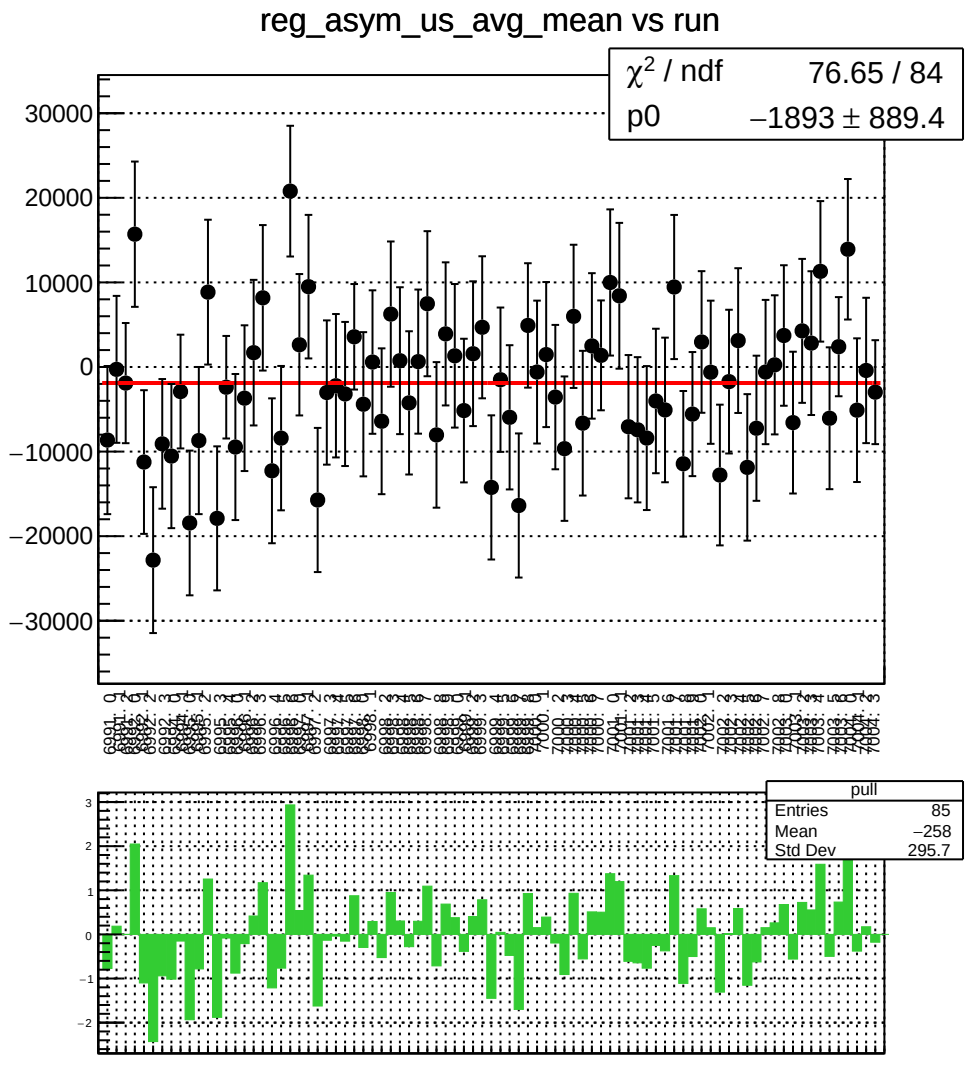
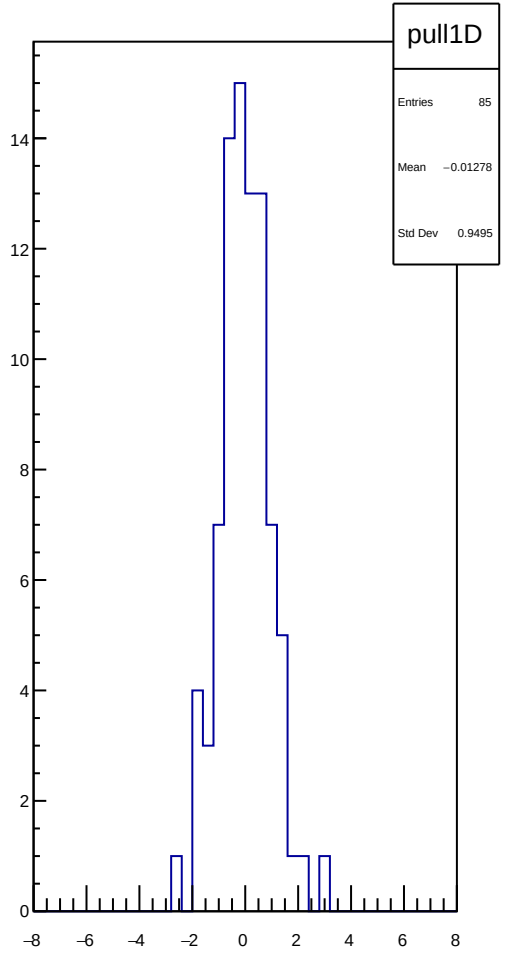
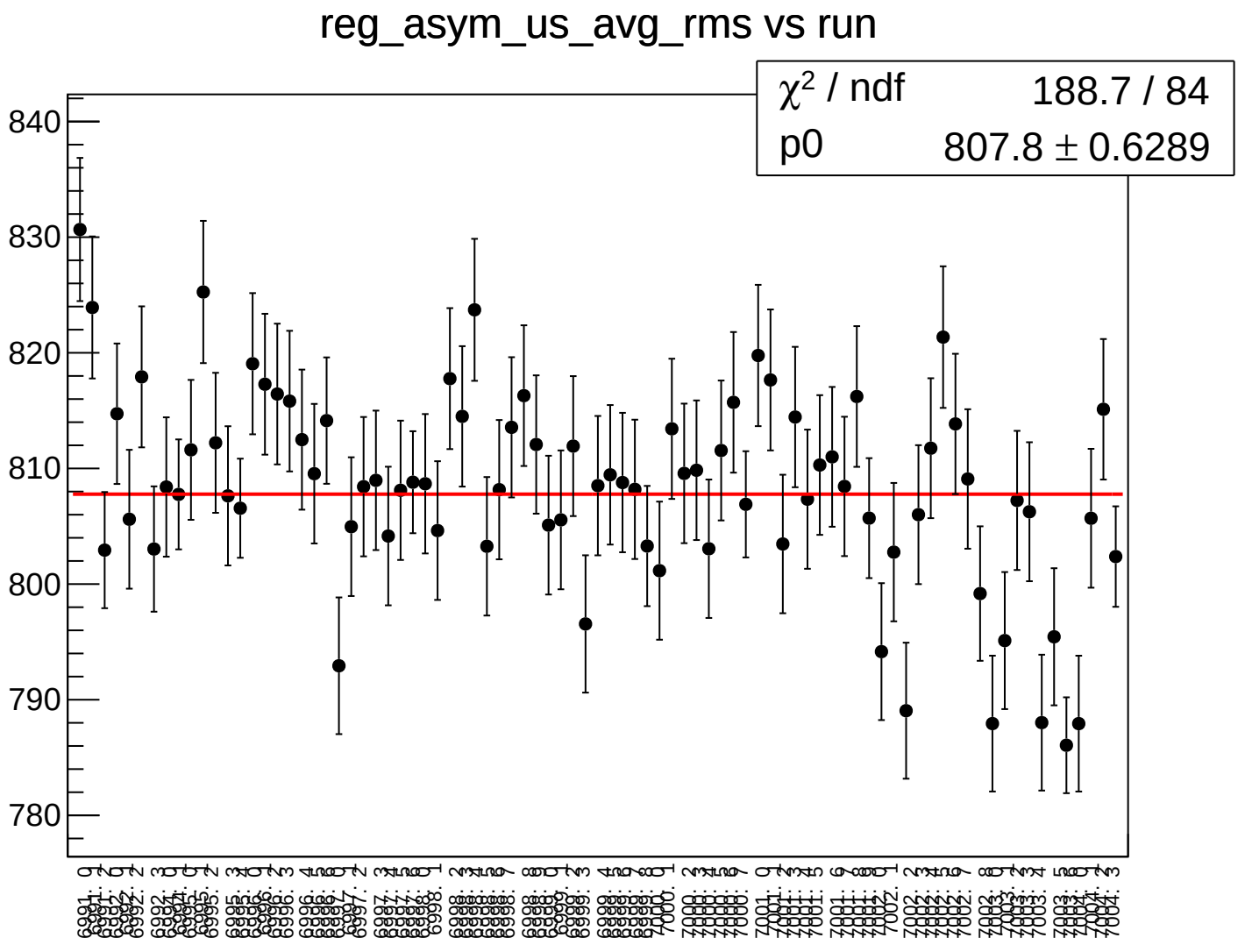
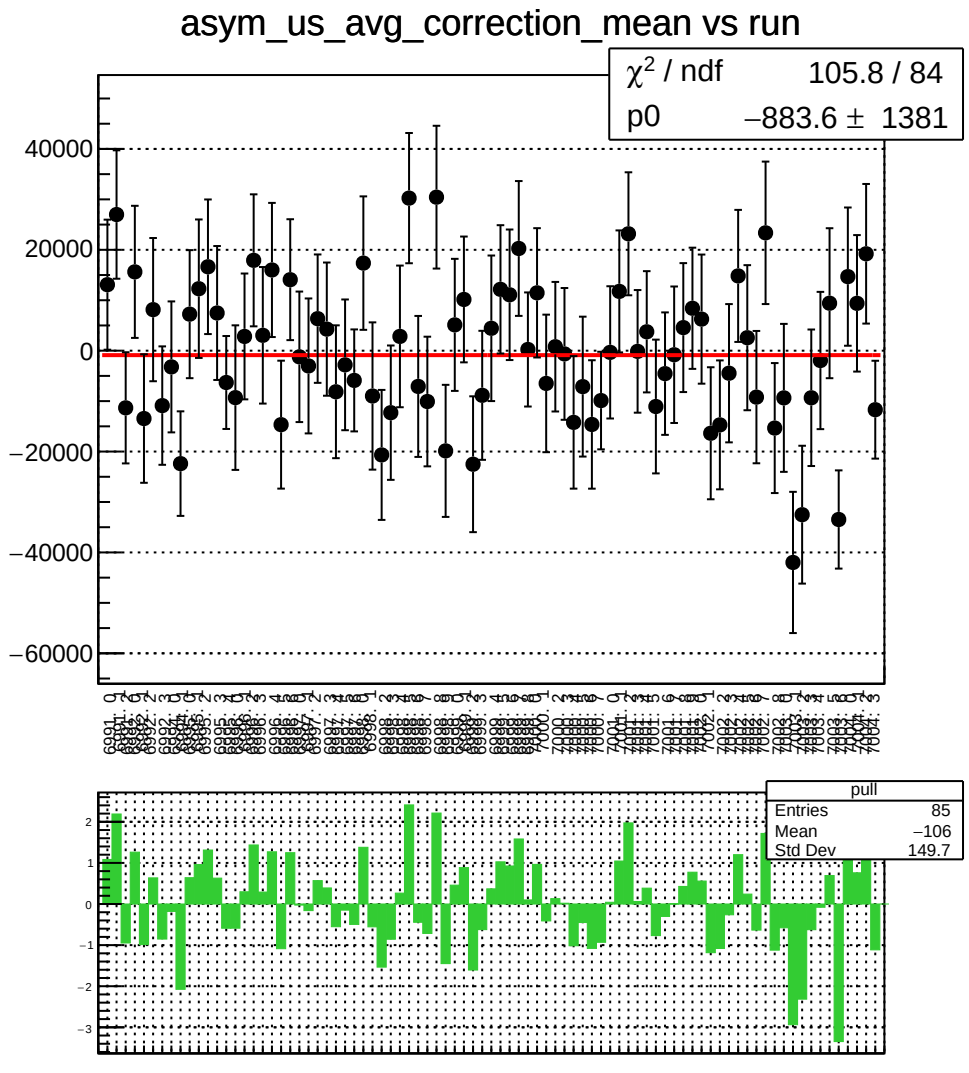
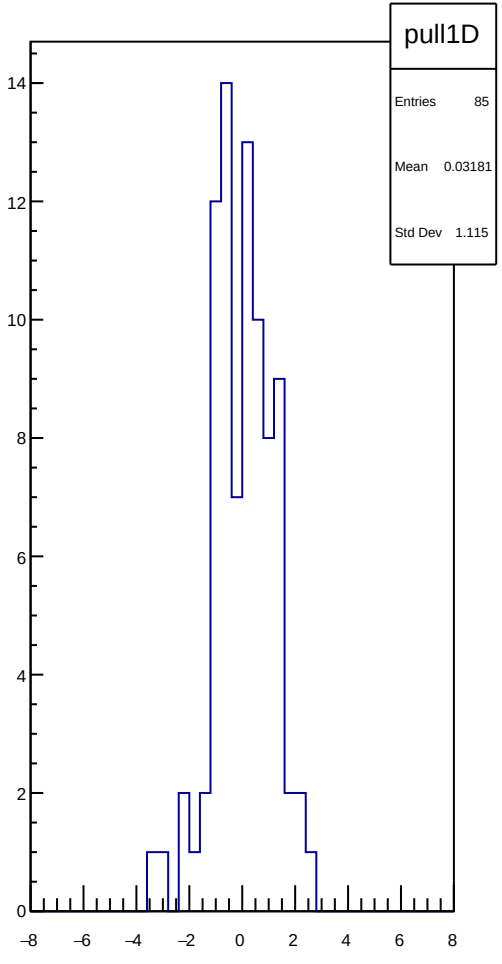
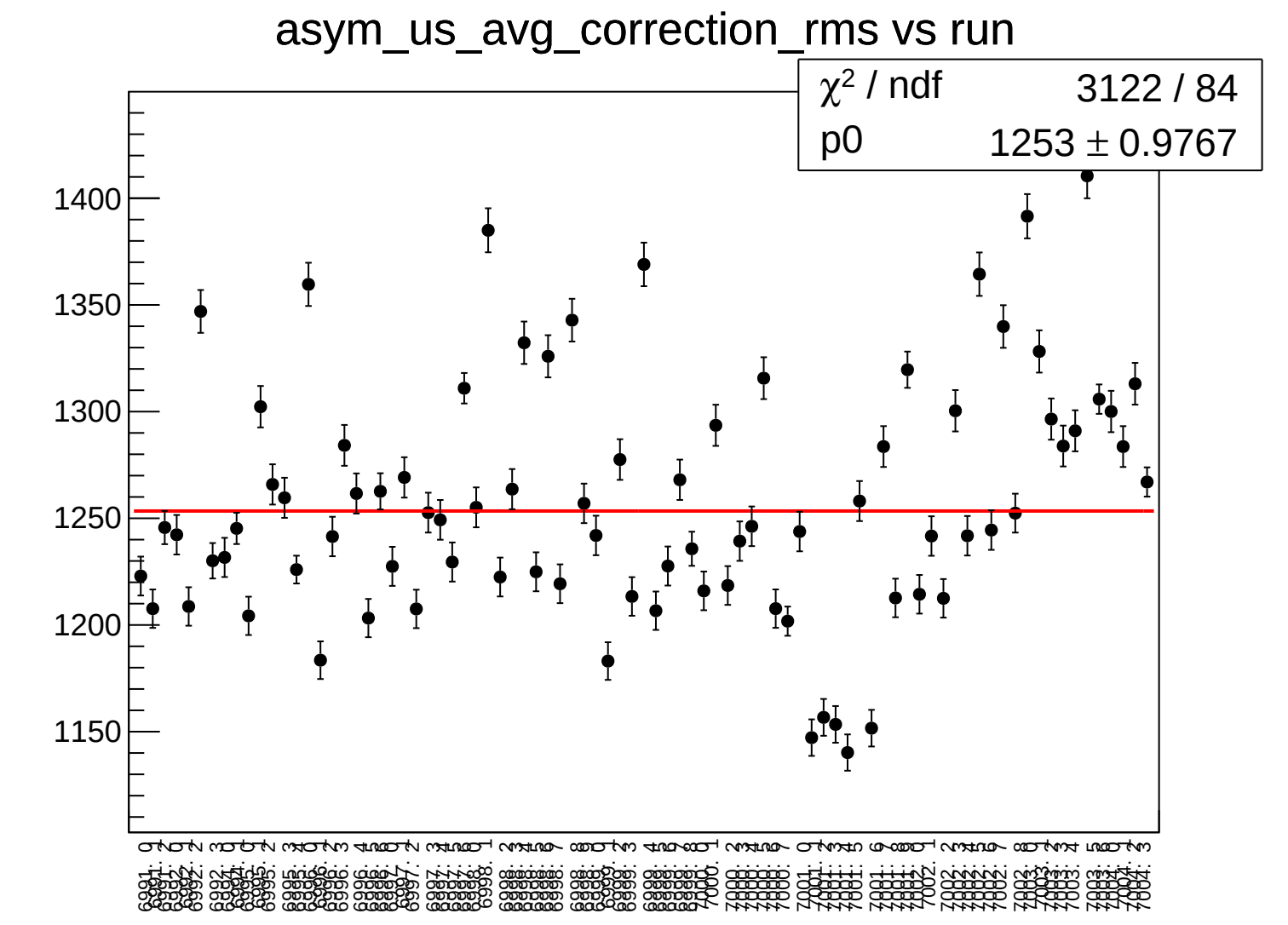

