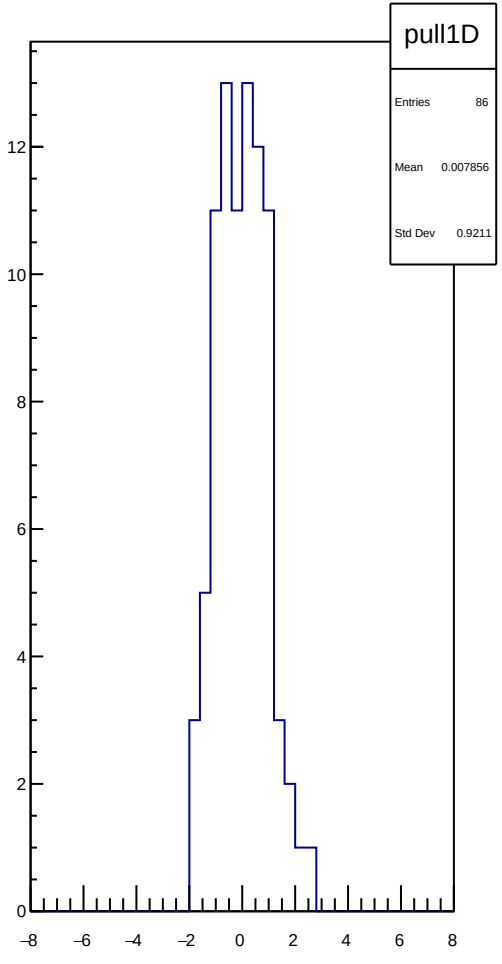

pull1D
Entries 86
Mean −0.009026
Std Dev 0.936

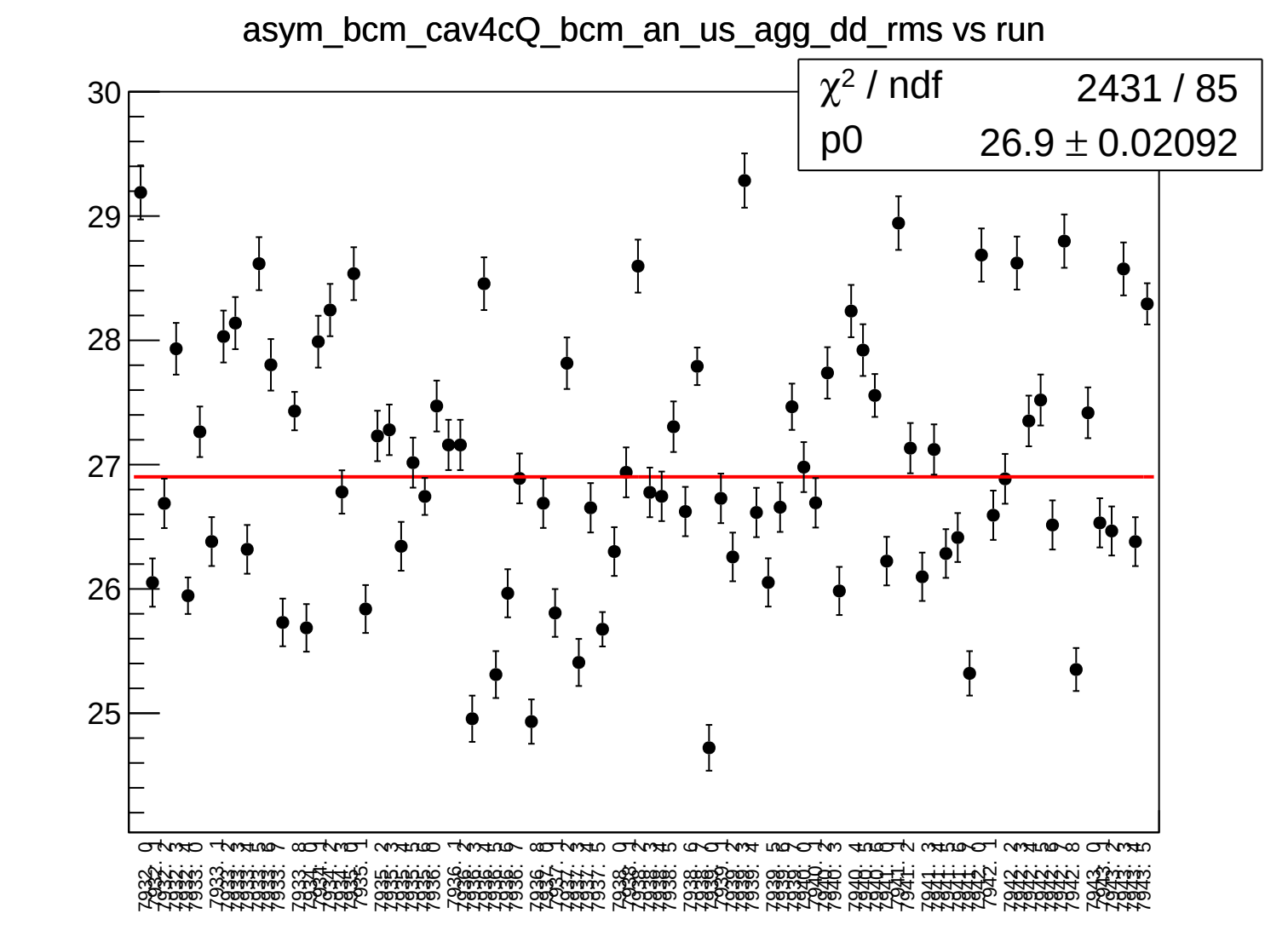

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2002 / 85
p0 23.11 ± 0.01797
25
24
23
22
21
20

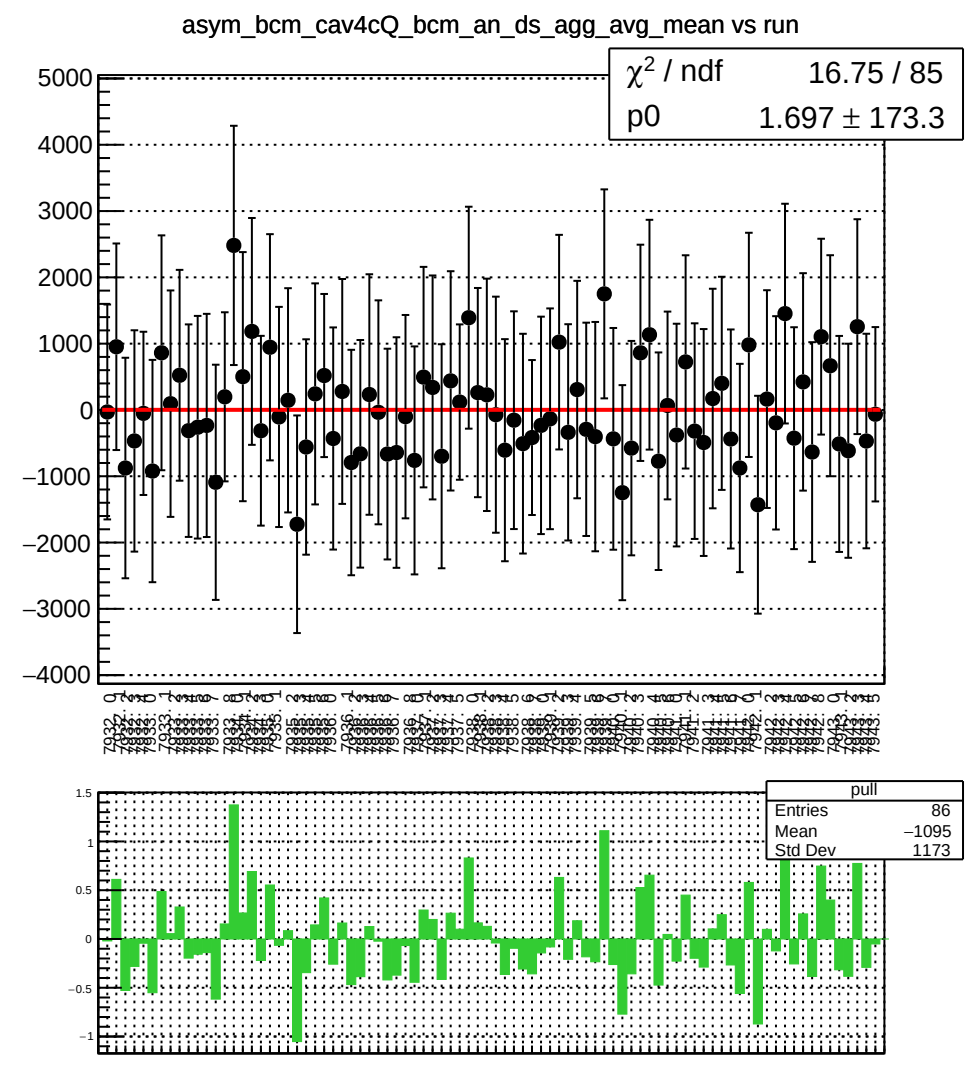

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.43 / 85
p0 −6.21 ± 173.7
pull
Entries 86
Mean −585.6
Std Dev 644.6
pull1D
Entries 86
Mean −0.0004502
Std Dev 0.4371

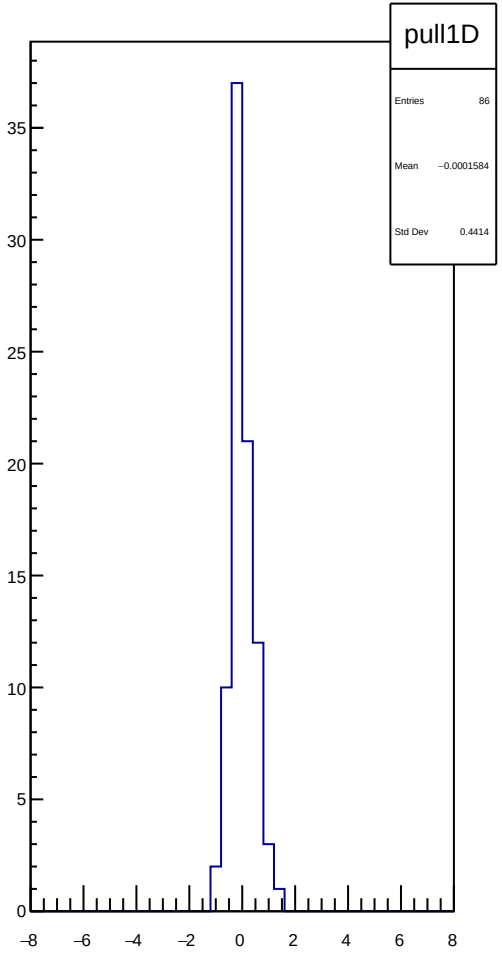

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1638 / 85
p0 158 ± 0.1228
180
175
170
165
160
155
150
145

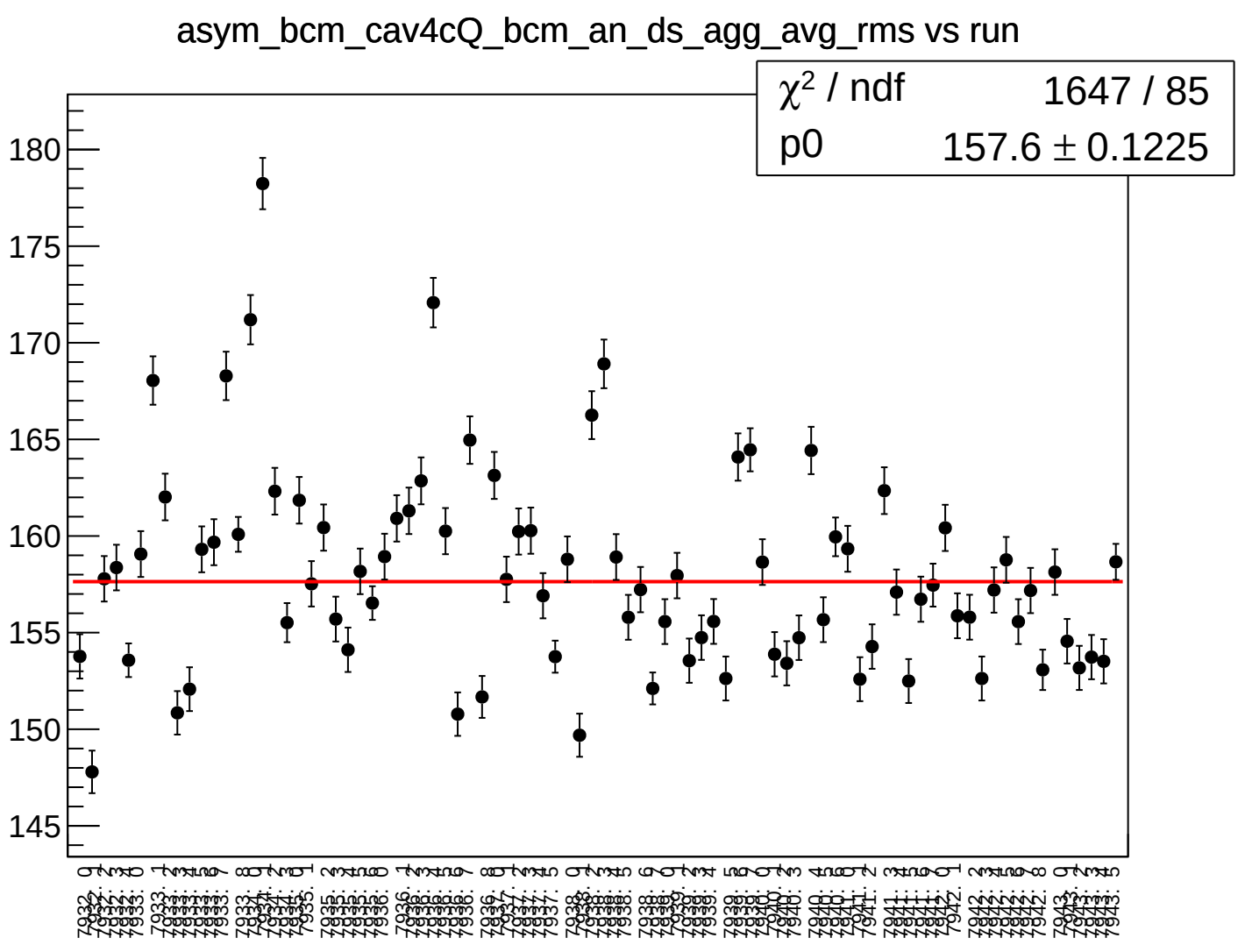

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 72.97 / 85
p0 −32.51 ± 29.58
1000
500
0
−500
−1000
pull
Entries 86
Mean −120.1
Std Dev 139.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

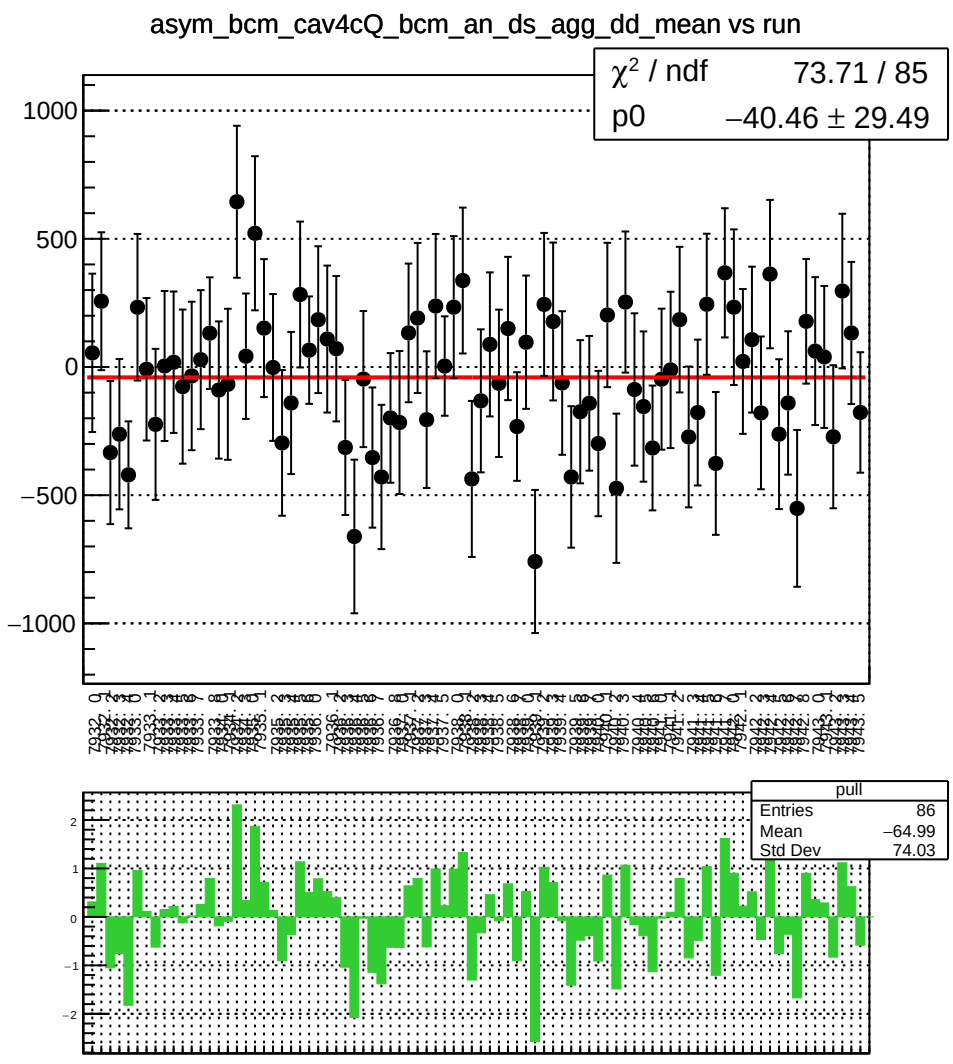

pull1D
Entries 86
Mean 0.007856
Std Dev 0.9211
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

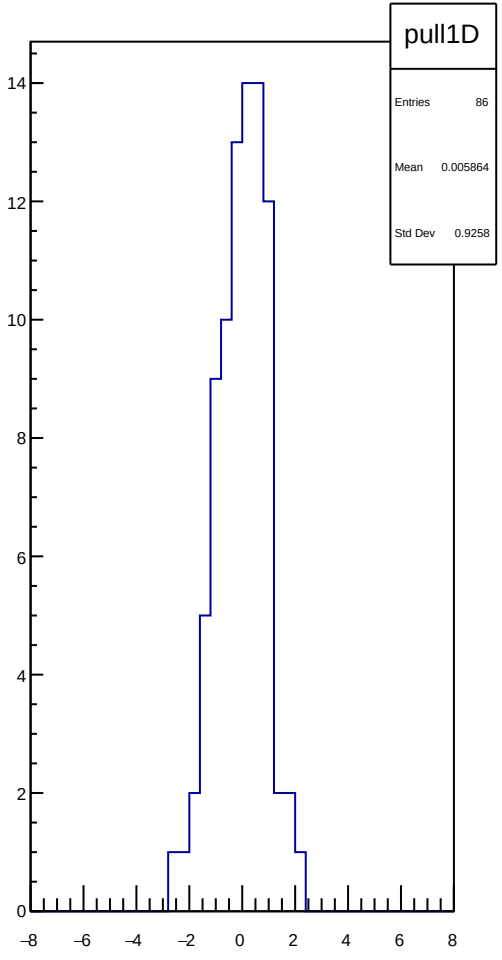

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2431 / 85
p0 26.9 ± 0.02092
30
29
28
27
26
25

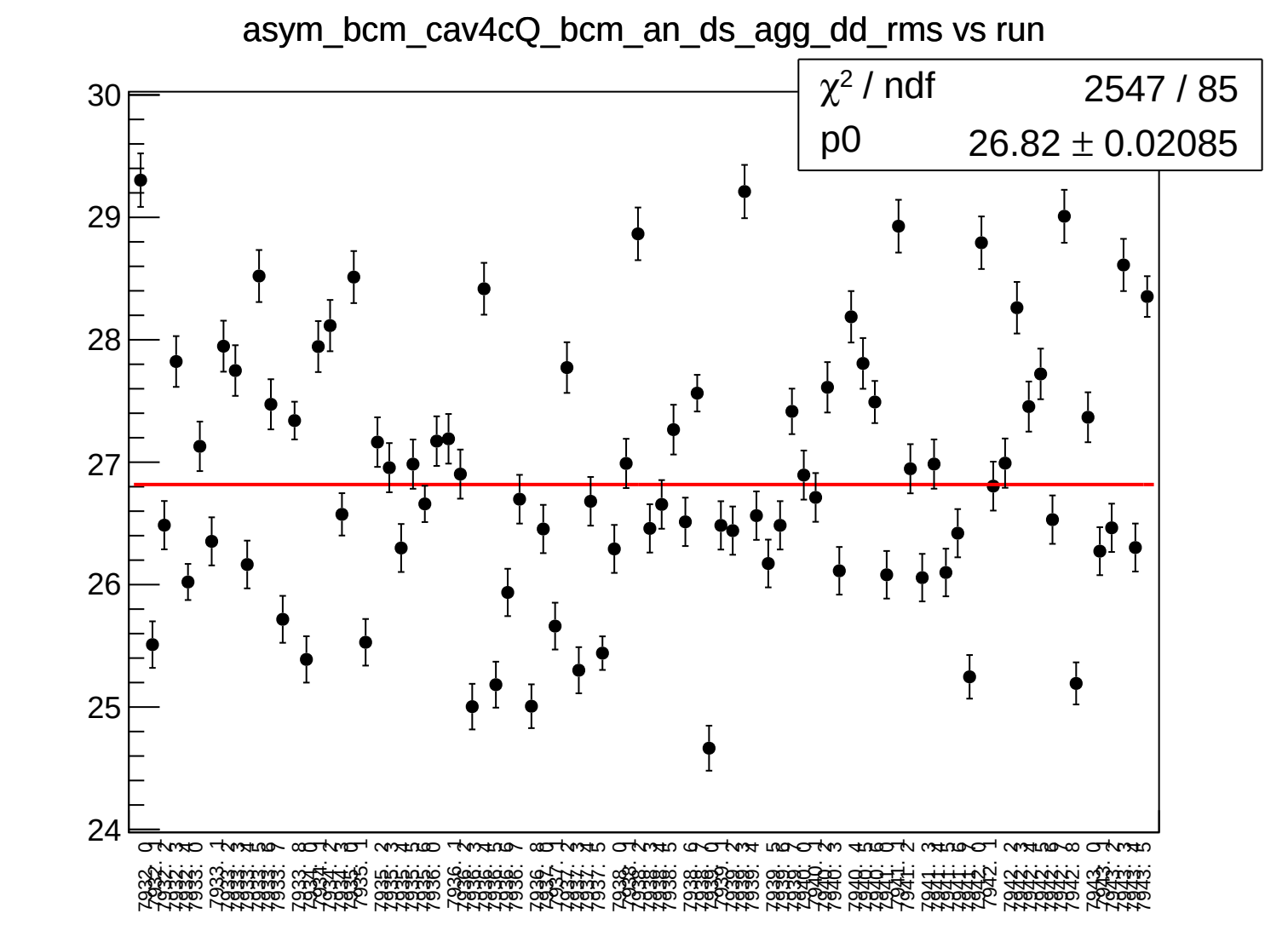

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.75 / 85
p0 1.697 ± 173.3
pull
Entries 86
Mean −1095
Std Dev 1173

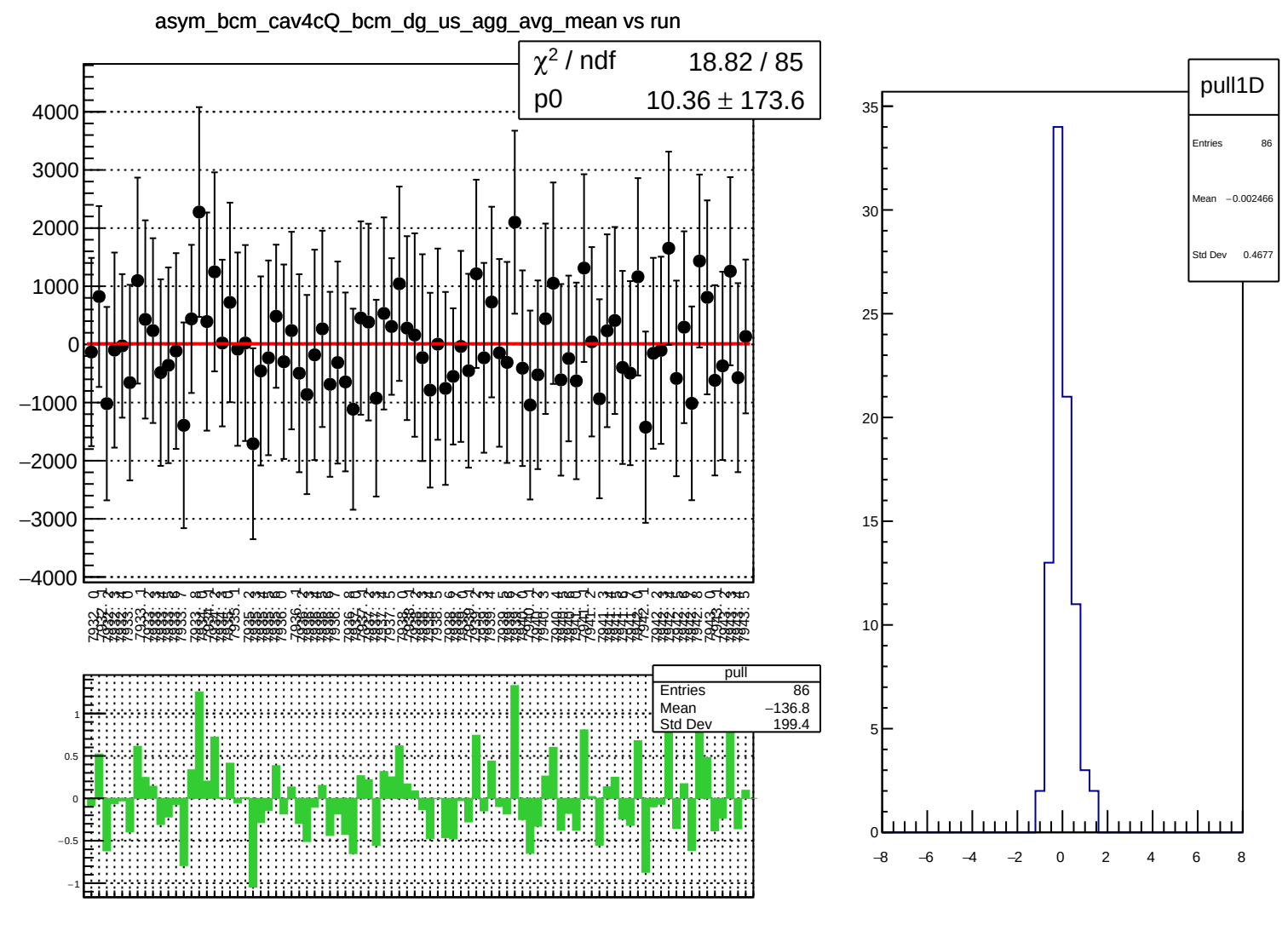

pull1D
Entries 86
Mean −0.0001584
Std Dev 0.4414

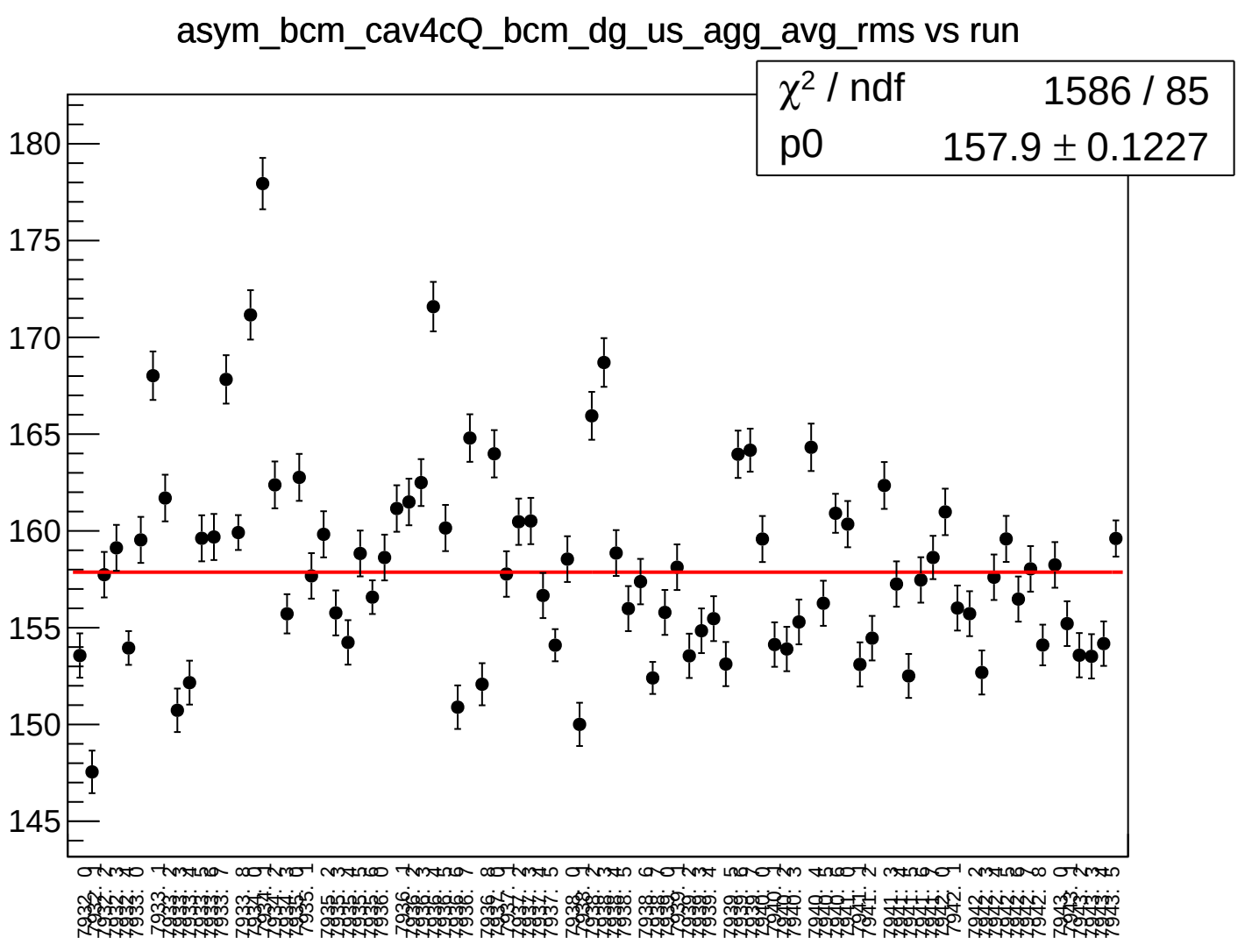

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1647 / 85
p0 157.6 ± 0.1225
180
175
170
165
160
155
150
145

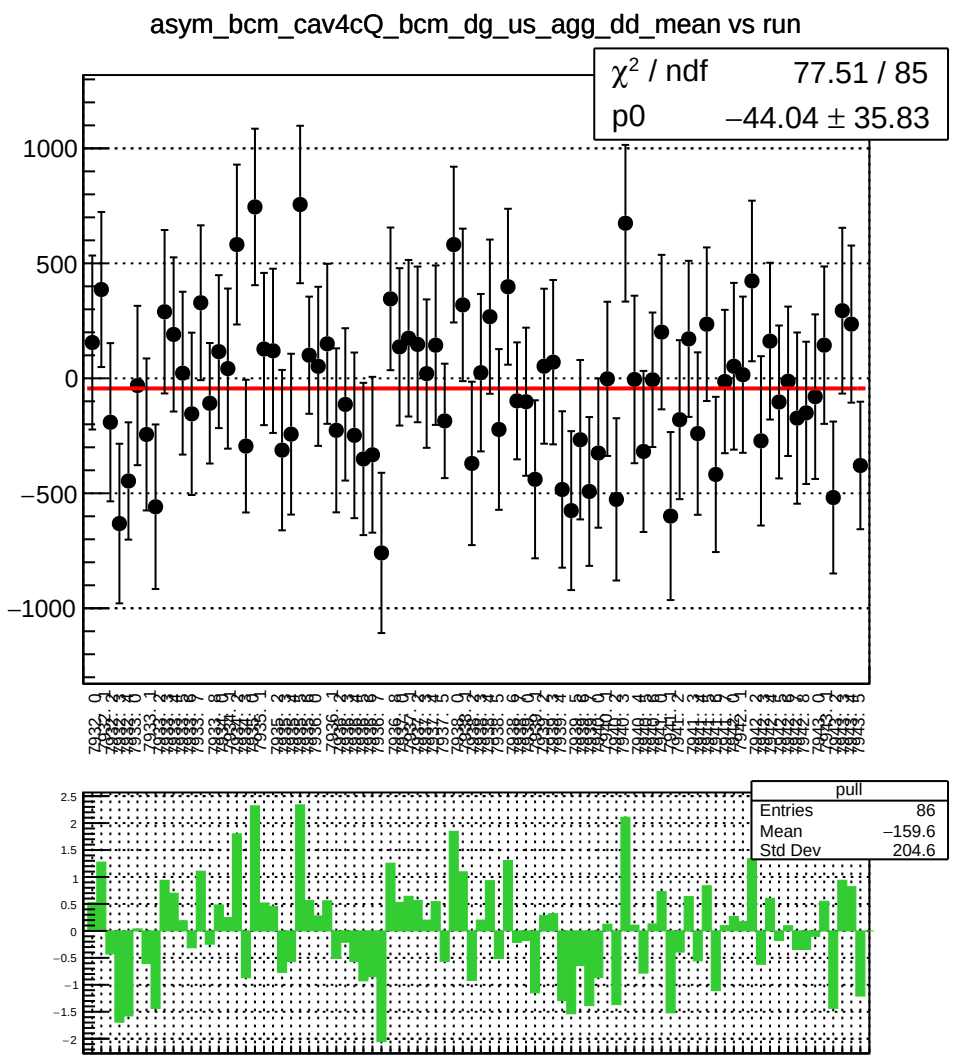

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 73.71 / 85
p0 −40.46 ± 29.49
1000
500
0
−500
−1000
pull
Entries 86
Mean −64.99
Std Dev 74.03
2
1
0
−1
−2

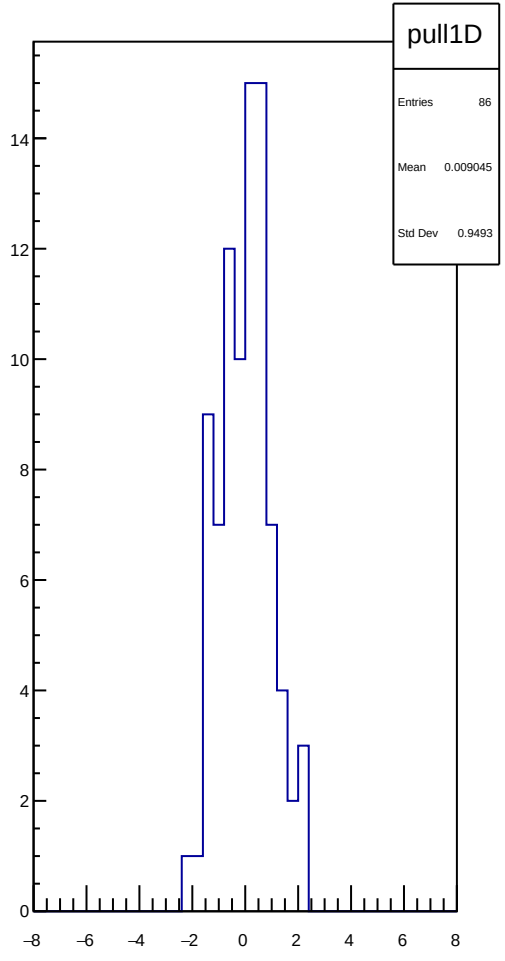

pull1D
Entries 86
Mean 0.005864
Std Dev 0.9258
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

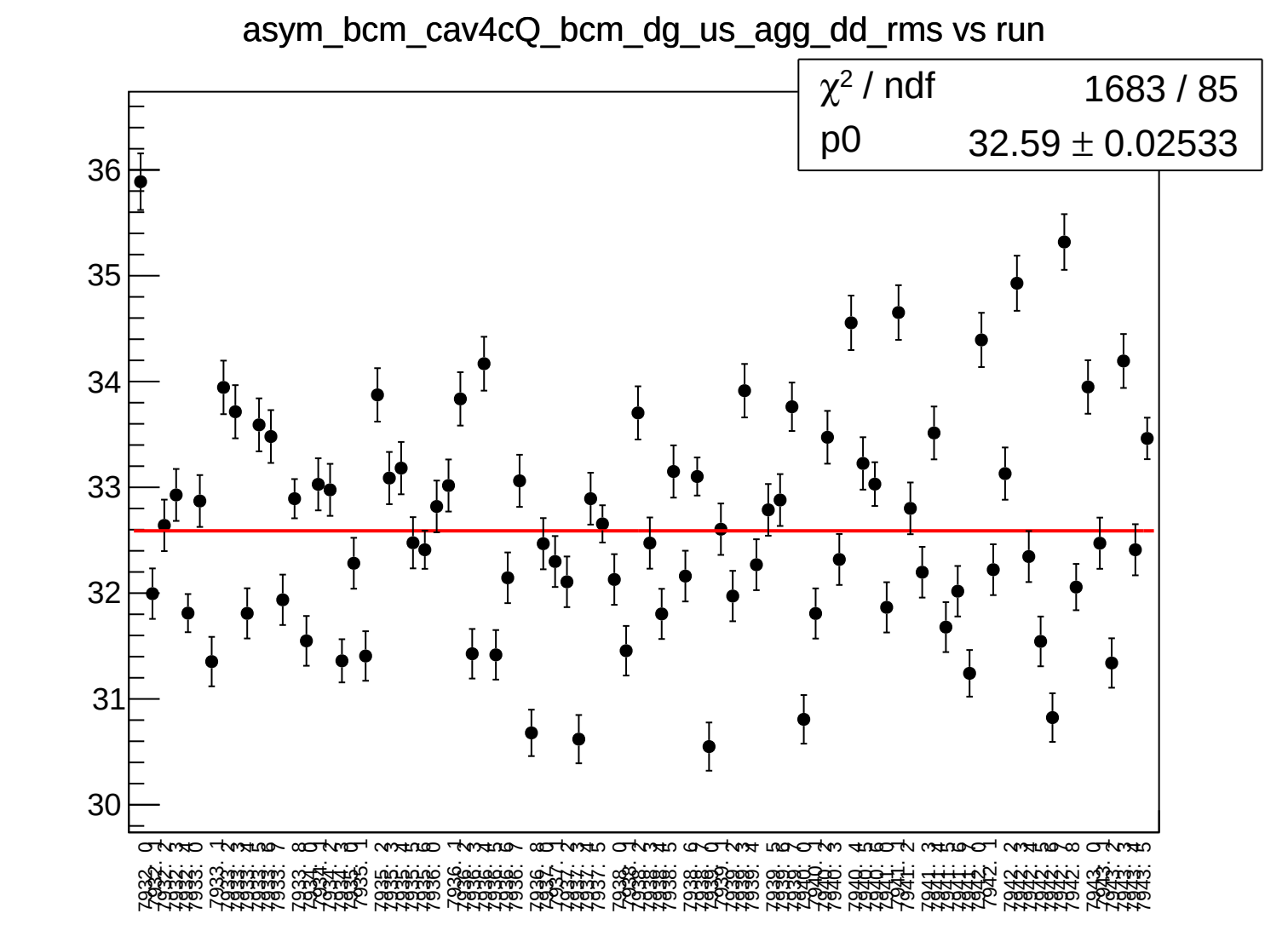

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2547 / 85
p0 26.82 ± 0.02085
30
29
28
27
26
25
24

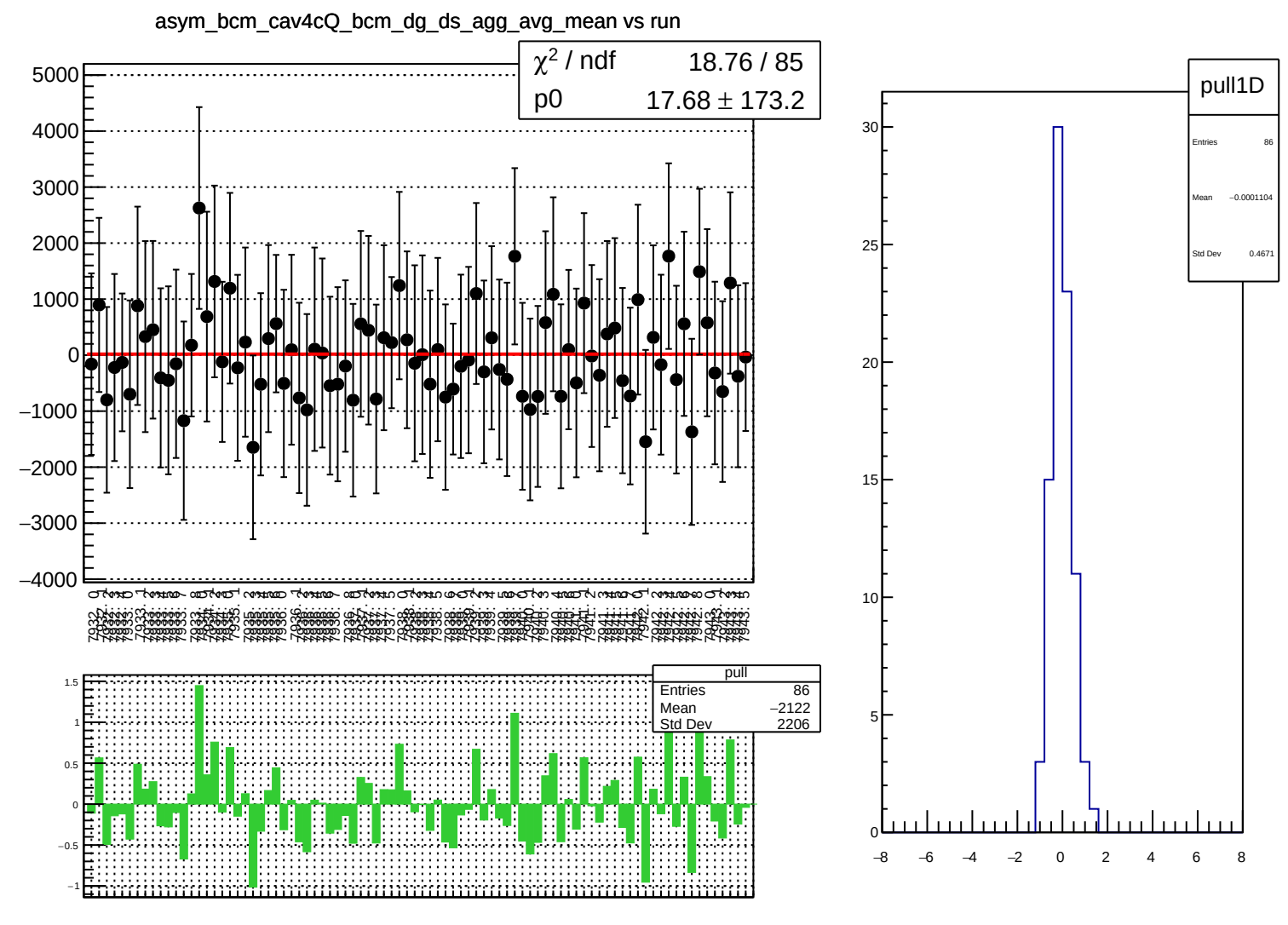

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 18.82 / 85
p0 10.36 ± 173.6
pull
Entries 86
Mean −136.8
Std Dev 199.4
pull1D
Entries 86
Mean −0.002466
Std Dev 0.4677

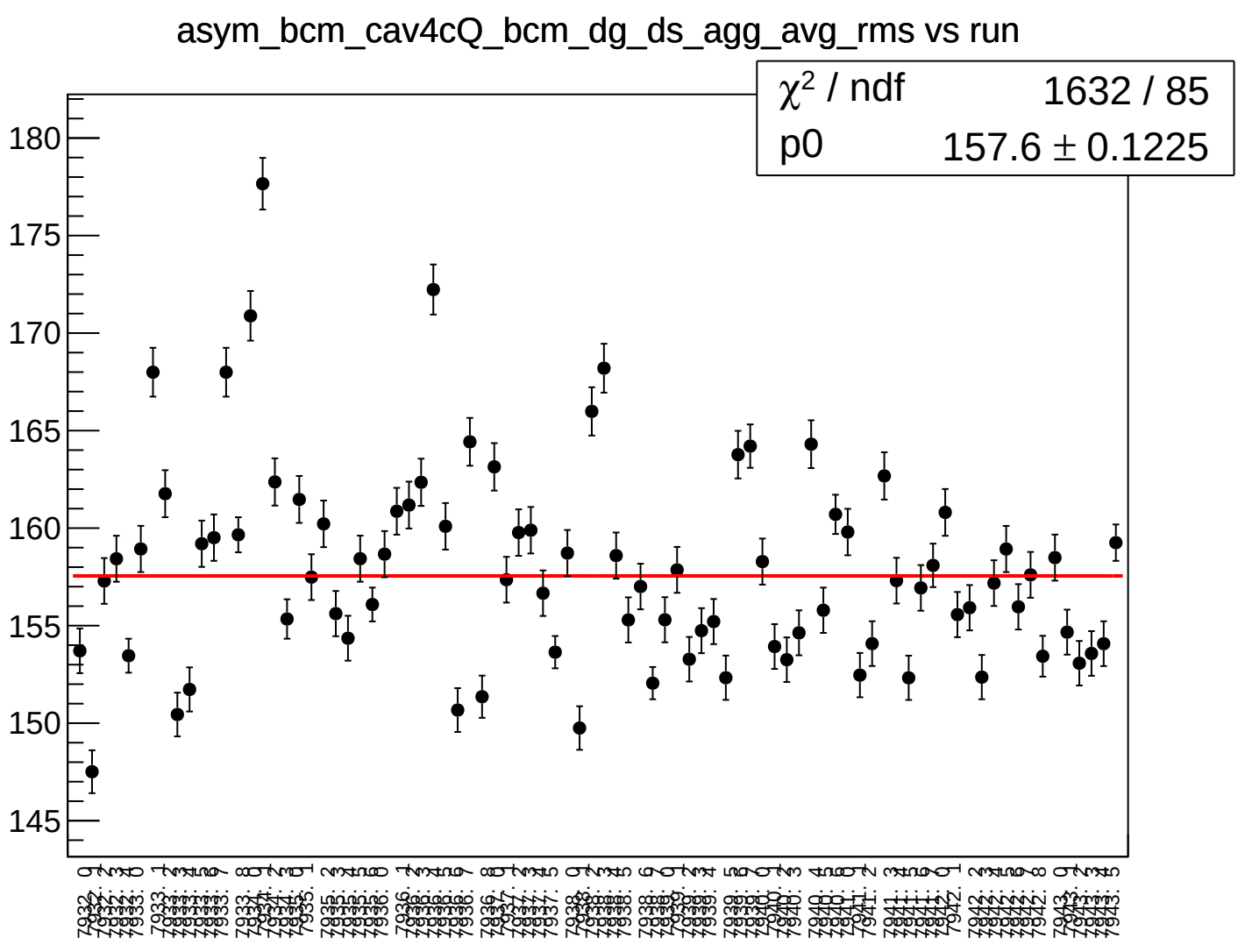

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1586 / 85
p0 157.9 ± 0.1227
180
175
170
165
160
155
150
145

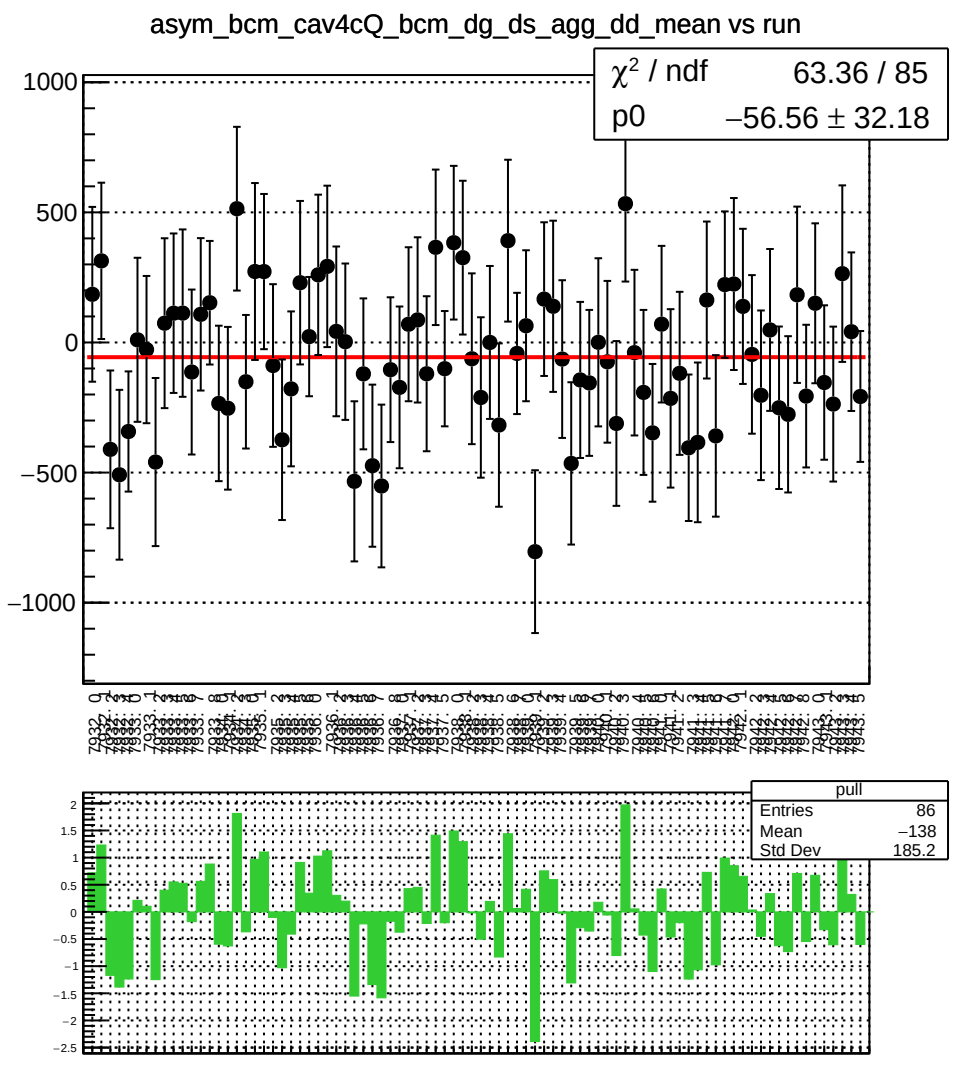

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 77.51 / 85
p0 −44.04 ± 35.83
1000
500
0
−500
−1000
pull
Entries 86
Mean −159.6
Std Dev 204.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

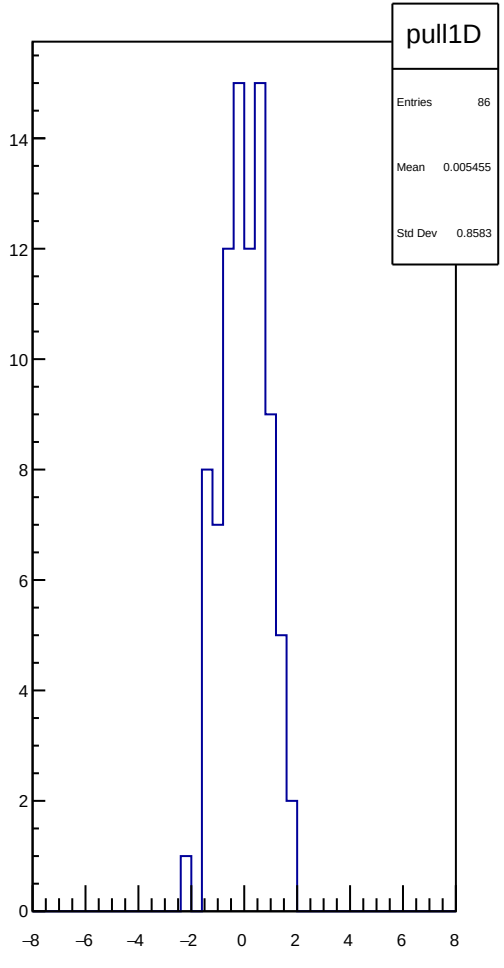

pull1D
Entries 86
Mean 0.009045
Std Dev 0.9493
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

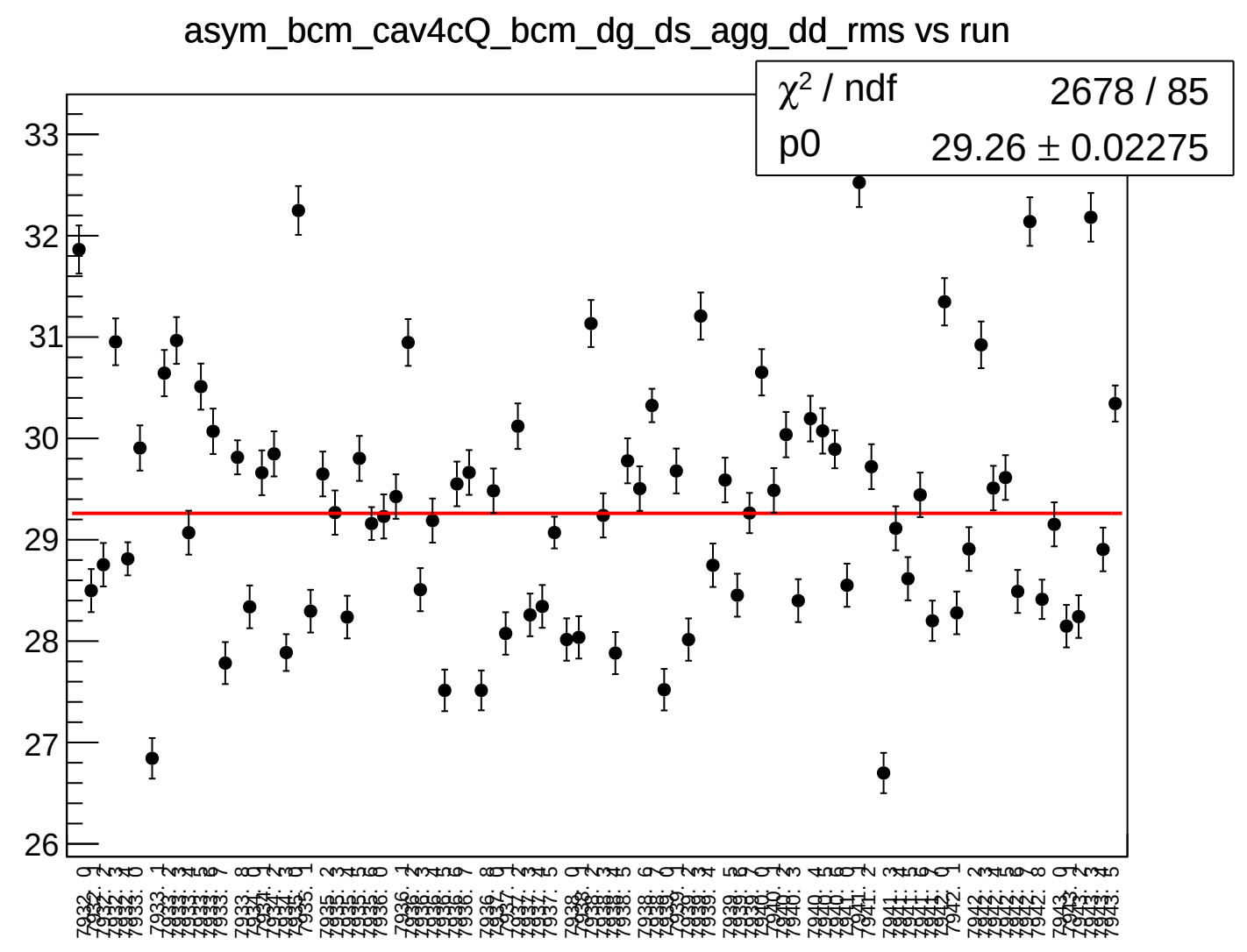

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1683 / 85
p0 32.59 ± 0.02533
36
35
34
33
32
31
30

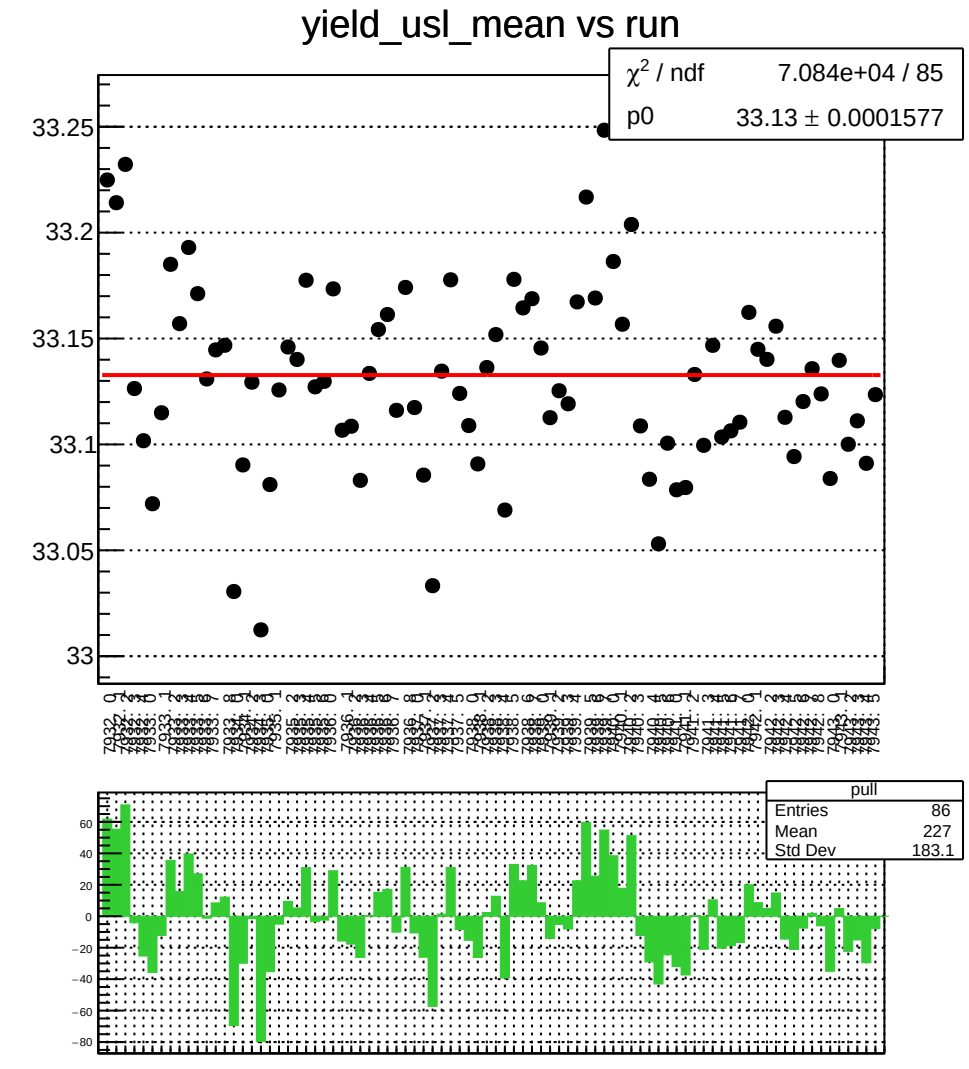

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.76 / 85
p0 17.68 ± 173.2
pull
Entries 86
Mean −2122
Std Dev 2206
pull1D
Entries 86
Mean −0.0001104
Std Dev 0.4671

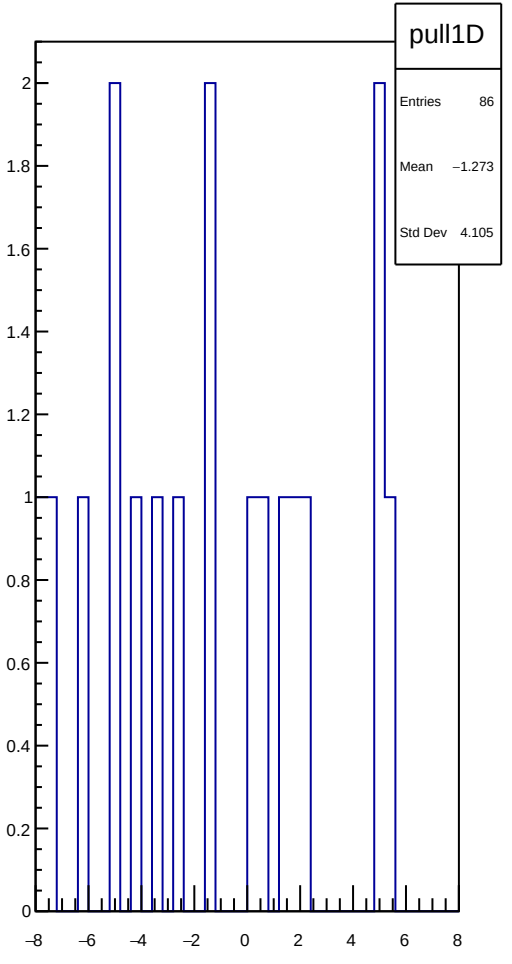

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1632 / 85
p0 157.6 ± 0.1225
180
175
170
165
160
155
150
145

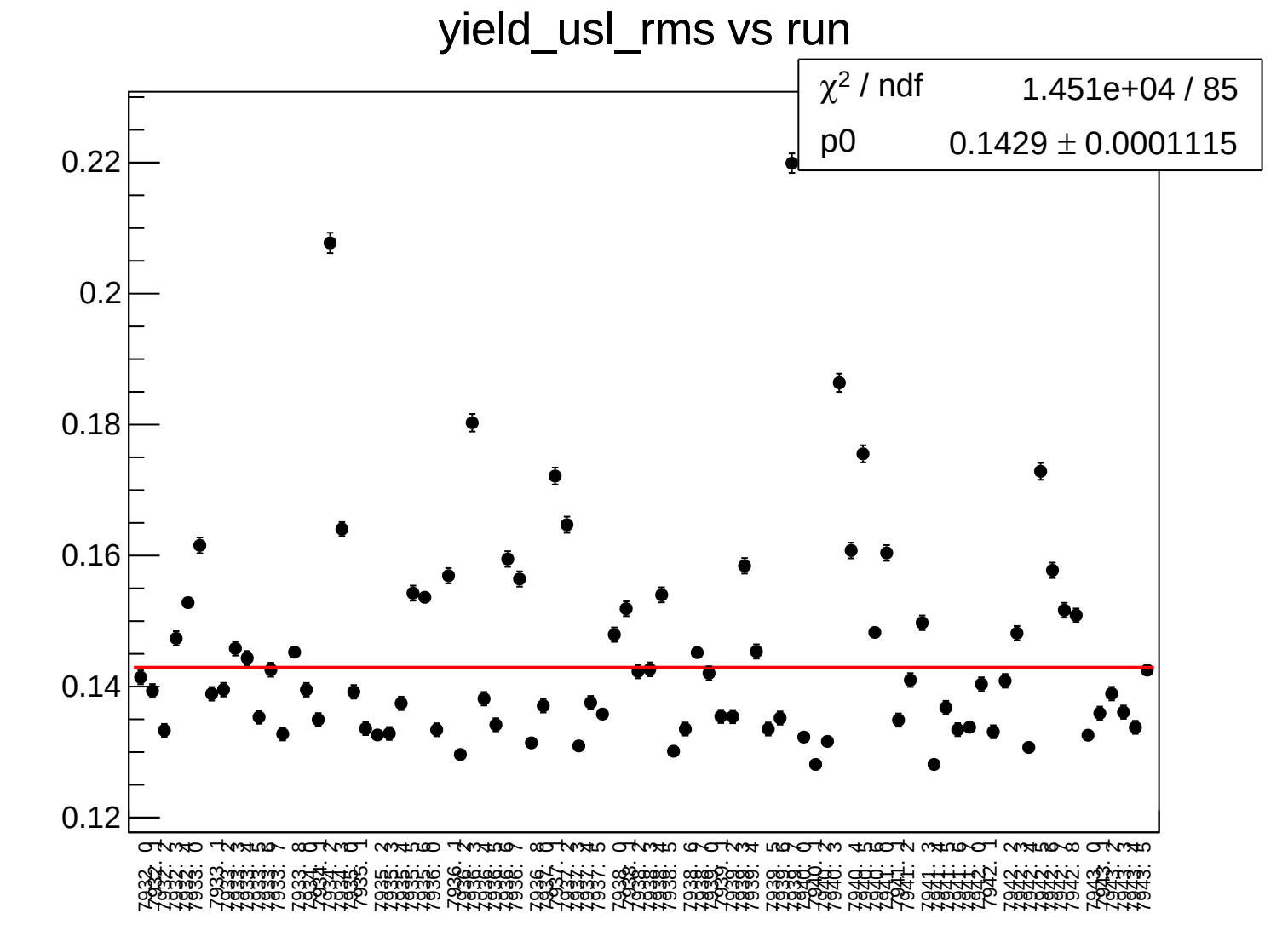

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 63.36 / 85
p0 −56.56 ± 32.18
1000
500
0
−500
−1000
pull
Entries 86
Mean −138
Std Dev 185.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

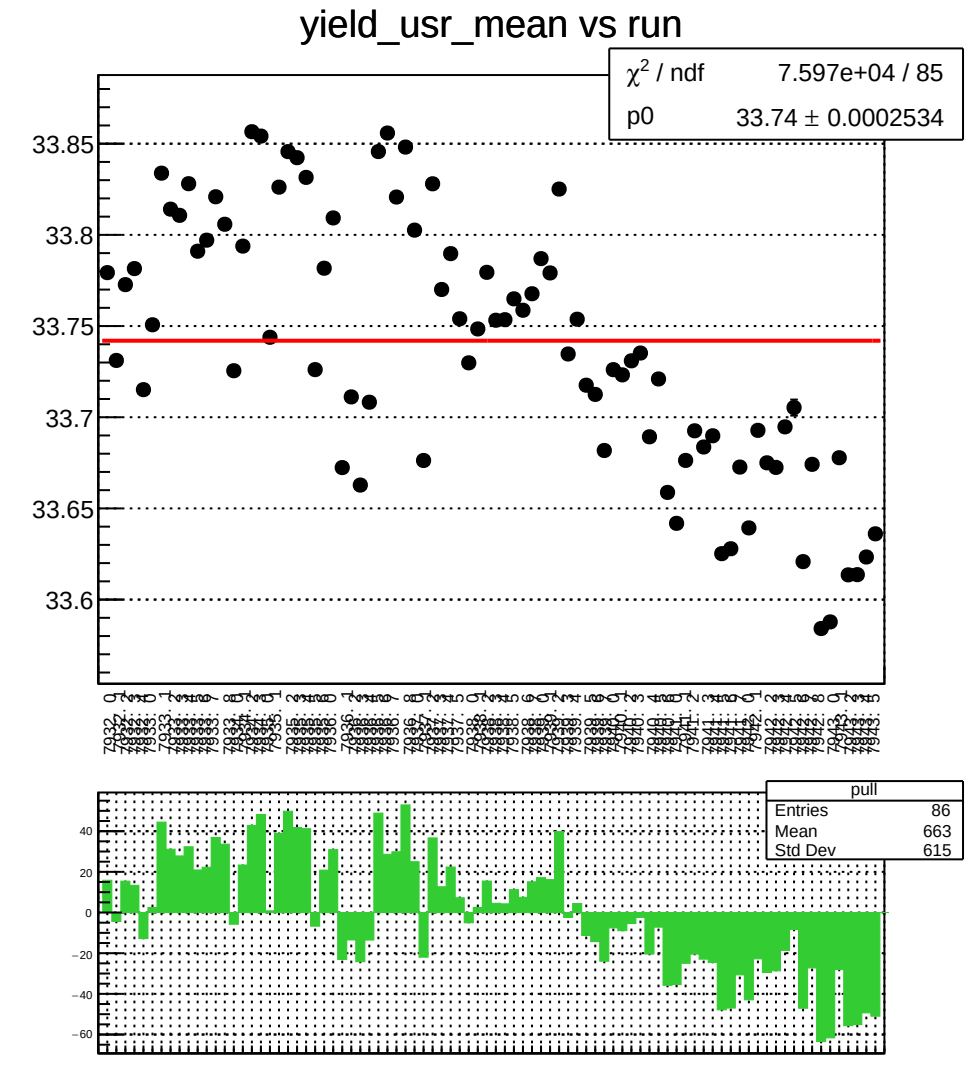

pull1D
Entries 86
Mean 0.005455
Std Dev 0.8583
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

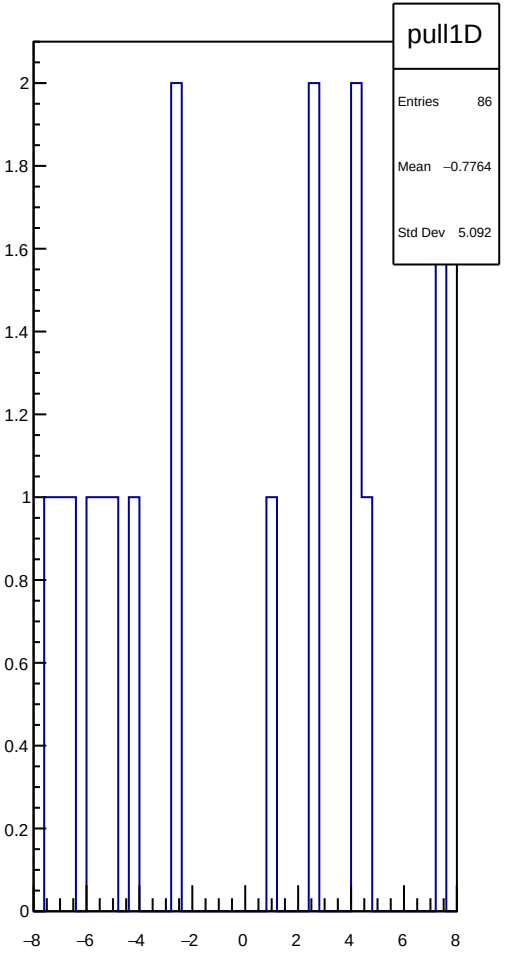

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2678 / 85
p0 29.26 ± 0.02275
33
32
31
30
29
28
27
26

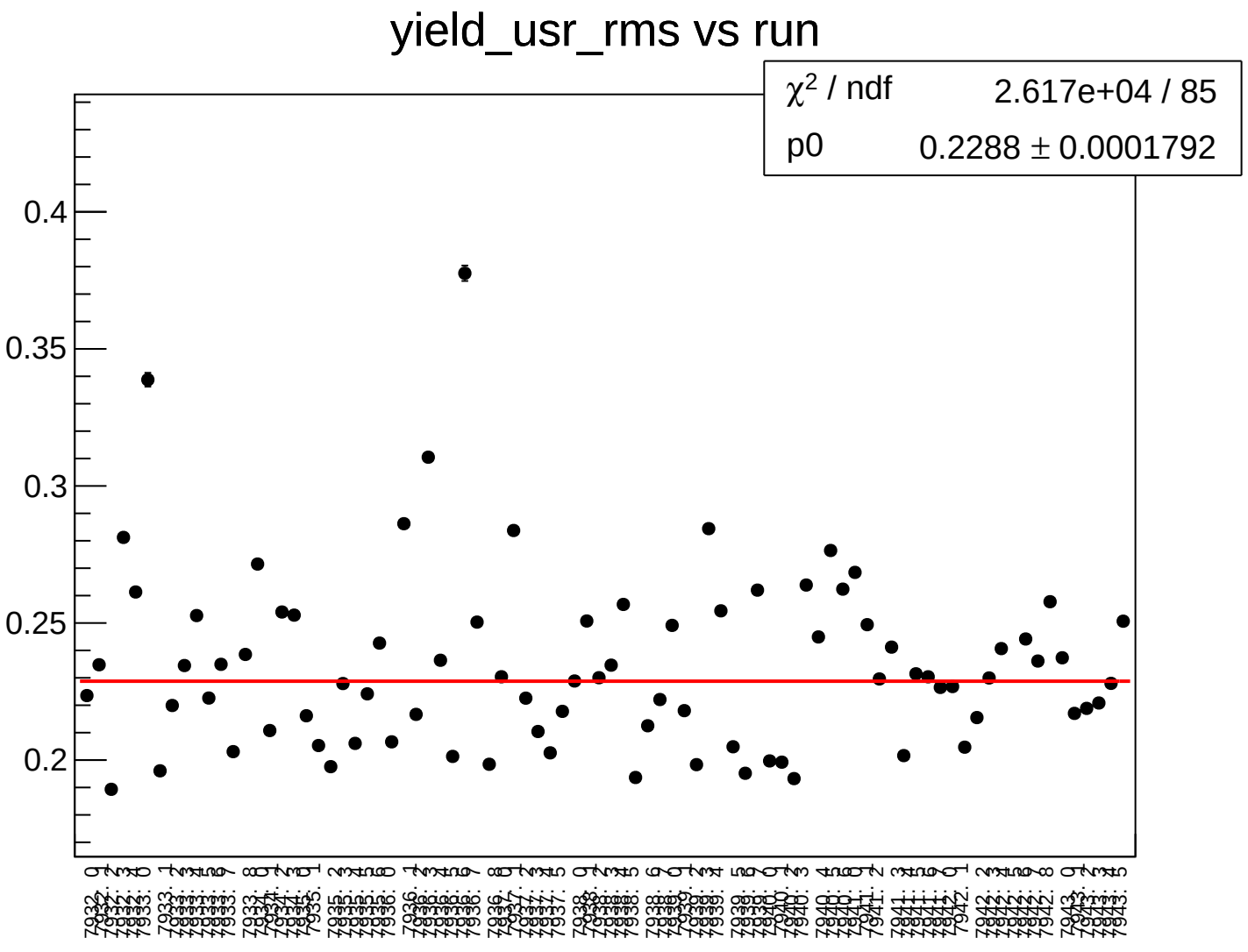

yield_usl_mean vs run
χ² / ndf 7.084e+04 / 85
p0 33.13 ± 0.0001577
33.25
33.2
33.15
33.1
33.05
33
pull
Entries 86
Mean 227
Std Dev 183.1
60
40
20
0
−20
−40
−60
−80

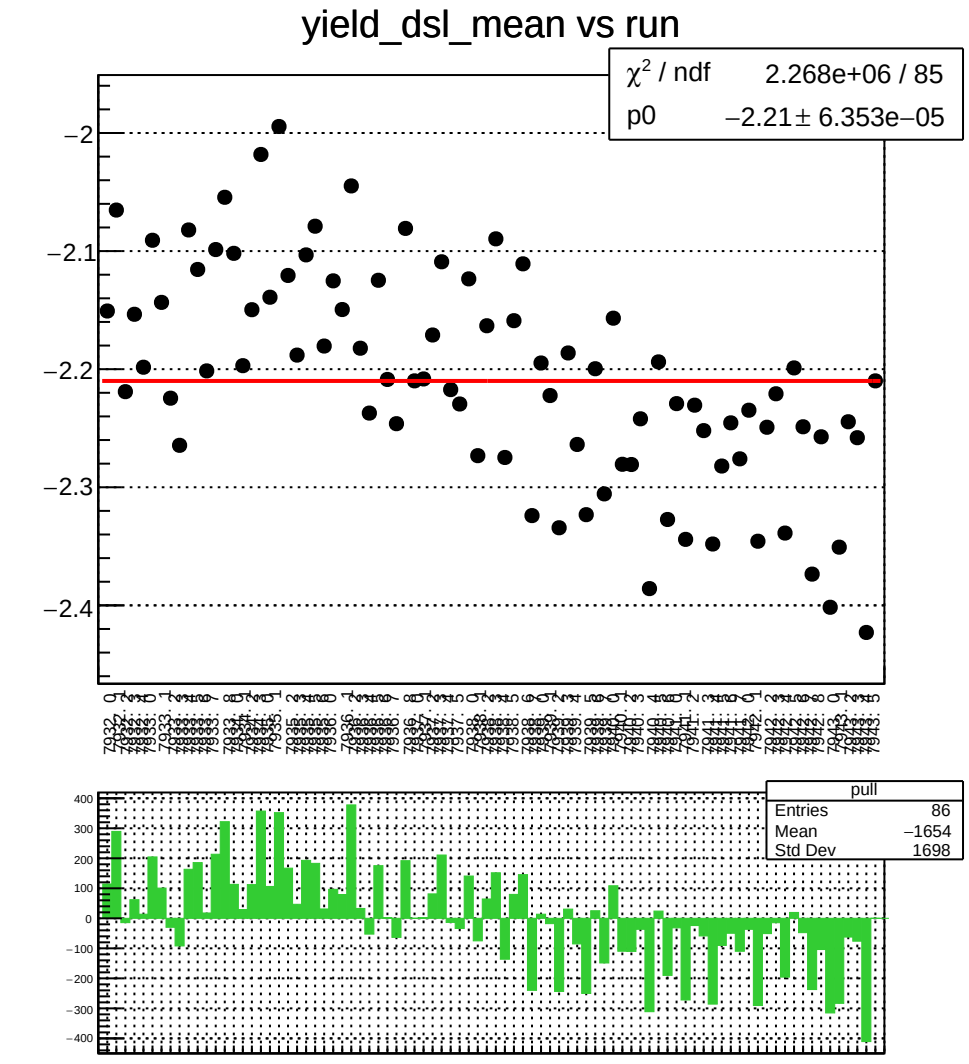

pull1D
Entries 86
Mean −1.273
Std Dev 4.105
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

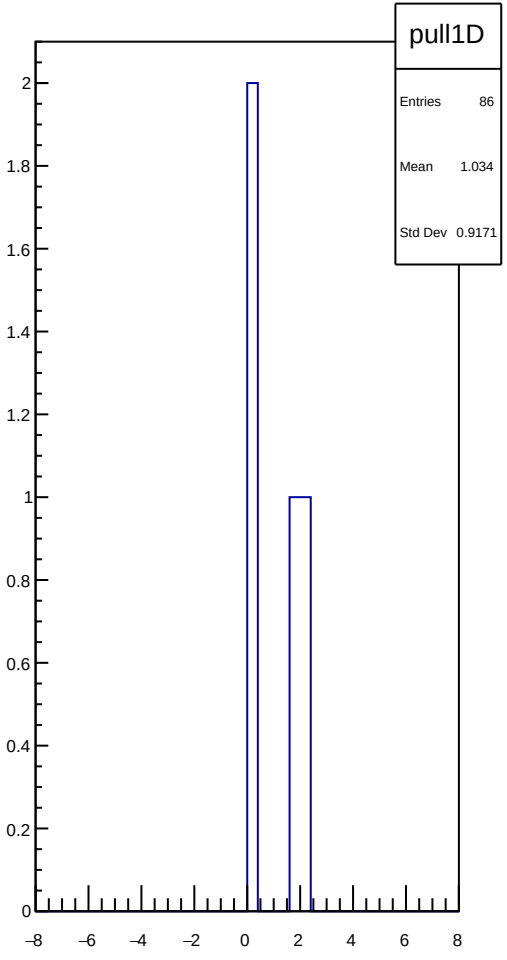

yield_usl_rms vs run
χ² / ndf 1.451e+04 / 85
p0 0.1429 ± 0.0001115
0.22
0.2
0.18
0.16
0.14
0.12

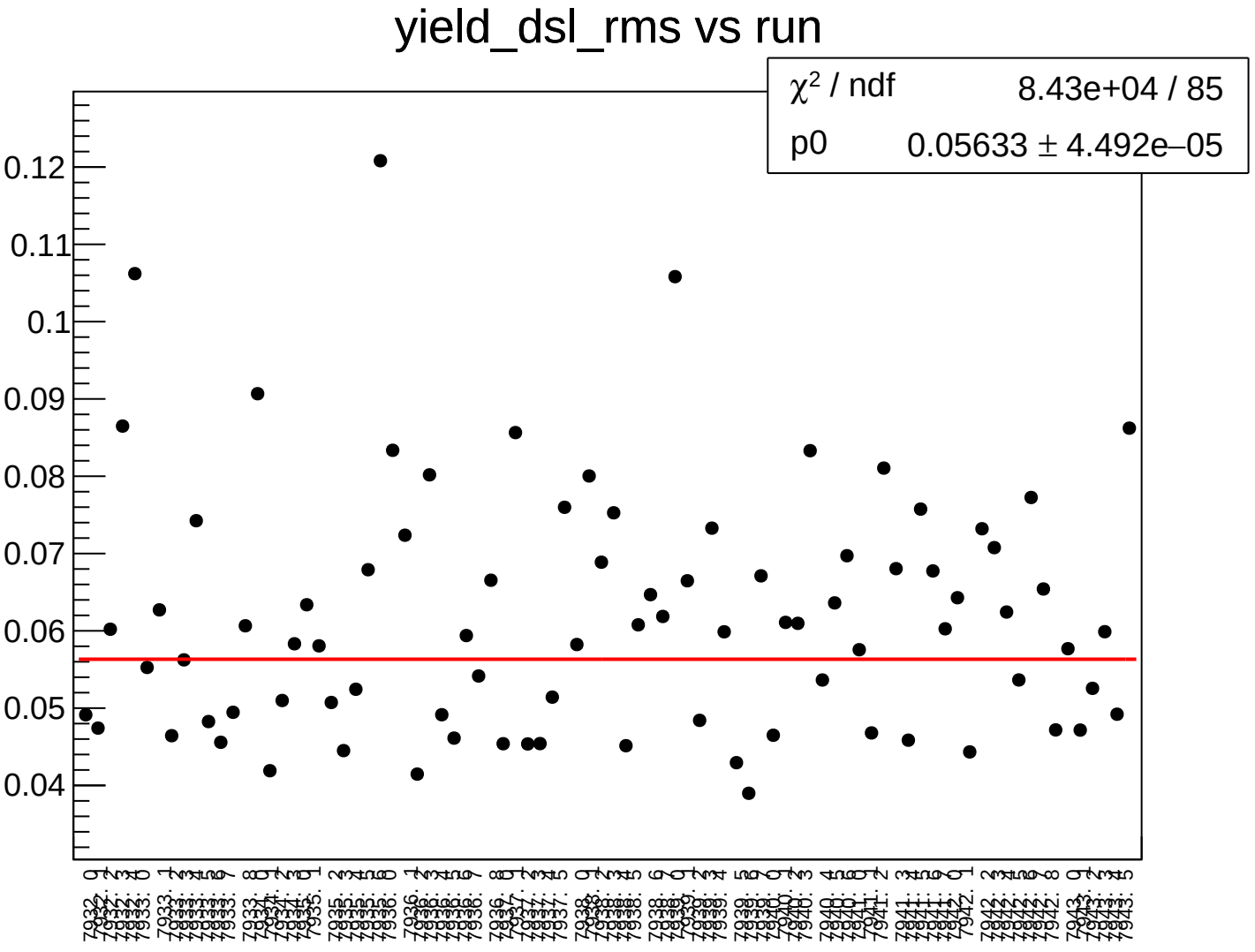

yield_usr_mean vs run
χ² / ndf 7.597e+04 / 85
p0 33.74 ± 0.0002534
33.85
33.8
33.75
33.7
33.65
33.6
pull
Entries 86
Mean 663
Std Dev 615
40
20
0
−20
−40
−60

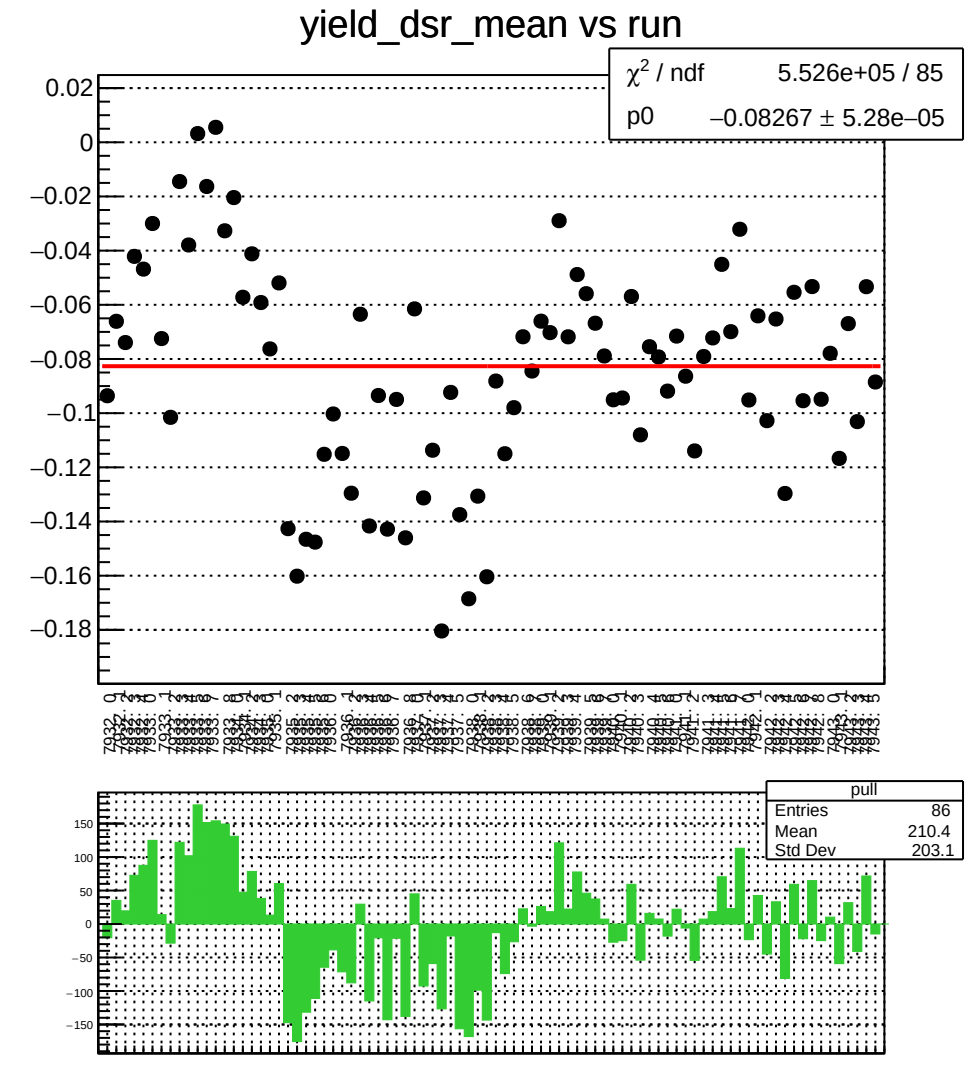

pull1D
Entries 86
Mean −0.7764
Std Dev 5.092
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

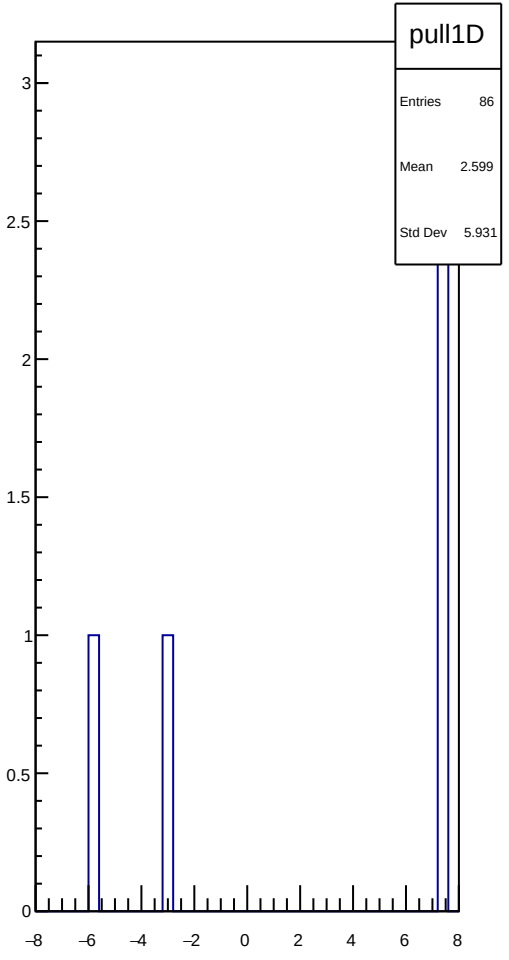

yield_usr_rms vs run
χ² / ndf 2.617e+04 / 85
p0 0.2288 ± 0.0001792
0.4
0.35
0.3
0.25
0.2

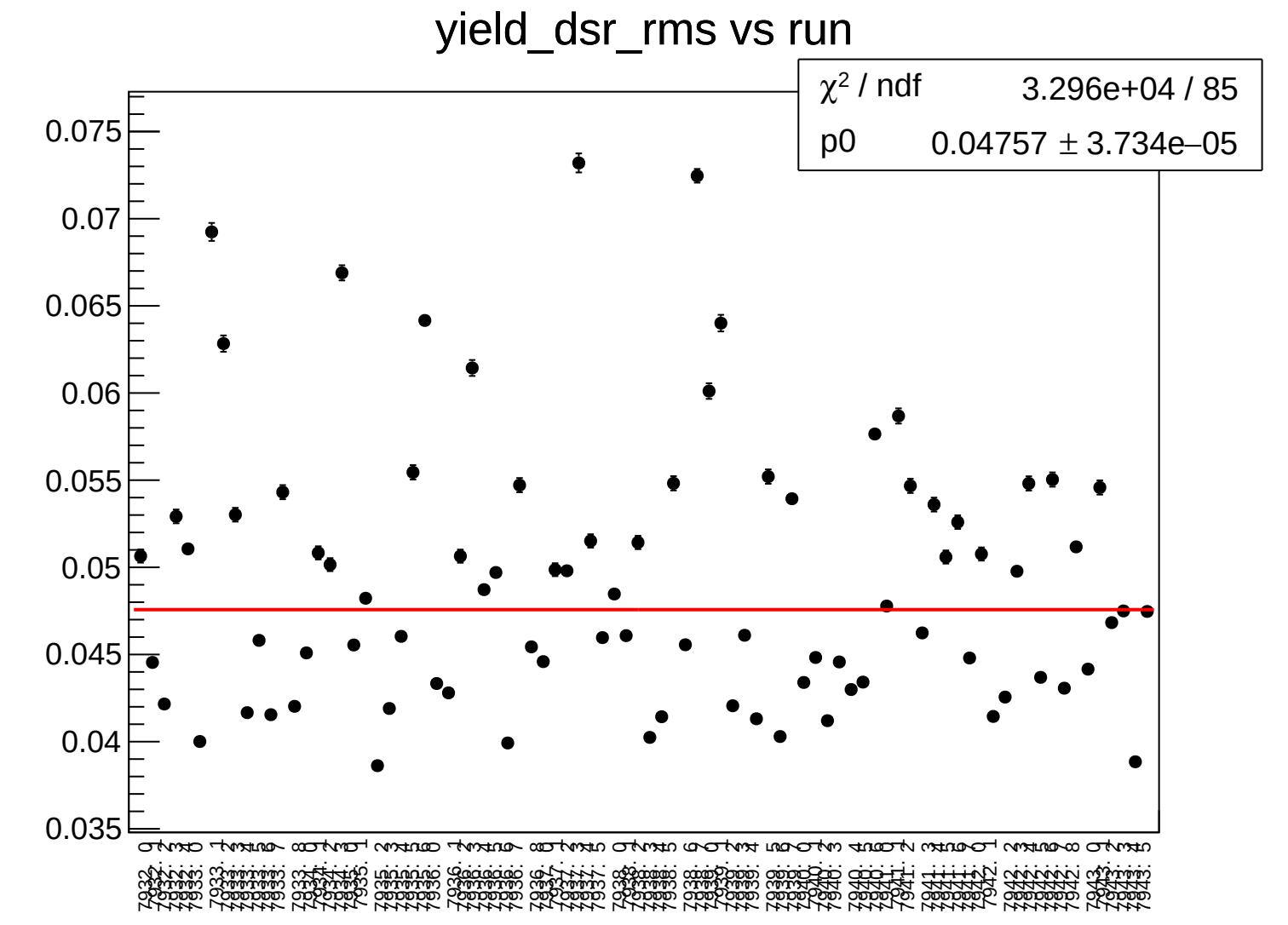

yield_dsl_mean vs run
χ² / ndf 2.268e+06 / 85
p0 −2.21 ± 6.353e−05
−2
−2.1
−2.2
−2.3
−2.4
pull
Entries 86
Mean −1654
Std Dev 1698
400
300
200
100
0
−100
−200
−300
−400

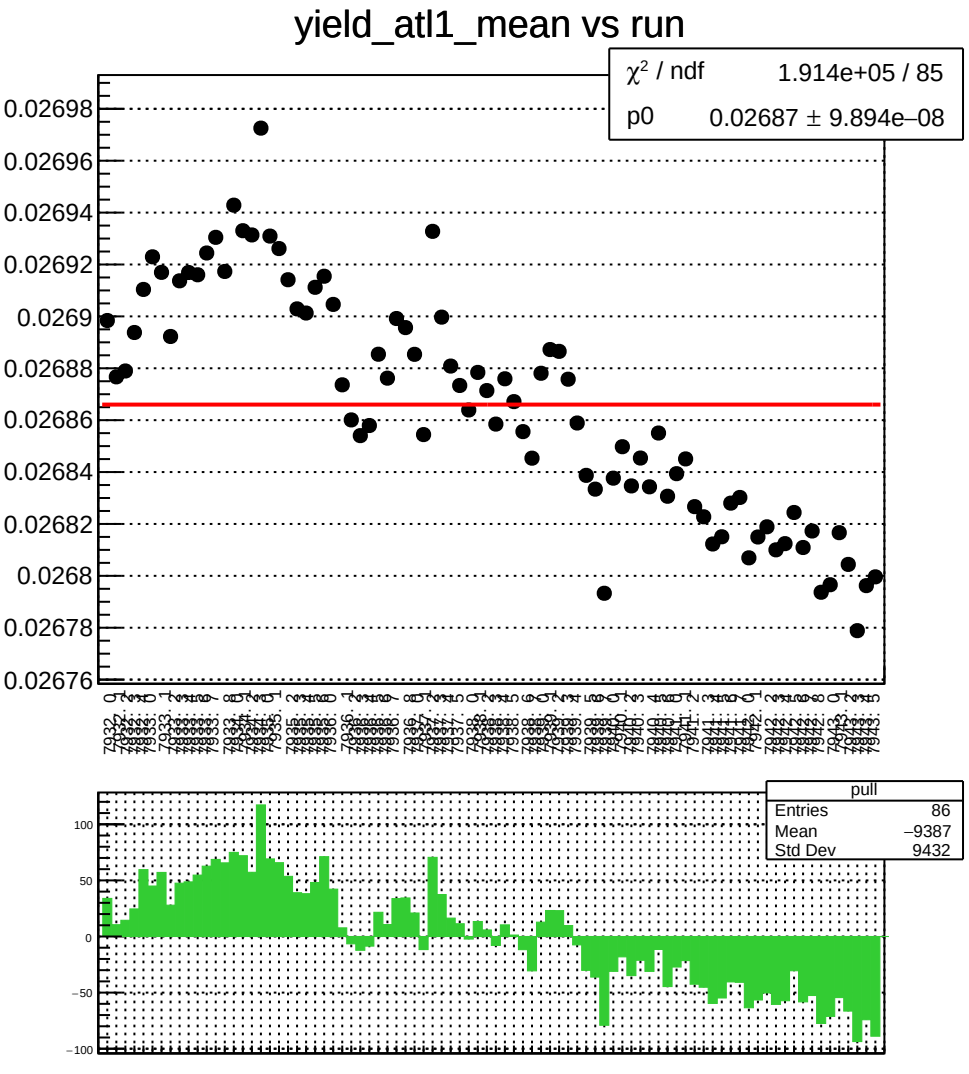

pull1D
Entries 86
Mean 1.034
Std Dev 0.9171
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

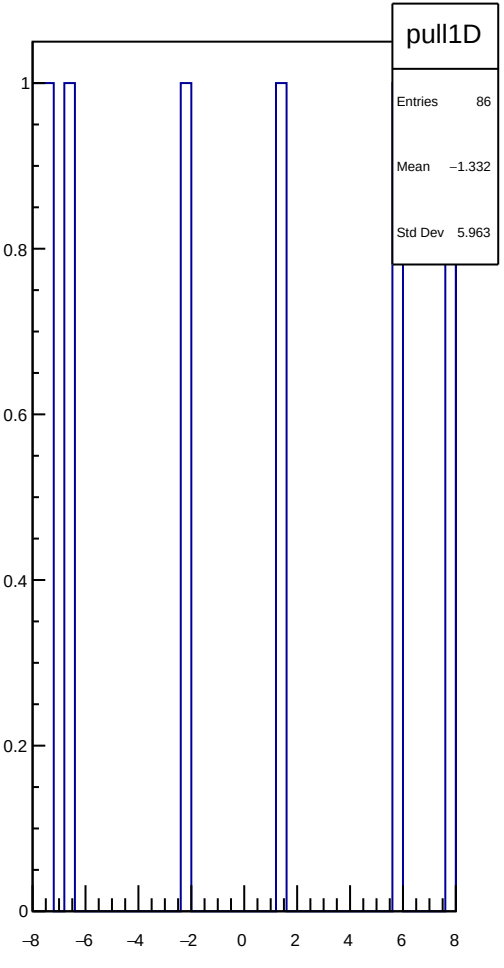

yield_dsl_rms vs run
χ² / ndf 8.43e+04 / 85
p0 0.05633 ± 4.492e−05
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

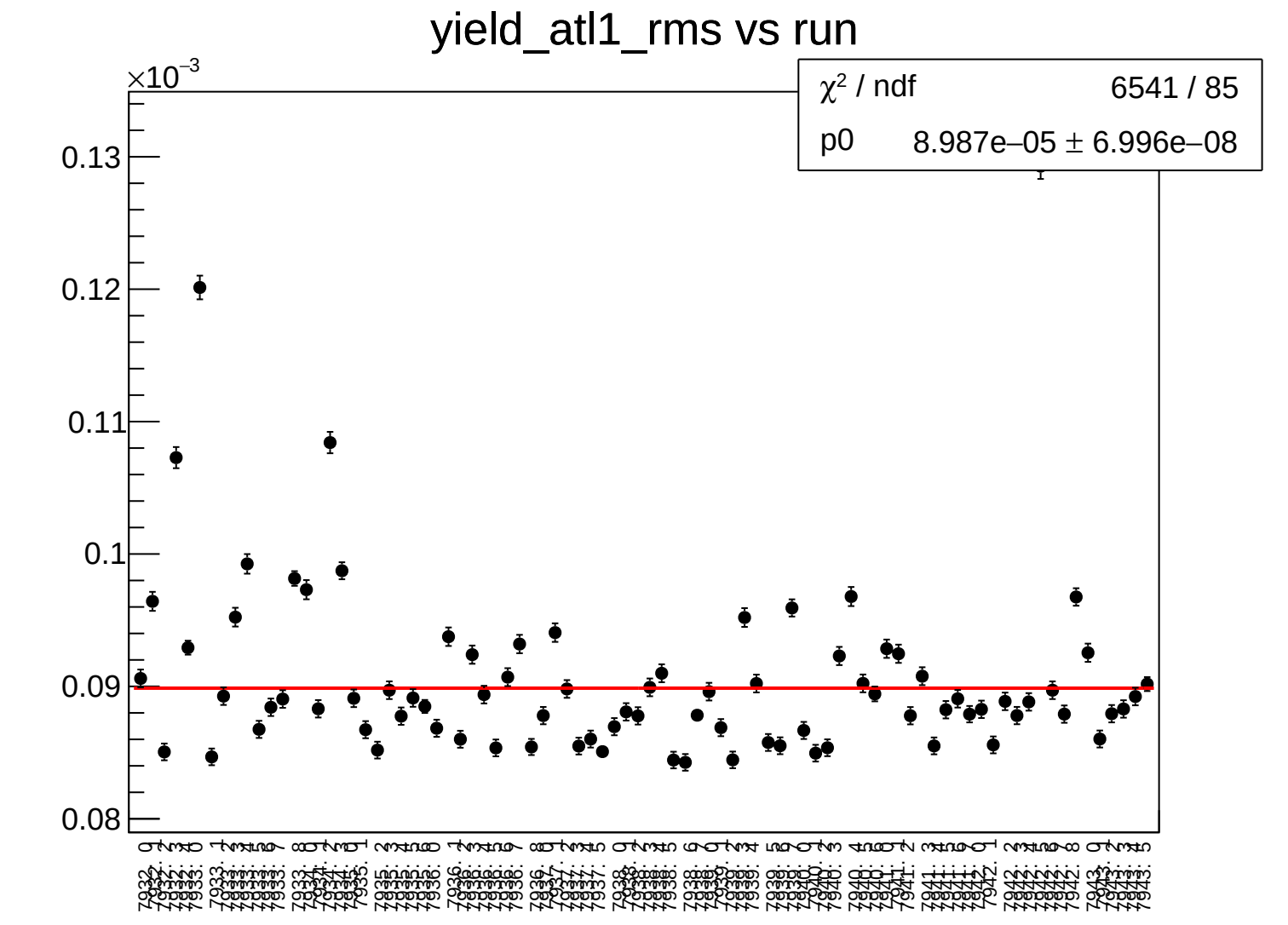

yield_dsr_mean vs run
χ² / ndf 5.526e+05 / 85
p0 −0.08267 ± 5.28e−05
pull
Entries 86
Mean 210.4
Std Dev 203.1

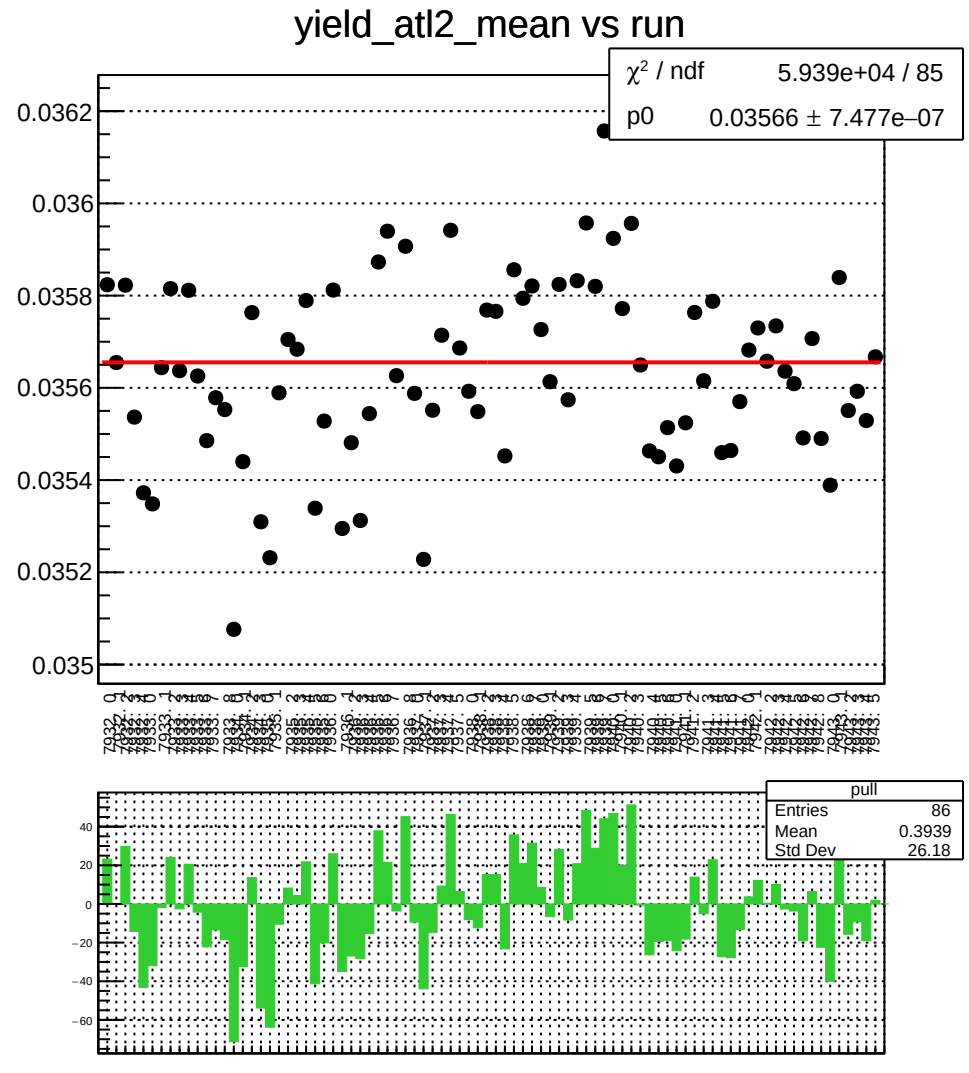

pull1D
Entries 86
Mean 2.599
Std Dev 5.931

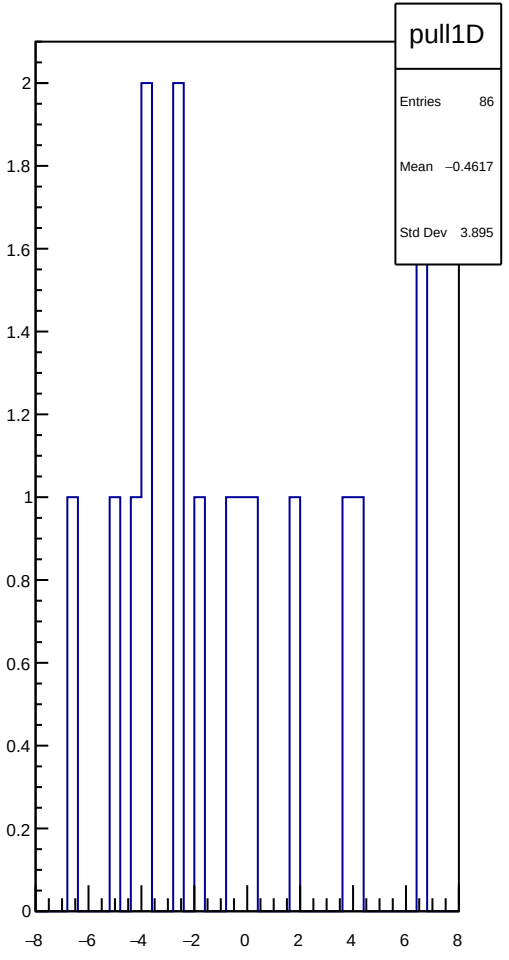

yield_dsr_rms vs run
χ² / ndf 3.296e+04 / 85
p0 0.04757 ± 3.734e−05
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
0.035

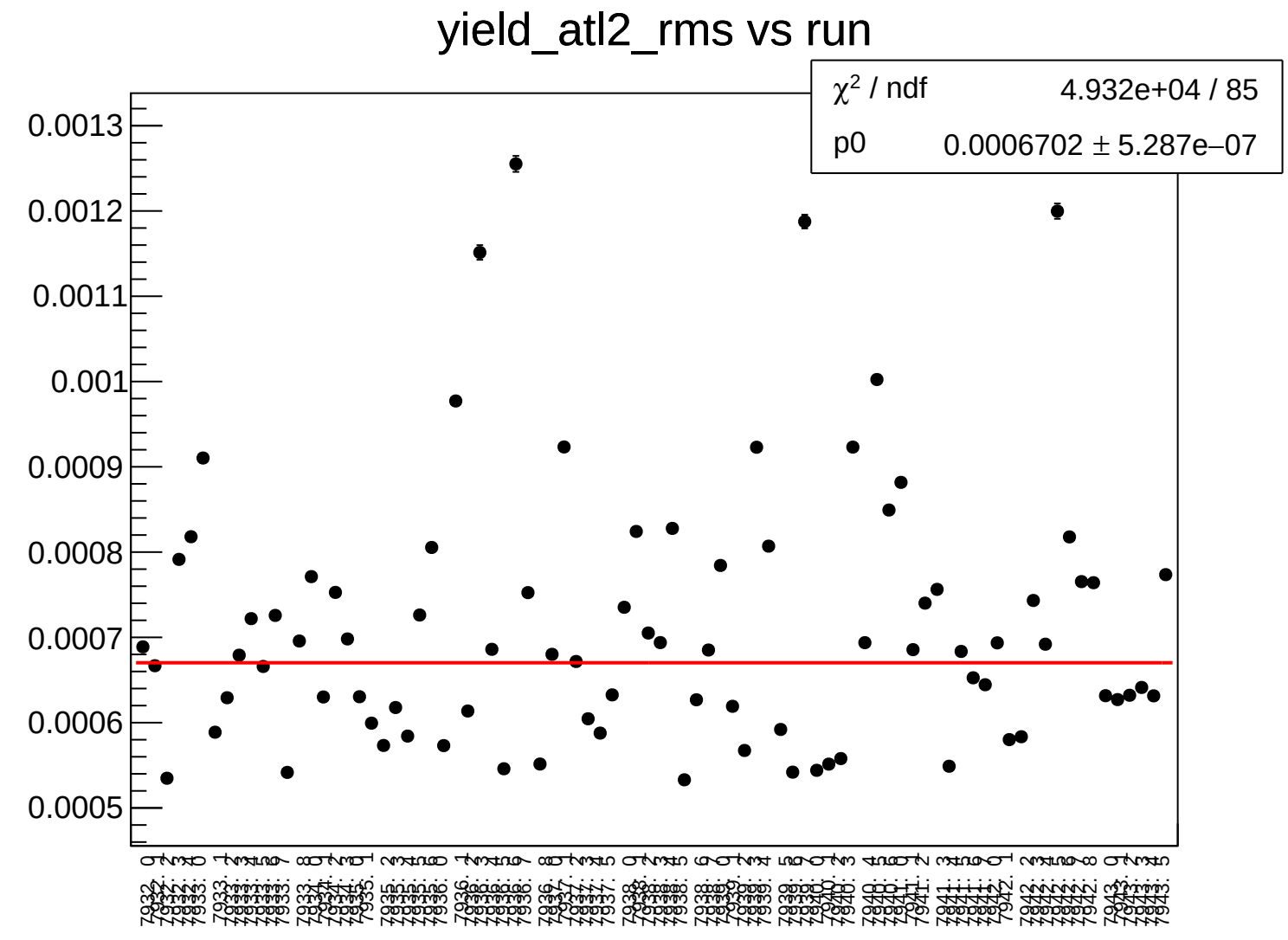

yield_atl1_mean vs run
χ² / ndf 1.914e+05 / 85
p0 0.02687 ± 9.894e−08
0.02698
0.02696
0.02694
0.02692
0.0269
0.02688
0.02686
0.02684
0.02682
0.0268
0.02678
0.02676
pull
Entries 86
Mean −9387
Std Dev 9432
100
50
0
−50
−100

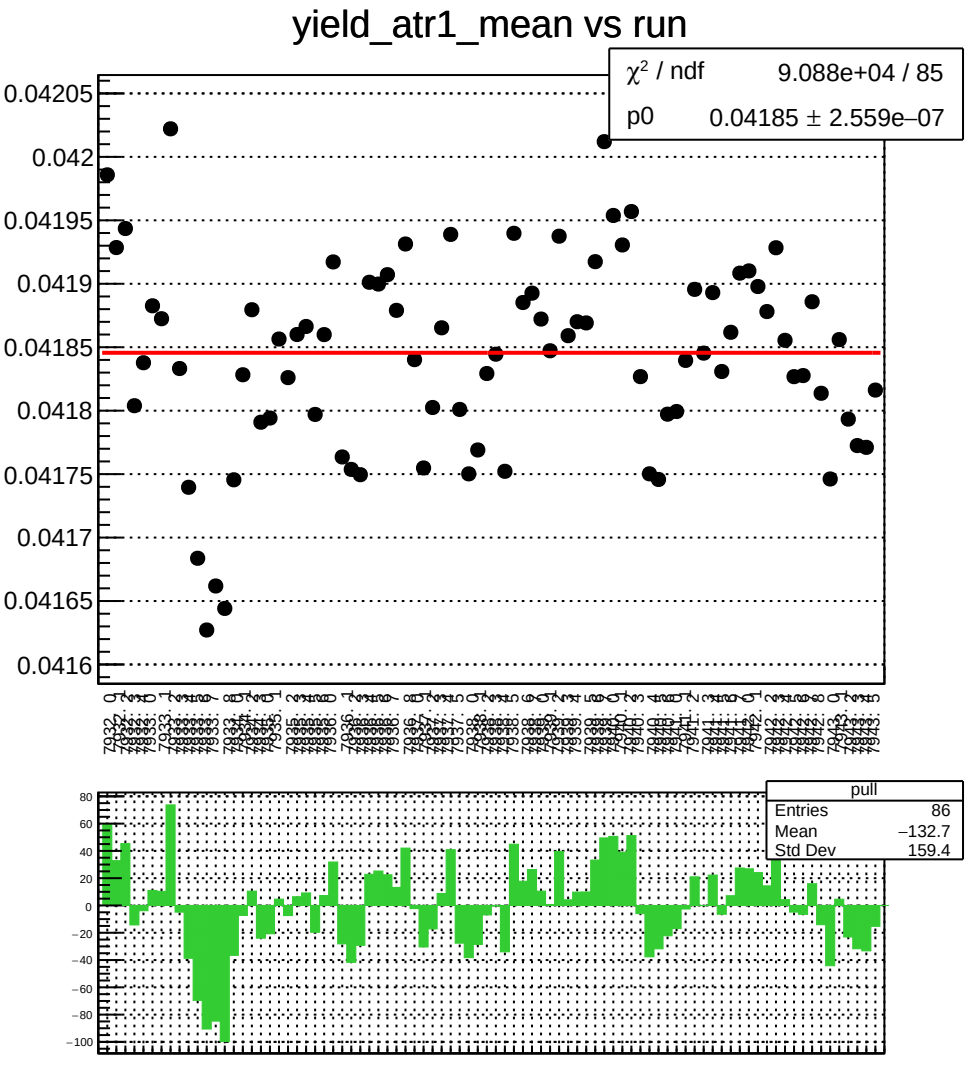

pull1D
Entries 86
Mean −1.332
Std Dev 5.963
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

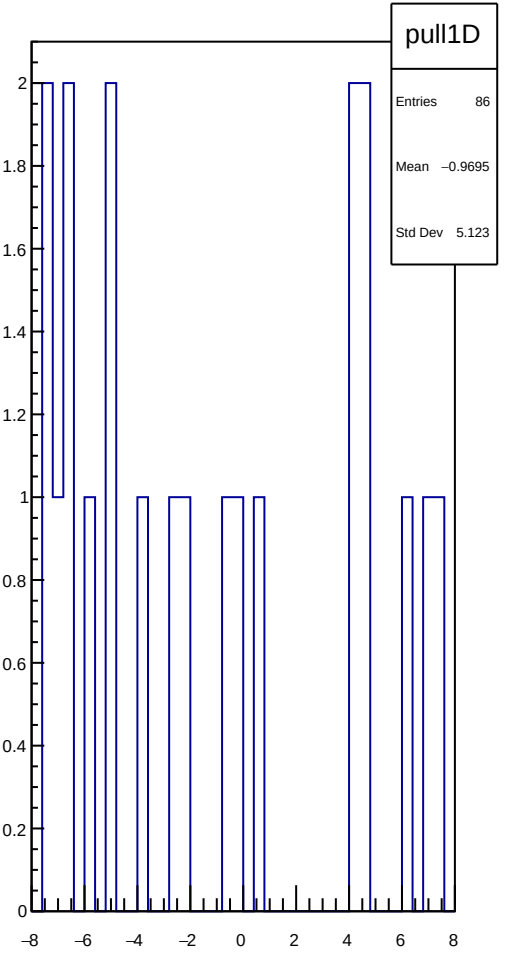

yield_atl1_rms vs run
×10⁻³
χ² / ndf 6541 / 85
p0 8.987e−05 ± 6.996e−08
0.13
0.12
0.11
0.1
0.09
0.08

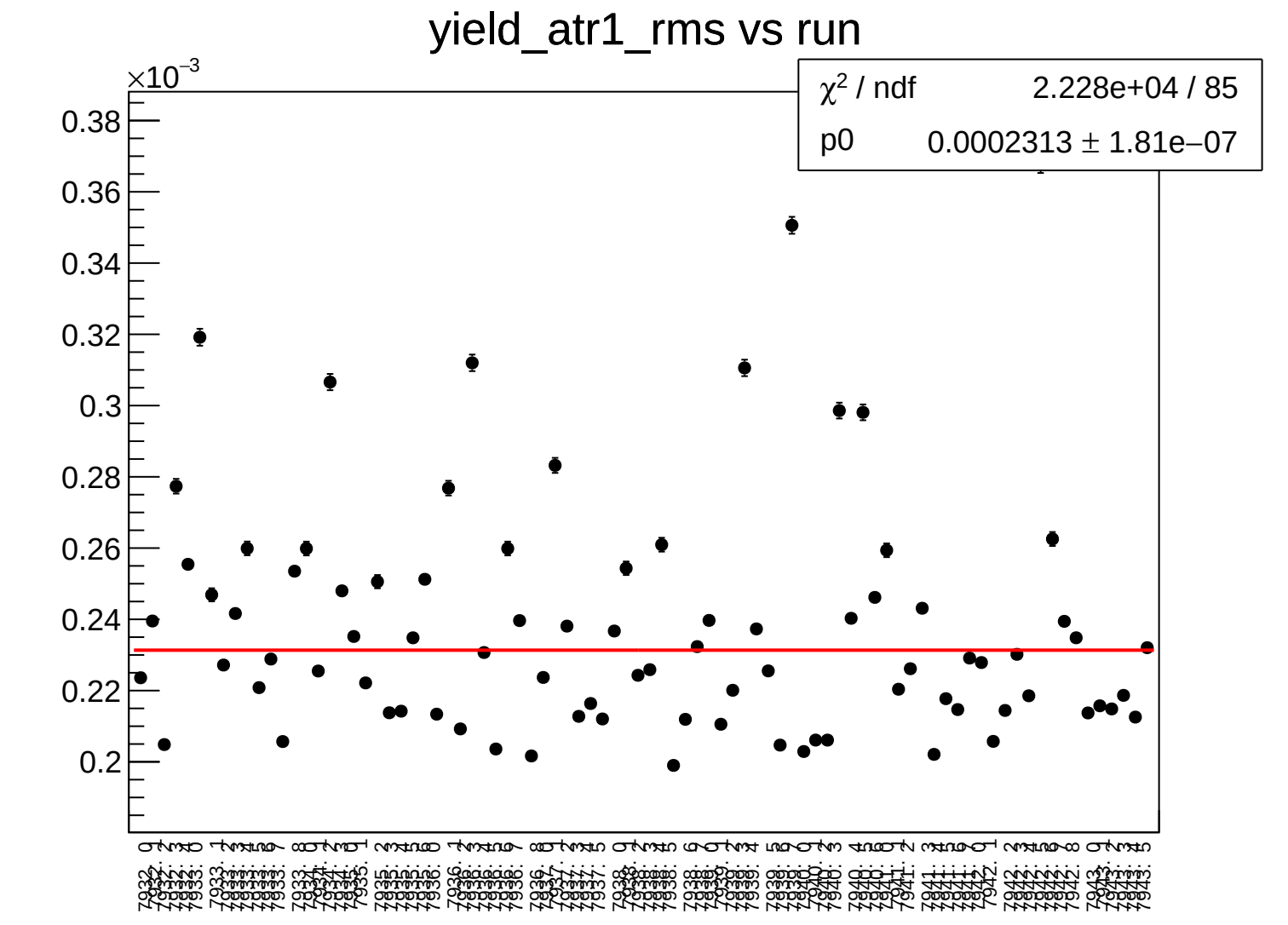

yield_atl2_mean vs run
χ² / ndf 5.939e+04 / 85
p0 0.03566 ± 7.477e−07
0.0362
0.036
0.0358
0.0356
0.0354
0.0352
0.035
pull
Entries 86
Mean 0.3939
Std Dev 26.18
40
20
0
−20
−40
−60

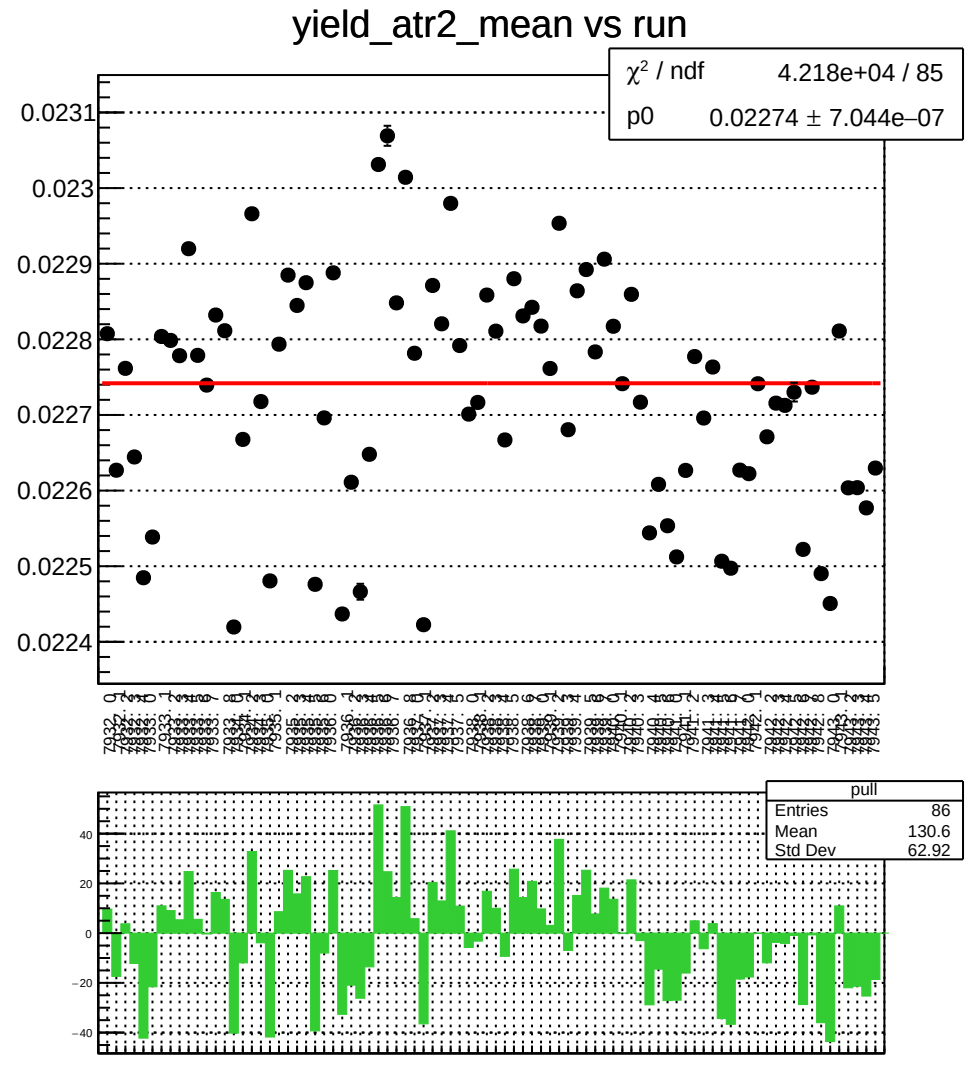

pull1D
Entries 86
Mean −0.4617
Std Dev 3.895
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

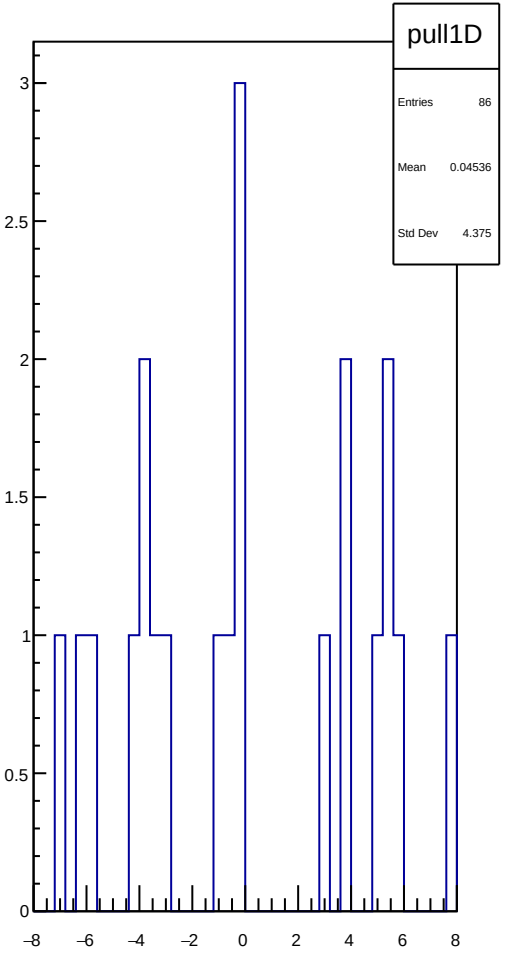

yield_atl2_rms vs run
χ² / ndf 4.932e+04 / 85
p0 0.0006702 ± 5.287e−07
0.0013
0.0012
0.0011
0.001
0.0009
0.0008
0.0007
0.0006
0.0005

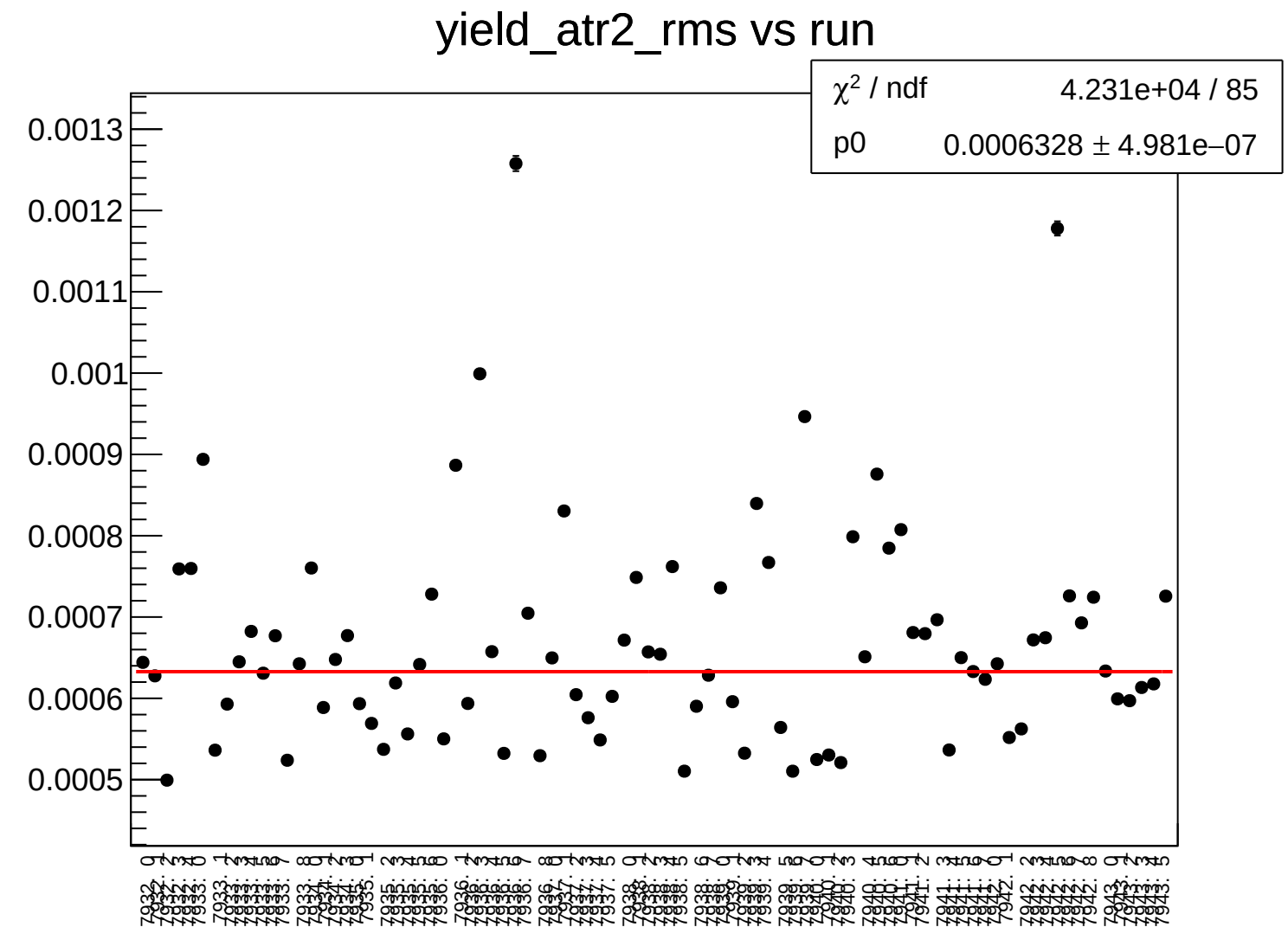

yield_atr1_mean vs run
χ² / ndf 9.088e+04 / 85
p0 0.04185 ± 2.559e−07
0.04205
0.042
0.04195
0.0419
0.04185
0.0418
0.04175
0.0417
0.04165
0.0416
pull
Entries 86
Mean −132.7
Std Dev 159.4
80
60
40
20
0
−20
−40
−60
−80
−100

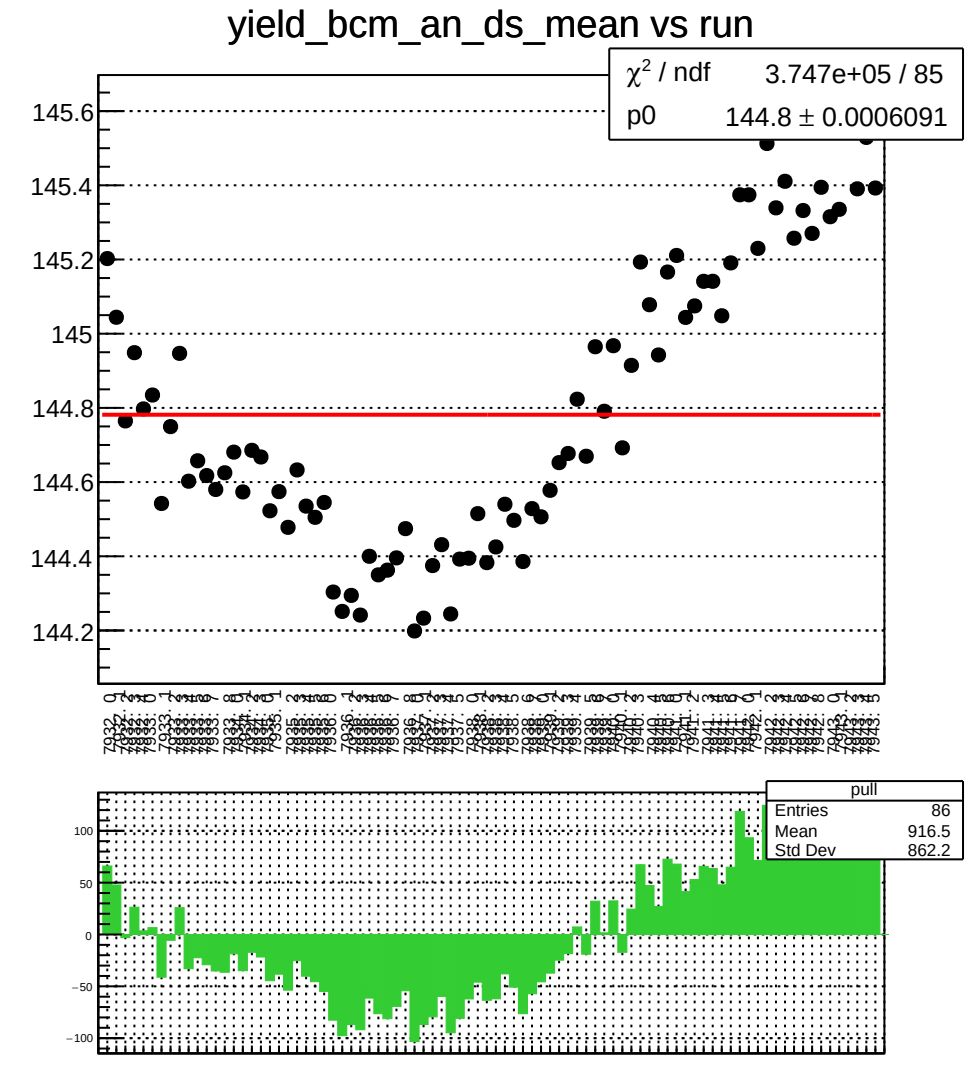

pull1D
Entries 86
Mean −0.9695
Std Dev 5.123
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

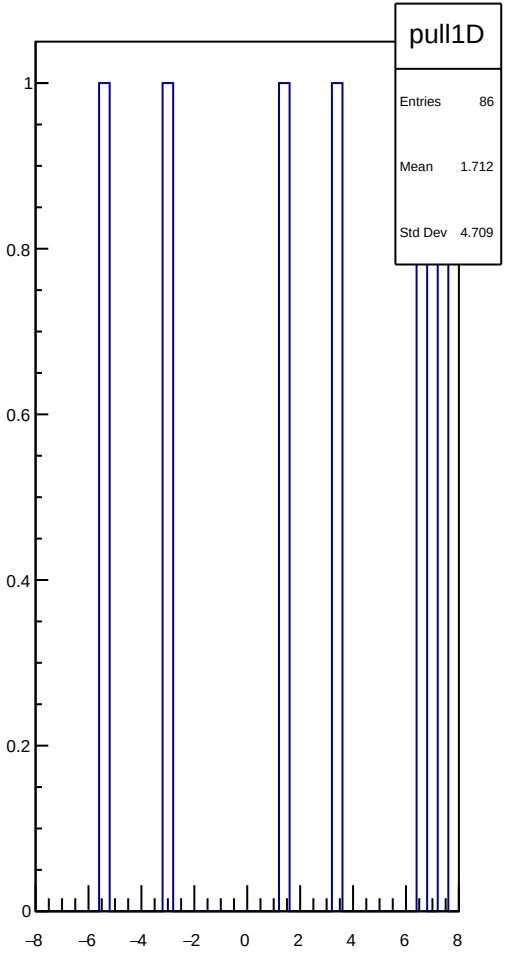

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.228e+04 / 85
p0 0.0002313 ± 1.81e−07
0.38
0.36
0.34
0.32
0.3
0.28
0.26
0.24
0.22
0.2

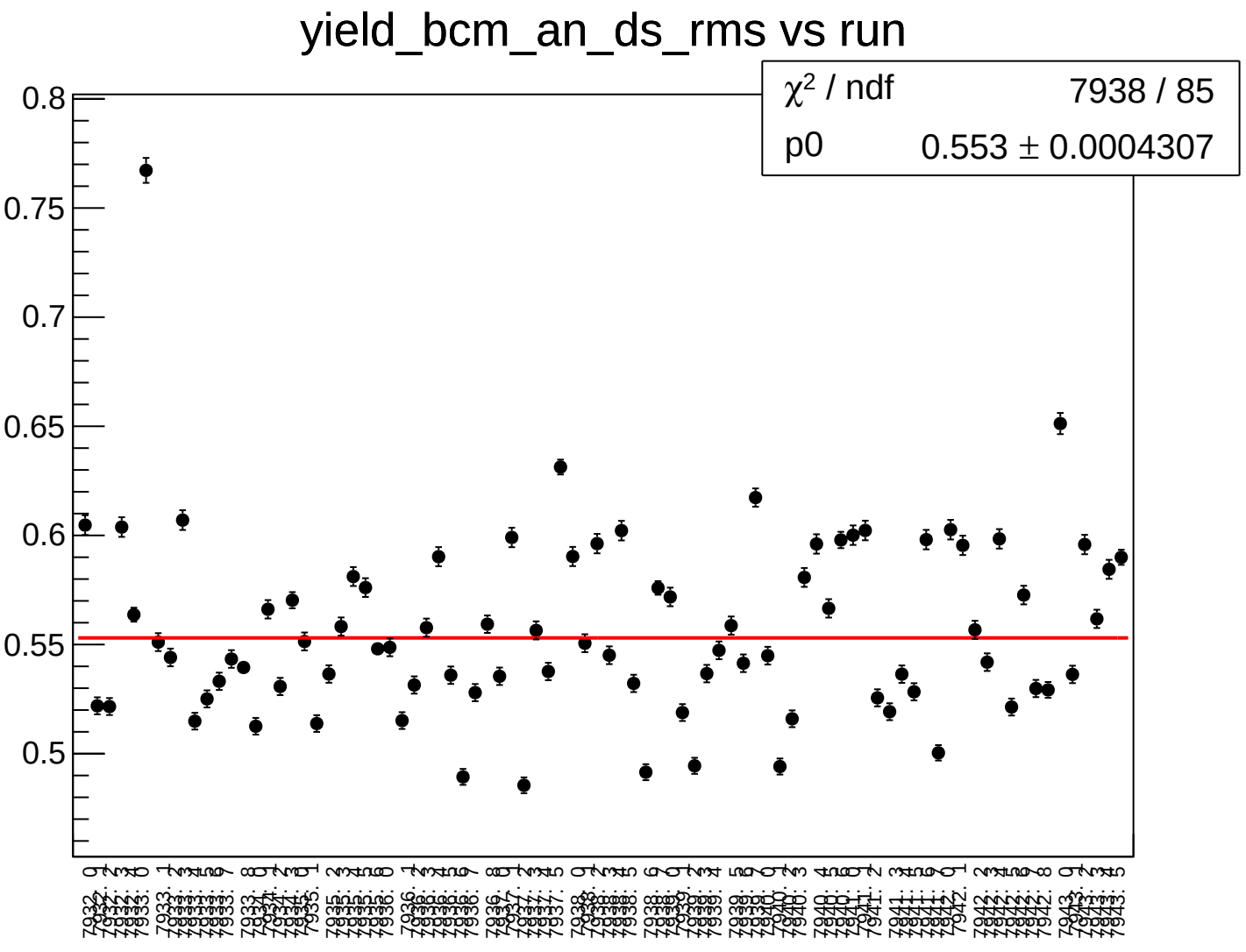

yield_atr2_mean vs run
χ² / ndf 4.218e+04 / 85
p0 0.02274 ± 7.044e−07
0.0231
0.023
0.0229
0.0228
0.0227
0.0226
0.0225
0.0224
pull
Entries 86
Mean 130.6
Std Dev 62.92
40
20
0
−20
−40

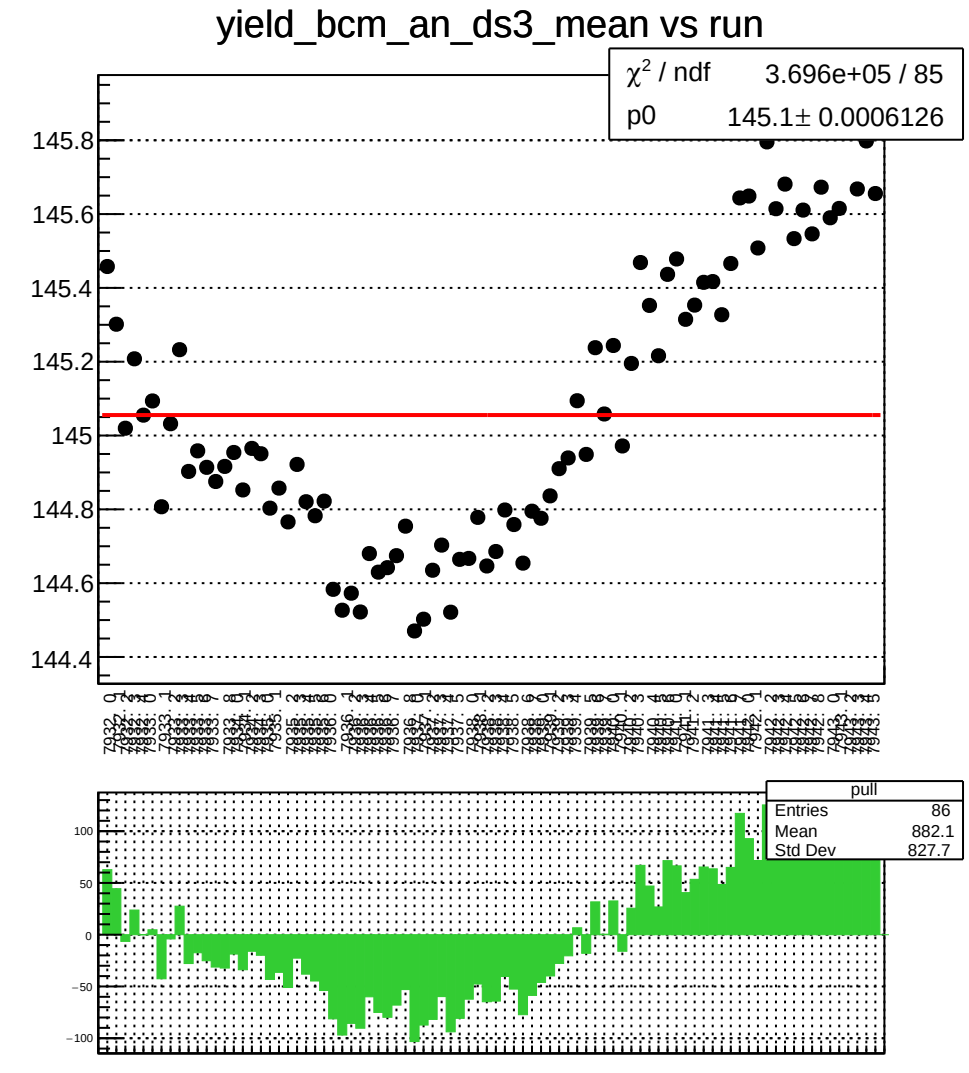

pull1D
Entries 86
Mean 0.04536
Std Dev 4.375
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

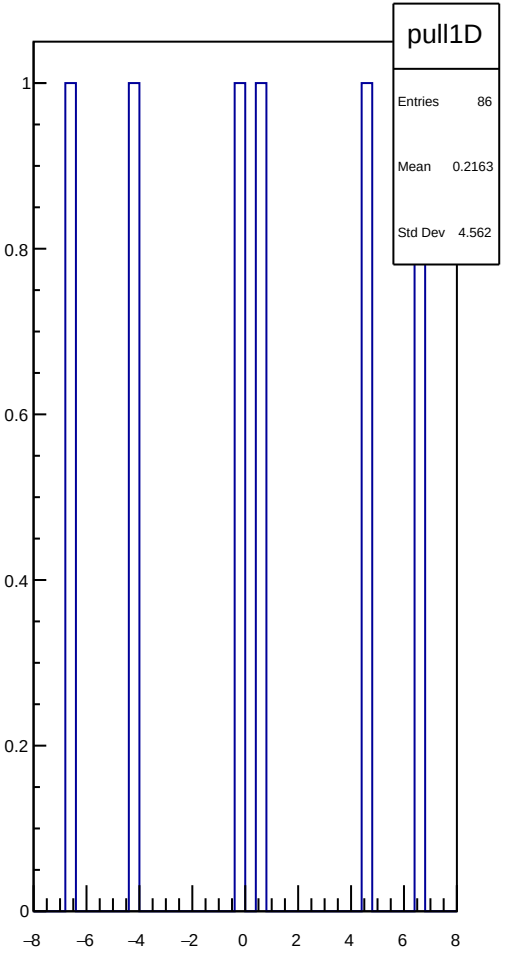

yield_atr2_rms vs run
χ² / ndf 4.231e+04 / 85
p0 0.0006328 ± 4.981e−07
0.0013
0.0012
0.0011
0.001
0.0009
0.0008
0.0007
0.0006
0.0005

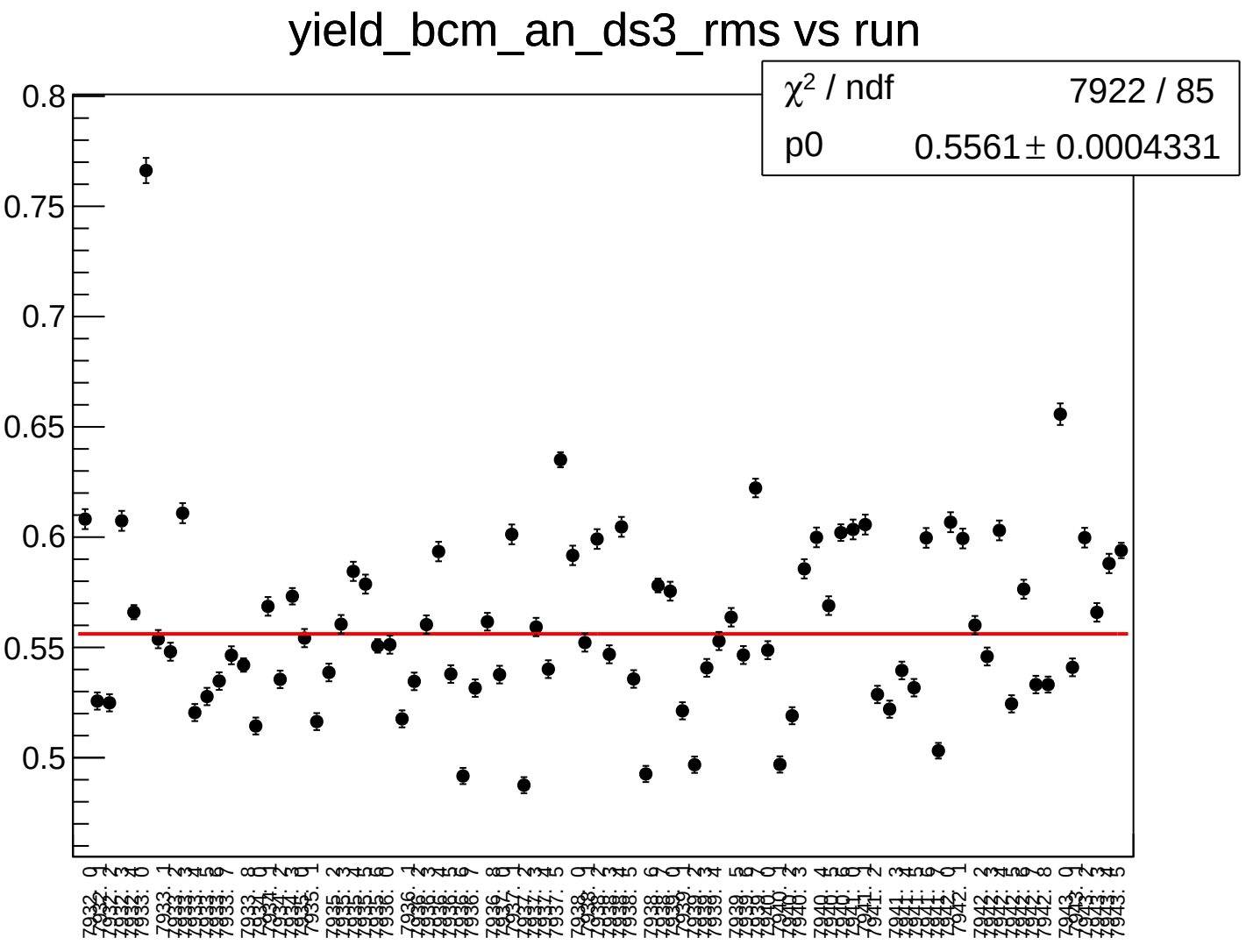

yield_bcm_an_ds_mean vs run
χ² / ndf 3.747e+05 / 85
p0 144.8 ± 0.0006091
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
pull
Entries 86
Mean 916.5
Std Dev 862.2
100
50
0
−50
−100

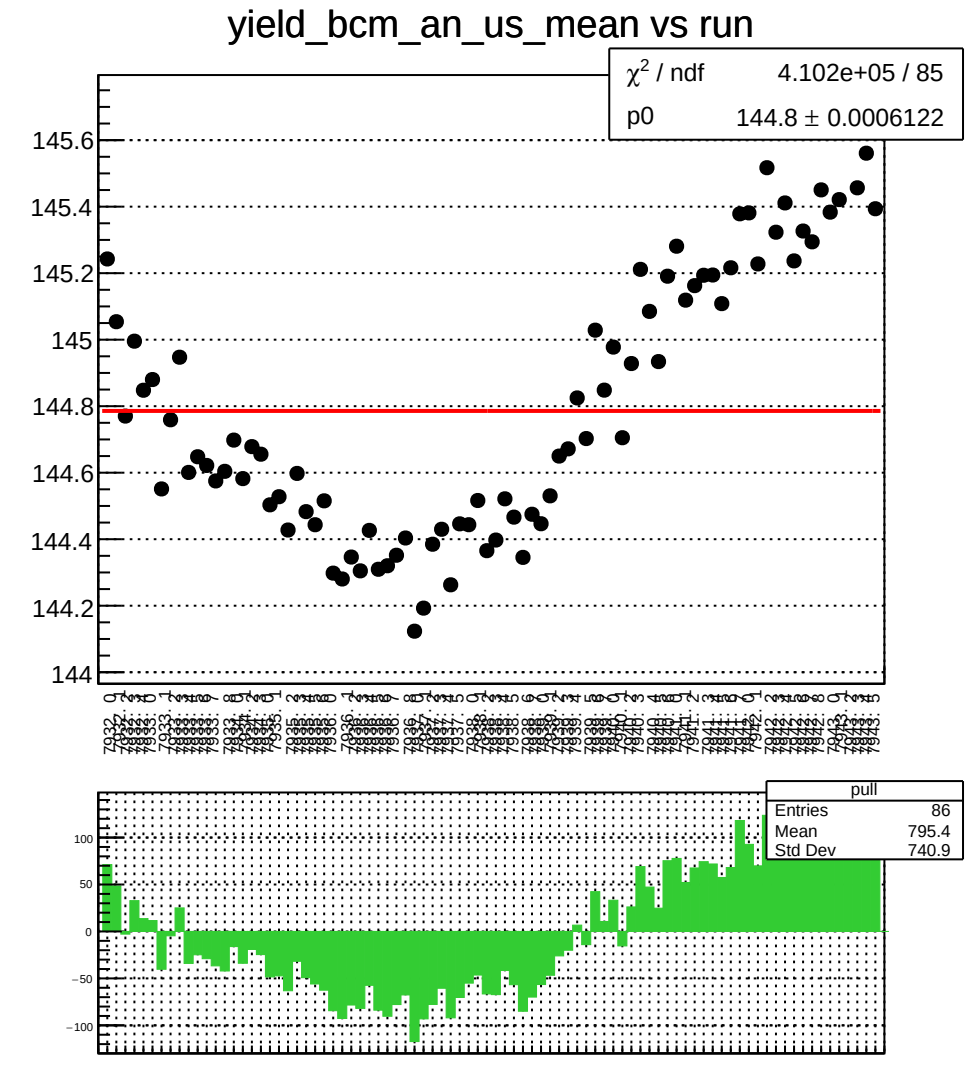

pull1D
Entries 86
Mean 1.712
Std Dev 4.709
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

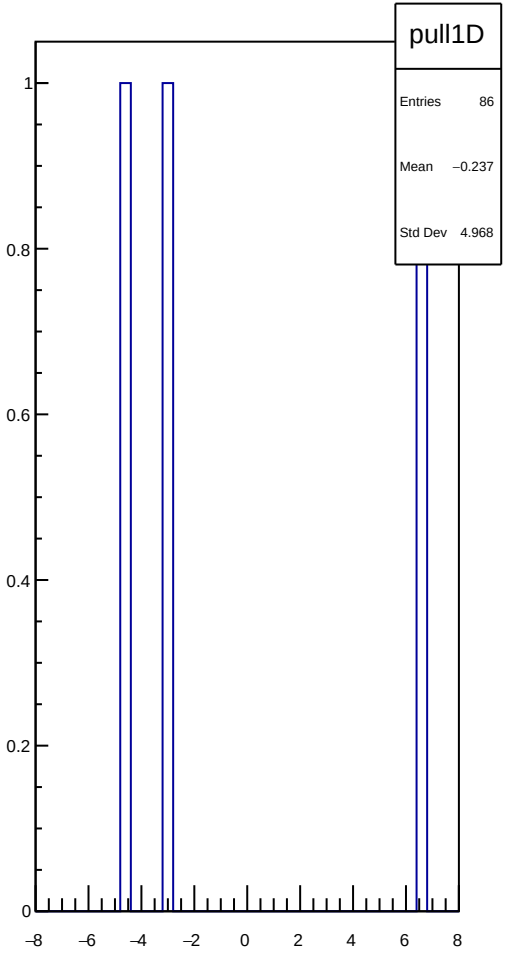

yield_bcm_an_ds_rms vs run
χ² / ndf 7938 / 85
p0 0.553 ± 0.0004307
0.8
0.75
0.7
0.65
0.6
0.55
0.5

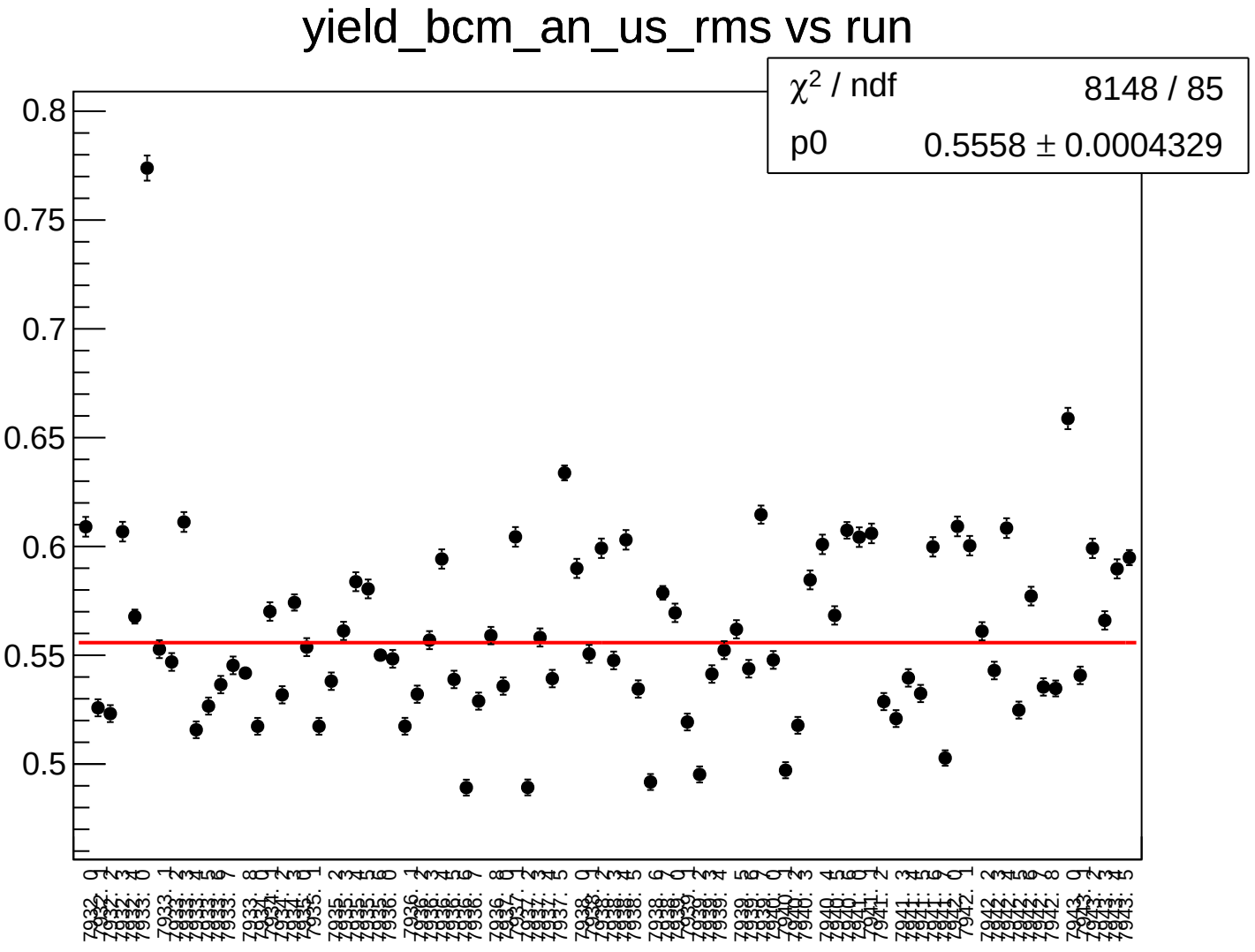

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.696e+05 / 85
p0 145.1± 0.0006126
145.8
145.6
145.4
145.2
145
144.8
144.6
144.4
pull
Entries 86
Mean 882.1
Std Dev 827.7
100
50
0
−50
−100

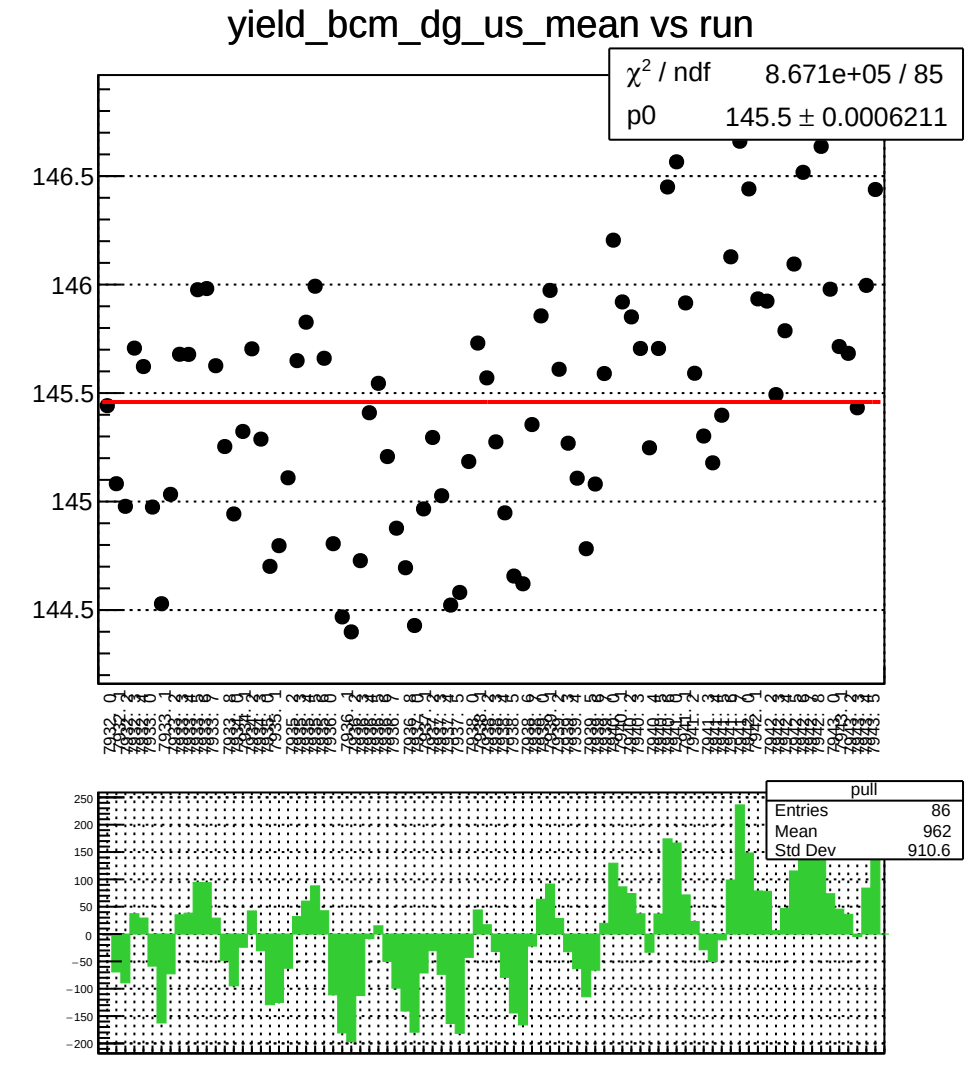

pull1D
Entries 86
Mean 0.2163
Std Dev 4.562
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

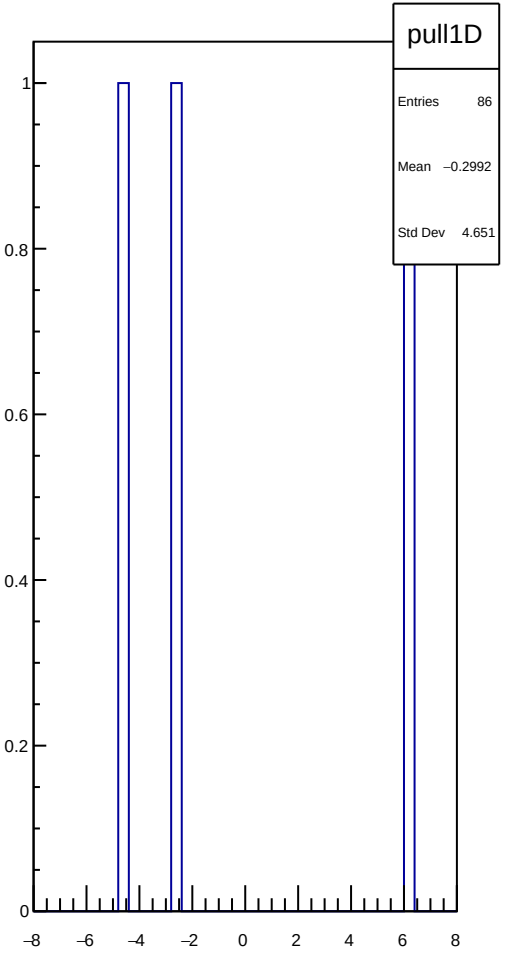

yield_bcm_an_ds3_rms vs run
χ² / ndf 7922 / 85
p0 0.5561 ± 0.0004331
0.8
0.75
0.7
0.65
0.6
0.55
0.5

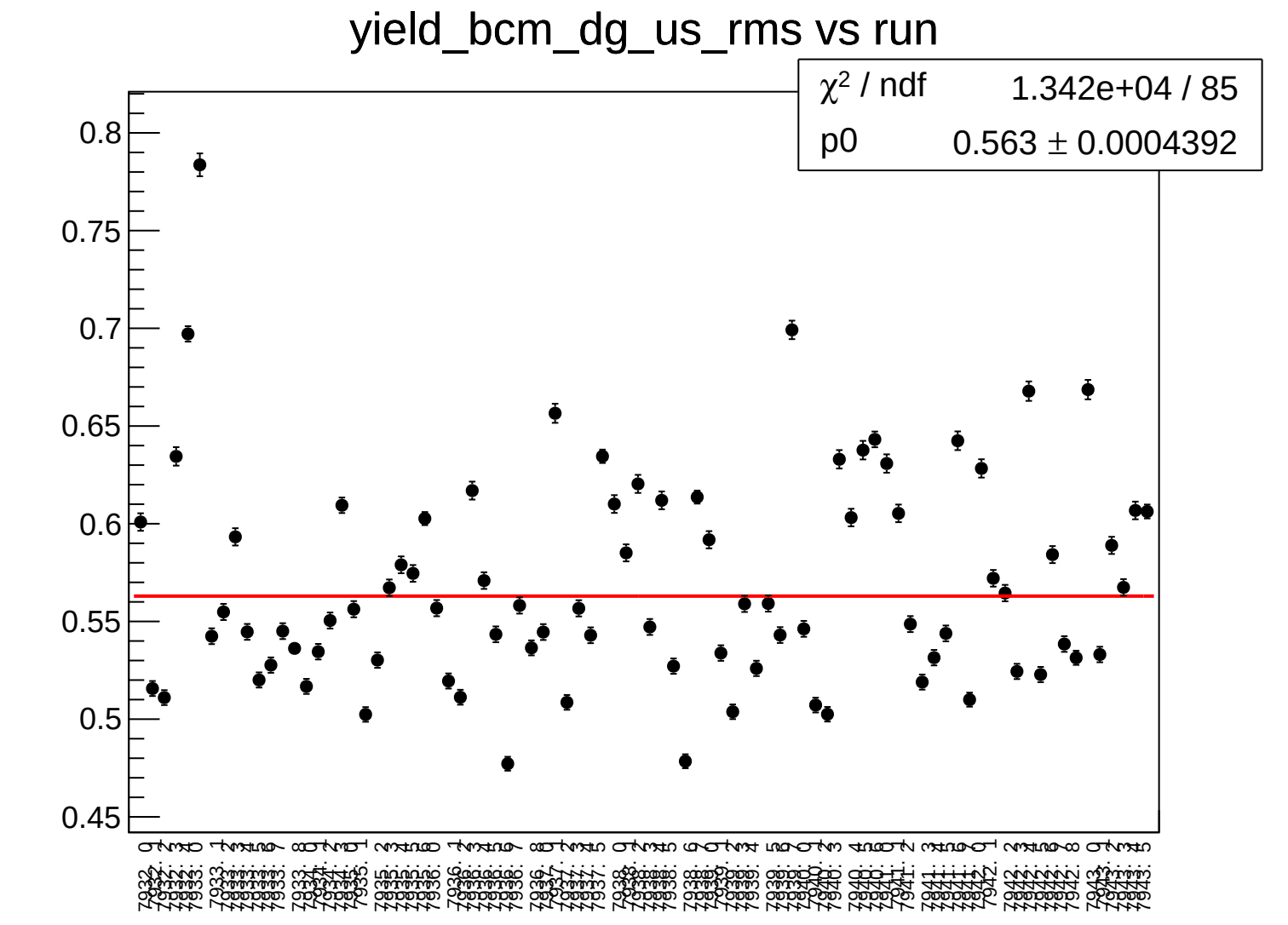

yield_bcm_an_us_mean vs run
χ² / ndf 4.102e+05 / 85
p0 144.8 ± 0.0006122
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
144
pull
Entries 86
Mean 795.4
Std Dev 740.9
100
50
0
−50
−100

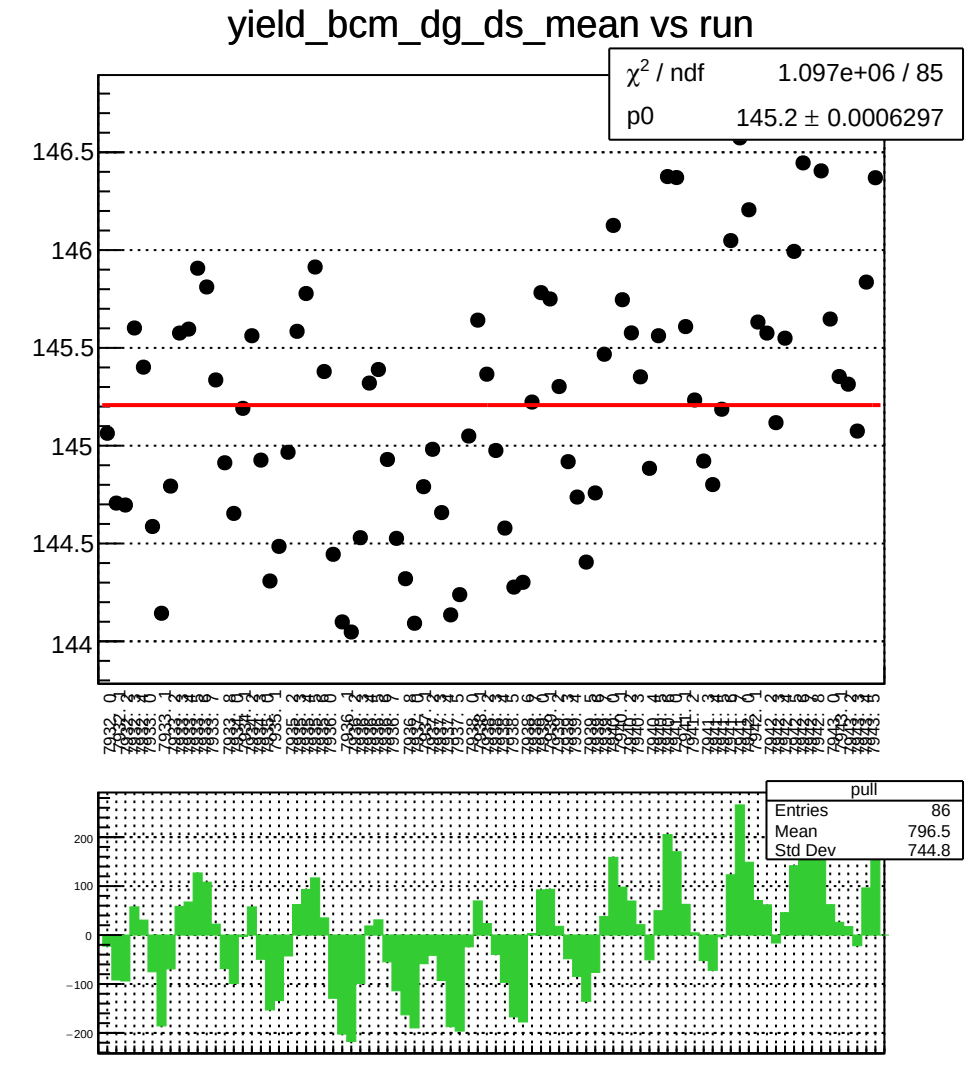

pull1D
Entries 86
Mean −0.237
Std Dev 4.968
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

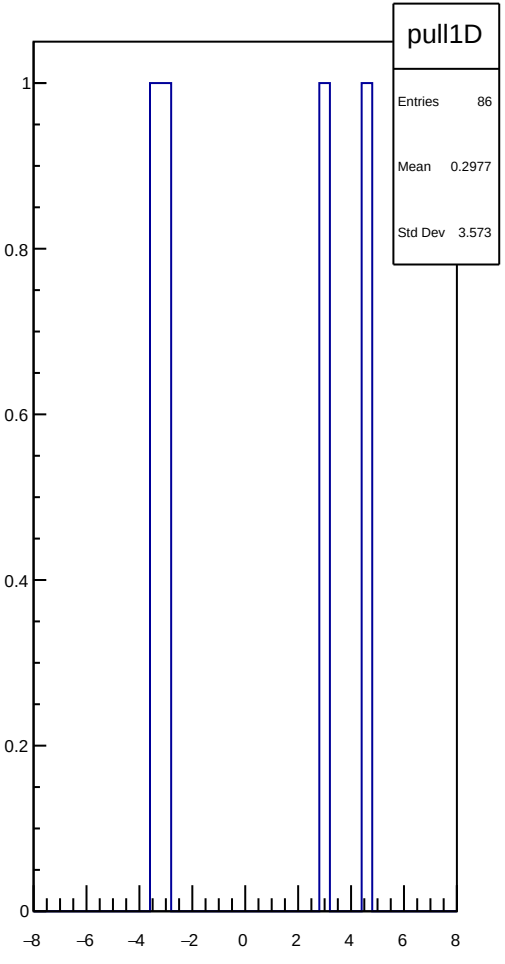

yield_bcm_an_us_rms vs run
χ² / ndf 8148 / 85
p0 0.5558 ± 0.0004329
0.8
0.75
0.7
0.65
0.6
0.55
0.5

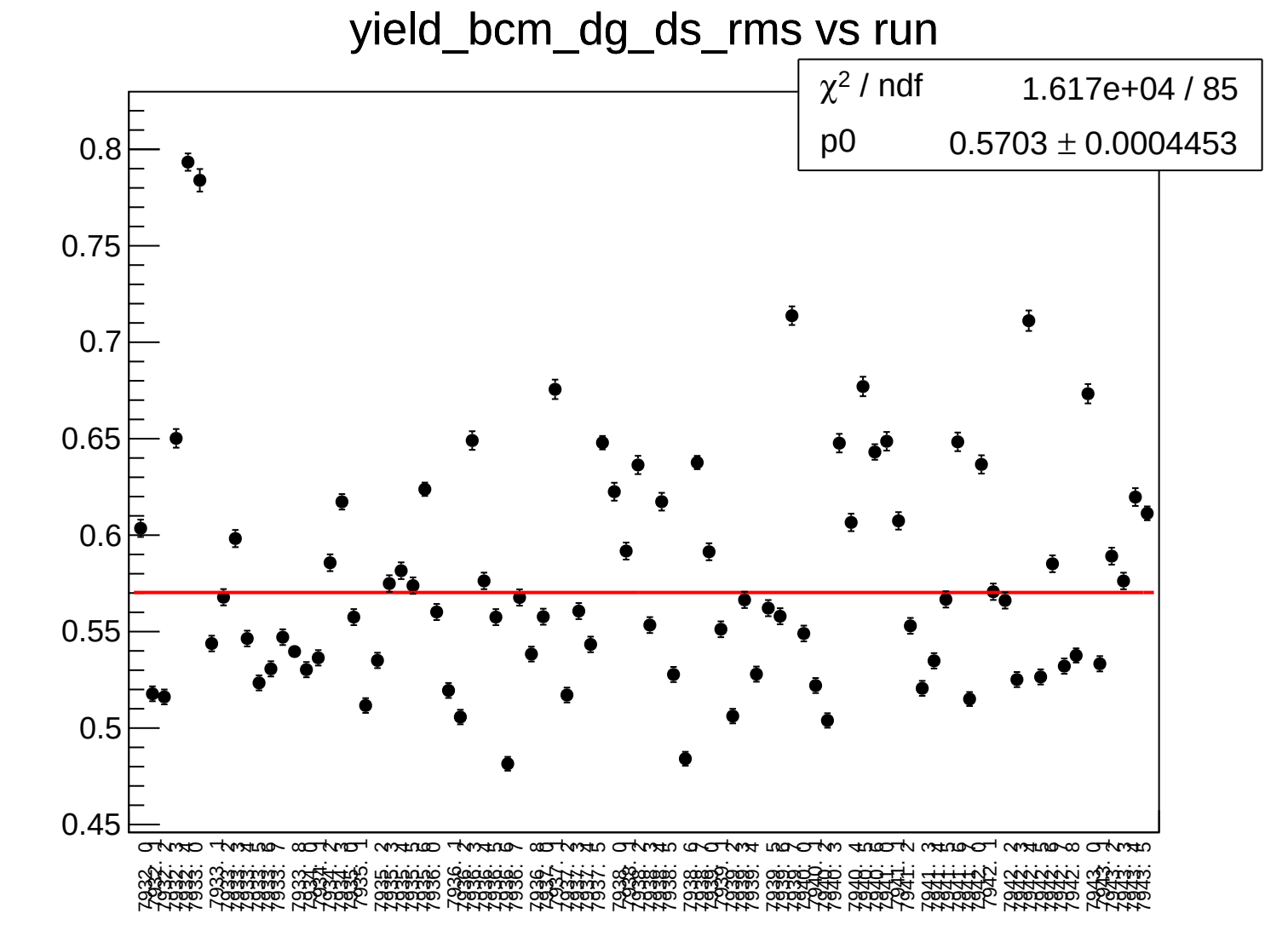

yield_bcm_dg_us_mean vs run
χ² / ndf 8.671e+05 / 85
p0 145.5 ± 0.0006211
146.5
146
145.5
145
144.5
pull
Entries 86
Mean 962
Std Dev 910.6
250
200
150
100
50
0
−50
−100
−150
−200

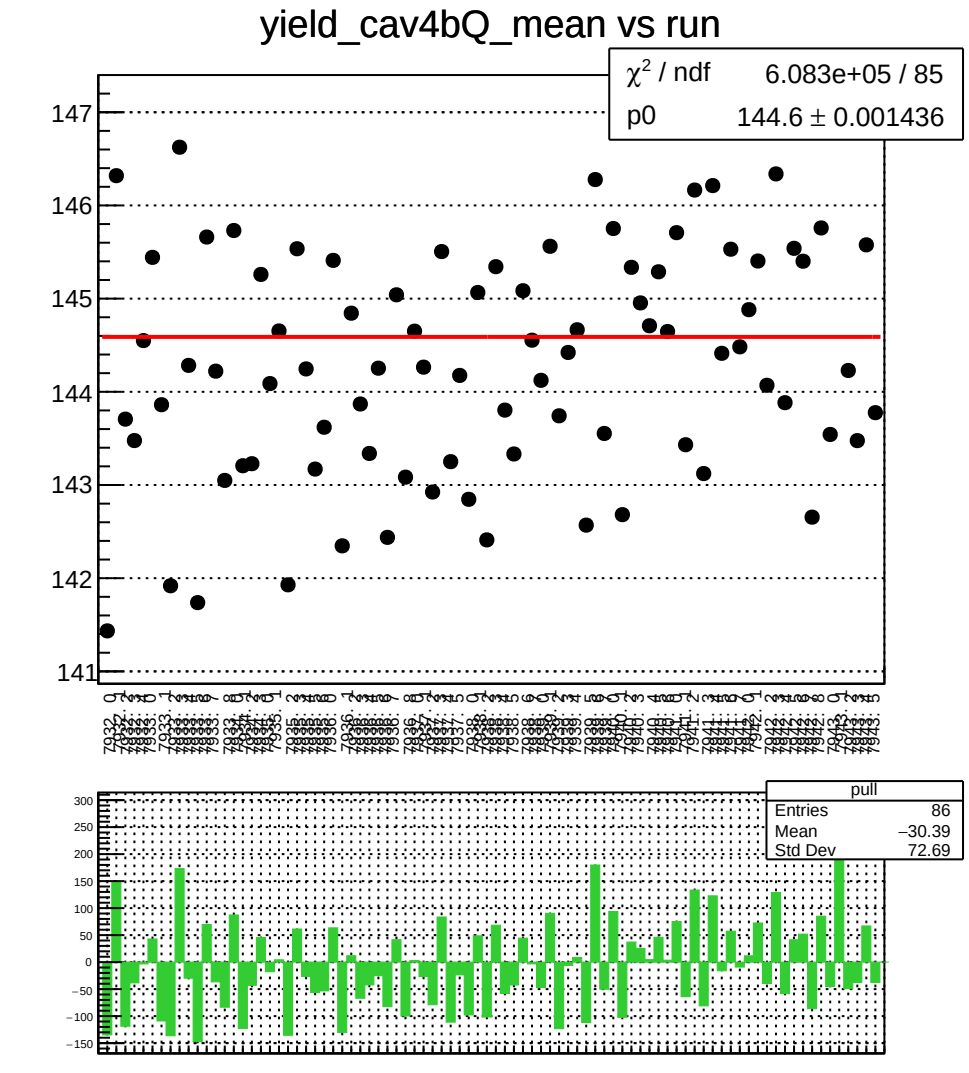

pull1D
Entries 86
Mean −0.2992
Std Dev 4.651
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

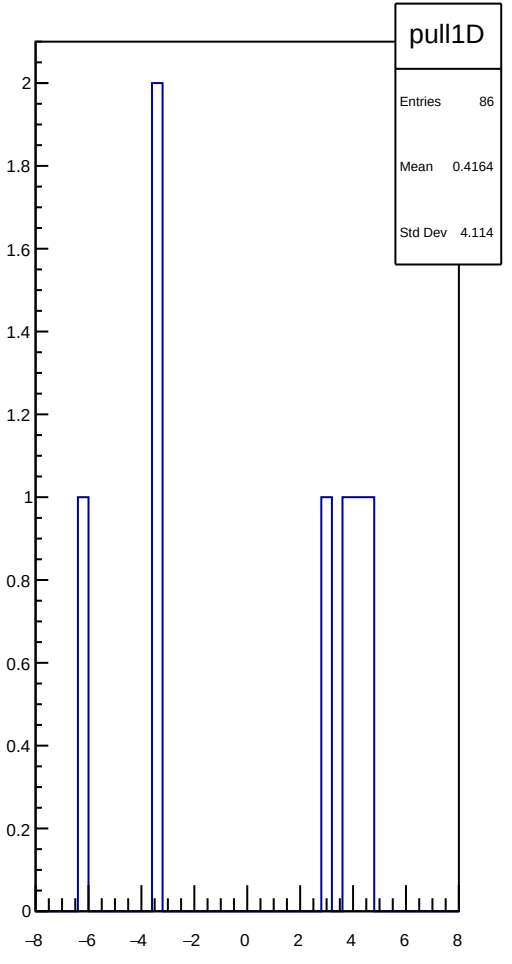

yield_bcm_dg_us_rms vs run
χ² / ndf 1.342e+04 / 85
p0 0.563 ± 0.0004392
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

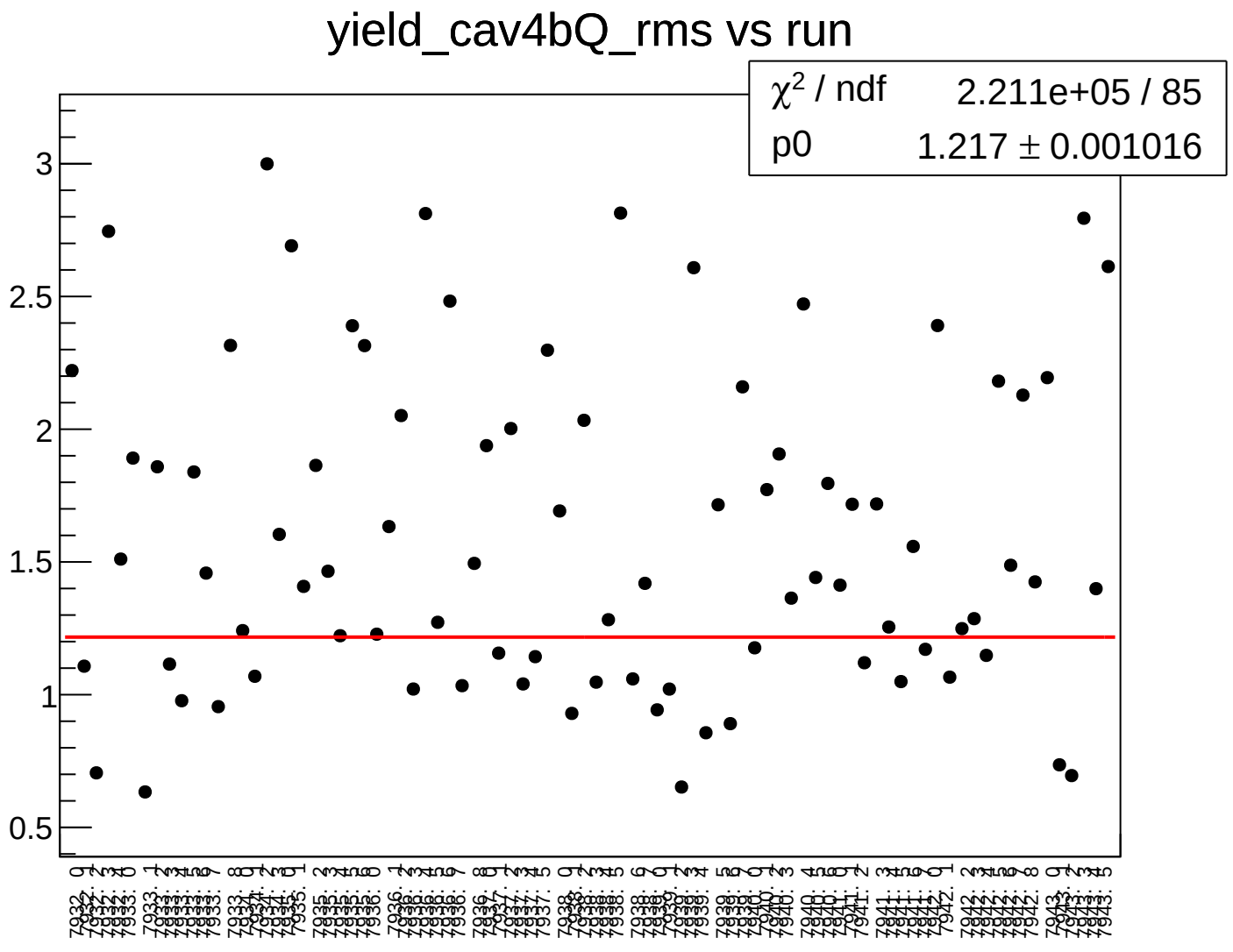

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.097e+06 / 85
p0 145.2 ± 0.0006297
146.5
146
145.5
145
144.5
144
pull
Entries 86
Mean 796.5
Std Dev 744.8
200
100
0
−100
−200

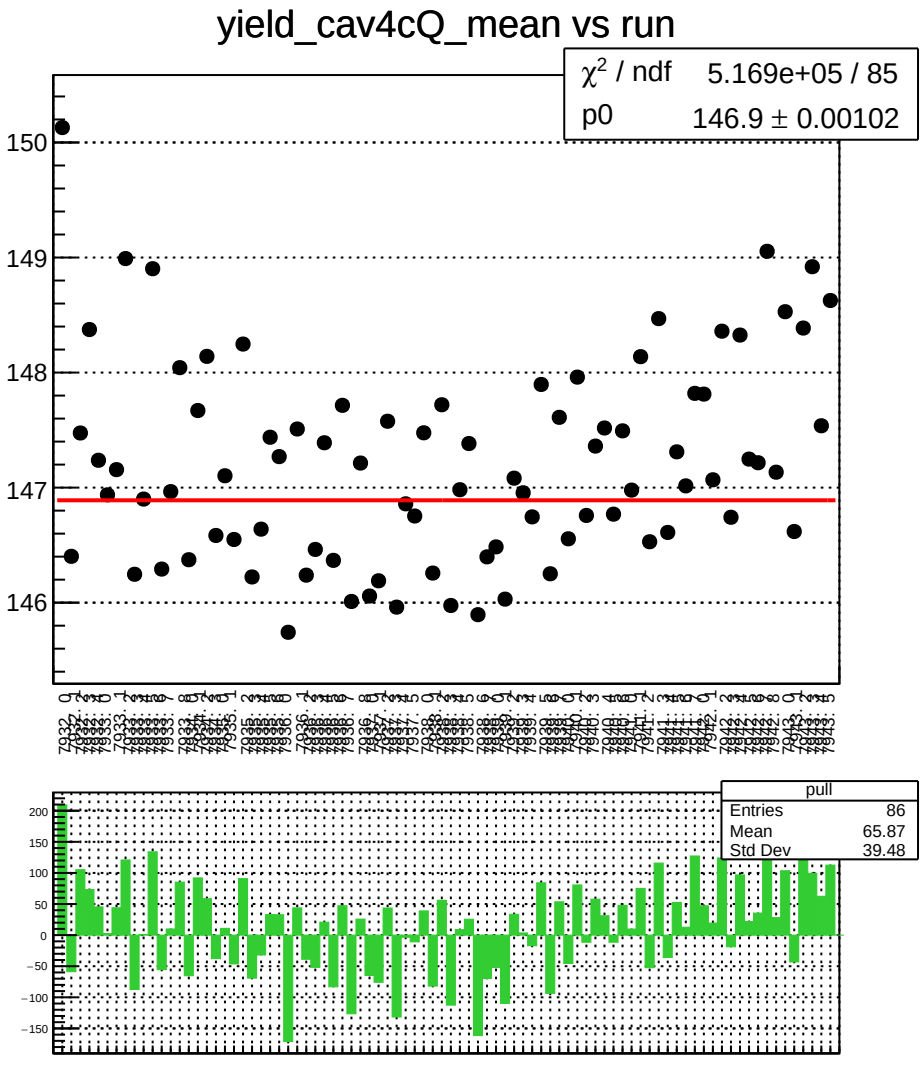

pull1D
Entries 86
Mean 0.2977
Std Dev 3.573
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

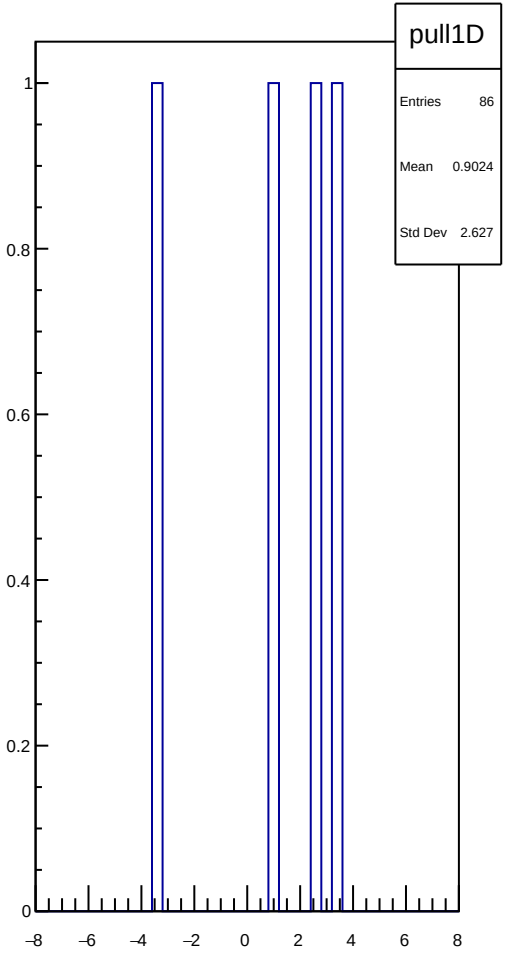

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.617e+04 / 85
p0 0.5703 ± 0.0004453
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

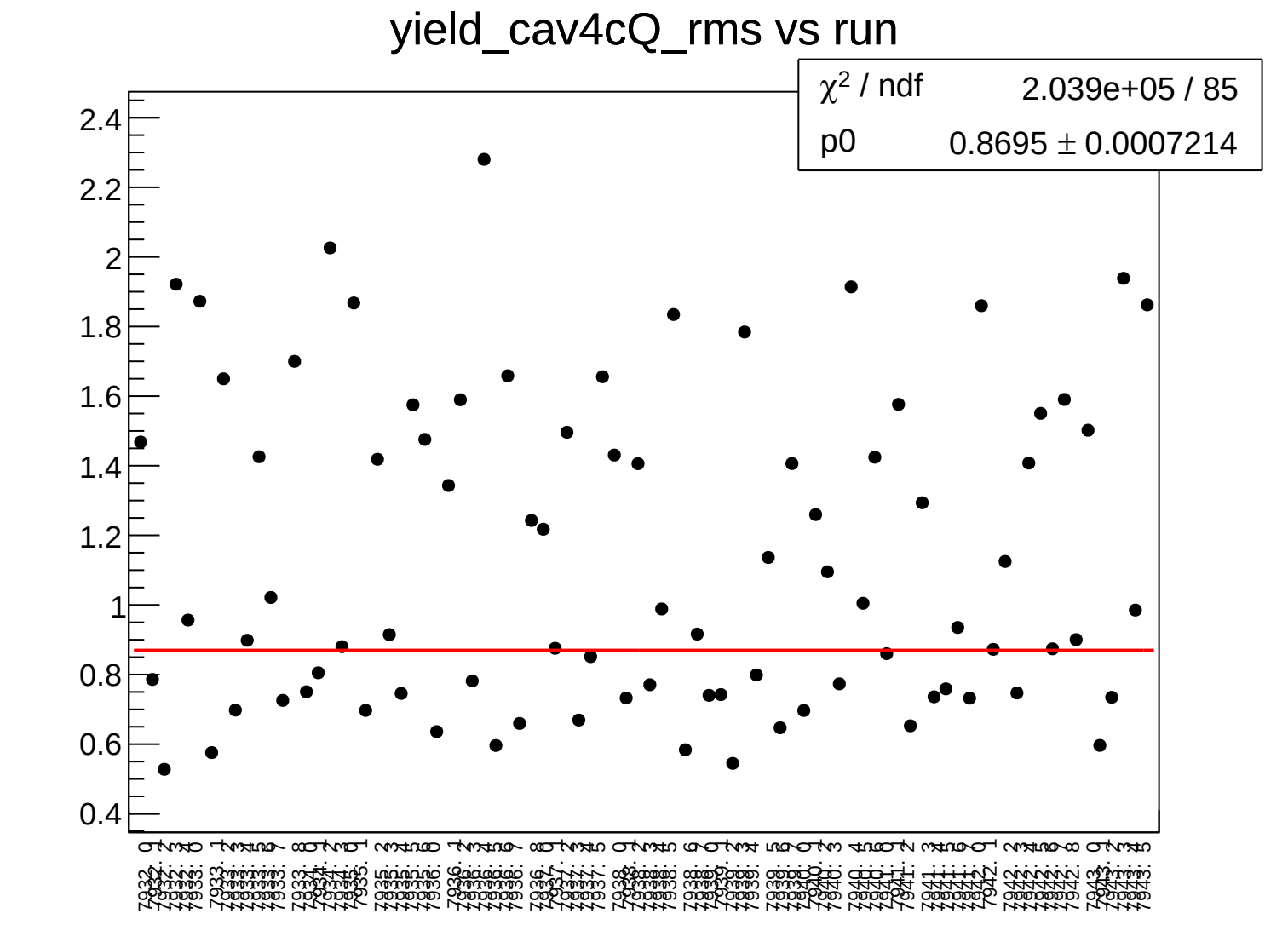

yield_cav4bQ_mean vs run
χ² / ndf 6.083e+05 / 85
p0 144.6 ± 0.001436
147
146
145
144
143
142
141
pull
Entries 86
Mean −30.39
Std Dev 72.69
300
250
200
150
100
50
0
−50
−100
−150

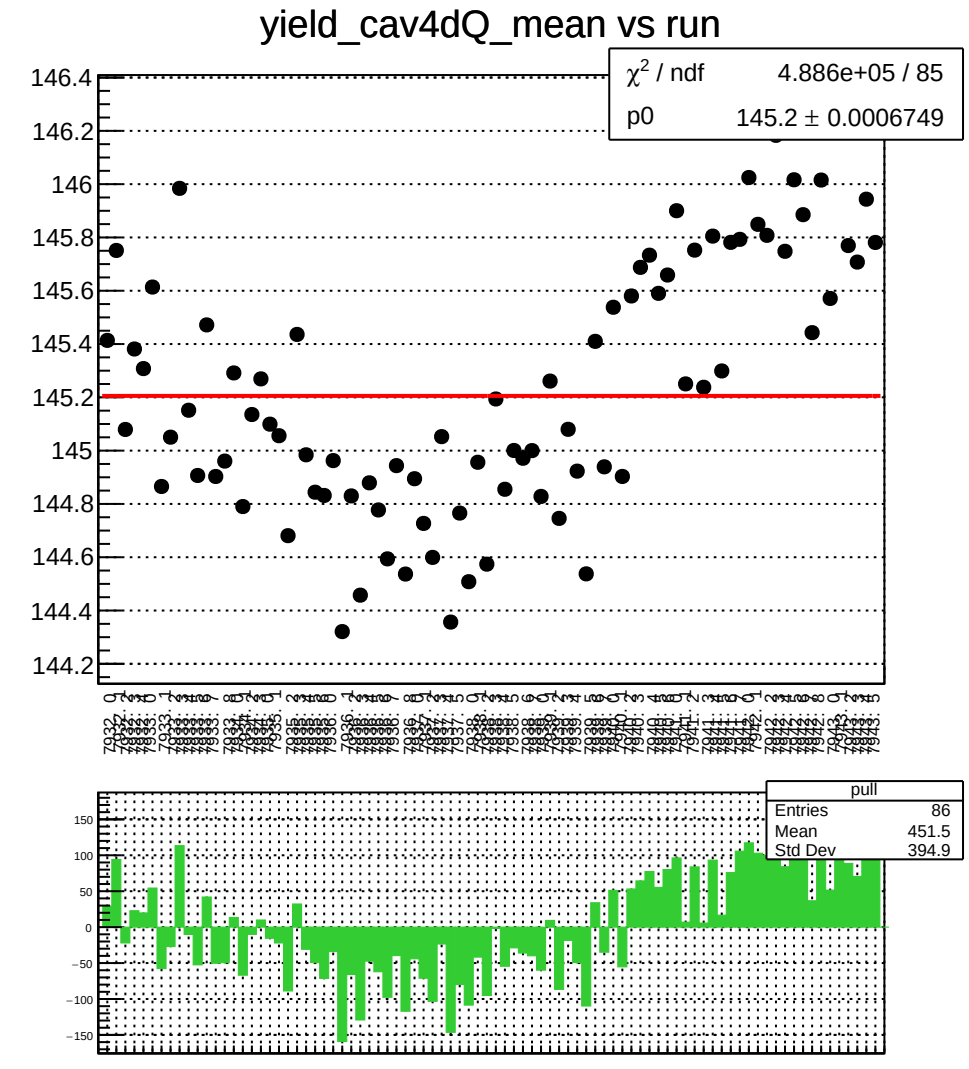

pull1D
Entries 86
Mean 0.4164
Std Dev 4.114
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

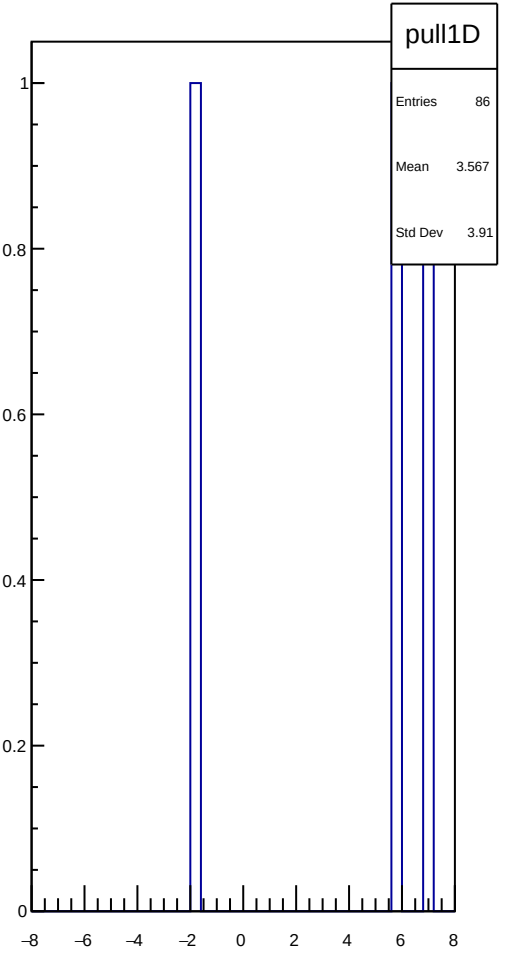

yield_cav4bQ_rms vs run
χ^2 / ndf 2.211e+05 / 85
p0 1.217 ± 0.001016
3
2.5
2
1.5
1
0.5

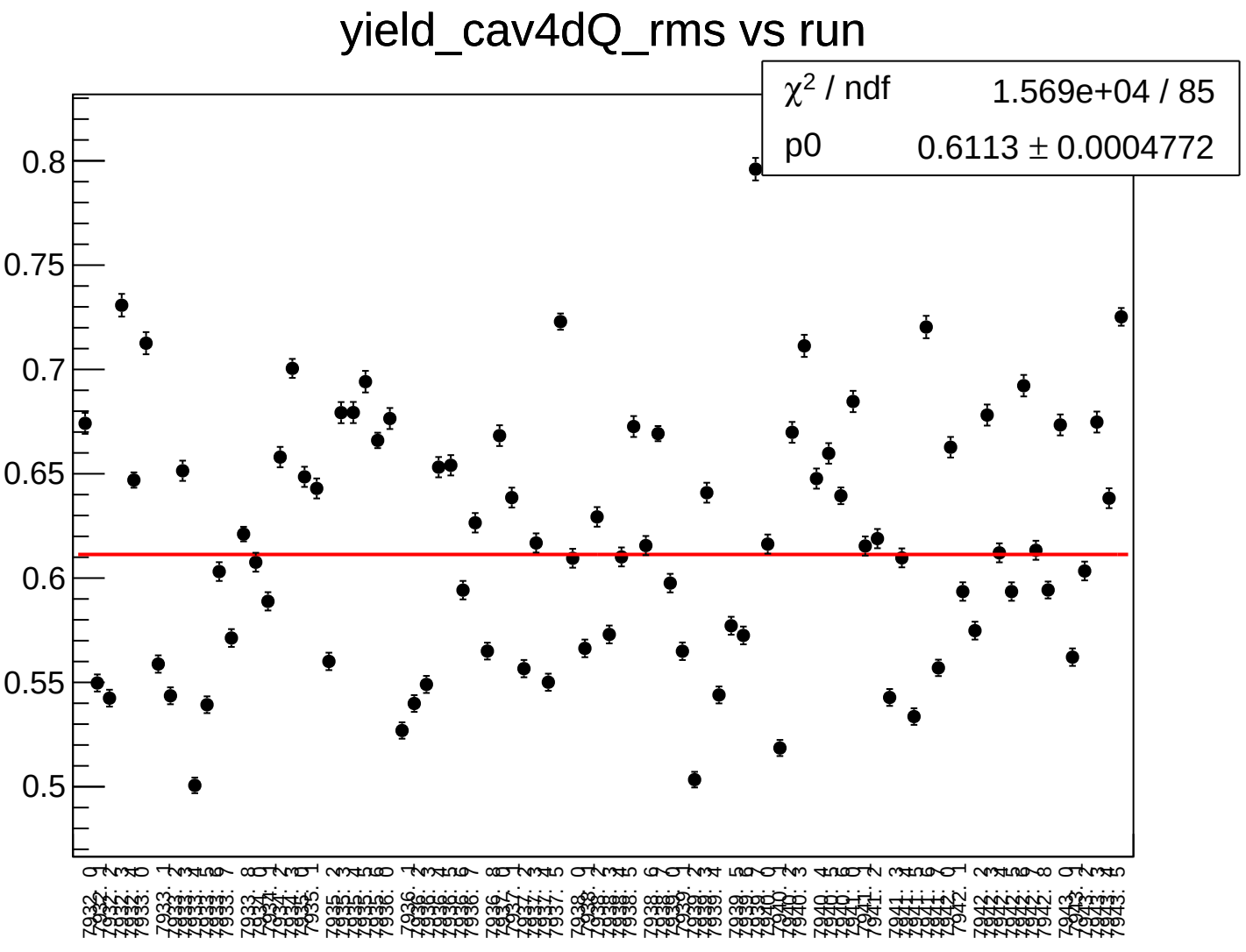

yield_cav4cQ_mean vs run
χ² / ndf 5.169e+05 / 85
p0 146.9 ± 0.00102
150
149
148
147
146
pull
Entries 86
Mean 65.87
Std Dev 39.48
200
150
100
50
0
−50
−100
−150

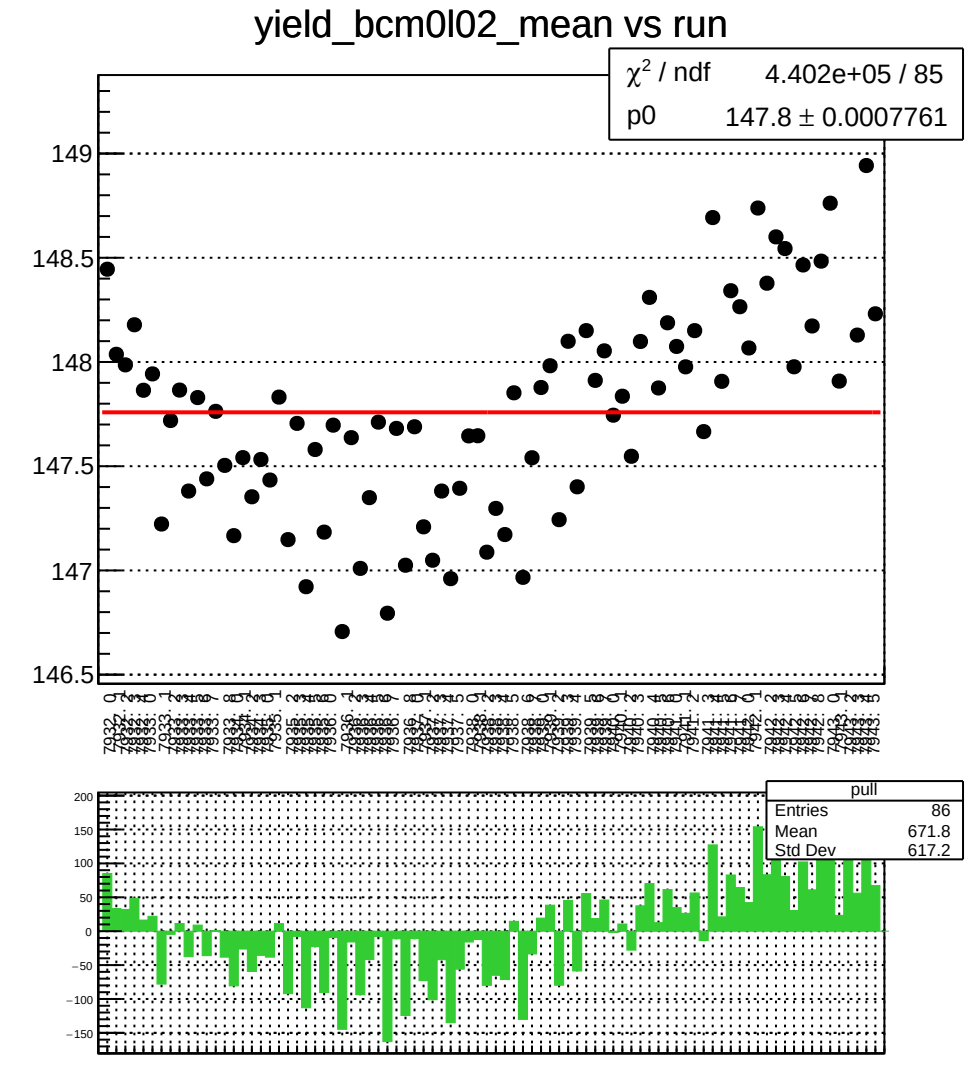

pull1D
Entries 86
Mean 0.9024
Std Dev 2.627
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

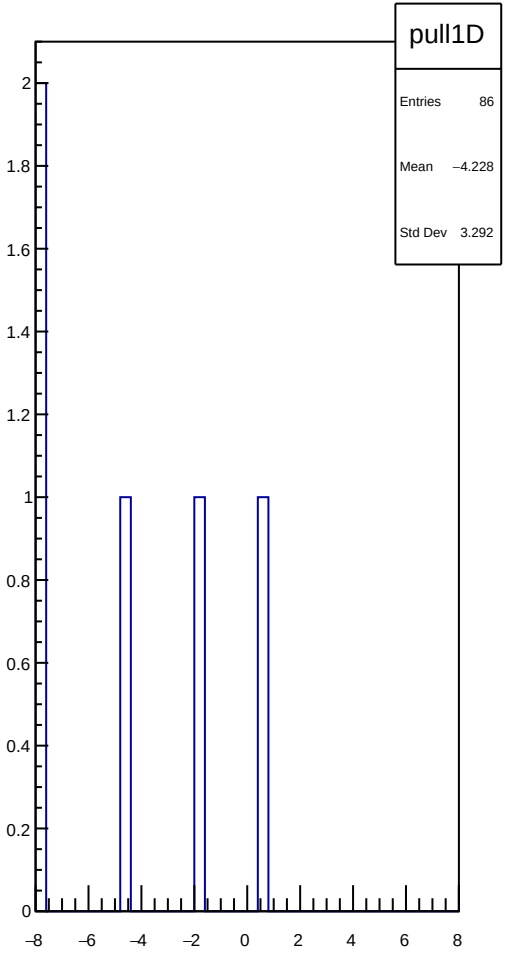

yield_cav4cQ_rms vs run
χ² / ndf 2.039e+05 / 85
p0 0.8695 ± 0.0007214
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4

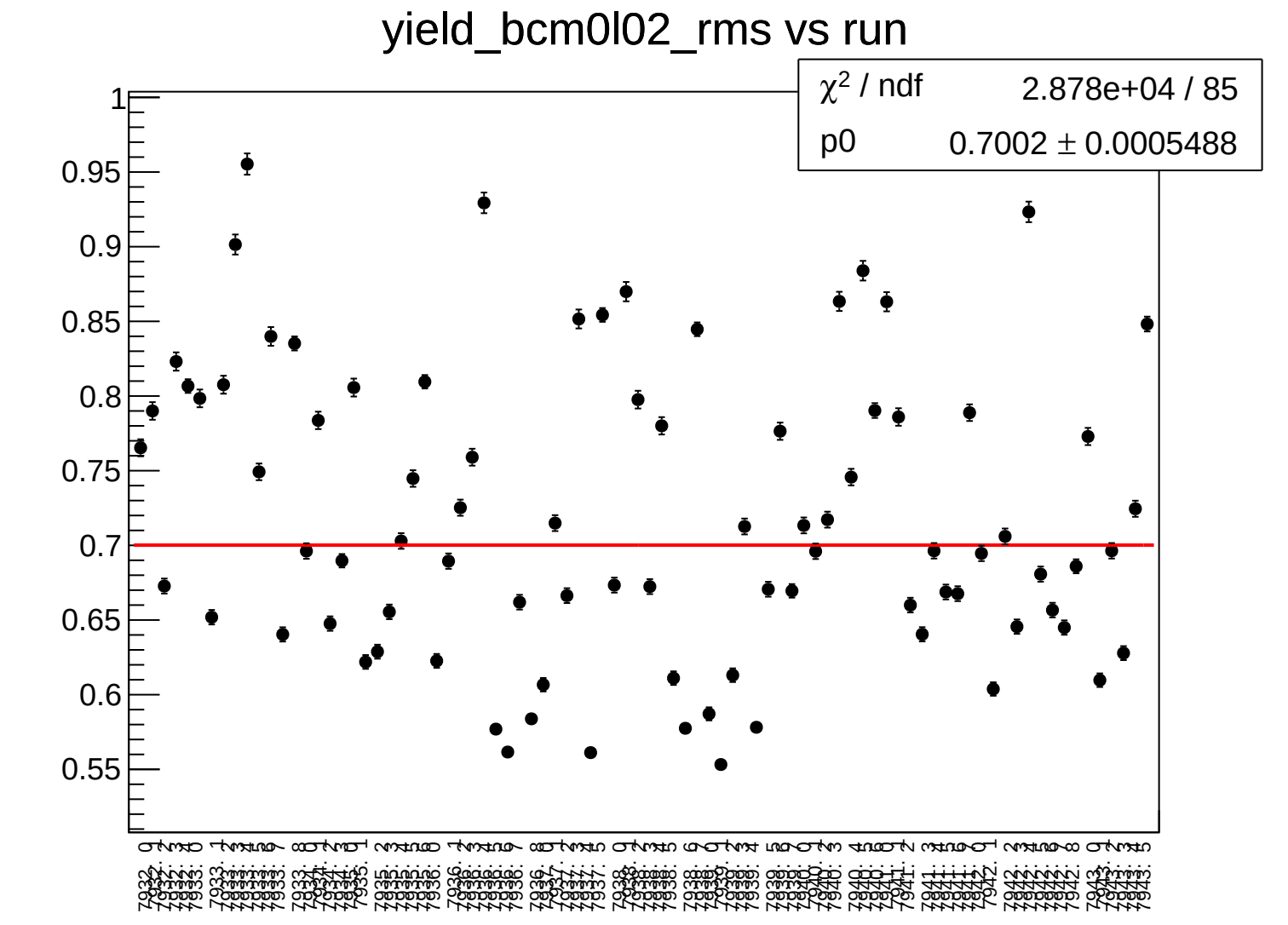

yield_cav4dQ_mean vs run
χ² / ndf 4.886e+05 / 85
p0 145.2 ± 0.0006749
146.4
146.2
146
145.8
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
pull
Entries 86
Mean 451.5
Std Dev 394.9
150
100
50
0
−50
−100
−150

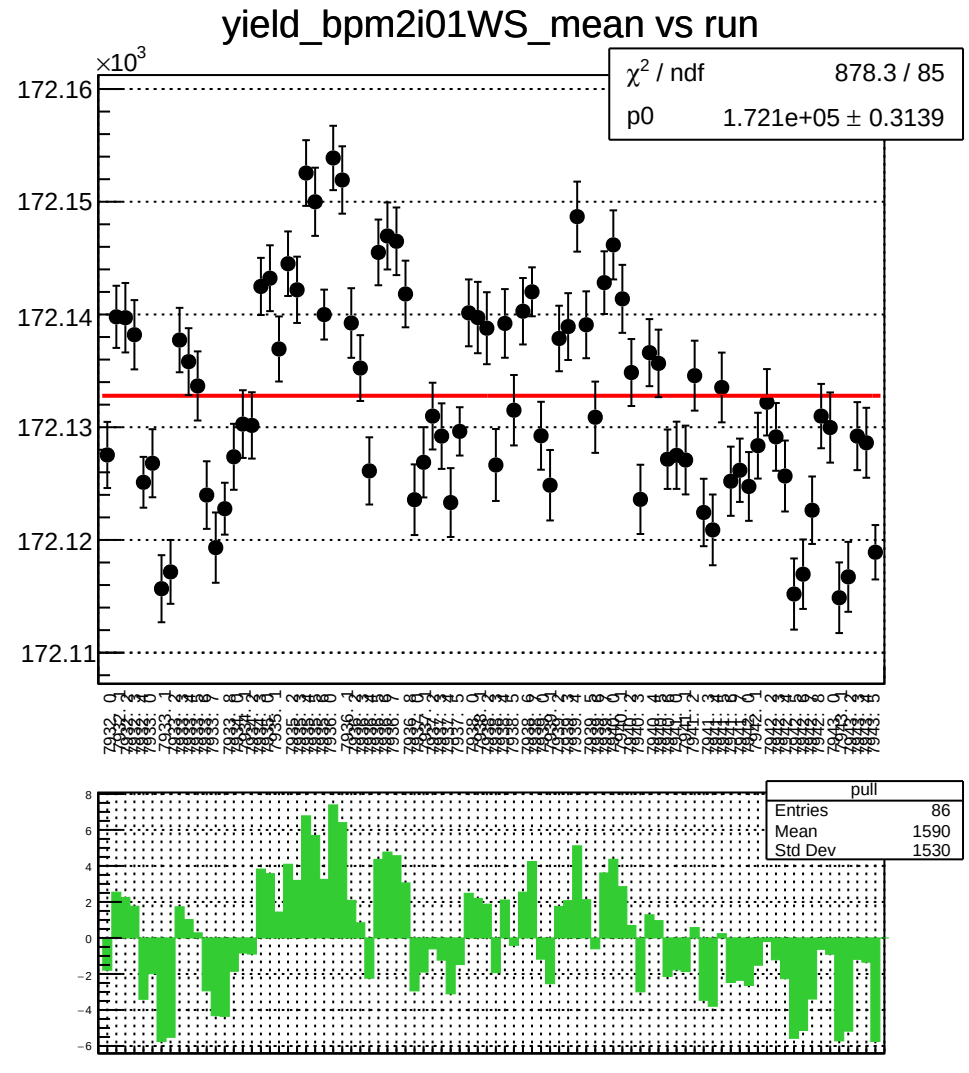

pull1D
Entries 86
Mean 3.567
Std Dev 3.91
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

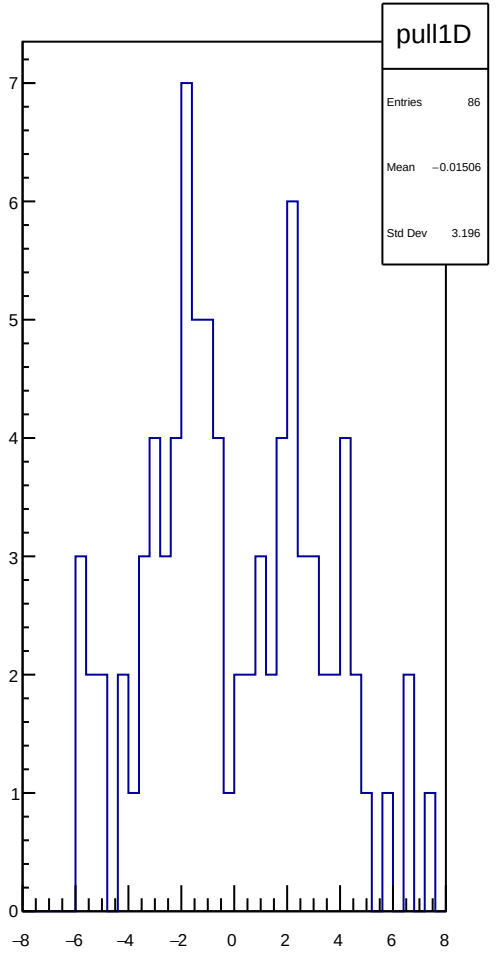

yield_cav4dQ_rms vs run
χ² / ndf 1.569e+04 / 85
p0 0.6113 ± 0.0004772
0.8
0.75
0.7
0.65
0.6
0.55
0.5

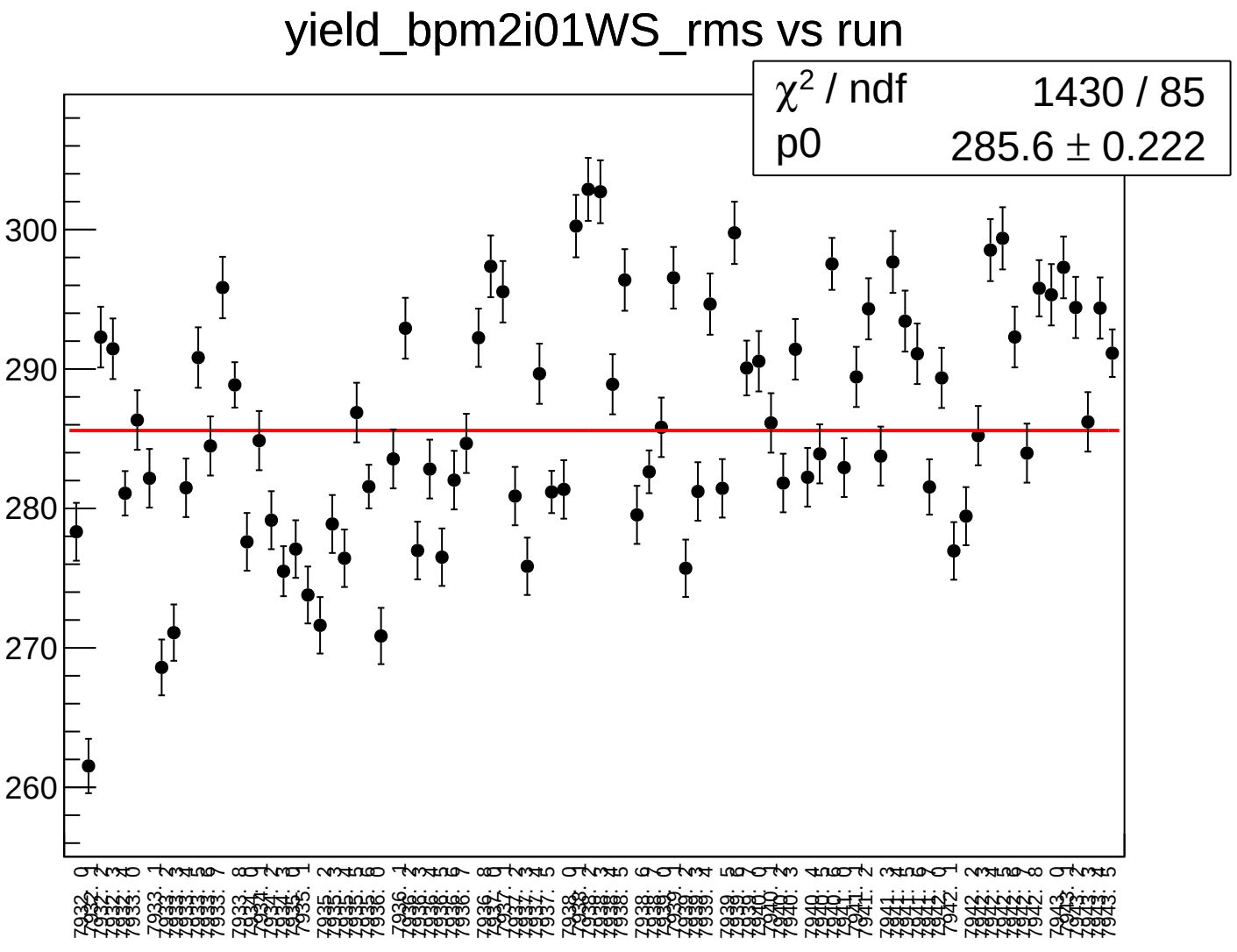

yield_bcm0l02_mean vs run
χ² / ndf 4.402e+05 / 85
p0 147.8 ± 0.0007761
149
148.5
148
147.5
147
146.5
pull
Entries 86
Mean 671.8
Std Dev 617.2
200
150
100
50
0
−50
−100
−150

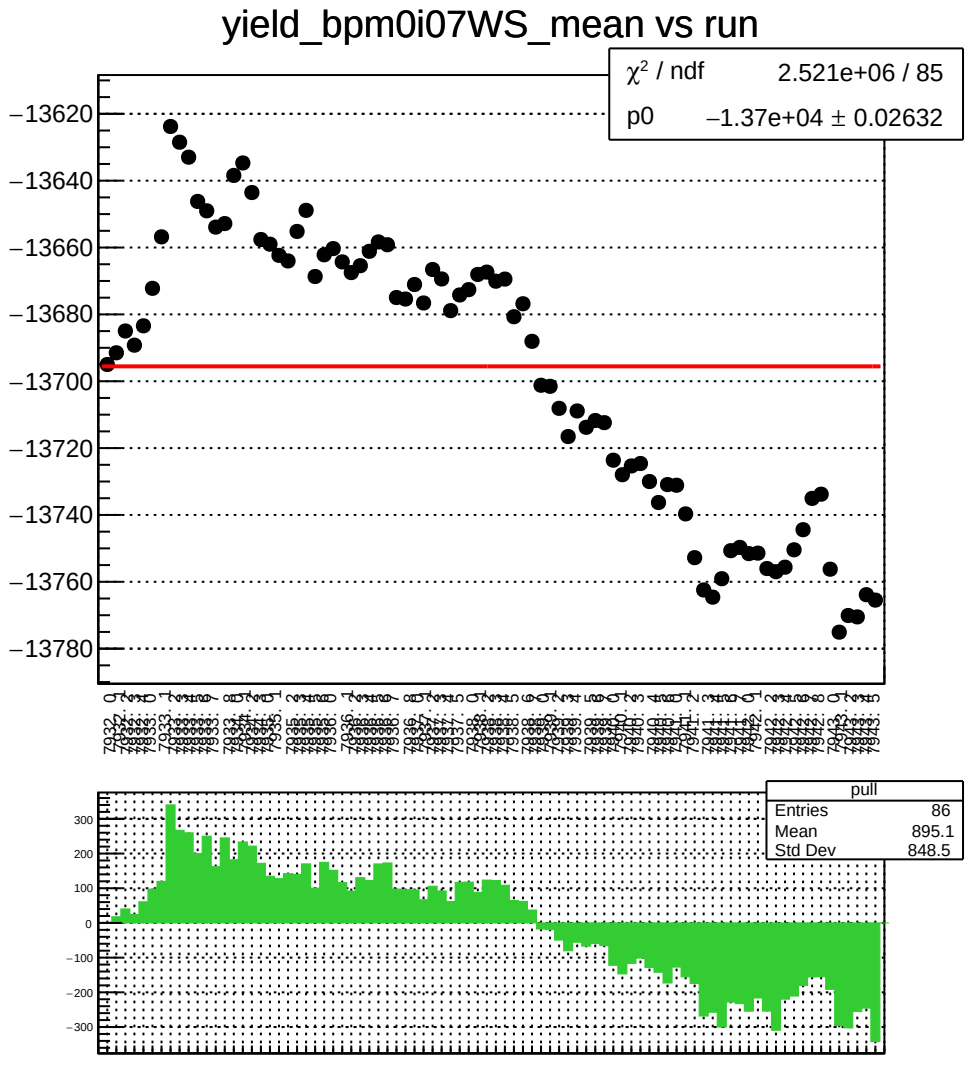

pull1D
Entries 86
Mean −4.228
Std Dev 3.292
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

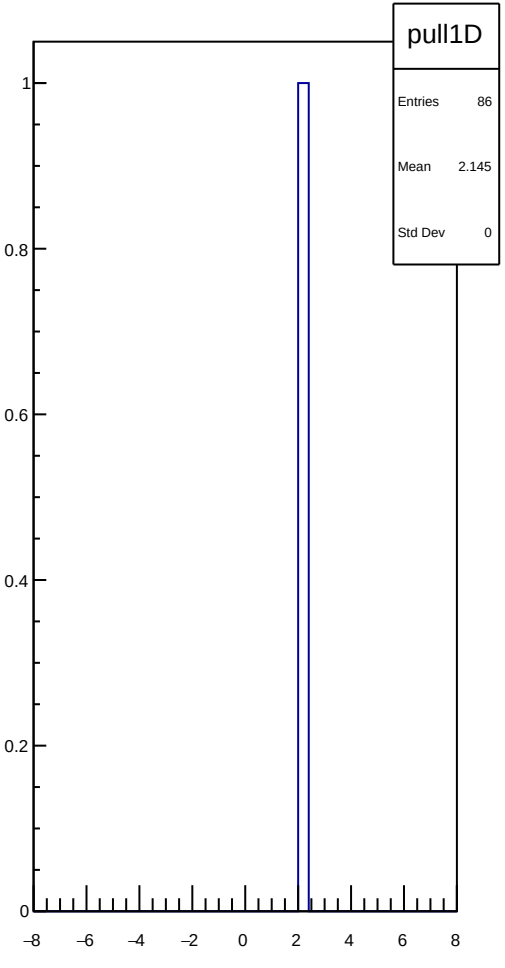

yield_bcm0l02_rms vs run
χ² / ndf 2.878e+04 / 85
p0 0.7002 ± 0.0005488
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

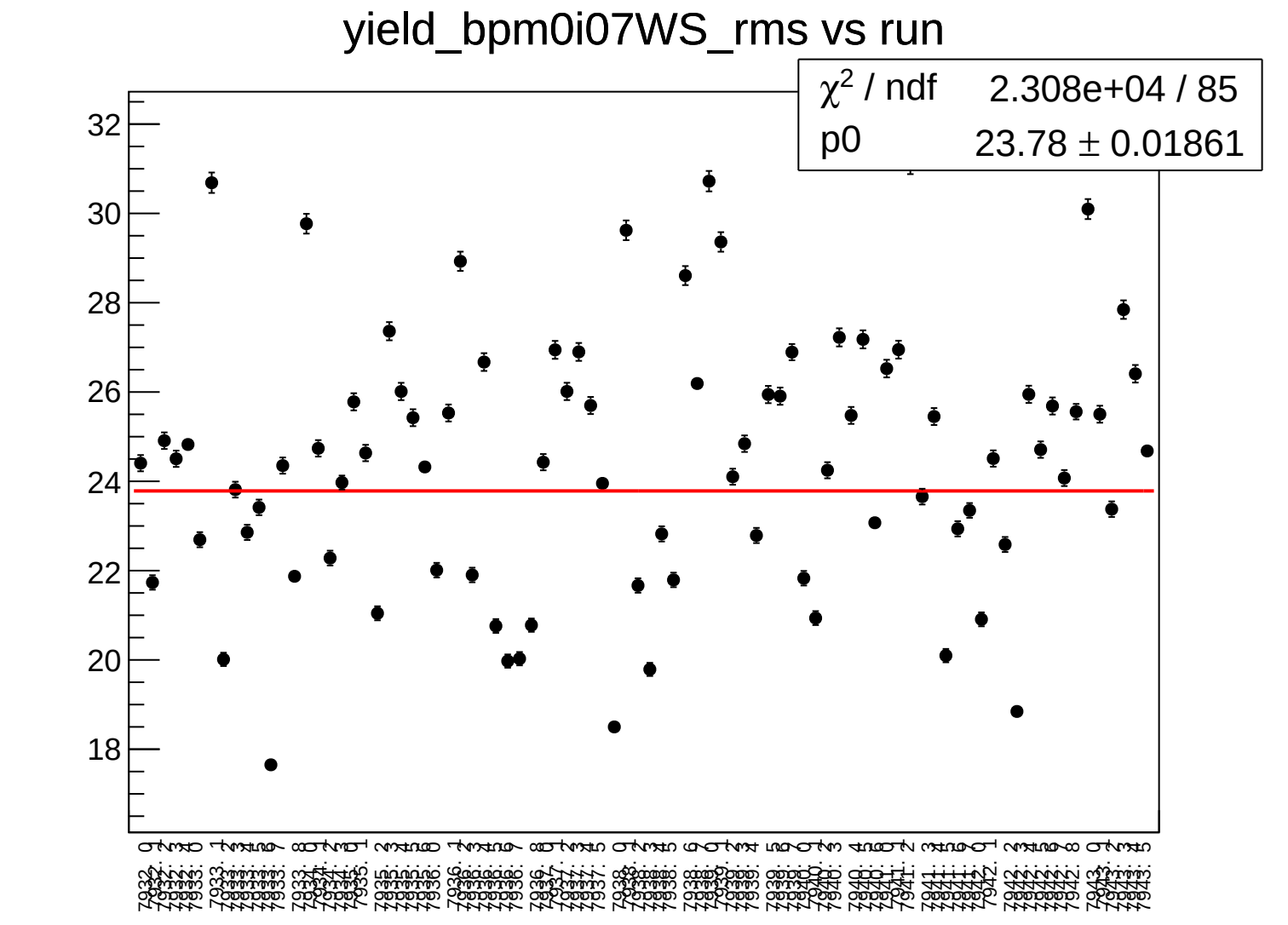

yield_bpm2i01WS_mean vs run
×10^3
172.16
172.15
172.14
172.13
172.12
172.11
χ² / ndf 878.3 / 85
p0 1.721e+05 ± 0.3139
pull
Entries 86
Mean 1590
Std Dev 1530
8
6
4
2
0
−2
−4
−6

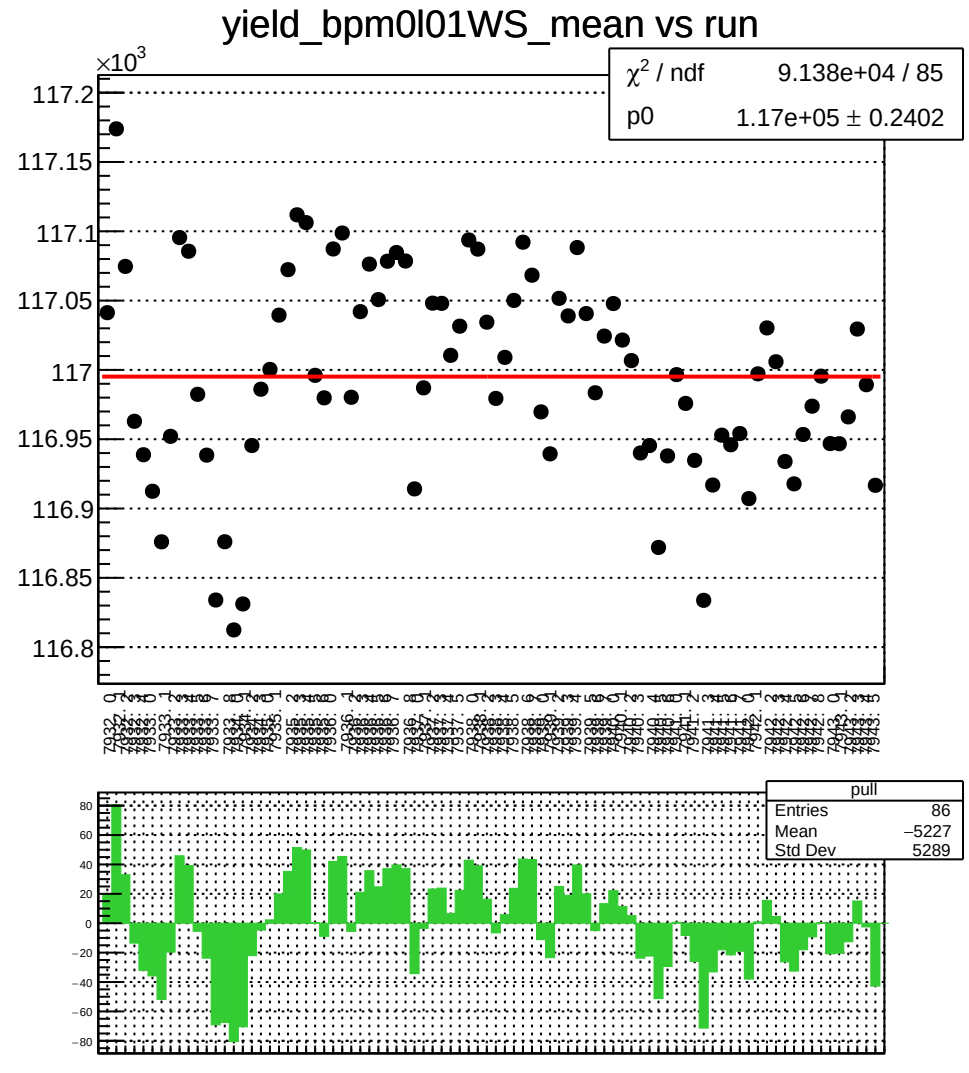

pull1D
Entries 86
Mean −0.01506
Std Dev 3.196
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

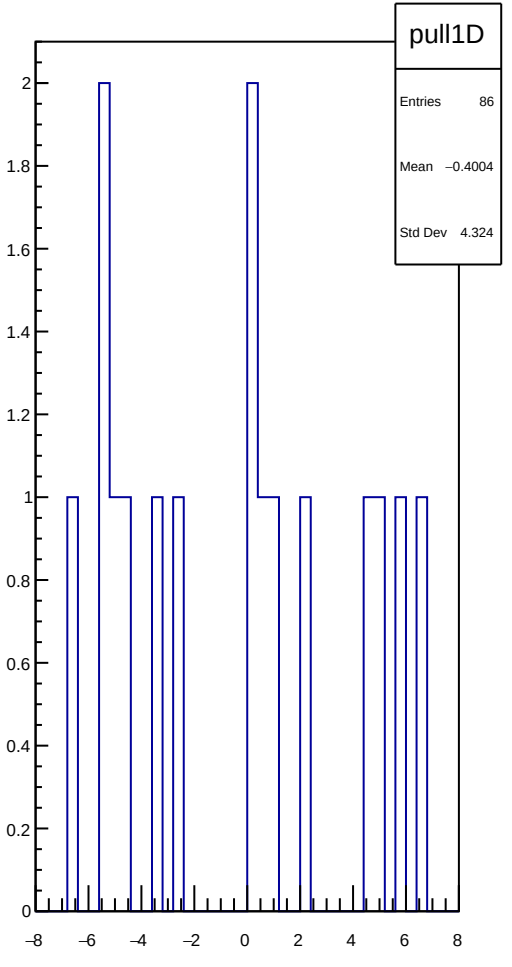

yield_bpm2i01WS_rms vs run
χ² / ndf 1430 / 85
p0 285.6 ± 0.222
300
290
280
270
260

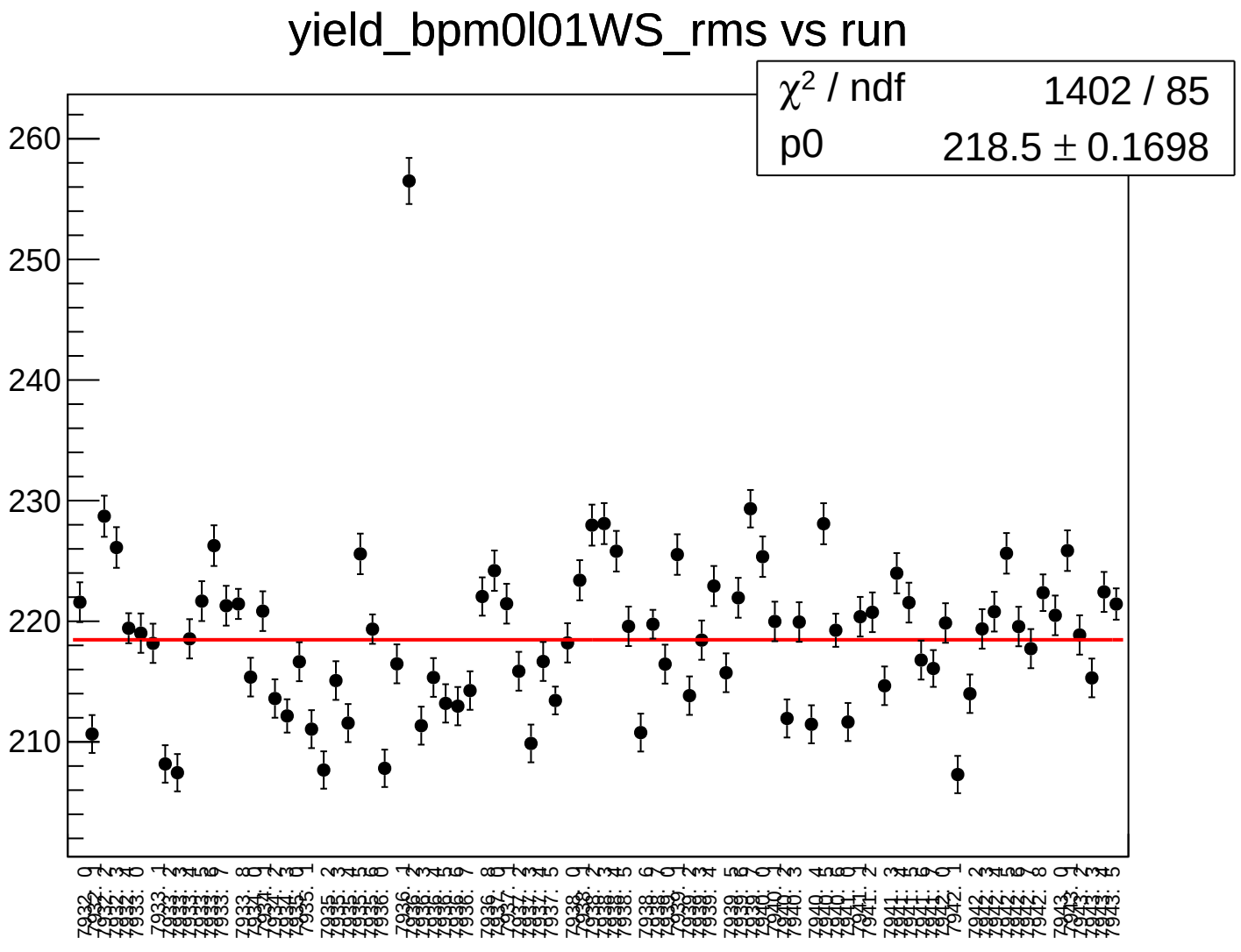

yield_bpm0i07WS_mean vs run
χ² / ndf 2.521e+06 / 85
p0 −1.37e+04 ± 0.02632
−13620
−13640
−13660
−13680
−13700
−13720
−13740
−13760
−13780
pull
Entries 86
Mean 895.1
Std Dev 848.5
300
200
100
0
−100
−200
−300

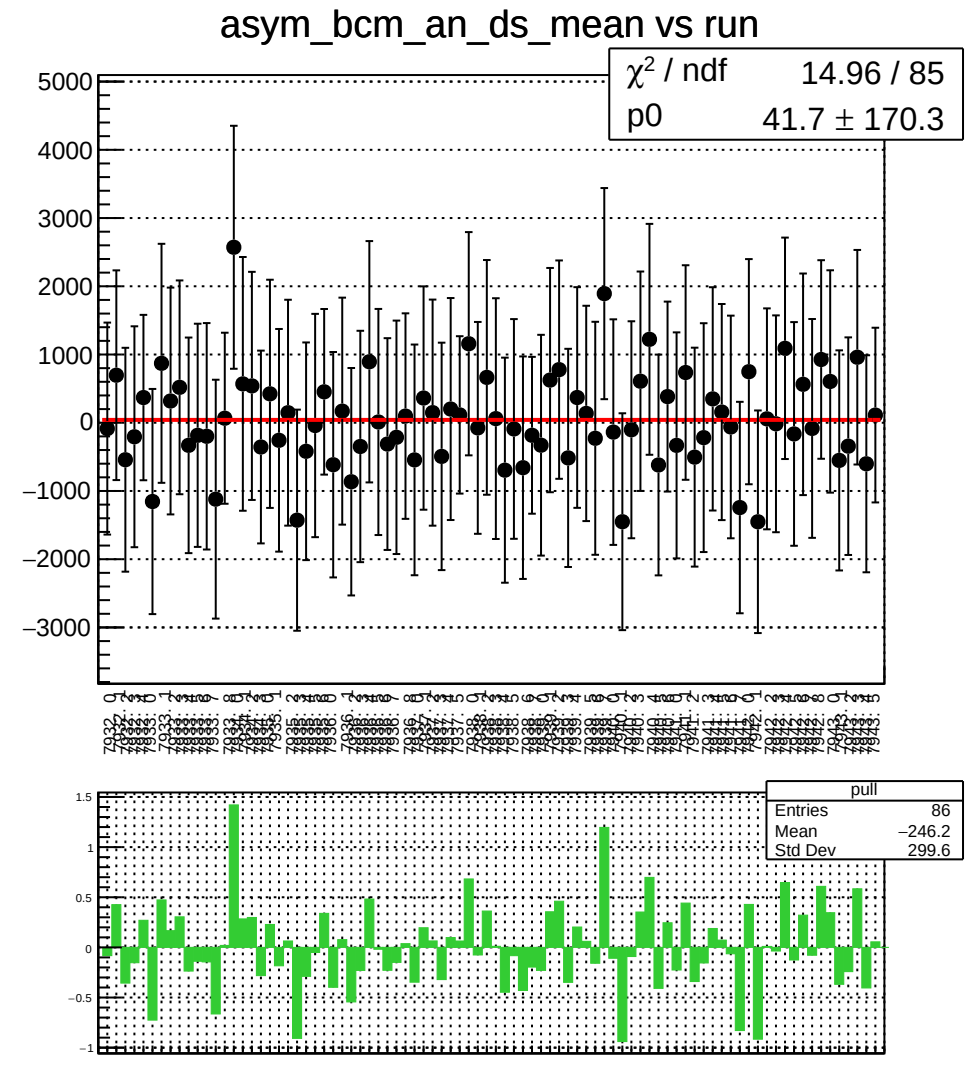

pull1D
Entries 86
Mean 2.145
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

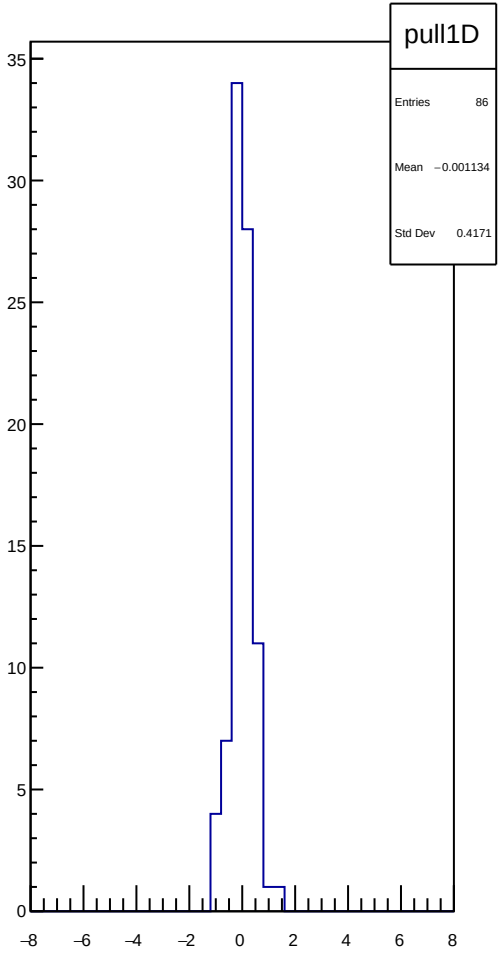

yield_bpm0i07WS_rms vs run
χ² / ndf 2.308e+04 / 85
p0 23.78 ± 0.01861
32
30
28
26
24
22
20
18

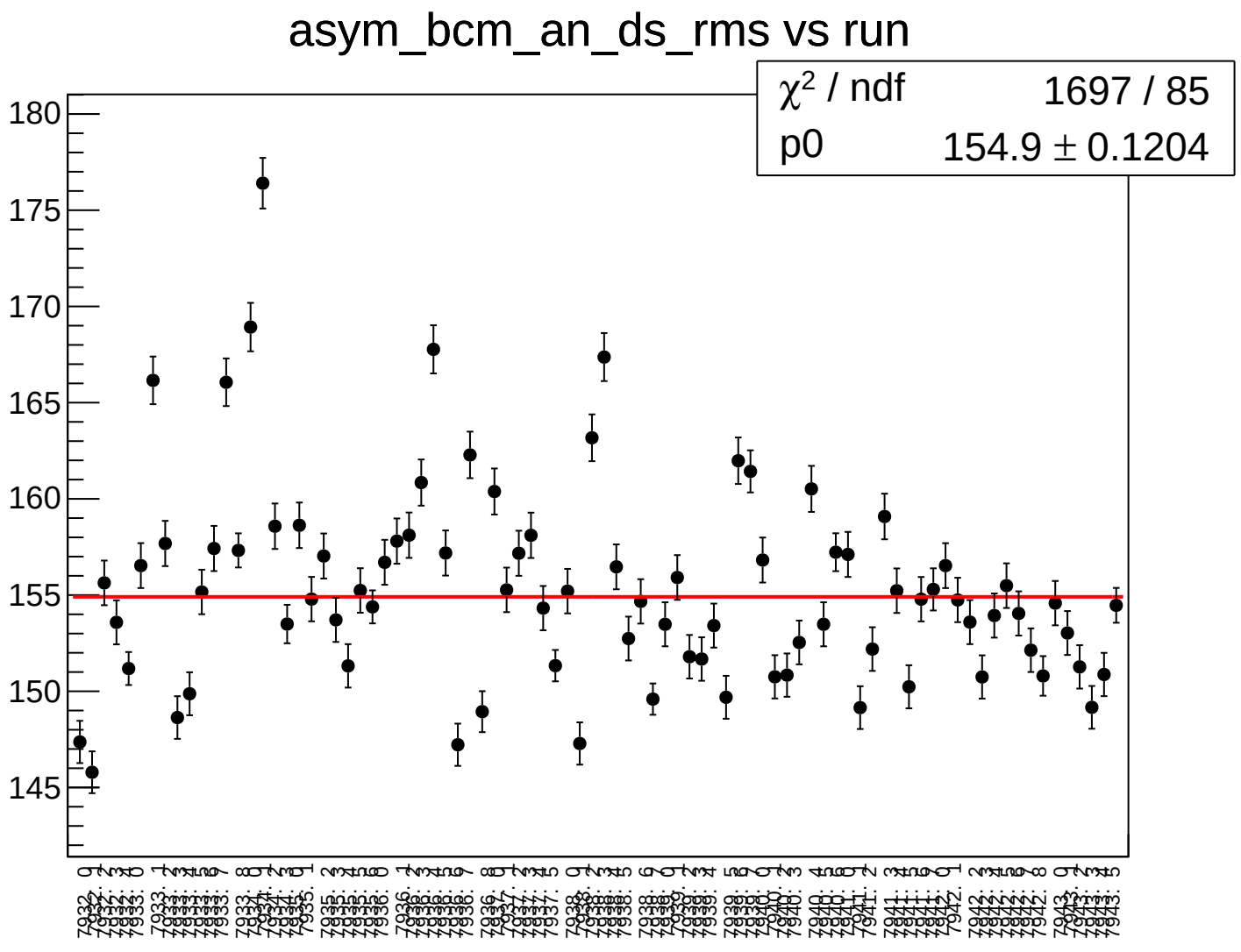

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 9.138e+04 / 85
p0 1.17e+05 ± 0.2402
117.2
117.15
117.1
117.05
117
116.95
116.9
116.85
116.8
pull
Entries 86
Mean −5227
Std Dev 5289
80
60
40
20
0
−20
−40
−60
−80

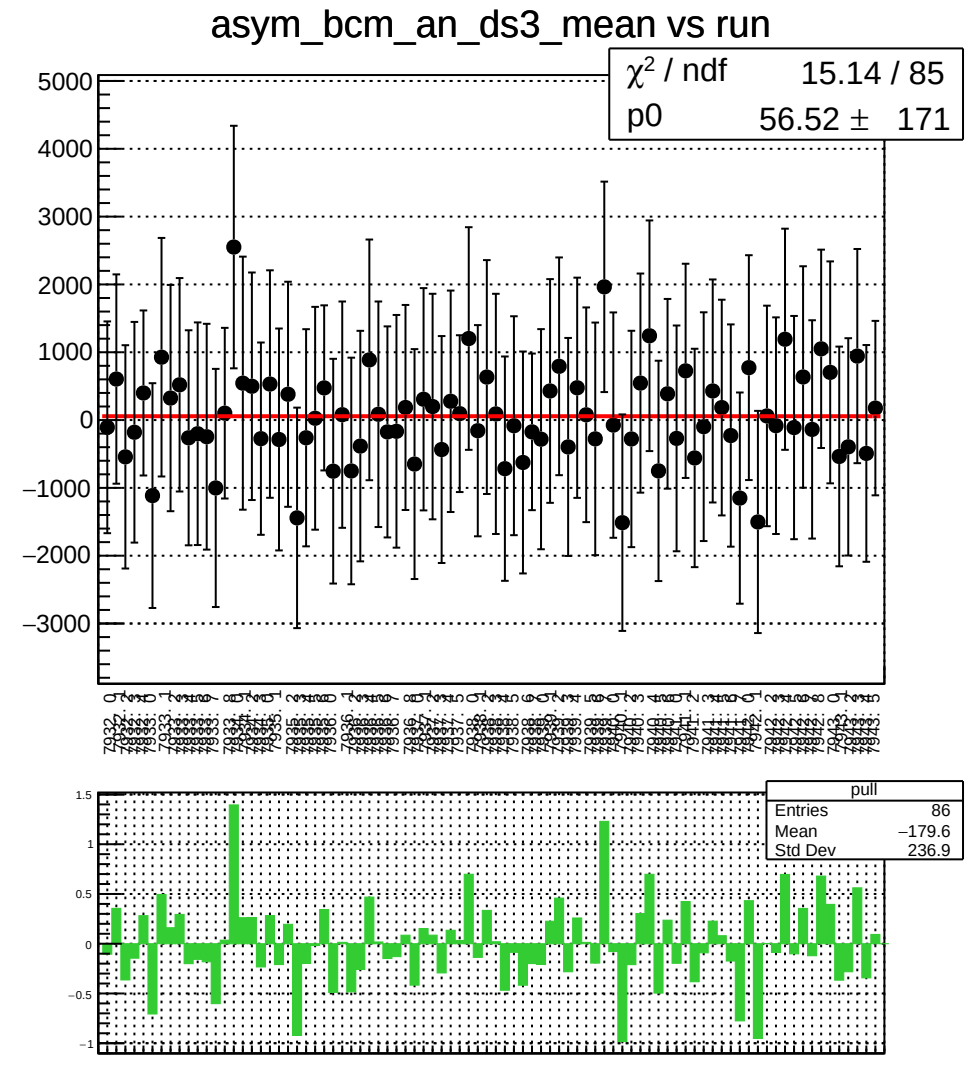

pull1D
Entries 86
Mean −0.4004
Std Dev 4.324
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

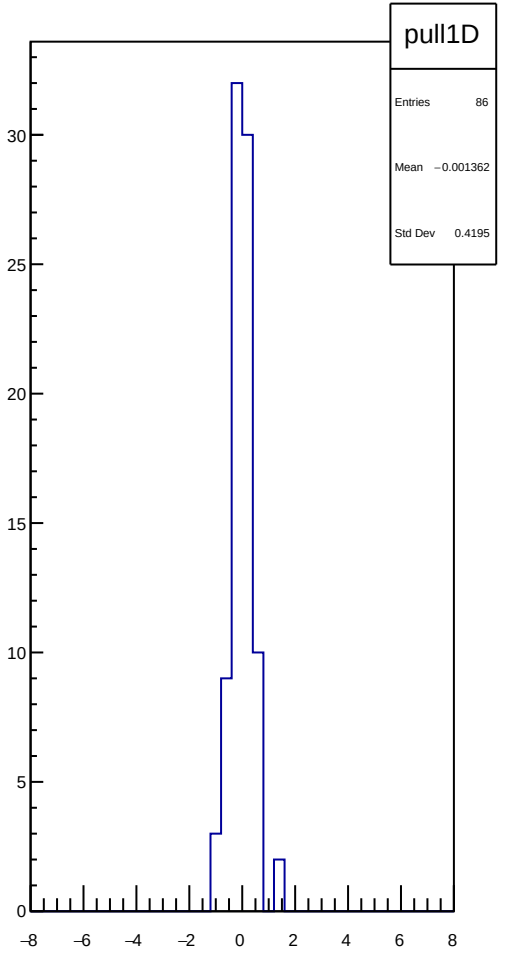

yield_bpm0l01WS_rms vs run
χ² / ndf 1402 / 85
p0 218.5 ± 0.1698
260
250
240
230
220
210

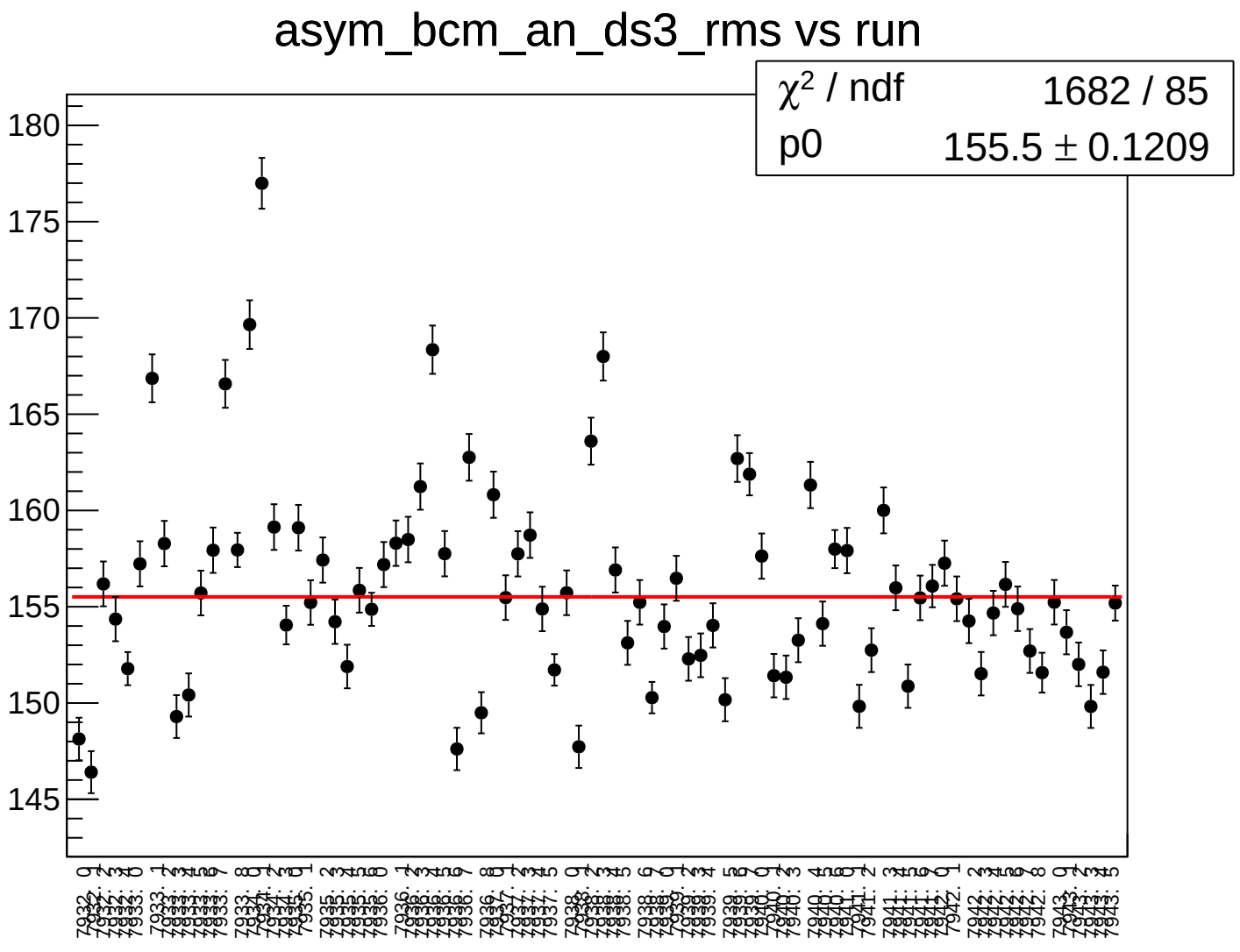

asym_bcm_an_ds_mean vs run
χ² / ndf 14.96 / 85
p0 41.7 ± 170.3
pull
Entries 86
Mean −246.2
Std Dev 299.6

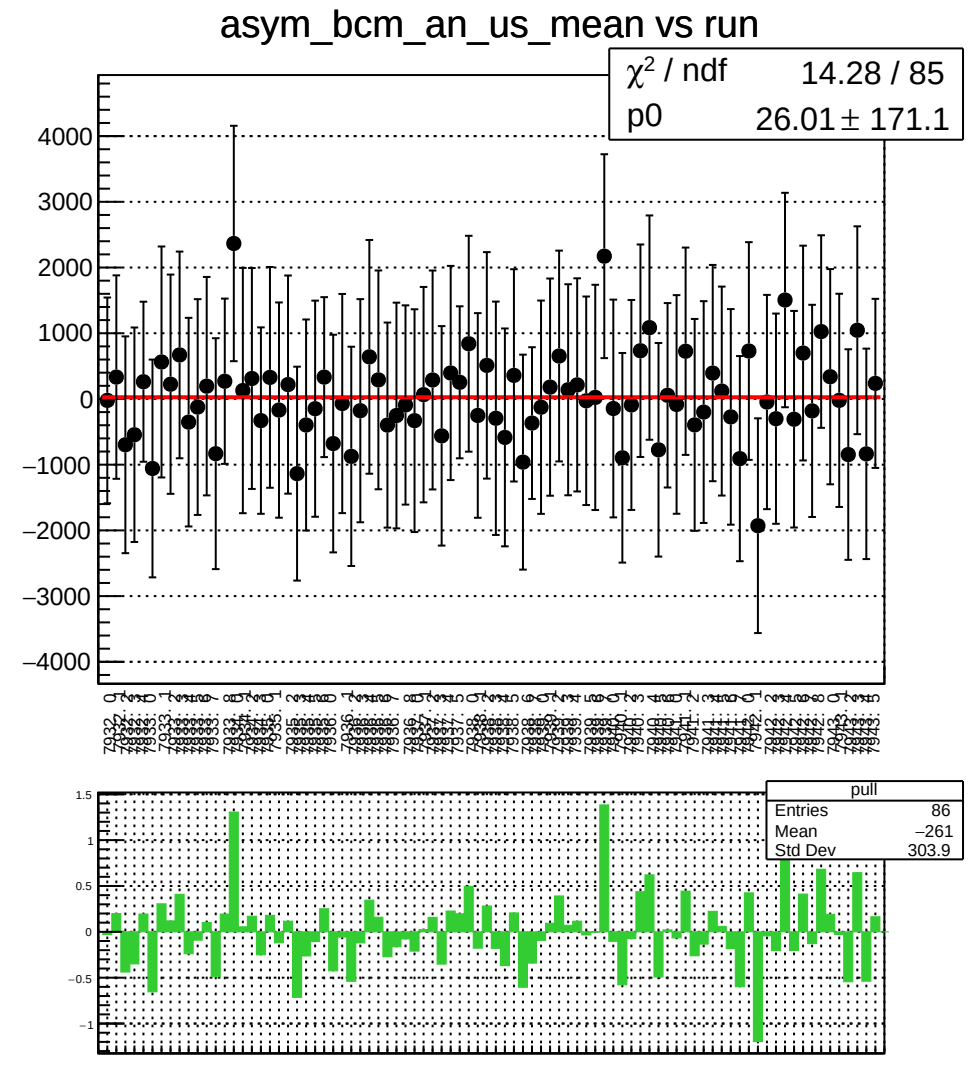

pull1D
Entries 86
Mean −0.001134
Std Dev 0.4171

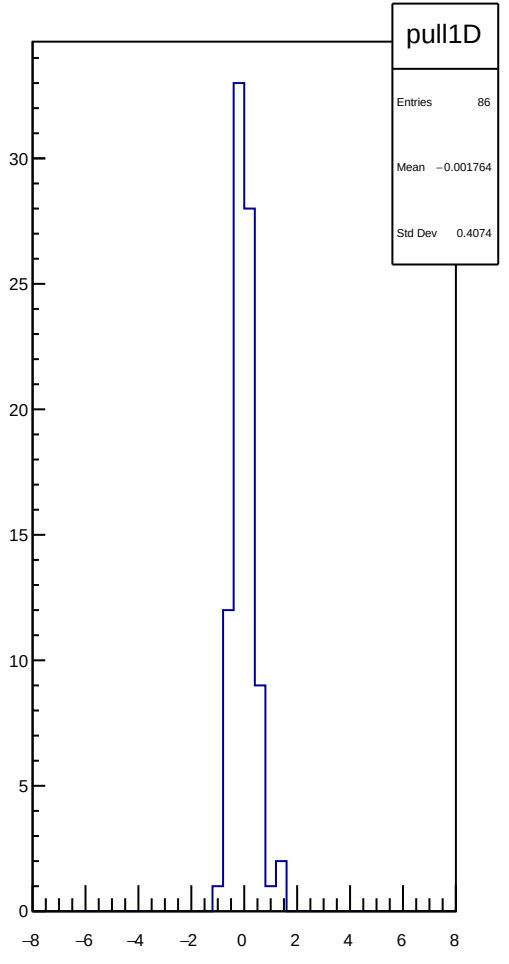

asym_bcm_an_ds_rms vs run
χ² / ndf 1697 / 85
p0 154.9 ± 0.1204
180
175
170
165
160
155
150
145

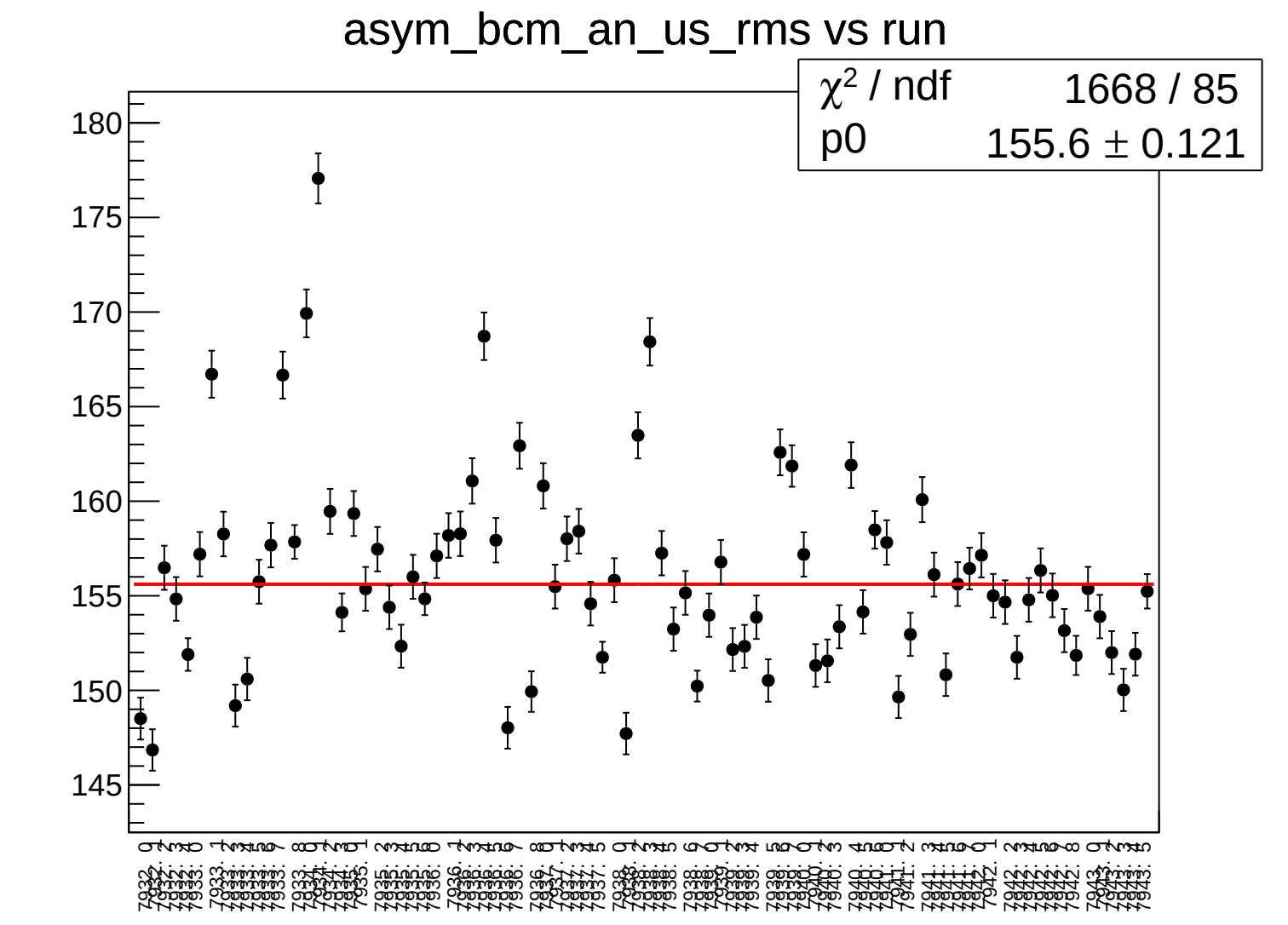

asym_bcm_an_ds3_mean vs run
χ² / ndf 15.14 / 85
p0 56.52 ± 171
pull
Entries 86
Mean −179.6
Std Dev 236.9

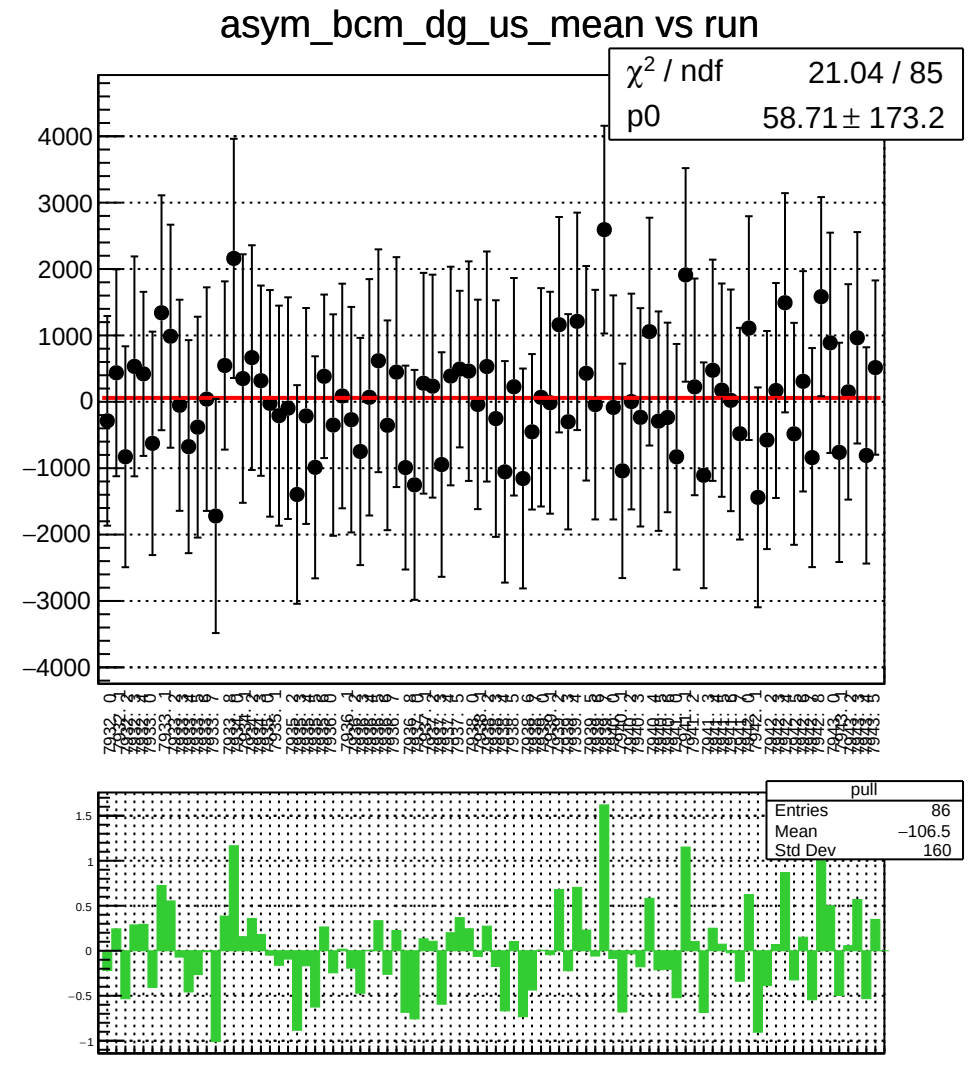

pull1D
Entries 86
Mean −0.001362
Std Dev 0.4195

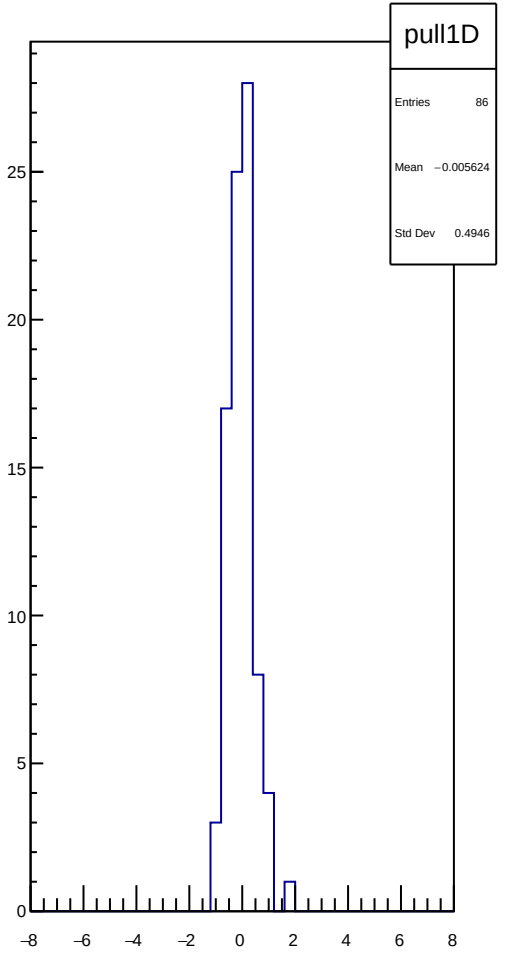

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 1682 / 85
p0 155.5 ± 0.1209
180
175
170
165
160
155
150
145

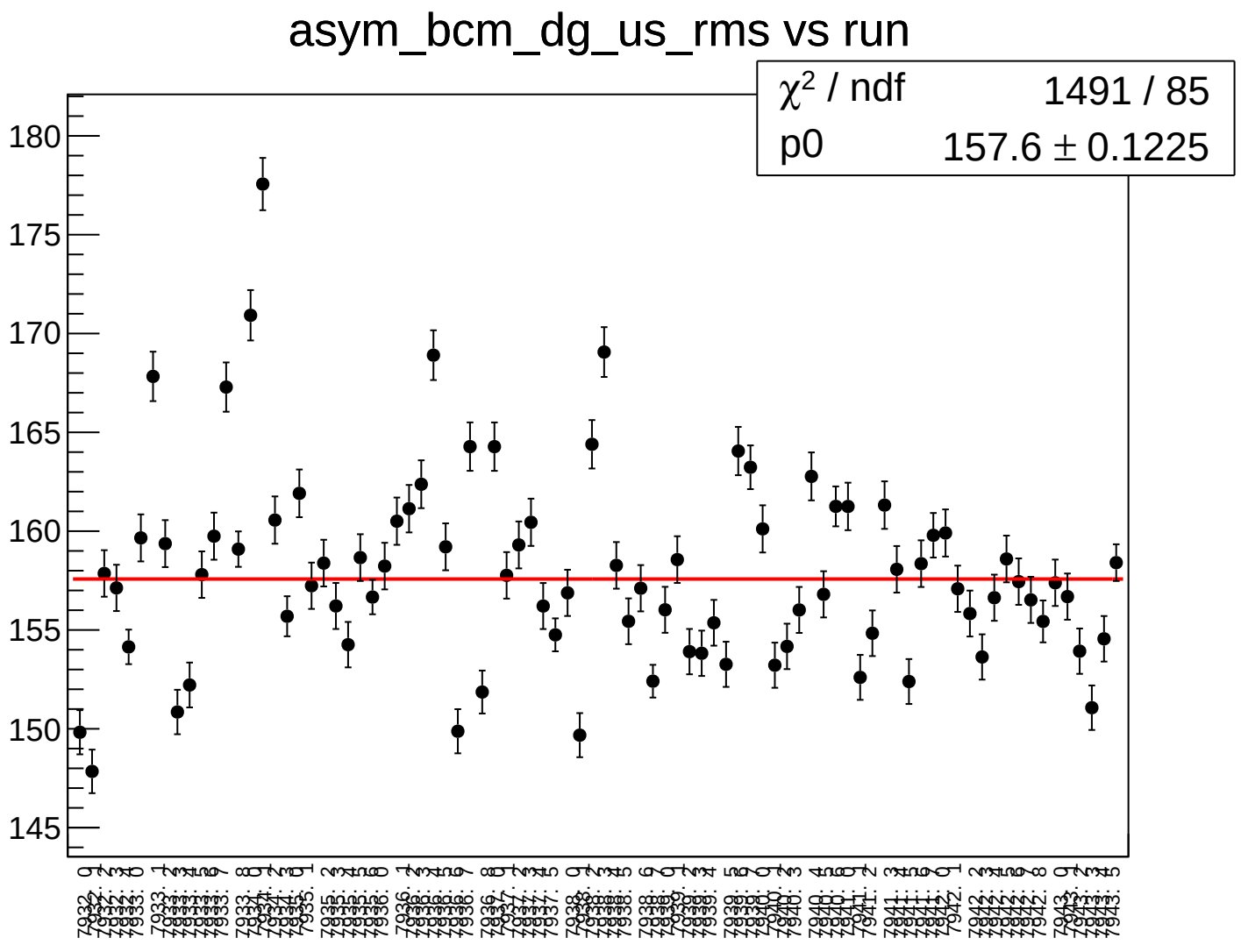

asym_bcm_an_us_mean vs run
χ² / ndf 14.28 / 85
p0 26.01 ± 171.1
pull
Entries 86
Mean −261
Std Dev 303.9

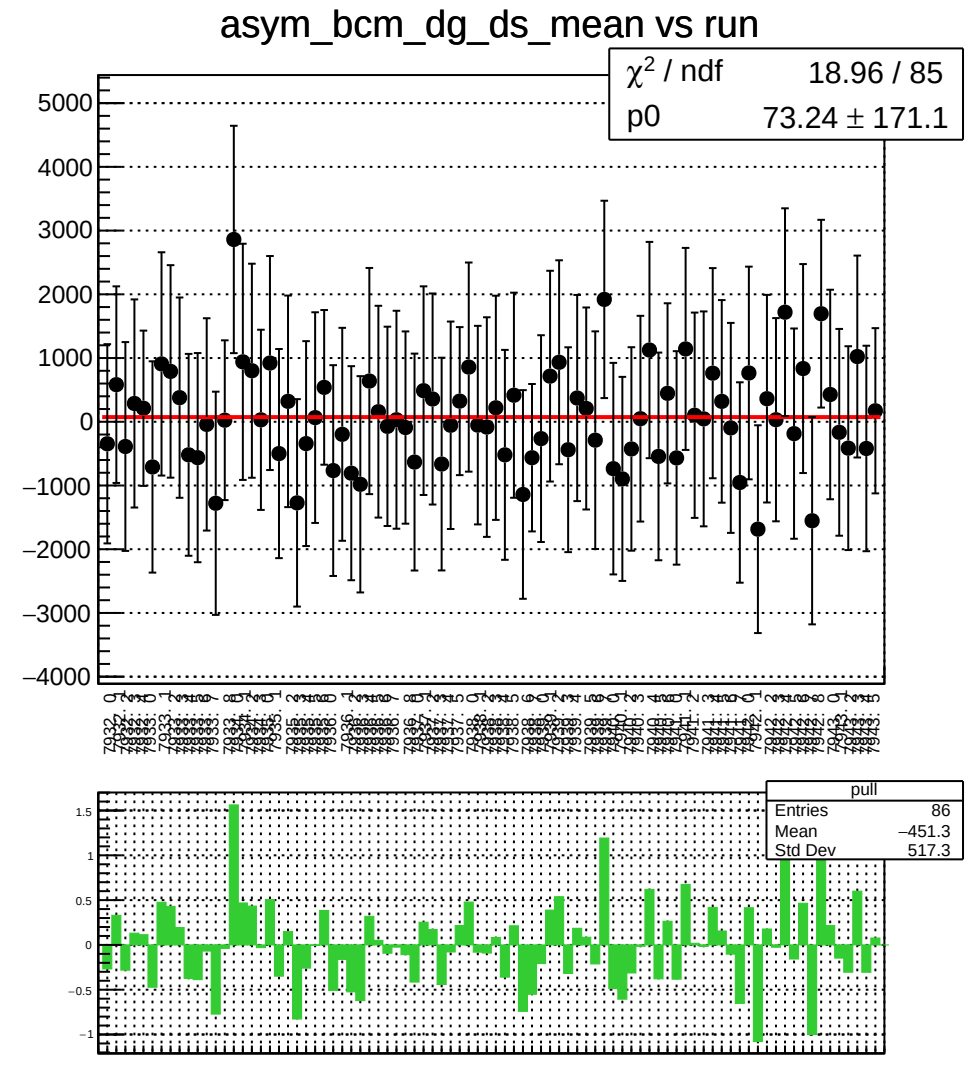

pull1D
Entries 86
Mean −0.001764
Std Dev 0.4074

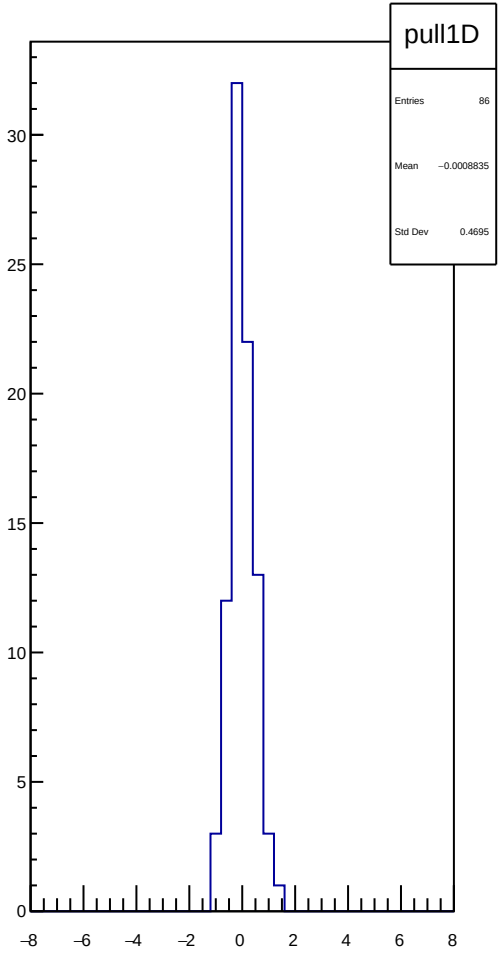

asym_bcm_an_us_rms vs run
χ² / ndf 1668 / 85
p0 155.6 ± 0.121
180
175
170
165
160
155
150
145

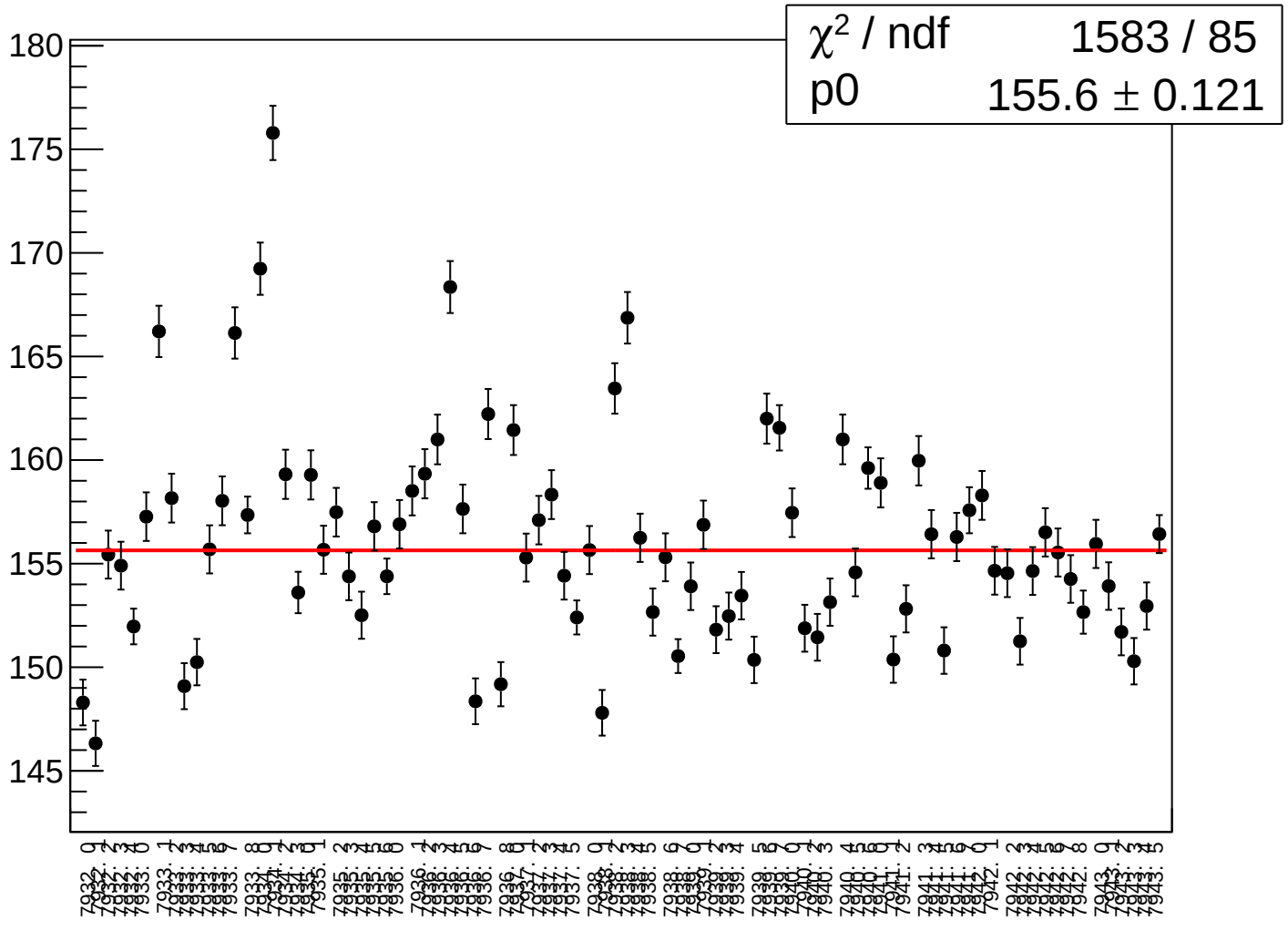

asym_bcm_dg_us_mean vs run
χ² / ndf 21.04 / 85
p0 58.71 ± 173.2
pull
Entries 86
Mean −106.5
Std Dev 160

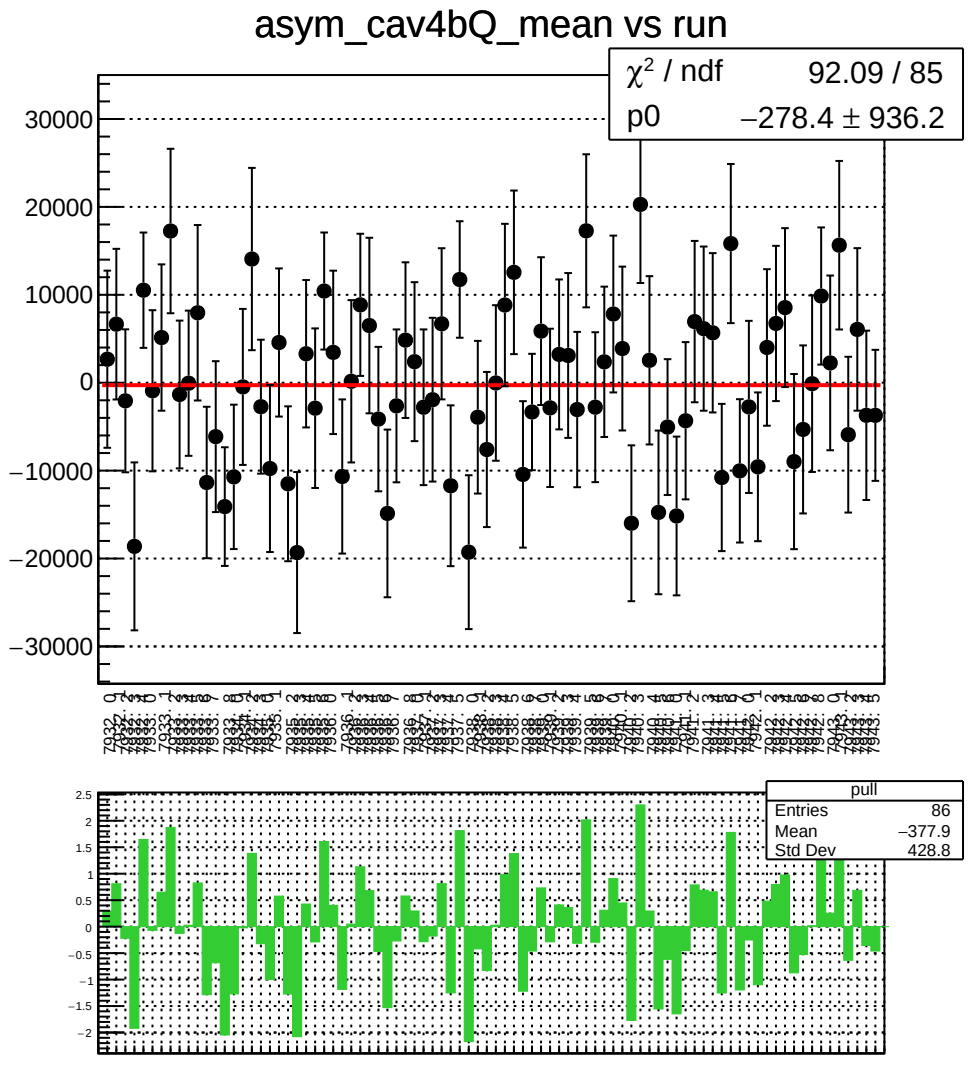

pull1D
Entries 86
Mean −0.005624
Std Dev 0.4946

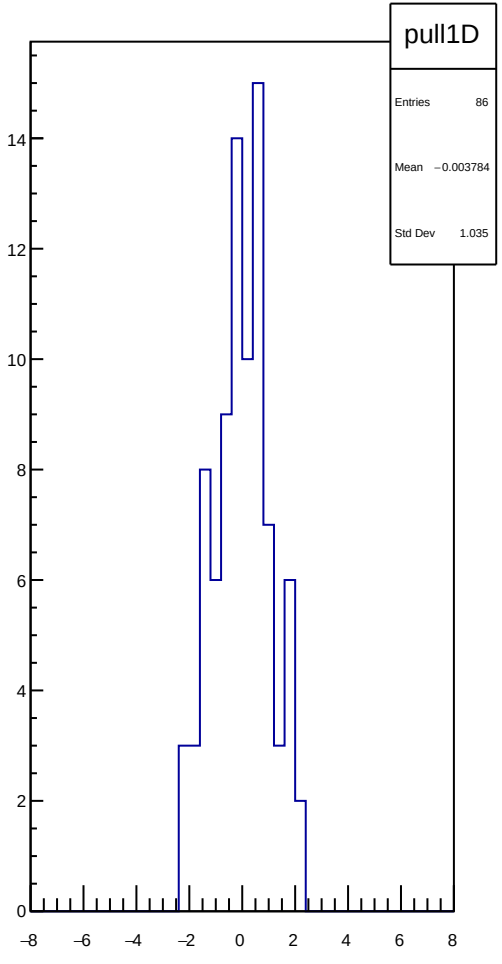

asym_bcm_dg_us_rms vs run
χ² / ndf 1491 / 85
p0 157.6 ± 0.1225
180
175
170
165
160
155
150
145

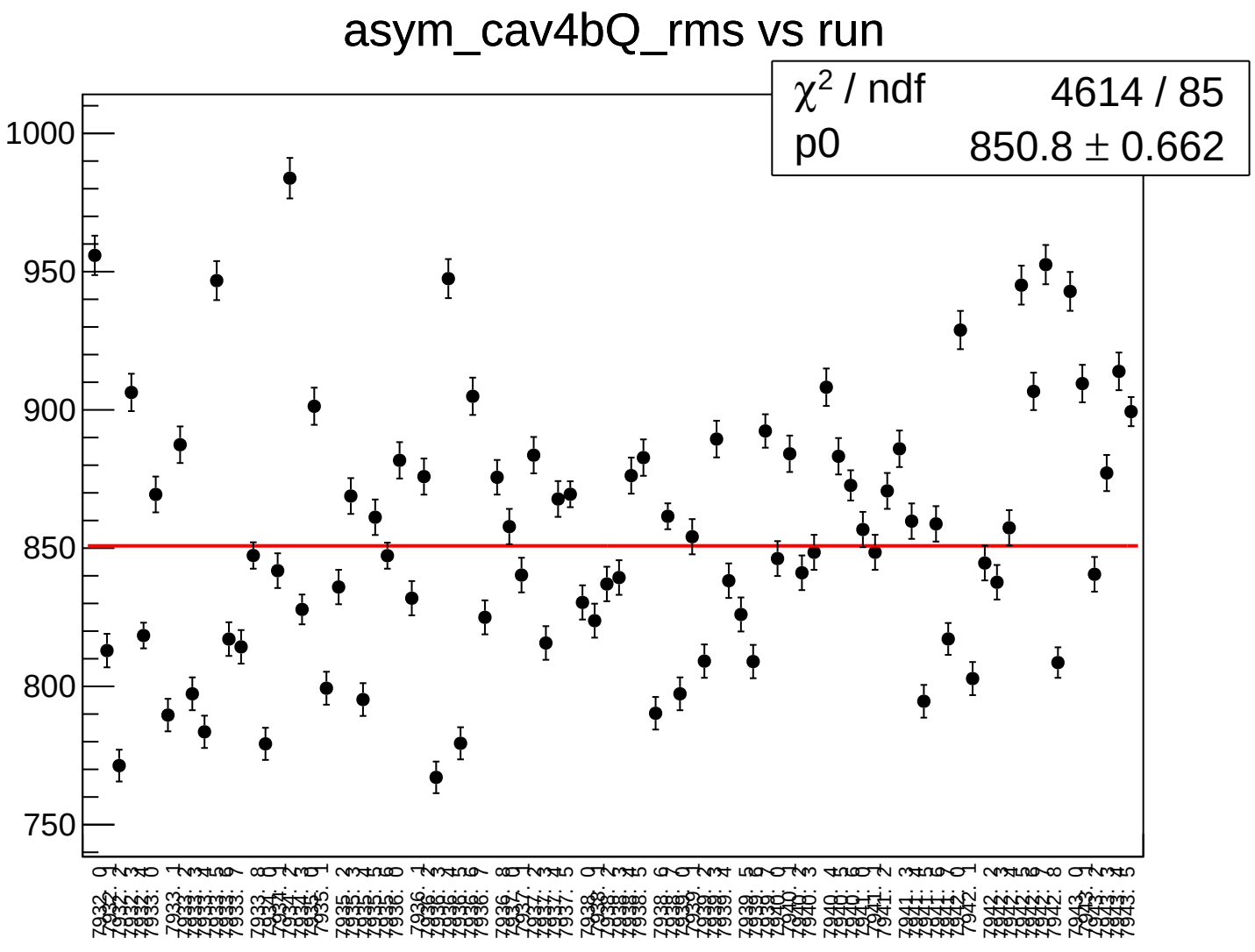

asym_bcm_dg_ds_mean vs run
χ² / ndf 18.96 / 85
p0 73.24 ± 171.1
pull
Entries 86
Mean −451.3
Std Dev 517.3

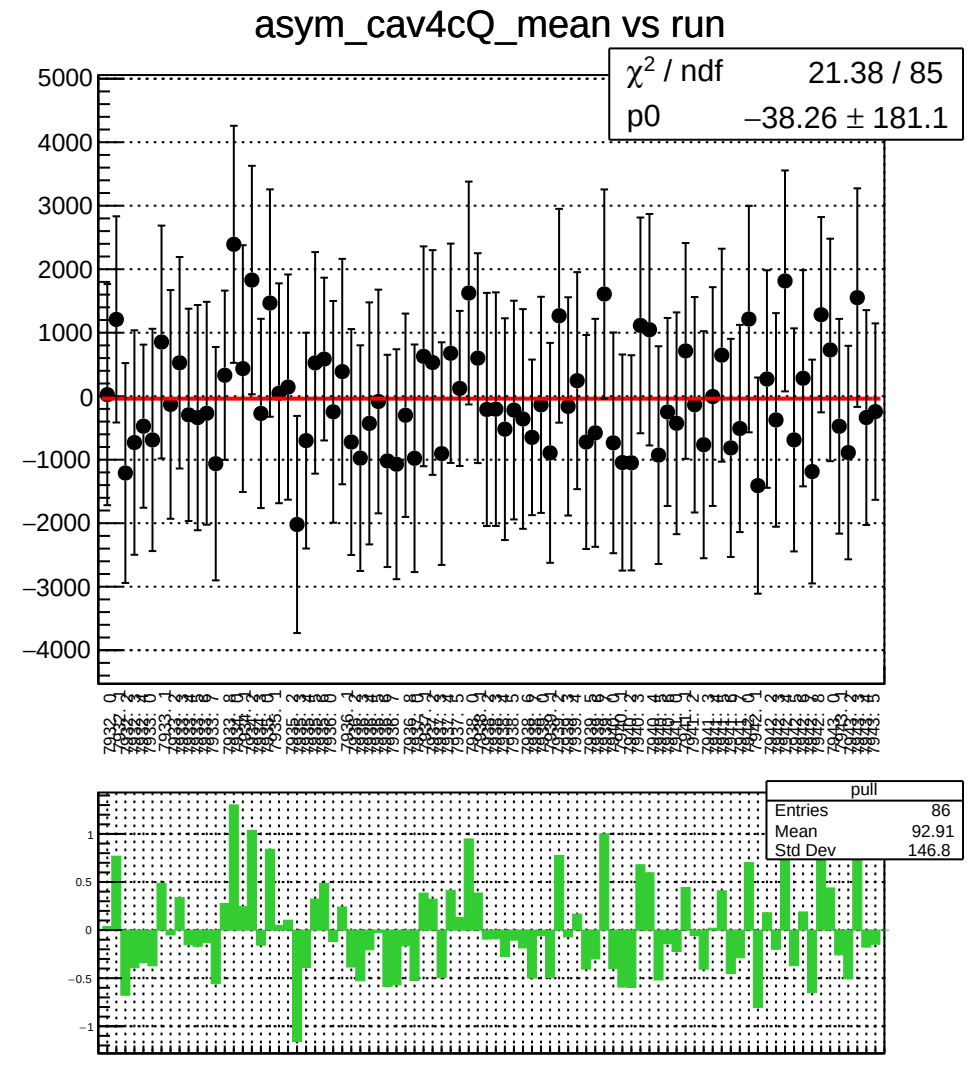

pull1D
Entries 86
Mean −0.0008835
Std Dev 0.4695

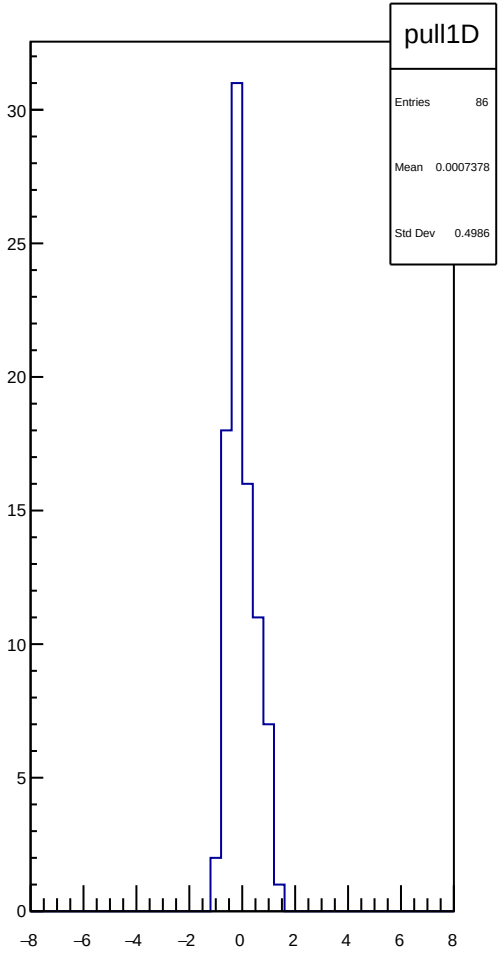

asym_bcm_dg_ds_rms vs run
χ² / ndf 1583 / 85
p0 155.6 ± 0.121
180
175
170
165
160
155
150
145

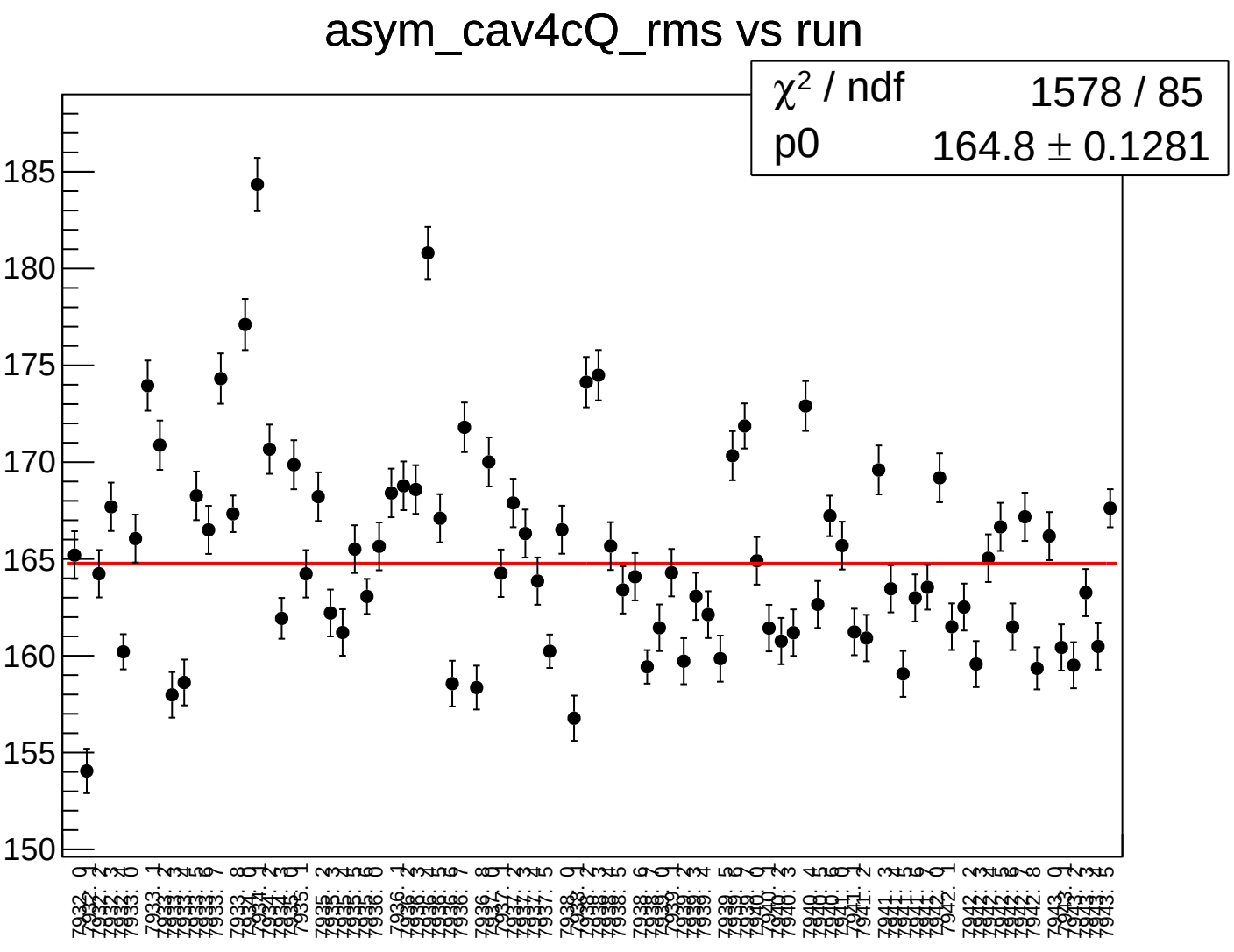

asym_cav4bQ_mean vs run
χ² / ndf 92.09 / 85
p0 −278.4 ± 936.2
pull
Entries 86
Mean −377.9
Std Dev 428.8

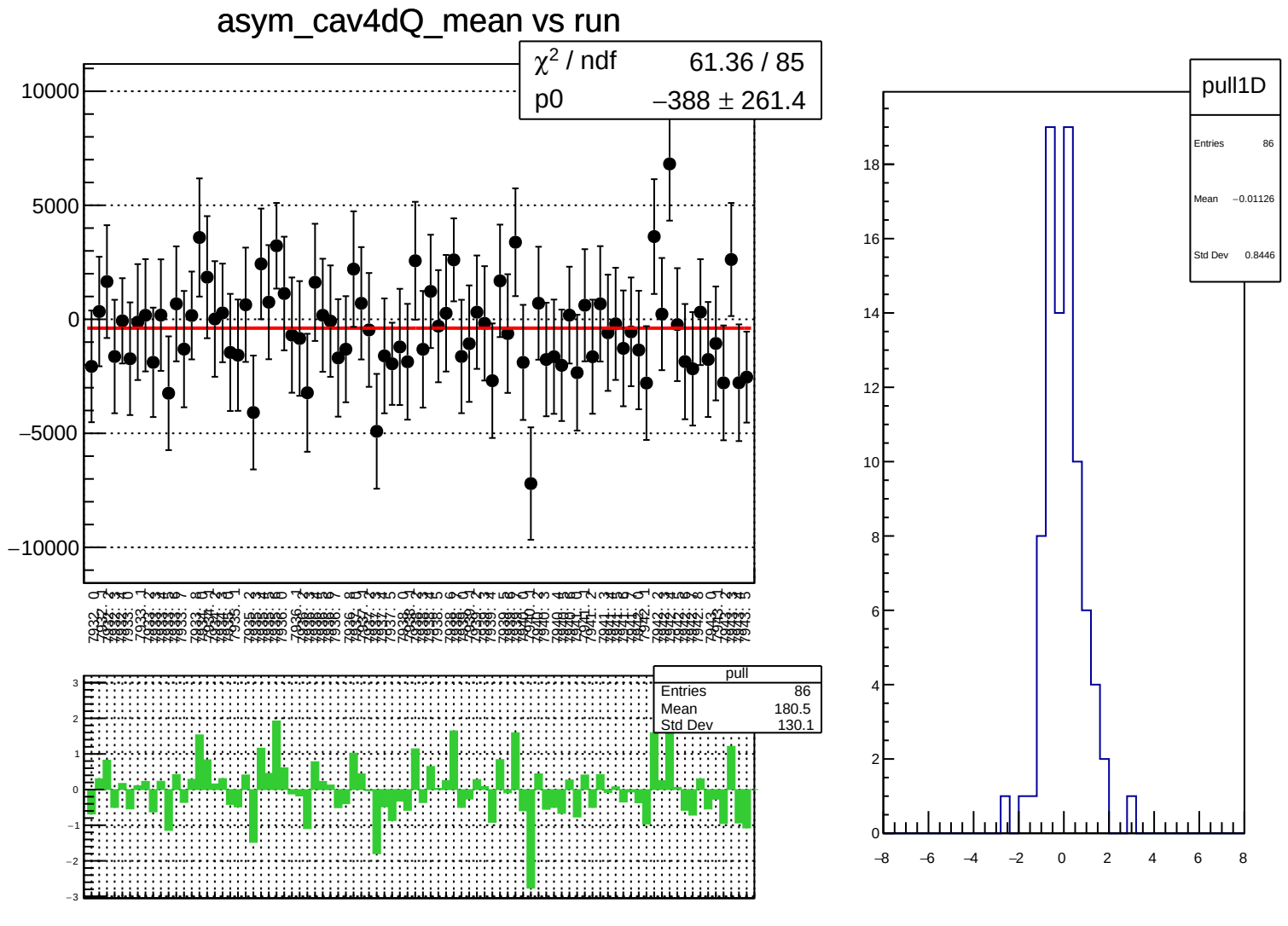

pull1D
Entries 86
Mean −0.003784
Std Dev 1.035

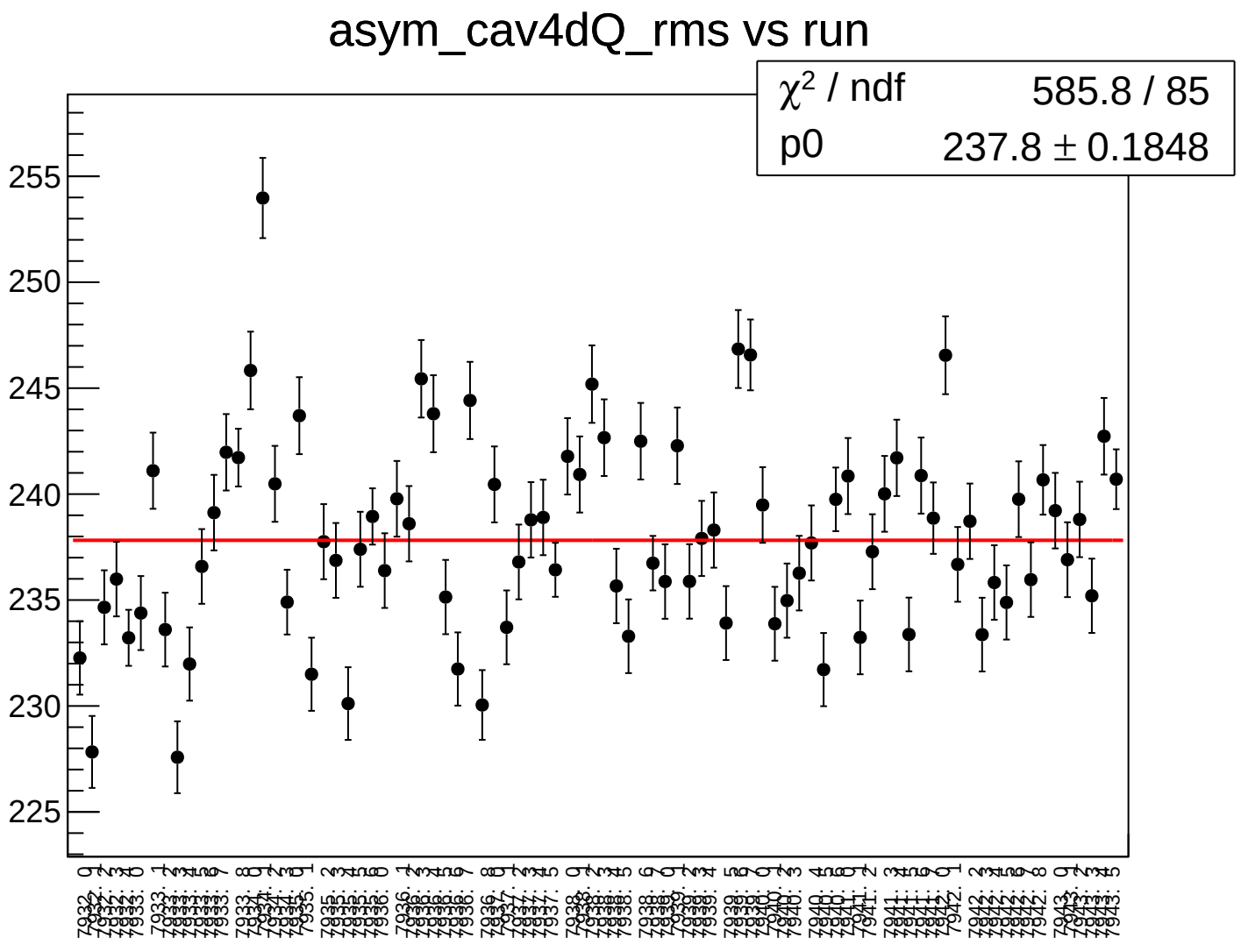

asym_cav4bQ_rms vs run
χ² / ndf 4614 / 85
p0 850.8 ± 0.662
1000
950
900
850
800
750

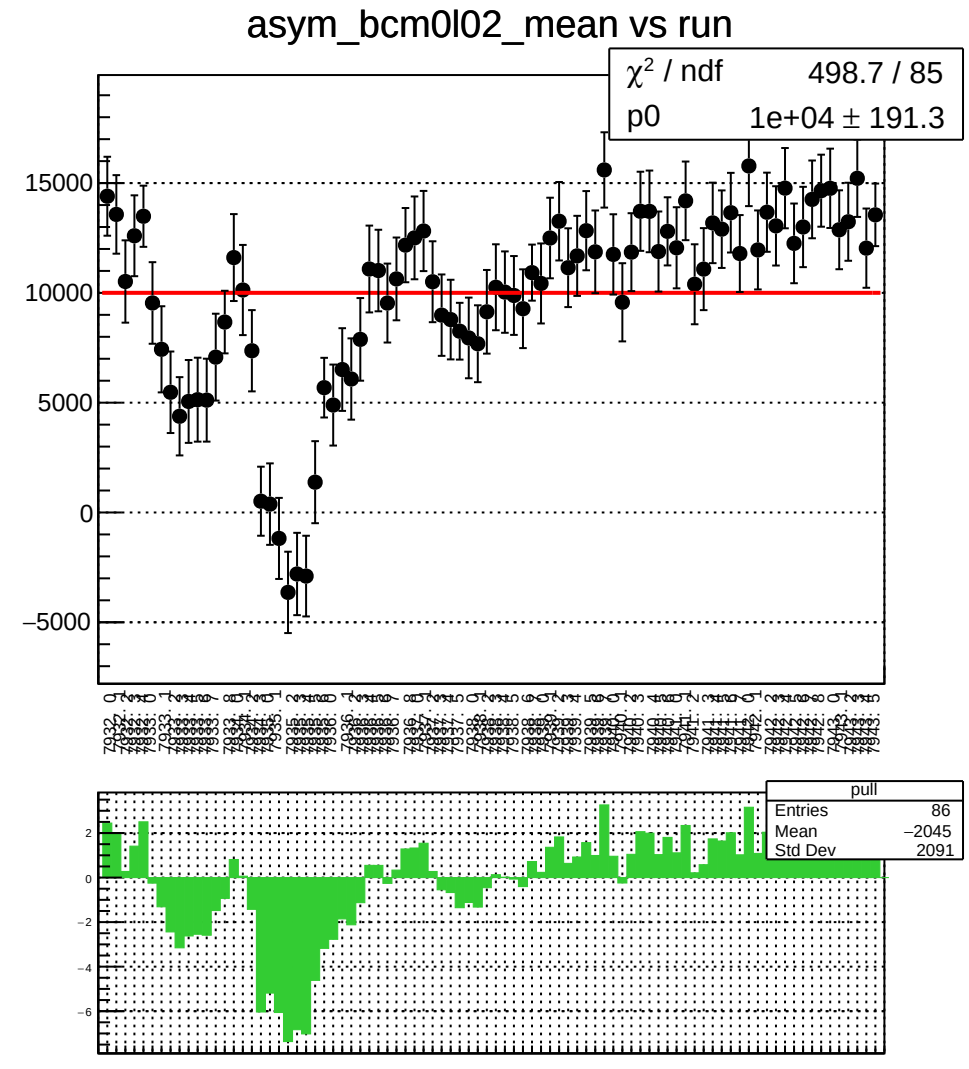

asym_cav4cQ_mean vs run
χ² / ndf 21.38 / 85
p0 −38.26 ± 181.1
pull
Entries 86
Mean 92.91
Std Dev 146.8

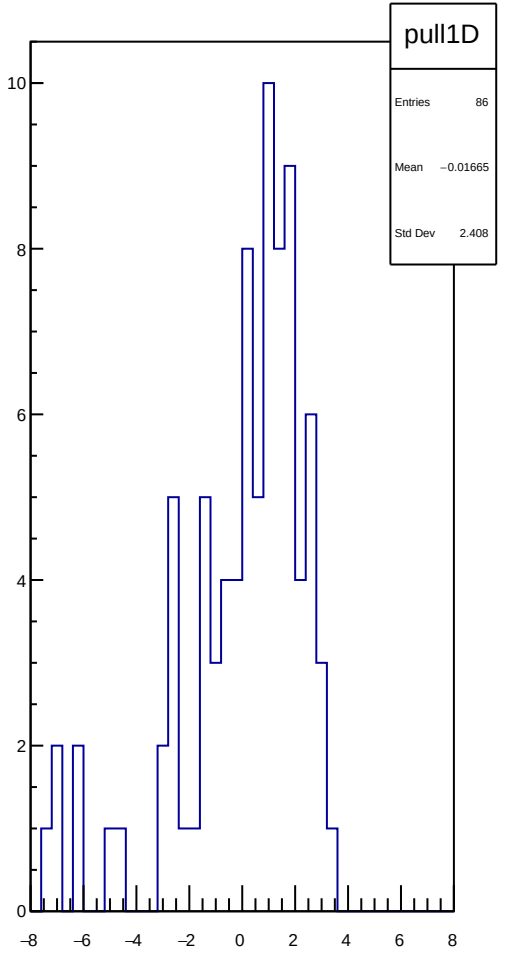

pull1D
Entries 86
Mean 0.0007378
Std Dev 0.4986

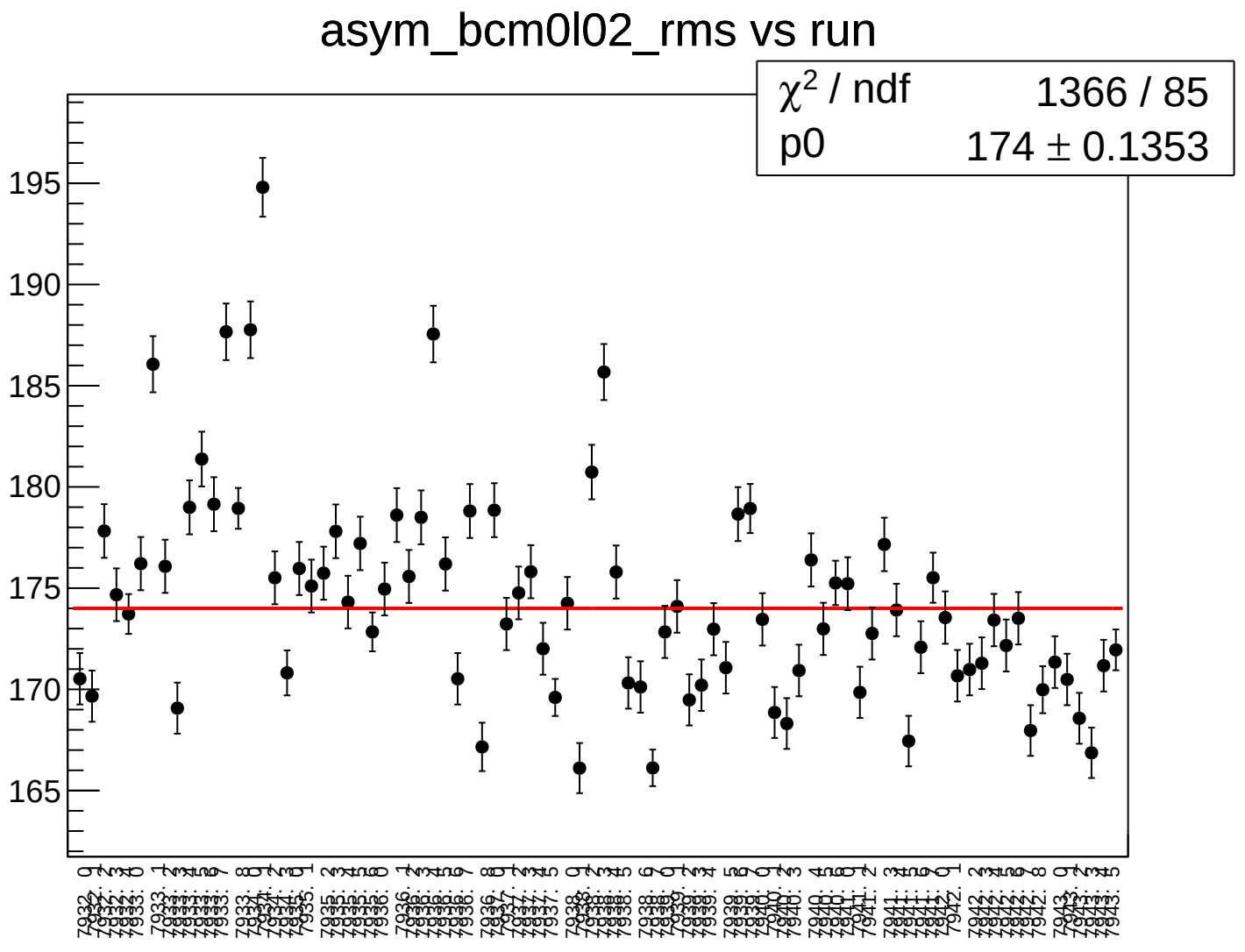

asym_cav4cQ_rms vs run
χ² / ndf 1578 / 85
p0 164.8 ± 0.1281
185
180
175
170
165
160
155
150

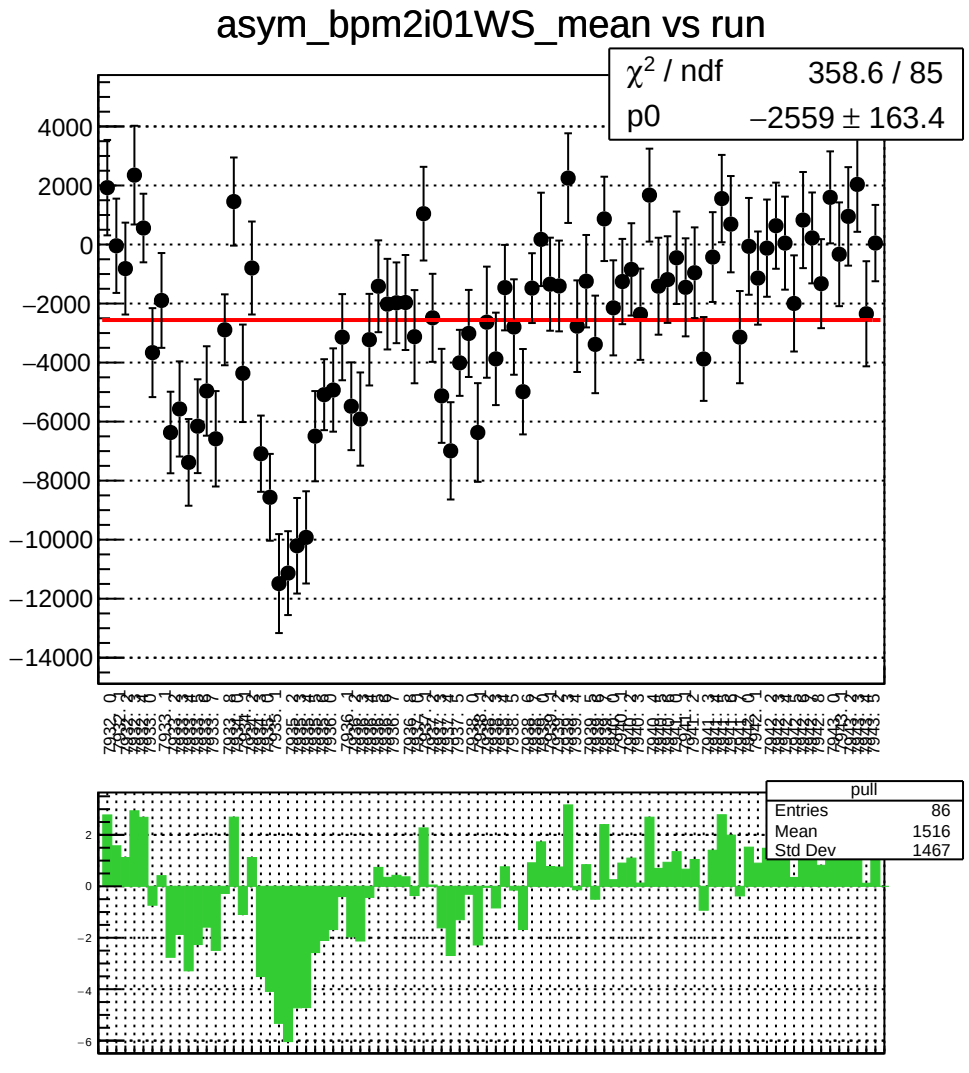

asym_cav4dQ_mean vs run
χ² / ndf 61.36 / 85
p0 −388 ± 261.4
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 180.5
Std Dev 130.1
3
2
1
0
−1
−2
−3
pull1D
Entries 86
Mean −0.01126
Std Dev 0.8446
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

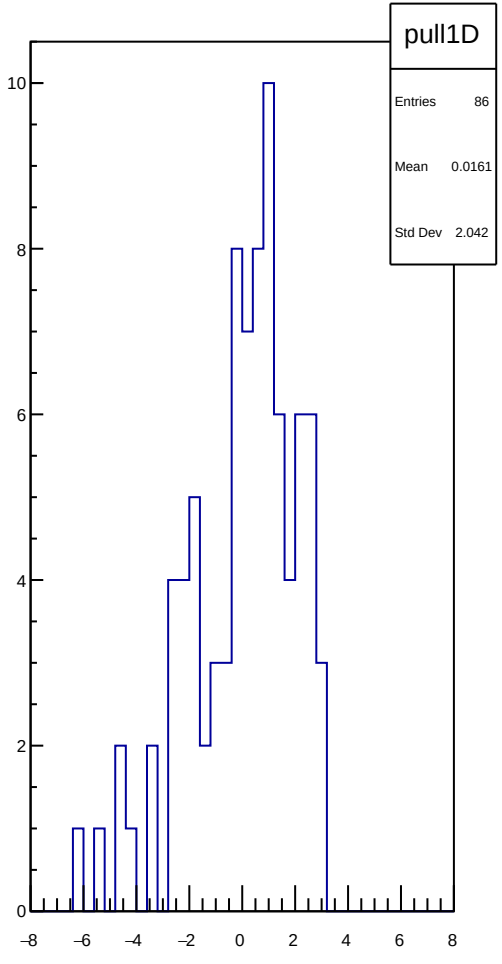

asym_cav4dQ_rms vs run
χ² / ndf 585.8 / 85
p0 237.8 ± 0.1848
255
250
245
240
235
230
225

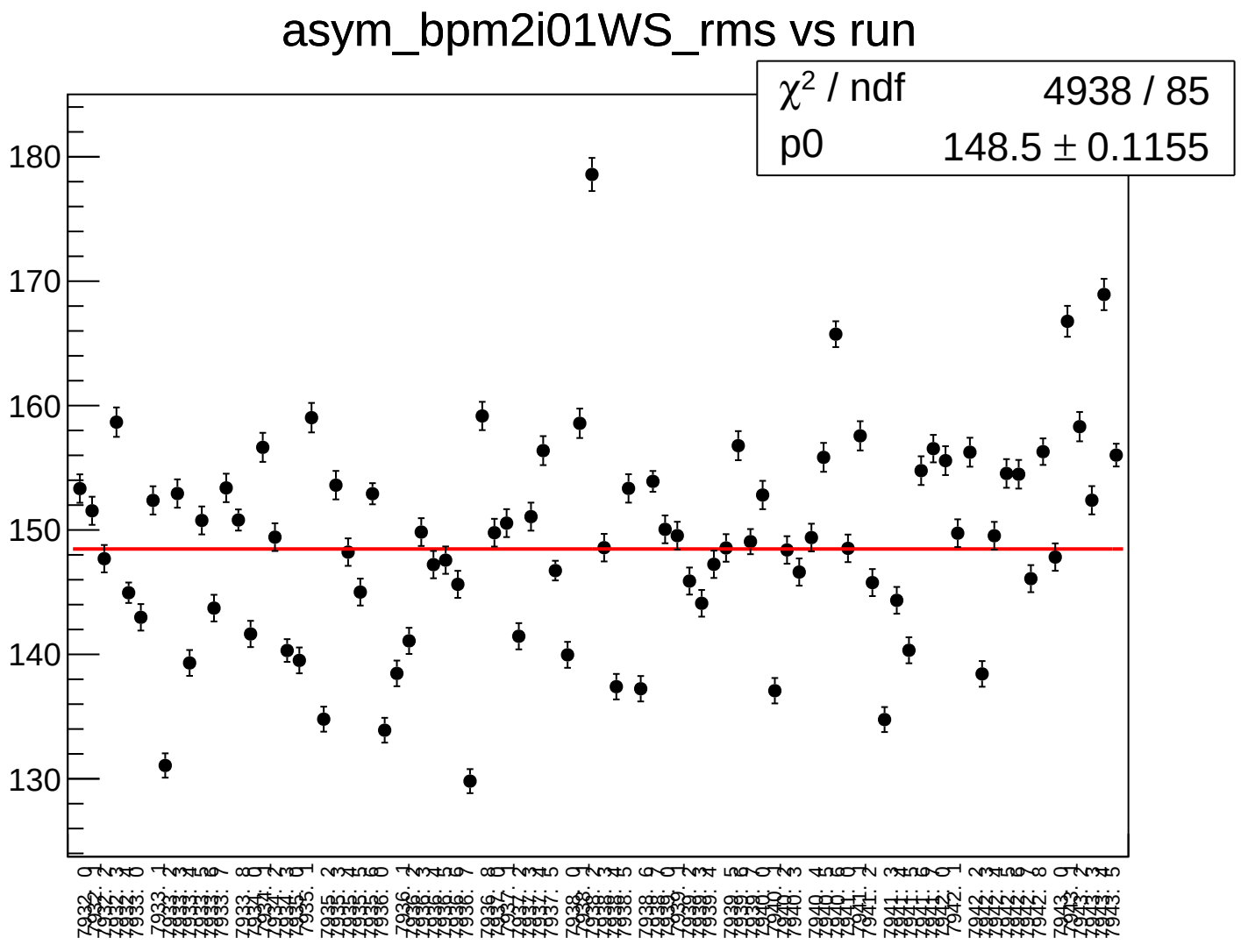

asym_bcm0l02_mean vs run
χ² / ndf 498.7 / 85
p0 1e+04 ± 191.3
15000
10000
5000
0
−5000
pull
Entries 86
Mean −2045
Std Dev 2091
2
0
−2
−4
−6

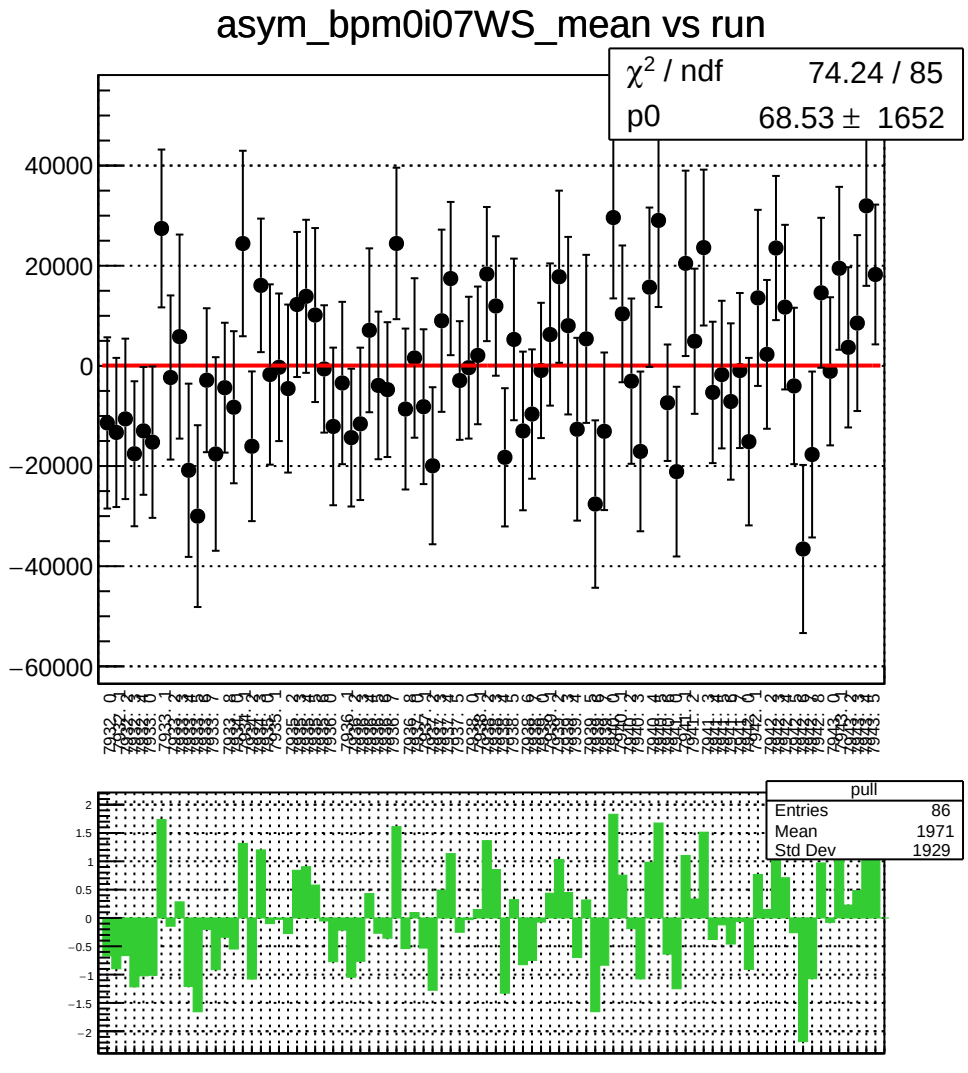

pull1D
Entries 86
Mean −0.01665
Std Dev 2.408
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

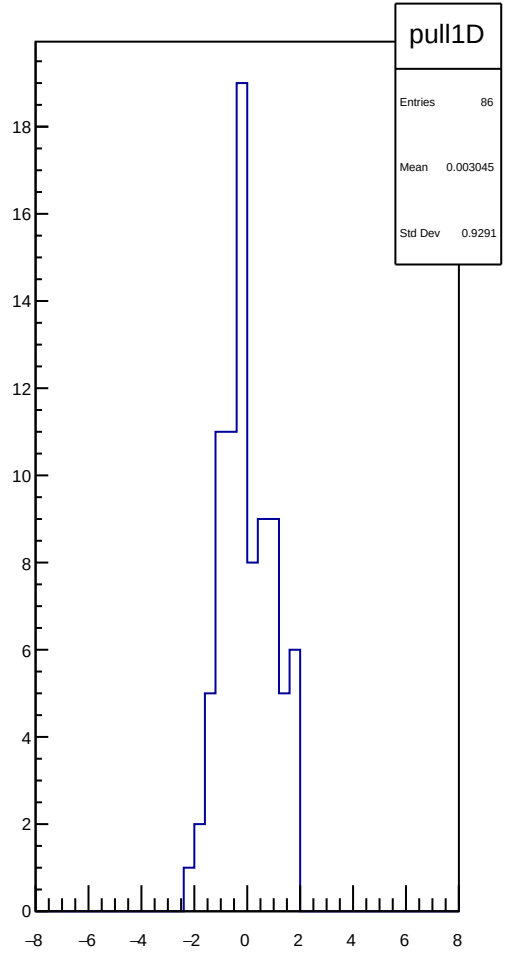

asym_bcm0l02_rms vs run
χ² / ndf 1366 / 85
p0 174 ± 0.1353
195
190
185
180
175
170
165

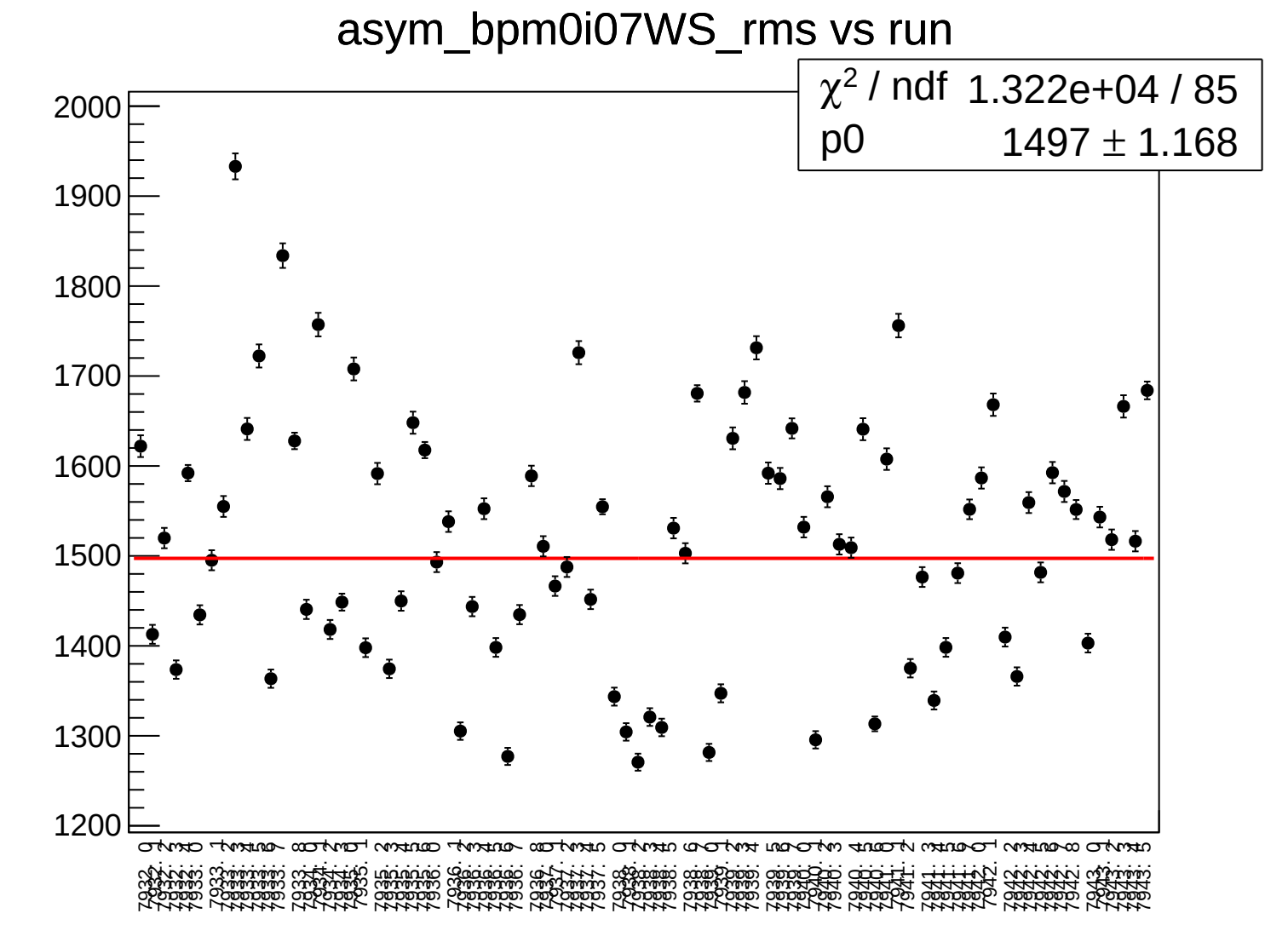

asym_bpm2i01WS_mean vs run
χ² / ndf 358.6 / 85
p0 −2559 ± 163.4
pull
Entries 86
Mean 1516
Std Dev 1467

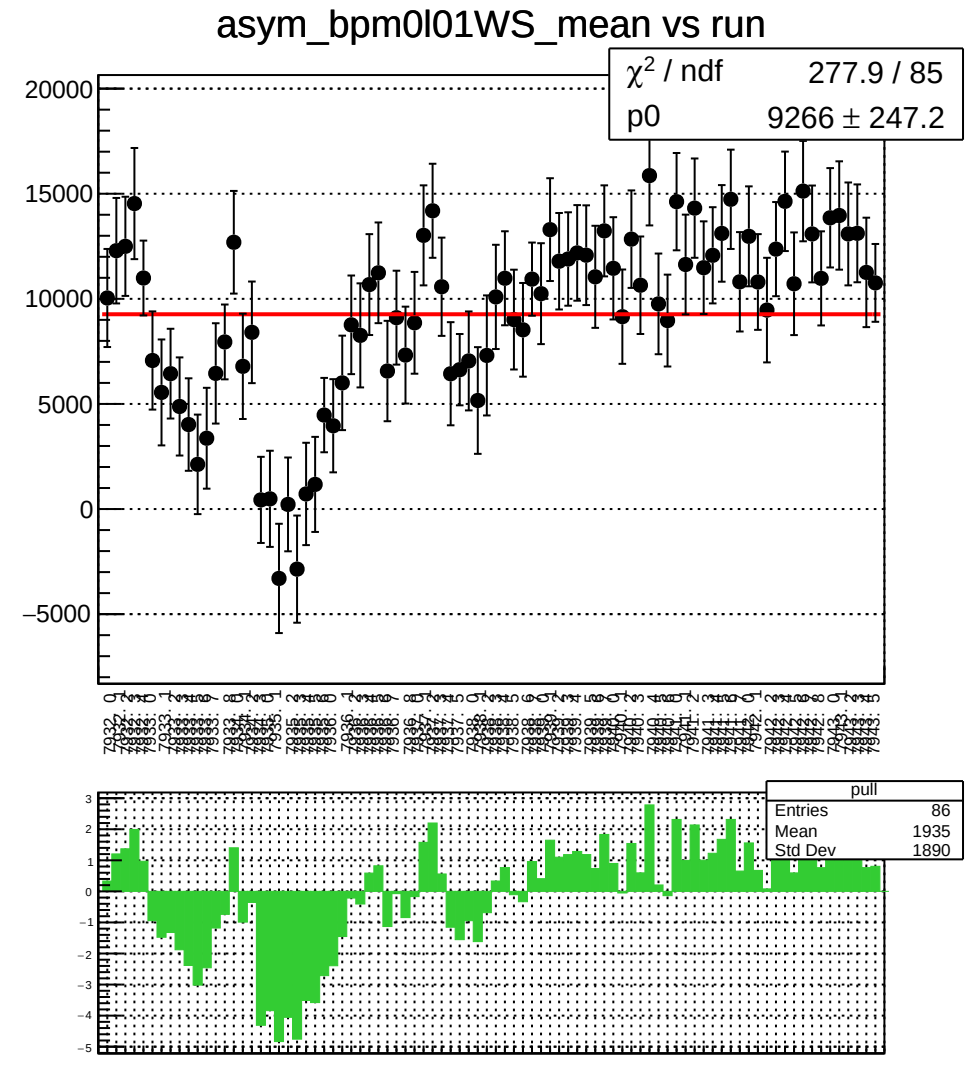

pull1D
Entries 86
Mean 0.0161
Std Dev 2.042

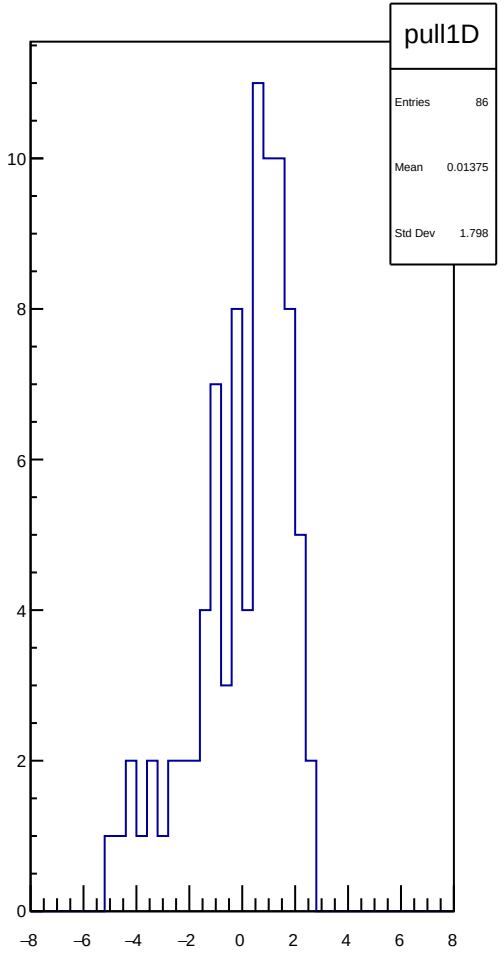

asym_bpm2i01WS_rms vs run
χ² / ndf 4938 / 85
p0 148.5 ± 0.1155
180
170
160
150
140
130

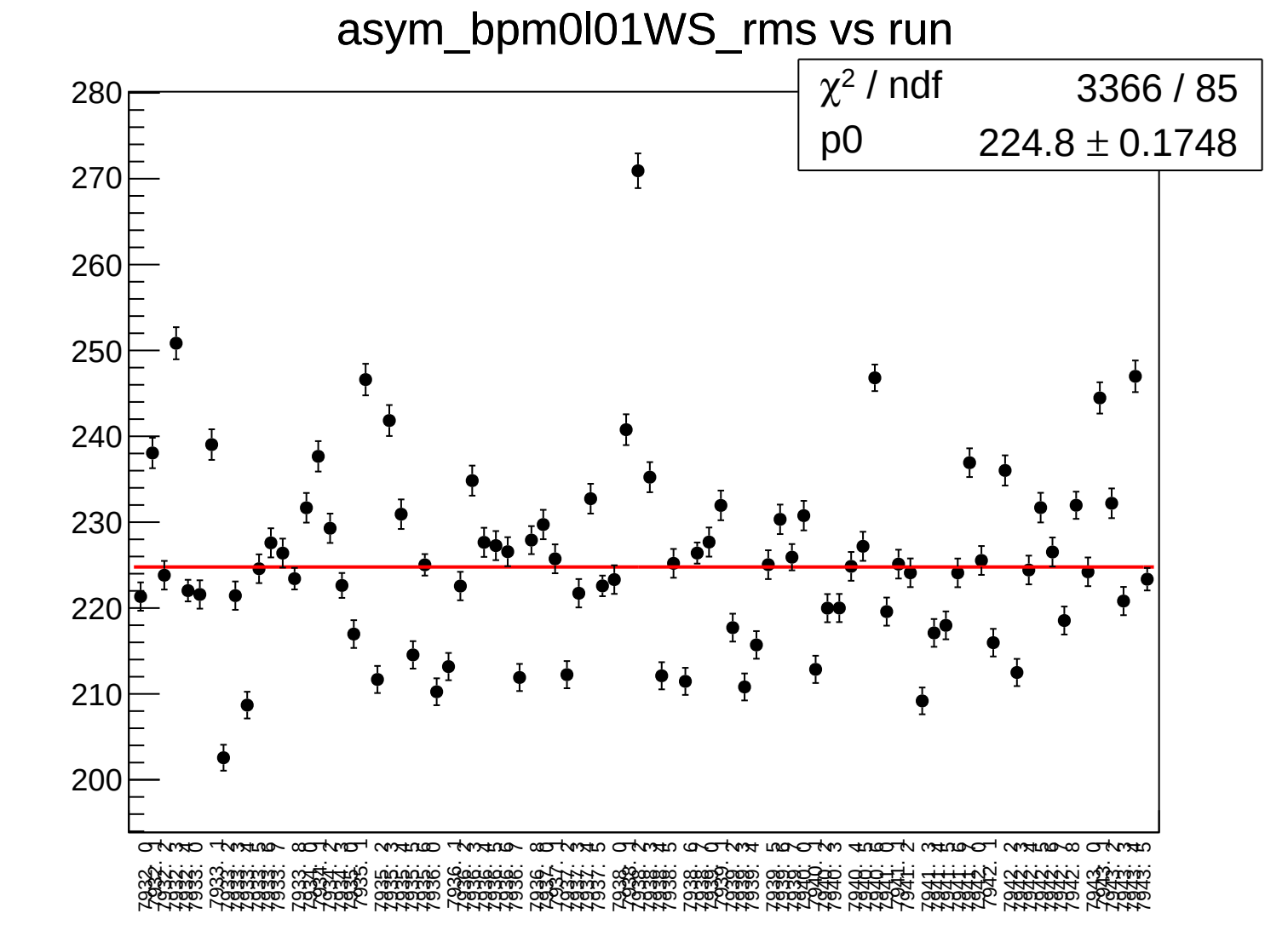

asym_bpm0i07WS_mean vs run
χ² / ndf 74.24 / 85
p0 68.53 ± 1652
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean 1971
Std Dev 1929
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

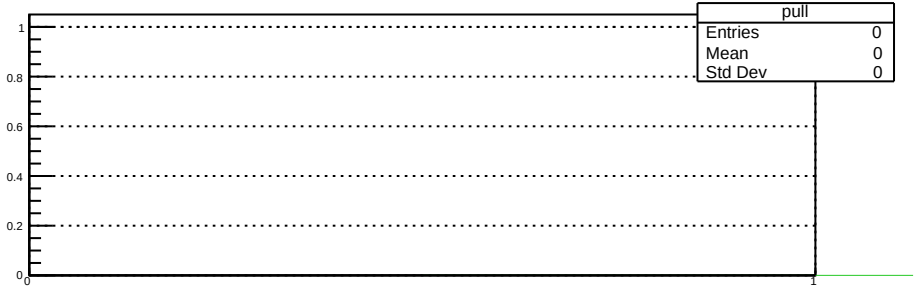

pull1D
Entries 86
Mean 0.003045
Std Dev 0.9291
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

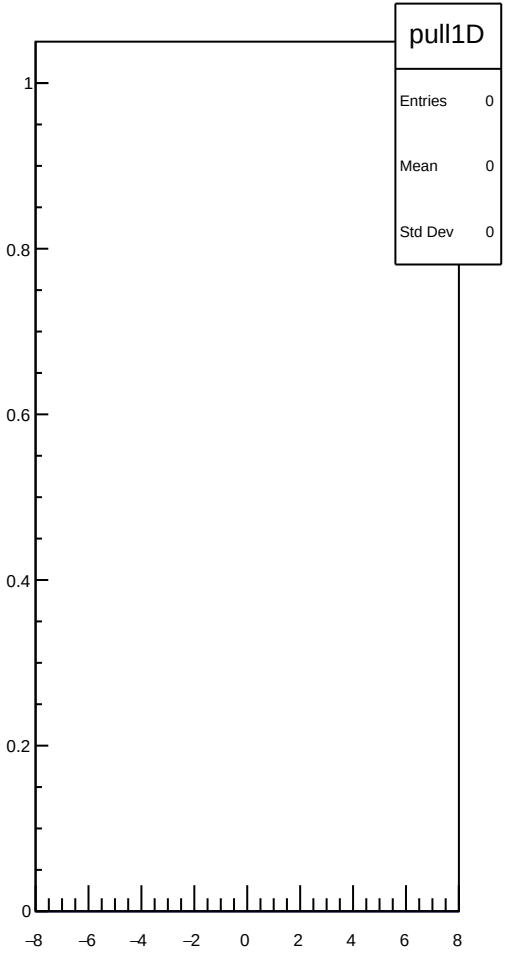

asym_bpm0i07WS_rms vs run
χ² / ndf 1.322e+04 / 85
p0 1497 ± 1.168
2000
1900
1800
1700
1600
1500
1400
1300
1200

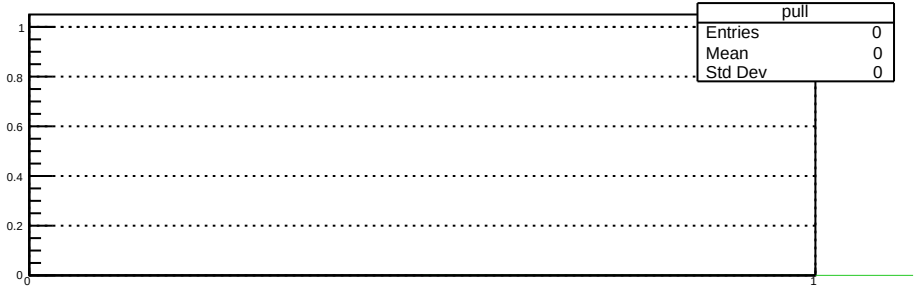

asym_bpm0l01WS_mean vs run
χ² / ndf 277.9 / 85
p0 9266 ± 247.2
20000
15000
10000
5000
0
−5000
pull
Entries 86
Mean 1935
Std Dev 1890
3
2
1
0
−1
−2
−3
−4
−5

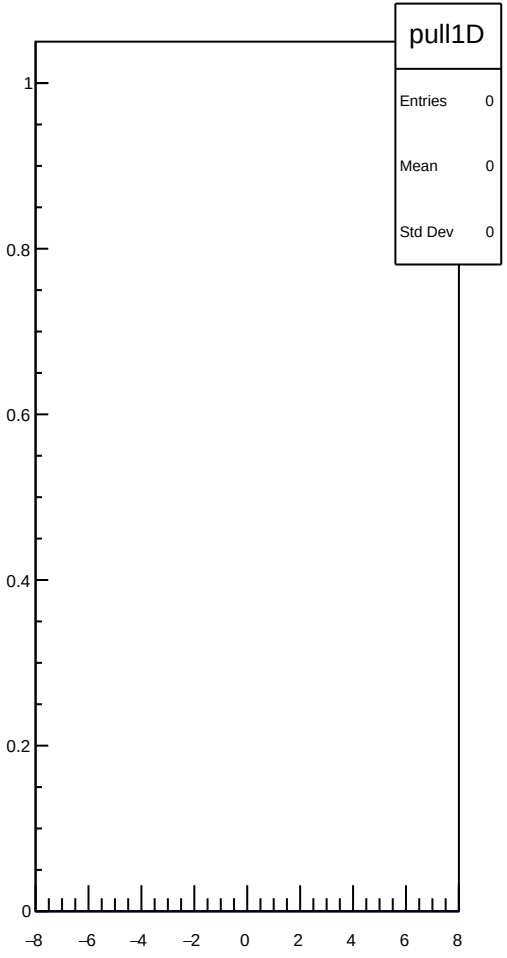

pull1D
Entries 86
Mean 0.01375
Std Dev 1.798
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

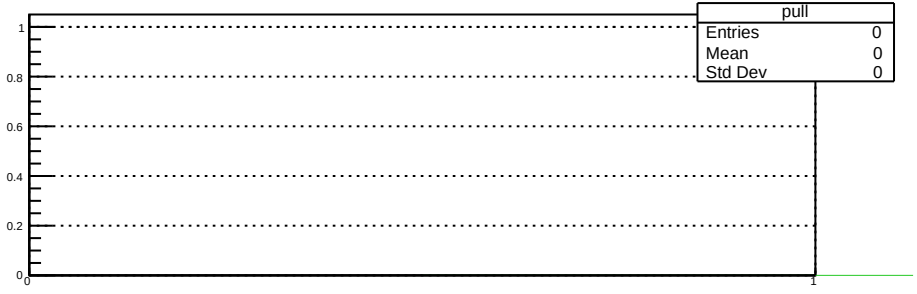

asym_bpm0l01WS_rms vs run
χ^2 / ndf 3366 / 85
p0 224.8 ± 0.1748
280
270
260
250
240
230
220
210
200

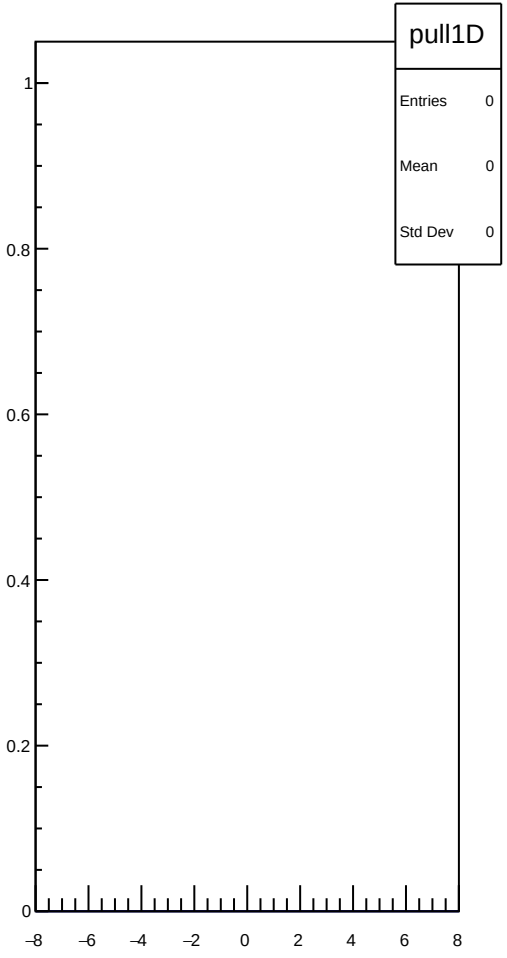

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

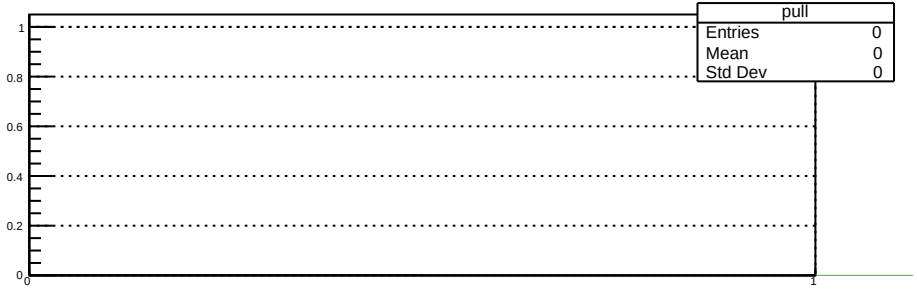

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

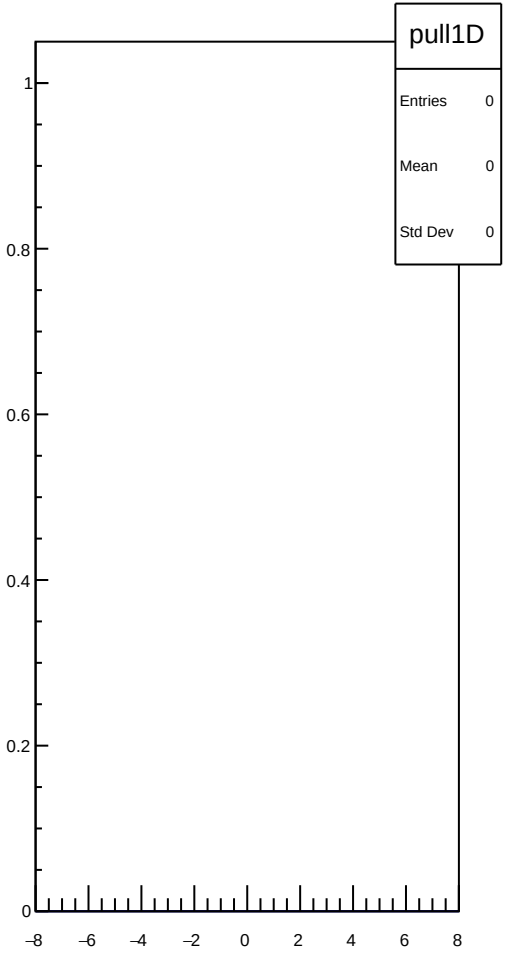

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

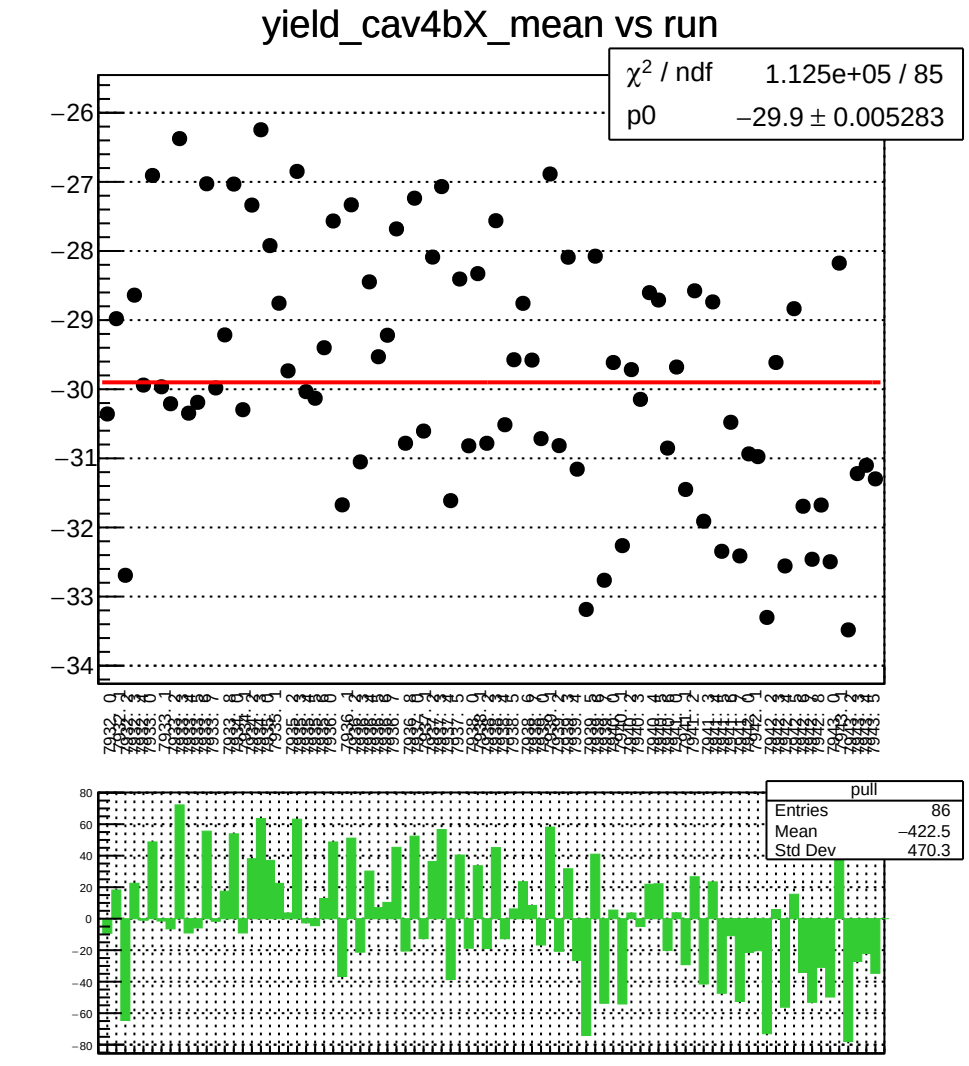

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

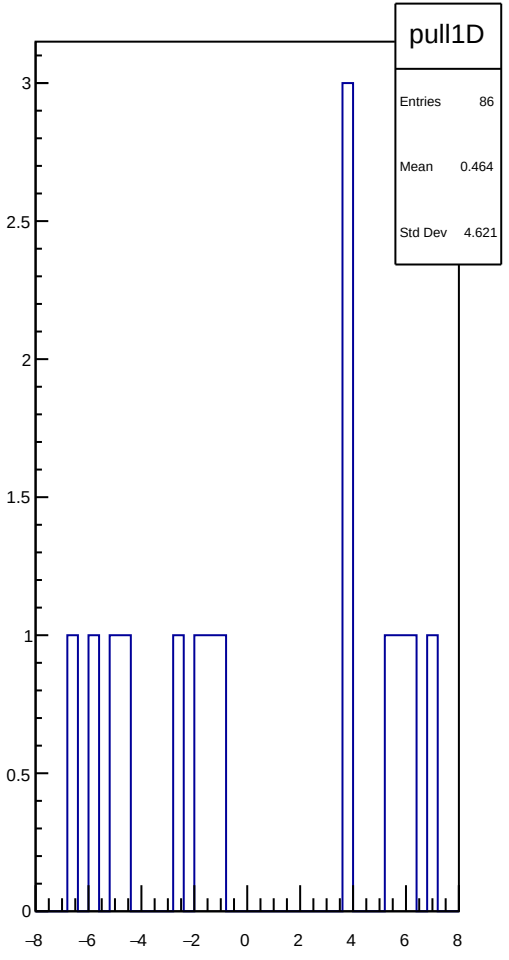

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

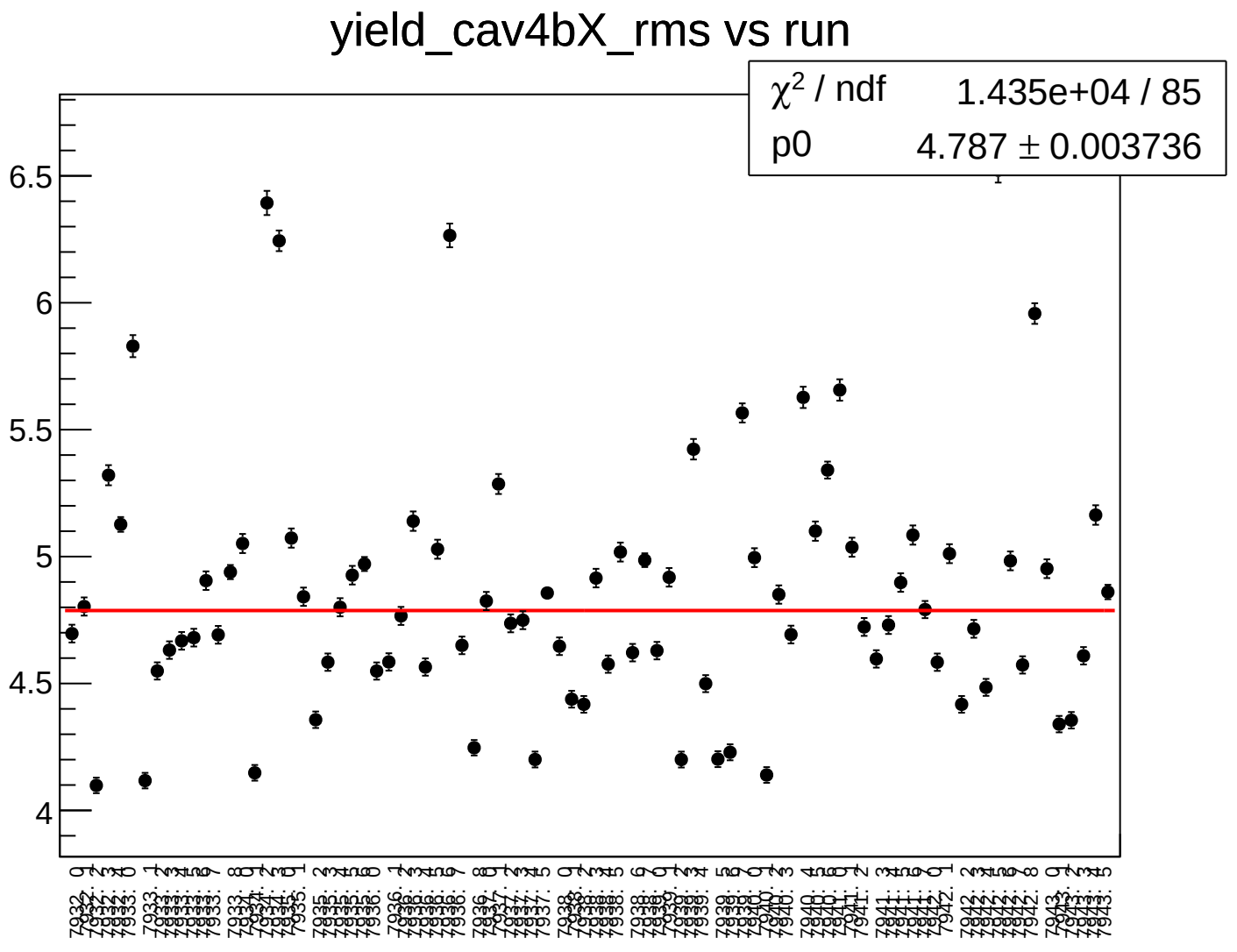

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

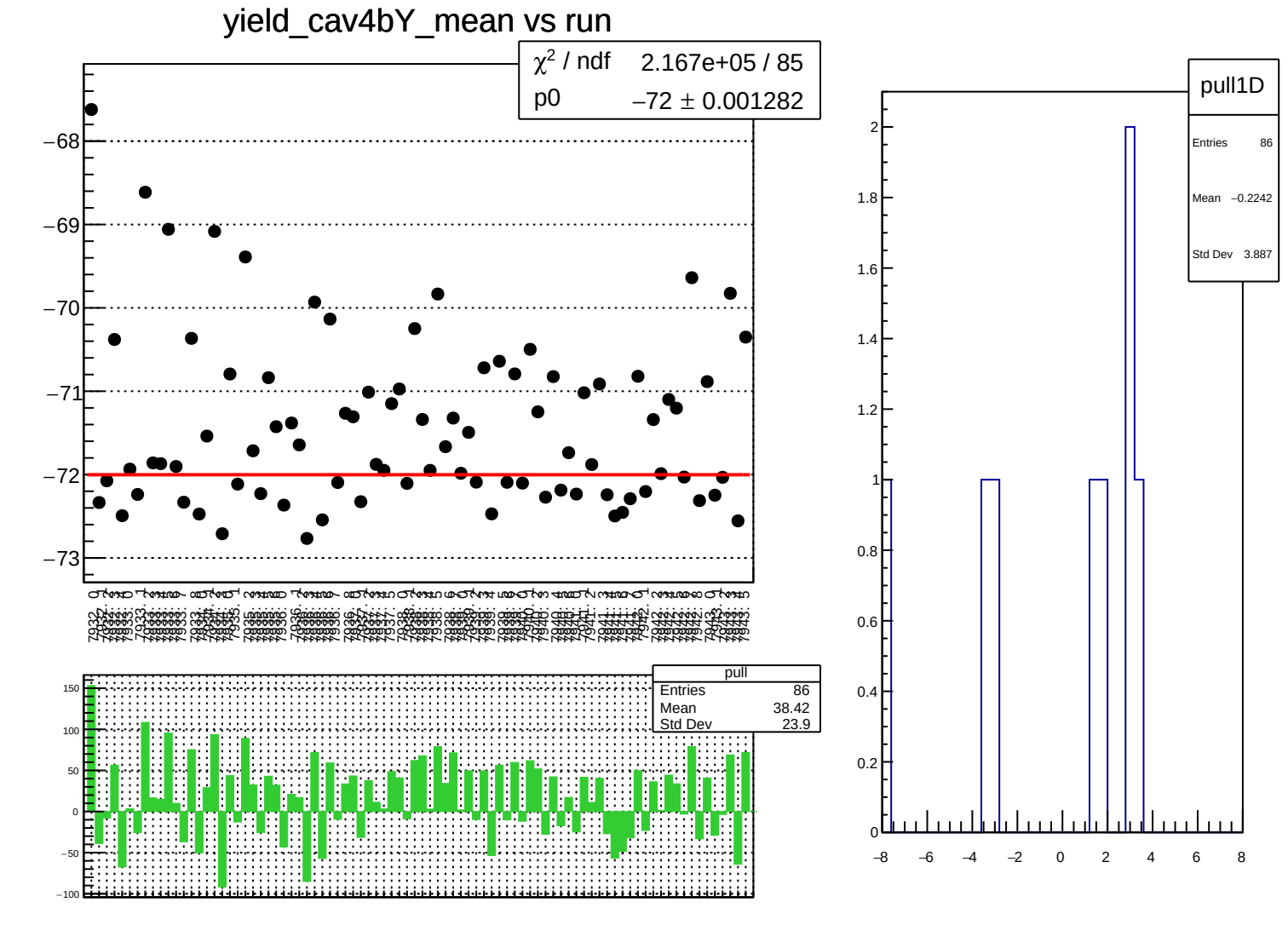

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

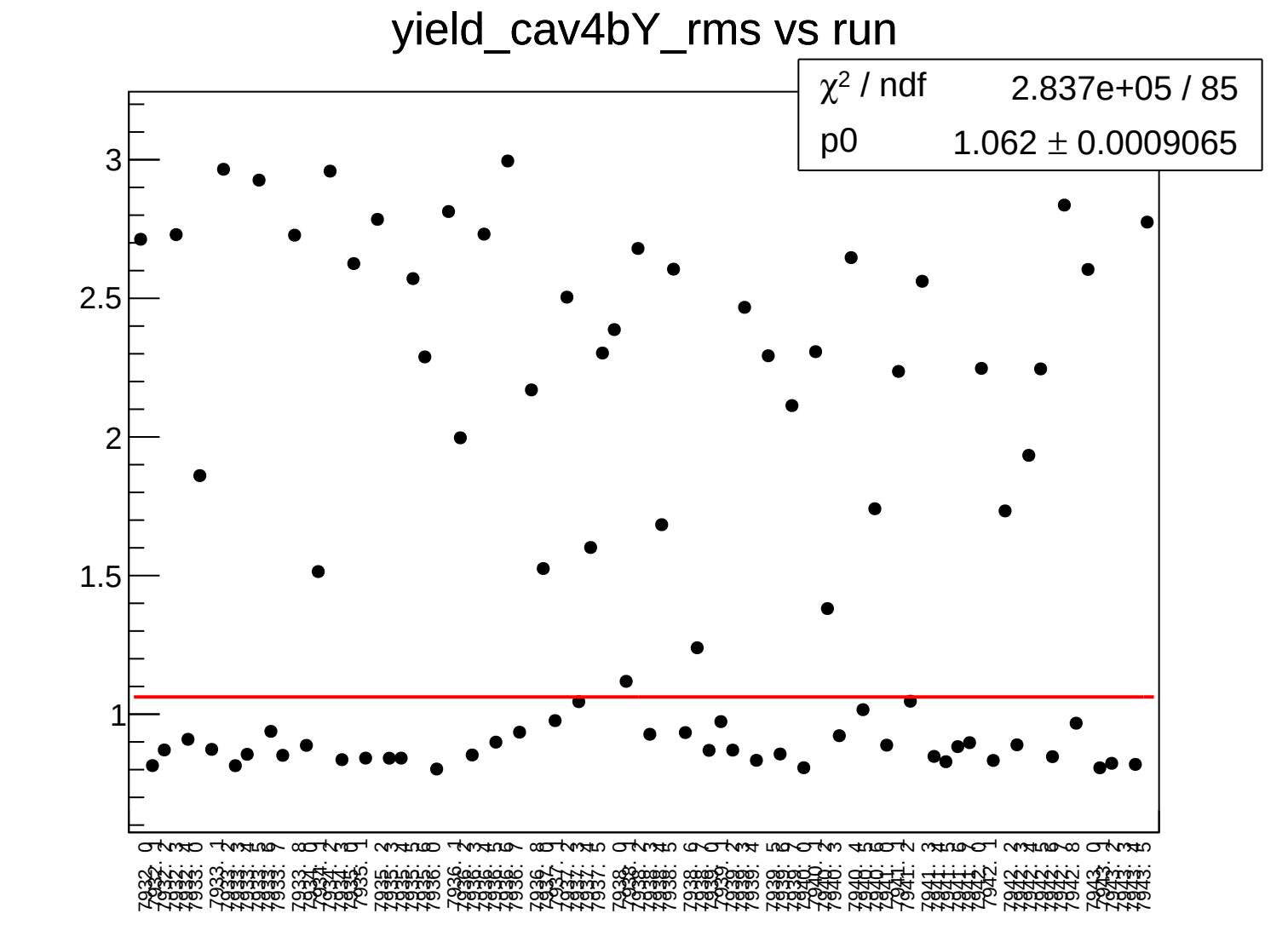

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

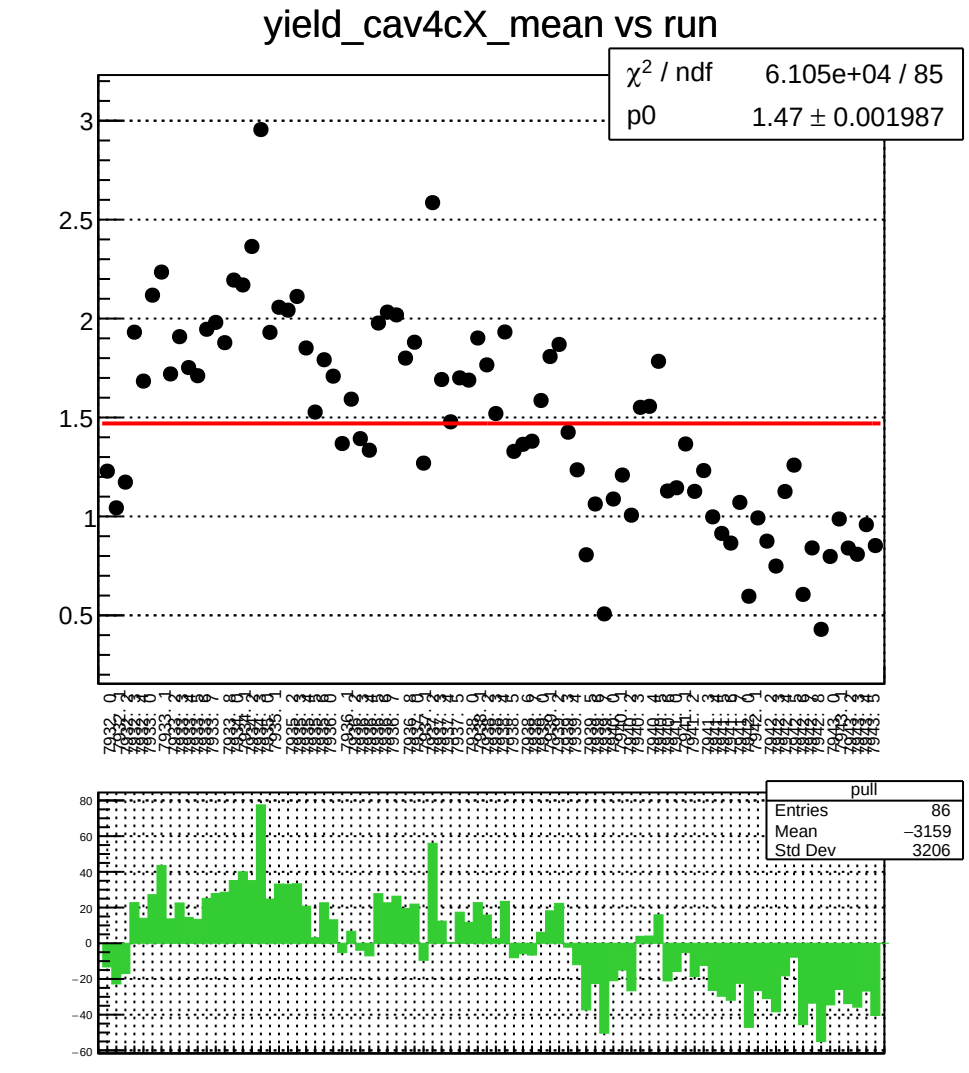

yield_cav4bX_mean vs run
χ² / ndf 1.125e+05 / 85
p0 −29.9 ± 0.005283
pull
Entries 86
Mean −422.5
Std Dev 470.3

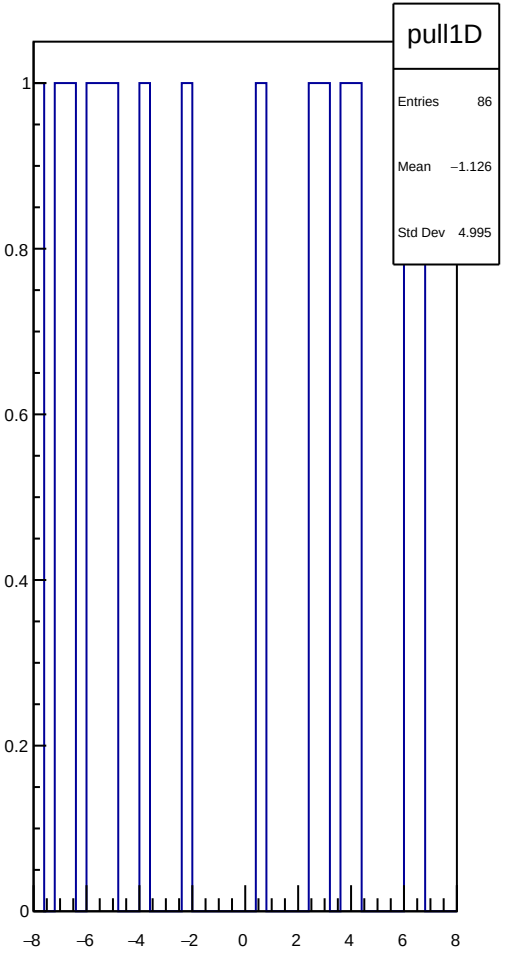

pull1D
Entries 86
Mean 0.464
Std Dev 4.621

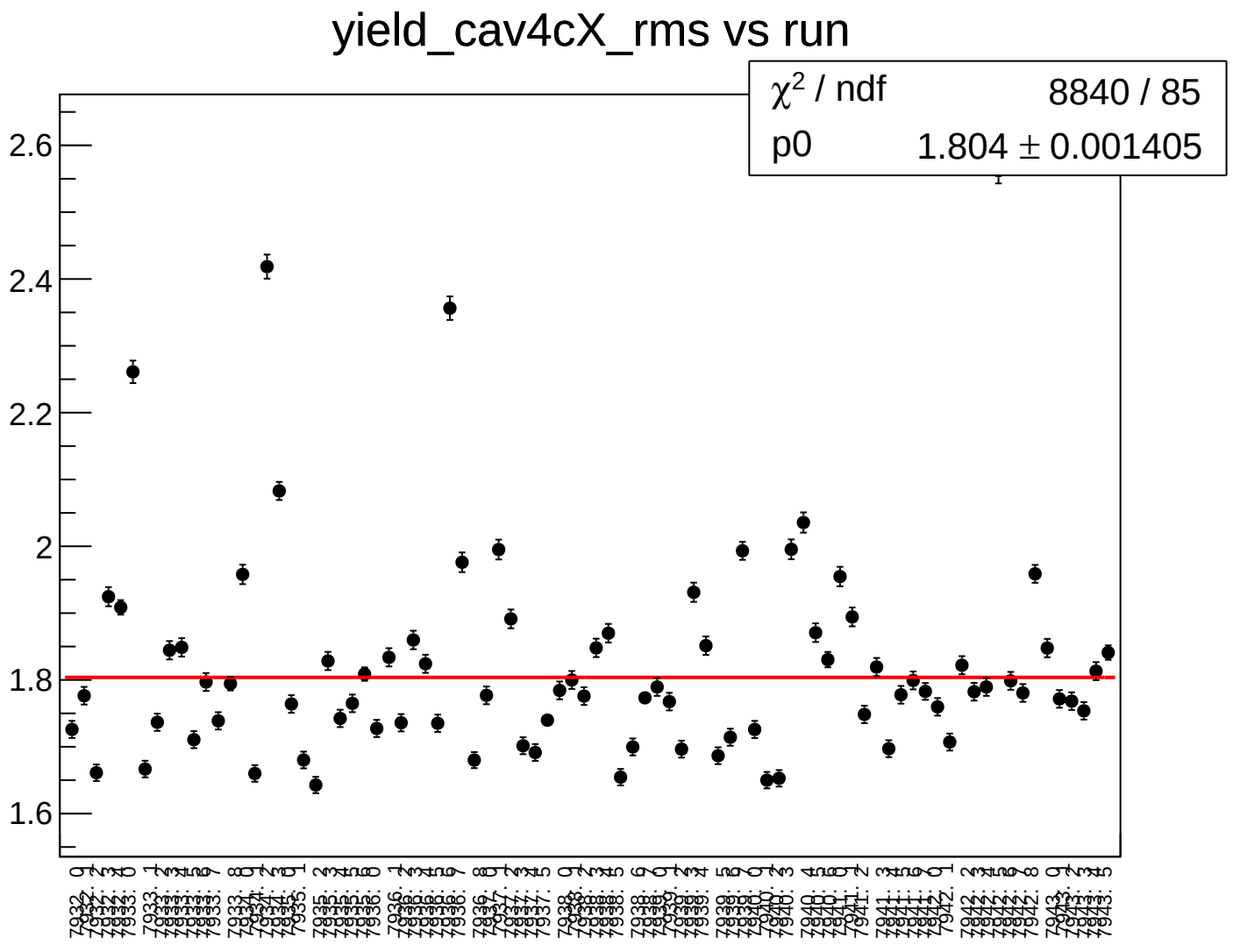

yield_cav4bX_rms vs run
χ^2 / ndf 1.435e+04 / 85
p0 4.787 ± 0.003736
6.5
6
5.5
5
4.5
4

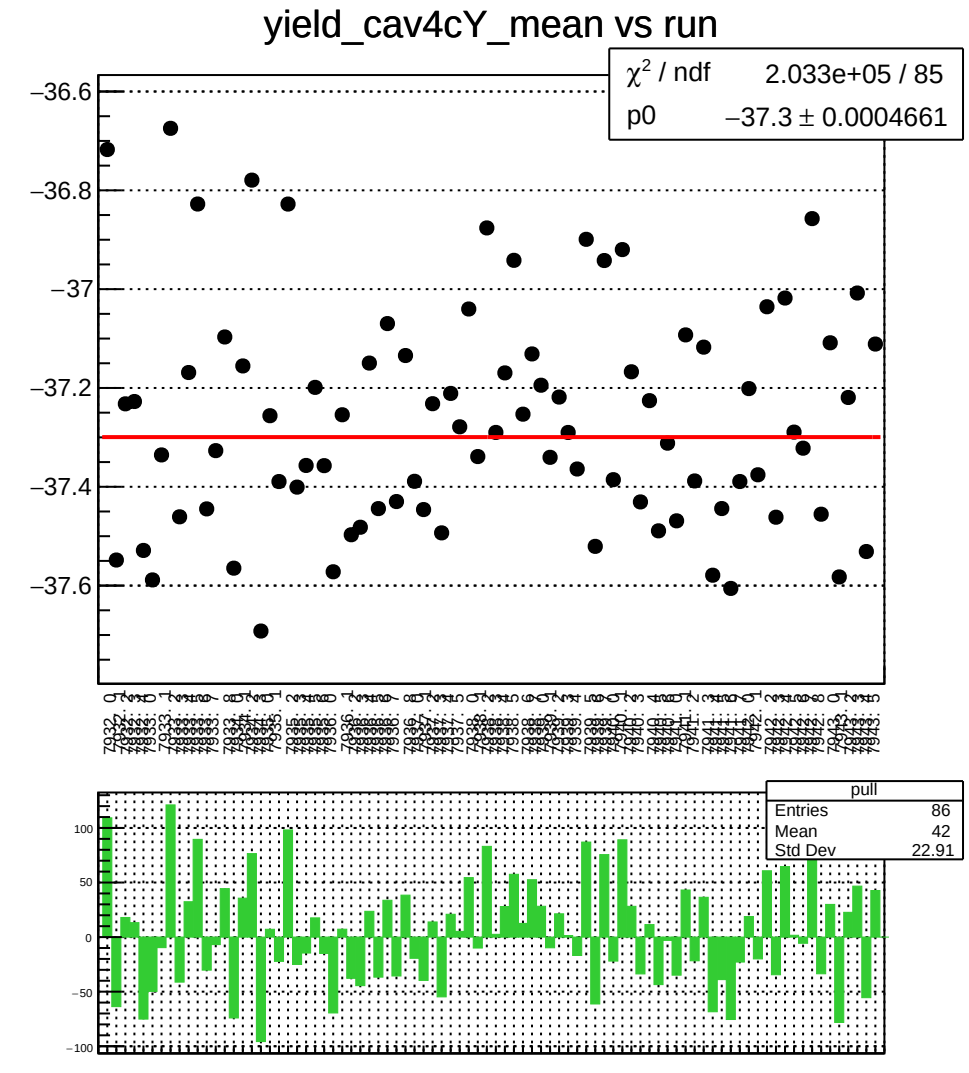

yield_cav4bY_mean vs run
χ² / ndf 2.167e+05 / 85
p0 −72 ± 0.001282
−68
−69
−70
−71
−72
−73
pull
Entries 86
Mean 38.42
Std Dev 23.9
150
100
50
0
−50
−100
pull1D
Entries 86
Mean −0.2242
Std Dev 3.887
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

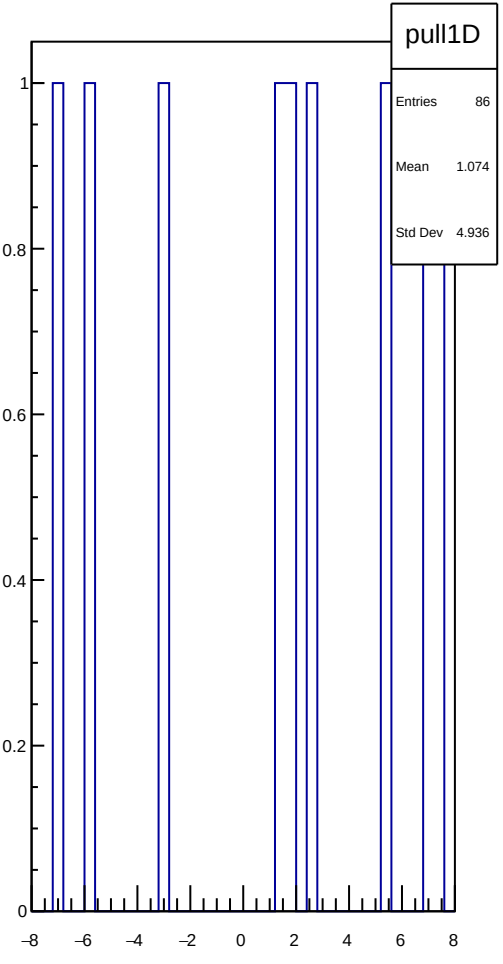

yield_cav4bY_rms vs run
χ² / ndf 2.837e+05 / 85
p0 1.062 ± 0.0009065
3
2.5
2
1.5
1

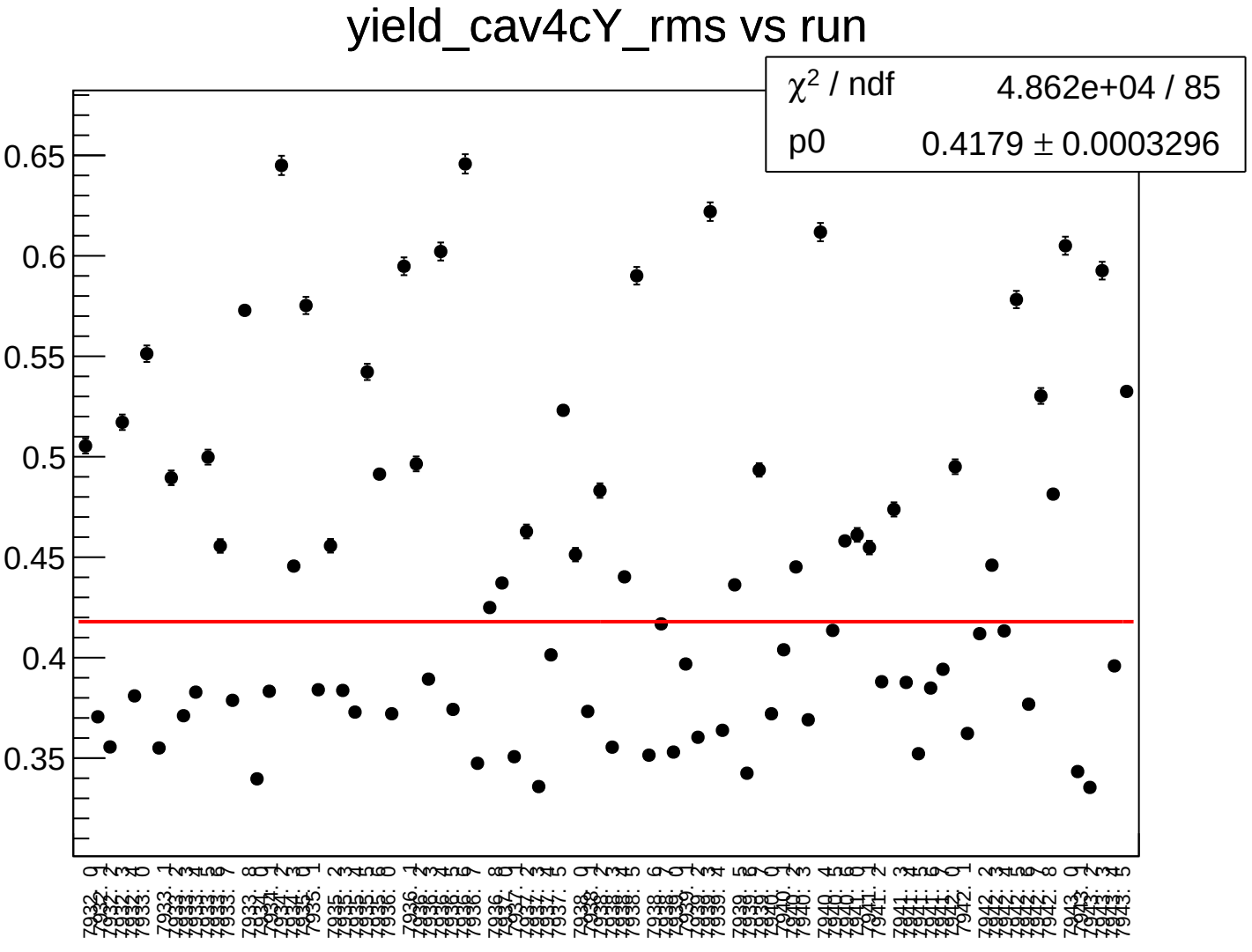

yield_cav4cX_mean vs run
χ² / ndf 6.105e+04 / 85
p0 1.47 ± 0.001987
pull
Entries 86
Mean −3159
Std Dev 3206

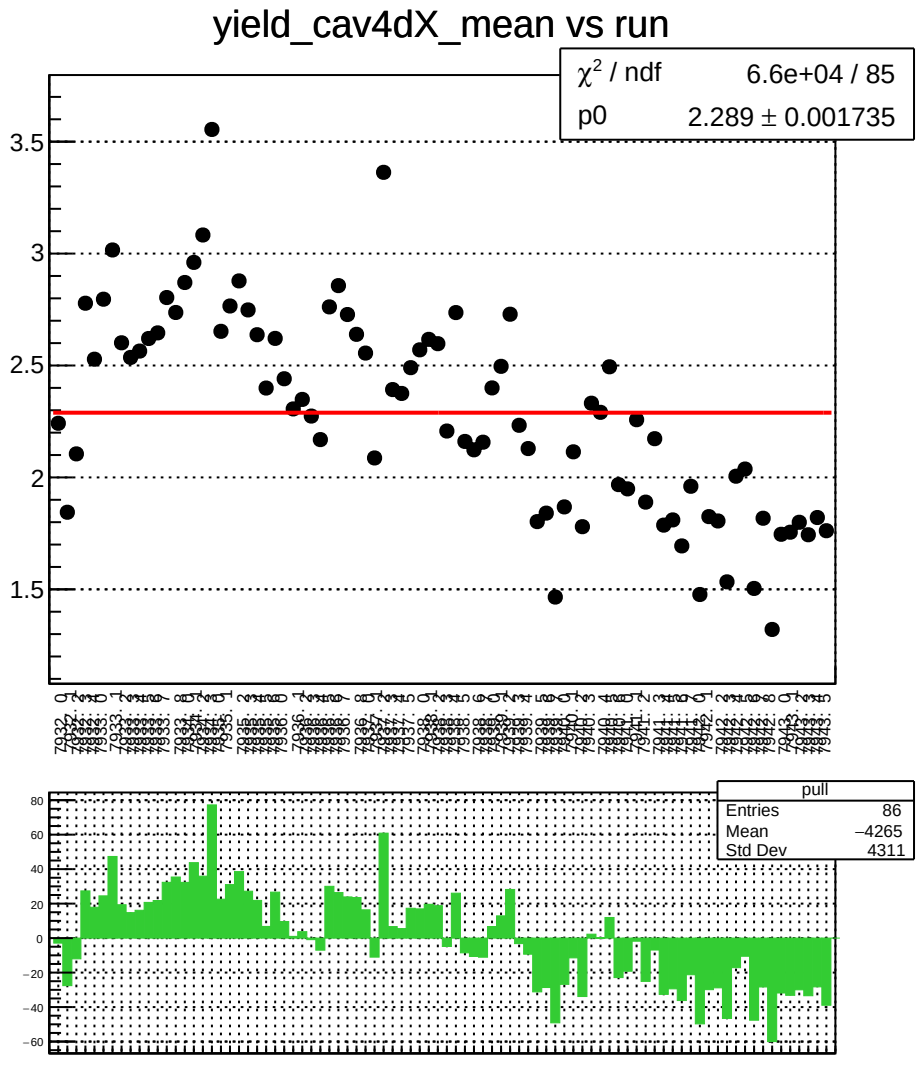

pull1D
Entries 86
Mean −1.126
Std Dev 4.995

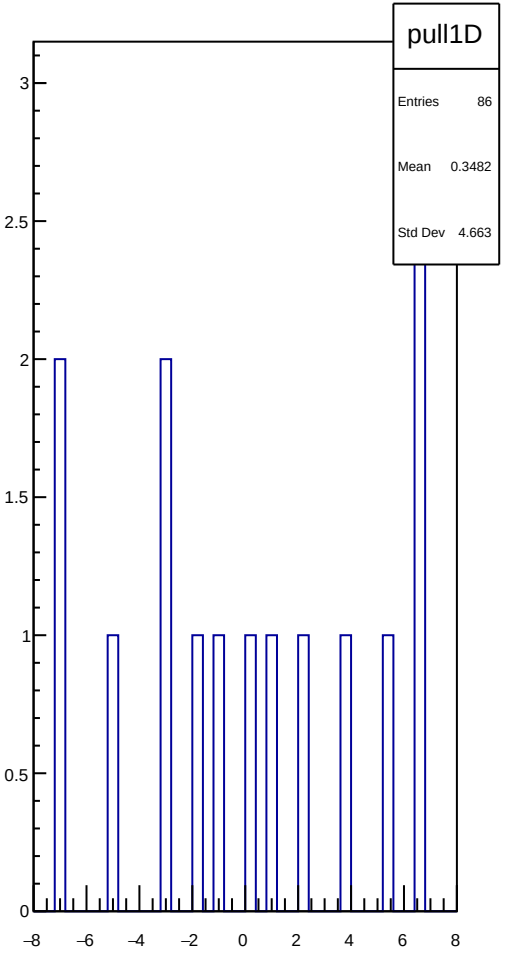

yield_cav4cX_rms vs run
χ² / ndf 8840 / 85
p0 1.804 ± 0.001405
2.6
2.4
2.2
2
1.8
1.6

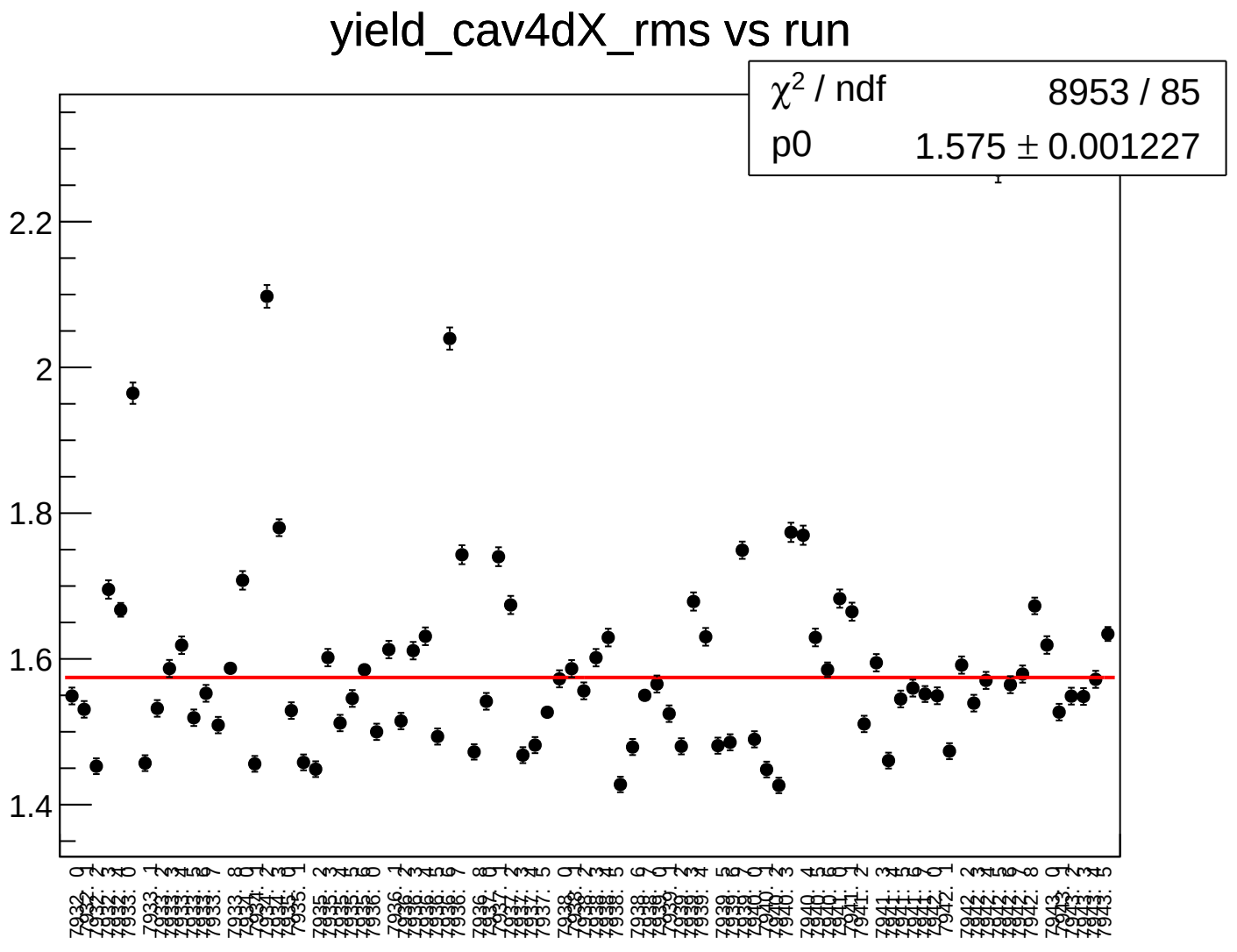

yield_cav4cY_mean vs run
χ² / ndf 2.033e+05 / 85
p0 −37.3 ± 0.0004661
−36.6
−36.8
−37
−37.2
−37.4
−37.6
pull
Entries 86
Mean 42
Std Dev 22.91
100
50
0
−50
−100

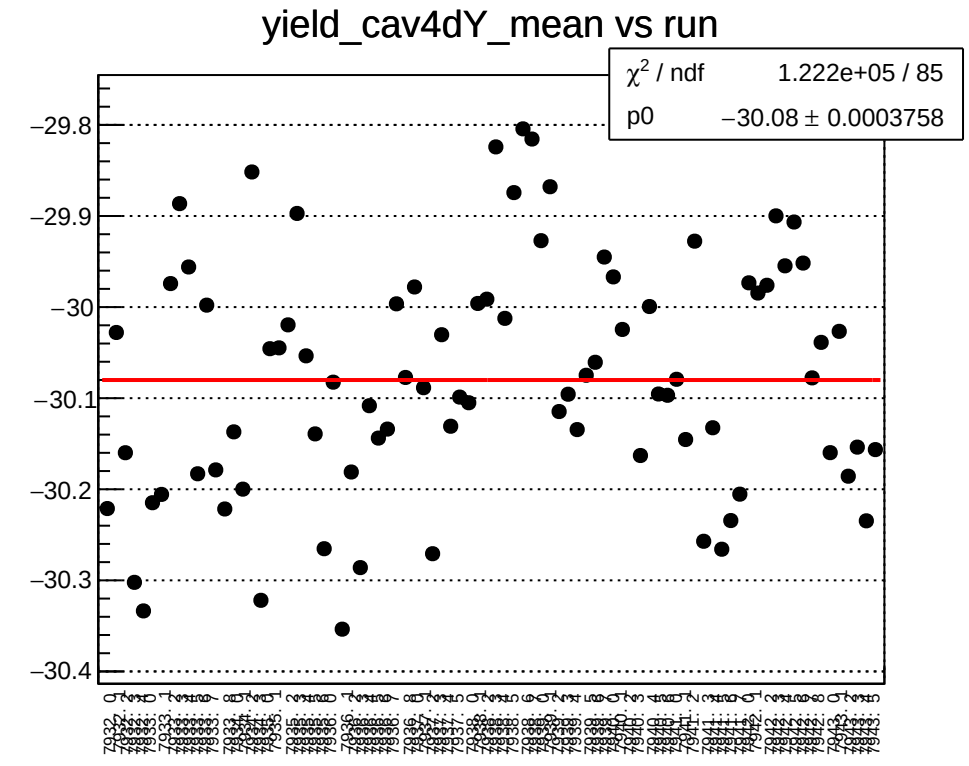

pull1D
Entries 86
Mean 1.074
Std Dev 4.936
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

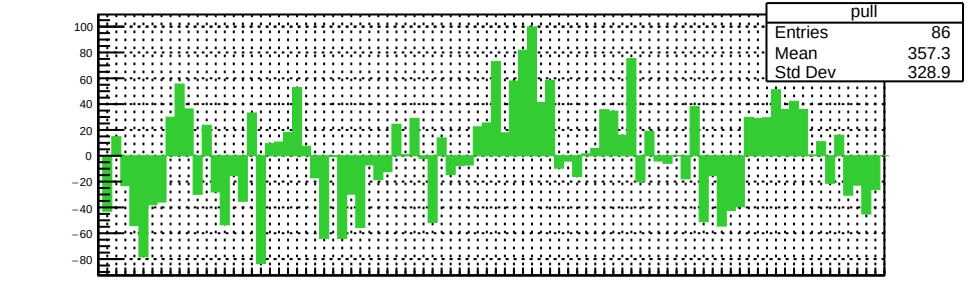

yield_cav4cY_rms vs run
χ² / ndf 4.862e+04 / 85
p0 0.4179 ± 0.0003296
0.65
0.6
0.55
0.5
0.45
0.4
0.35

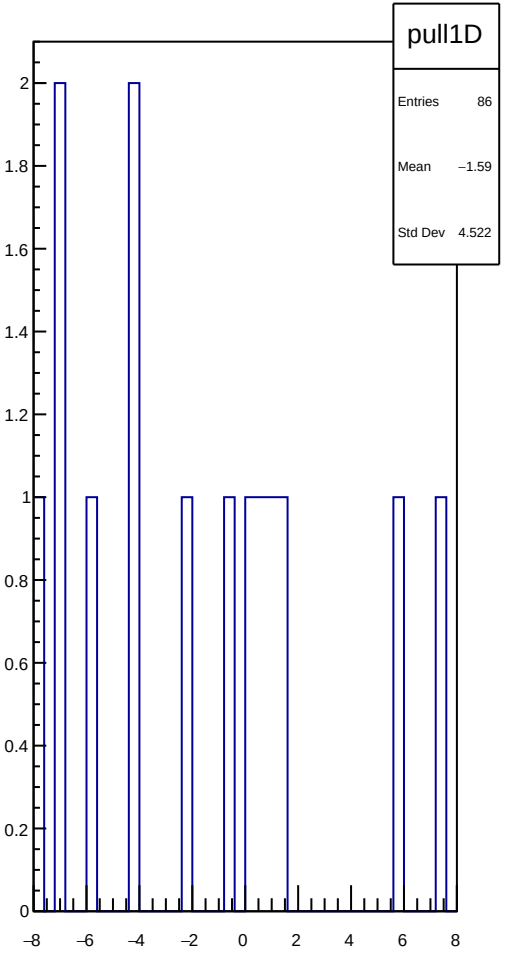

yield_cav4dX_mean vs run
χ² / ndf 6.6e+04 / 85
p0 2.289 ± 0.001735
pull
Entries 86
Mean −4265
Std Dev 4311

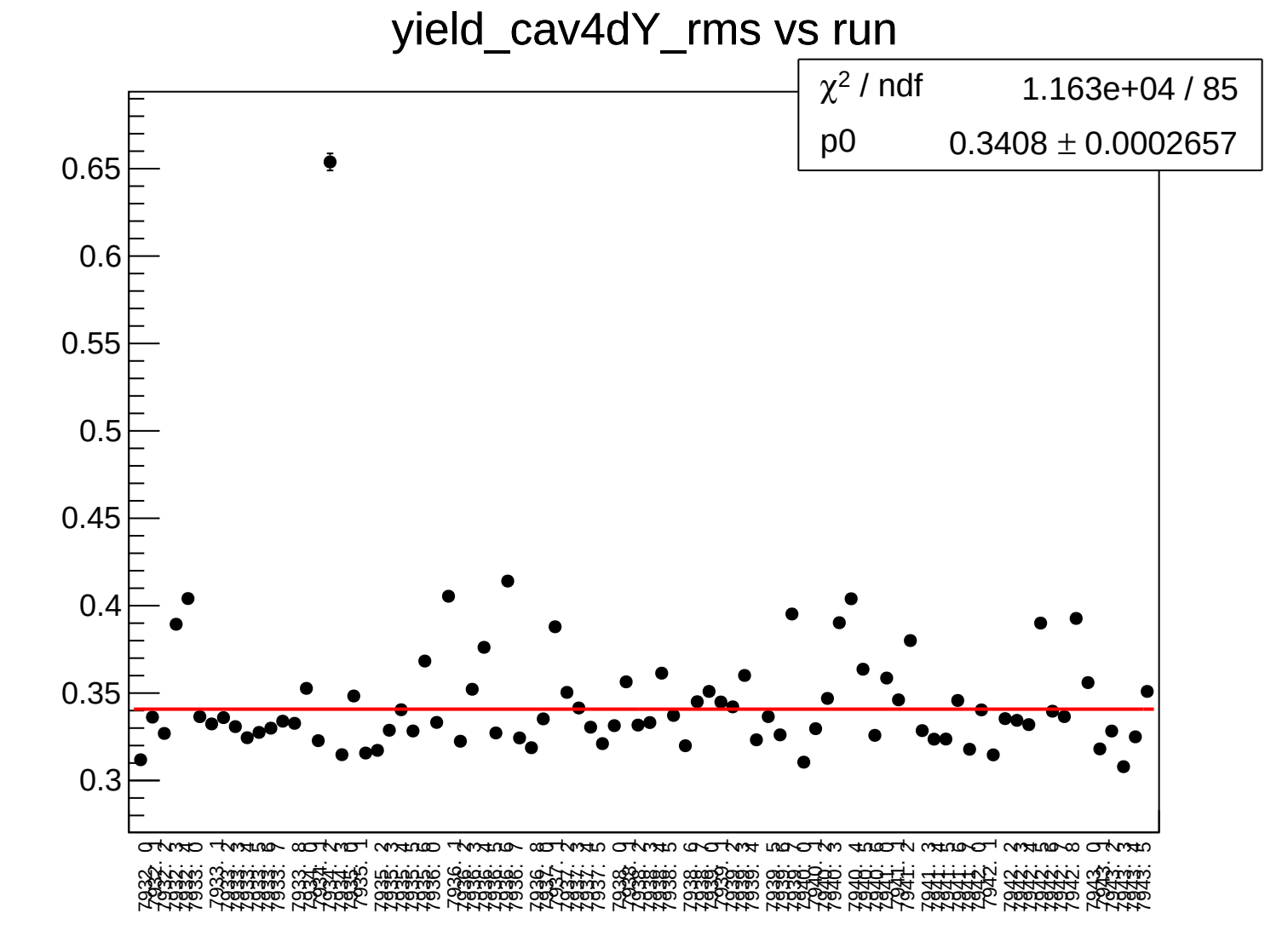

pull1D
Entries 86
Mean 0.3482
Std Dev 4.663

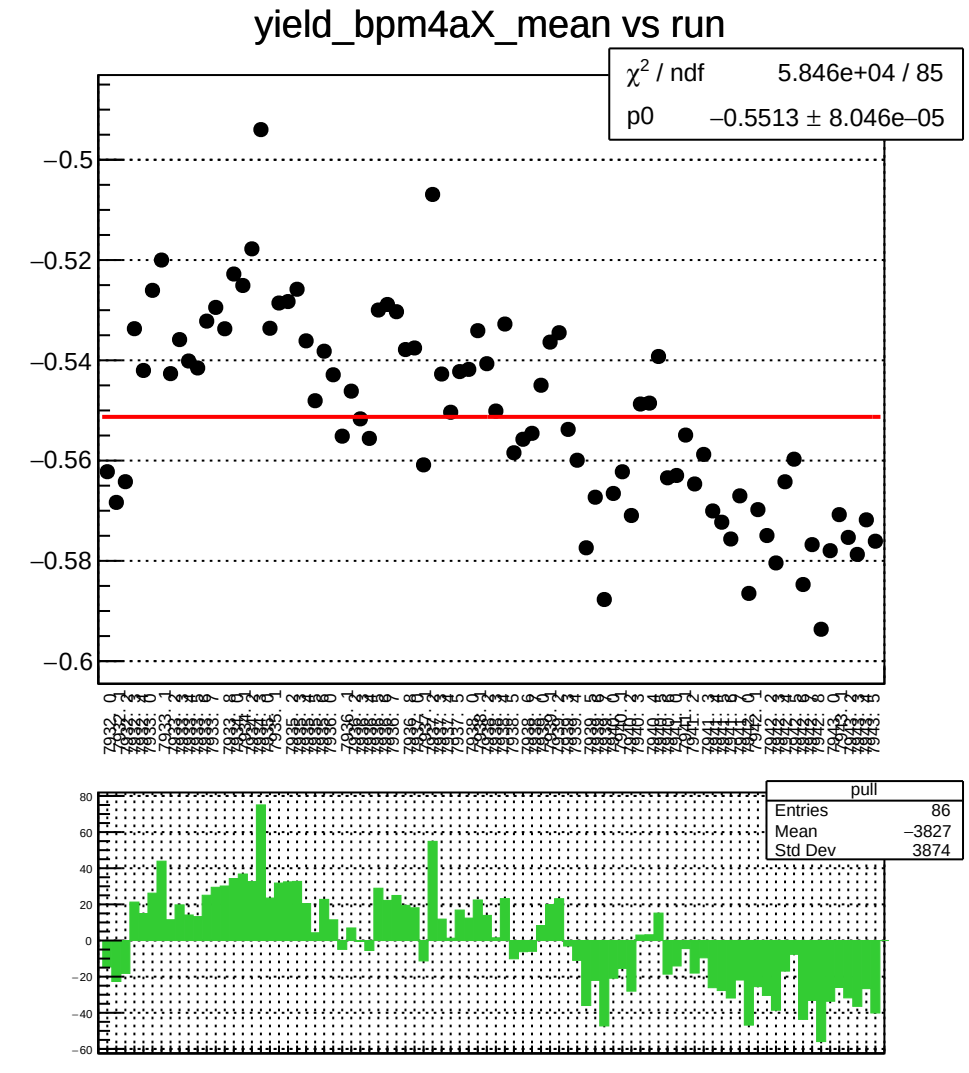

yield_cav4dX_rms vs run
χ^2 / ndf 8953 / 85
p0 1.575 ± 0.001227
2.2
2
1.8
1.6
1.4

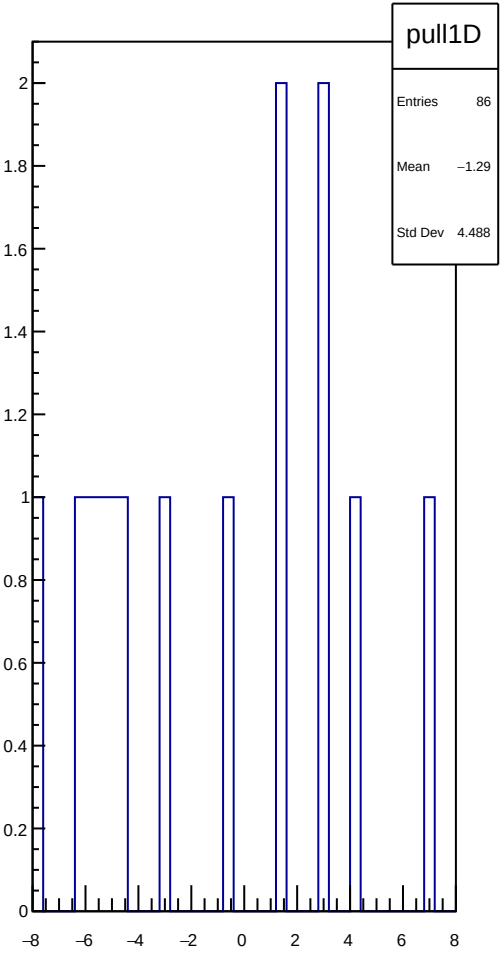

yield_cav4dY_mean vs run
χ² / ndf 1.222e+05 / 85
p0 −30.08 ± 0.0003758
−29.8
−29.9
−30
−30.1
−30.2
−30.3
−30.4

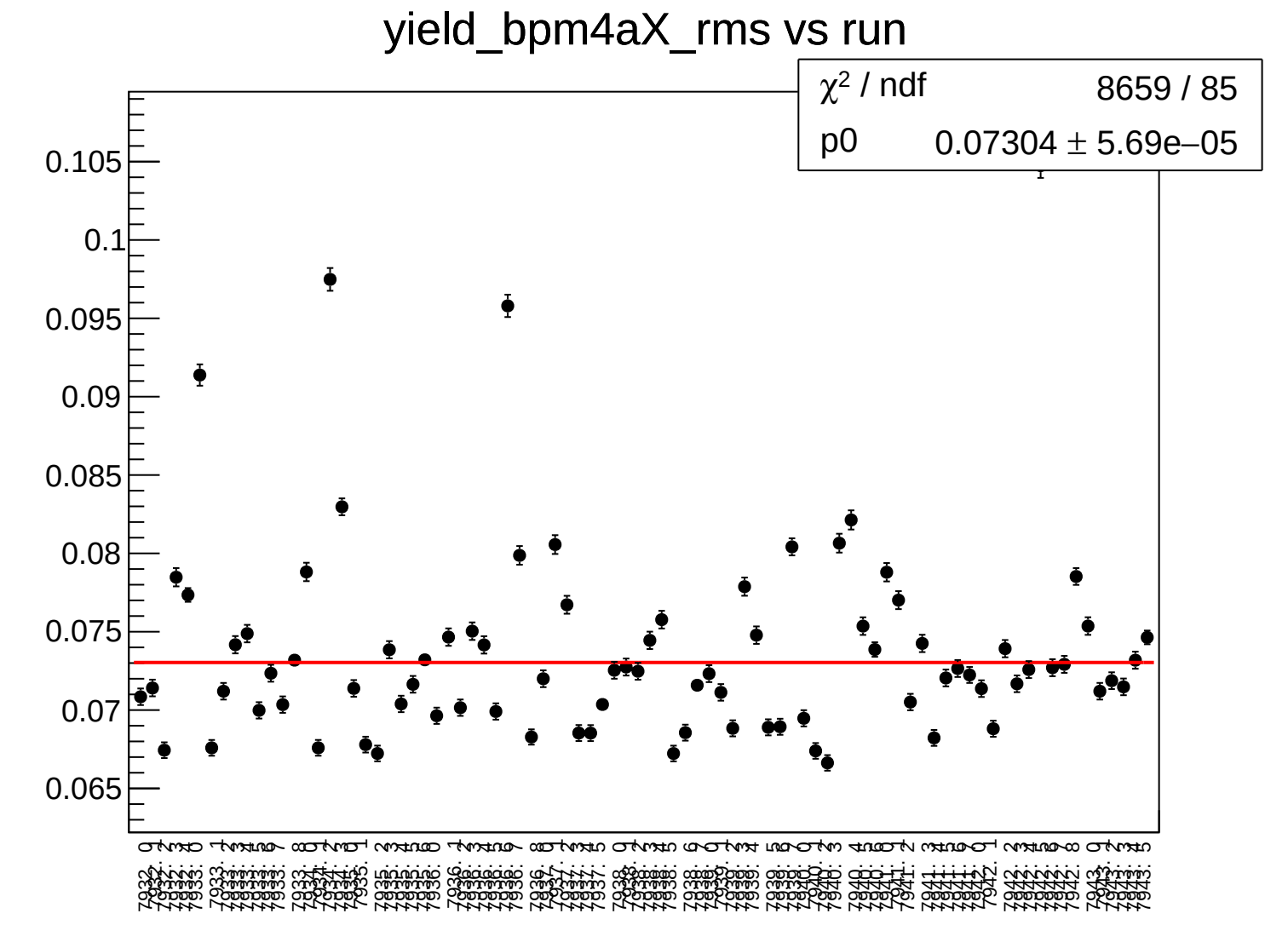

pull
Entries 86
Mean 357.3
Std Dev 328.9
100
80
60
40
20
0
−20
−40
−60
−80

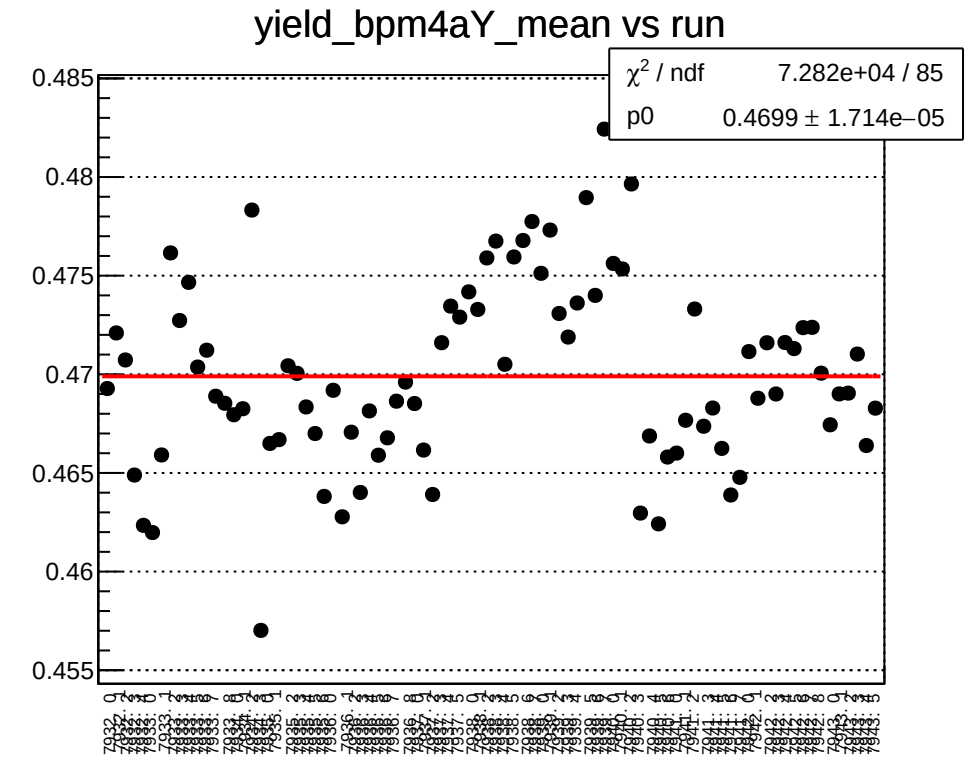

pull1D
Entries 86
Mean −1.59
Std Dev 4.522
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

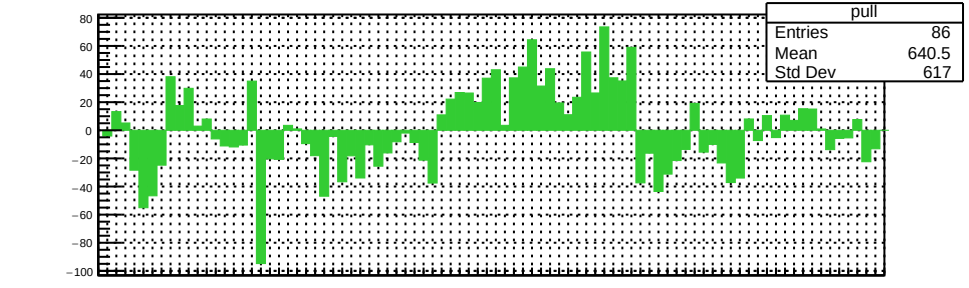

yield_cav4dY_rms vs run
χ² / ndf 1.163e+04 / 85
p0 0.3408 ± 0.0002657
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

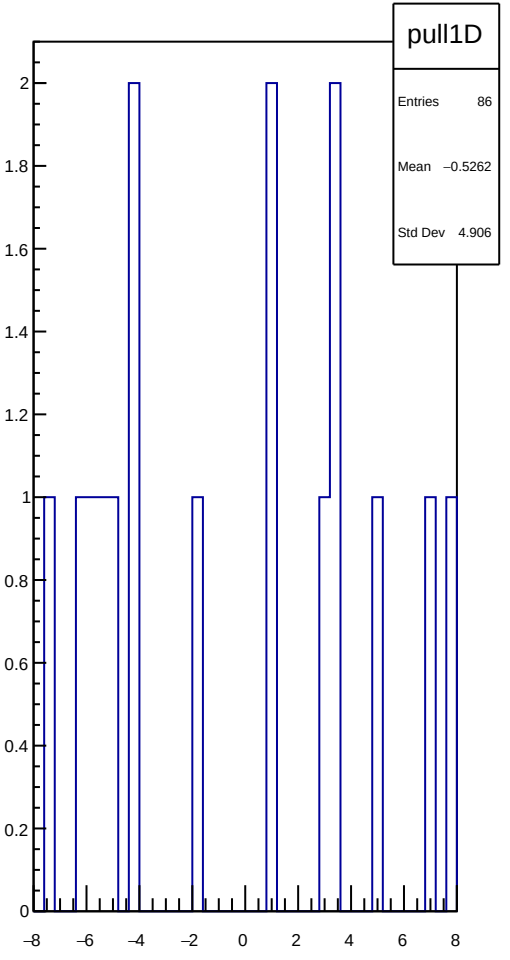

yield_bpm4aX_mean vs run
χ² / ndf 5.846e+04 / 85
p0 −0.5513 ± 8.046e−05
−0.5
−0.52
−0.54
−0.56
−0.58
−0.6
pull
Entries 86
Mean −3827
Std Dev 3874
80
60
40
20
0
−20
−40
−60

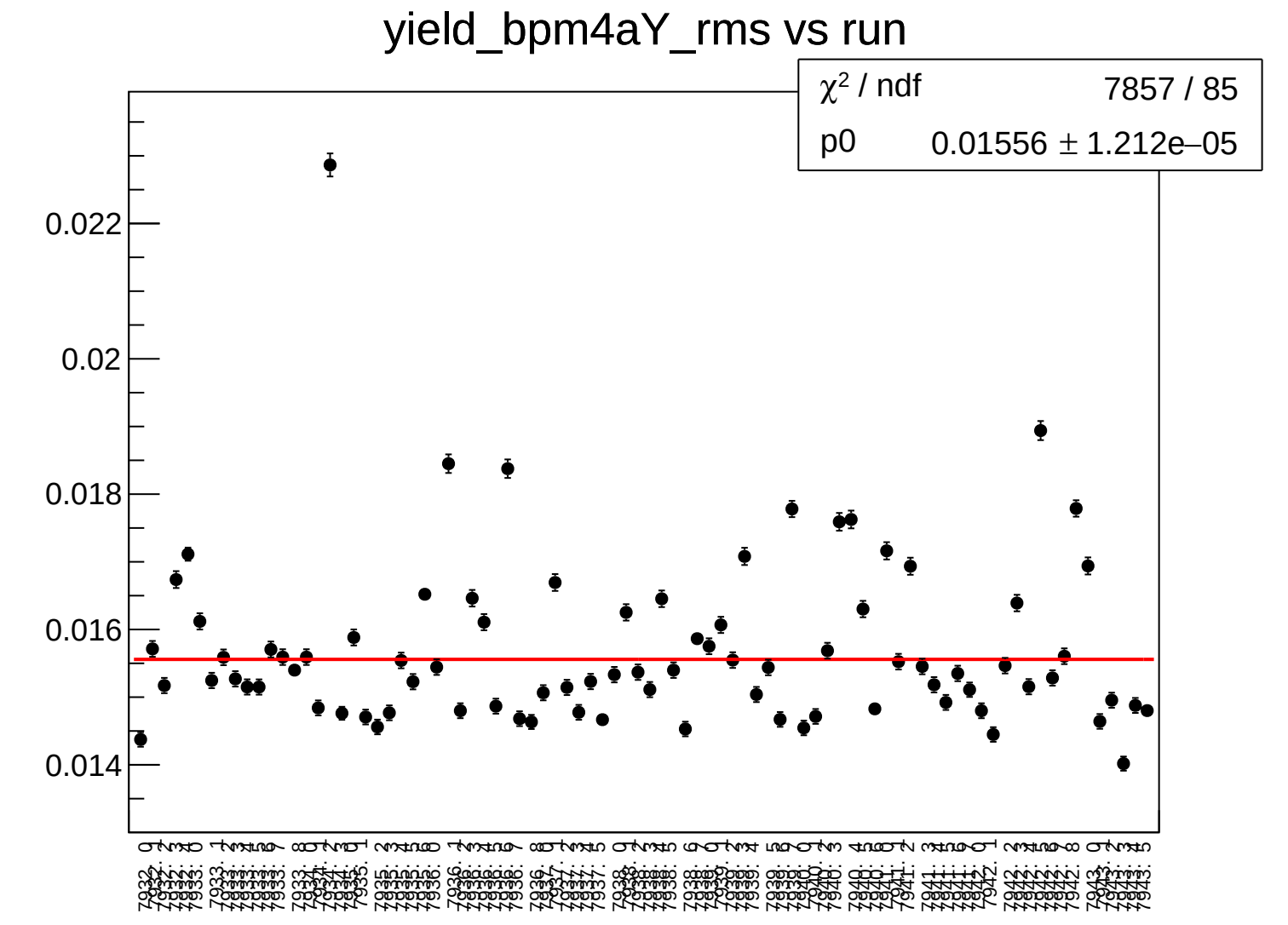

pull1D
Entries 86
Mean −1.29
Std Dev 4.488
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

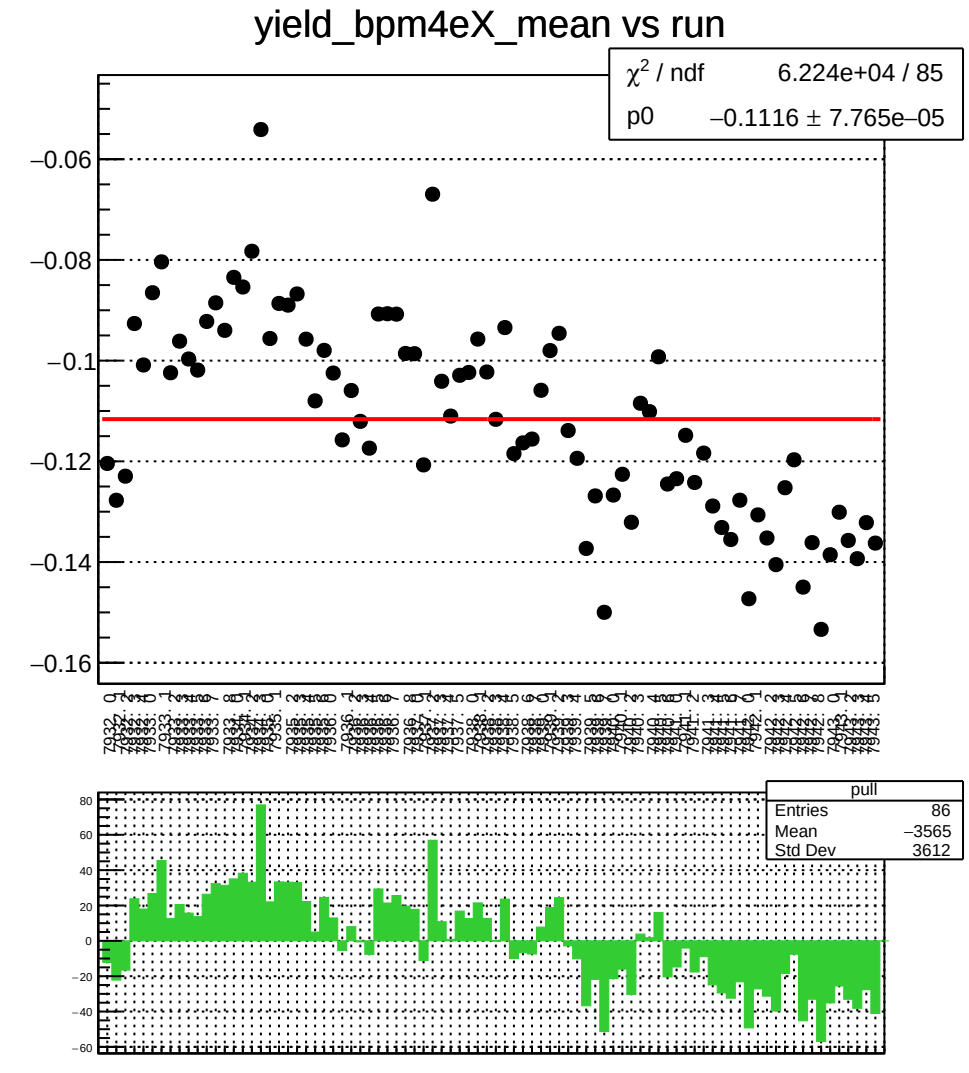

yield_bpm4aX_rms vs run
χ² / ndf 8659 / 85
p0 0.07304 ± 5.69e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

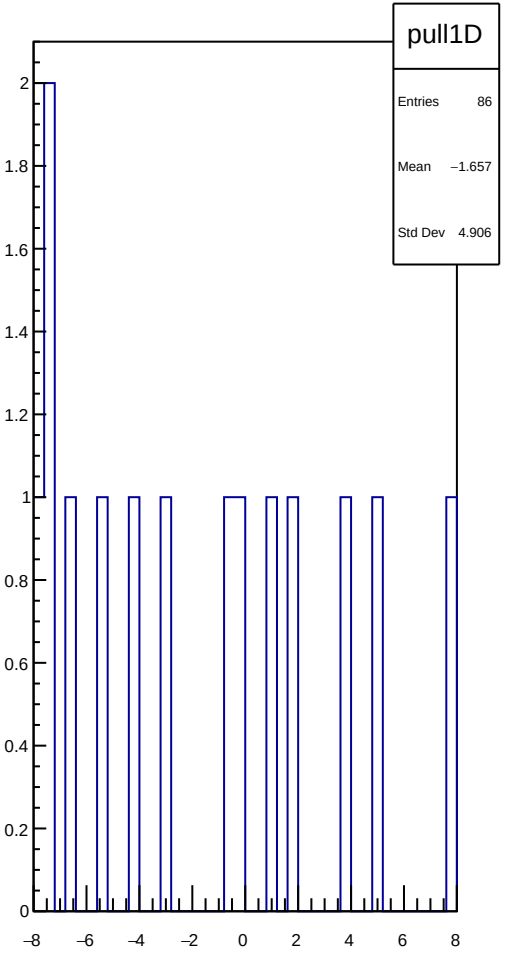

yield_bpm4aY_mean vs run
χ² / ndf 7.282e+04 / 85
p0 0.4699 ± 1.714e−05
0.485
0.48
0.475
0.47
0.465
0.46
0.455

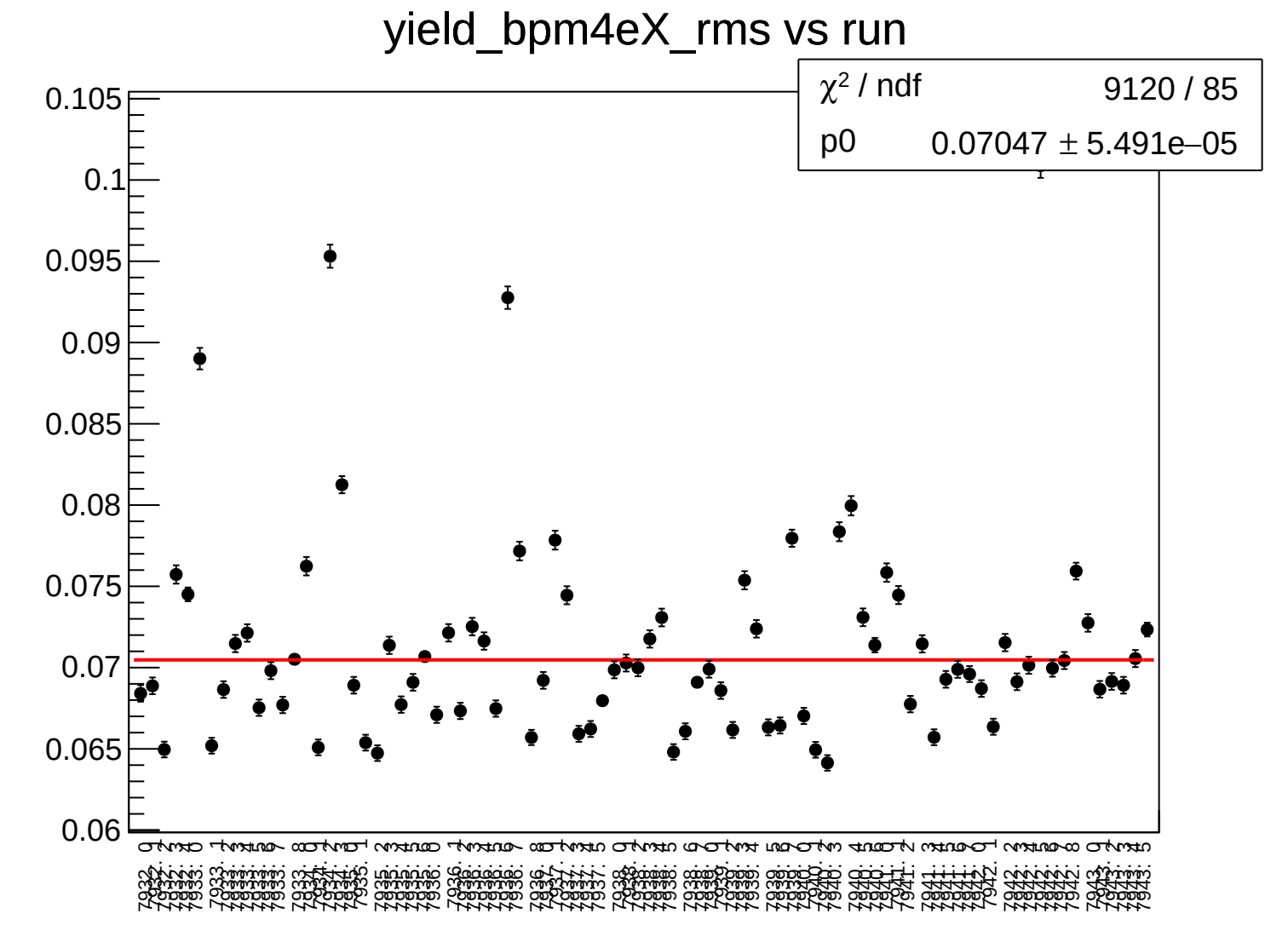

pull
Entries 86
Mean 640.5
Std Dev 617
80
60
40
20
0
−20
−40
−60
−80
−100

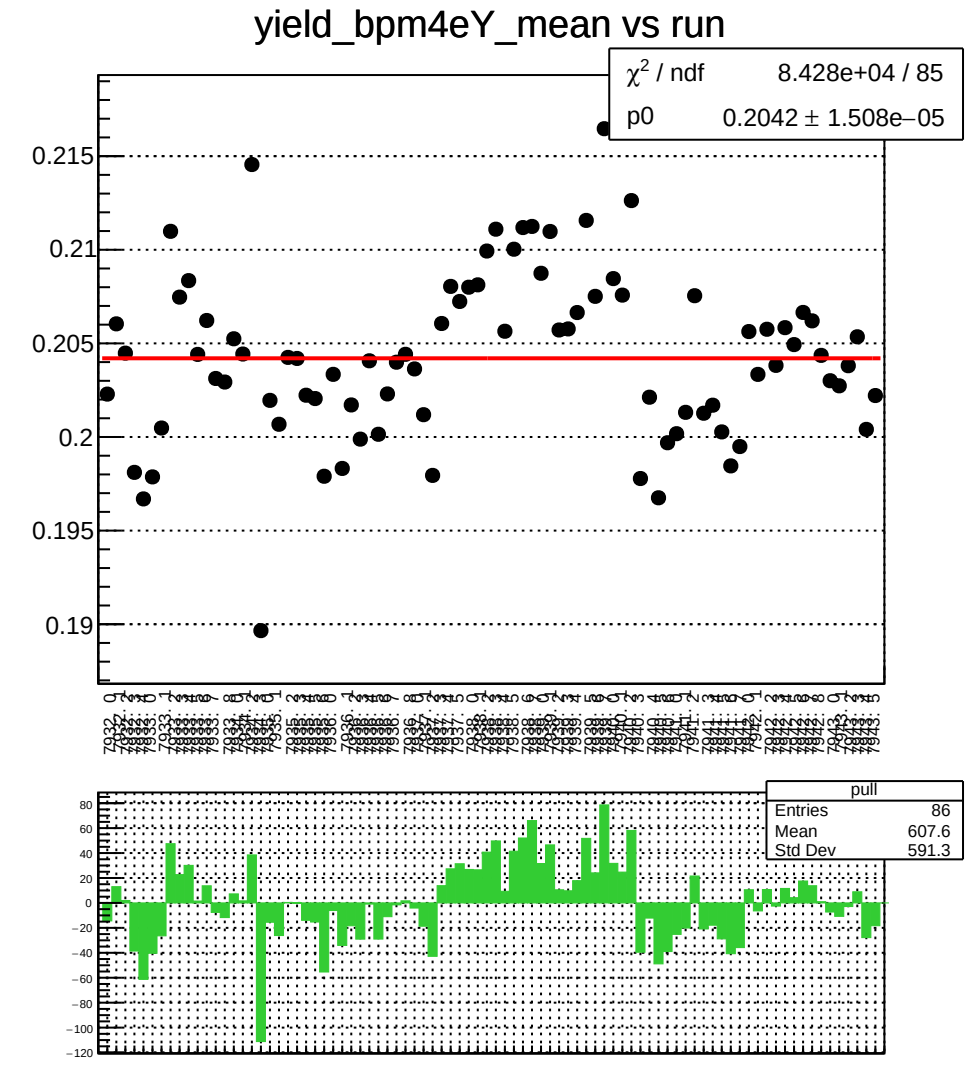

pull1D
Entries 86
Mean −0.5262
Std Dev 4.906
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

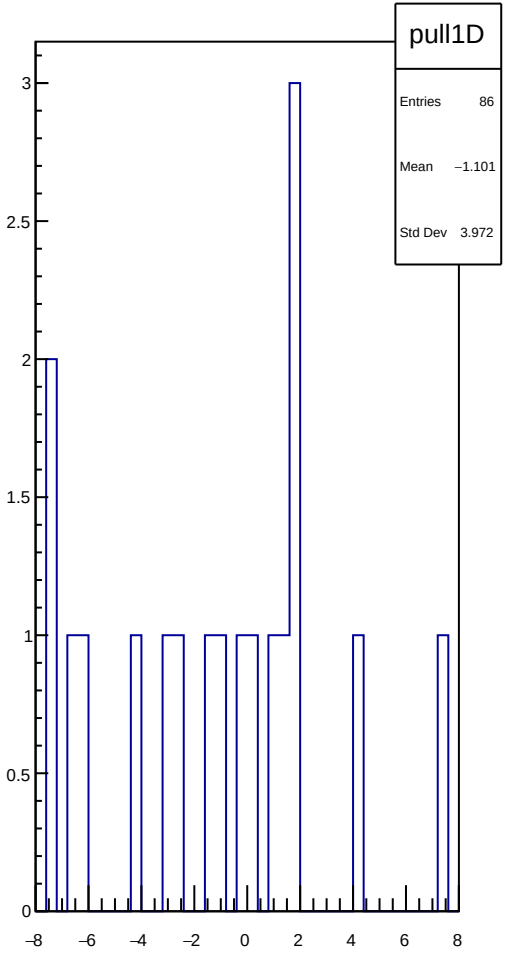

yield_bpm4aY_rms vs run
χ² / ndf 7857 / 85
p0 0.01556 ± 1.212e–05
0.022
0.02
0.018
0.016
0.014

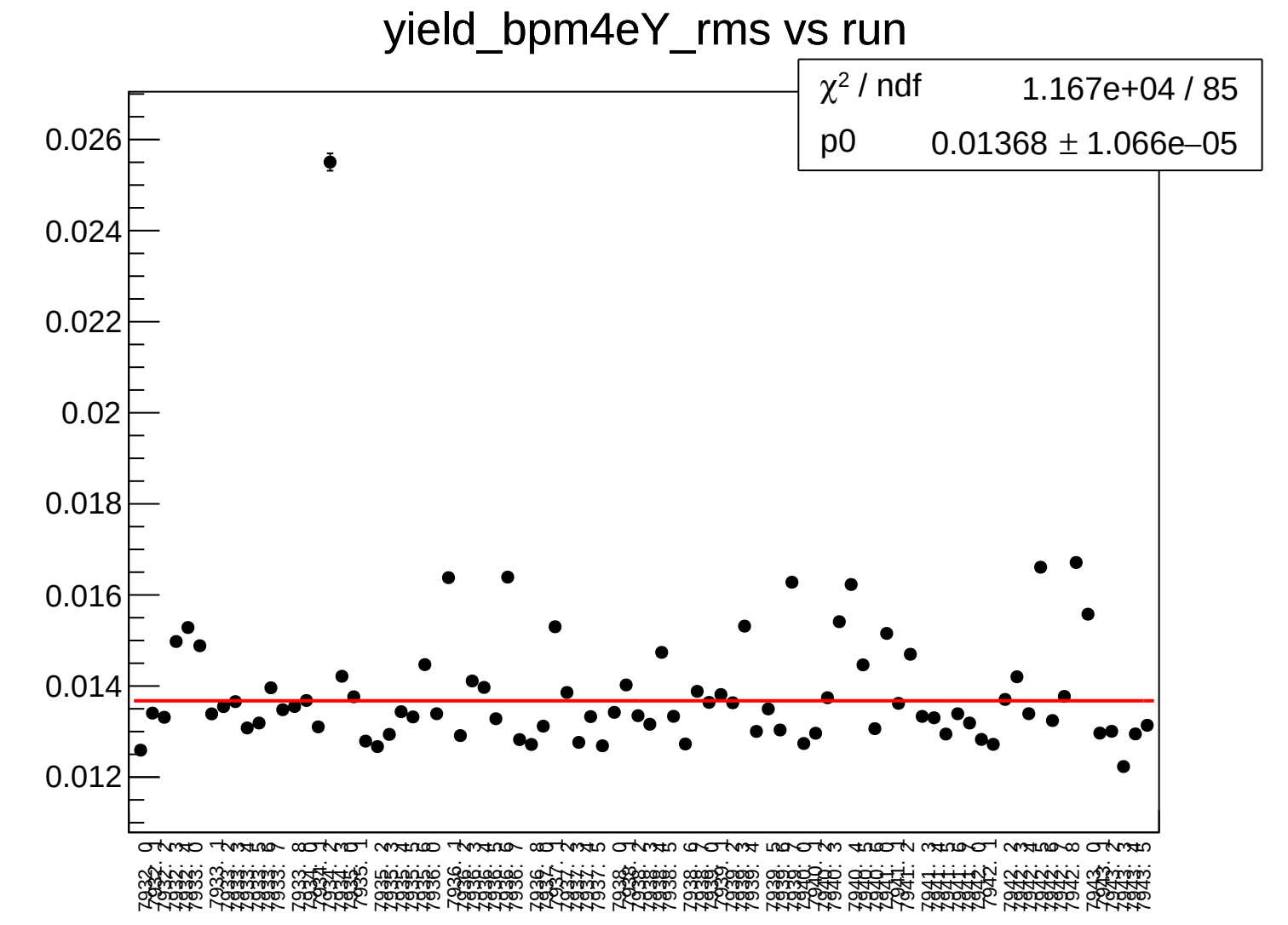

yield_bpm4eX_mean vs run
χ² / ndf 6.224e+04 / 85
p0 −0.1116 ± 7.765e−05
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
pull
Entries 86
Mean −3565
Std Dev 3612
80
60
40
20
0
−20
−40
−60

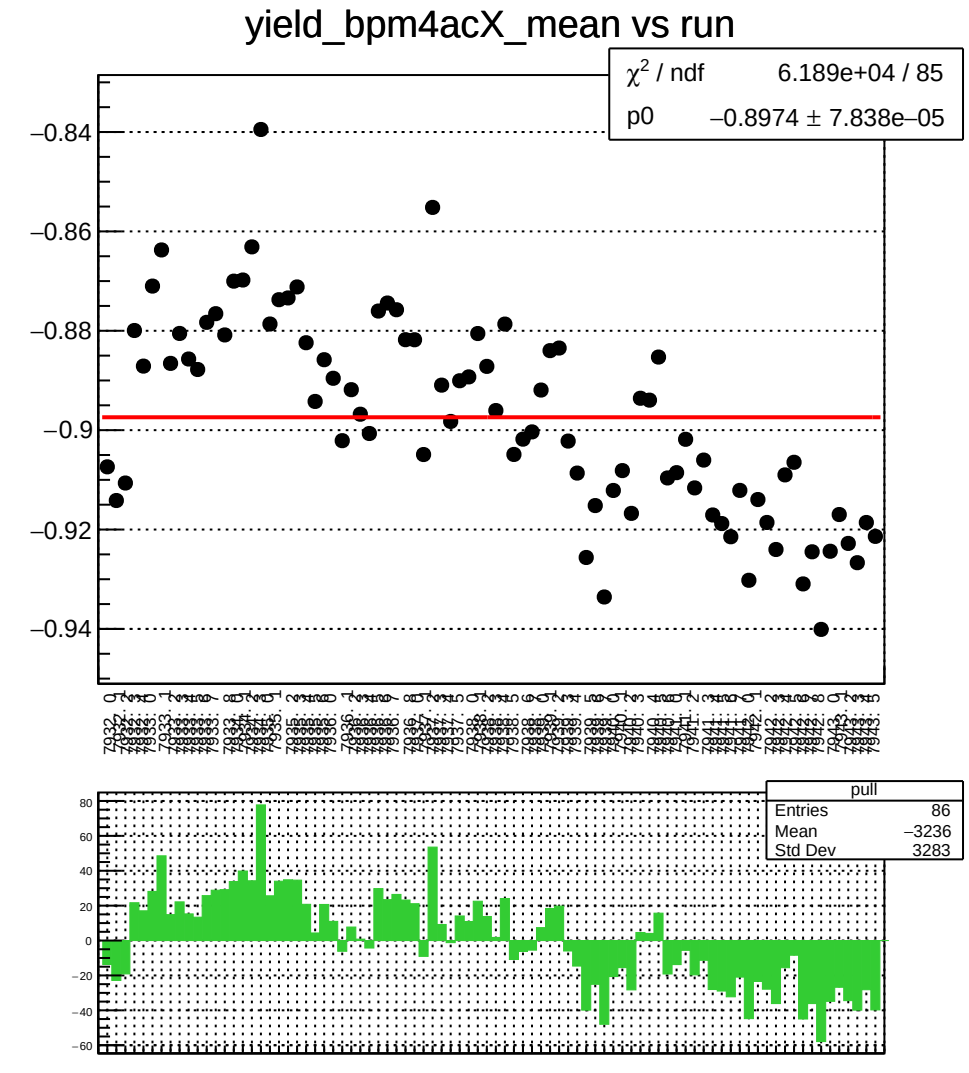

pull1D
Entries 86
Mean −1.657
Std Dev 4.906
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

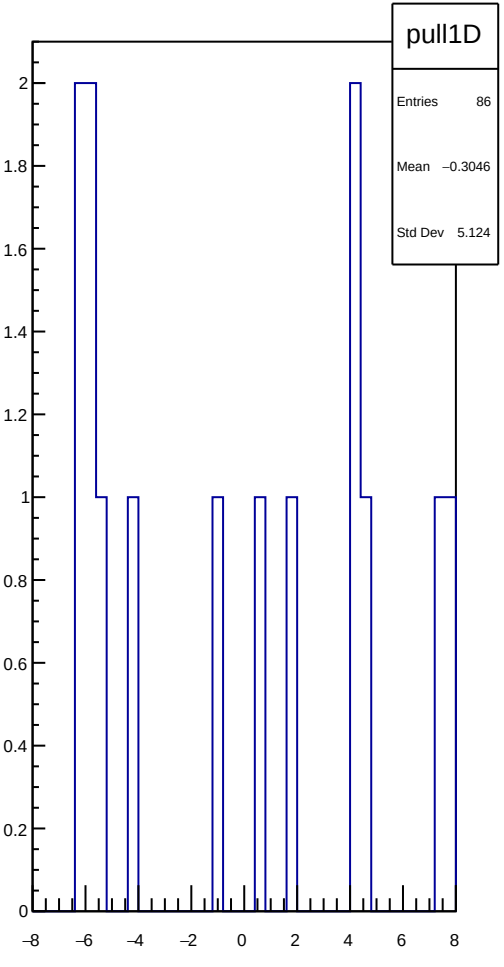

yield_bpm4eX_rms vs run
χ² / ndf 9120 / 85
p0 0.07047 ± 5.491e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065
0.06

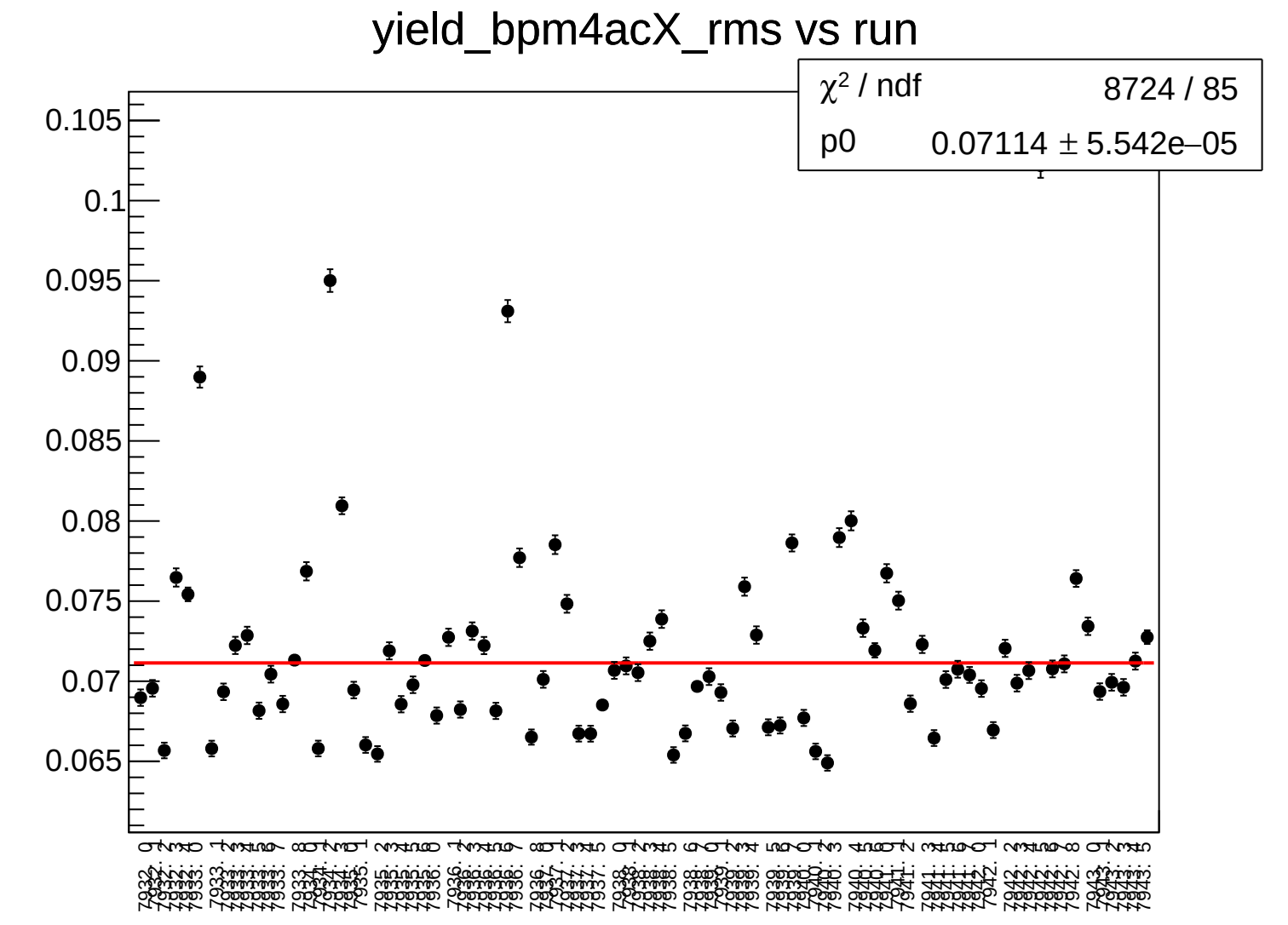

yield_bpm4eY_mean vs run
χ² / ndf 8.428e+04 / 85
p0 0.2042 ± 1.508e−05
0.215
0.21
0.205
0.2
0.195
0.19
pull
Entries 86
Mean 607.6
Std Dev 591.3
80
60
40
20
0
−20
−40
−60
−80
−100
−120

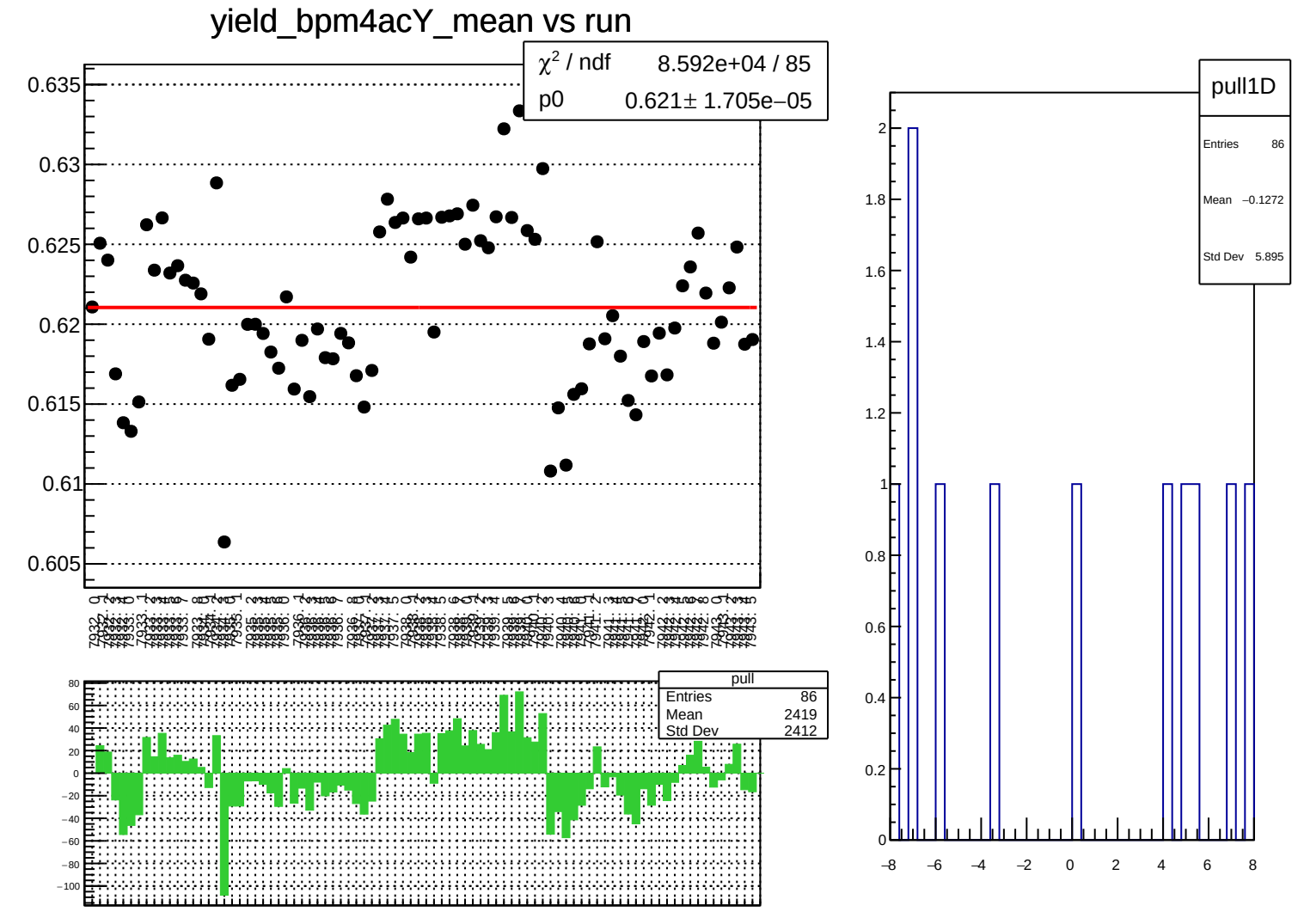

pull1D
Entries 86
Mean −1.101
Std Dev 3.972
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

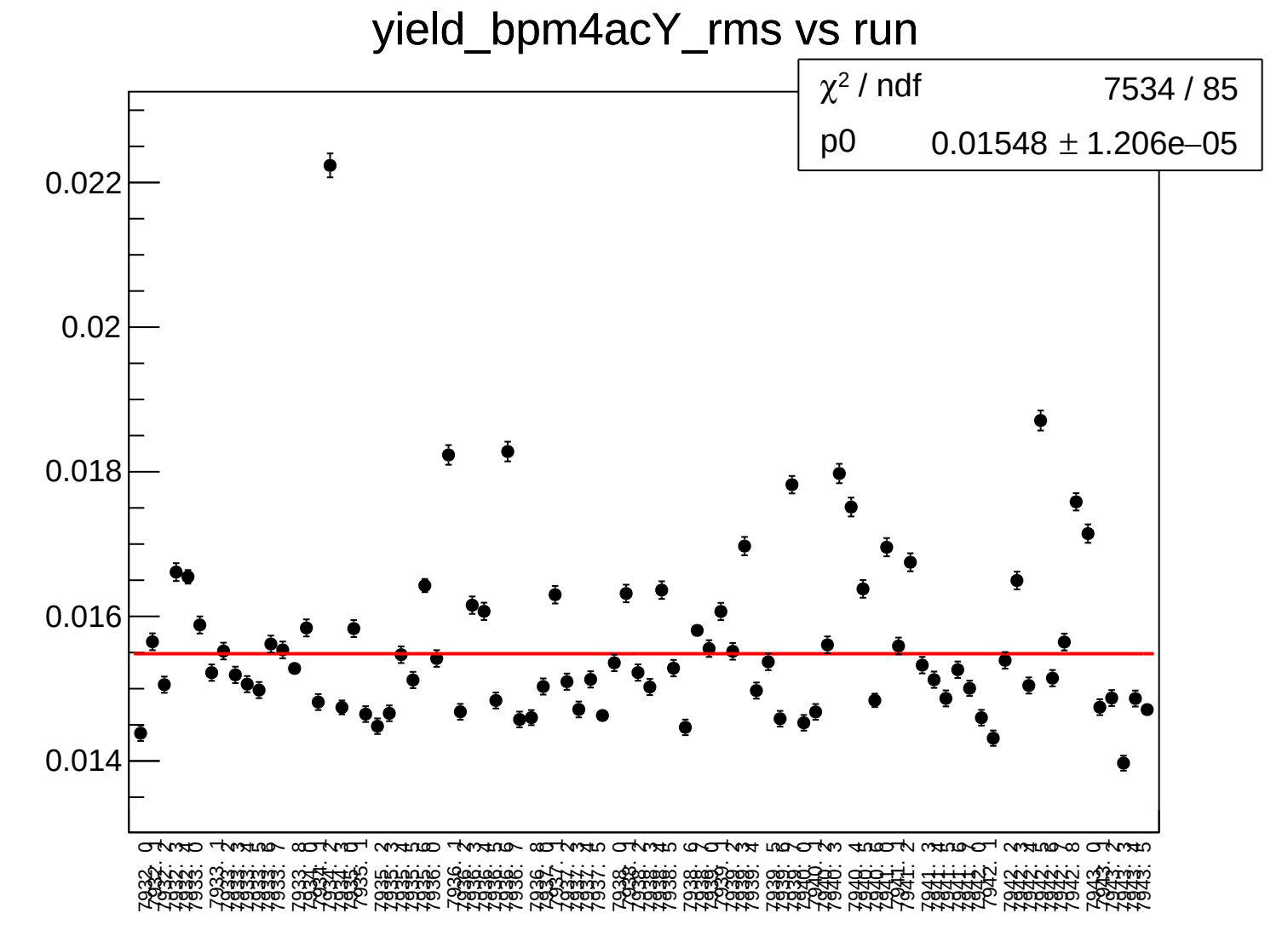

yield_bpm4eY_rms vs run
χ² / ndf 1.167e+04 / 85
p0 0.01368 ± 1.066e−05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

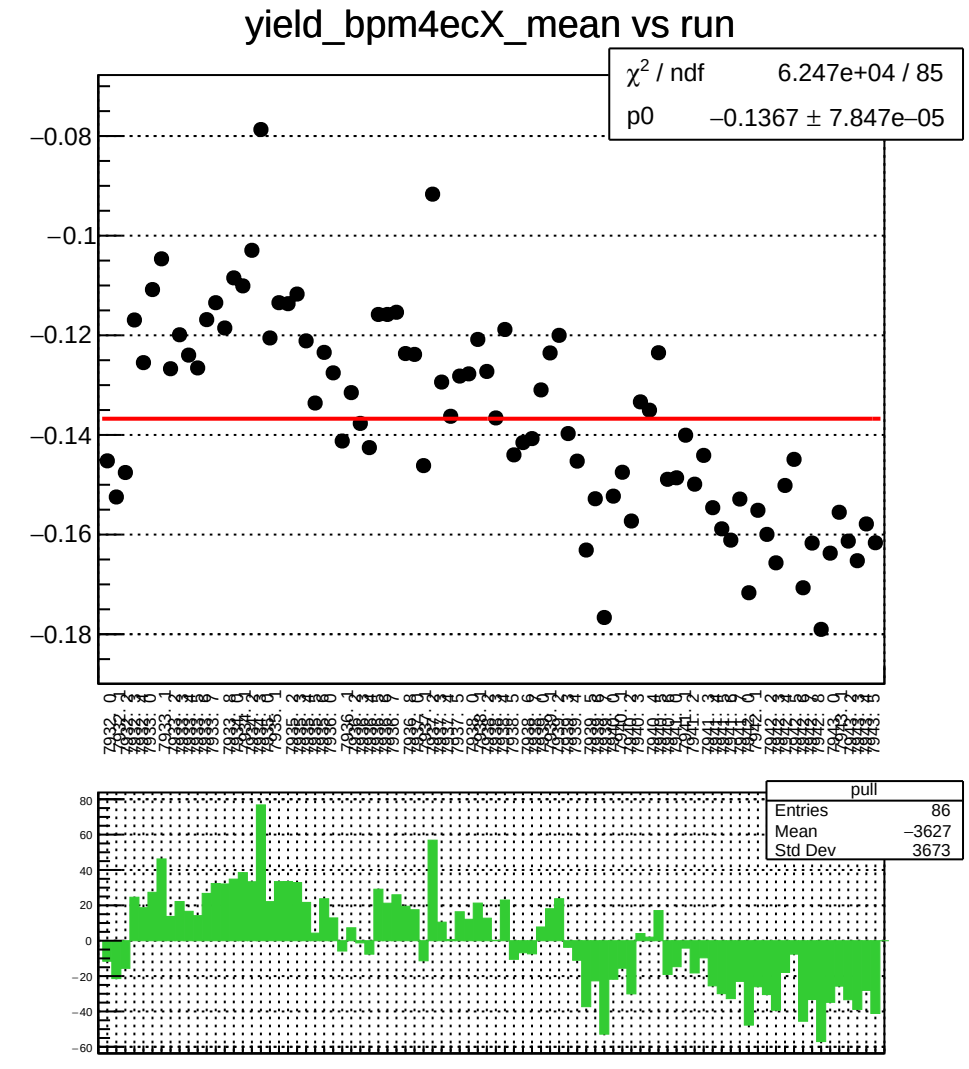

yield_bpm4acX_mean vs run
χ² / ndf 6.189e+04 / 85
p0 −0.8974 ± 7.838e−05
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 86
Mean −3236
Std Dev 3283
80
60
40
20
0
−20
−40
−60

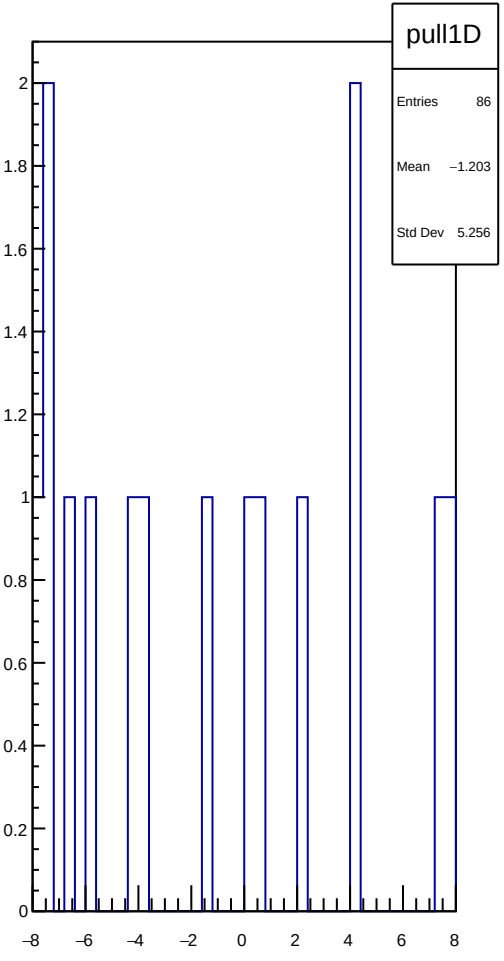

pull1D
Entries 86
Mean −0.3046
Std Dev 5.124
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

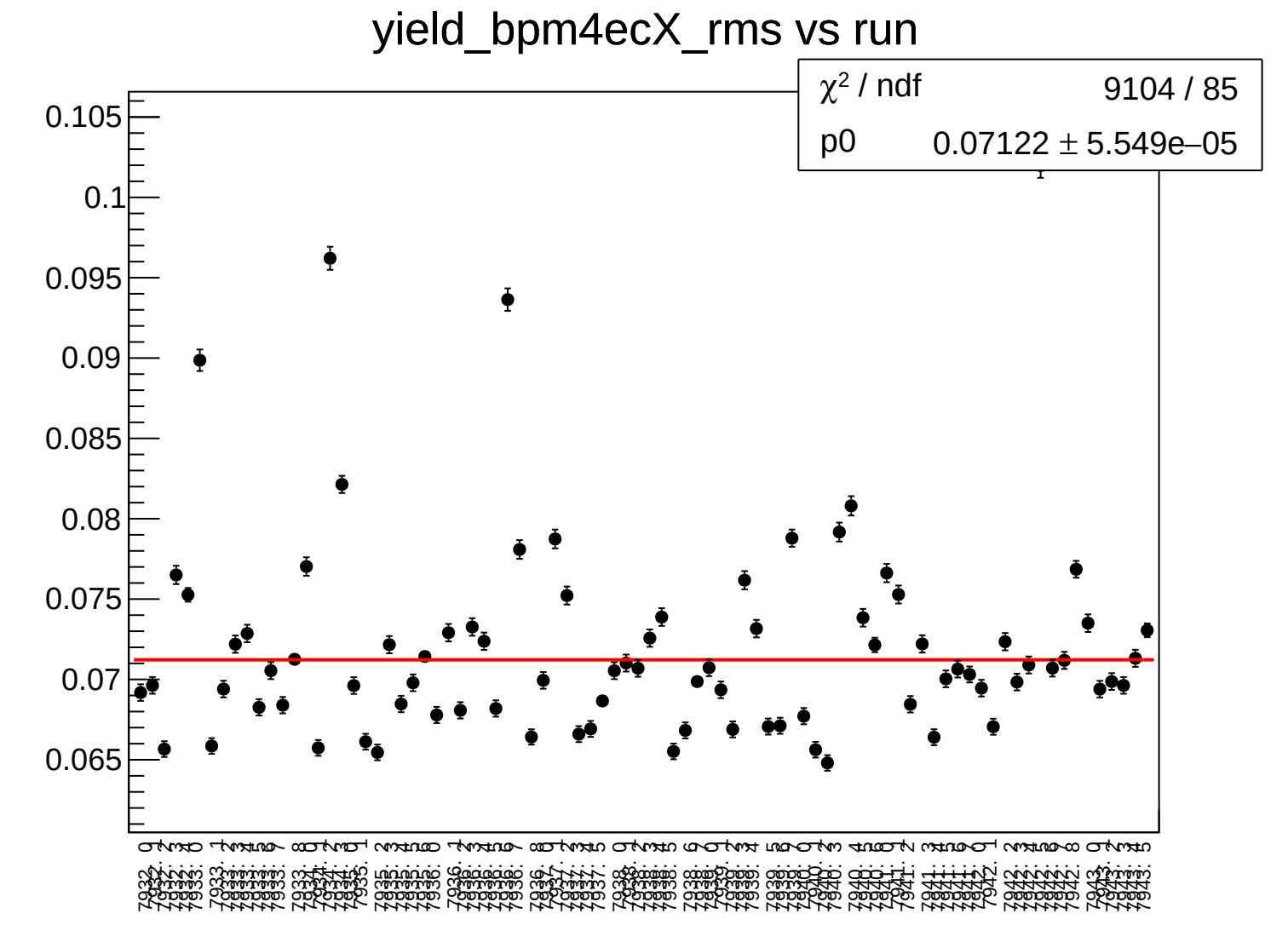

yield_bpm4acX_rms vs run
χ² / ndf 8724 / 85
p0 0.07114 ± 5.542e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

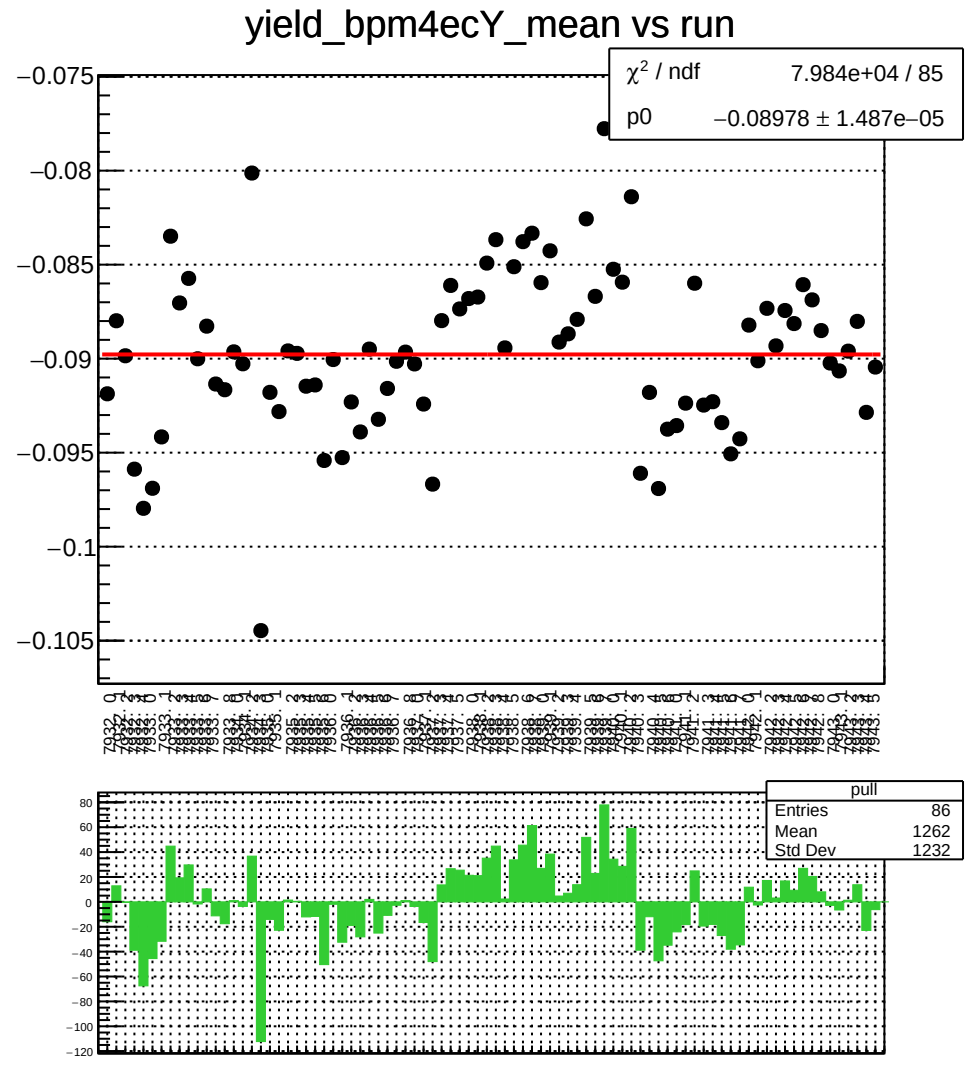

yield_bpm4acY_mean vs run
χ² / ndf 8.592e+04 / 85
p0 0.621± 1.705e−05
0.635
0.63
0.625
0.62
0.615
0.61
0.605
pull
Entries 86
Mean 2419
Std Dev 2412
80
60
40
20
0
−20
−40
−60
−80
−100
pull1D
Entries 86
Mean −0.1272
Std Dev 5.895
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

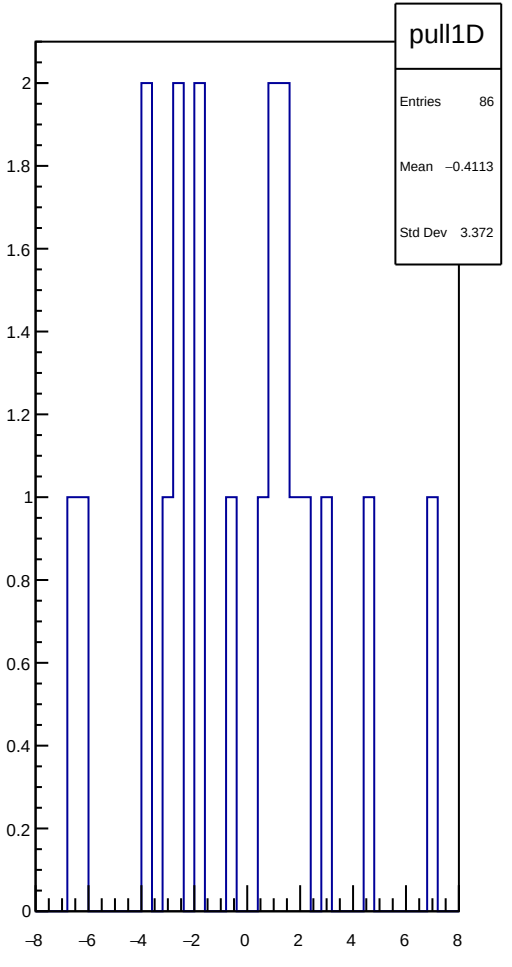

yield_bpm4acY_rms vs run
χ² / ndf 7534 / 85
p0 0.01548 ± 1.206e–05
0.022
0.02
0.018
0.016
0.014

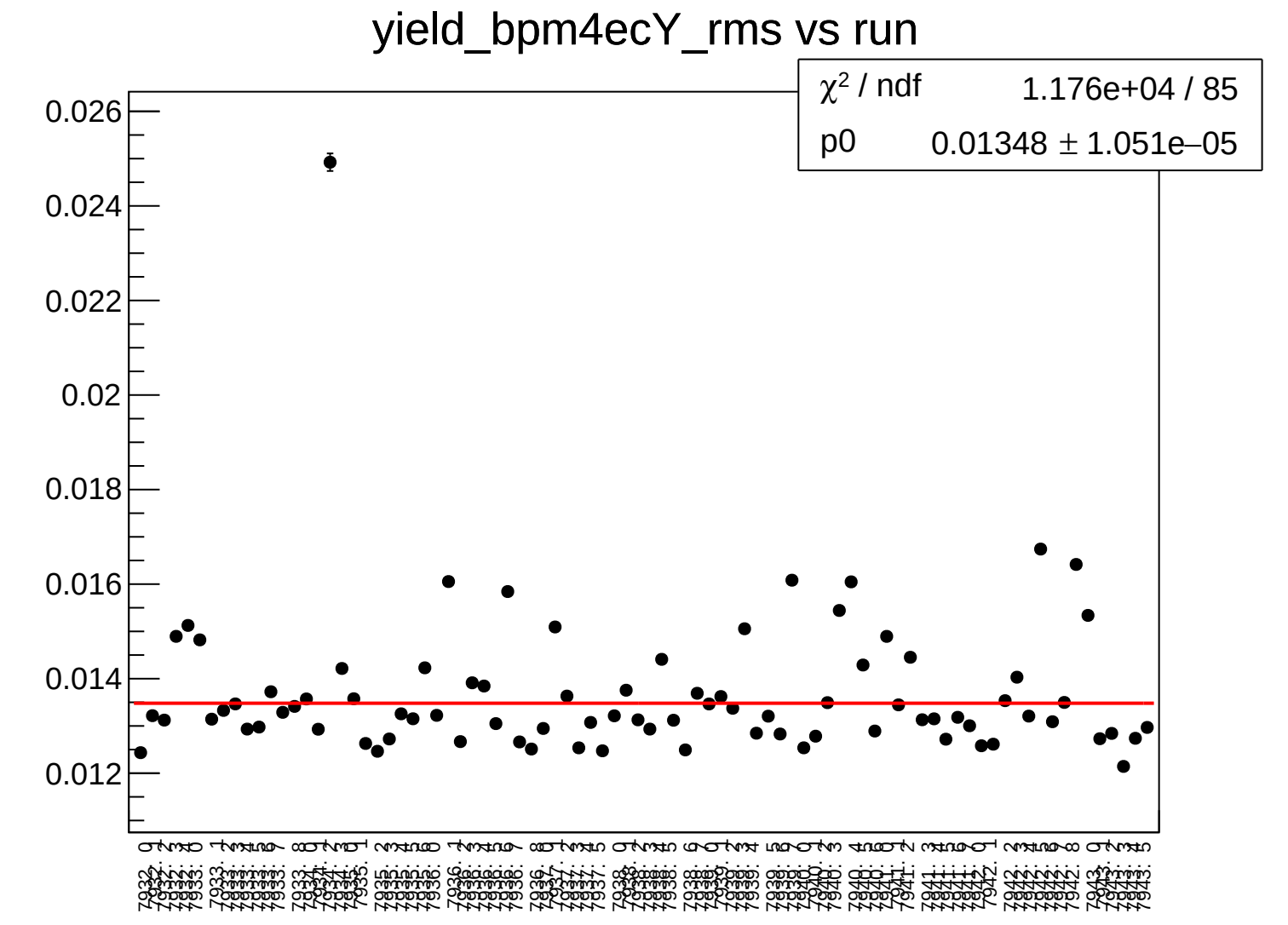

yield_bpm4ecX_mean vs run
χ² / ndf 6.247e+04 / 85
p0 −0.1367 ± 7.847e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 86
Mean −3627
Std Dev 3673
80
60
40
20
0
−20
−40
−60

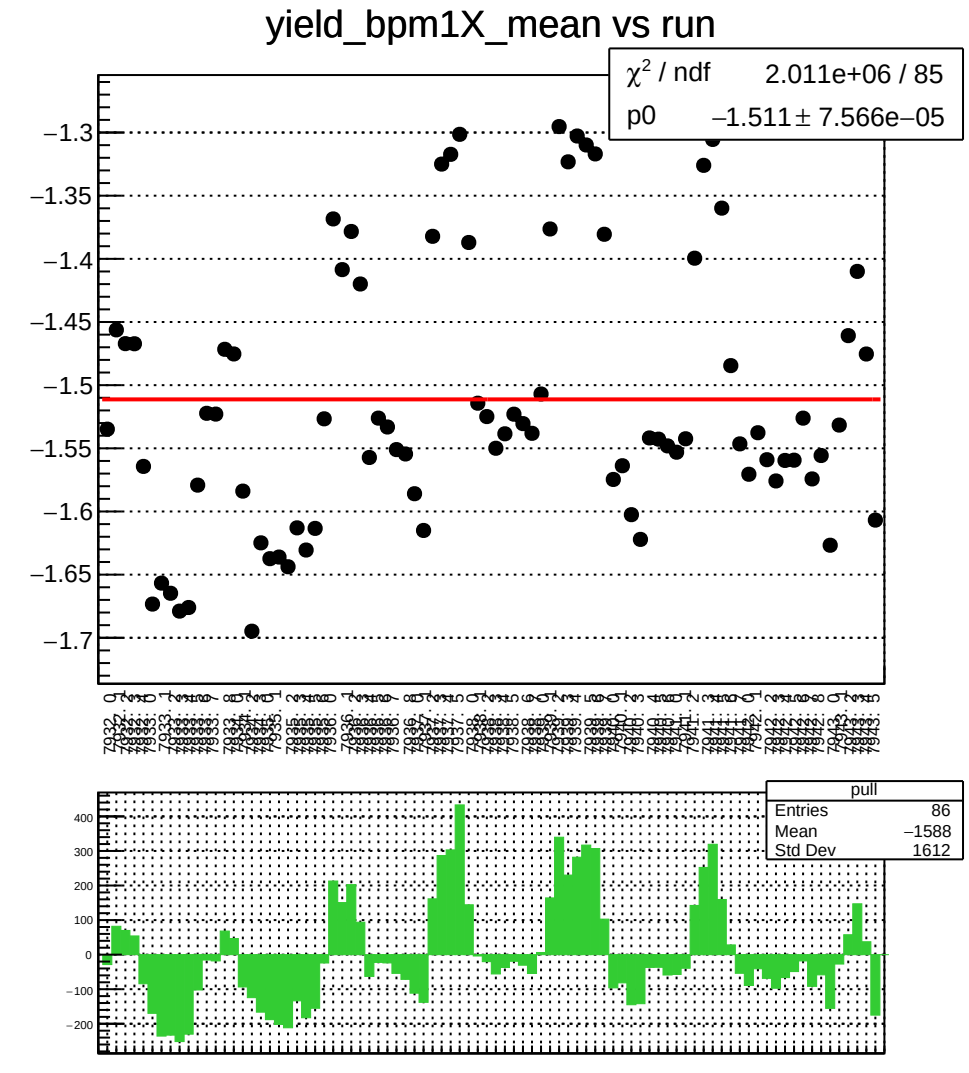

pull1D
Entries 86
Mean −1.203
Std Dev 5.256
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

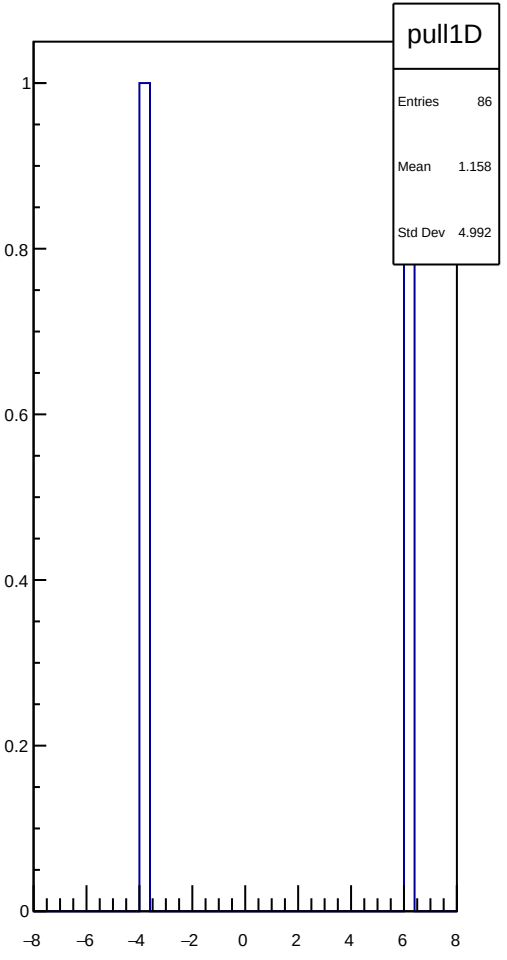

yield_bpm4ecX_rms vs run
χ² / ndf 9104 / 85
p0 0.07122 ± 5.549e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

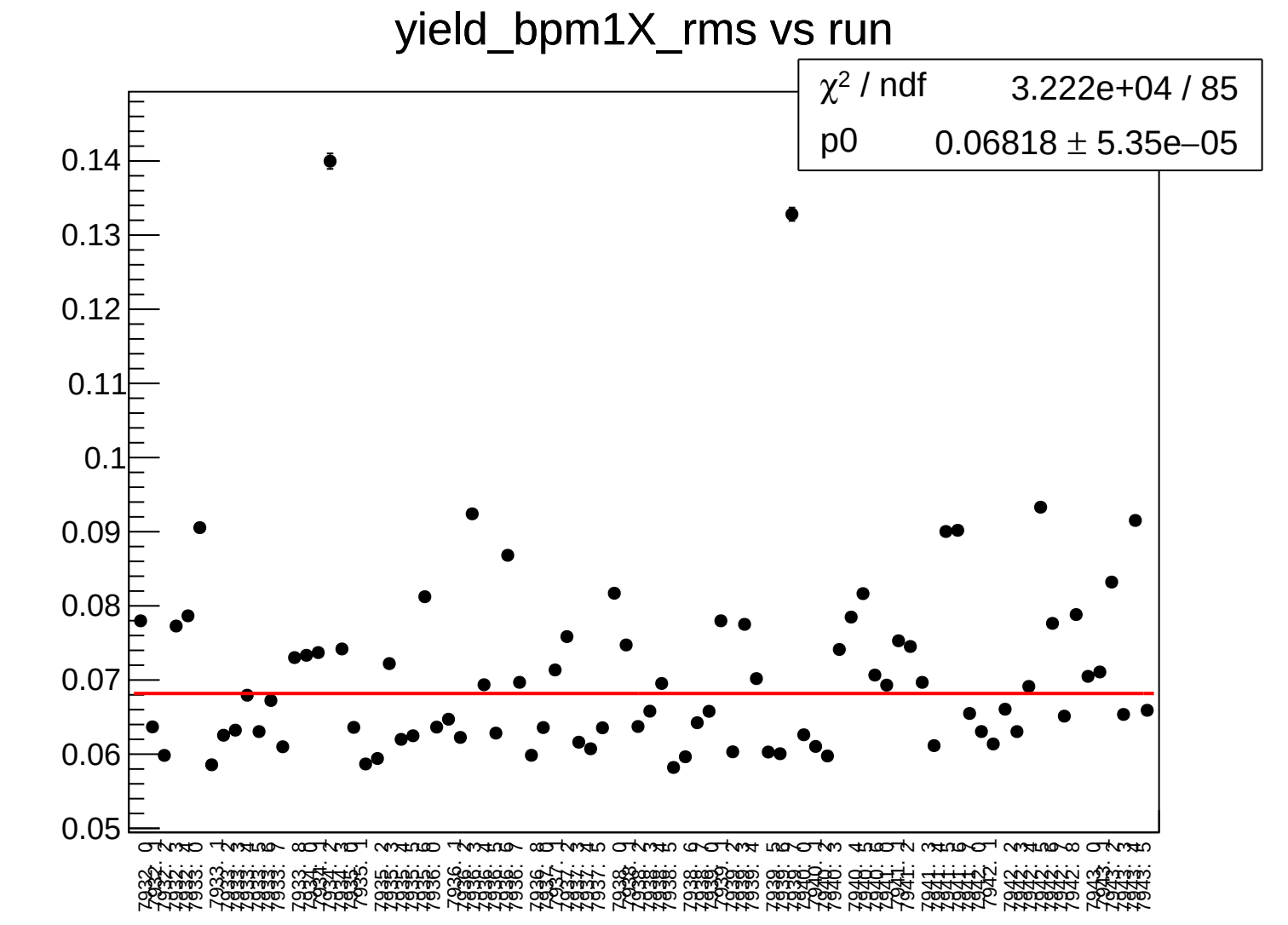

yield_bpm4ecY_mean vs run
χ² / ndf 7.984e+04 / 85
p0 −0.08978 ± 1.487e−05
−0.075
−0.08
−0.085
−0.09
−0.095
−0.1
−0.105
pull
Entries 86
Mean 1262
Std Dev 1232
80
60
40
20
0
−20
−40
−60
−80
−100
−120

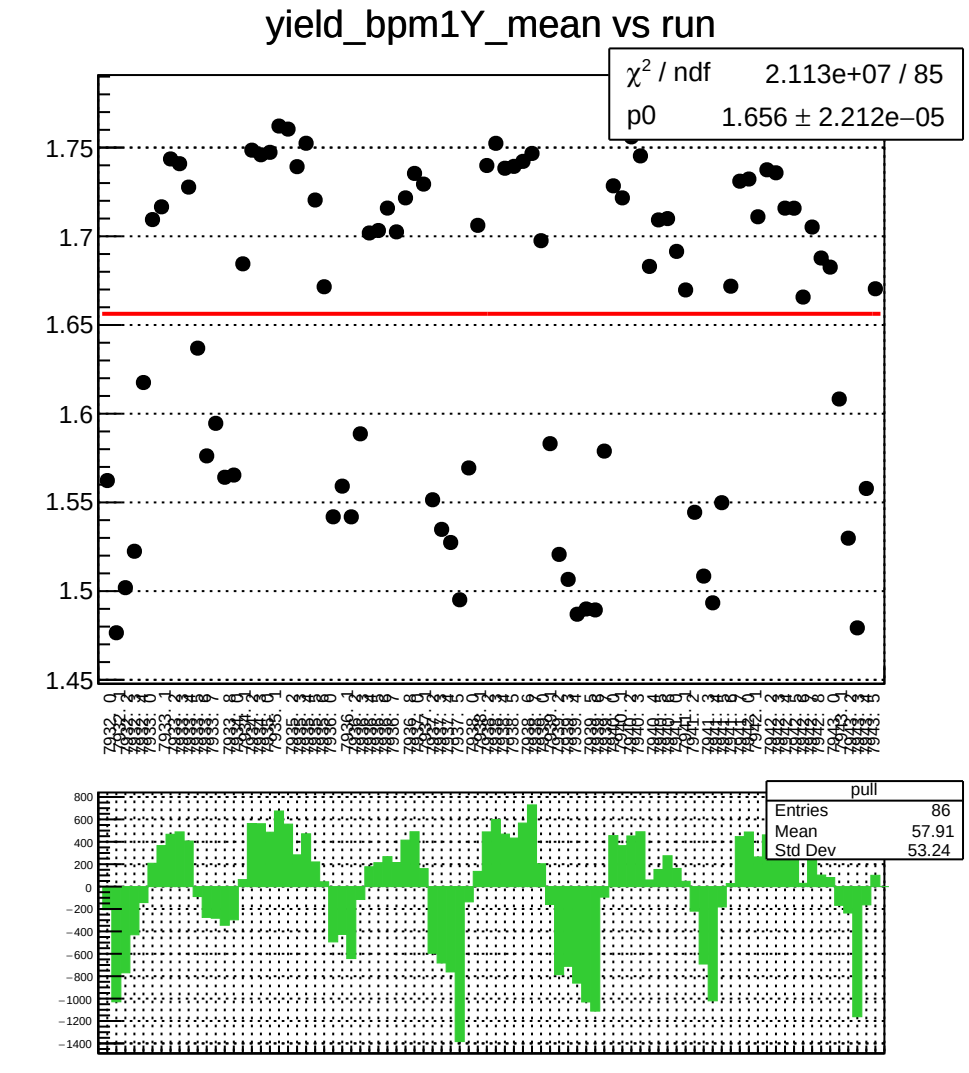

pull1D
Entries 86
Mean −0.4113
Std Dev 3.372
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

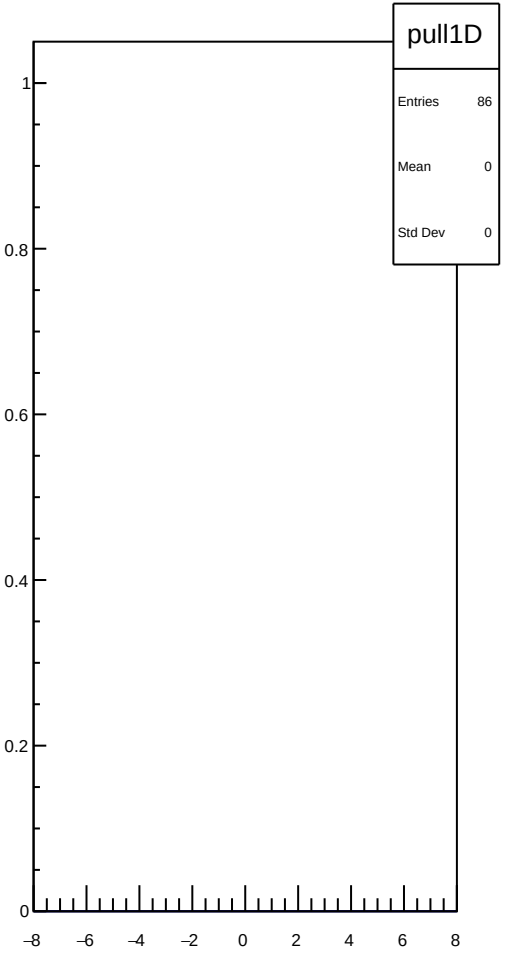

yield_bpm4ecY_rms vs run
χ² / ndf 1.176e+04 / 85
p0 0.01348 ± 1.051e–05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

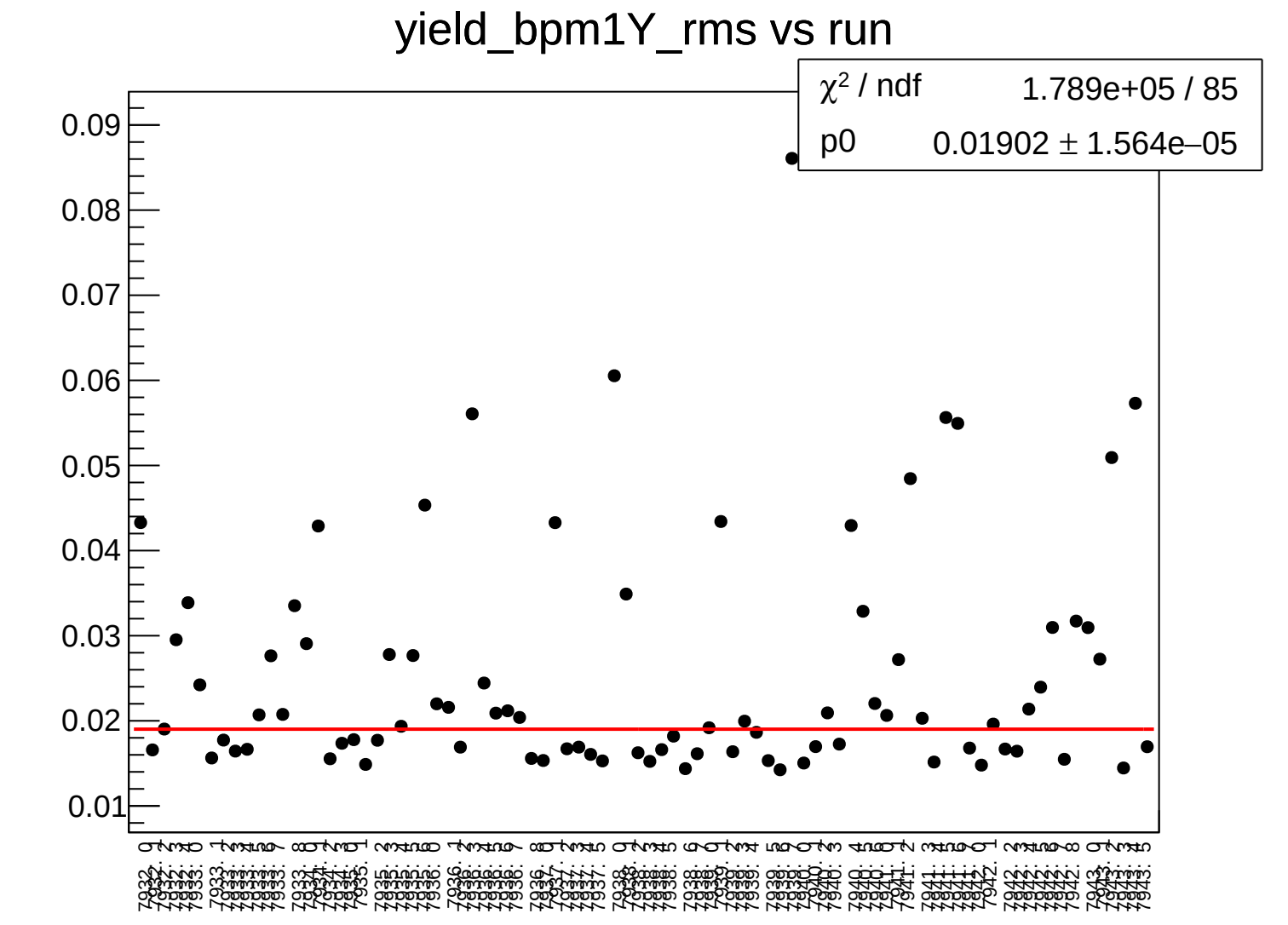

yield_bpm1X_mean vs run
χ² / ndf 2.011e+06 / 85
p0 −1.511 ± 7.566e−05
pull
Entries 86
Mean −1588
Std Dev 1612

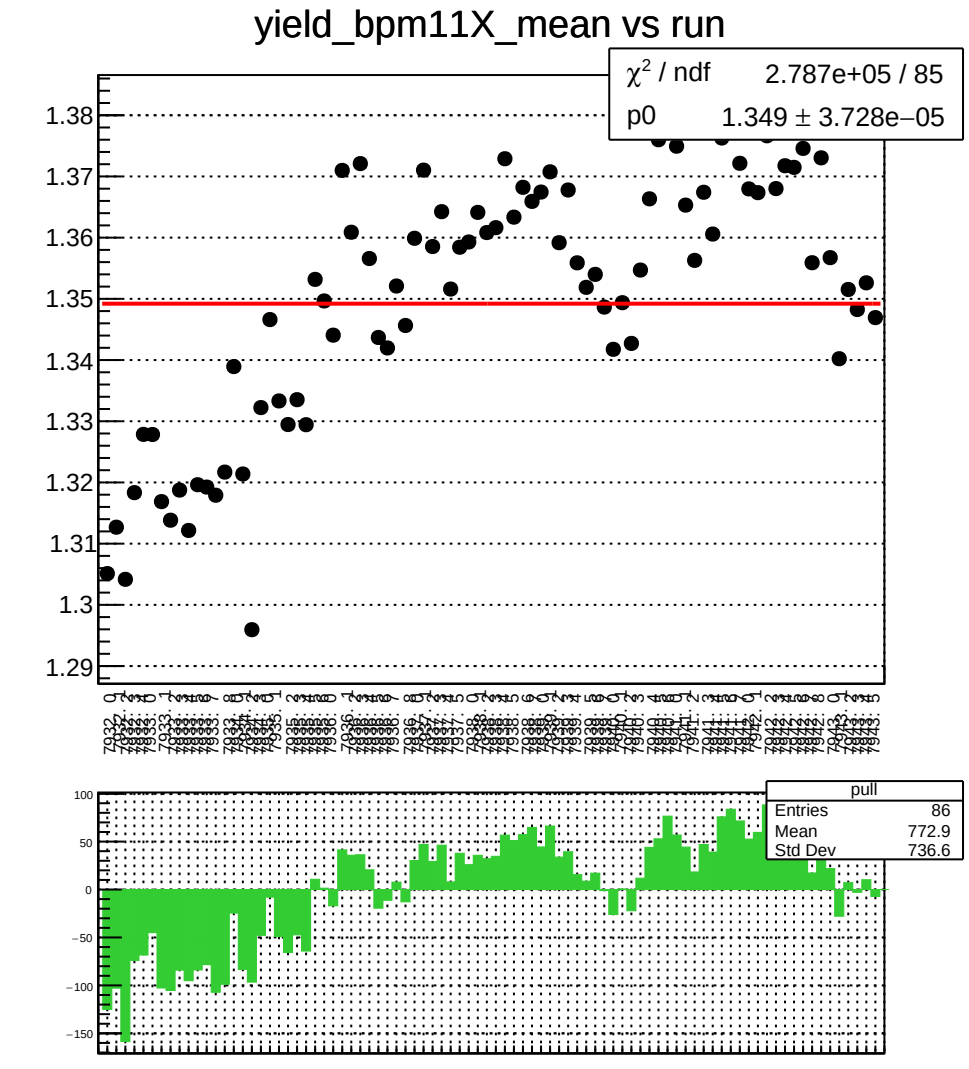

pull1D
Entries 86
Mean 1.158
Std Dev 4.992

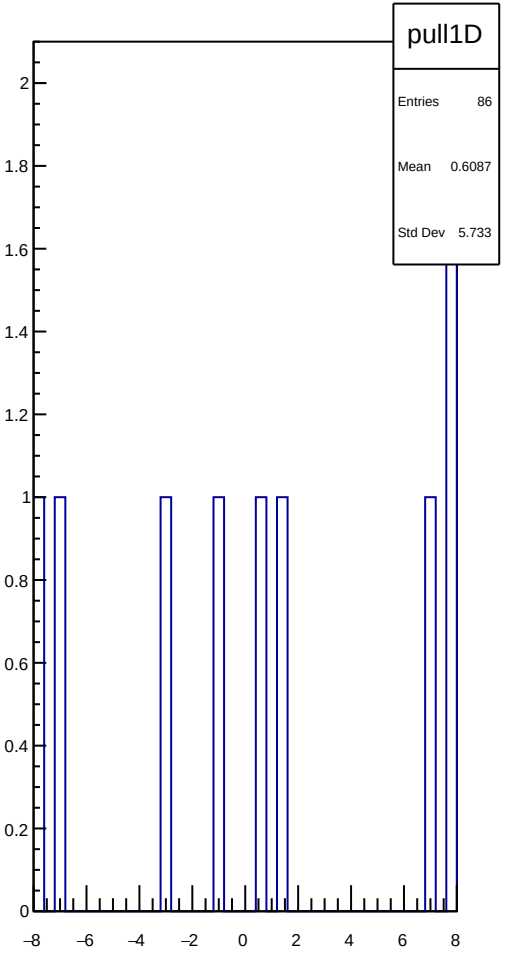

yield_bpm1X_rms vs run
χ² / ndf 3.222e+04 / 85
p0 0.06818 ± 5.35e−05
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05

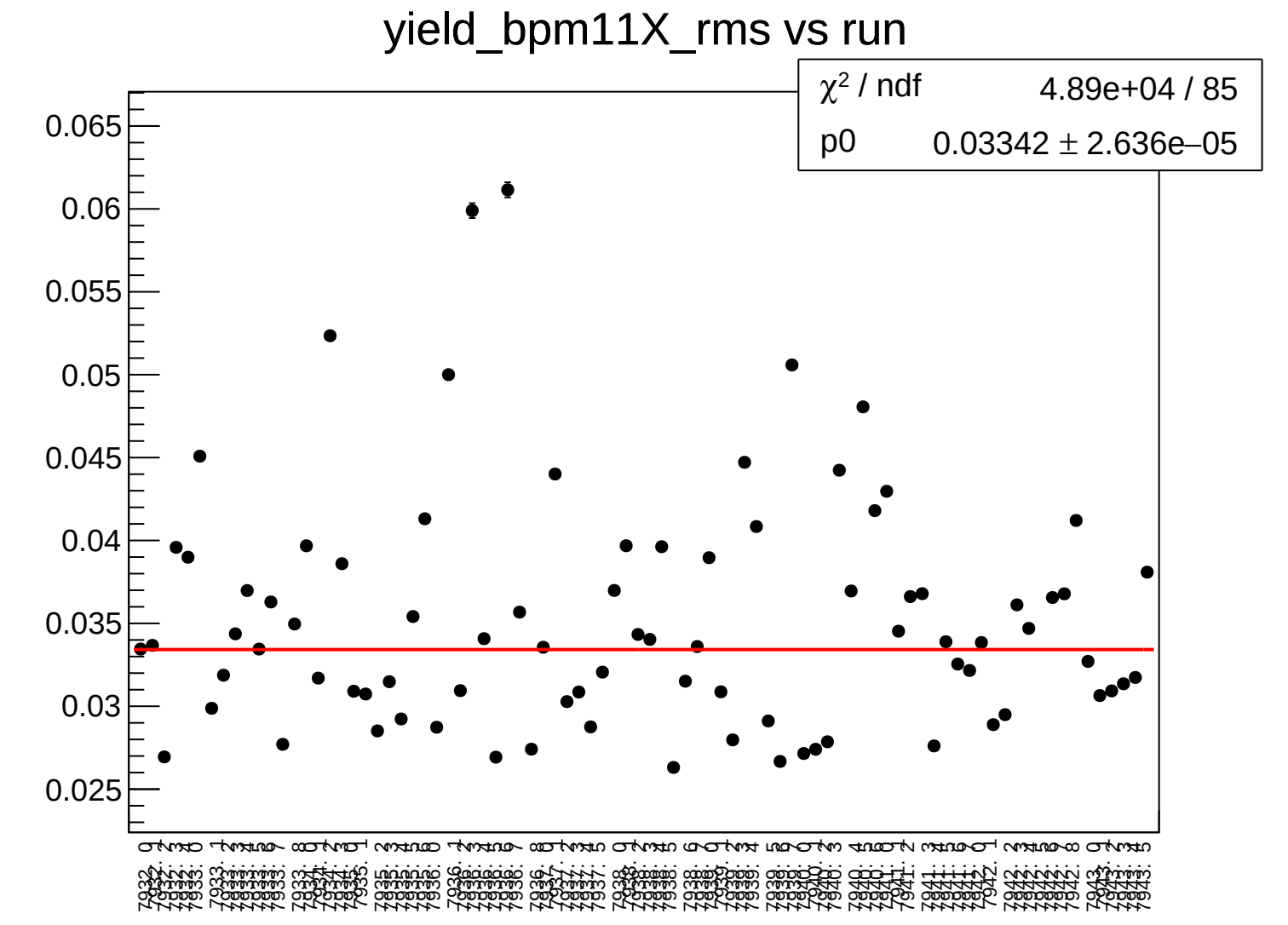

yield_bpm1Y_mean vs run
χ² / ndf 2.113e+07 / 85
p0 1.656 ± 2.212e−05
1.75
1.7
1.65
1.6
1.55
1.5
1.45
pull
Entries 86
Mean 57.91
Std Dev 53.24
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

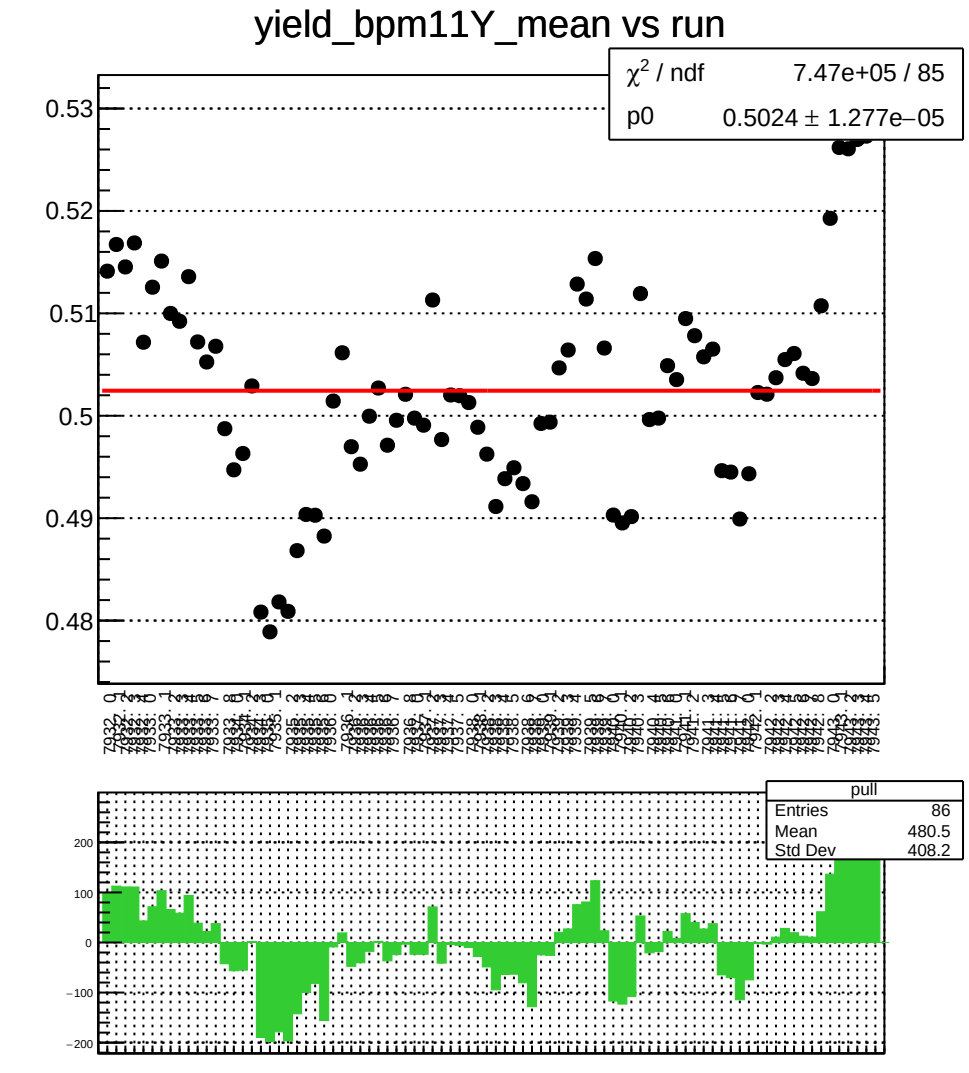

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

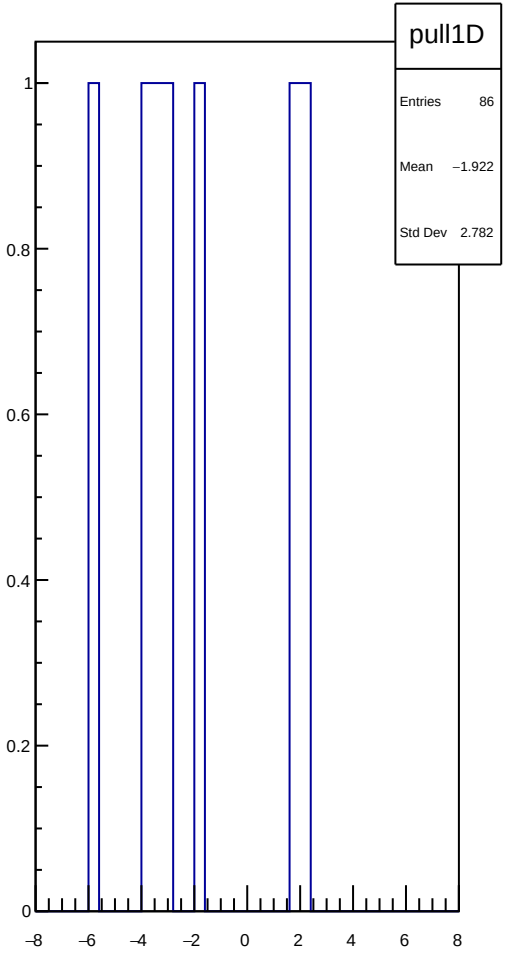

yield_bpm1Y_rms vs run
χ² / ndf 1.789e+05 / 85
p0 0.01902 ± 1.564e–05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

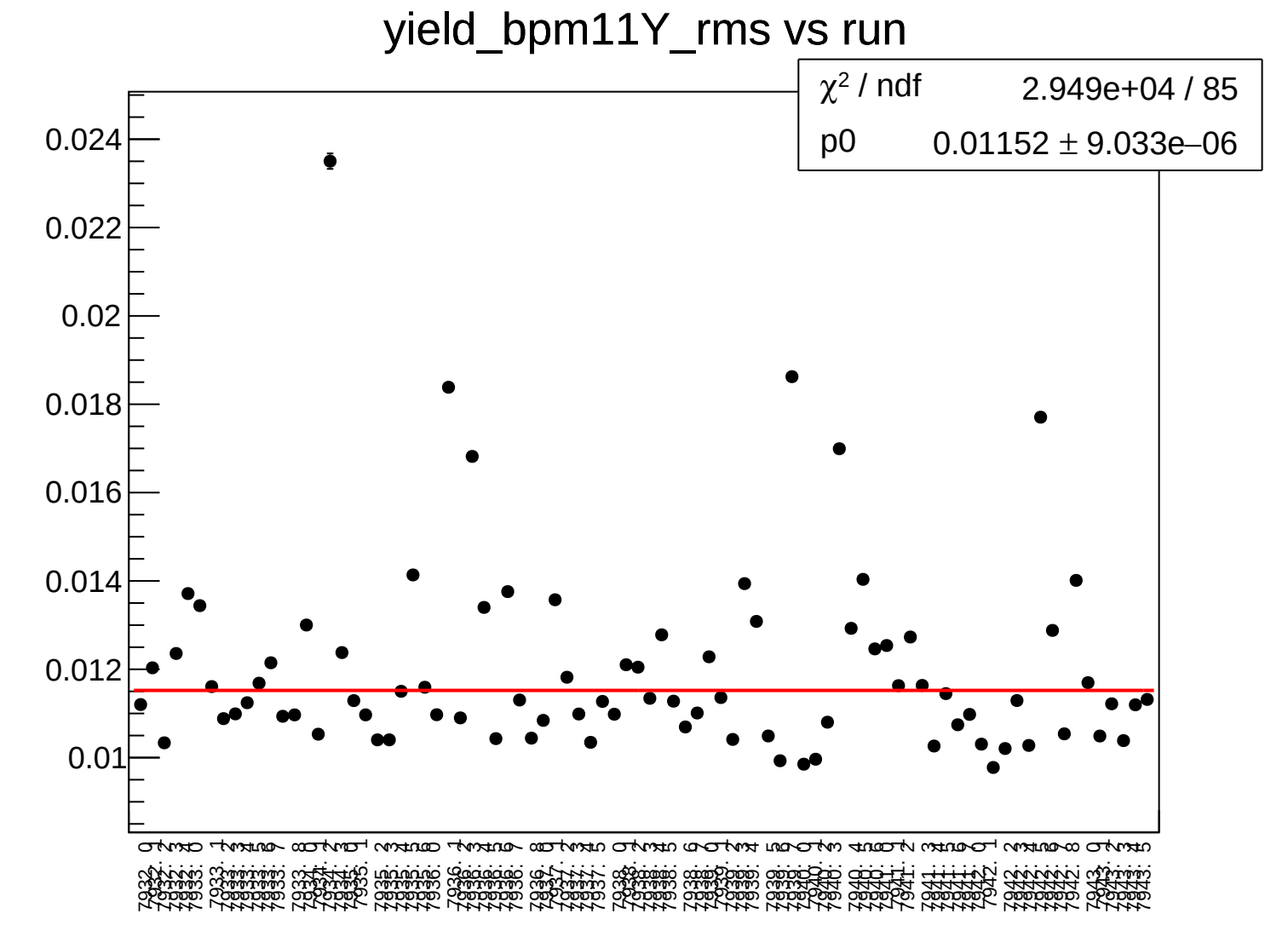

yield_bpm11X_mean vs run
χ^2 / ndf 2.787e+05 / 85
p0 1.349 ± 3.728e−05
1.38
1.37
1.36
1.35
1.34
1.33
1.32
1.31
1.3
1.29
pull
Entries 86
Mean 772.9
Std Dev 736.6
100
50
0
−50
−100
−150

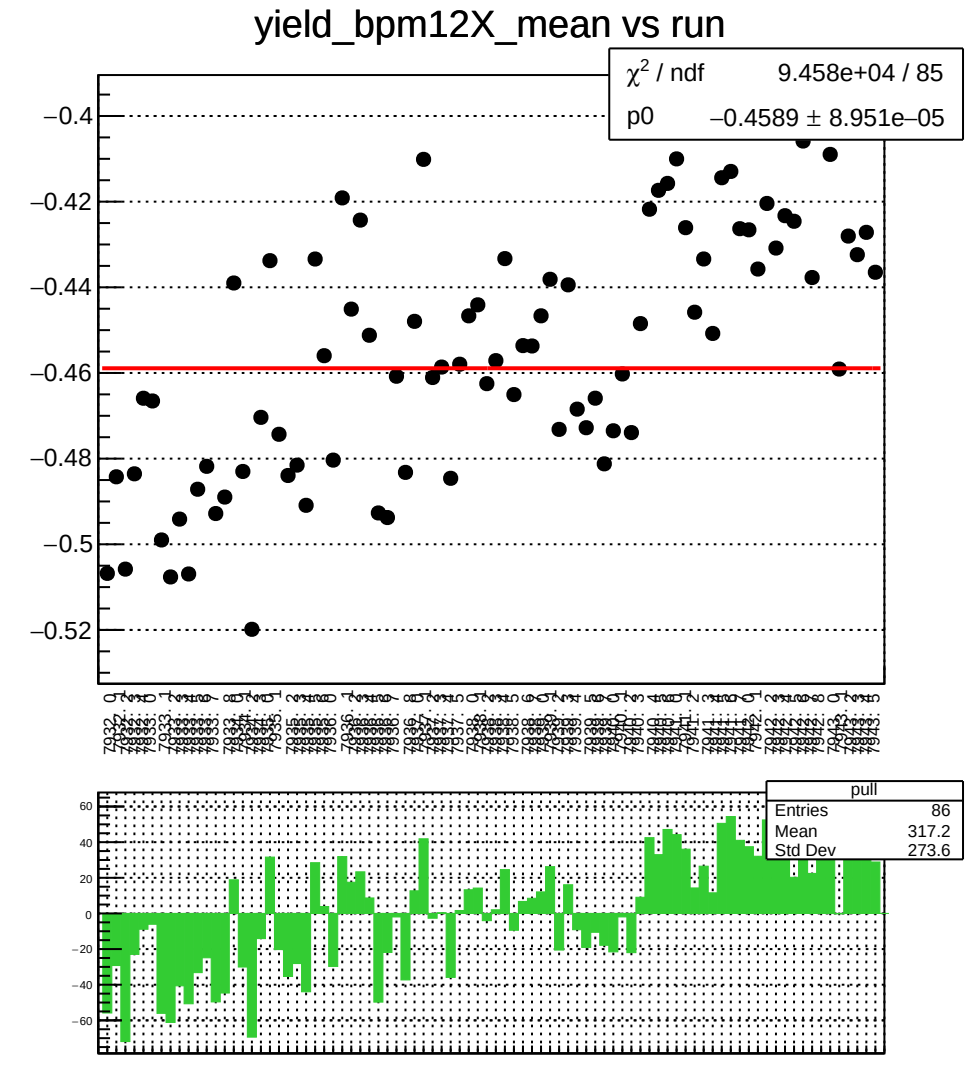

pull1D
Entries 86
Mean 0.6087
Std Dev 5.733
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

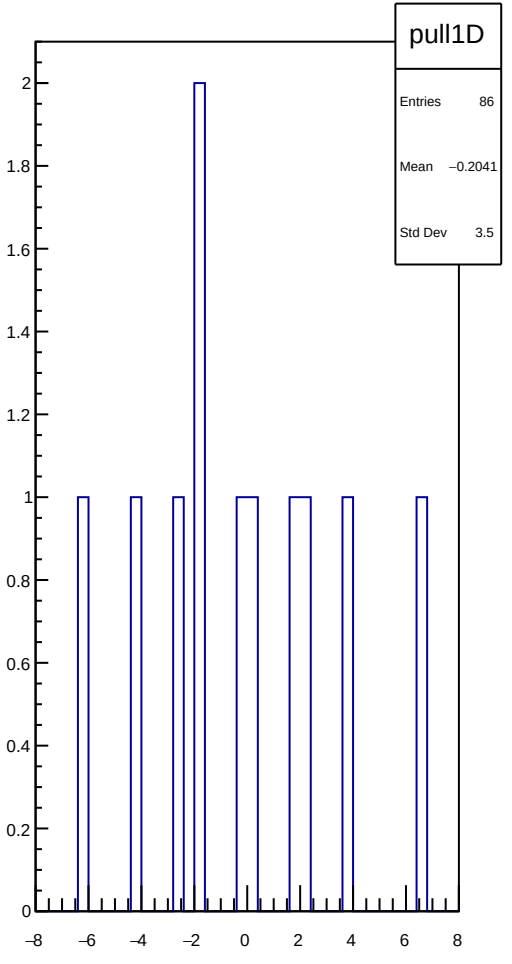

yield_bpm11X_rms vs run
χ² / ndf 4.89e+04 / 85
p0 0.03342 ± 2.636e–05
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025

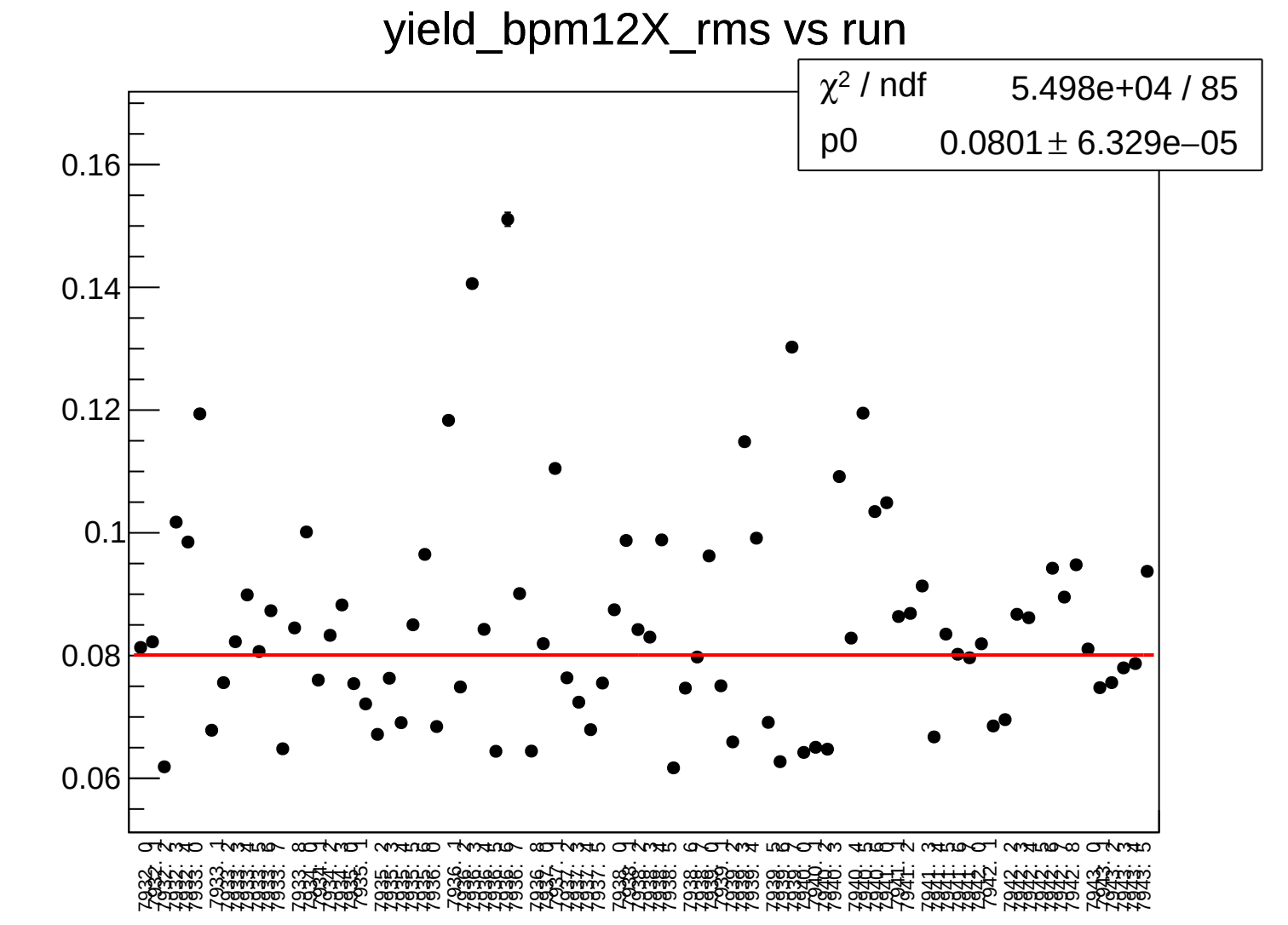

yield_bpm11Y_mean vs run
χ² / ndf 7.47e+05 / 85
p0 0.5024 ± 1.277e−05
0.53
0.52
0.51
0.5
0.49
0.48
pull
Entries 86
Mean 480.5
Std Dev 408.2
200
100
0
−100
−200

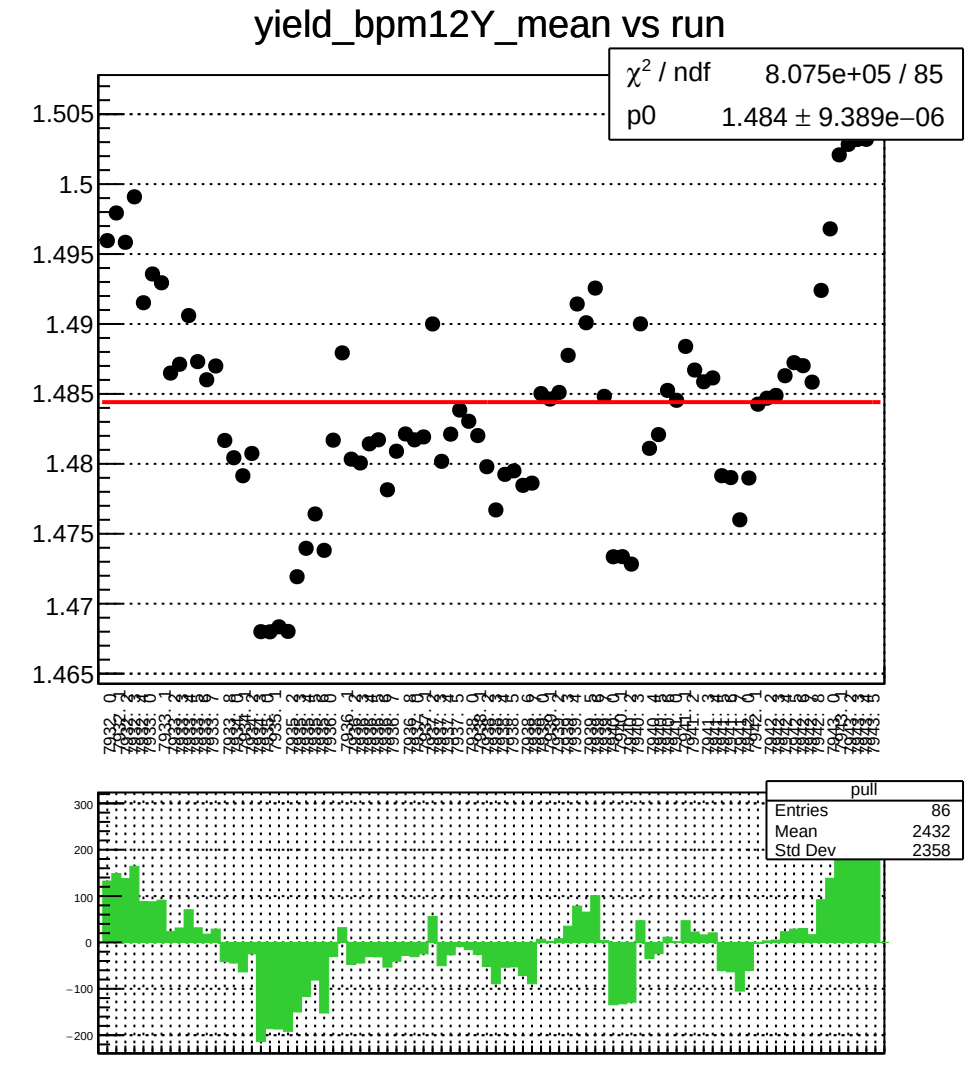

pull1D
Entries 86
Mean −1.922
Std Dev 2.782
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

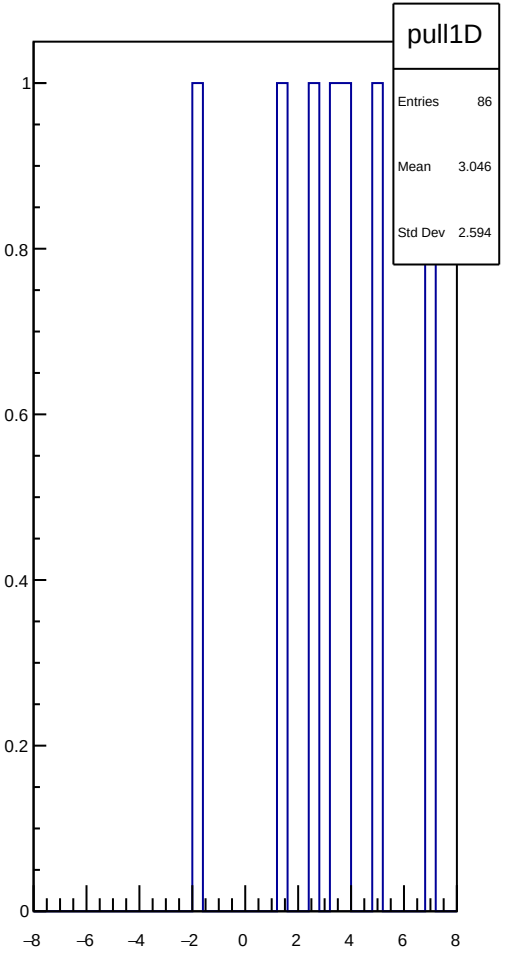

yield_bpm11Y_rms vs run
χ² / ndf 2.949e+04 / 85
p0 0.01152 ± 9.033e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

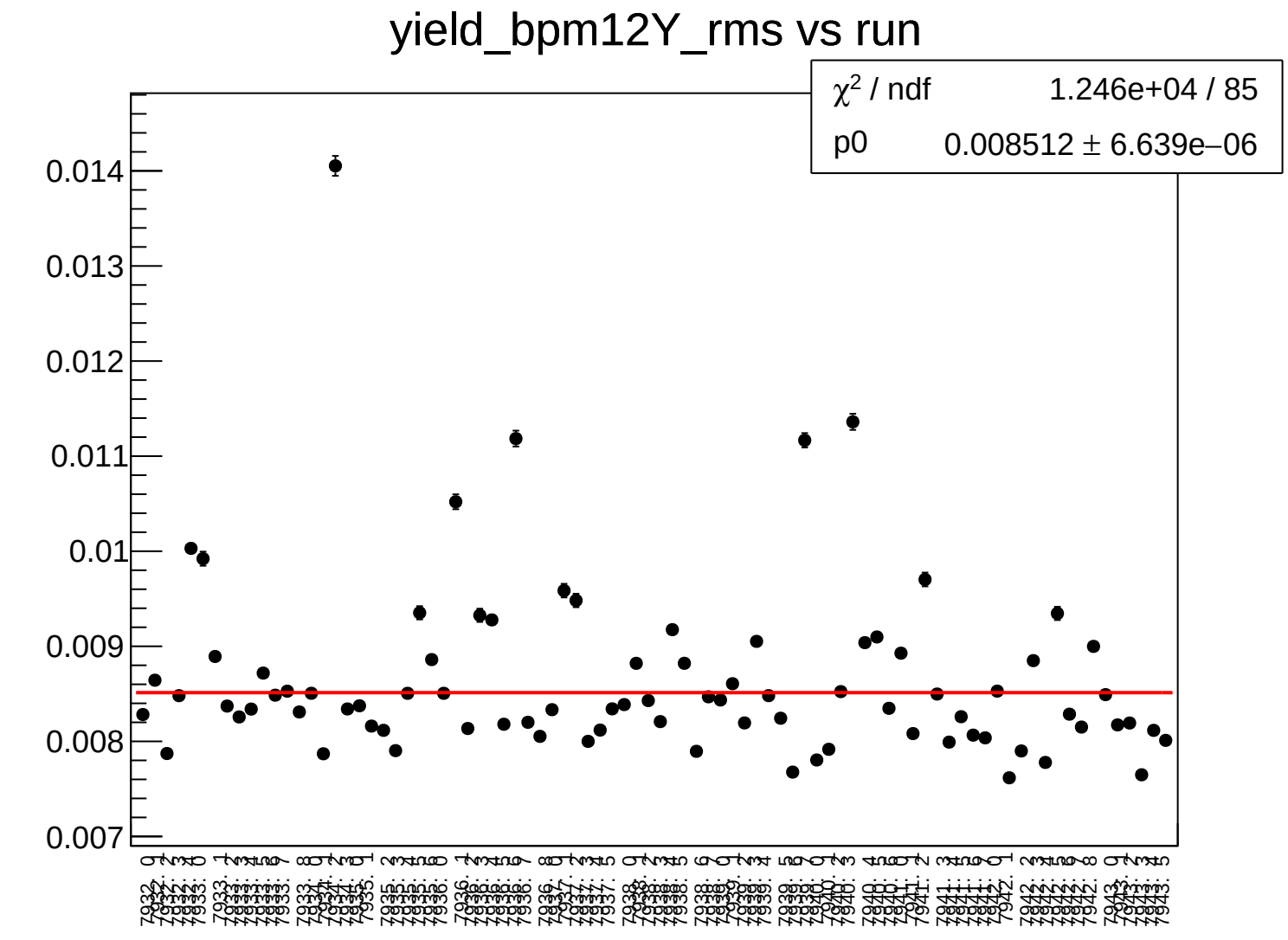

yield_bpm12X_mean vs run
χ² / ndf 9.458e+04 / 85
p0 −0.4589 ± 8.951e−05
−0.4
−0.42
−0.44
−0.46
−0.48
−0.5
−0.52
pull
Entries 86
Mean 317.2
Std Dev 273.6
60
40
20
0
−20
−40
−60

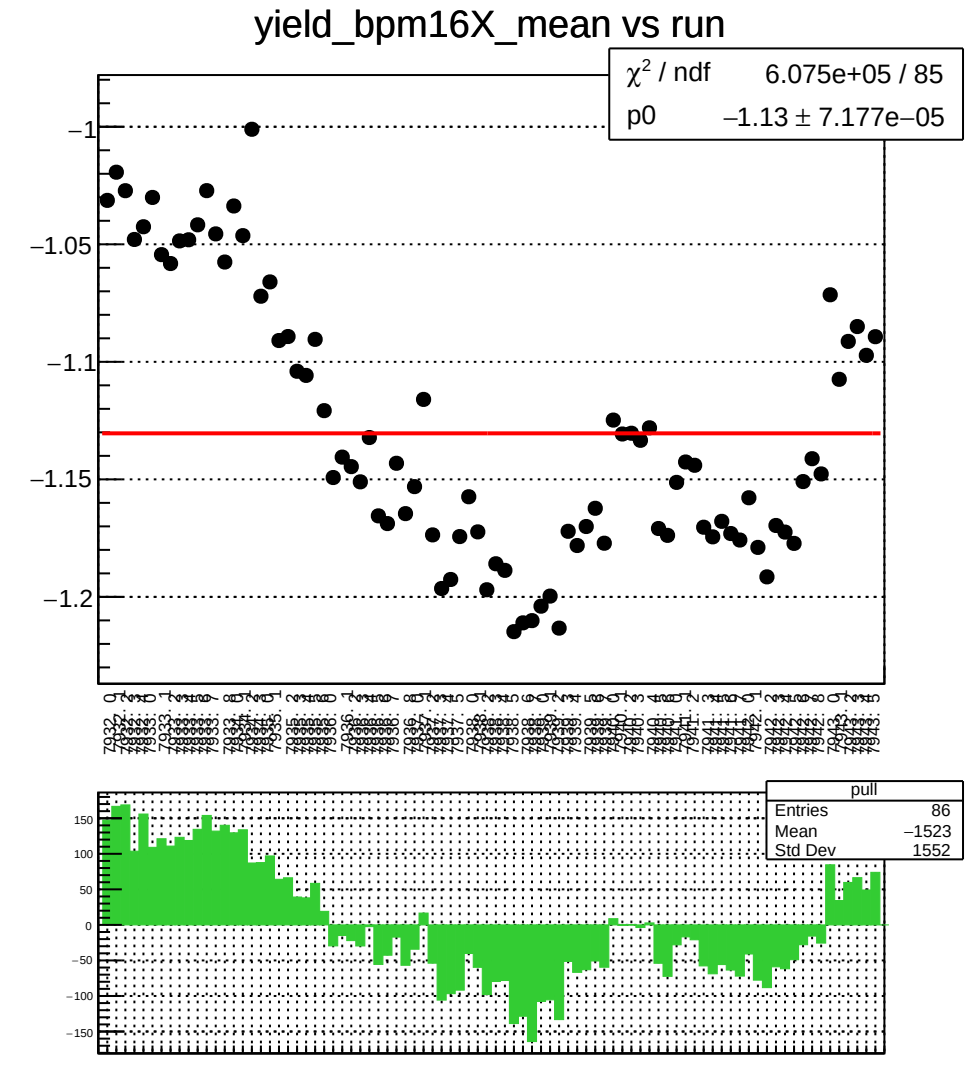

pull1D
Entries 86
Mean −0.2041
Std Dev 3.5
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

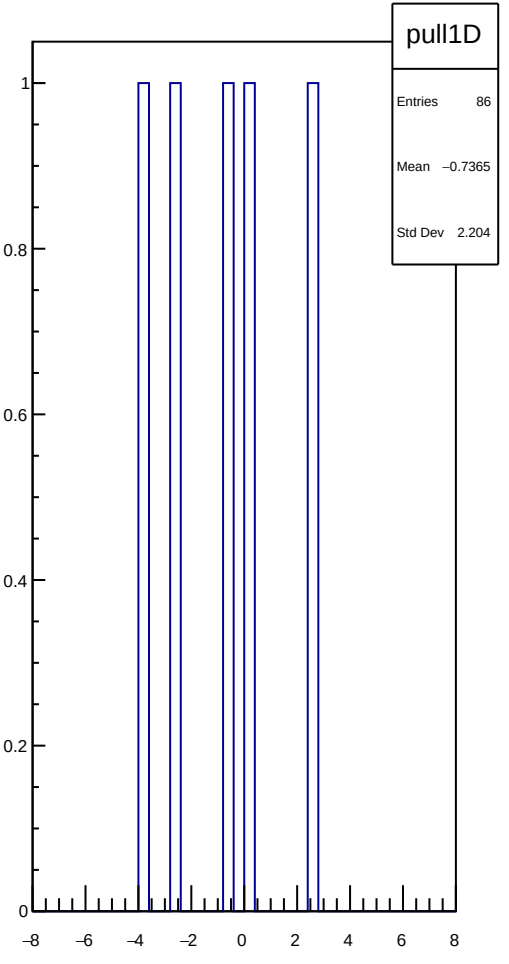

yield_bpm12X_rms vs run
χ² / ndf 5.498e+04 / 85
p0 0.0801 ± 6.329e−05
0.16
0.14
0.12
0.1
0.08
0.06

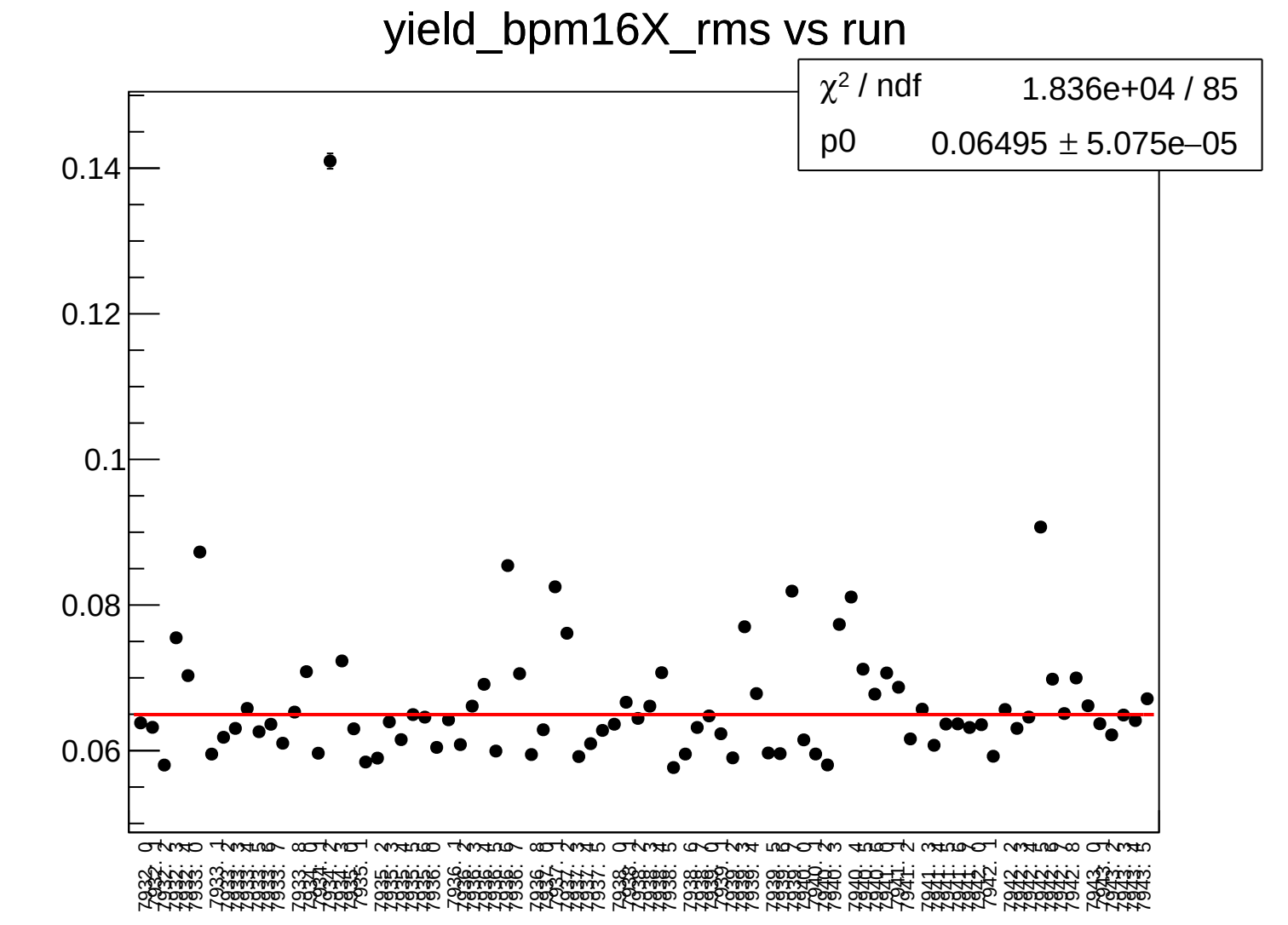

yield_bpm12Y_mean vs run
χ² / ndf 8.075e+05 / 85
p0 1.484 ± 9.389e−06
1.505
1.5
1.495
1.49
1.485
1.48
1.475
1.47
1.465
pull
Entries 86
Mean 2432
Std Dev 2358
300
200
100
0
−100
−200

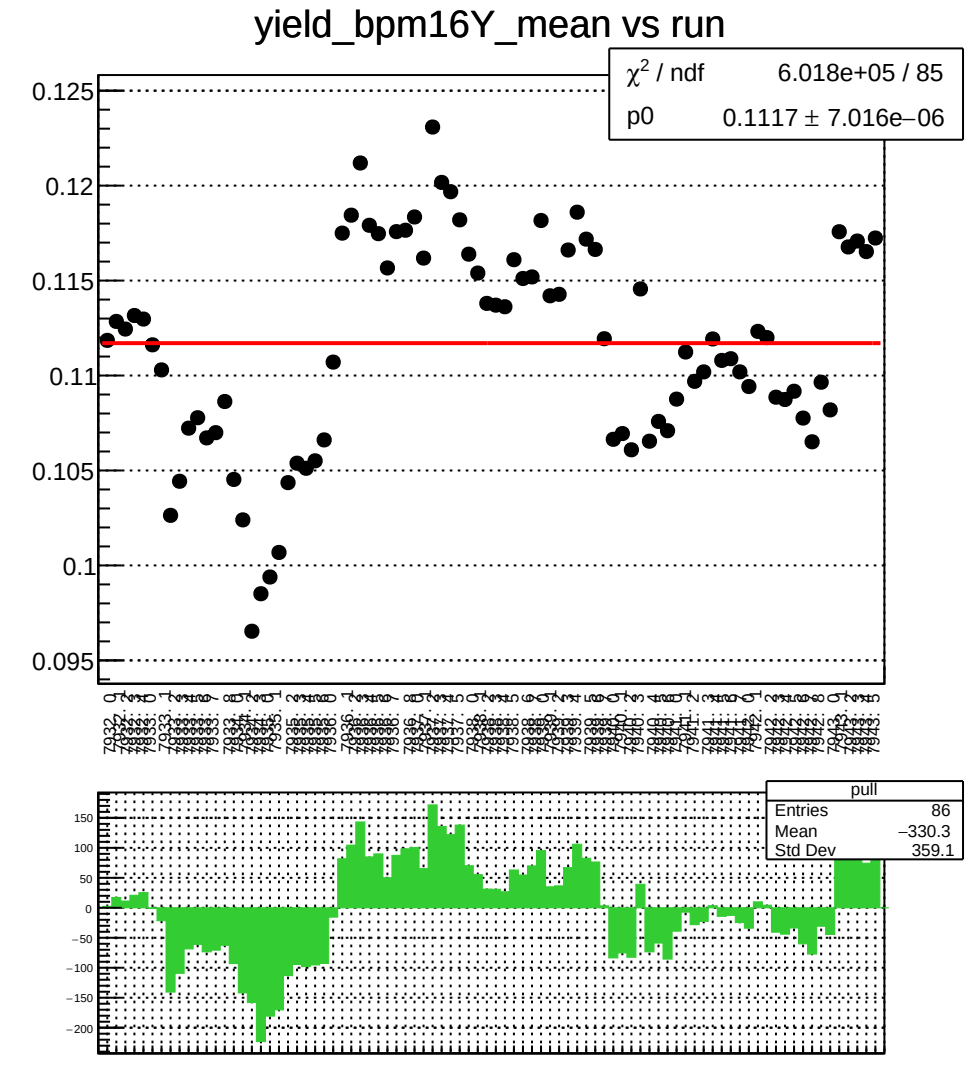

pull1D
Entries 86
Mean 3.046
Std Dev 2.594
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

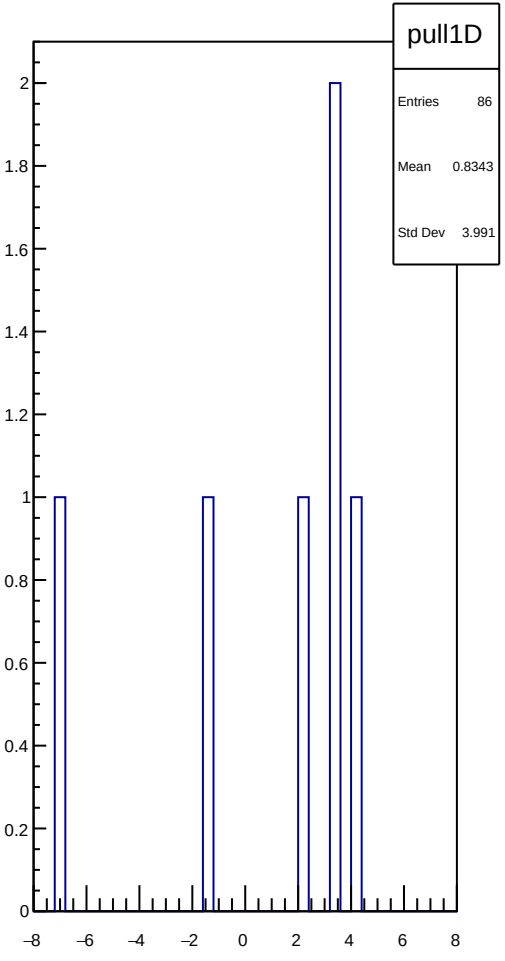

yield_bpm12Y_rms vs run
χ² / ndf 1.246e+04 / 85
p0 0.008512 ± 6.639e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

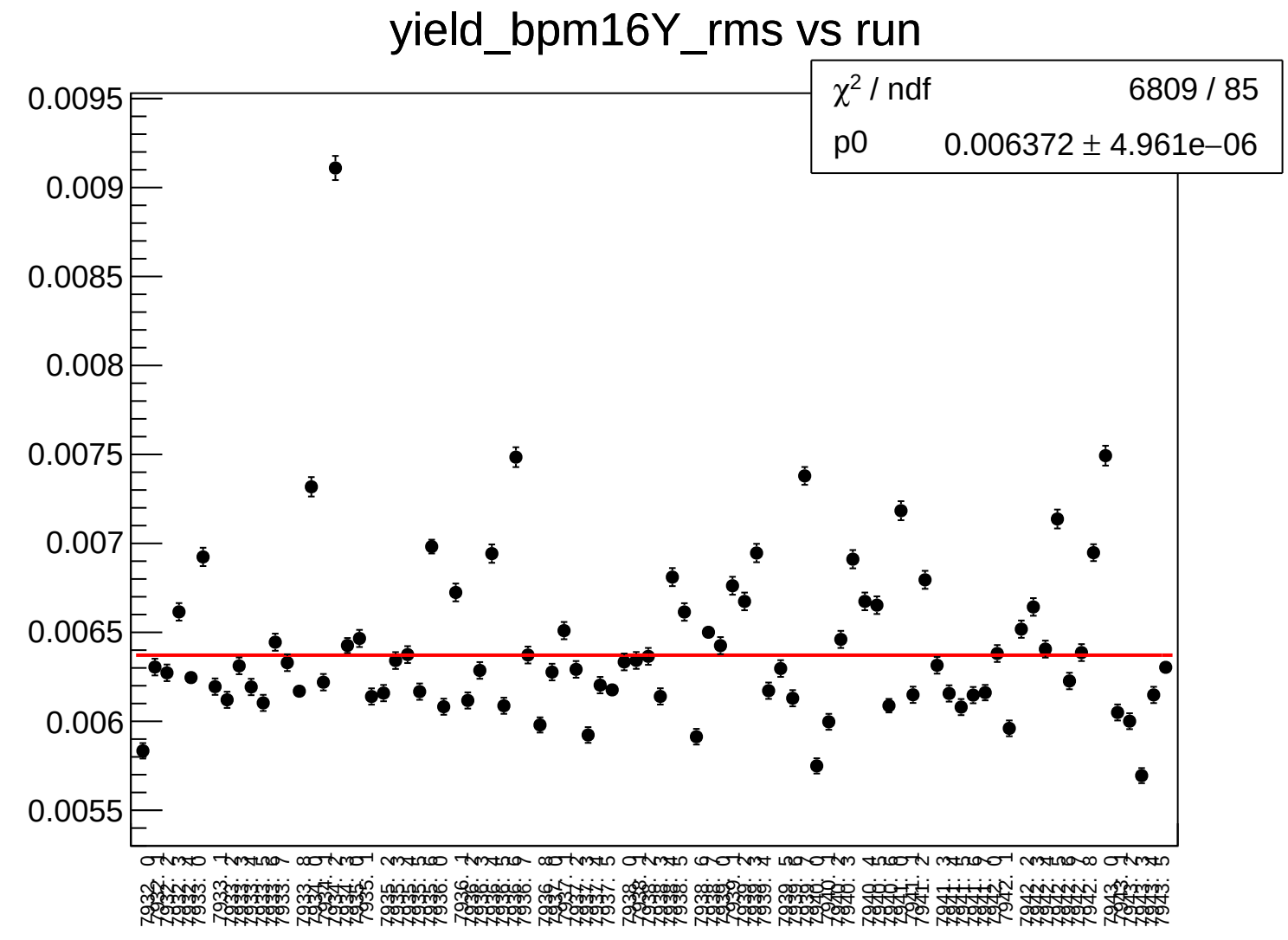

yield_bpm16X_mean vs run
χ² / ndf 6.075e+05 / 85
p0 −1.13 ± 7.177e−05
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 86
Mean −1523
Std Dev 1552
150
100
50
0
−50
−100
−150

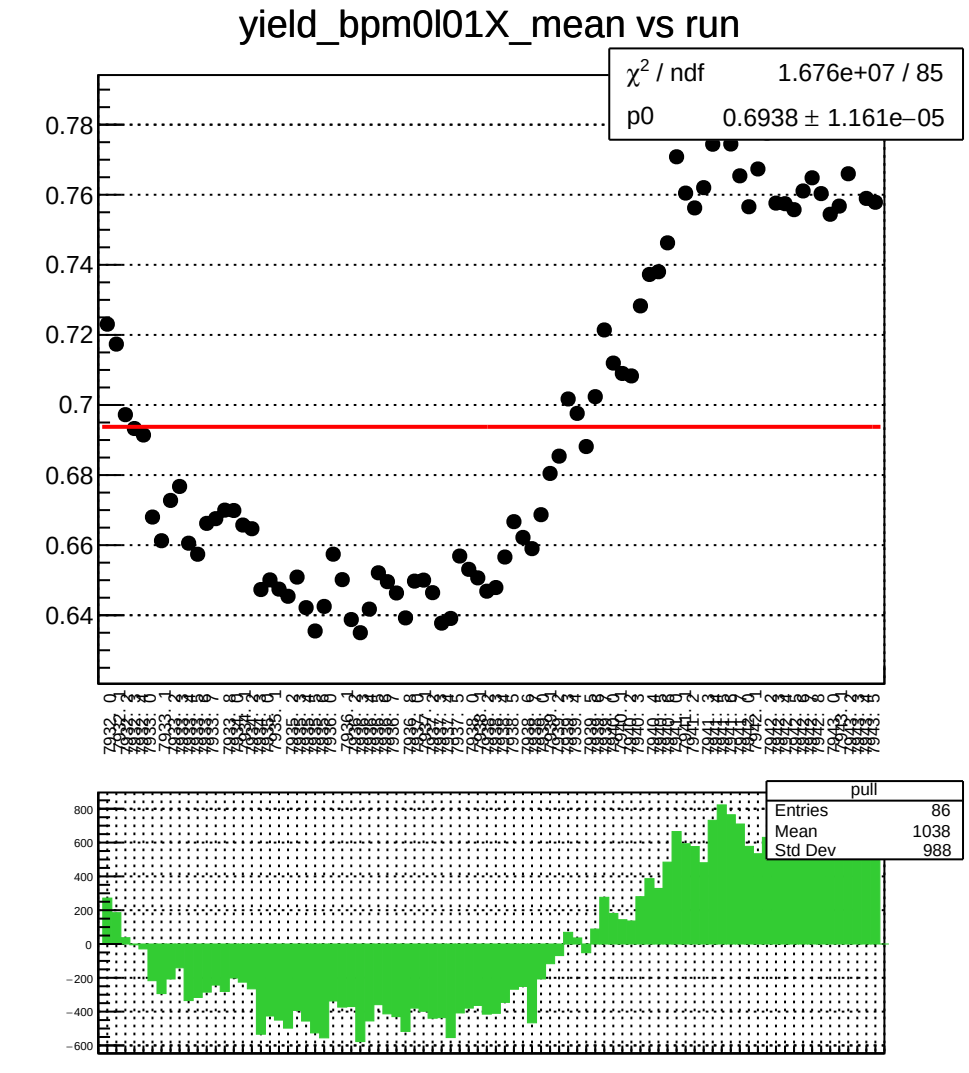

pull1D
Entries 86
Mean −0.7365
Std Dev 2.204
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

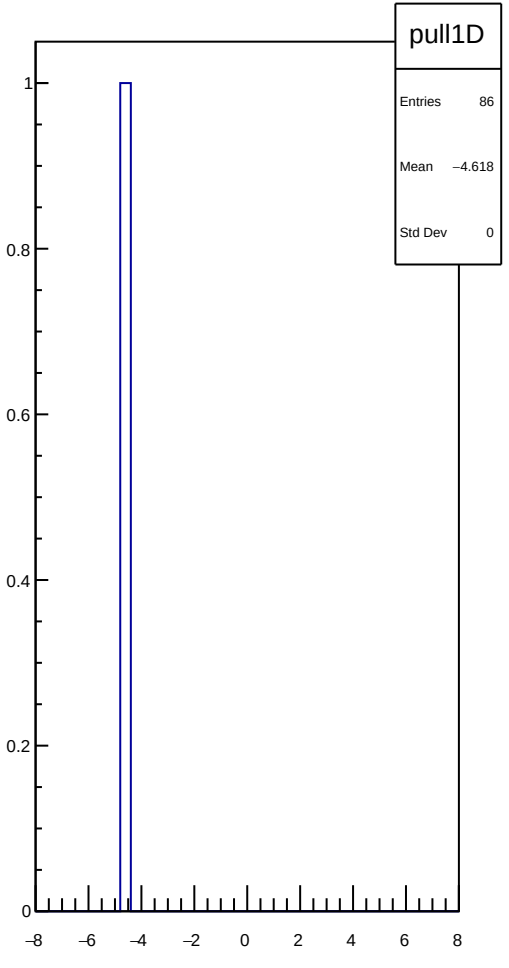

yield_bpm16X_rms vs run
χ² / ndf 1.836e+04 / 85
p0 0.06495 ± 5.075e–05
0.14
0.12
0.1
0.08
0.06

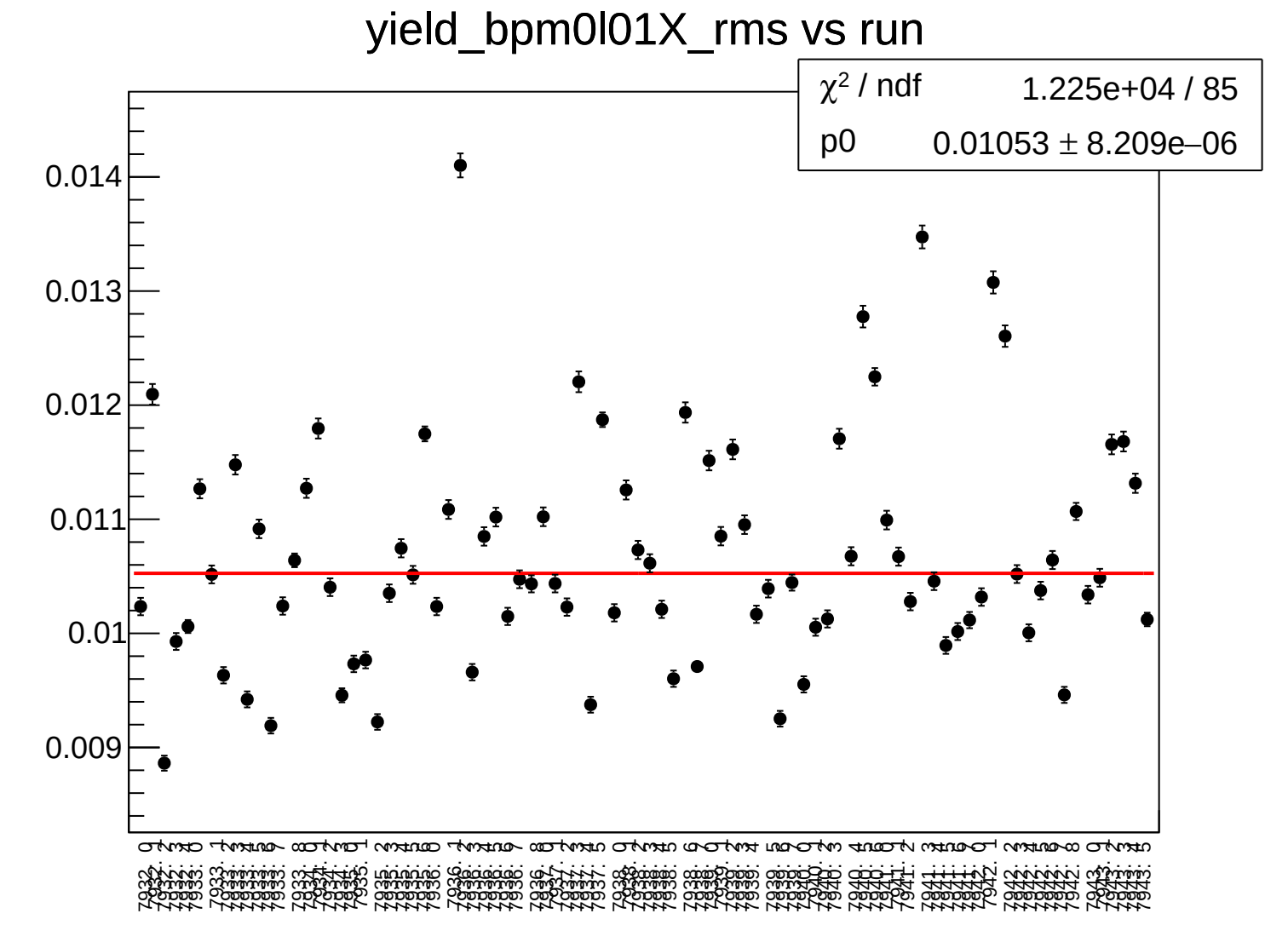

yield_bpm16Y_mean vs run
χ² / ndf 6.018e+05 / 85
p0 0.1117 ± 7.016e−06
0.125
0.12
0.115
0.11
0.105
0.1
0.095
pull
Entries 86
Mean −330.3
Std Dev 359.1
150
100
50
0
−50
−100
−150
−200

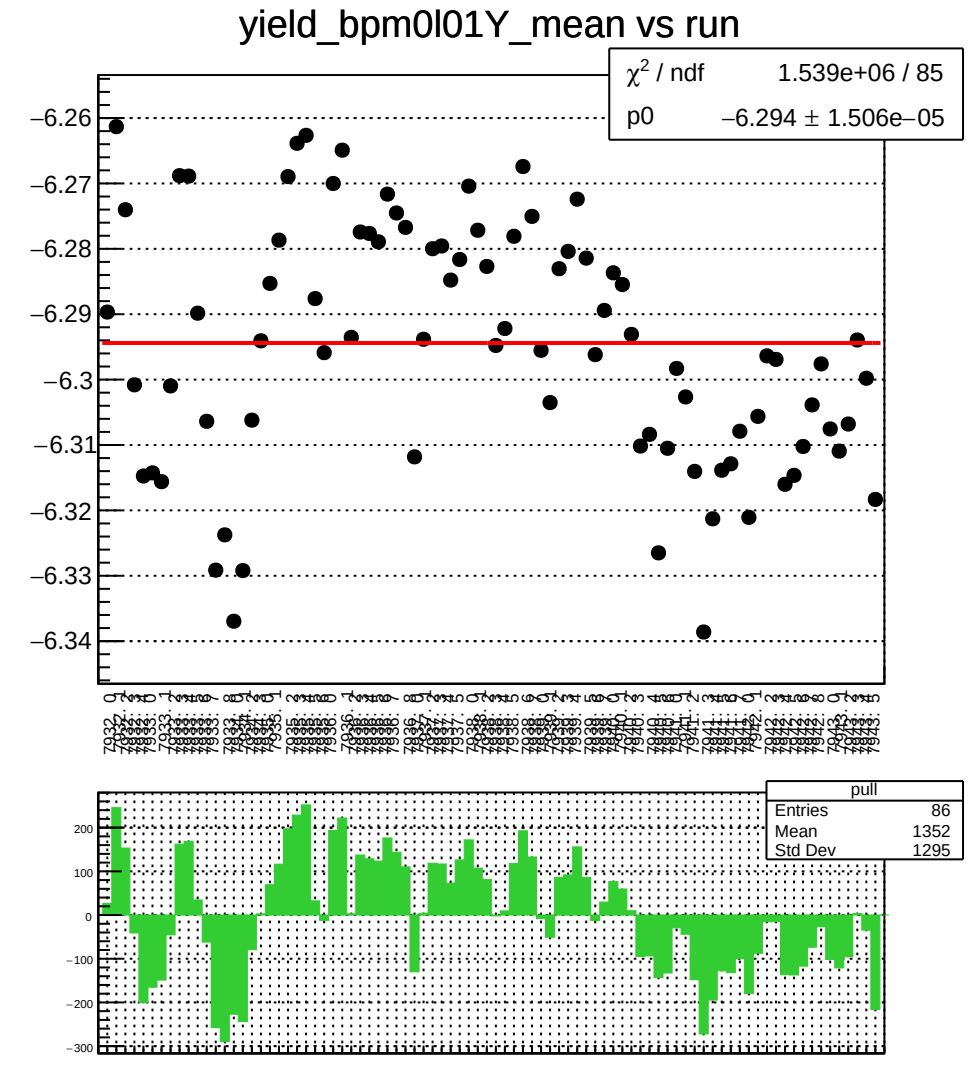

pull1D
Entries 86
Mean 0.8343
Std Dev 3.991
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

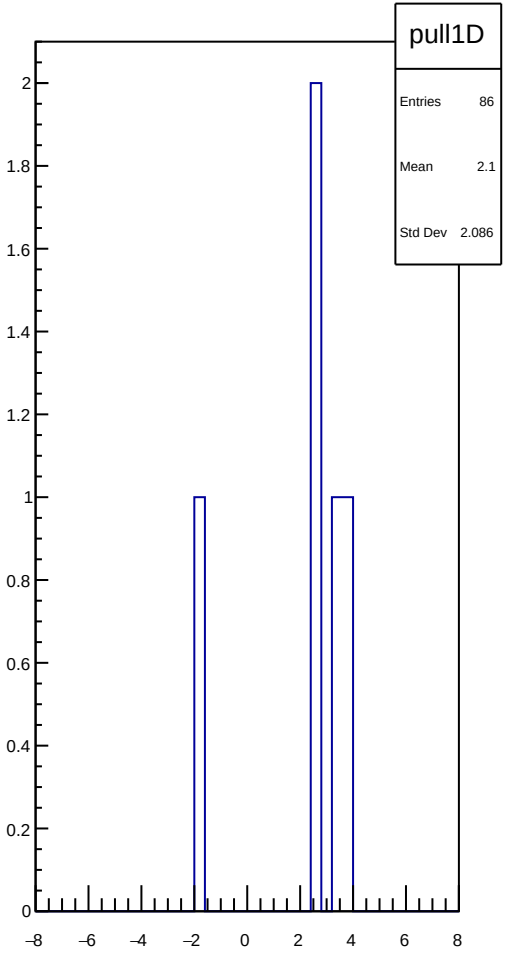

yield_bpm16Y_rms vs run
χ2 / ndf 6809 / 85
p0 0.006372 ± 4.961e−06
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006
0.0055

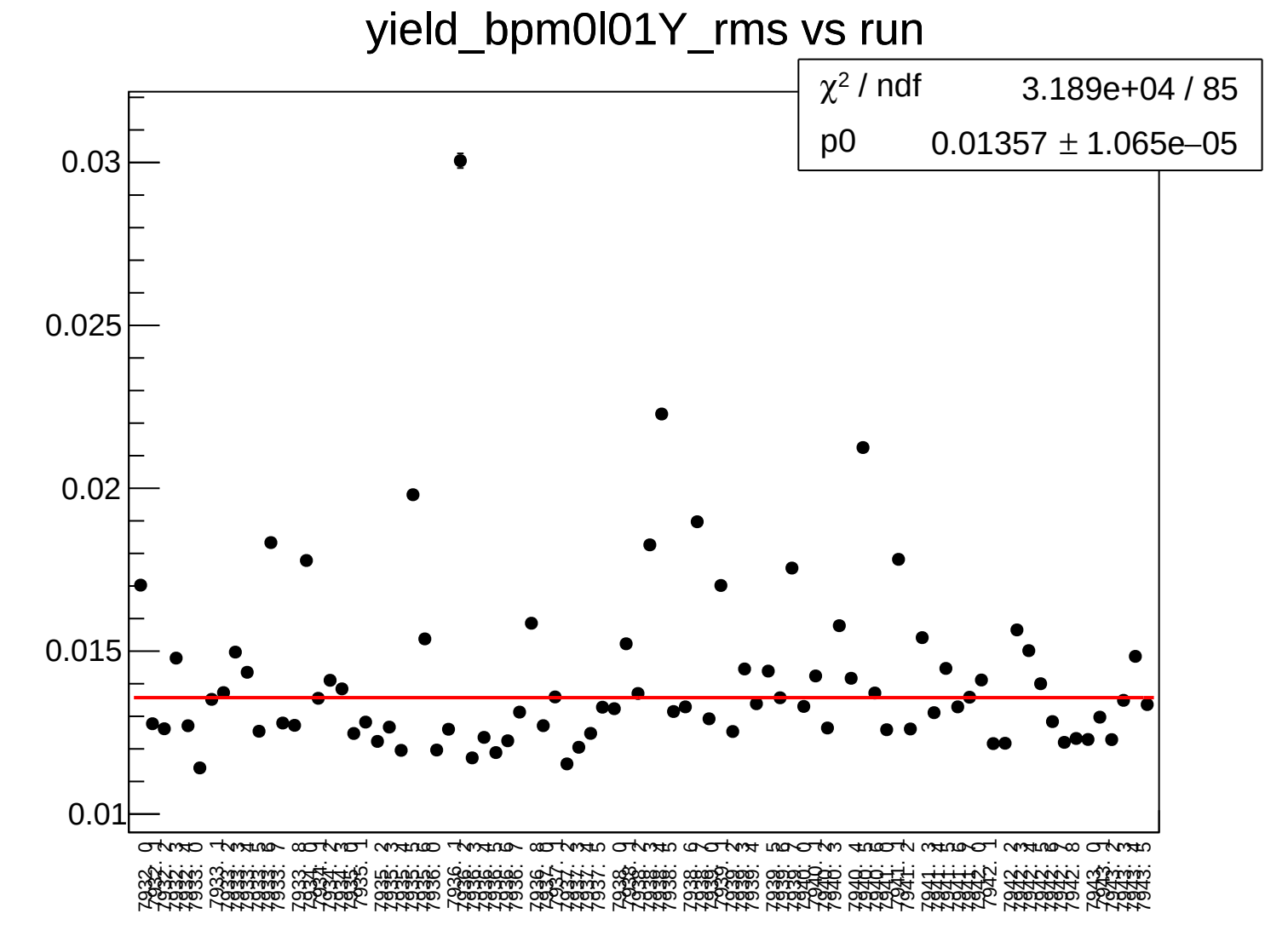

yield_bpm0l01X_mean vs run
χ² / ndf 1.676e+07 / 85
p0 0.6938 ± 1.161e−05
0.78
0.76
0.74
0.72
0.7
0.68
0.66
0.64
pull
Entries 86
Mean 1038
Std Dev 988
800
600
400
200
0
−200
−400
−600

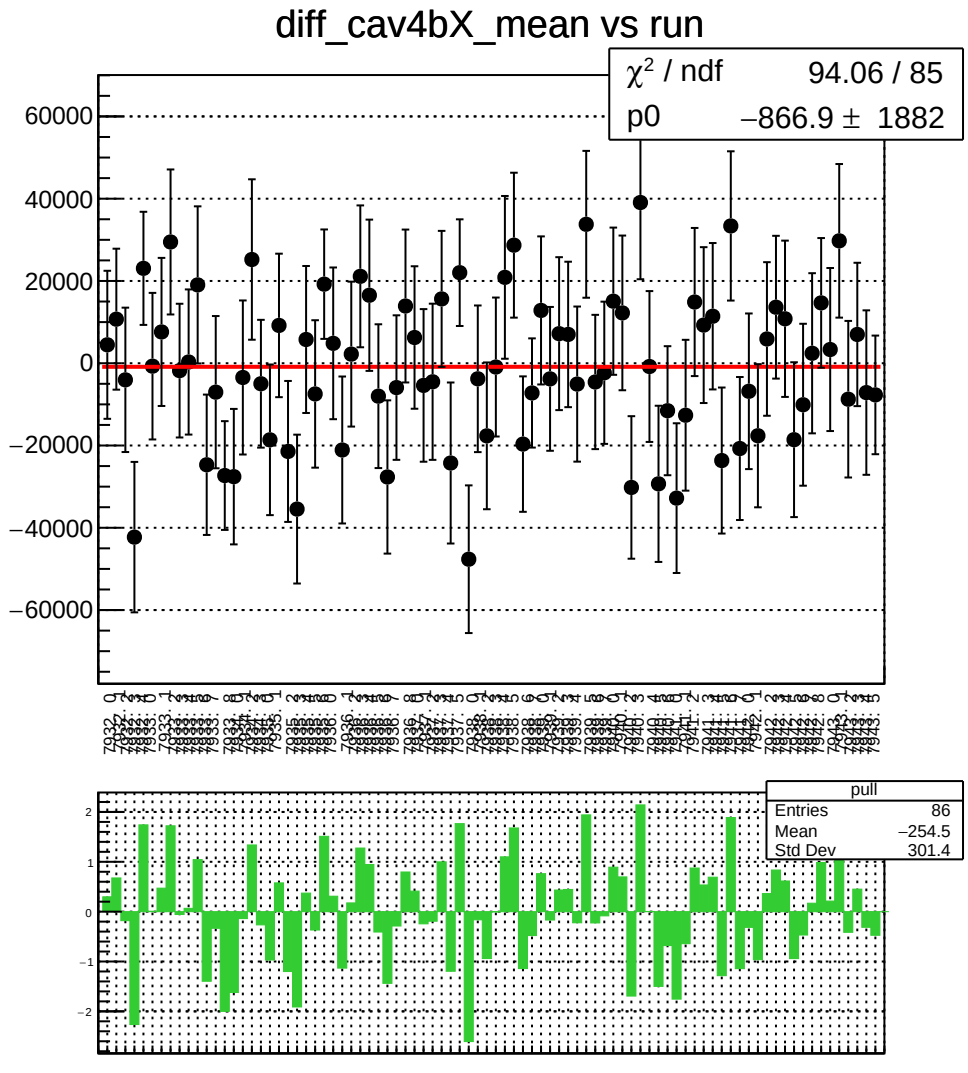

pull1D
Entries 86
Mean −4.618
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

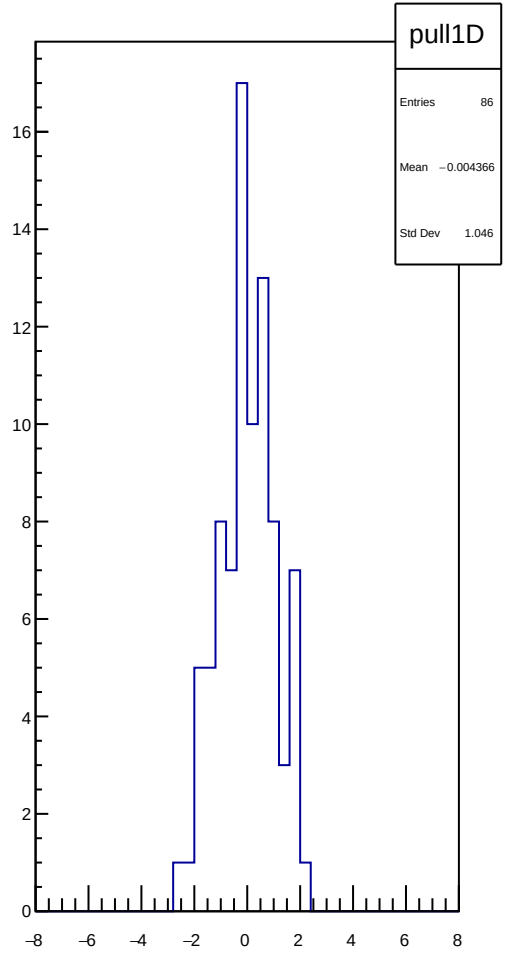

yield_bpm0l01X_rms vs run
χ² / ndf 1.225e+04 / 85
p0 0.01053 ± 8.209e–06
0.014
0.013
0.012
0.011
0.01
0.009

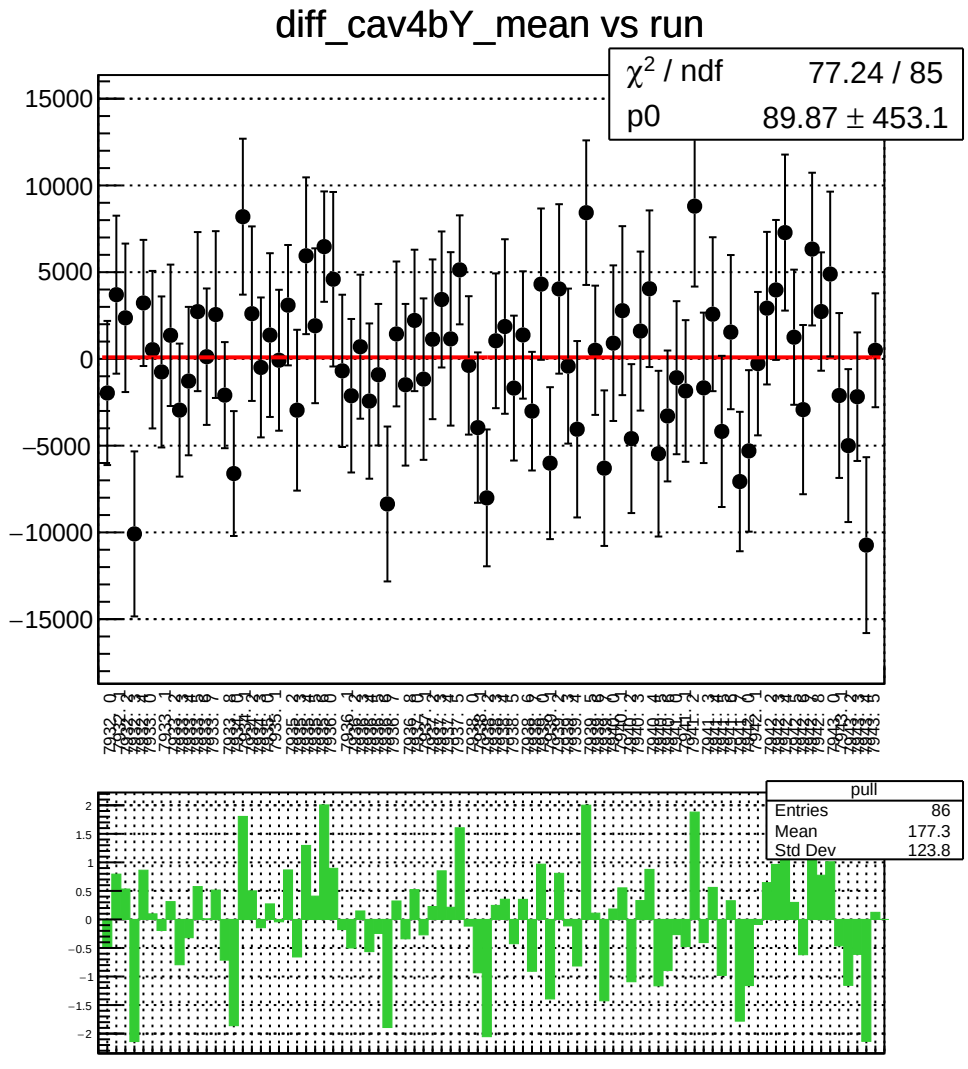

yield_bpm0l01Y_mean vs run
χ² / ndf 1.539e+06 / 85
p0 −6.294 ± 1.506e−05
−6.26
−6.27
−6.28
−6.29
−6.3
−6.31
−6.32
−6.33
−6.34
pull
Entries 86
Mean 1352
Std Dev 1295
200
100
0
−100
−200
−300

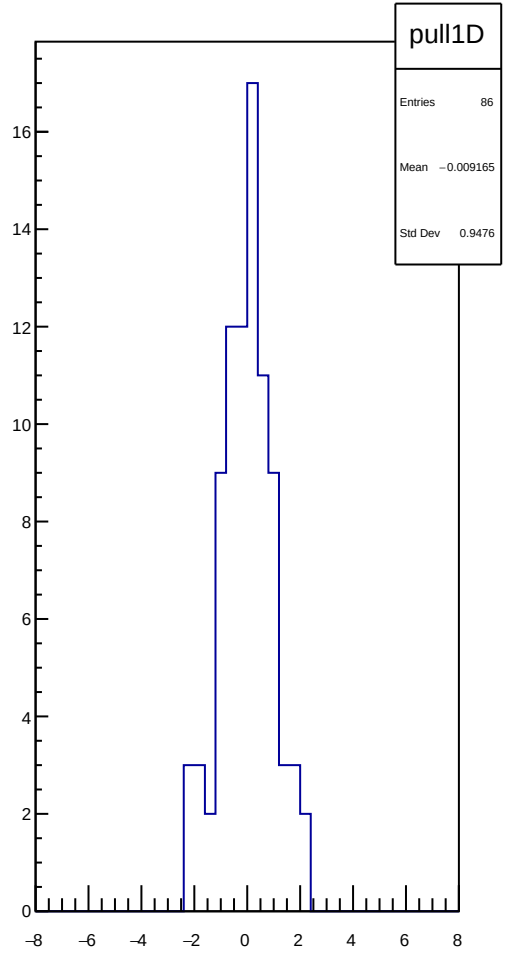

pull1D
Entries 86
Mean 2.1
Std Dev 2.086
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

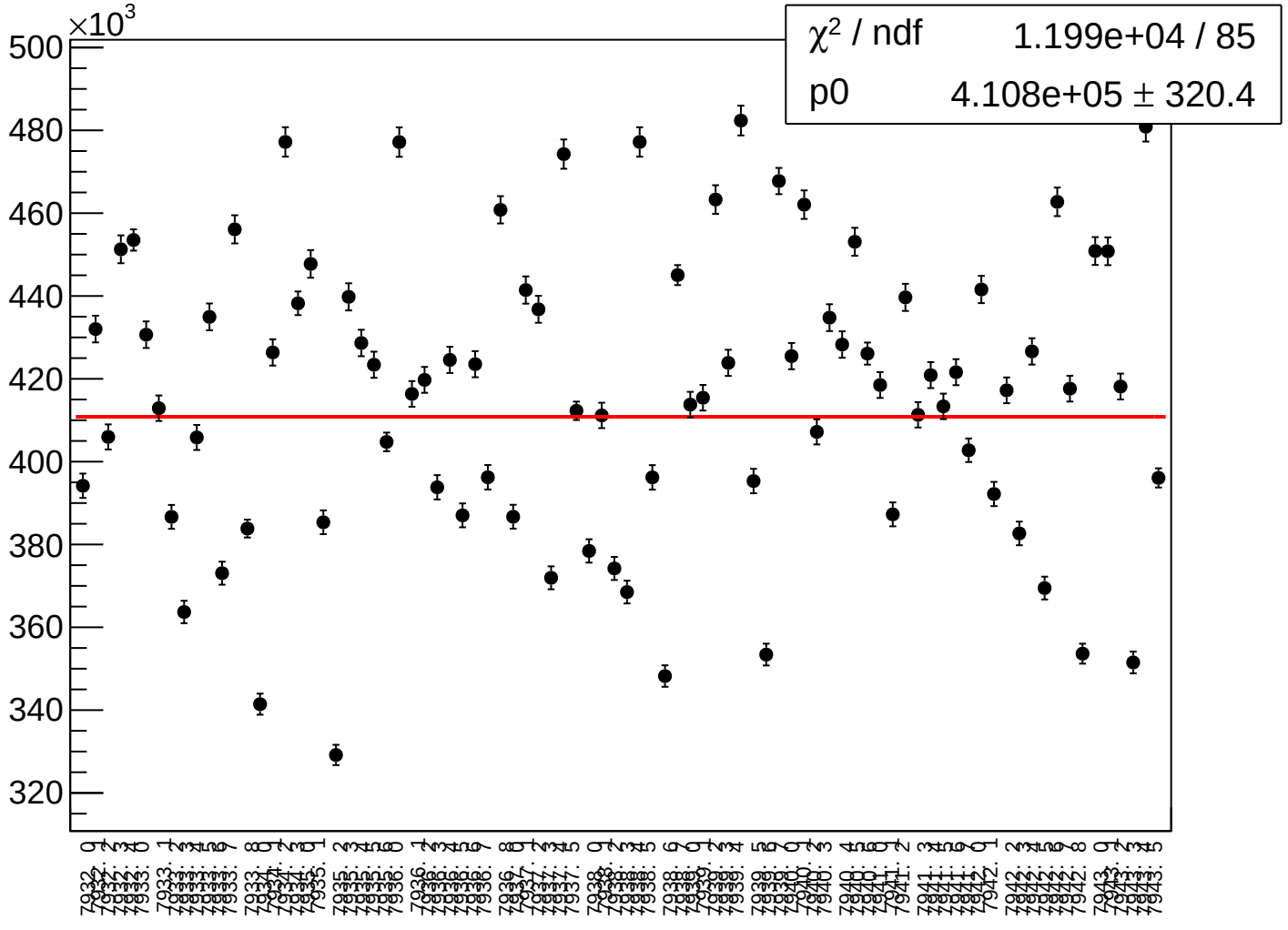

yield_bpm0l01Y_rms vs run
χ² / ndf 3.189e+04 / 85
p0 0.01357 ± 1.065e−05
0.03
0.025
0.02
0.015
0.01

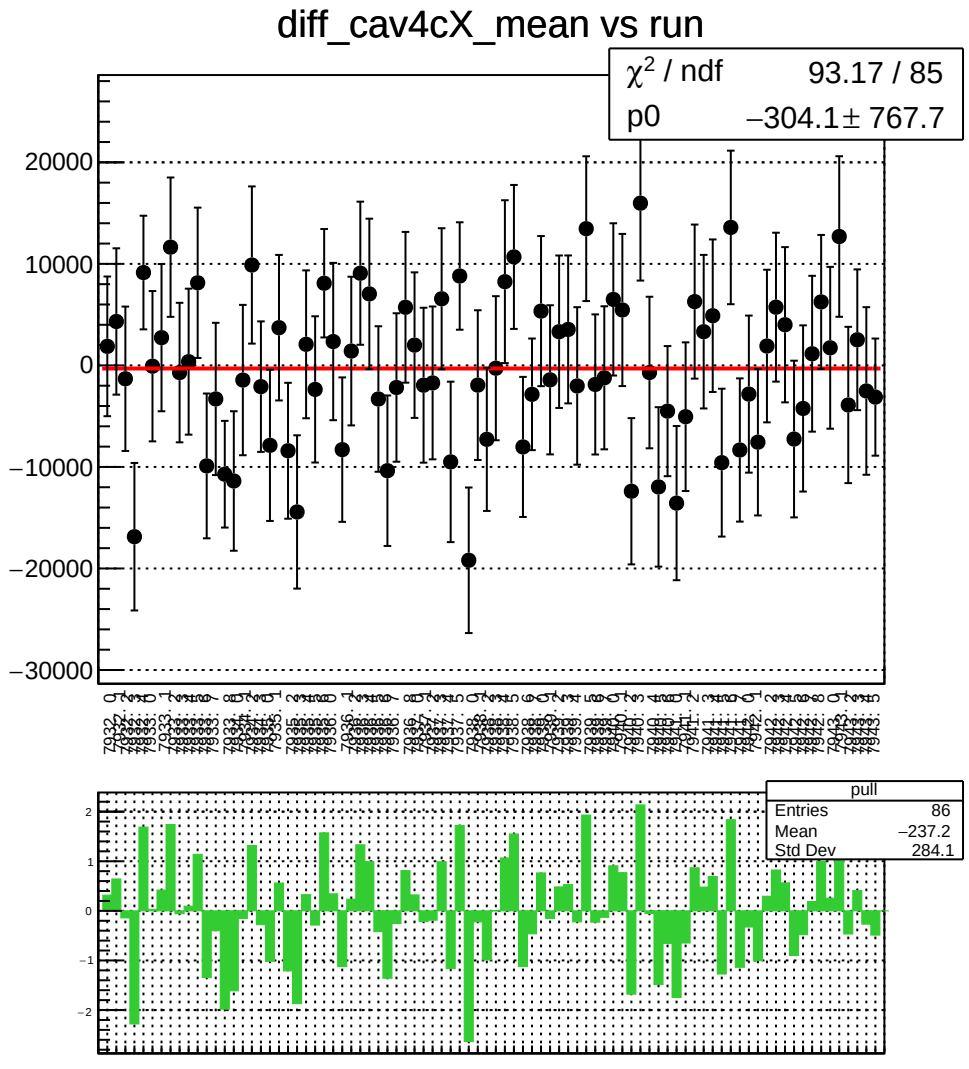

diff_cav4bX_mean vs run
χ² / ndf 94.06 / 85
p0 −866.9 ± 1882
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −254.5
Std Dev 301.4
2
1
0
−1
−2

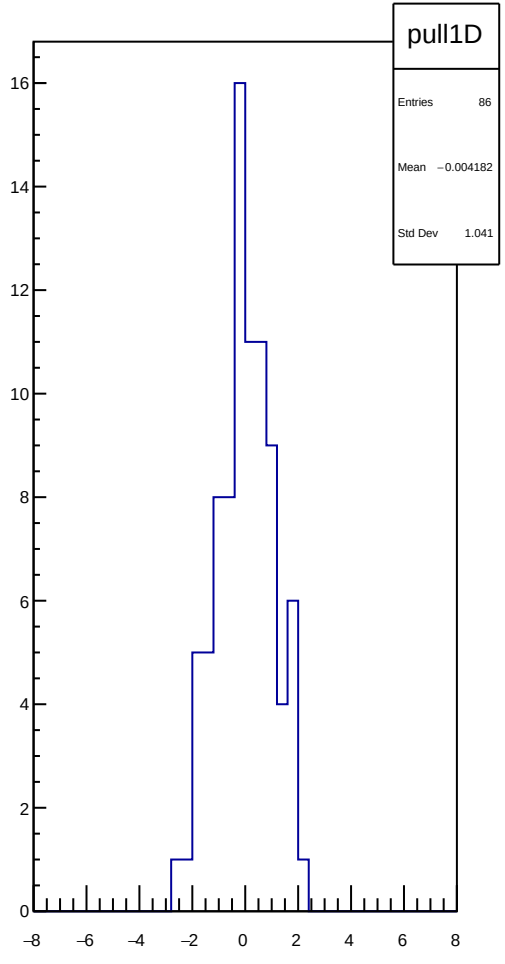

pull1D
Entries 86
Mean −0.004366
Std Dev 1.046
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

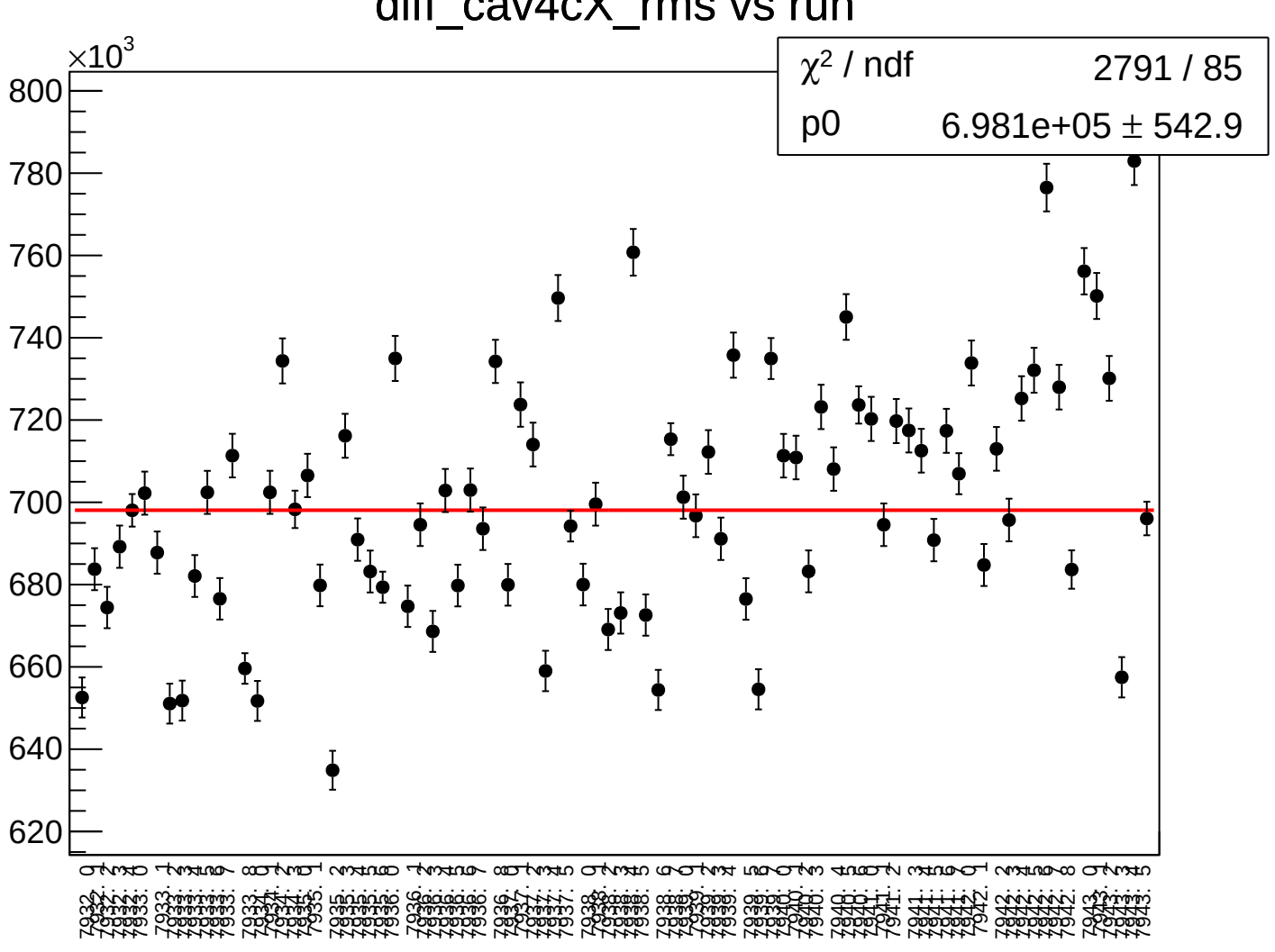

diff_cav4bY_mean vs run
χ² / ndf 77.24 / 85
p0 89.87 ± 453.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 177.3
Std Dev 123.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

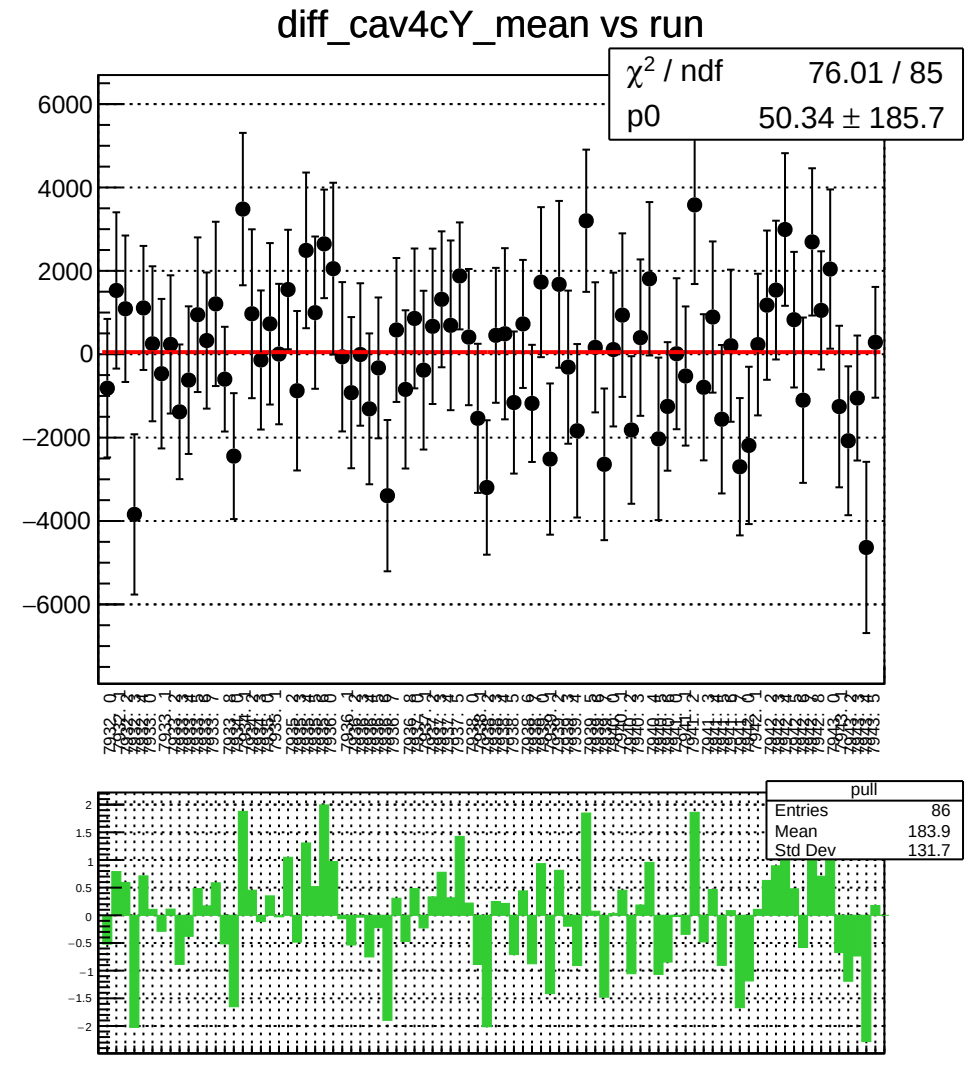

pull1D
Entries 86
Mean −0.009165
Std Dev 0.9476
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

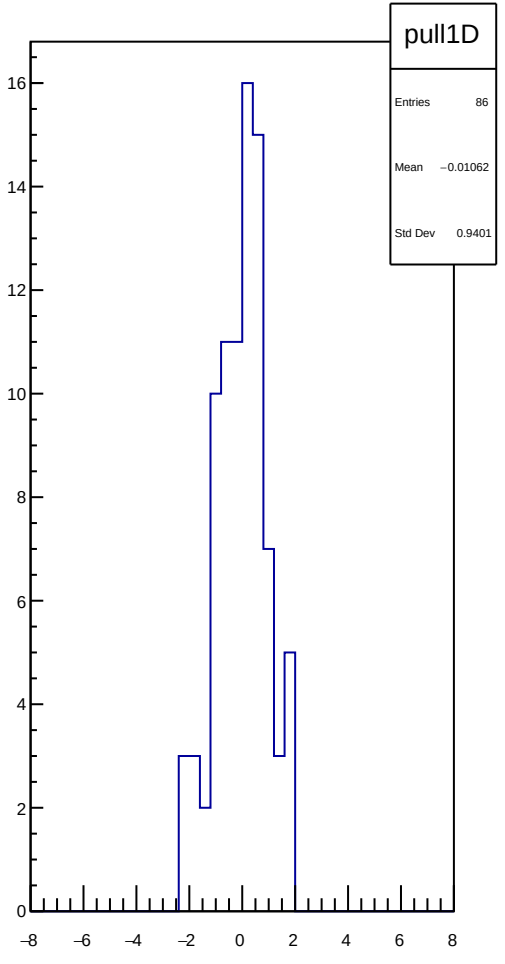

diff_cav4bY_rms vs run
χ² / ndf 1.199e+04 / 85
p0 4.108e+05 ± 320.4
×10³
500
480
460
440
420
400
380
360
340
320

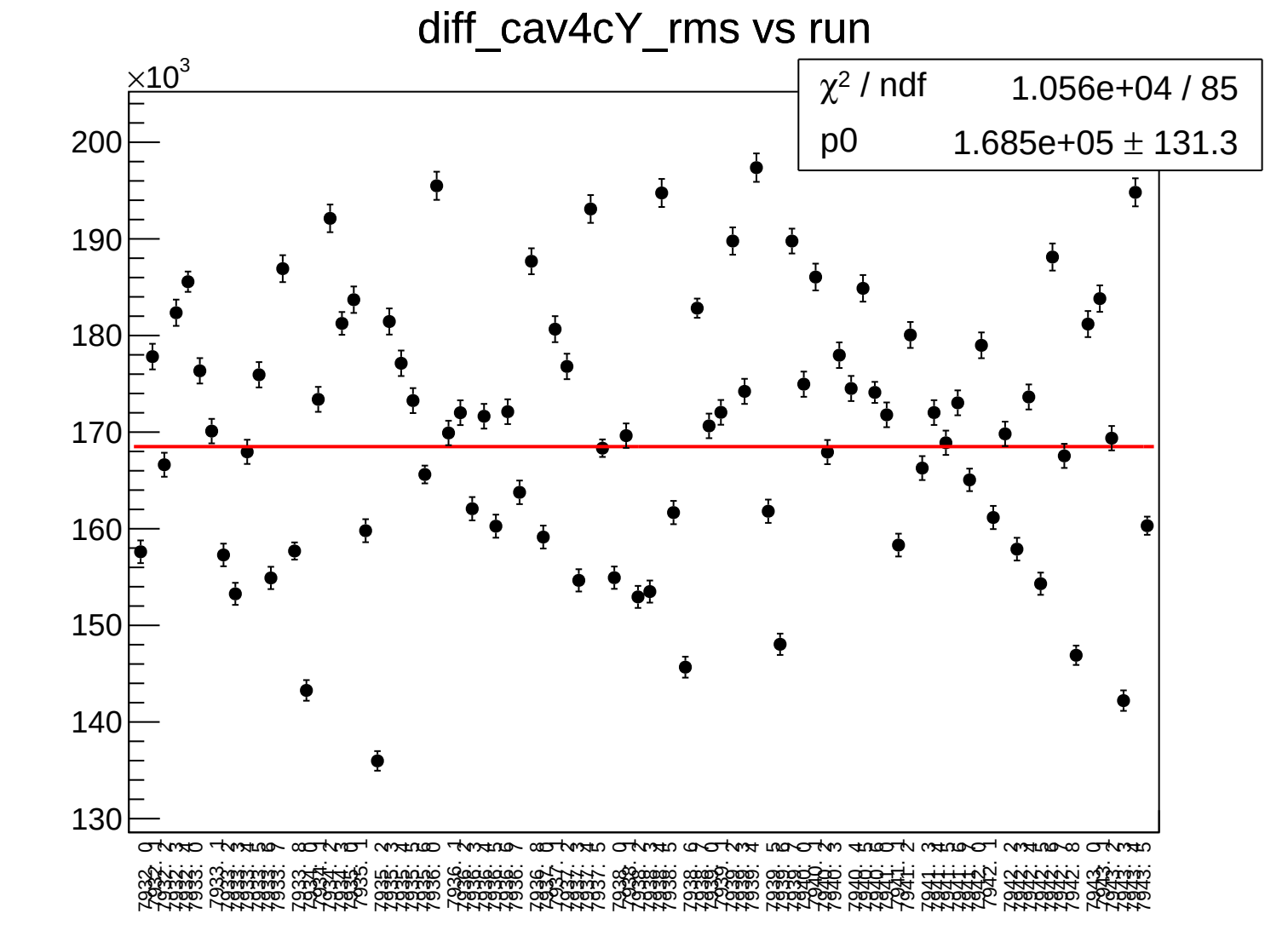

diff_cav4cX_mean vs run
χ² / ndf 93.17 / 85
p0 −304.1± 767.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −237.2
Std Dev 284.1
2
1
0
−1
−2

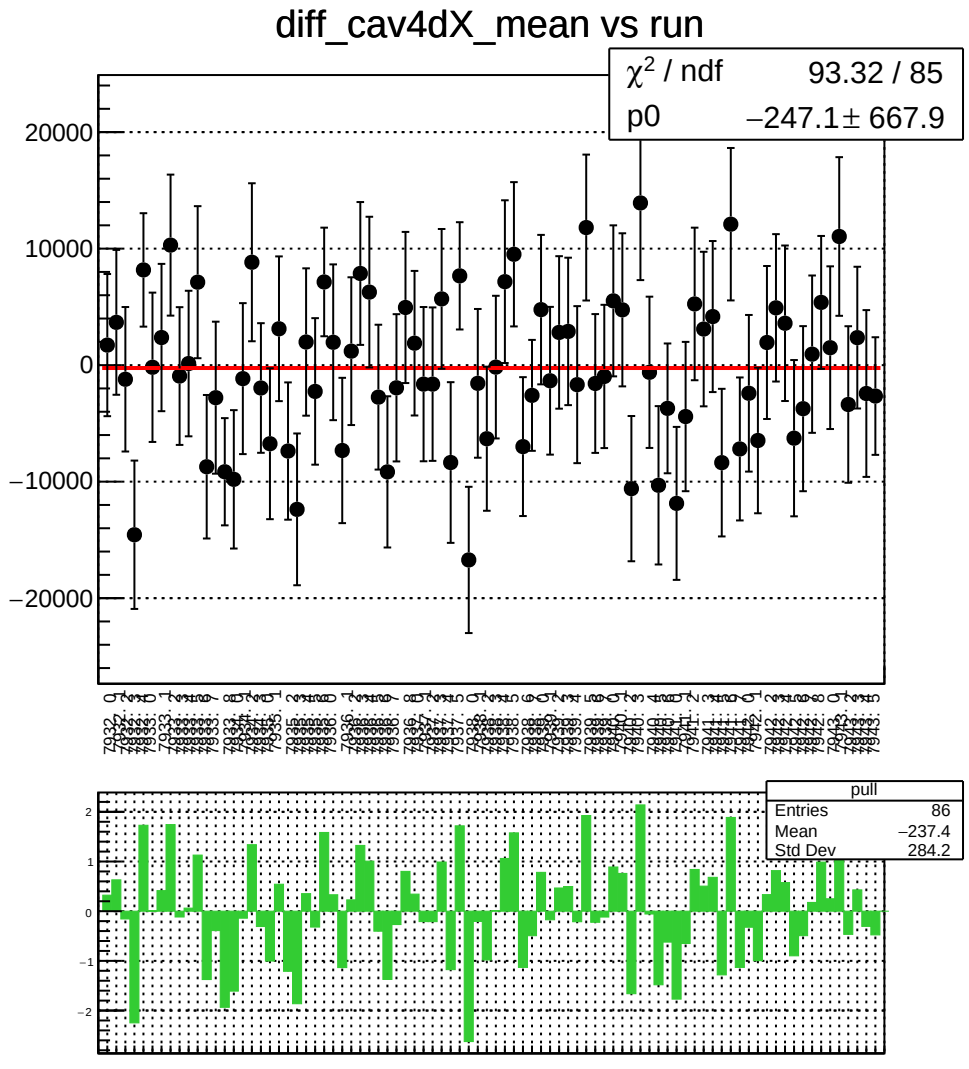

pull1D
Entries 86
Mean −0.004182
Std Dev 1.041
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

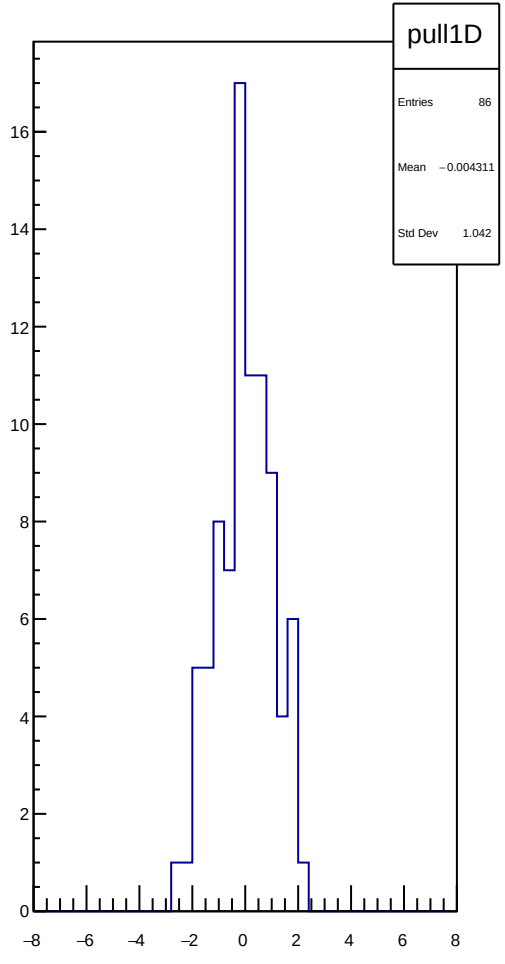

diff_cav4cX_rms vs run
×10^3
800
780
760
740
720
700
680
660
640
620
χ² / ndf 2791 / 85
p0 6.981e+05 ± 542.9

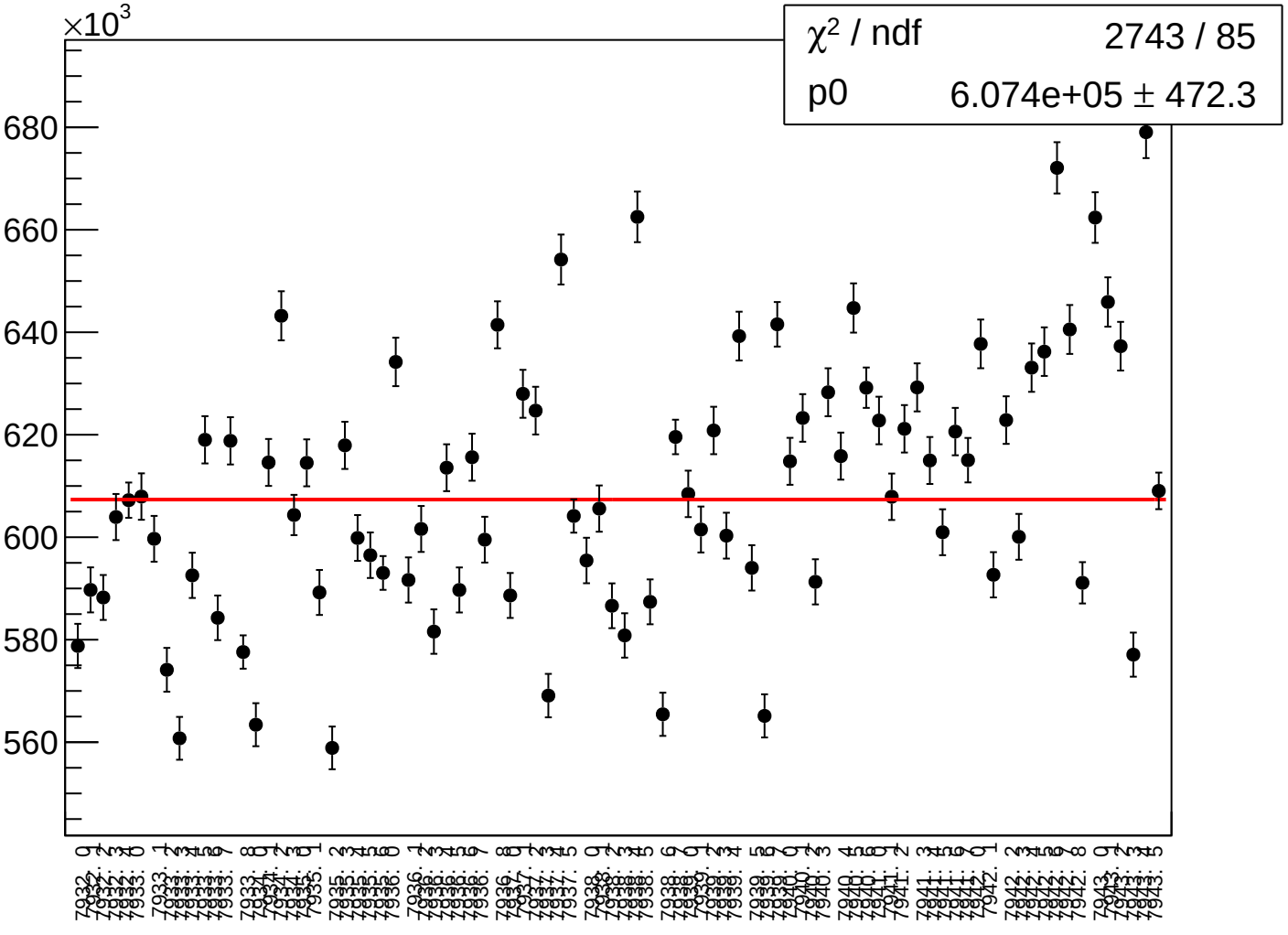

diff_cav4cY_mean vs run
χ^2 / ndf 76.01 / 85
p0 50.34 ± 185.7
pull
Entries 86
Mean 183.9
Std Dev 131.7

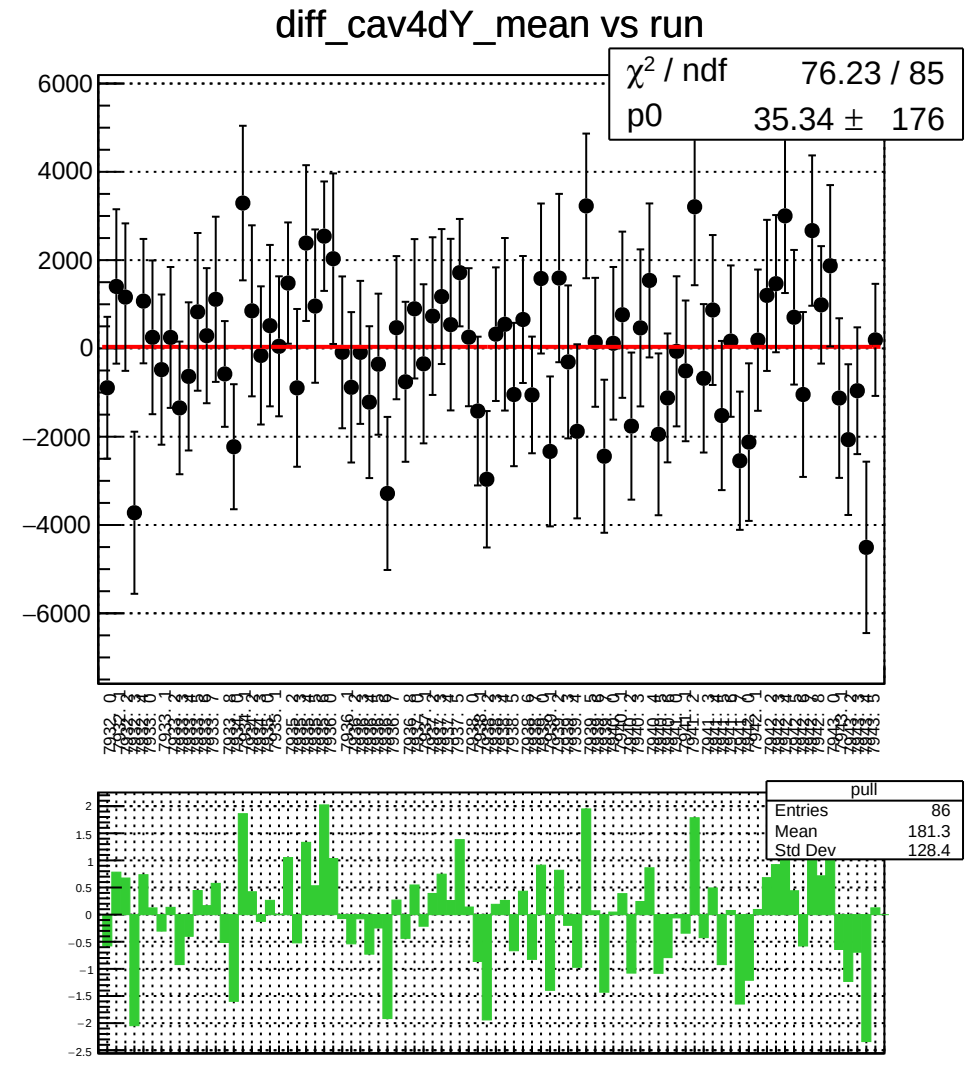

pull1D
Entries 86
Mean −0.01062
Std Dev 0.9401

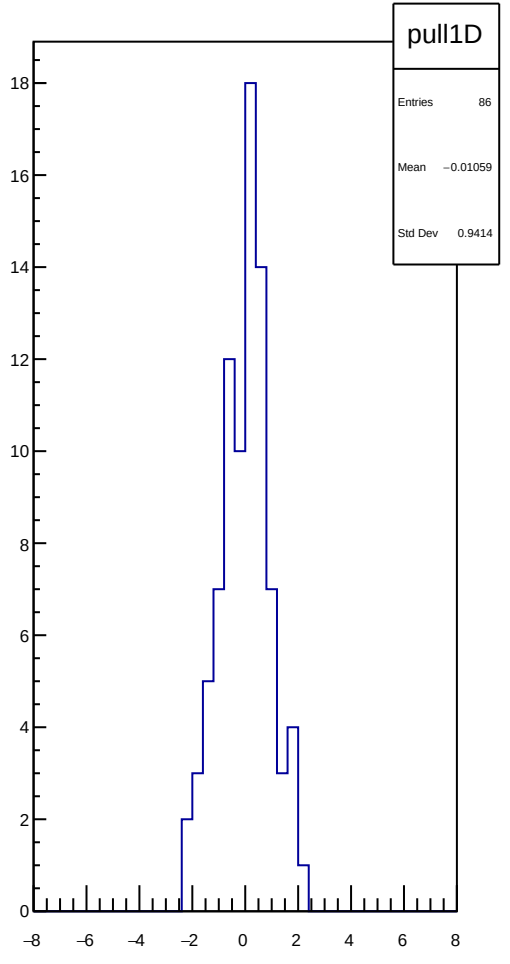

diff_cav4cY_rms vs run
×10^3
χ² / ndf 1.056e+04 / 85
p0 1.685e+05 ± 131.3
200
190
180
170
160
150
140
130

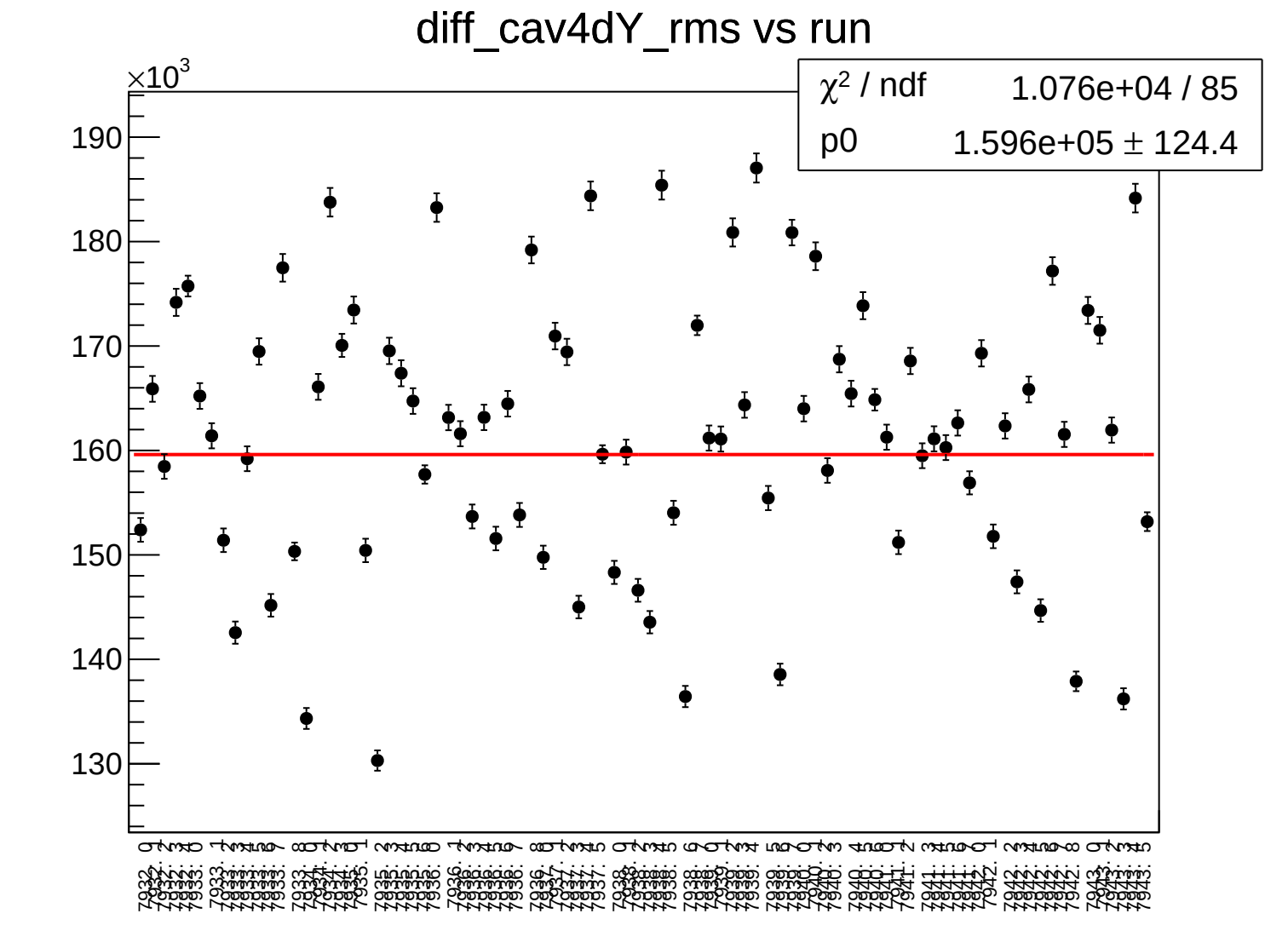

diff_cav4dX_mean vs run
χ² / ndf 93.32 / 85
p0 −247.1± 667.9
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −237.4
Std Dev 284.2
2
1
0
−1
−2

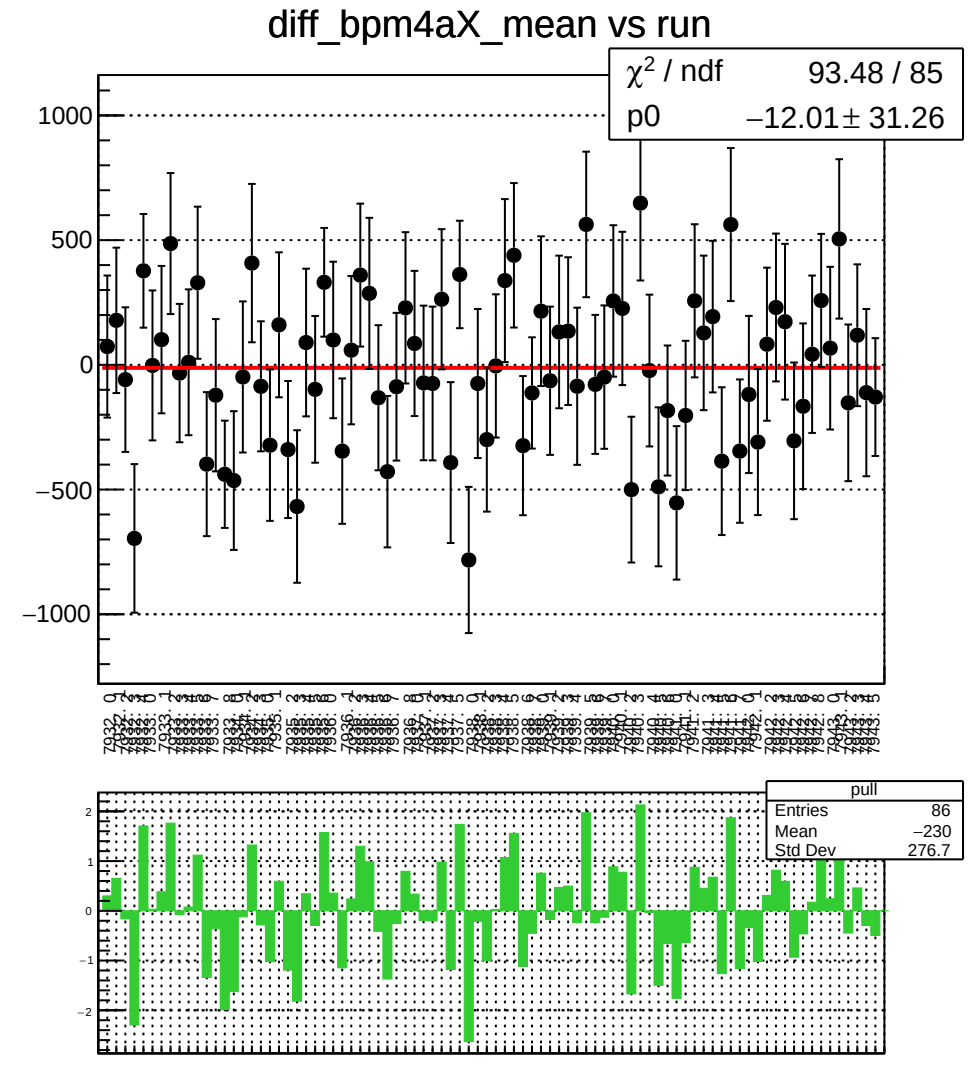

pull1D
Entries 86
Mean −0.004311
Std Dev 1.042
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

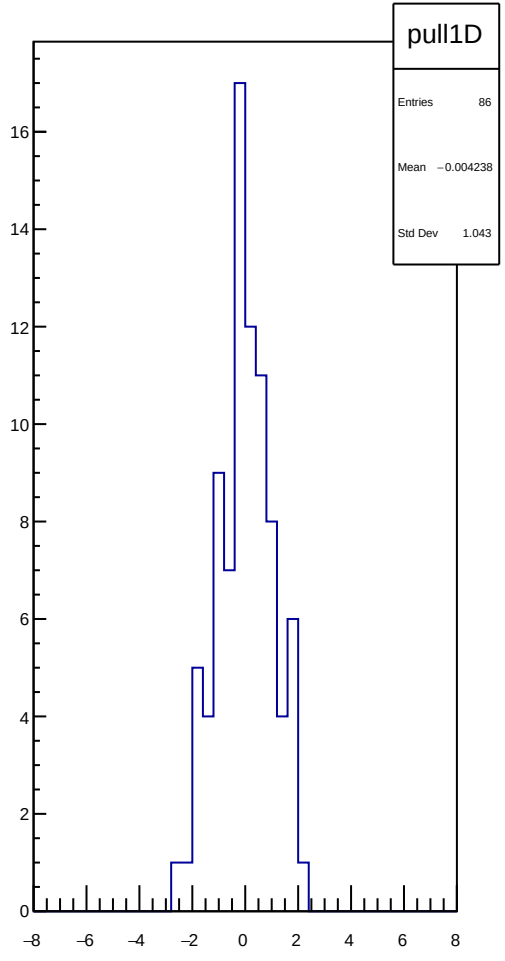

diff_cav4dX_rms vs run
×10^3
680
660
640
620
600
580
560
χ² / ndf 2743 / 85
p0 6.074e+05 ± 472.3

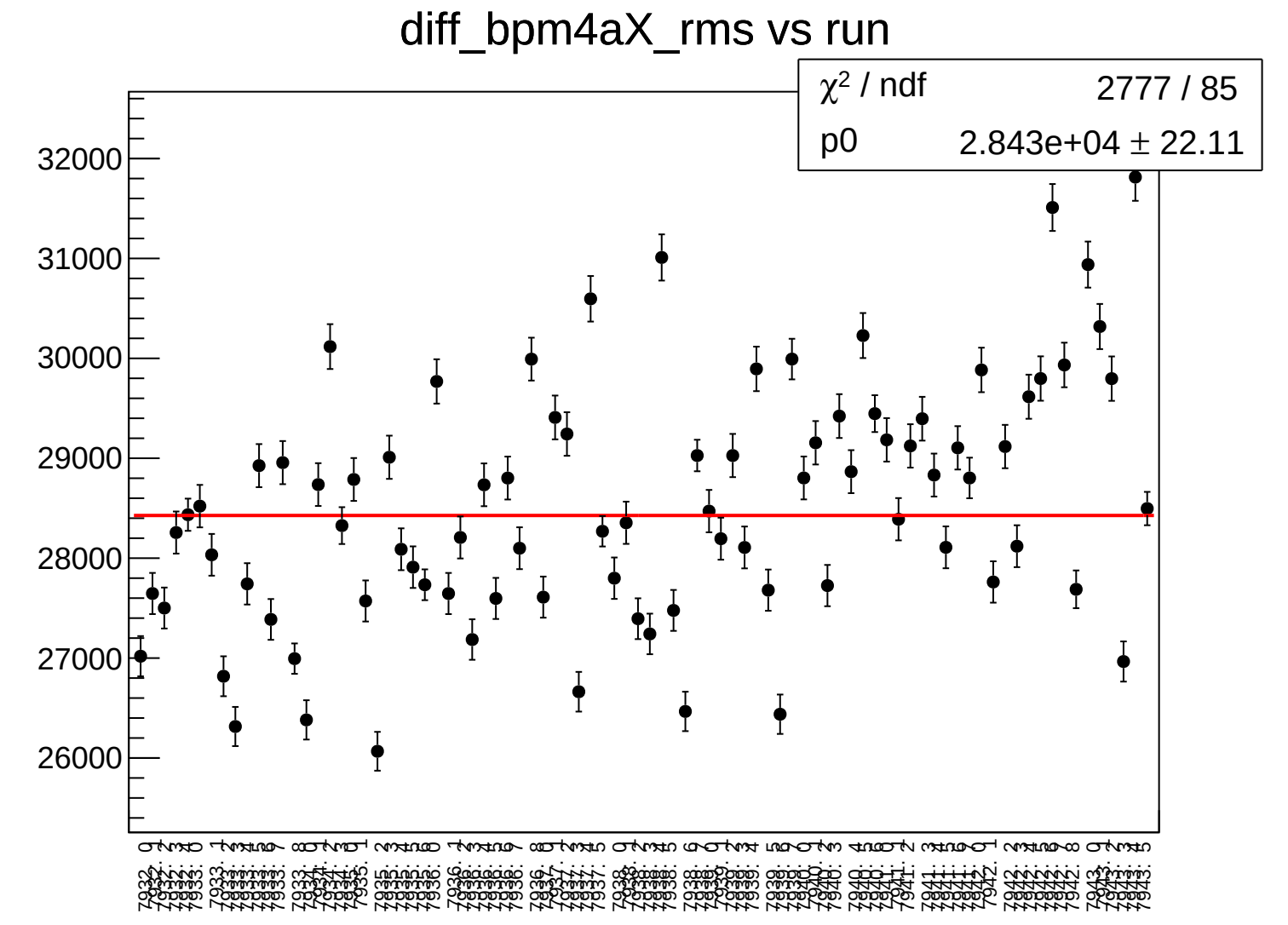

diff_cav4dY_mean vs run
χ² / ndf 76.23 / 85
p0 35.34 ± 176
pull
Entries 86
Mean 181.3
Std Dev 128.4

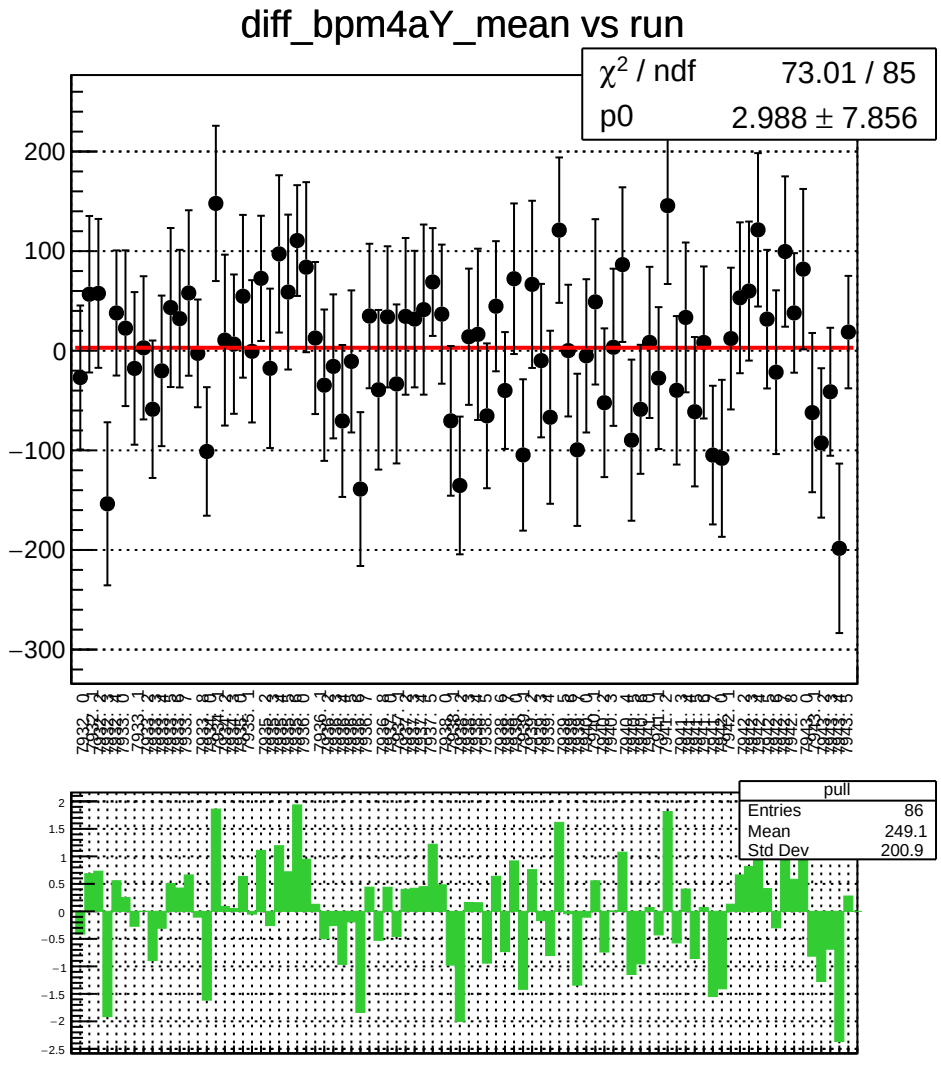

pull1D
Entries 86
Mean −0.01059
Std Dev 0.9414

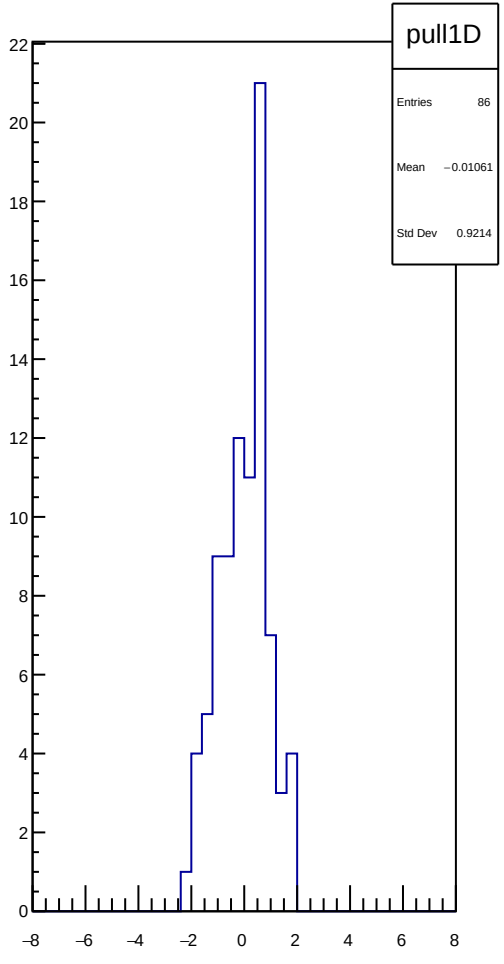

diff_cav4dY_rms vs run
×10^3
χ² / ndf 1.076e+04 / 85
p0 1.596e+05 ± 124.4
190
180
170
160
150
140
130

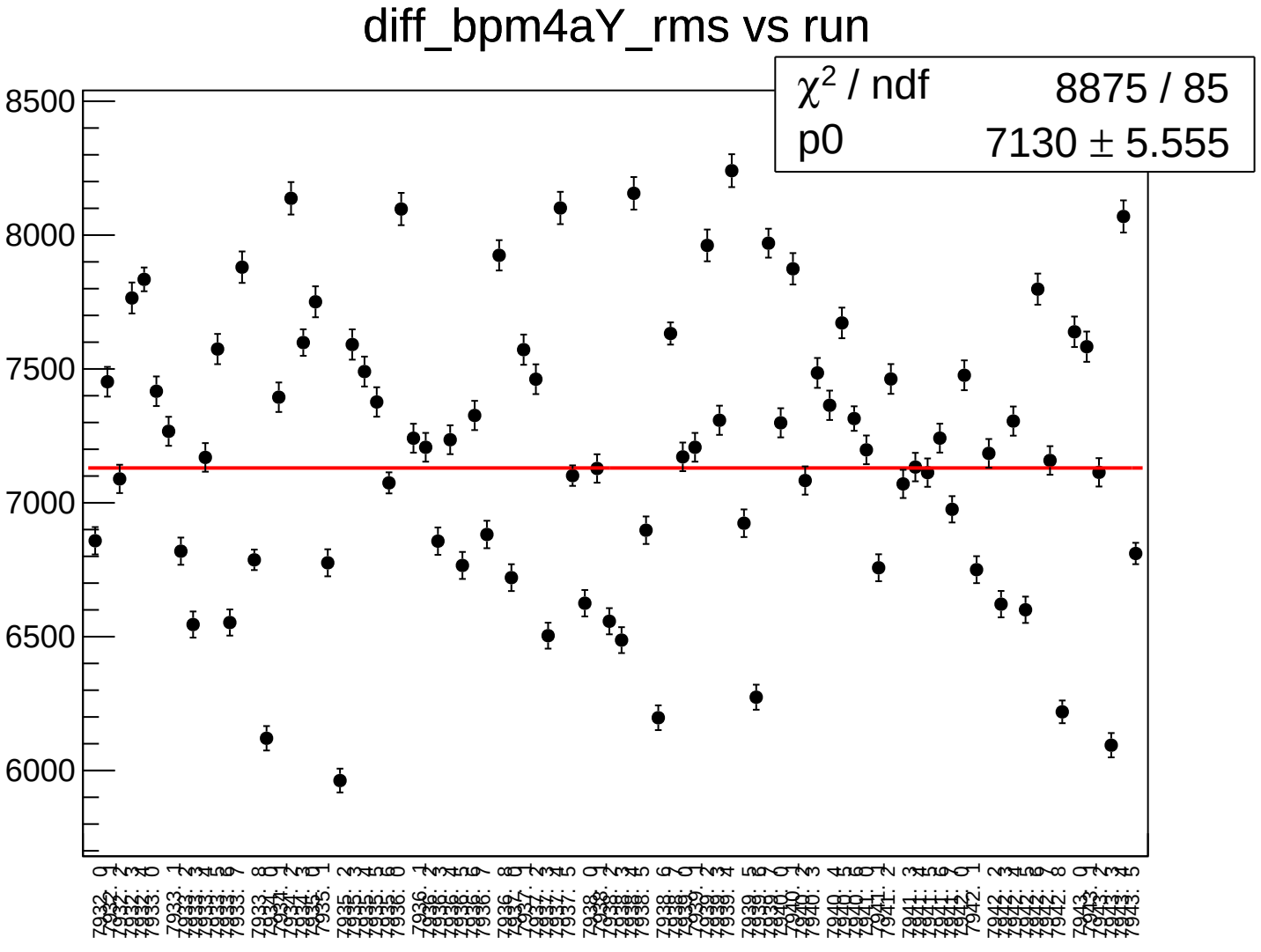

diff_bpm4aX_mean vs run
χ² / ndf 93.48 / 85
p0 −12.01± 31.26
1000
500
0
−500
−1000
pull
Entries 86
Mean −230
Std Dev 276.7
2
1
0
−1
−2

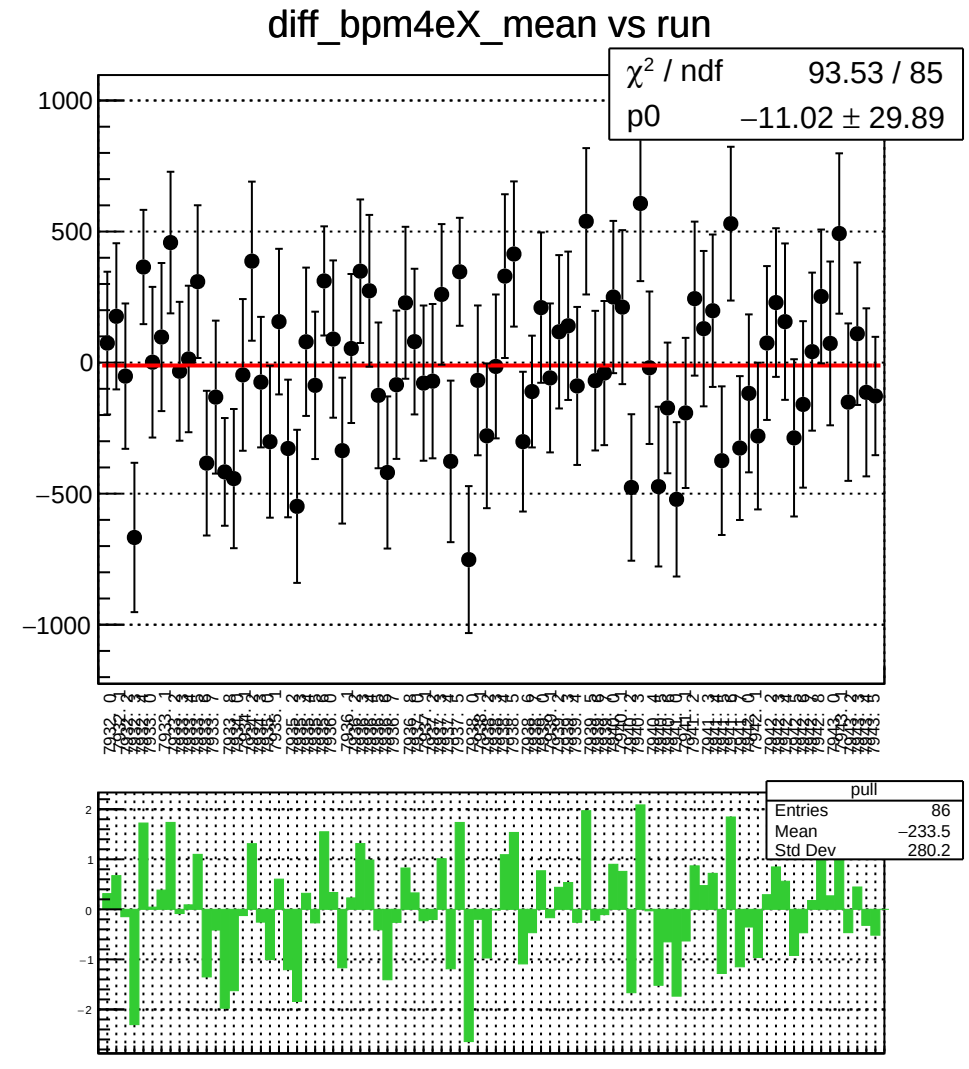

pull1D
Entries 86
Mean −0.004238
Std Dev 1.043
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

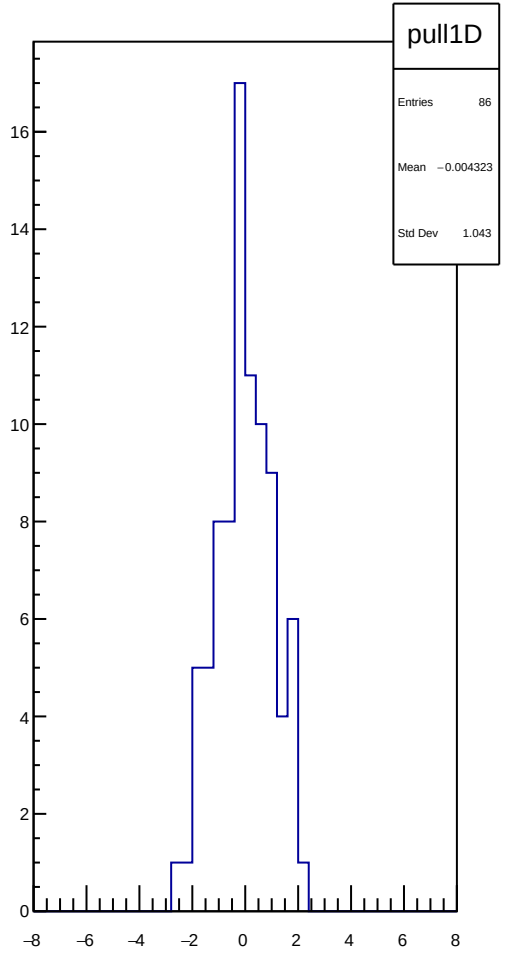

diff_bpm4aX_rms vs run
χ² / ndf 2777 / 85
p0 2.843e+04 ± 22.11
32000
31000
30000
29000
28000
27000
26000

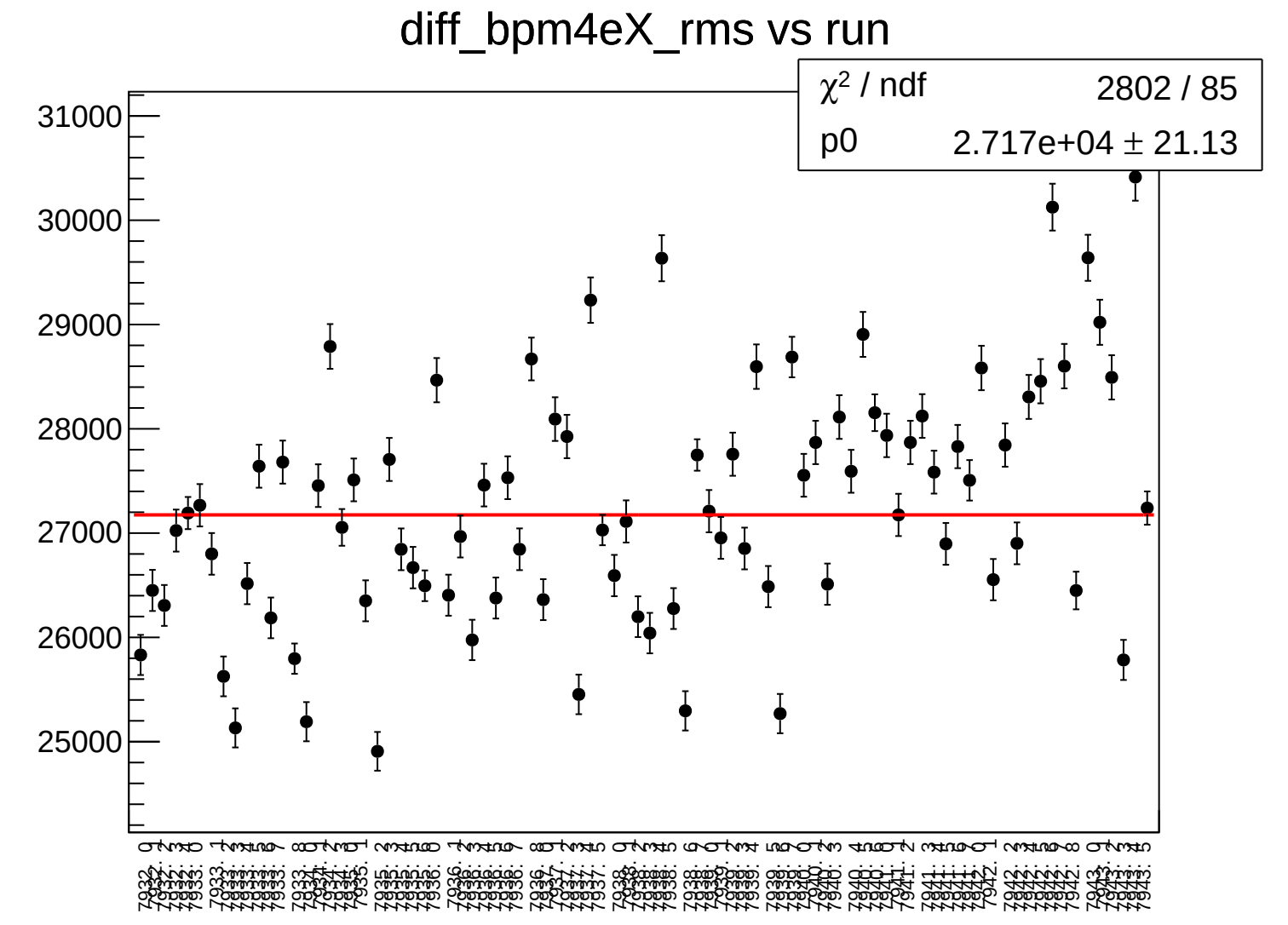

diff_bpm4aY_mean vs run
χ² / ndf 73.01 / 85
p0 2.988 ± 7.856
200
100
0
−100
−200
−300
pull
Entries 86
Mean 249.1
Std Dev 200.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

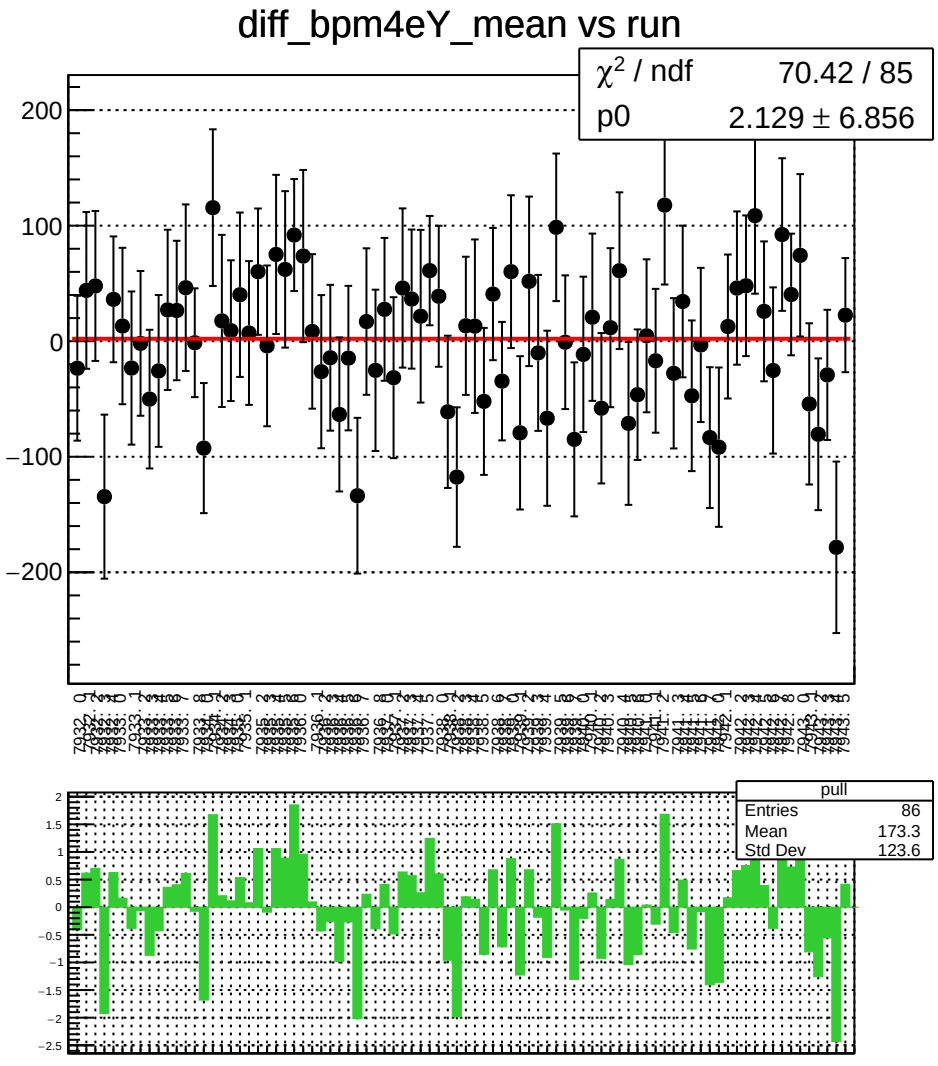

pull1D
Entries 86
Mean −0.01061
Std Dev 0.9214
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

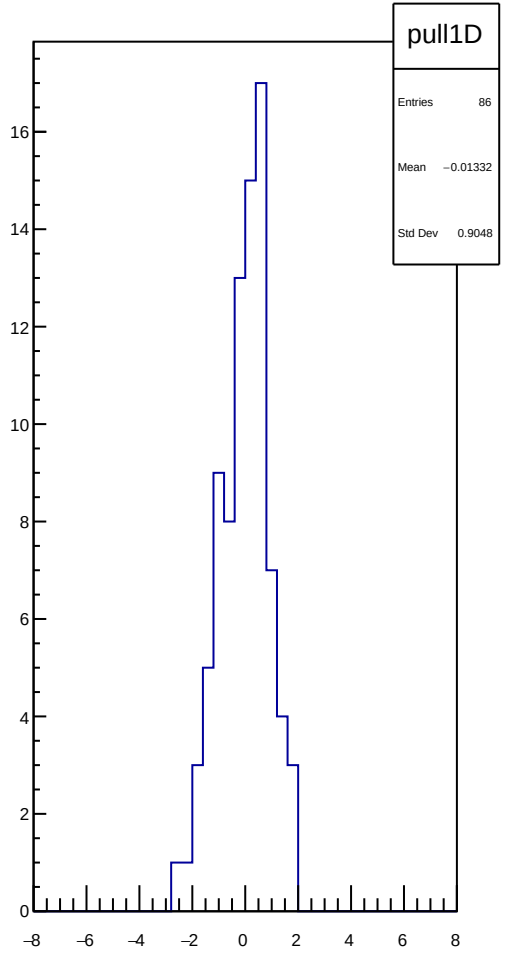

diff_bpm4aY_rms vs run
χ² / ndf 8875 / 85
p0 7130 ± 5.555
8500
8000
7500
7000
6500
6000

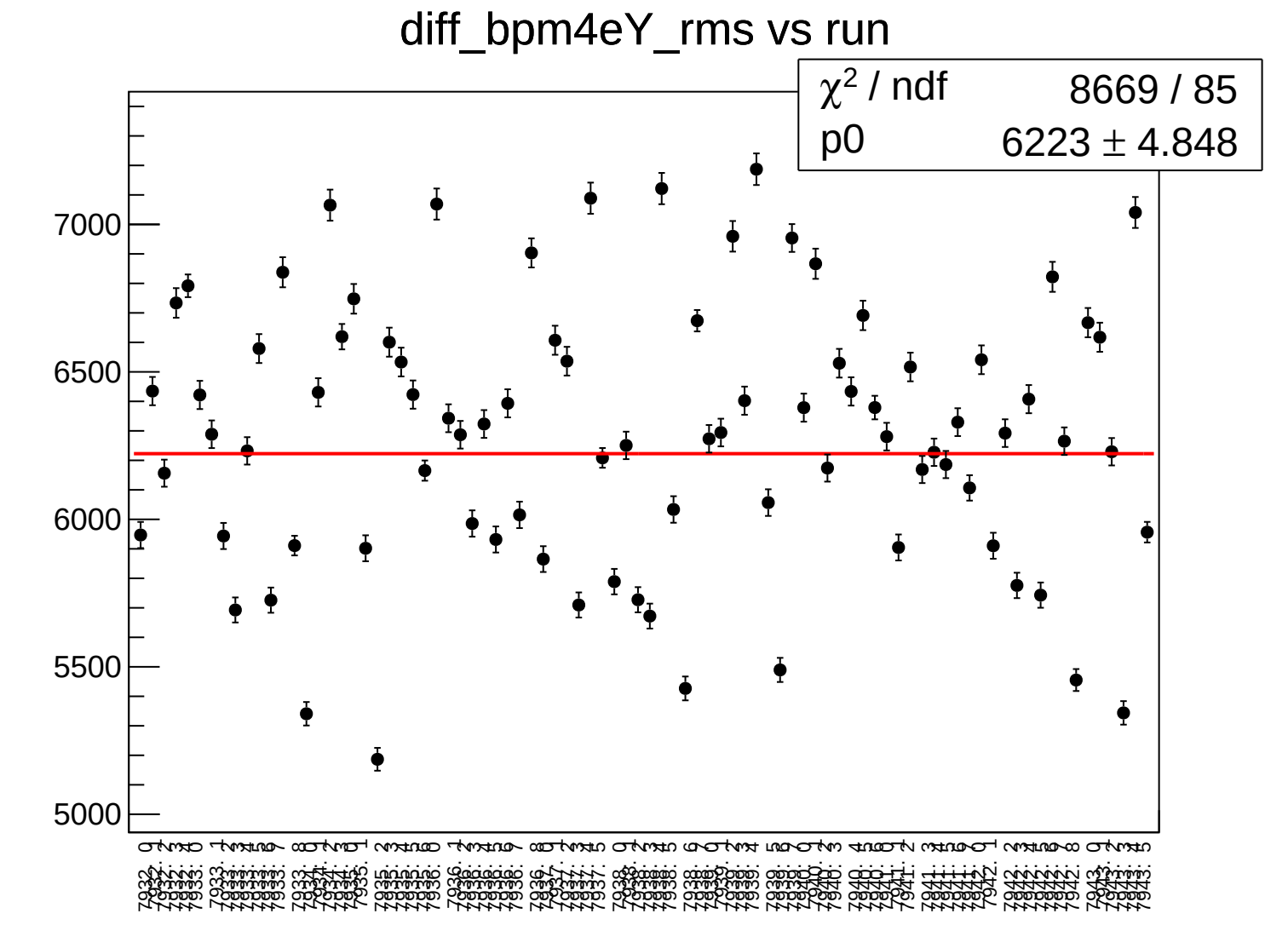

diff_bpm4eX_mean vs run
χ² / ndf 93.53 / 85
p0 −11.02 ± 29.89
1000
500
0
−500
−1000
pull
Entries 86
Mean −233.5
Std Dev 280.2
2
1
0
−1
−2

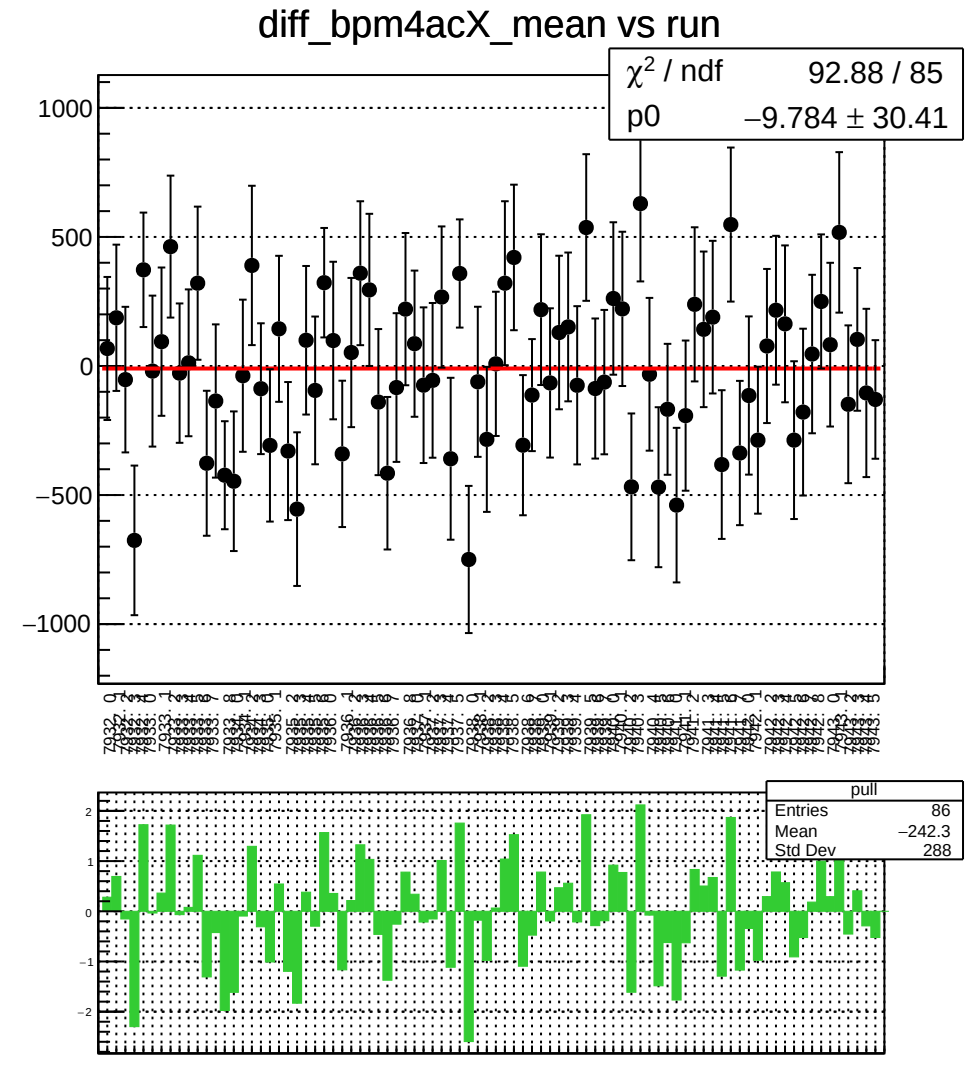

pull1D
Entries 86
Mean −0.004323
Std Dev 1.043
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

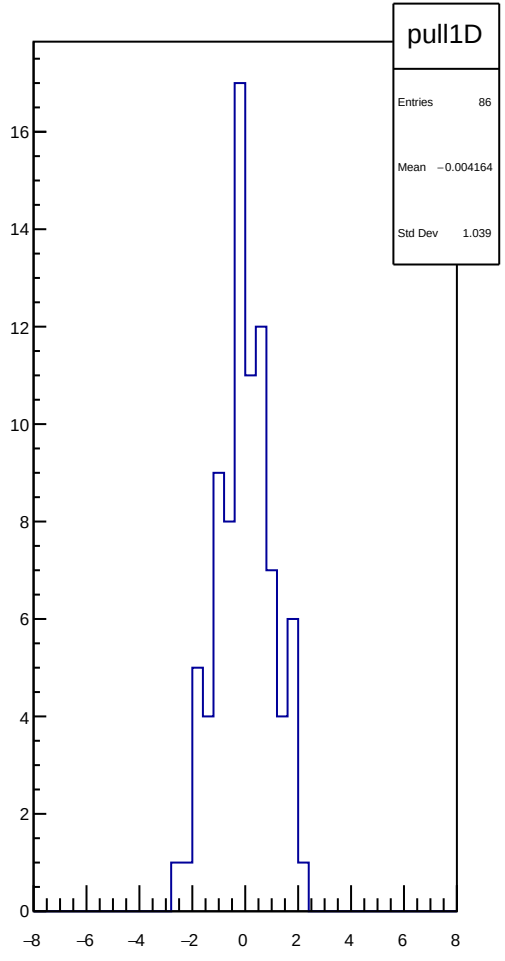

diff_bpm4eX_rms vs run
χ² / ndf 2802 / 85
p0 2.717e+04 ± 21.13
31000
30000
29000
28000
27000
26000
25000

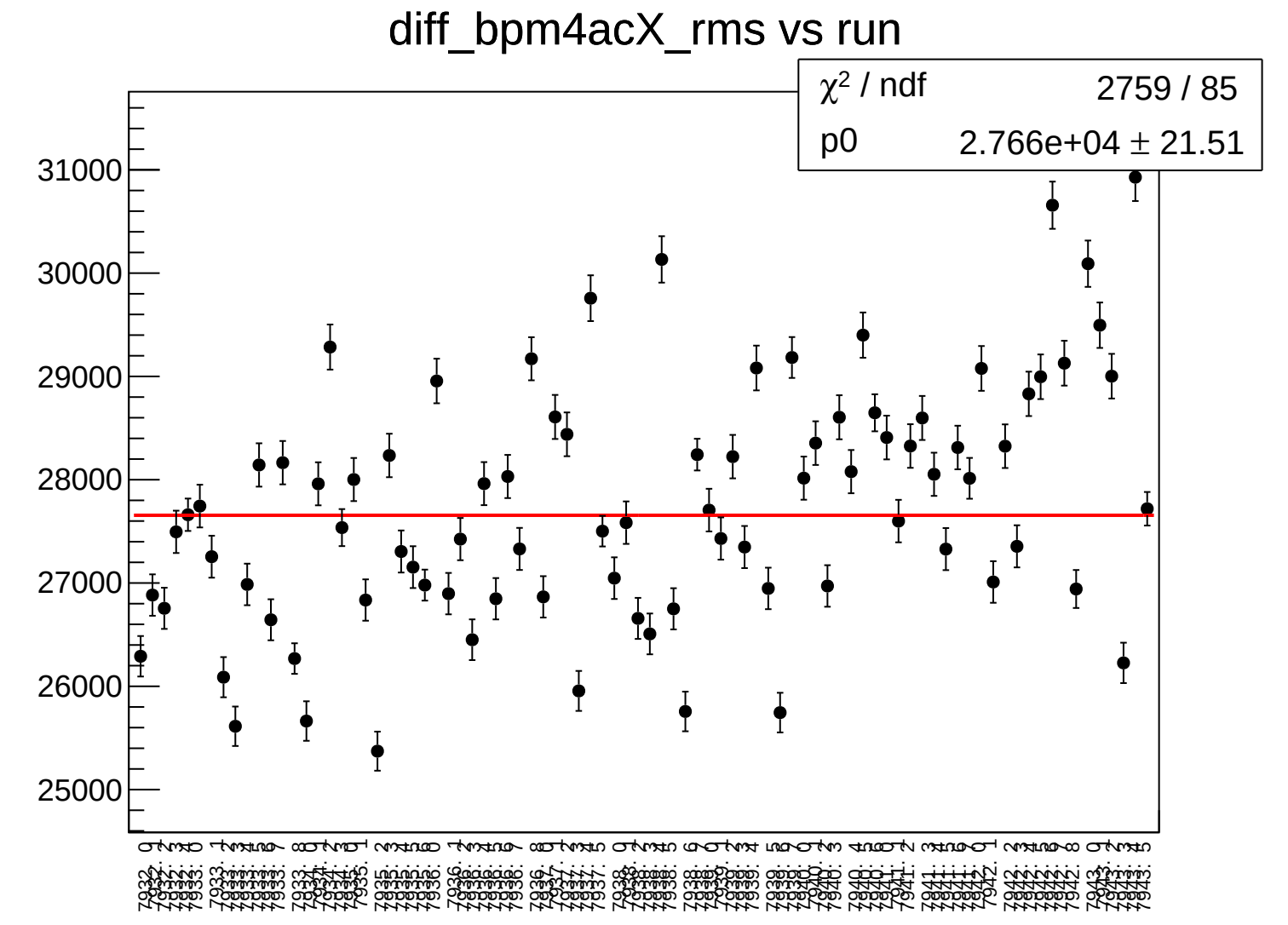

diff_bpm4eY_mean vs run
χ² / ndf 70.42 / 85
p0 2.129 ± 6.856
200
100
0
−100
−200
pull
Entries 86
Mean 173.3
Std Dev 123.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

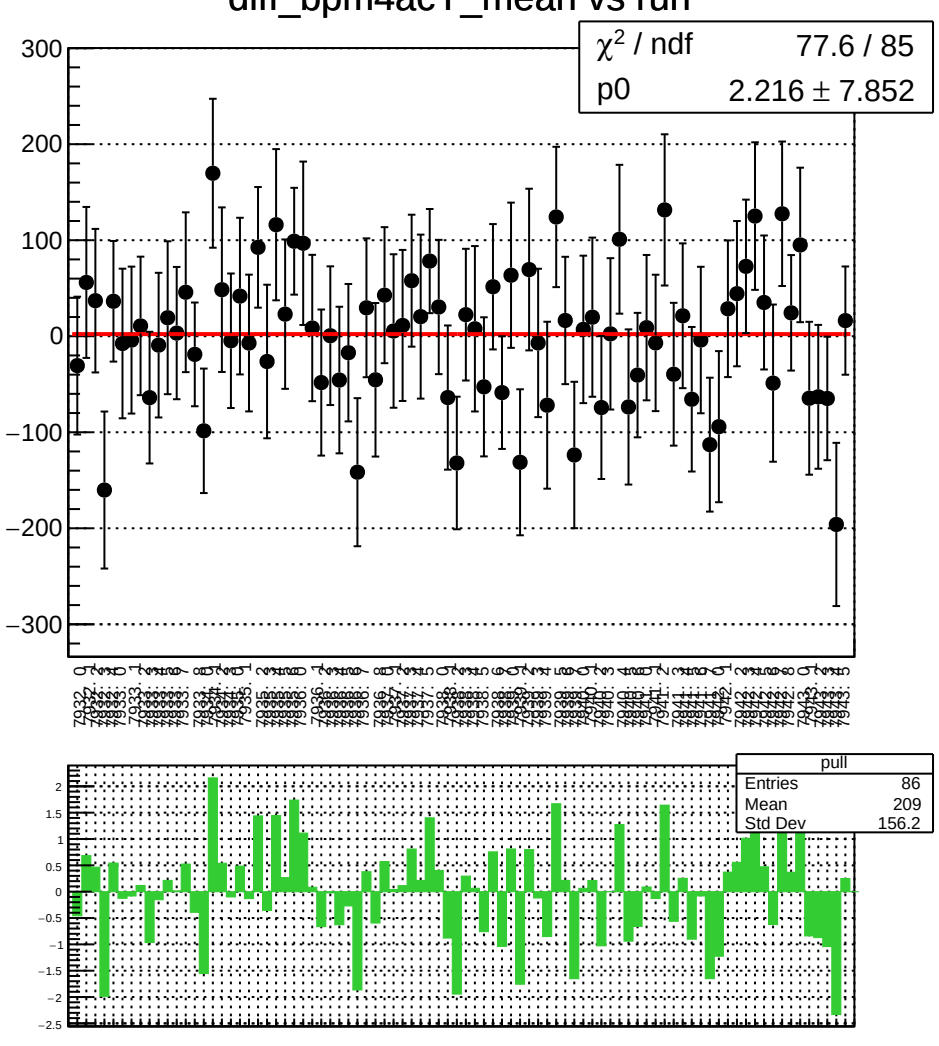

pull1D
Entries 86
Mean −0.01332
Std Dev 0.9048
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

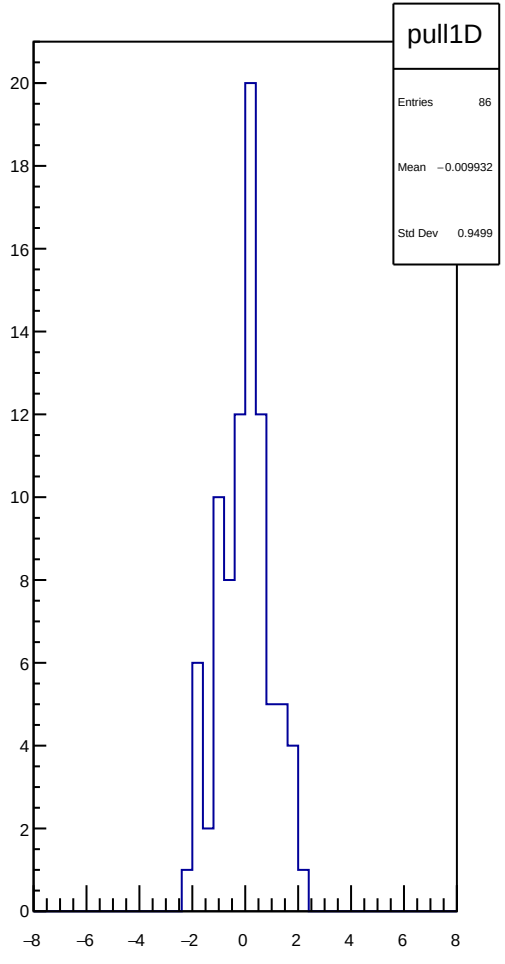

diff_bpm4eY_rms vs run
χ^2 / ndf 8669 / 85
p0 6223 ± 4.848
7000
6500
6000
5500
5000

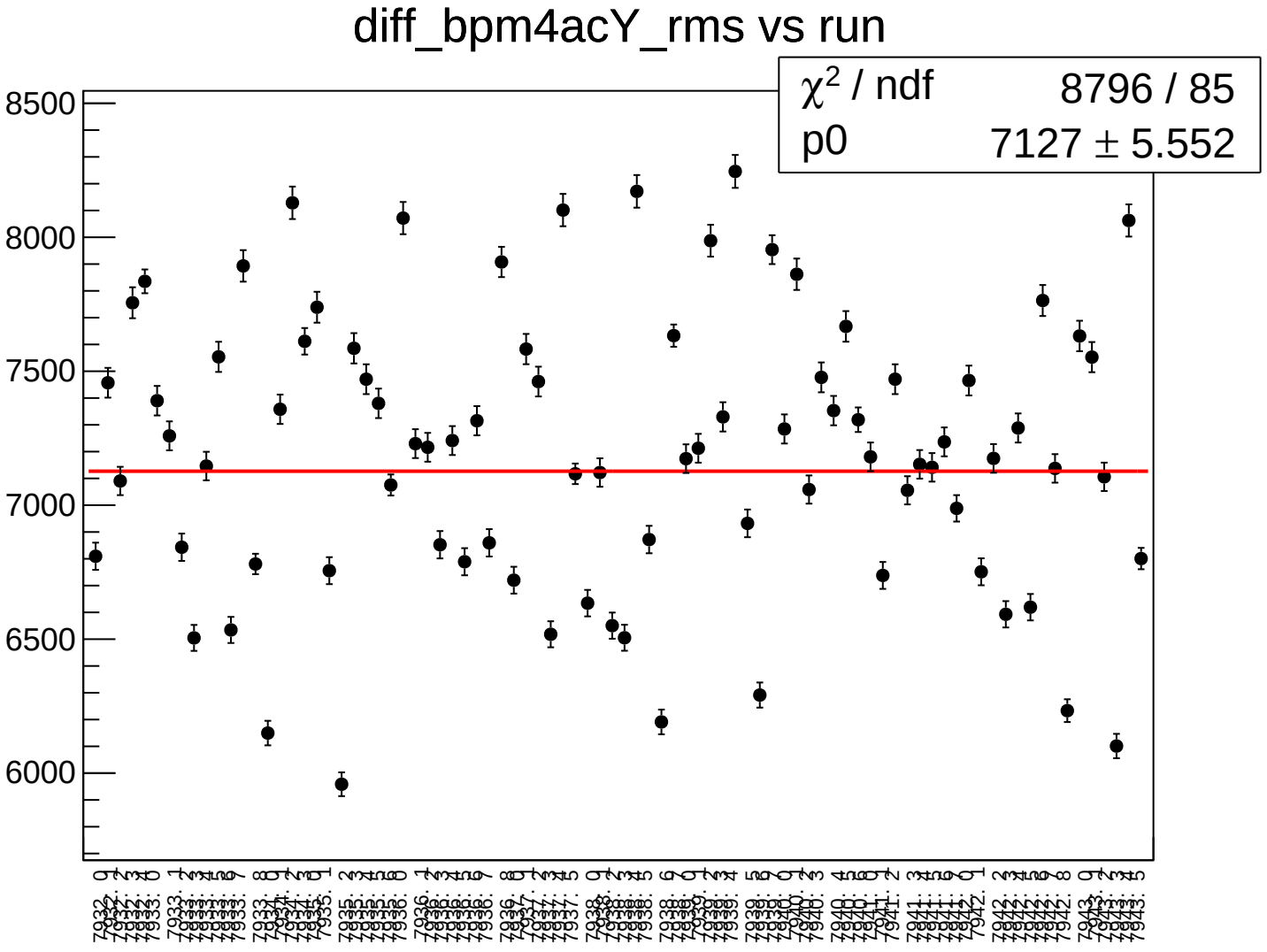

diff_bpm4acX_mean vs run
χ² / ndf 92.88 / 85
p0 −9.784 ± 30.41
1000
500
0
−500
−1000
pull
Entries 86
Mean −242.3
Std Dev 288
2
1
0
−1
−2

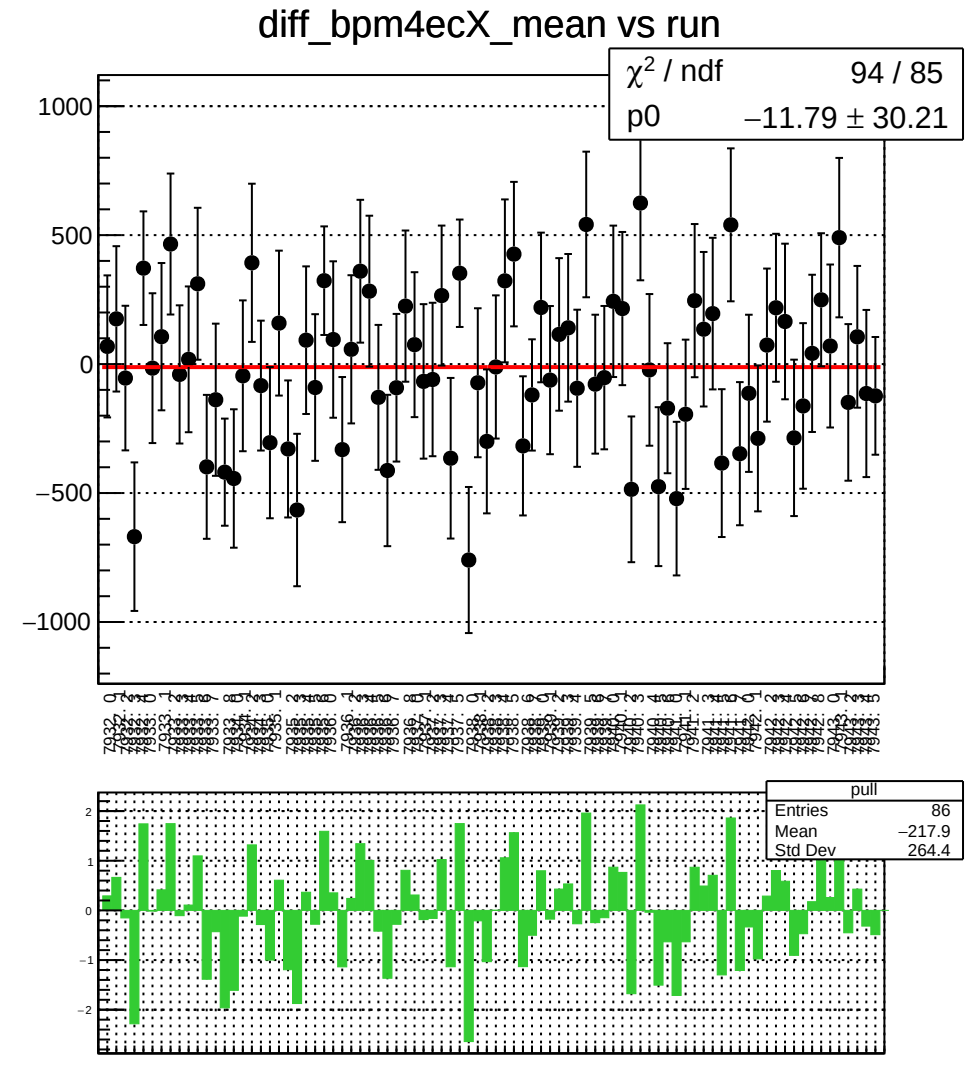

pull1D
Entries 86
Mean −0.004164
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

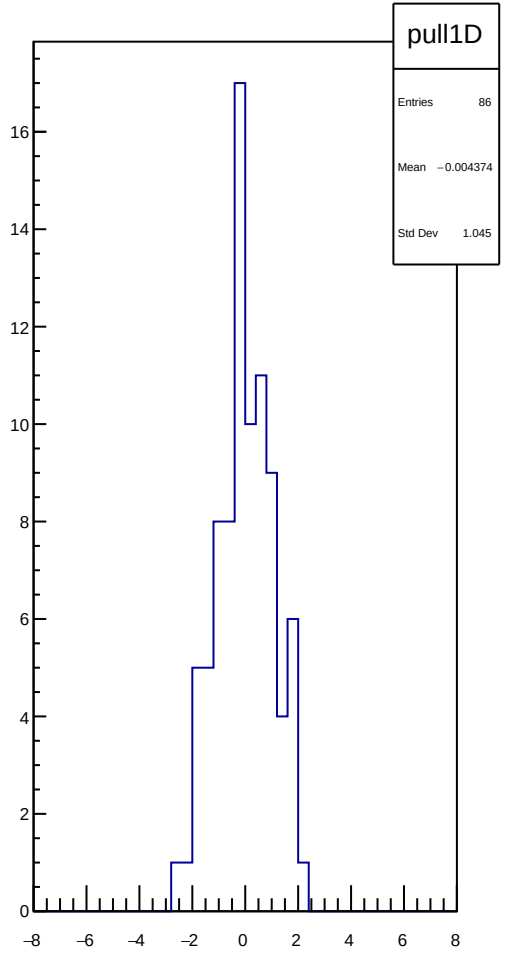

diff_bpm4acX_rms vs run
χ² / ndf 2759 / 85
p0 2.766e+04 ± 21.51
31000
30000
29000
28000
27000
26000
25000

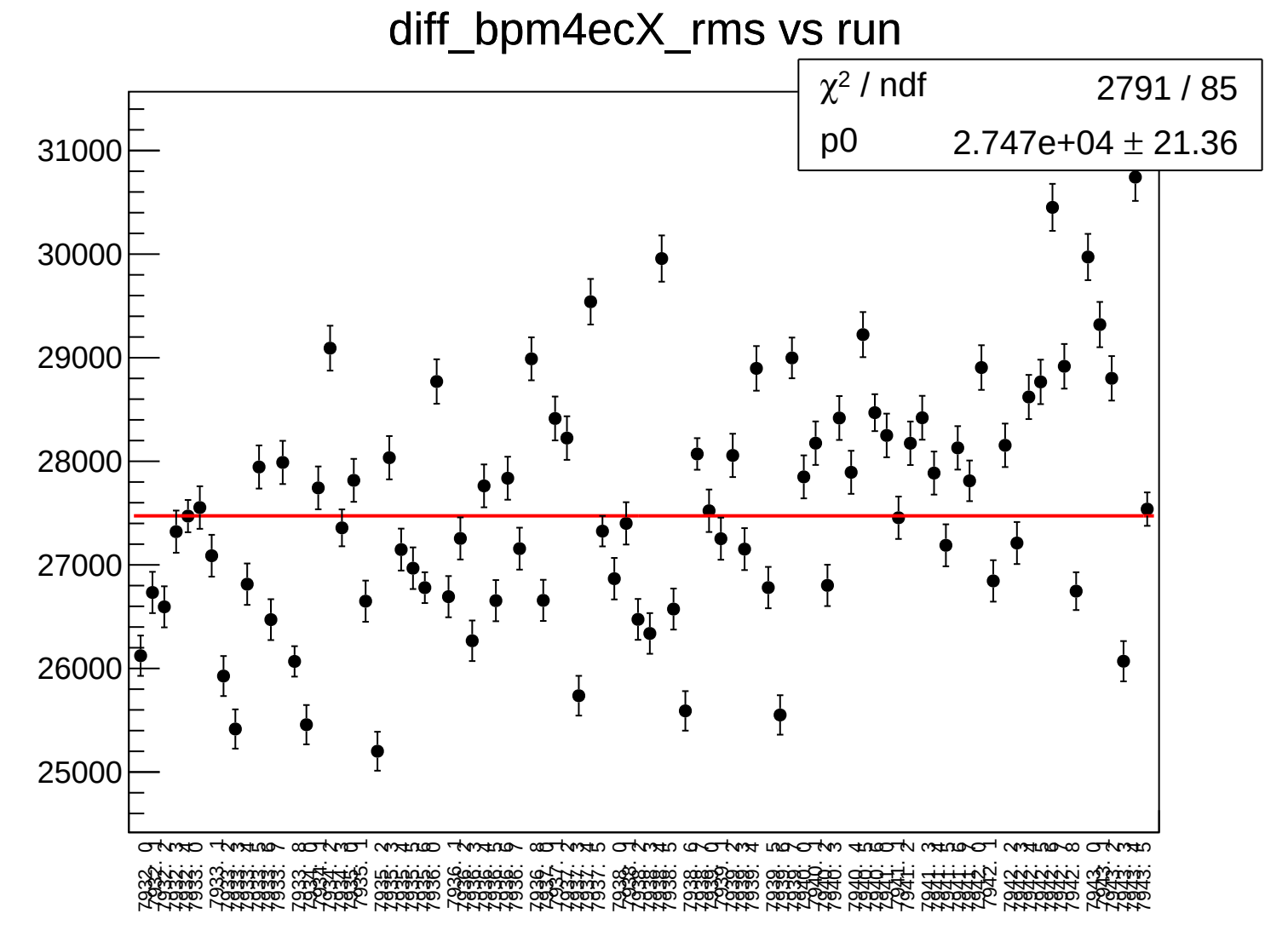

diff_bpm4acY_mean vs run
χ^2 / ndf 77.6 / 85
p0 2.216 ± 7.852
pull
Entries 86
Mean 209
Std Dev 156.2

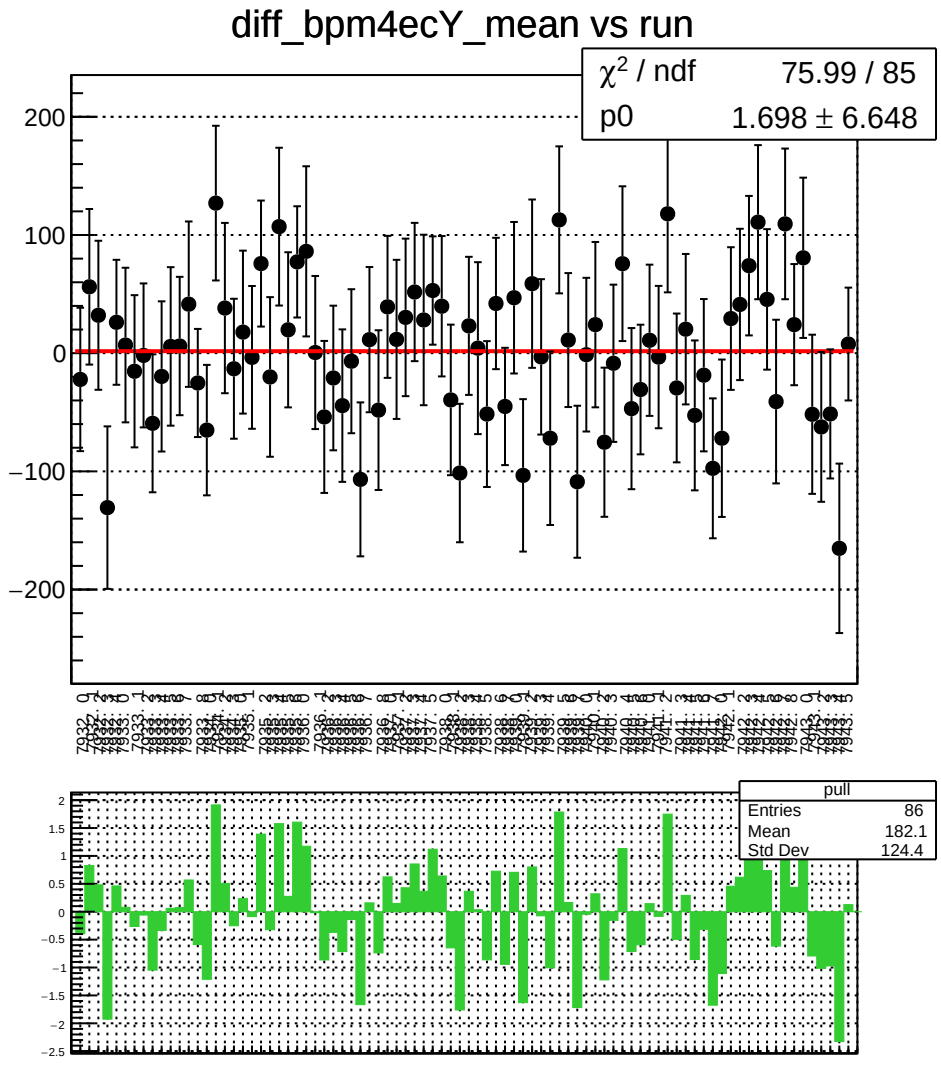

pull1D
Entries 86
Mean −0.009932
Std Dev 0.9499

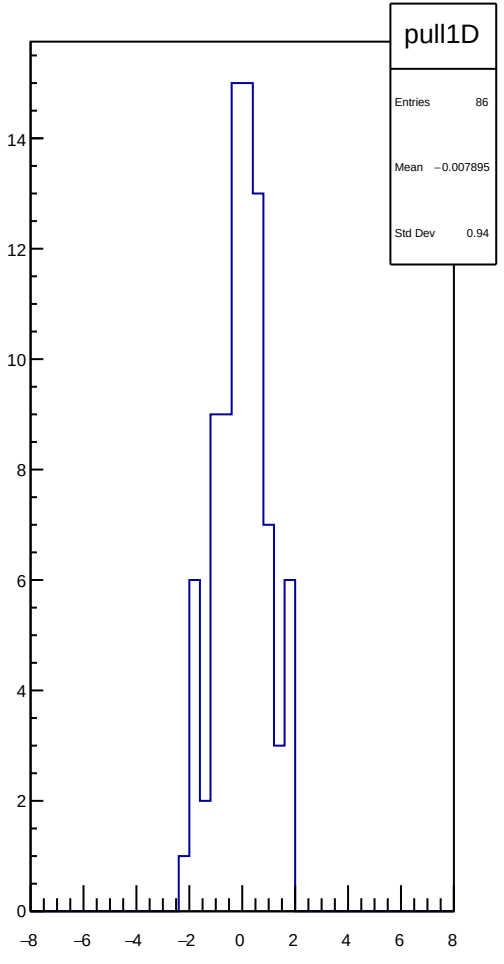

diff_bpm4acY_rms vs run
χ² / ndf 8796 / 85
p0 7127 ± 5.552
8500
8000
7500
7000
6500
6000

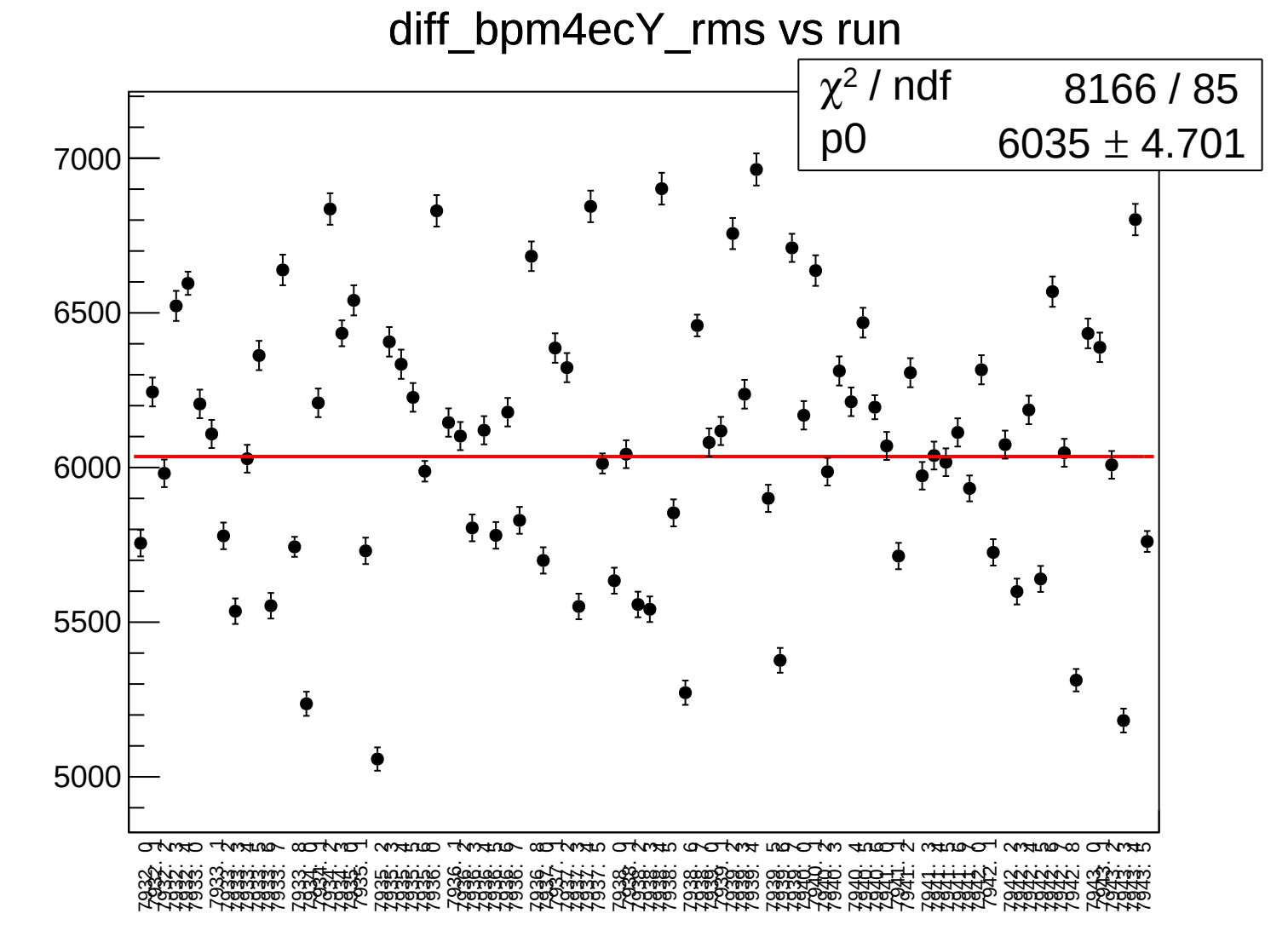

diff_bpm4ecX_mean vs run
χ² / ndf 94 / 85
p0 −11.79 ± 30.21
1000
500
0
−500
−1000
pull
Entries 86
Mean −217.9
Std Dev 264.4
2
1
0
−1
−2

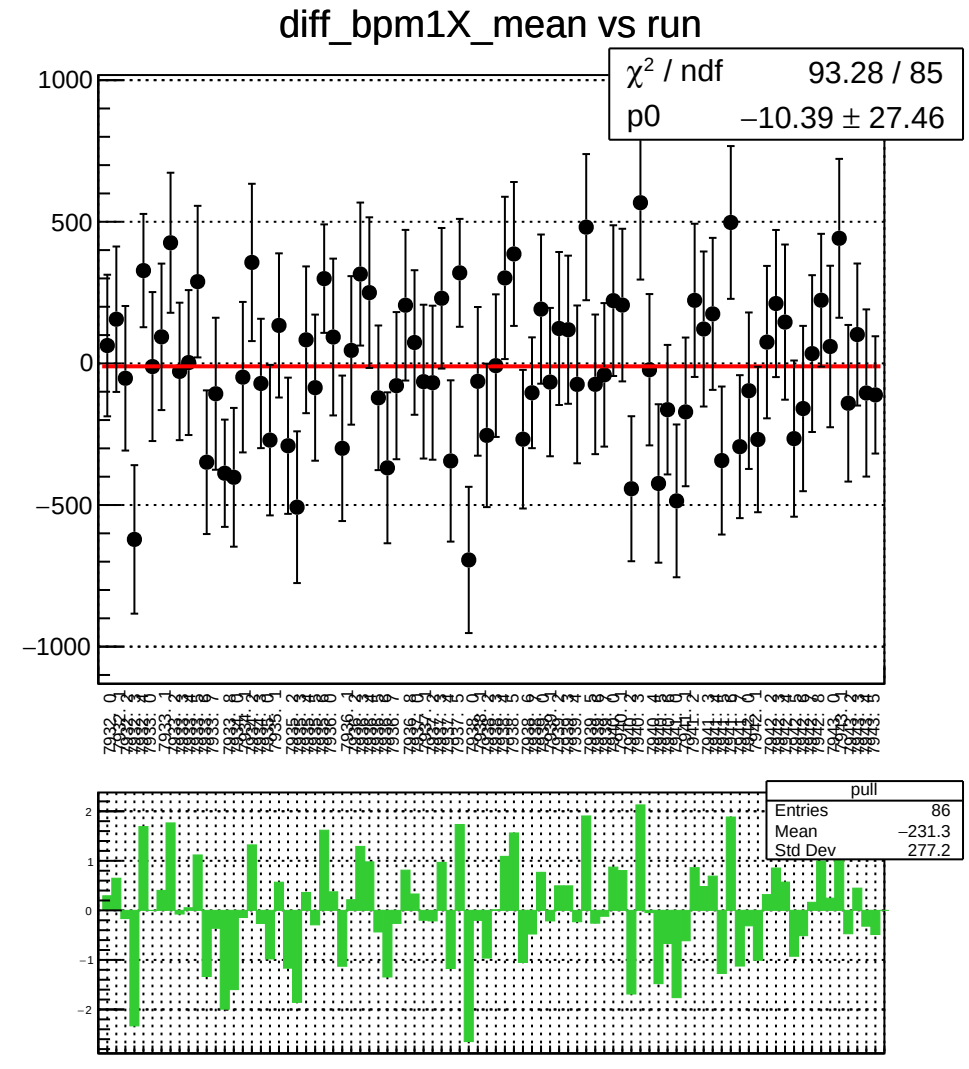

pull1D
Entries 86
Mean −0.004374
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

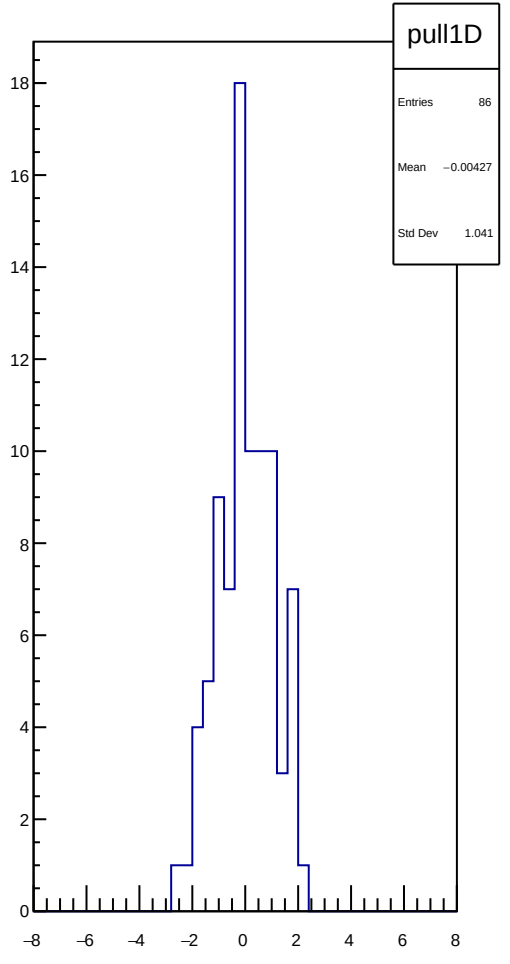

diff_bpm4ecX_rms vs run
χ² / ndf 2791 / 85
p0 2.747e+04 ± 21.36
31000
30000
29000
28000
27000
26000
25000

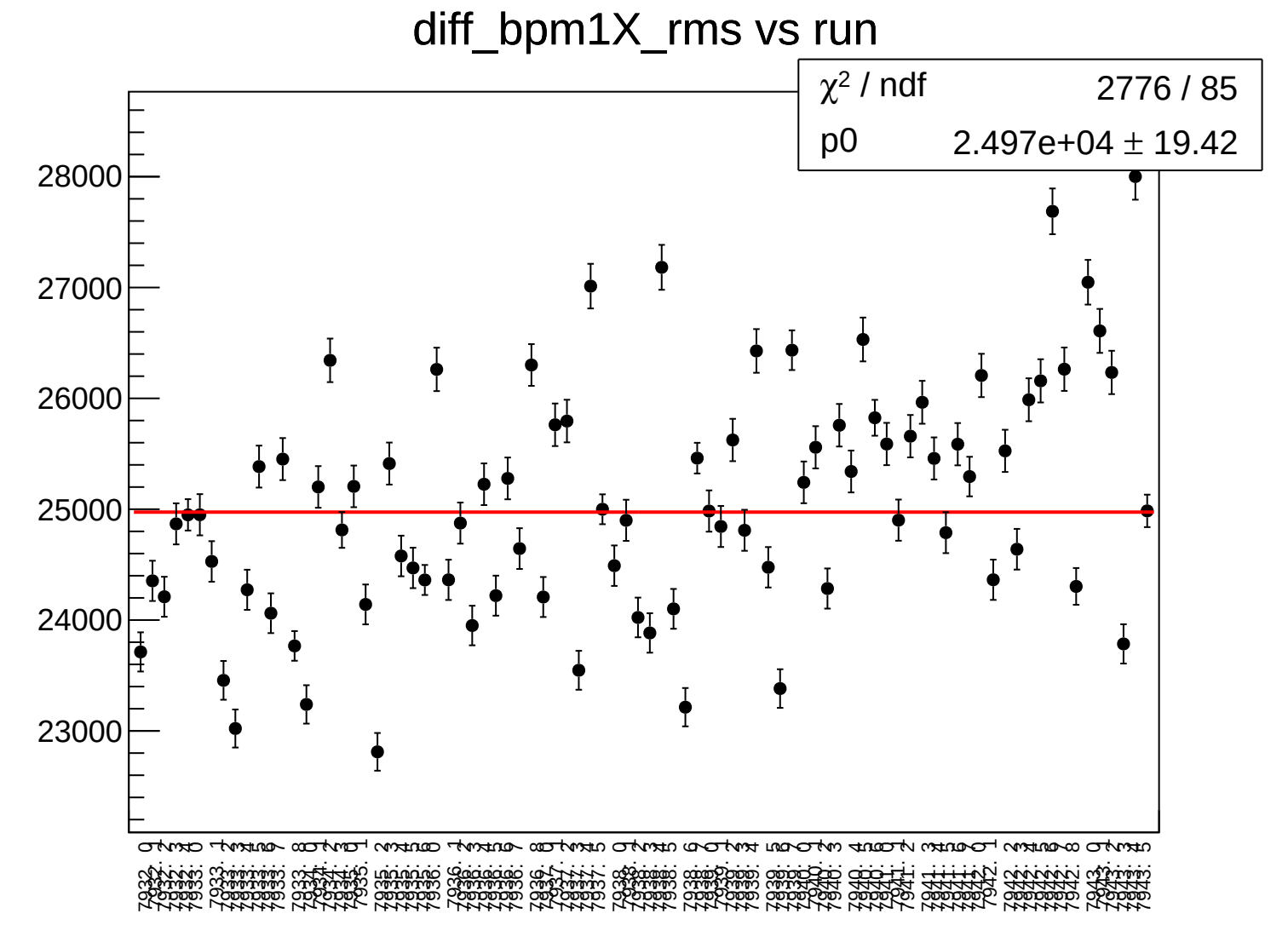

diff_bpm4ecY_mean vs run
χ^2 / ndf 75.99 / 85
p0 1.698 ± 6.648
pull
Entries 86
Mean 182.1
Std Dev 124.4

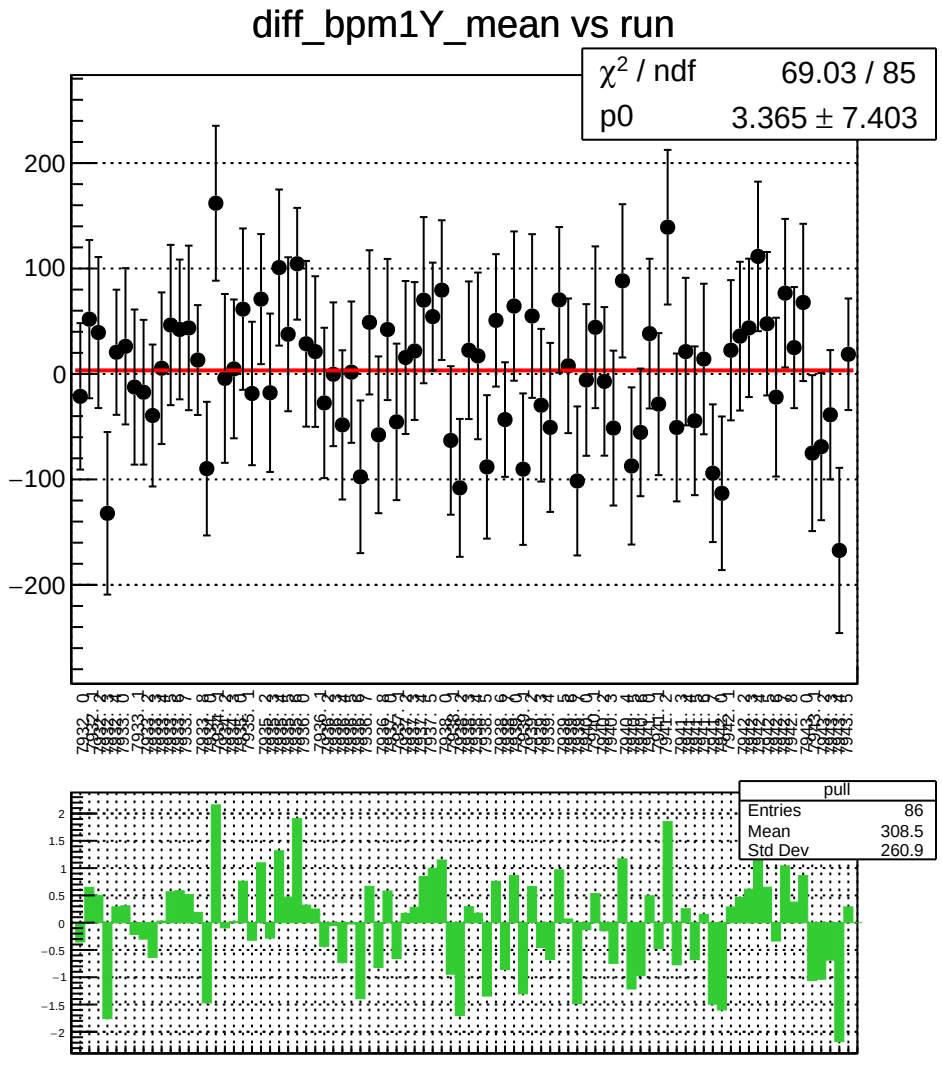

pull1D
Entries 86
Mean −0.007895
Std Dev 0.94

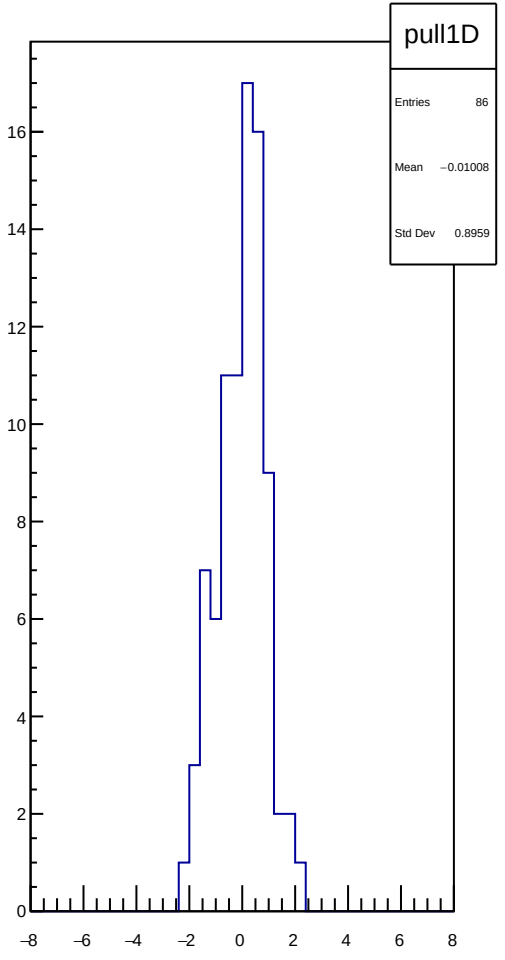

diff_bpm4ecY_rms vs run
χ² / ndf 8166 / 85
p0 6035 ± 4.701
7000
6500
6000
5500
5000

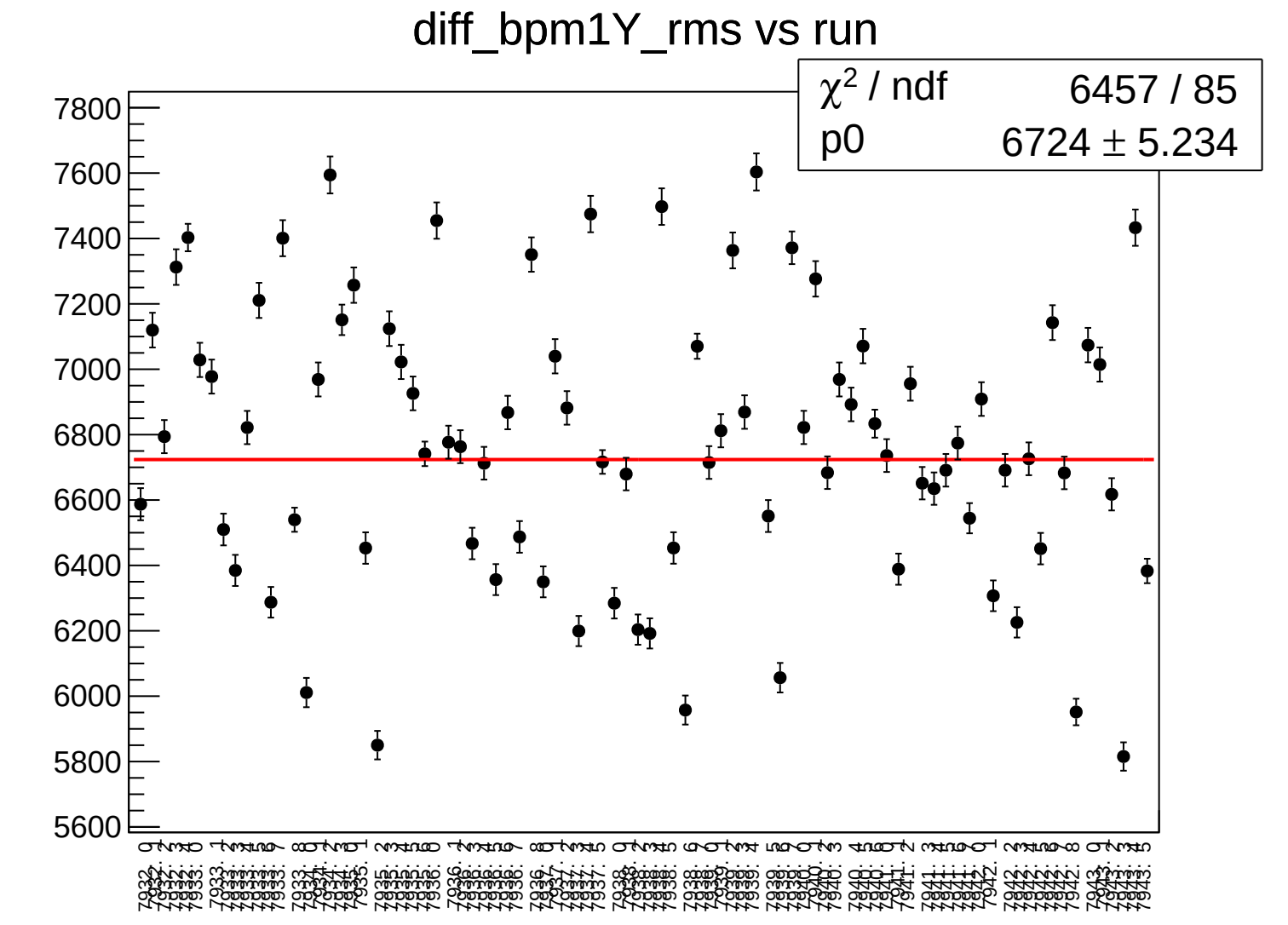

diff_bpm1X_mean vs run
χ² / ndf 93.28 / 85
p0 −10.39 ± 27.46
1000
500
0
−500
−1000
pull
Entries 86
Mean −231.3
Std Dev 277.2
2
1
0
−1
−2

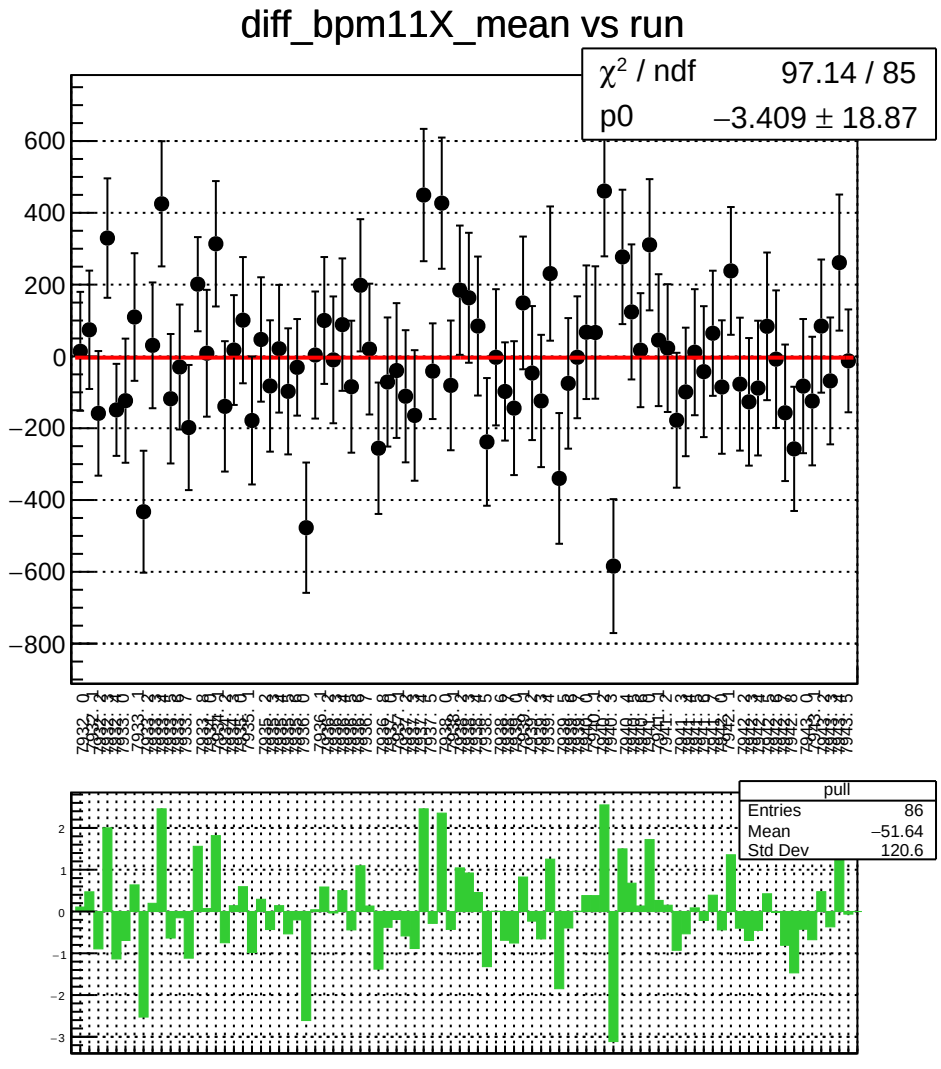

pull1D
Entries 86
Mean −0.00427
Std Dev 1.041
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

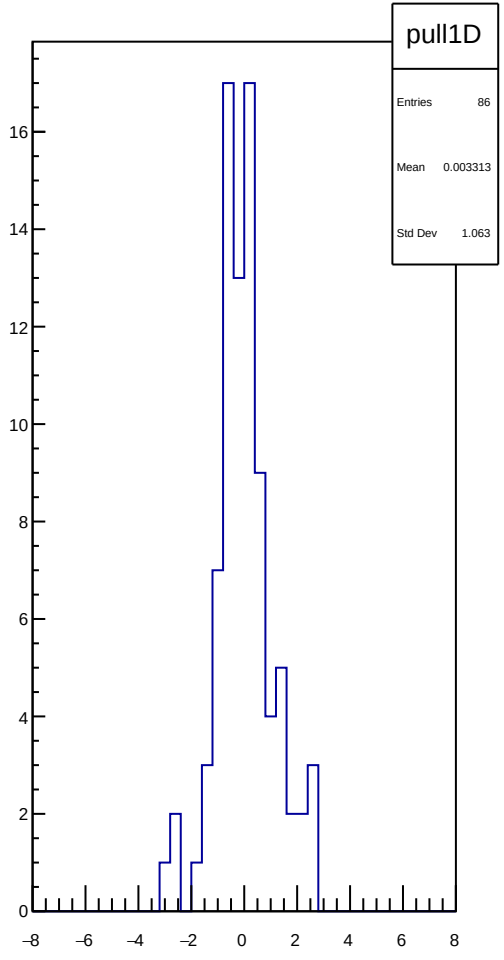

diff_bpm1X_rms vs run
χ² / ndf 2776 / 85
p0 2.497e+04 ± 19.42
28000
27000
26000
25000
24000
23000

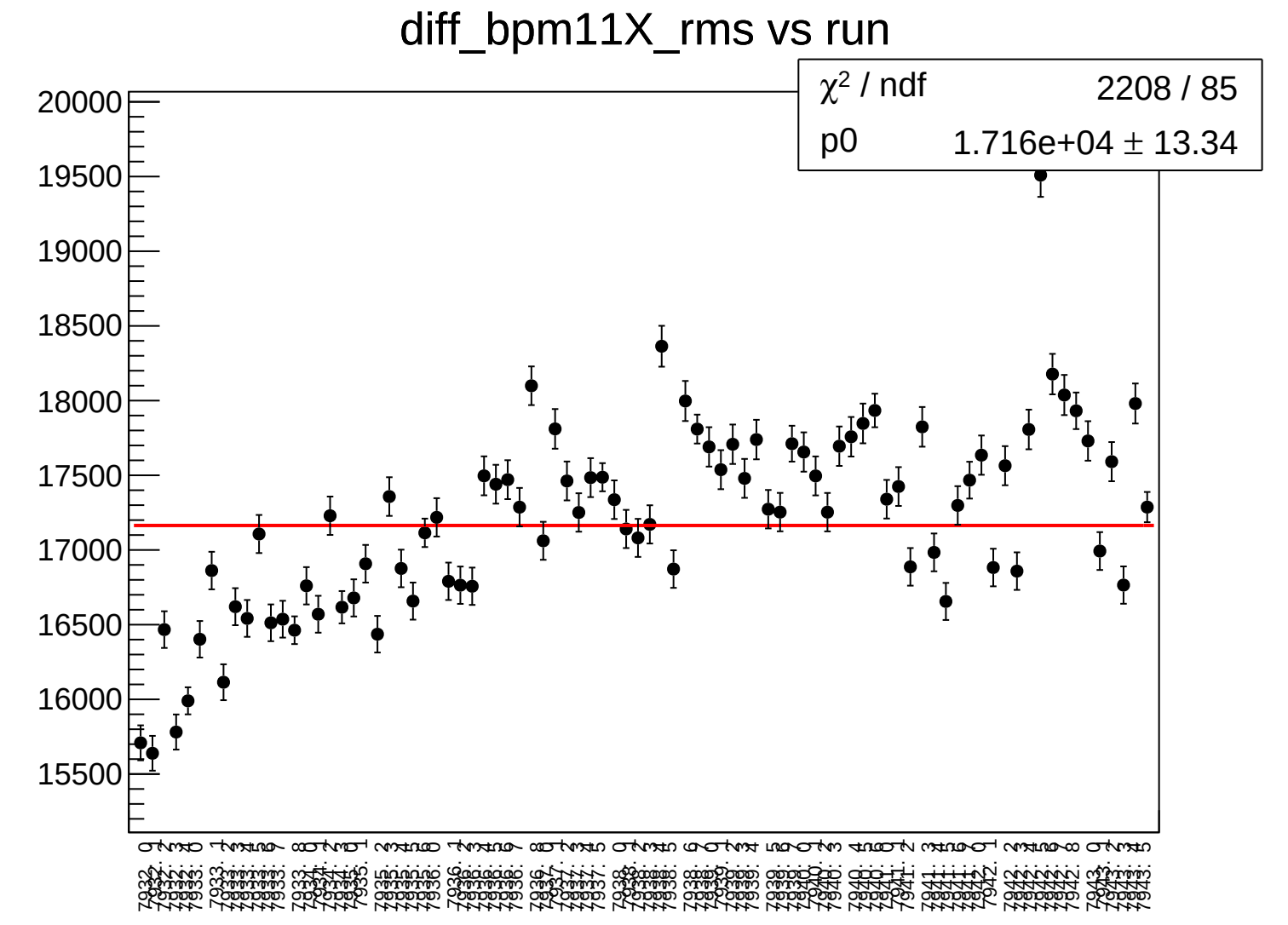

diff_bpm1Y_mean vs run
χ^2 / ndf 69.03 / 85
p0 3.365 ± 7.403
200
100
0
−100
−200
pull
Entries 86
Mean 308.5
Std Dev 260.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

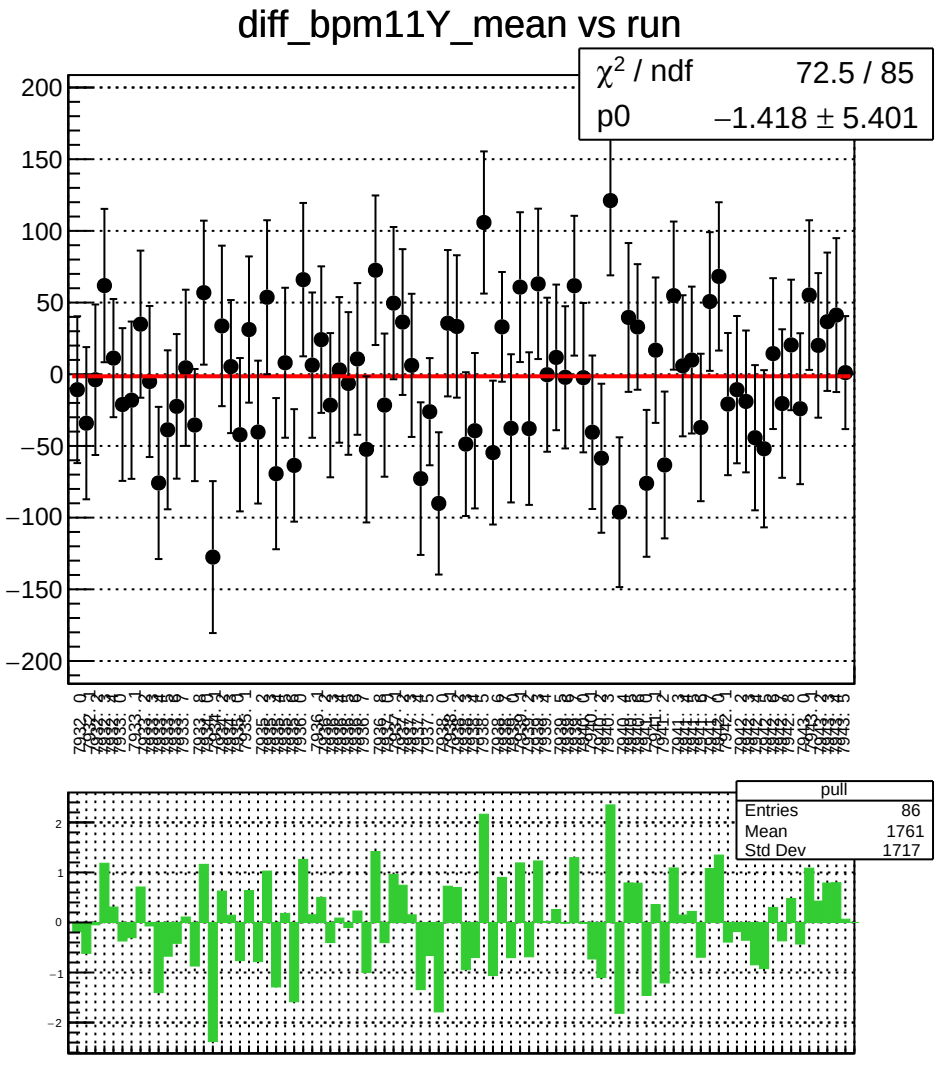

pull1D
Entries 86
Mean −0.01008
Std Dev 0.8959
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

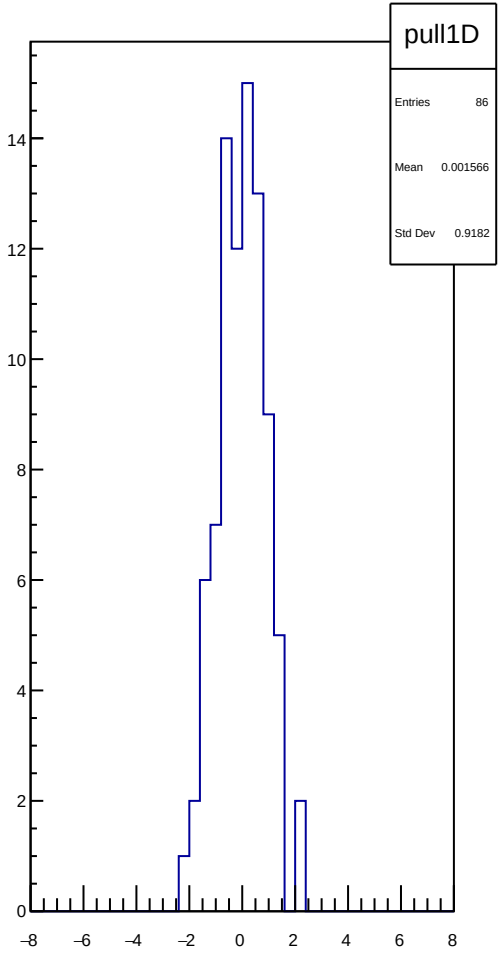

diff_bpm1Y_rms vs run
χ² / ndf 6457 / 85
p0 6724 ± 5.234
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600

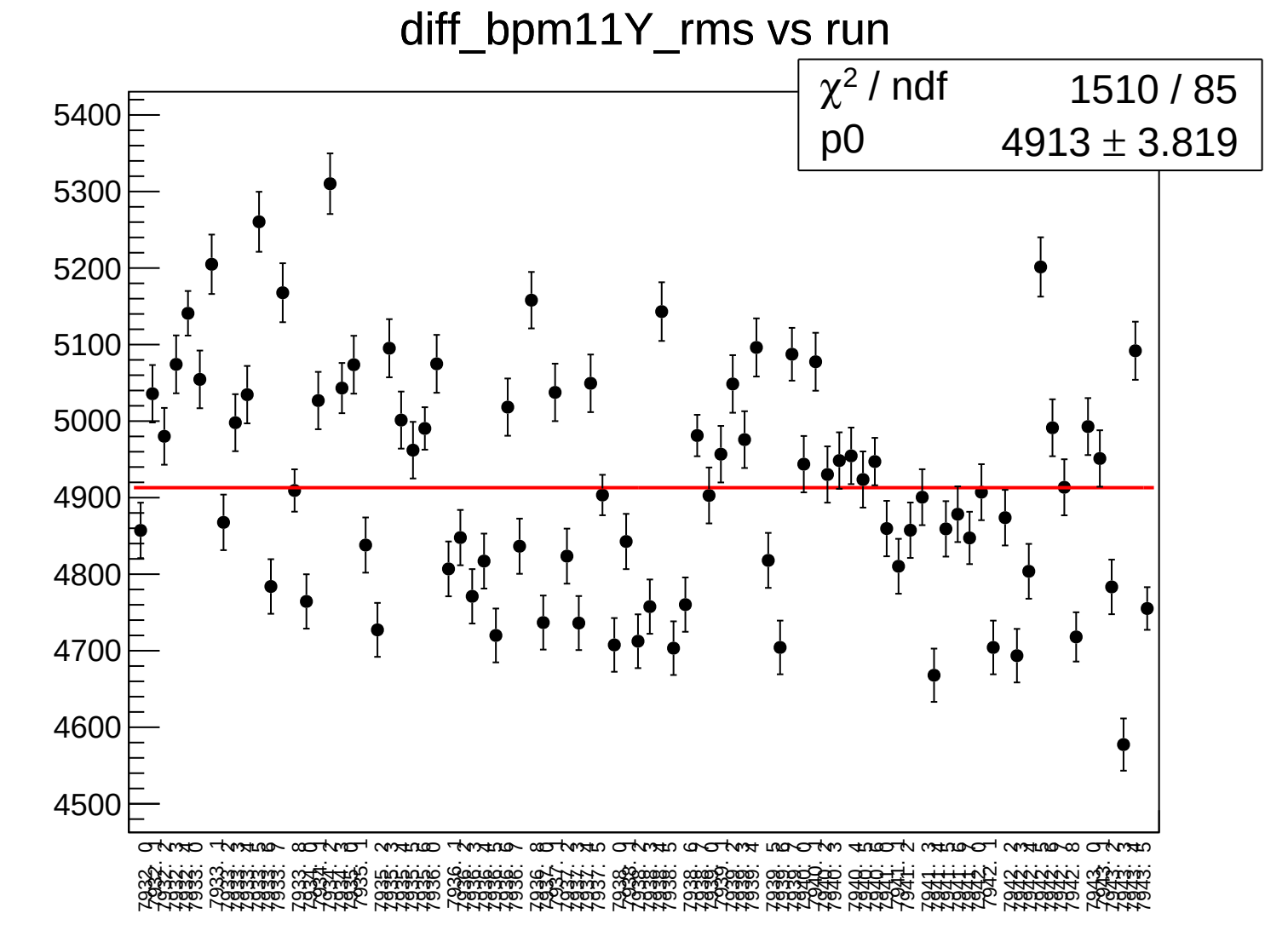

diff_bpm11X_mean vs run
χ² / ndf 97.14 / 85
p0 −3.409 ± 18.87
pull
Entries 86
Mean −51.64
Std Dev 120.6

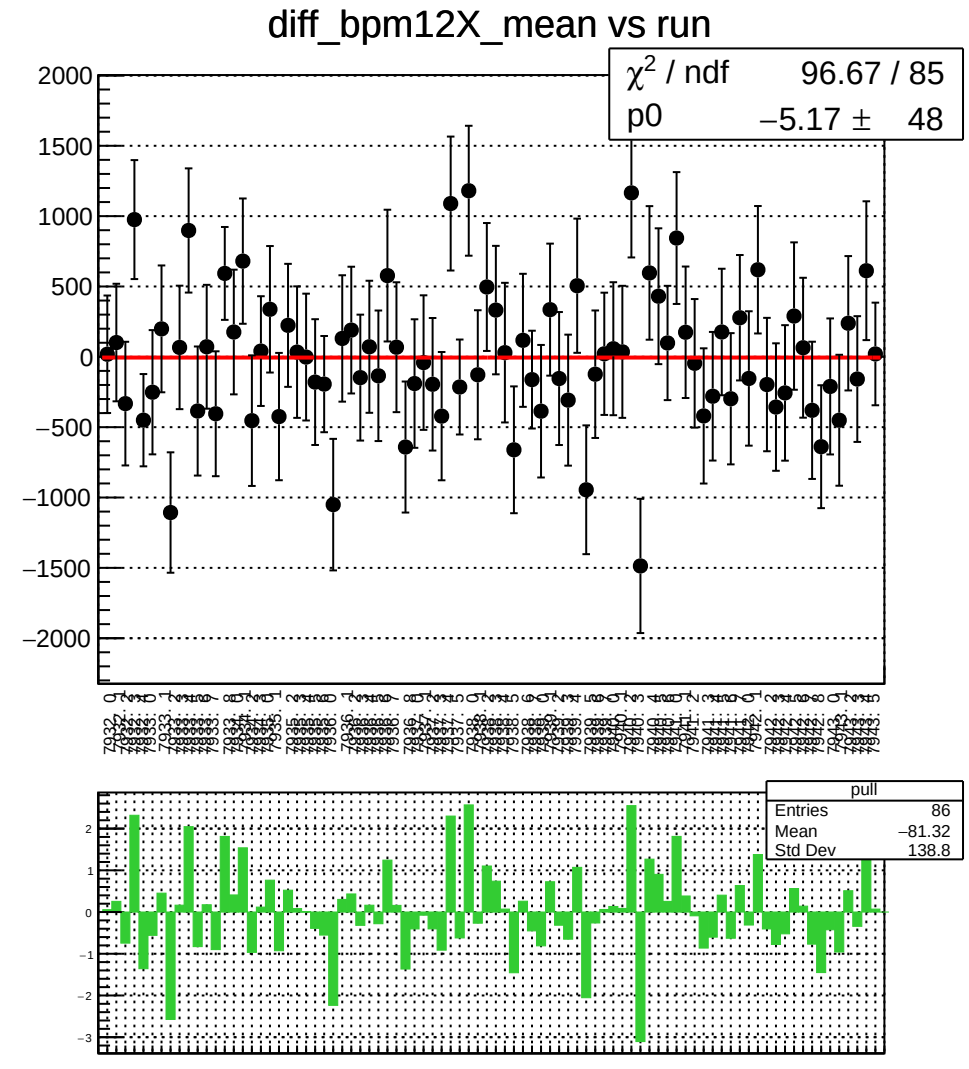

pull1D
Entries 86
Mean 0.003313
Std Dev 1.063

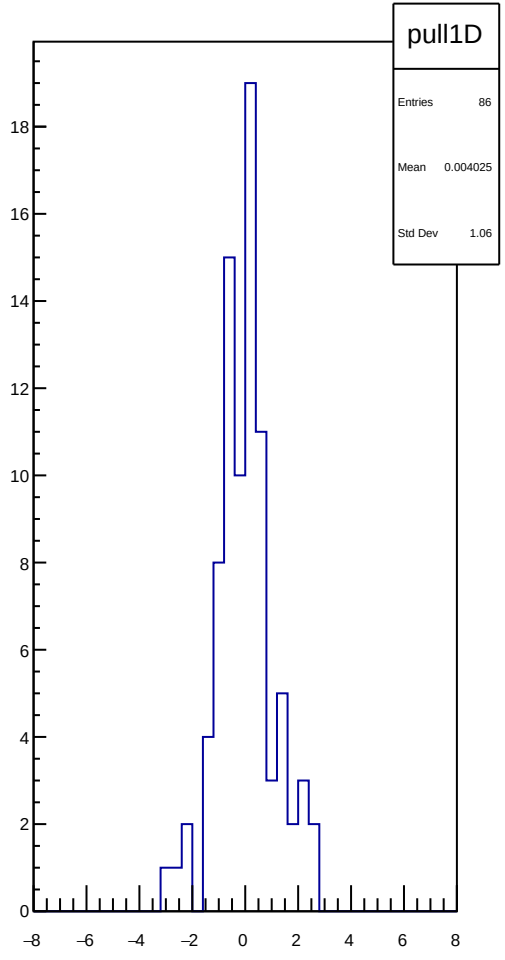

diff_bpm11X_rms vs run
χ² / ndf 2208 / 85
p0 1.716e+04 ± 13.34
20000
19500
19000
18500
18000
17500
17000
16500
16000
15500

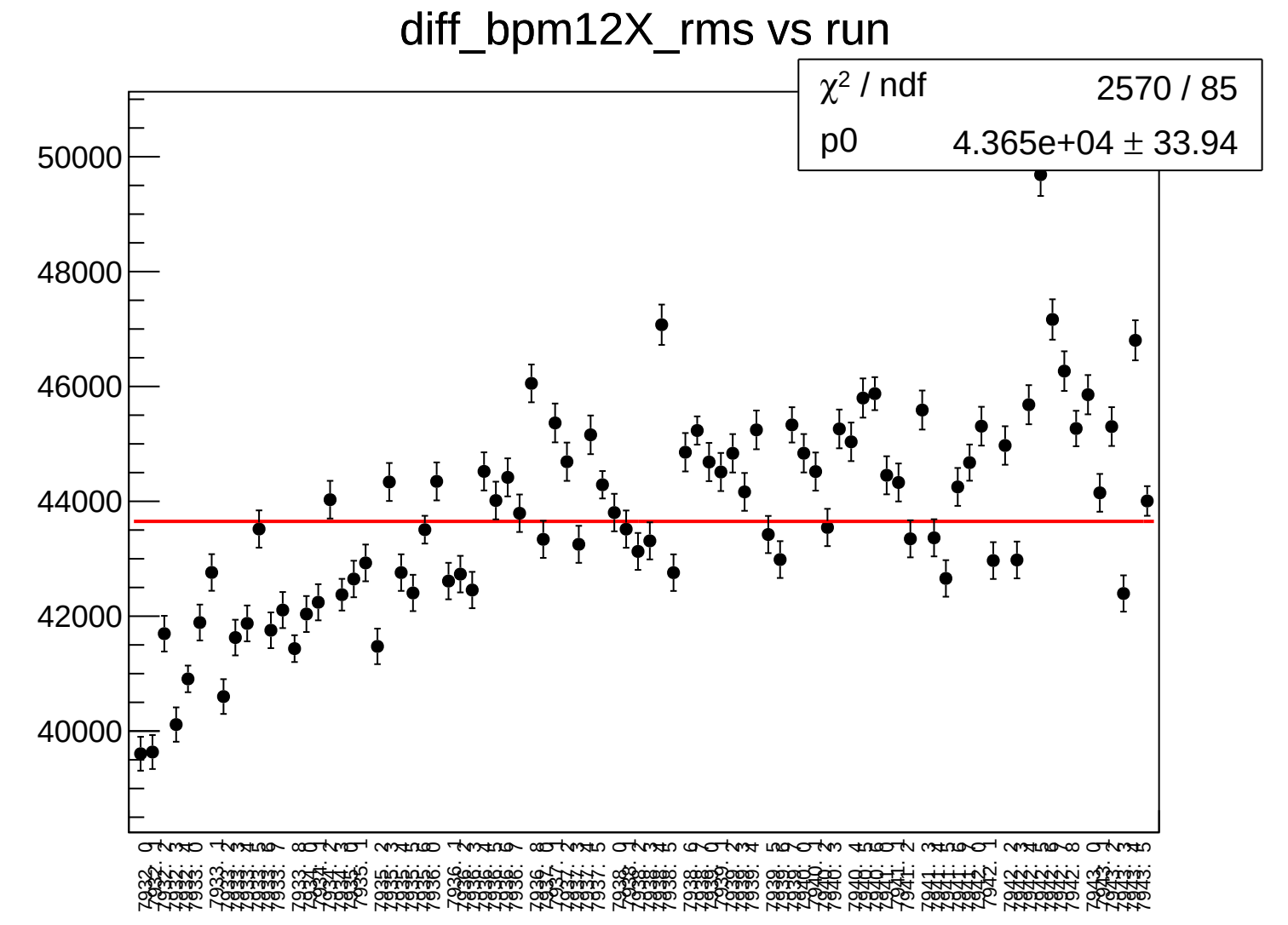

diff_bpm11Y_mean vs run
χ² / ndf 72.5 / 85
p0 −1.418 ± 5.401
pull
Entries 86
Mean 1761
Std Dev 1717

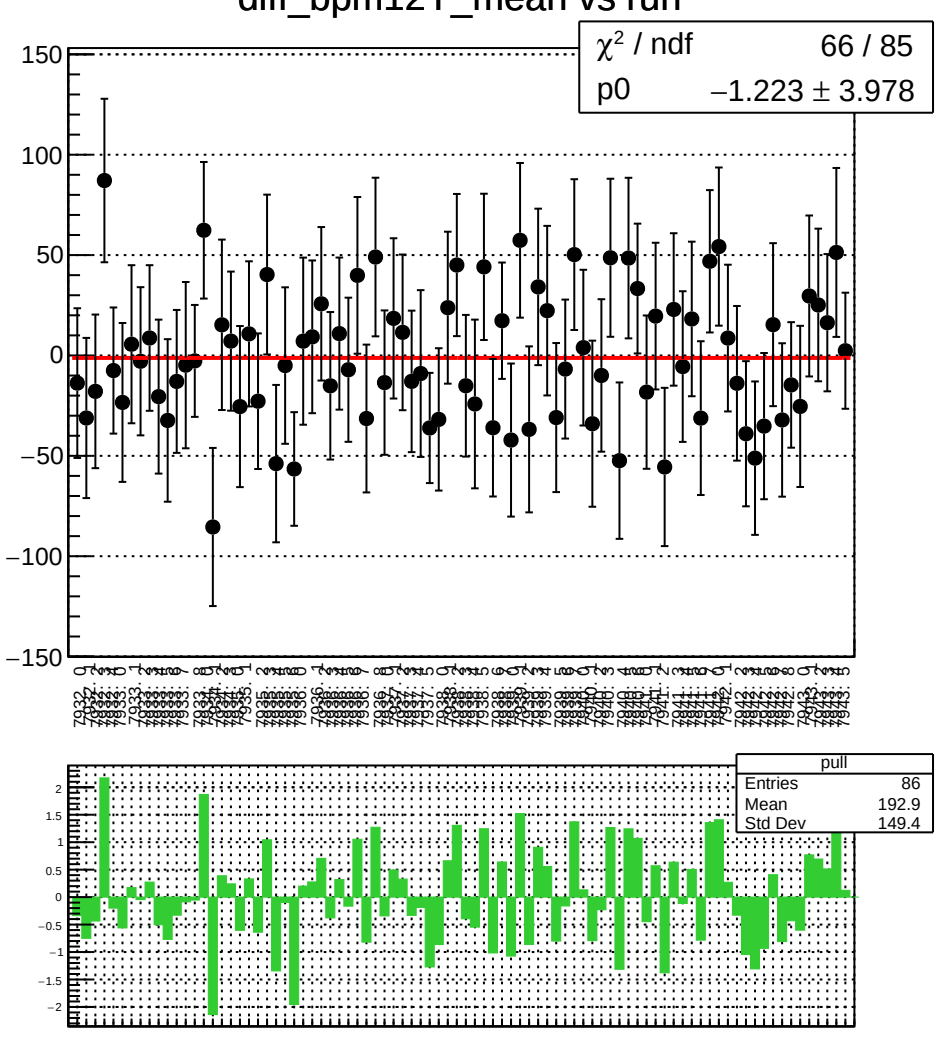

pull1D
Entries 86
Mean 0.001566
Std Dev 0.9182

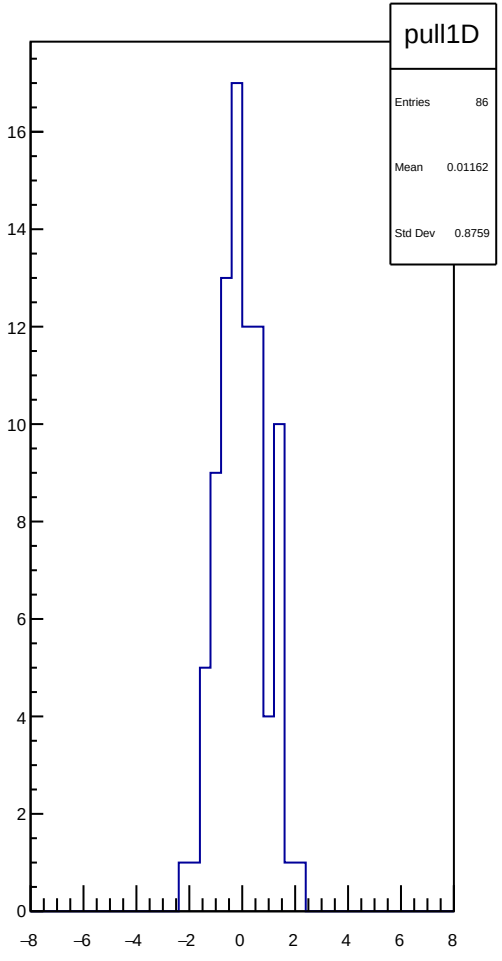

diff_bpm11Y_rms vs run
χ^2 / ndf 1510 / 85
p0 4913 ± 3.819
5400
5300
5200
5100
5000
4900
4800
4700
4600
4500

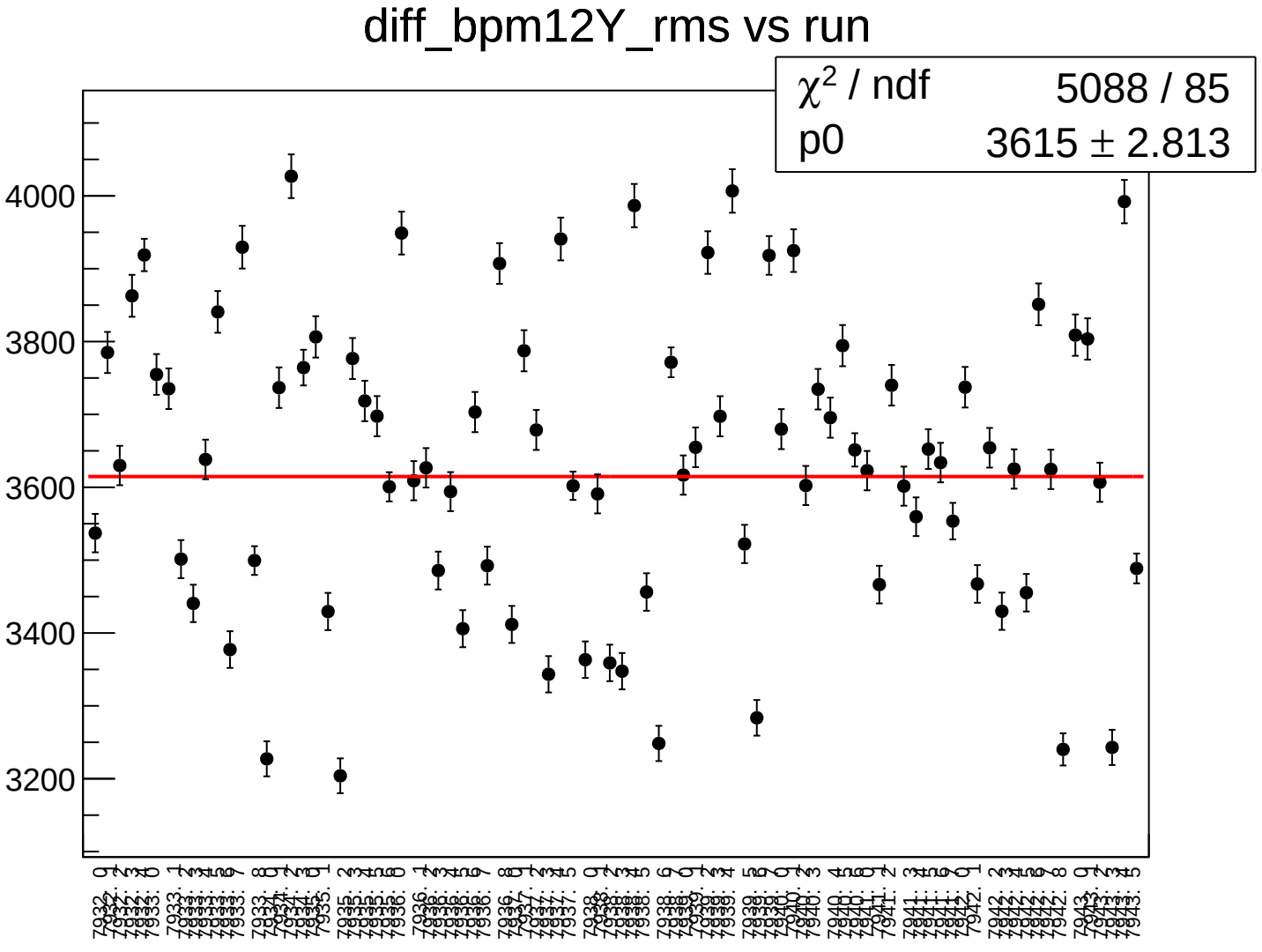

diff_bpm12X_mean vs run
χ² / ndf 96.67 / 85
p0 −5.17 ± 48
pull
Entries 86
Mean −81.32
Std Dev 138.8

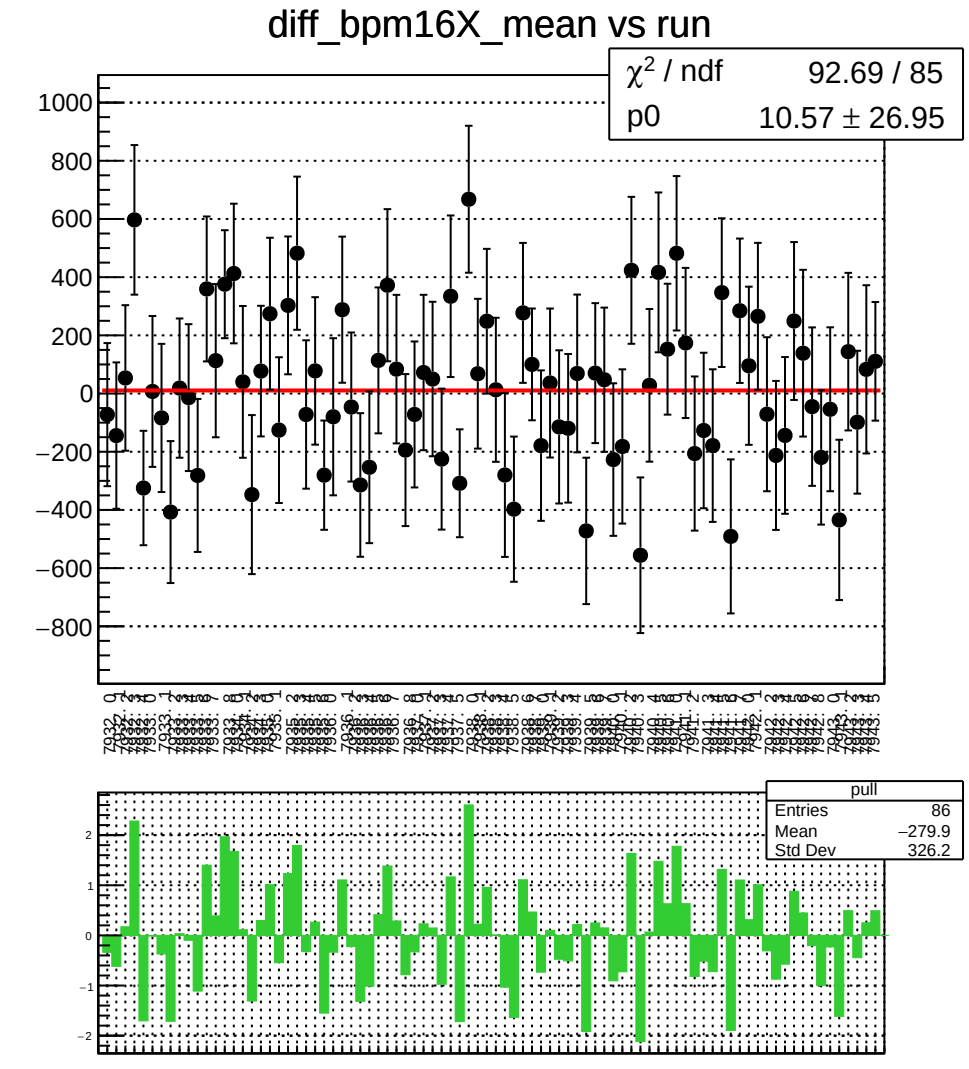

pull1D
Entries 86
Mean 0.004025
Std Dev 1.06

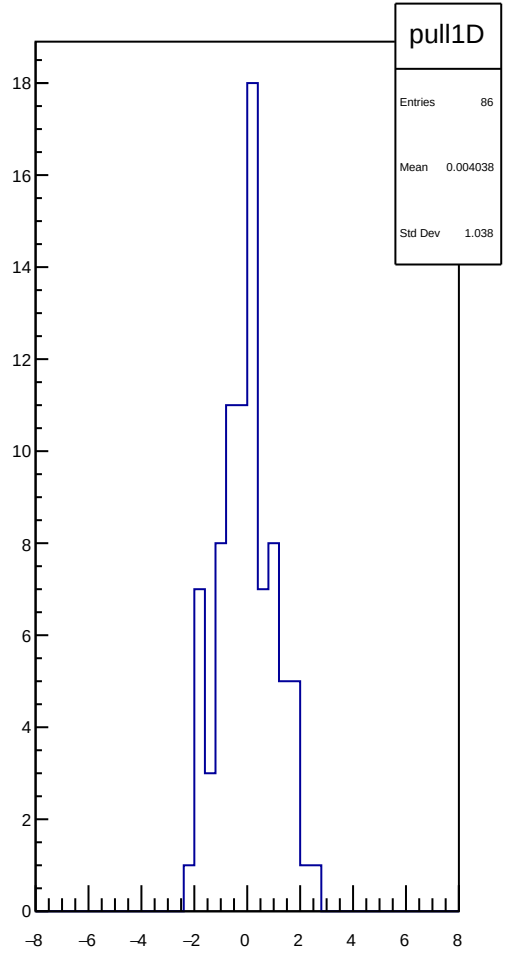

diff_bpm12X_rms vs run
χ² / ndf 2570 / 85
p0 4.365e+04 ± 33.94
50000
48000
46000
44000
42000
40000

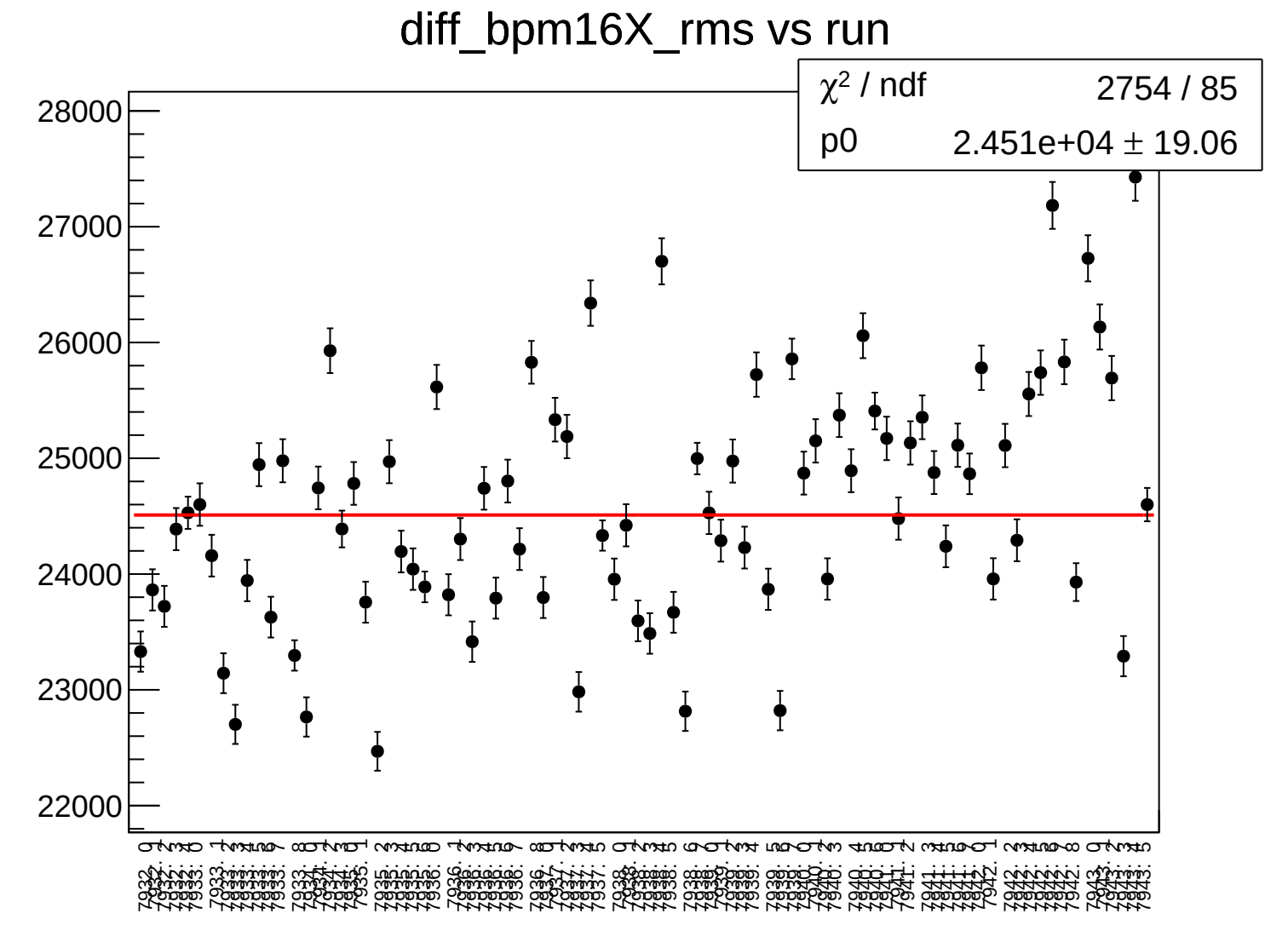

diff_bpm12Y_mean vs run
χ² / ndf 66 / 85
p0 −1.223 ± 3.978
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 192.9
Std Dev 149.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

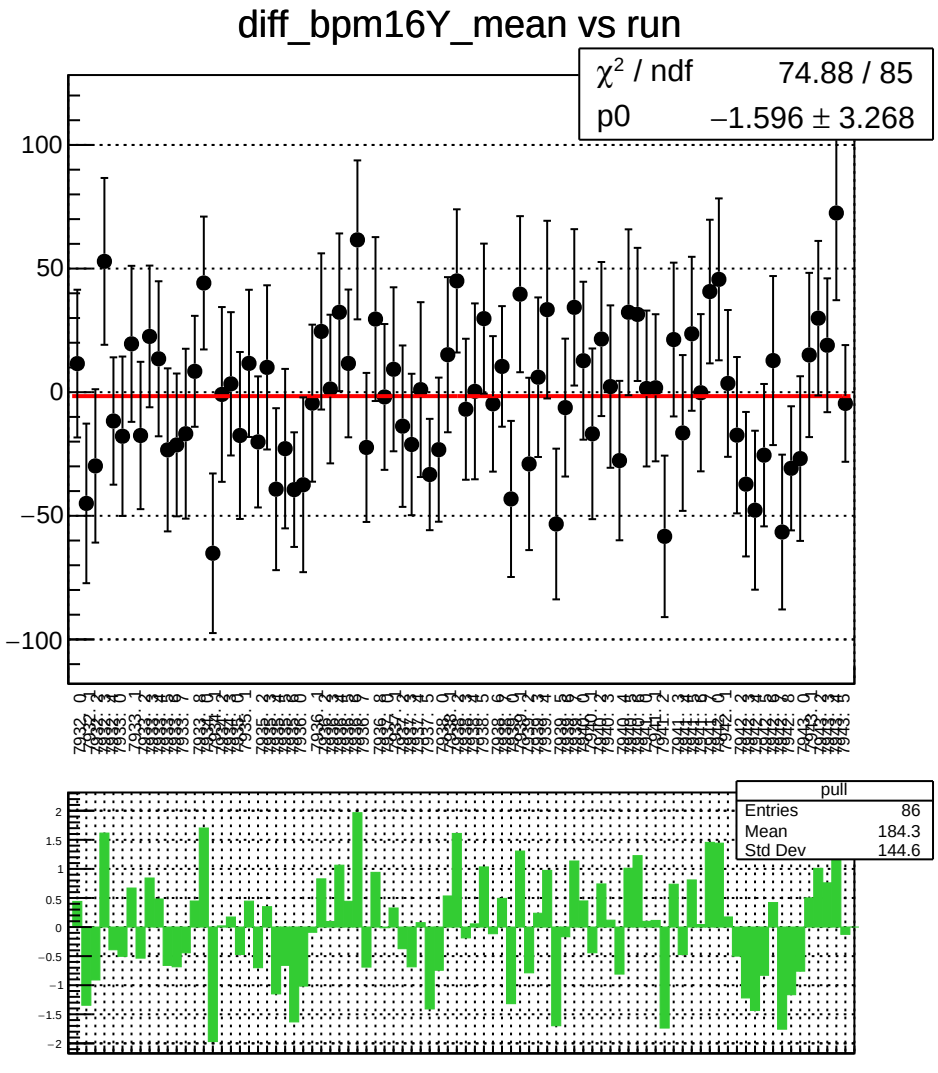

pull1D
Entries 86
Mean 0.01162
Std Dev 0.8759
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

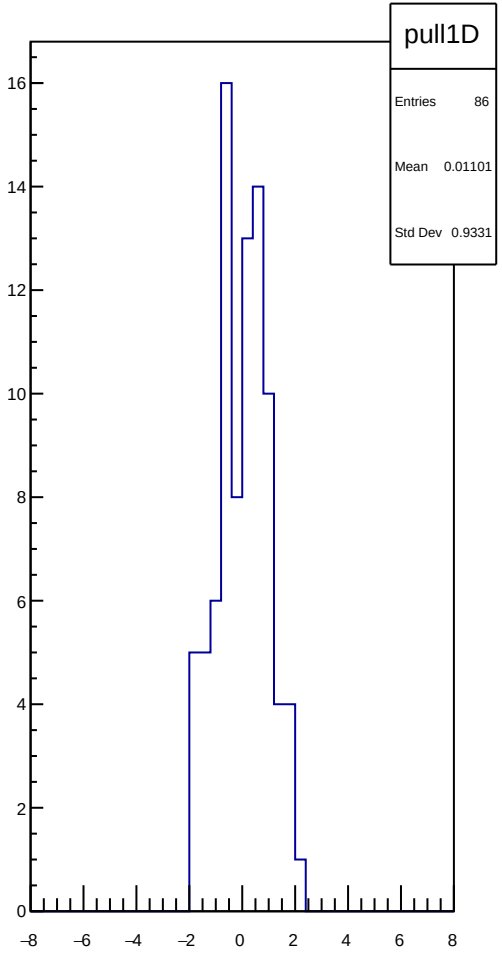

diff_bpm12Y_rms vs run
χ² / ndf 5088 / 85
p0 3615 ± 2.813
4000
3800
3600
3400
3200

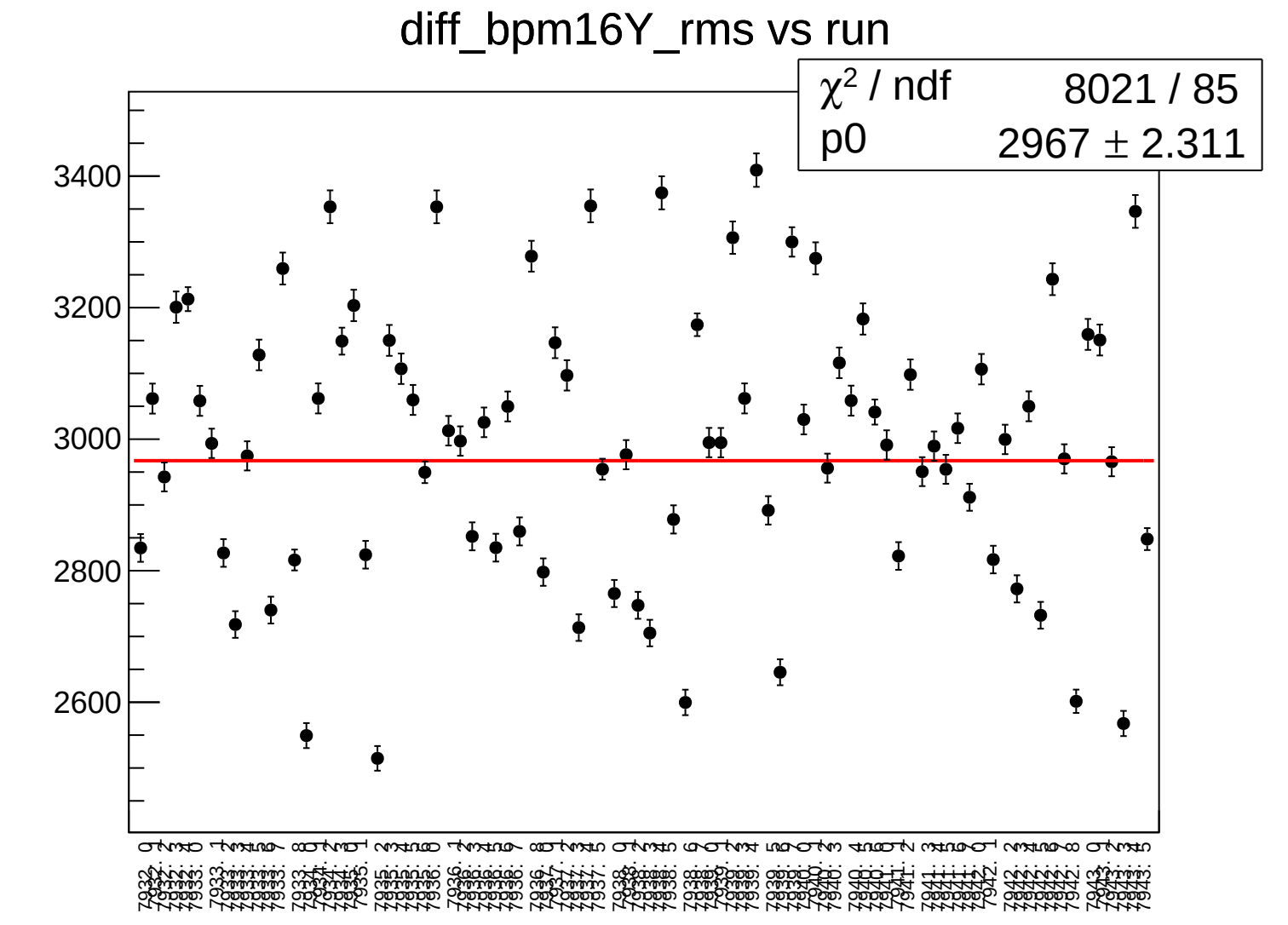

diff_bpm16X_mean vs run
χ² / ndf 92.69 / 85
p0 10.57 ± 26.95
pull
Entries 86
Mean −279.9
Std Dev 326.2

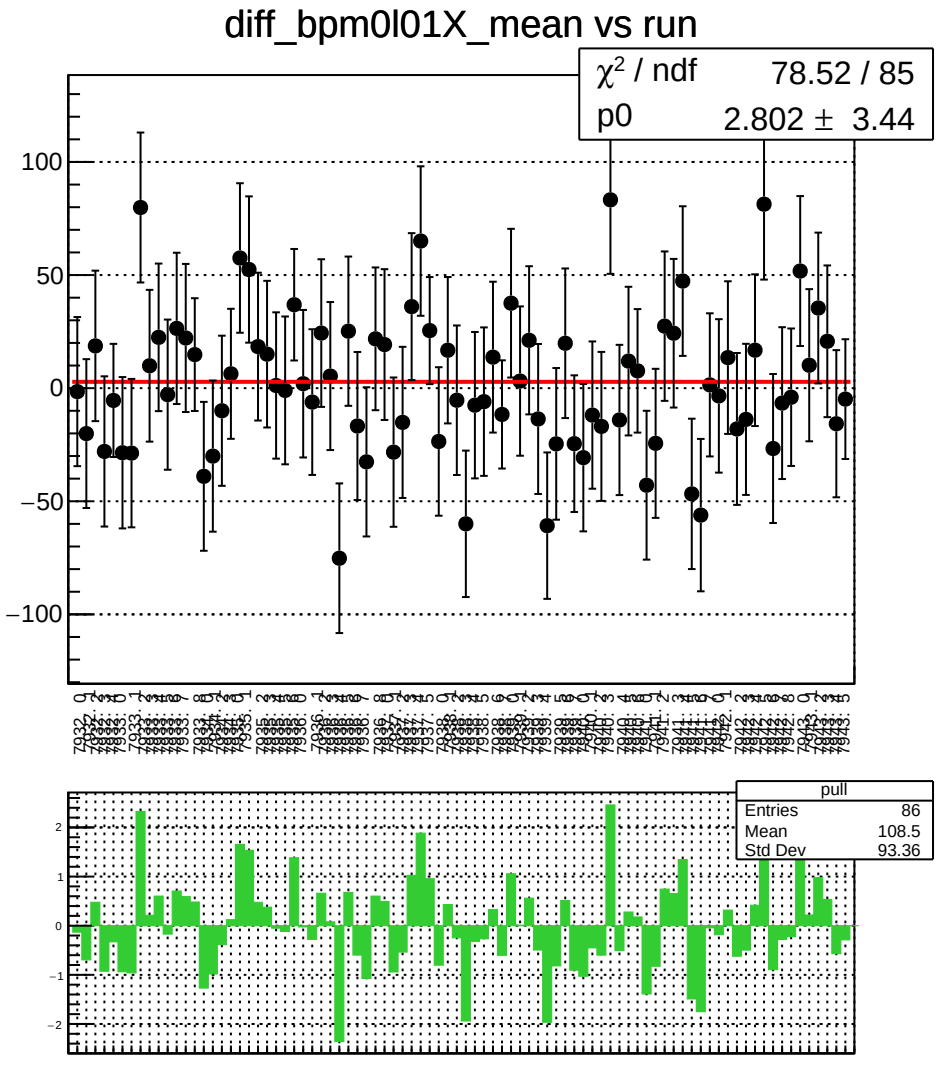

pull1D
Entries 86
Mean 0.004038
Std Dev 1.038

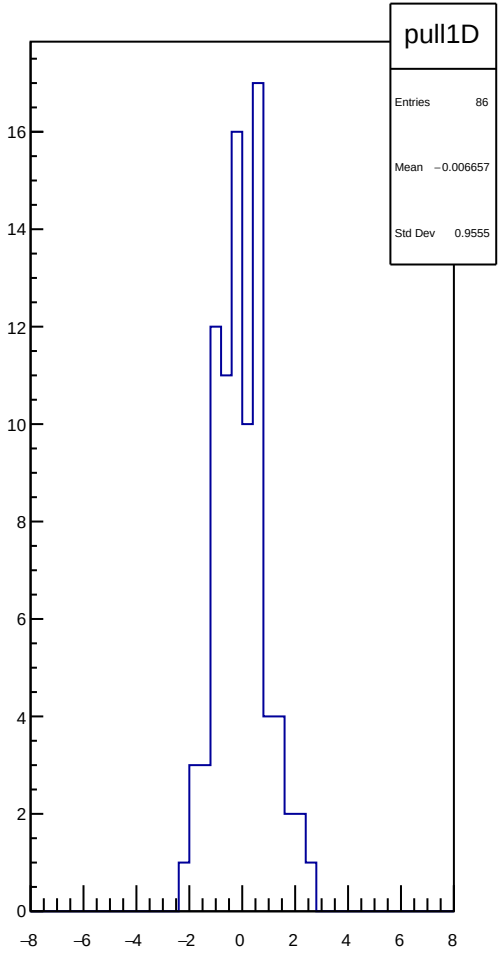

diff_bpm16X_rms vs run
χ² / ndf 2754 / 85
p0 2.451e+04 ± 19.06
28000
27000
26000
25000
24000
23000
22000

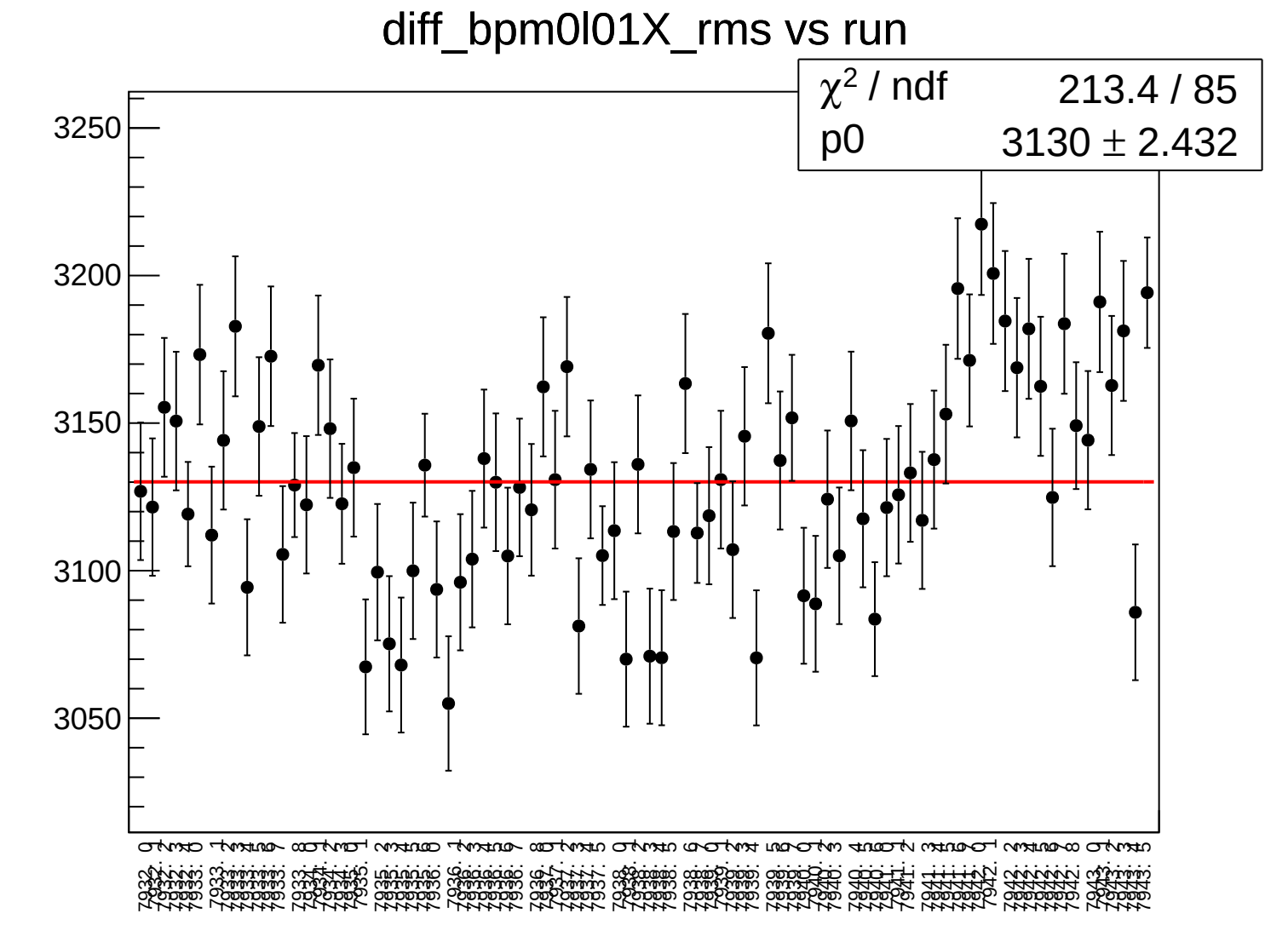

diff_bpm16Y_mean vs run
χ² / ndf 74.88 / 85
p0 −1.596 ± 3.268
pull
Entries 86
Mean 184.3
Std Dev 144.6

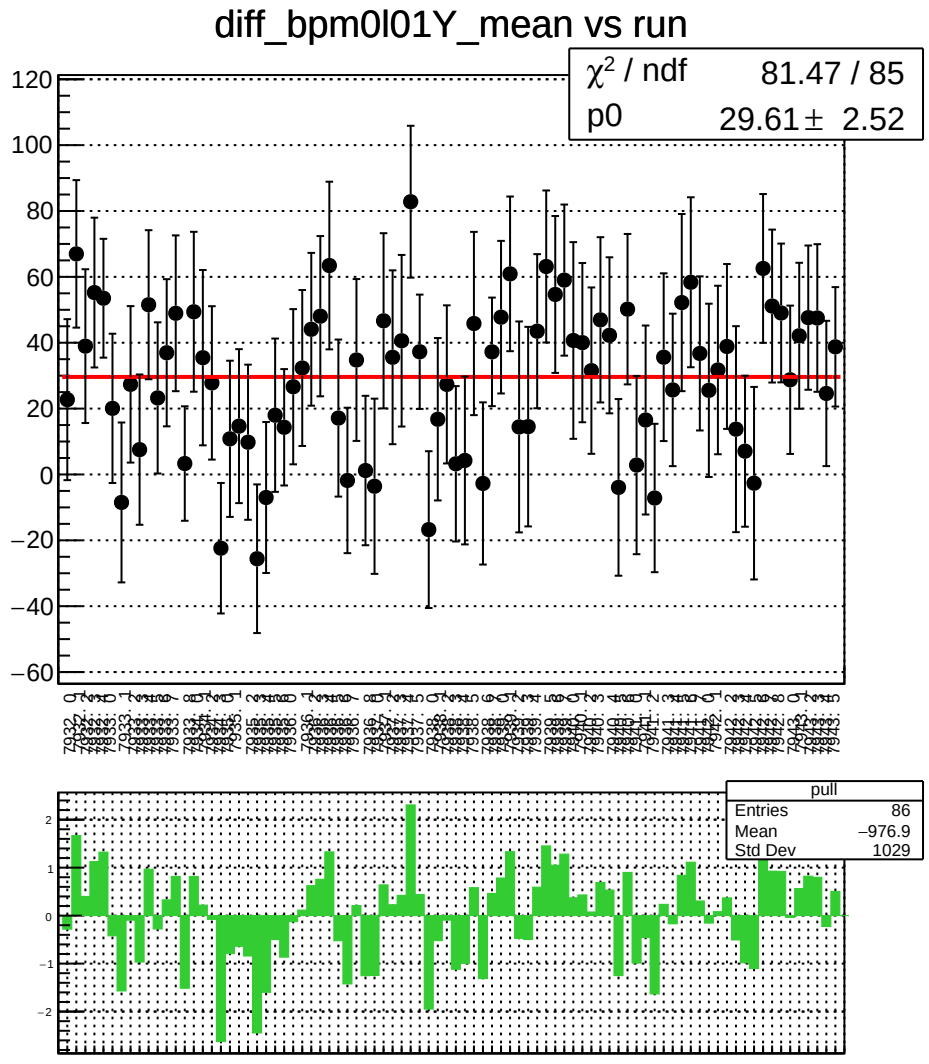

pull1D
Entries 86
Mean 0.01101
Std Dev 0.9331

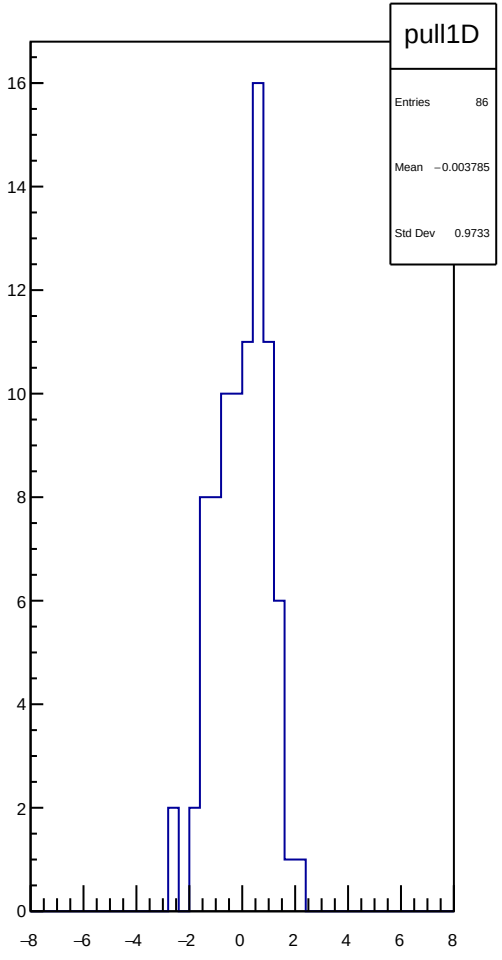

diff_bpm16Y_rms vs run
χ² / ndf 8021 / 85
p0 2967 ± 2.311
3400
3200
3000
2800
2600

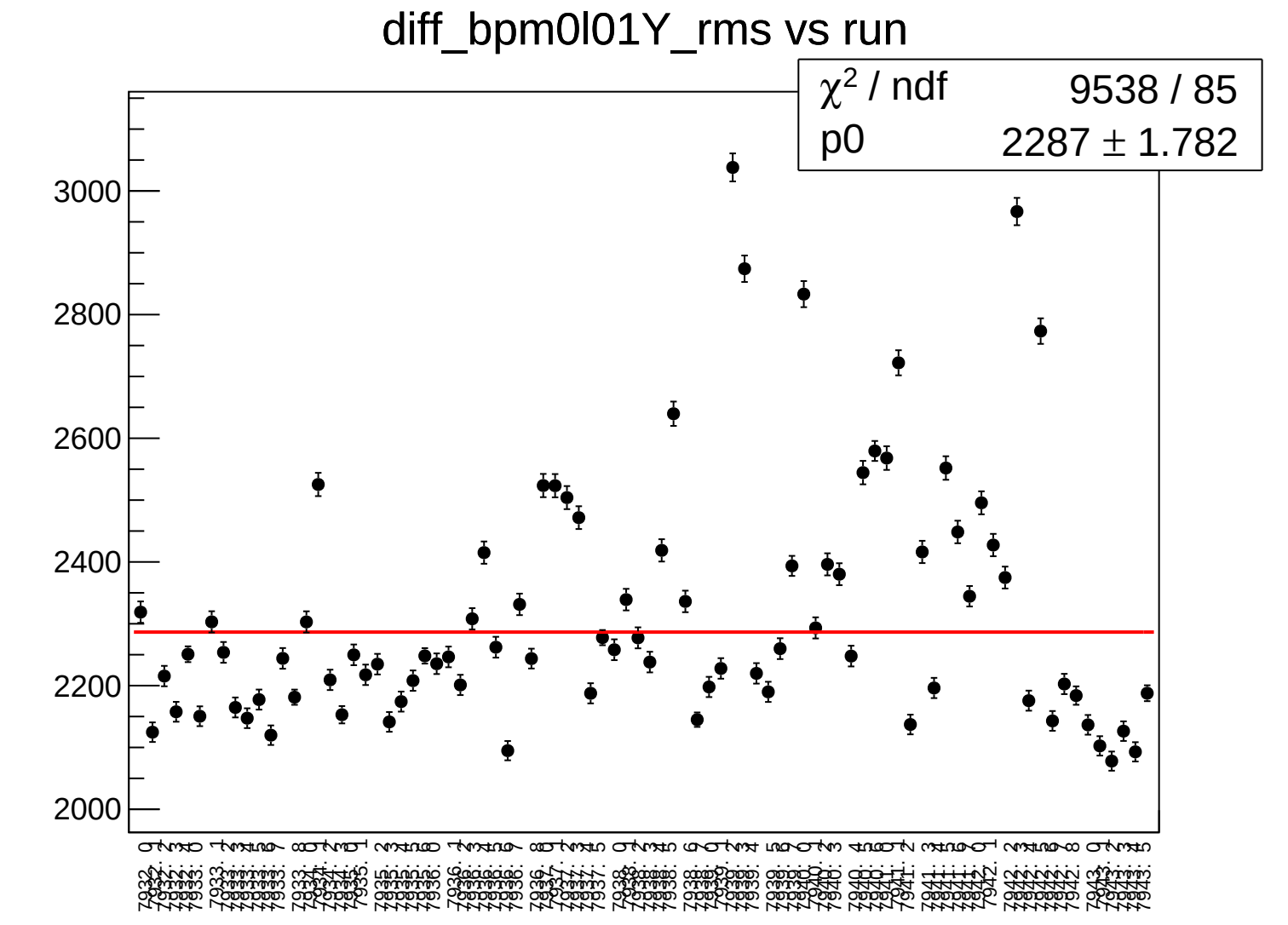

diff_bpm0l01X_mean vs run
χ² / ndf 78.52 / 85
p0 2.802 ± 3.44
100
50
0
−50
−100
pull
Entries 86
Mean 108.5
Std Dev 93.36
2
1
0
−1
−2

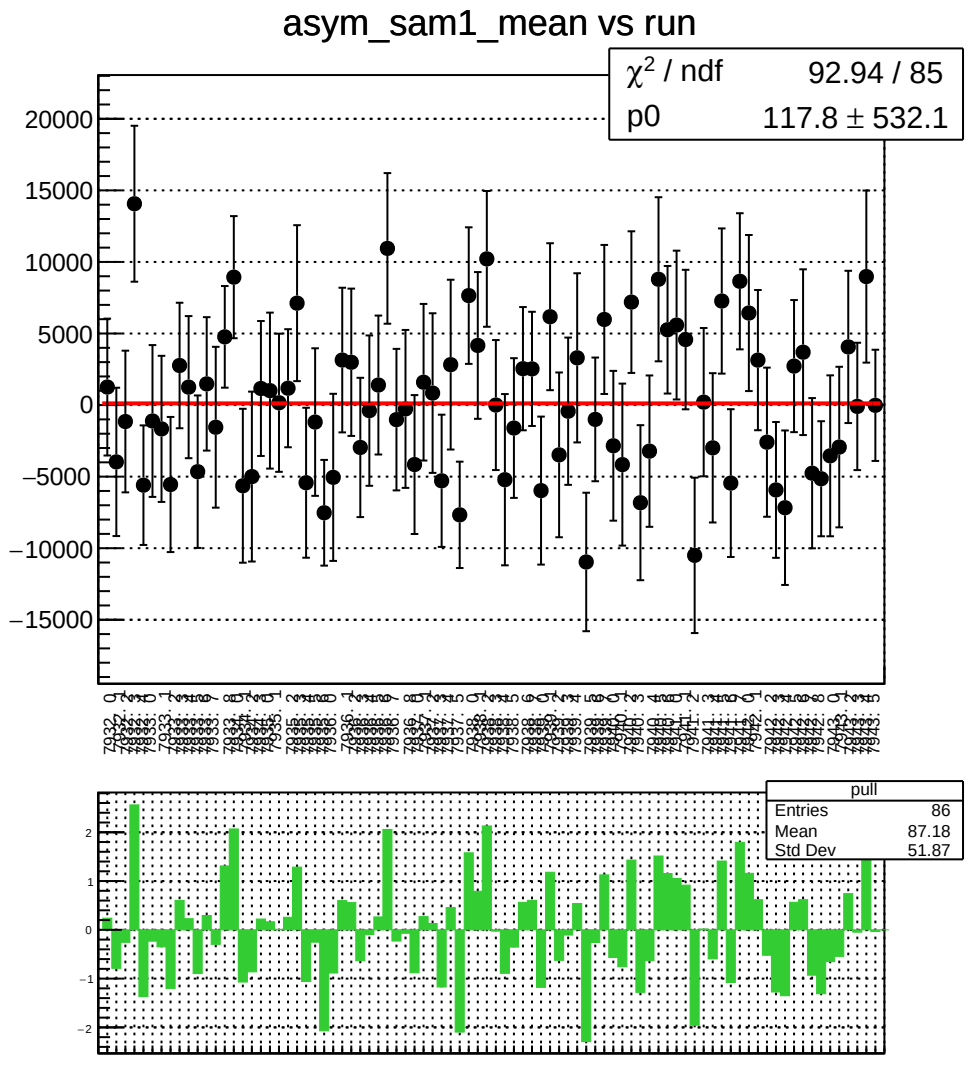

pull1D
Entries 86
Mean −0.006657
Std Dev 0.9555
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

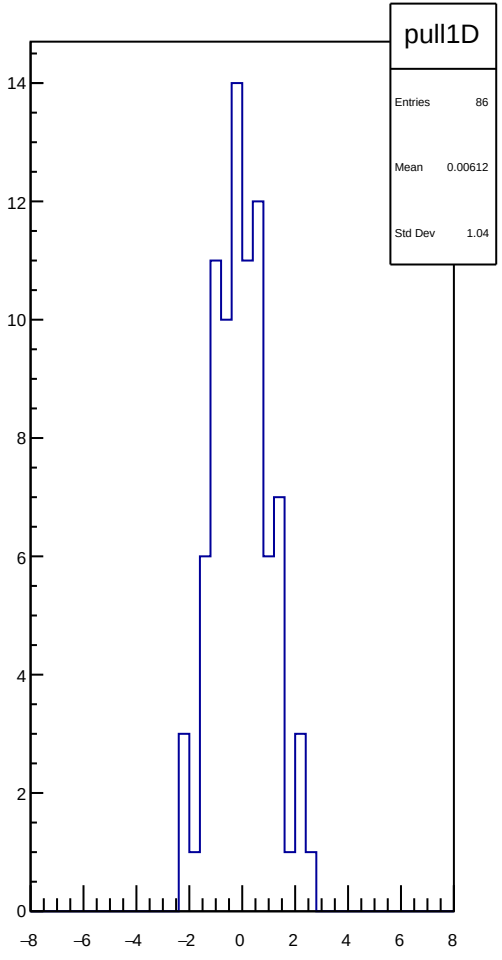

diff_bpm0l01X_rms vs run
χ² / ndf 213.4 / 85
p0 3130 ± 2.432
3250
3200
3150
3100
3050

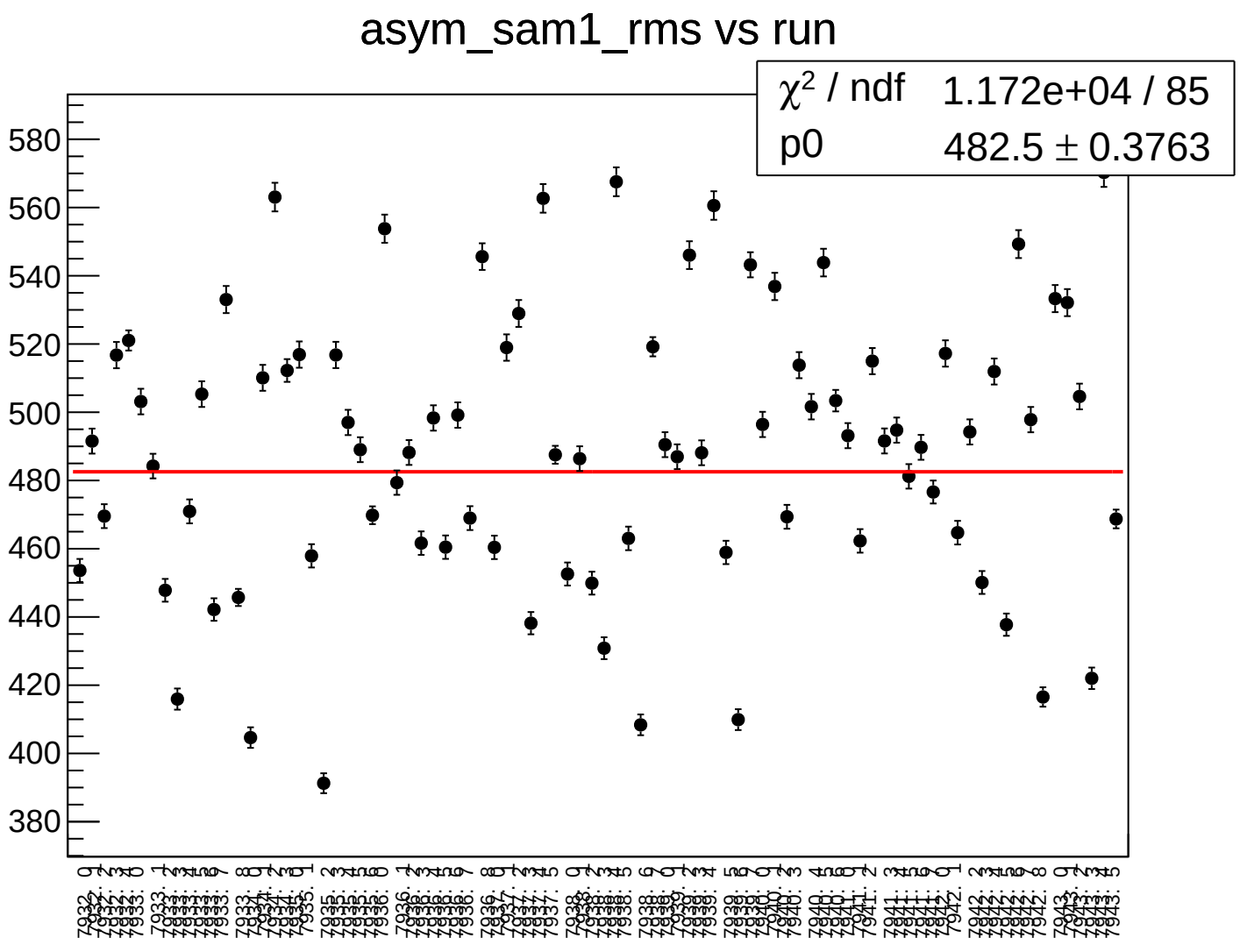

diff_bpm0l01Y_mean vs run
χ² / ndf 81.47 / 85
p0 29.61 ± 2.52
pull
Entries 86
Mean −976.9
Std Dev 1029

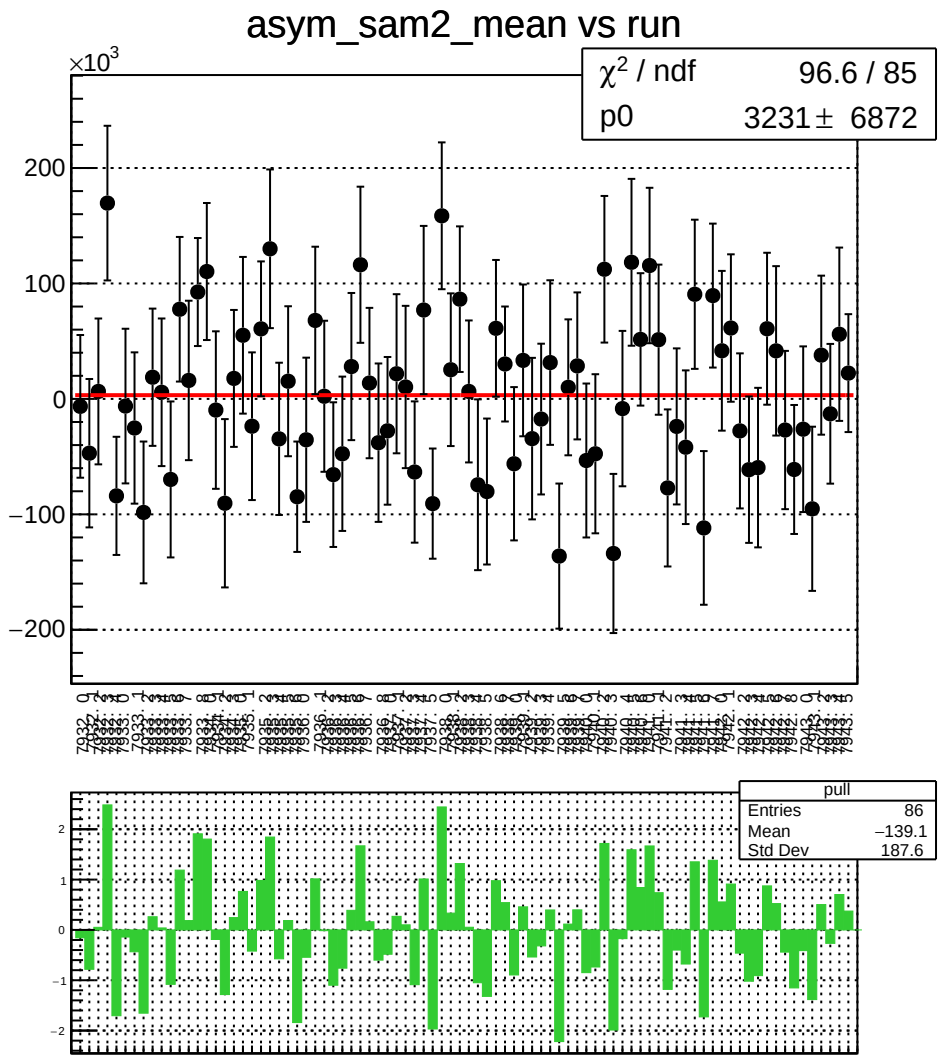

pull1D
Entries 86
Mean −0.003785
Std Dev 0.9733

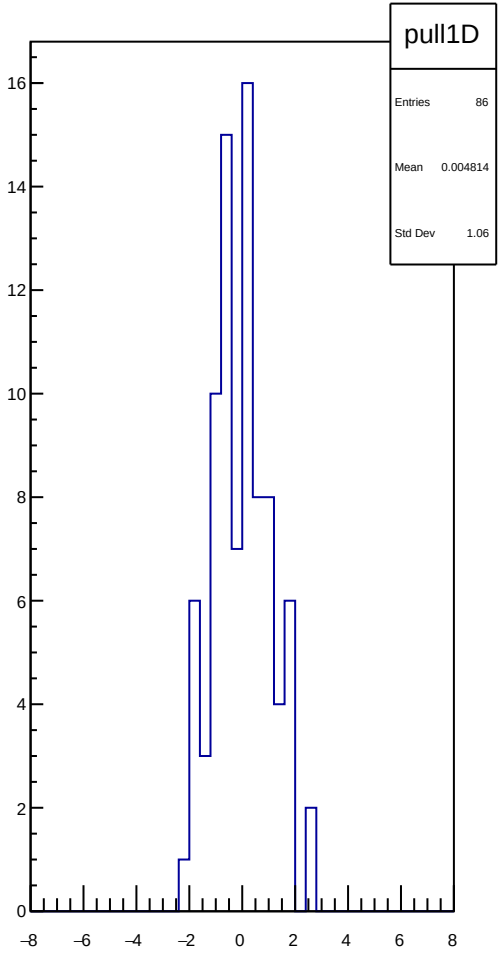

diff_bpm0l01Y_rms vs run
χ^2 / ndf 9538 / 85
p0 2287 ± 1.782
3000
2800
2600
2400
2200
2000

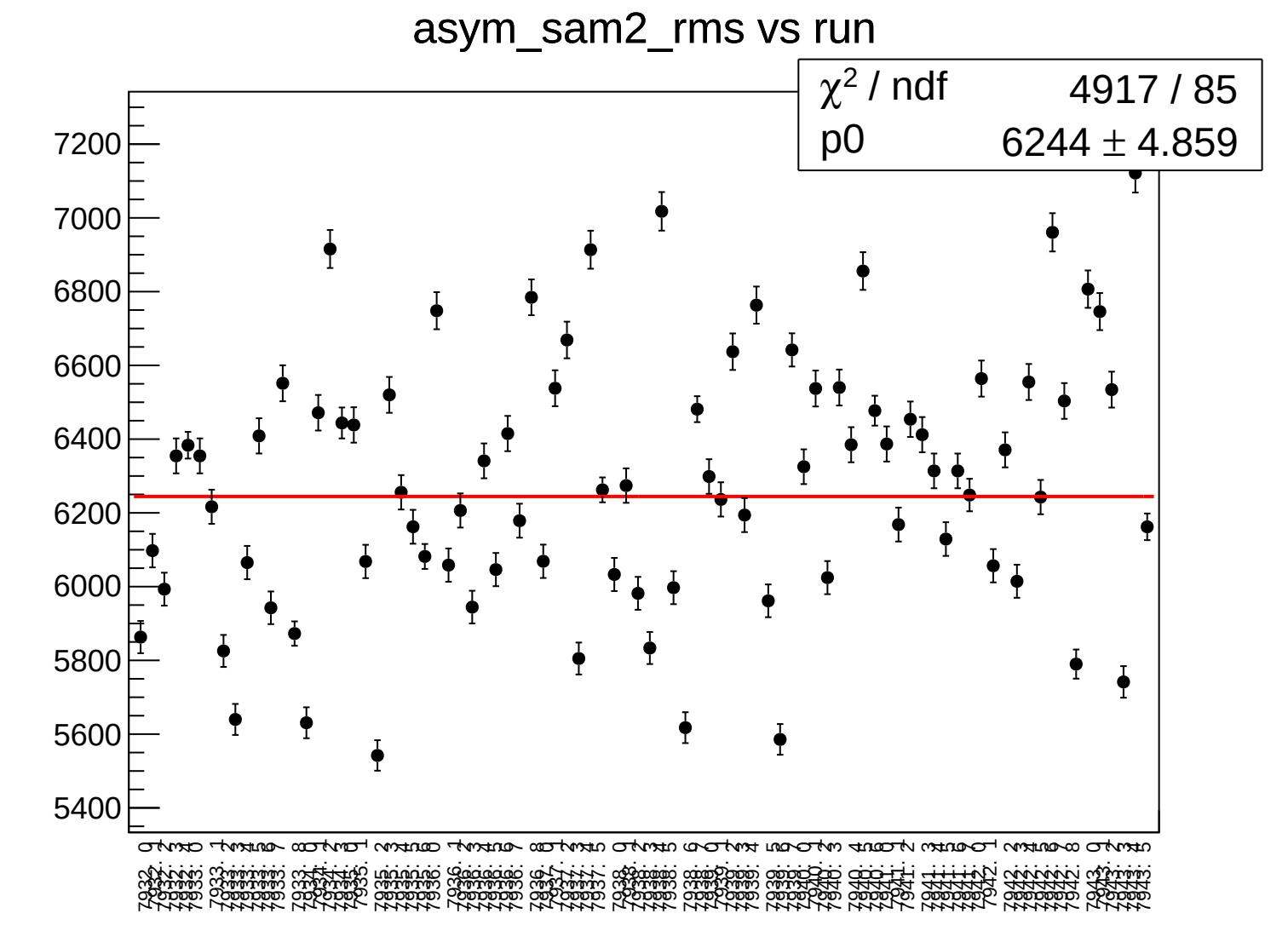

asym_sam1_mean vs run
χ² / ndf 92.94 / 85
p0 117.8 ± 532.1
pull
Entries 86
Mean 87.18
Std Dev 51.87

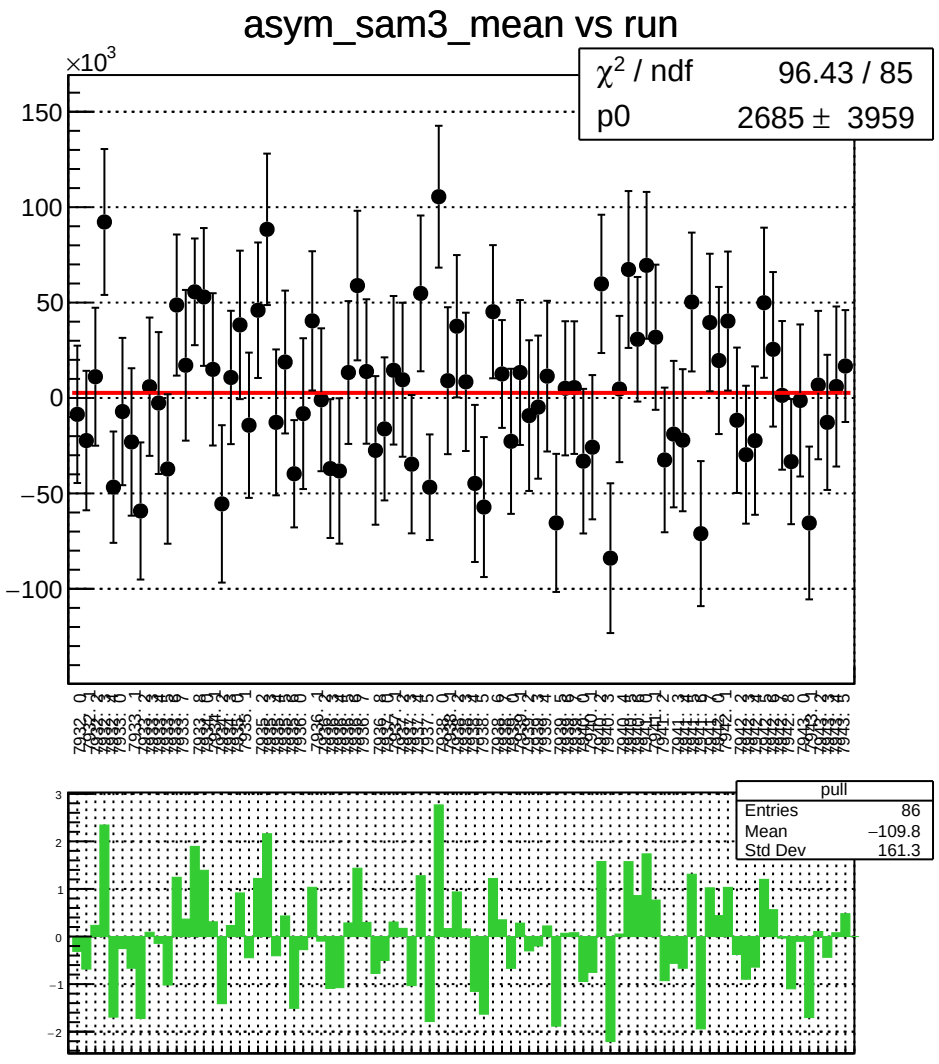

pull1D
Entries 86
Mean 0.00612
Std Dev 1.04

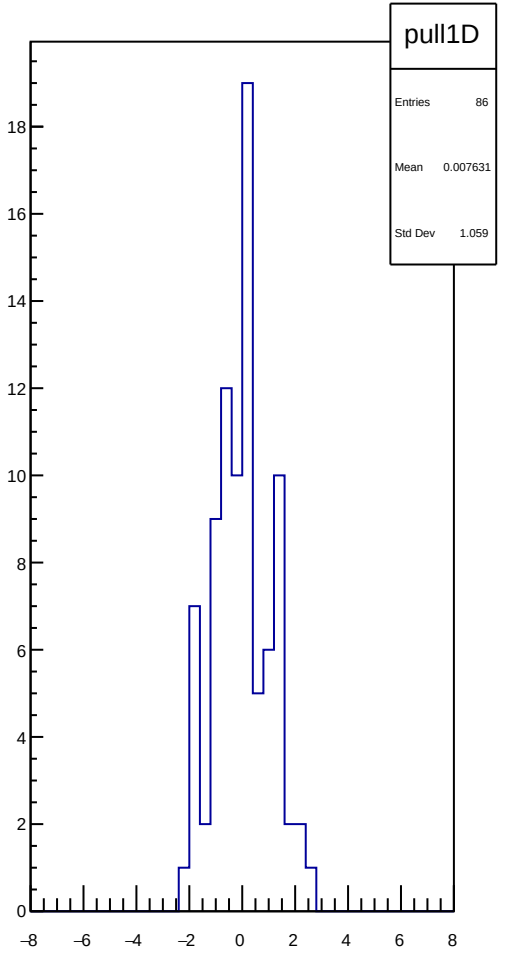

asym_sam1_rms vs run
χ² / ndf 1.172e+04 / 85
p0 482.5 ± 0.3763
580
560
540
520
500
480
460
440
420
400
380

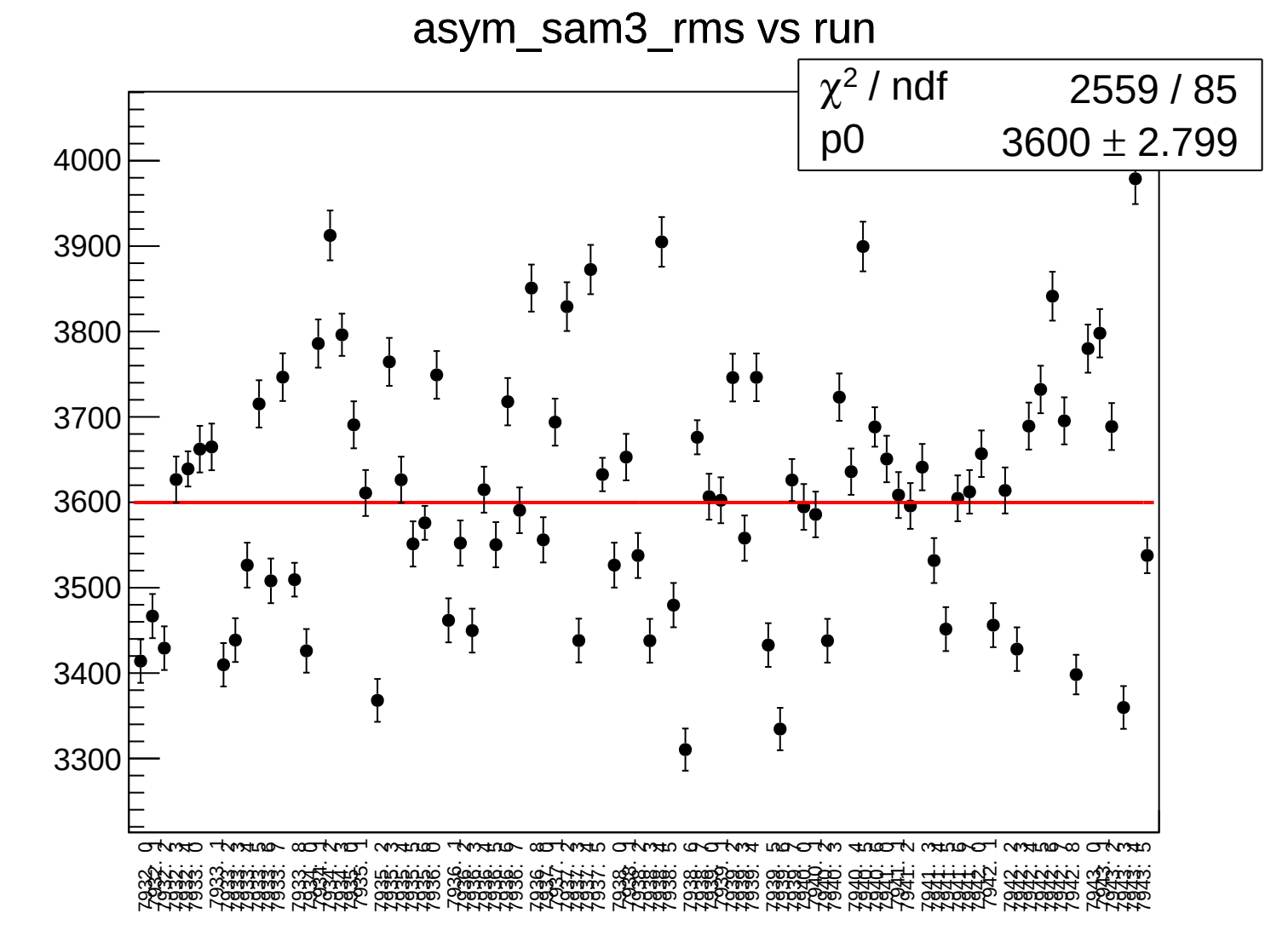

asym_sam2_mean vs run
×10^3
χ^2 / ndf 96.6 / 85
p0 3231 ± 6872
200
100
0
−100
−200
pull
Entries 86
Mean −139.1
Std Dev 187.6
2
1
0
−1
−2

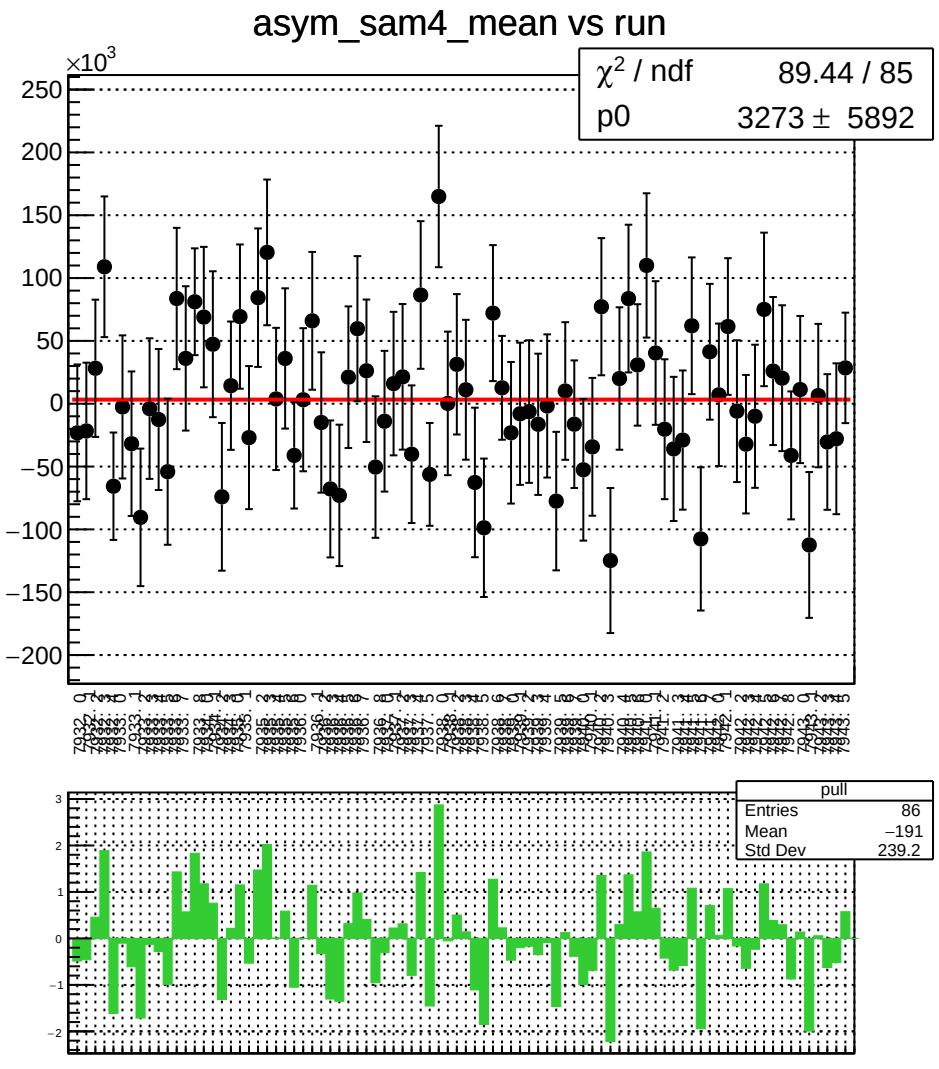

pull1D
Entries 86
Mean 0.004814
Std Dev 1.06
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

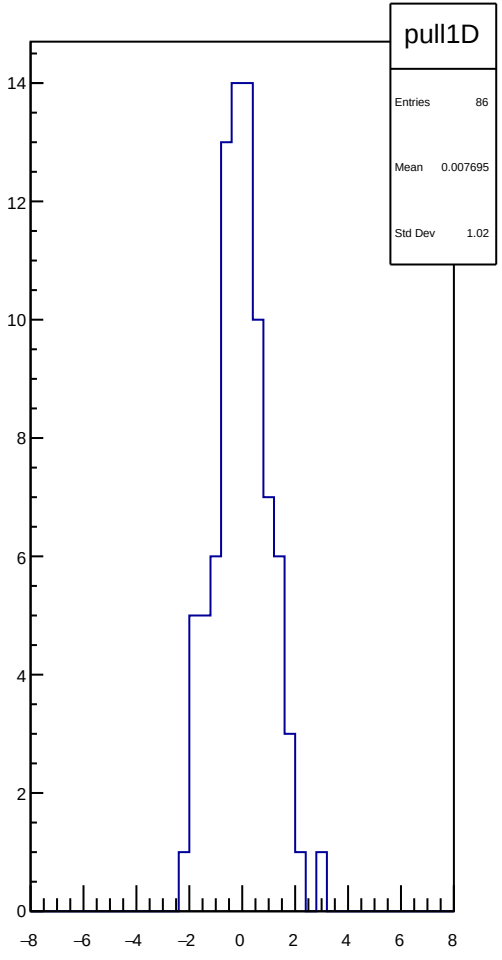

asym_sam2_rms vs run
χ² / ndf 4917 / 85
p0 6244 ± 4.859
7200
7000
6800
6600
6400
6200
6000
5800
5600
5400

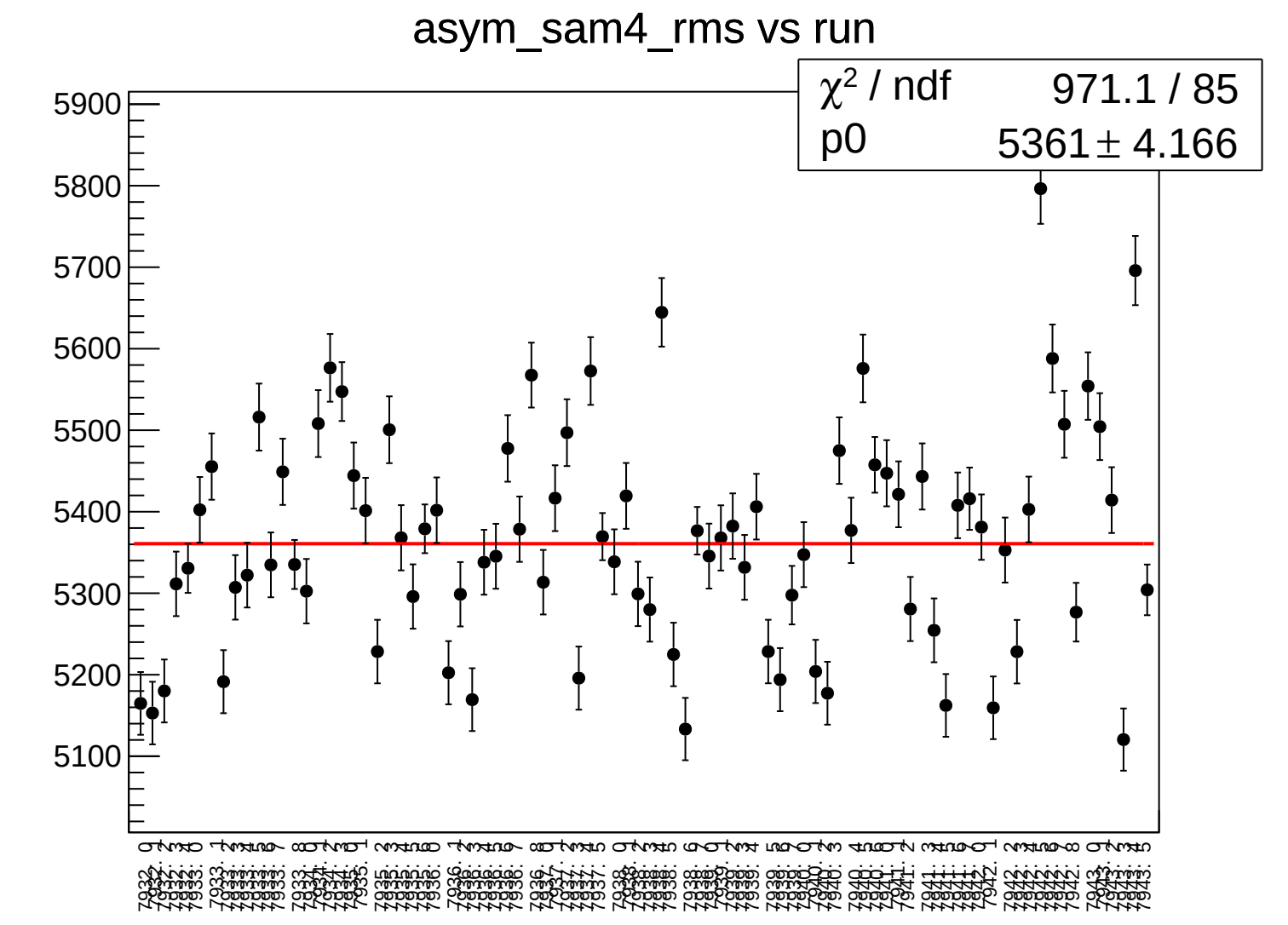

asym_sam3_mean vs run
×10^3
χ² / ndf 96.43 / 85
p0 2685 ± 3959
150
100
50
0
−50
−100
pull
Entries 86
Mean −109.8
Std Dev 161.3
3
2
1
0
−1
−2

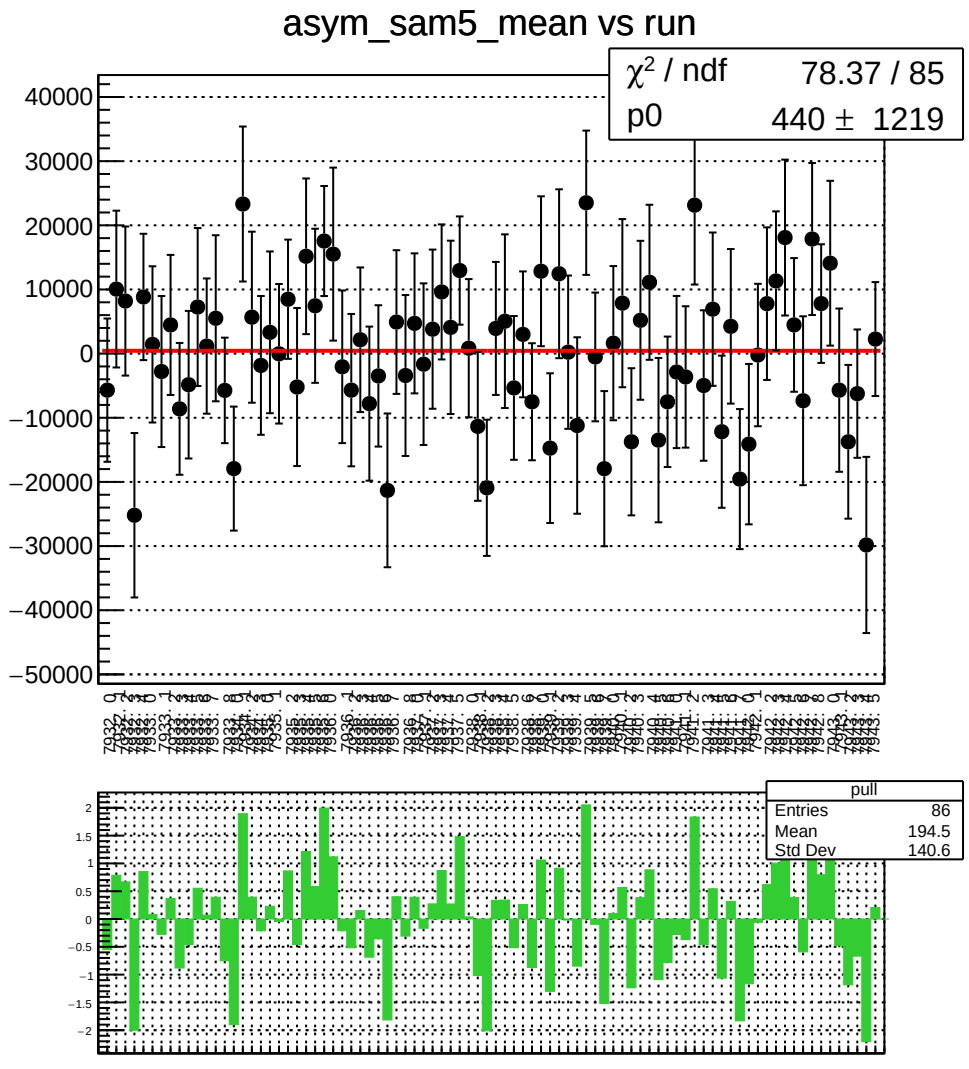

pull1D
Entries 86
Mean 0.007631
Std Dev 1.059
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

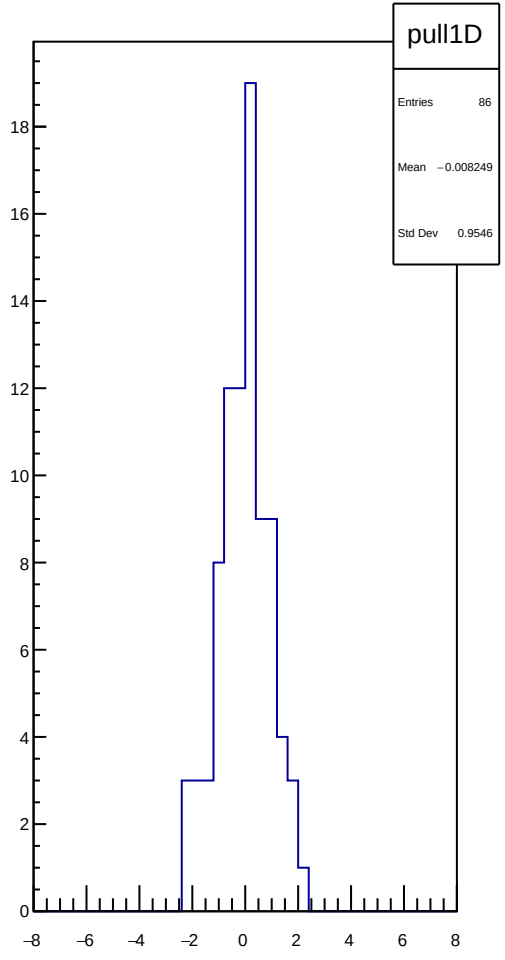

asym_sam3_rms vs run
χ² / ndf 2559 / 85
p0 3600 ± 2.799
4000
3900
3800
3700
3600
3500
3400
3300

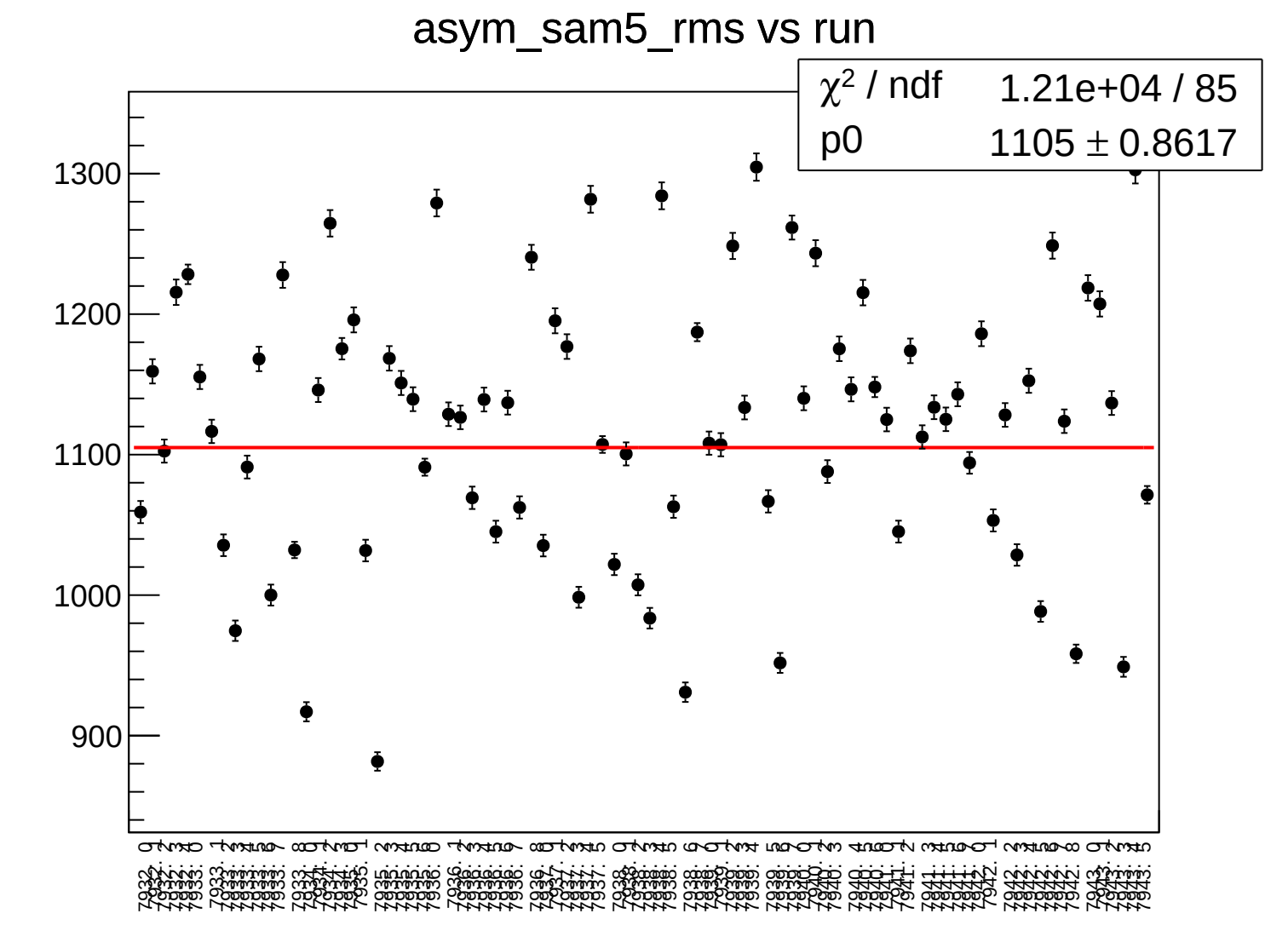

asym_sam4_mean vs run
×10^3
χ^2 / ndf 89.44 / 85
p0 3273 ± 5892
pull
Entries 86
Mean −191
Std Dev 239.2

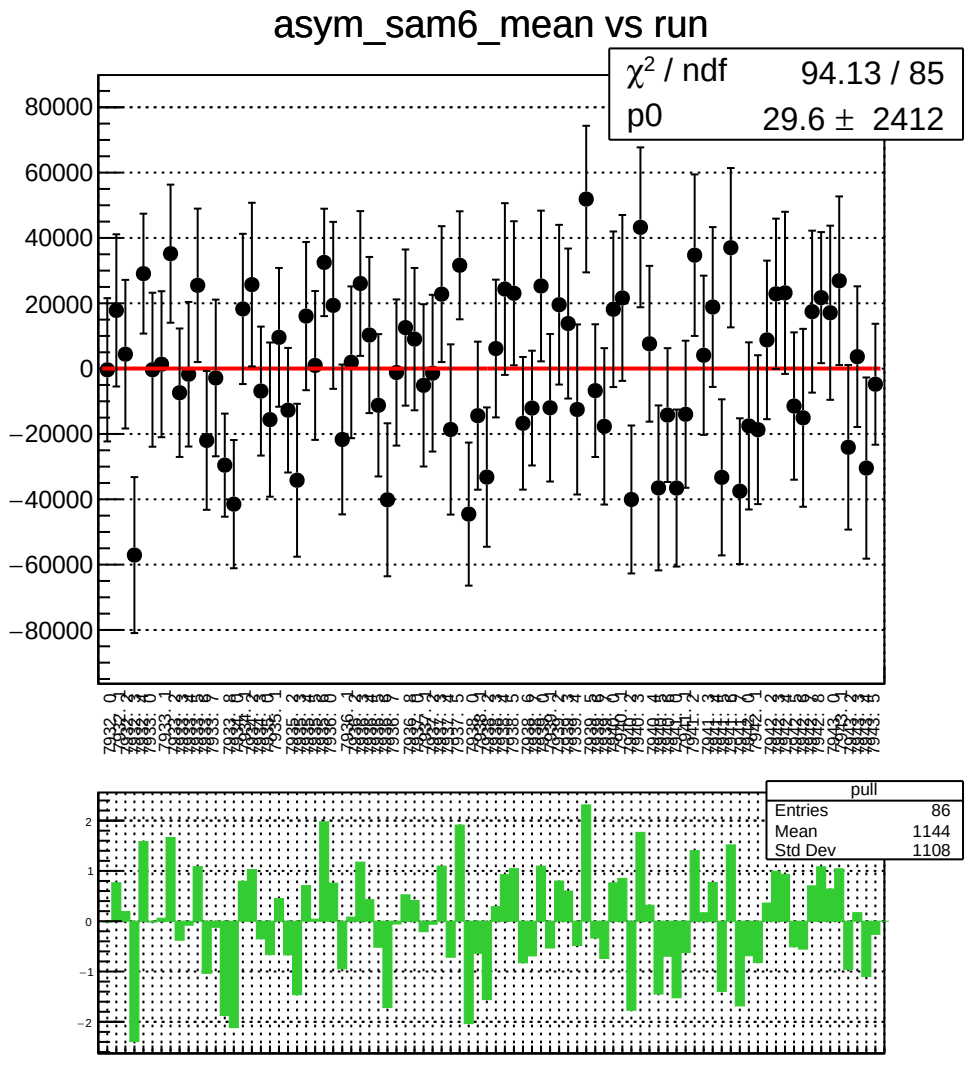

pull1D
Entries 86
Mean 0.007695
Std Dev 1.02

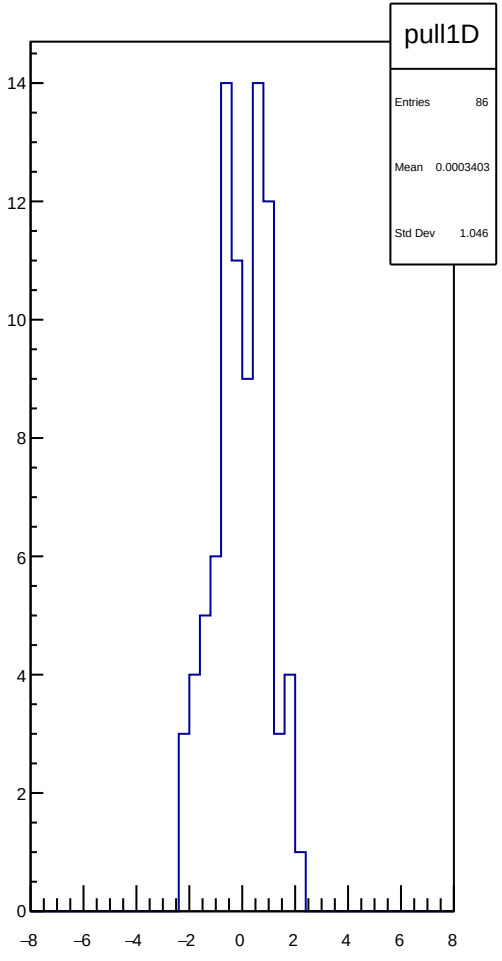

asym_sam4_rms vs run
χ^2 / ndf 971.1 / 85
p0 5361 ± 4.166
5900
5800
5700
5600
5500
5400
5300
5200
5100