reg_asym_us_avg_mean vs run
χ² / ndf 76.65 / 84
p0 −1893 ± 889.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −258
Std Dev 295.7
3
2
1
0
−1
−2

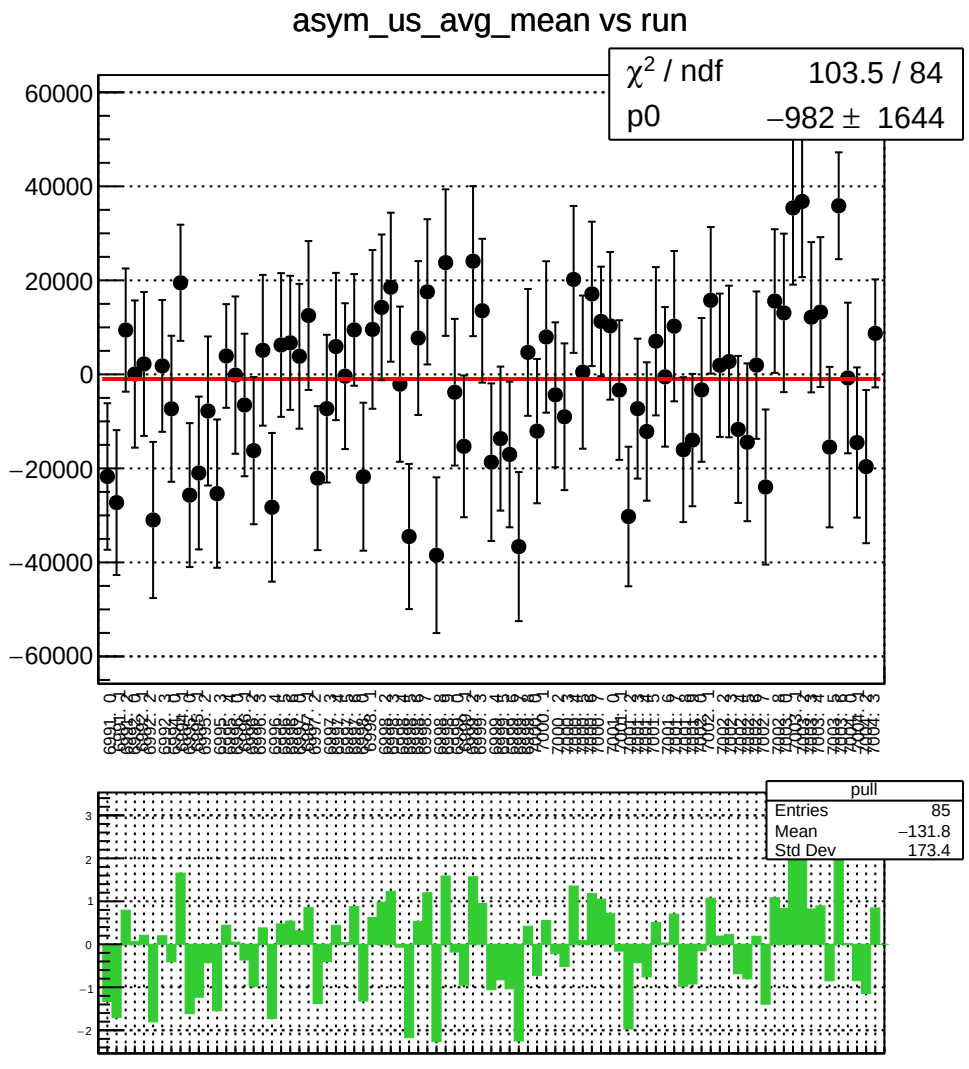

pull1D
Entries 85
Mean −0.01278
Std Dev 0.9495
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

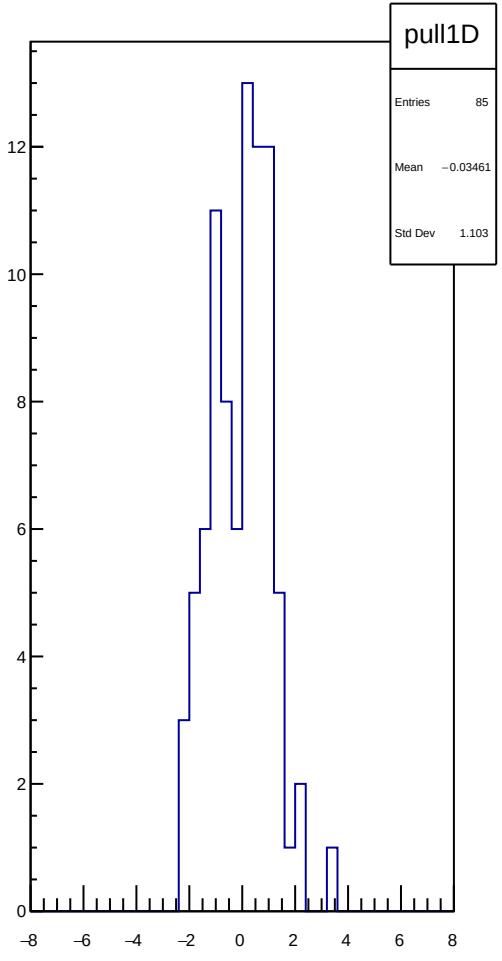

reg_asym_us_avg_rms vs run
χ² / ndf 188.7 / 84
p0 807.8 ± 0.6289
840
830
820
810
800
790
780

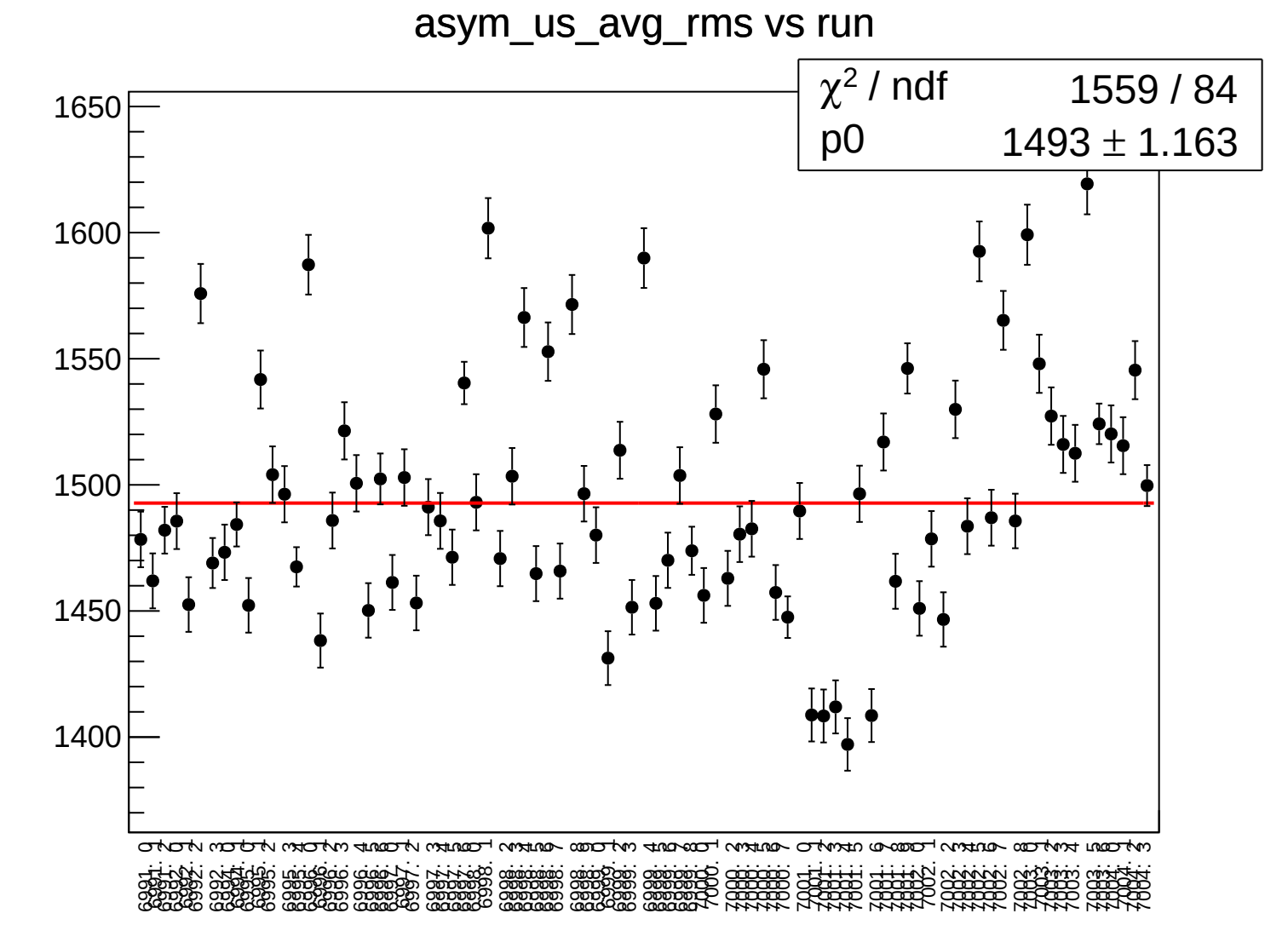

asym_us_avg_correction_mean vs run
χ² / ndf 105.8 / 84
p0 −883.6 ± 1381
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −106
Std Dev 149.7
2
1
0
−1
−2
−3

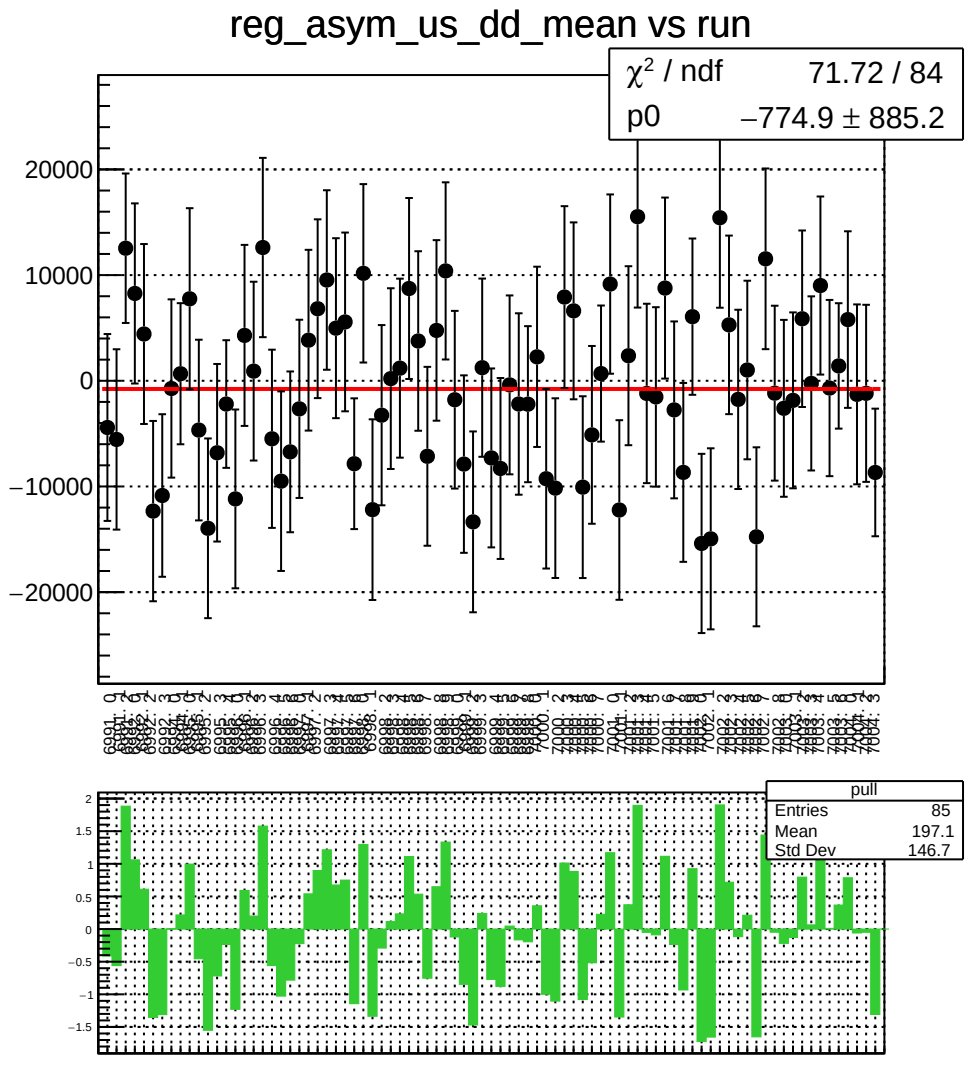

pull1D
Entries 85
Mean 0.03181
Std Dev 1.115
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