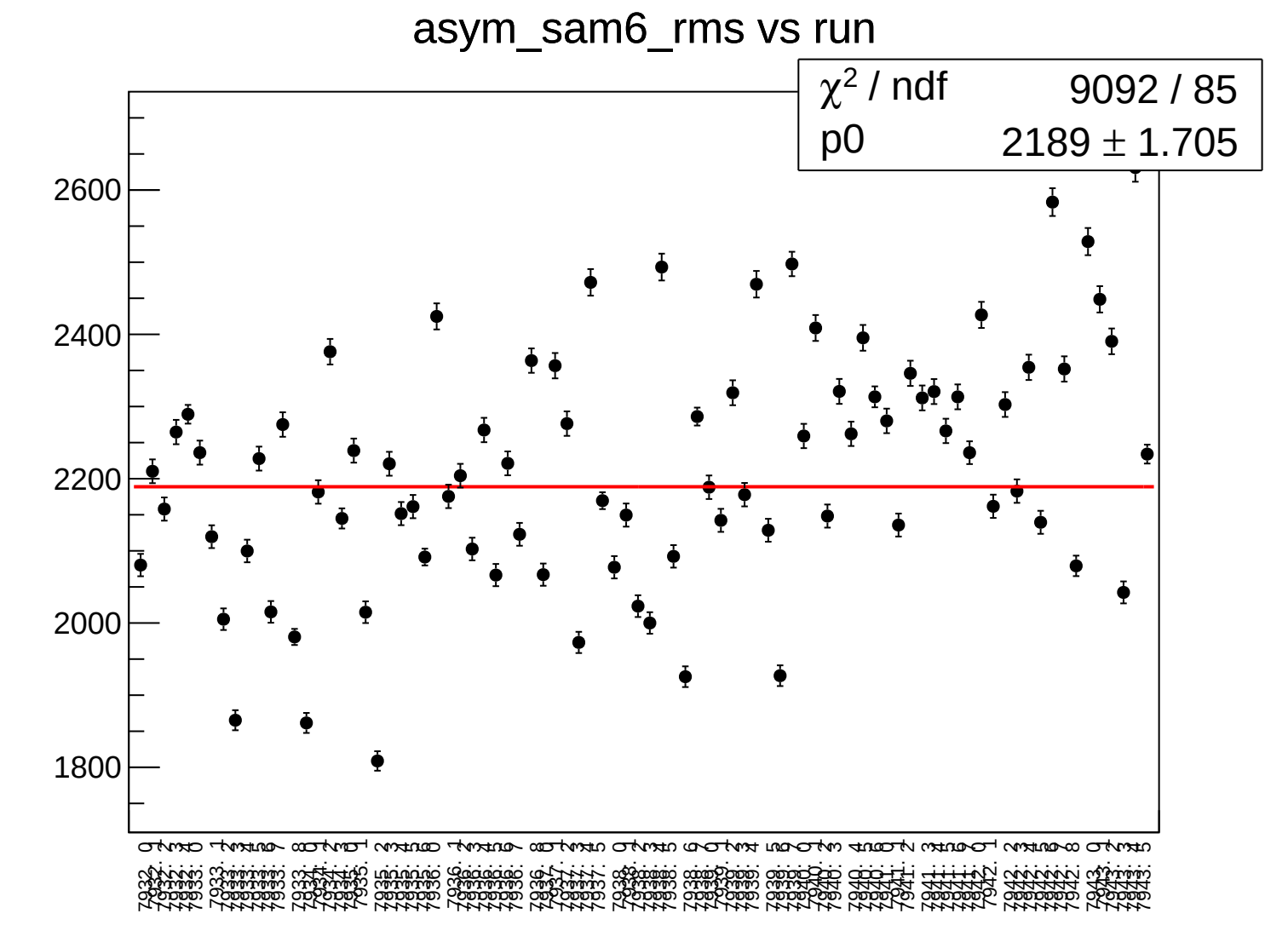

asym_sam5_mean vs run
χ² / ndf 78.37 / 85
p0 440 ± 1219
pull
Entries 86
Mean 194.5
Std Dev 140.6

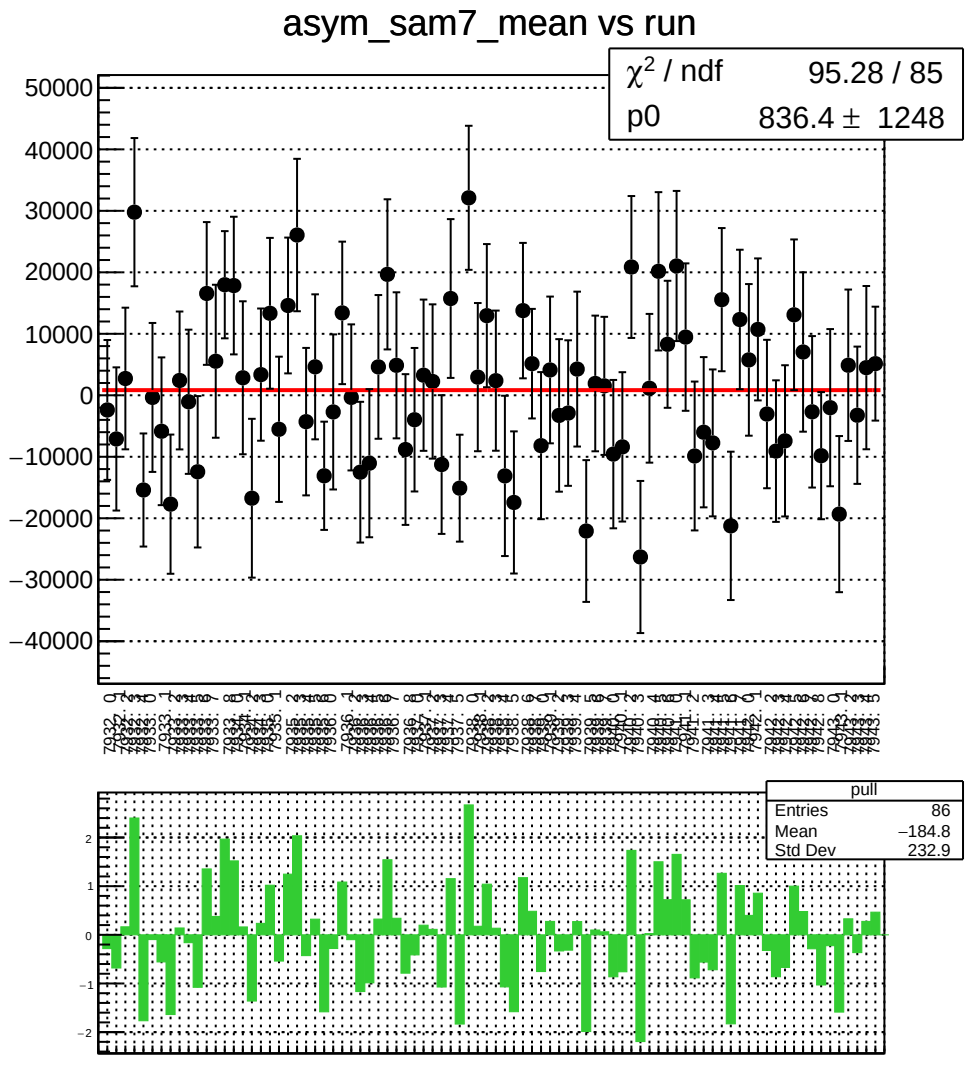

pull1D
Entries 86
Mean −0.008249
Std Dev 0.9546

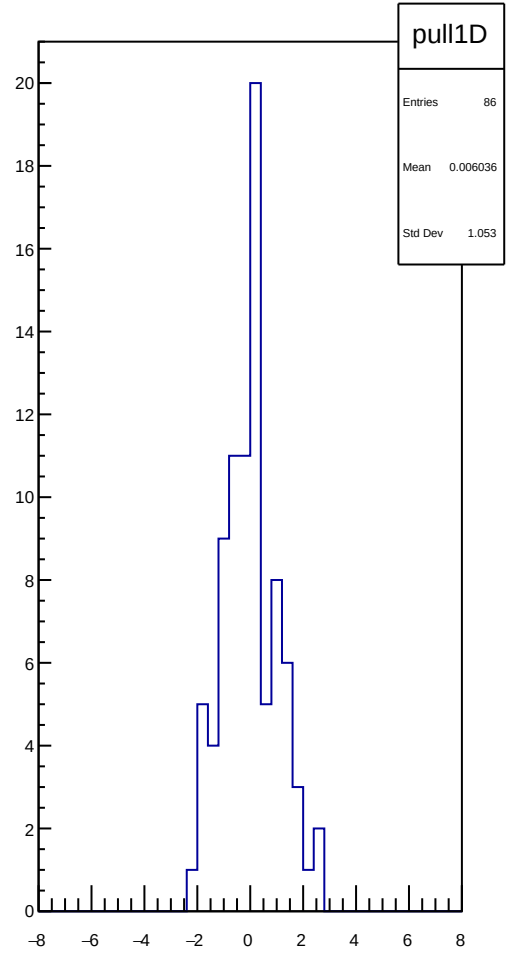

asym_sam5_rms vs run
χ^2 / ndf 1.21e+04 / 85
p0 1105 ± 0.8617
1300
1200
1100
1000
900

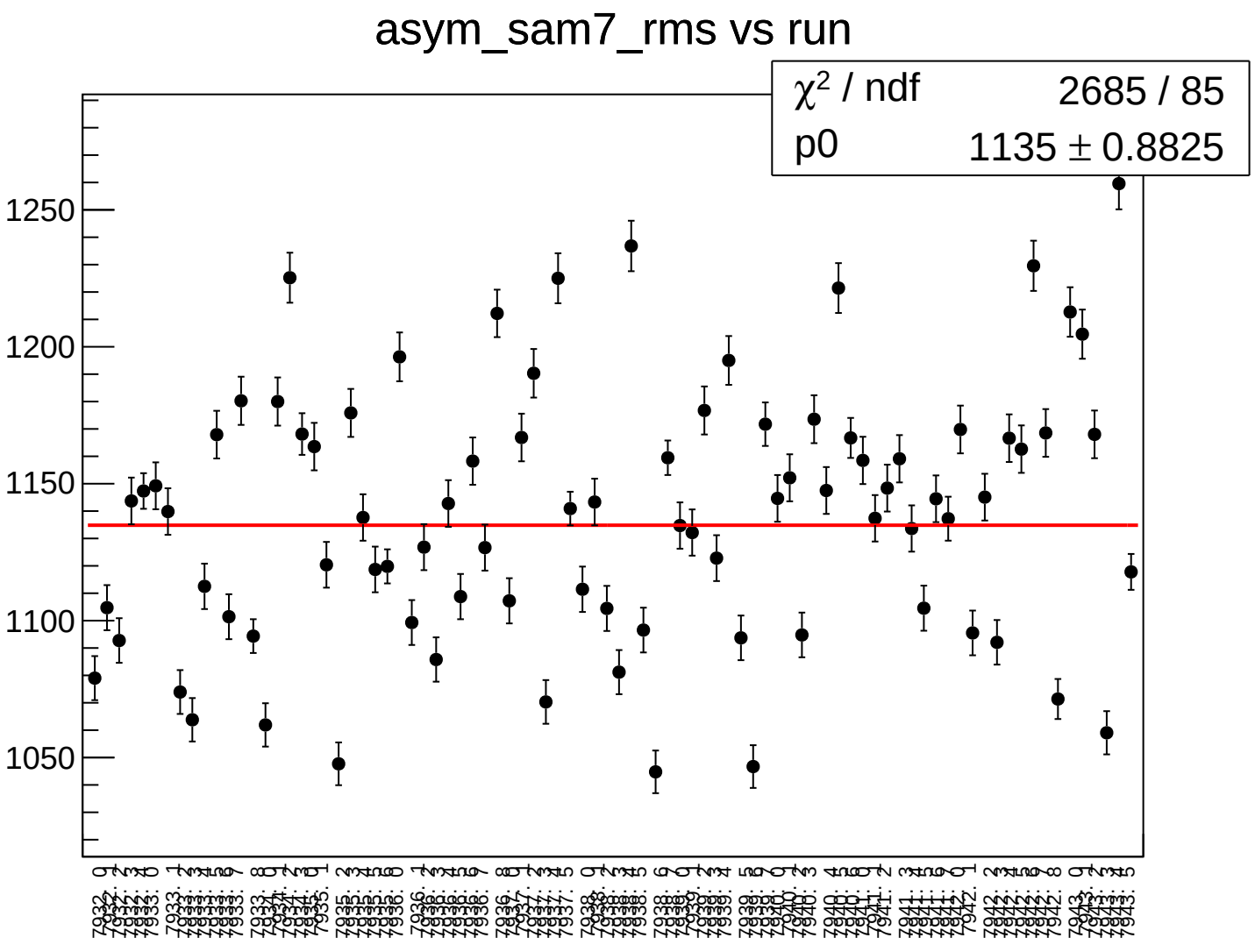

asym_sam6_mean vs run
χ² / ndf 94.13 / 85
p0 29.6 ± 2412
pull
Entries 86
Mean 1144
Std Dev 1108

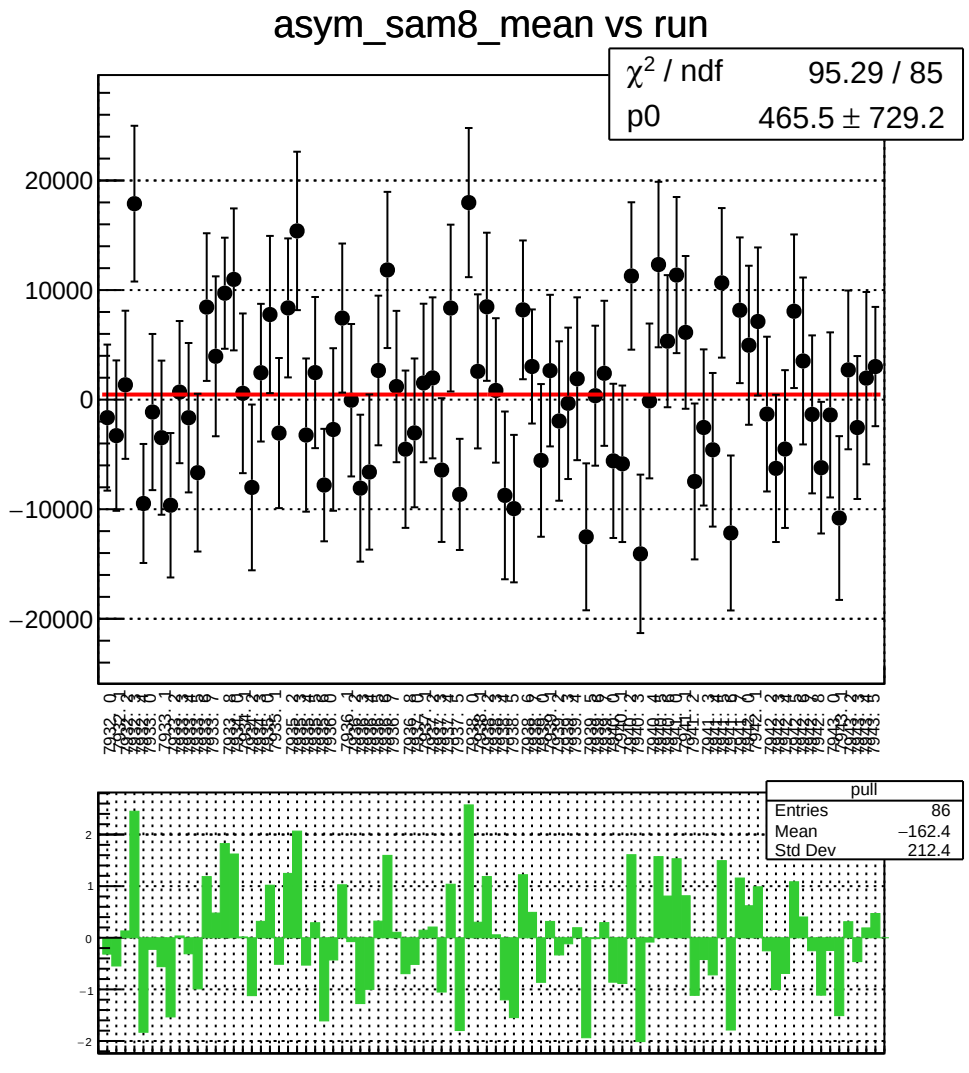

pull1D
Entries 86
Mean 0.0003403
Std Dev 1.046

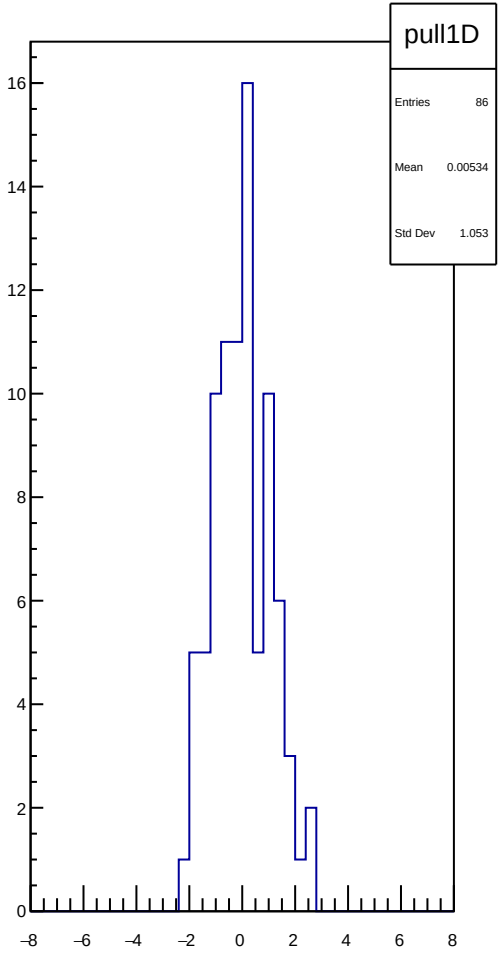

asym_sam6_rms vs run
χ² / ndf 9092 / 85
p0 2189 ± 1.705
2600
2400
2200
2000
1800

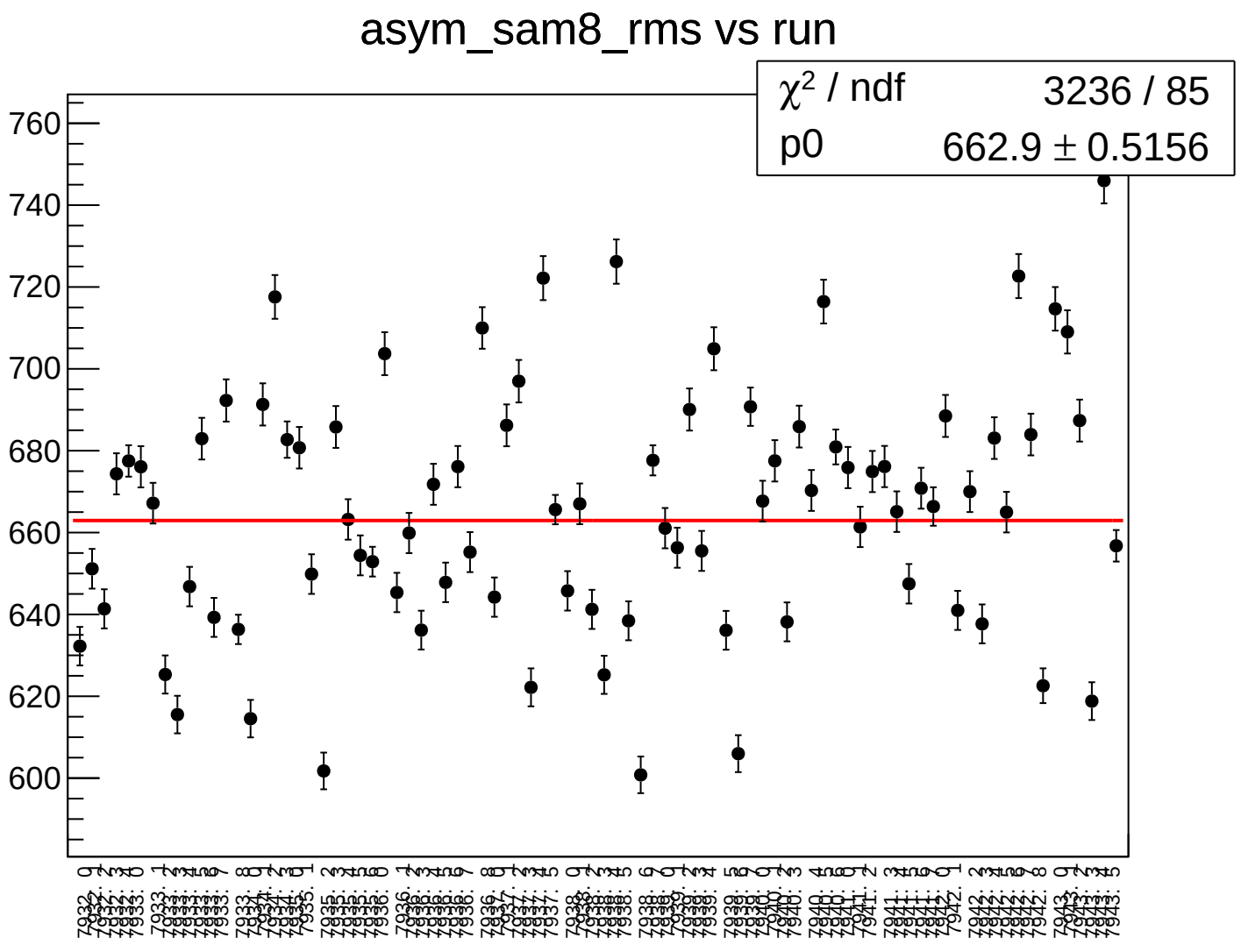

asym_sam7_mean vs run
χ² / ndf 95.28 / 85
p0 836.4 ± 1248
pull
Entries 86
Mean −184.8
Std Dev 232.9

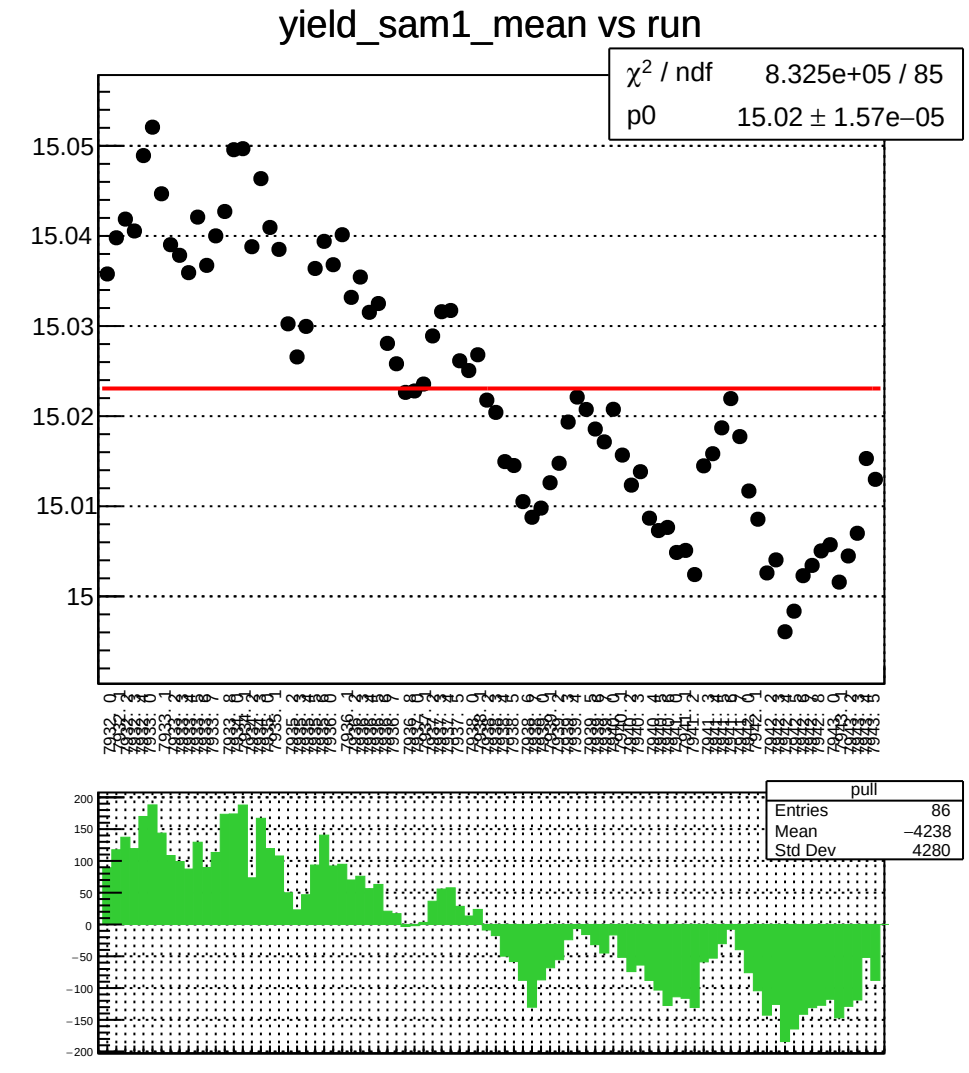

pull1D
Entries 86
Mean 0.006036
Std Dev 1.053

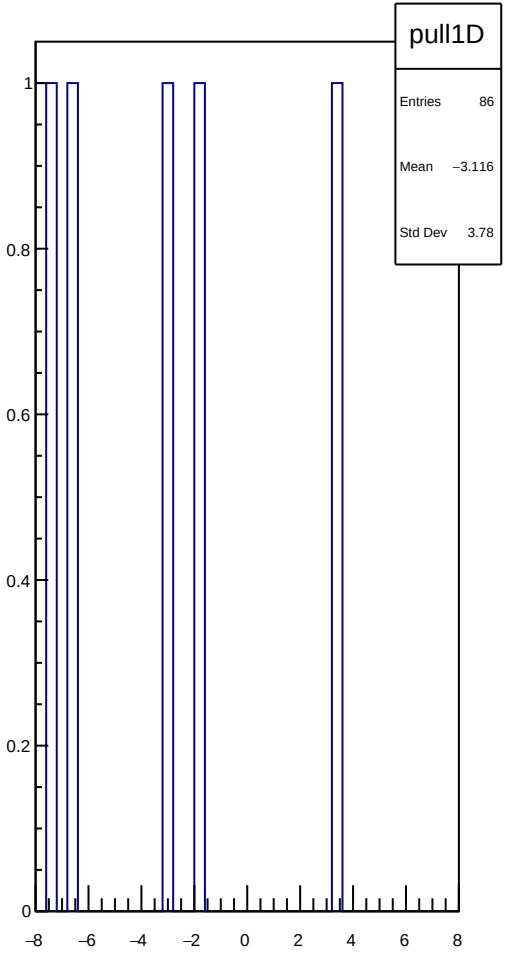

asym_sam7_rms vs run
χ² / ndf 2685 / 85
p0 1135 ± 0.8825
1250
1200
1150
1100
1050

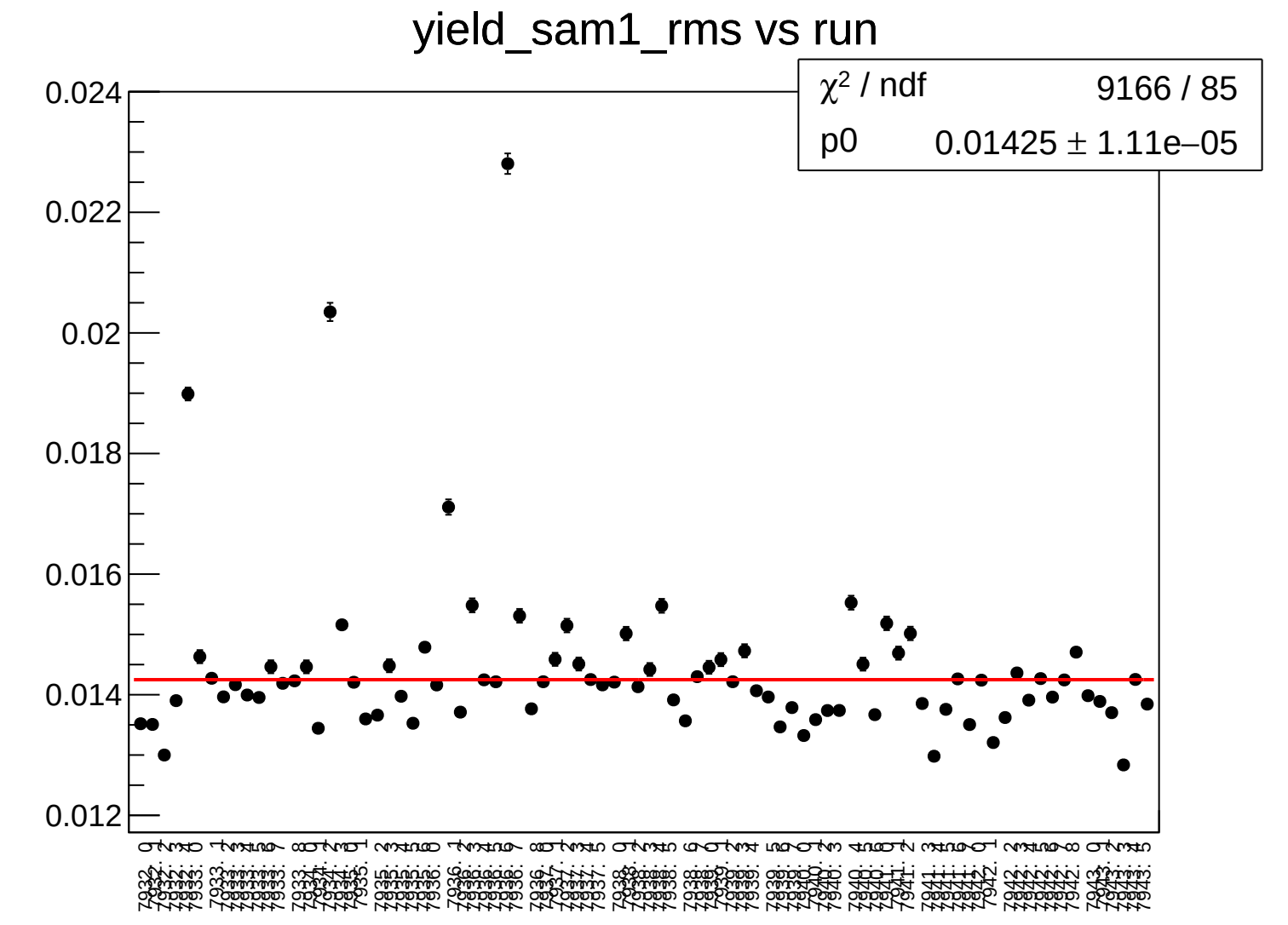

asym_sam8_mean vs run
χ² / ndf 95.29 / 85
p0 465.5 ± 729.2
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −162.4
Std Dev 212.4
2
1
0
−1
−2

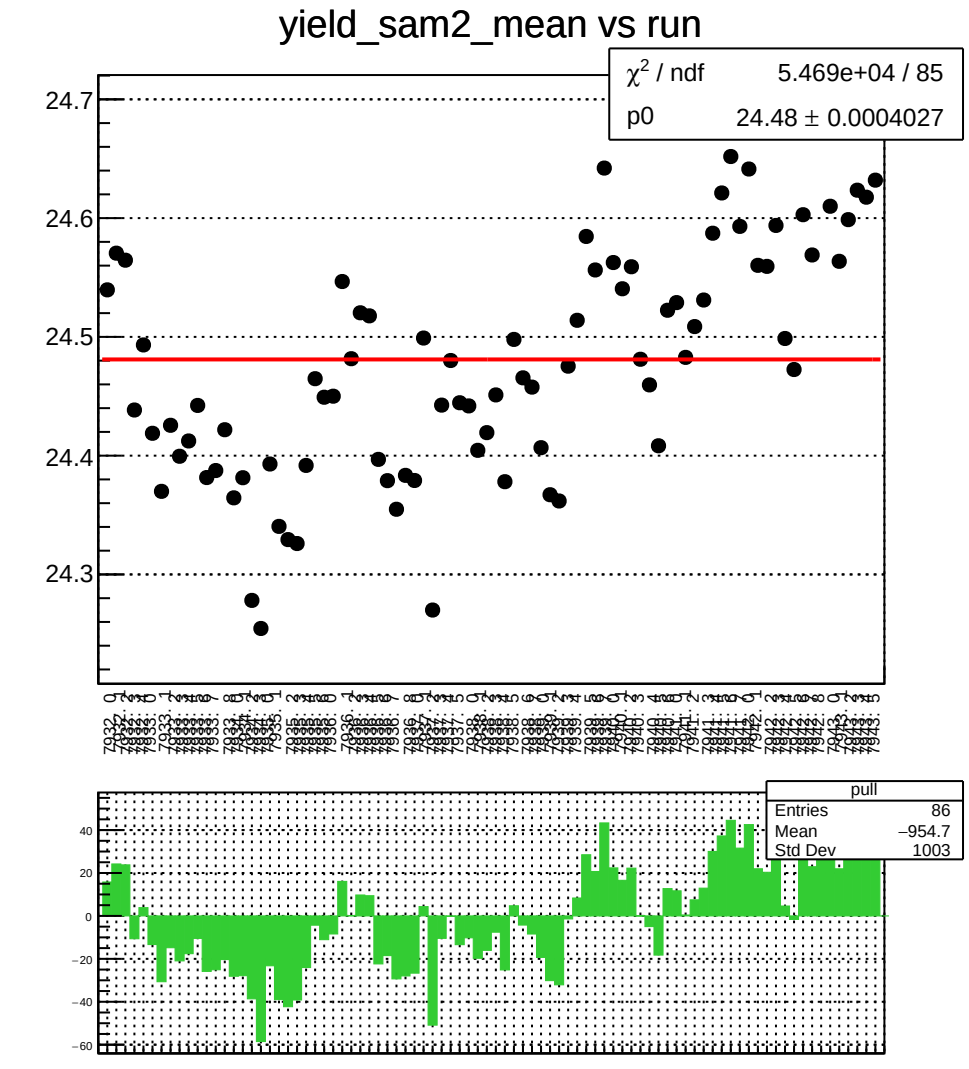

pull1D
Entries 86
Mean 0.00534
Std Dev 1.053
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

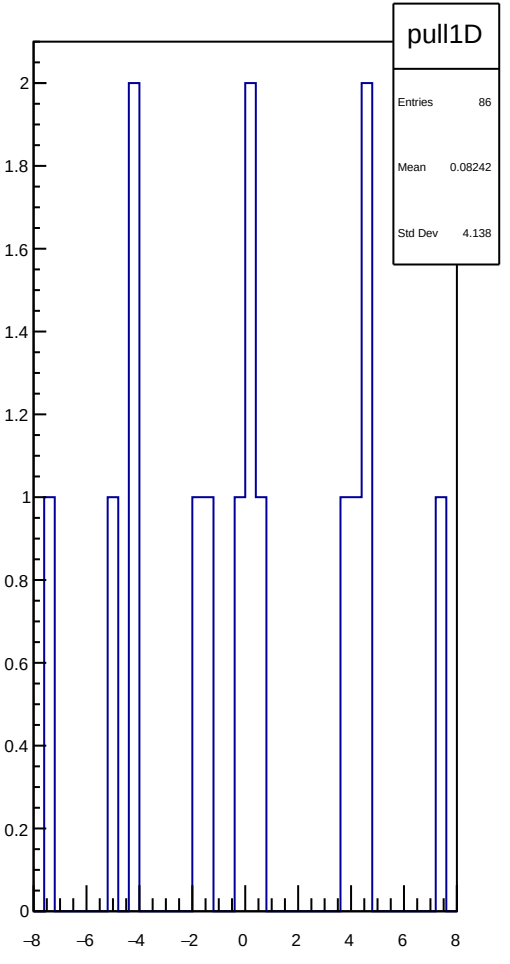

asym_sam8_rms vs run
χ^2 / ndf 3236 / 85
p0 662.9 ± 0.5156
760
740
720
700
680
660
640
620
600

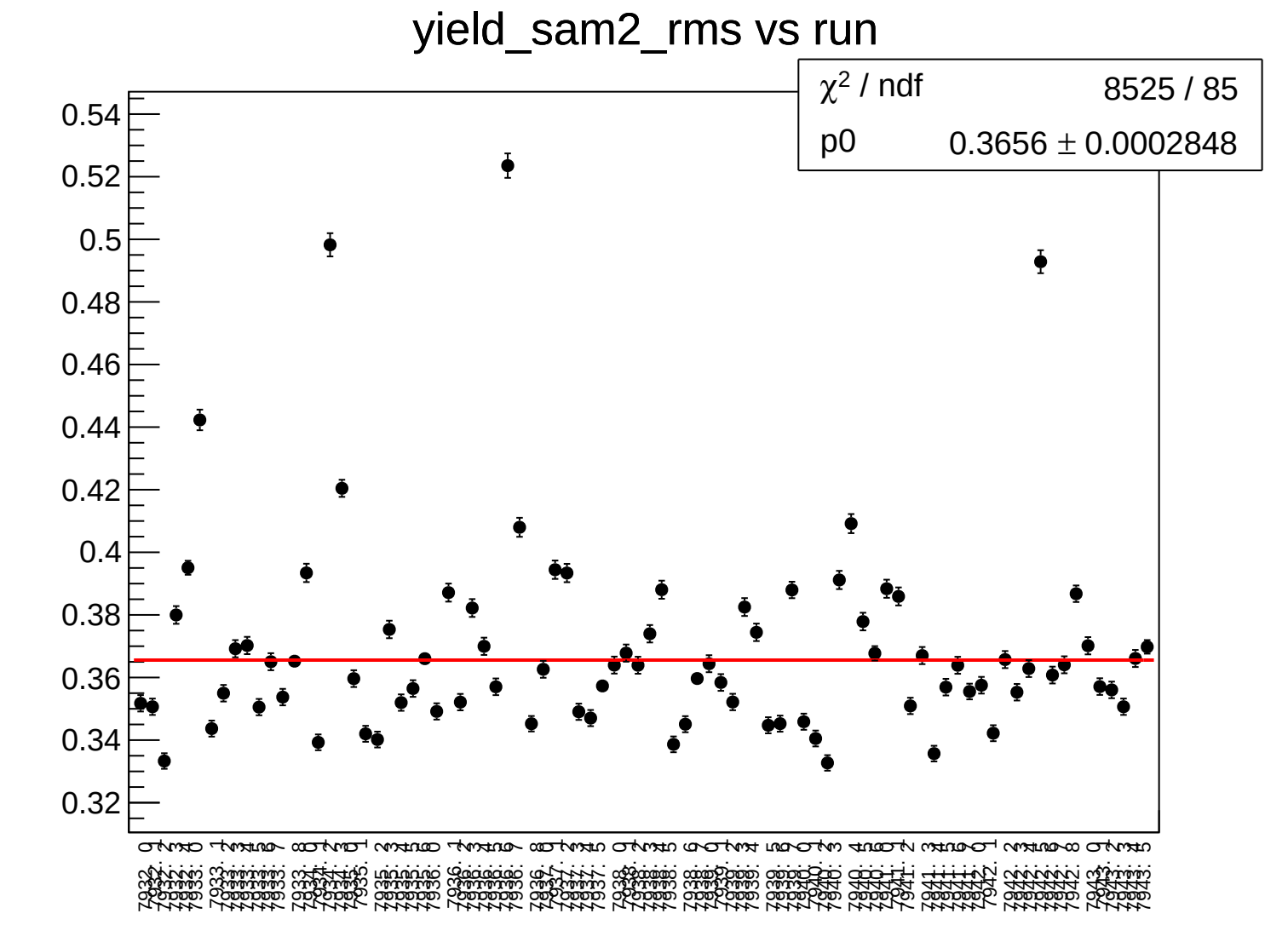

yield_sam1_mean vs run
χ² / ndf 8.325e+05 / 85
p0 15.02 ± 1.57e−05
15.05
15.04
15.03
15.02
15.01
15
pull
Entries 86
Mean −4238
Std Dev 4280
200
150
100
50
0
−50
−100
−150
−200

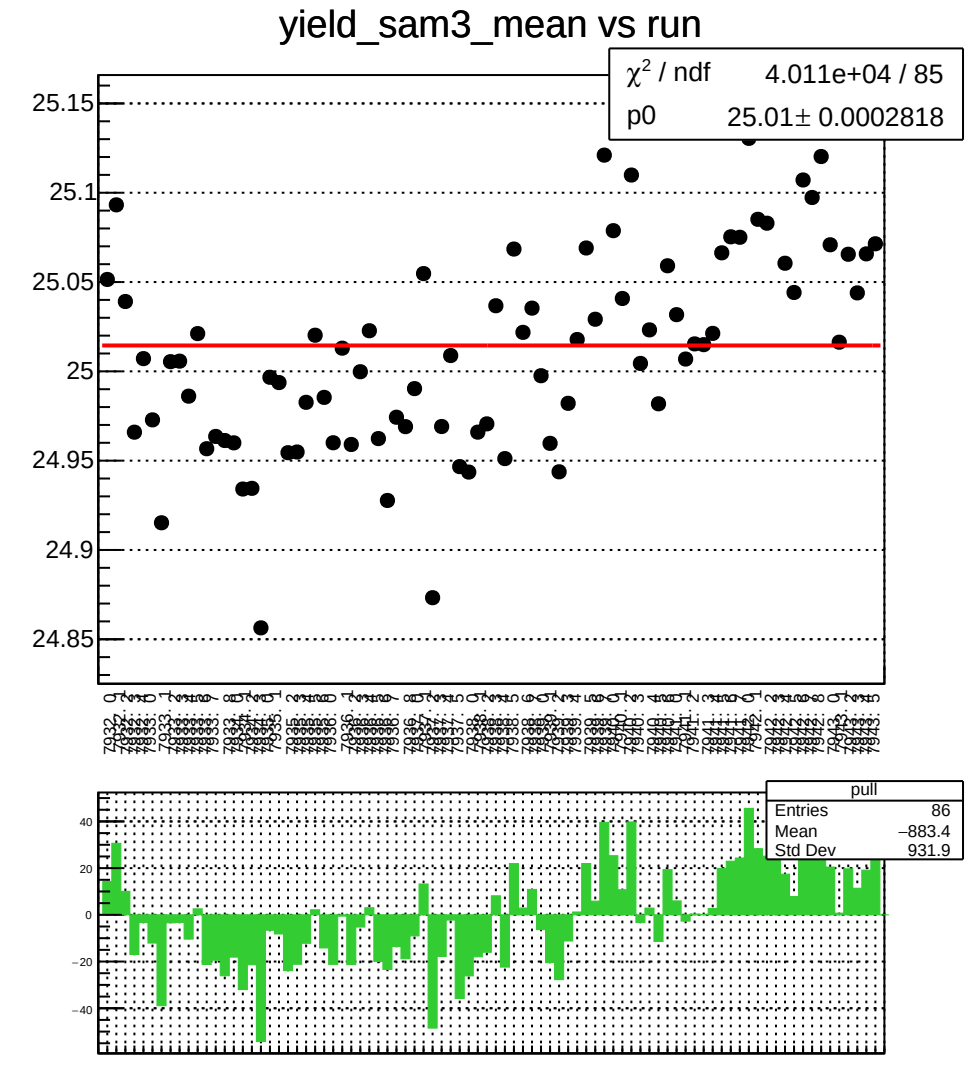

pull1D
Entries 86
Mean −3.116
Std Dev 3.78
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

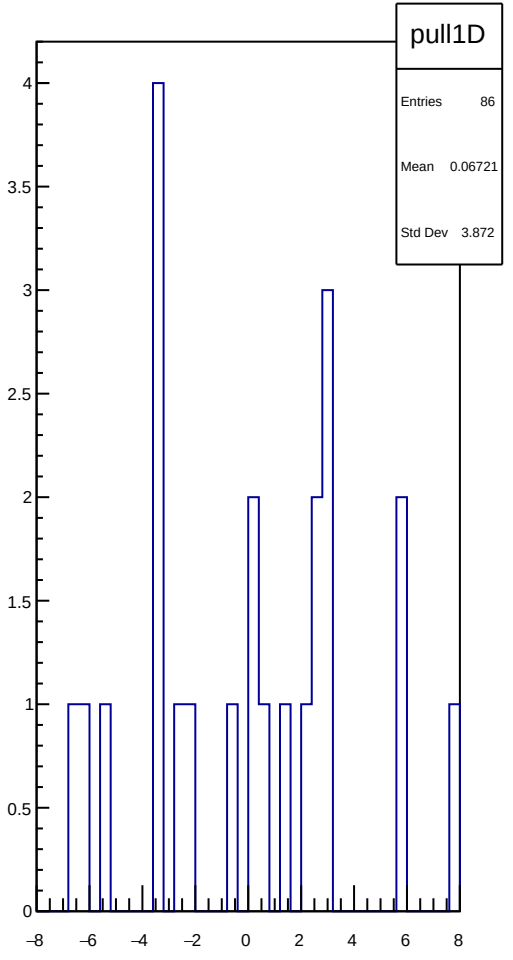

yield_sam1_rms vs run
χ² / ndf 9166 / 85
p0 0.01425 ± 1.11e−05
0.024
0.022
0.02
0.018
0.016
0.014
0.012

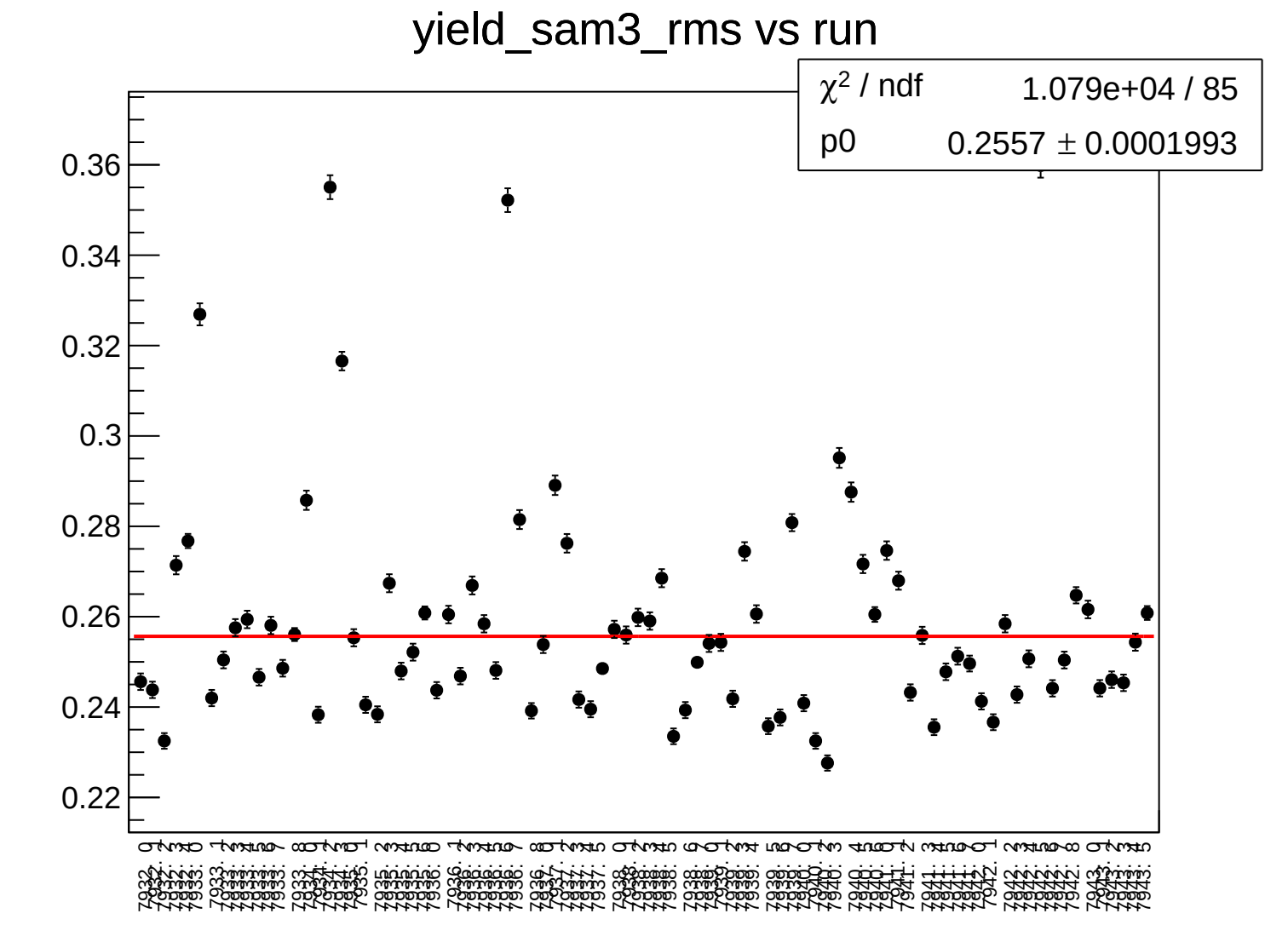

yield_sam2_mean vs run
χ² / ndf 5.469e+04 / 85
p0 24.48 ± 0.0004027
24.7
24.6
24.5
24.4
24.3
pull
Entries 86
Mean −954.7
Std Dev 1003
40
20
0
−20
−40
−60

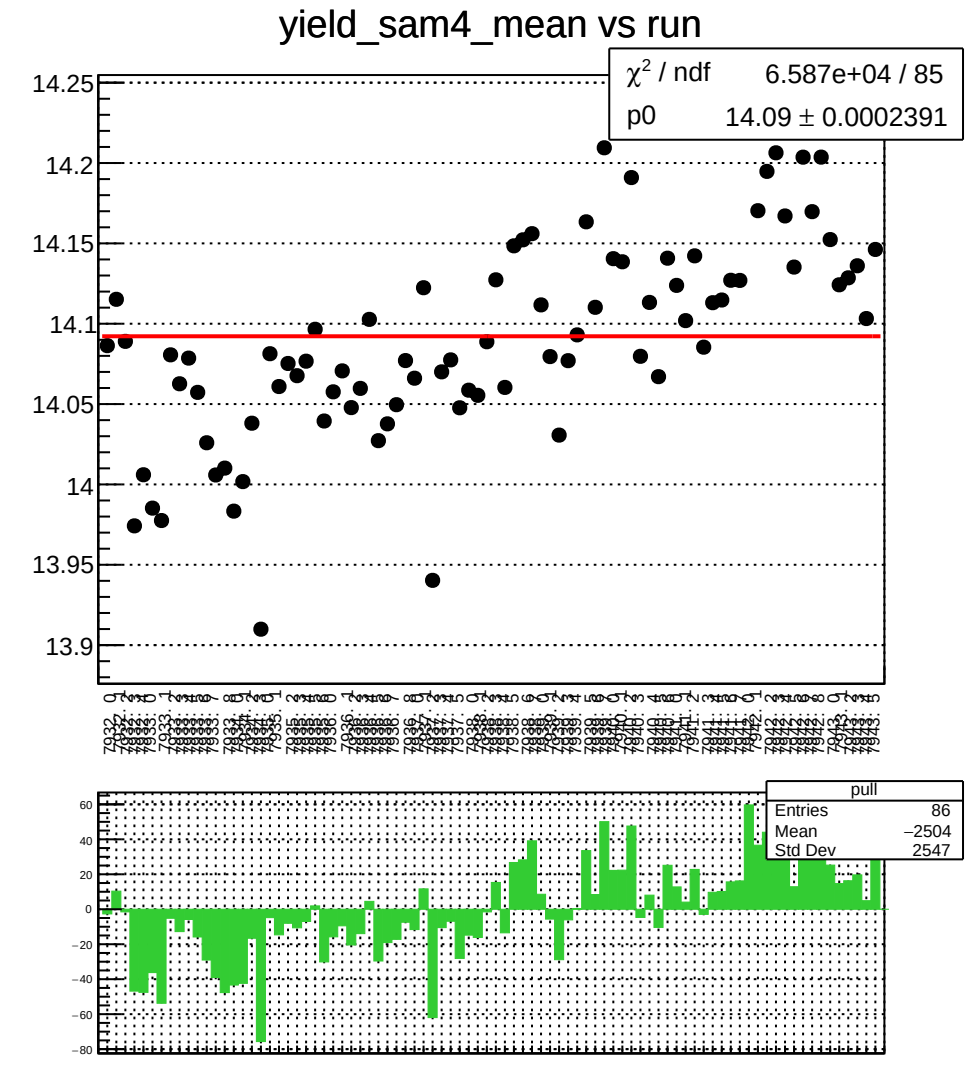

pull1D
Entries 86
Mean 0.08242
Std Dev 4.138
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

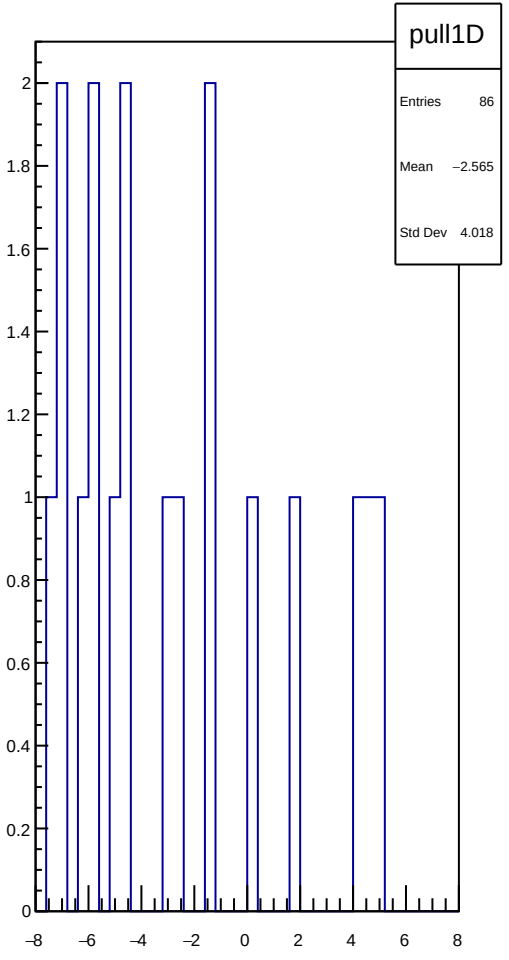

yield_sam2_rms vs run
χ² / ndf 8525 / 85
p0 0.3656 ± 0.0002848
0.54
0.52
0.5
0.48
0.46
0.44
0.42
0.4
0.38
0.36
0.34
0.32

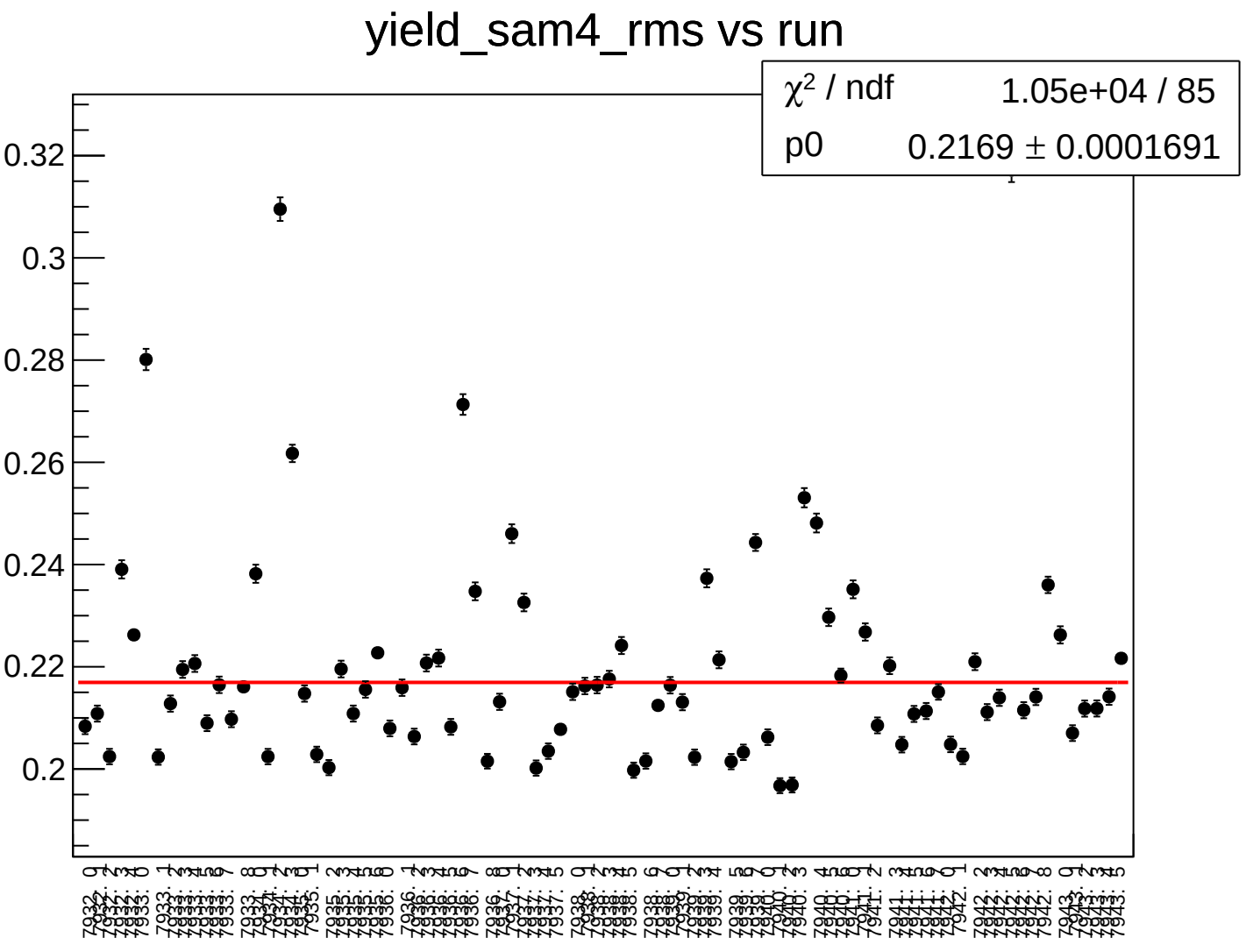

yield_sam3_mean vs run
χ² / ndf 4.011e+04 / 85
p0 25.01± 0.0002818
25.15
25.1
25.05
25
24.95
24.9
24.85
pull
Entries 86
Mean −883.4
Std Dev 931.9
40
20
0
−20
−40

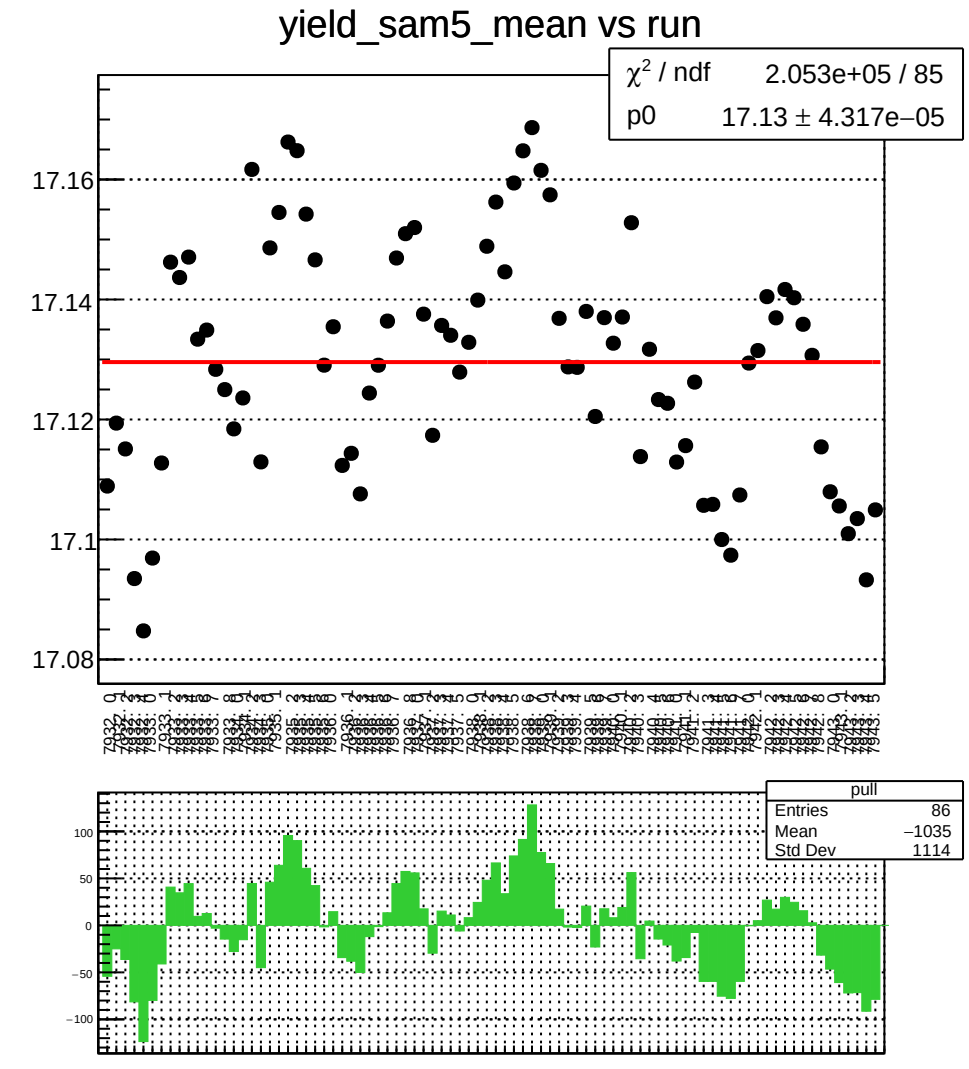

pull1D
Entries 86
Mean 0.06721
Std Dev 3.872
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

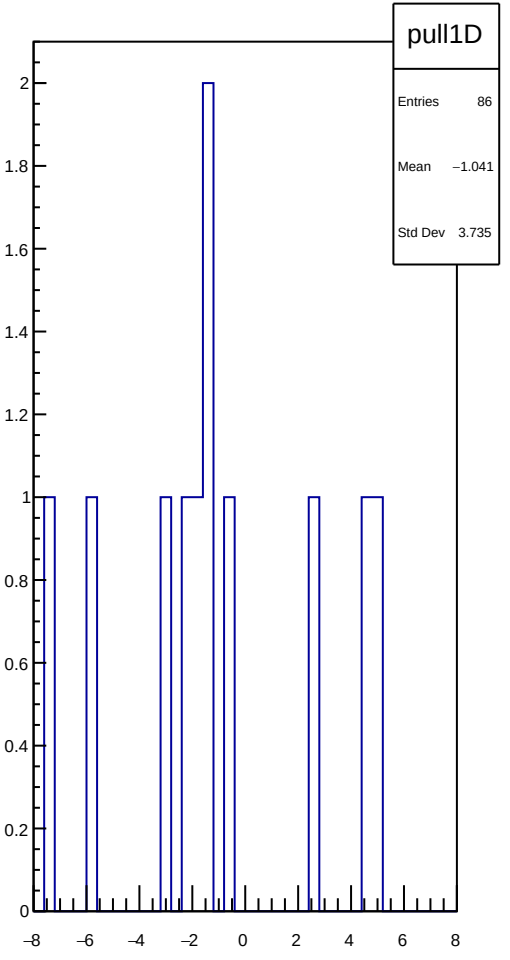

yield_sam3_rms vs run
χ² / ndf 1.079e+04 / 85
p0 0.2557 ± 0.0001993
0.36
0.34
0.32
0.3
0.28
0.26
0.24
0.22

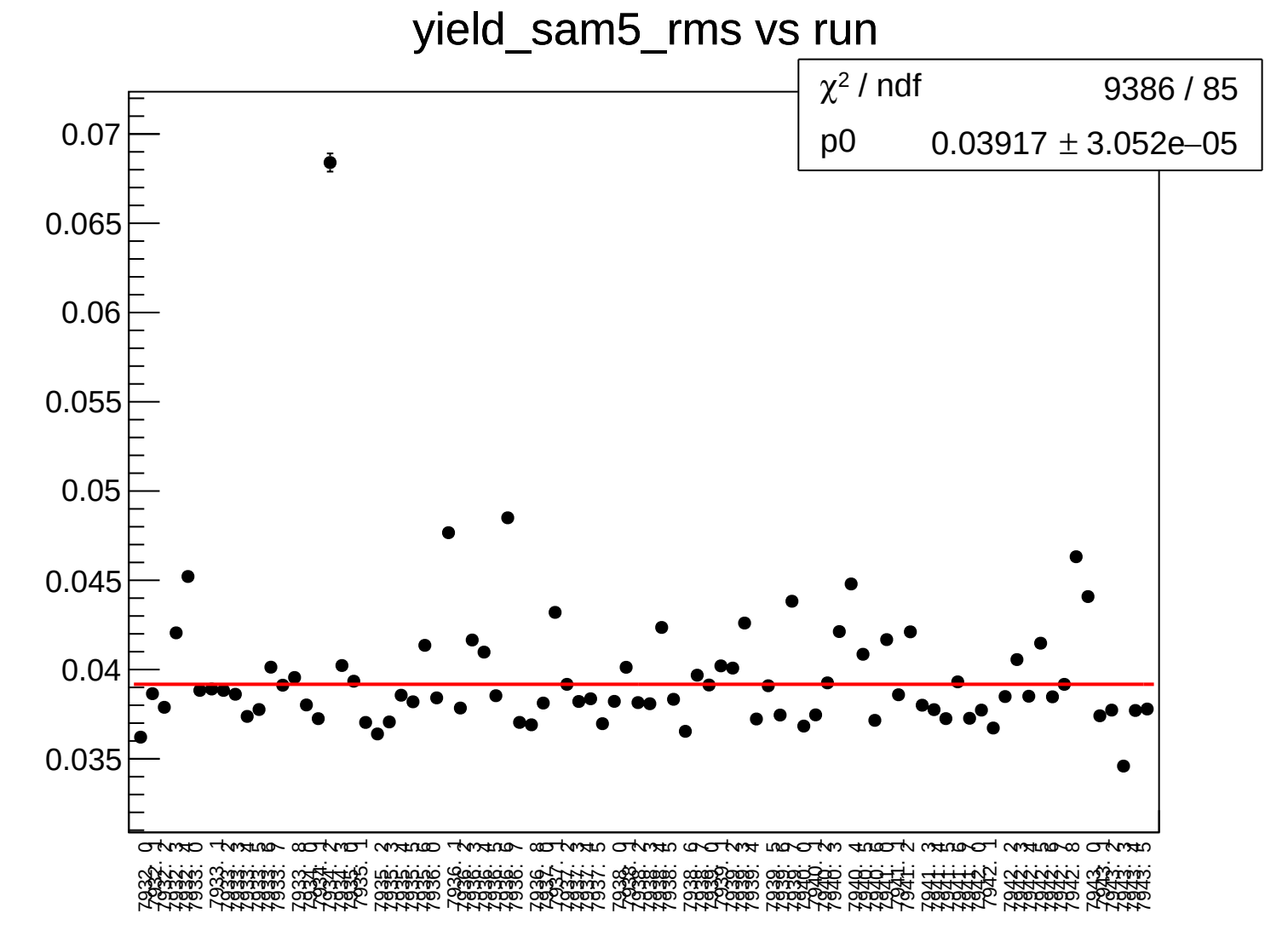

yield_sam4_mean vs run
χ² / ndf 6.587e+04 / 85
p0 14.09 ± 0.0002391
14.25
14.2
14.15
14.1
14.05
14
13.95
13.9
pull
Entries 86
Mean −2504
Std Dev 2547
60
40
20
0
−20
−40
−60
−80

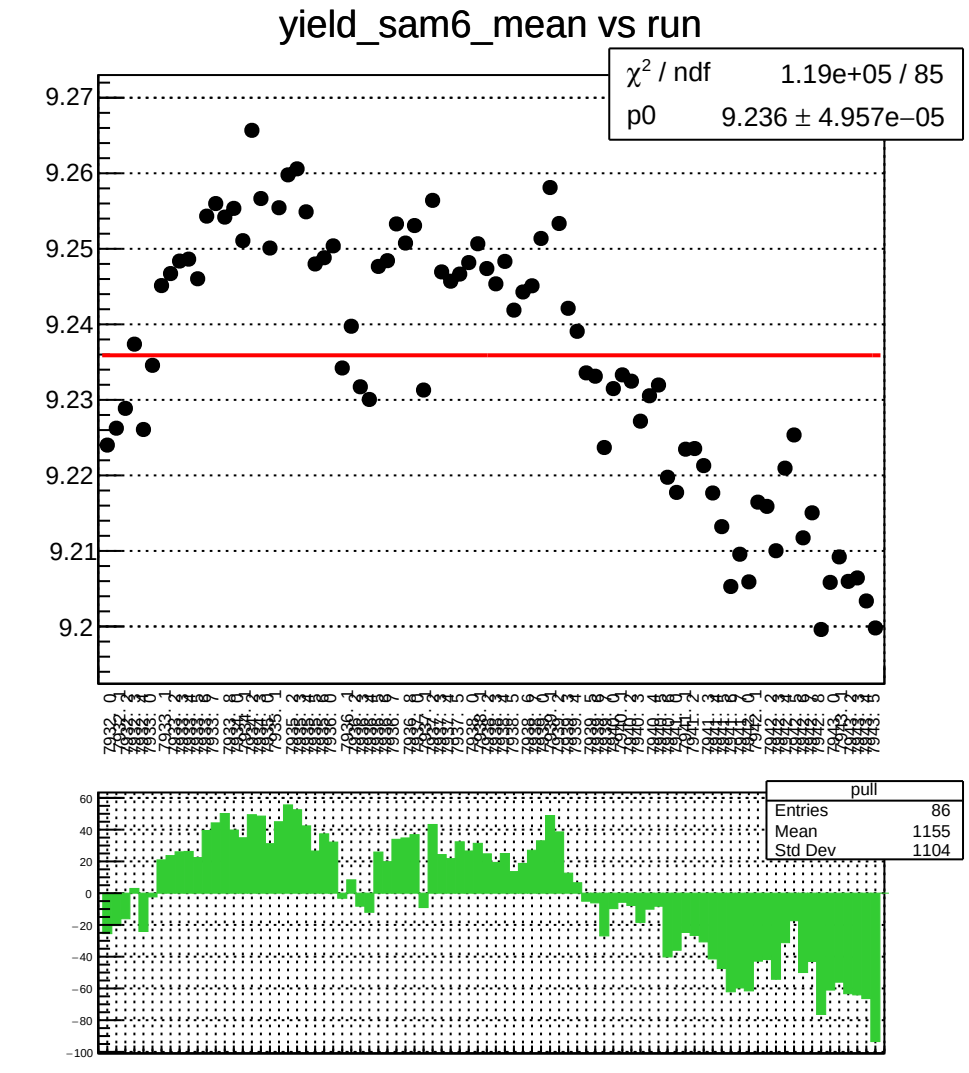

pull1D
Entries 86
Mean −2.565
Std Dev 4.018
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

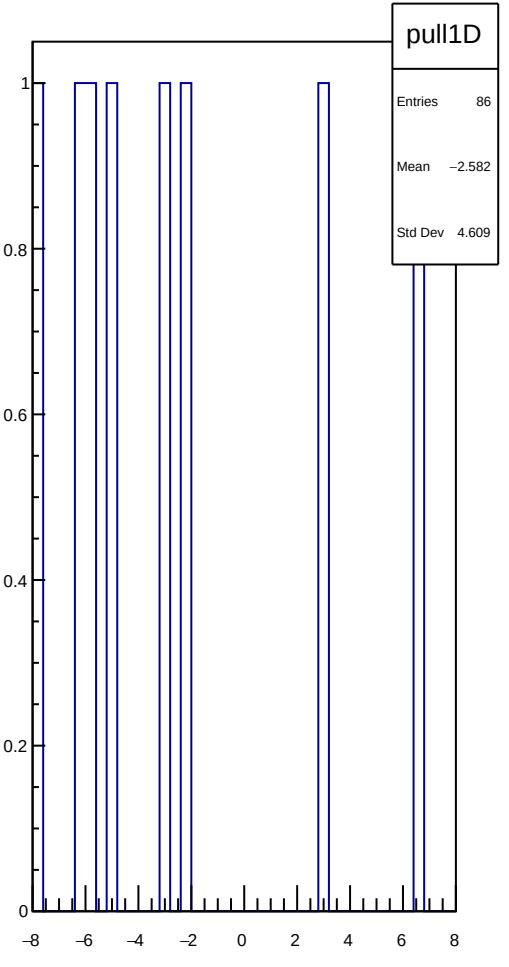

yield_sam4_rms vs run
χ² / ndf 1.05e+04 / 85
p0 0.2169 ± 0.0001691
0.32
0.3
0.28
0.26
0.24
0.22
0.2

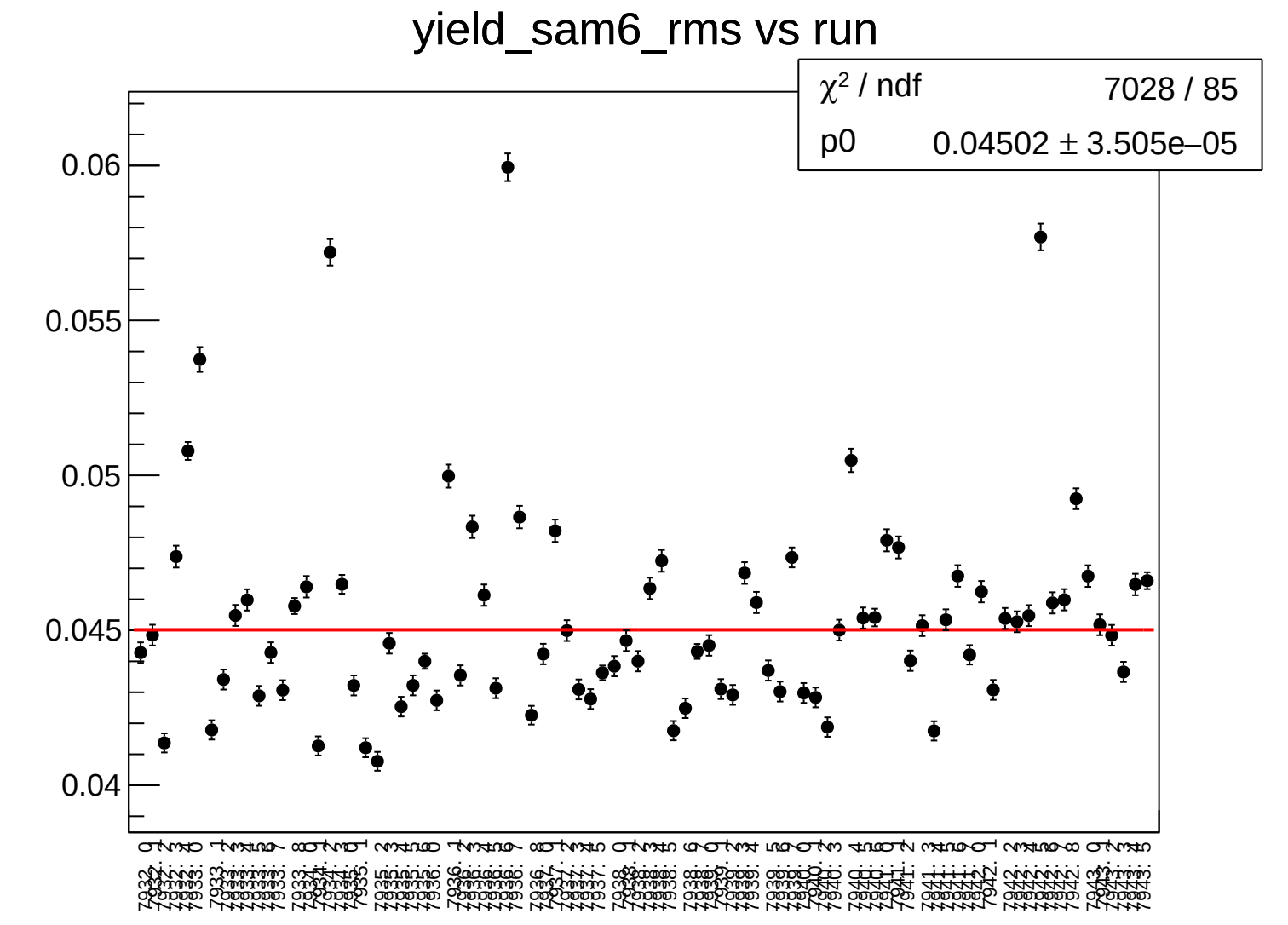

yield_sam5_mean vs run
χ² / ndf 2.053e+05 / 85
p0 17.13 ± 4.317e−05
17.16
17.14
17.12
17.1
17.08
pull
Entries 86
Mean −1035
Std Dev 1114
100
50
0
−50
−100

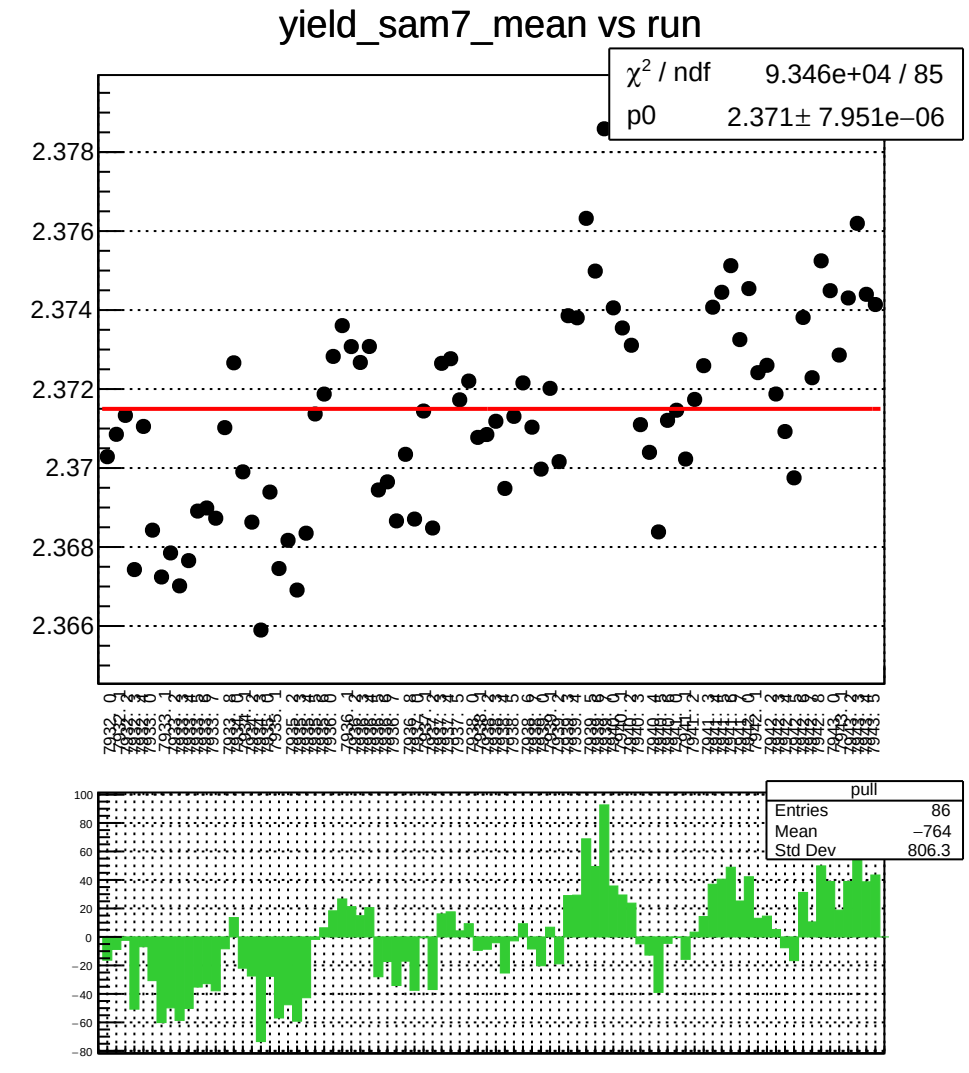

pull1D
Entries 86
Mean −1.041
Std Dev 3.735
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

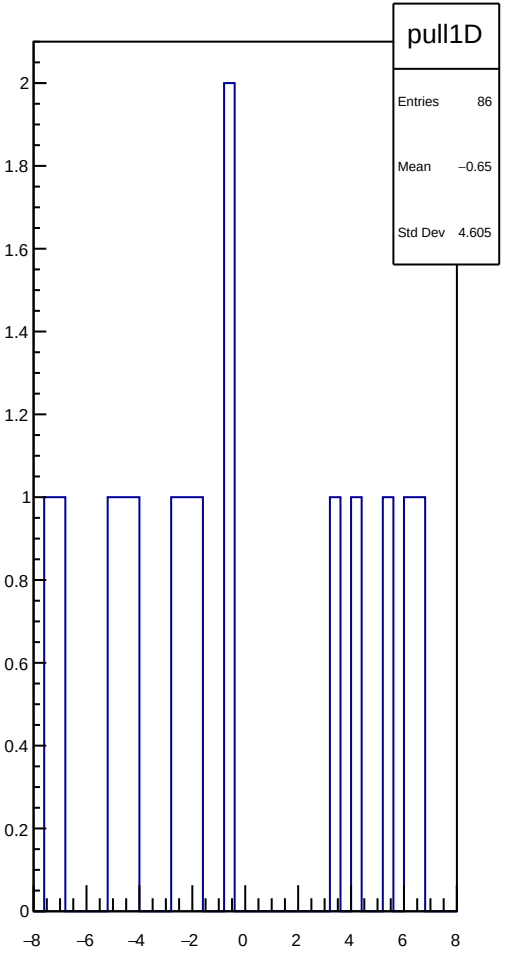

yield_sam5_rms vs run
χ² / ndf 9386 / 85
p0 0.03917 ± 3.052e−05
0.07
0.065
0.06
0.055
0.05
0.045
0.04
0.035

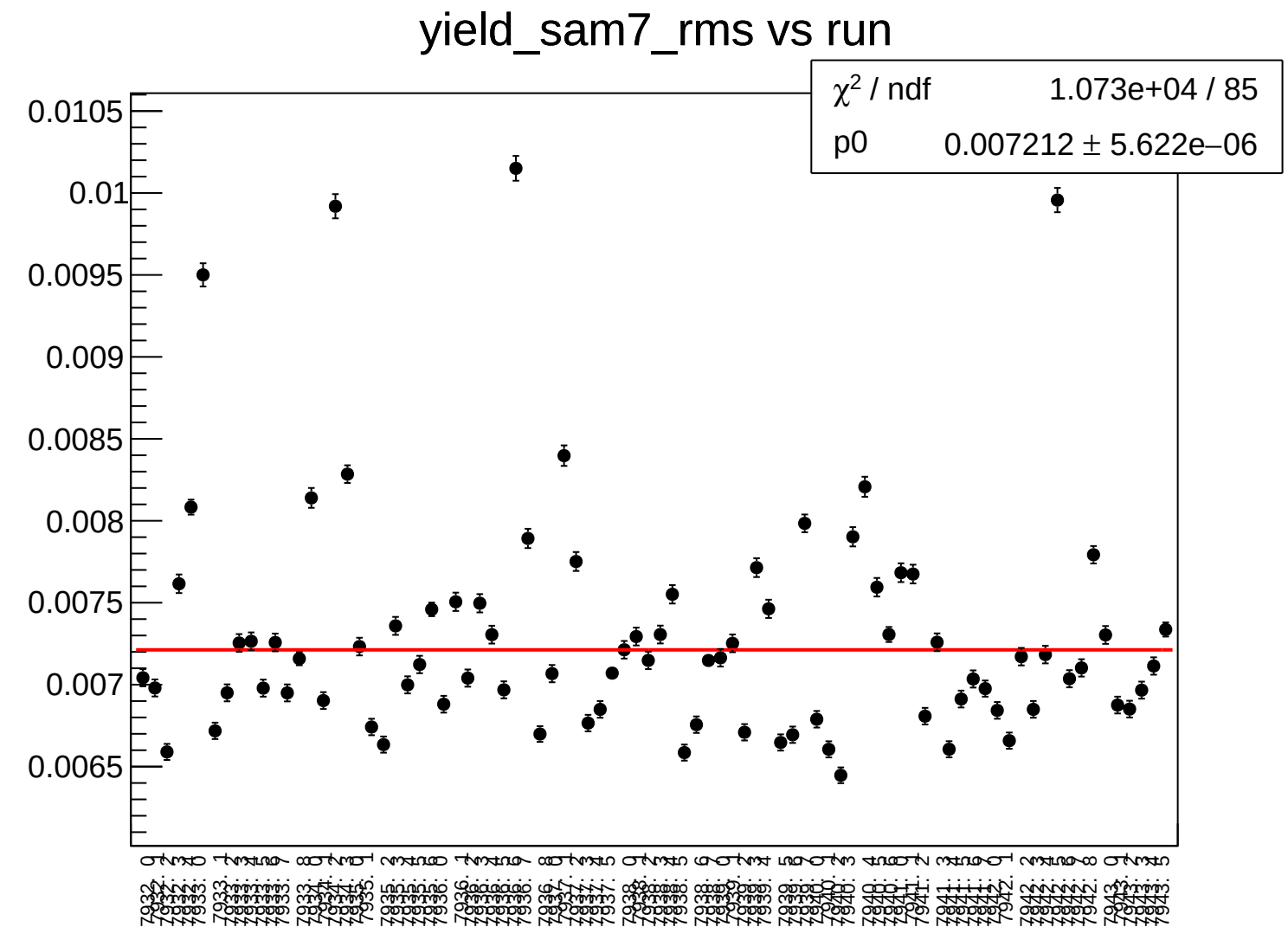

yield_sam6_mean vs run
χ² / ndf 1.19e+05 / 85
p0 9.236 ± 4.957e−05
9.27
9.26
9.25
9.24
9.23
9.22
9.21
9.2
pull
Entries 86
Mean 1155
Std Dev 1104
60
40
20
0
−20
−40
−60
−80
−100

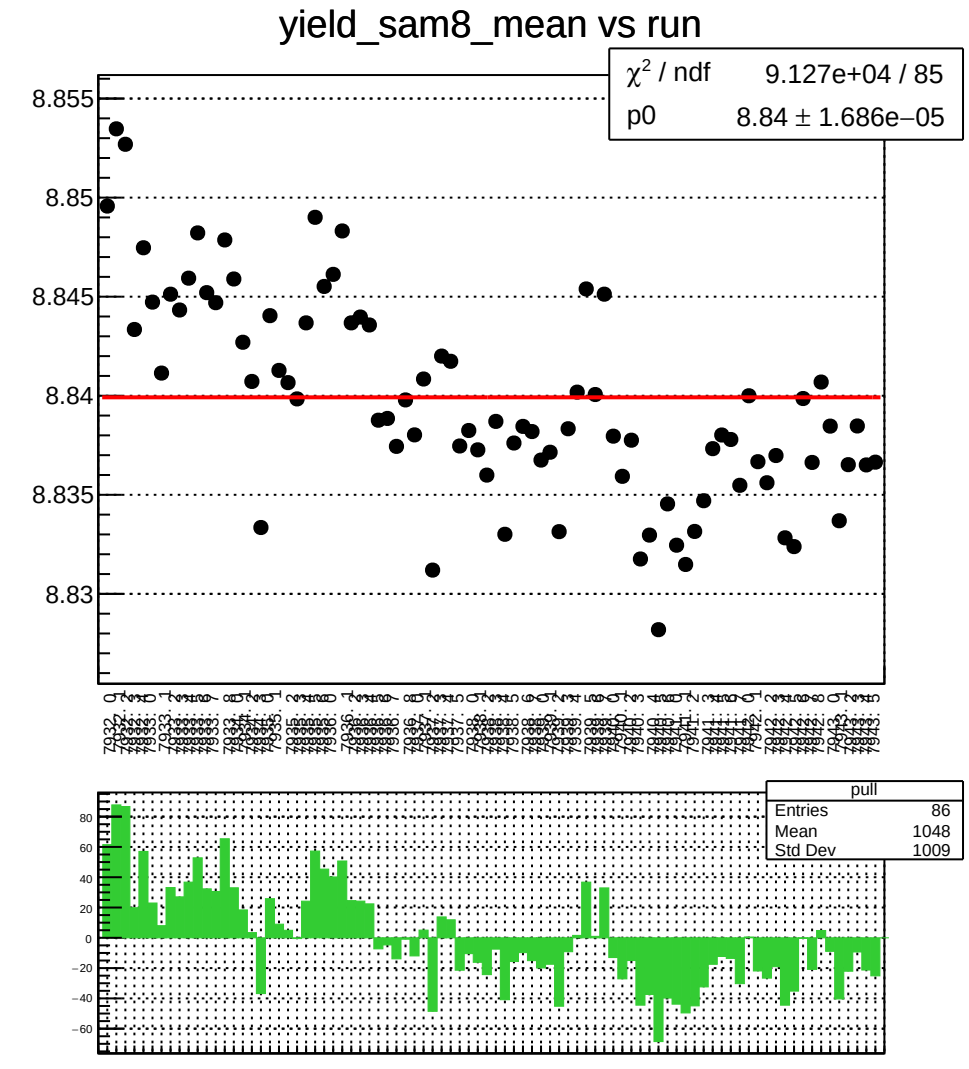

pull1D
Entries 86
Mean −2.582
Std Dev 4.609
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

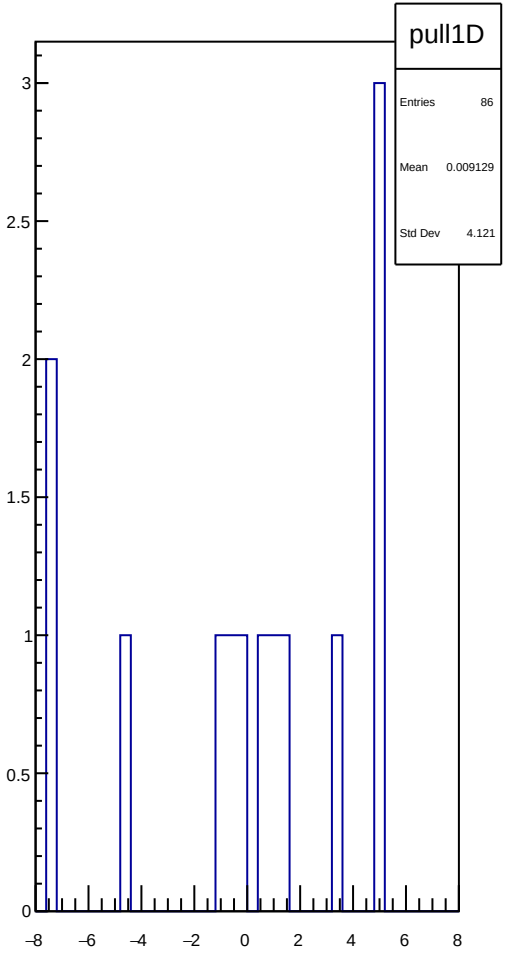

yield_sam6_rms vs run
χ² / ndf 7028 / 85
p0 0.04502 ± 3.505e−05
0.06
0.055
0.05
0.045
0.04

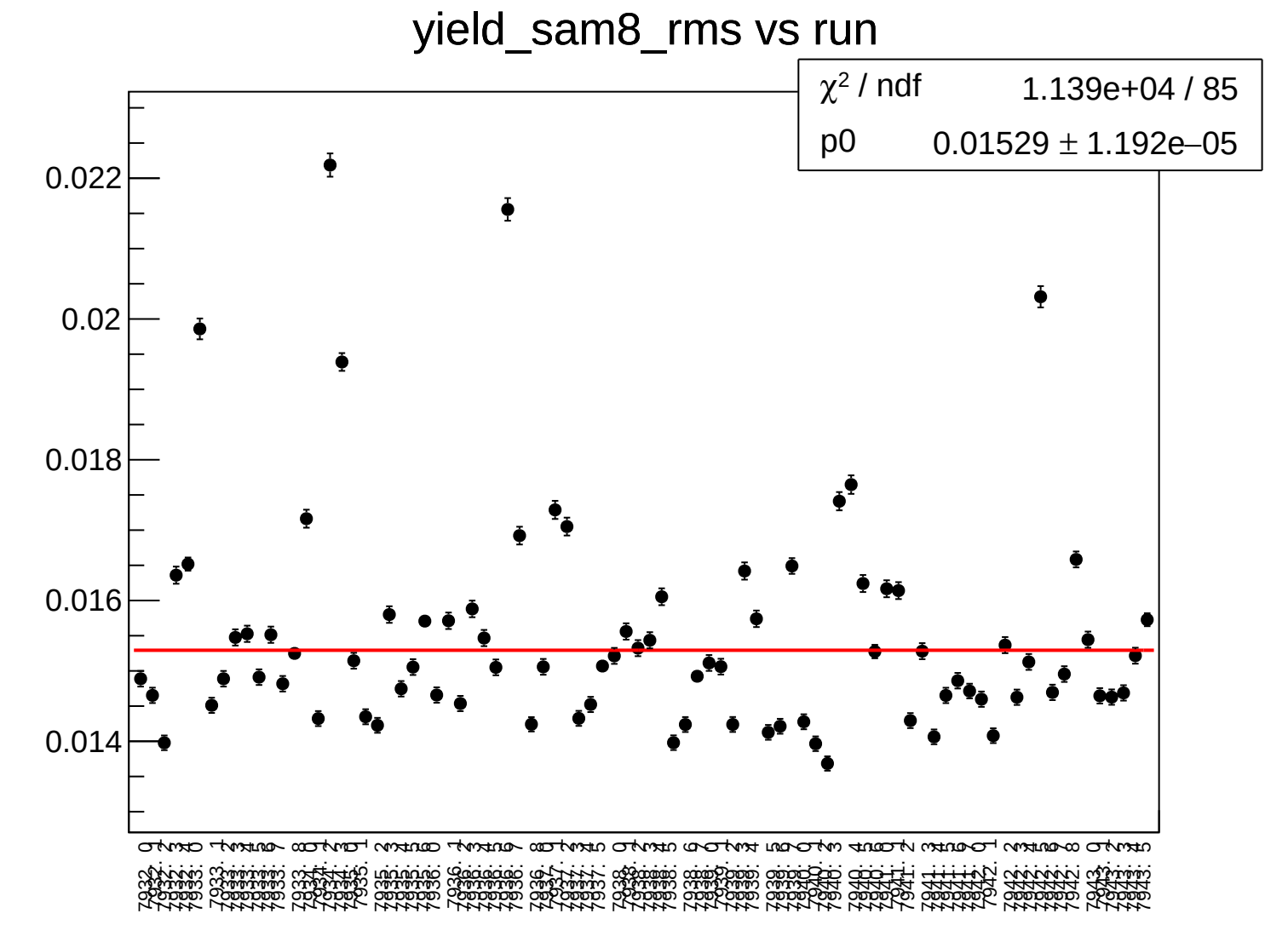

yield_sam7_mean vs run
χ² / ndf 9.346e+04 / 85
p0 2.371± 7.951e−06
2.378
2.376
2.374
2.372
2.37
2.368
2.366
pull
Entries 86
Mean −764
Std Dev 806.3
100
80
60
40
20
0
−20
−40
−60
−80

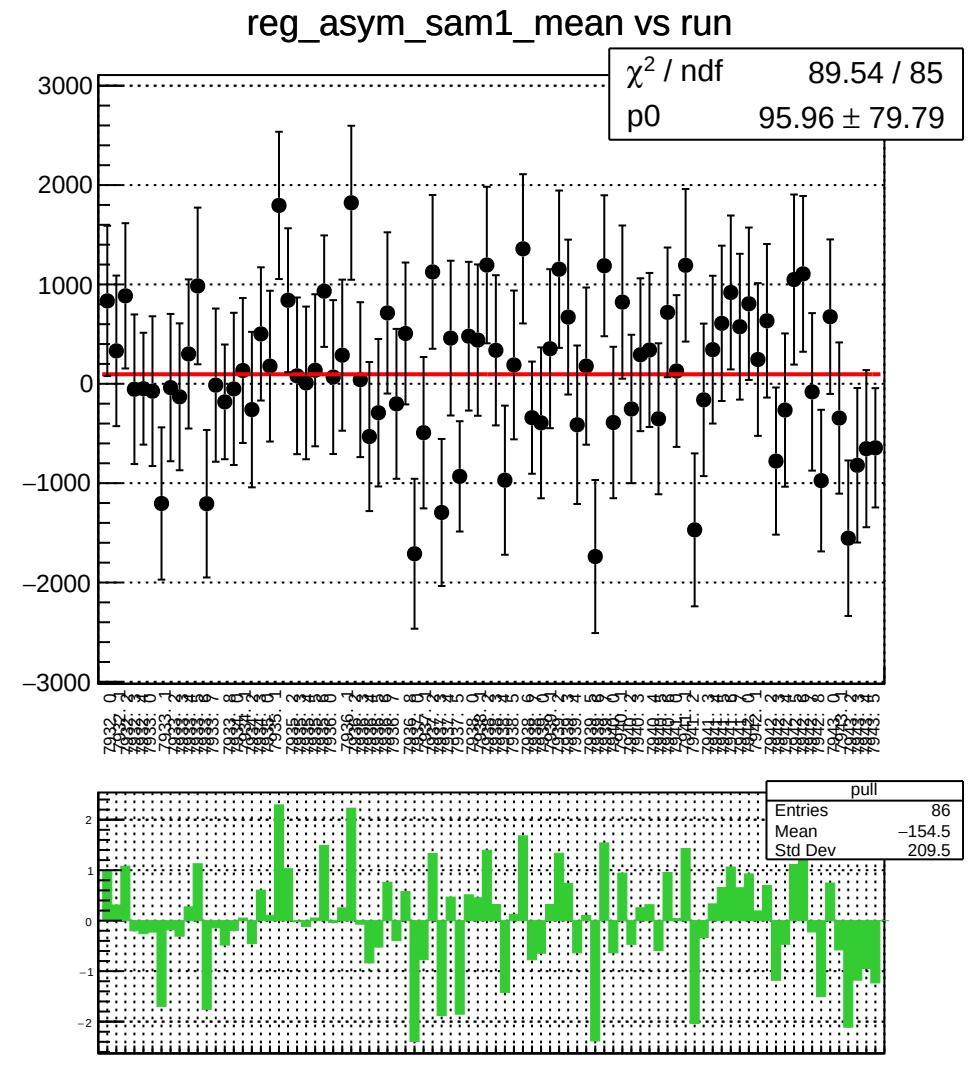

pull1D
Entries 86
Mean −0.65
Std Dev 4.605
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

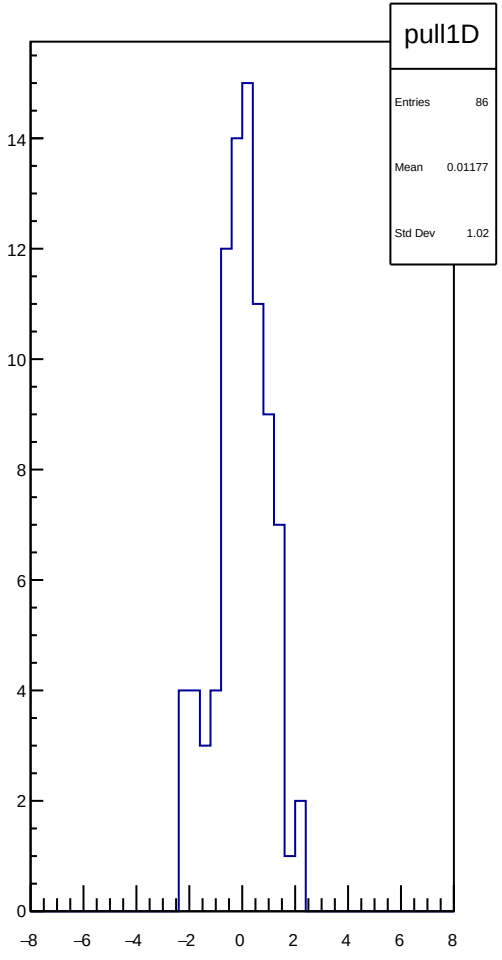

yield_sam7_rms vs run
χ^2 / ndf 1.073e+04 / 85
p0 0.007212 ± 5.622e−06
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065

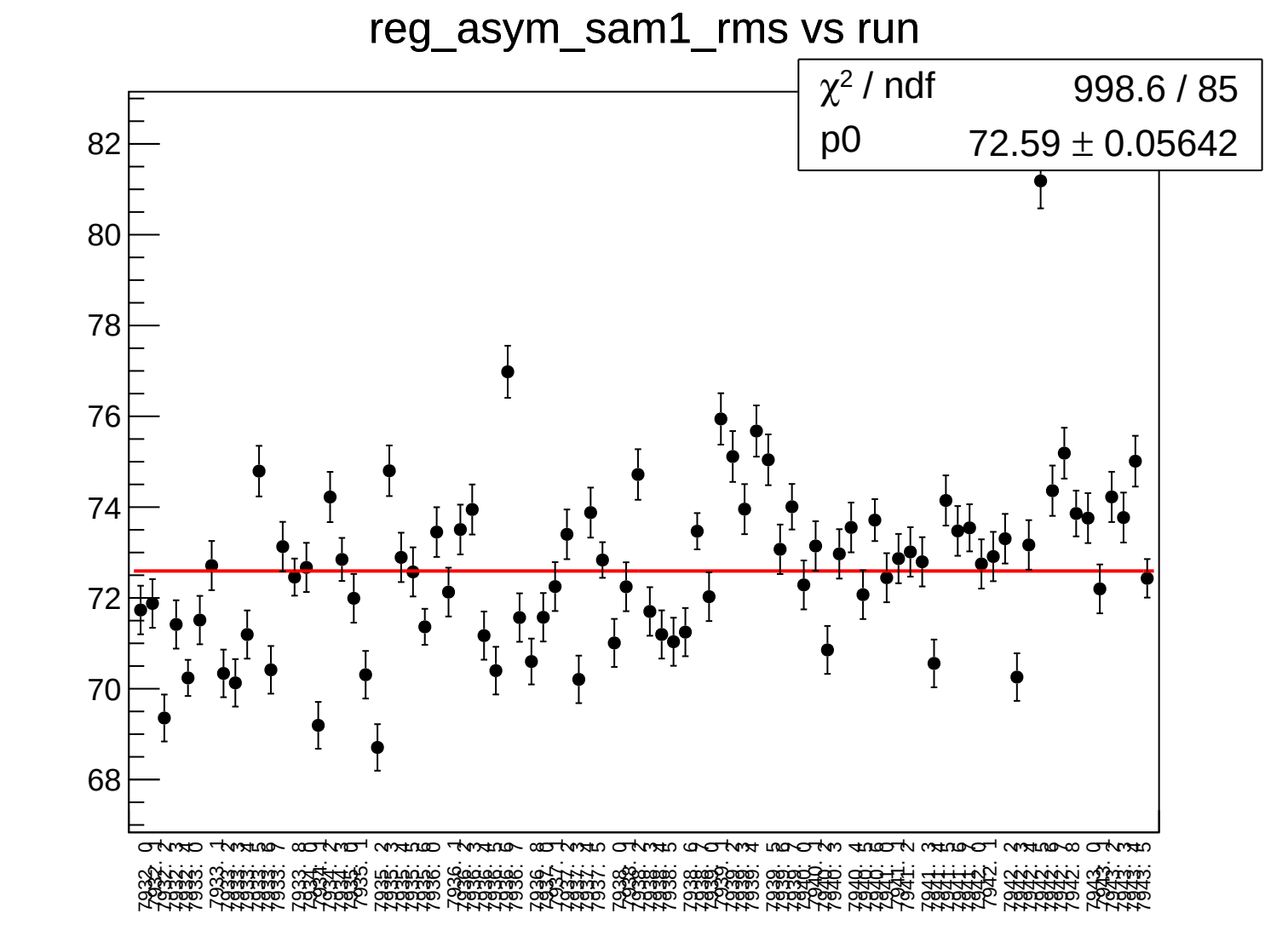

yield_sam8_mean vs run
χ² / ndf 9.127e+04 / 85
p0 8.84 ± 1.686e−05
8.855
8.85
8.845
8.84
8.835
8.83
pull
Entries 86
Mean 1048
Std Dev 1009
80
60
40
20
0
−20
−40
−60

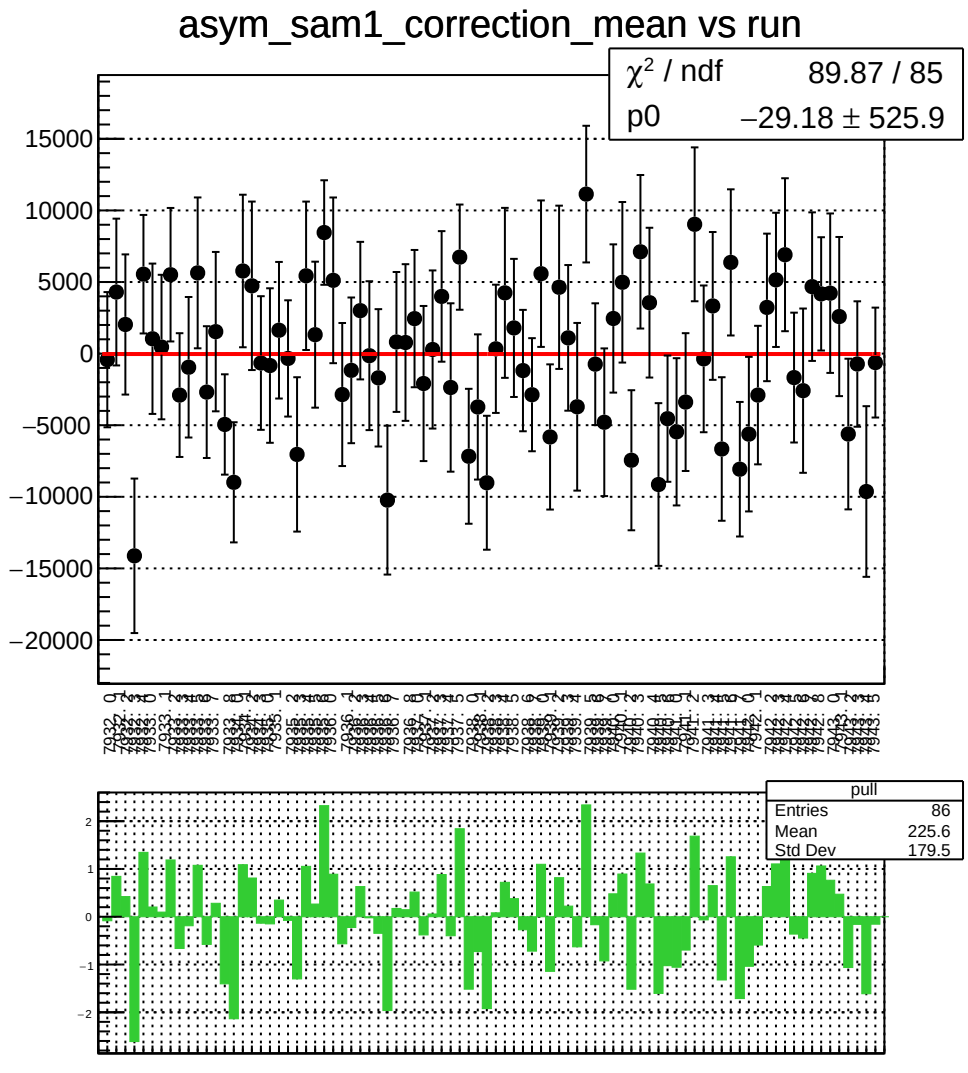

pull1D
Entries 86
Mean 0.009129
Std Dev 4.121
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

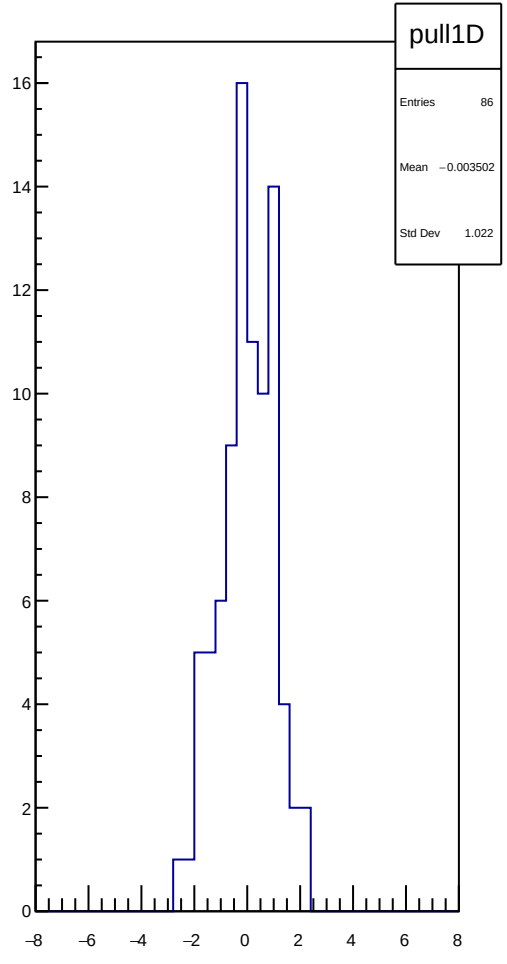

yield_sam8_rms vs run
χ² / ndf 1.139e+04 / 85
p0 0.01529 ± 1.192e−05
0.022
0.02
0.018
0.016
0.014

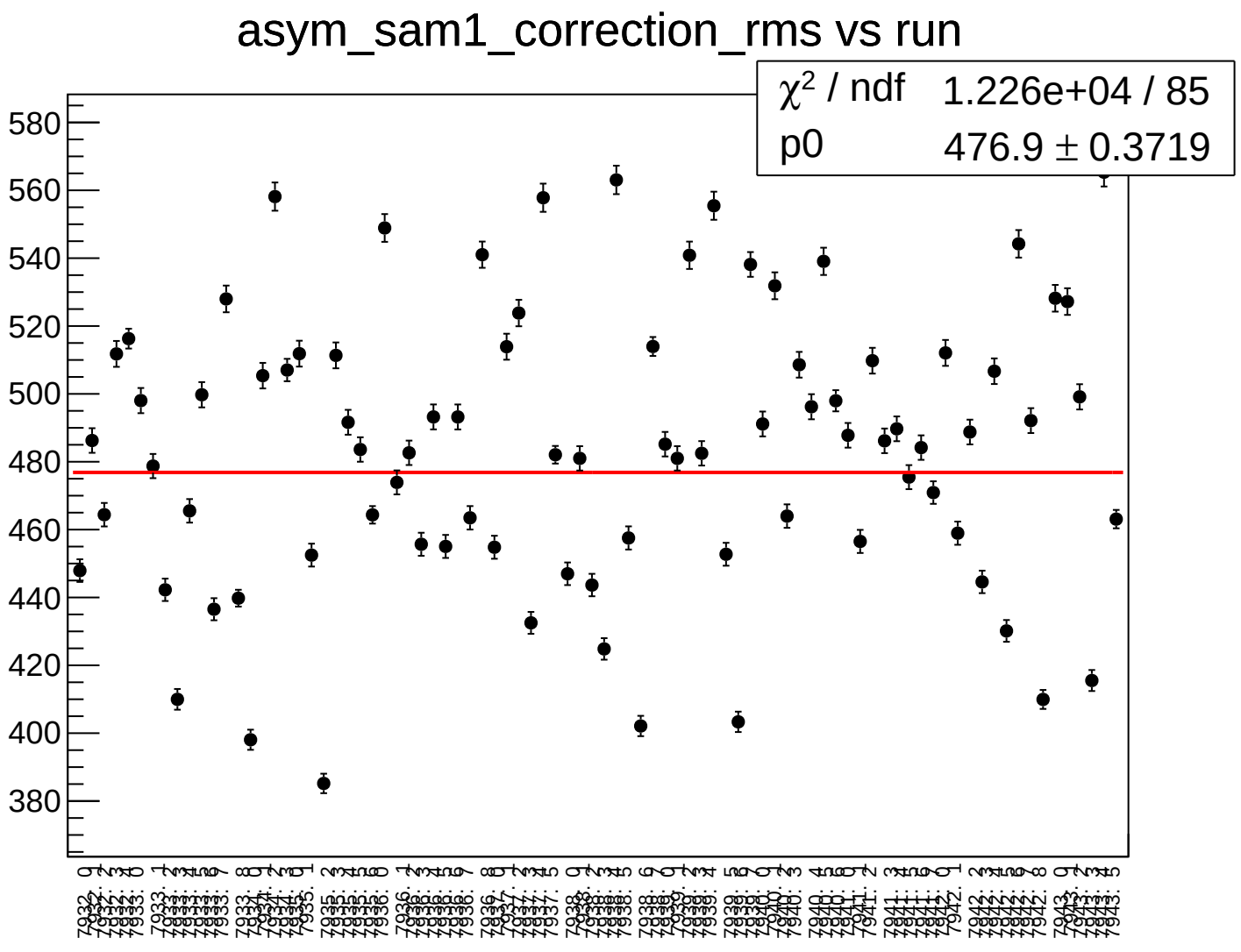

reg_asym_sam1_mean vs run
χ² / ndf 89.54 / 85
p0 95.96 ± 79.79
pull
Entries 86
Mean −154.5
Std Dev 209.5

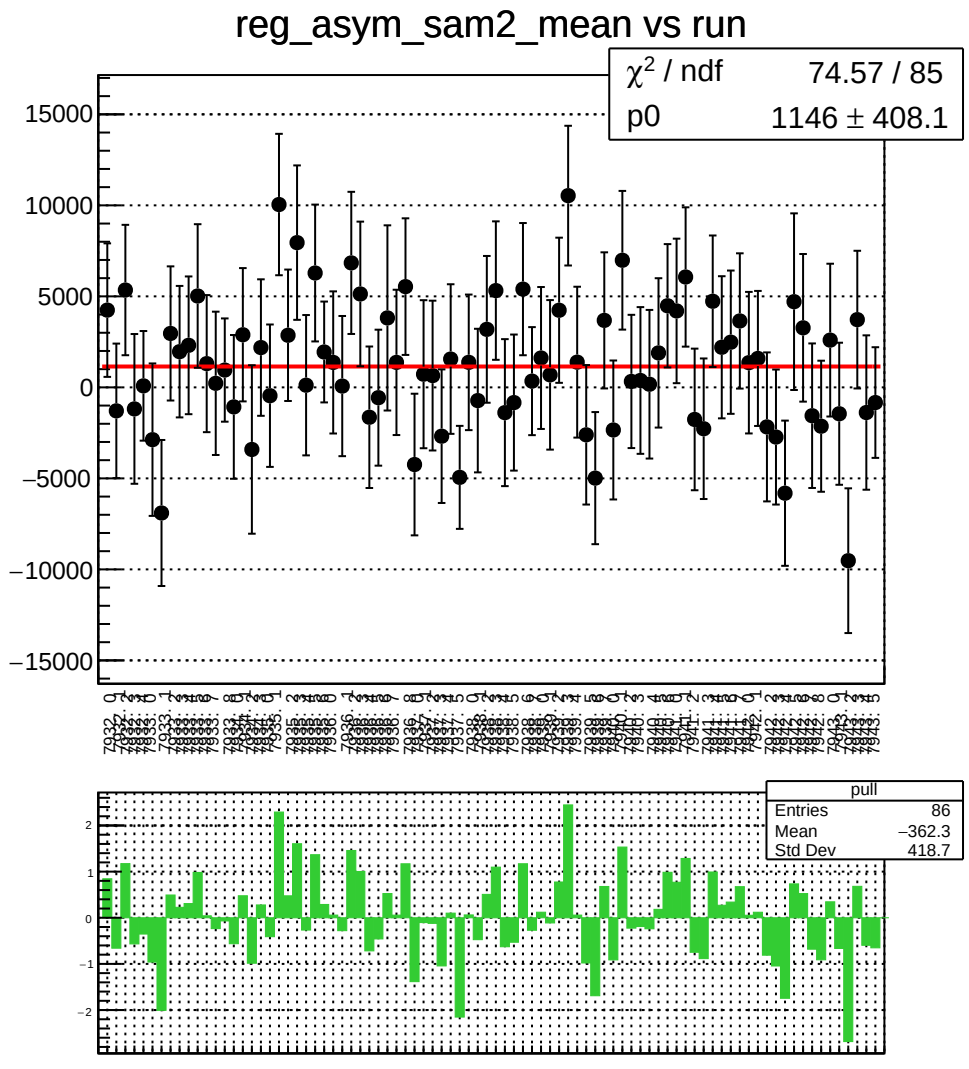

pull1D
Entries 86
Mean 0.01177
Std Dev 1.02

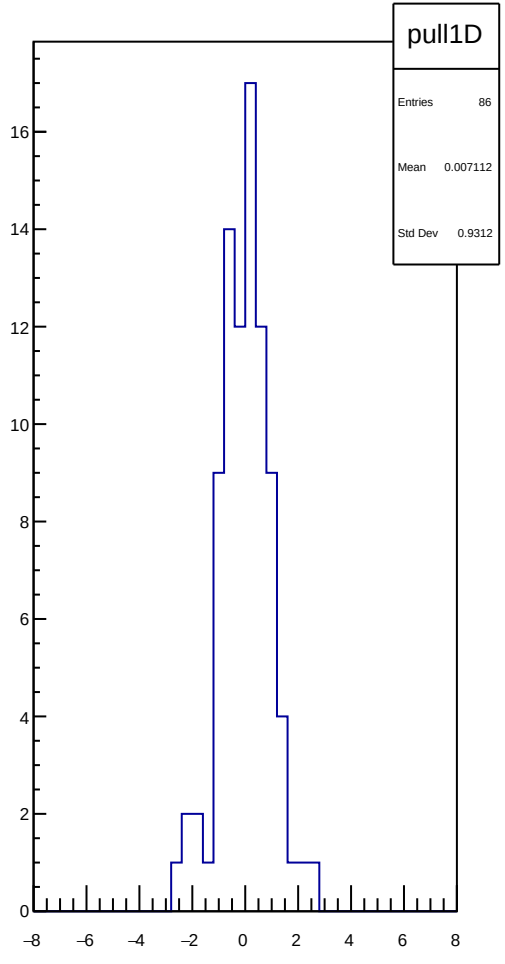

reg_asym_sam1_rms vs run
χ^2 / ndf 998.6 / 85
p0 72.59 ± 0.05642
82
80
78
76
74
72
70
68

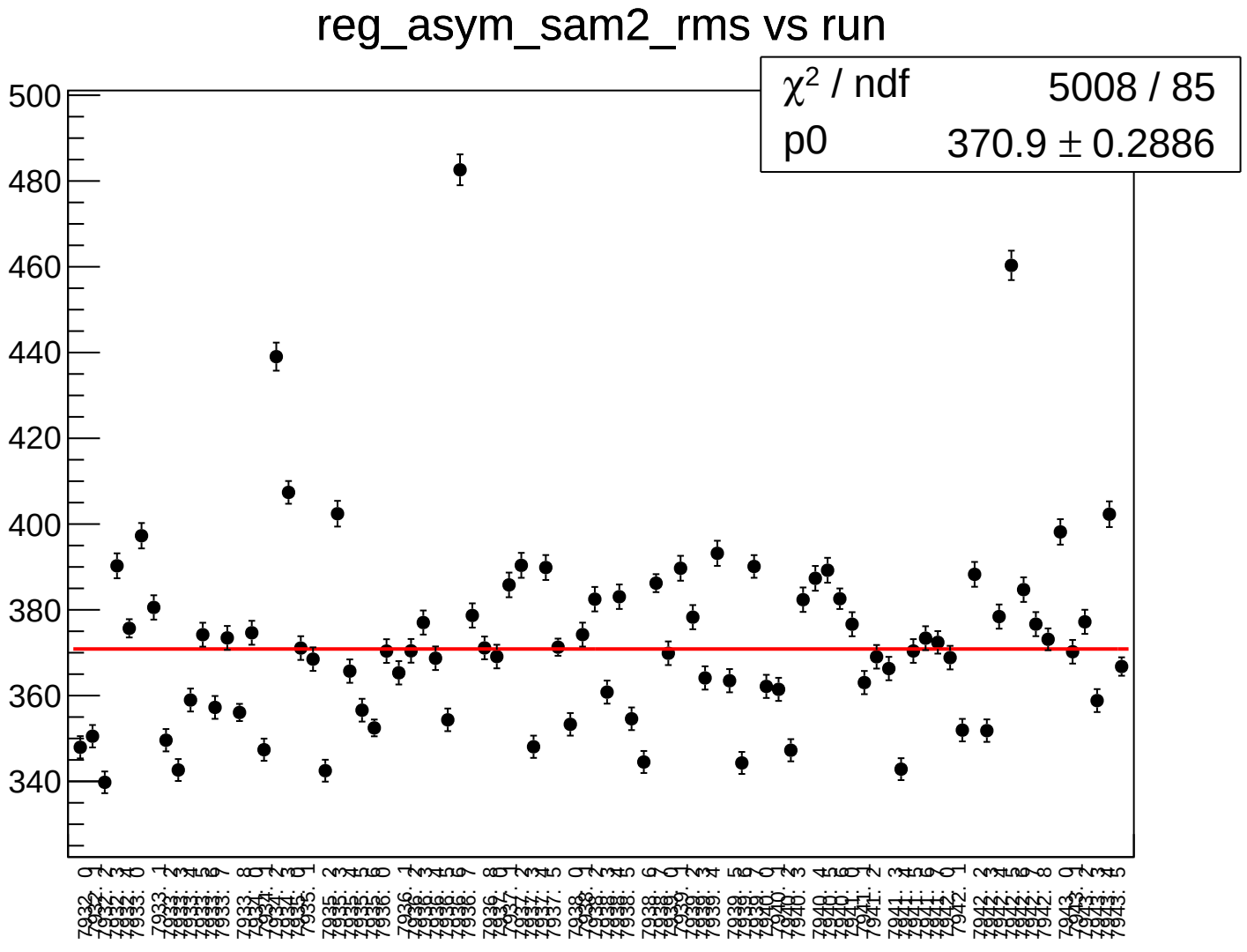

asym_sam1_correction_mean vs run
χ² / ndf 89.87 / 85
p0 −29.18 ± 525.9
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 86
Mean 225.6
Std Dev 179.5
2
1
0
−1
−2

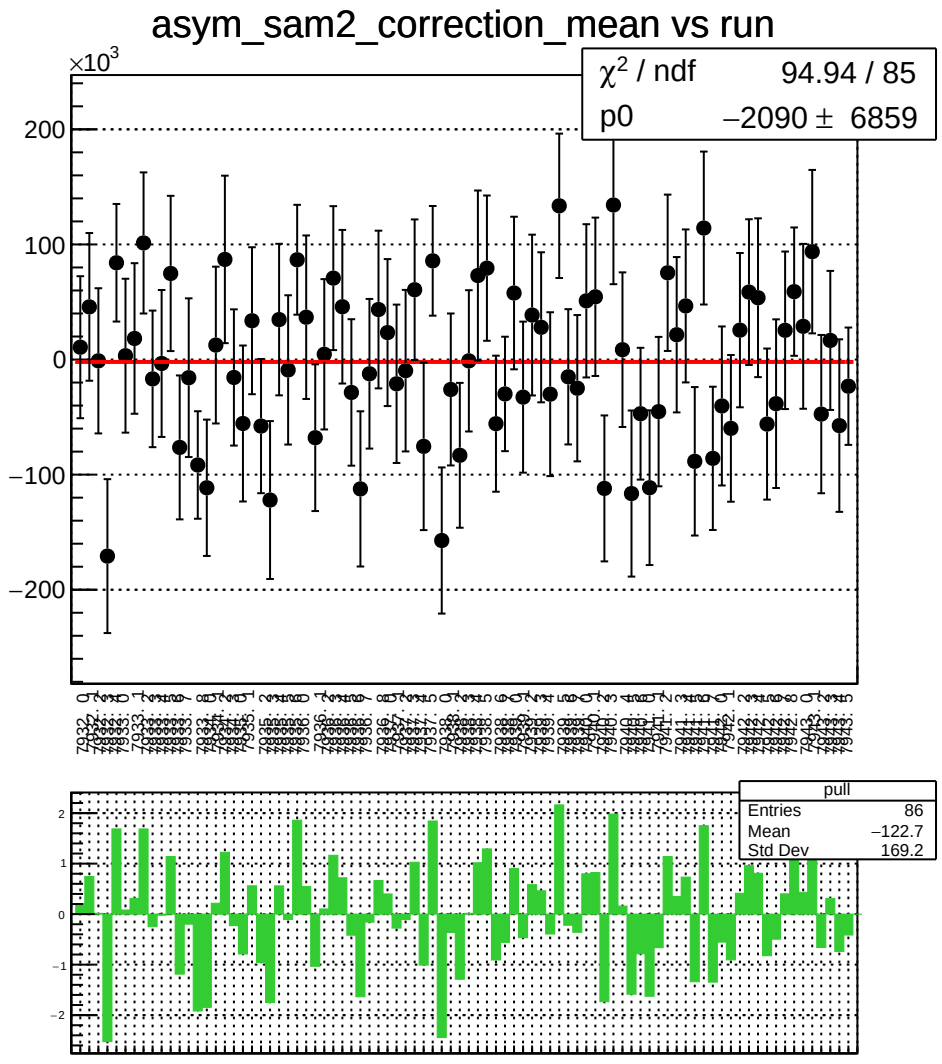

pull1D
Entries 86
Mean −0.003502
Std Dev 1.022
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

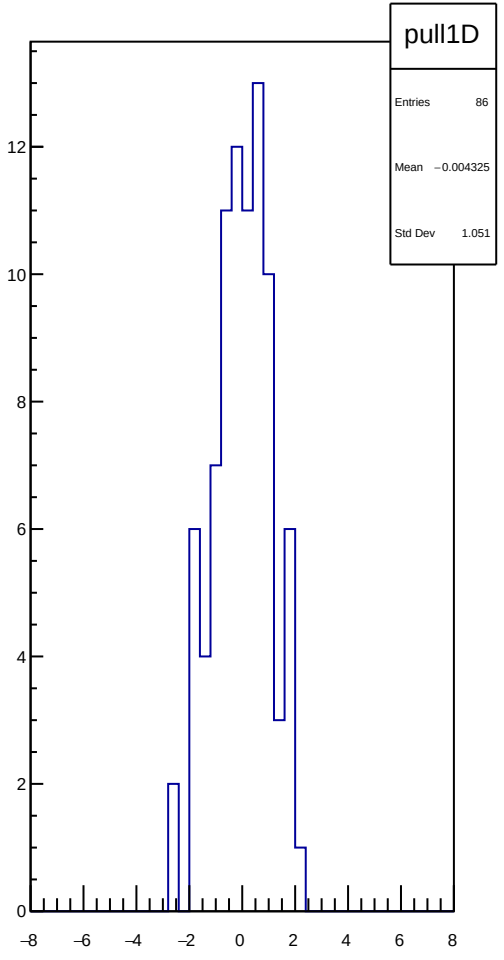

asym_sam1_correction_rms vs run
χ² / ndf 1.226e+04 / 85
p0 476.9 ± 0.3719
580
560
540
520
500
480
460
440
420
400
380

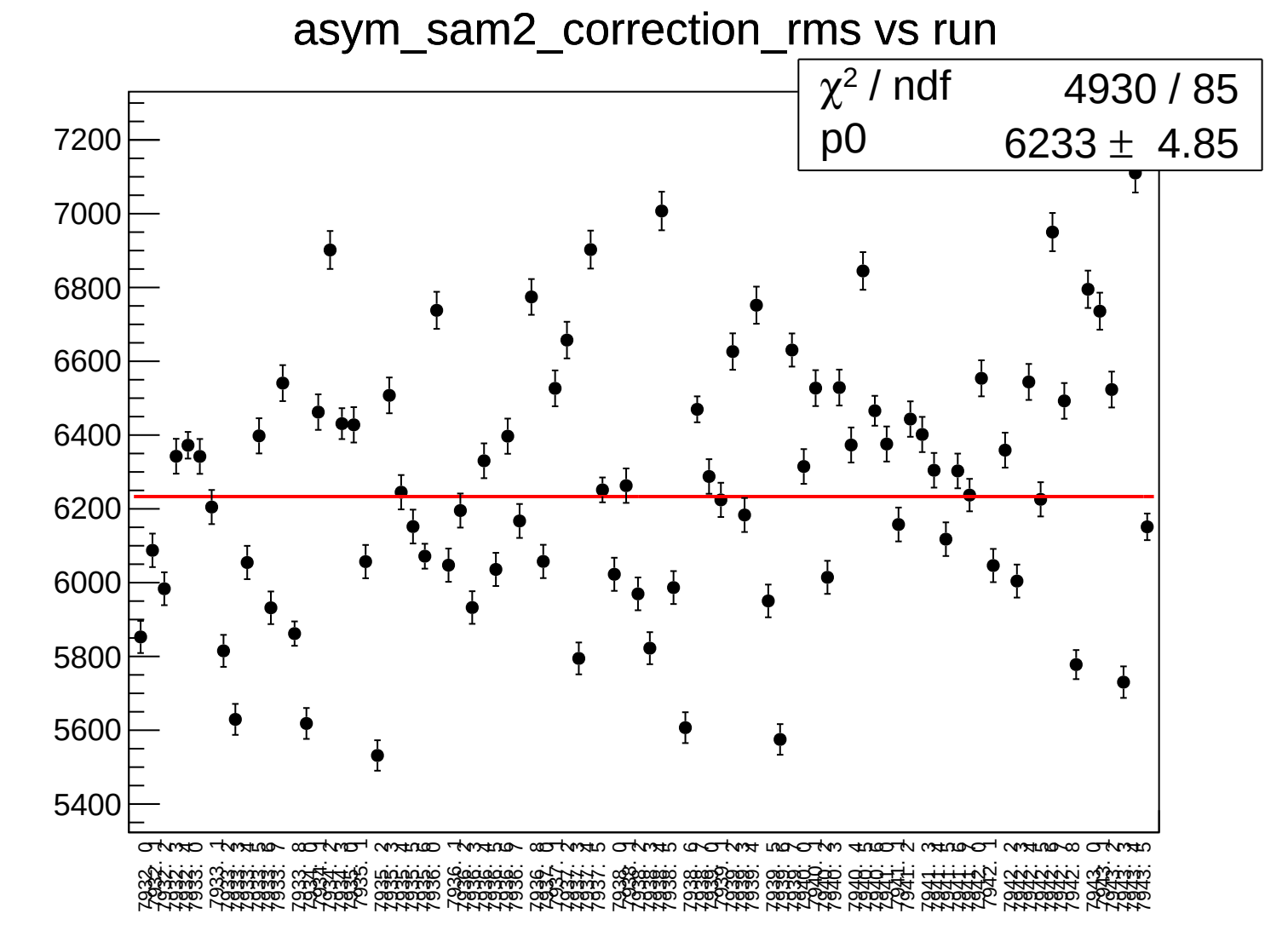

reg_asym_sam2_mean vs run
χ² / ndf 74.57 / 85
p0 1146 ± 408.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −362.3
Std Dev 418.7
2
1
0
−1
−2

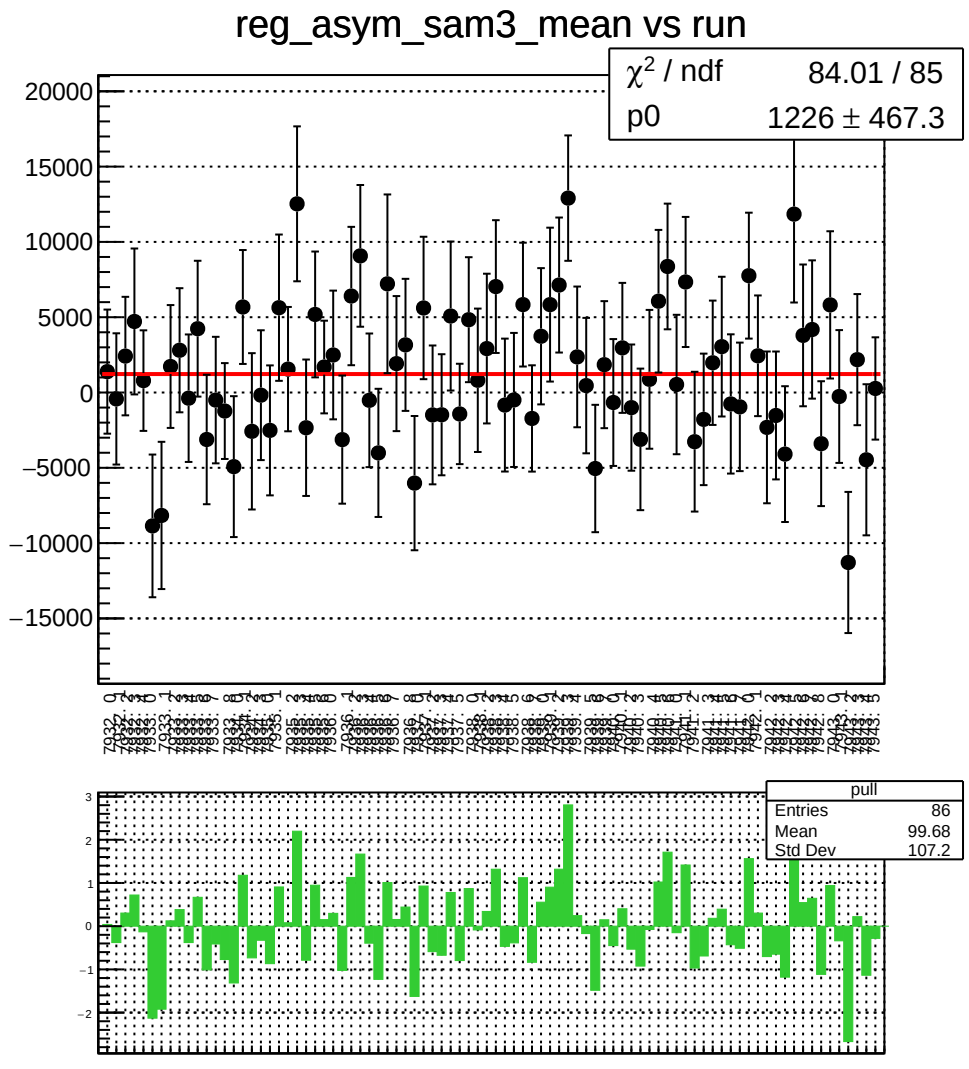

pull1D
Entries 86
Mean 0.007112
Std Dev 0.9312
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

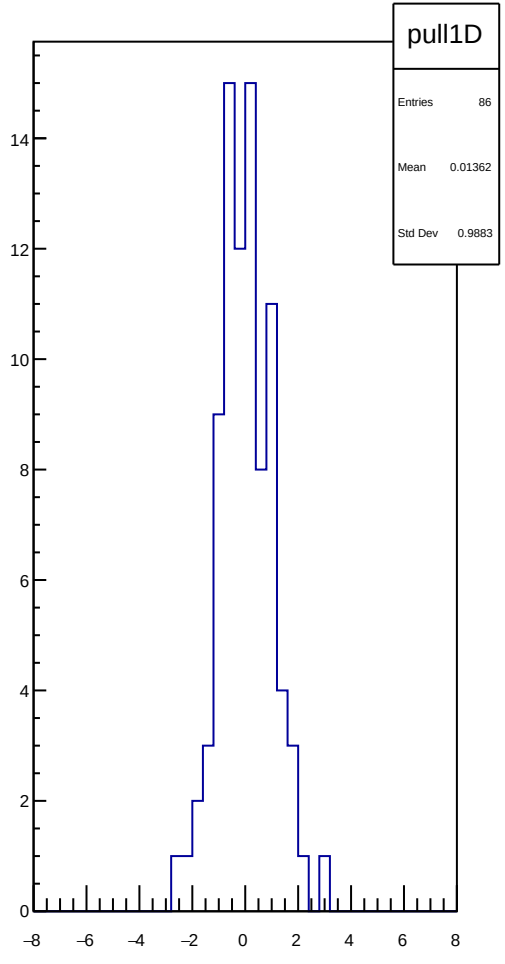

reg_asym_sam2_rms vs run
χ² / ndf 5008 / 85
p0 370.9 ± 0.2886
500
480
460
440
420
400
380
360
340

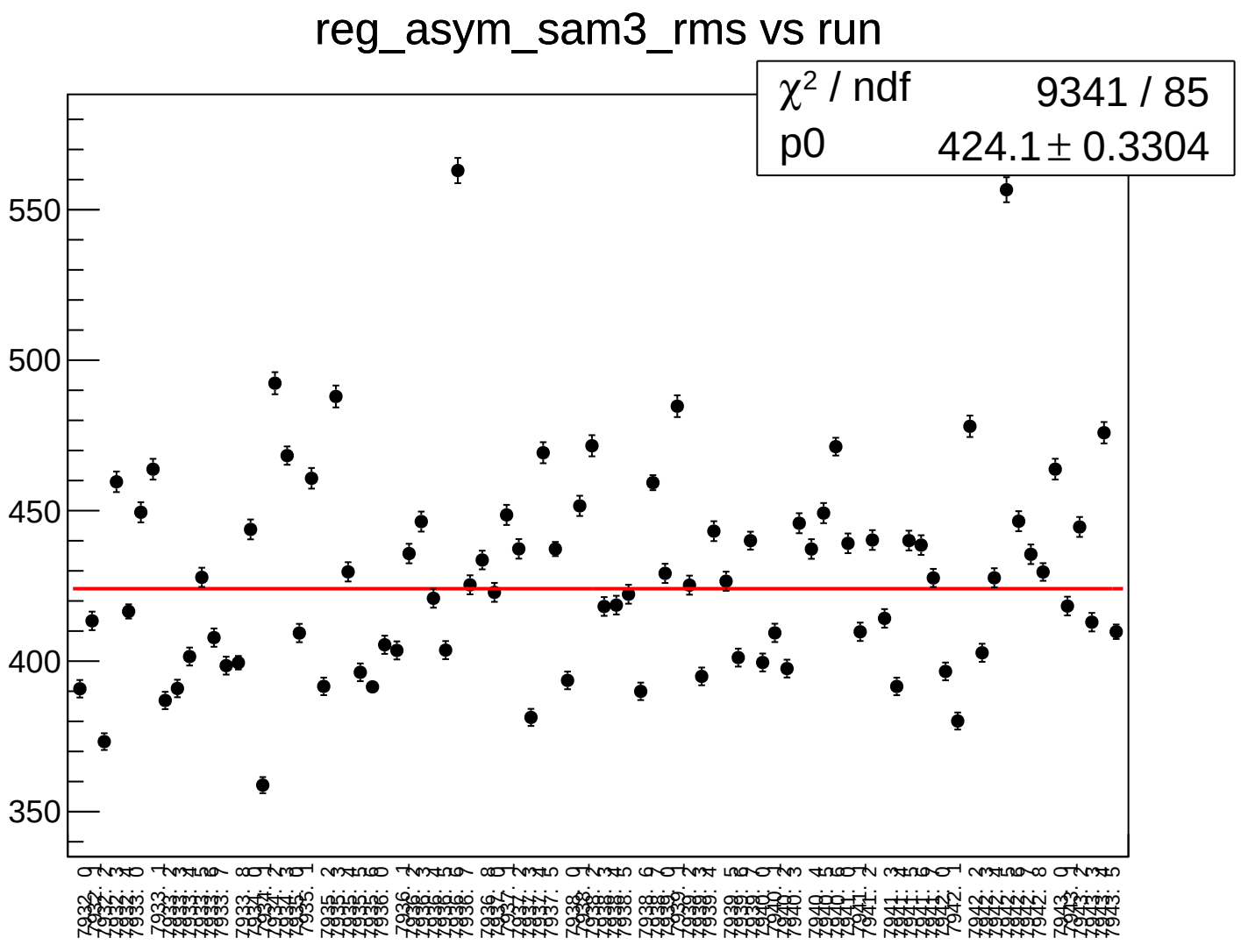

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 94.94 / 85
p0 −2090 ± 6859
200
100
0
−100
−200
pull
Entries 86
Mean −122.7
Std Dev 169.2
2
1
0
−1
−2

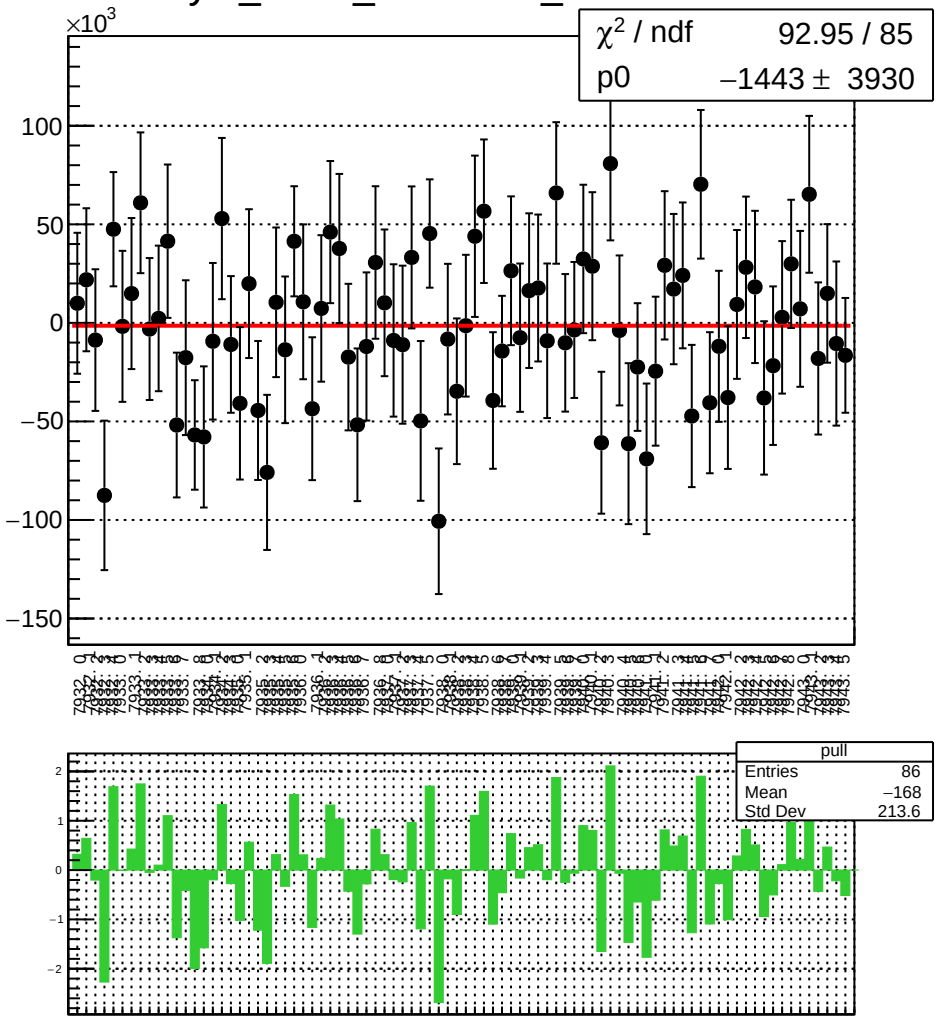

pull1D
Entries 86
Mean −0.004325
Std Dev 1.051
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

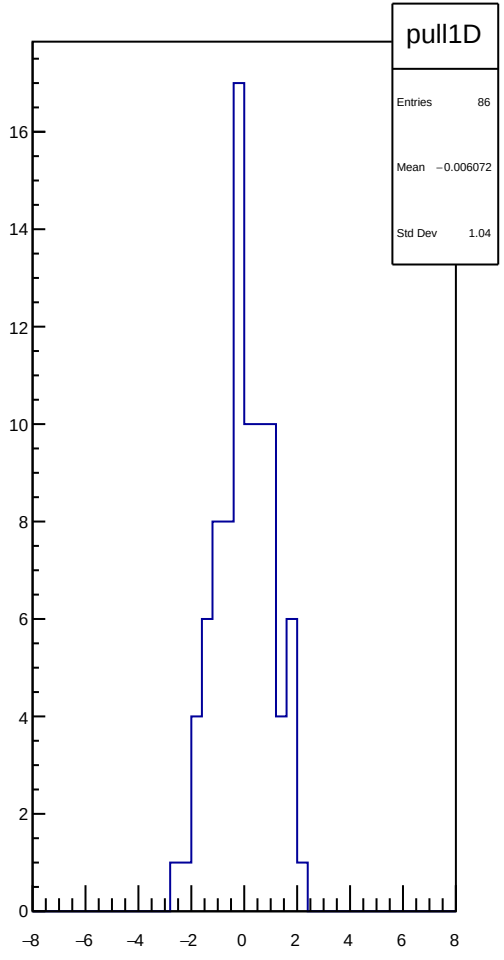

asym_sam2_correction_rms vs run
χ² / ndf 4930 / 85
p0 6233 ± 4.85
7200
7000
6800
6600
6400
6200
6000
5800
5600
5400


reg_asym_sam3_mean vs run
χ² / ndf 84.01 / 85
p0 1226 ± 467.3
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 99.68
Std Dev 107.2
3
2
1
0
−1
−2

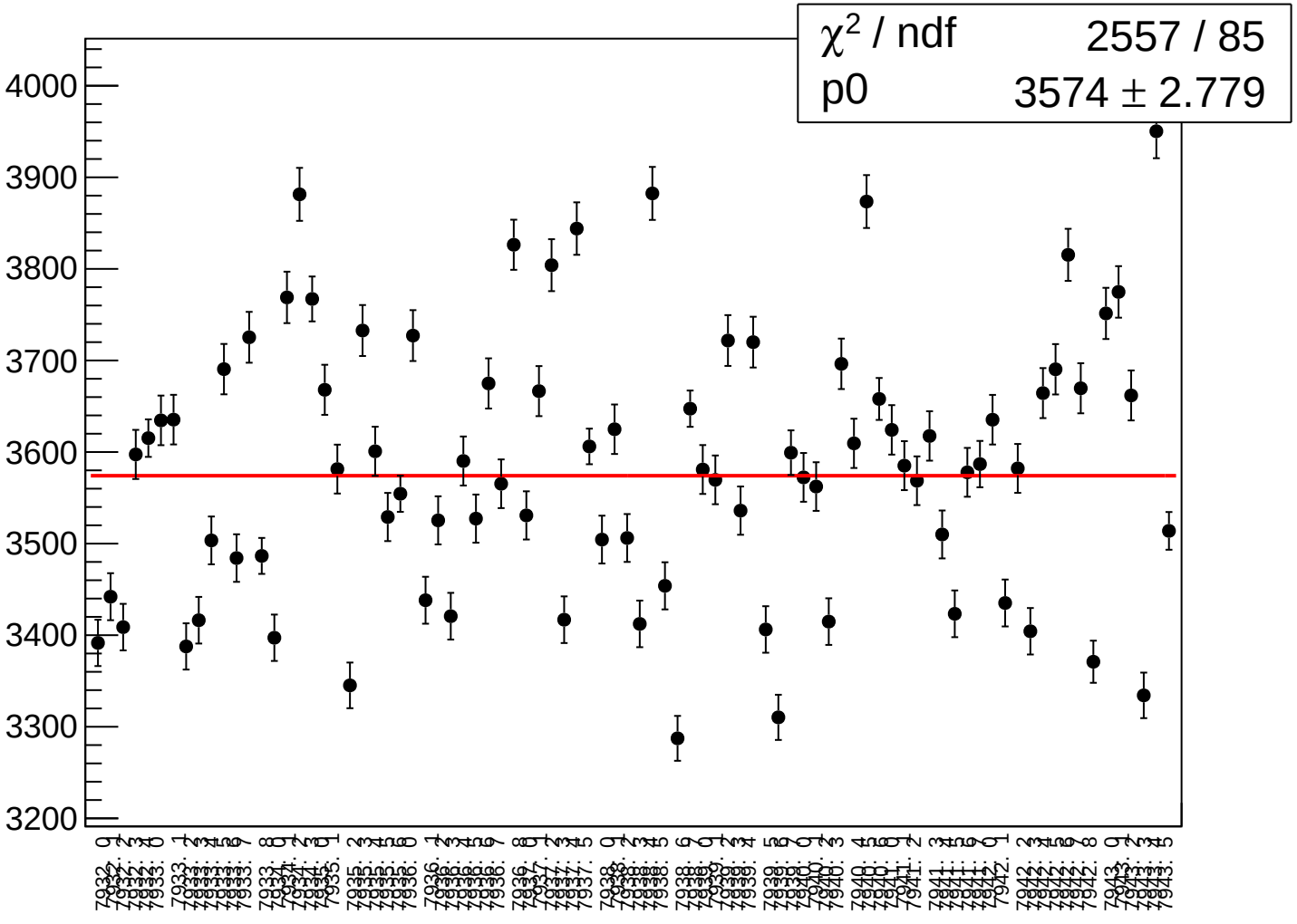

pull1D
Entries 86
Mean 0.01362
Std Dev 0.9883
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

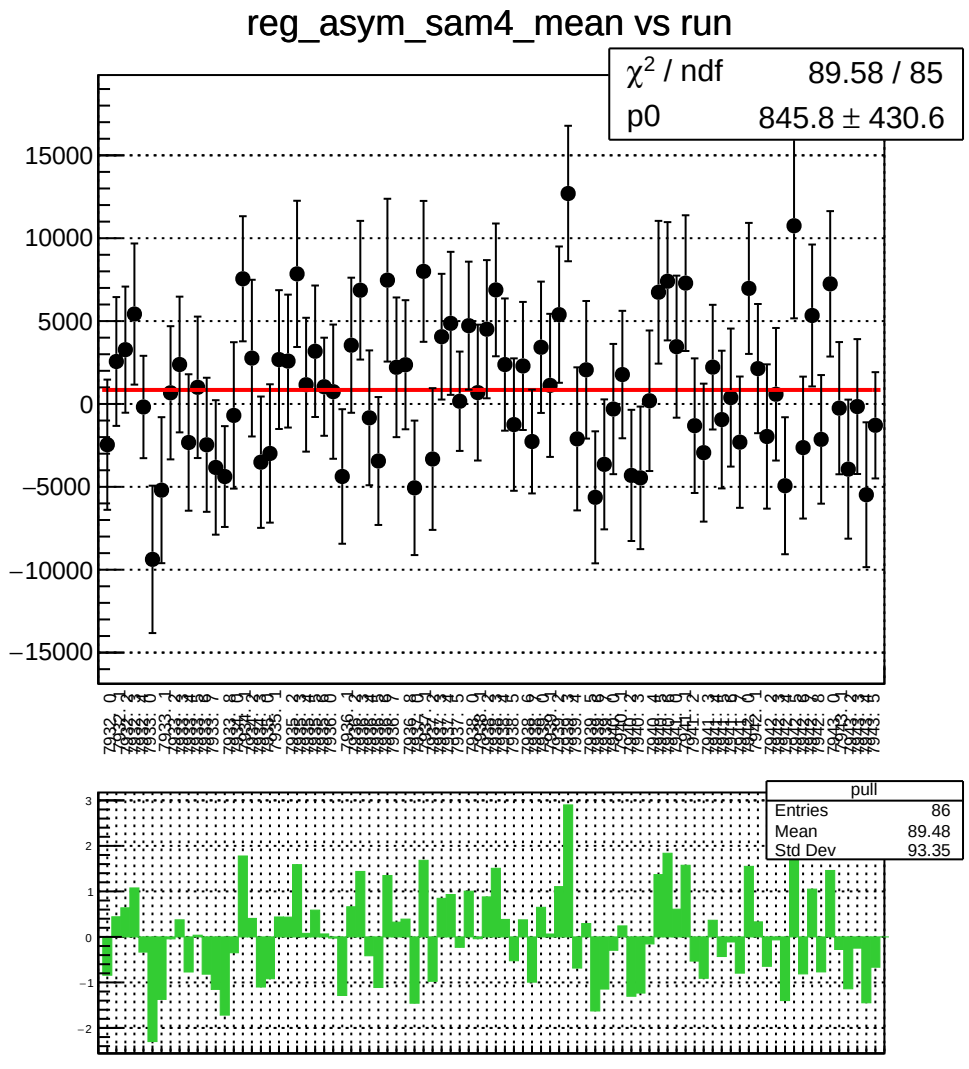

reg_asym_sam3_rms vs run
χ² / ndf 9341 / 85
p0 424.1 ± 0.3304
550
500
450
400
350

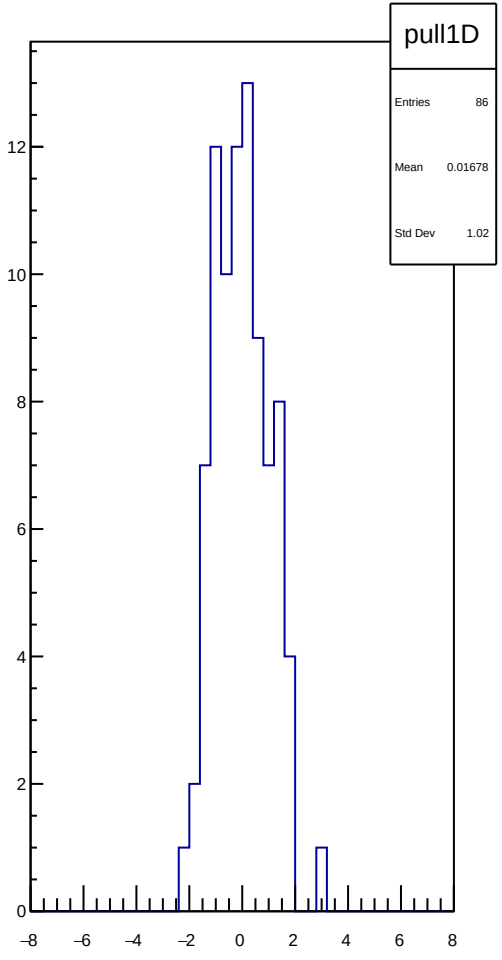

asym_sam3_correction_mean vs run
×10^3
χ² / ndf 92.95 / 85
p0 −1443 ± 3930
100
50
0
−50
−100
−150
pull
Entries 86
Mean −168
Std Dev 213.6
2
1
0
−1
−2

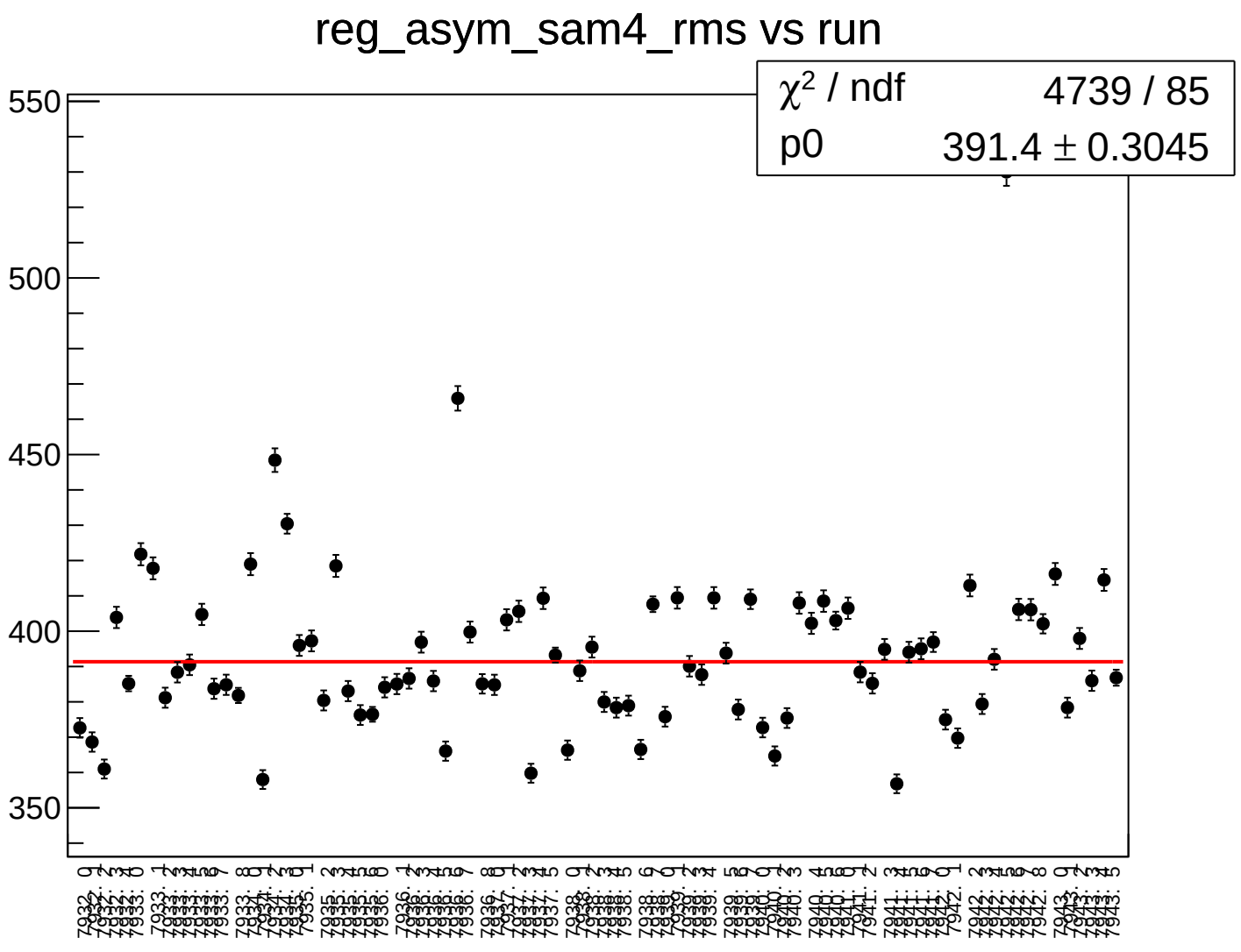

pull1D
Entries 86
Mean −0.006072
Std Dev 1.04
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

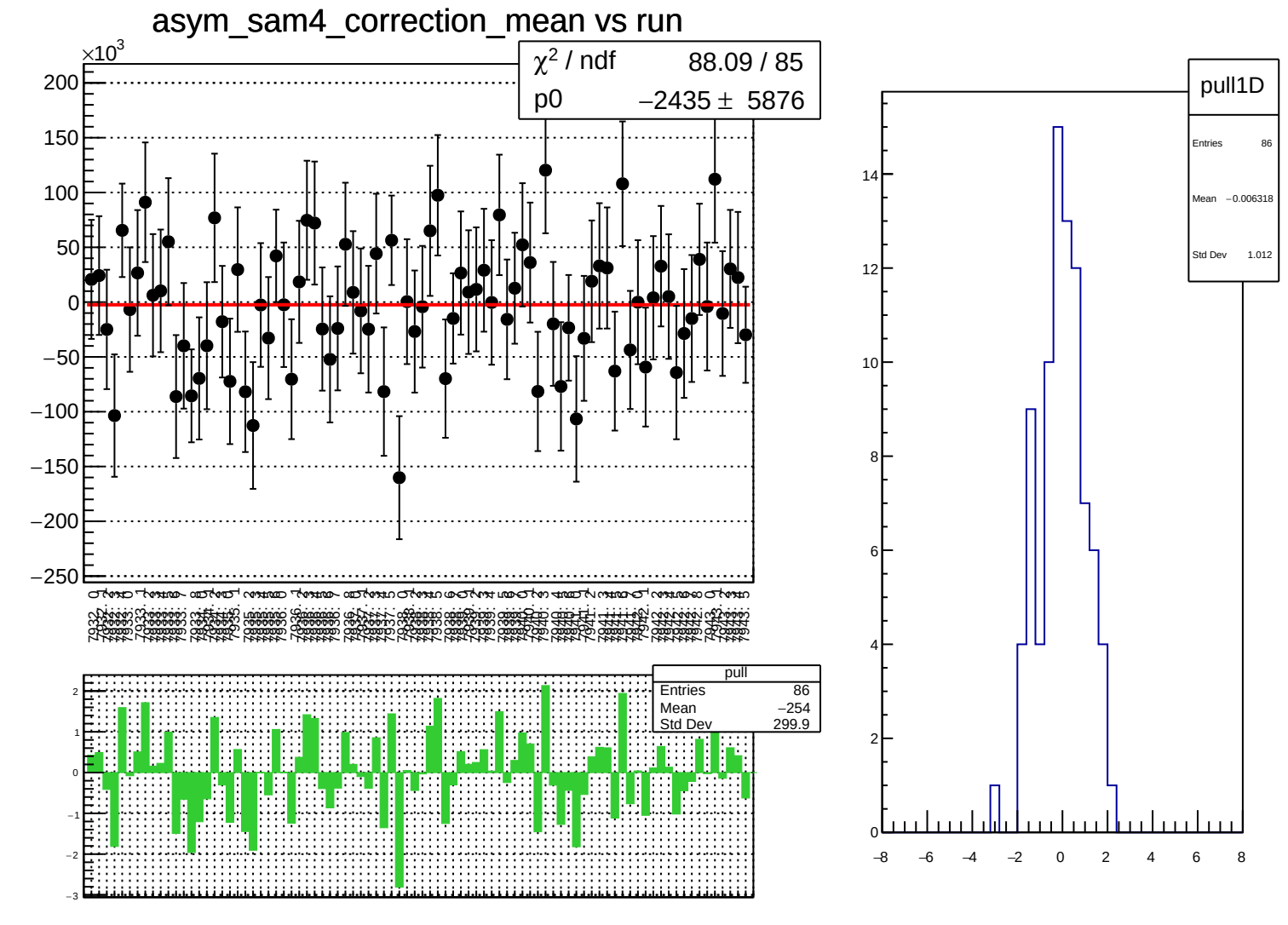
asym_sam3_correction_rms vs run

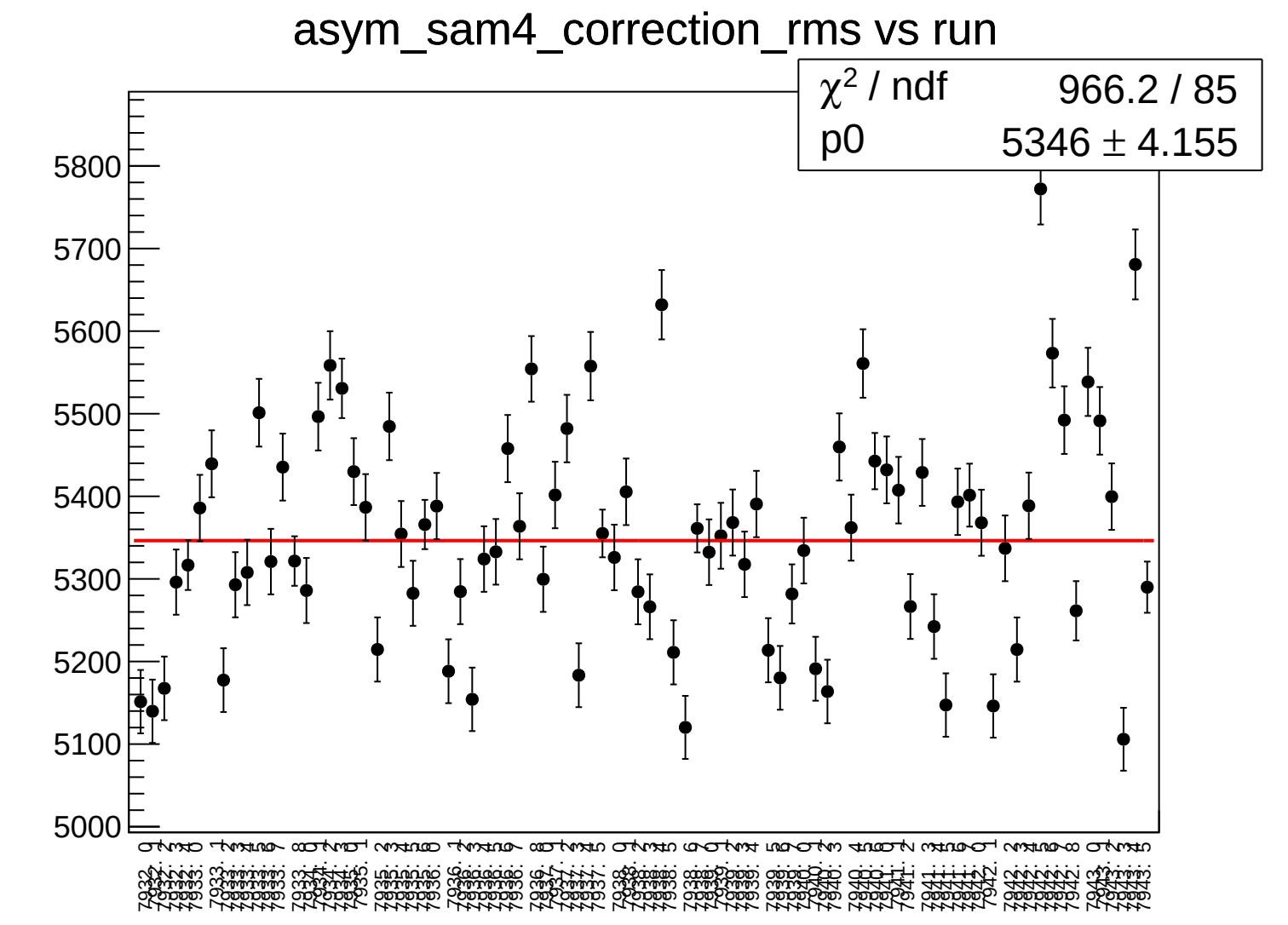


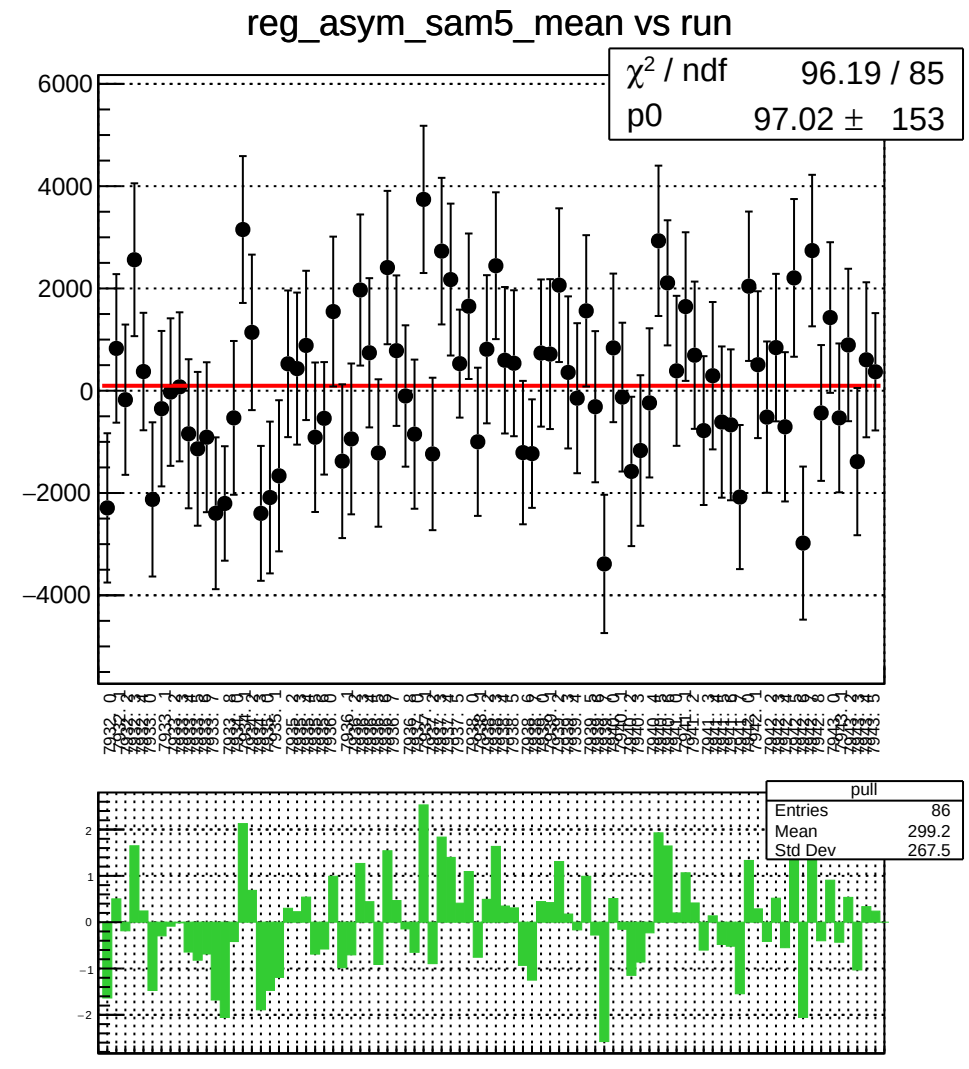

reg_asym_sam4_mean vs run
χ² / ndf 89.58 / 85
p0 845.8 ± 430.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 89.48
Std Dev 93.35
3
2
1
0
−1
−2

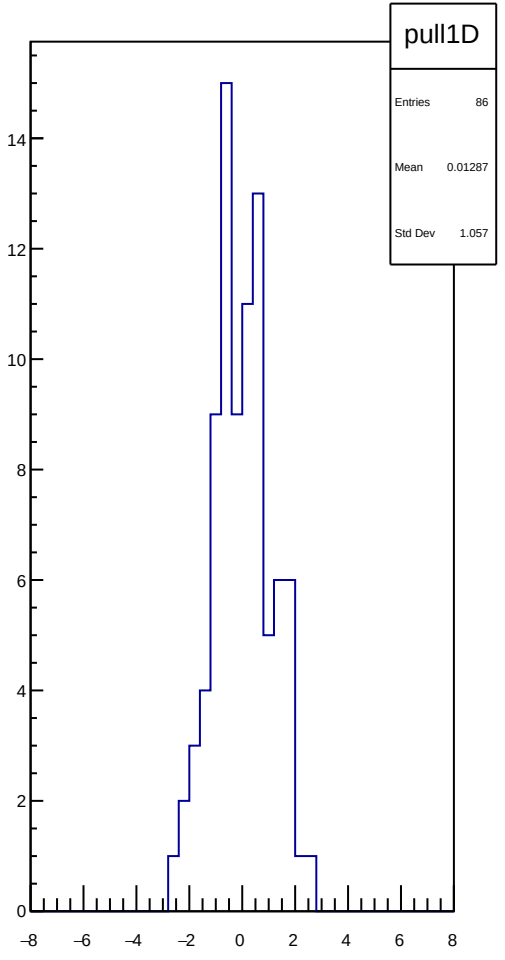

pull1D
Entries 86
Mean 0.01678
Std Dev 1.02
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

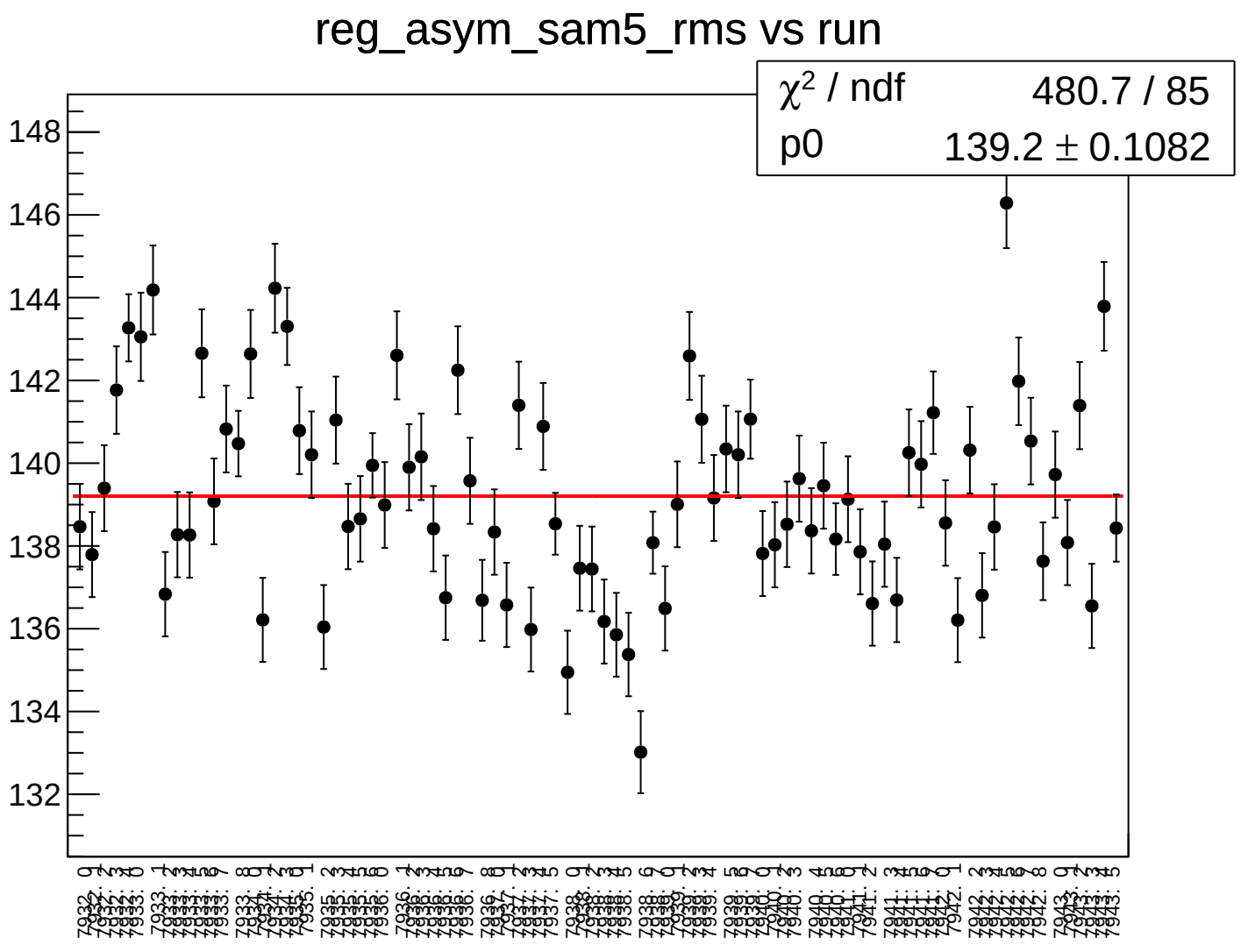

reg_asym_sam4_rms vs run
χ² / ndf 4739 / 85
p0 391.4 ± 0.3045
550
500
450
400
350

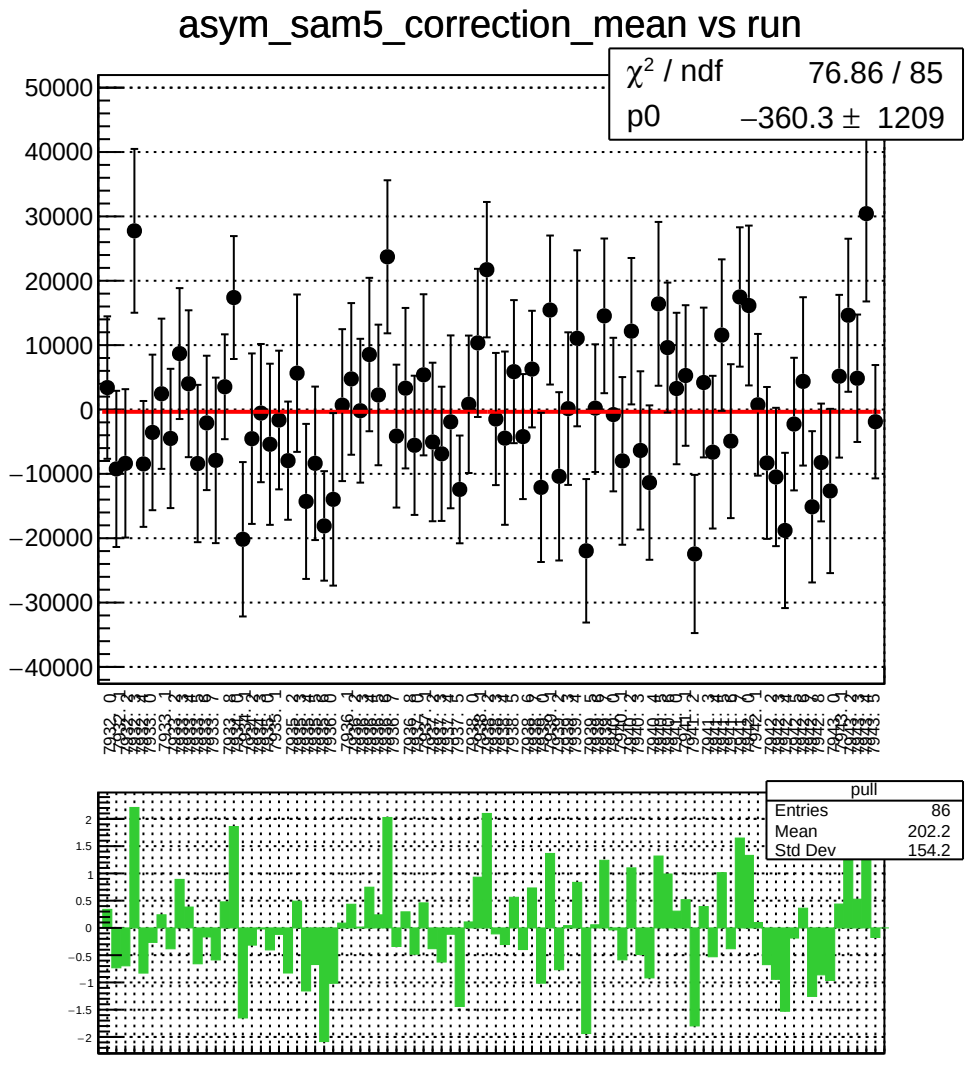

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 88.09 / 85
p0 −2435 ± 5876
pull
Entries 86
Mean −254
Std Dev 299.9
pull1D
Entries 86
Mean −0.006318
Std Dev 1.012

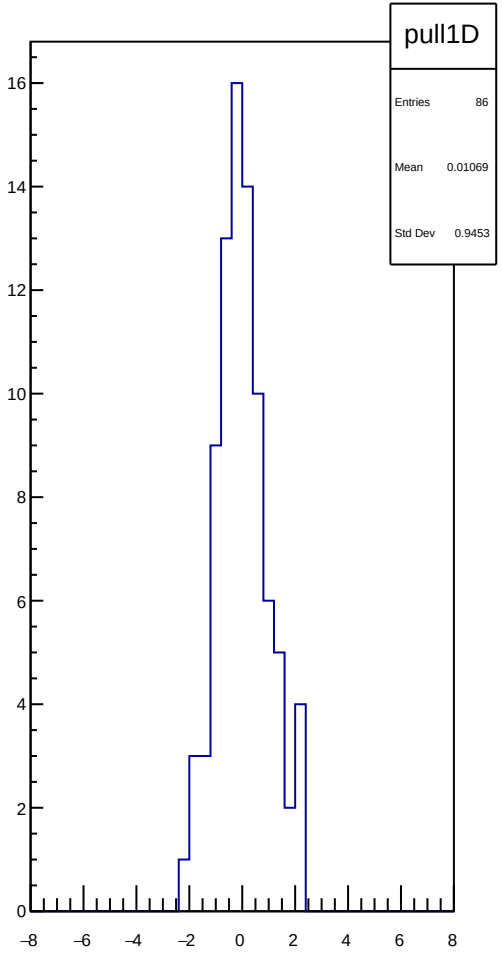

asym_sam4_correction_rms vs run
χ^2 / ndf 966.2 / 85
p0 5346 ± 4.155
5800
5700
5600
5500
5400
5300
5200
5100
5000


reg_asym_sam5_mean vs run
χ² / ndf 96.19 / 85
p0 97.02 ± 153
pull
Entries 86
Mean 299.2
Std Dev 267.5

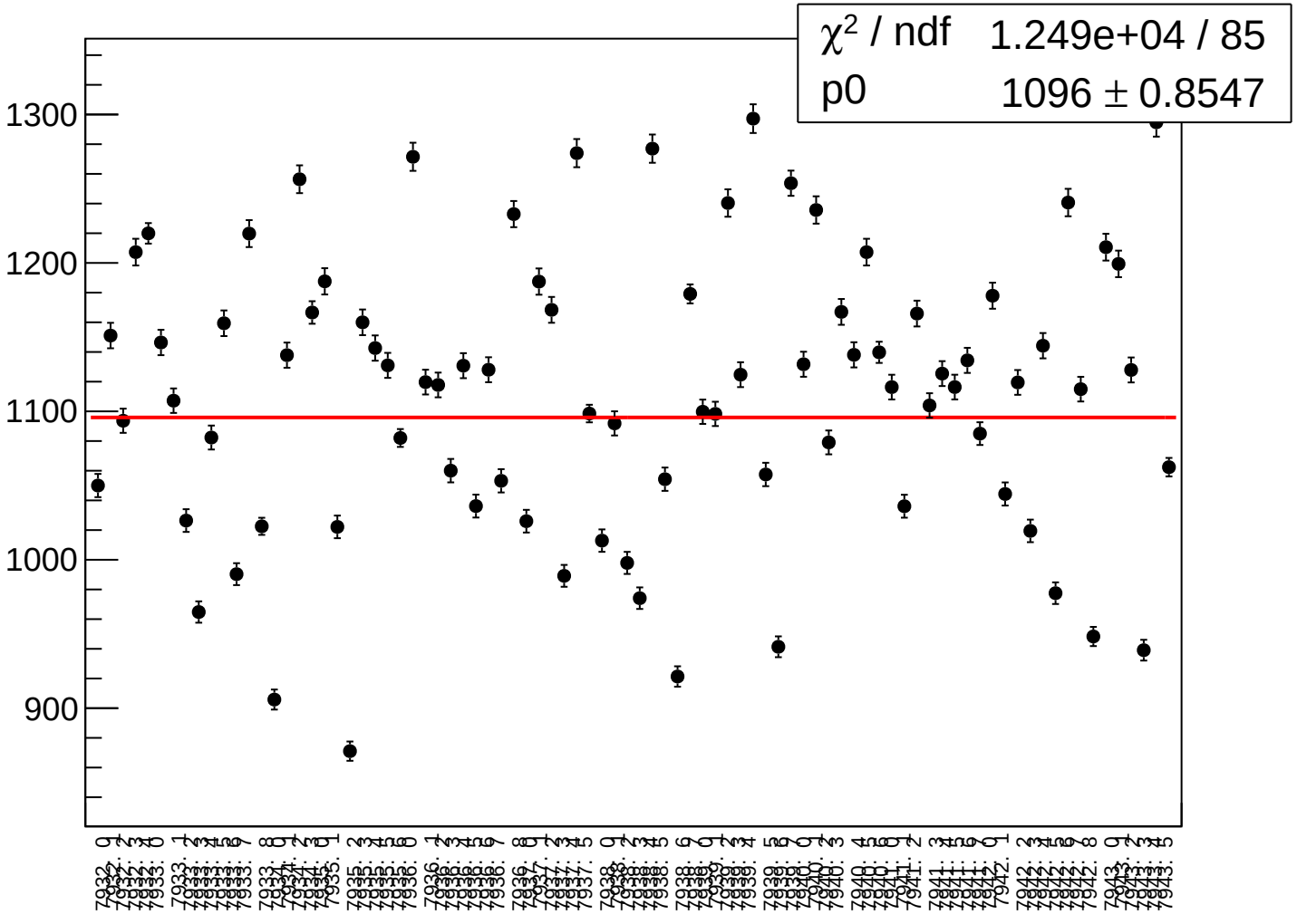

pull1D
Entries 86
Mean 0.01287
Std Dev 1.057

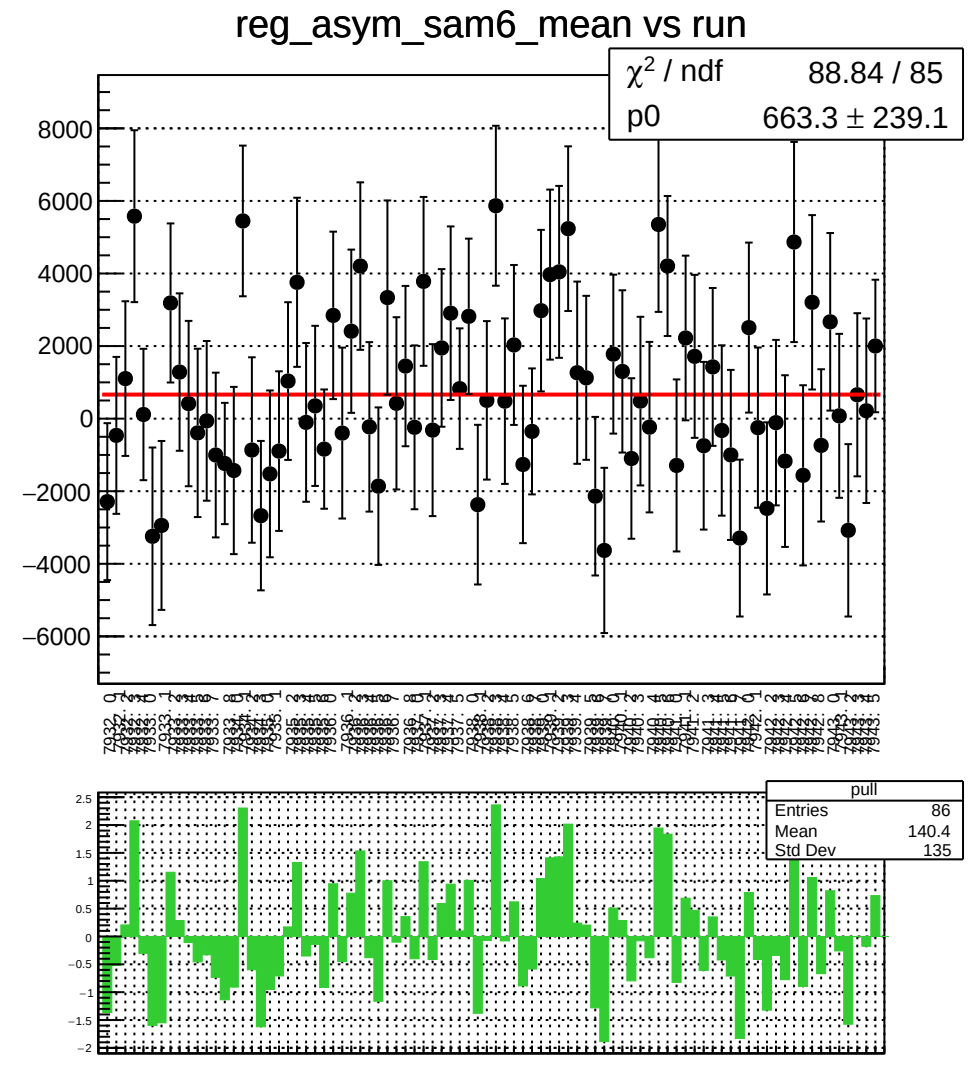

reg_asym_sam5_rms vs run
χ² / ndf 480.7 / 85
p0 139.2 ± 0.1082
148
146
144
142
140
138
136
134
132

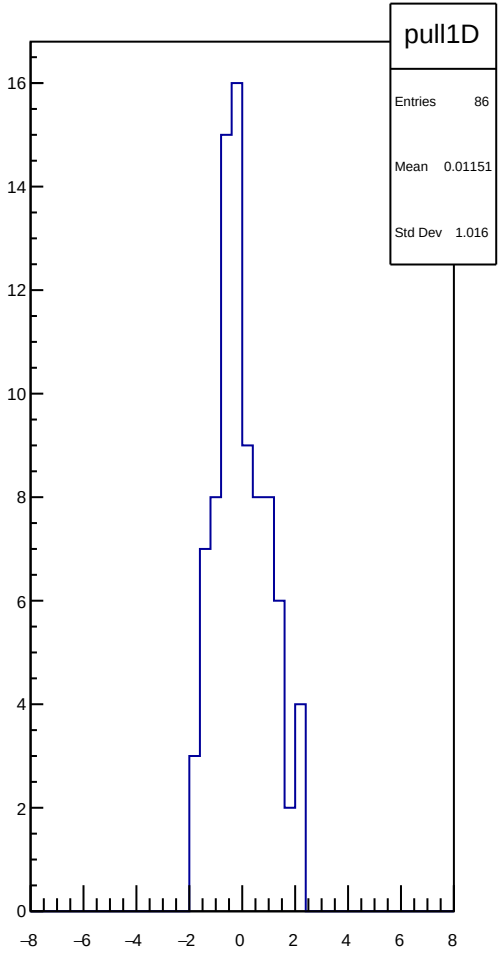

asym_sam5_correction_mean vs run
χ² / ndf 76.86 / 85
p0 −360.3 ± 1209
pull
Entries 86
Mean 202.2
Std Dev 154.2

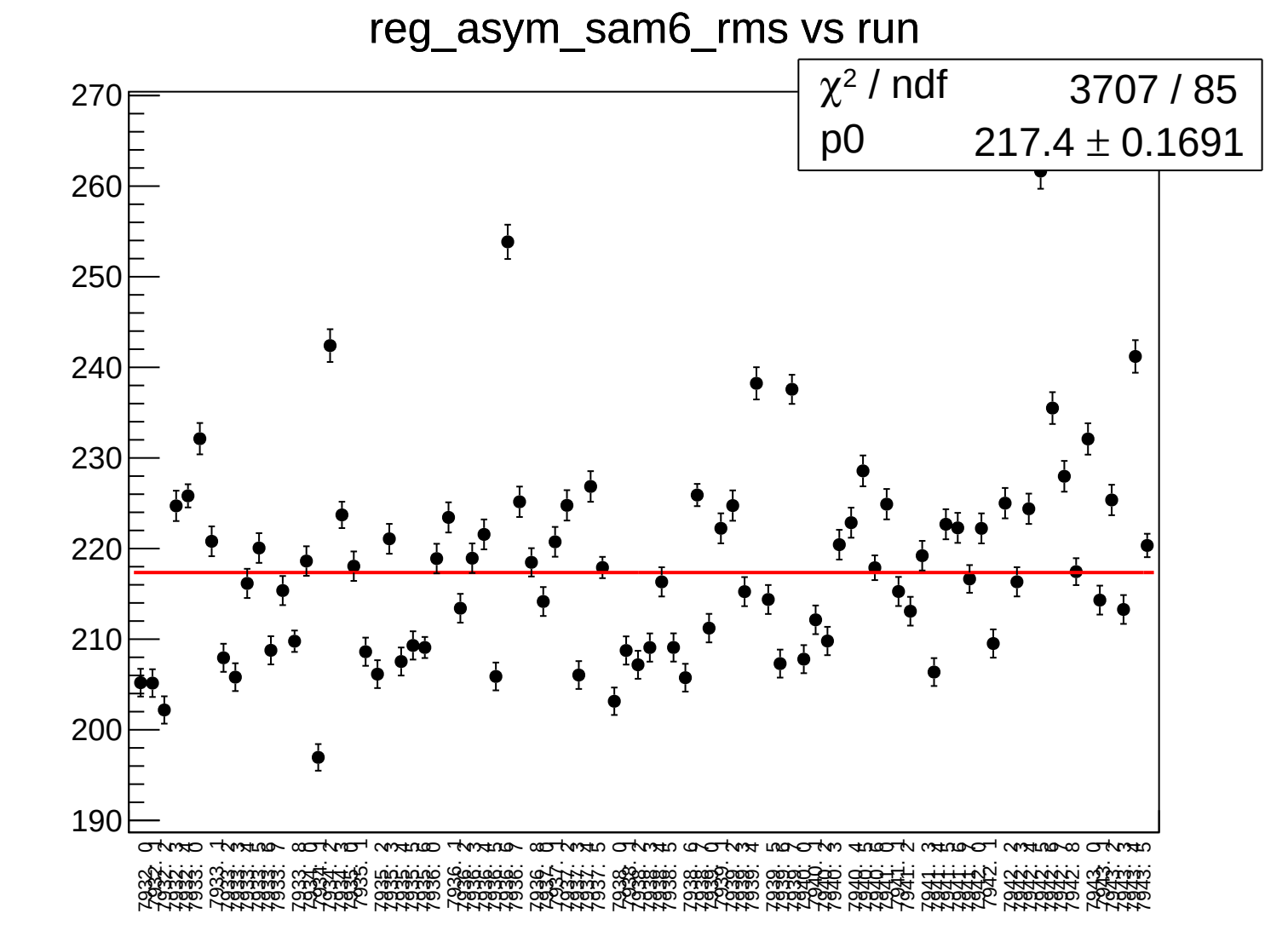

pull1D
Entries 86
Mean 0.01069
Std Dev 0.9453

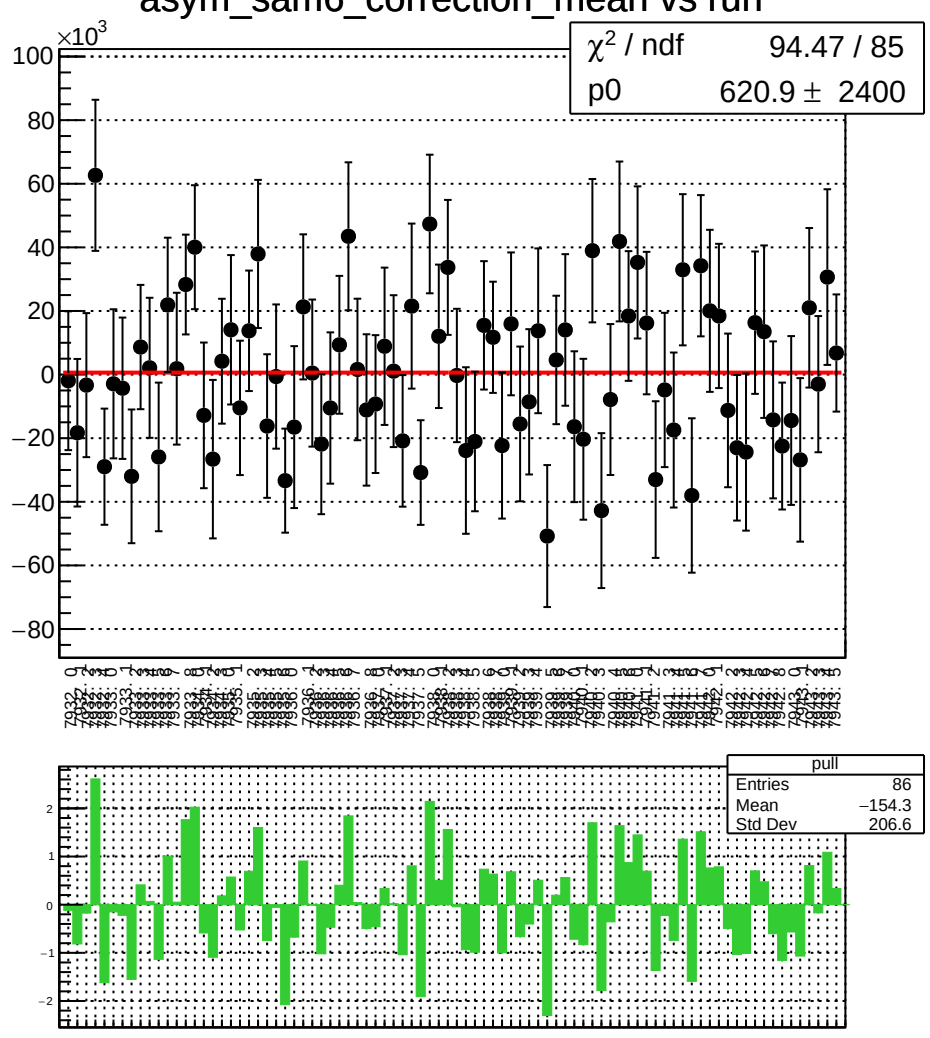
asym_sam5_correction_rms vs run

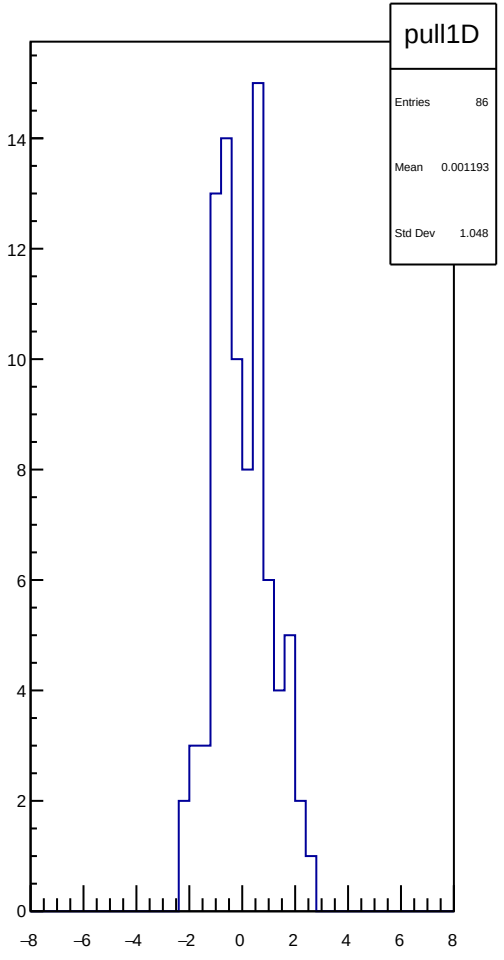


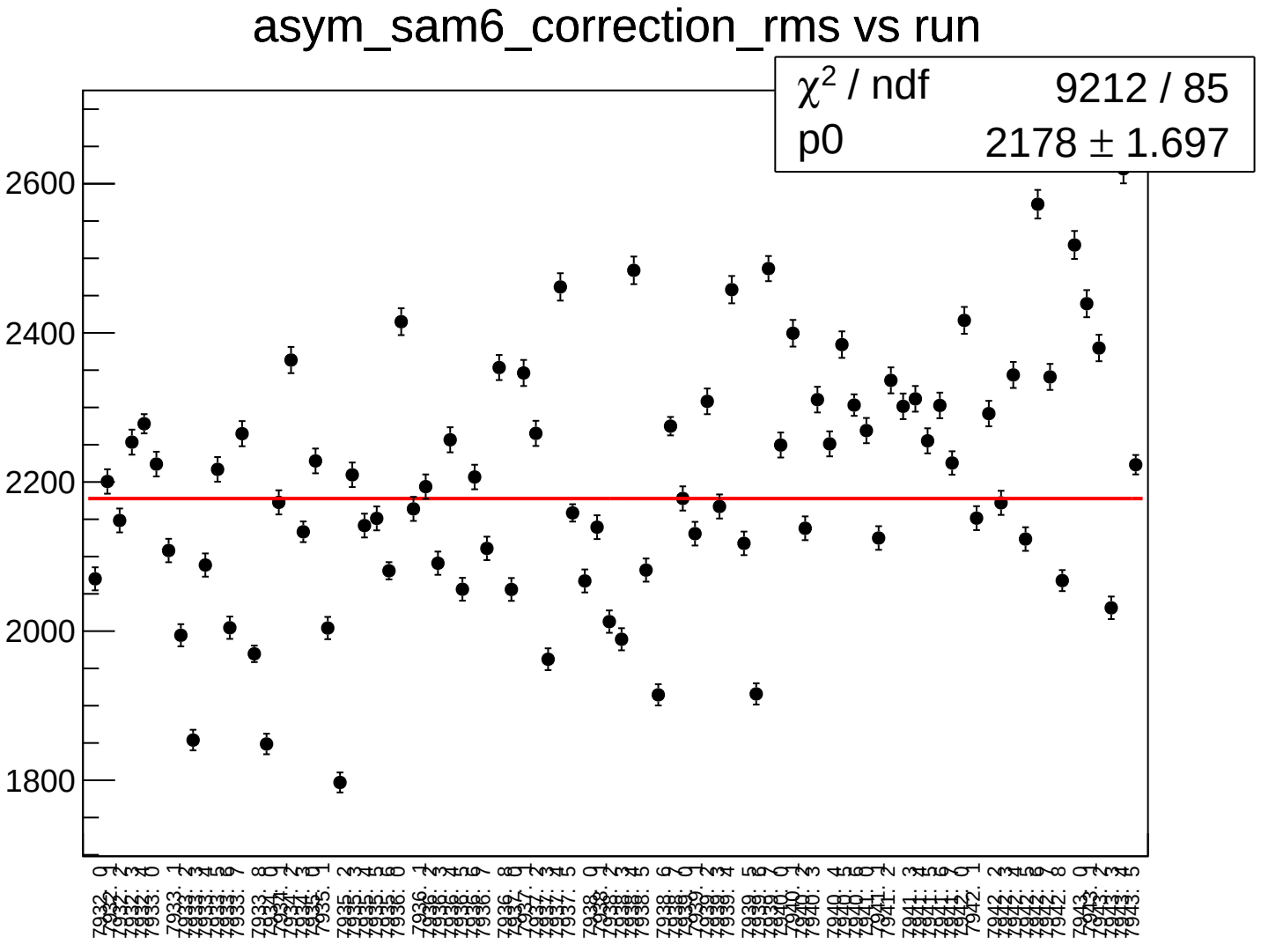

reg_asym_sam6_mean vs run
χ^2 / ndf 88.84 / 85
p0 663.3 ± 239.1
pull
Entries 86
Mean 140.4
Std Dev 135

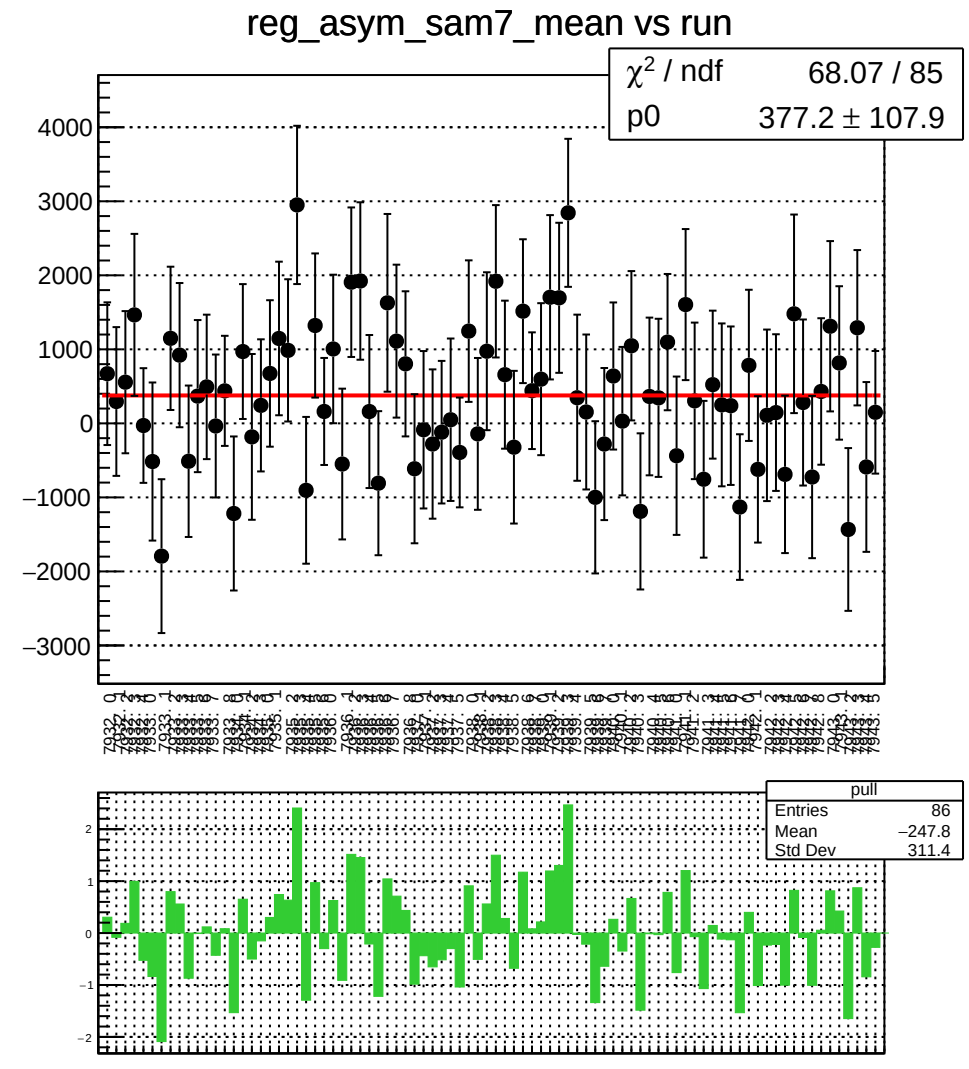

pull1D
Entries 86
Mean 0.01151
Std Dev 1.016

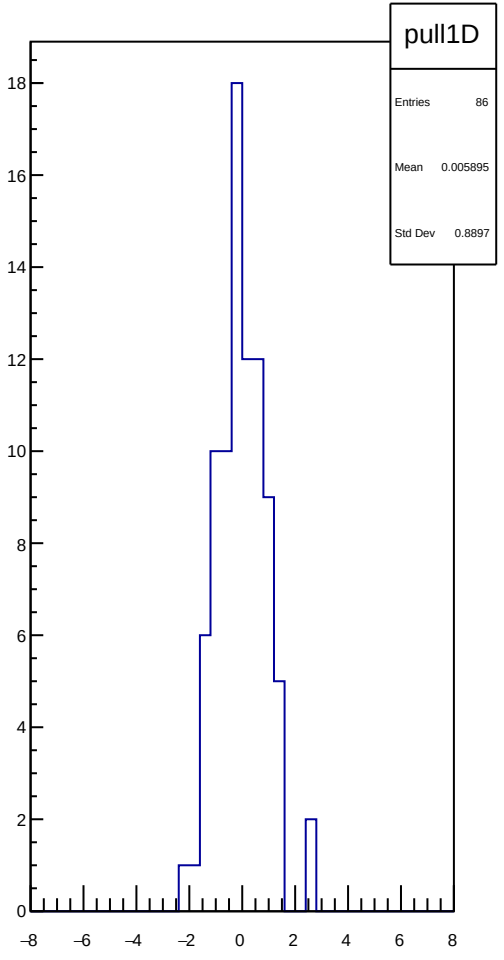

reg_asym_sam6_rms vs run
χ² / ndf 3707 / 85
p0 217.4 ± 0.1691
270
260
250
240
230
220
210
200
190

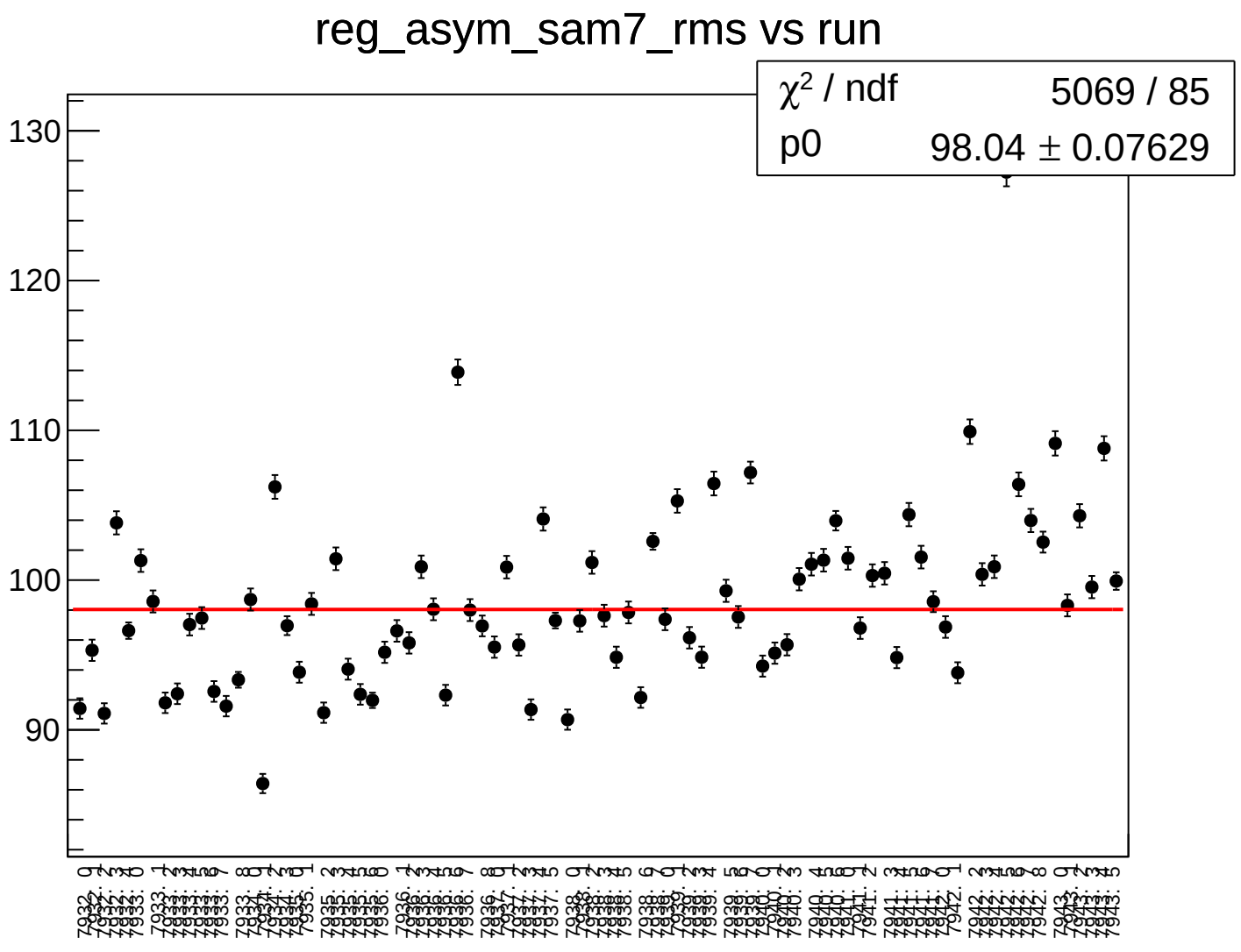

asym_sam6_correction_mean vs run
χ² / ndf 94.47 / 85
p0 620.9 ± 2400
×10³
pull
Entries 86
Mean −154.3
Std Dev 206.6

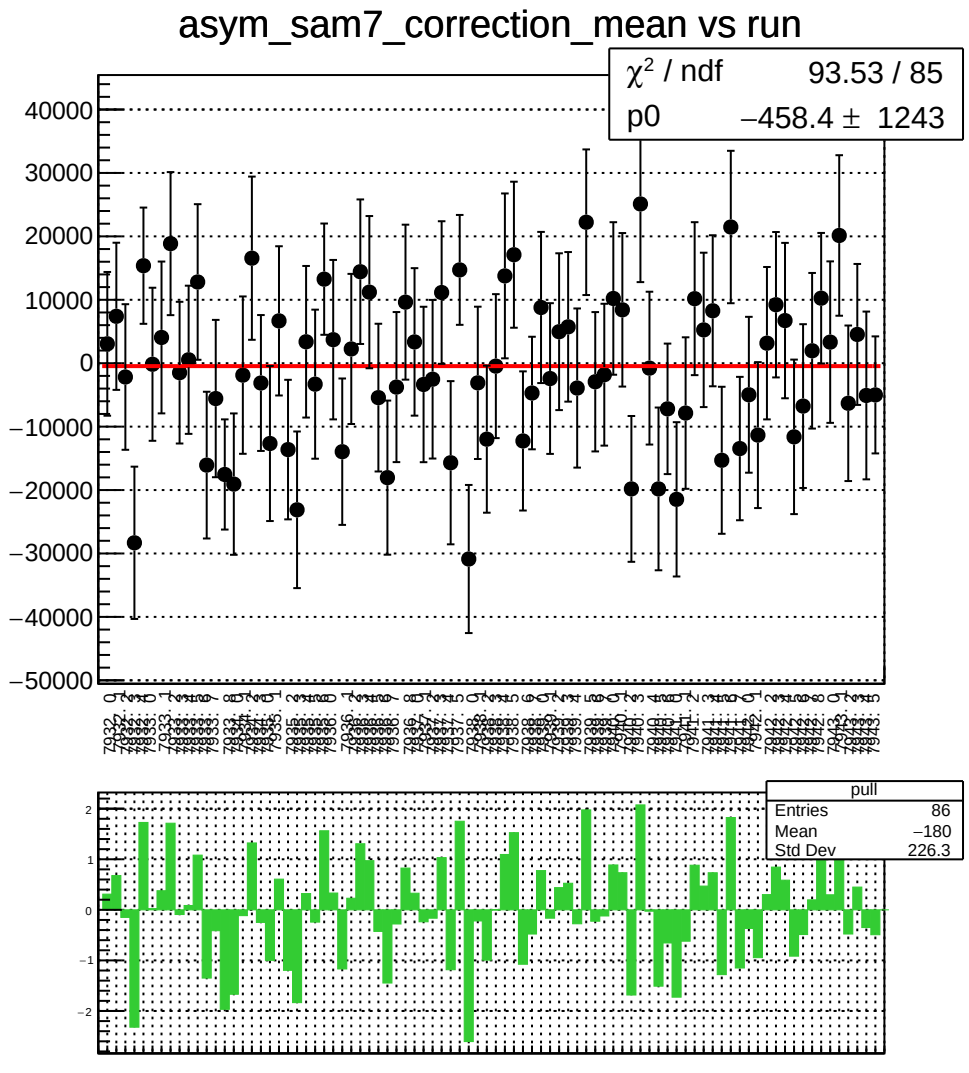

pull1D
Entries 86
Mean 0.001193
Std Dev 1.048

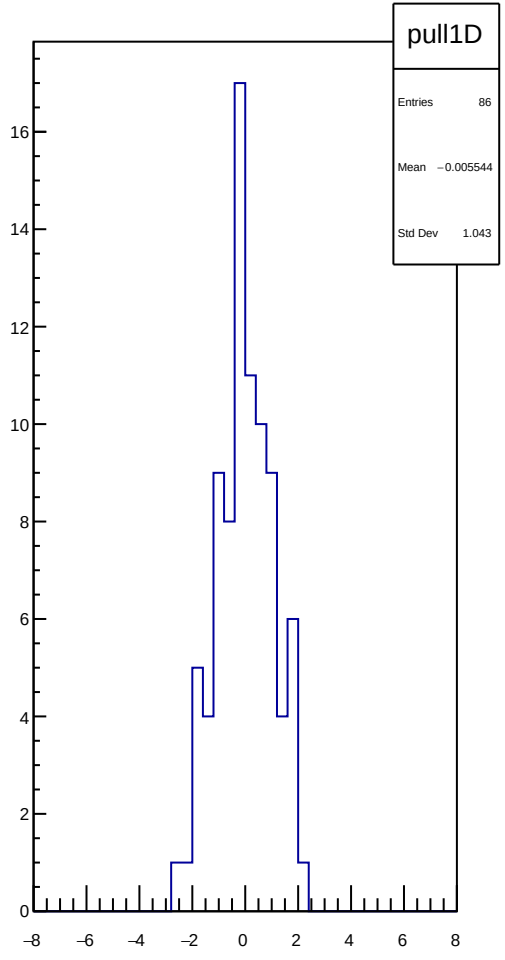

asym_sam6_correction_rms vs run
χ² / ndf 9212 / 85
p0 2178 ± 1.697
2600
2400
2200
2000
1800

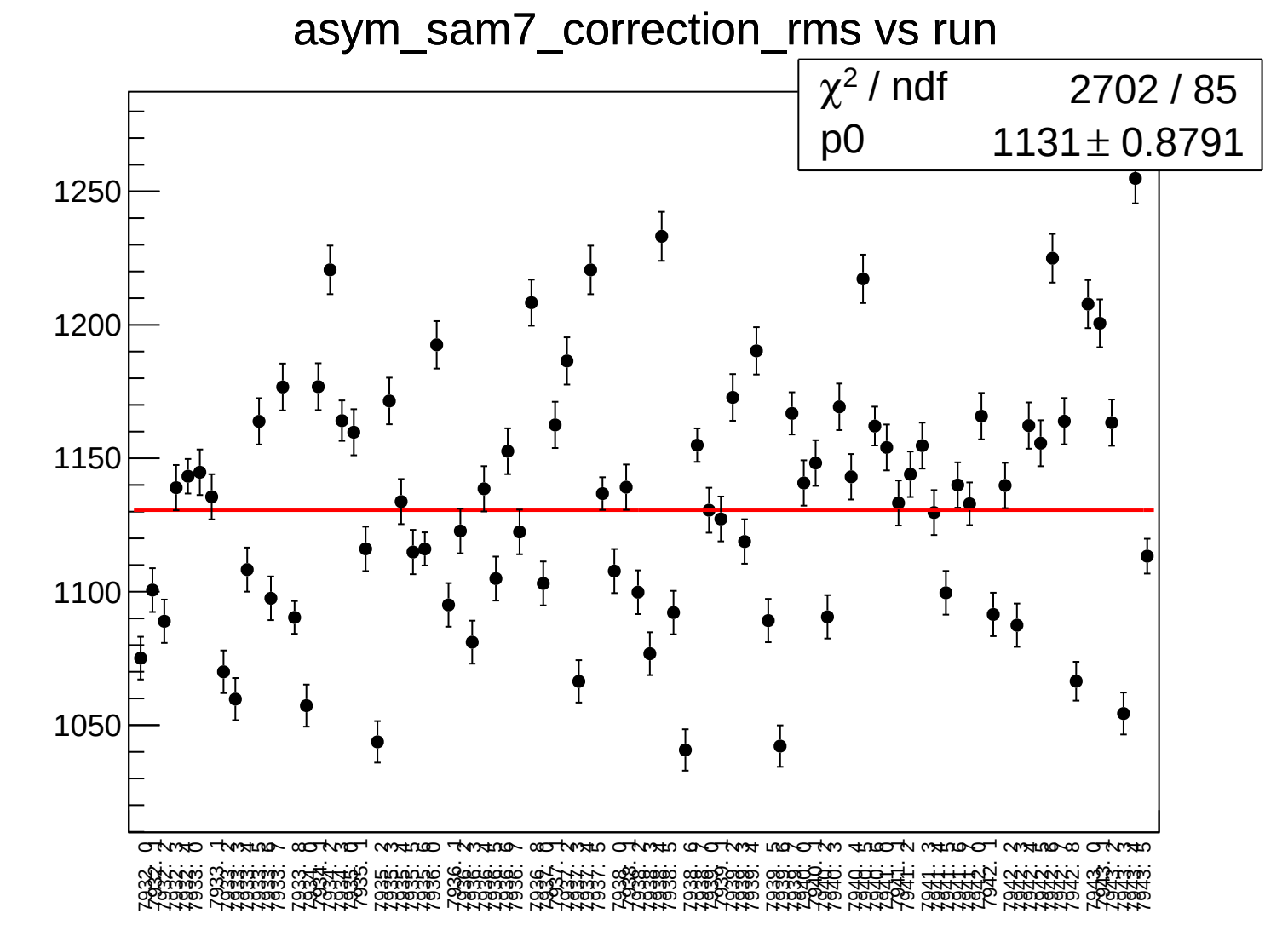

reg_asym_sam7_mean vs run
χ² / ndf 68.07 / 85
p0 377.2 ± 107.9
pull
Entries 86
Mean −247.8
Std Dev 311.4

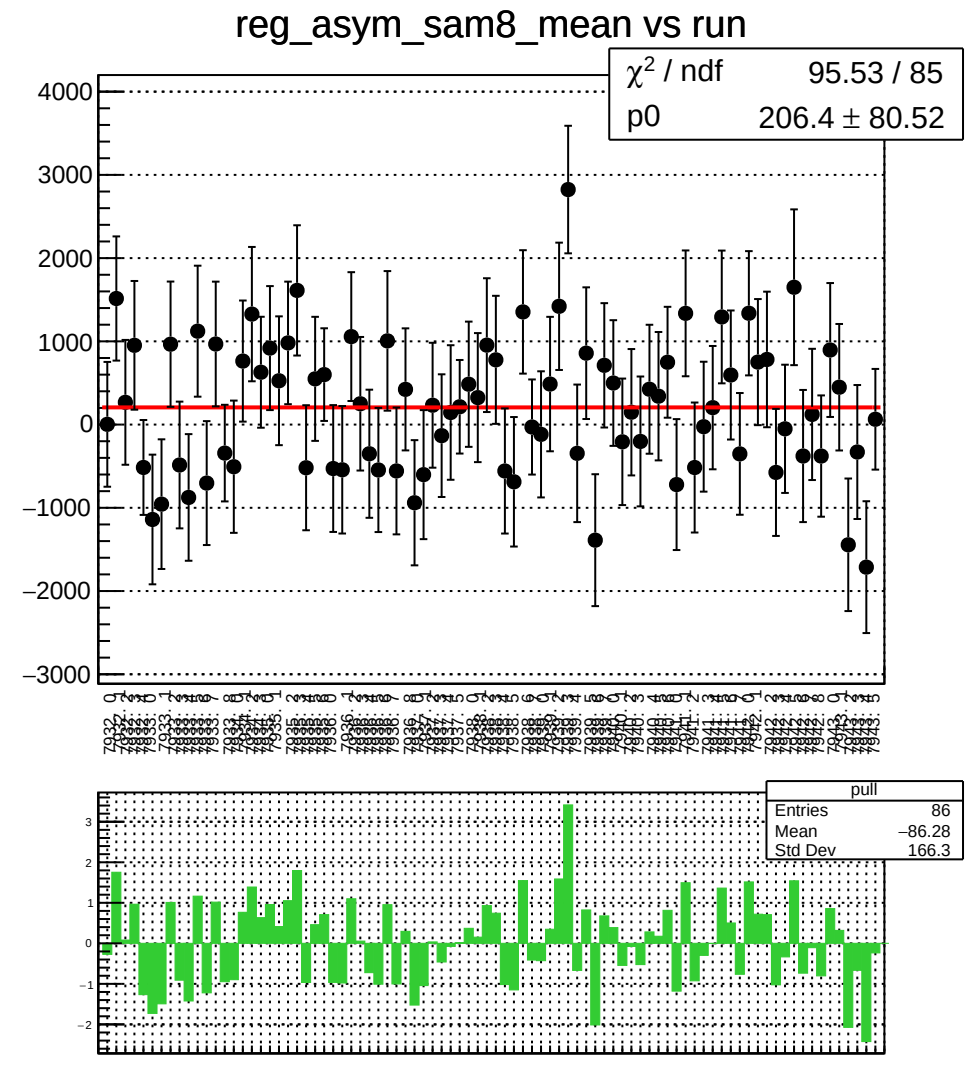

pull1D
Entries 86
Mean 0.005895
Std Dev 0.8897

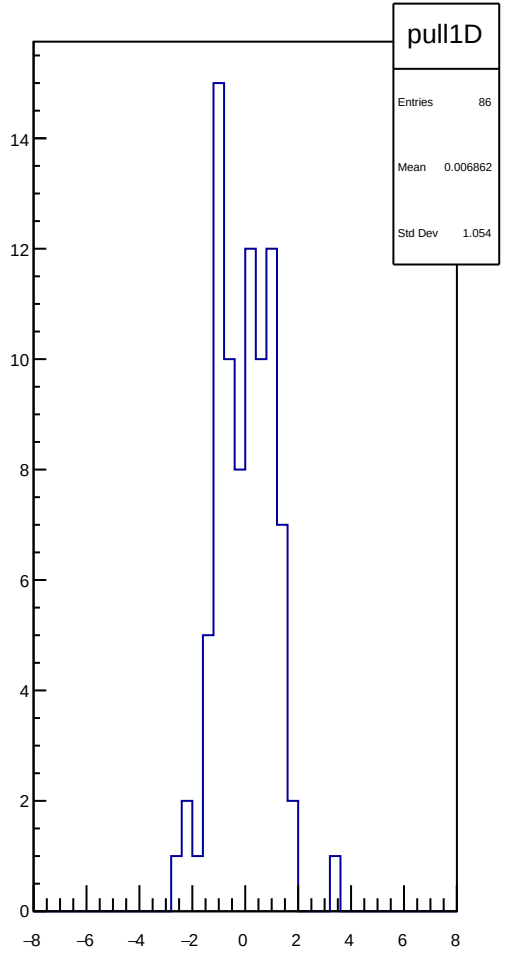

reg_asym_sam7_rms vs run
χ^2 / ndf 5069 / 85
p0 98.04 ± 0.07629
130
120
110
100
90

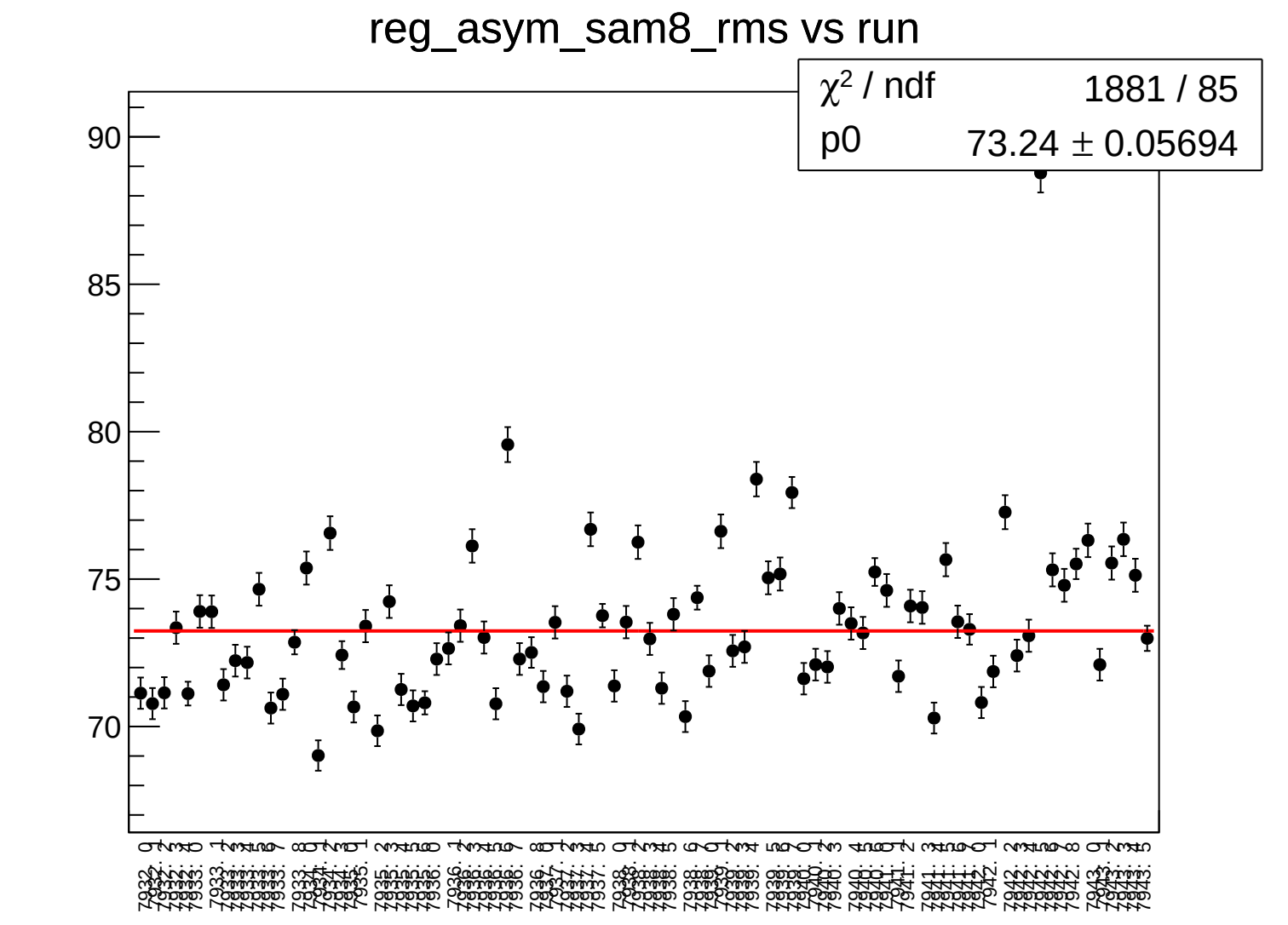

asym_sam7_correction_mean vs run
χ² / ndf 93.53 / 85
p0 −458.4 ± 1243
pull
Entries 86
Mean −180
Std Dev 226.3

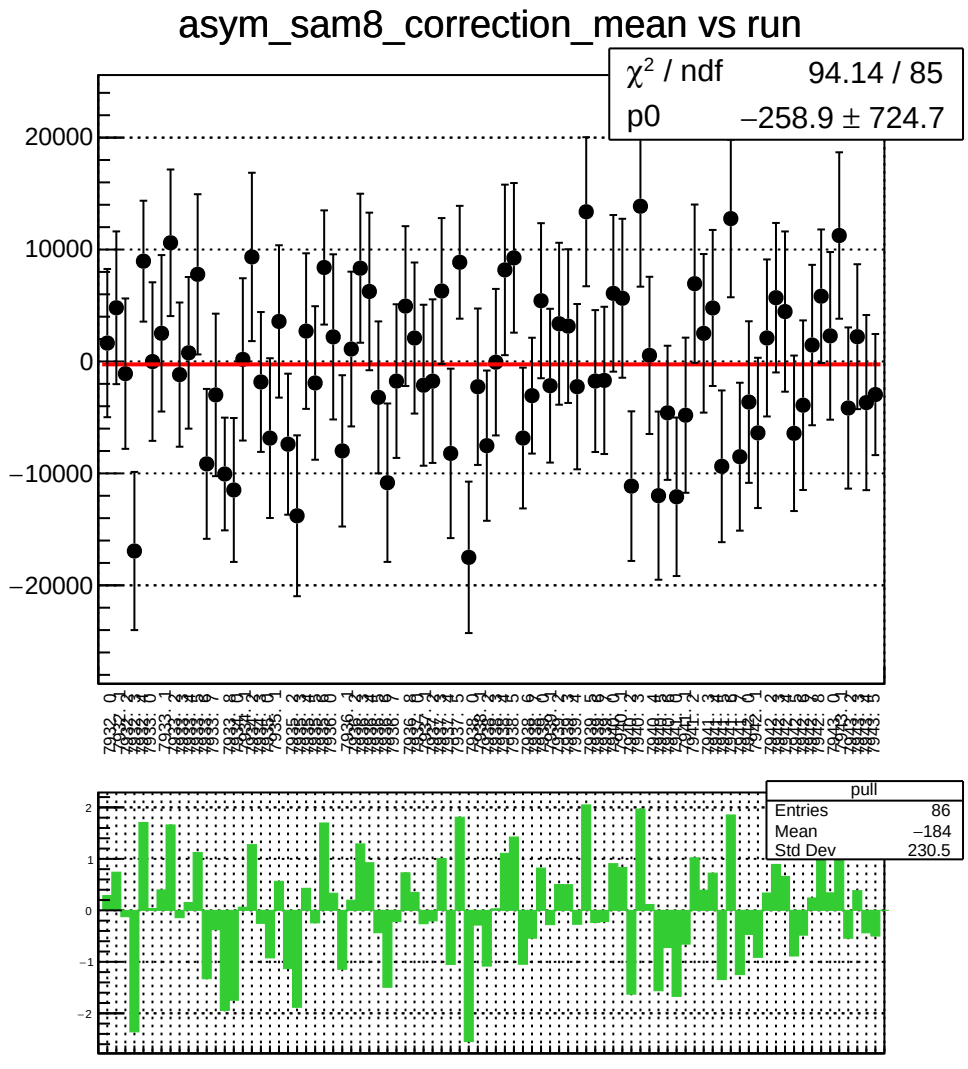

pull1D
Entries 86
Mean −0.005544
Std Dev 1.043

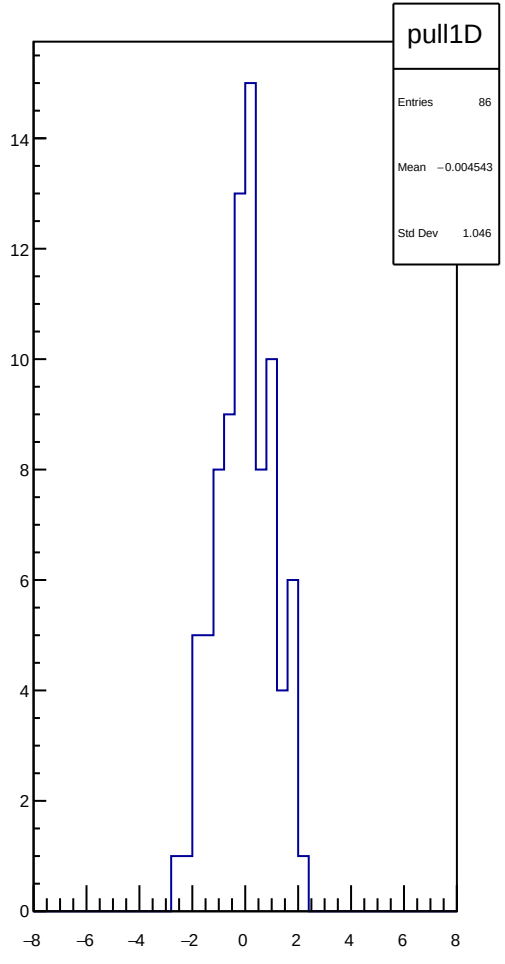

asym_sam7_correction_rms vs run
χ² / ndf 2702 / 85
p0 1131 ± 0.8791
1250
1200
1150
1100
1050

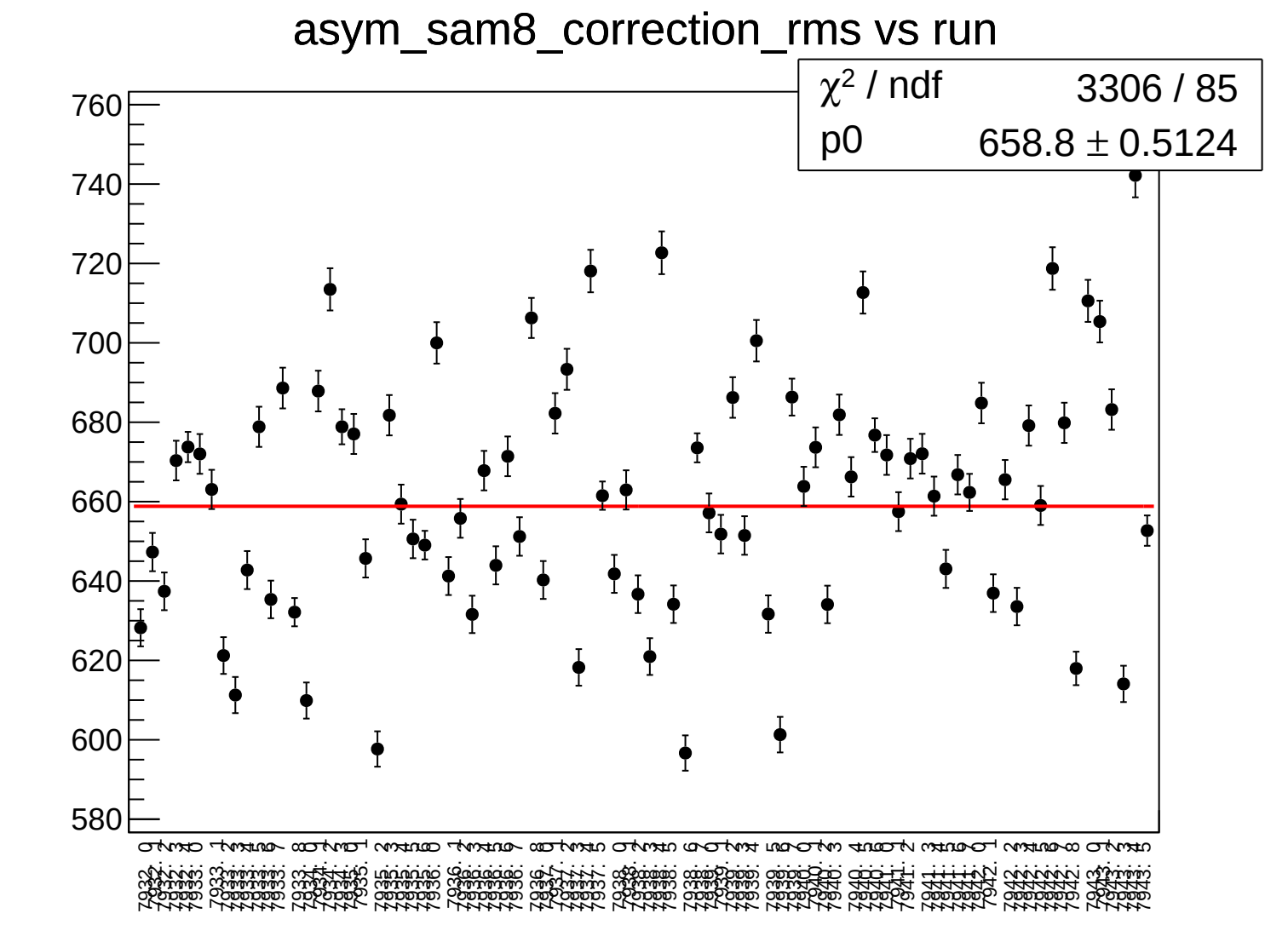

reg_asym_sam8_mean vs run
χ² / ndf 95.53 / 85
p0 206.4 ± 80.52
pull
Entries 86
Mean −86.28
Std Dev 166.3

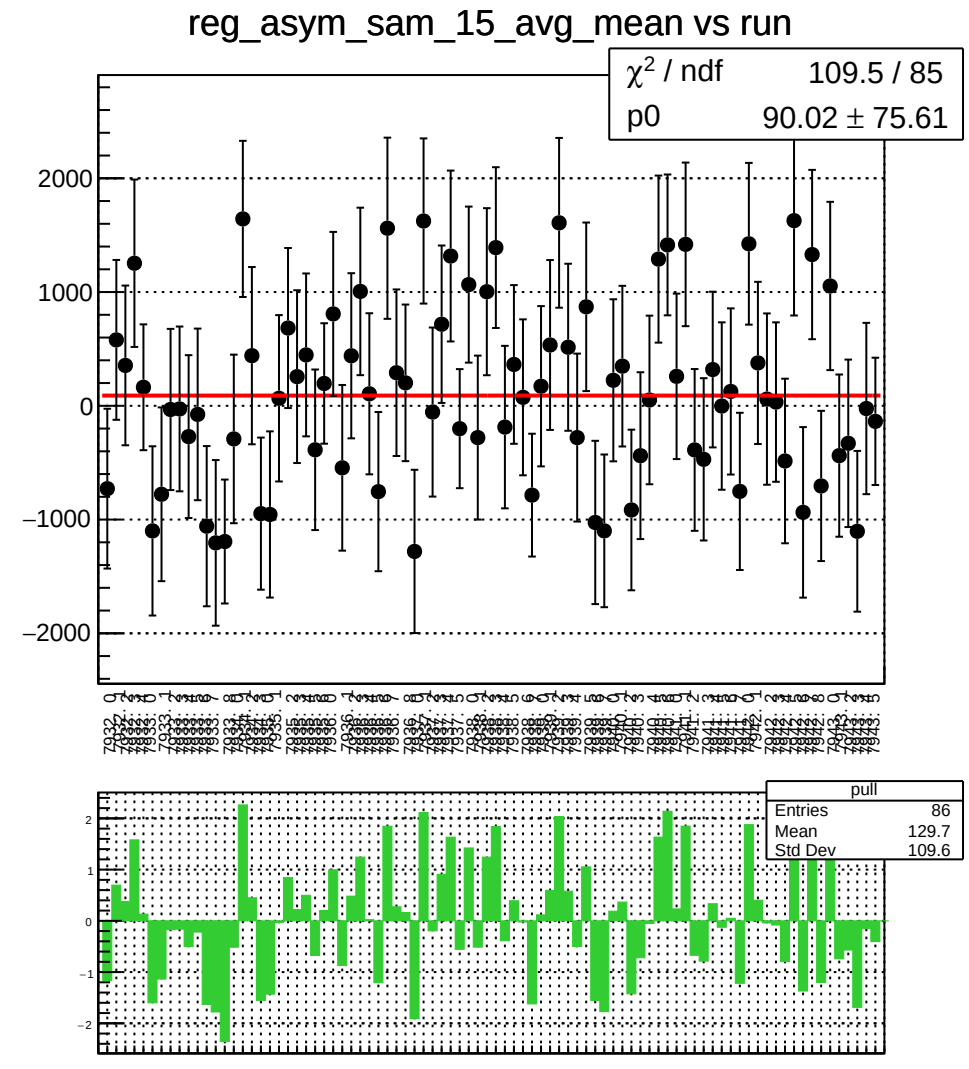

pull1D
Entries 86
Mean 0.006862
Std Dev 1.054

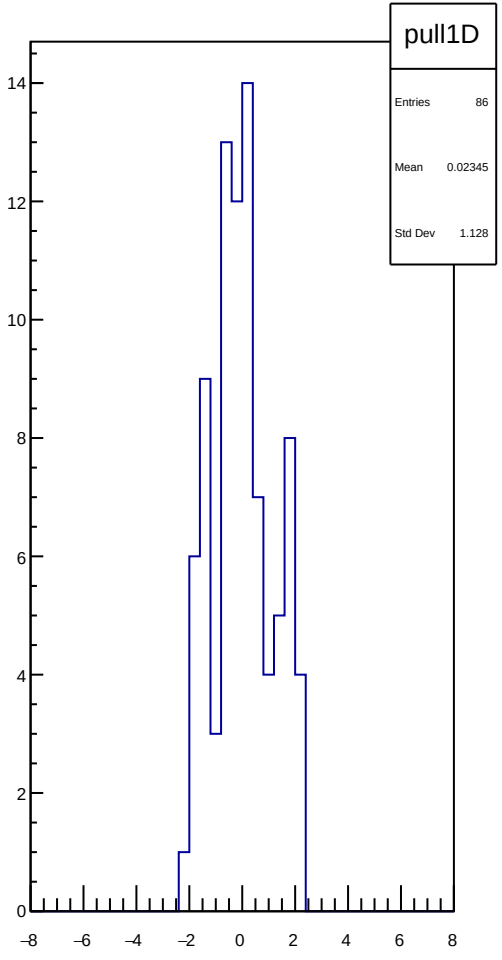

reg_asym_sam8_rms vs run
χ^2 / ndf 1881 / 85
p0 73.24 ± 0.05694
90
85
80
75
70

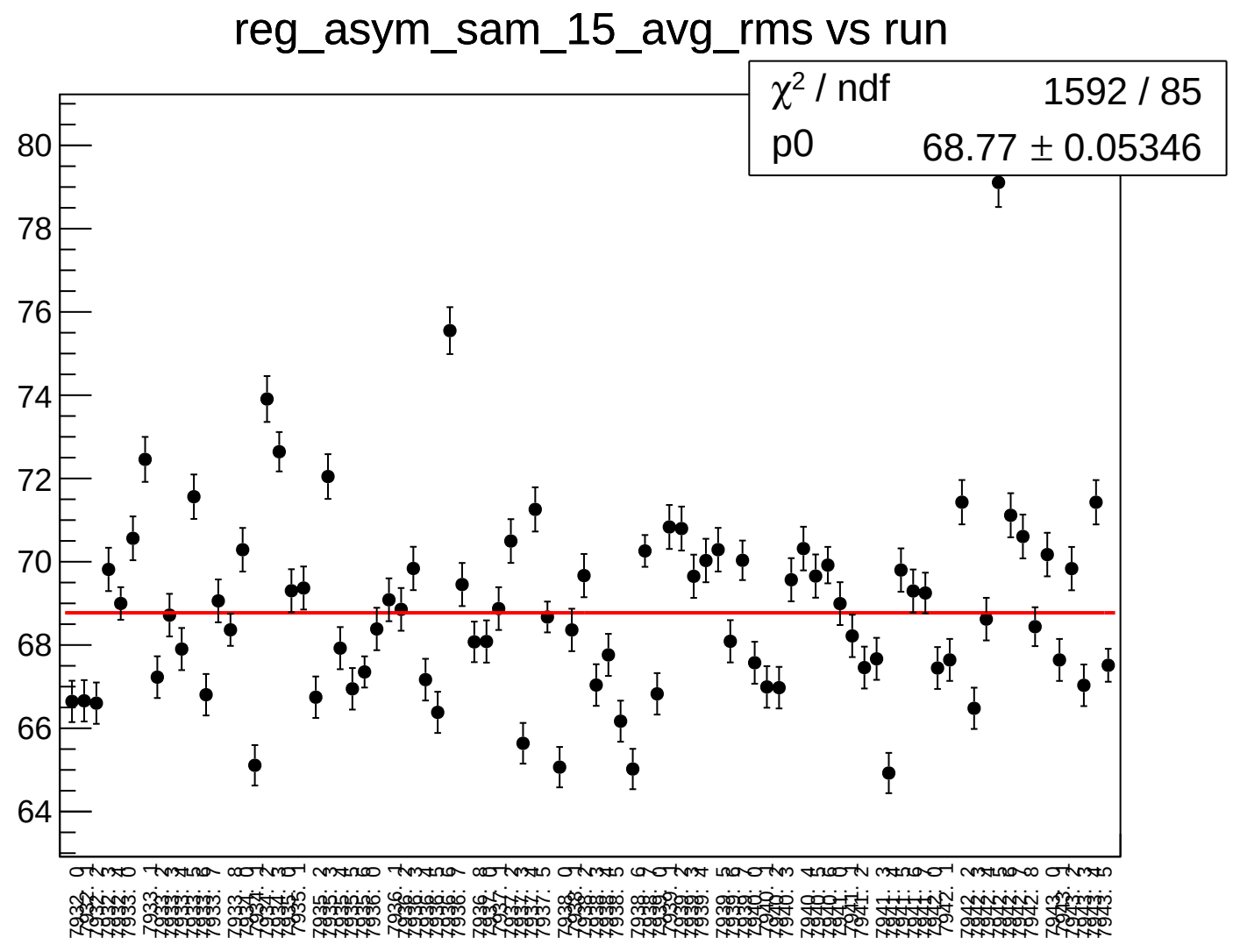

asym_sam8_correction_mean vs run
χ² / ndf 94.14 / 85
p0 −258.9 ± 724.7
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −184
Std Dev 230.5
2
1
0
−1
−2

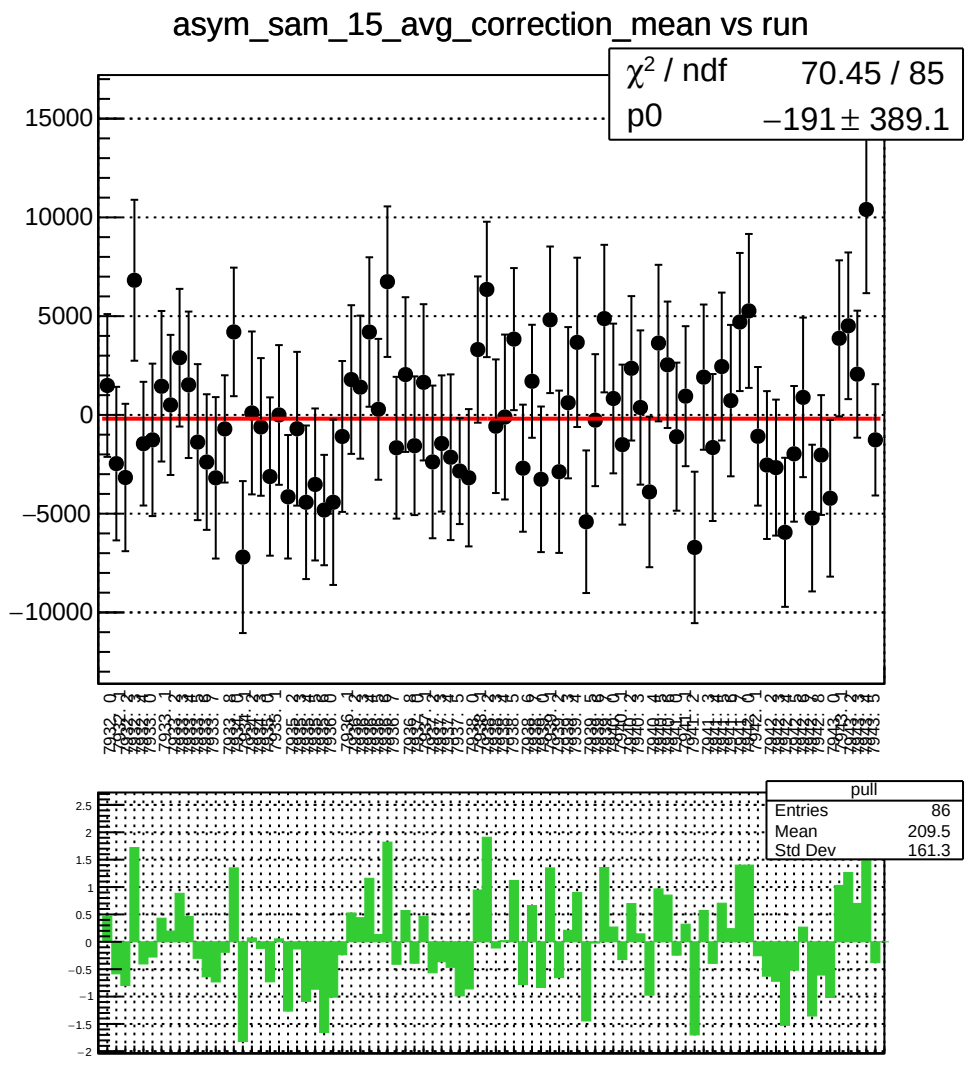

pull1D
Entries 86
Mean −0.004543
Std Dev 1.046
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

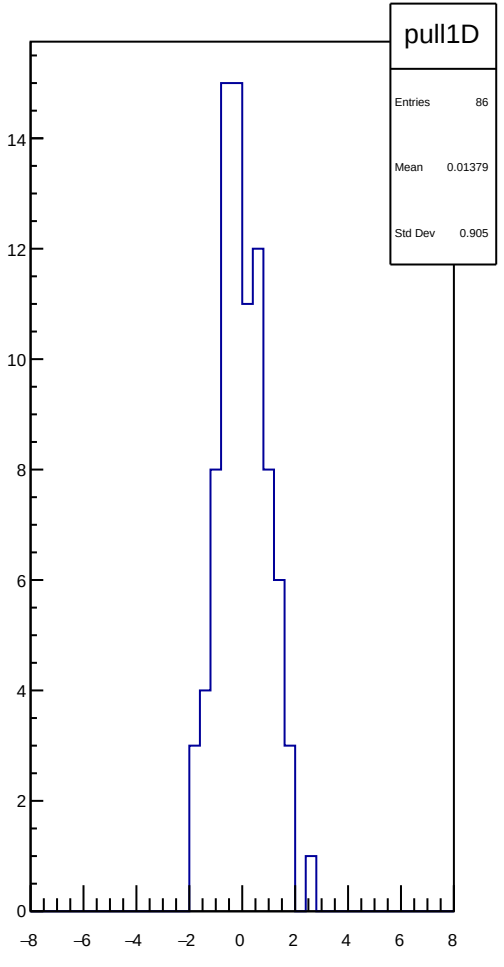

asym_sam8_correction_rms vs run
χ² / ndf 3306 / 85
p0 658.8 ± 0.5124
760
740
720
700
680
660
640
620
600
580


reg_asym_sam_15_avg_mean vs run
χ² / ndf 109.5 / 85
p0 90.02 ± 75.61
pull
Entries 86
Mean 129.7
Std Dev 109.6

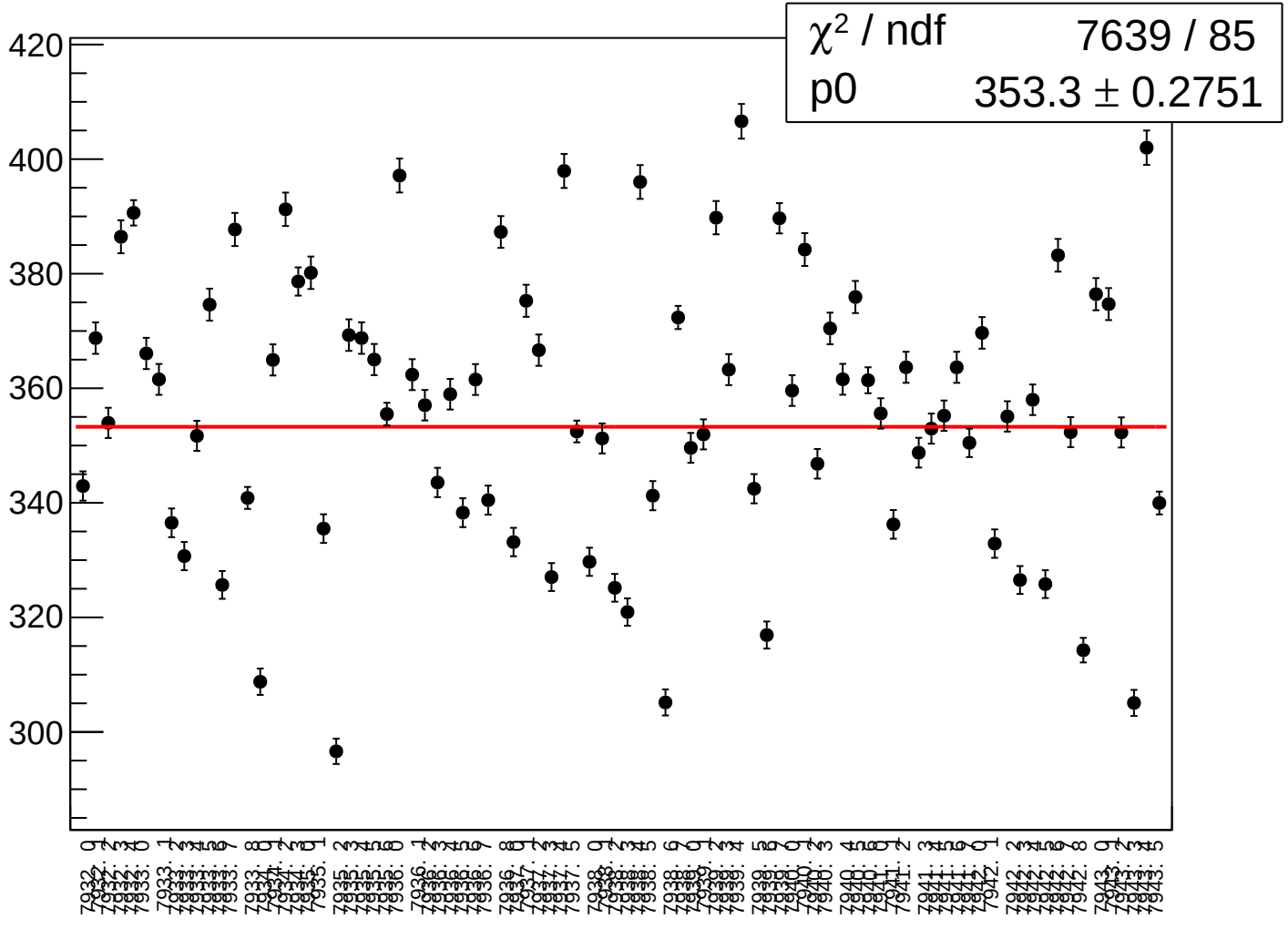

pull1D
Entries 86
Mean 0.02345
Std Dev 1.128

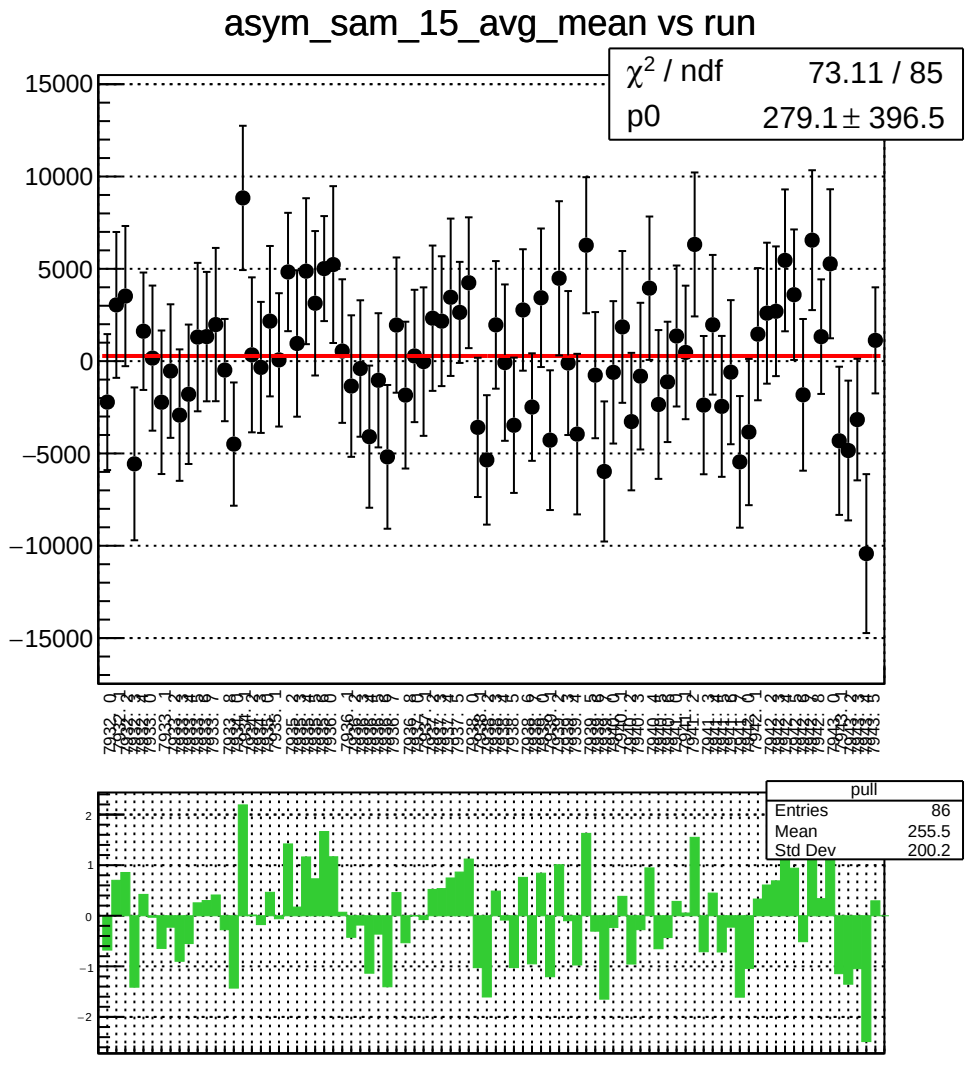

reg_asym_sam_15_avg_rms vs run
χ² / ndf 1592 / 85
p0 68.77 ± 0.05346
80
78
76
74
72
70
68
66
64

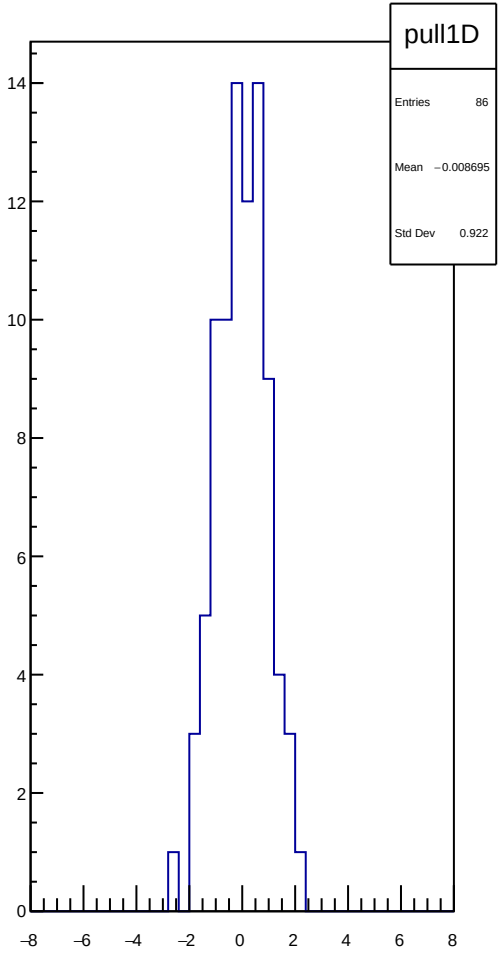

asym_sam_15_avg_correction_mean vs run
χ² / ndf 70.45 / 85
p0 −191 ± 389.1
15000
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 209.5
Std Dev 161.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

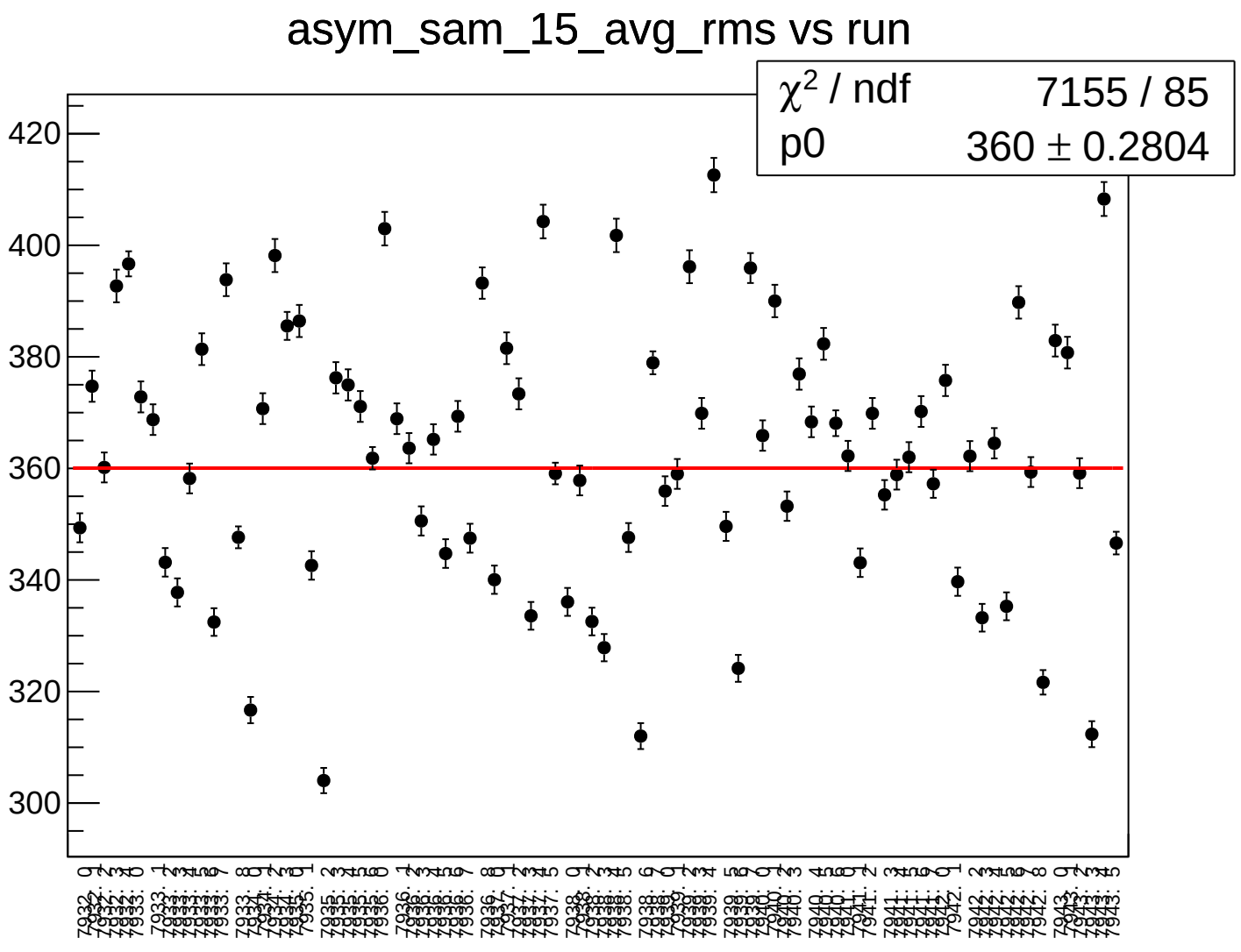

pull1D
Entries 86
Mean 0.01379
Std Dev 0.905
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

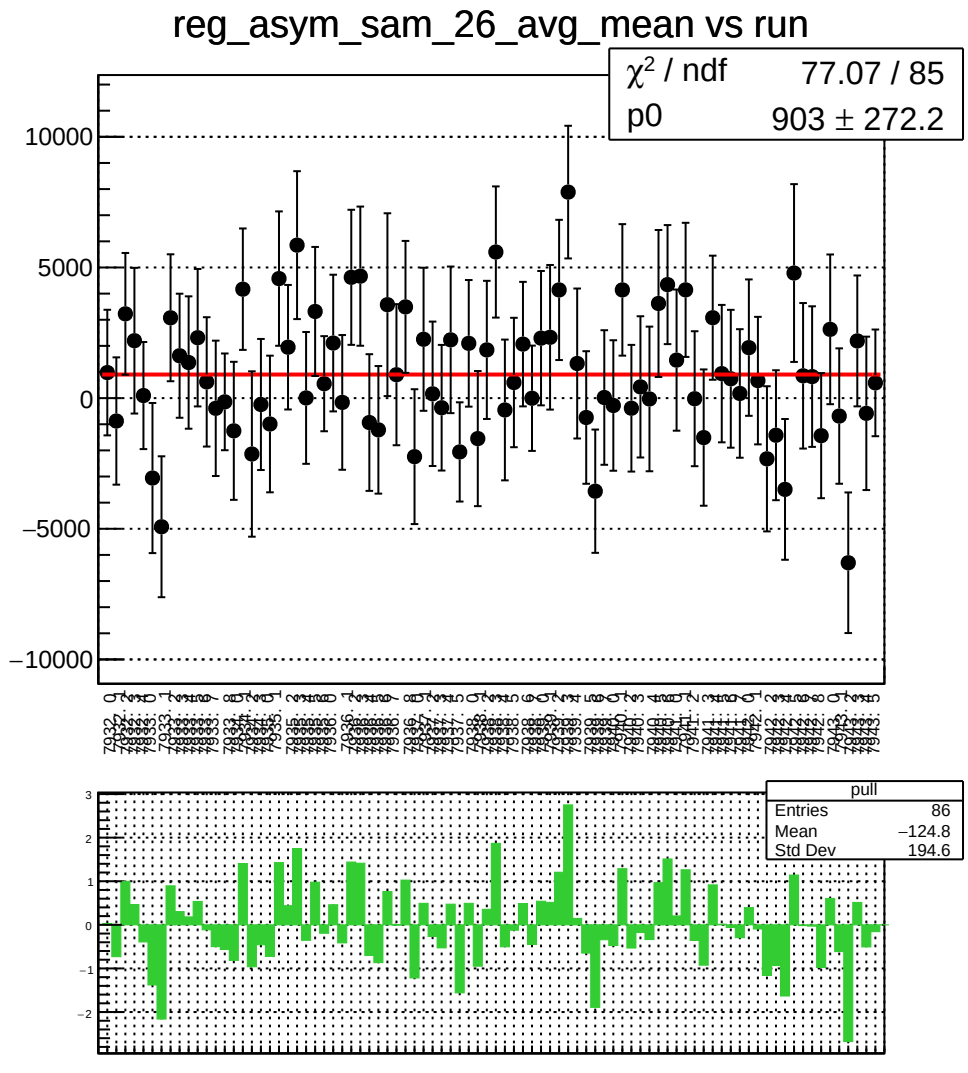
asym_sam_15_avg_correction_rms vs run

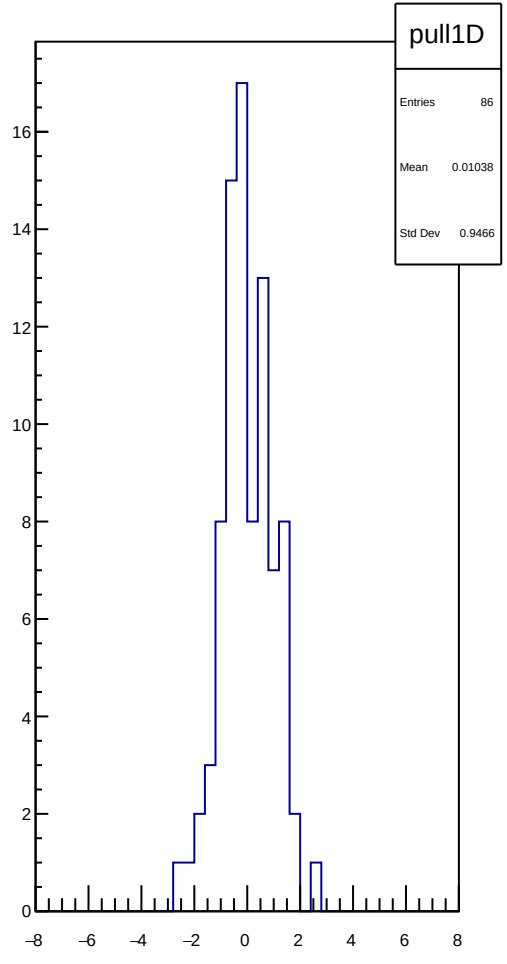


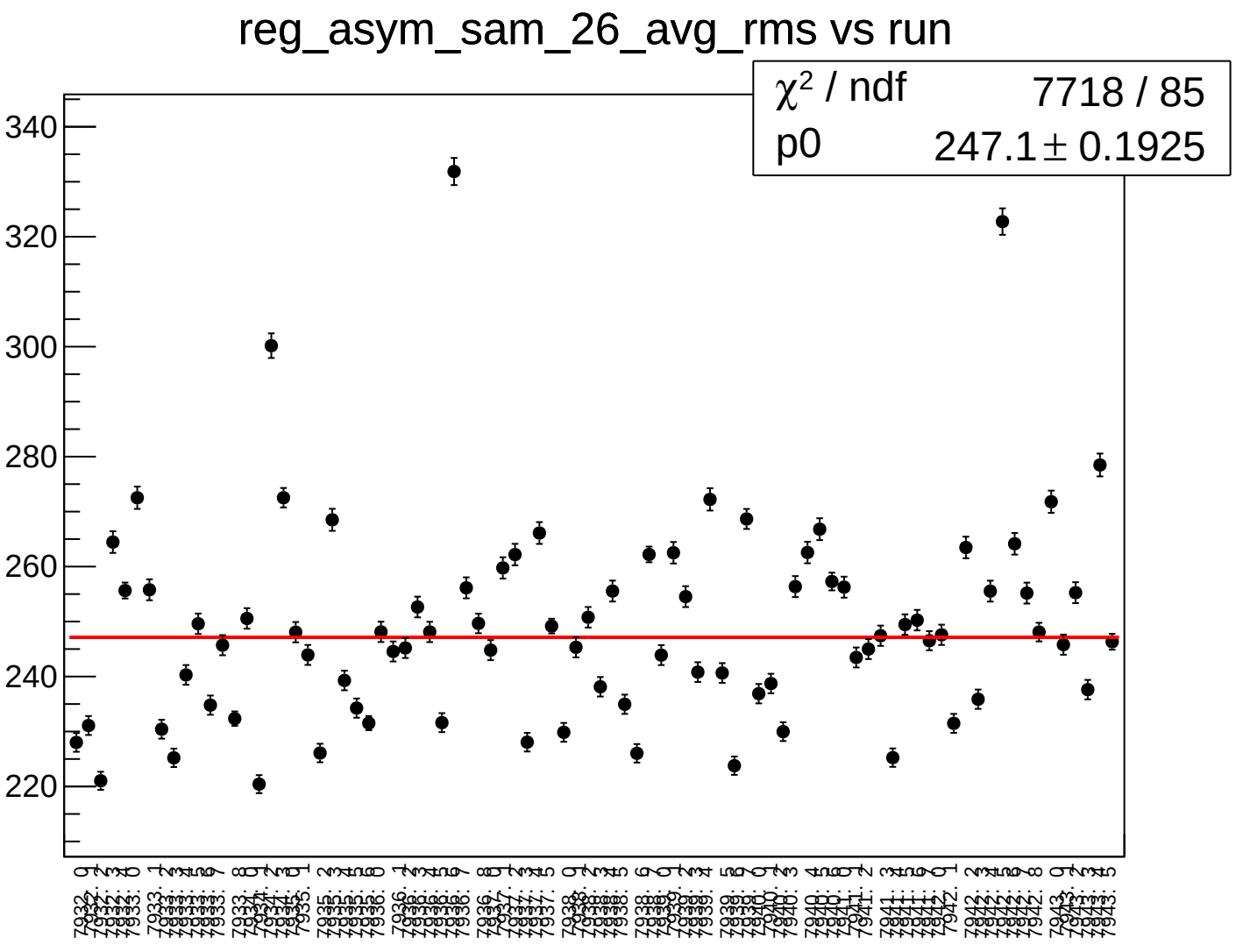

asym_sam_15_avg_mean vs run
χ² / ndf 73.11 / 85
p0 279.1 ± 396.5
pull
Entries 86
Mean 255.5
Std Dev 200.2

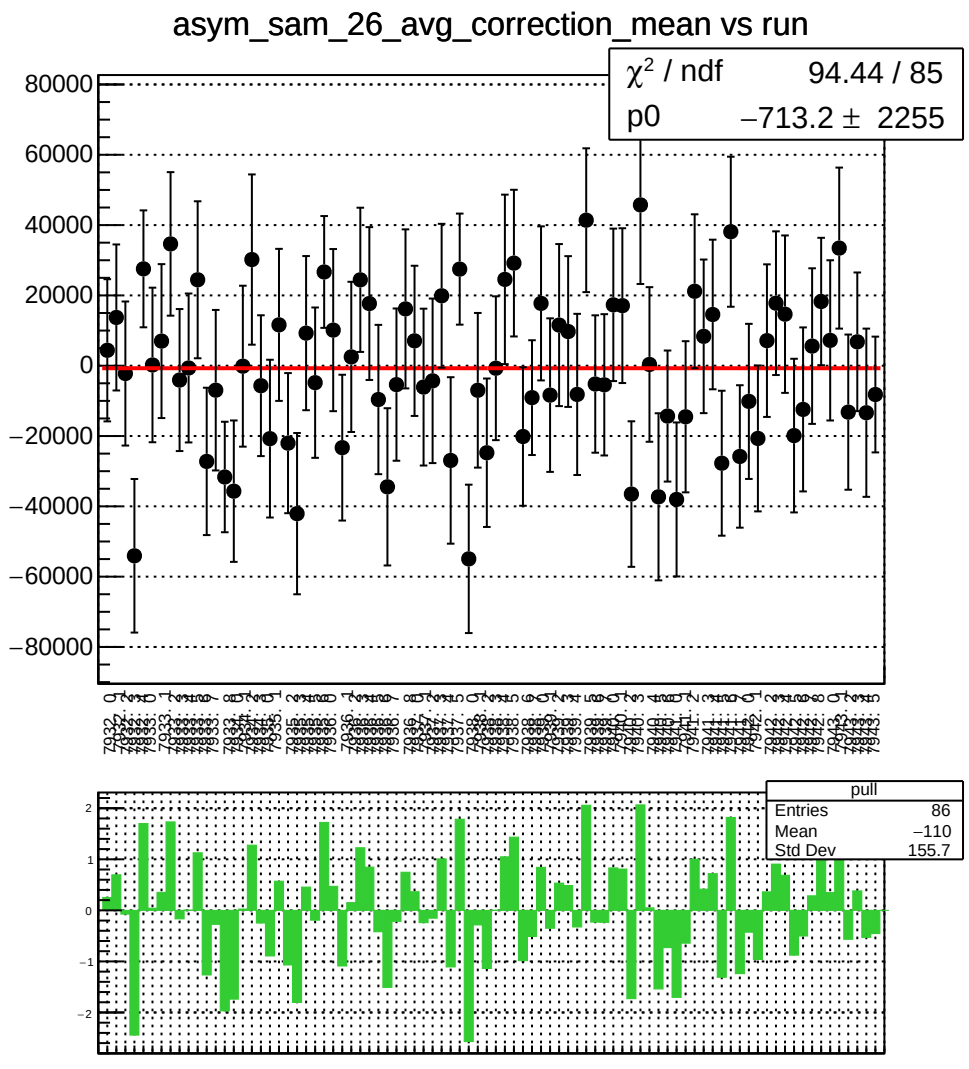

pull1D
Entries 86
Mean −0.008695
Std Dev 0.922

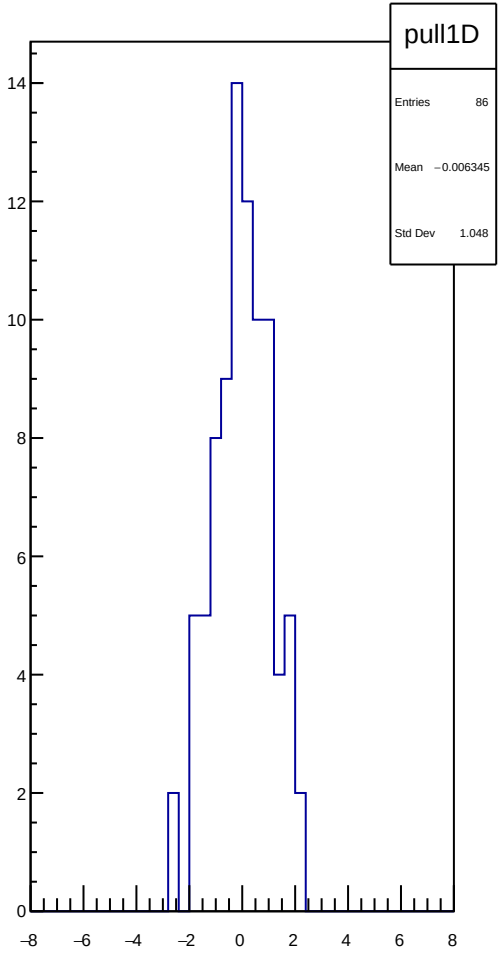

asym_sam_15_avg_rms vs run
χ² / ndf 7155 / 85
p0 360 ± 0.2804
420
400
380
360
340
320
300

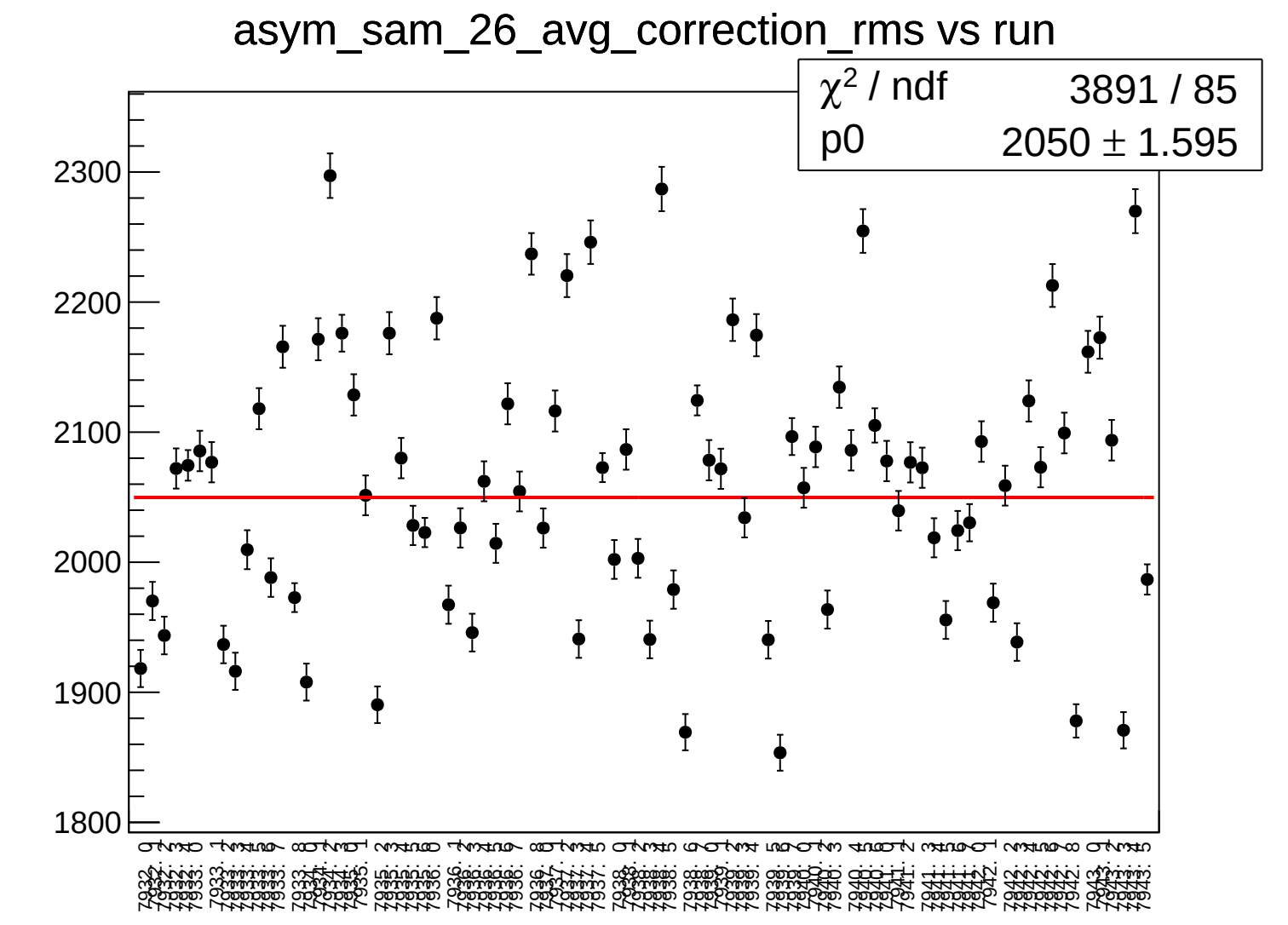

reg_asym_sam_26_avg_mean vs run
χ² / ndf 77.07 / 85
p0 903 ± 272.2
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −124.8
Std Dev 194.6
3
2
1
0
−1
−2

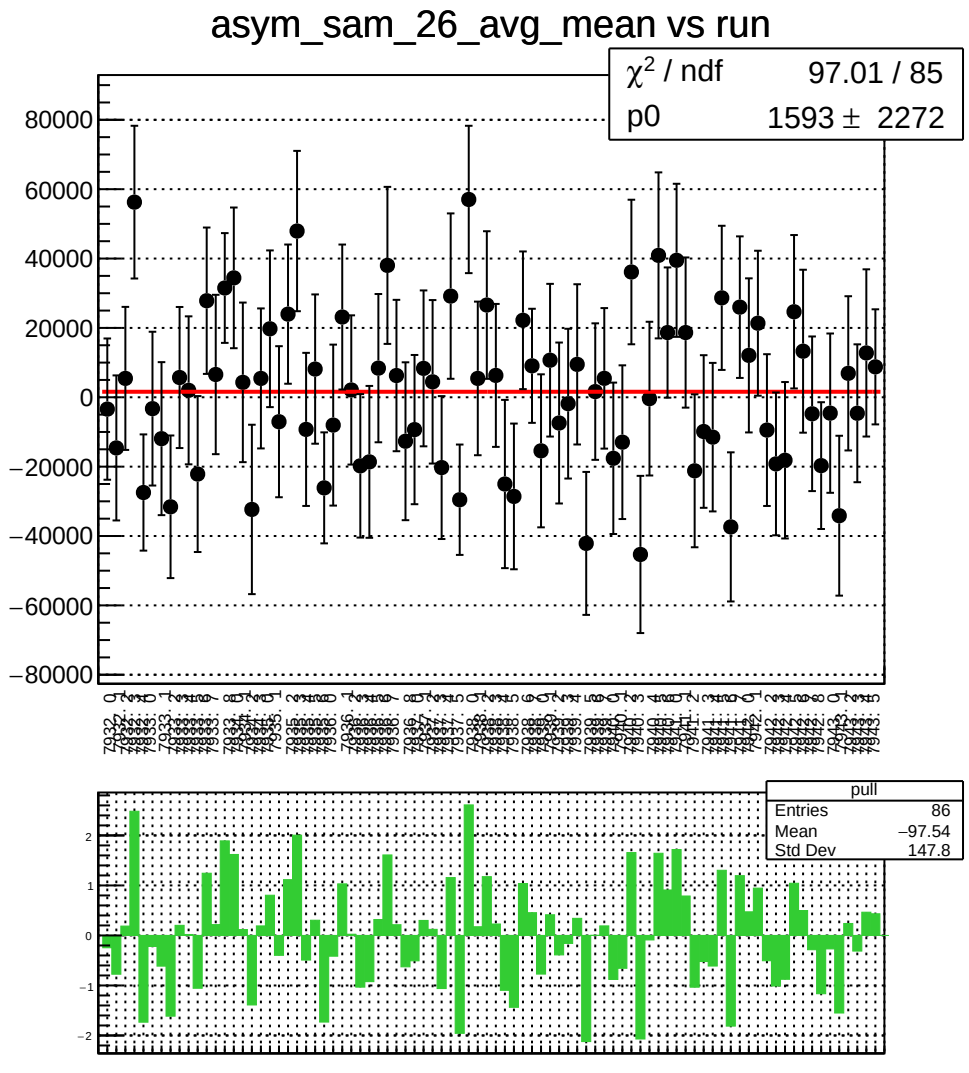

pull1D
Entries 86
Mean 0.01038
Std Dev 0.9466
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

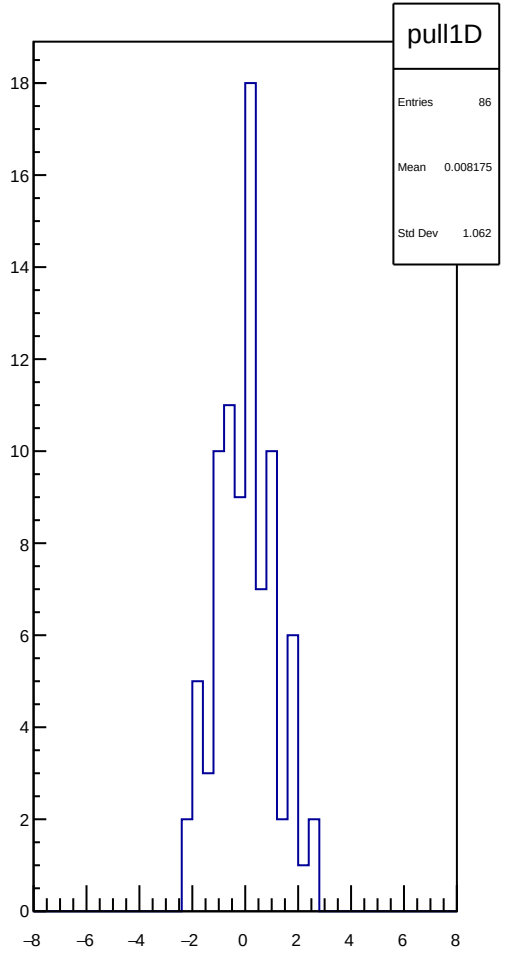

reg_asym_sam_26_avg_rms vs run
χ² / ndf 7718 / 85
p0 247.1 ± 0.1925
340
320
300
280
260
240
220

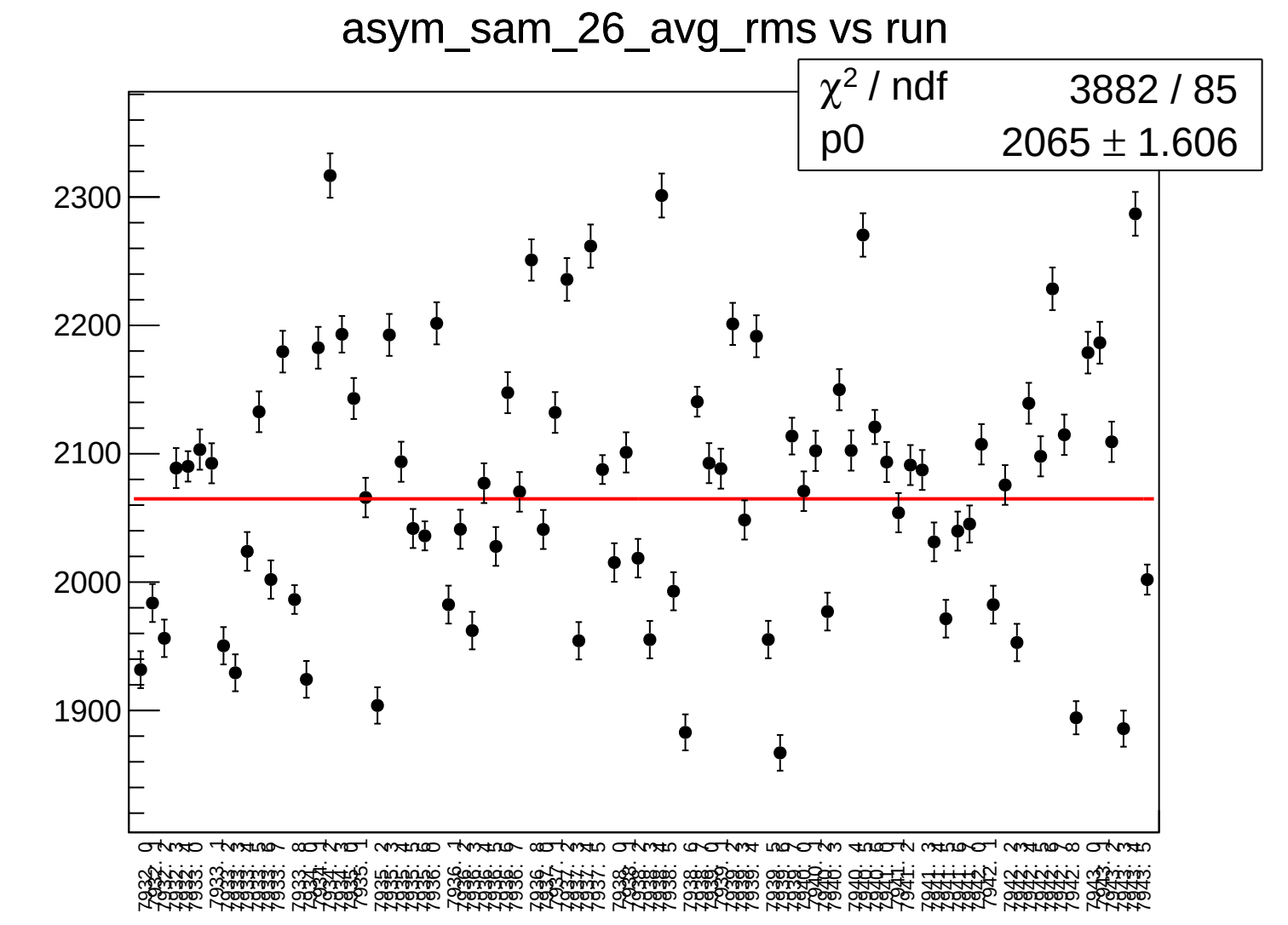

asym_sam_26_avg_correction_mean vs run
χ² / ndf 94.44 / 85
p0 −713.2 ± 2255
pull
Entries 86
Mean −110
Std Dev 155.7

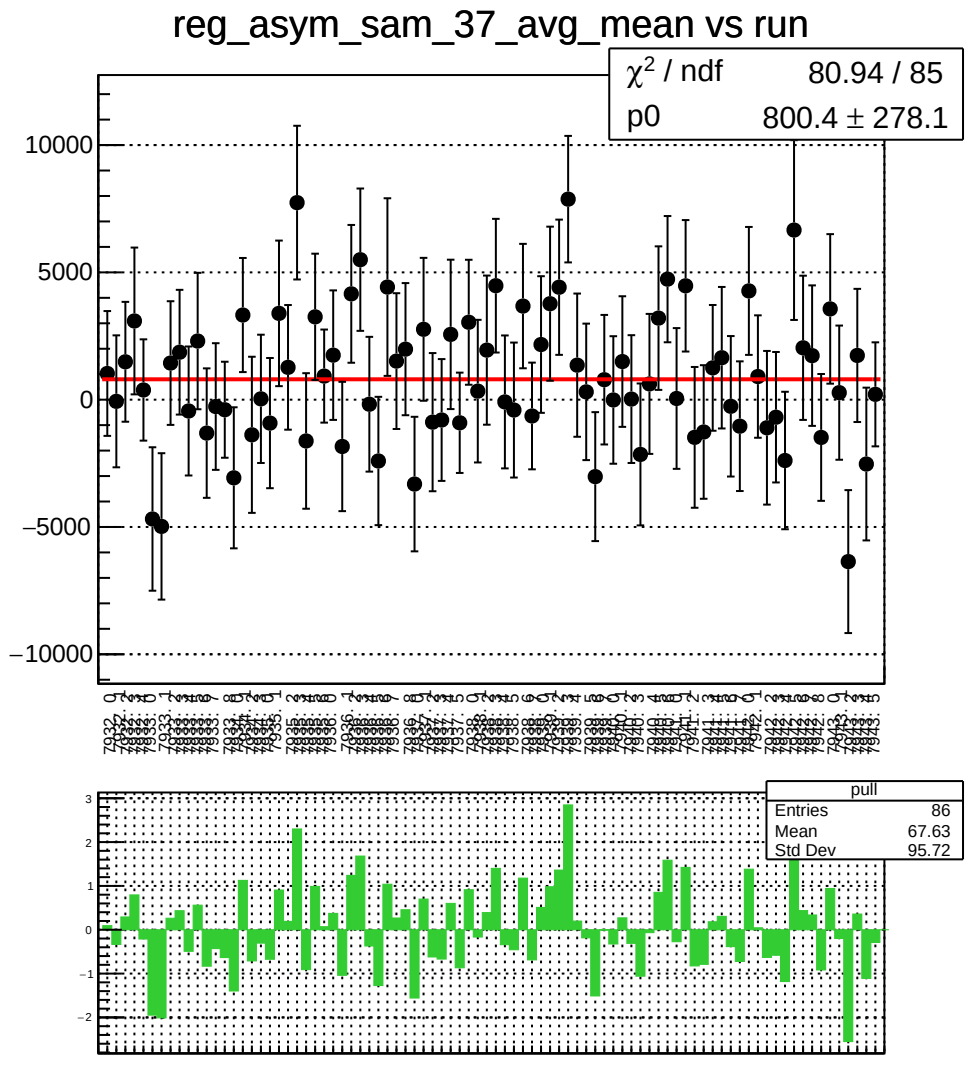

pull1D
Entries 86
Mean −0.006345
Std Dev 1.048

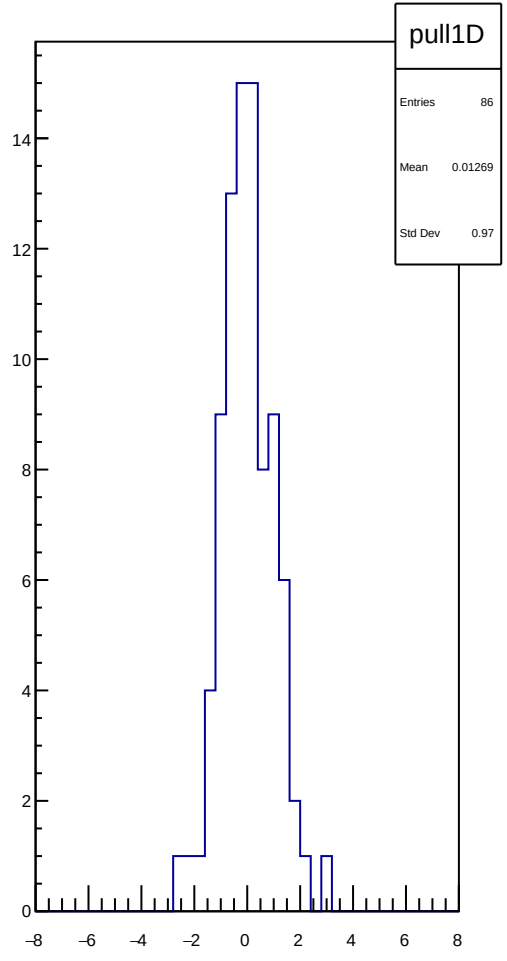

asym_sam_26_avg_correction_rms vs run
χ^2 / ndf 3891 / 85
p0 2050 ± 1.595
2300
2200
2100
2000
1900
1800

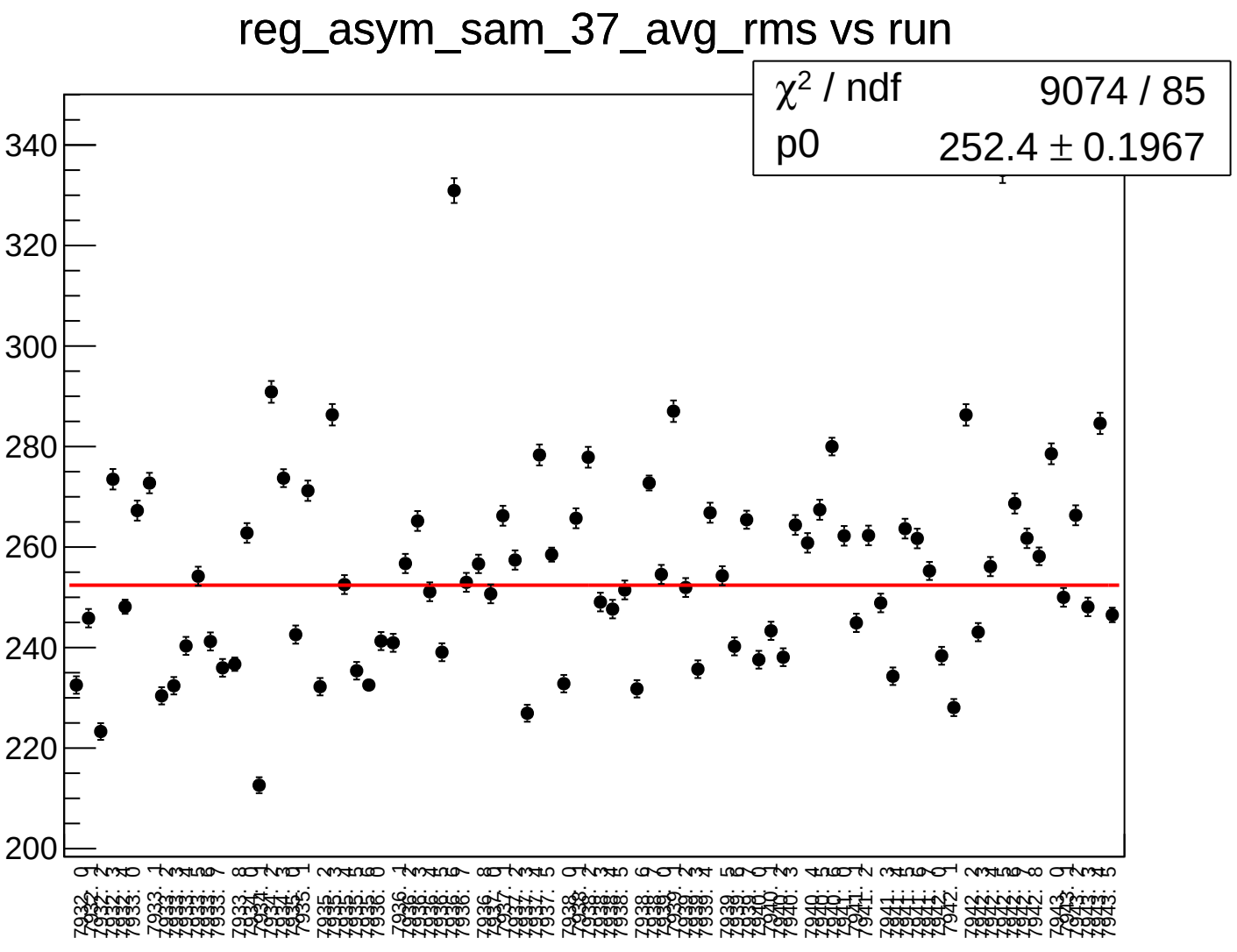

asym_sam_26_avg_mean vs run
χ² / ndf 97.01 / 85
p0 1593 ± 2272
pull
Entries 86
Mean −97.54
Std Dev 147.8

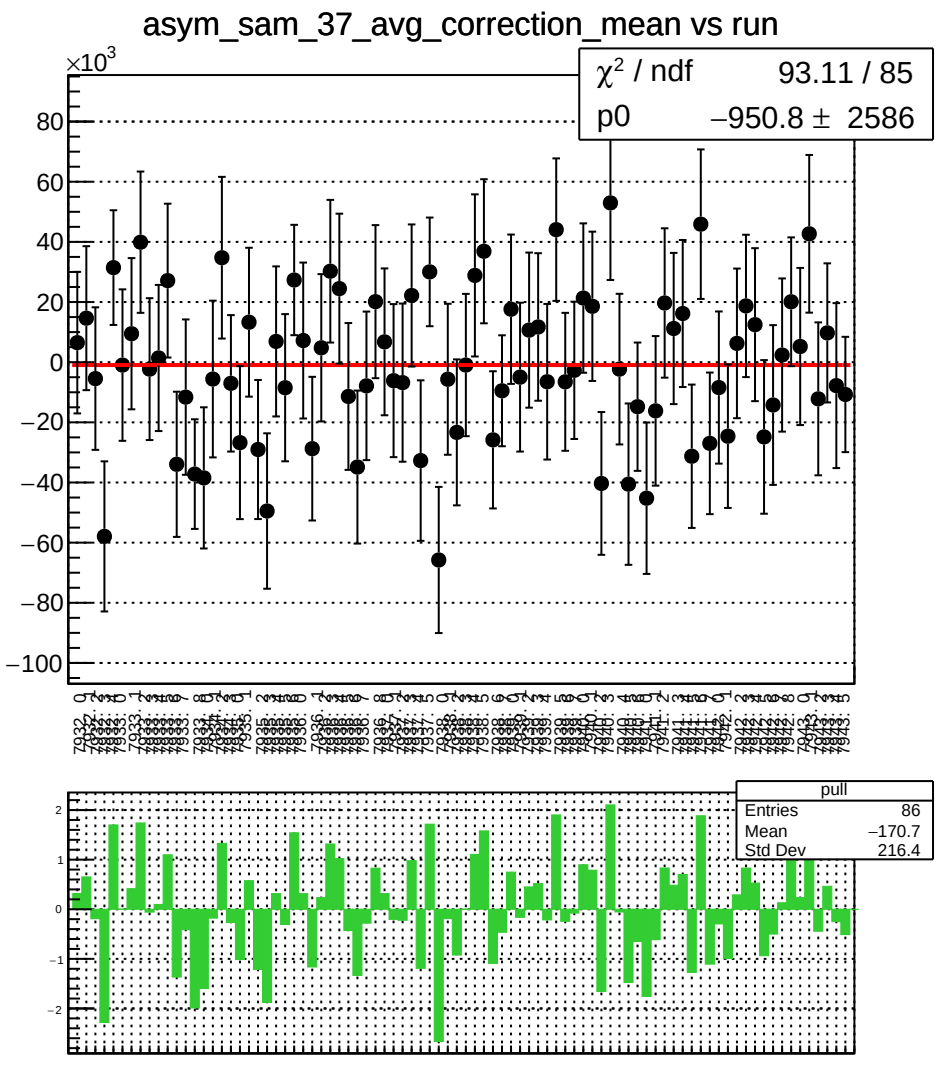

pull1D
Entries 86
Mean 0.008175
Std Dev 1.062

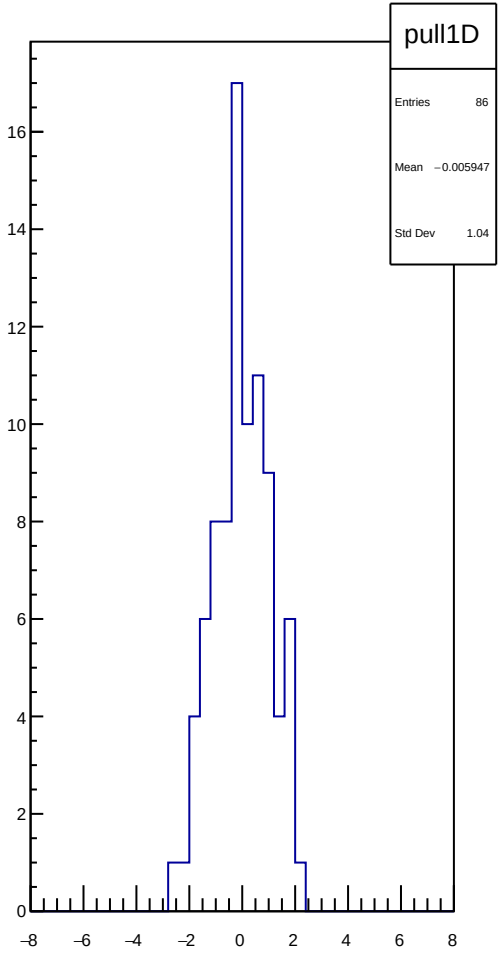

asym_sam_26_avg_rms vs run
χ² / ndf 3882 / 85
p0 2065 ± 1.606
2300
2200
2100
2000
1900

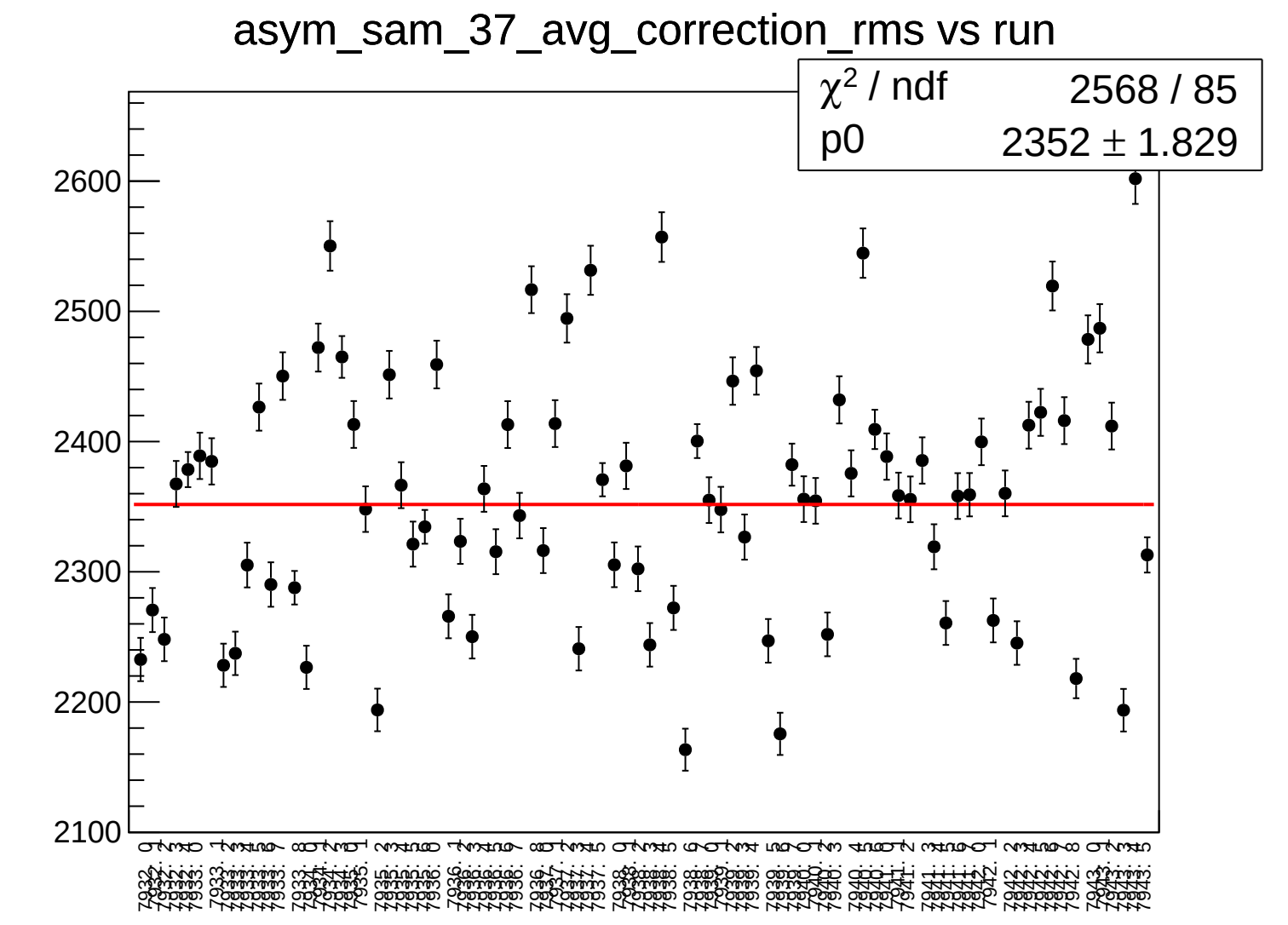

reg_asym_sam_37_avg_mean vs run
χ² / ndf 80.94 / 85
p0 800.4 ± 278.1
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 67.63
Std Dev 95.72
3
2
1
0
−1
−2

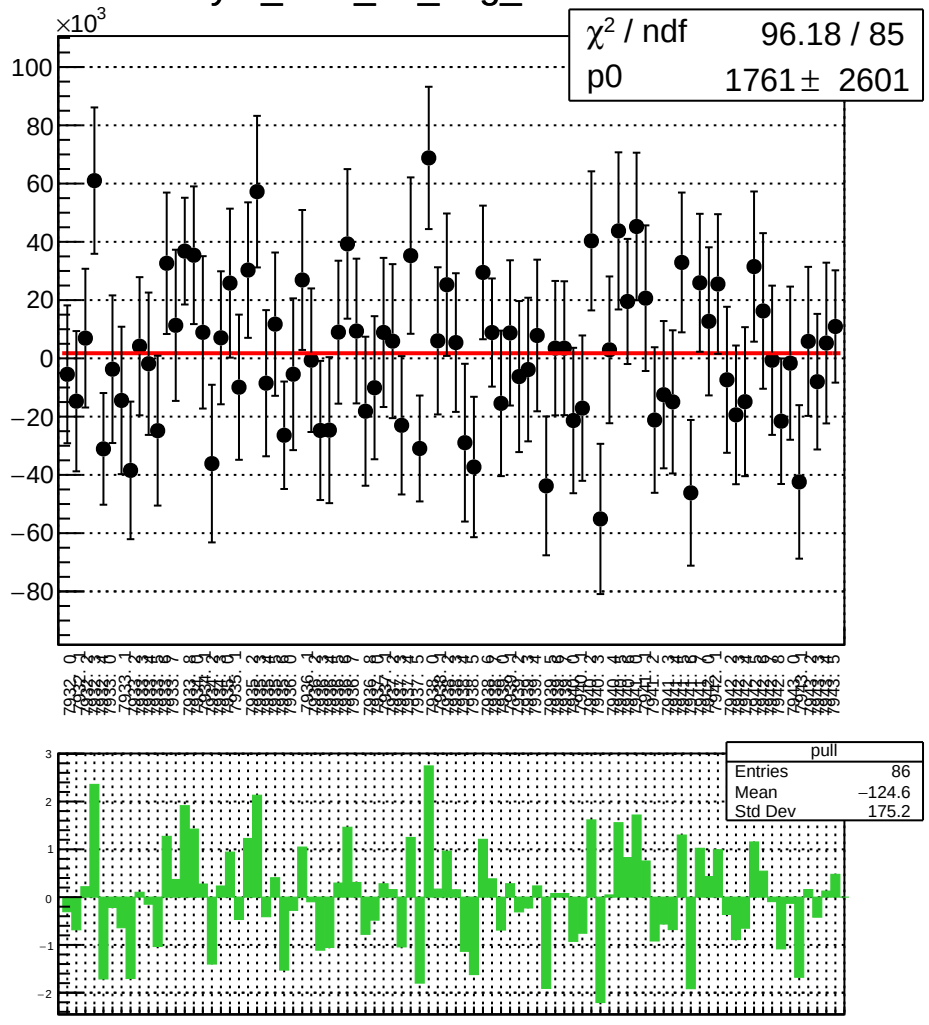

pull1D
Entries 86
Mean 0.01269
Std Dev 0.97
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

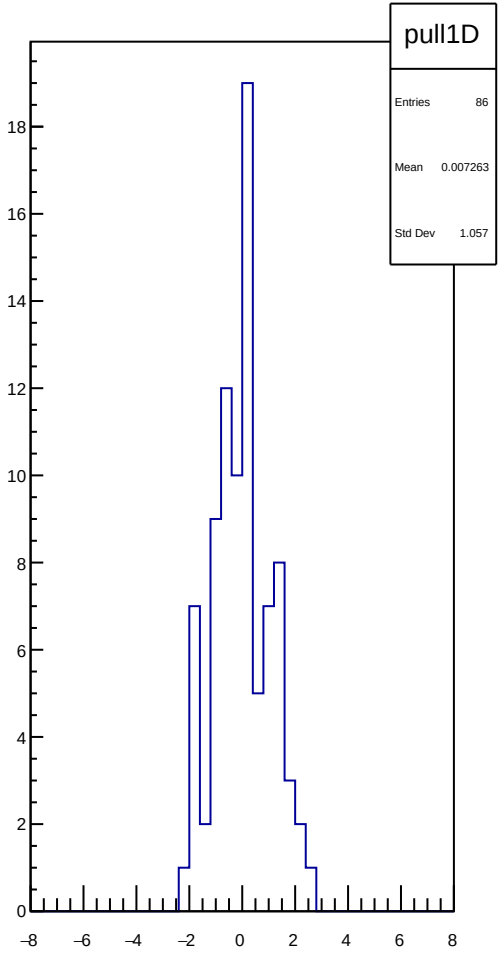

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 9074 / 85
p0 252.4 ± 0.1967
340
320
300
280
260
240
220
200

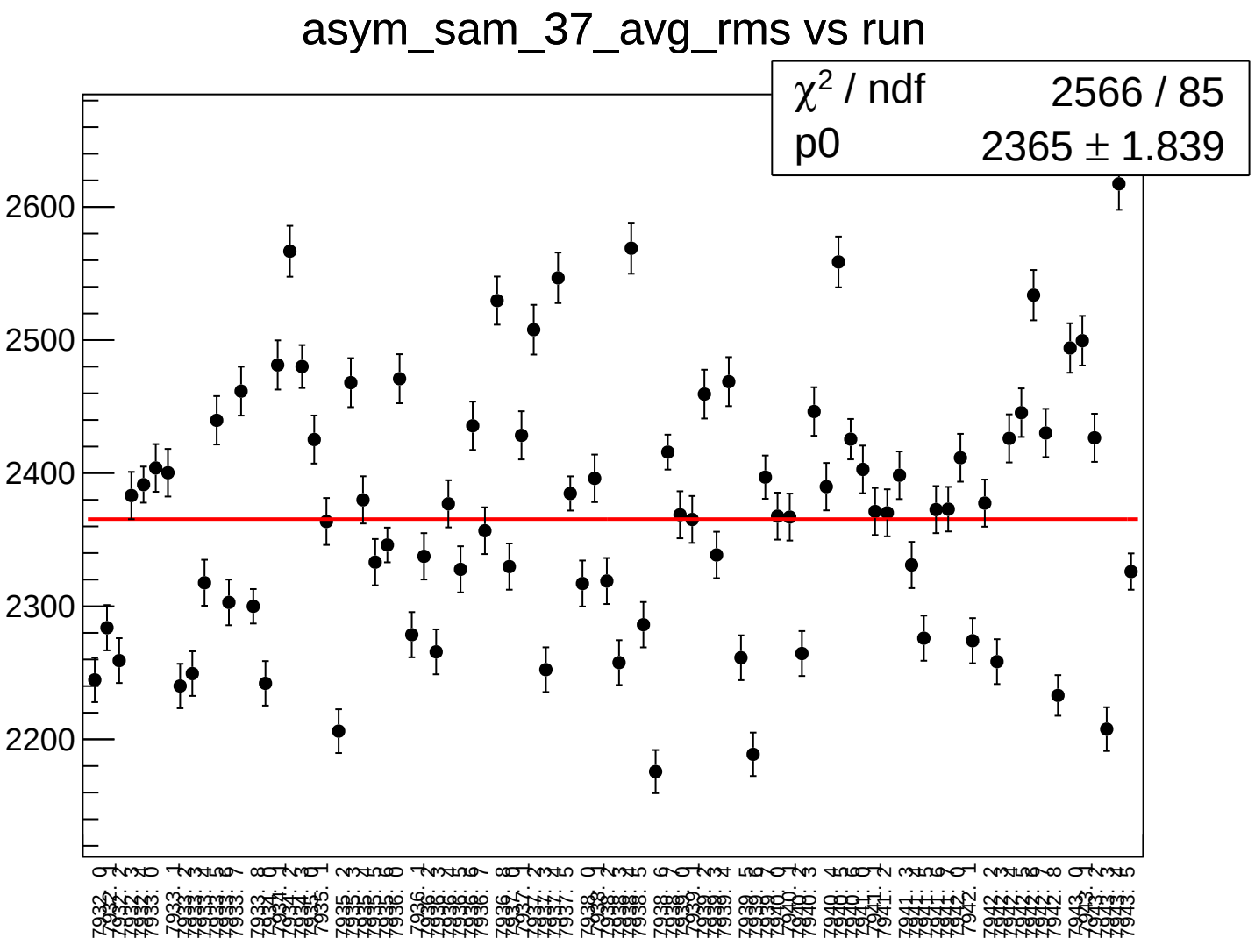

asym_sam_37_avg_correction_mean vs run
×10^3
χ² / ndf 93.11 / 85
p0 −950.8 ± 2586
pull
Entries 86
Mean −170.7
Std Dev 216.4

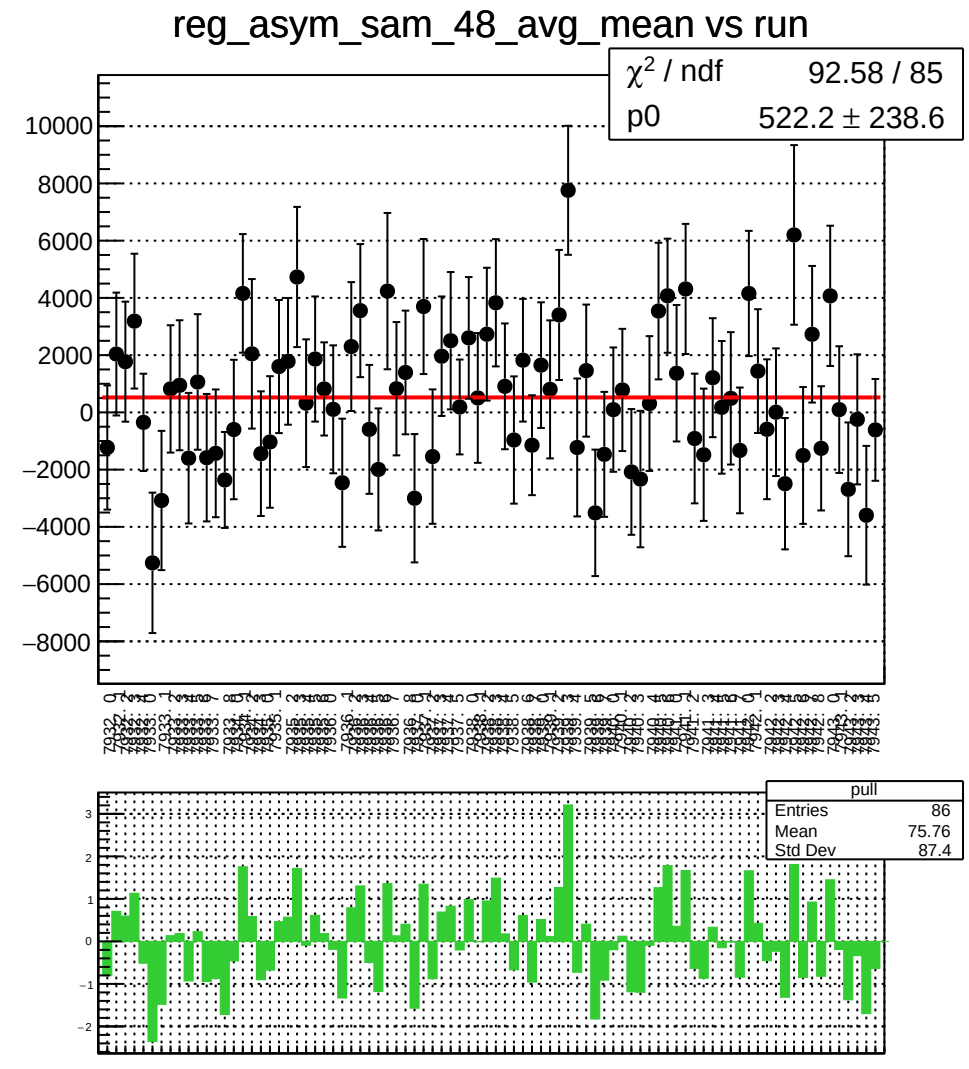

pull1D
Entries 86
Mean −0.005947
Std Dev 1.04

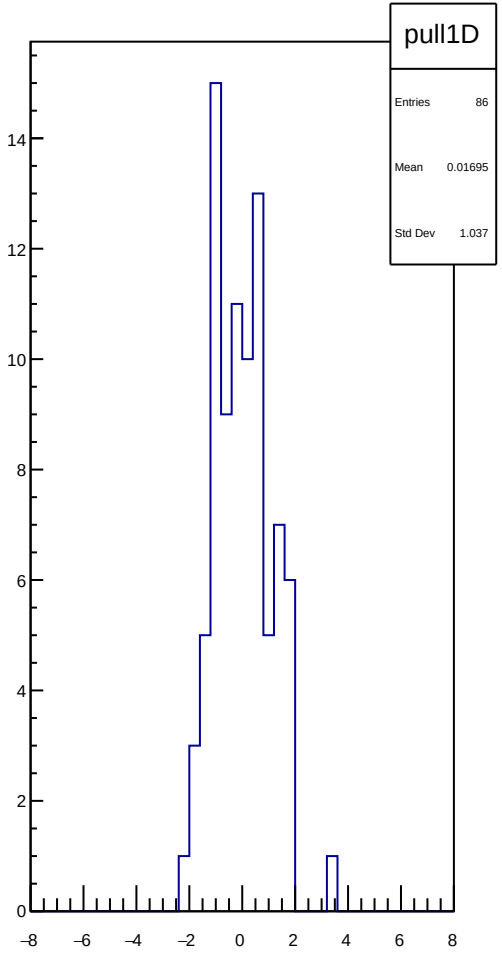

asym_sam_37_avg_correction_rms vs run
χ² / ndf 2568 / 85
p0 2352 ± 1.829
2600
2500
2400
2300
2200
2100

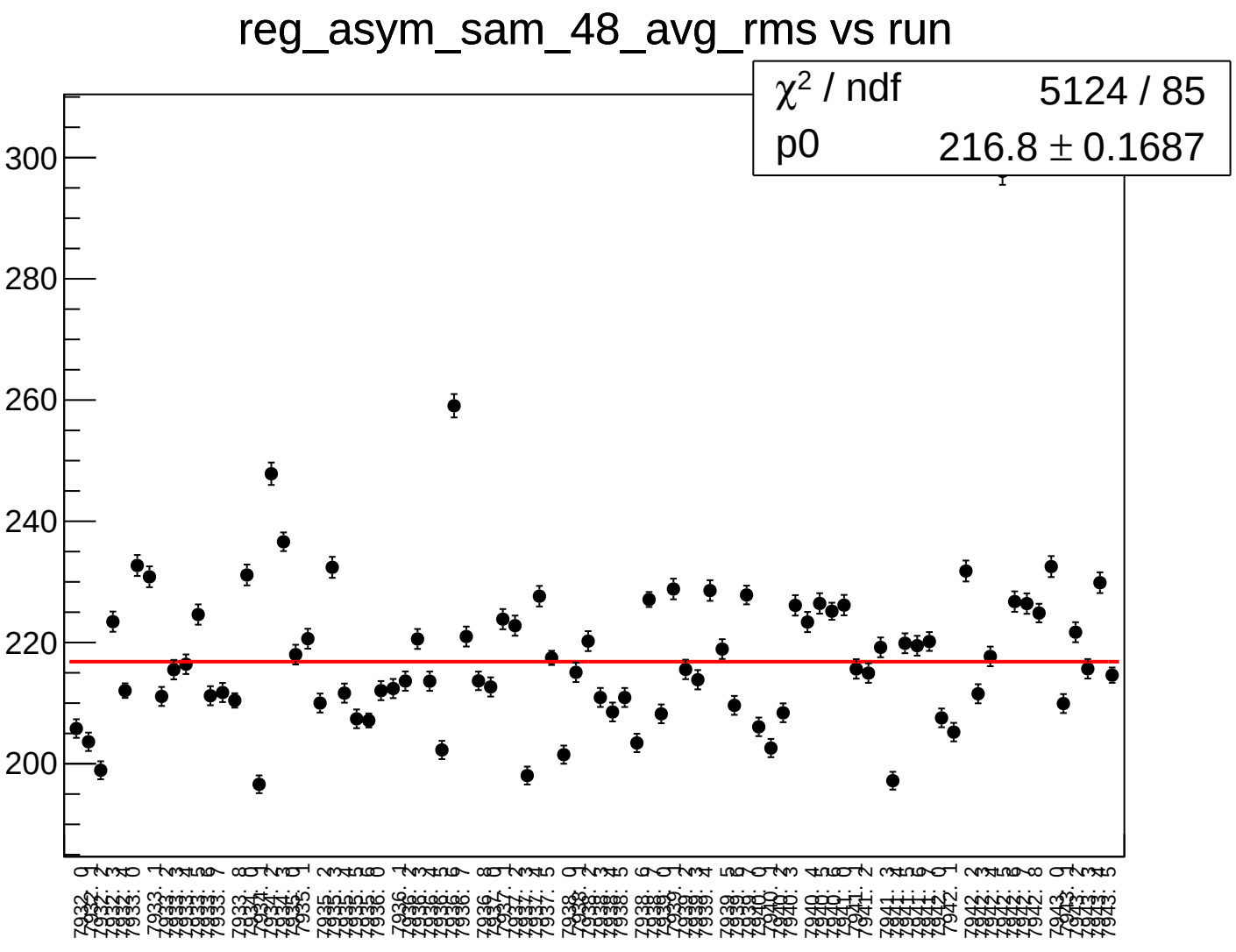

asym_sam_37_avg_mean vs run
×10^3
χ² / ndf 96.18 / 85
p0 1761 ± 2601
pull
Entries 86
Mean −124.6
Std Dev 175.2

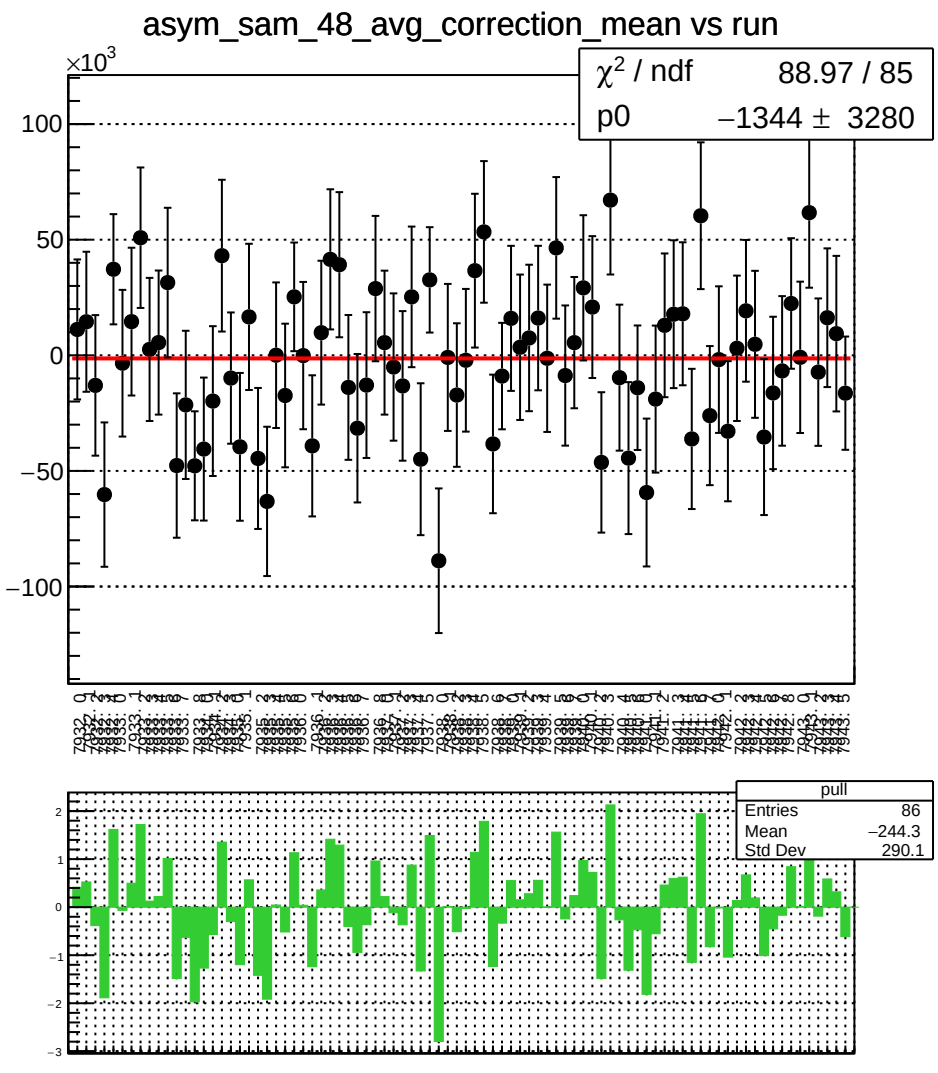

pull1D
Entries 86
Mean 0.007263
Std Dev 1.057

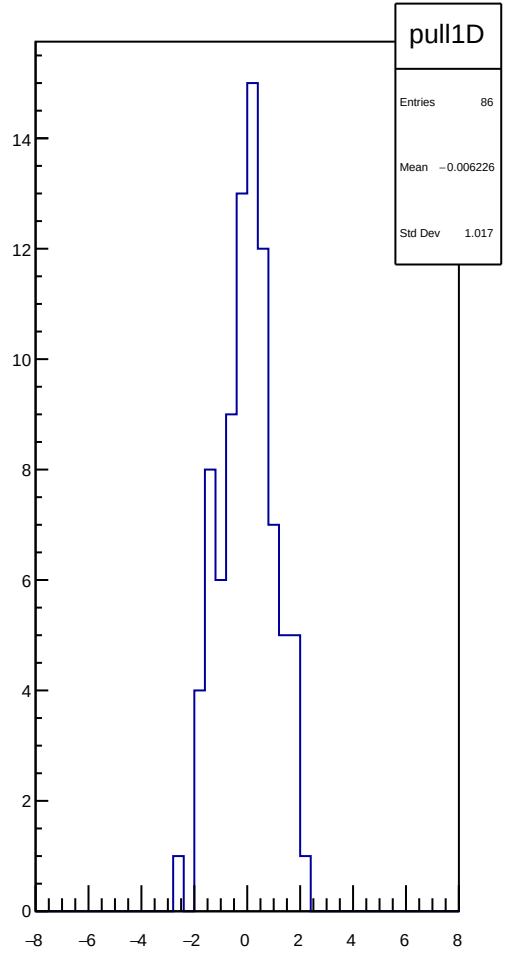

asym_sam_37_avg_rms vs run
χ² / ndf 2566 / 85
p0 2365 ± 1.839
2600
2500
2400
2300
2200

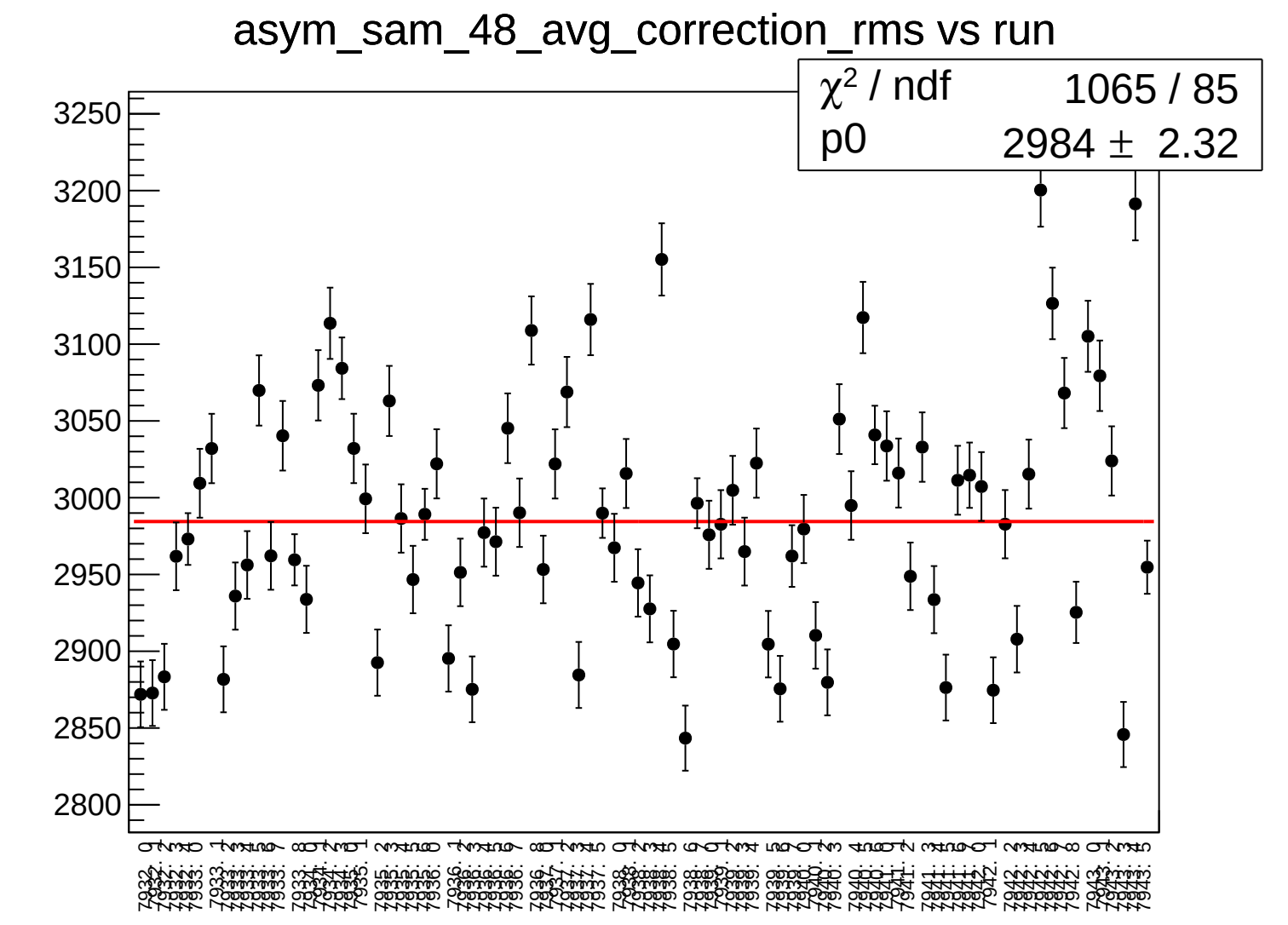

reg_asym_sam_48_avg_mean vs run
χ² / ndf 92.58 / 85
p0 522.2 ± 238.6
pull
Entries 86
Mean 75.76
Std Dev 87.4

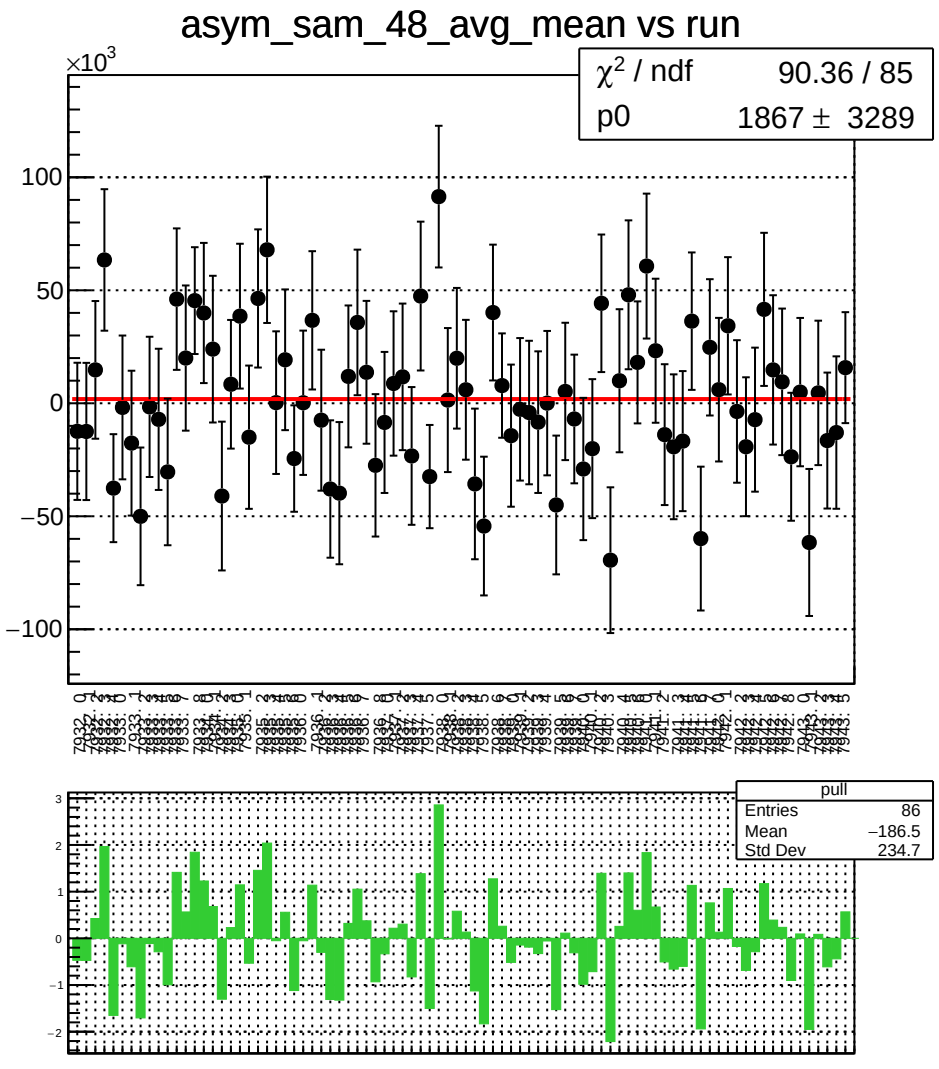

pull1D
Entries 86
Mean 0.01695
Std Dev 1.037

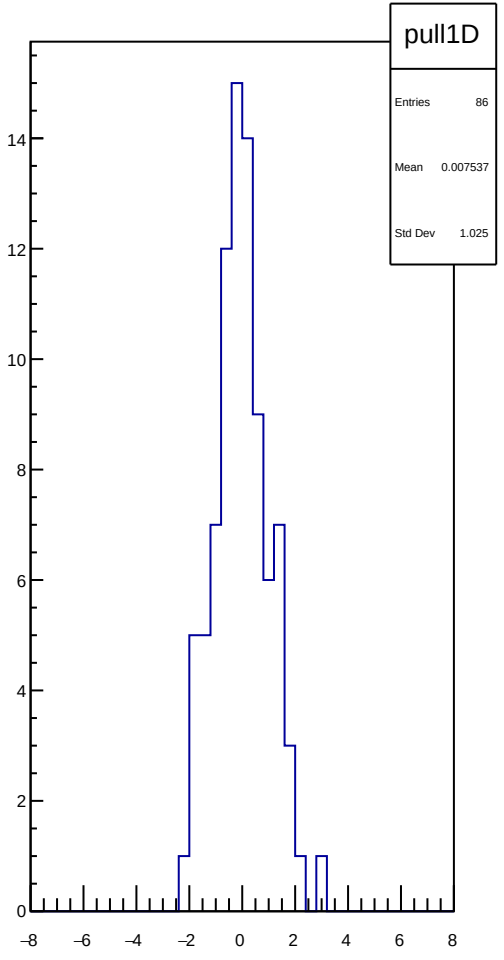

reg_asym_sam_48_avg_rms vs run
χ² / ndf 5124 / 85
p0 216.8 ± 0.1687
300
280
260
240
220
200

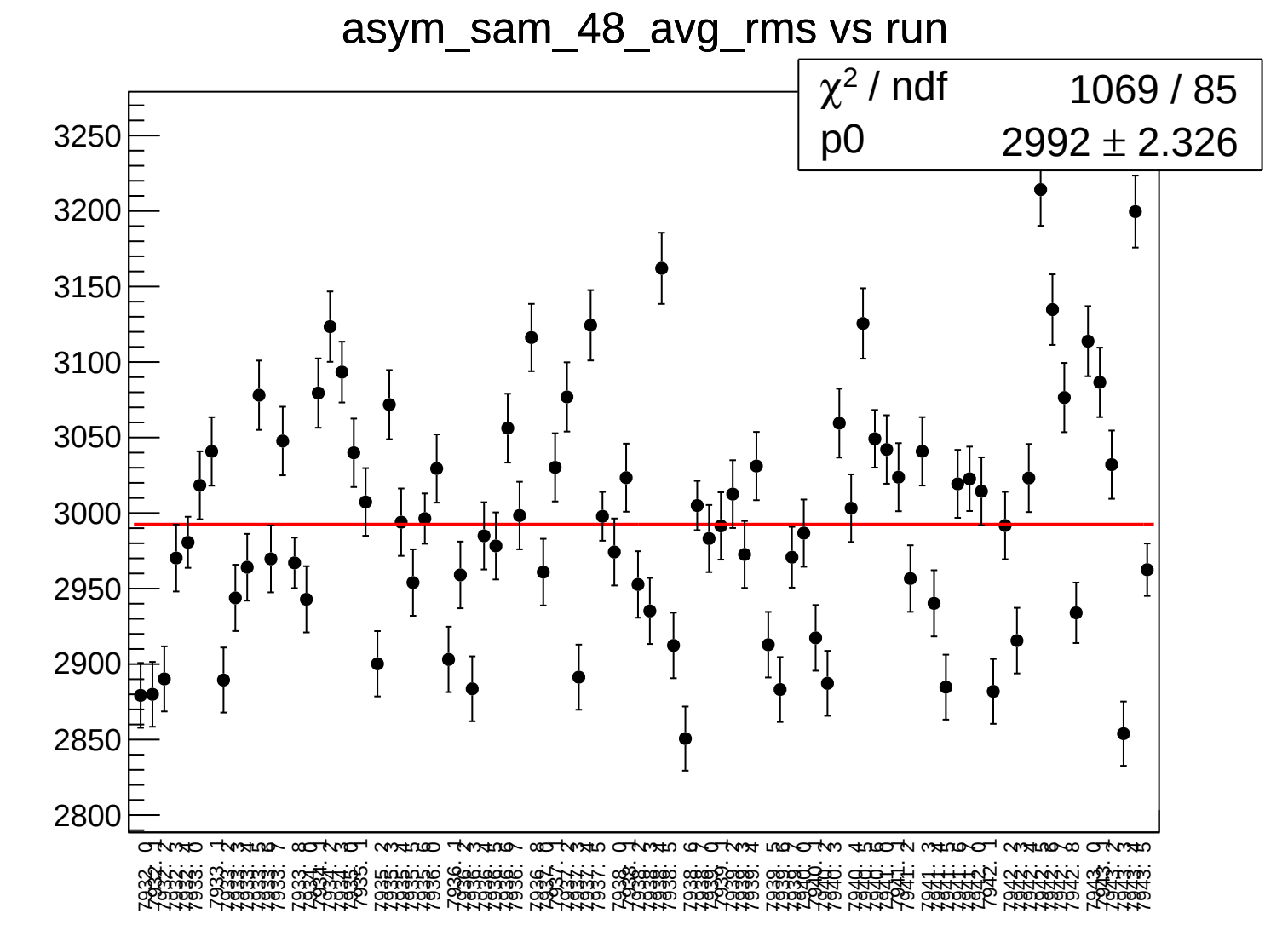

asym_sam_48_avg_correction_mean vs run
×10^3
χ² / ndf 88.97 / 85
p0 −1344 ± 3280
100
50
0
−50
−100
pull
Entries 86
Mean −244.3
Std Dev 290.1
2
1
0
−1
−2
−3

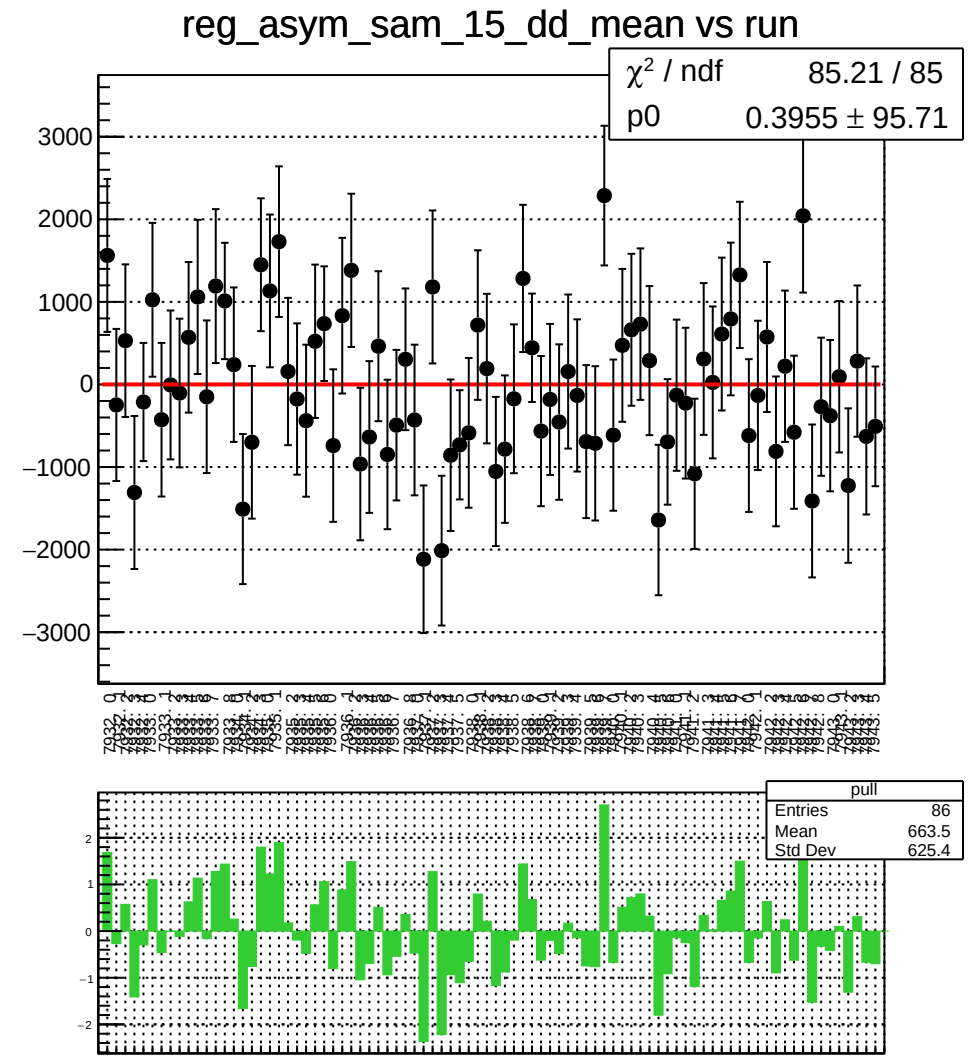

pull1D
Entries 86
Mean −0.006226
Std Dev 1.017
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

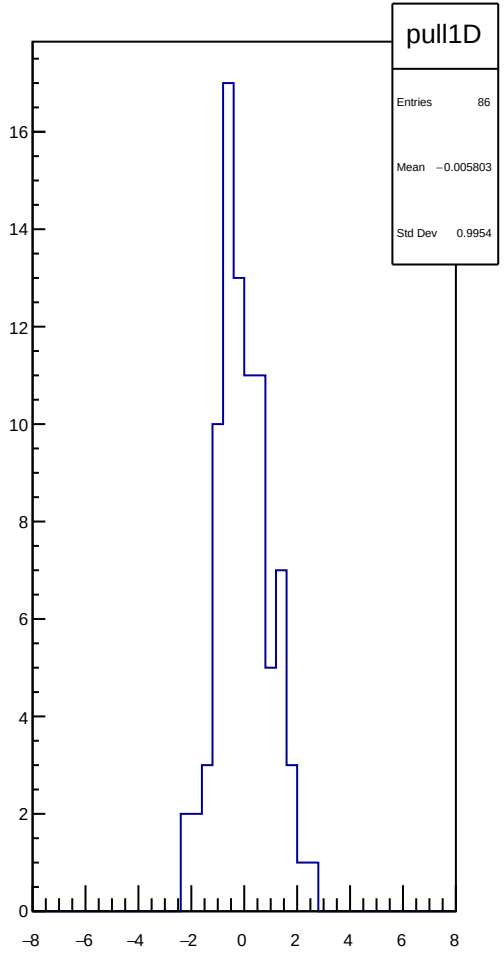

asym_sam_48_avg_correction_rms vs run
χ² / ndf 1065 / 85
p0 2984 ± 2.32
3250
3200
3150
3100
3050
3000
2950
2900
2850
2800

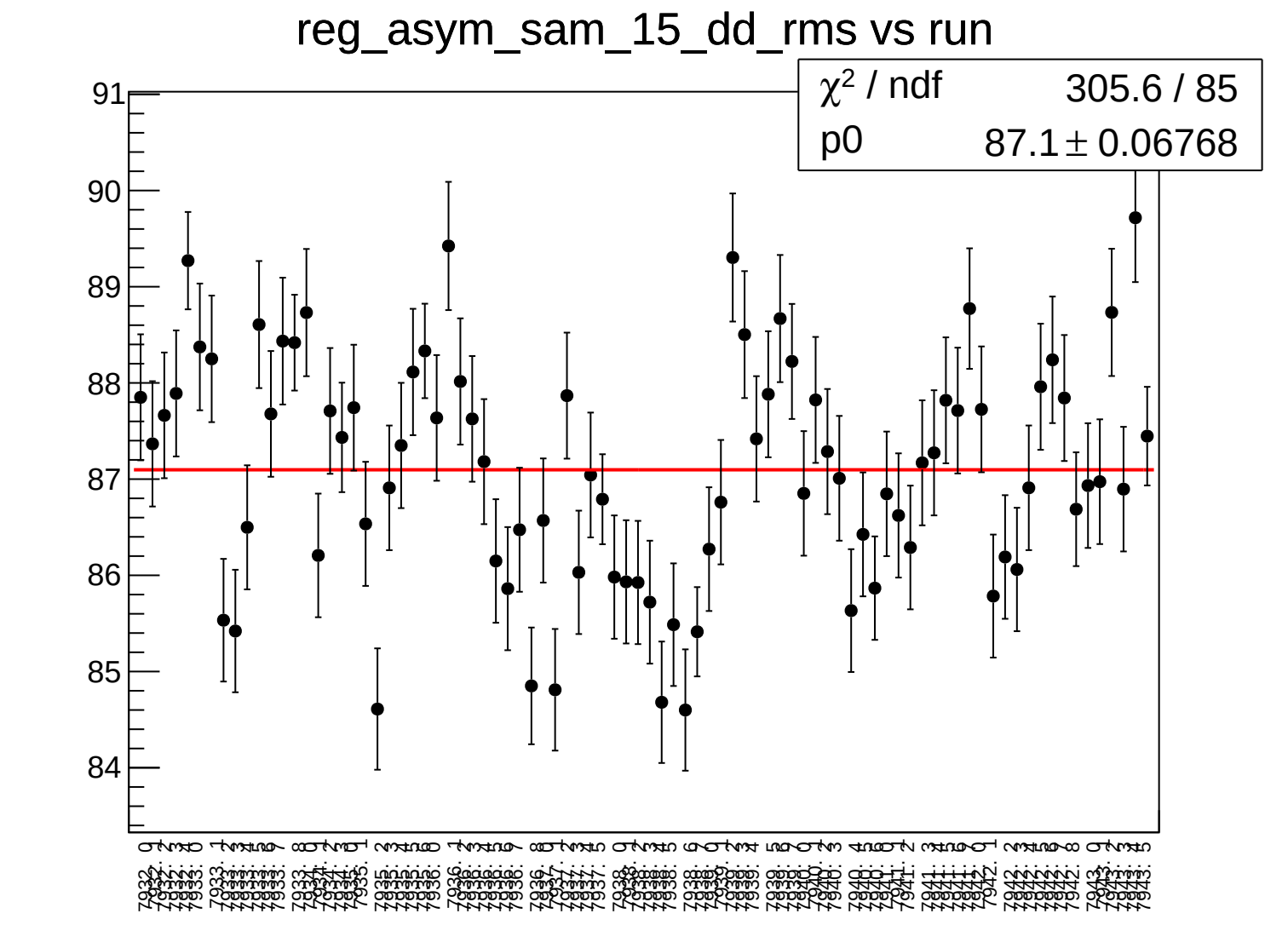

asym_sam_48_avg_mean vs run
×10^3
χ^2 / ndf 90.36 / 85
p0 1867 ± 3289
100
50
0
−50
−100
pull
Entries 86
Mean −186.5
Std Dev 234.7
3
2
1
0
−1
−2

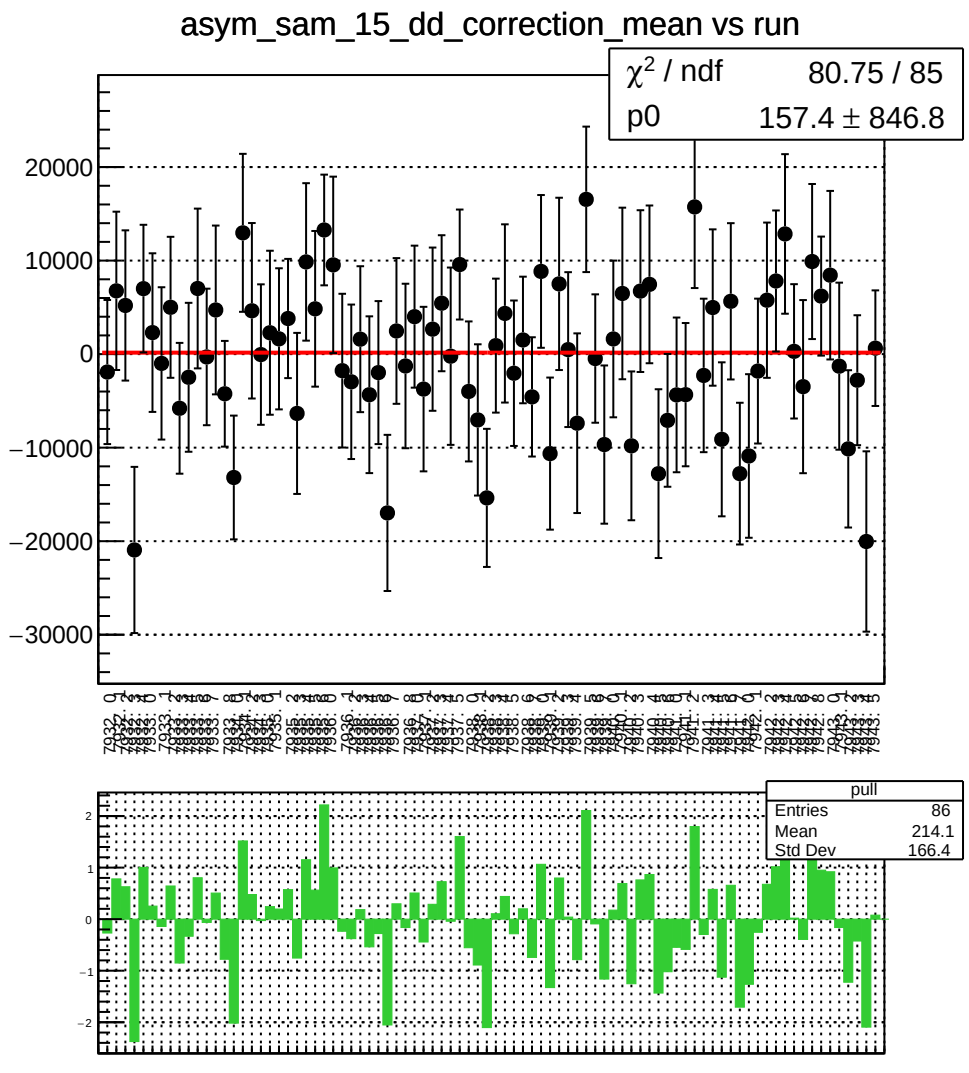

pull1D
Entries 86
Mean 0.007537
Std Dev 1.025
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

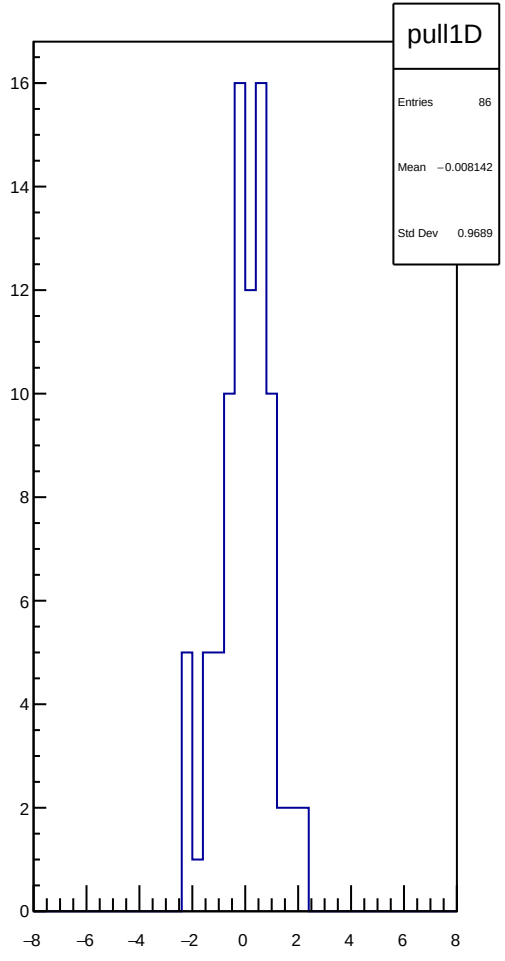

asym_sam_48_avg_rms vs run
χ^2 / ndf 1069 / 85
p0 2992 ± 2.326
3250
3200
3150
3100
3050
3000
2950
2900
2850
2800

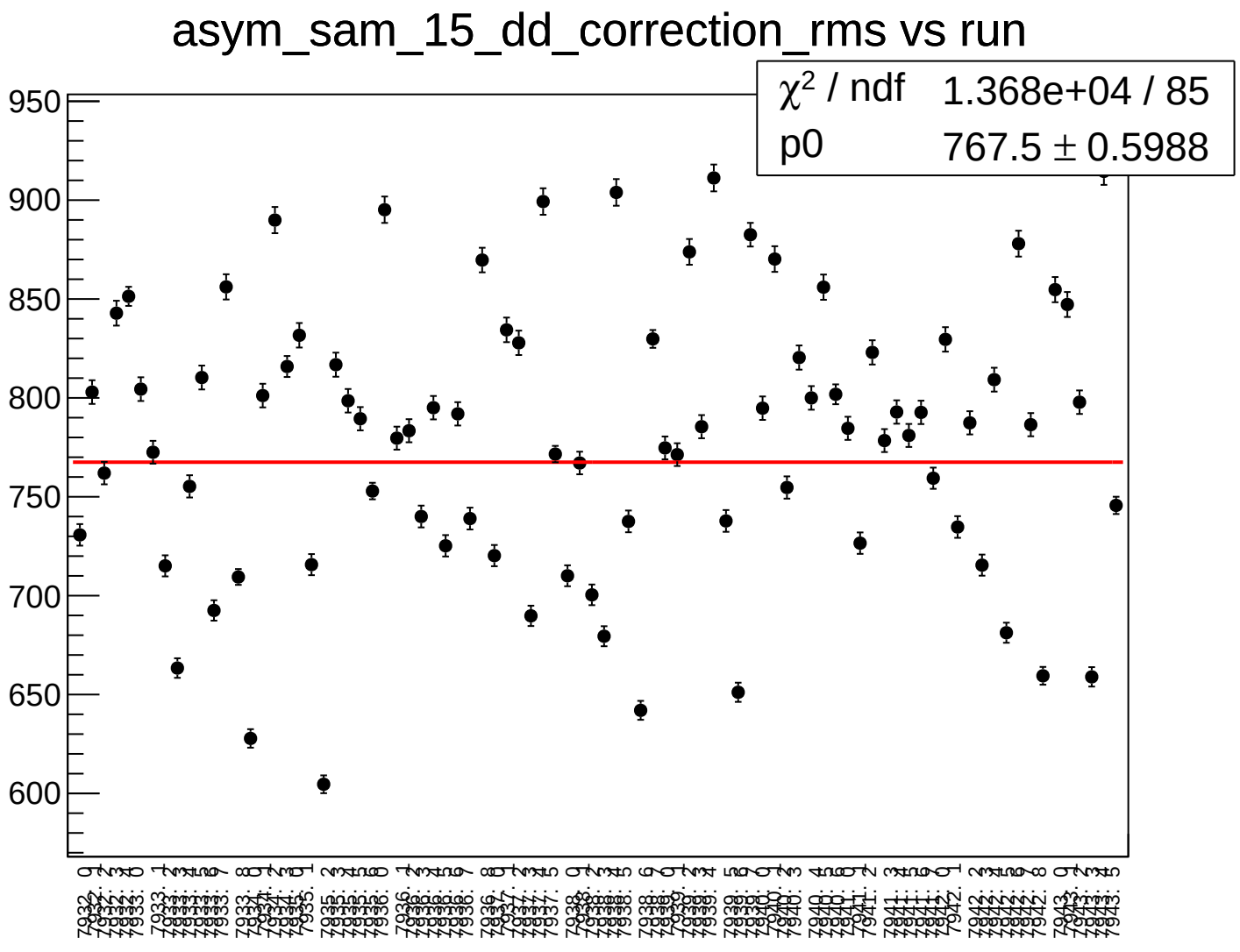

reg_asym_sam_15_dd_mean vs run
χ² / ndf 85.21 / 85
p0 0.3955 ± 95.71
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 663.5
Std Dev 625.4
2
1
0
−1
−2

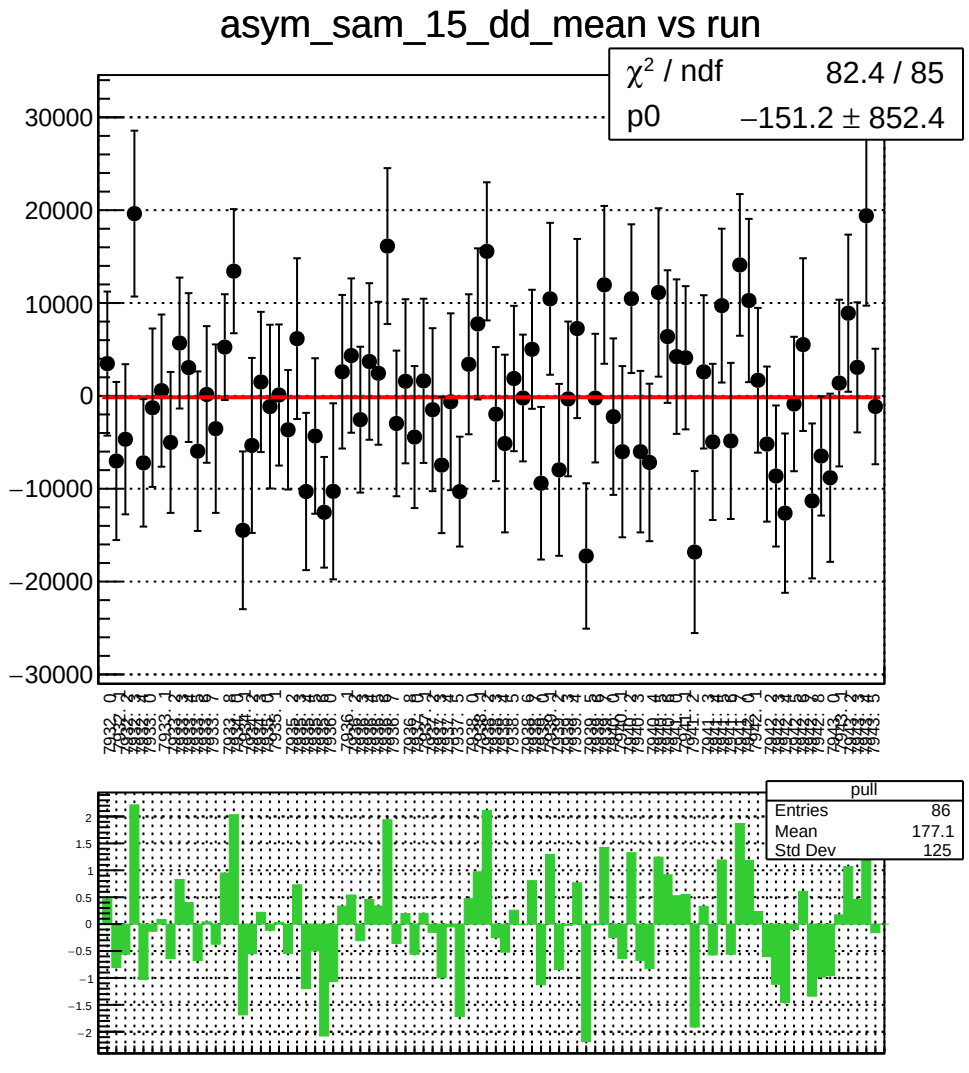

pull1D
Entries 86
Mean −0.005803
Std Dev 0.9954
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

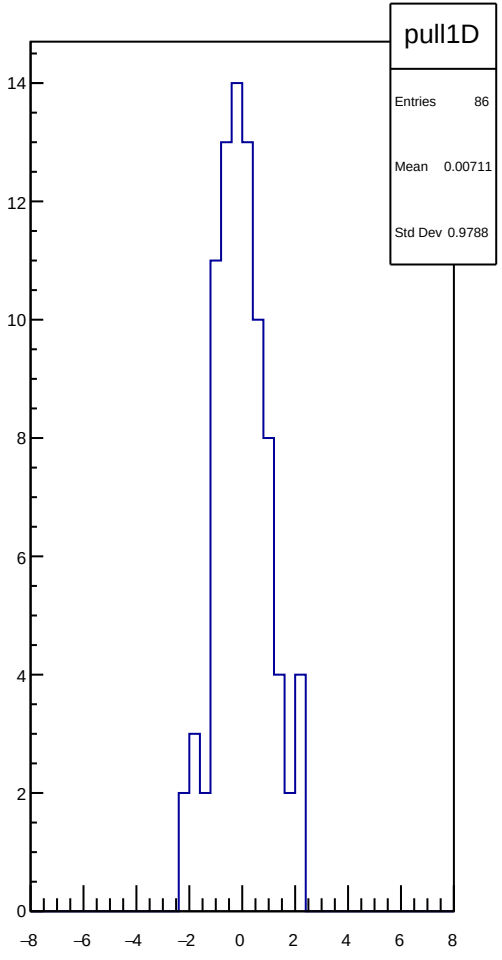

reg_asym_sam_15_dd_rms vs run
χ² / ndf 305.6 / 85
p0 87.1 ± 0.06768
91
90
89
88
87
86
85
84

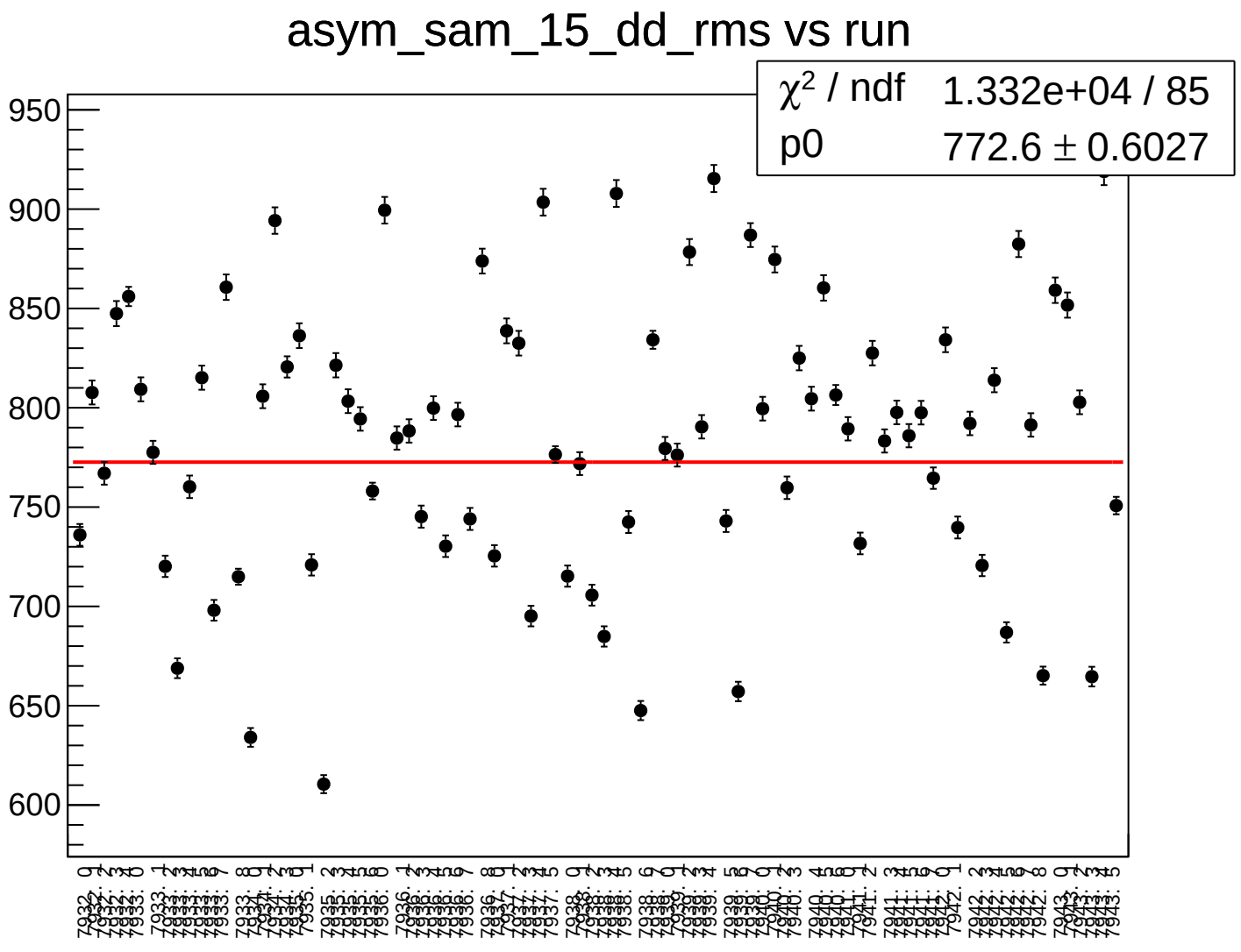

asym_sam_15_dd_correction_mean vs run
χ² / ndf 80.75 / 85
p0 157.4 ± 846.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 214.1
Std Dev 166.4
2
1
0
−1
−2

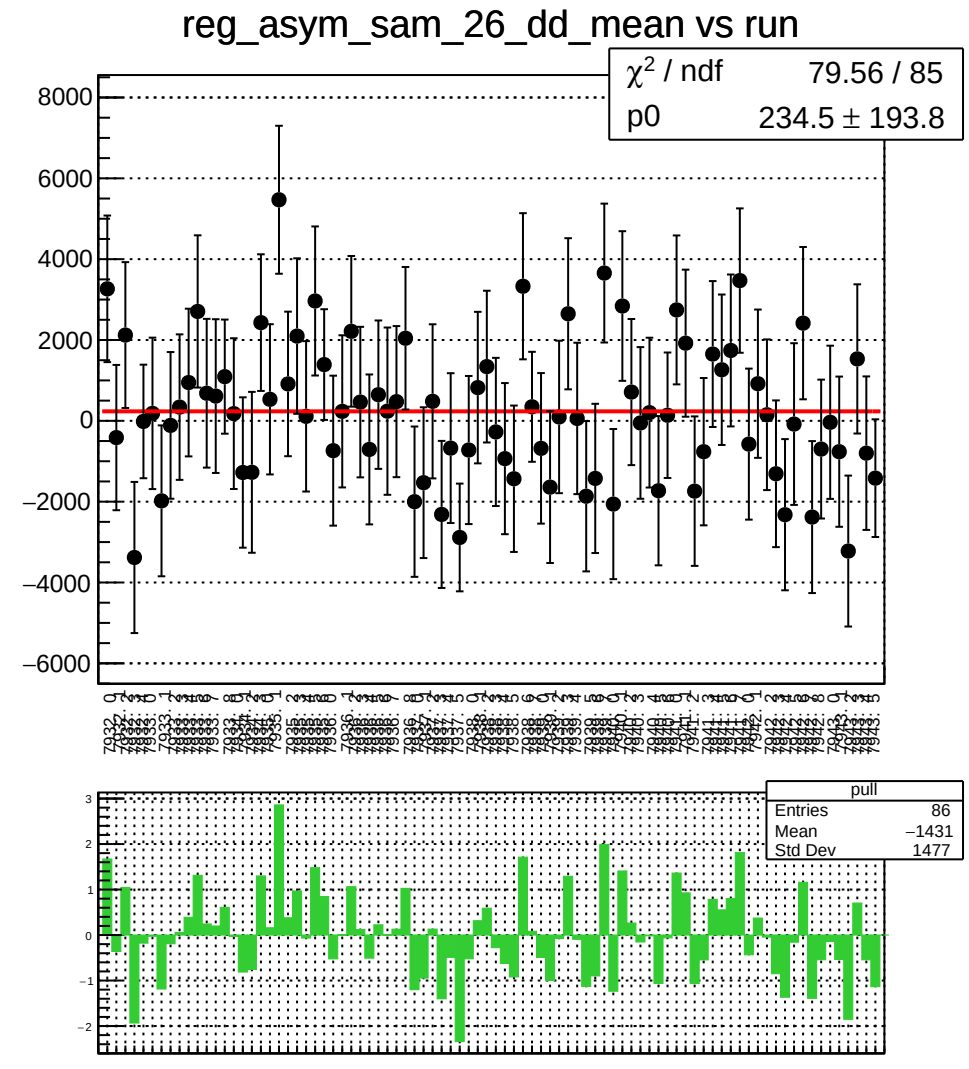

pull1D
Entries 86
Mean −0.008142
Std Dev 0.9689
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

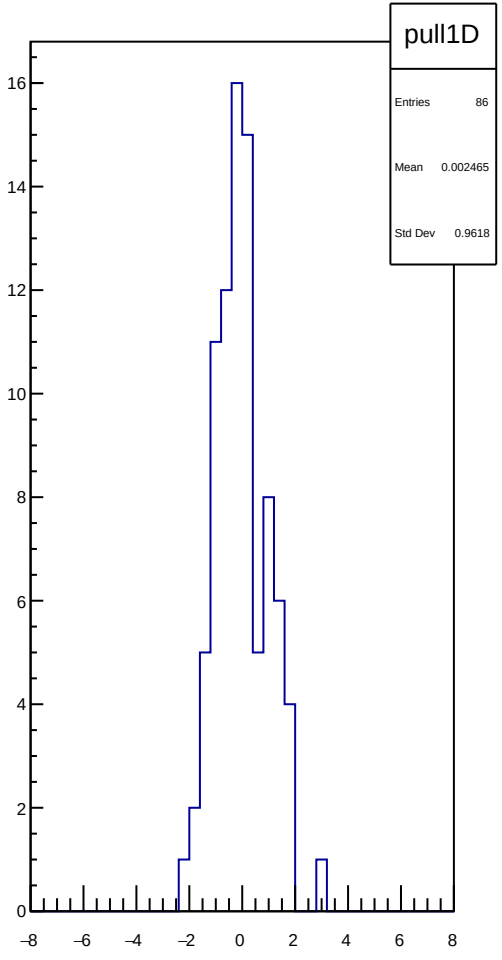

asym_sam_15_dd_correction_rms vs run
χ² / ndf 1.368e+04 / 85
p0 767.5 ± 0.5988
950
900
850
800
750
700
650
600

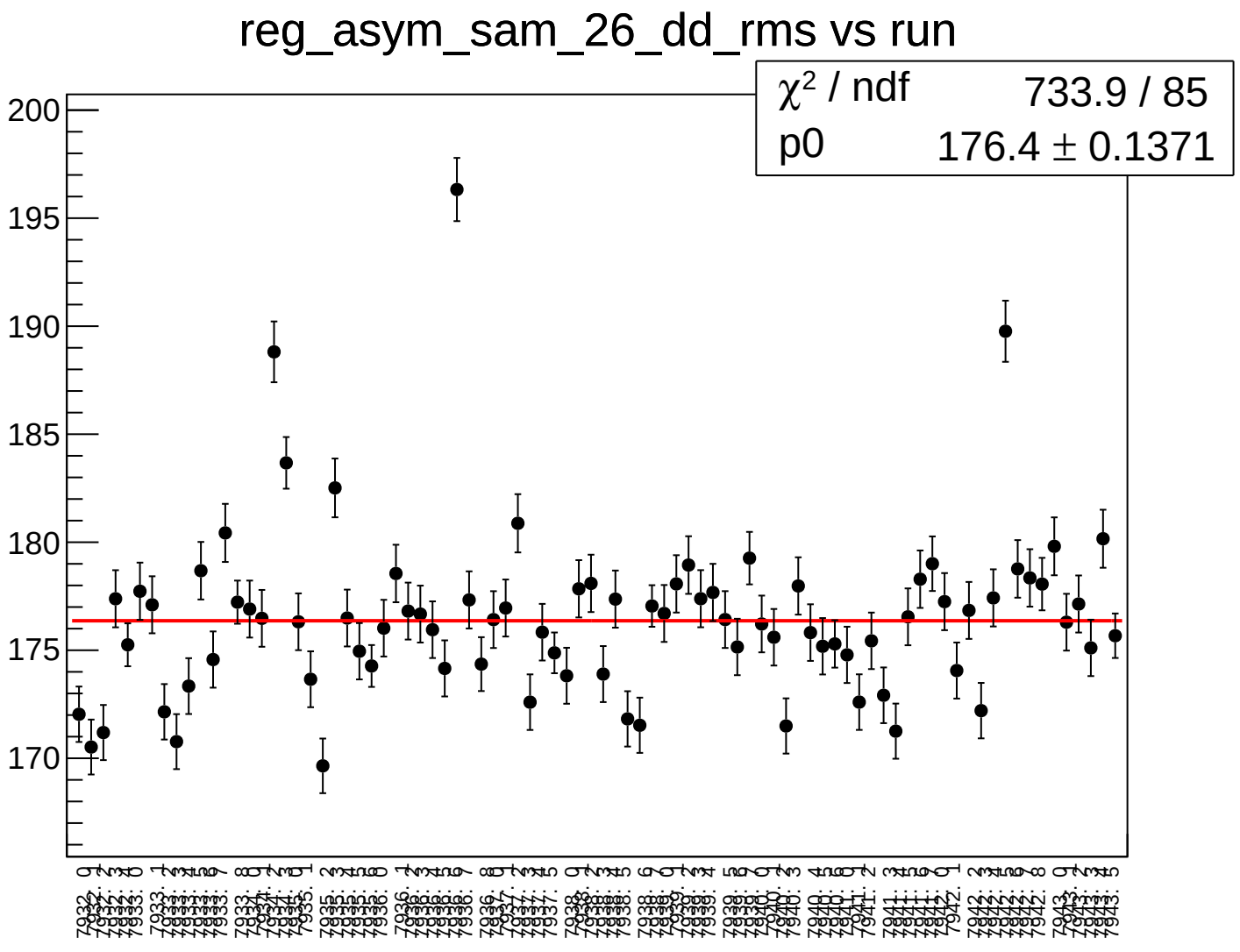

asym_sam_15_dd_mean vs run
χ² / ndf 82.4 / 85
p0 −151.2 ± 852.4
pull
Entries 86
Mean 177.1
Std Dev 125

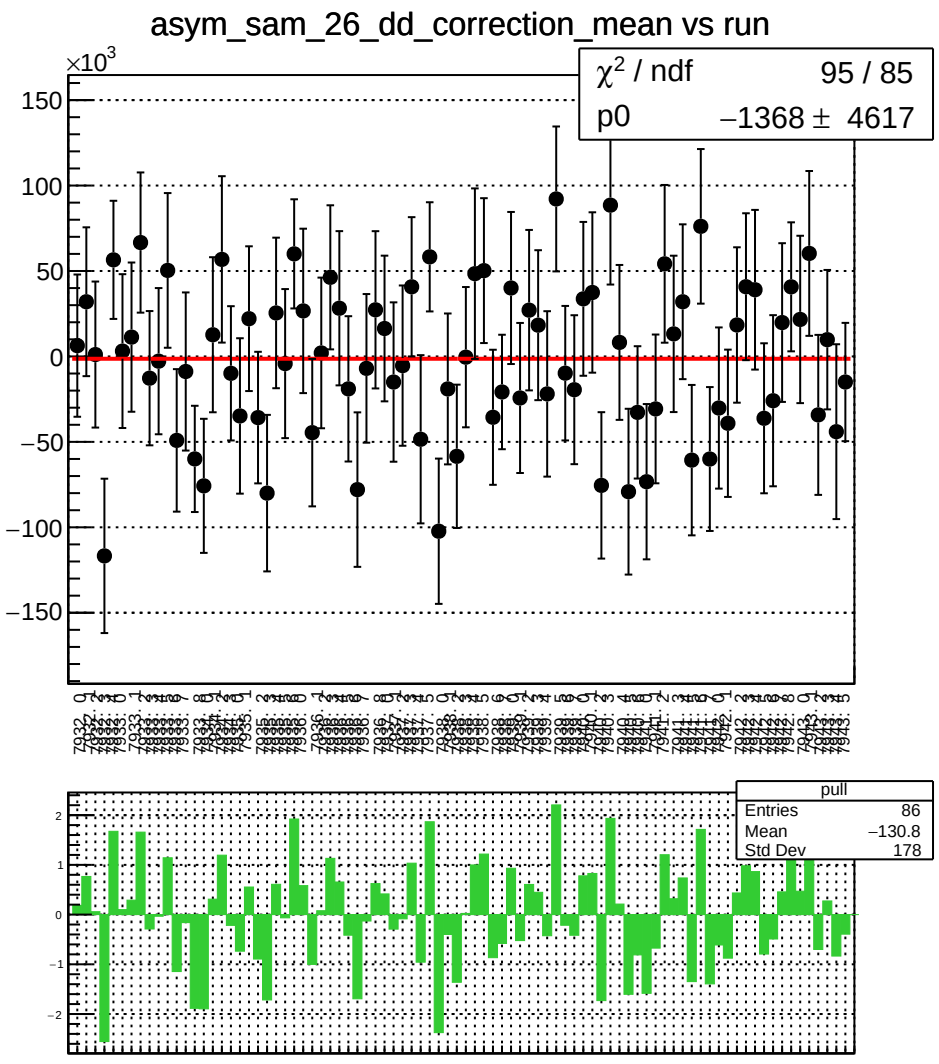

pull1D
Entries 86
Mean 0.00711
Std Dev 0.9788

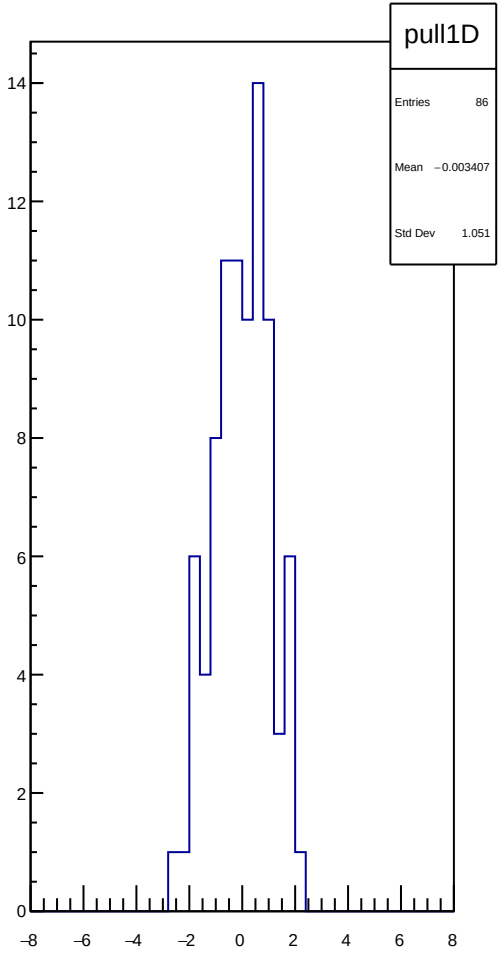

asym_sam_15_dd_rms vs run
χ² / ndf 1.332e+04 / 85
p0 772.6 ± 0.6027
950
900
850
800
750
700
650
600

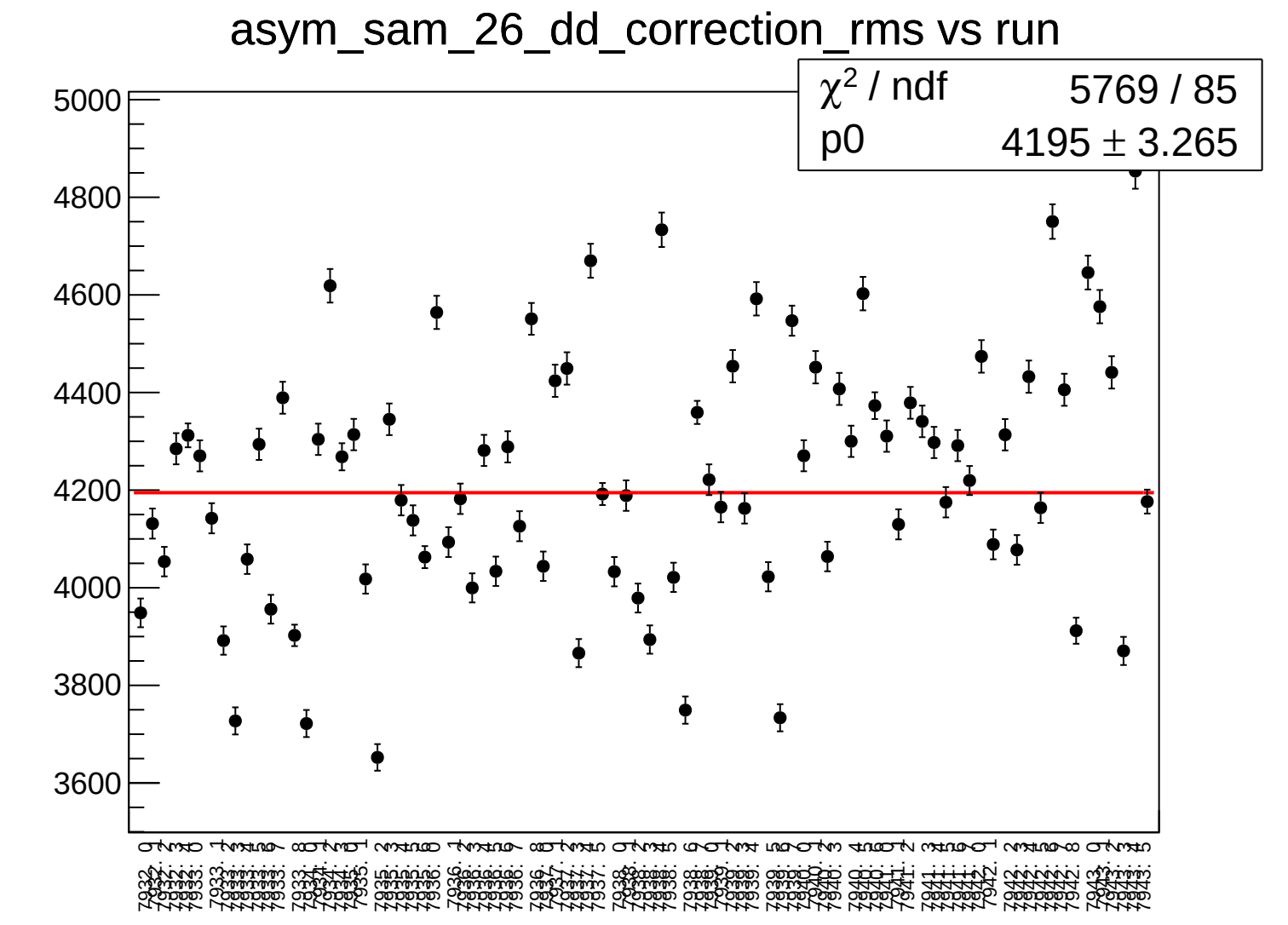

reg_asym_sam_26_dd_mean vs run
χ² / ndf 79.56 / 85
p0 234.5 ± 193.8
pull
Entries 86
Mean −1431
Std Dev 1477

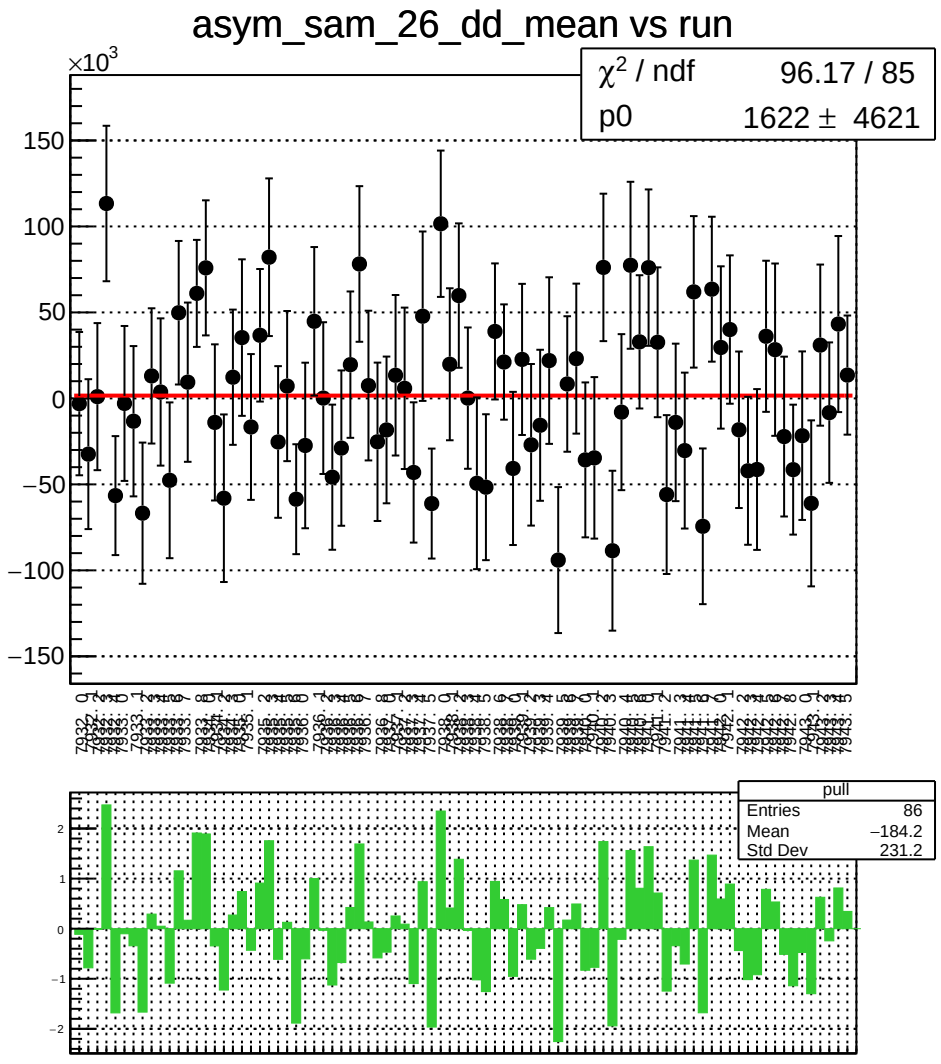

pull1D
Entries 86
Mean 0.002465
Std Dev 0.9618

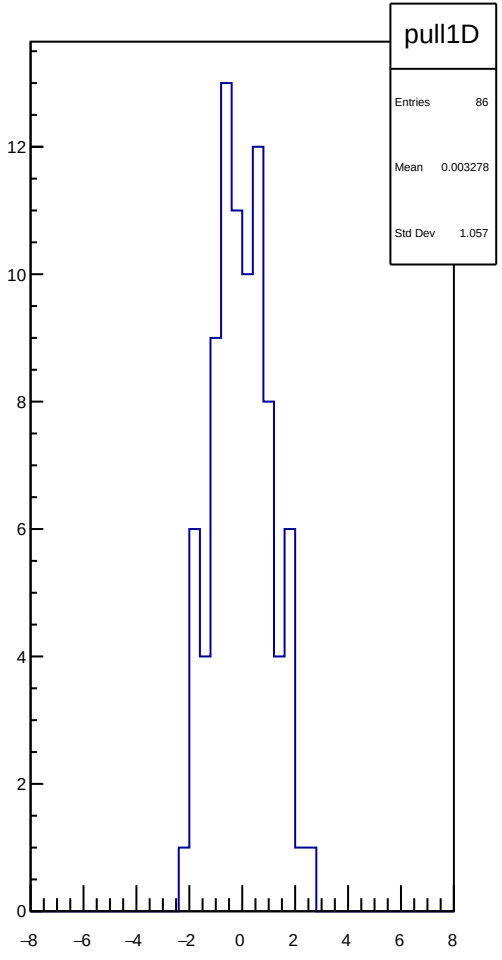

reg_asym_sam_26_dd_rms vs run
χ² / ndf 733.9 / 85
p0 176.4 ± 0.1371
200
195
190
185
180
175
170

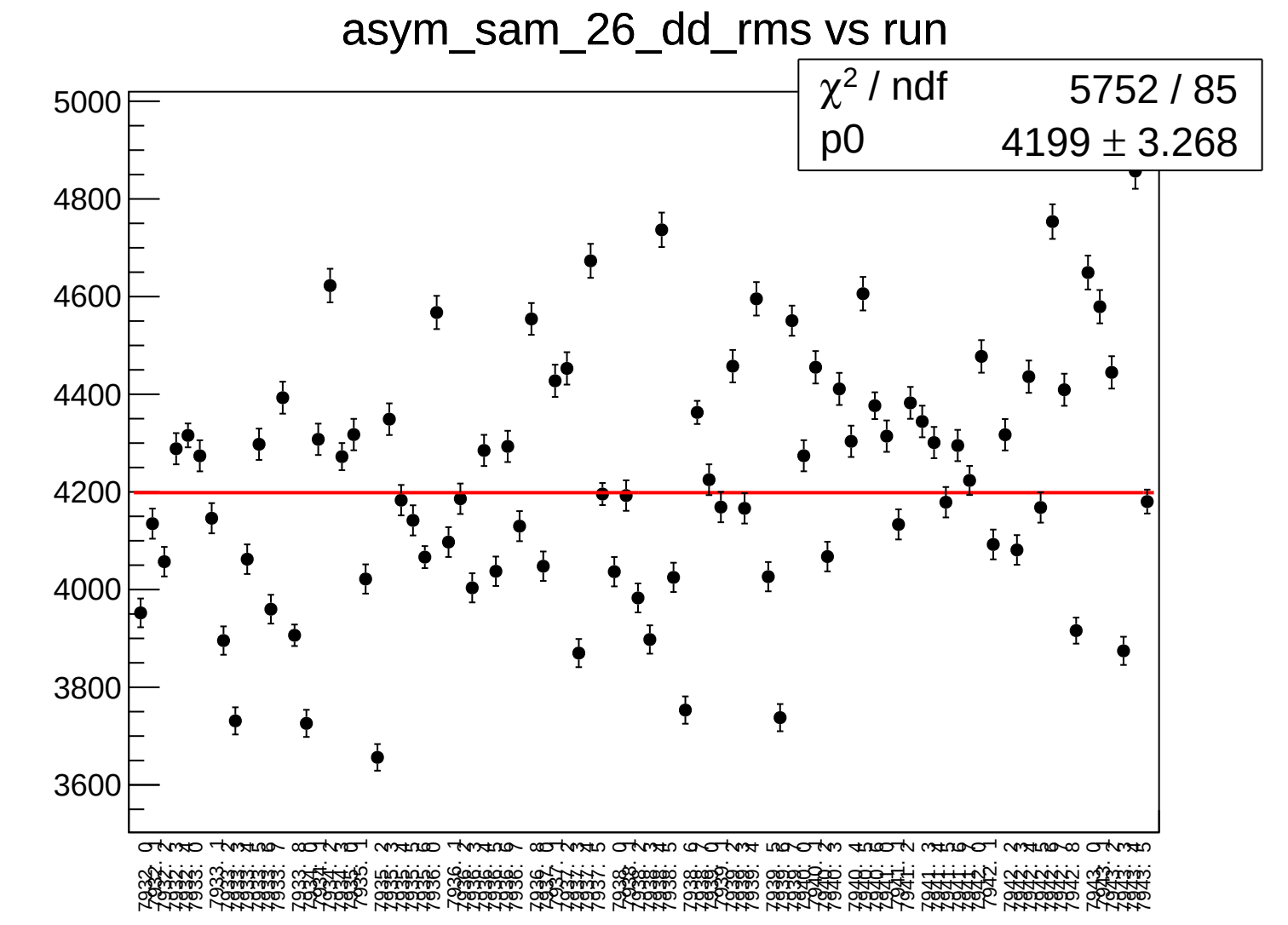

asym_sam_26_dd_correction_mean vs run
×10^3
χ² / ndf 95 / 85
p0 −1368 ± 4617
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −130.8
Std Dev 178
2
1
0
−1
−2

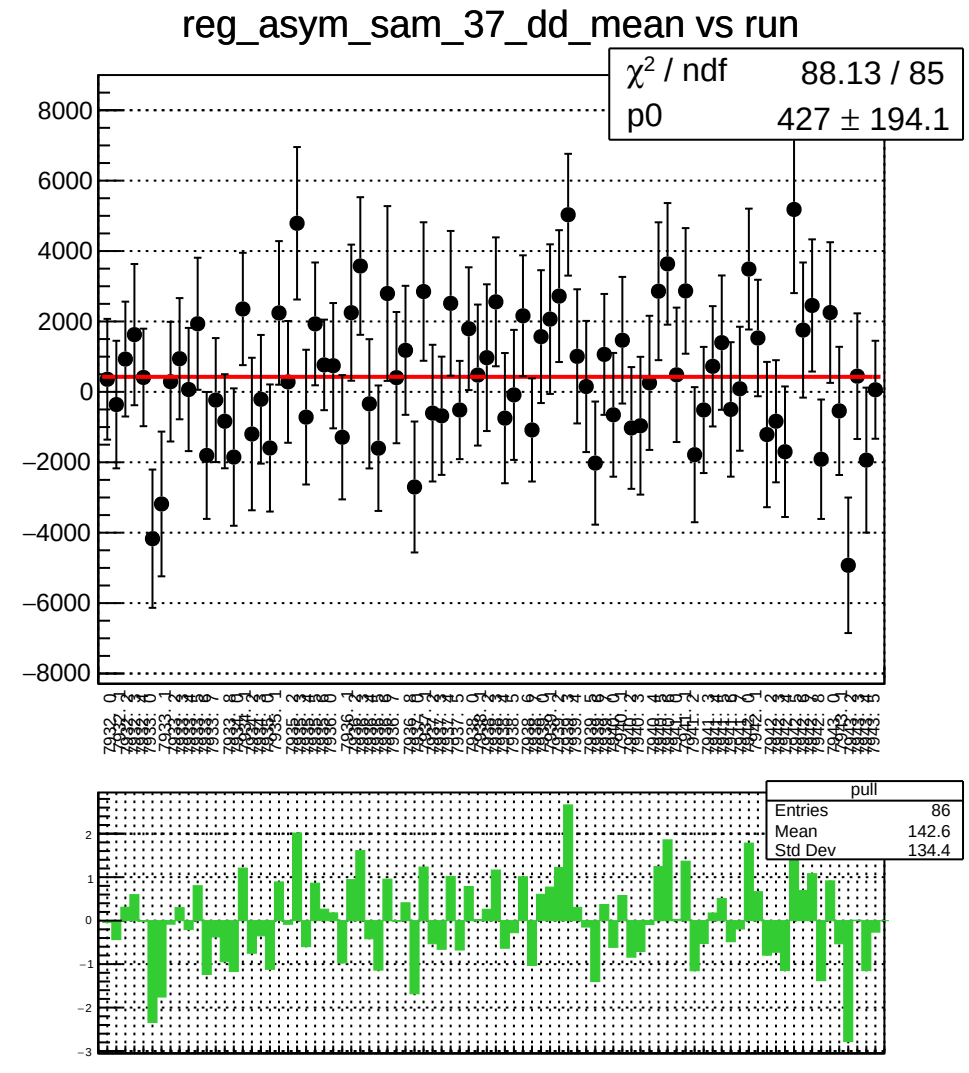

pull1D
Entries 86
Mean −0.003407
Std Dev 1.051
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

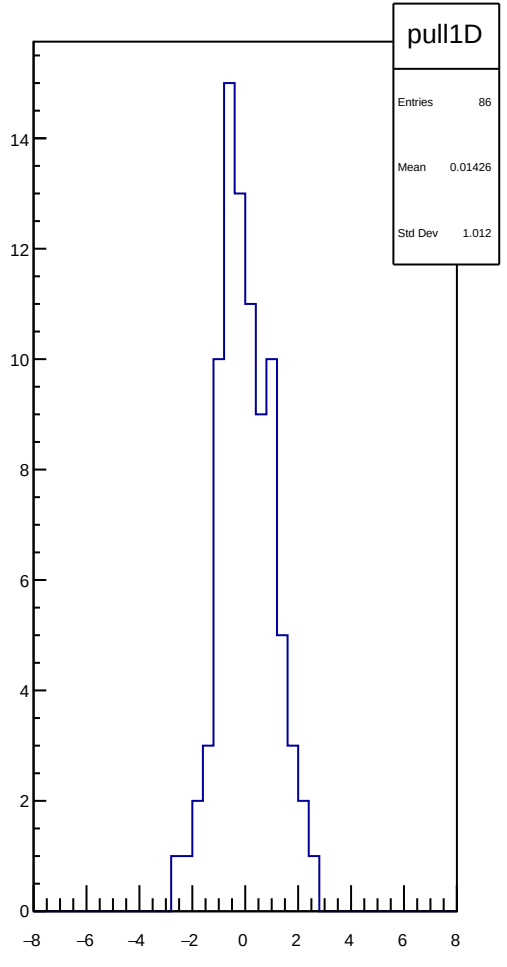

asym_sam_26_dd_correction_rms vs run
χ^2 / ndf 5769 / 85
p0 4195 ± 3.265
5000
4800
4600
4400
4200
4000
3800
3600

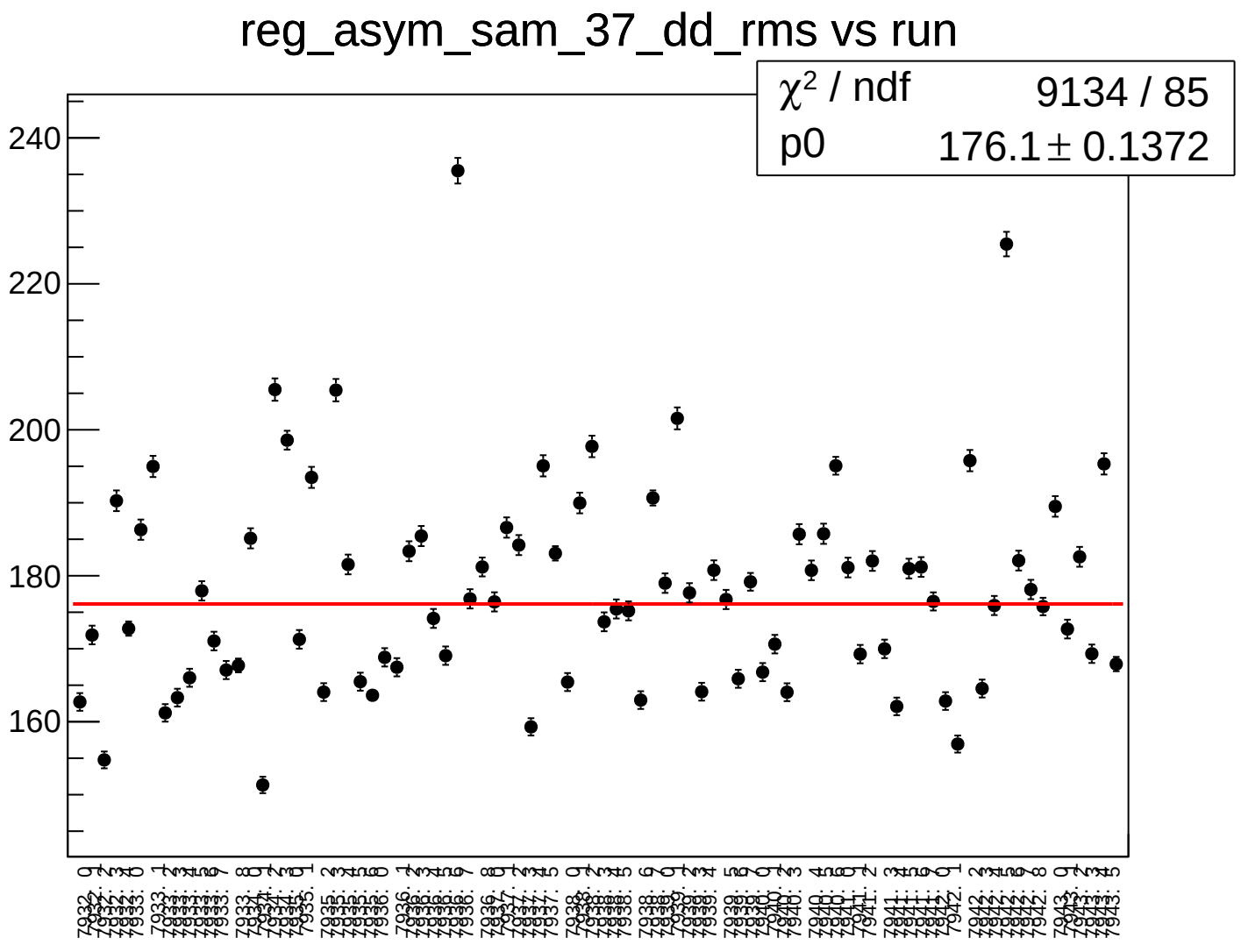

asym_sam_26_dd_mean vs run
×10^3
χ^2 / ndf 96.17 / 85
p0 1622 ± 4621
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −184.2
Std Dev 231.2
2
1
0
−1
−2

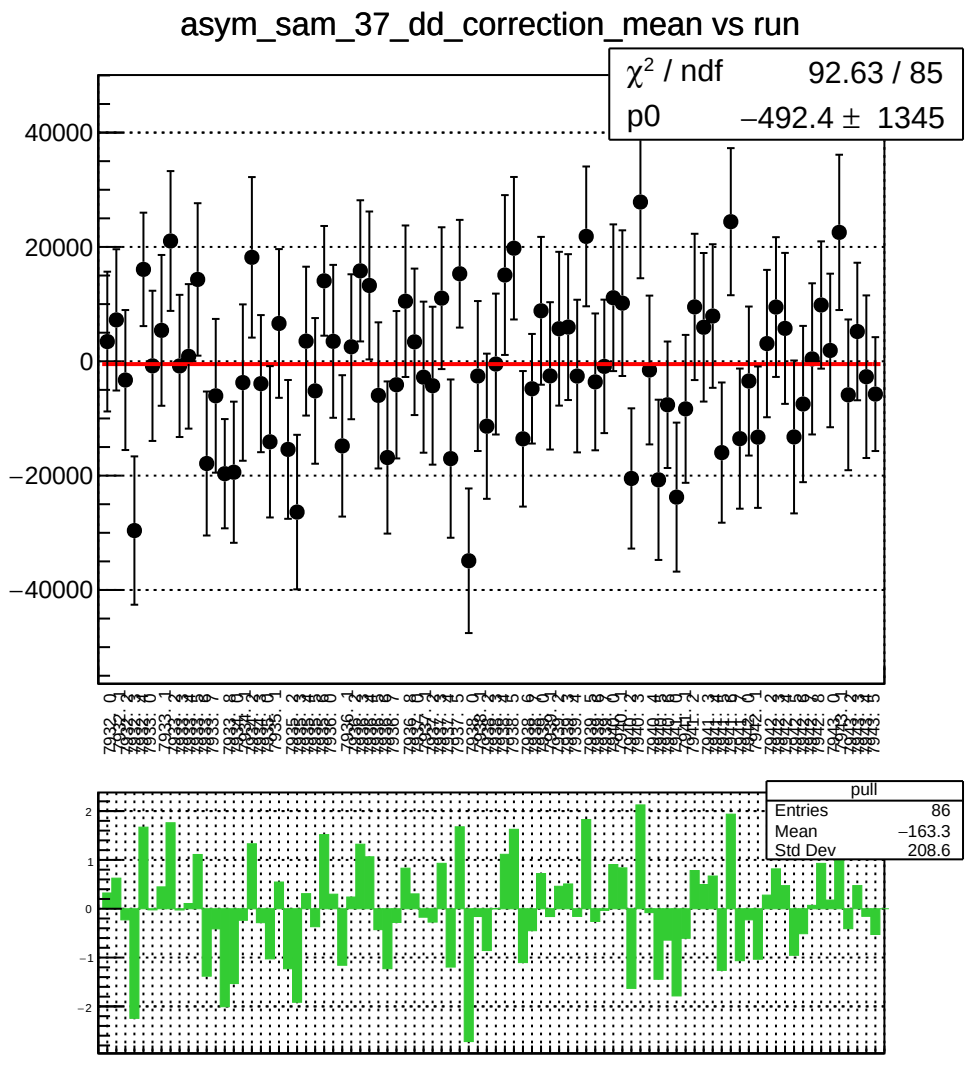

pull1D
Entries 86
Mean 0.003278
Std Dev 1.057
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

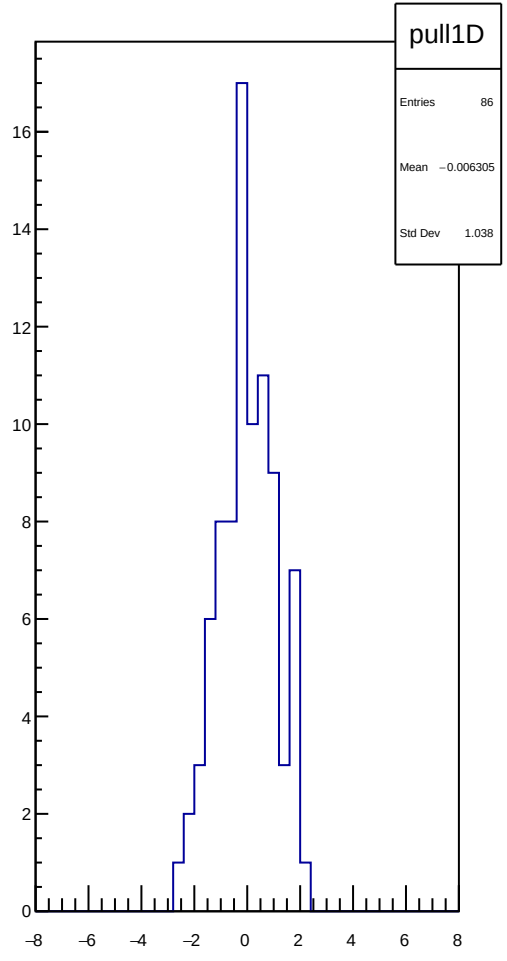

asym_sam_26_dd_rms vs run
χ^2 / ndf 5752 / 85
p0 4199 ± 3.268
5000
4800
4600
4400
4200
4000
3800
3600

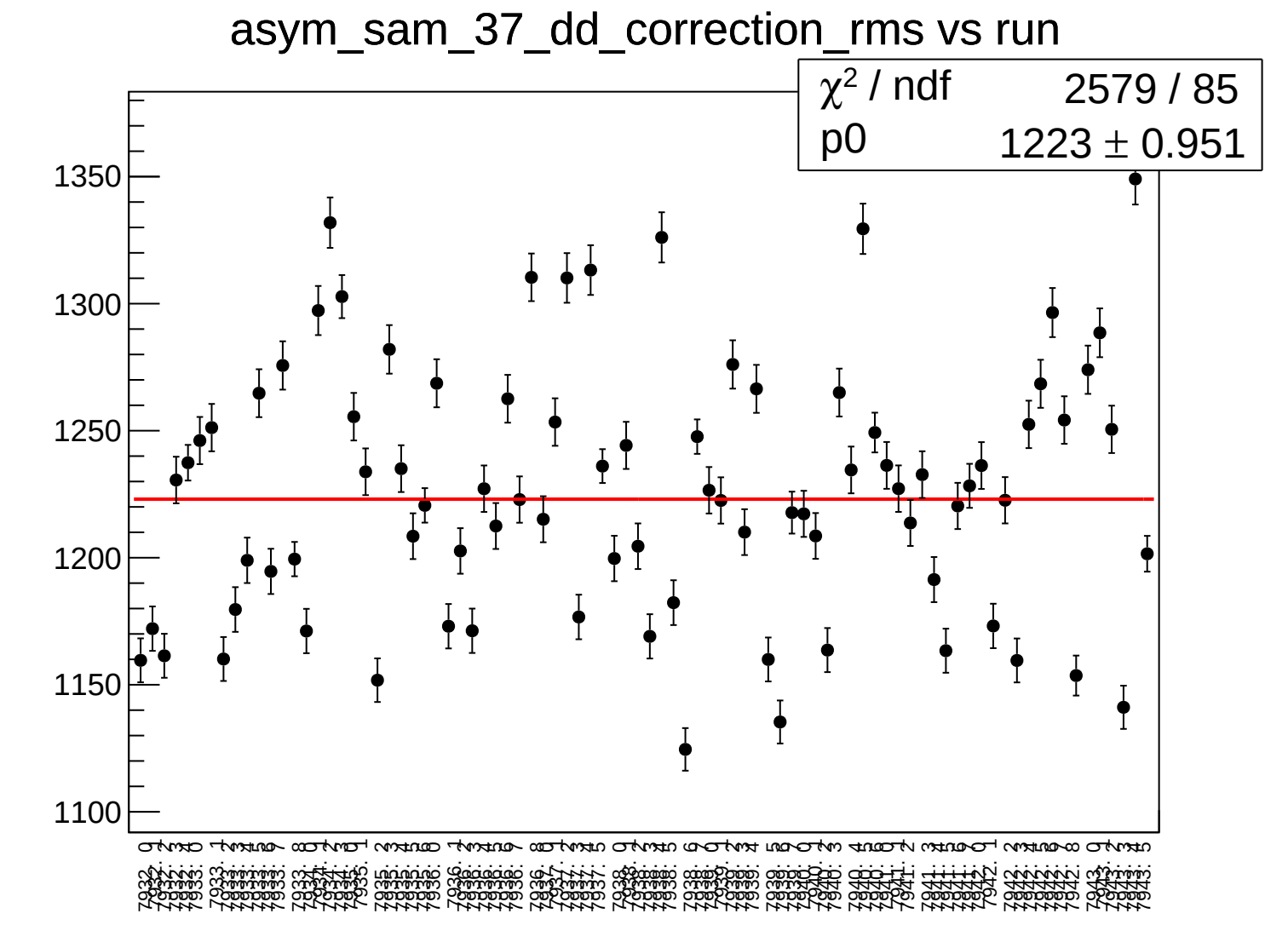

reg_asym_sam_37_dd_mean vs run
χ² / ndf 88.13 / 85
p0 427 ± 194.1
pull
Entries 86
Mean 142.6
Std Dev 134.4

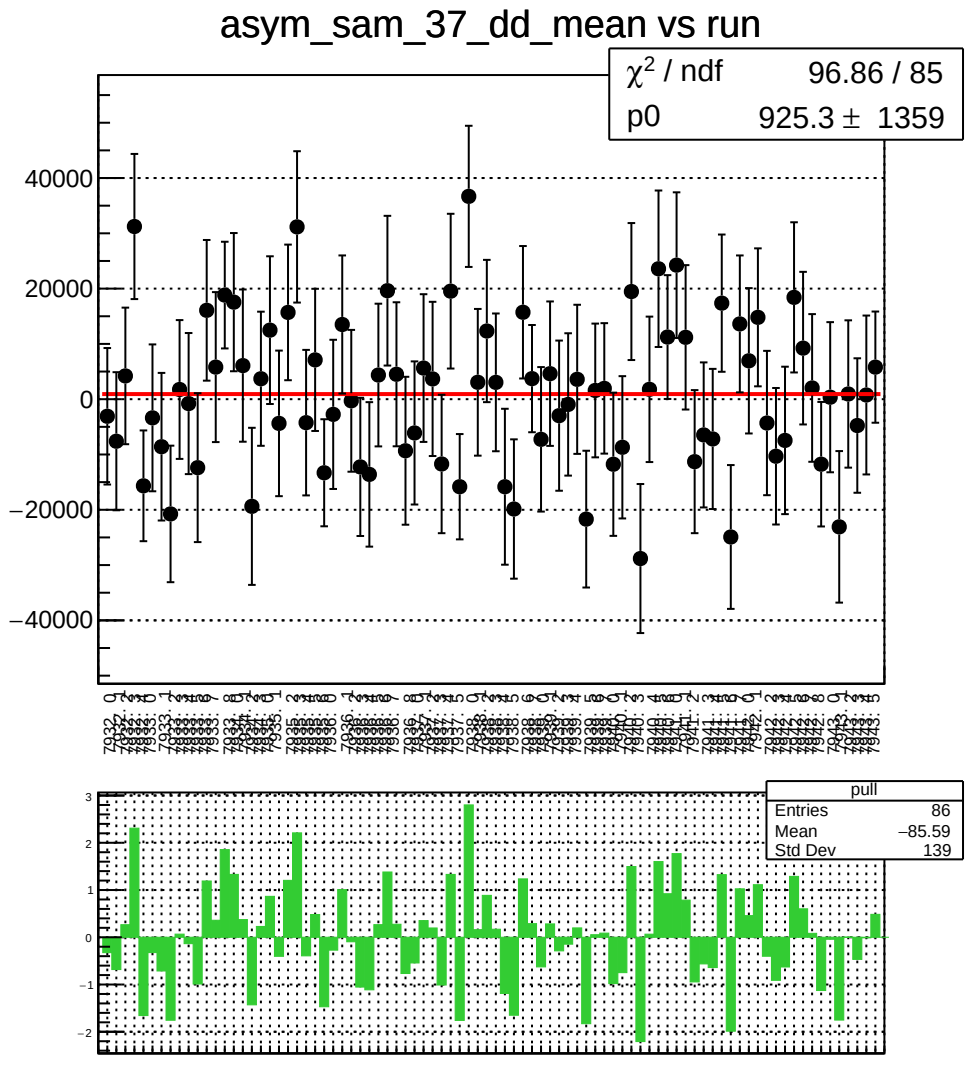

pull1D
Entries 86
Mean 0.01426
Std Dev 1.012

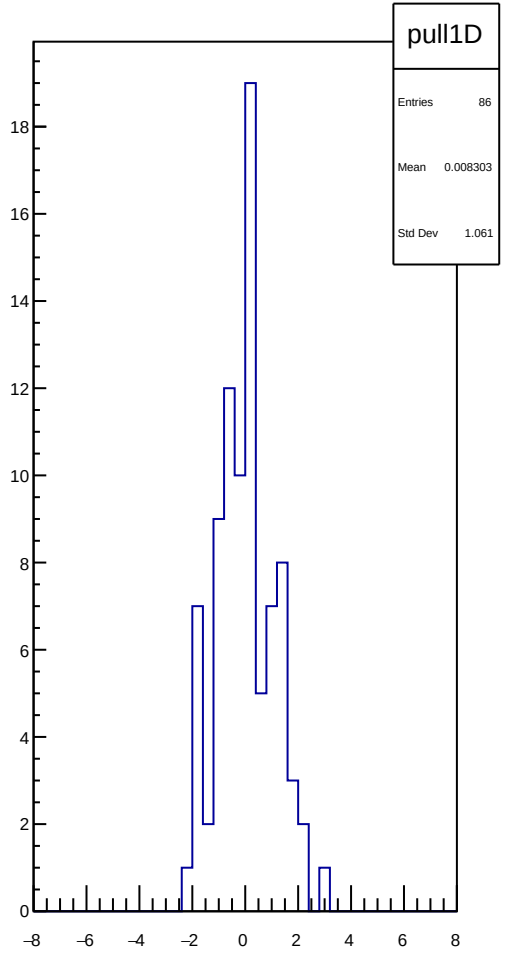

reg_asym_sam_37_dd_rms vs run
χ² / ndf 9134 / 85
p0 176.1 ± 0.1372
240
220
200
180
160

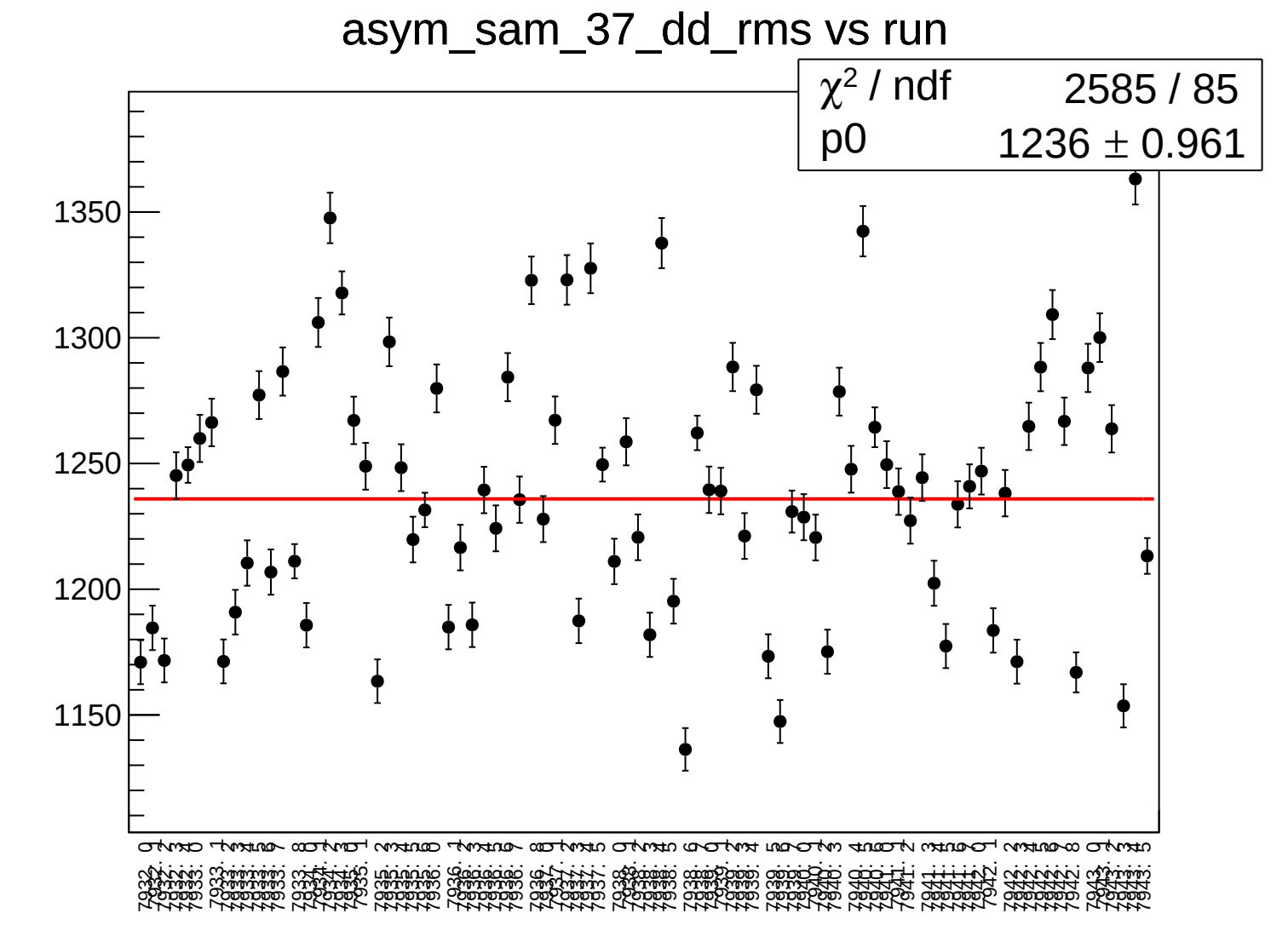

asym_sam_37_dd_correction_mean vs run
χ² / ndf 92.63 / 85
p0 −492.4 ± 1345
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −163.3
Std Dev 208.6
2
1
0
−1
−2

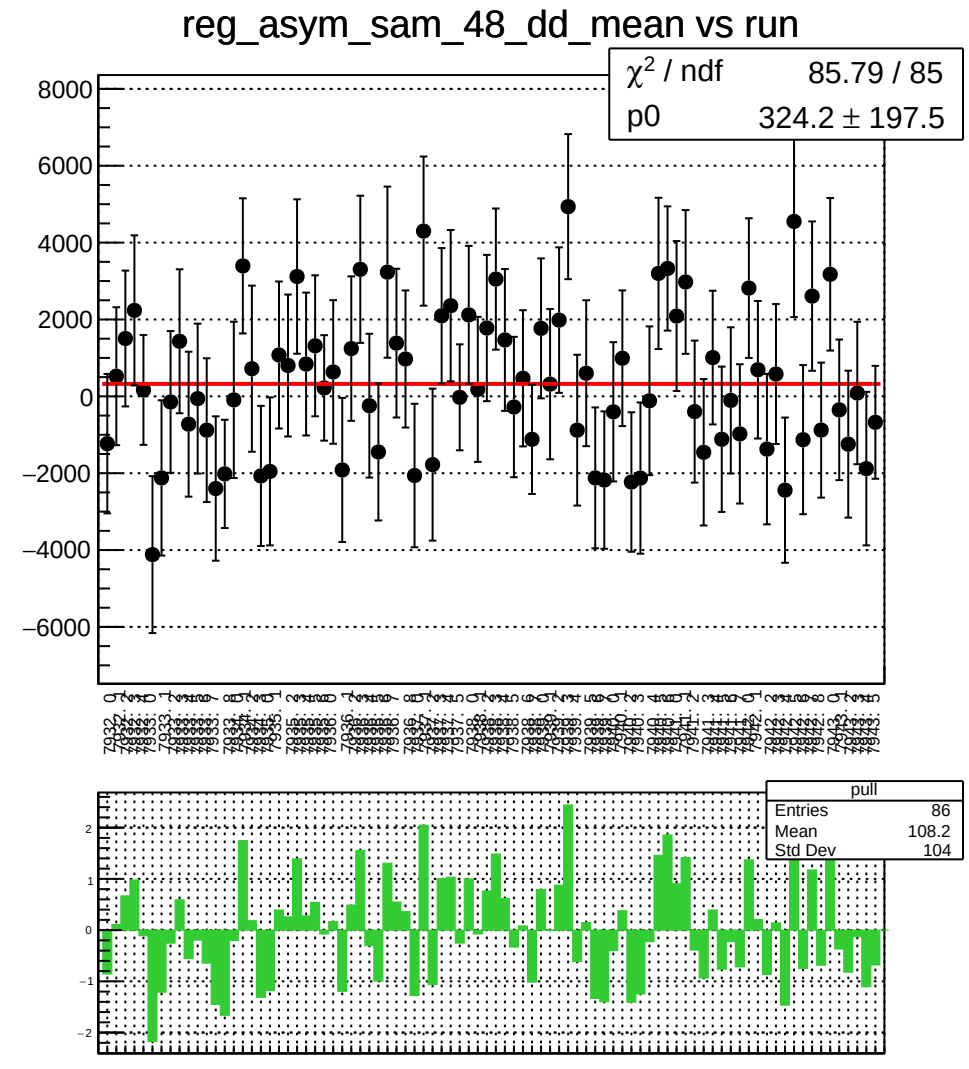

pull1D
Entries 86
Mean −0.006305
Std Dev 1.038
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

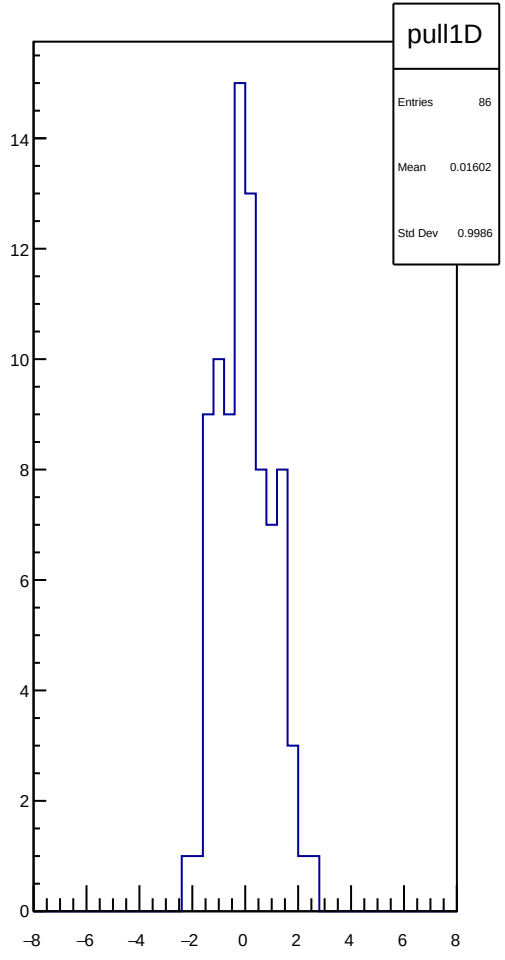

asym_sam_37_dd_correction_rms vs run
χ² / ndf 2579 / 85
p0 1223 ± 0.951
1350
1300
1250
1200
1150
1100

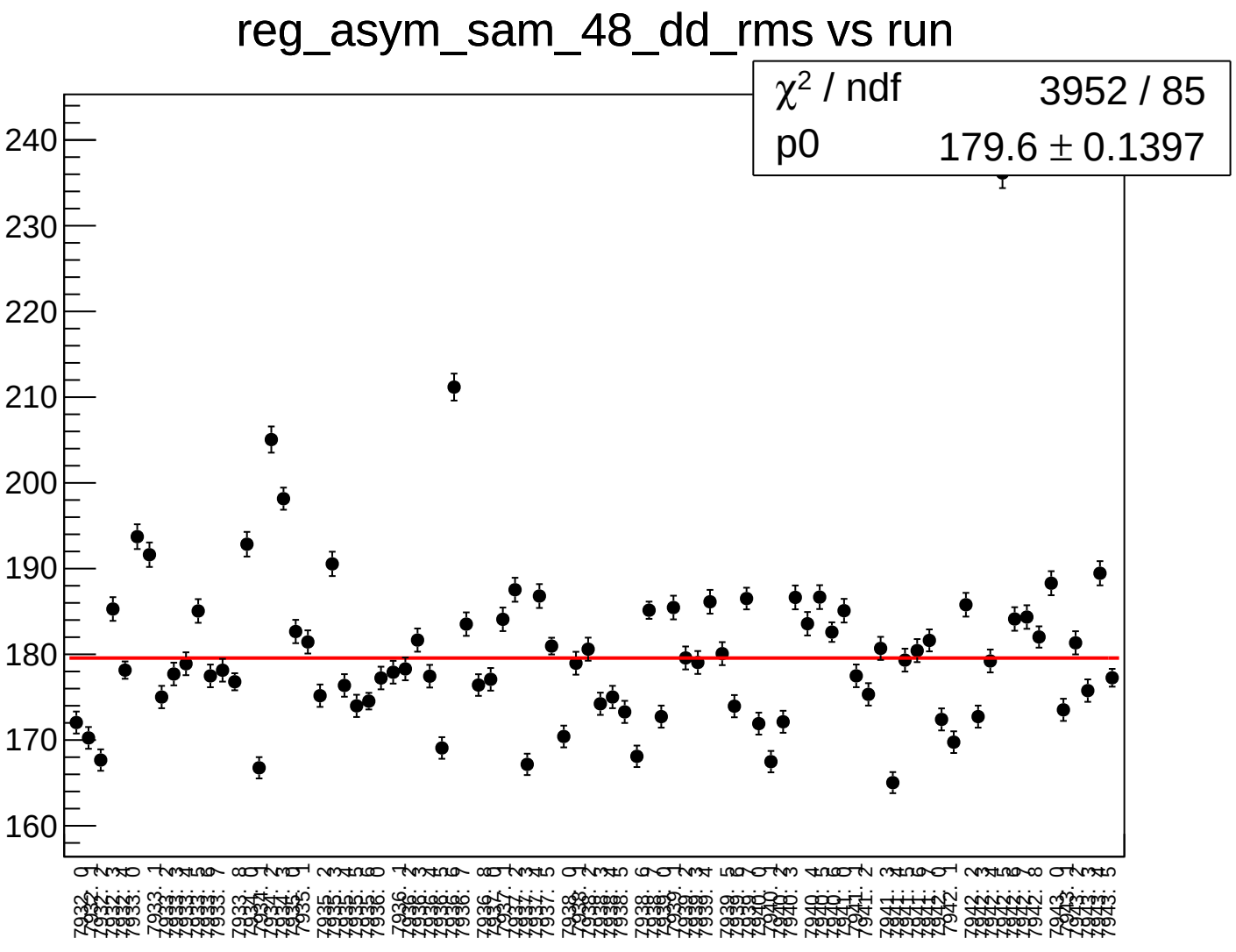

asym_sam_37_dd_mean vs run
χ² / ndf 96.86 / 85
p0 925.3 ± 1359
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −85.59
Std Dev 139
3
2
1
0
−1
−2

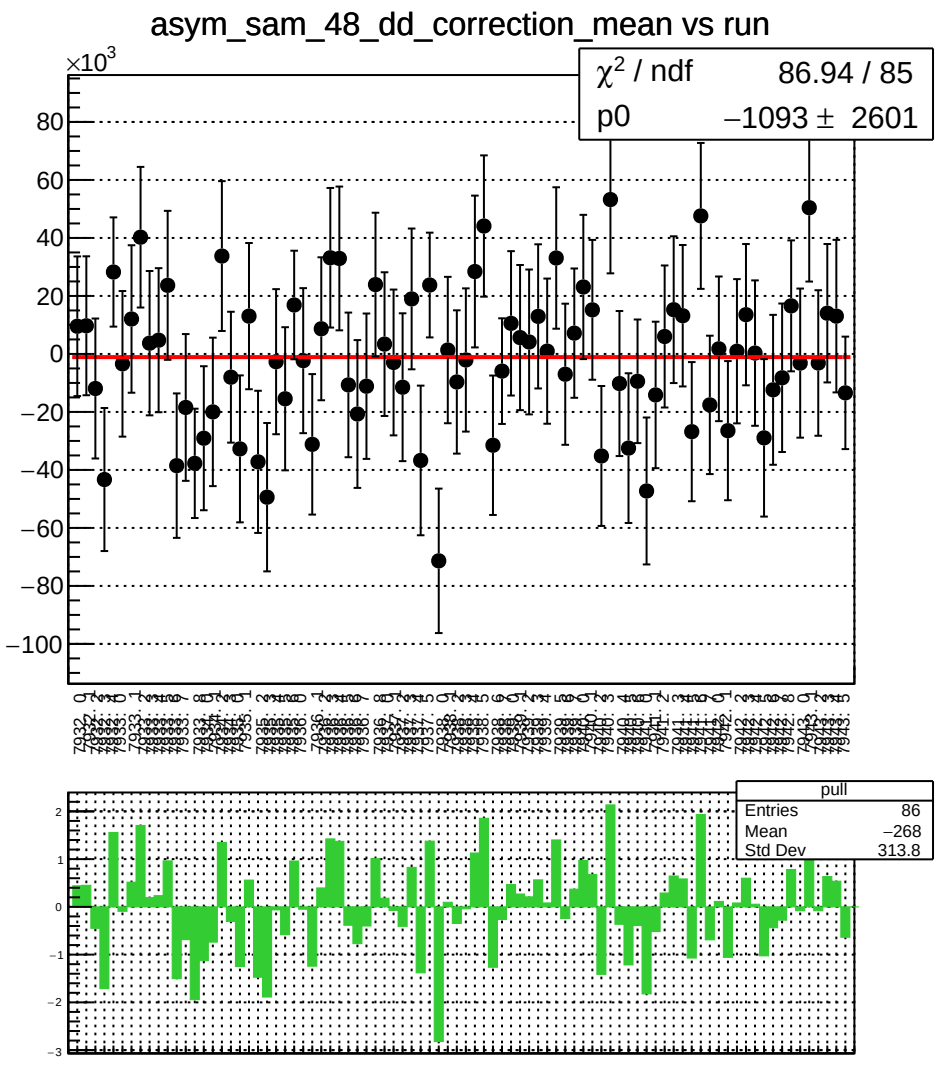

pull1D
Entries 86
Mean 0.008303
Std Dev 1.061
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

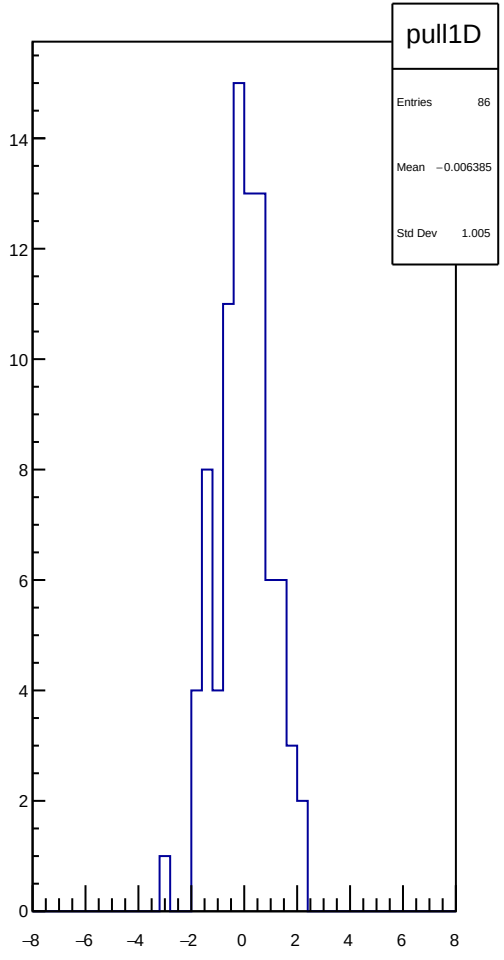

asym_sam_37_dd_rms vs run
χ² / ndf 2585 / 85
p0 1236 ± 0.961
1350
1300
1250
1200
1150

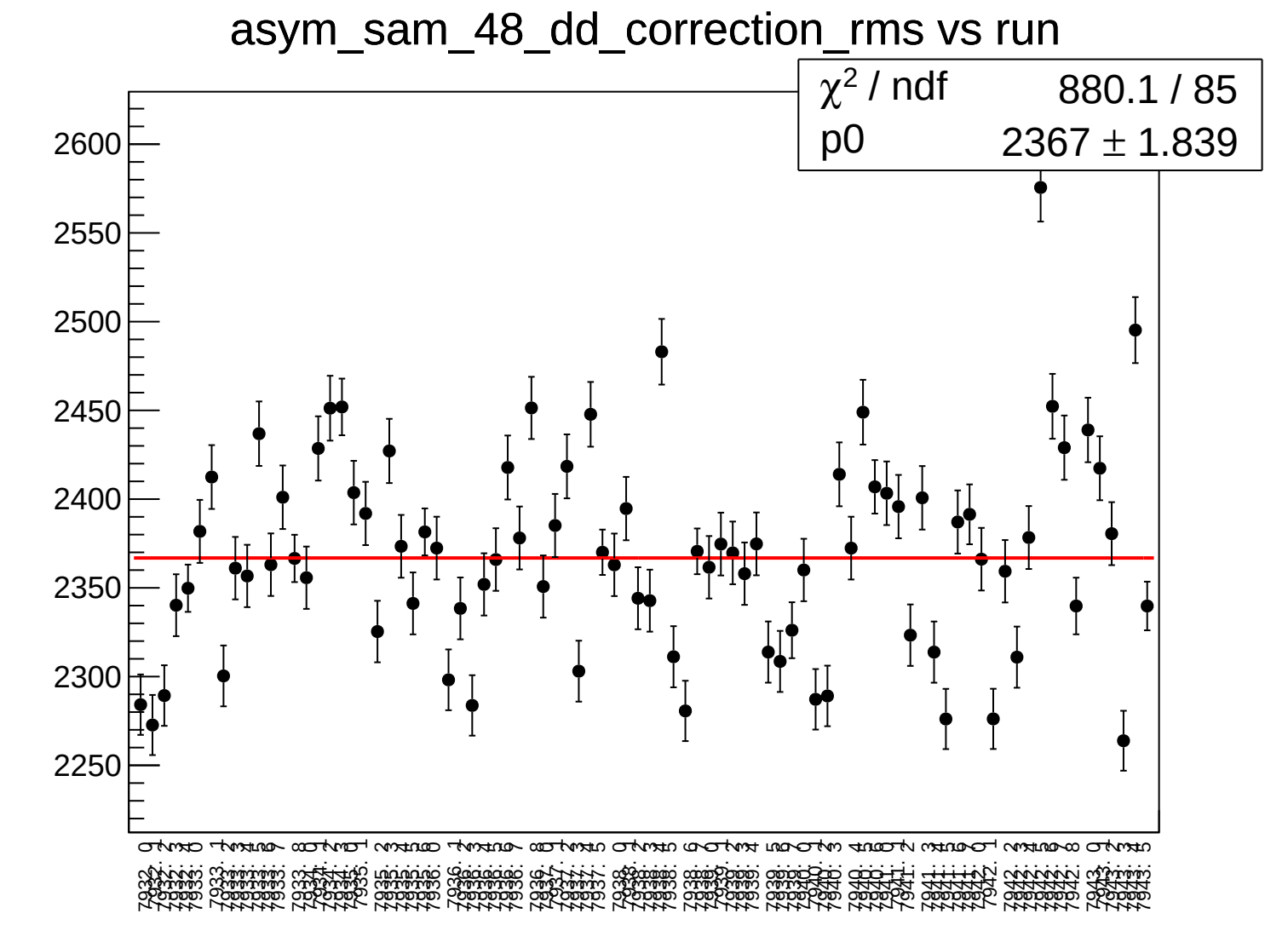

reg_asym_sam_48_dd_mean vs run
χ² / ndf 85.79 / 85
p0 324.2 ± 197.5
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 108.2
Std Dev 104
2
1
0
−1
−2

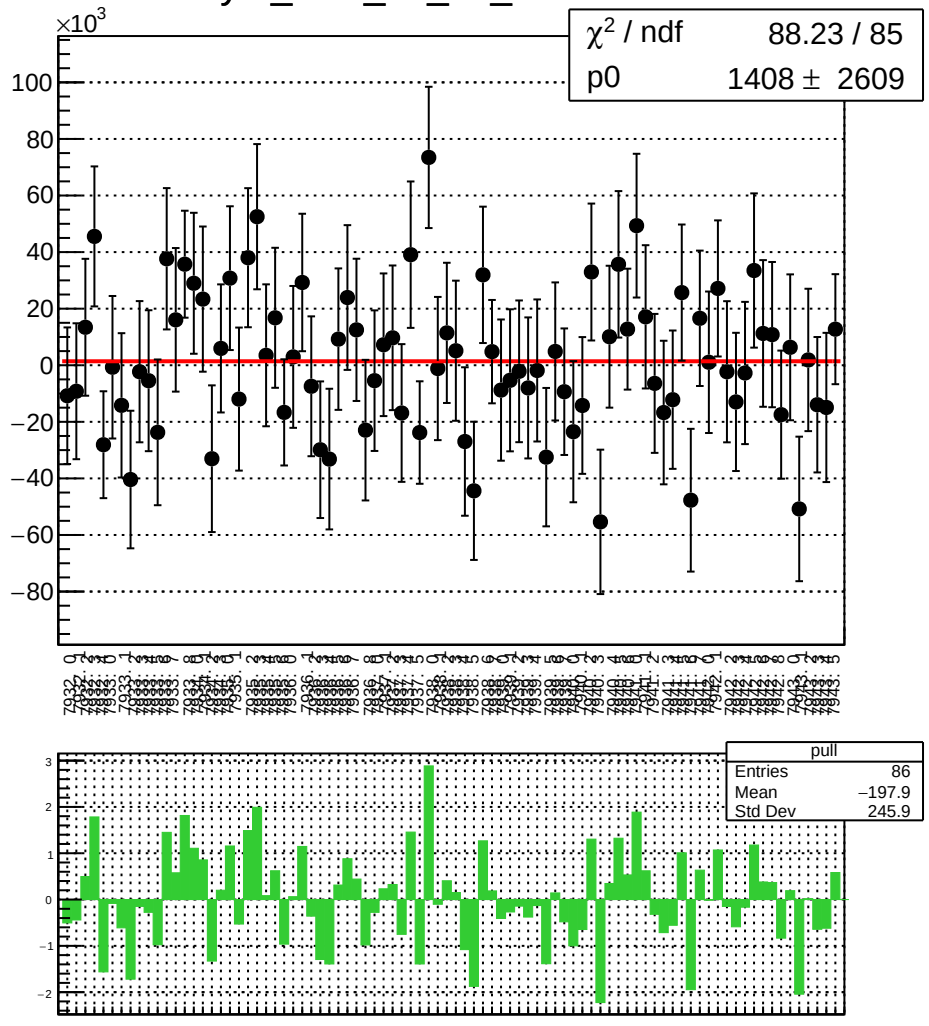

pull1D
Entries 86
Mean 0.01602
Std Dev 0.9986
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

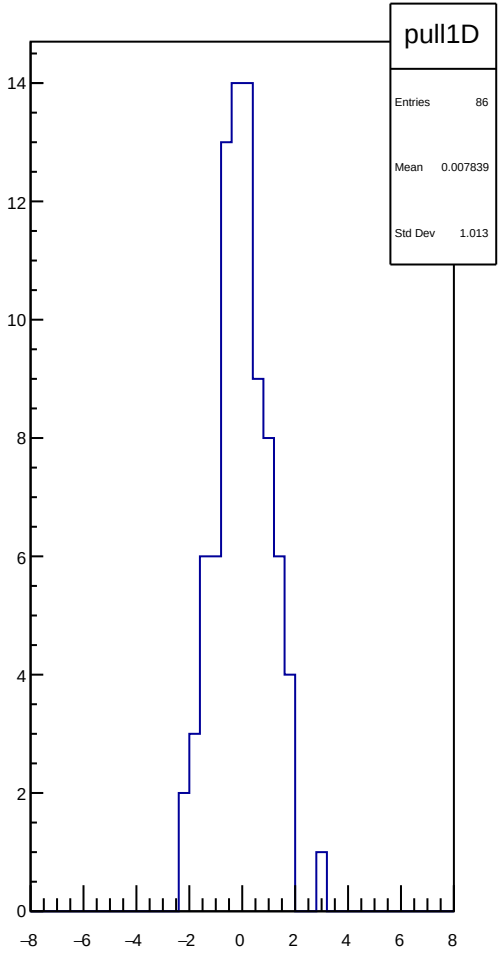

reg_asym_sam_48_dd_rms vs run
χ² / ndf 3952 / 85
p0 179.6 ± 0.1397
240
230
220
210
200
190
180
170
160

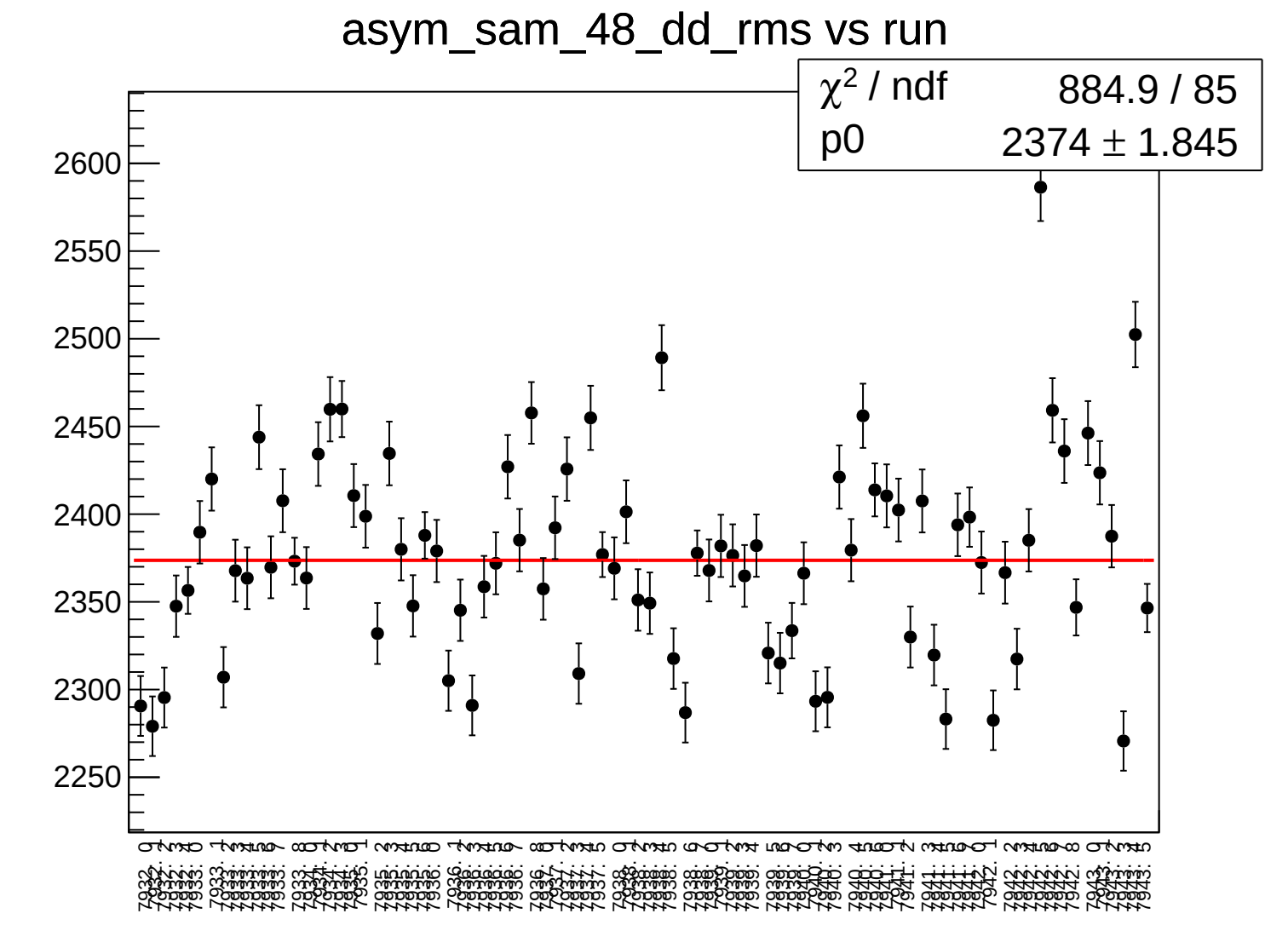

asym_sam_48_dd_correction_mean vs run
×10^3
χ² / ndf 86.94 / 85
p0 −1093 ± 2601
pull
Entries 86
Mean −268
Std Dev 313.8

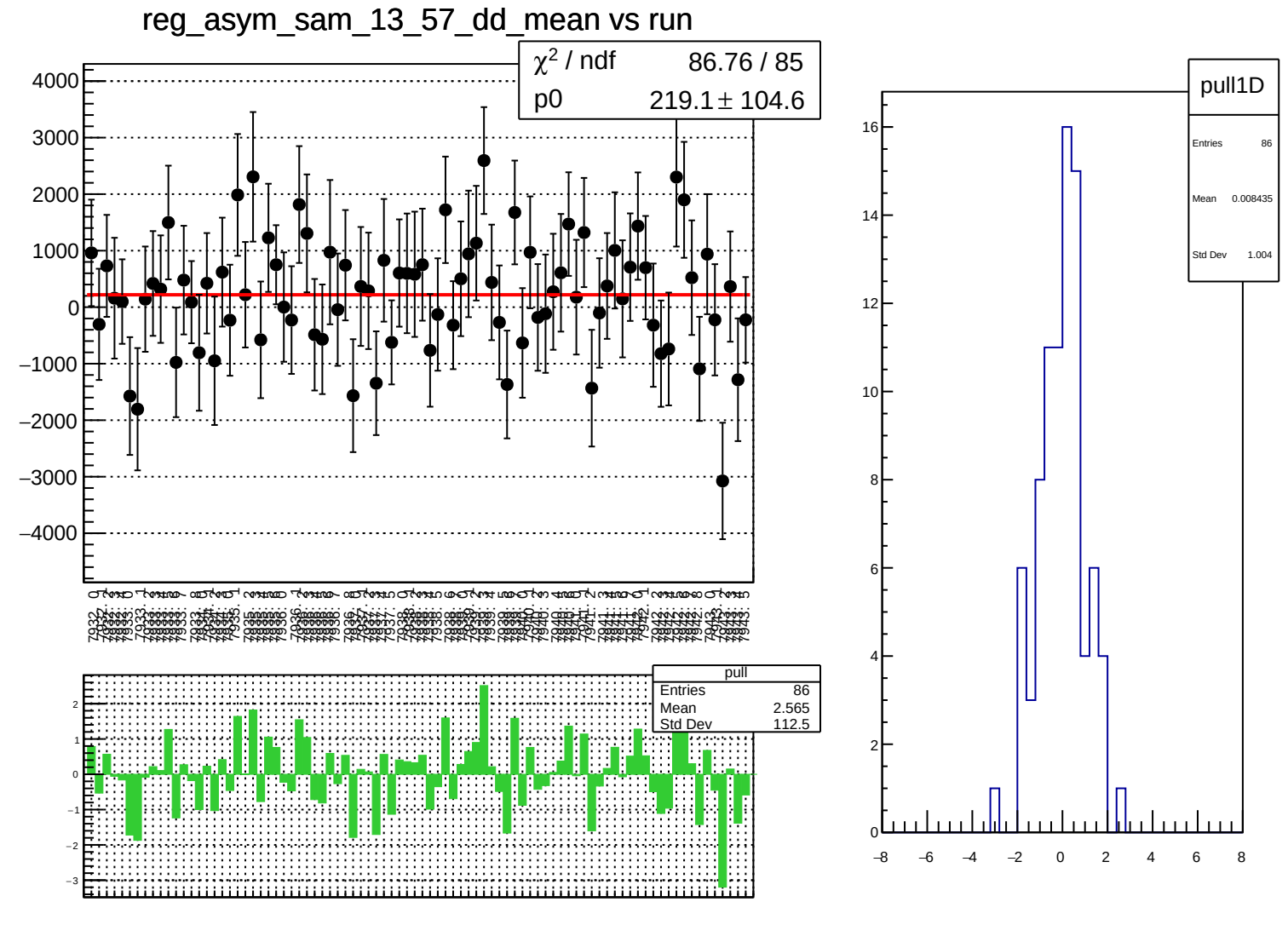

pull1D
Entries 86
Mean −0.006385
Std Dev 1.005

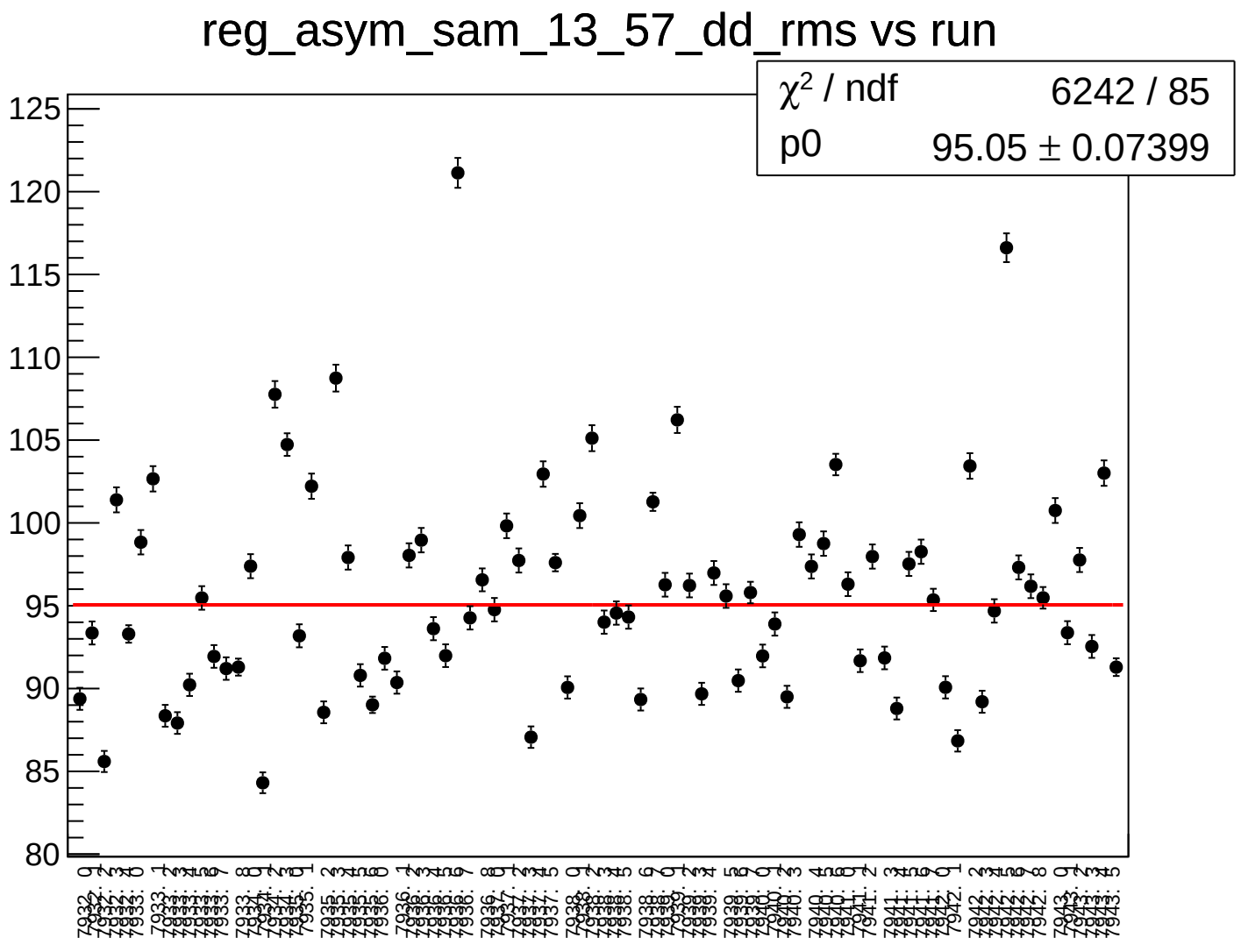

asym_sam_48_dd_correction_rms vs run
χ² / ndf 880.1 / 85
p0 2367 ± 1.839
2600
2550
2500
2450
2400
2350
2300
2250

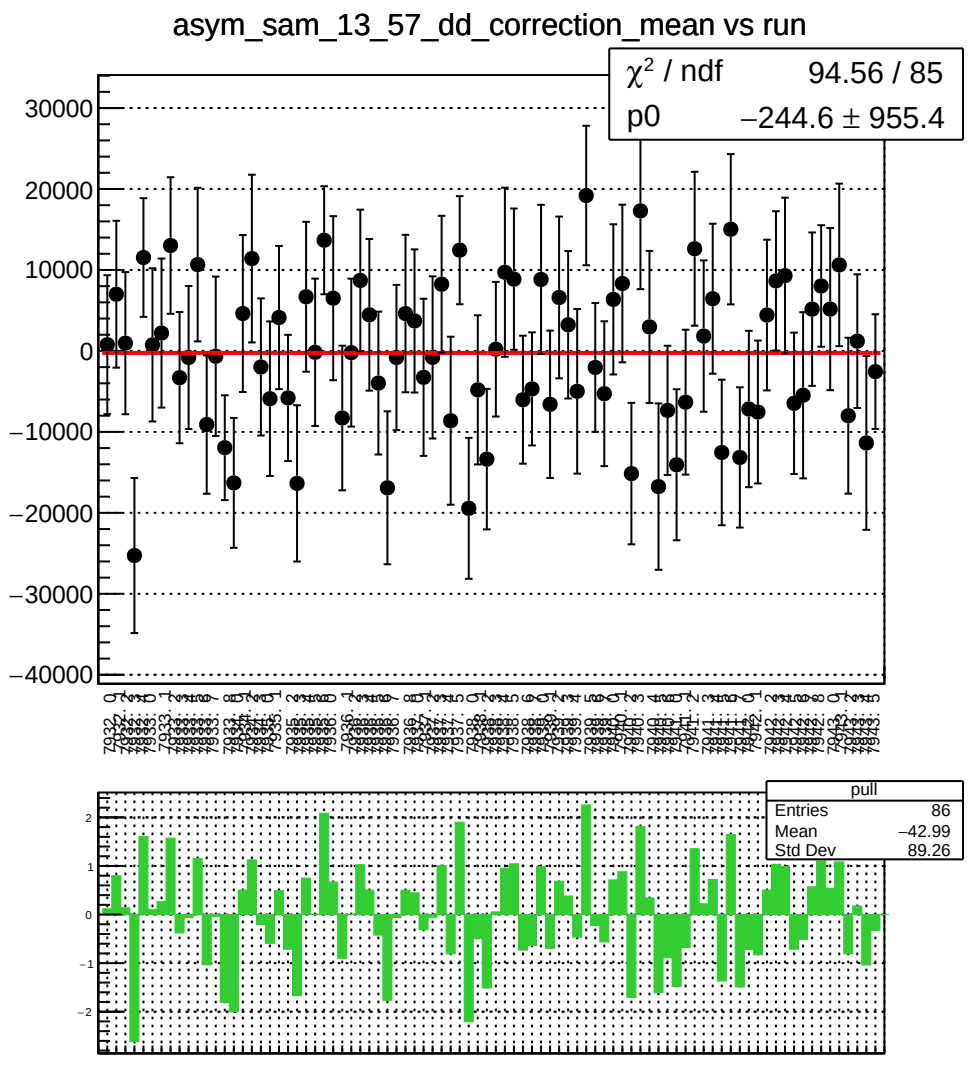

asym_sam_48_dd_mean vs run
×10^3
χ^2 / ndf 88.23 / 85
p0 1408 ± 2609
pull
Entries 86
Mean −197.9
Std Dev 245.9

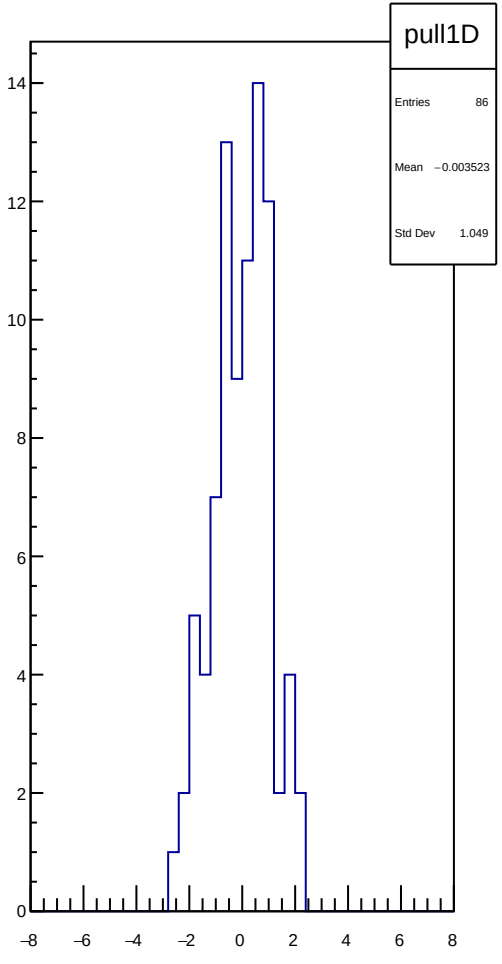

pull1D
Entries 86
Mean 0.007839
Std Dev 1.013

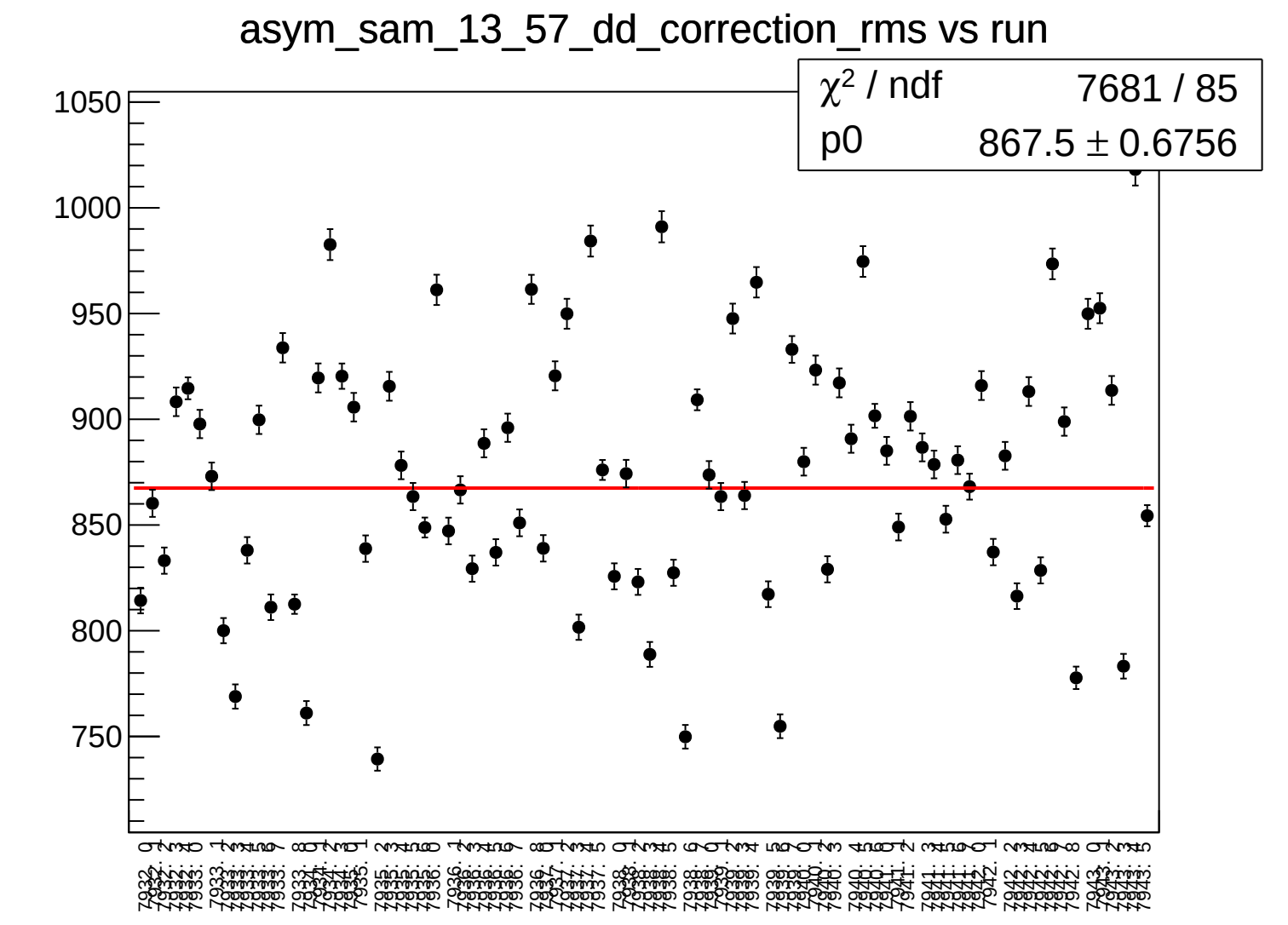

asym_sam_48_dd_rms vs run
χ^2 / ndf 884.9 / 85
p0 2374 ± 1.845
2600
2550
2500
2450
2400
2350
2300
2250

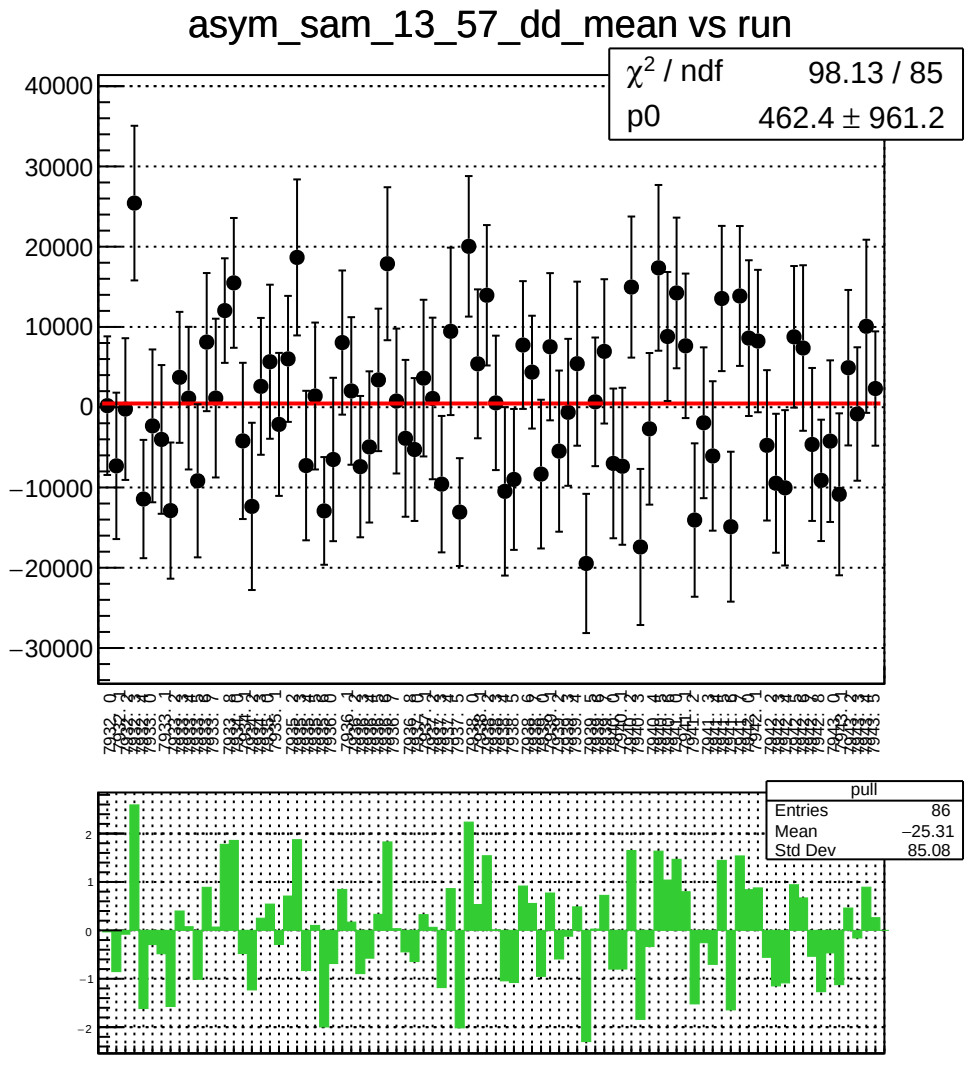

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 86.76 / 85
p0 219.1 ± 104.6
pull
Entries 86
Mean 2.565
Std Dev 112.5
pull1D
Entries 86
Mean 0.008435
Std Dev 1.004

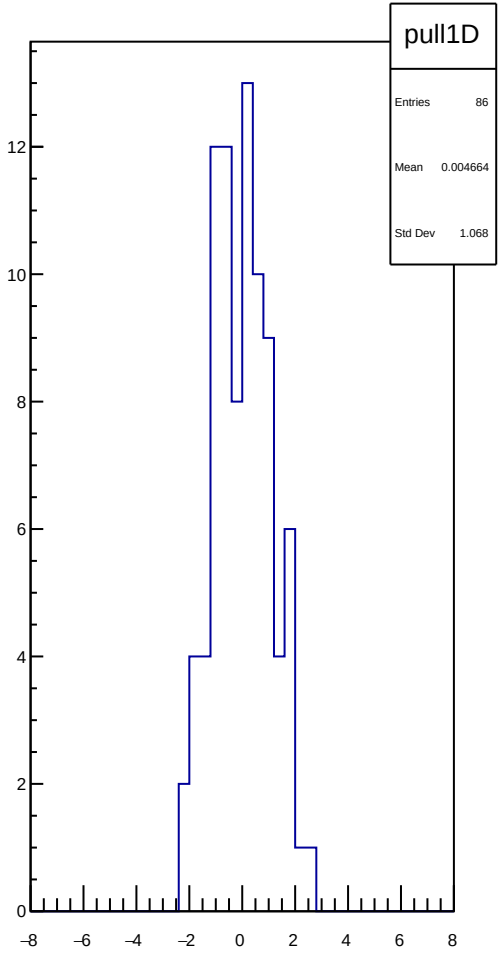

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 6242 / 85
p0 95.05 ± 0.07399
125
120
115
110
105
100
95
90
85
80

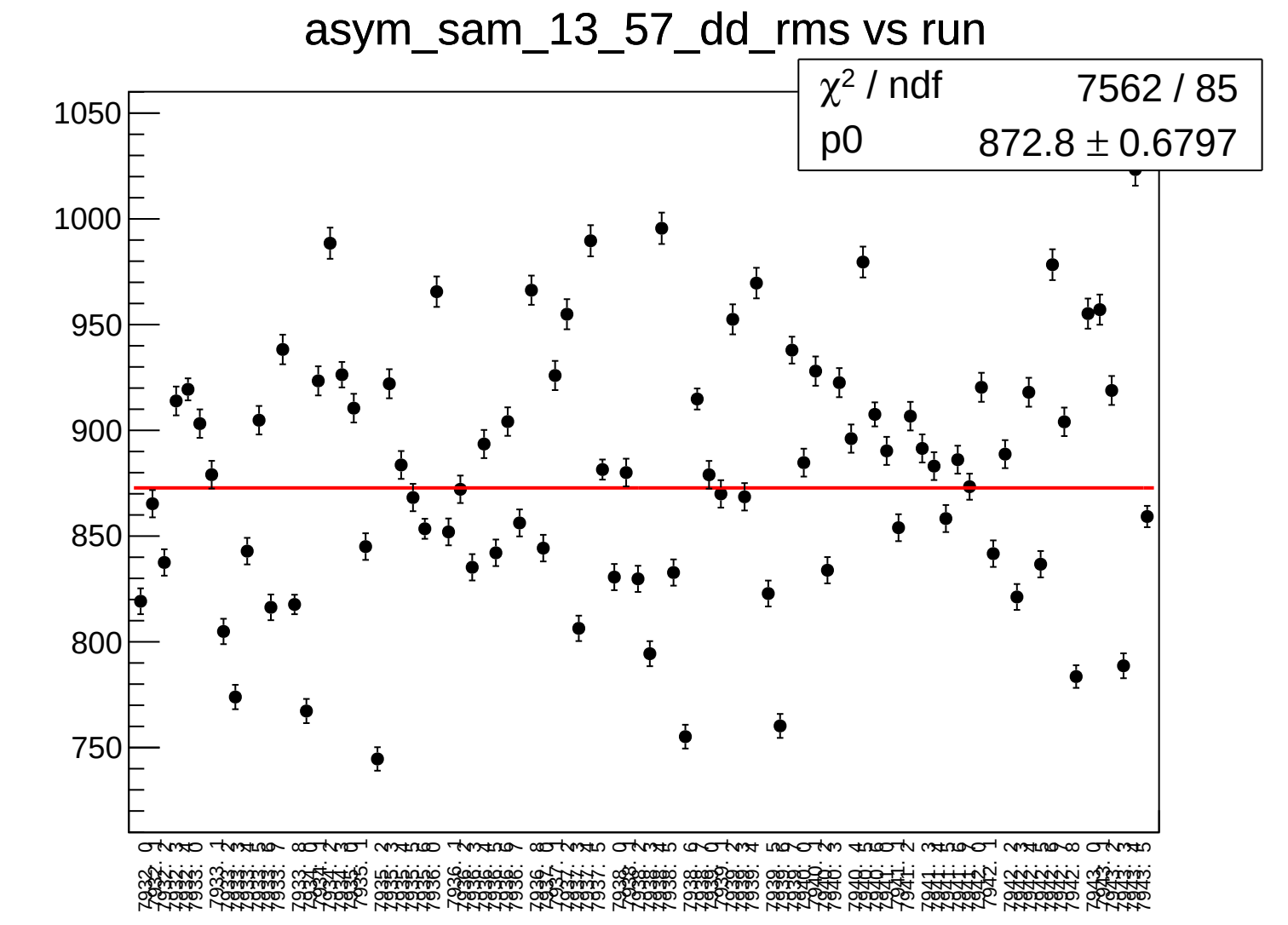

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 94.56 / 85
p0 −244.6 ± 955.4
pull
Entries 86
Mean −42.99
Std Dev 89.26

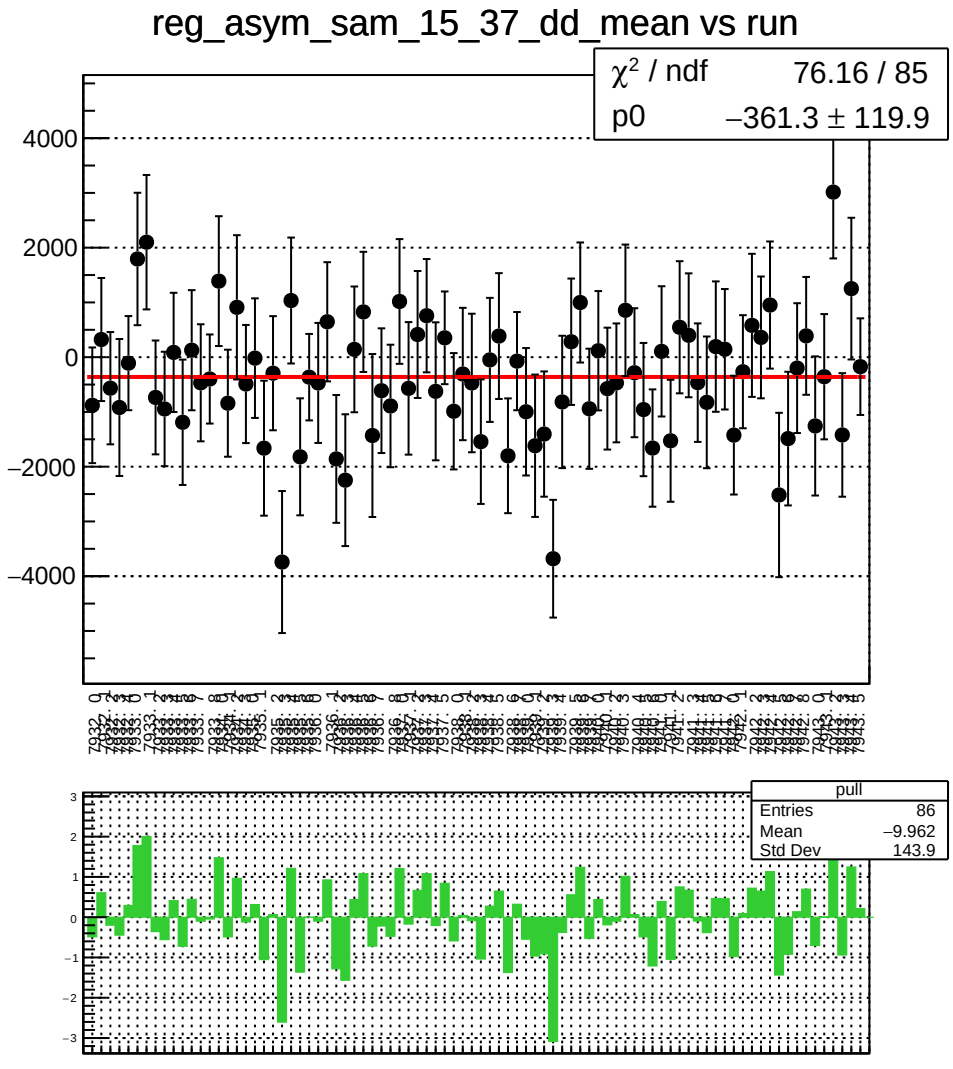

pull1D
Entries 86
Mean −0.003523
Std Dev 1.049

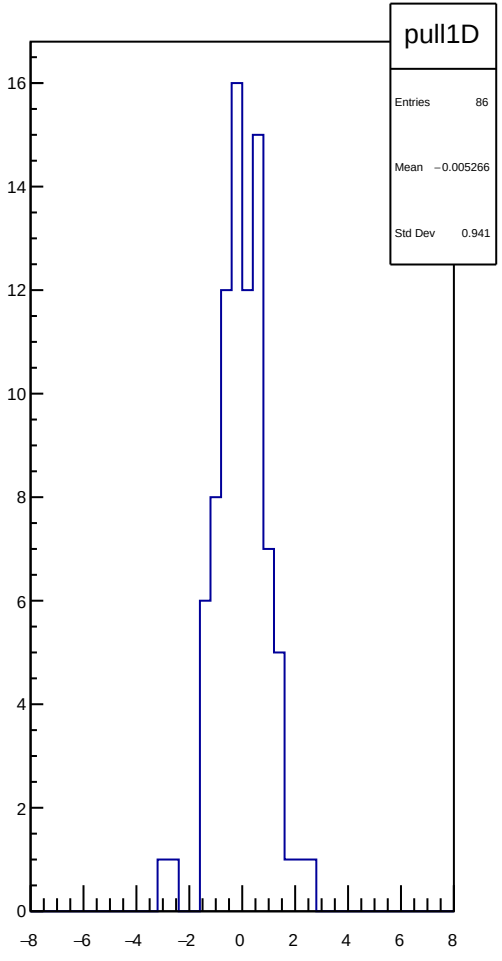

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 7681 / 85
p0 867.5 ± 0.6756
1050
1000
950
900
850
800
750

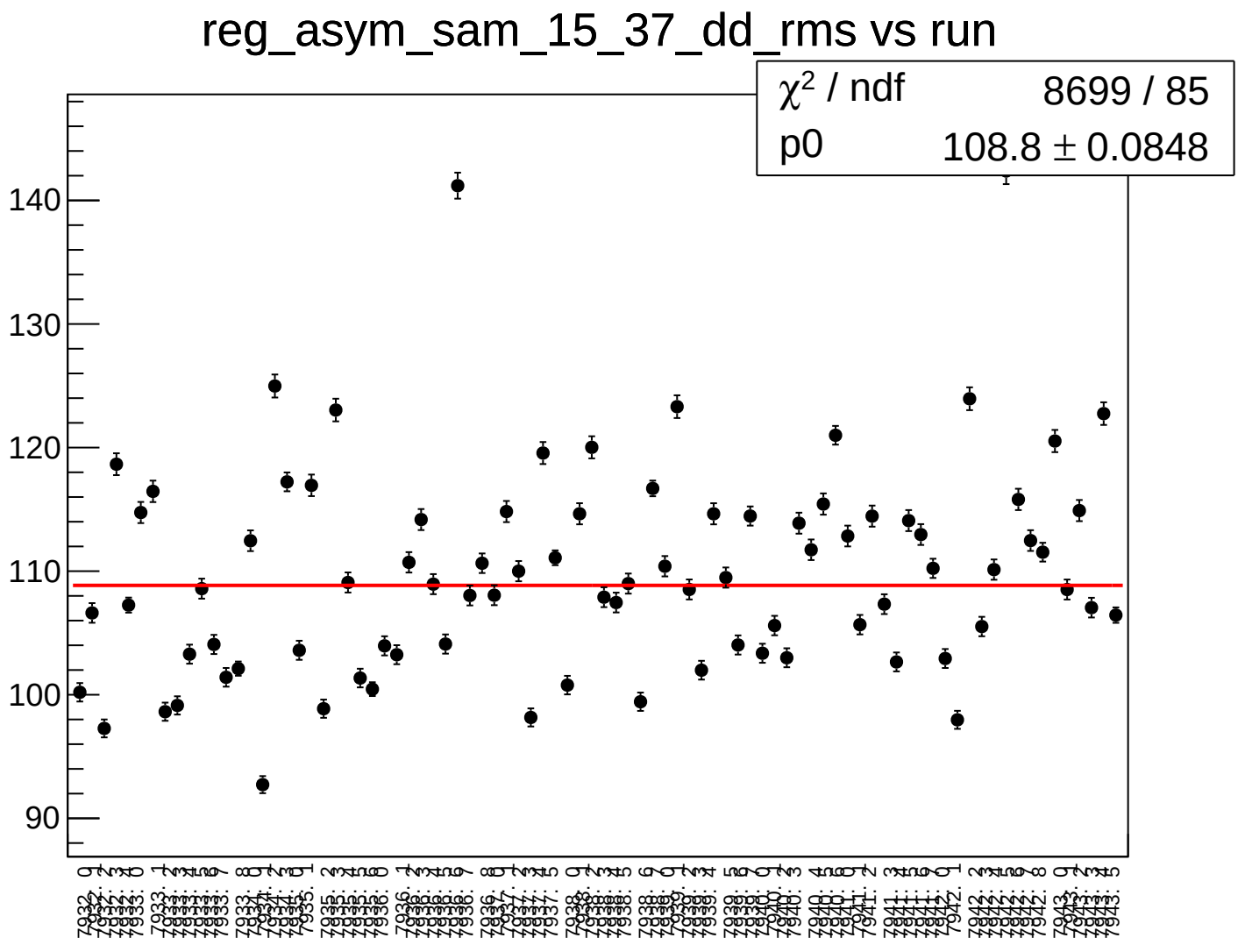

asym_sam_13_57_dd_mean vs run
χ² / ndf 98.13 / 85
p0 462.4 ± 961.2
pull
Entries 86
Mean −25.31
Std Dev 85.08

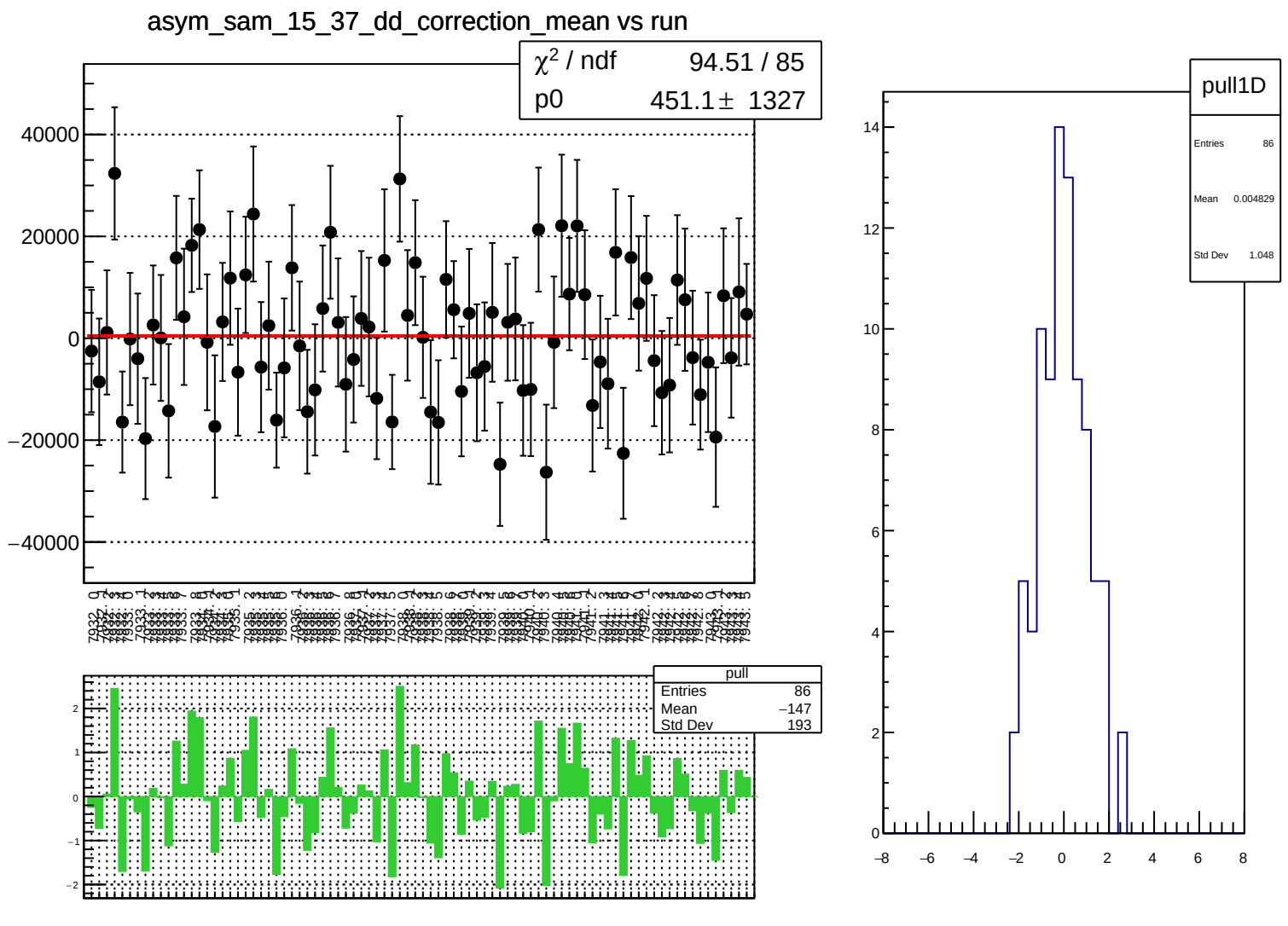

pull1D
Entries 86
Mean 0.004664
Std Dev 1.068

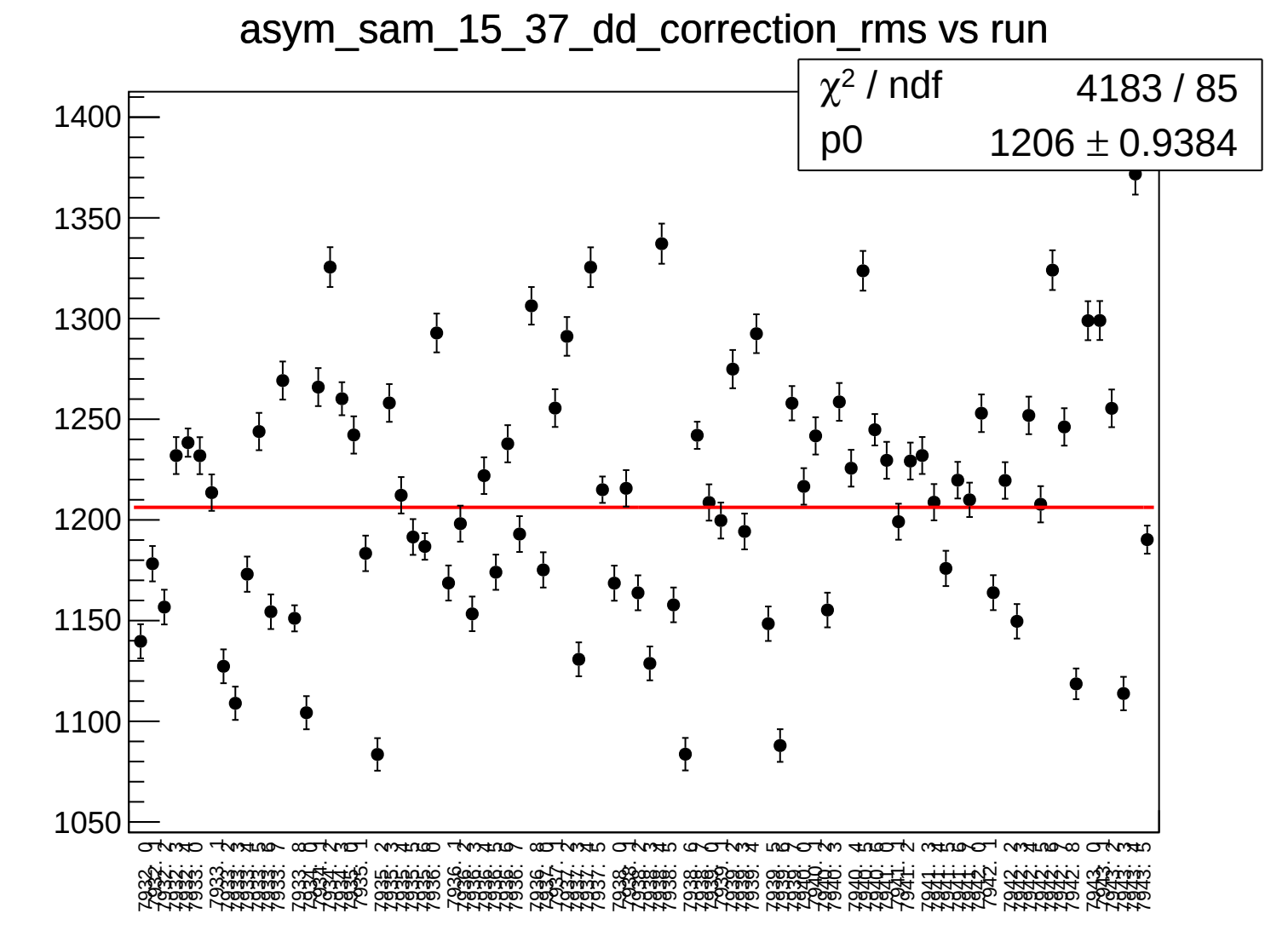

asym_sam_13_57_dd_rms vs run
χ² / ndf 7562 / 85
p0 872.8 ± 0.6797
1050
1000
950
900
850
800
750

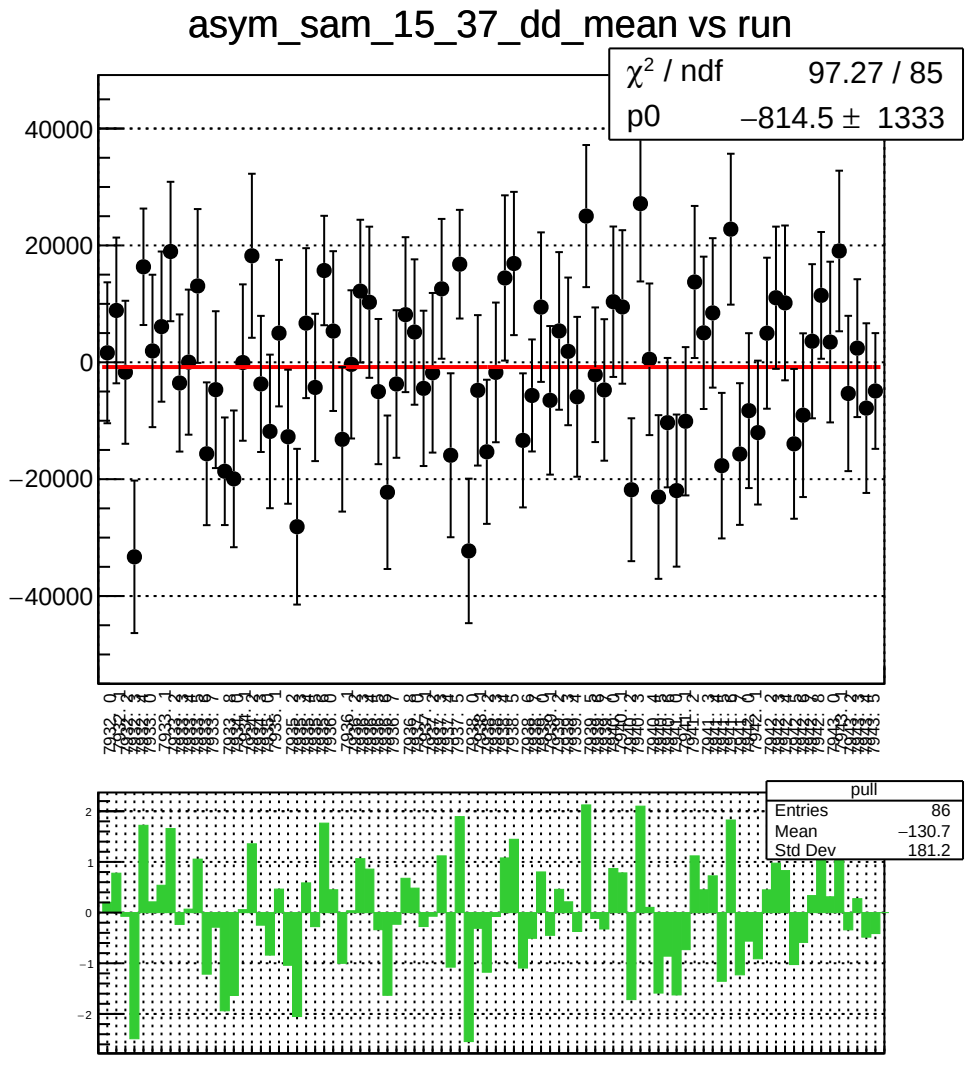

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 76.16 / 85
p0 −361.3 ± 119.9
4000
2000
0
−2000
−4000
pull
Entries 86
Mean −9.962
Std Dev 143.9
3
2
1
0
−1
−2
−3

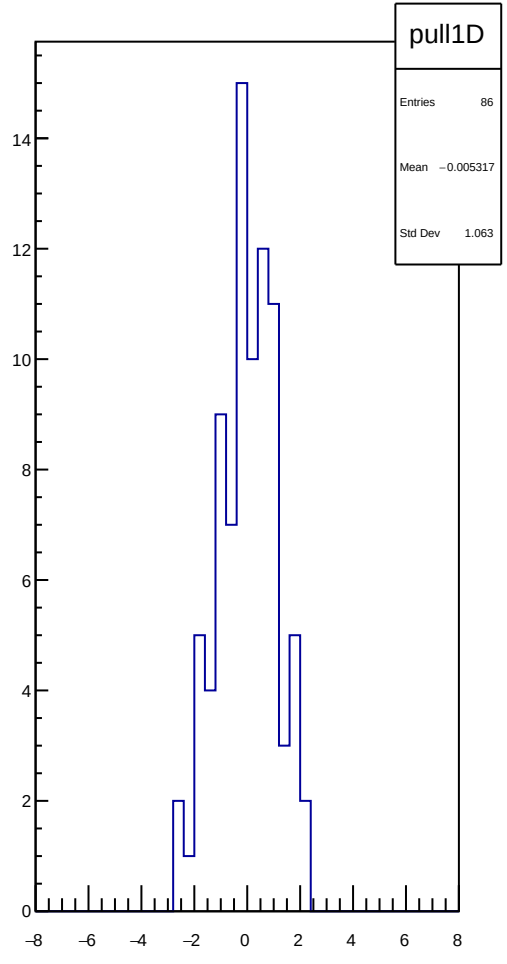

pull1D
Entries 86
Mean −0.005266
Std Dev 0.941
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

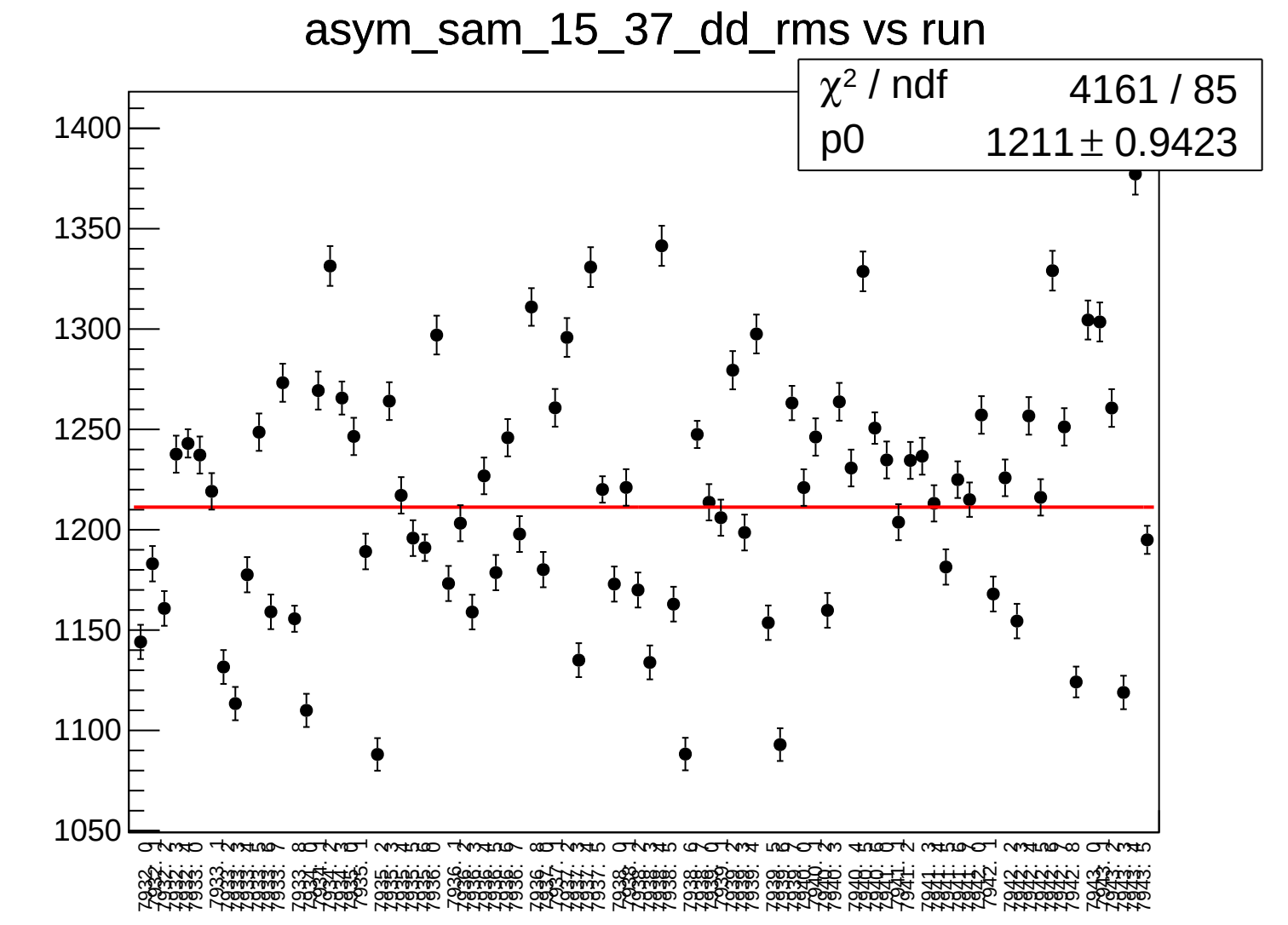

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 8699 / 85
p0 108.8 ± 0.0848
140
130
120
110
100
90

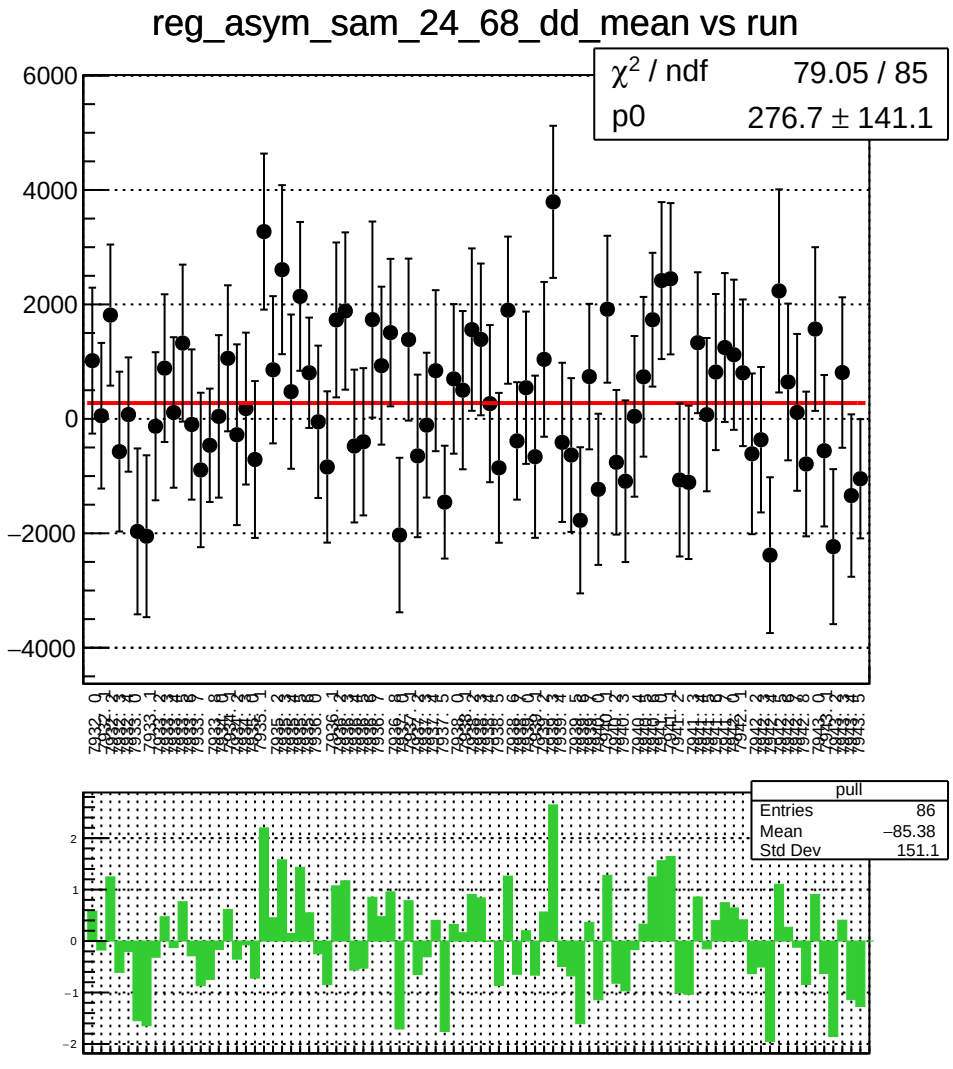

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 94.51 / 85
p0 451.1 ± 1327
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −147
Std Dev 193
2
1
0
−1
−2
pull1D
Entries 86
Mean 0.004829
Std Dev 1.048
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

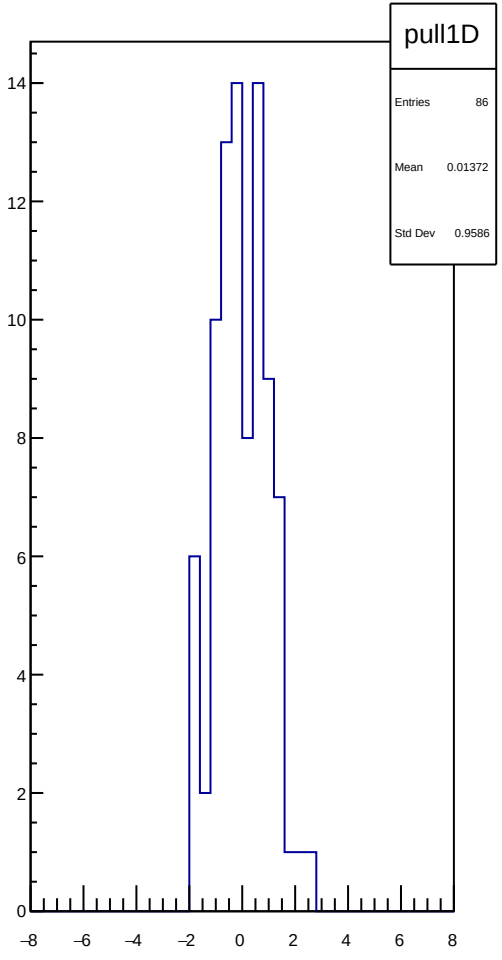

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 4183 / 85
p0 1206 ± 0.9384
1400
1350
1300
1250
1200
1150
1100
1050

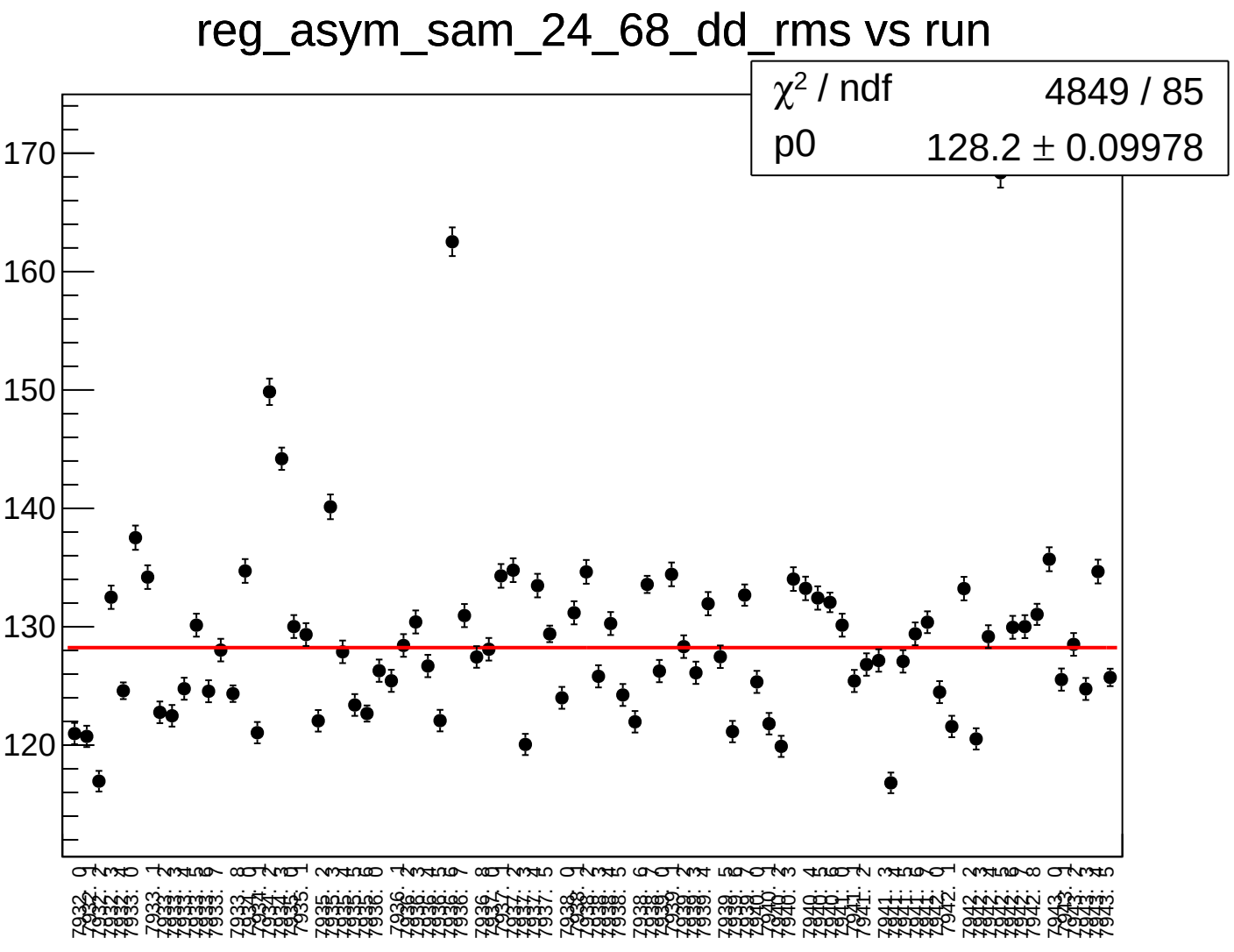

asym_sam_15_37_dd_mean vs run
χ² / ndf 97.27 / 85
p0 −814.5 ± 1333
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −130.7
Std Dev 181.2
2
1
0
−1
−2

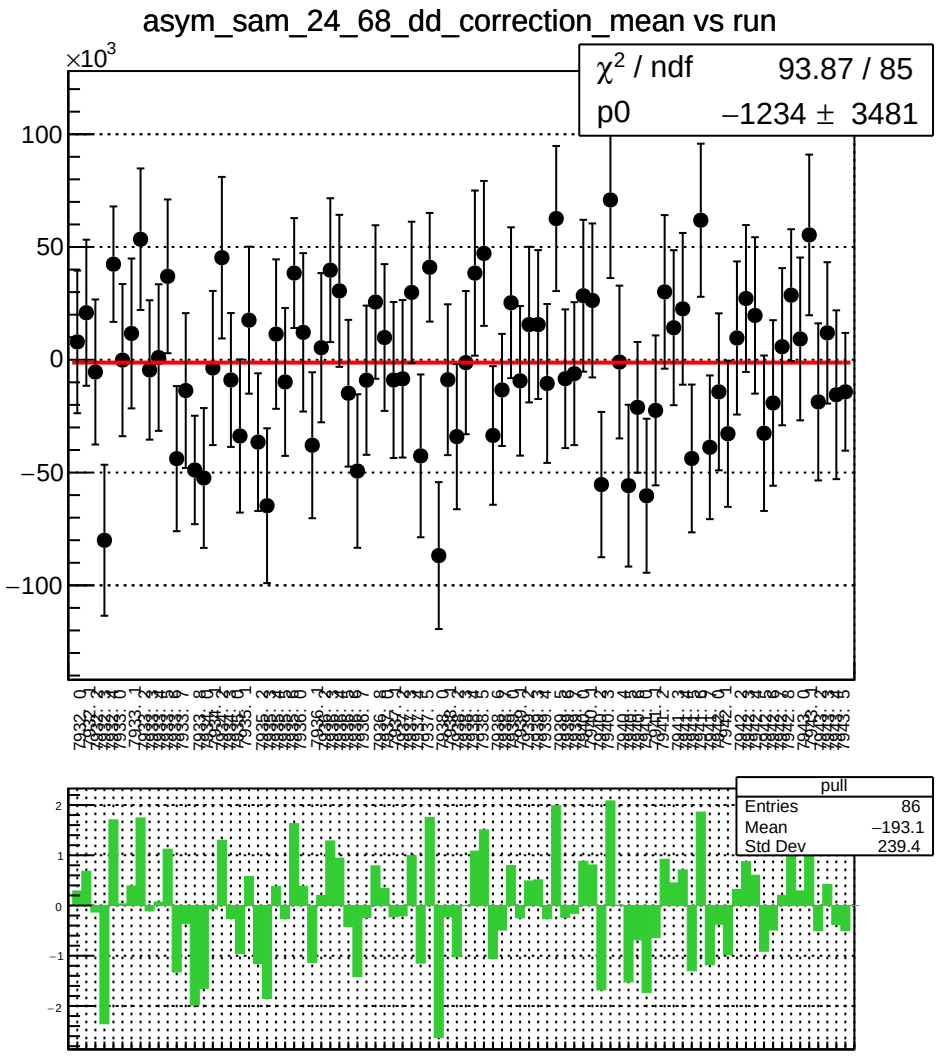

pull1D
Entries 86
Mean −0.005317
Std Dev 1.063
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

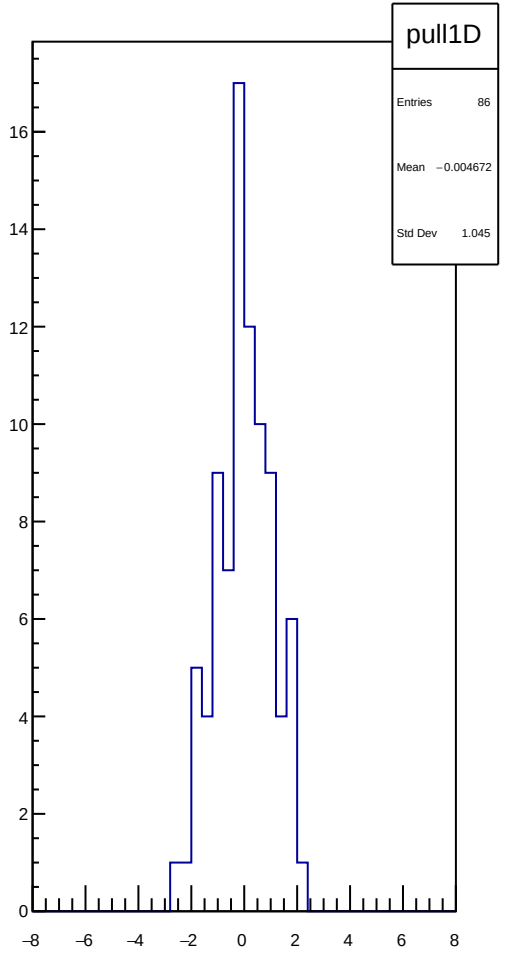

asym_sam_15_37_dd_rms vs run
χ² / ndf 4161 / 85
p0 1211 ± 0.9423
1400
1350
1300
1250
1200
1150
1100
1050

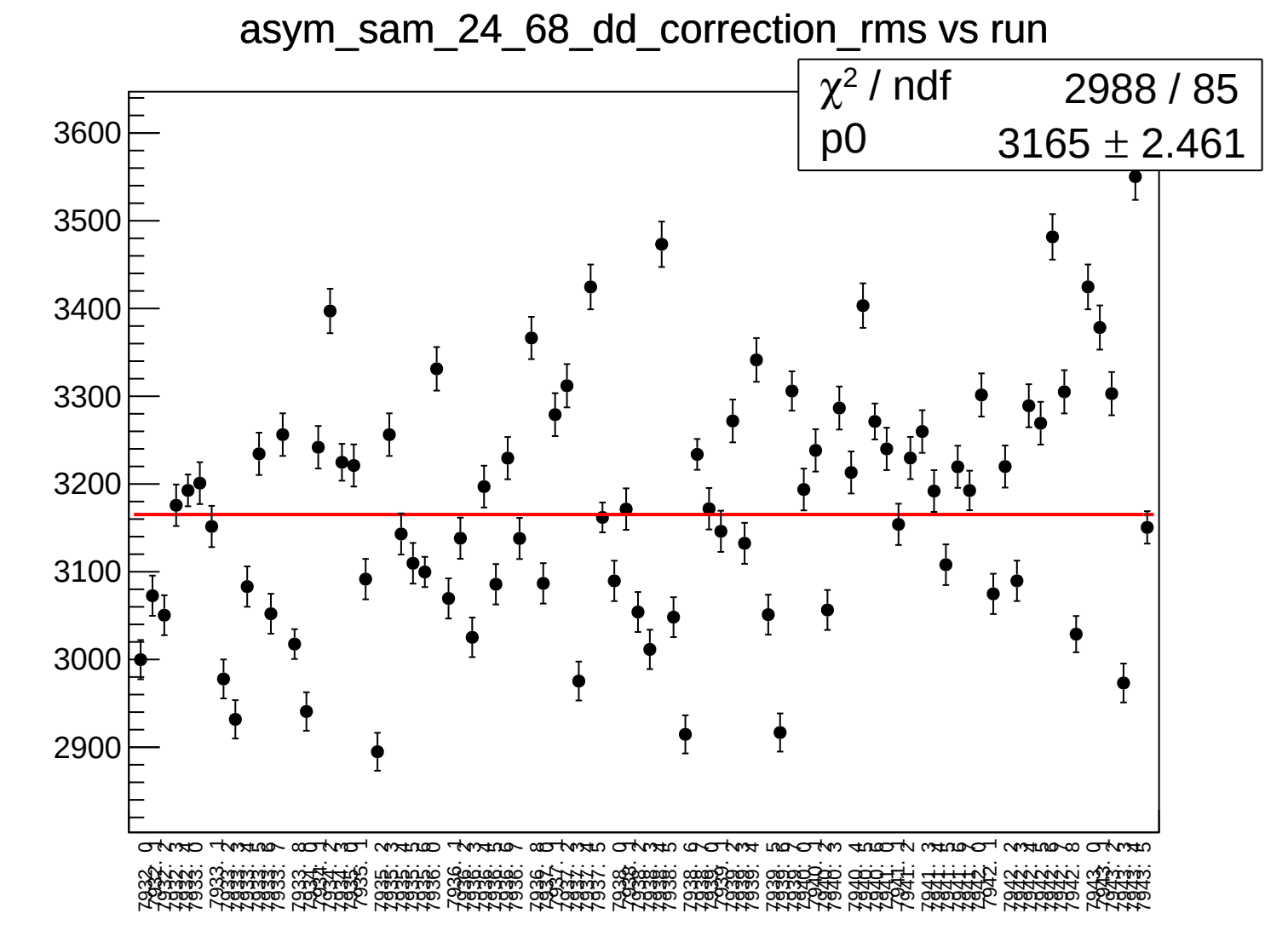

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 79.05 / 85
p0 276.7 ± 141.1
pull
Entries 86
Mean −85.38
Std Dev 151.1

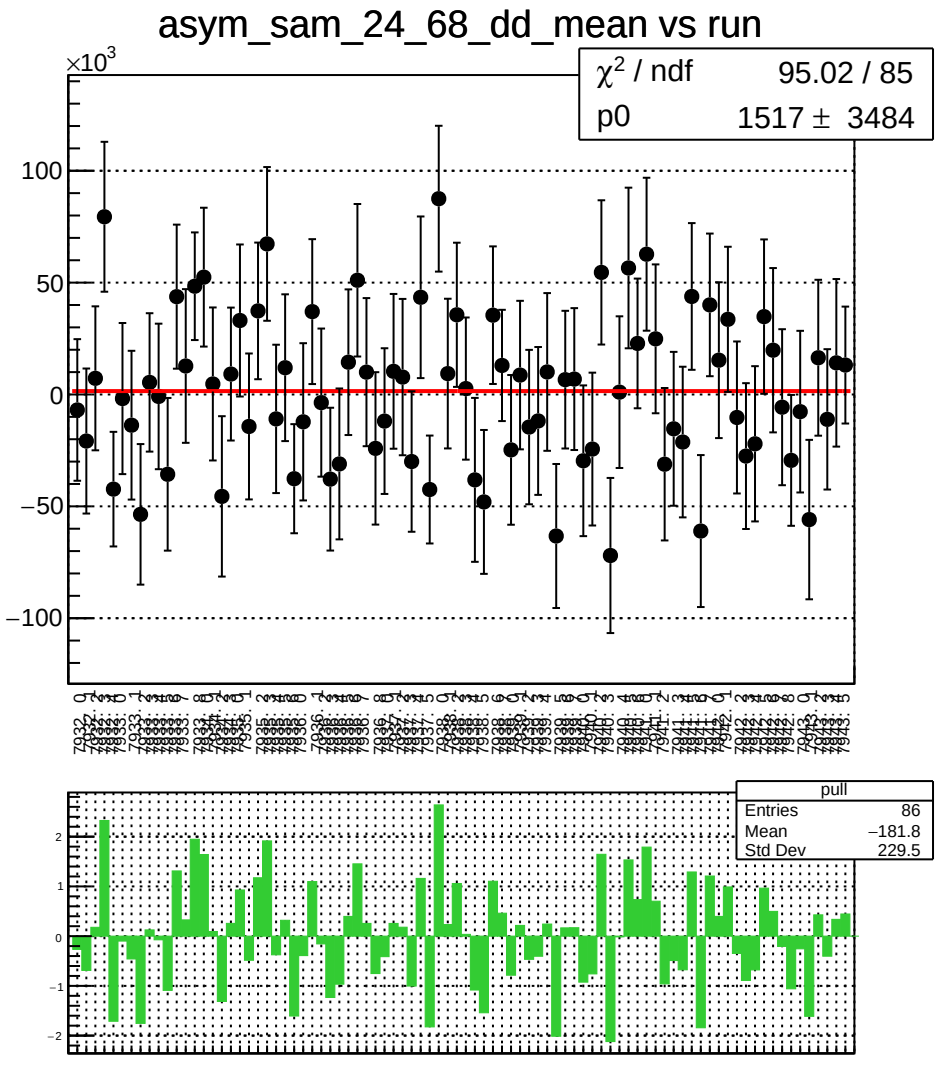

pull1D
Entries 86
Mean 0.01372
Std Dev 0.9586

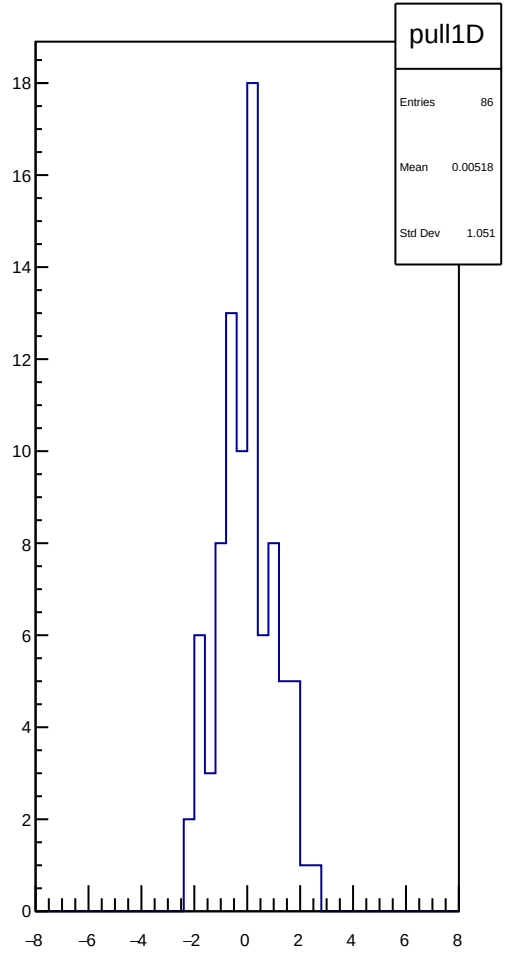

reg_asym_sam_24_68_dd_rms vs run
χ^2 / ndf 4849 / 85
p0 128.2 ± 0.09978
170
160
150
140
130
120

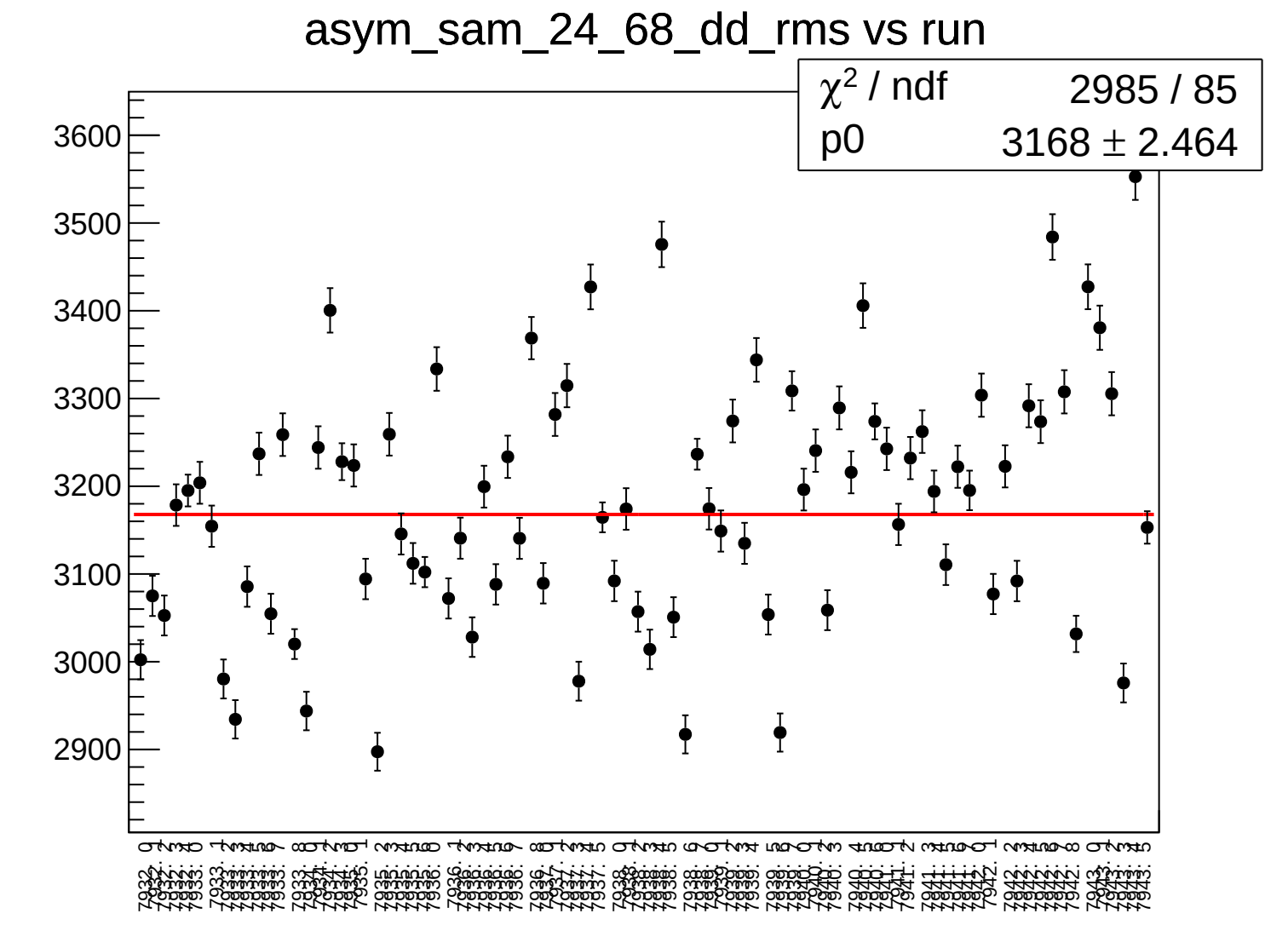

asym_sam_24_68_dd_correction_mean vs run
×10^3
χ² / ndf 93.87 / 85
p0 −1234 ± 3481
100
50
0
−50
−100
pull
Entries 86
Mean −193.1
Std Dev 239.4
2
1
0
−1
−2

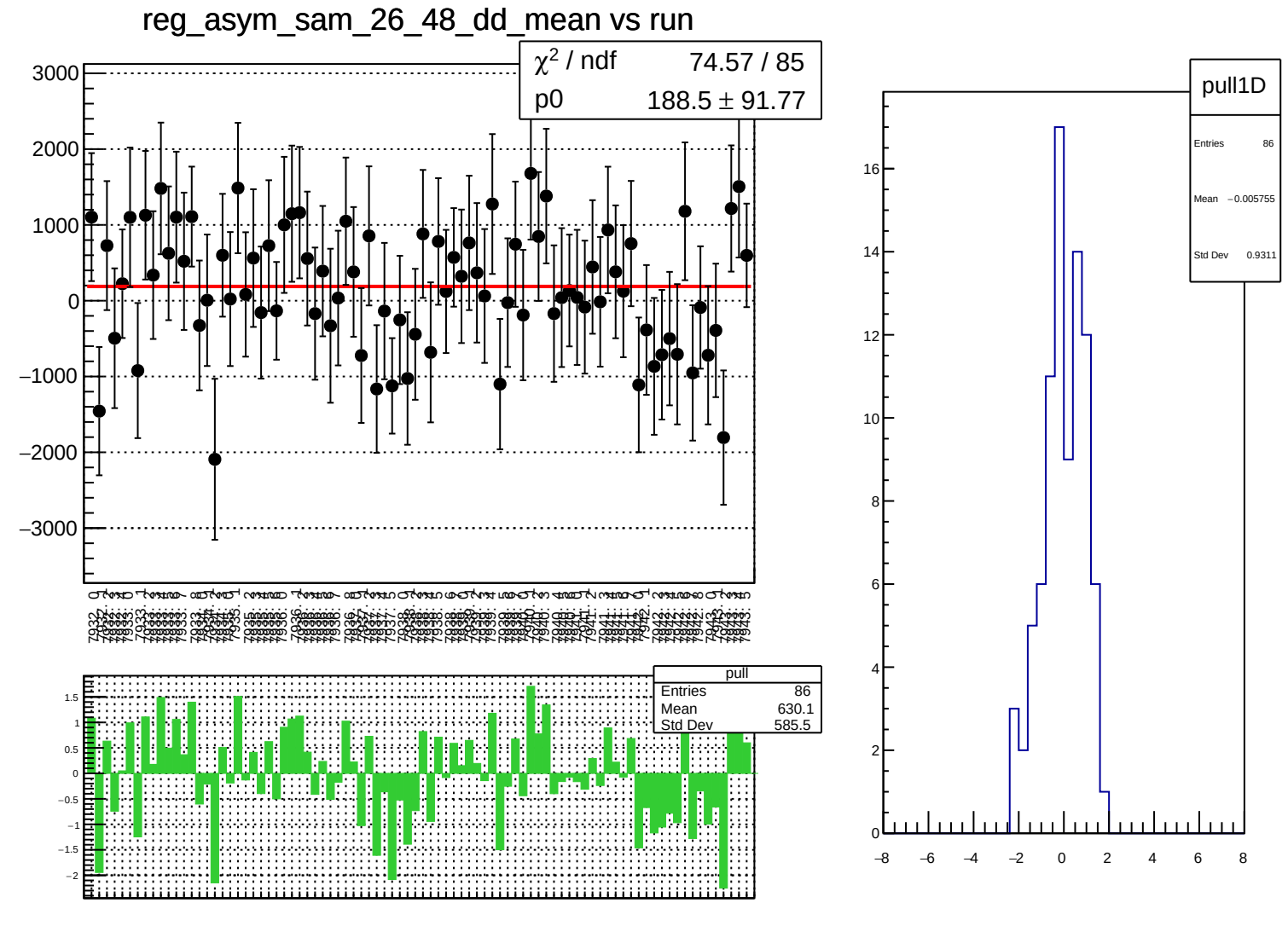

pull1D
Entries 86
Mean −0.004672
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

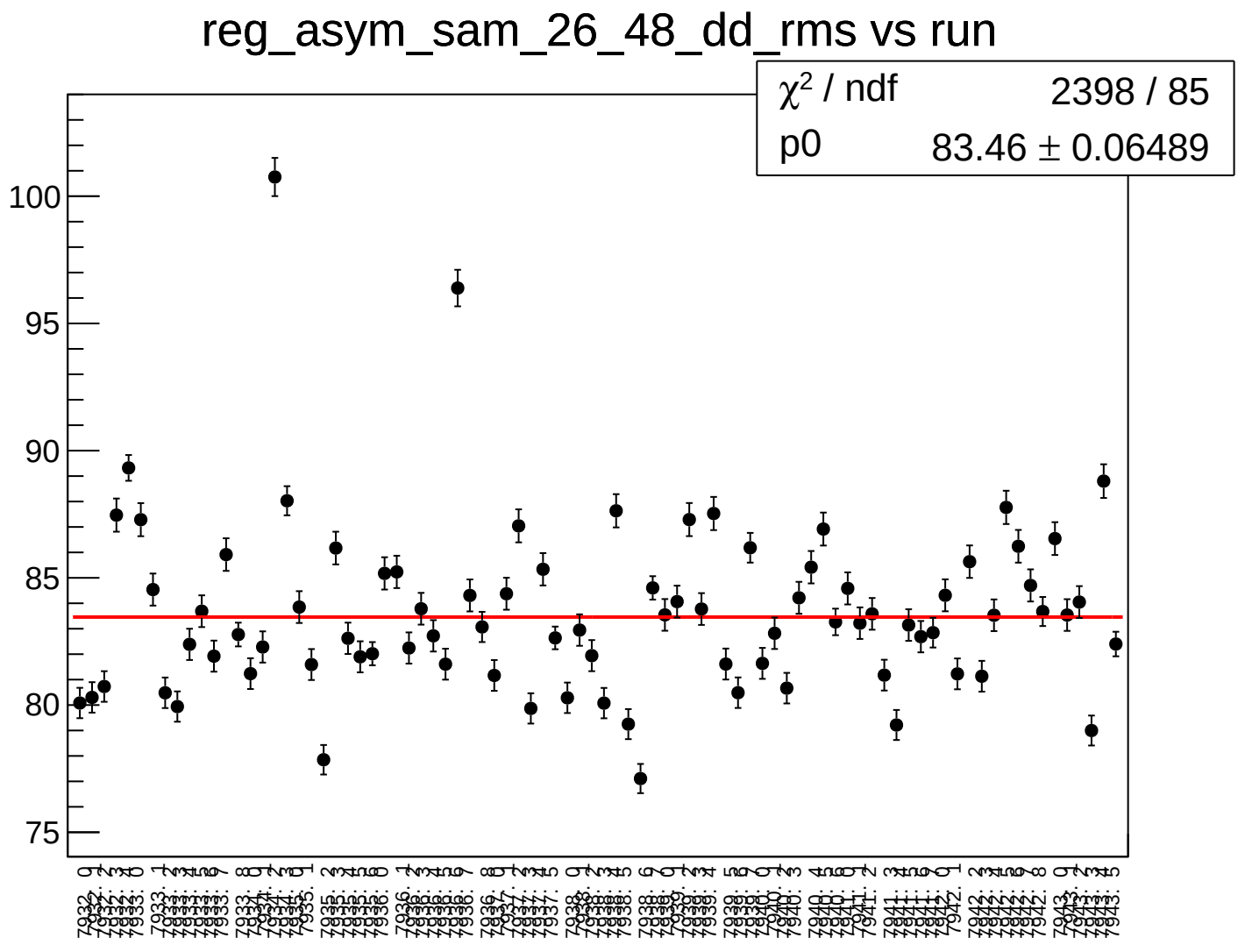

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 2988 / 85
p0 3165 ± 2.461
3600
3500
3400
3300
3200
3100
3000
2900

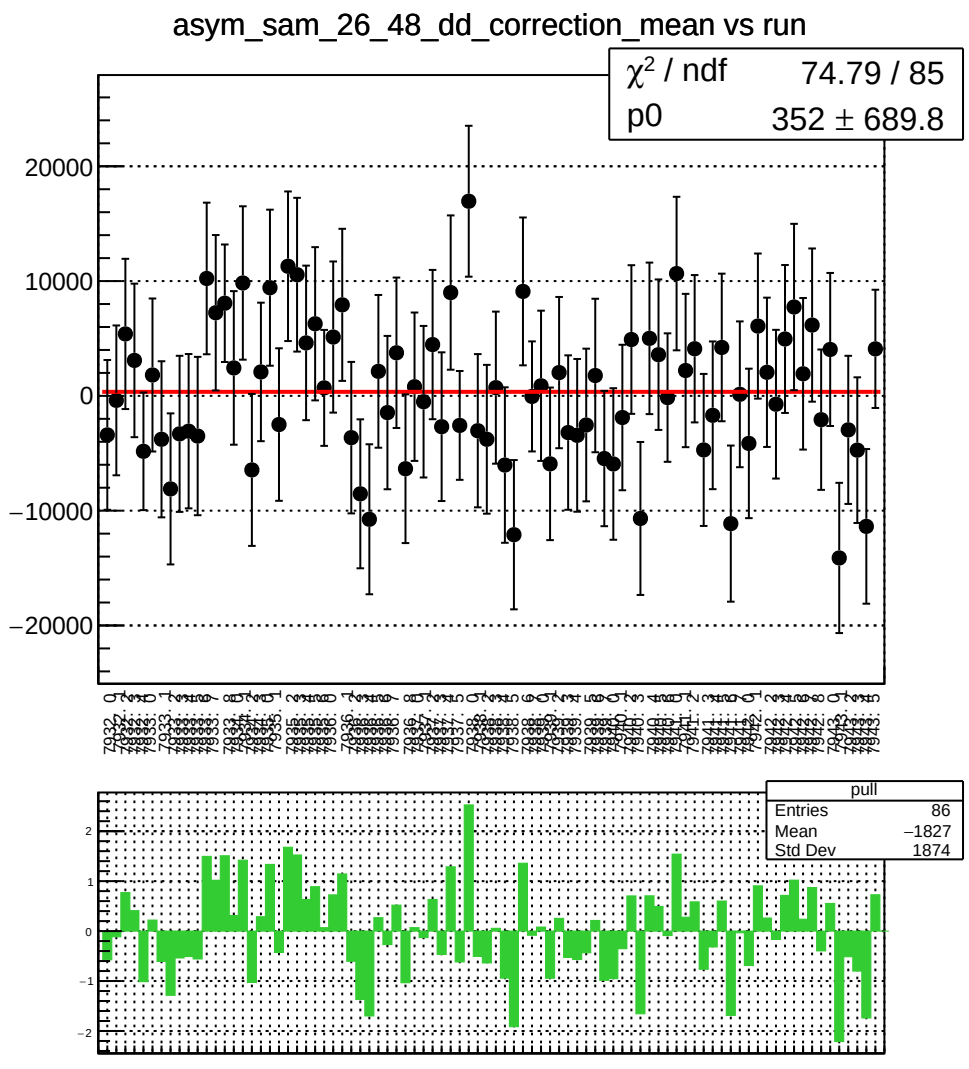

asym_sam_24_68_dd_mean vs run
×10^3
χ² / ndf 95.02 / 85
p0 1517 ± 3484
100
50
0
−50
−100
pull
Entries 86
Mean −181.8
Std Dev 229.5
2
1
0
−1
−2

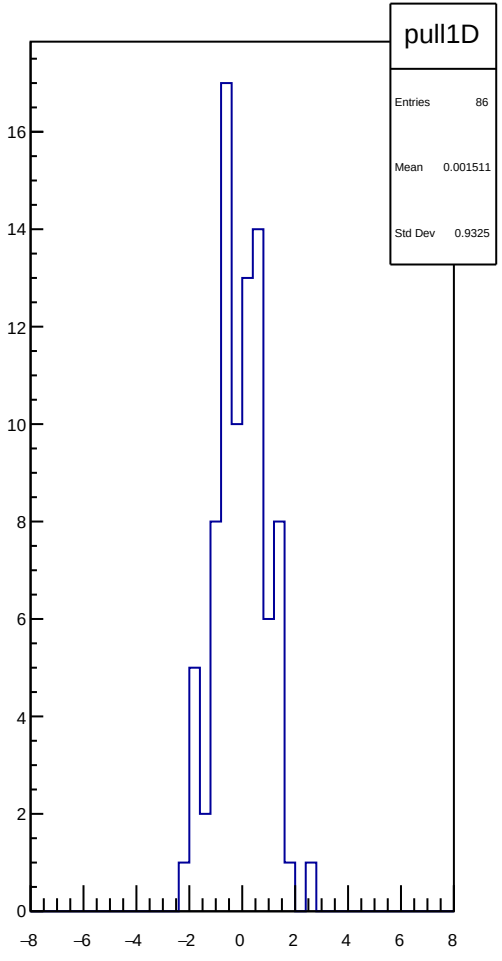

pull1D
Entries 86
Mean 0.00518
Std Dev 1.051
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

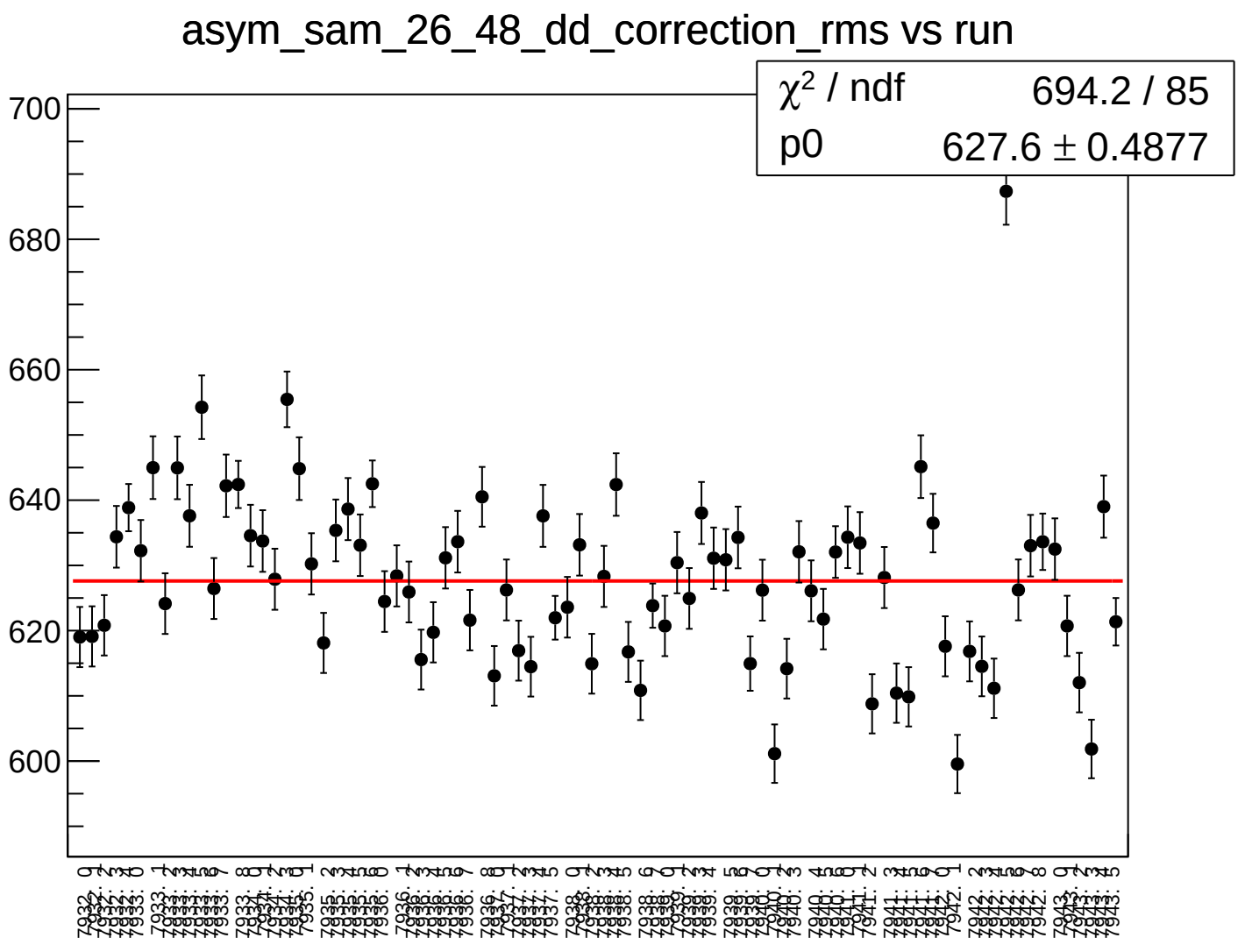

asym_sam_24_68_dd_rms vs run
χ² / ndf 2985 / 85
p0 3168 ± 2.464
3600
3500
3400
3300
3200
3100
3000
2900

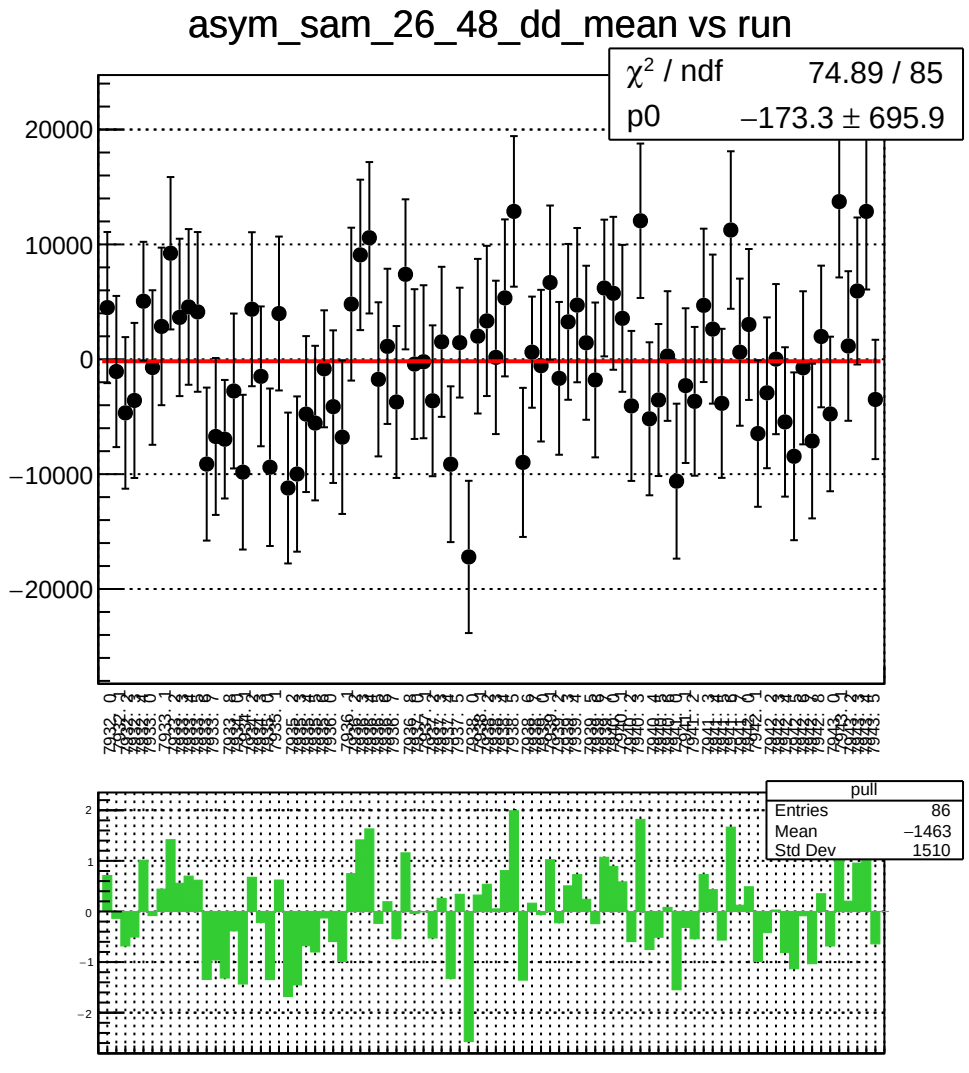

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 74.57 / 85
p0 188.5 ± 91.77
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 630.1
Std Dev 585.5
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean −0.005755
Std Dev 0.9311
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

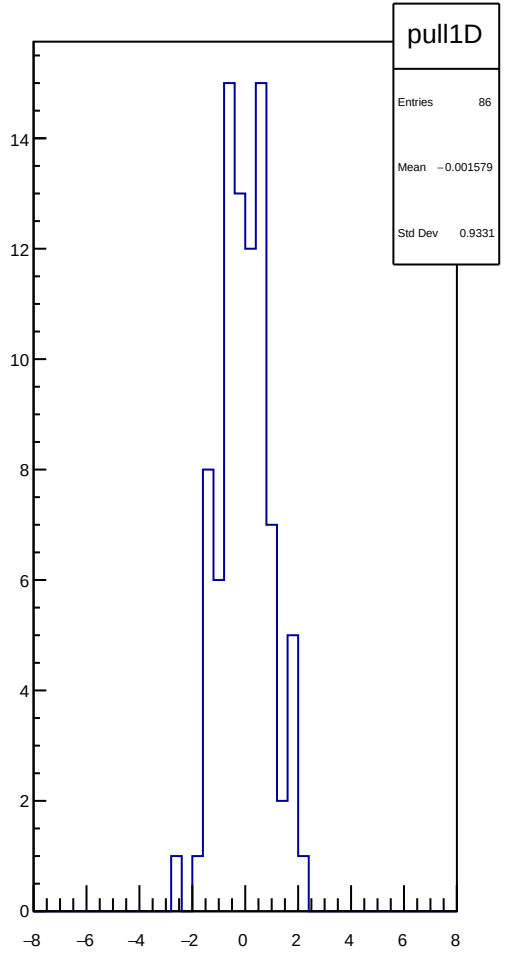

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 2398 / 85
p0 83.46 ± 0.06489
100
95
90
85
80
75

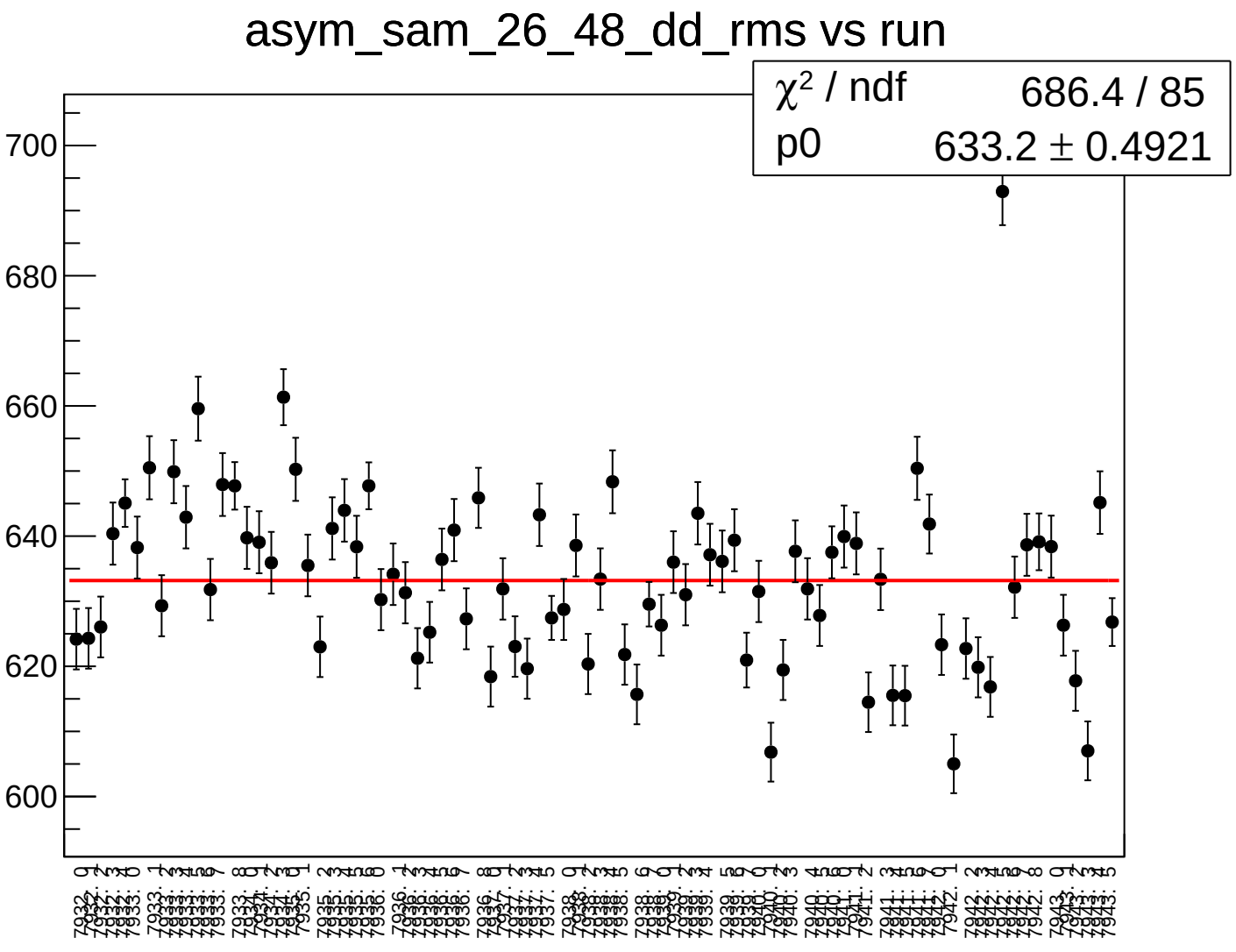

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 74.79 / 85
p0 352 ± 689.8
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −1827
Std Dev 1874
2
1
0
−1
−2

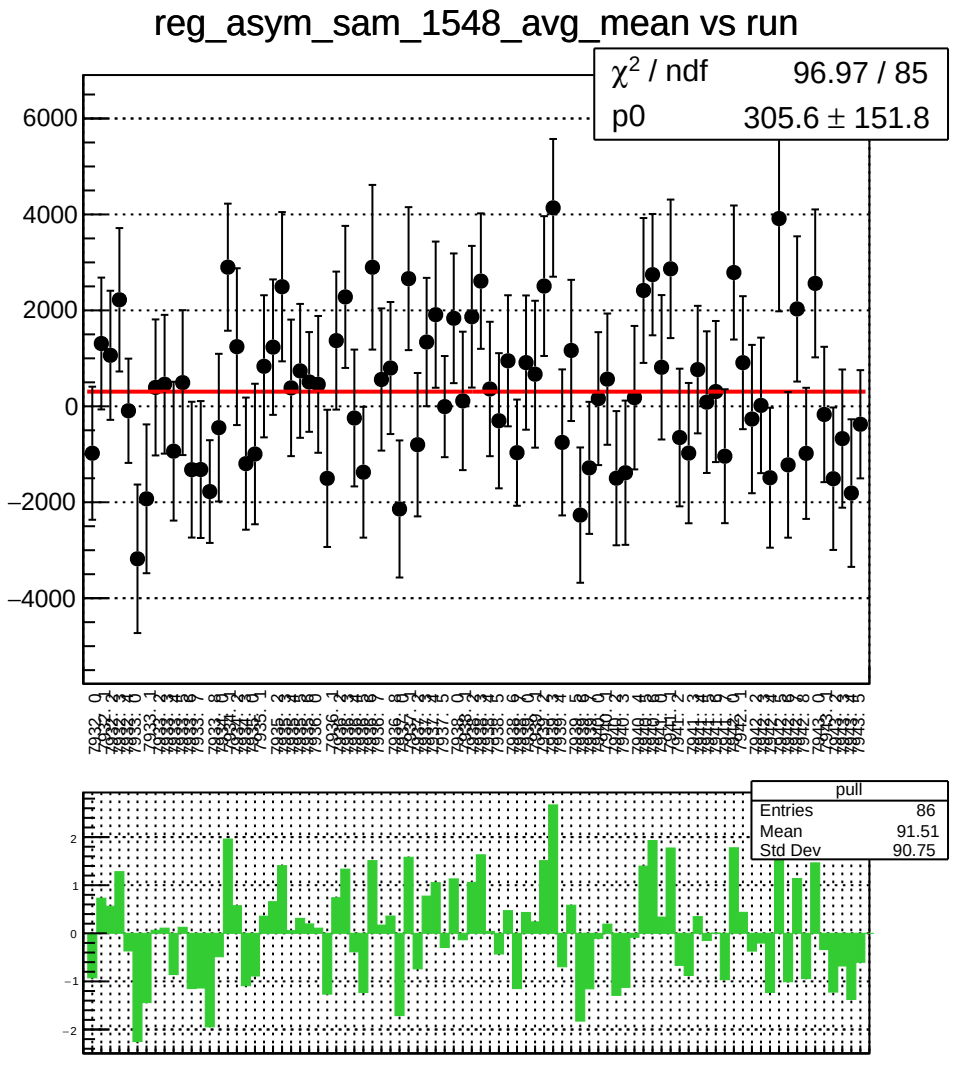

pull1D
Entries 86
Mean 0.001511
Std Dev 0.9325
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

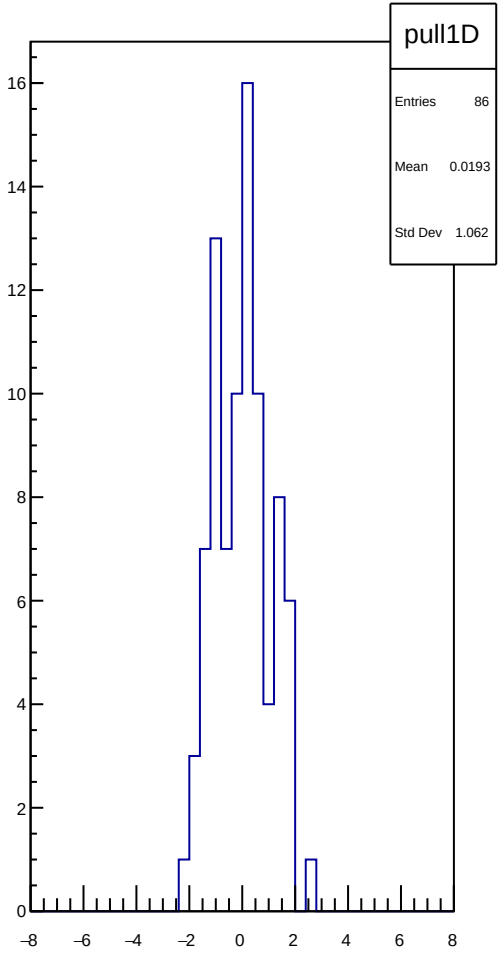

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 694.2 / 85
p0 627.6 ± 0.4877
700
680
660
640
620
600

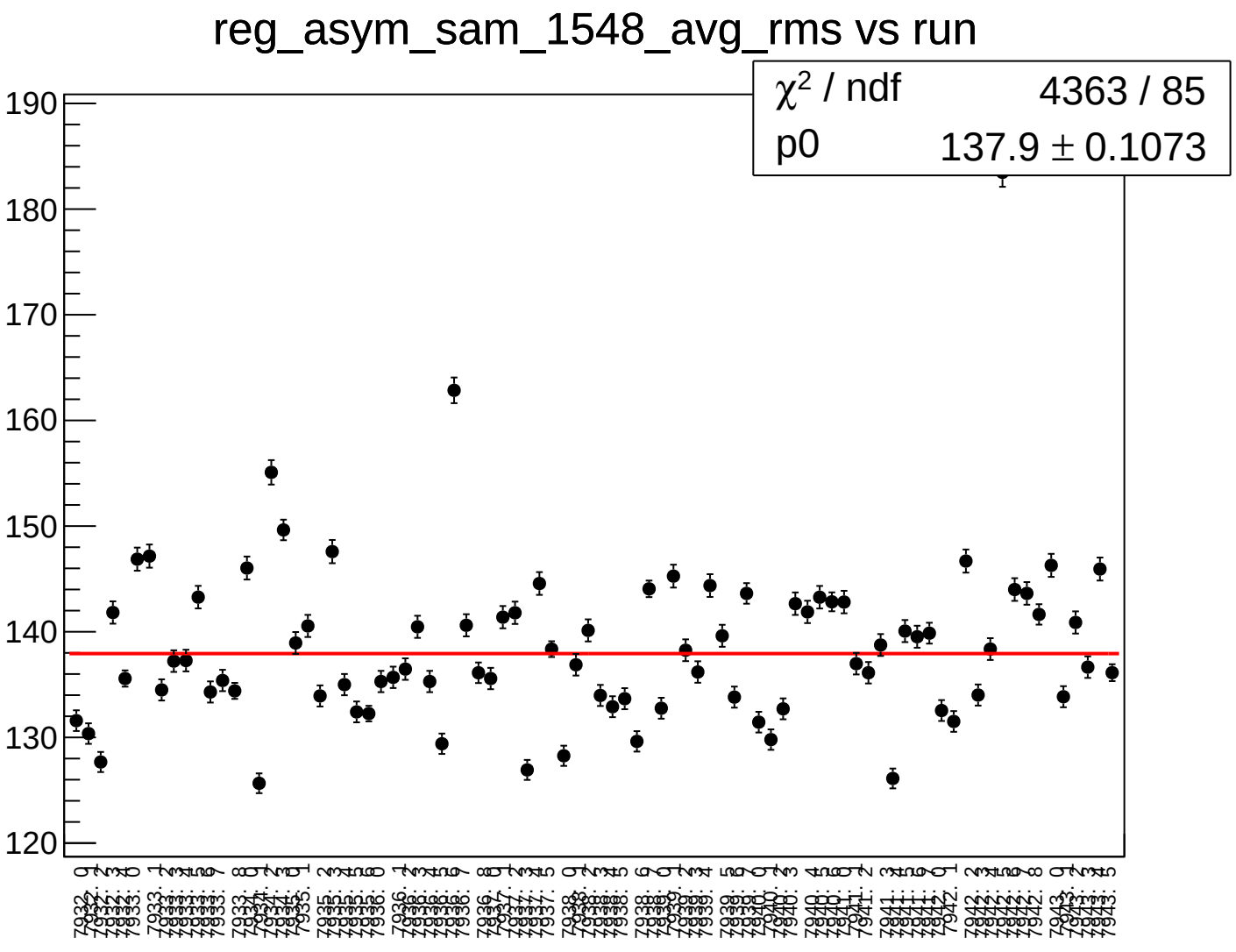

asym_sam_26_48_dd_mean vs run
χ² / ndf 74.89 / 85
p0 −173.3 ± 695.9
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −1463
Std Dev 1510
2
1
0
−1
−2

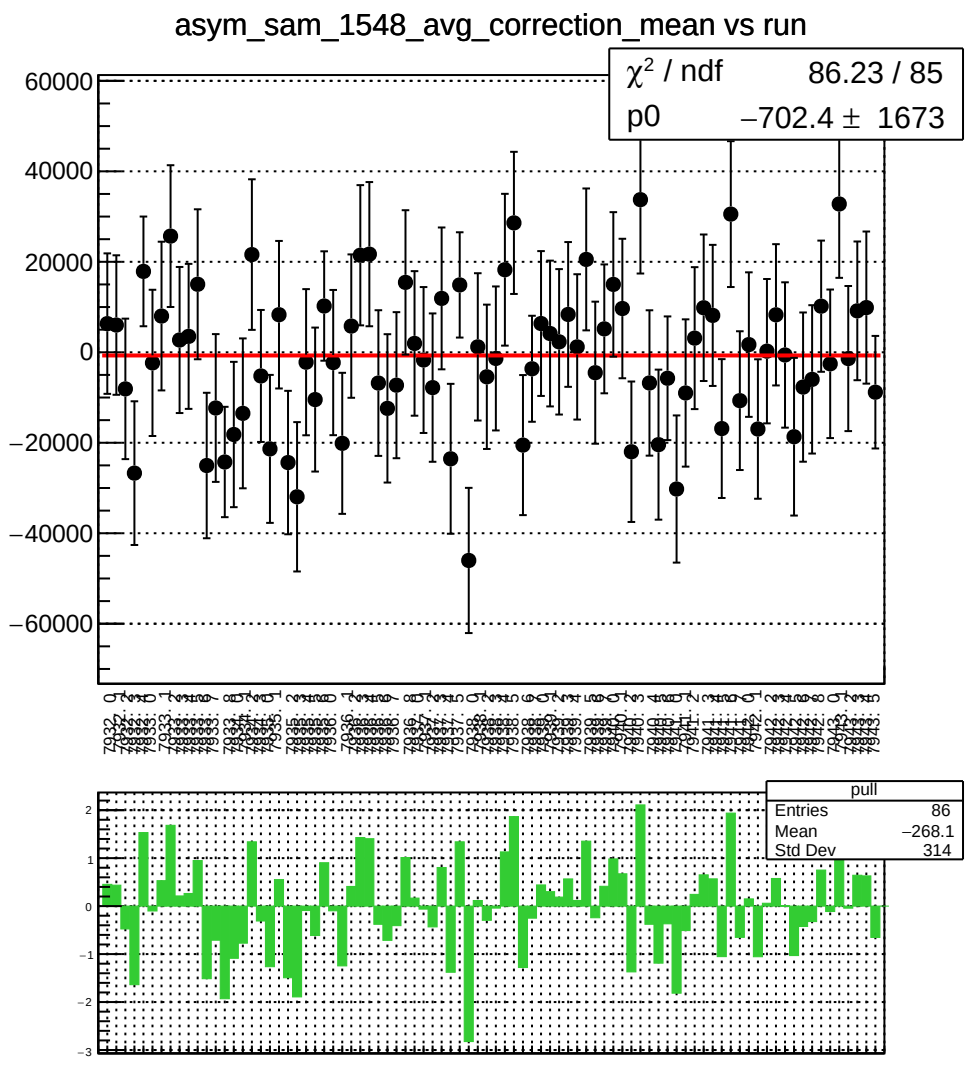

pull1D
Entries 86
Mean −0.001579
Std Dev 0.9331
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

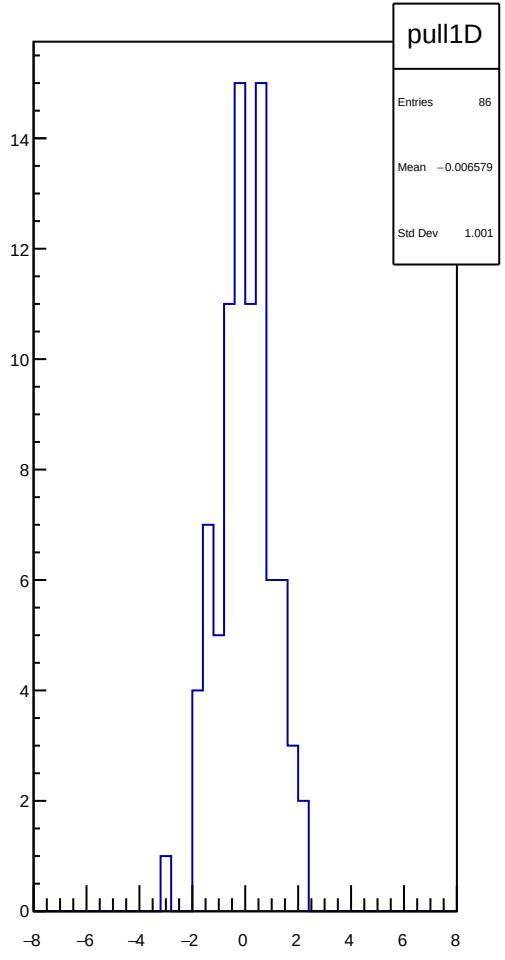

asym_sam_26_48_dd_rms vs run
χ² / ndf 686.4 / 85
p0 633.2 ± 0.4921
700
680
660
640
620
600

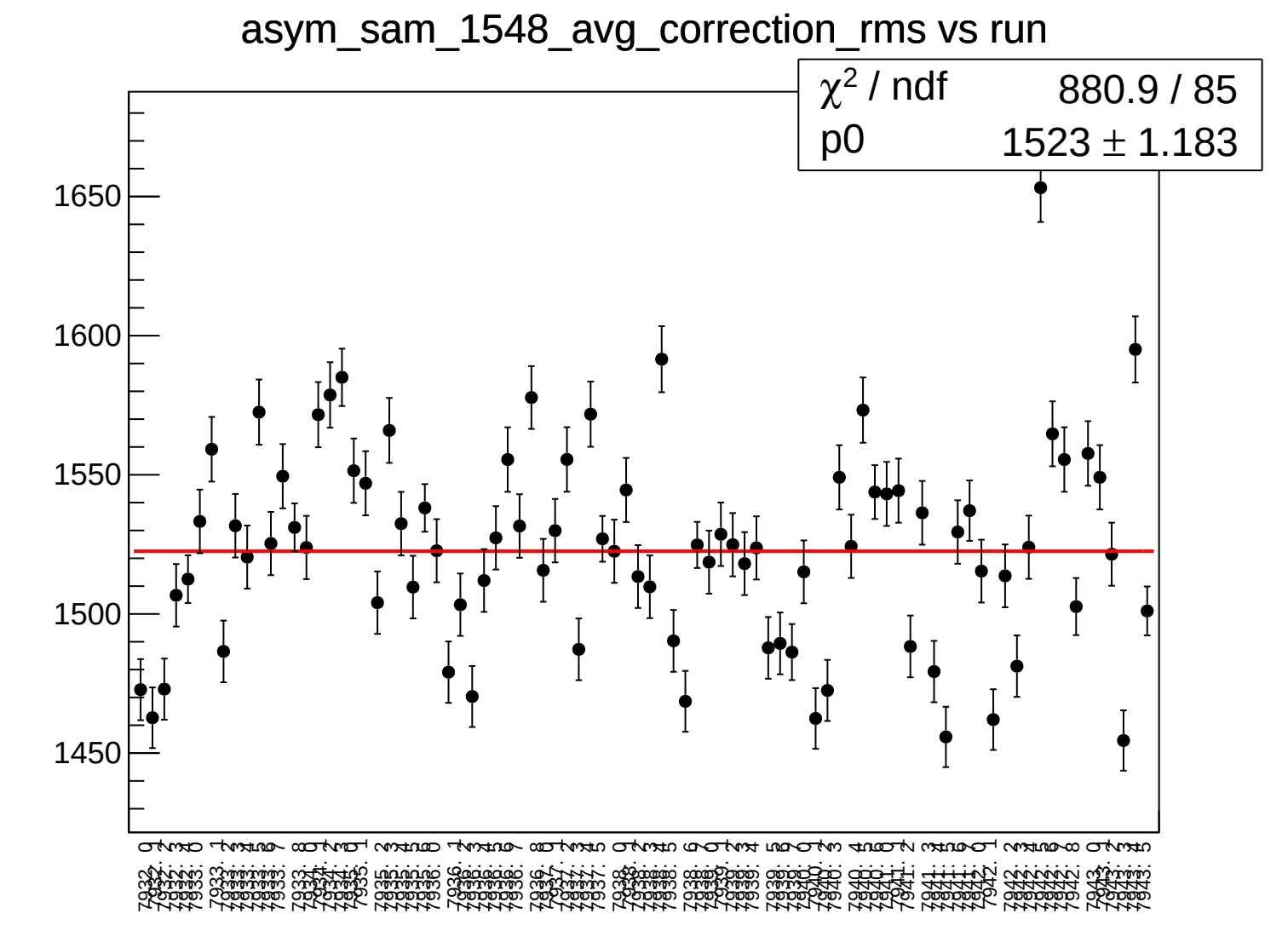

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 96.97 / 85
p0 305.6 ± 151.8
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 91.51
Std Dev 90.75
2
1
0
−1
−2

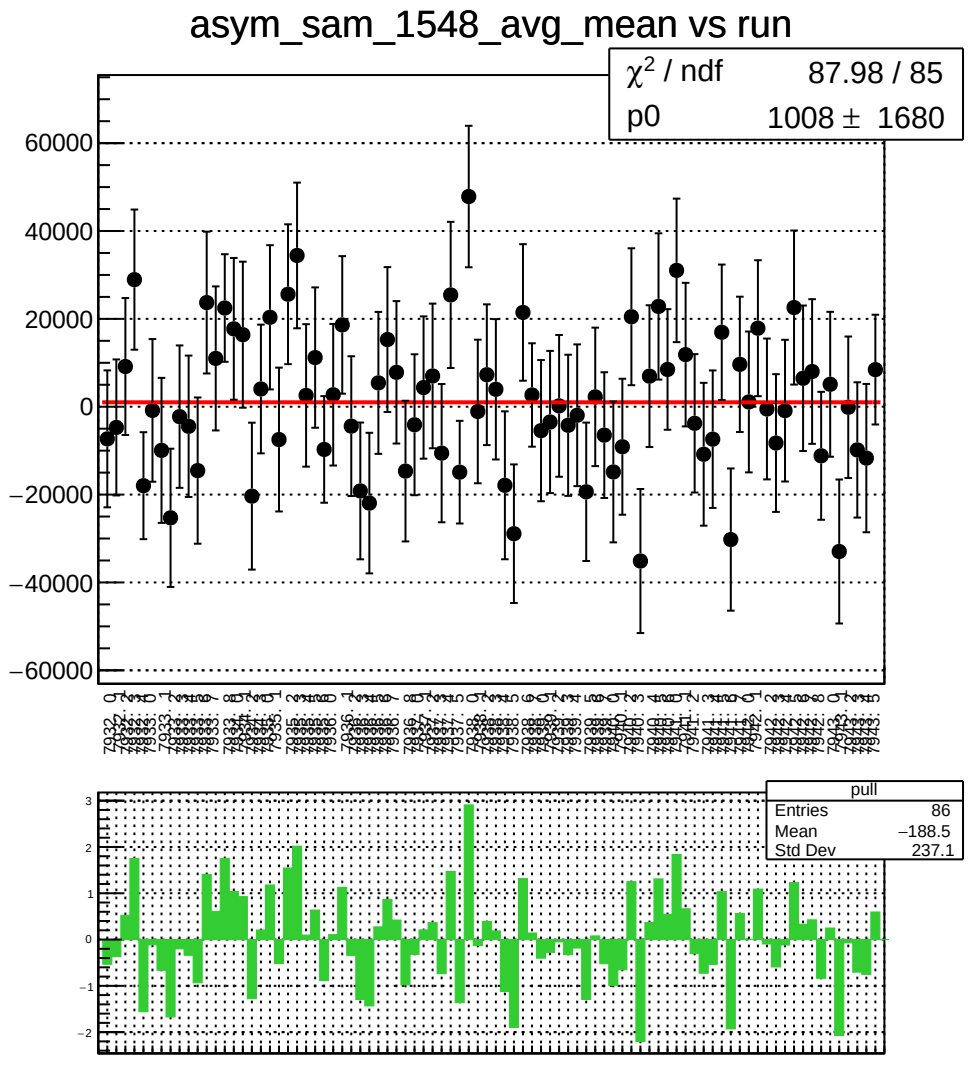

pull1D
Entries 86
Mean 0.0193
Std Dev 1.062
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

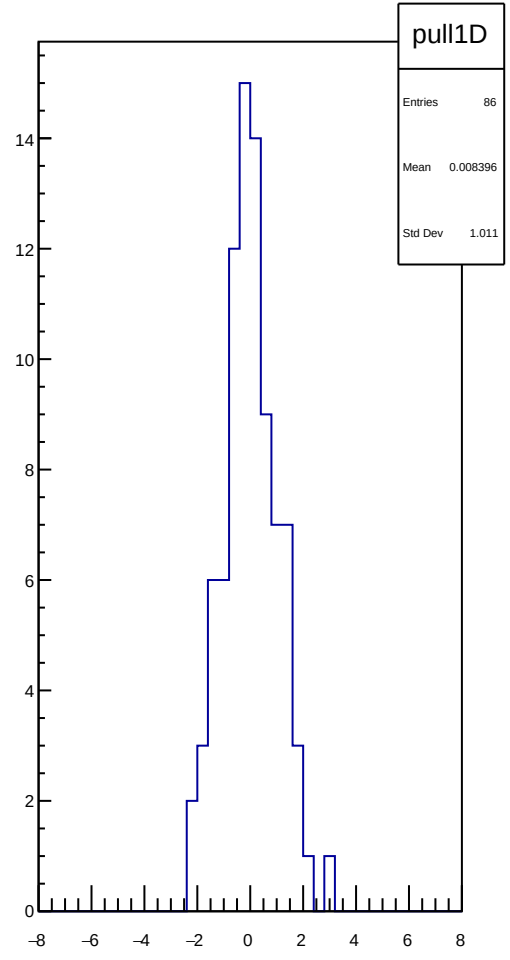

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 4363 / 85
p0 137.9 ± 0.1073
190
180
170
160
150
140
130
120

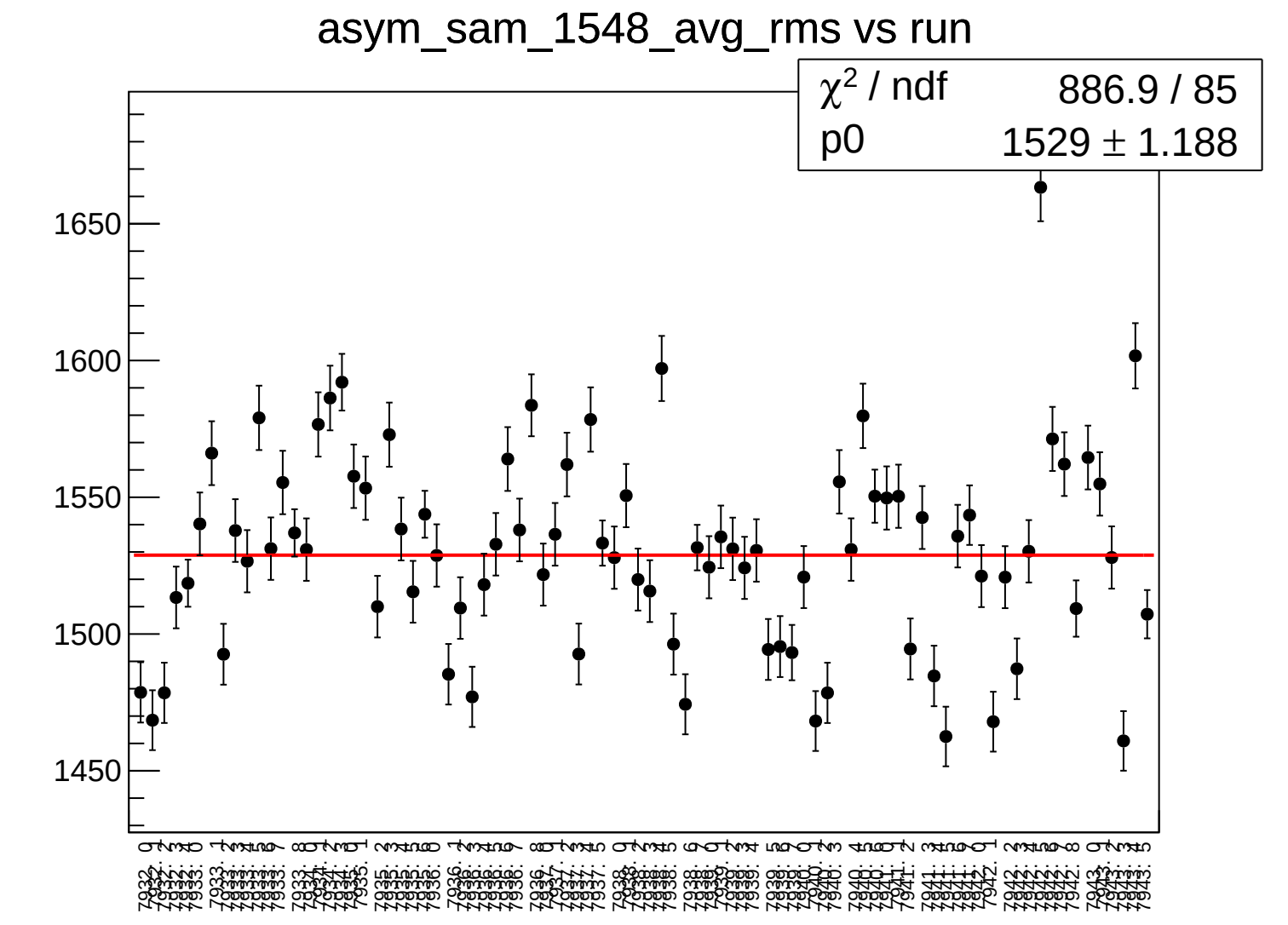

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 86.23 / 85
p0 −702.4 ± 1673
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −268.1
Std Dev 314
2
1
0
−1
−2
−3

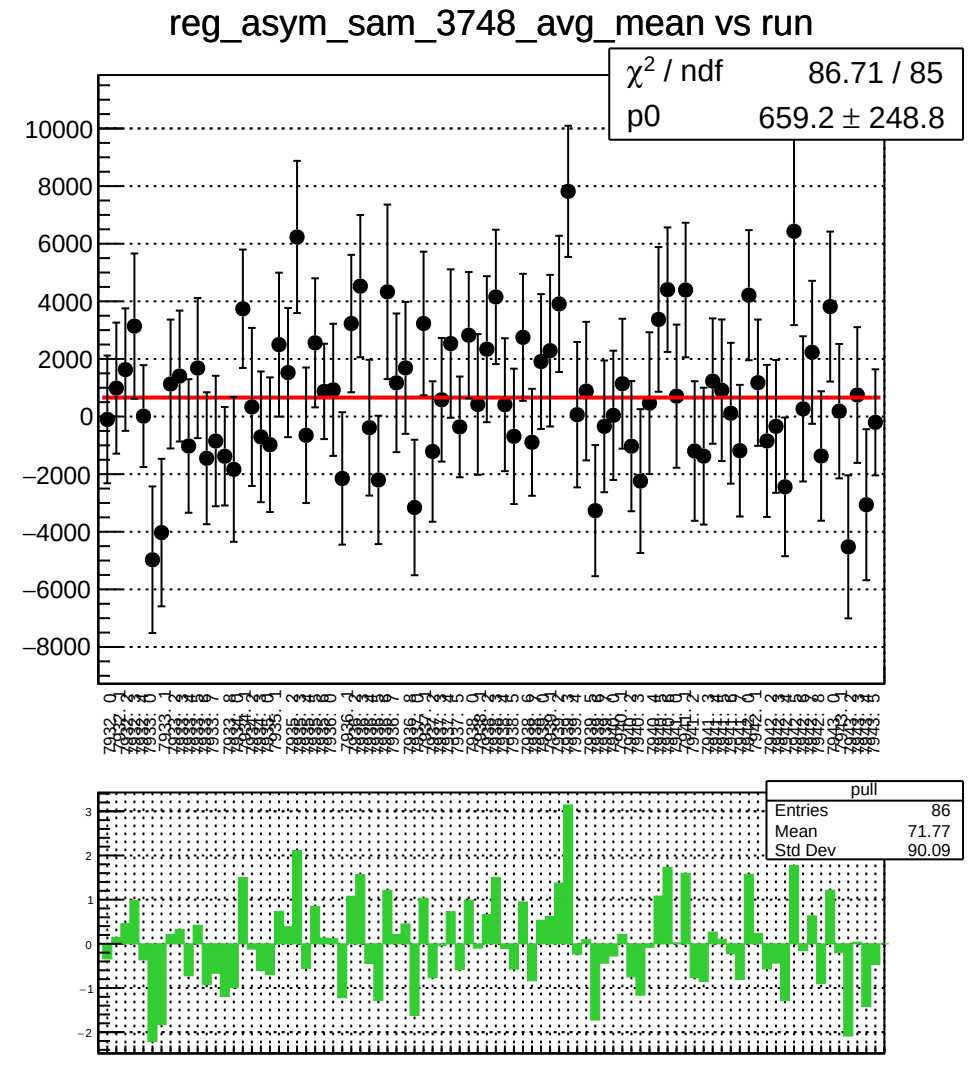

pull1D
Entries 86
Mean −0.006579
Std Dev 1.001
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

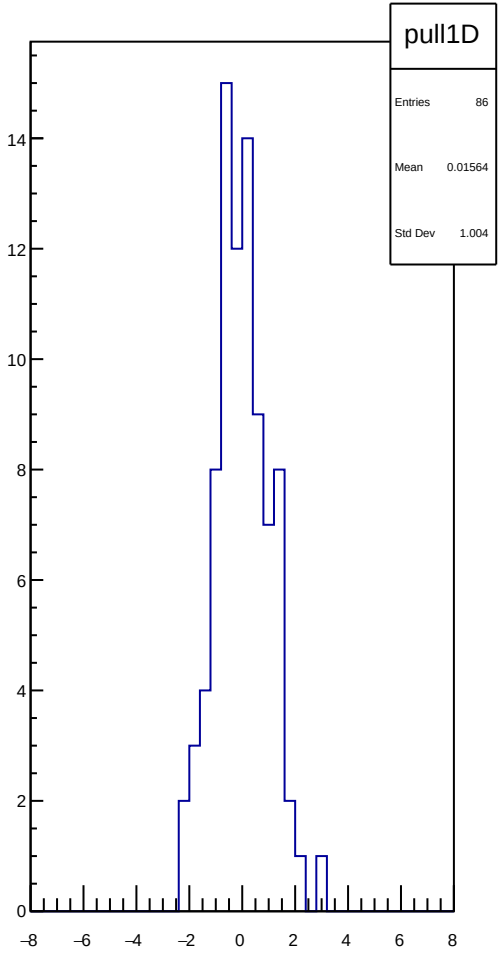

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 880.9 / 85
p0 1523 ± 1.183
1650
1600
1550
1500
1450

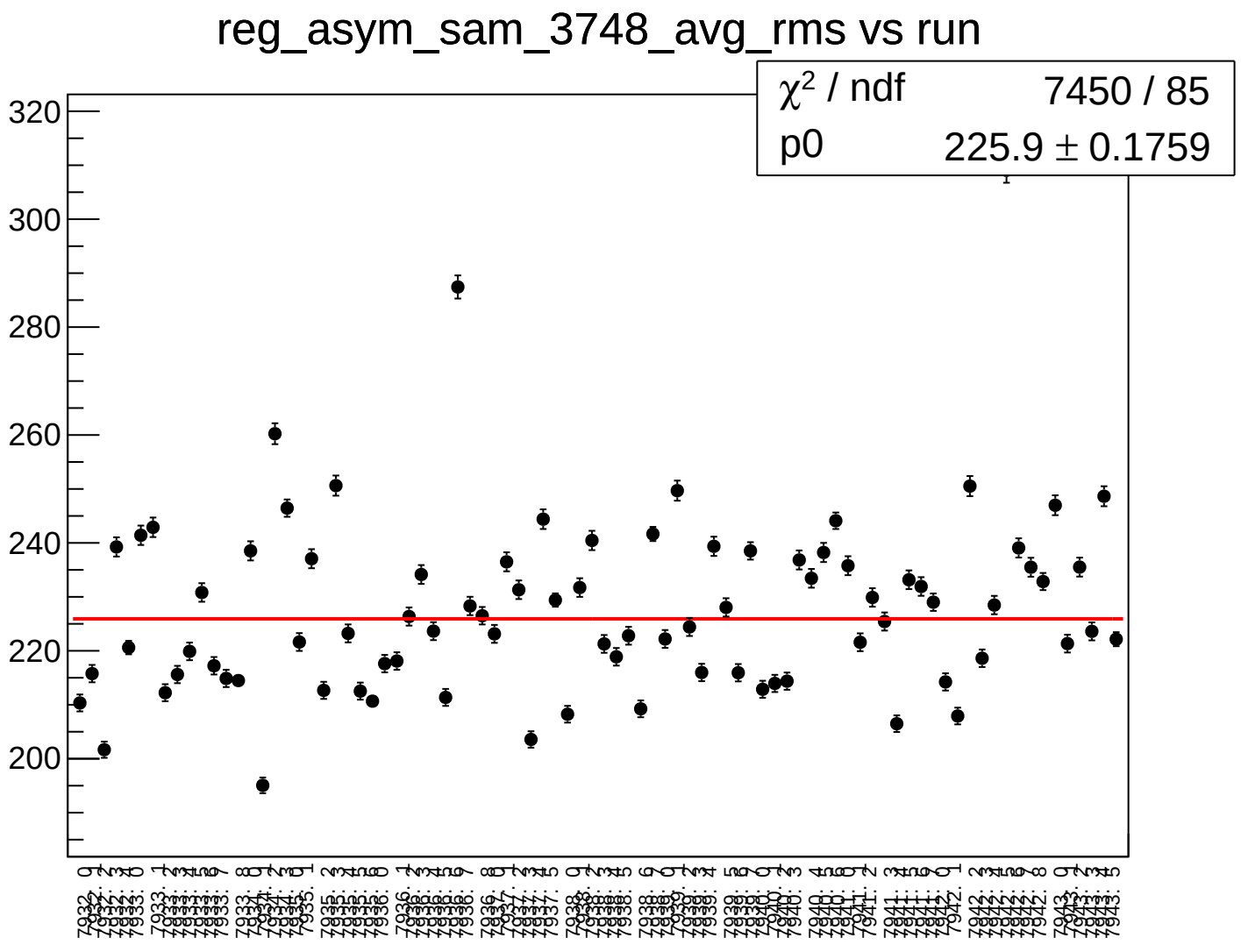

asym_sam_1548_avg_mean vs run
χ² / ndf 87.98 / 85
p0 1008 ± 1680
pull
Entries 86
Mean −188.5
Std Dev 237.1

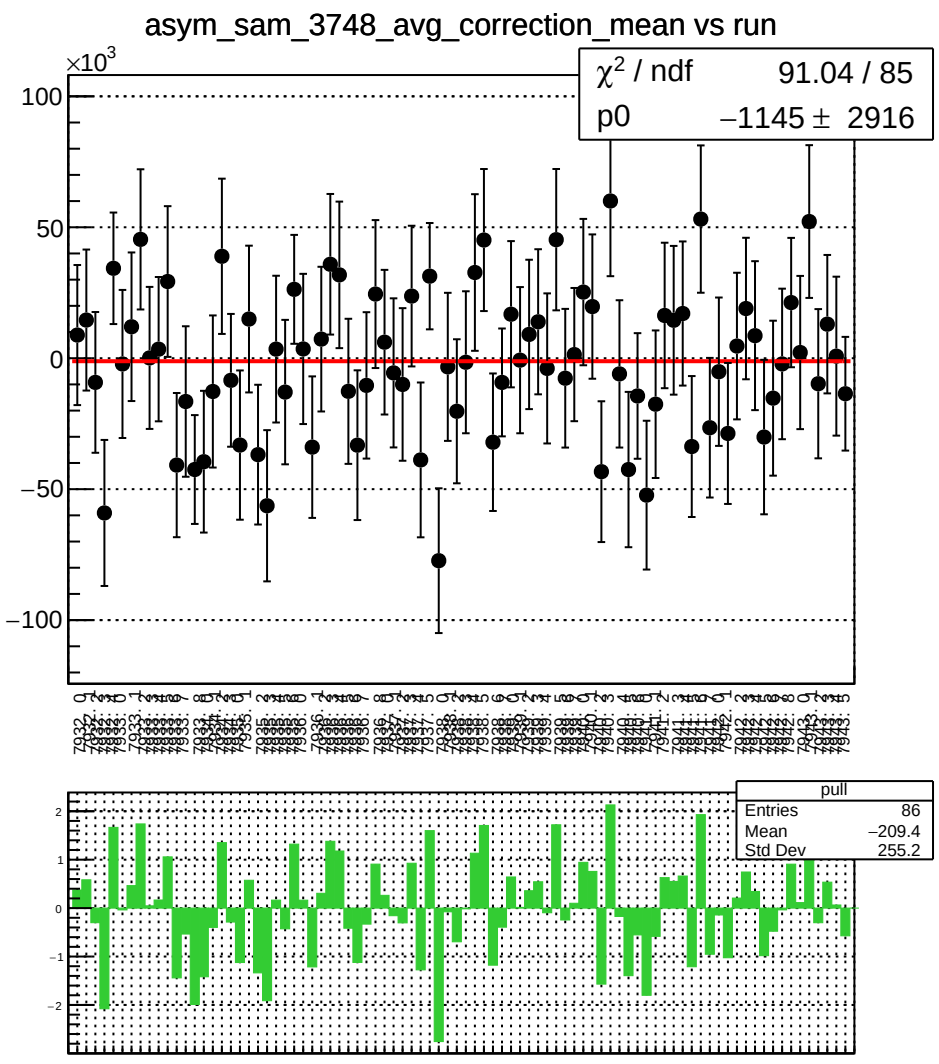

pull1D
Entries 86
Mean 0.008396
Std Dev 1.011

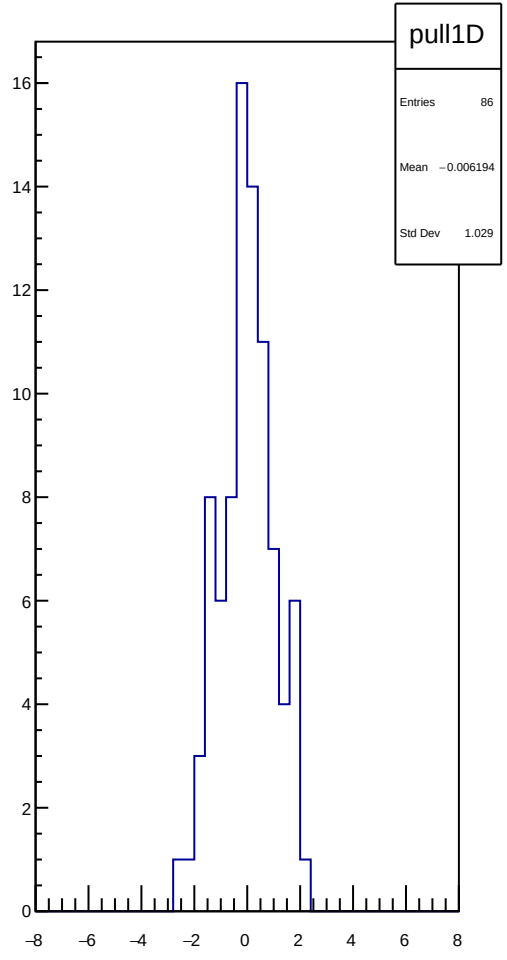

asym_sam_1548_avg_rms vs run
χ^2 / ndf 886.9 / 85
p0 1529 ± 1.188
1650
1600
1550
1500
1450

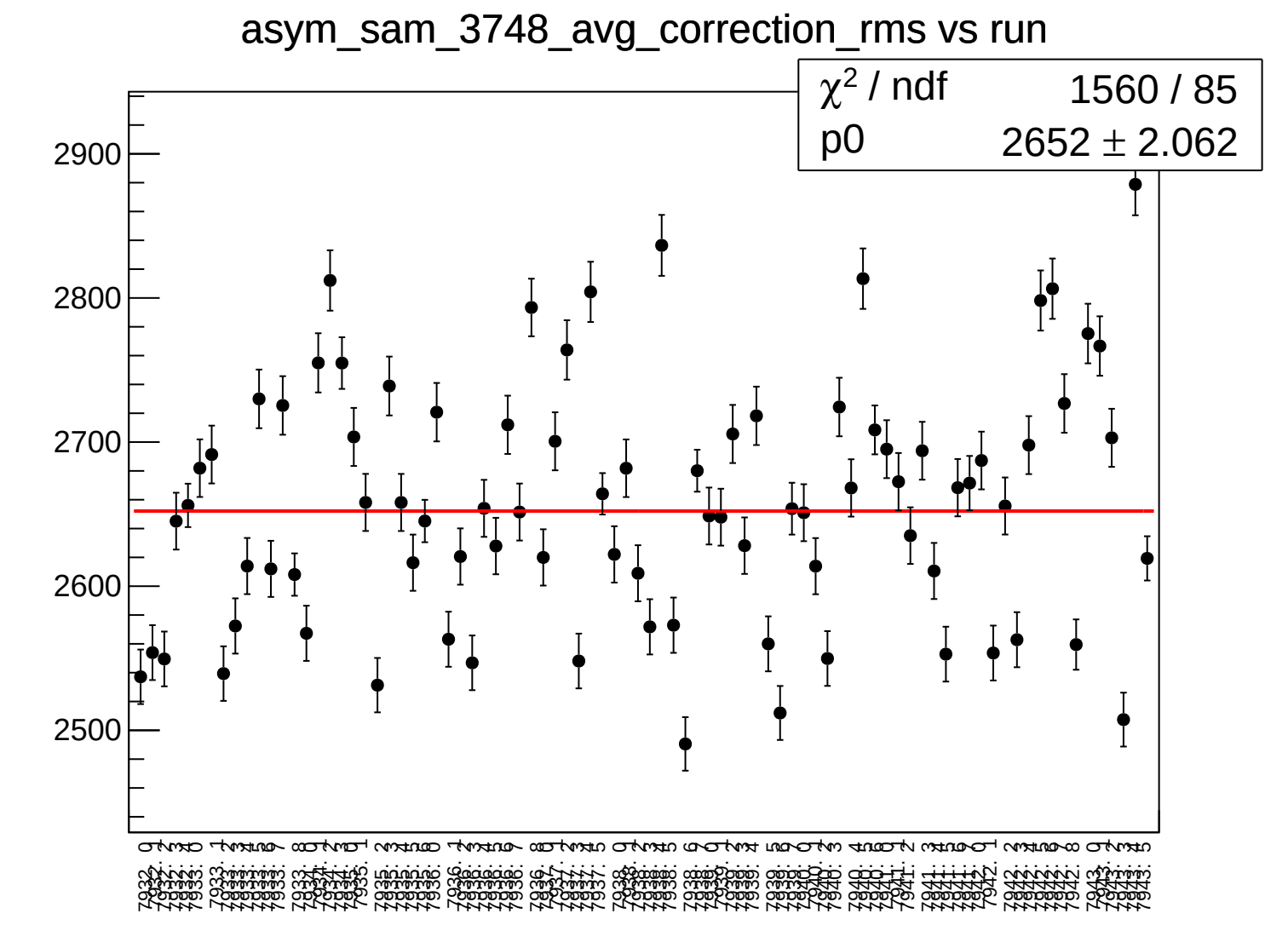

reg_asym_sam_3748_avg_mean vs run
χ^2 / ndf 86.71 / 85
p0 659.2 ± 248.8
pull
Entries 86
Mean 71.77
Std Dev 90.09

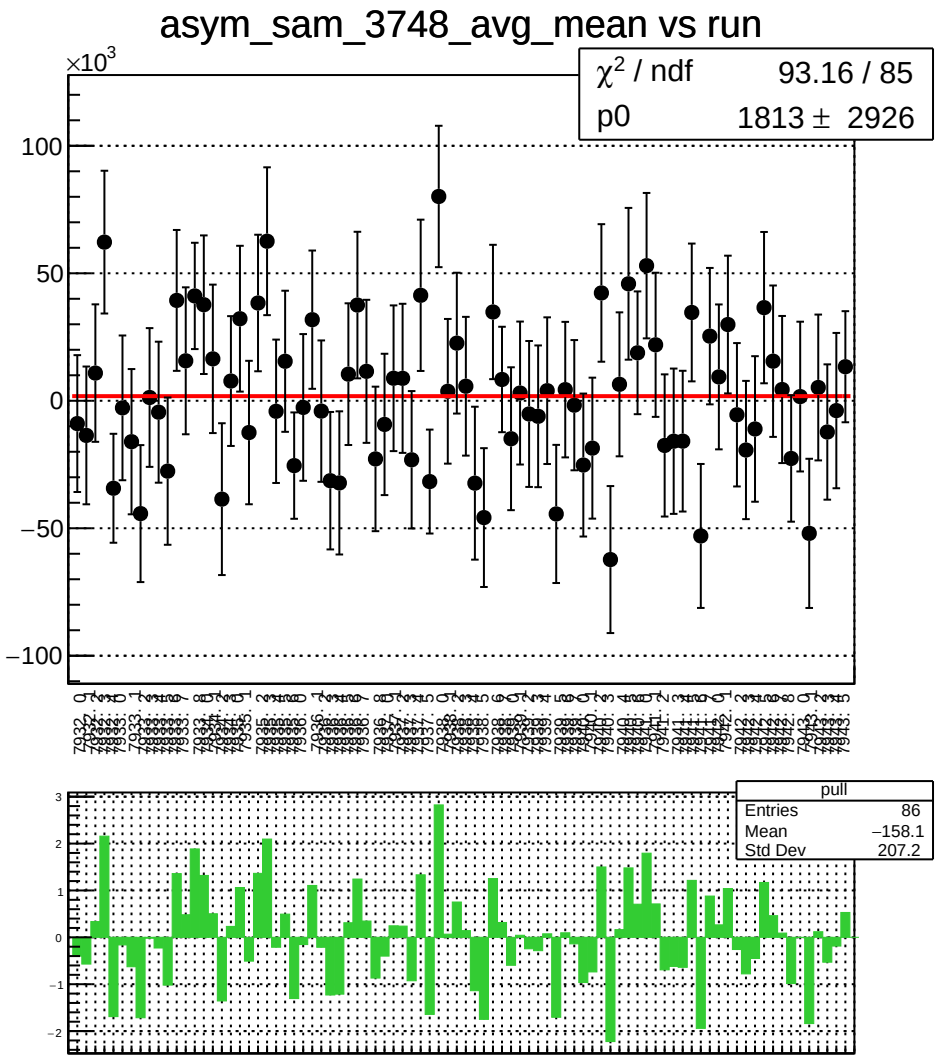

pull1D
Entries 86
Mean 0.01564
Std Dev 1.004

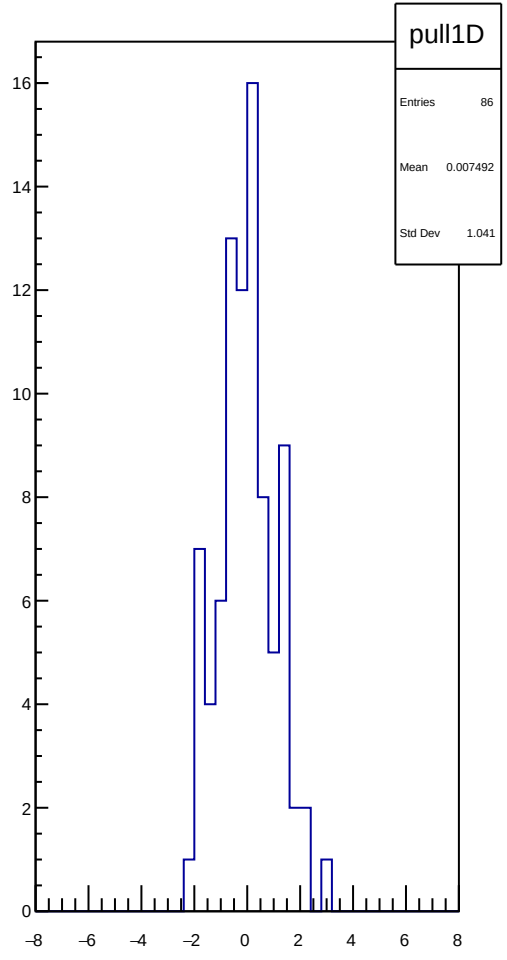

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 7450 / 85
p0 225.9 ± 0.1759
320
300
280
260
240
220
200

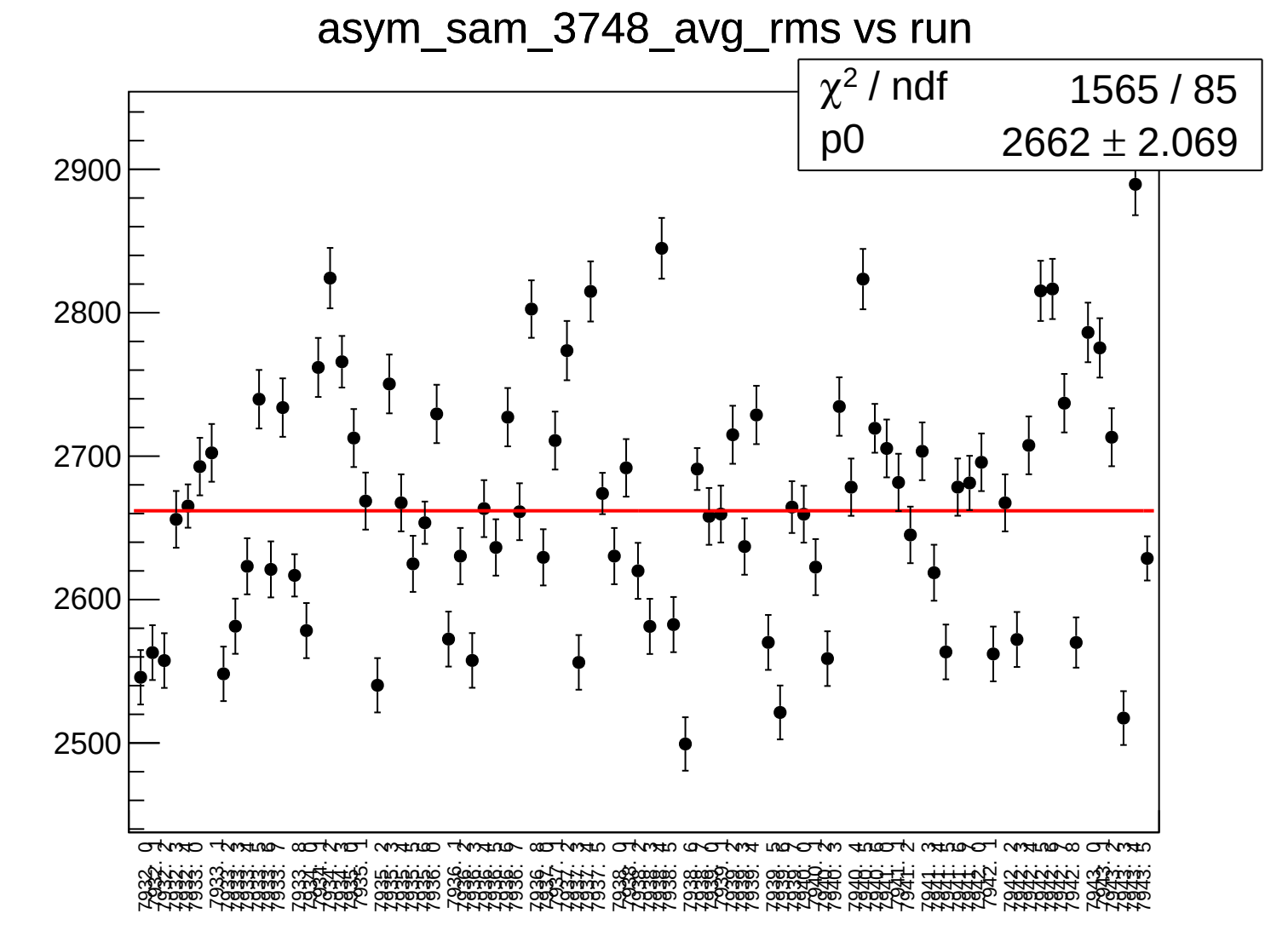

asym_sam_3748_avg_correction_mean vs run
×10^3
χ² / ndf 91.04 / 85
p0 −1145 ± 2916
100
50
0
−50
−100
pull
Entries 86
Mean −209.4
Std Dev 255.2
2
1
0
−1
−2

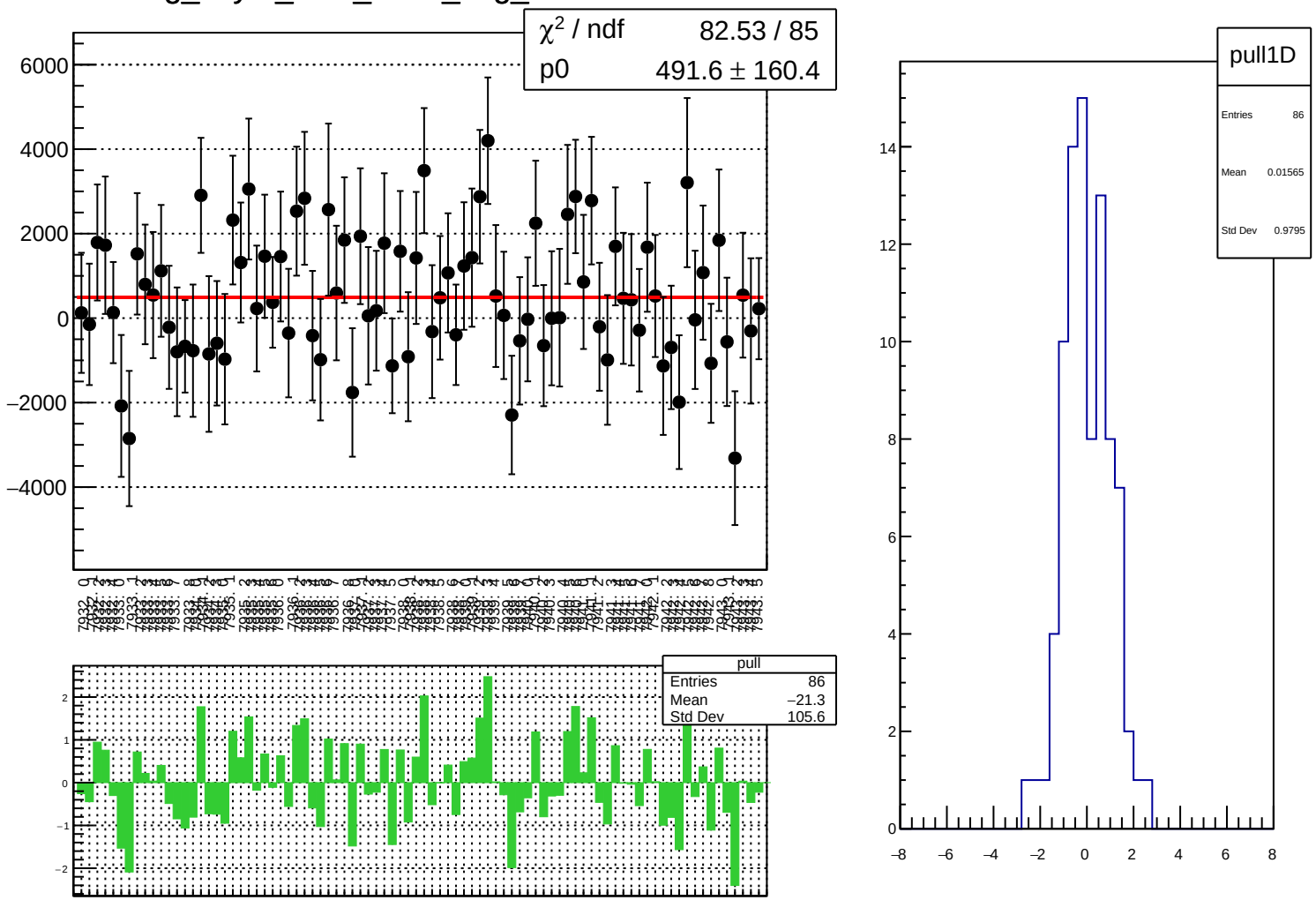

pull1D
Entries 86
Mean −0.006194
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

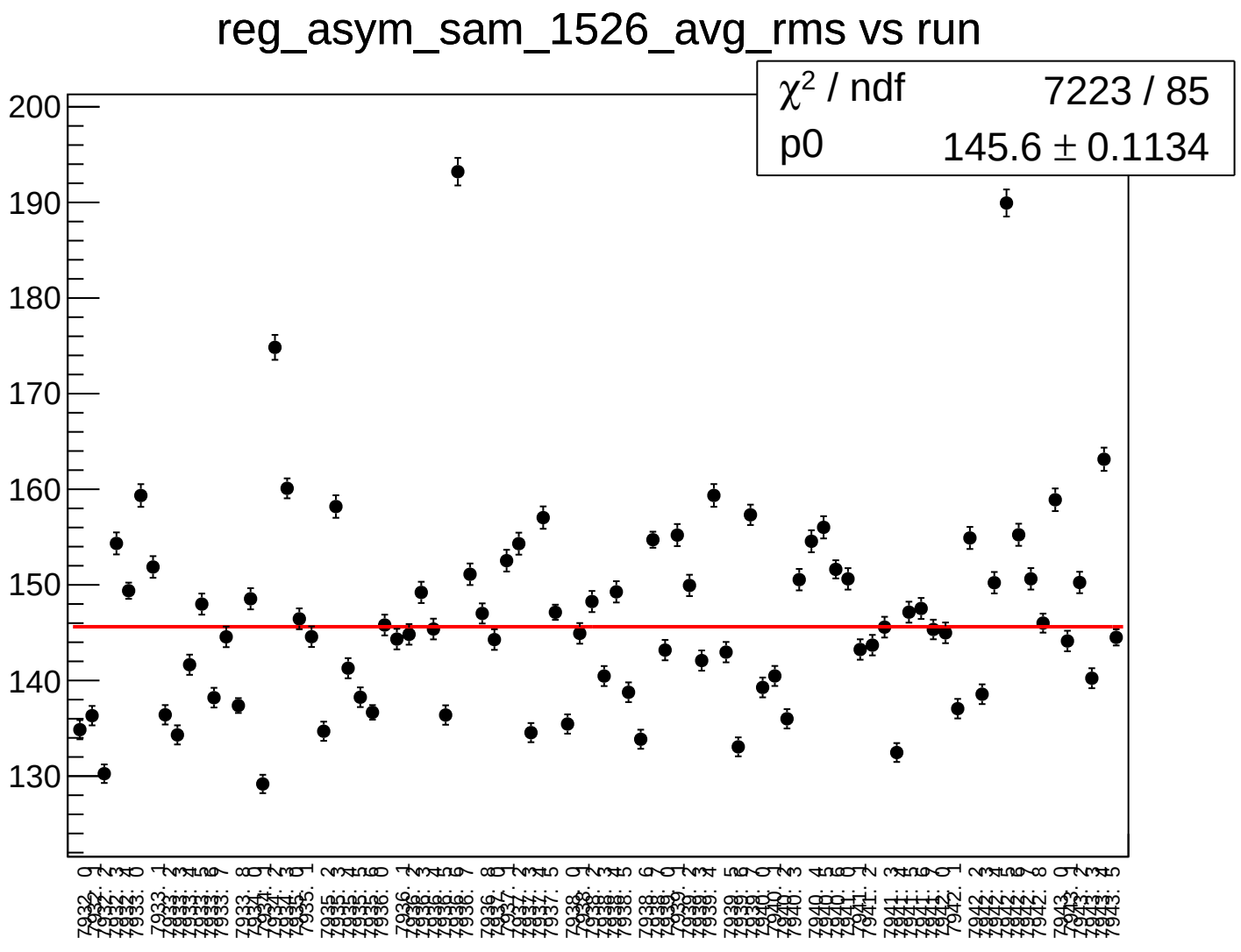

asym_sam_3748_avg_correction_rms vs run
χ^2 / ndf 1560 / 85
p0 2652 ± 2.062
2900
2800
2700
2600
2500

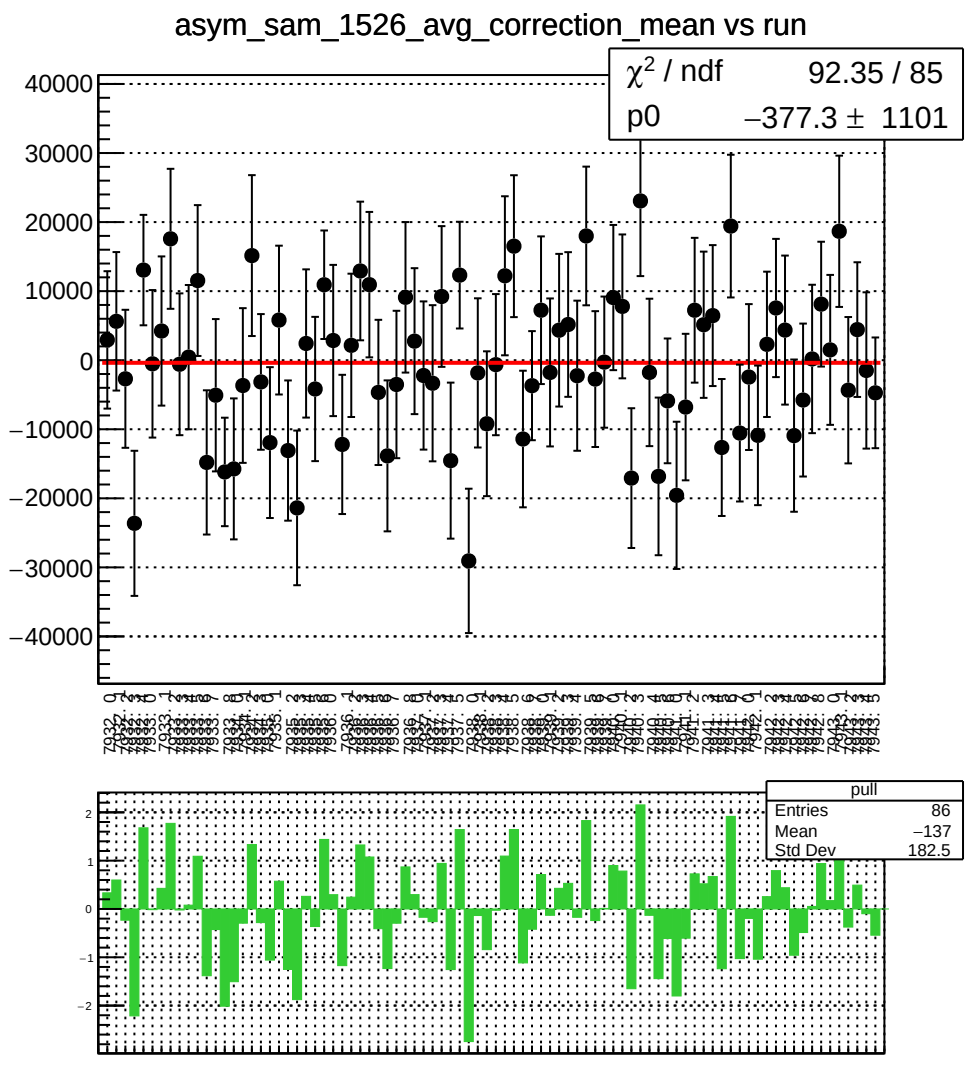

asym_sam_3748_avg_mean vs run
×10^3
χ² / ndf 93.16 / 85
p0 1813 ± 2926
100
50
0
−50
−100
pull
Entries 86
Mean −158.1
Std Dev 207.2
3
2
1
0
−1
−2

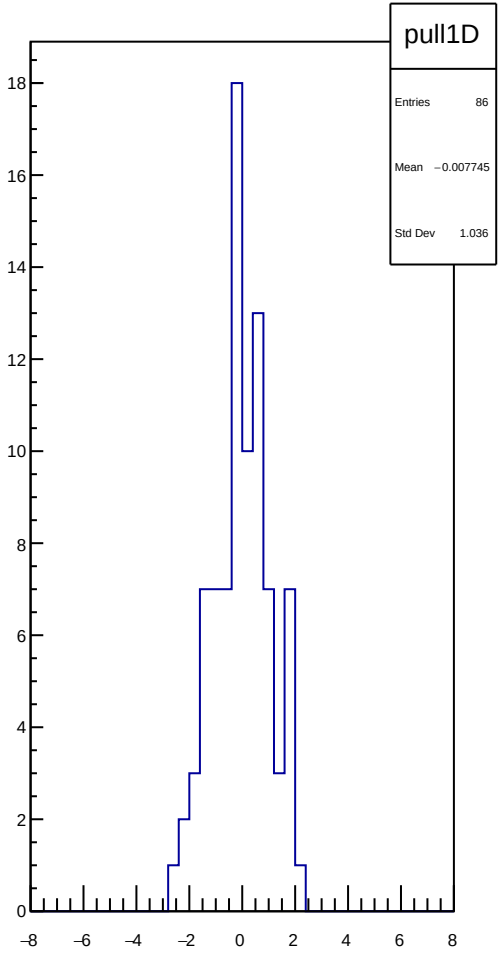

pull1D
Entries 86
Mean 0.007492
Std Dev 1.041
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

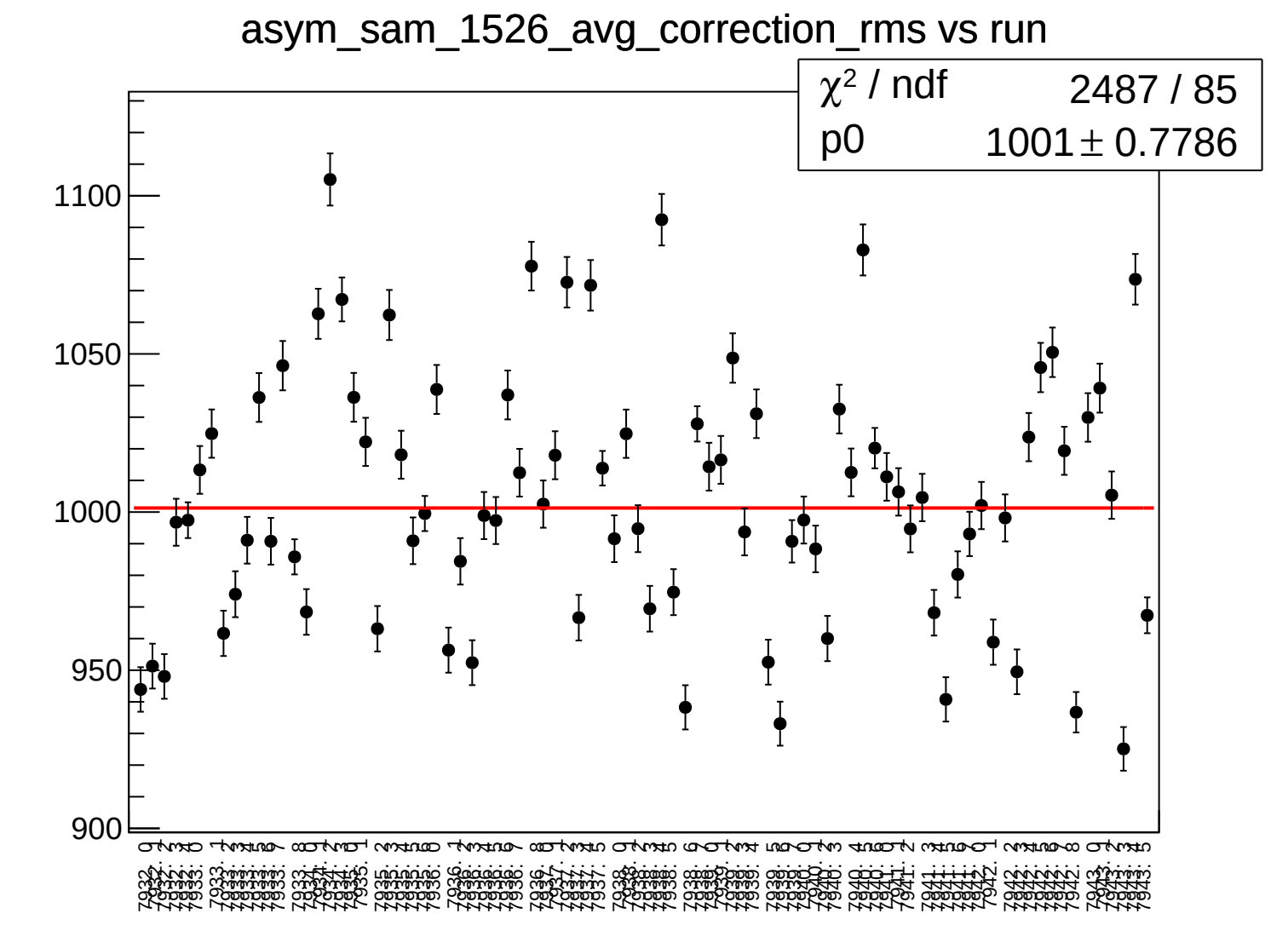

asym_sam_3748_avg_rms vs run
χ² / ndf 1565 / 85
p0 2662 ± 2.069
2900
2800
2700
2600
2500

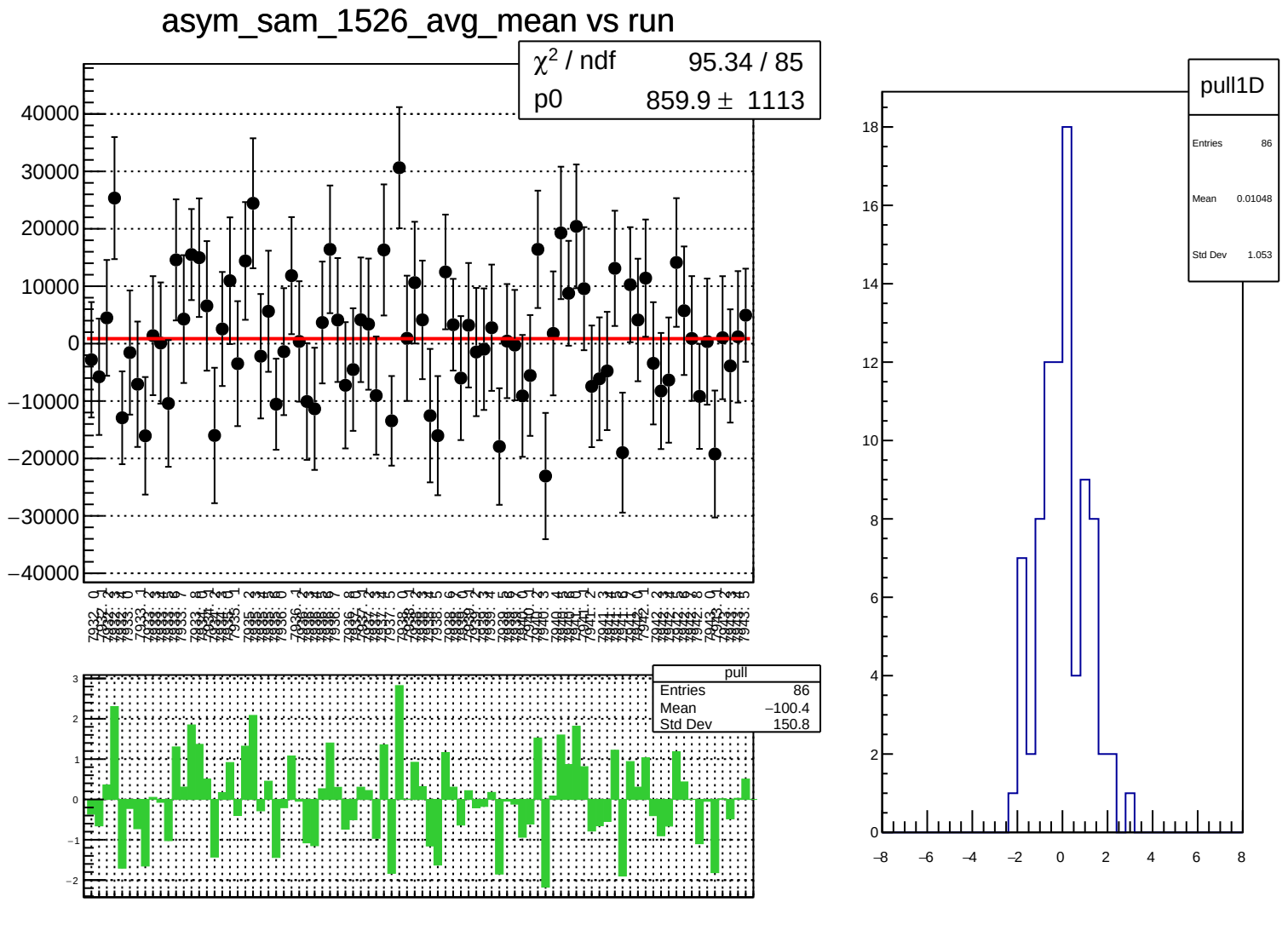

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 82.53 / 85
p0 491.6 ± 160.4
pull
Entries 86
Mean −21.3
Std Dev 105.6
pull1D
Entries 86
Mean 0.01565
Std Dev 0.9795

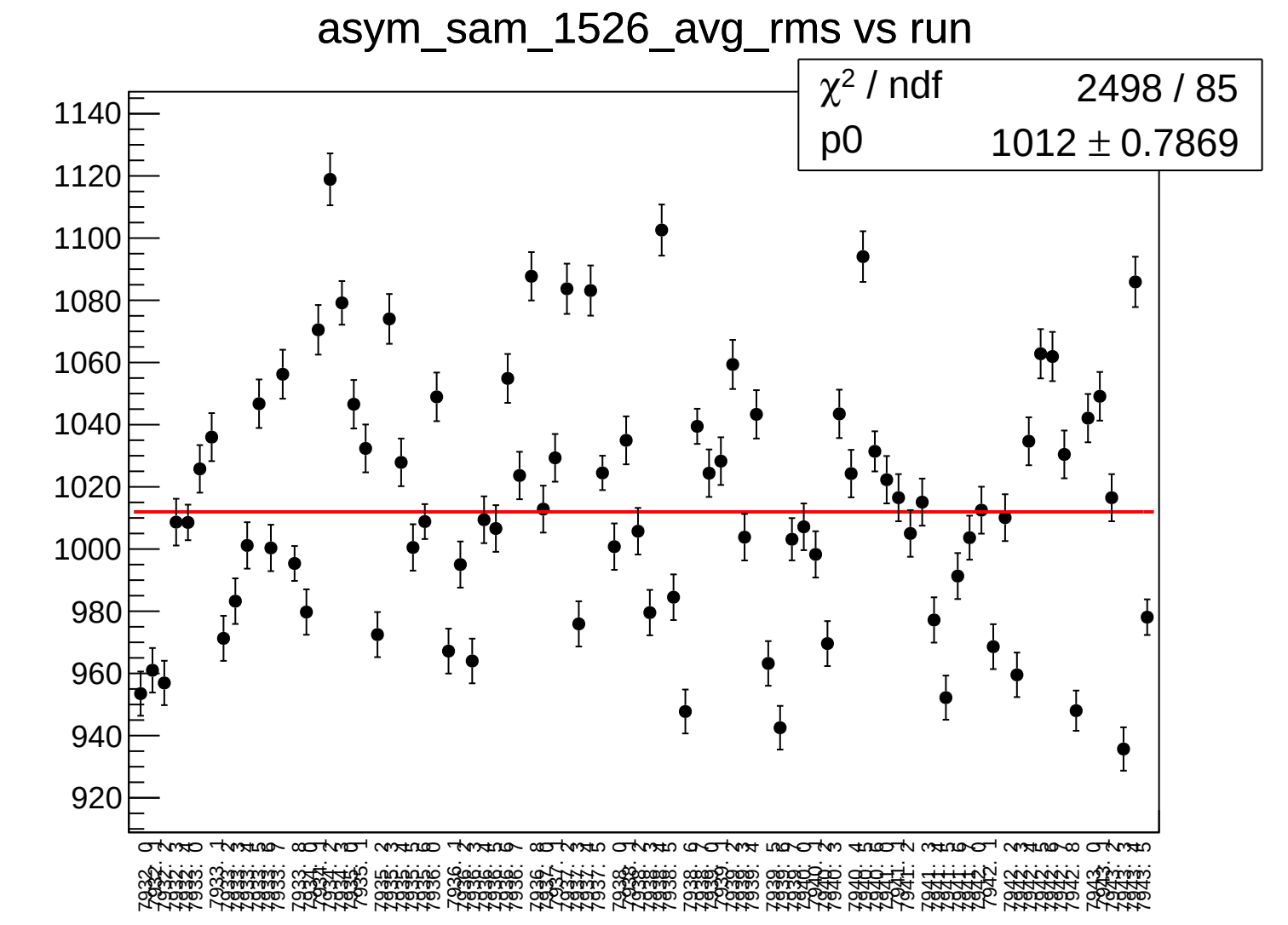

reg_asym_sam_1526_avg_rms vs run
χ² / ndf 7223 / 85
p0 145.6 ± 0.1134
200
190
180
170
160
150
140
130

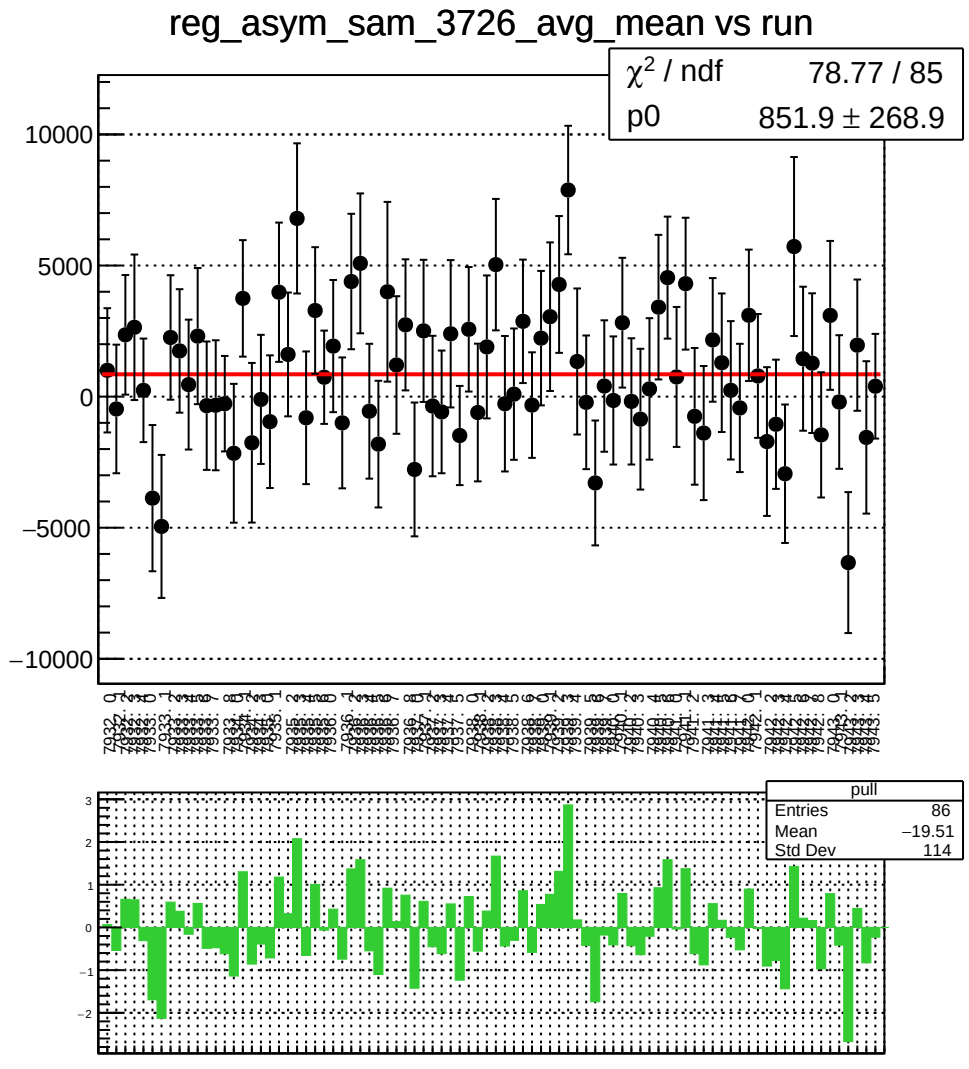

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 92.35 / 85
p0 −377.3 ± 1101
pull
Entries 86
Mean −137
Std Dev 182.5

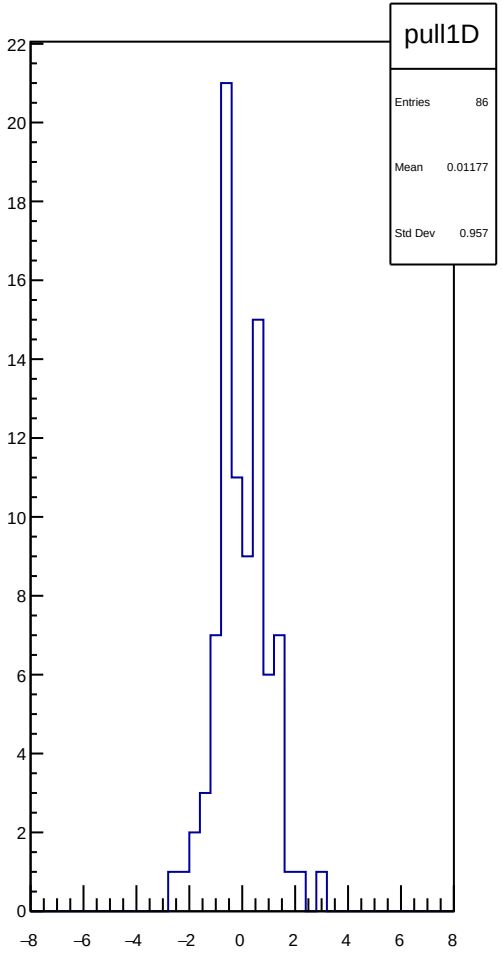

pull1D
Entries 86
Mean −0.007745
Std Dev 1.036

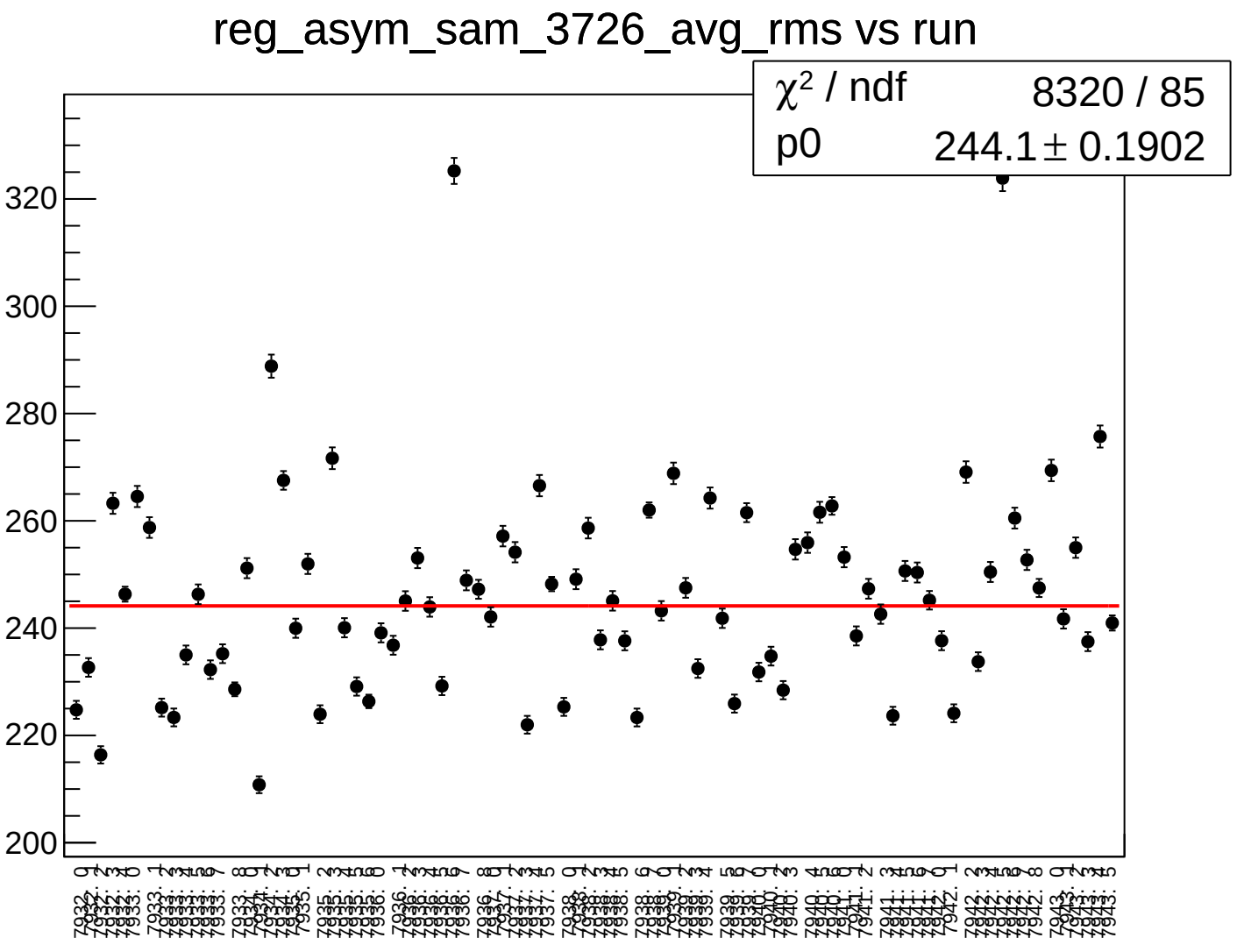

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 2487 / 85
p0 1001 ± 0.7786
1100
1050
1000
950
900

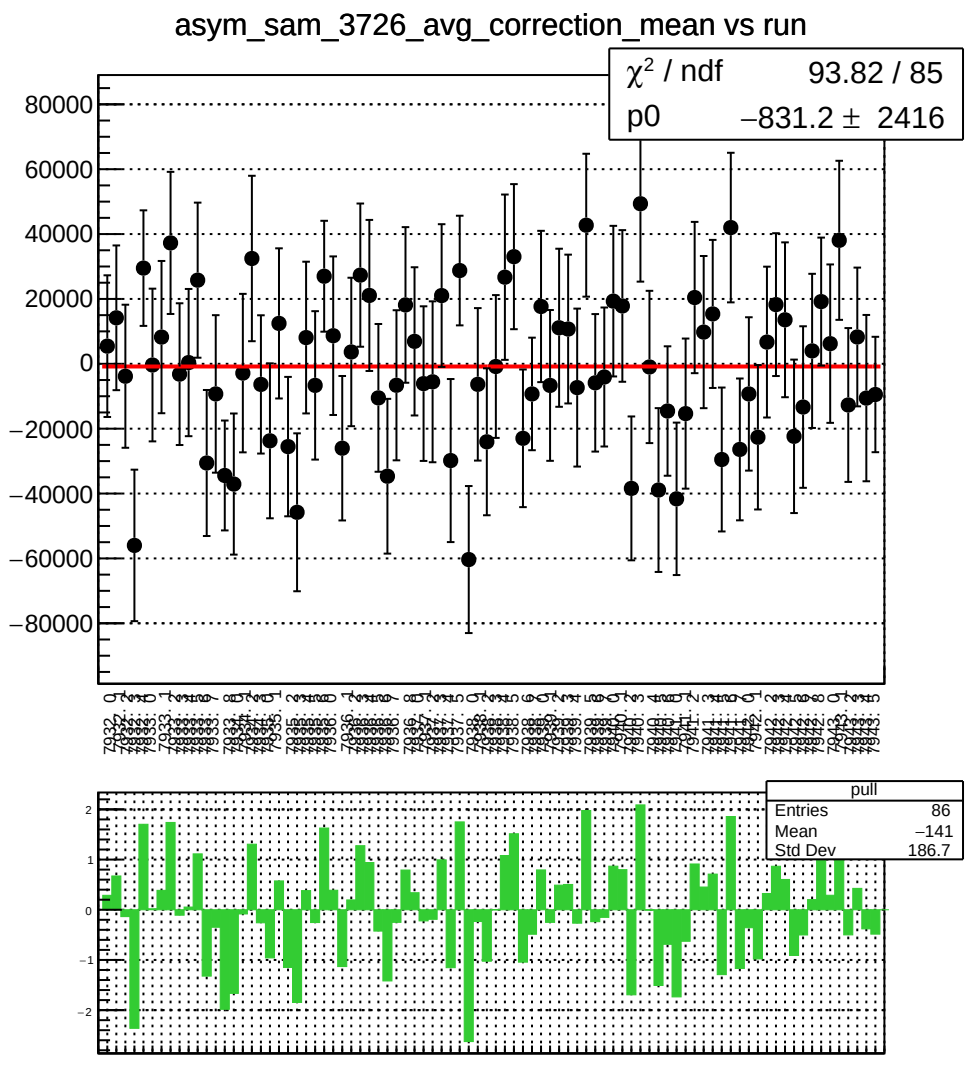

asym_sam_1526_avg_mean vs run
χ² / ndf 95.34 / 85
p0 859.9 ± 1113
pull
Entries 86
Mean −100.4
Std Dev 150.8
pull1D
Entries 86
Mean 0.01048
Std Dev 1.053

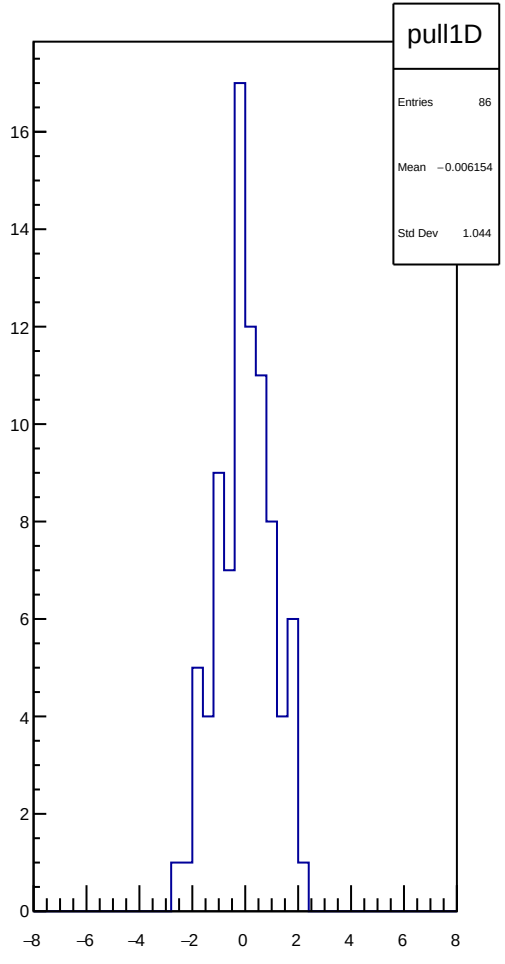

asym_sam_1526_avg_rms vs run
χ² / ndf 2498 / 85
p0 1012 ± 0.7869
1140
1120
1100
1080
1060
1040
1020
1000
980
960
940
920

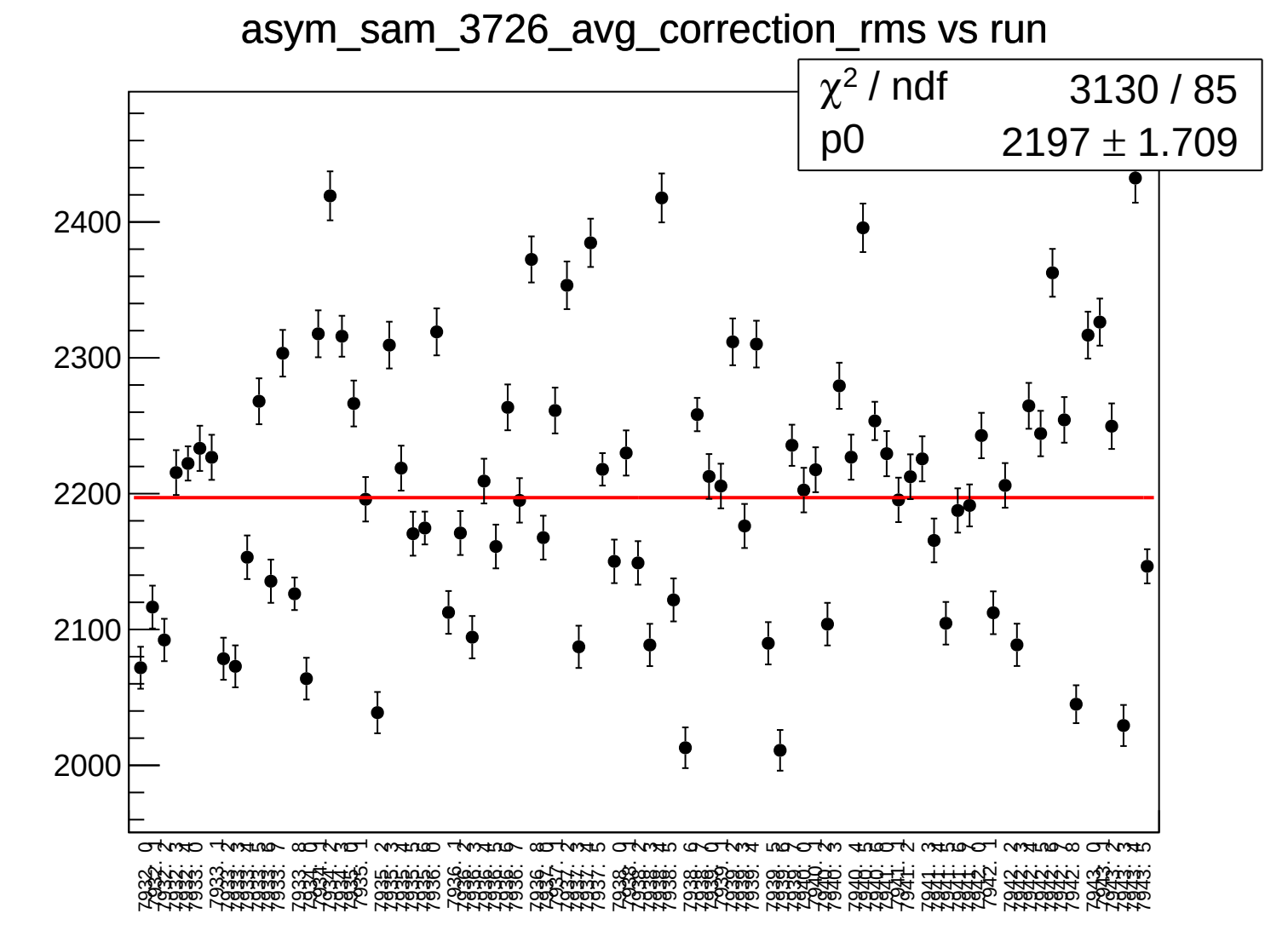

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 78.77 / 85
p0 851.9 ± 268.9
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −19.51
Std Dev 114
3
2
1
0
−1
−2

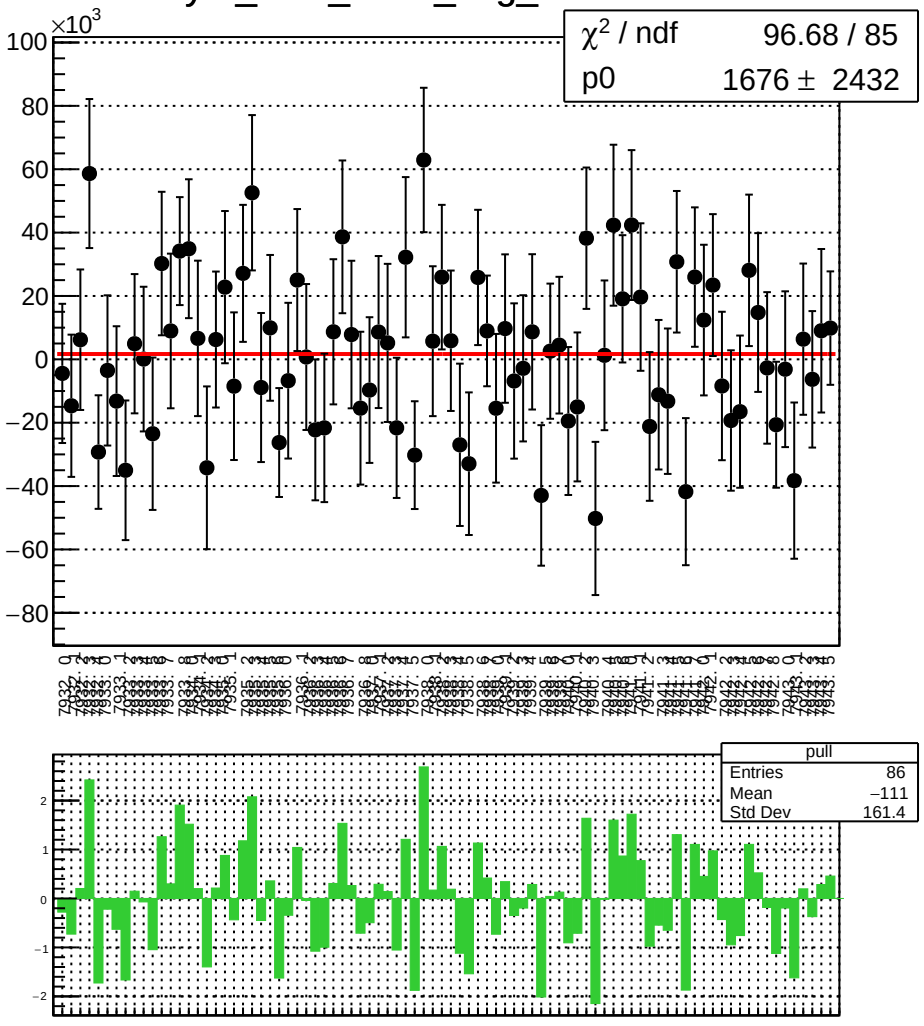

pull1D
Entries 86
Mean 0.01177
Std Dev 0.957
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

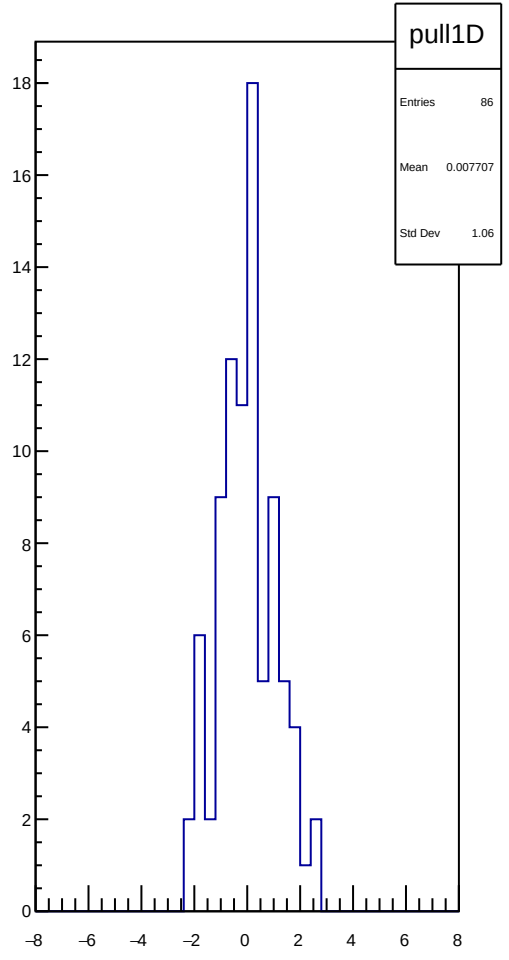

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 8320 / 85
p0 244.1 ± 0.1902
320
300
280
260
240
220
200

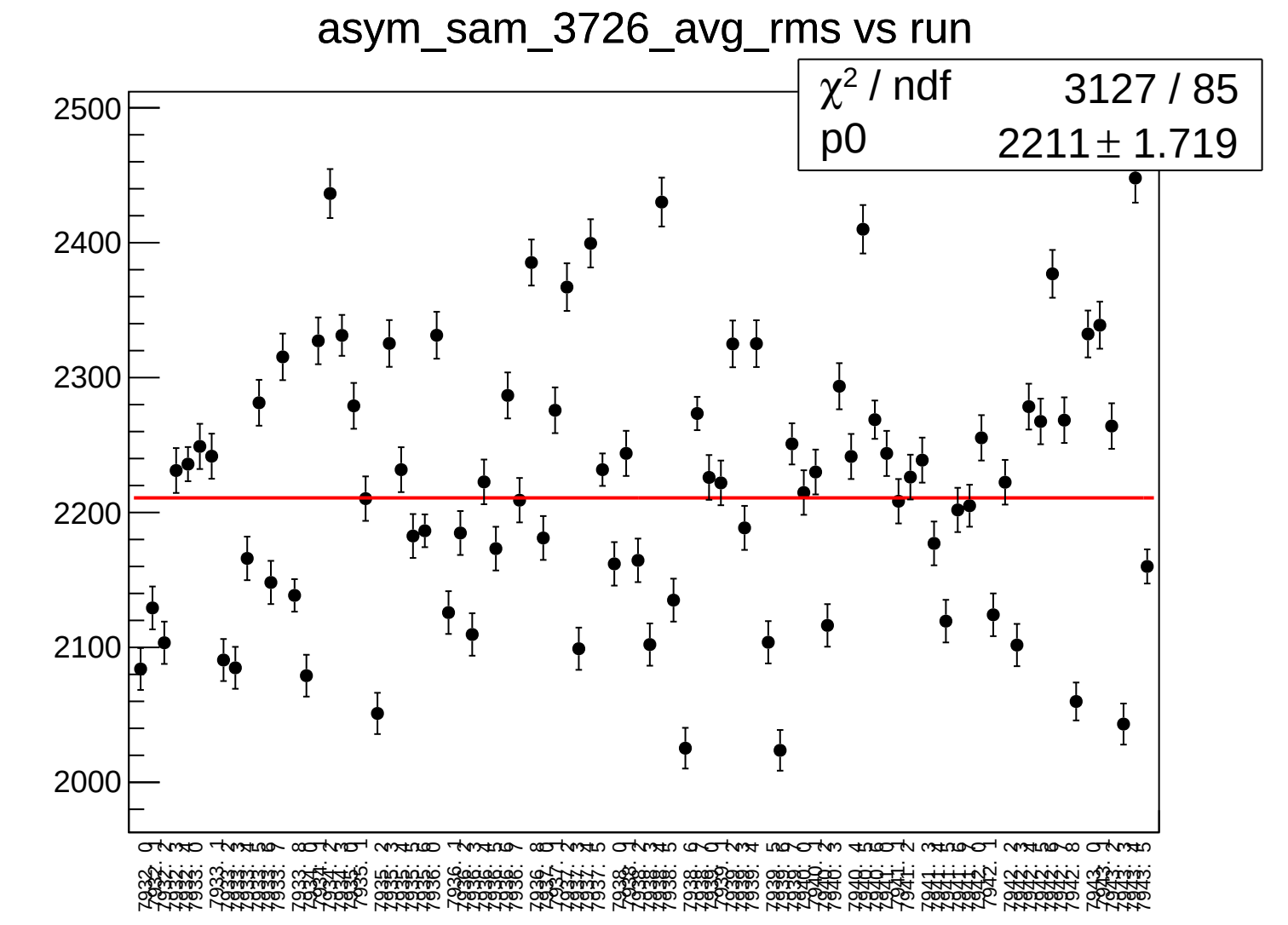

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 93.82 / 85
p0 −831.2 ± 2416
pull
Entries 86
Mean −141
Std Dev 186.7

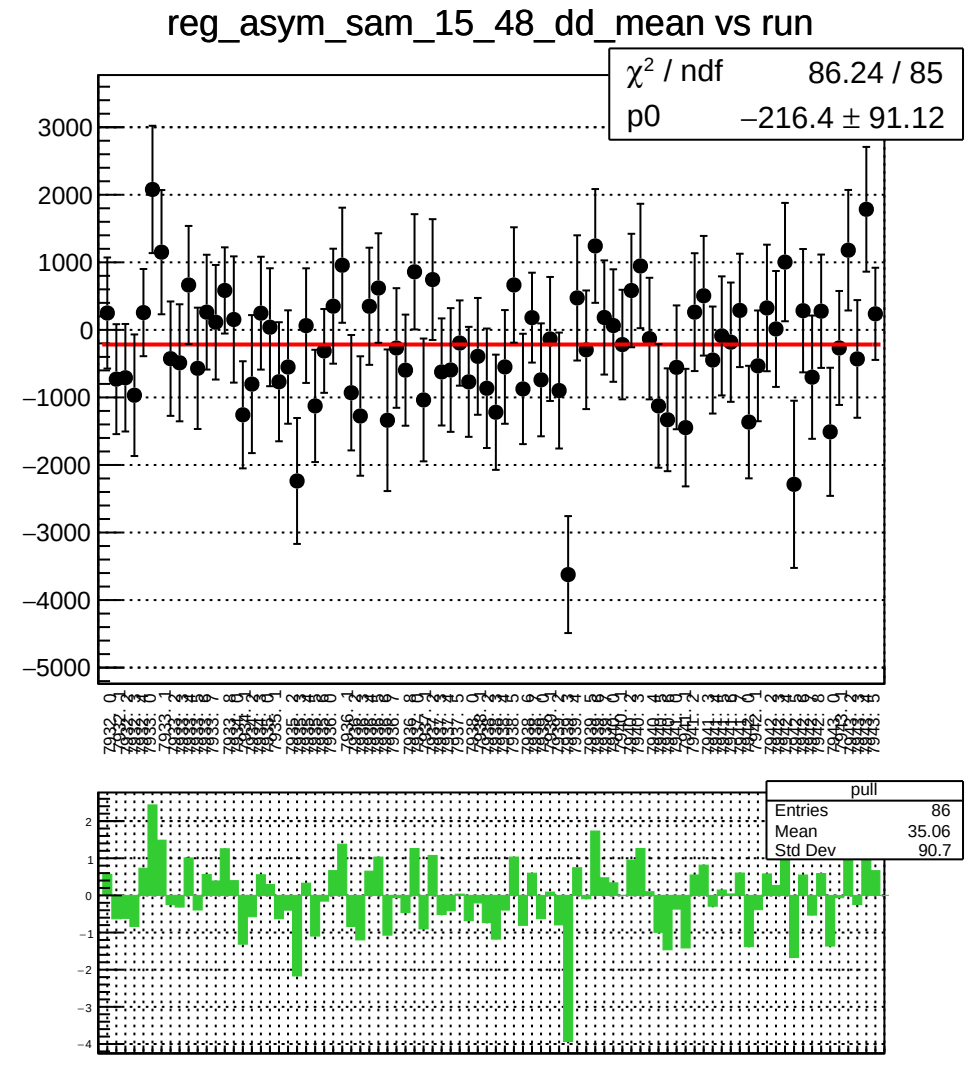

pull1D
Entries 86
Mean −0.006154
Std Dev 1.044

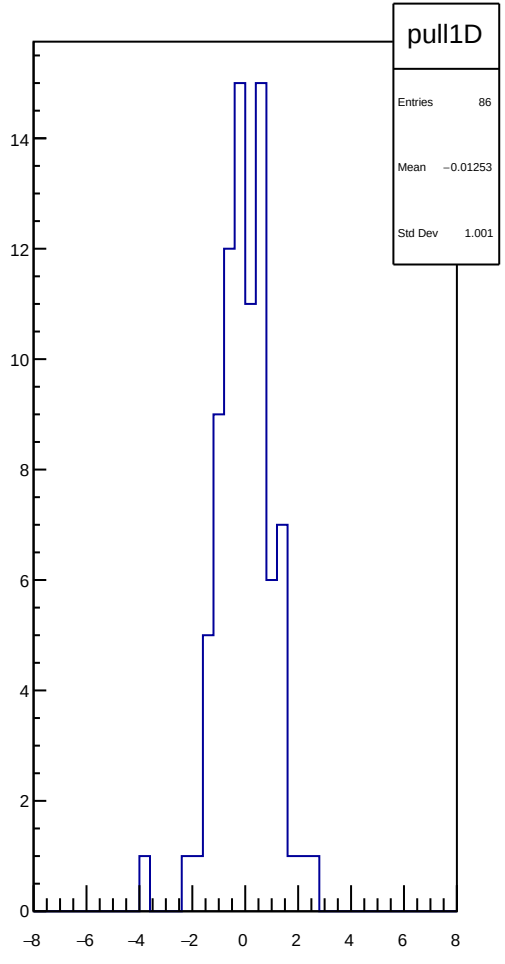

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 3130 / 85
p0 2197 ± 1.709
2400
2300
2200
2100
2000

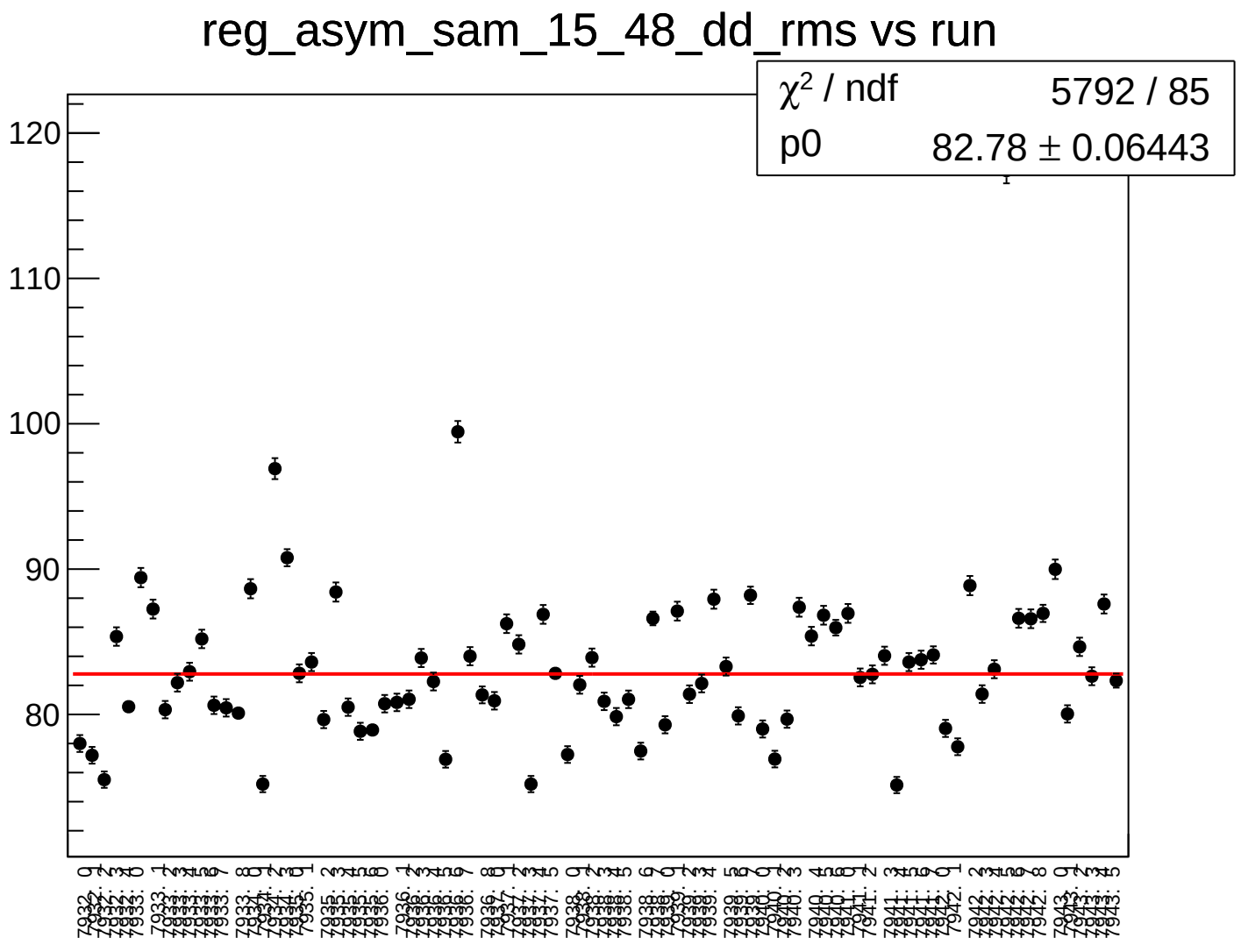

asym_sam_3726_avg_mean vs run
χ^2 / ndf 96.68 / 85
p0 1676 ± 2432
pull
Entries 86
Mean −111
Std Dev 161.4

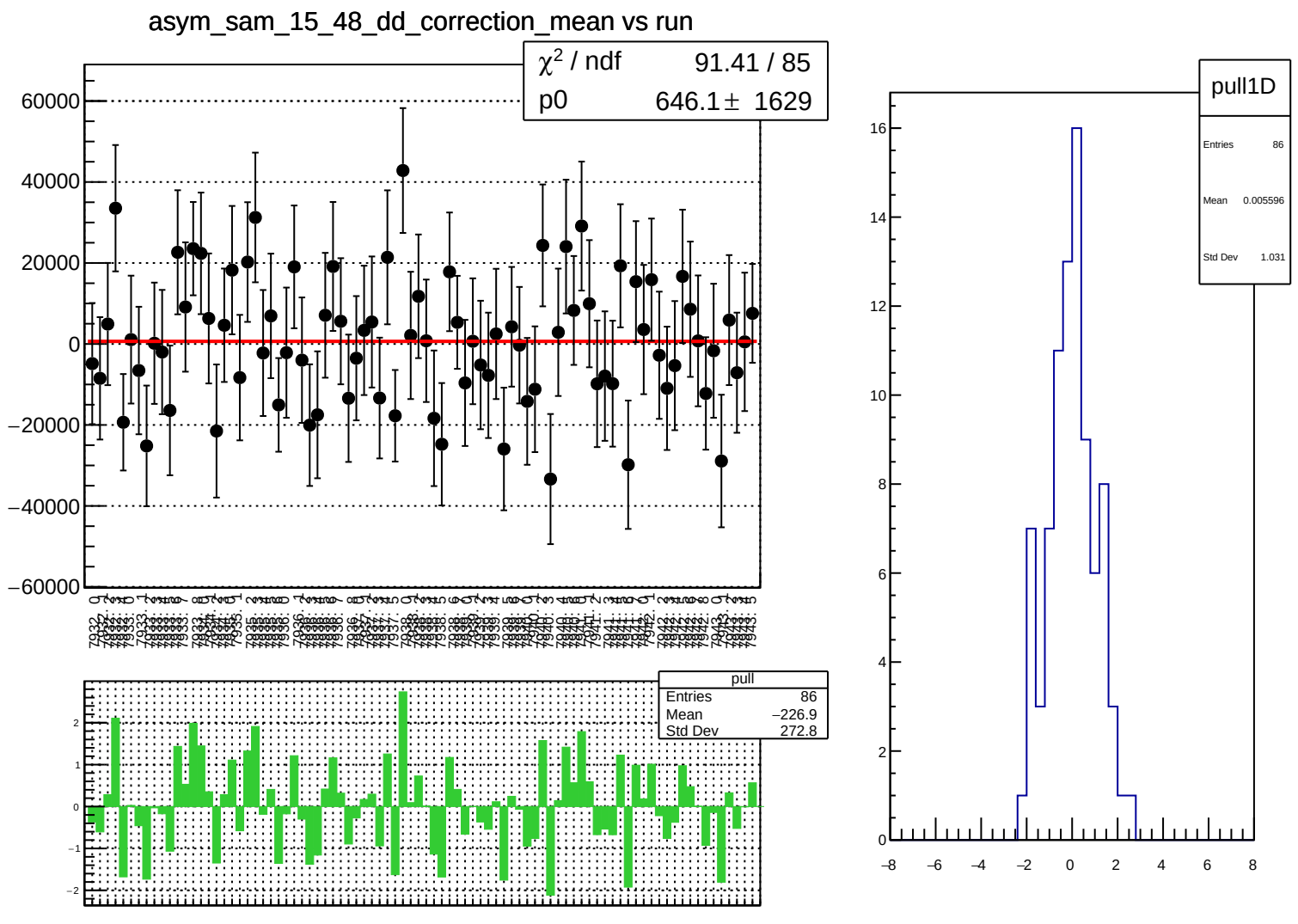

pull1D
Entries 86
Mean 0.007707
Std Dev 1.06

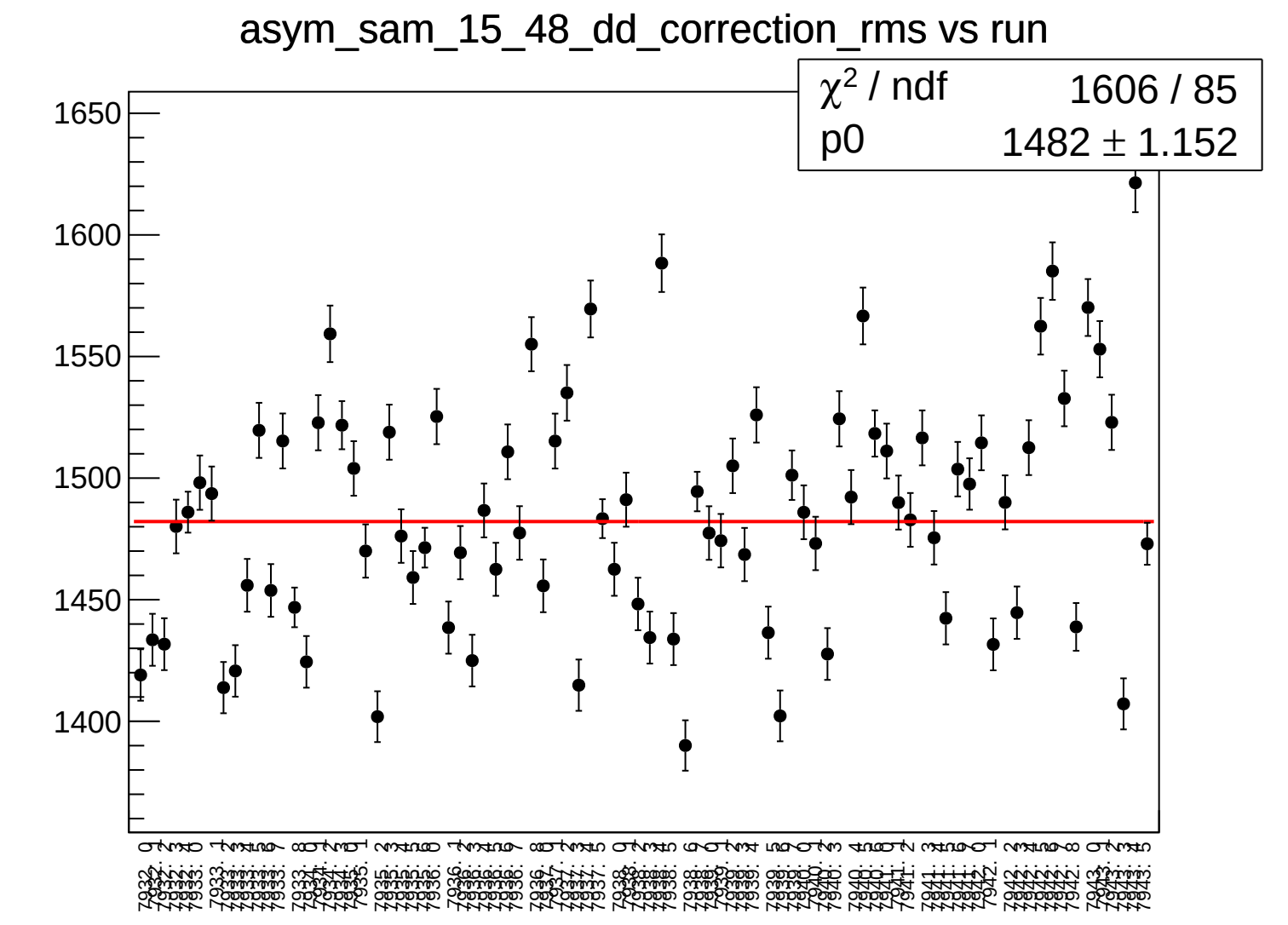

asym_sam_3726_avg_rms vs run
χ² / ndf 3127 / 85
p0 2211 ± 1.719
2500
2400
2300
2200
2100
2000

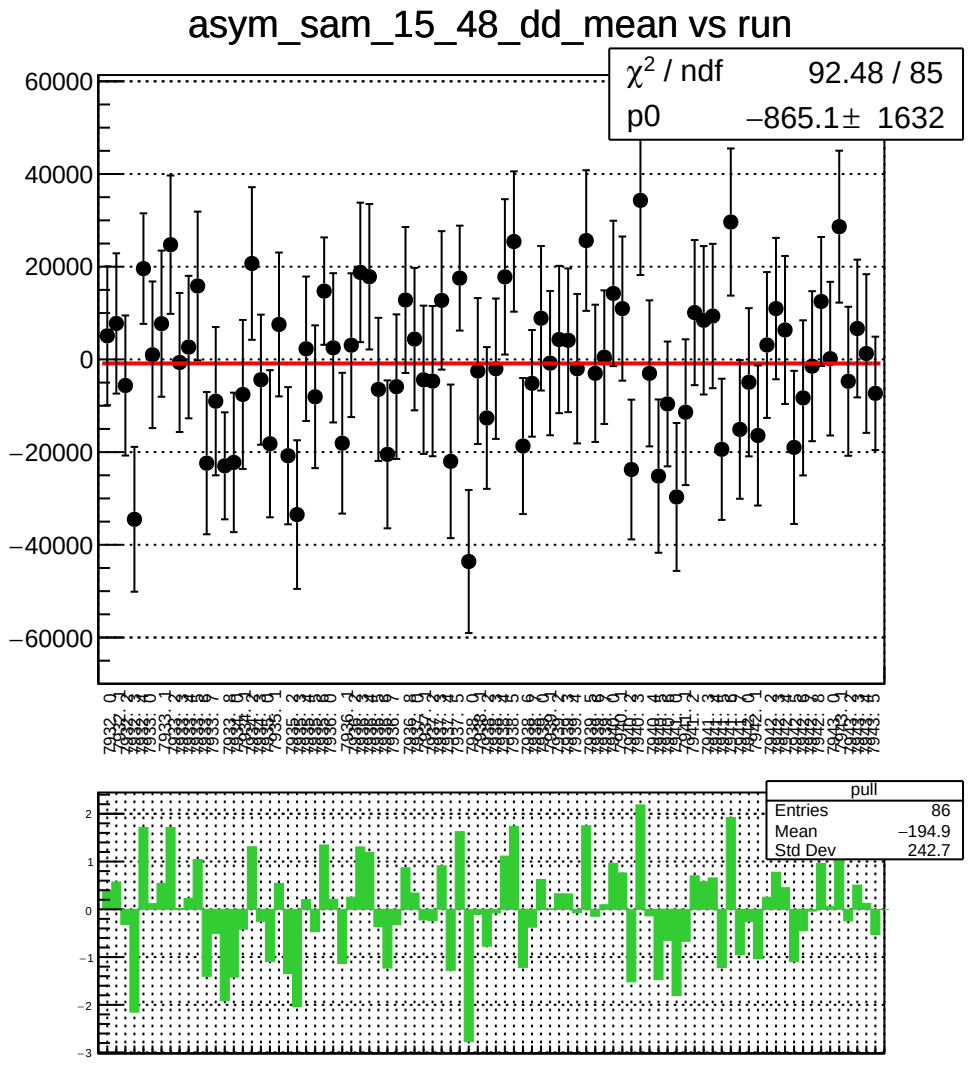

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 86.24 / 85
p0 −216.4 ± 91.12
pull
Entries 86
Mean 35.06
Std Dev 90.7

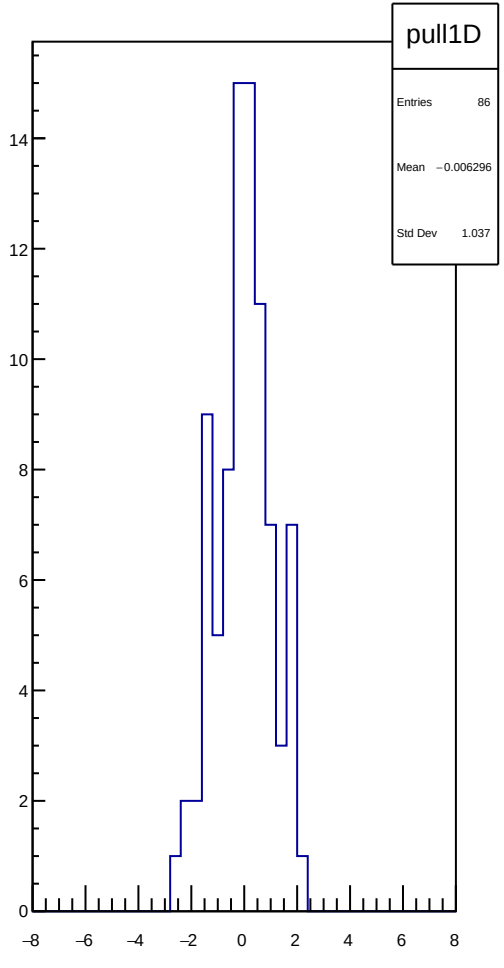

pull1D
Entries 86
Mean −0.01253
Std Dev 1.001

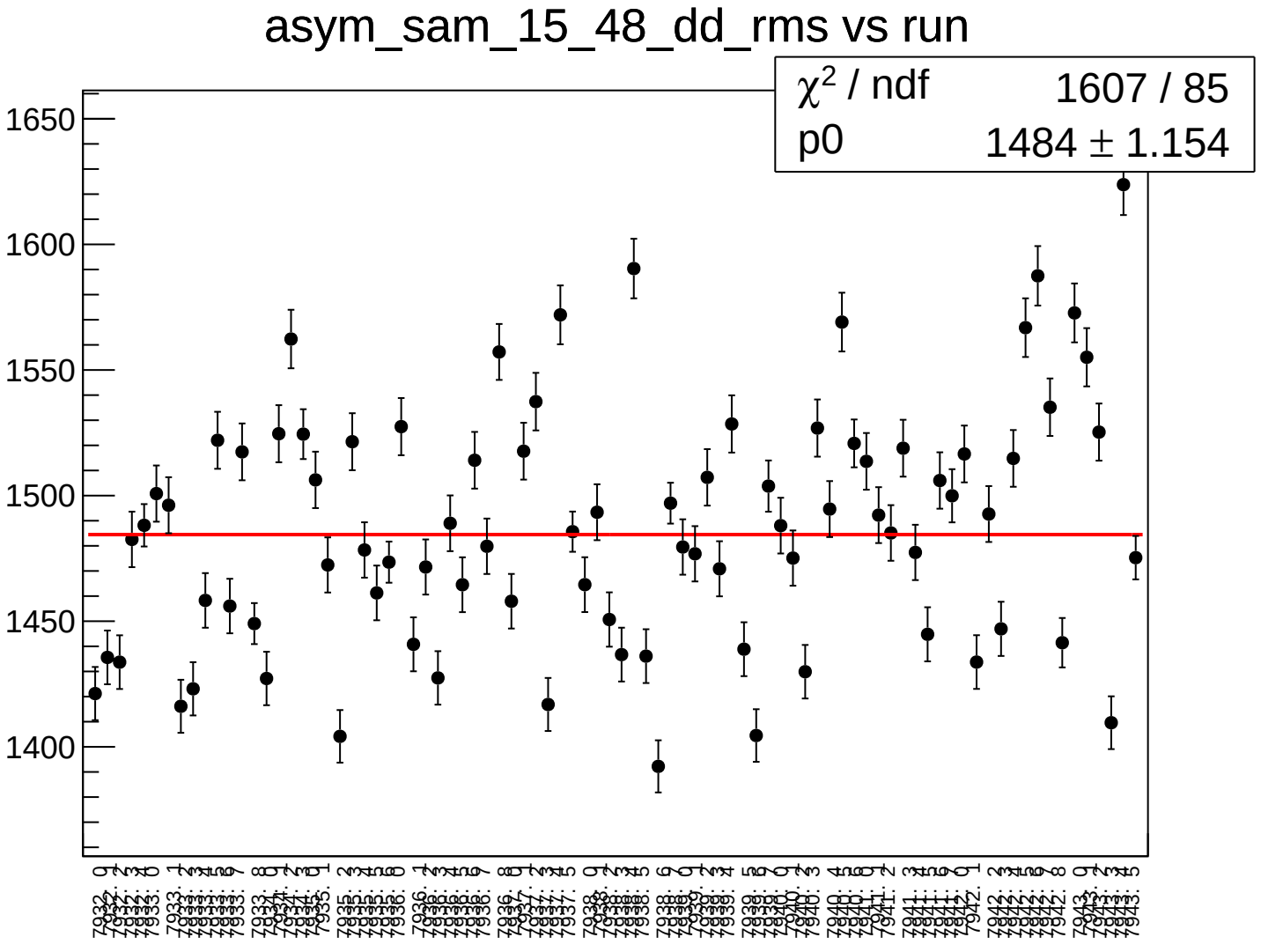

reg_asym_sam_15_48_dd_rms vs run
χ^2 / ndf 5792 / 85
p0 82.78 ± 0.06443
120
110
100
90
80

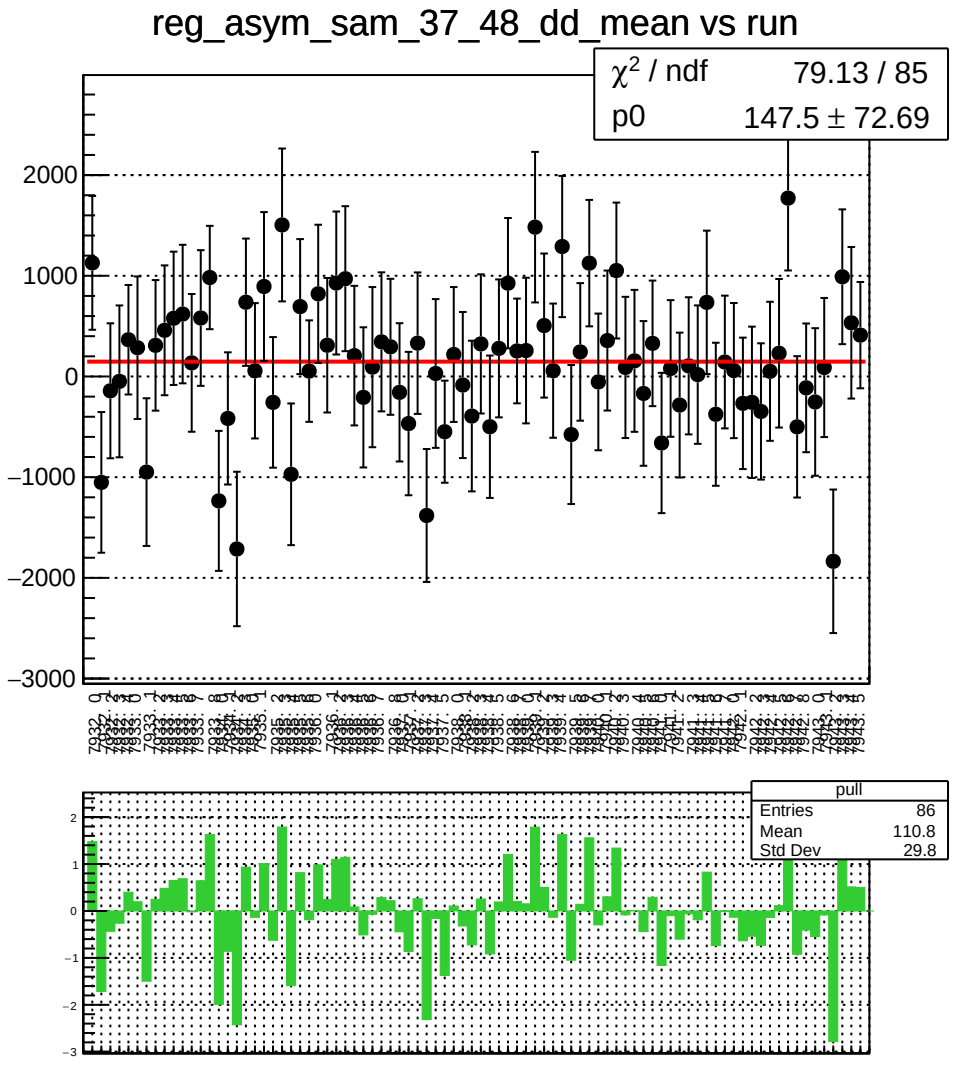

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 91.41 / 85
p0 646.1 ± 1629
pull
Entries 86
Mean −226.9
Std Dev 272.8
pull1D
Entries 86
Mean 0.005596
Std Dev 1.031

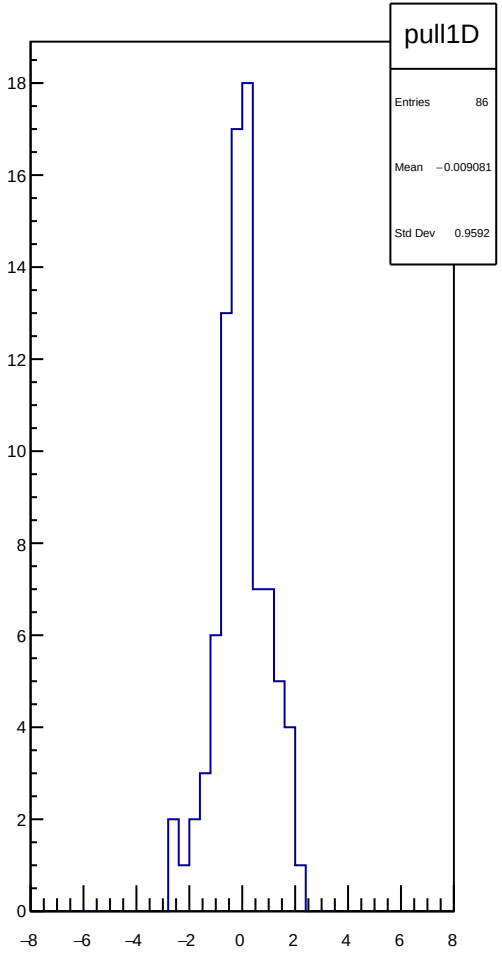

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 1606 / 85
p0 1482 ± 1.152
1650
1600
1550
1500
1450
1400

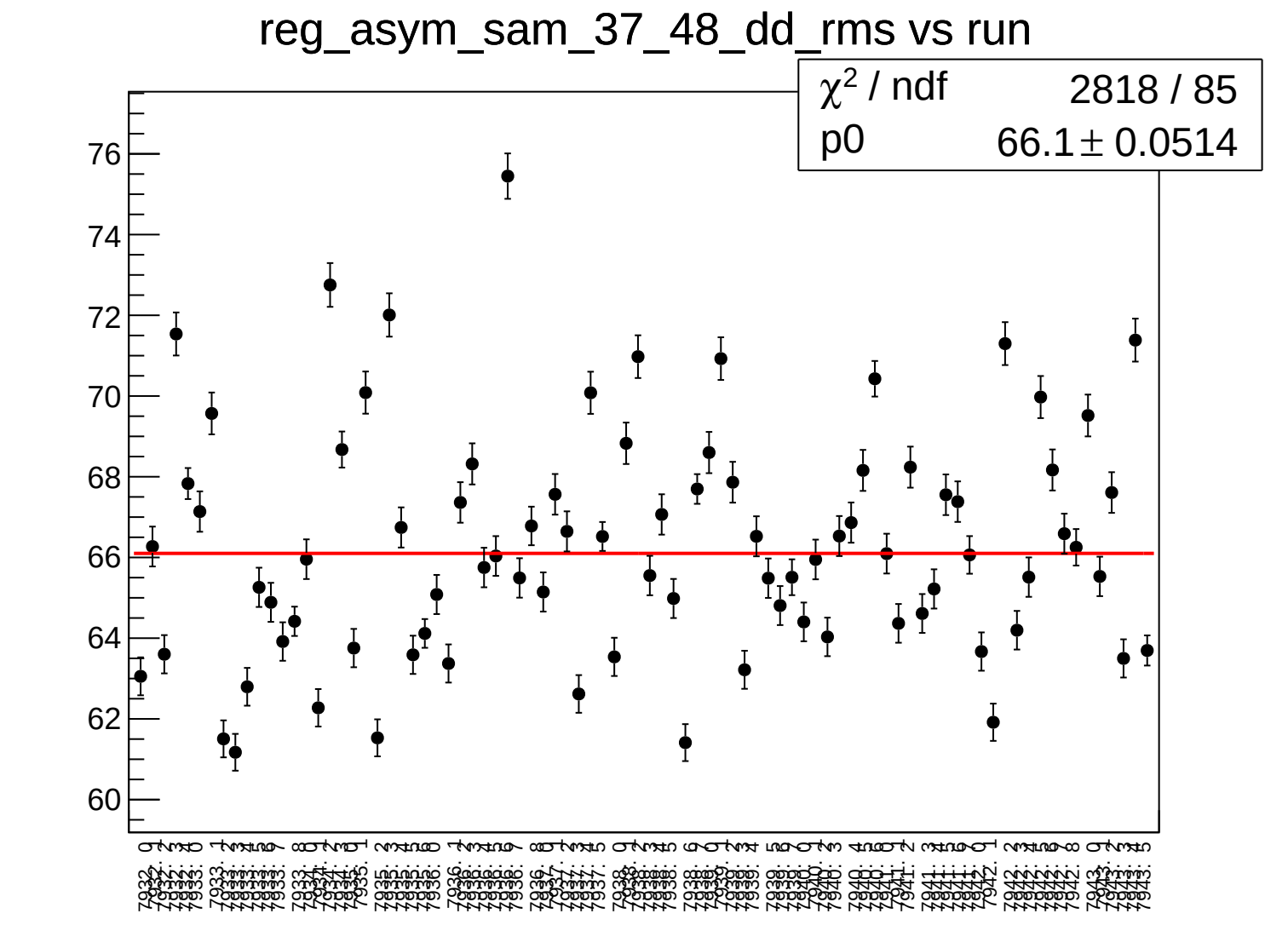

asym_sam_15_48_dd_mean vs run
χ² / ndf 92.48 / 85
p0 −865.1± 1632
pull
Entries 86
Mean −194.9
Std Dev 242.7

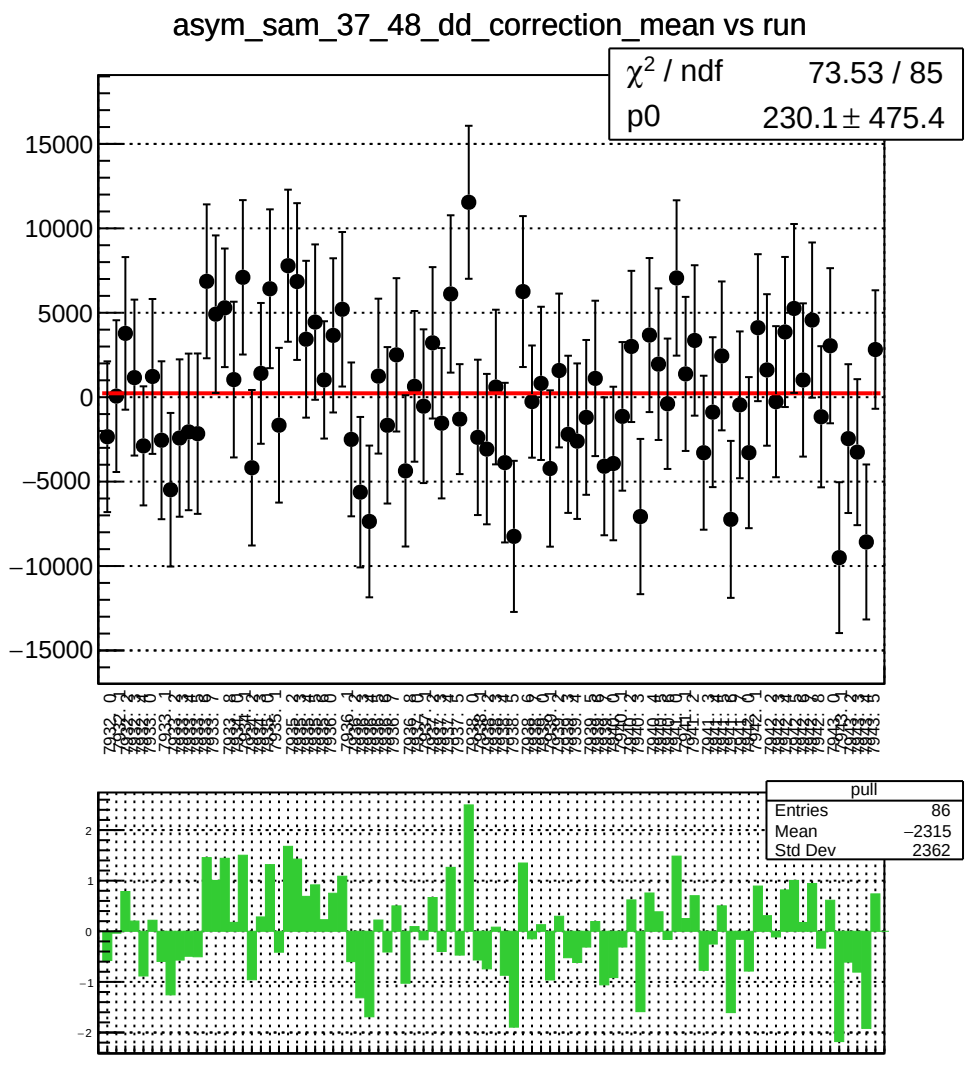

pull1D
Entries 86
Mean −0.006296
Std Dev 1.037

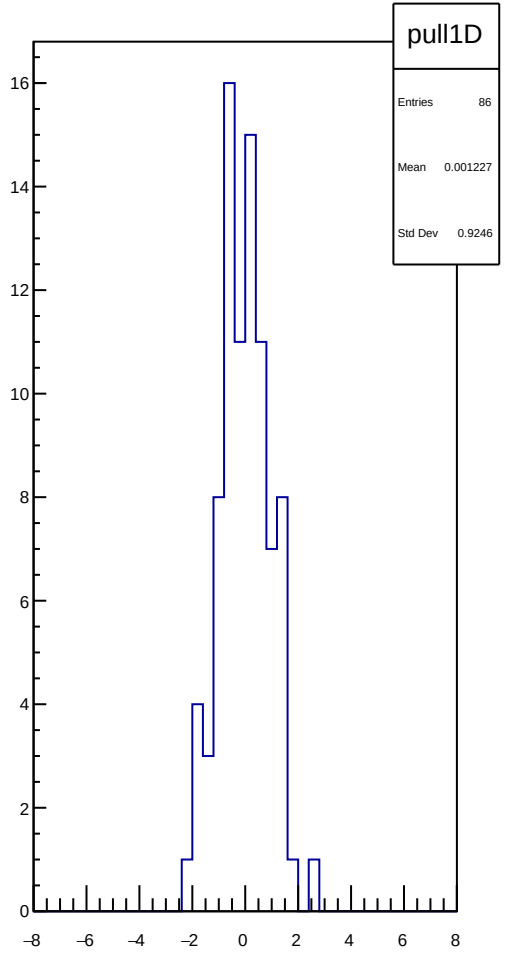

asym_sam_15_48_dd_rms vs run
χ² / ndf 1607 / 85
p0 1484 ± 1.154
1650
1600
1550
1500
1450
1400

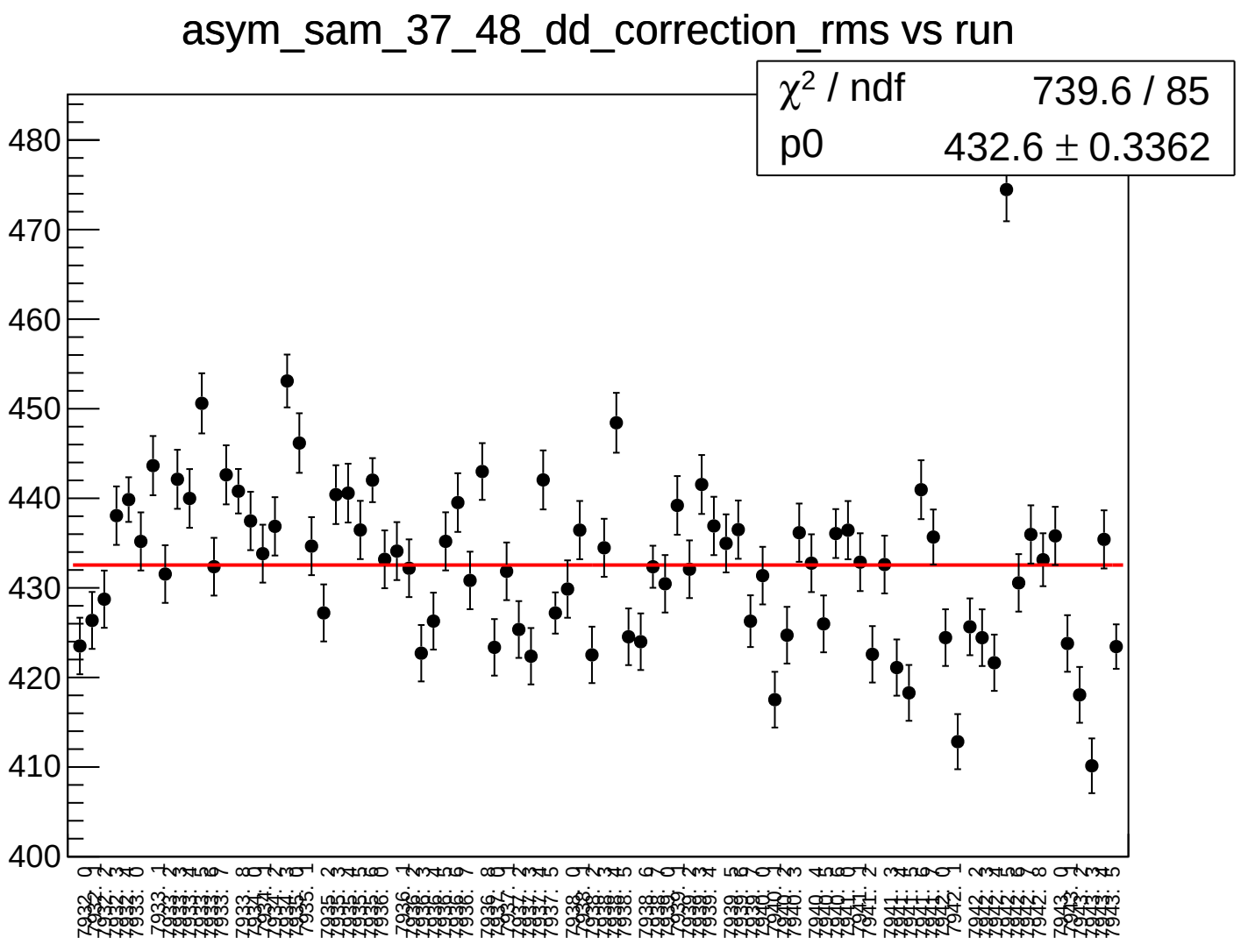

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 79.13 / 85
p0 147.5 ± 72.69
pull
Entries 86
Mean 110.8
Std Dev 29.8

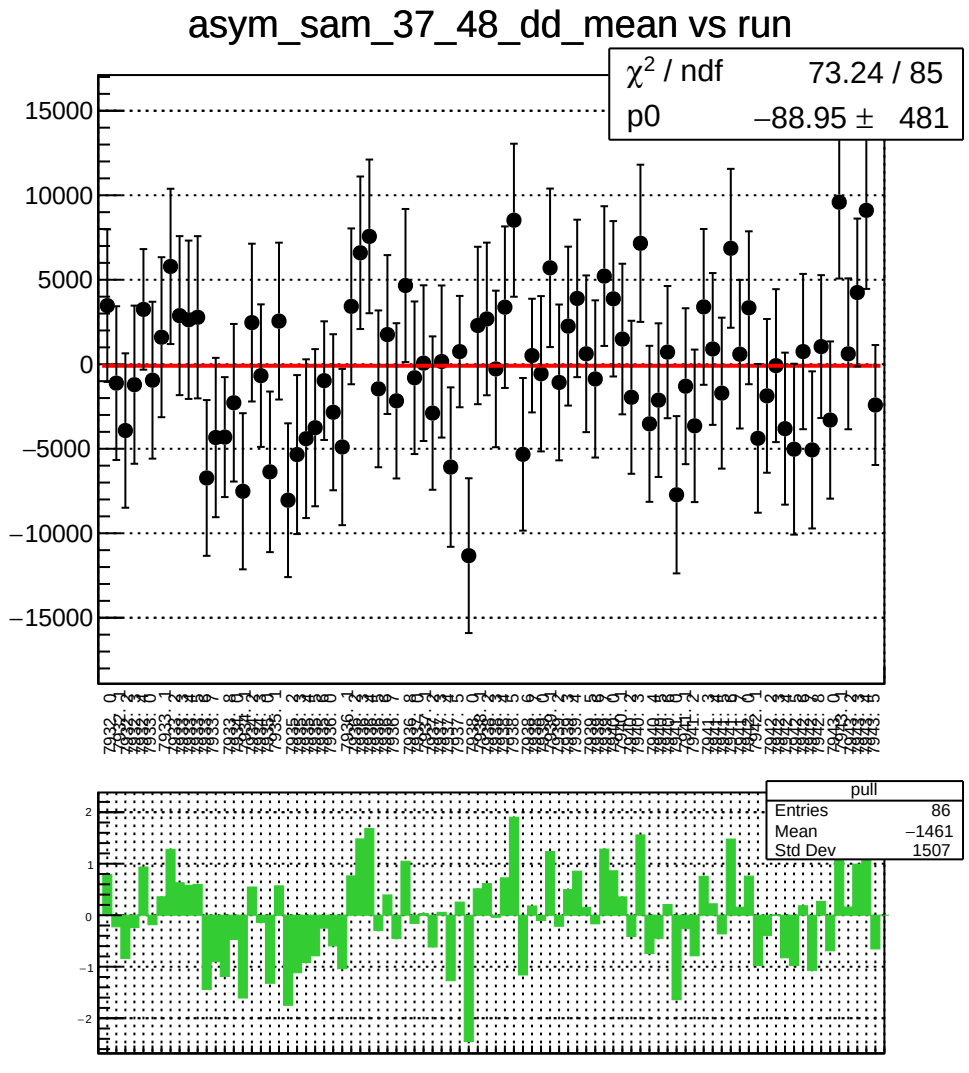

pull1D
Entries 86
Mean −0.009081
Std Dev 0.9592

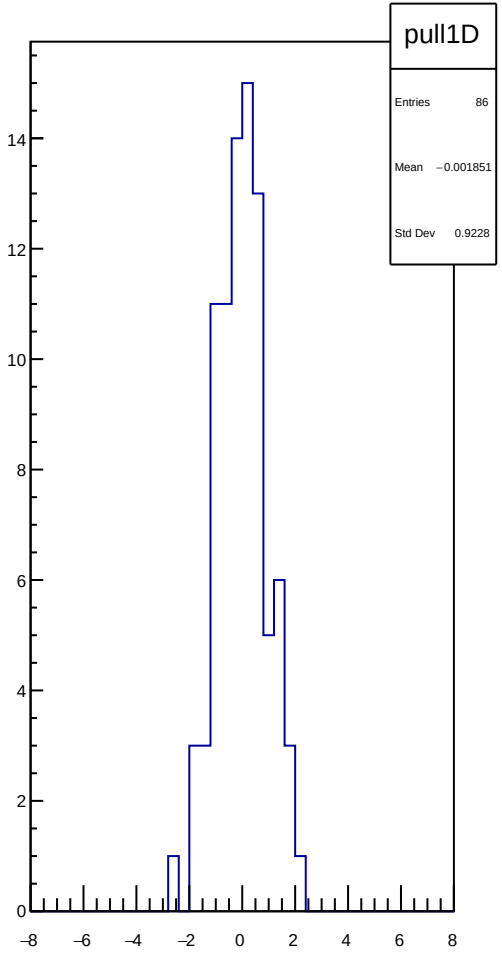

reg_asym_sam_37_48_dd_rms vs run
χ^2 / ndf 2818 / 85
p0 66.1 ± 0.0514
76
74
72
70
68
66
64
62
60

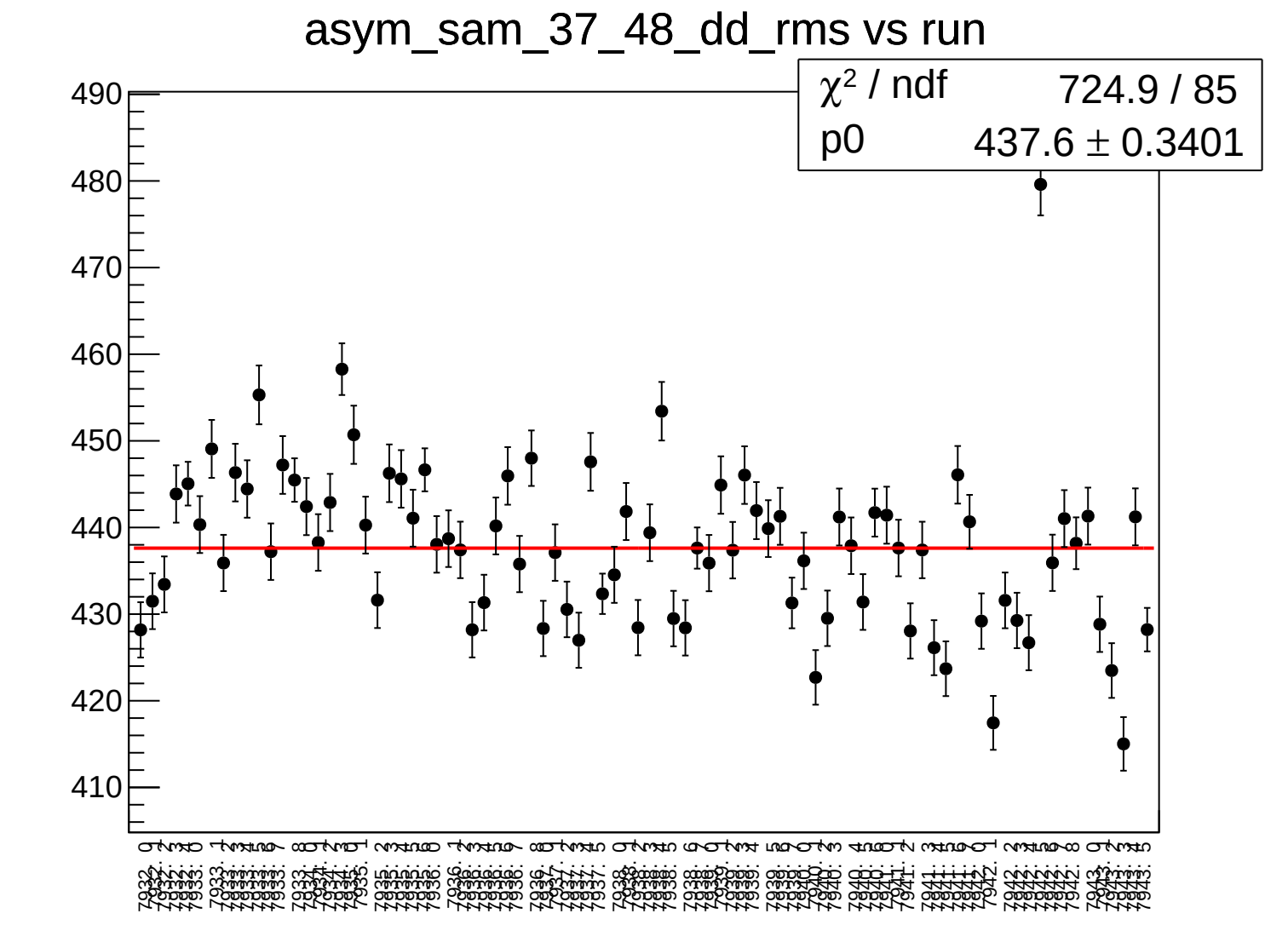

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 73.53 / 85
p0 230.1 ± 475.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −2315
Std Dev 2362
2
1
0
−1
−2

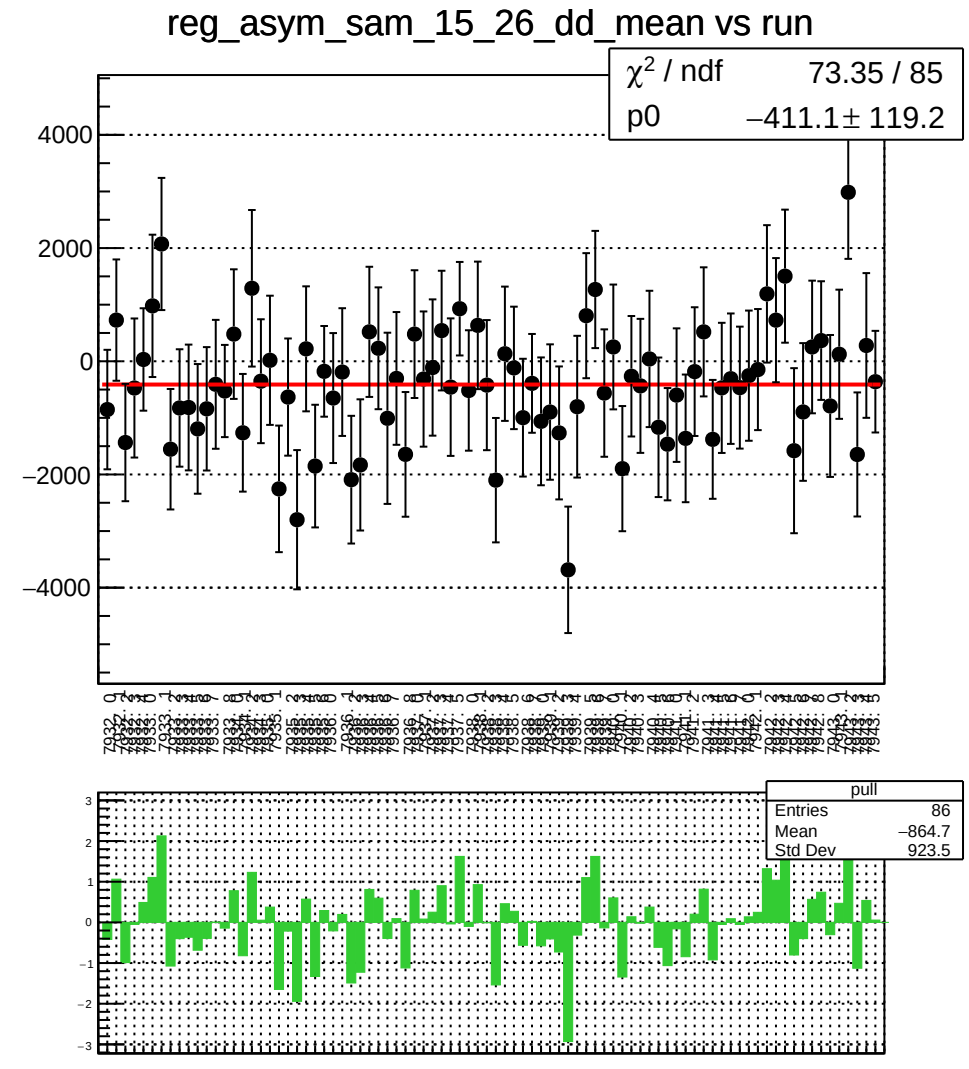

pull1D
Entries 86
Mean 0.001227
Std Dev 0.9246
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

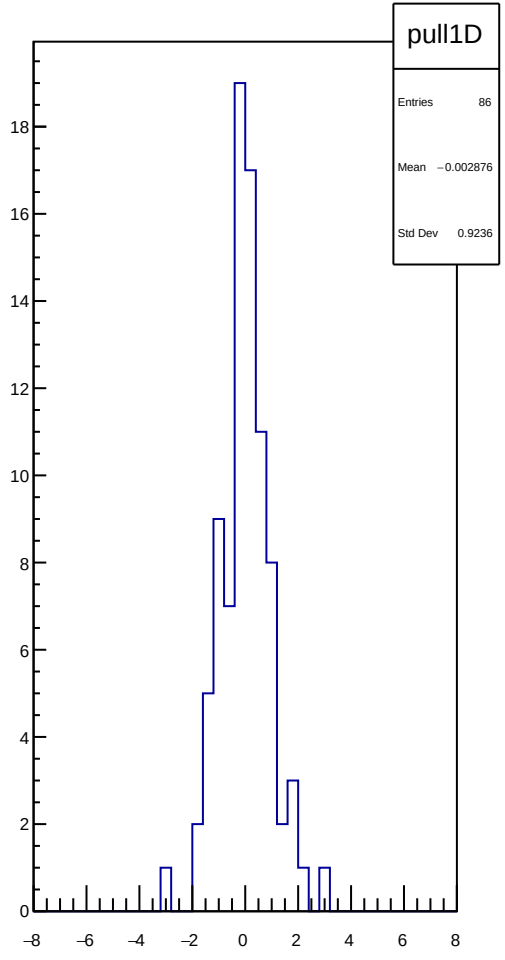

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 739.6 / 85
p0 432.6 ± 0.3362
480
470
460
450
440
430
420
410
400


asym_sam_37_48_dd_mean vs run
χ² / ndf 73.24 / 85
p0 −88.95 ± 481
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −1461
Std Dev 1507
2
1
0
−1
−2

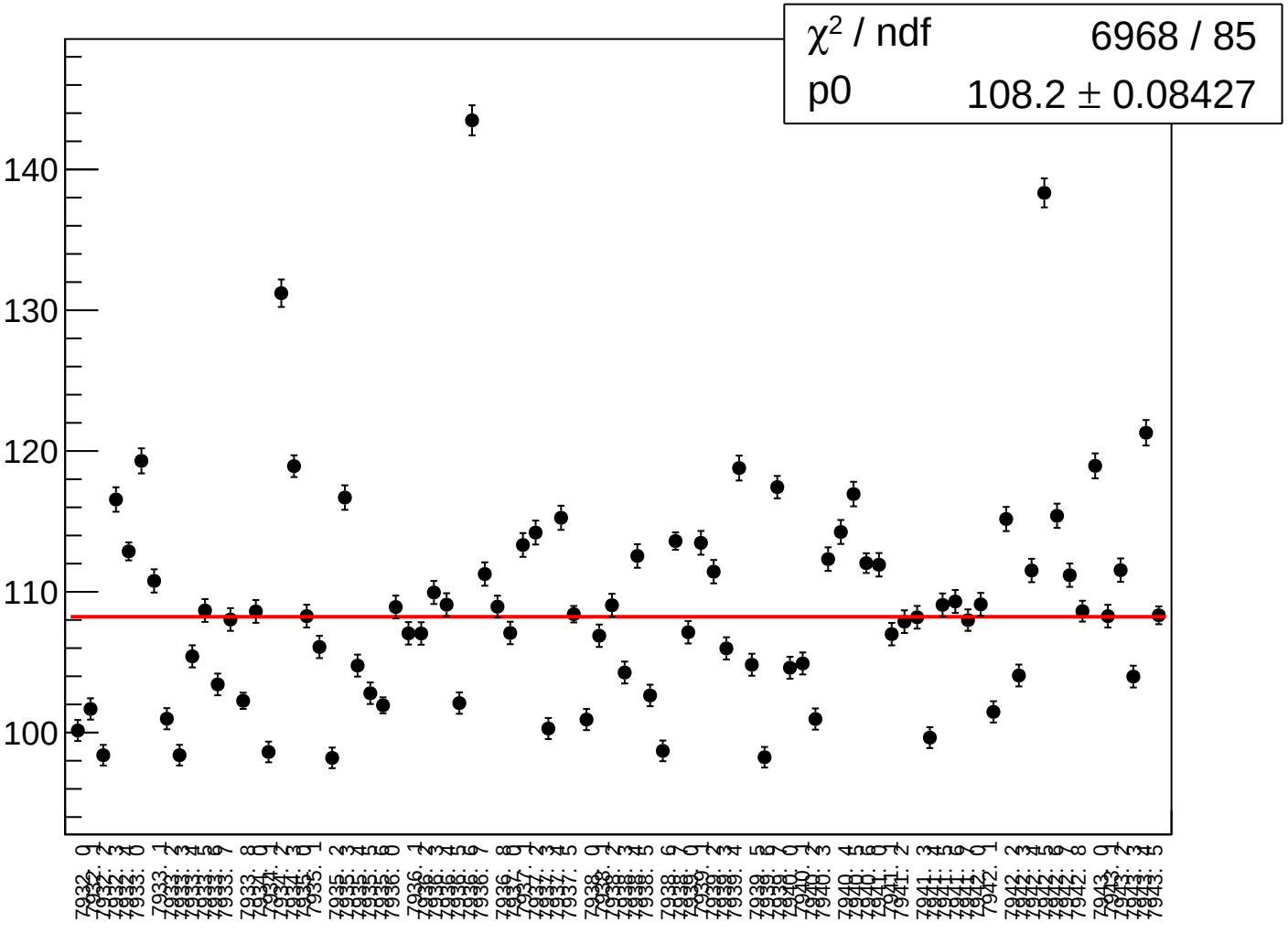

pull1D
Entries 86
Mean −0.001851
Std Dev 0.9228
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

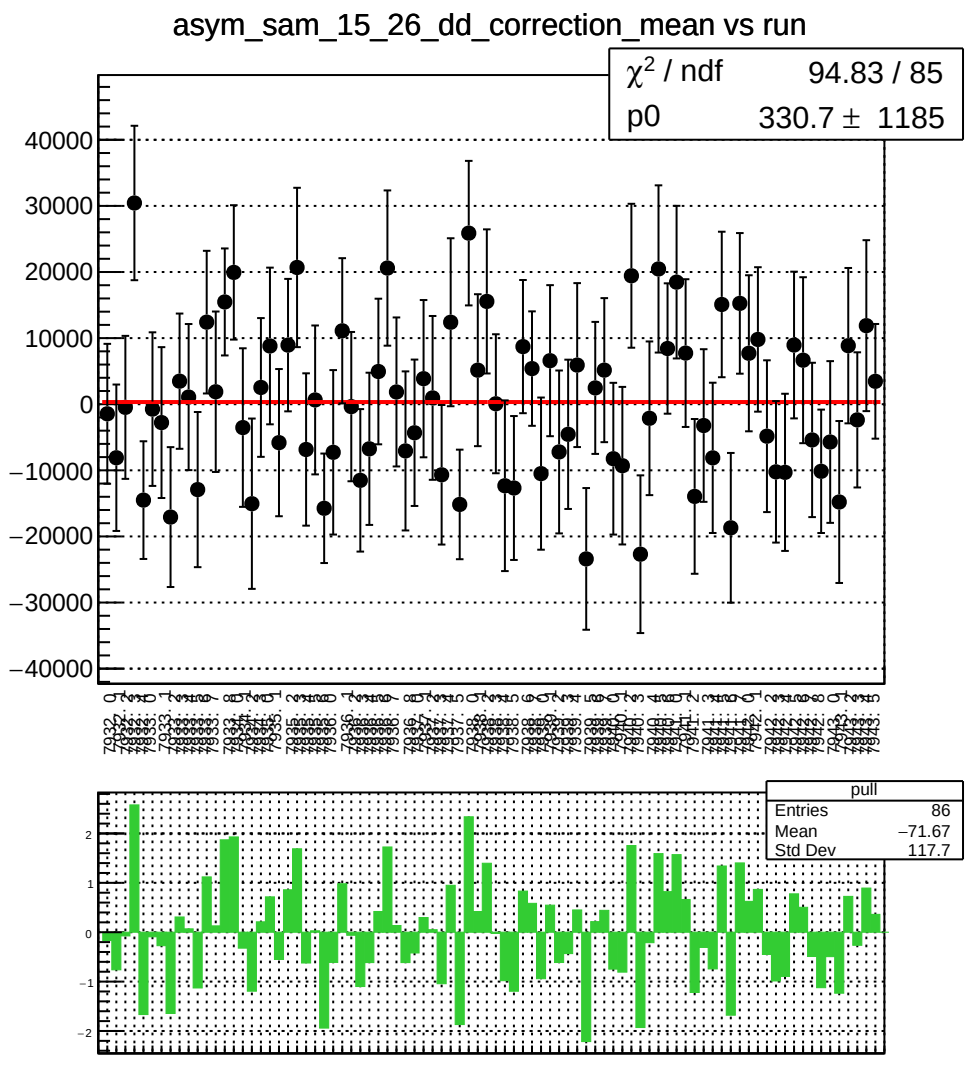

asym_sam_37_48_dd_rms vs run
χ² / ndf 724.9 / 85
p0 437.6 ± 0.3401
490
480
470
460
450
440
430
420
410

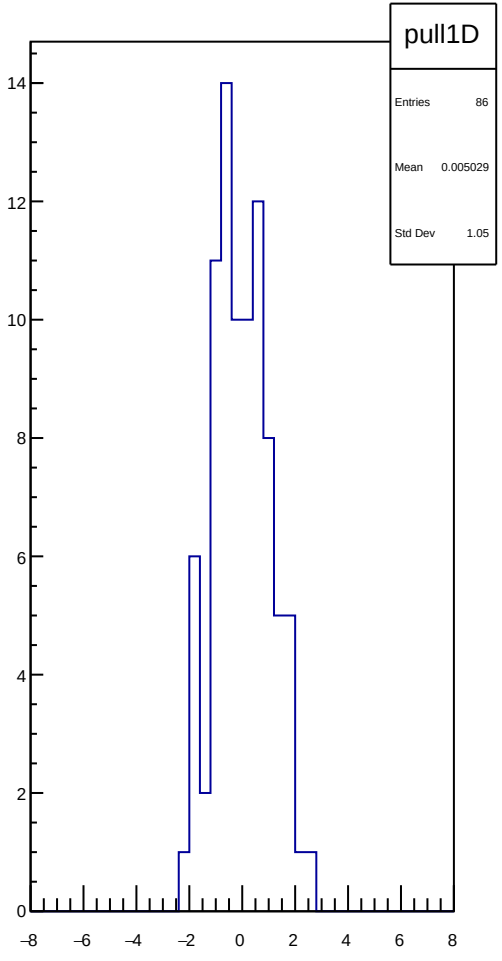

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 73.35 / 85
p0 −411.1± 119.2
4000
2000
0
−2000
−4000
pull
Entries 86
Mean −864.7
Std Dev 923.5
3
2
1
0
−1
−2
−3

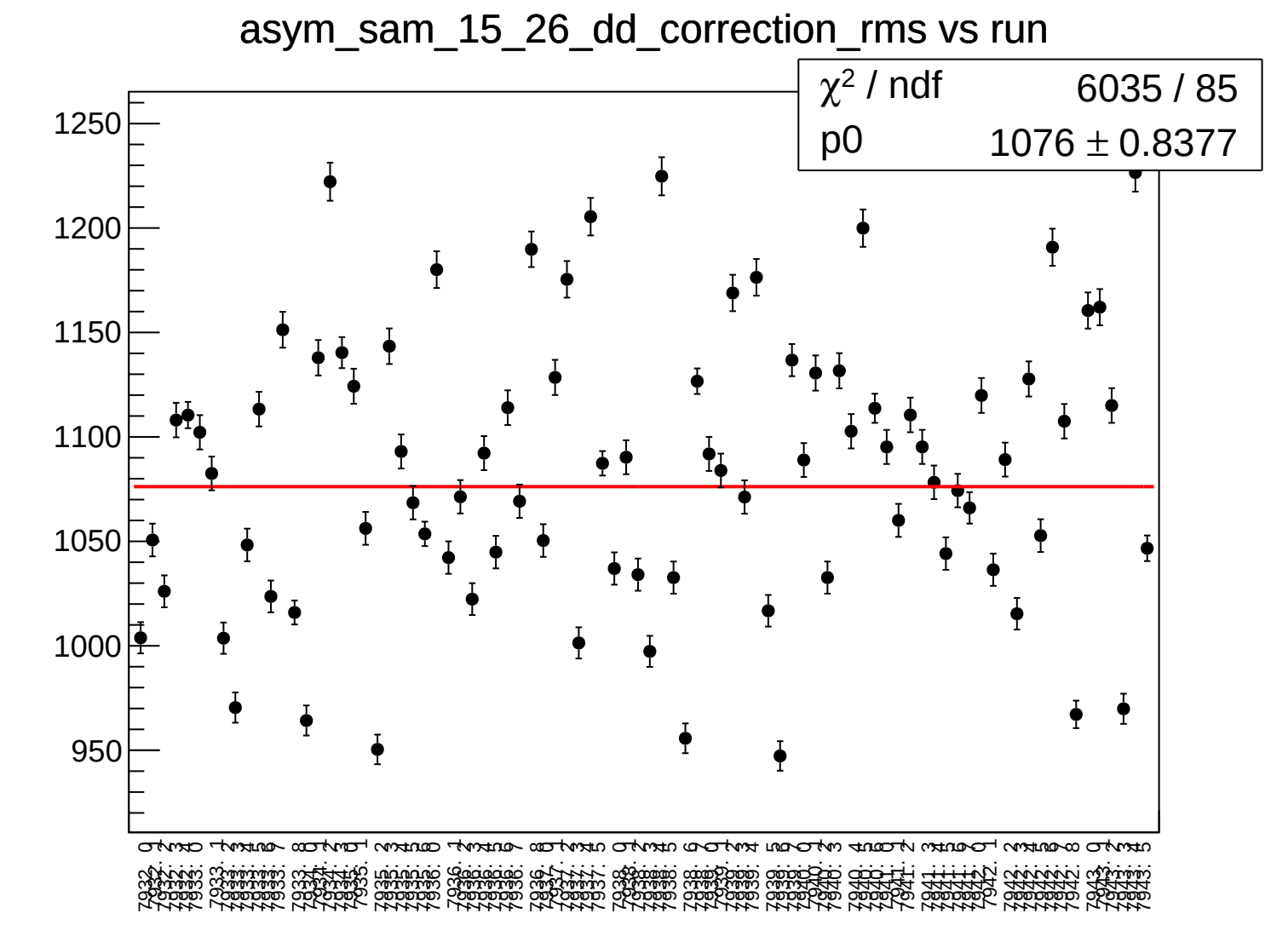

pull1D
Entries 86
Mean −0.002876
Std Dev 0.9236
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

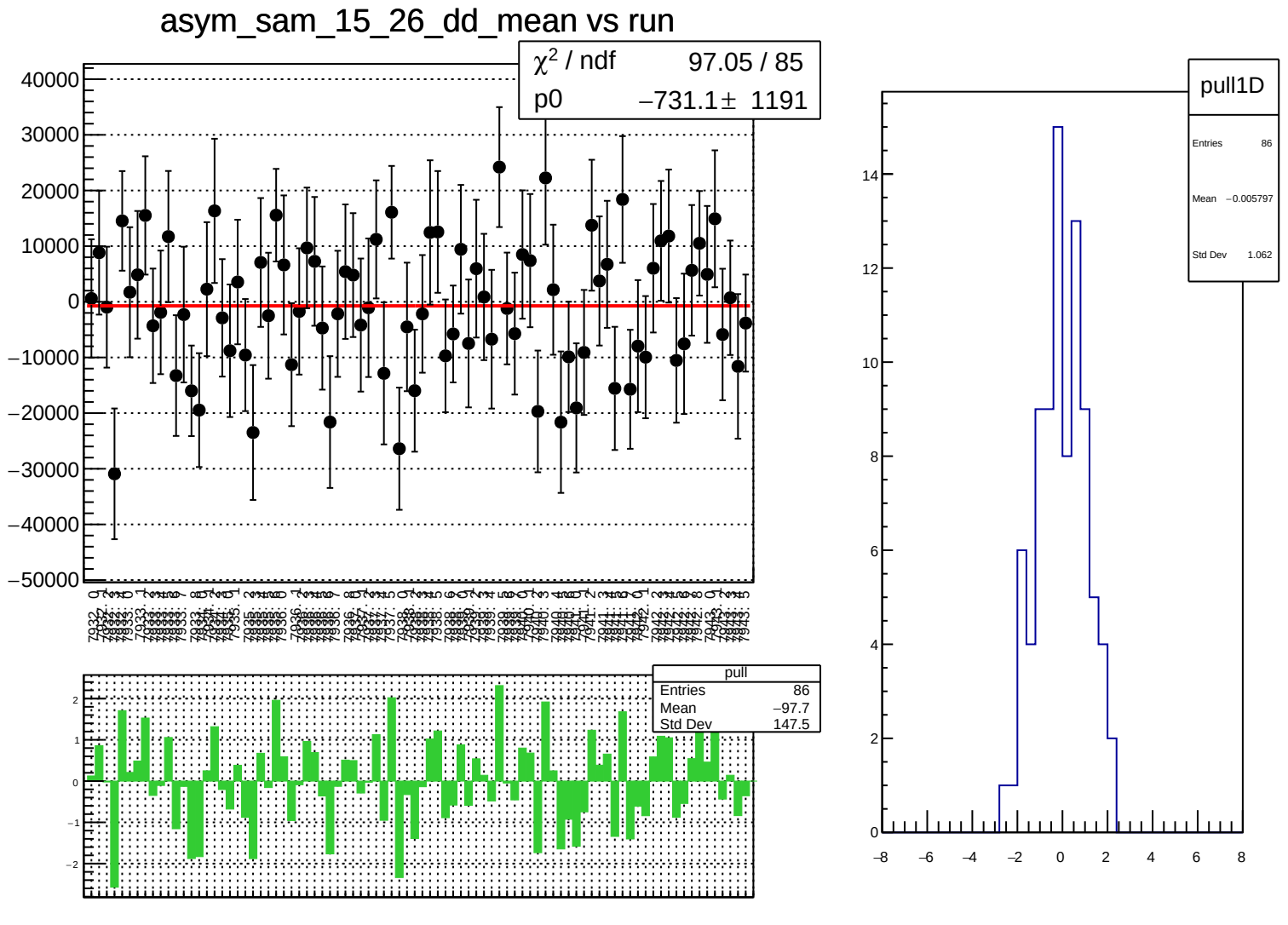
reg_asym_sam_15_26_dd_rms vs run

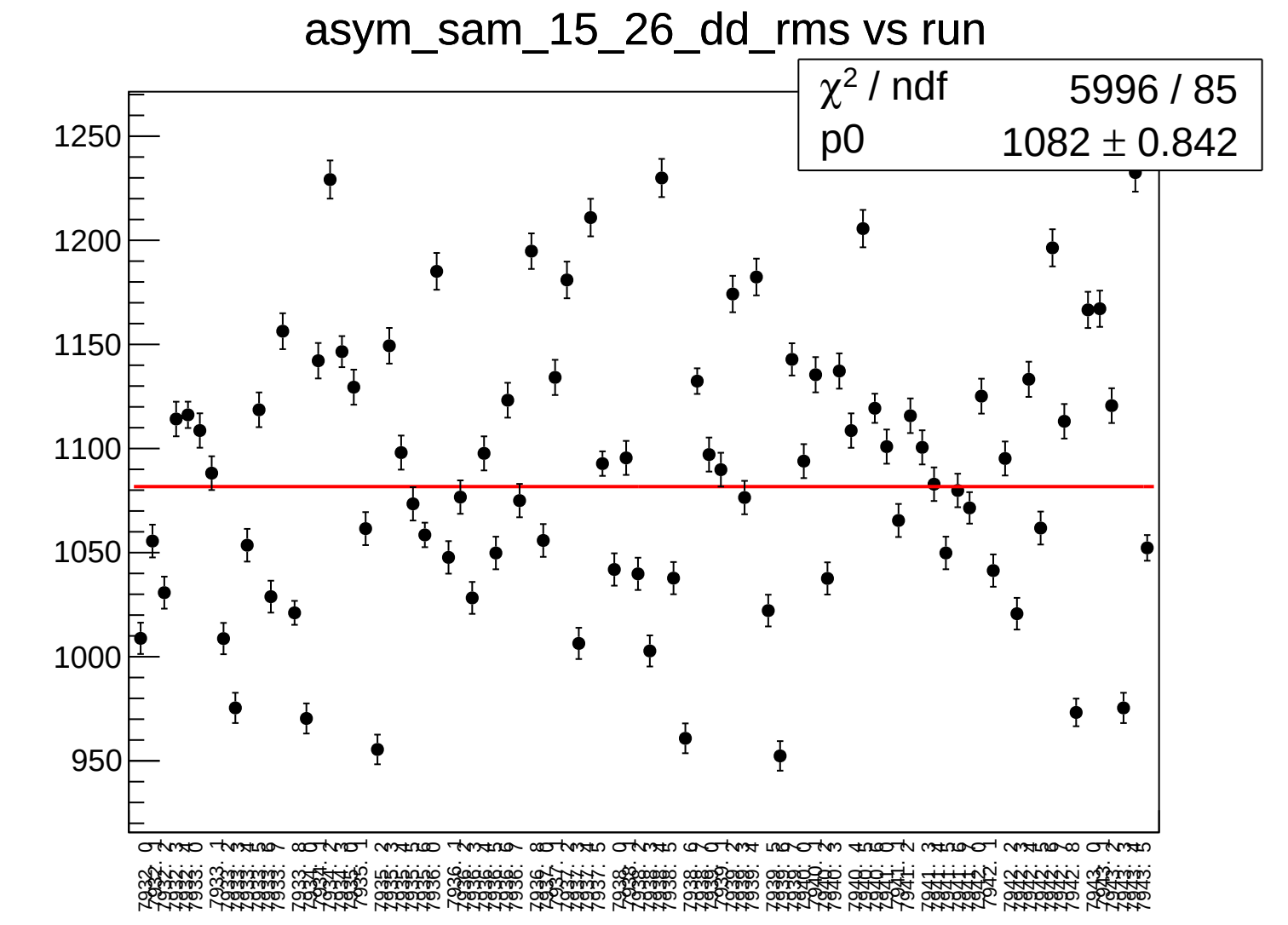


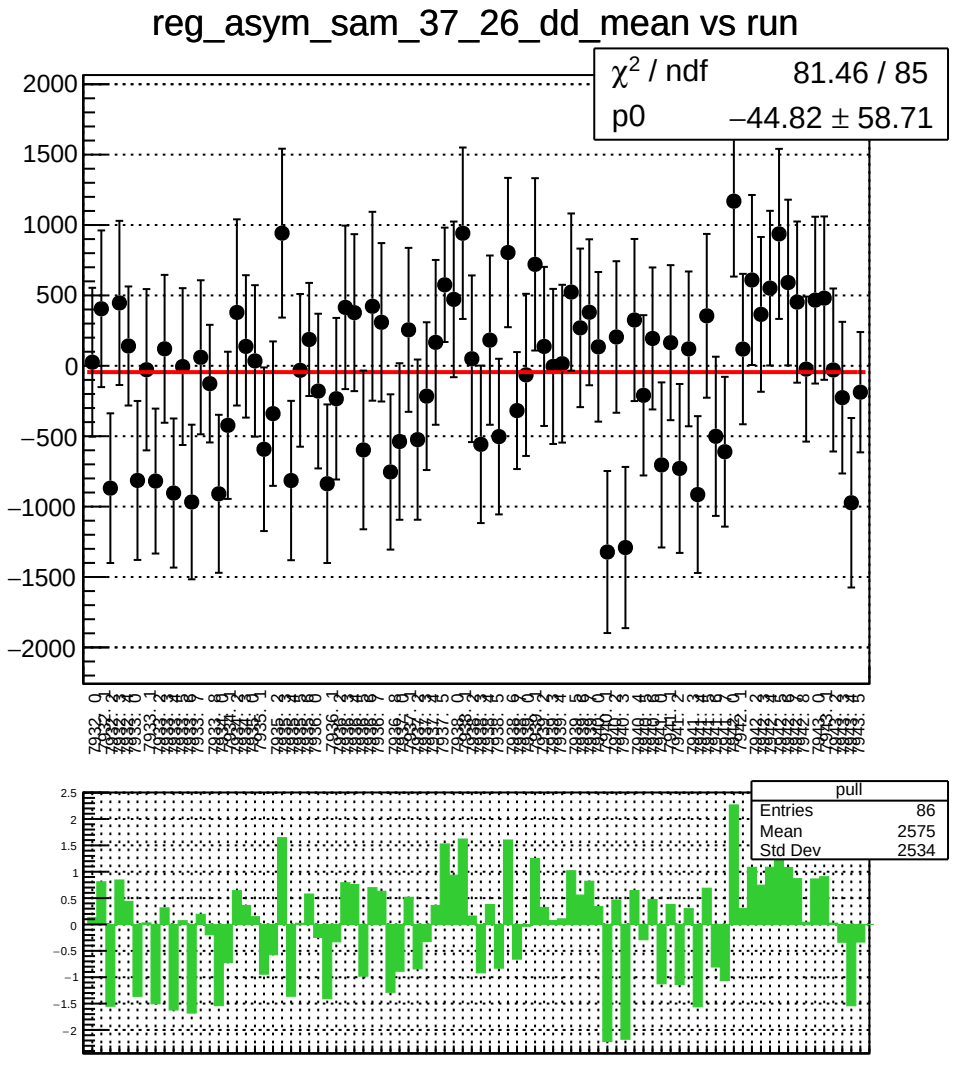

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 94.83 / 85
p0 330.7 ± 1185
pull
Entries 86
Mean −71.67
Std Dev 117.7

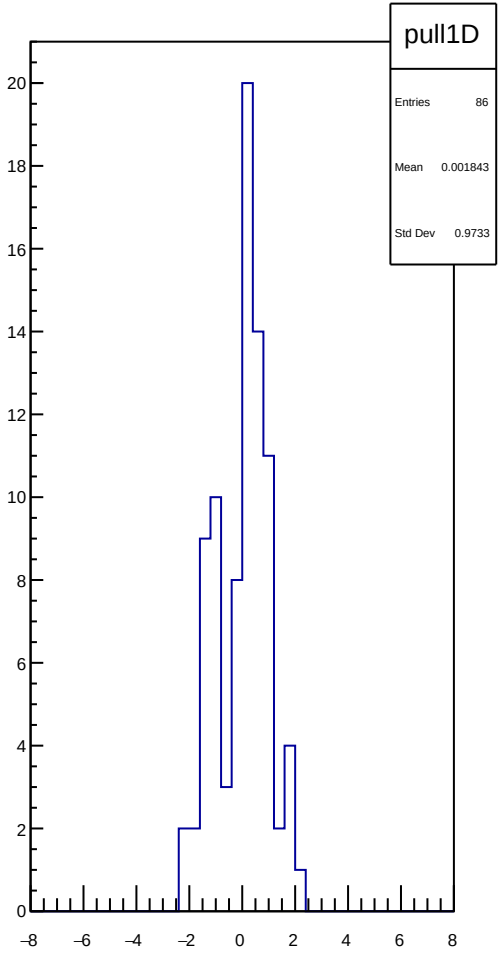

pull1D
Entries 86
Mean 0.005029
Std Dev 1.05

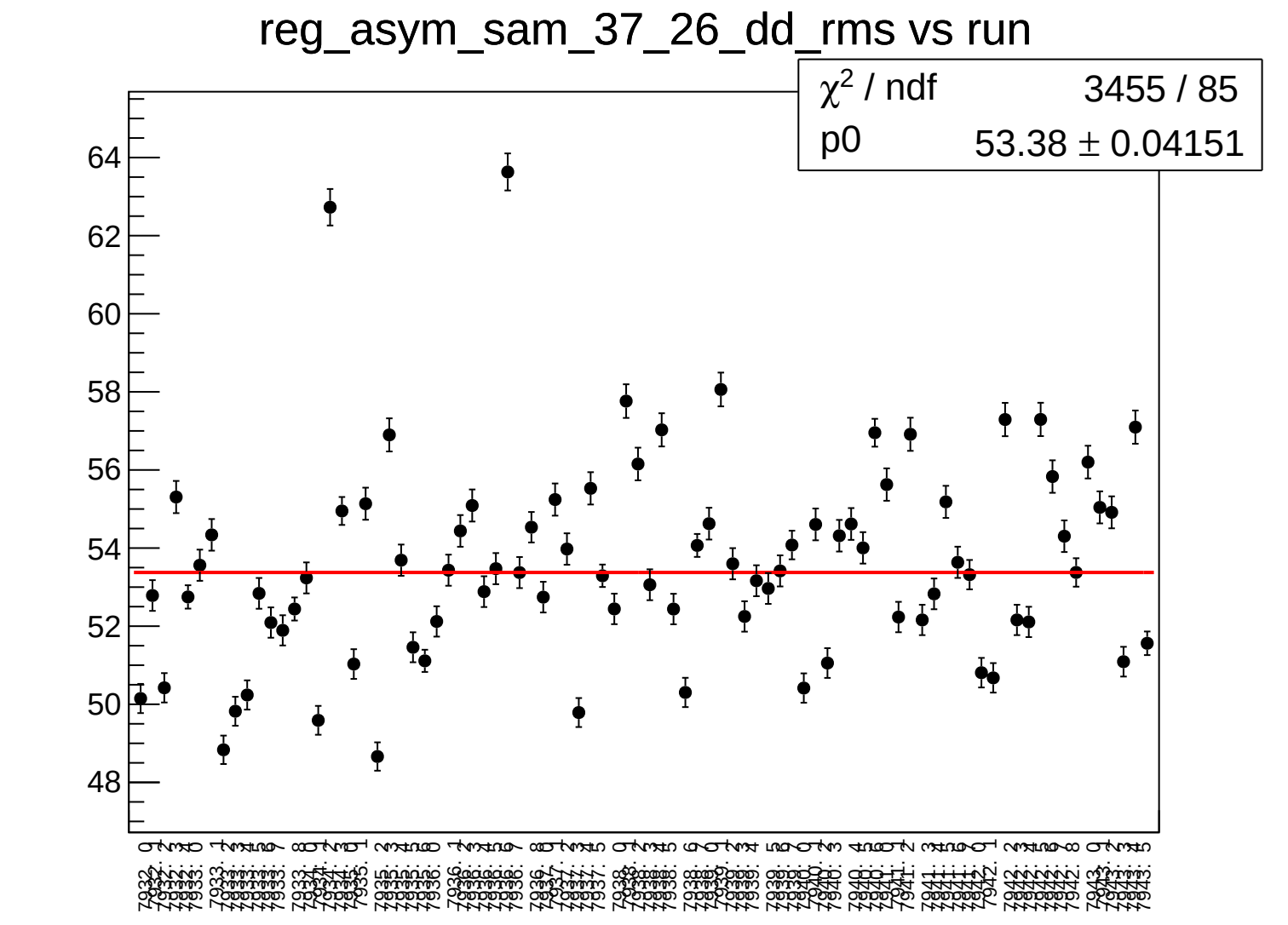

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 6035 / 85
p0 1076 ± 0.8377
1250
1200
1150
1100
1050
1000
950

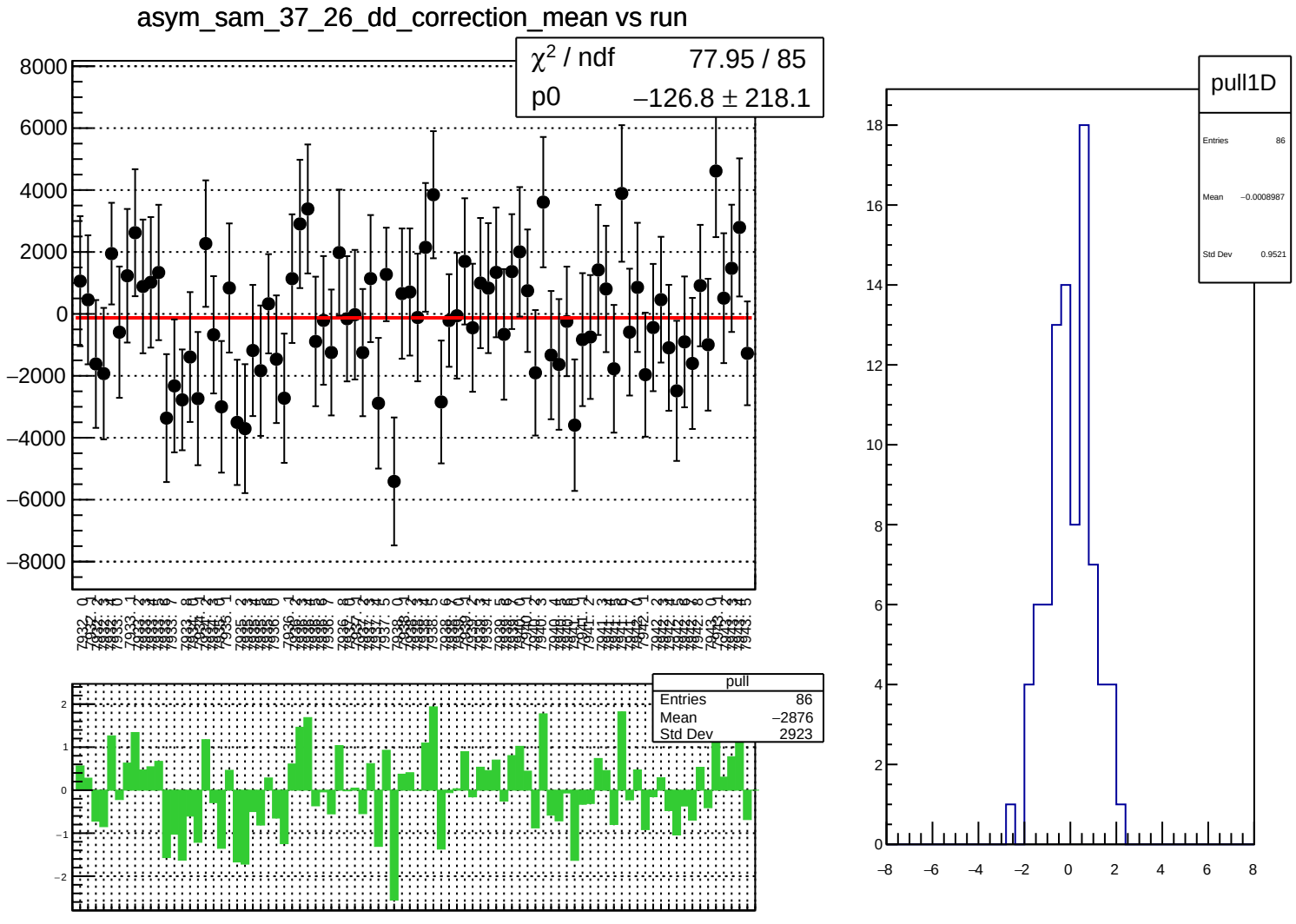

asym_sam_15_26_dd_mean vs run
χ² / ndf 97.05 / 85
p0 −731.1± 1191
pull
Entries 86
Mean −97.7
Std Dev 147.5
pull1D
Entries 86
Mean −0.005797
Std Dev 1.062

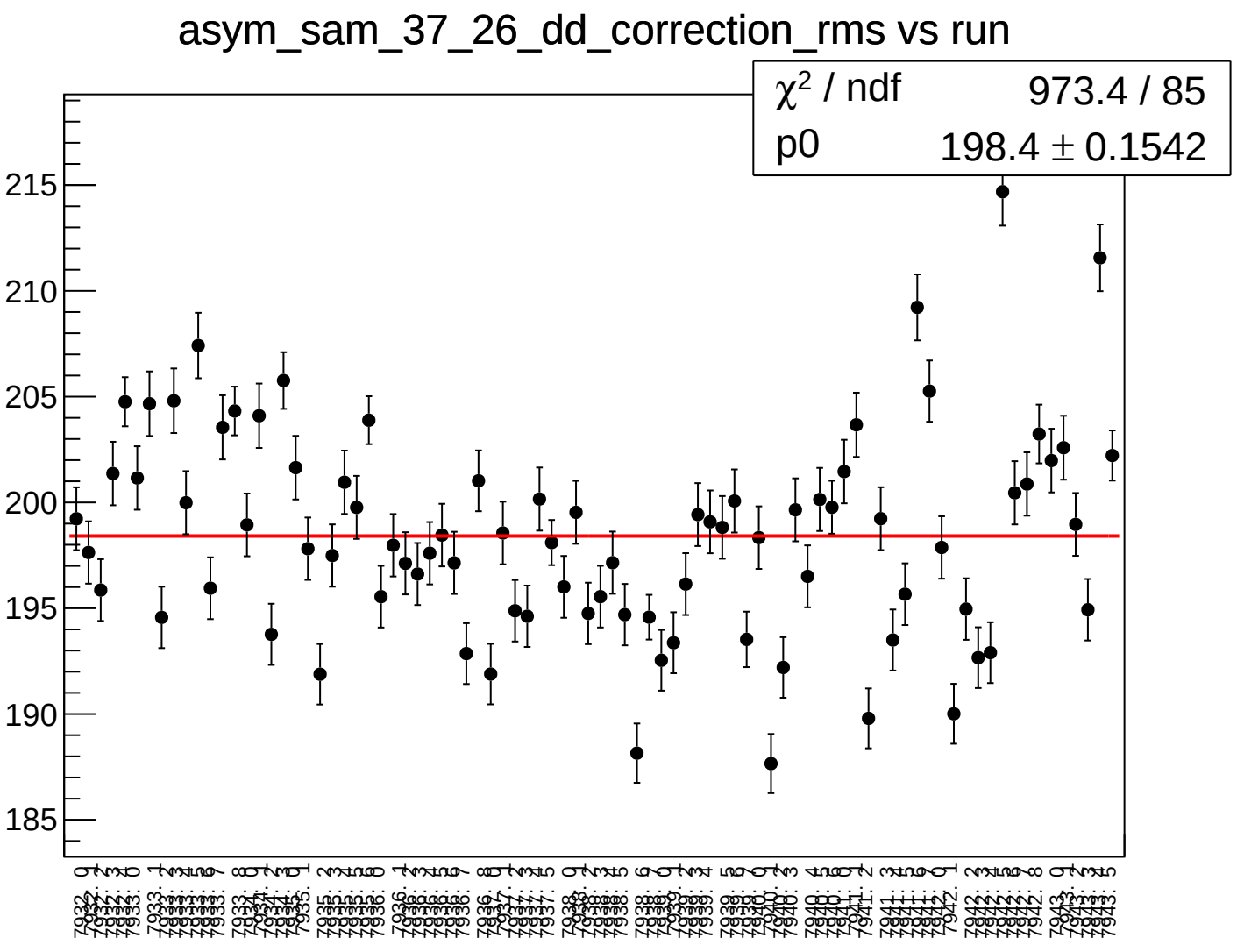

asym_sam_15_26_dd_rms vs run
χ² / ndf 5996 / 85
p0 1082 ± 0.842
1250
1200
1150
1100
1050
1000
950

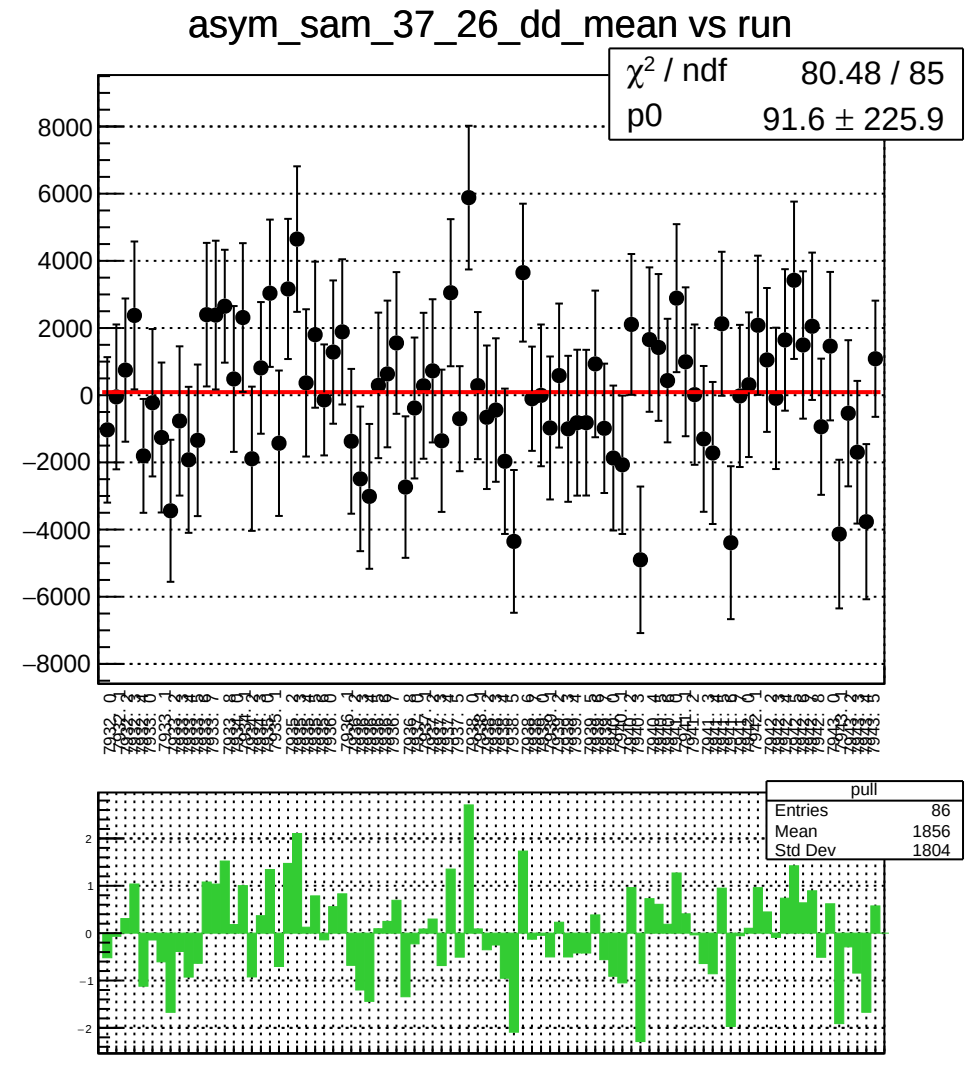

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 81.46 / 85
p0 −44.82 ± 58.71
pull
Entries 86
Mean 2575
Std Dev 2534

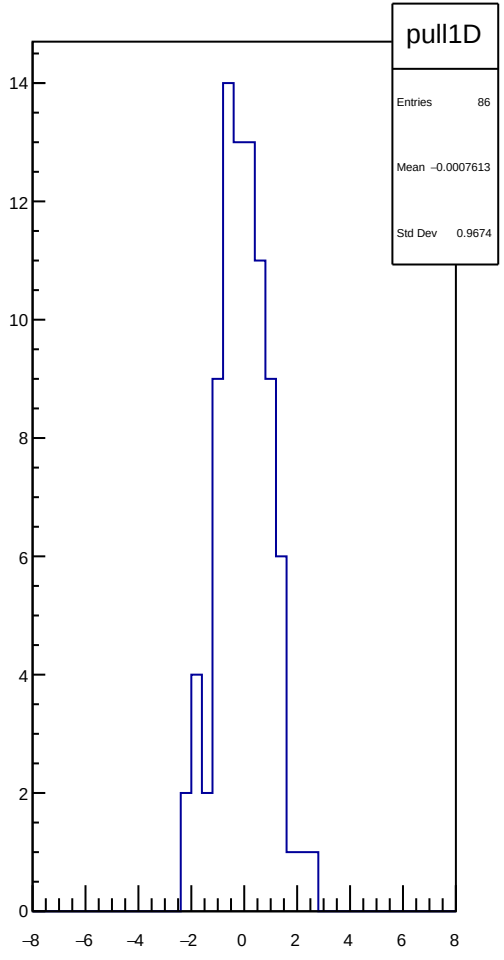

pull1D
Entries 86
Mean 0.001843
Std Dev 0.9733

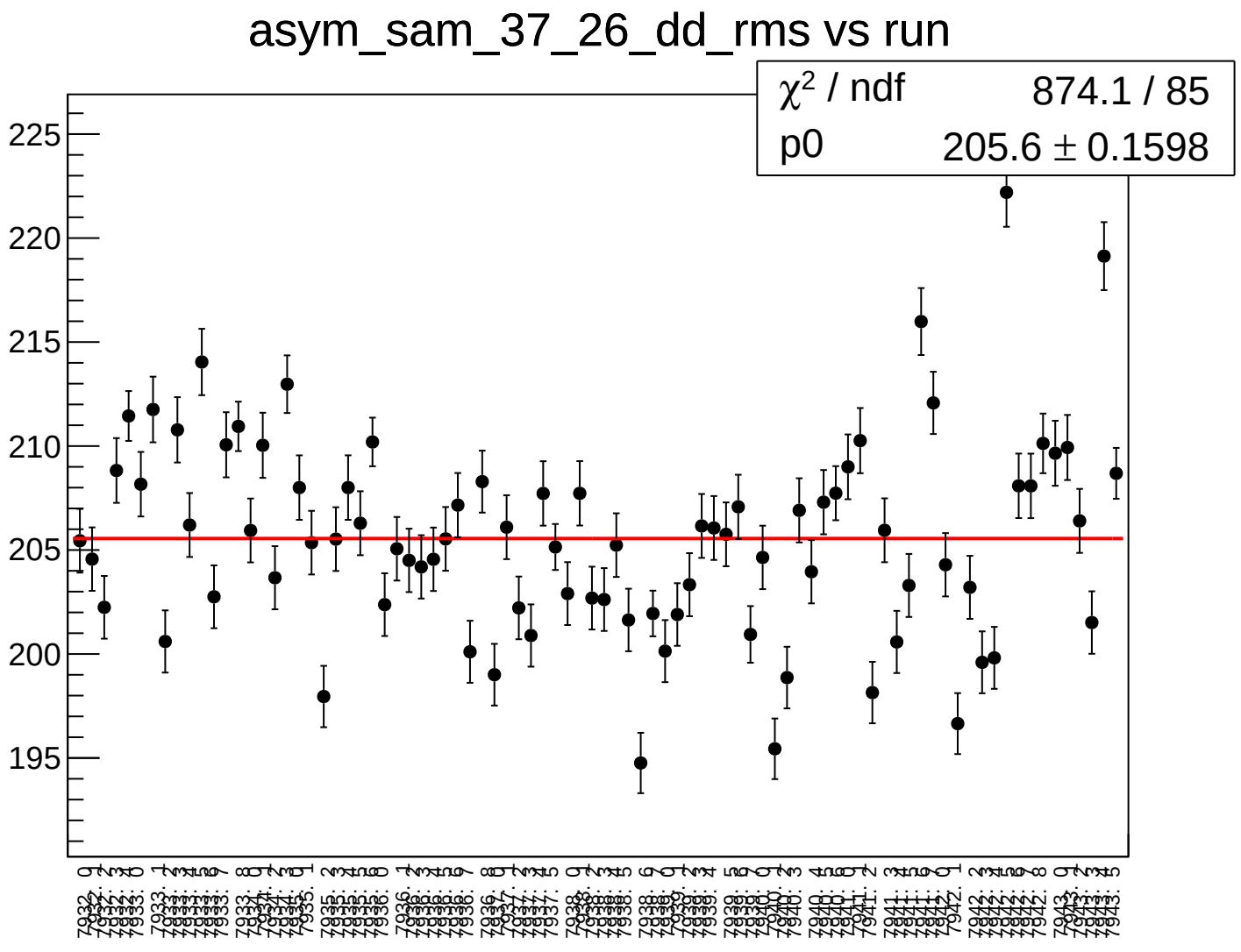

reg_asym_sam_37_26_dd_rms vs run
χ^2 / ndf 3455 / 85
p0 53.38 ± 0.04151
64
62
60
58
56
54
52
50
48

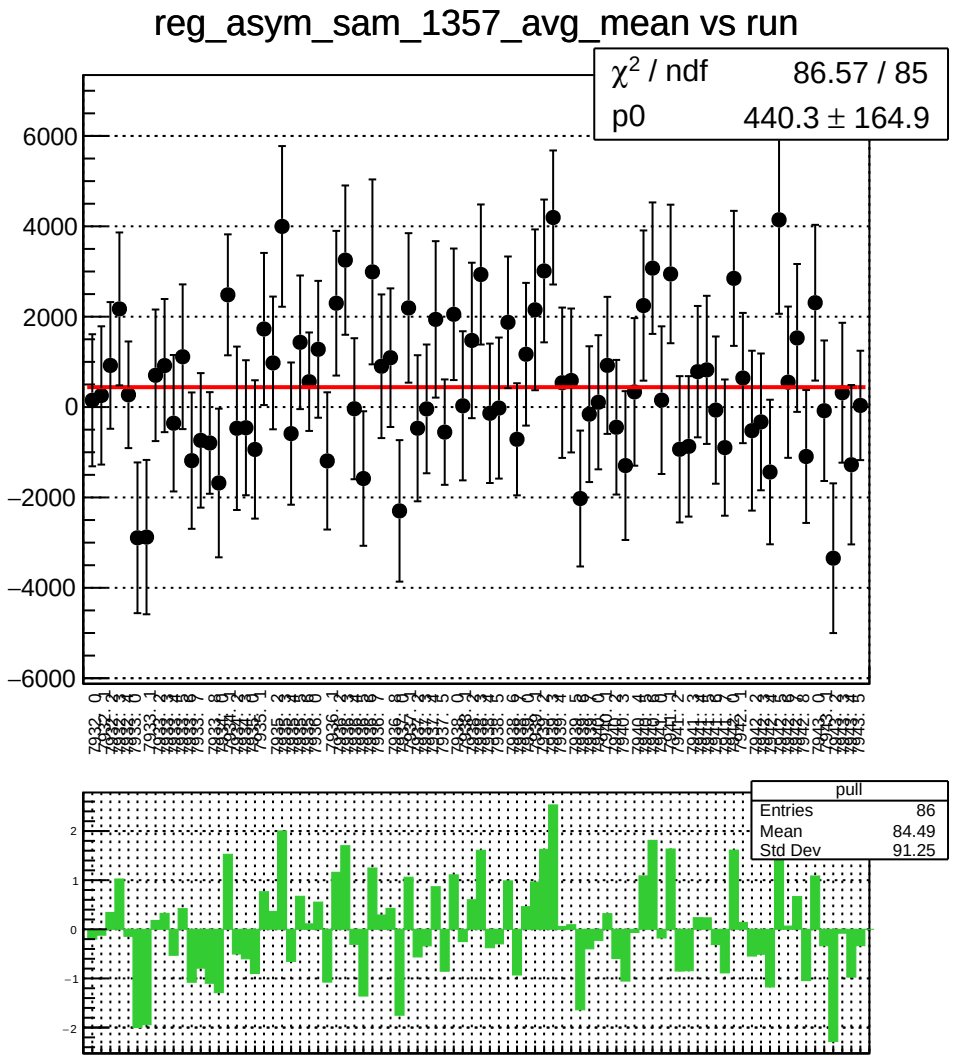

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 77.95 / 85
p0 −126.8 ± 218.1
pull
Entries 86
Mean −2876
Std Dev 2923
pull1D
Entries 86
Mean −0.0008987
Std Dev 0.9521

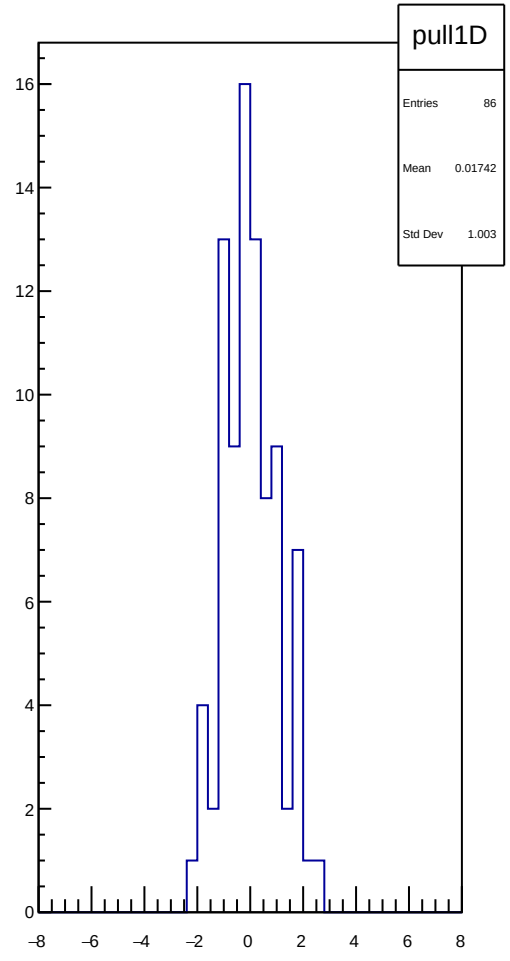

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 973.4 / 85
p0 198.4 ± 0.1542
215
210
205
200
195
190
185

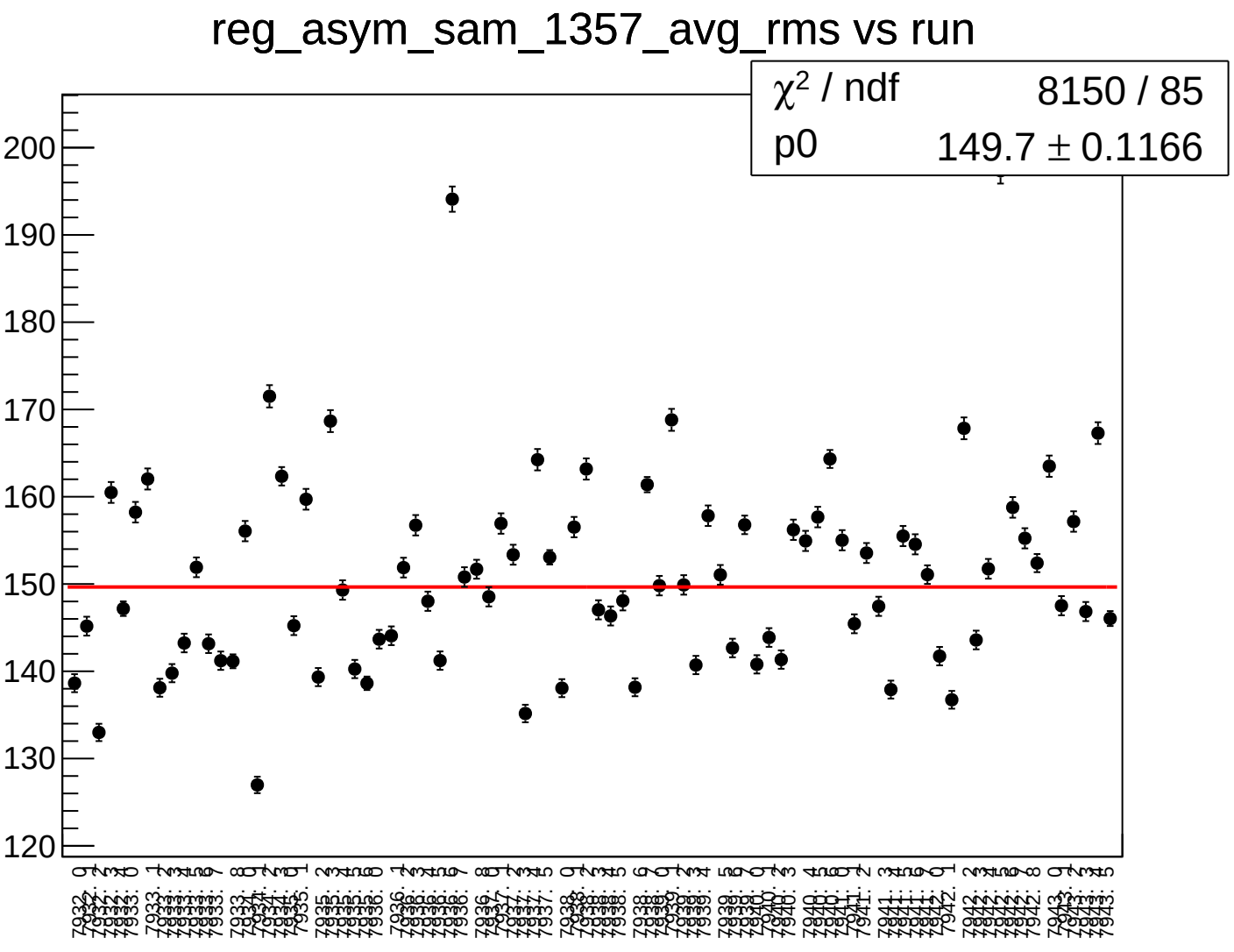

asym_sam_37_26_dd_mean vs run
χ² / ndf 80.48 / 85
p0 91.6 ± 225.9
pull
Entries 86
Mean 1856
Std Dev 1804

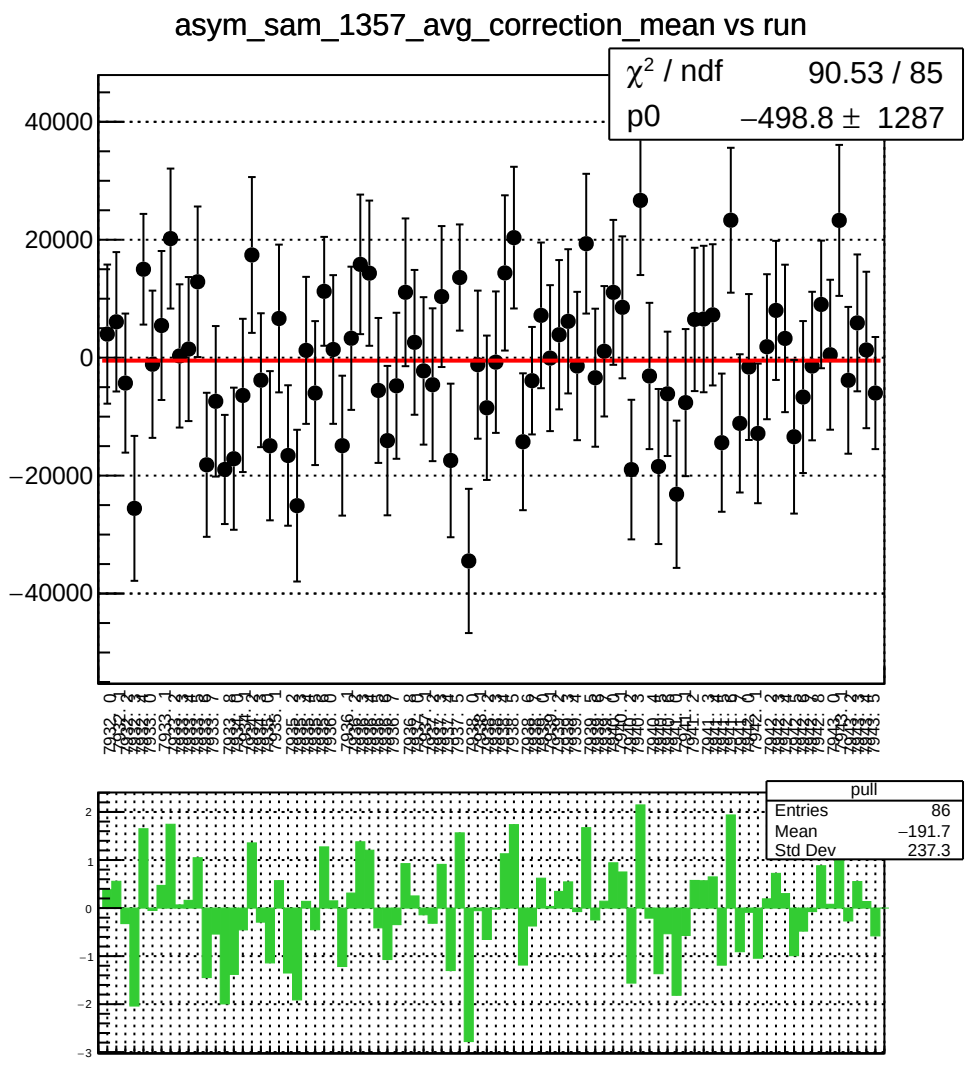

pull1D
Entries 86
Mean −0.0007613
Std Dev 0.9674

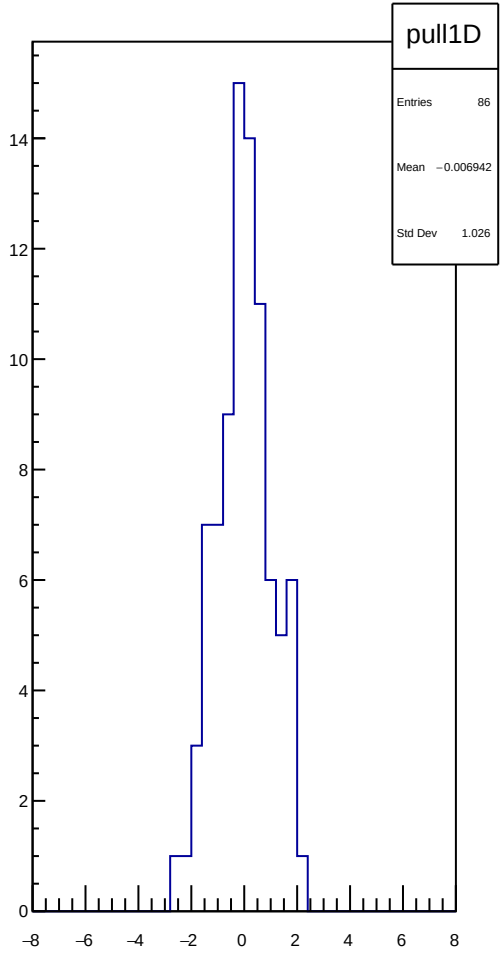

asym_sam_37_26_dd_rms vs run
χ² / ndf 874.1 / 85
p0 205.6 ± 0.1598
225
220
215
210
205
200
195

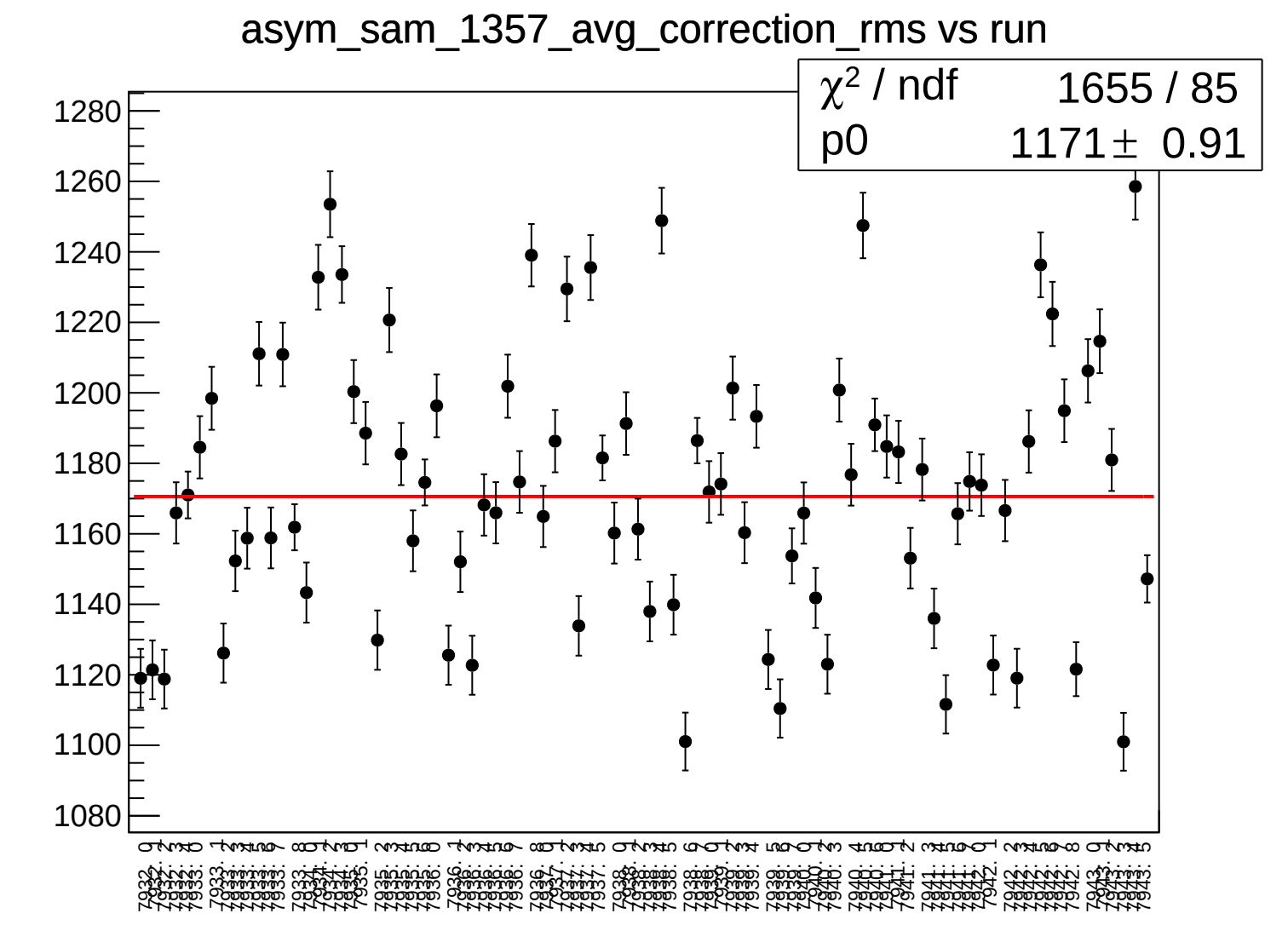

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 86.57 / 85
p0 440.3 ± 164.9
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 84.49
Std Dev 91.25
2
1
0
−1
−2

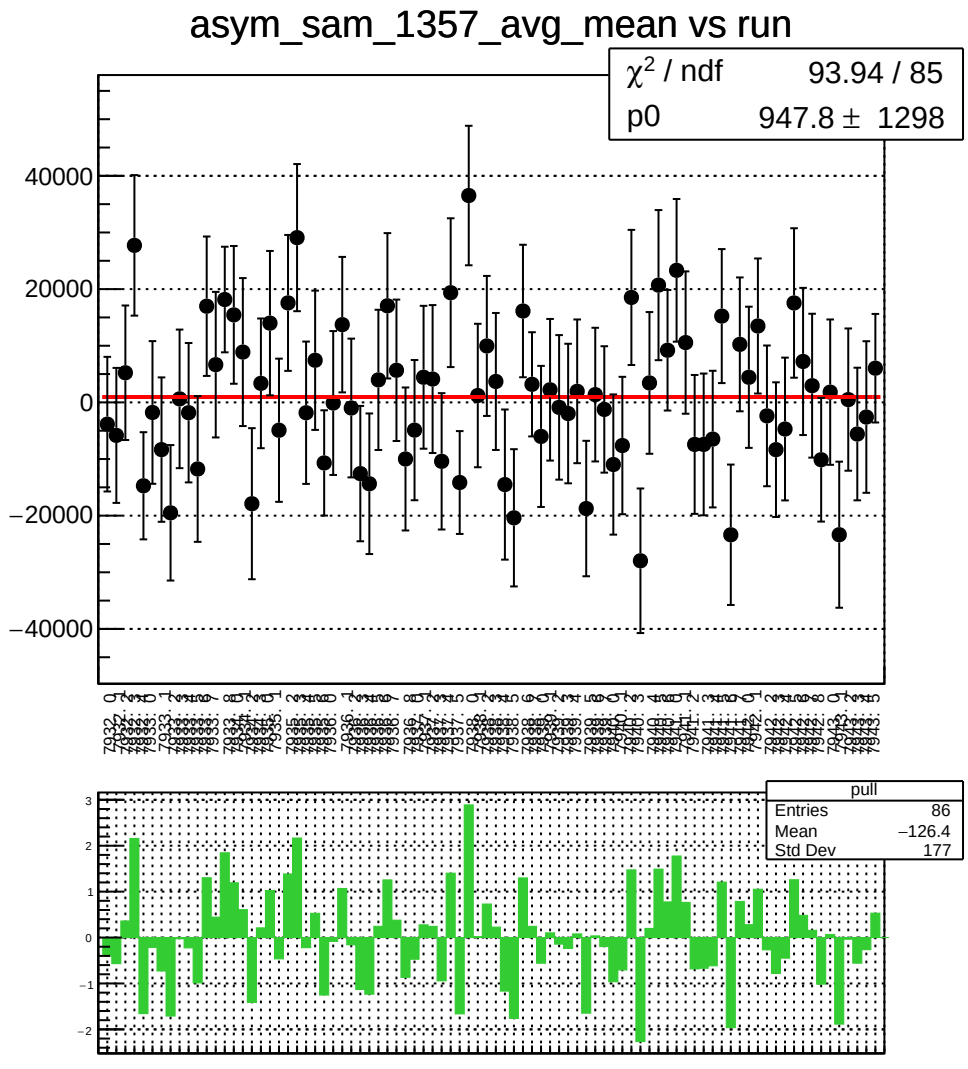

pull1D
Entries 86
Mean 0.01742
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

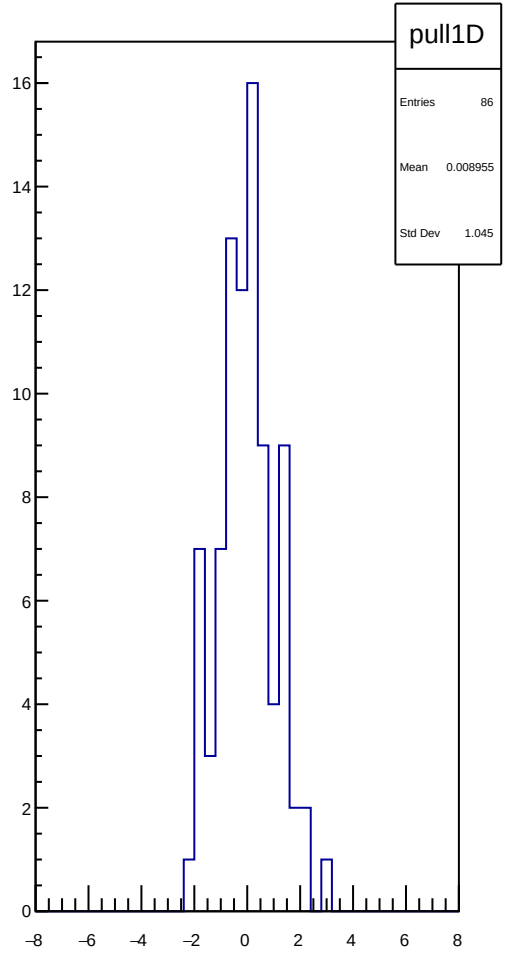

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 8150 / 85
p0 149.7 ± 0.1166
200
190
180
170
160
150
140
130
120

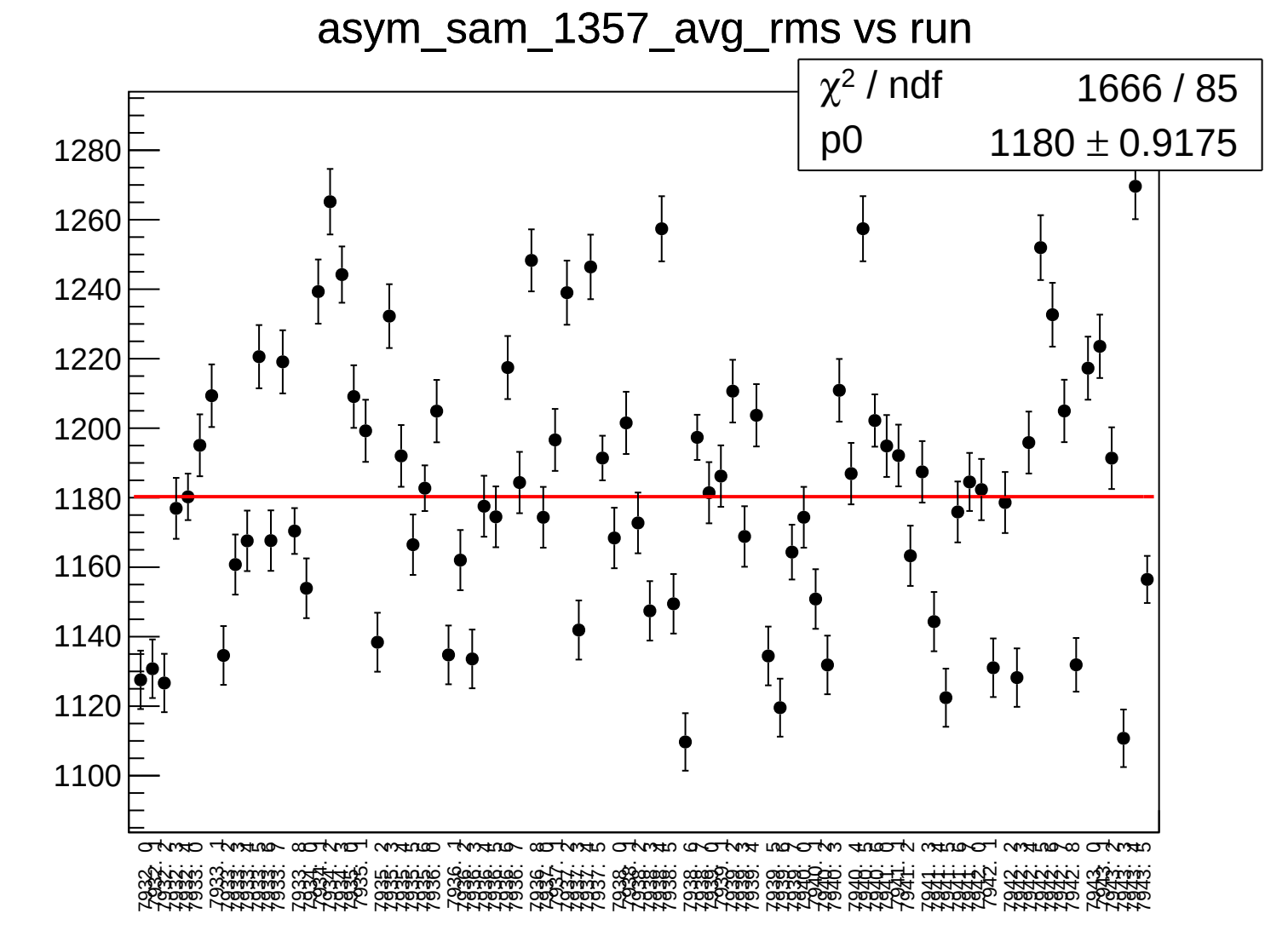

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 90.53 / 85
p0 −498.8 ± 1287
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −191.7
Std Dev 237.3
2
1
0
−1
−2
−3

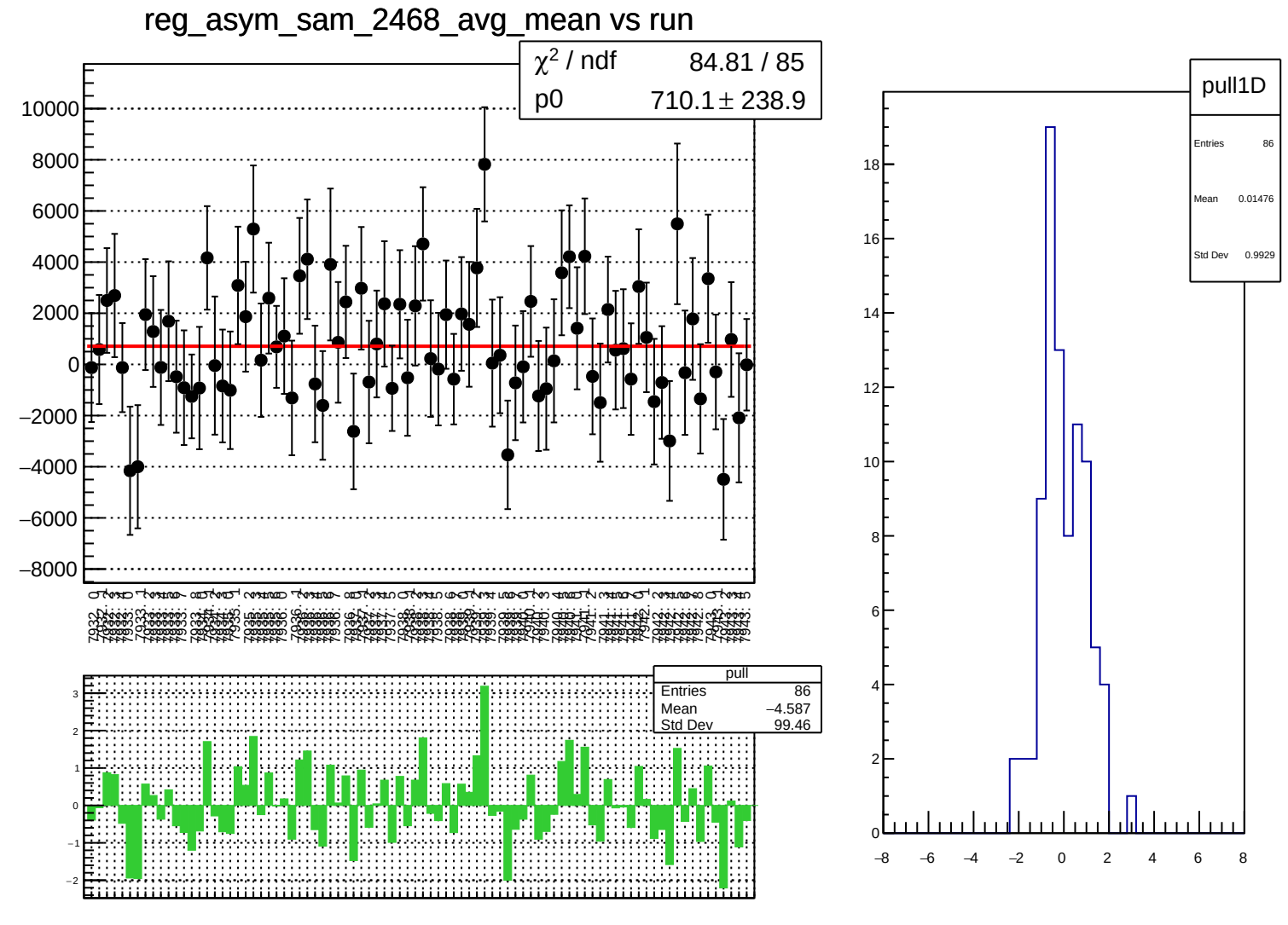

pull1D
Entries 86
Mean −0.006942
Std Dev 1.026
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

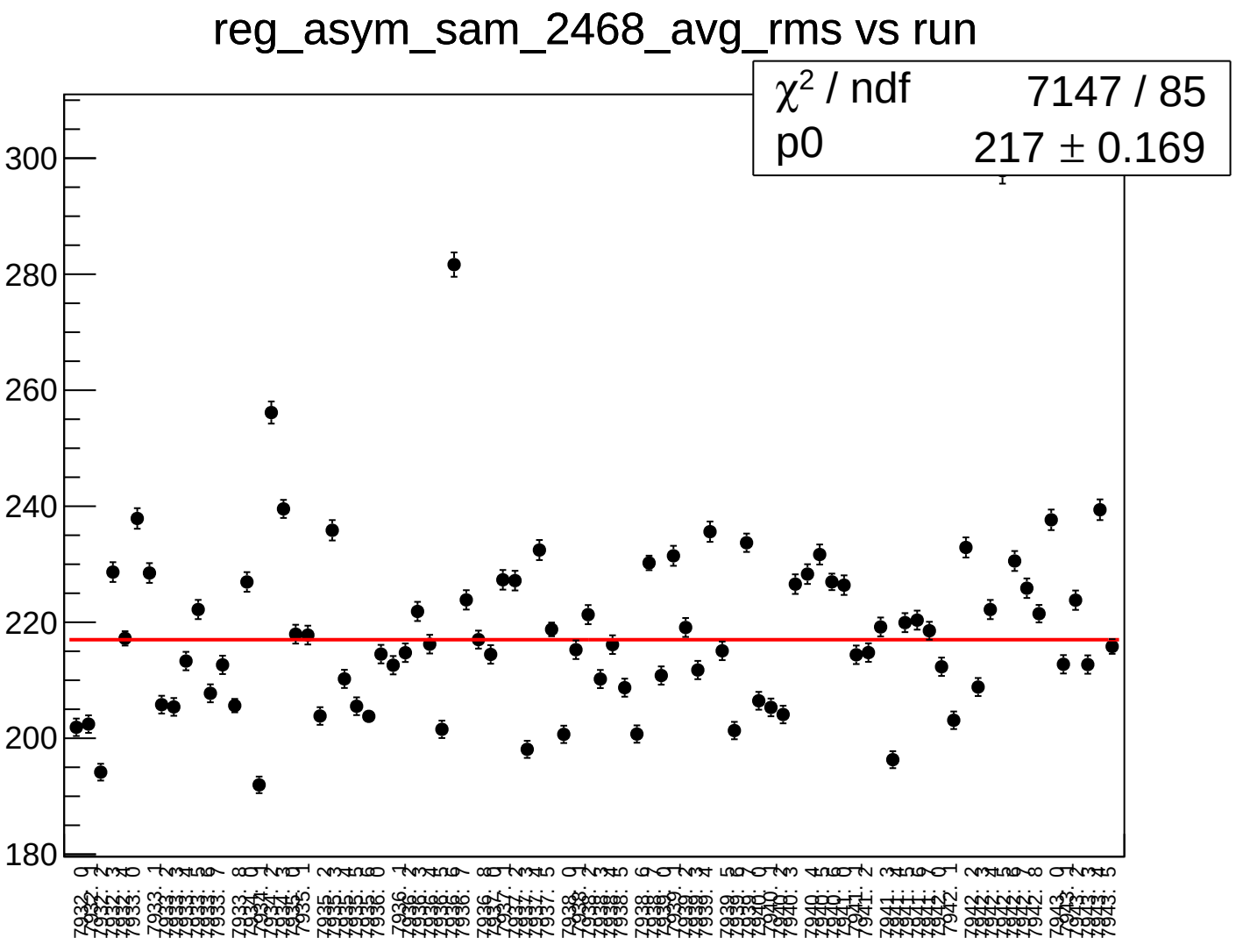

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 1655 / 85
p0 1171 ± 0.91
1280
1260
1240
1220
1200
1180
1160
1140
1120
1100
1080

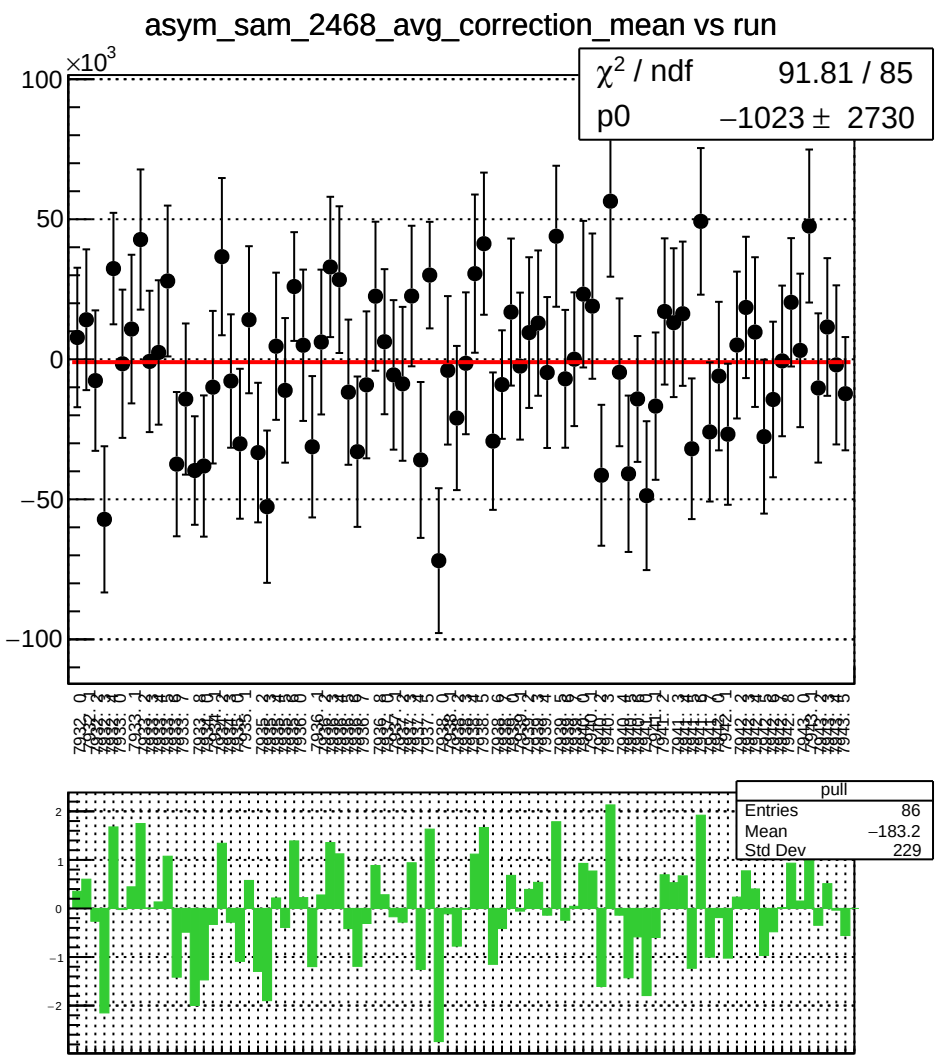

asym_sam_1357_avg_mean vs run
χ² / ndf 93.94 / 85
p0 947.8 ± 1298
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −126.4
Std Dev 177
3
2
1
0
−1
−2

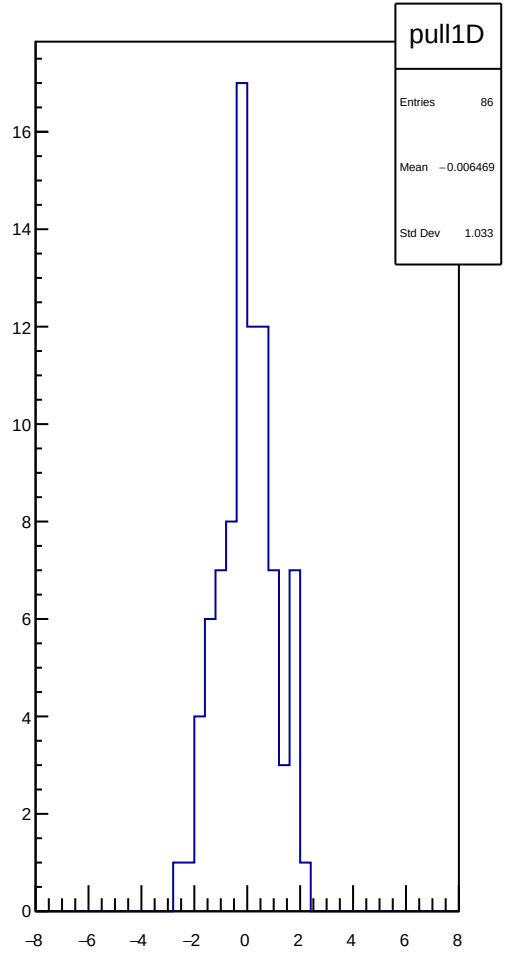

pull1D
Entries 86
Mean 0.008955
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

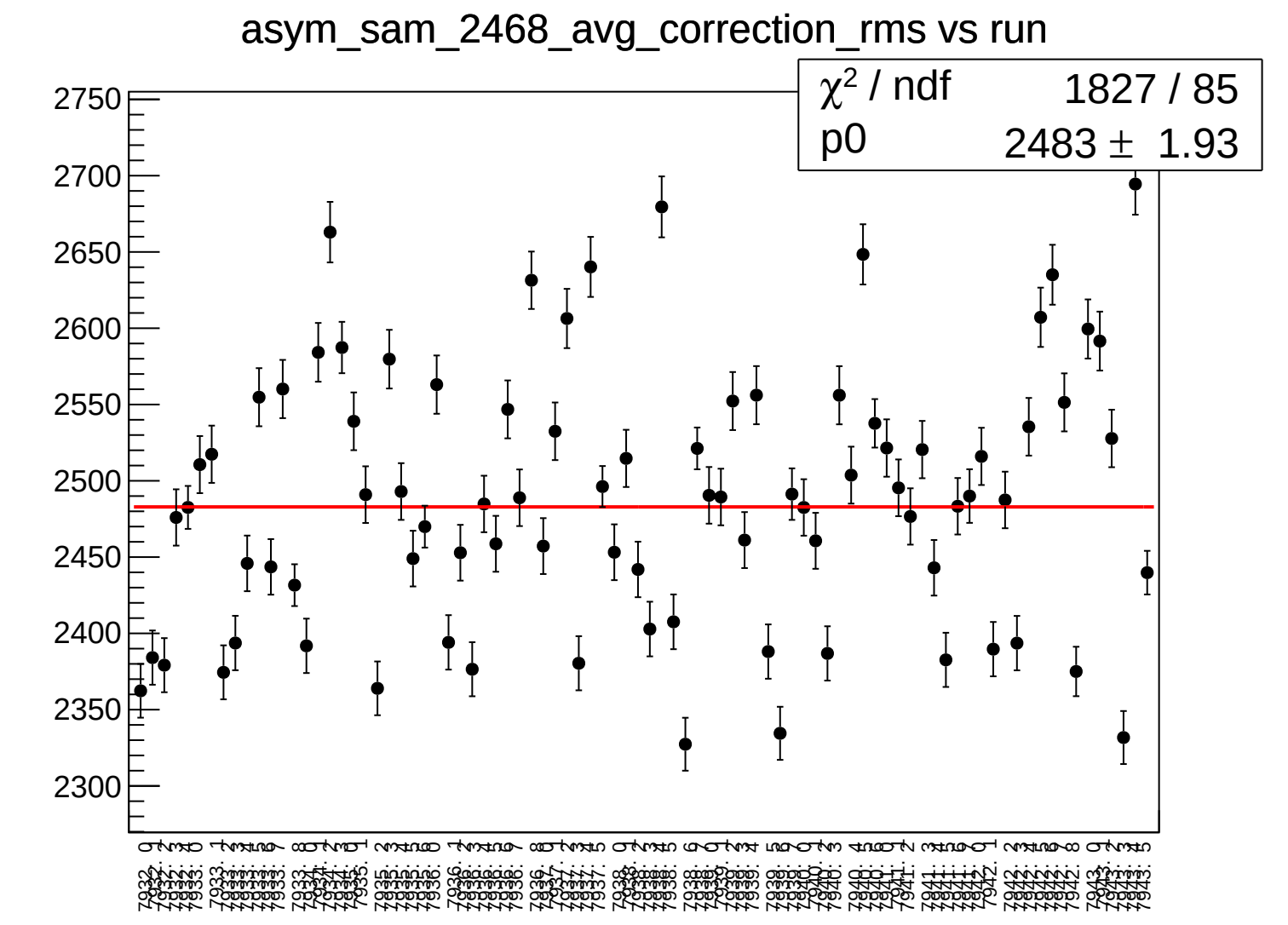

asym_sam_1357_avg_rms vs run
χ² / ndf 1666 / 85
p0 1180 ± 0.9175
1280
1260
1240
1220
1200
1180
1160
1140
1120
1100

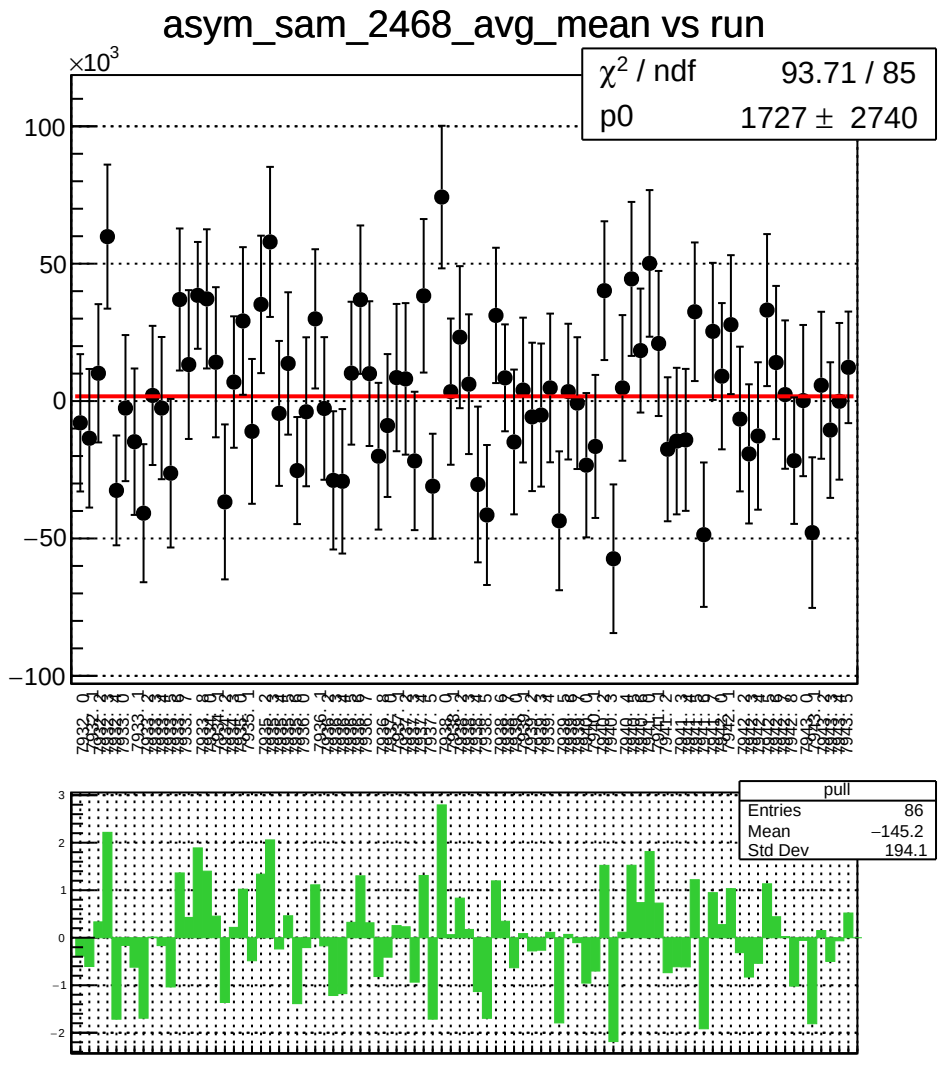

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 84.81 / 85
p0 710.1 ± 238.9
pull
Entries 86
Mean −4.587
Std Dev 99.46
pull1D
Entries 86
Mean 0.01476
Std Dev 0.9929

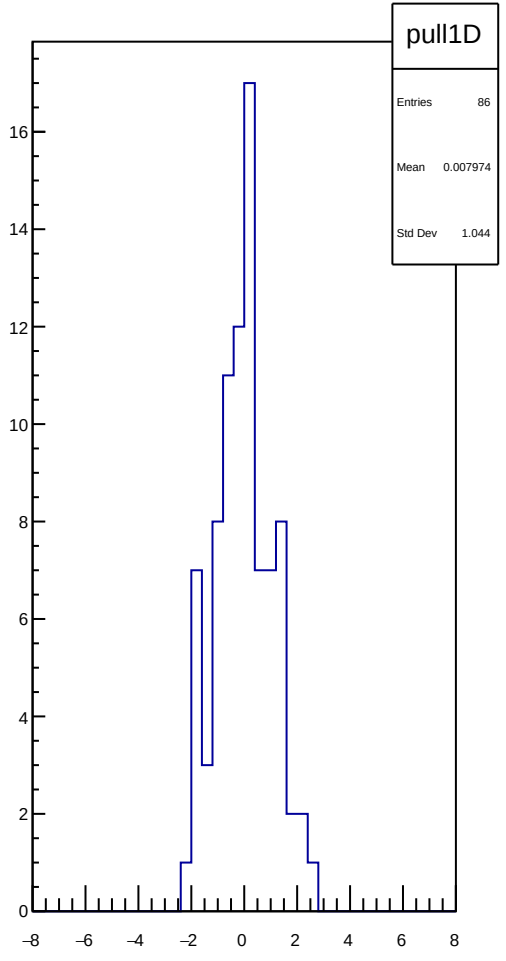

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 7147 / 85
p0 217 ± 0.169
300
280
260
240
220
200
180

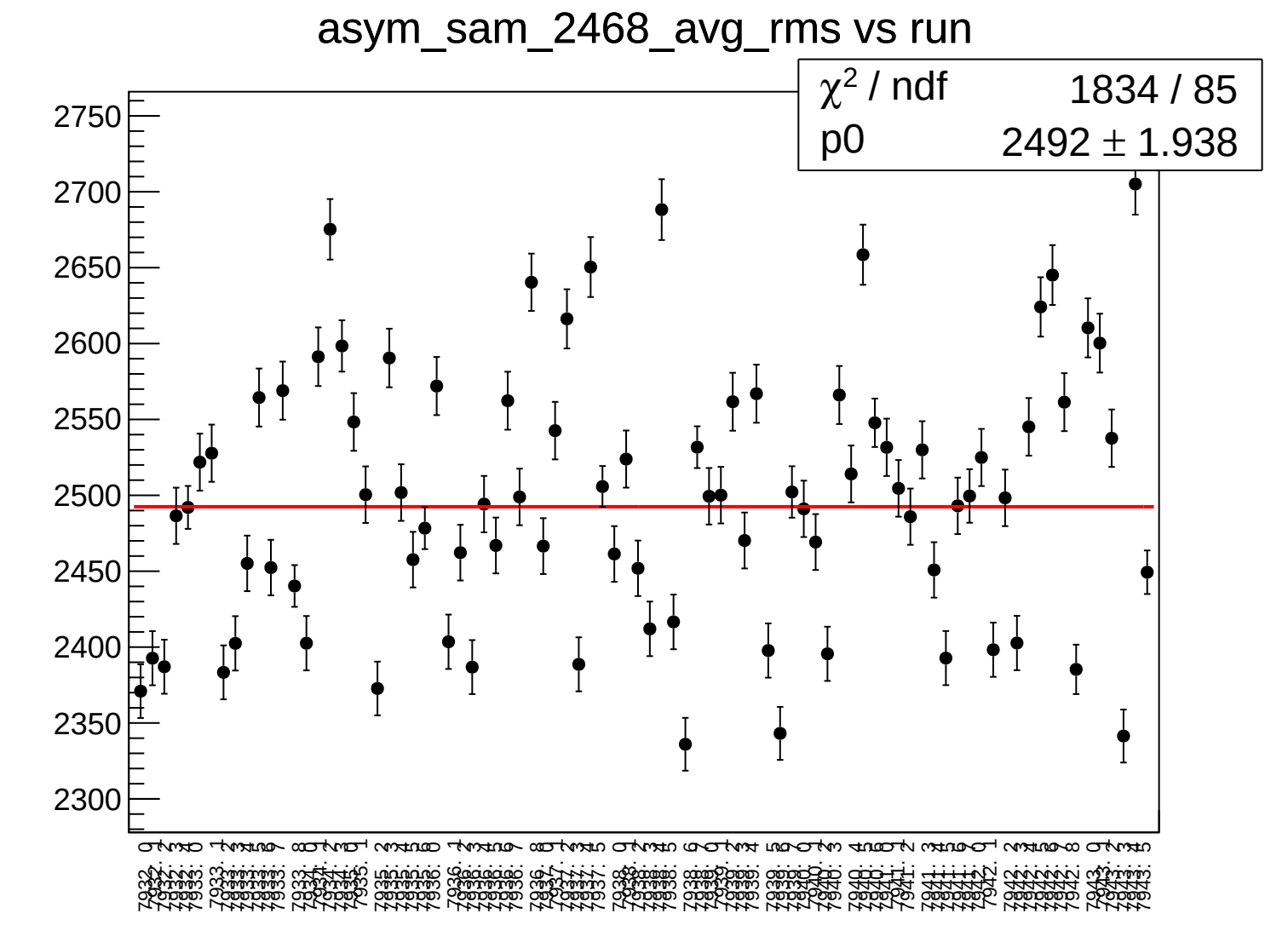

asym_sam_2468_avg_correction_mean vs run
×10^3
χ² / ndf 91.81 / 85
p0 −1023 ± 2730
100
50
0
−50
−100
pull
Entries 86
Mean −183.2
Std Dev 229
2
1
0
−1
−2

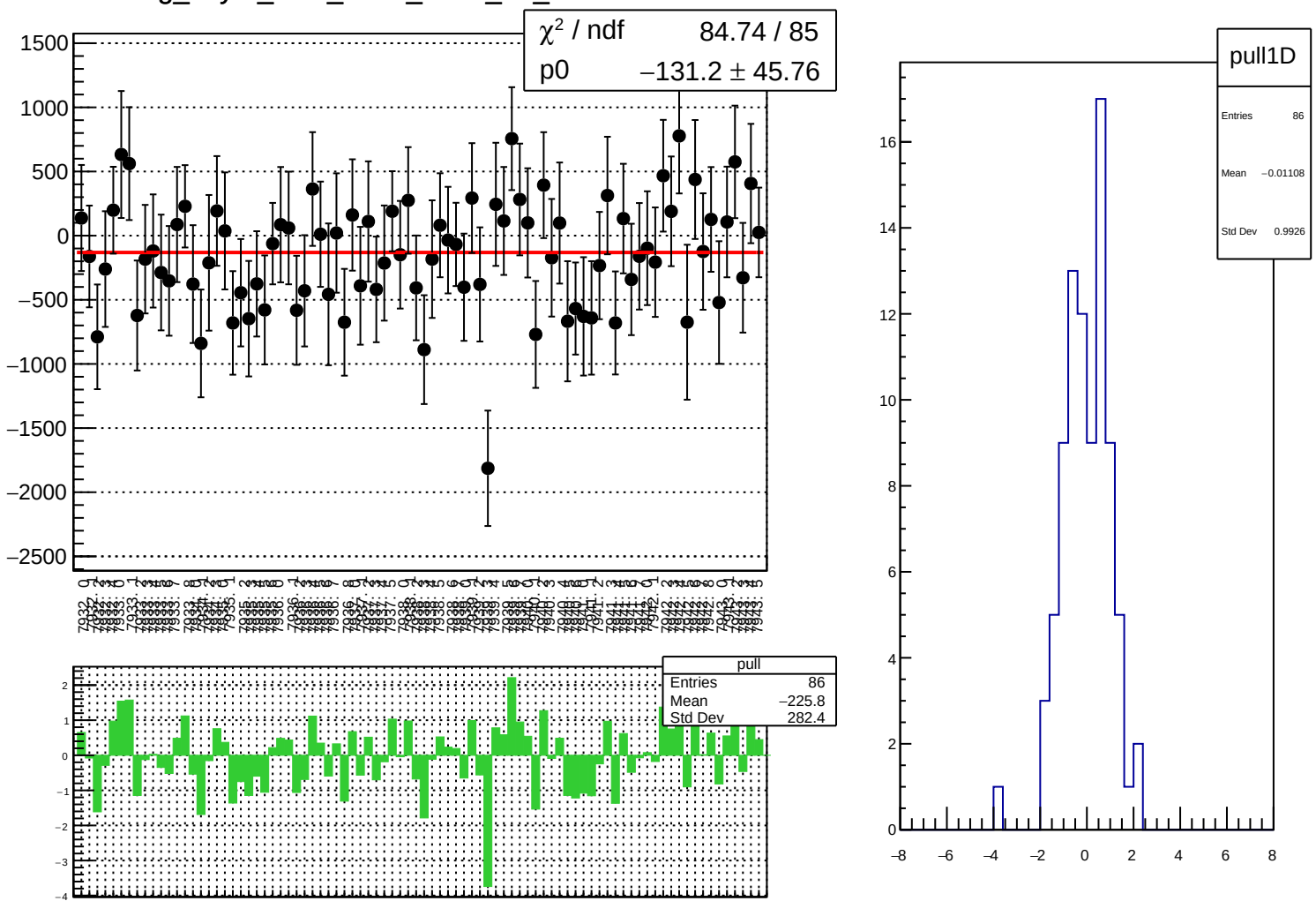

pull1D
Entries 86
Mean −0.006469
Std Dev 1.033
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

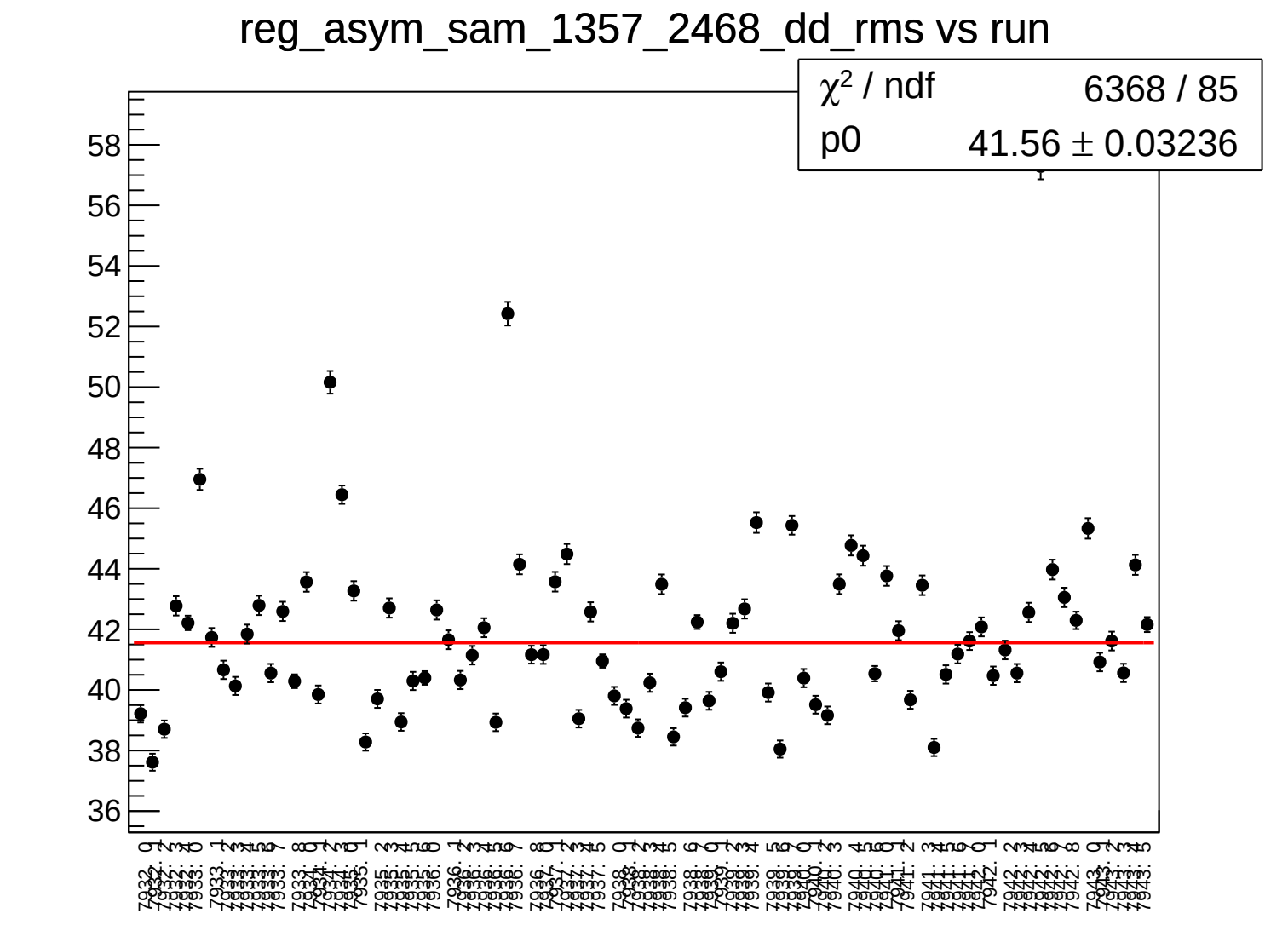

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 1827 / 85
p0 2483 ± 1.93
2750
2700
2650
2600
2550
2500
2450
2400
2350
2300

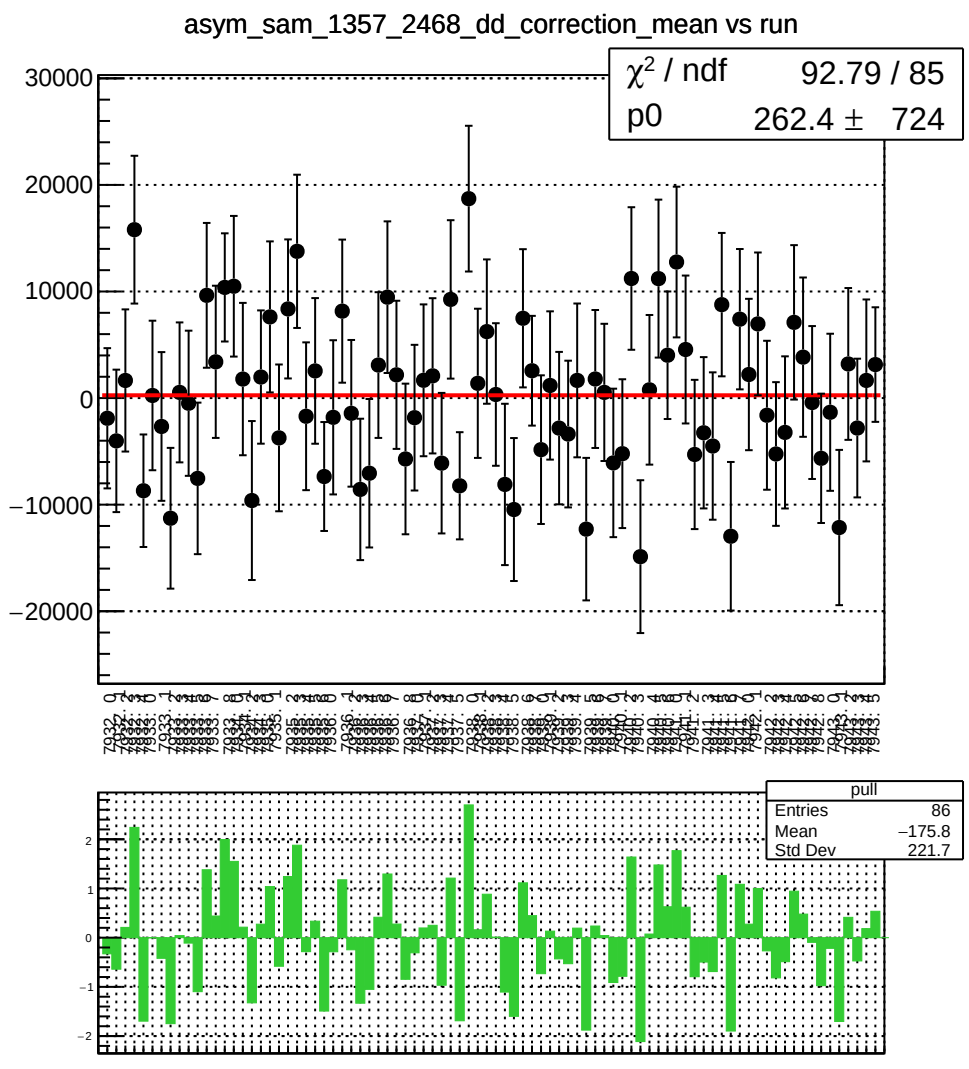

asym_sam_2468_avg_mean vs run
×10^3
χ² / ndf 93.71 / 85
p0 1727 ± 2740
100
50
0
−50
−100
pull
Entries 86
Mean −145.2
Std Dev 194.1
3
2
1
0
−1
−2

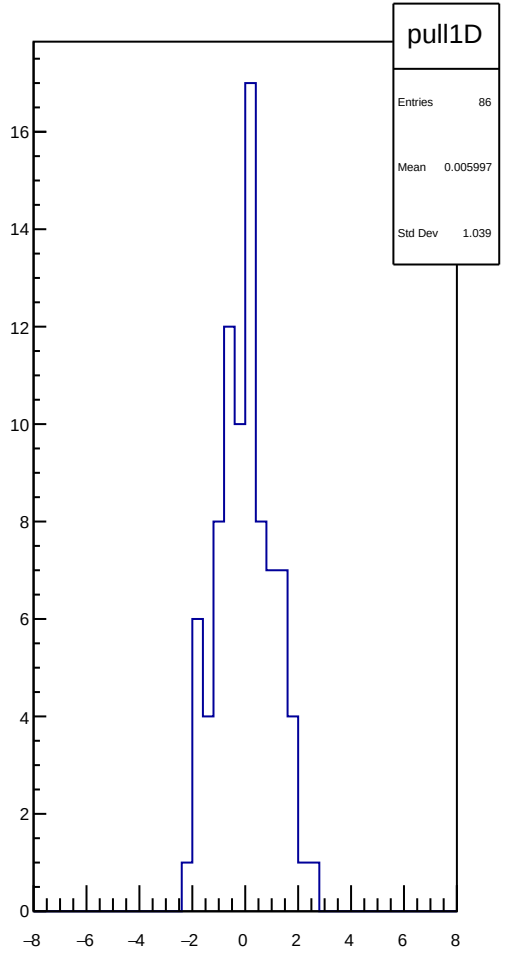

pull1D
Entries 86
Mean 0.007974
Std Dev 1.044
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