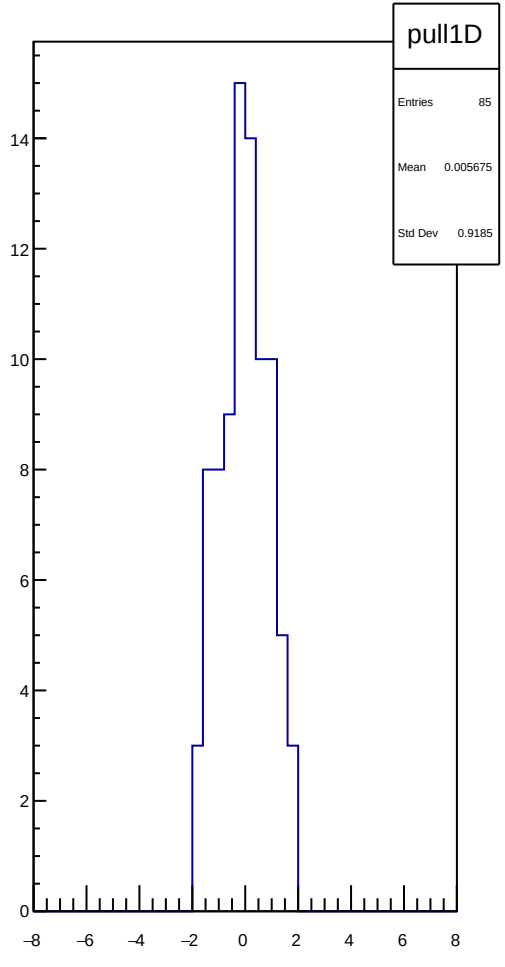

asym_us_avg_correction_rms vs run
χ² / ndf 3122 / 84
p0 1253 ± 0.9767
1400
1350
1300
1250
1200
1150

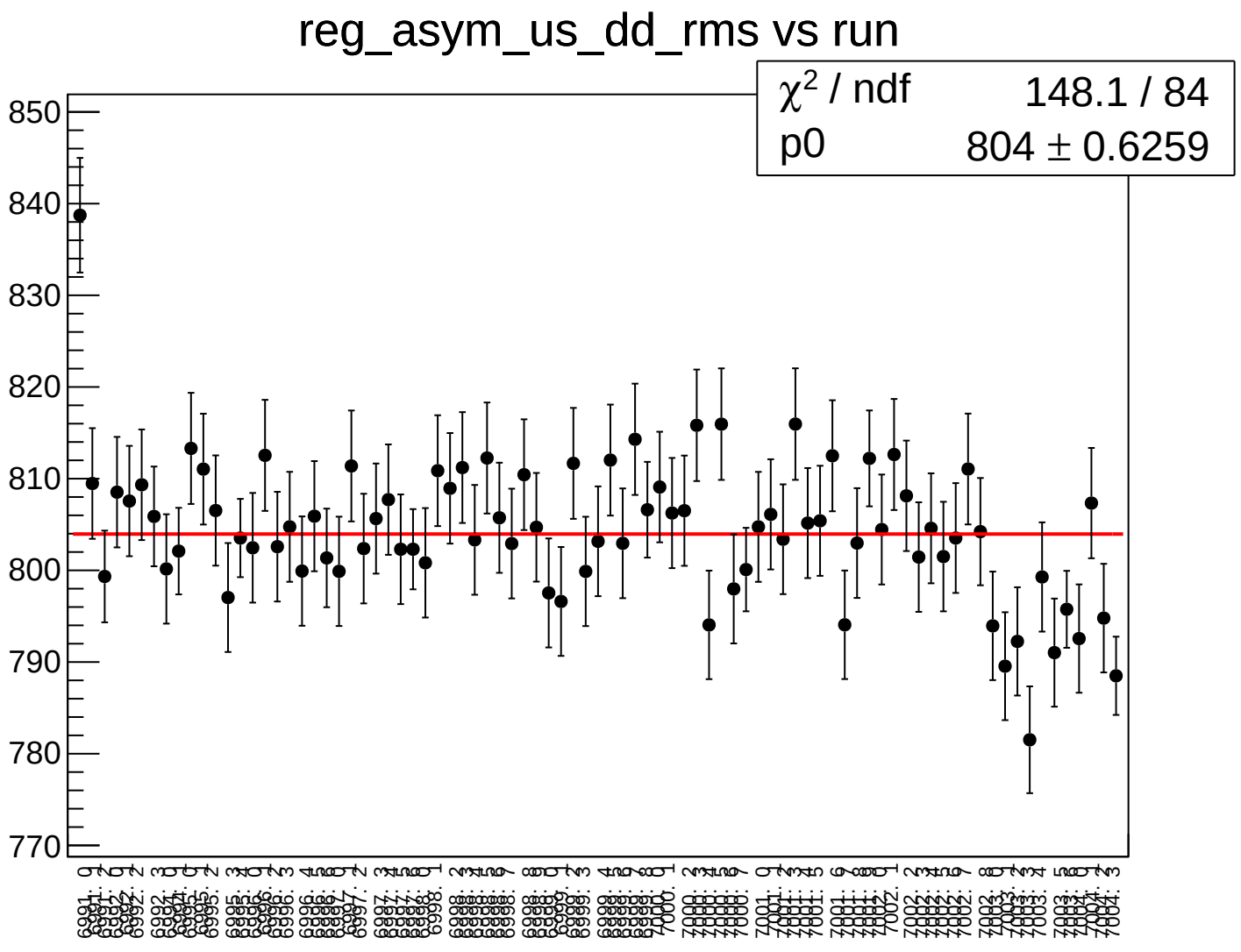

asym_us_avg_mean vs run
χ² / ndf 103.5 / 84
p0 −982 ± 1644
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −131.8
Std Dev 173.4
3
2
1
0
−1
−2

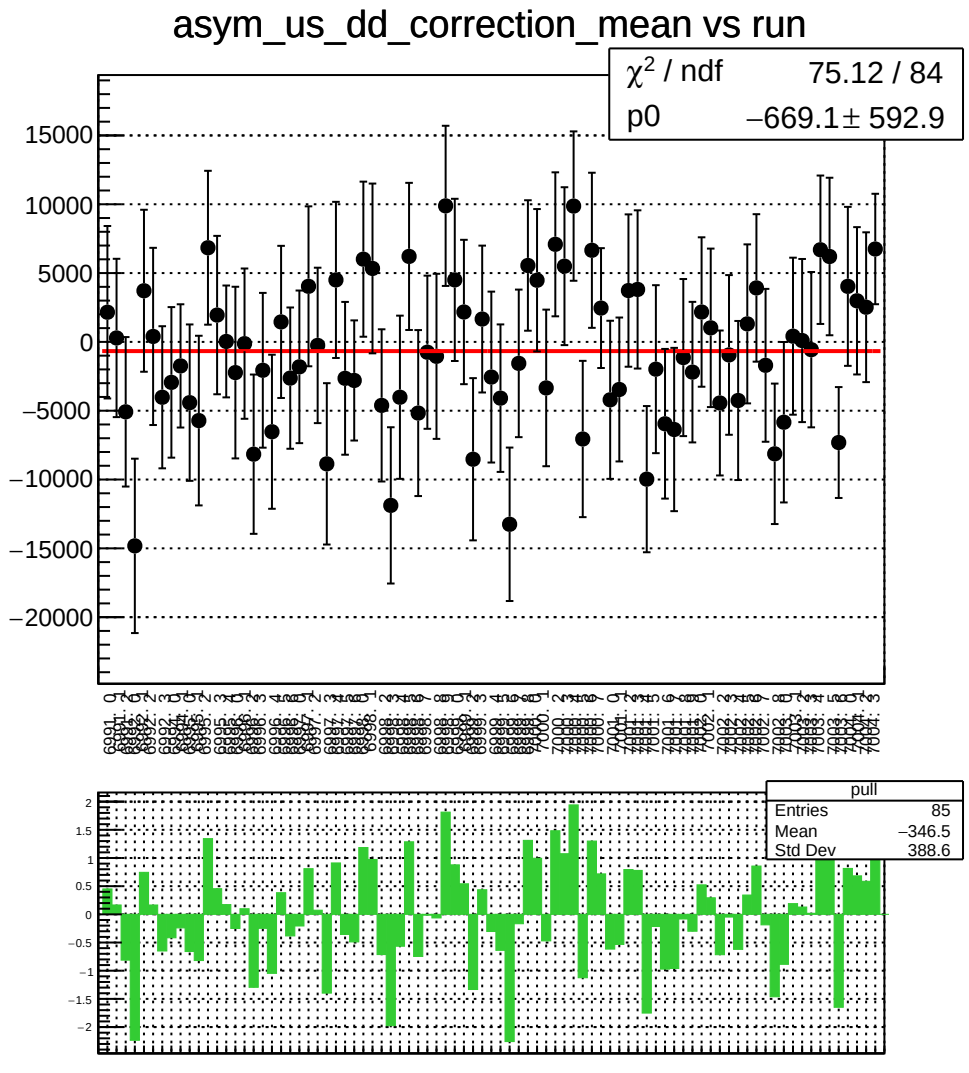

pull1D
Entries 85
Mean −0.03461
Std Dev 1.103
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

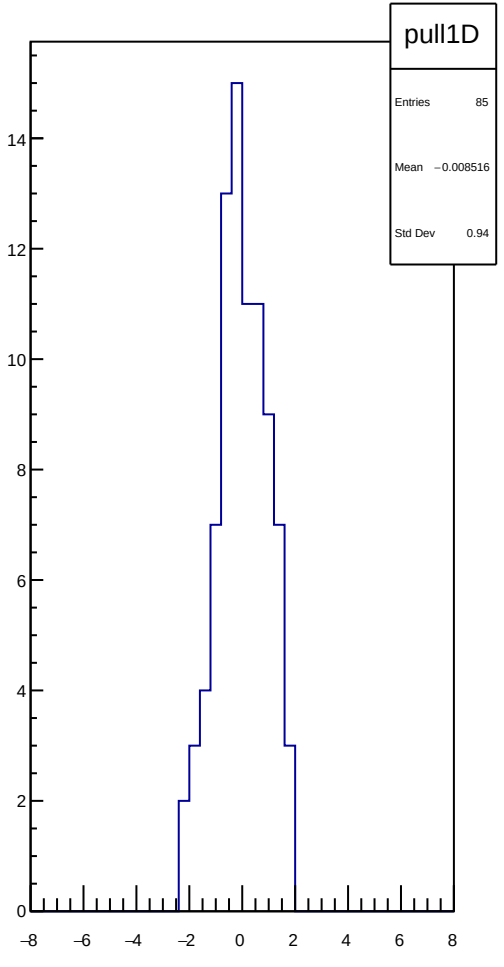

asym_us_avg_rms vs run
χ² / ndf 1559 / 84
p0 1493 ± 1.163
1650
1600
1550
1500
1450
1400

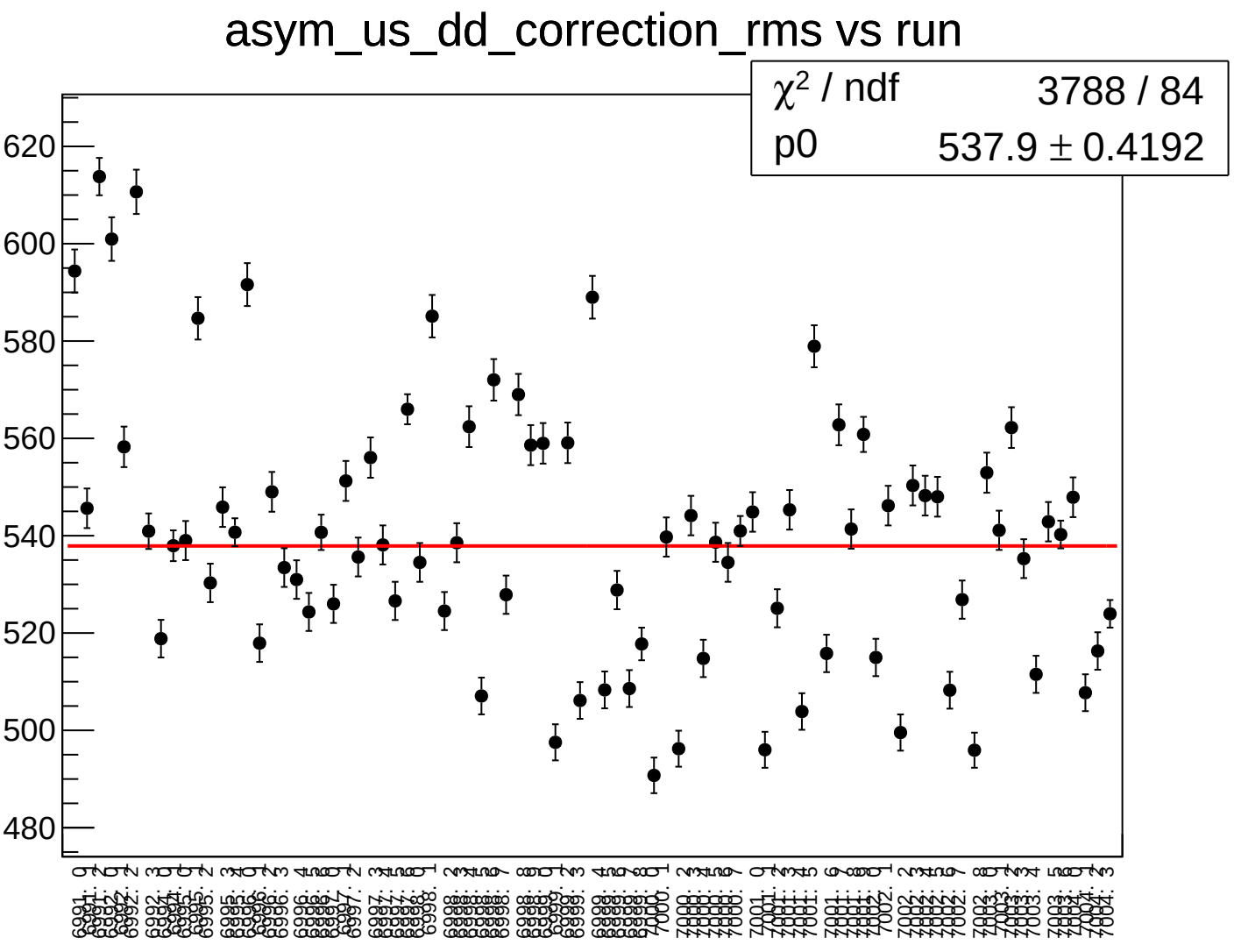

reg_asym_us_dd_mean vs run
χ² / ndf 71.72 / 84
p0 −774.9 ± 885.2
20000
10000
0
−10000
−20000
pull
Entries 85
Mean 197.1
Std Dev 146.7
2
1.5
1
0.5
0
−0.5
−1
−1.5