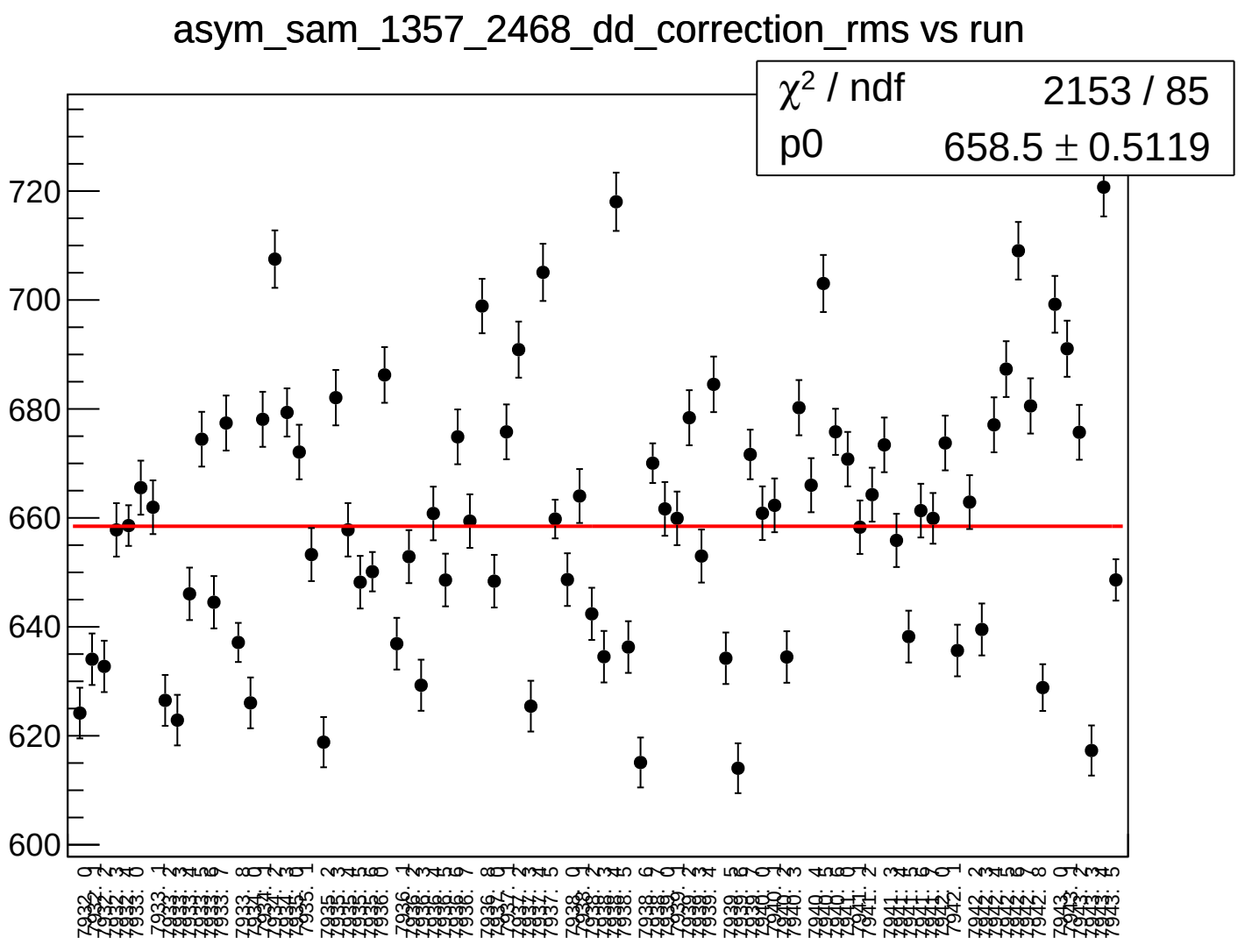

asym_sam_2468_avg_rms vs run
χ² / ndf 1834 / 85
p0 2492 ± 1.938
2750
2700
2650
2600
2550
2500
2450
2400
2350
2300

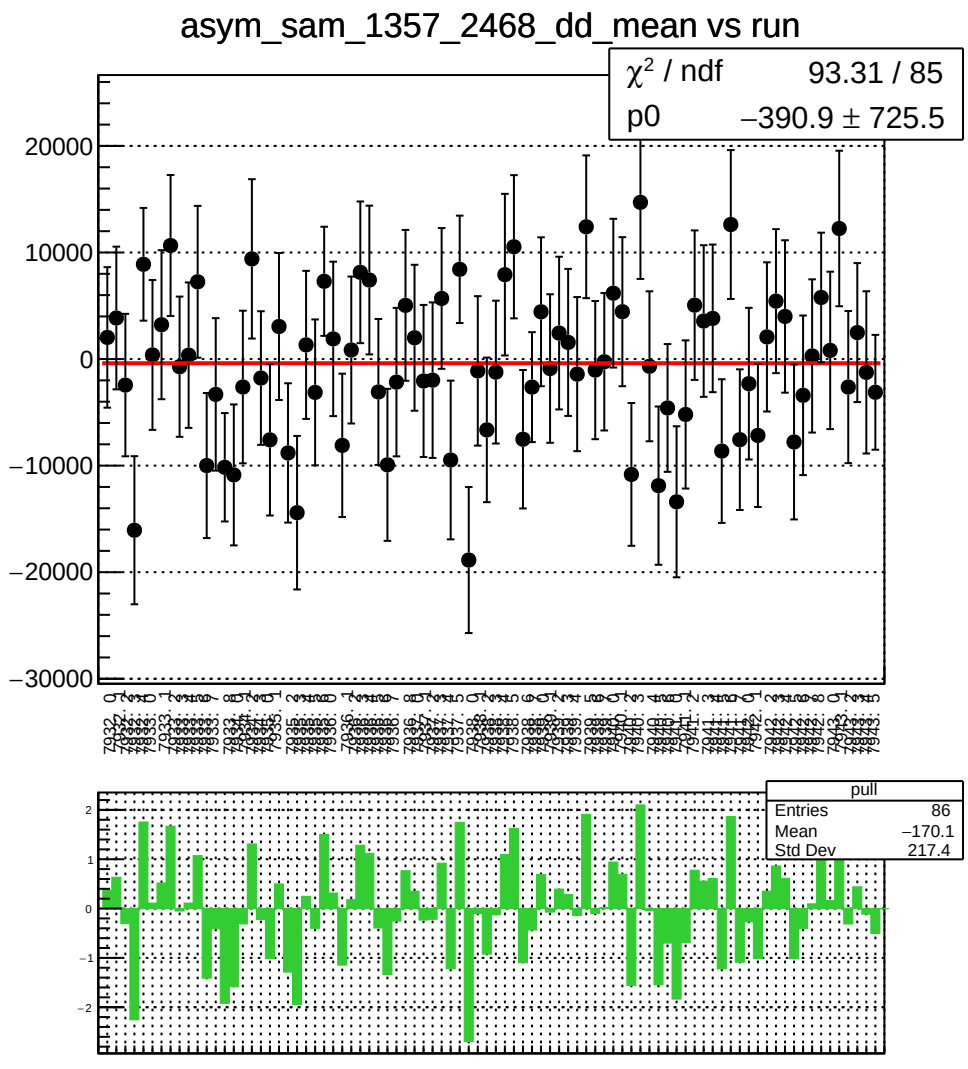

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 84.74 / 85
p0 −131.2 ± 45.76
pull
Entries 86
Mean −225.8
Std Dev 282.4
pull1D
Entries 86
Mean −0.01108
Std Dev 0.9926

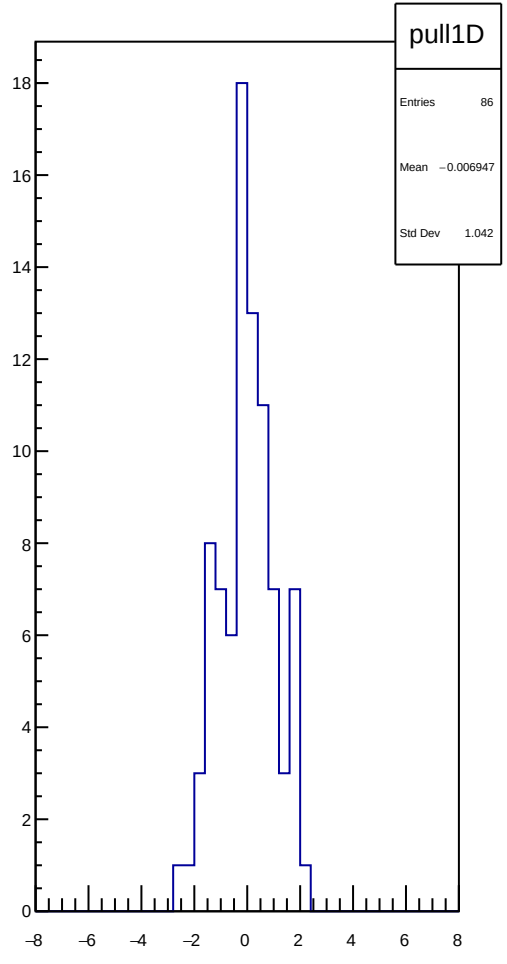

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 6368 / 85
p0 41.56 ± 0.03236
58
56
54
52
50
48
46
44
42
40
38
36

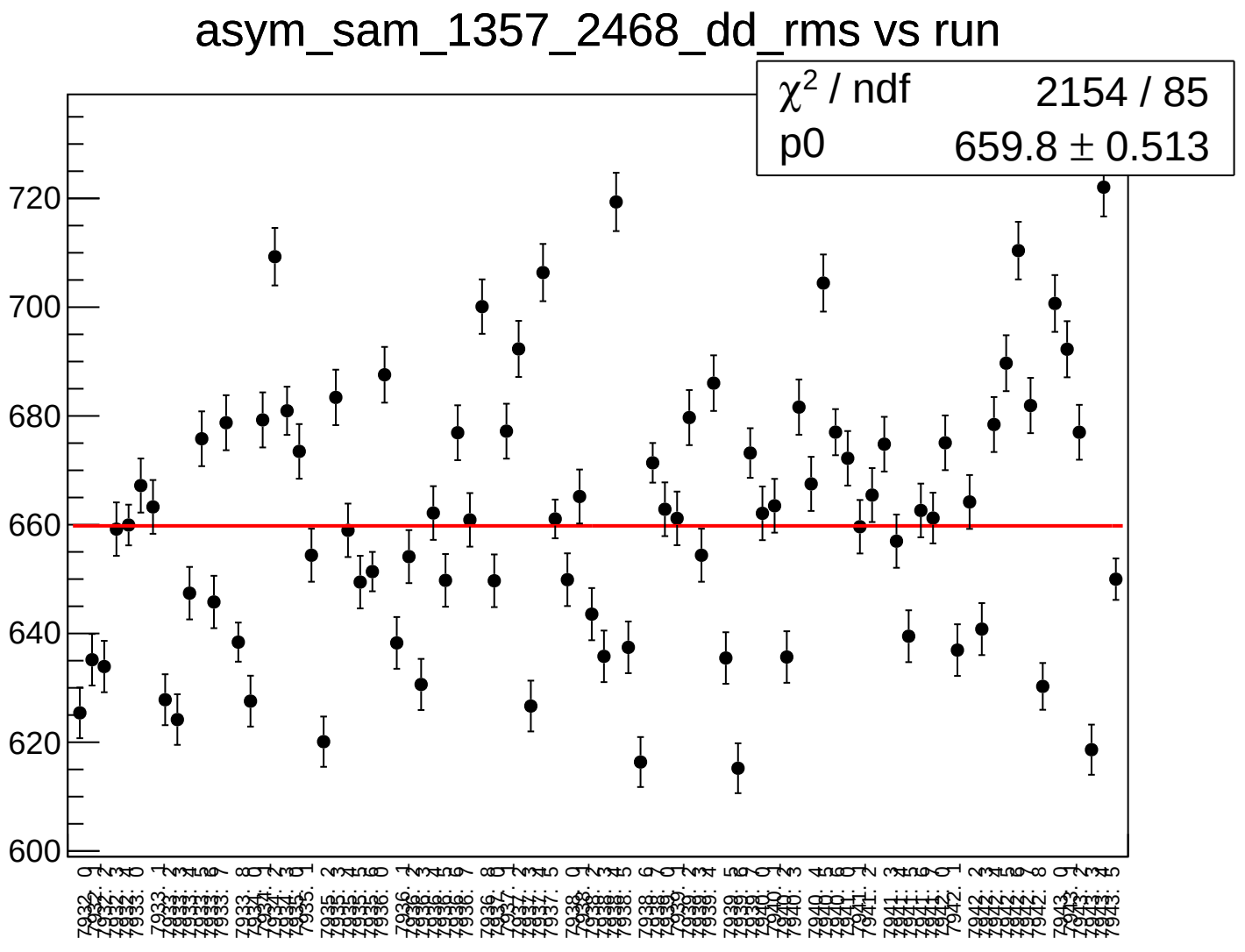

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 92.79 / 85
p0 262.4 ± 724
30000
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −175.8
Std Dev 221.7
2
1
0
−1
−2

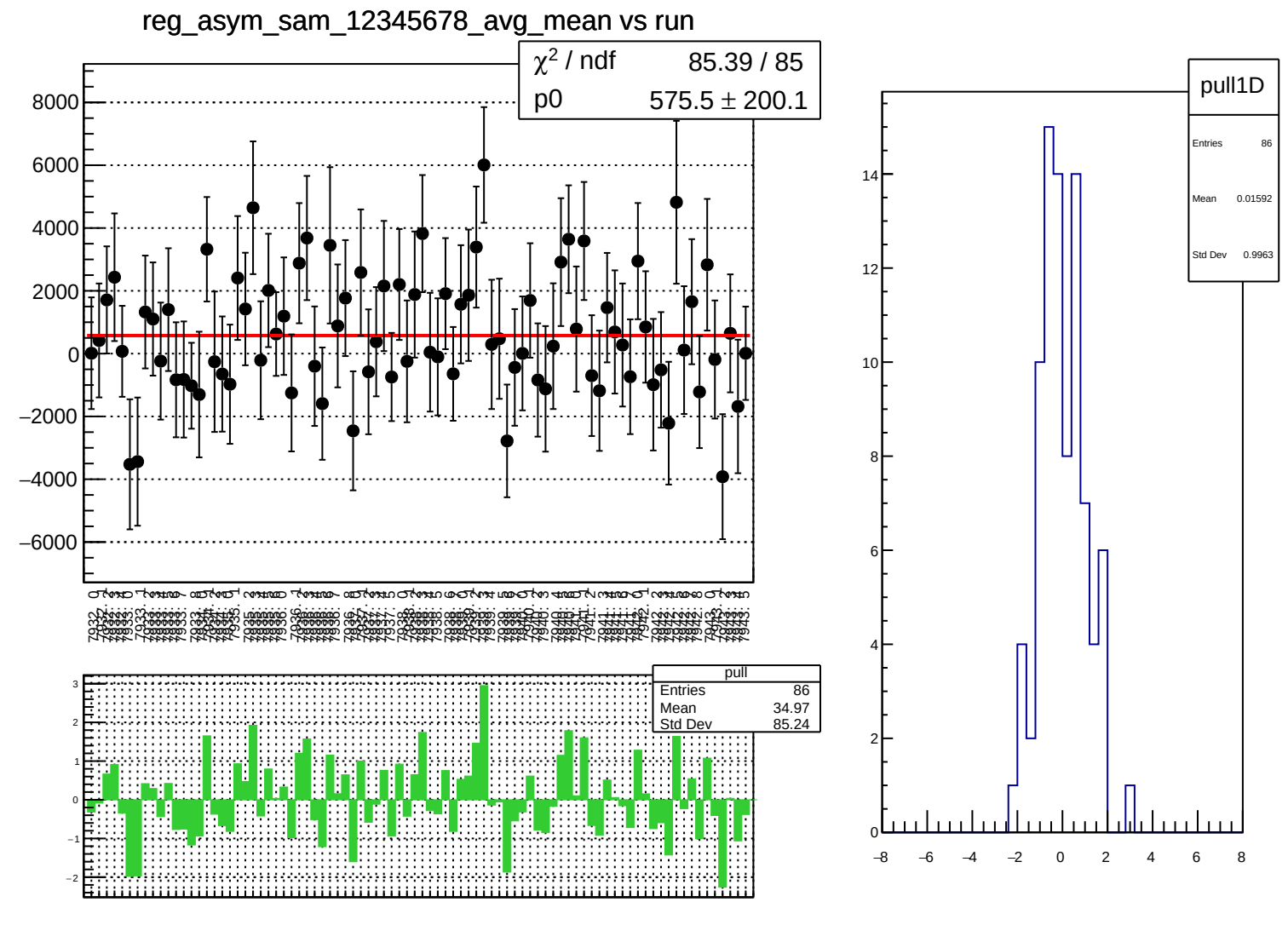

pull1D
Entries 86
Mean 0.005997
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

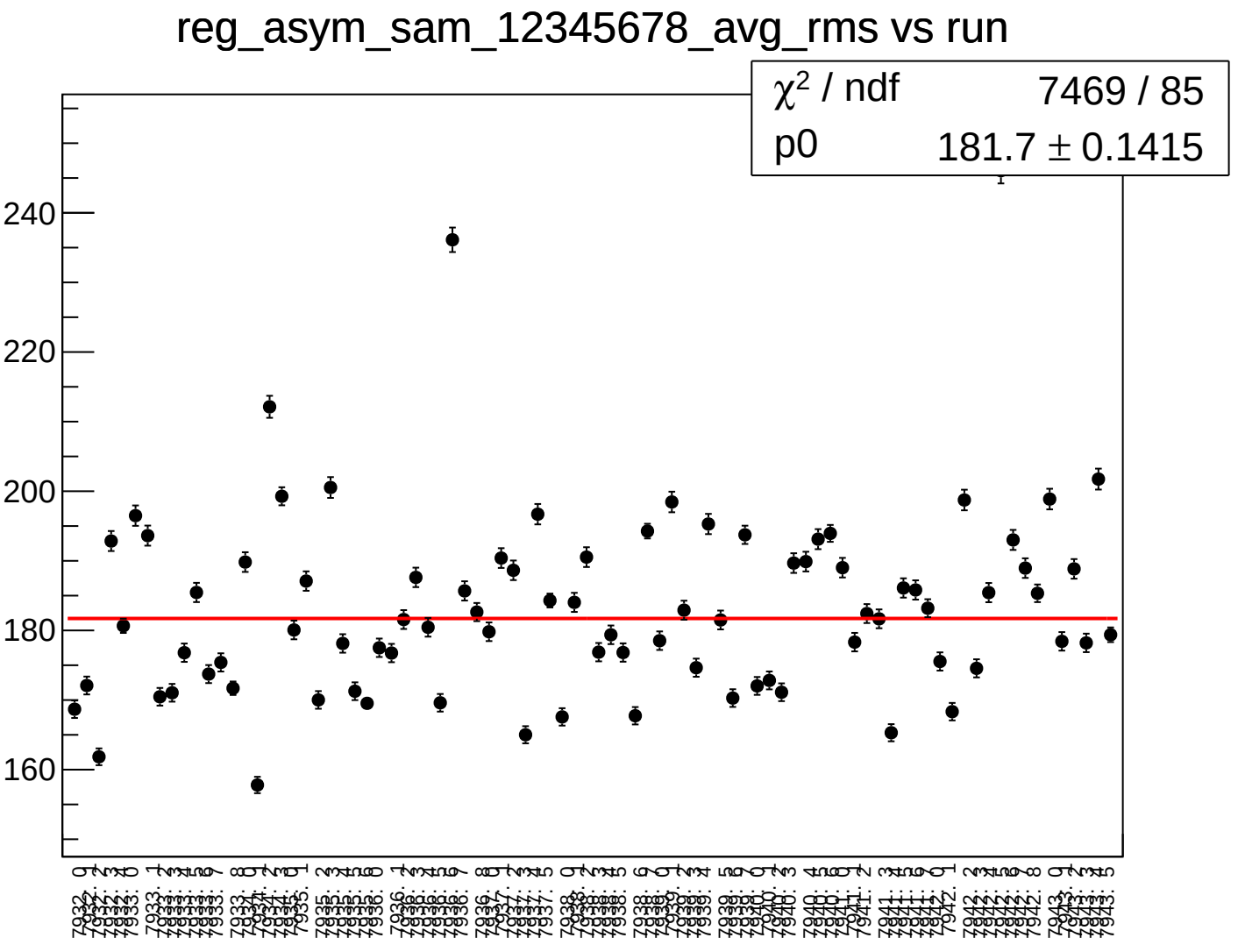

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 2153 / 85
p0 658.5 ± 0.5119
720
700
680
660
640
620
600

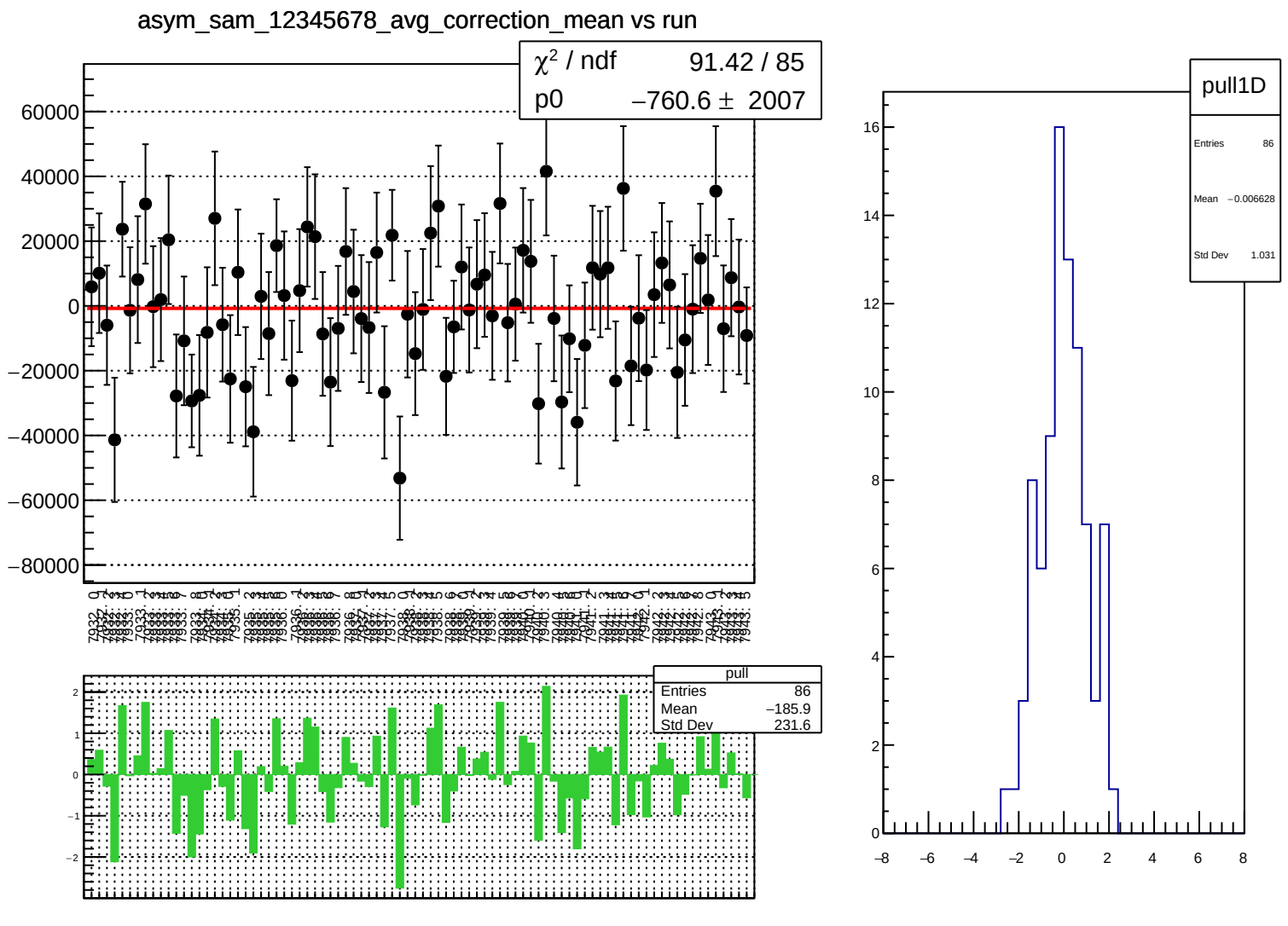

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 93.31 / 85
p0 −390.9 ± 725.5
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −170.1
Std Dev 217.4
2
1
0
−1
−2

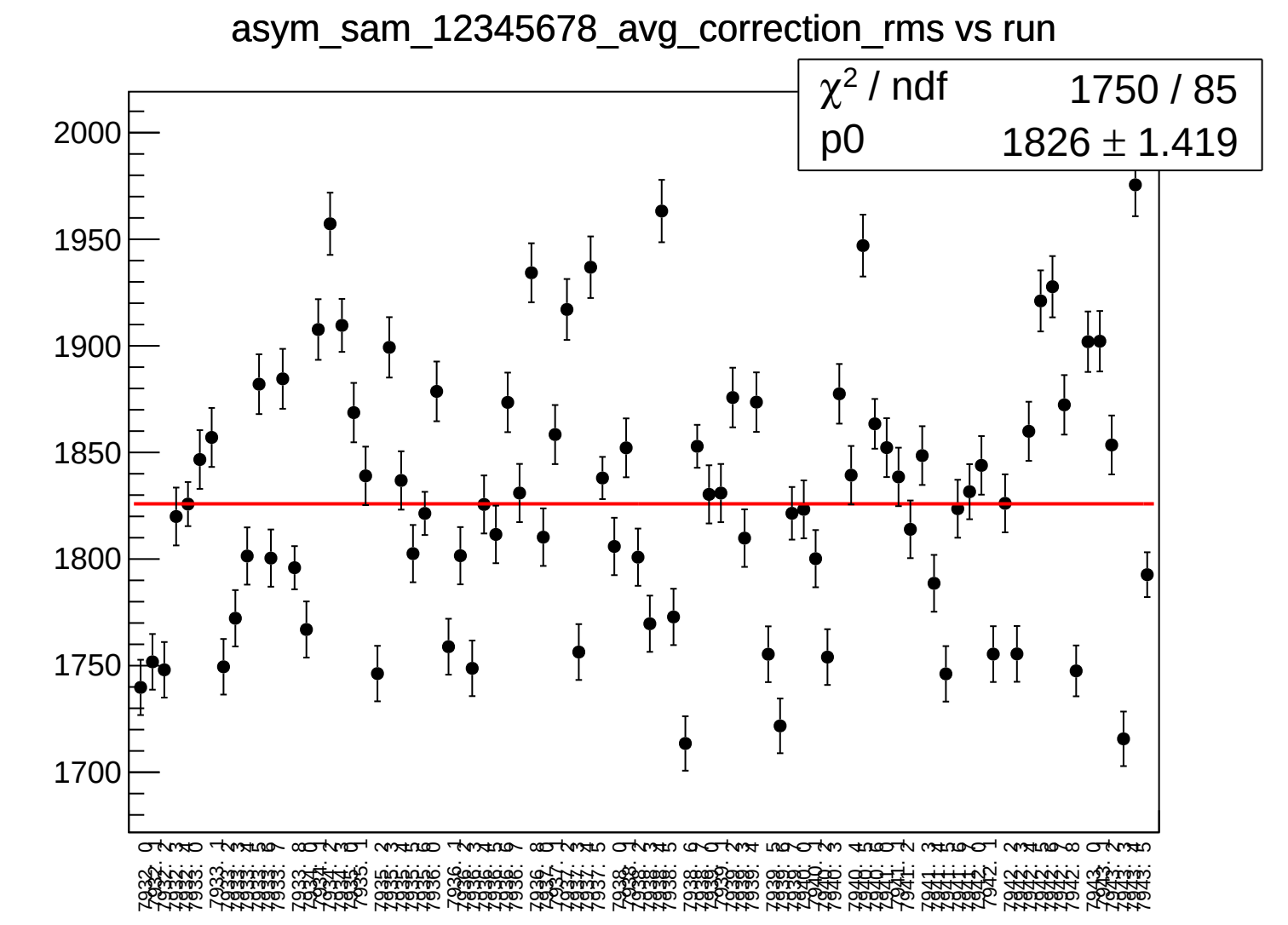

pull1D
Entries 86
Mean −0.006947
Std Dev 1.042
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

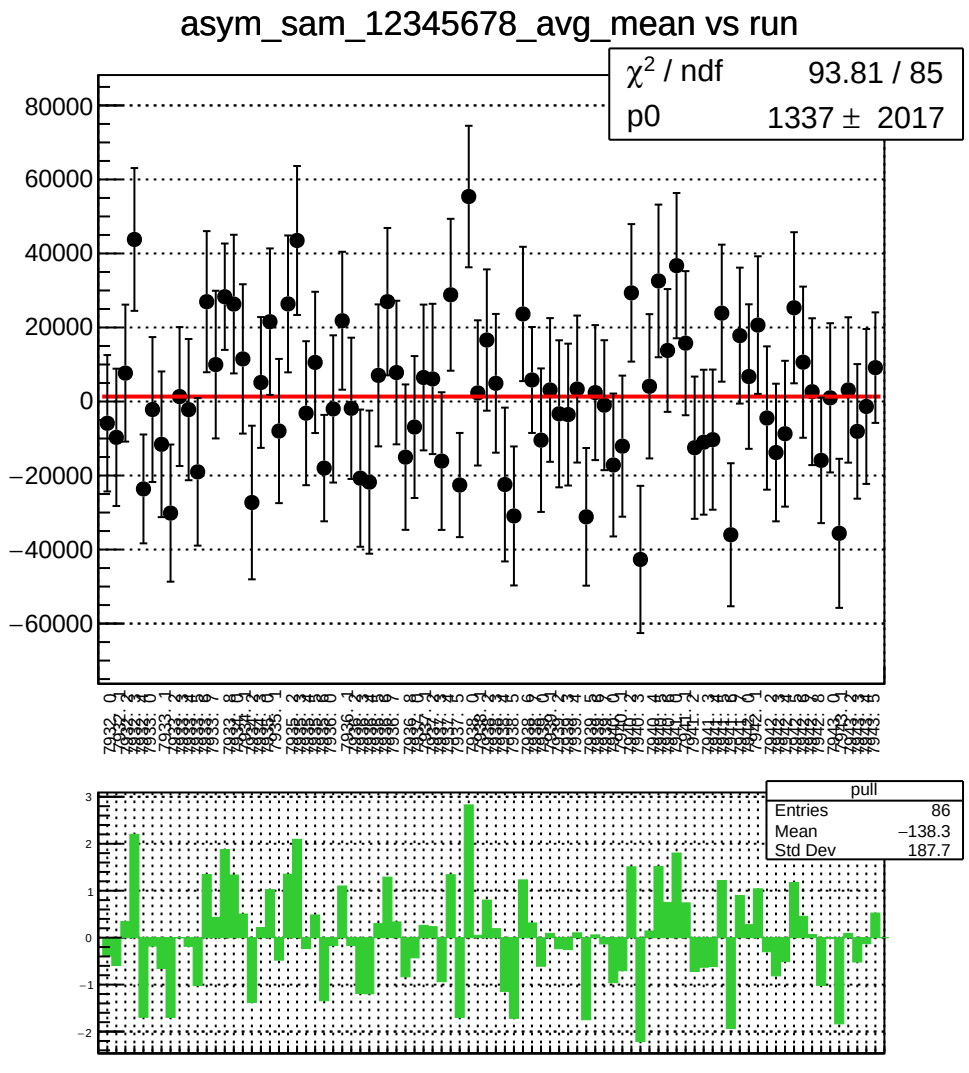

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 2154 / 85
p0 659.8 ± 0.513
720
700
680
660
640
620
600

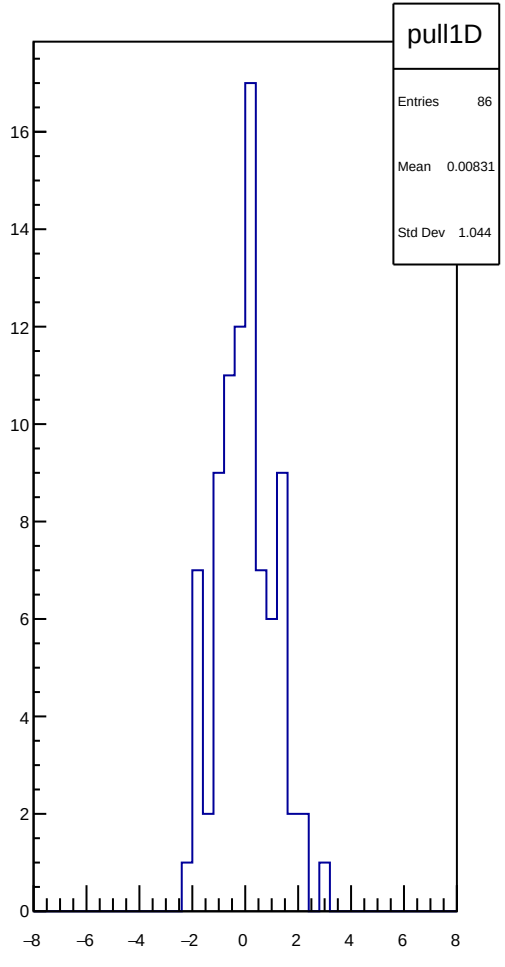

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 85.39 / 85
p0 575.5 ± 200.1
pull
Entries 86
Mean 34.97
Std Dev 85.24
pull1D
Entries 86
Mean 0.01592
Std Dev 0.9963

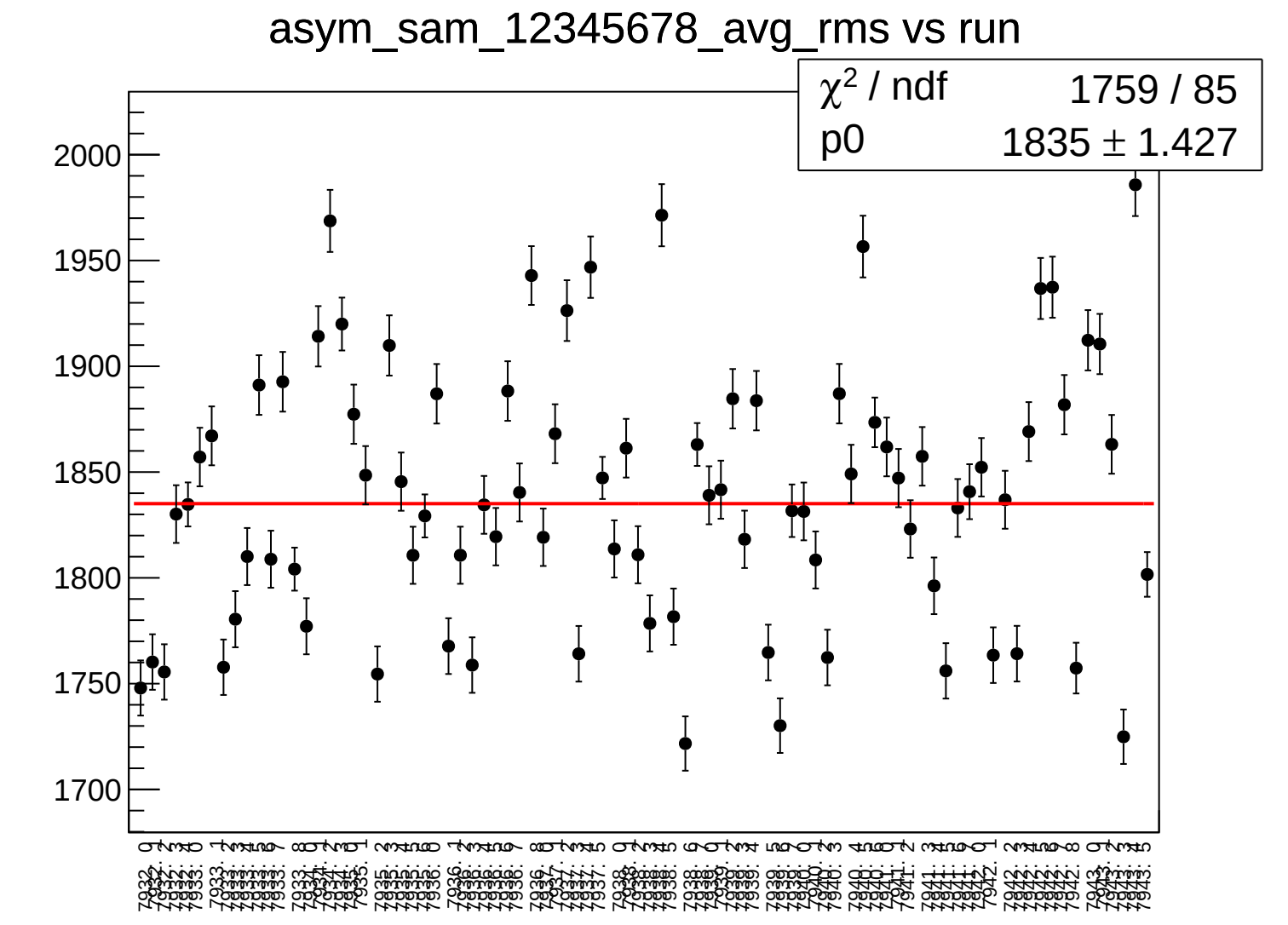

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 7469 / 85
p0 181.7 ± 0.1415
240
220
200
180
160

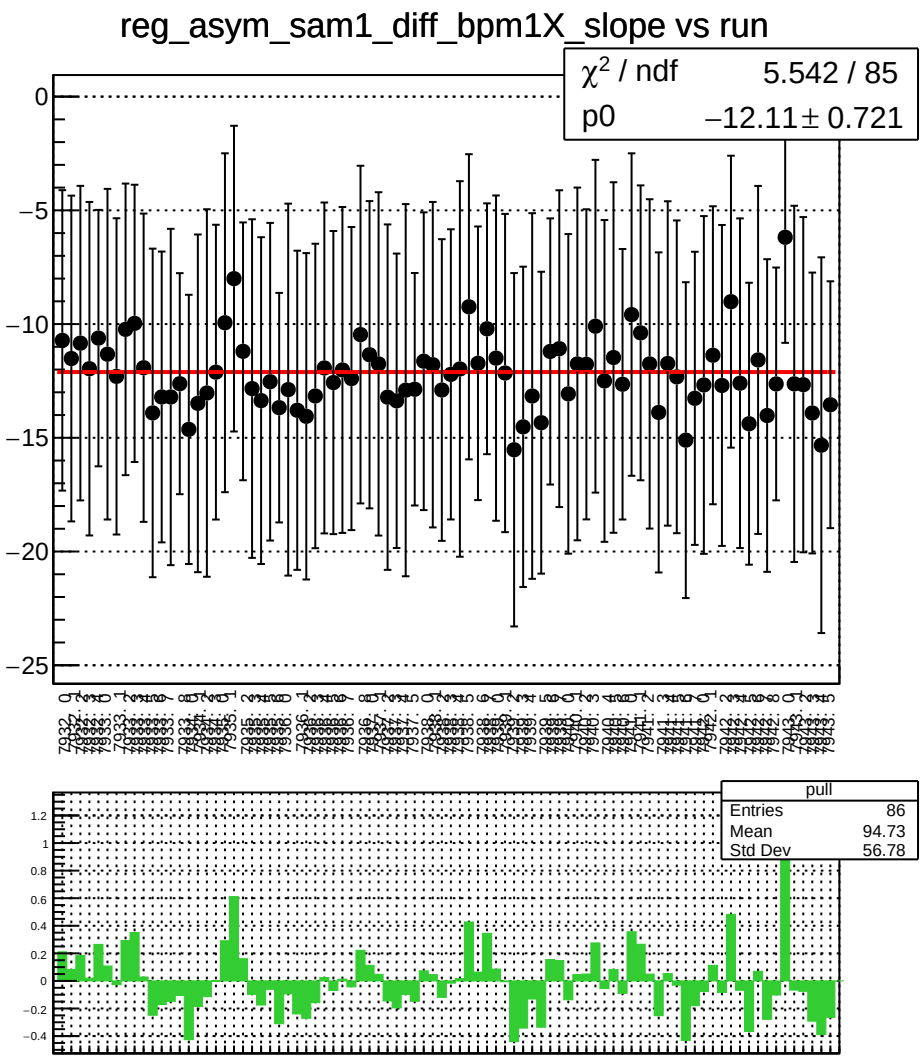

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 91.42 / 85
p0 −760.6 ± 2007
pull
Entries 86
Mean −185.9
Std Dev 231.6
pull1D
Entries 86
Mean −0.006628
Std Dev 1.031

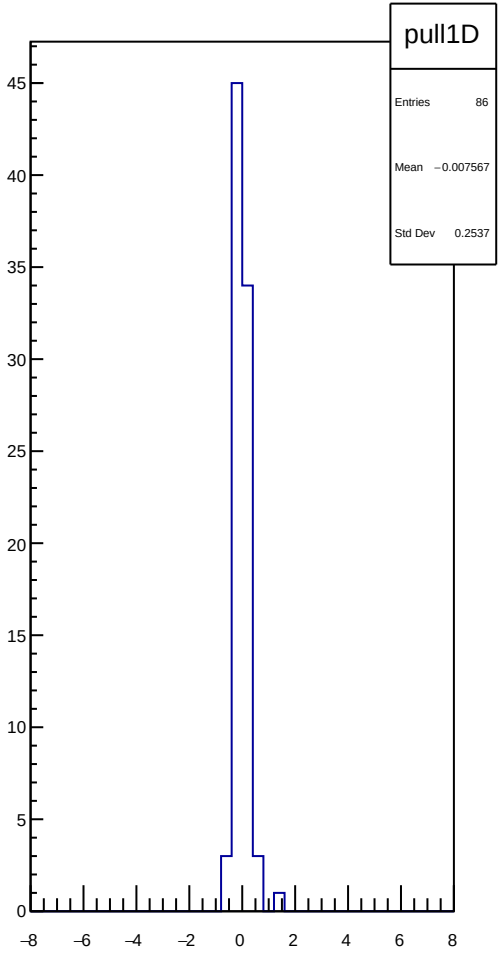

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 1750 / 85
p0 1826 ± 1.419
2000
1950
1900
1850
1800
1750
1700

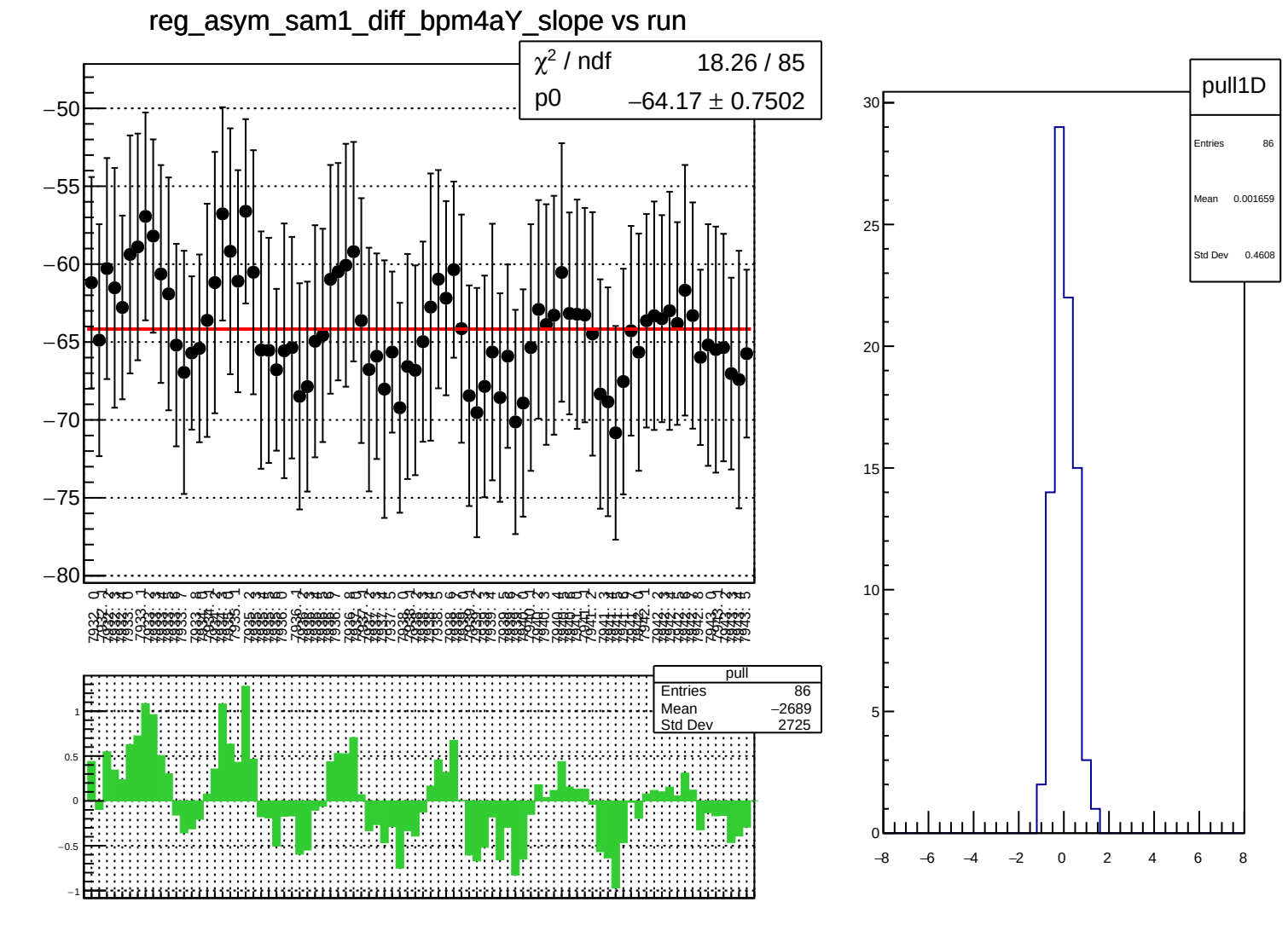

asym_sam_12345678_avg_mean vs run
χ² / ndf 93.81 / 85
p0 1337 ± 2017
pull
Entries 86
Mean −138.3
Std Dev 187.7

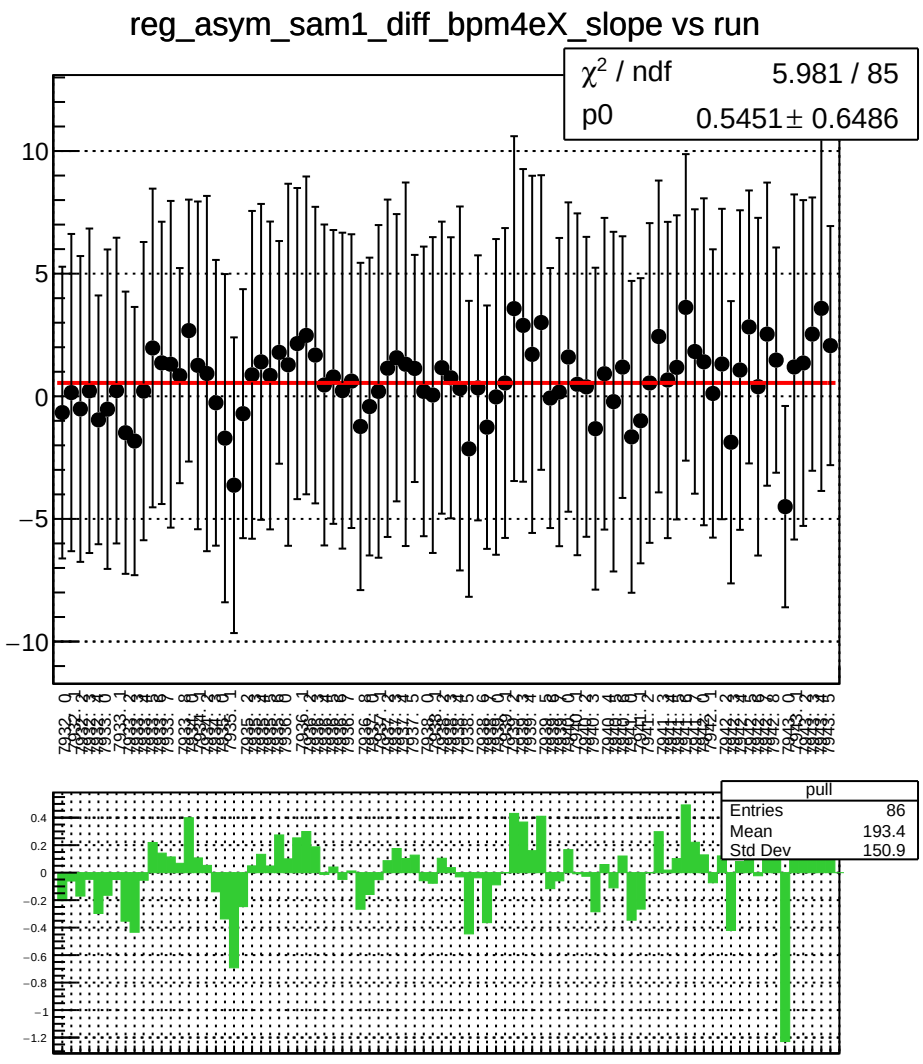

pull1D
Entries 86
Mean 0.00831
Std Dev 1.044

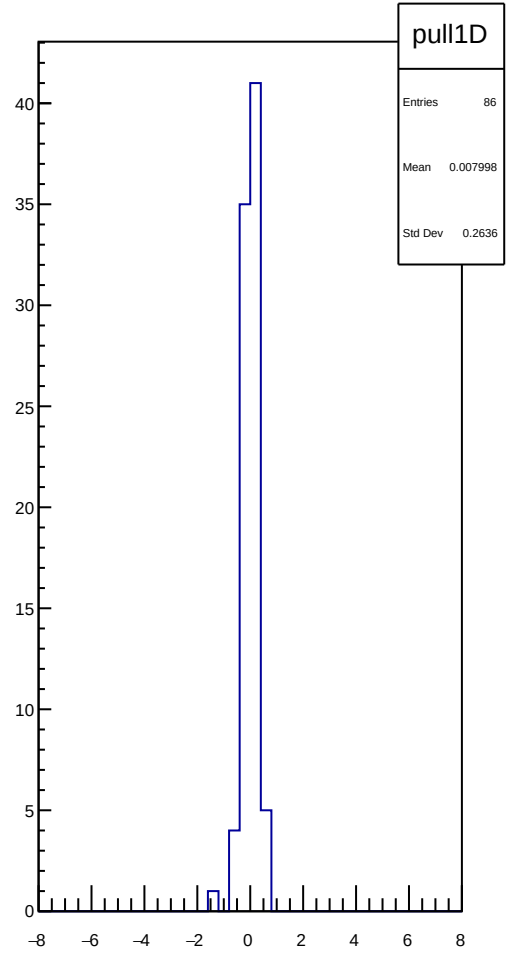

asym_sam_12345678_avg_rms vs run
χ² / ndf 1759 / 85
p0 1835 ± 1.427
2000
1950
1900
1850
1800
1750
1700

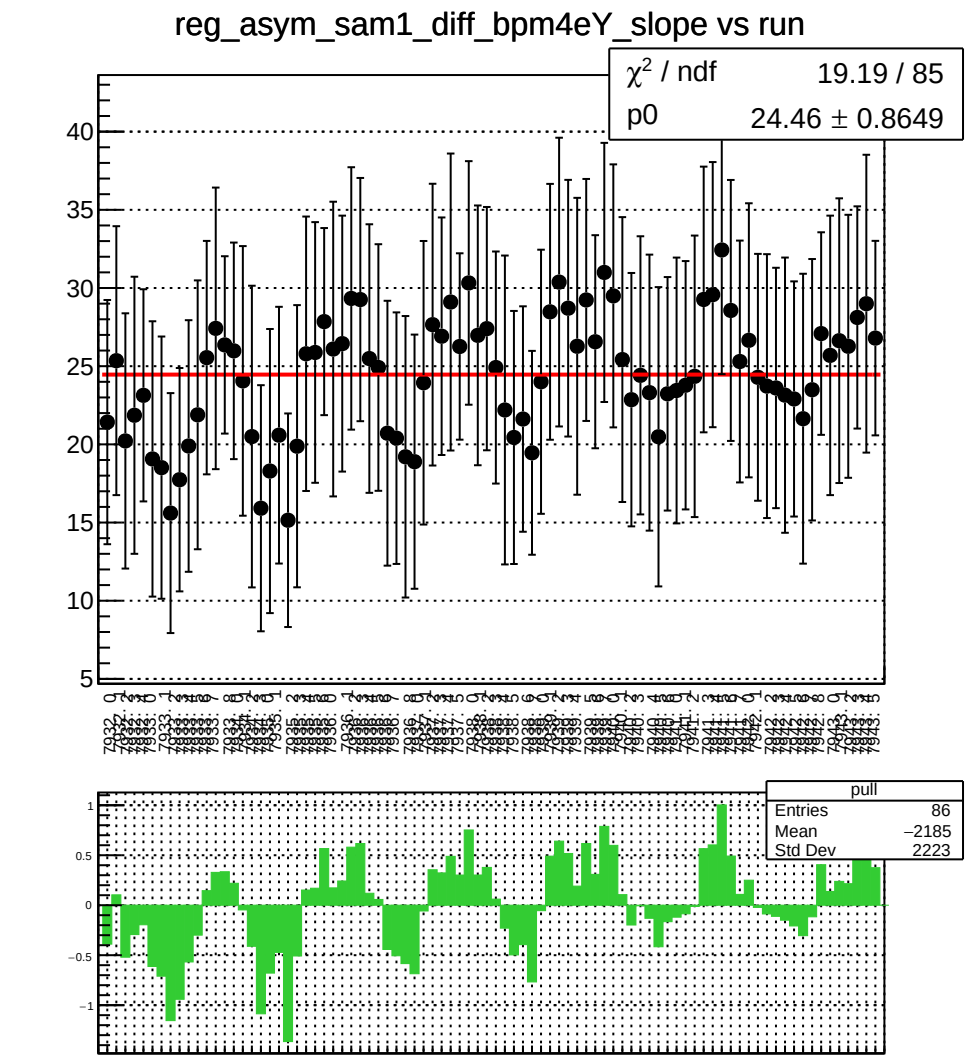

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 5.542 / 85
p0 −12.11 ± 0.721
pull
Entries 86
Mean 94.73
Std Dev 56.78

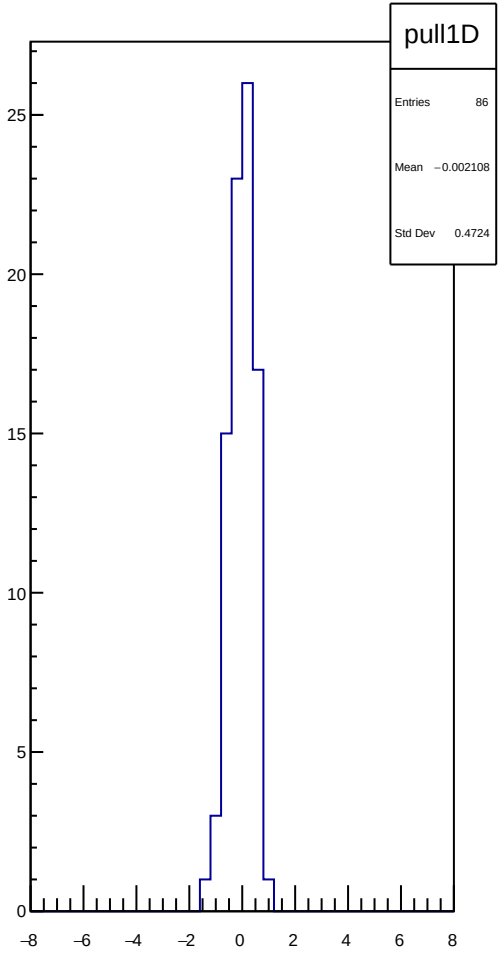

pull1D
Entries 86
Mean −0.007567
Std Dev 0.2537

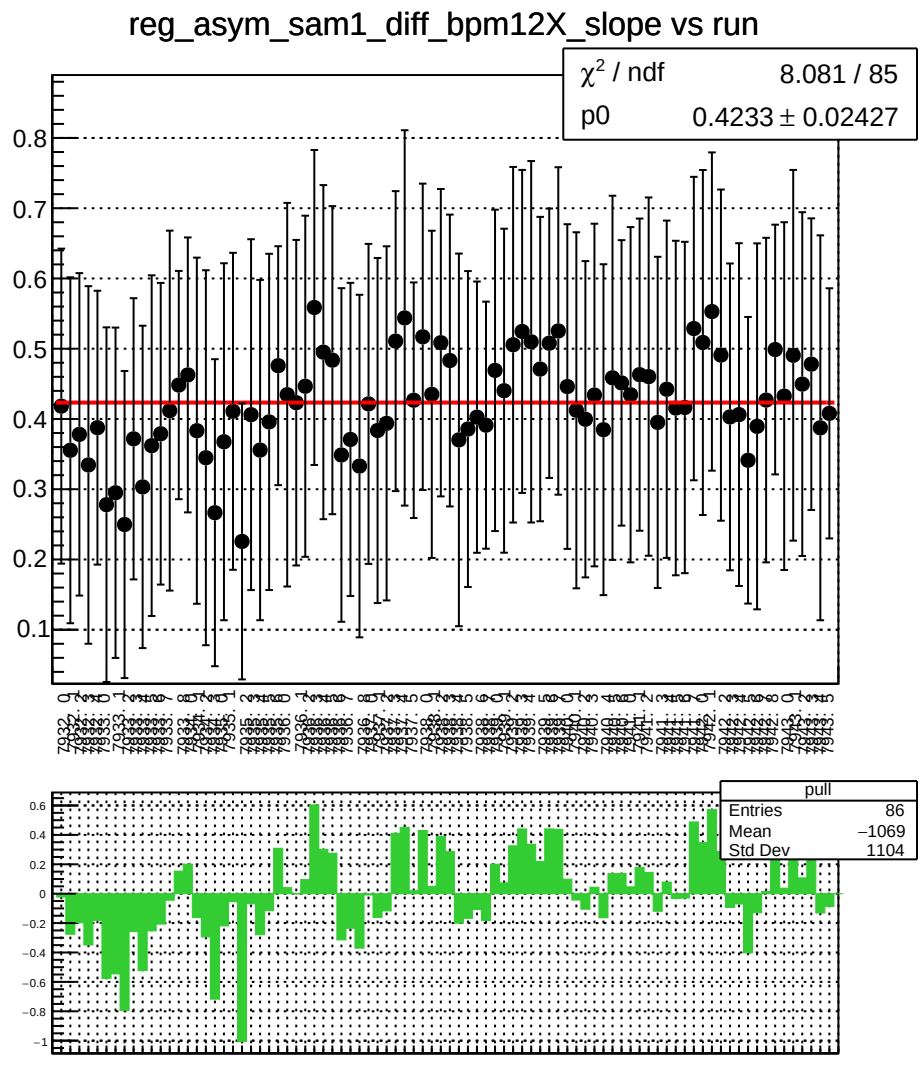

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 18.26 / 85
p0 −64.17 ± 0.7502
pull
Entries 86
Mean −2689
Std Dev 2725
pull1D
Entries 86
Mean 0.001659
Std Dev 0.4608

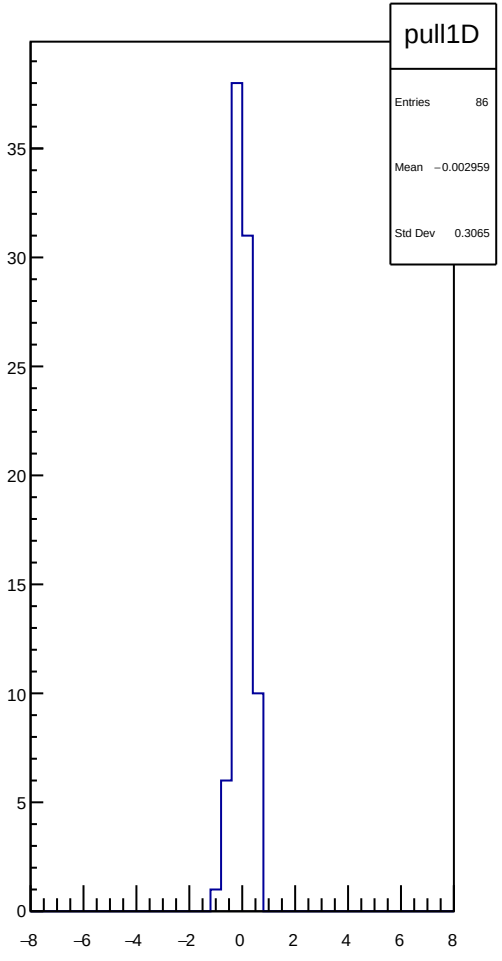

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 5.981 / 85
p0 0.5451± 0.6486
pull
Entries 86
Mean 193.4
Std Dev 150.9

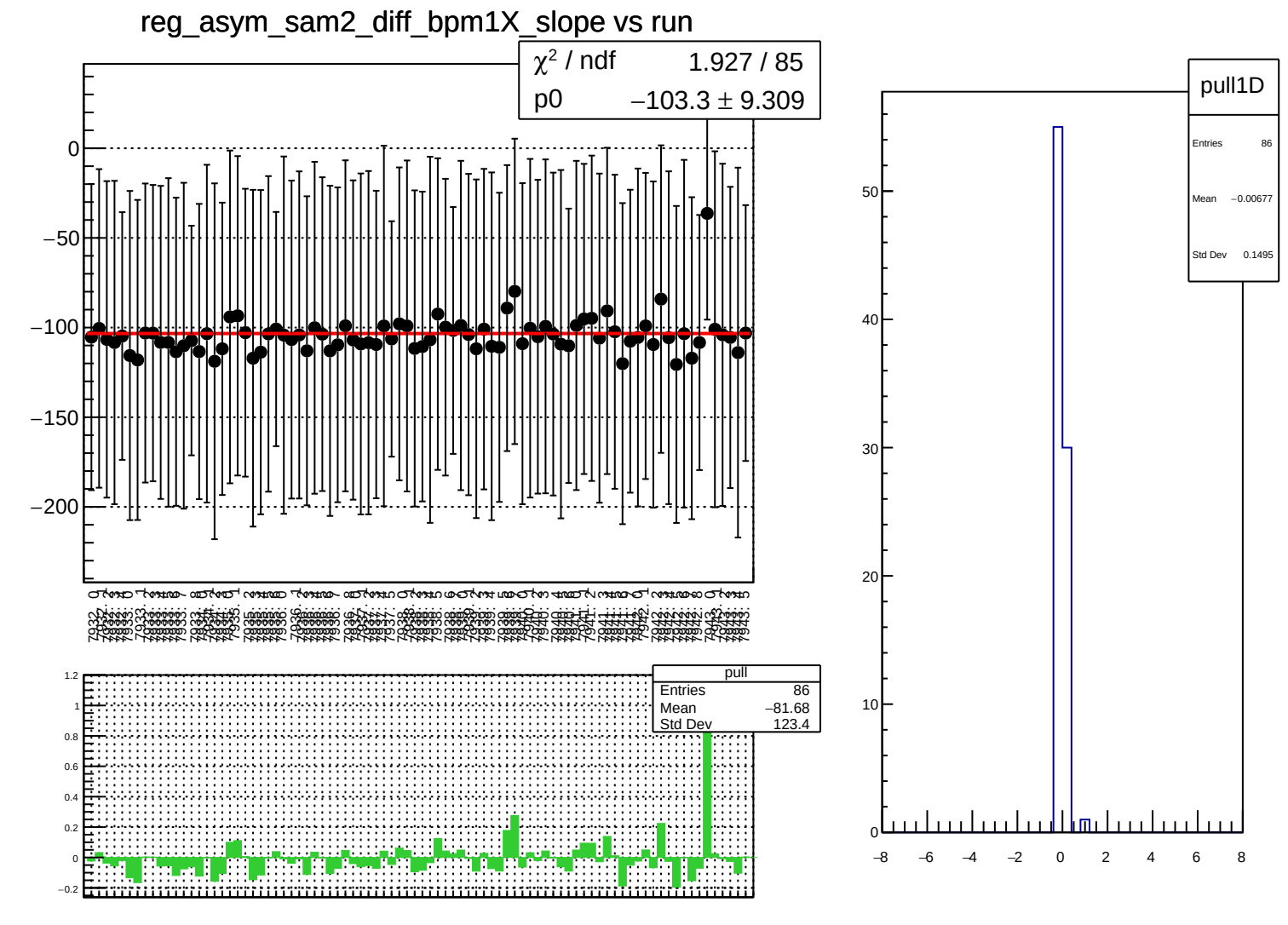

pull1D
Entries 86
Mean 0.007998
Std Dev 0.2636

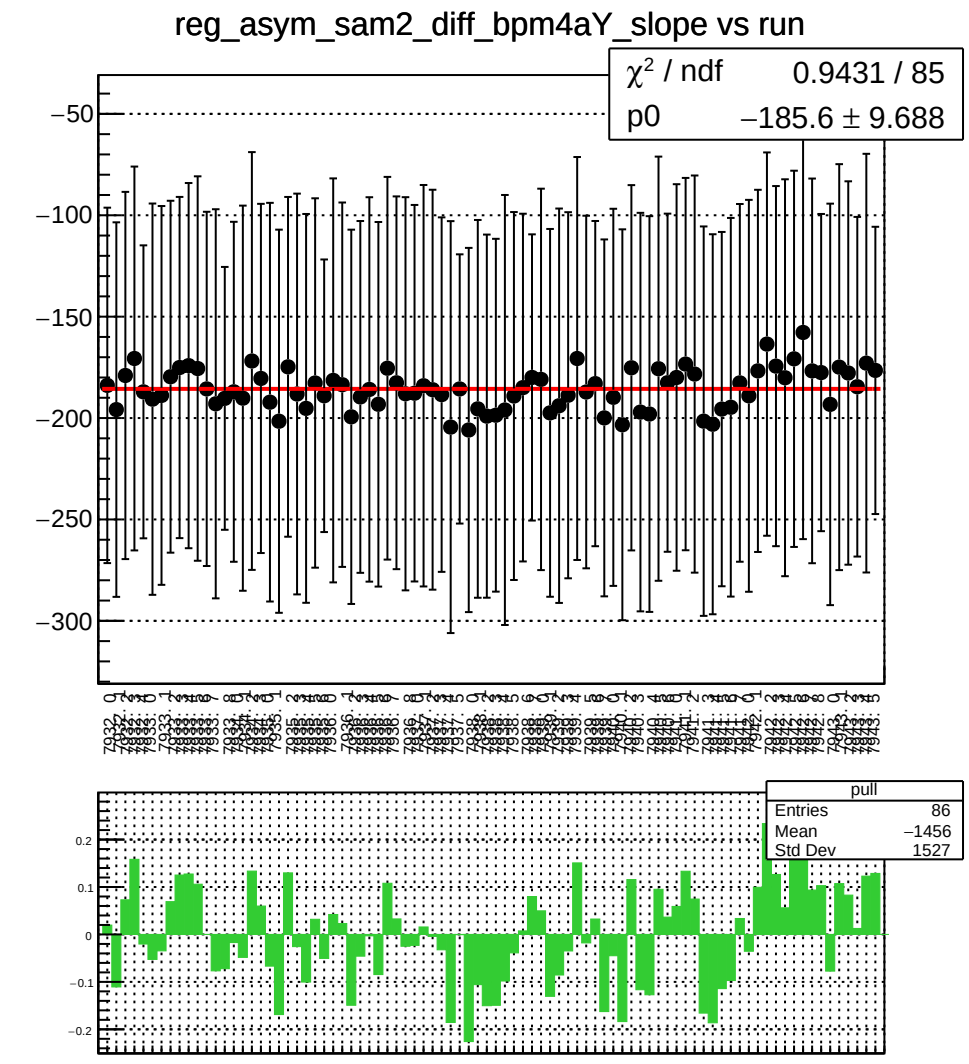

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 19.19 / 85
p0 24.46 ± 0.8649
pull
Entries 86
Mean −2185
Std Dev 2223

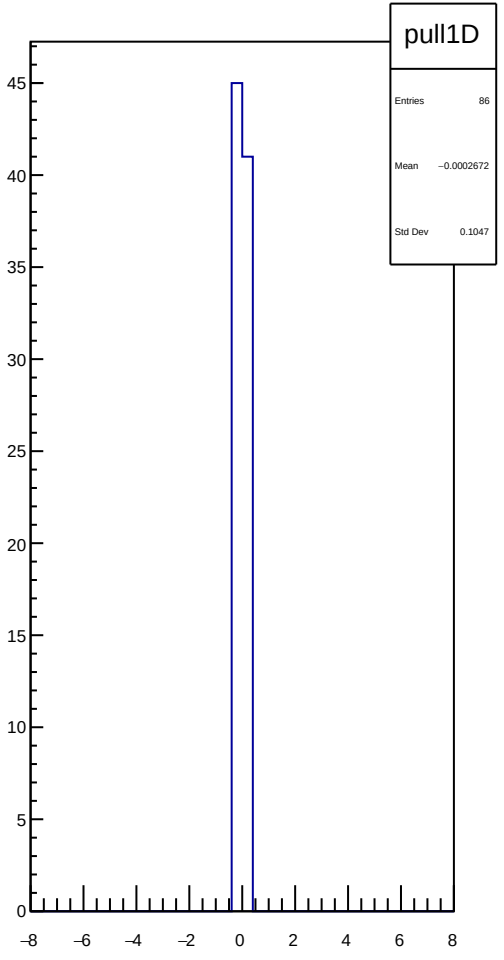

pull1D
Entries 86
Mean −0.002108
Std Dev 0.4724

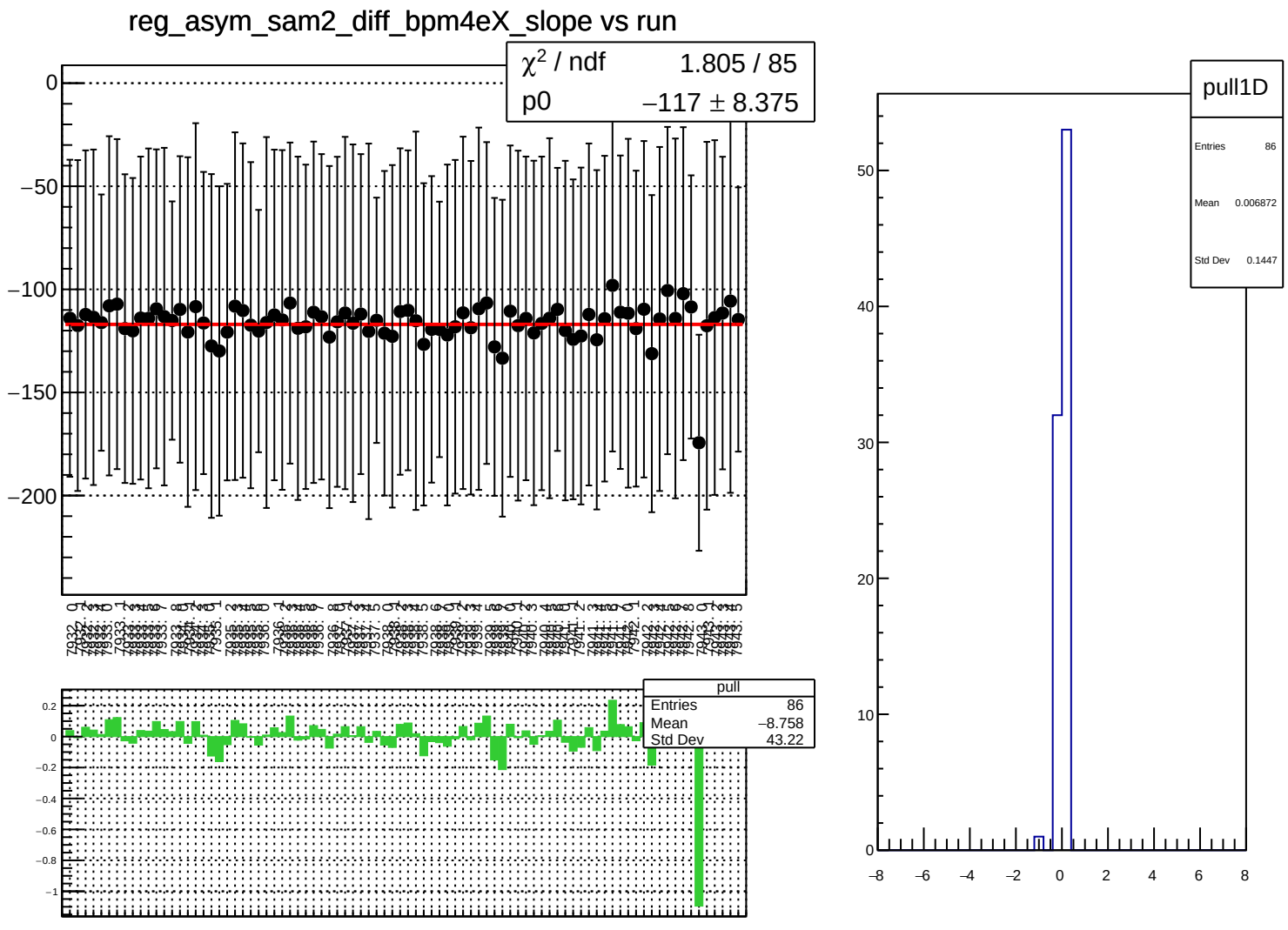

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 8.081 / 85
p0 0.4233 ± 0.02427
pull
Entries 86
Mean −1069
Std Dev 1104

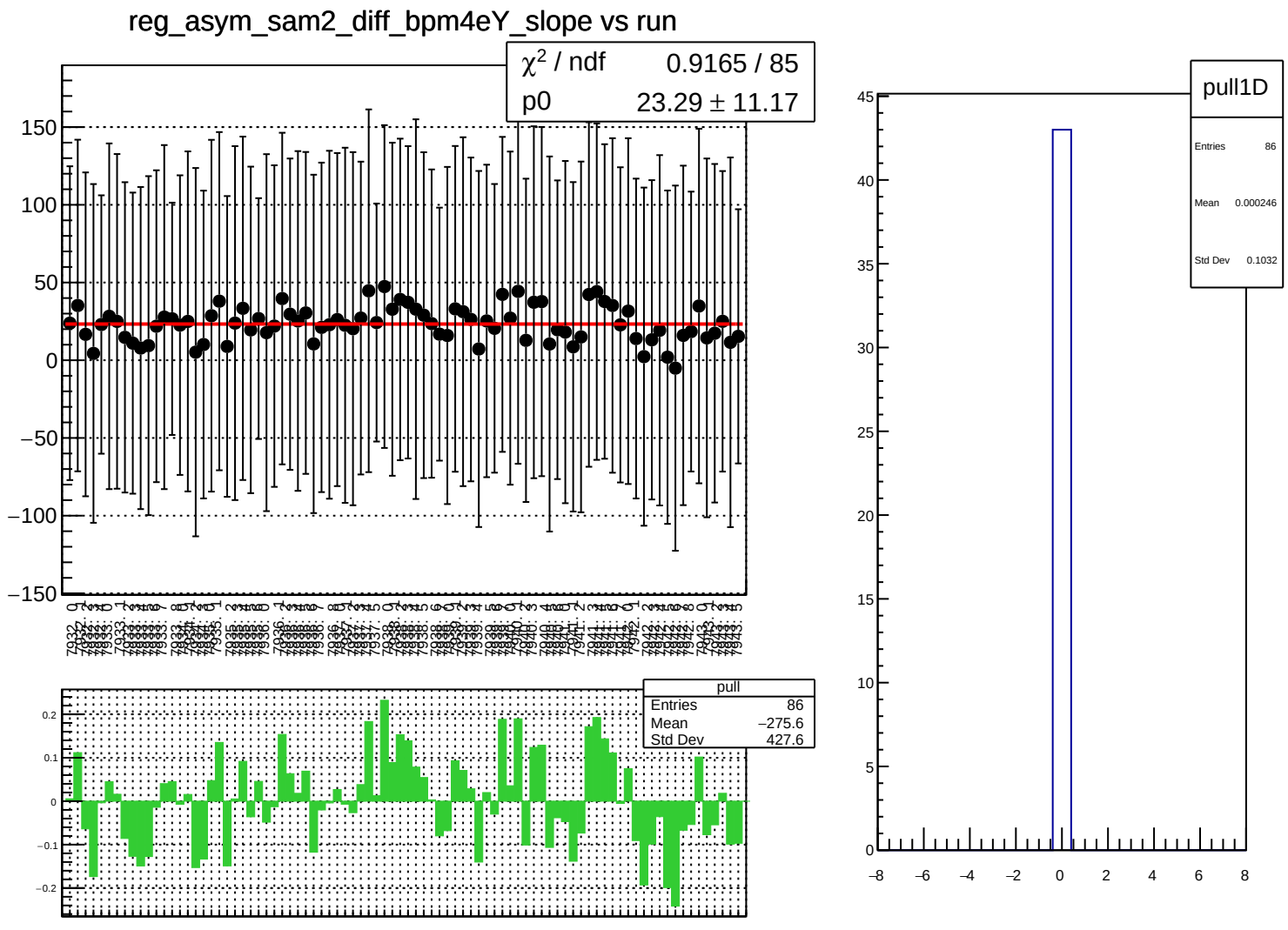

pull1D
Entries 86
Mean −0.002959
Std Dev 0.3065

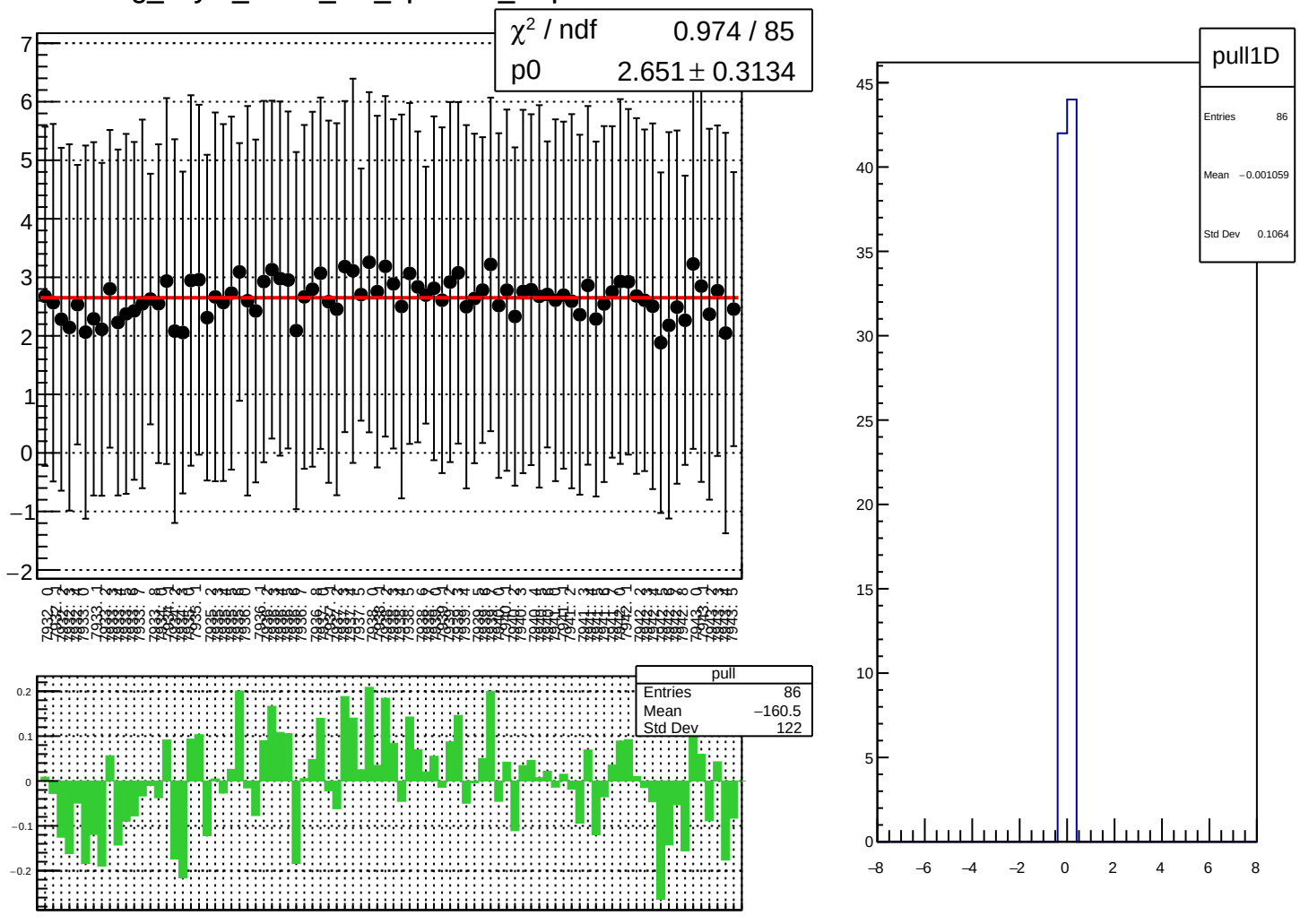

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 1.927 / 85
p0 −103.3 ± 9.309
pull
Entries 86
Mean −81.68
Std Dev 123.4
pull1D
Entries 86
Mean −0.00677
Std Dev 0.1495

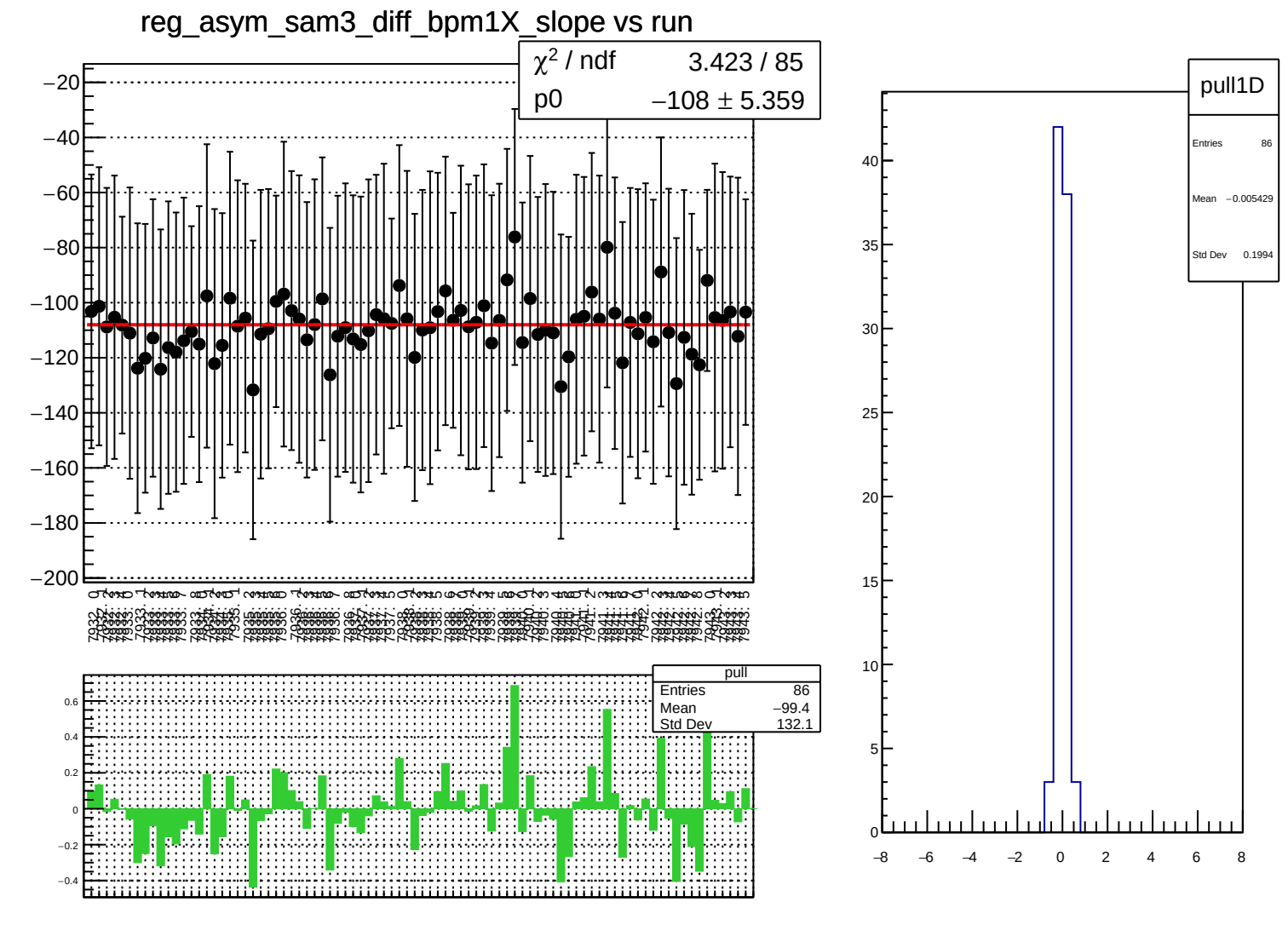

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 0.9431 / 85
p0 −185.6 ± 9.688
pull
Entries 86
Mean −1456
Std Dev 1527

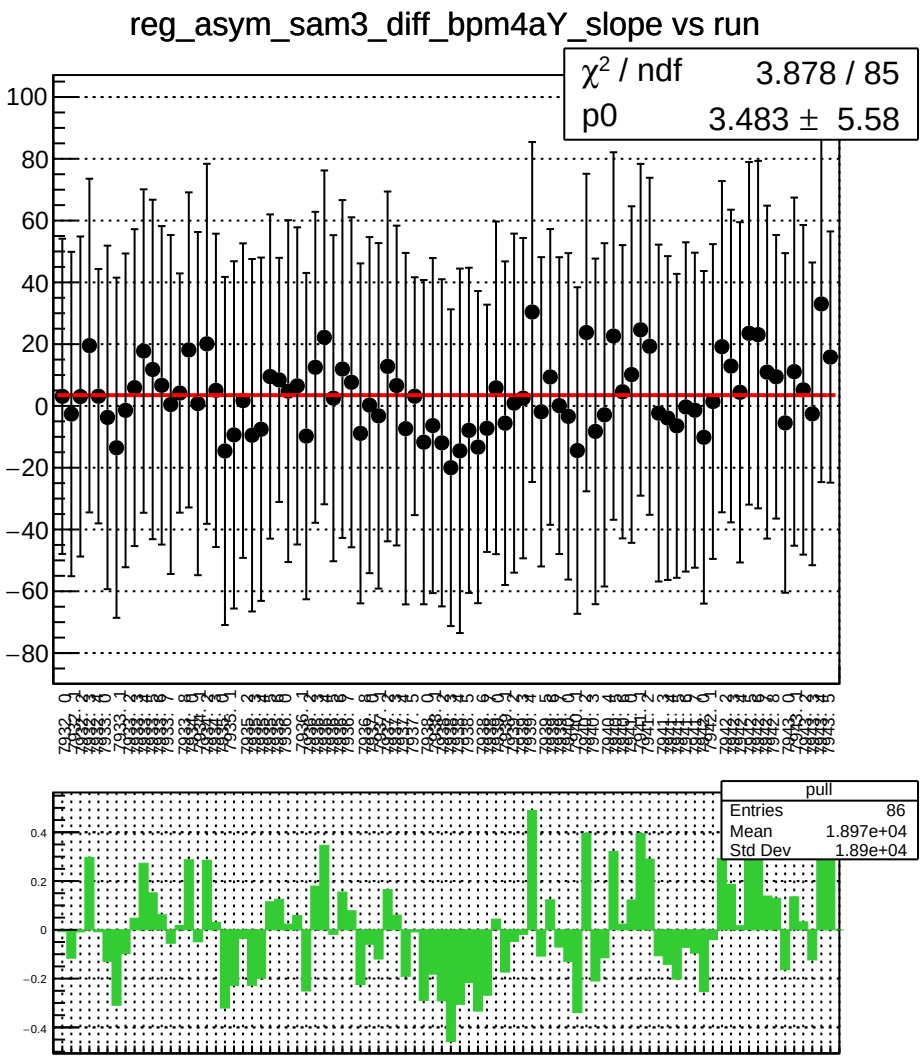

pull1D
Entries 86
Mean −0.0002672
Std Dev 0.1047

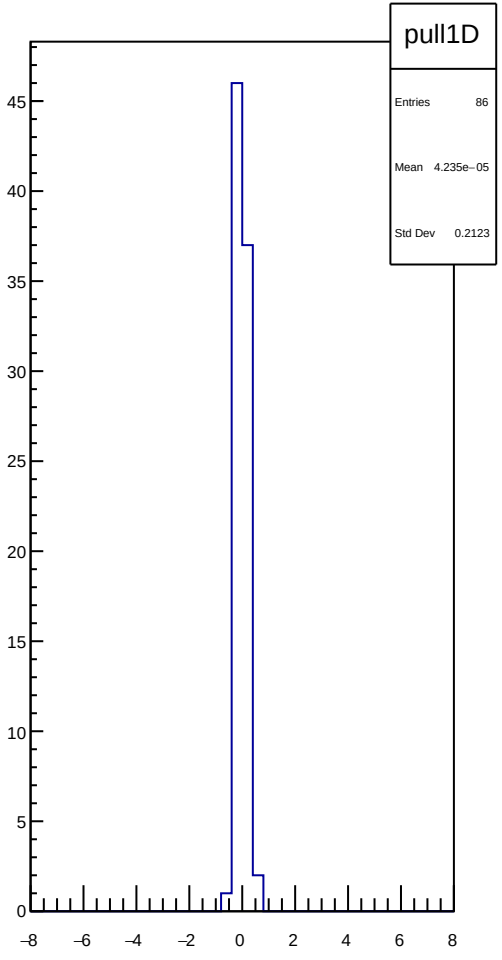

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 1.805 / 85
p0 −117 ± 8.375
pull
Entries 86
Mean −8.758
Std Dev 43.22
pull1D
Entries 86
Mean 0.006872
Std Dev 0.1447

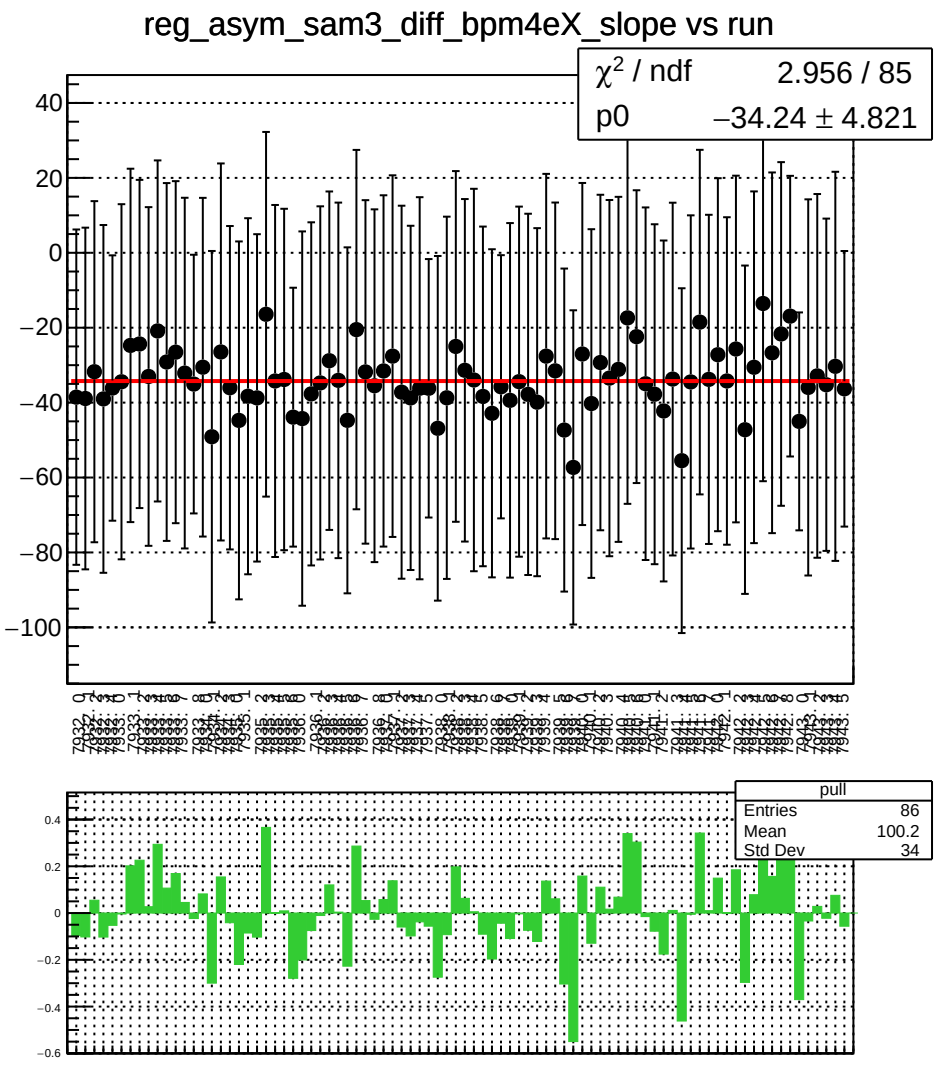

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 0.9165 / 85
p0 23.29 ± 11.17
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −275.6
Std Dev 427.6
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 86
Mean 0.000246
Std Dev 0.1032
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

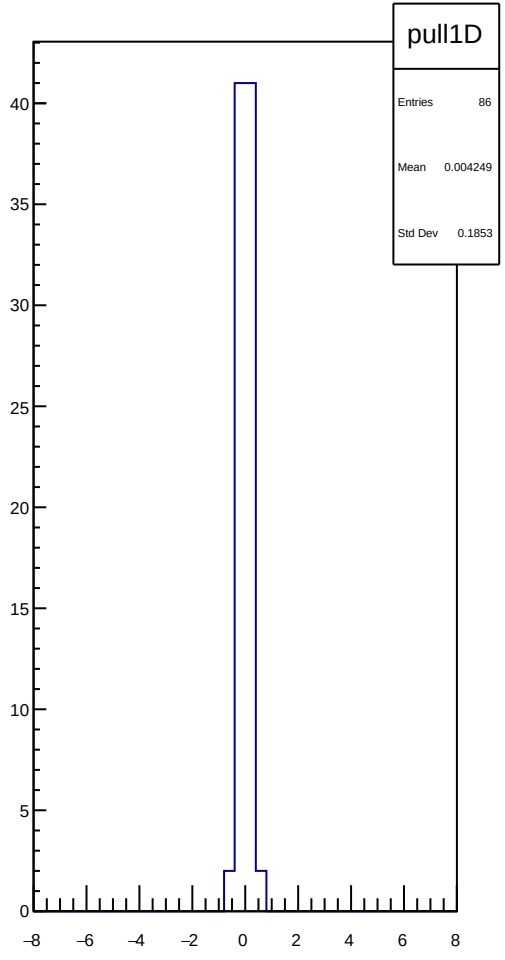

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 0.974 / 85
p0 2.651 ± 0.3134
pull
Entries 86
Mean −160.5
Std Dev 122
pull1D
Entries 86
Mean −0.001059
Std Dev 0.1064

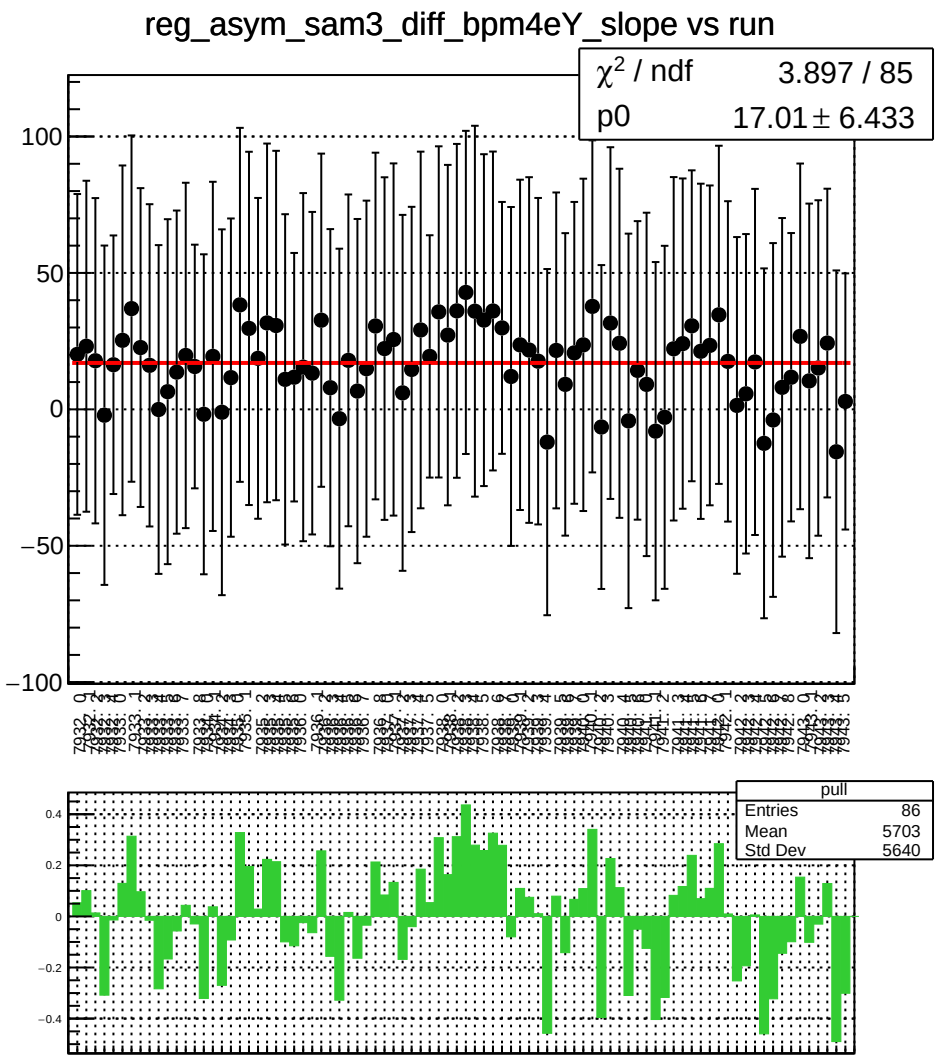

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 3.423 / 85
p0 −108 ± 5.359
pull
Entries 86
Mean −99.4
Std Dev 132.1
pull1D
Entries 86
Mean −0.005429
Std Dev 0.1994

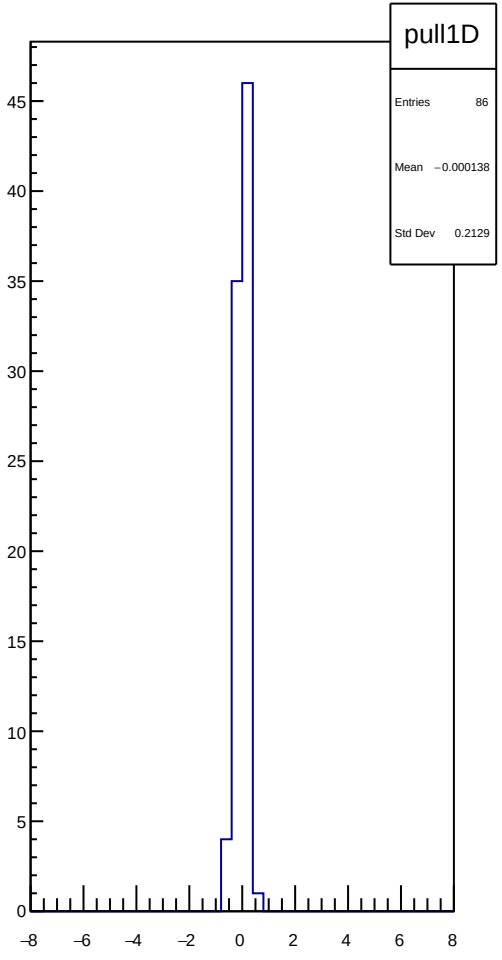

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 3.878 / 85
p0 3.483 ± 5.58
pull
Entries 86
Mean 1.897e+04
Std Dev 1.89e+04

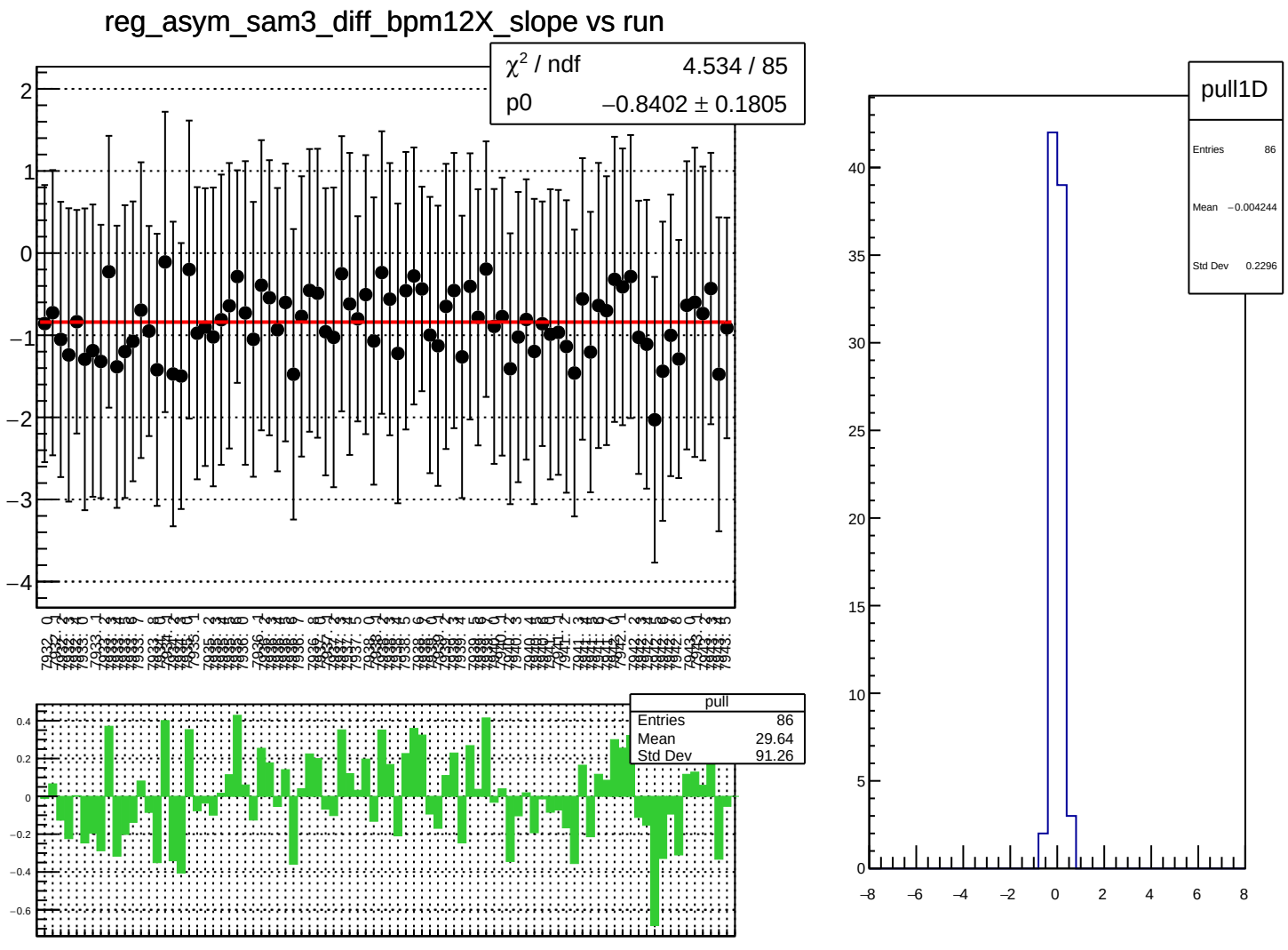

pull1D
Entries 86
Mean 4.235e−05
Std Dev 0.2123

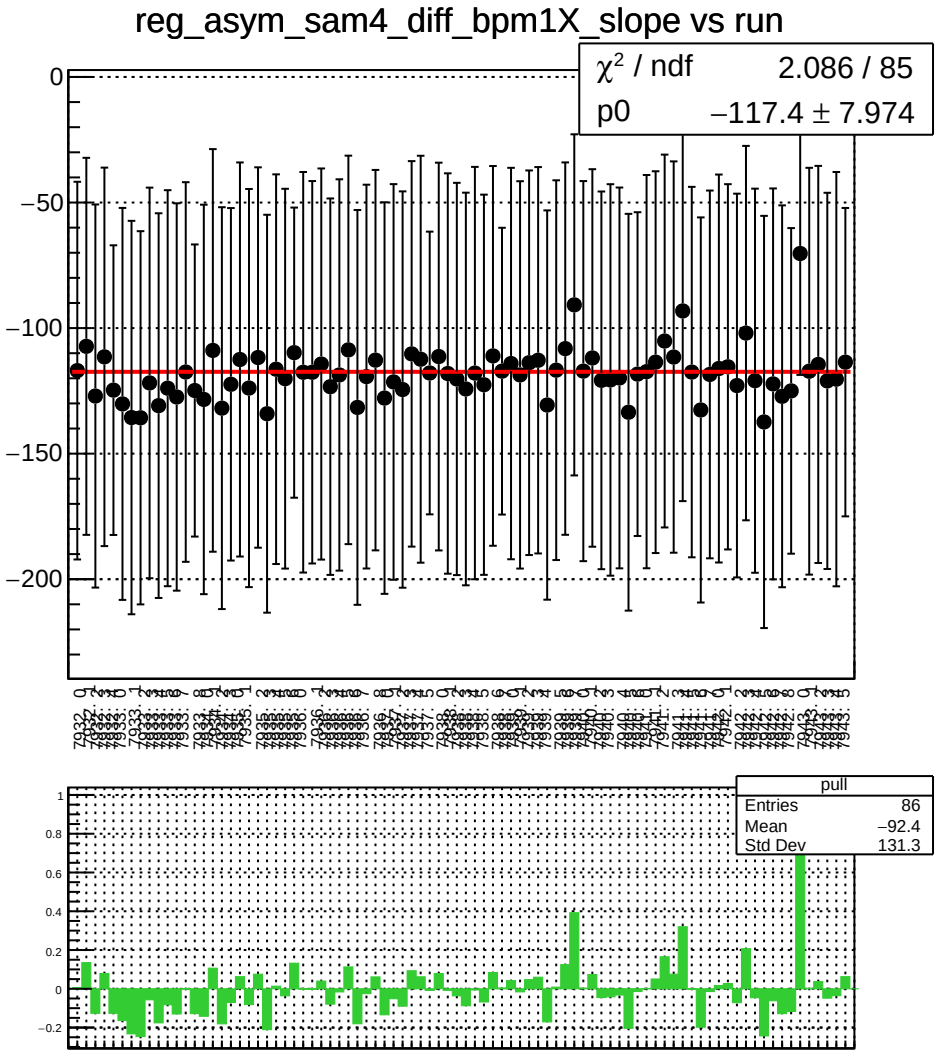

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 2.956 / 85
p0 −34.24 ± 4.821
pull
Entries 86
Mean 100.2
Std Dev 34

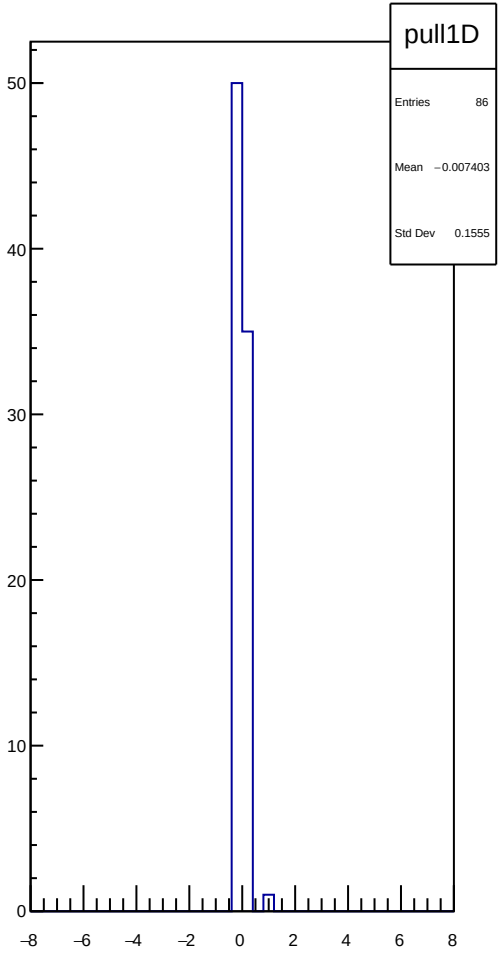

pull1D
Entries 86
Mean 0.004249
Std Dev 0.1853

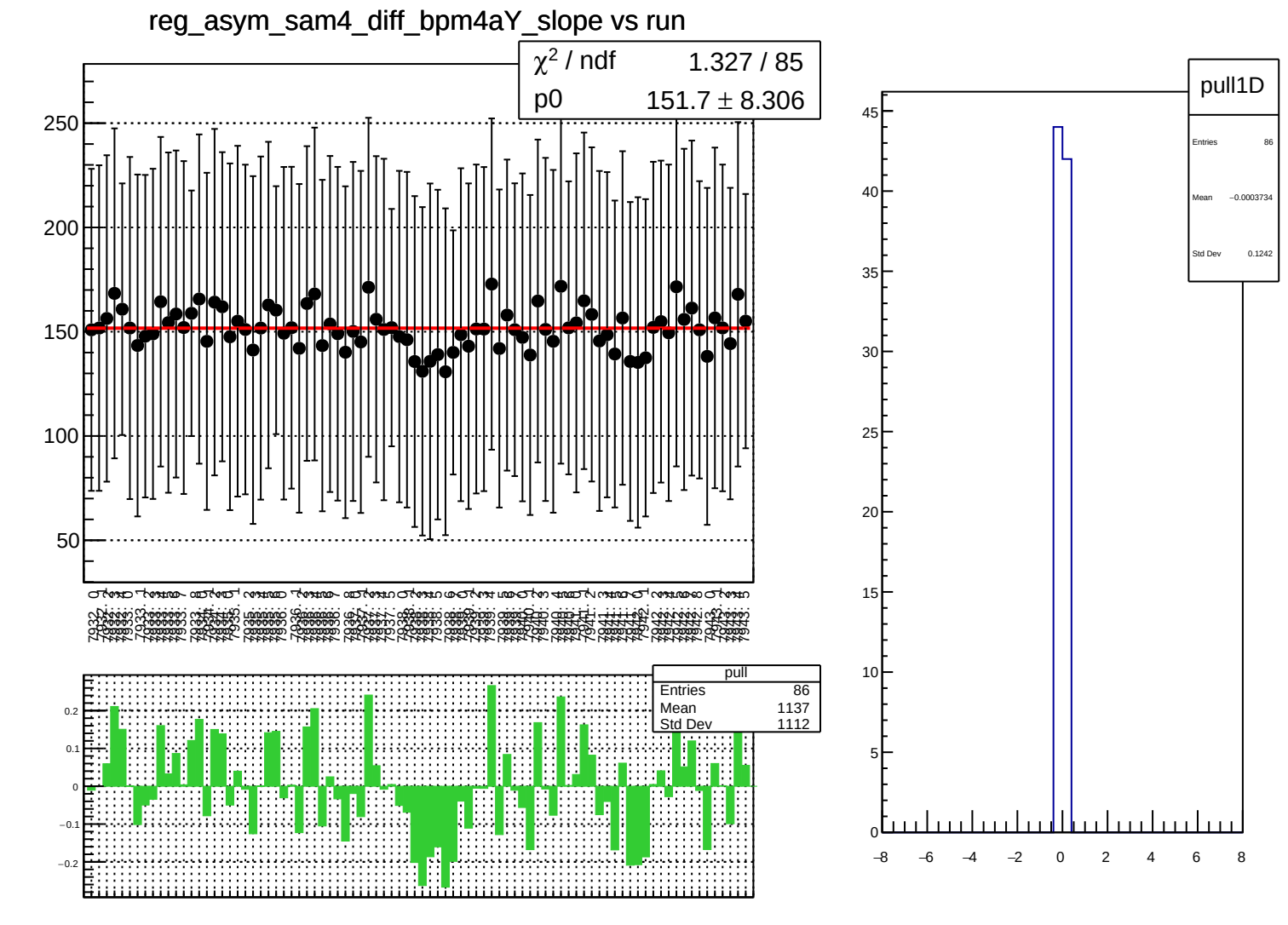

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 3.897 / 85
p0 17.01 ± 6.433
100
50
0
−50
−100
pull
Entries 86
Mean 5703
Std Dev 5640
0.4
0.2
0
−0.2
−0.4

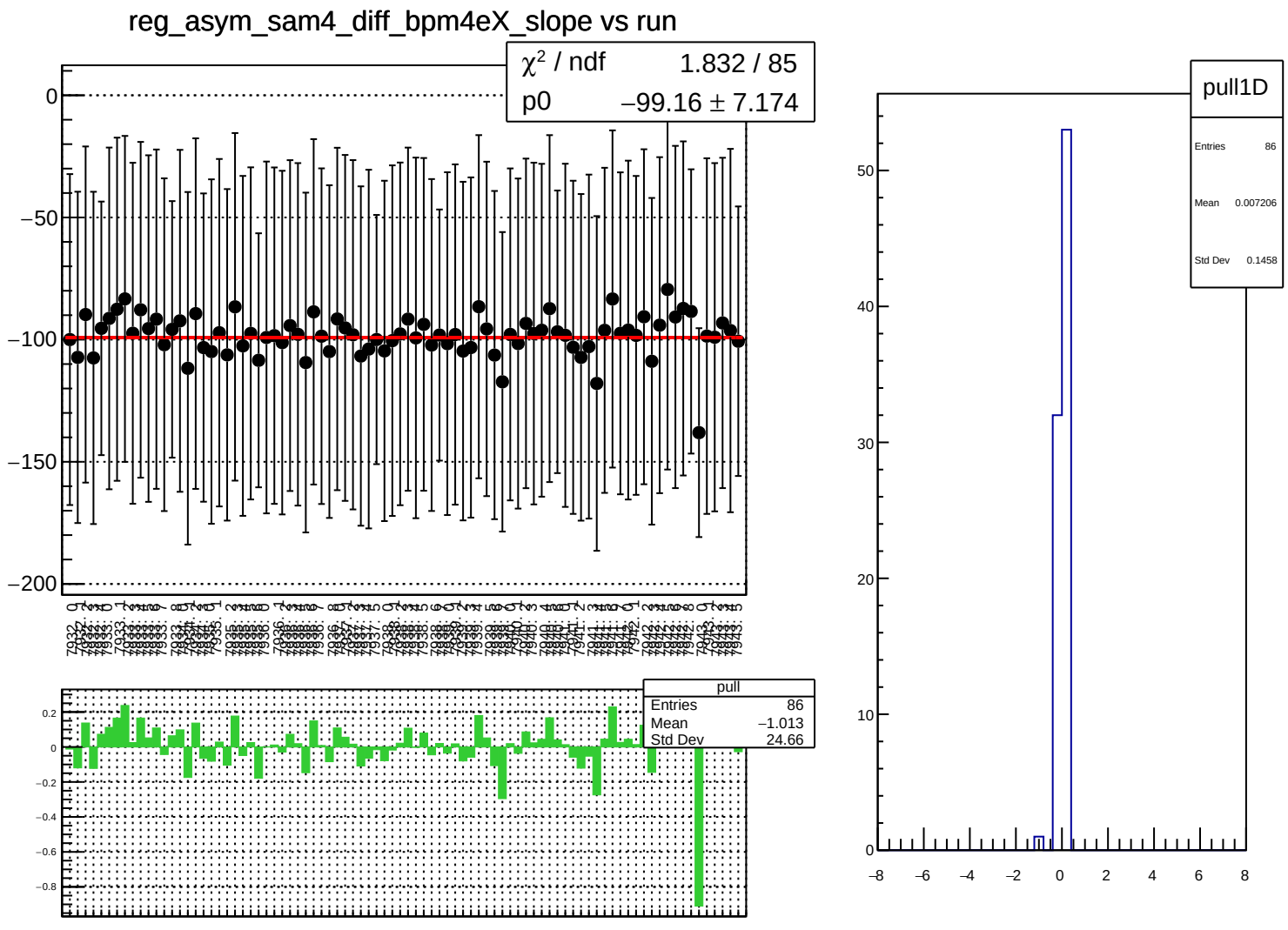

pull1D
Entries 86
Mean −0.000138
Std Dev 0.2129
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

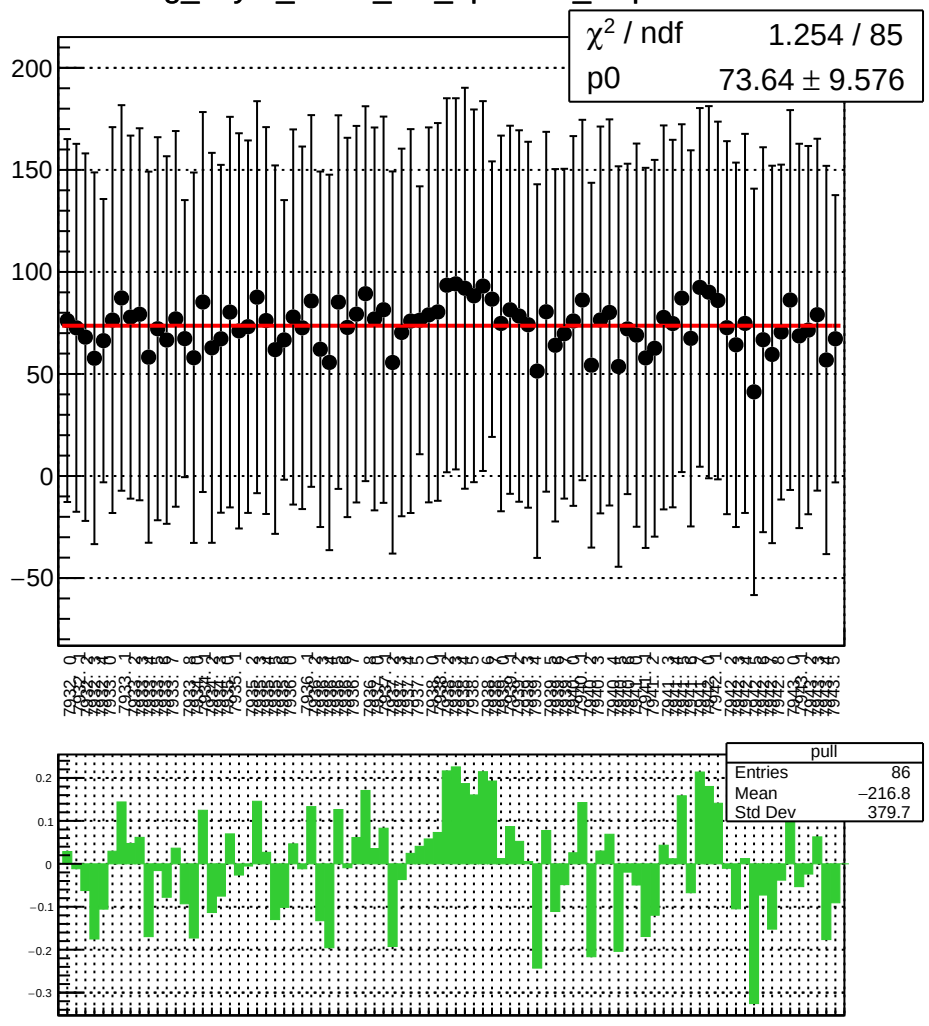

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 4.534 / 85
p0 −0.8402 ± 0.1805
pull
Entries 86
Mean 29.64
Std Dev 91.26
pull1D
Entries 86
Mean −0.004244
Std Dev 0.2296

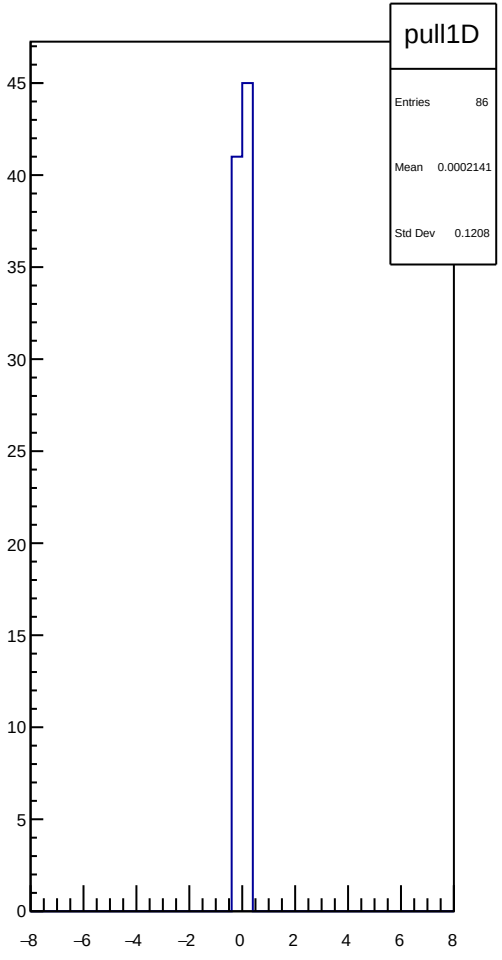

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 2.086 / 85
p0 −117.4 ± 7.974
pull
Entries 86
Mean −92.4
Std Dev 131.3

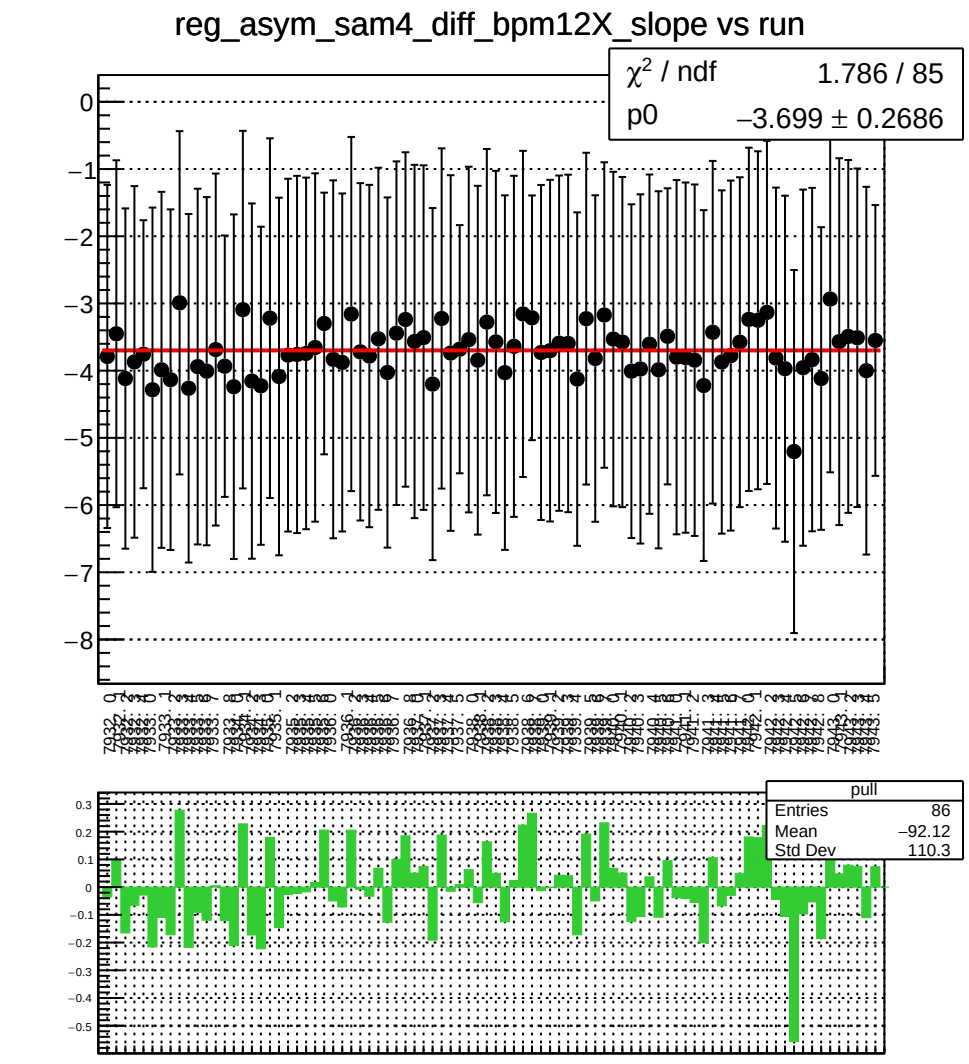

pull1D
Entries 86
Mean −0.007403
Std Dev 0.1555

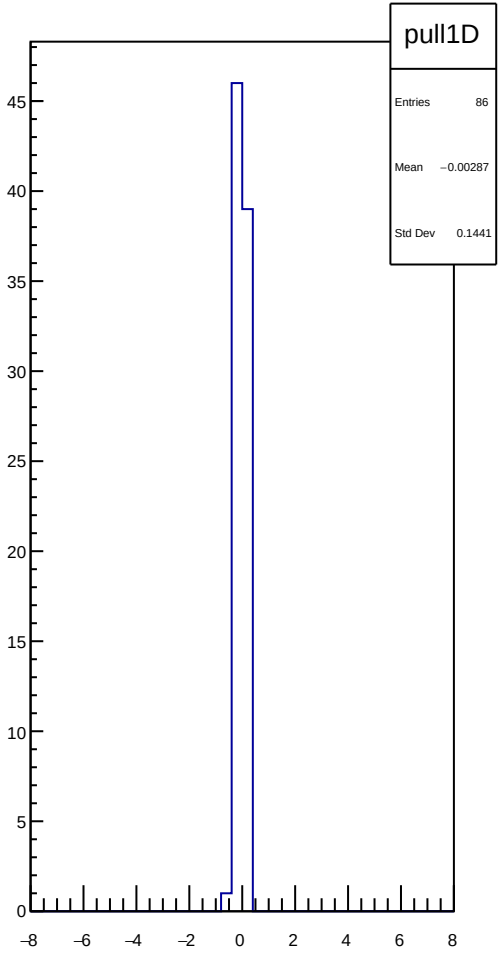

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 1.327 / 85
p0 151.7 ± 8.306
250
200
150
100
50
pull
Entries 86
Mean 1137
Std Dev 1112
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 86
Mean −0.0003734
Std Dev 0.1242
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

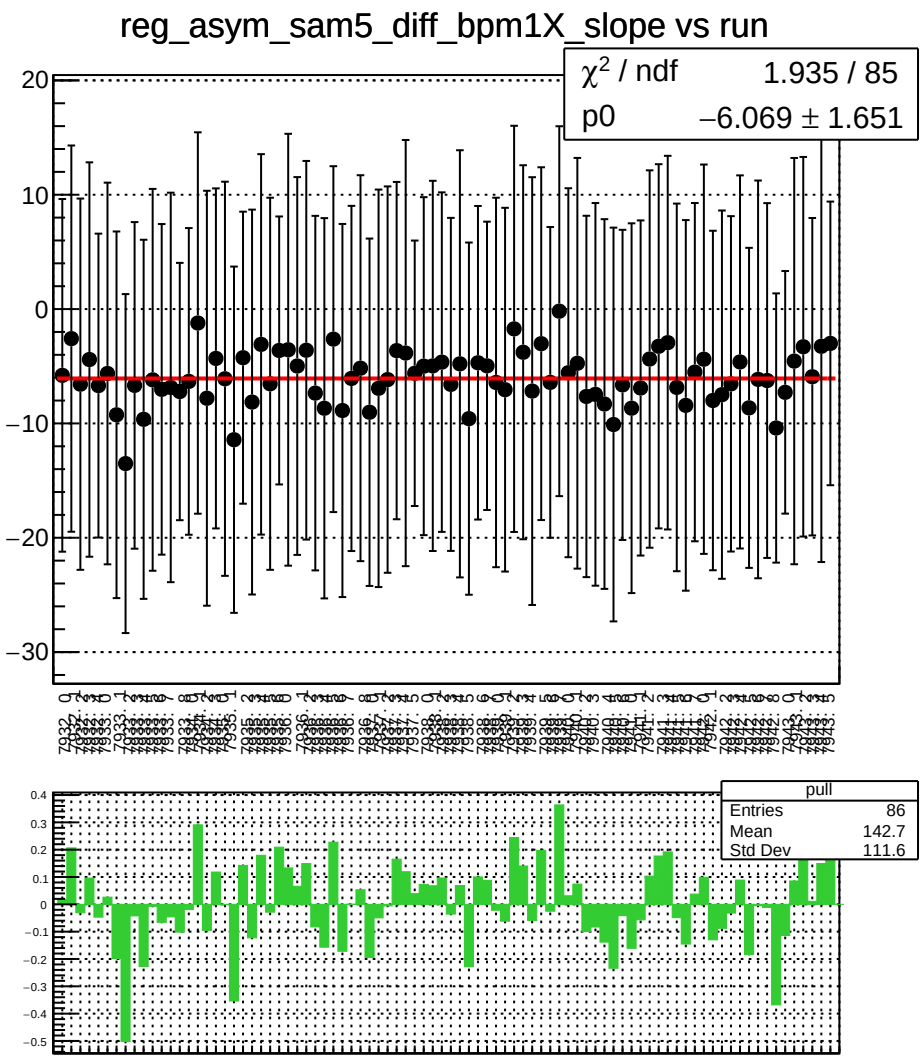

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 1.832 / 85
p0 −99.16 ± 7.174
pull
Entries 86
Mean −1.013
Std Dev 24.66
pull1D
Entries 86
Mean 0.007206
Std Dev 0.1458

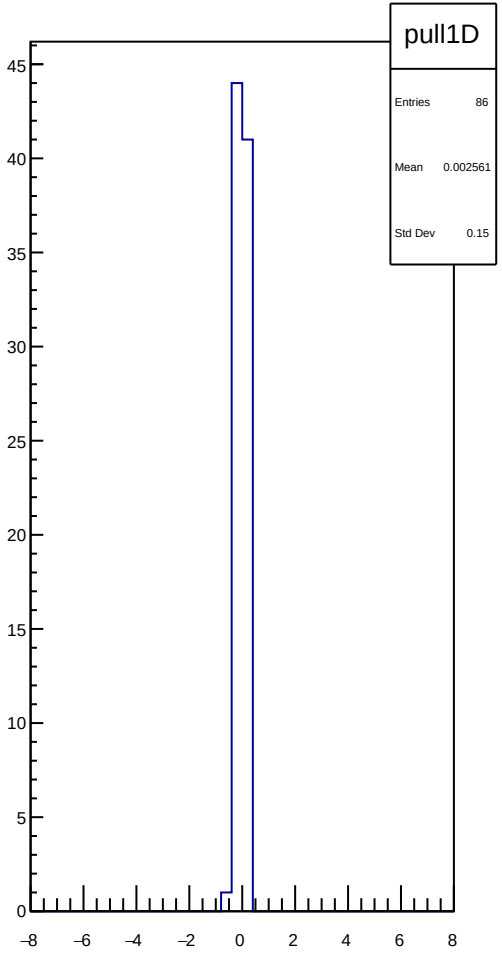

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 1.254 / 85
p0 73.64 ± 9.576
pull
Entries 86
Mean −216.8
Std Dev 379.7

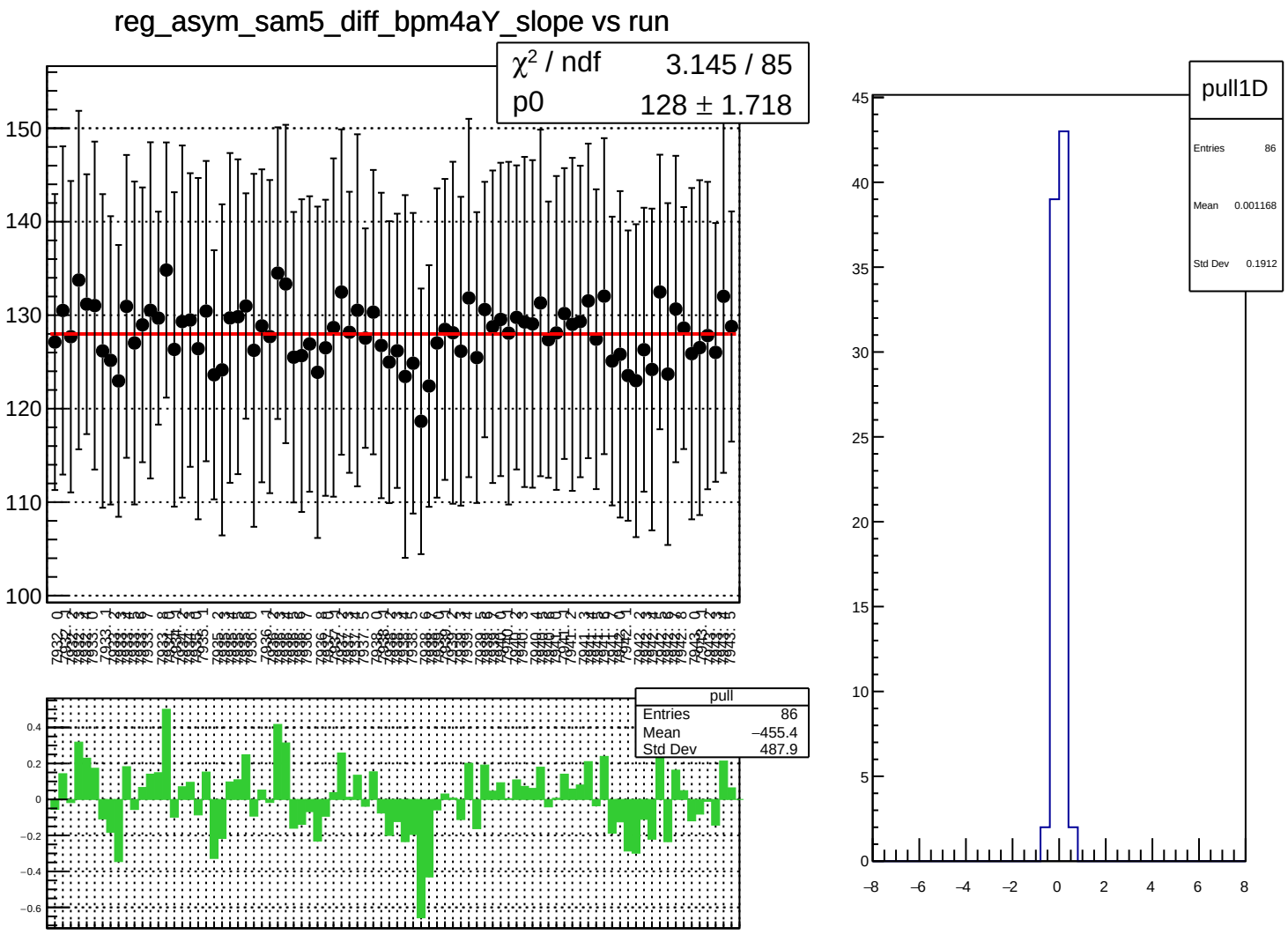

pull1D
Entries 86
Mean 0.0002141
Std Dev 0.1208

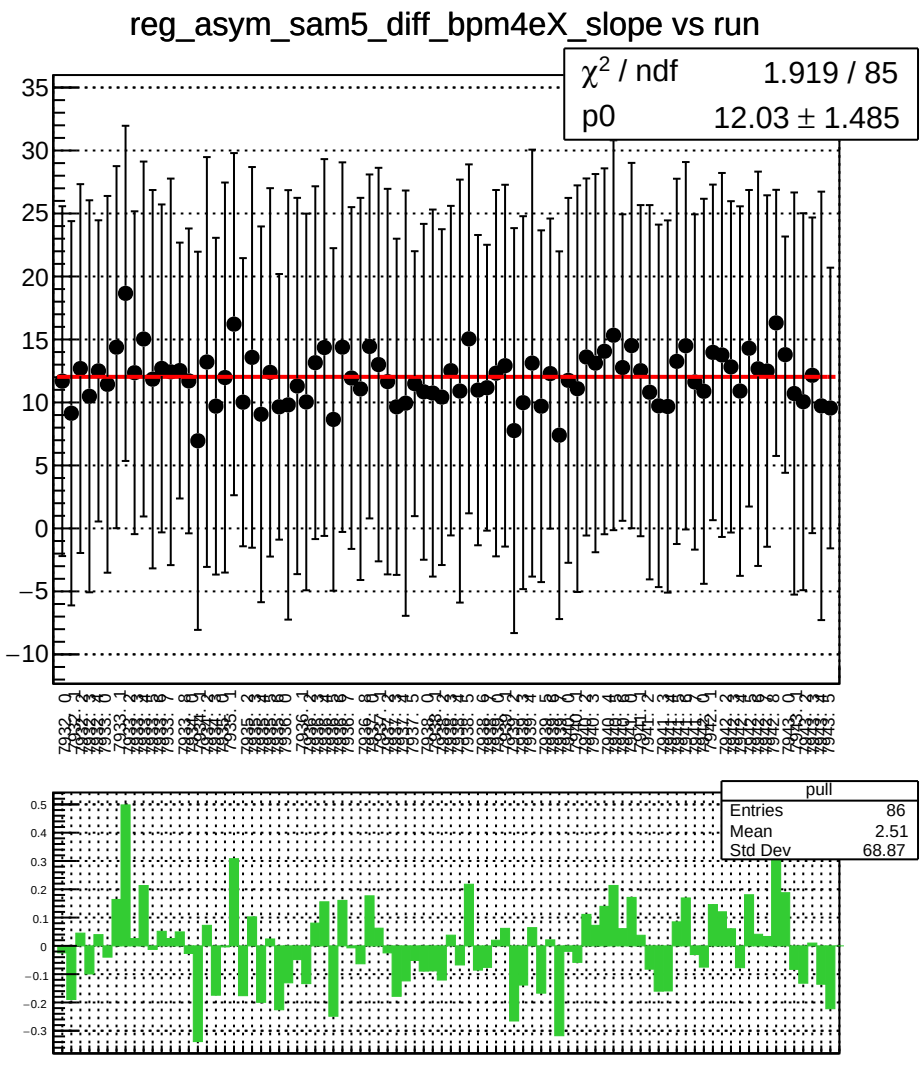

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 1.786 / 85
p0 −3.699 ± 0.2686
pull
Entries 86
Mean −92.12
Std Dev 110.3

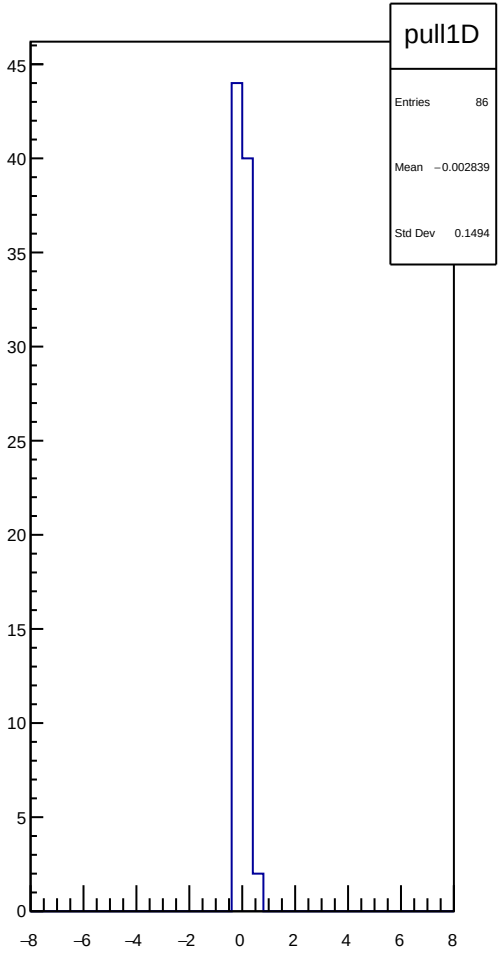

pull1D
Entries 86
Mean −0.00287
Std Dev 0.1441

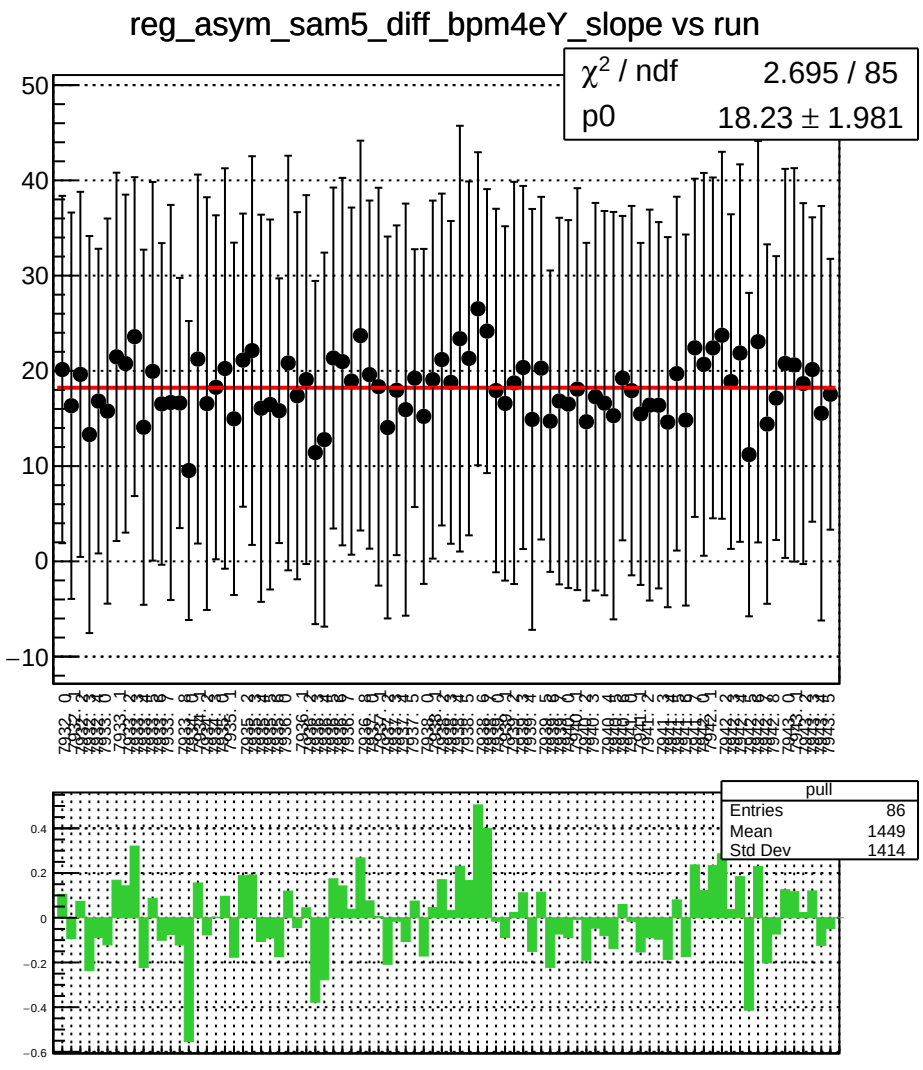

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 1.935 / 85
p0 −6.069 ± 1.651
pull
Entries 86
Mean 142.7
Std Dev 111.6

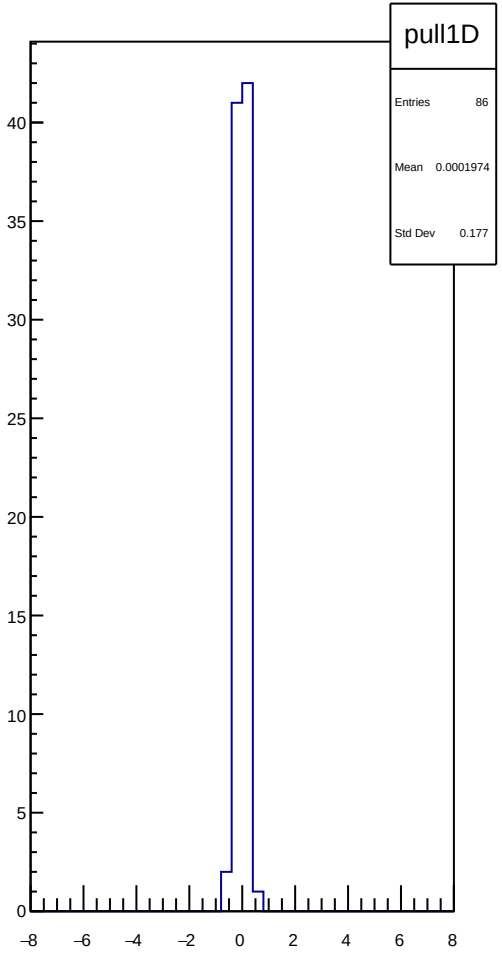

pull1D
Entries 86
Mean 0.002561
Std Dev 0.15

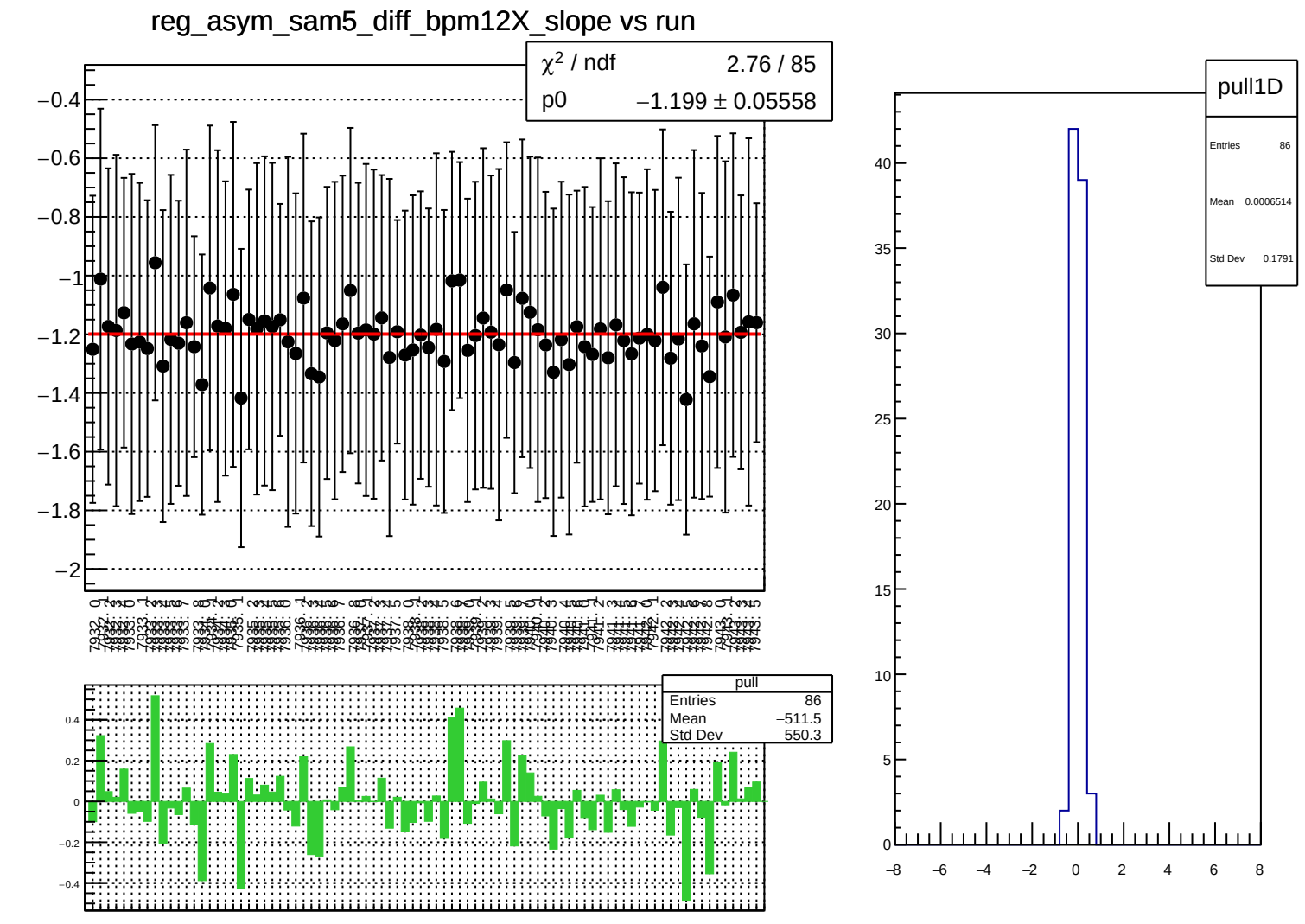

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 3.145 / 85
p0 128 ± 1.718
pull
Entries 86
Mean −455.4
Std Dev 487.9
pull1D
Entries 86
Mean 0.001168
Std Dev 0.1912

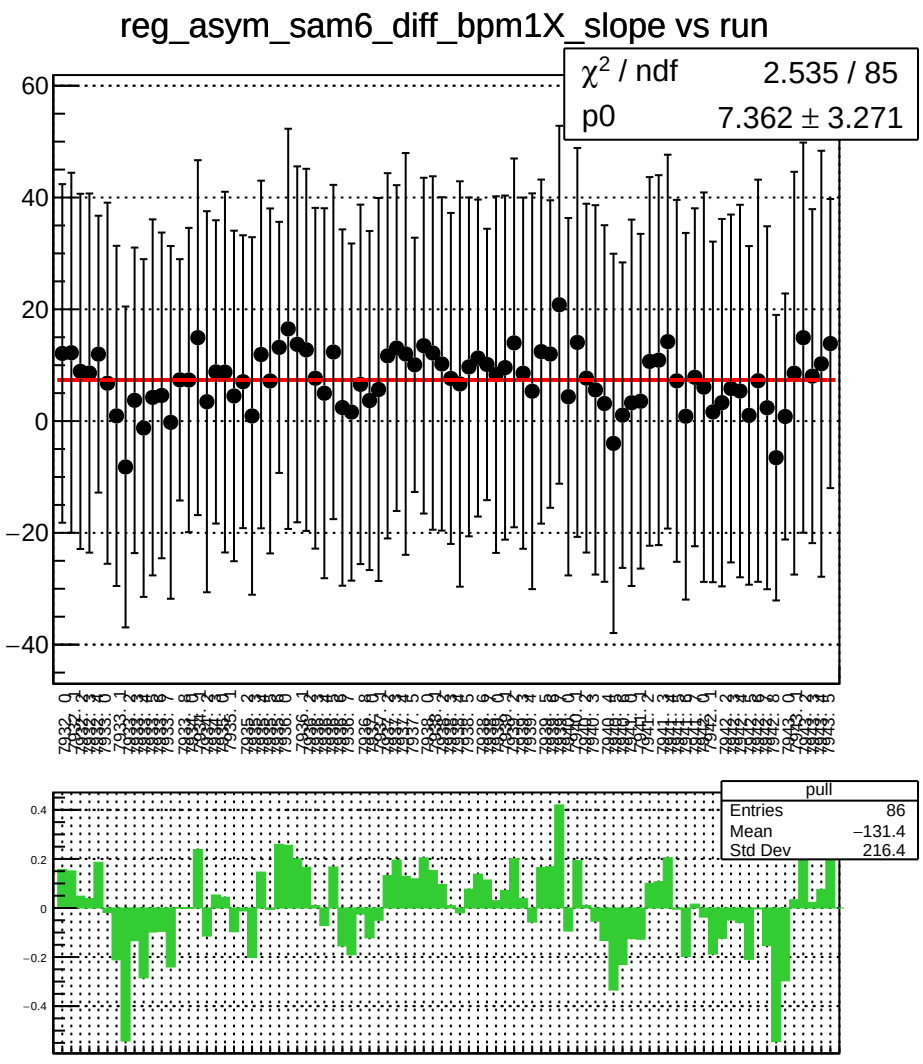

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 1.919 / 85
p0 12.03 ± 1.485
pull
Entries 86
Mean 2.51
Std Dev 68.87

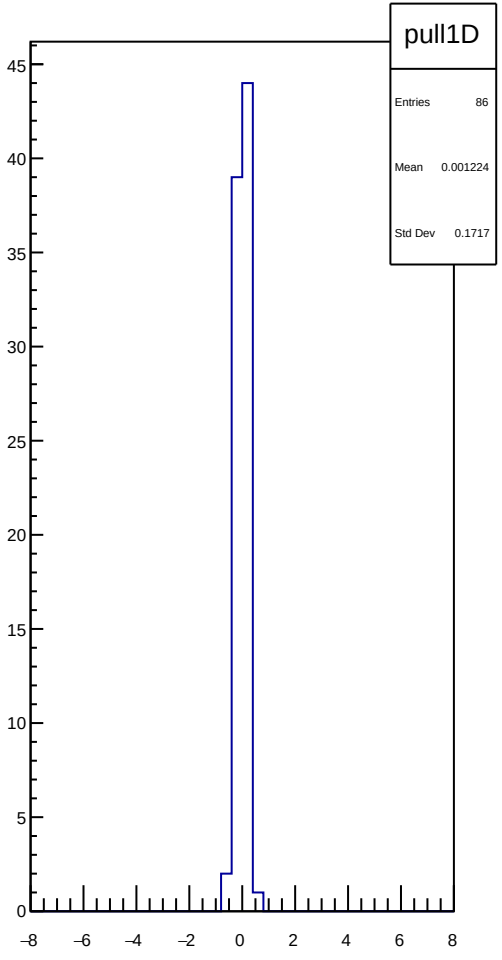

pull1D
Entries 86
Mean −0.002839
Std Dev 0.1494

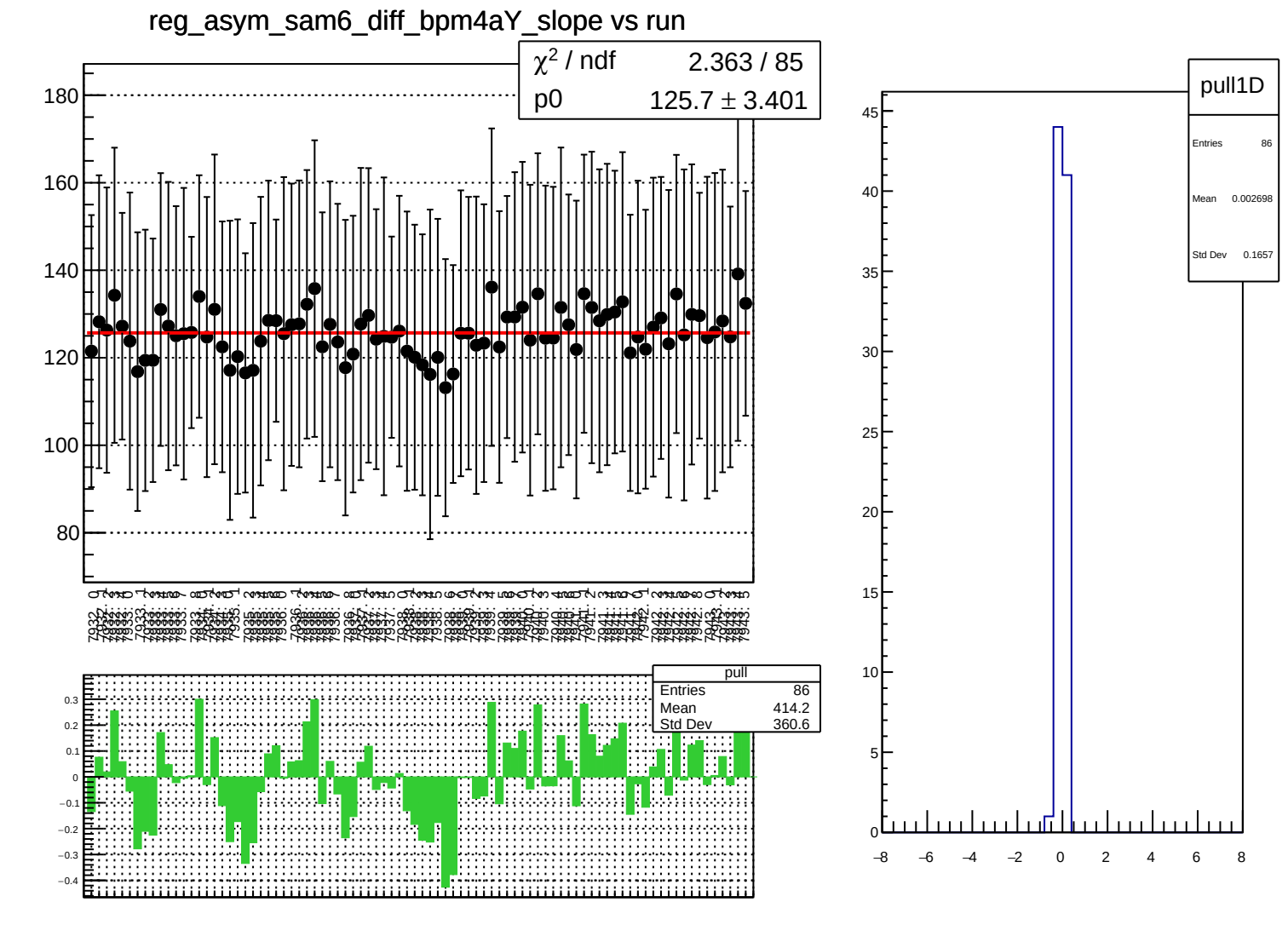

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 2.695 / 85
p0 18.23 ± 1.981
pull
Entries 86
Mean 1449
Std Dev 1414

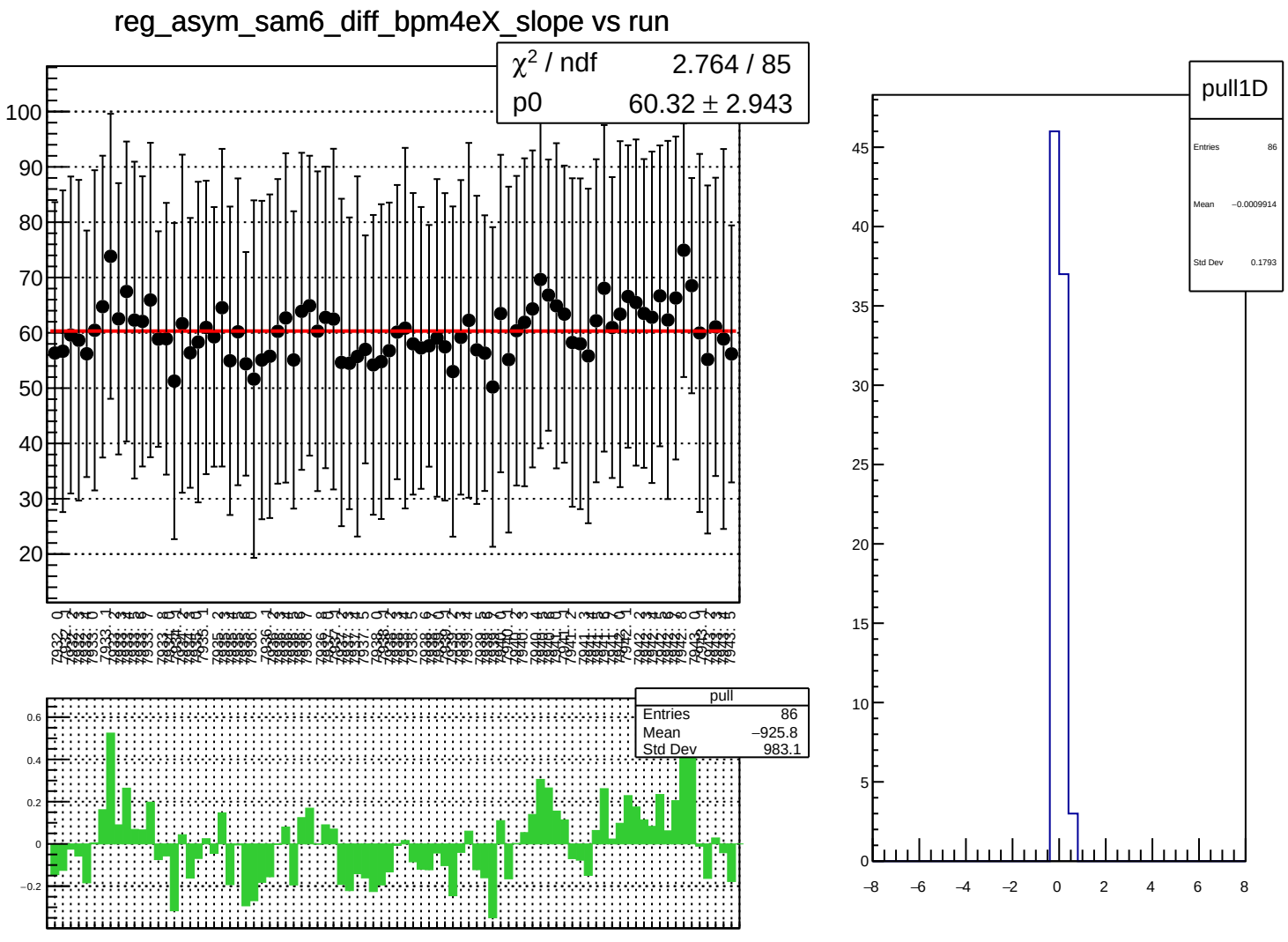

pull1D
Entries 86
Mean 0.0001974
Std Dev 0.177

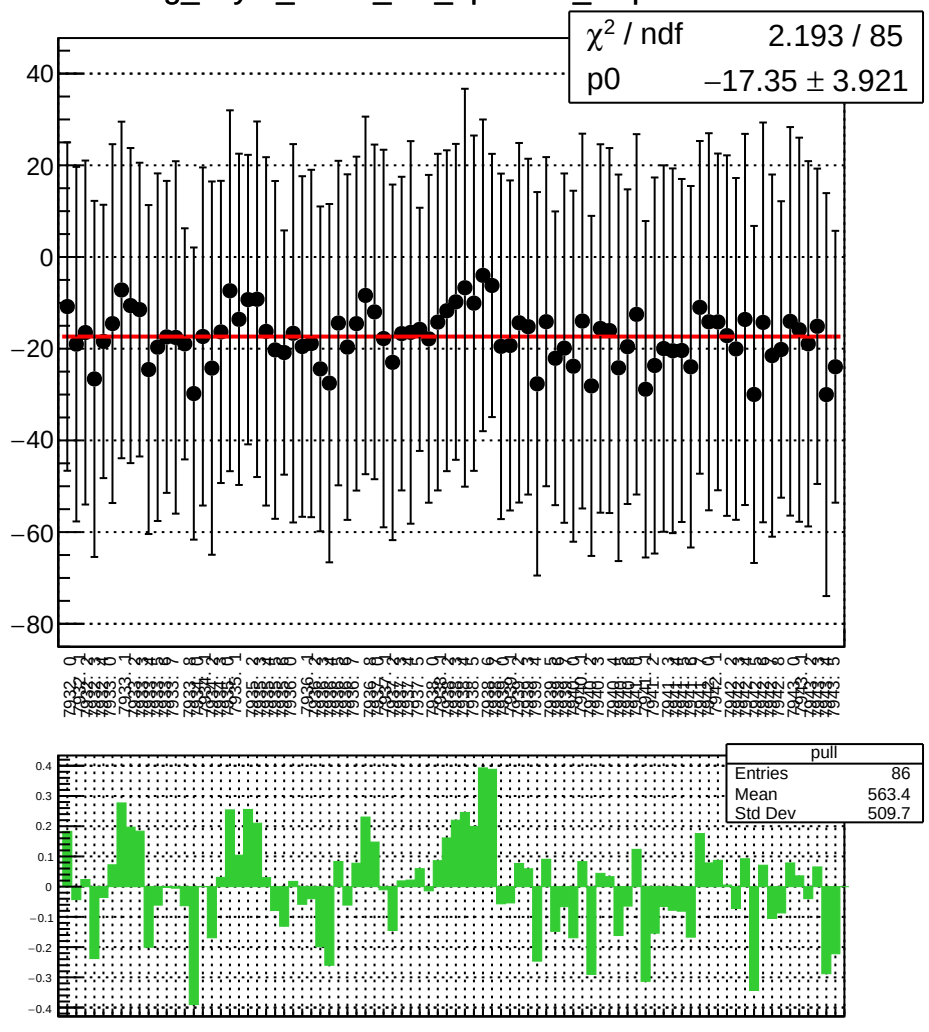

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 2.76 / 85
p0 −1.199 ± 0.05558
pull
Entries 86
Mean −511.5
Std Dev 550.3
pull1D
Entries 86
Mean 0.0006514
Std Dev 0.1791

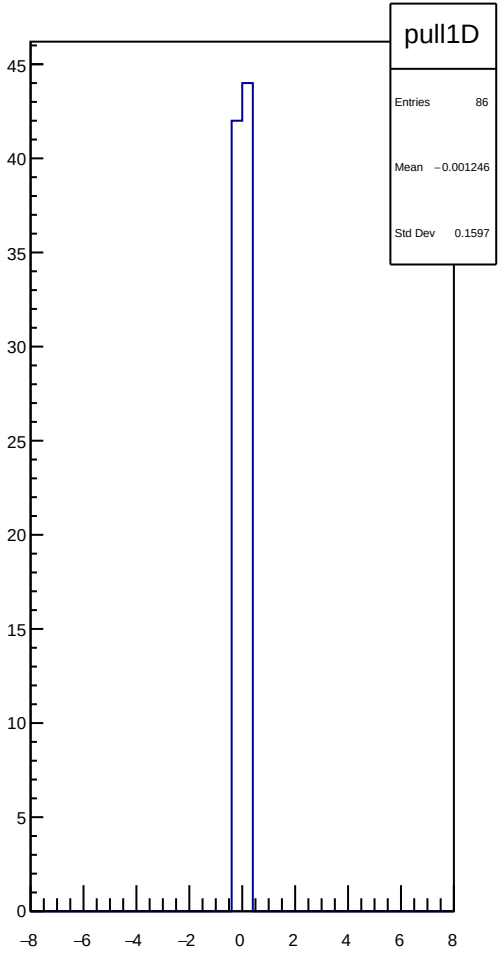

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 2.535 / 85
p0 7.362 ± 3.271
pull
Entries 86
Mean −131.4
Std Dev 216.4

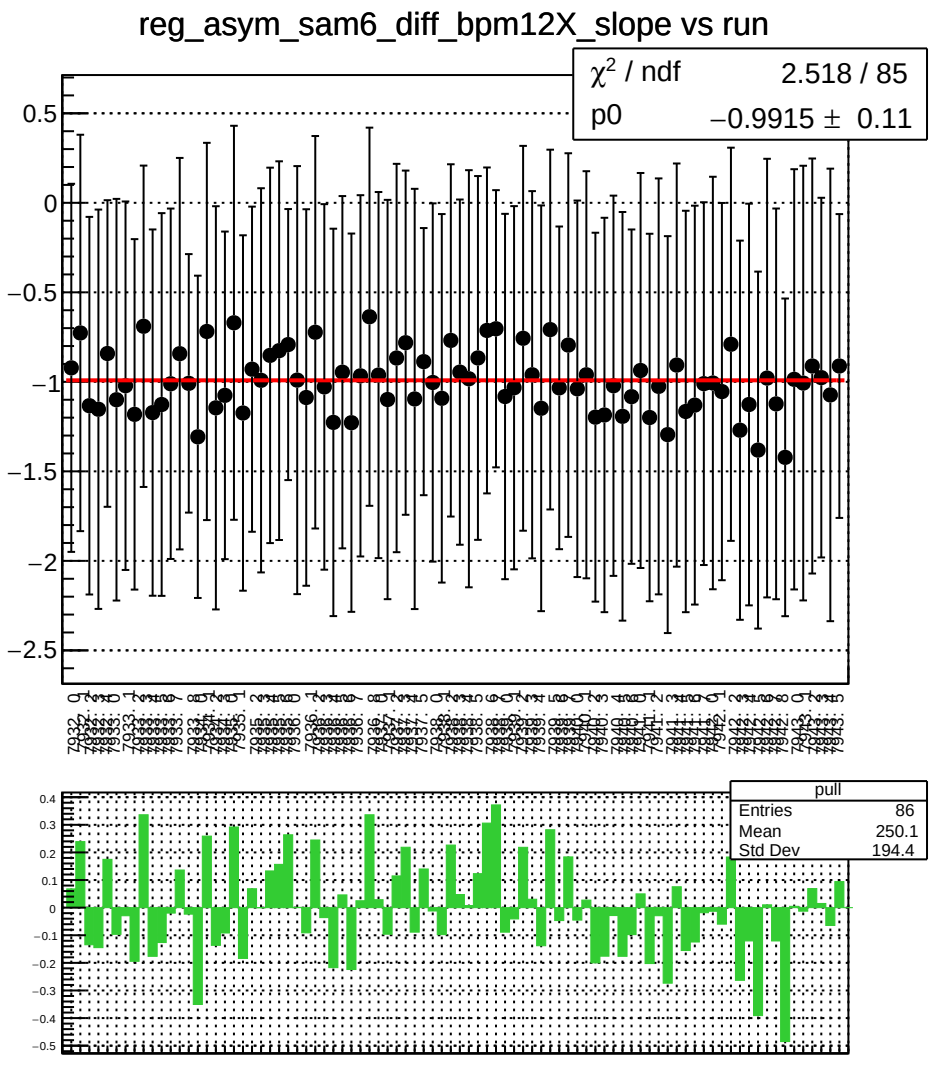

pull1D
Entries 86
Mean 0.001224
Std Dev 0.1717

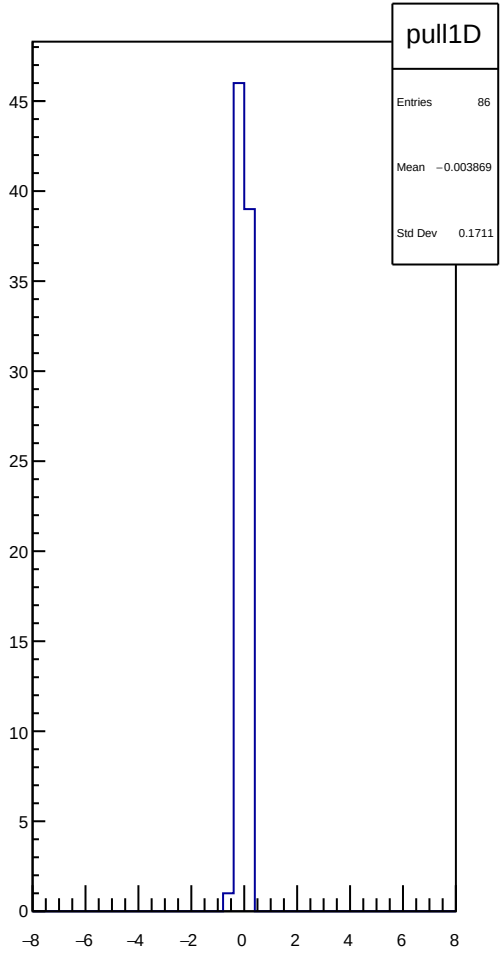

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 2.363 / 85
p0 125.7 ± 3.401
pull
Entries 86
Mean 414.2
Std Dev 360.6
pull1D
Entries 86
Mean 0.002698
Std Dev 0.1657

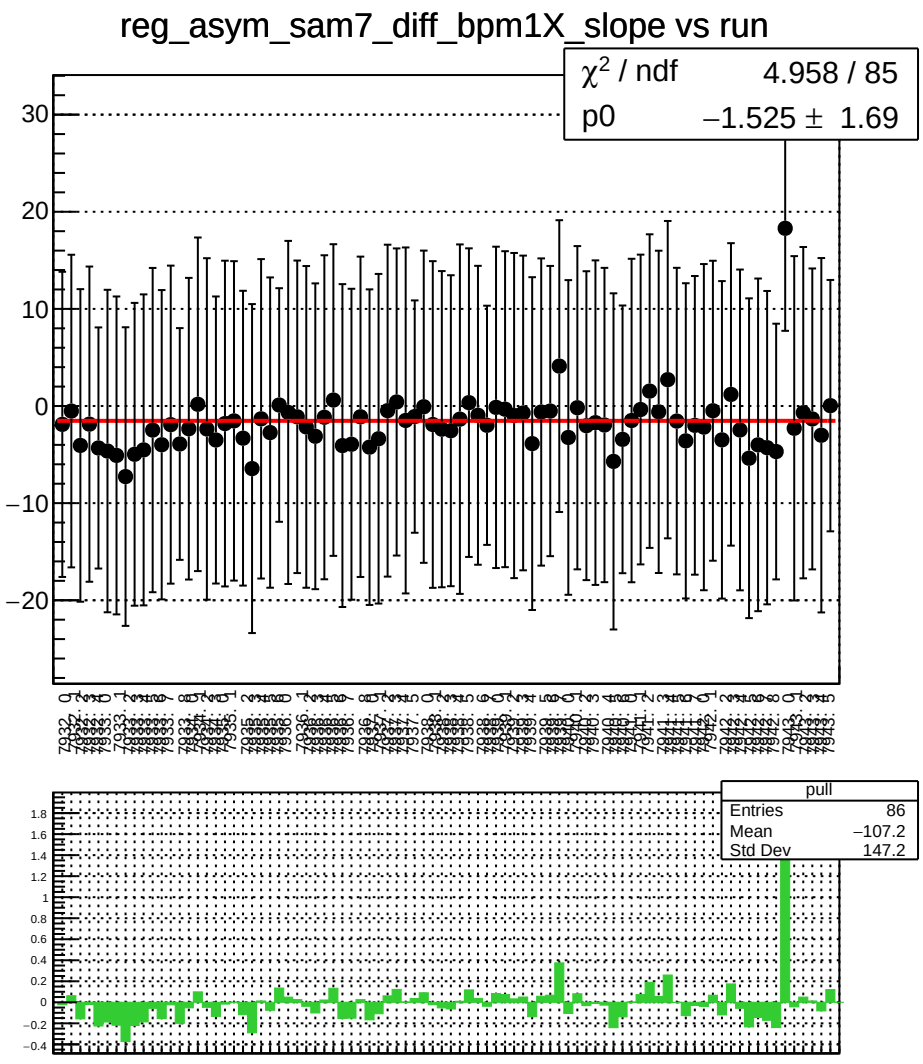

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 2.764 / 85
p0 60.32 ± 2.943
pull
Entries 86
Mean −925.8
Std Dev 983.1
pull1D
Entries 86
Mean −0.0009914
Std Dev 0.1793

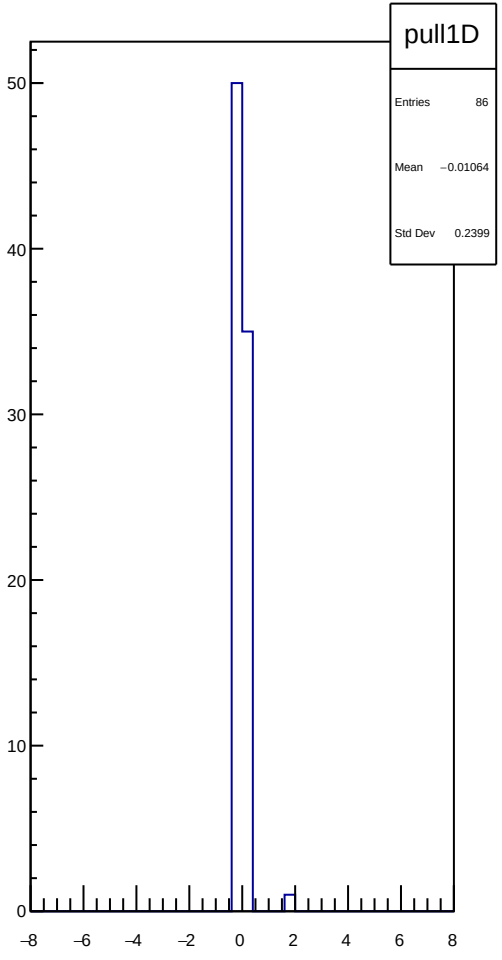

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 2.193 / 85
p0 −17.35 ± 3.921
pull
Entries 86
Mean 563.4
Std Dev 509.7

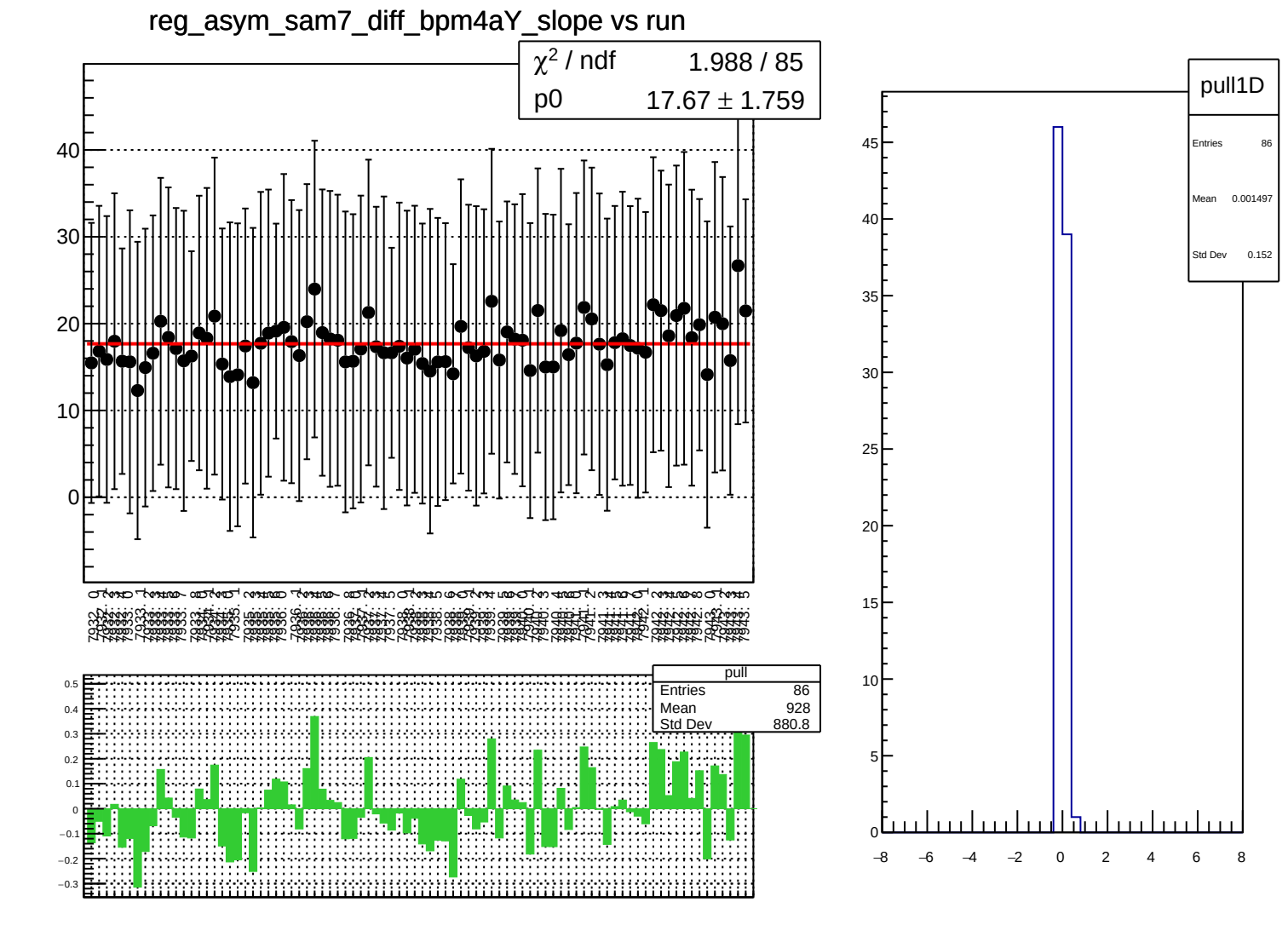

pull1D
Entries 86
Mean −0.001246
Std Dev 0.1597

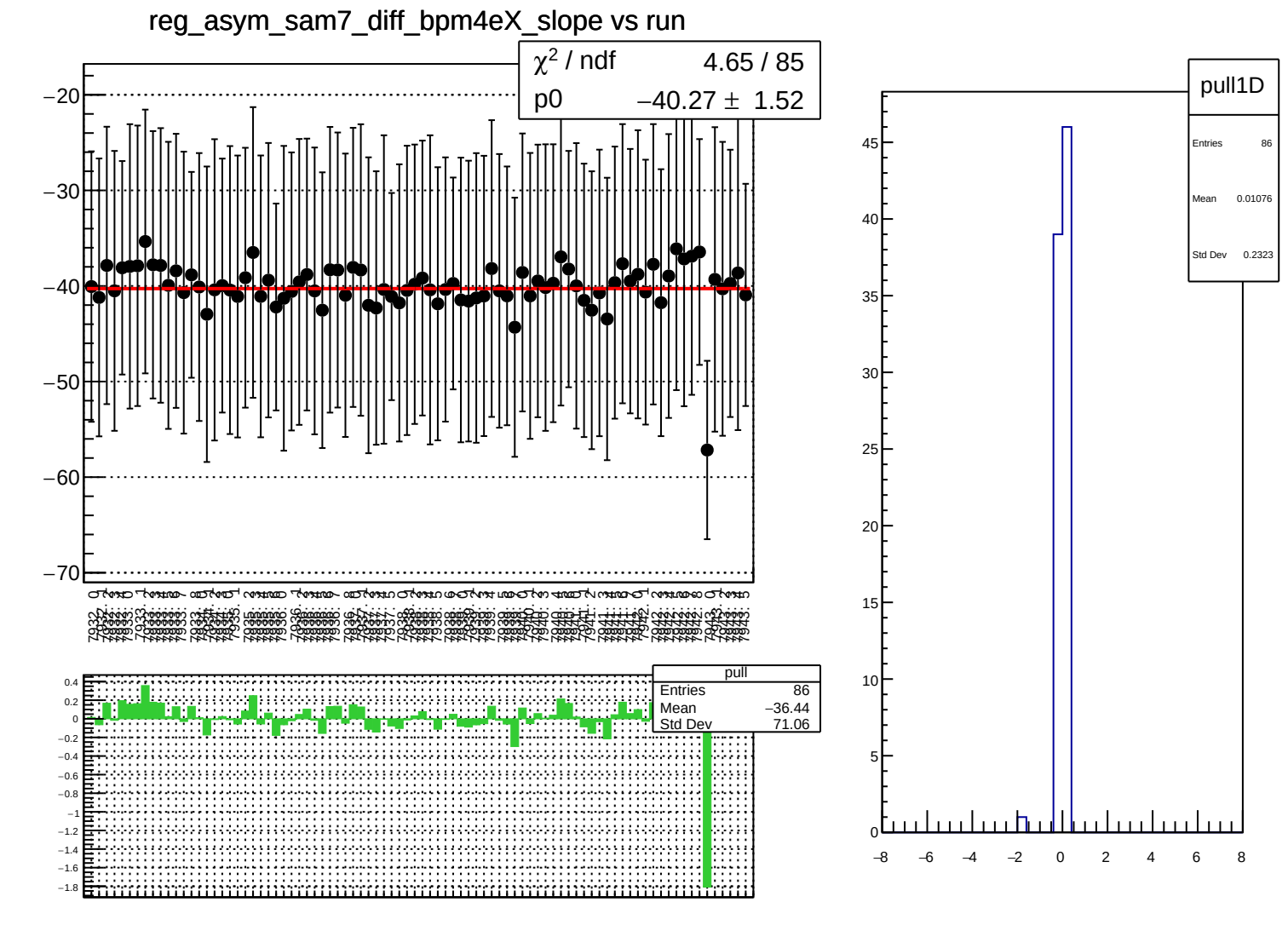

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 2.518 / 85
p0 −0.9915 ± 0.11
pull
Entries 86
Mean 250.1
Std Dev 194.4

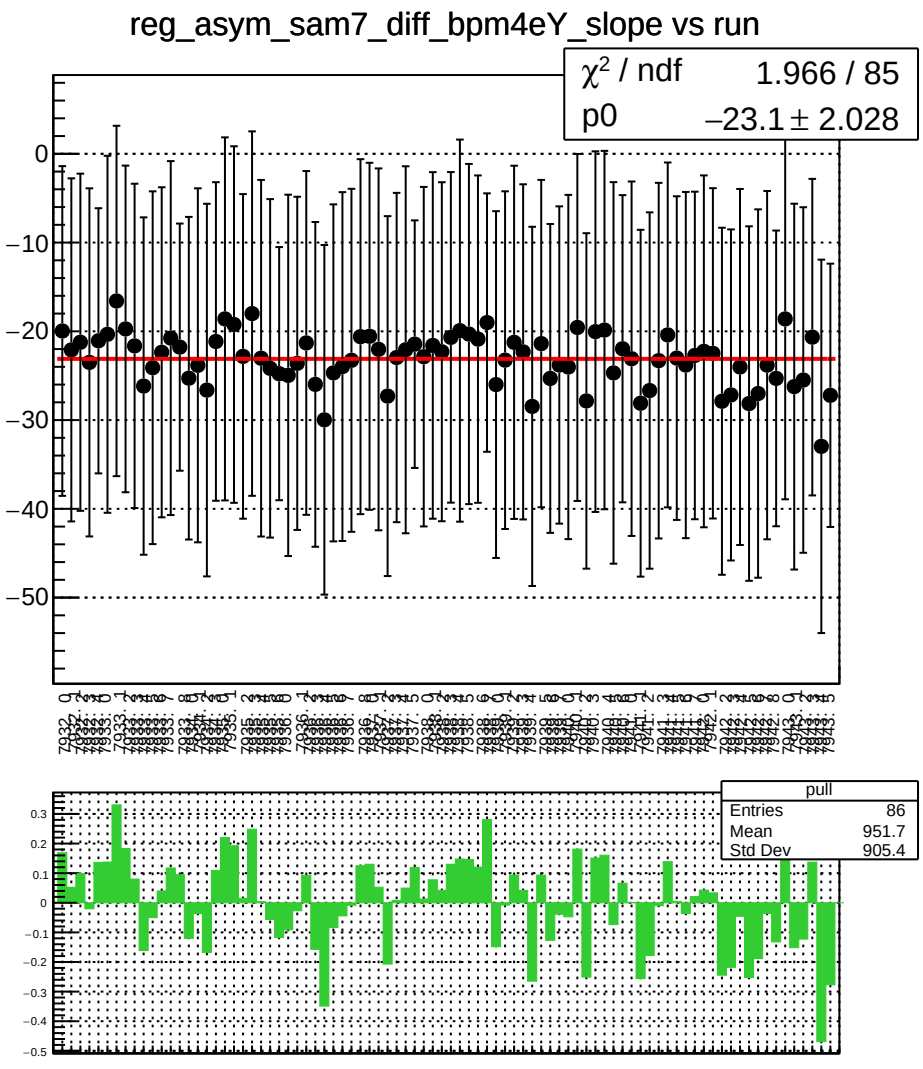

pull1D
Entries 86
Mean −0.003869
Std Dev 0.1711

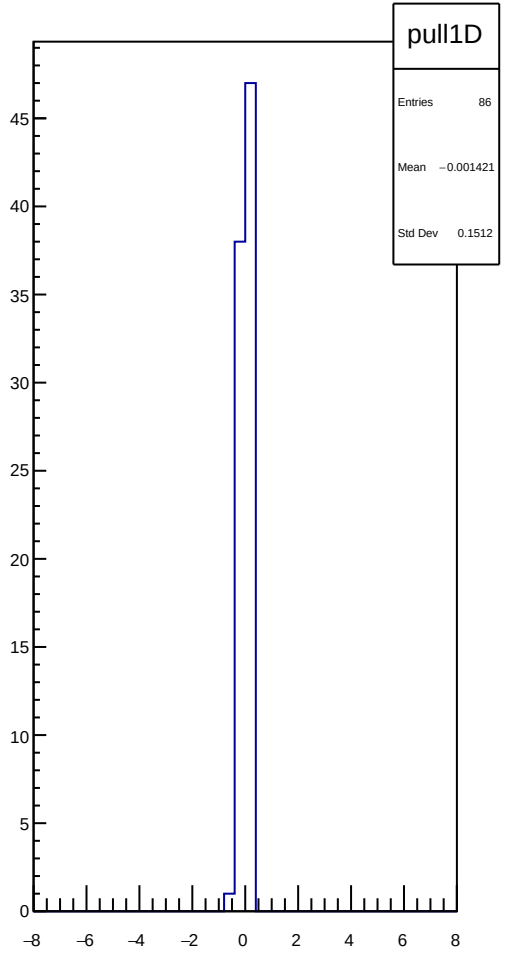

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 4.958 / 85
p0 −1.525 ± 1.69
pull
Entries 86
Mean −107.2
Std Dev 147.2

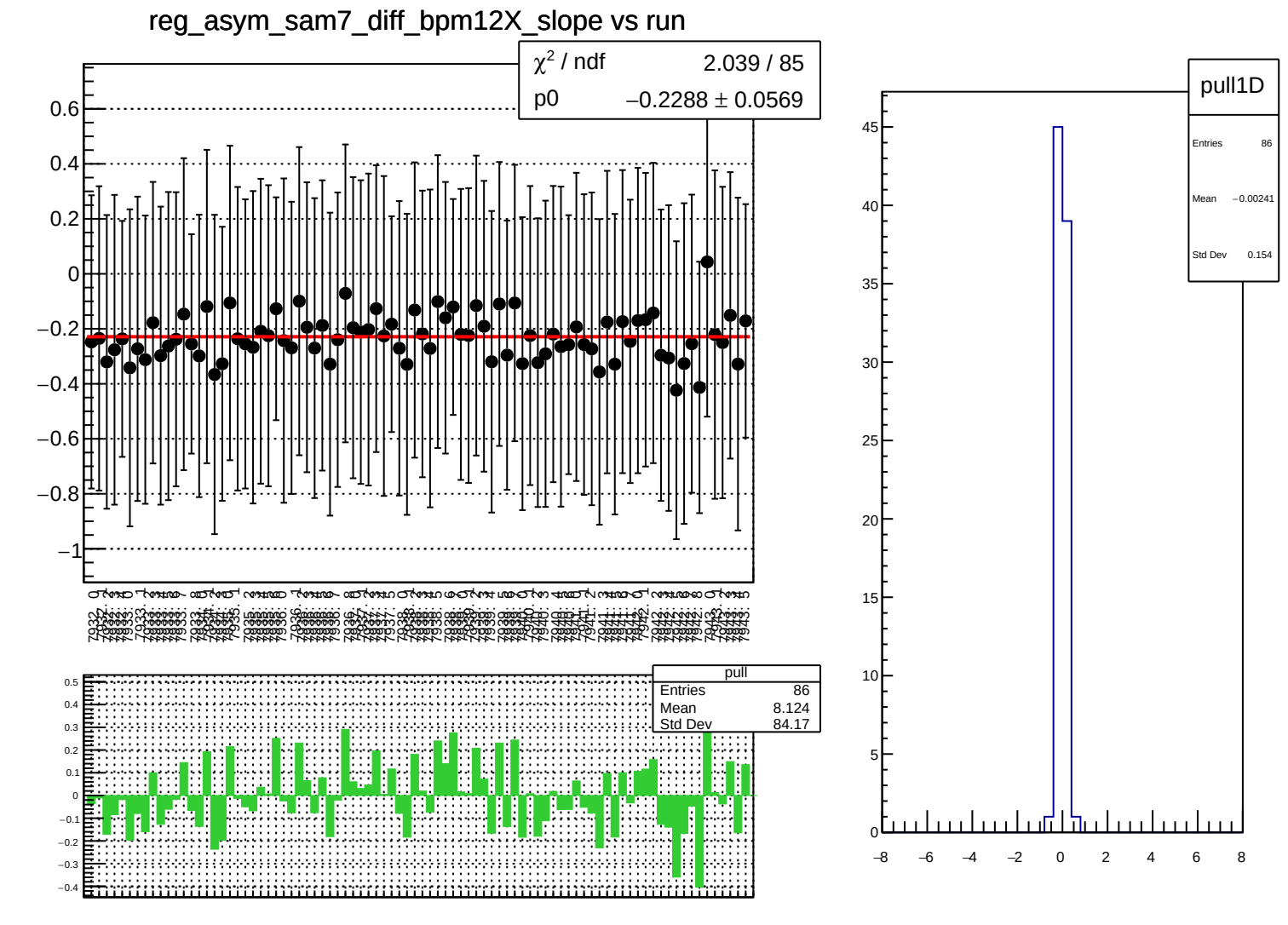

pull1D
Entries 86
Mean −0.01064
Std Dev 0.2399

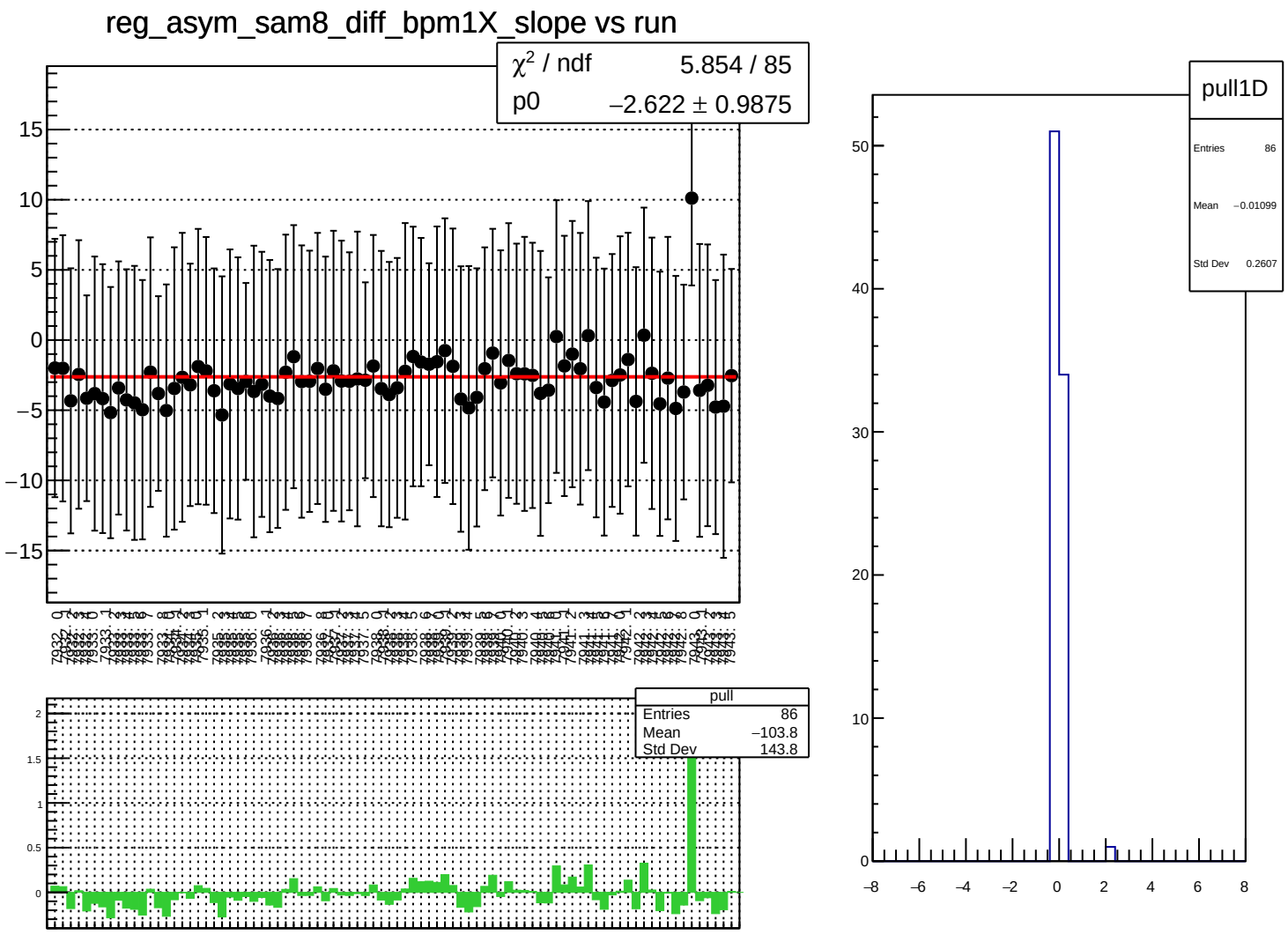

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 1.988 / 85
p0 17.67 ± 1.759
pull
Entries 86
Mean 928
Std Dev 880.8
pull1D
Entries 86
Mean 0.001497
Std Dev 0.152

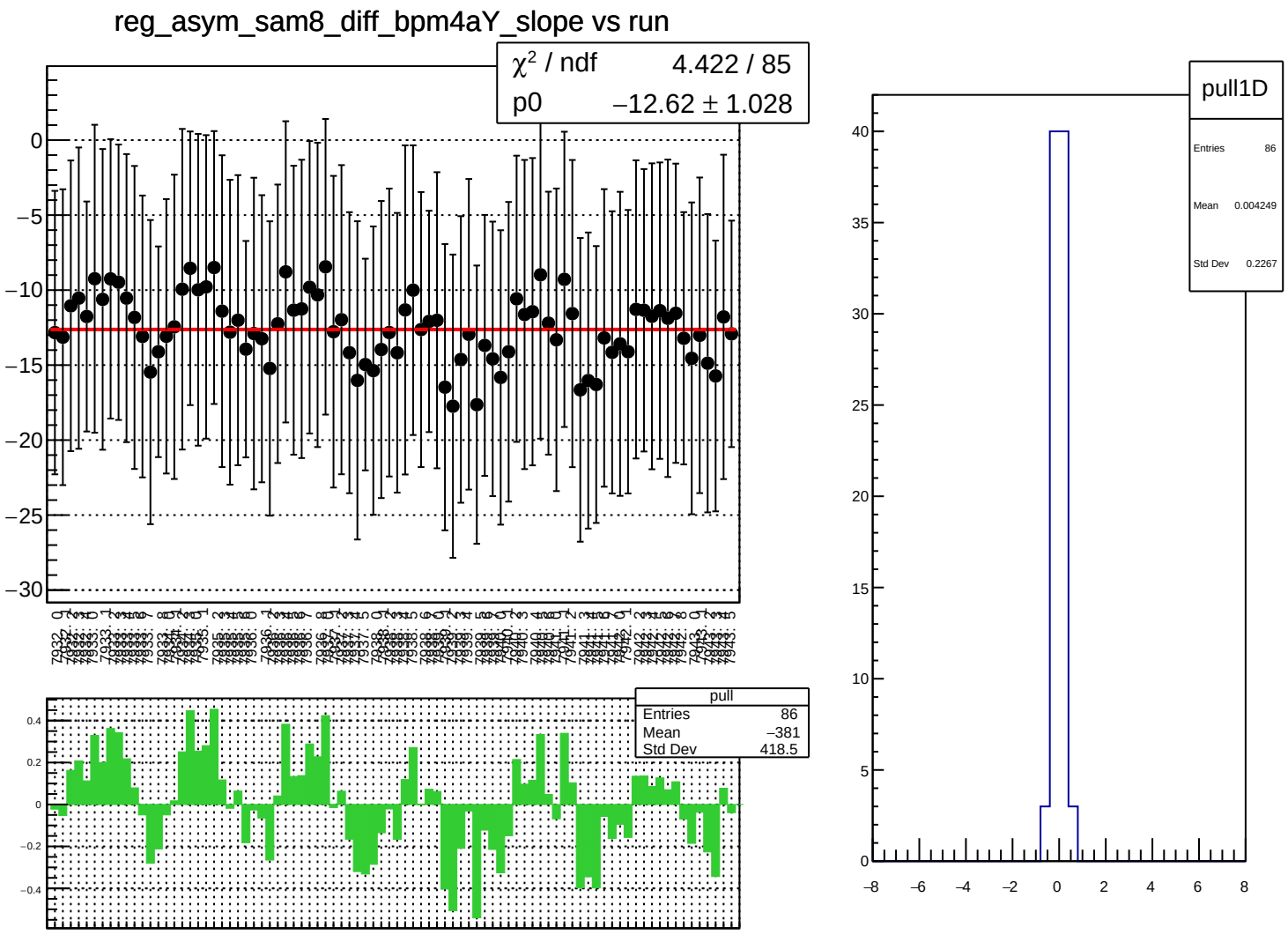

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 4.65 / 85
p0 −40.27 ± 1.52
pull
Entries 86
Mean −36.44
Std Dev 71.06
pull1D
Entries 86
Mean 0.01076
Std Dev 0.2323

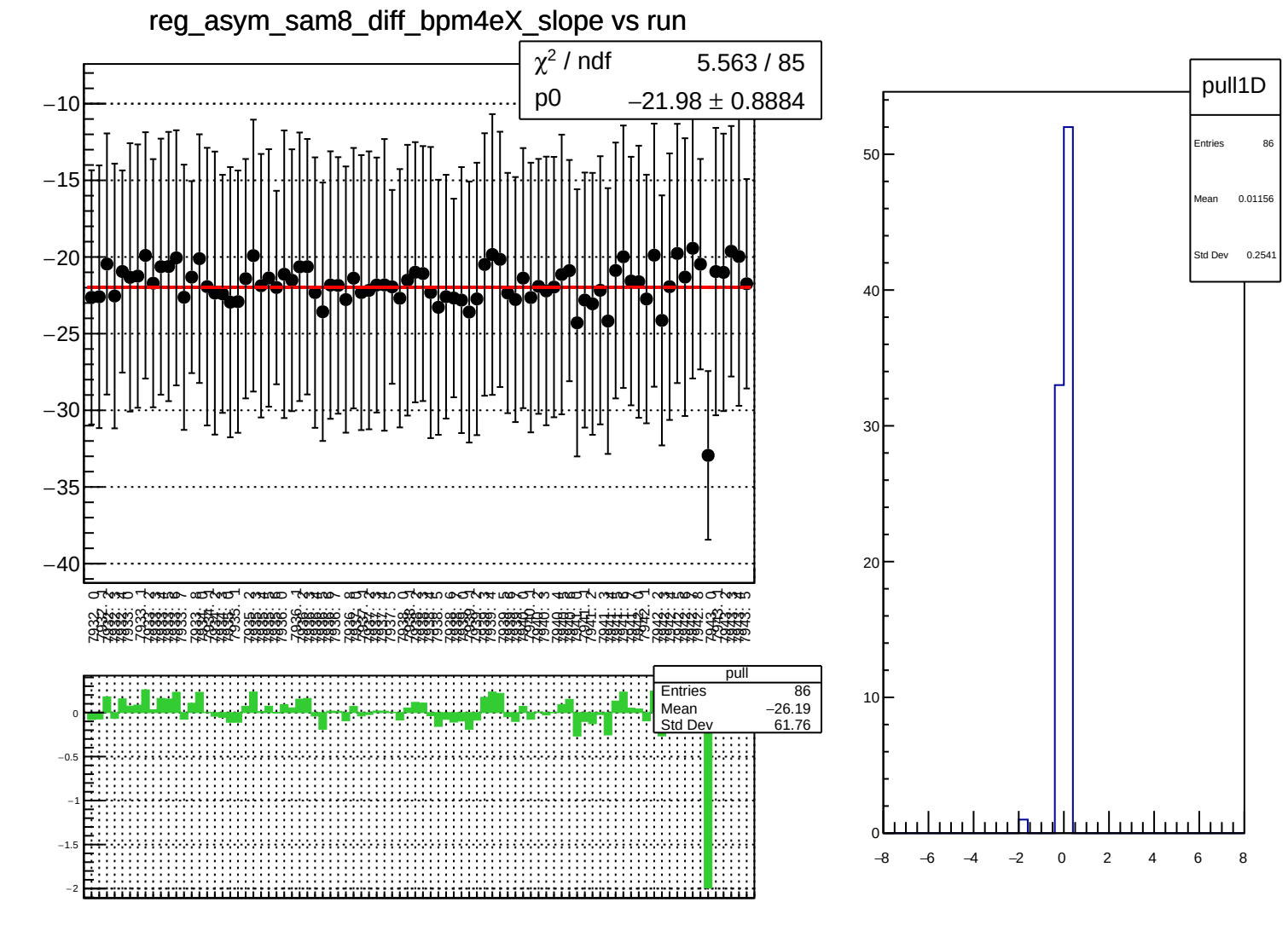

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 1.966 / 85
p0 −23.1 ± 2.028
pull
Entries 86
Mean 951.7
Std Dev 905.4

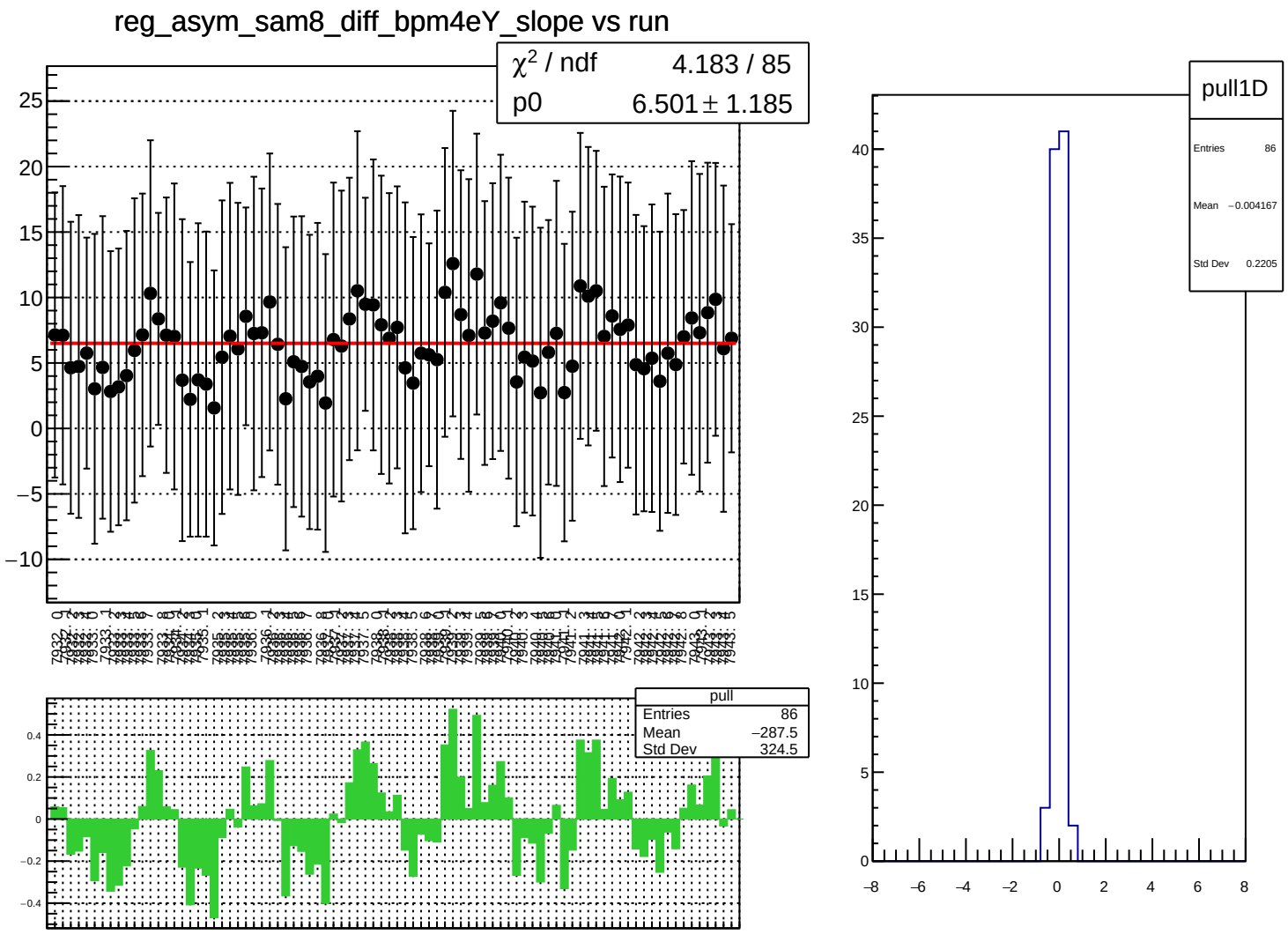

pull1D
Entries 86
Mean −0.001421
Std Dev 0.1512

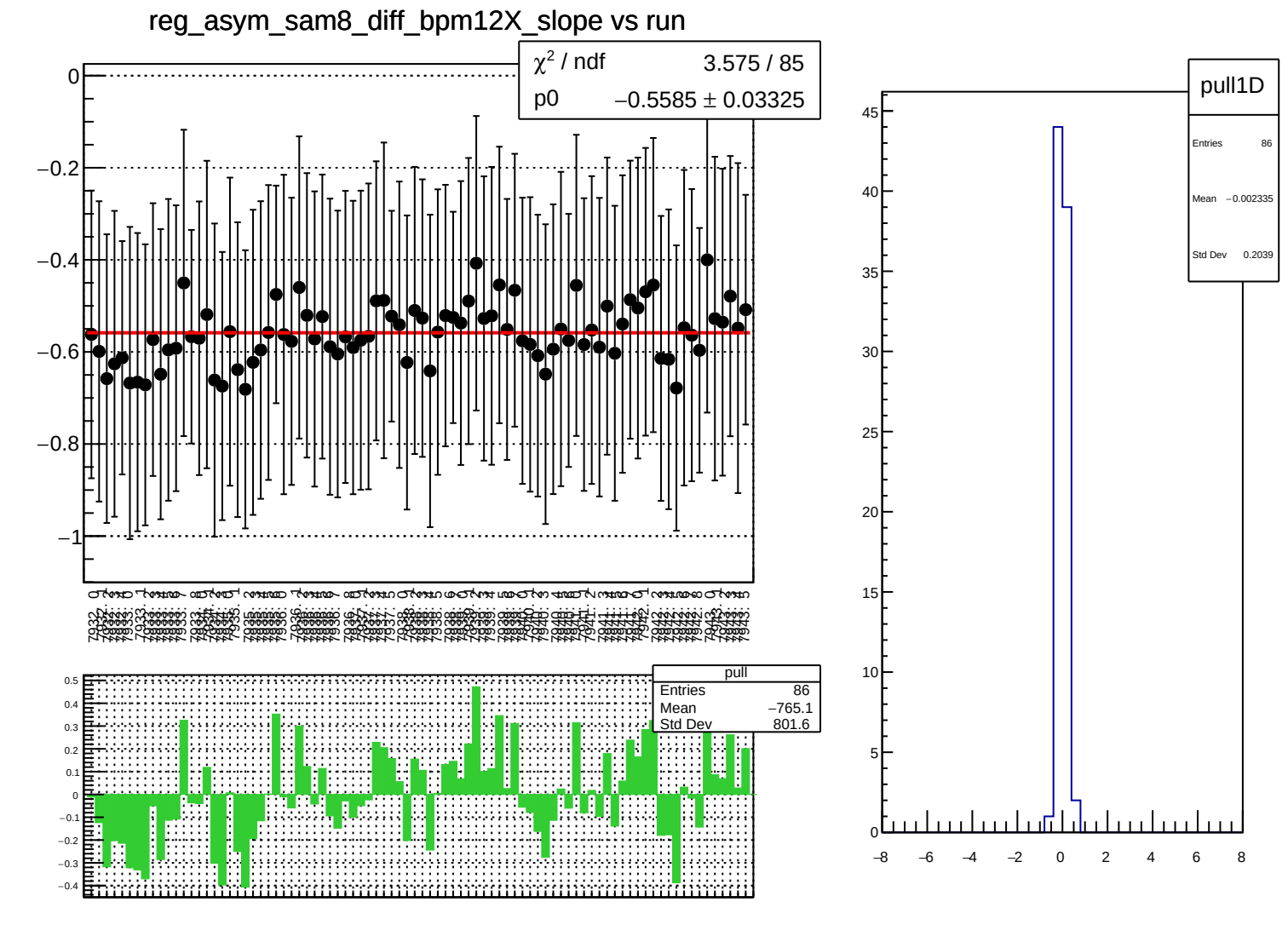

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 2.039 / 85
p0 −0.2288 ± 0.0569
pull
Entries 86
Mean 8.124
Std Dev 84.17
pull1D
Entries 86
Mean −0.00241
Std Dev 0.154

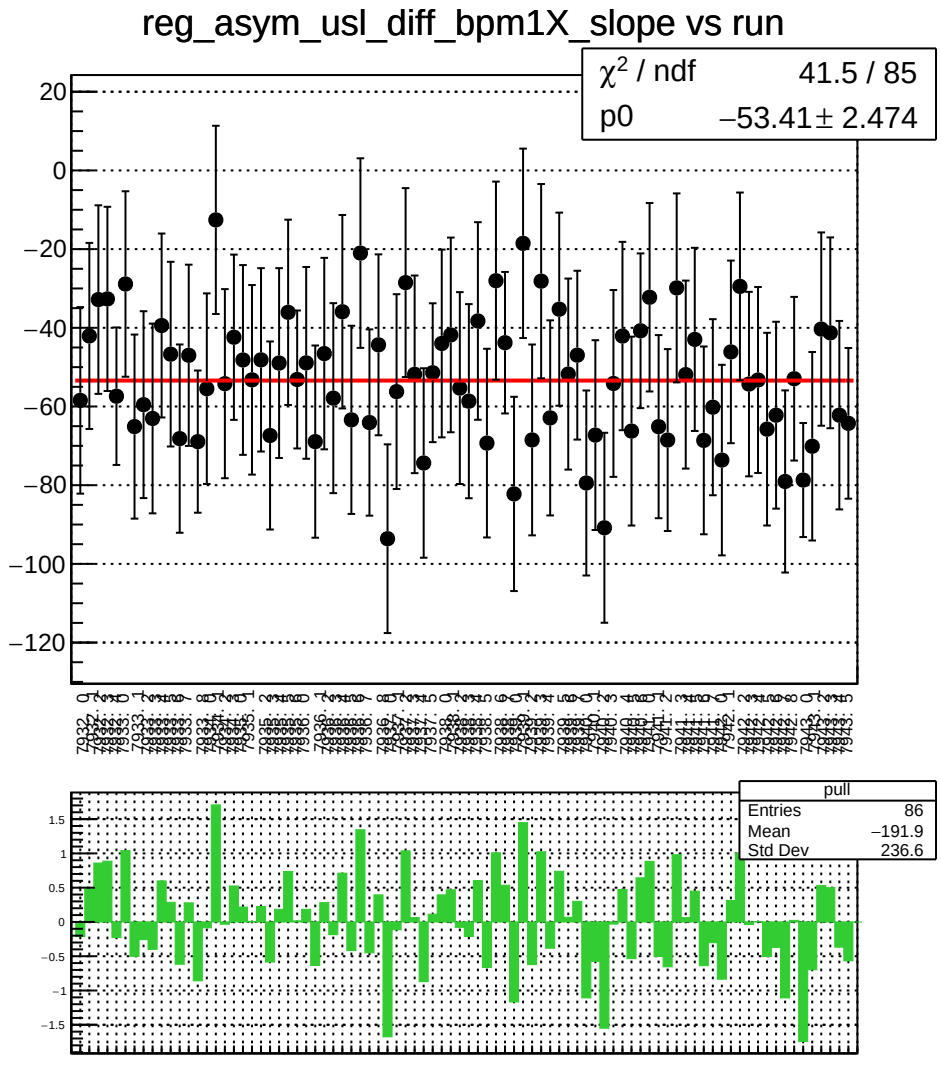

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 5.854 / 85
p0 −2.622 ± 0.9875
pull
Entries 86
Mean −103.8
Std Dev 143.8
pull1D
Entries 86
Mean −0.01099
Std Dev 0.2607

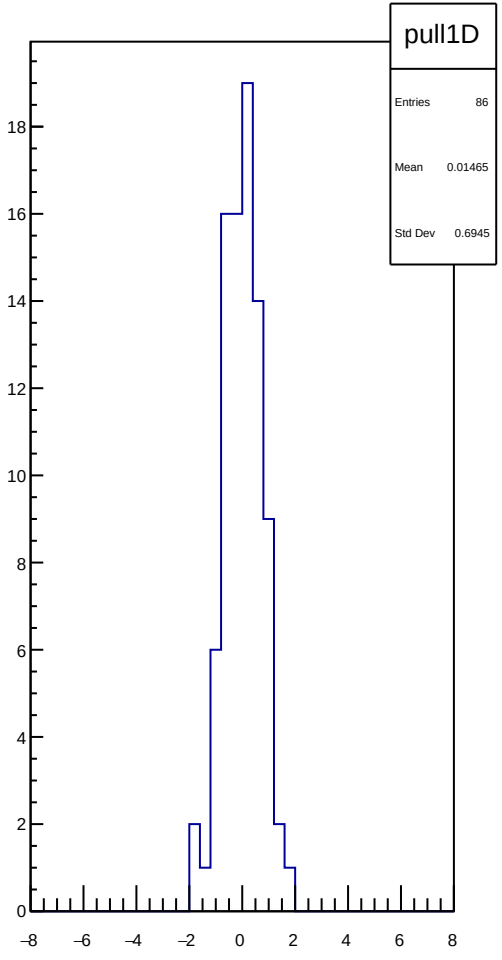

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 4.422 / 85
p0 −12.62 ± 1.028
pull
Entries 86
Mean −381
Std Dev 418.5
pull1D
Entries 86
Mean 0.004249
Std Dev 0.2267

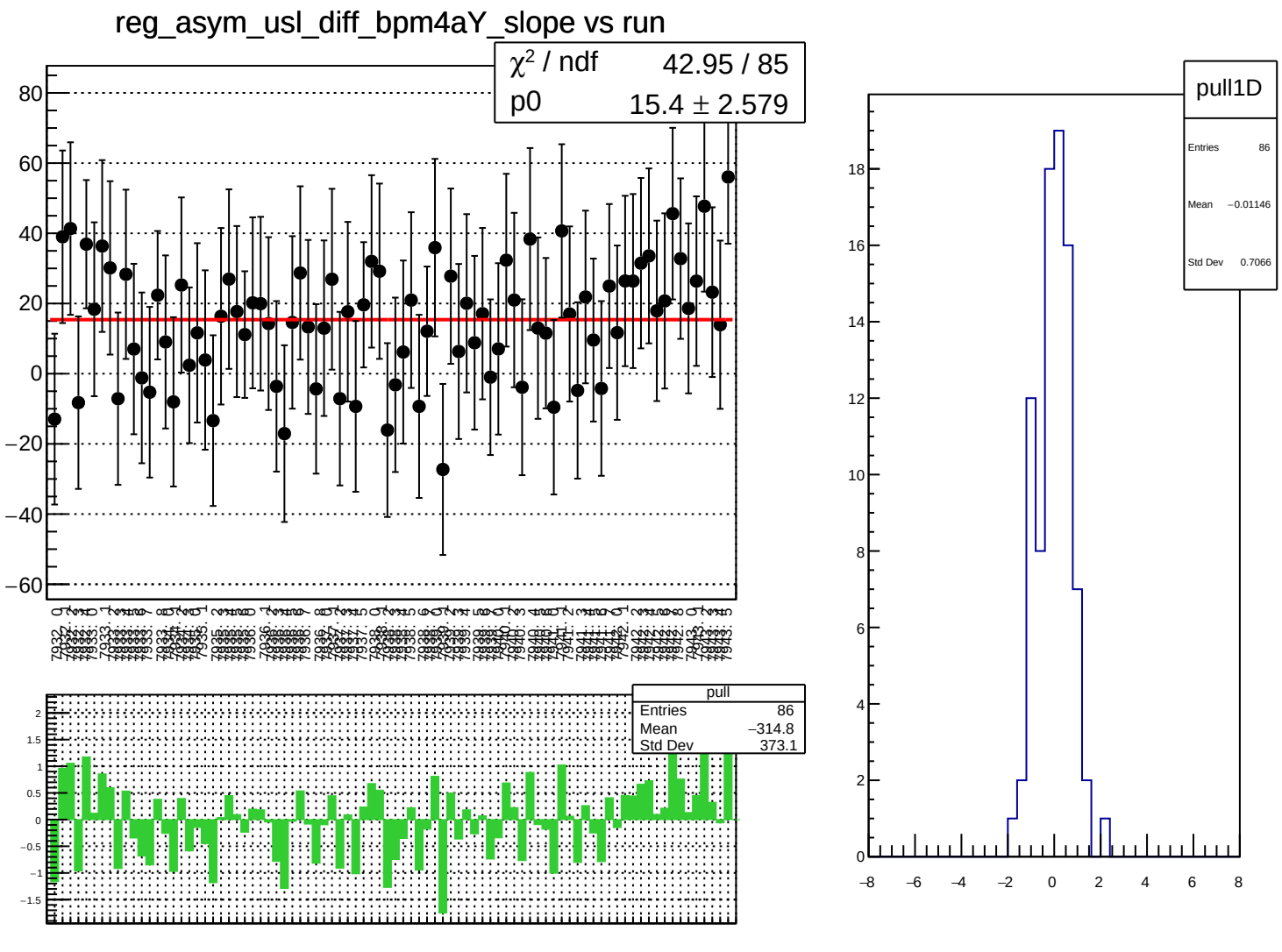

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 5.563 / 85
p0 −21.98 ± 0.8884
pull
Entries 86
Mean −26.19
Std Dev 61.76
pull1D
Entries 86
Mean 0.01156
Std Dev 0.2541

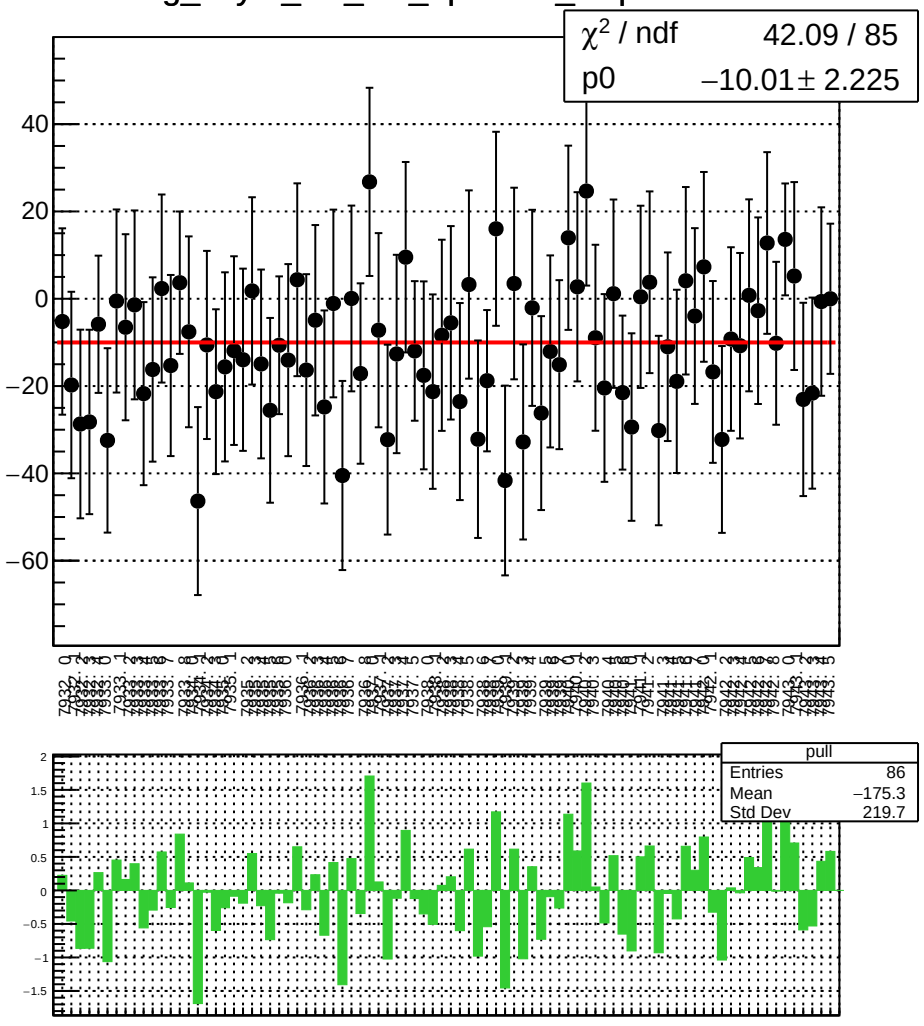

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 4.183 / 85
p0 6.501 ± 1.185
pull
Entries 86
Mean −287.5
Std Dev 324.5
pull1D
Entries 86
Mean −0.004167
Std Dev 0.2205

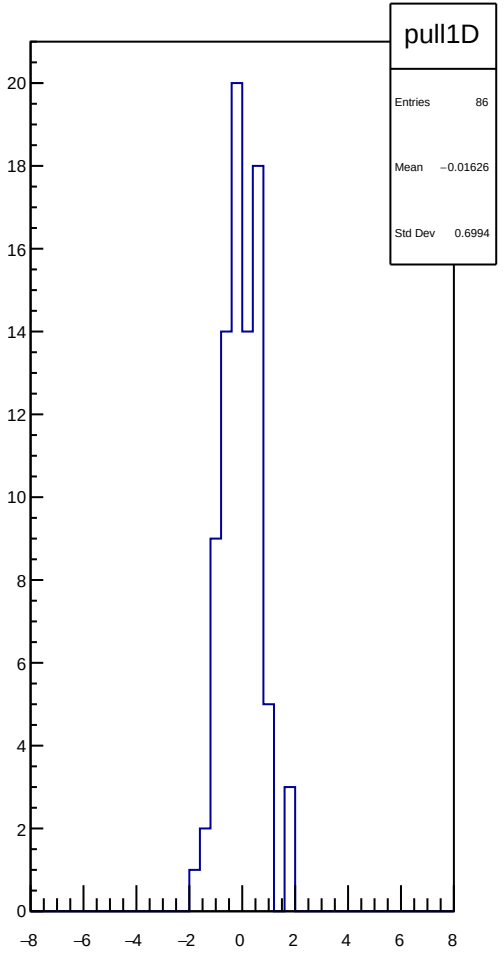

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 3.575 / 85
p0 −0.5585 ± 0.03325
pull
Entries 86
Mean −765.1
Std Dev 801.6
pull1D
Entries 86
Mean −0.002335
Std Dev 0.2039

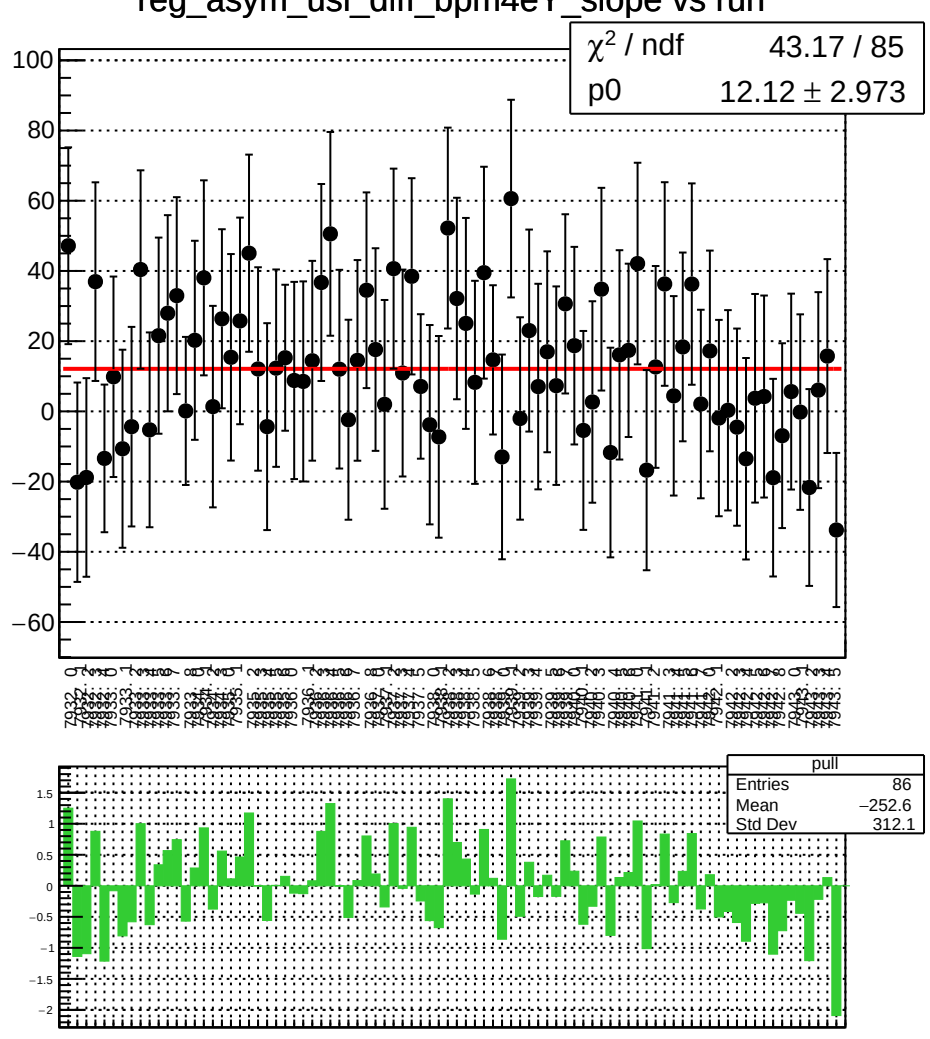

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 41.5 / 85
p0 −53.41 ± 2.474
pull
Entries 86
Mean −191.9
Std Dev 236.6

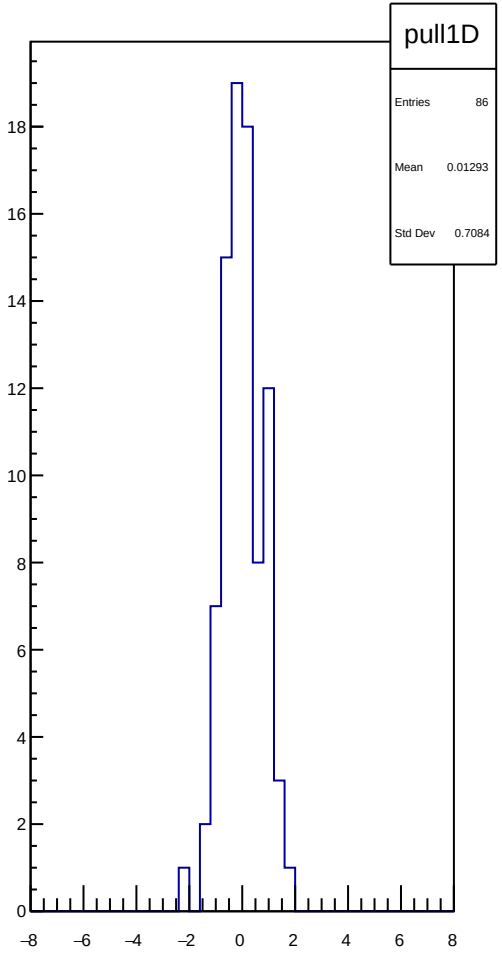

pull1D
Entries 86
Mean 0.01465
Std Dev 0.6945

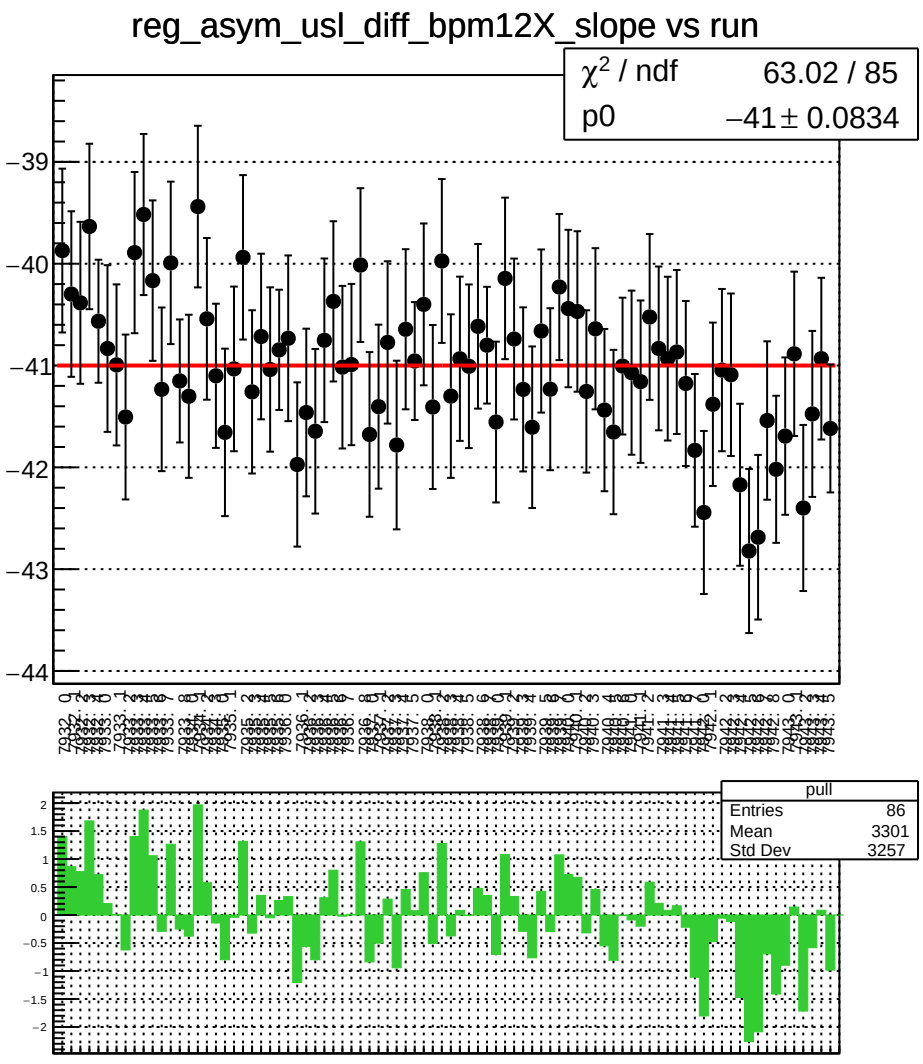

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 42.95 / 85
p0 15.4 ± 2.579
pull
Entries 86
Mean −314.8
Std Dev 373.1
pull1D
Entries 86
Mean −0.01146
Std Dev 0.7066

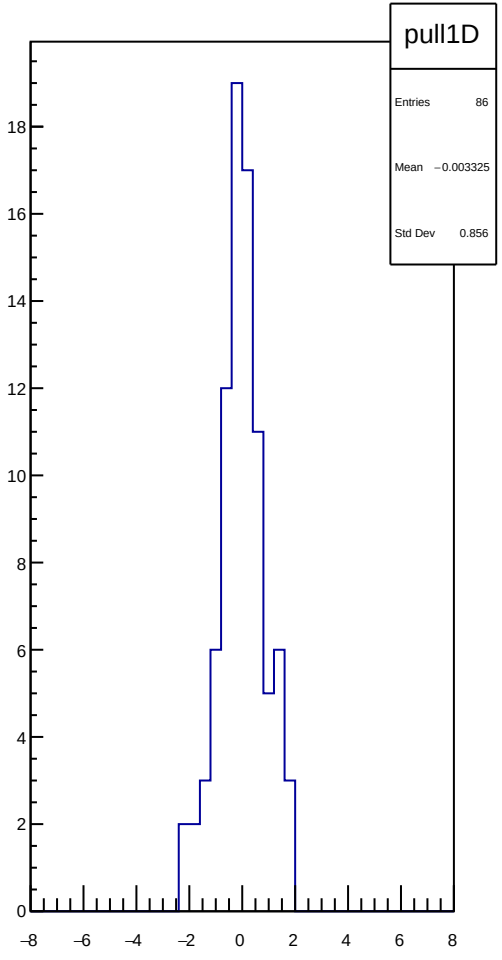

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 42.09 / 85
p0 −10.01± 2.225
pull
Entries 86
Mean −175.3
Std Dev 219.7

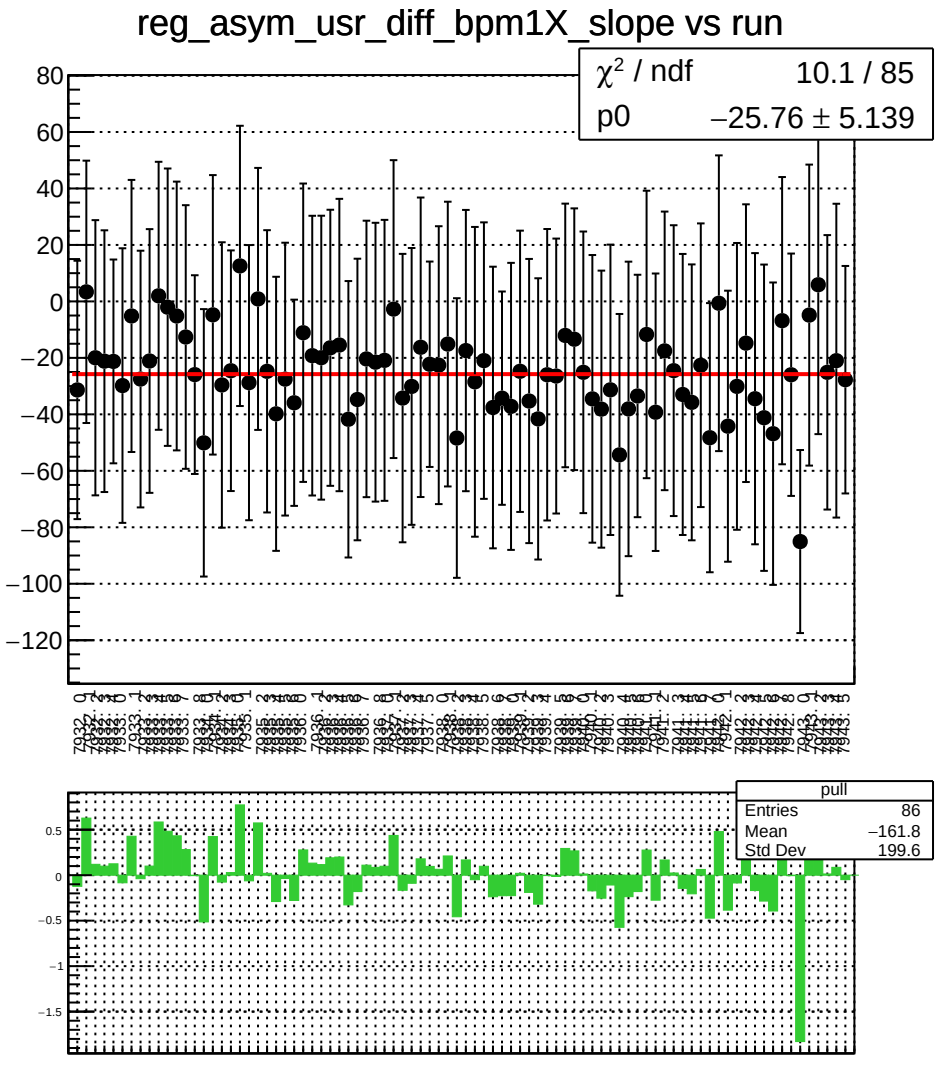

pull1D
Entries 86
Mean −0.01626
Std Dev 0.6994

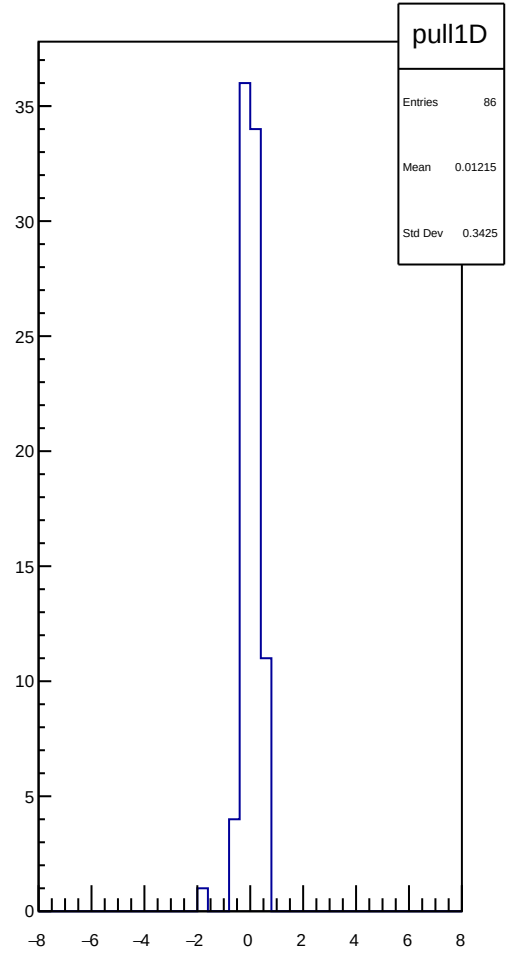

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 43.17 / 85
p0 12.12 ± 2.973
pull
Entries 86
Mean −252.6
Std Dev 312.1

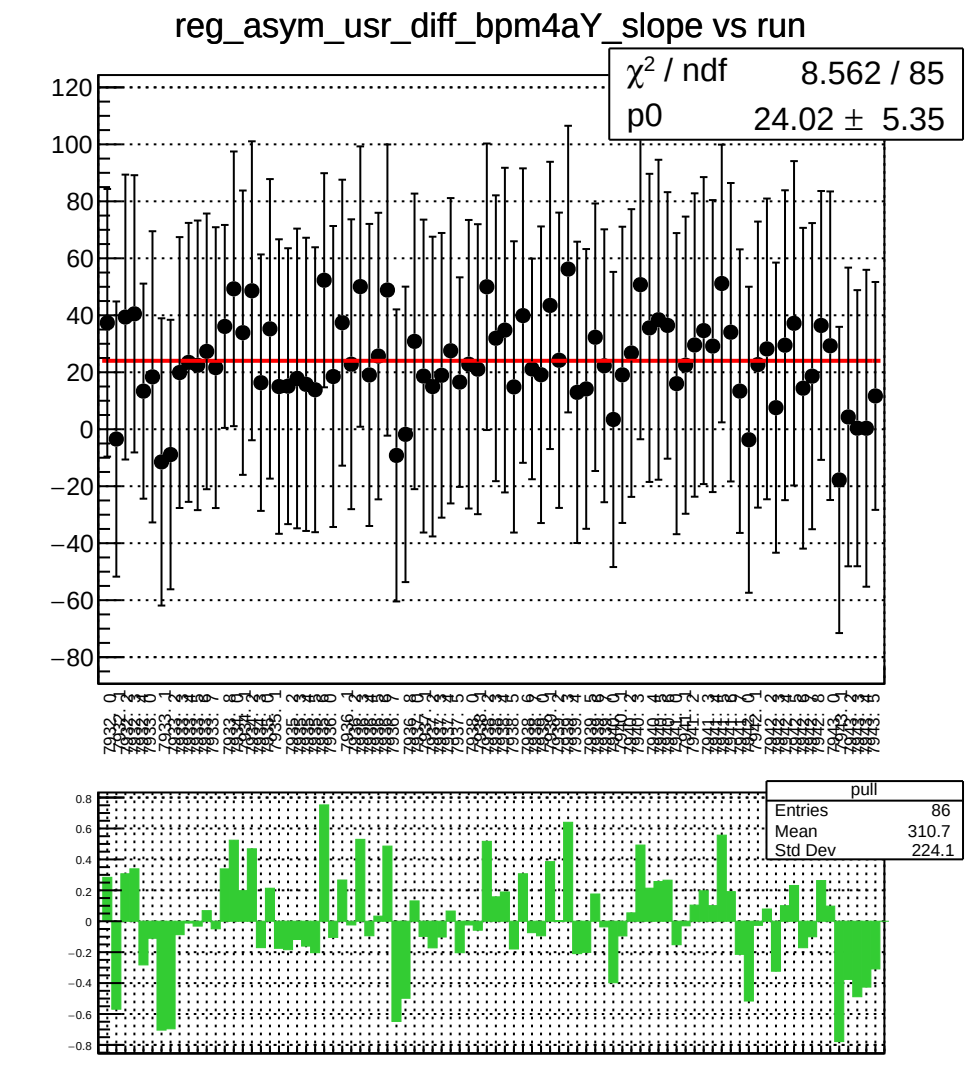

pull1D
Entries 86
Mean 0.01293
Std Dev 0.7084

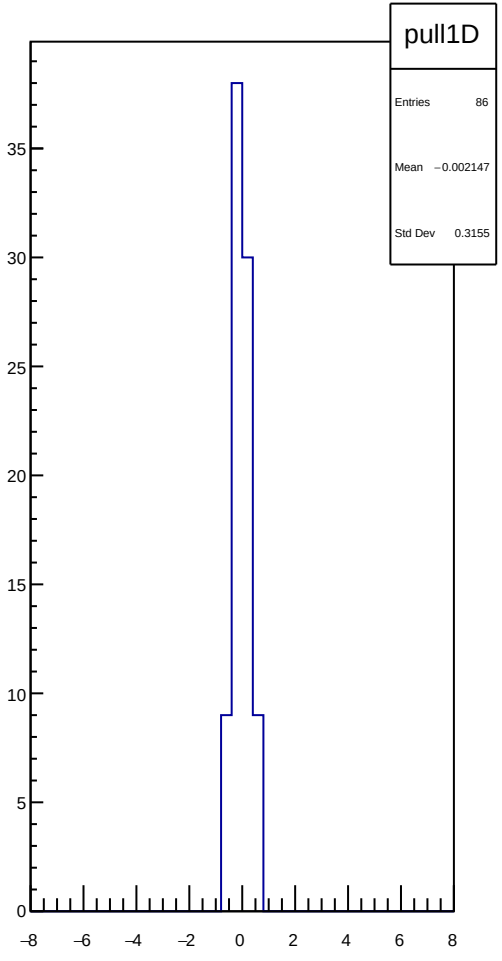

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 63.02 / 85
p0 −41 ± 0.0834
pull
Entries 86
Mean 3301
Std Dev 3257

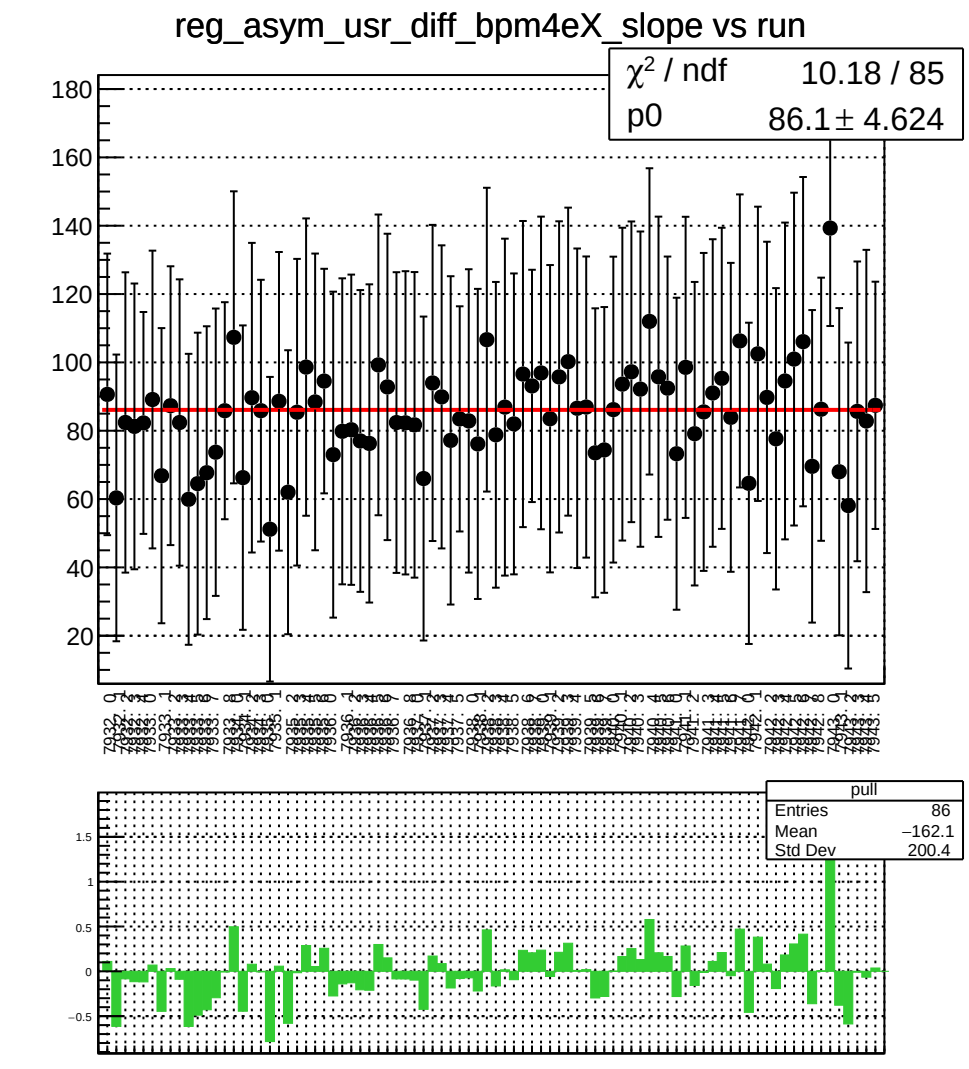

pull1D
Entries 86
Mean −0.003325
Std Dev 0.856

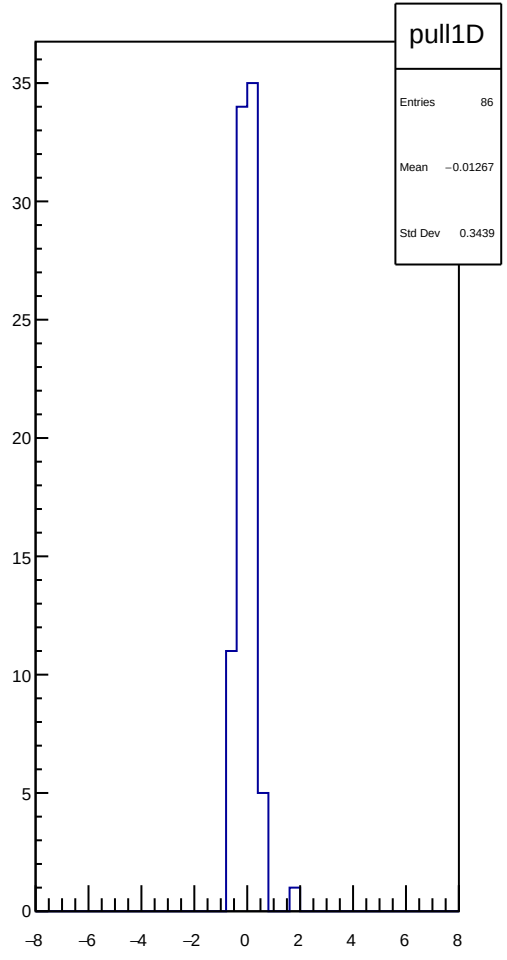

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 10.1 / 85
p0 −25.76 ± 5.139
pull
Entries 86
Mean −161.8
Std Dev 199.6

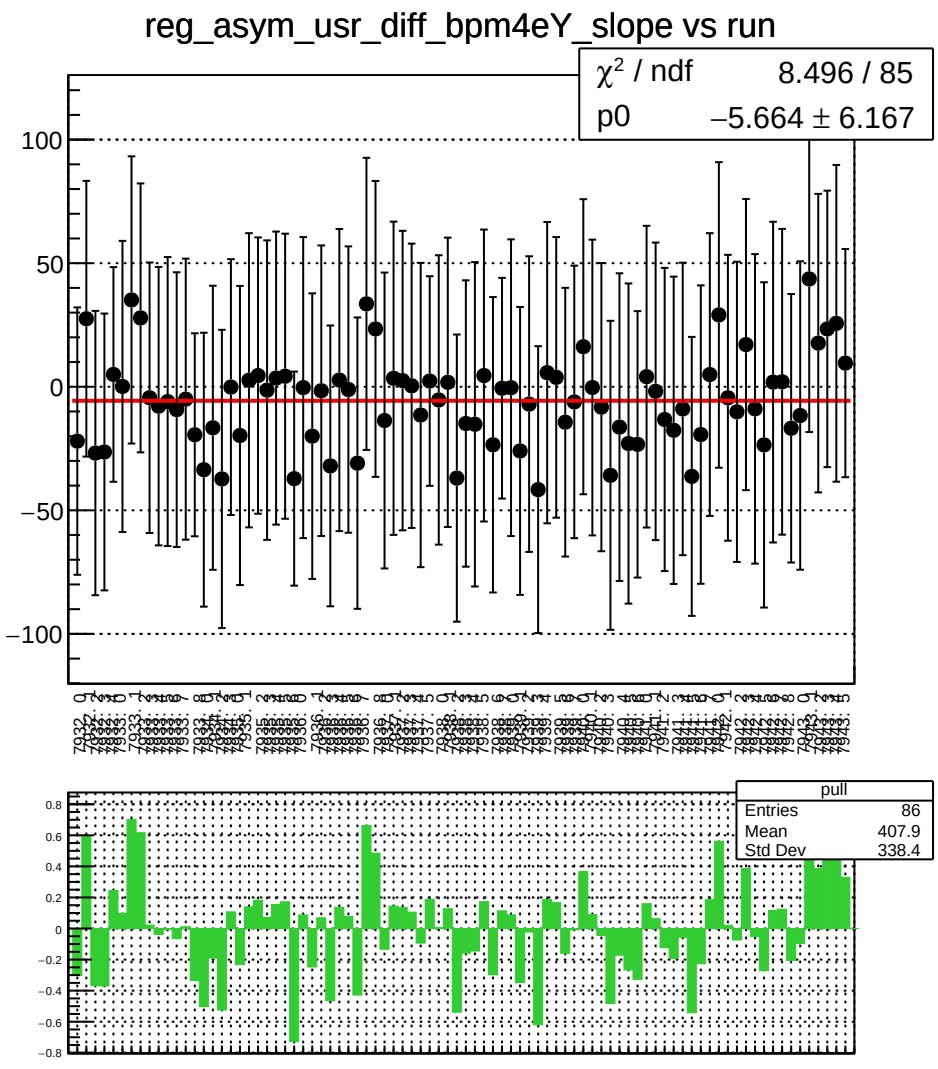

pull1D
Entries 86
Mean 0.01215
Std Dev 0.3425

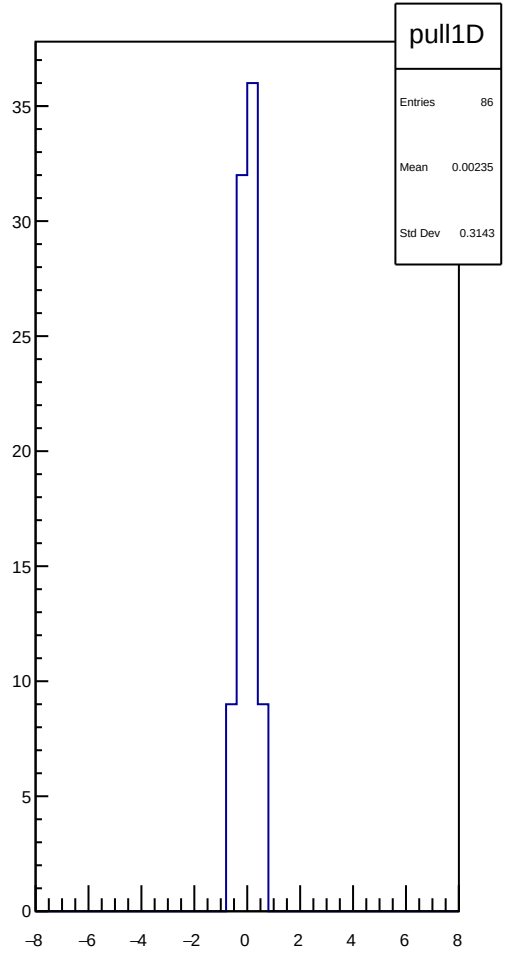

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 8.562 / 85
p0 24.02 ± 5.35
pull
Entries 86
Mean 310.7
Std Dev 224.1

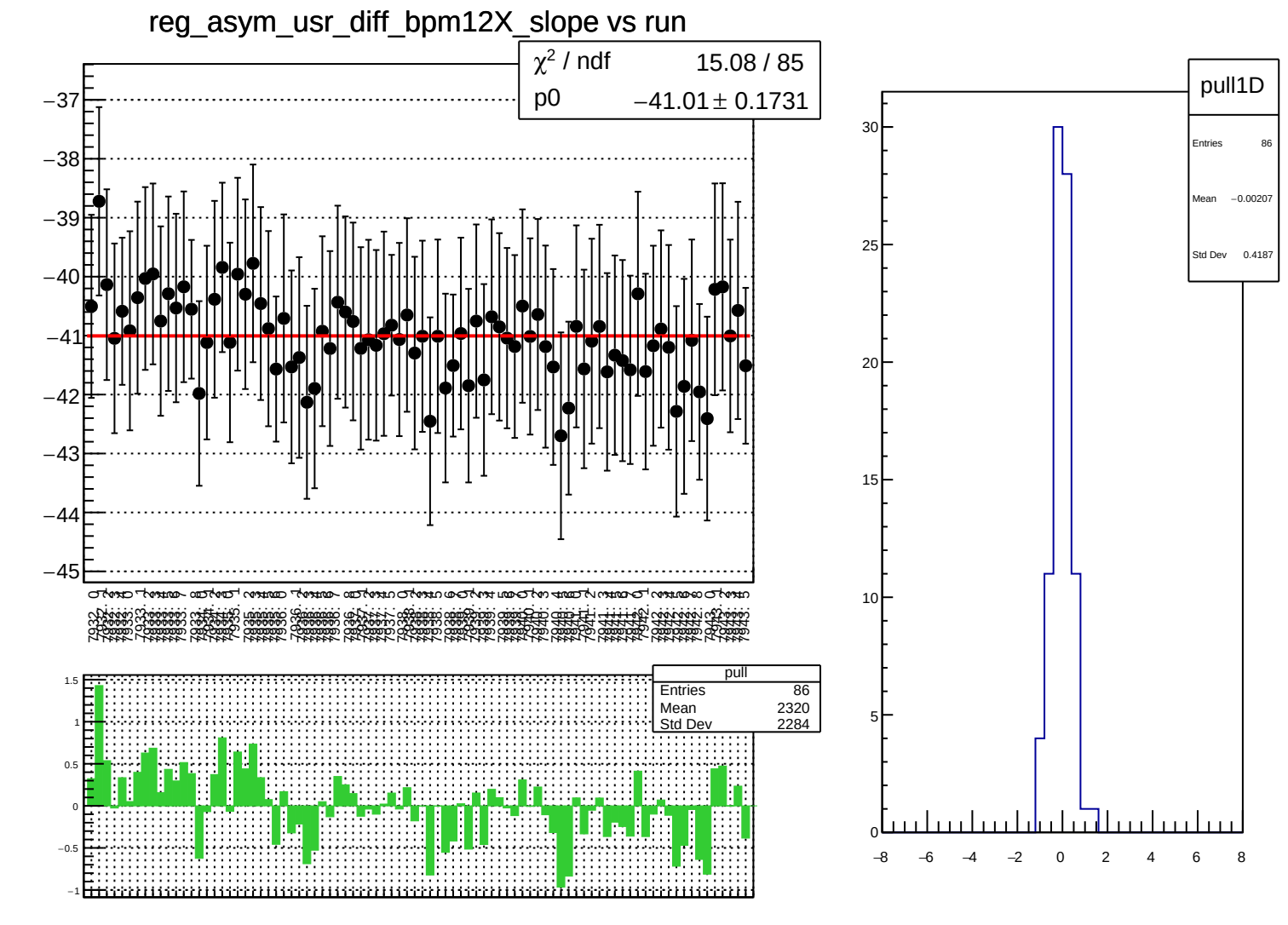

pull1D
Entries 86
Mean −0.002147
Std Dev 0.3155

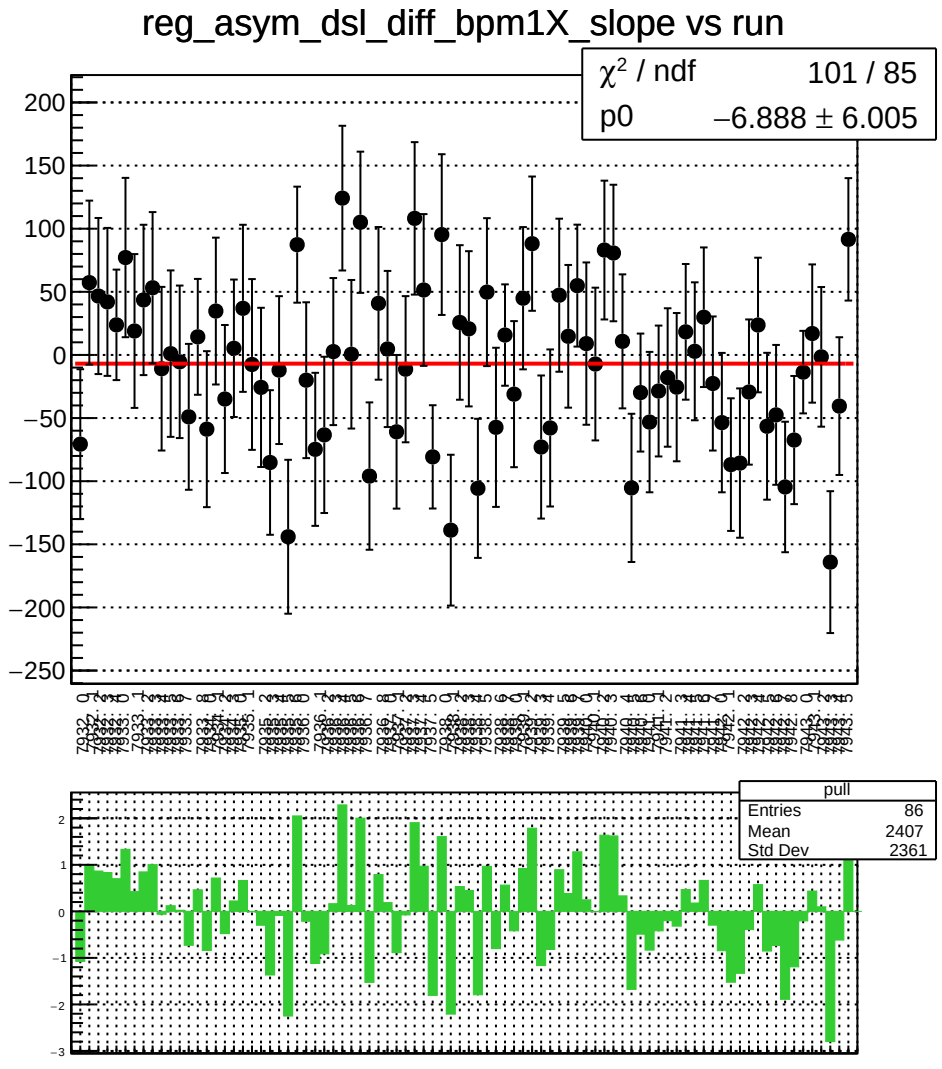

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 10.18 / 85
p0 86.1 ± 4.624
pull
Entries 86
Mean −162.1
Std Dev 200.4

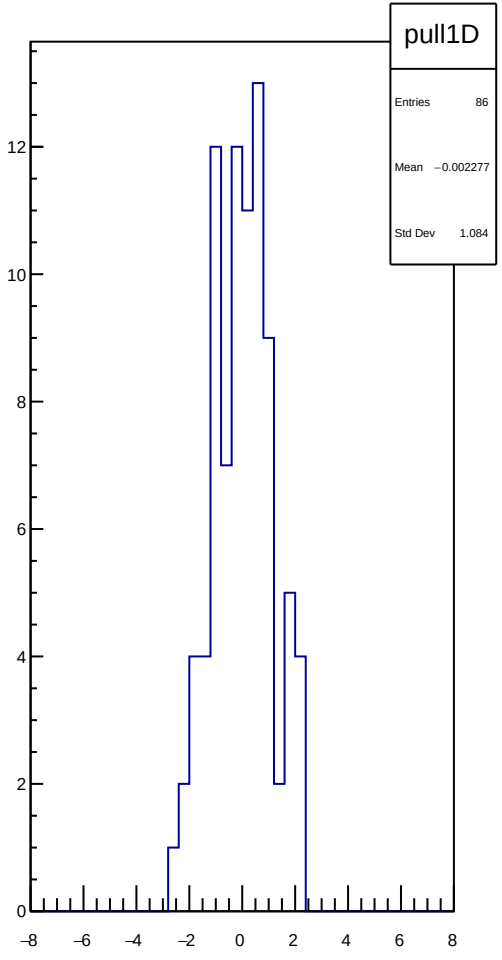

pull1D
Entries 86
Mean −0.01267
Std Dev 0.3439

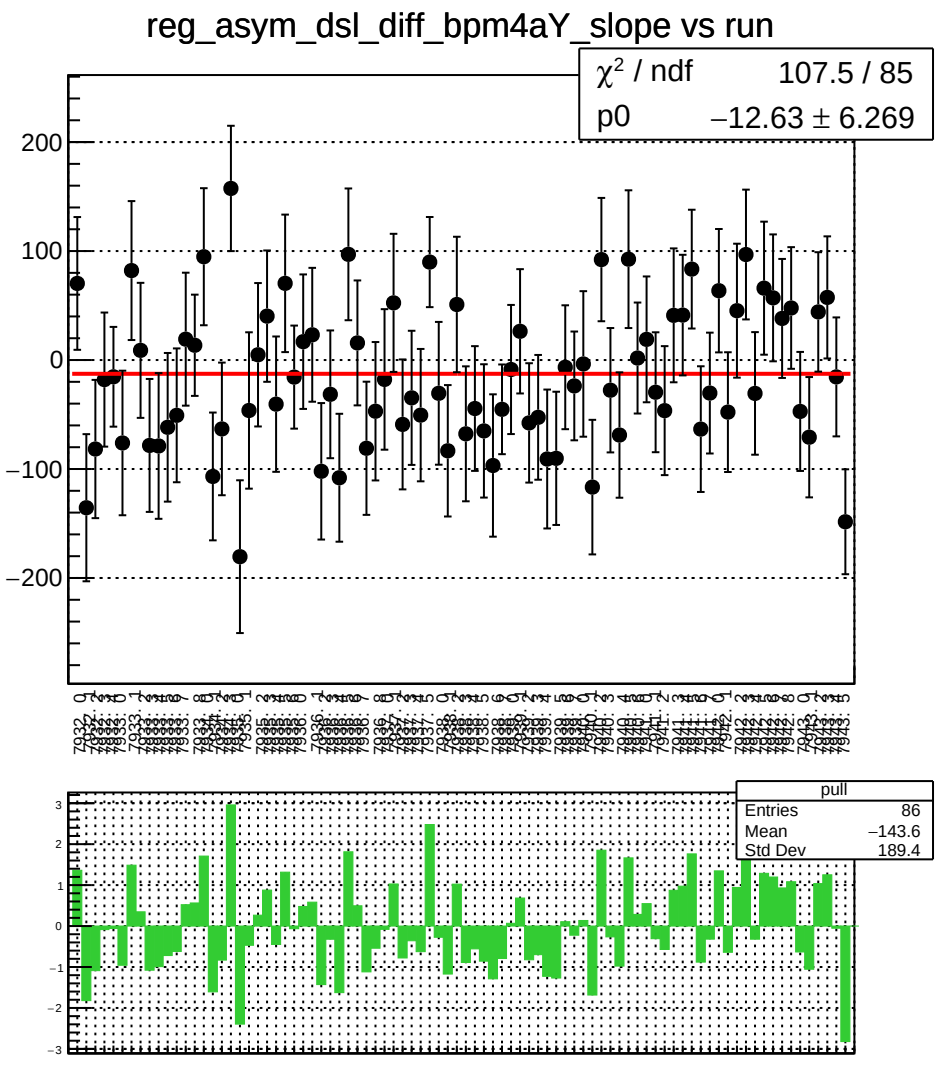

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 8.496 / 85
p0 −5.664 ± 6.167
100
50
0
−50
−100
pull
Entries 86
Mean 407.9
Std Dev 338.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

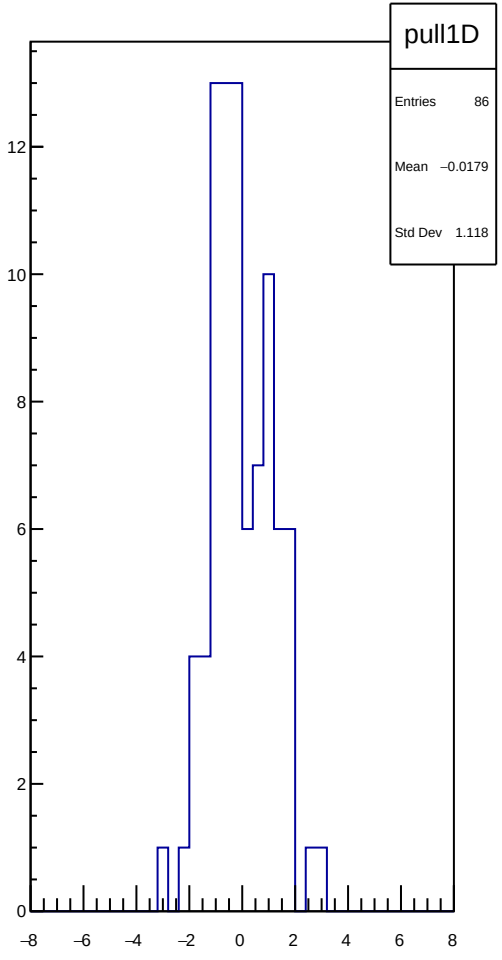

pull1D
Entries 86
Mean 0.00235
Std Dev 0.3143
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

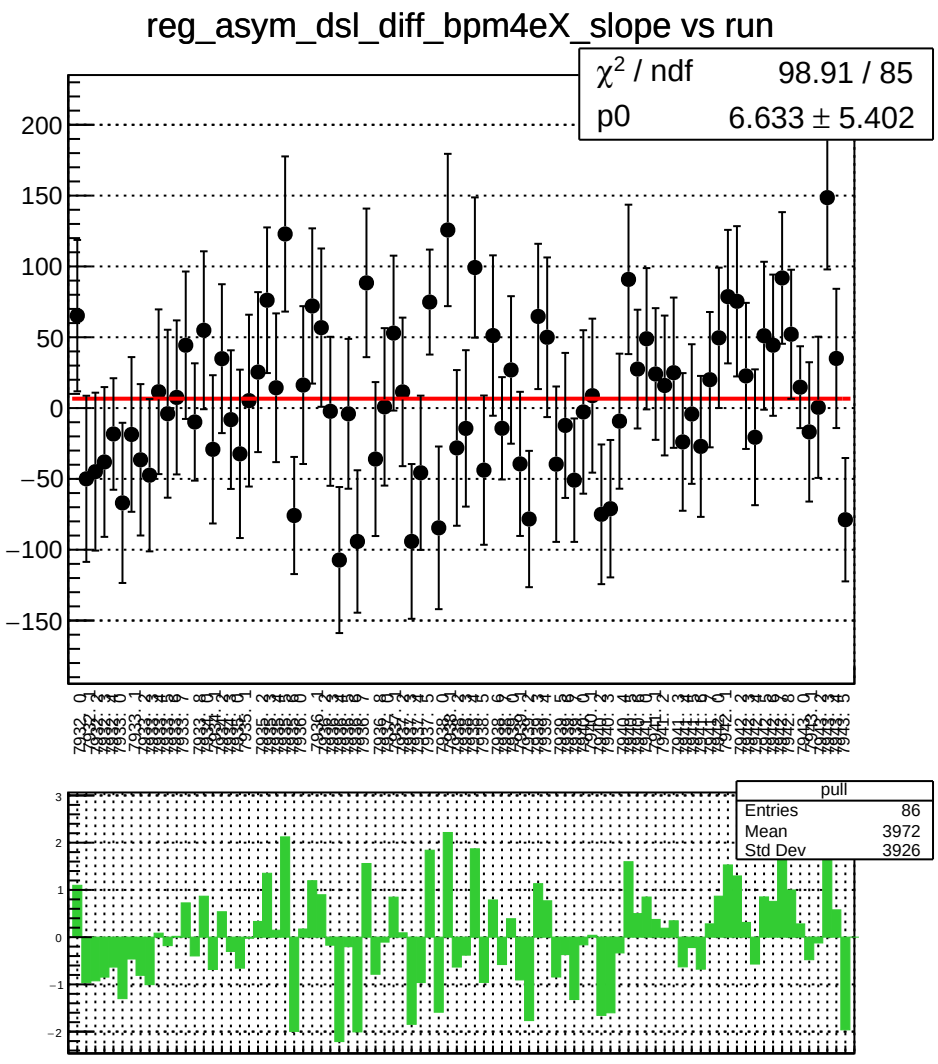

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 15.08 / 85
p0 −41.01 ± 0.1731
pull
Entries 86
Mean 2320
Std Dev 2284
pull1D
Entries 86
Mean −0.00207
Std Dev 0.4187

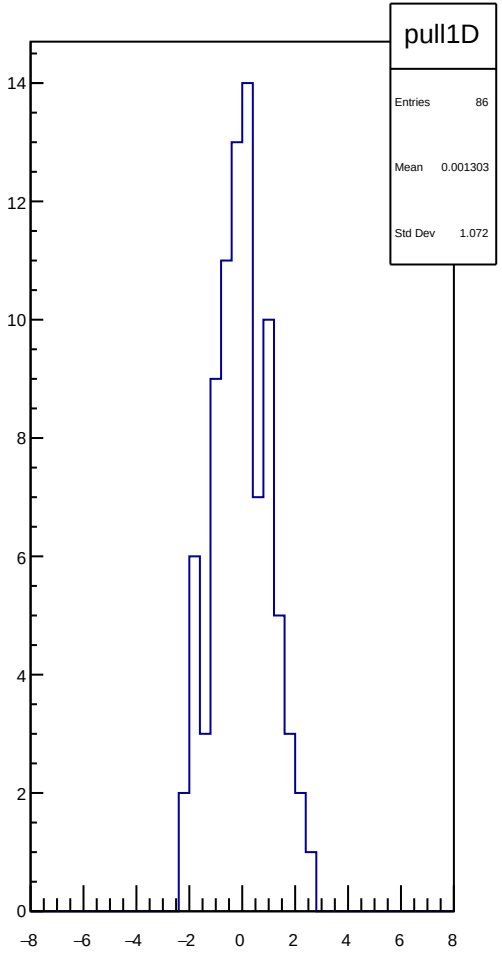

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 101 / 85
p0 −6.888 ± 6.005
pull
Entries 86
Mean 2407
Std Dev 2361

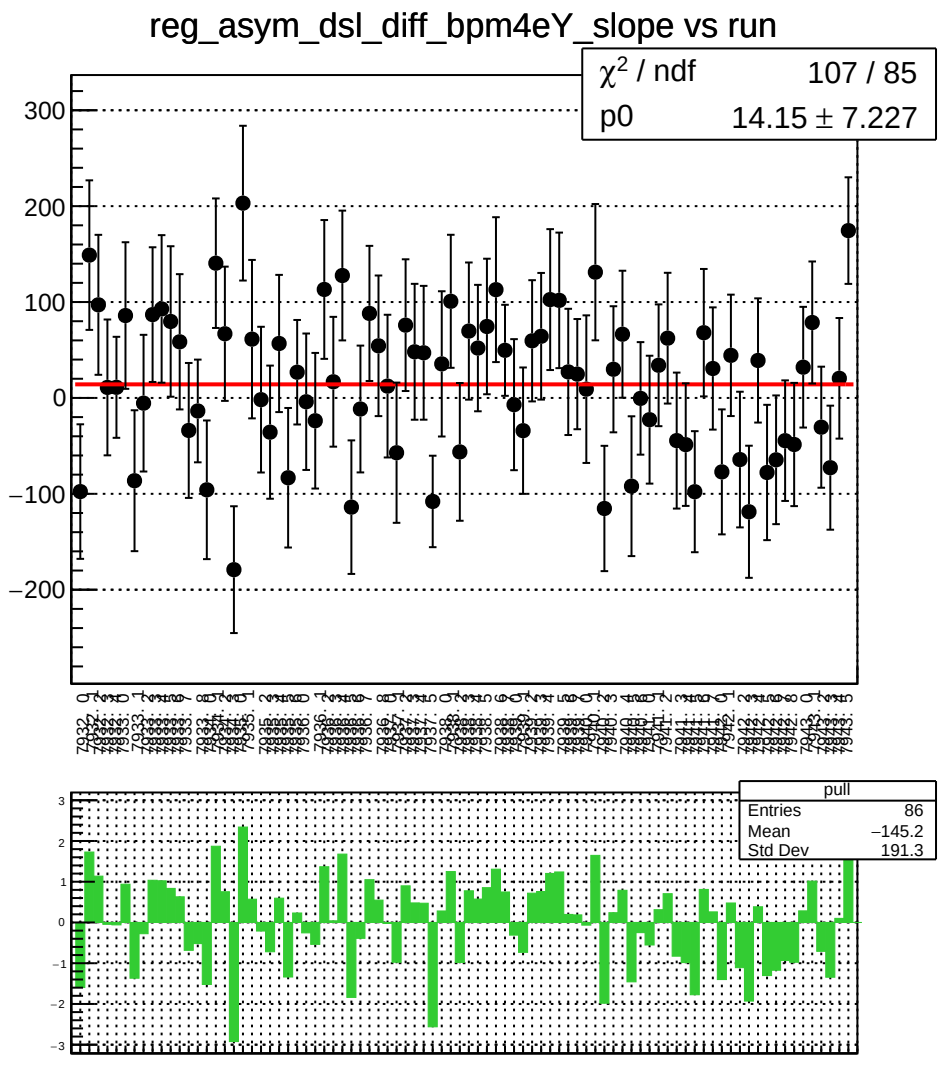

pull1D
Entries 86
Mean −0.002277
Std Dev 1.084

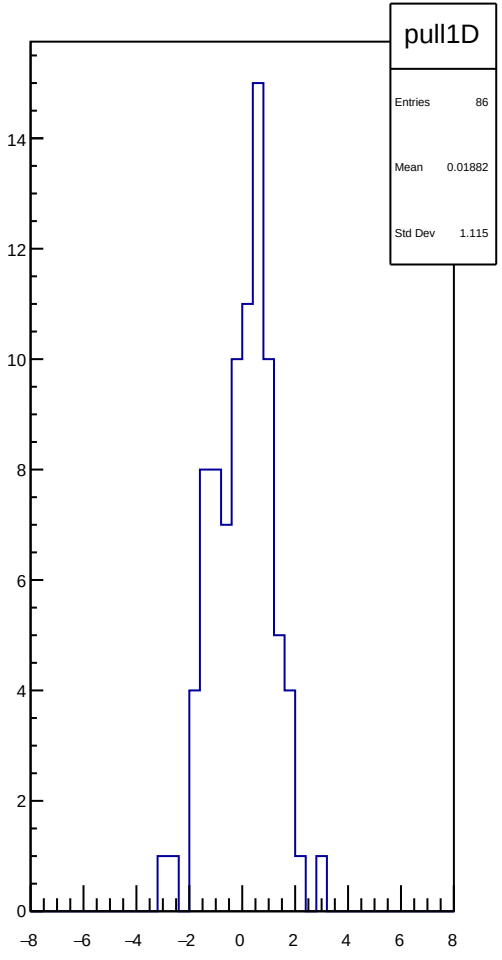

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 107.5 / 85
p0 −12.63 ± 6.269
200
100
0
−100
−200
pull
Entries 86
Mean −143.6
Std Dev 189.4
3
2
1
0
−1
−2
−3

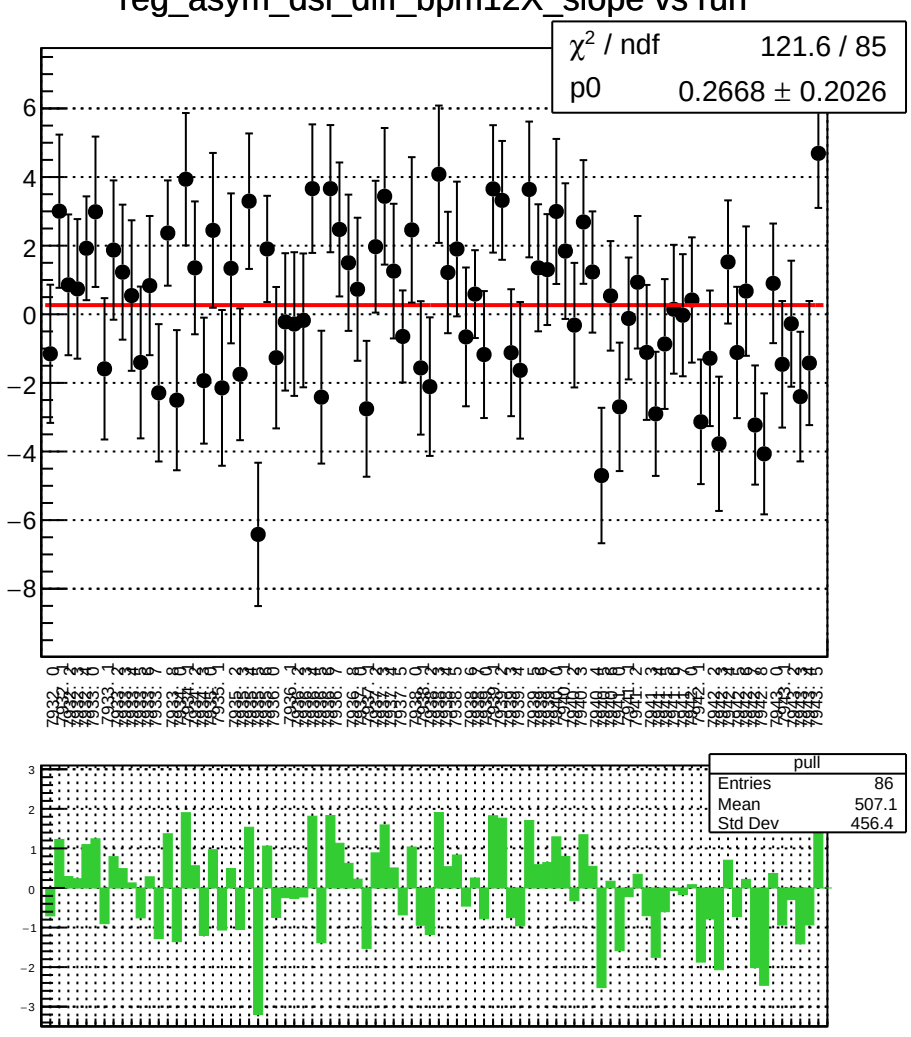

pull1D
Entries 86
Mean −0.0179
Std Dev 1.118
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

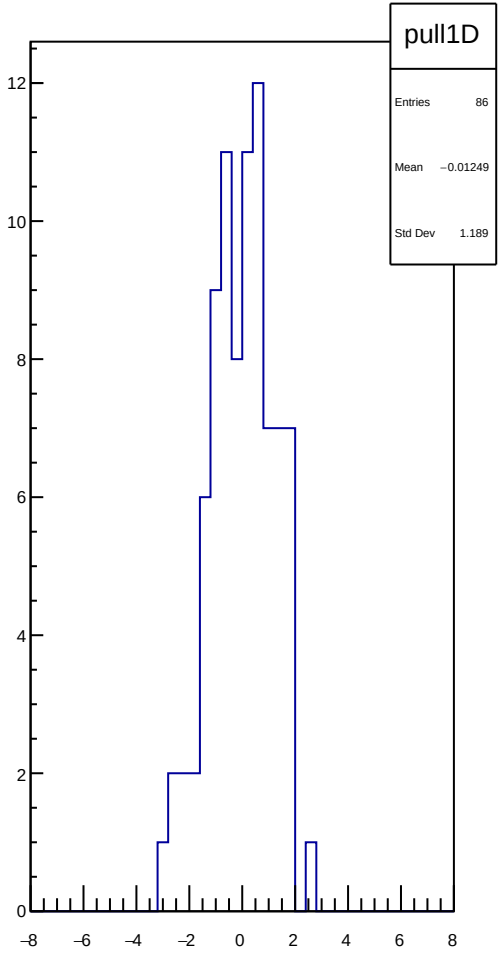

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 98.91 / 85
p0 6.633 ± 5.402
pull
Entries 86
Mean 3972
Std Dev 3926

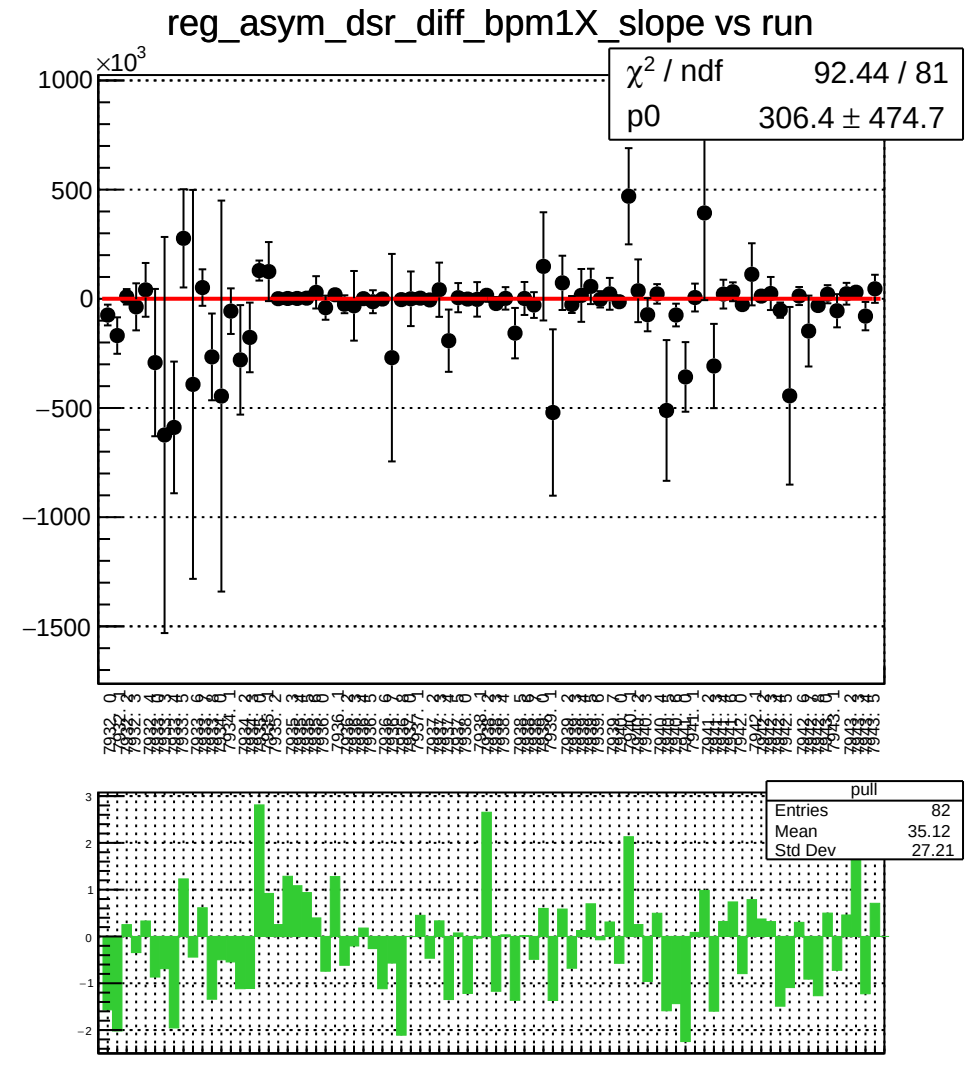

pull1D
Entries 86
Mean 0.001303
Std Dev 1.072

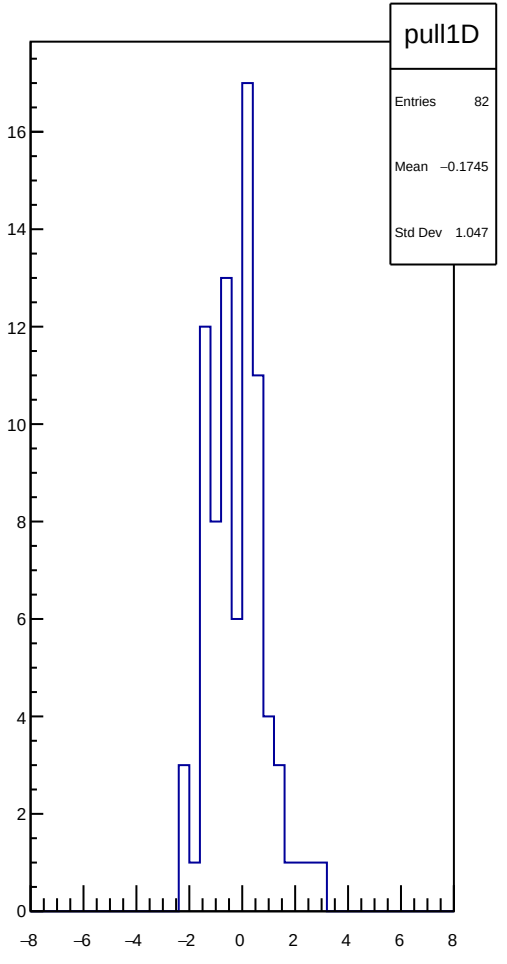

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 107 / 85
p0 14.15 ± 7.227
pull
Entries 86
Mean −145.2
Std Dev 191.3

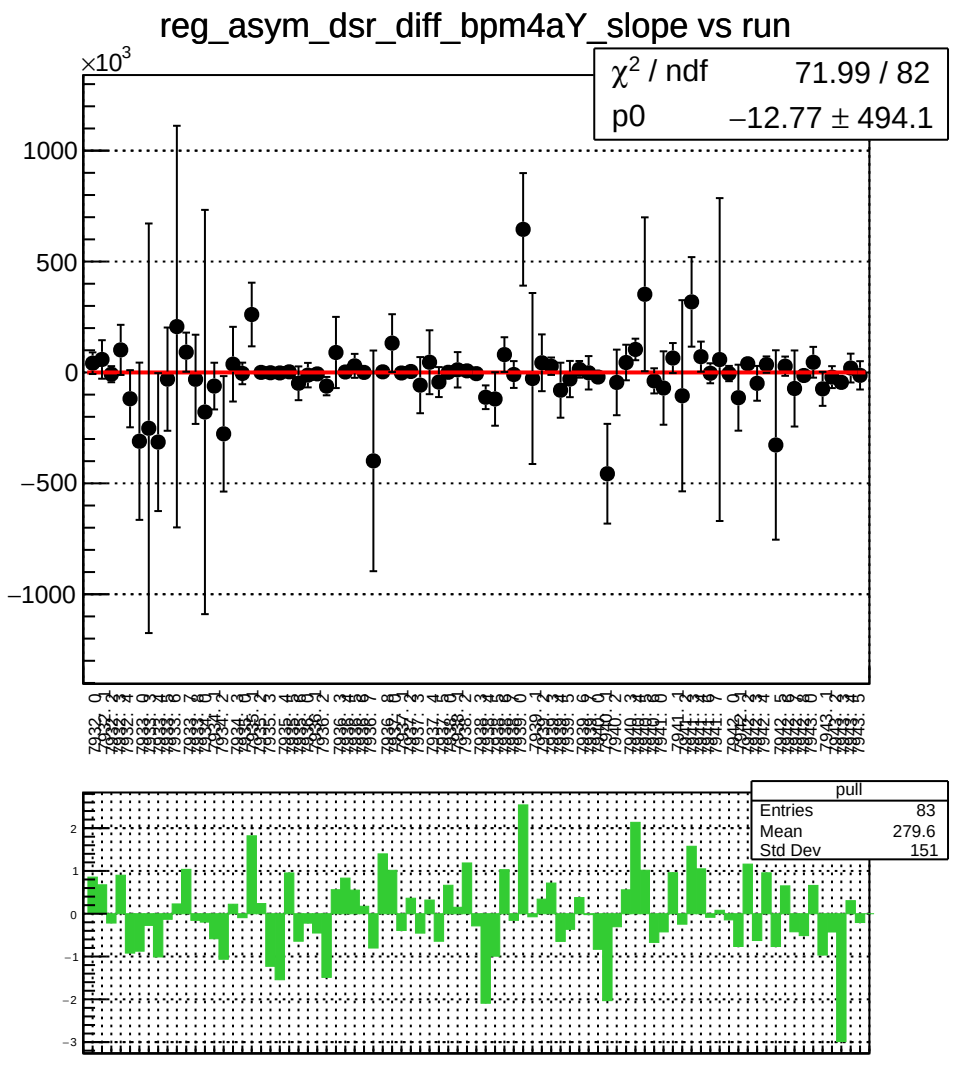

pull1D
Entries 86
Mean 0.01882
Std Dev 1.115

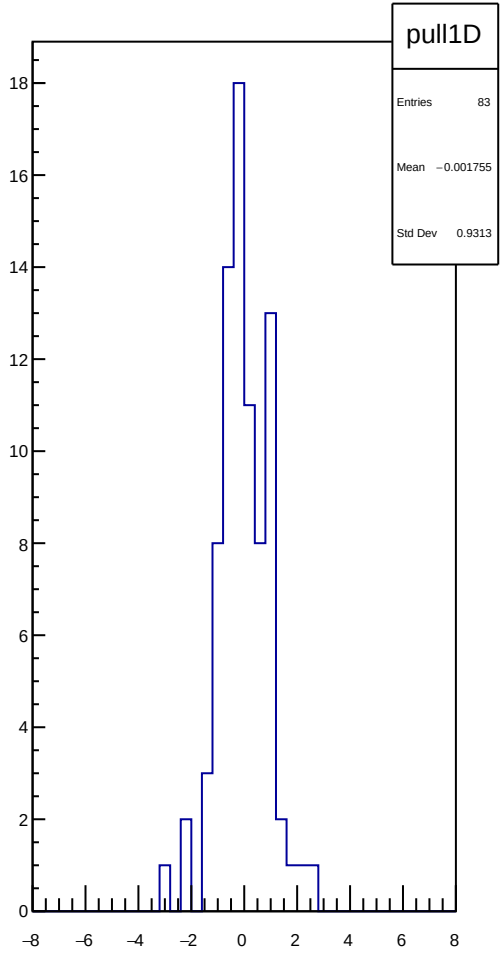

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 121.6 / 85
p0 0.2668 ± 0.2026
pull
Entries 86
Mean 507.1
Std Dev 456.4

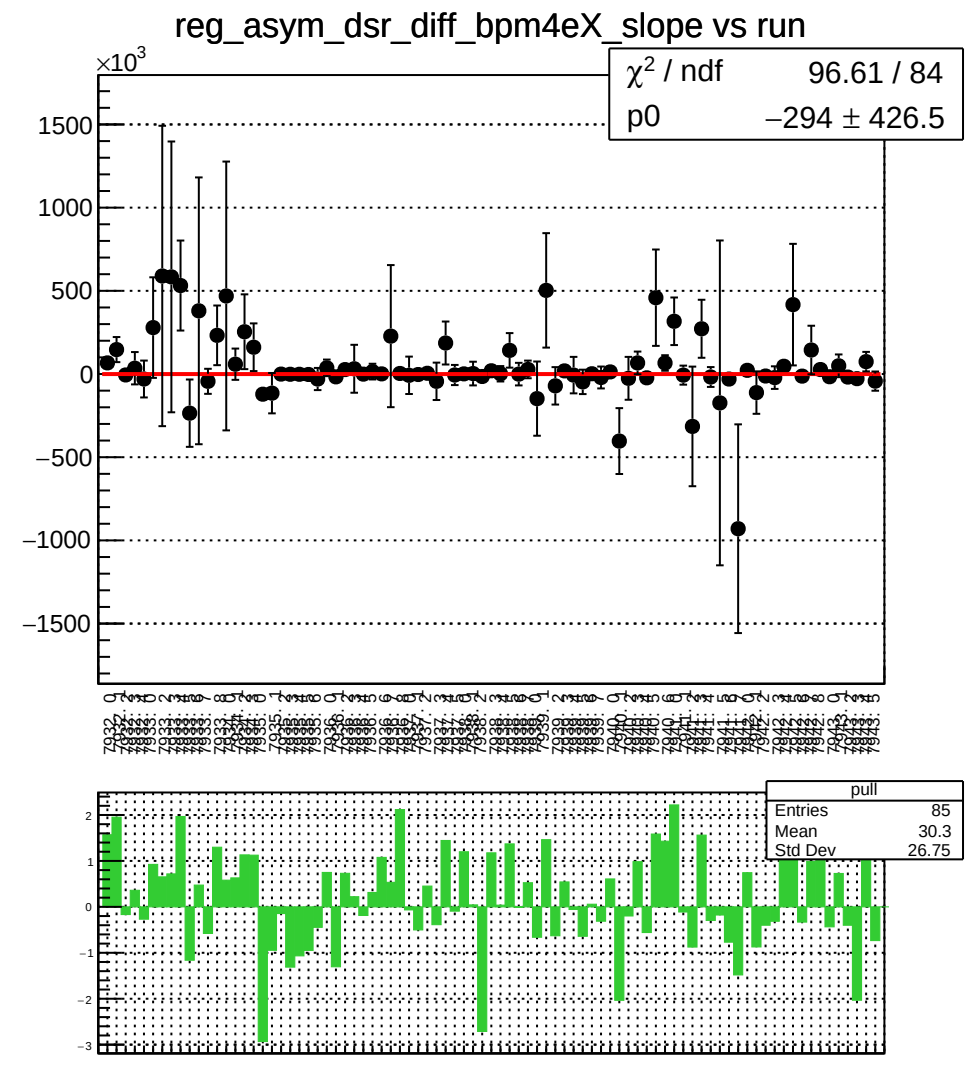

pull1D
Entries 86
Mean −0.01249
Std Dev 1.189

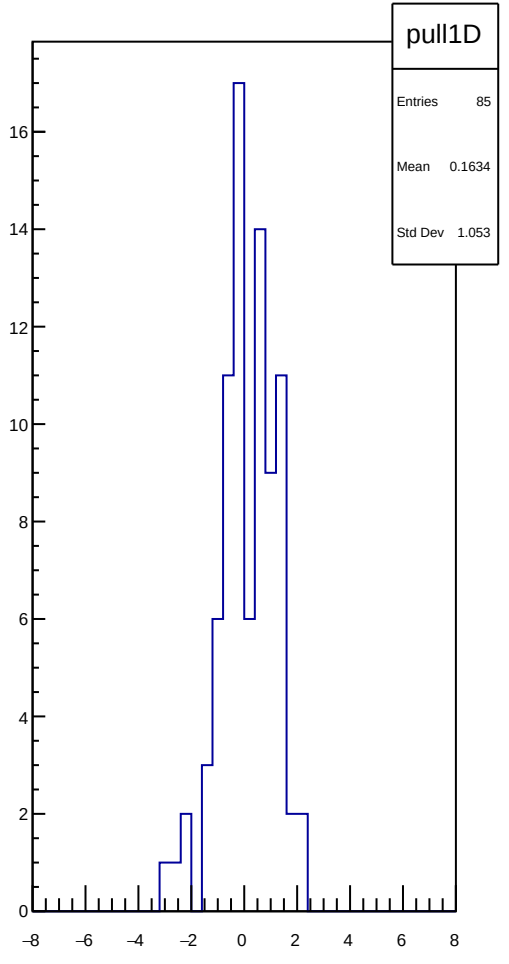

reg_asym_dsr_diff_bpm1X_slope vs run
×10^3
χ² / ndf 92.44 / 81
p0 306.4 ± 474.7
1000
500
0
−500
−1000
−1500
pull
Entries 82
Mean 35.12
Std Dev 27.21
3
2
1
0
−1
−2

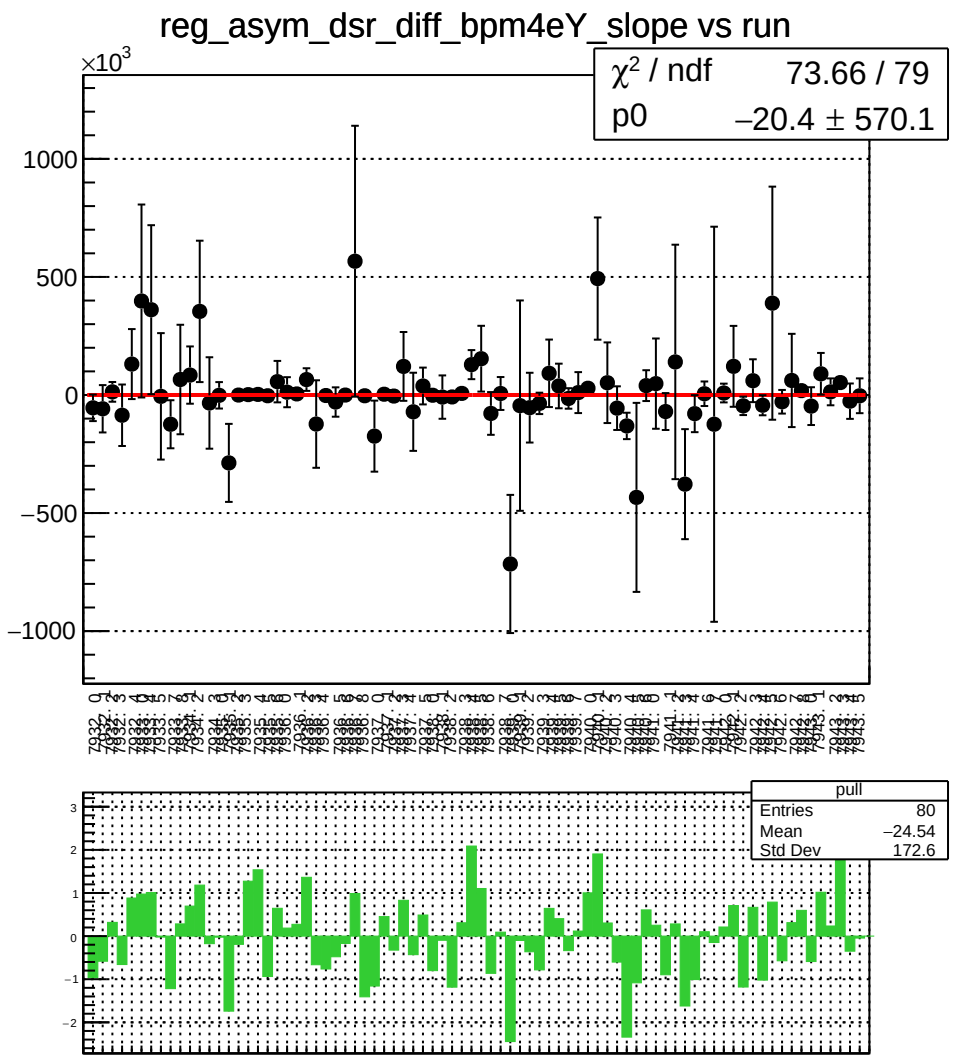

pull1D
Entries 82
Mean −0.1745
Std Dev 1.047
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

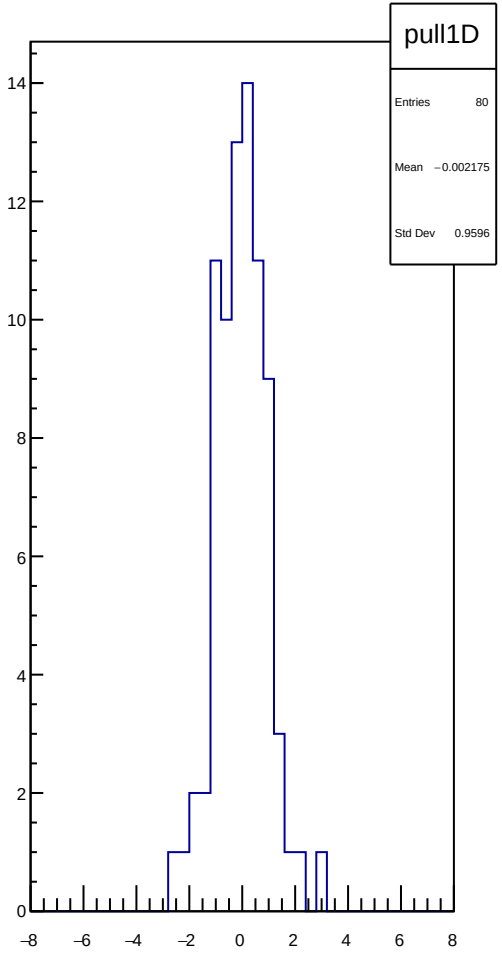

reg_asym_dsr_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 71.99 / 82
p0 −12.77 ± 494.1
1000
500
0
−500
−1000
pull
Entries 83
Mean 279.6
Std Dev 151
2
1
0
−1
−2
−3

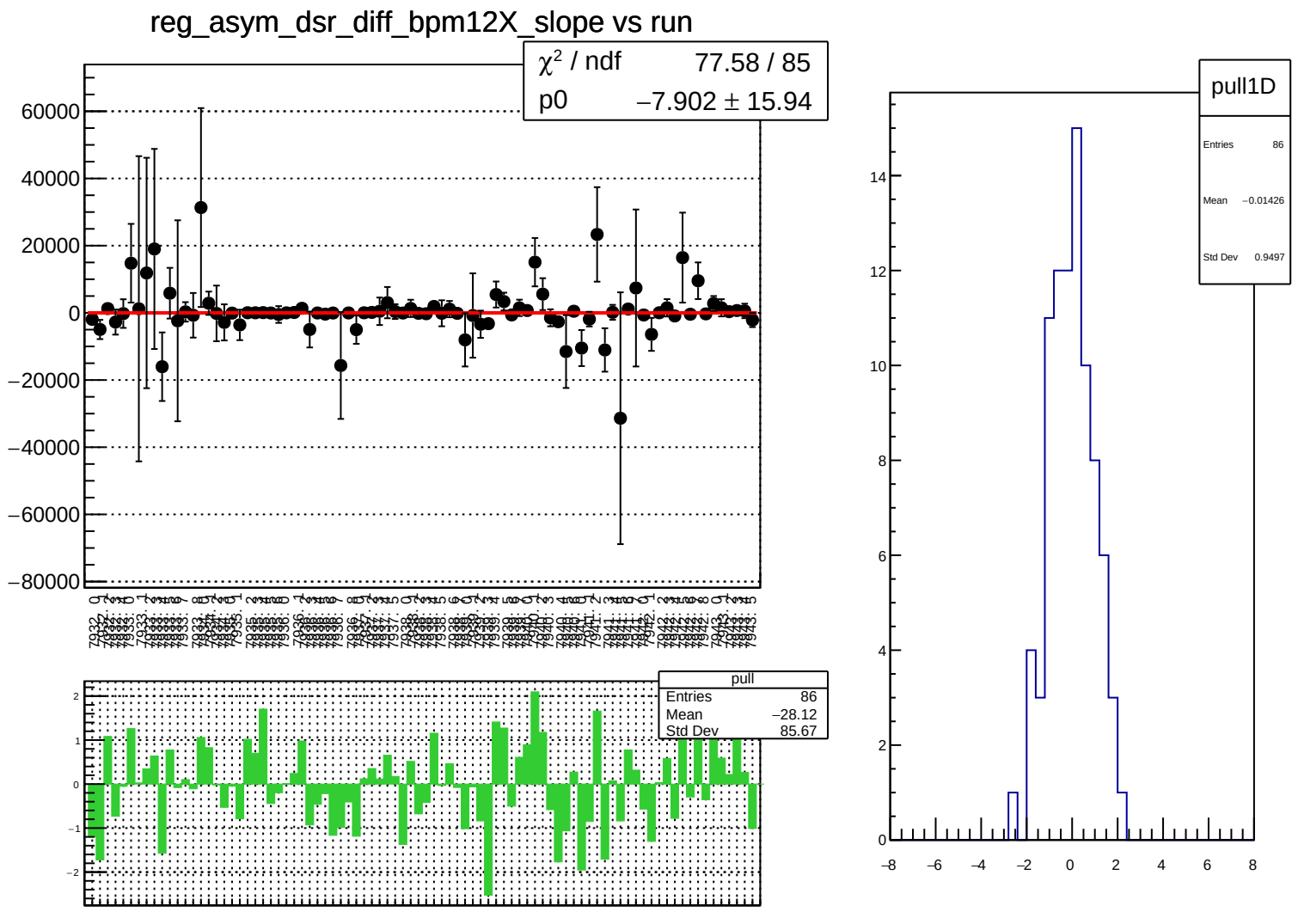

pull1D
Entries 83
Mean −0.001755
Std Dev 0.9313
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

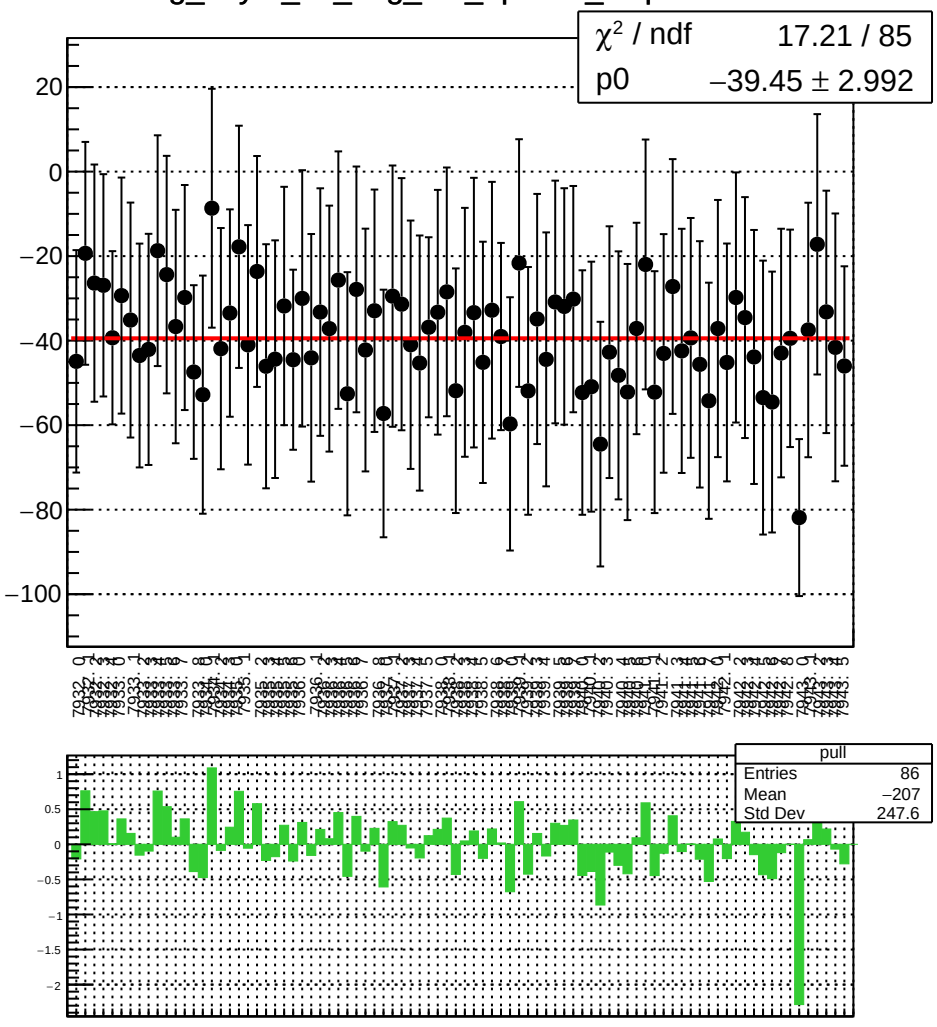

reg_asym_dsr_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 96.61 / 84
p0 −294 ± 426.5
1500
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 30.3
Std Dev 26.75
2
1
0
−1
−2
−3

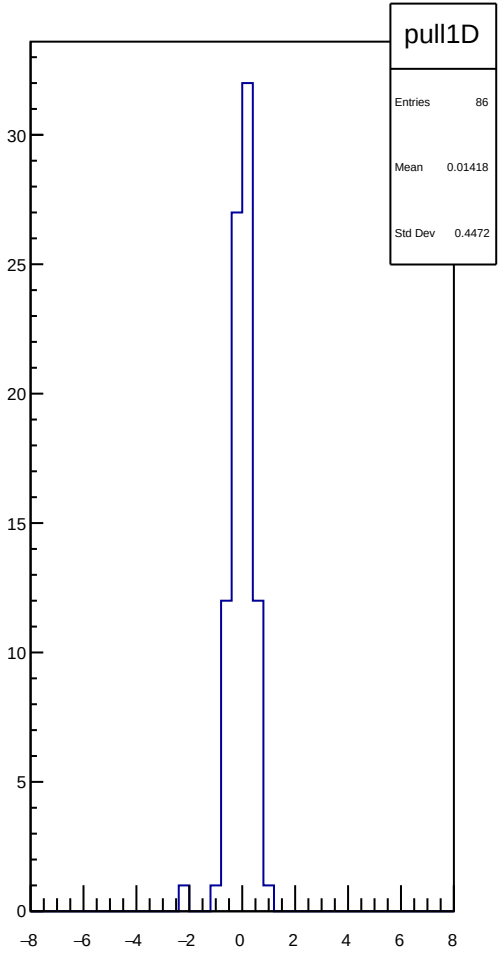

pull1D
Entries 85
Mean 0.1634
Std Dev 1.053
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

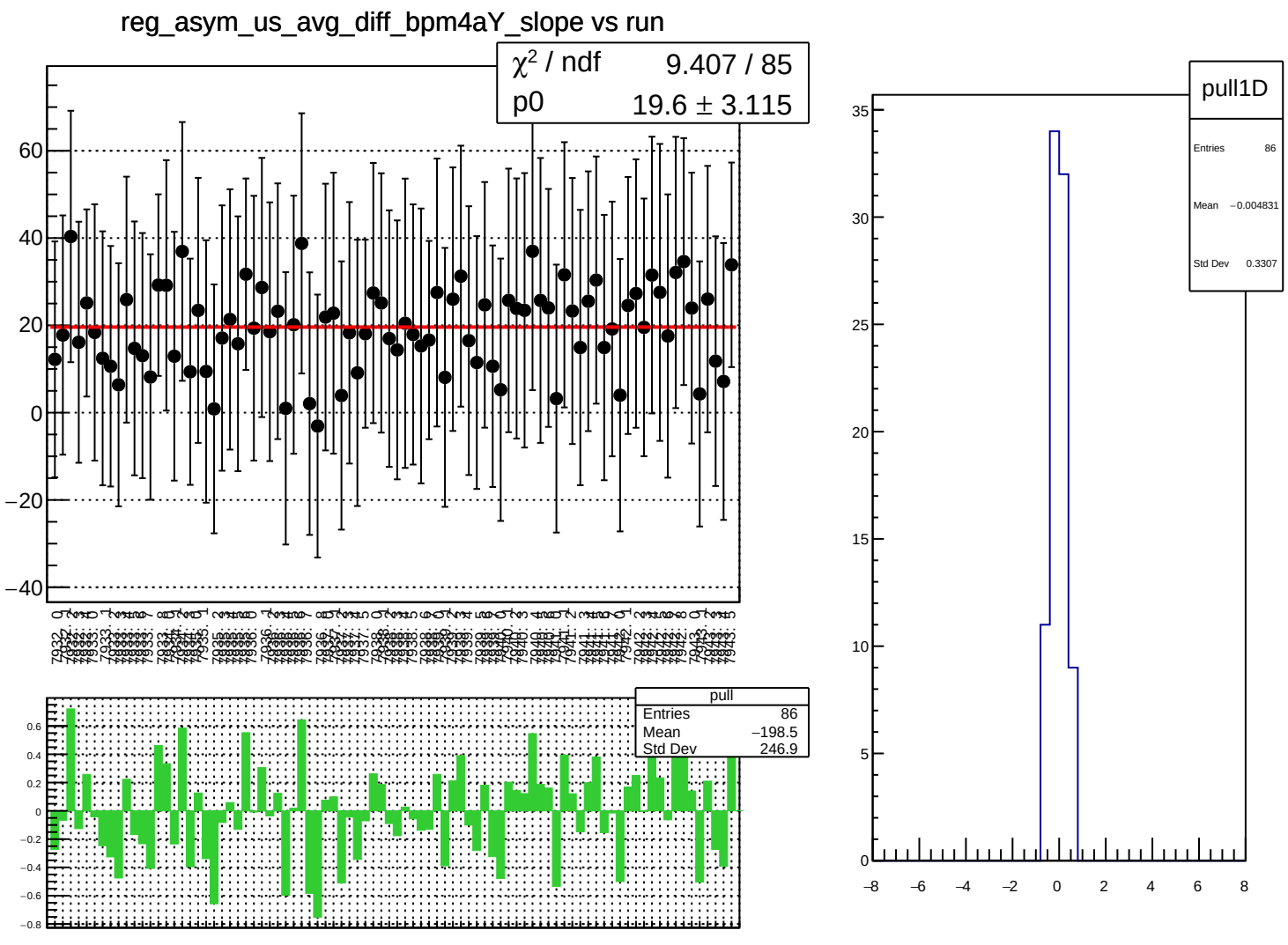

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 73.66 / 79
p0 −20.4 ± 570.1
×10³
1000
500
0
−500
−1000
pull
Entries 80
Mean −24.54
Std Dev 172.6
3
2
1
0
−1

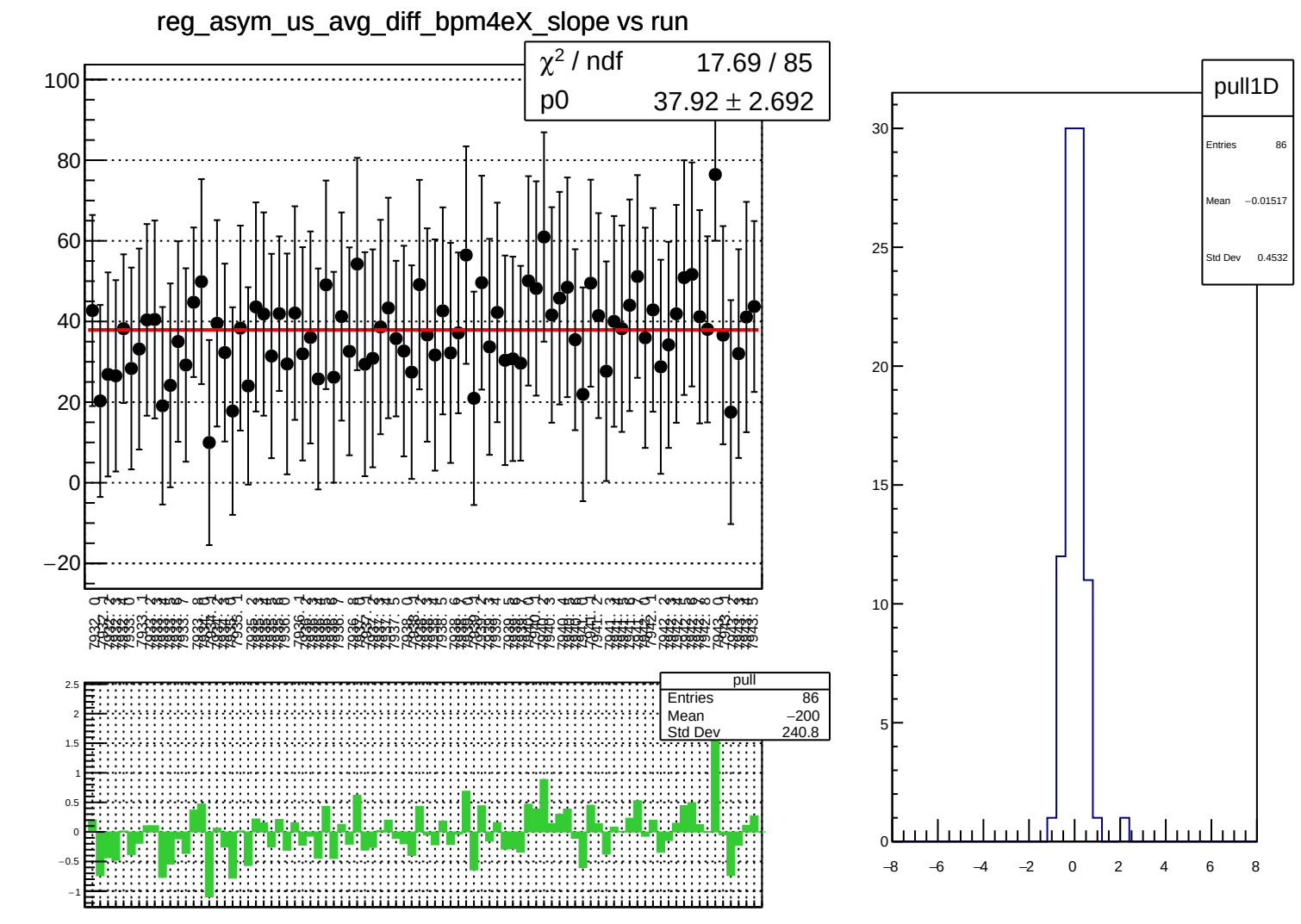

pull1D
Entries 80
Mean −0.002175
Std Dev 0.9596
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

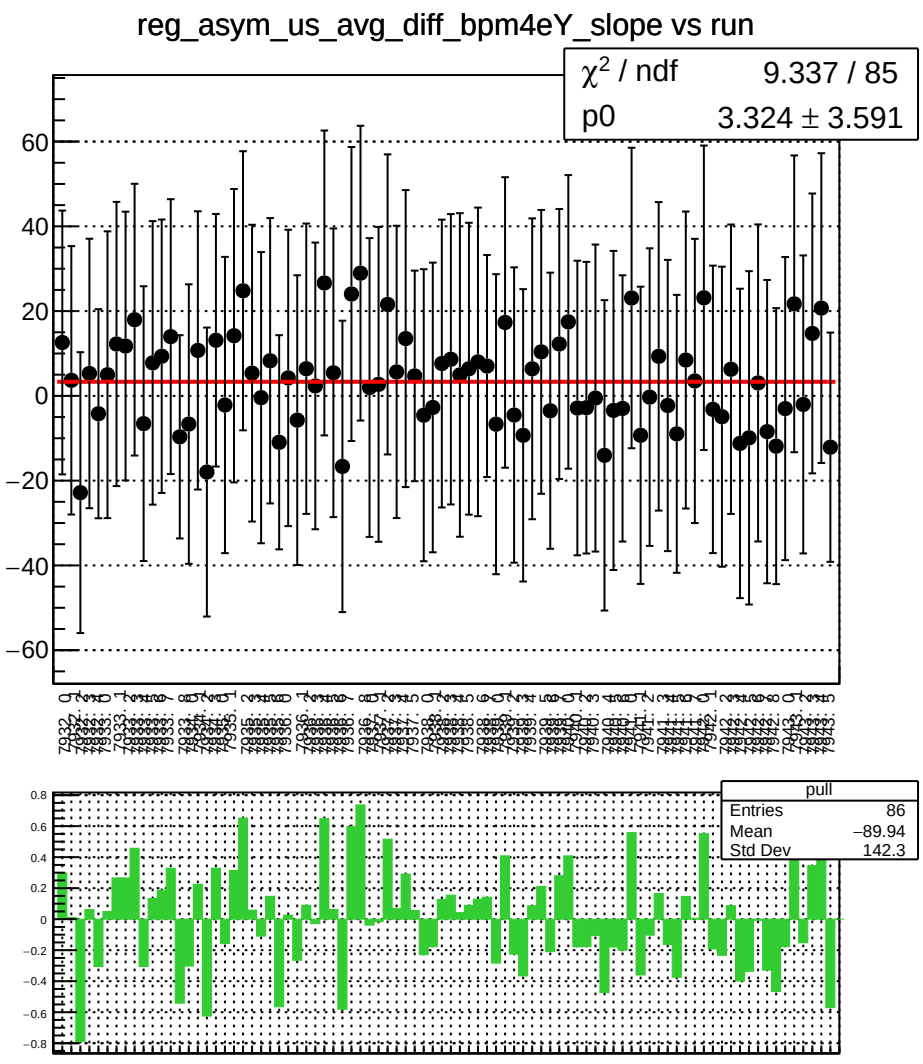

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 77.58 / 85
p0 −7.902 ± 15.94
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 86
Mean −28.12
Std Dev 85.67
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.01426
Std Dev 0.9497
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

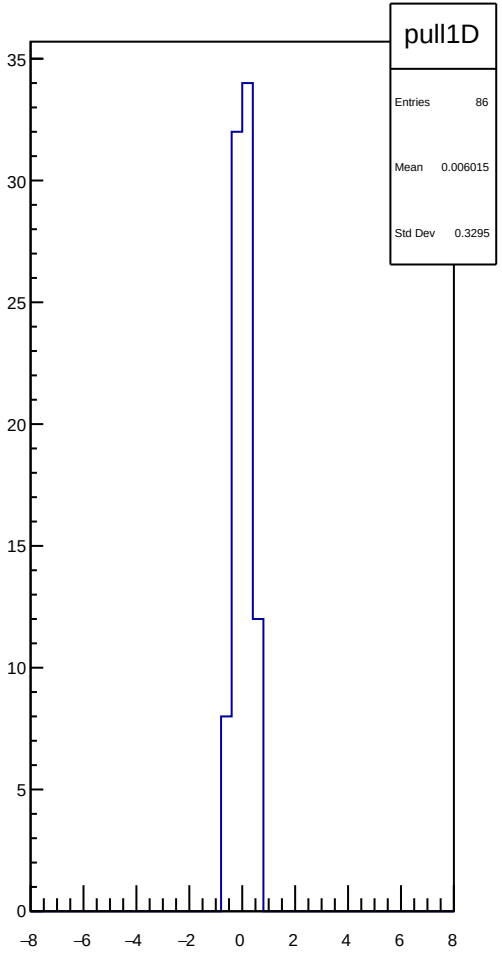

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 17.21 / 85
p0 −39.45 ± 2.992
pull
Entries 86
Mean −207
Std Dev 247.6

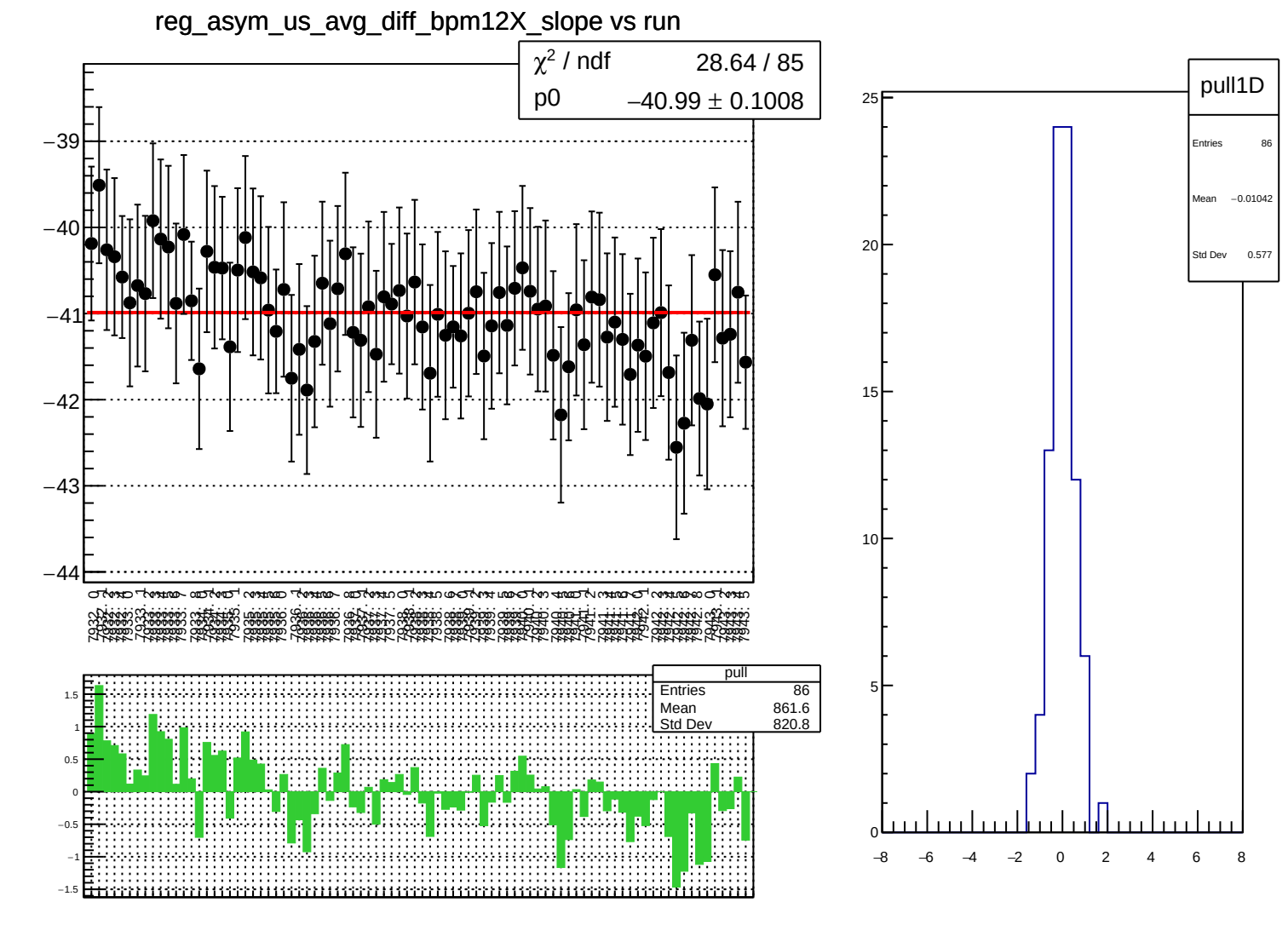

pull1D
Entries 86
Mean 0.01418
Std Dev 0.4472

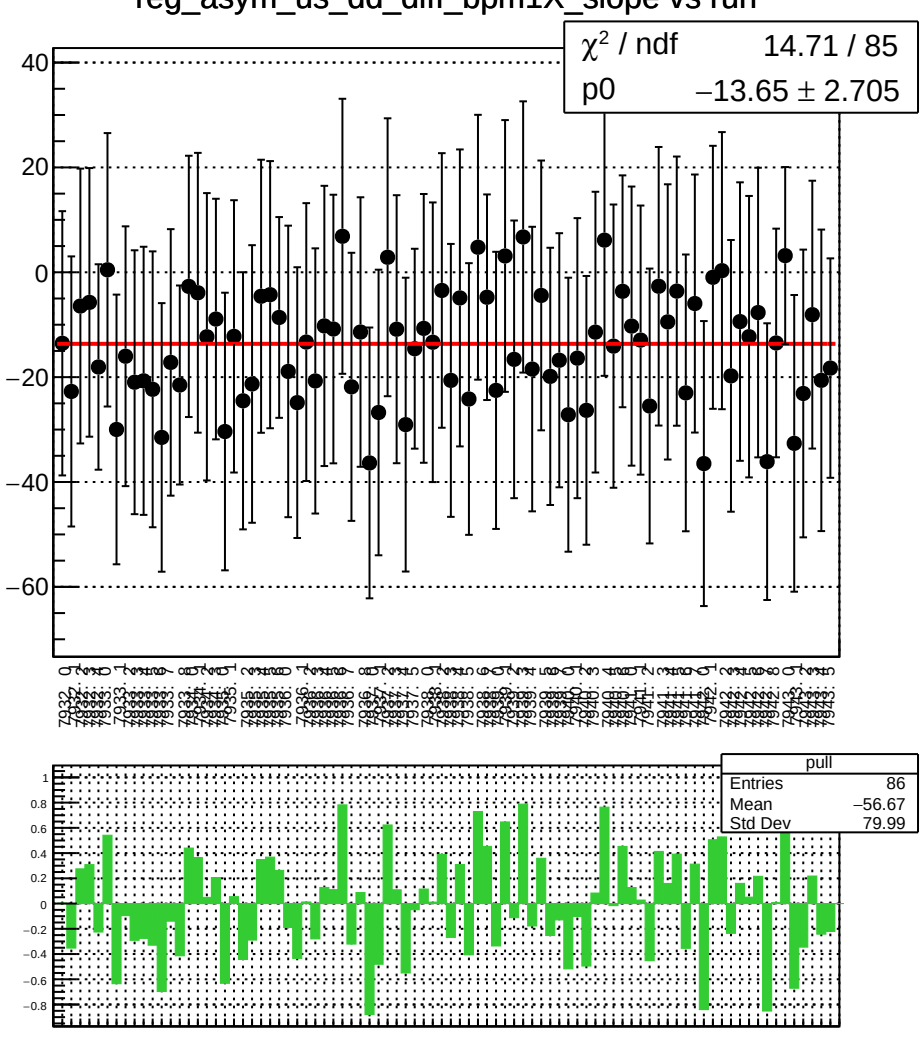

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.407 / 85
p0 19.6 ± 3.115
pull
Entries 86
Mean −198.5
Std Dev 246.9
pull1D
Entries 86
Mean −0.004831
Std Dev 0.3307

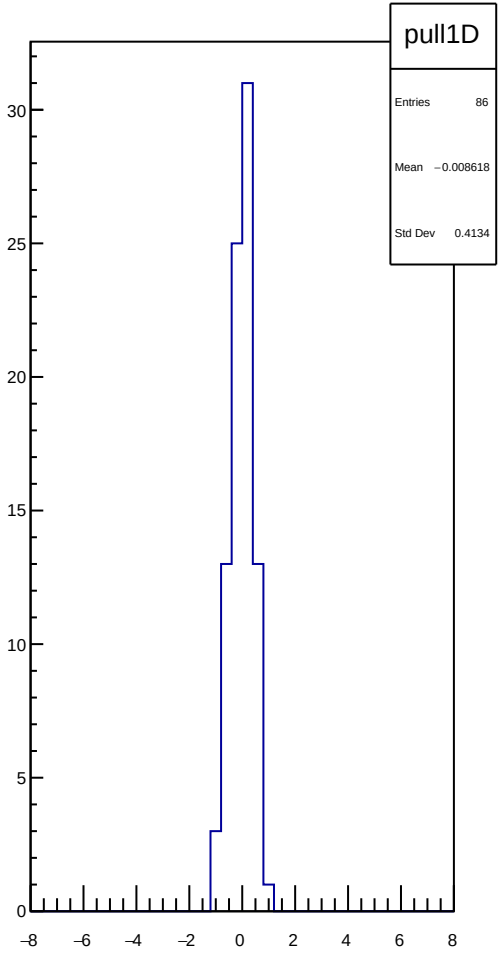

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 17.69 / 85
p0 37.92 ± 2.692
pull
Entries 86
Mean −200
Std Dev 240.8
pull1D
Entries 86
Mean −0.01517
Std Dev 0.4532

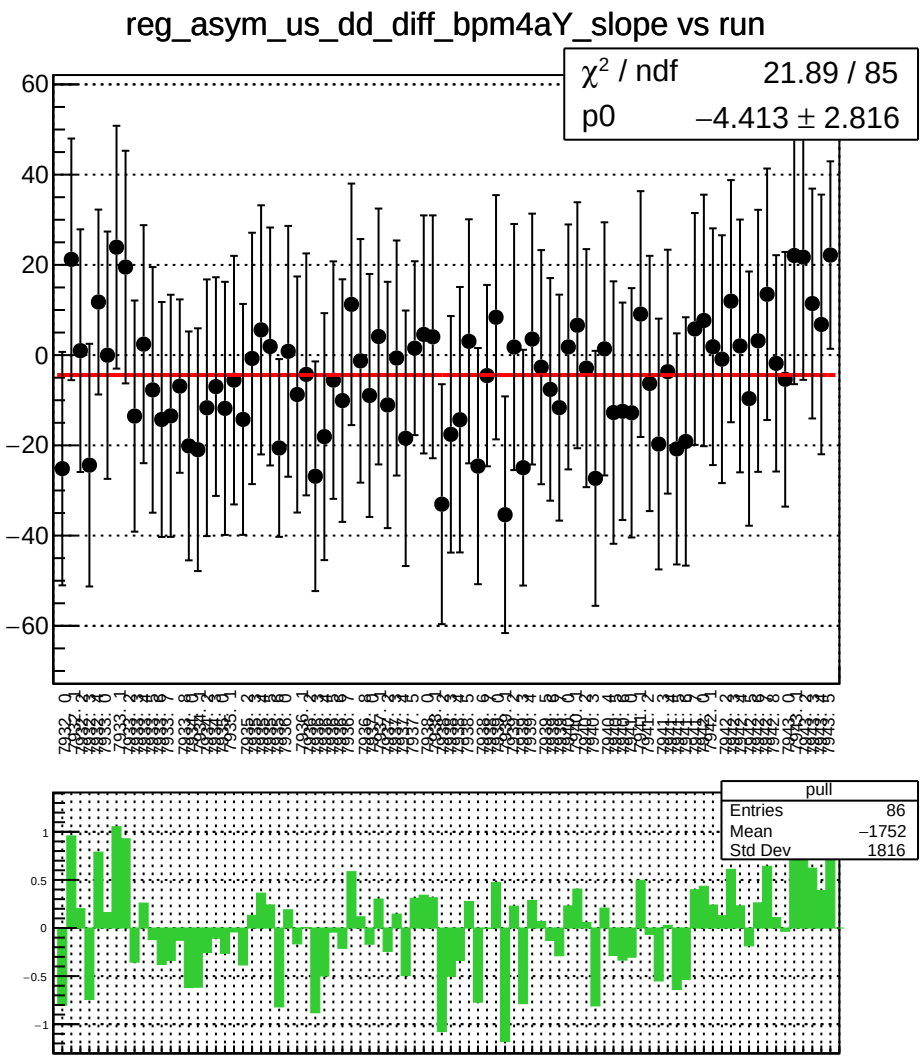

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.337 / 85
p0 3.324 ± 3.591
pull
Entries 86
Mean −89.94
Std Dev 142.3

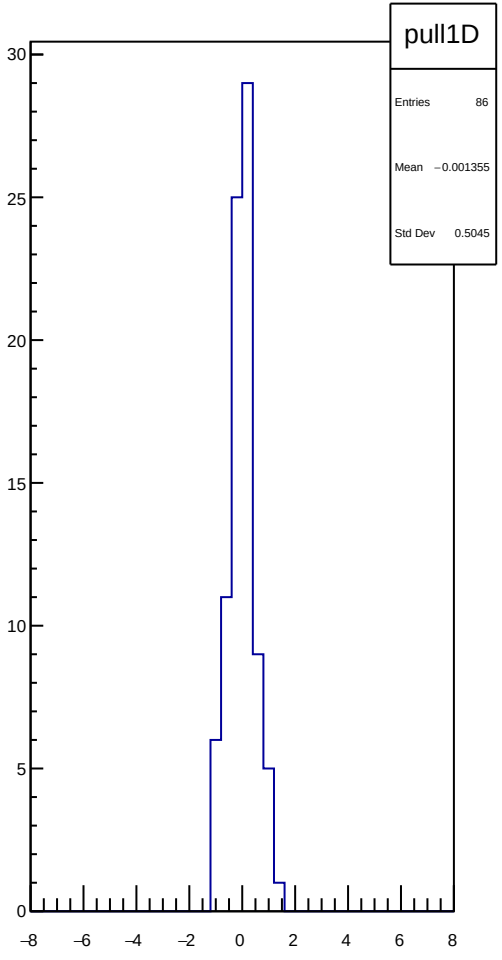

pull1D
Entries 86
Mean 0.006015
Std Dev 0.3295

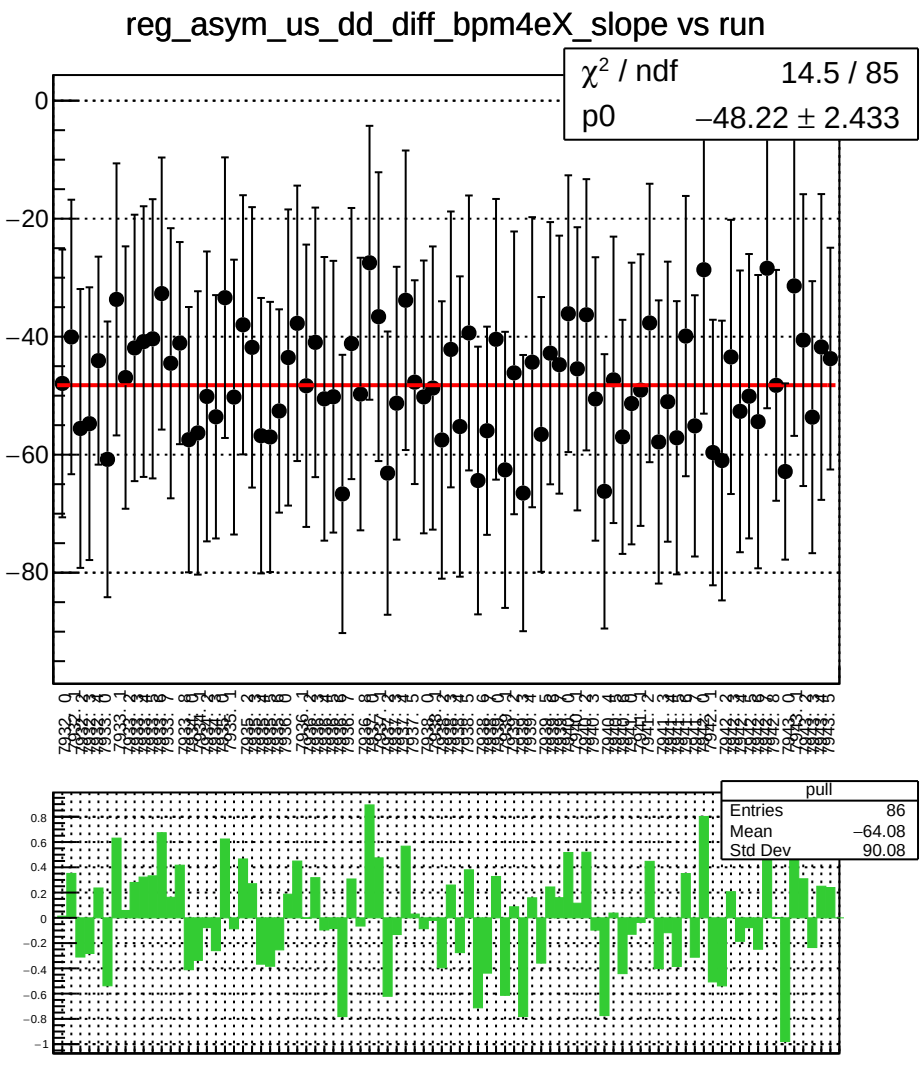

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 28.64 / 85
p0 −40.99 ± 0.1008
pull
Entries 86
Mean 861.6
Std Dev 820.8
pull1D
Entries 86
Mean −0.01042
Std Dev 0.577

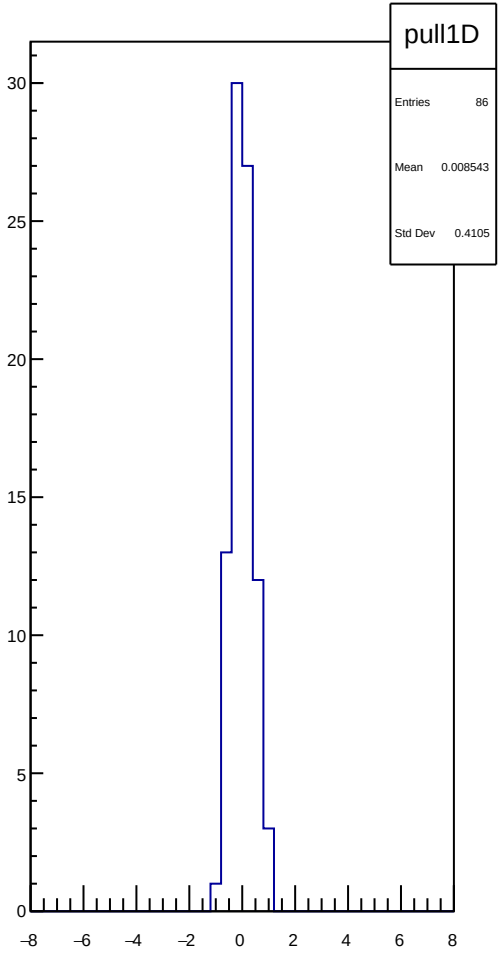

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 14.71 / 85
p0 −13.65 ± 2.705
pull
Entries 86
Mean −56.67
Std Dev 79.99

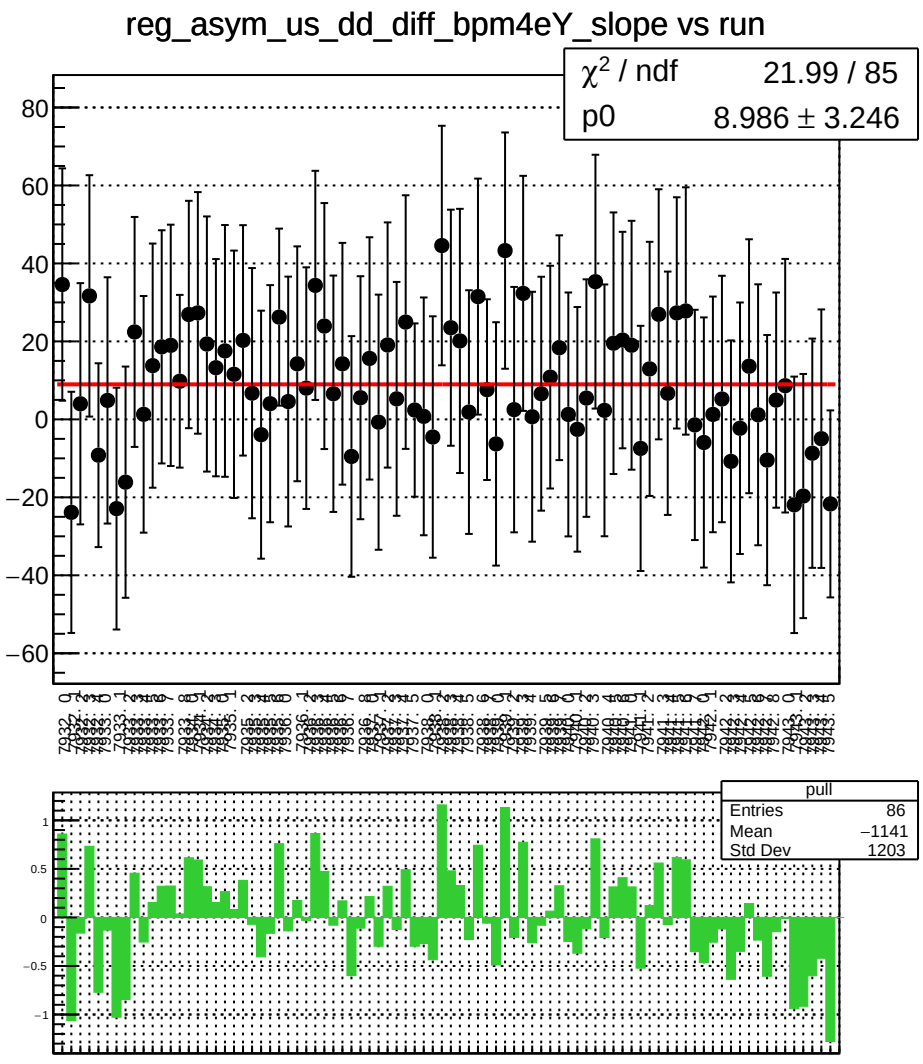

pull1D
Entries 86
Mean −0.008618
Std Dev 0.4134

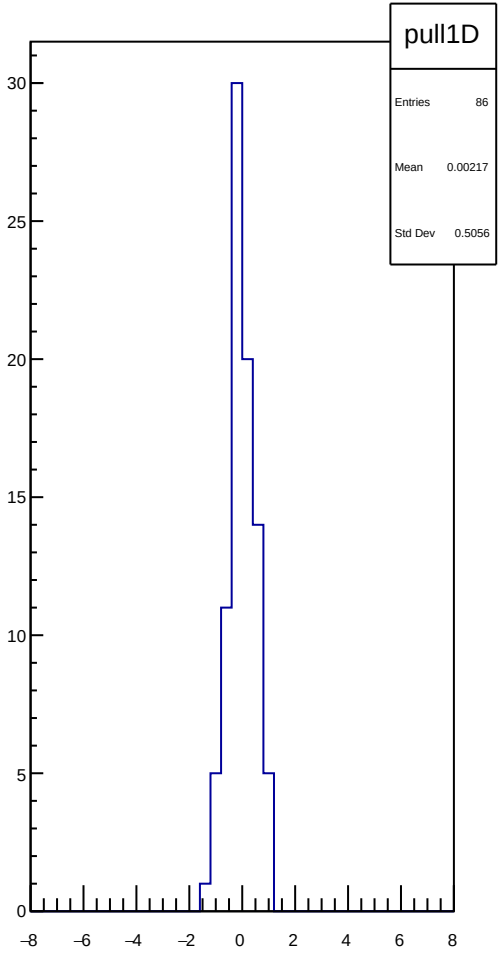

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 21.89 / 85
p0 −4.413 ± 2.816
pull
Entries 86
Mean −1752
Std Dev 1816

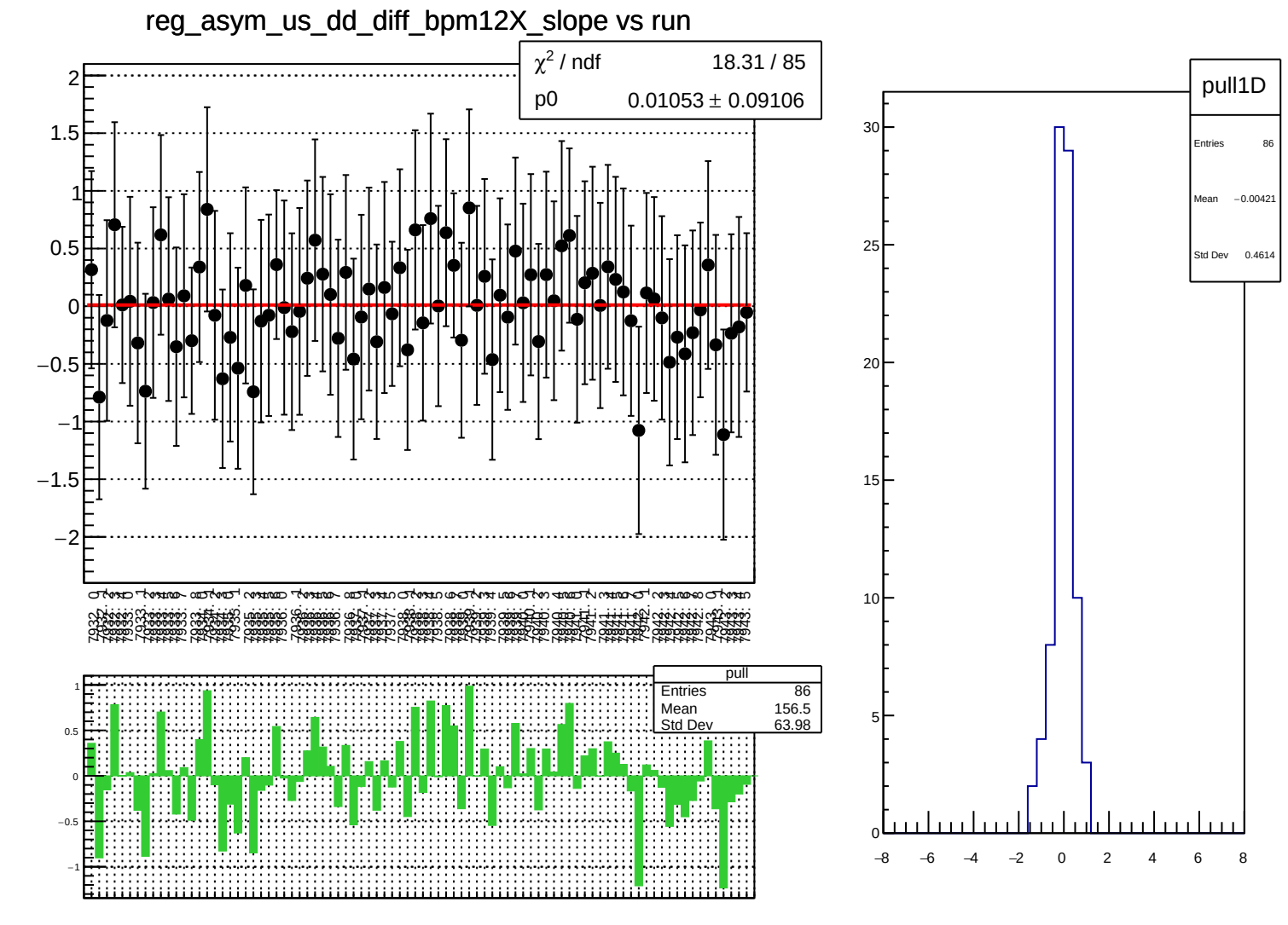

pull1D
Entries 86
Mean −0.001355
Std Dev 0.5045

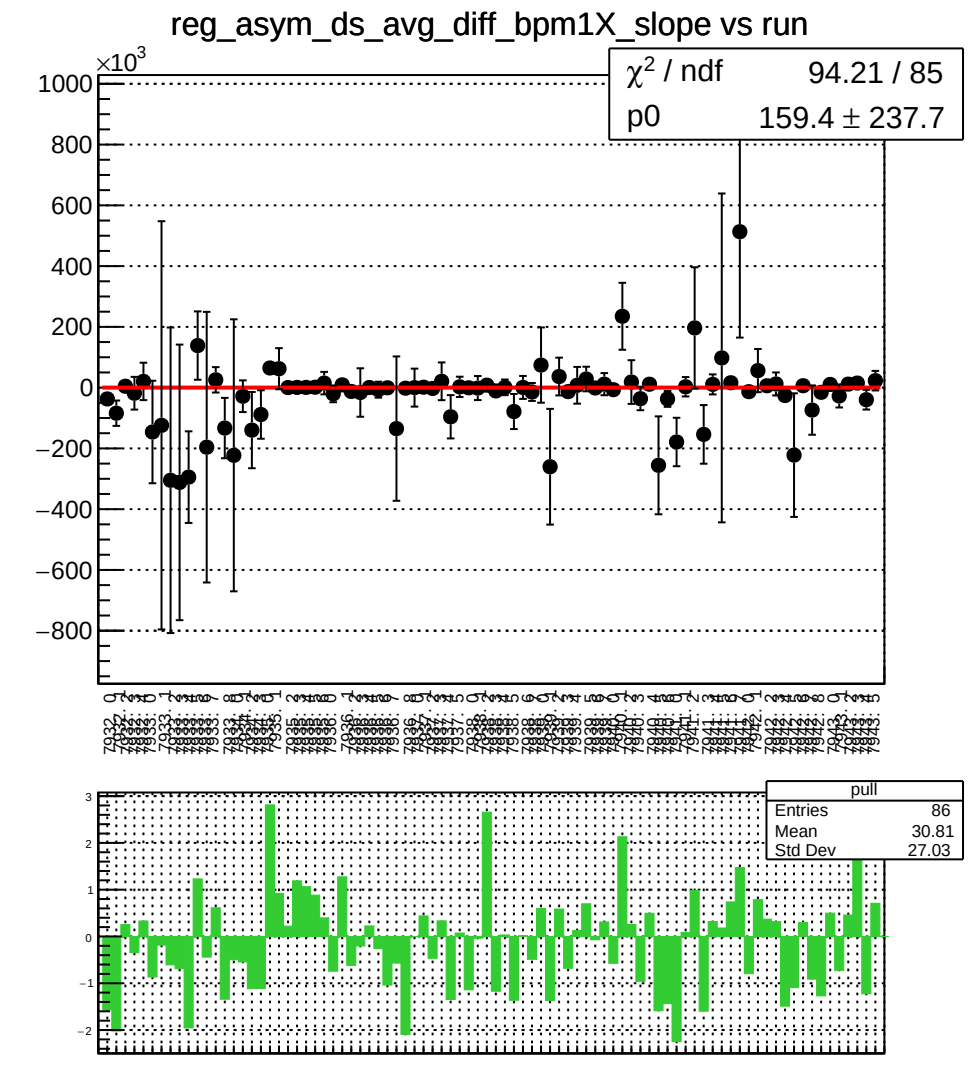

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 14.5 / 85
p0 −48.22 ± 2.433
pull
Entries 86
Mean −64.08
Std Dev 90.08

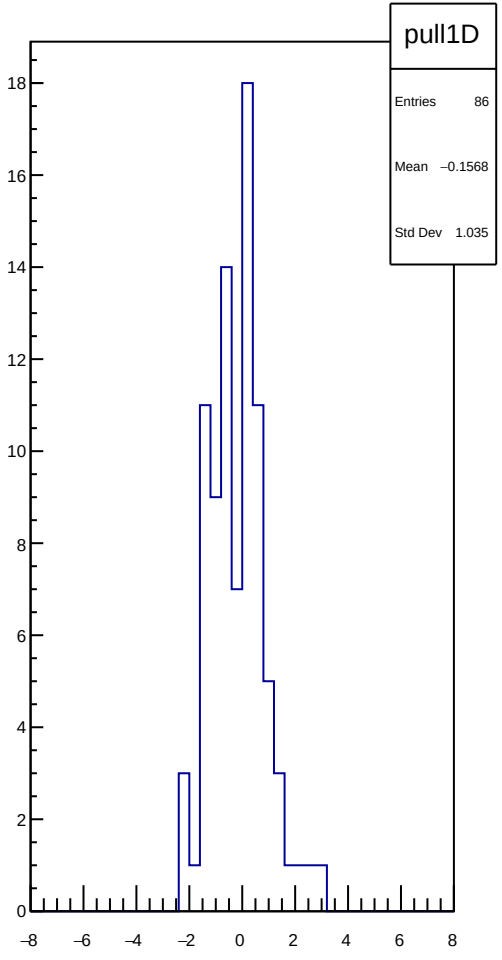

pull1D
Entries 86
Mean 0.008543
Std Dev 0.4105

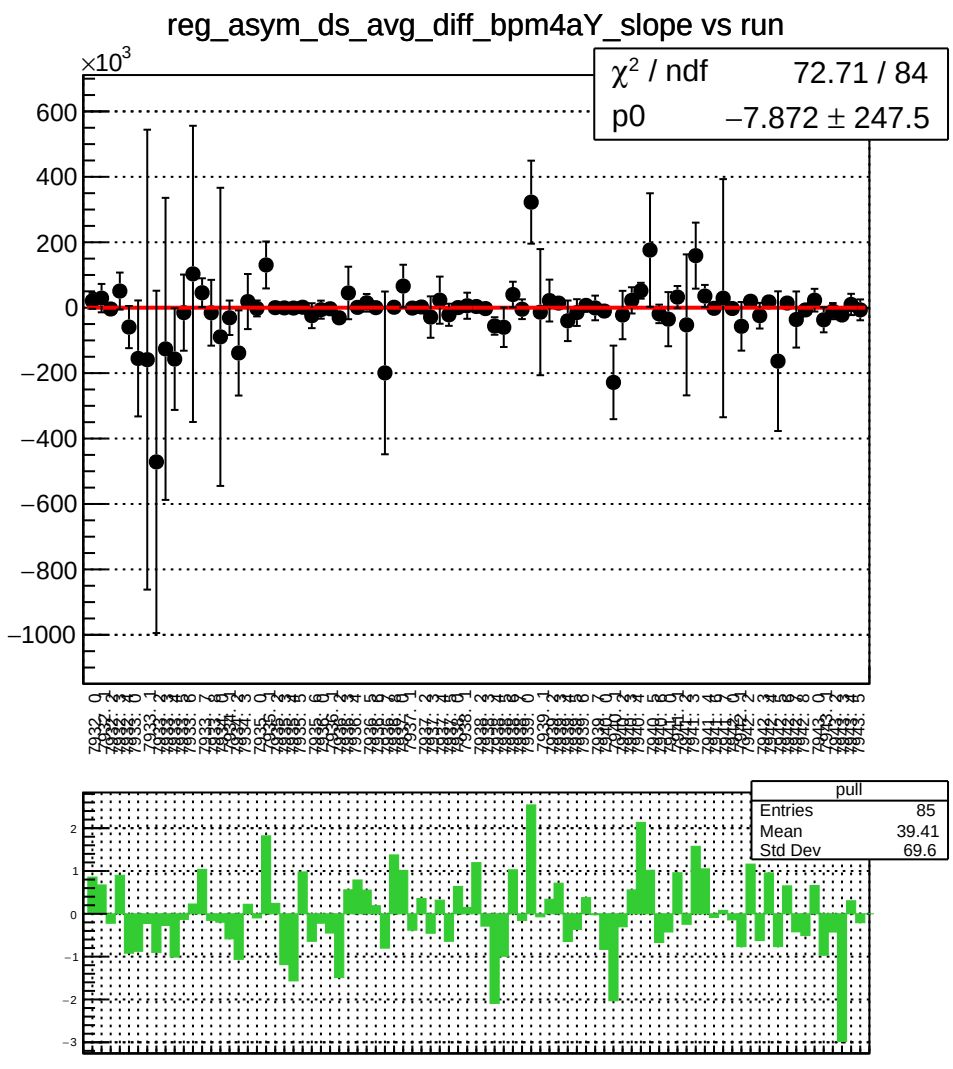

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 21.99 / 85
p0 8.986 ± 3.246
pull
Entries 86
Mean −1141
Std Dev 1203

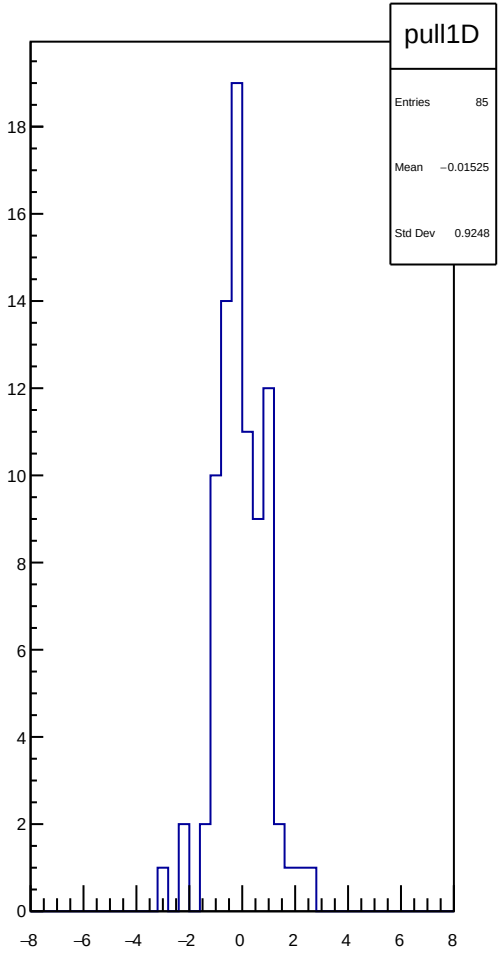

pull1D
Entries 86
Mean 0.00217
Std Dev 0.5056

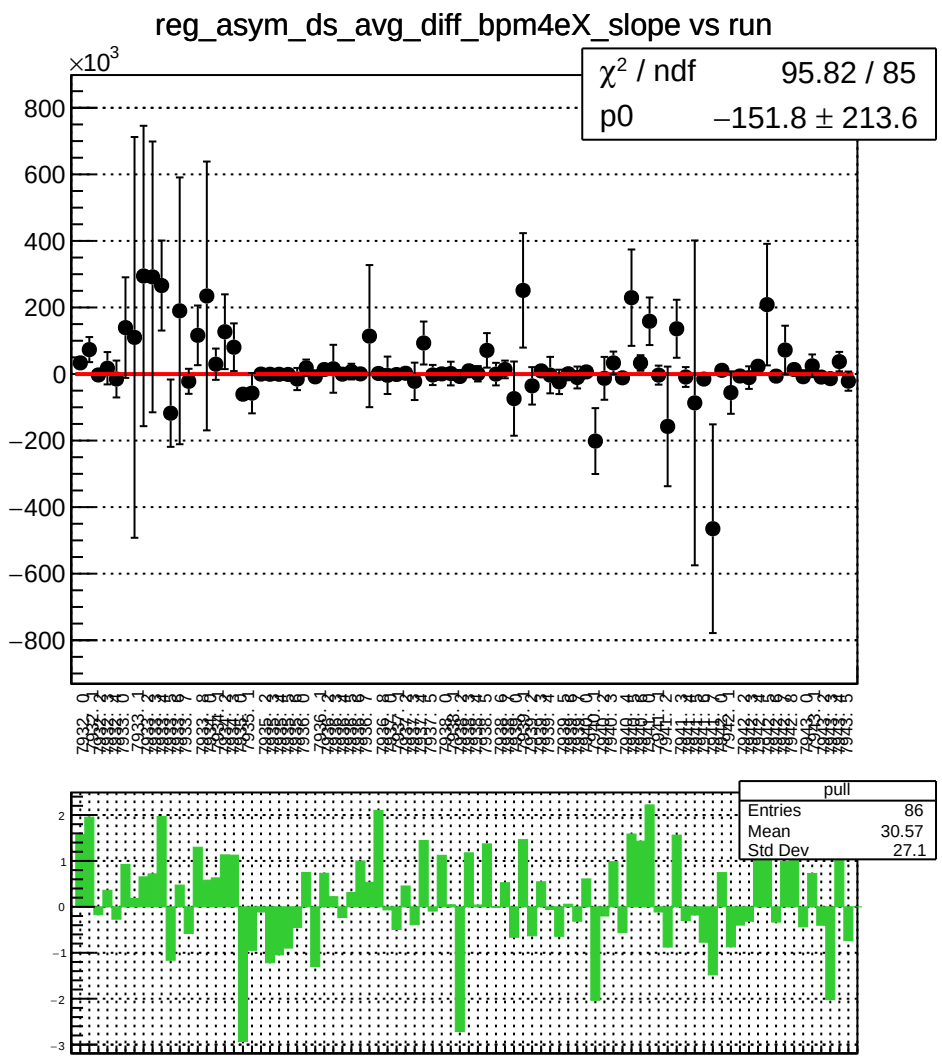

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 18.31 / 85
p0 0.01053 ± 0.09106
pull
Entries 86
Mean 156.5
Std Dev 63.98
pull1D
Entries 86
Mean −0.00421
Std Dev 0.4614

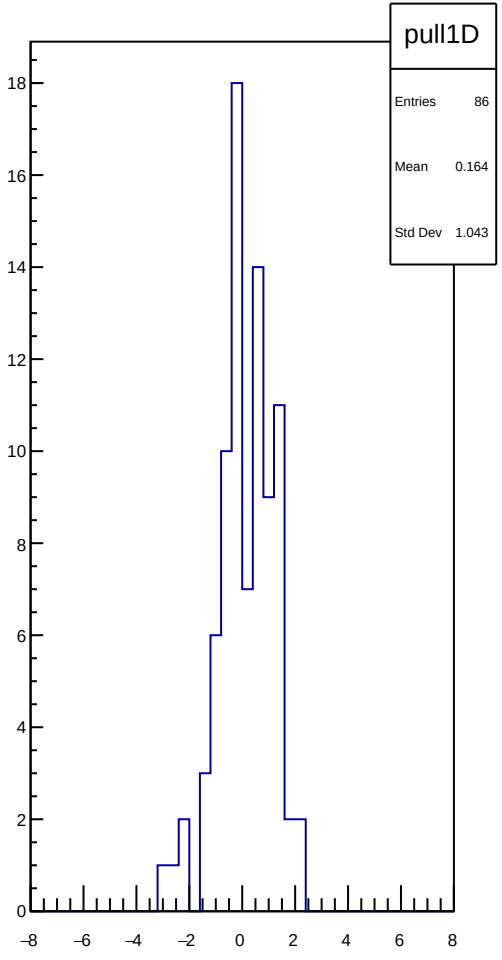

reg_asym_ds_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 94.21 / 85
p0 159.4 ± 237.7
pull
Entries 86
Mean 30.81
Std Dev 27.03

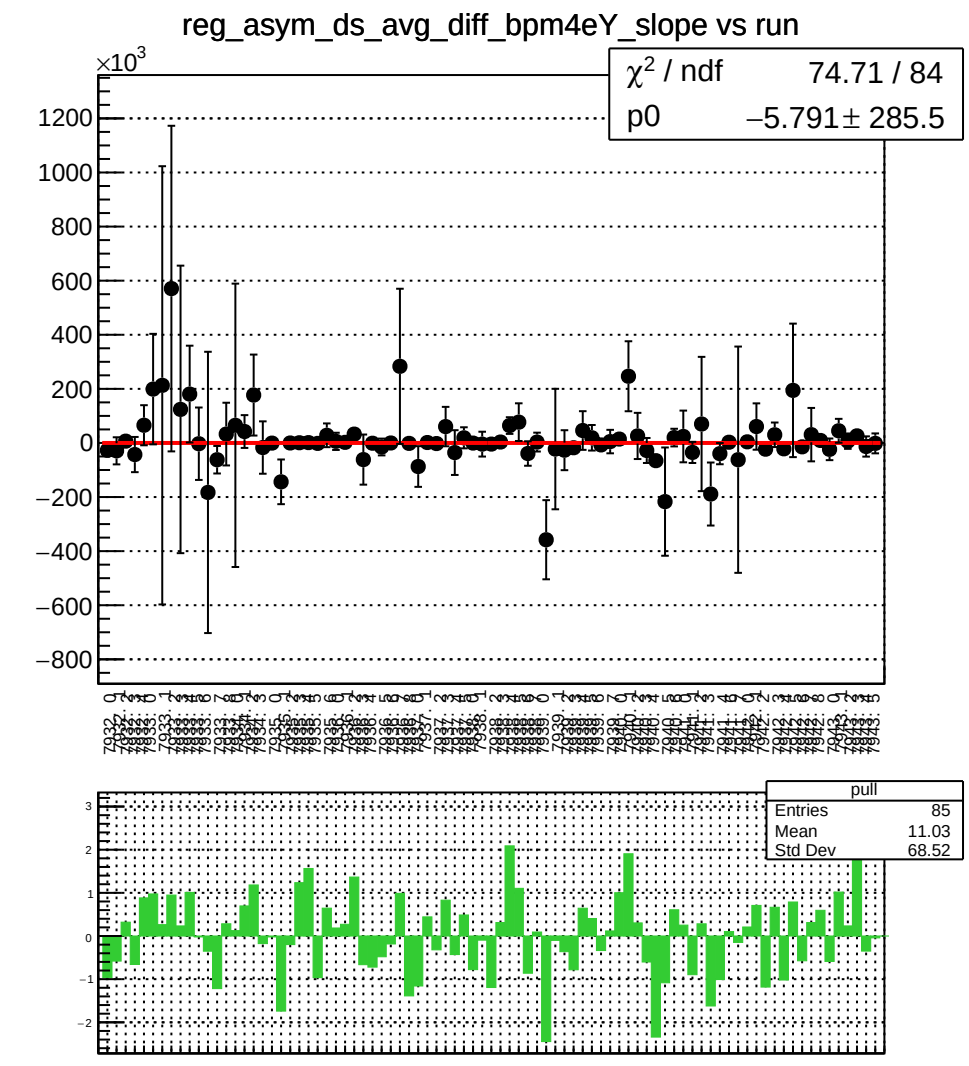

pull1D
Entries 86
Mean −0.1568
Std Dev 1.035

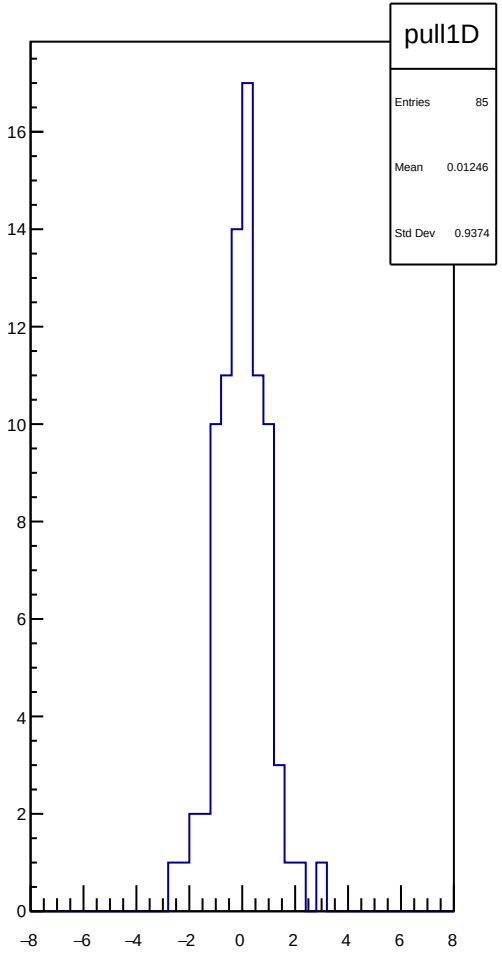

reg_asym_ds_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 72.71 / 84
p0 −7.872 ± 247.5
pull
Entries 85
Mean 39.41
Std Dev 69.6

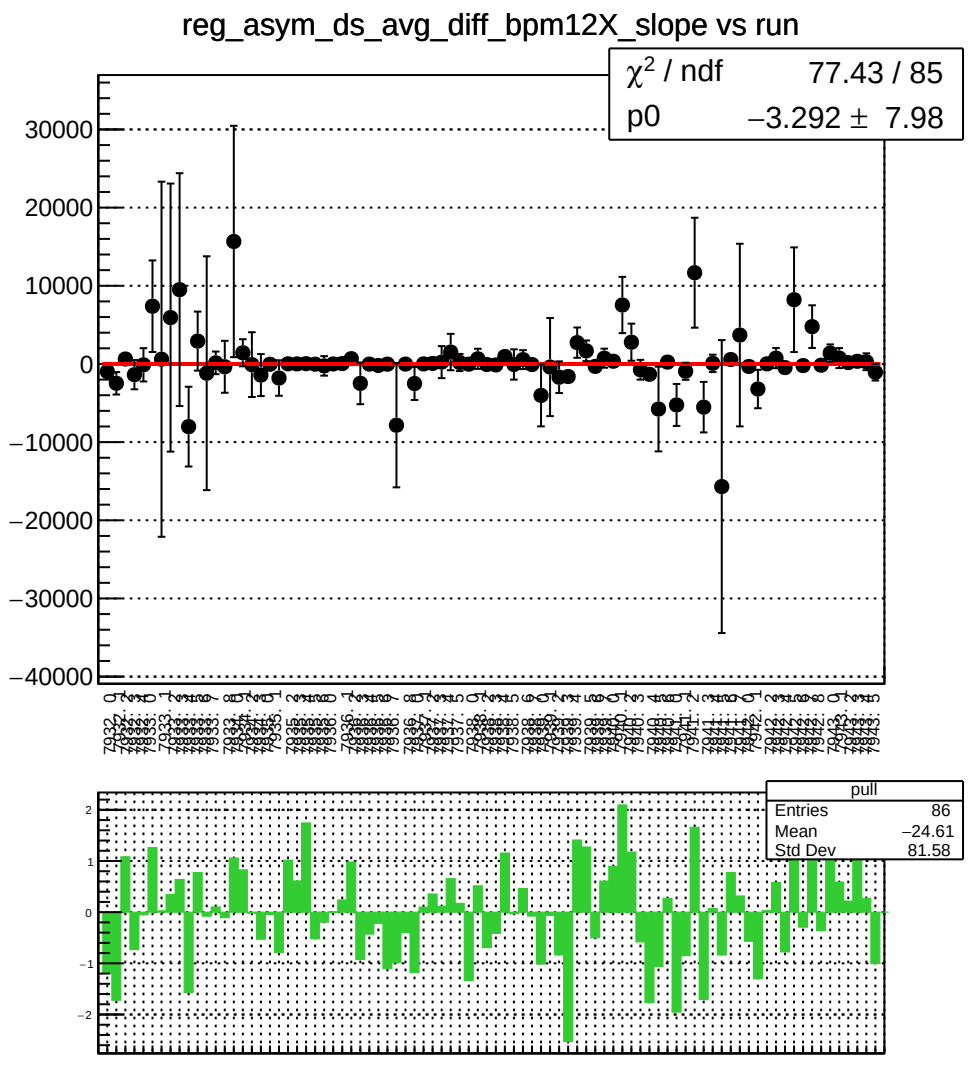

pull1D
Entries 85
Mean −0.01525
Std Dev 0.9248

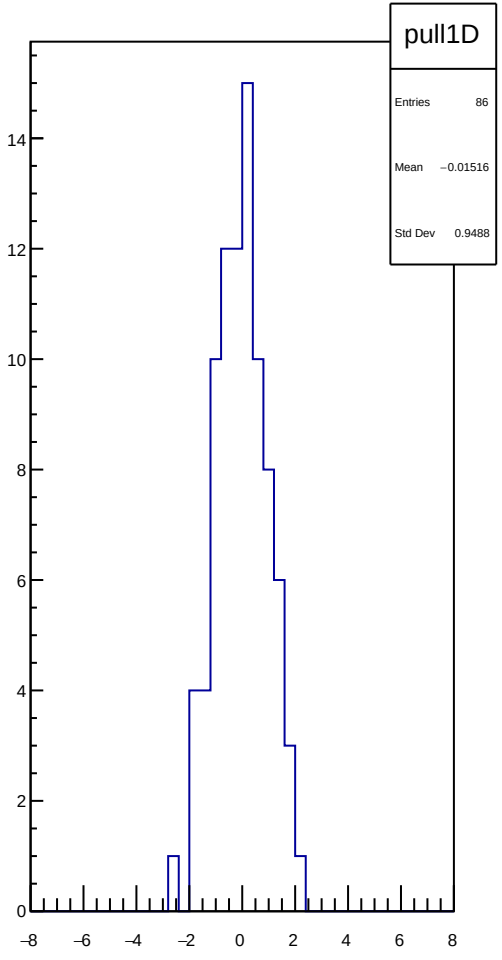

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ^2 / ndf 95.82 / 85
p0 −151.8 ± 213.6
×10^3
pull
Entries 86
Mean 30.57
Std Dev 27.1

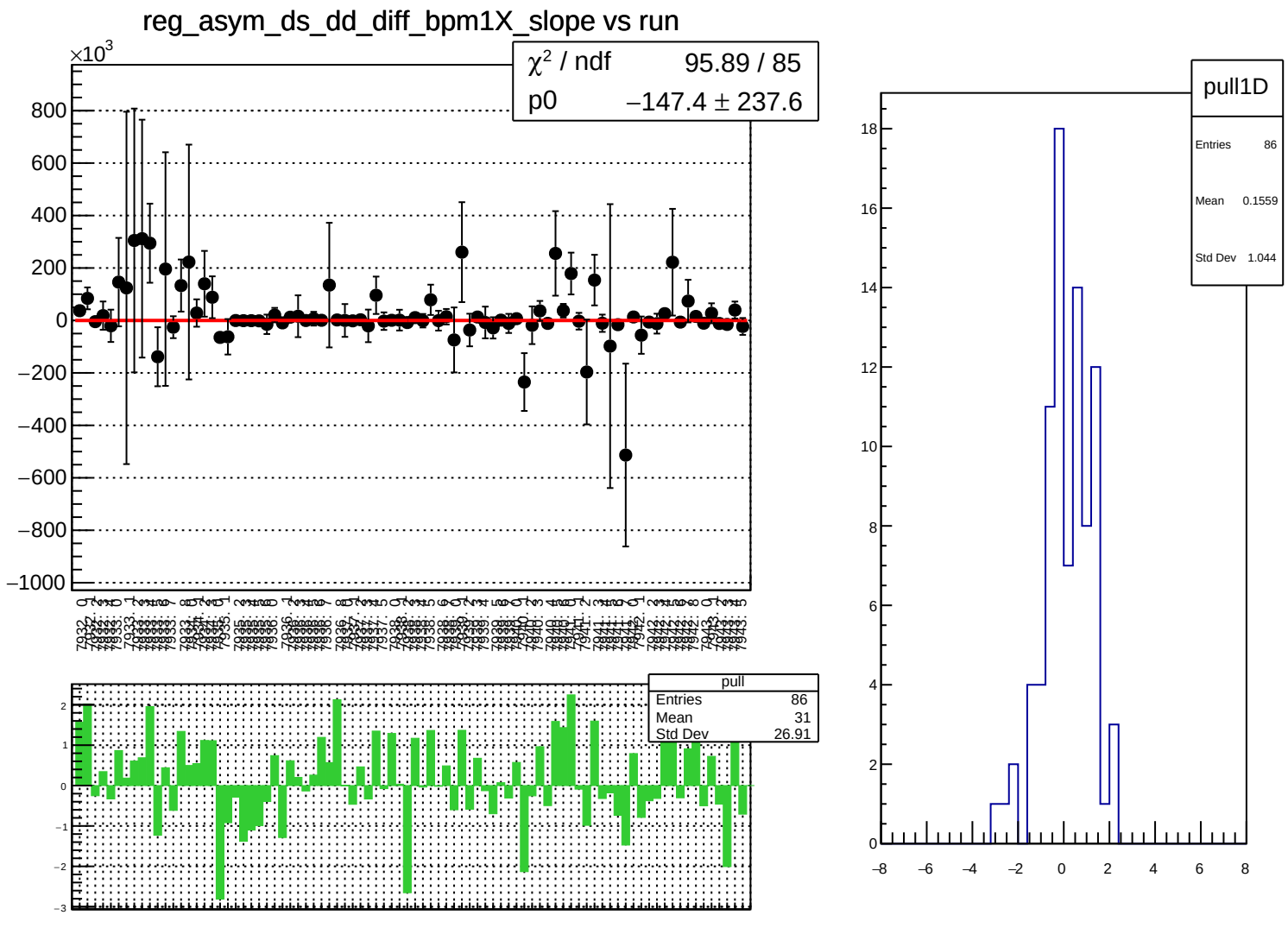

pull1D
Entries 86
Mean 0.164
Std Dev 1.043

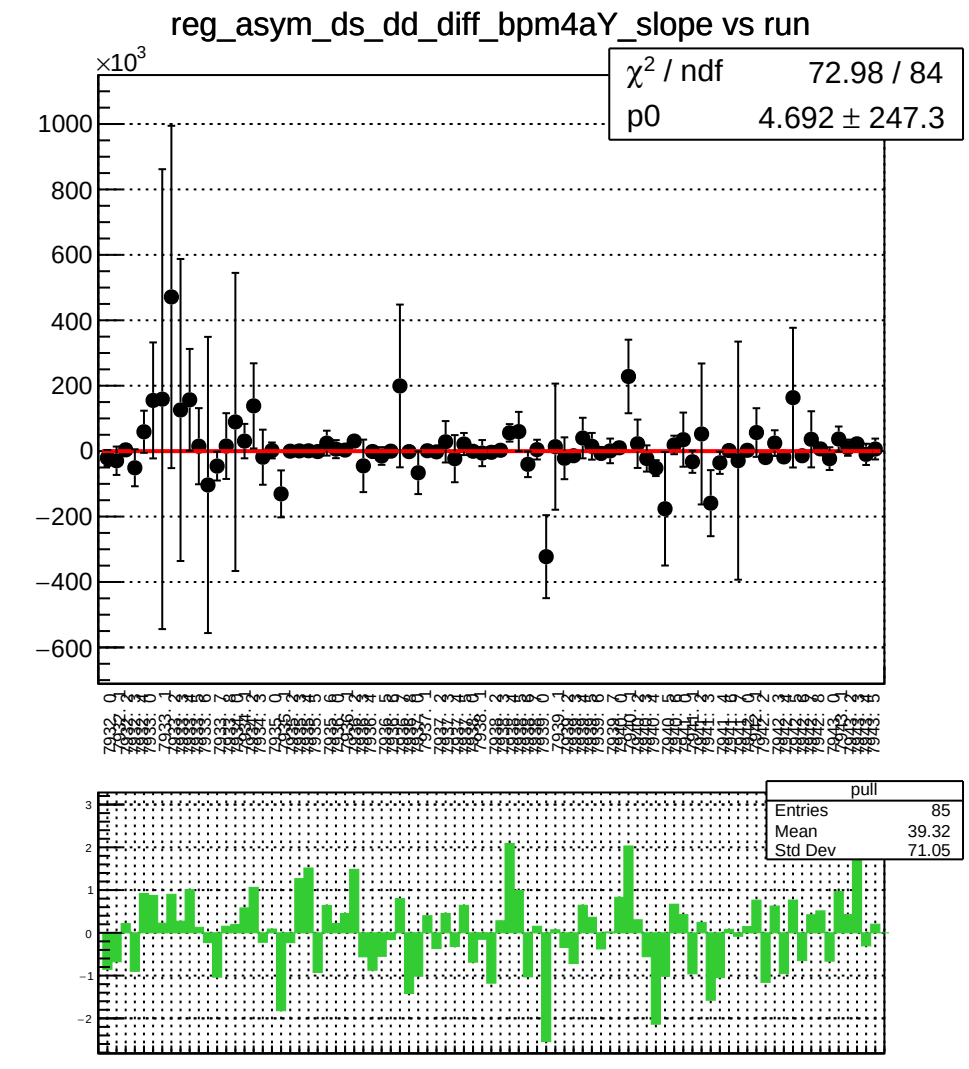

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 74.71 / 84
p0 −5.791 ± 285.5
pull
Entries 85
Mean 11.03
Std Dev 68.52

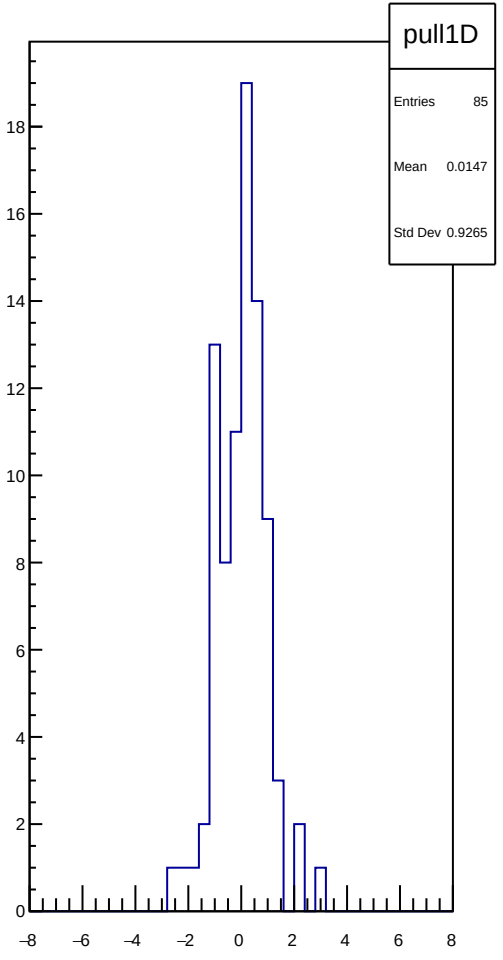

pull1D
Entries 85
Mean 0.01246
Std Dev 0.9374

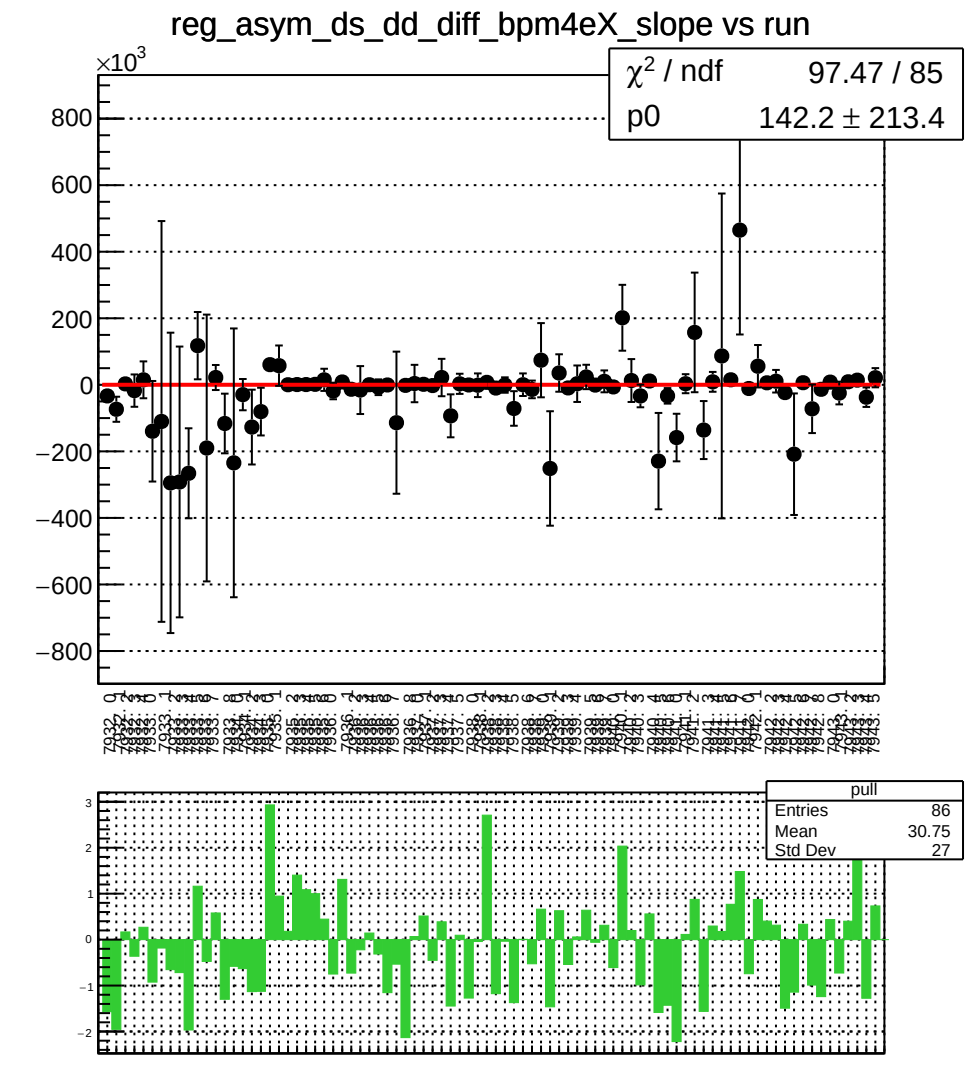

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 77.43 / 85
p0 −3.292 ± 7.98
pull
Entries 86
Mean −24.61
Std Dev 81.58

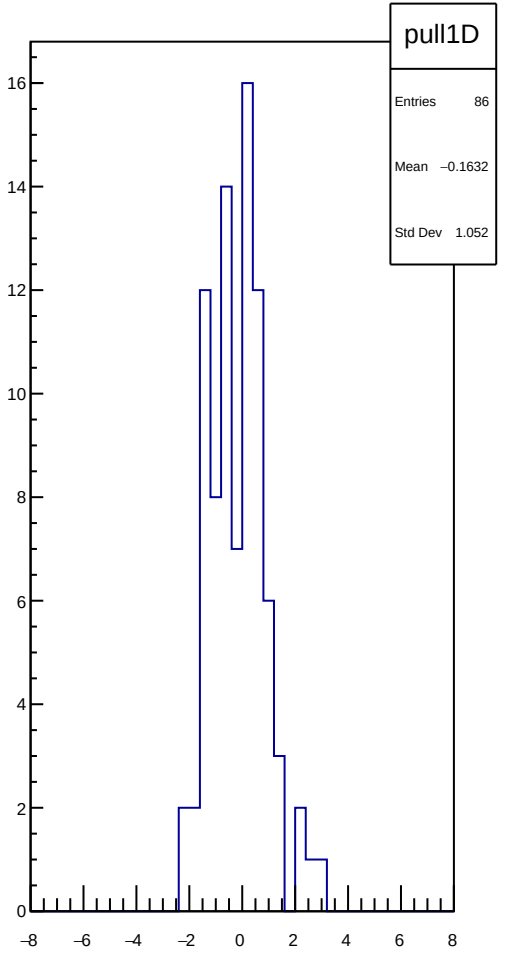

pull1D
Entries 86
Mean −0.01516
Std Dev 0.9488

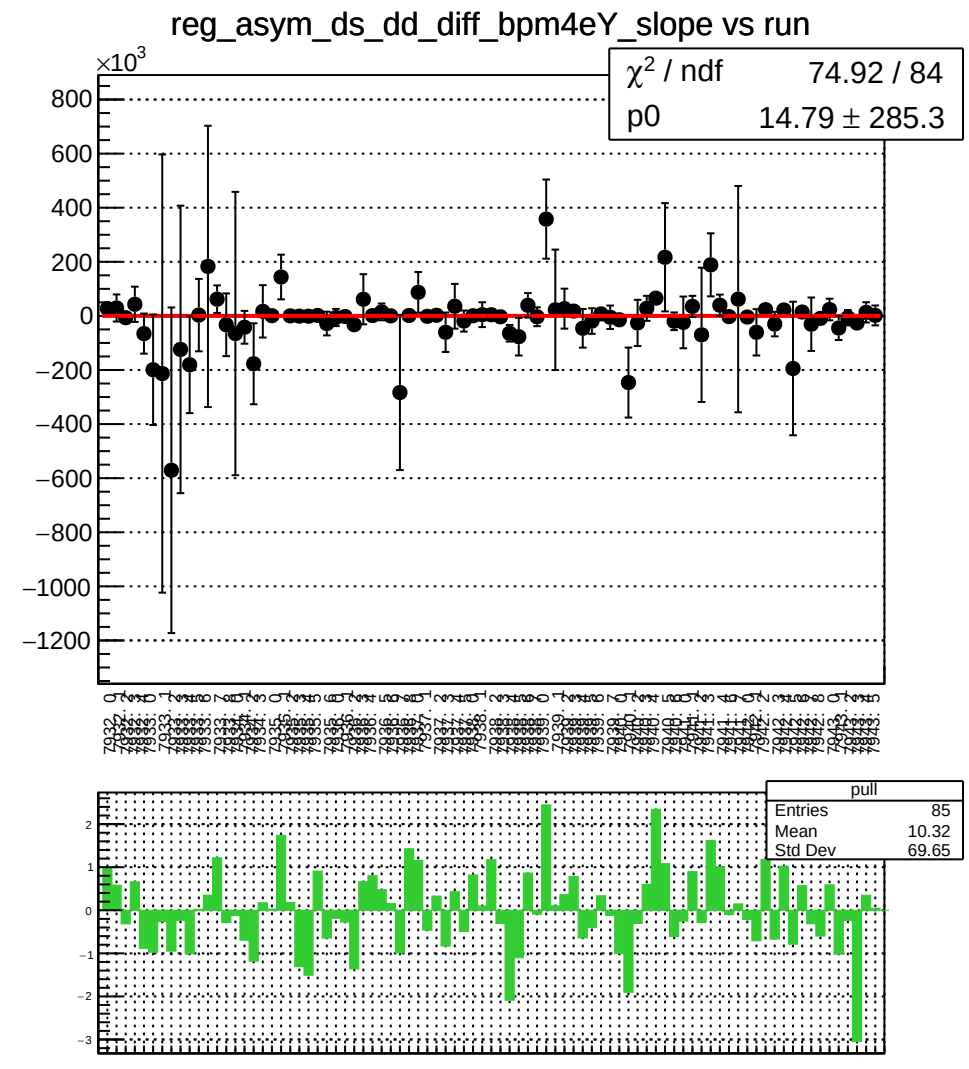

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 95.89 / 85
p0 −147.4 ± 237.6
pull
Entries 86
Mean 31
Std Dev 26.91
pull1D
Entries 86
Mean 0.1559
Std Dev 1.044

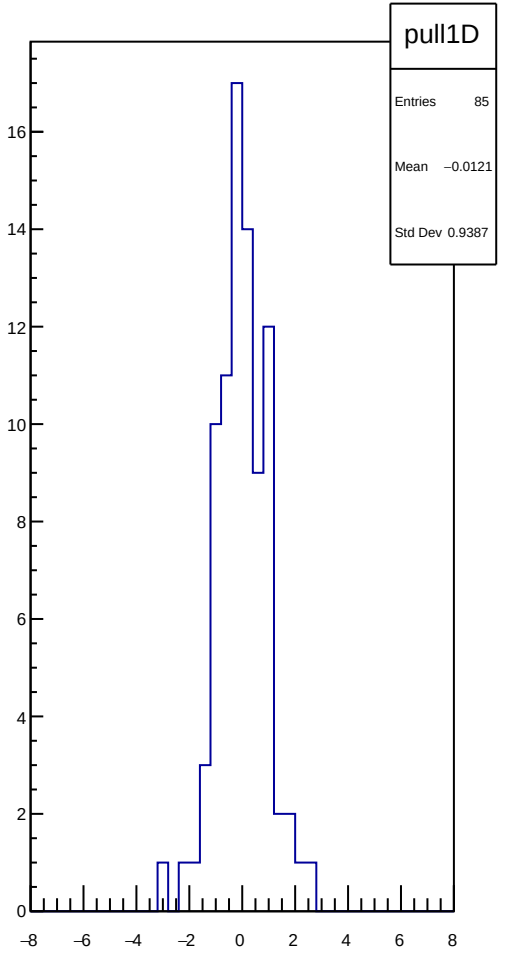

reg_asym_ds_dd_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 72.98 / 84
p0 4.692 ± 247.3
pull
Entries 85
Mean 39.32
Std Dev 71.05

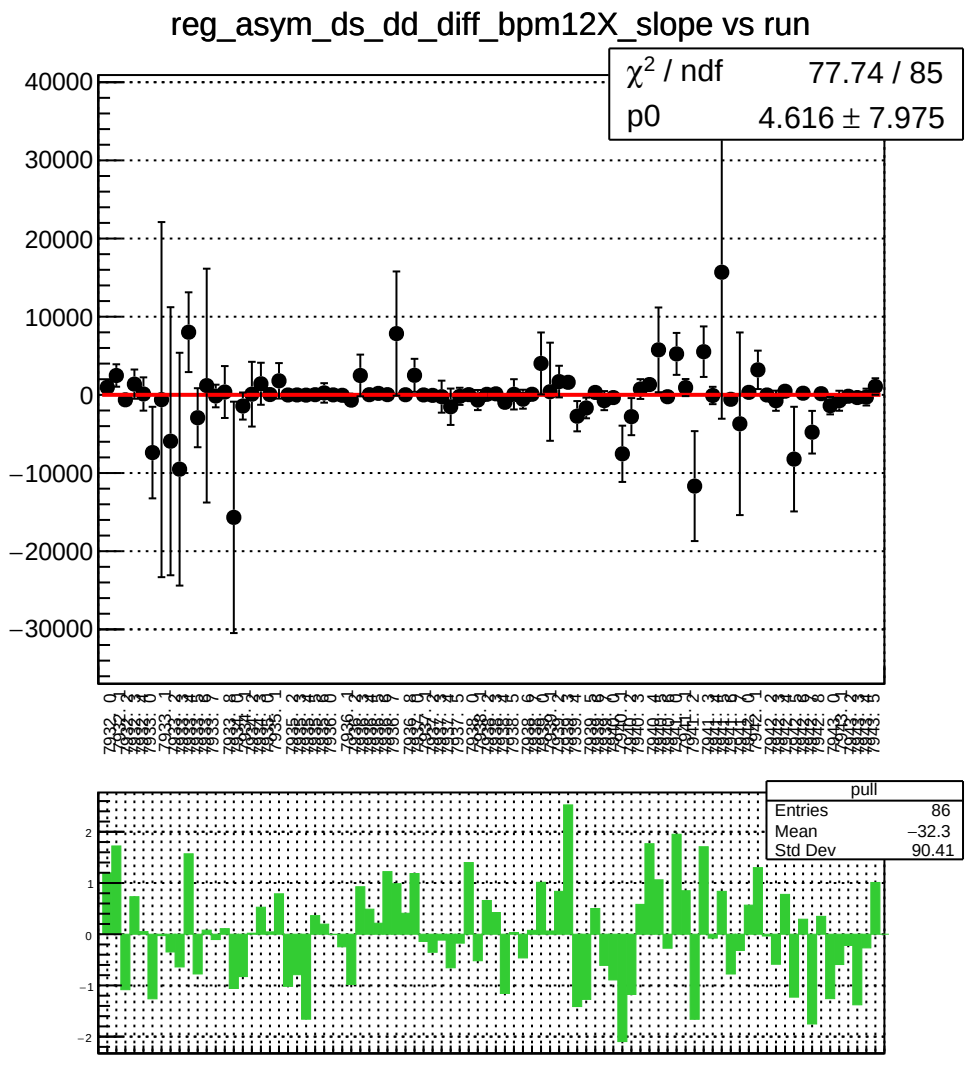

pull1D
Entries 85
Mean 0.0147
Std Dev 0.9265

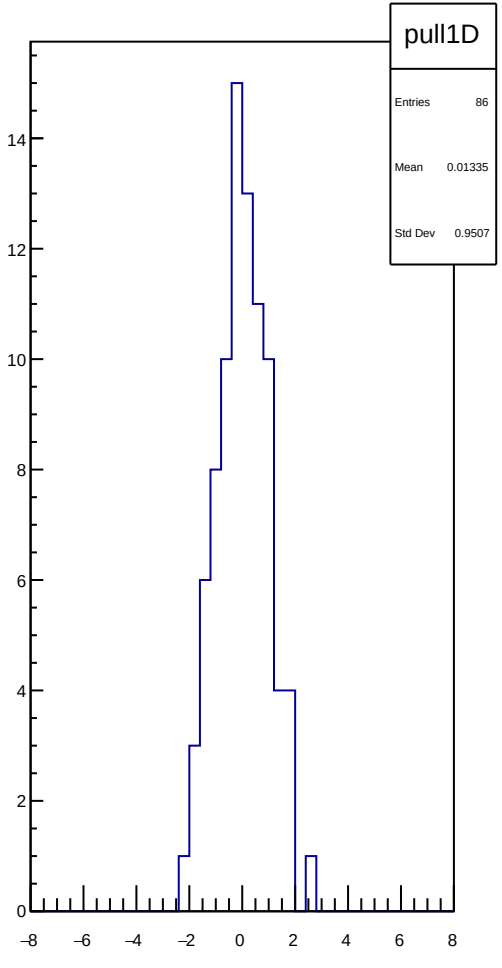

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 97.47 / 85
p0 142.2 ± 213.4
×10³
pull
Entries 86
Mean 30.75
Std Dev 27

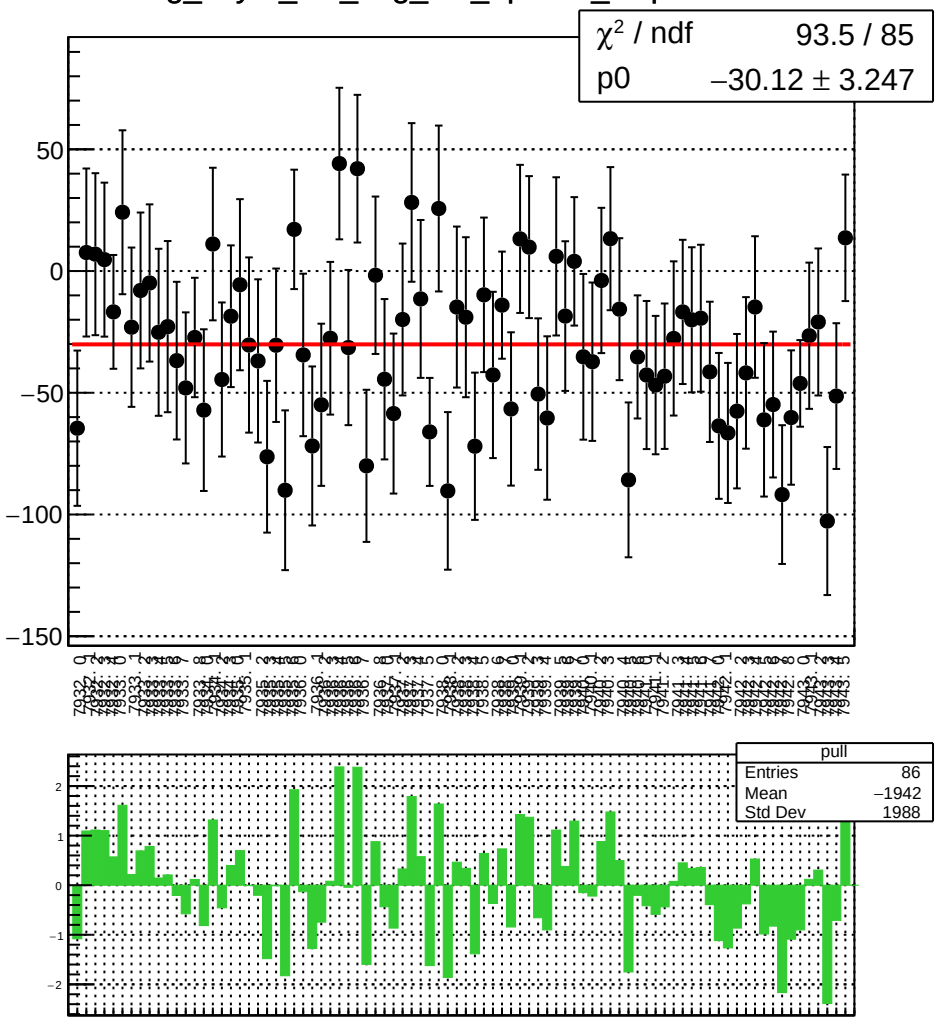

pull1D
Entries 86
Mean −0.1632
Std Dev 1.052

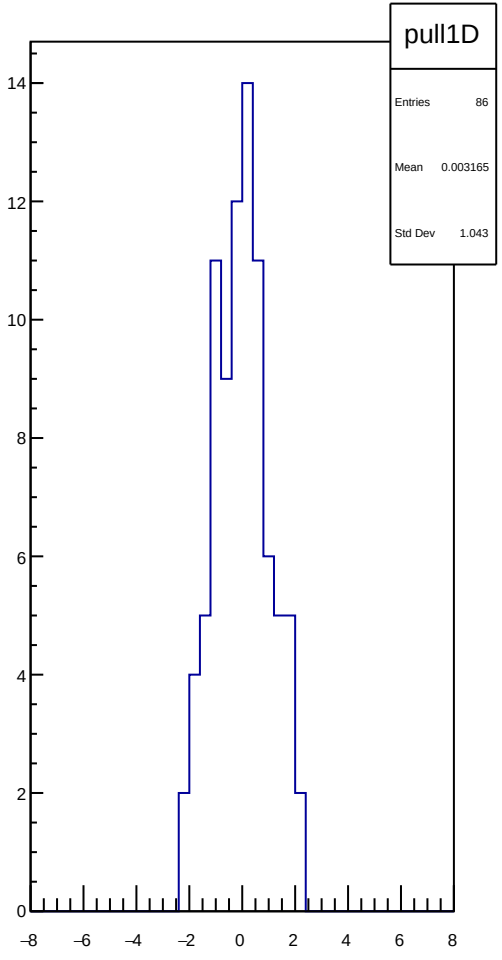

reg_asym_ds_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 74.92 / 84
p0 14.79 ± 285.3
pull
Entries 85
Mean 10.32
Std Dev 69.65

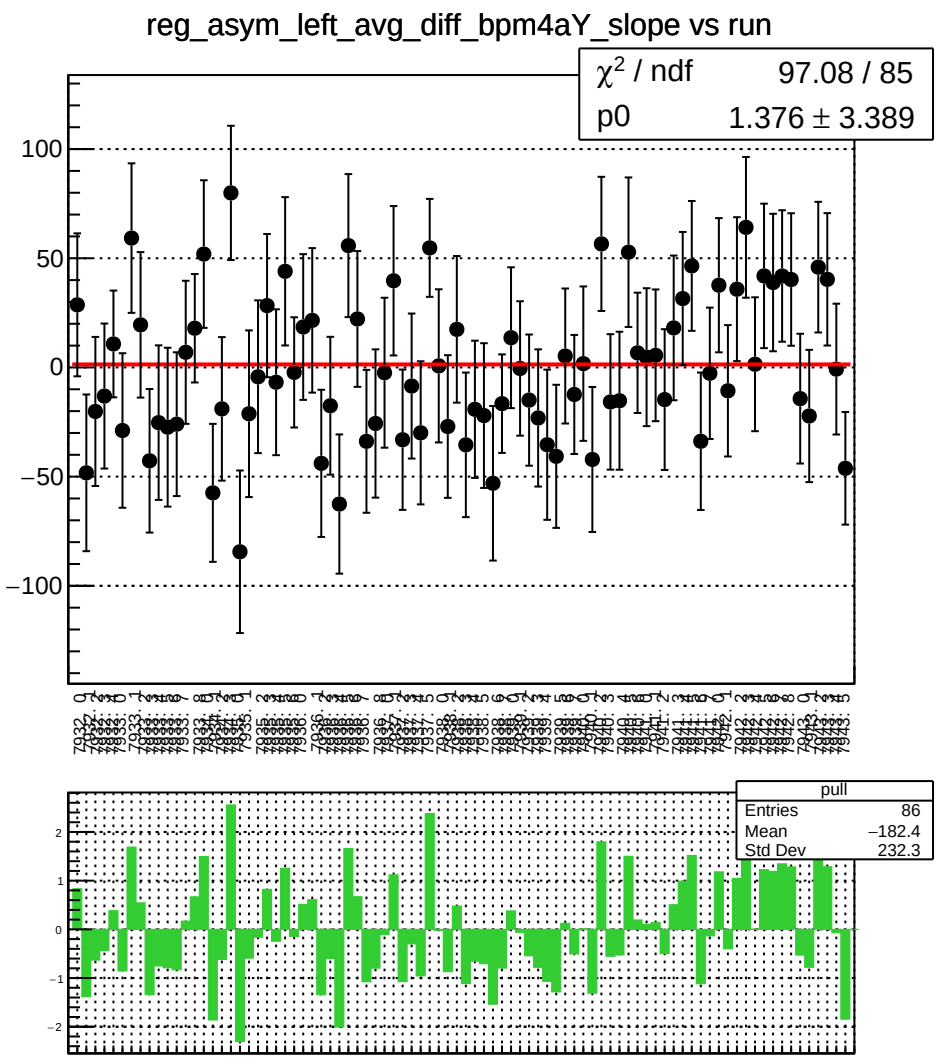

pull1D
Entries 85
Mean −0.0121
Std Dev 0.9387

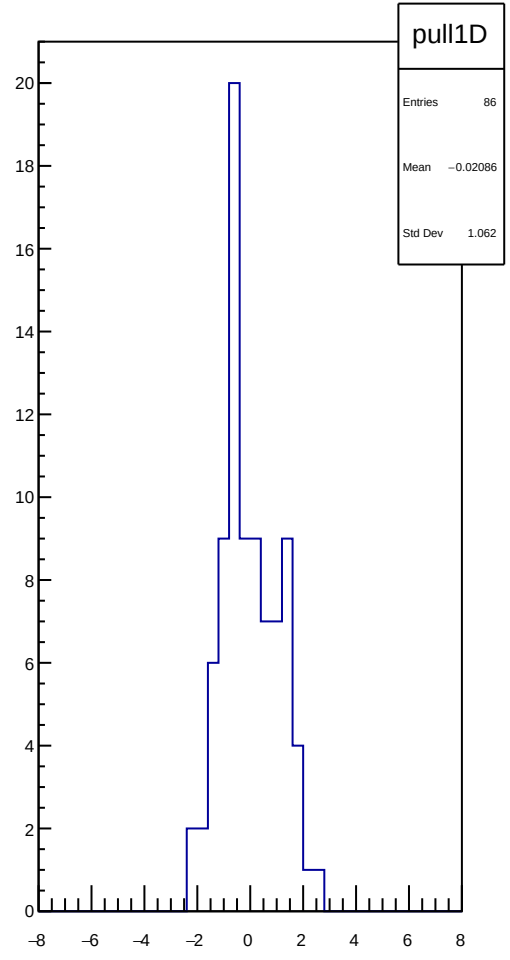

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 77.74 / 85
p0 4.616 ± 7.975
pull
Entries 86
Mean −32.3
Std Dev 90.41

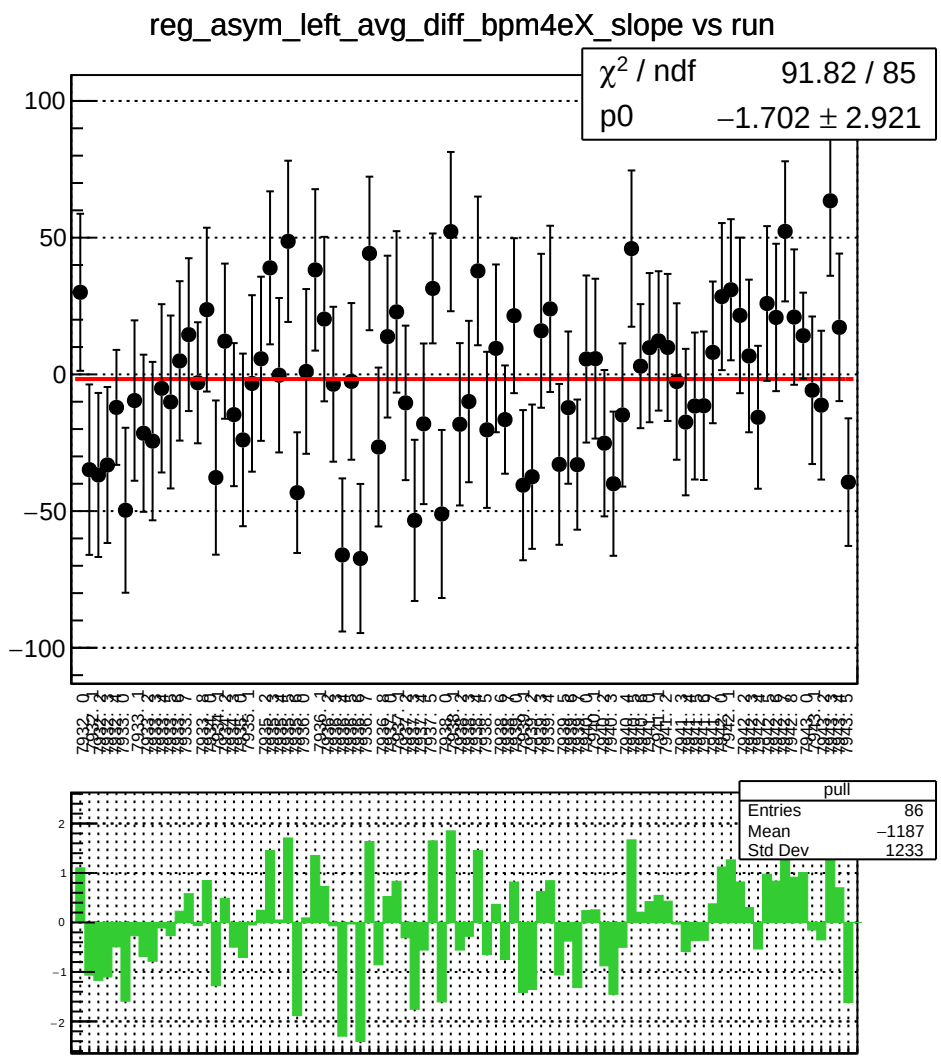

pull1D
Entries 86
Mean 0.01335
Std Dev 0.9507

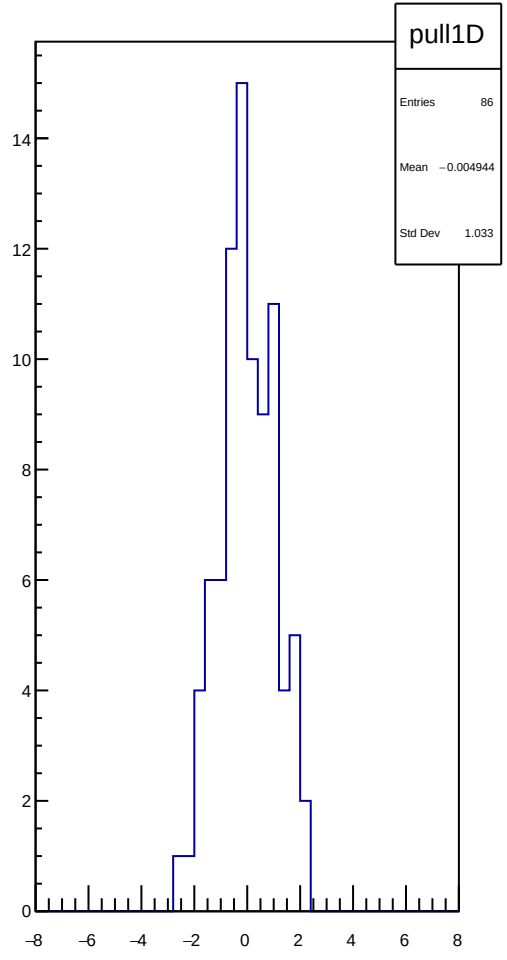

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 93.5 / 85
p0 −30.12 ± 3.247
pull
Entries 86
Mean −1942
Std Dev 1988