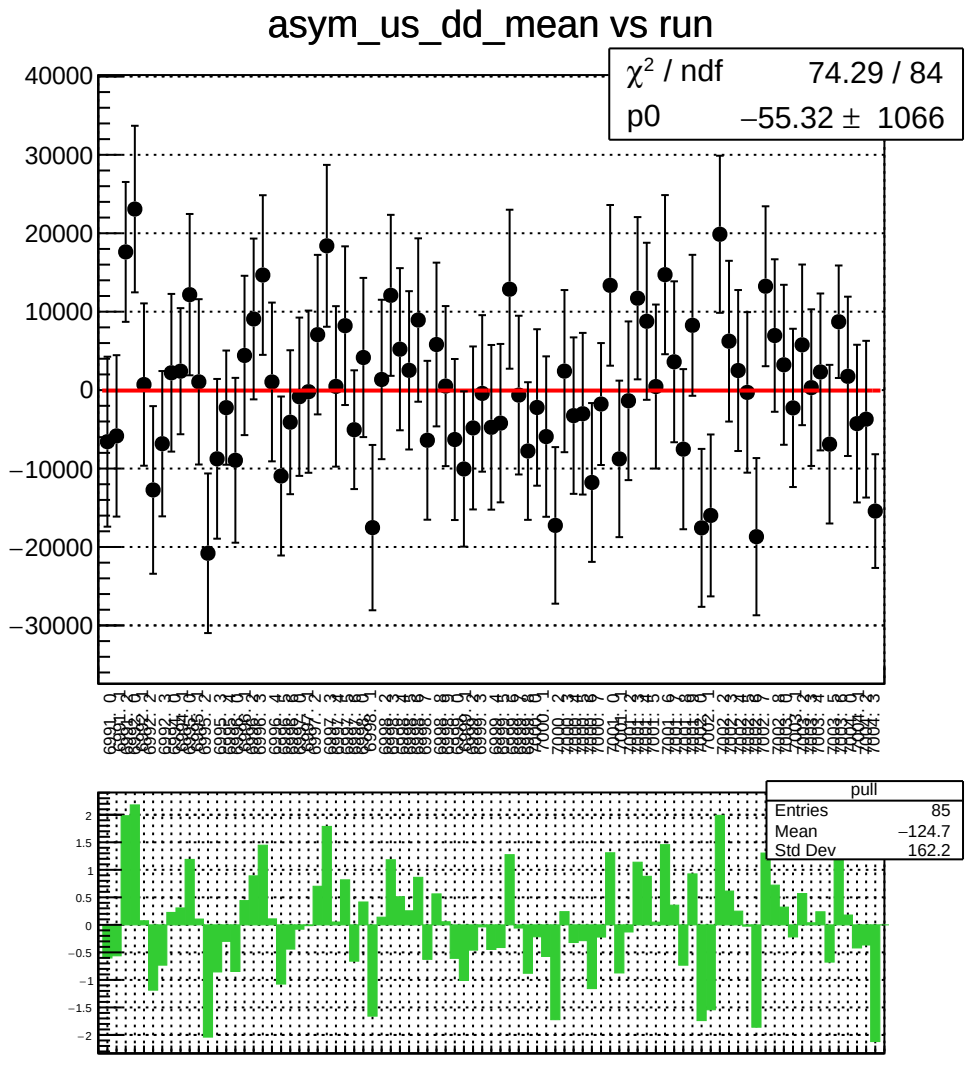

pull1D
Entries 85
Mean 0.005675
Std Dev 0.9185
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

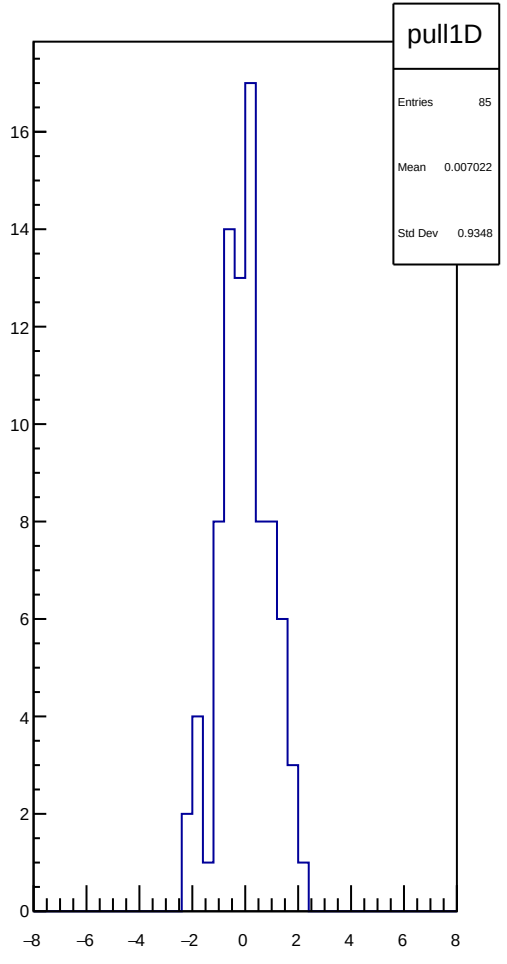

reg_asym_us_dd_rms vs run
χ² / ndf 148.1 / 84
p0 804 ± 0.6259
850
840
830
820
810
800
790
780
770

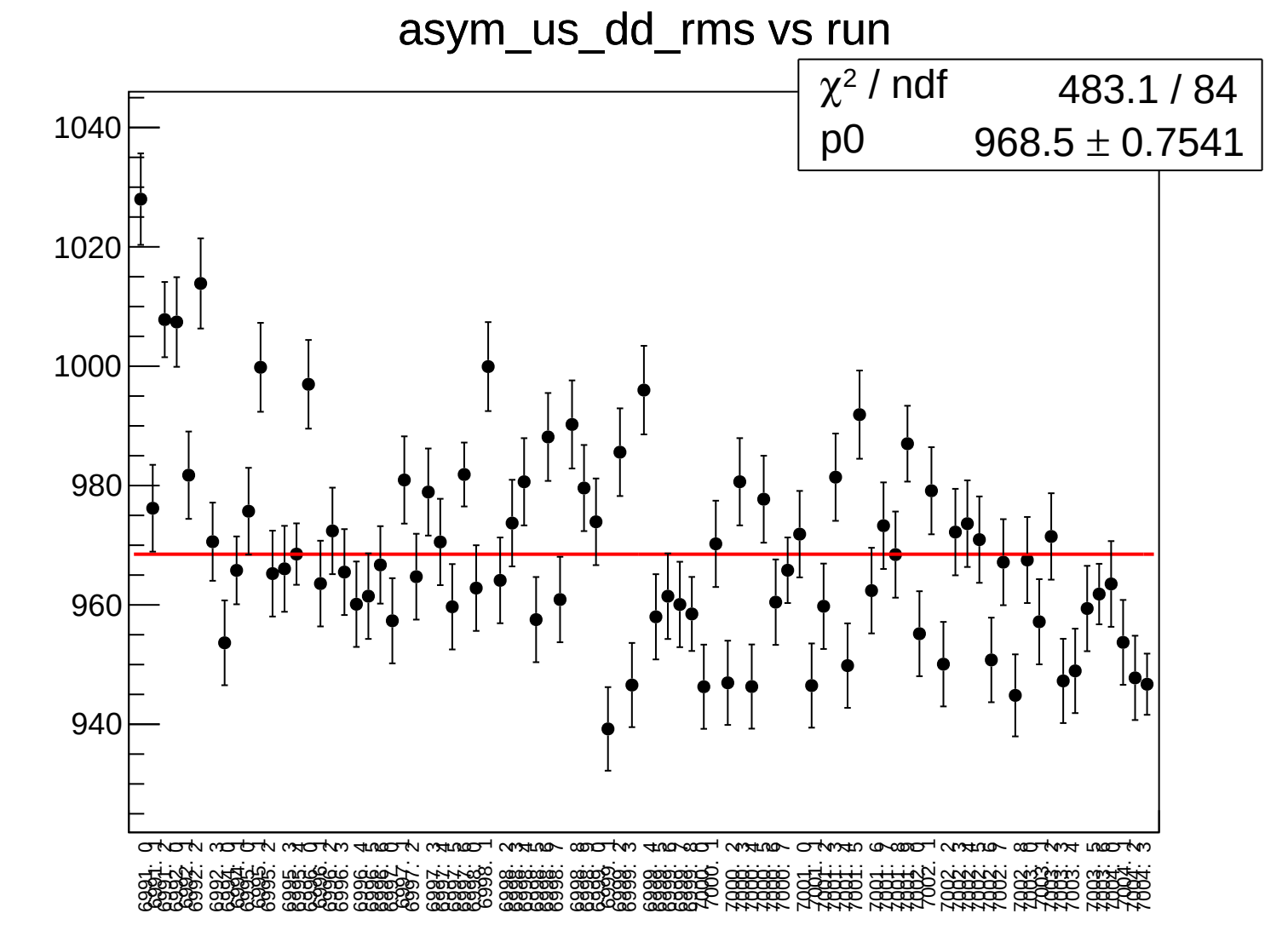

asym_us_dd_correction_mean vs run
χ² / ndf 75.12 / 84
p0 −669.1 ± 592.9
pull
Entries 85
Mean −346.5
Std Dev 388.6

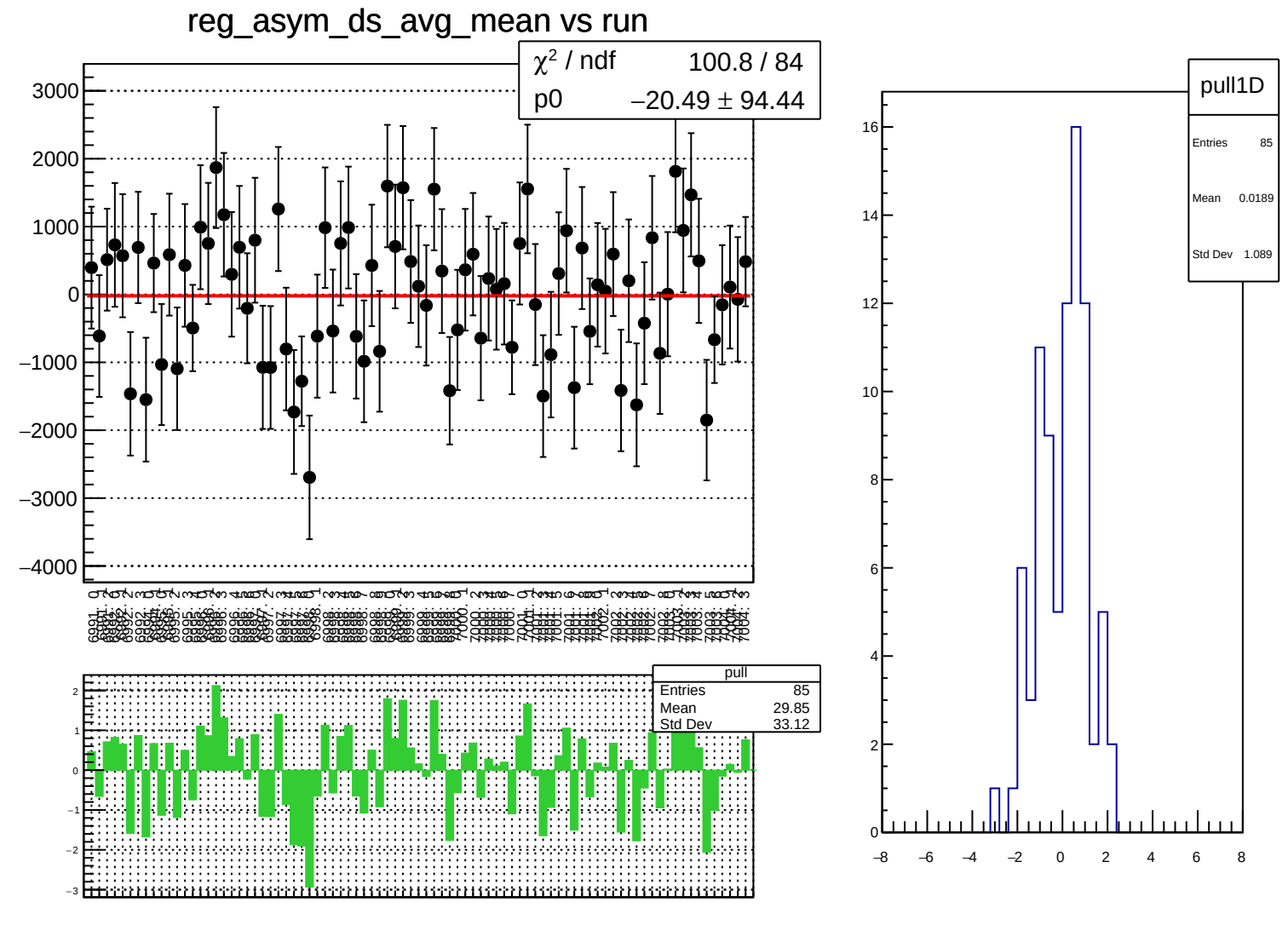

pull1D
Entries 85
Mean −0.008516
Std Dev 0.94

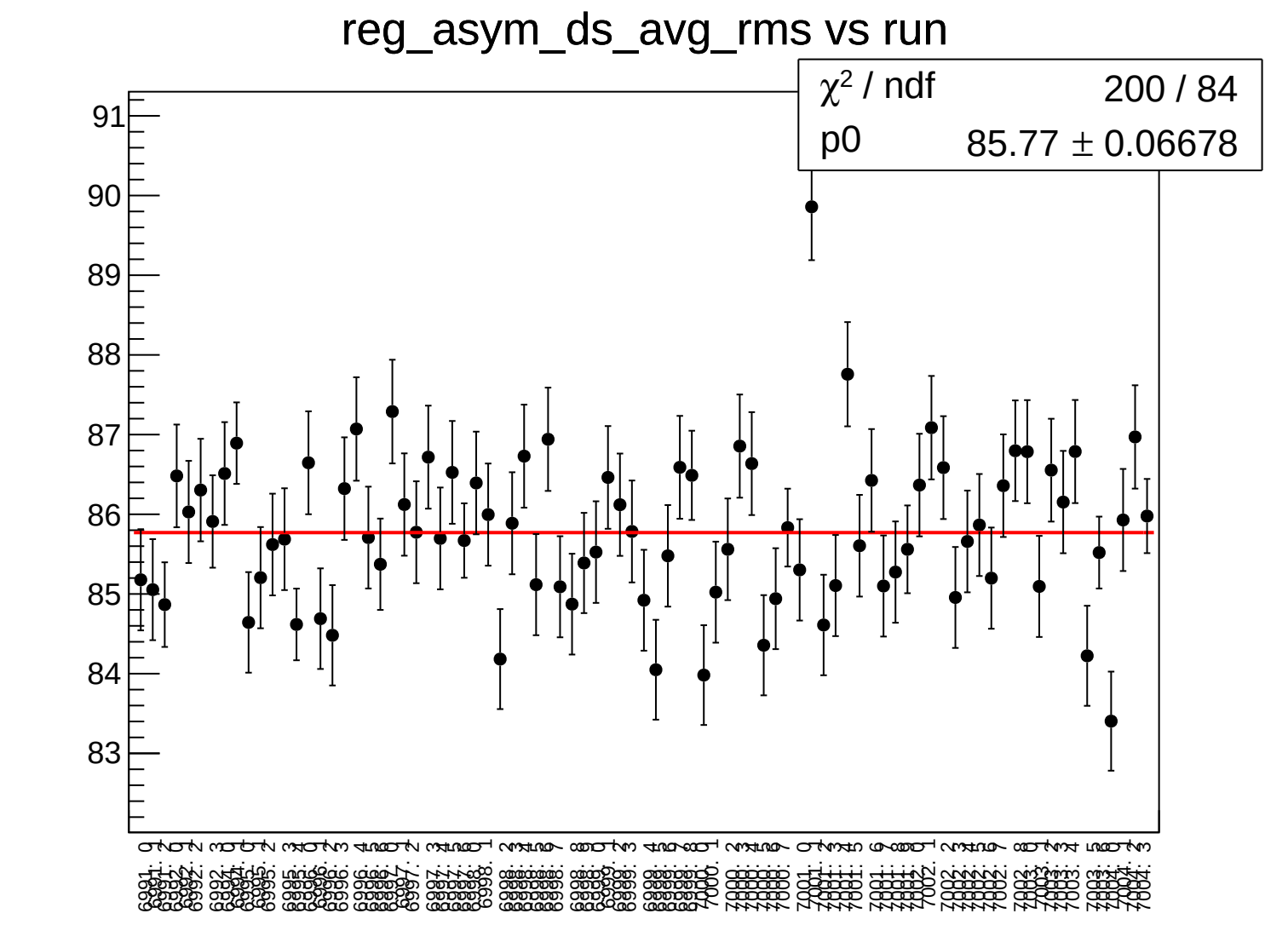

asym_us_dd_correction_rms vs run
χ² / ndf 3788 / 84
p0 537.9 ± 0.4192
620
600
580
560
540
520
500
480

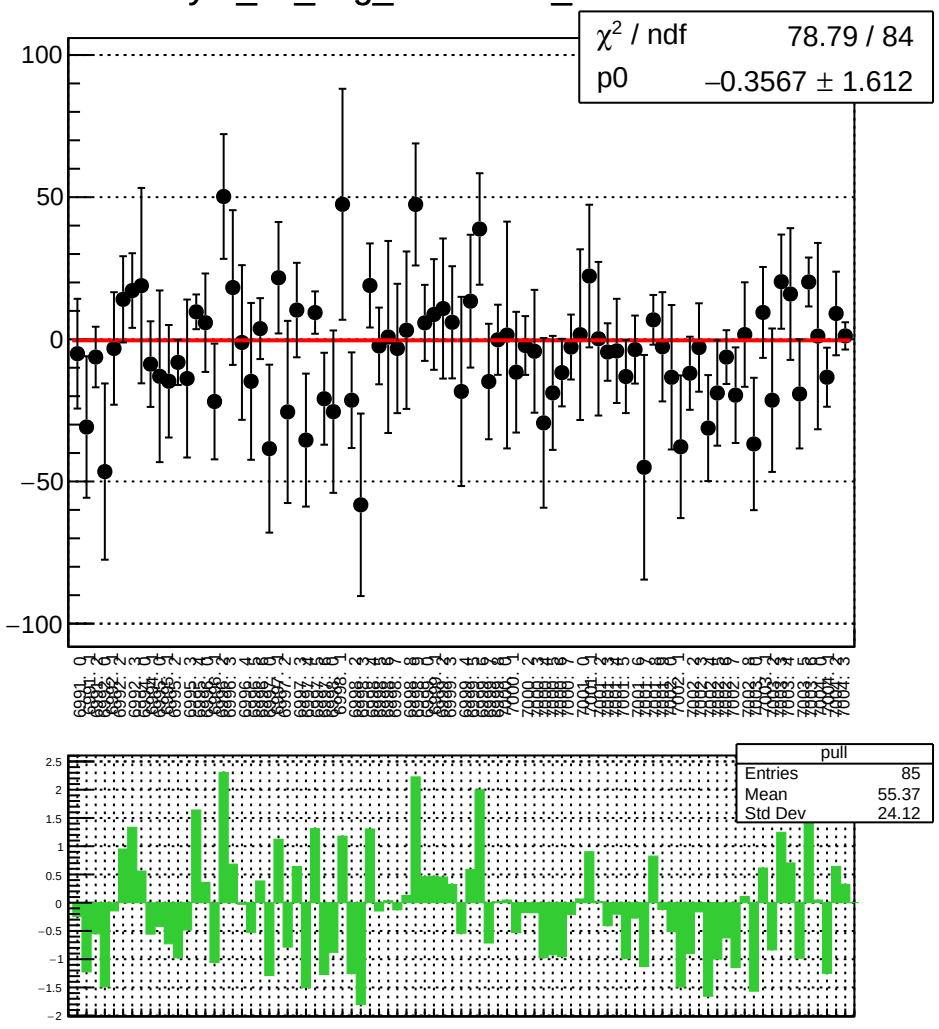

asym_us_dd_mean vs run
χ² / ndf 74.29 / 84
p0 −55.32 ± 1066
pull
Entries 85
Mean −124.7
Std Dev 162.2

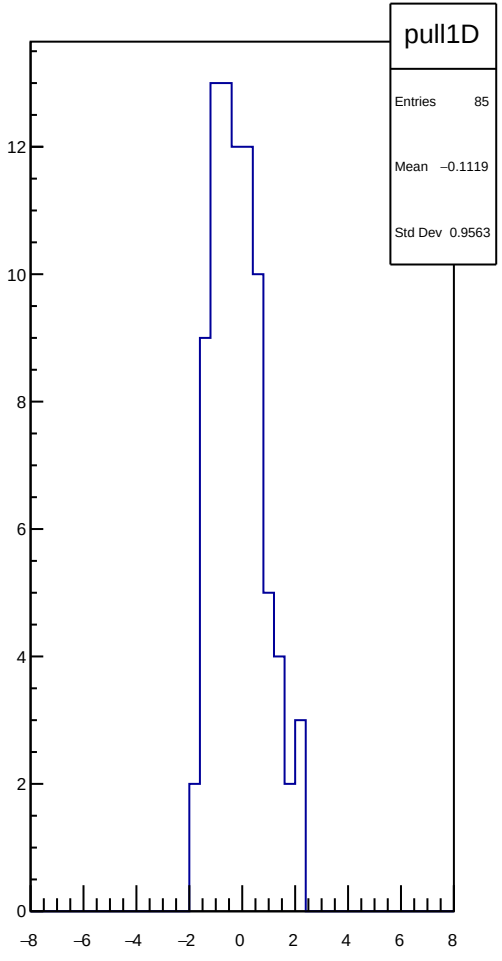

pull1D
Entries 85
Mean 0.007022
Std Dev 0.9348

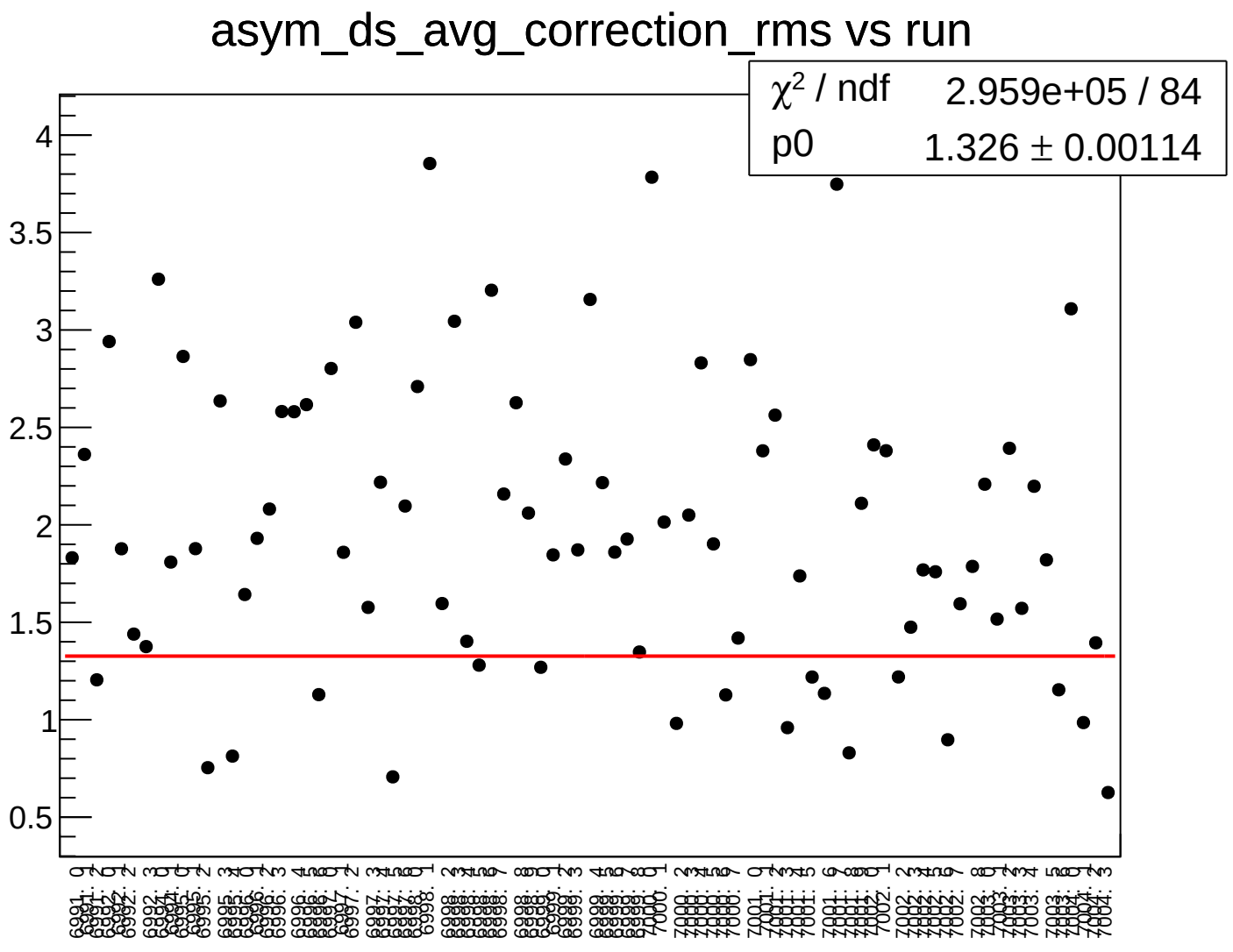

asym_us_dd_rms vs run
χ² / ndf 483.1 / 84
p0 968.5 ± 0.7541
1040
1020
1000
980
960
940