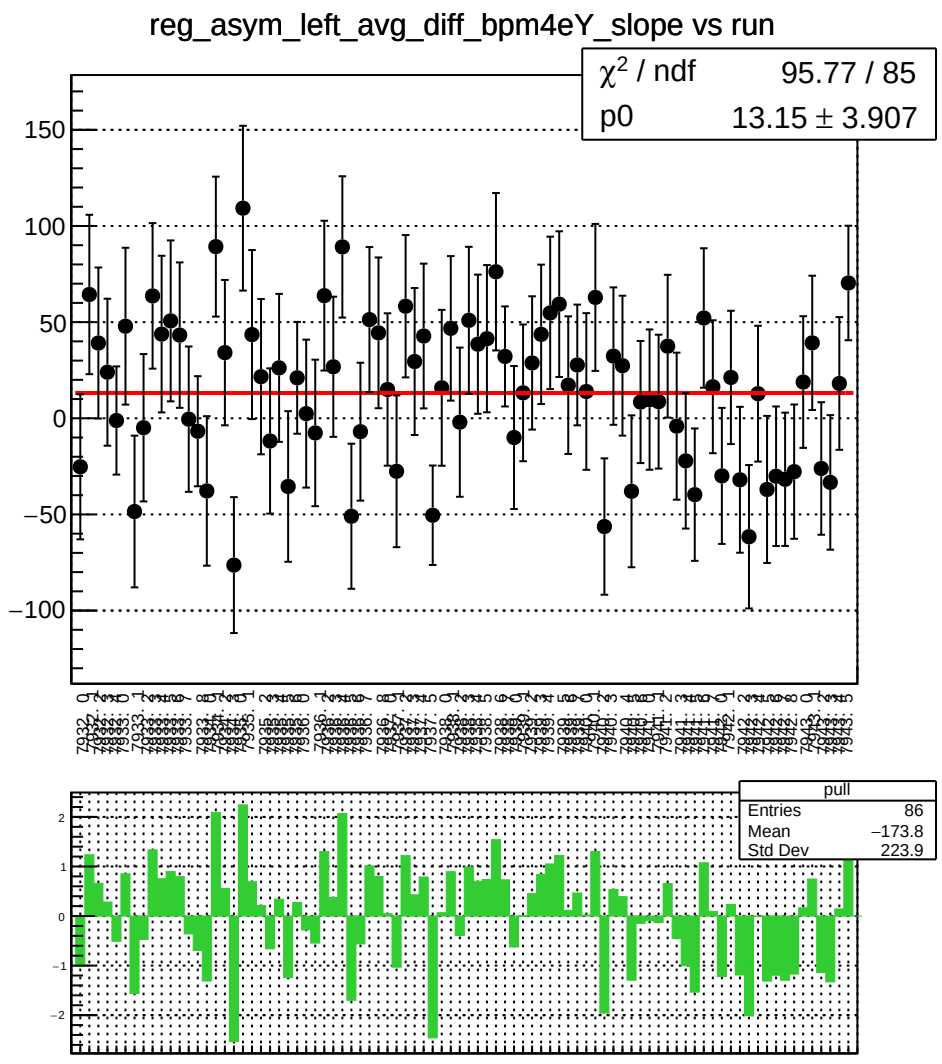

pull1D
Entries 86
Mean 0.003165
Std Dev 1.043

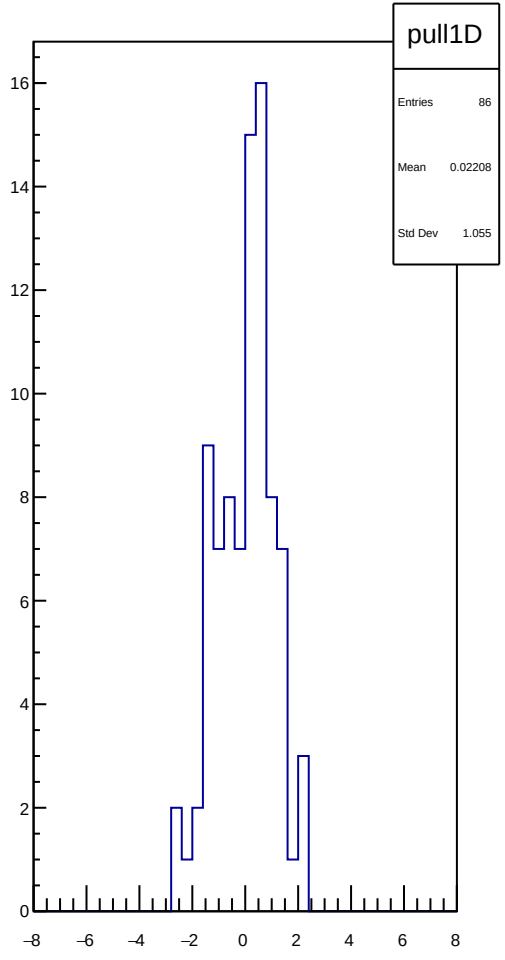

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 97.08 / 85
p0 1.376 ± 3.389
100
50
0
−50
−100
pull
Entries 86
Mean −182.4
Std Dev 232.3
2
1
0
−1
−2

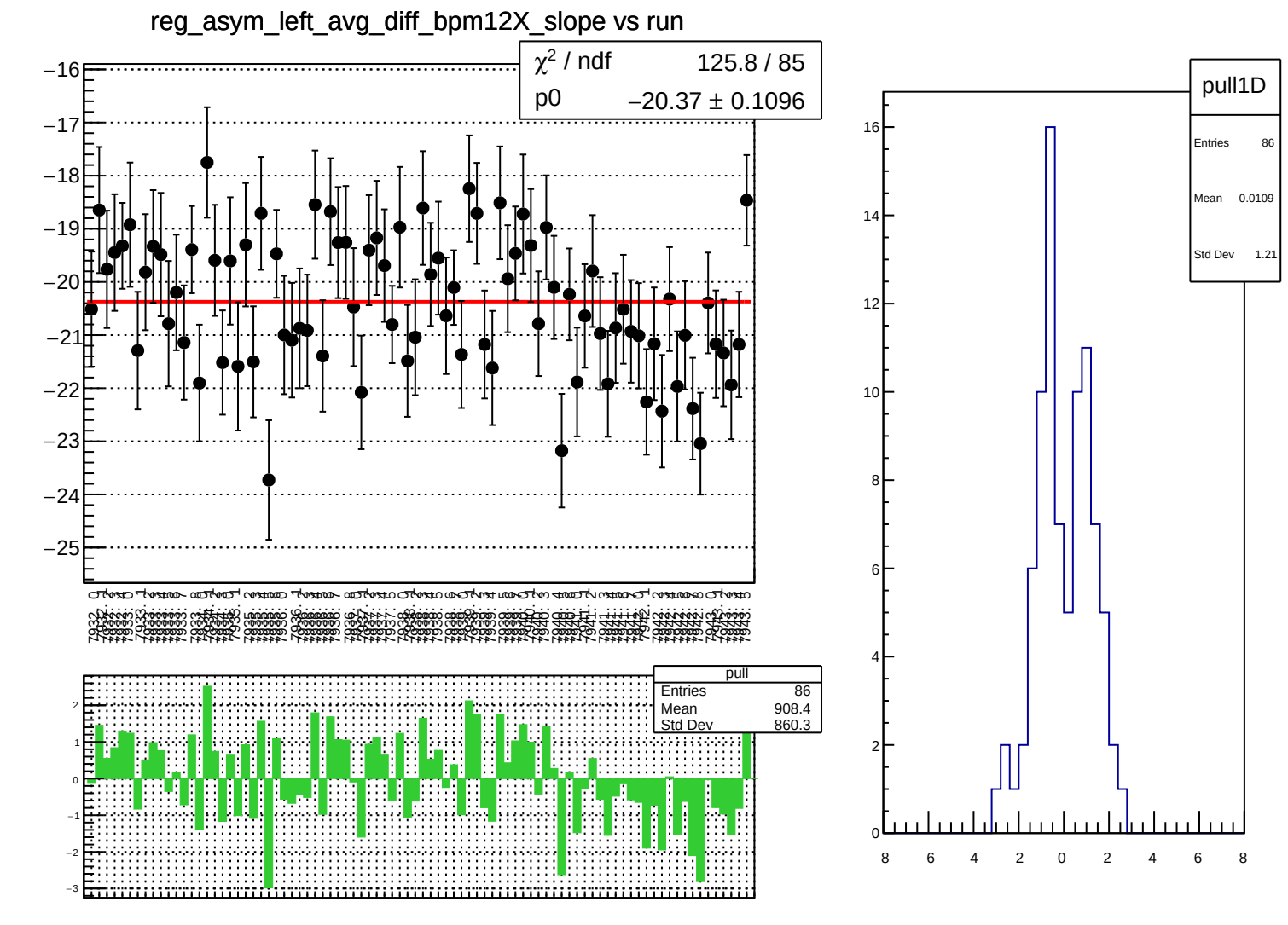

pull1D
Entries 86
Mean −0.02086
Std Dev 1.062
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

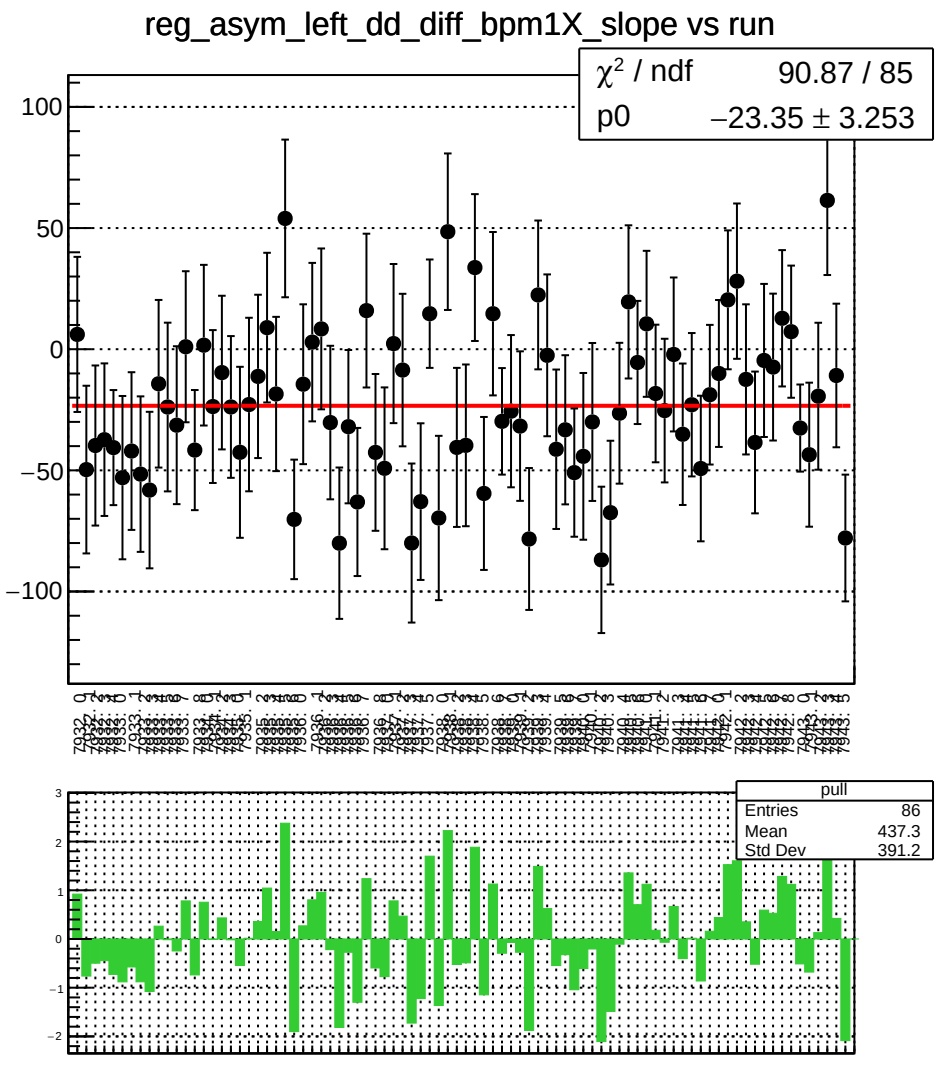

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 91.82 / 85
p0 −1.702 ± 2.921
100
50
0
−50
−100
pull
Entries 86
Mean −1187
Std Dev 1233
2
1
0
−1
−2

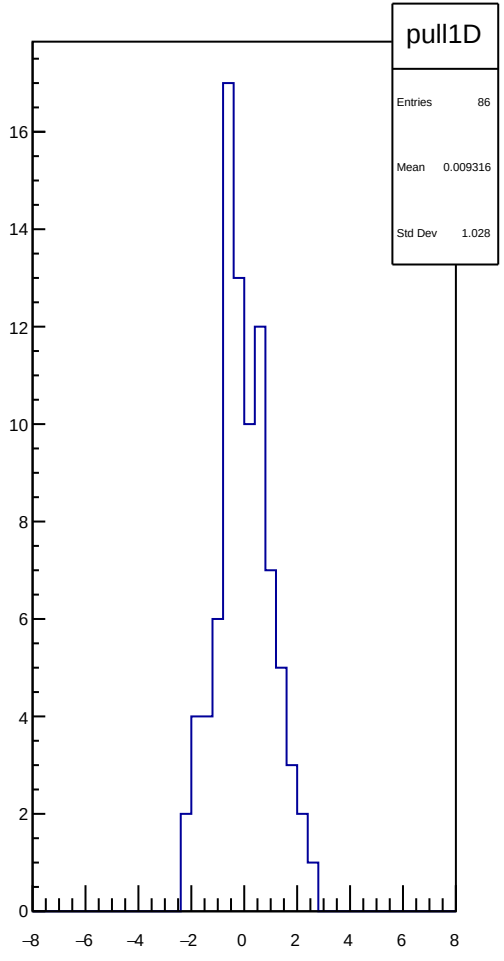

pull1D
Entries 86
Mean −0.004944
Std Dev 1.033
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

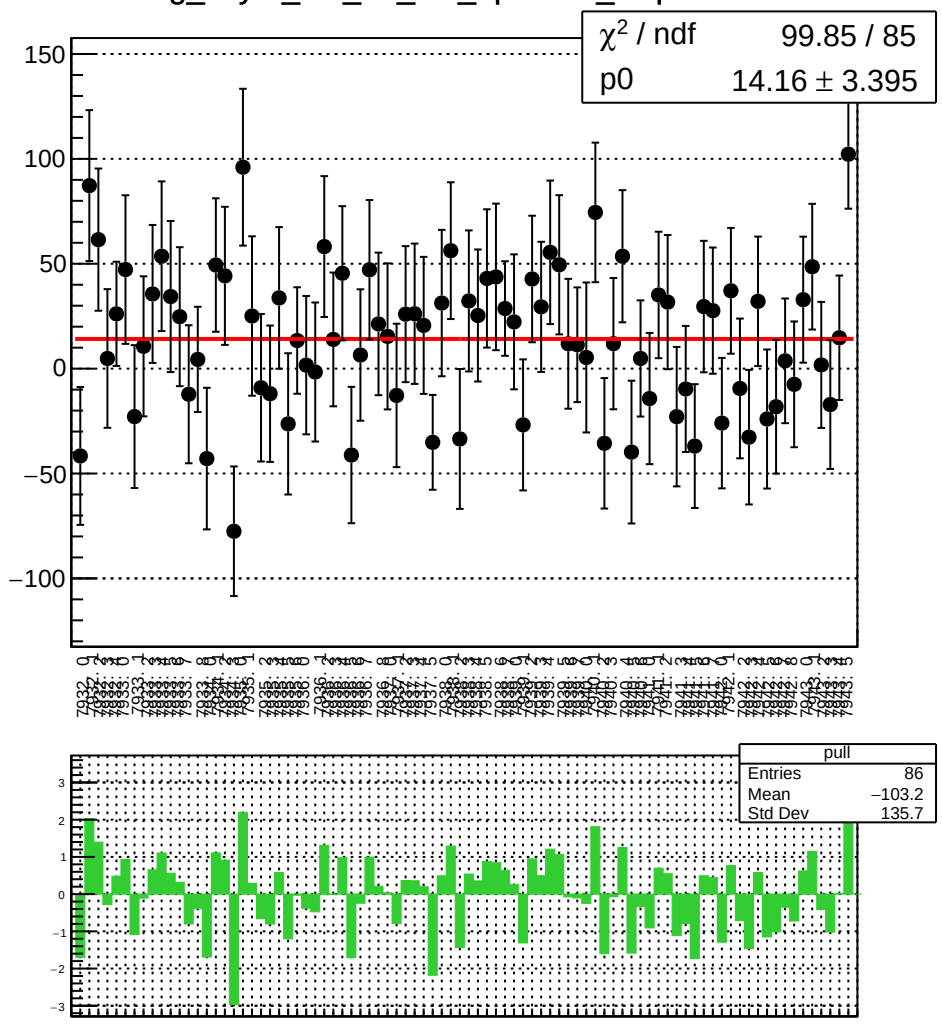

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 95.77 / 85
p0 13.15 ± 3.907
150
100
50
0
−50
−100
pull
Entries 86
Mean −173.8
Std Dev 223.9
2
1
0
−1
−2

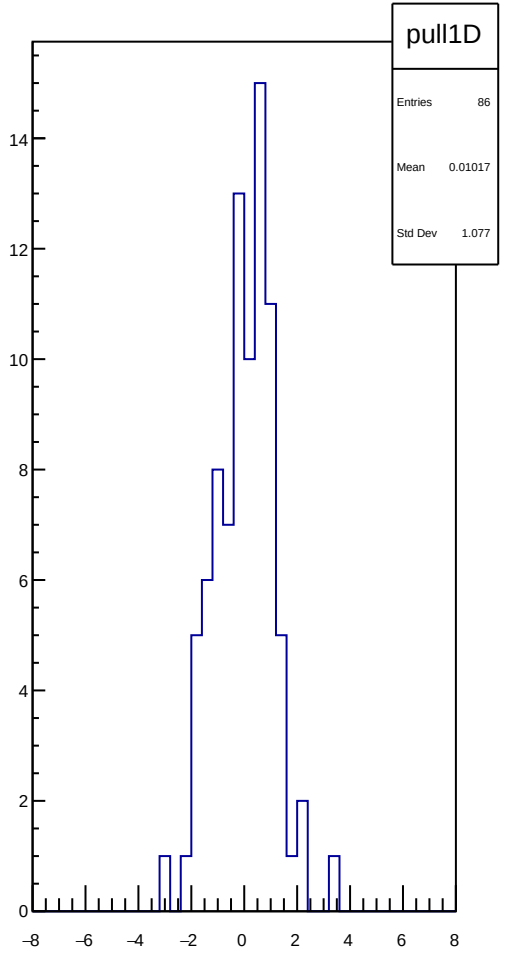

pull1D
Entries 86
Mean 0.02208
Std Dev 1.055
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

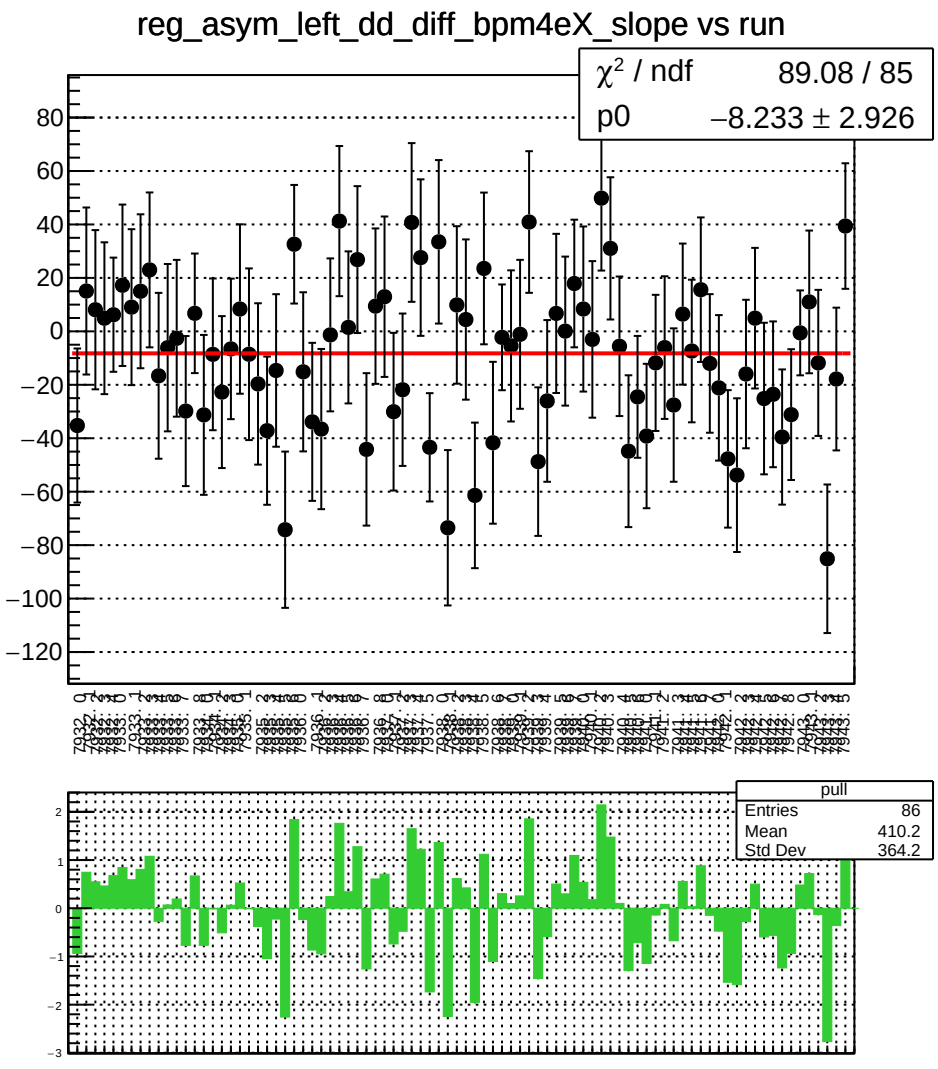

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 125.8 / 85
p0 −20.37 ± 0.1096
pull
Entries 86
Mean 908.4
Std Dev 860.3
pull1D
Entries 86
Mean −0.0109
Std Dev 1.21

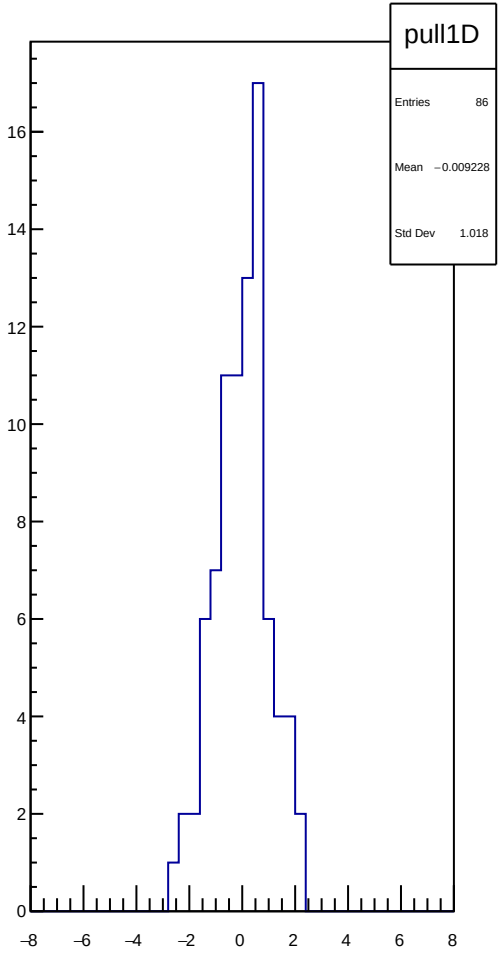

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 90.87 / 85
p0 −23.35 ± 3.253
100
50
0
−50
−100
pull
Entries 86
Mean 437.3
Std Dev 391.2
3
2
1
0
−1
−2

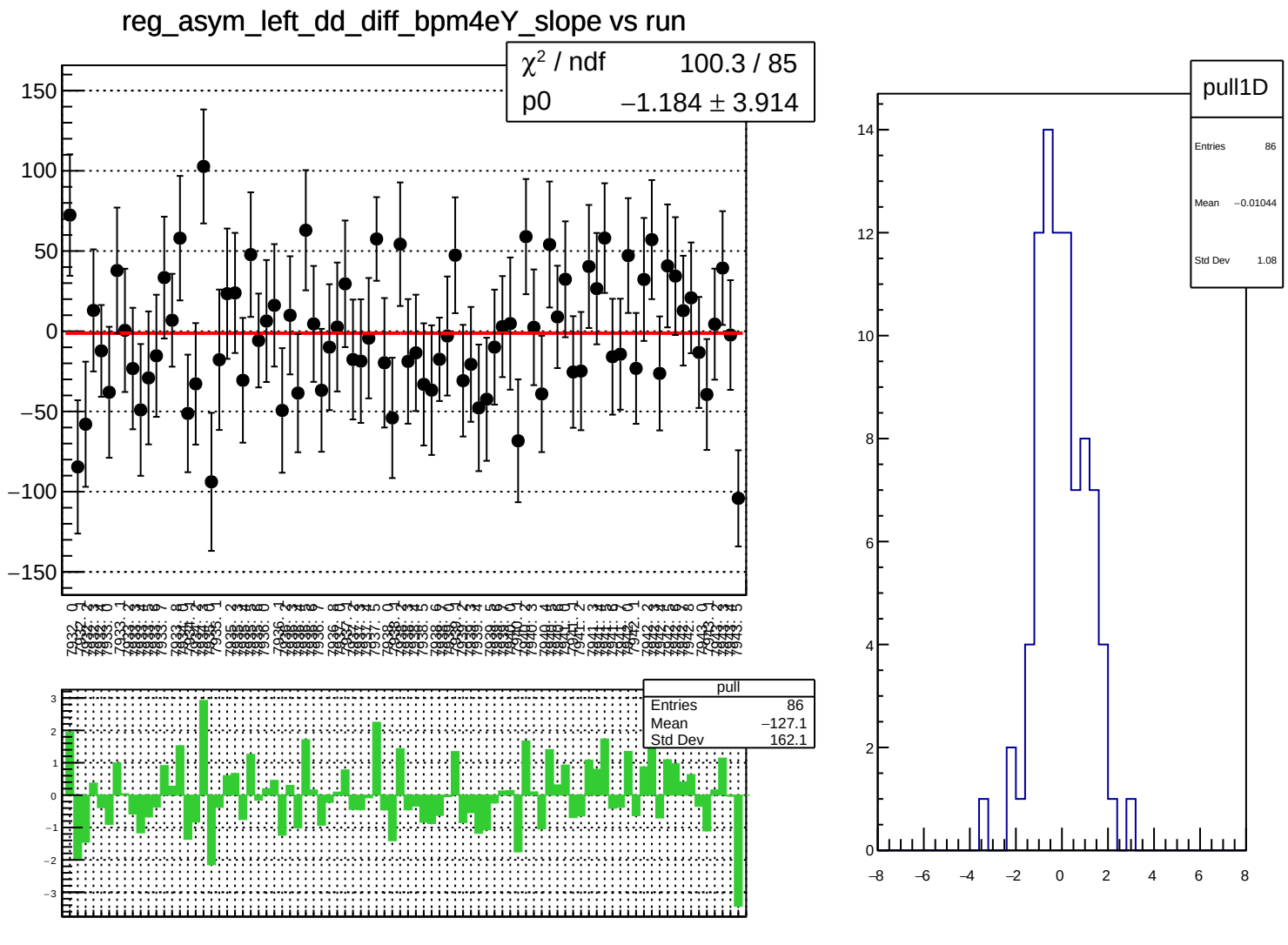

pull1D
Entries 86
Mean 0.009316
Std Dev 1.028
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

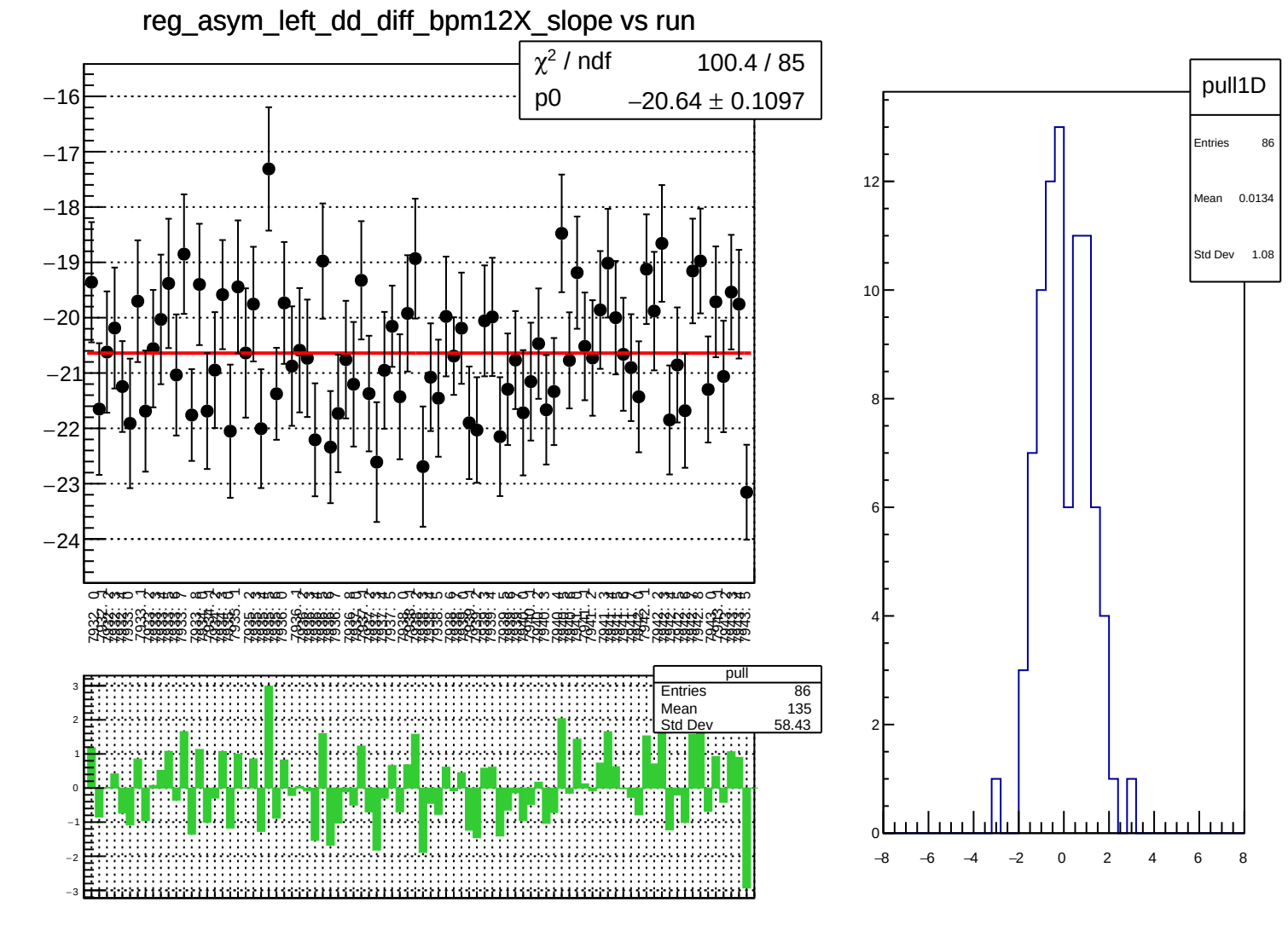

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 99.85 / 85
p0 14.16 ± 3.395
150
100
50
0
−50
−100
pull
Entries 86
Mean −103.2
Std Dev 135.7
3
2
1
0
−1
−2
−3

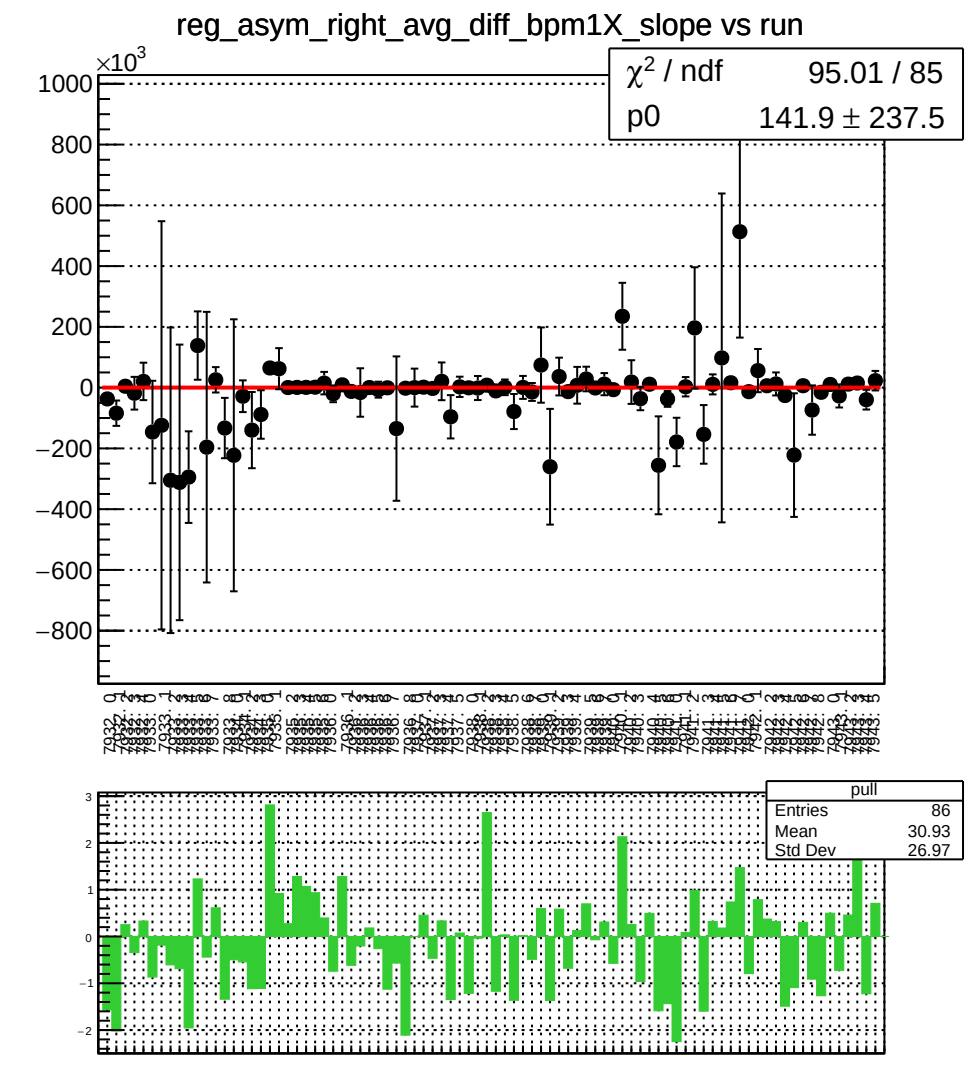

pull1D
Entries 86
Mean 0.01017
Std Dev 1.077
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

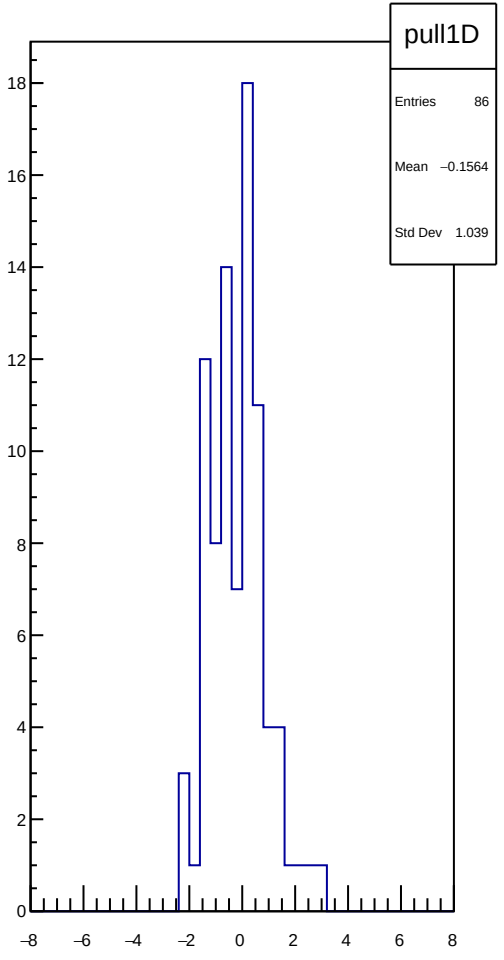

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 89.08 / 85
p0 −8.233 ± 2.926
pull
Entries 86
Mean 410.2
Std Dev 364.2

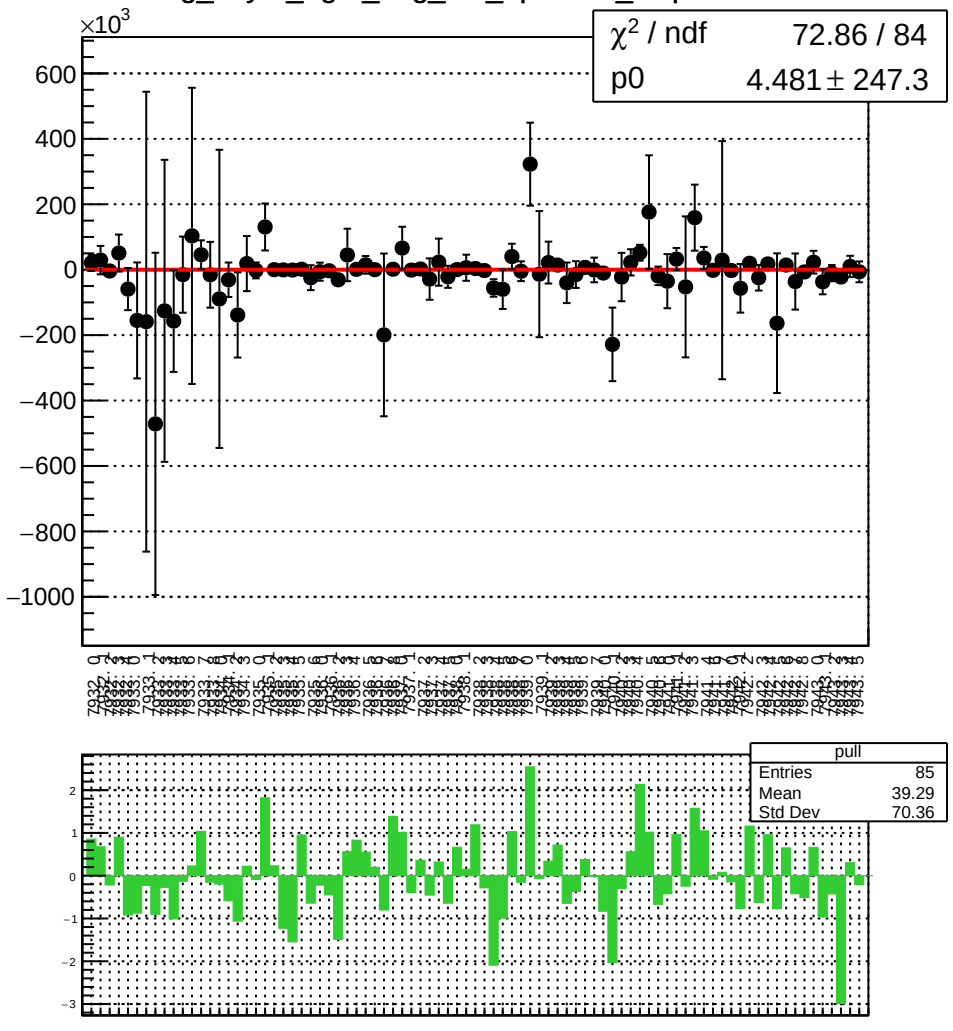

pull1D
Entries 86
Mean −0.009228
Std Dev 1.018

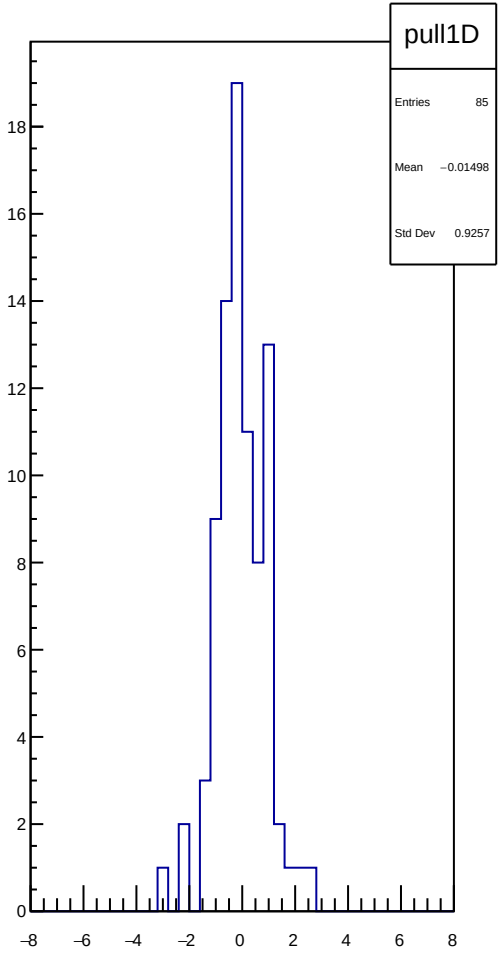

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 100.3 / 85
p0 −1.184 ± 3.914
pull
Entries 86
Mean −127.1
Std Dev 162.1
pull1D
Entries 86
Mean −0.01044
Std Dev 1.08

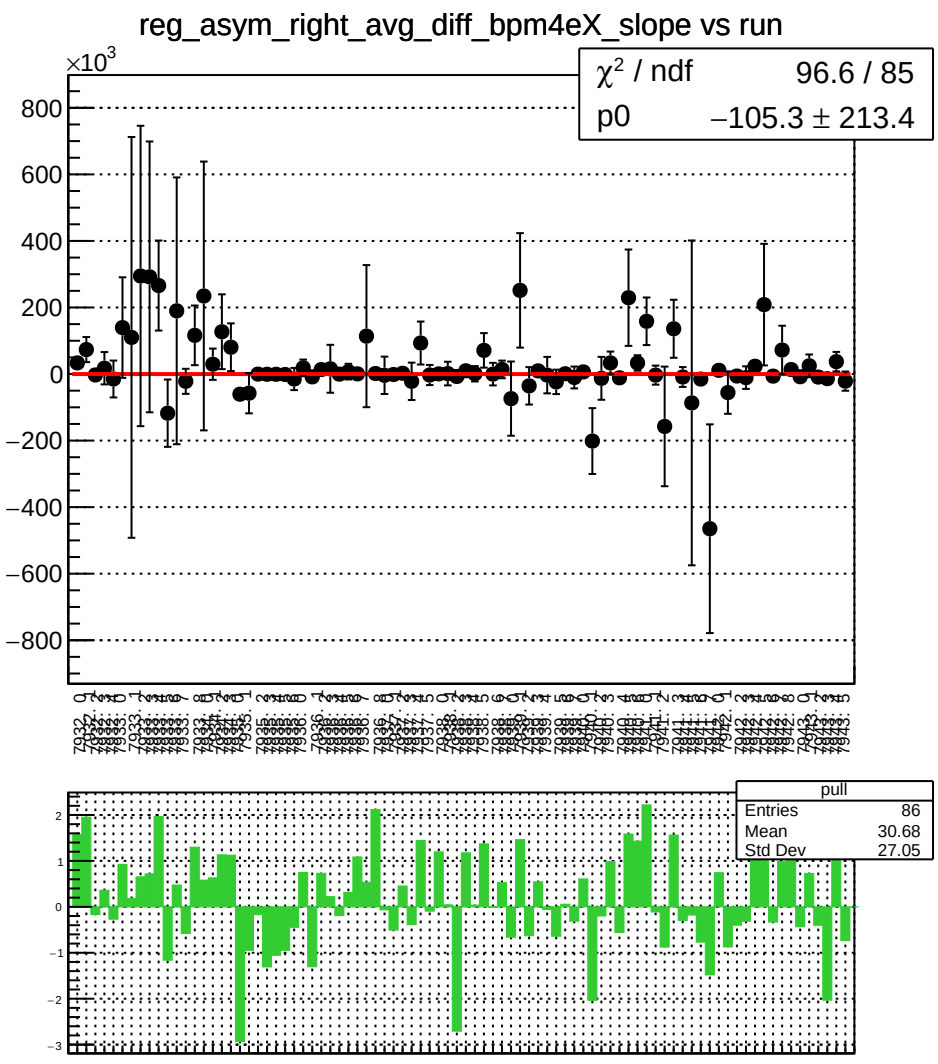

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 100.4 / 85
p0 −20.64 ± 0.1097
pull
Entries 86
Mean 135
Std Dev 58.43
pull1D
Entries 86
Mean 0.0134
Std Dev 1.08

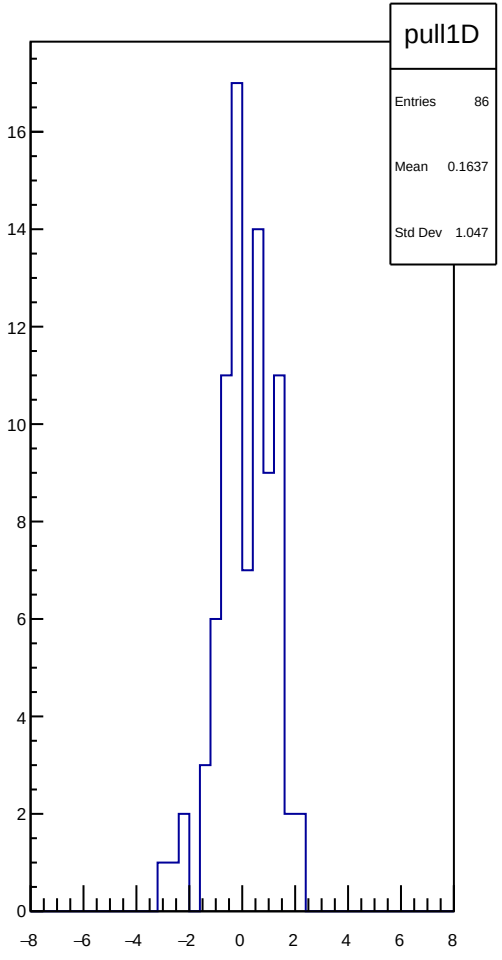

reg_asym_right_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 95.01 / 85
p0 141.9 ± 237.5
pull
Entries 86
Mean 30.93
Std Dev 26.97

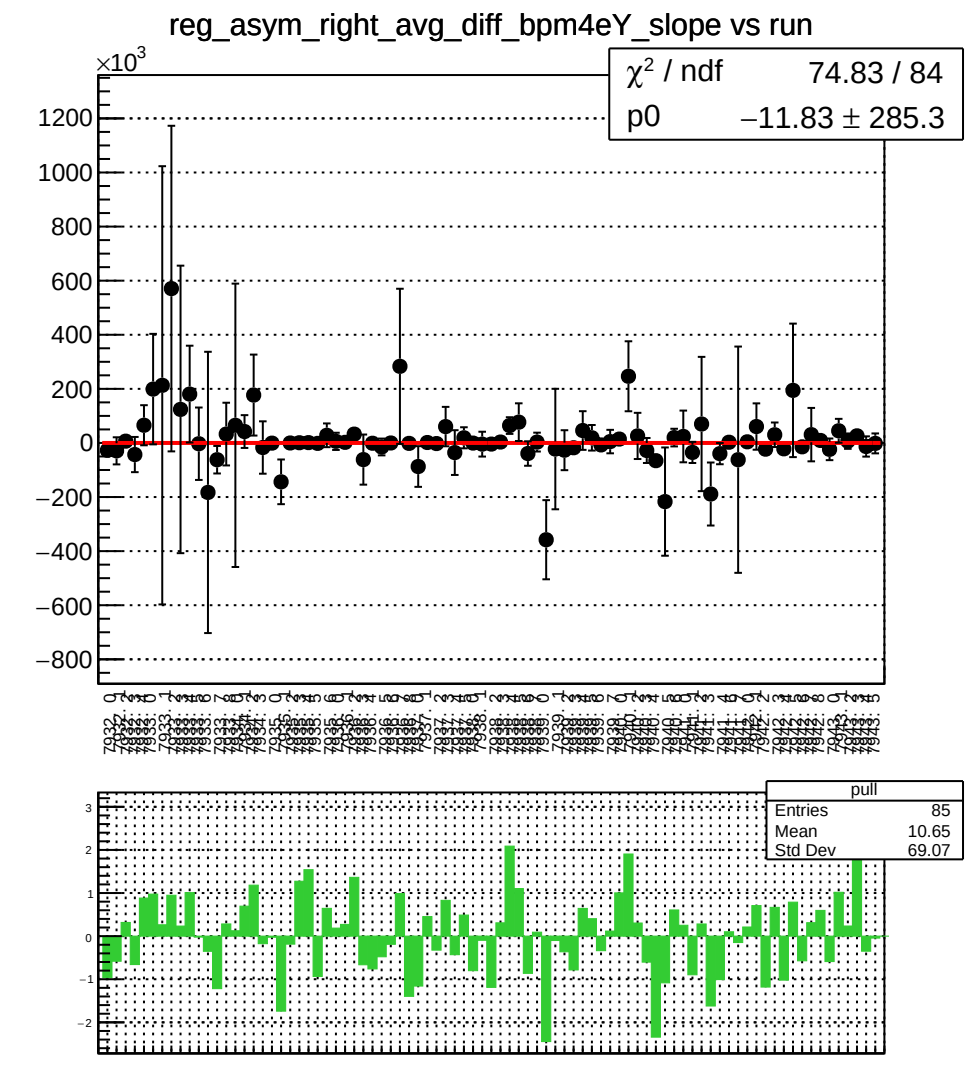

pull1D
Entries 86
Mean −0.1564
Std Dev 1.039

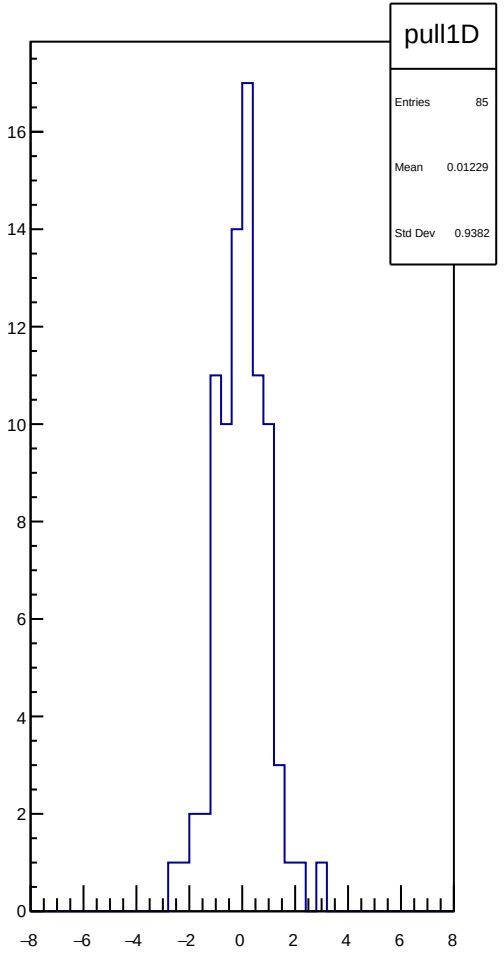

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 72.86 / 84
p0 4.481 ± 247.3
×10³
pull
Entries 85
Mean 39.29
Std Dev 70.36

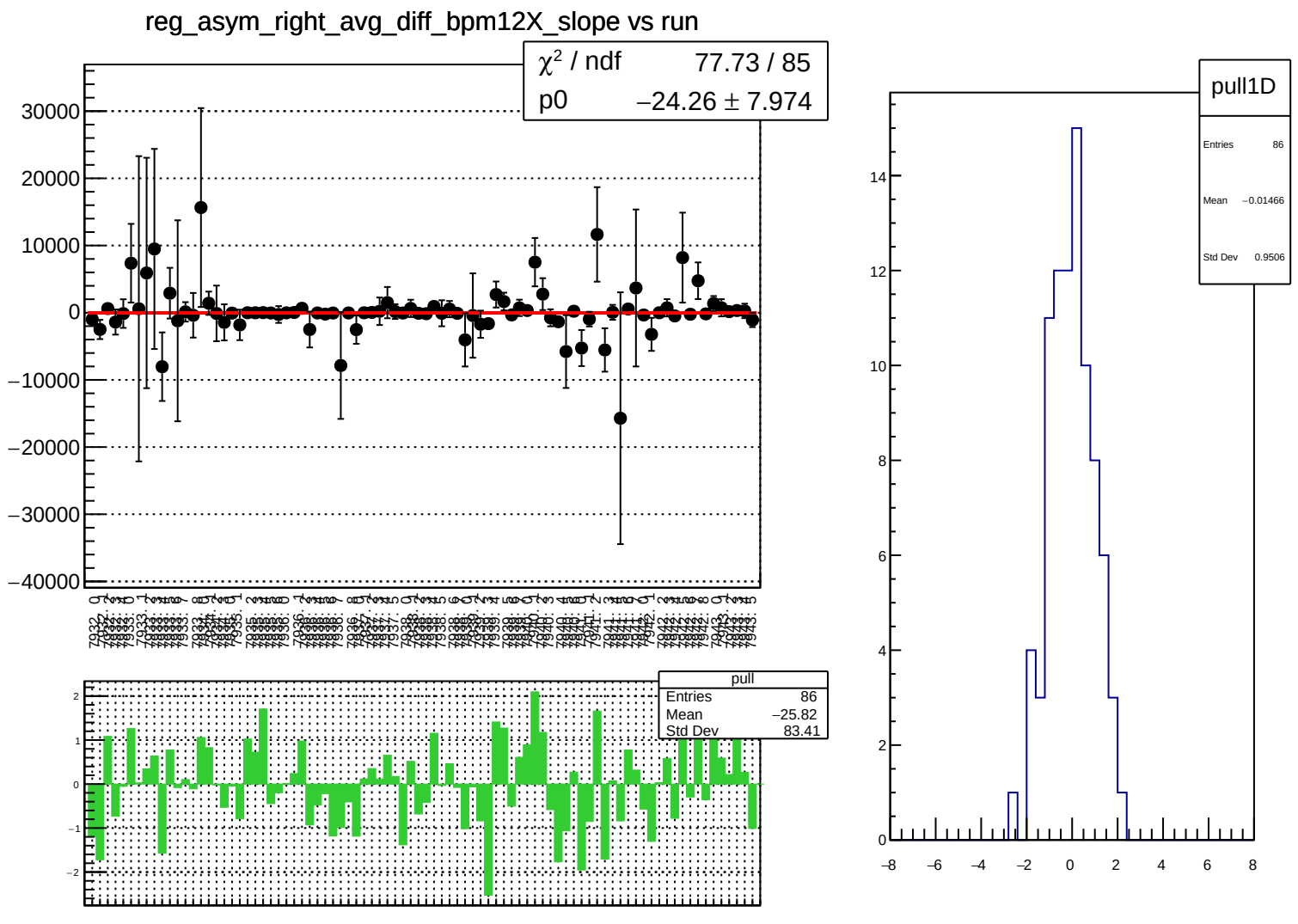

pull1D
Entries 85
Mean −0.01498
Std Dev 0.9257

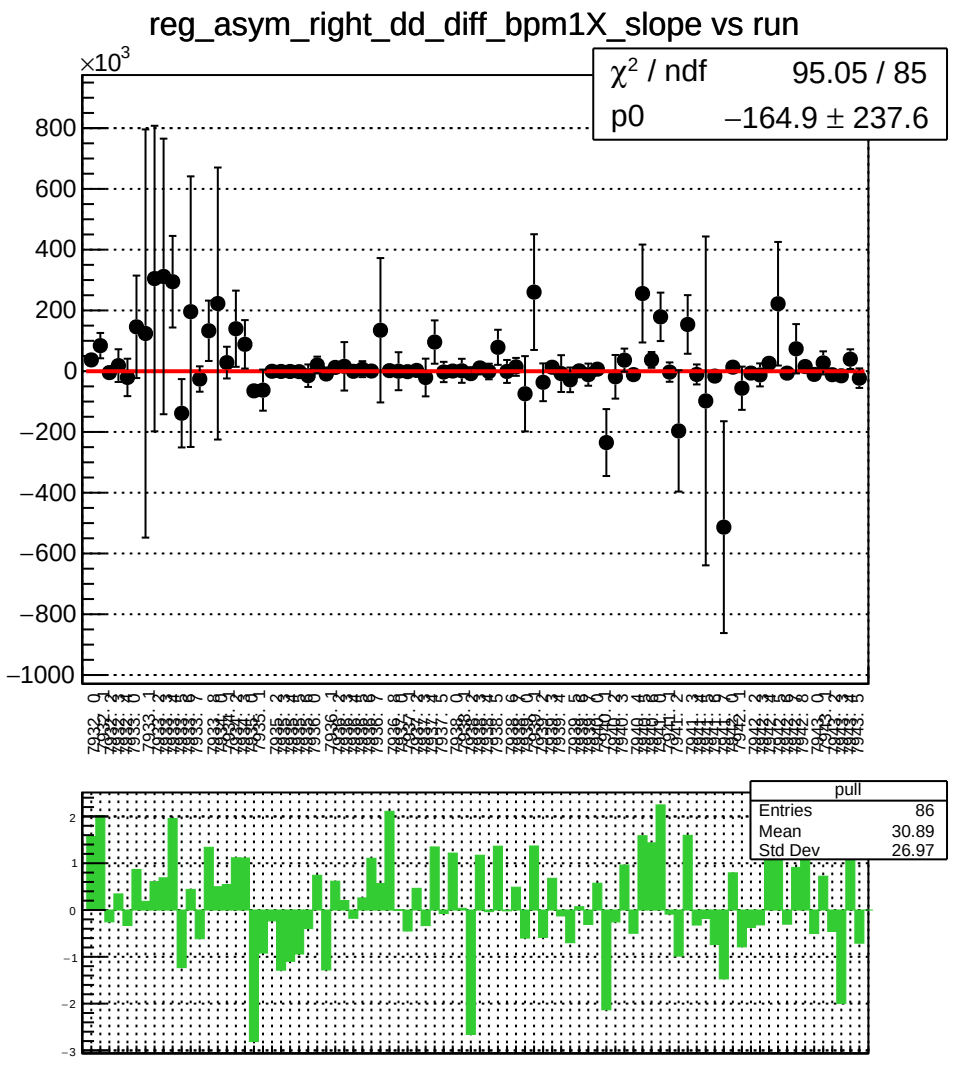

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 96.6 / 85
p0 −105.3 ± 213.4
×10³
pull
Entries 86
Mean 30.68
Std Dev 27.05

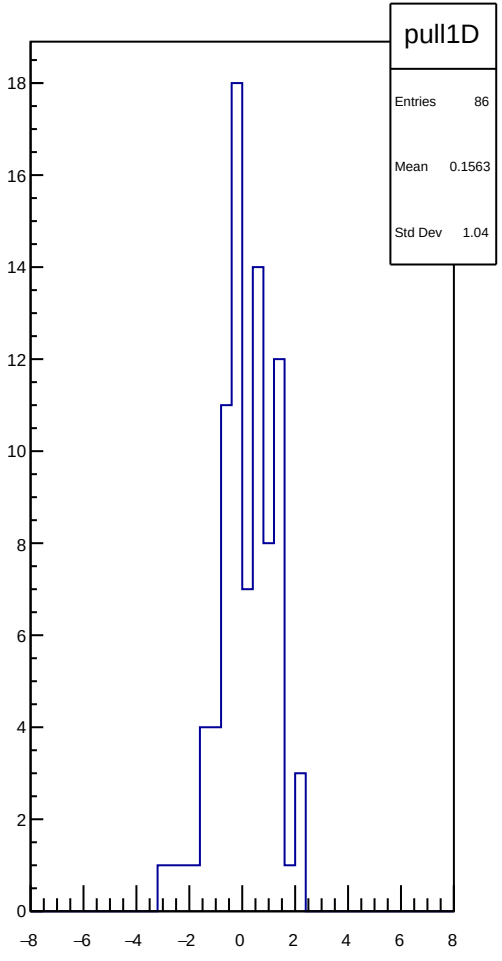

pull1D
Entries 86
Mean 0.1637
Std Dev 1.047

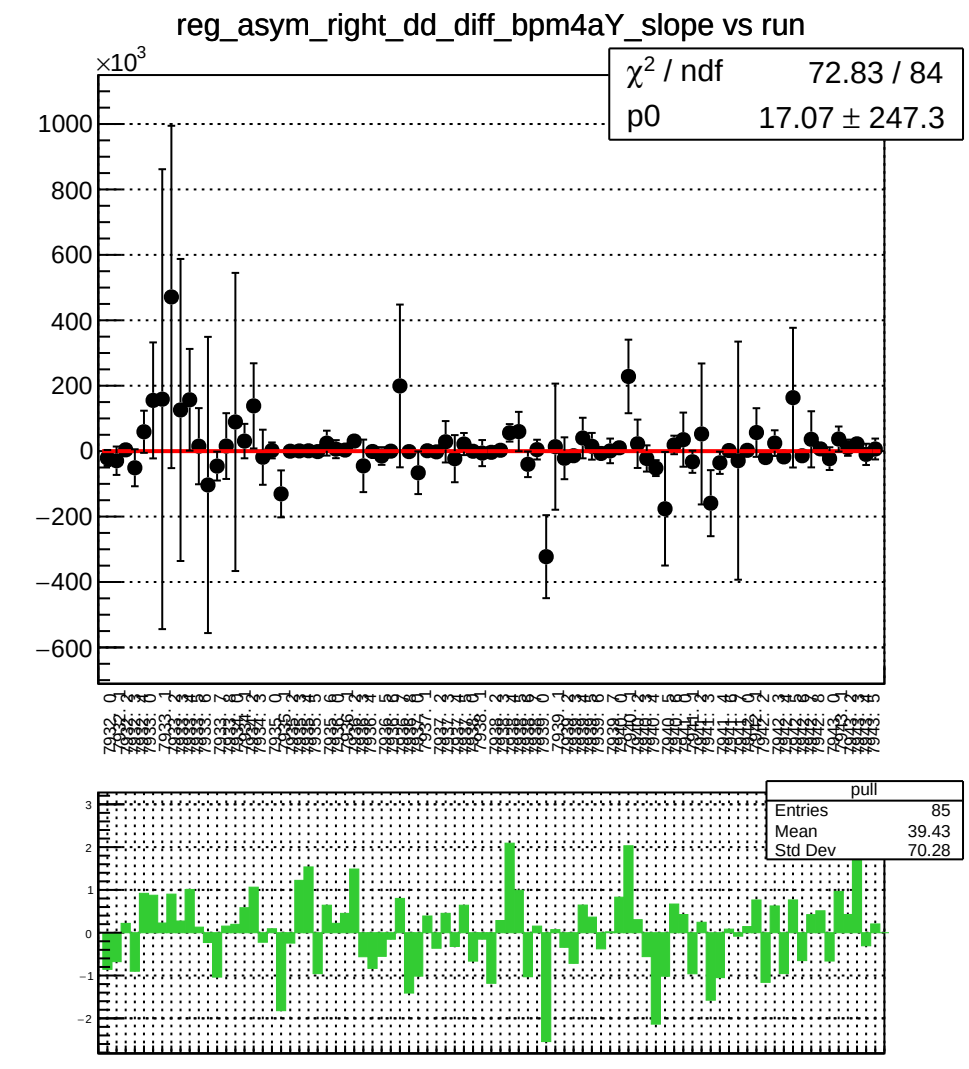

reg_asym_right_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 74.83 / 84
p0 −11.83 ± 285.3
pull
Entries 85
Mean 10.65
Std Dev 69.07

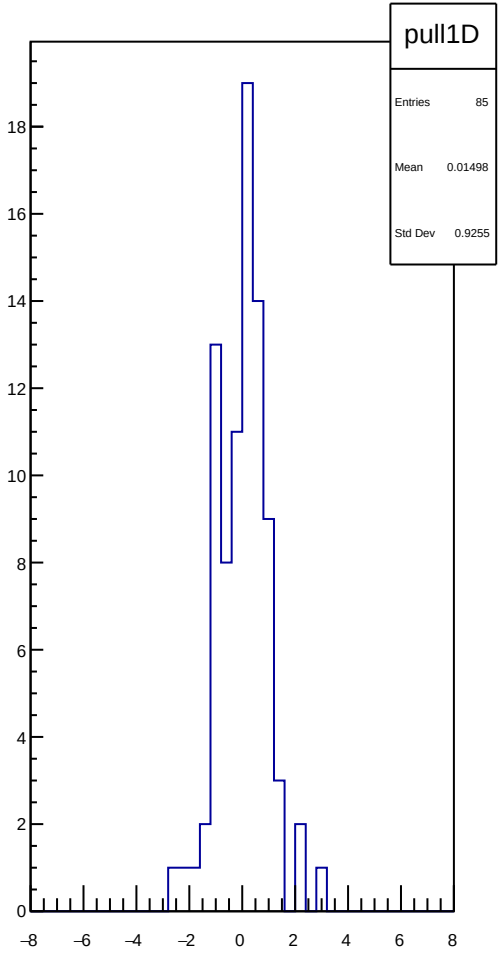

pull1D
Entries 85
Mean 0.01229
Std Dev 0.9382

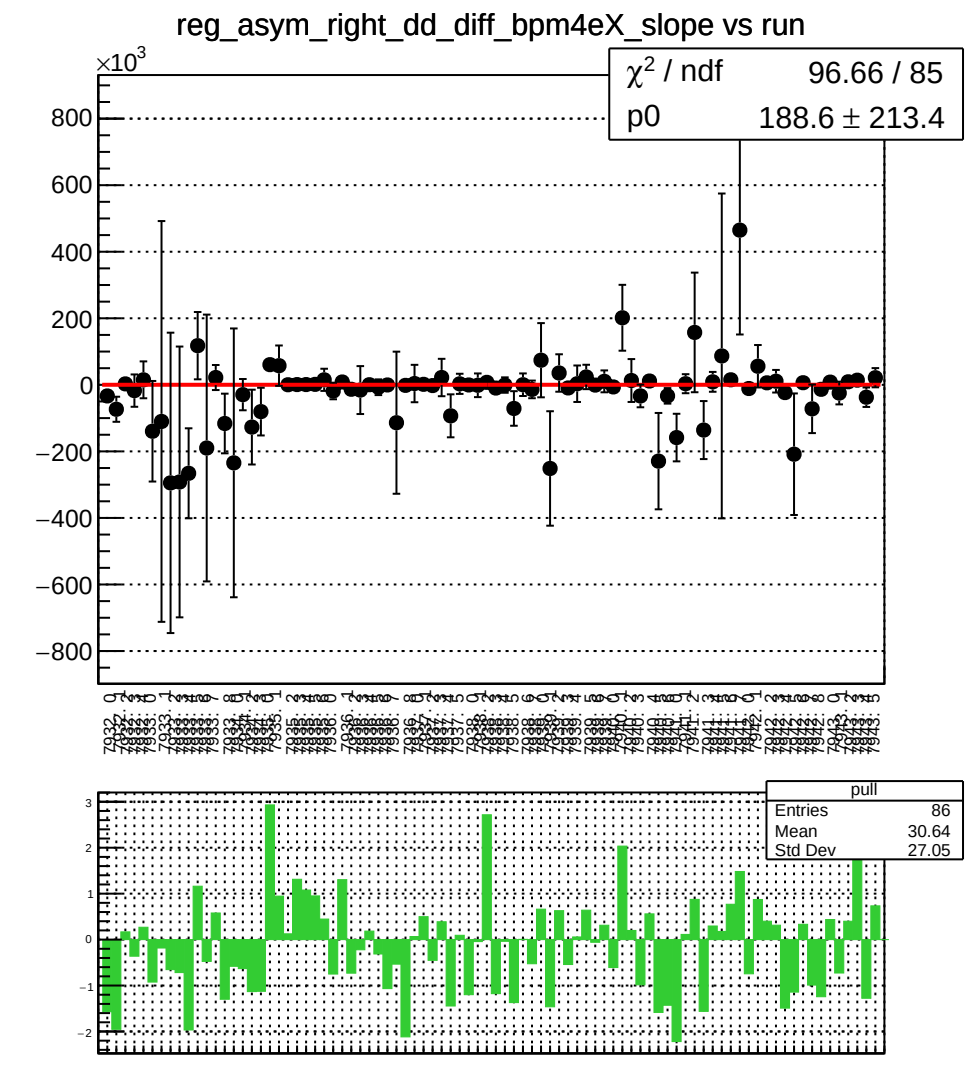

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 77.73 / 85
p0 −24.26 ± 7.974
pull
Entries 86
Mean −25.82
Std Dev 83.41
pull1D
Entries 86
Mean −0.01466
Std Dev 0.9506

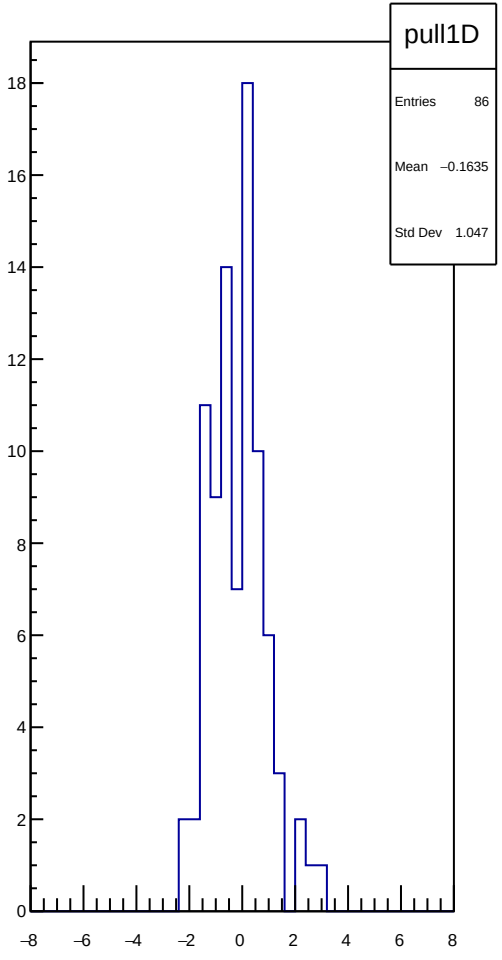

reg_asym_right_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 95.05 / 85
p0 −164.9 ± 237.6
pull
Entries 86
Mean 30.89
Std Dev 26.97

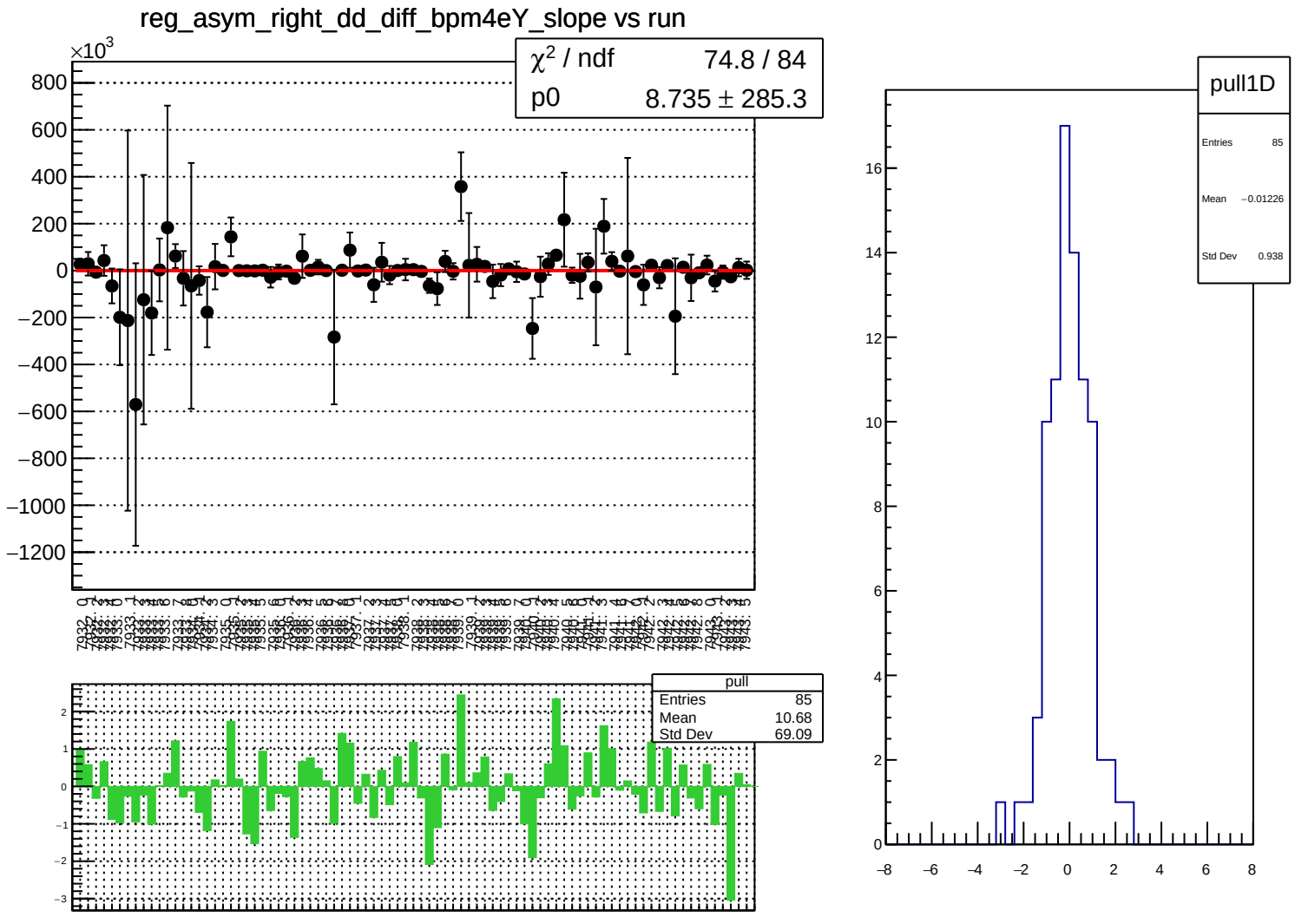

pull1D
Entries 86
Mean 0.1563
Std Dev 1.04

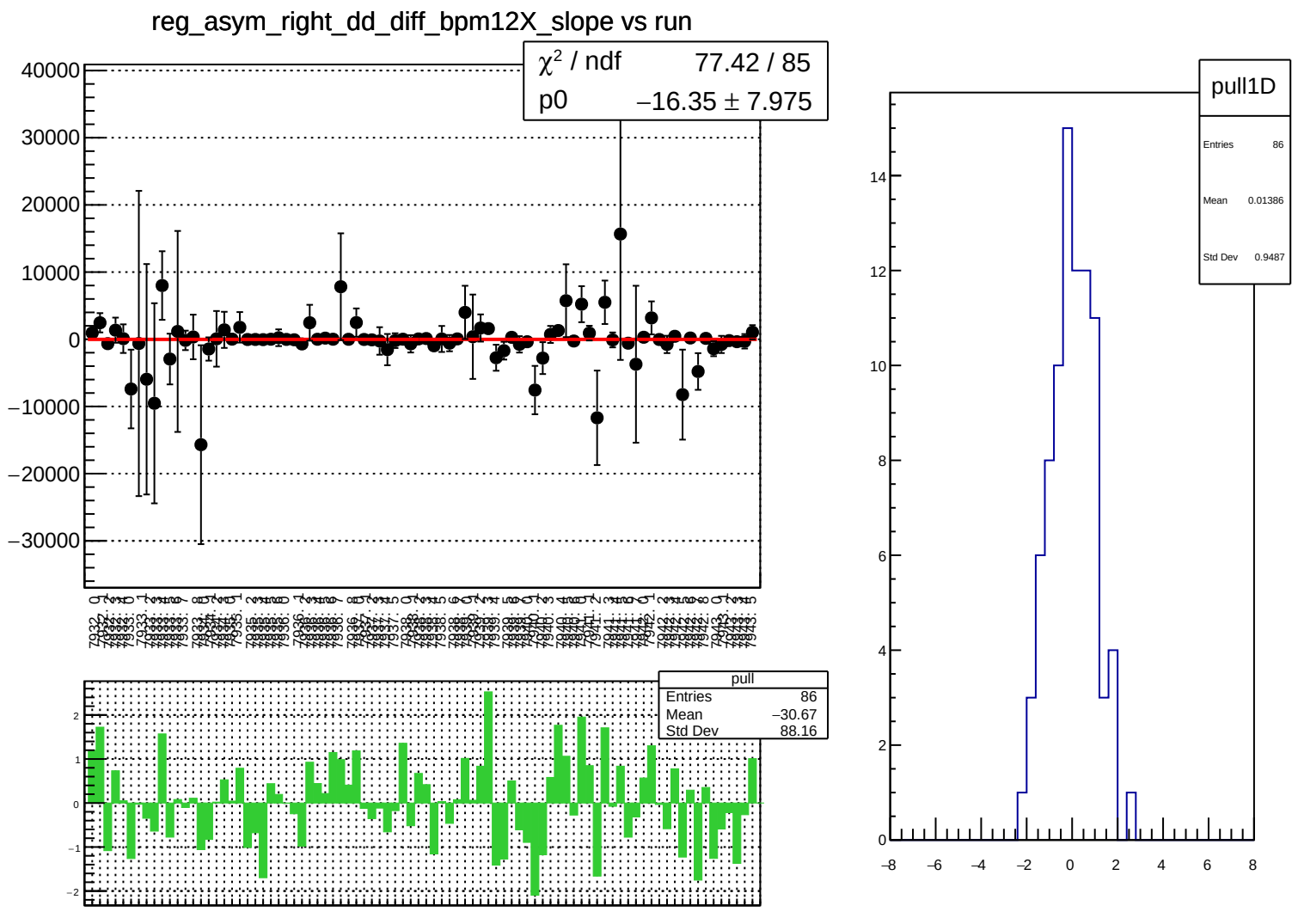

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 72.83 / 84
p0 17.07 ± 247.3
×10³
pull
Entries 85
Mean 39.43
Std Dev 70.28

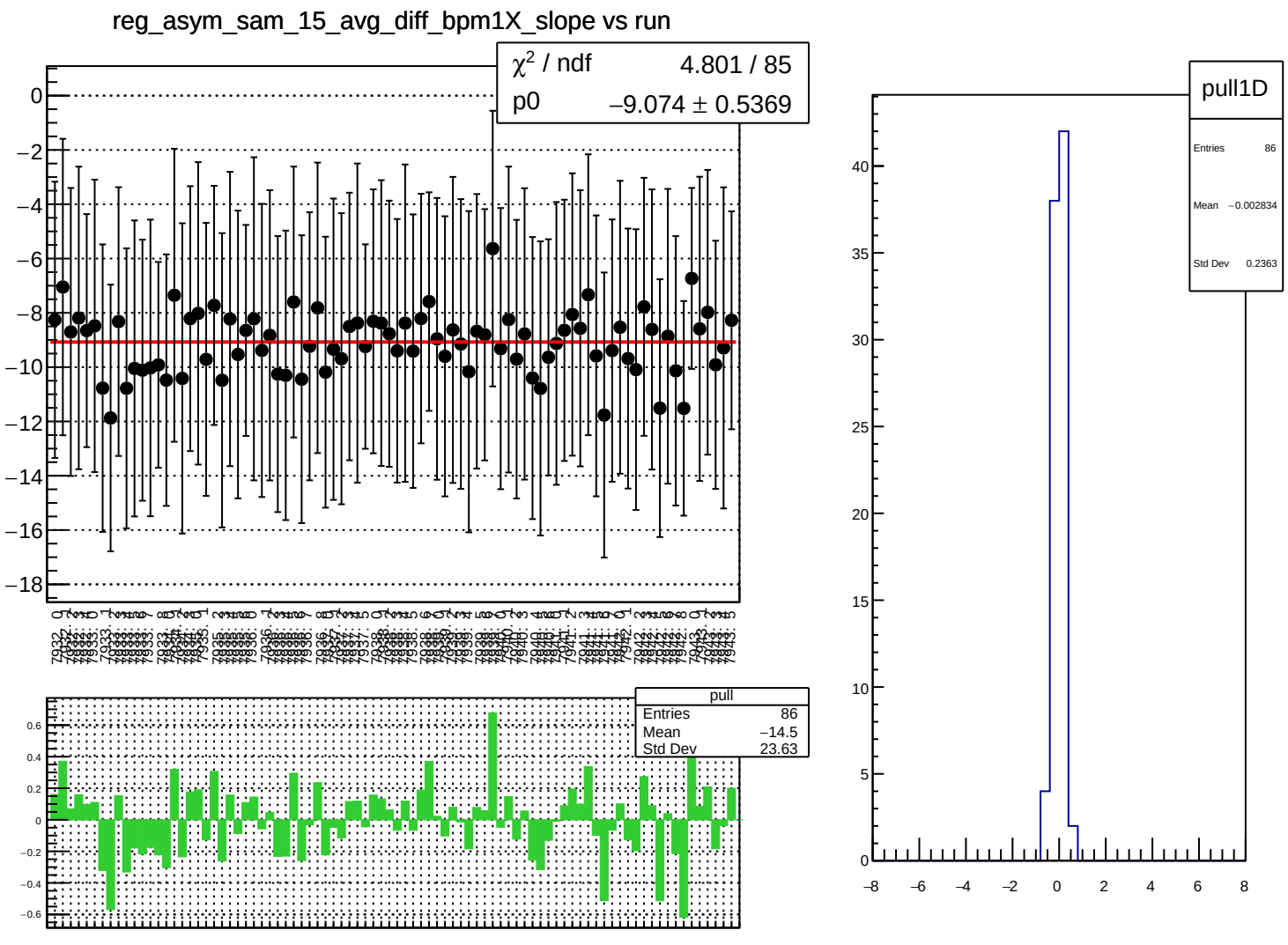

pull1D
Entries 85
Mean 0.01498
Std Dev 0.9255

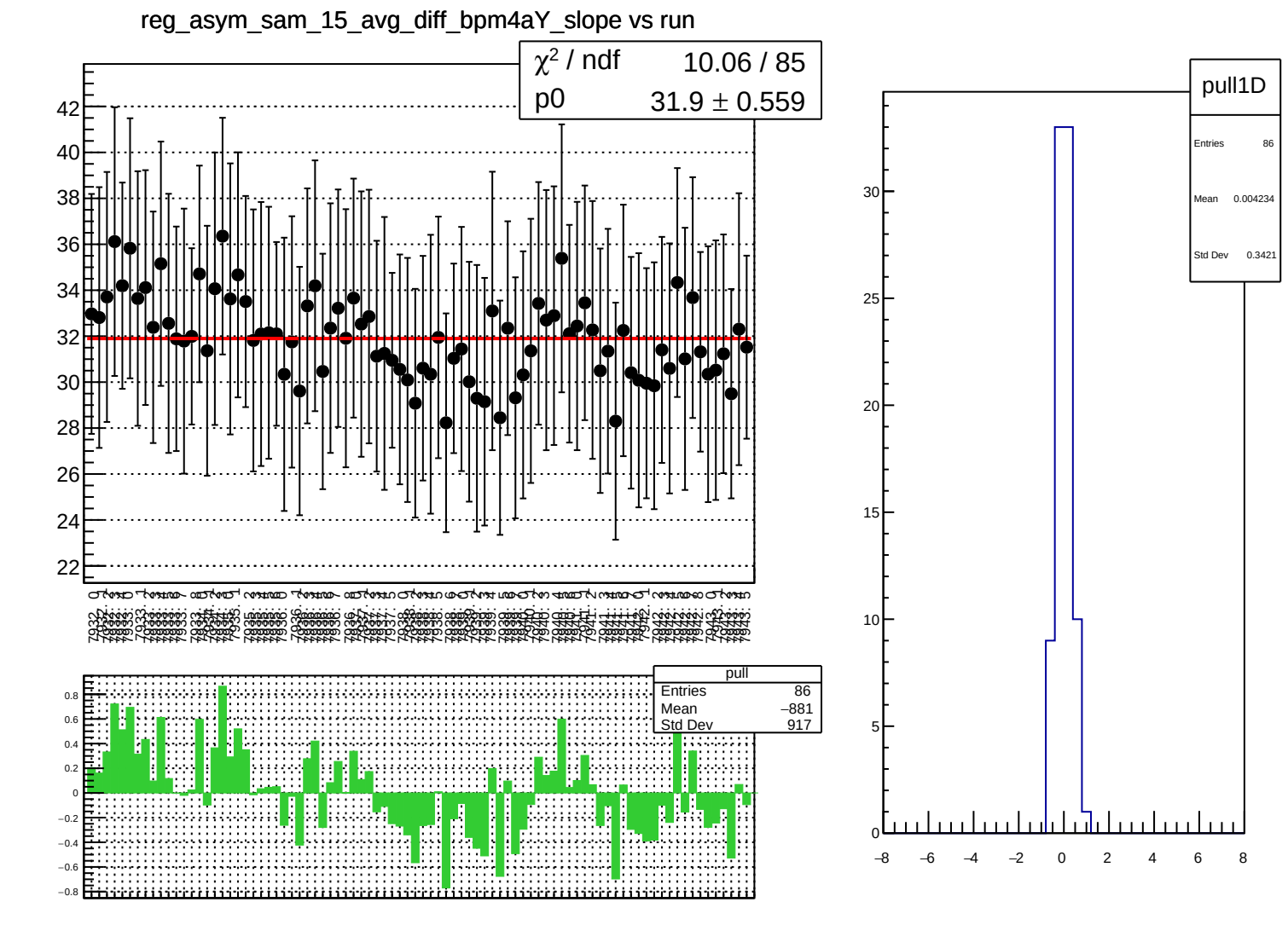

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 96.66 / 85
p0 188.6 ± 213.4
×10³
pull
Entries 86
Mean 30.64
Std Dev 27.05

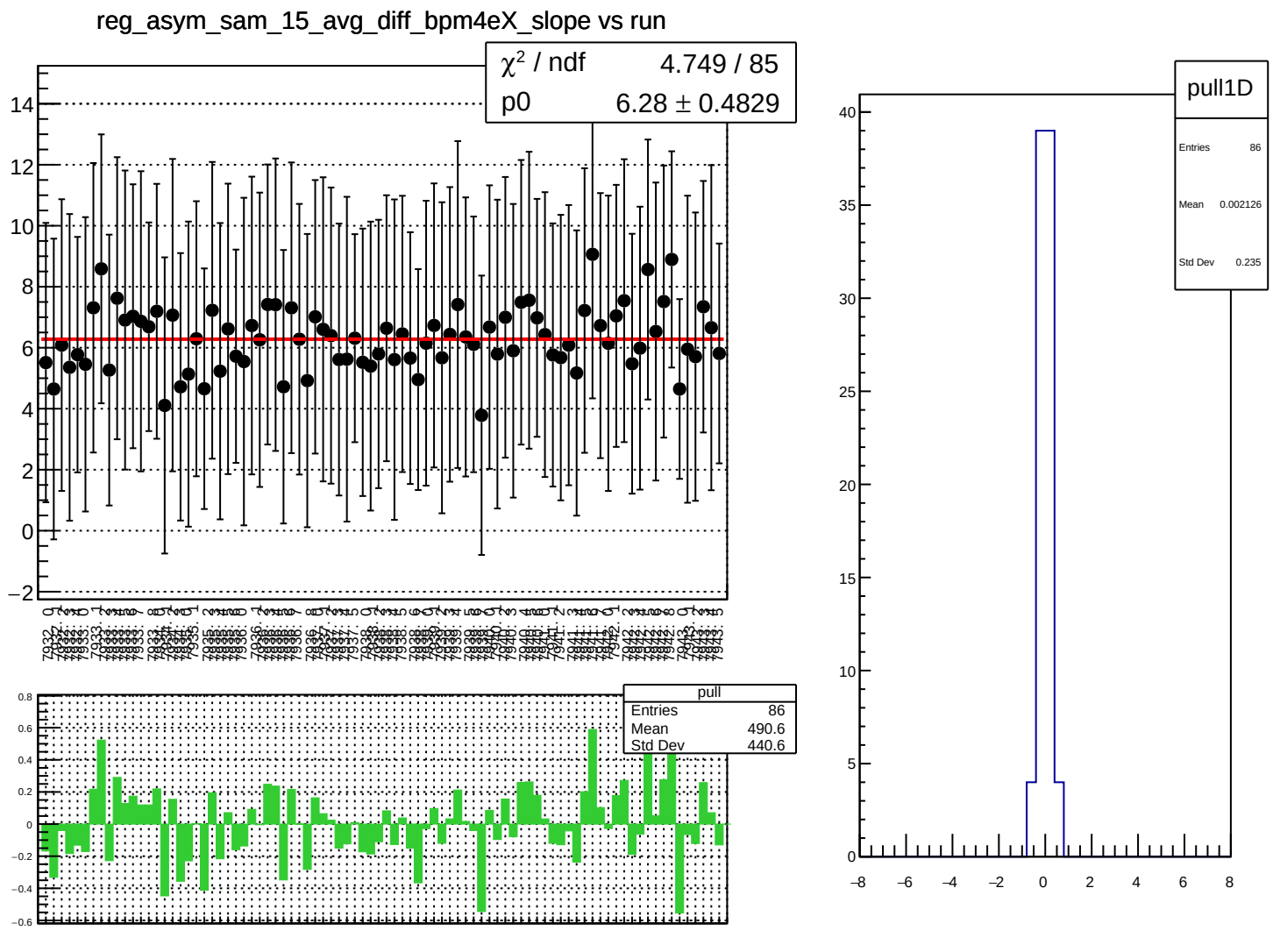

pull1D
Entries 86
Mean −0.1635
Std Dev 1.047

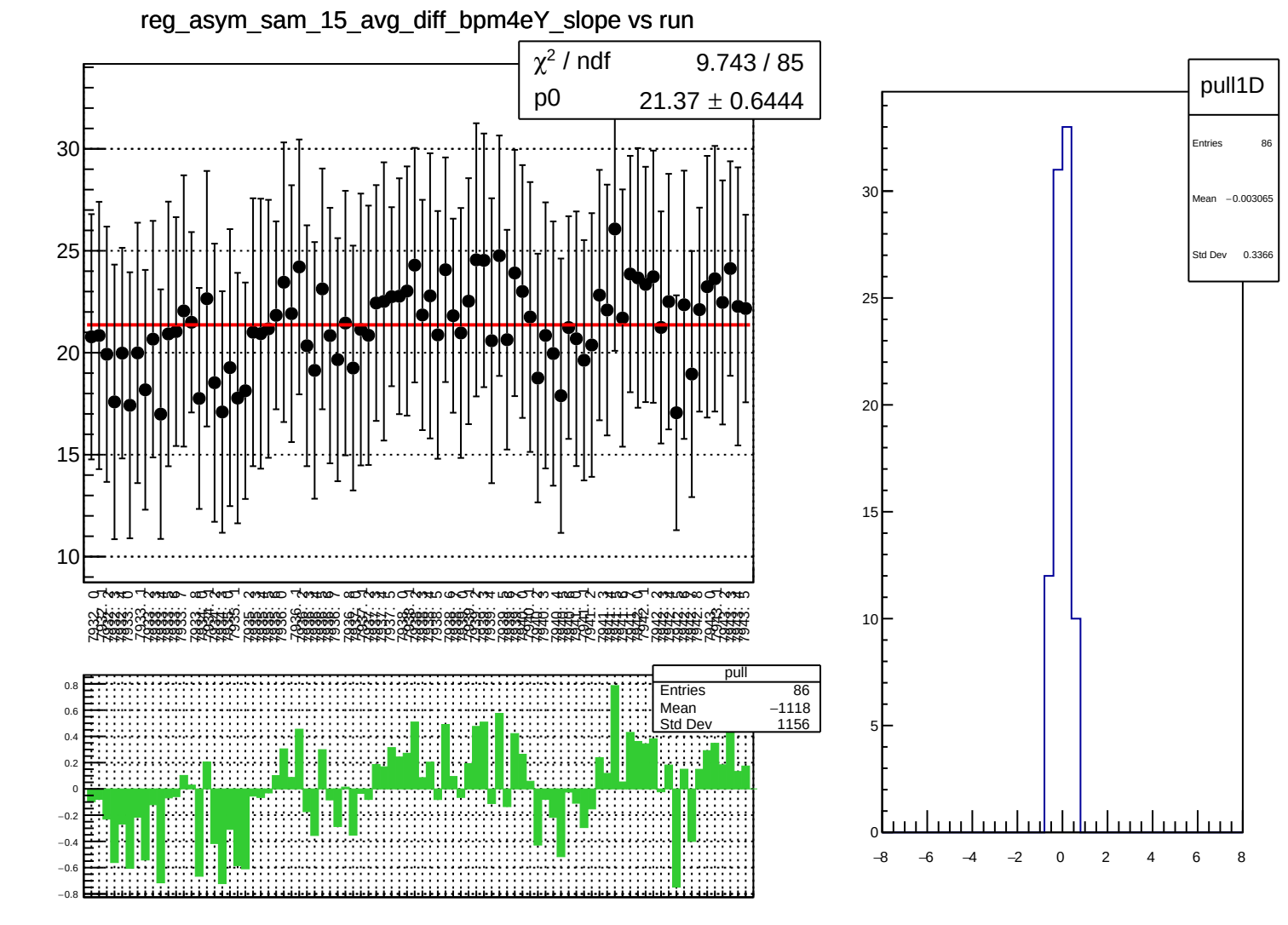

reg_asym_right_dd_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 74.8 / 84
p0 8.735 ± 285.3
pull
Entries 85
Mean 10.68
Std Dev 69.09
pull1D
Entries 85
Mean −0.01226
Std Dev 0.938

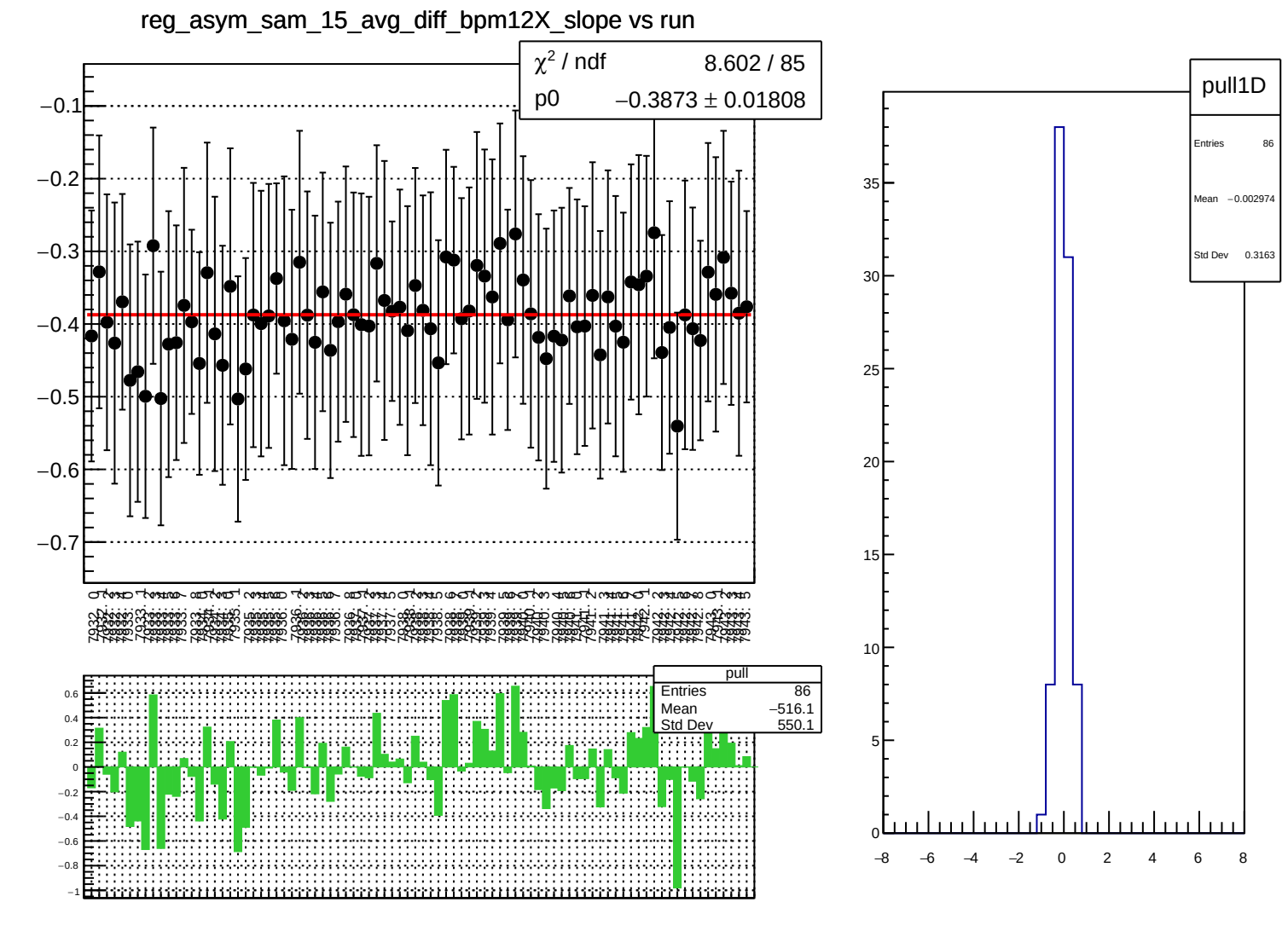

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 77.42 / 85
p0 −16.35 ± 7.975
pull
Entries 86
Mean −30.67
Std Dev 88.16
pull1D
Entries 86
Mean 0.01386
Std Dev 0.9487

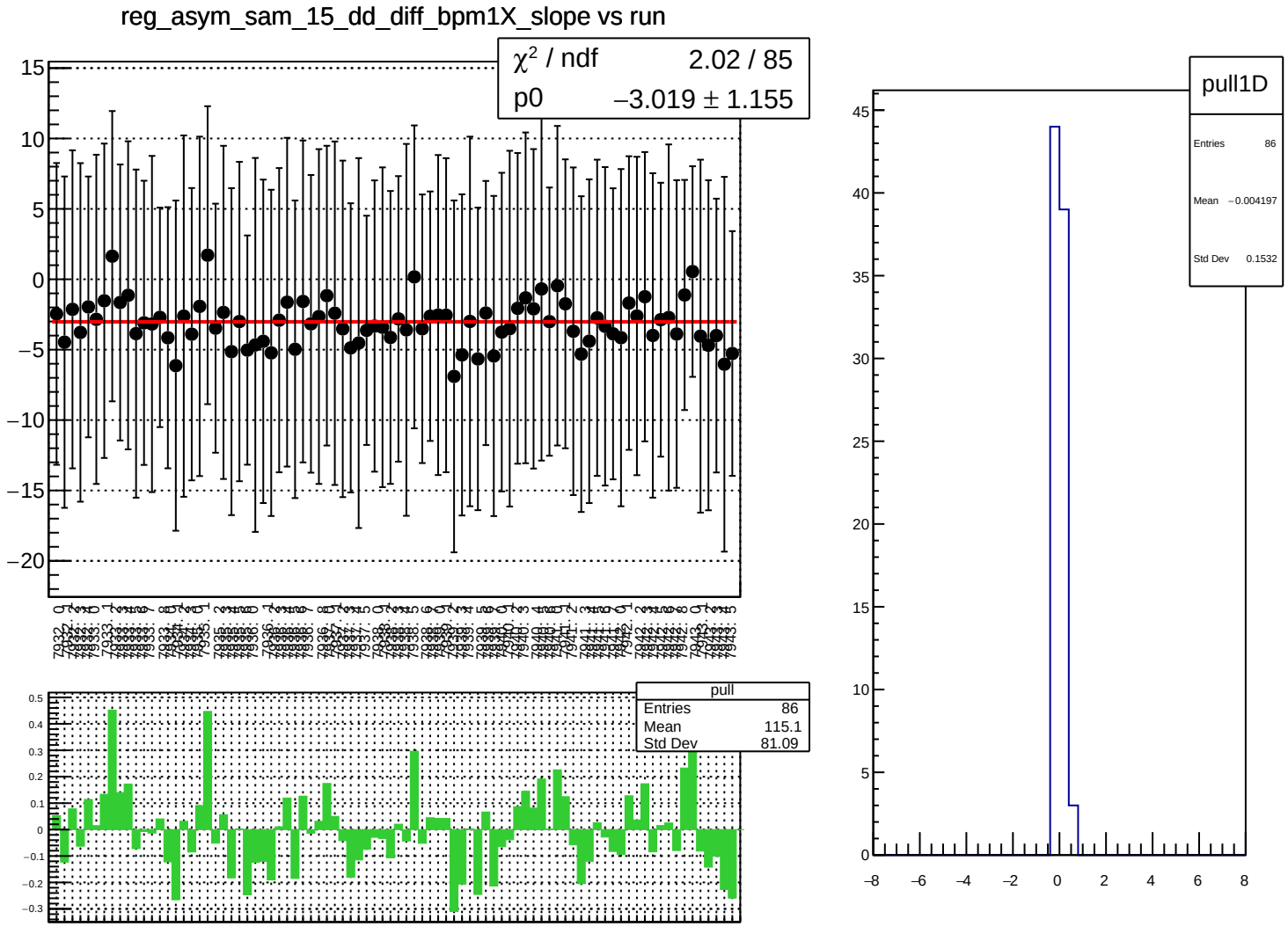

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 4.801 / 85
p0 −9.074 ± 0.5369
pull
Entries 86
Mean −14.5
Std Dev 23.63
pull1D
Entries 86
Mean −0.002834
Std Dev 0.2363

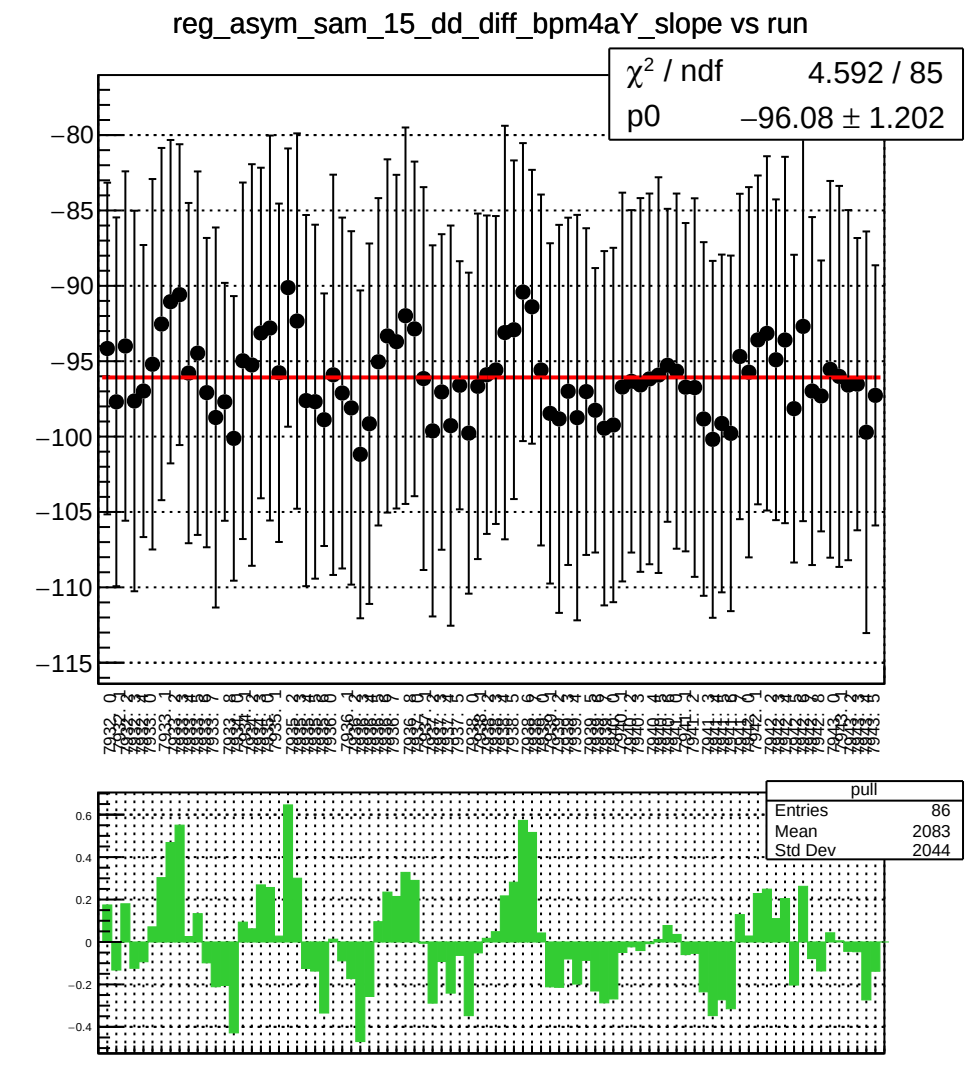

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.06 / 85
p0 31.9 ± 0.559
pull
Entries 86
Mean −881
Std Dev 917
pull1D
Entries 86
Mean 0.004234
Std Dev 0.3421

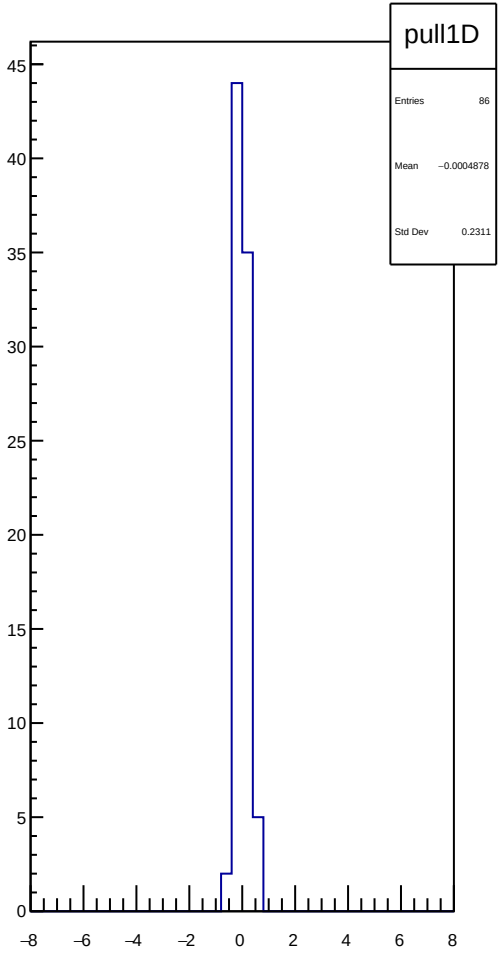

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.749 / 85
p0 6.28 ± 0.4829
pull
Entries 86
Mean 490.6
Std Dev 440.6
pull1D
Entries 86
Mean 0.002126
Std Dev 0.235

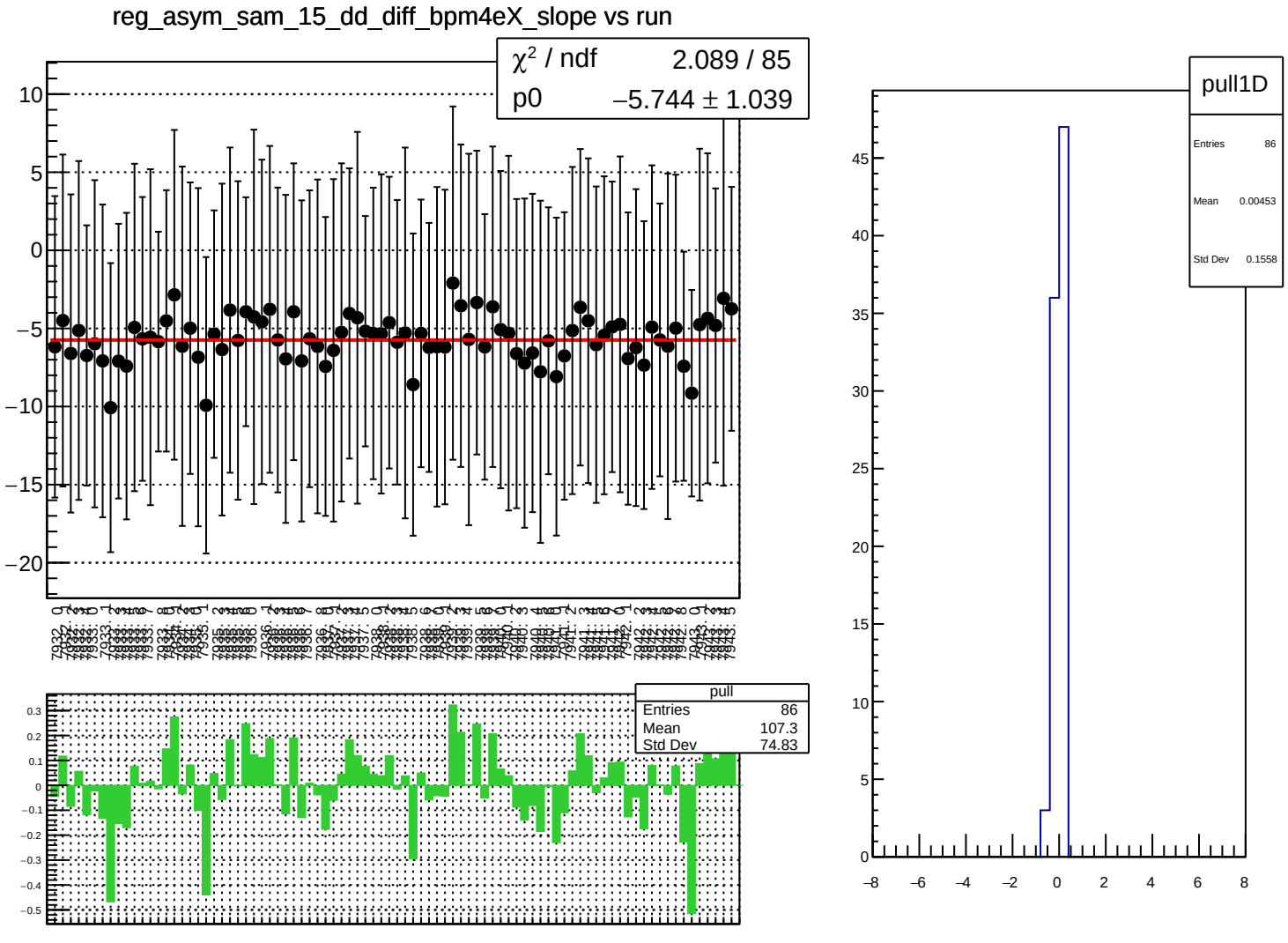

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.743 / 85
p0 21.37 ± 0.6444
pull
Entries 86
Mean −1118
Std Dev 1156
pull1D
Entries 86
Mean −0.003065
Std Dev 0.3366

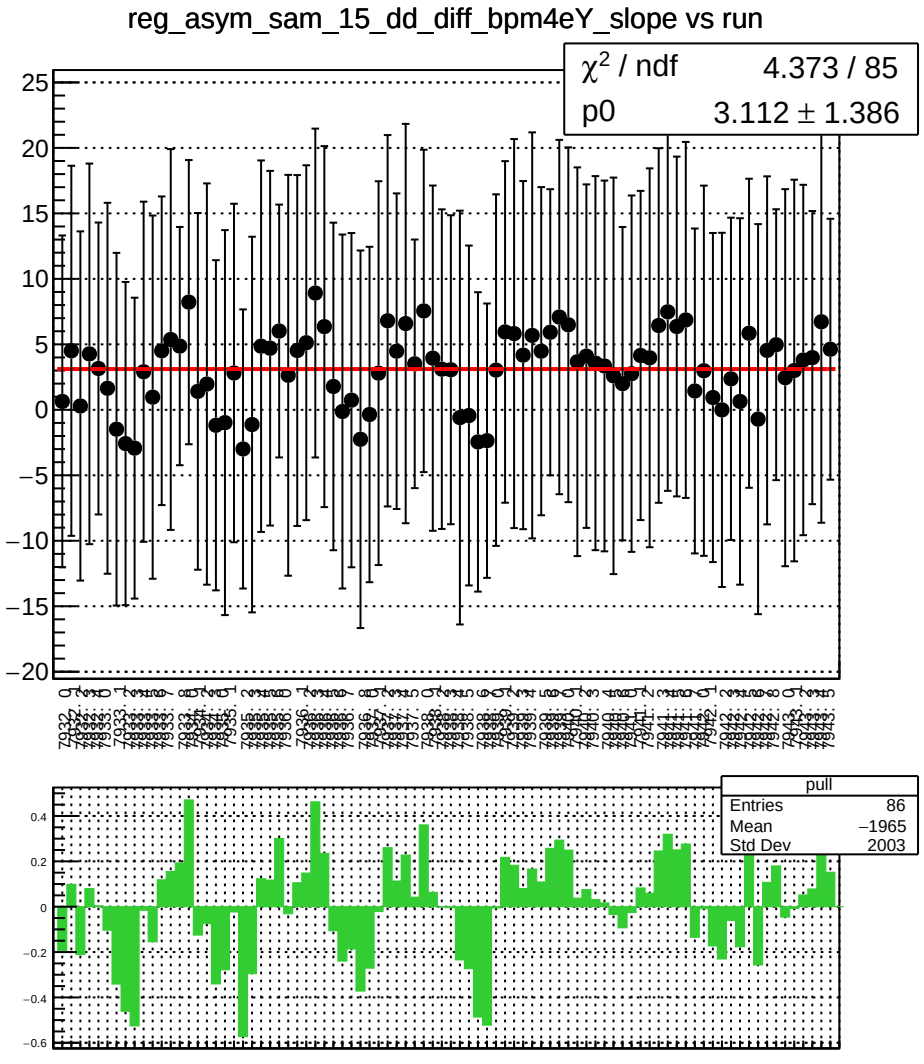

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 8.602 / 85
p0 −0.3873 ± 0.01808
pull
Entries 86
Mean −516.1
Std Dev 550.1
pull1D
Entries 86
Mean −0.002974
Std Dev 0.3163

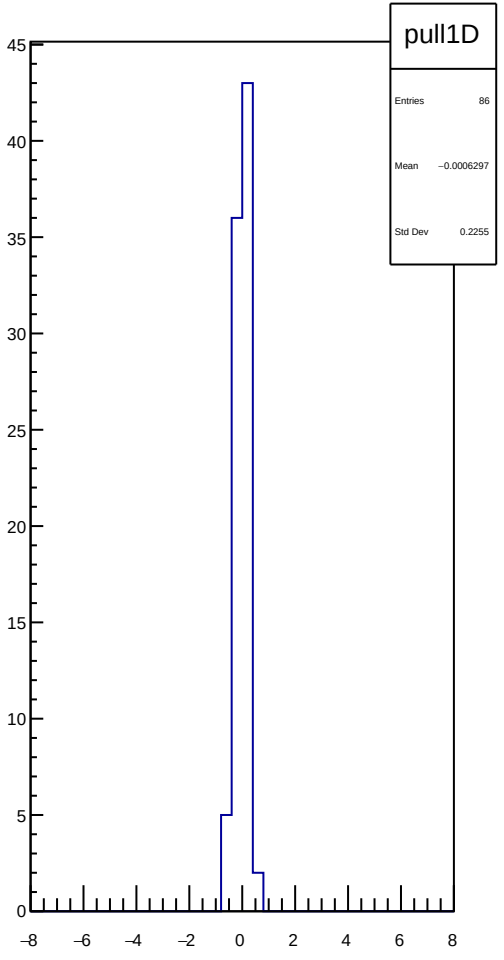

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 2.02 / 85
p0 −3.019 ± 1.155
pull
Entries 86
Mean 115.1
Std Dev 81.09
pull1D
Entries 86
Mean −0.004197
Std Dev 0.1532

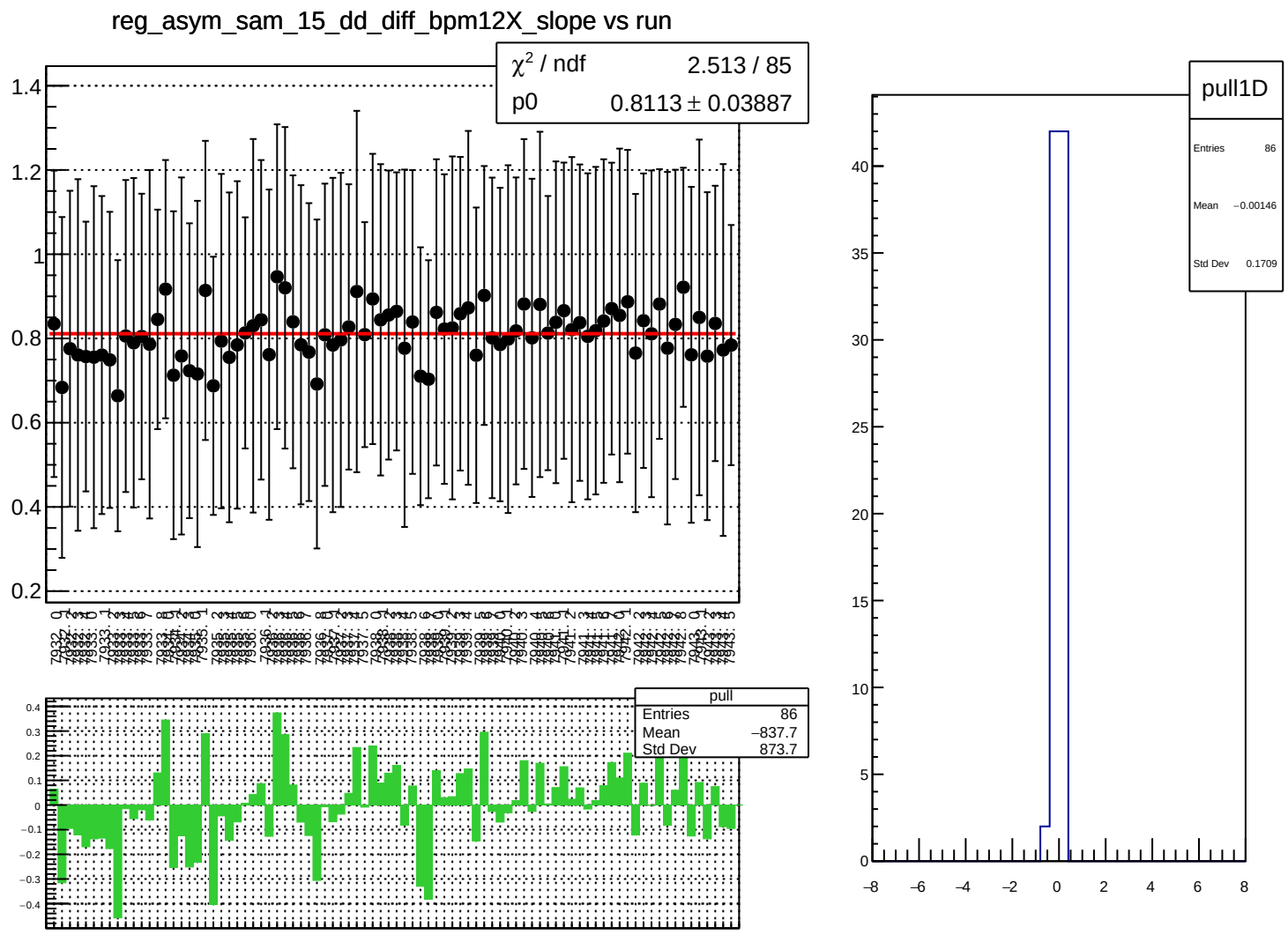

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.592 / 85
p0 −96.08 ± 1.202
pull
Entries 86
Mean 2083
Std Dev 2044

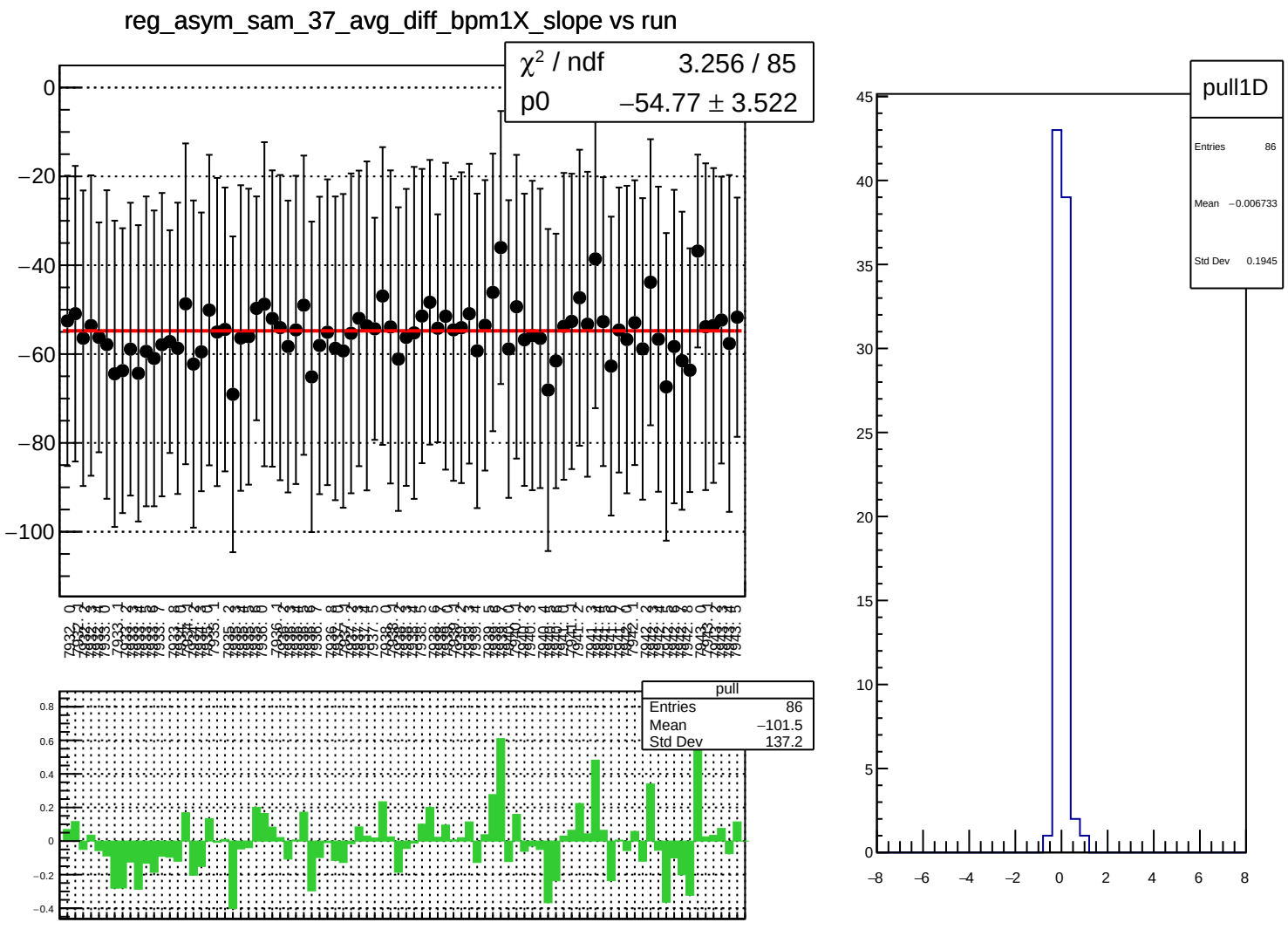

pull1D
Entries 86
Mean −0.0004878
Std Dev 0.2311

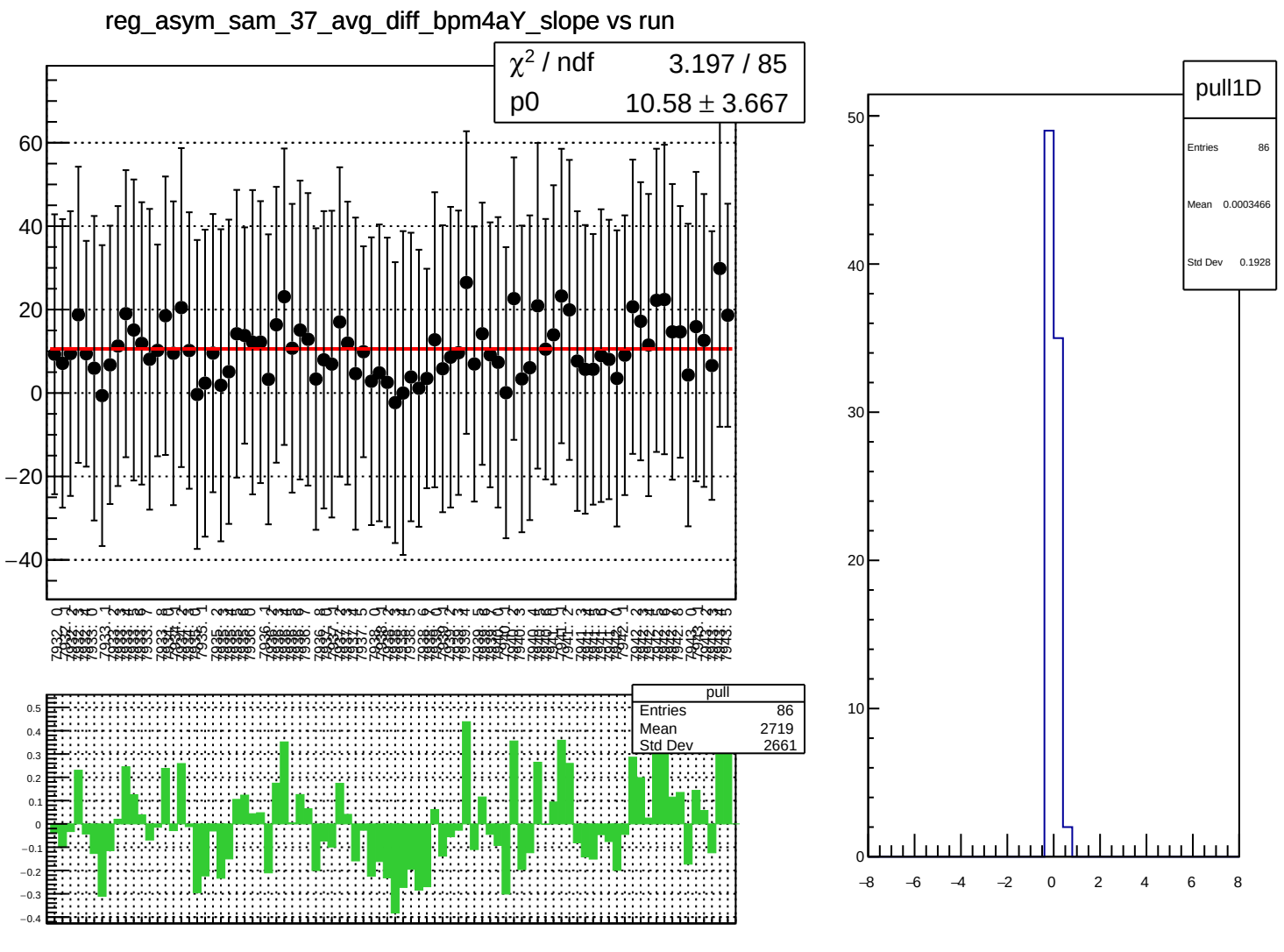

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.089 / 85
p0 −5.744 ± 1.039
pull
Entries 86
Mean 107.3
Std Dev 74.83
pull1D
Entries 86
Mean 0.00453
Std Dev 0.1558

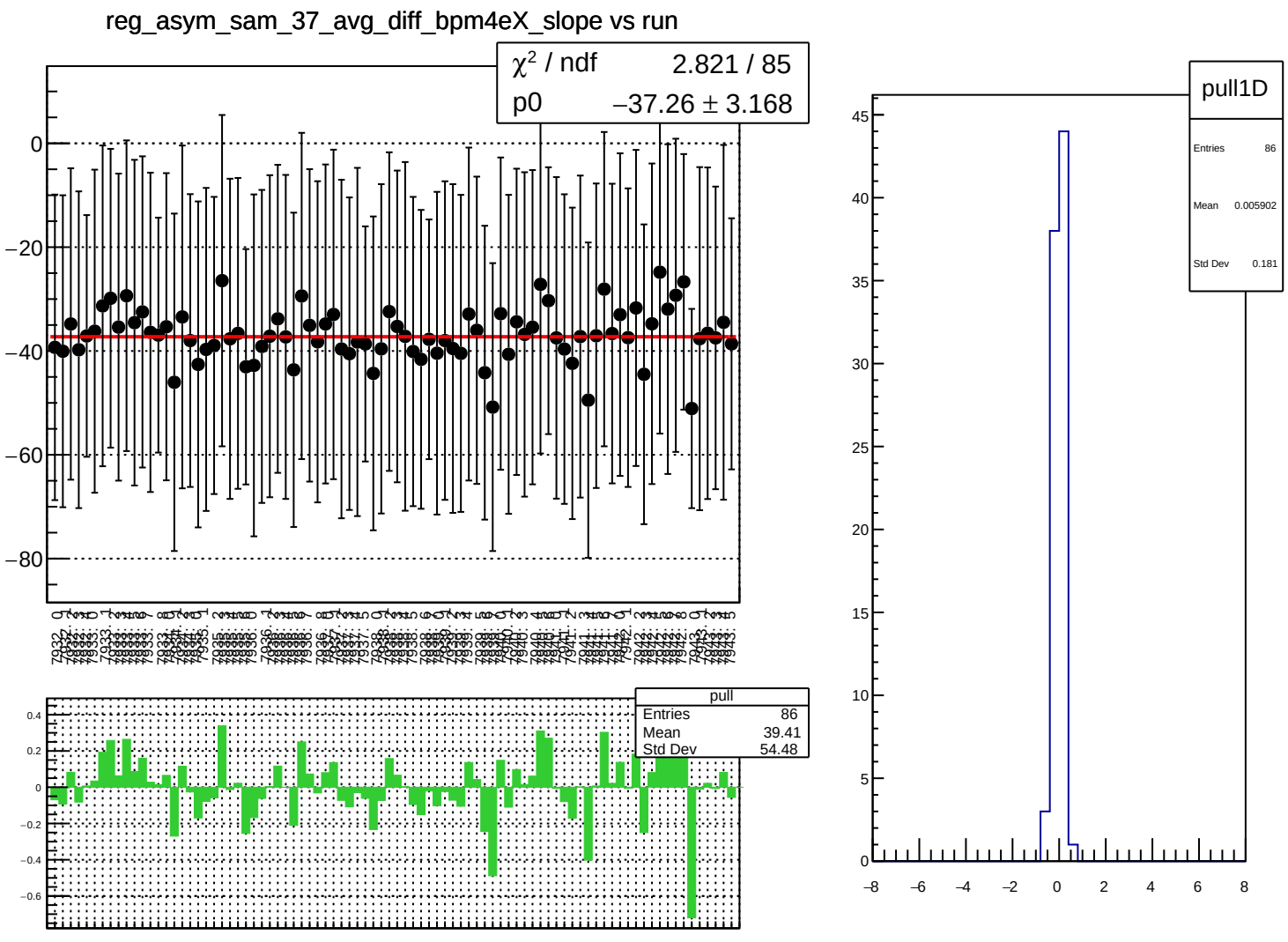

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.373 / 85
p0 3.112 ± 1.386
pull
Entries 86
Mean −1965
Std Dev 2003

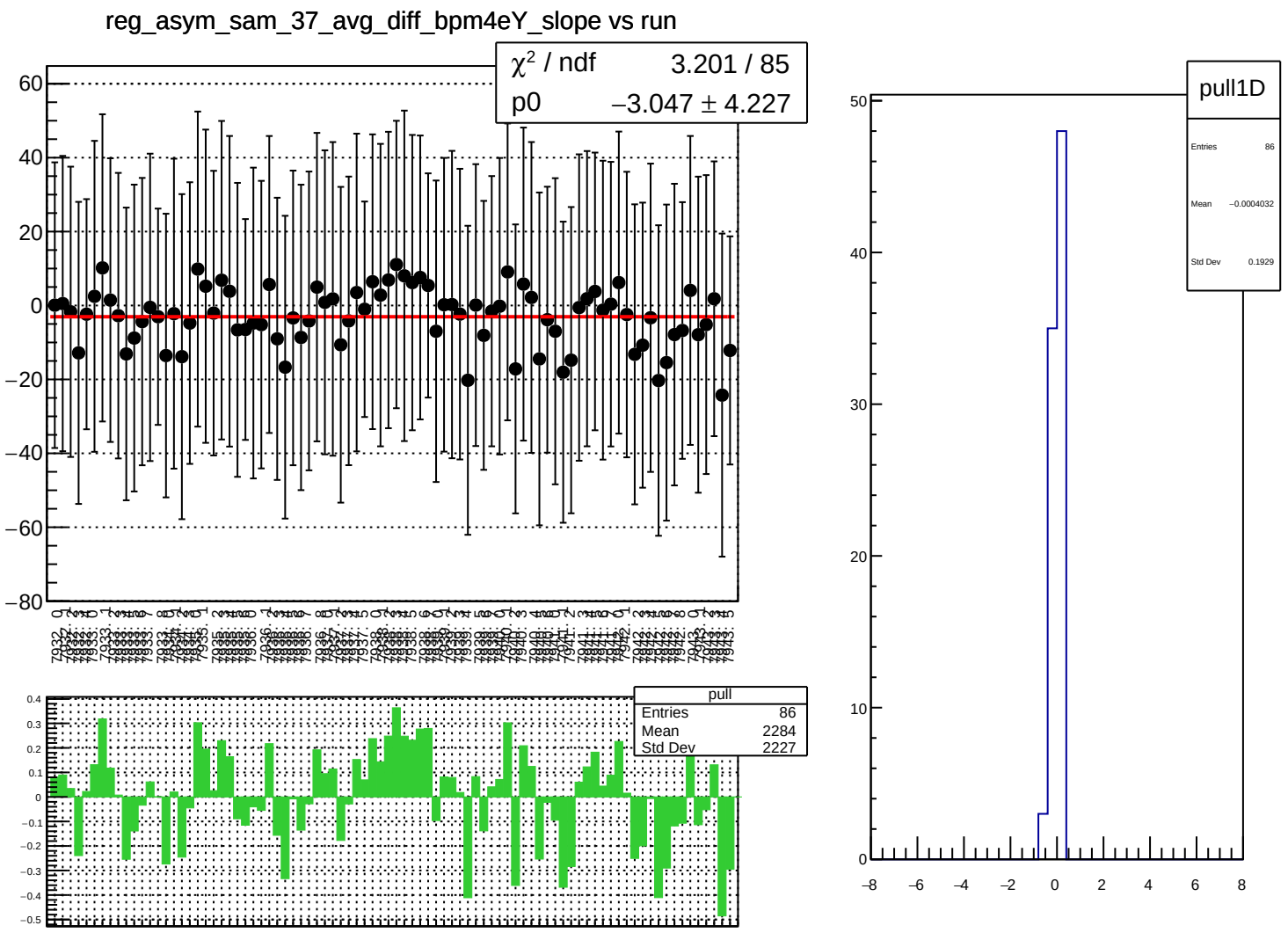

pull1D
Entries 86
Mean −0.0006297
Std Dev 0.2255

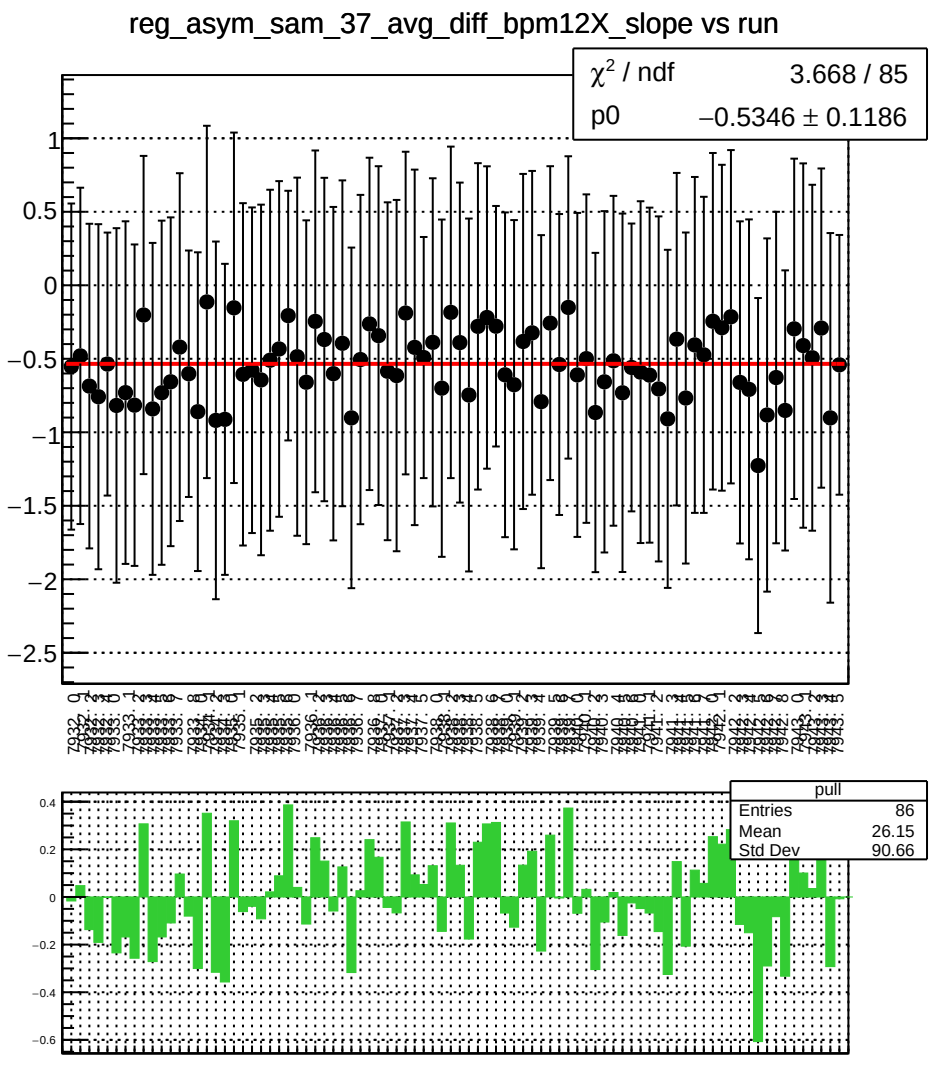

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 2.513 / 85
p0 0.8113 ± 0.03887
pull
Entries 86
Mean −837.7
Std Dev 873.7
pull1D
Entries 86
Mean −0.00146
Std Dev 0.1709

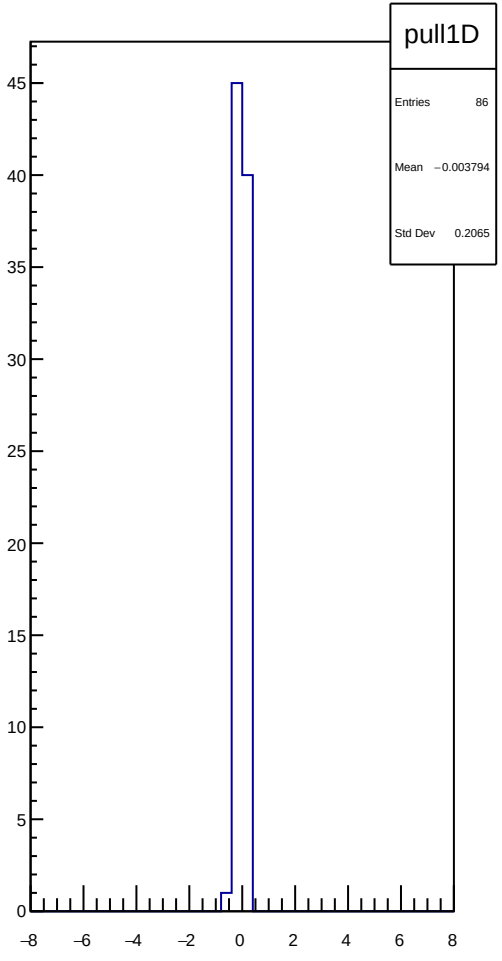

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 3.256 / 85
p0 −54.77 ± 3.522
pull
Entries 86
Mean −101.5
Std Dev 137.2
pull1D
Entries 86
Mean −0.006733
Std Dev 0.1945

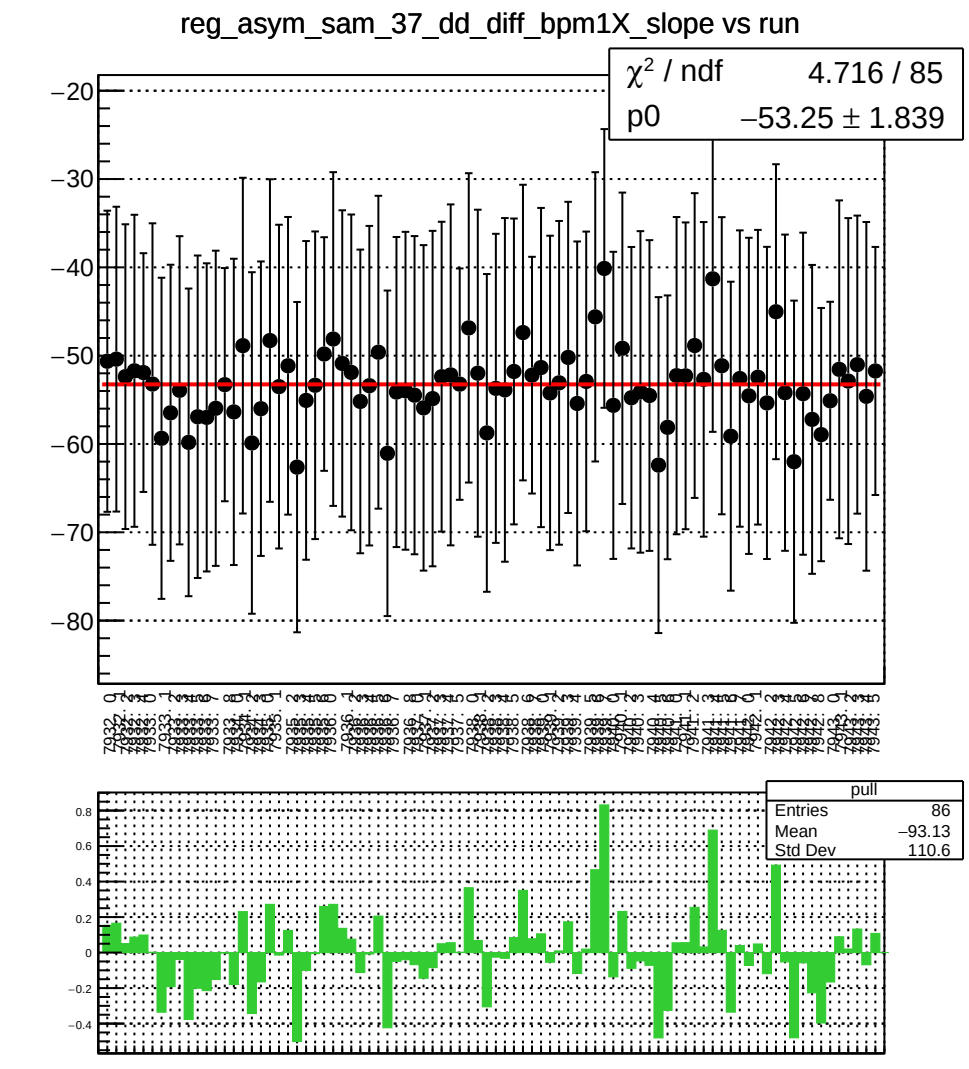

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.197 / 85
p0 10.58 ± 3.667
pull
Entries 86
Mean 2719
Std Dev 2661
pull1D
Entries 86
Mean 0.0003466
Std Dev 0.1928

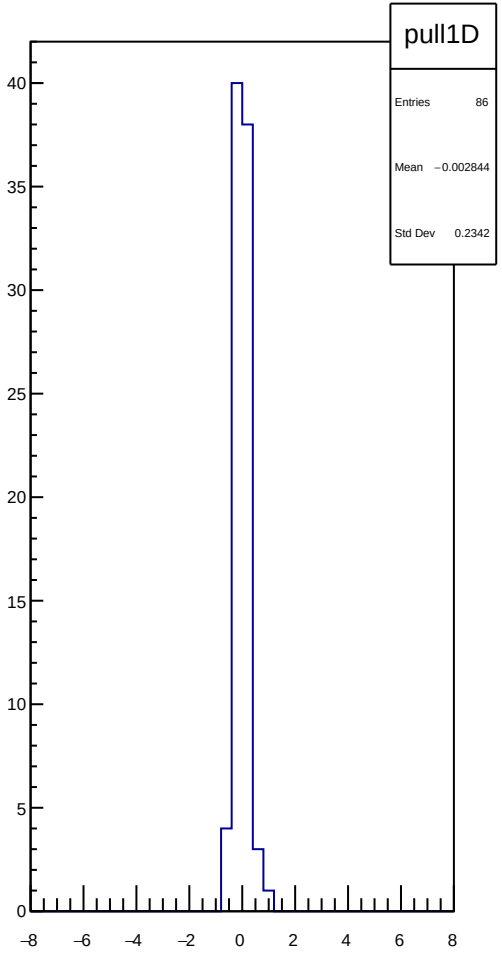

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.821 / 85
p0 −37.26 ± 3.168
pull
Entries 86
Mean 39.41
Std Dev 54.48
pull1D
Entries 86
Mean 0.005902
Std Dev 0.181

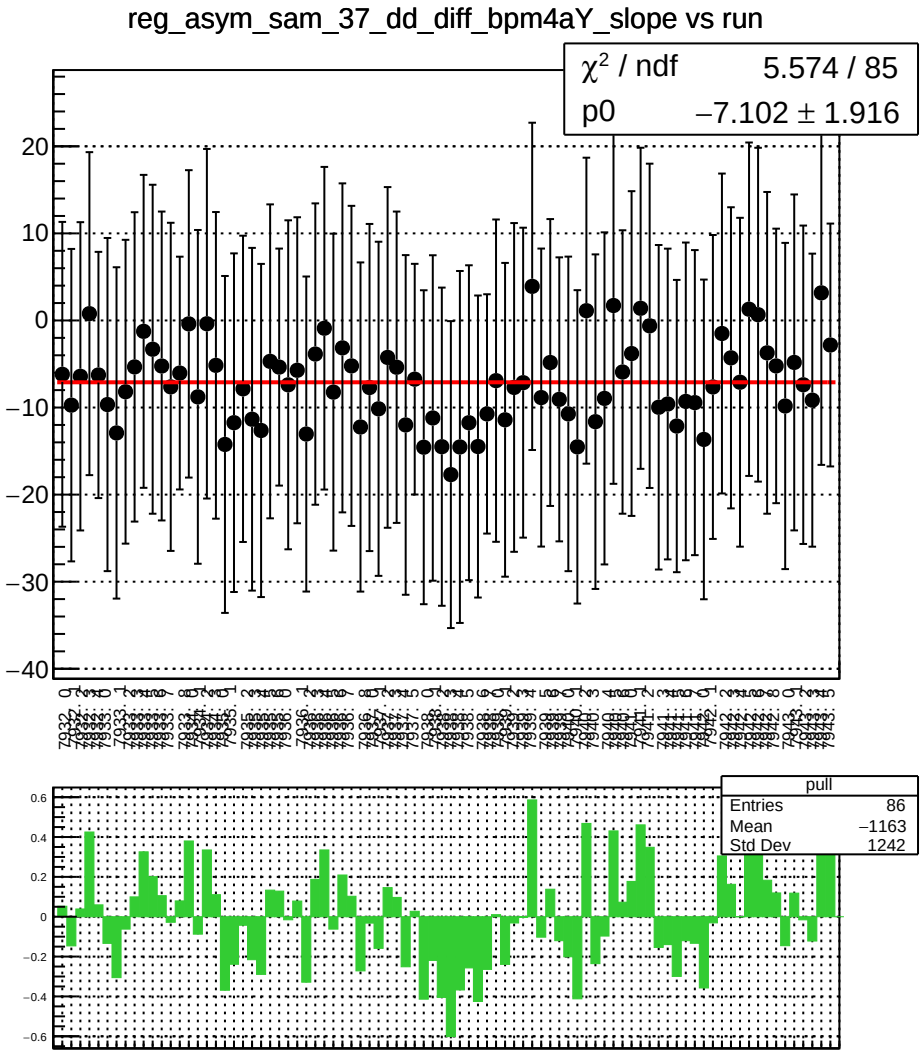

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.201 / 85
p0 −3.047 ± 4.227
pull
Entries 86
Mean 2284
Std Dev 2227
pull1D
Entries 86
Mean −0.0004032
Std Dev 0.1929

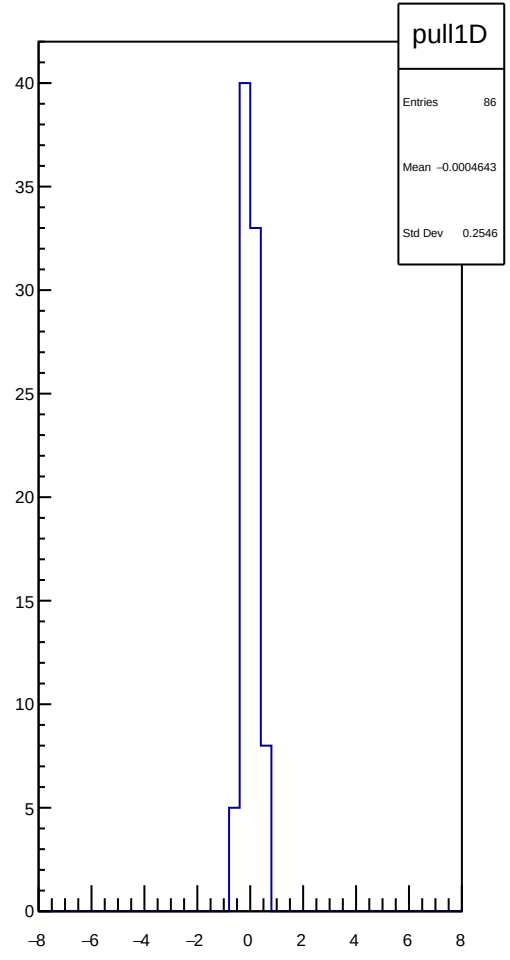

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 3.668 / 85
p0 −0.5346 ± 0.1186
pull
Entries 86
Mean 26.15
Std Dev 90.66

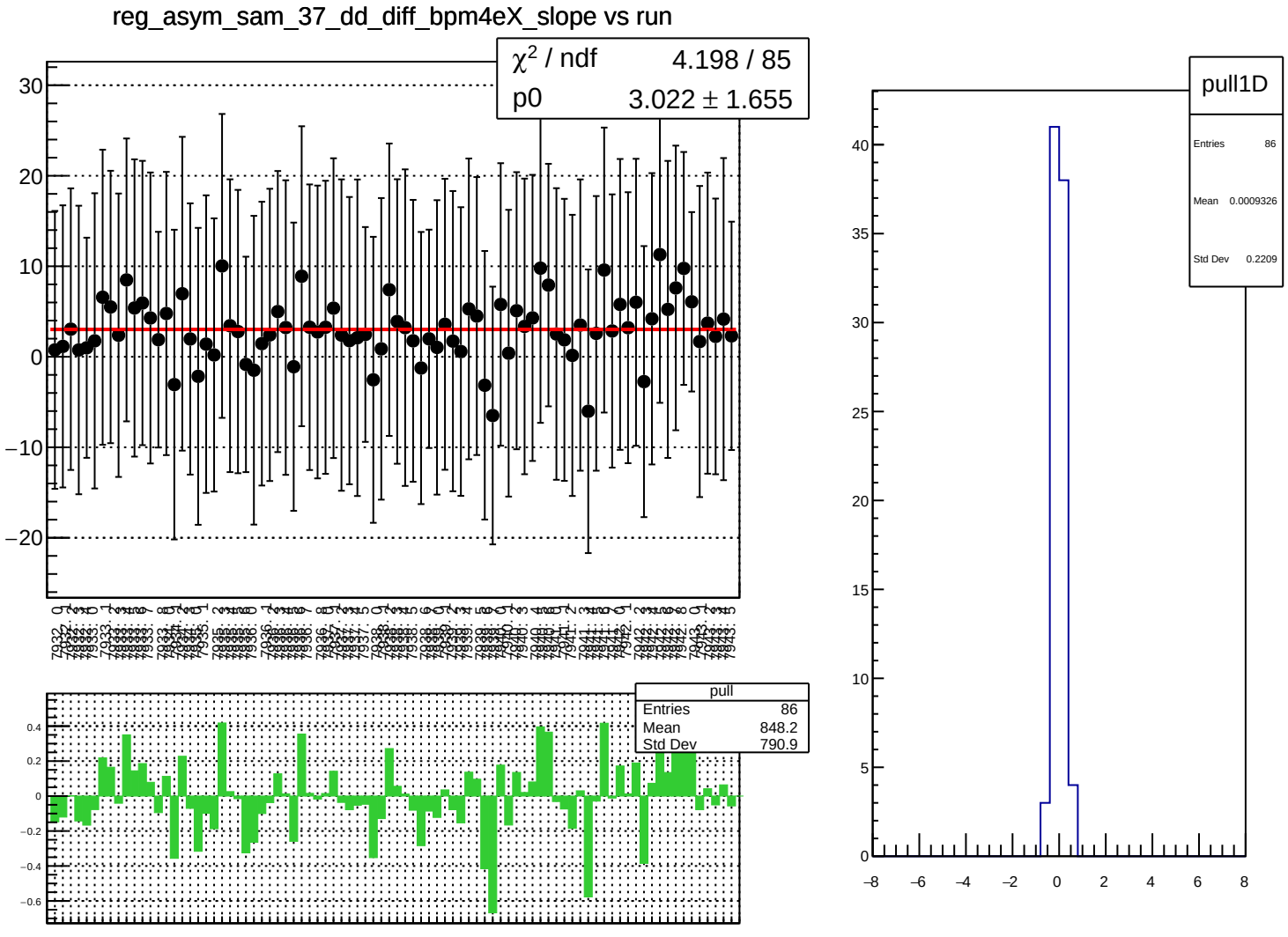

pull1D
Entries 86
Mean −0.003794
Std Dev 0.2065

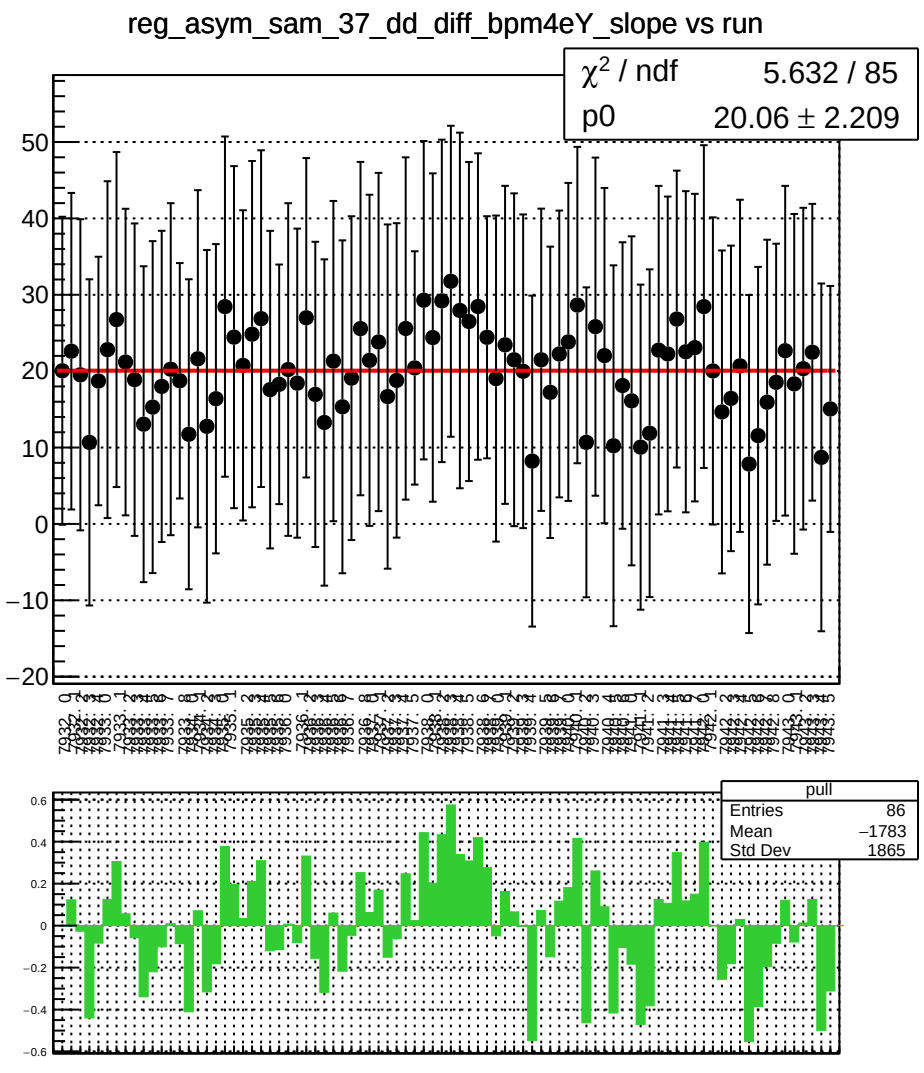

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 4.716 / 85
p0 −53.25 ± 1.839
pull
Entries 86
Mean −93.13
Std Dev 110.6

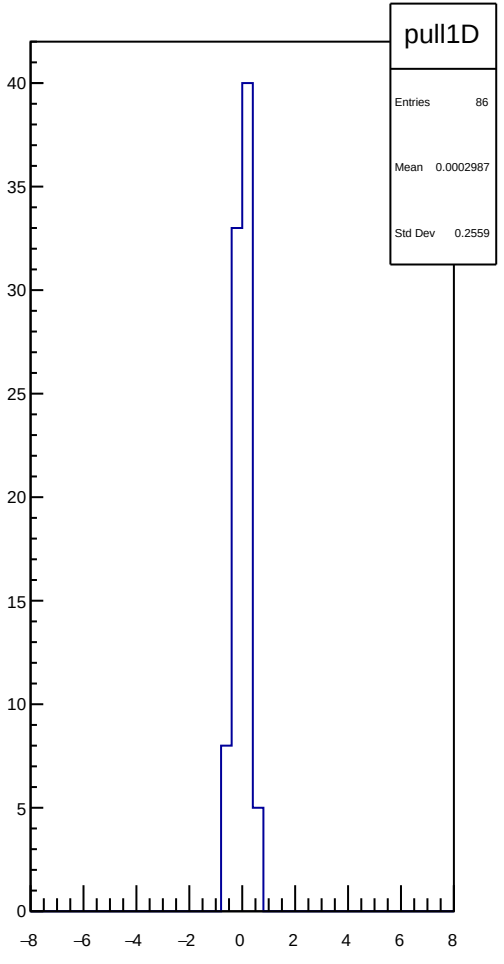

pull1D
Entries 86
Mean −0.002844
Std Dev 0.2342

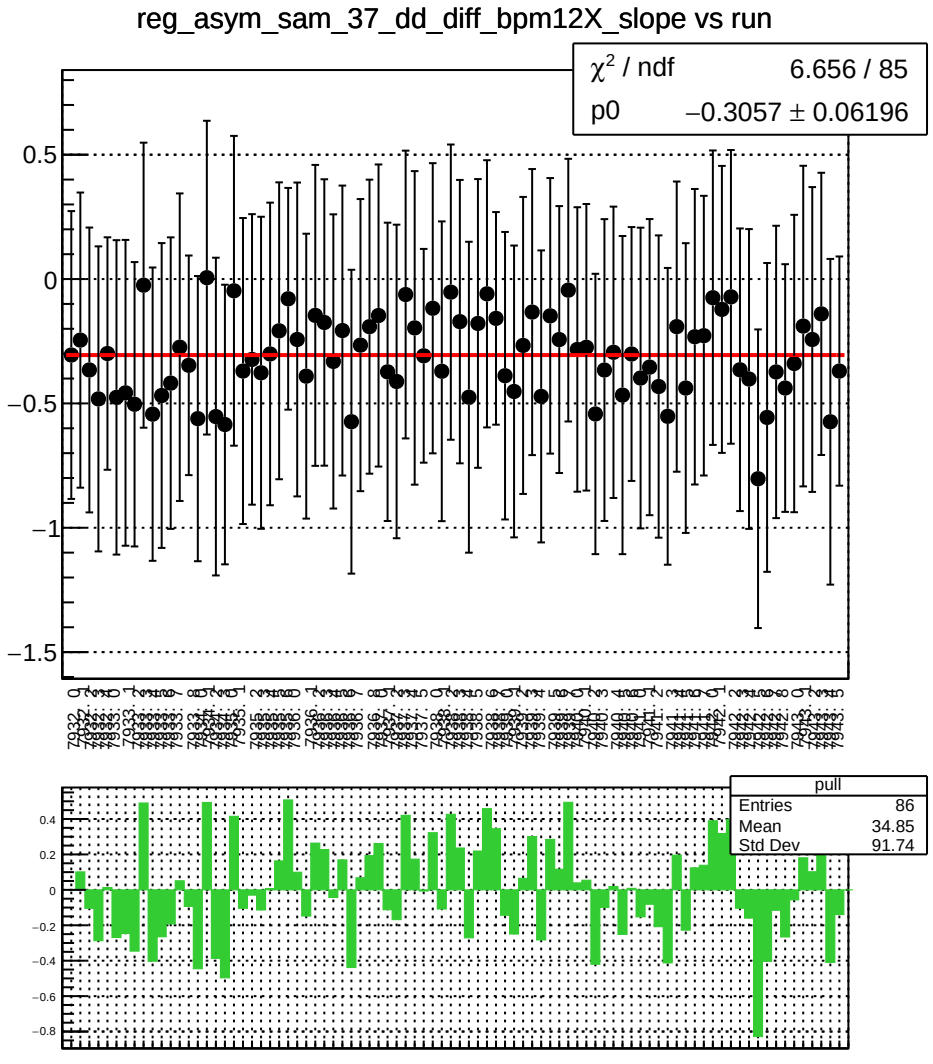

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.574 / 85
p0 −7.102 ± 1.916
pull
Entries 86
Mean −1163
Std Dev 1242

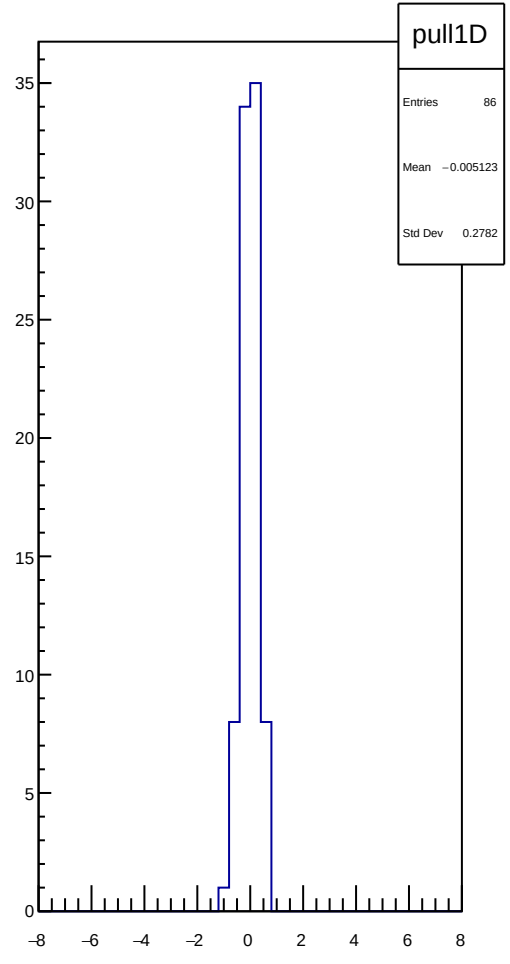

pull1D
Entries 86
Mean −0.0004643
Std Dev 0.2546

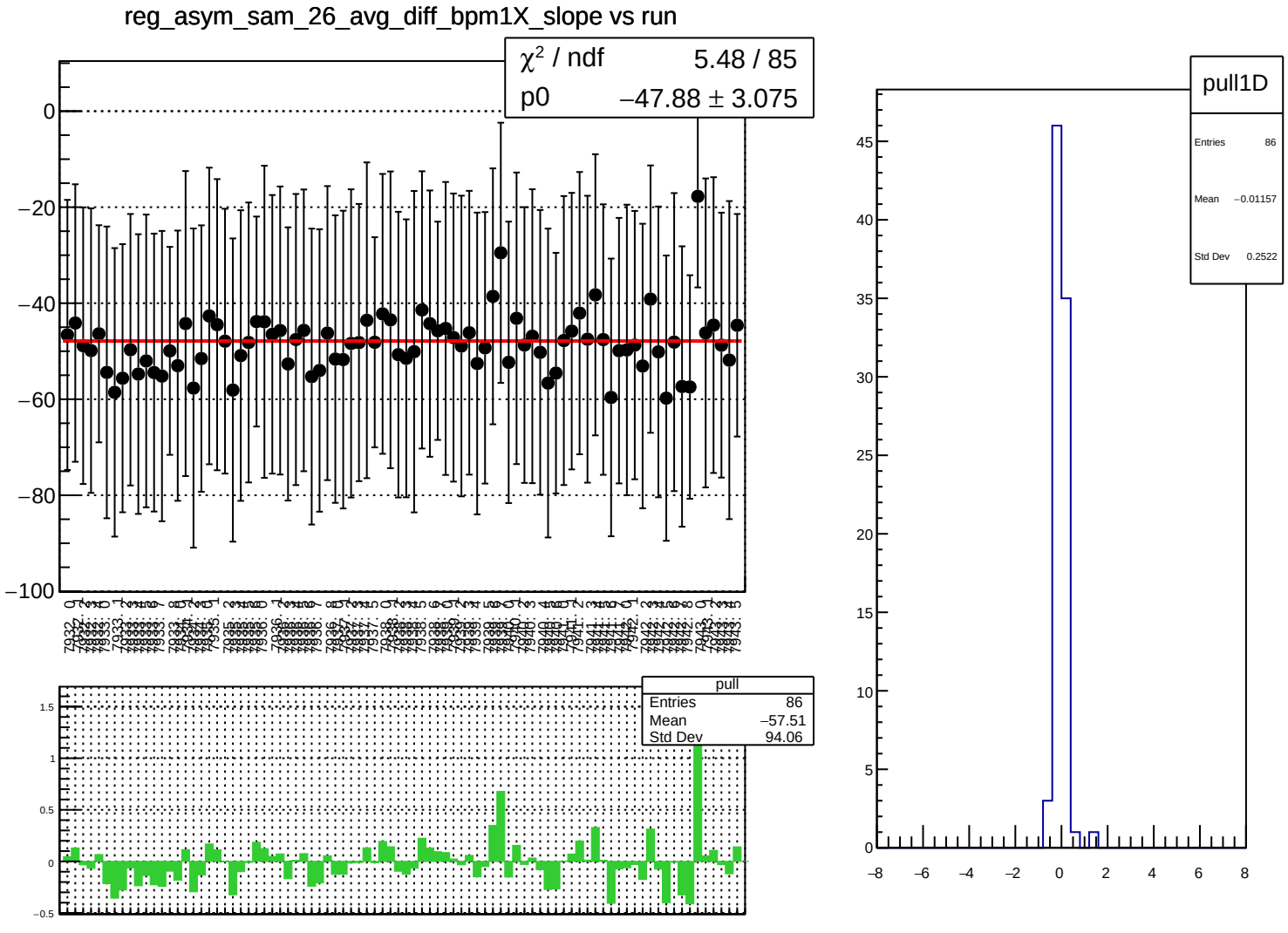

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.198 / 85
p0 3.022 ± 1.655
pull
Entries 86
Mean 848.2
Std Dev 790.9
pull1D
Entries 86
Mean 0.0009326
Std Dev 0.2209

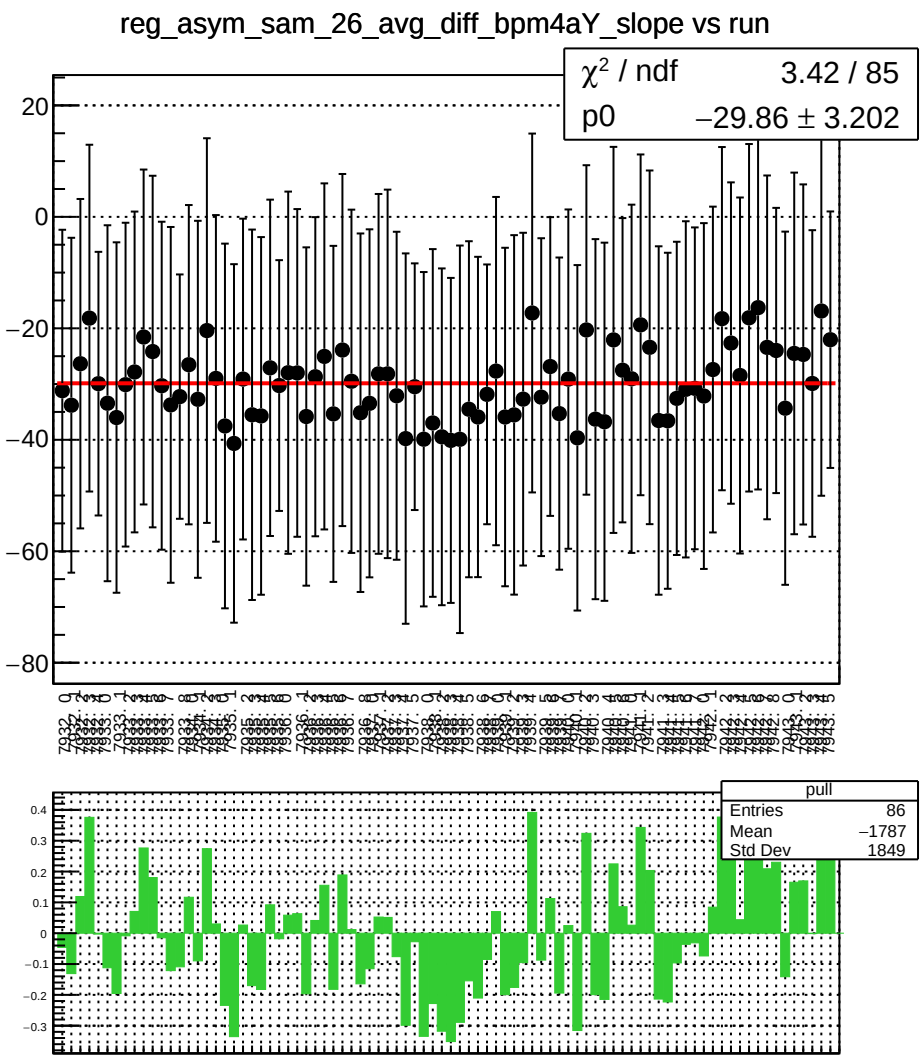

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.632 / 85
p0 20.06 ± 2.209
pull
Entries 86
Mean −1783
Std Dev 1865

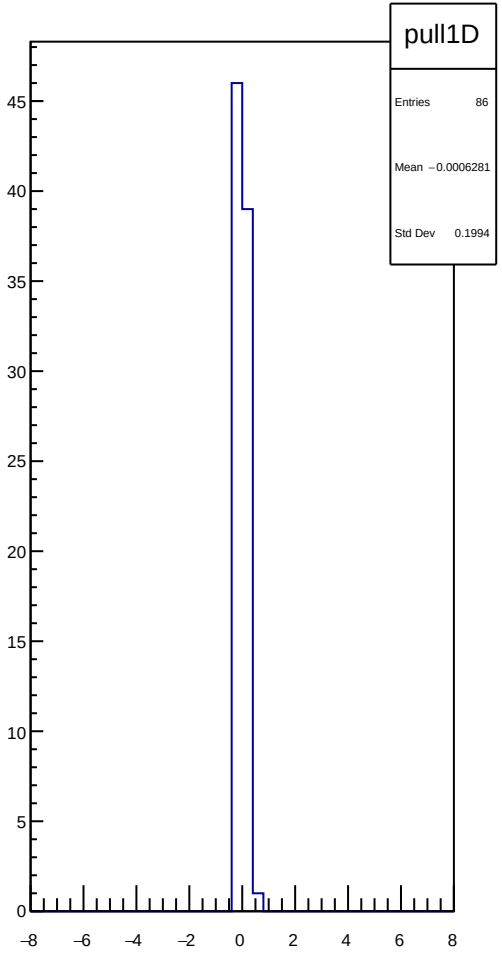

pull1D
Entries 86
Mean 0.0002987
Std Dev 0.2559

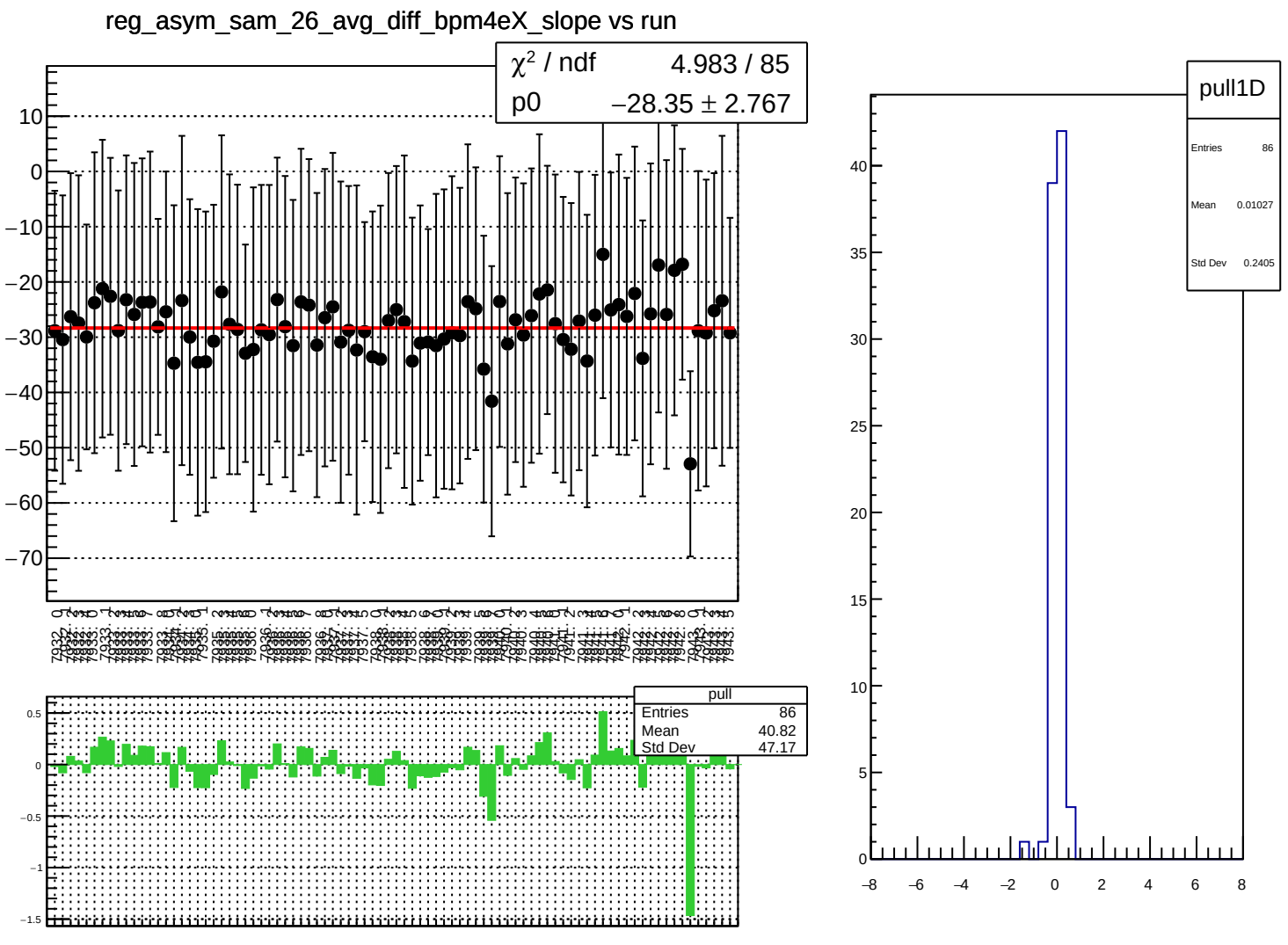

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 6.656 / 85
p0 −0.3057 ± 0.06196
pull
Entries 86
Mean 34.85
Std Dev 91.74

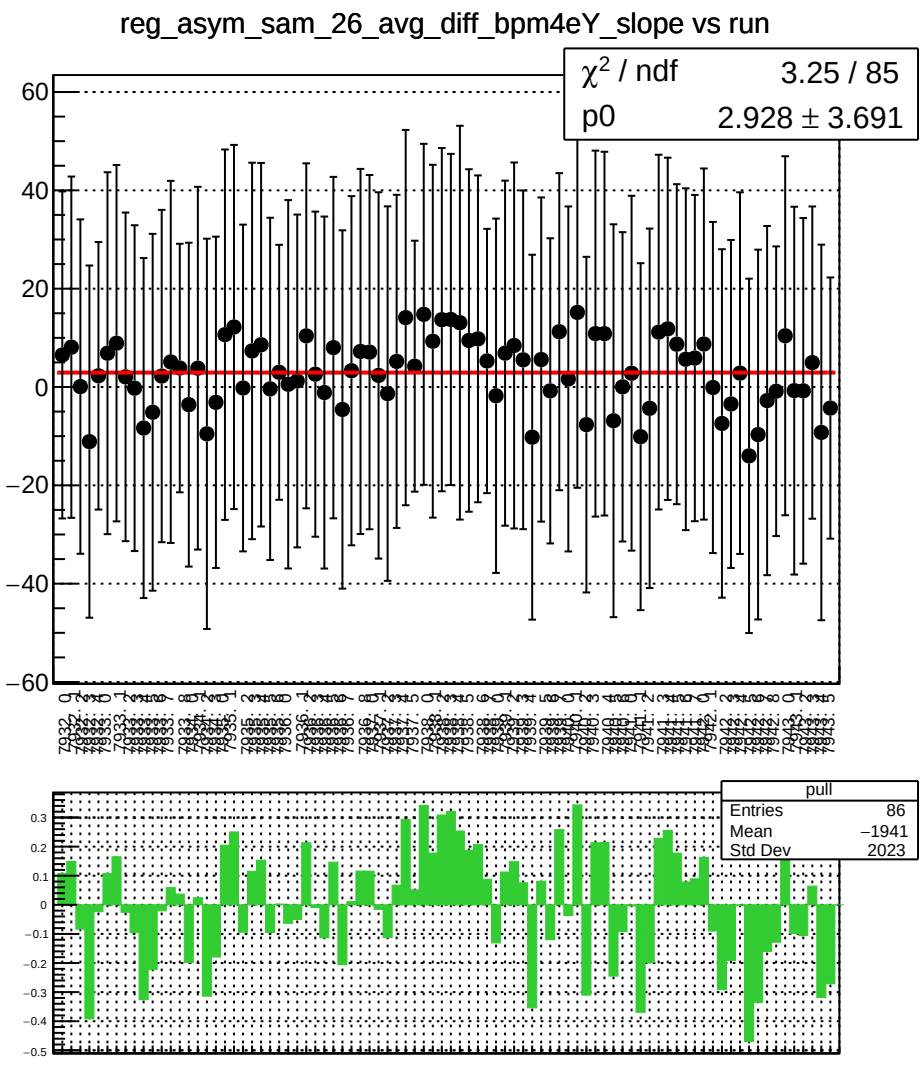

pull1D
Entries 86
Mean −0.005123
Std Dev 0.2782

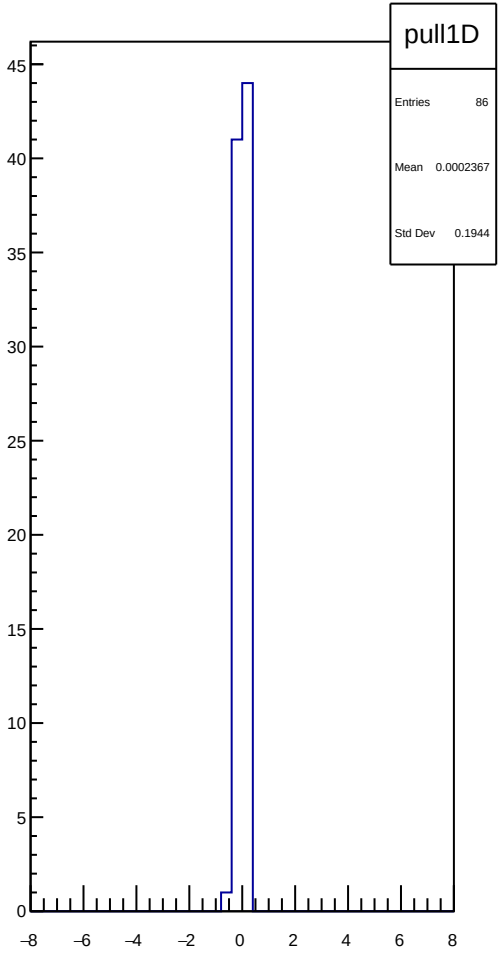

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 5.48 / 85
p0 −47.88 ± 3.075
pull
Entries 86
Mean −57.51
Std Dev 94.06
pull1D
Entries 86
Mean −0.01157
Std Dev 0.2522

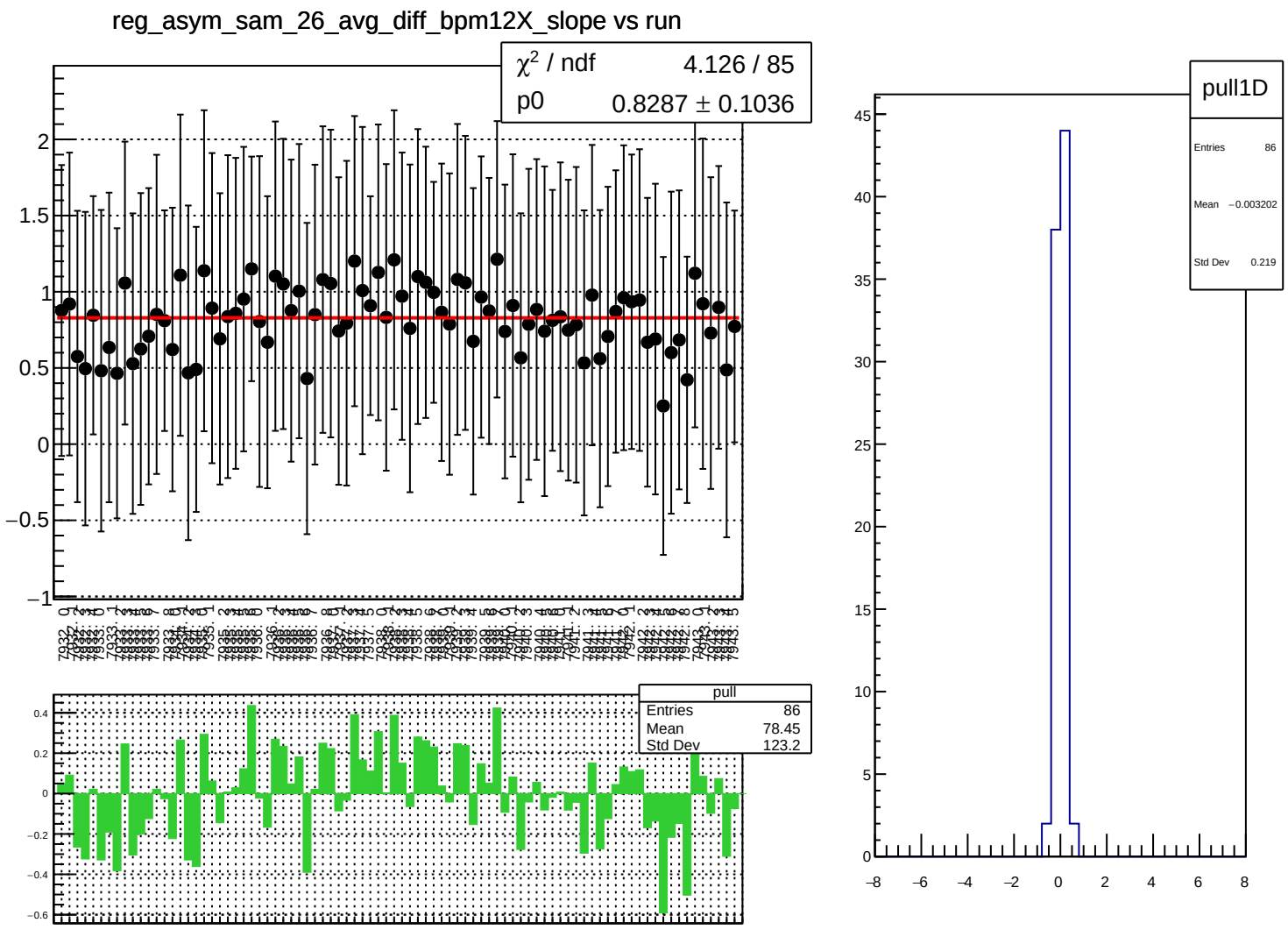

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.42 / 85
p0 −29.86 ± 3.202
pull
Entries 86
Mean −1787
Std Dev 1849

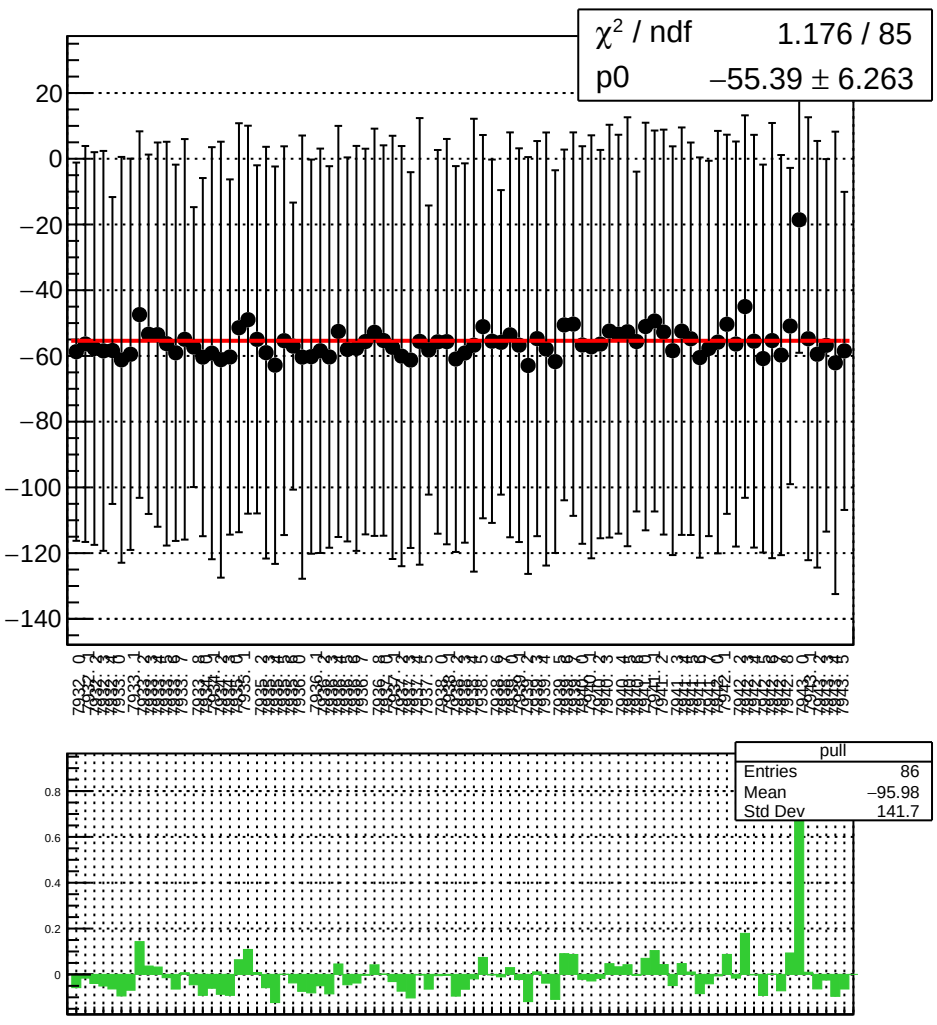

pull1D
Entries 86
Mean −0.0006281
Std Dev 0.1994

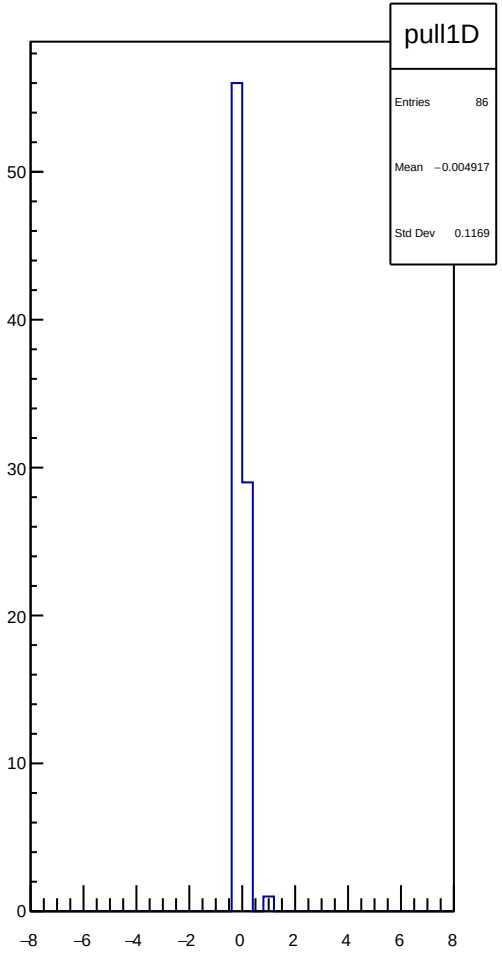

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.983 / 85
p0 −28.35 ± 2.767
pull
Entries 86
Mean 40.82
Std Dev 47.17
pull1D
Entries 86
Mean 0.01027
Std Dev 0.2405

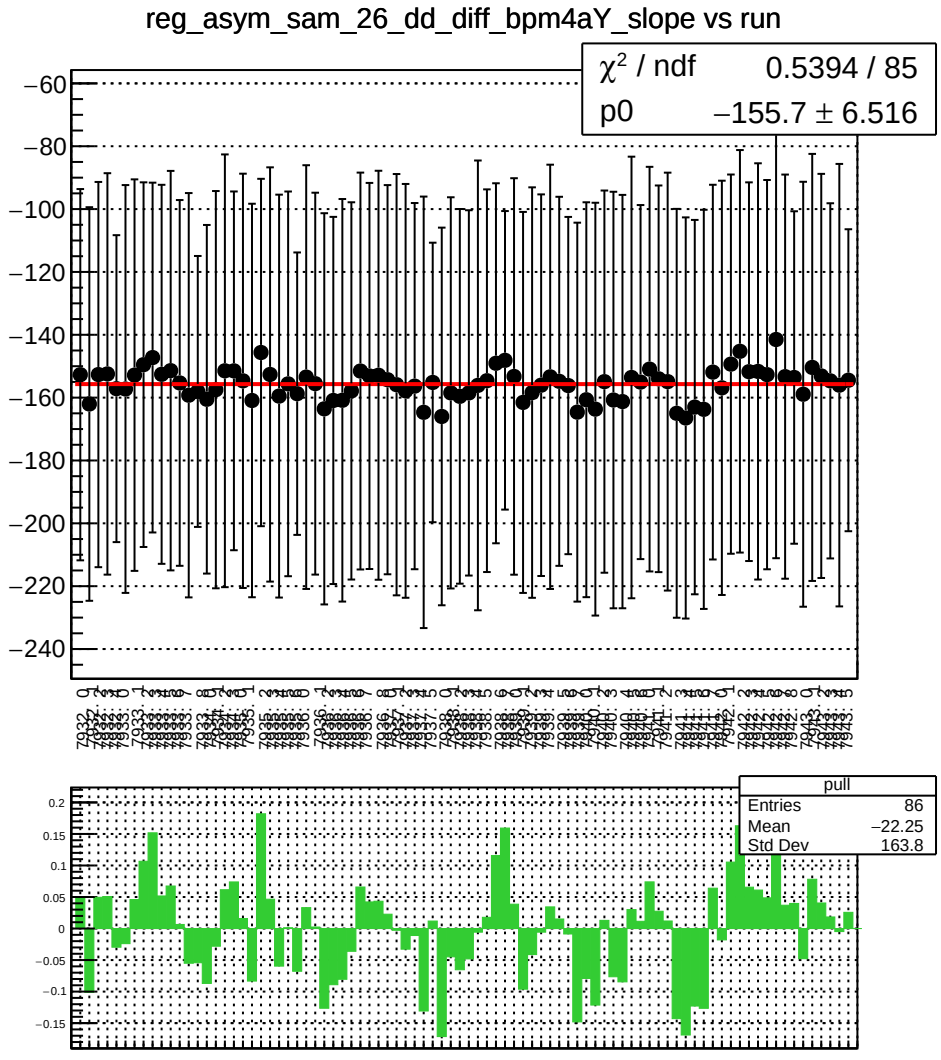

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.25 / 85
p0 2.928 ± 3.691
pull
Entries 86
Mean −1941
Std Dev 2023

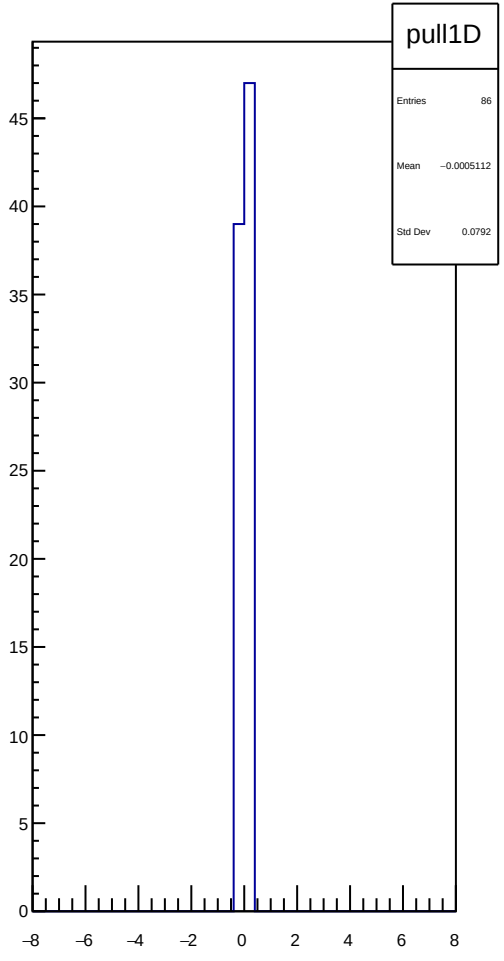

pull1D
Entries 86
Mean 0.0002367
Std Dev 0.1944

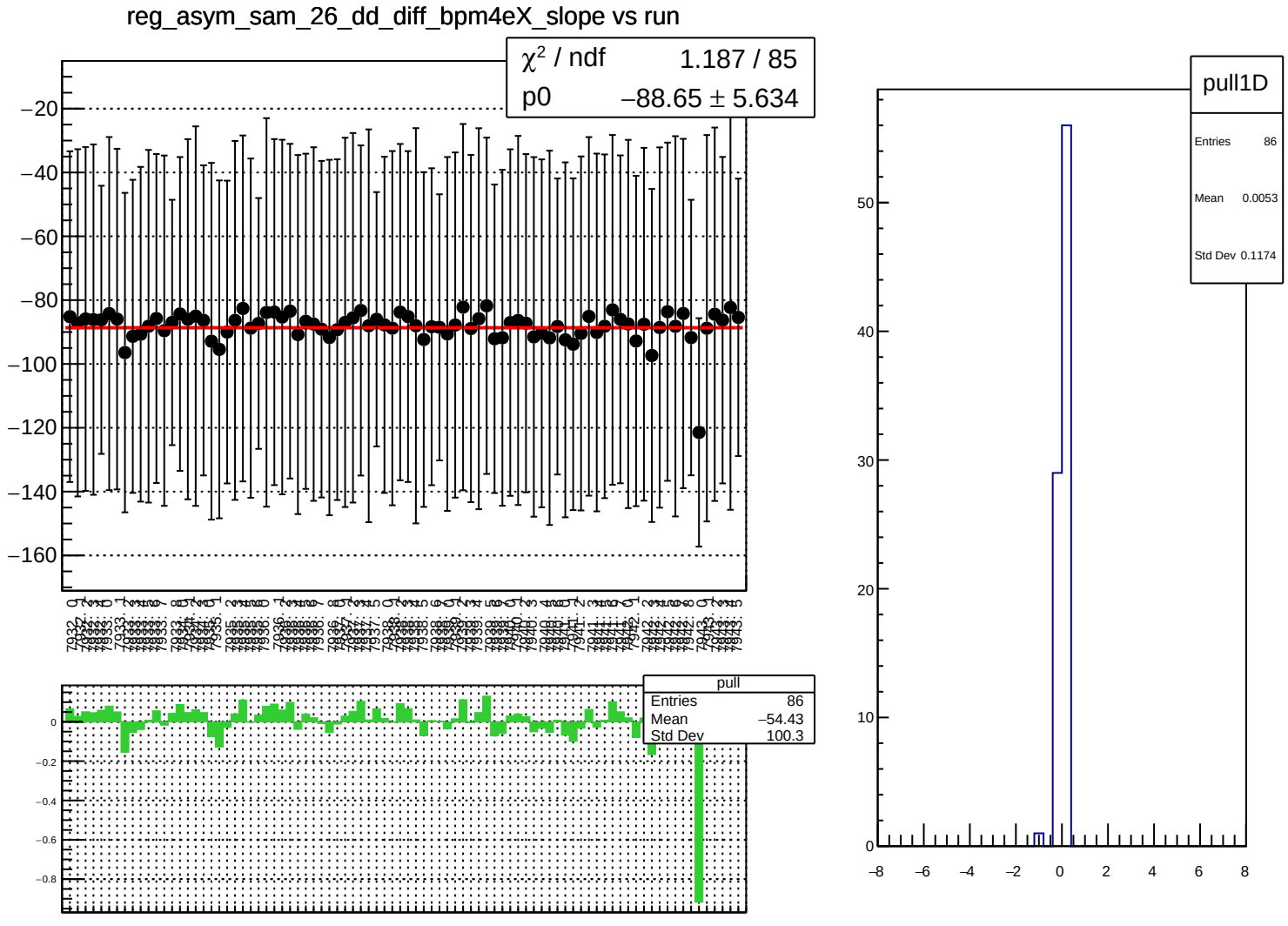

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 4.126 / 85
p0 0.8287 ± 0.1036
pull
Entries 86
Mean 78.45
Std Dev 123.2
pull1D
Entries 86
Mean −0.003202
Std Dev 0.219

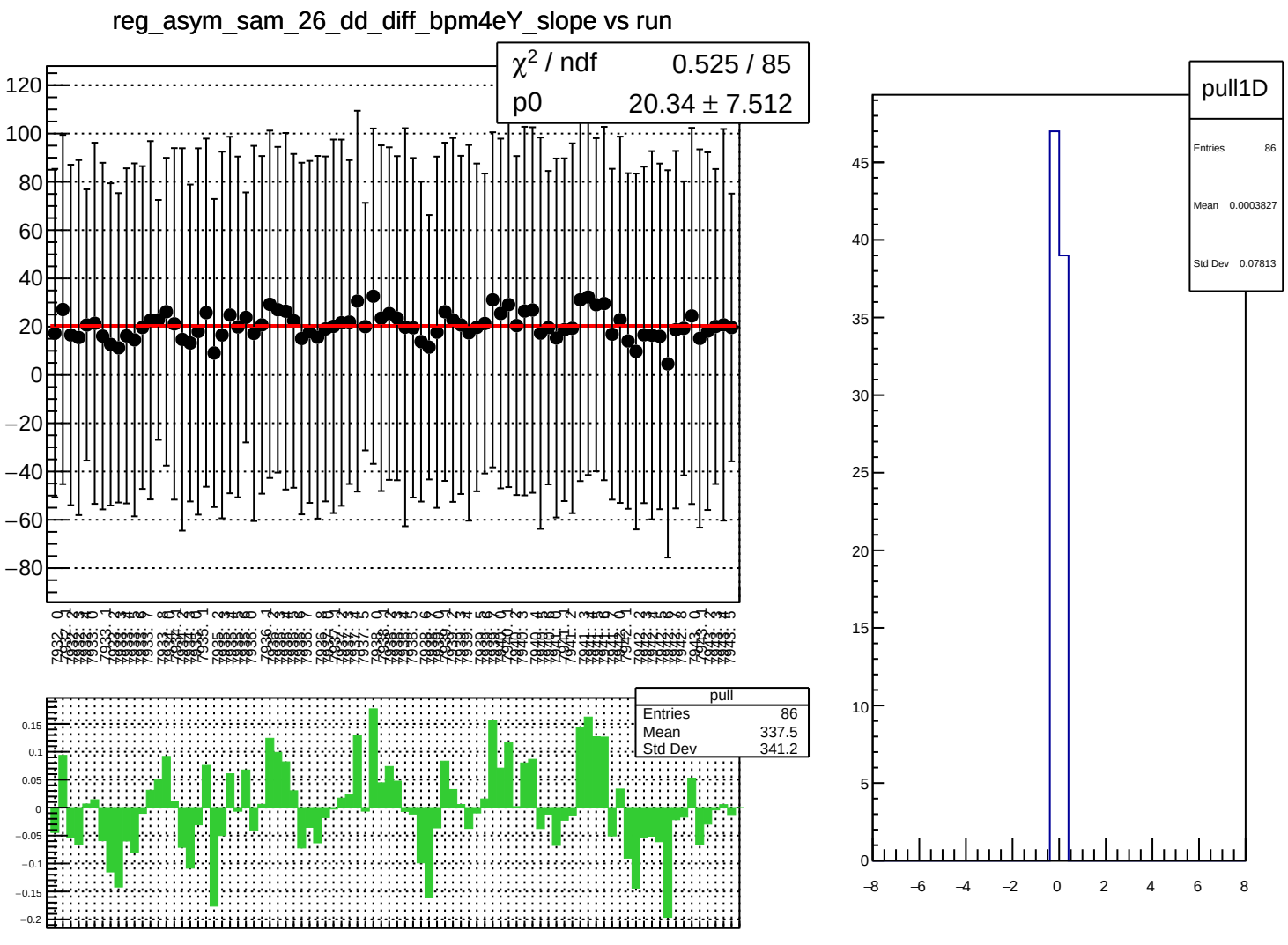

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 1.176 / 85
p0 −55.39 ± 6.263
pull
Entries 86
Mean −95.98
Std Dev 141.7

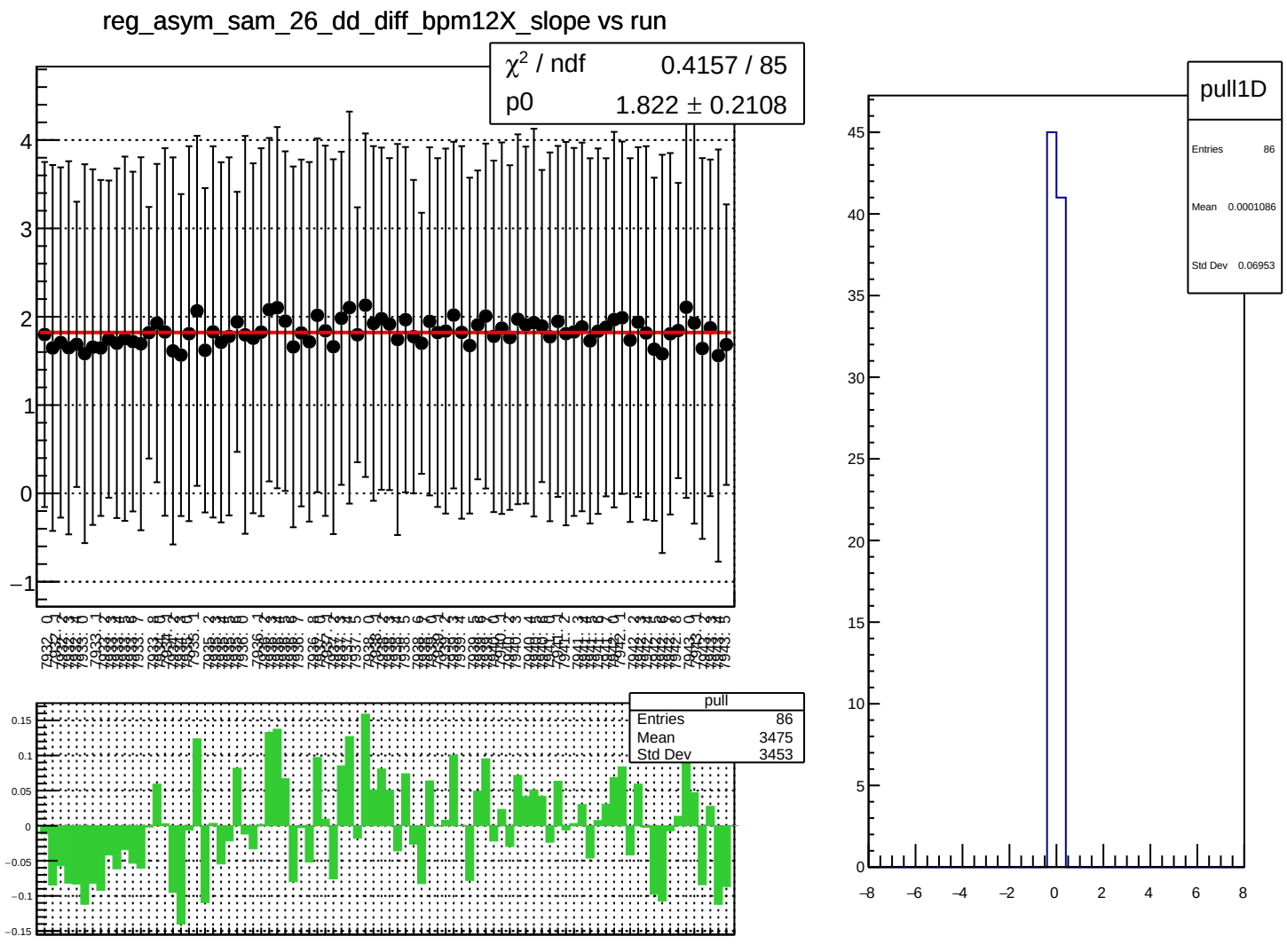

pull1D
Entries 86
Mean −0.004917
Std Dev 0.1169

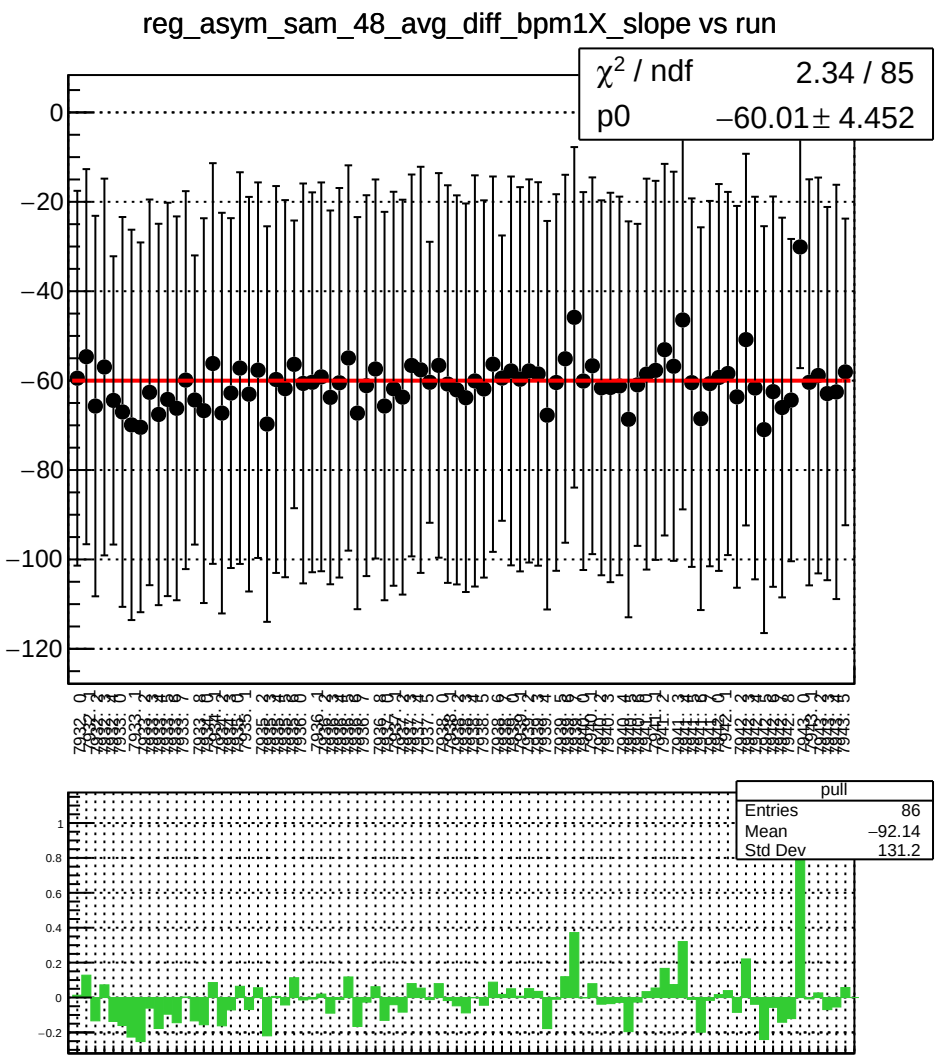

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.5394 / 85
p0 −155.7 ± 6.516
pull
Entries 86
Mean −22.25
Std Dev 163.8

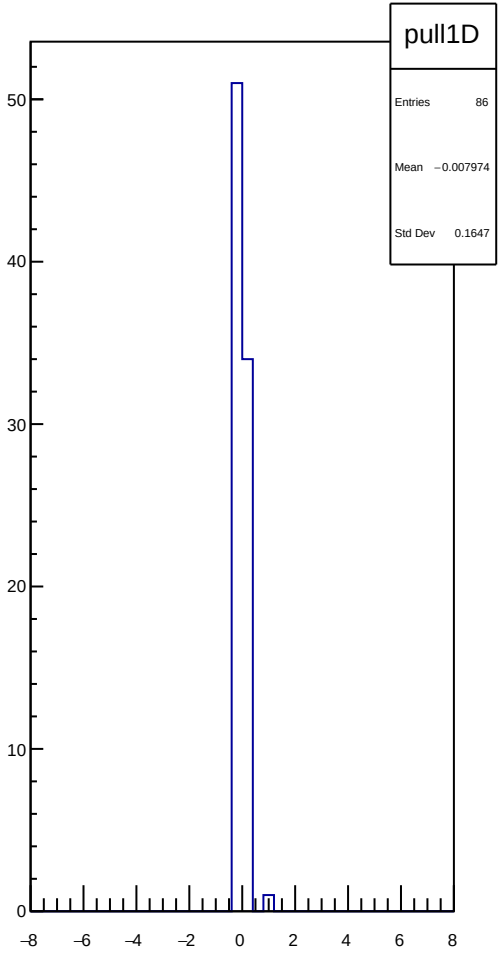

pull1D
Entries 86
Mean −0.0005112
Std Dev 0.0792

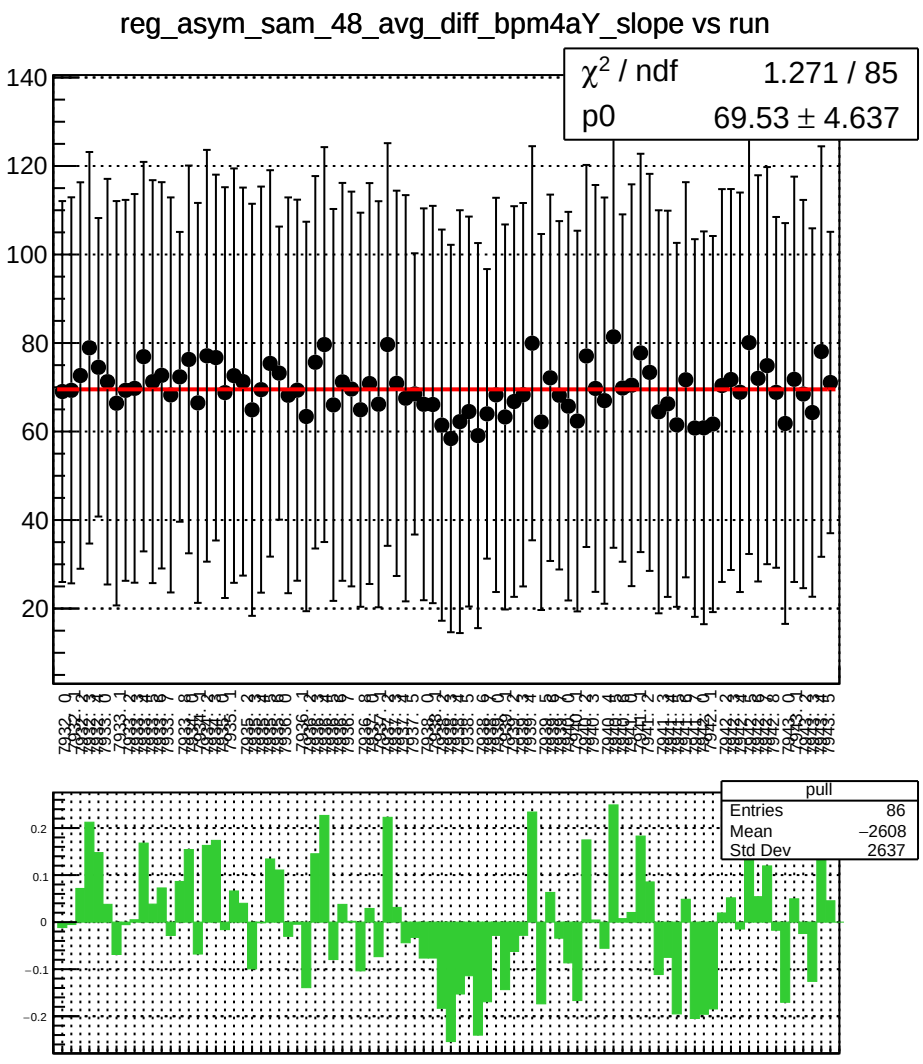

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.187 / 85
p0 −88.65 ± 5.634
pull
Entries 86
Mean −54.43
Std Dev 100.3
pull1D
Entries 86
Mean 0.0053
Std Dev 0.1174

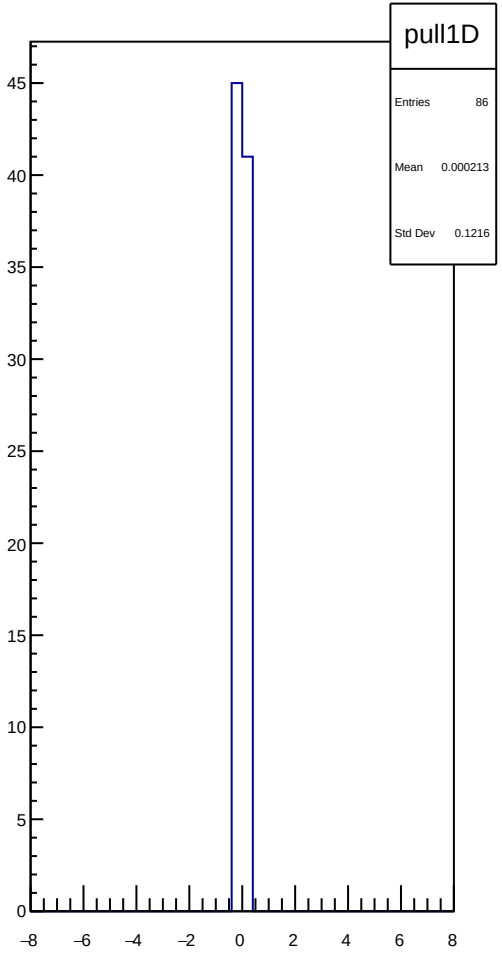

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.525 / 85
p0 20.34 ± 7.512
pull
Entries 86
Mean 337.5
Std Dev 341.2
pull1D
Entries 86
Mean 0.0003827
Std Dev 0.07813

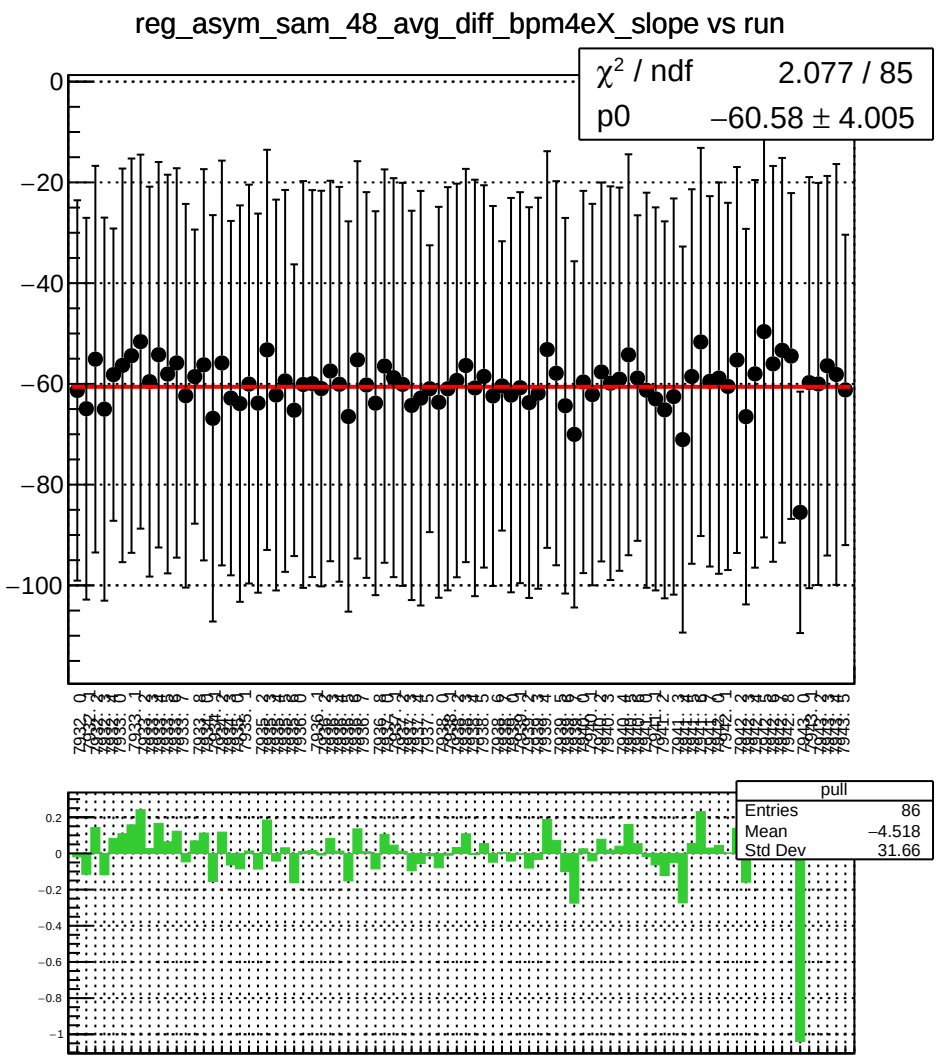

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 0.4157 / 85
p0 1.822 ± 0.2108
pull
Entries 86
Mean 3475
Std Dev 3453
pull1D
Entries 86
Mean 0.0001086
Std Dev 0.06953

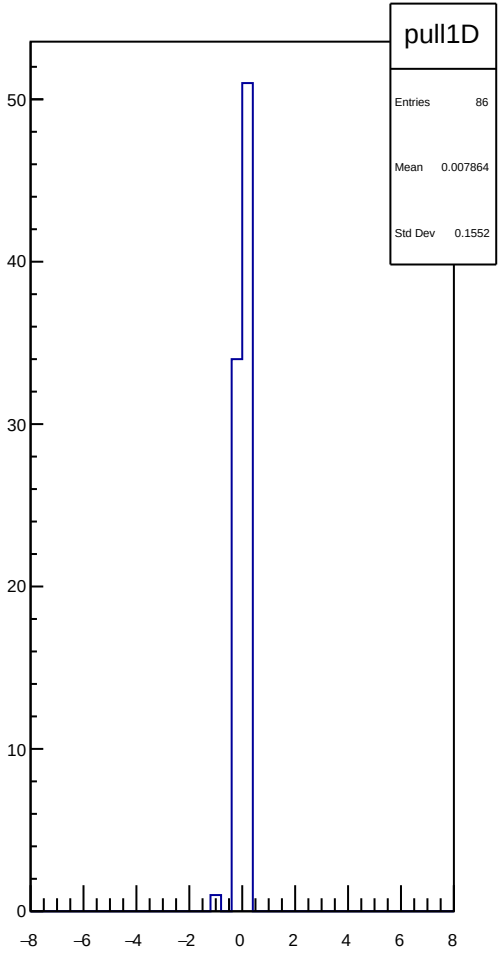

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 2.34 / 85
p0 −60.01 ± 4.452
pull
Entries 86
Mean −92.14
Std Dev 131.2

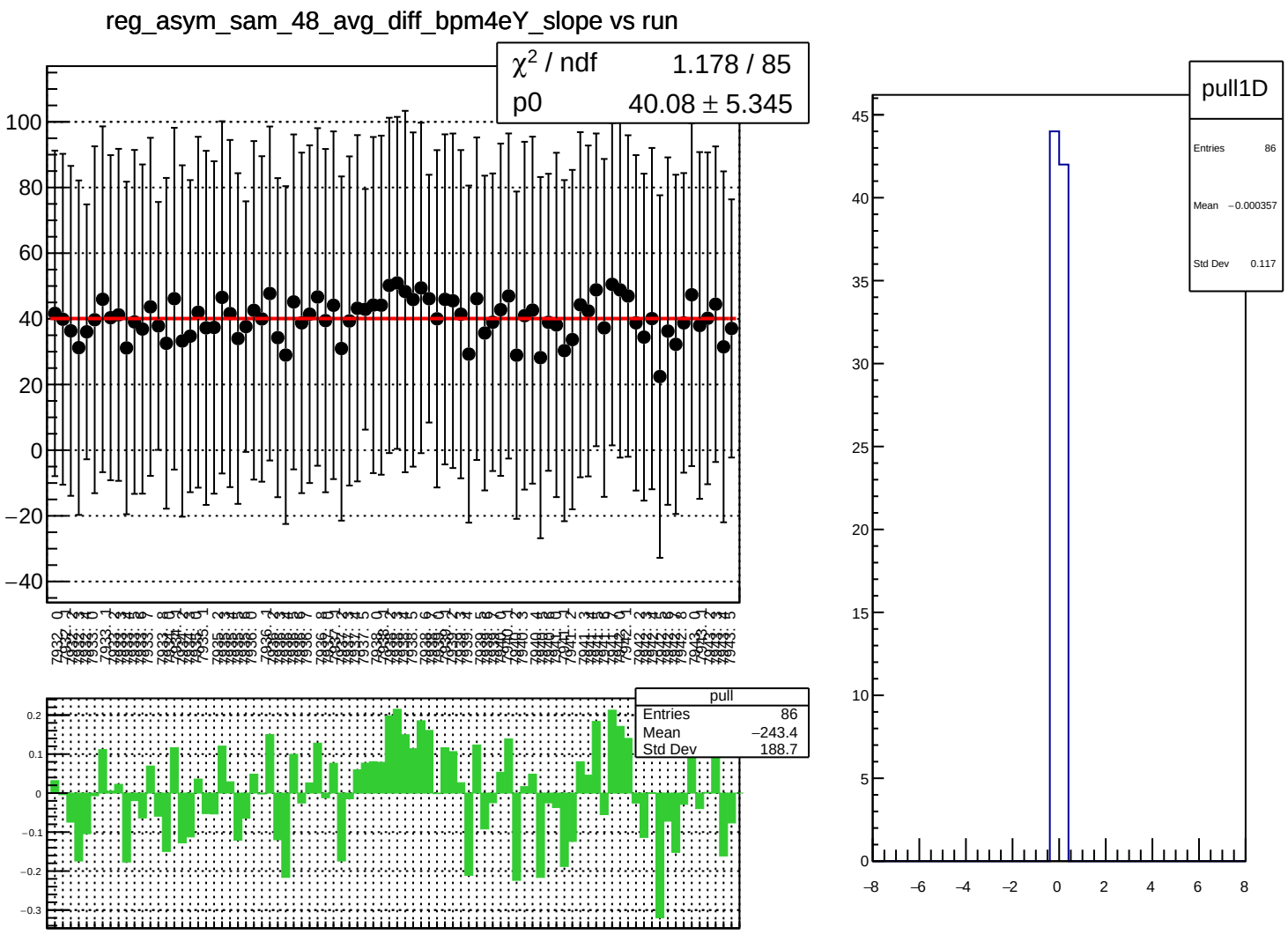

pull1D
Entries 86
Mean −0.007974
Std Dev 0.1647

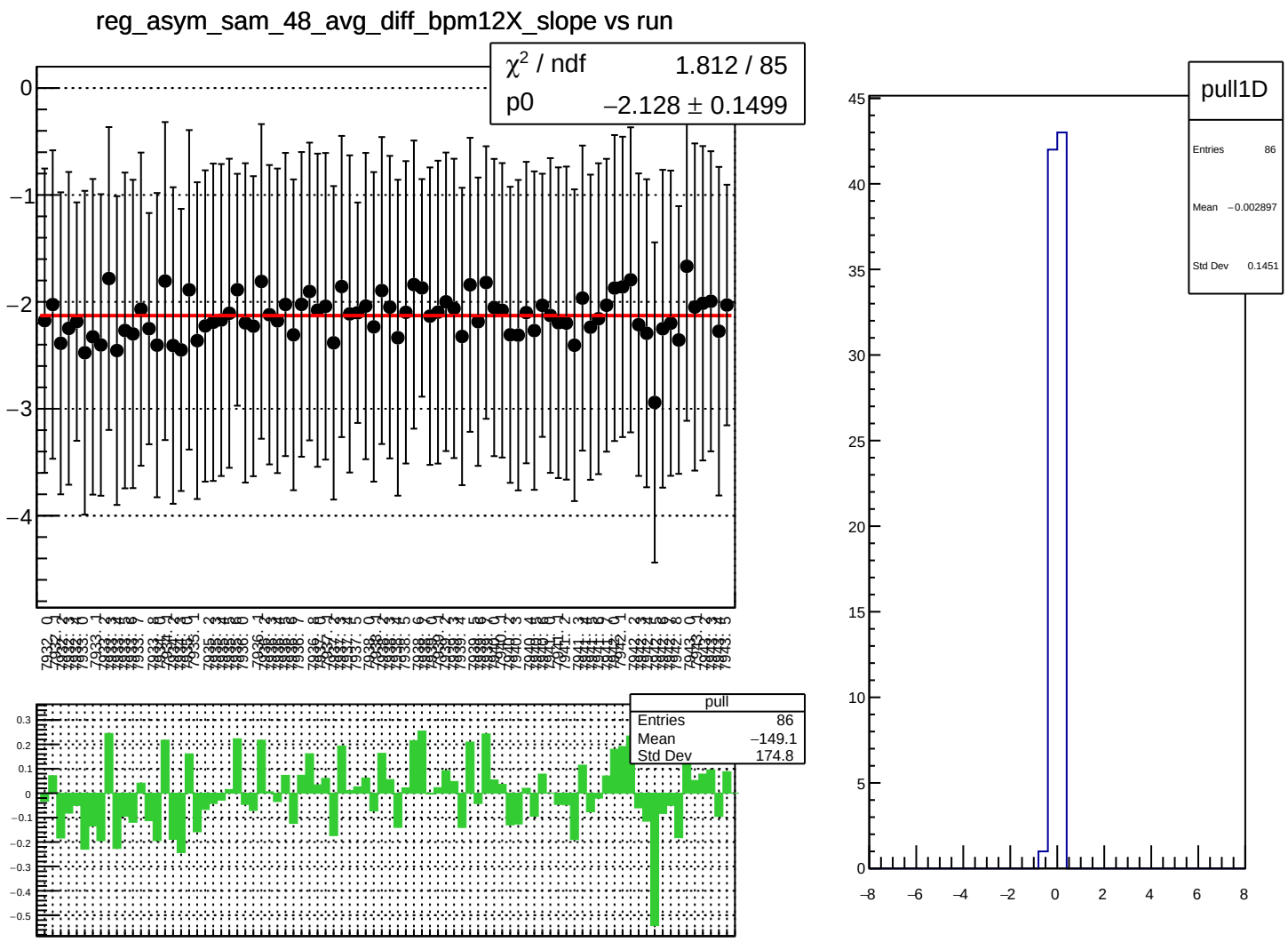

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.271 / 85
p0 69.53 ± 4.637
pull
Entries 86
Mean −2608
Std Dev 2637

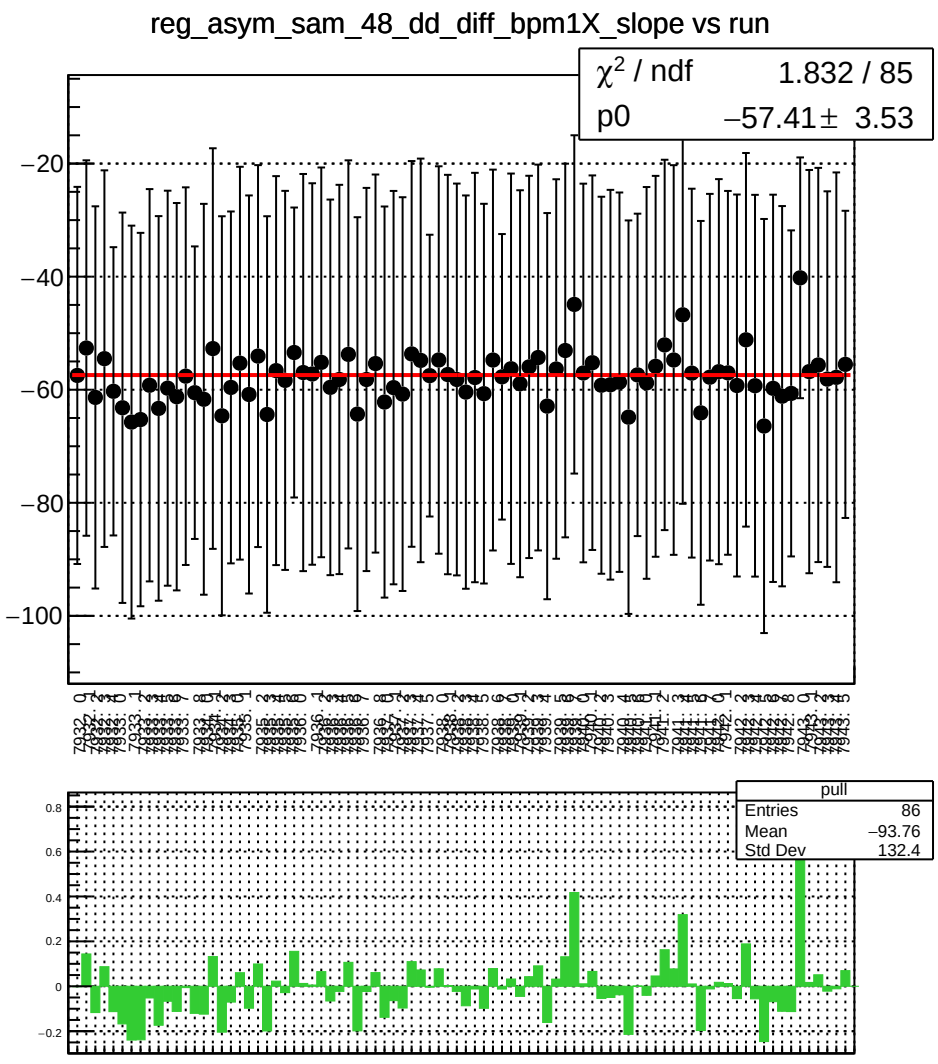

pull1D
Entries 86
Mean 0.000213
Std Dev 0.1216

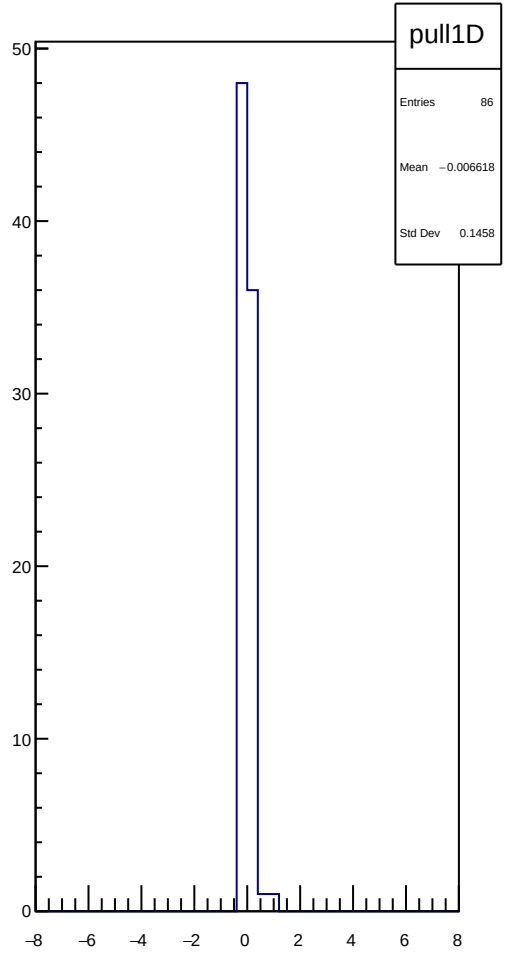

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.077 / 85
p0 −60.58 ± 4.005
pull
Entries 86
Mean −4.518
Std Dev 31.66

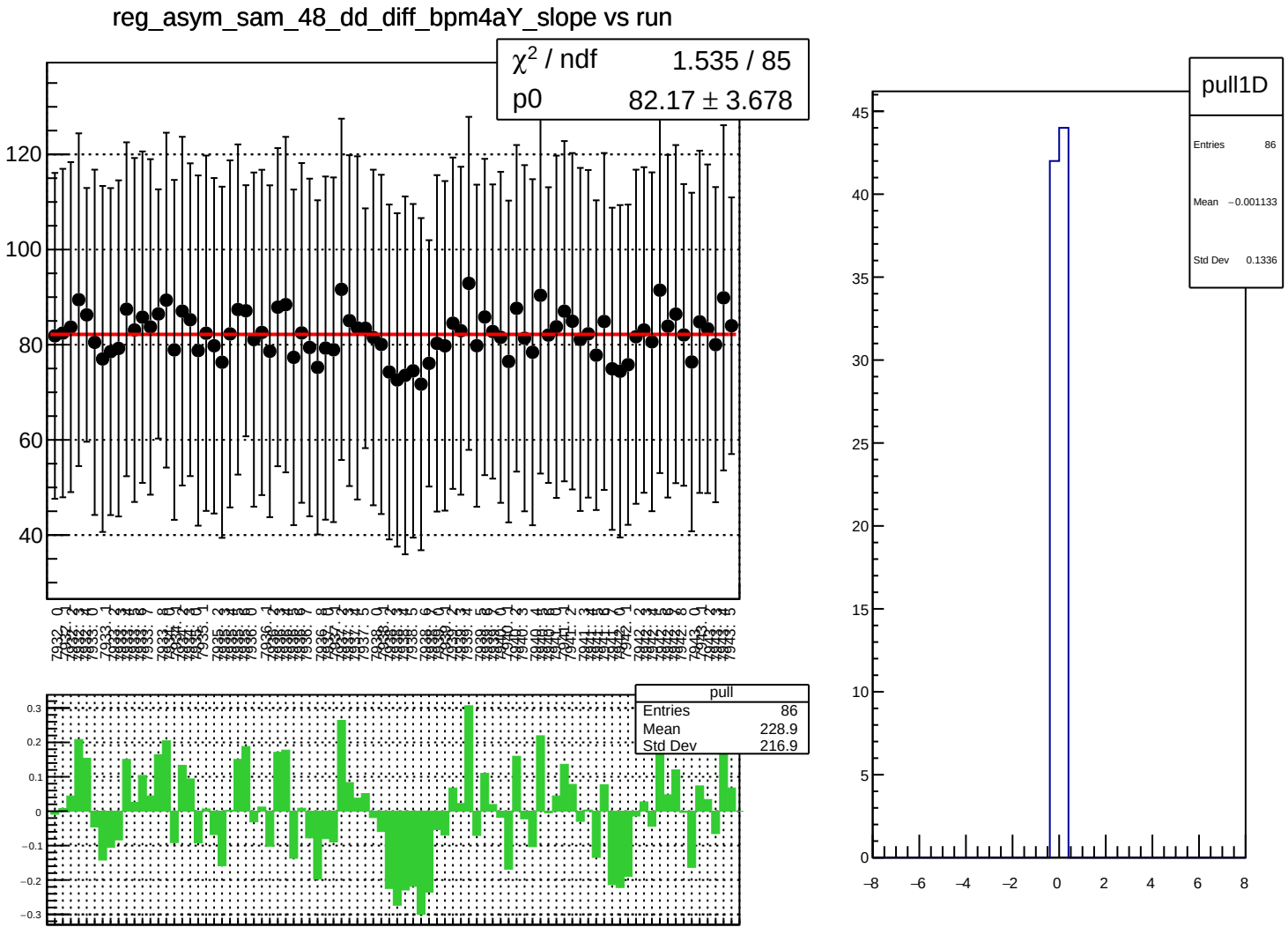

pull1D
Entries 86
Mean 0.007864
Std Dev 0.1552

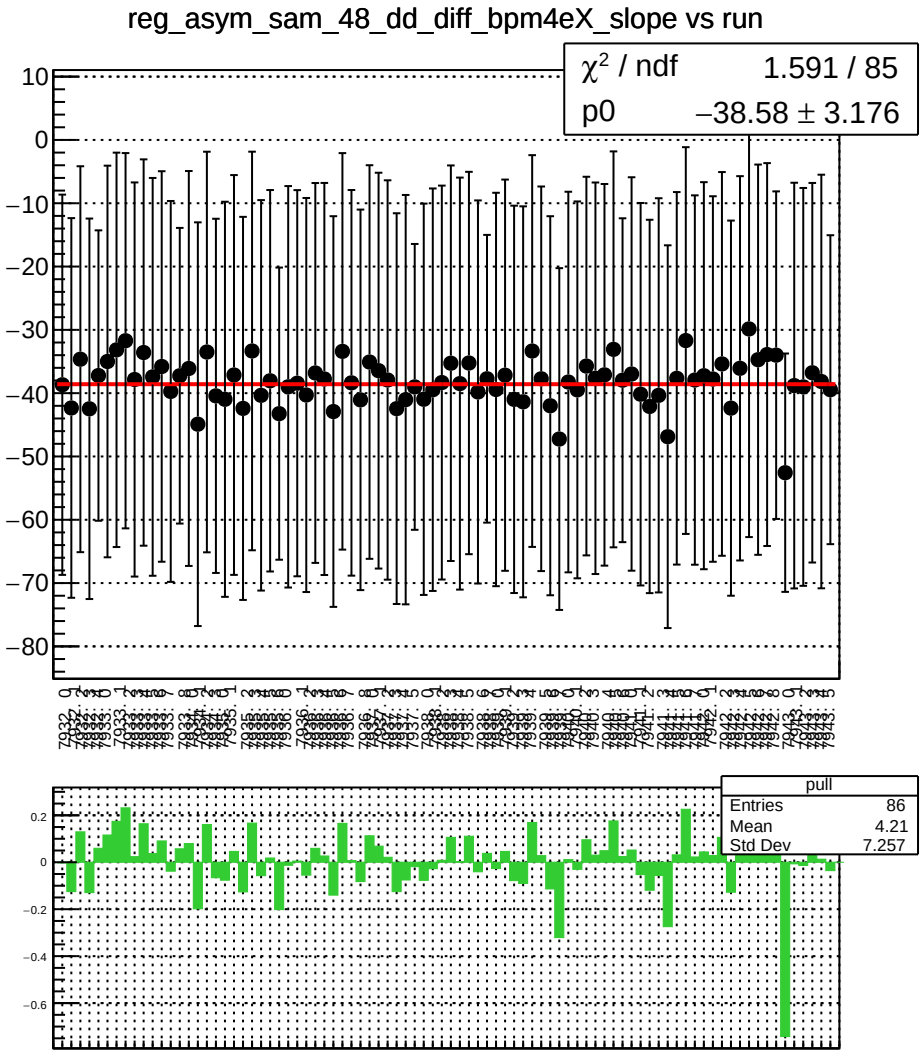

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.178 / 85
p0 40.08 ± 5.345
pull
Entries 86
Mean −243.4
Std Dev 188.7
pull1D
Entries 86
Mean −0.000357
Std Dev 0.117

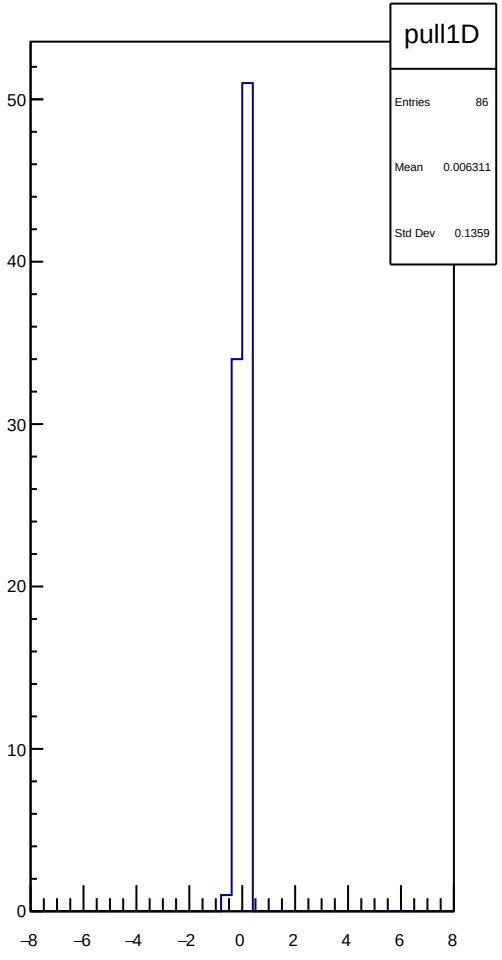

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 1.812 / 85
p0 −2.128 ± 0.1499
pull
Entries 86
Mean −149.1
Std Dev 174.8
pull1D
Entries 86
Mean −0.002897
Std Dev 0.1451

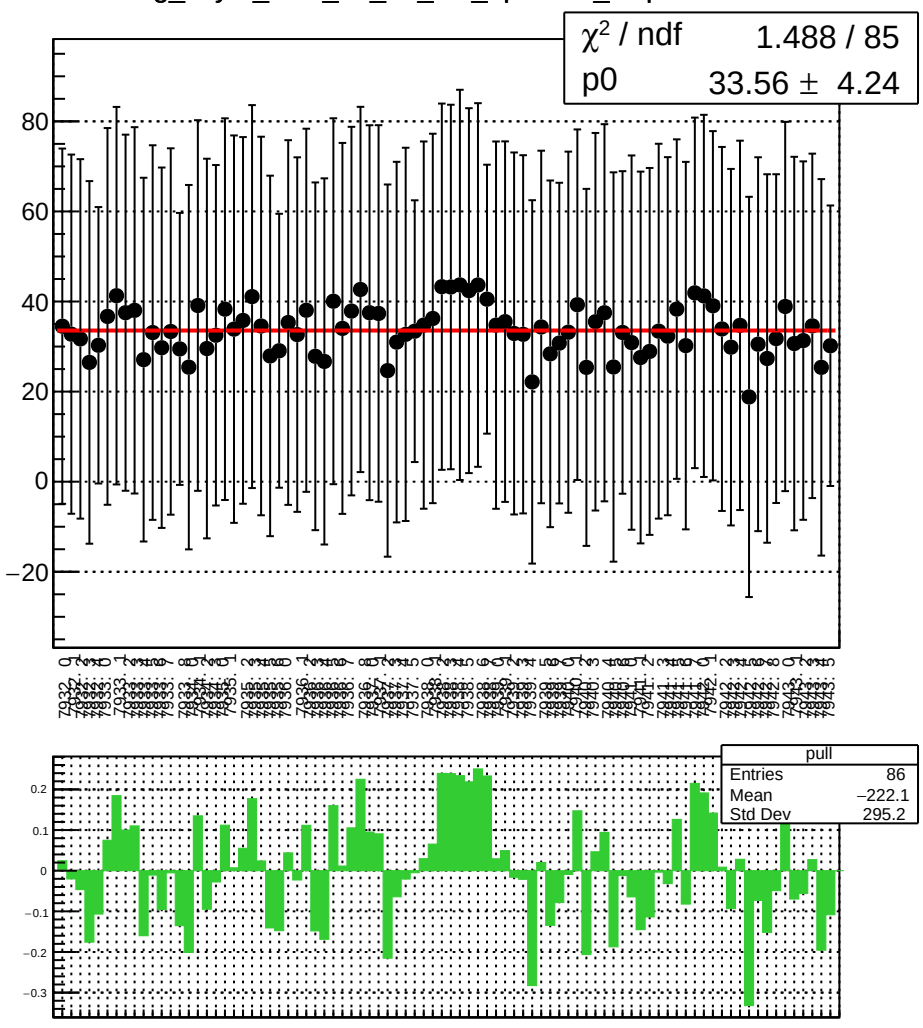

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.832 / 85
p0 −57.41 ± 3.53
−20
−40
−60
−80
−100
pull
Entries 86
Mean −93.76
Std Dev 132.4
0.8
0.6
0.4
0.2
0
−0.2

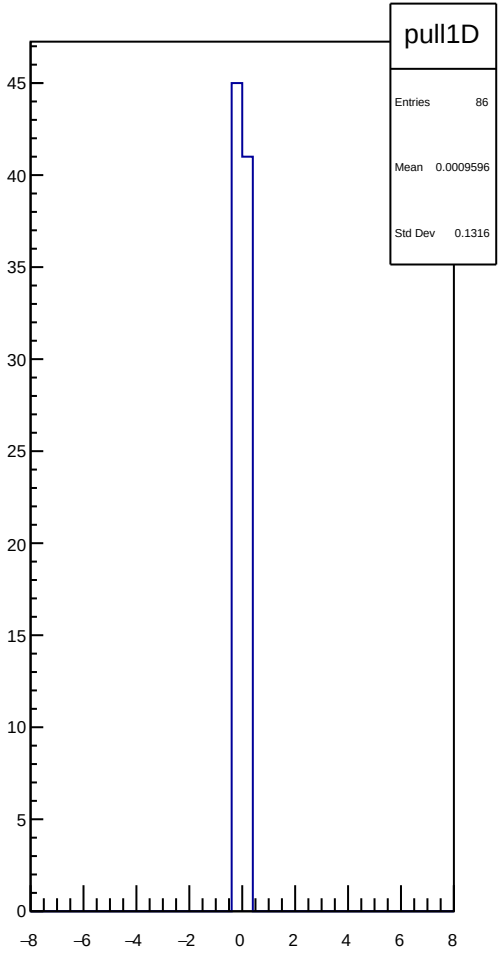

pull1D
Entries 86
Mean −0.006618
Std Dev 0.1458
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

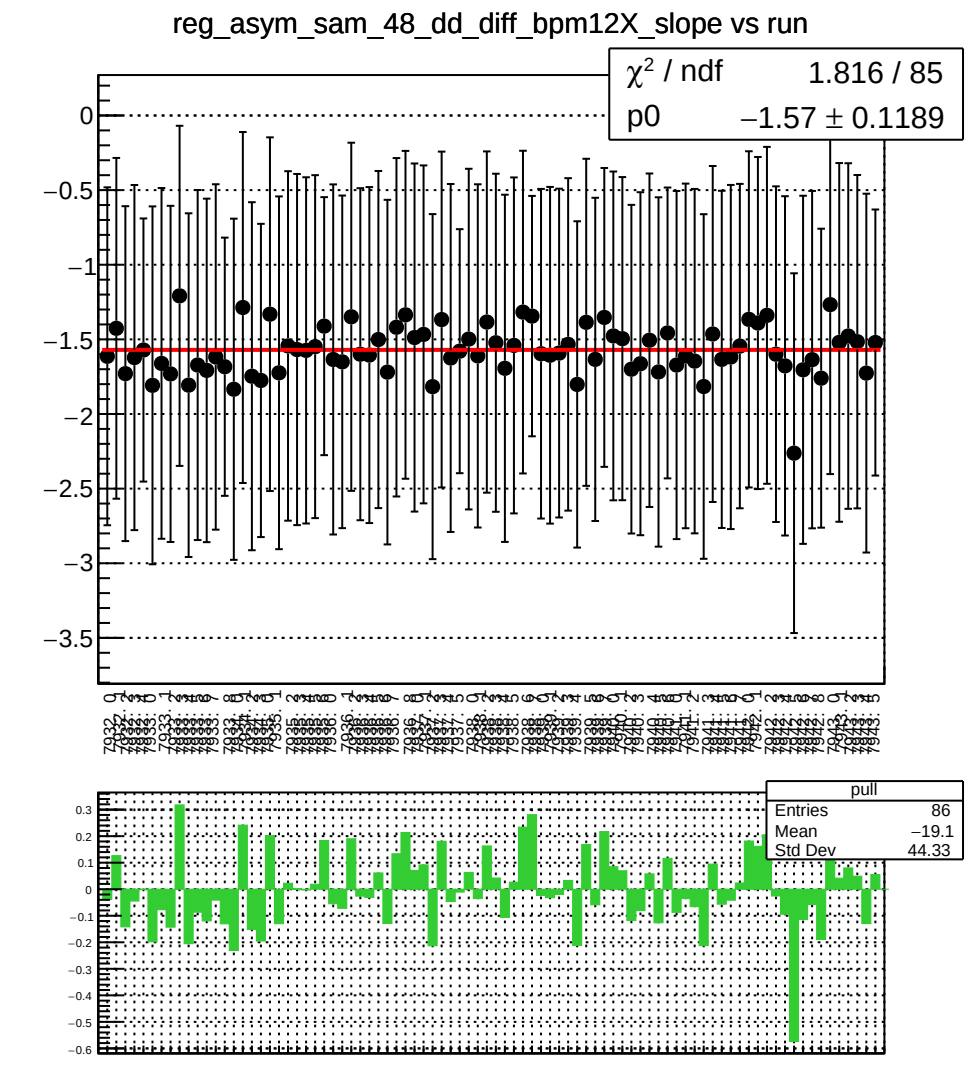

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.535 / 85
p0 82.17 ± 3.678
pull
Entries 86
Mean 228.9
Std Dev 216.9
pull1D
Entries 86
Mean −0.001133
Std Dev 0.1336

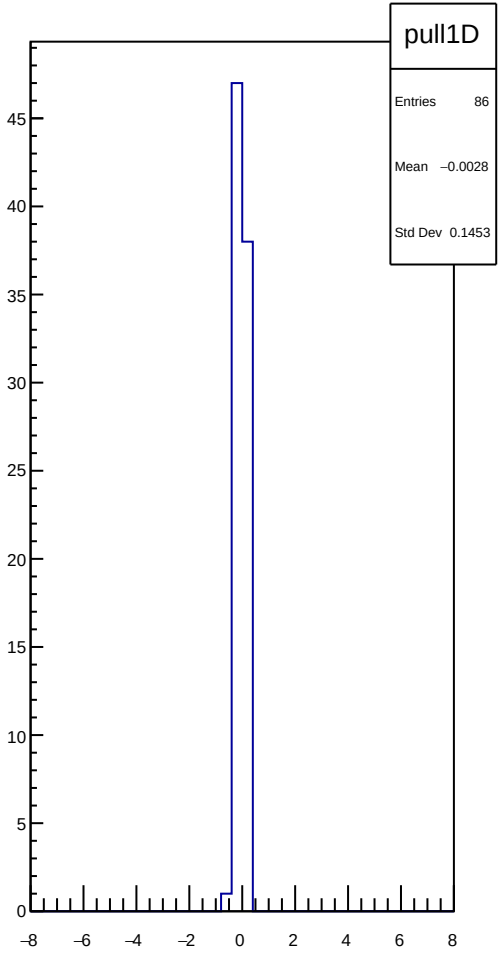

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.591 / 85
p0 −38.58 ± 3.176
pull
Entries 86
Mean 4.21
Std Dev 7.257

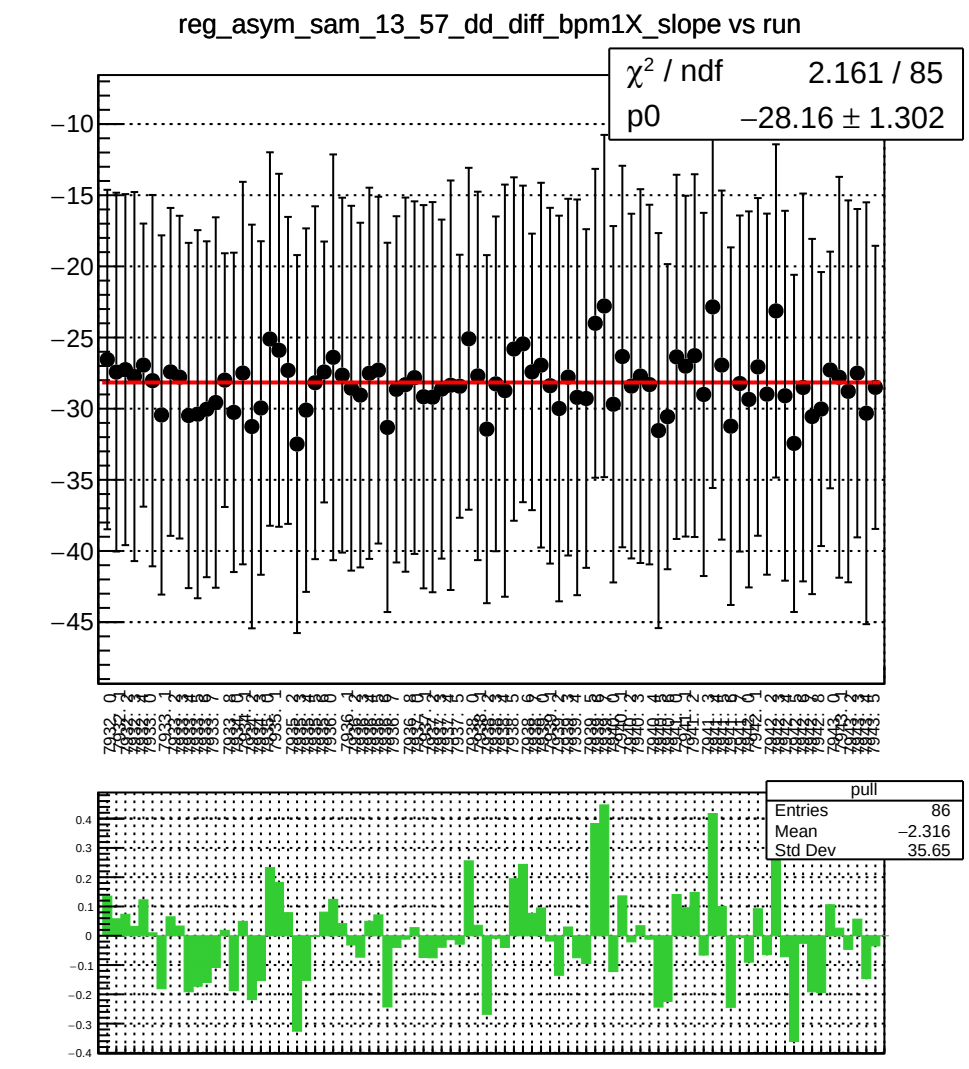

pull1D
Entries 86
Mean 0.006311
Std Dev 0.1359

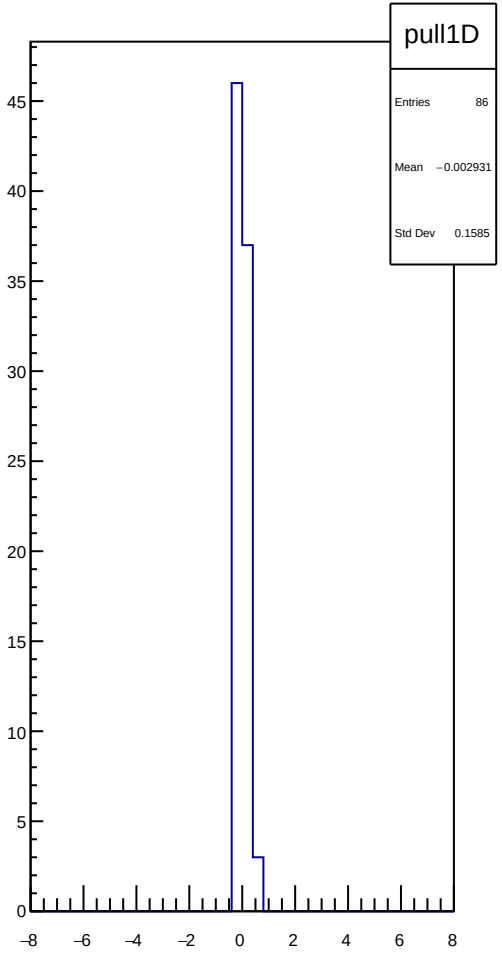

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.488 / 85
p0 33.56 ± 4.24
pull
Entries 86
Mean −222.1
Std Dev 295.2

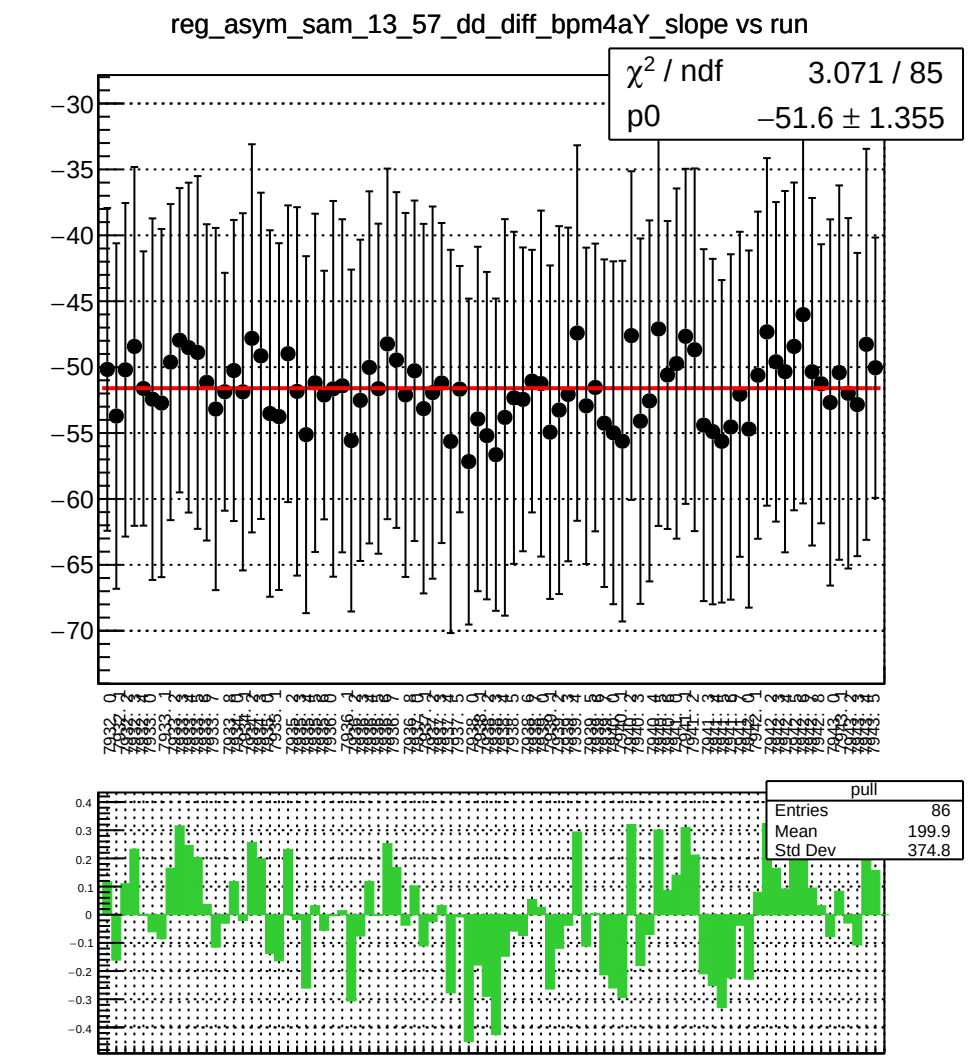

pull1D
Entries 86
Mean 0.0009596
Std Dev 0.1316

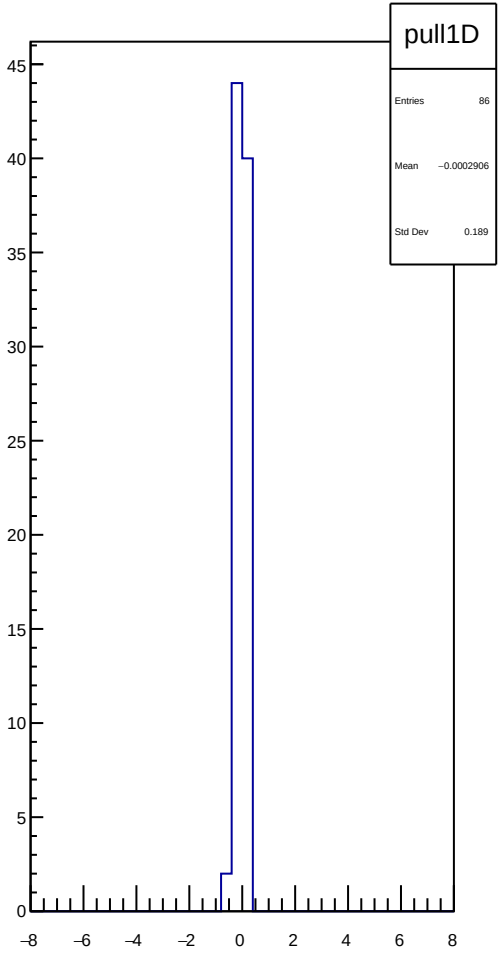

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 1.816 / 85
p0 −1.57 ± 0.1189
pull
Entries 86
Mean −19.1
Std Dev 44.33

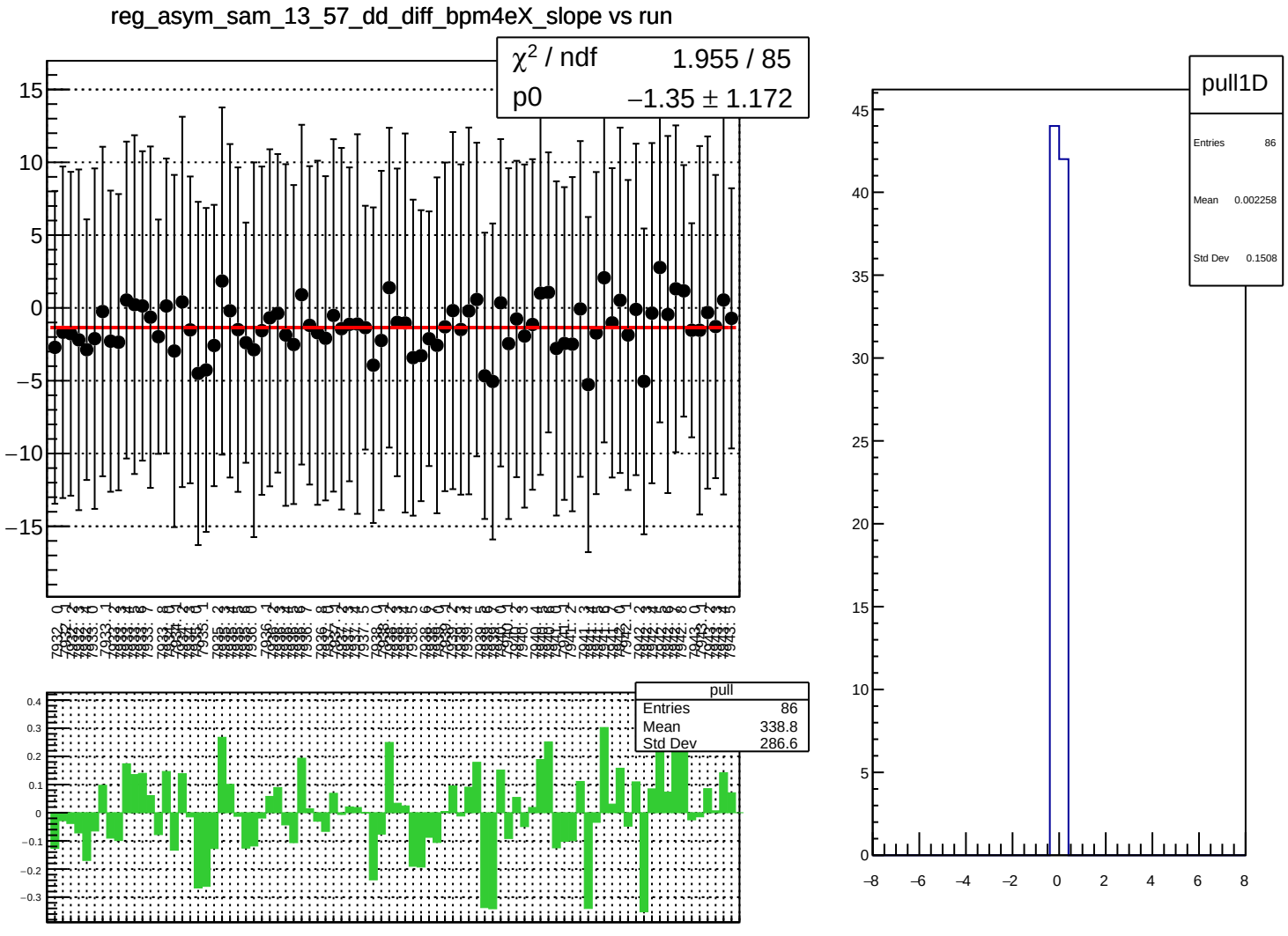

pull1D
Entries 86
Mean −0.0028
Std Dev 0.1453

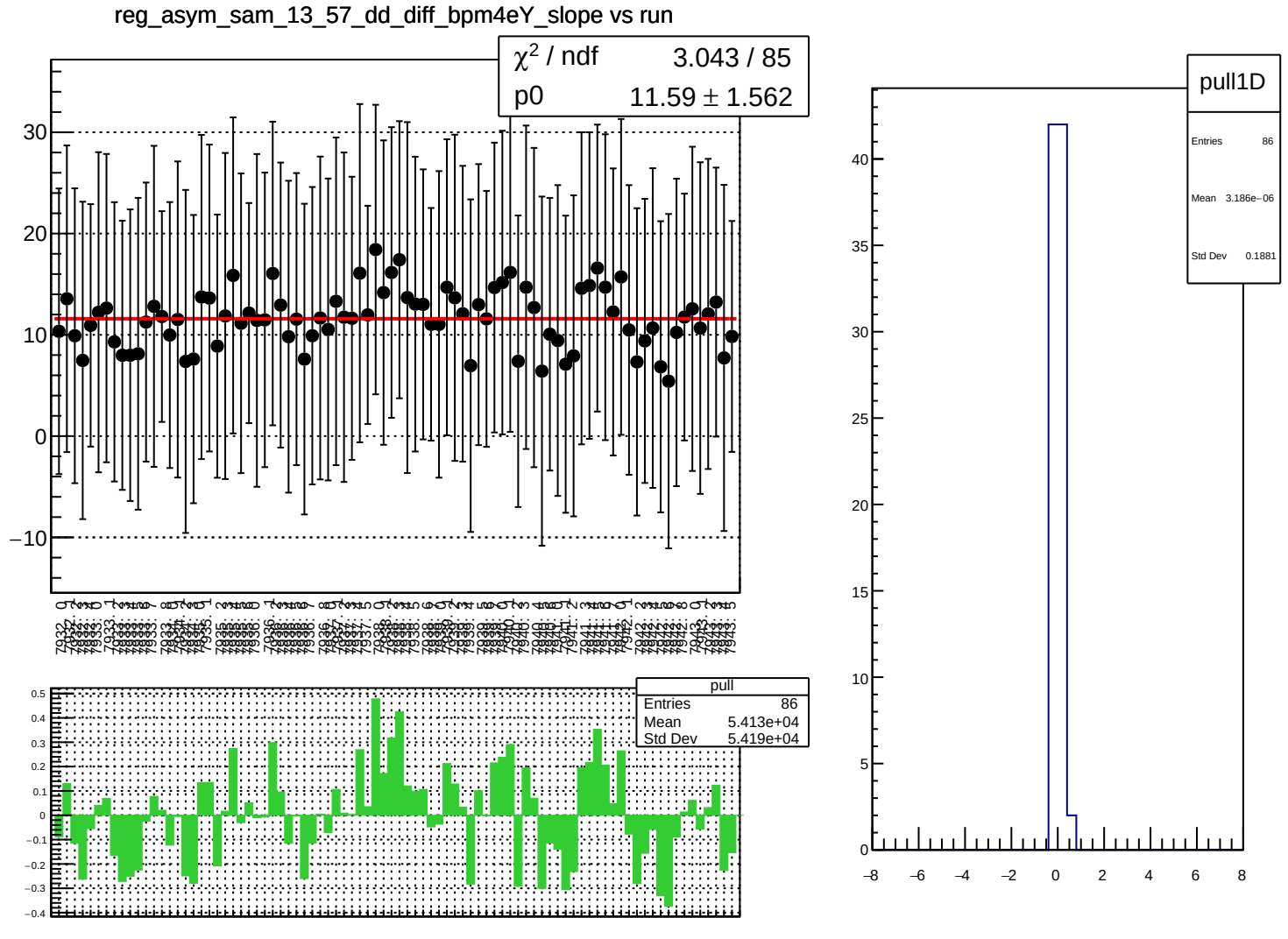

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 2.161 / 85
p0 −28.16 ± 1.302
pull
Entries 86
Mean −2.316
Std Dev 35.65

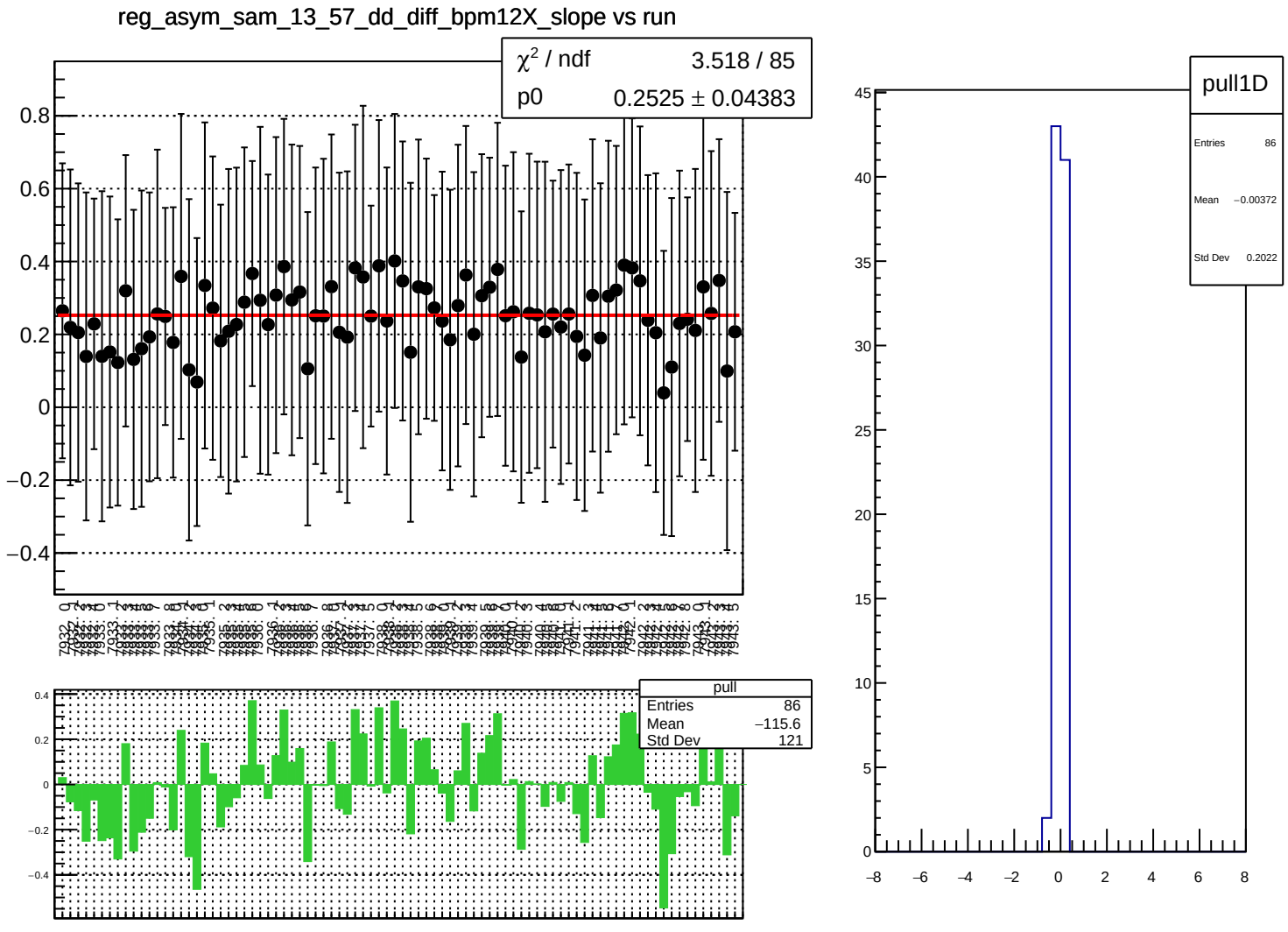

pull1D
Entries 86
Mean −0.002931
Std Dev 0.1585

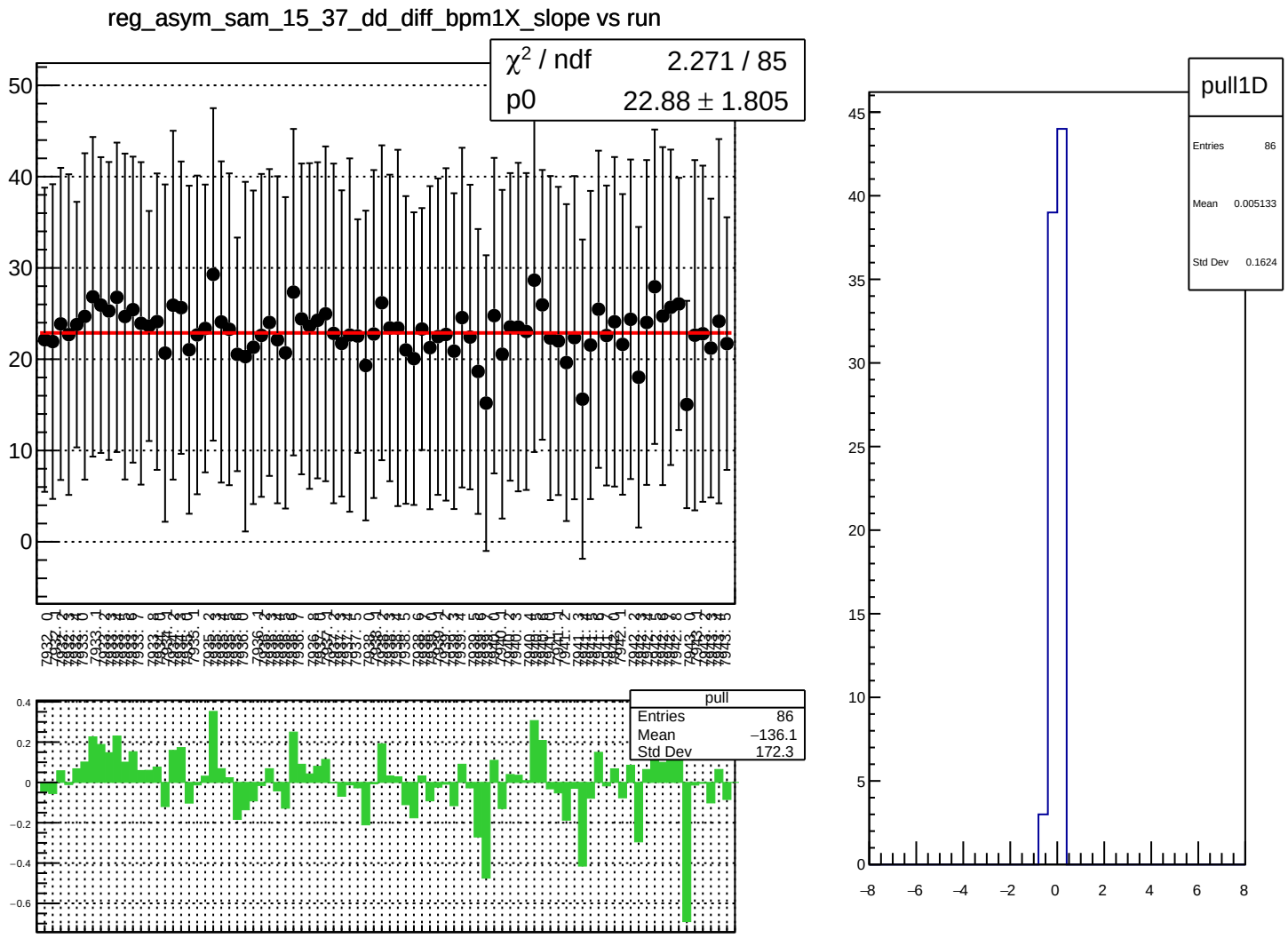

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.071 / 85
p0 −51.6 ± 1.355
pull
Entries 86
Mean 199.9
Std Dev 374.8

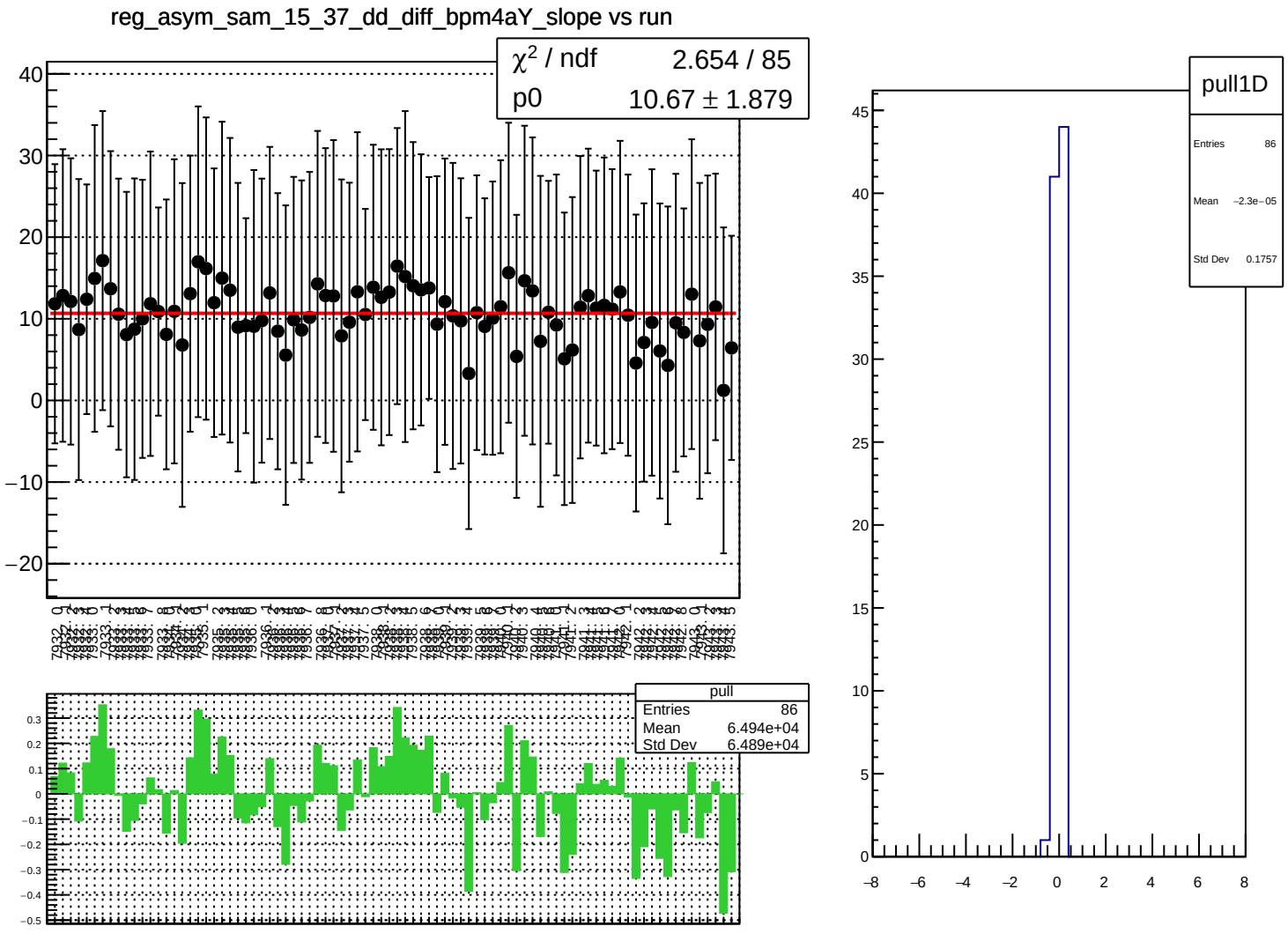

pull1D
Entries 86
Mean −0.0002906
Std Dev 0.189

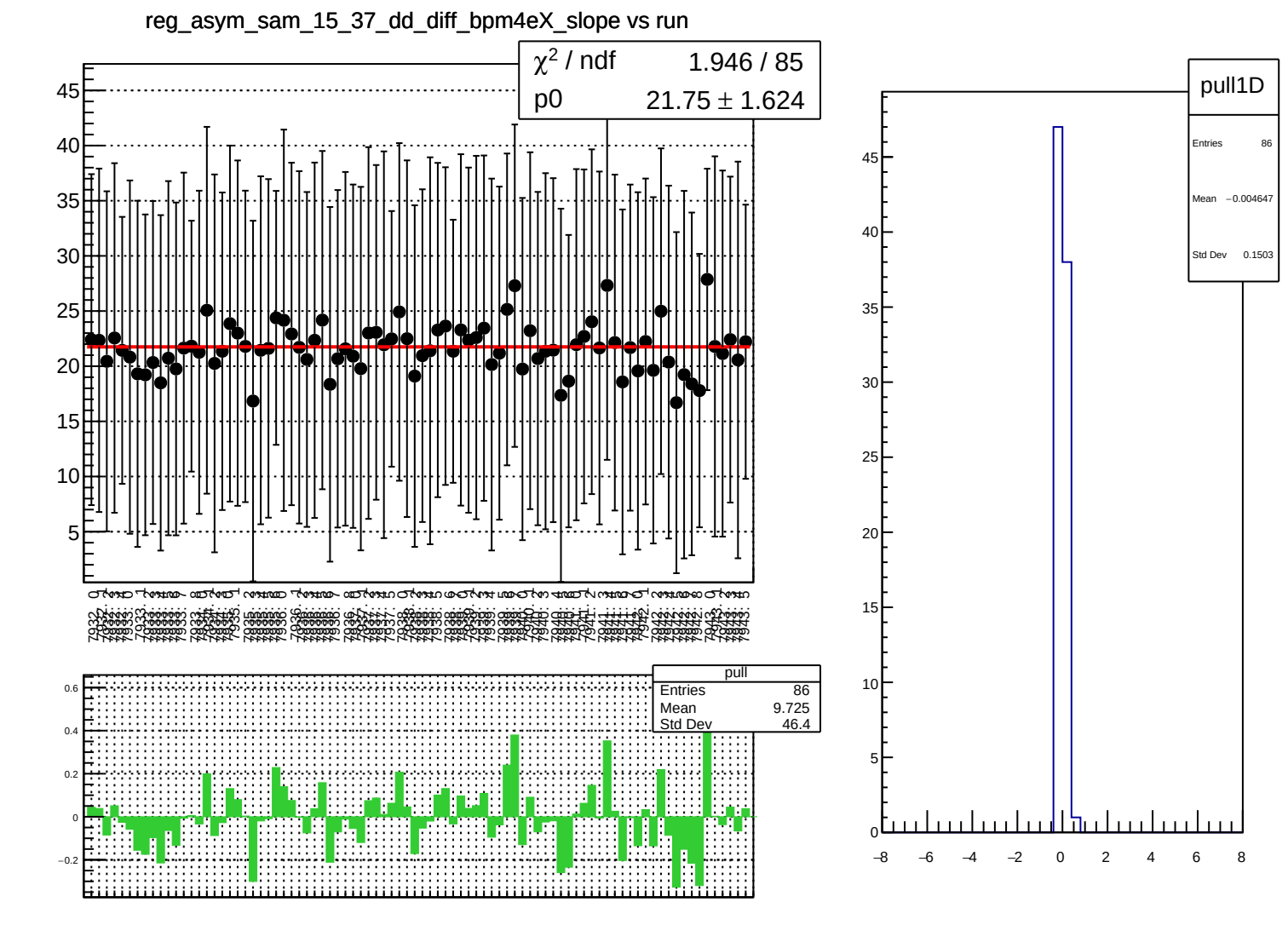

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.955 / 85
p0 −1.35 ± 1.172
pull
Entries 86
Mean 338.8
Std Dev 286.6
pull1D
Entries 86
Mean 0.002258
Std Dev 0.1508

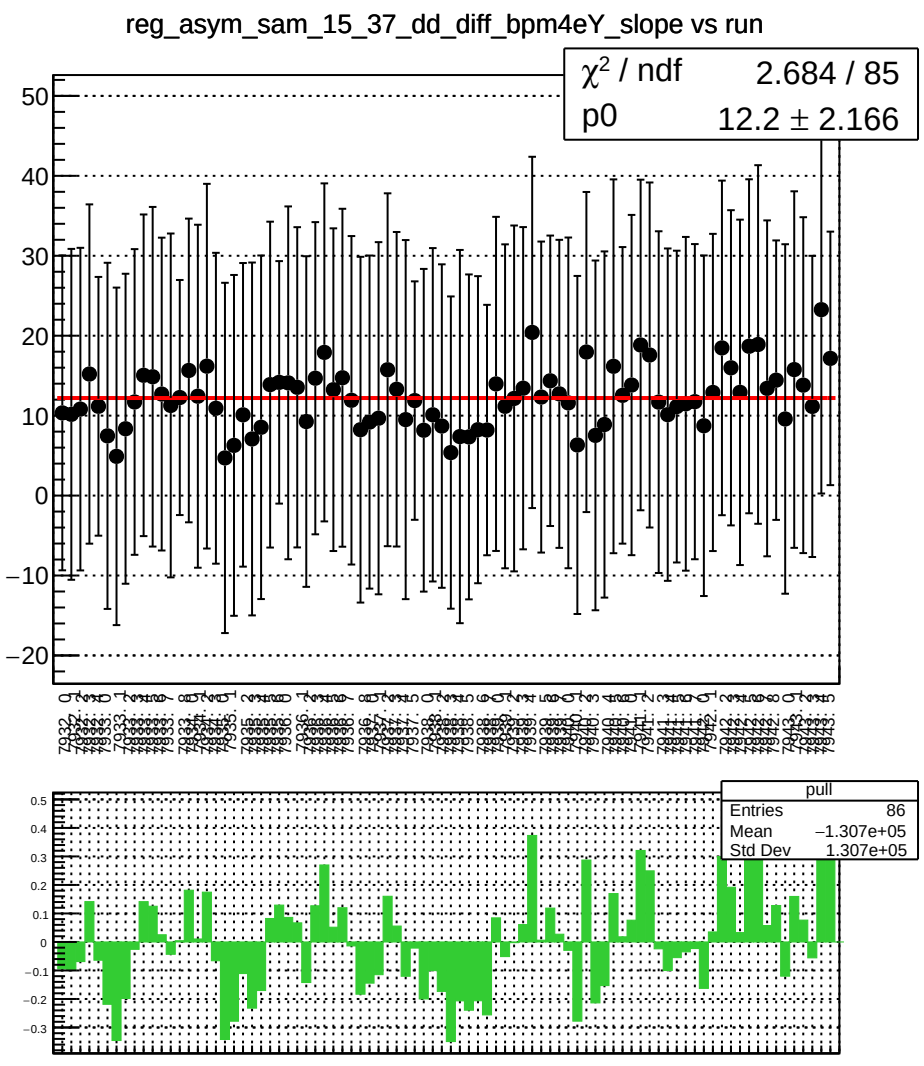

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.043 / 85
p0 11.59 ± 1.562
pull
Entries 86
Mean 5.413e+04
Std Dev 5.419e+04
pull1D
Entries 86
Mean 3.186e−06
Std Dev 0.1881

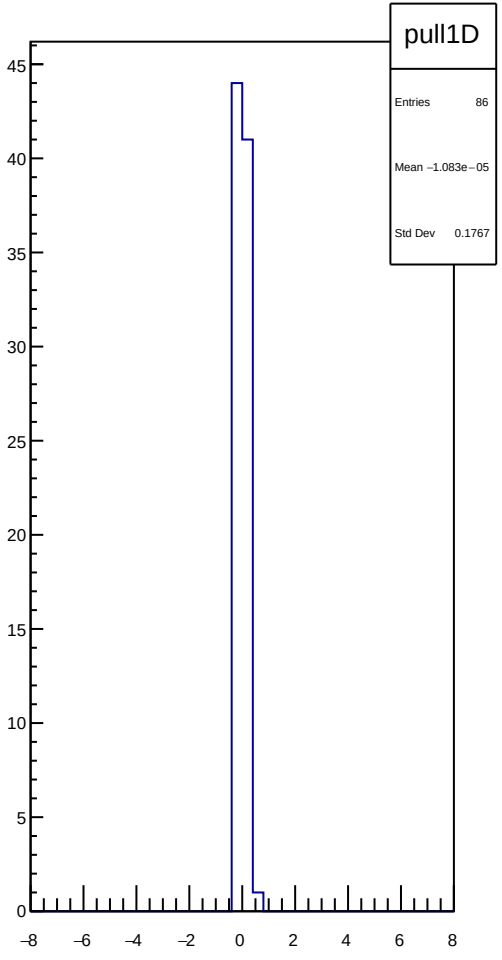

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 3.518 / 85
p0 0.2525 ± 0.04383
pull
Entries 86
Mean −115.6
Std Dev 121
pull1D
Entries 86
Mean −0.00372
Std Dev 0.2022

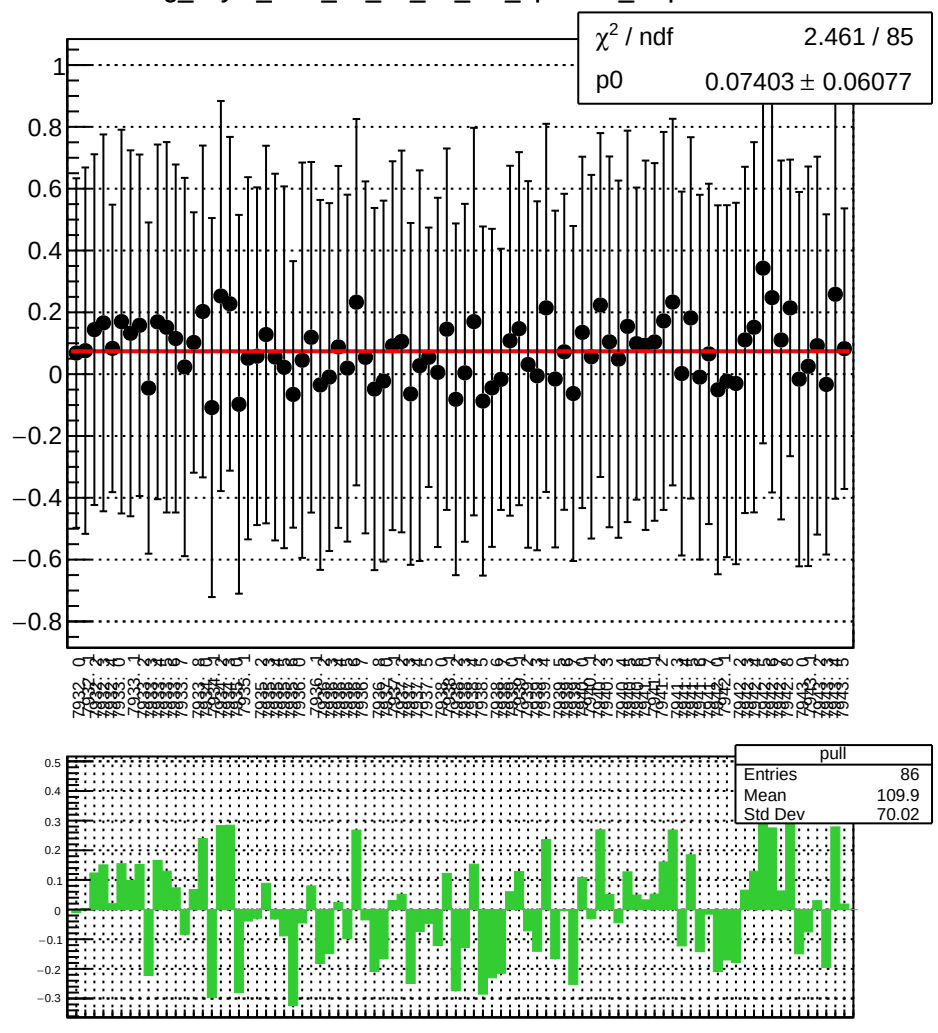

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 2.271 / 85
p0 22.88 ± 1.805
pull
Entries 86
Mean −136.1
Std Dev 172.3
pull1D
Entries 86
Mean 0.005133
Std Dev 0.1624

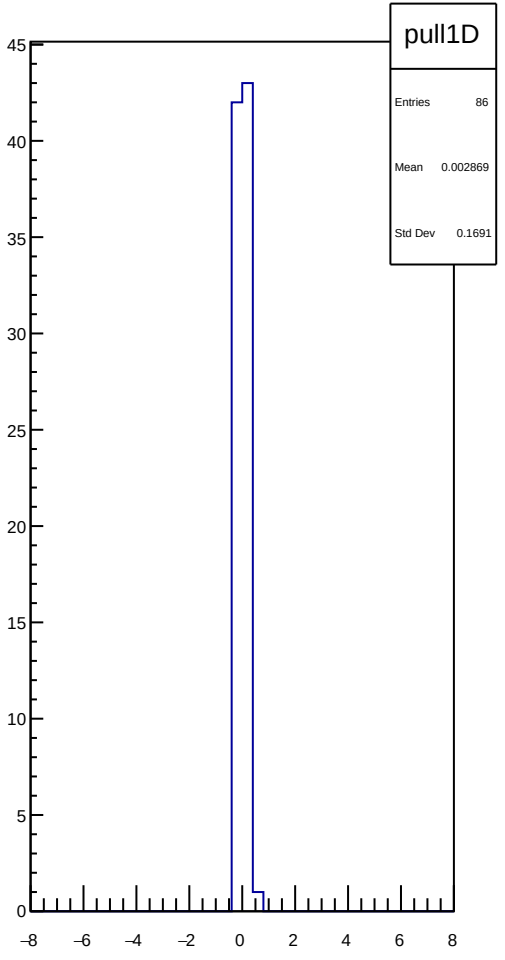

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.654 / 85
p0 10.67 ± 1.879
pull
Entries 86
Mean 6.494e+04
Std Dev 6.489e+04
pull1D
Entries 86
Mean −2.3e−05
Std Dev 0.1757

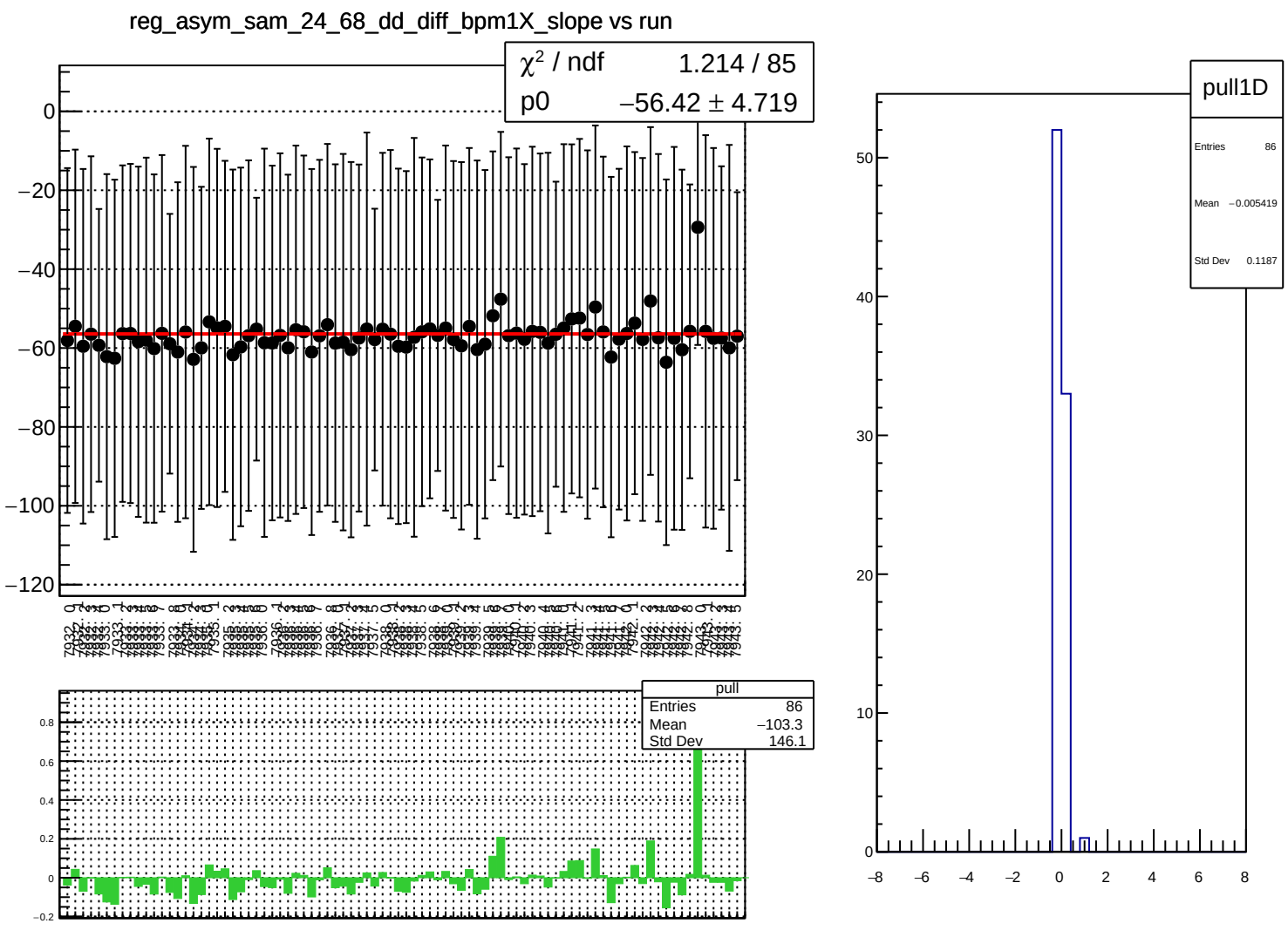

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.946 / 85
p0 21.75 ± 1.624
pull
Entries 86
Mean 9.725
Std Dev 46.4
pull1D
Entries 86
Mean −0.004647
Std Dev 0.1503

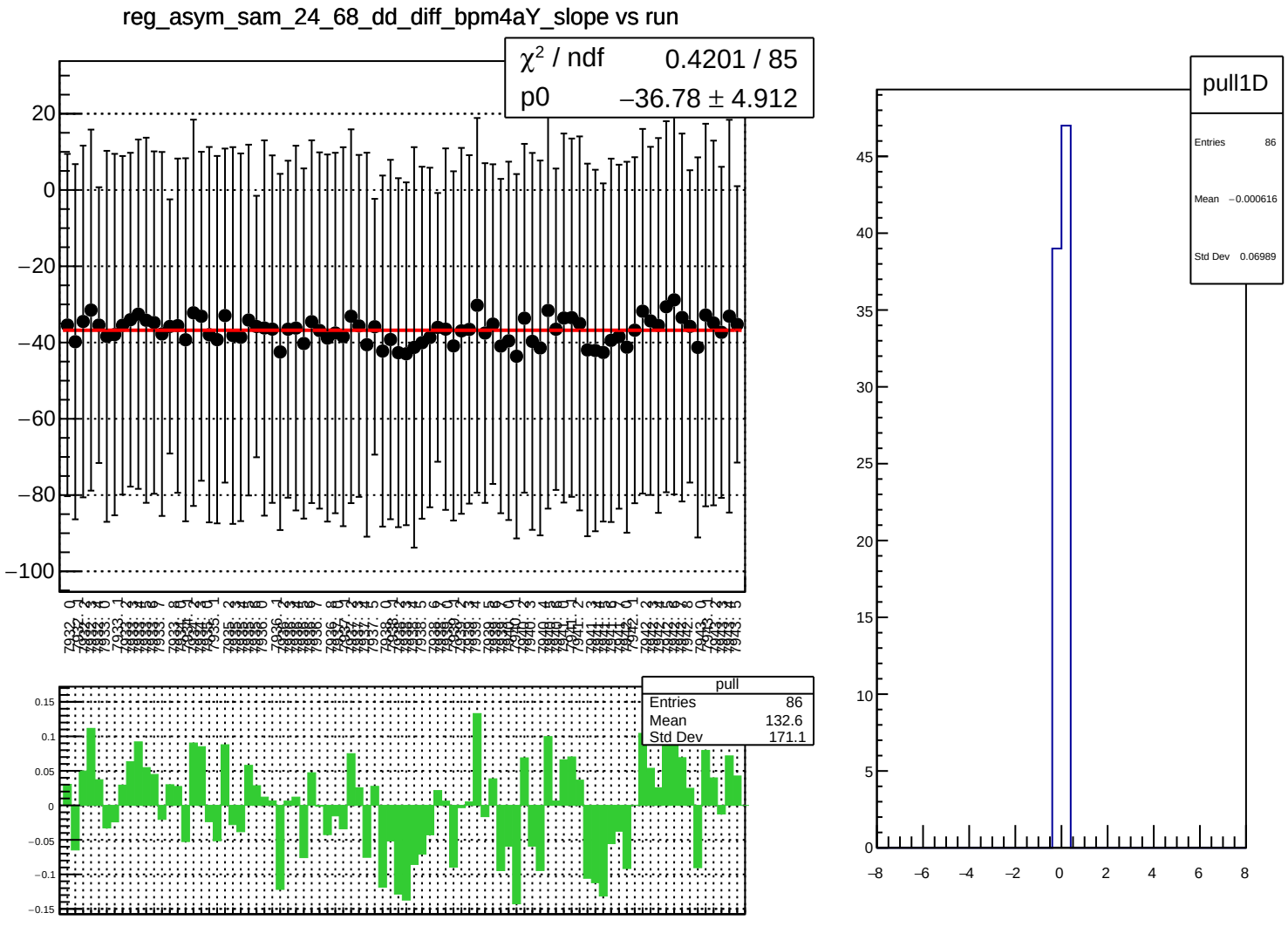

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.684 / 85
p0 12.2 ± 2.166
pull
Entries 86
Mean −1.307e+05
Std Dev 1.307e+05

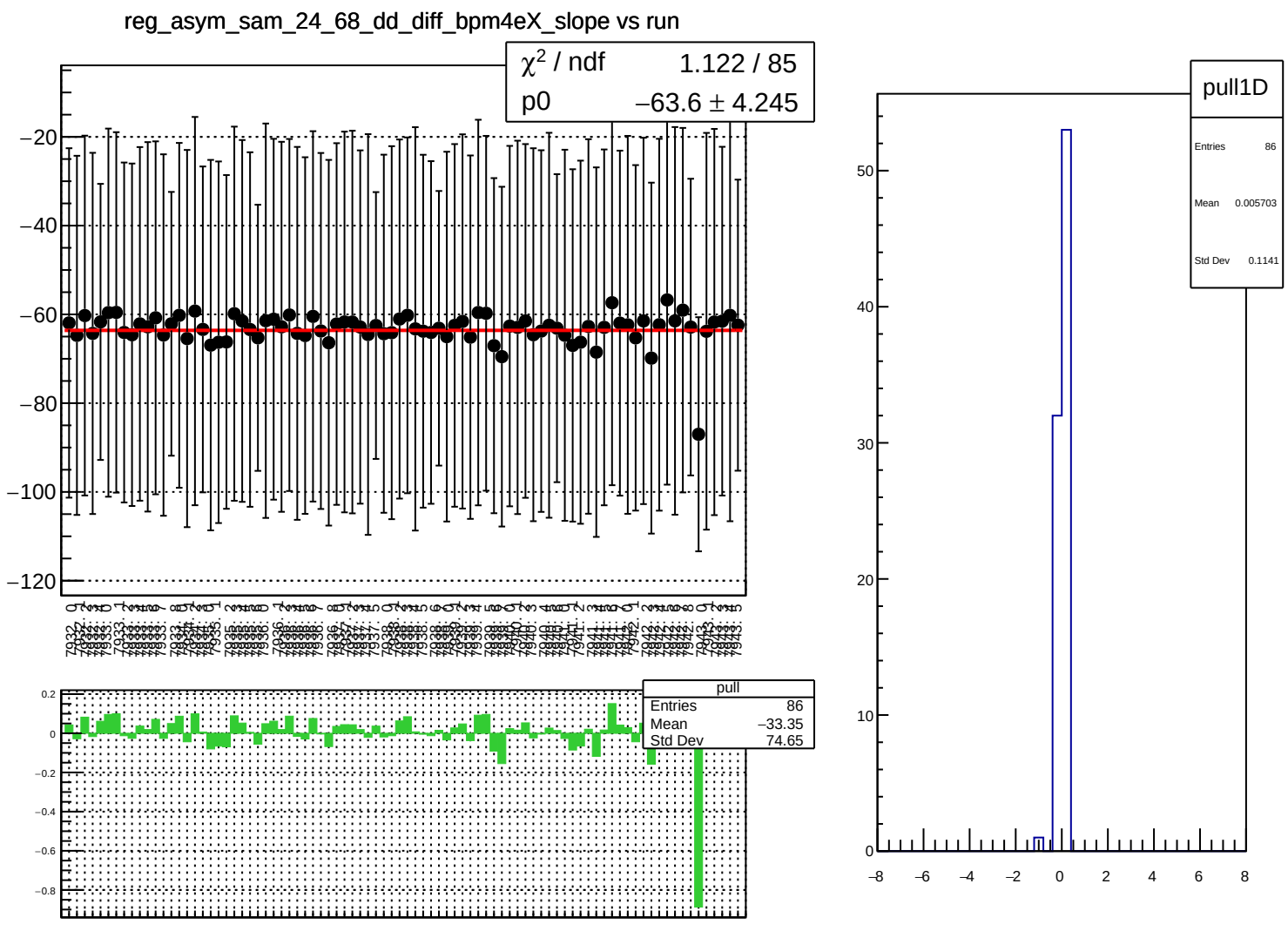

pull1D
Entries 86
Mean −1.083e−05
Std Dev 0.1767

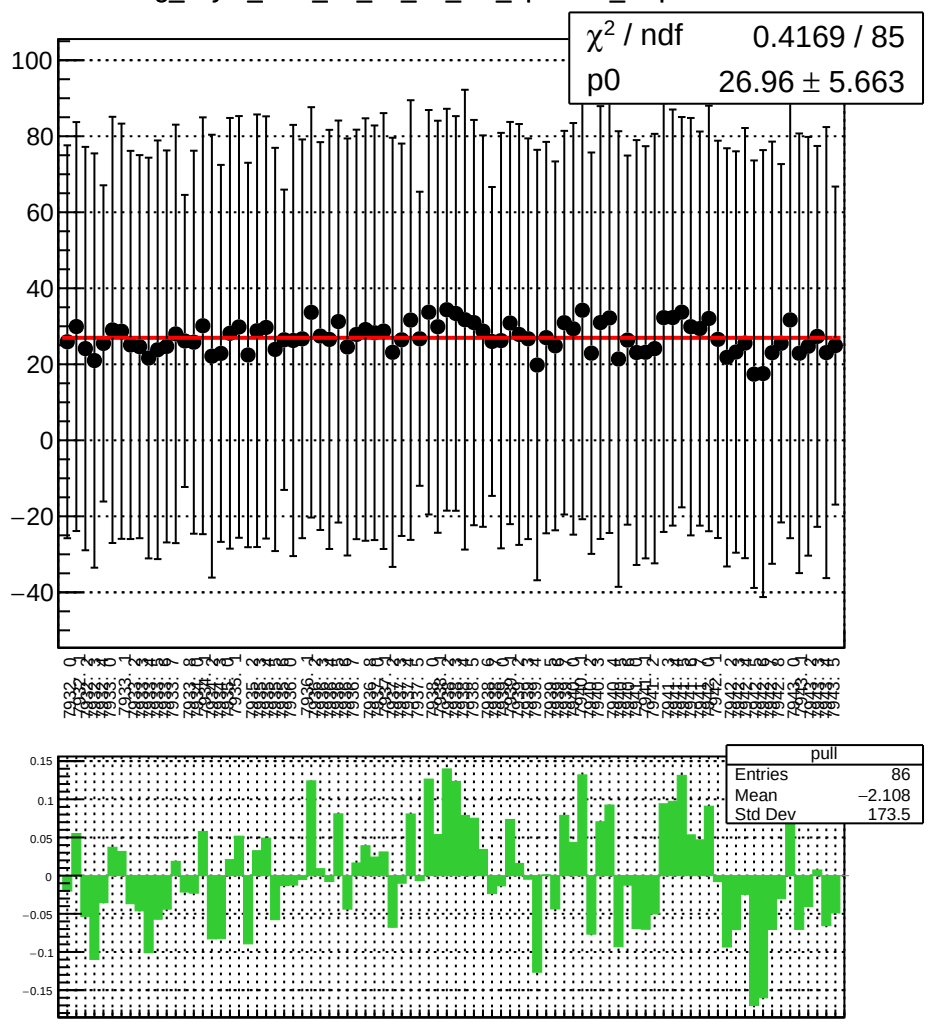

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 2.461 / 85
p0 0.07403 ± 0.06077
pull
Entries 86
Mean 109.9
Std Dev 70.02

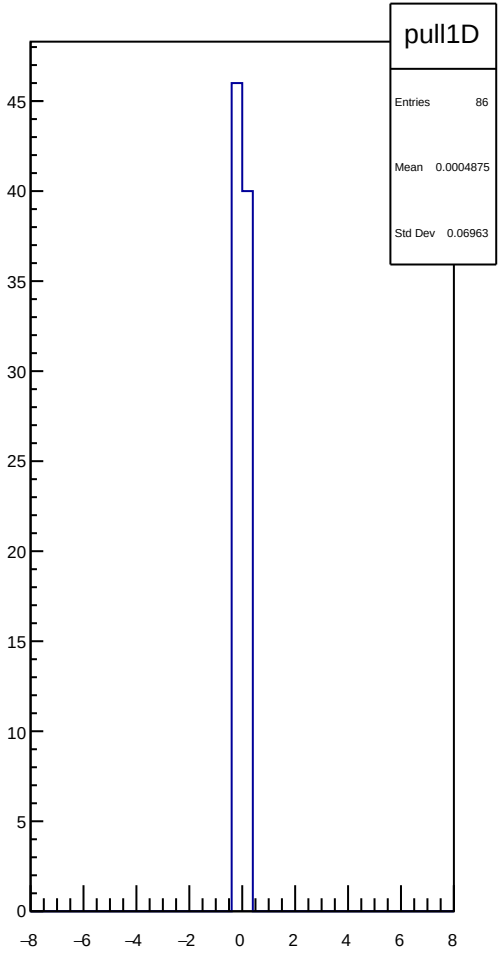

pull1D
Entries 86
Mean 0.002869
Std Dev 0.1691

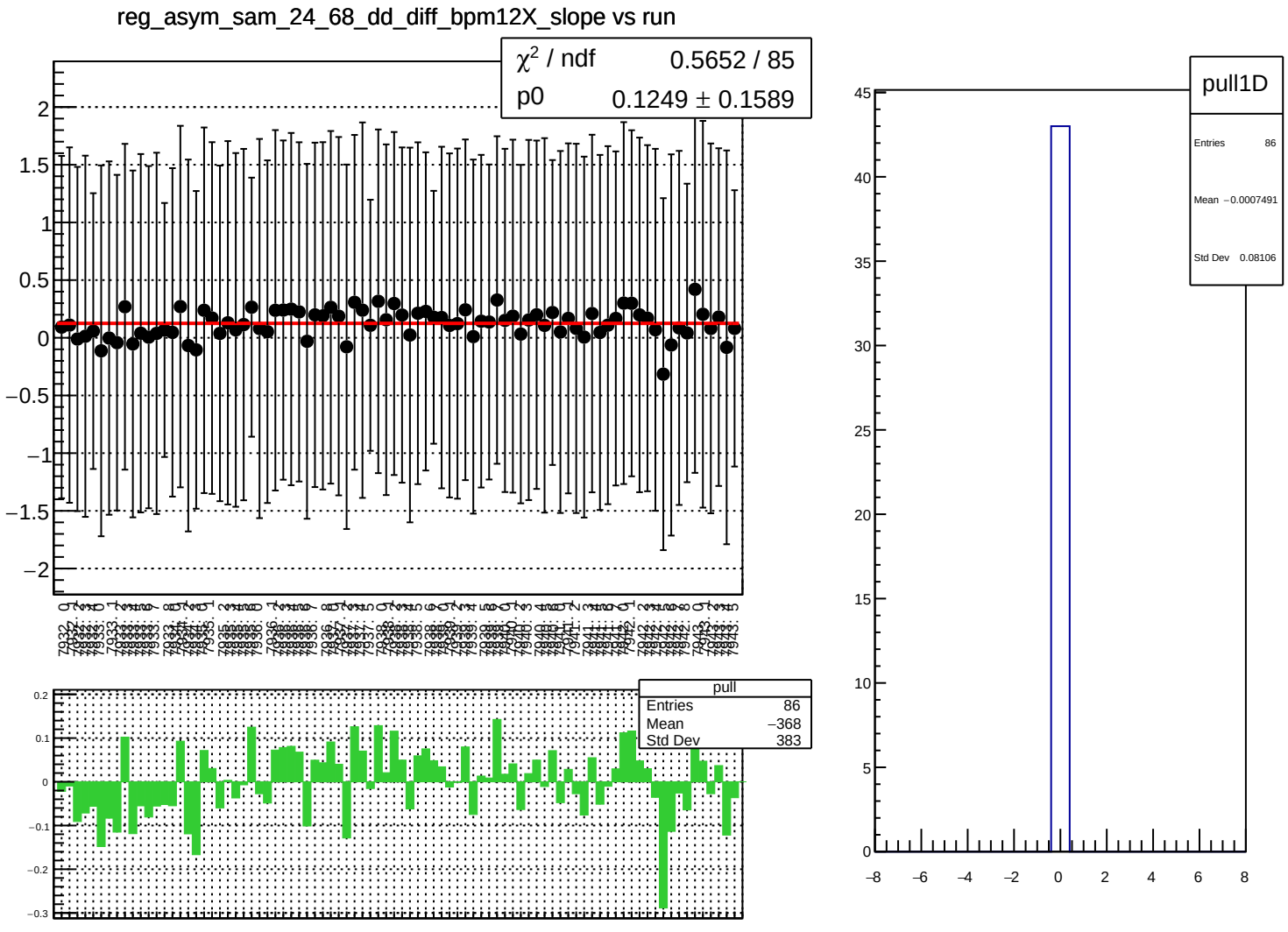

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 1.214 / 85
p0 −56.42 ± 4.719
pull
Entries 86
Mean −103.3
Std Dev 146.1
pull1D
Entries 86
Mean −0.005419
Std Dev 0.1187

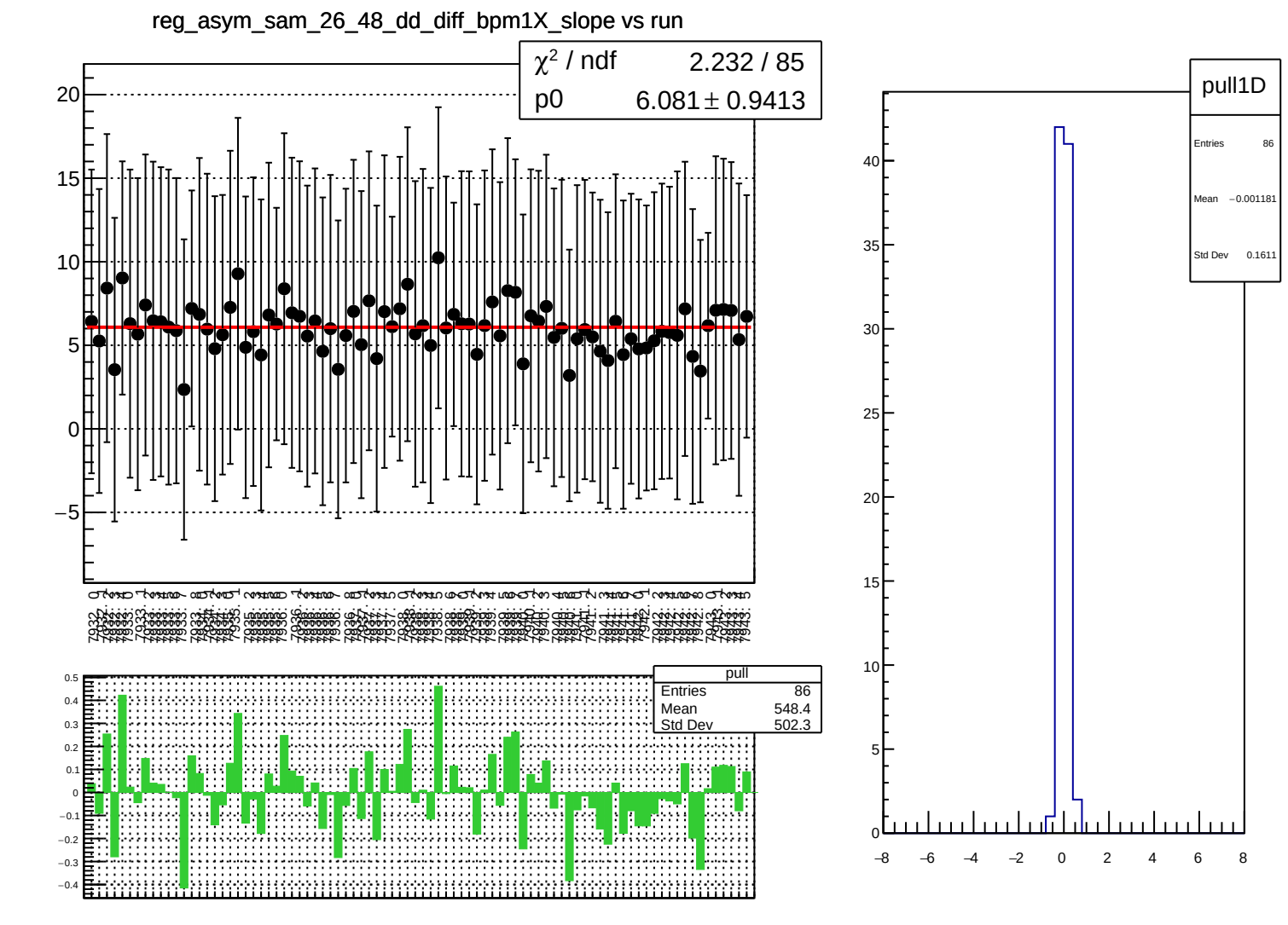

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.4201 / 85
p0 −36.78 ± 4.912
pull
Entries 86
Mean 132.6
Std Dev 171.1
pull1D
Entries 86
Mean −0.000616
Std Dev 0.06989

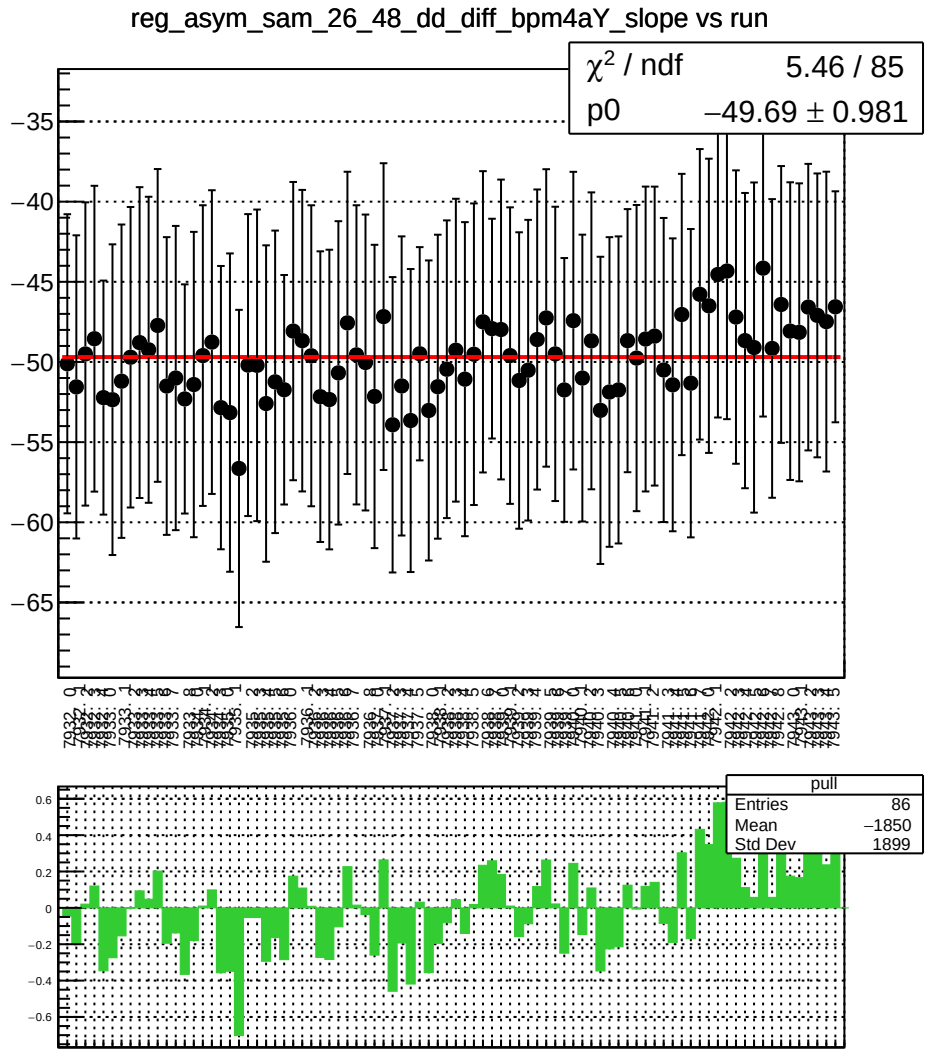

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.122 / 85
p0 −63.6 ± 4.245
pull
Entries 86
Mean −33.35
Std Dev 74.65
pull1D
Entries 86
Mean 0.005703
Std Dev 0.1141

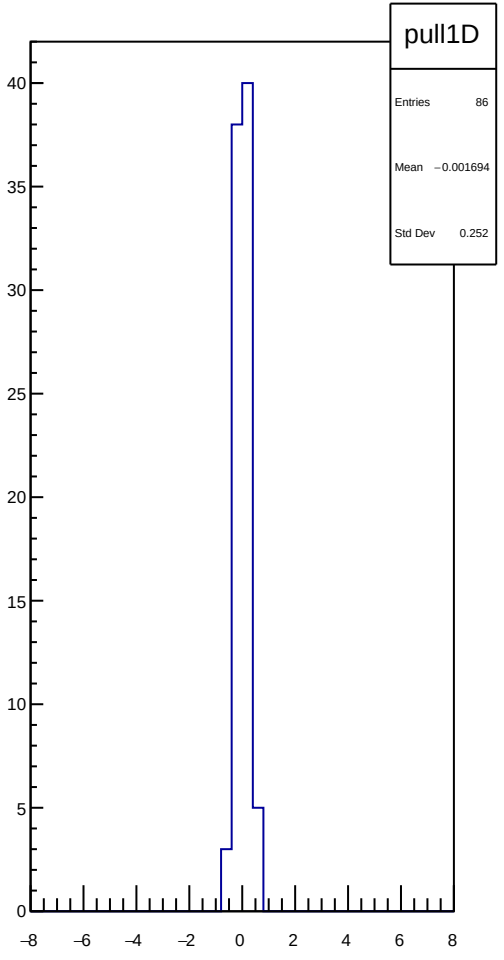

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.4169 / 85
p0 26.96 ± 5.663
pull
Entries 86
Mean −2.108
Std Dev 173.5

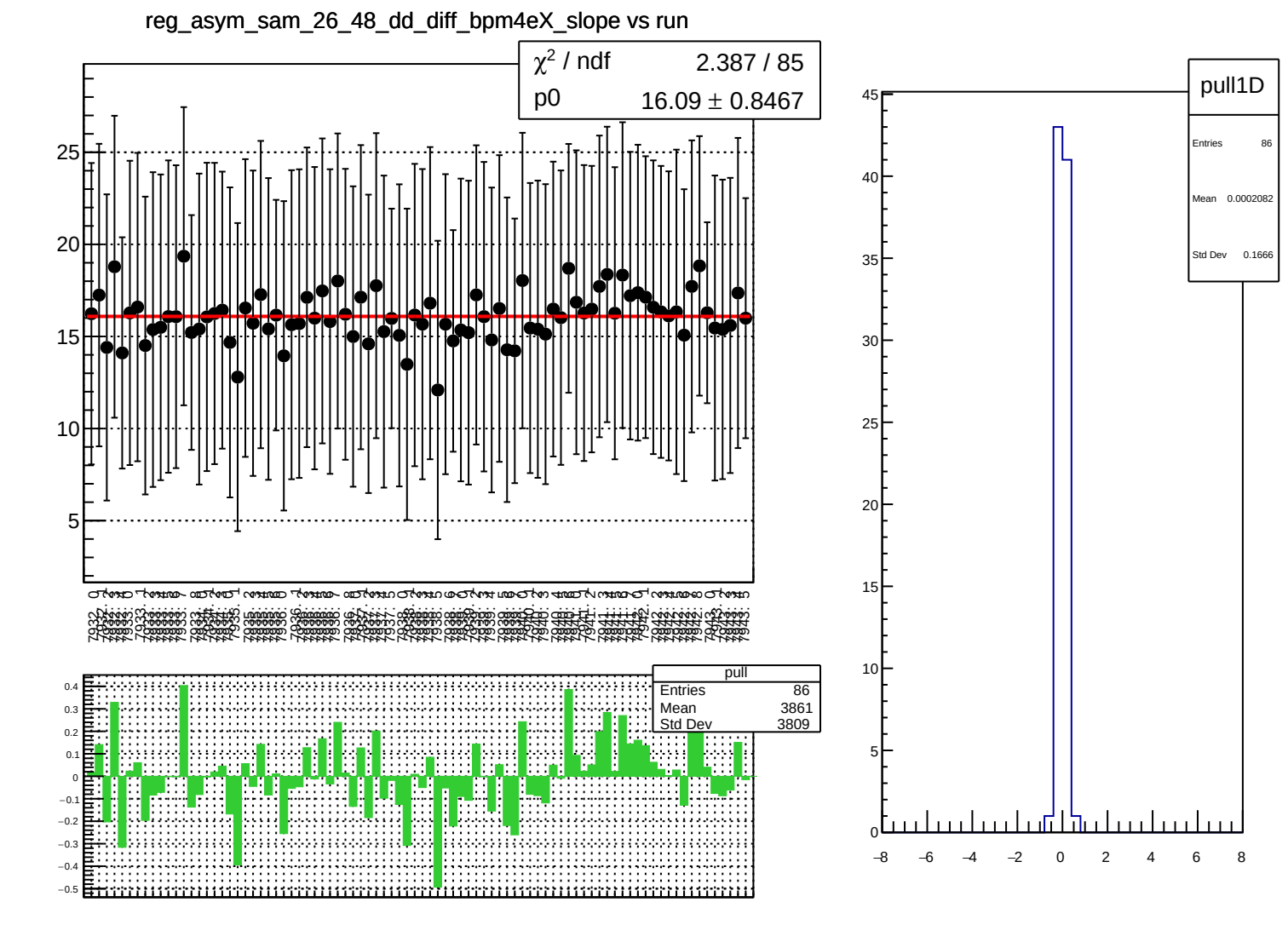

pull1D
Entries 86
Mean 0.0004875
Std Dev 0.06963

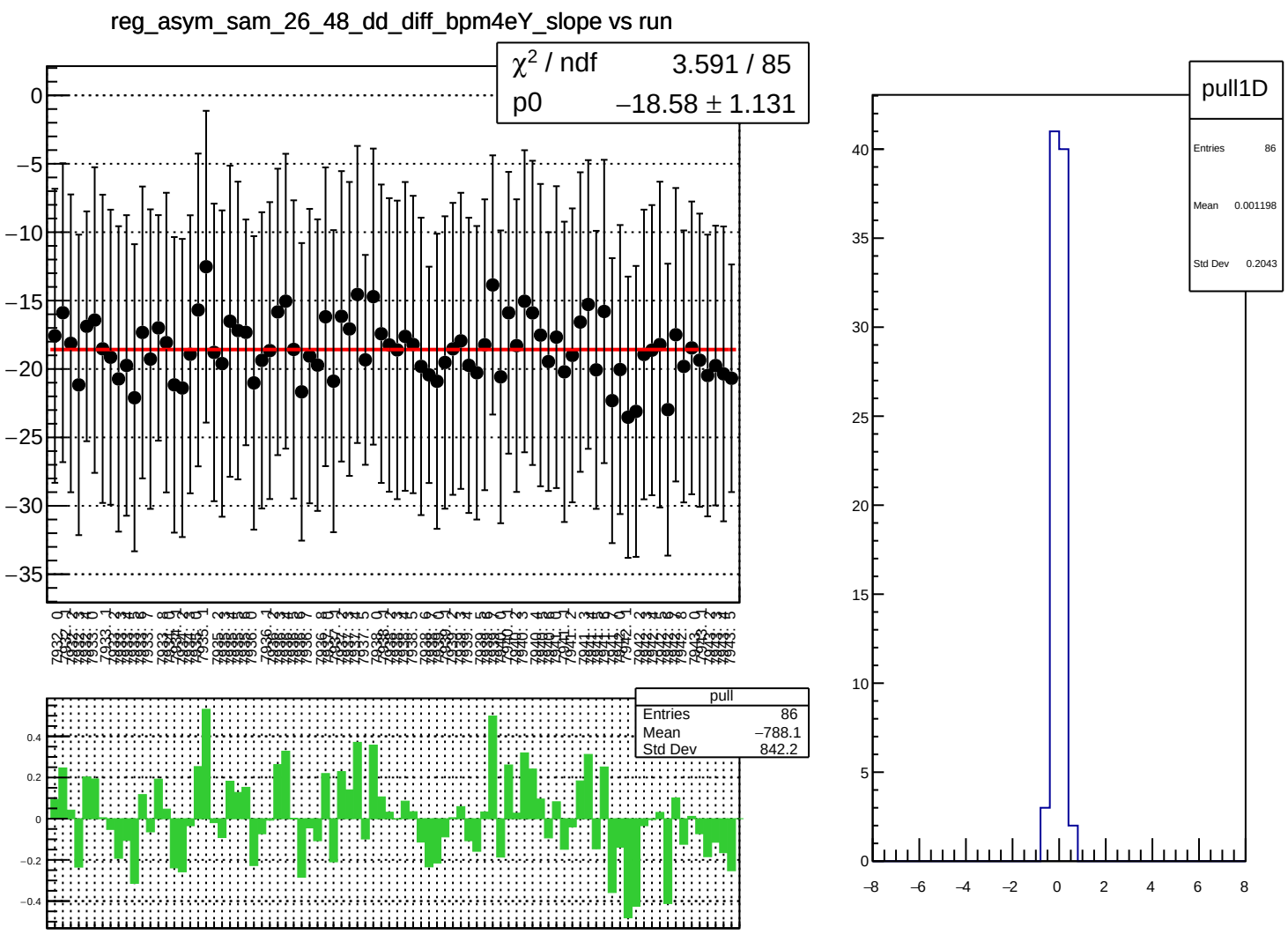

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 0.5652 / 85
p0 0.1249 ± 0.1589
pull
Entries 86
Mean −368
Std Dev 383
pull1D
Entries 86
Mean −0.0007491
Std Dev 0.08106

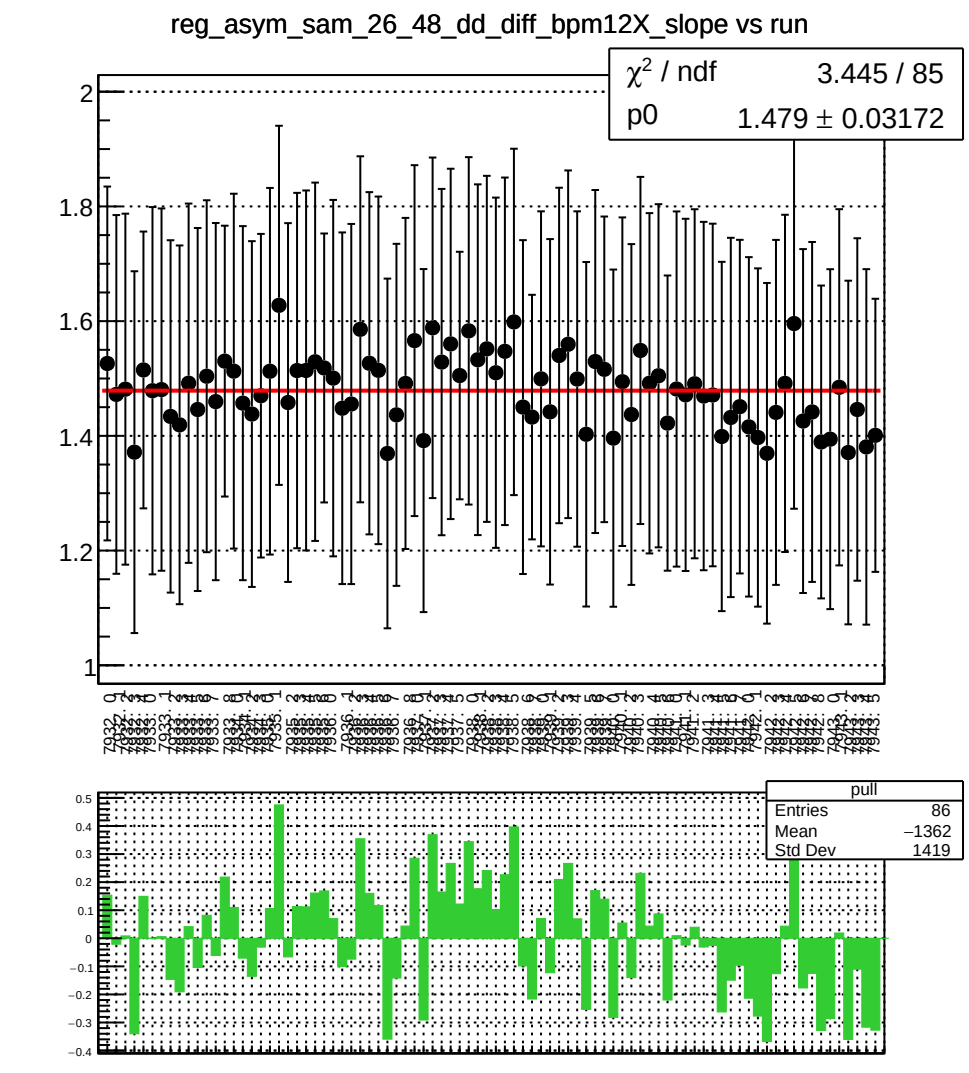

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 2.232 / 85
p0 6.081 ± 0.9413
pull
Entries 86
Mean 548.4
Std Dev 502.3
pull1D
Entries 86
Mean −0.001181
Std Dev 0.1611

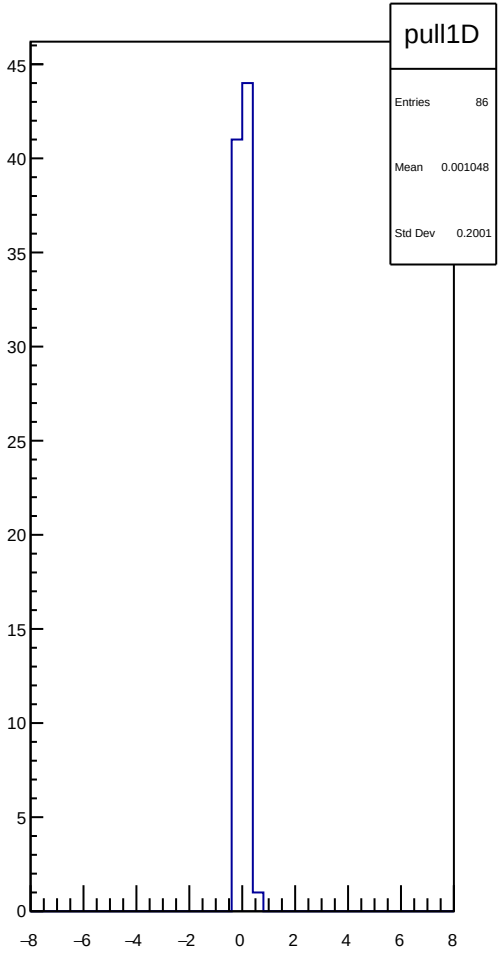

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.46 / 85
p0 −49.69 ± 0.981
pull
Entries 86
Mean −1850
Std Dev 1899

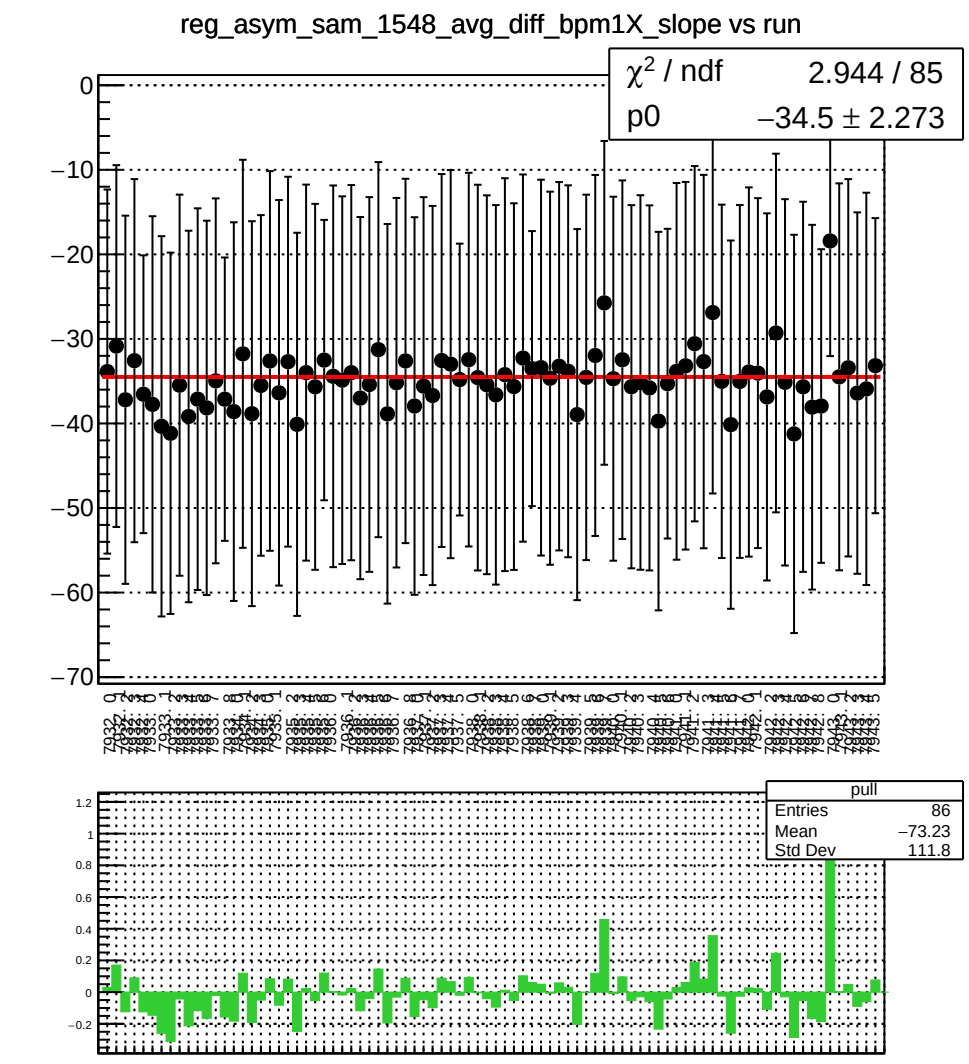

pull1D
Entries 86
Mean −0.001694
Std Dev 0.252

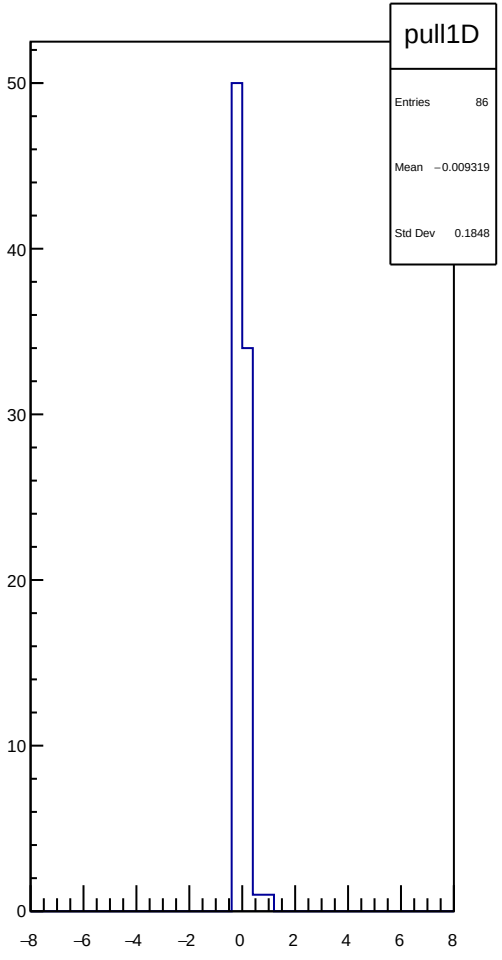

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.387 / 85
p0 16.09 ± 0.8467
pull
Entries 86
Mean 3861
Std Dev 3809
pull1D
Entries 86
Mean 0.0002082
Std Dev 0.1666

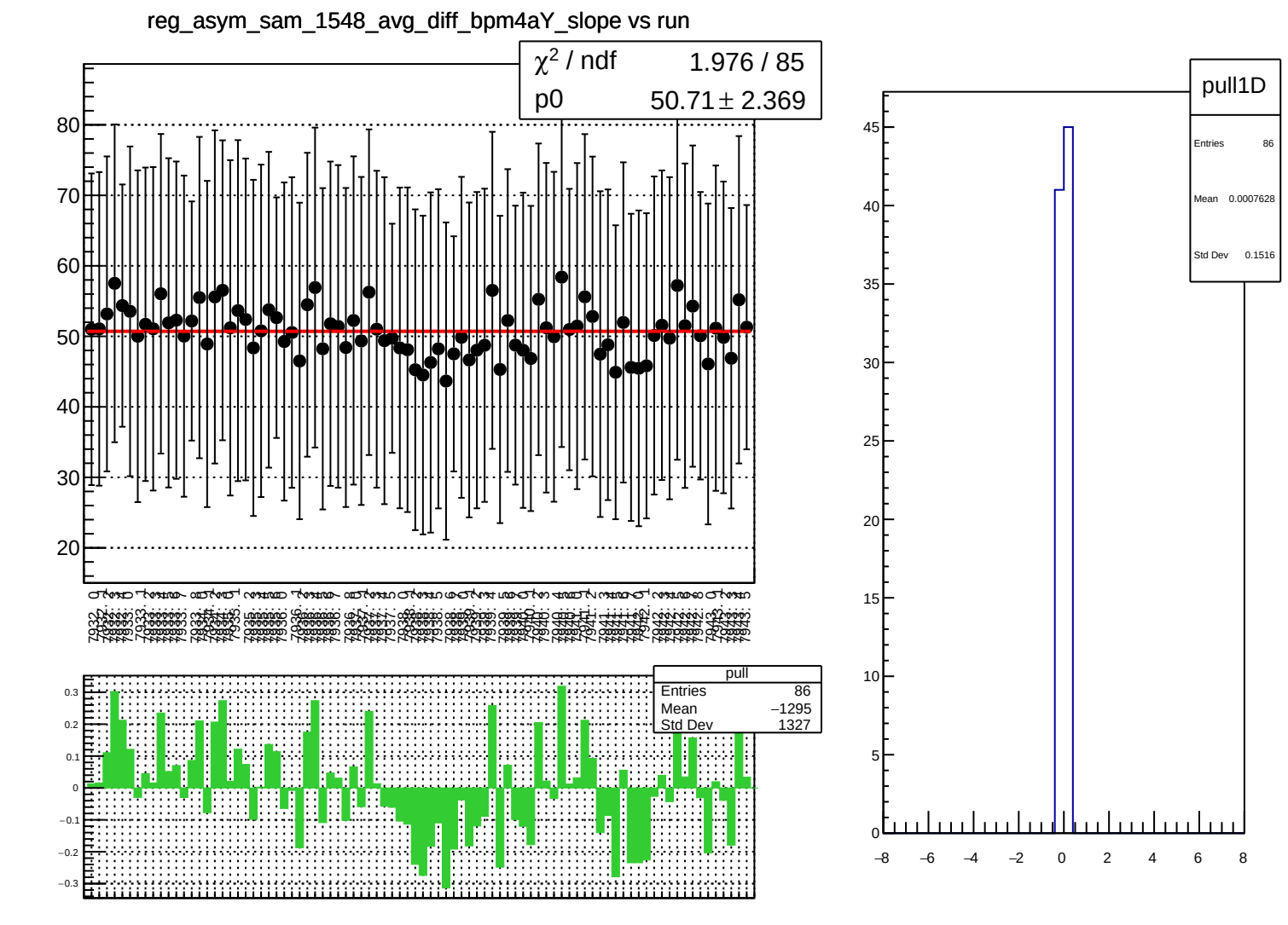

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.591 / 85
p0 −18.58 ± 1.131
pull
Entries 86
Mean −788.1
Std Dev 842.2
pull1D
Entries 86
Mean 0.001198
Std Dev 0.2043

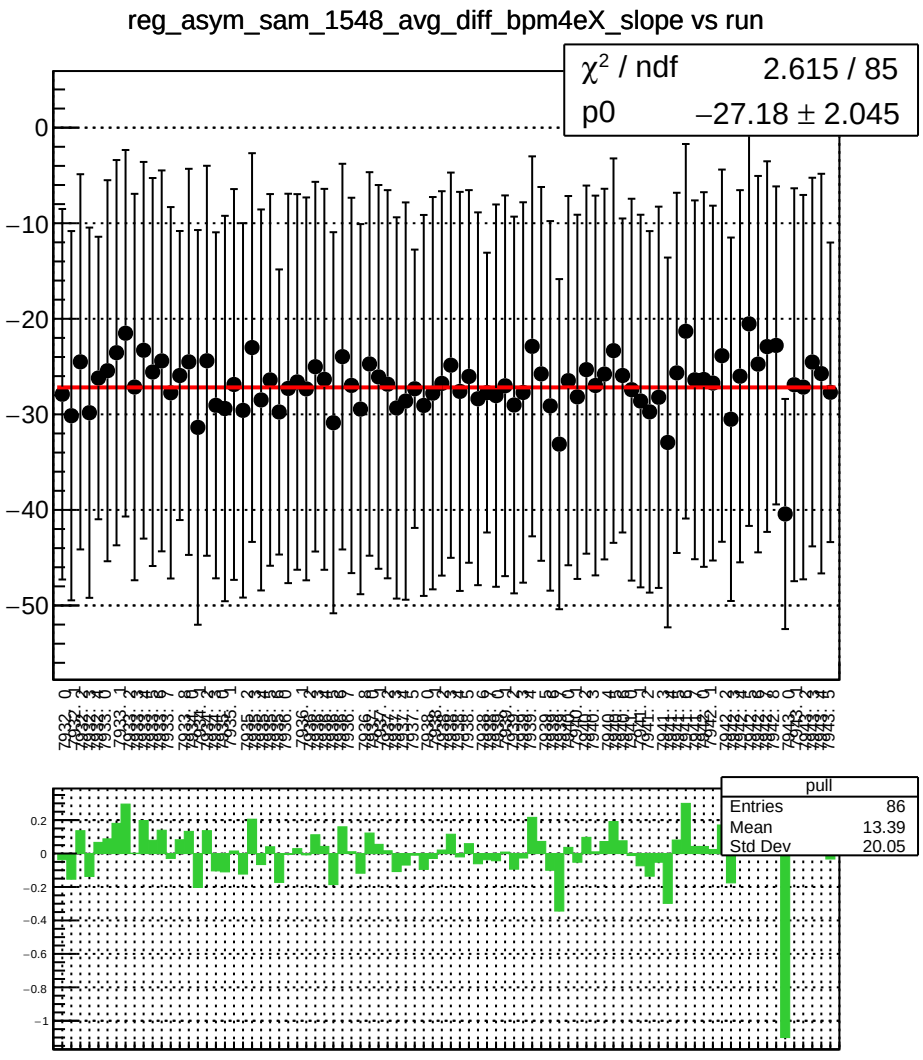

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 3.445 / 85
p0 1.479 ± 0.03172
pull
Entries 86
Mean −1362
Std Dev 1419

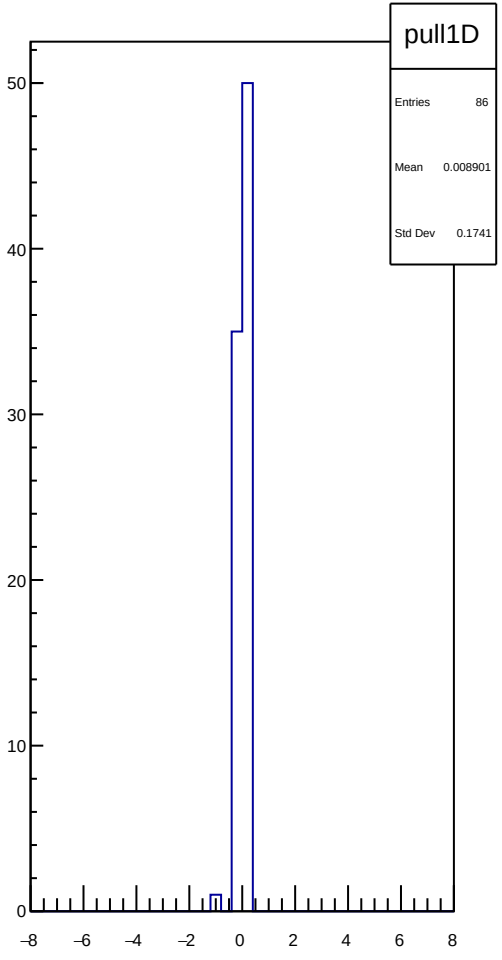

pull1D
Entries 86
Mean 0.001048
Std Dev 0.2001

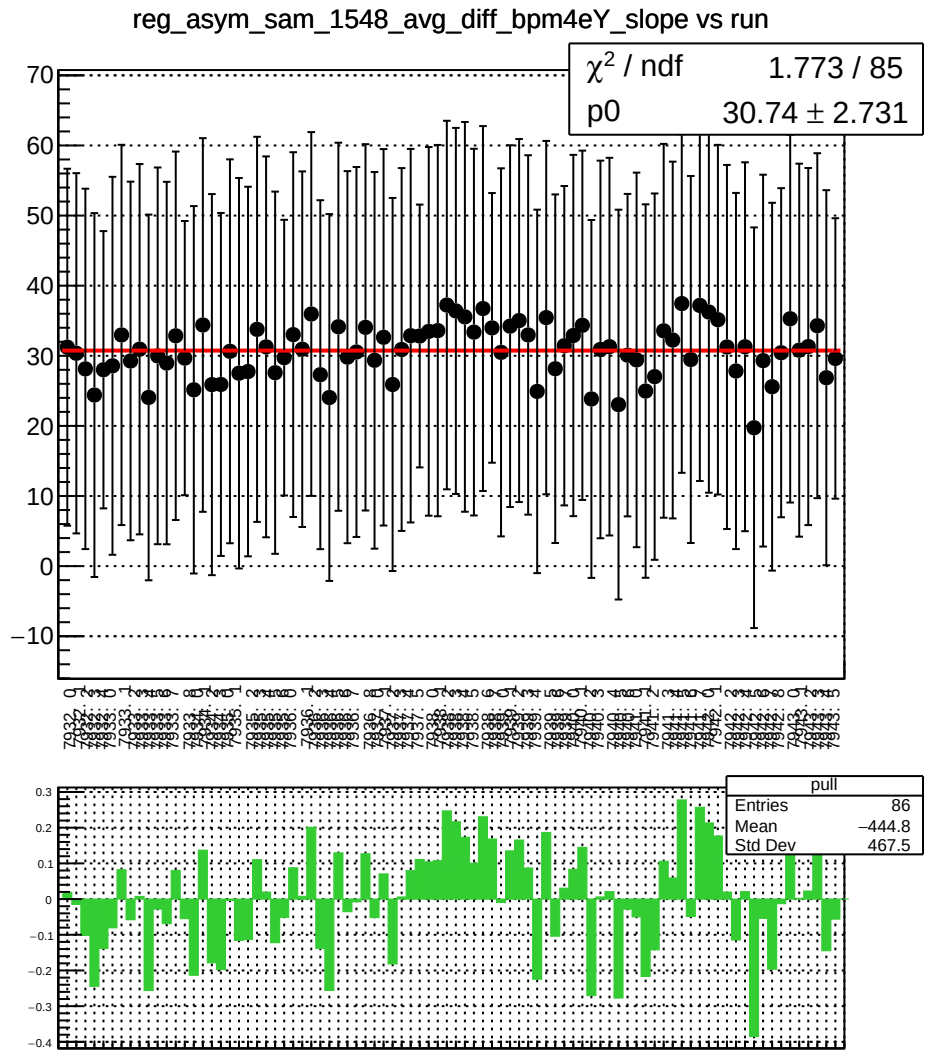

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 2.944 / 85
p0 −34.5 ± 2.273
pull
Entries 86
Mean −73.23
Std Dev 111.8

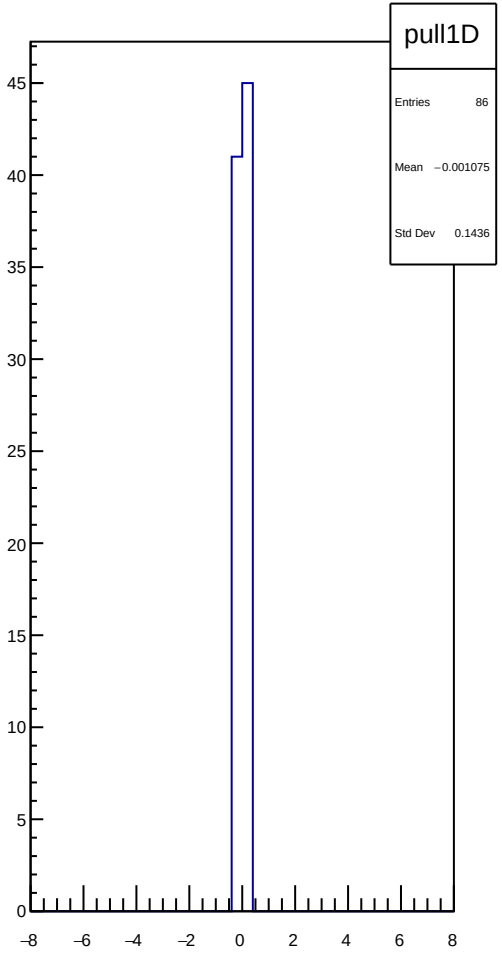

pull1D
Entries 86
Mean −0.009319
Std Dev 0.1848

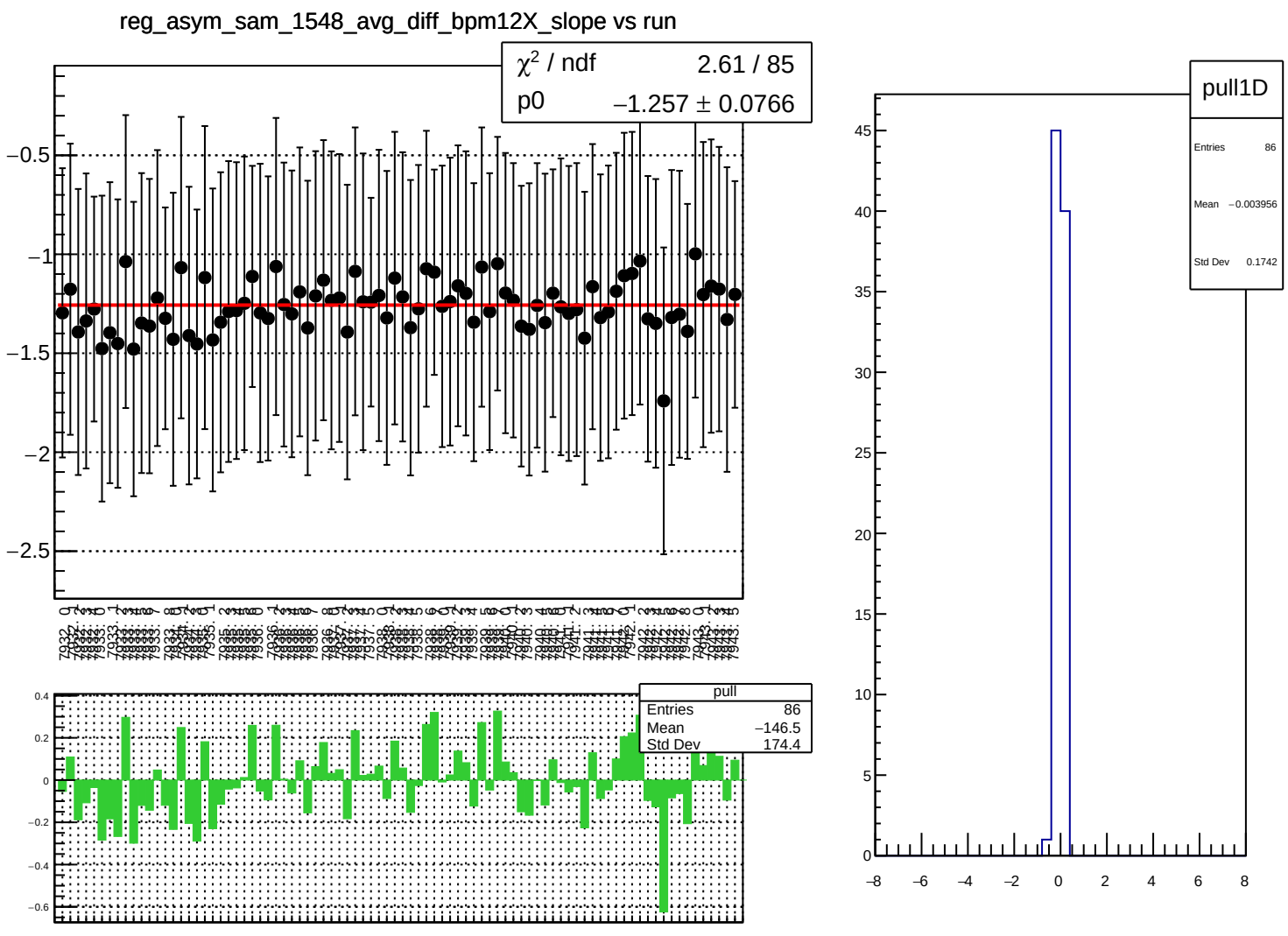

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.976 / 85
p0 50.71 ± 2.369
pull
Entries 86
Mean −1295
Std Dev 1327
pull1D
Entries 86
Mean 0.0007628
Std Dev 0.1516

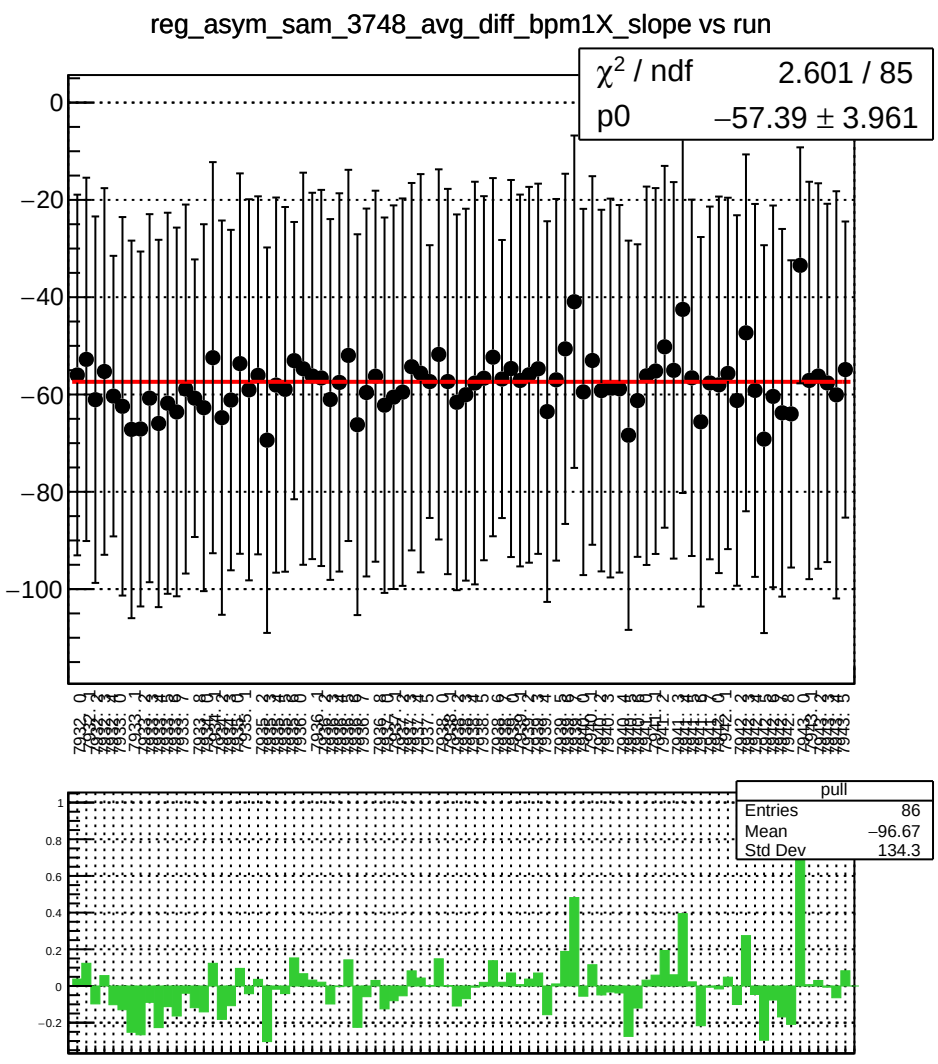

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.615 / 85
p0 −27.18 ± 2.045
pull
Entries 86
Mean 13.39
Std Dev 20.05

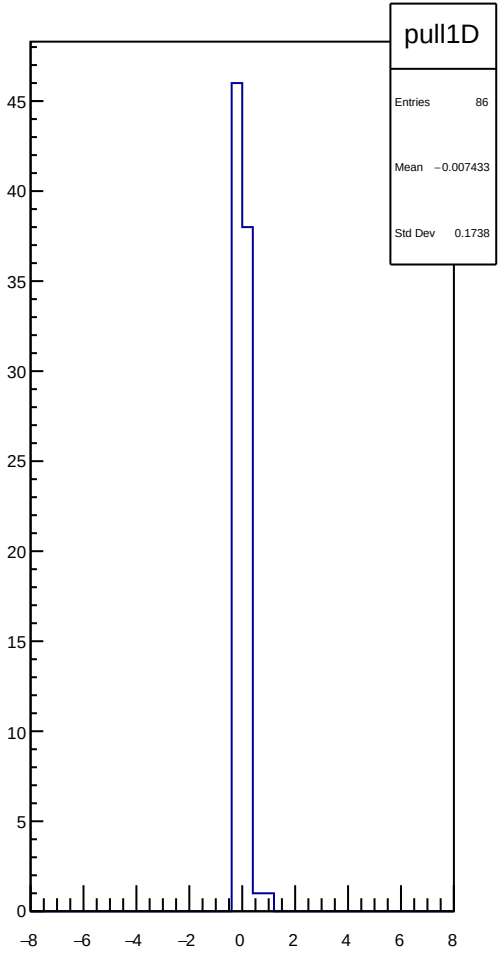

pull1D
Entries 86
Mean 0.008901
Std Dev 0.1741

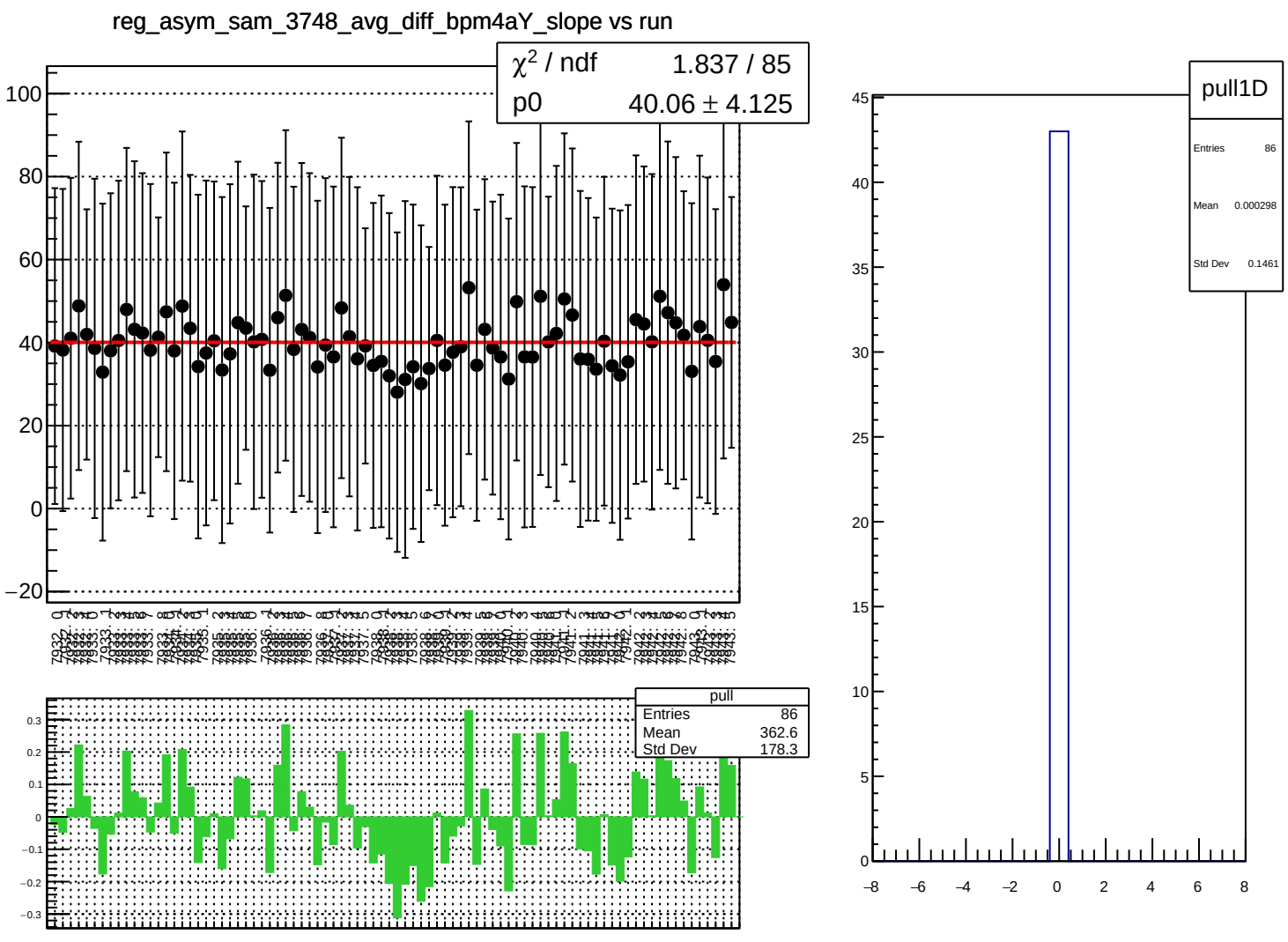

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.773 / 85
p0 30.74 ± 2.731
pull
Entries 86
Mean −444.8
Std Dev 467.5

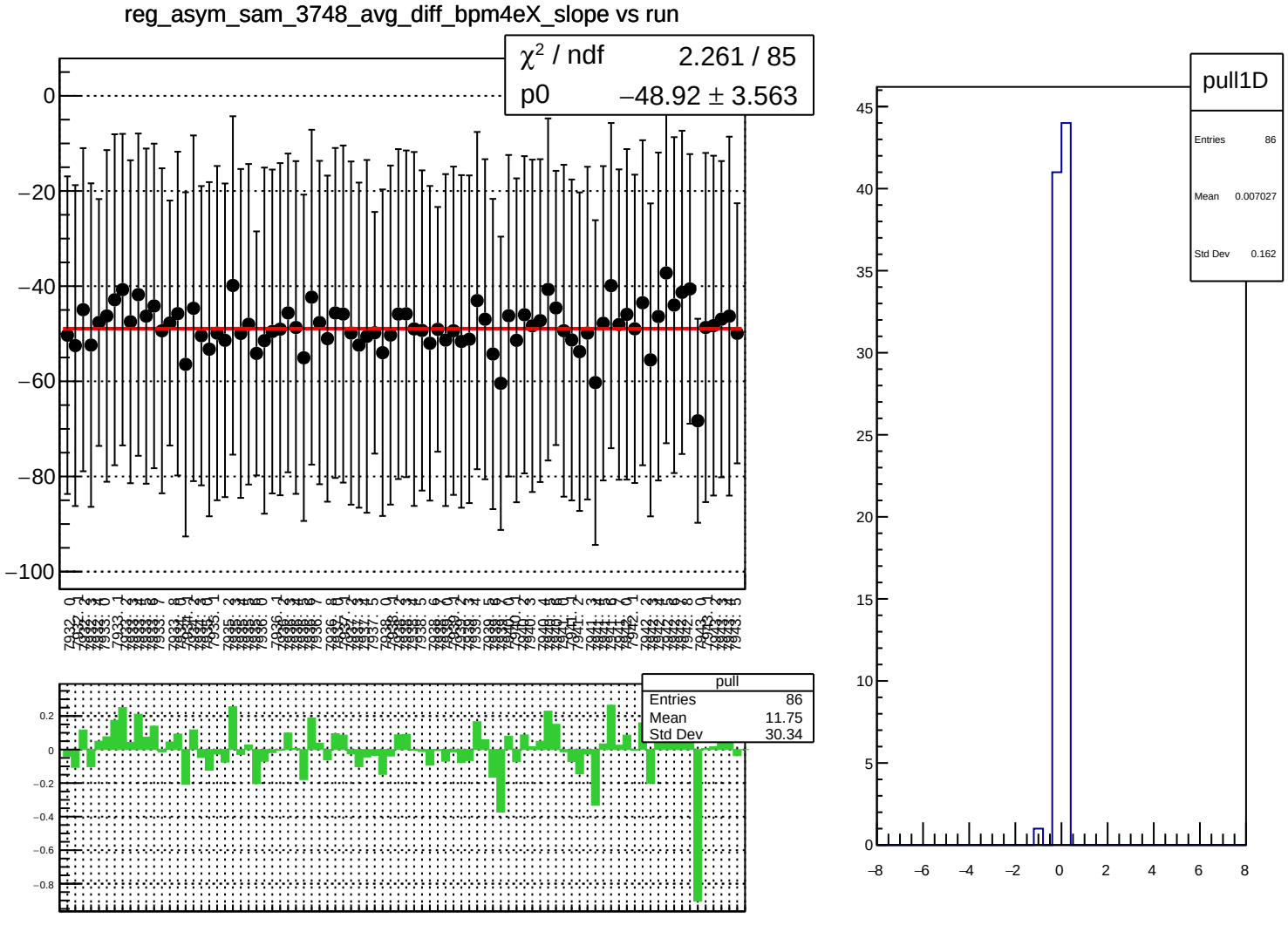

pull1D
Entries 86
Mean −0.001075
Std Dev 0.1436

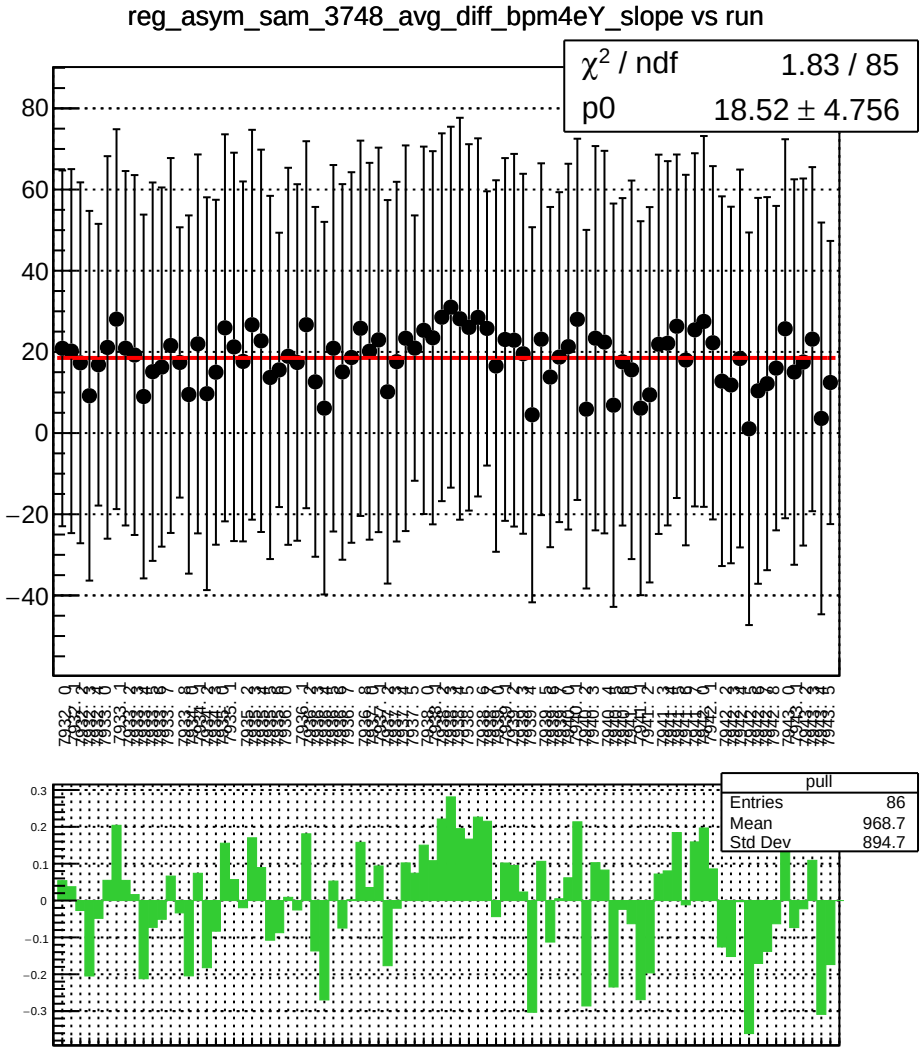

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 2.61 / 85
p0 −1.257 ± 0.0766
pull
Entries 86
Mean −146.5
Std Dev 174.4
pull1D
Entries 86
Mean −0.003956
Std Dev 0.1742

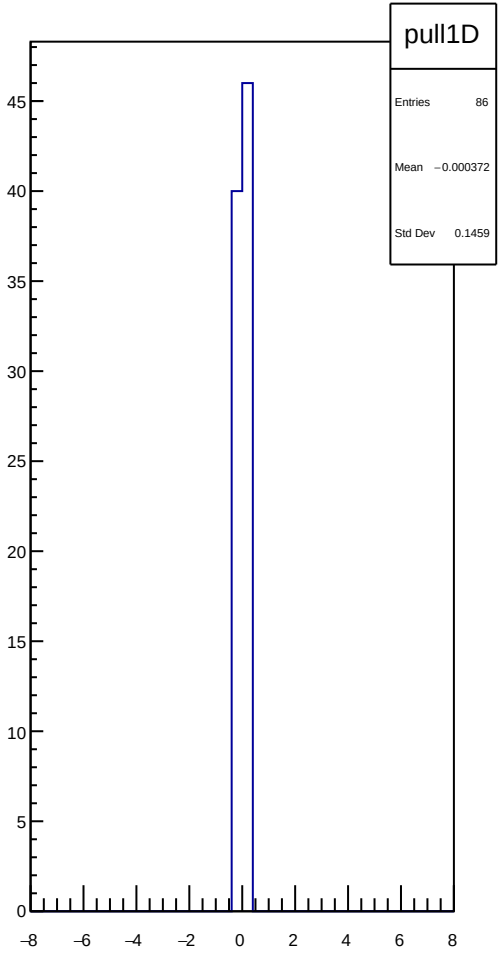

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 2.601 / 85
p0 −57.39 ± 3.961
pull
Entries 86
Mean −96.67
Std Dev 134.3

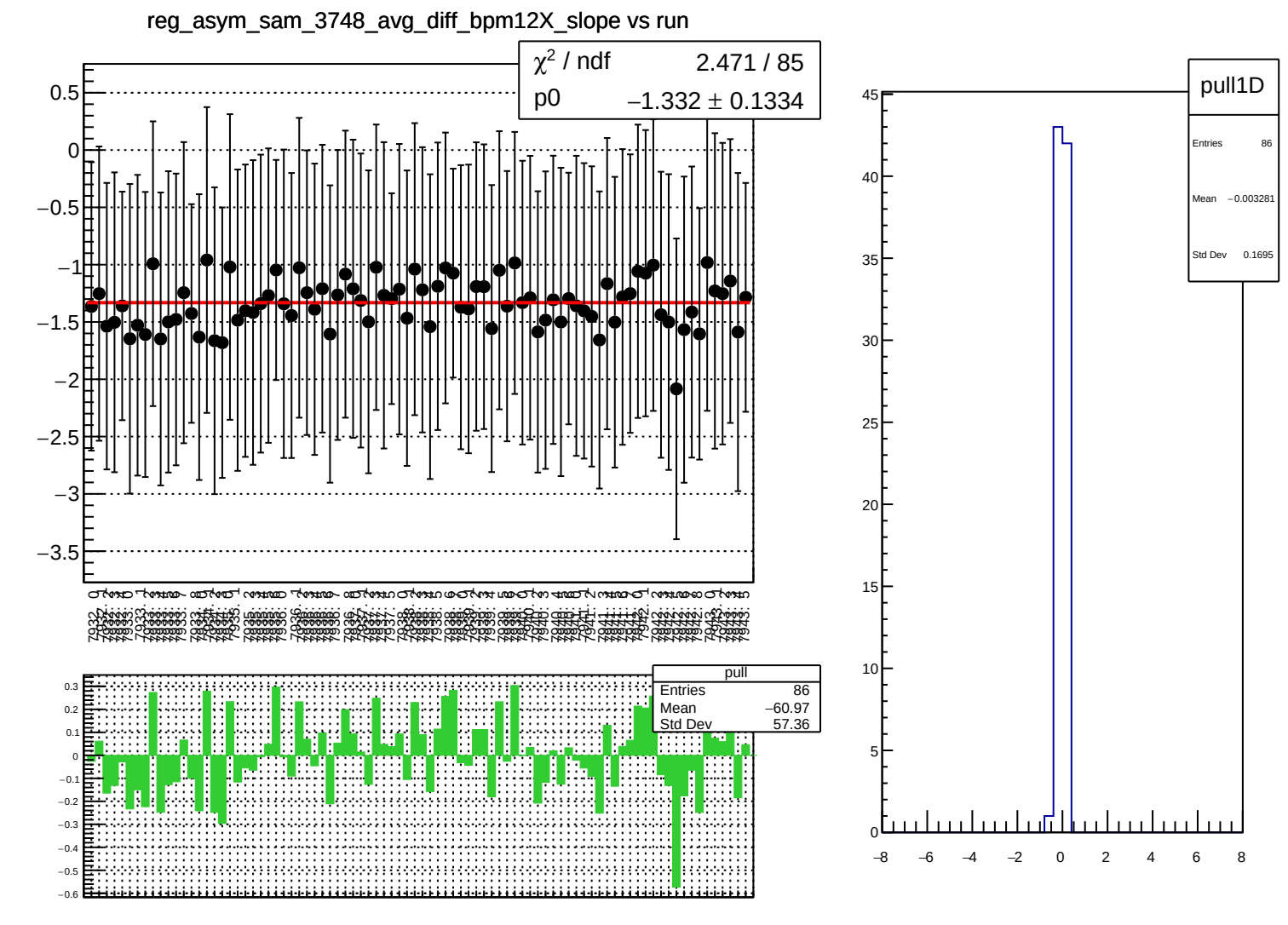

pull1D
Entries 86
Mean −0.007433
Std Dev 0.1738

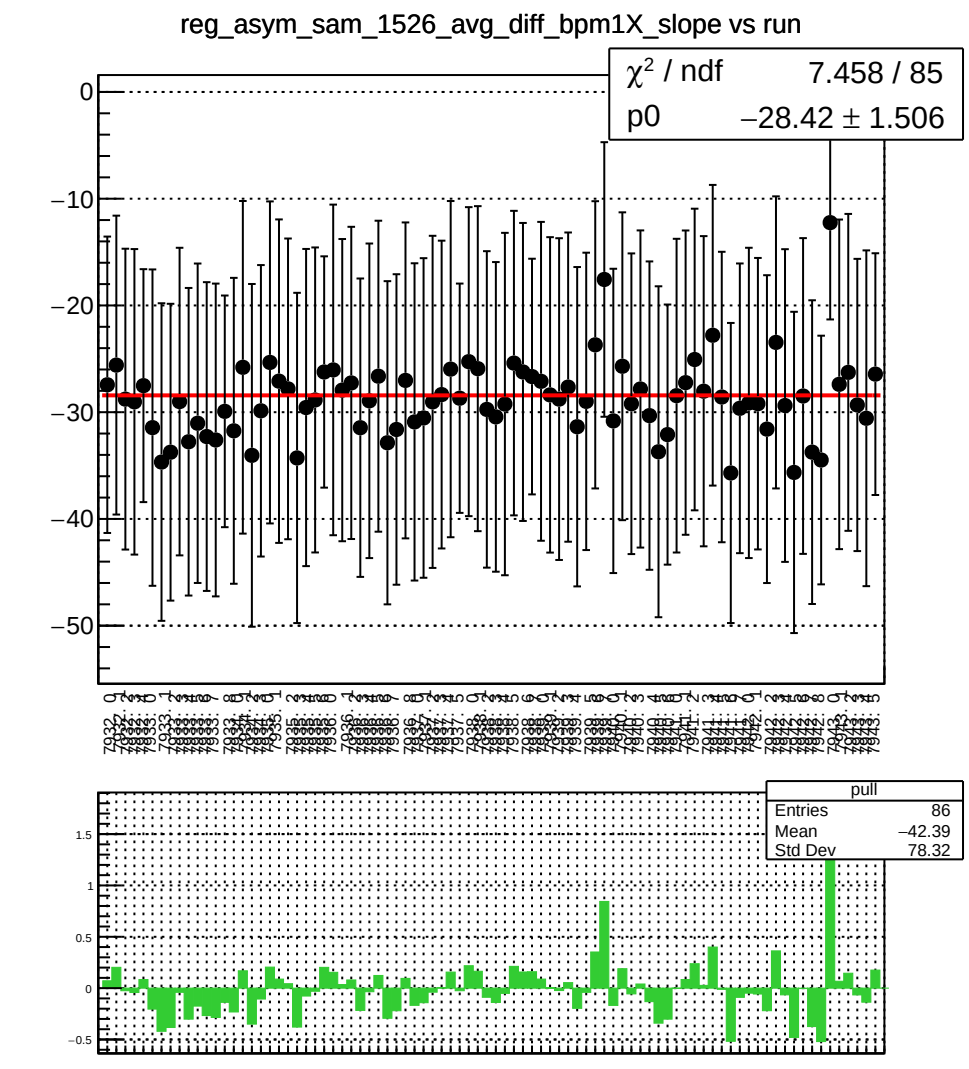

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.837 / 85
p0 40.06 ± 4.125
pull
Entries 86
Mean 362.6
Std Dev 178.3
pull1D
Entries 86
Mean 0.000298
Std Dev 0.1461

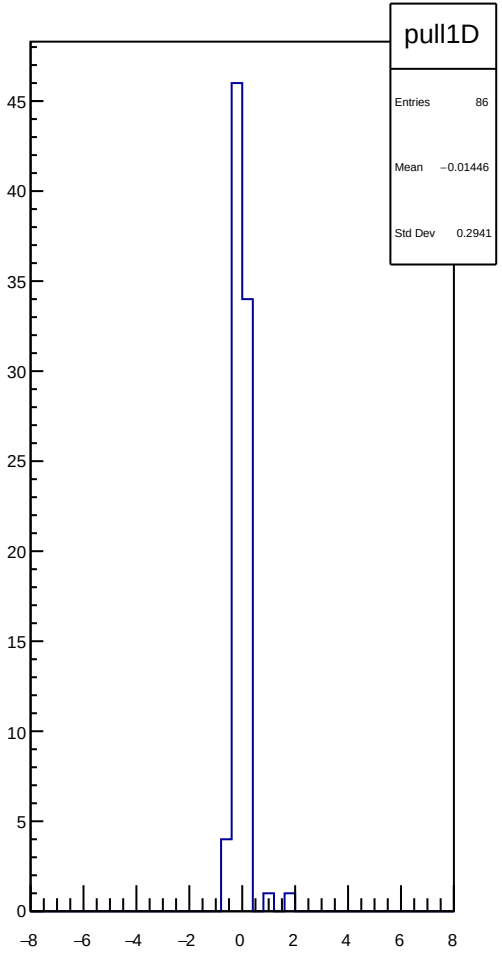

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.261 / 85
p0 −48.92 ± 3.563
pull
Entries 86
Mean 11.75
Std Dev 30.34
pull1D
Entries 86
Mean 0.007027
Std Dev 0.162

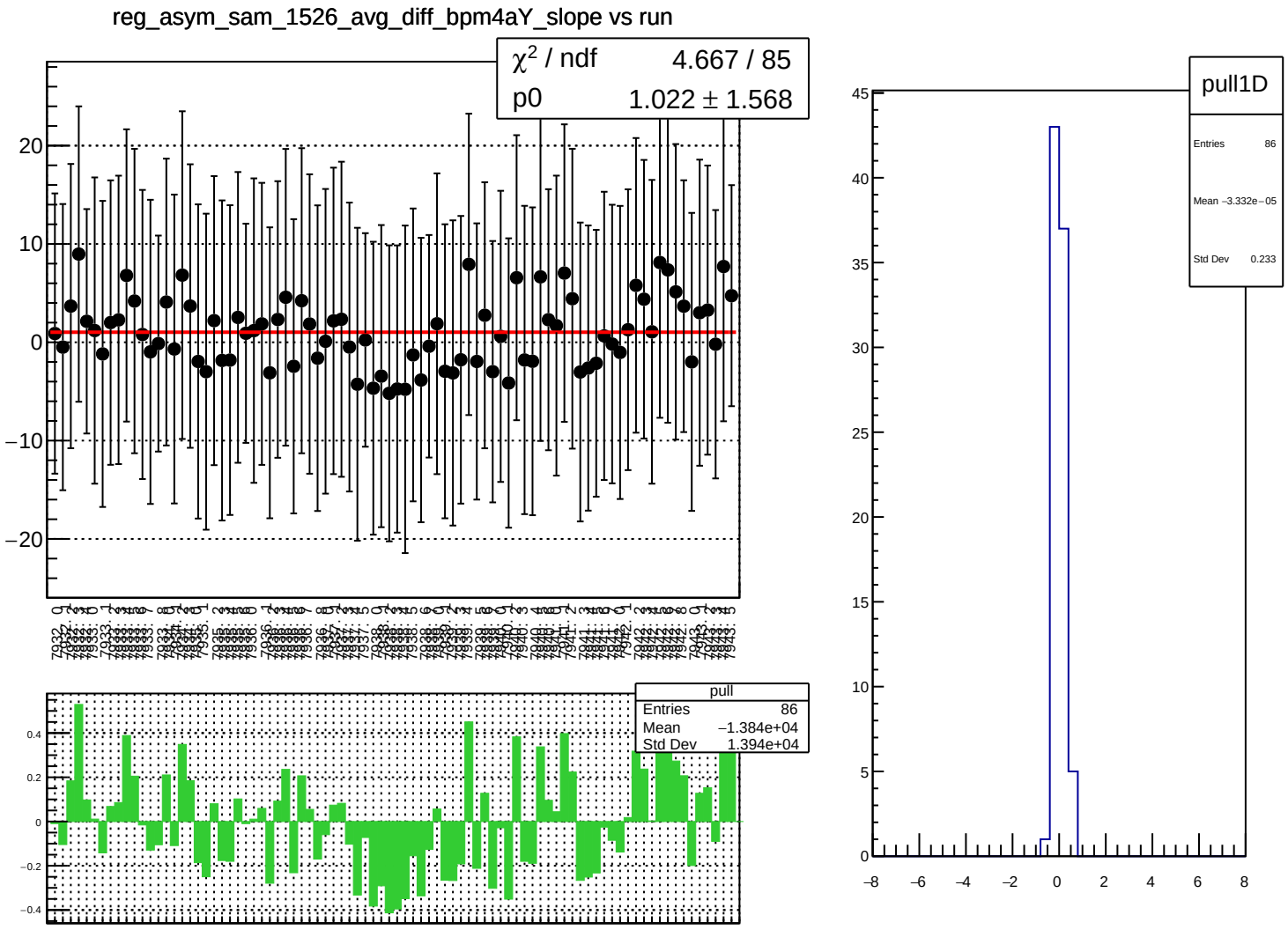

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.83 / 85
p0 18.52 ± 4.756
pull
Entries 86
Mean 968.7
Std Dev 894.7

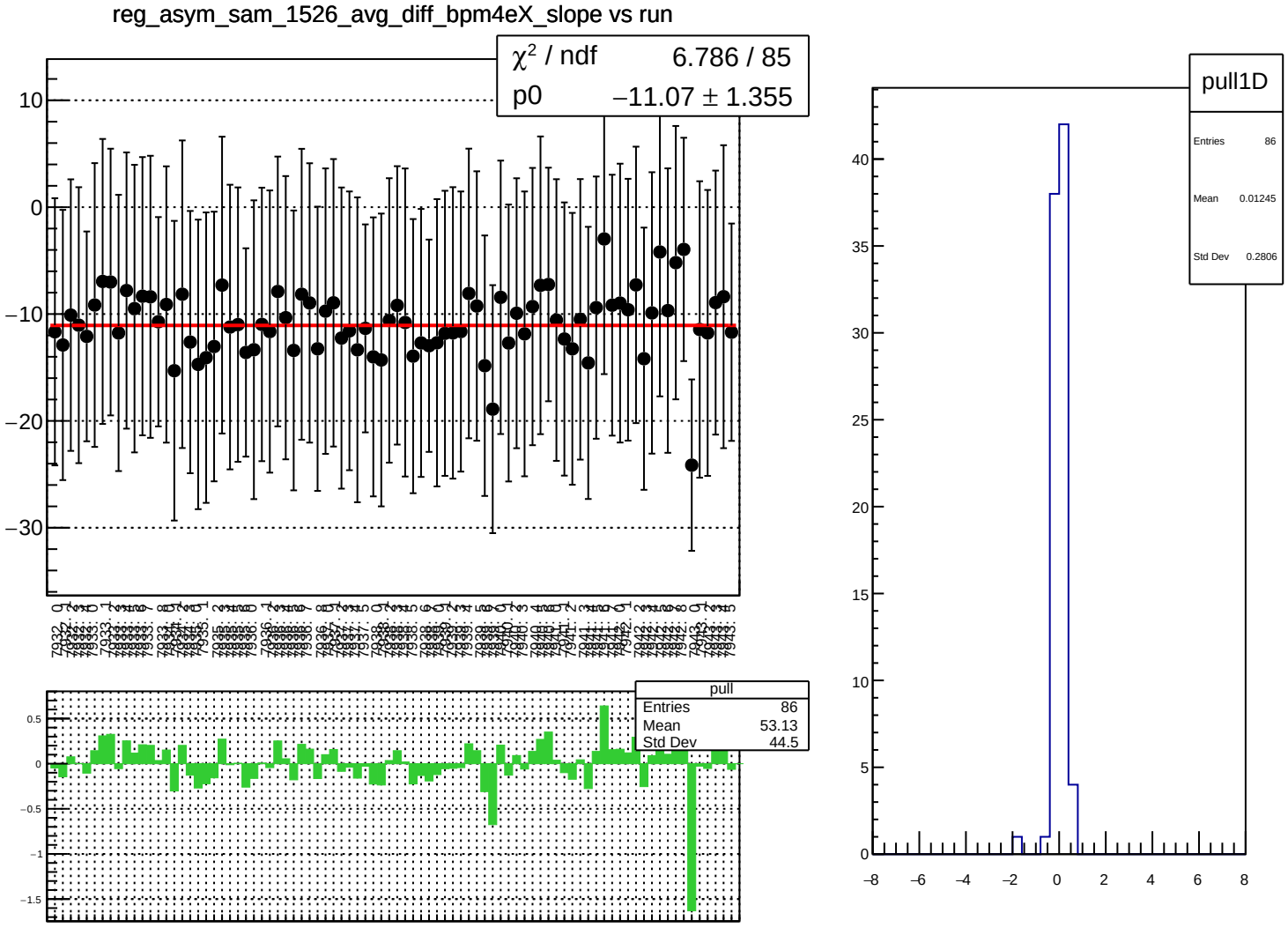

pull1D
Entries 86
Mean −0.000372
Std Dev 0.1459

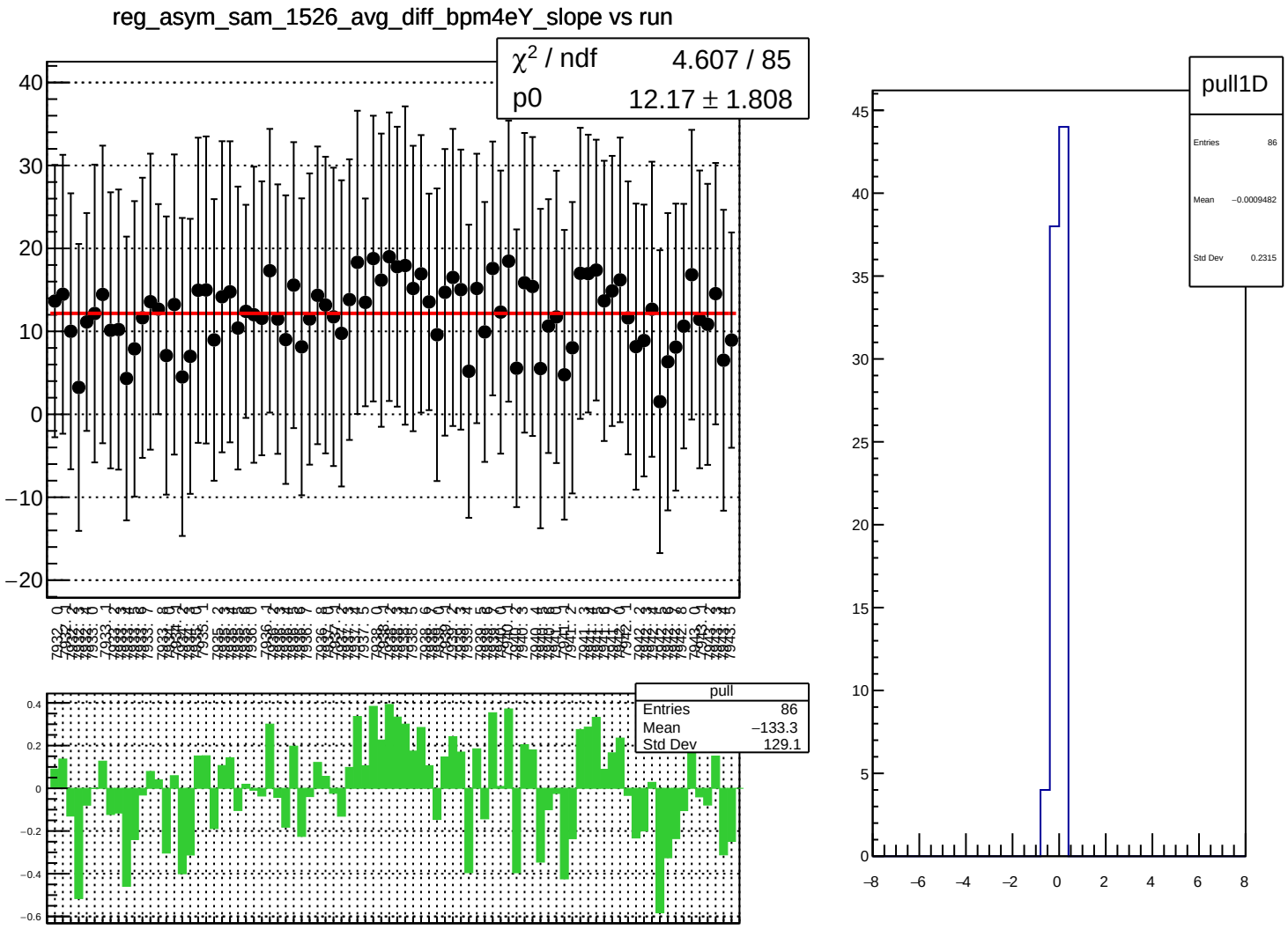

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 2.471 / 85
p0 −1.332 ± 0.1334
pull
Entries 86
Mean −60.97
Std Dev 57.36
pull1D
Entries 86
Mean −0.003281
Std Dev 0.1695

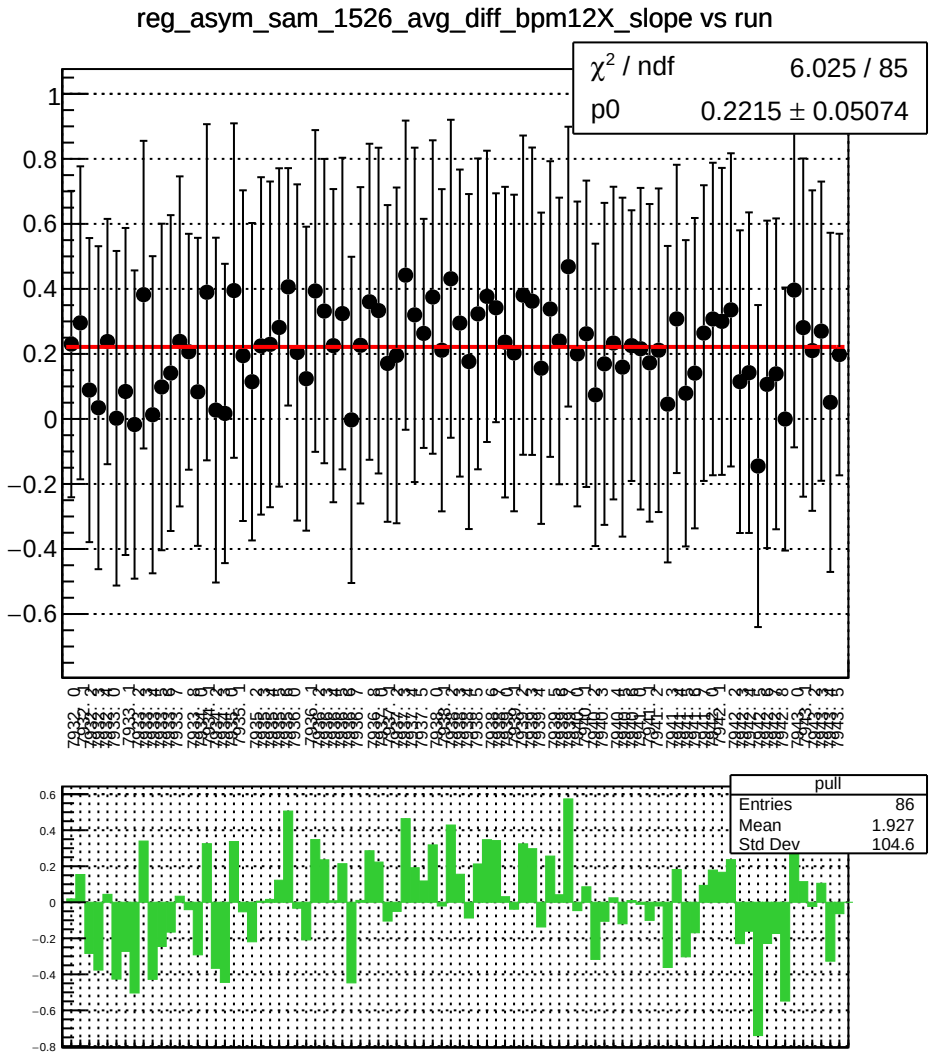

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 7.458 / 85
p0 −28.42 ± 1.506
pull
Entries 86
Mean −42.39
Std Dev 78.32

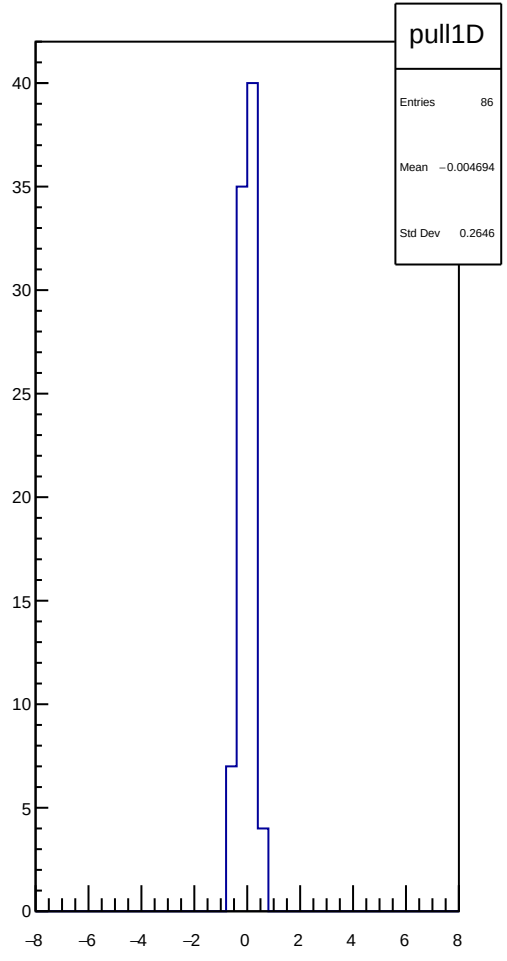

pull1D
Entries 86
Mean −0.01446
Std Dev 0.2941

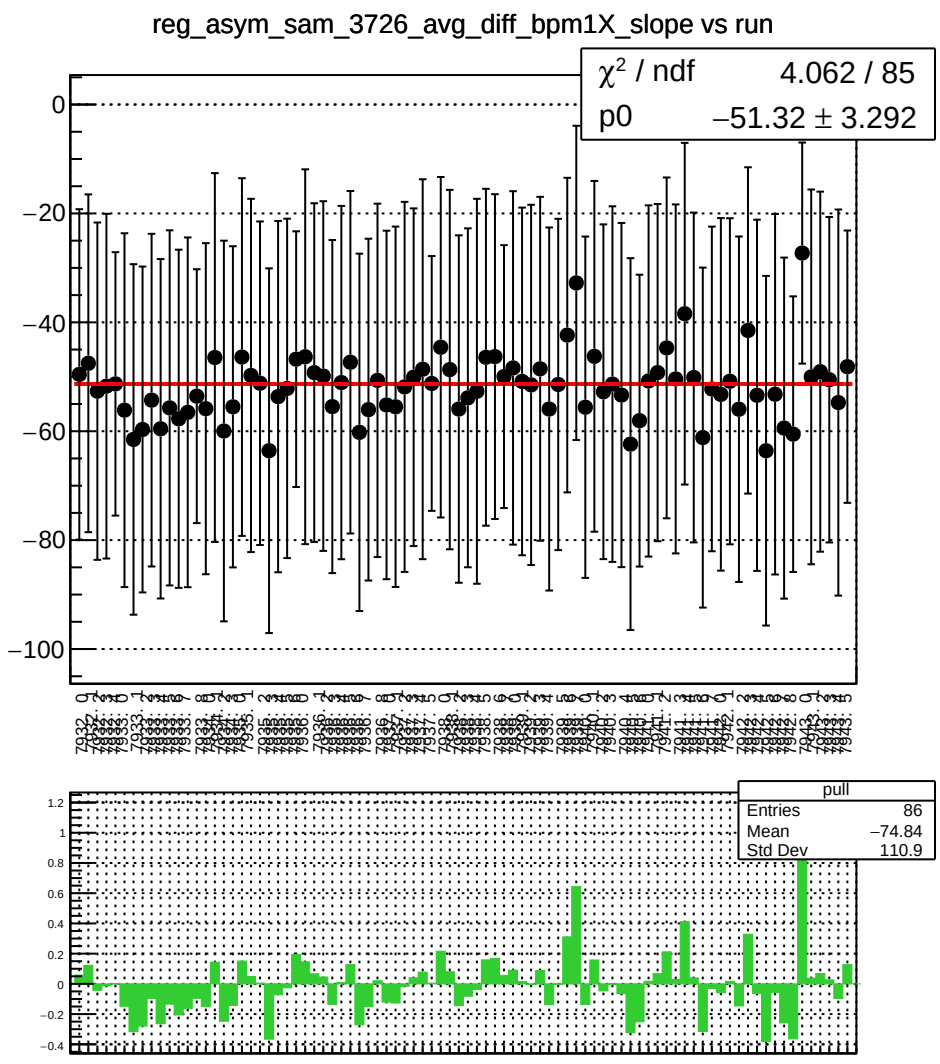

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.667 / 85
p0 1.022 ± 1.568
pull
Entries 86
Mean −1.384e+04
Std Dev 1.394e+04
pull1D
Entries 86
Mean −3.332e−05
Std Dev 0.233

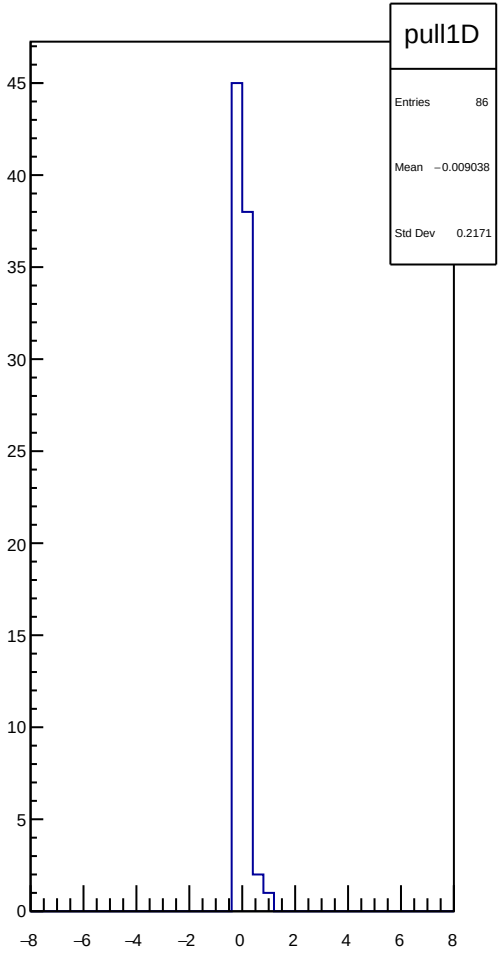

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.786 / 85
p0 −11.07 ± 1.355
pull
Entries 86
Mean 53.13
Std Dev 44.5
pull1D
Entries 86
Mean 0.01245
Std Dev 0.2806

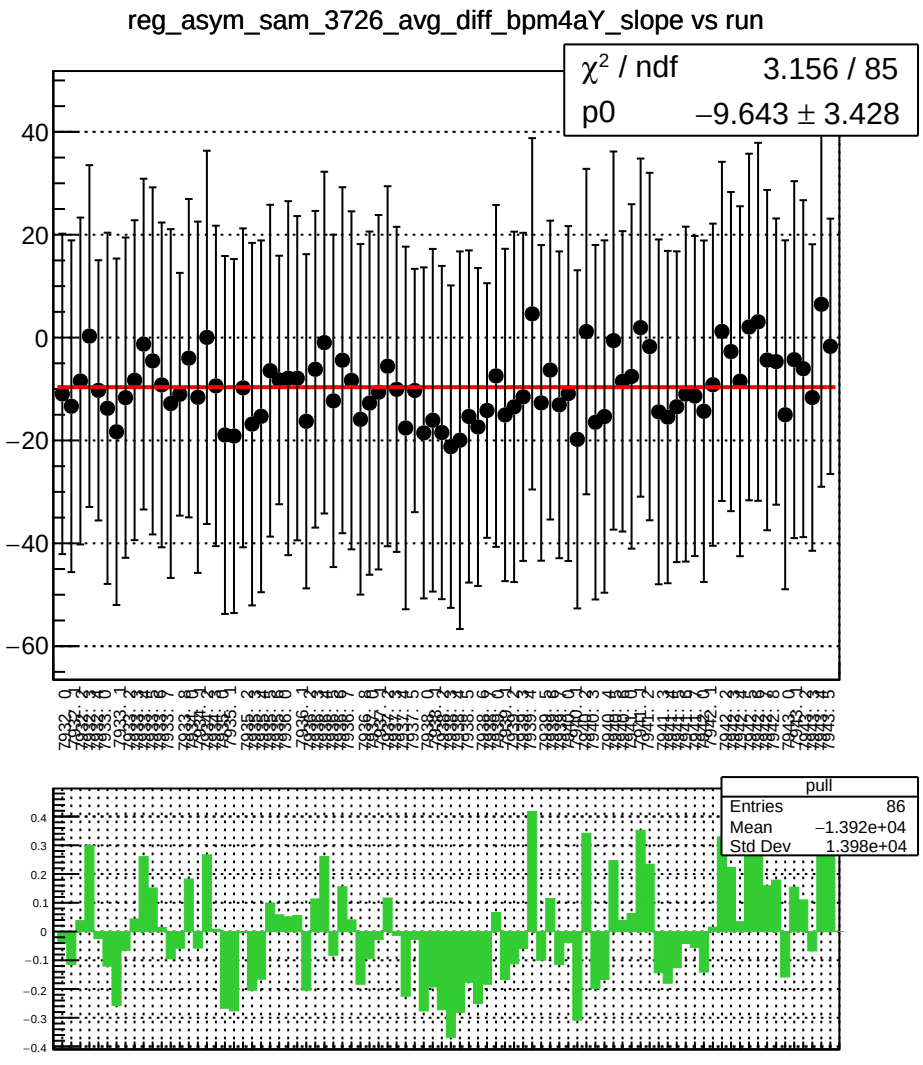

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.607 / 85
p0 12.17 ± 1.808
pull
Entries 86
Mean −133.3
Std Dev 129.1
pull1D
Entries 86
Mean −0.0009482
Std Dev 0.2315

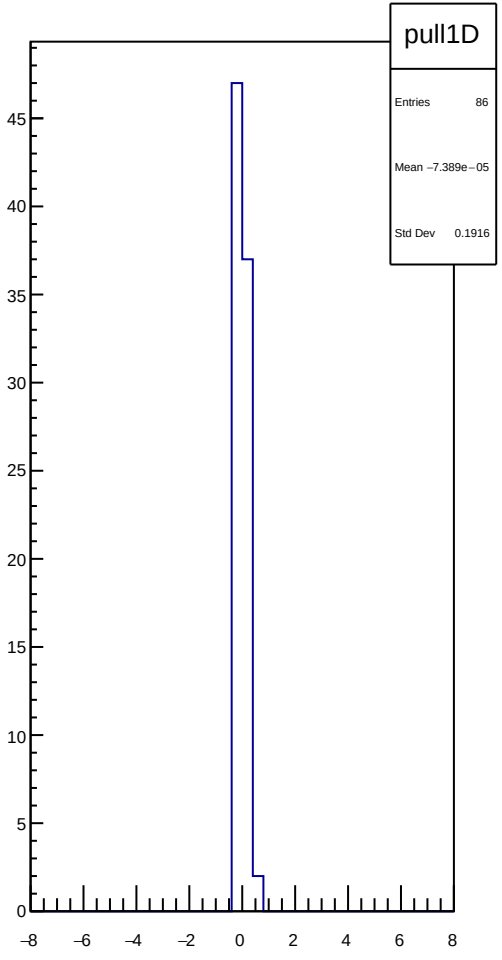

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 6.025 / 85
p0 0.2215 ± 0.05074
pull
Entries 86
Mean 1.927
Std Dev 104.6