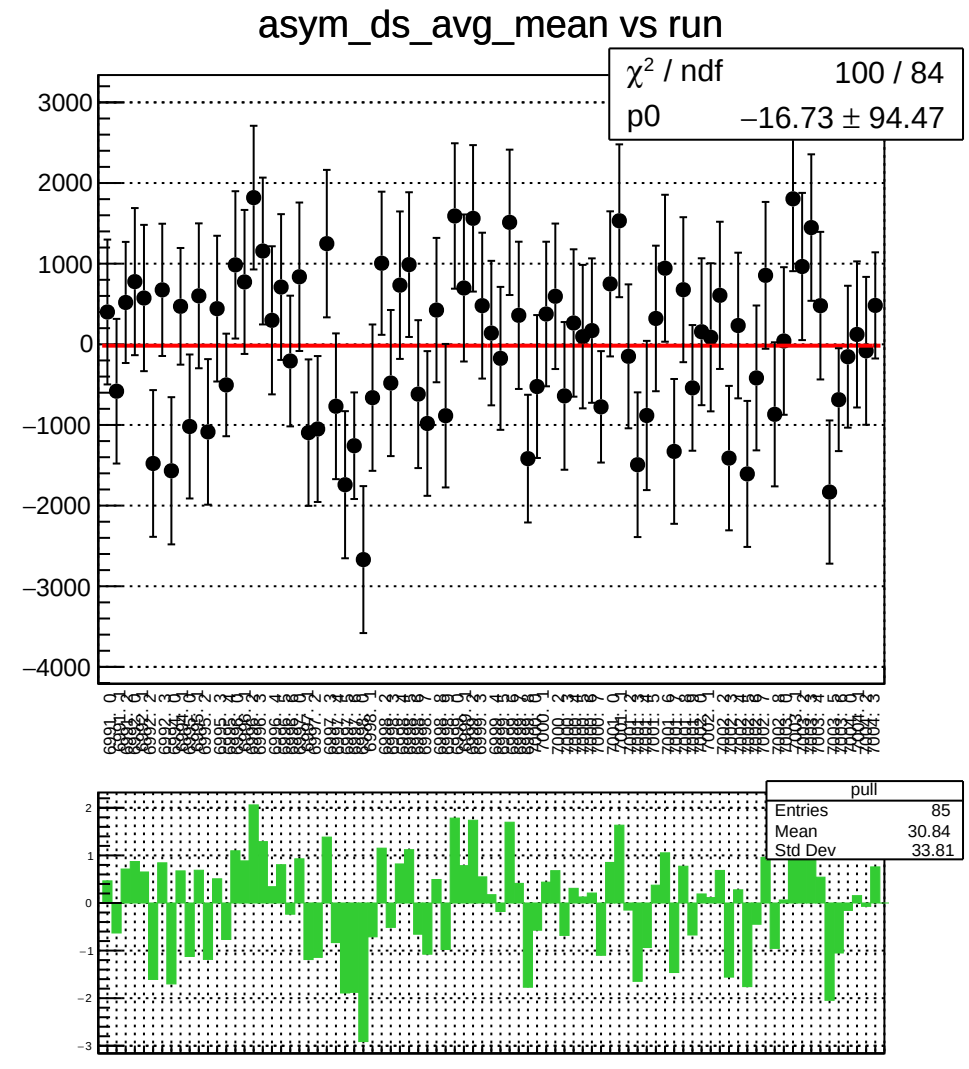

reg_asym_ds_avg_mean vs run
χ² / ndf 100.8 / 84
p0 −20.49 ± 94.44
pull
Entries 85
Mean 29.85
Std Dev 33.12
pull1D
Entries 85
Mean 0.0189
Std Dev 1.089

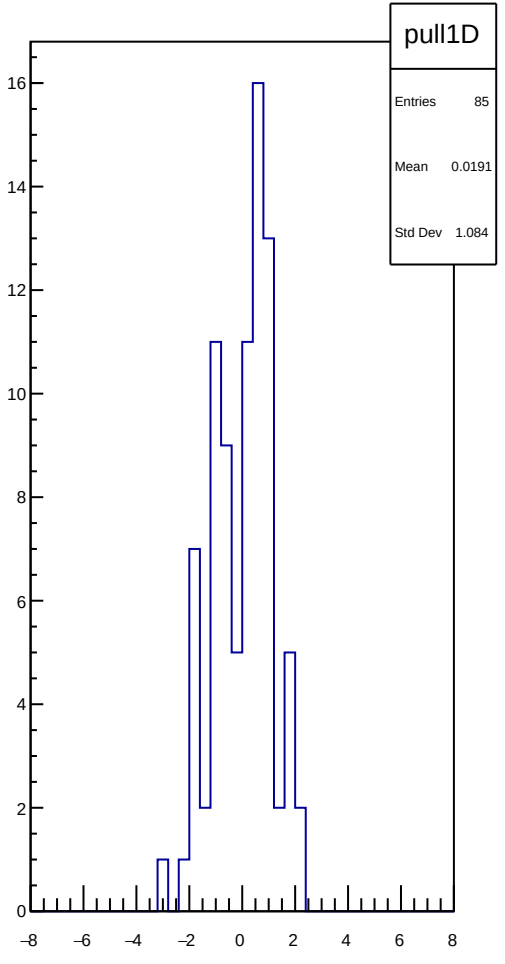

reg_asym_ds_avg_rms vs run
χ^2 / ndf 200 / 84
p0 85.77 ± 0.06678
91
90
89
88
87
86
85
84
83

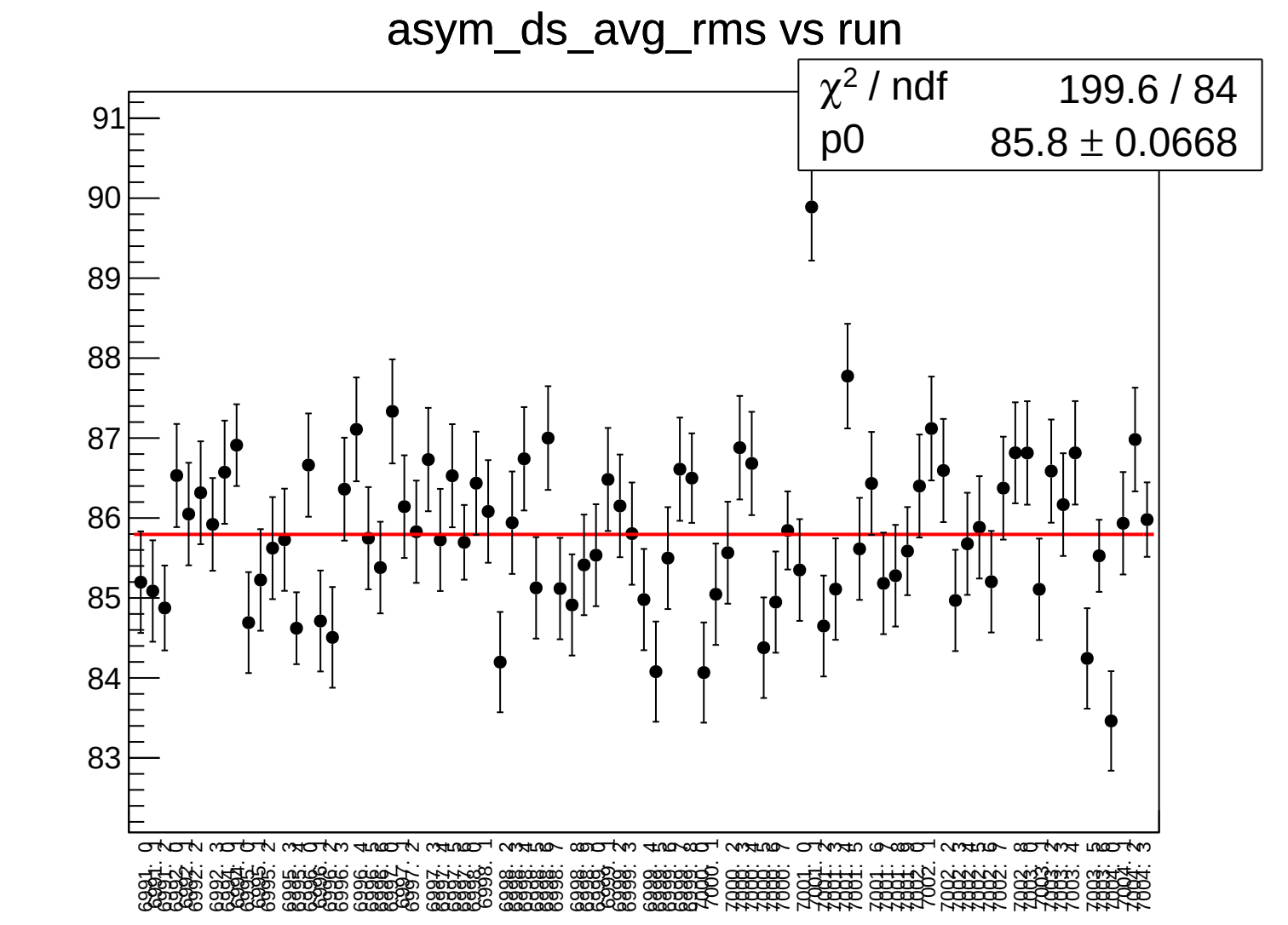

asym_ds_avg_correction_mean vs run
χ² / ndf 78.79 / 84
p0 −0.3567 ± 1.612
100
50
0
−50
−100
pull
Entries 85
Mean 55.37
Std Dev 24.12
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

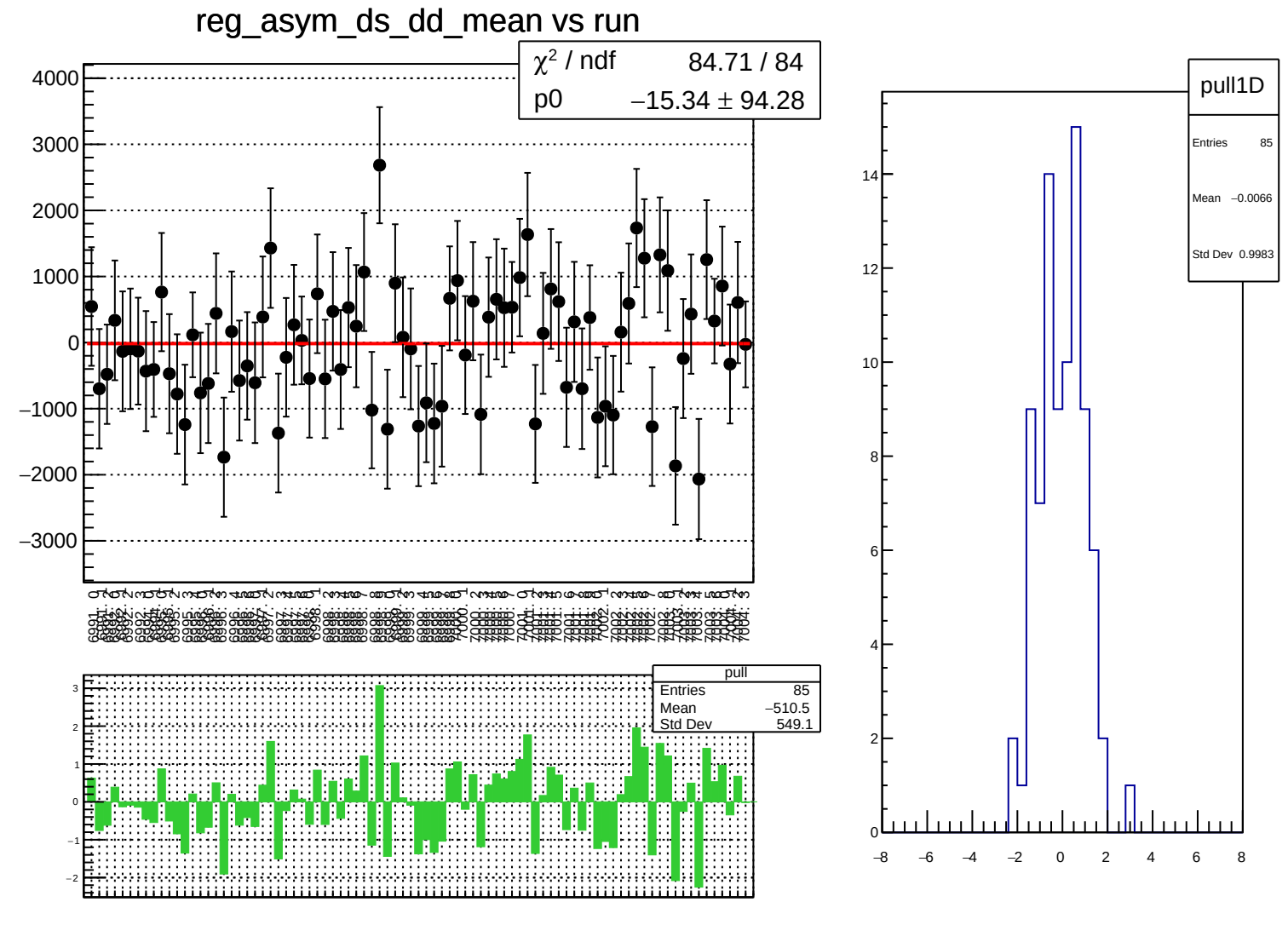

pull1D
Entries 85
Mean −0.1119
Std Dev 0.9563
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

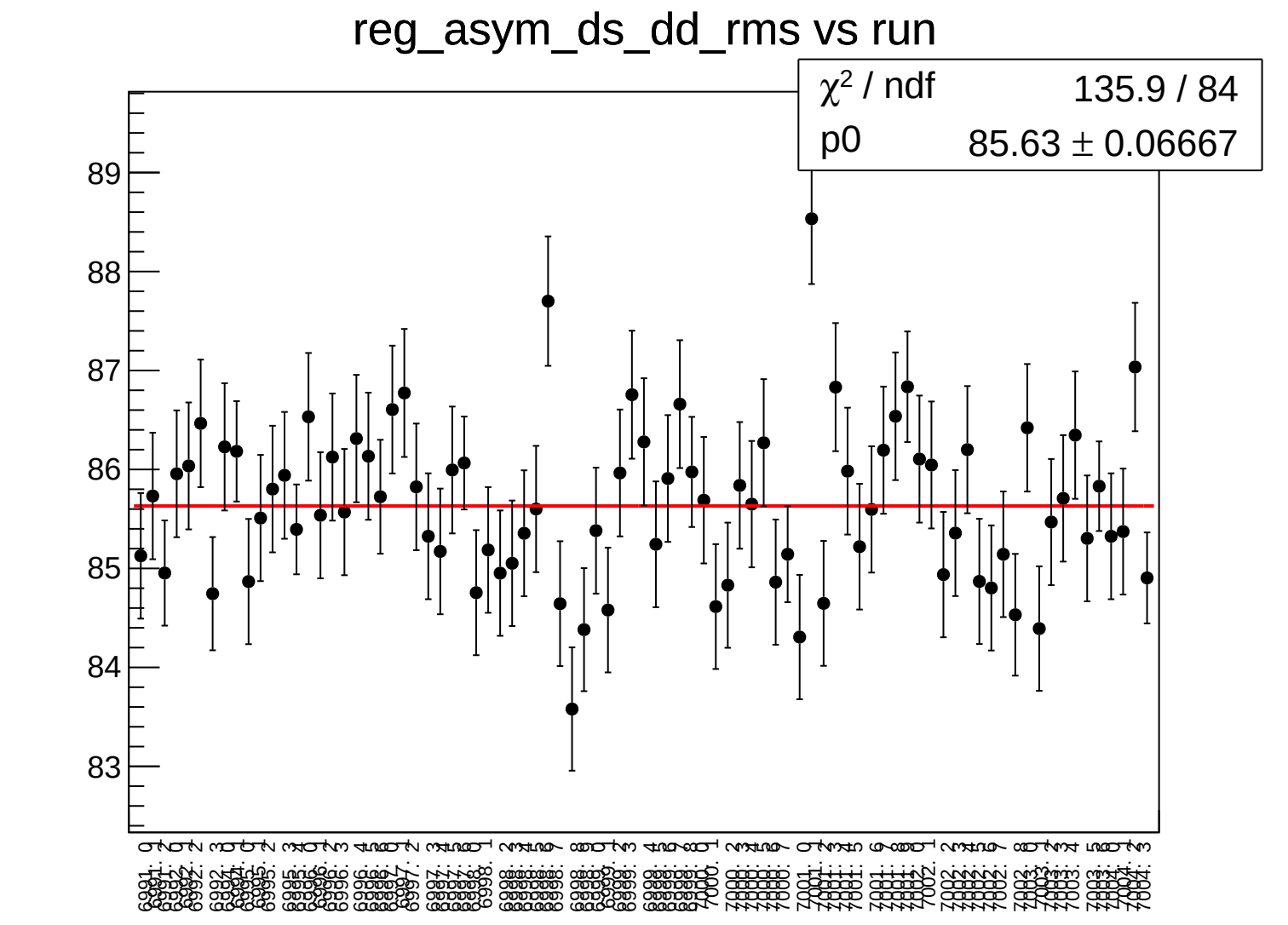

asym_ds_avg_correction_rms vs run
χ² / ndf 2.959e+05 / 84
p0 1.326 ± 0.00114
4
3.5
3
2.5
2
1.5
1
0.5