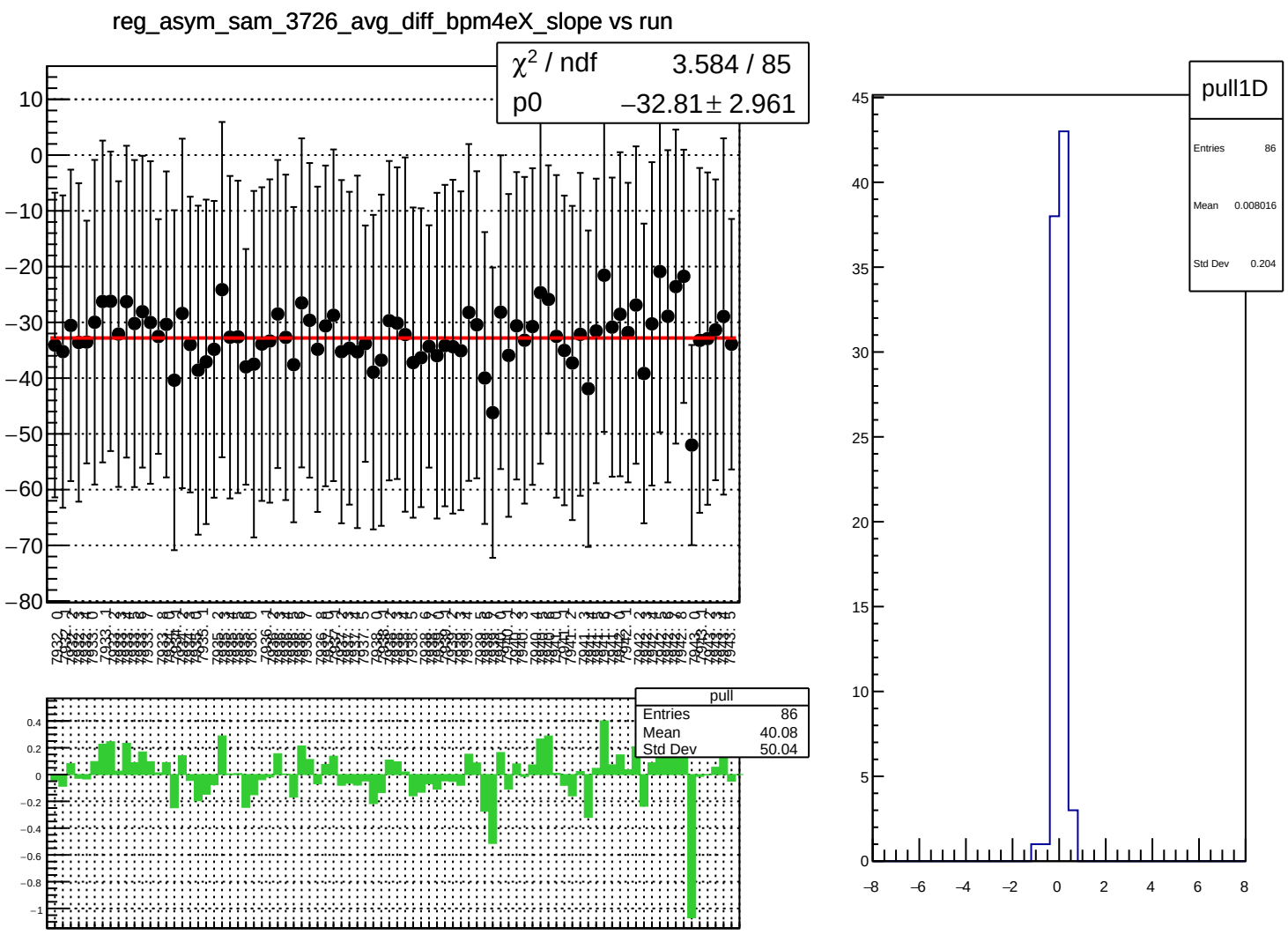

pull1D
Entries 86
Mean −0.004694
Std Dev 0.2646

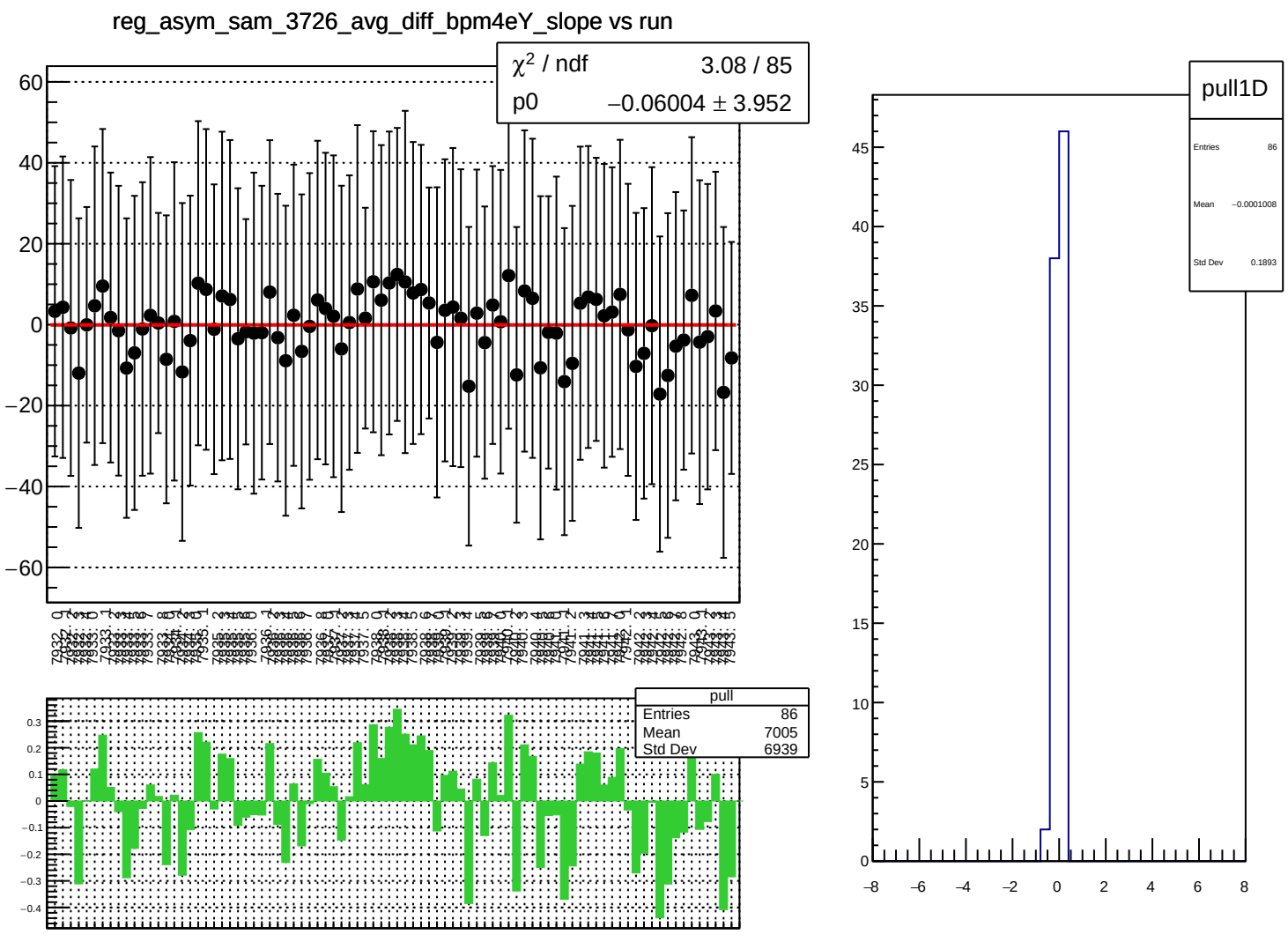

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 4.062 / 85
p0 −51.32 ± 3.292
pull
Entries 86
Mean −74.84
Std Dev 110.9

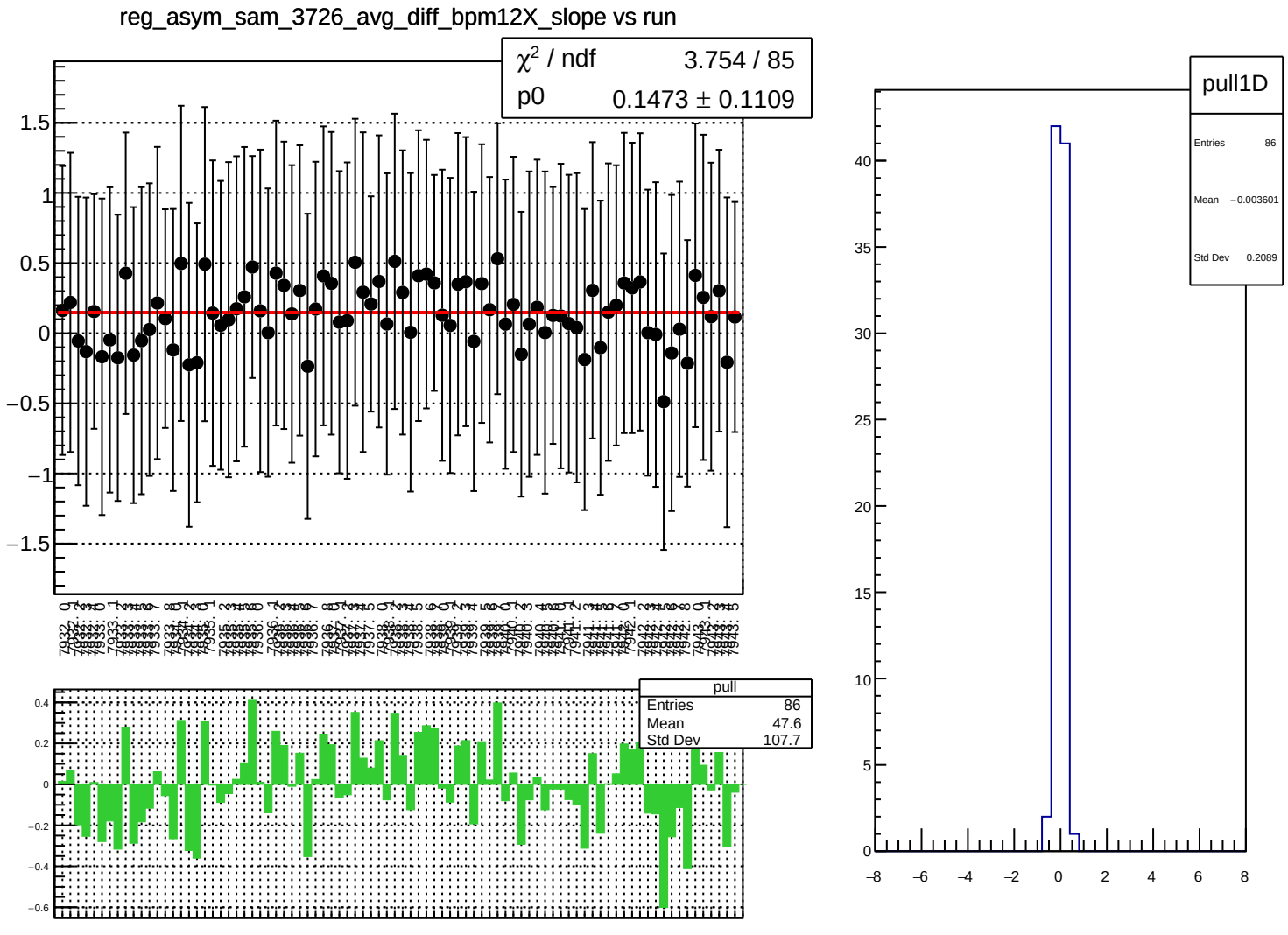

pull1D
Entries 86
Mean −0.009038
Std Dev 0.2171

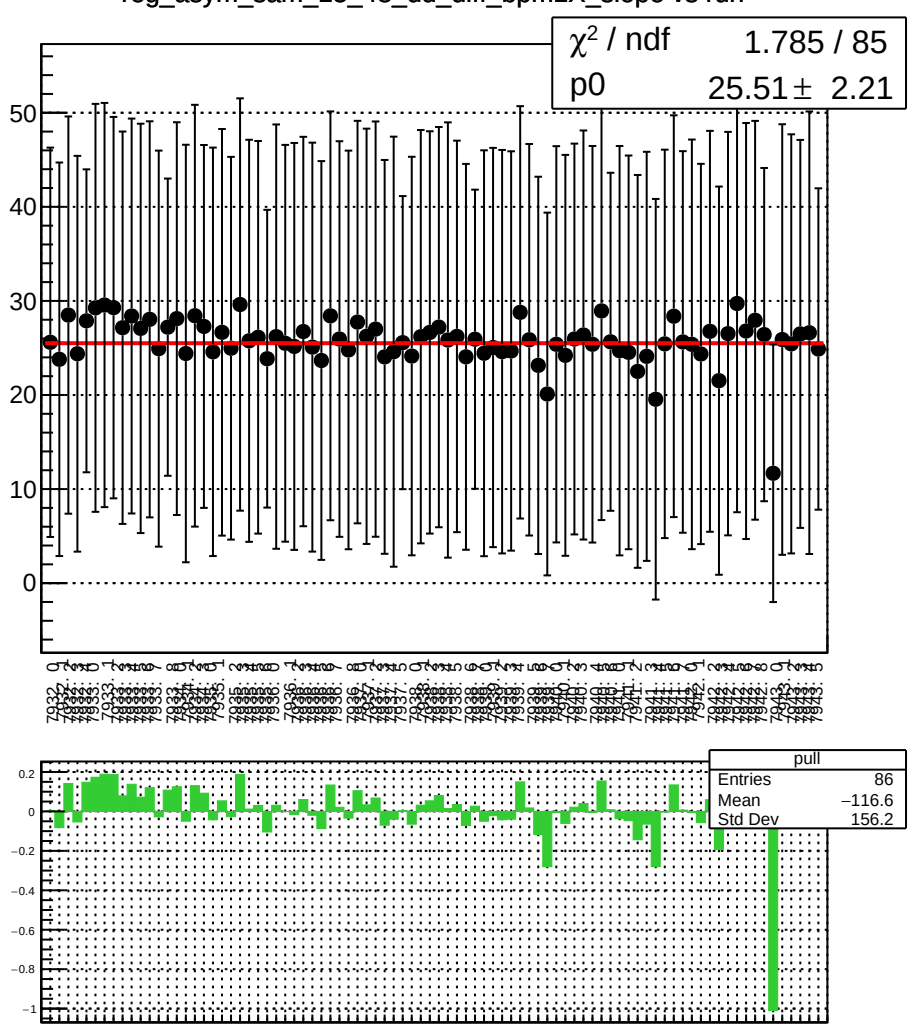

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.156 / 85
p0 −9.643 ± 3.428
pull
Entries 86
Mean −1.392e+04
Std Dev 1.398e+04

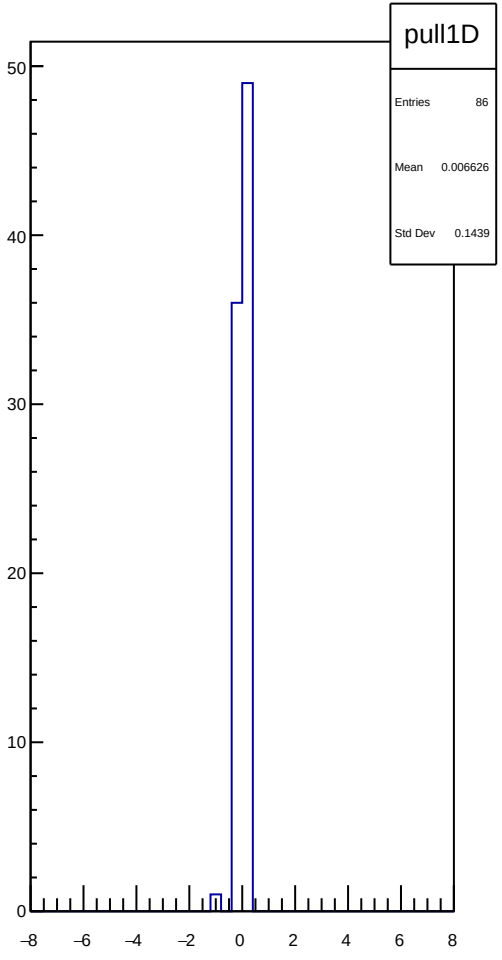

pull1D
Entries 86
Mean −7.389e−05
Std Dev 0.1916

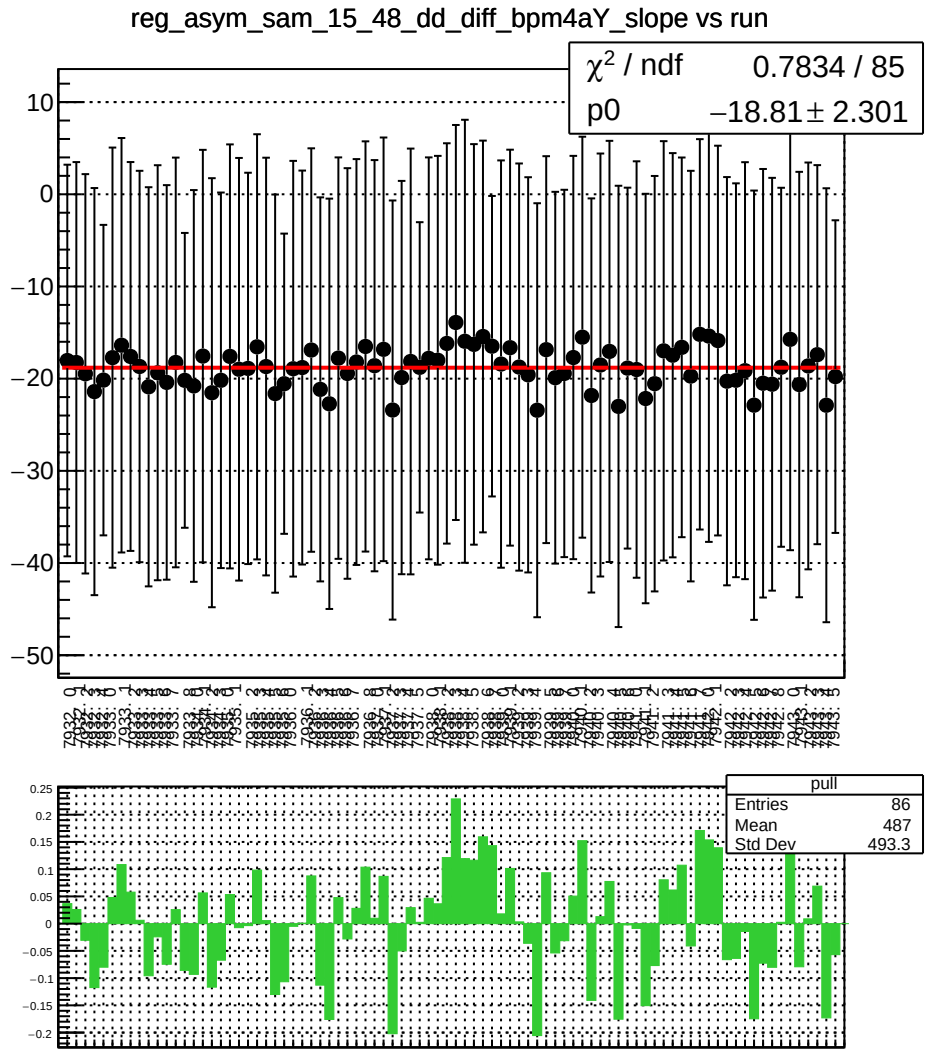

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.584 / 85
p0 −32.81 ± 2.961
pull
Entries 86
Mean 40.08
Std Dev 50.04
pull1D
Entries 86
Mean 0.008016
Std Dev 0.204

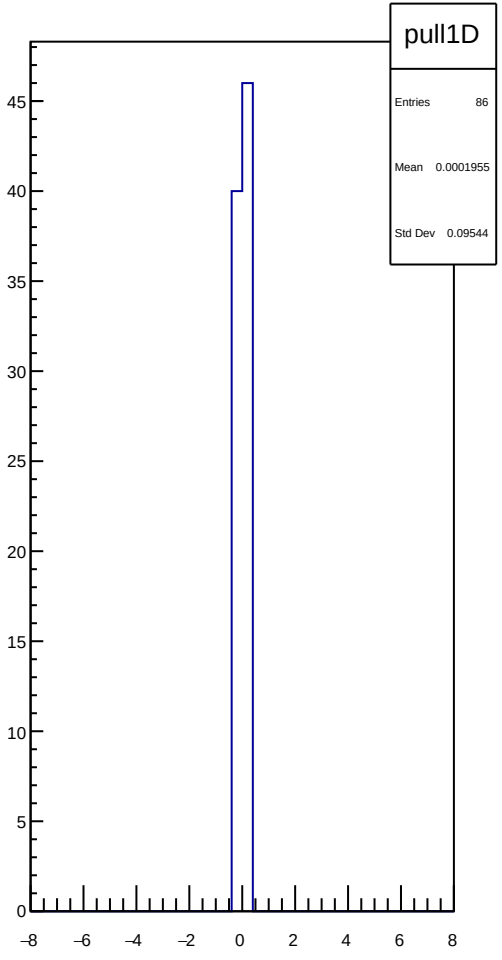

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.08 / 85
p0 −0.06004 ± 3.952
pull
Entries 86
Mean 7005
Std Dev 6939
pull1D
Entries 86
Mean −0.0001008
Std Dev 0.1893

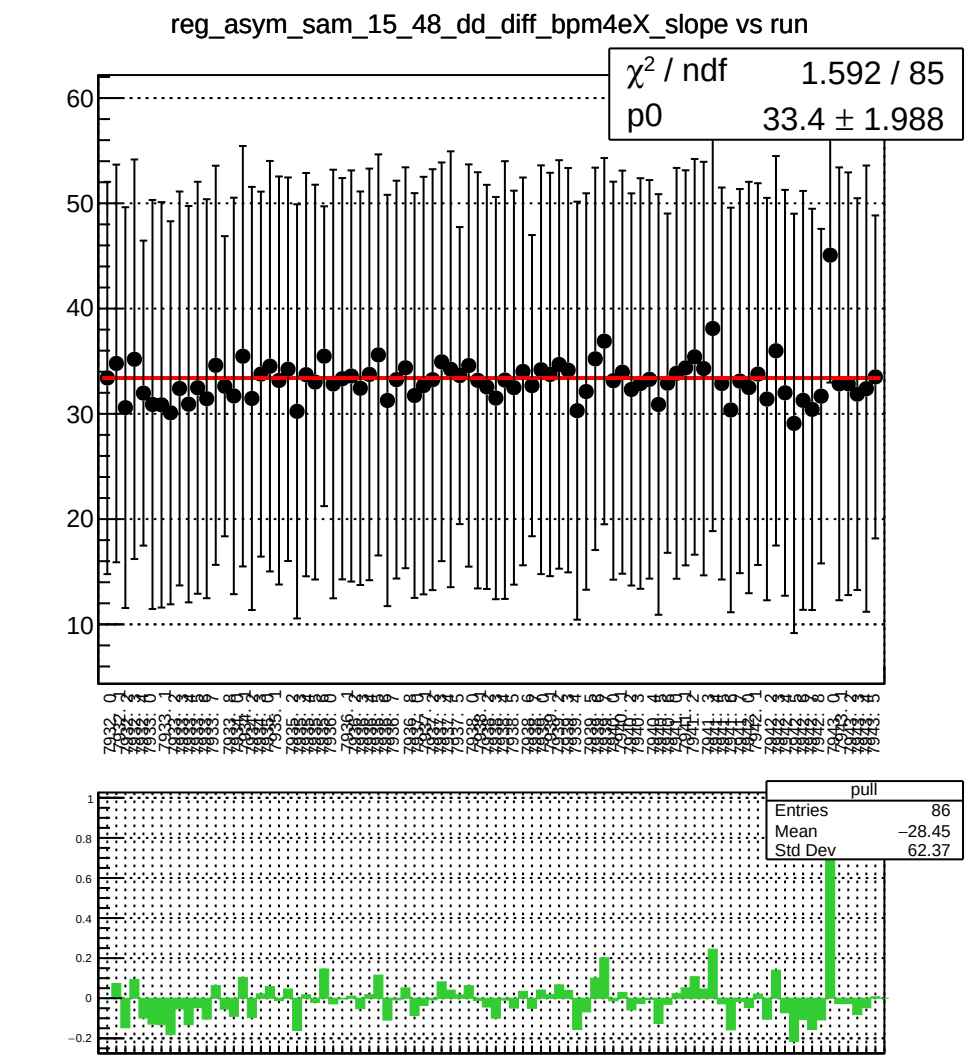

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 3.754 / 85
p0 0.1473 ± 0.1109
pull
Entries 86
Mean 47.6
Std Dev 107.7
pull1D
Entries 86
Mean −0.003601
Std Dev 0.2089

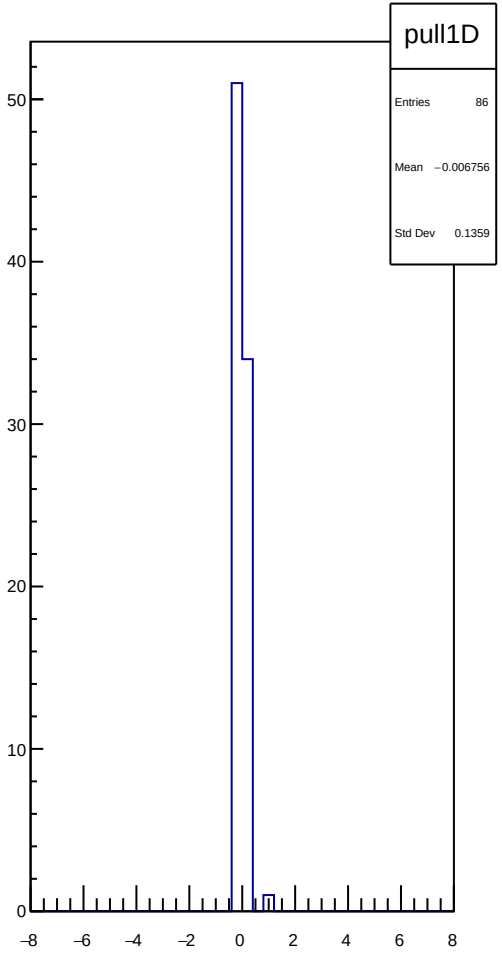

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.785 / 85
p0 25.51 ± 2.21
pull
Entries 86
Mean −116.6
Std Dev 156.2

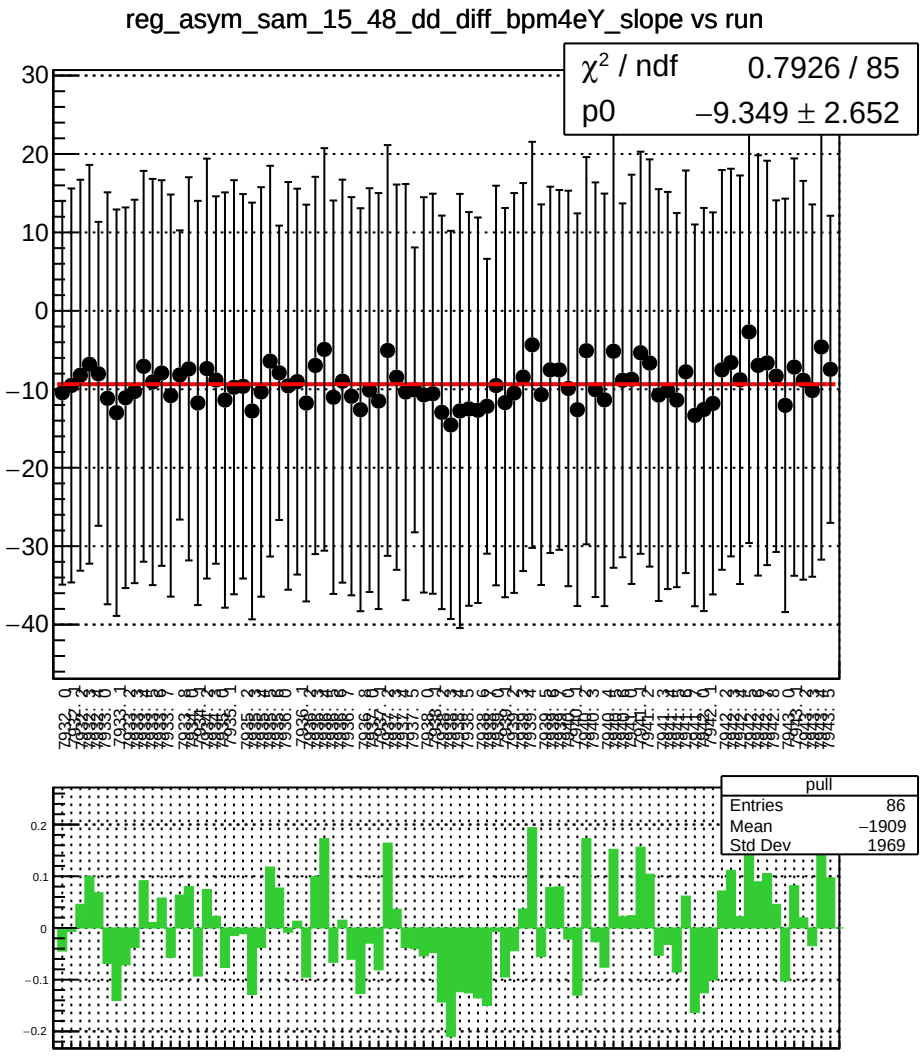

pull1D
Entries 86
Mean 0.006626
Std Dev 0.1439

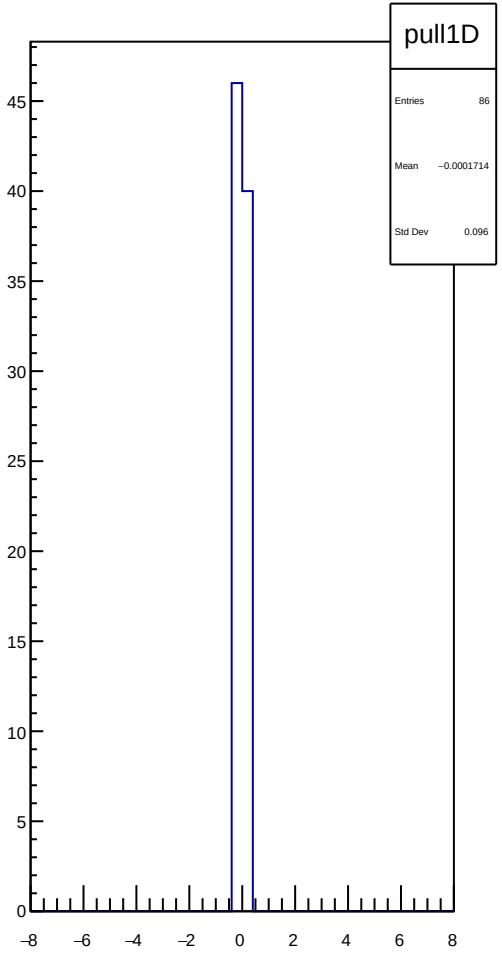

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.7834 / 85
p0 −18.81 ± 2.301
pull
Entries 86
Mean 487
Std Dev 493.3

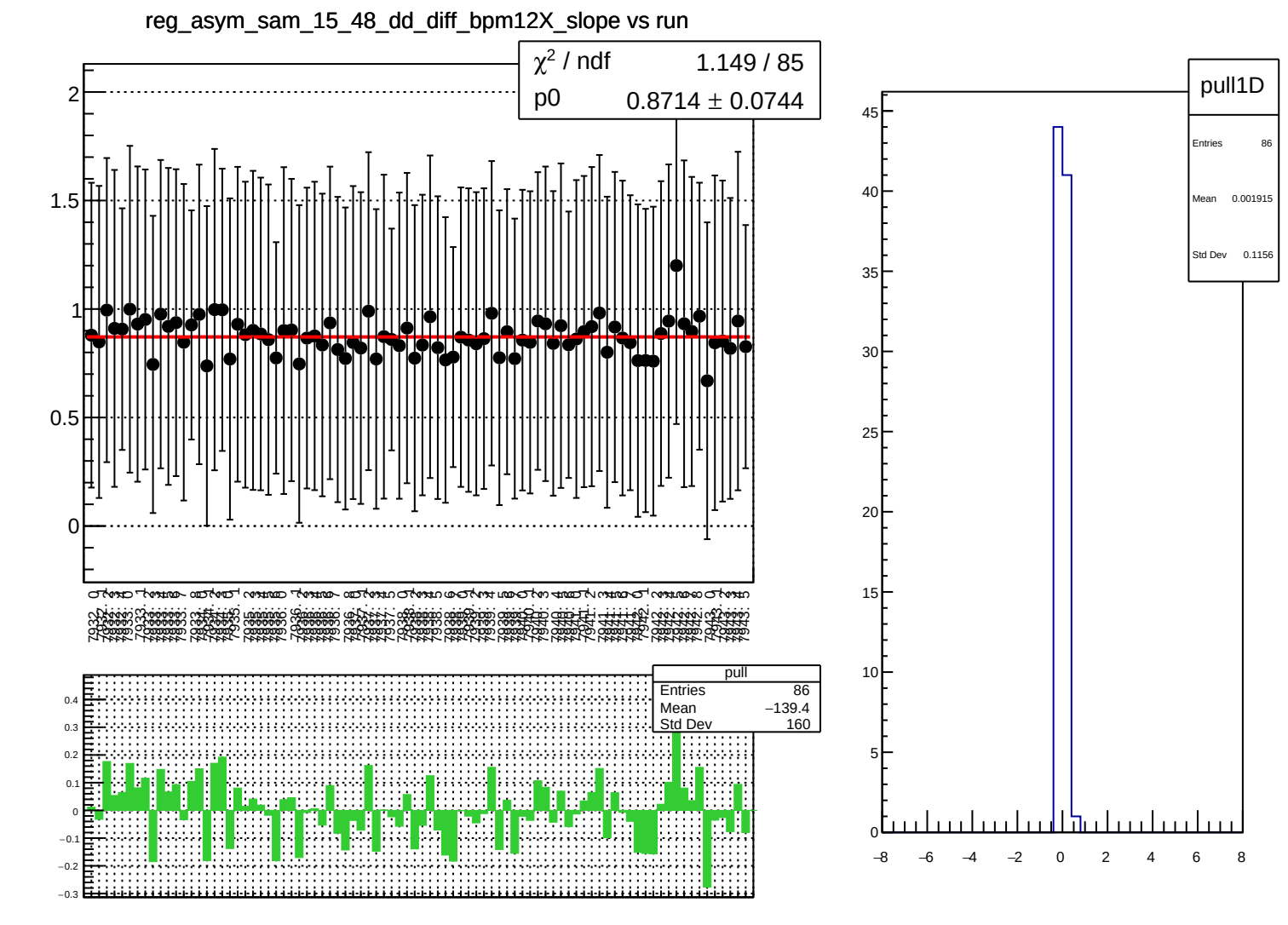

pull1D
Entries 86
Mean 0.0001955
Std Dev 0.09544

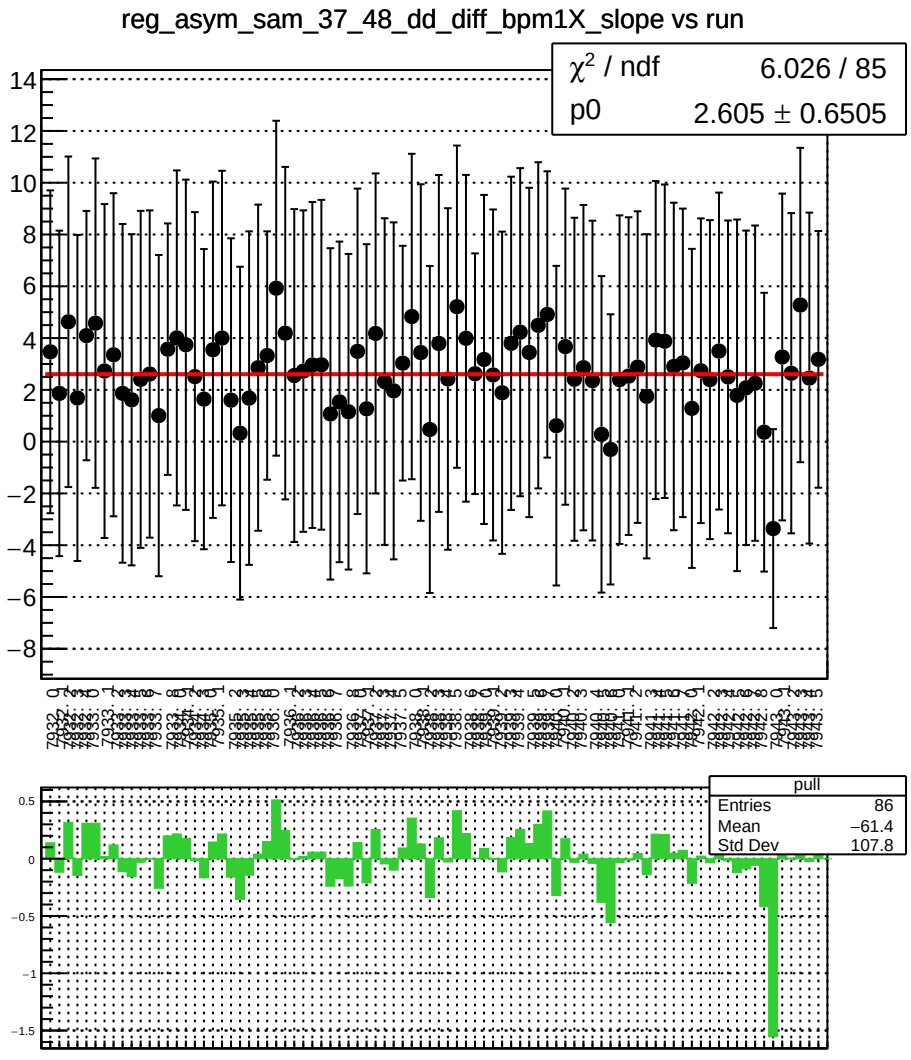

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.592 / 85
p0 33.4 ± 1.988
pull
Entries 86
Mean −28.45
Std Dev 62.37

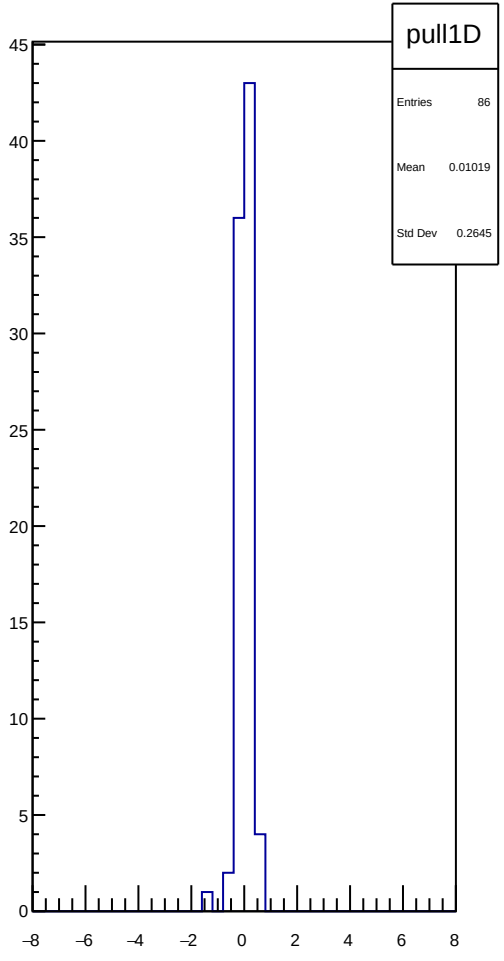

pull1D
Entries 86
Mean −0.006756
Std Dev 0.1359

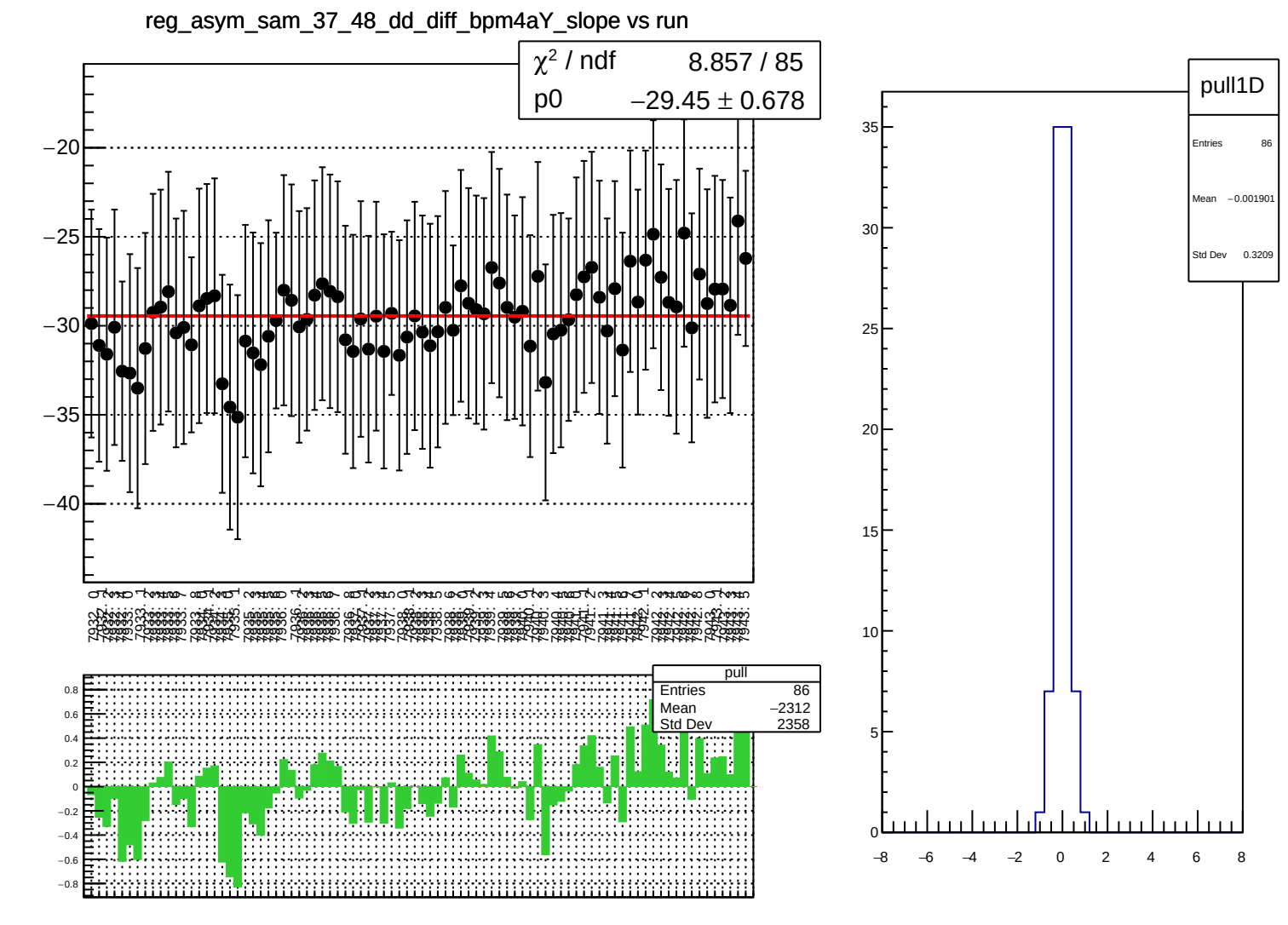

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.7926 / 85
p0 −9.349 ± 2.652
pull
Entries 86
Mean −1909
Std Dev 1969

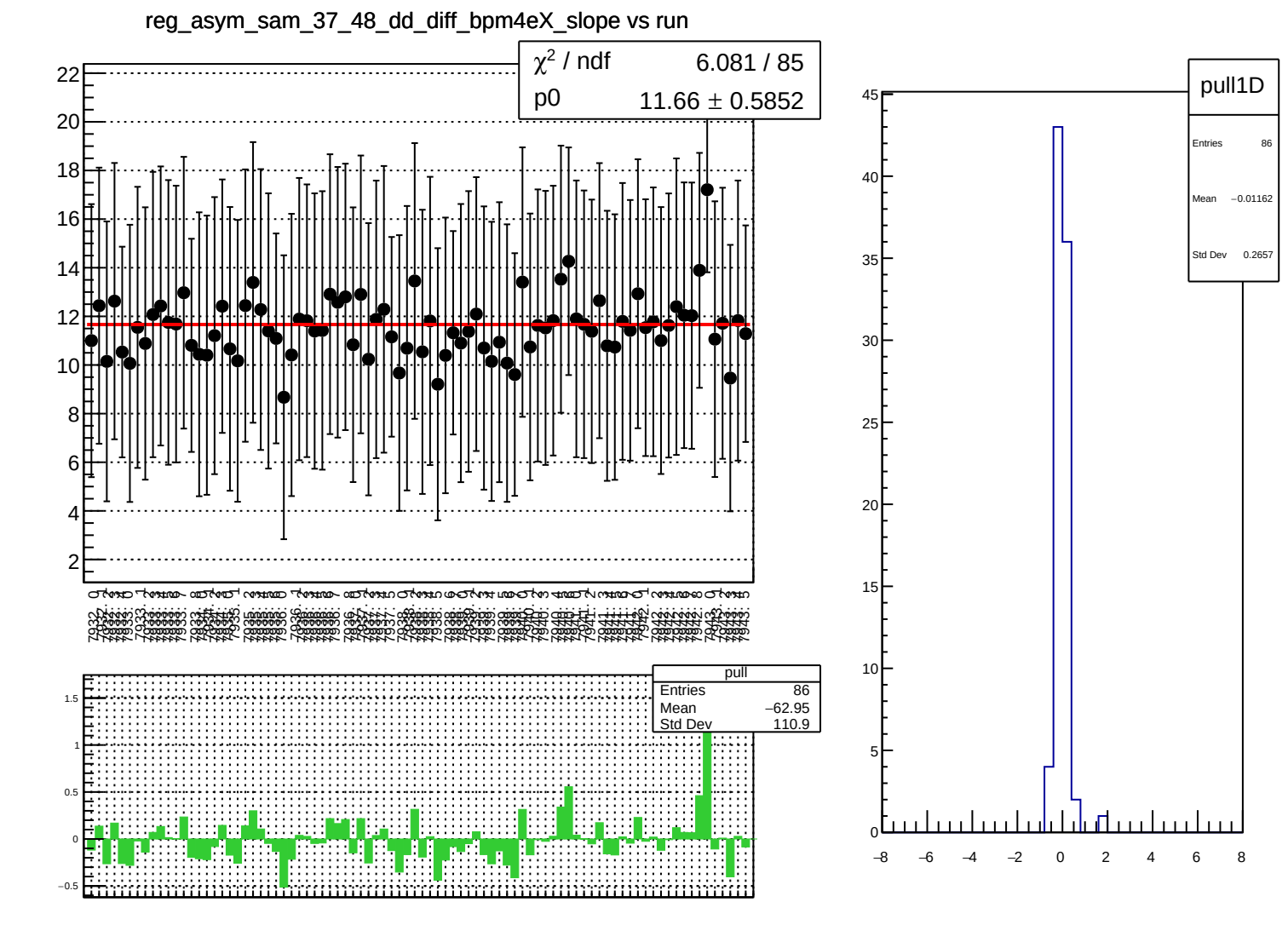

pull1D
Entries 86
Mean −0.0001714
Std Dev 0.096

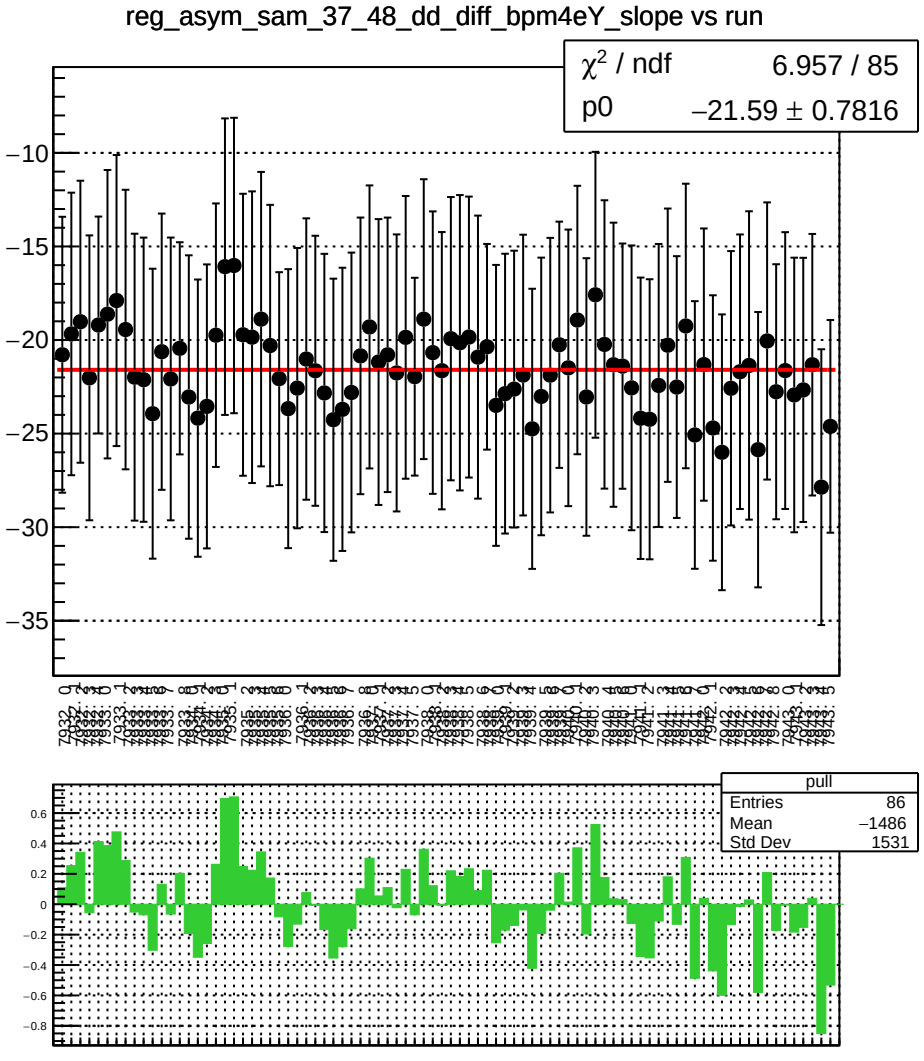

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 1.149 / 85
p0 0.8714 ± 0.0744
pull
Entries 86
Mean −139.4
Std Dev 160
pull1D
Entries 86
Mean 0.001915
Std Dev 0.1156

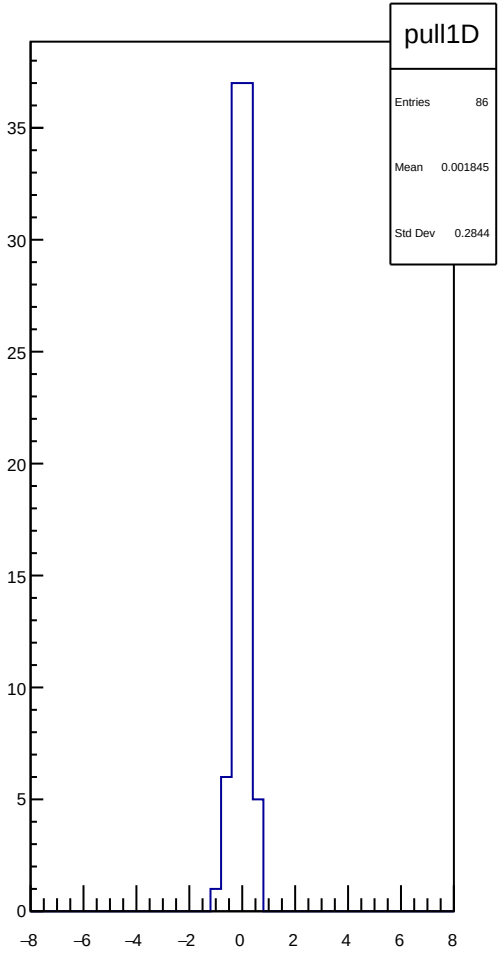

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 6.026 / 85
p0 2.605 ± 0.6505
pull
Entries 86
Mean −61.4
Std Dev 107.8

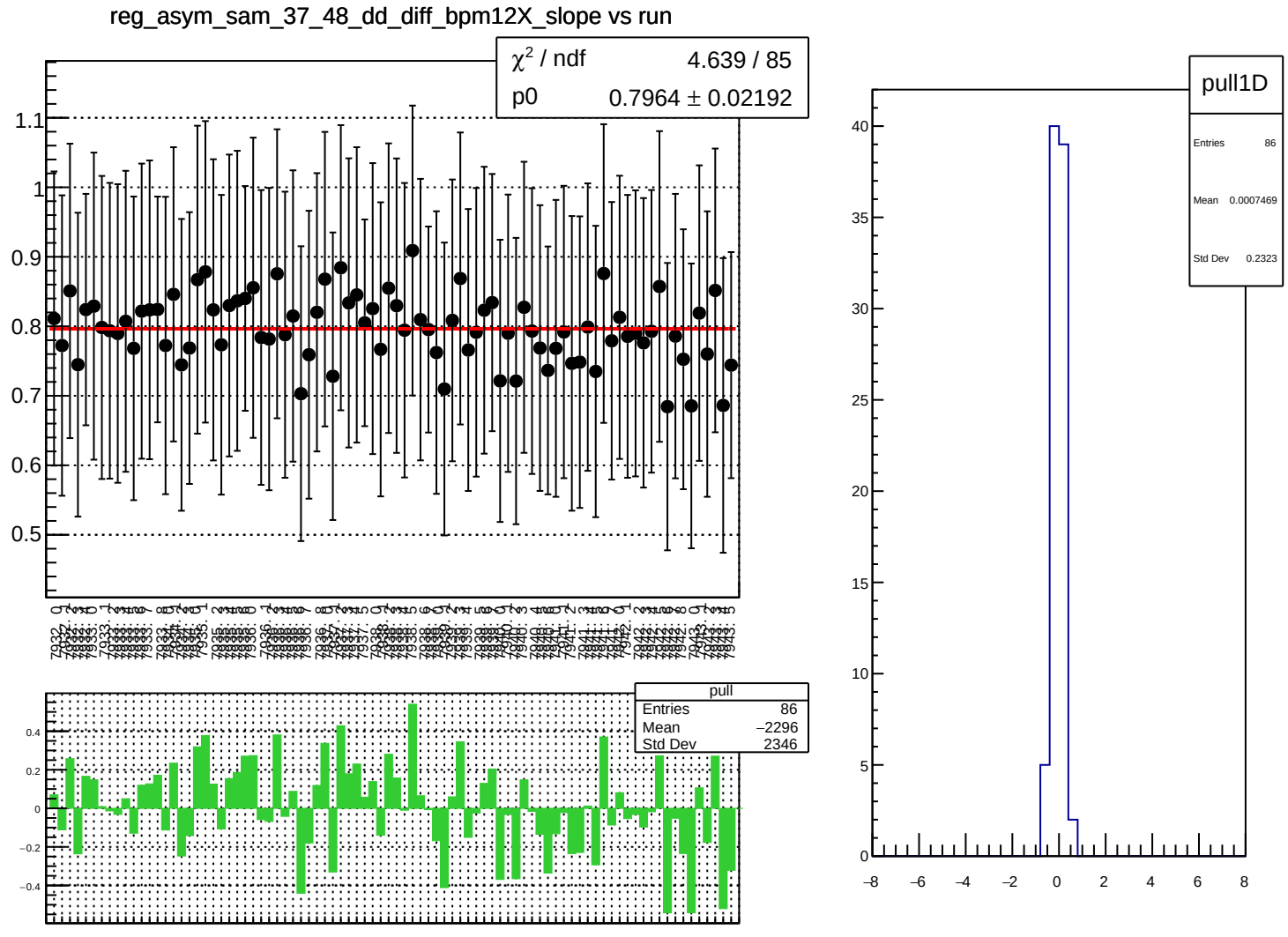

pull1D
Entries 86
Mean 0.01019
Std Dev 0.2645

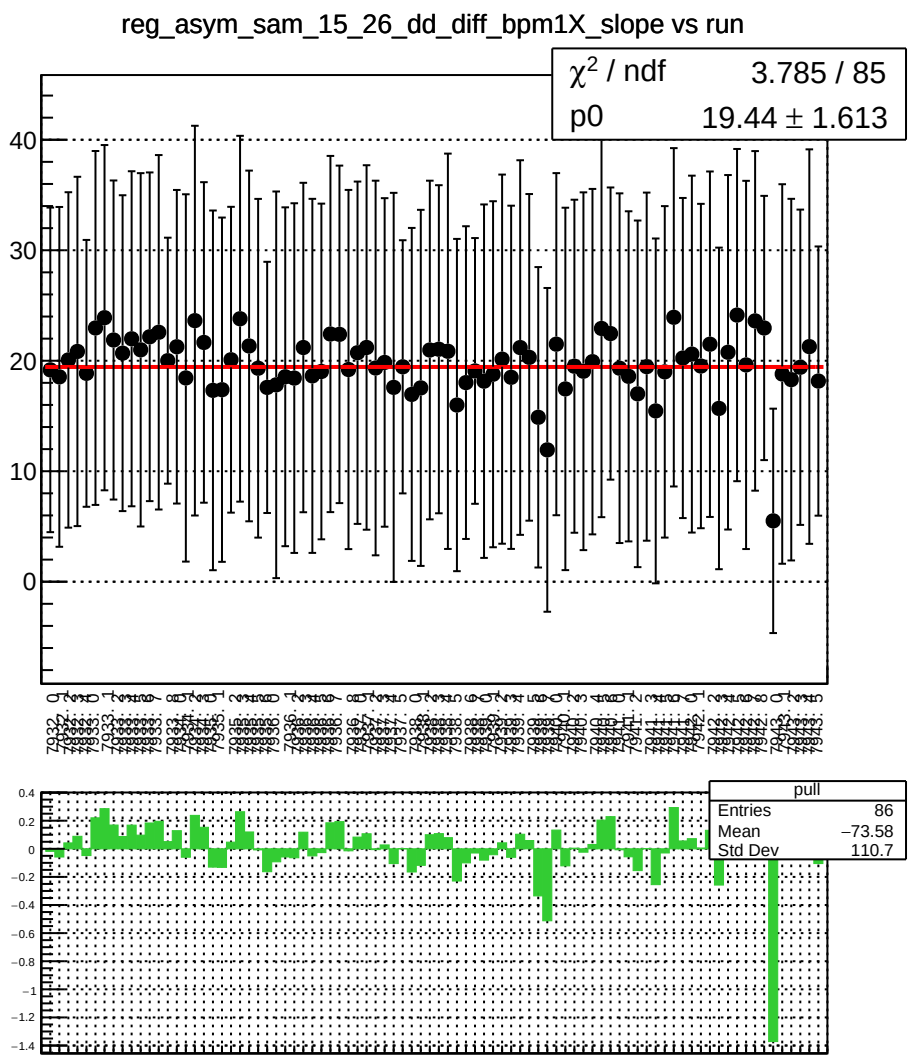

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.857 / 85
p0 −29.45 ± 0.678
pull
Entries 86
Mean −2312
Std Dev 2358
pull1D
Entries 86
Mean −0.001901
Std Dev 0.3209

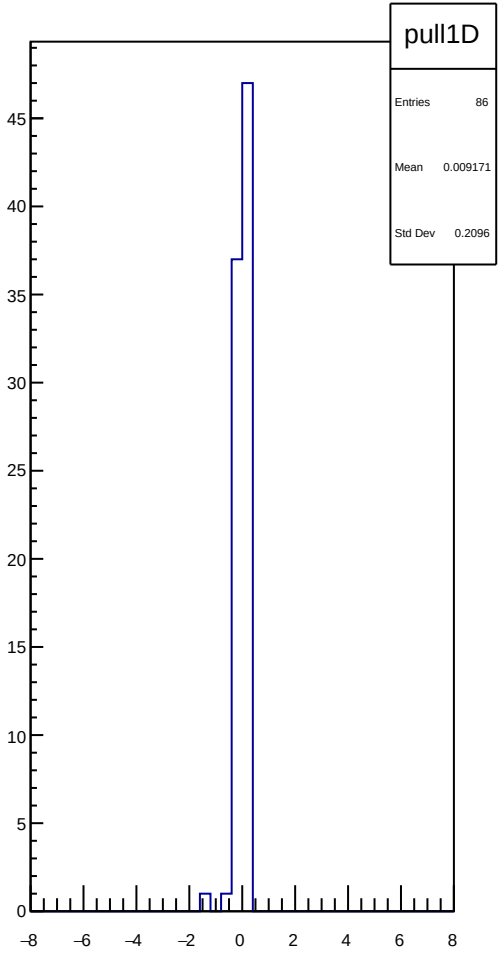

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 6.081 / 85
p0 11.66 ± 0.5852
pull
Entries 86
Mean −62.95
Std Dev 110.9
pull1D
Entries 86
Mean −0.01162
Std Dev 0.2657

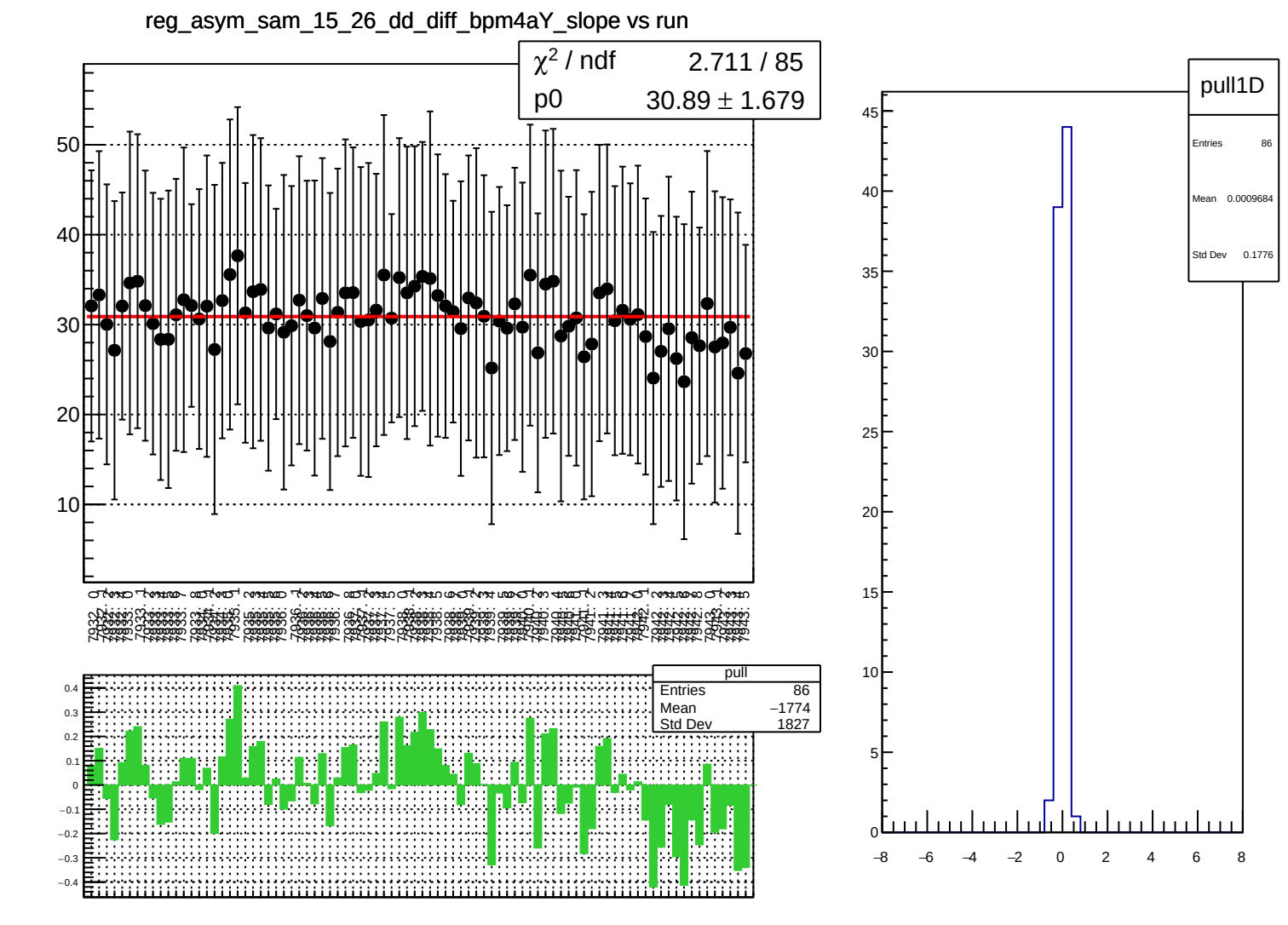

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.957 / 85
p0 −21.59 ± 0.7816
pull
Entries 86
Mean −1486
Std Dev 1531

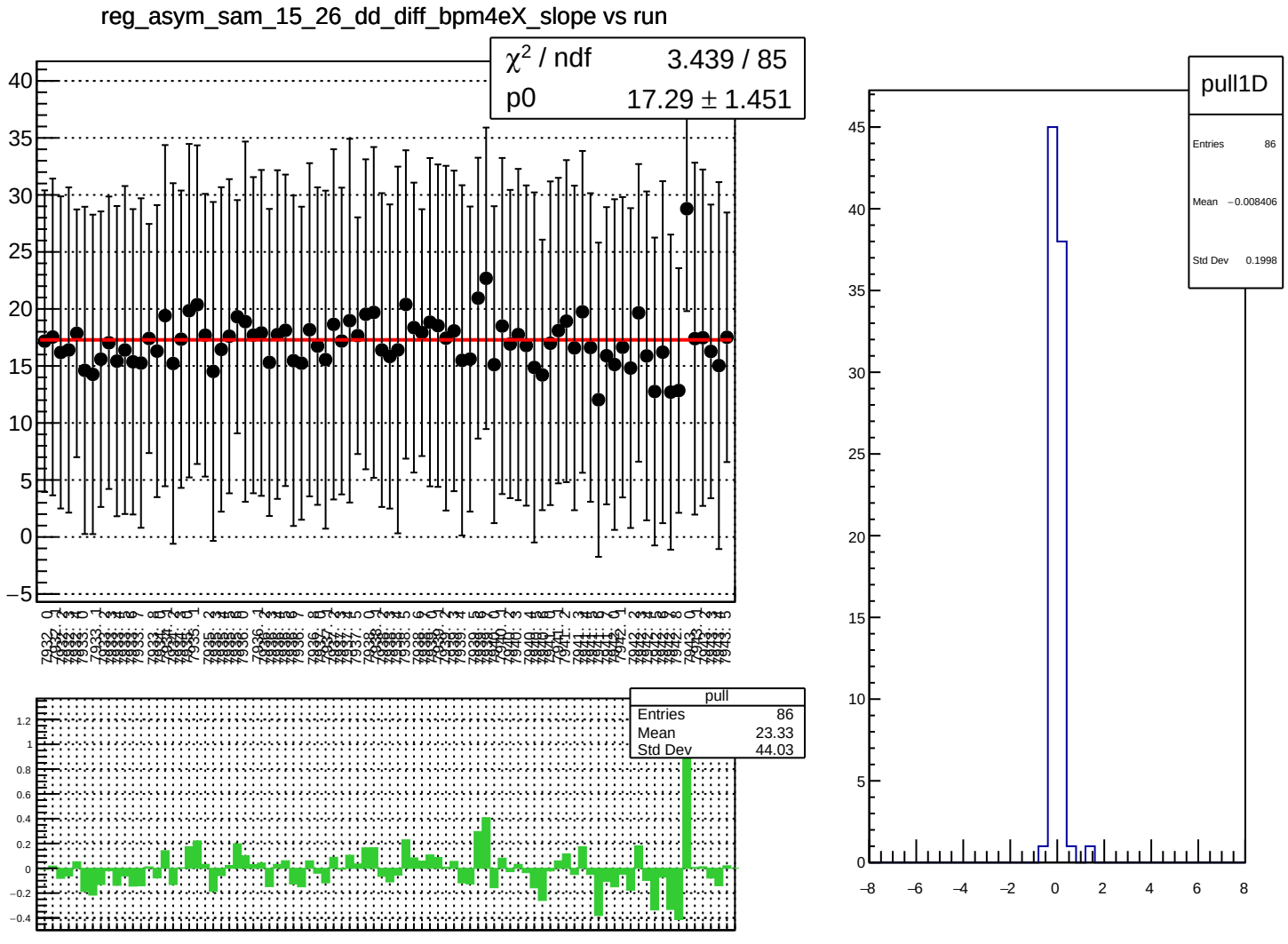

pull1D
Entries 86
Mean 0.001845
Std Dev 0.2844

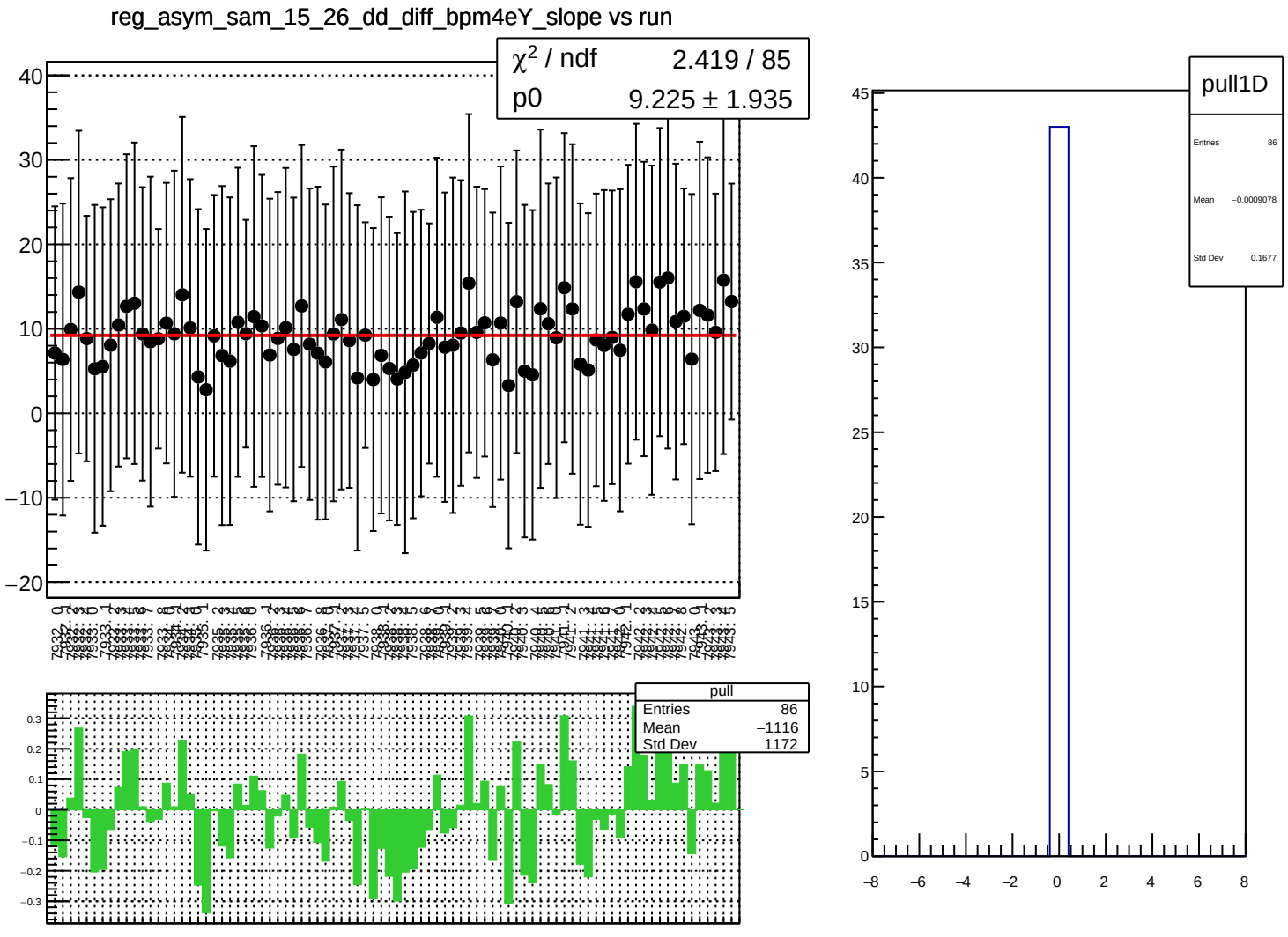

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 4.639 / 85
p0 0.7964 ± 0.02192
pull
Entries 86
Mean −2296
Std Dev 2346
pull1D
Entries 86
Mean 0.0007469
Std Dev 0.2323

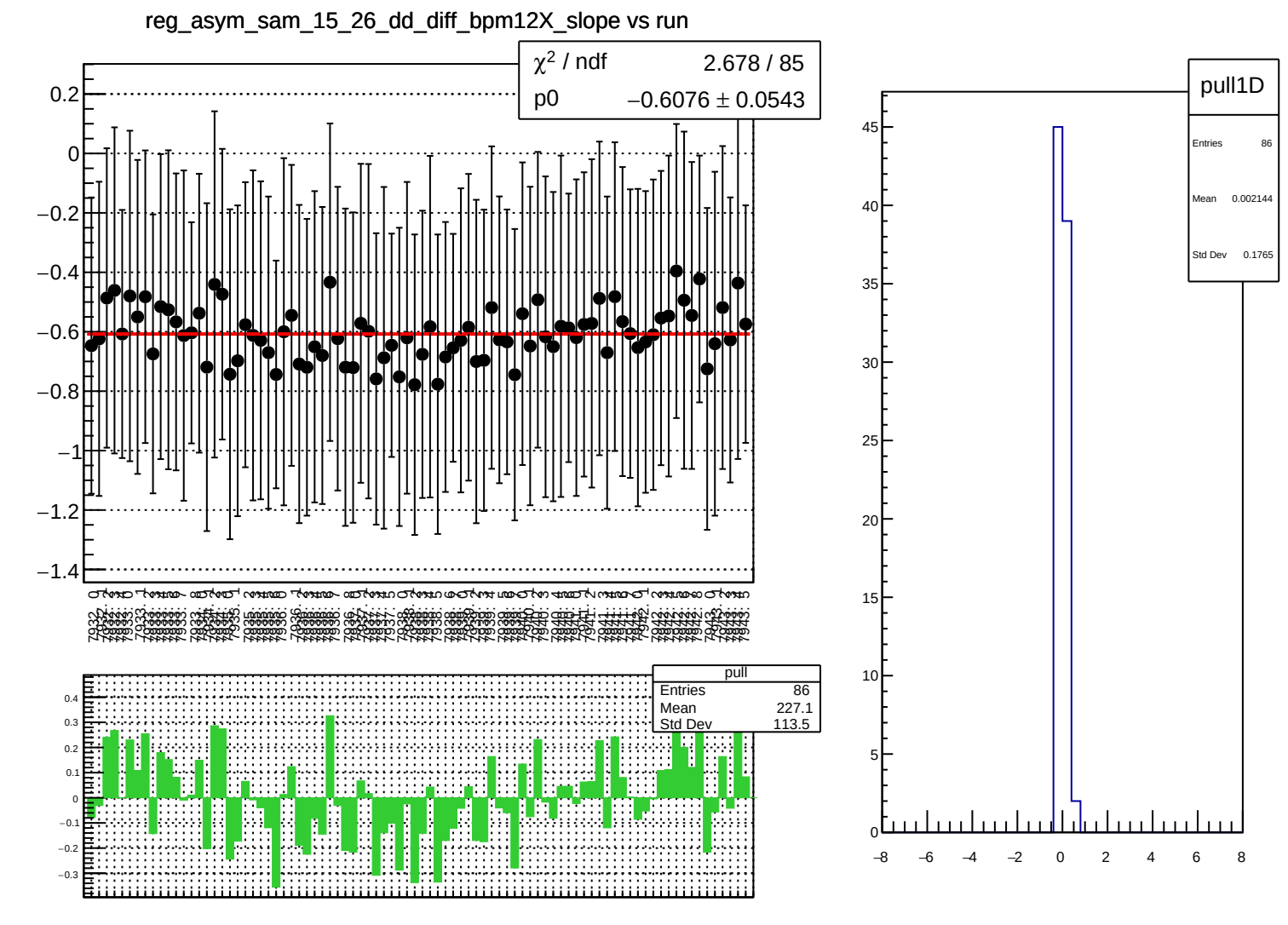

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 3.785 / 85
p0 19.44 ± 1.613
pull
Entries 86
Mean −73.58
Std Dev 110.7

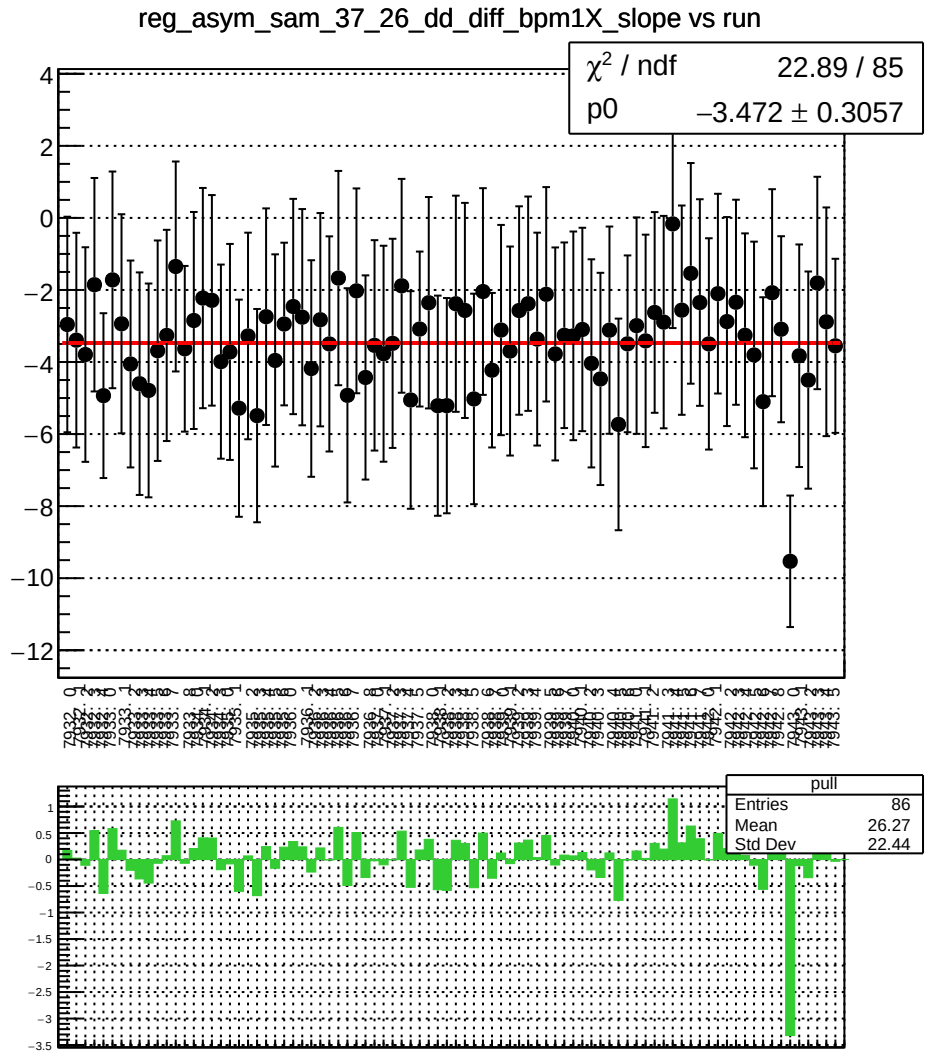

pull1D
Entries 86
Mean 0.009171
Std Dev 0.2096

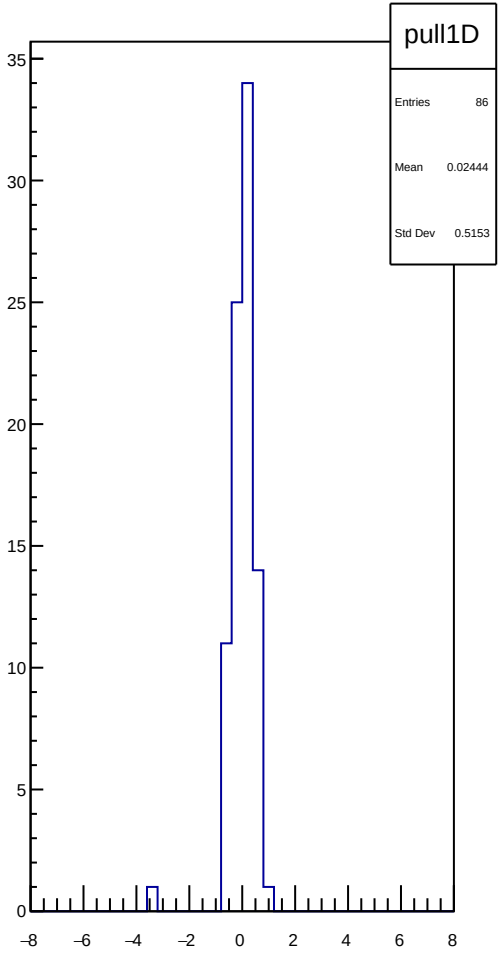

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.711 / 85
p0 30.89 ± 1.679
pull
Entries 86
Mean −1774
Std Dev 1827
pull1D
Entries 86
Mean 0.0009684
Std Dev 0.1776

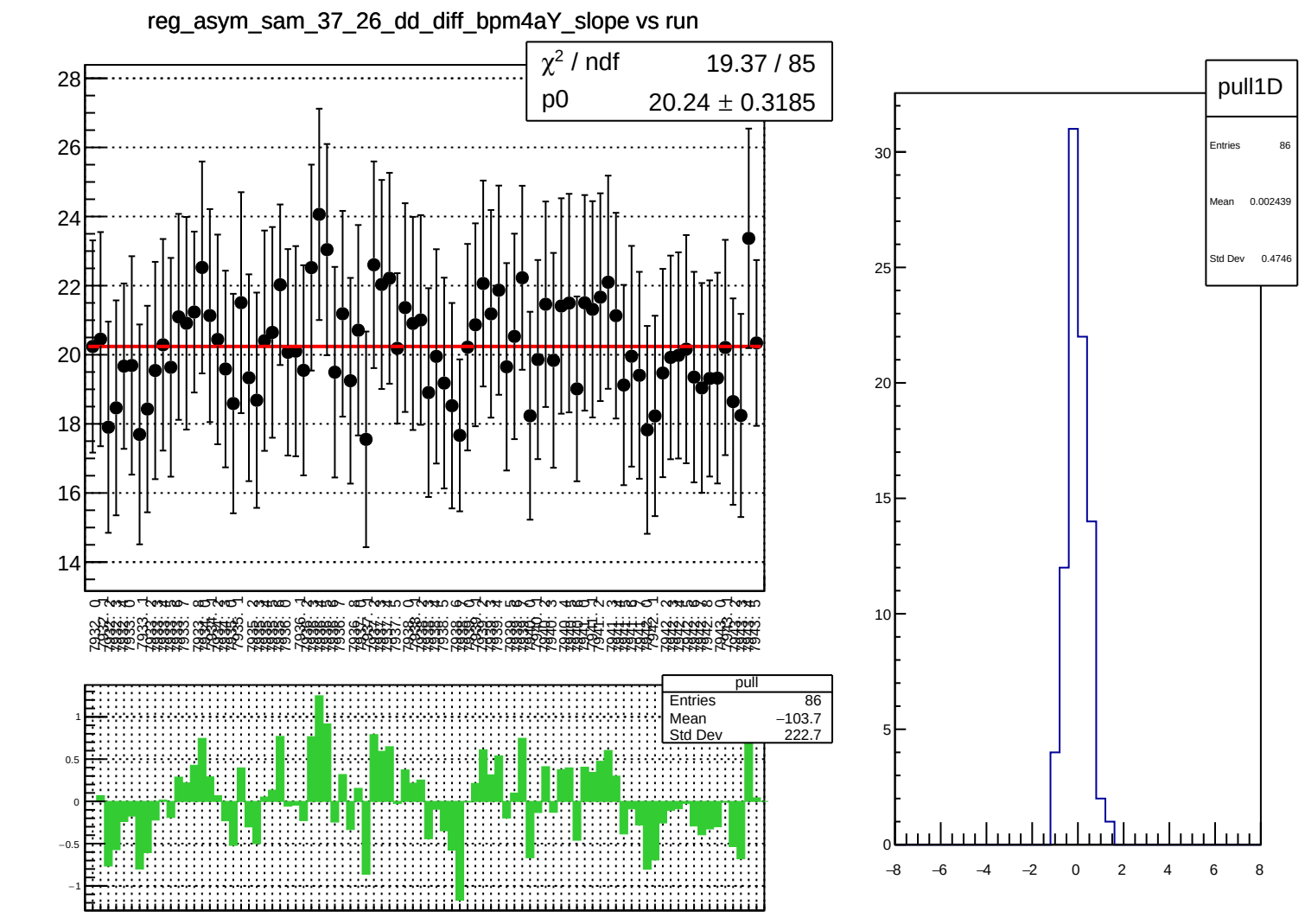

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.439 / 85
p0 17.29 ± 1.451
pull
Entries 86
Mean 23.33
Std Dev 44.03
pull1D
Entries 86
Mean −0.008406
Std Dev 0.1998

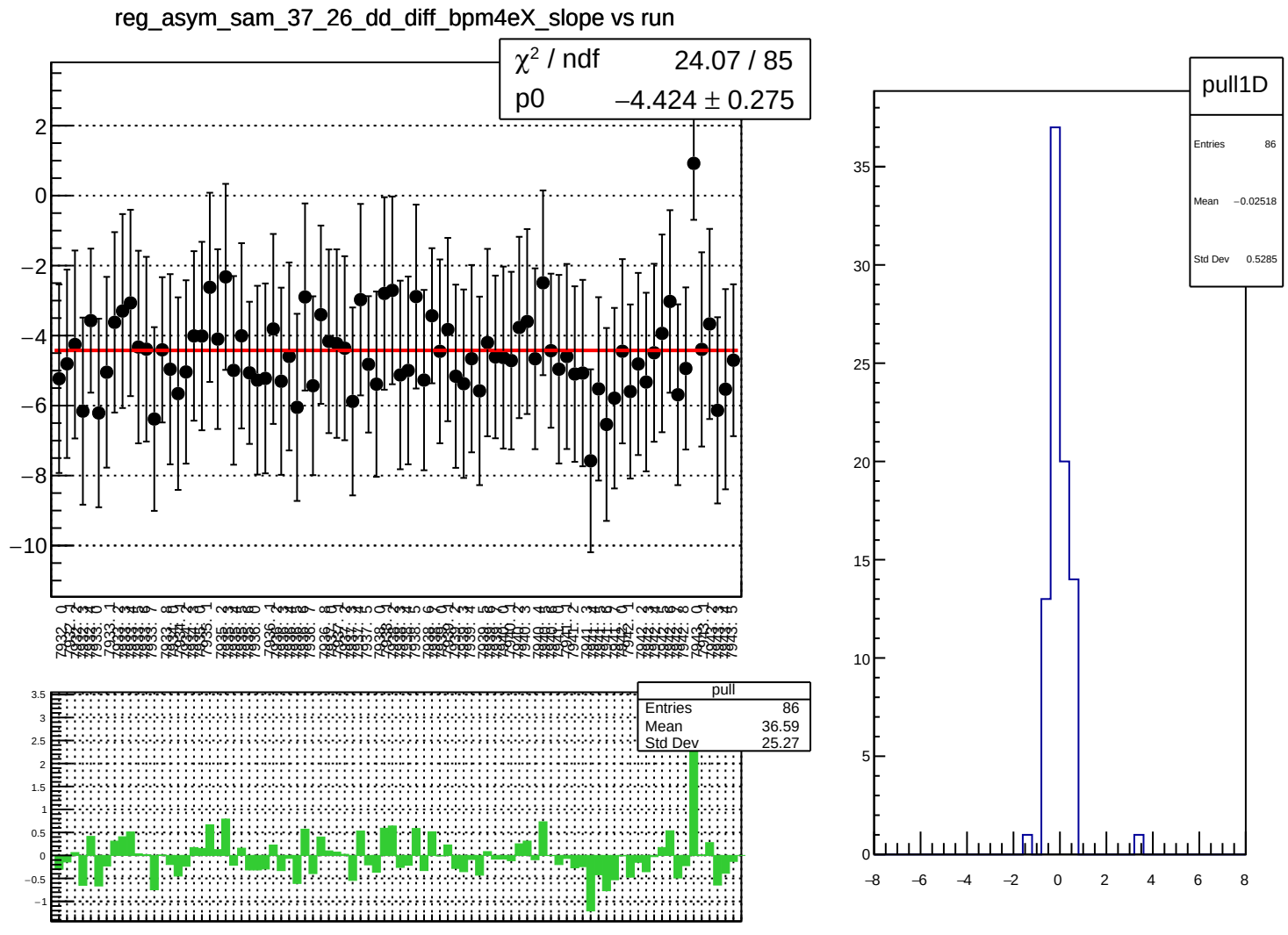

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.419 / 85
p0 9.225 ± 1.935
pull
Entries 86
Mean −1116
Std Dev 1172
pull1D
Entries 86
Mean −0.0009078
Std Dev 0.1677

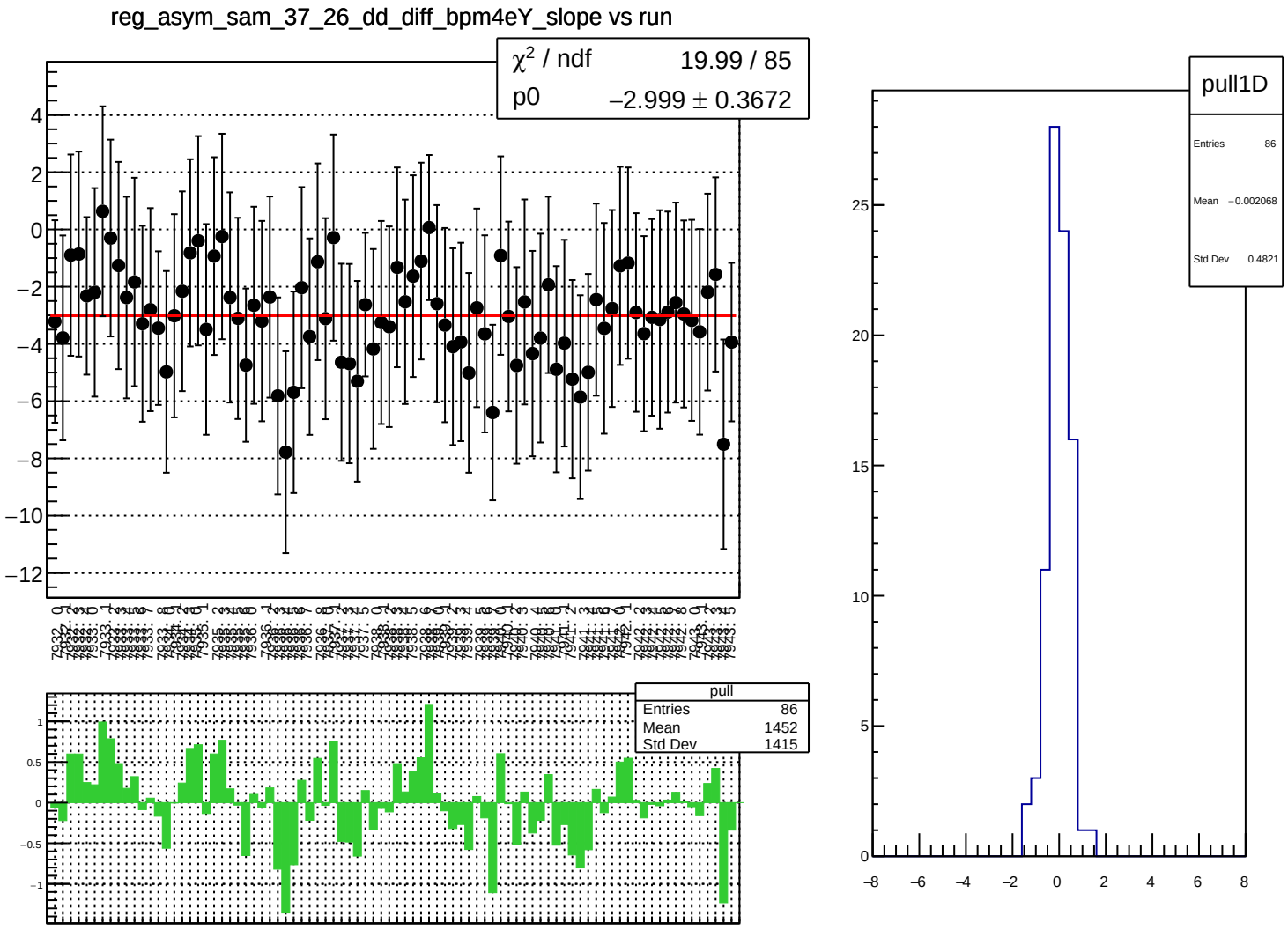

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 2.678 / 85
p0 −0.6076 ± 0.0543
pull
Entries 86
Mean 227.1
Std Dev 113.5
pull1D
Entries 86
Mean 0.002144
Std Dev 0.1765

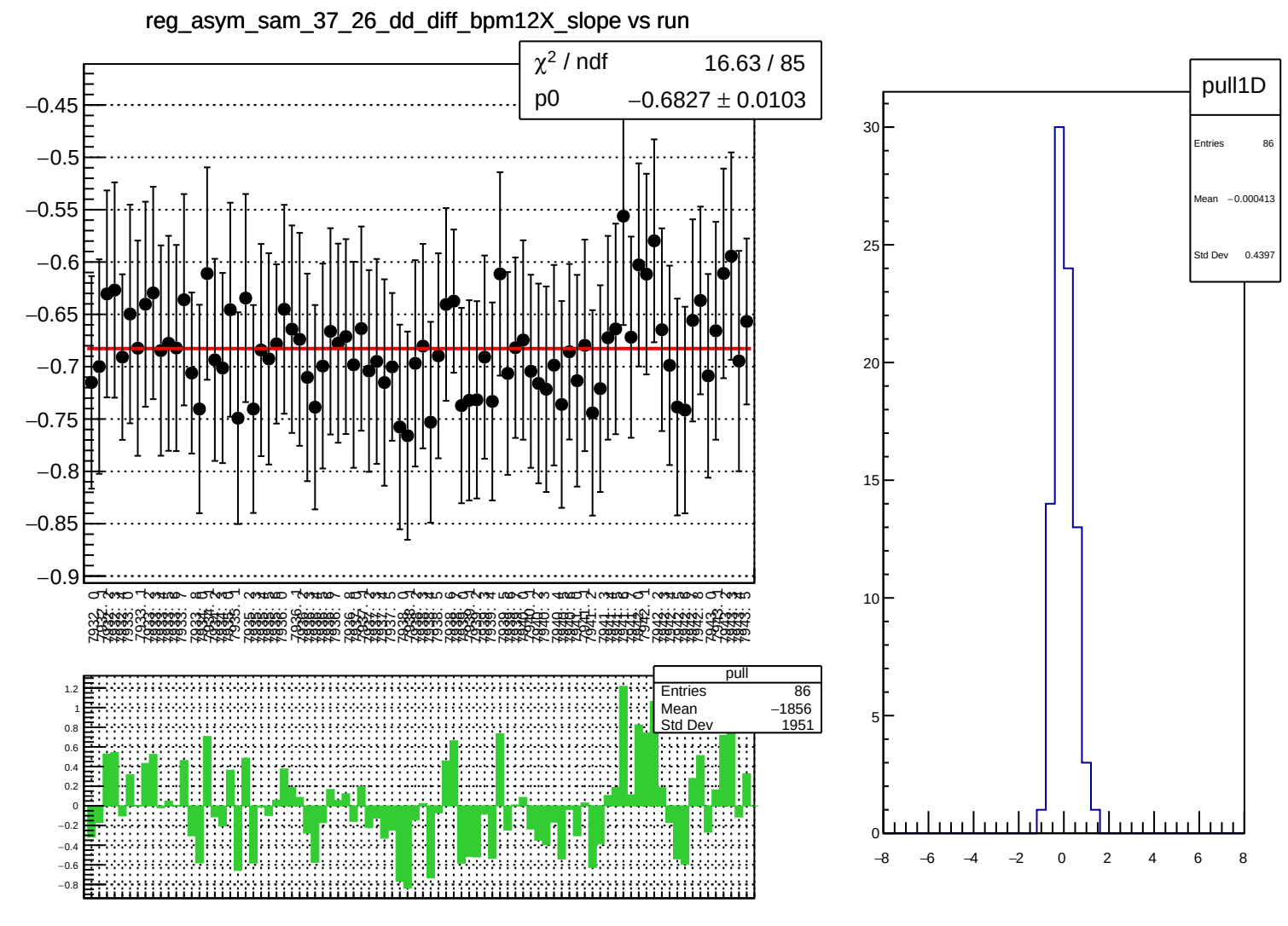

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 22.89 / 85
p0 −3.472 ± 0.3057
pull
Entries 86
Mean 26.27
Std Dev 22.44

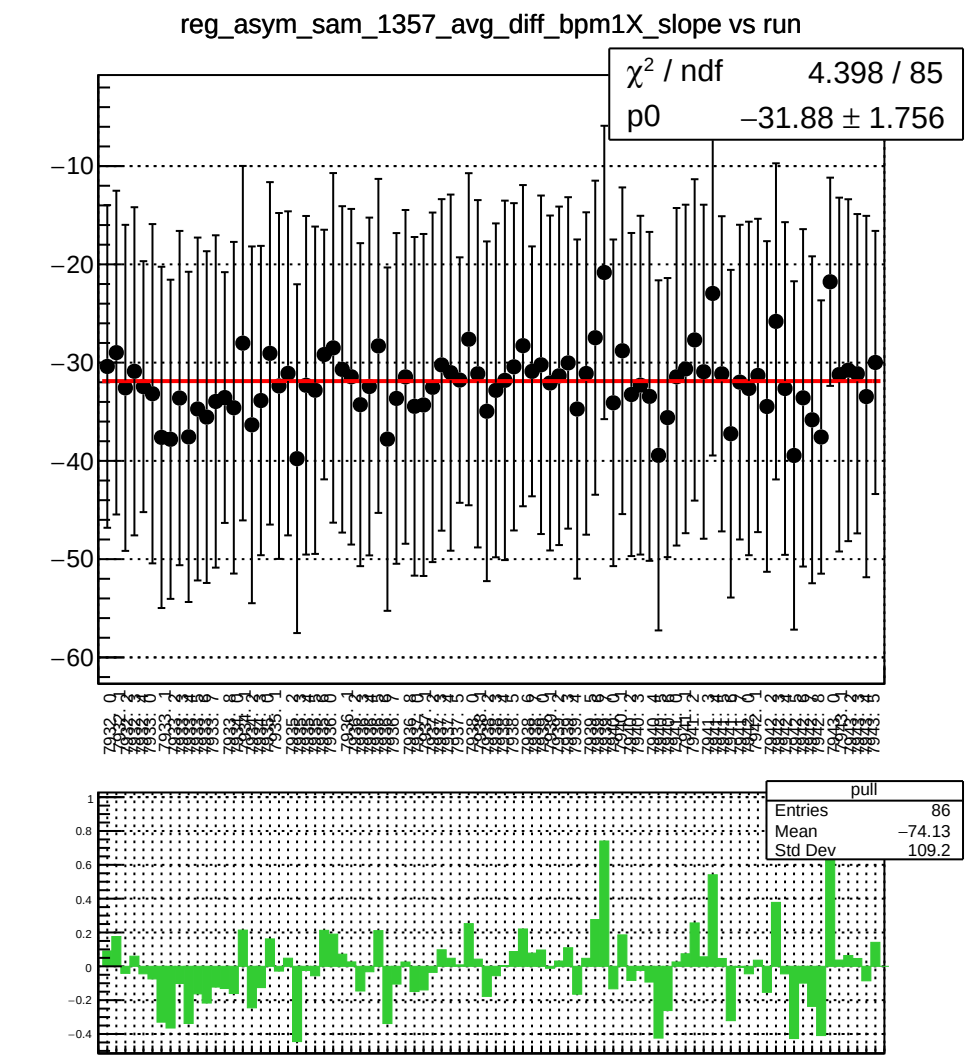

pull1D
Entries 86
Mean 0.02444
Std Dev 0.5153

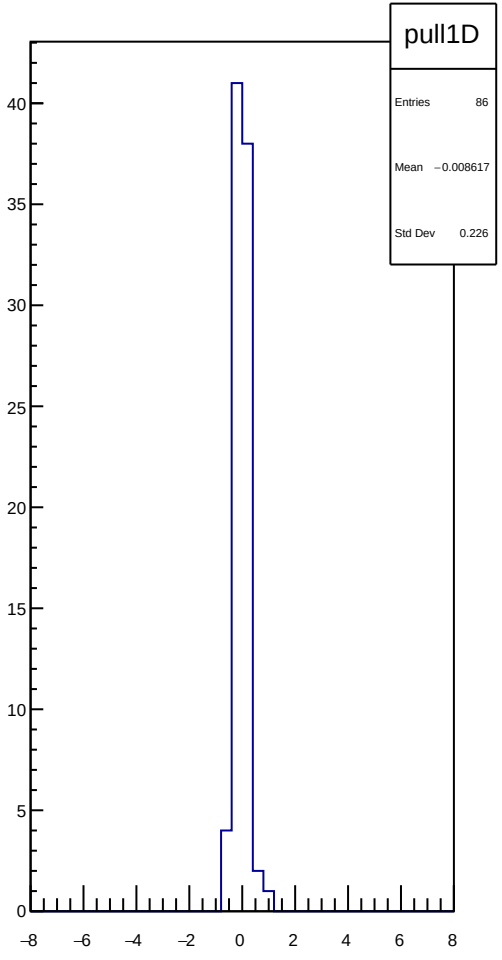

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 19.37 / 85
p0 20.24 ± 0.3185
pull
Entries 86
Mean −103.7
Std Dev 222.7
pull1D
Entries 86
Mean 0.002439
Std Dev 0.4746

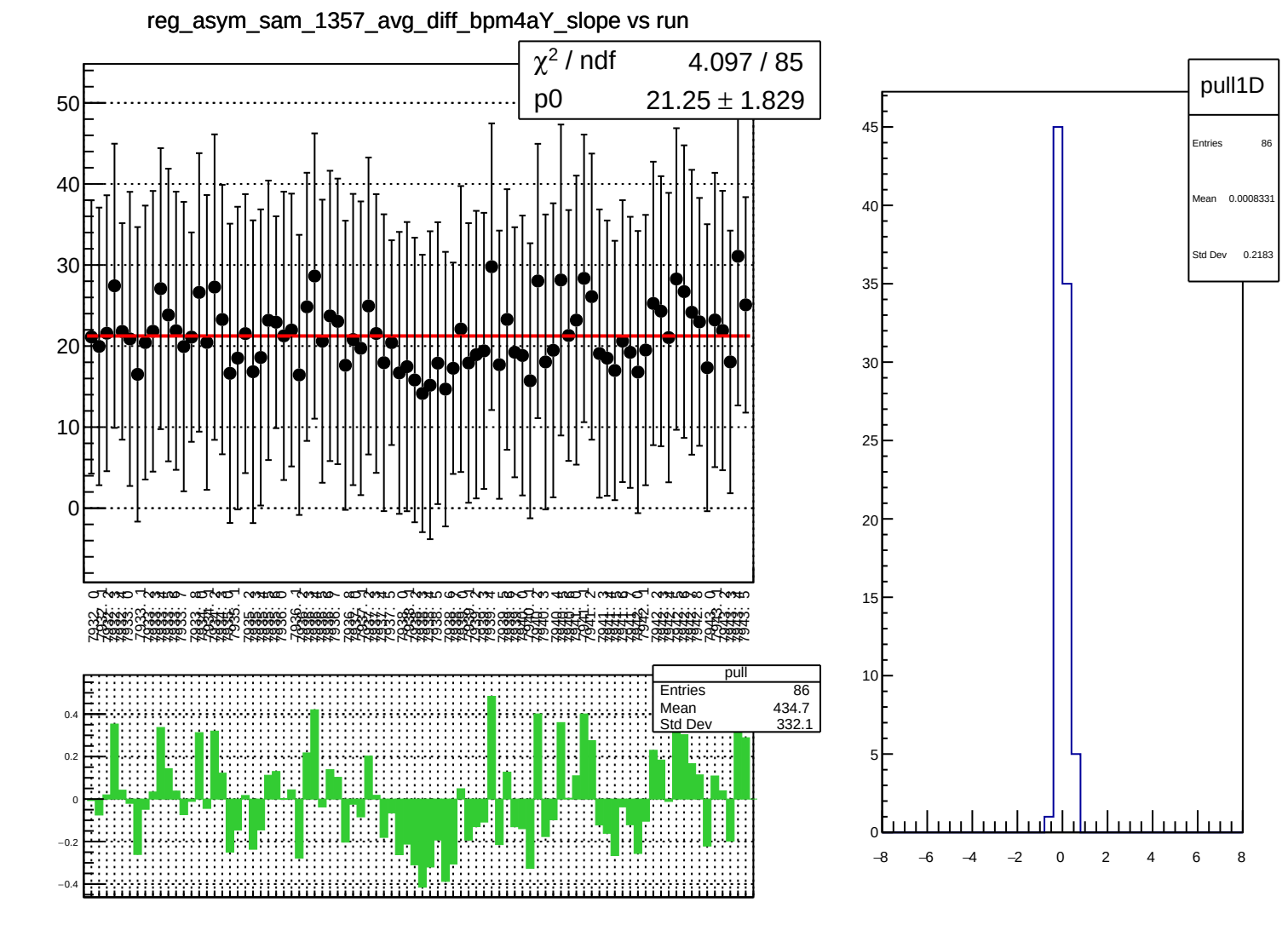

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 24.07 / 85
p0 −4.424 ± 0.275
pull
Entries 86
Mean 36.59
Std Dev 25.27
pull1D
Entries 86
Mean −0.02518
Std Dev 0.5285

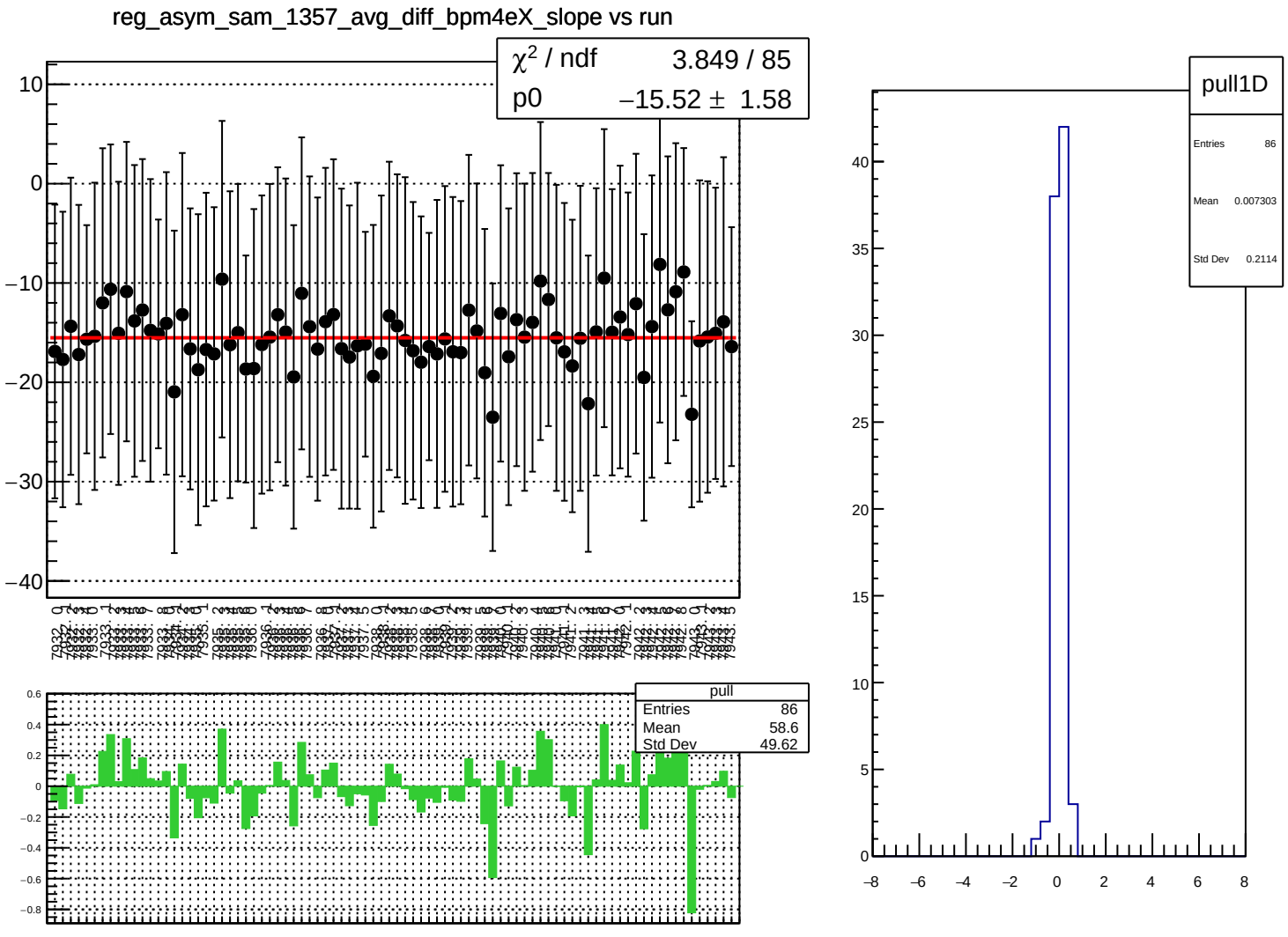

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 19.99 / 85
p0 −2.999 ± 0.3672
pull
Entries 86
Mean 1452
Std Dev 1415
pull1D
Entries 86
Mean −0.002068
Std Dev 0.4821

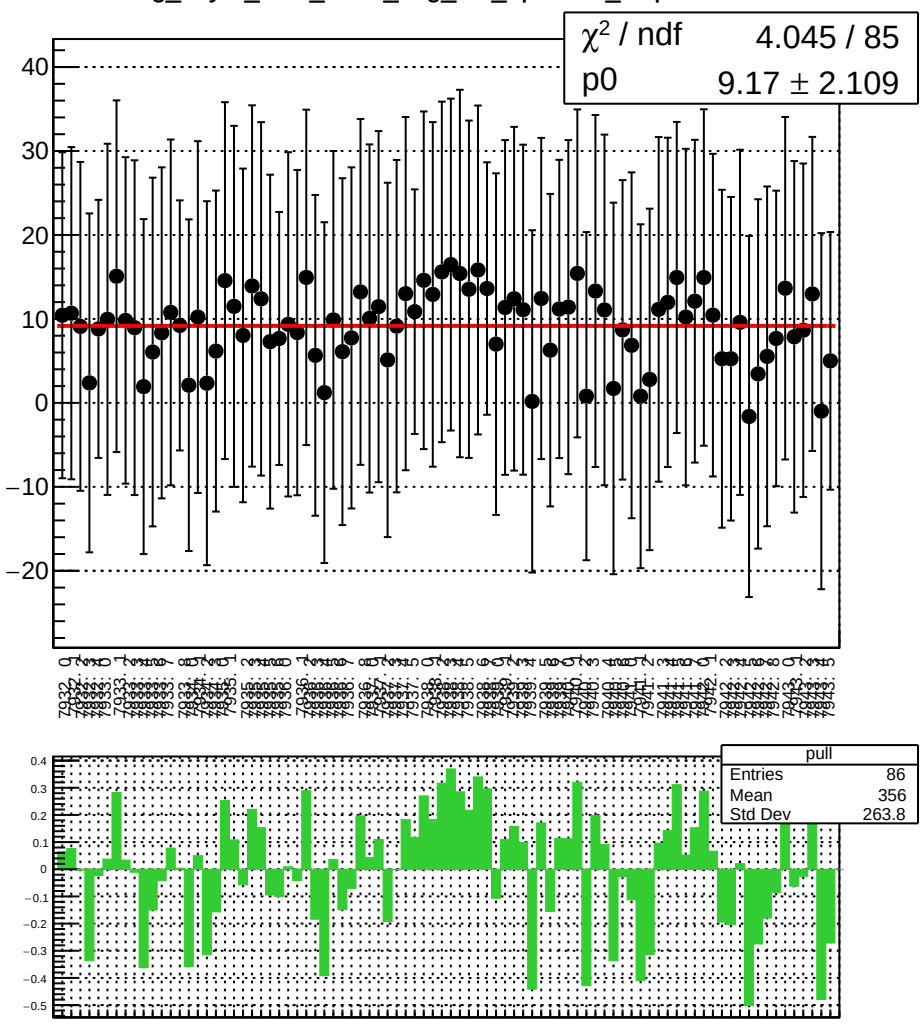

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 16.63 / 85
p0 −0.6827 ± 0.0103
pull
Entries 86
Mean −1856
Std Dev 1951
pull1D
Entries 86
Mean −0.000413
Std Dev 0.4397

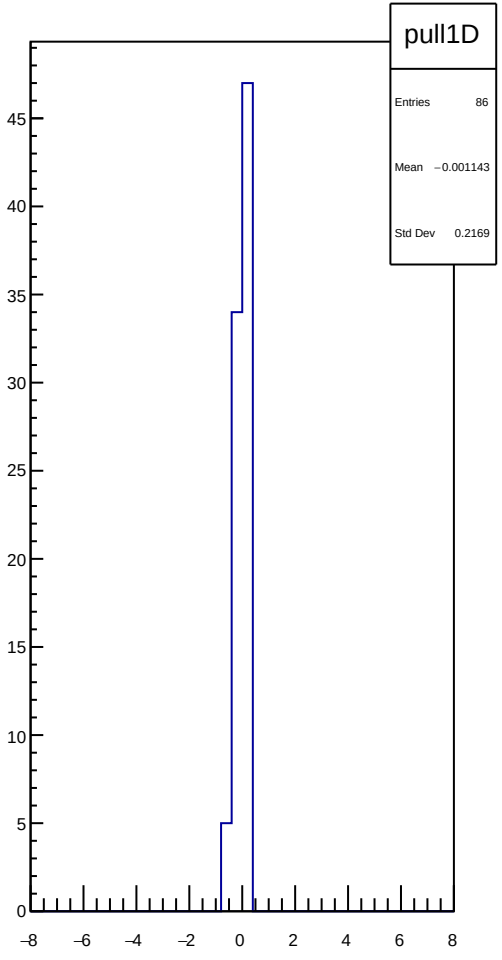

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 4.398 / 85
p0 −31.88 ± 1.756
pull
Entries 86
Mean −74.13
Std Dev 109.2

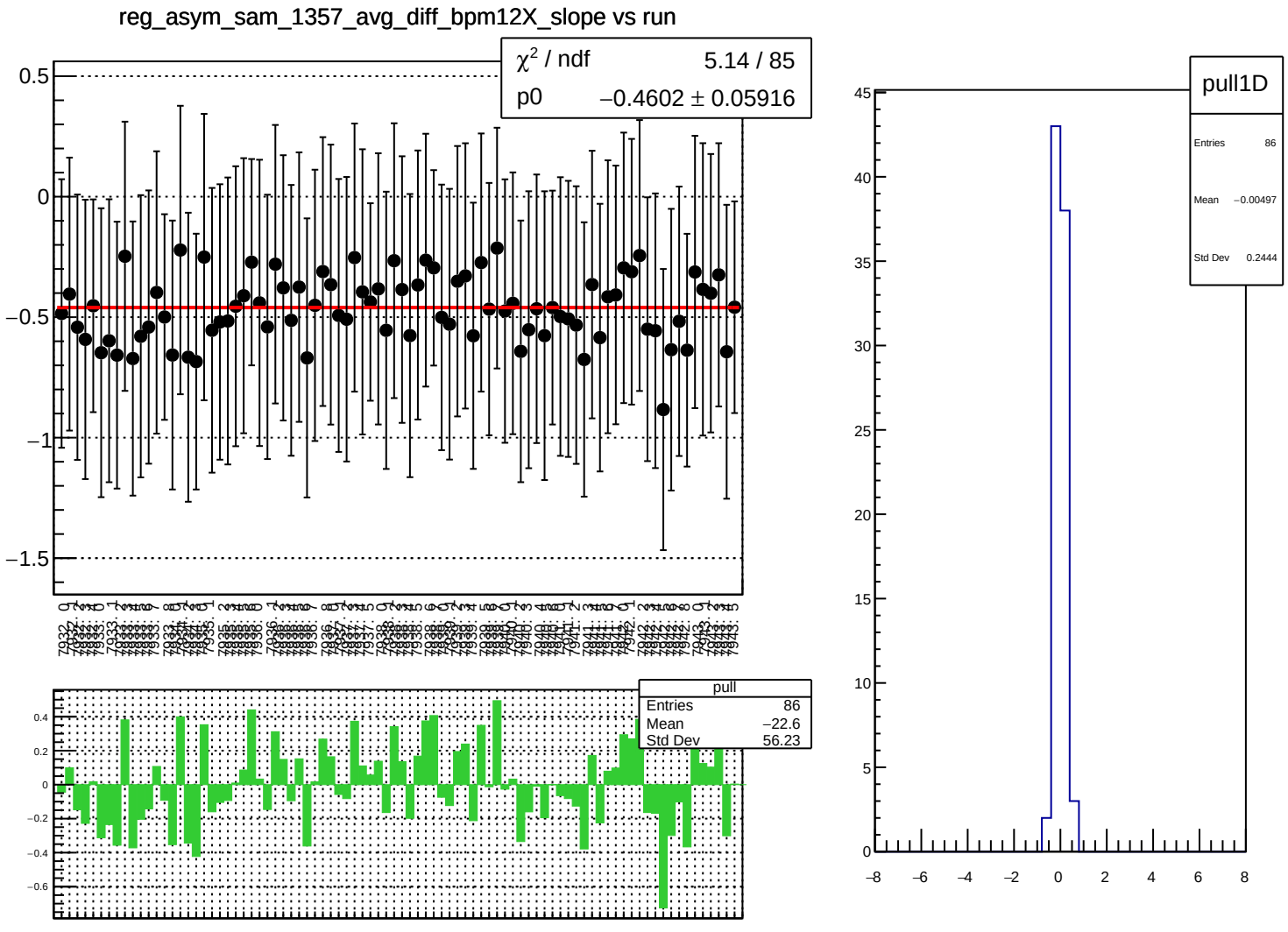

pull1D
Entries 86
Mean −0.008617
Std Dev 0.226

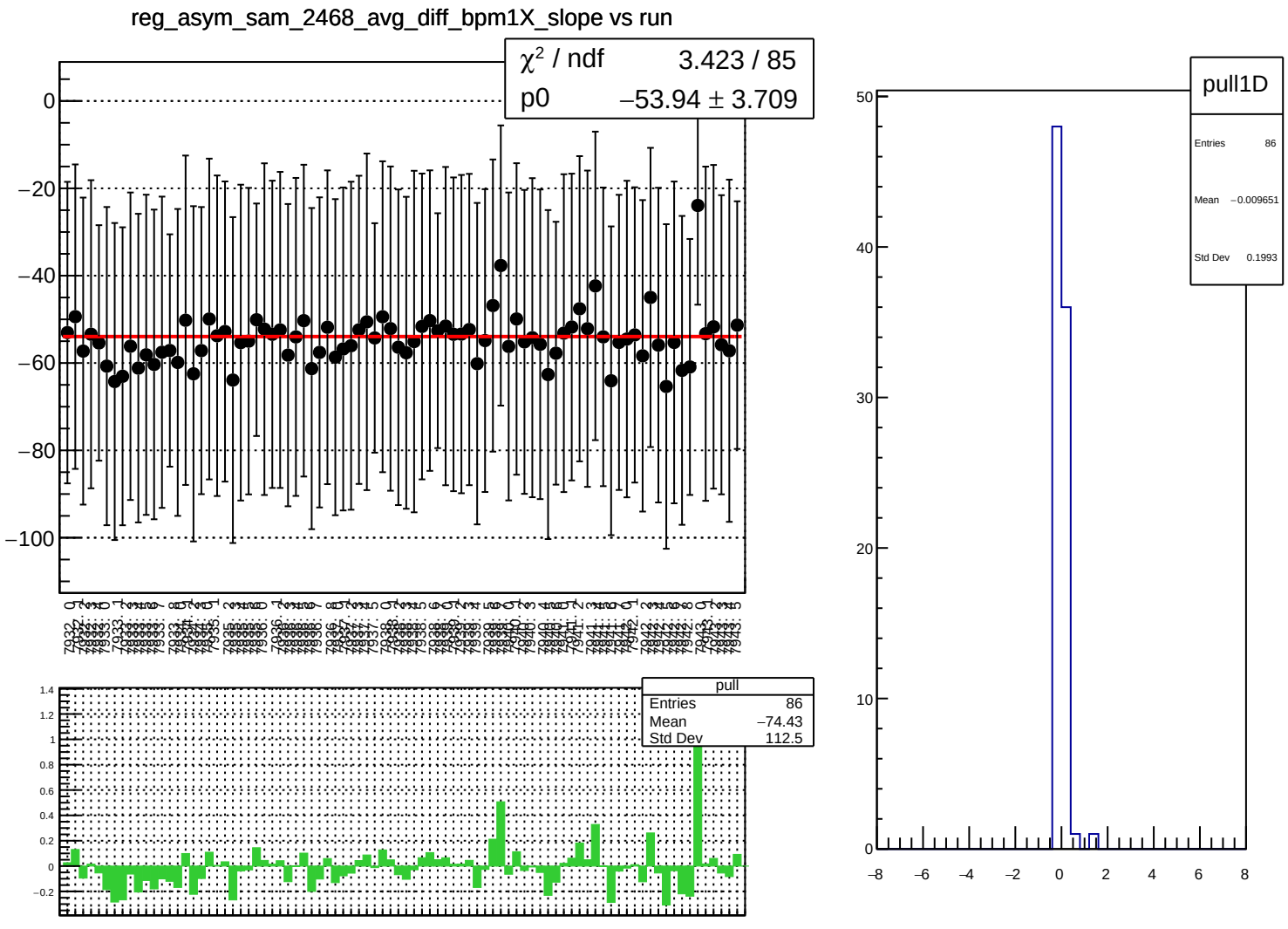

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.097 / 85
p0 21.25 ± 1.829
pull
Entries 86
Mean 434.7
Std Dev 332.1
pull1D
Entries 86
Mean 0.0008331
Std Dev 0.2183

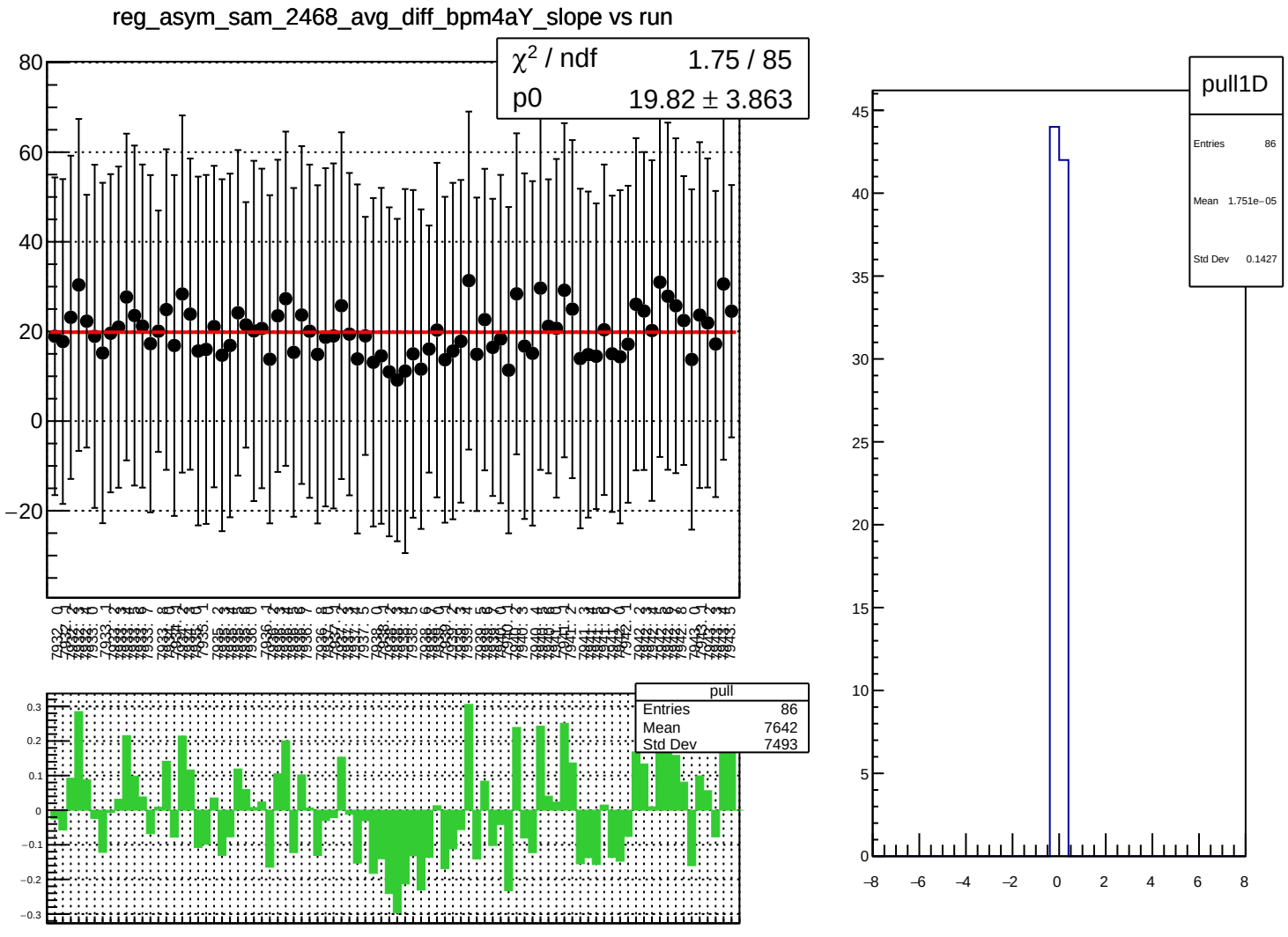

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.849 / 85
p0 −15.52 ± 1.58
pull
Entries 86
Mean 58.6
Std Dev 49.62
pull1D
Entries 86
Mean 0.007303
Std Dev 0.2114

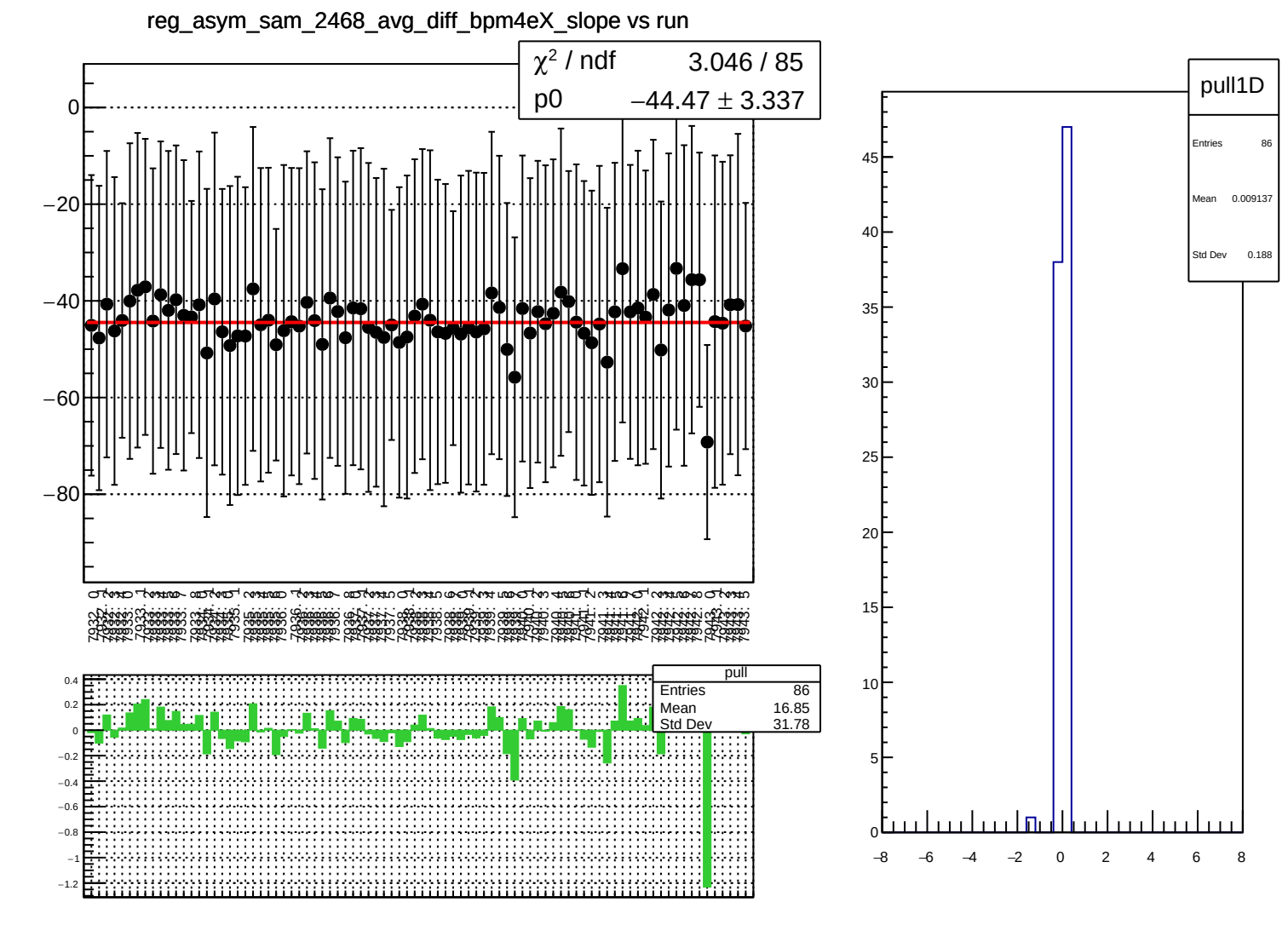

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.045 / 85
p0 9.17 ± 2.109
pull
Entries 86
Mean 356
Std Dev 263.8

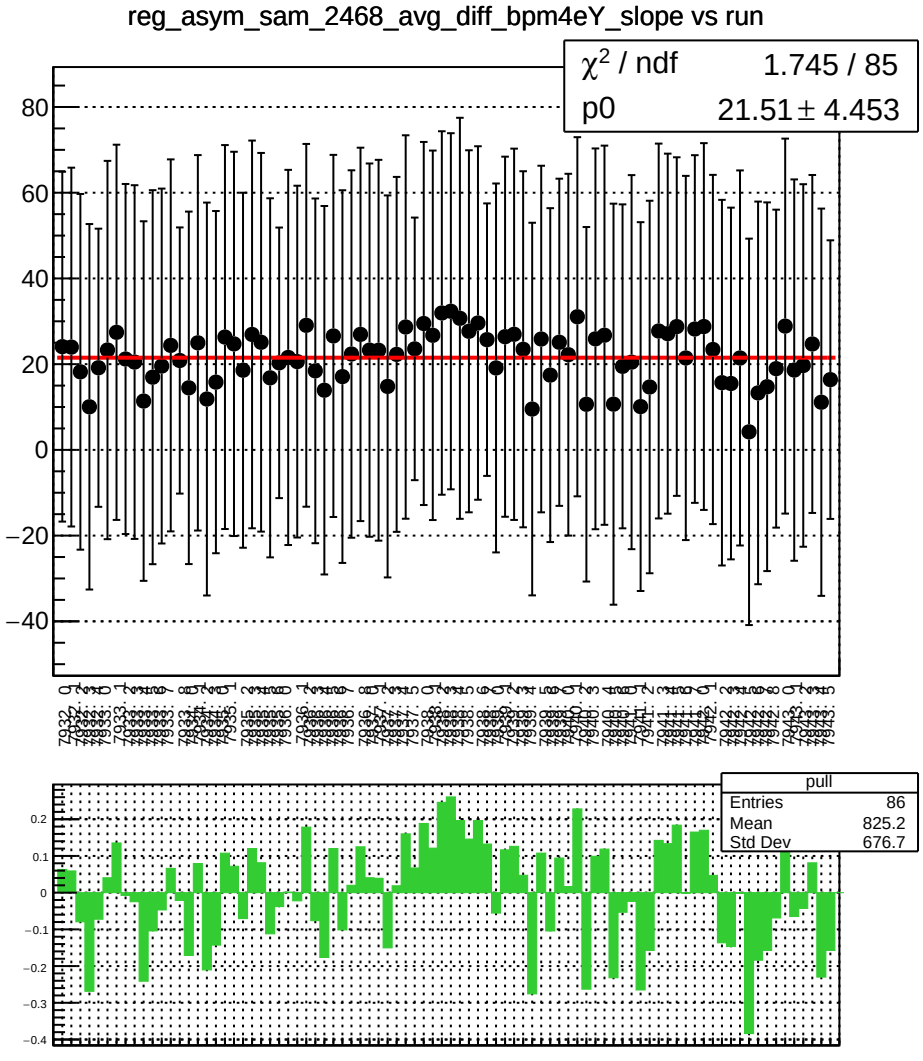

pull1D
Entries 86
Mean −0.001143
Std Dev 0.2169

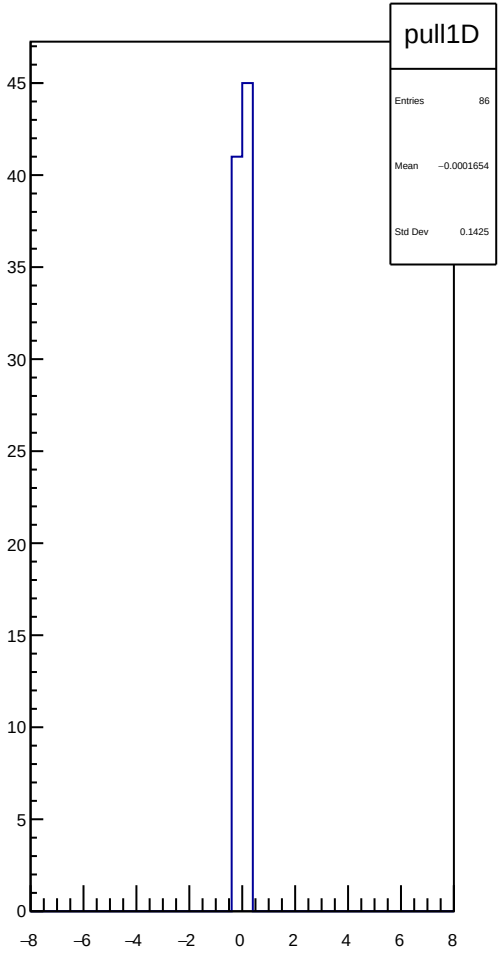

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 5.14 / 85
p0 −0.4602 ± 0.05916
pull
Entries 86
Mean −22.6
Std Dev 56.23
pull1D
Entries 86
Mean −0.00497
Std Dev 0.2444

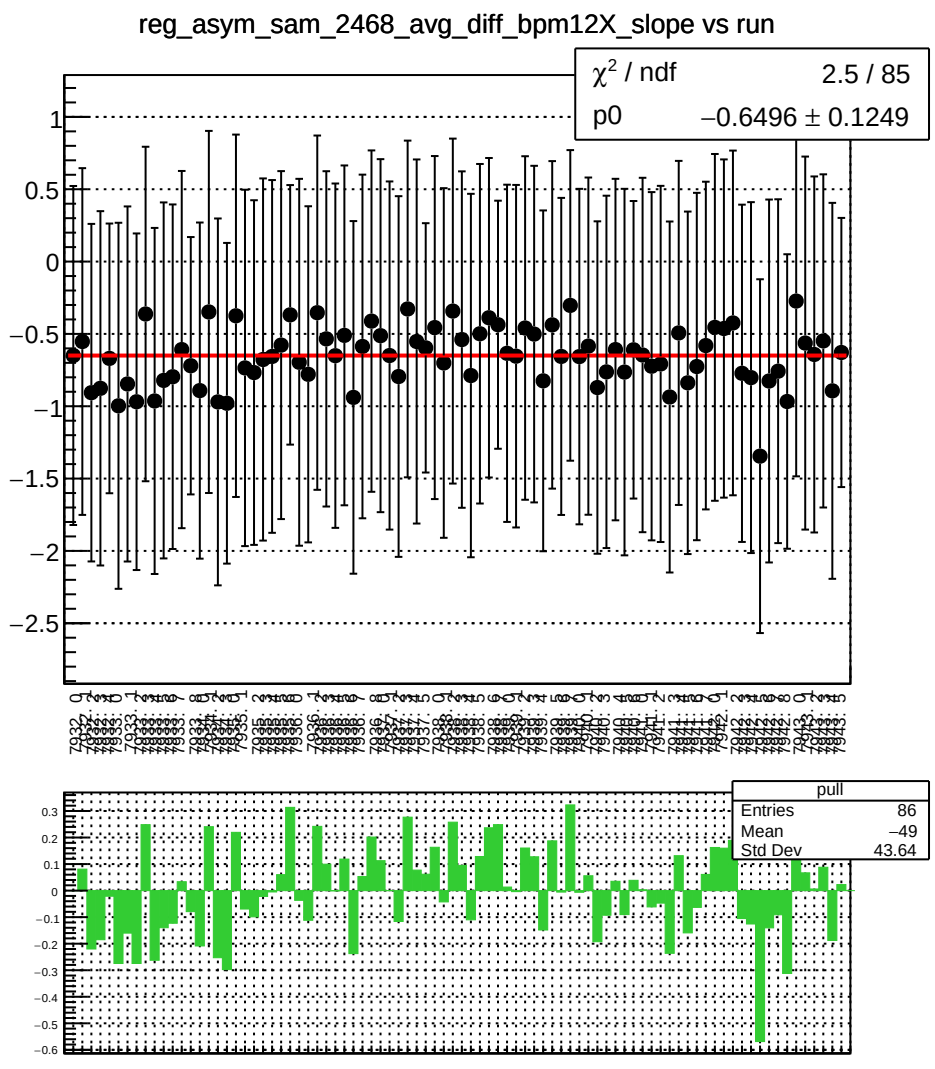

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 3.423 / 85
p0 −53.94 ± 3.709
pull
Entries 86
Mean −74.43
Std Dev 112.5
pull1D
Entries 86
Mean −0.009651
Std Dev 0.1993

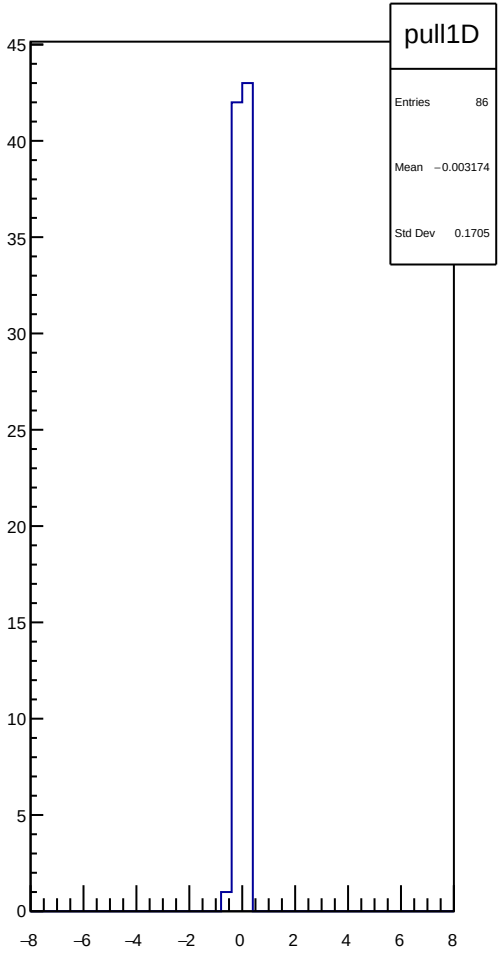

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.75 / 85
p0 19.82 ± 3.863
pull
Entries 86
Mean 7642
Std Dev 7493
pull1D
Entries 86
Mean 1.751e−05
Std Dev 0.1427

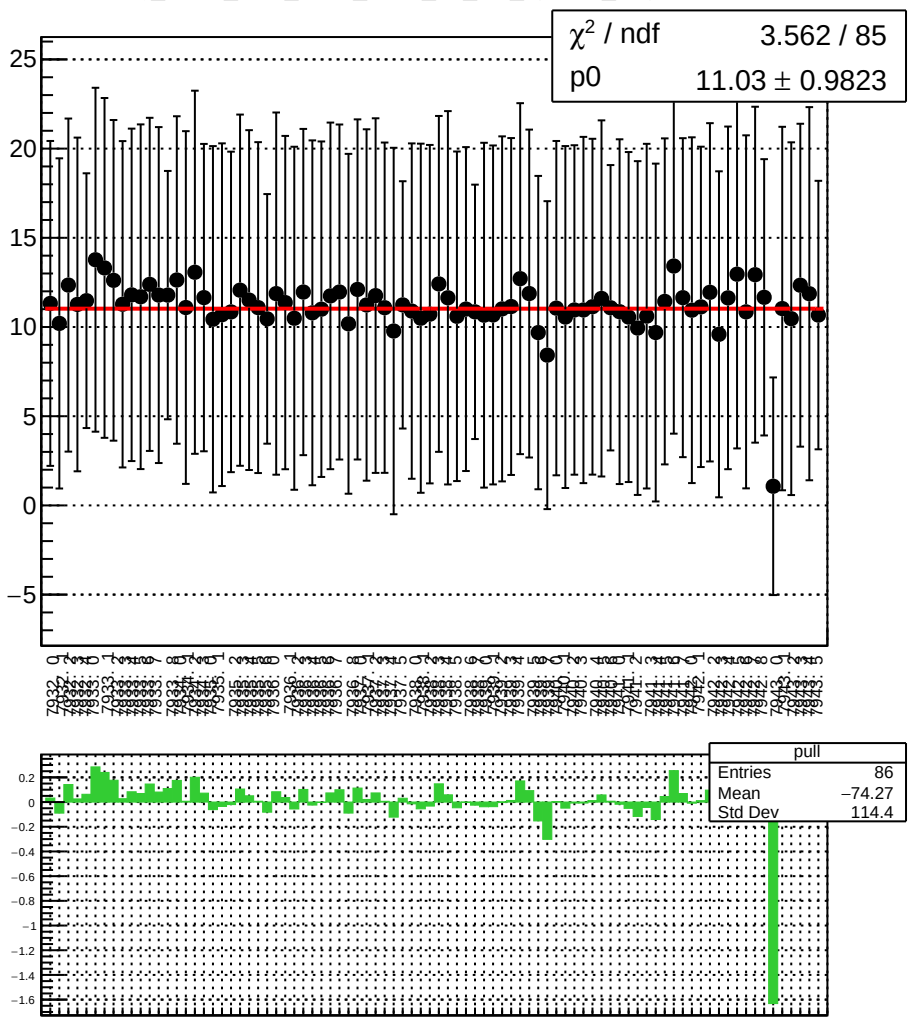

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.046 / 85
p0 −44.47 ± 3.337
pull
Entries 86
Mean 16.85
Std Dev 31.78
pull1D
Entries 86
Mean 0.009137
Std Dev 0.188

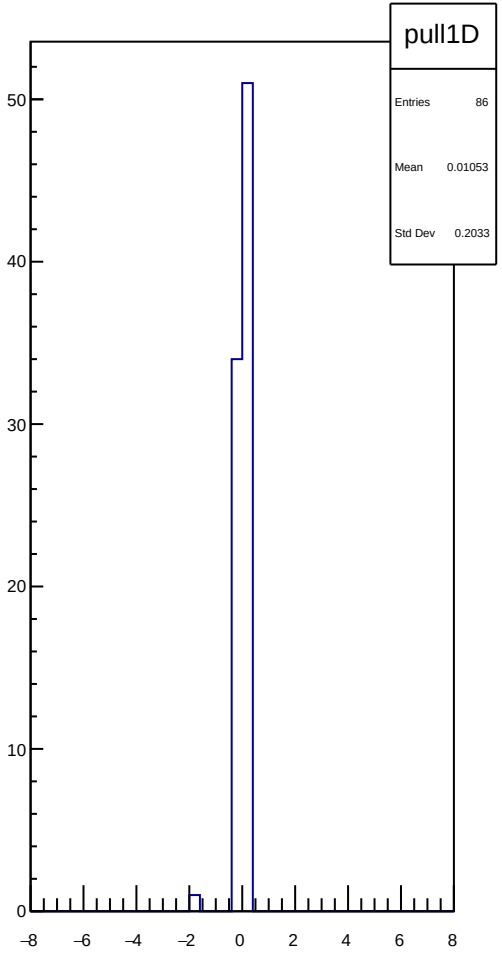

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.745 / 85
p0 21.51 ± 4.453
pull
Entries 86
Mean 825.2
Std Dev 676.7

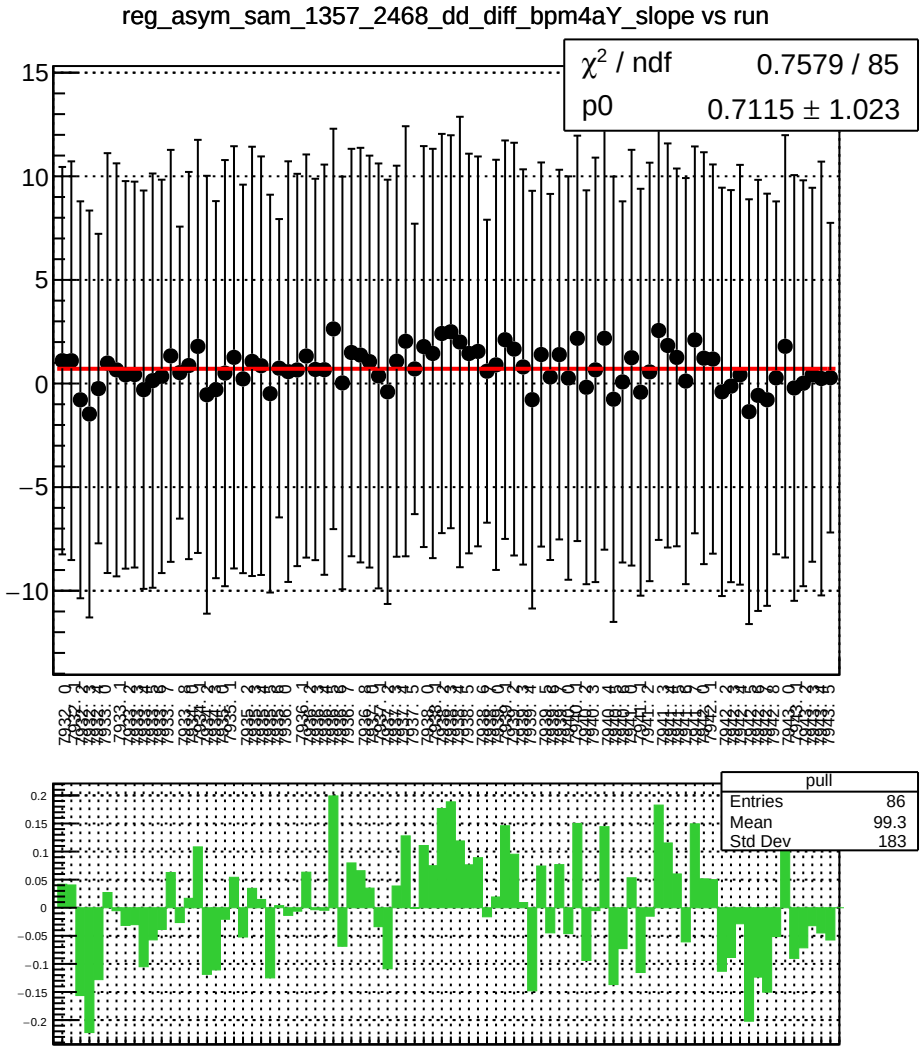

pull1D
Entries 86
Mean −0.0001654
Std Dev 0.1425

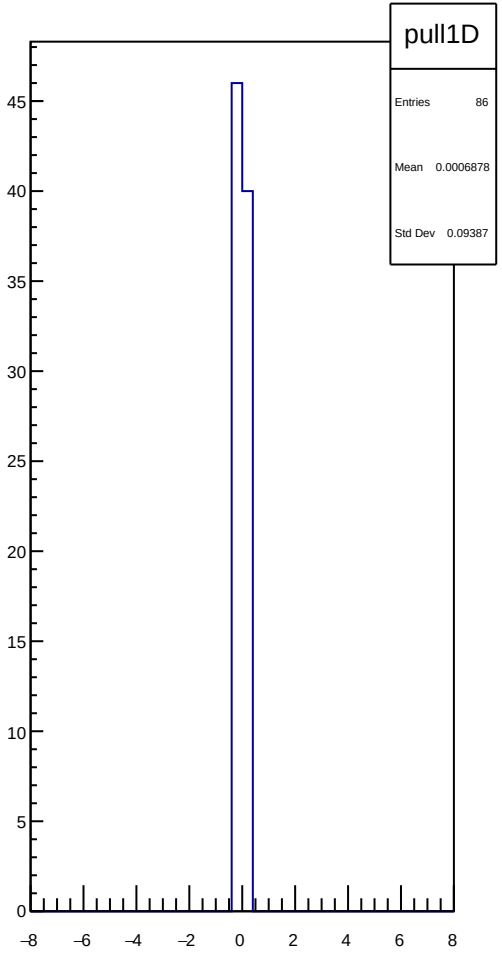

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 2.5 / 85
p0 −0.6496 ± 0.1249
pull
Entries 86
Mean −49
Std Dev 43.64

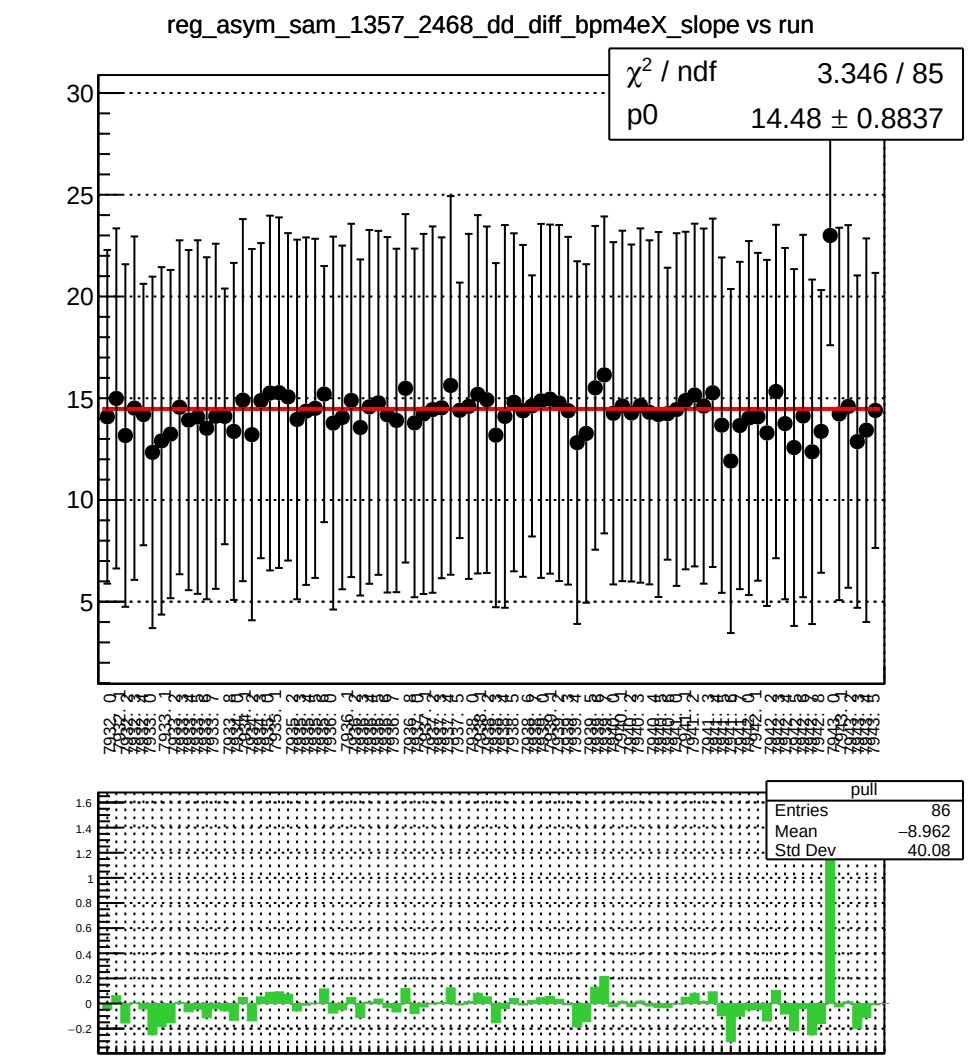

pull1D
Entries 86
Mean −0.003174
Std Dev 0.1705

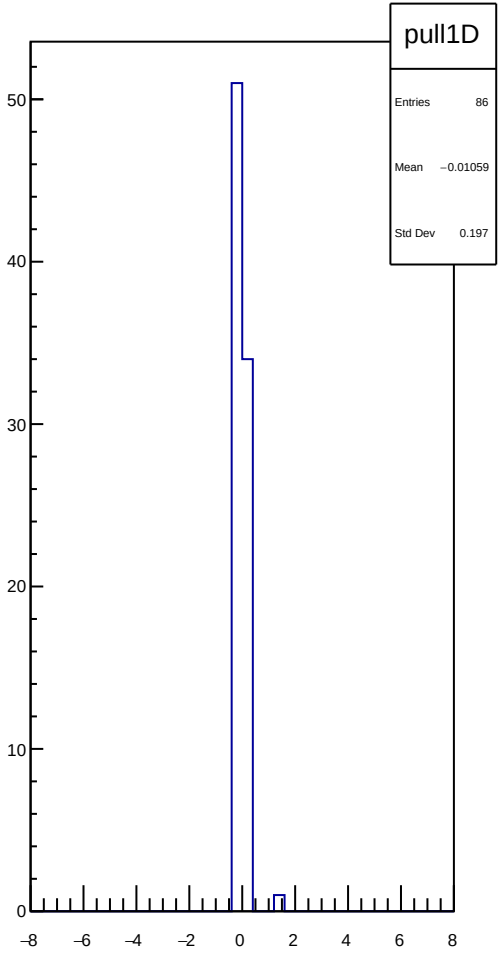

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 3.562 / 85
p0 11.03 ± 0.9823
pull
Entries 86
Mean −74.27
Std Dev 114.4

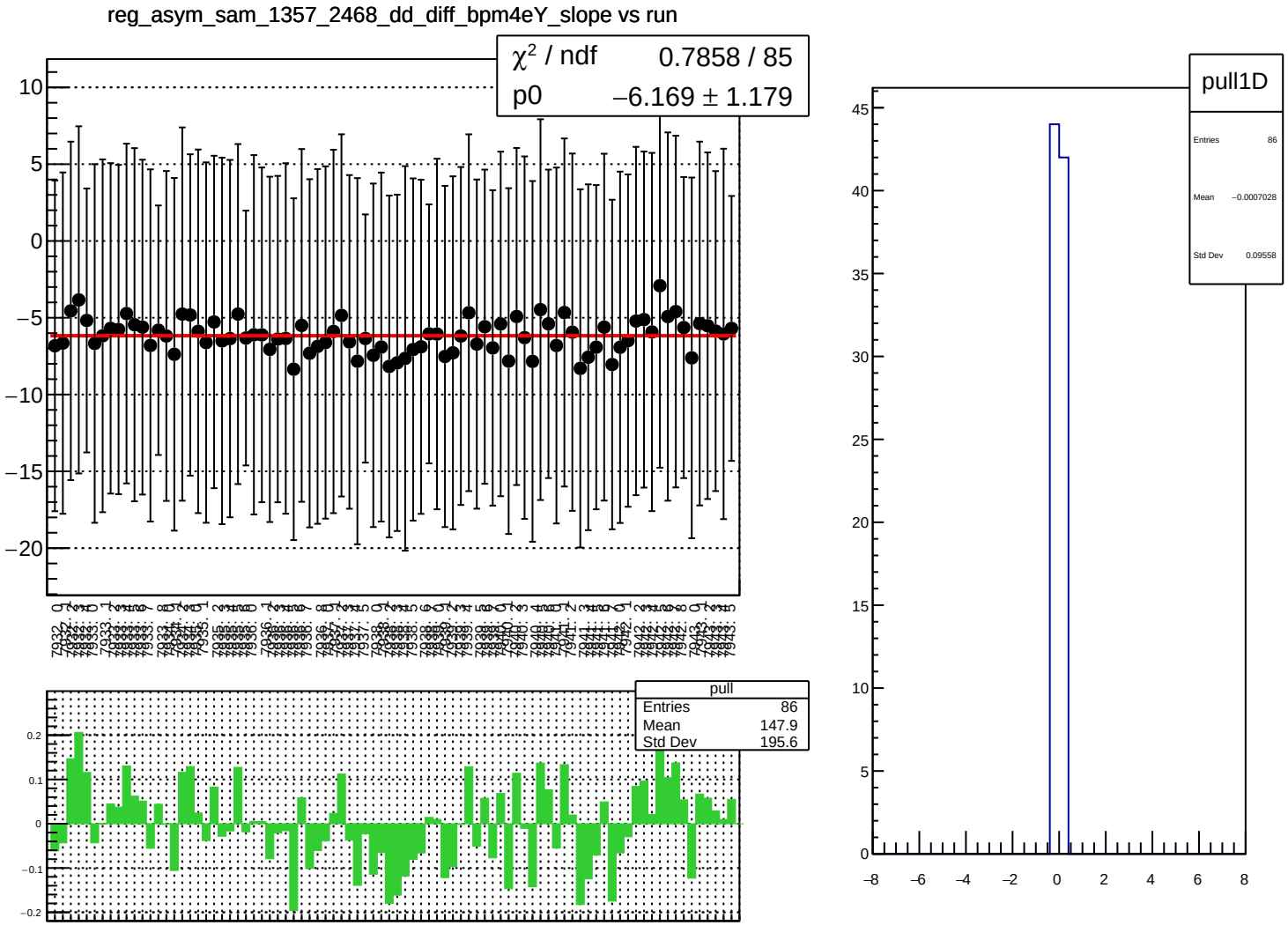

pull1D
Entries 86
Mean 0.01053
Std Dev 0.2033

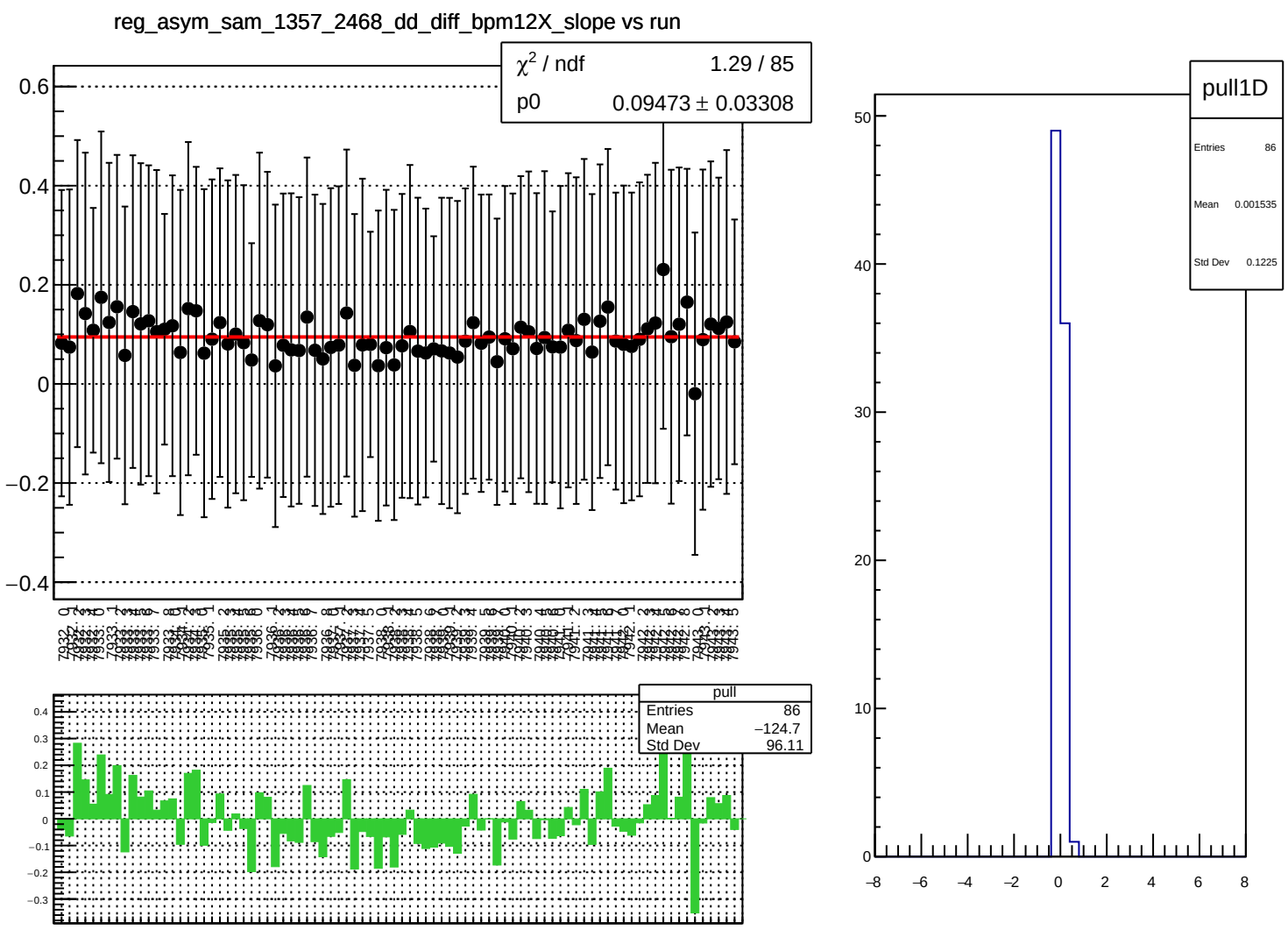

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.7579 / 85
p0 0.7115 ± 1.023
pull
Entries 86
Mean 99.3
Std Dev 183

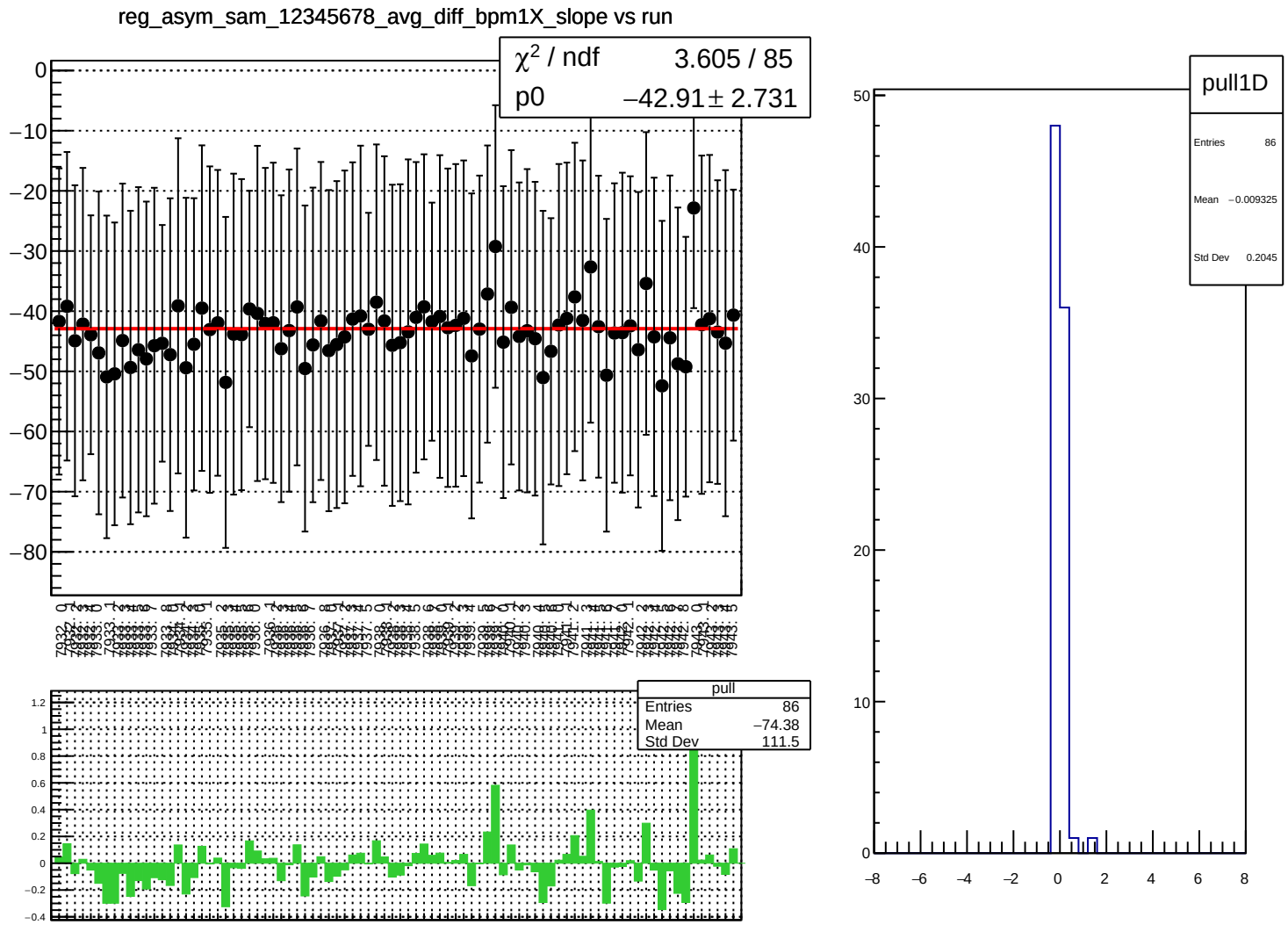

pull1D
Entries 86
Mean 0.0006878
Std Dev 0.09387

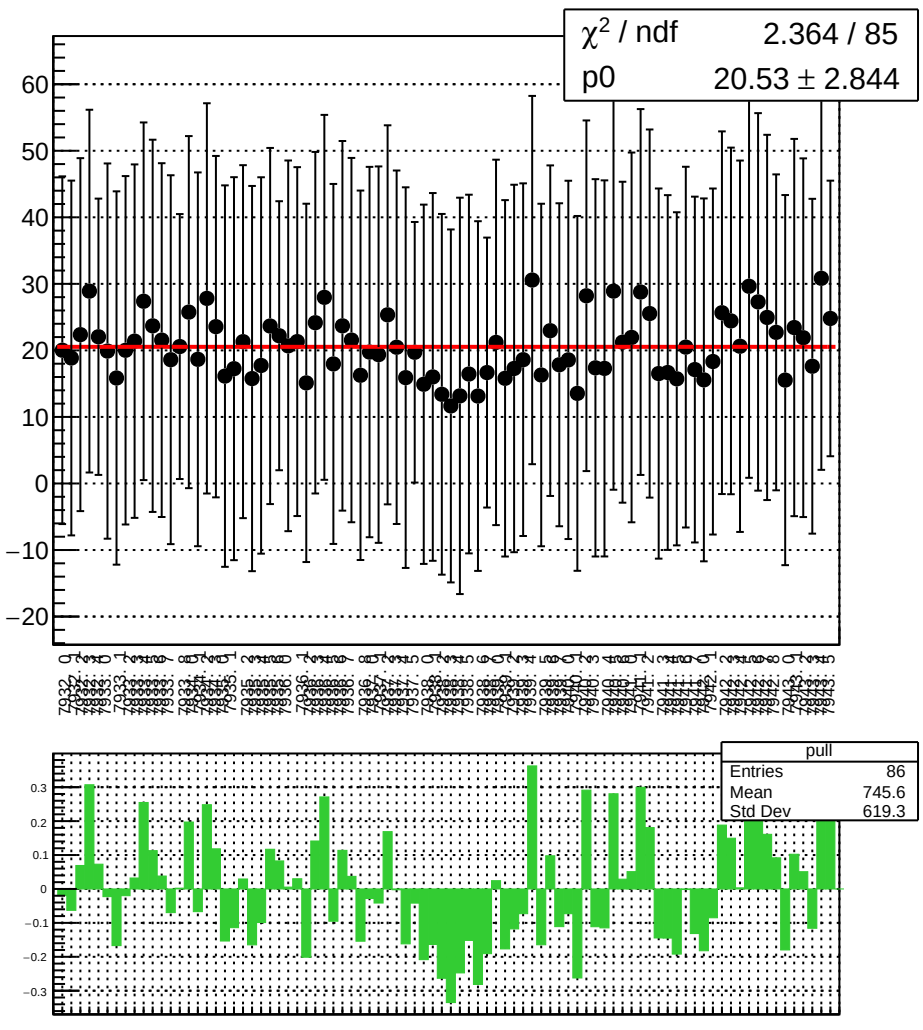

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.346 / 85
p0 14.48 ± 0.8837
pull
Entries 86
Mean −8.962
Std Dev 40.08

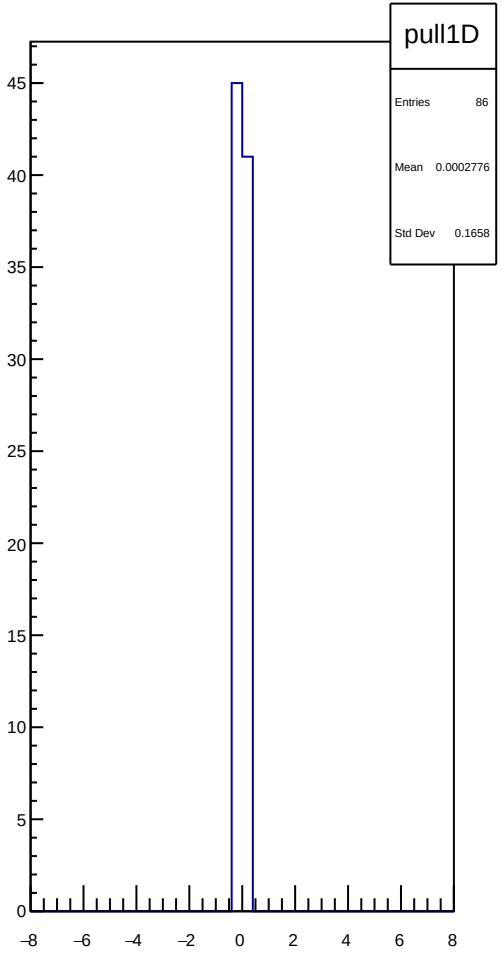

pull1D
Entries 86
Mean −0.01059
Std Dev 0.197

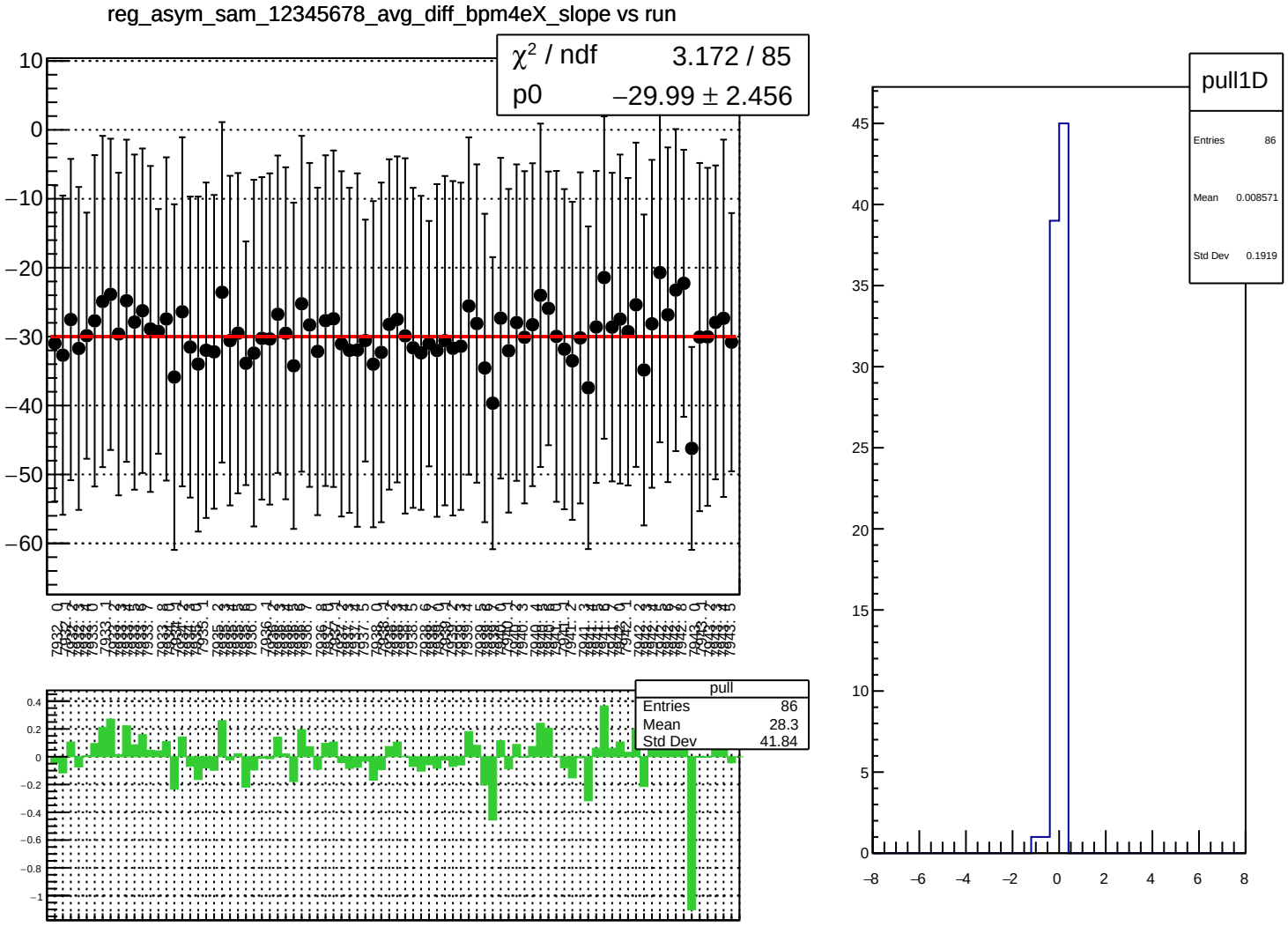

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.7858 / 85
p0 −6.169 ± 1.179
pull
Entries 86
Mean 147.9
Std Dev 195.6
pull1D
Entries 86
Mean −0.0007028
Std Dev 0.09558

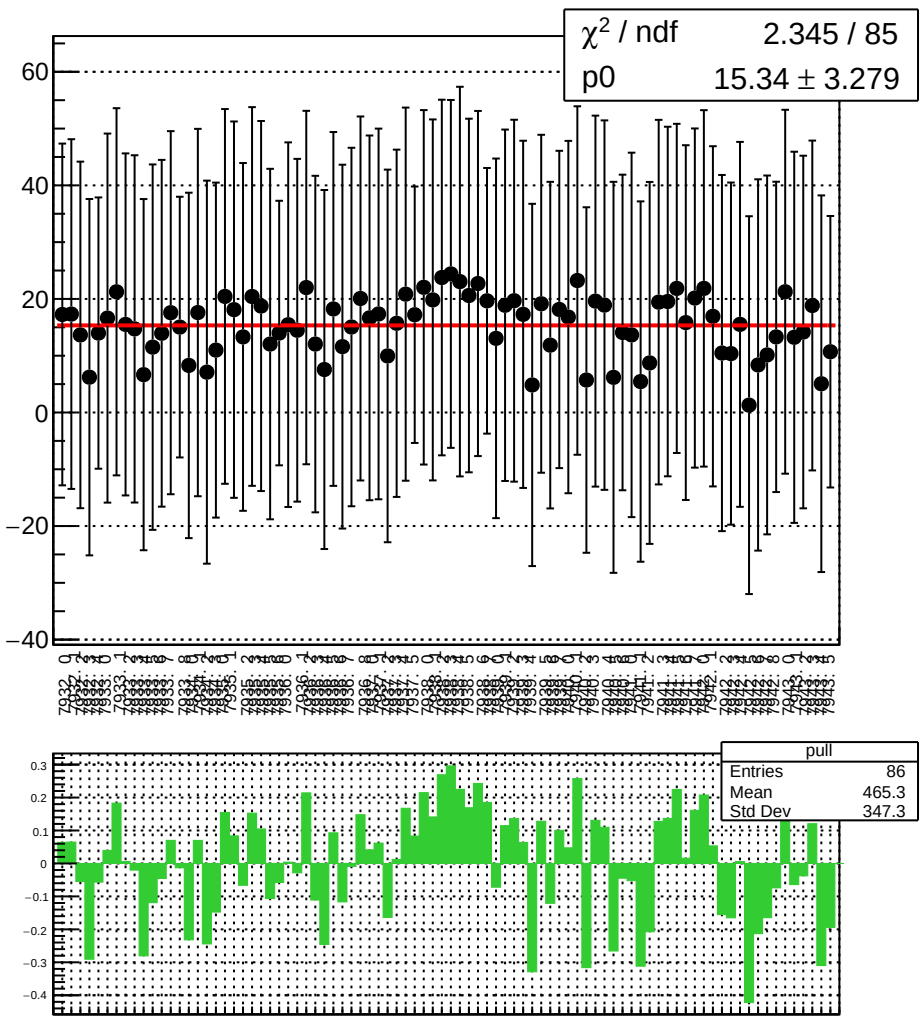

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 1.29 / 85
p0 0.09473 ± 0.03308
pull
Entries 86
Mean −124.7
Std Dev 96.11
pull1D
Entries 86
Mean 0.001535
Std Dev 0.1225

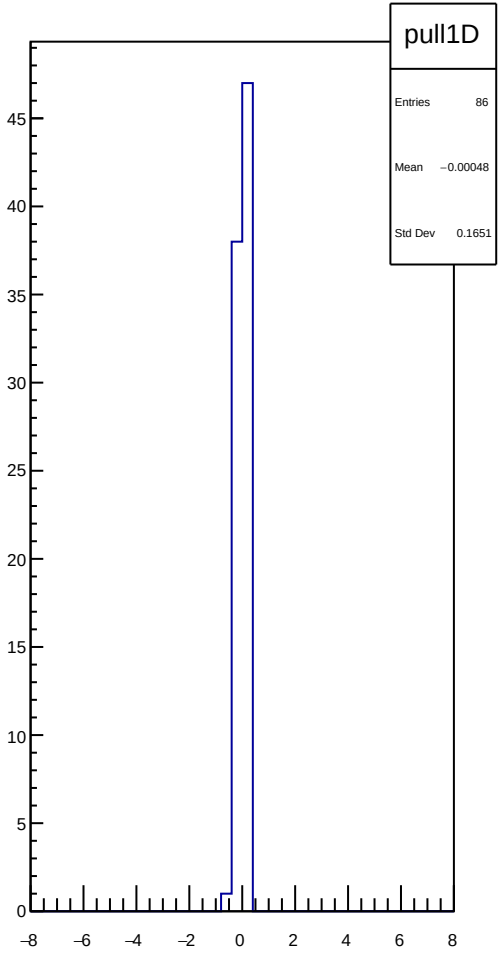

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 3.605 / 85
p0 −42.91 ± 2.731
pull
Entries 86
Mean −74.38
Std Dev 111.5
pull1D
Entries 86
Mean −0.009325
Std Dev 0.2045

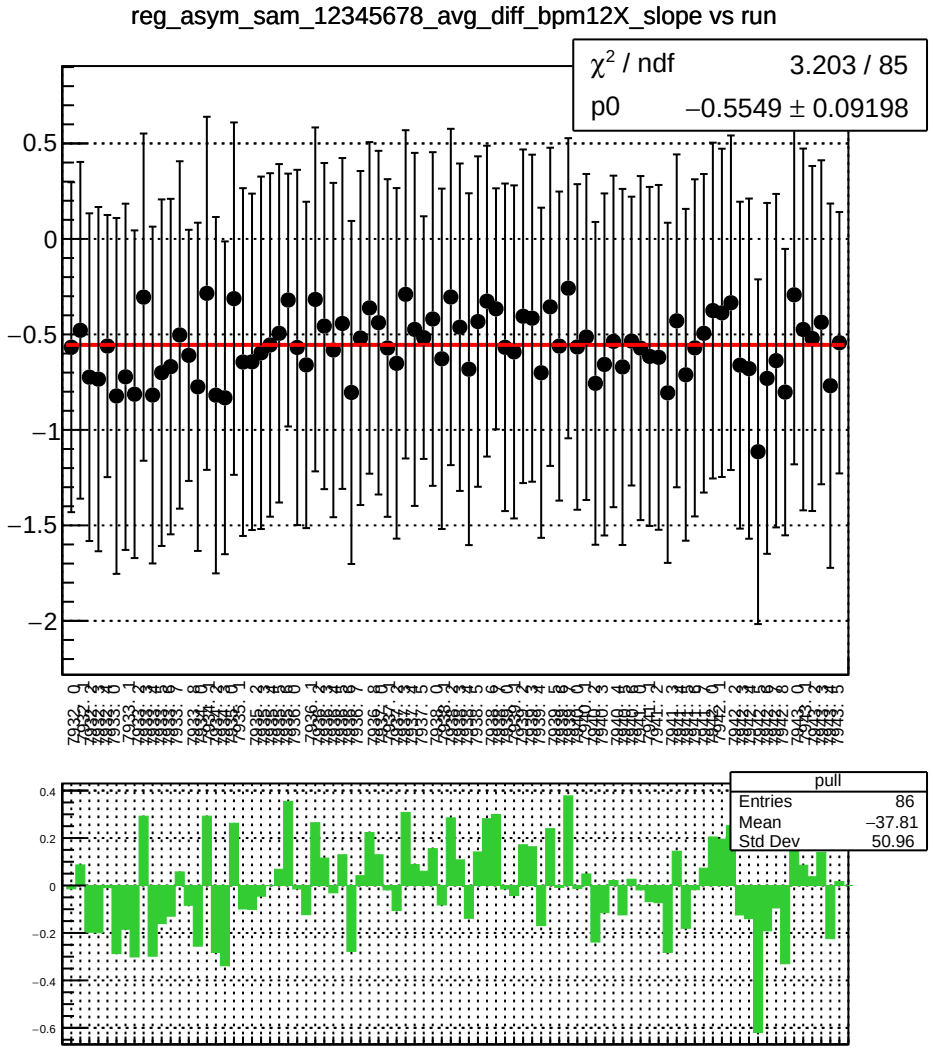

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.364 / 85
p0 20.53 ± 2.844
pull
Entries 86
Mean 745.6
Std Dev 619.3

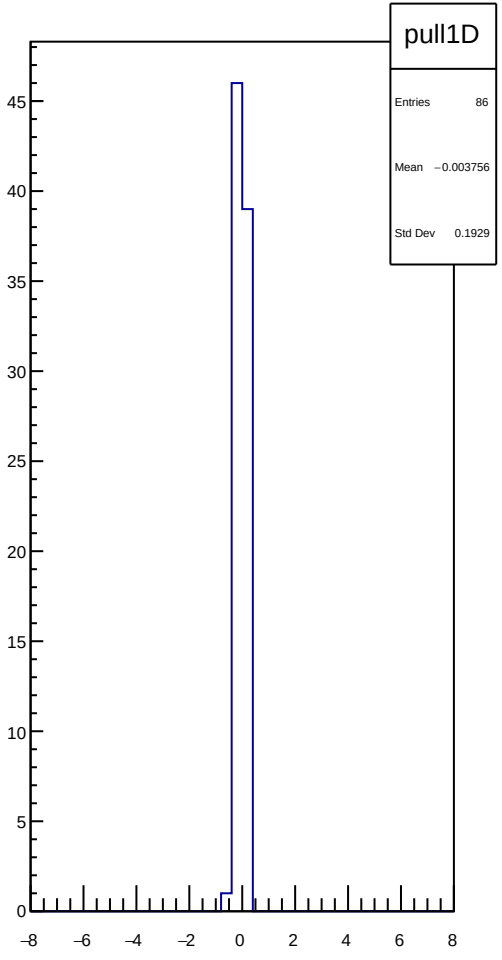

pull1D
Entries 86
Mean 0.0002776
Std Dev 0.1658

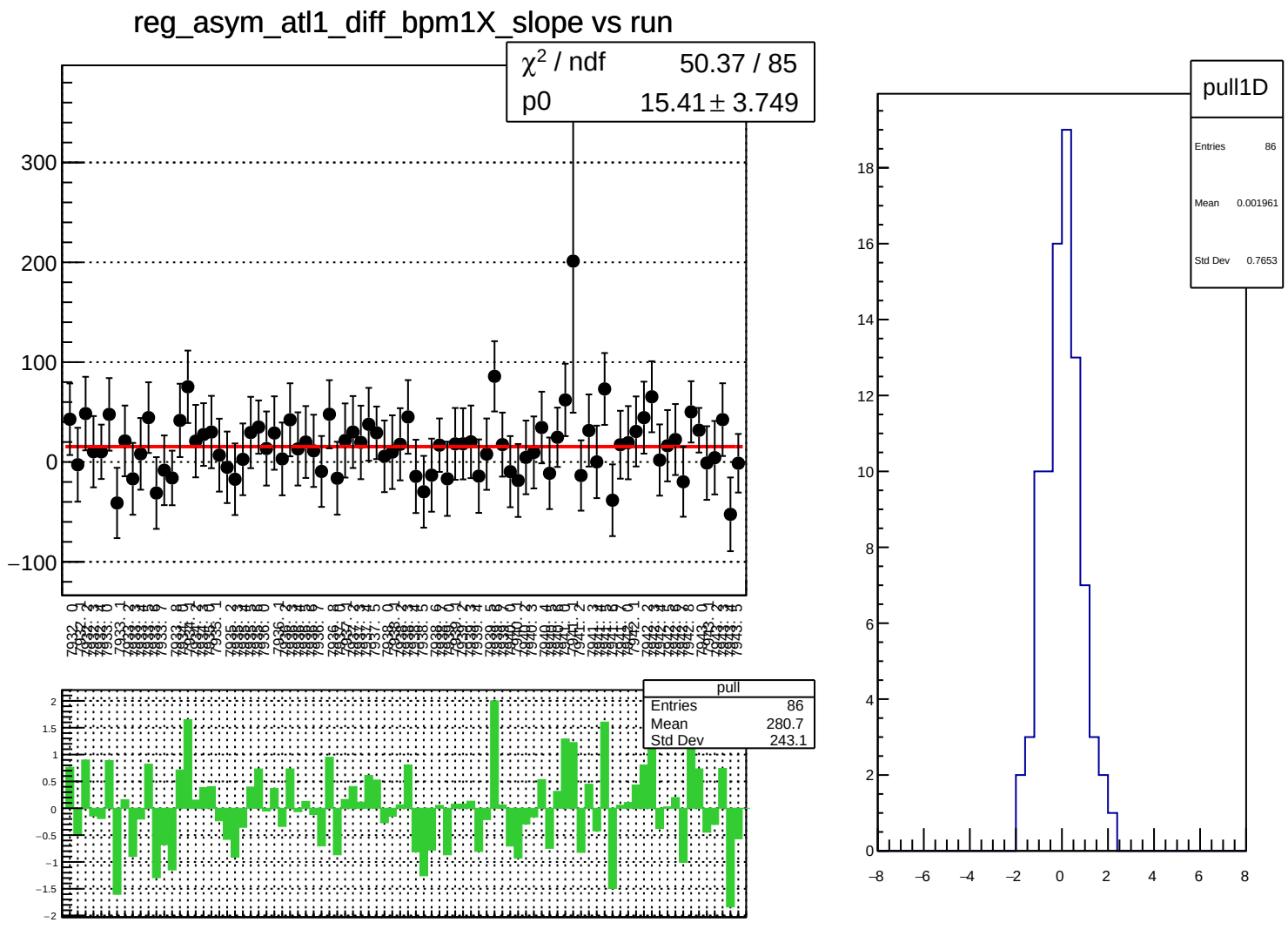

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.172 / 85
p0 −29.99 ± 2.456
pull
Entries 86
Mean 28.3
Std Dev 41.84
pull1D
Entries 86
Mean 0.008571
Std Dev 0.1919

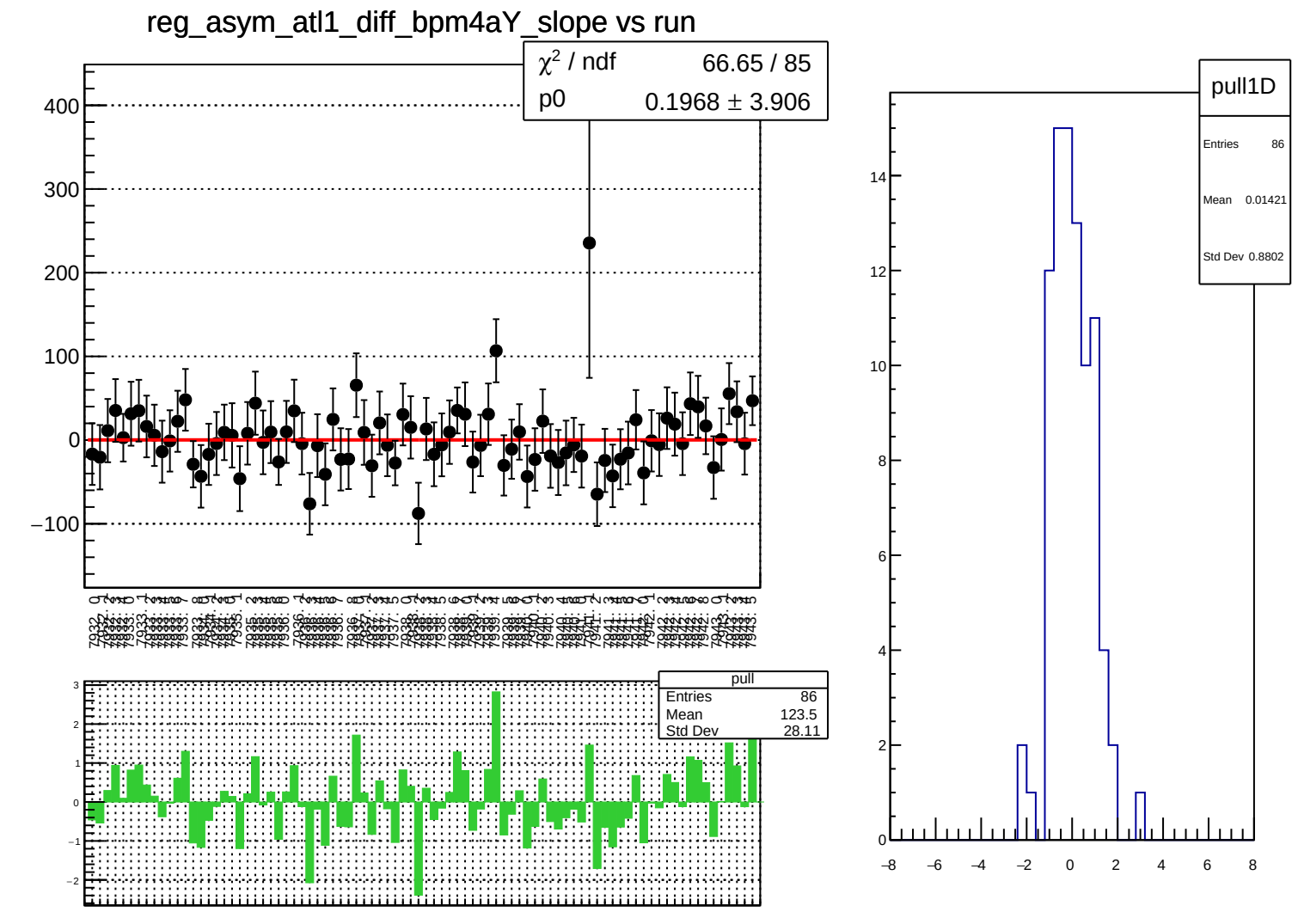

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.345 / 85
p0 15.34 ± 3.279
pull
Entries 86
Mean 465.3
Std Dev 347.3

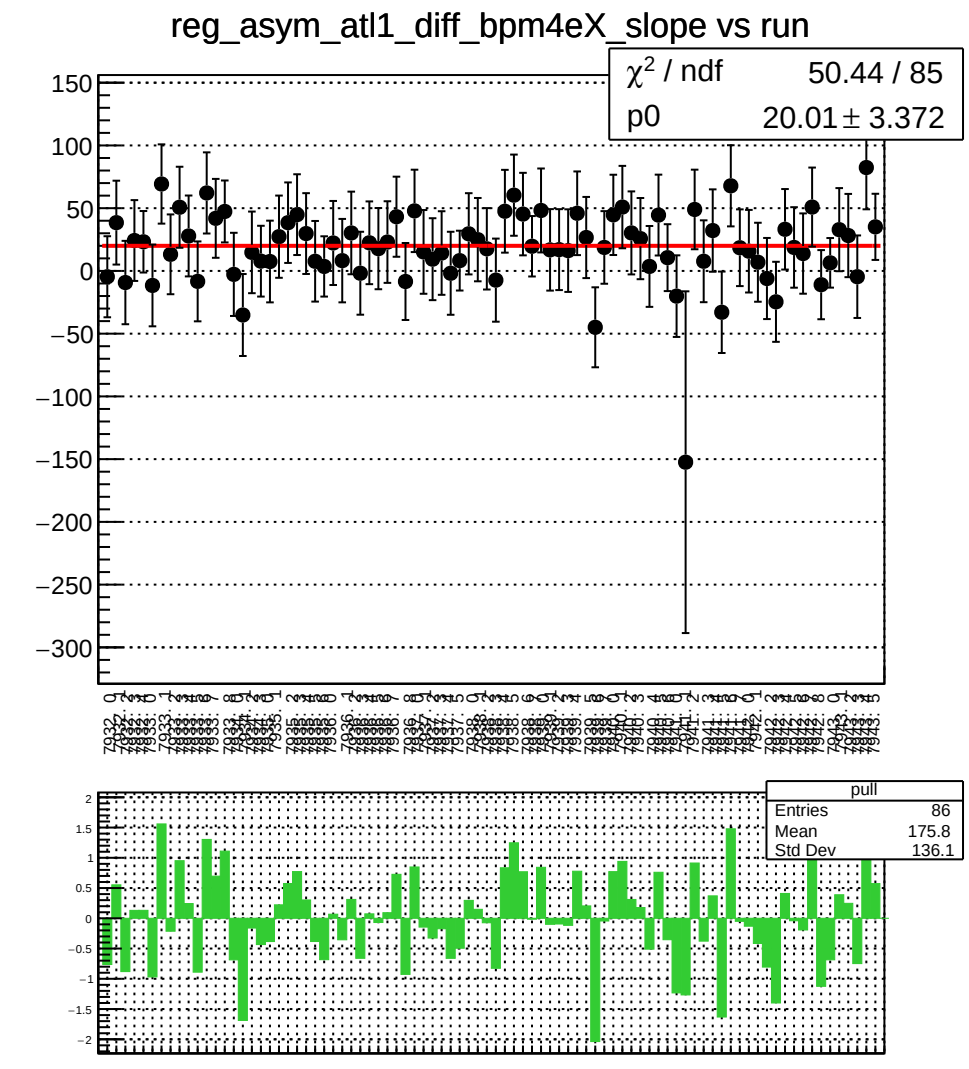

pull1D
Entries 86
Mean −0.00048
Std Dev 0.1651

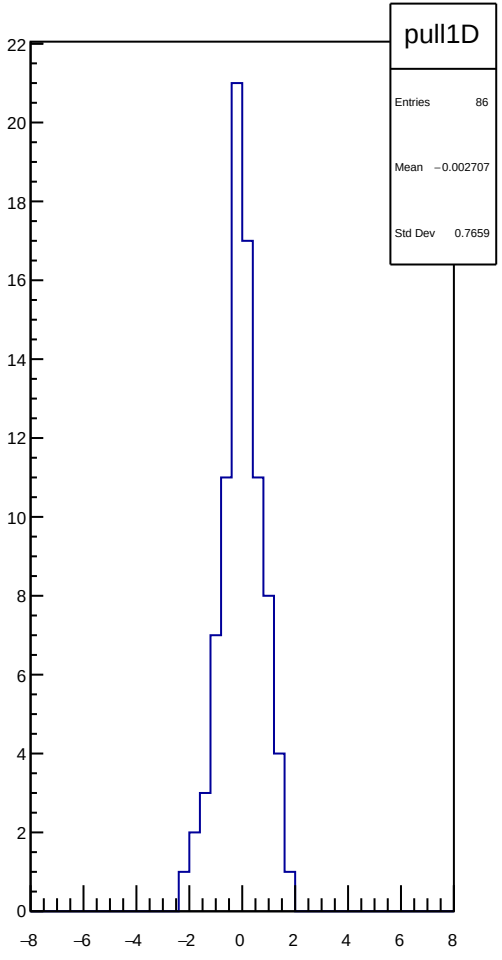

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 3.203 / 85
p0 −0.5549 ± 0.09198
pull
Entries 86
Mean −37.81
Std Dev 50.96

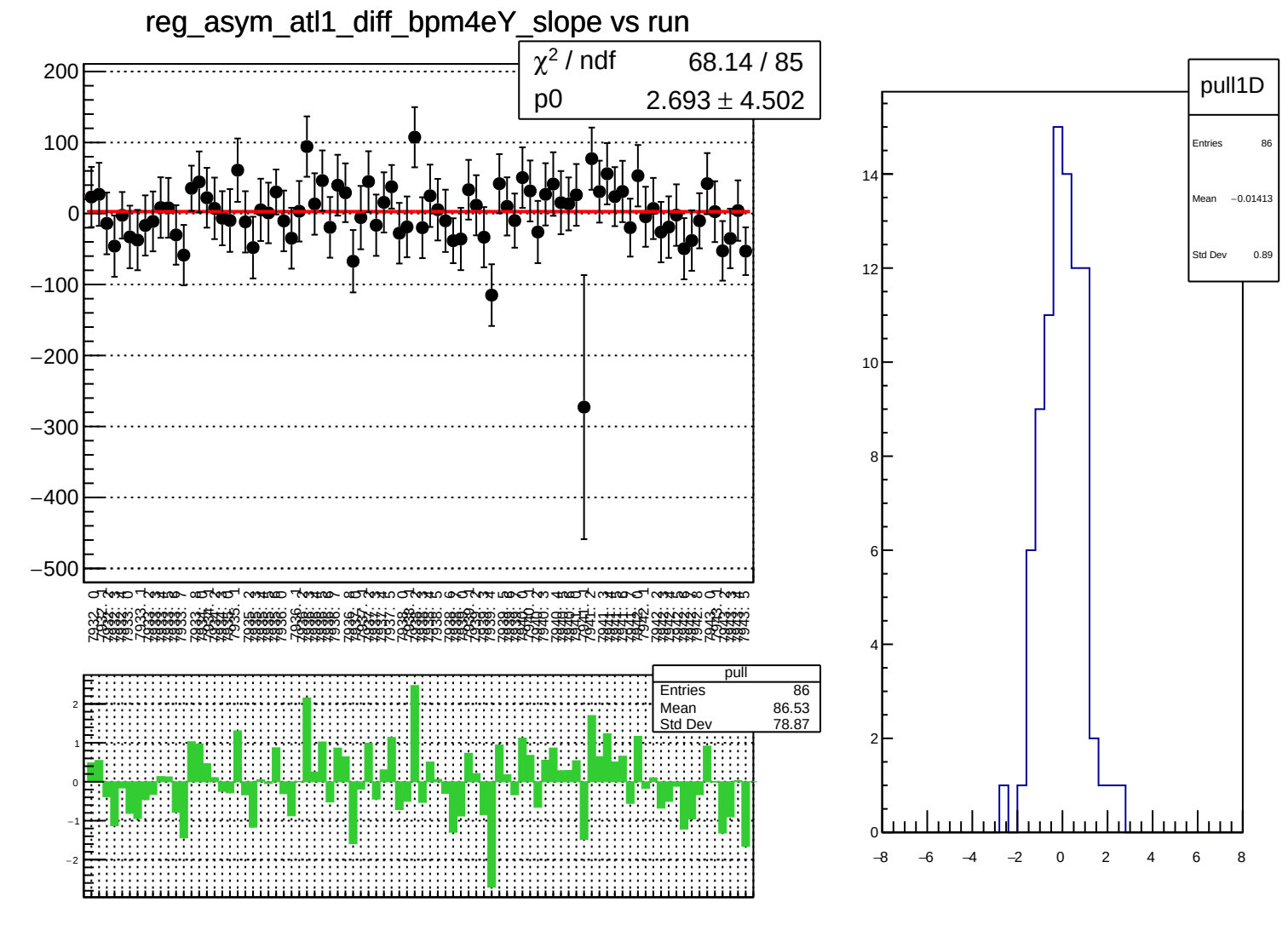

pull1D
Entries 86
Mean −0.003756
Std Dev 0.1929

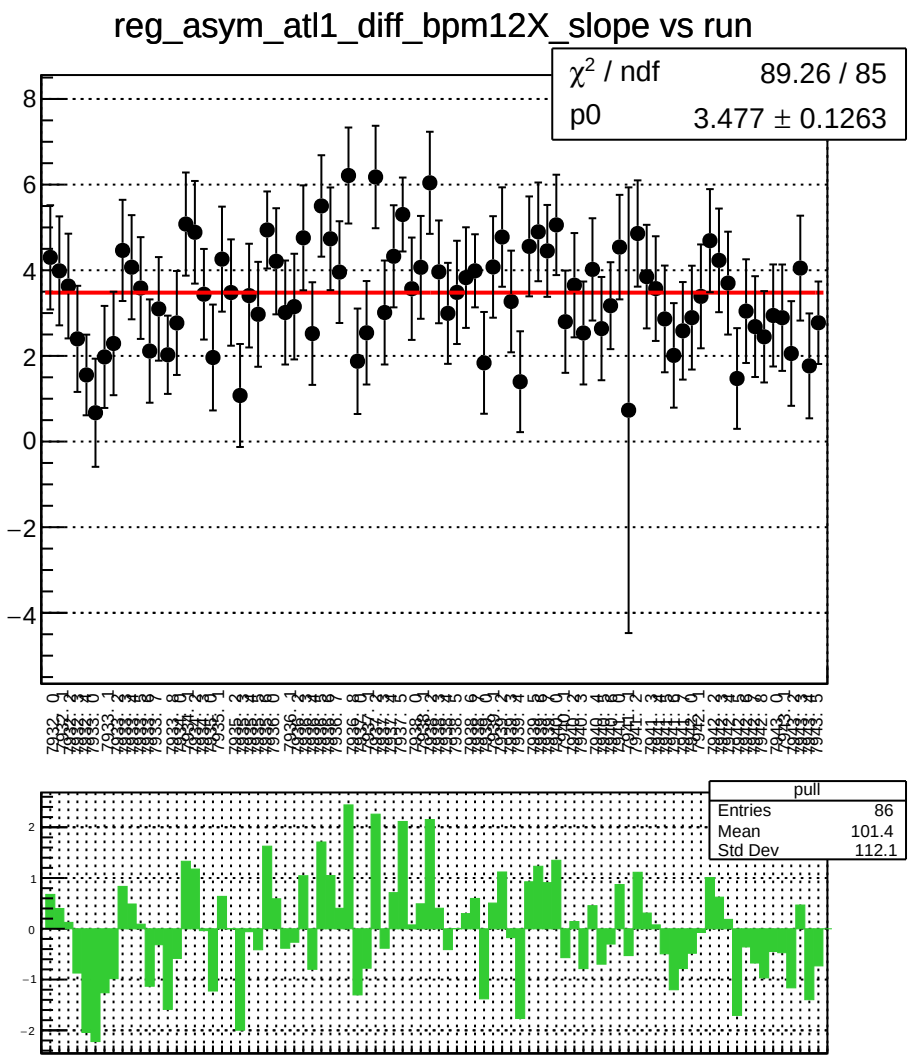

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 50.37 / 85
p0 15.41 ± 3.749
300
200
100
0
−100
pull
Entries 86
Mean 280.7
Std Dev 243.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean 0.001961
Std Dev 0.7653
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

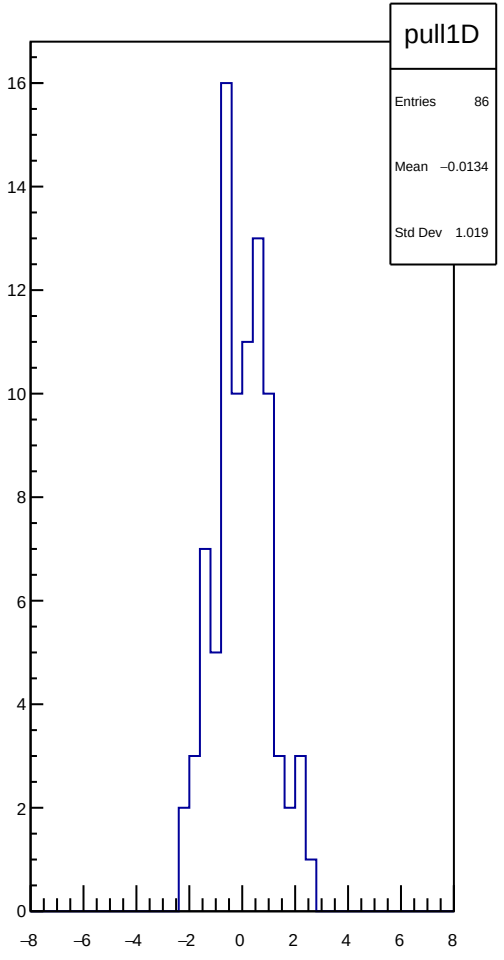

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 66.65 / 85
p0 0.1968 ± 3.906
400
300
200
100
0
−100
pull
Entries 86
Mean 123.5
Std Dev 28.11
3
2
1
0
−1
−2
pull1D
Entries 86
Mean 0.01421
Std Dev 0.8802
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

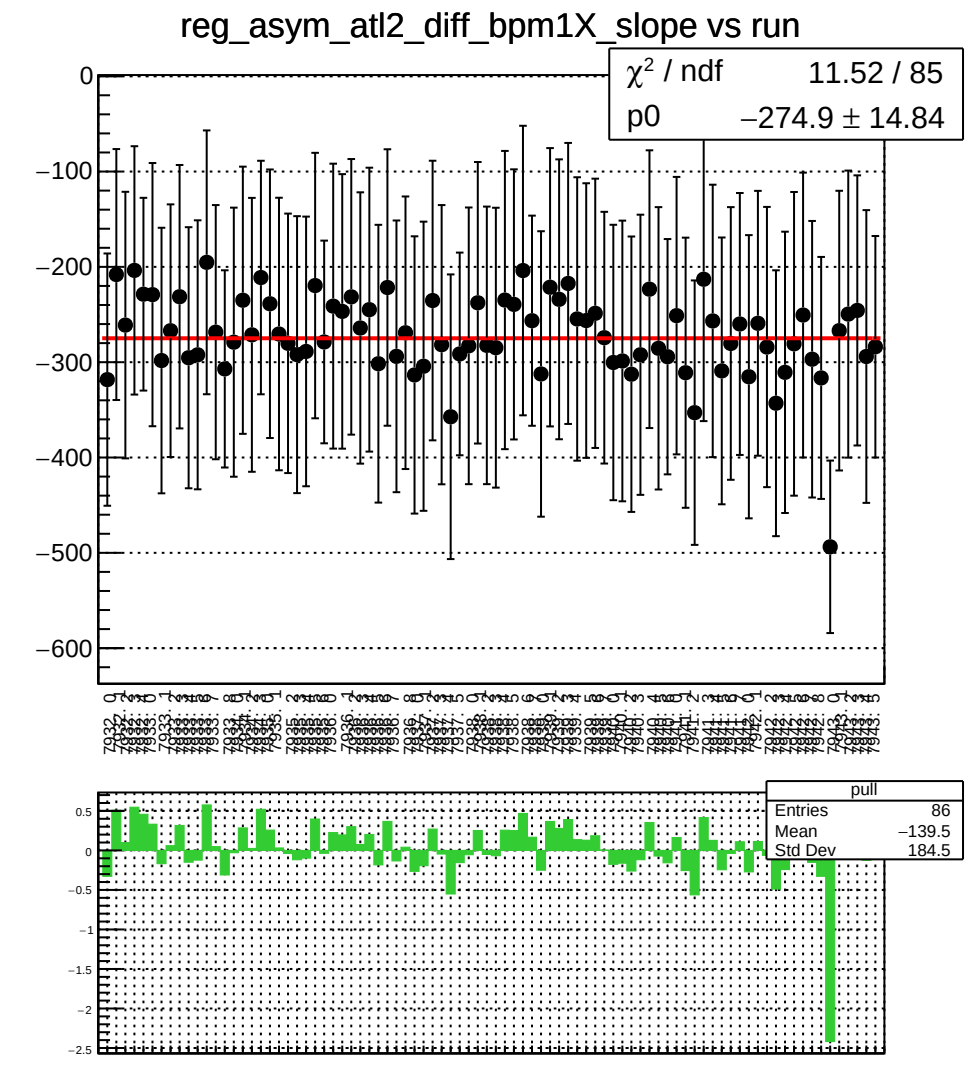

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 50.44 / 85
p0 20.01 ± 3.372
pull
Entries 86
Mean 175.8
Std Dev 136.1

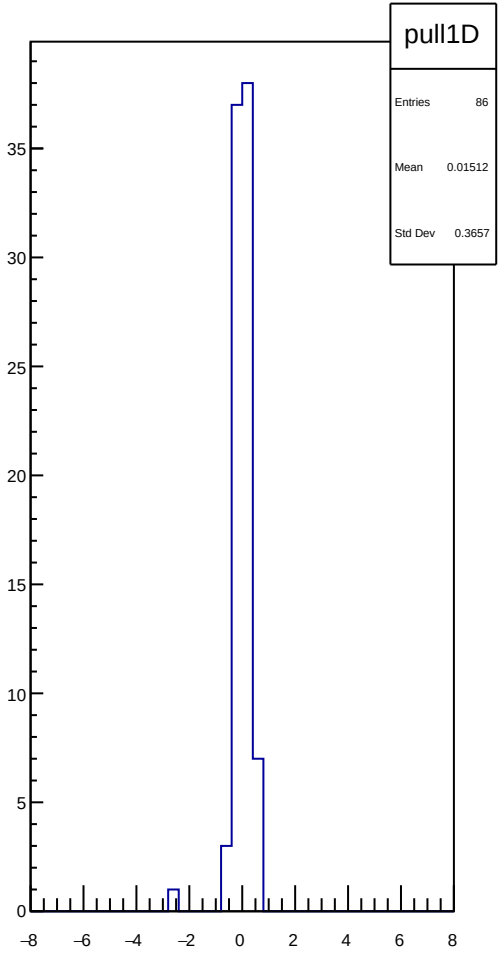

pull1D
Entries 86
Mean −0.002707
Std Dev 0.7659

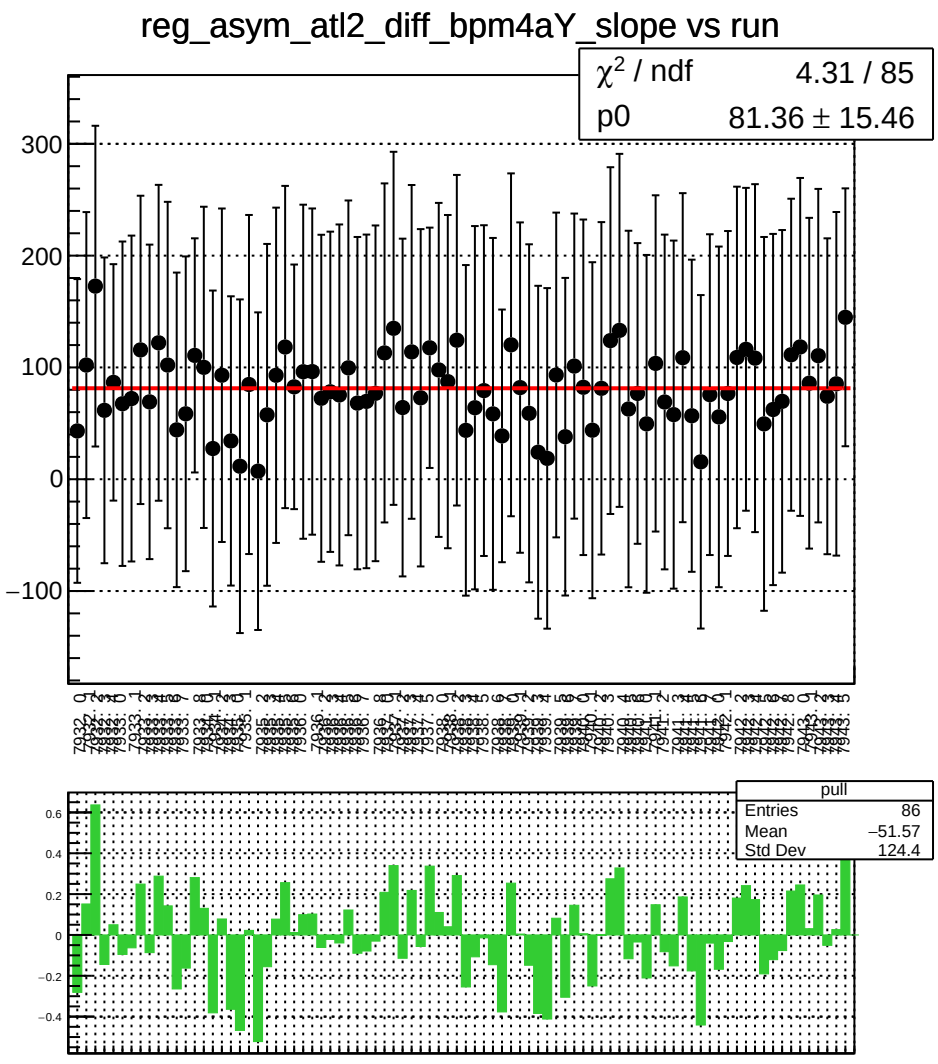

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 68.14 / 85
p0 2.693 ± 4.502
pull
Entries 86
Mean 86.53
Std Dev 78.87
pull1D
Entries 86
Mean −0.01413
Std Dev 0.89

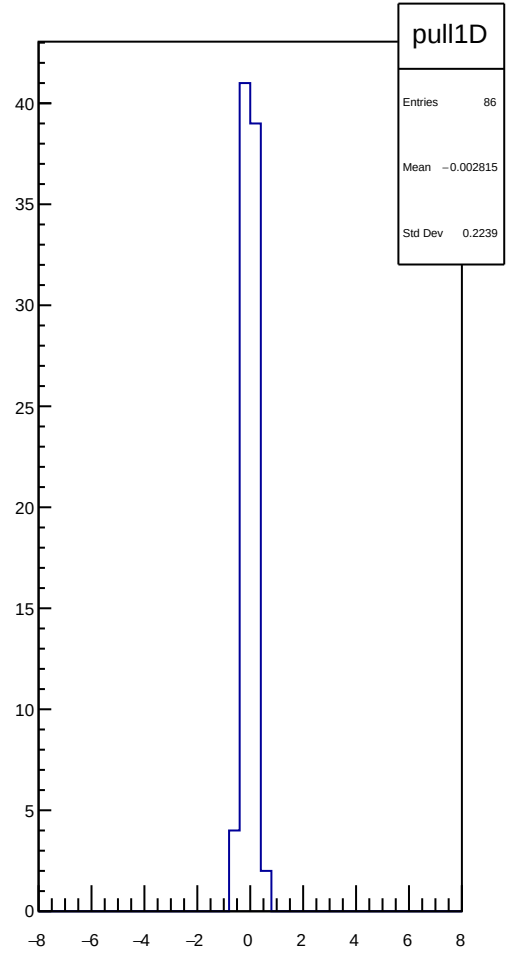

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 89.26 / 85
p0 3.477 ± 0.1263
pull
Entries 86
Mean 101.4
Std Dev 112.1

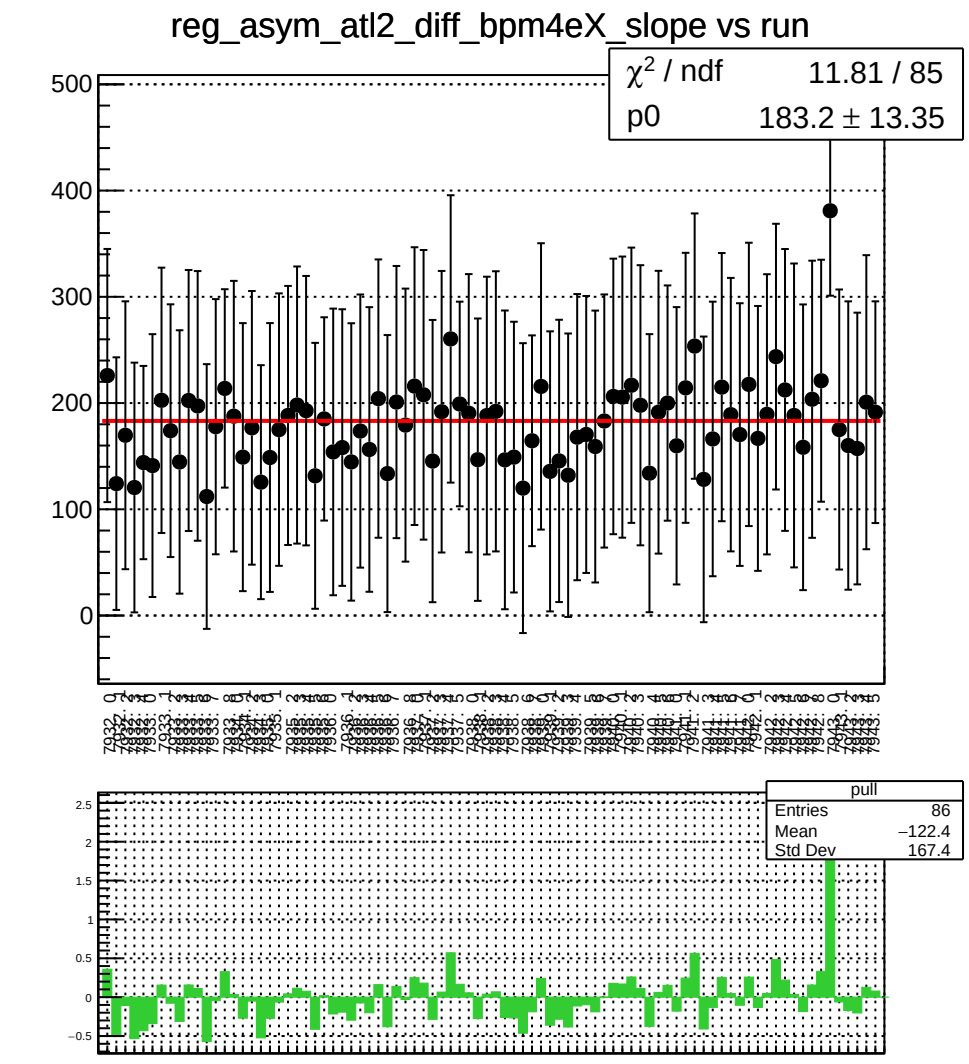

pull1D
Entries 86
Mean −0.0134
Std Dev 1.019

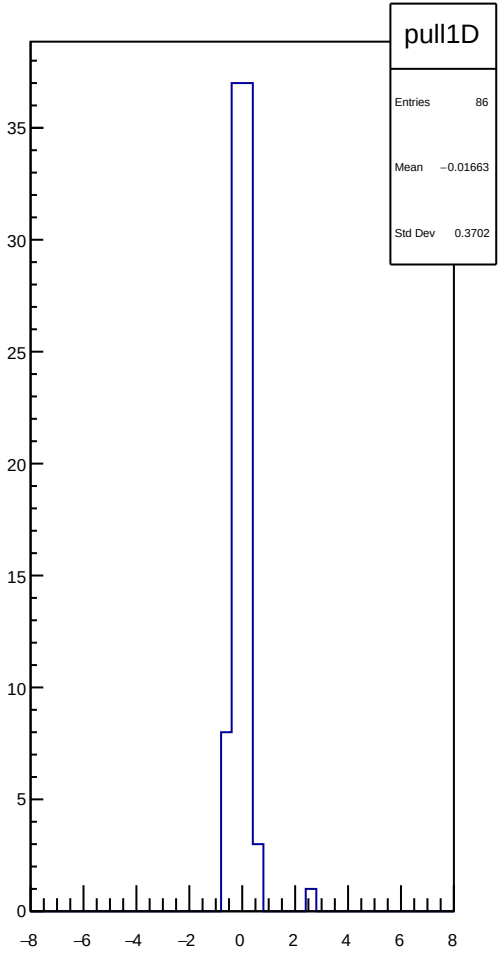

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 11.52 / 85
p0 −274.9 ± 14.84
pull
Entries 86
Mean −139.5
Std Dev 184.5

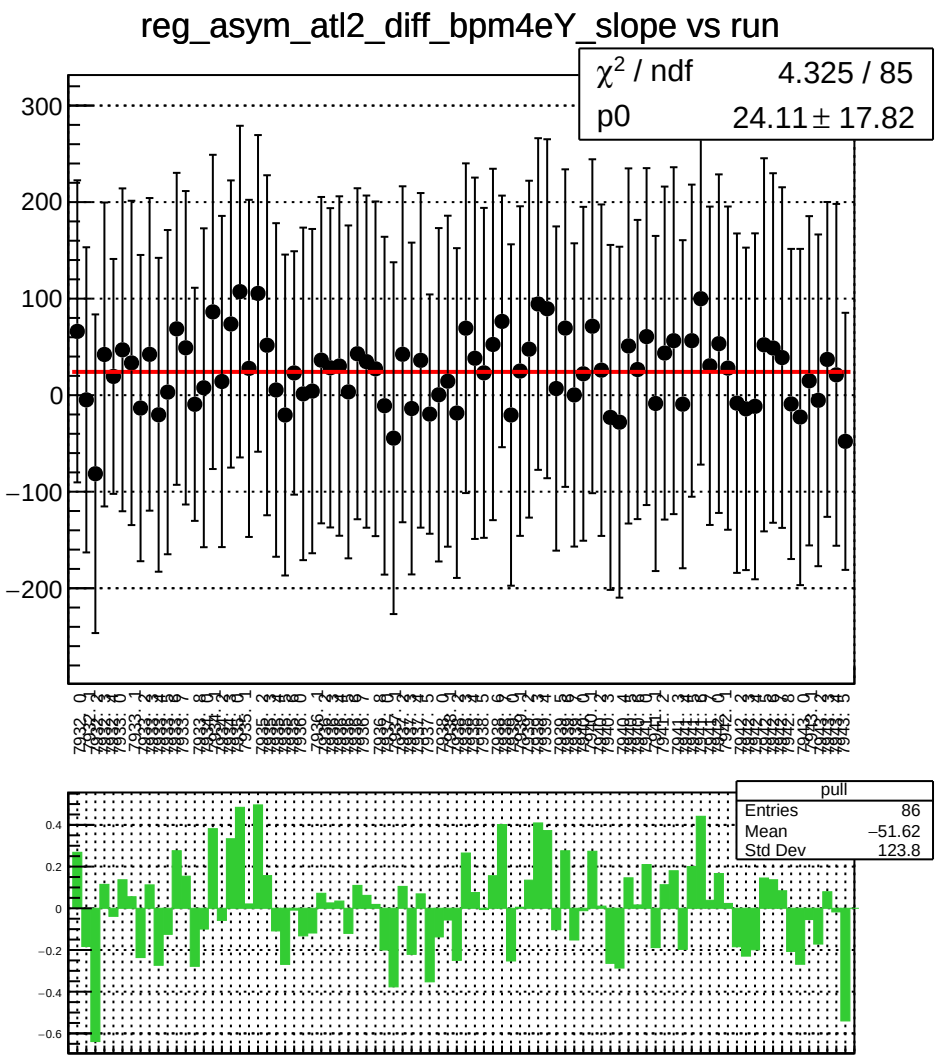

pull1D
Entries 86
Mean 0.01512
Std Dev 0.3657

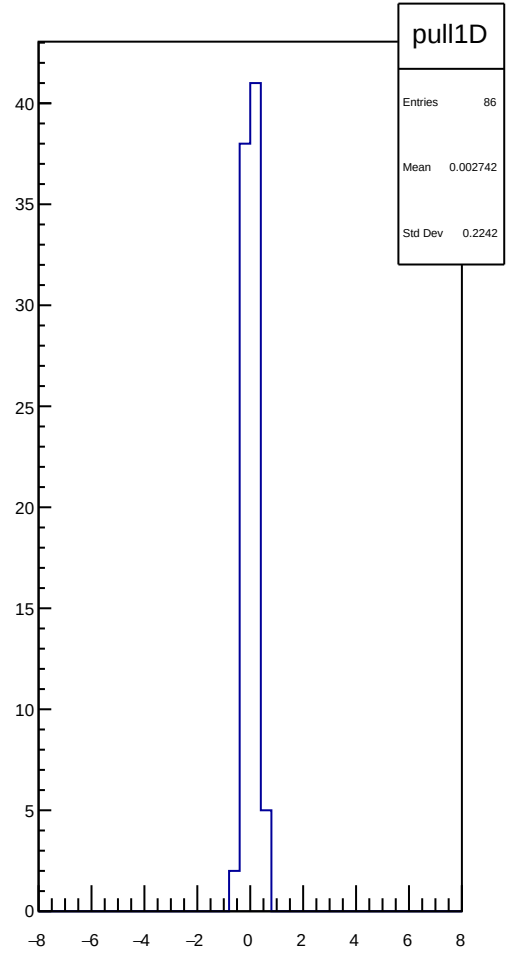

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 4.31 / 85
p0 81.36 ± 15.46
300
200
100
0
−100
pull
Entries 86
Mean −51.57
Std Dev 124.4
0.6
0.4
0.2
0
−0.2
−0.4

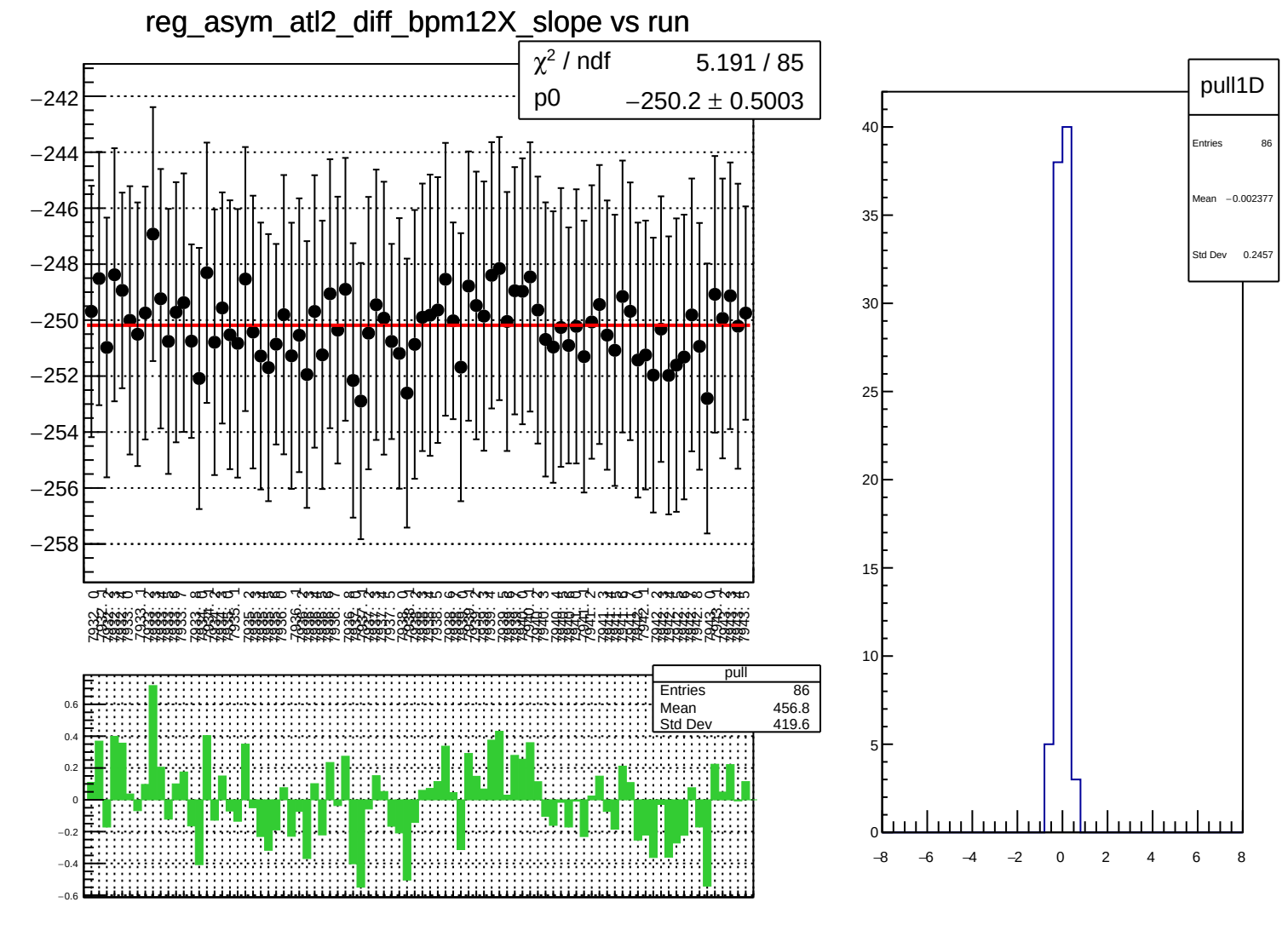

pull1D
Entries 86
Mean −0.002815
Std Dev 0.2239
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

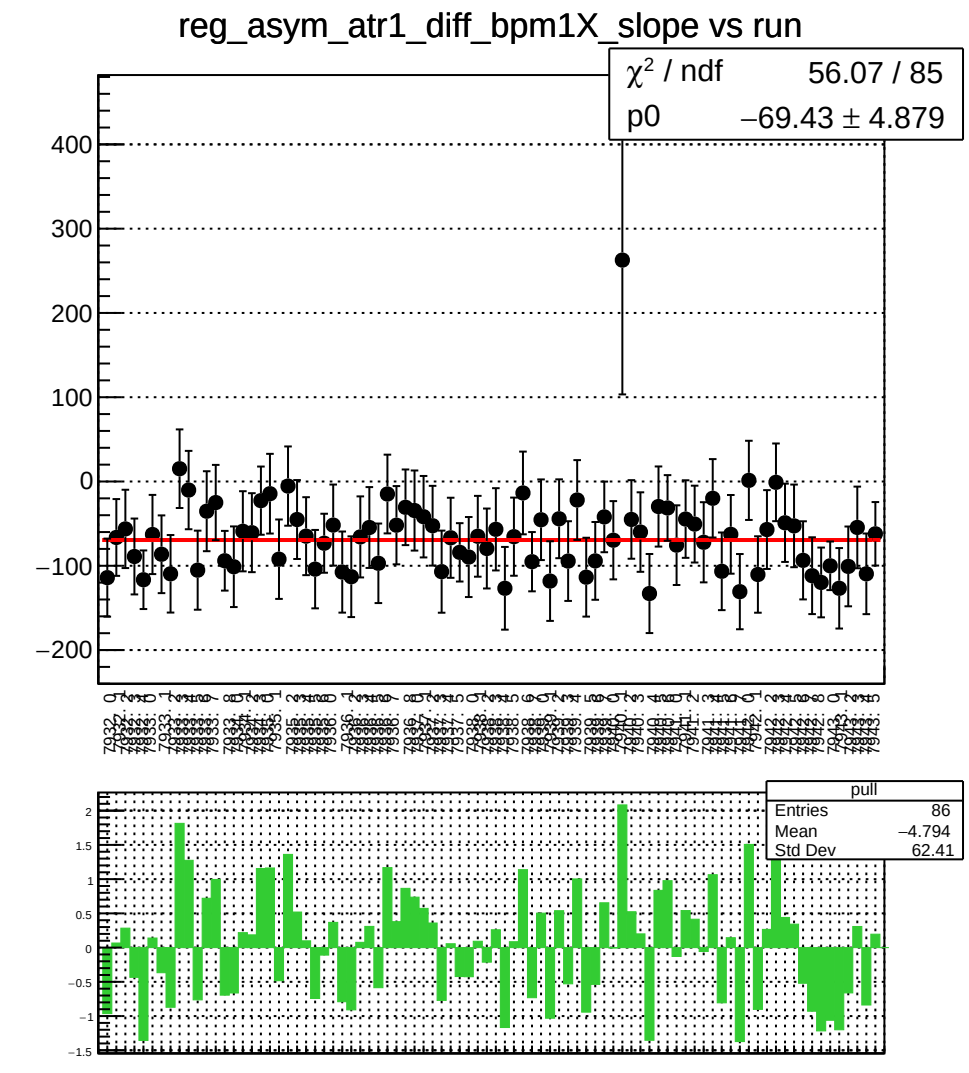

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 11.81 / 85
p0 183.2 ± 13.35
pull
Entries 86
Mean −122.4
Std Dev 167.4

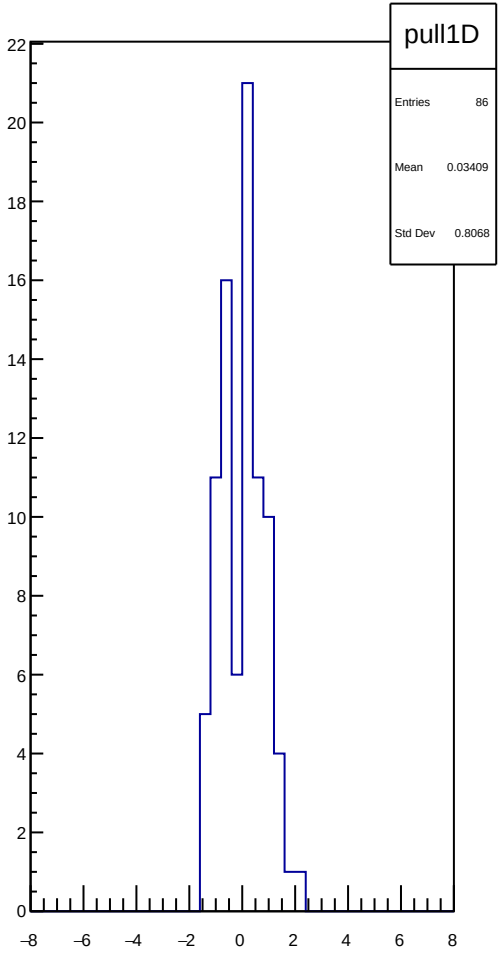

pull1D
Entries 86
Mean −0.01663
Std Dev 0.3702

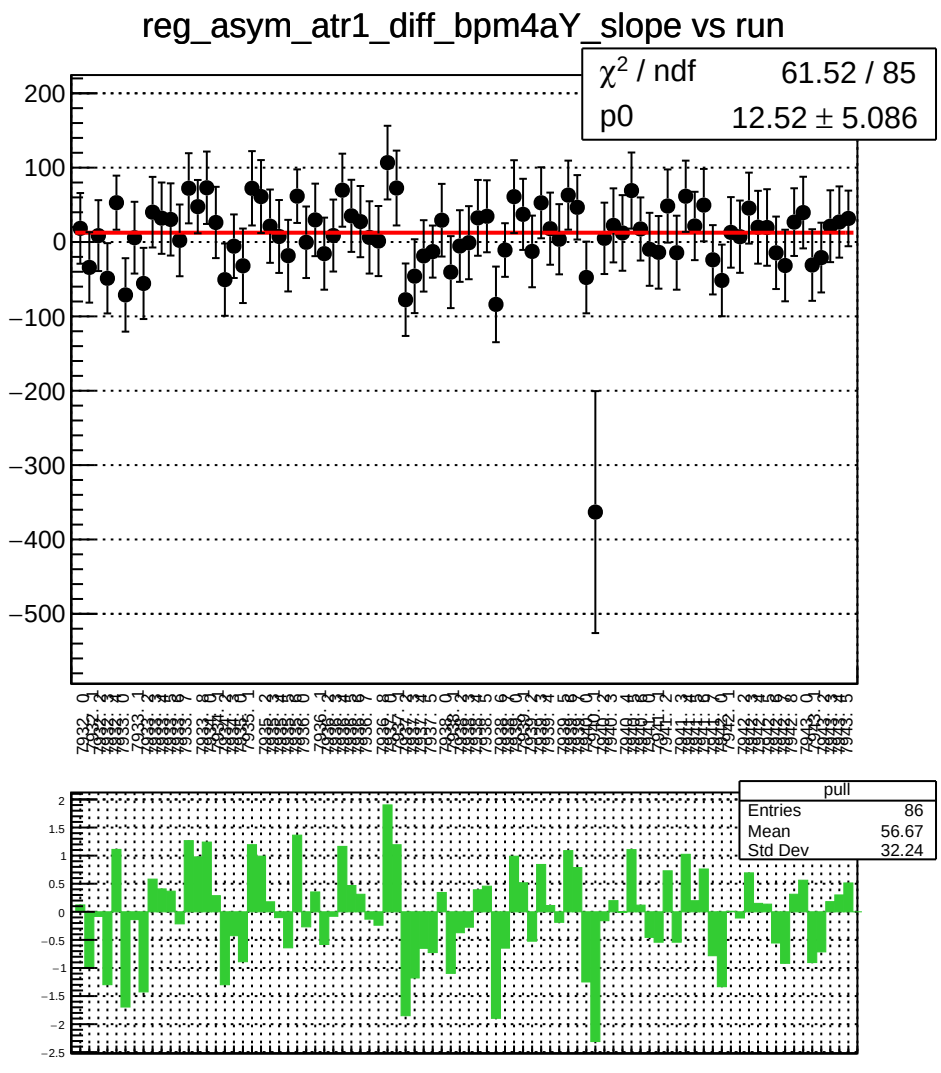

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 4.325 / 85
p0 24.11 ± 17.82
300
200
100
0
−100
−200
pull
Entries 86
Mean −51.62
Std Dev 123.8
0.4
0.2
0
−0.2
−0.4
−0.6

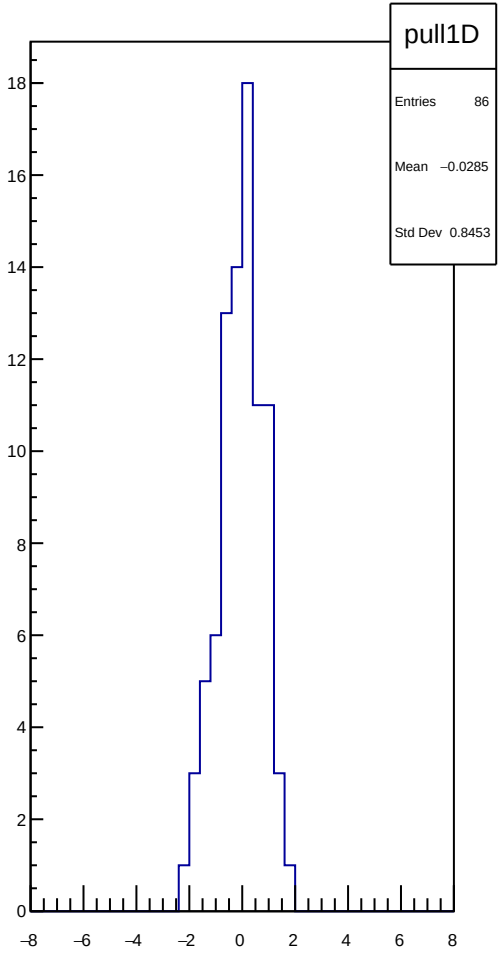

pull1D
Entries 86
Mean 0.002742
Std Dev 0.2242
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

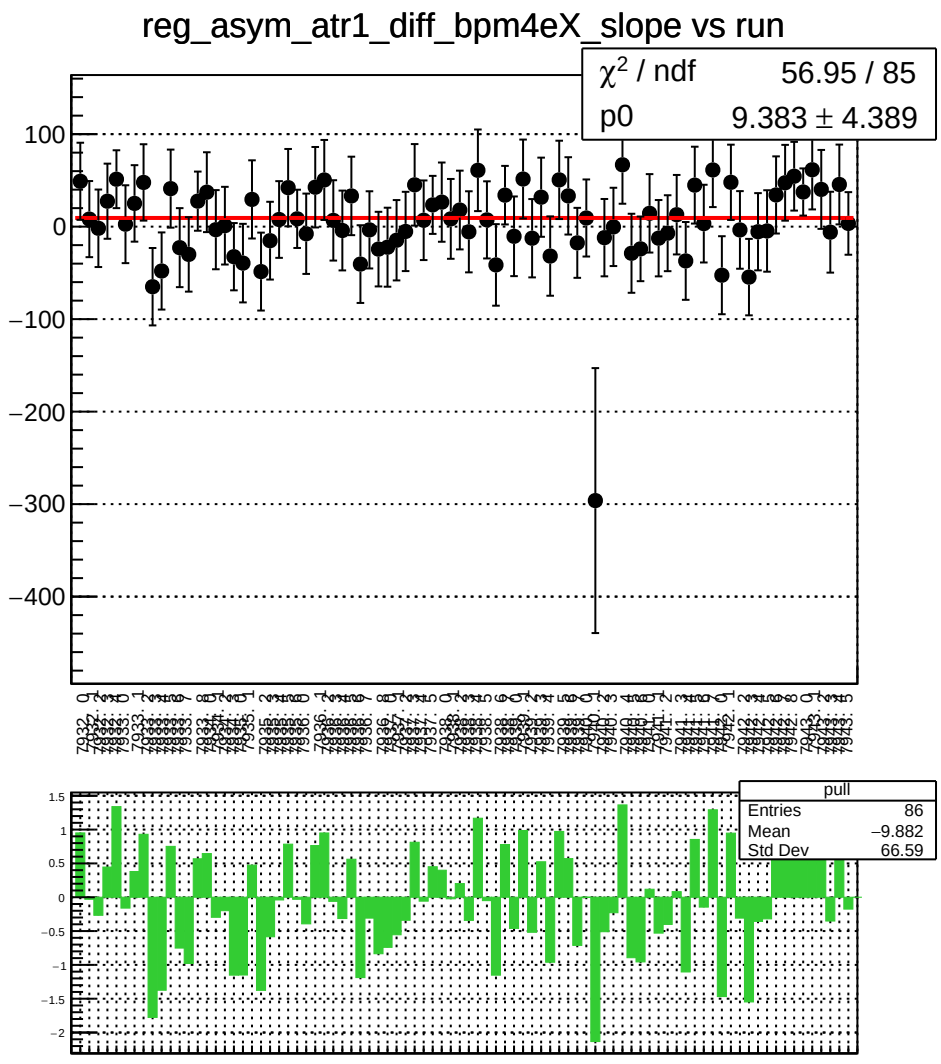

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 5.191 / 85
p0 −250.2 ± 0.5003
pull
Entries 86
Mean 456.8
Std Dev 419.6
pull1D
Entries 86
Mean −0.002377
Std Dev 0.2457

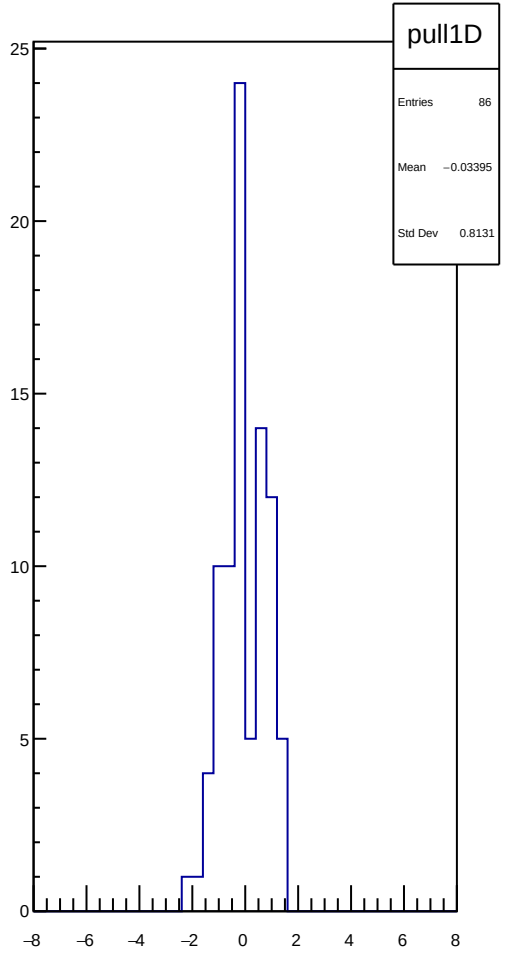

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 56.07 / 85
p0 −69.43 ± 4.879
pull
Entries 86
Mean −4.794
Std Dev 62.41

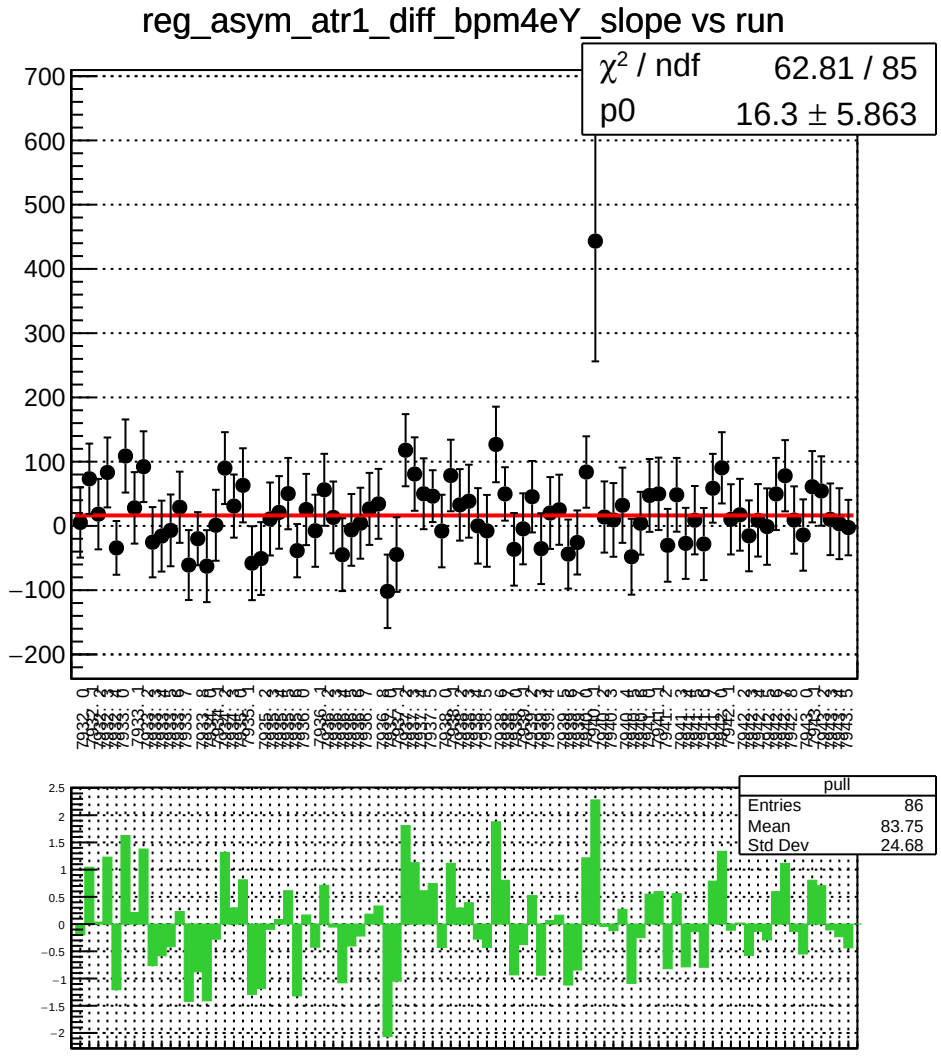

pull1D
Entries 86
Mean 0.03409
Std Dev 0.8068

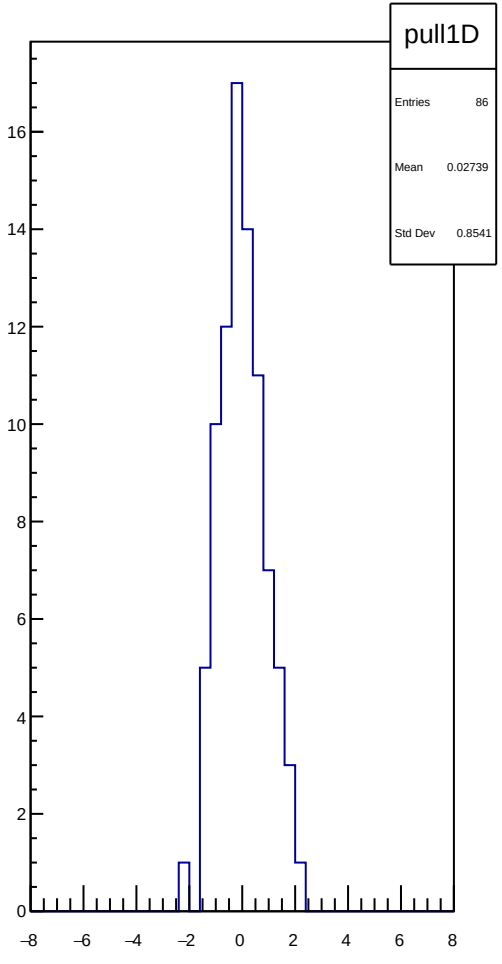

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 61.52 / 85
p0 12.52 ± 5.086
pull
Entries 86
Mean 56.67
Std Dev 32.24

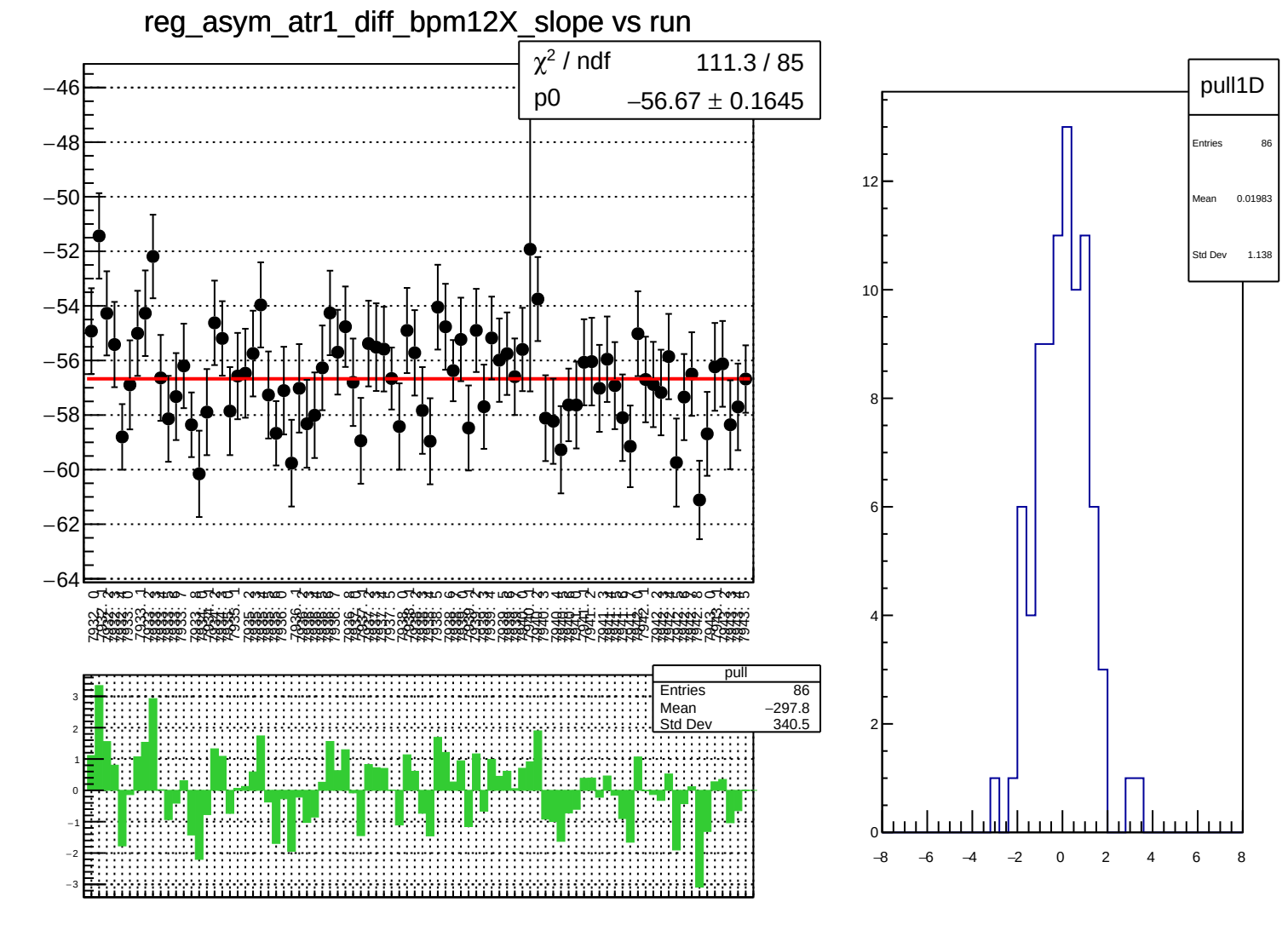

pull1D
Entries 86
Mean −0.0285
Std Dev 0.8453

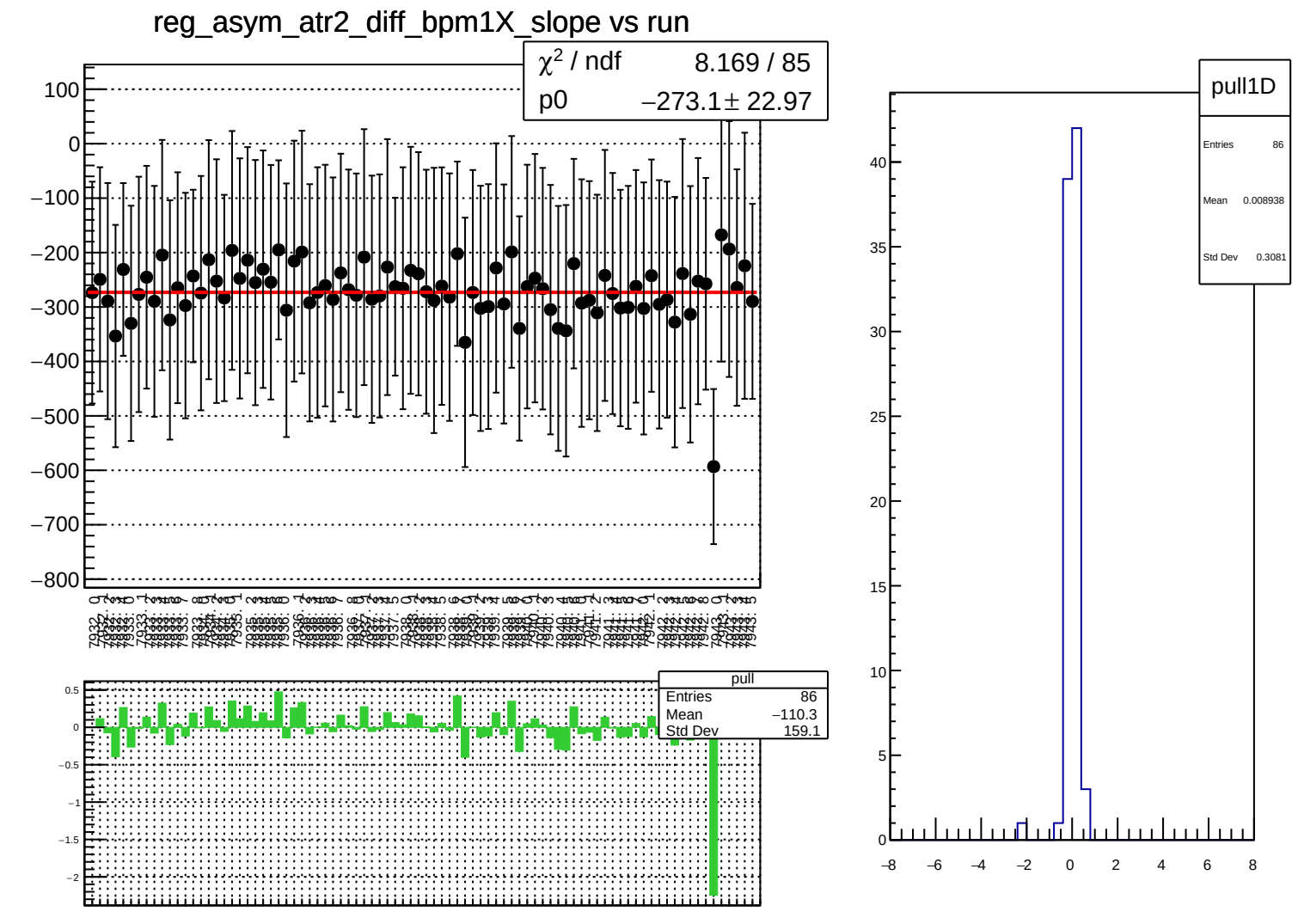

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 56.95 / 85
p0 9.383 ± 4.389
100
0
−100
−200
−300
−400
pull
Entries 86
Mean −9.882
Std Dev 66.59
1.5
1
0.5
0
−0.5
−1
−1.5
−2

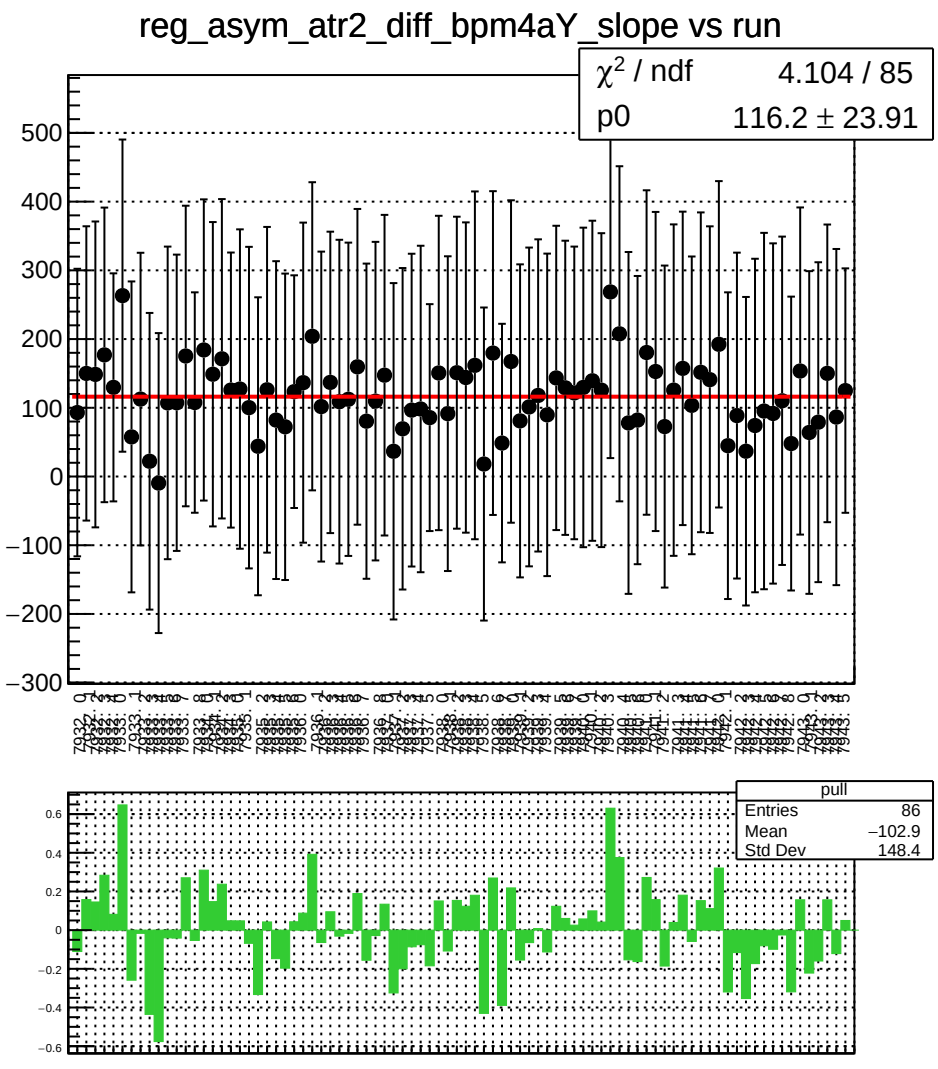

pull1D
Entries 86
Mean −0.03395
Std Dev 0.8131
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

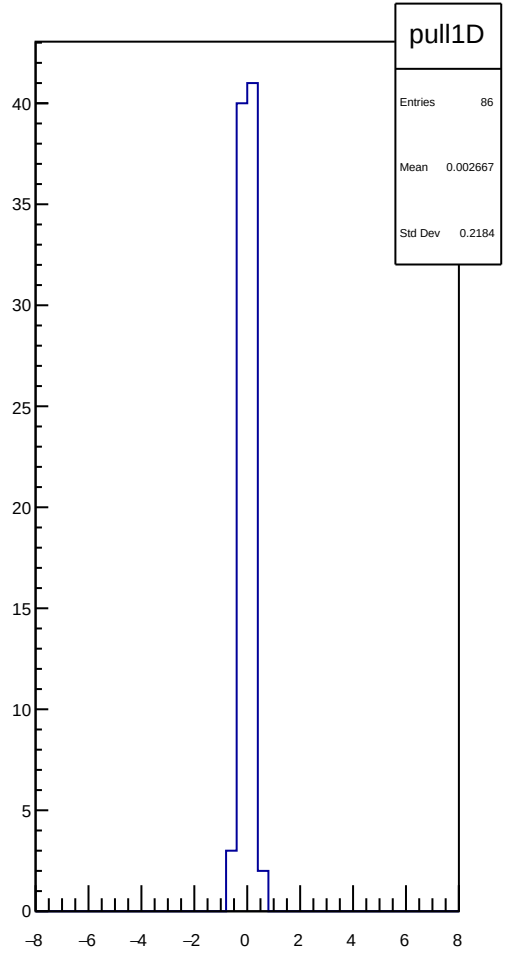

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 62.81 / 85
p0 16.3 ± 5.863
pull
Entries 86
Mean 83.75
Std Dev 24.68

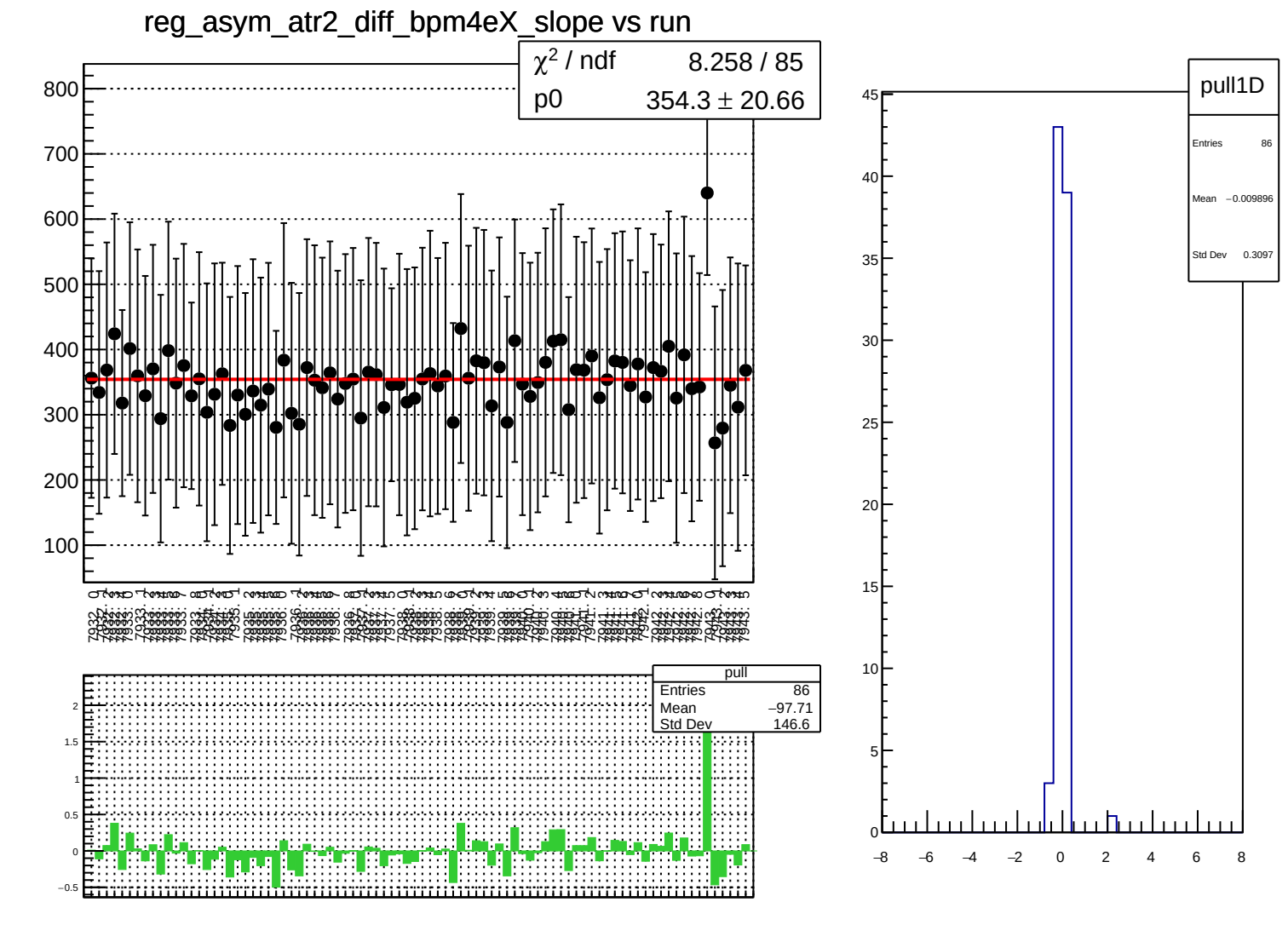

pull1D
Entries 86
Mean 0.02739
Std Dev 0.8541

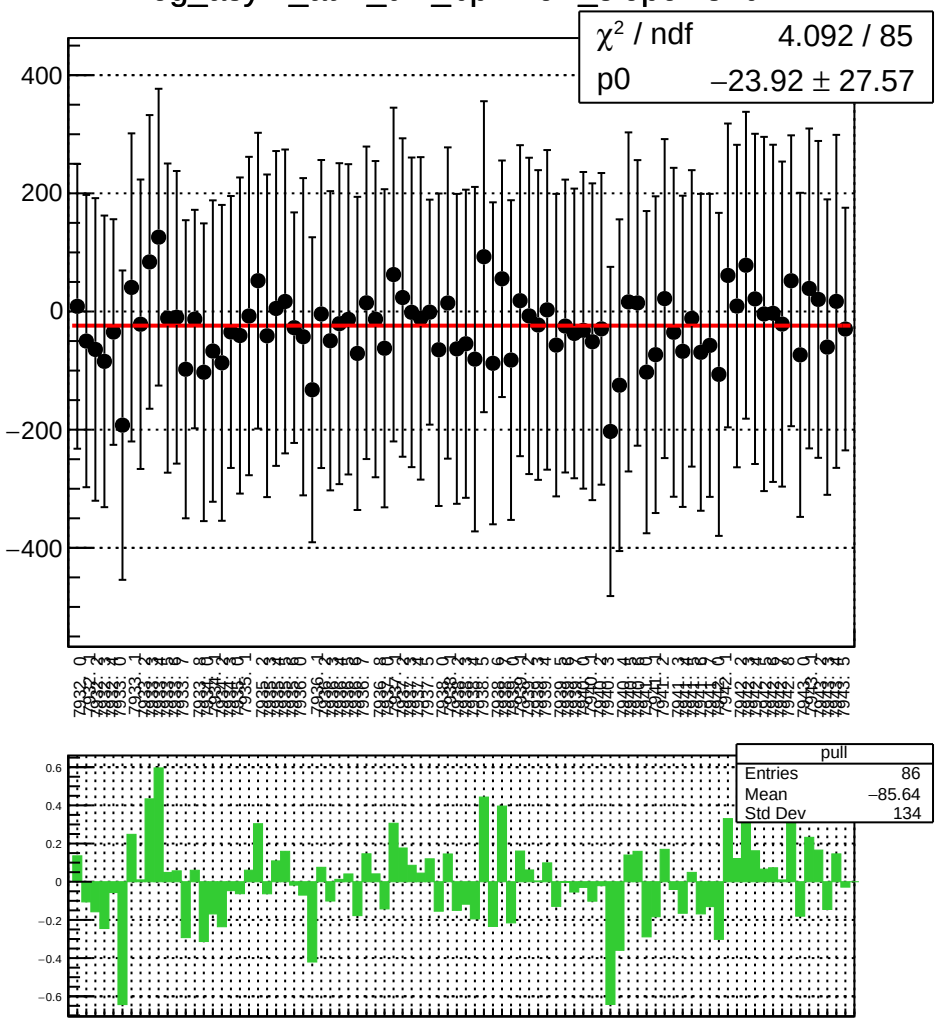

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 111.3 / 85
p0 −56.67 ± 0.1645
pull
Entries 86
Mean −297.8
Std Dev 340.5
pull1D
Entries 86
Mean 0.01983
Std Dev 1.138

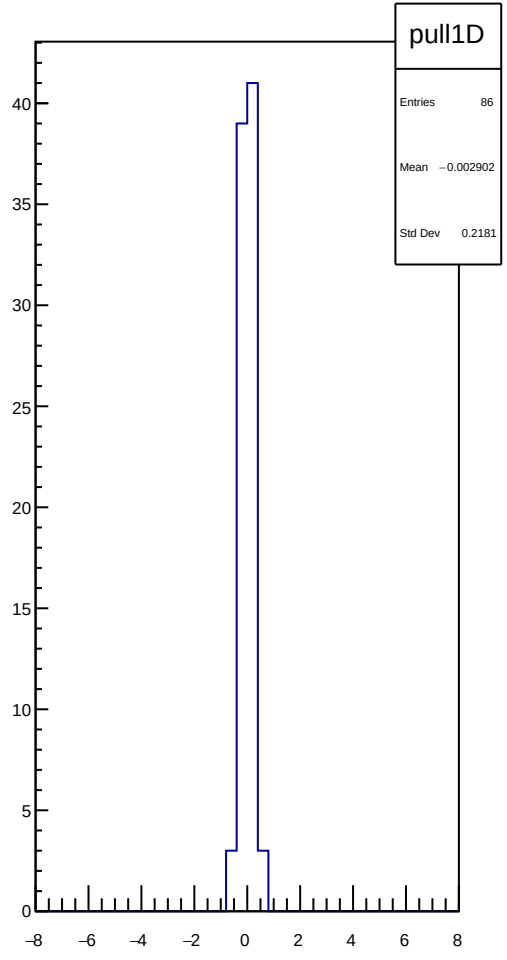

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 8.169 / 85
p0 −273.1± 22.97
pull
Entries 86
Mean −110.3
Std Dev 159.1
pull1D
Entries 86
Mean 0.008938
Std Dev 0.3081

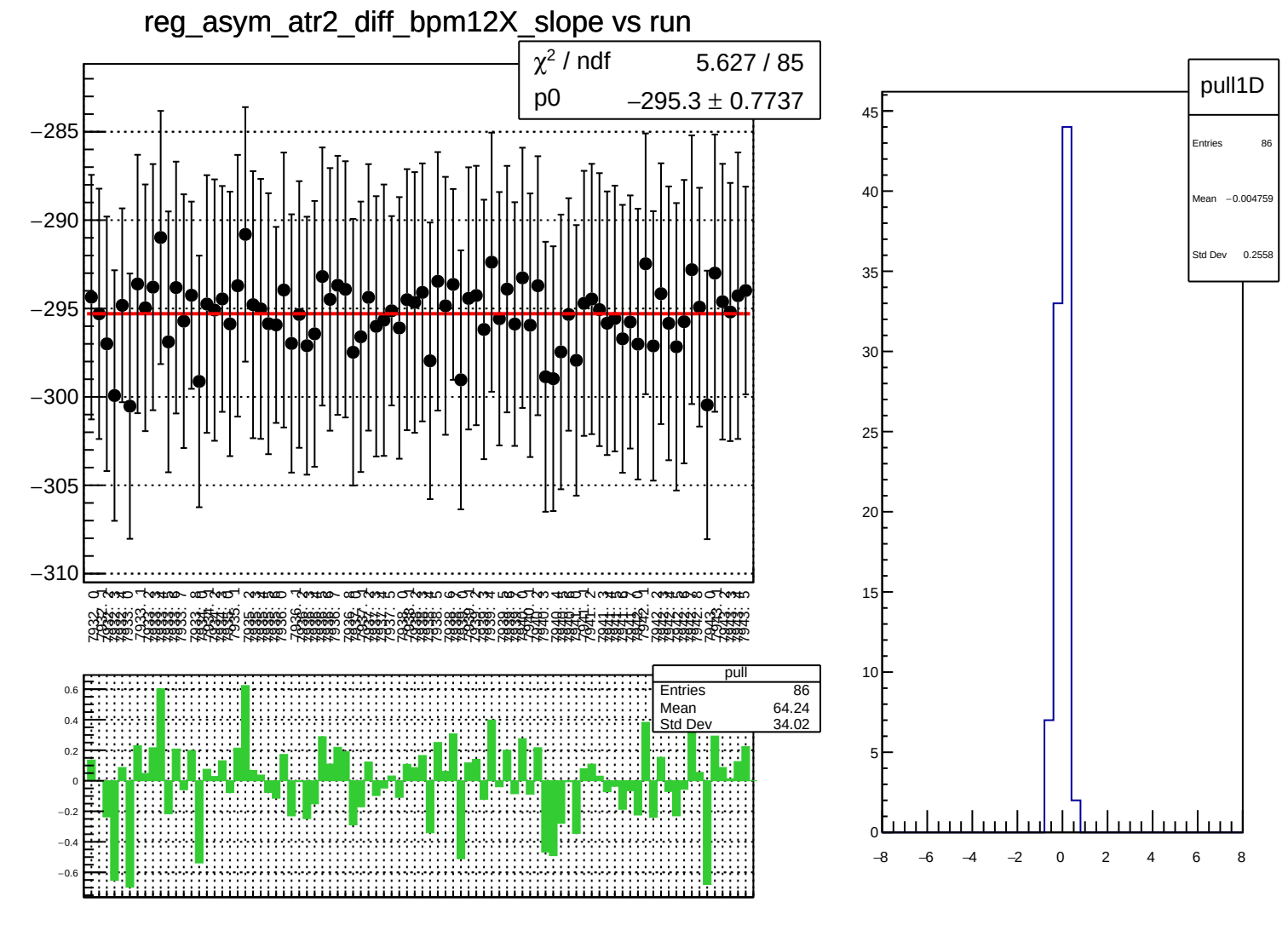

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 4.104 / 85
p0 116.2 ± 23.91
pull
Entries 86
Mean −102.9
Std Dev 148.4

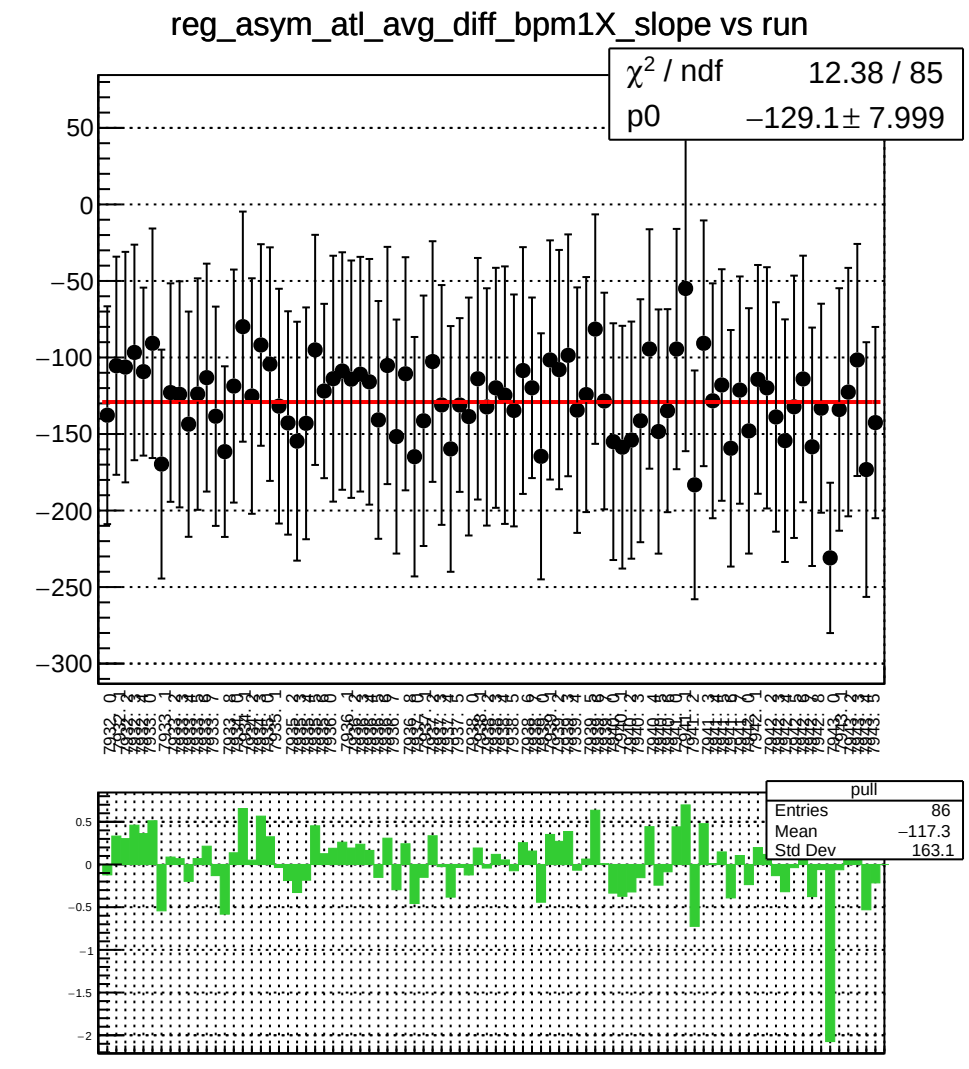

pull1D
Entries 86
Mean 0.002667
Std Dev 0.2184

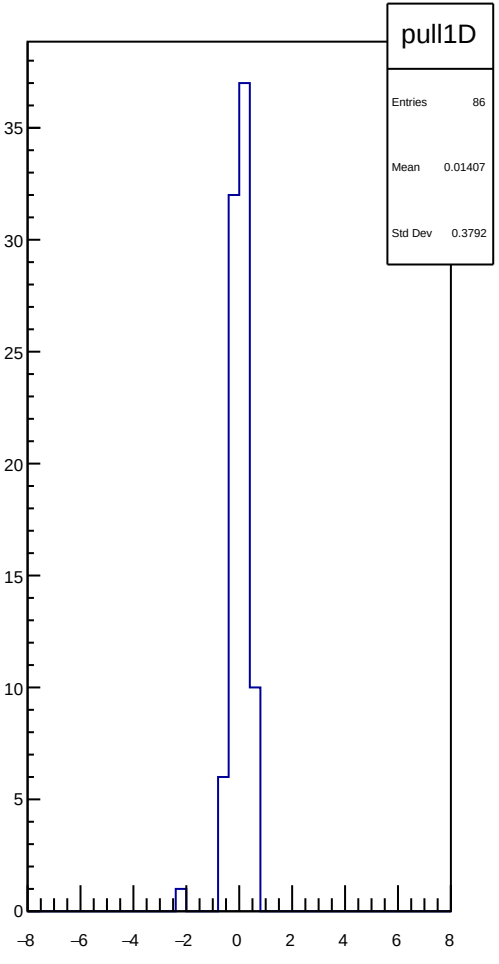

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 8.258 / 85
p0 354.3 ± 20.66
pull
Entries 86
Mean −97.71
Std Dev 146.6
pull1D
Entries 86
Mean −0.009896
Std Dev 0.3097

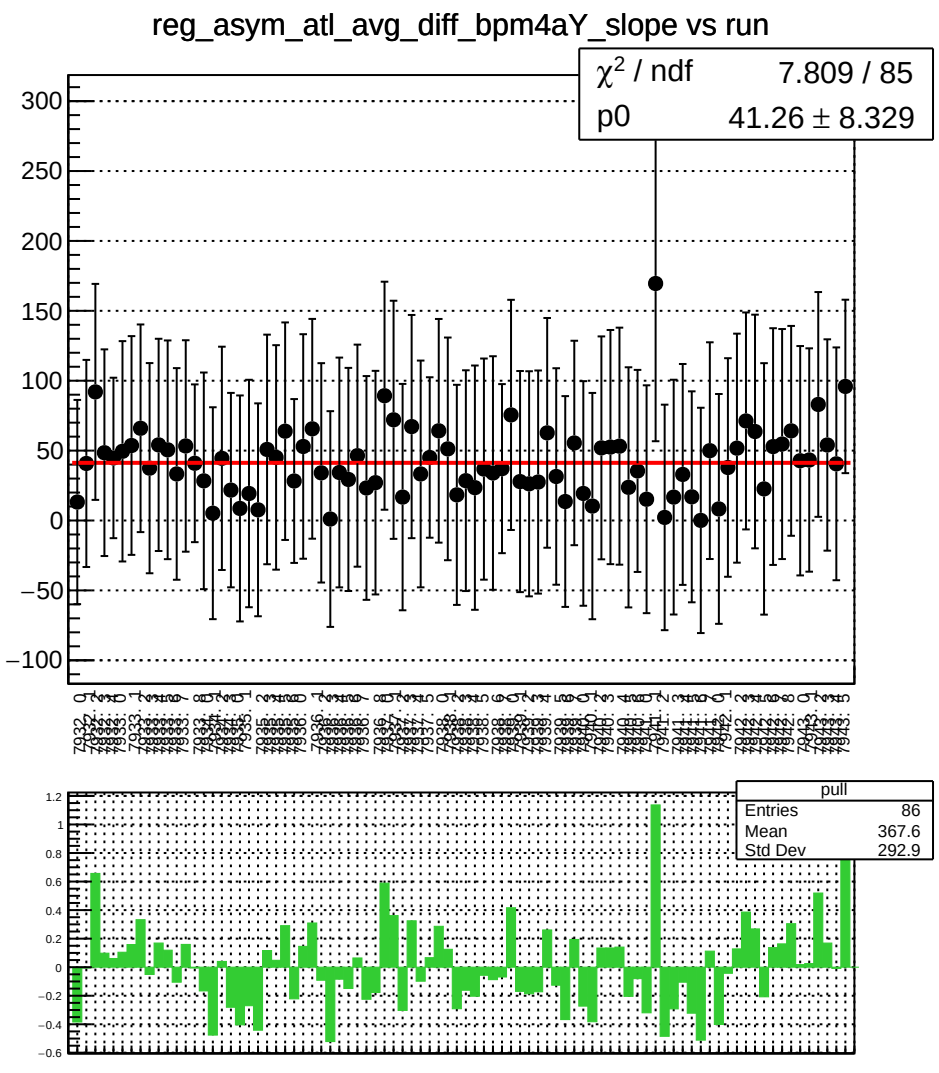

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 4.092 / 85
p0 −23.92 ± 27.57
400
200
0
−200
−400
pull
Entries 86
Mean −85.64
Std Dev 134
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

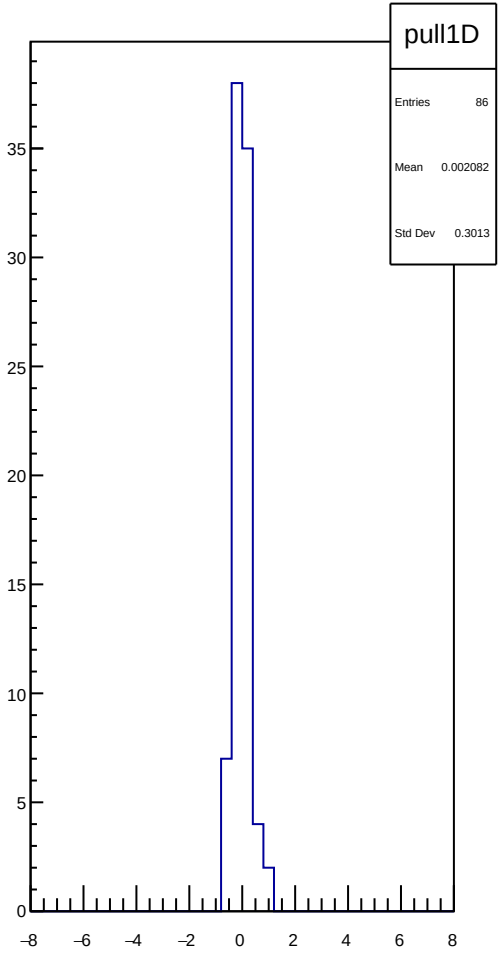

pull1D
Entries 86
Mean −0.002902
Std Dev 0.2181
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

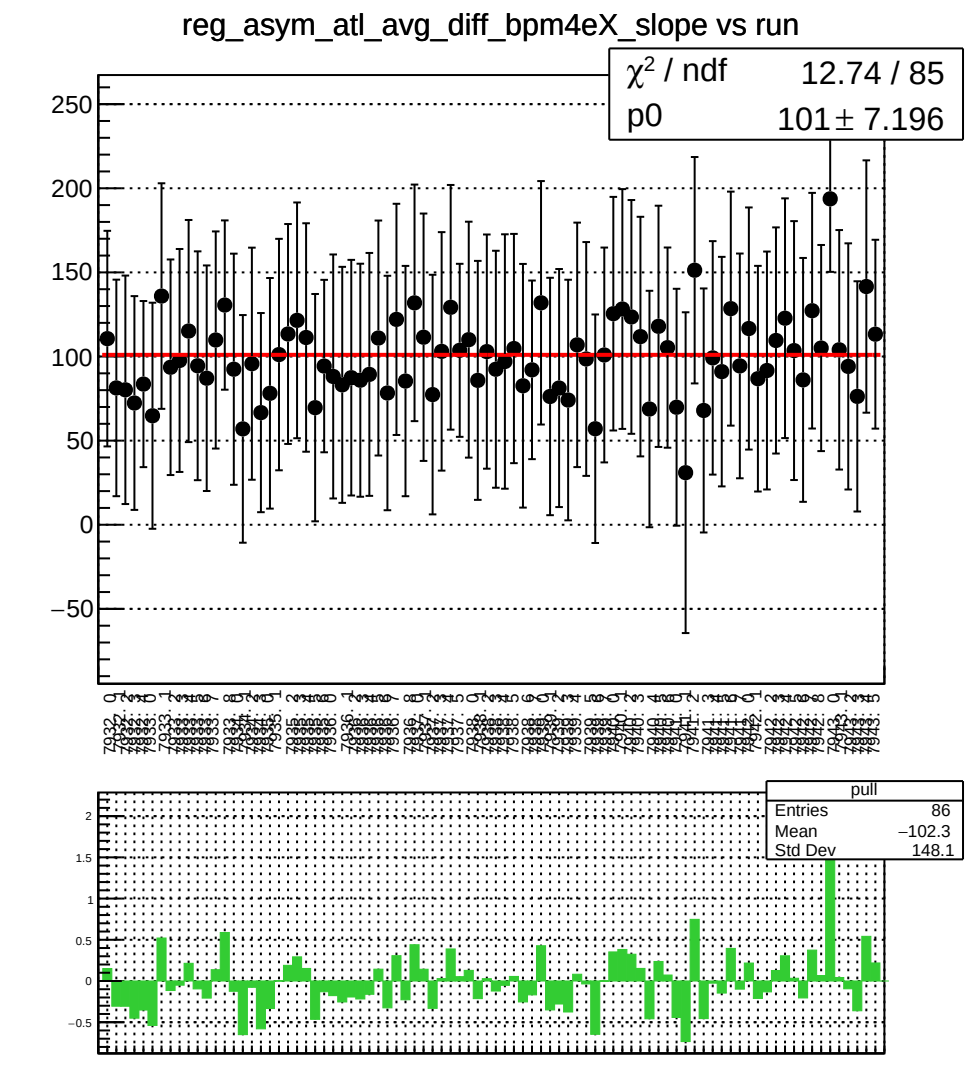

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 5.627 / 85
p0 −295.3 ± 0.7737
pull
Entries 86
Mean 64.24
Std Dev 34.02
pull1D
Entries 86
Mean −0.004759
Std Dev 0.2558

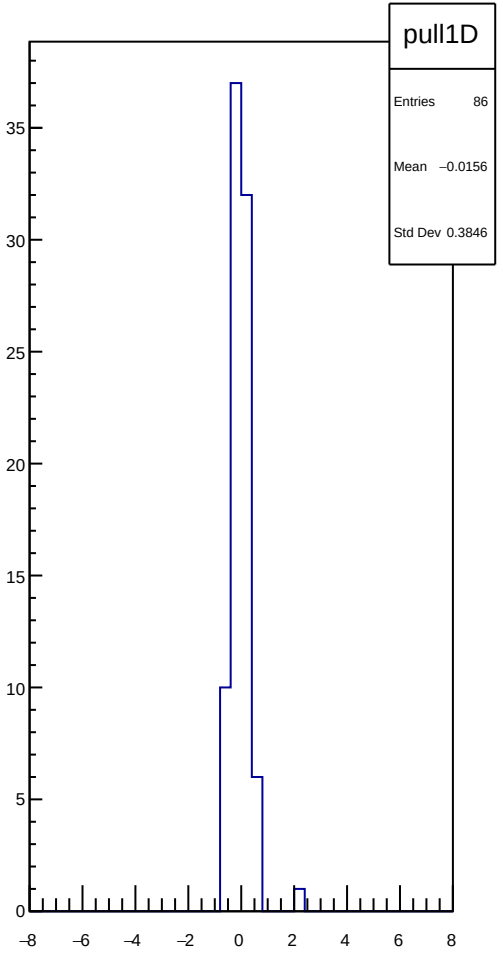

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 12.38 / 85
p0 −129.1± 7.999
pull
Entries 86
Mean −117.3
Std Dev 163.1

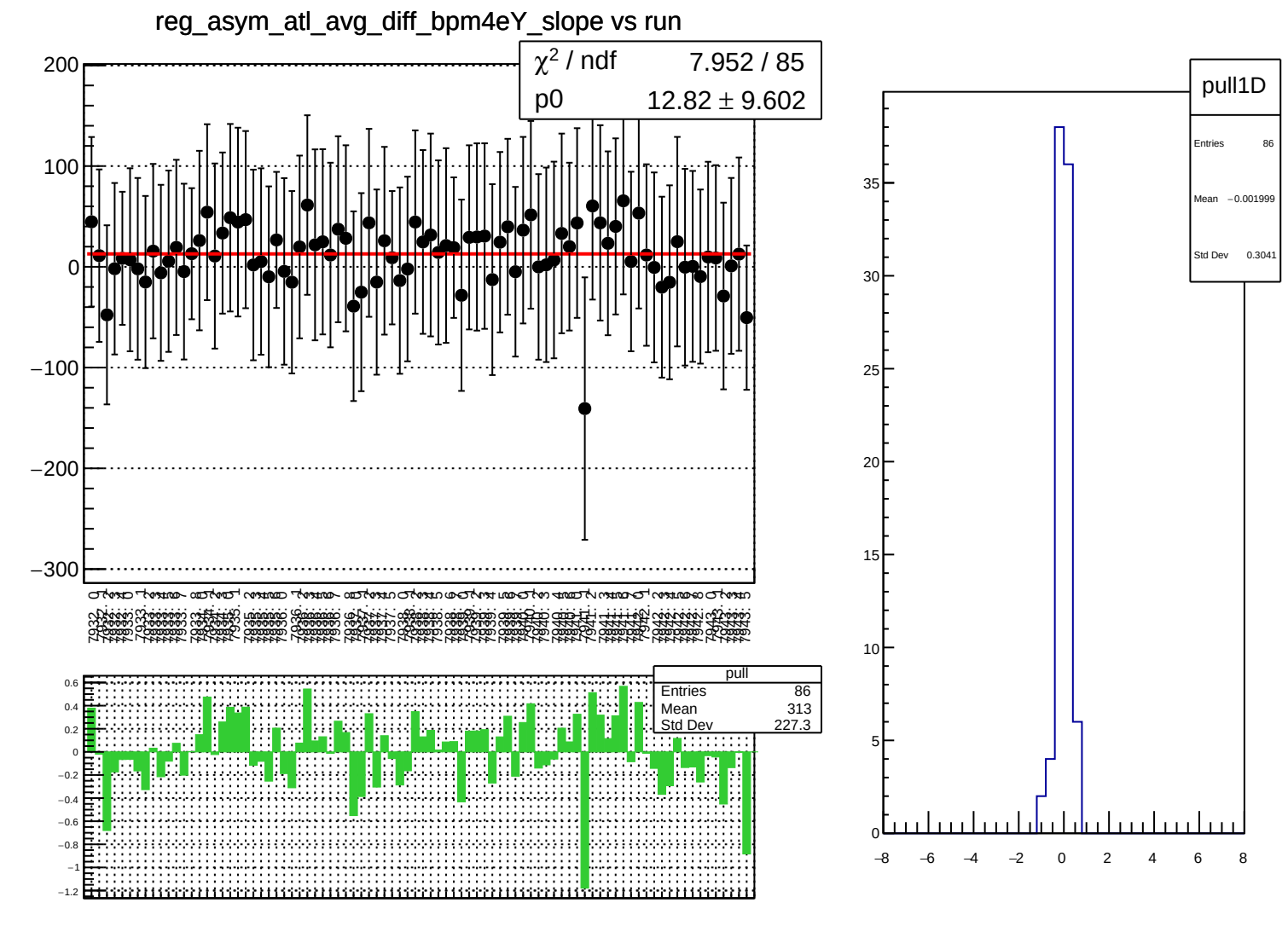

pull1D
Entries 86
Mean 0.01407
Std Dev 0.3792

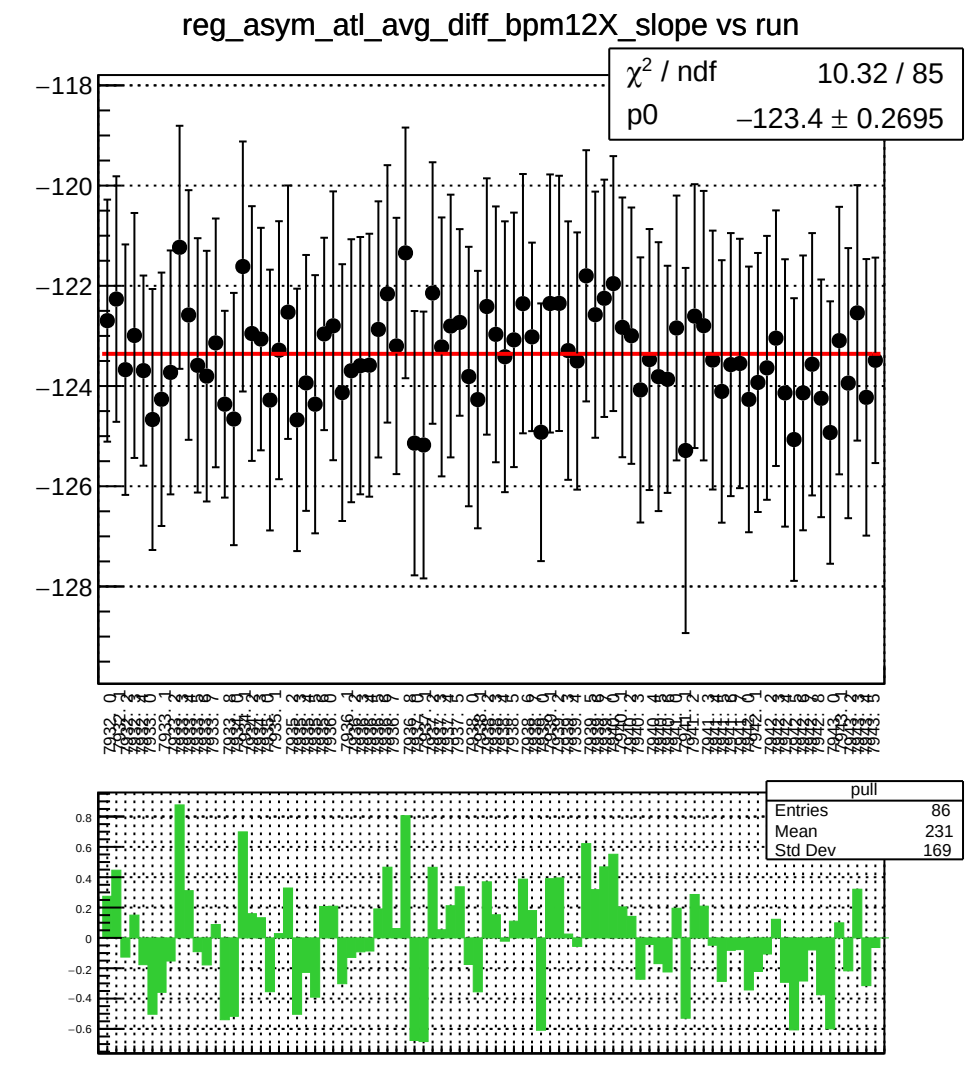

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.809 / 85
p0 41.26 ± 8.329
pull
Entries 86
Mean 367.6
Std Dev 292.9

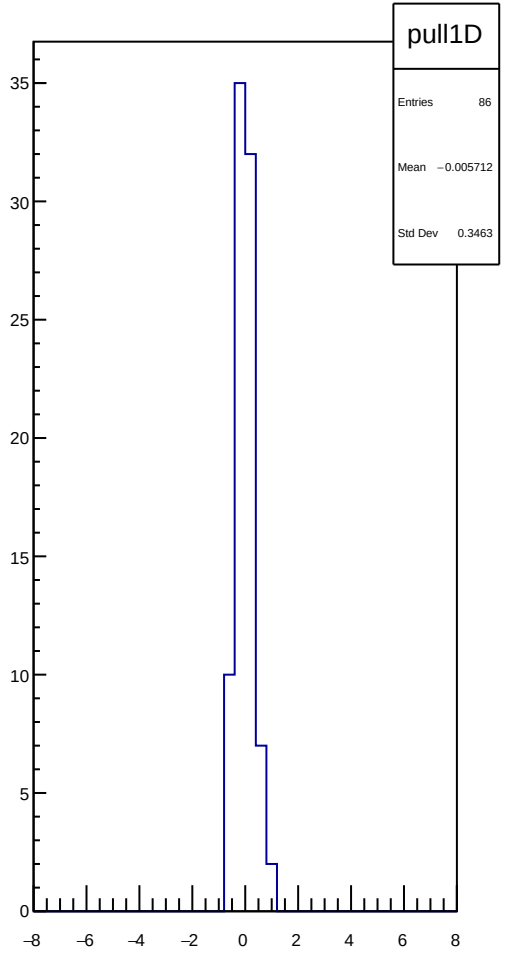

pull1D
Entries 86
Mean 0.002082
Std Dev 0.3013

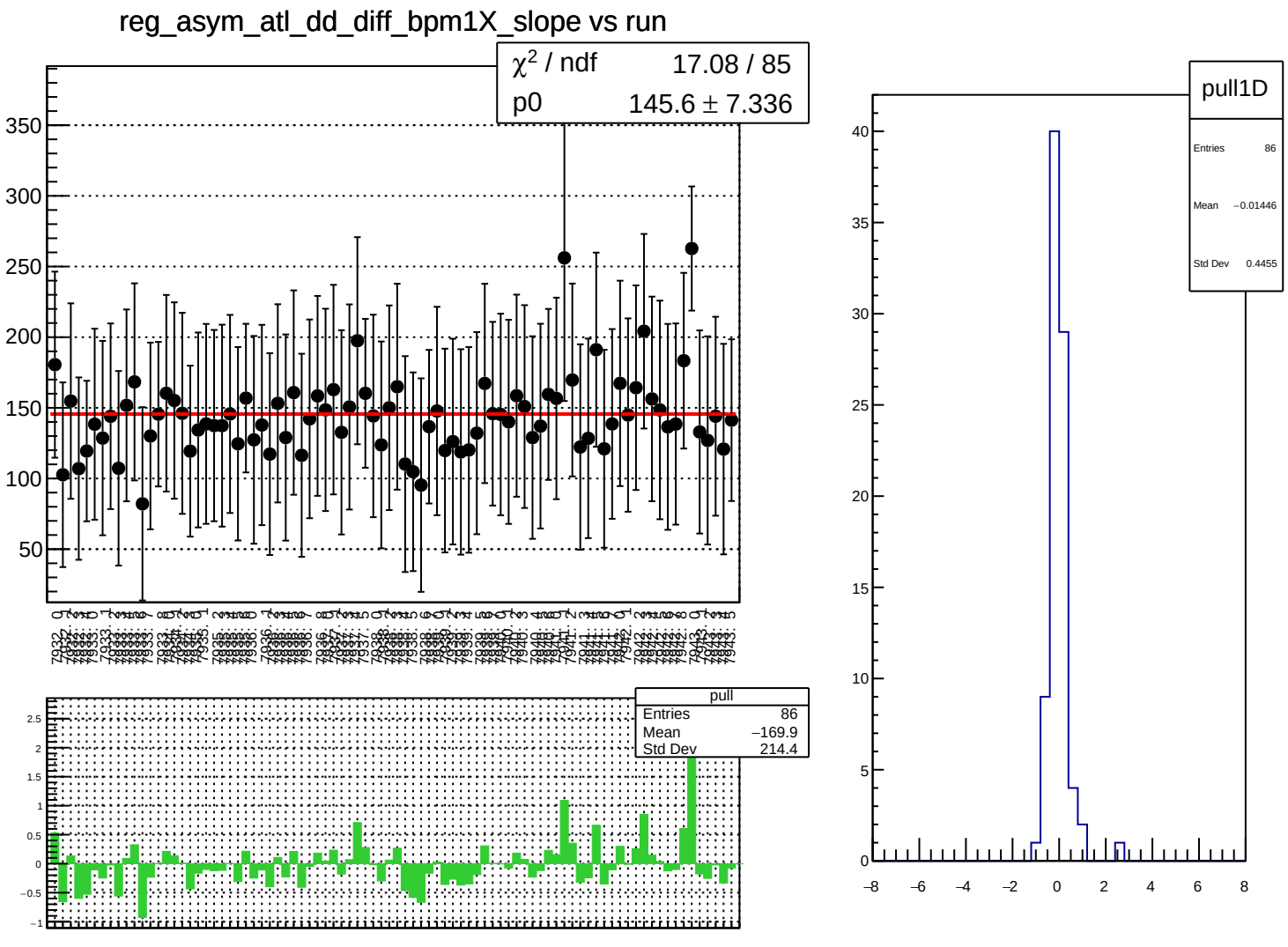

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.74 / 85
p0 101 ± 7.196
pull
Entries 86
Mean −102.3
Std Dev 148.1

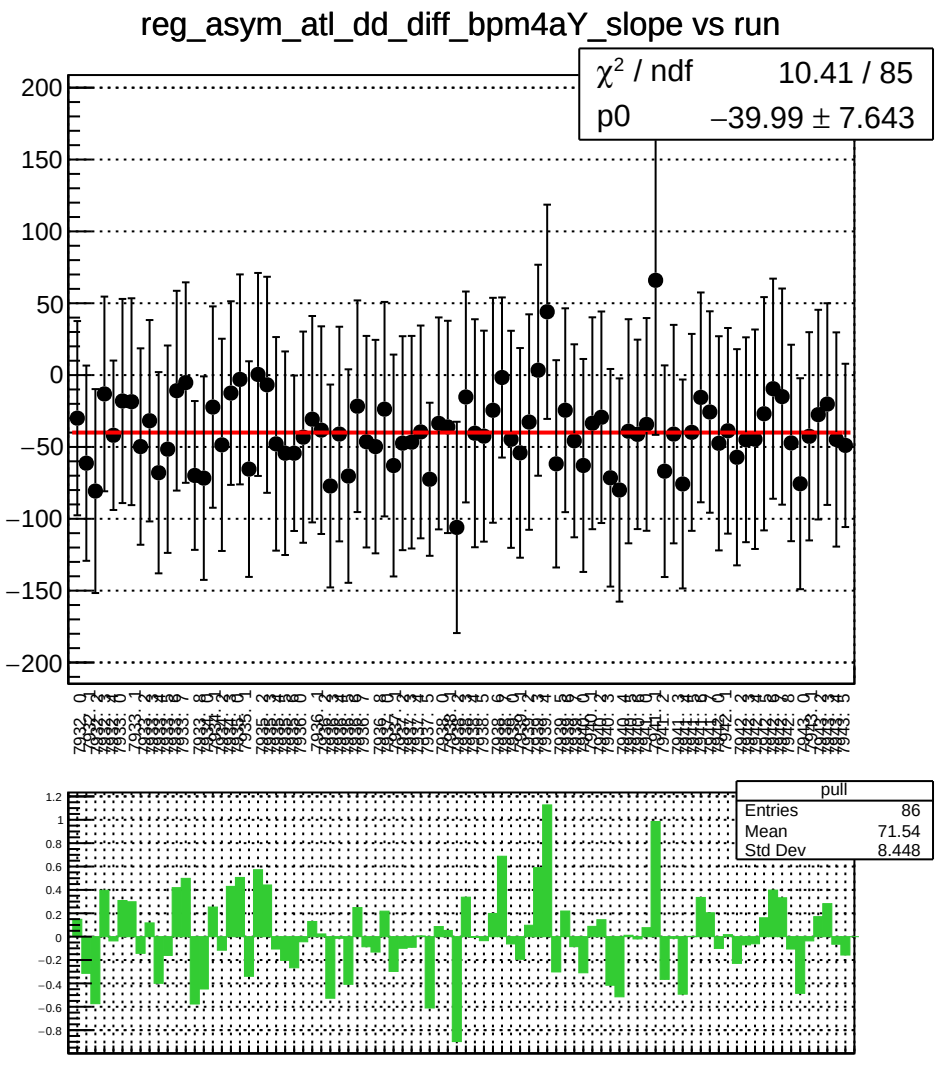

pull1D
Entries 86
Mean −0.0156
Std Dev 0.3846

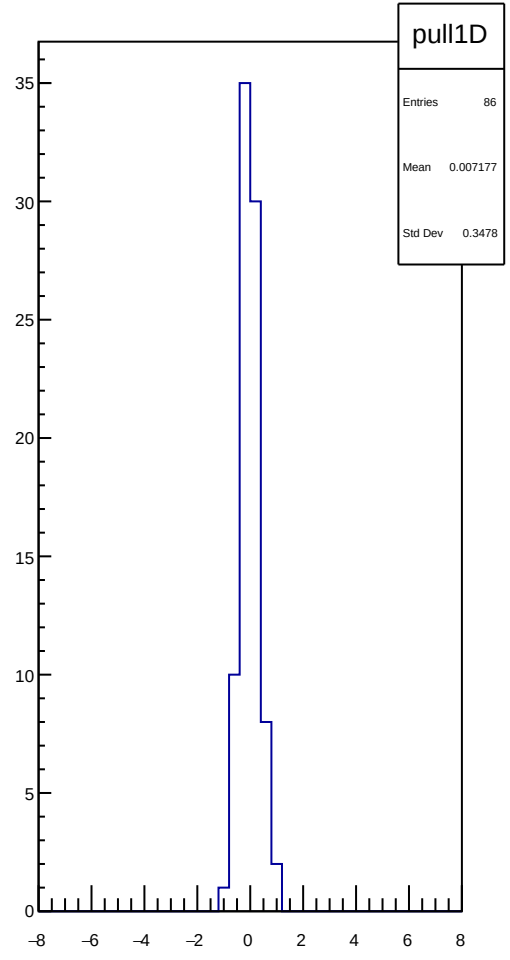

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.952 / 85
p0 12.82 ± 9.602
pull
Entries 86
Mean 313
Std Dev 227.3
pull1D
Entries 86
Mean −0.001999
Std Dev 0.3041

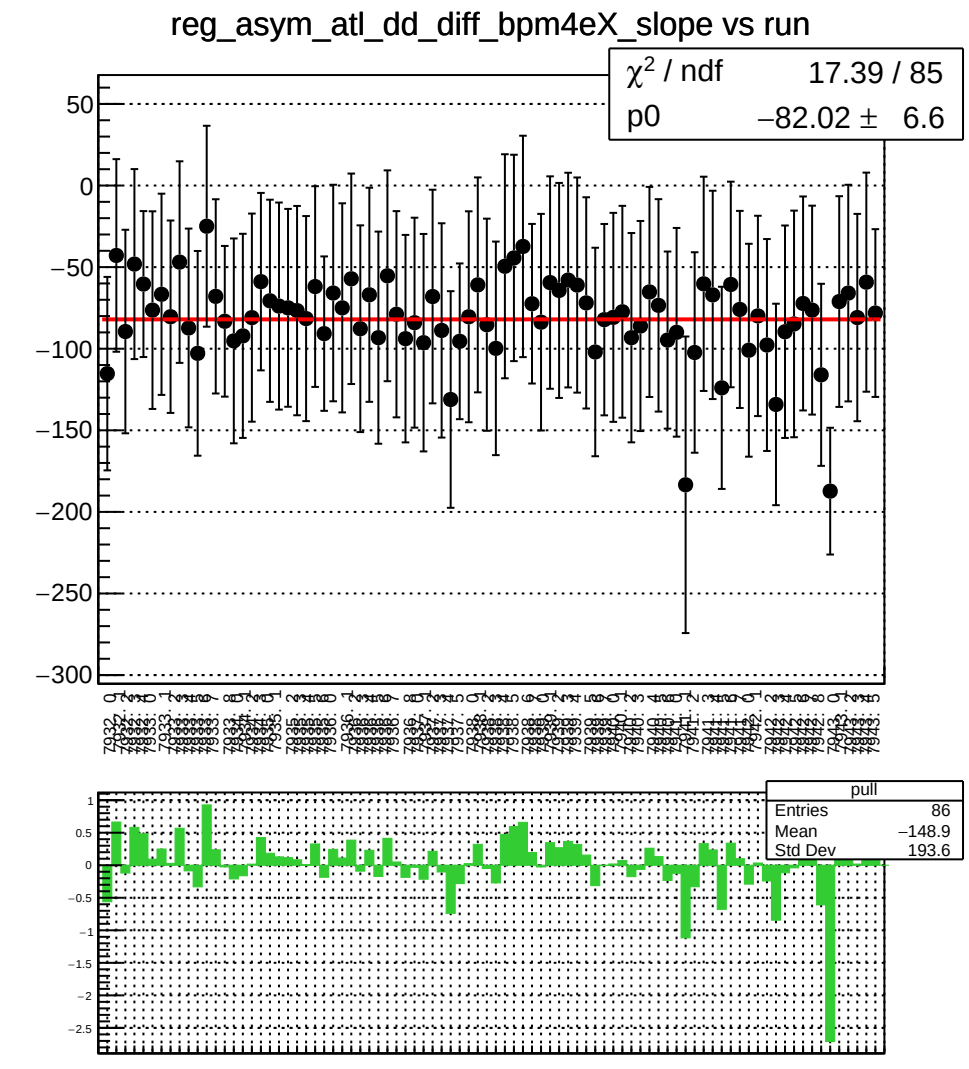

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 10.32 / 85
p0 −123.4 ± 0.2695
pull
Entries 86
Mean 231
Std Dev 169

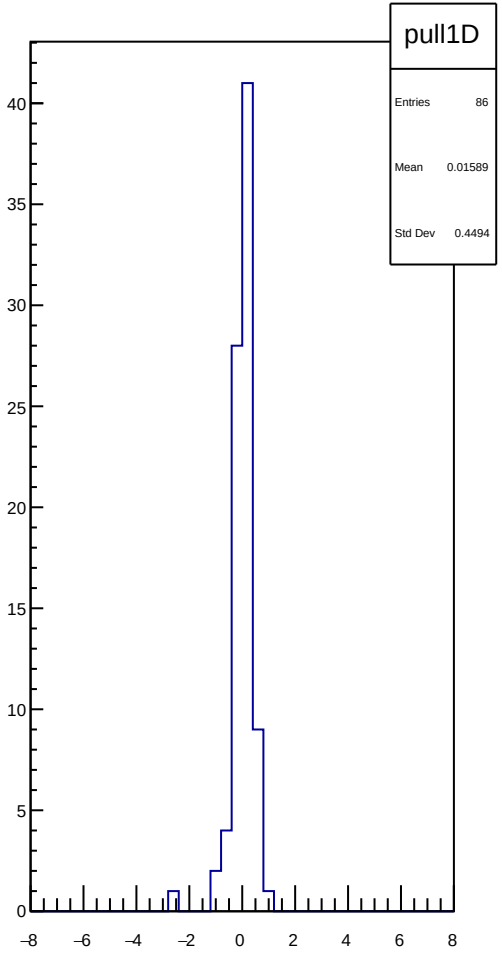

pull1D
Entries 86
Mean −0.005712
Std Dev 0.3463

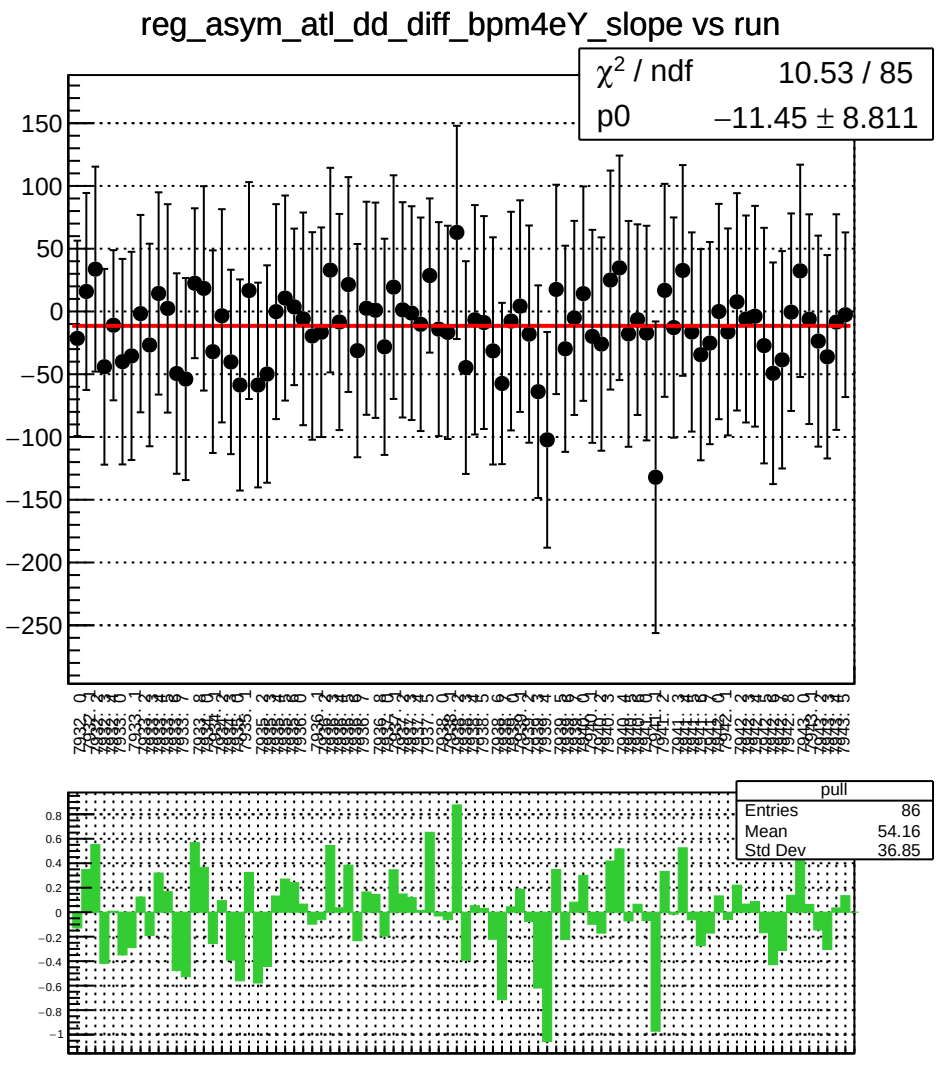

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 17.08 / 85
p0 145.6 ± 7.336
pull
Entries 86
Mean −169.9
Std Dev 214.4
pull1D
Entries 86
Mean −0.01446
Std Dev 0.4455

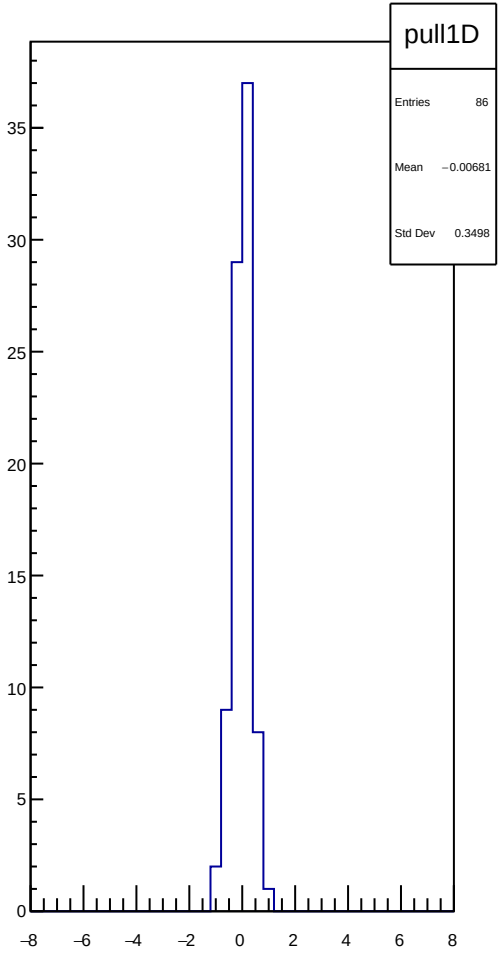

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.41 / 85
p0 −39.99 ± 7.643
pull
Entries 86
Mean 71.54
Std Dev 8.448

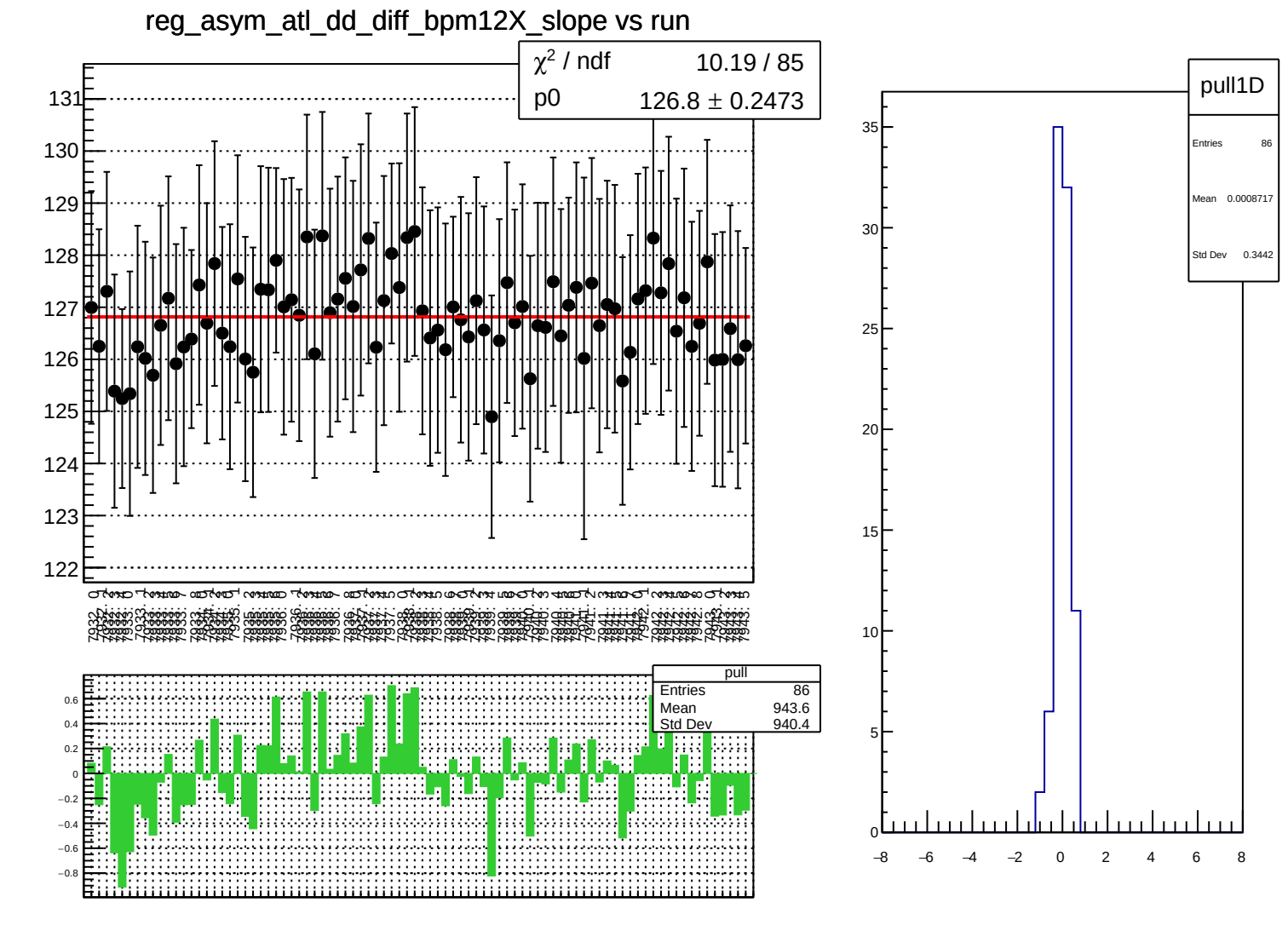

pull1D
Entries 86
Mean 0.007177
Std Dev 0.3478

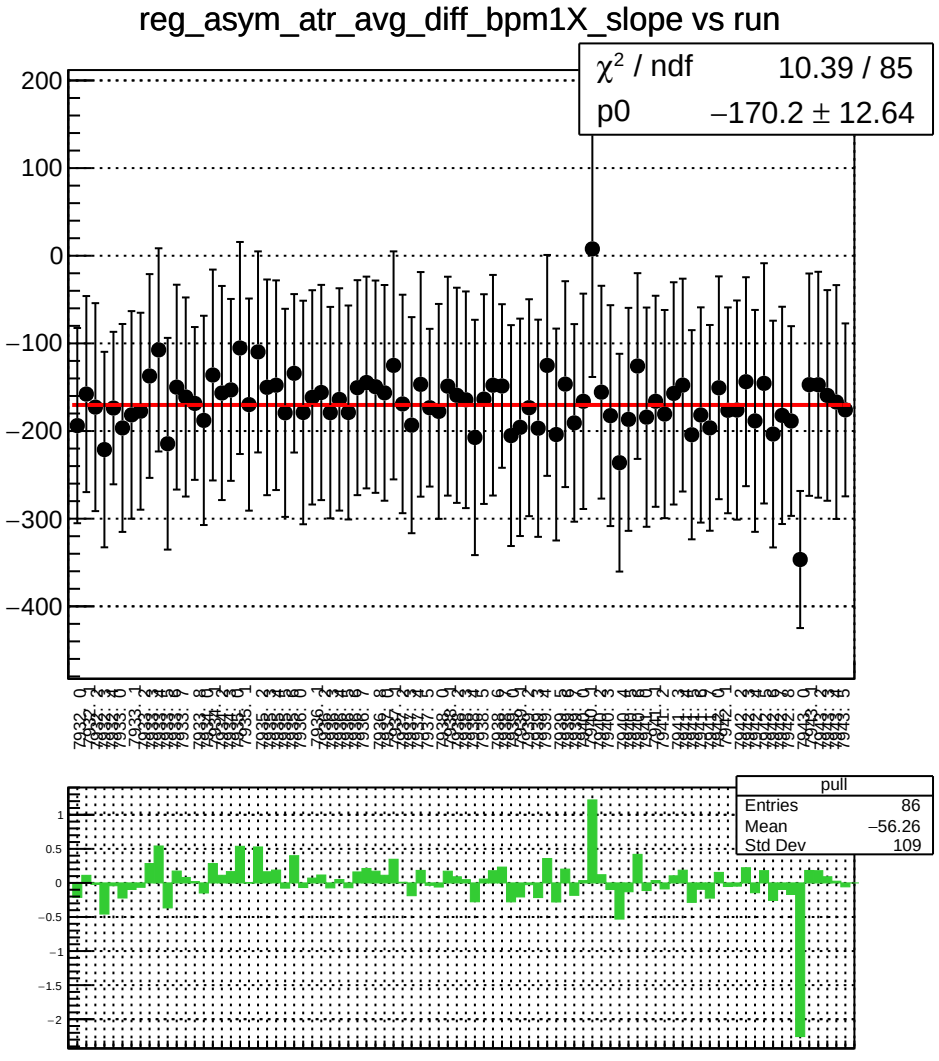

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 17.39 / 85
p0 −82.02 ± 6.6
pull
Entries 86
Mean −148.9
Std Dev 193.6

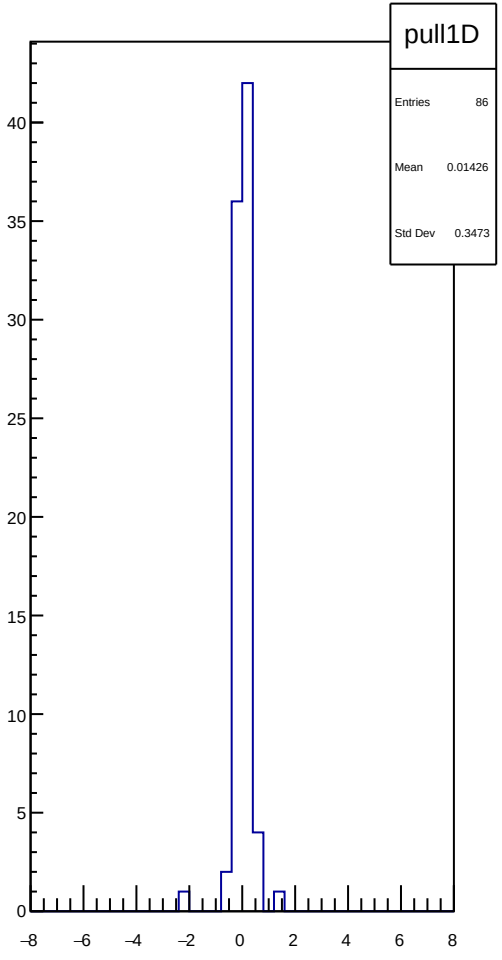

pull1D
Entries 86
Mean 0.01589
Std Dev 0.4494

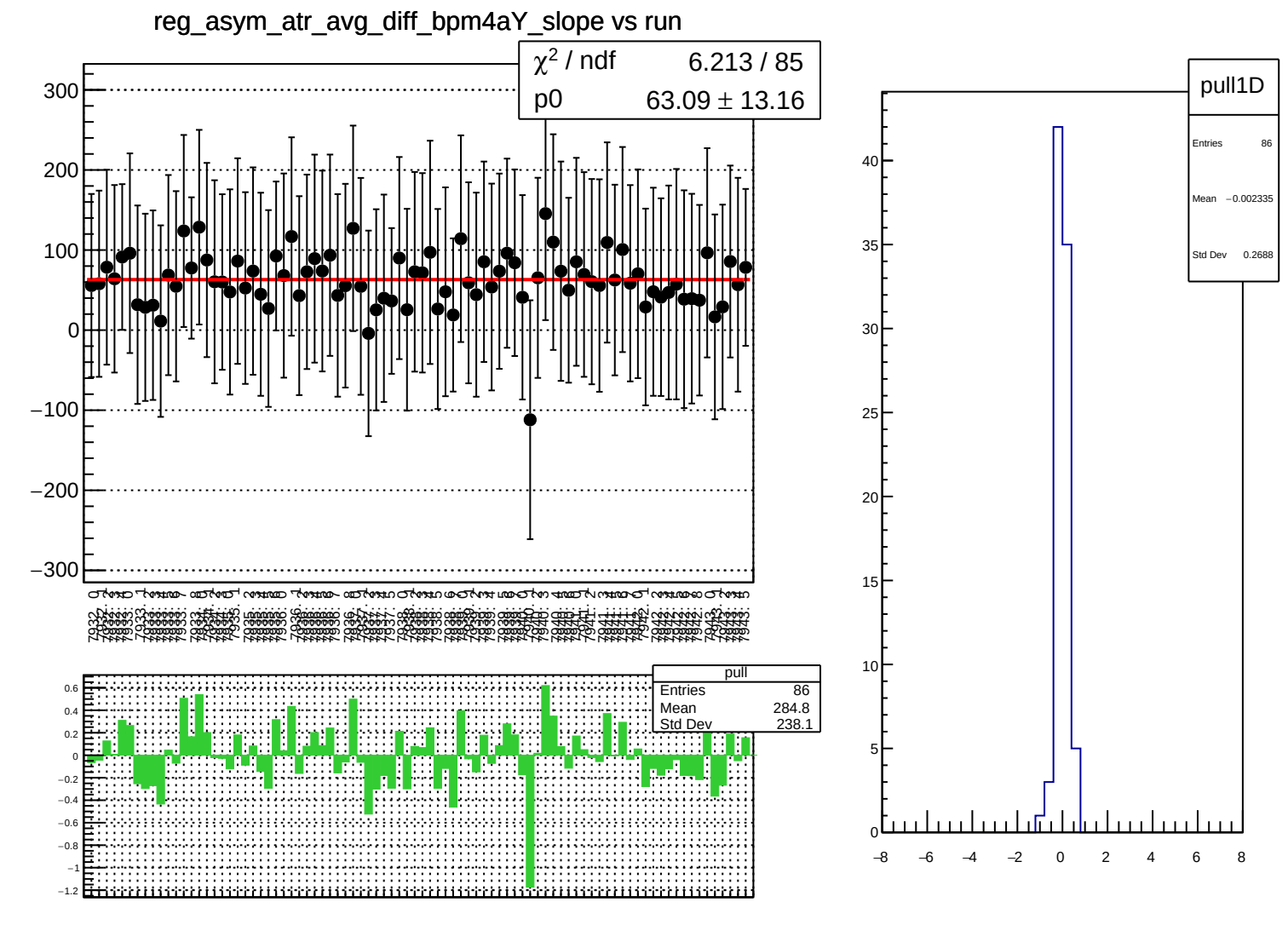

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.53 / 85
p0 −11.45 ± 8.811
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 86
Mean 54.16
Std Dev 36.85
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

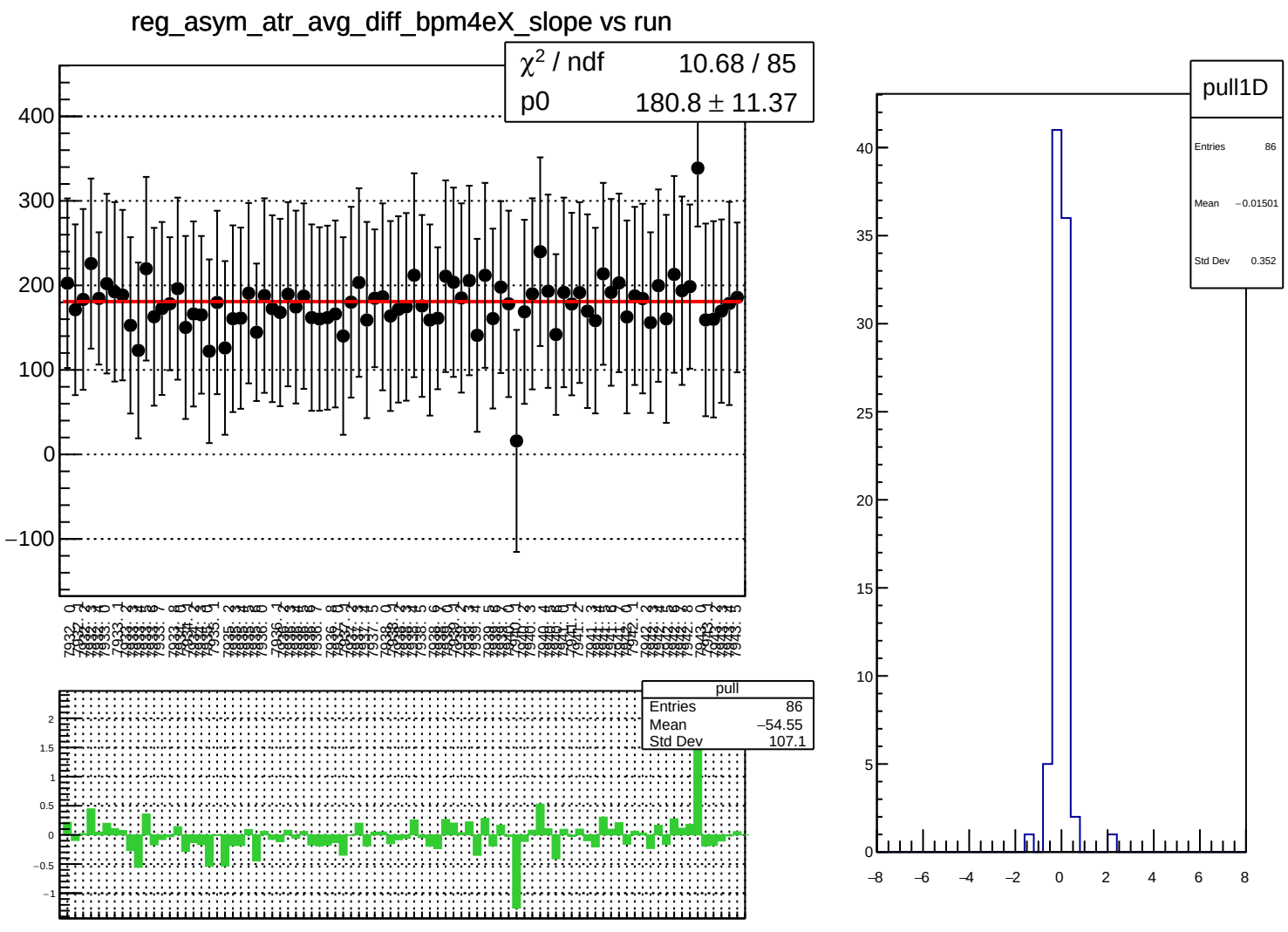

pull1D
Entries 86
Mean −0.00681
Std Dev 0.3498
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

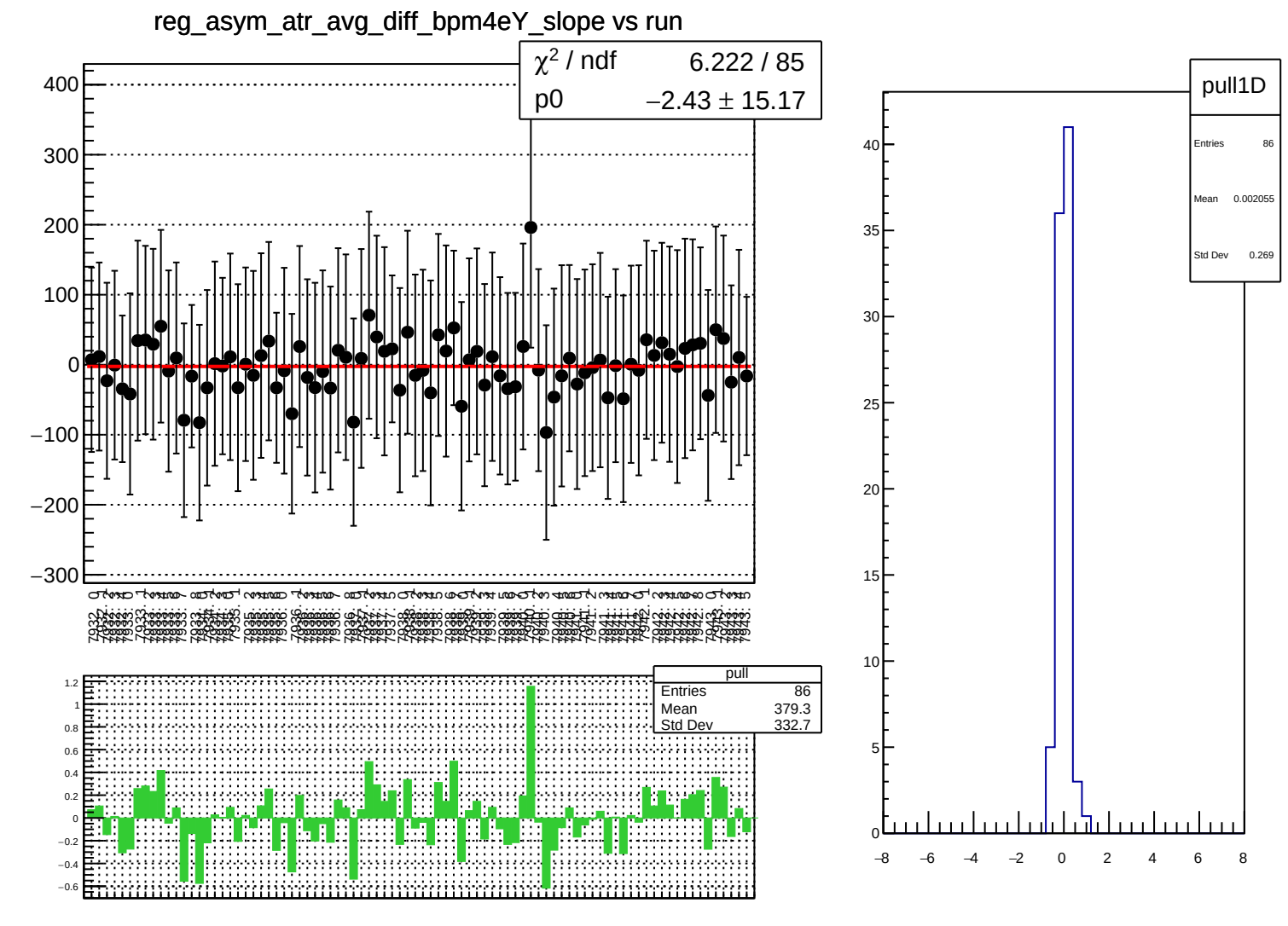

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 10.19 / 85
p0 126.8 ± 0.2473
pull
Entries 86
Mean 943.6
Std Dev 940.4
pull1D
Entries 86
Mean 0.0008717
Std Dev 0.3442

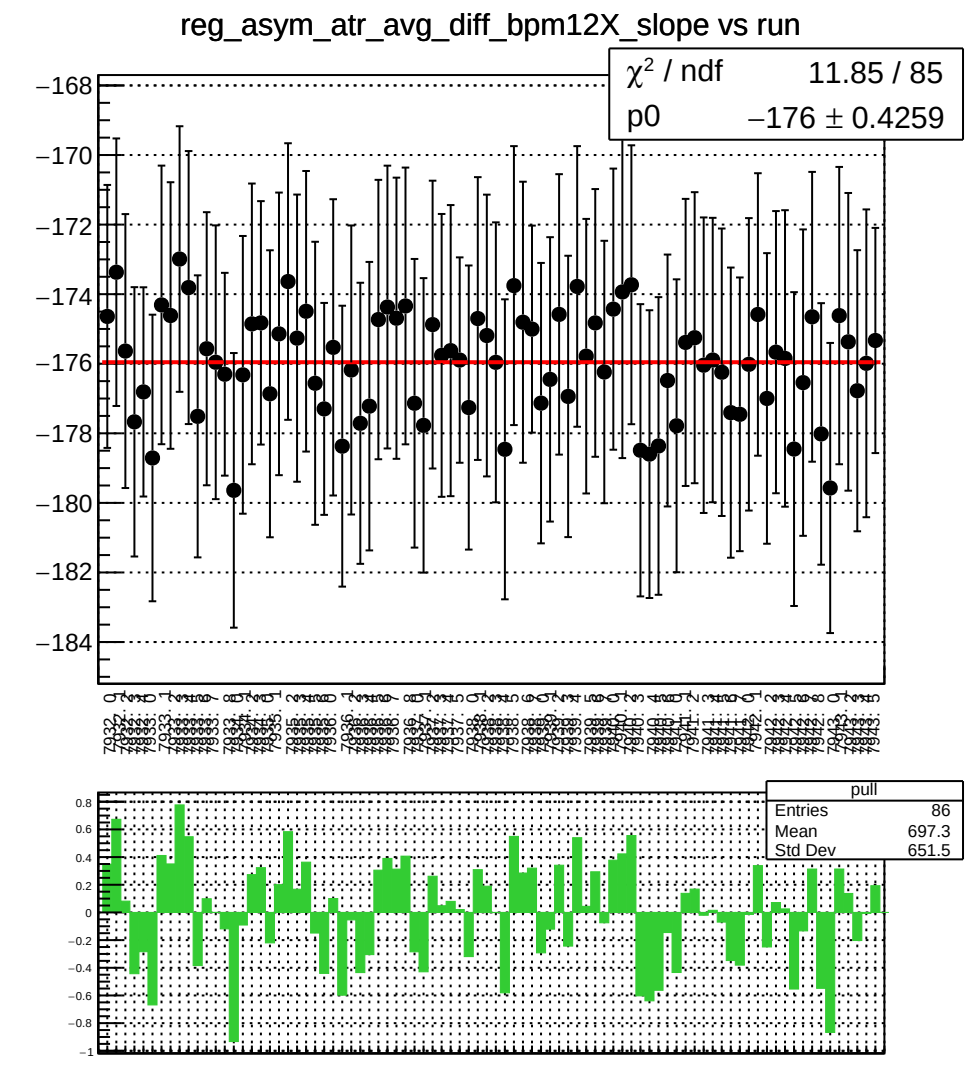

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 10.39 / 85
p0 −170.2 ± 12.64
pull
Entries 86
Mean −56.26
Std Dev 109

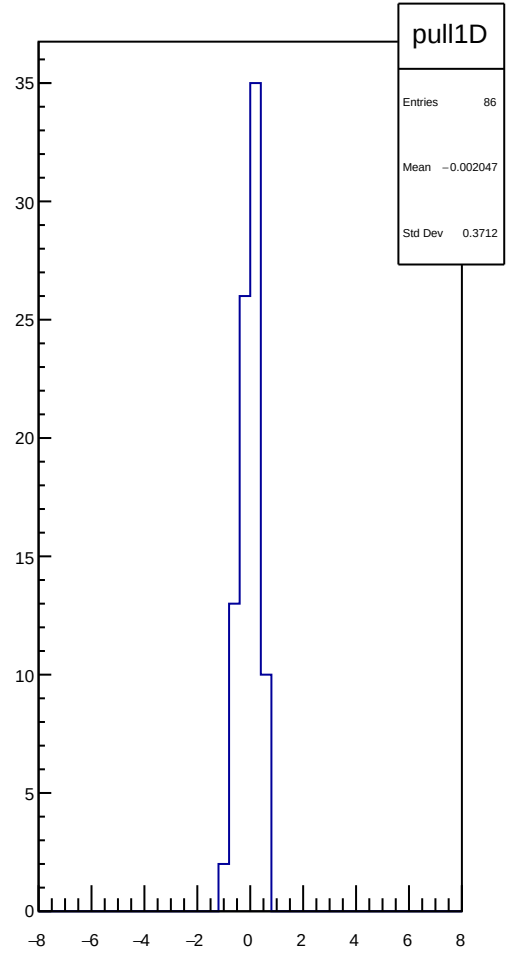

pull1D
Entries 86
Mean 0.01426
Std Dev 0.3473

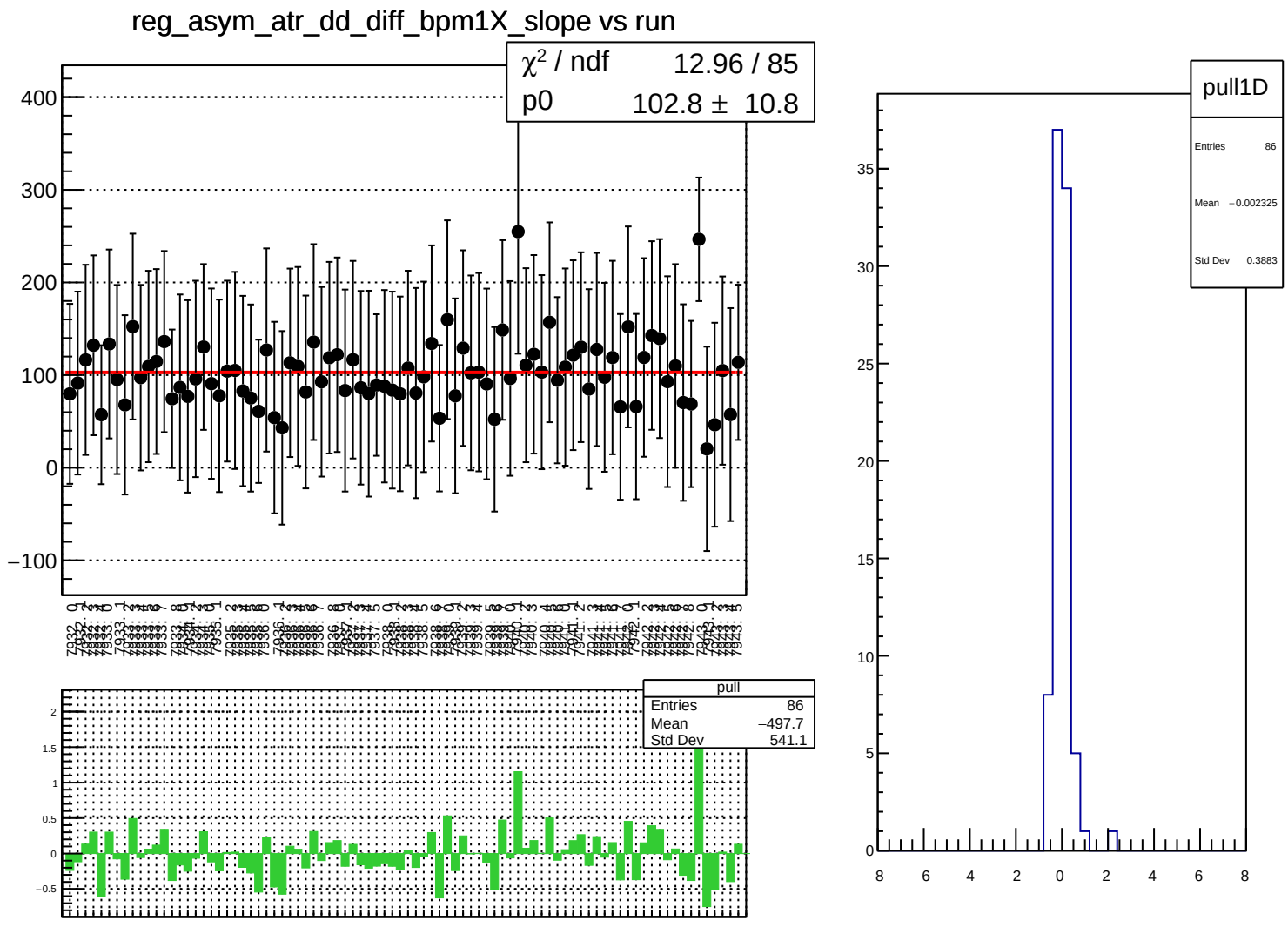

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.213 / 85
p0 63.09 ± 13.16
pull
Entries 86
Mean 284.8
Std Dev 238.1
pull1D
Entries 86
Mean −0.002335
Std Dev 0.2688

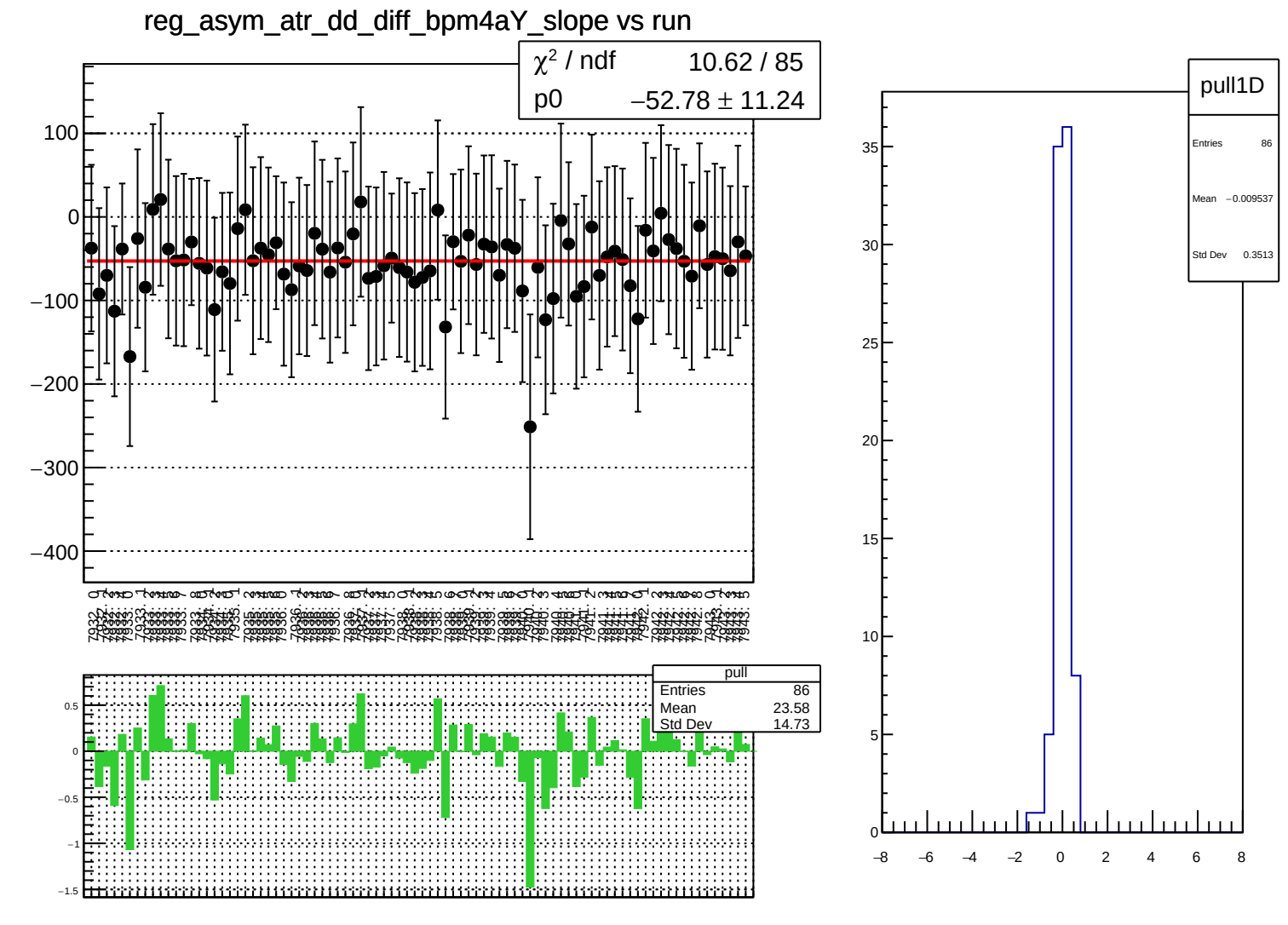

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 10.68 / 85
p0 180.8 ± 11.37
pull
Entries 86
Mean −54.55
Std Dev 107.1
pull1D
Entries 86
Mean −0.01501
Std Dev 0.352

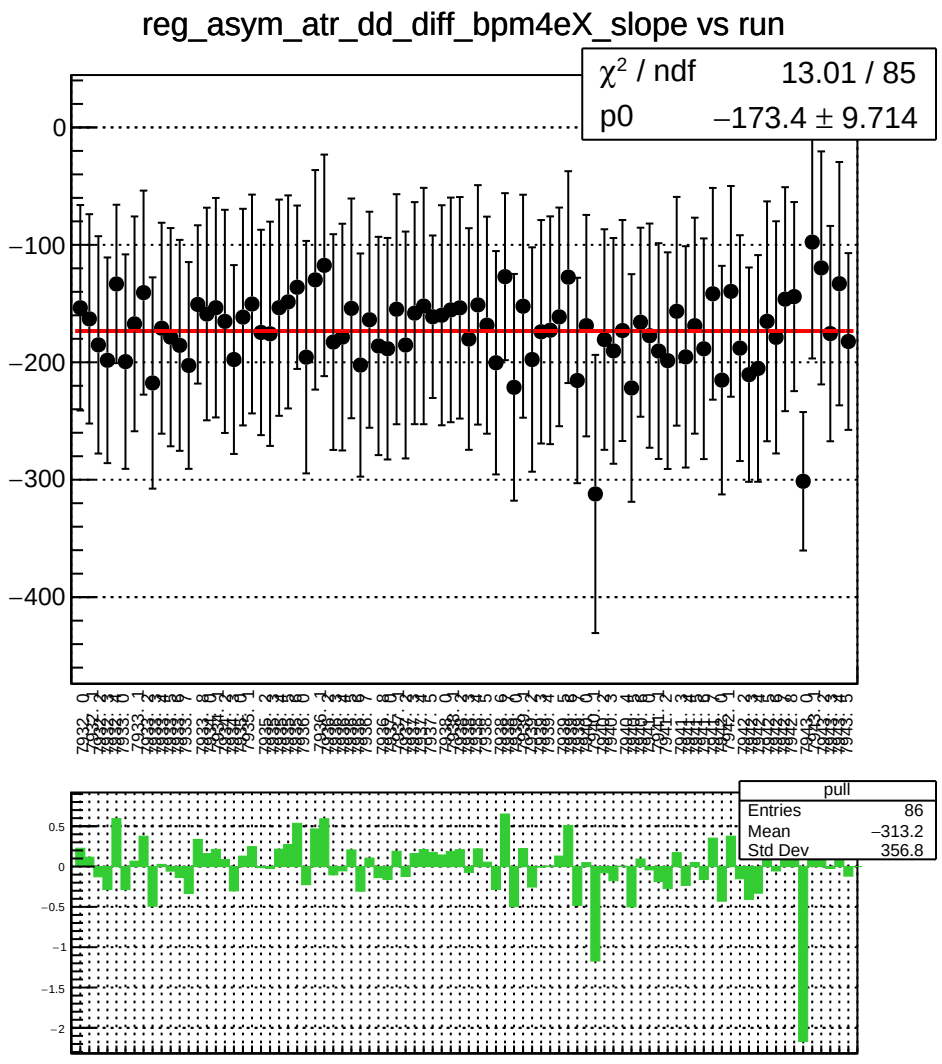

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.222 / 85
p0 −2.43 ± 15.17
pull
Entries 86
Mean 379.3
Std Dev 332.7
pull1D
Entries 86
Mean 0.002055
Std Dev 0.269

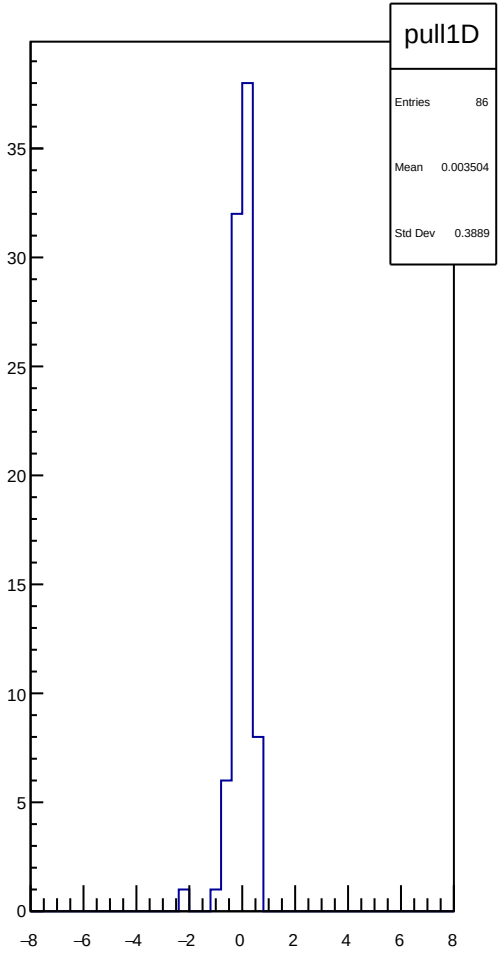

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 11.85 / 85
p0 −176 ± 0.4259
pull
Entries 86
Mean 697.3
Std Dev 651.5

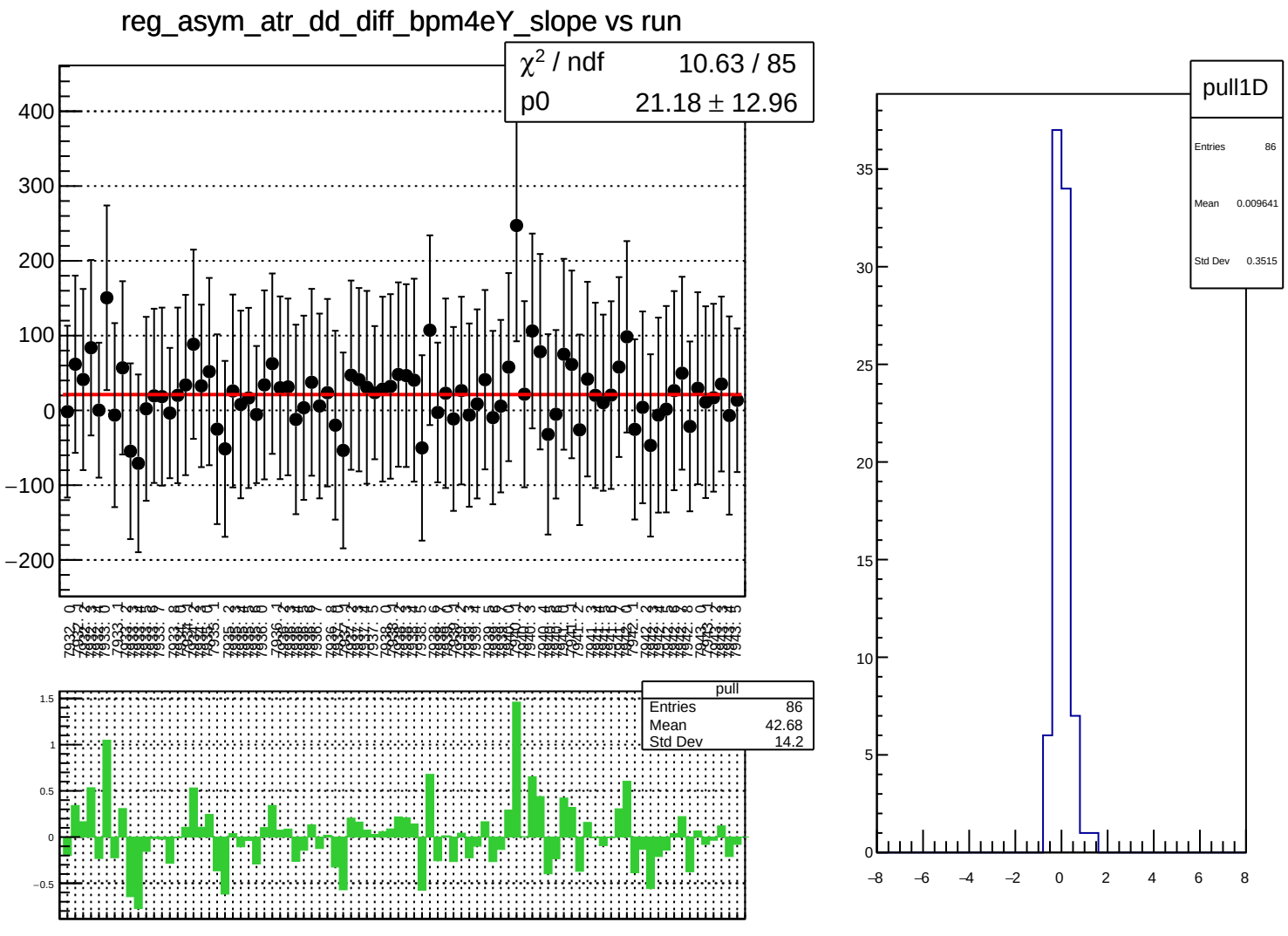

pull1D
Entries 86
Mean −0.002047
Std Dev 0.3712

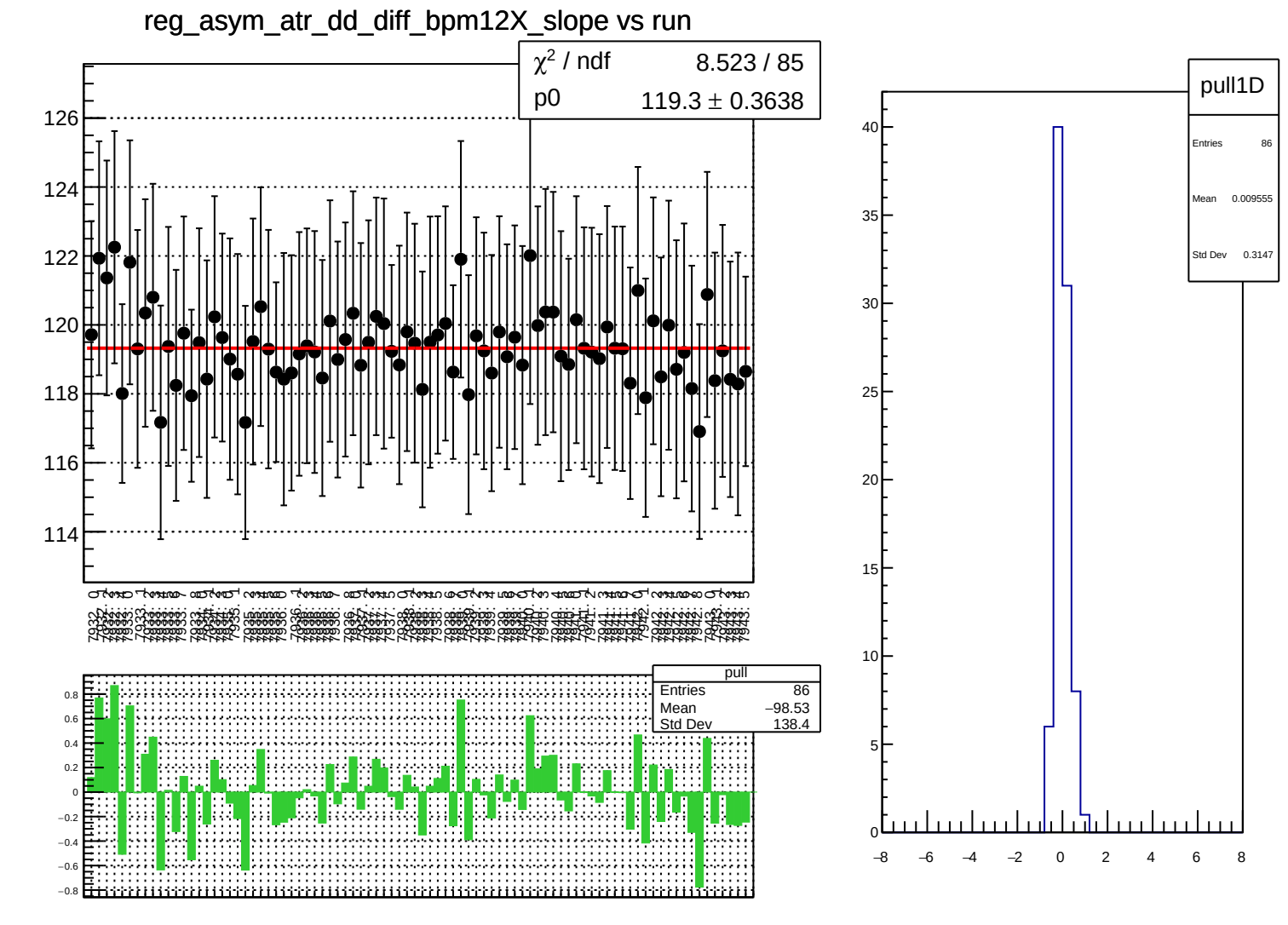

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 12.96 / 85
p0 102.8 ± 10.8
pull
Entries 86
Mean −497.7
Std Dev 541.1
pull1D
Entries 86
Mean −0.002325
Std Dev 0.3883

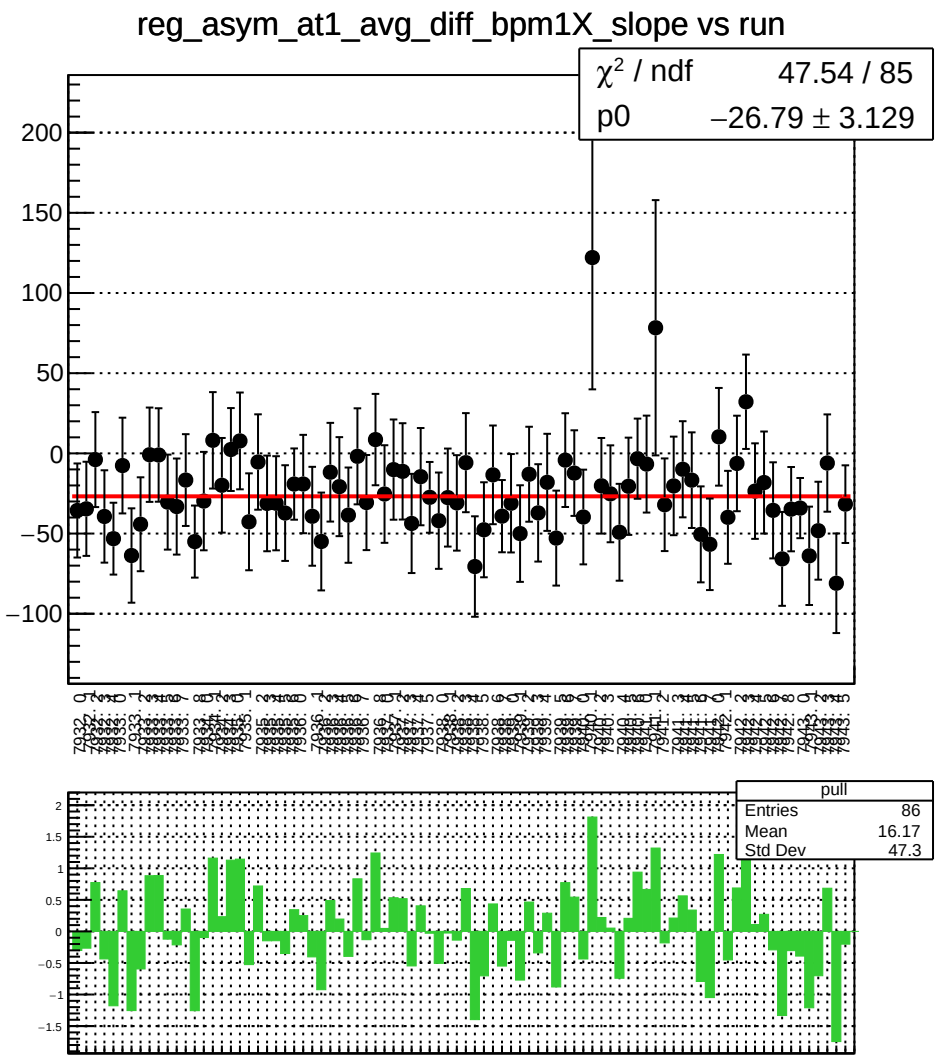

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.62 / 85
p0 −52.78 ± 11.24
100
0
−100
−200
−300
−400
pull
Entries 86
Mean 23.58
Std Dev 14.73
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean −0.009537
Std Dev 0.3513
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

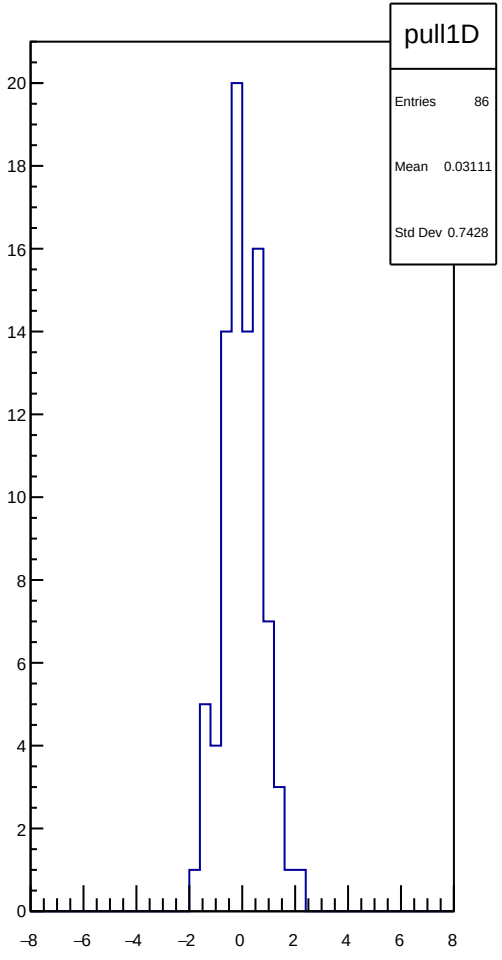

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 13.01 / 85
p0 −173.4 ± 9.714
pull
Entries 86
Mean −313.2
Std Dev 356.8

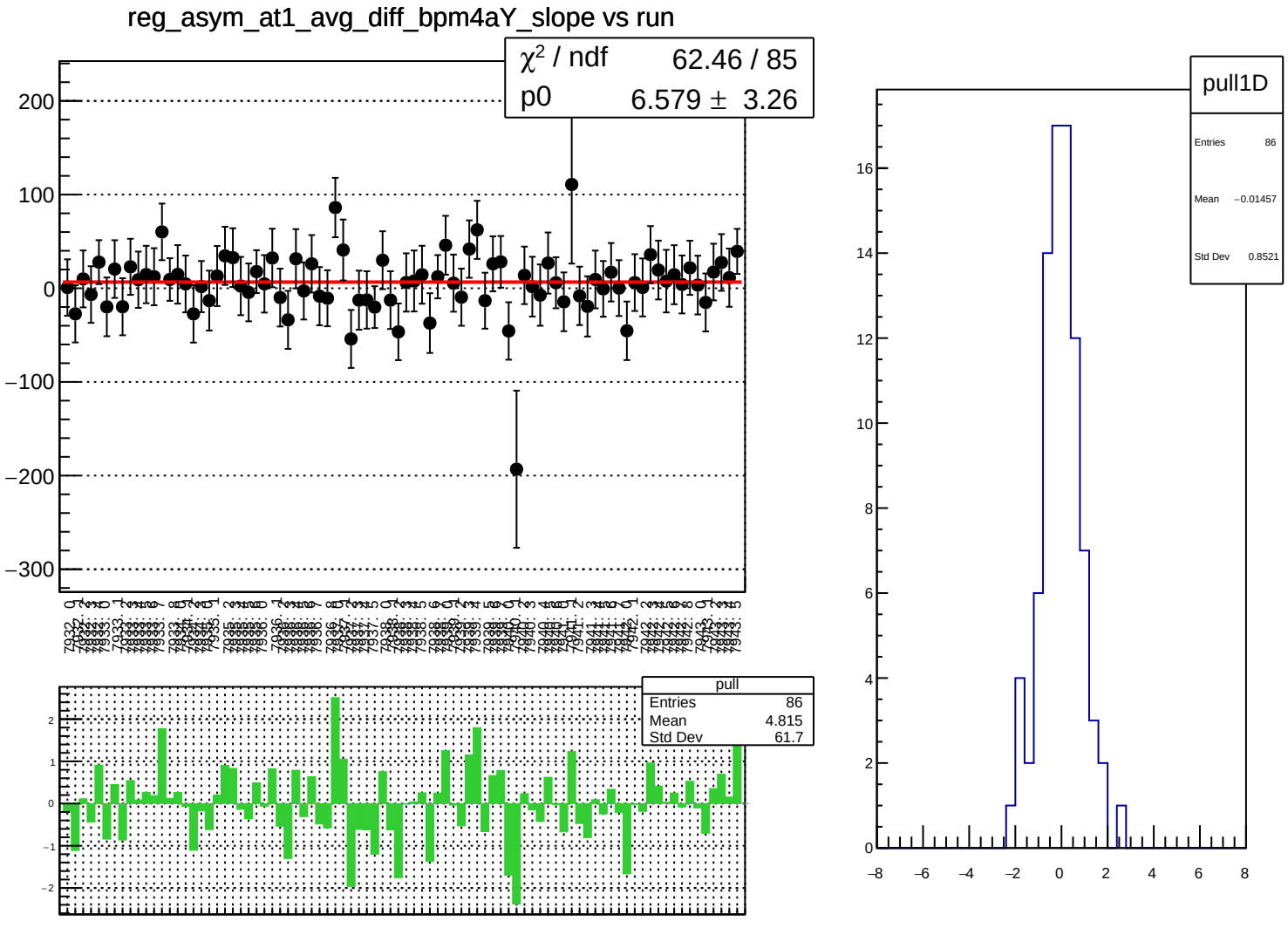

pull1D
Entries 86
Mean 0.003504
Std Dev 0.3889

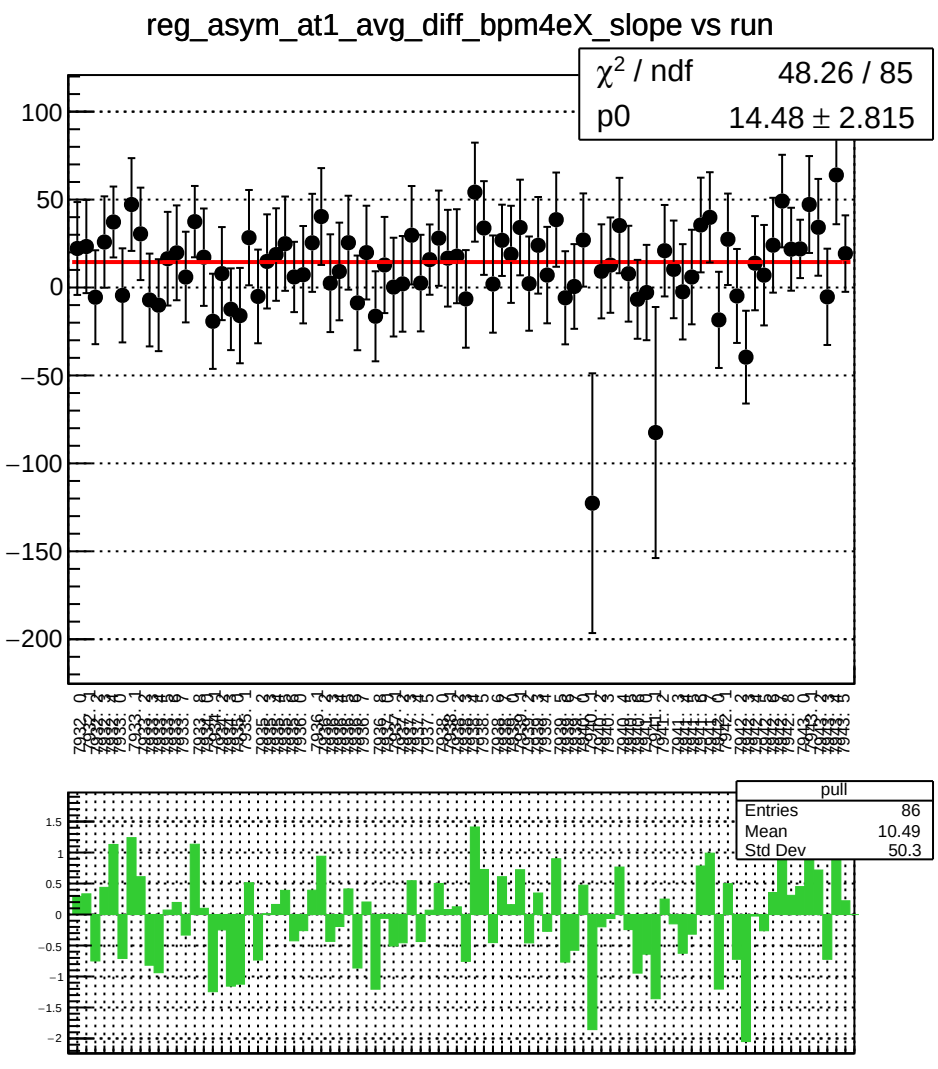

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.63 / 85
p0 21.18 ± 12.96
pull
Entries 86
Mean 42.68
Std Dev 14.2
pull1D
Entries 86
Mean 0.009641
Std Dev 0.3515

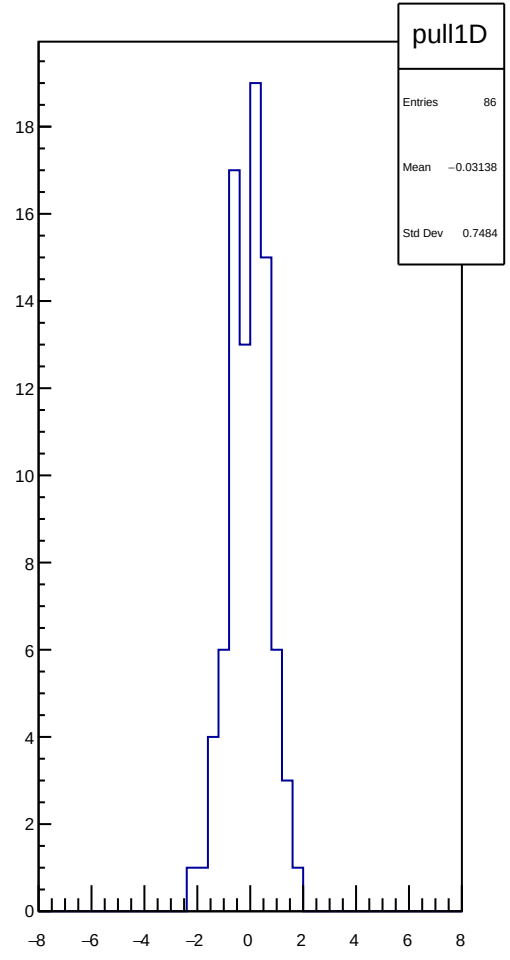

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 8.523 / 85
p0 119.3 ± 0.3638
126
124
122
120
118
116
114
pull
Entries 86
Mean −98.53
Std Dev 138.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 86
Mean 0.009555
Std Dev 0.3147
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

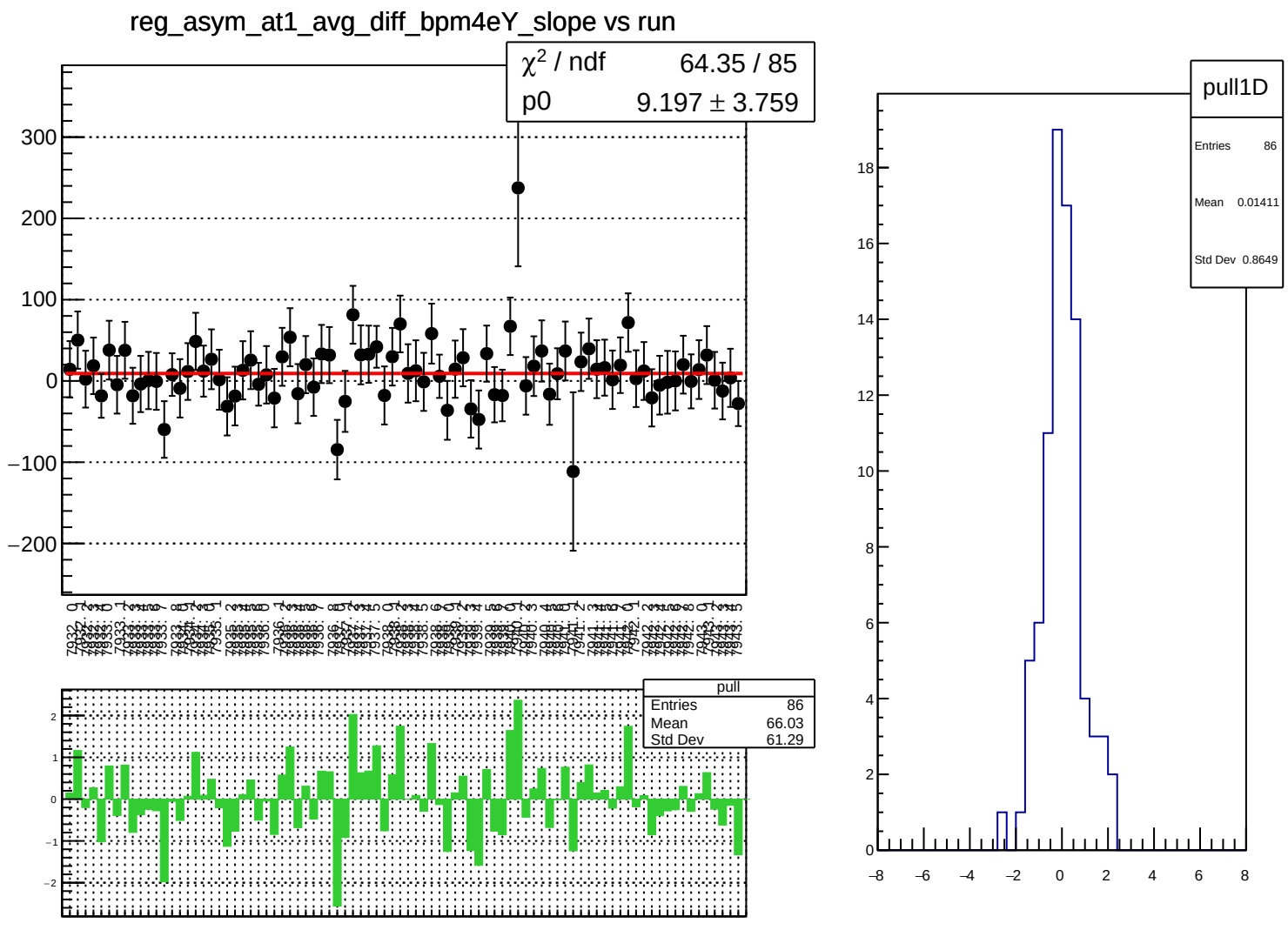

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 47.54 / 85
p0 −26.79 ± 3.129
pull
Entries 86
Mean 16.17
Std Dev 47.3

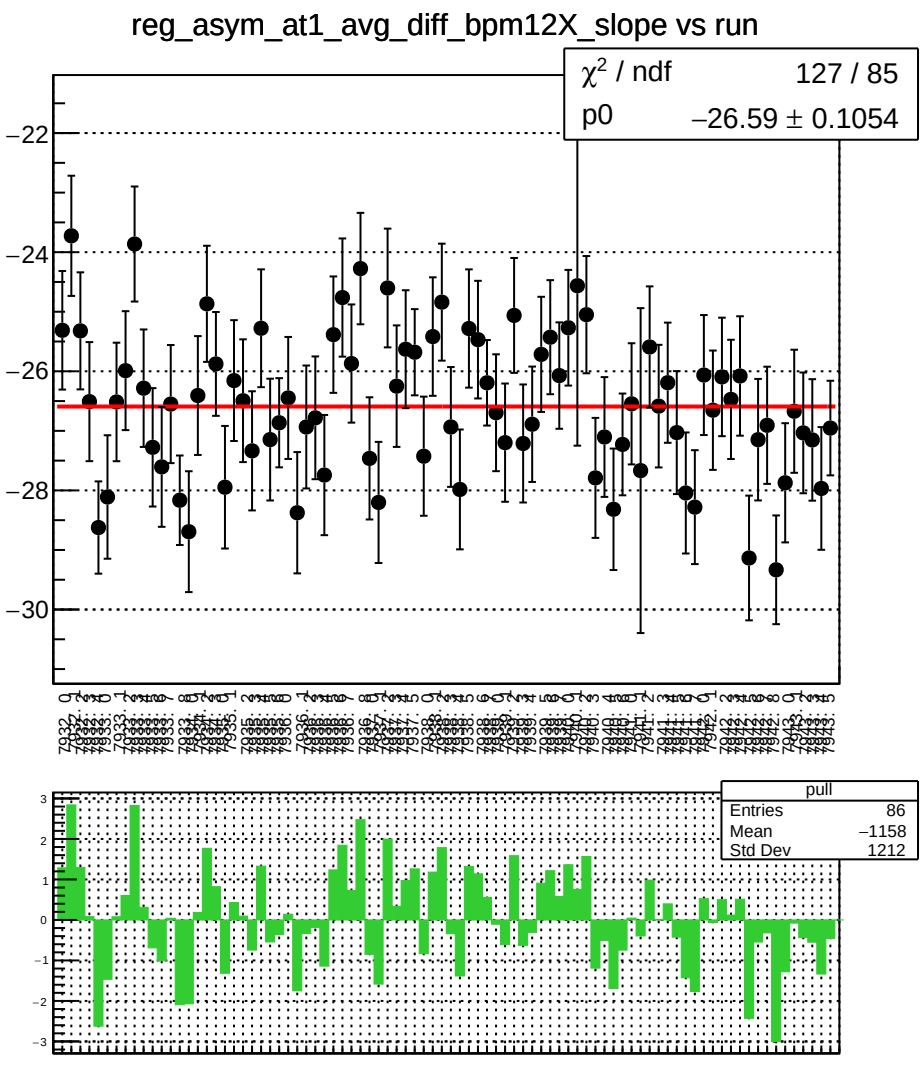

pull1D
Entries 86
Mean 0.03111
Std Dev 0.7428

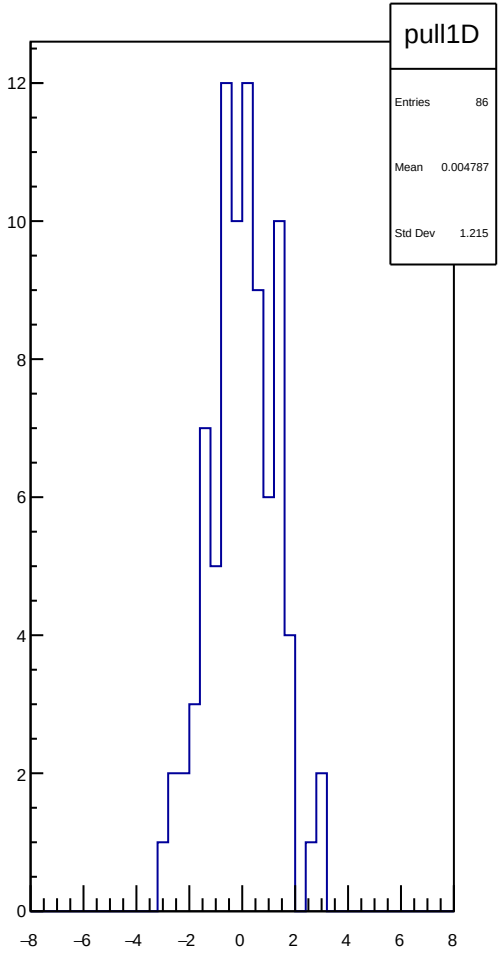

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 62.46 / 85
p0 6.579 ± 3.26
pull
Entries 86
Mean 4.815
Std Dev 61.7
pull1D
Entries 86
Mean −0.01457
Std Dev 0.8521

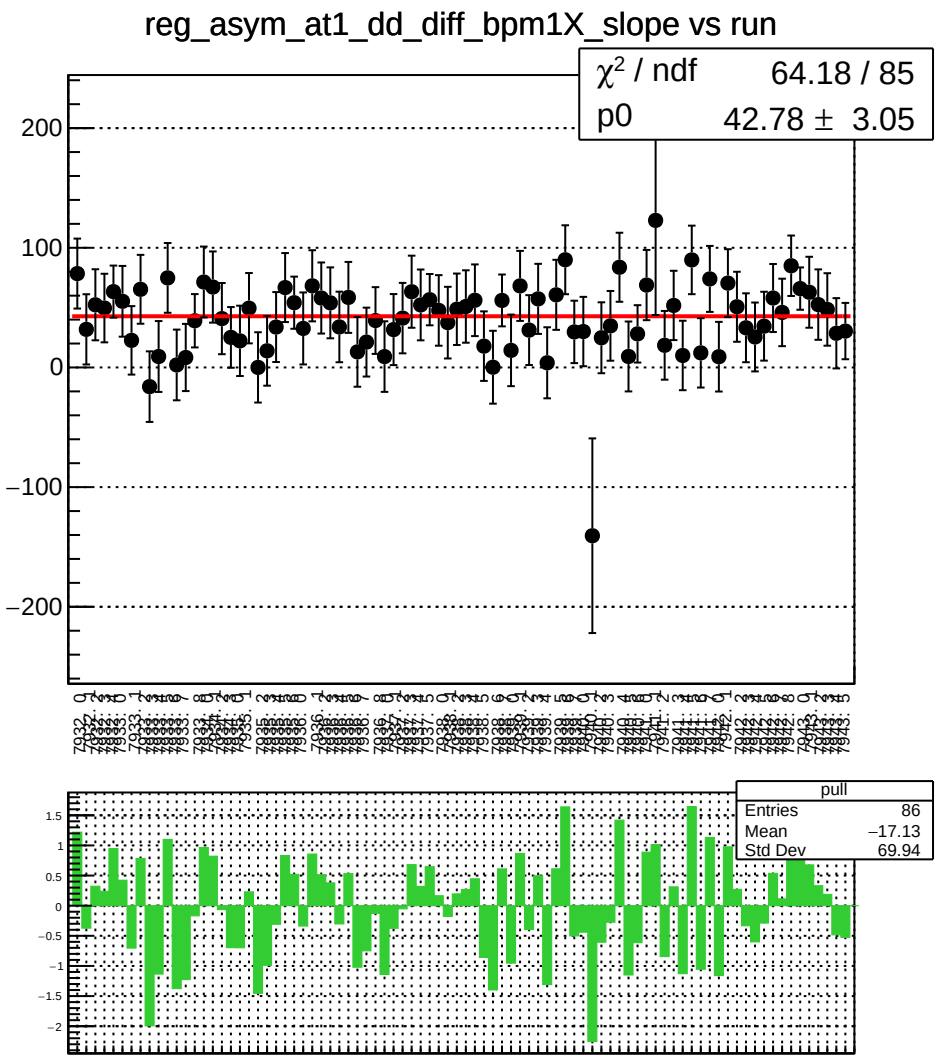

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 48.26 / 85
p0 14.48 ± 2.815
pull
Entries 86
Mean 10.49
Std Dev 50.3

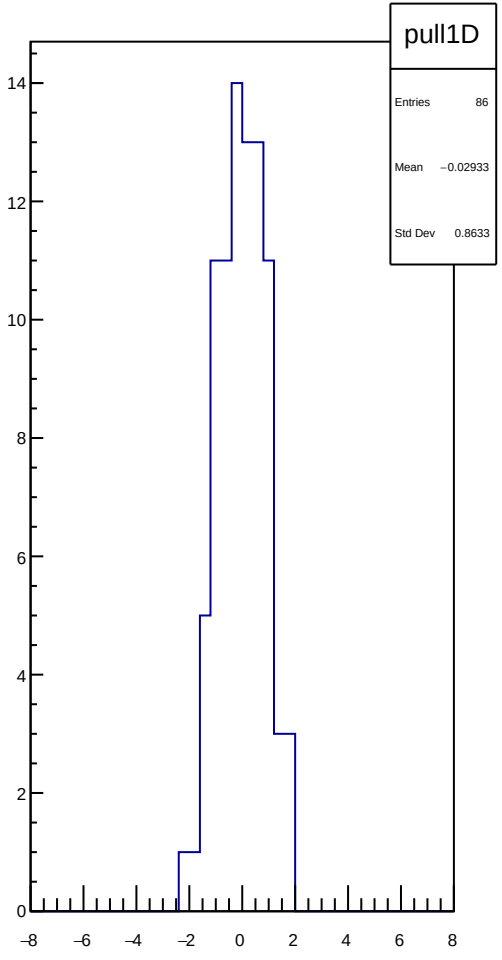

pull1D
Entries 86
Mean −0.03138
Std Dev 0.7484

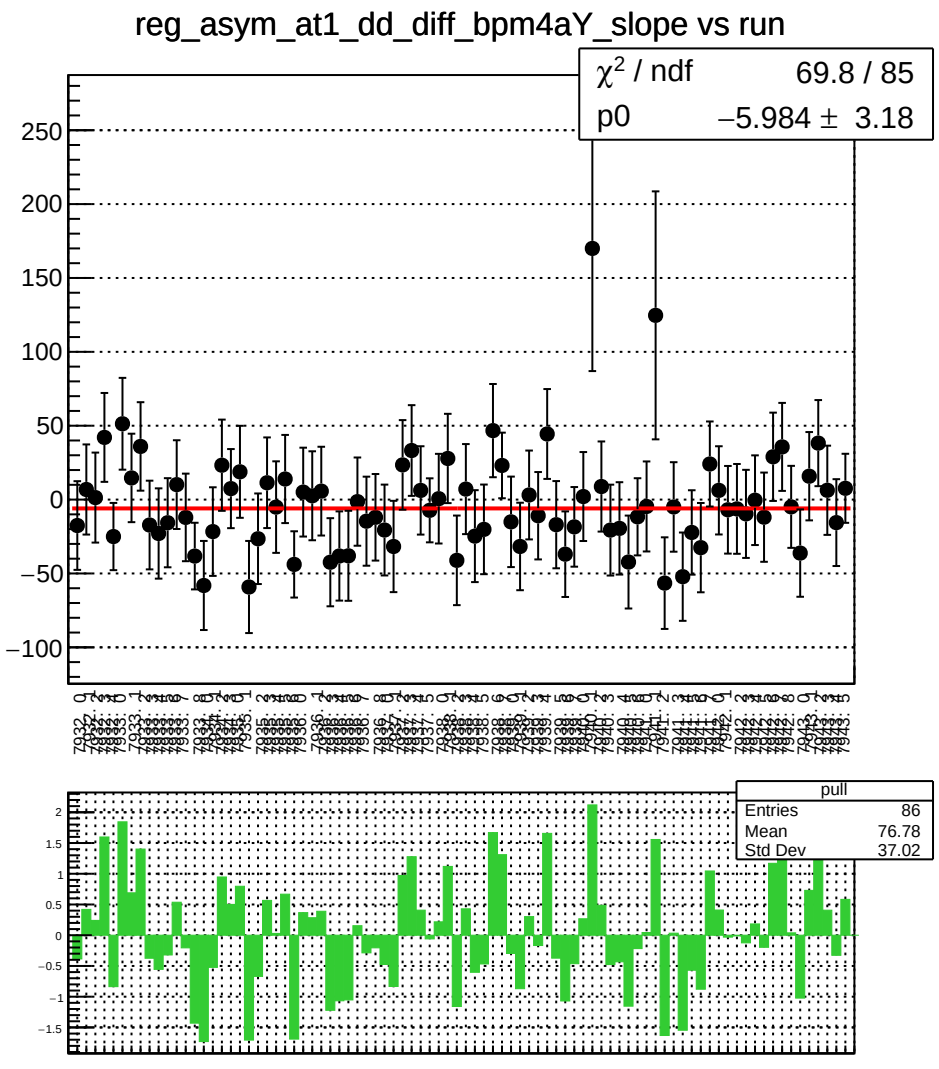

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 64.35 / 85
p0 9.197 ± 3.759
300
200
100
0
−100
−200
pull
Entries 86
Mean 66.03
Std Dev 61.29
2
1
0
−1
−2
pull1D
Entries 86
Mean 0.01411
Std Dev 0.8649
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

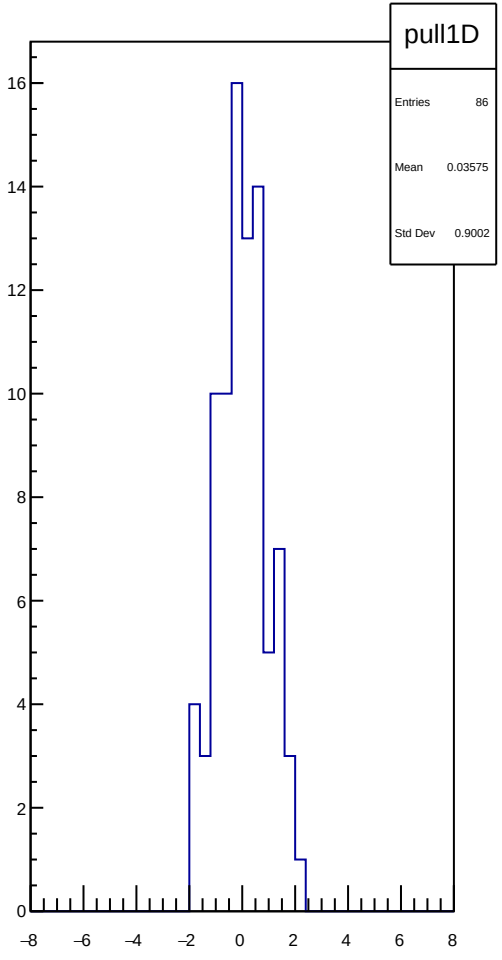

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 127 / 85
p0 −26.59 ± 0.1054
pull
Entries 86
Mean −1158
Std Dev 1212

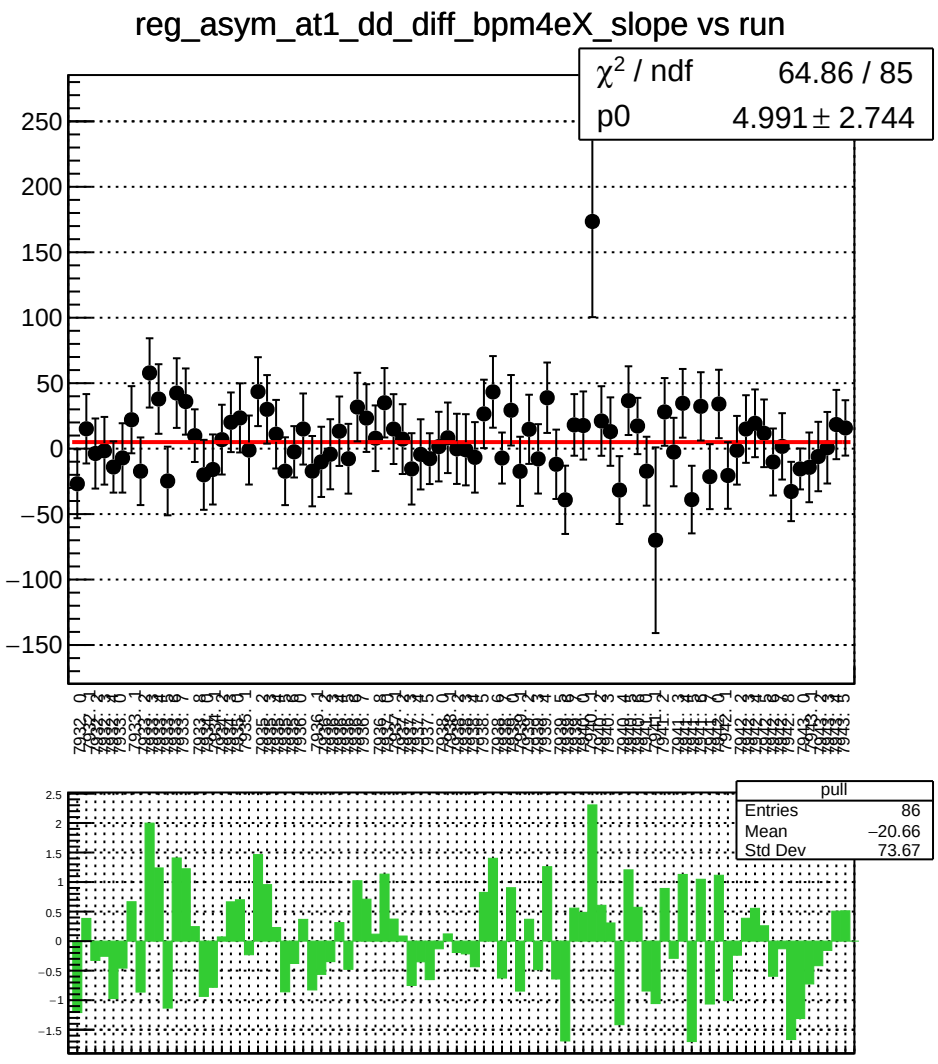

pull1D
Entries 86
Mean 0.004787
Std Dev 1.215

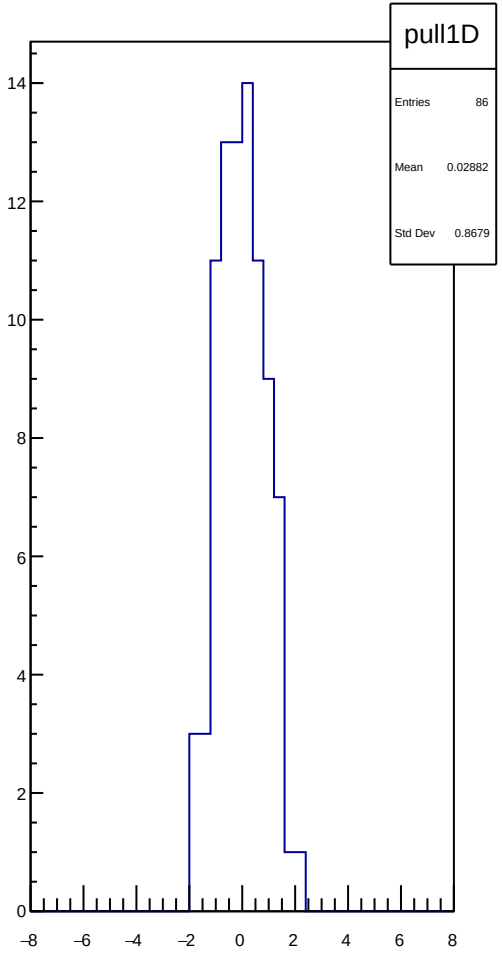

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 64.18 / 85
p0 42.78 ± 3.05
pull
Entries 86
Mean −17.13
Std Dev 69.94

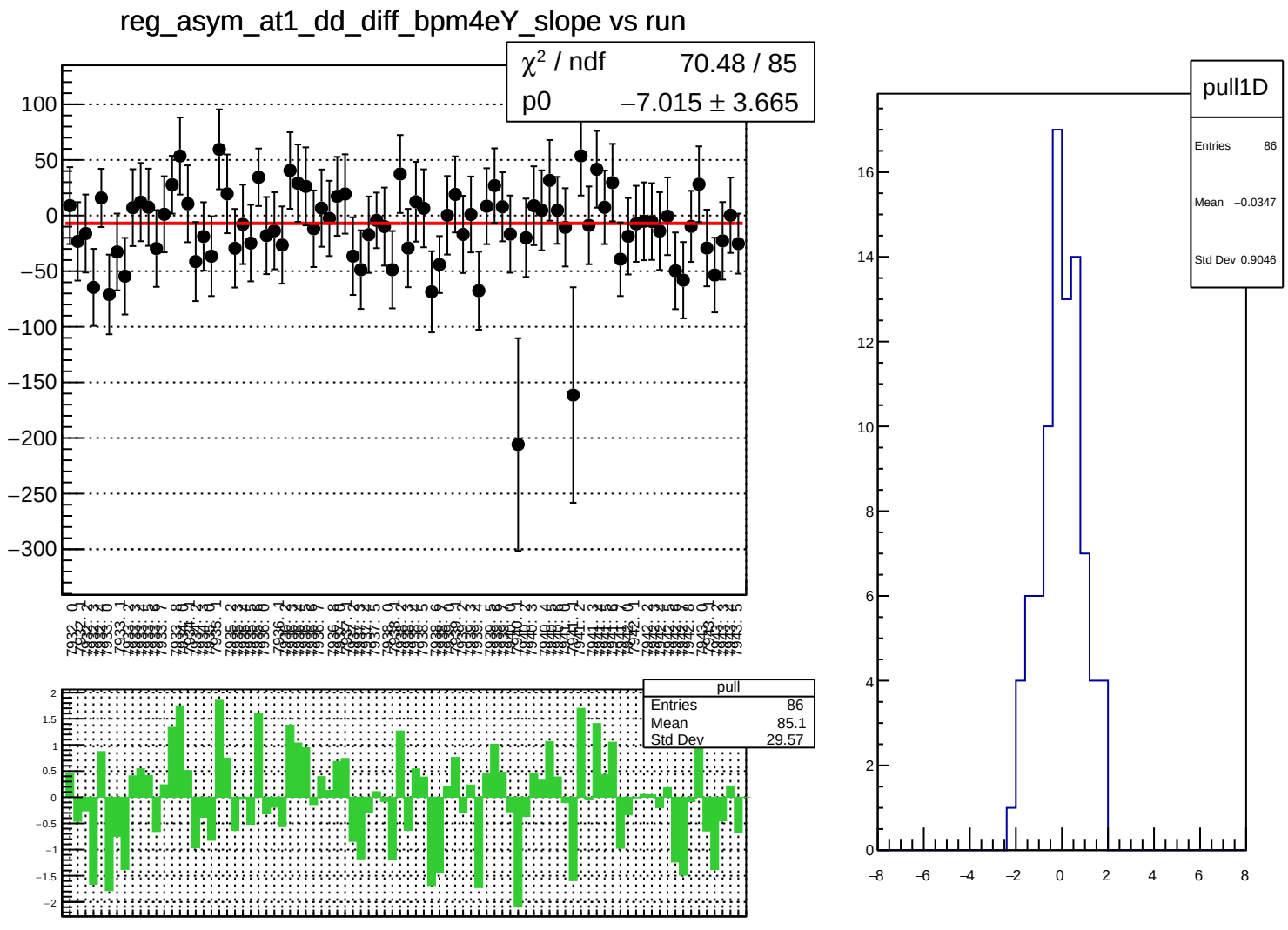

pull1D
Entries 86
Mean −0.02933
Std Dev 0.8633

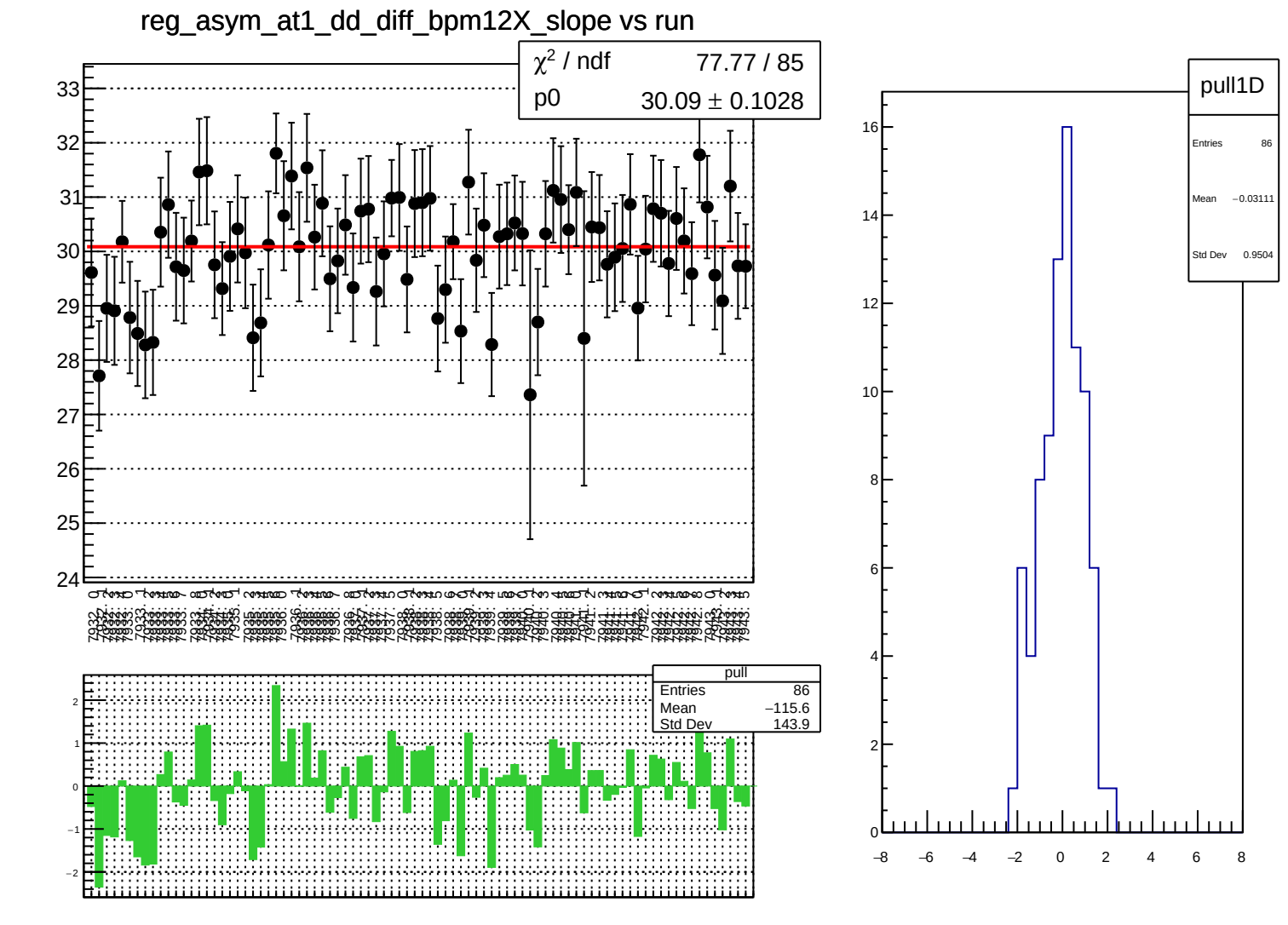

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 69.8 / 85
p0 −5.984 ± 3.18
250
200
150
100
50
0
−50
−100
pull
Entries 86
Mean 76.78
Std Dev 37.02
2
1.5
1
0.5
0
−0.5
−1
−1.5

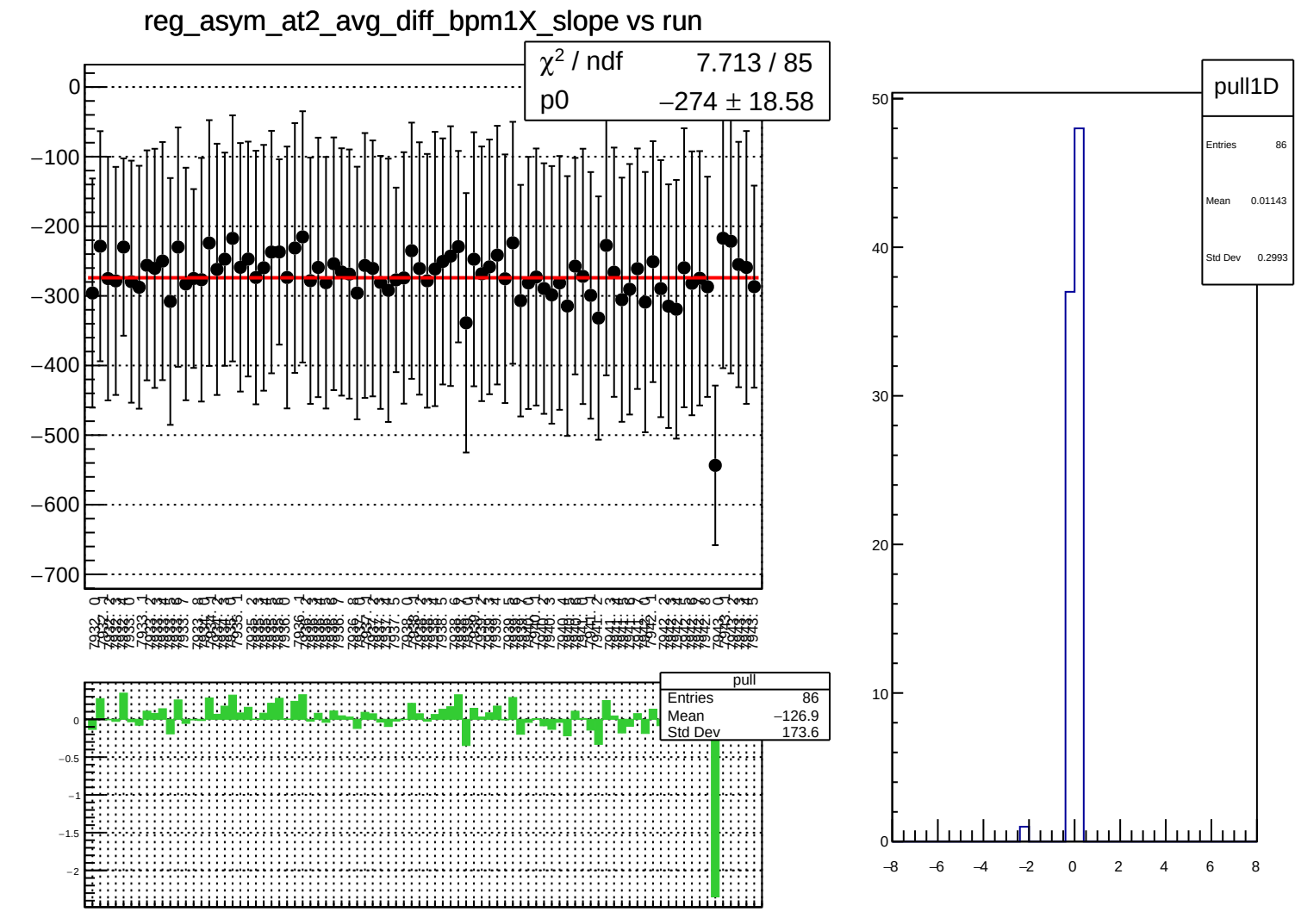

pull1D
Entries 86
Mean 0.03575
Std Dev 0.9002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

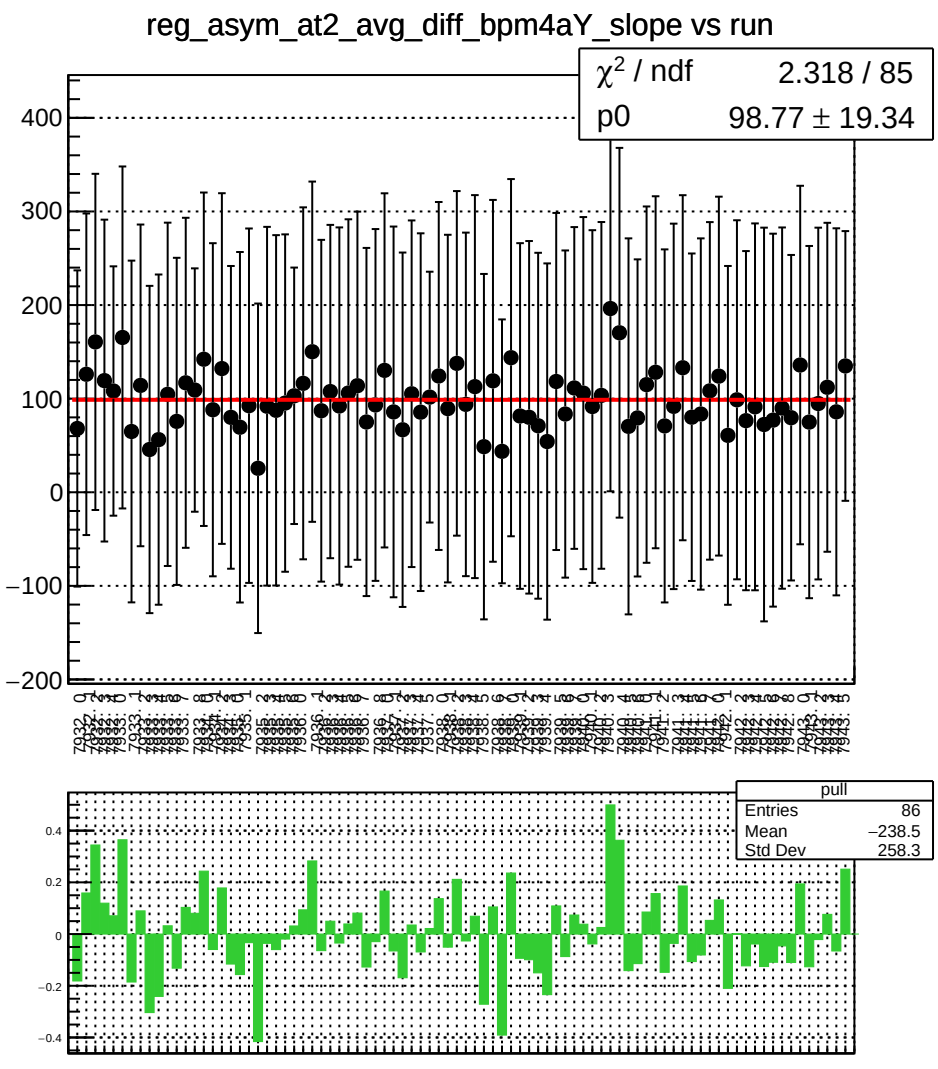

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 64.86 / 85
p0 4.991 ± 2.744
pull
Entries 86
Mean −20.66
Std Dev 73.67