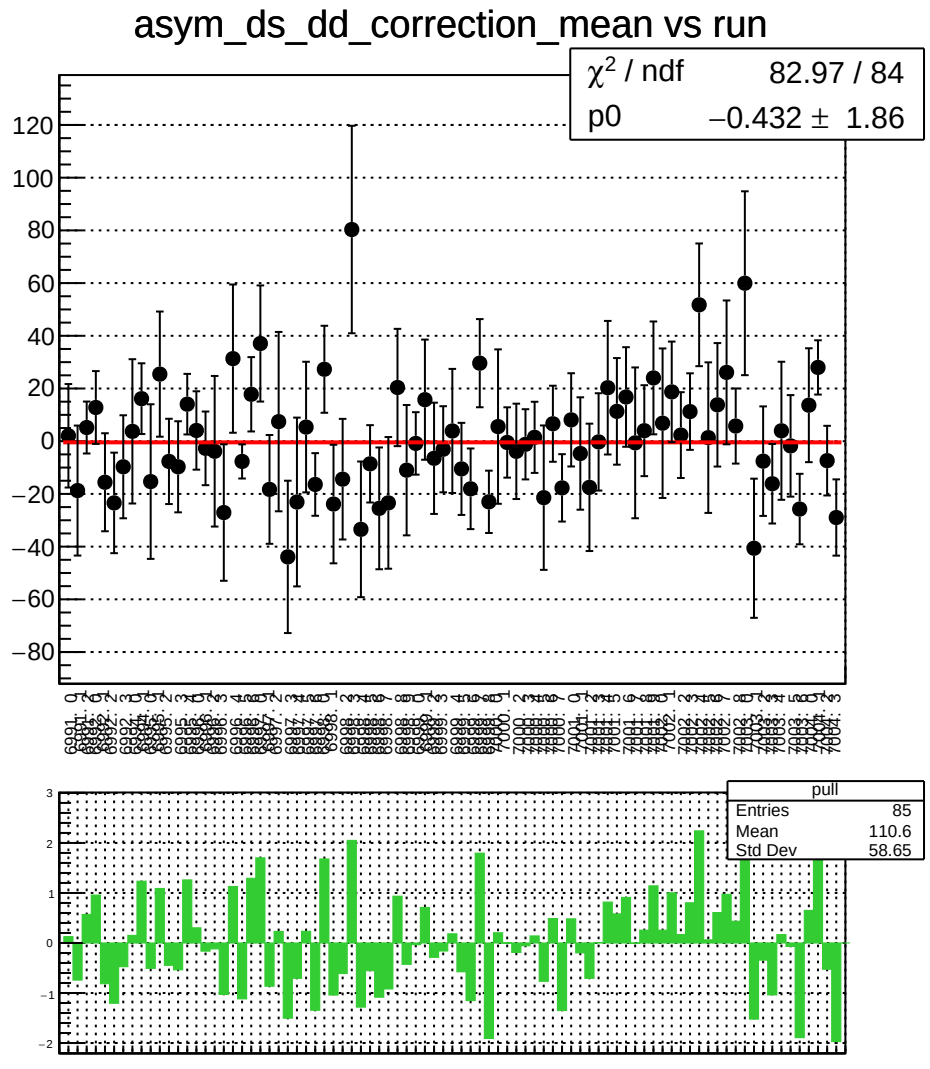

asym_ds_avg_mean vs run
χ² / ndf 100 / 84
p0 −16.73 ± 94.47
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 85
Mean 30.84
Std Dev 33.81
2
1
0
−1
−2
−3

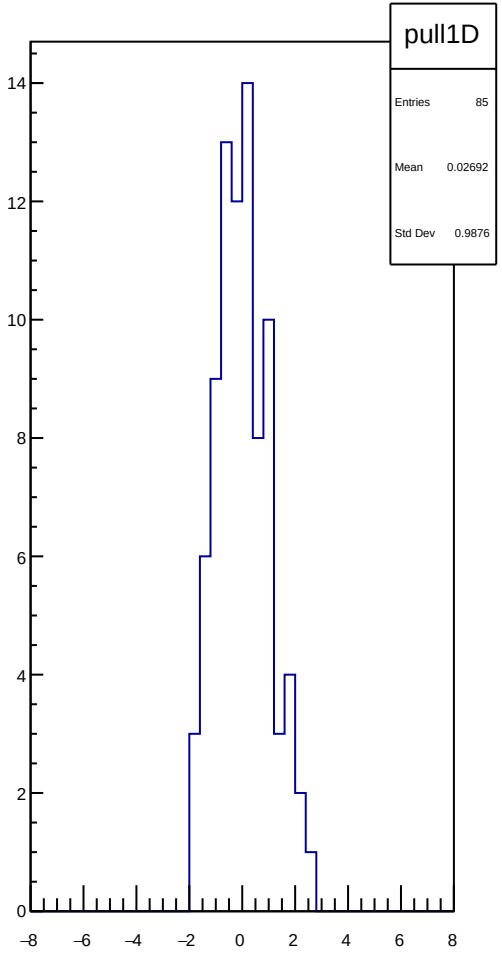

pull1D
Entries 85
Mean 0.0191
Std Dev 1.084
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

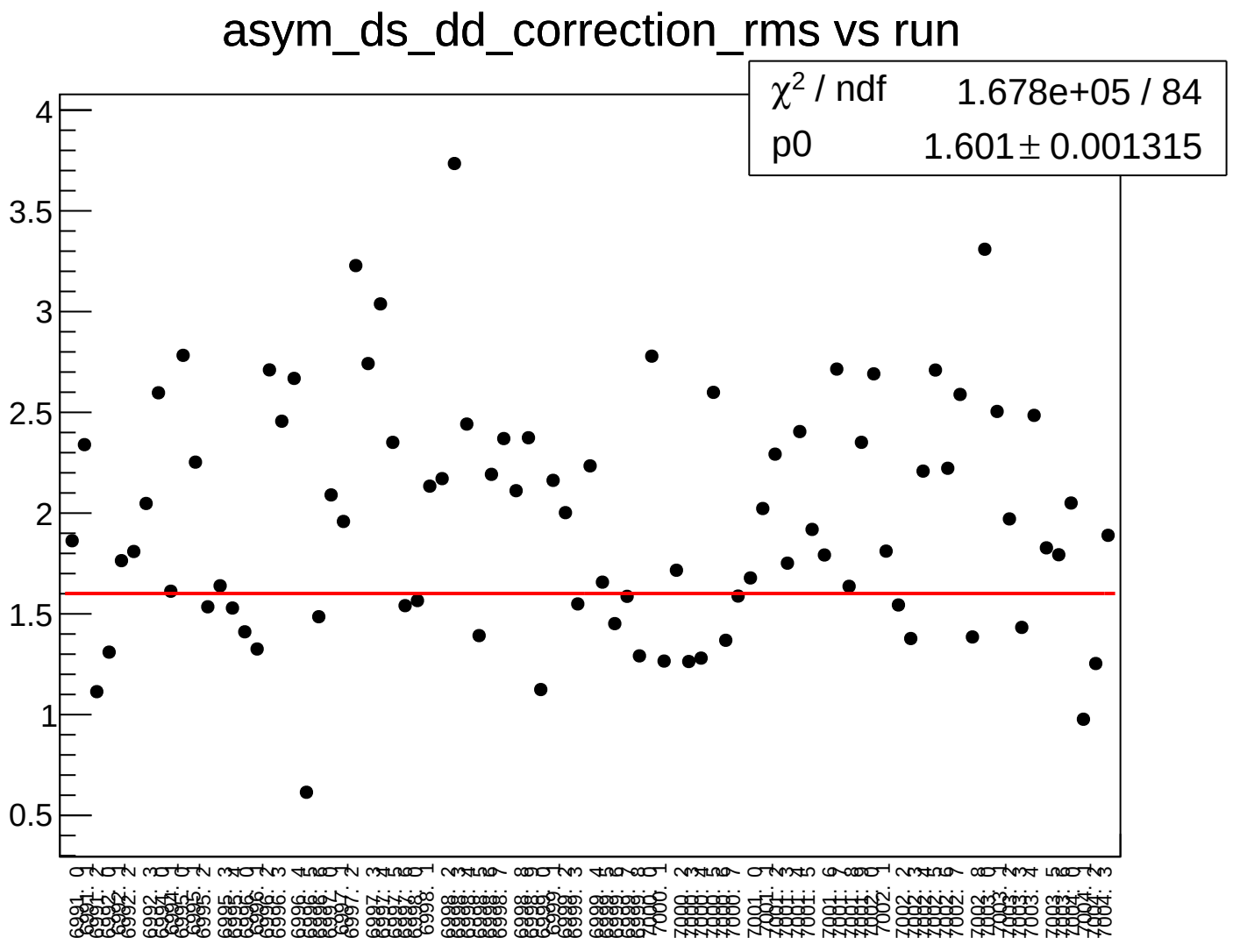

asym_ds_avg_rms vs run
χ^2 / ndf 199.6 / 84
p0 85.8 ± 0.0668
91
90
89
88
87
86
85
84
83

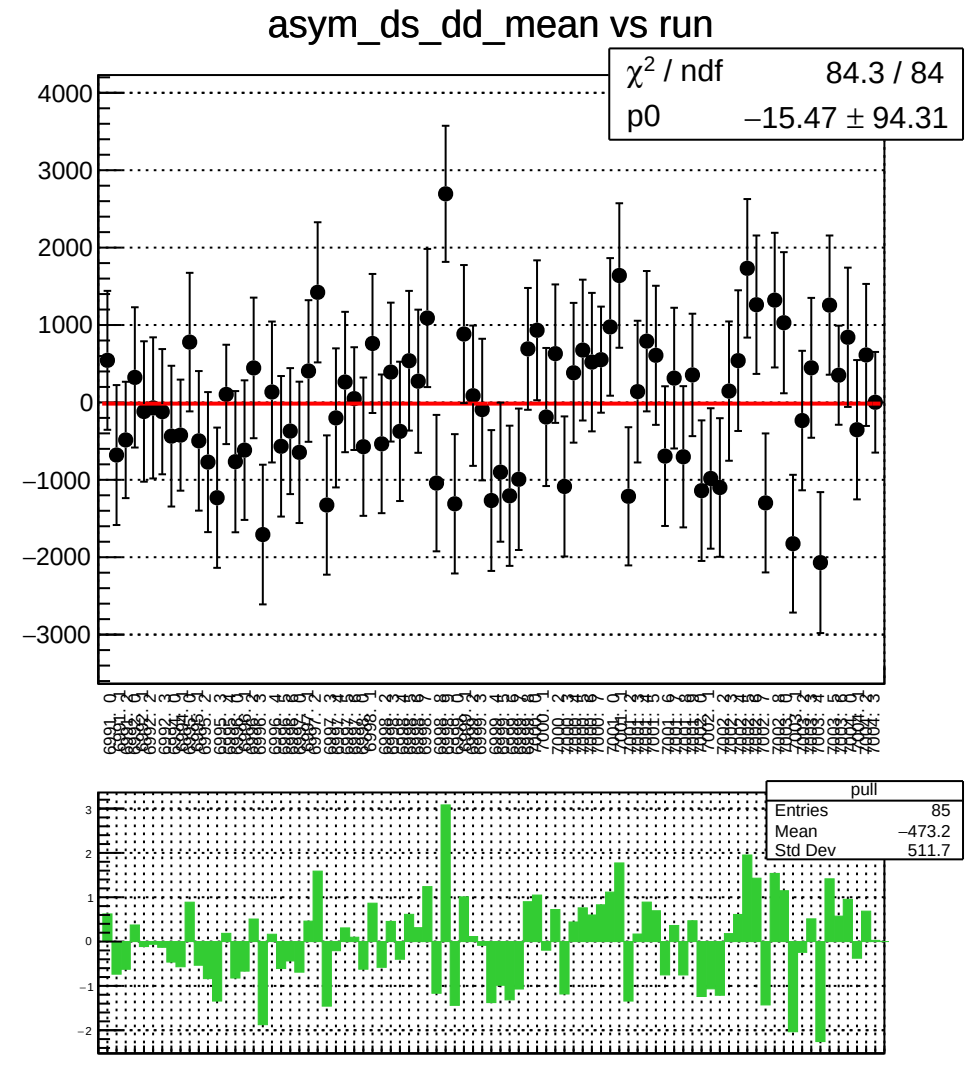

reg_asym_ds_dd_mean vs run
χ² / ndf 84.71 / 84
p0 −15.34 ± 94.28
pull
Entries 85
Mean −510.5
Std Dev 549.1
pull1D
Entries 85
Mean −0.0066
Std Dev 0.9983