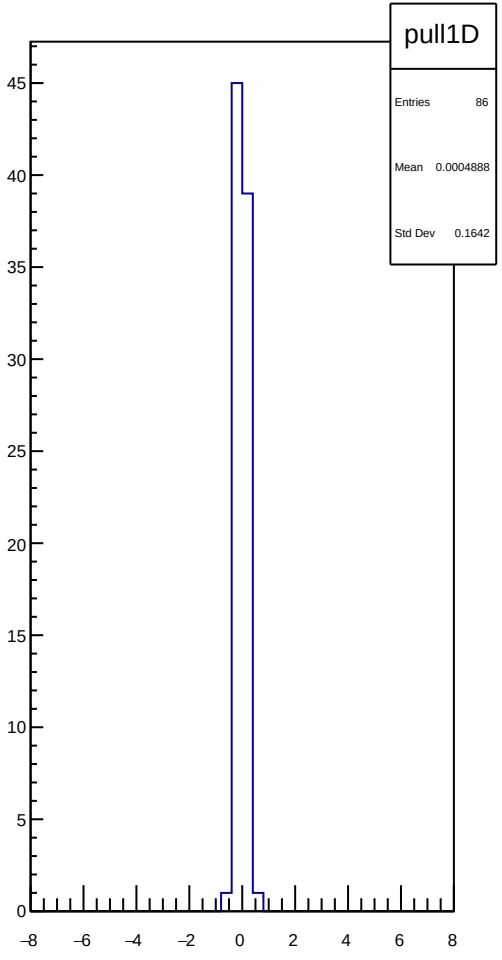

pull1D
Entries 86
Mean 0.02882
Std Dev 0.8679

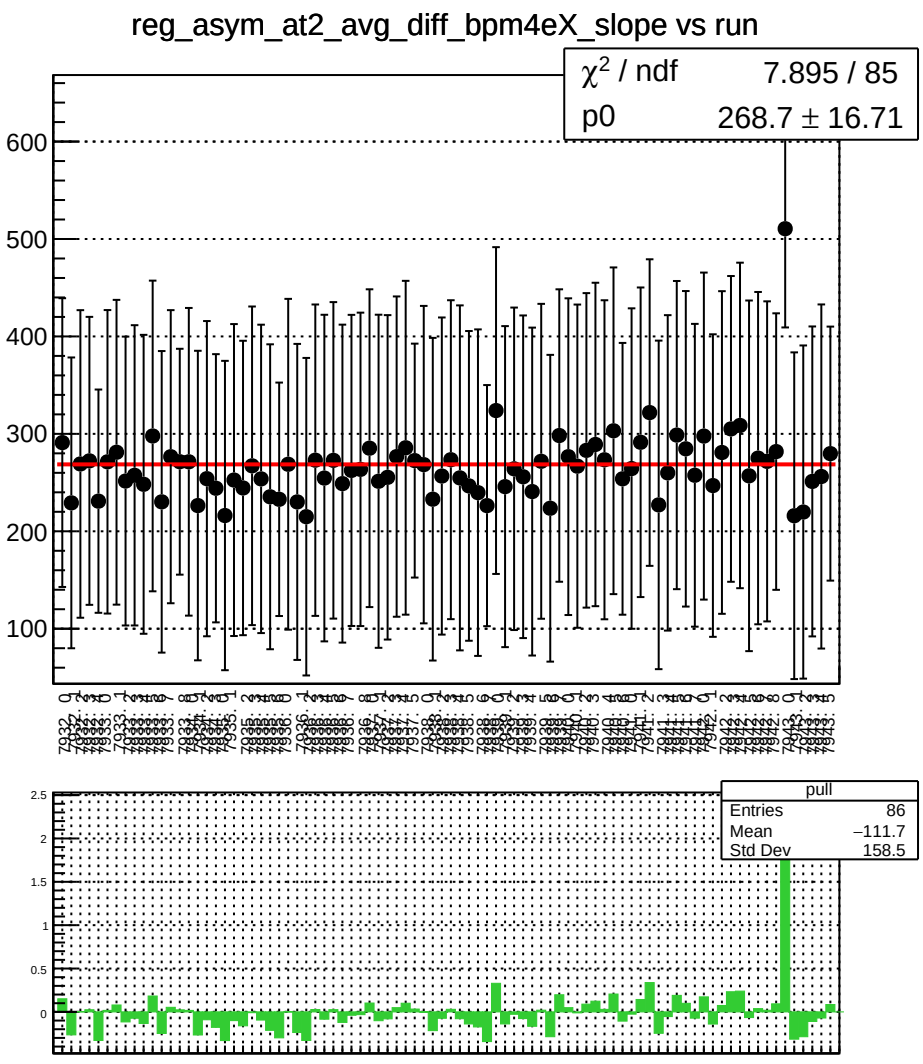

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 70.48 / 85
p0 −7.015 ± 3.665
pull
Entries 86
Mean 85.1
Std Dev 29.57
pull1D
Entries 86
Mean −0.0347
Std Dev 0.9046

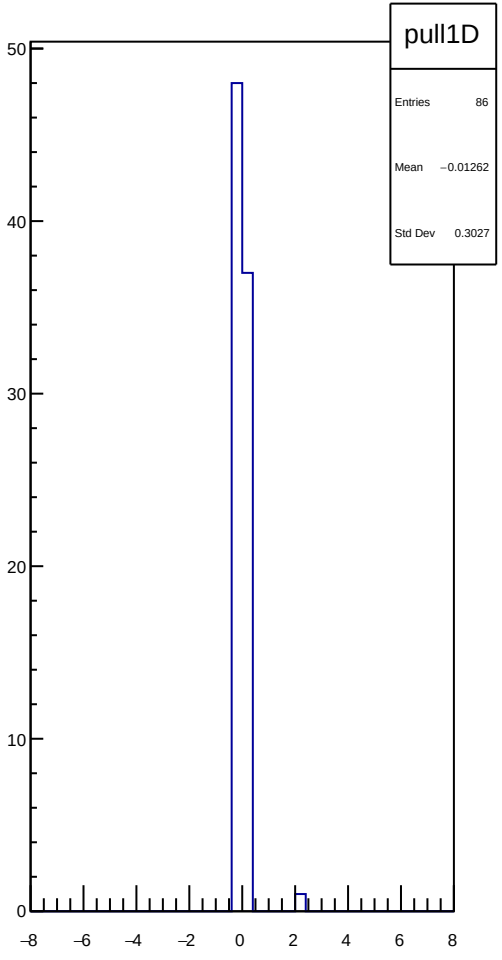

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 77.77 / 85
p0 30.09 ± 0.1028
pull
Entries 86
Mean −115.6
Std Dev 143.9
pull1D
Entries 86
Mean −0.03111
Std Dev 0.9504

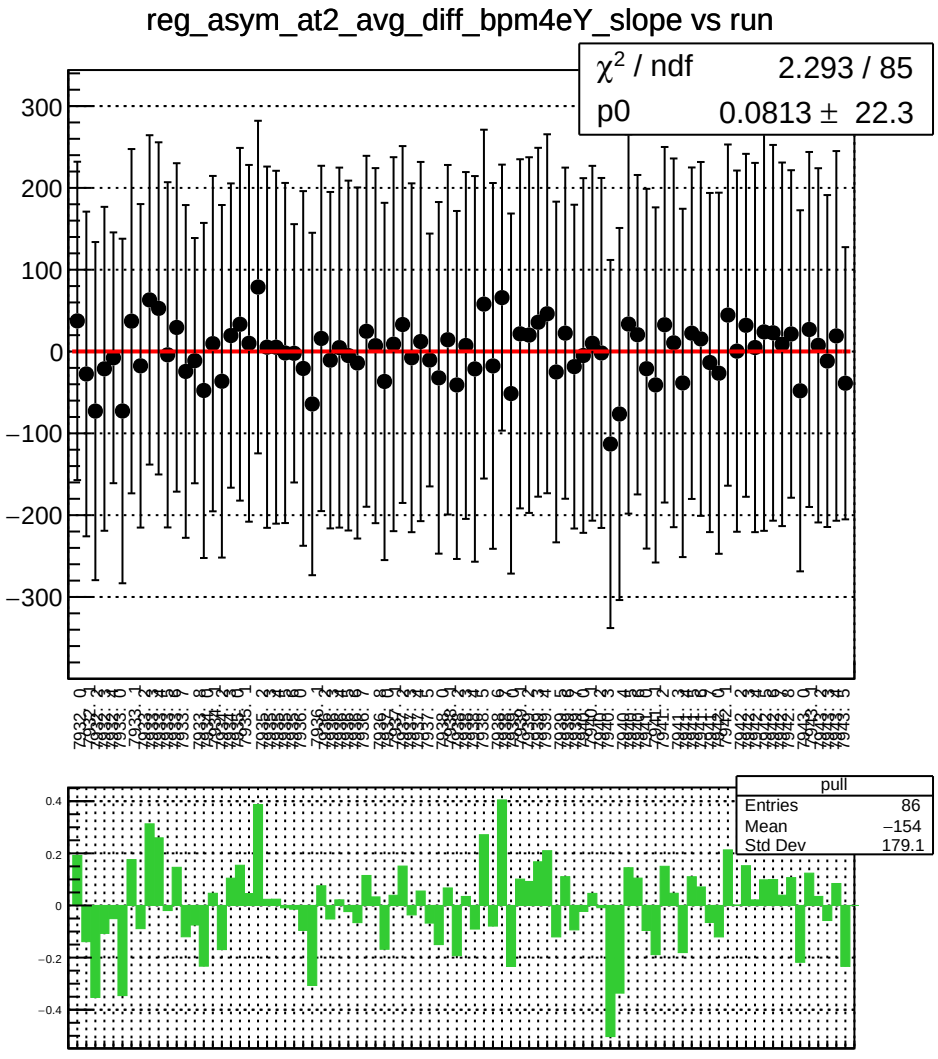

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 7.713 / 85
p0 −274 ± 18.58
pull
Entries 86
Mean −126.9
Std Dev 173.6
pull1D
Entries 86
Mean 0.01143
Std Dev 0.2993

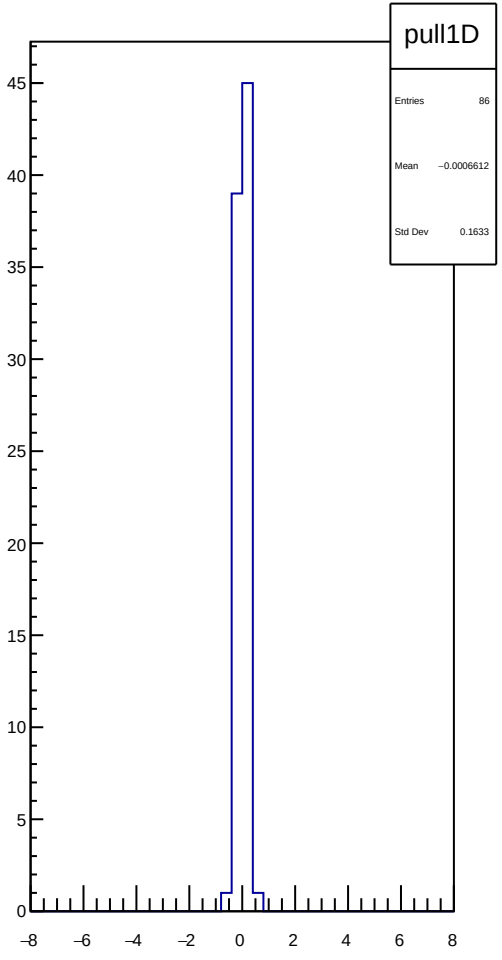

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.318 / 85
p0 98.77 ± 19.34
pull
Entries 86
Mean −238.5
Std Dev 258.3

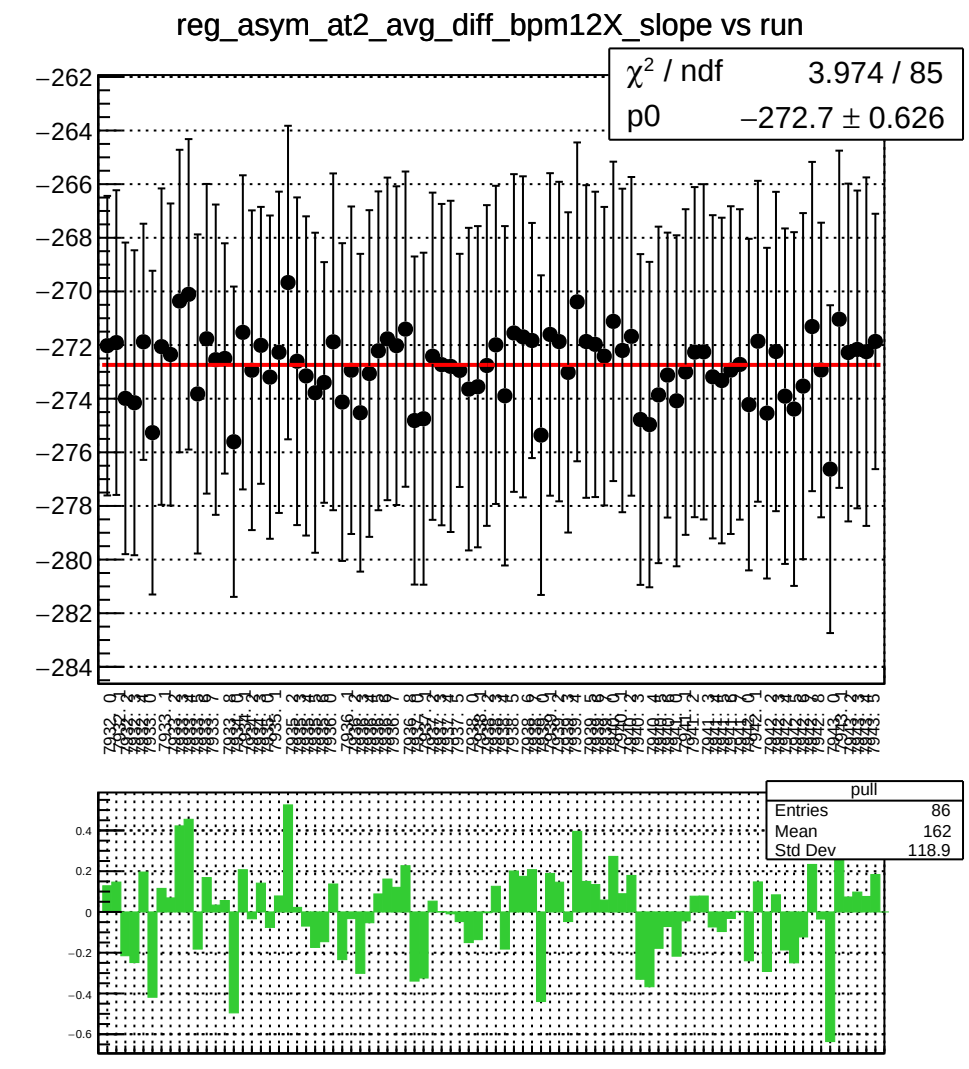

pull1D
Entries 86
Mean 0.0004888
Std Dev 0.1642

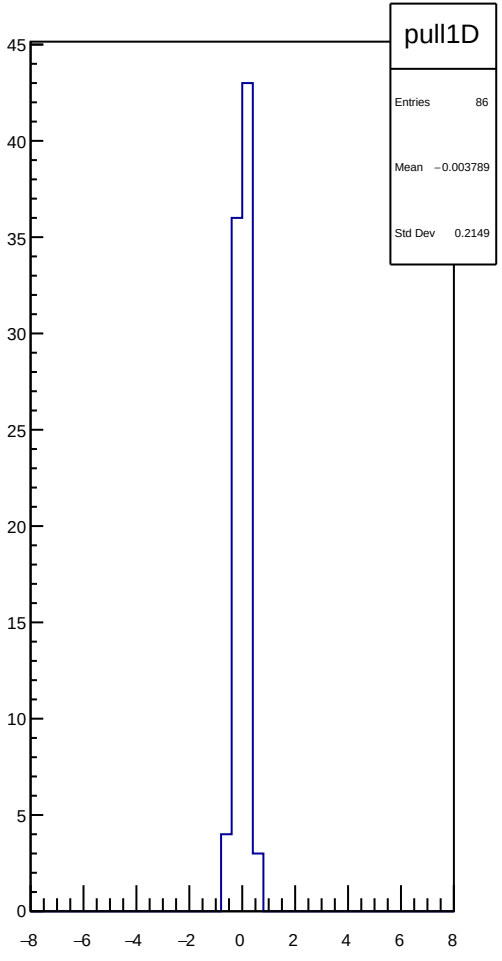

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.895 / 85
p0 268.7 ± 16.71
pull
Entries 86
Mean −111.7
Std Dev 158.5

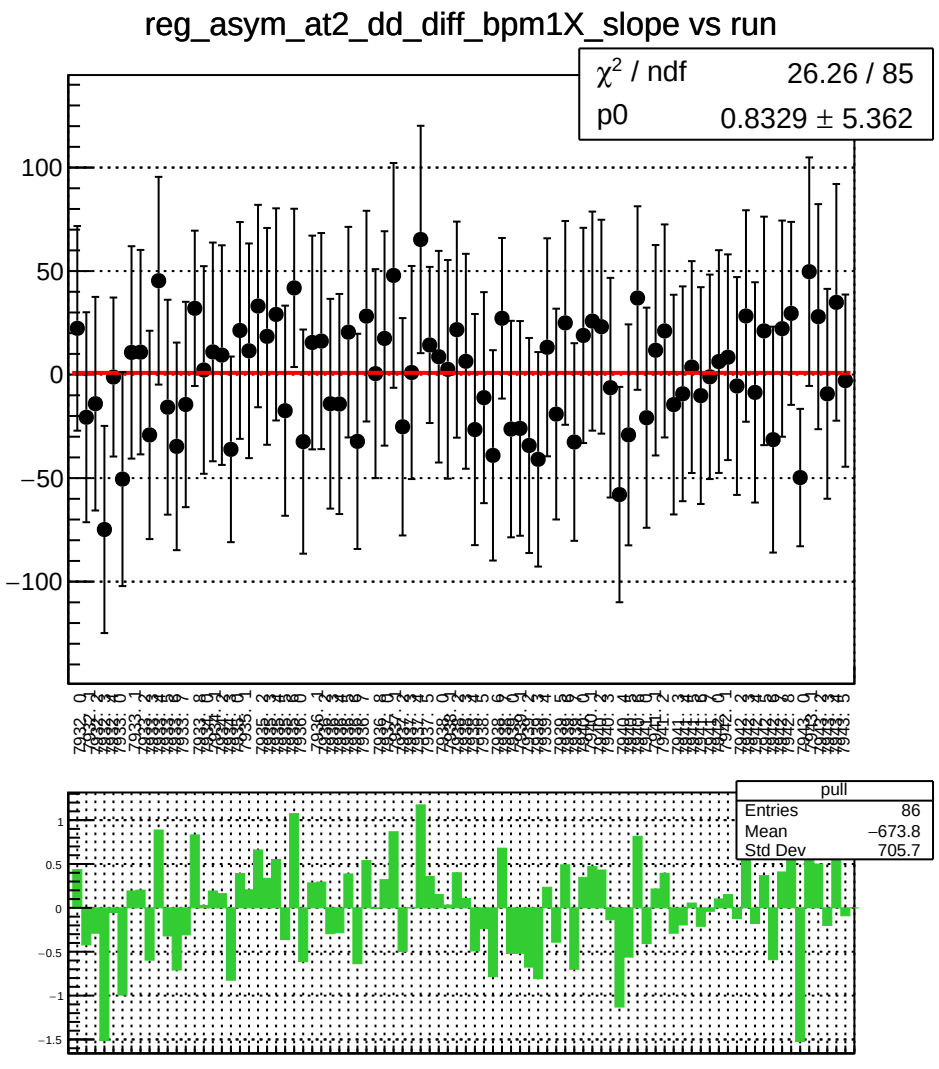

pull1D
Entries 86
Mean −0.01262
Std Dev 0.3027

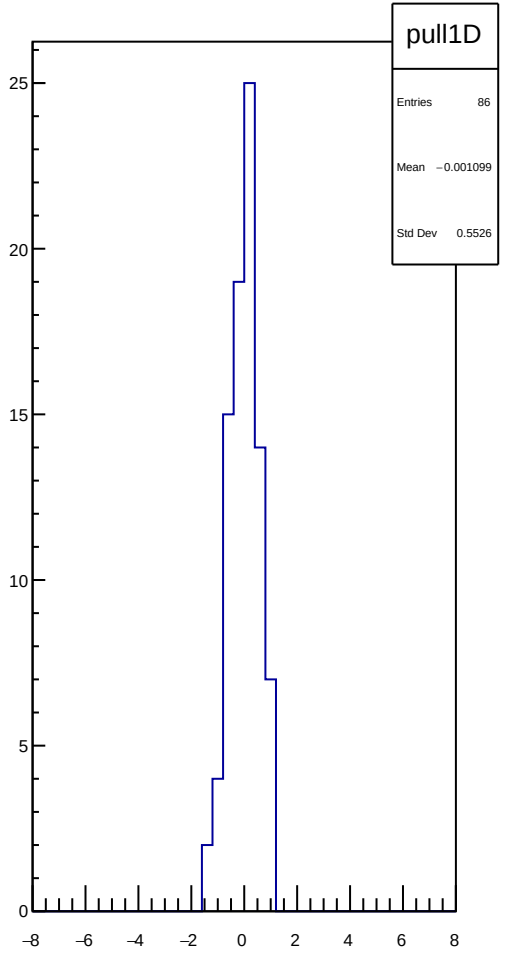

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.293 / 85
p0 0.0813 ± 22.3
pull
Entries 86
Mean −154
Std Dev 179.1

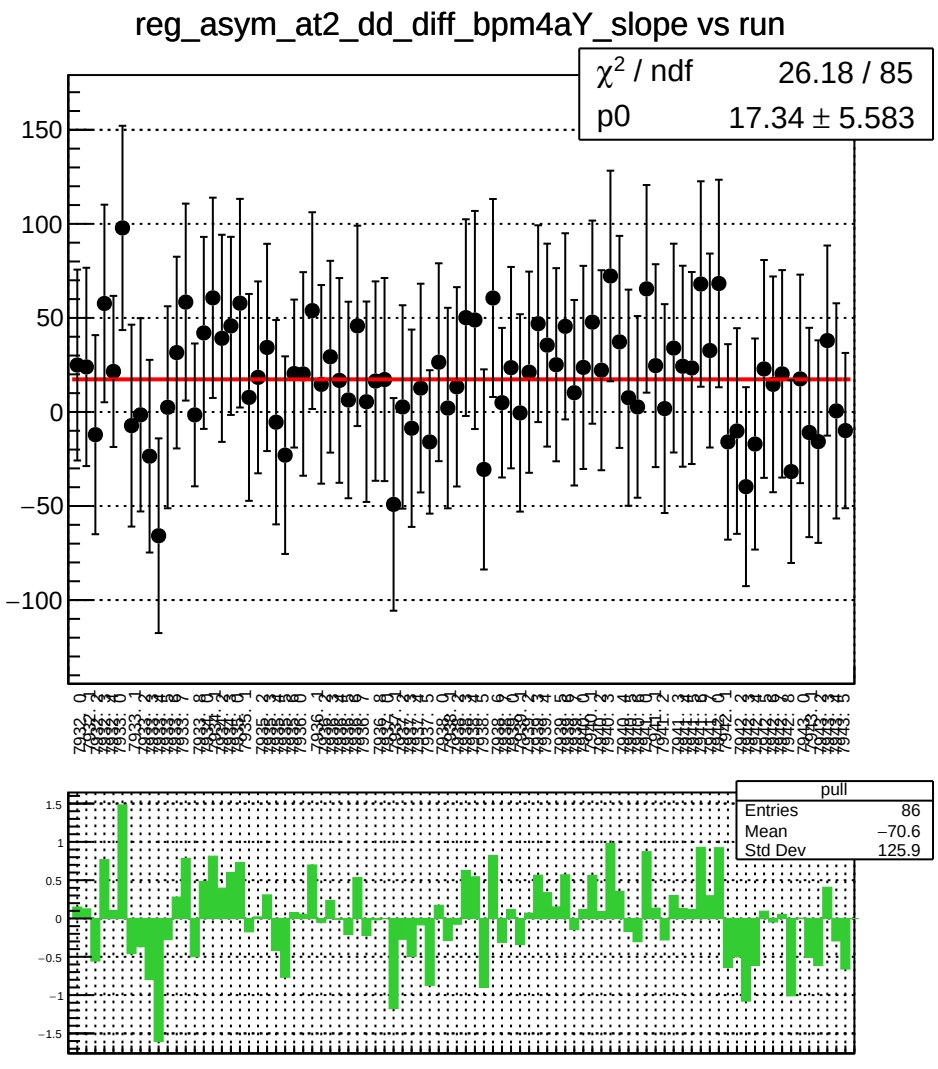

pull1D
Entries 86
Mean −0.0006612
Std Dev 0.1633

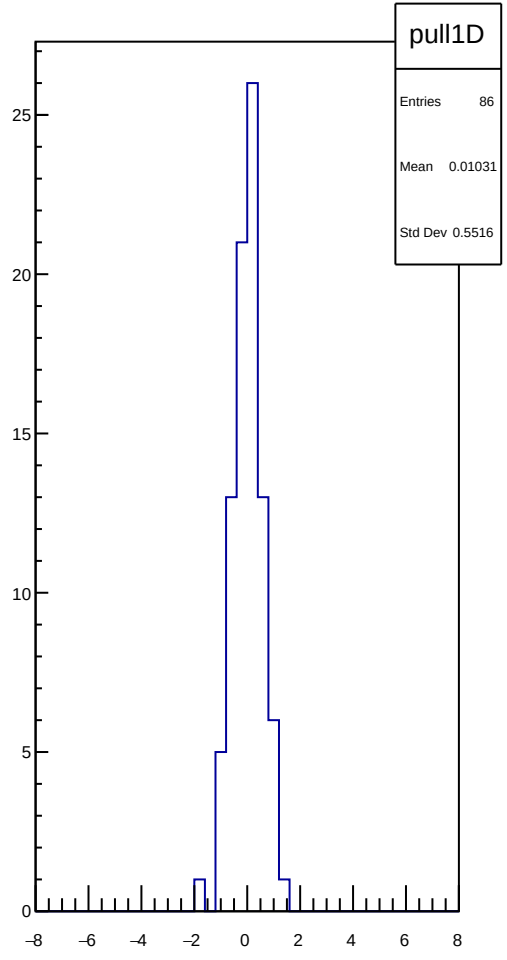

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 3.974 / 85
p0 −272.7 ± 0.626
pull
Entries 86
Mean 162
Std Dev 118.9

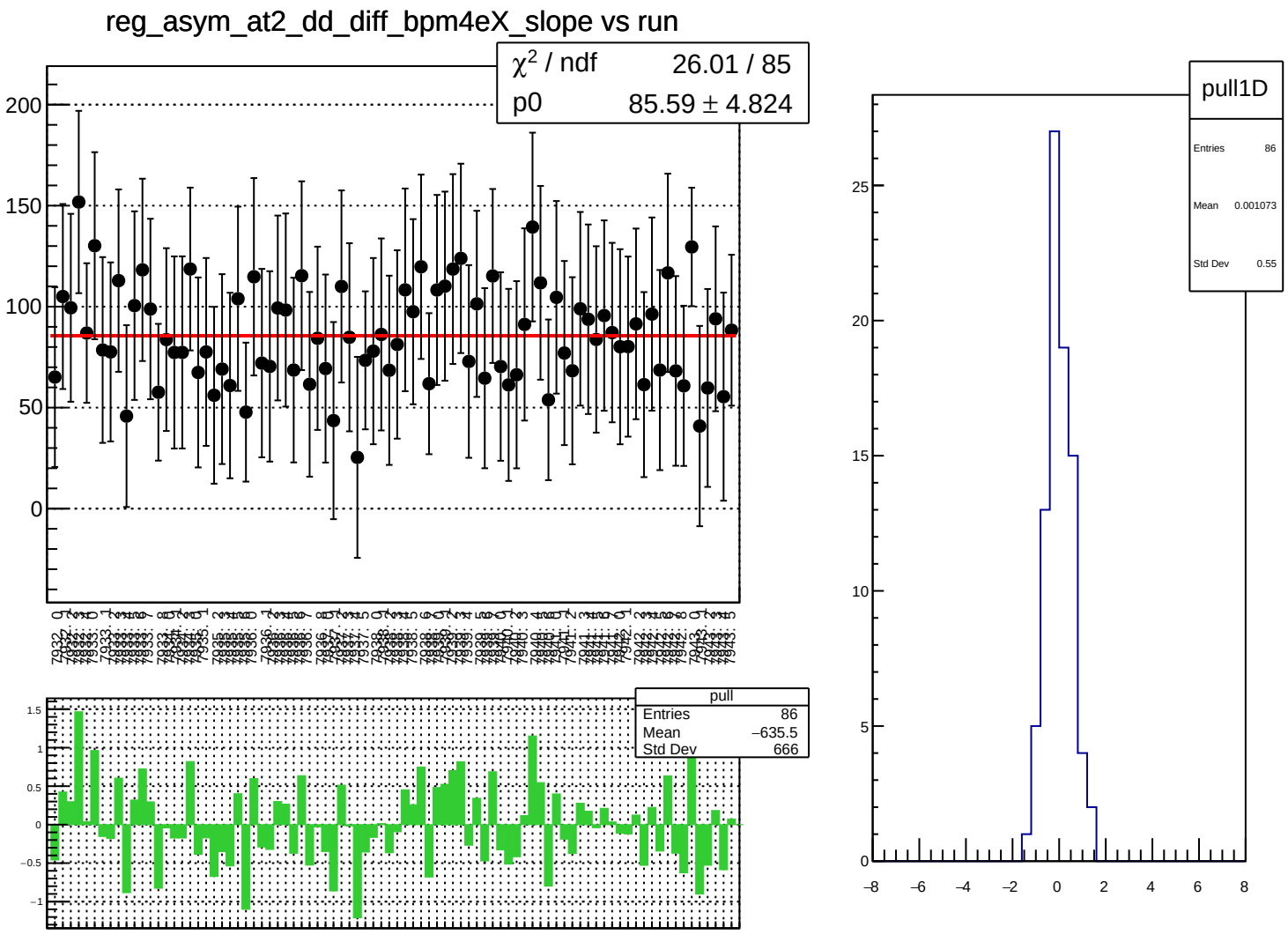

pull1D
Entries 86
Mean −0.003789
Std Dev 0.2149

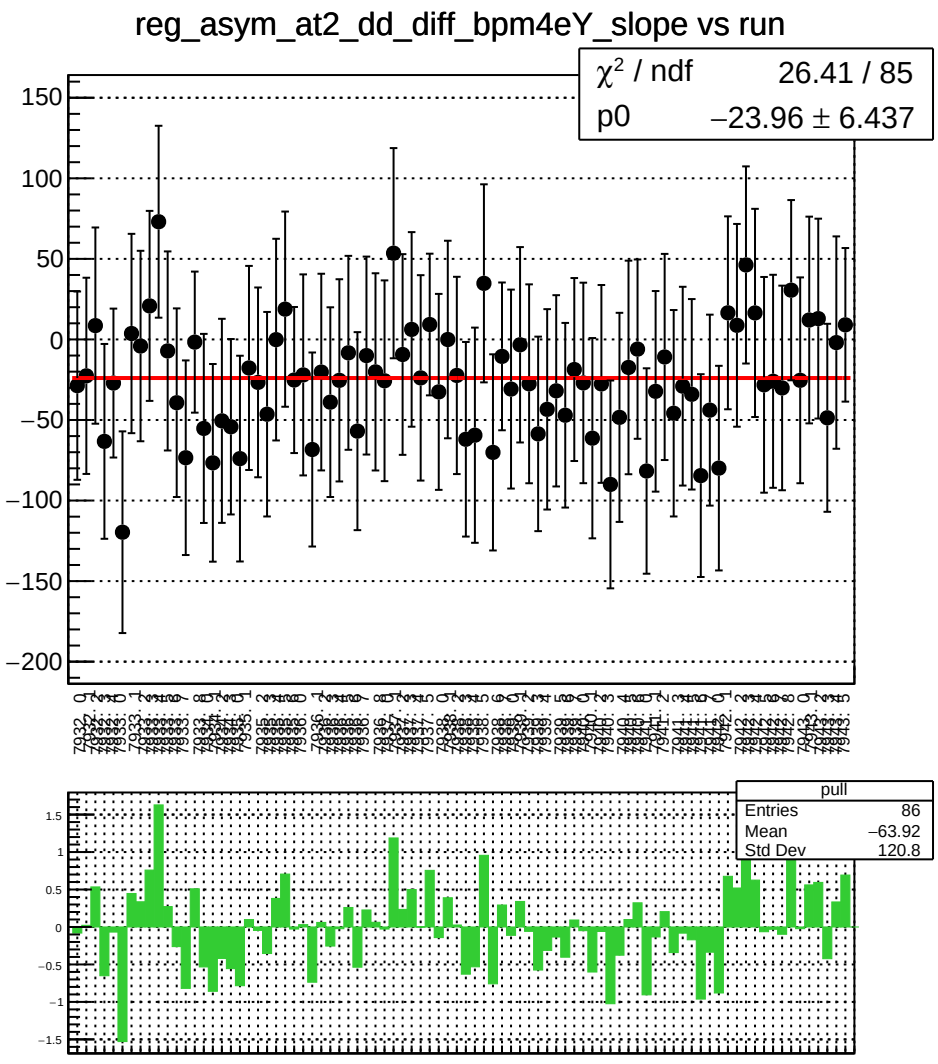

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 26.26 / 85
p0 0.8329 ± 5.362
100
50
0
−50
−100
pull
Entries 86
Mean −673.8
Std Dev 705.7
1
0.5
0
−0.5
−1
−1.5

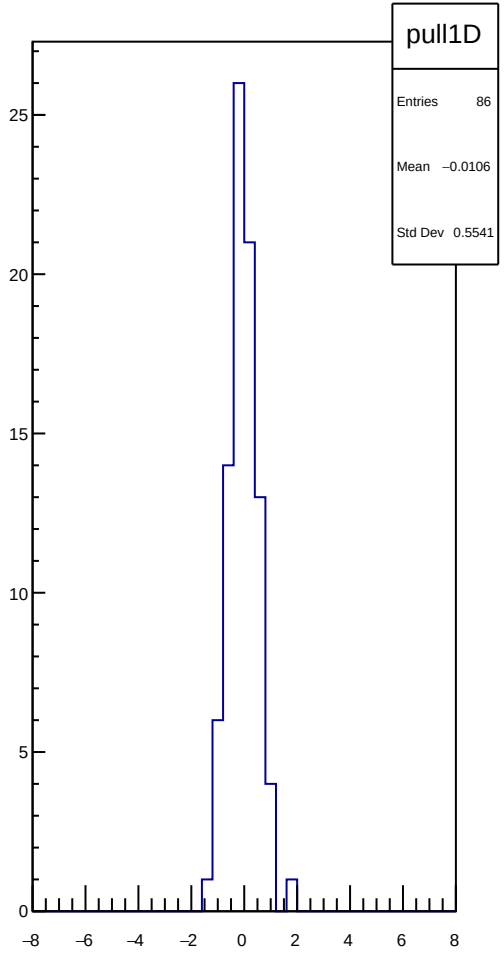

pull1D
Entries 86
Mean −0.001099
Std Dev 0.5526
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

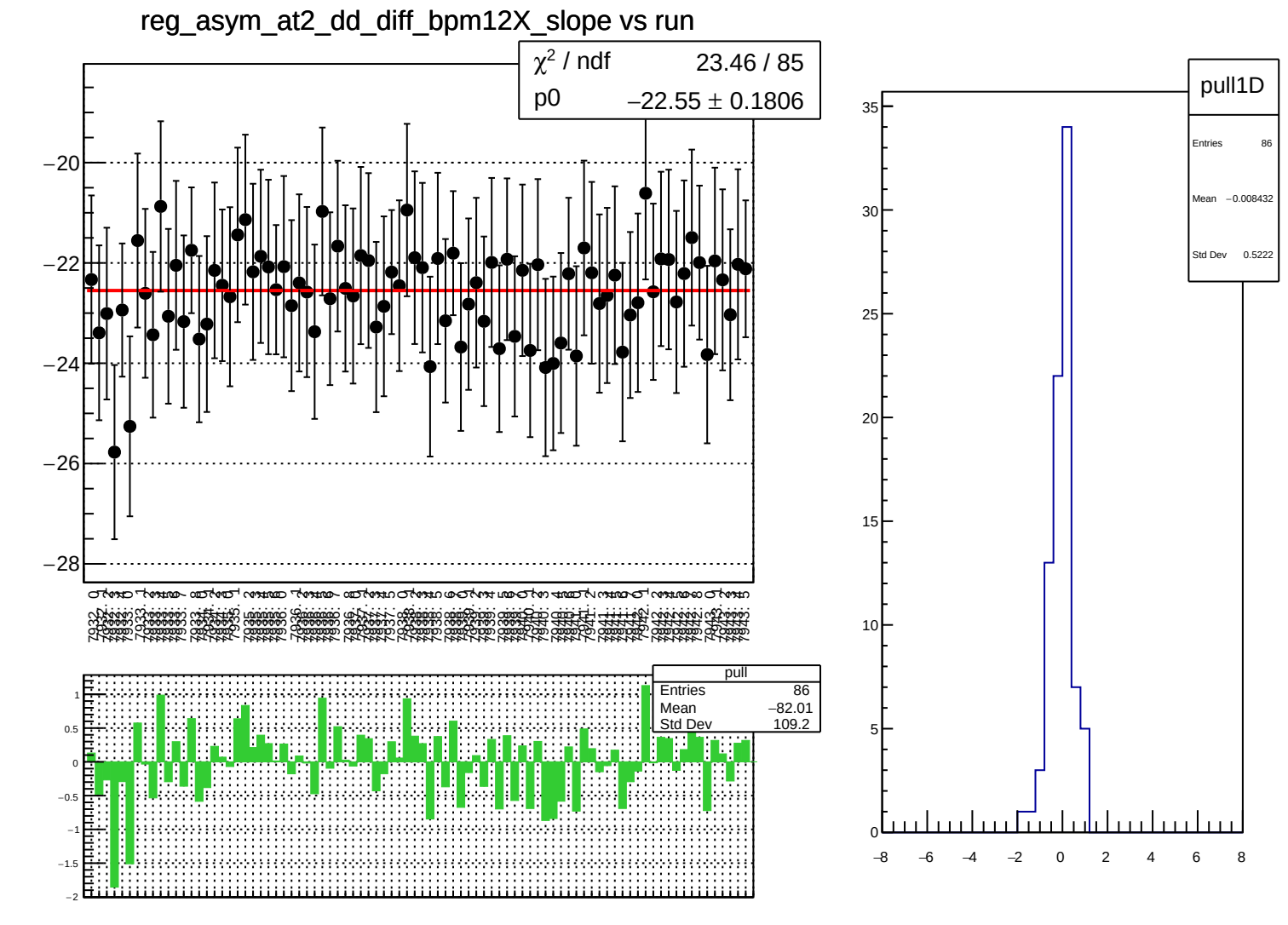

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 26.18 / 85
p0 17.34 ± 5.583
150
100
50
0
−50
−100
pull
Entries 86
Mean −70.6
Std Dev 125.9
1.5
1
0.5
0
−0.5
−1
−1.5

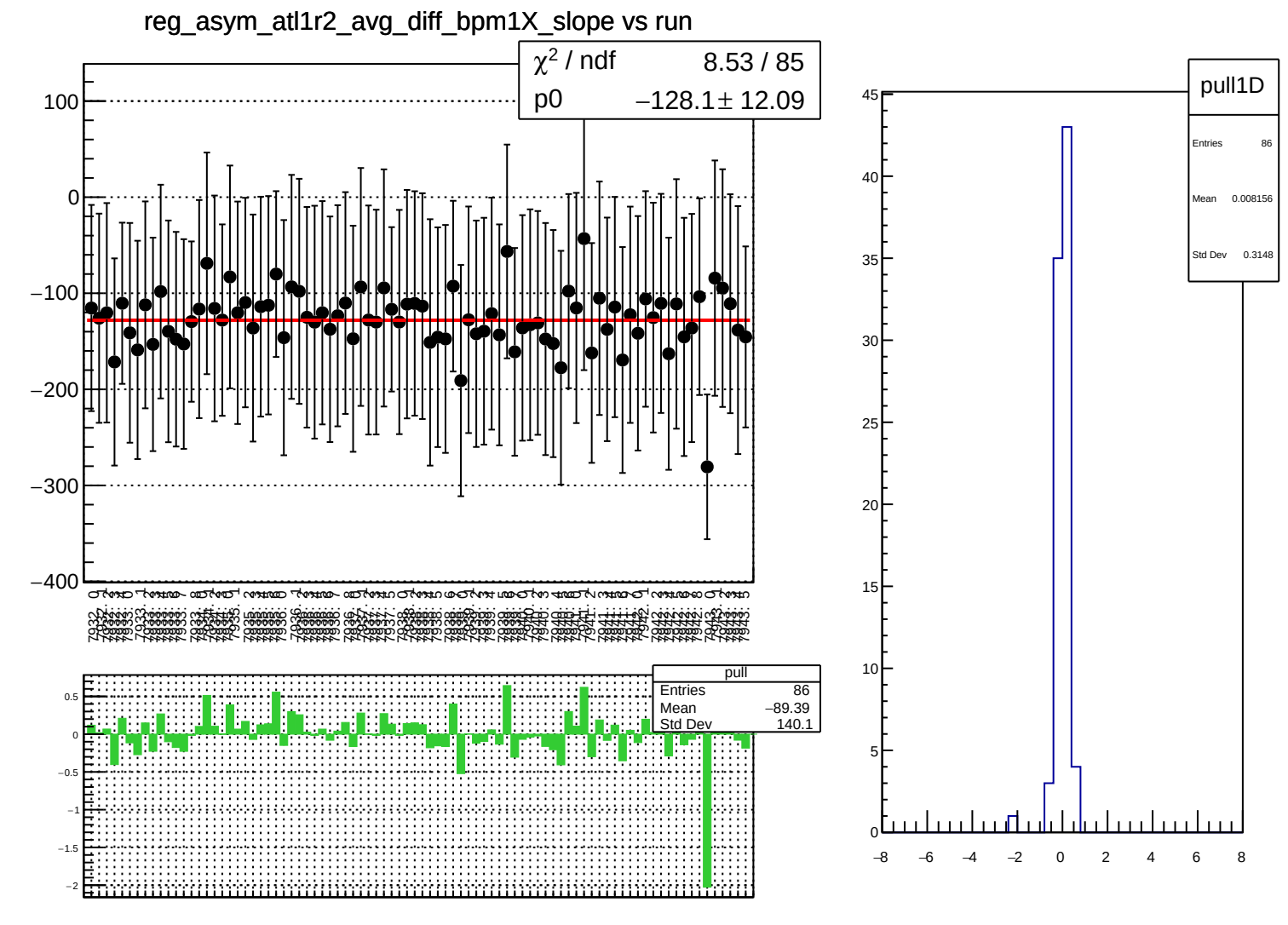

pull1D
Entries 86
Mean 0.01031
Std Dev 0.5516
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

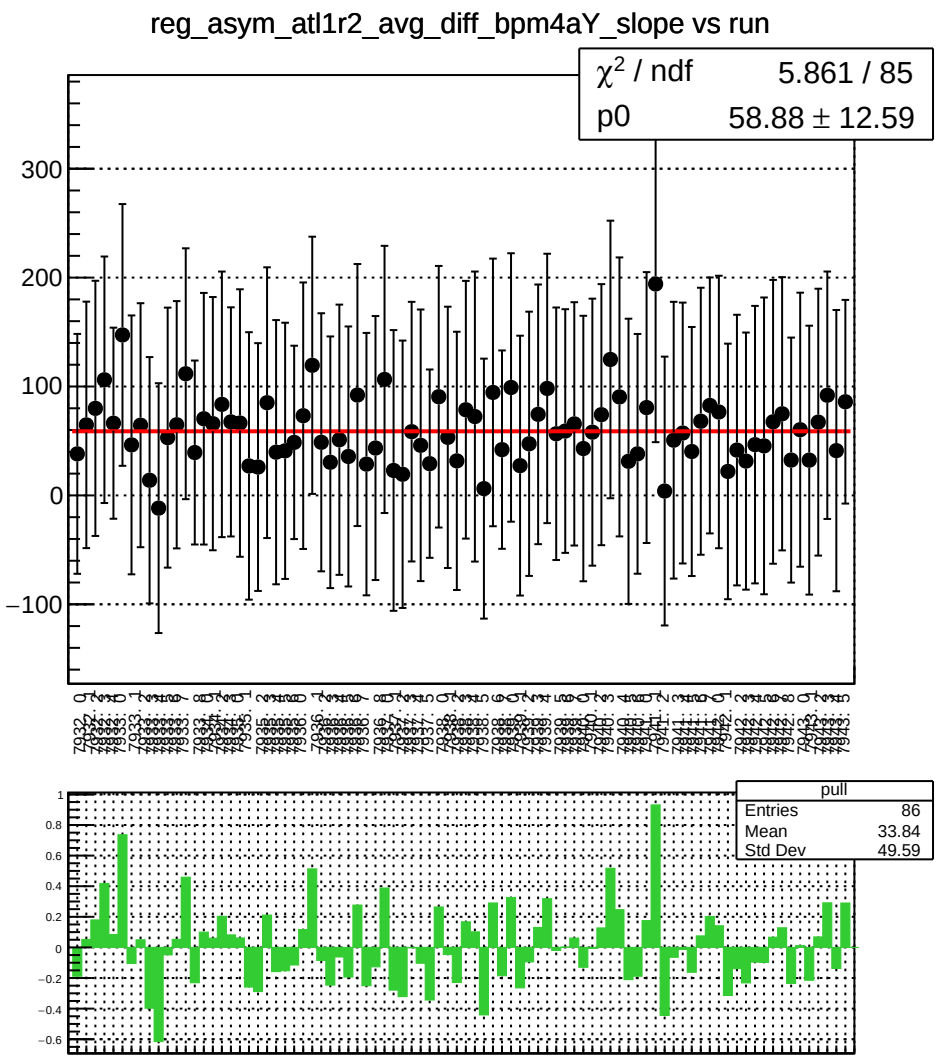

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 26.01 / 85
p0 85.59 ± 4.824
pull
Entries 86
Mean −635.5
Std Dev 666
pull1D
Entries 86
Mean 0.001073
Std Dev 0.55

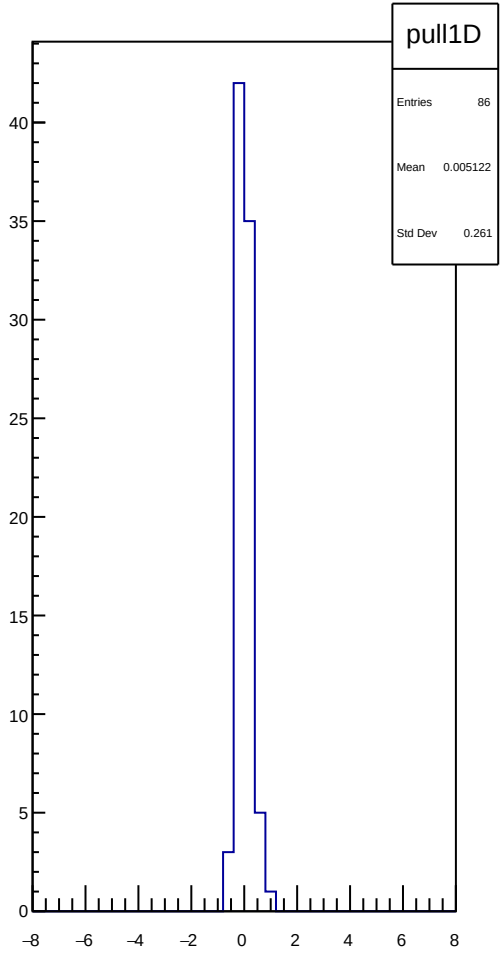

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 26.41 / 85
p0 −23.96 ± 6.437
150
100
50
0
−50
−100
−150
−200
pull
Entries 86
Mean −63.92
Std Dev 120.8
1.5
1
0.5
0
−0.5
−1
−1.5

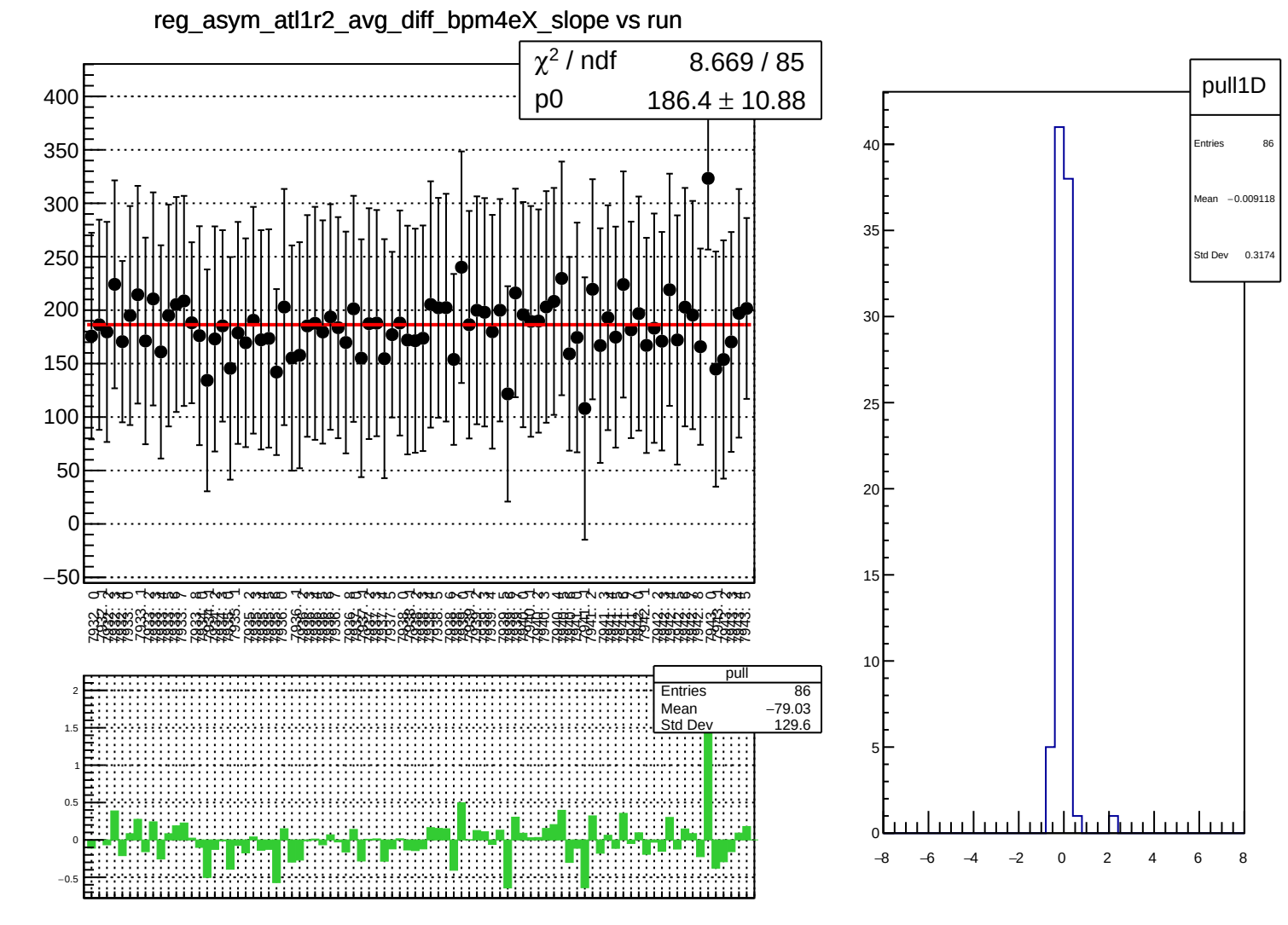

pull1D
Entries 86
Mean −0.0106
Std Dev 0.5541
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

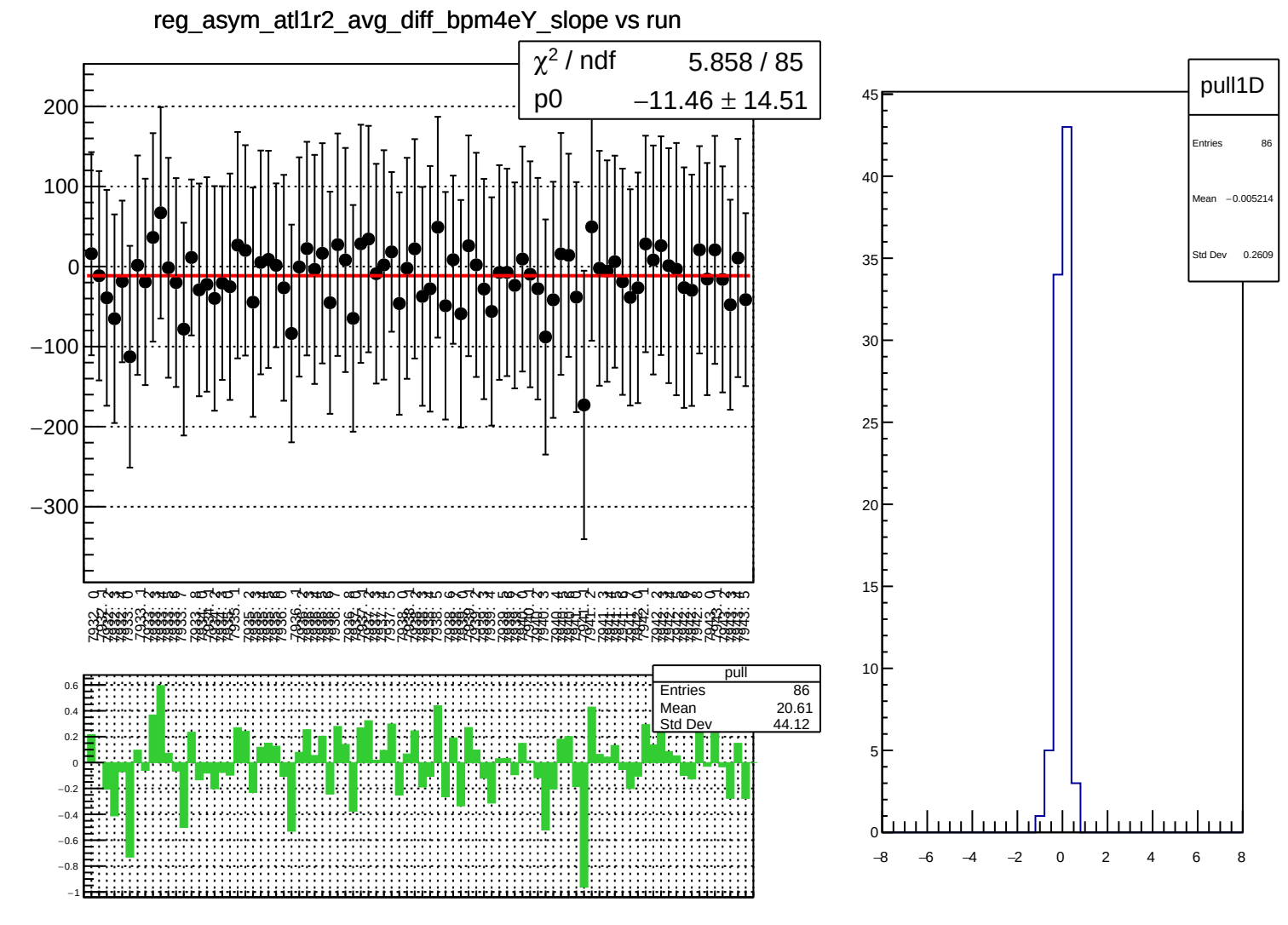

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 23.46 / 85
p0 −22.55 ± 0.1806
pull
Entries 86
Mean −82.01
Std Dev 109.2
pull1D
Entries 86
Mean −0.008432
Std Dev 0.5222

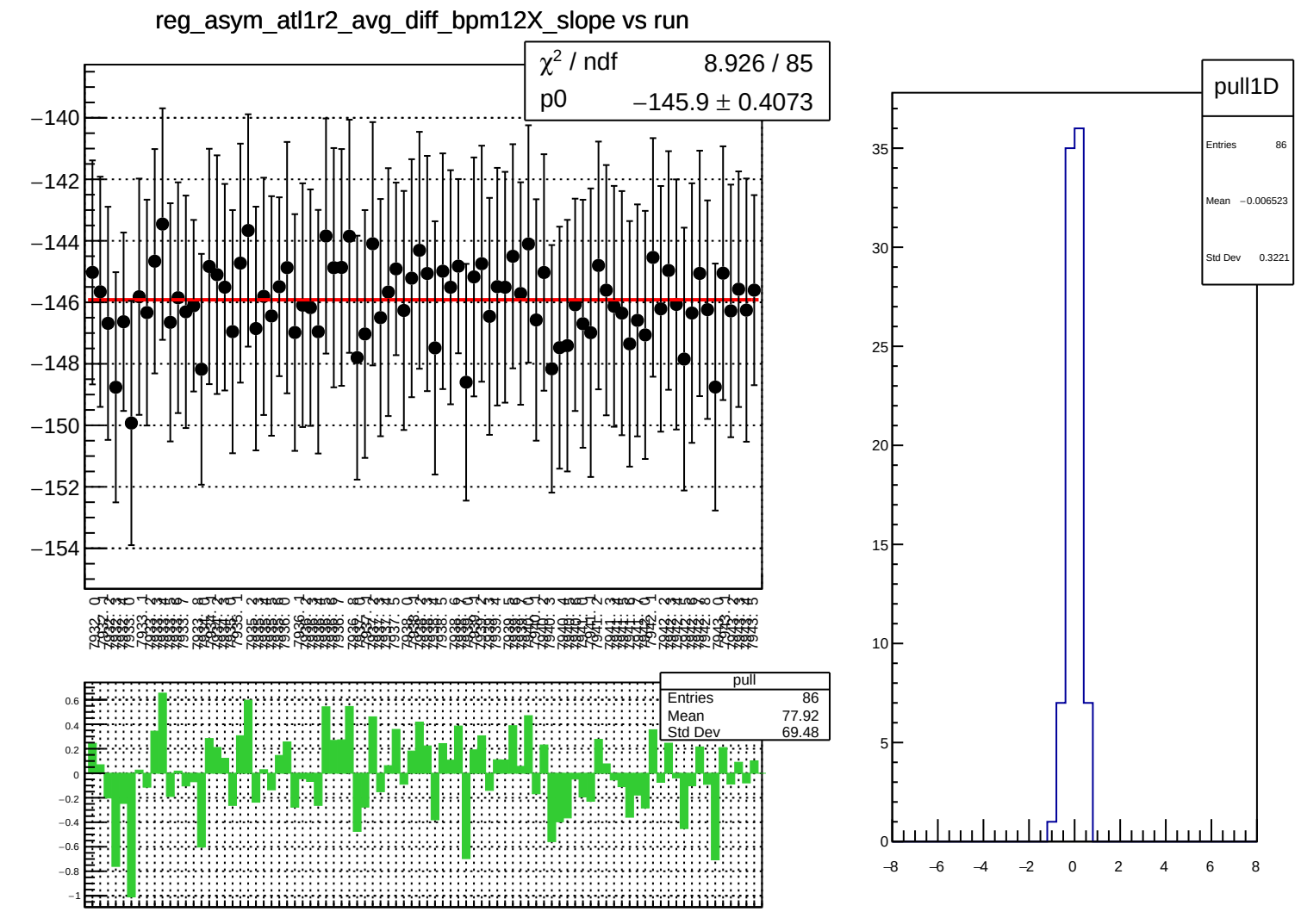

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 8.53 / 85
p0 −128.1± 12.09
pull
Entries 86
Mean −89.39
Std Dev 140.1
pull1D
Entries 86
Mean 0.008156
Std Dev 0.3148

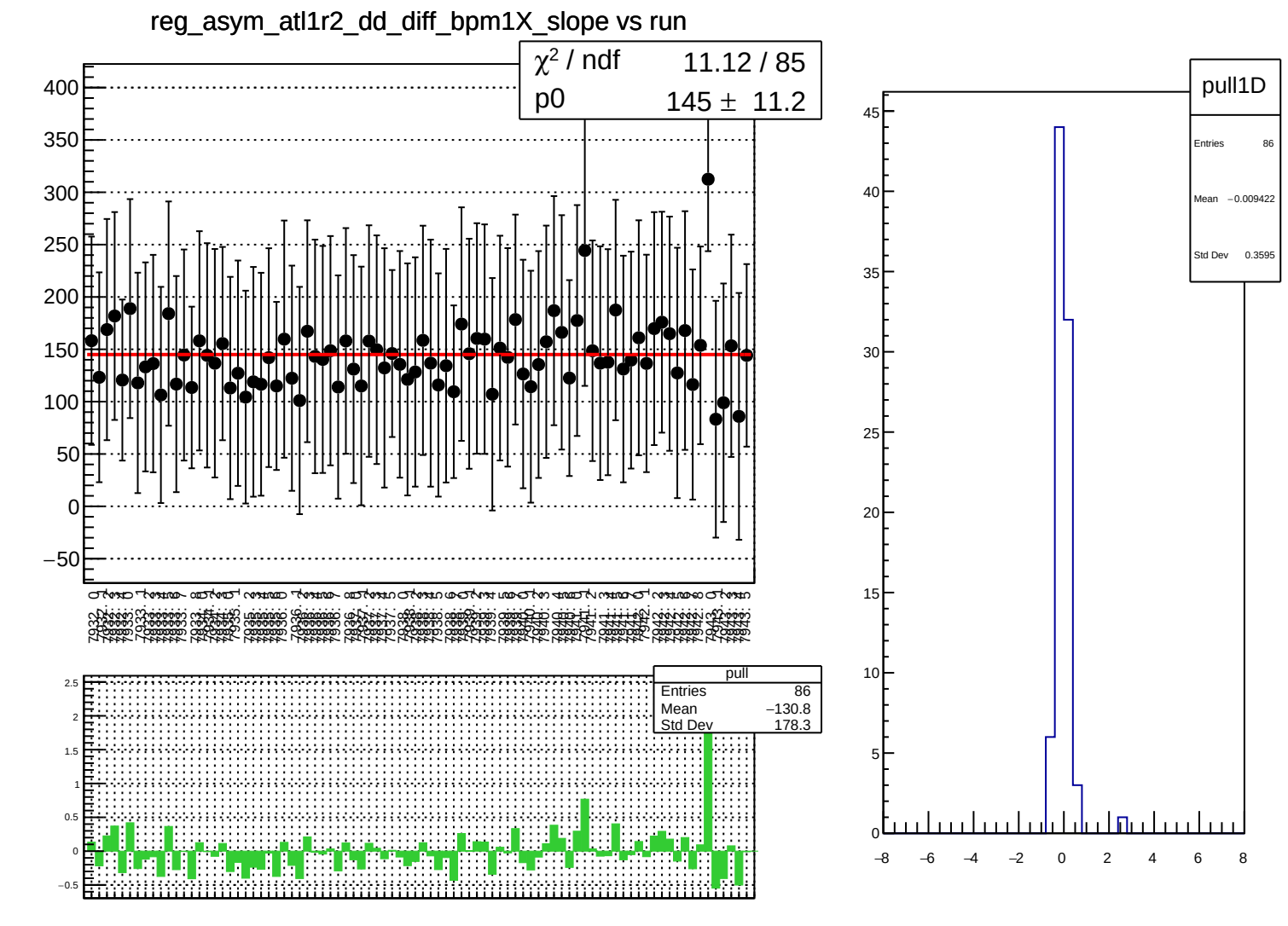

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.861 / 85
p0 58.88 ± 12.59
300
200
100
0
−100
pull
Entries 86
Mean 33.84
Std Dev 49.59
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

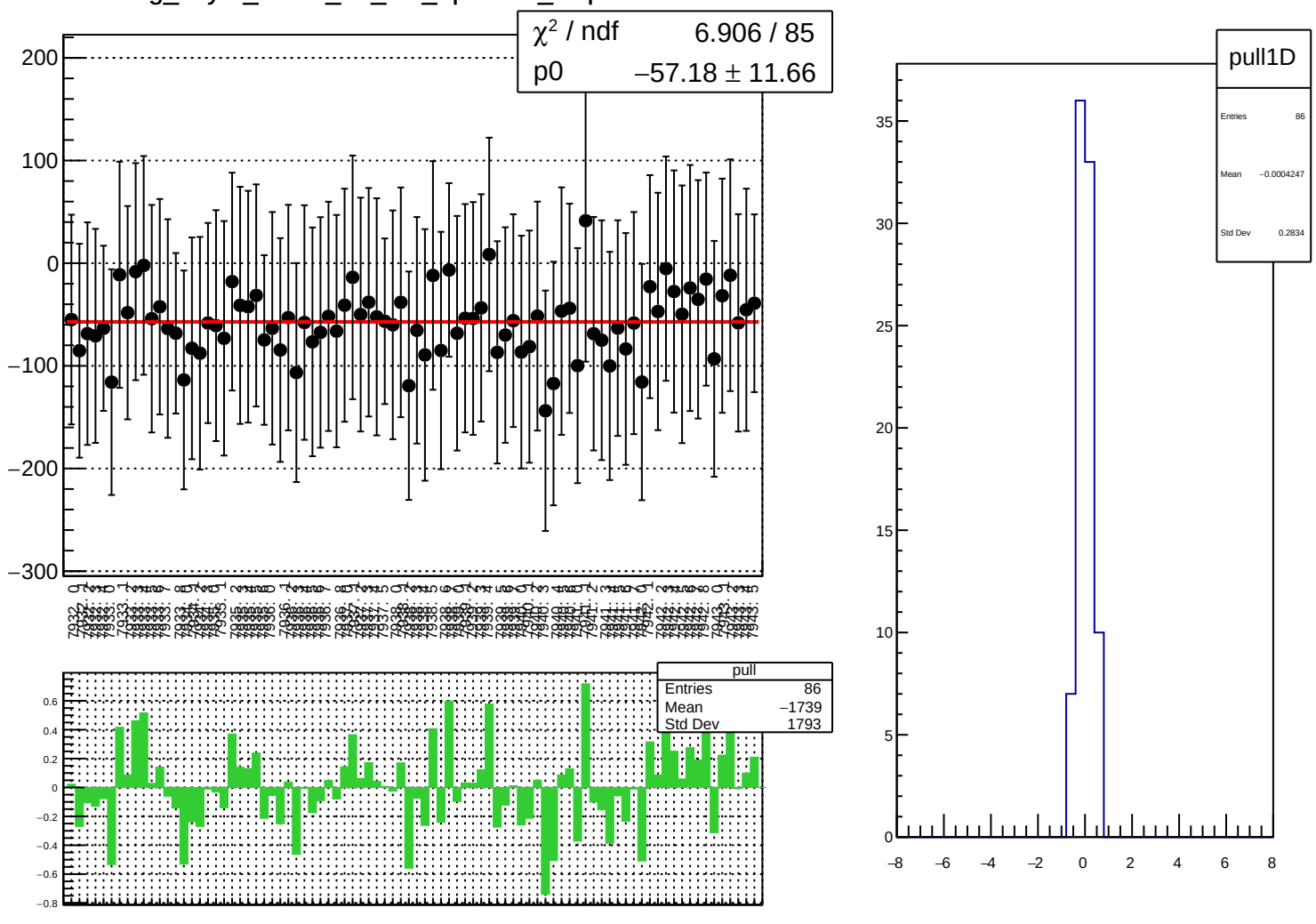

pull1D
Entries 86
Mean 0.005122
Std Dev 0.261
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

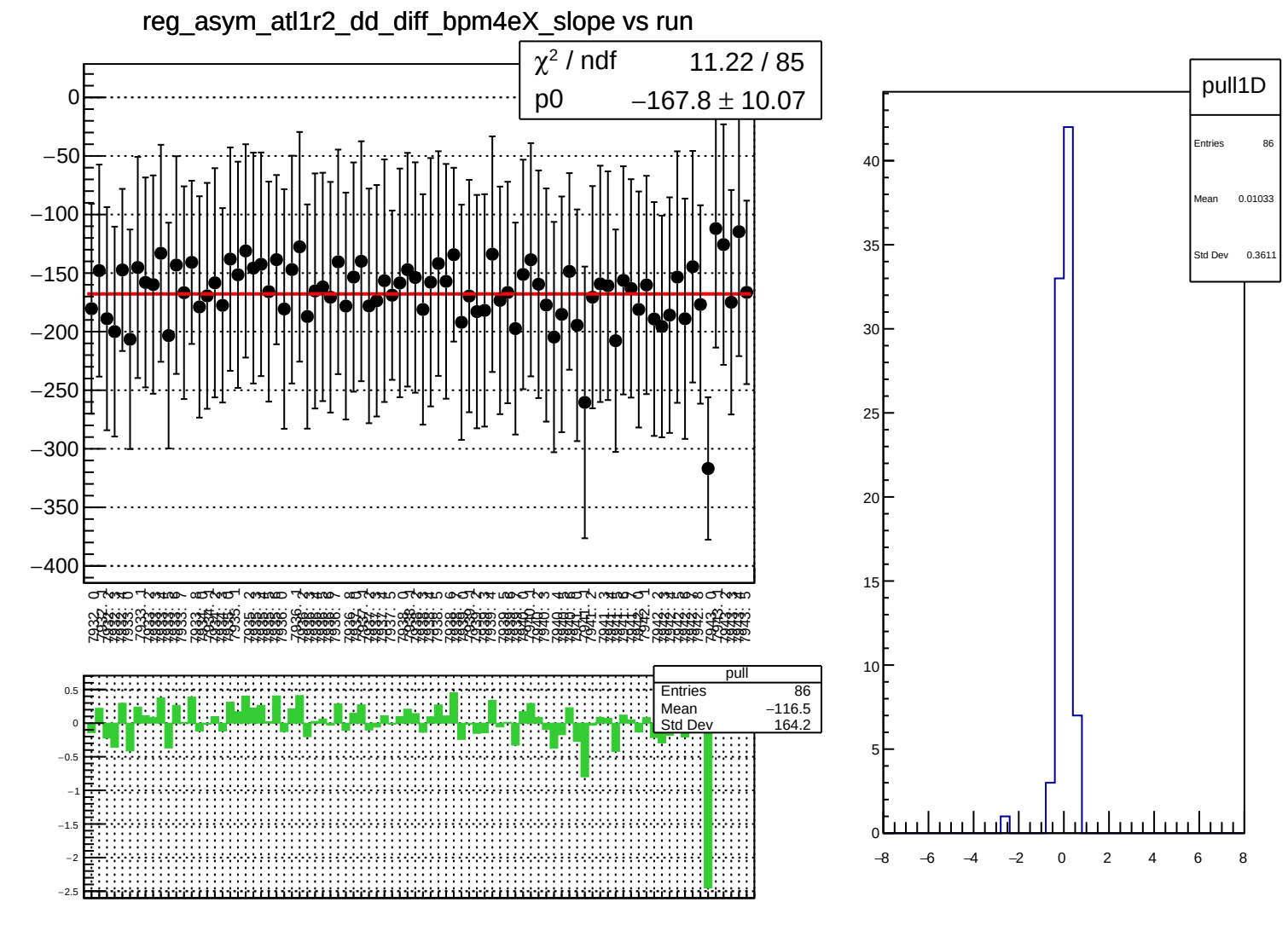

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.669 / 85
p0 186.4 ± 10.88
pull
Entries 86
Mean −79.03
Std Dev 129.6
pull1D
Entries 86
Mean −0.009118
Std Dev 0.3174

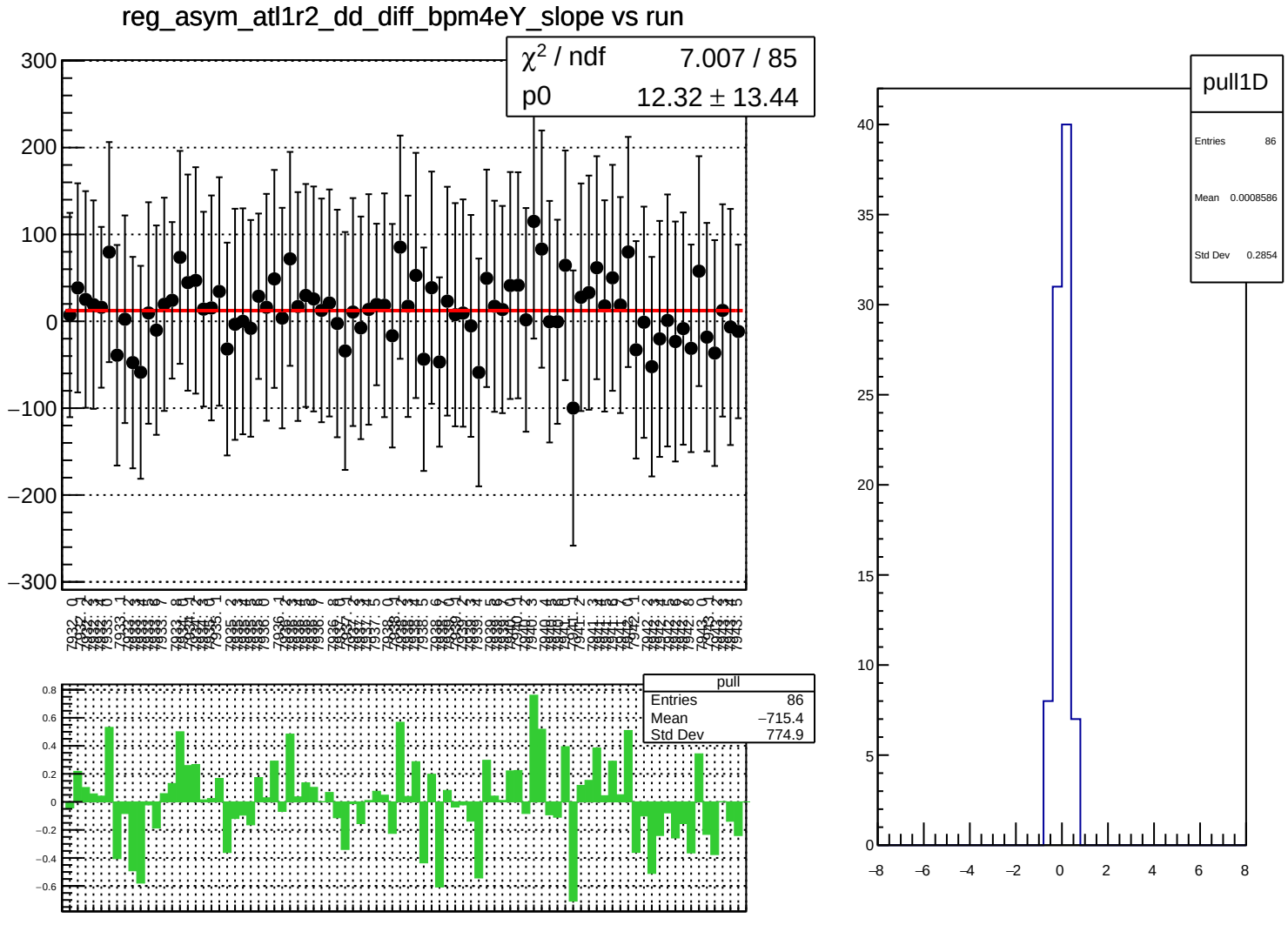

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.858 / 85
p0 −11.46 ± 14.51
pull
Entries 86
Mean 20.61
Std Dev 44.12
pull1D
Entries 86
Mean −0.005214
Std Dev 0.2609

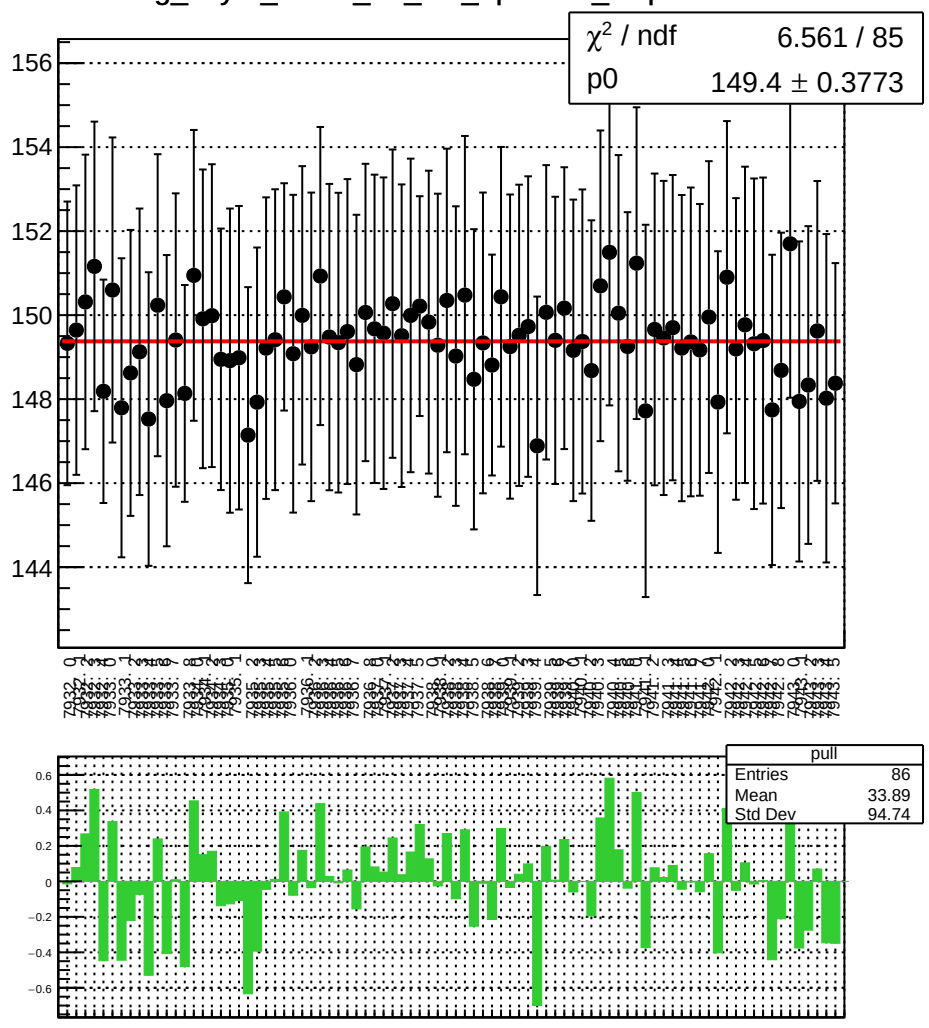

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 8.926 / 85
p0 −145.9 ± 0.4073
pull
Entries 86
Mean 77.92
Std Dev 69.48
pull1D
Entries 86
Mean −0.006523
Std Dev 0.3221

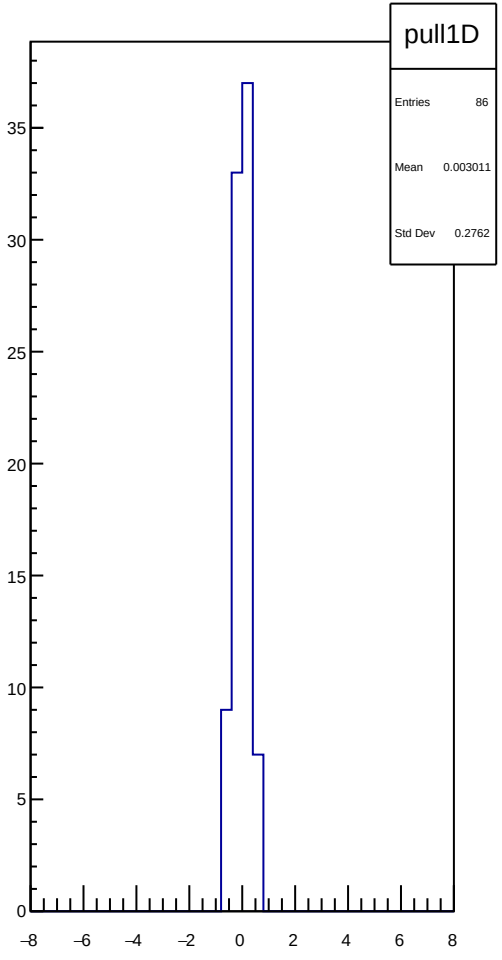

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 11.12 / 85
p0 145 ± 11.2
pull
Entries 86
Mean −130.8
Std Dev 178.3
pull1D
Entries 86
Mean −0.009422
Std Dev 0.3595

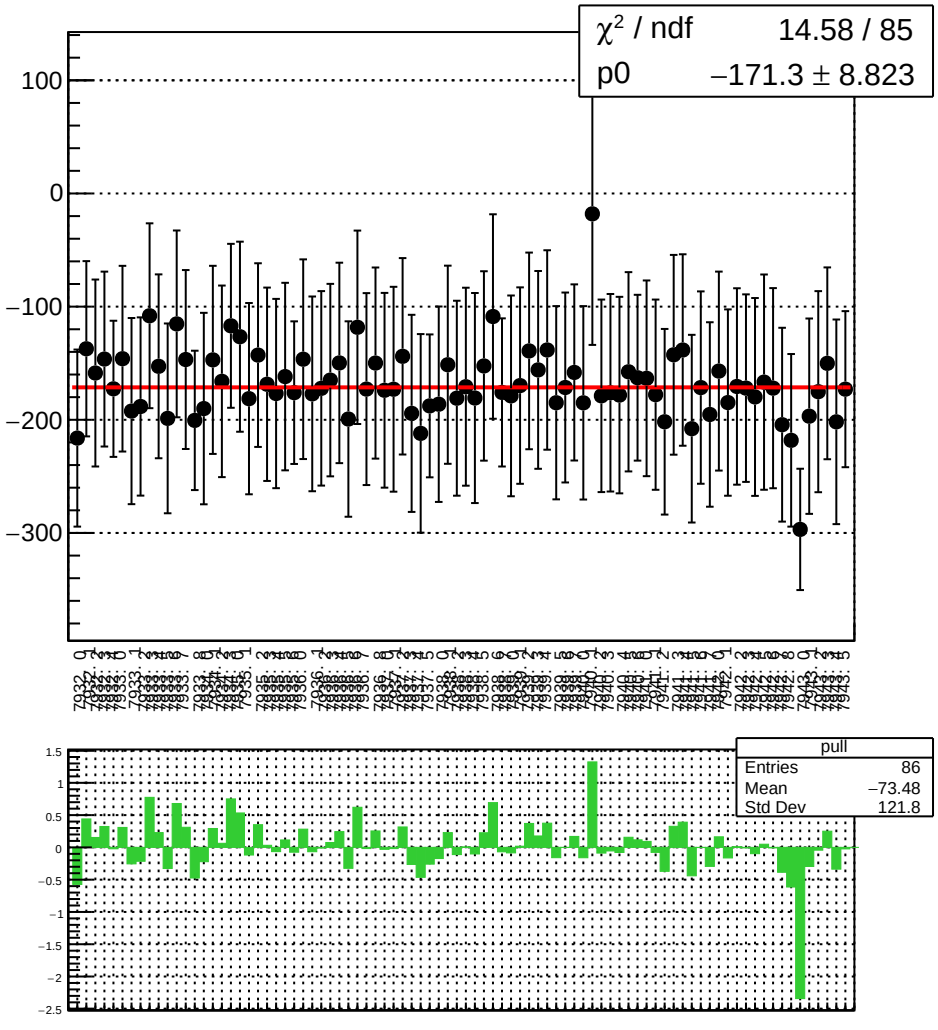

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.906 / 85
p0 −57.18 ± 11.66
pull
Entries 86
Mean −1739
Std Dev 1793
pull1D
Entries 86
Mean −0.0004247
Std Dev 0.2834

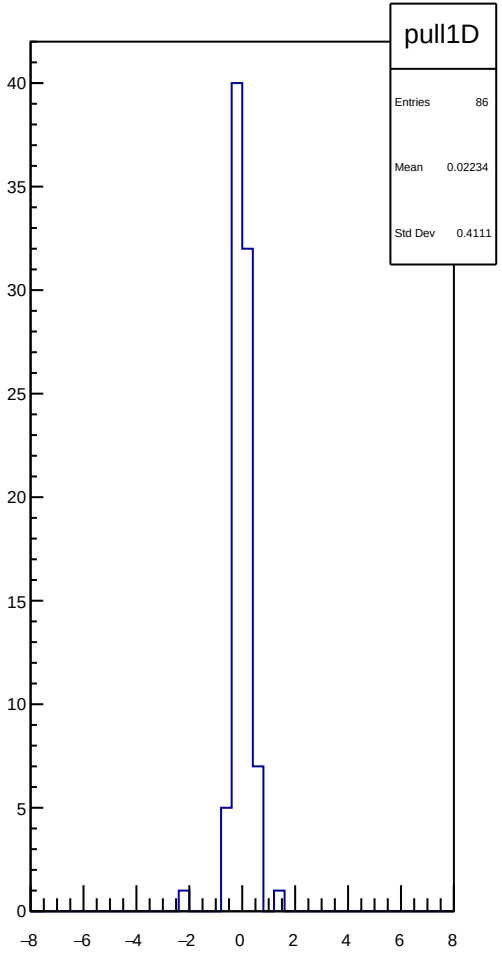

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 11.22 / 85
p0 −167.8 ± 10.07
pull
Entries 86
Mean −116.5
Std Dev 164.2
pull1D
Entries 86
Mean 0.01033
Std Dev 0.3611

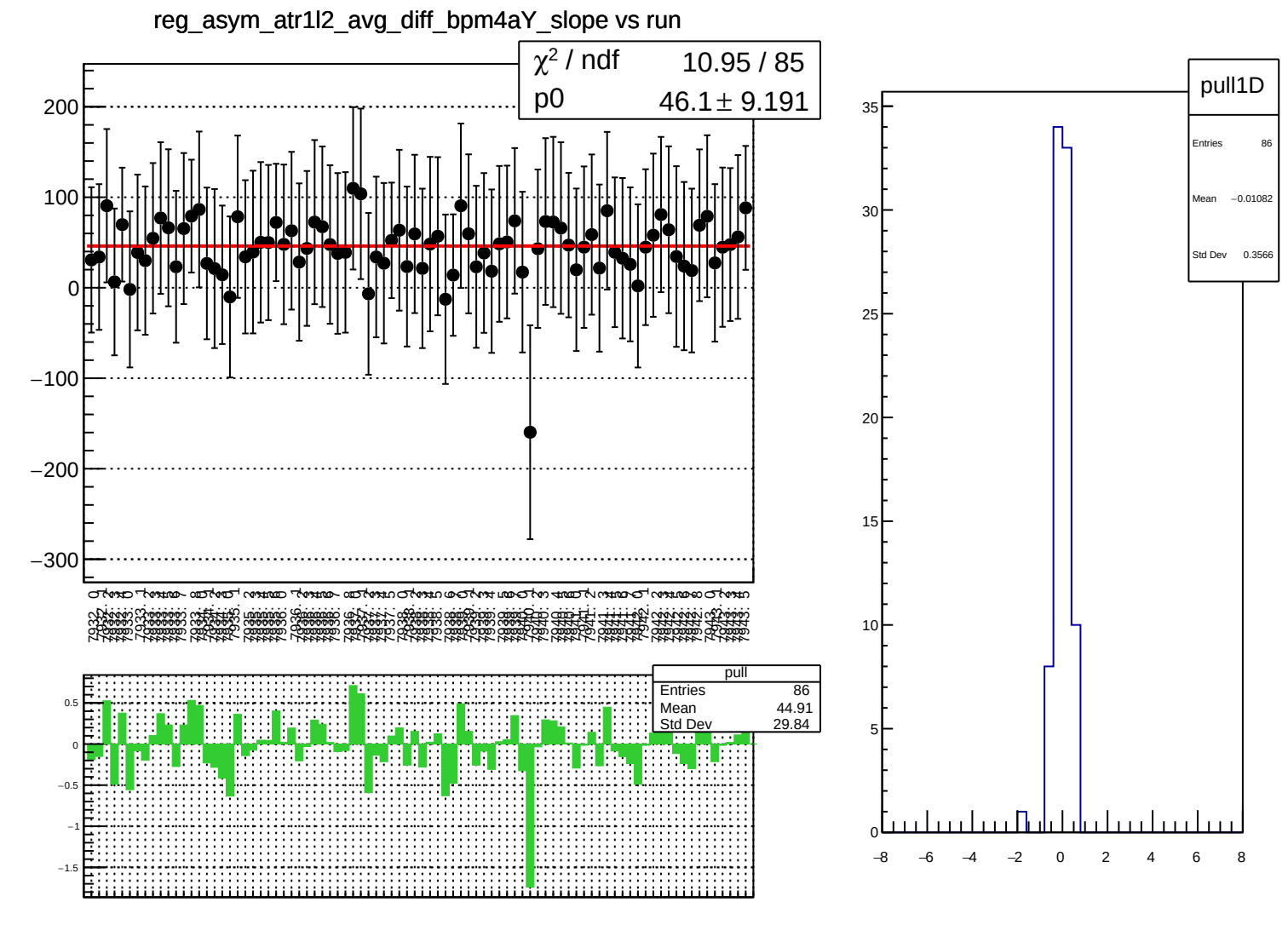

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.007 / 85
p0 12.32 ± 13.44
pull
Entries 86
Mean −715.4
Std Dev 774.9
pull1D
Entries 86
Mean 0.0008586
Std Dev 0.2854

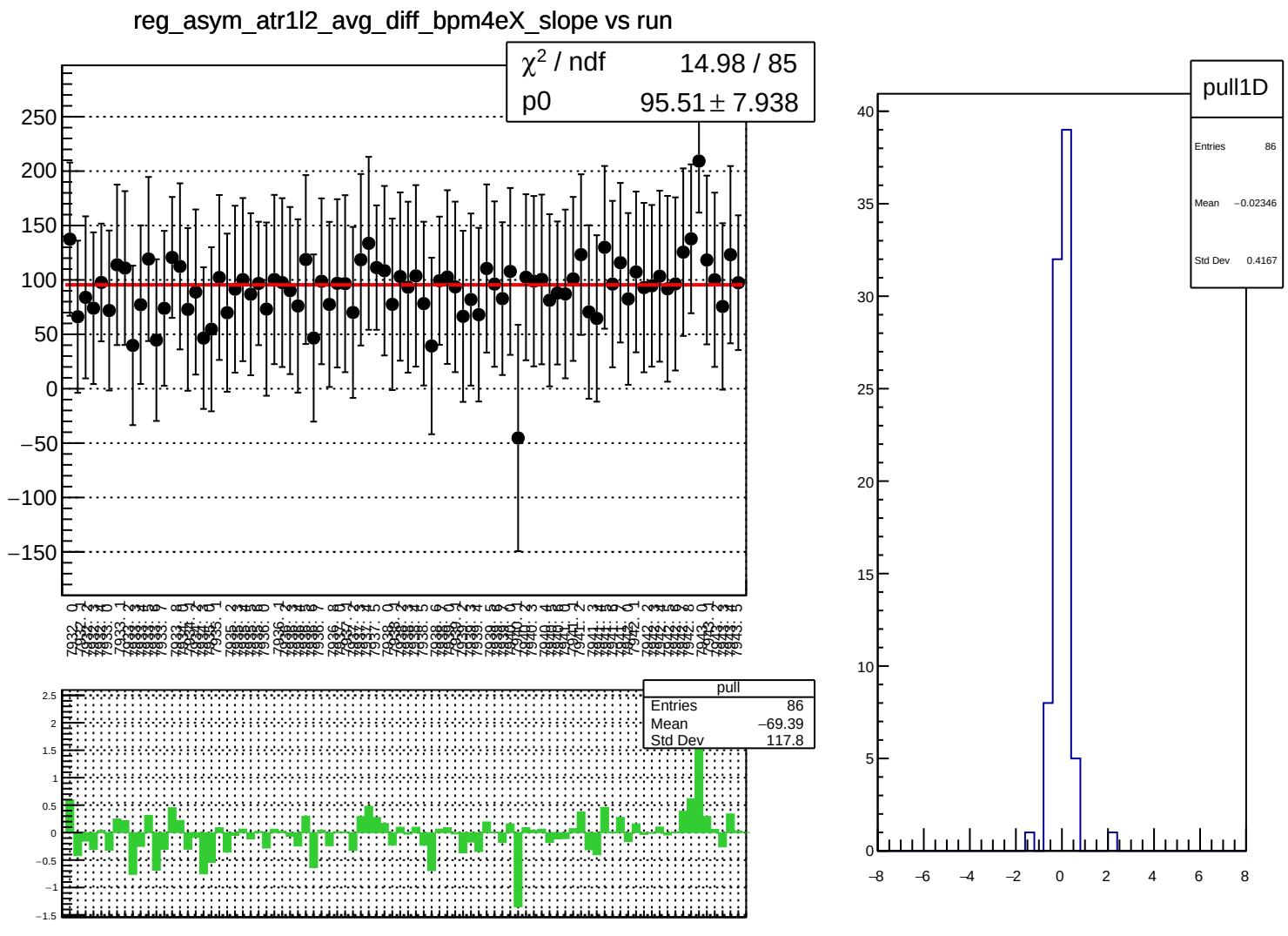

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 6.561 / 85
p0 149.4 ± 0.3773
pull
Entries 86
Mean 33.89
Std Dev 94.74

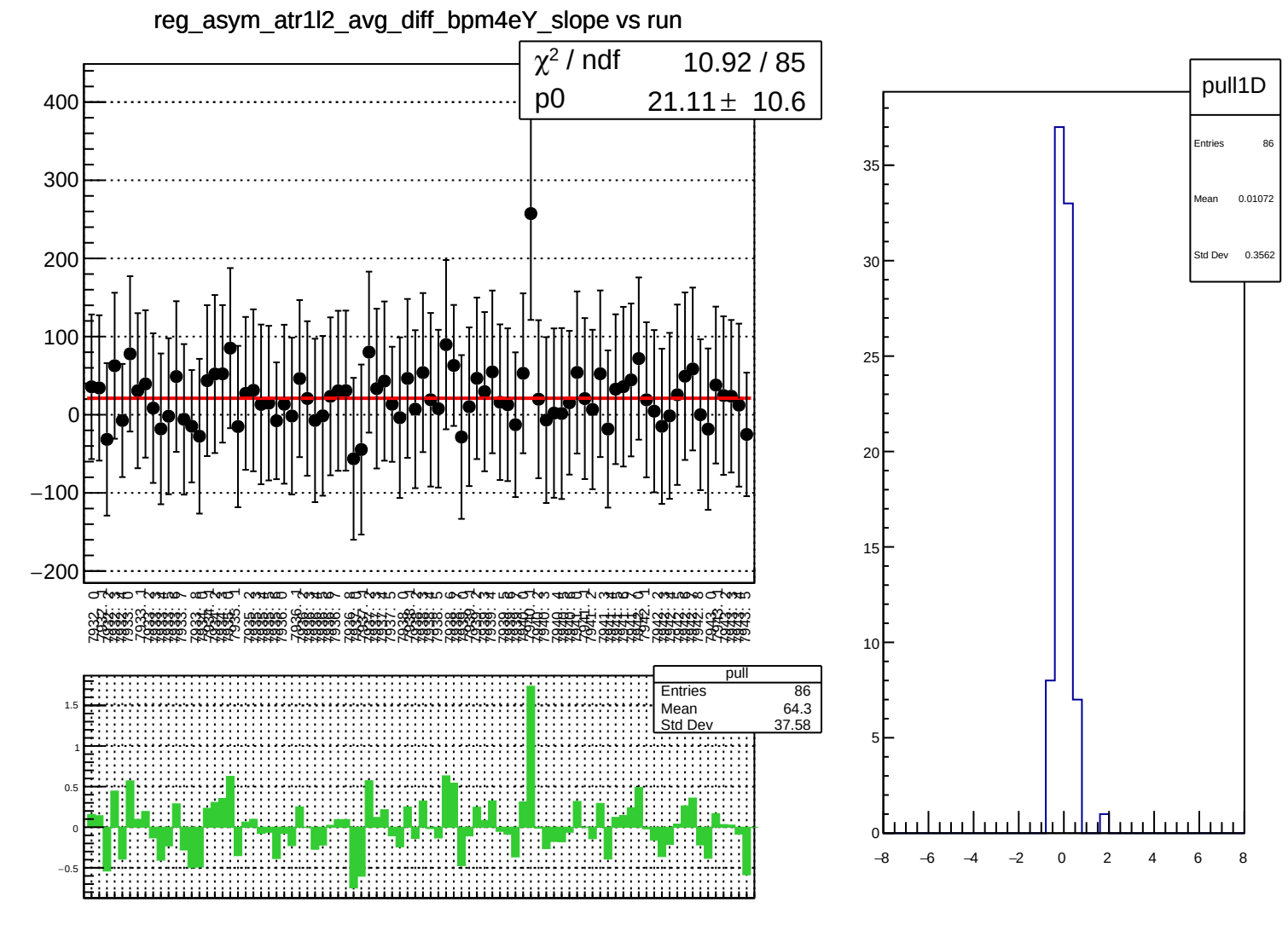

pull1D
Entries 86
Mean 0.003011
Std Dev 0.2762

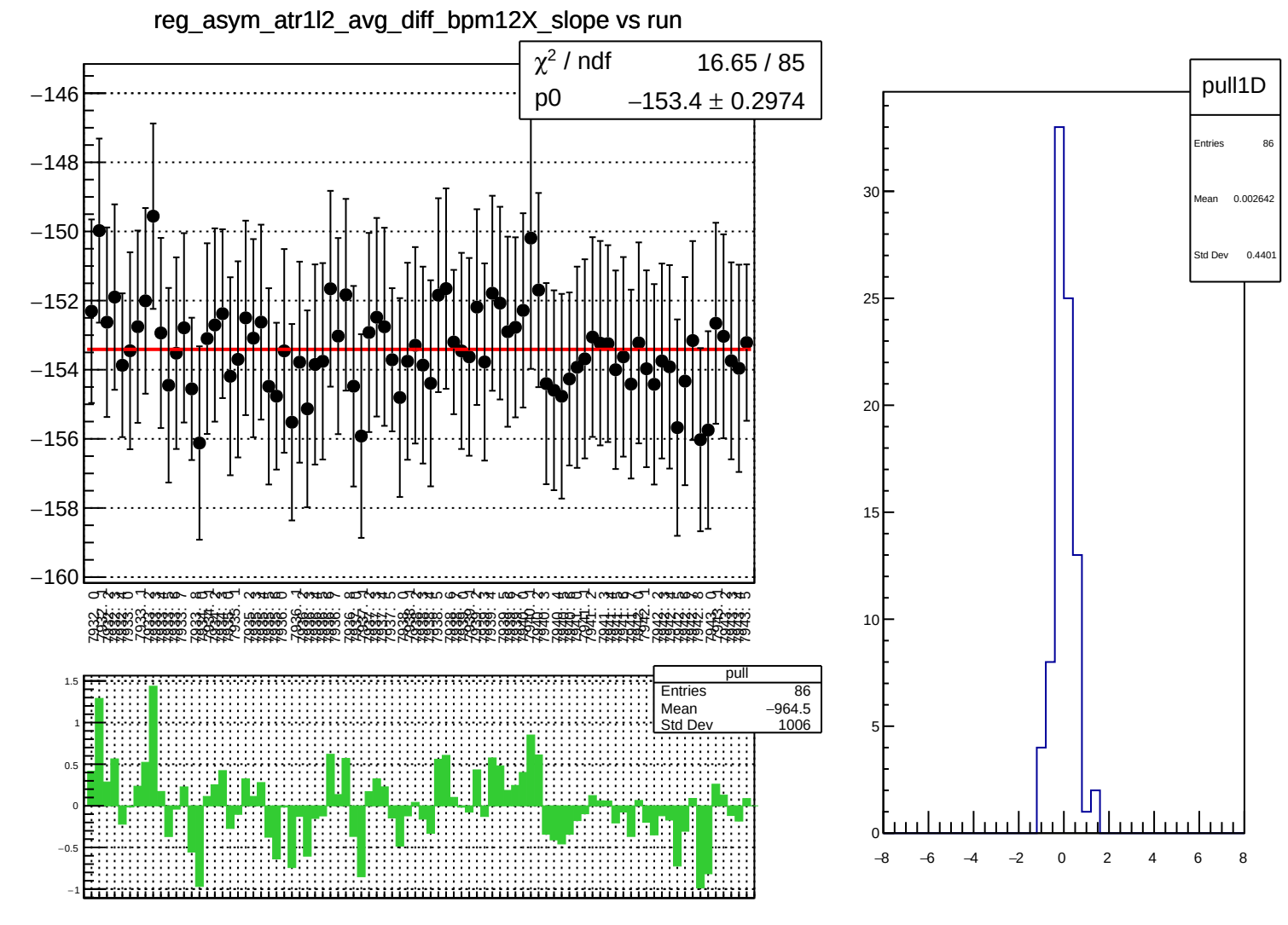

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 14.58 / 85
p0 −171.3 ± 8.823
pull
Entries 86
Mean −73.48
Std Dev 121.8

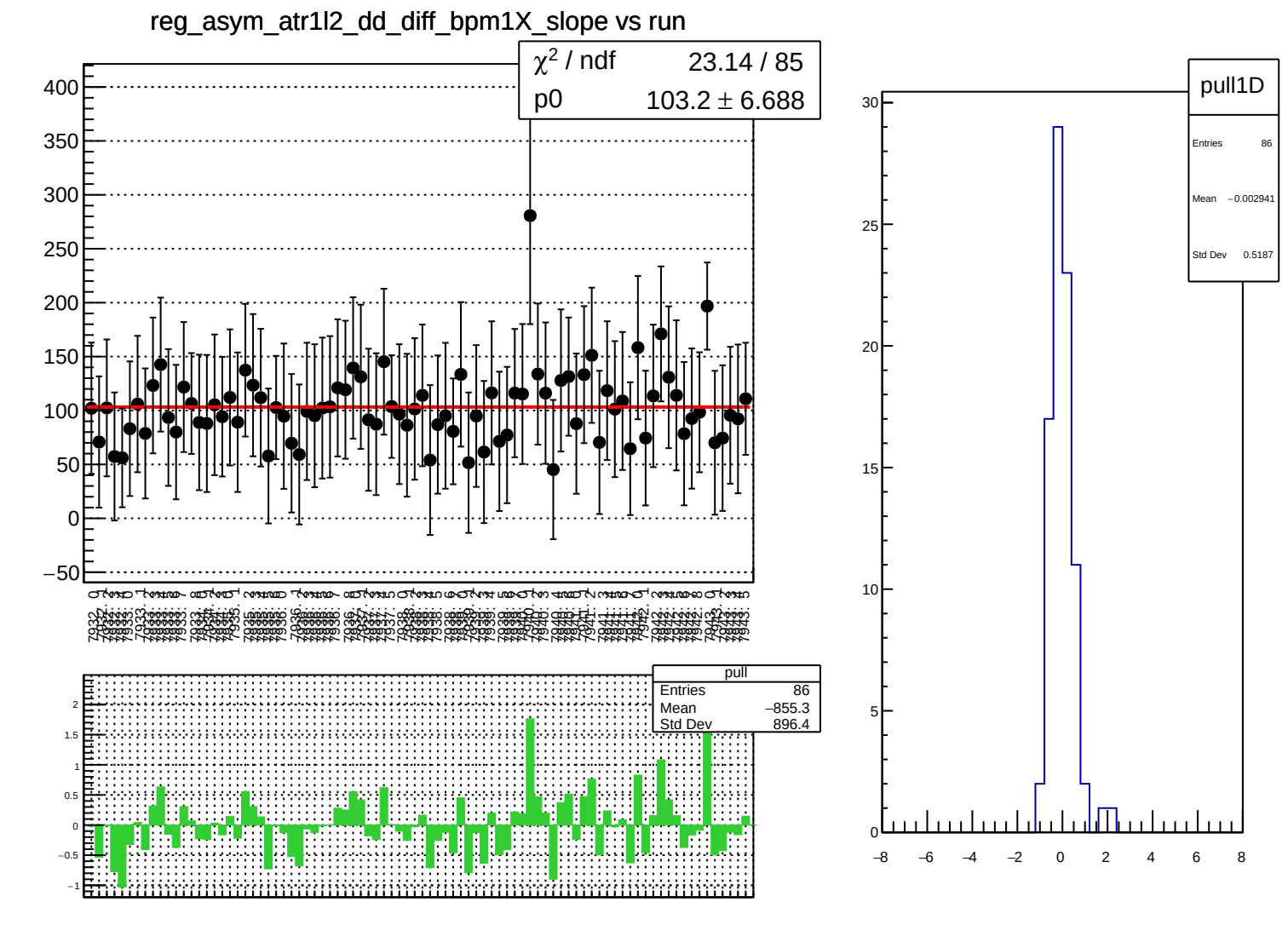

pull1D
Entries 86
Mean 0.02234
Std Dev 0.4111

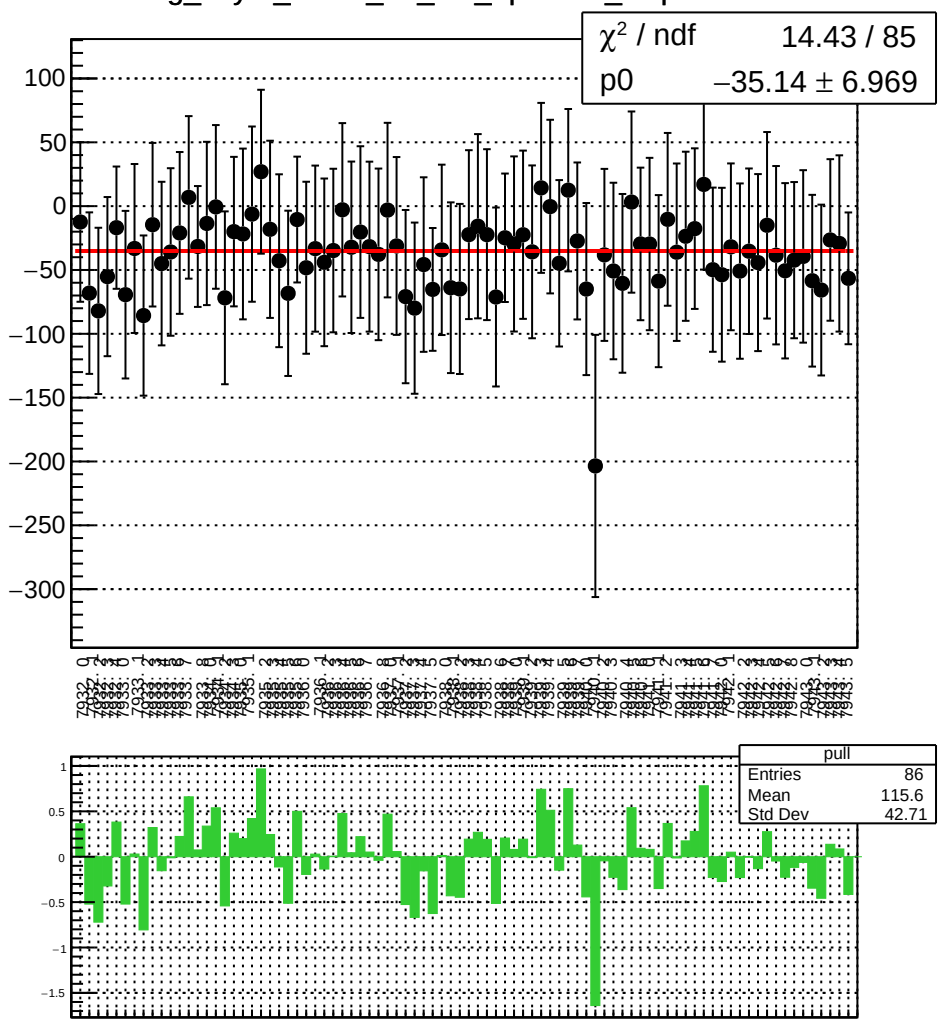

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.95 / 85
p0 46.1 ± 9.191
pull
Entries 86
Mean 44.91
Std Dev 29.84
pull1D
Entries 86
Mean −0.01082
Std Dev 0.3566

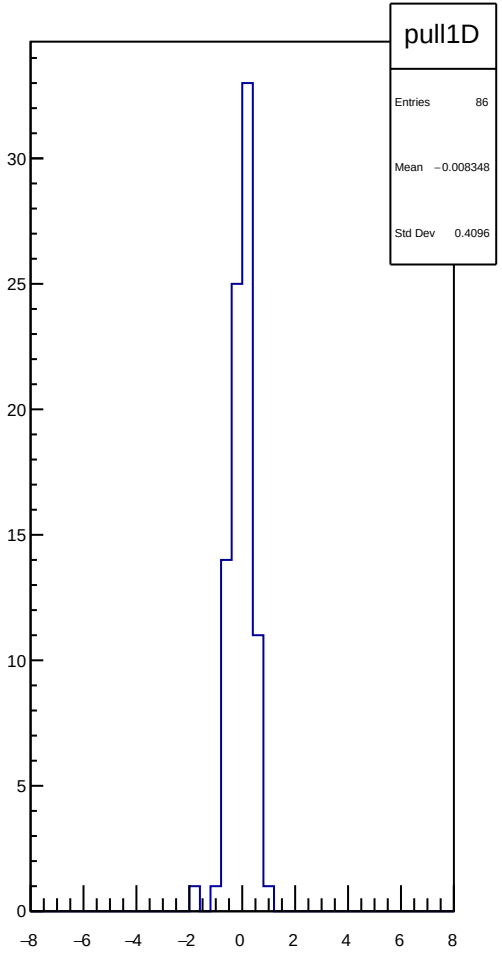

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.98 / 85
p0 95.51 ± 7.938
pull
Entries 86
Mean −69.39
Std Dev 117.8
pull1D
Entries 86
Mean −0.02346
Std Dev 0.4167

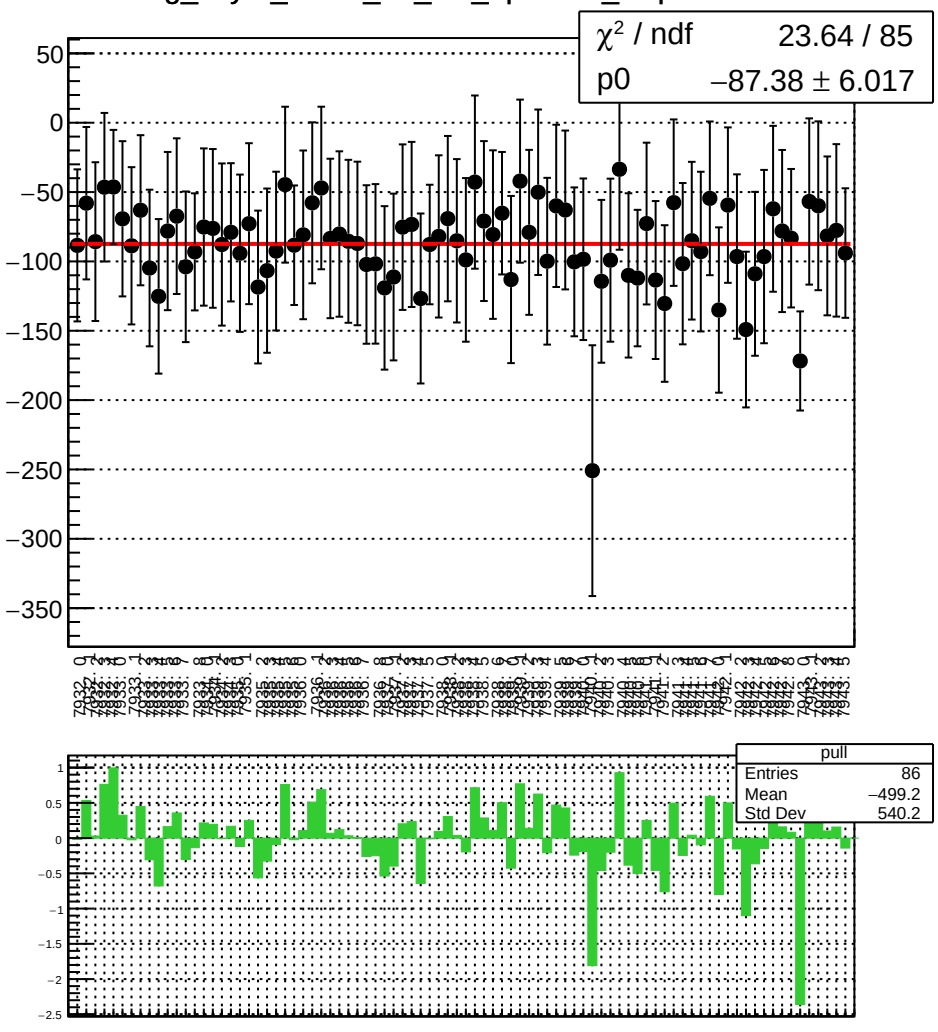

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.92 / 85
p0 21.11 ± 10.6
pull
Entries 86
Mean 64.3
Std Dev 37.58
pull1D
Entries 86
Mean 0.01072
Std Dev 0.3562

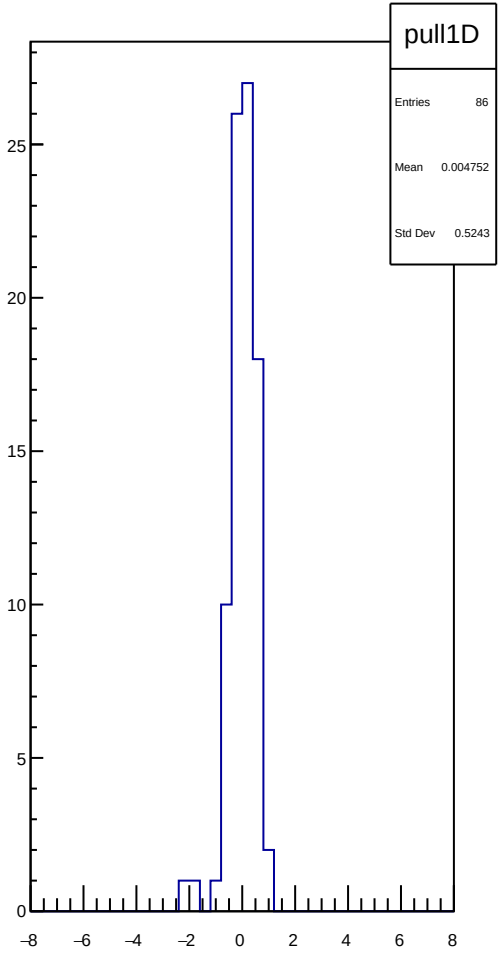

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 16.65 / 85
p0 −153.4 ± 0.2974
pull
Entries 86
Mean −964.5
Std Dev 1006
pull1D
Entries 86
Mean 0.002642
Std Dev 0.4401

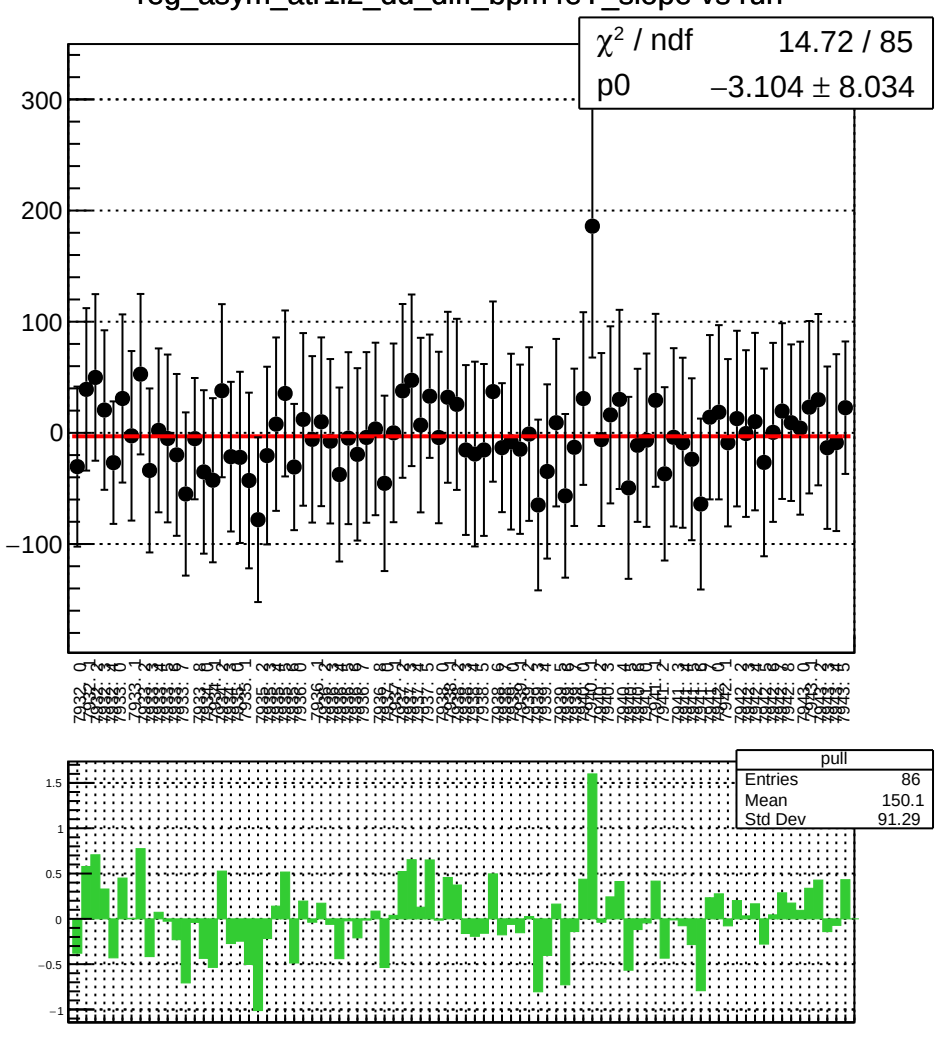

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 23.14 / 85
p0 103.2 ± 6.688
pull
Entries 86
Mean −855.3
Std Dev 896.4
pull1D
Entries 86
Mean −0.002941
Std Dev 0.5187

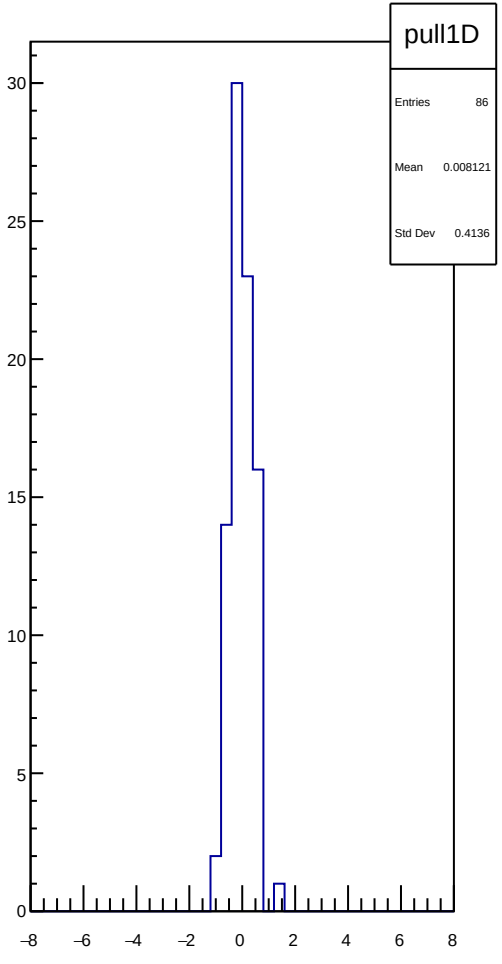

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 14.43 / 85
p0 −35.14 ± 6.969
pull
Entries 86
Mean 115.6
Std Dev 42.71

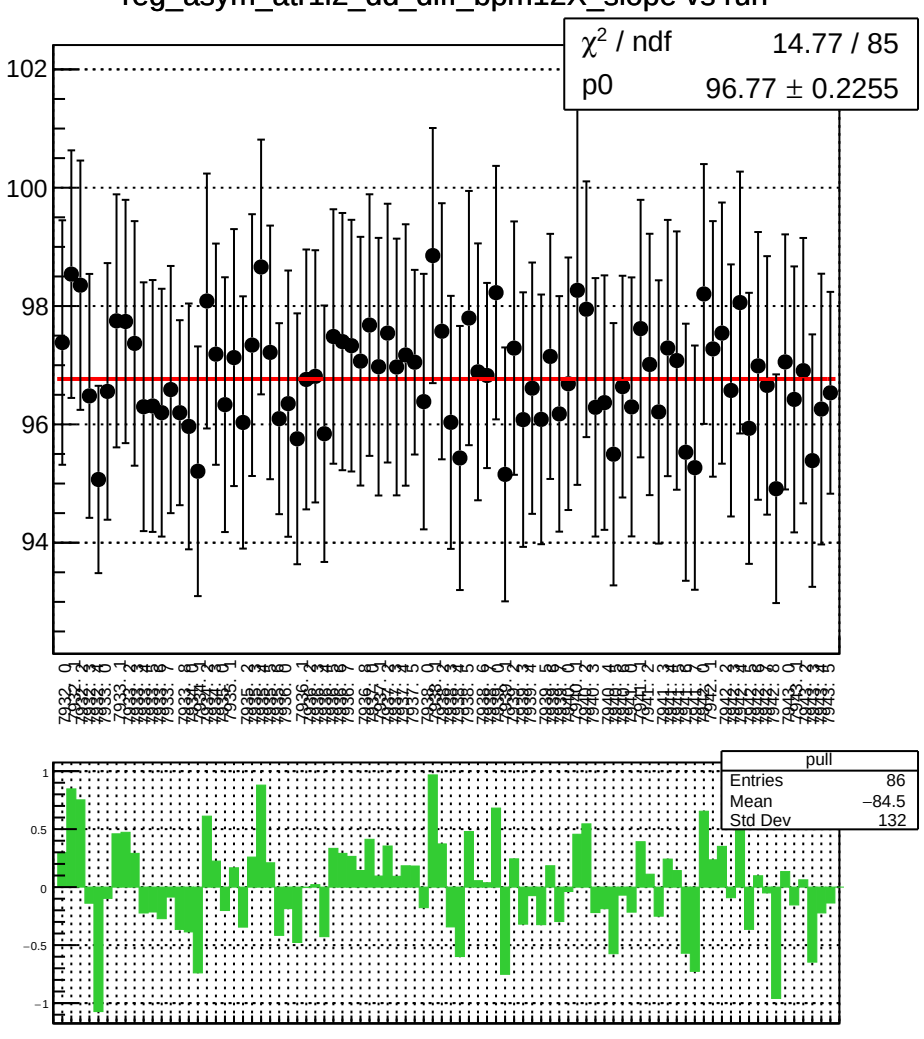

pull1D
Entries 86
Mean −0.008348
Std Dev 0.4096

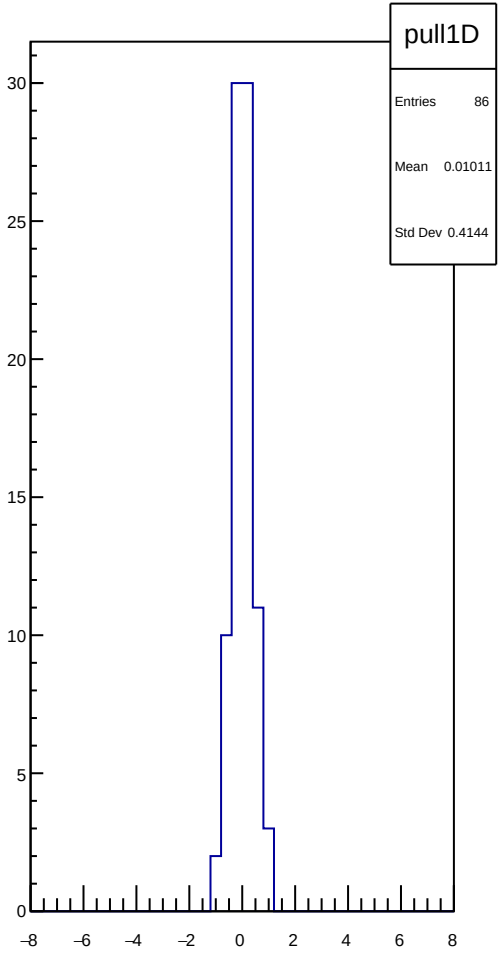

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.64 / 85
p0 −87.38 ± 6.017
pull
Entries 86
Mean −499.2
Std Dev 540.2

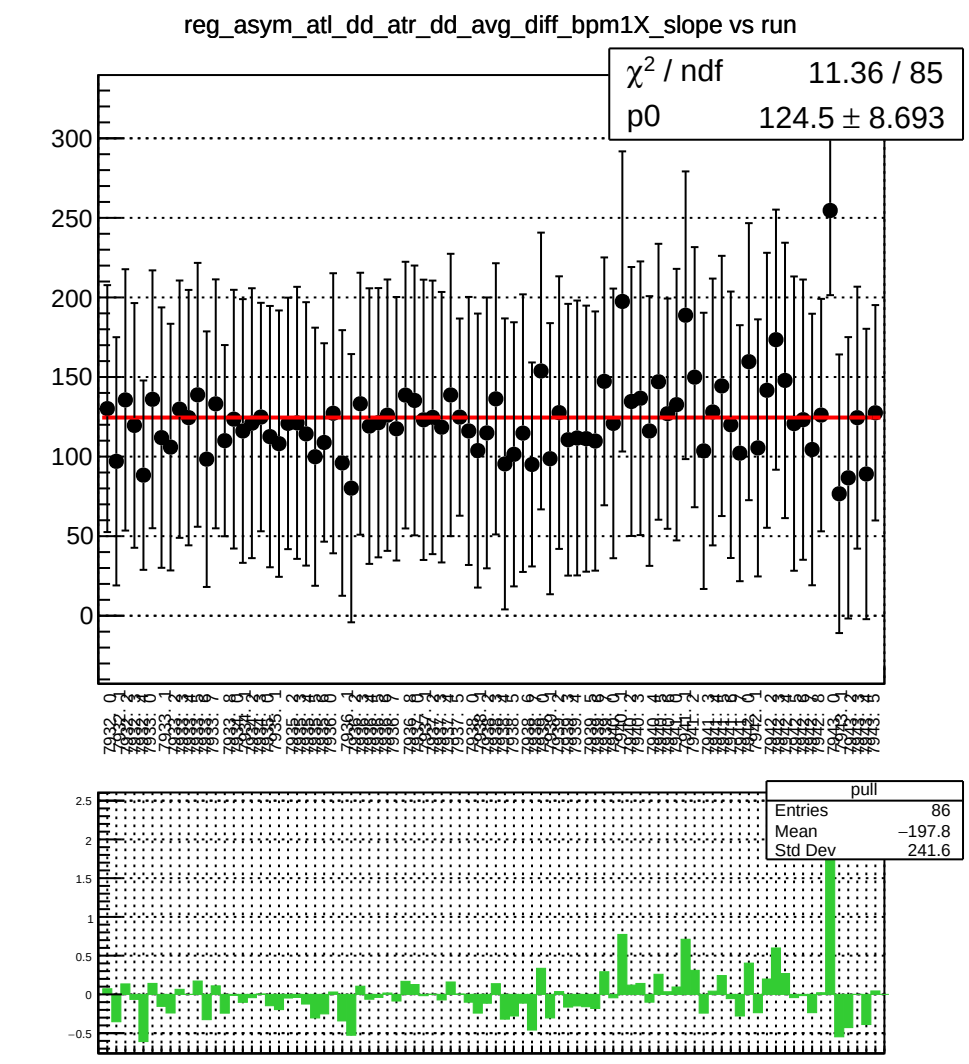

pull1D
Entries 86
Mean 0.004752
Std Dev 0.5243

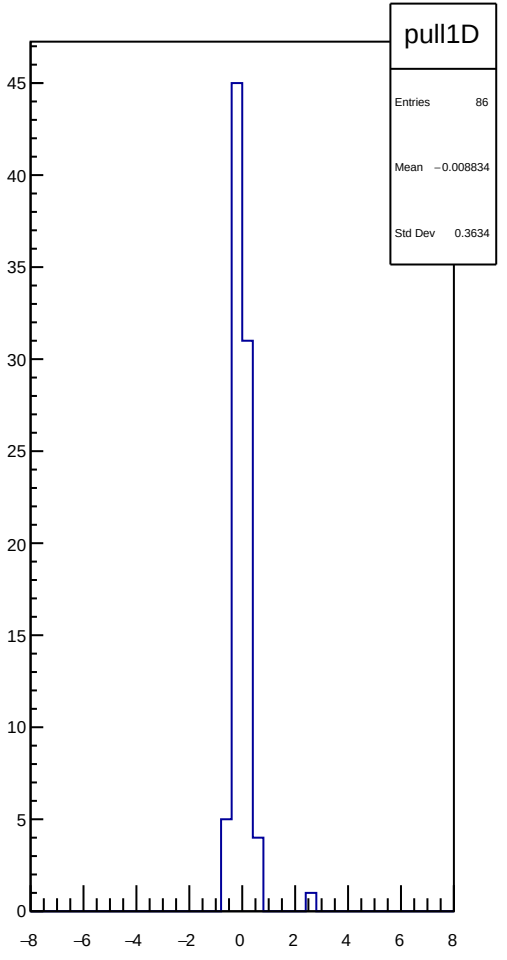

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.72 / 85
p0 −3.104 ± 8.034
300
200
100
0
−100
pull
Entries 86
Mean 150.1
Std Dev 91.29
1.5
1
0.5
0
−0.5
−1

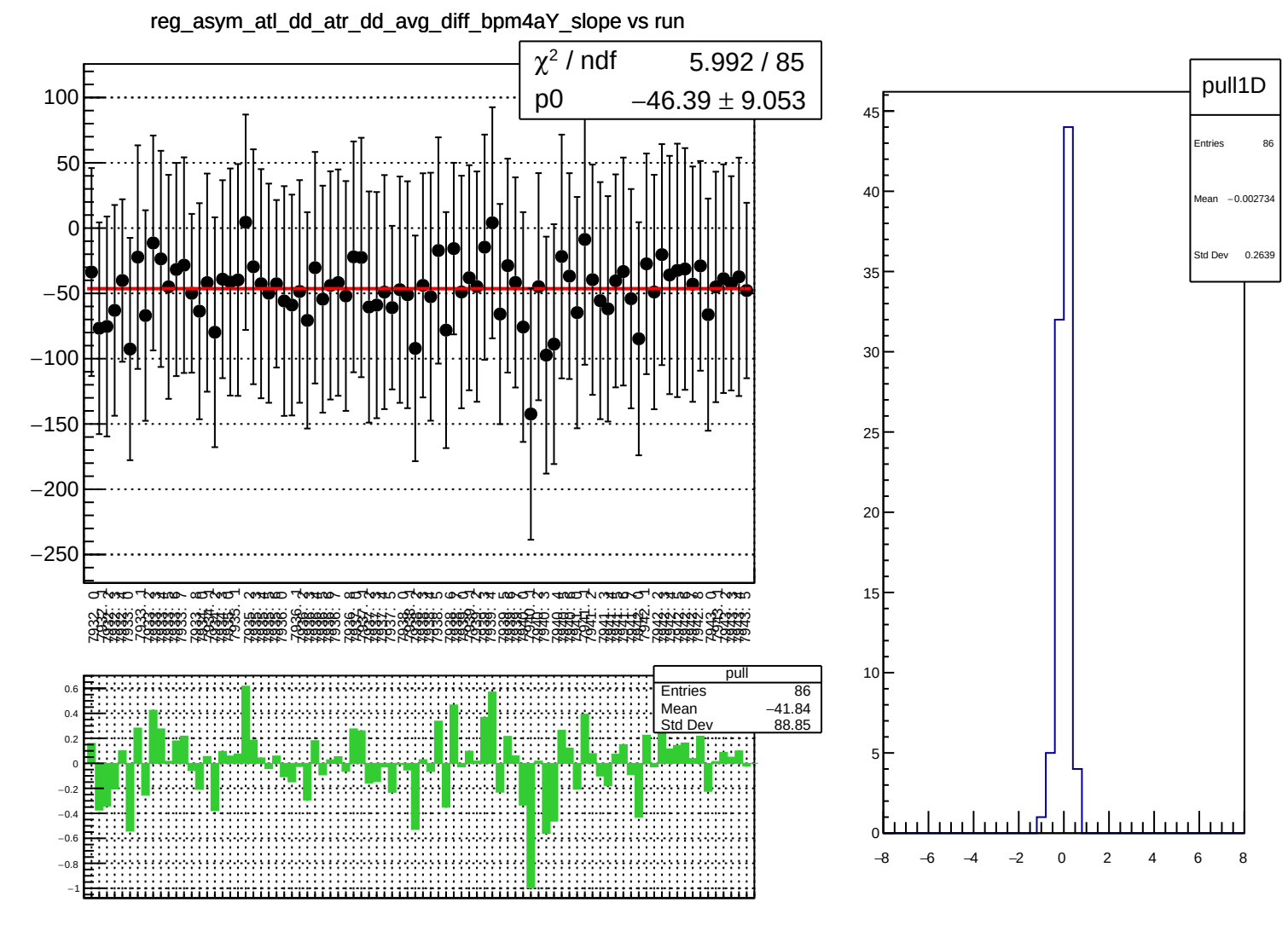

pull1D
Entries 86
Mean 0.008121
Std Dev 0.4136
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

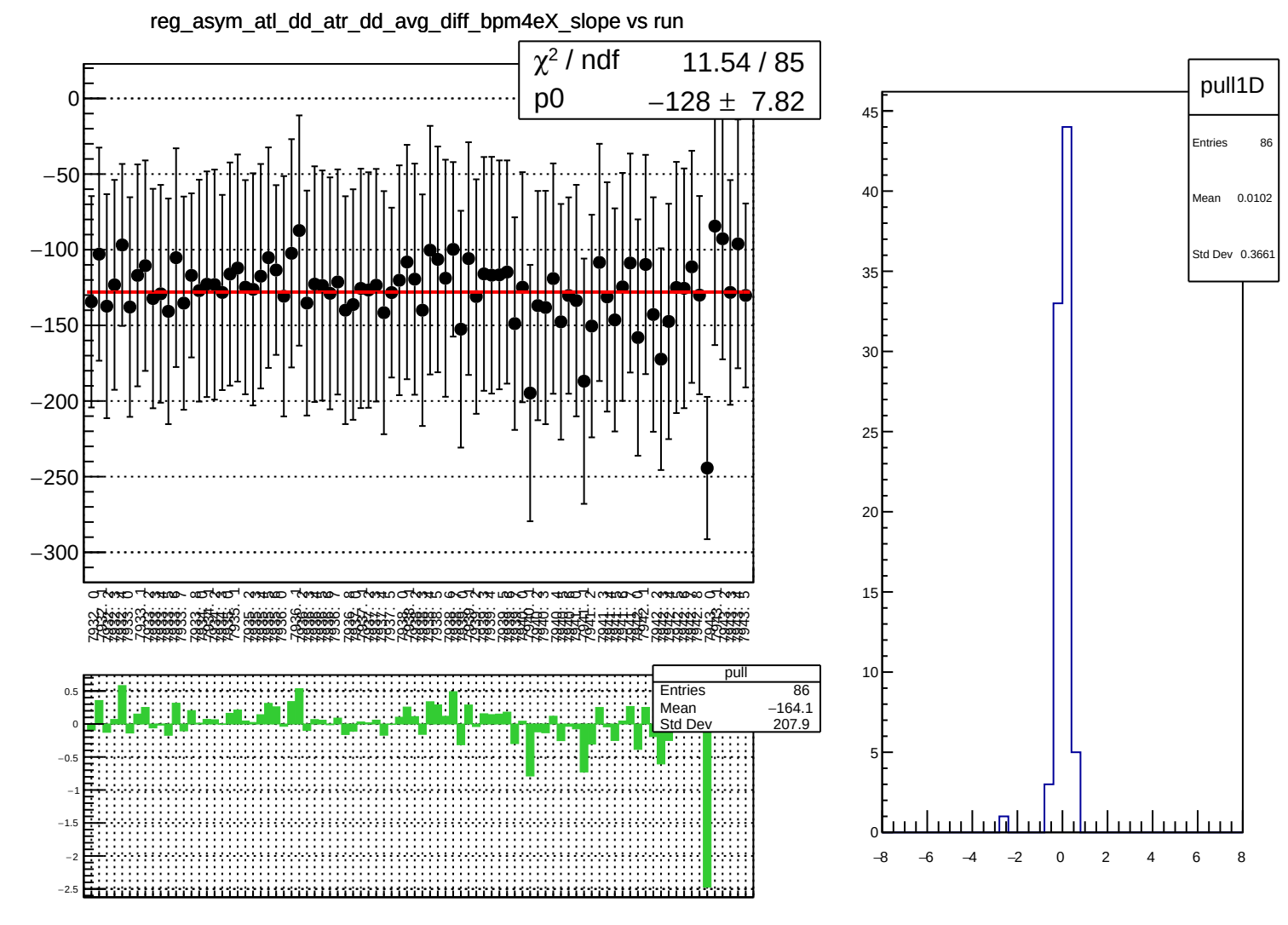

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 14.77 / 85
p0 96.77 ± 0.2255
102
100
98
96
94
pull
Entries 86
Mean −84.5
Std Dev 132
1
0.5
0
−0.5
−1

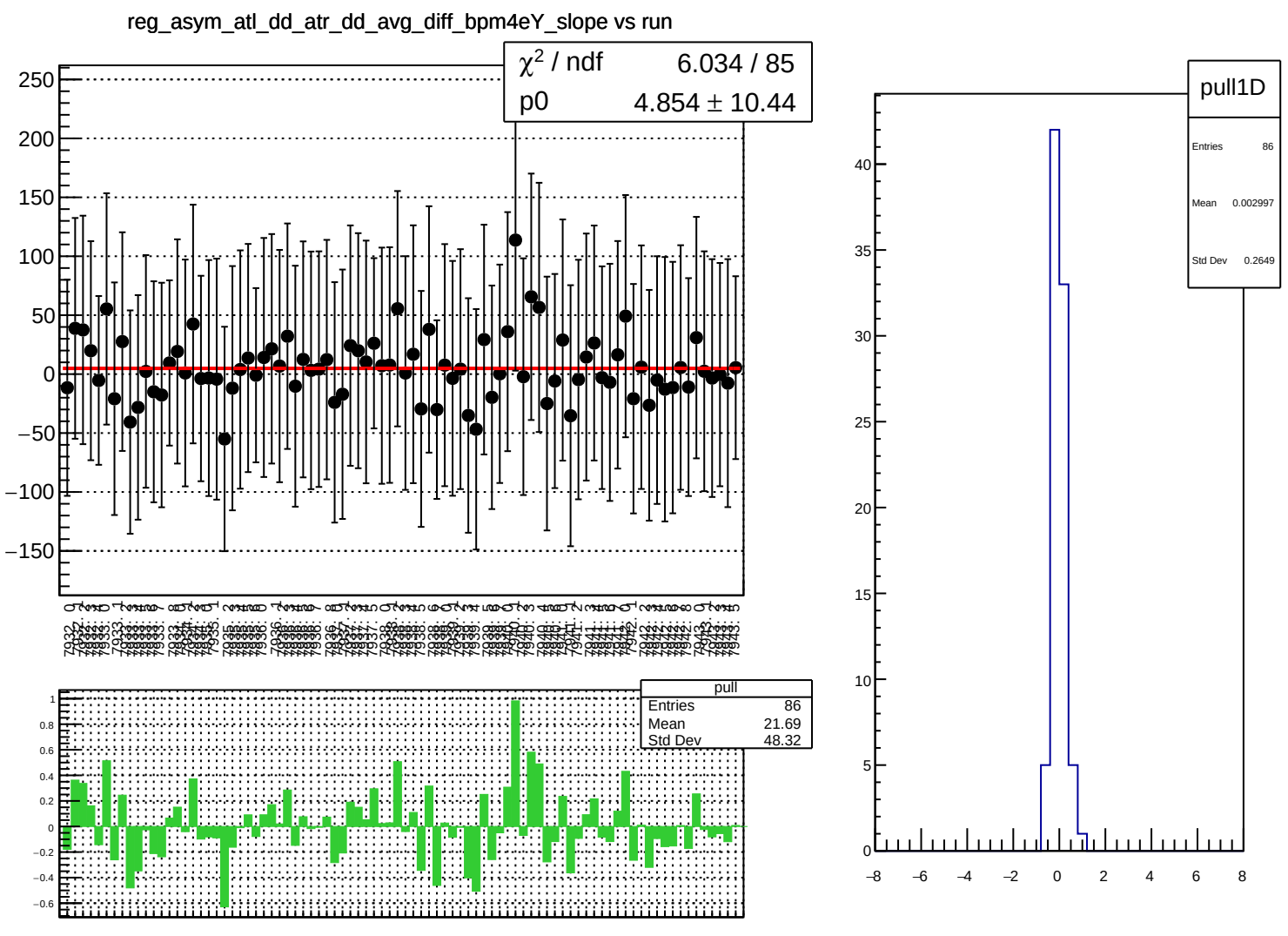

pull1D
Entries 86
Mean 0.01011
Std Dev 0.4144
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

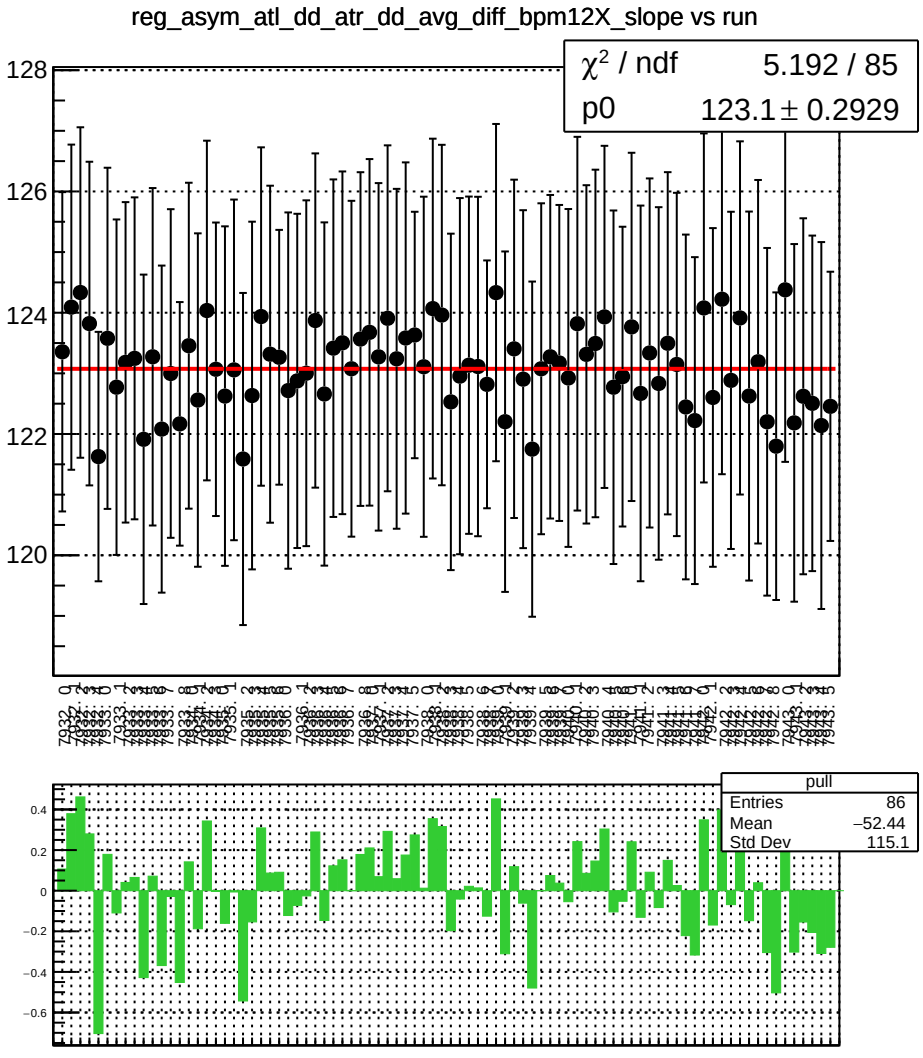

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 11.36 / 85
p0 124.5 ± 8.693
pull
Entries 86
Mean −197.8
Std Dev 241.6

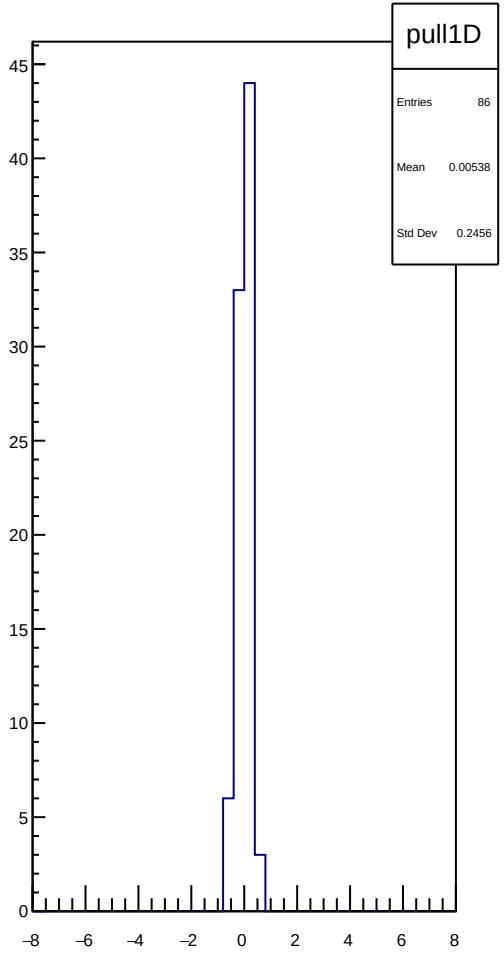

pull1D
Entries 86
Mean −0.008834
Std Dev 0.3634

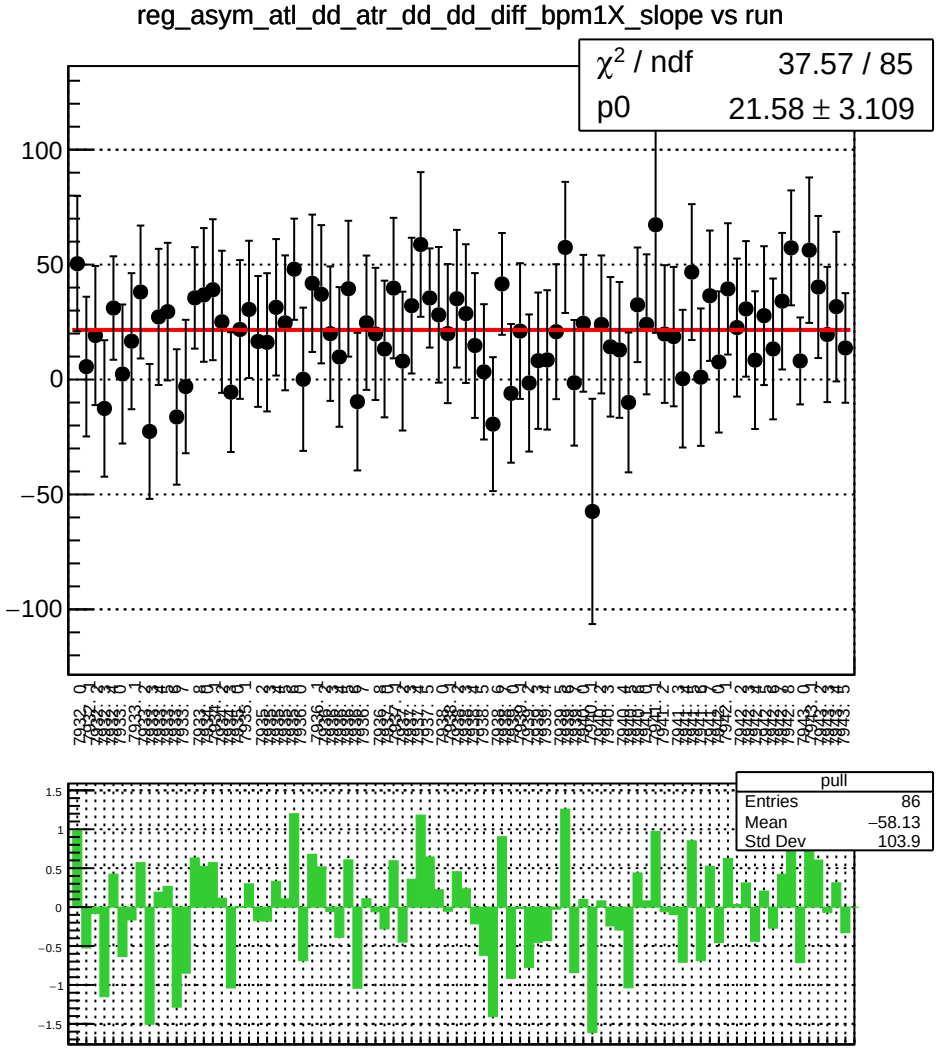

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.992 / 85
p0 −46.39 ± 9.053
pull
Entries 86
Mean −41.84
Std Dev 88.85
pull1D
Entries 86
Mean −0.002734
Std Dev 0.2639

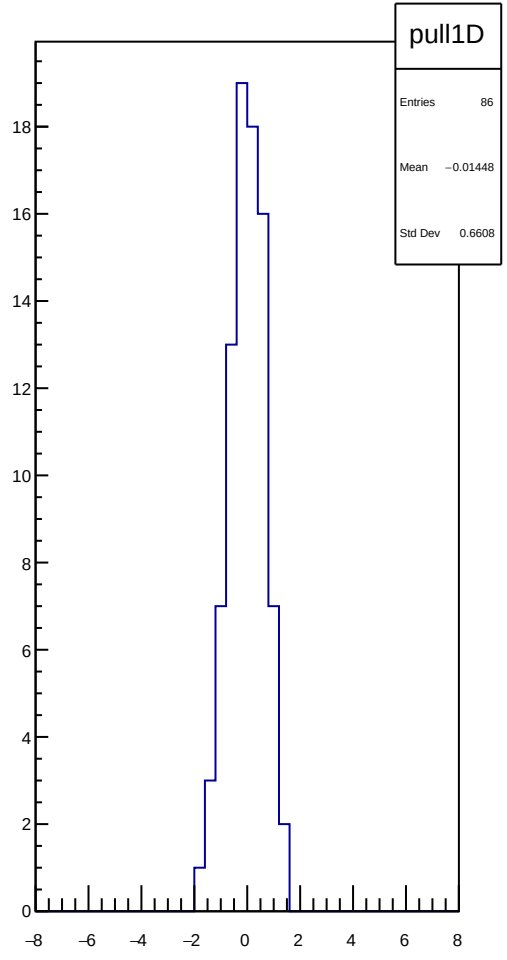

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 11.54 / 85
p0 −128 ± 7.82
pull
Entries 86
Mean −164.1
Std Dev 207.9
pull1D
Entries 86
Mean 0.0102
Std Dev 0.3661

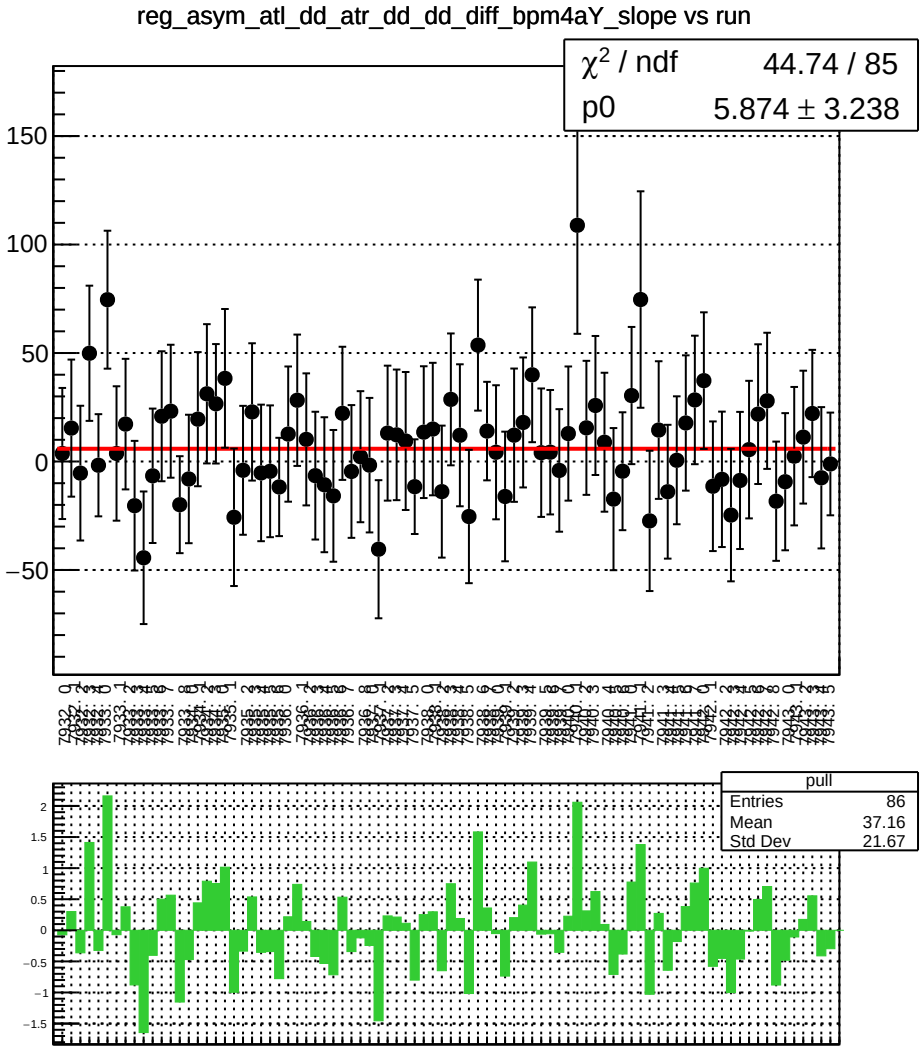

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.034 / 85
p0 4.854 ± 10.44
pull
Entries 86
Mean 21.69
Std Dev 48.32
pull1D
Entries 86
Mean 0.002997
Std Dev 0.2649

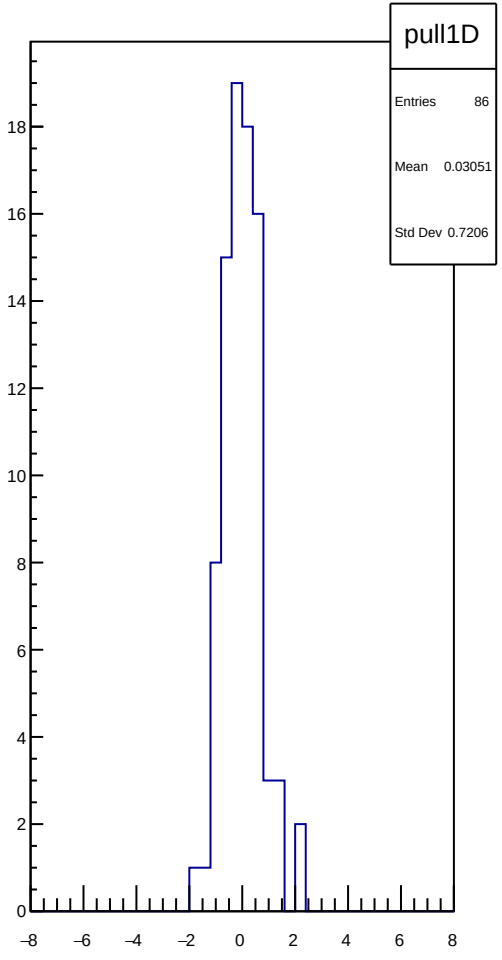

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 5.192 / 85
p0 123.1 ± 0.2929
128
126
124
122
120
pull
Entries 86
Mean −52.44
Std Dev 115.1
0.4
0.2
0
−0.2
−0.4
−0.6

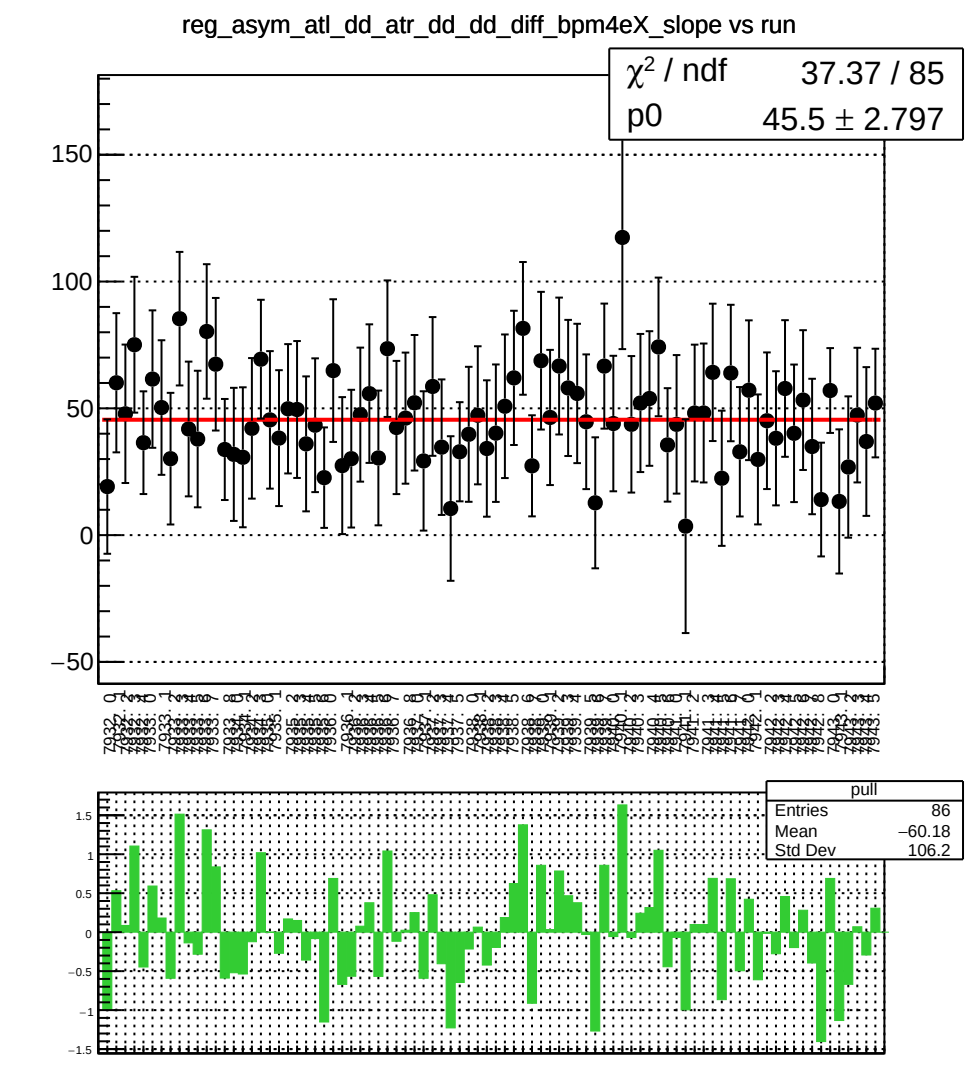

pull1D
Entries 86
Mean 0.00538
Std Dev 0.2456
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

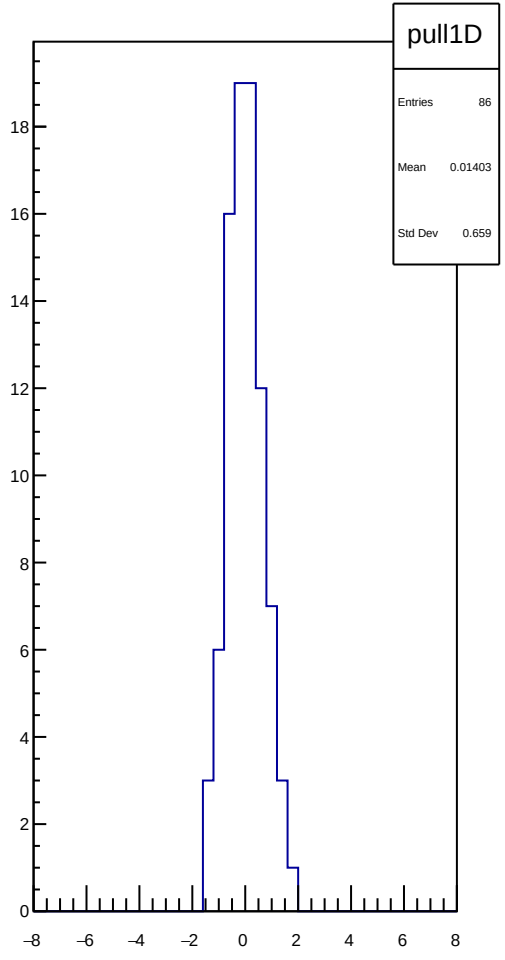

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 37.57 / 85
p0 21.58 ± 3.109
pull
Entries 86
Mean −58.13
Std Dev 103.9

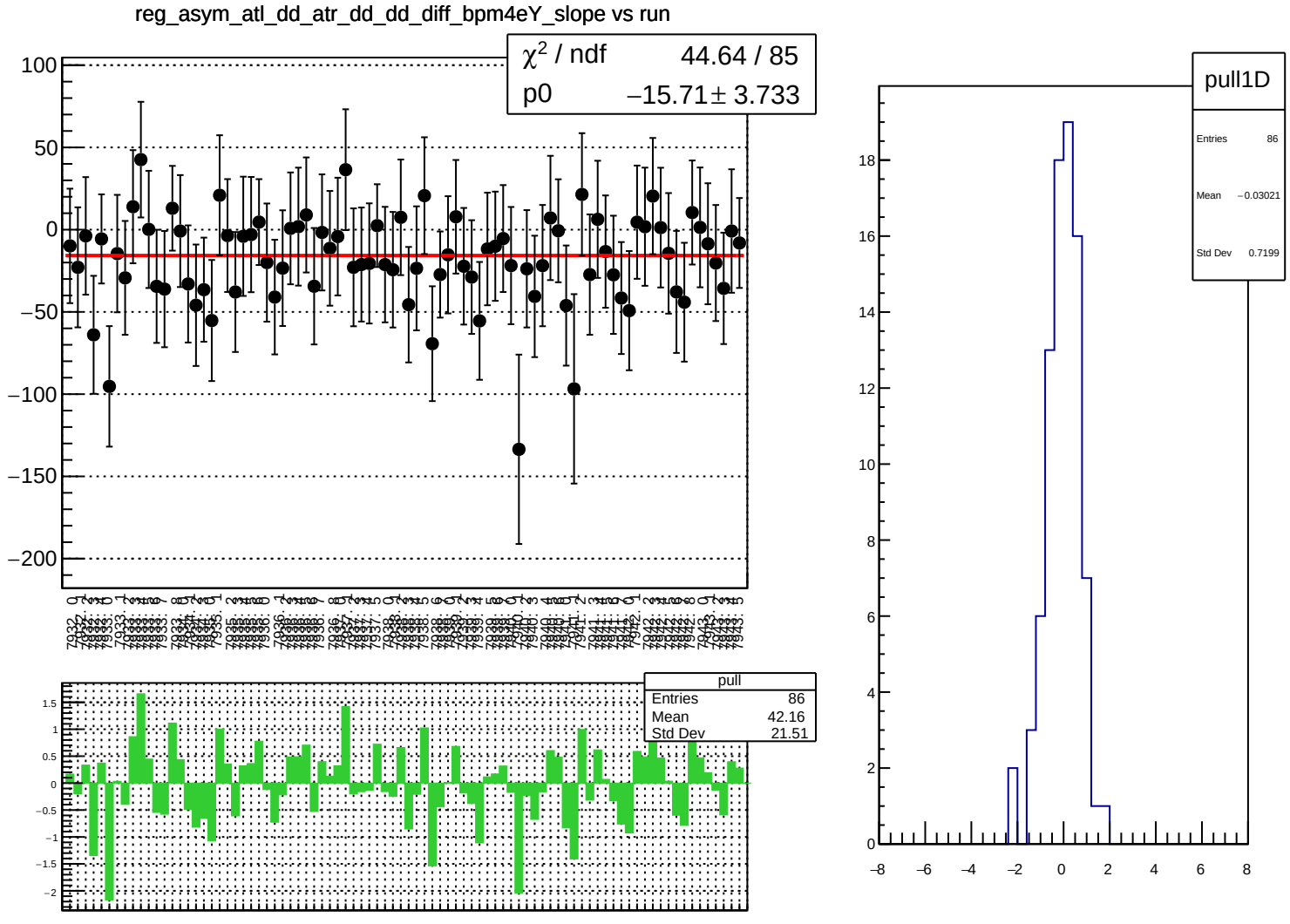

pull1D
Entries 86
Mean −0.01448
Std Dev 0.6608

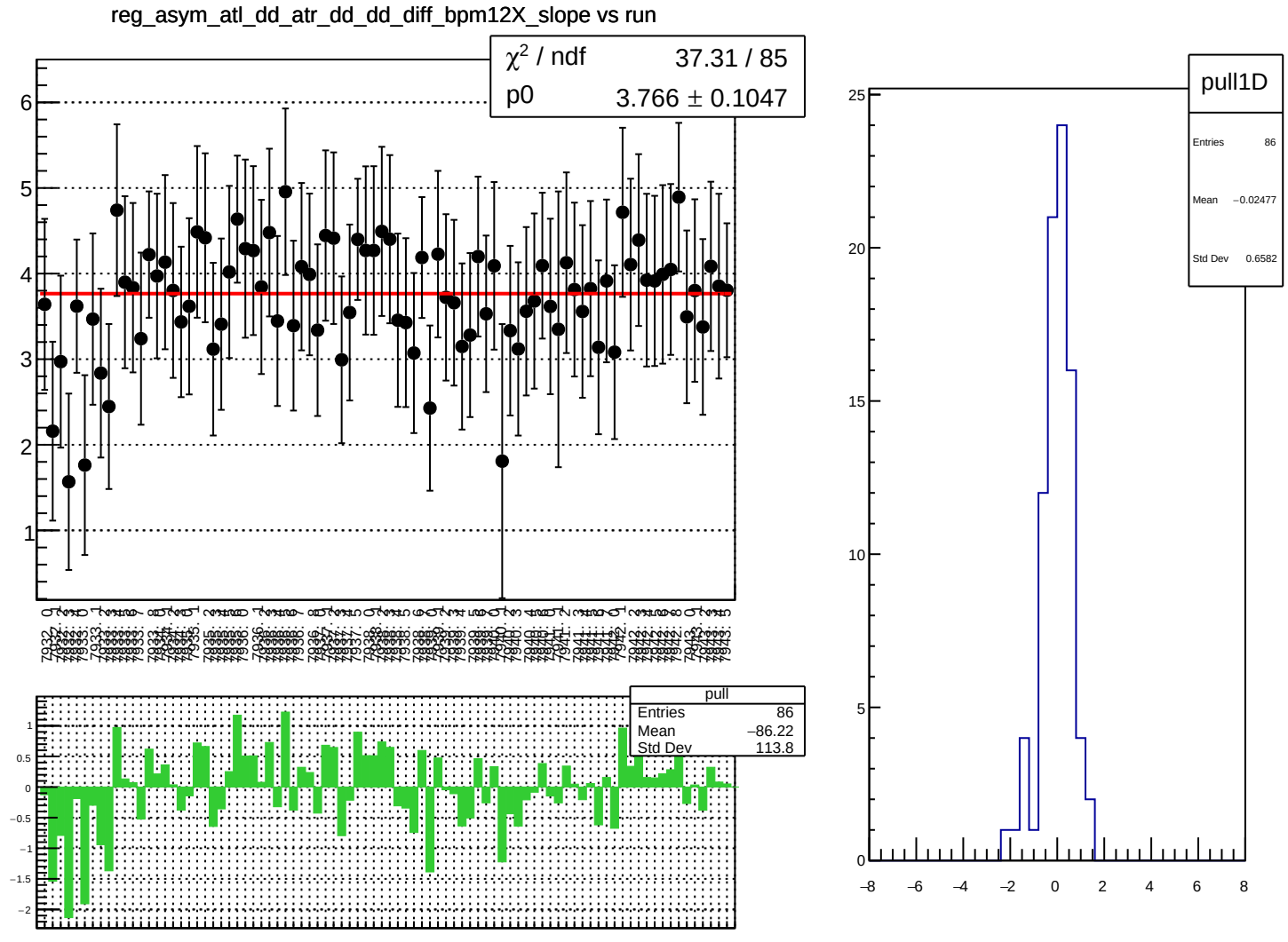

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 44.74 / 85
p0 5.874 ± 3.238
150
100
50
0
−50
pull
Entries 86
Mean 37.16
Std Dev 21.67
2
1.5
1
0.5
0
−0.5
−1
−1.5

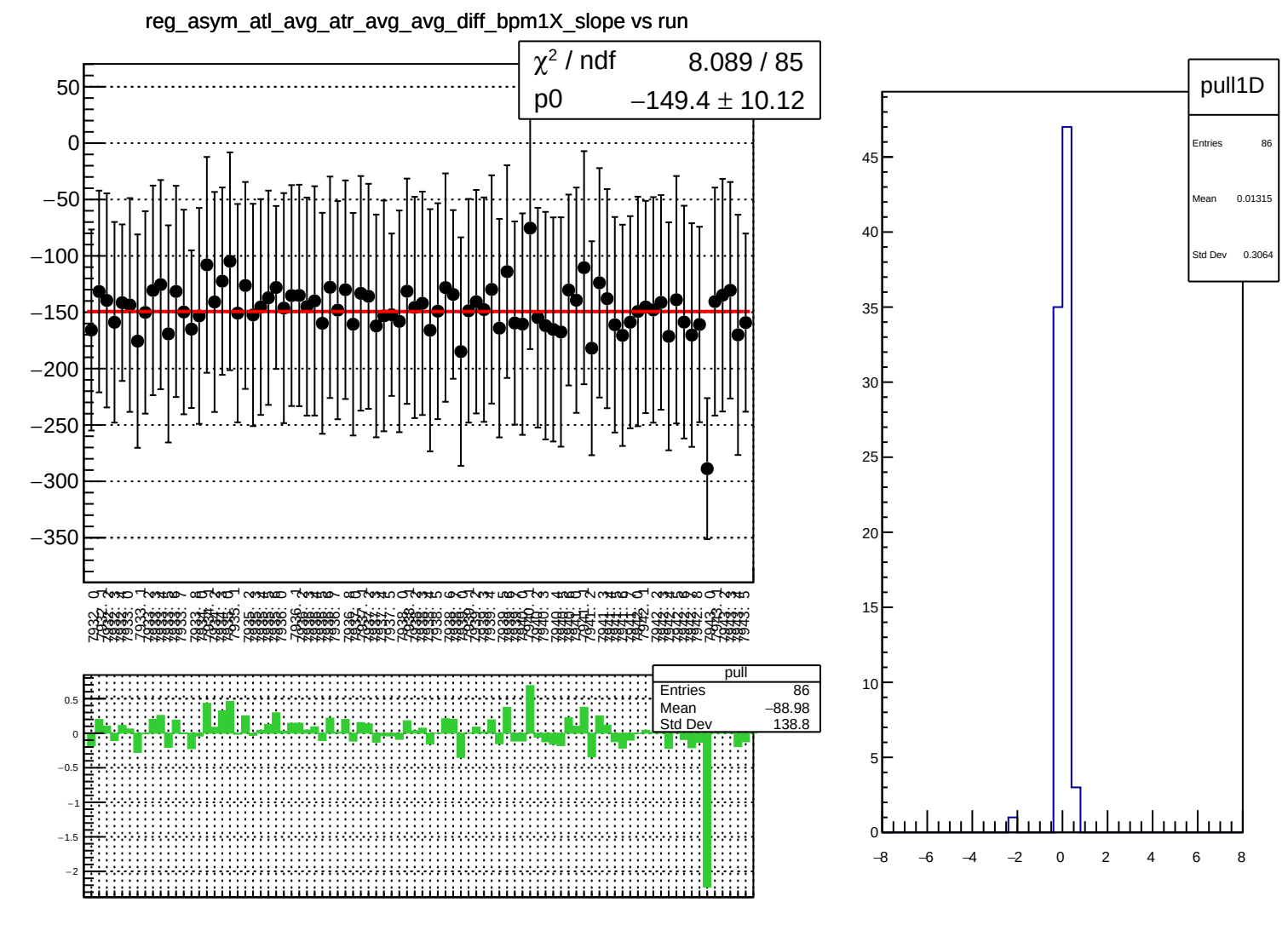

pull1D
Entries 86
Mean 0.03051
Std Dev 0.7206
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

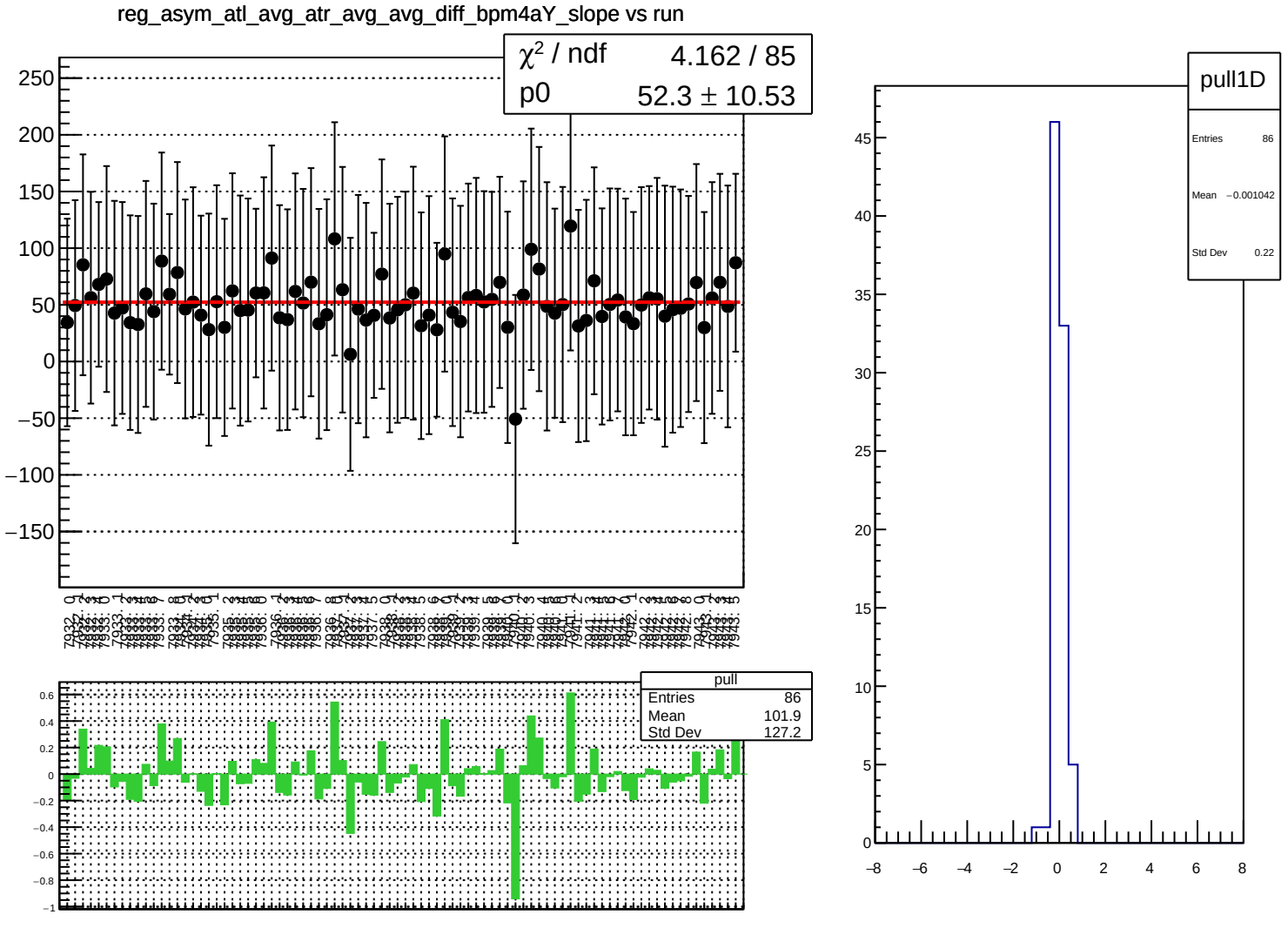

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 37.37 / 85
p0 45.5 ± 2.797
150
100
50
0
−50
pull
Entries 86
Mean −60.18
Std Dev 106.2
1.5
1
0.5
0
−0.5
−1
−1.5

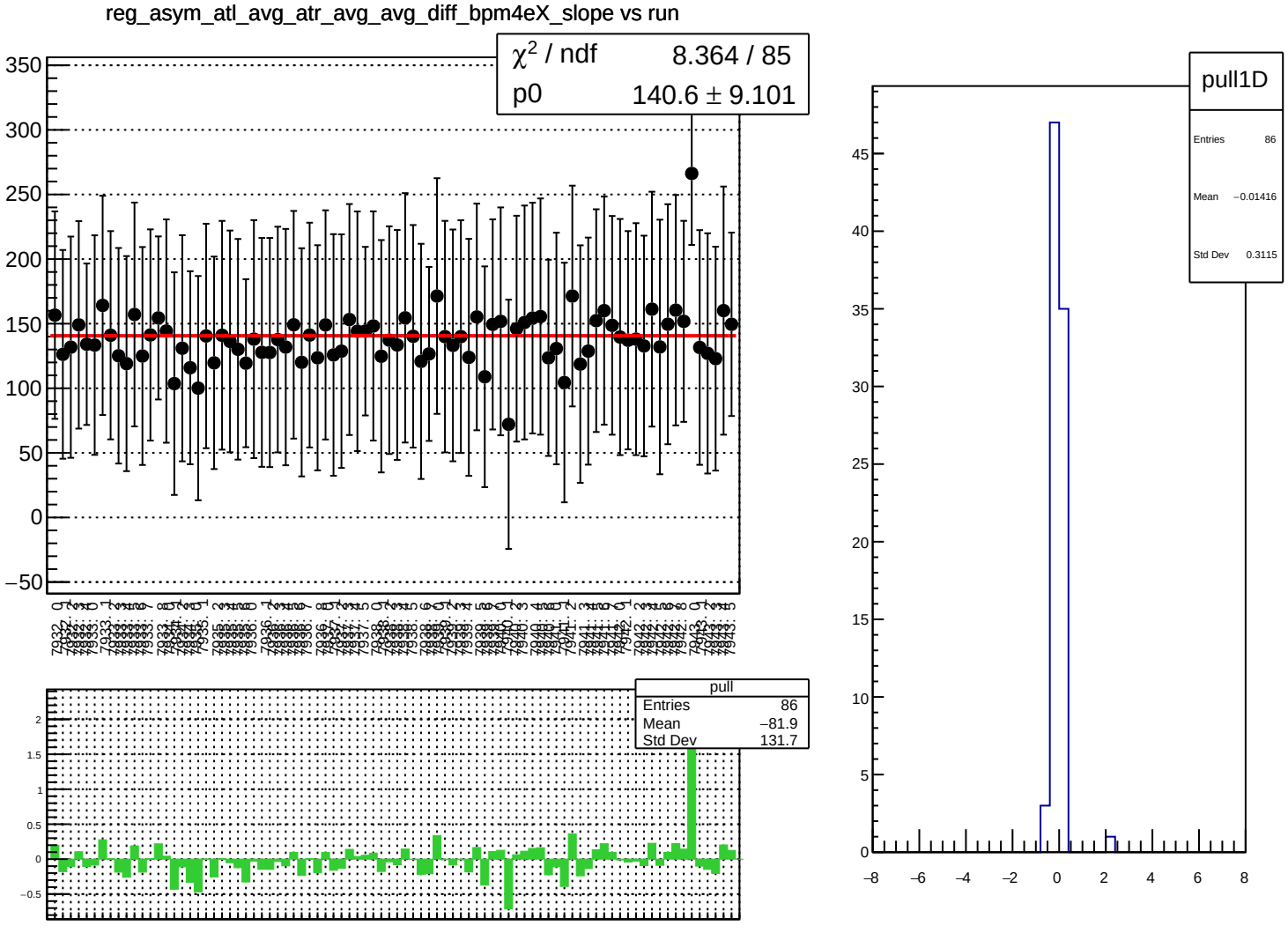

pull1D
Entries 86
Mean 0.01403
Std Dev 0.659
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

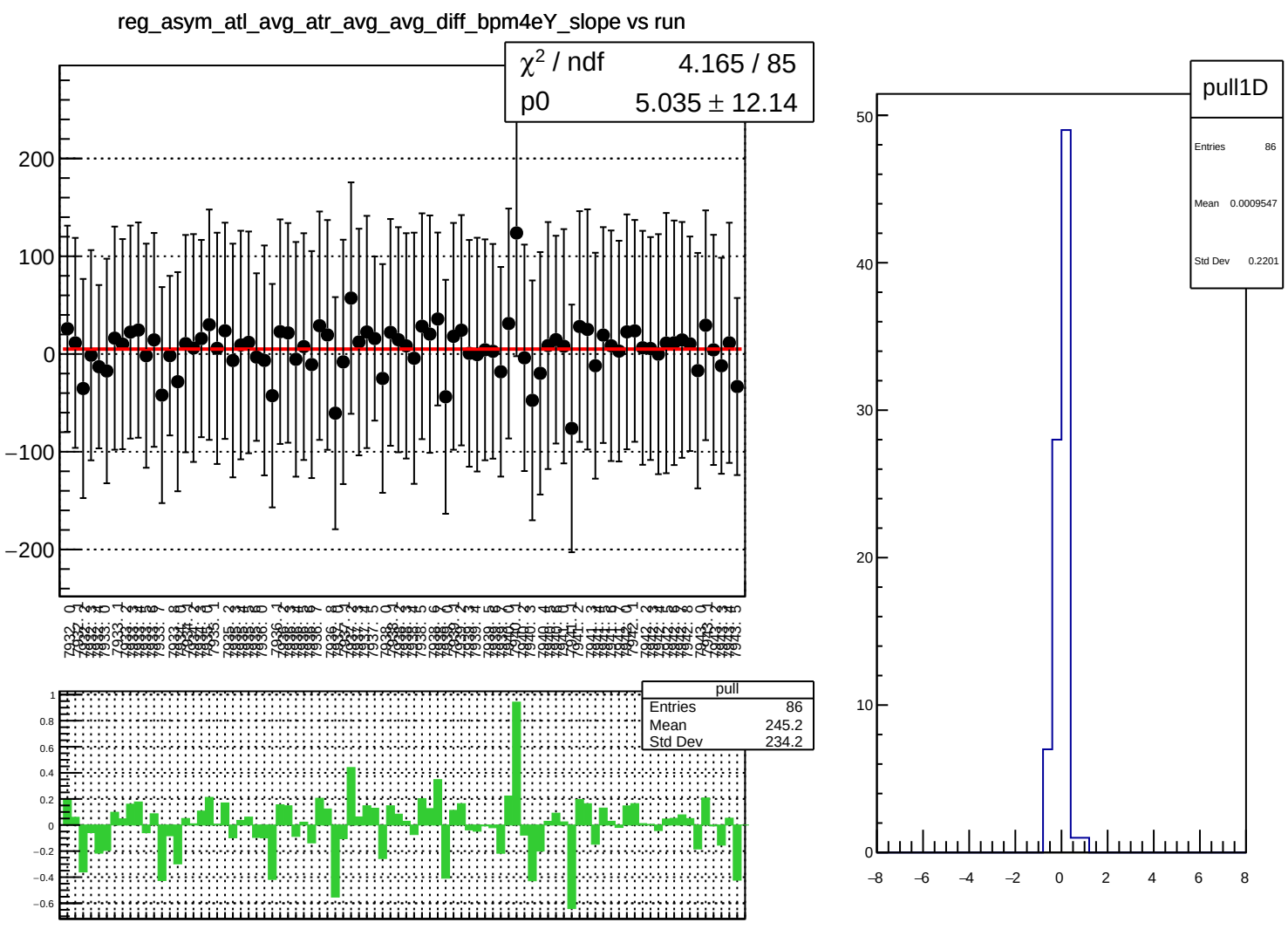

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 44.64 / 85
p0 −15.71± 3.733
pull
Entries 86
Mean 42.16
Std Dev 21.51
pull1D
Entries 86
Mean −0.03021
Std Dev 0.7199

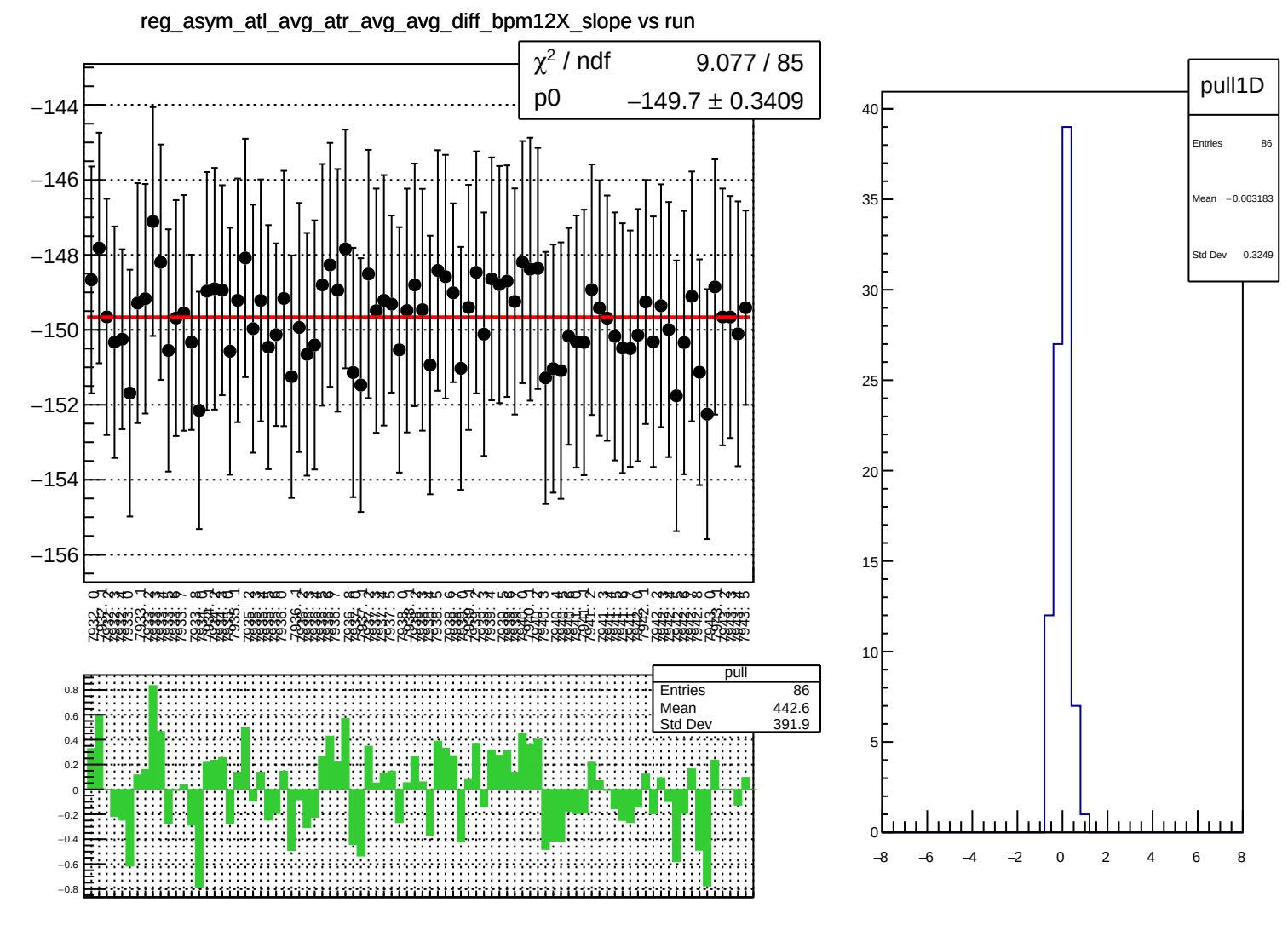

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 37.31 / 85
p0 3.766 ± 0.1047
pull
Entries 86
Mean −86.22
Std Dev 113.8
pull1D
Entries 86
Mean −0.02477
Std Dev 0.6582

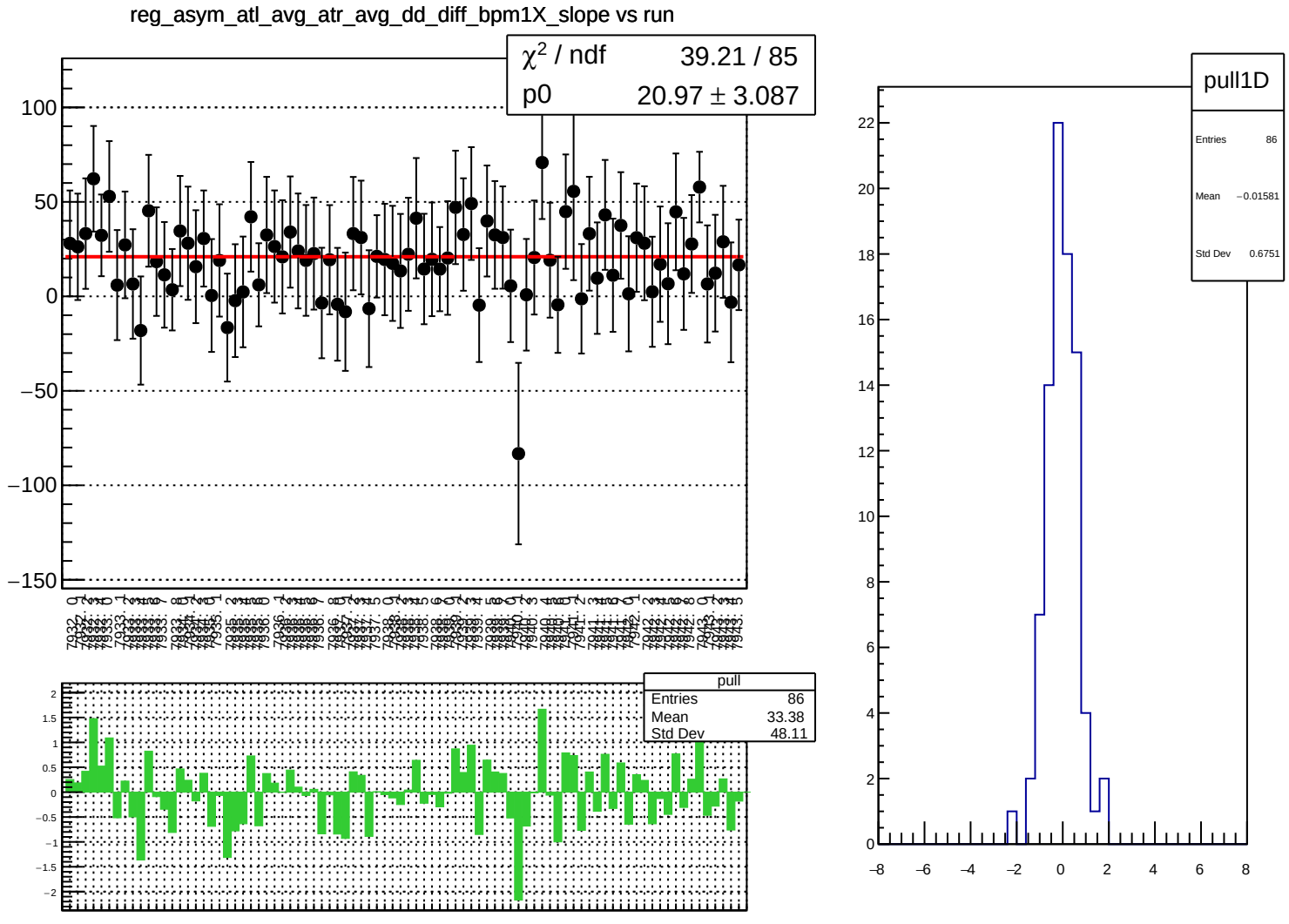

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 8.089 / 85
p0 −149.4 ± 10.12
pull
Entries 86
Mean −88.98
Std Dev 138.8
pull1D
Entries 86
Mean 0.01315
Std Dev 0.3064

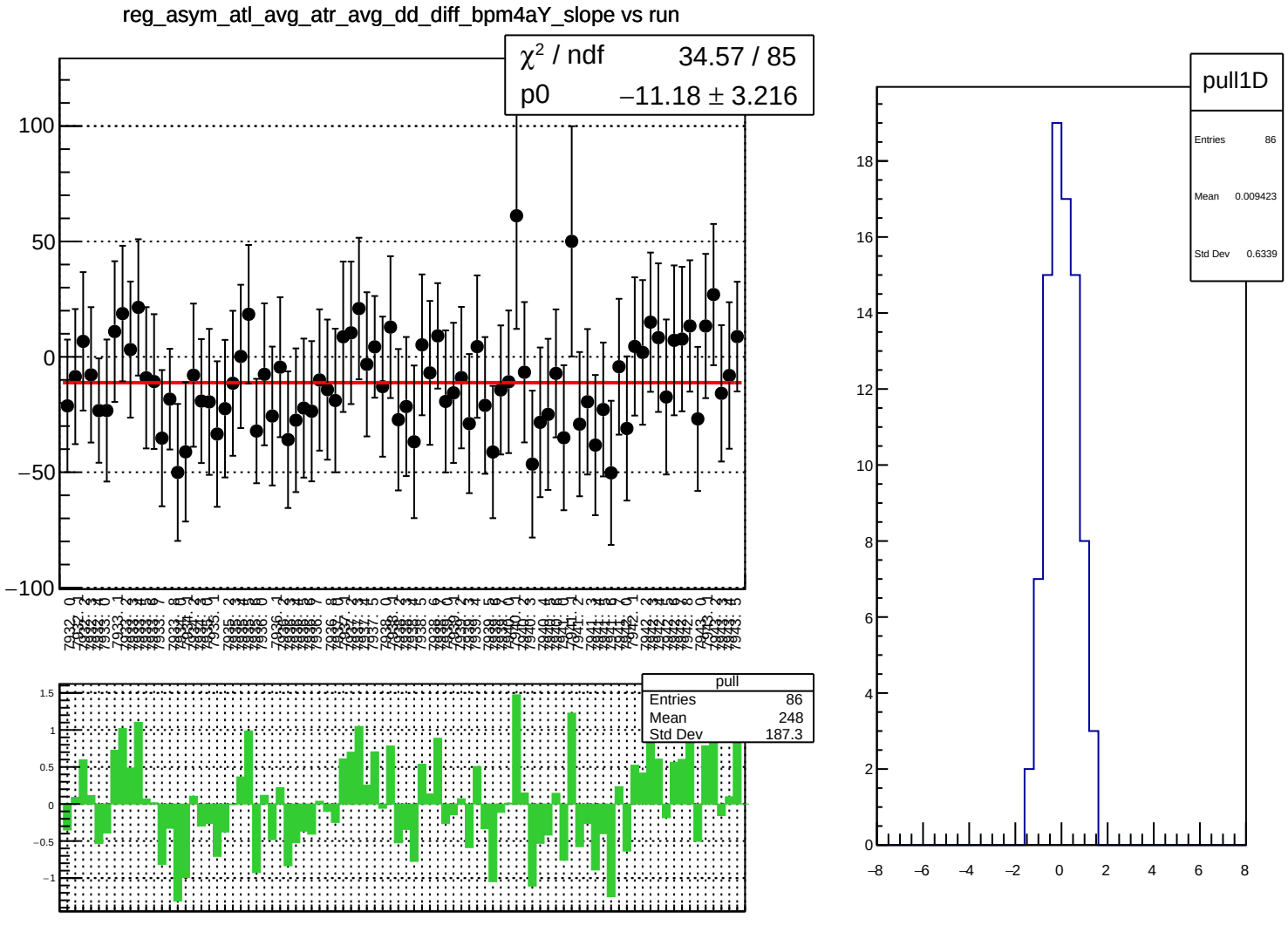

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.162 / 85
p0 52.3 ± 10.53
pull
Entries 86
Mean 101.9
Std Dev 127.2
pull1D
Entries 86
Mean −0.001042
Std Dev 0.22

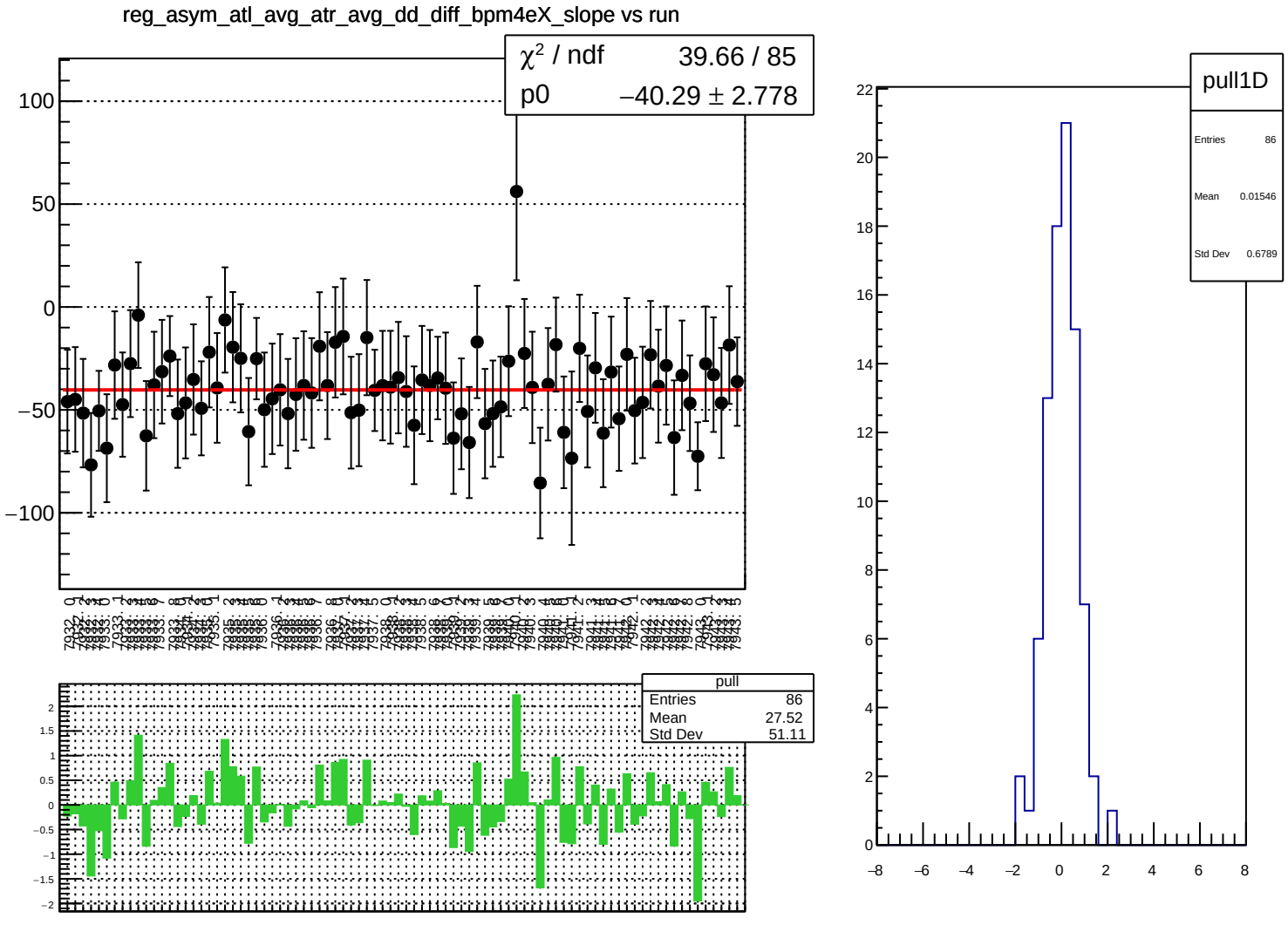

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.364 / 85
p0 140.6 ± 9.101
pull
Entries 86
Mean −81.9
Std Dev 131.7
pull1D
Entries 86
Mean −0.01416
Std Dev 0.3115

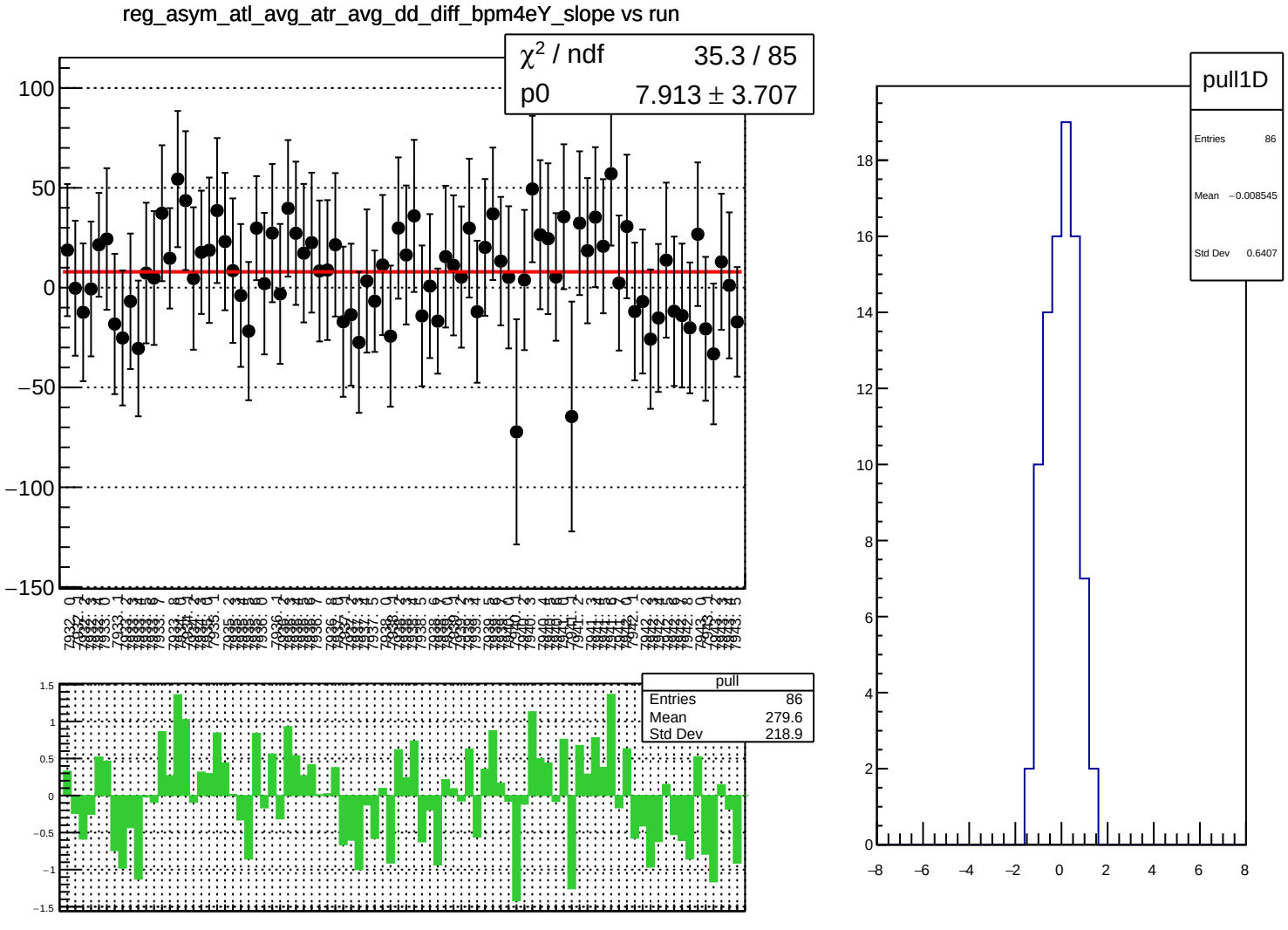

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.165 / 85
p0 5.035 ± 12.14
pull
Entries 86
Mean 245.2
Std Dev 234.2
pull1D
Entries 86
Mean 0.0009547
Std Dev 0.2201

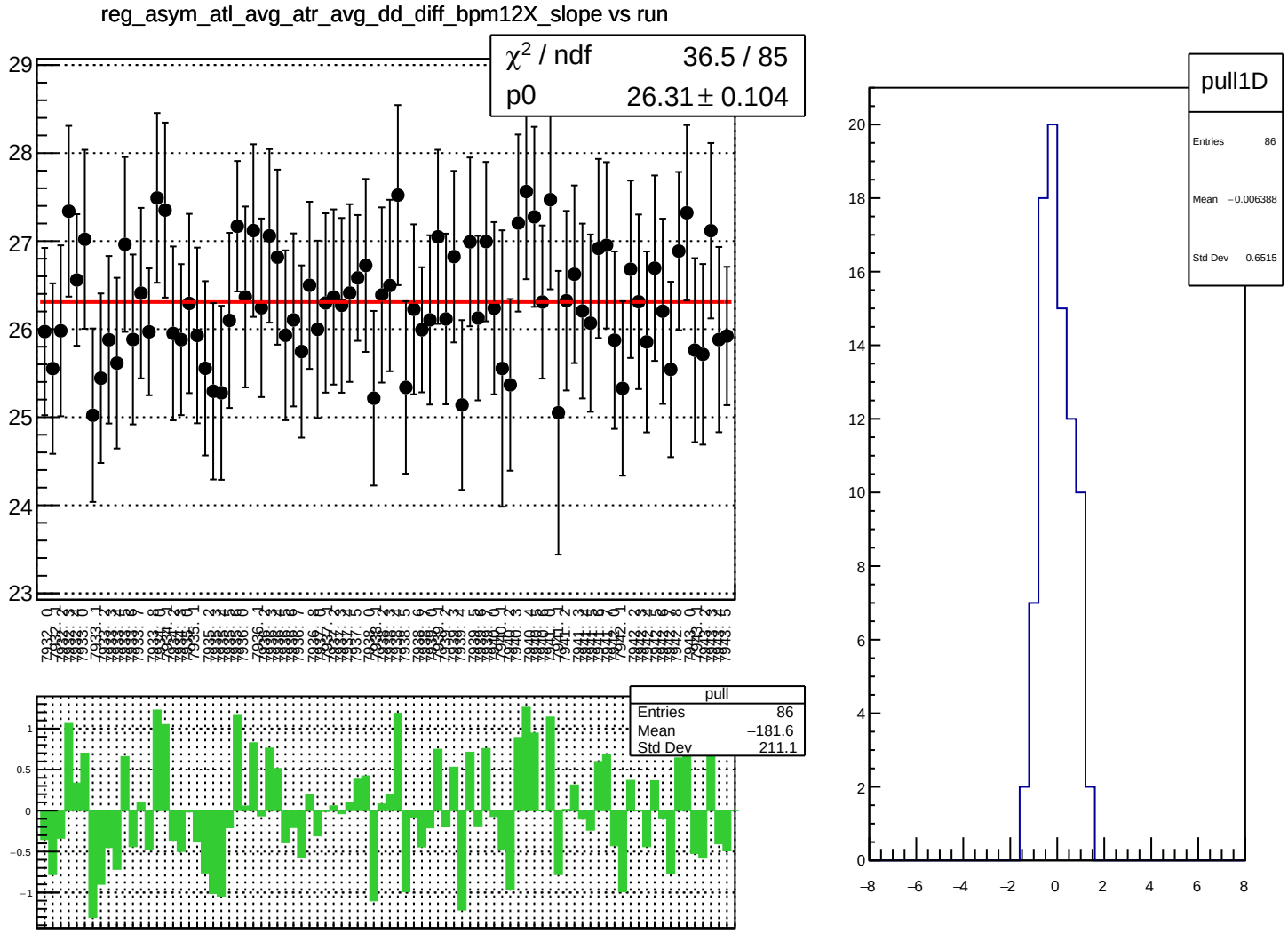

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 9.077 / 85
p0 −149.7 ± 0.3409
−144
−146
−148
−150
−152
−154
−156
pull
Entries 86
Mean 442.6
Std Dev 391.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 86
Mean −0.003183
Std Dev 0.3249
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

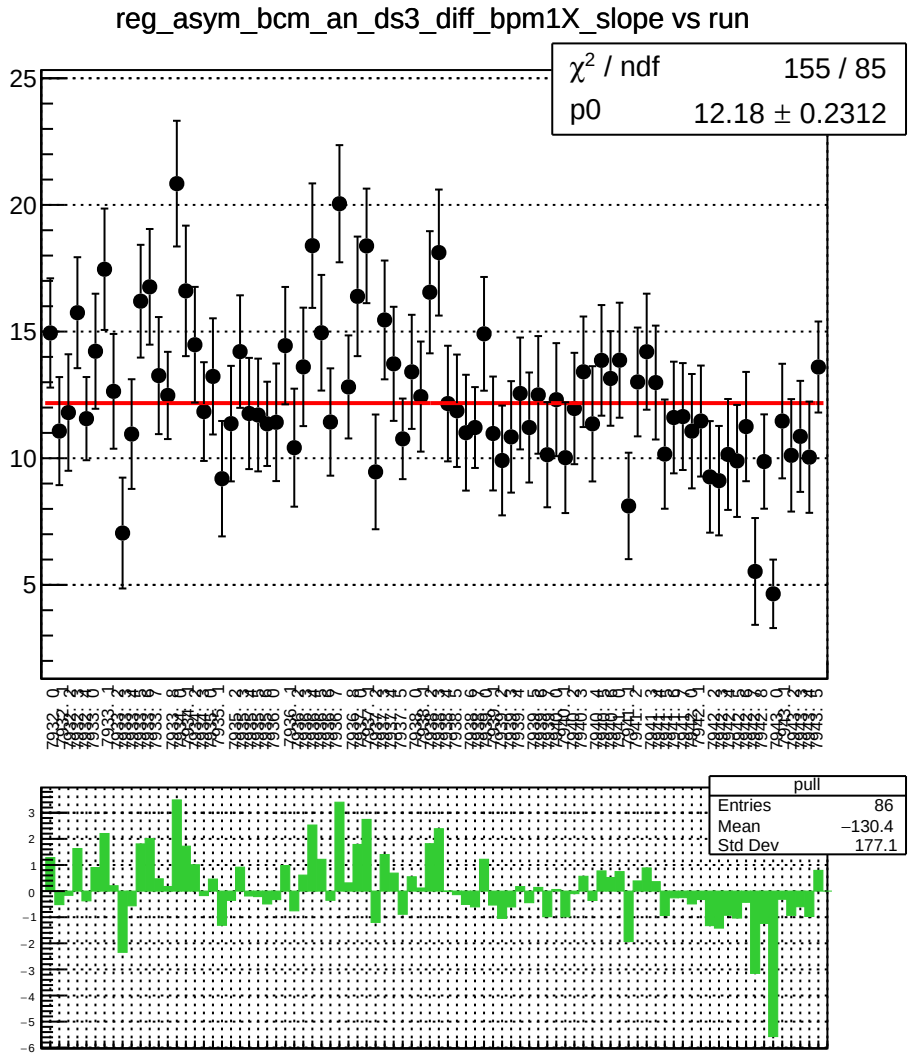

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 39.21 / 85
p0 20.97 ± 3.087
pull
Entries 86
Mean 33.38
Std Dev 48.11
pull1D
Entries 86
Mean −0.01581
Std Dev 0.6751

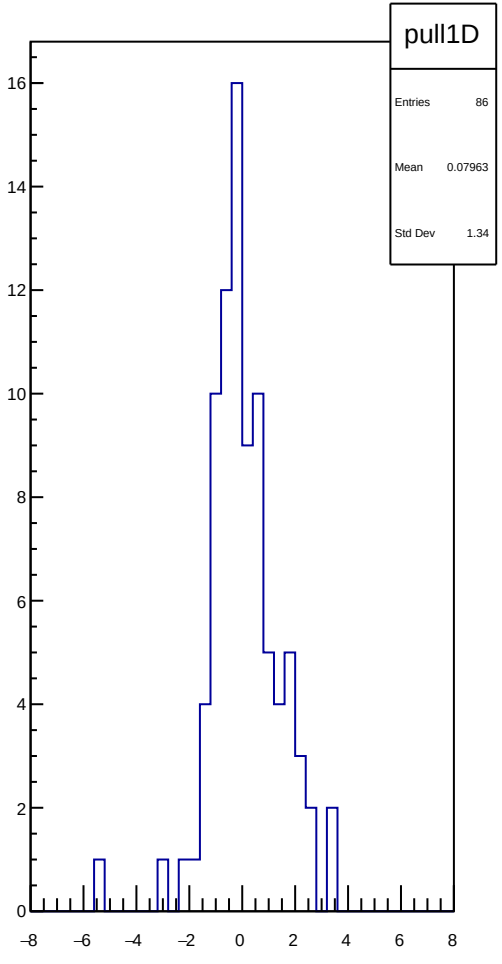

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 34.57 / 85
p0 −11.18 ± 3.216
pull
Entries 86
Mean 248
Std Dev 187.3
pull1D
Entries 86
Mean 0.009423
Std Dev 0.6339

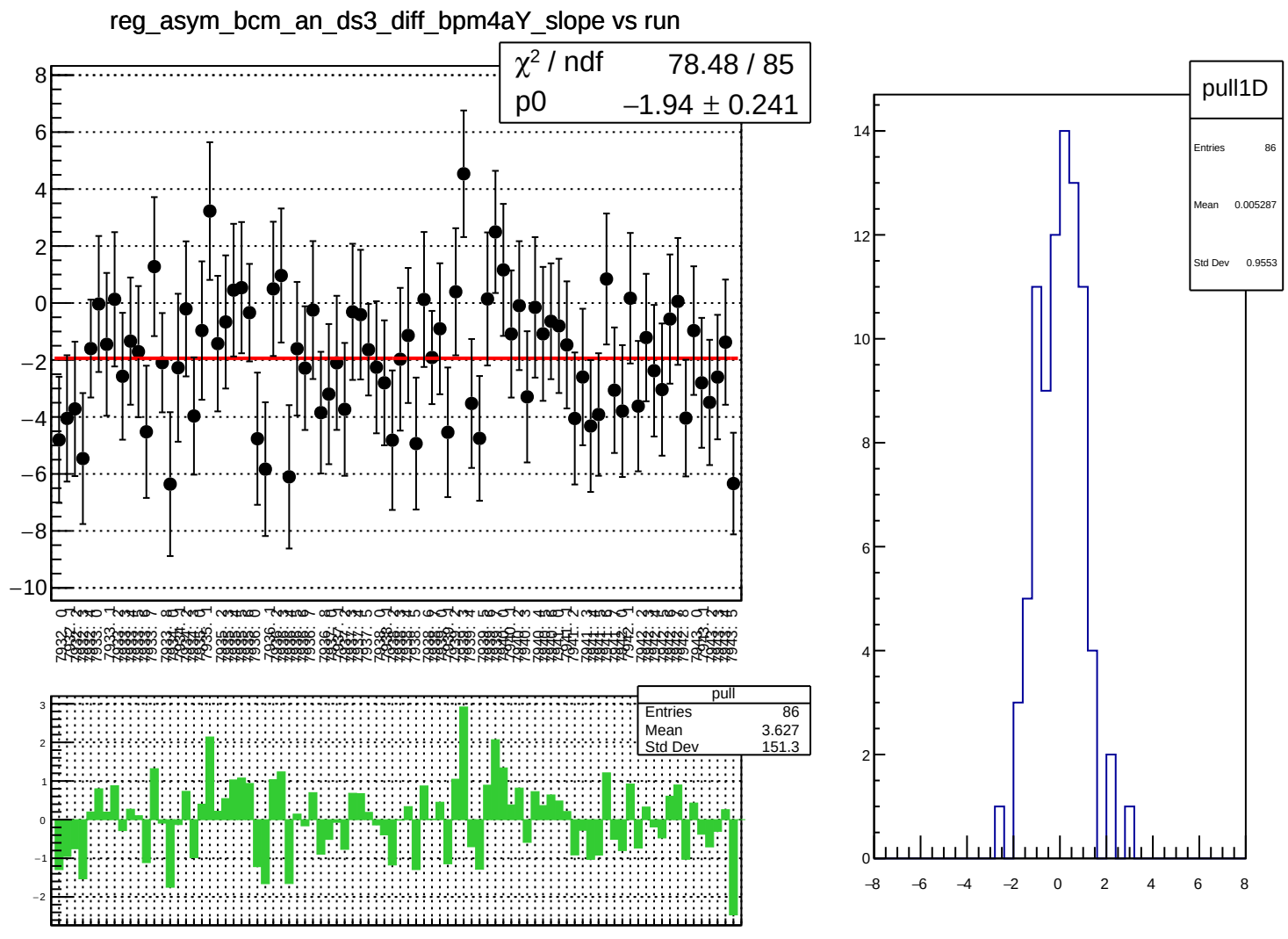

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 39.66 / 85
p0 −40.29 ± 2.778
pull
Entries 86
Mean 27.52
Std Dev 51.11
pull1D
Entries 86
Mean 0.01546
Std Dev 0.6789

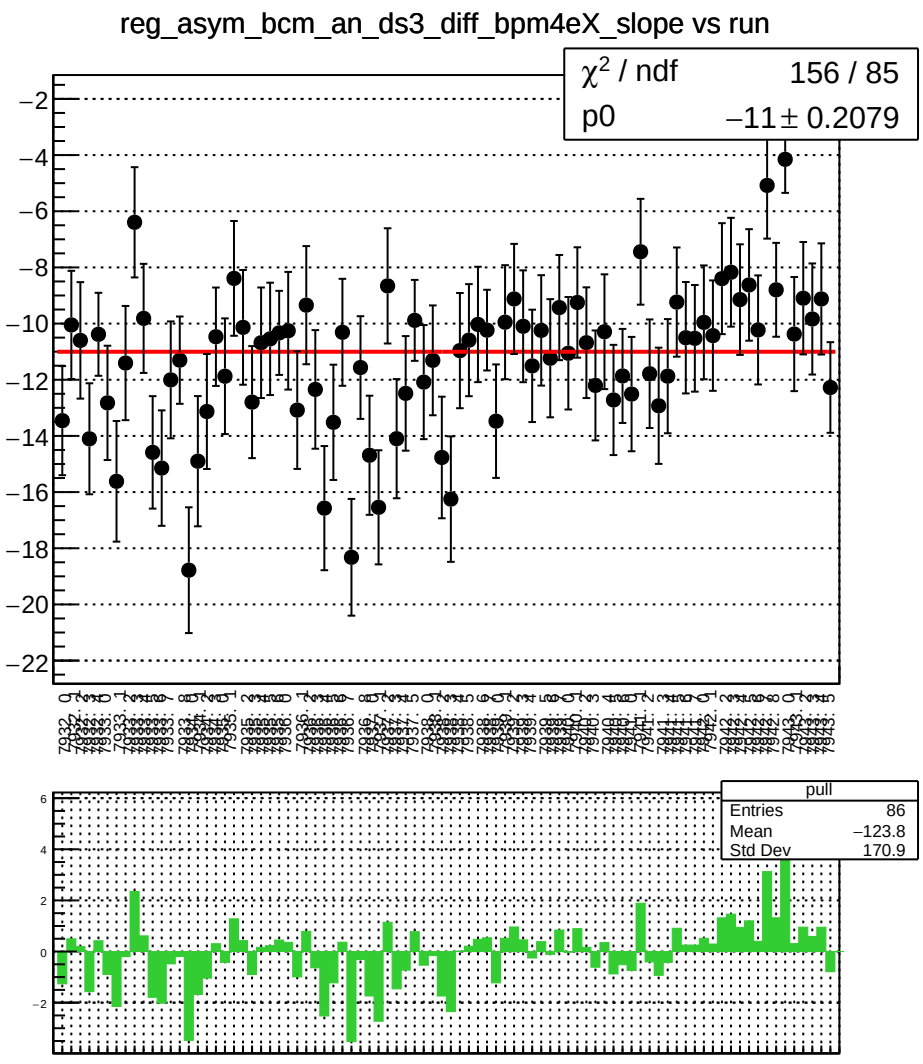

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 35.3 / 85
p0 7.913 ± 3.707
pull
Entries 86
Mean 279.6
Std Dev 218.9
pull1D
Entries 86
Mean −0.008545
Std Dev 0.6407

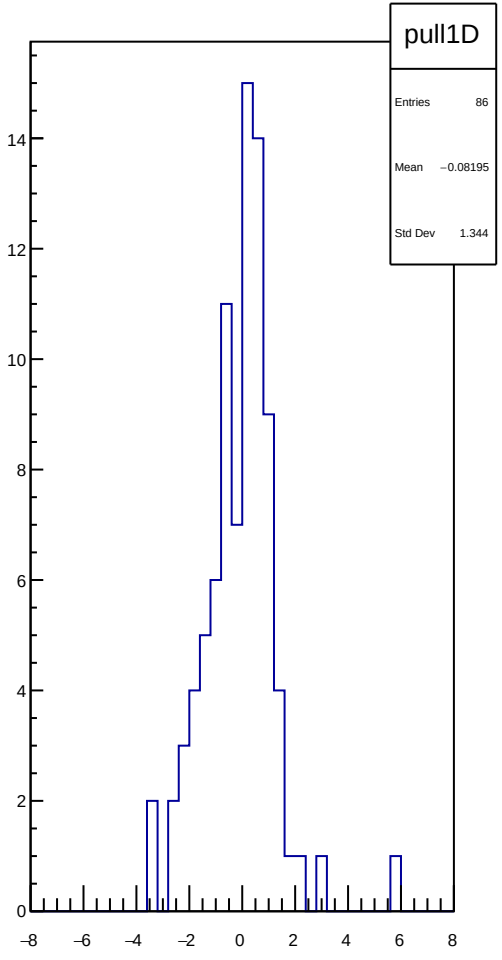

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 36.5 / 85
p0 26.31 ± 0.104
pull
Entries 86
Mean −181.6
Std Dev 211.1
pull1D
Entries 86
Mean −0.006388
Std Dev 0.6515

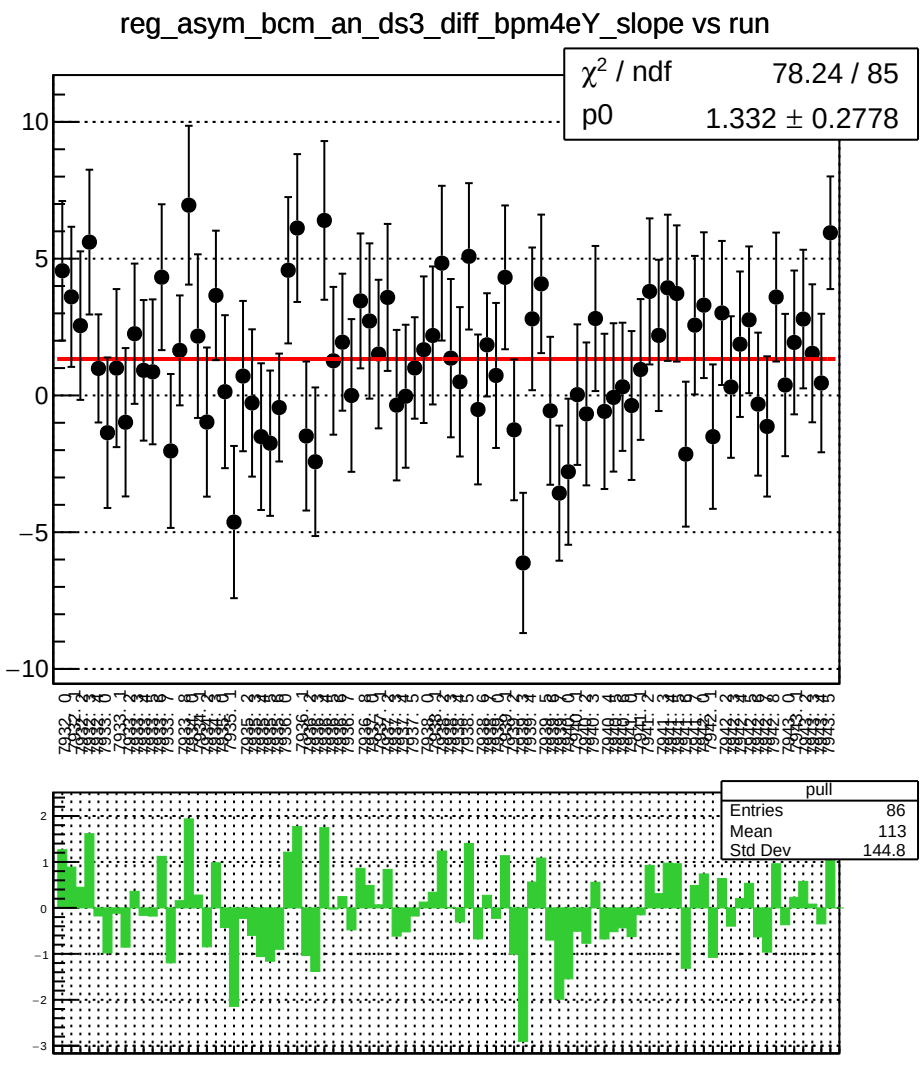

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 155 / 85
p0 12.18 ± 0.2312
pull
Entries 86
Mean −130.4
Std Dev 177.1

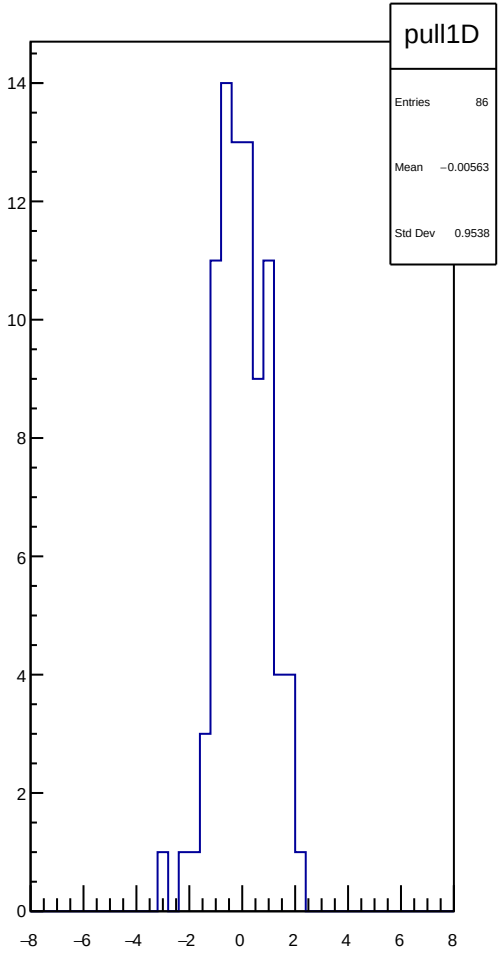

pull1D
Entries 86
Mean 0.07963
Std Dev 1.34

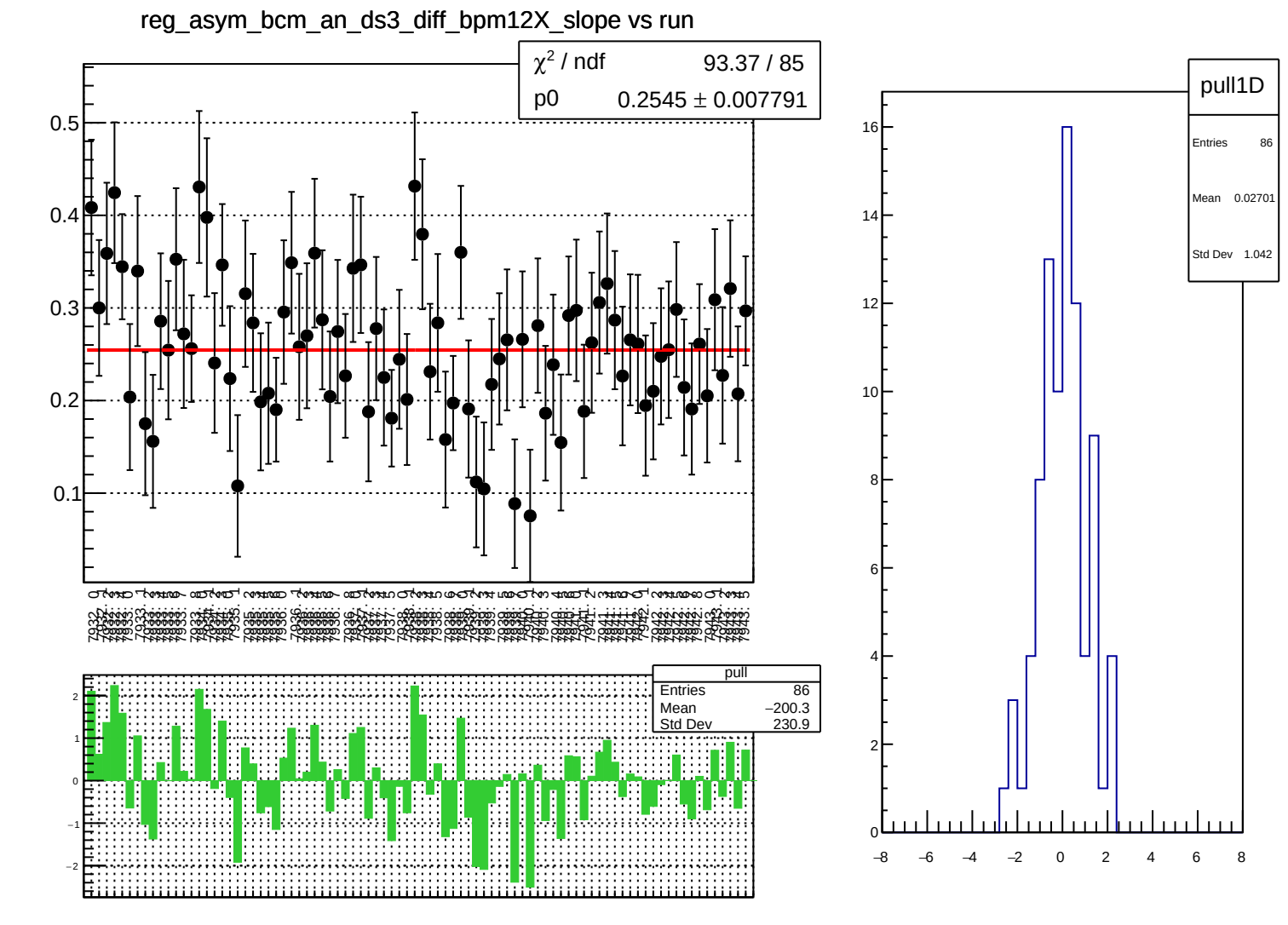

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 78.48 / 85
p0 −1.94 ± 0.241
pull
Entries 86
Mean 3.627
Std Dev 151.3
pull1D
Entries 86
Mean 0.005287
Std Dev 0.9553

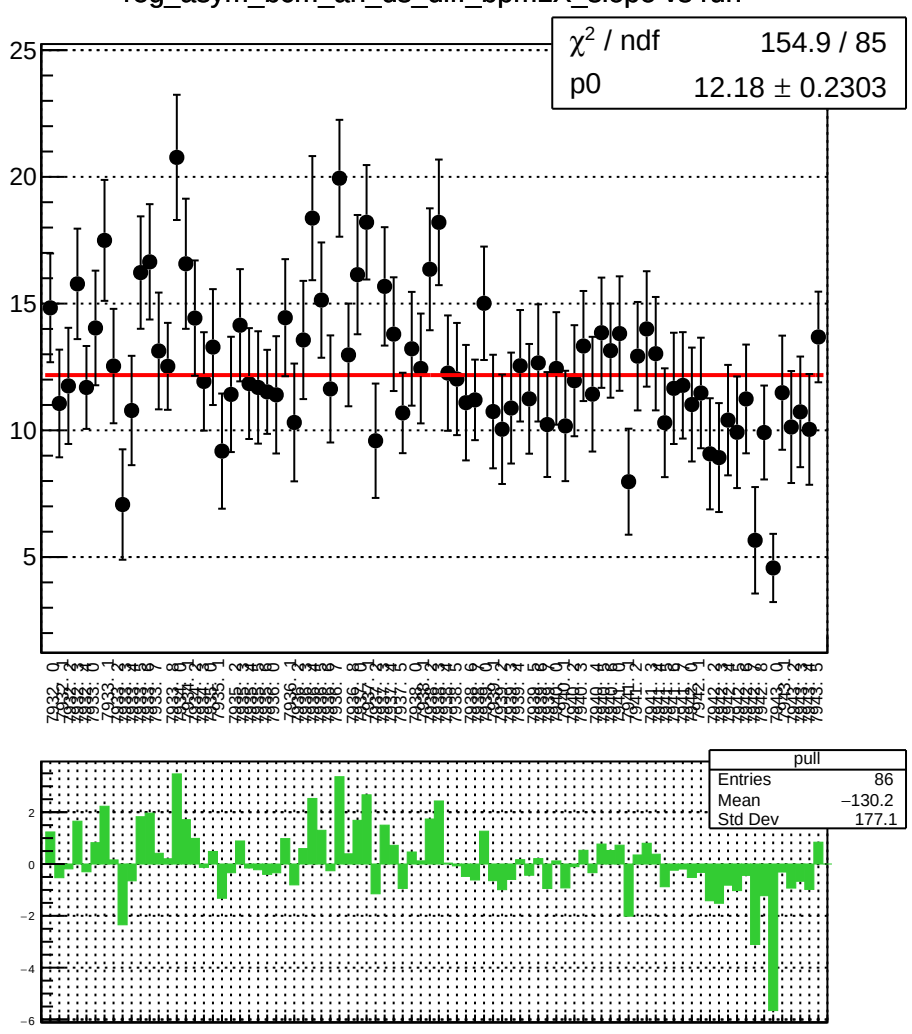

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 156 / 85
p0 −11 ± 0.2079
pull
Entries 86
Mean −123.8
Std Dev 170.9

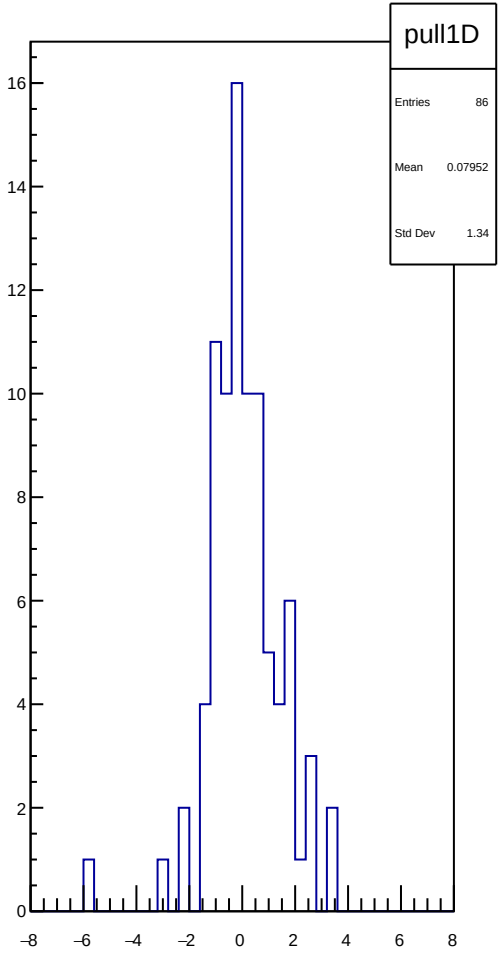

pull1D
Entries 86
Mean −0.08195
Std Dev 1.344

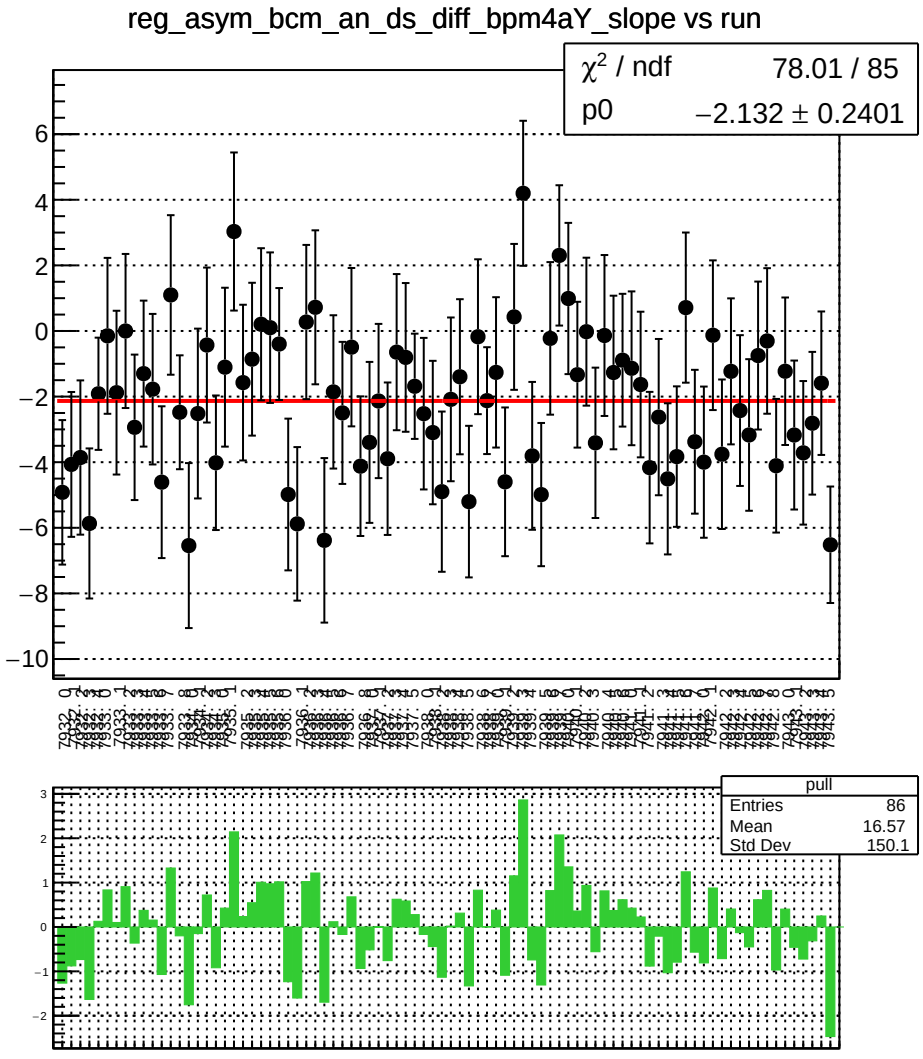

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 78.24 / 85
p0 1.332 ± 0.2778
pull
Entries 86
Mean 113
Std Dev 144.8

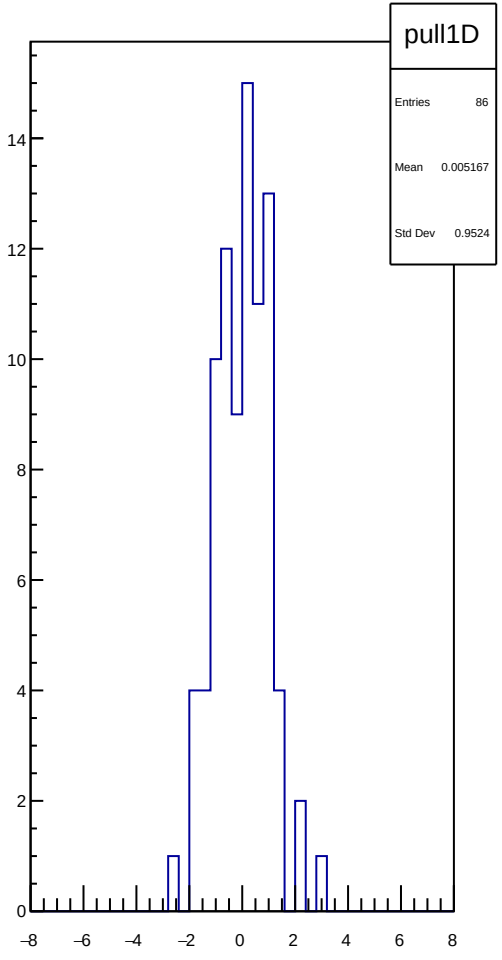

pull1D
Entries 86
Mean −0.00563
Std Dev 0.9538

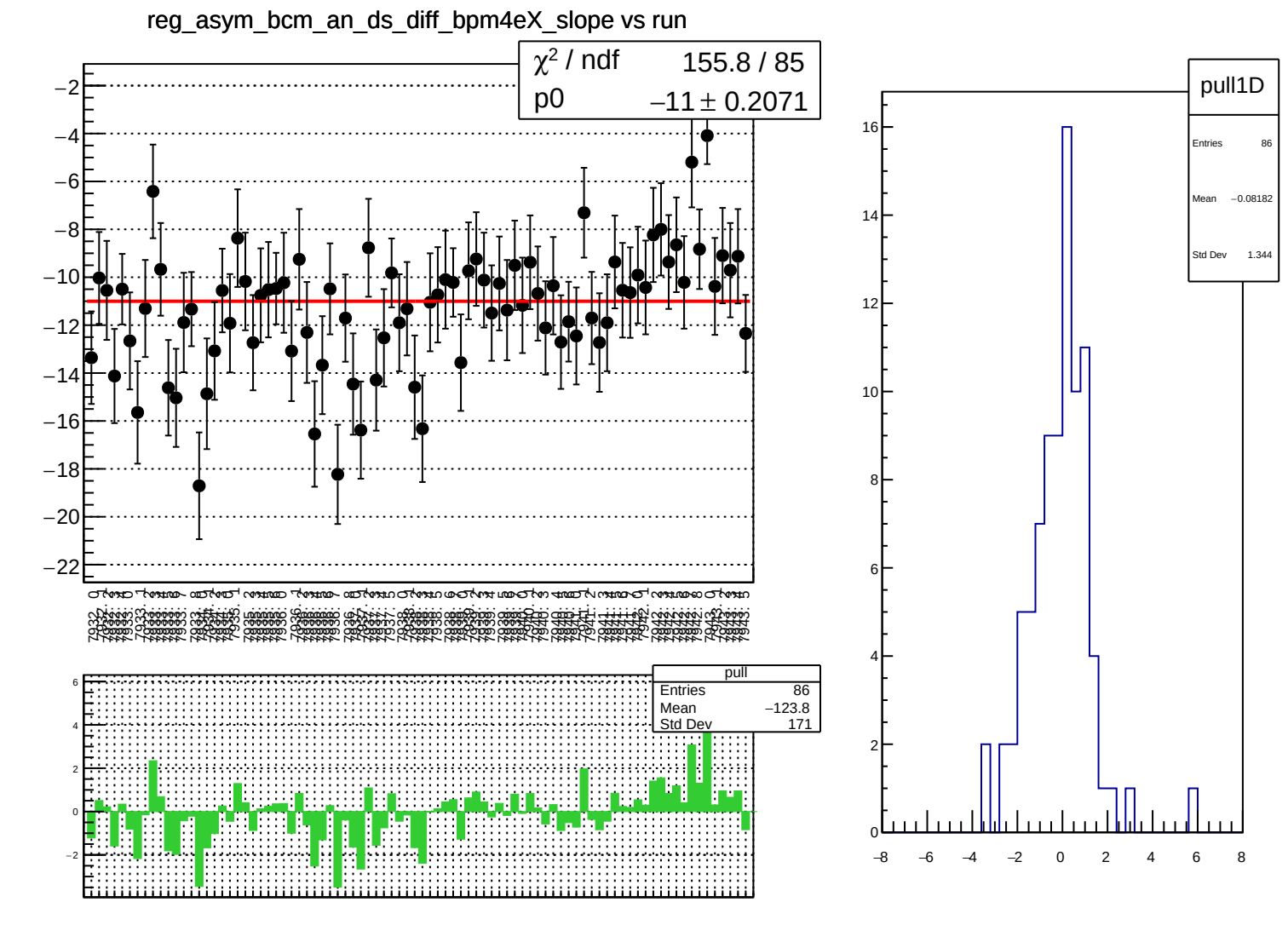

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 93.37 / 85
p0 0.2545 ± 0.007791
pull
Entries 86
Mean −200.3
Std Dev 230.9
pull1D
Entries 86
Mean 0.02701
Std Dev 1.042

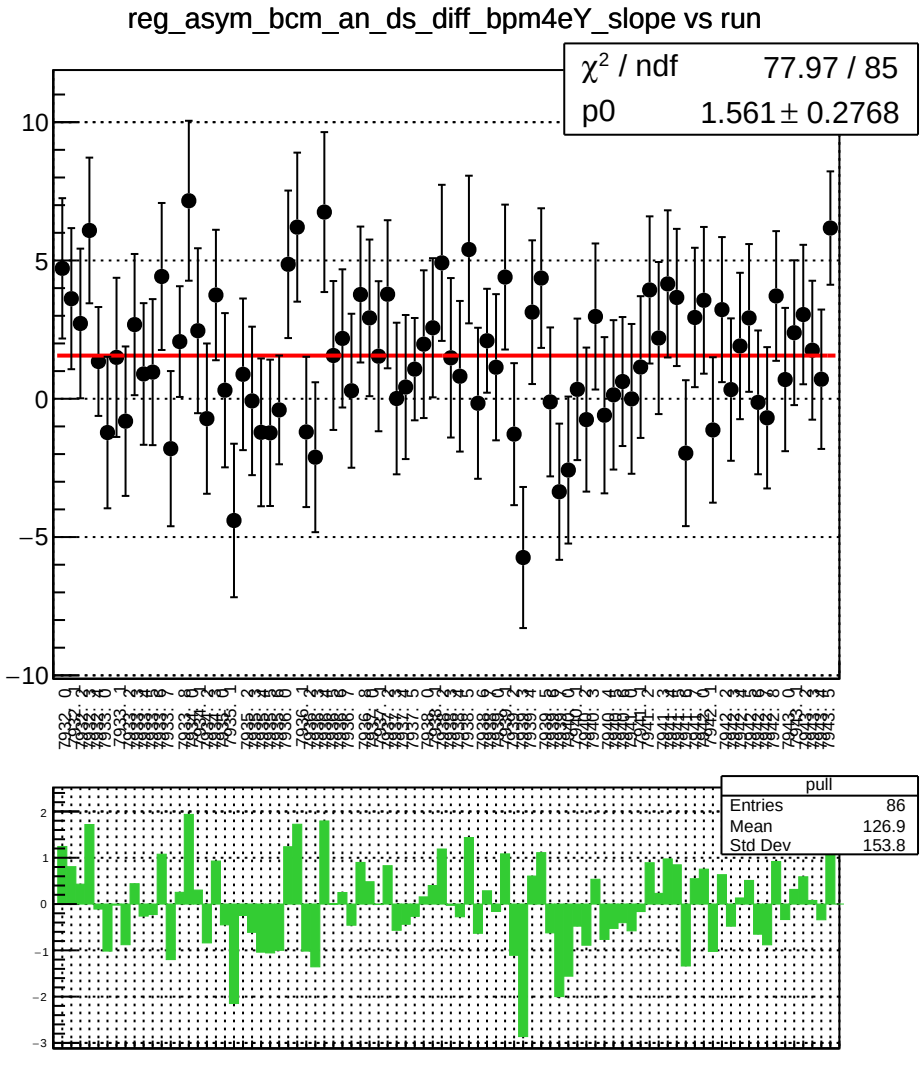

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 154.9 / 85
p0 12.18 ± 0.2303
pull
Entries 86
Mean −130.2
Std Dev 177.1

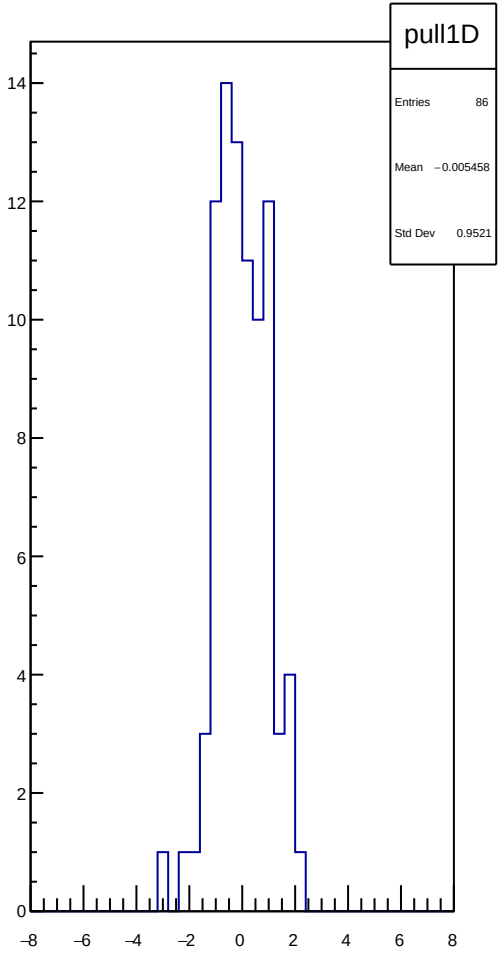

pull1D
Entries 86
Mean 0.07952
Std Dev 1.34

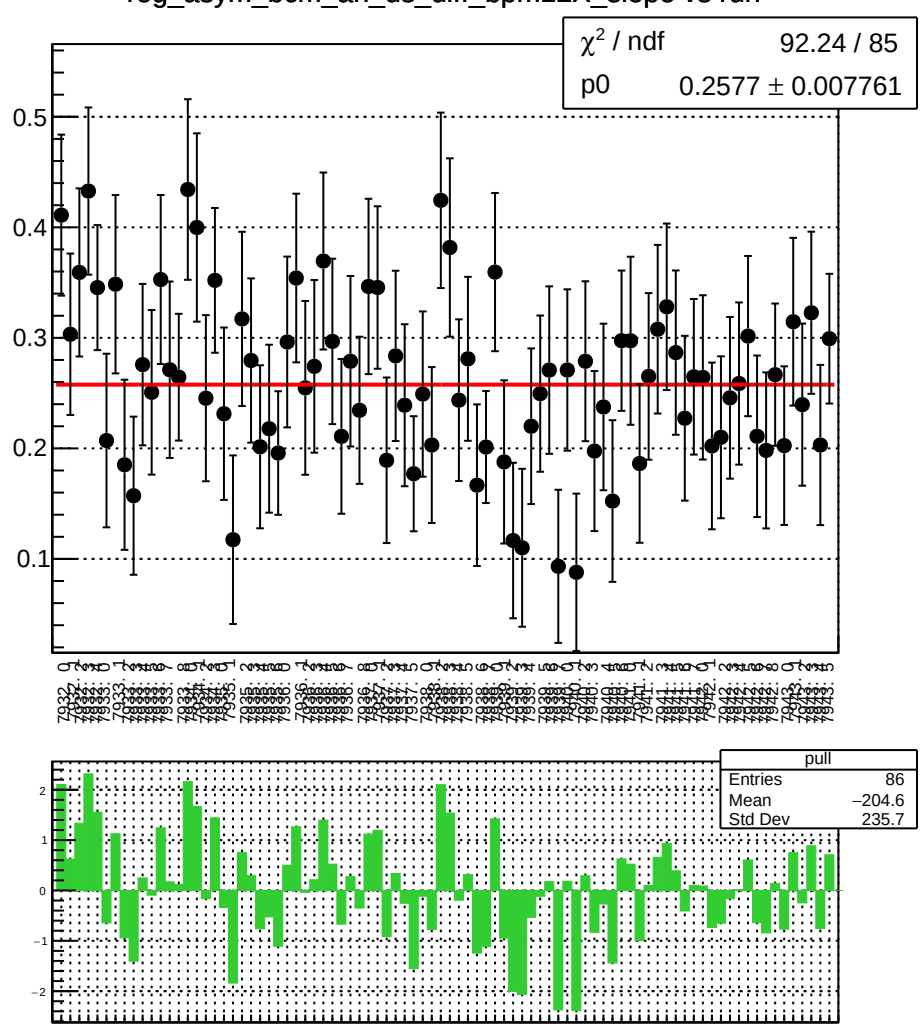

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 78.01 / 85
p0 −2.132 ± 0.2401
pull
Entries 86
Mean 16.57
Std Dev 150.1

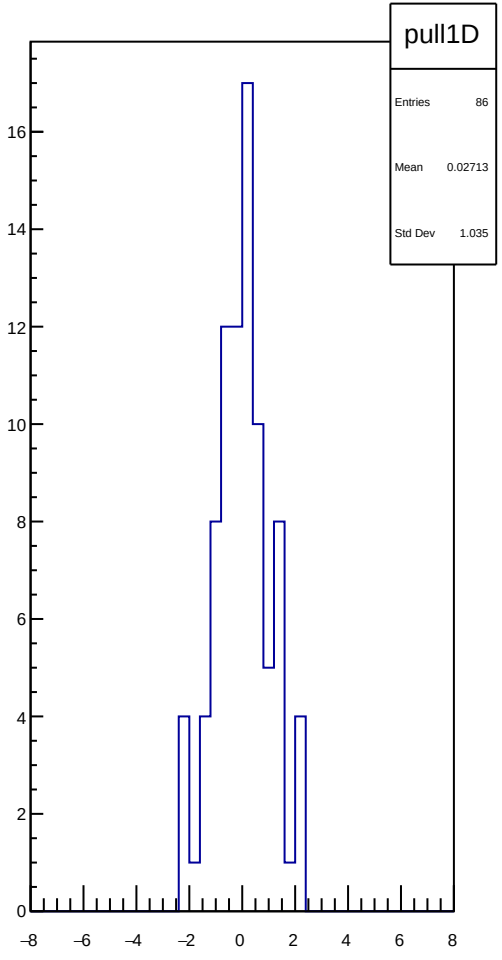

pull1D
Entries 86
Mean 0.005167
Std Dev 0.9524

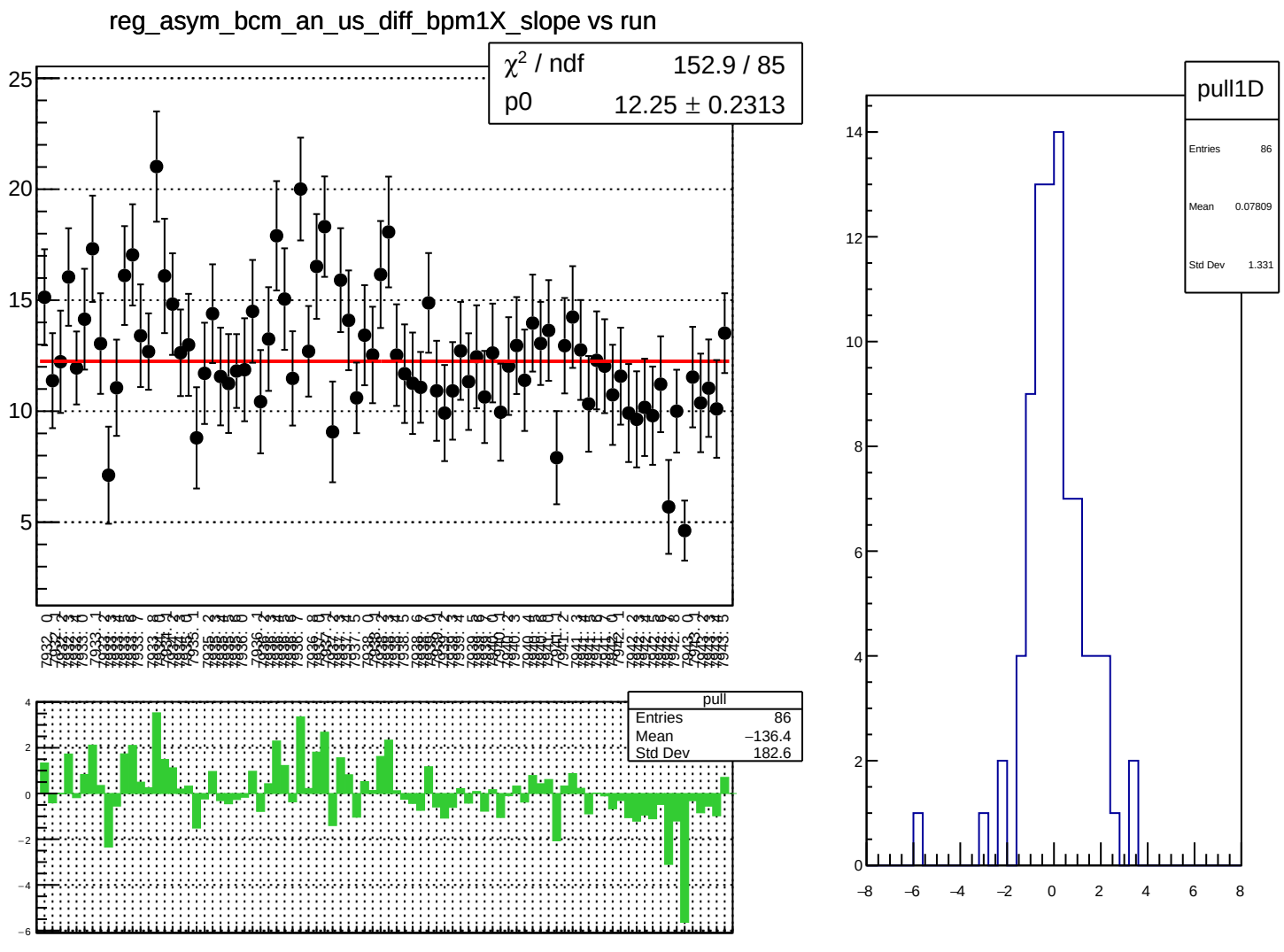

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 155.8 / 85
p0 −11 ± 0.2071
pull
Entries 86
Mean −123.8
Std Dev 171
pull1D
Entries 86
Mean −0.08182
Std Dev 1.344

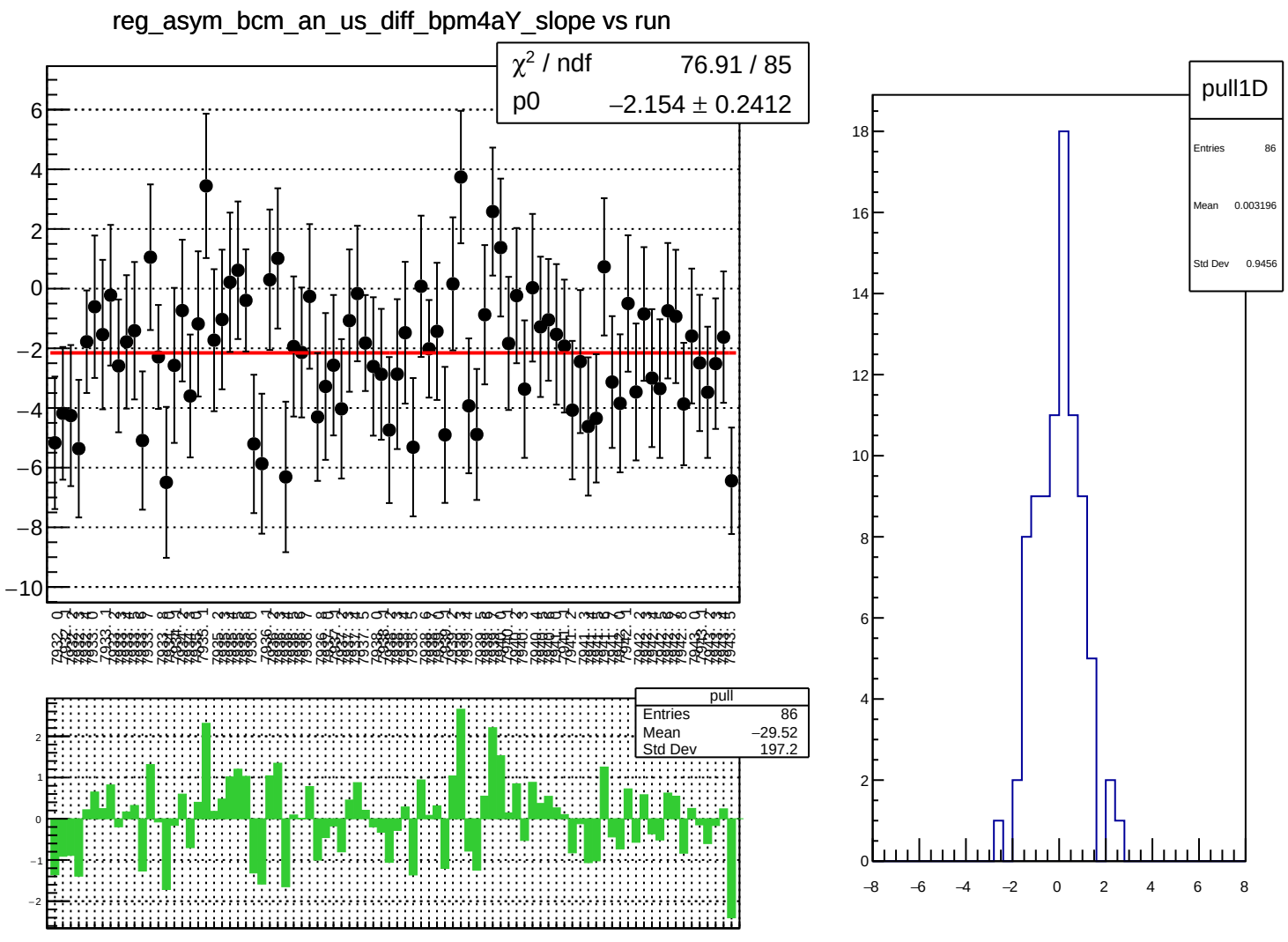

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ^2 / ndf 77.97 / 85
p0 1.561 ± 0.2768
pull
Entries 86
Mean 126.9
Std Dev 153.8

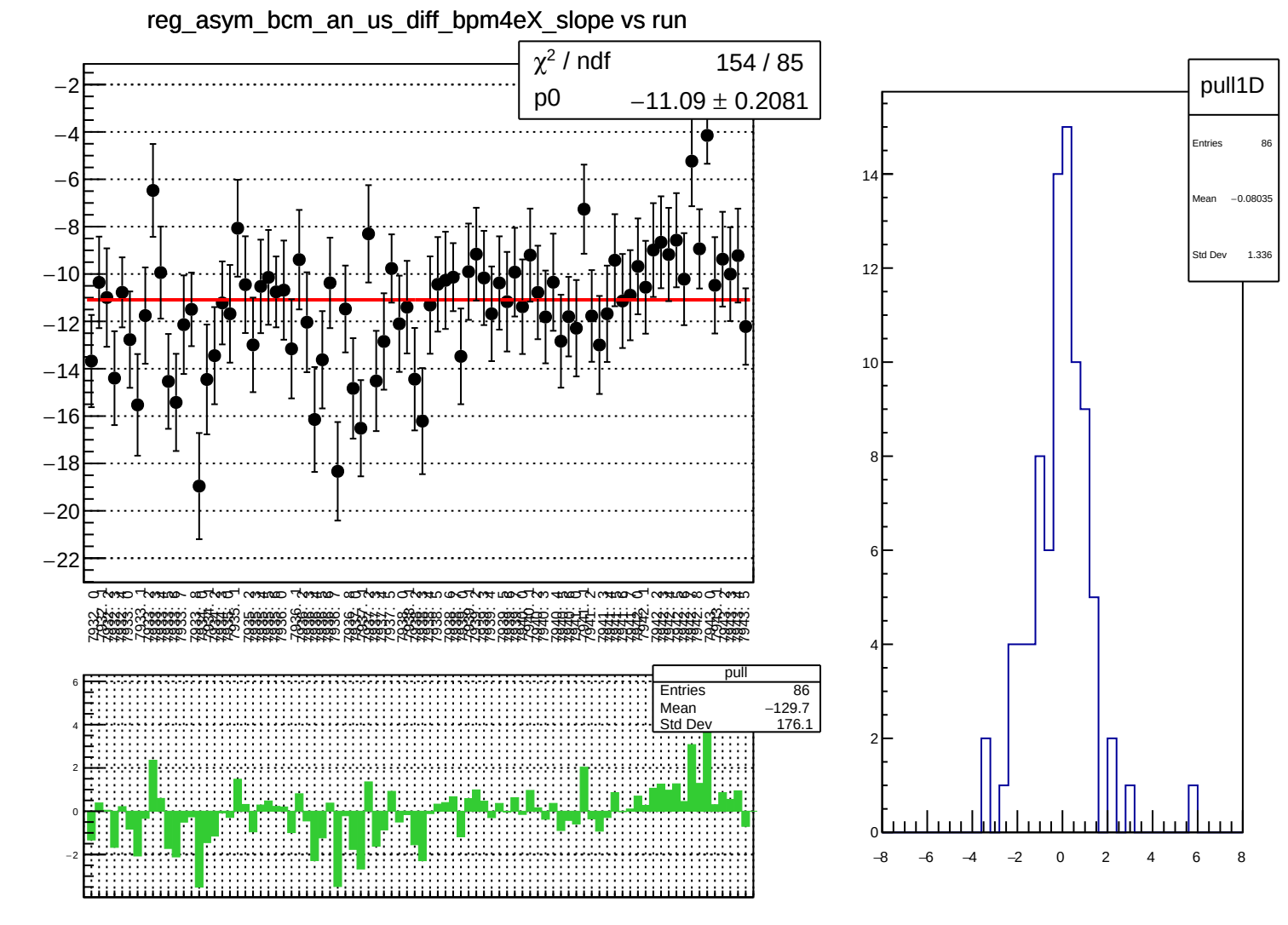

pull1D
Entries 86
Mean −0.005458
Std Dev 0.9521

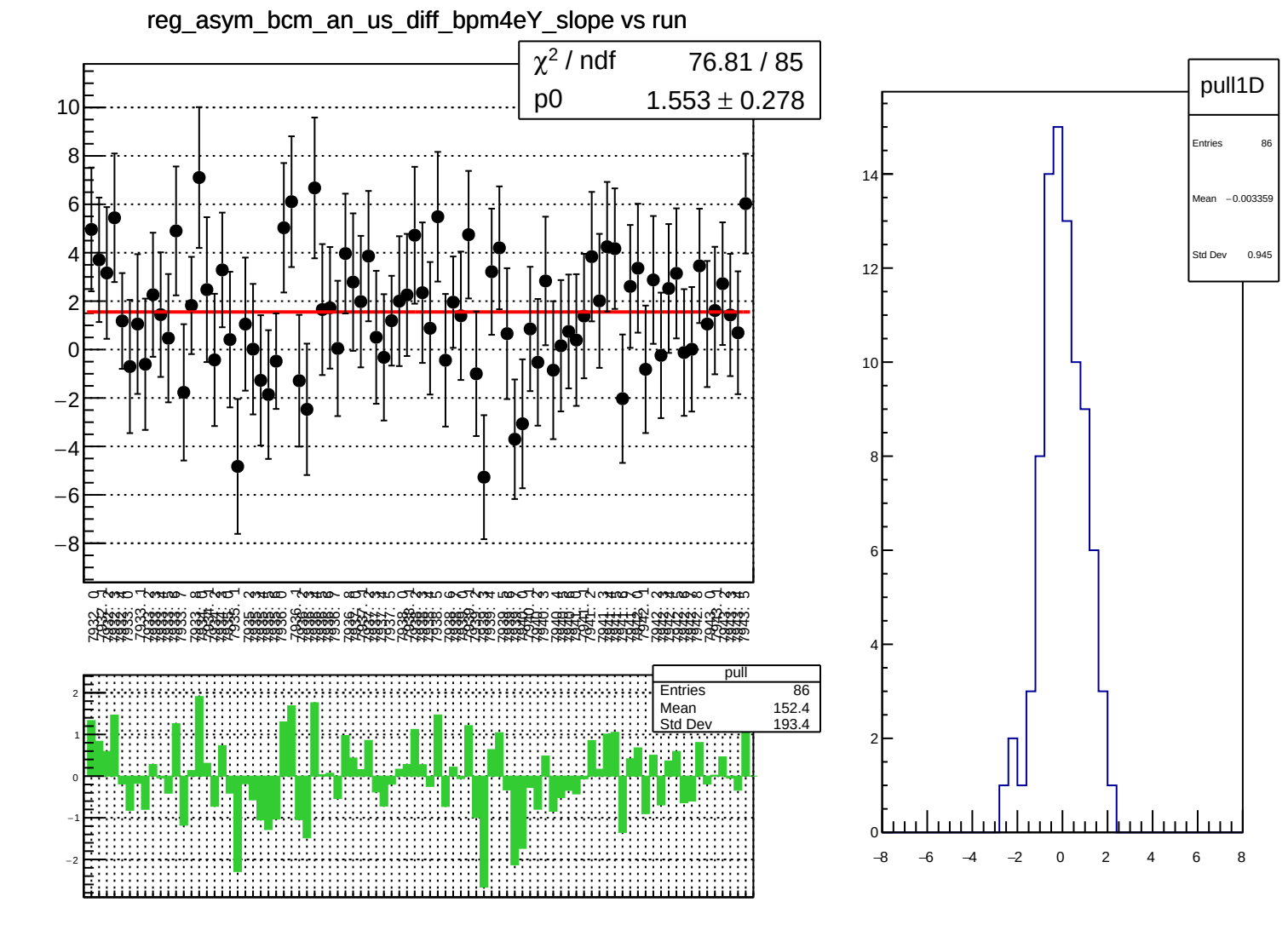

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 92.24 / 85
p0 0.2577 ± 0.007761
pull
Entries 86
Mean −204.6
Std Dev 235.7

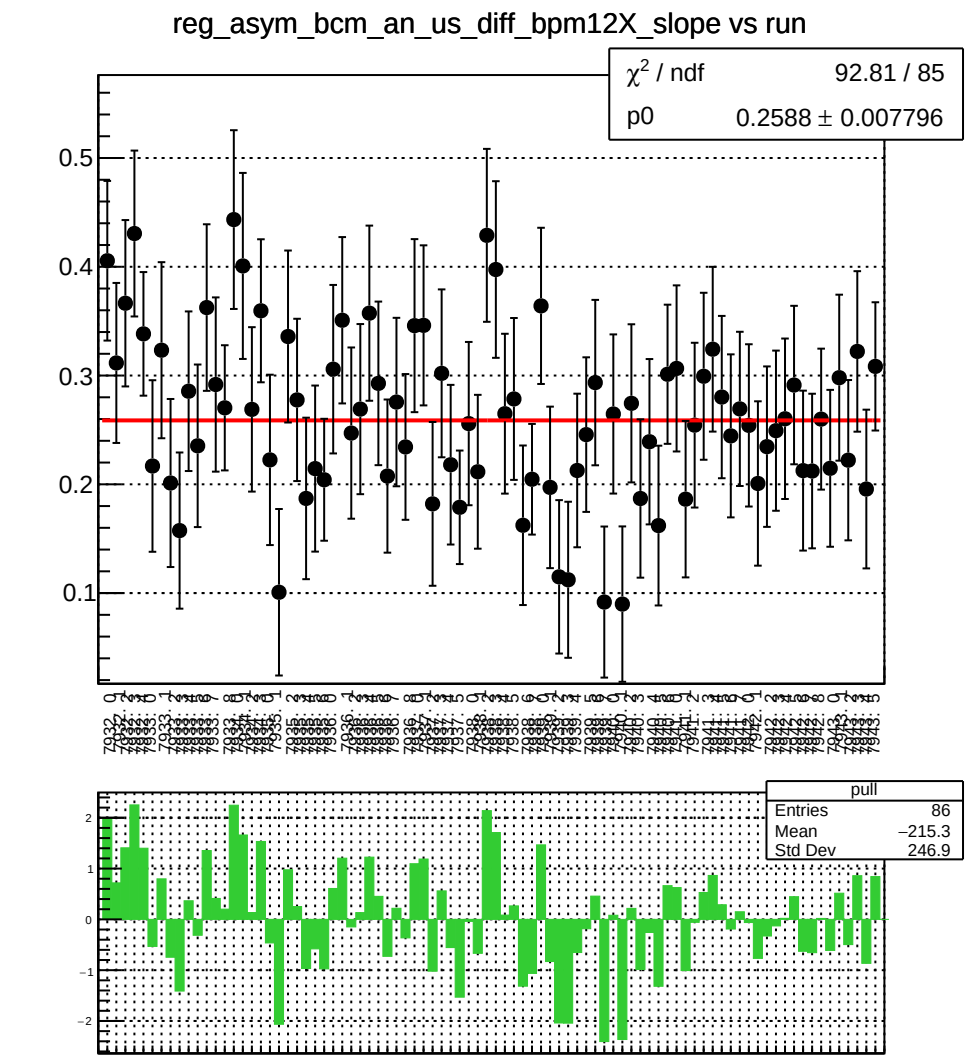

pull1D
Entries 86
Mean 0.02713
Std Dev 1.035

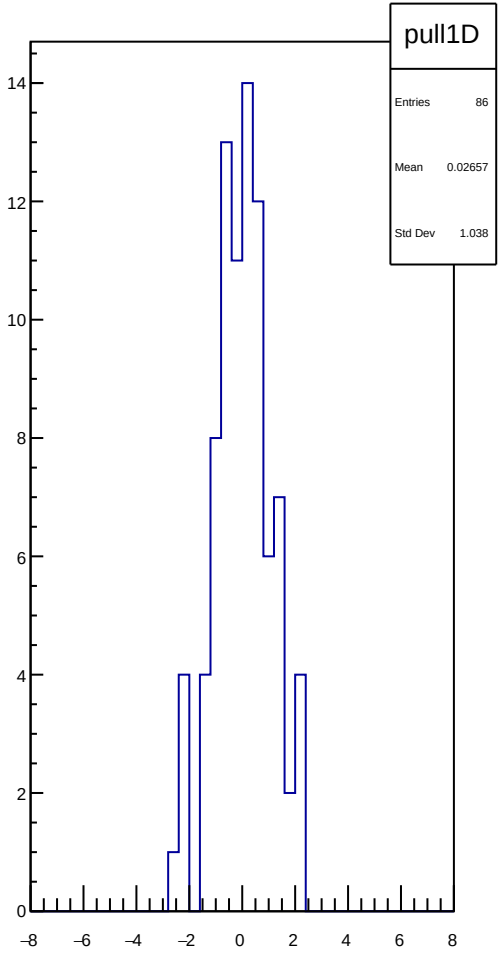

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 152.9 / 85
p0 12.25 ± 0.2313
pull
Entries 86
Mean −136.4
Std Dev 182.6
pull1D
Entries 86
Mean 0.07809
Std Dev 1.331

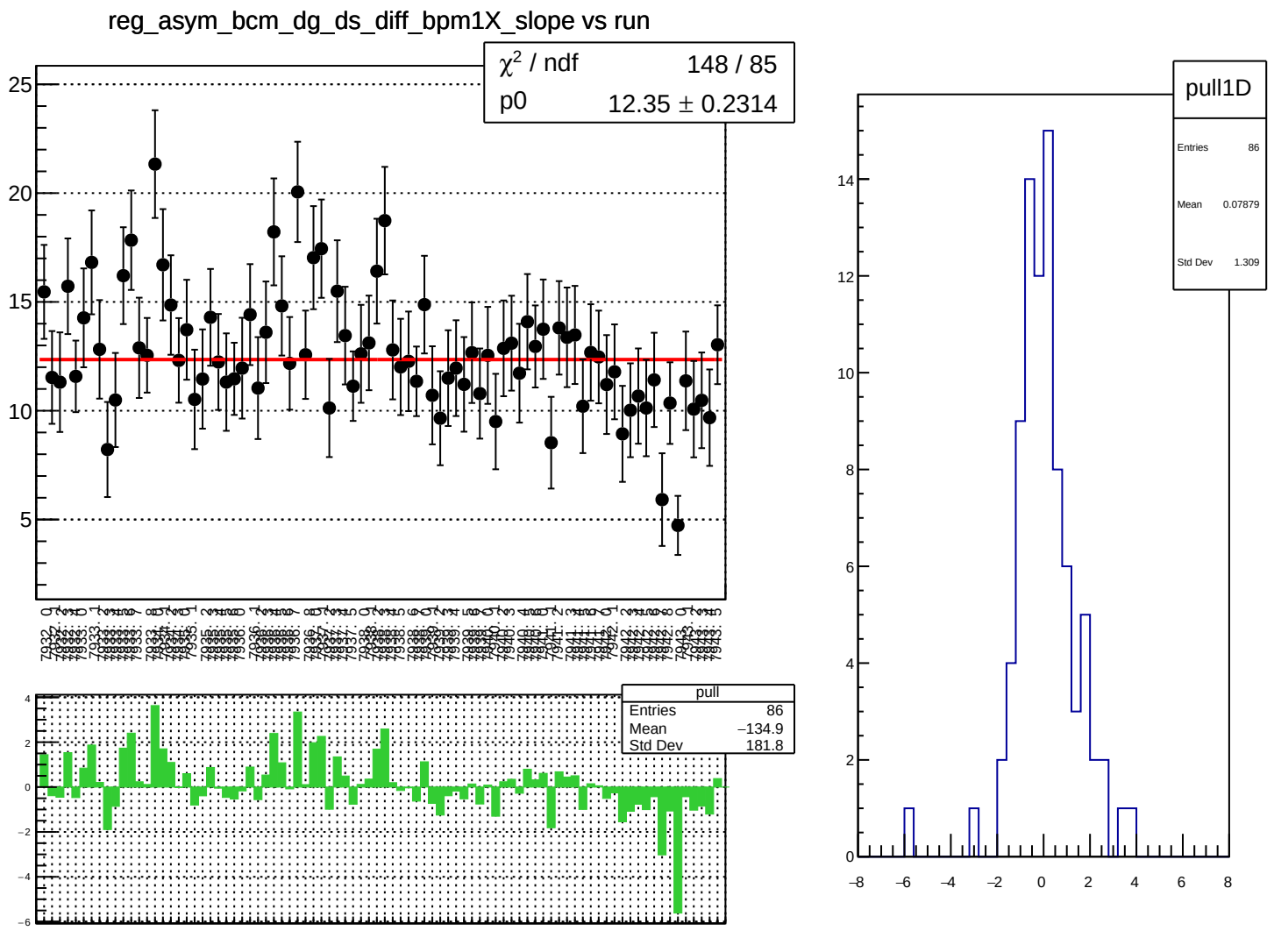

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 76.91 / 85
p0 −2.154 ± 0.2412
pull
Entries 86
Mean −29.52
Std Dev 197.2
pull1D
Entries 86
Mean 0.003196
Std Dev 0.9456

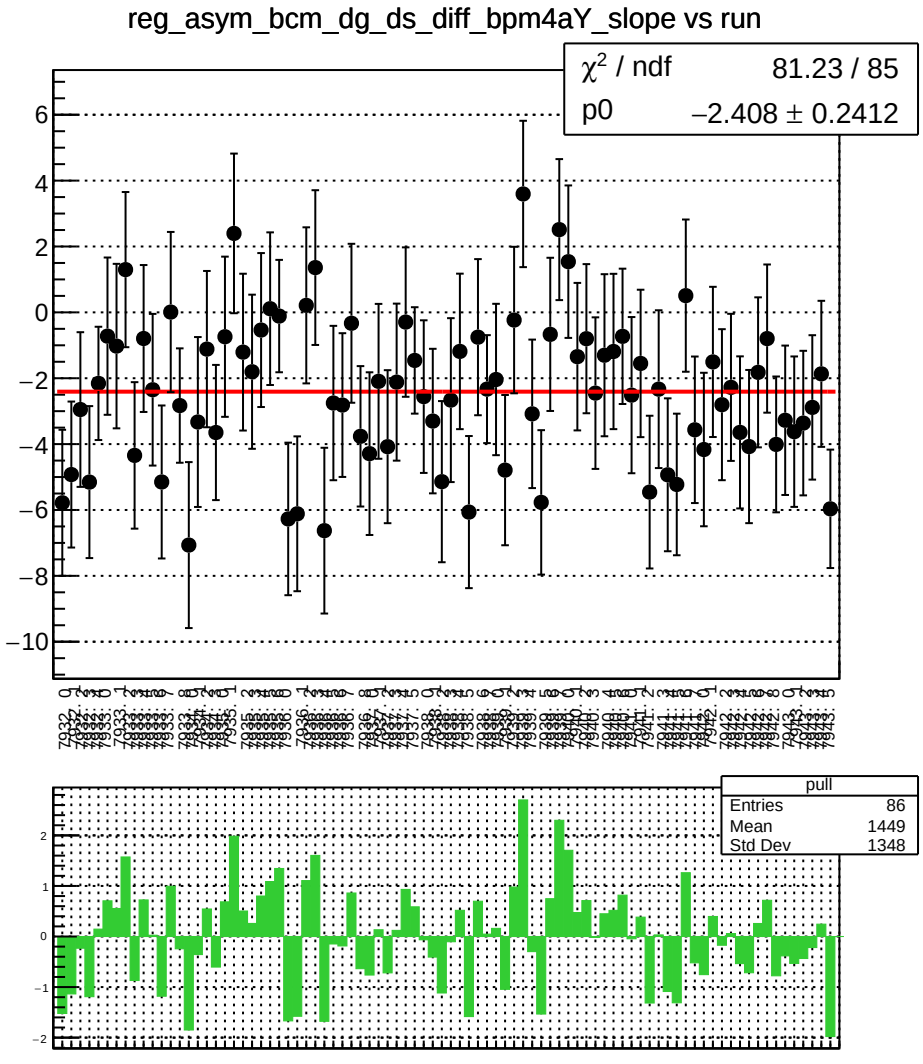

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 154 / 85
p0 −11.09 ± 0.2081
pull
Entries 86
Mean −129.7
Std Dev 176.1
pull1D
Entries 86
Mean −0.08035
Std Dev 1.336

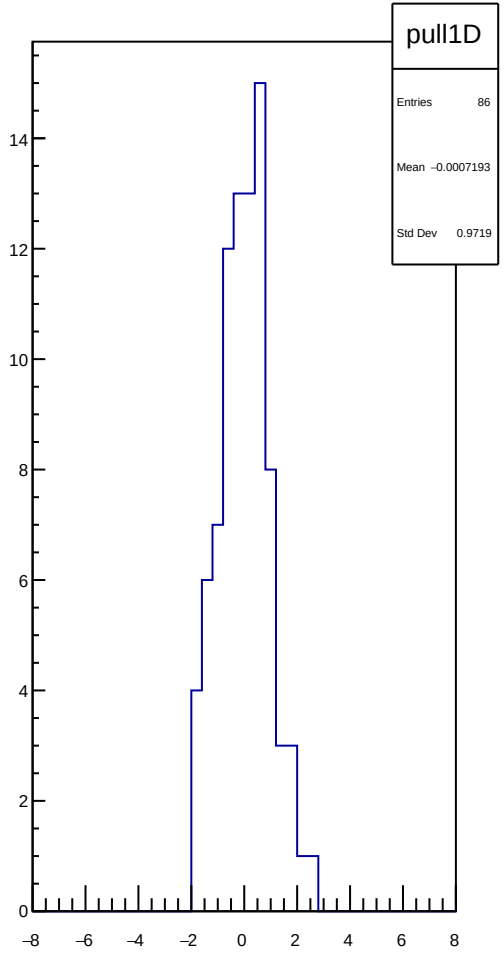

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 76.81 / 85
p0 1.553 ± 0.278
pull
Entries 86
Mean 152.4
Std Dev 193.4
pull1D
Entries 86
Mean −0.003359
Std Dev 0.945

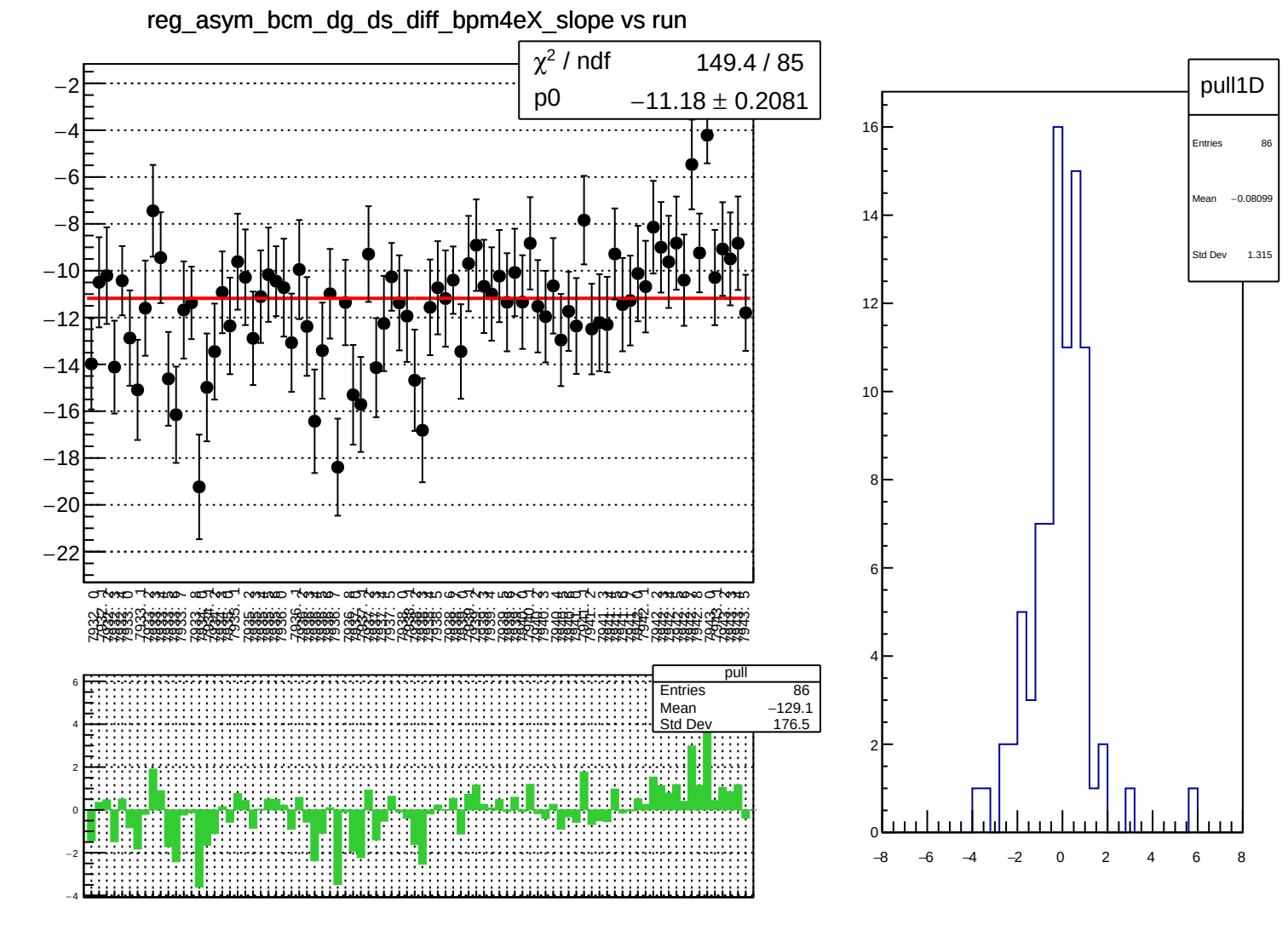

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 92.81 / 85
p0 0.2588 ± 0.007796
pull
Entries 86
Mean −215.3
Std Dev 246.9

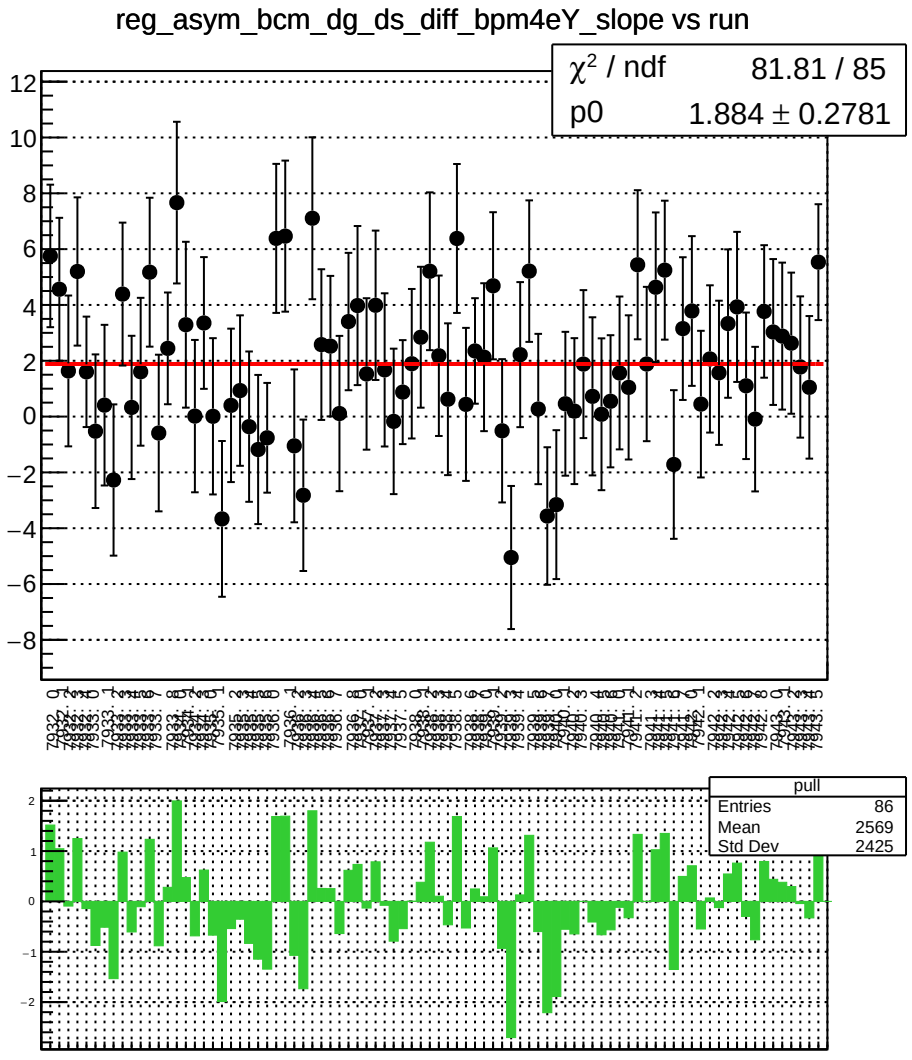

pull1D
Entries 86
Mean 0.02657
Std Dev 1.038

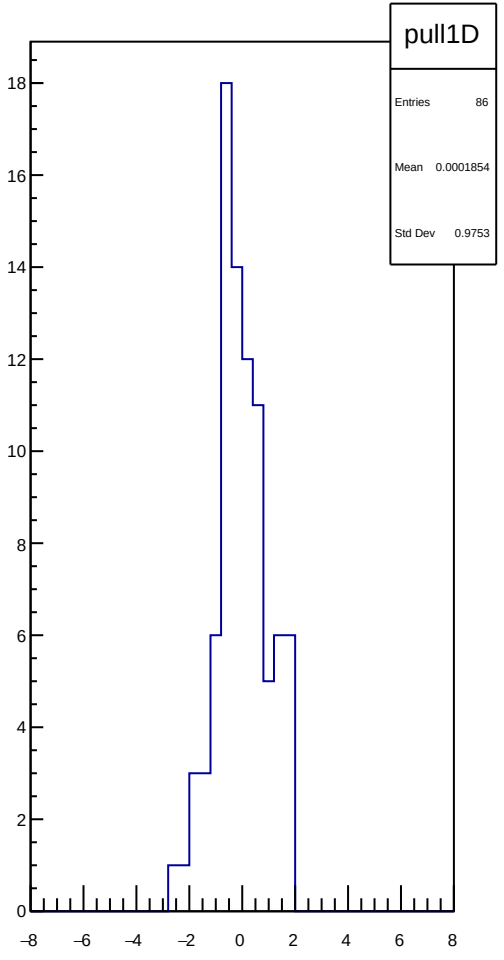

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 148 / 85
p0 12.35 ± 0.2314
pull
Entries 86
Mean −134.9
Std Dev 181.8
pull1D
Entries 86
Mean 0.07879
Std Dev 1.309

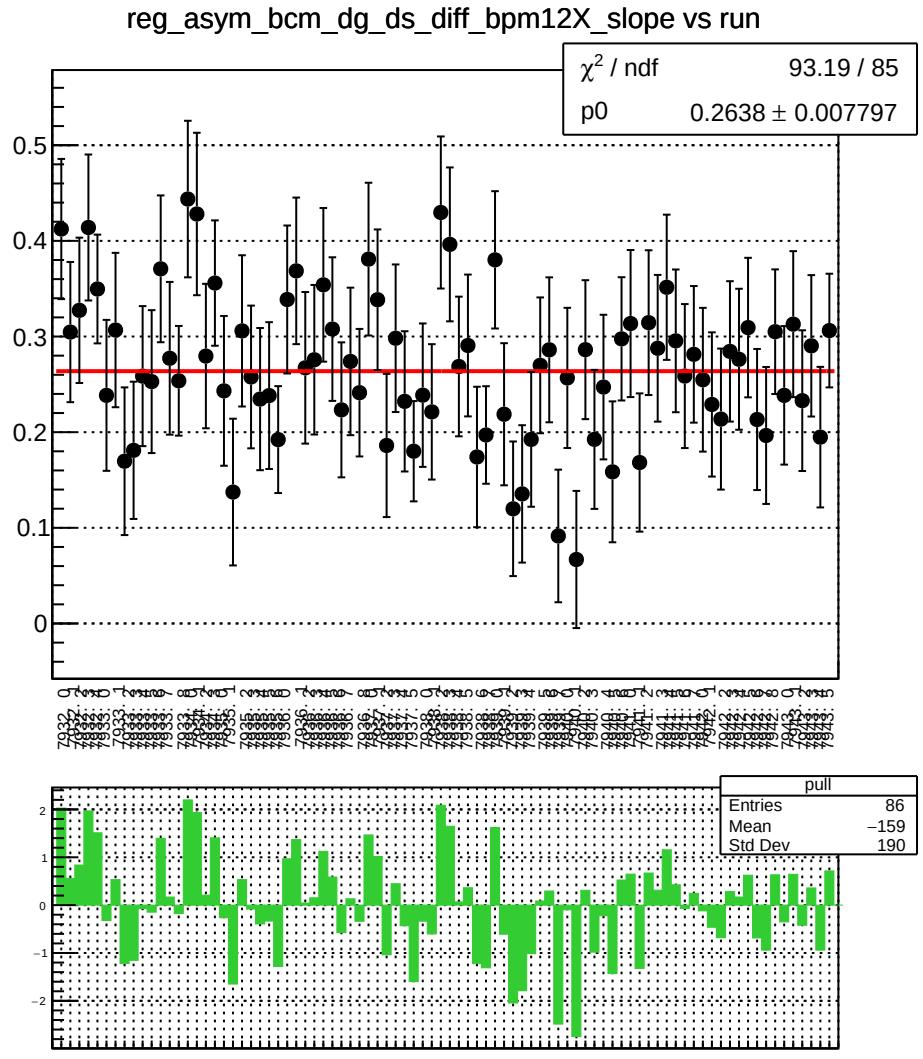

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 81.23 / 85
p0 −2.408 ± 0.2412
pull
Entries 86
Mean 1449
Std Dev 1348

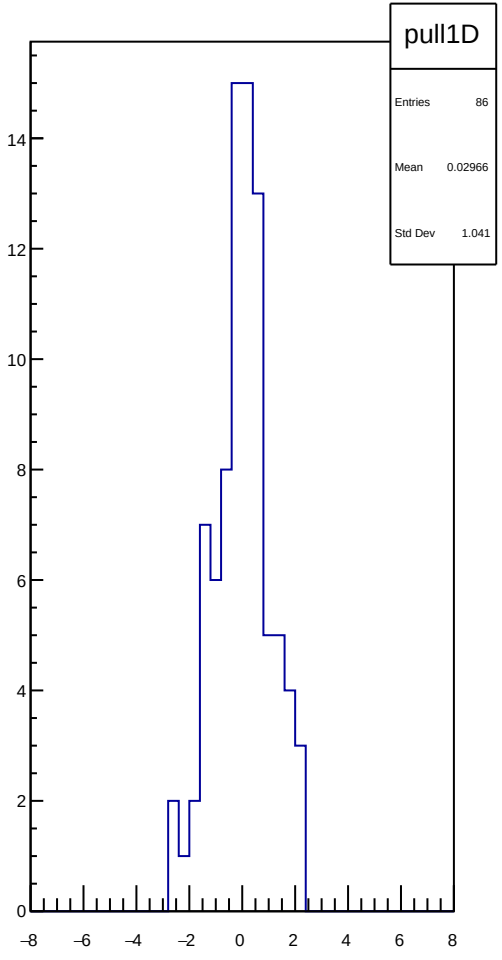

pull1D
Entries 86
Mean −0.0007193
Std Dev 0.9719

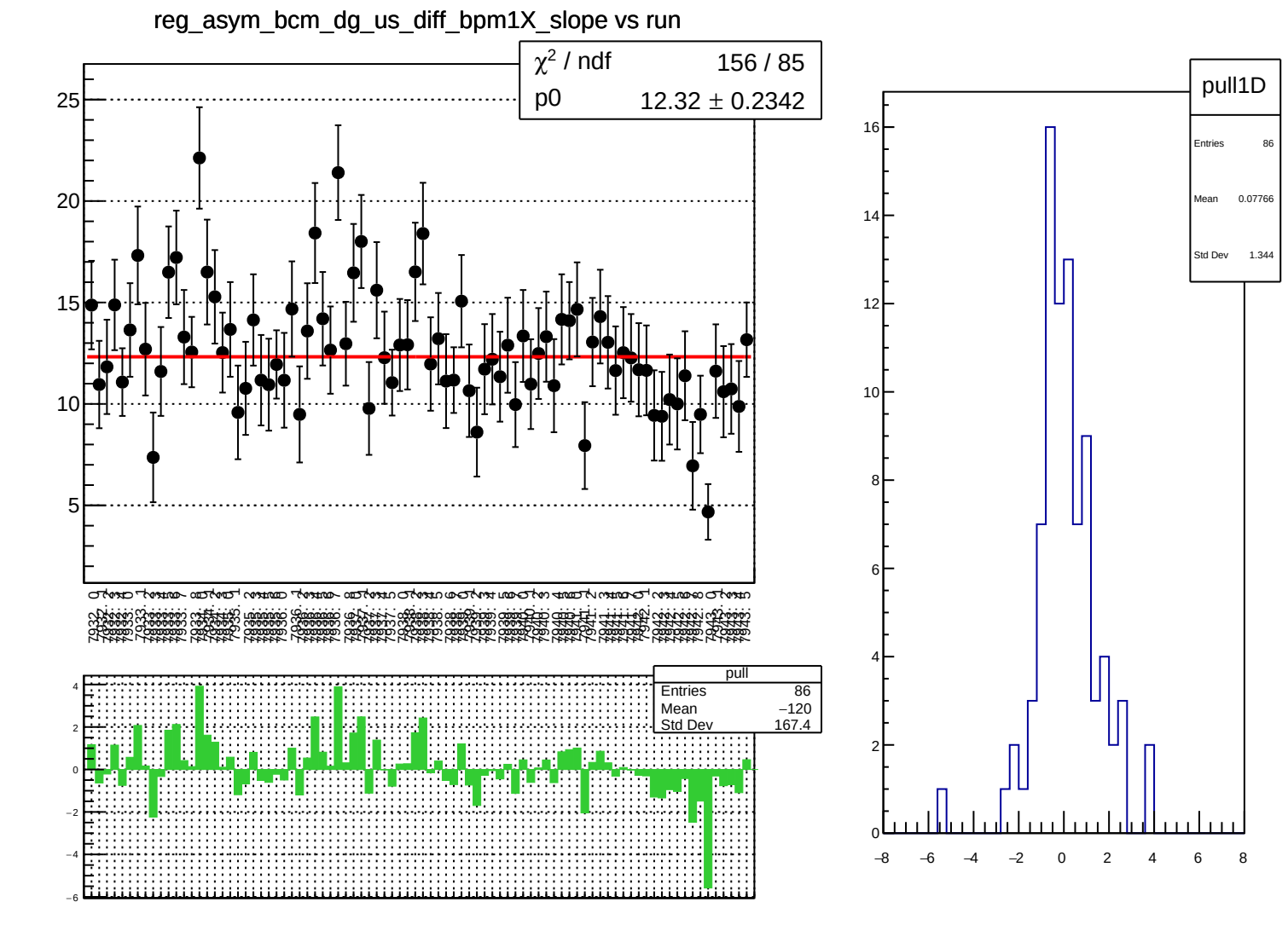

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 149.4 / 85
p0 −11.18 ± 0.2081
pull
Entries 86
Mean −129.1
Std Dev 176.5
pull1D
Entries 86
Mean −0.08099
Std Dev 1.315

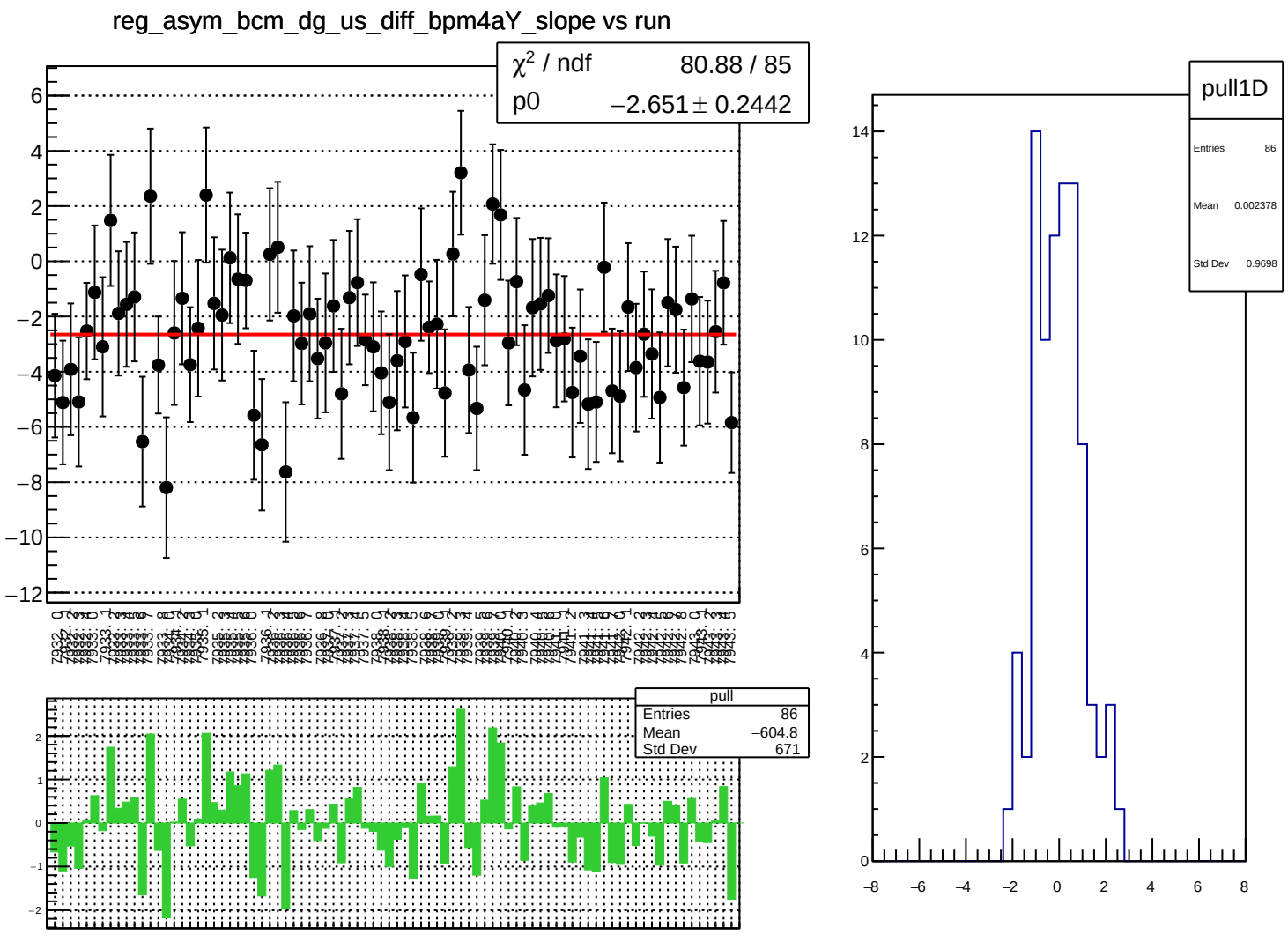

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 81.81 / 85
p0 1.884 ± 0.2781
pull
Entries 86
Mean 2569
Std Dev 2425

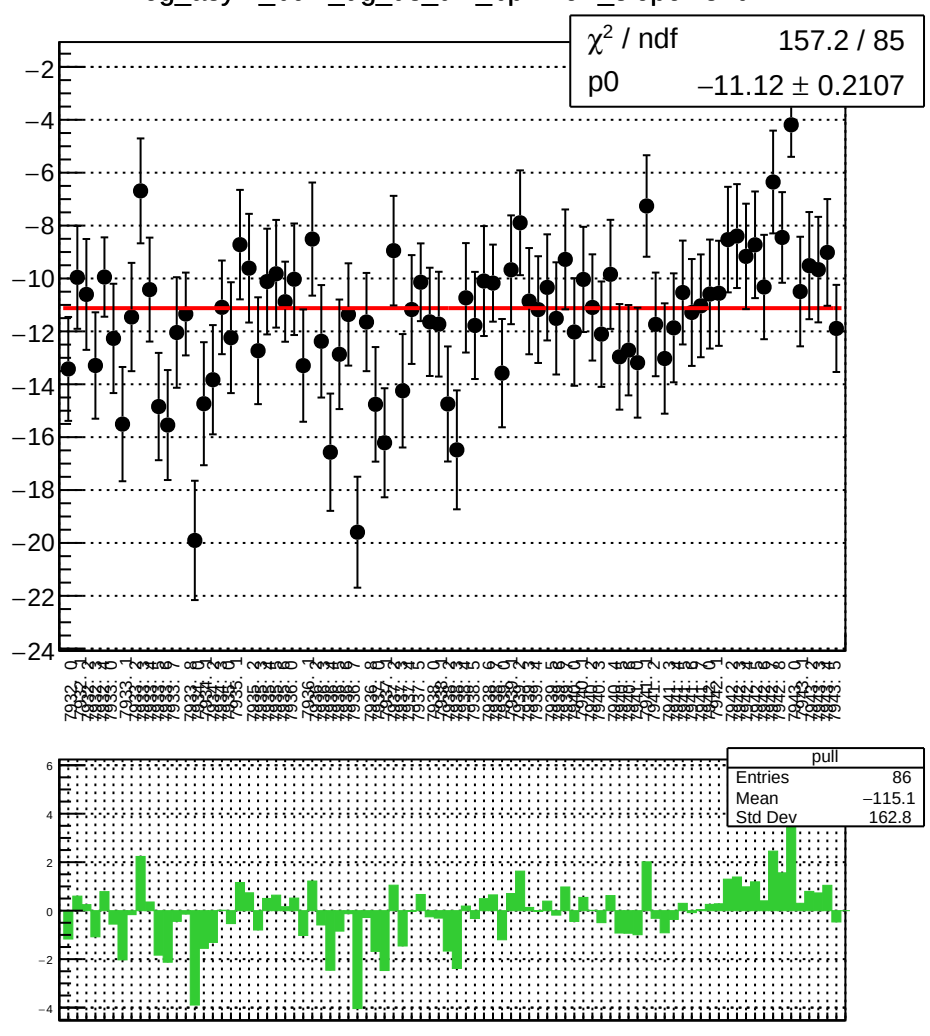

pull1D
Entries 86
Mean 0.0001854
Std Dev 0.9753

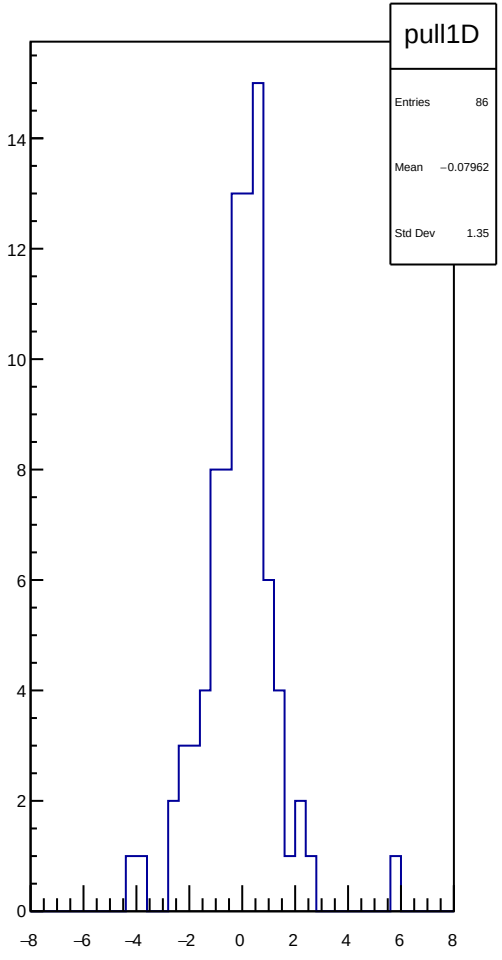

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 93.19 / 85
p0 0.2638 ± 0.007797
pull
Entries 86
Mean −159
Std Dev 190

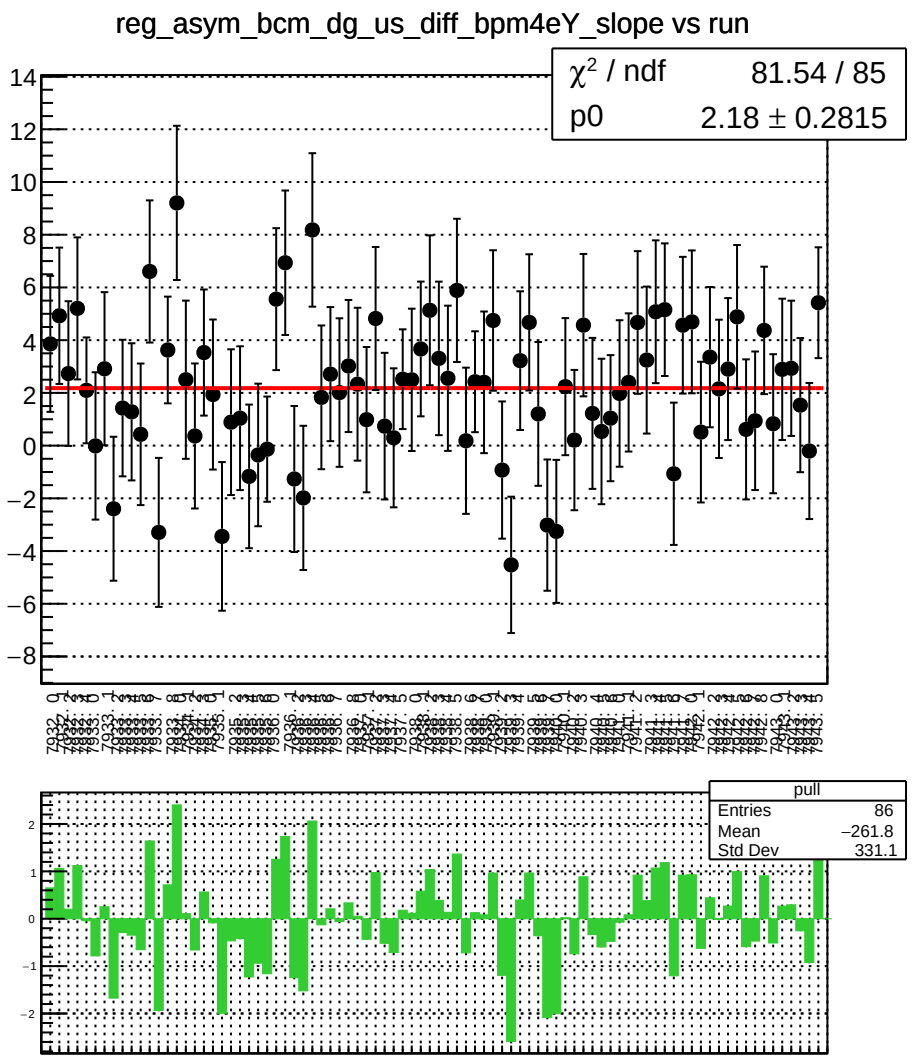

pull1D
Entries 86
Mean 0.02966
Std Dev 1.041

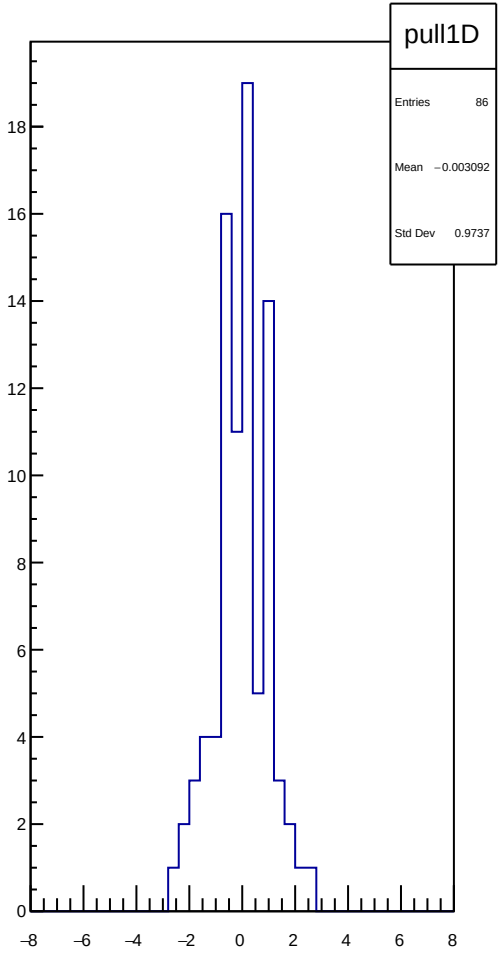

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 156 / 85
p0 12.32 ± 0.2342
pull
Entries 86
Mean −120
Std Dev 167.4
pull1D
Entries 86
Mean 0.07766
Std Dev 1.344

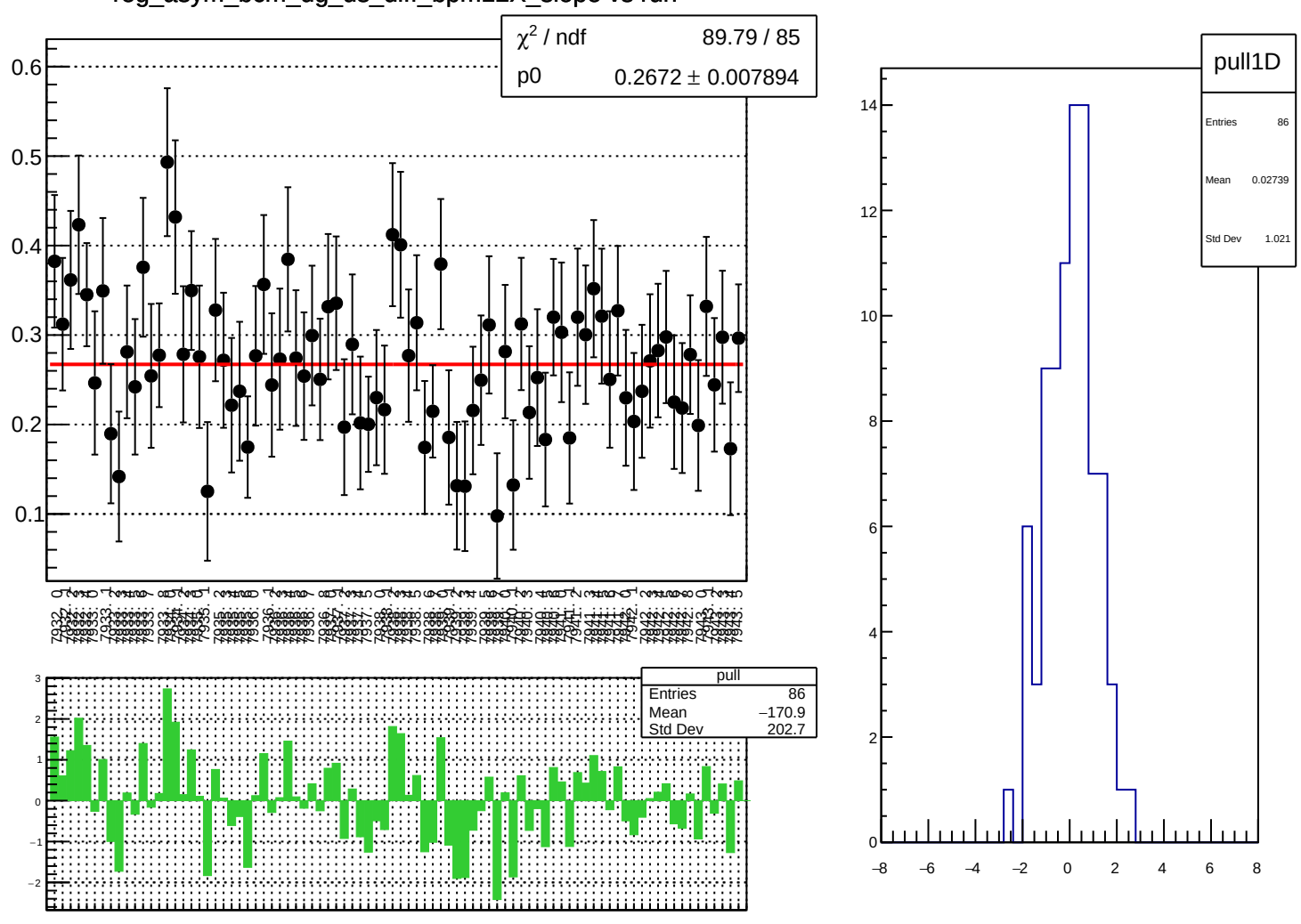

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 80.88 / 85
p0 −2.651 ± 0.2442
pull
Entries 86
Mean −604.8
Std Dev 671
pull1D
Entries 86
Mean 0.002378
Std Dev 0.9698

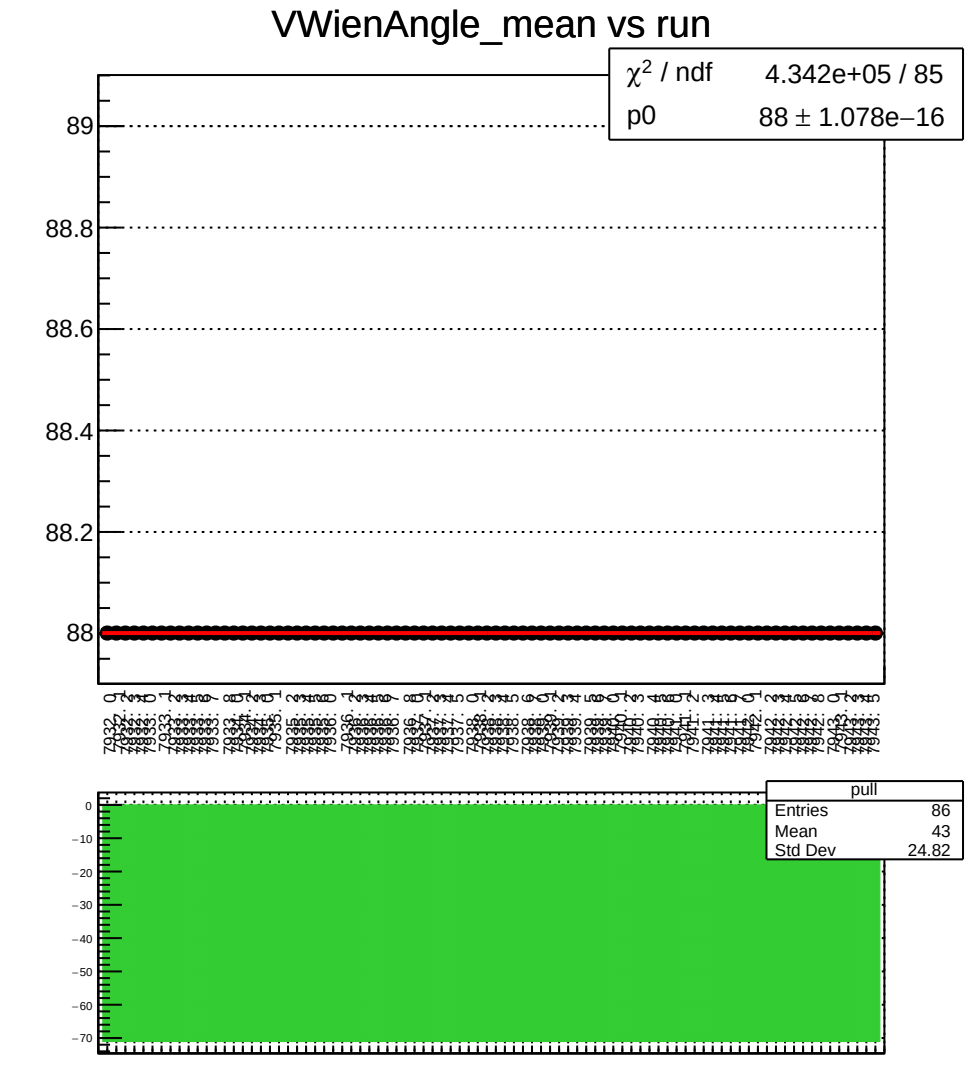

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 157.2 / 85
p0 −11.12 ± 0.2107
pull
Entries 86
Mean −115.1
Std Dev 162.8

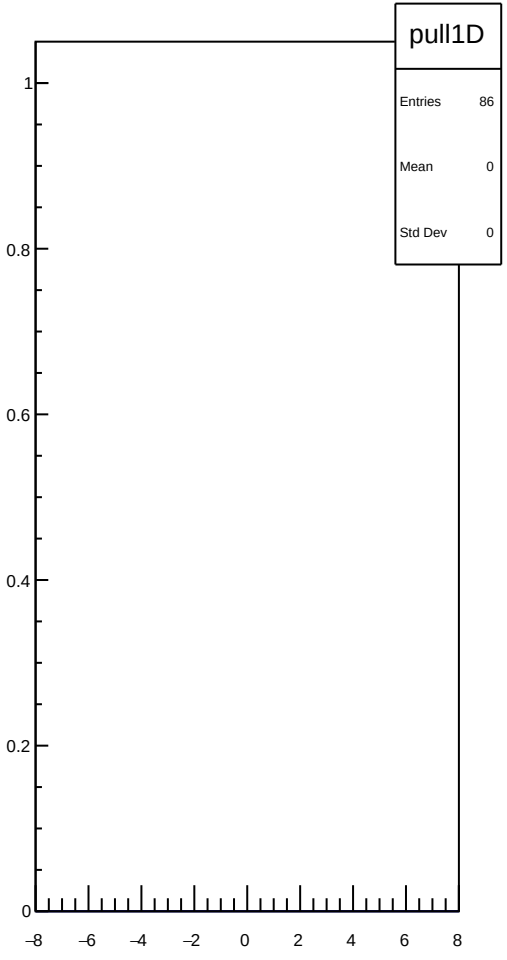

pull1D
Entries 86
Mean −0.07962
Std Dev 1.35

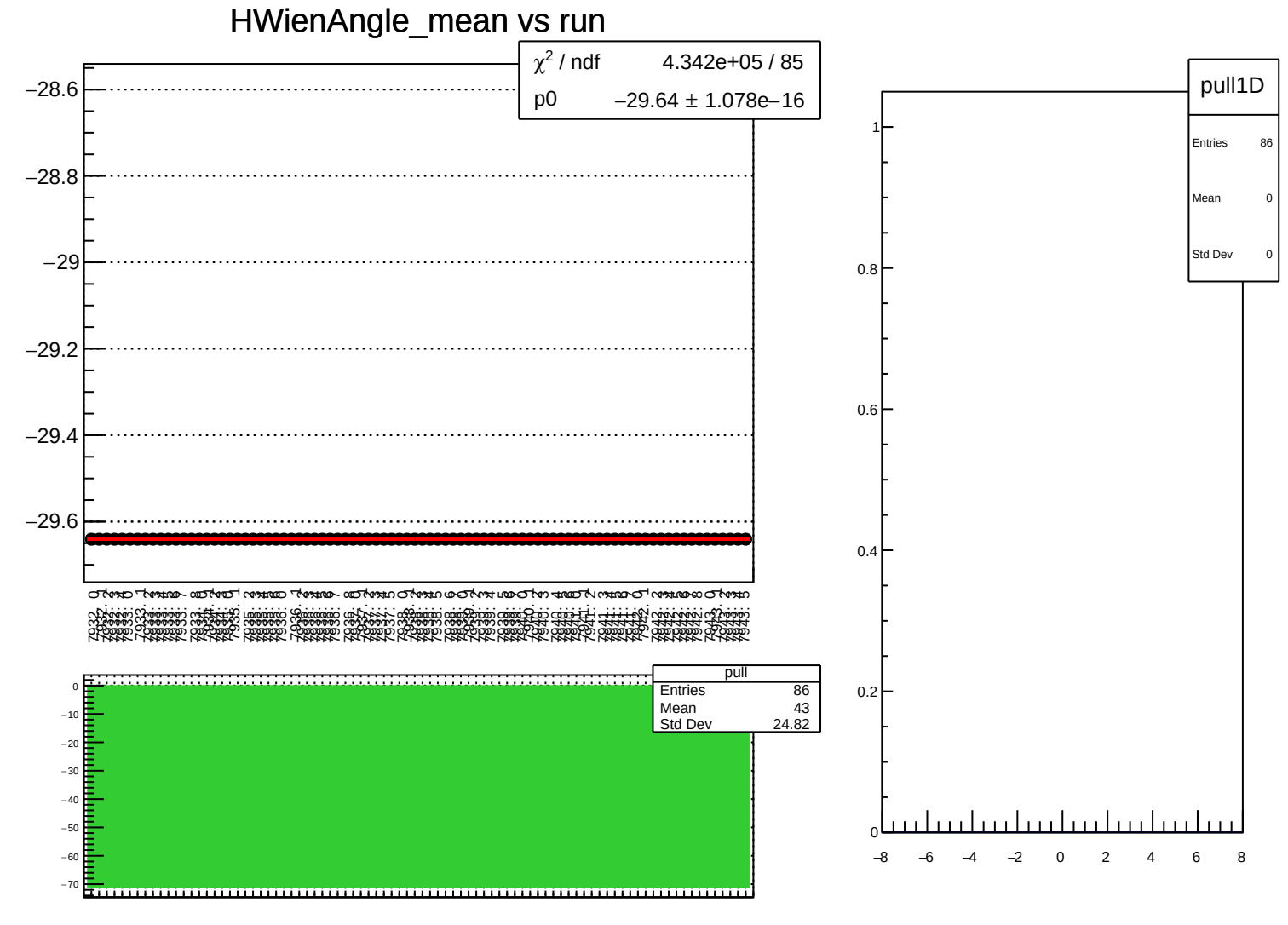

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 81.54 / 85
p0 2.18 ± 0.2815
pull
Entries 86
Mean −261.8
Std Dev 331.1

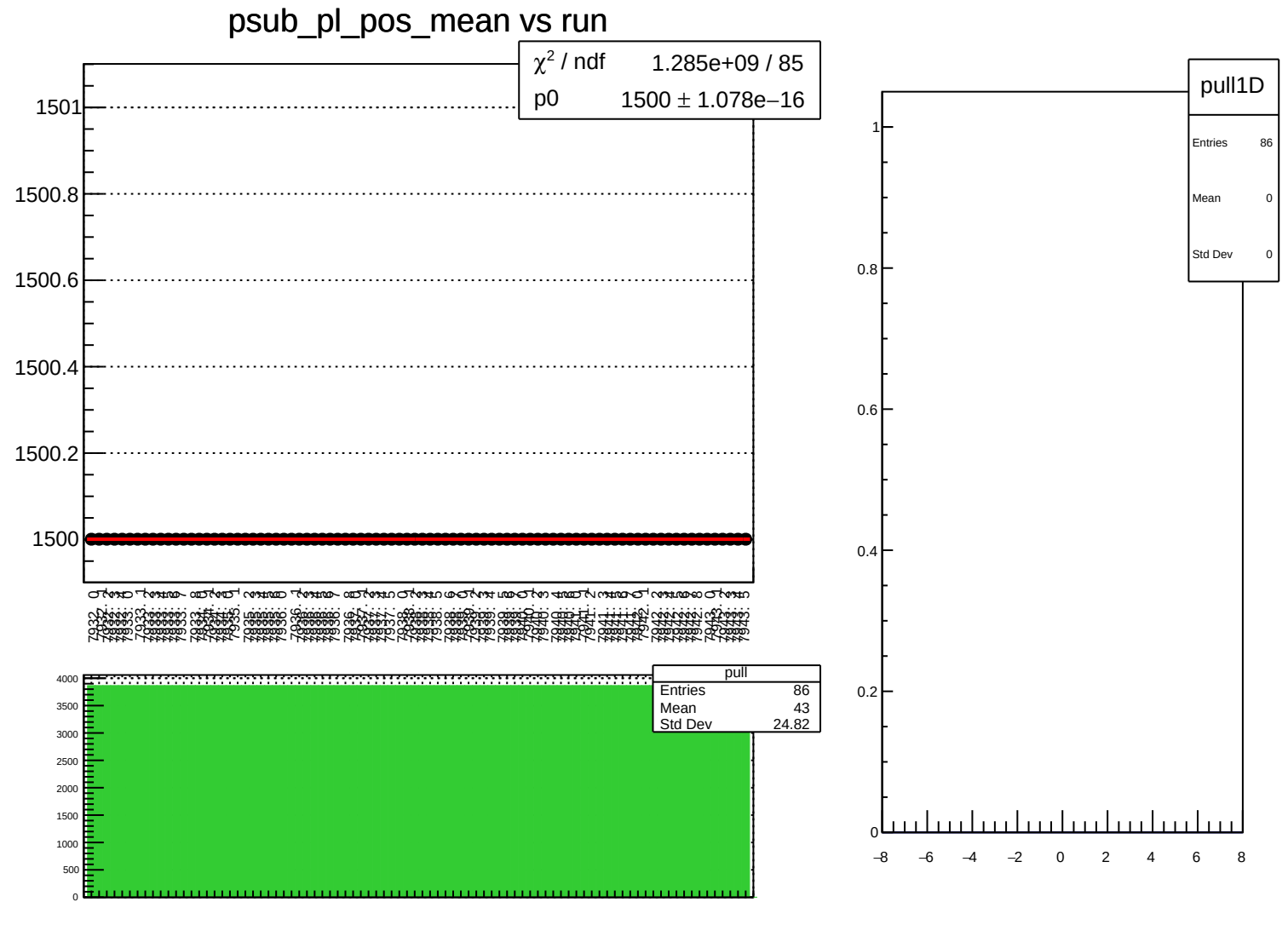

pull1D
Entries 86
Mean −0.003092
Std Dev 0.9737

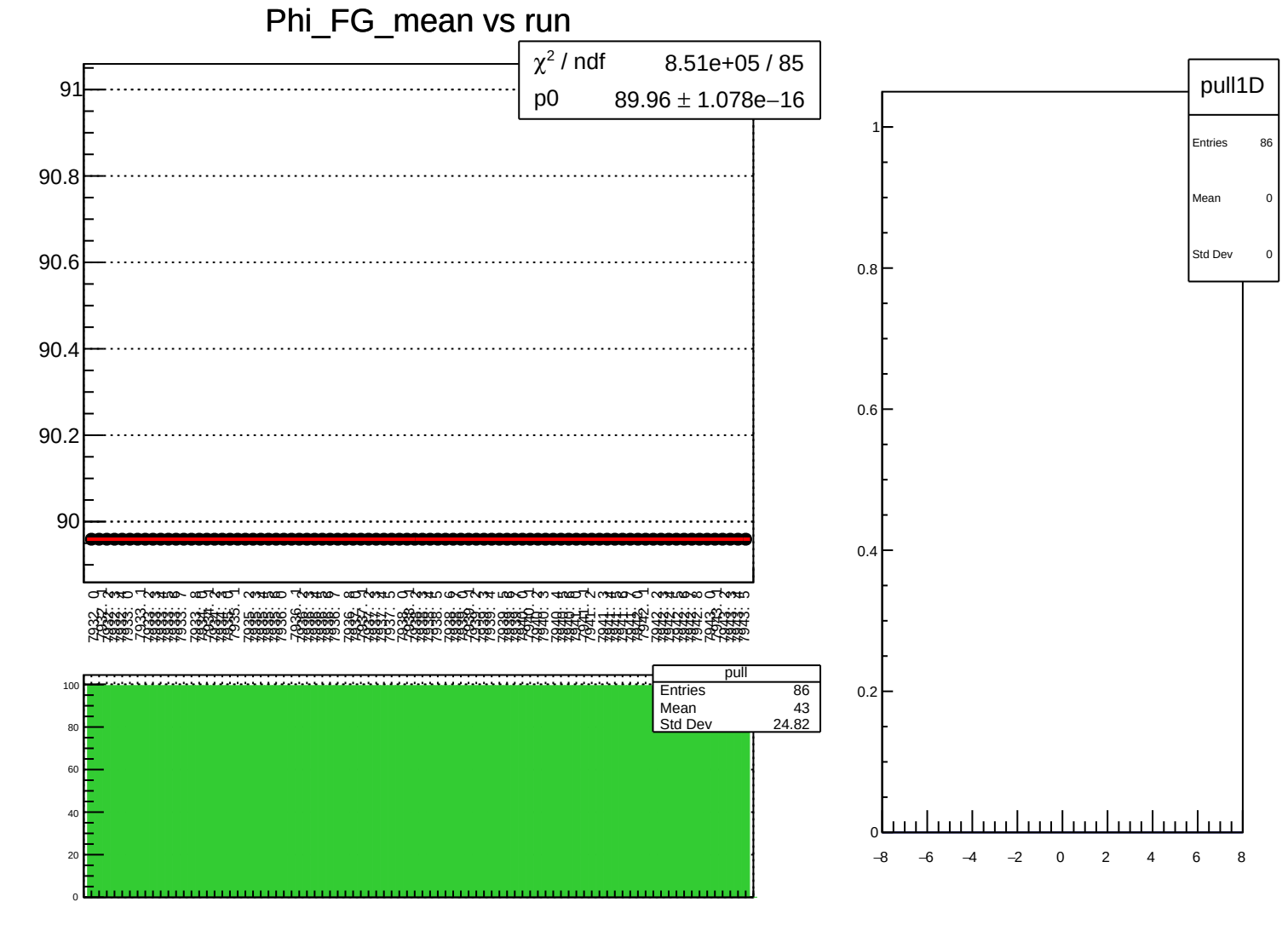

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 89.79 / 85
p0 0.2672 ± 0.007894
pull
Entries 86
Mean −170.9
Std Dev 202.7
pull1D
Entries 86
Mean 0.02739
Std Dev 1.021

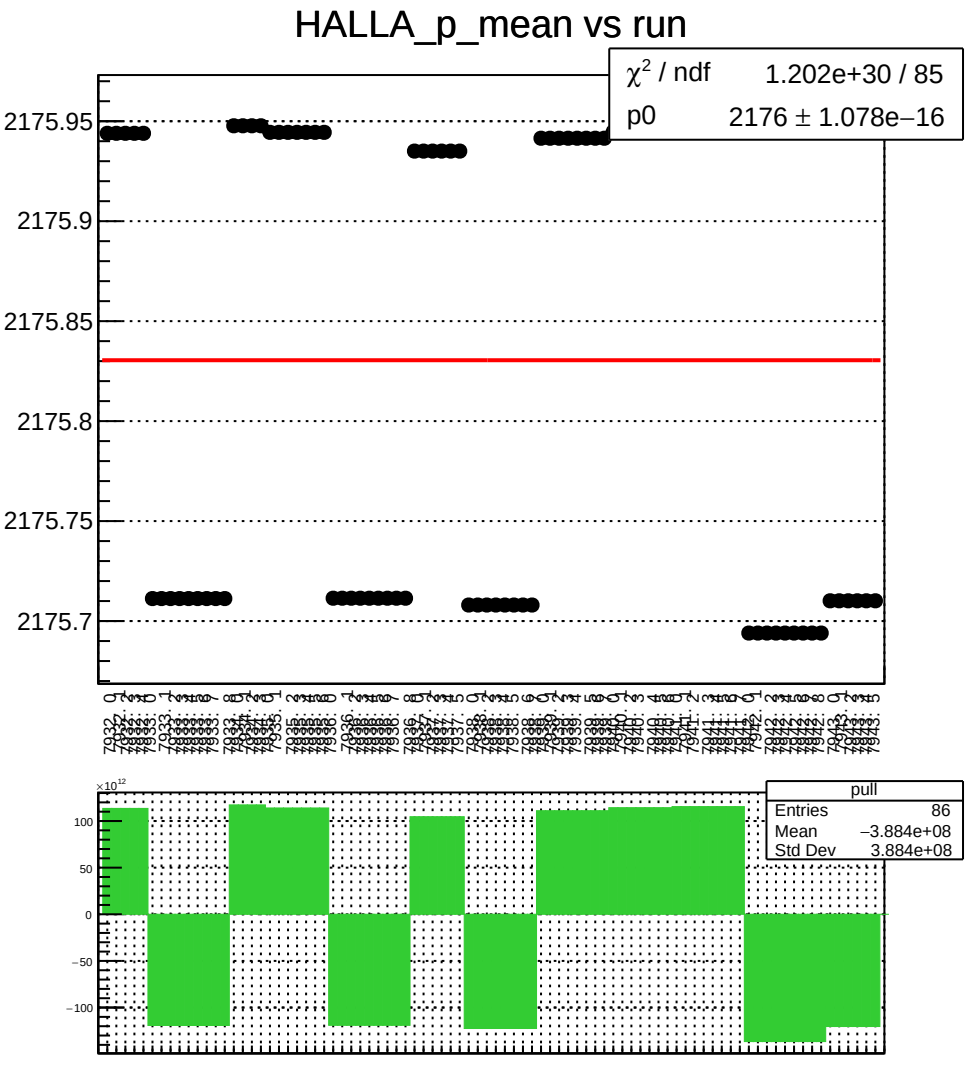

VWienAngle_mean vs run
χ² / ndf 4.342e+05 / 85
p0 88 ± 1.078e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 86
Mean 43
Std Dev 24.82
0
−10
−20
−30
−40
−50
−60
−70

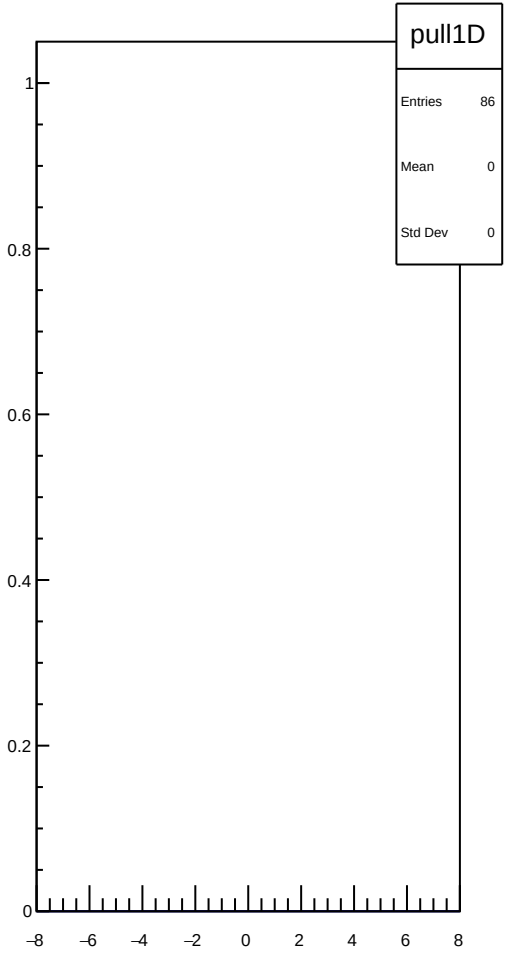

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

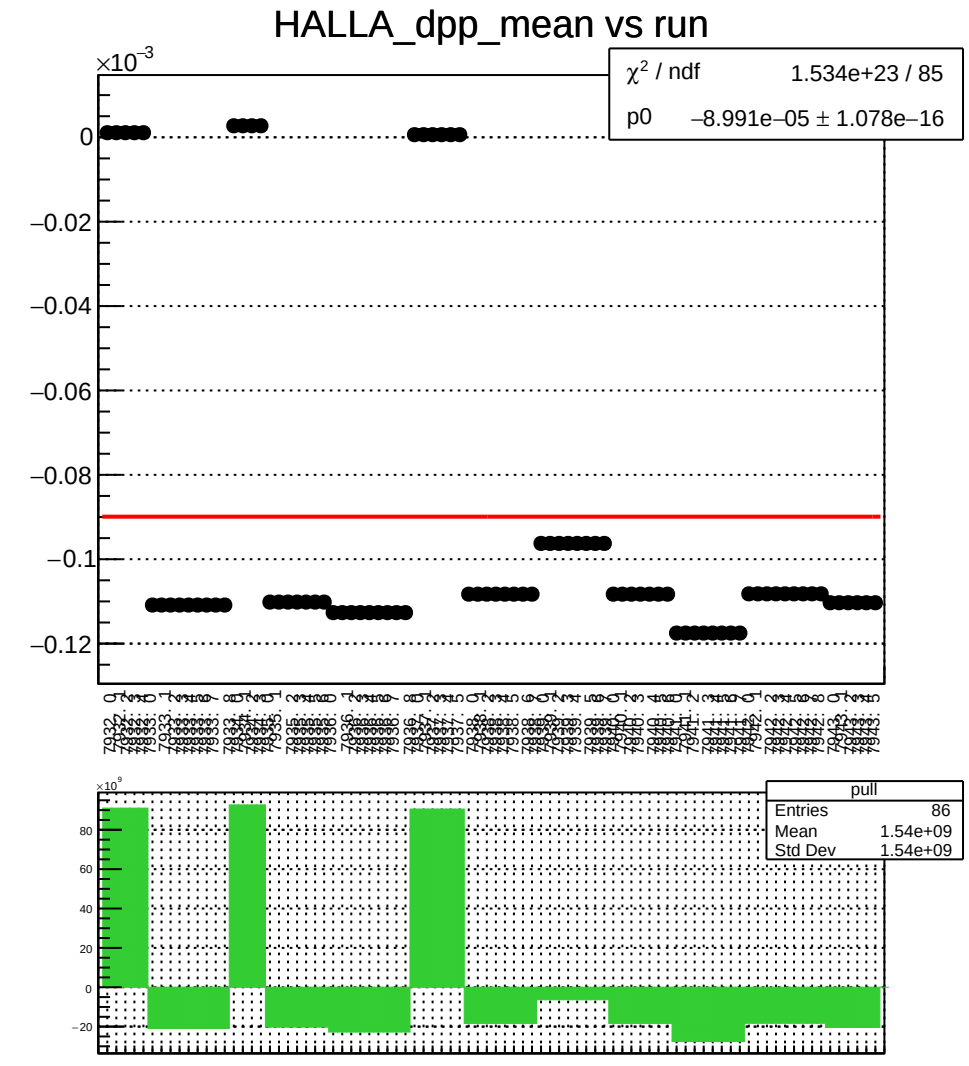

HWienAngle_mean vs run
χ² / ndf 4.342e+05 / 85
p0 −29.64 ± 1.078e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 86
Mean 43
Std Dev 24.82
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

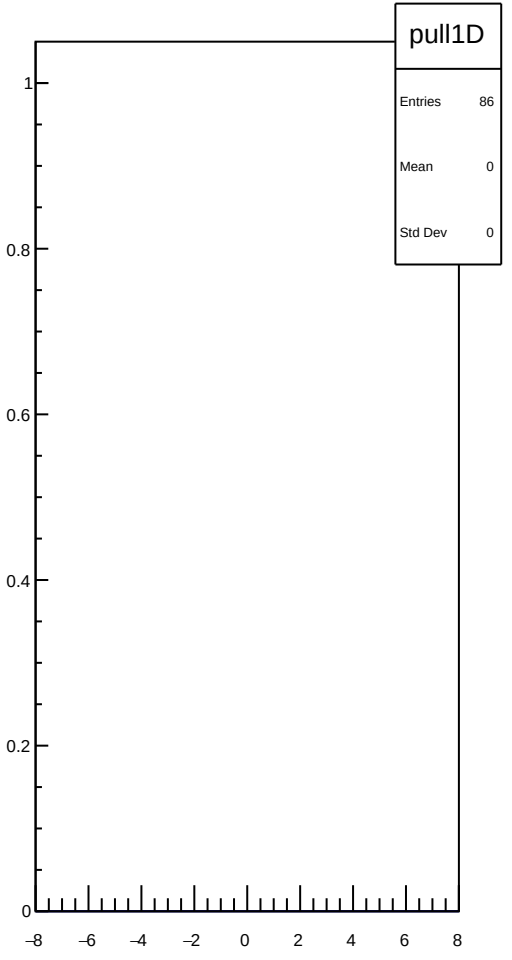

psub_pl_pos_mean vs run
χ² / ndf 1.285e+09 / 85
p0 1500 ± 1.078e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 86
Mean 43
Std Dev 24.82
4000
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

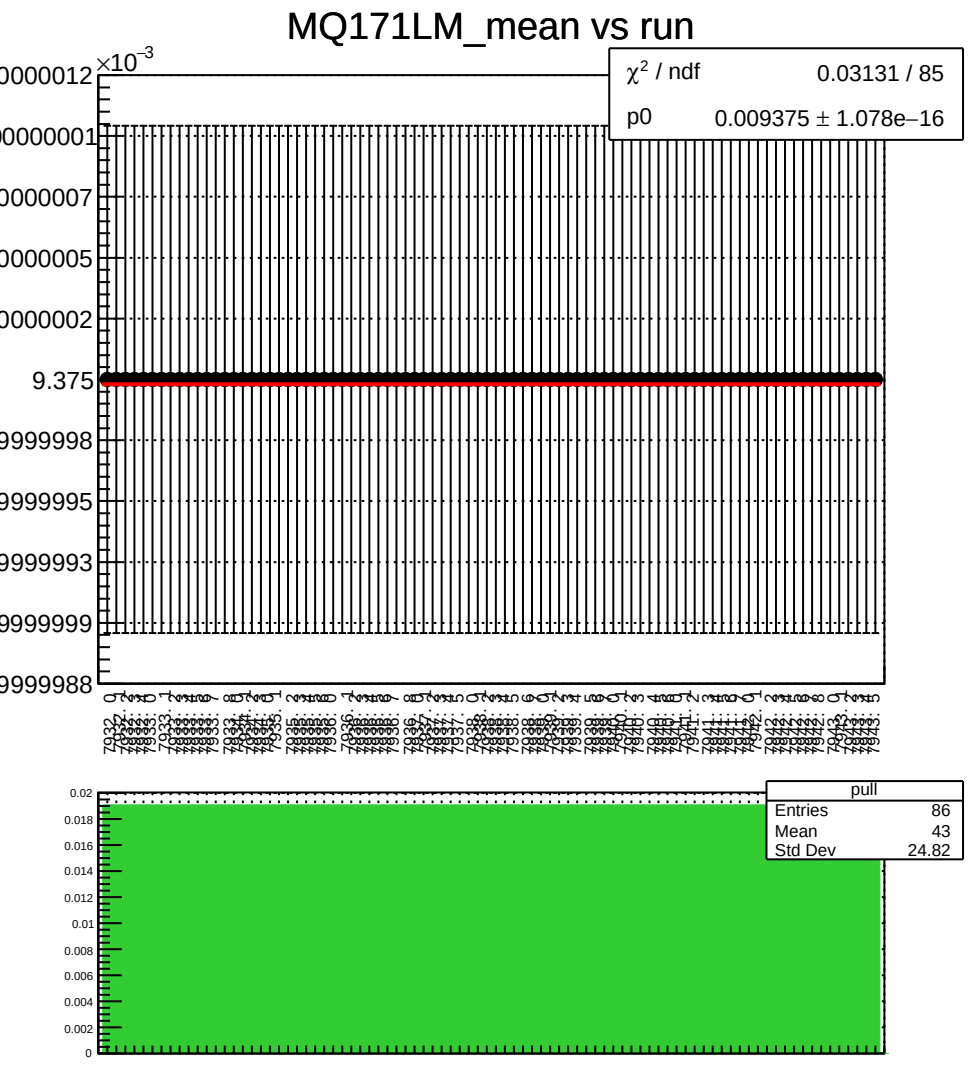

Phi_FG_mean vs run
χ² / ndf 8.51e+05 / 85
p0 89.96 ± 1.078e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 86
Mean 43
Std Dev 24.82
100
80
60
40
20
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

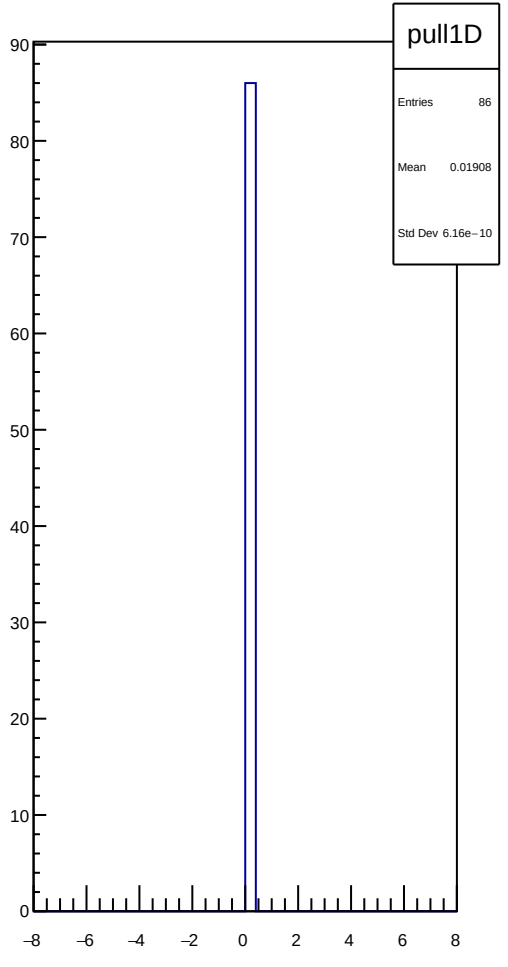

HALLA_p_mean vs run
χ² / ndf 1.202e+30 / 85
p0 2176 ± 1.078e−16
2175.95
2175.9
2175.85
2175.8
2175.75
2175.7
pull
Entries 86
Mean −3.884e+08
Std Dev 3.884e+08
×10¹²
100
50
0
−50
−100

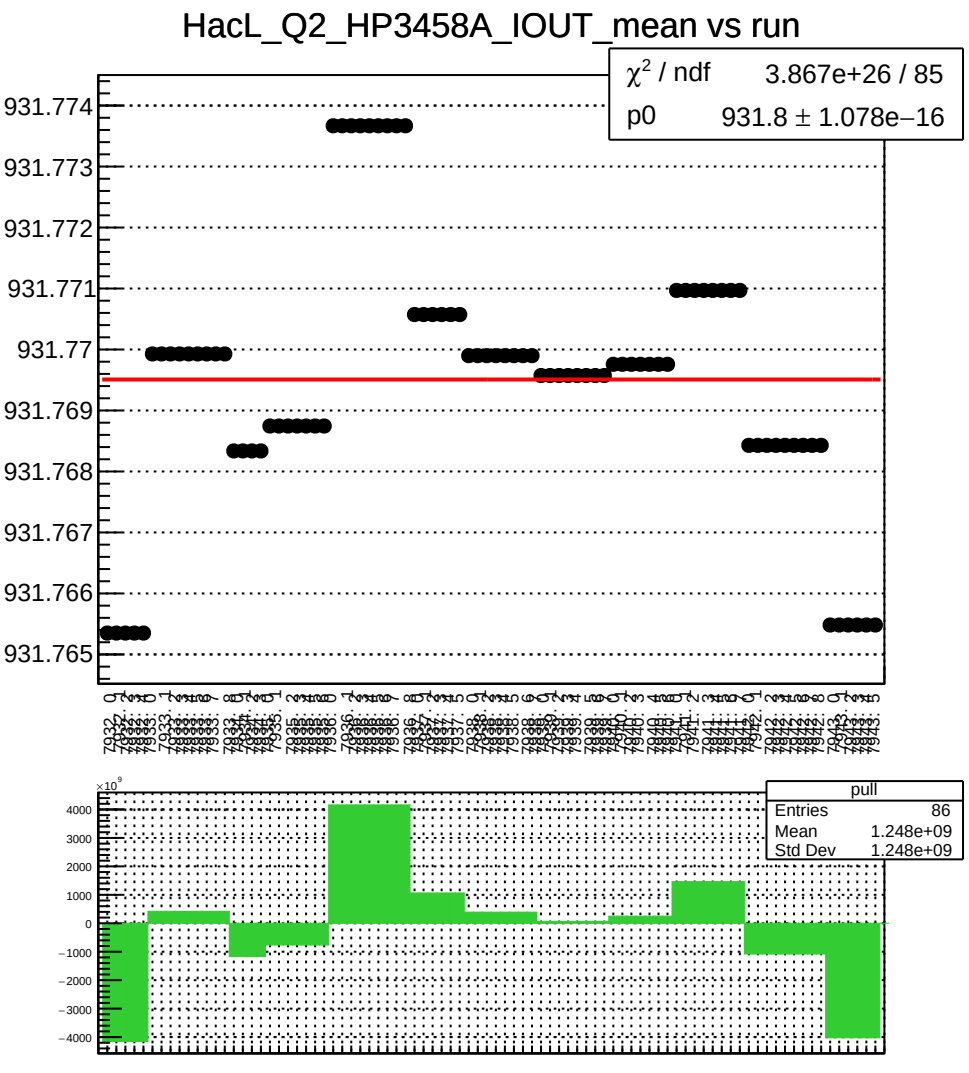

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

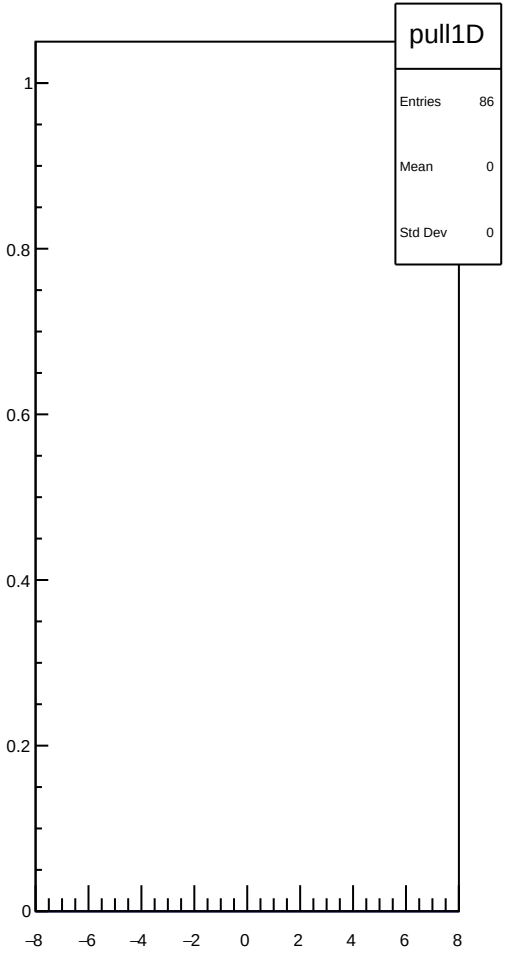

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 1.534e+23 / 85
p0 −8.991e−05 ± 1.078e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
×10⁹
pull
Entries 86
Mean 1.54e+09
Std Dev 1.54e+09
80
60
40
20
0
−20

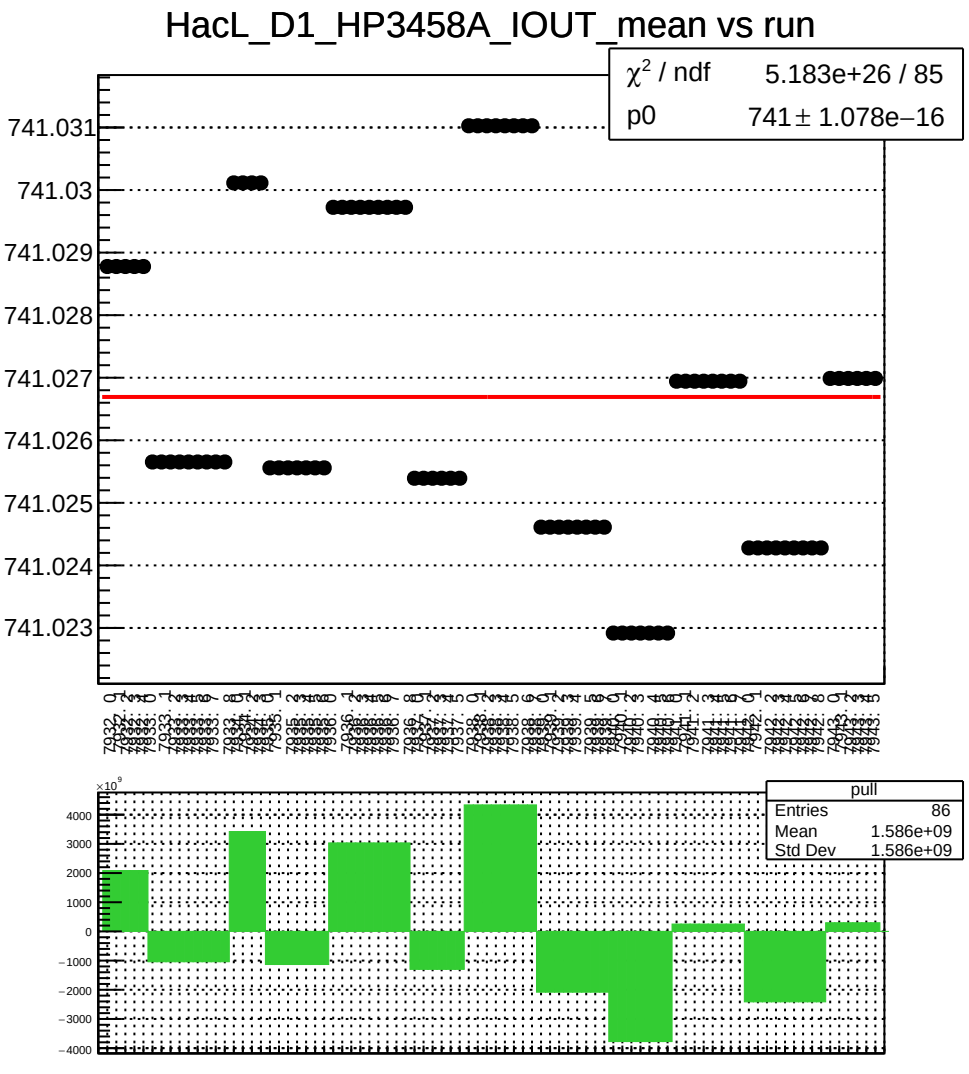

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

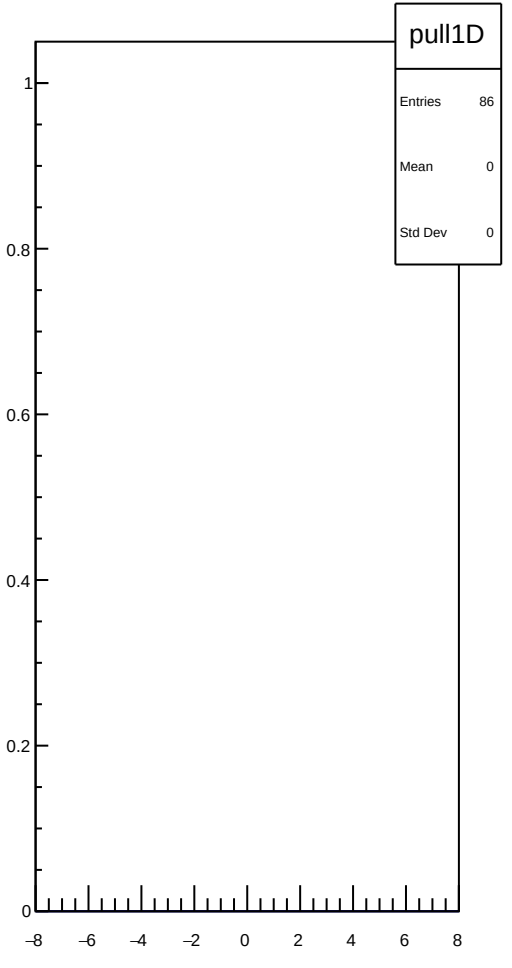

MQ171LM_mean vs run
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
×10⁻³
pull
Entries 86
Mean 43
Std Dev 24.82

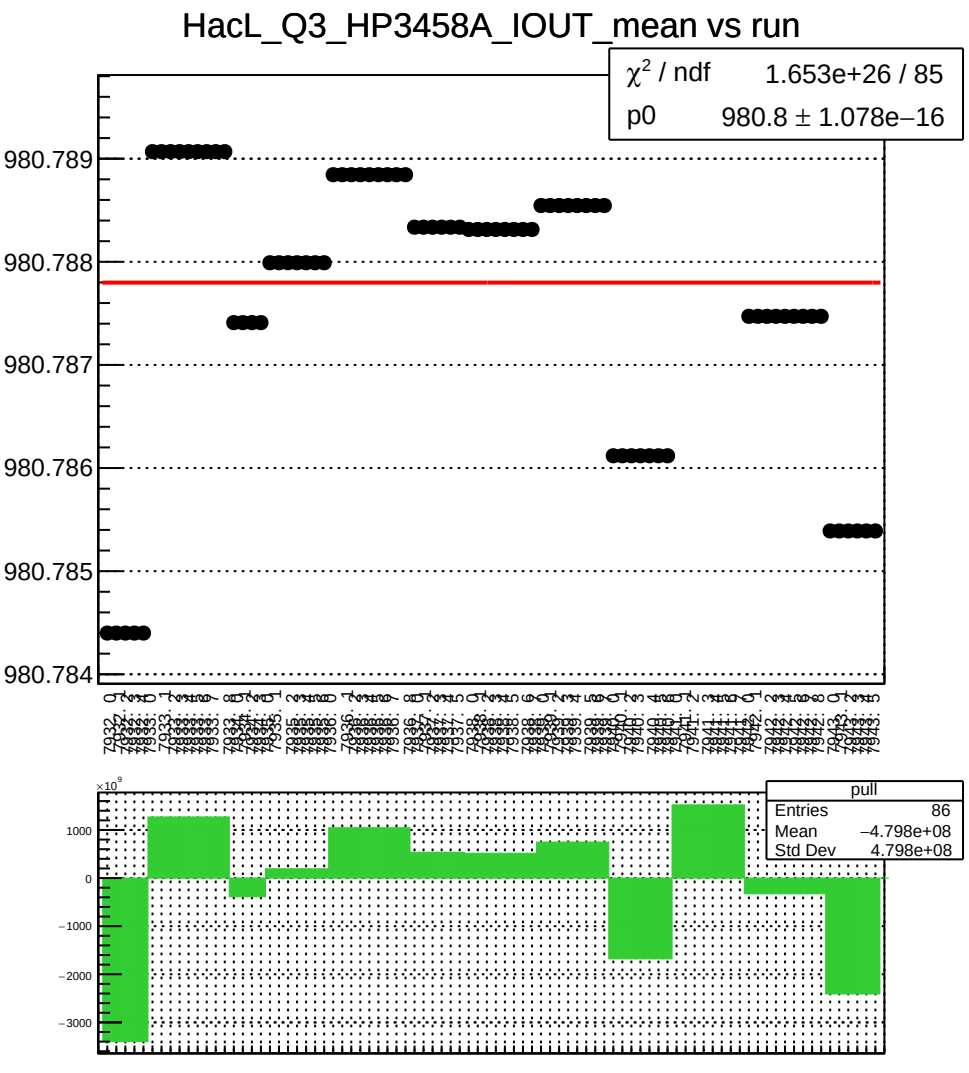

pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

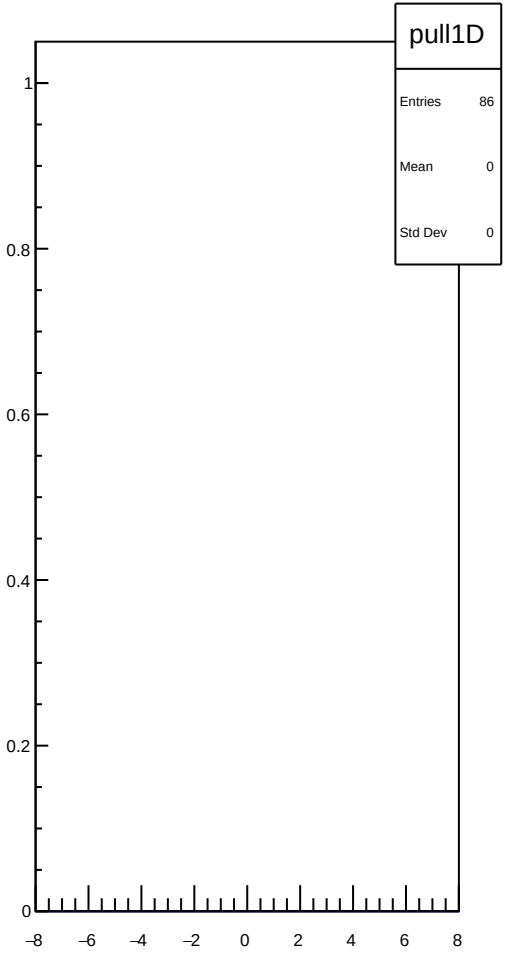

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 3.867e+26 / 85
p0 931.8 ± 1.078e−16
931.774
931.773
931.772
931.771
931.77
931.769
931.768
931.767
931.766
931.765
×10⁹
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 86
Mean 1.248e+09
Std Dev 1.248e+09

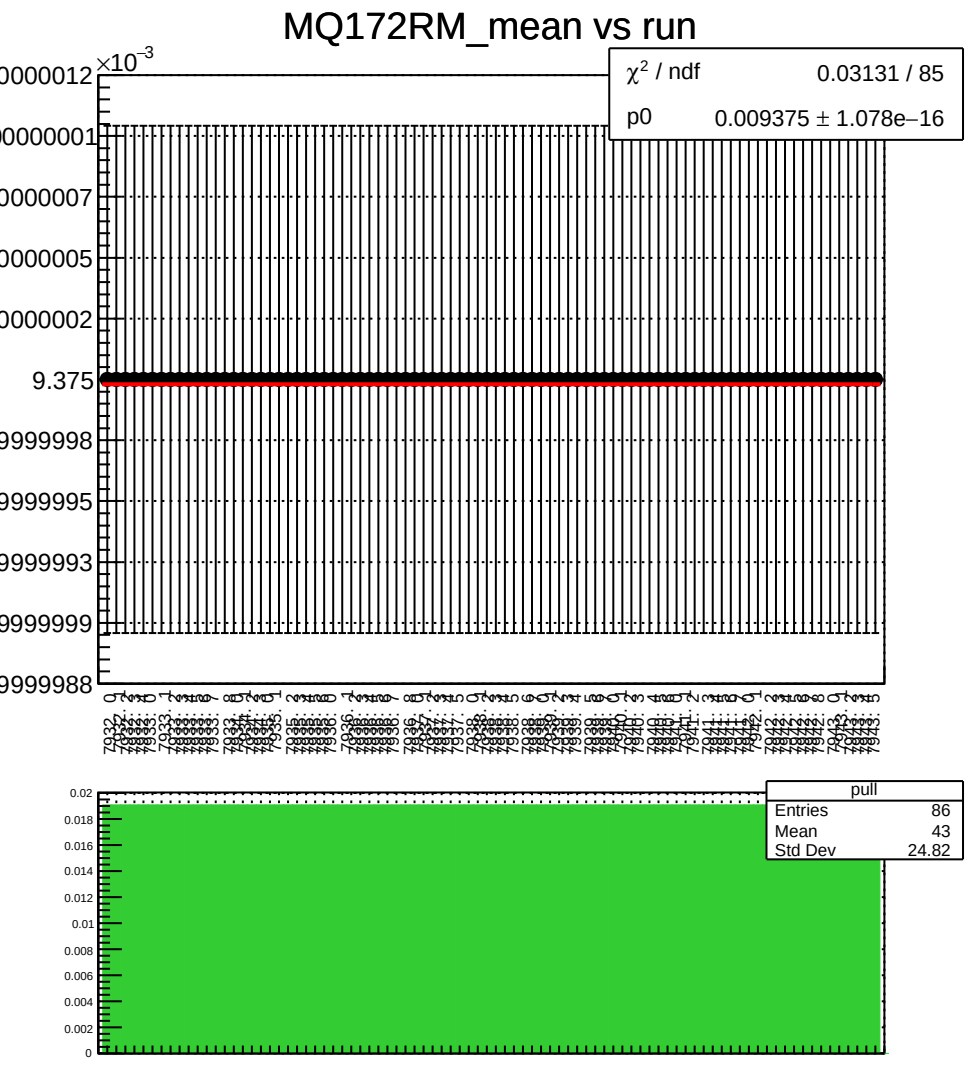

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

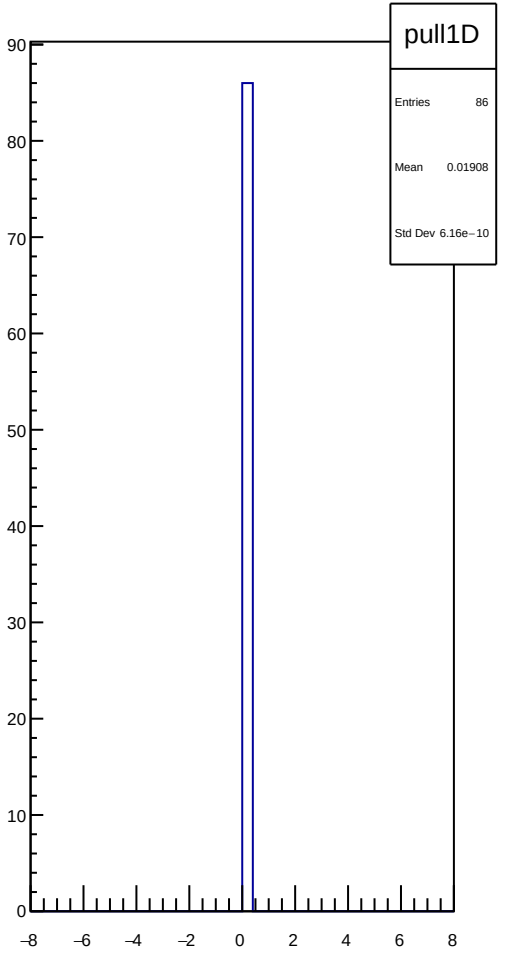

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 5.183e+26 / 85
p0 741 ± 1.078e−16
741.031
741.03
741.029
741.028
741.027
741.026
741.025
741.024
741.023
×10⁹
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 86
Mean 1.586e+09
Std Dev 1.586e+09

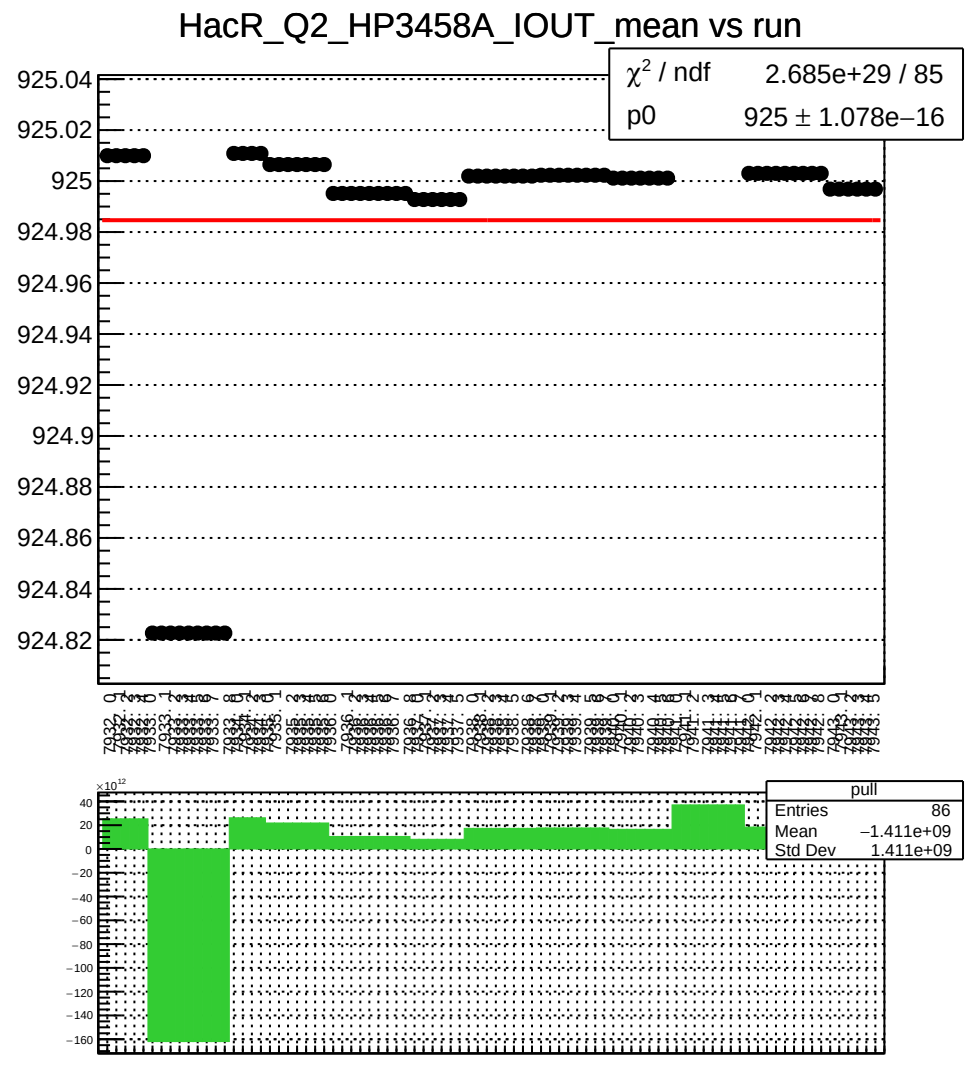

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

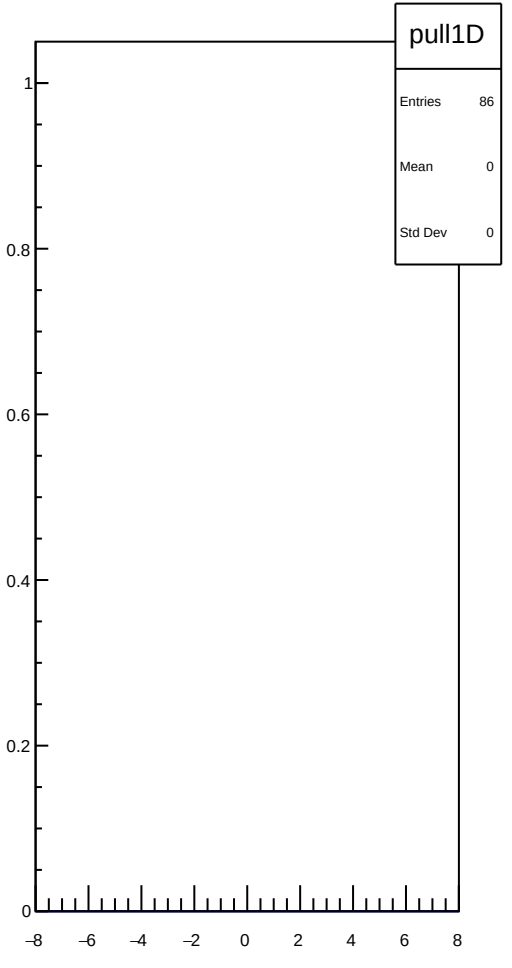

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.653e+26 / 85
p0 980.8 ± 1.078e−16
980.789
980.788
980.787
980.786
980.785
980.784
×10⁹
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −4.798e+08
Std Dev 4.798e+08

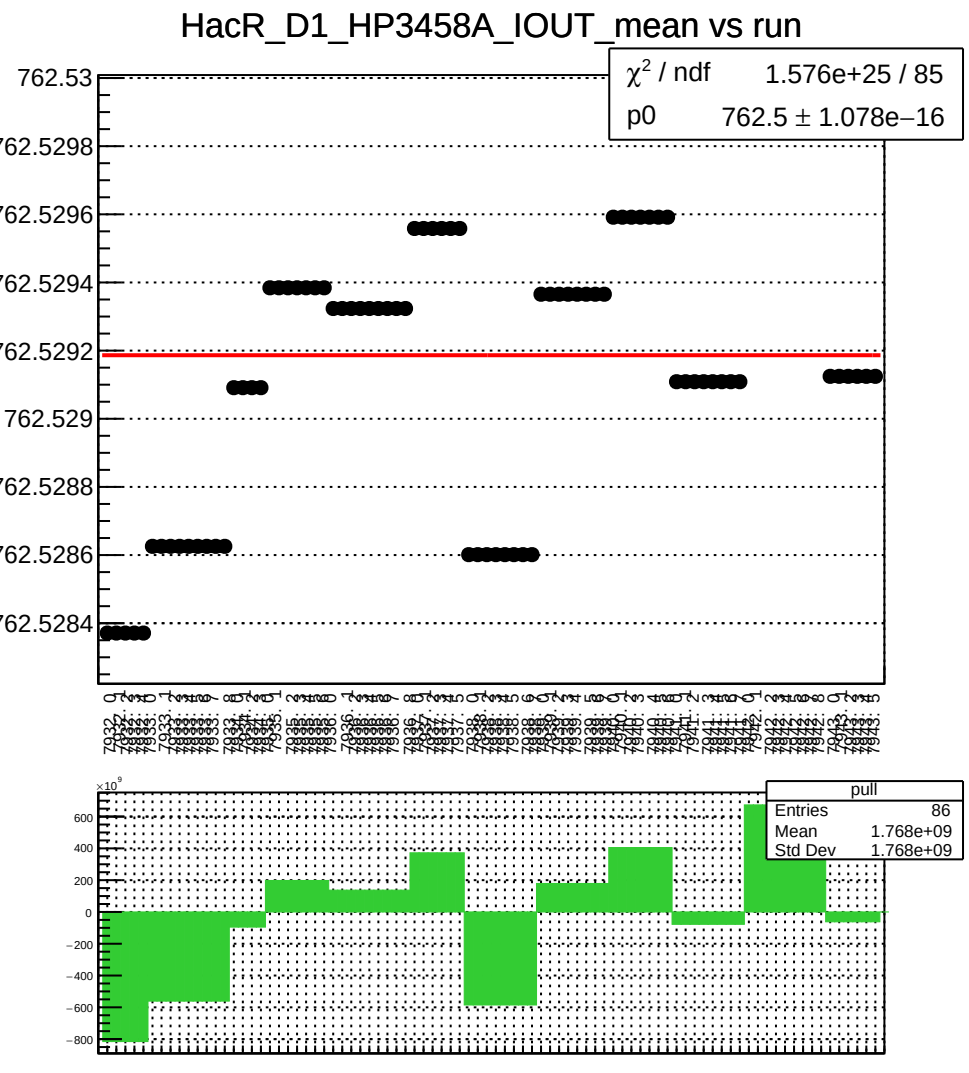

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

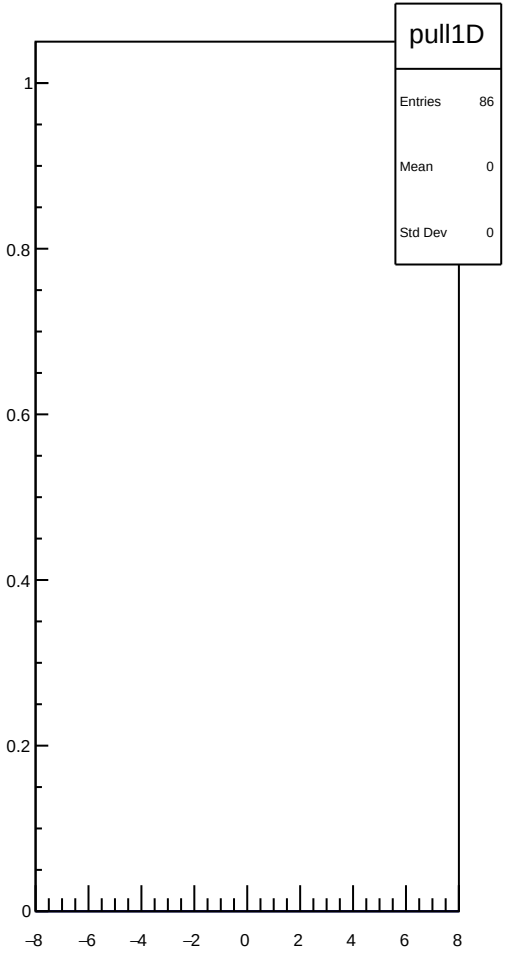

MQ172RM_mean vs run
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
×10⁻³
pull
Entries 86
Mean 43
Std Dev 24.82

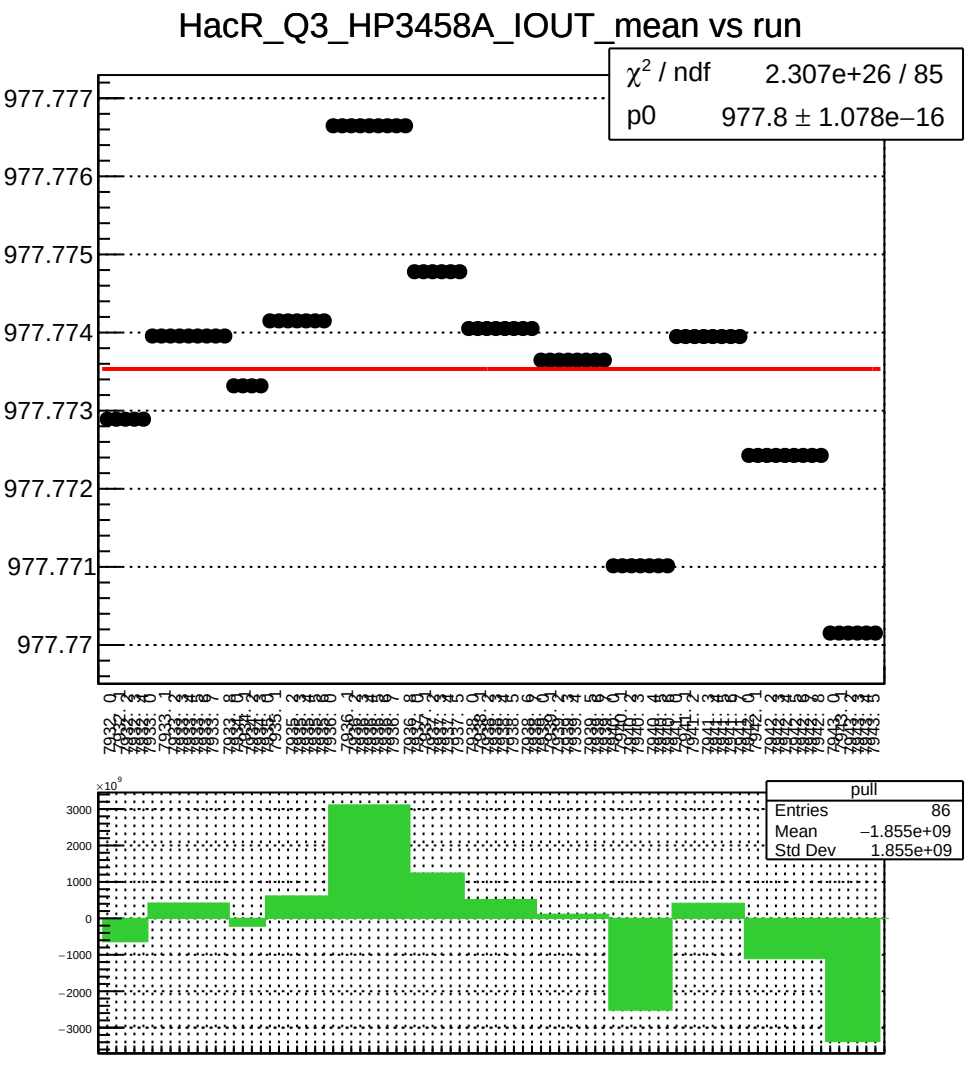

pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

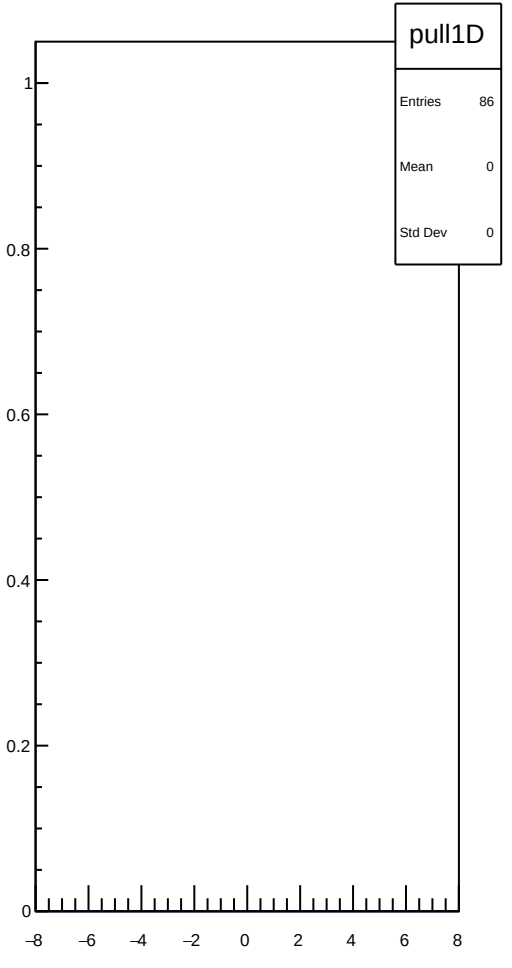

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 2.685e+29 / 85
p0 925 ± 1.078e−16
925.04
925.02
925
924.98
924.96
924.94
924.92
924.9
924.88
924.86
924.84
924.82
×10¹²
40
20
0
−20
−40
−60
−80
−100
−120
−140
−160
pull
Entries 86
Mean −1.411e+09
Std Dev 1.411e+09

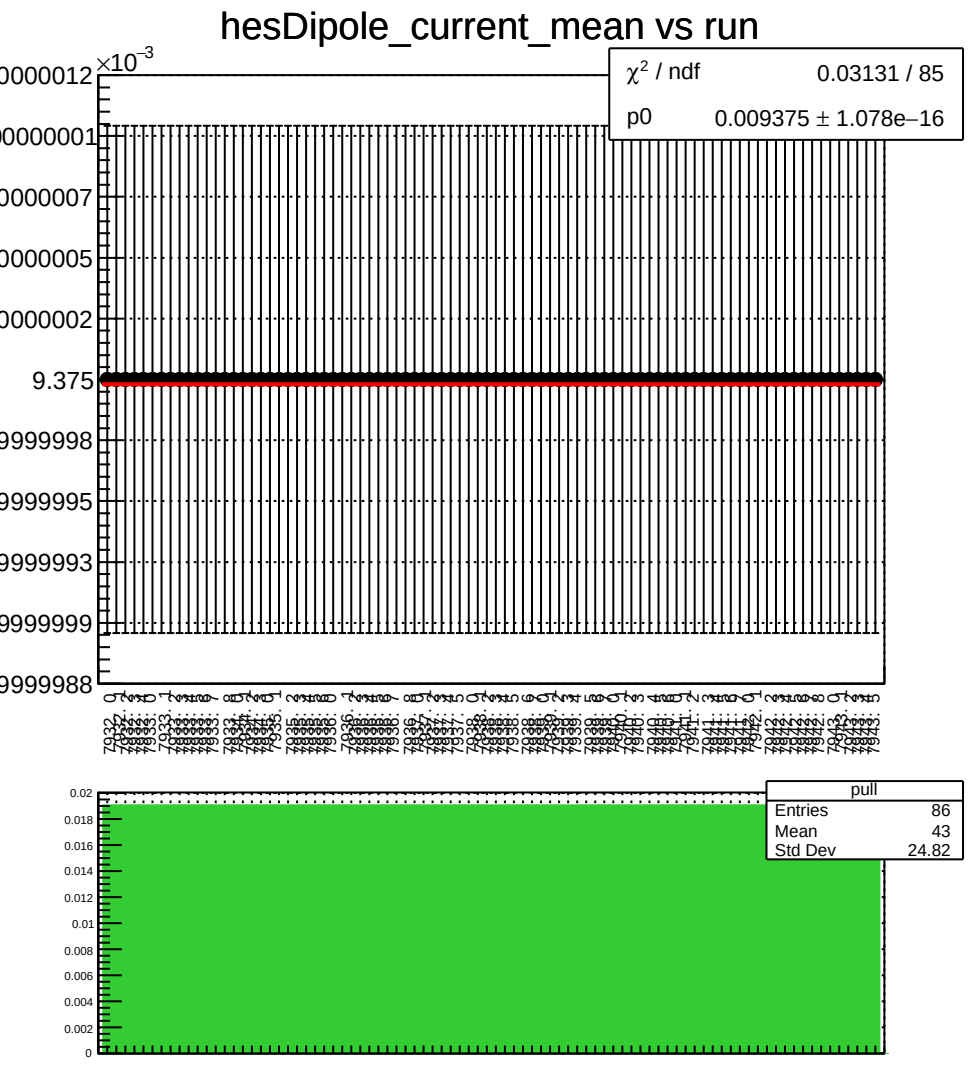

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

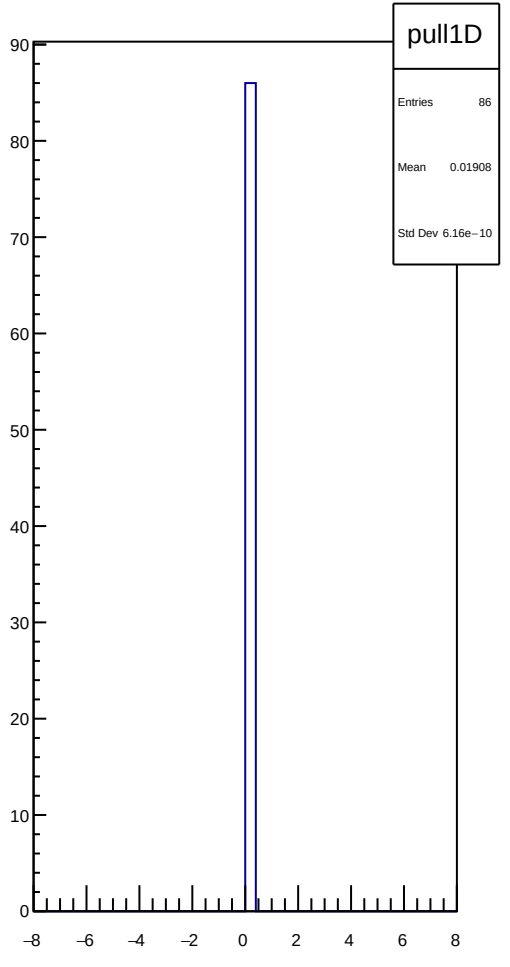

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.576e+25 / 85
p0 762.5 ± 1.078e−16
762.53
762.5298
762.5296
762.5294
762.5292
762.529
762.5288
762.5286
762.5284
×10⁹
600
400
200
0
−200
−400
−600
−800
pull
Entries 86
Mean 1.768e+09
Std Dev 1.768e+09

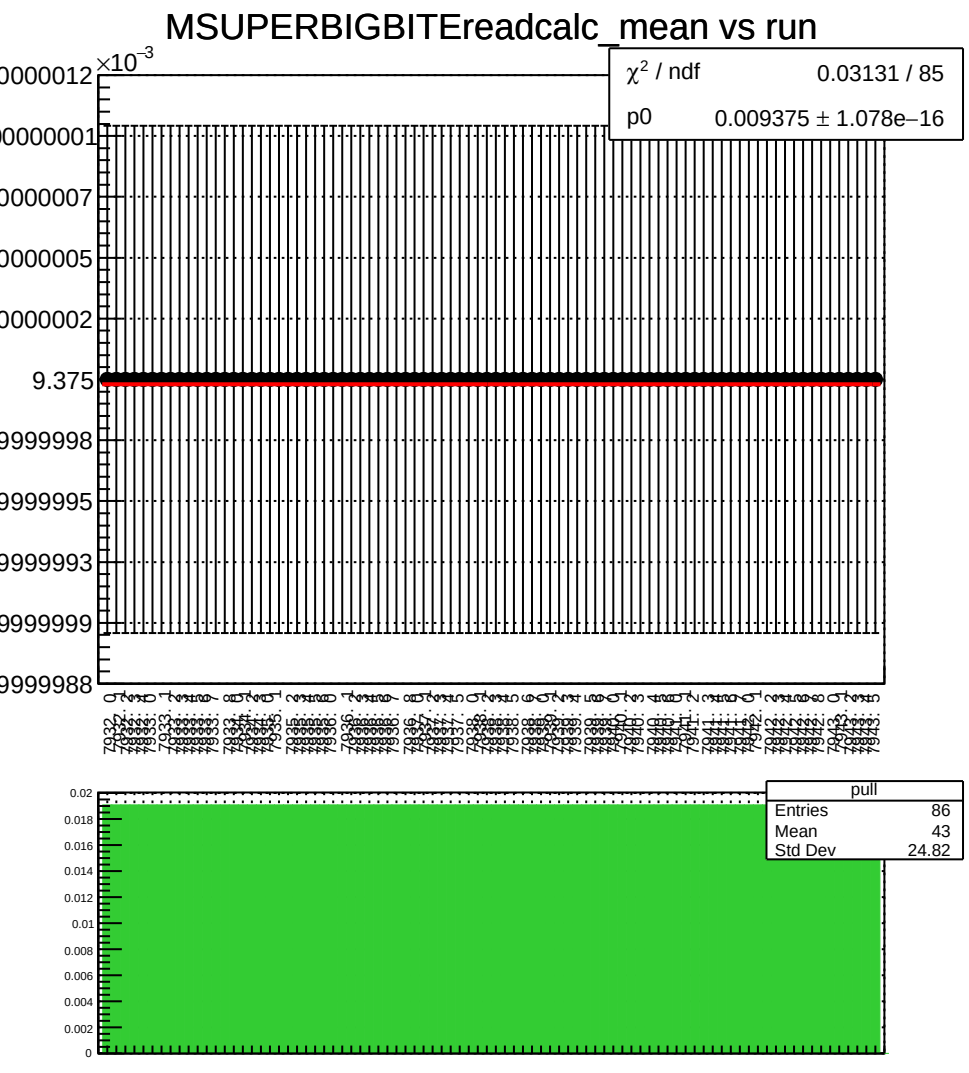

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

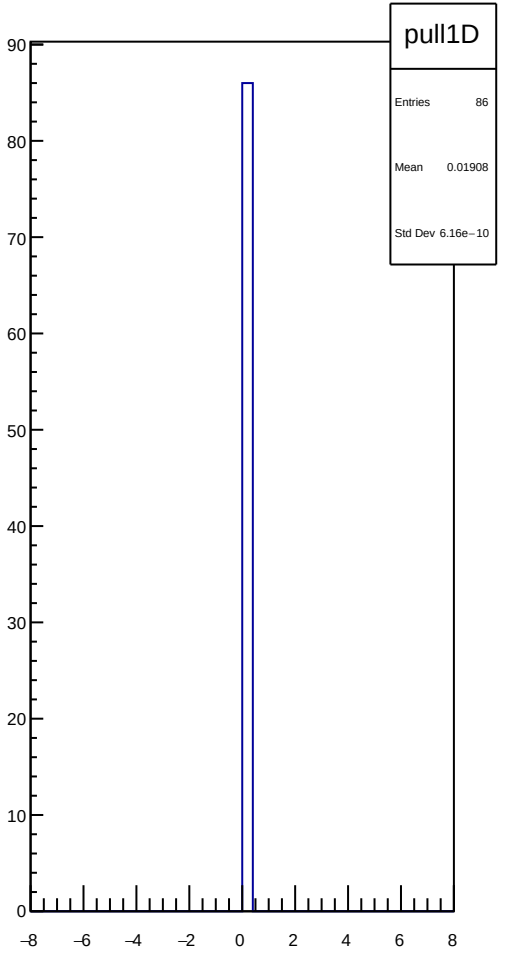

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.307e+26 / 85
p0 977.8 ± 1.078e−16
977.777
977.776
977.775
977.774
977.773
977.772
977.771
977.77
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −1.855e+09
Std Dev 1.855e+09

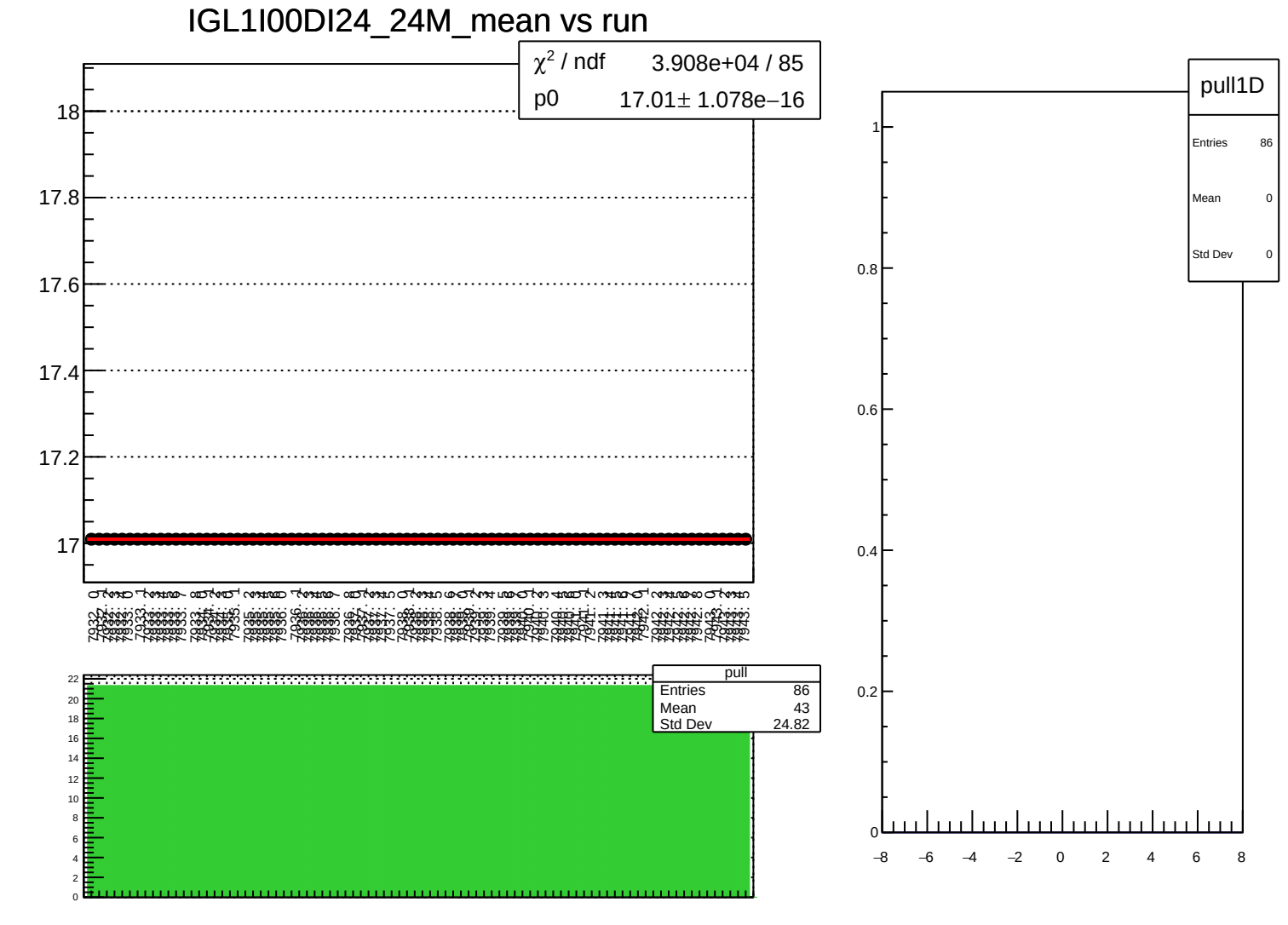

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

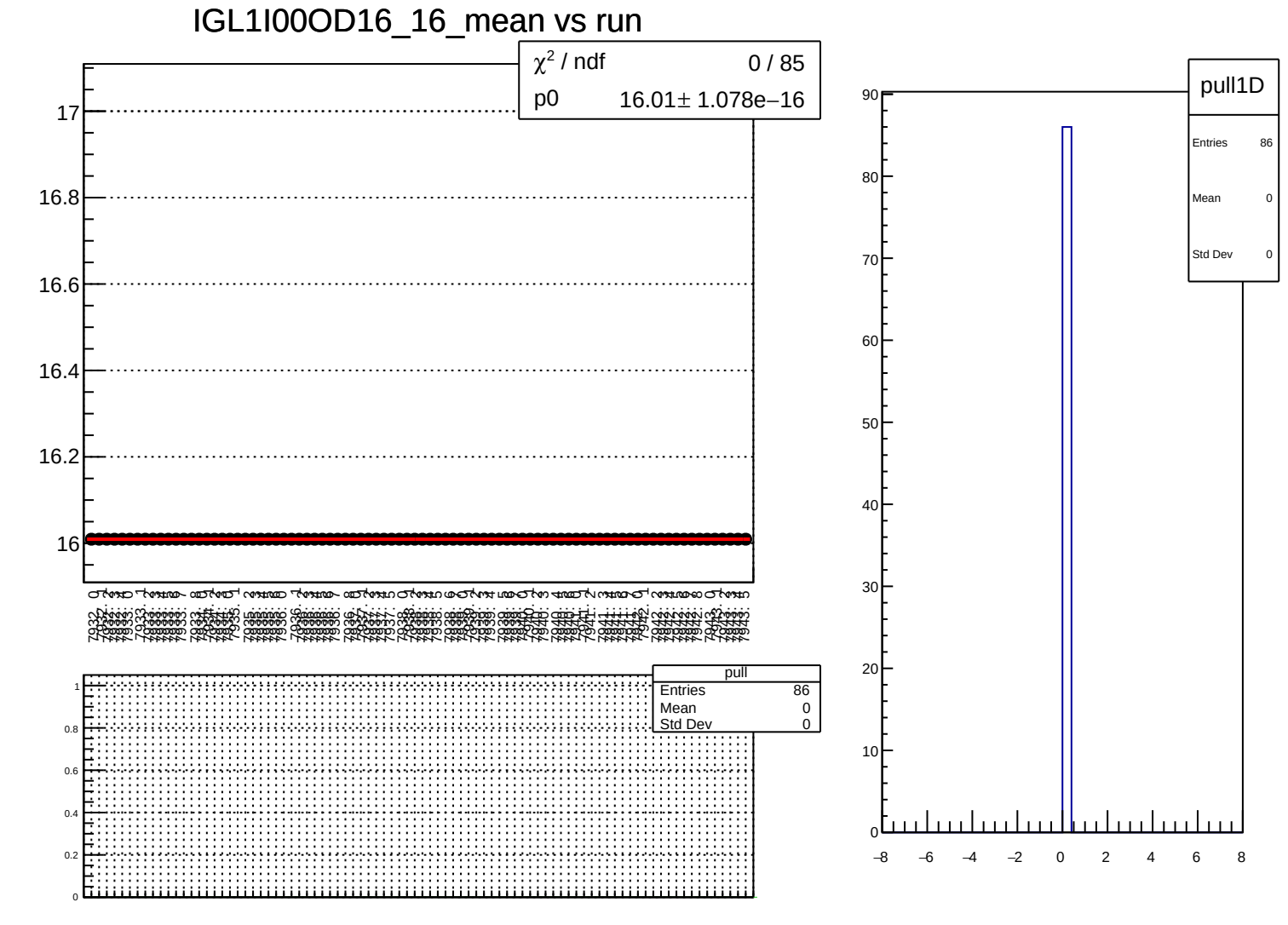

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
pull
Entries 86
Mean 43
Std Dev 24.82

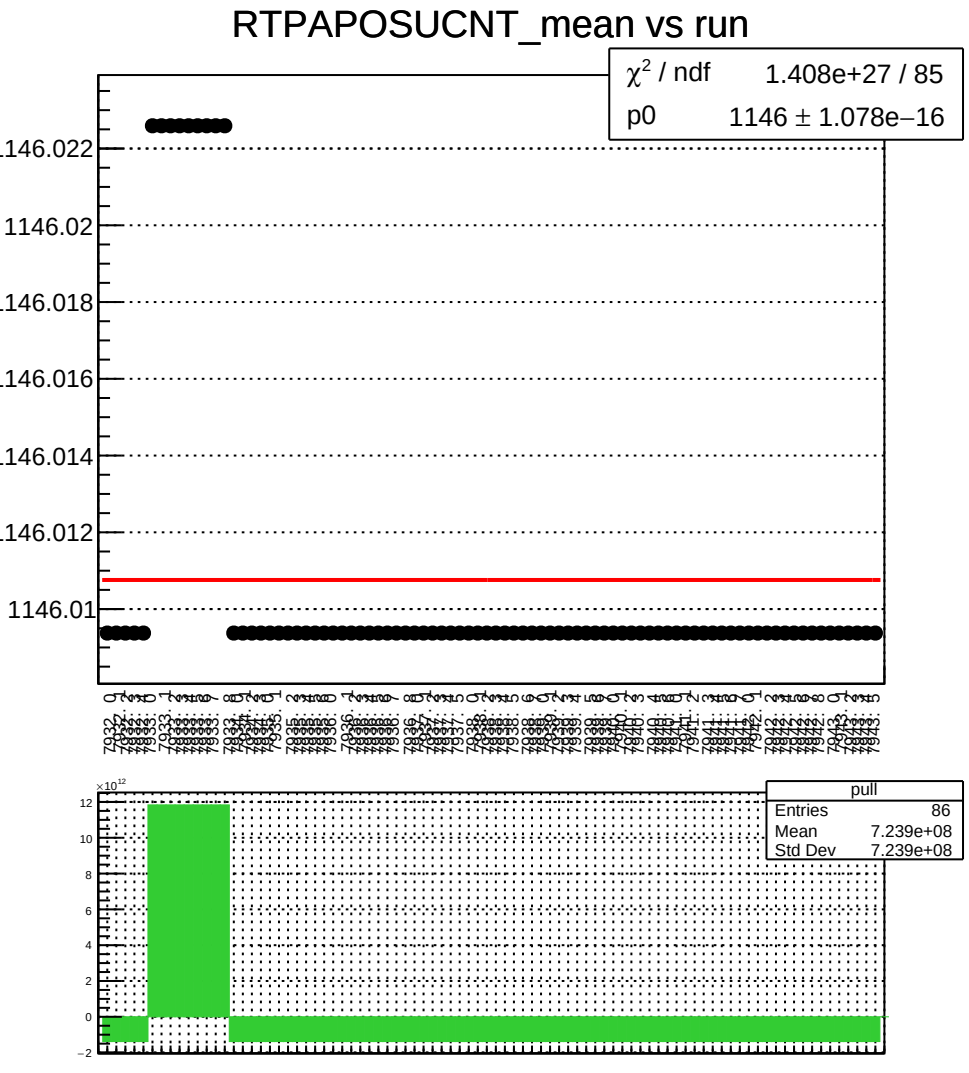

pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

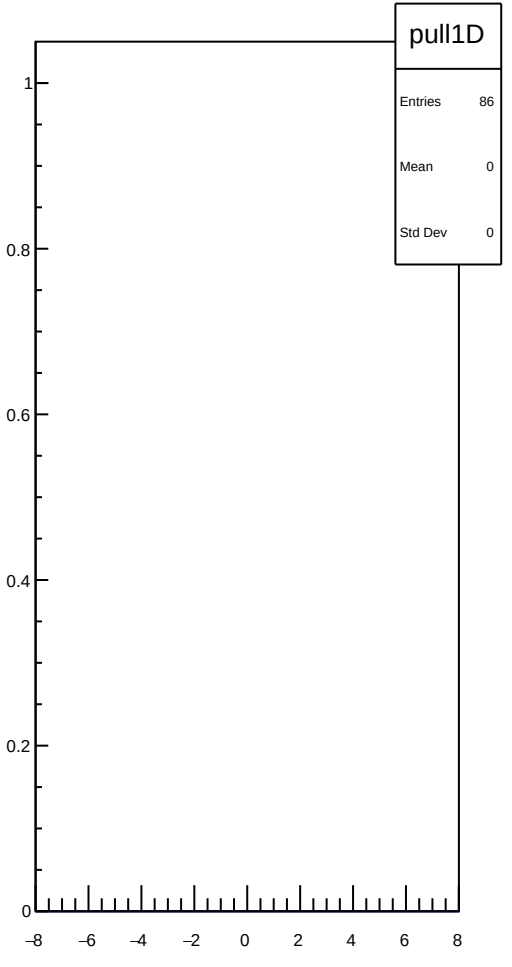

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
×10⁻³
pull
Entries 86
Mean 43
Std Dev 24.82

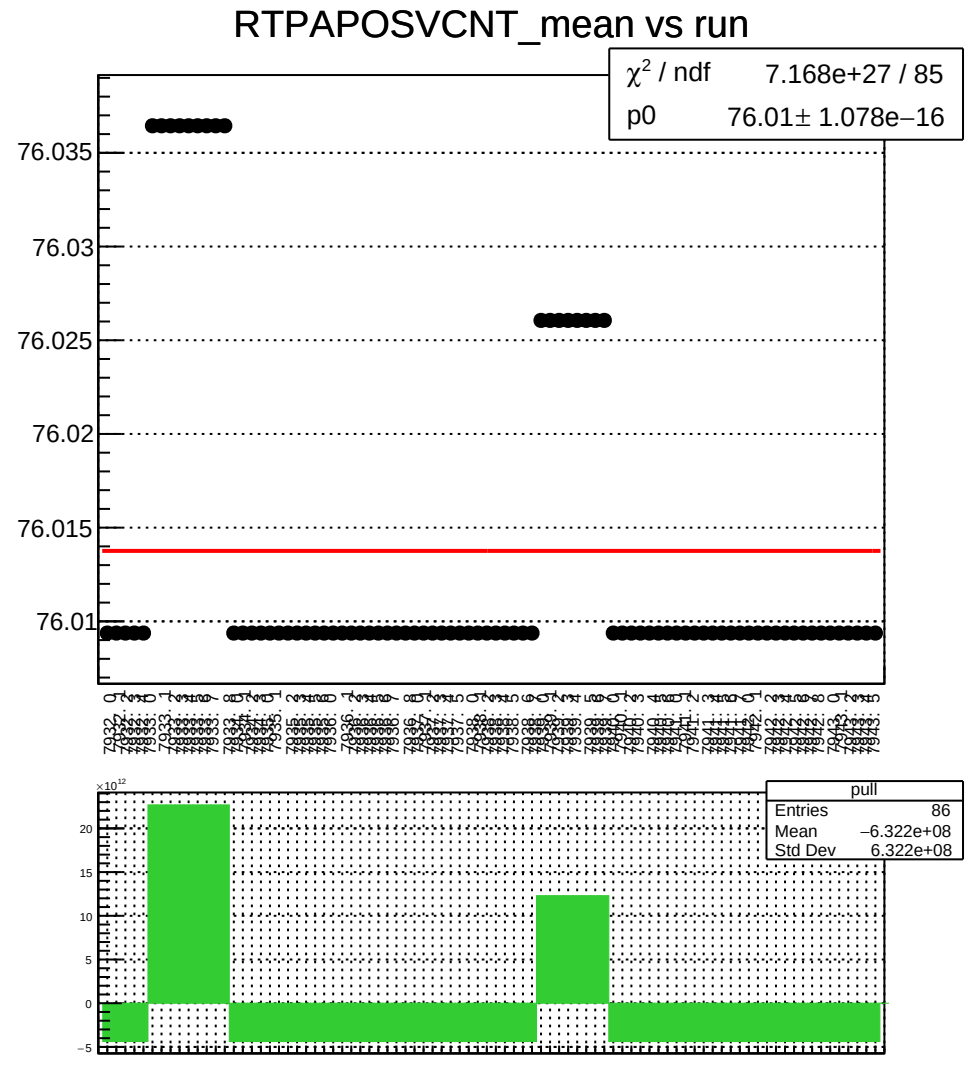

pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

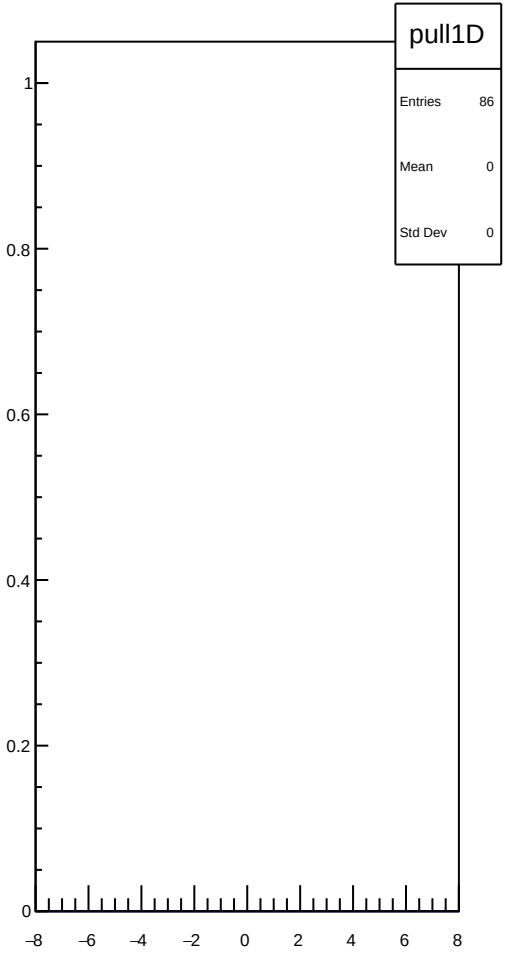

IGL1I00DI24_24M_mean vs run
χ² / ndf 3.908e+04 / 85
p0 17.01± 1.078e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 86
Mean 43
Std Dev 24.82
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 0 / 85
p0 16.01± 1.078e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 86
Mean 0
Std Dev 0
90
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 1.408e+27 / 85
p0 1146 ± 1.078e−16
1146.022
1146.02
1146.018
1146.016
1146.014
1146.012
1146.01
pull
Entries 86
Mean 7.239e+08
Std Dev 7.239e+08
×10¹²
12
10
8
6
4
2
0
−2


pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 7.168e+27 / 85
p0 76.01± 1.078e−16
76.035
76.03
76.025
76.02
76.015
76.01
pull
Entries 86
Mean −6.322e+08
Std Dev 6.322e+08
×10¹²
20
15
10
5
0
−5


pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8