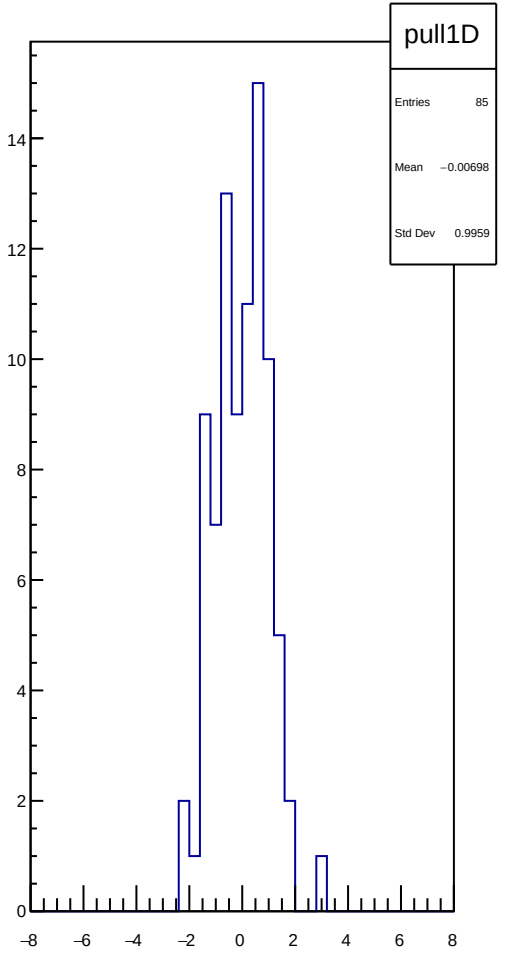

reg_asym_ds_dd_rms vs run
χ² / ndf 135.9 / 84
p0 85.63 ± 0.06667
89
88
87
86
85
84
83

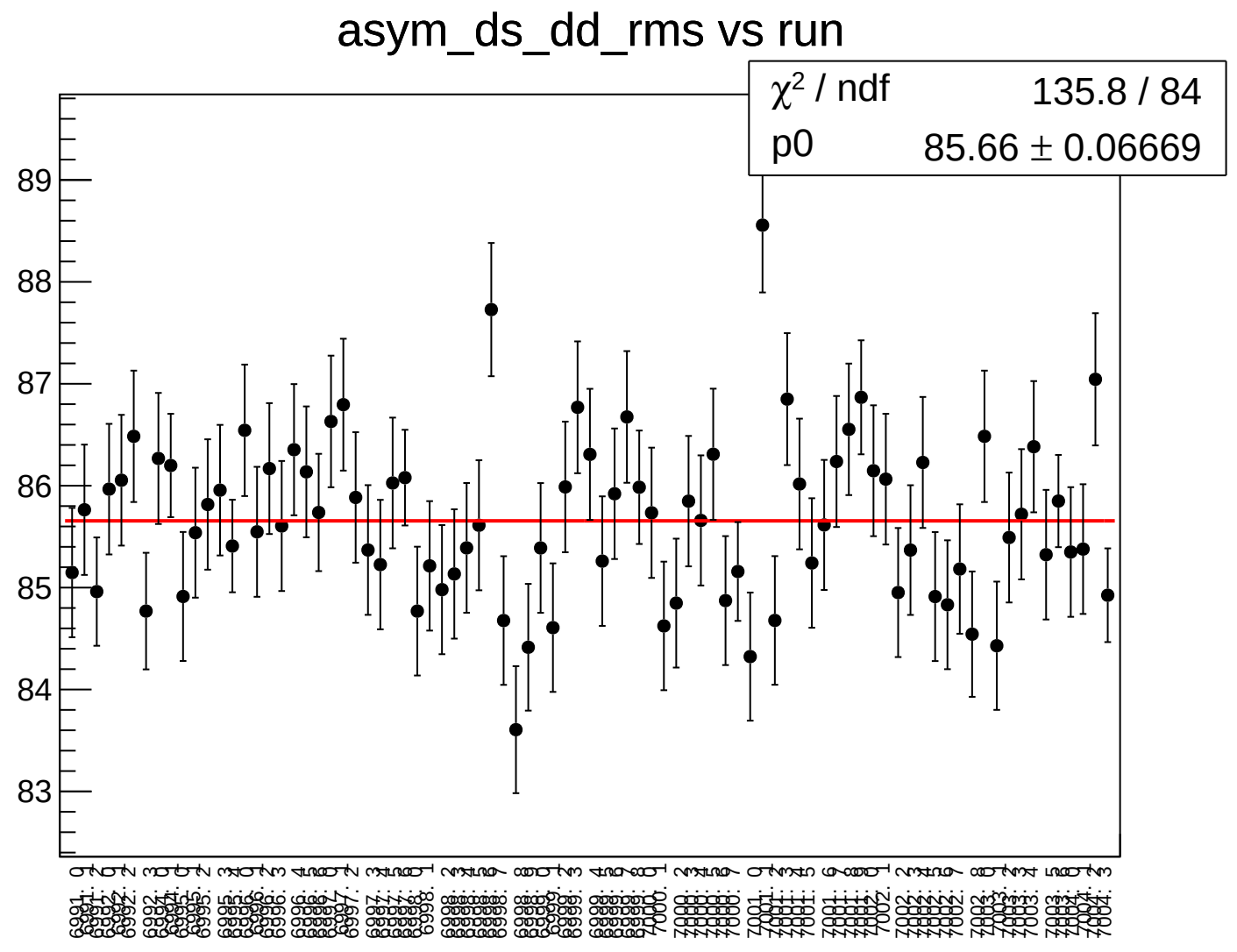

asym_ds_dd_correction_mean vs run
χ² / ndf 82.97 / 84
p0 −0.432 ± 1.86
pull
Entries 85
Mean 110.6
Std Dev 58.65

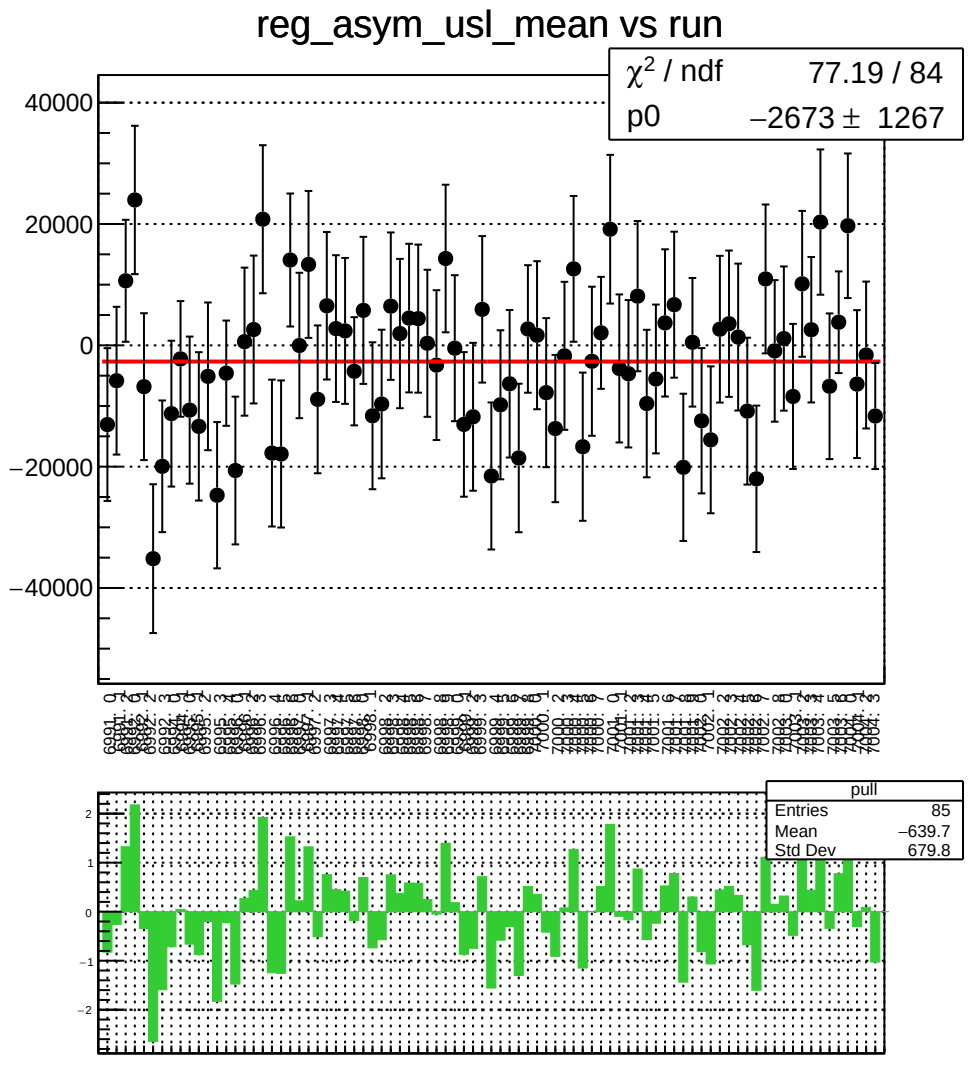

pull1D
Entries 85
Mean 0.02692
Std Dev 0.9876

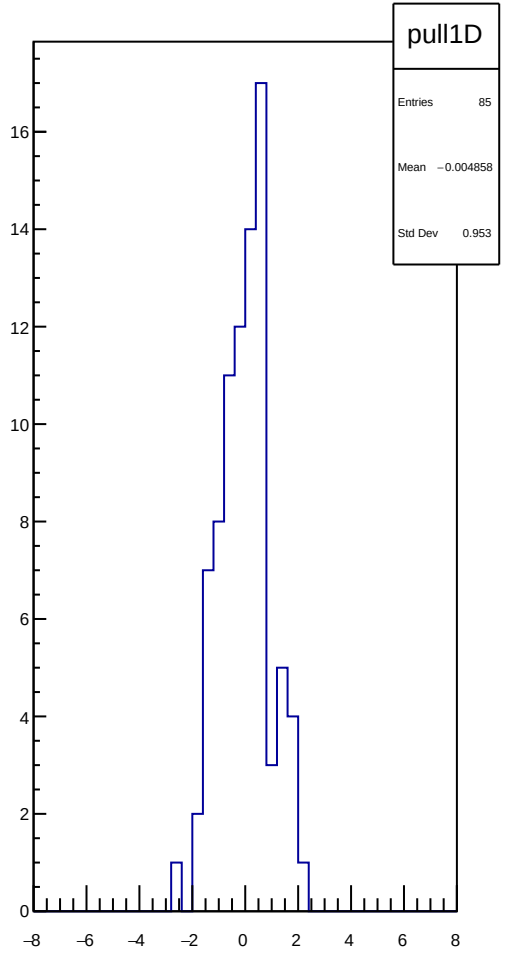

asym_ds_dd_correction_rms vs run
χ² / ndf 1.678e+05 / 84
p0 1.601 ± 0.001315
4
3.5
3
2.5
2
1.5
1
0.5

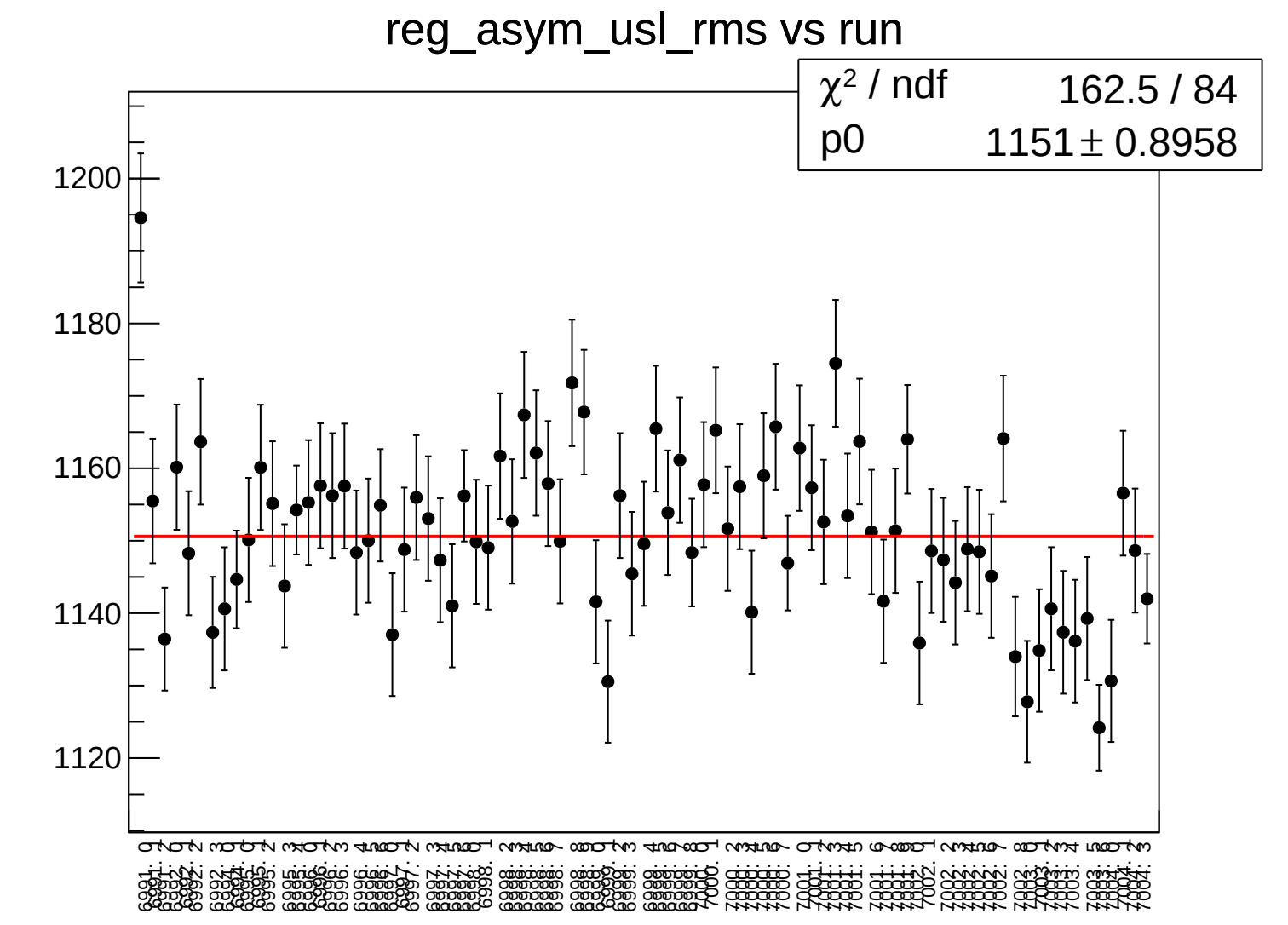

asym_ds_dd_mean vs run
χ² / ndf 84.3 / 84
p0 −15.47 ± 94.31
4000
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean −473.2
Std Dev 511.7
3
2
1
0
−1
−2

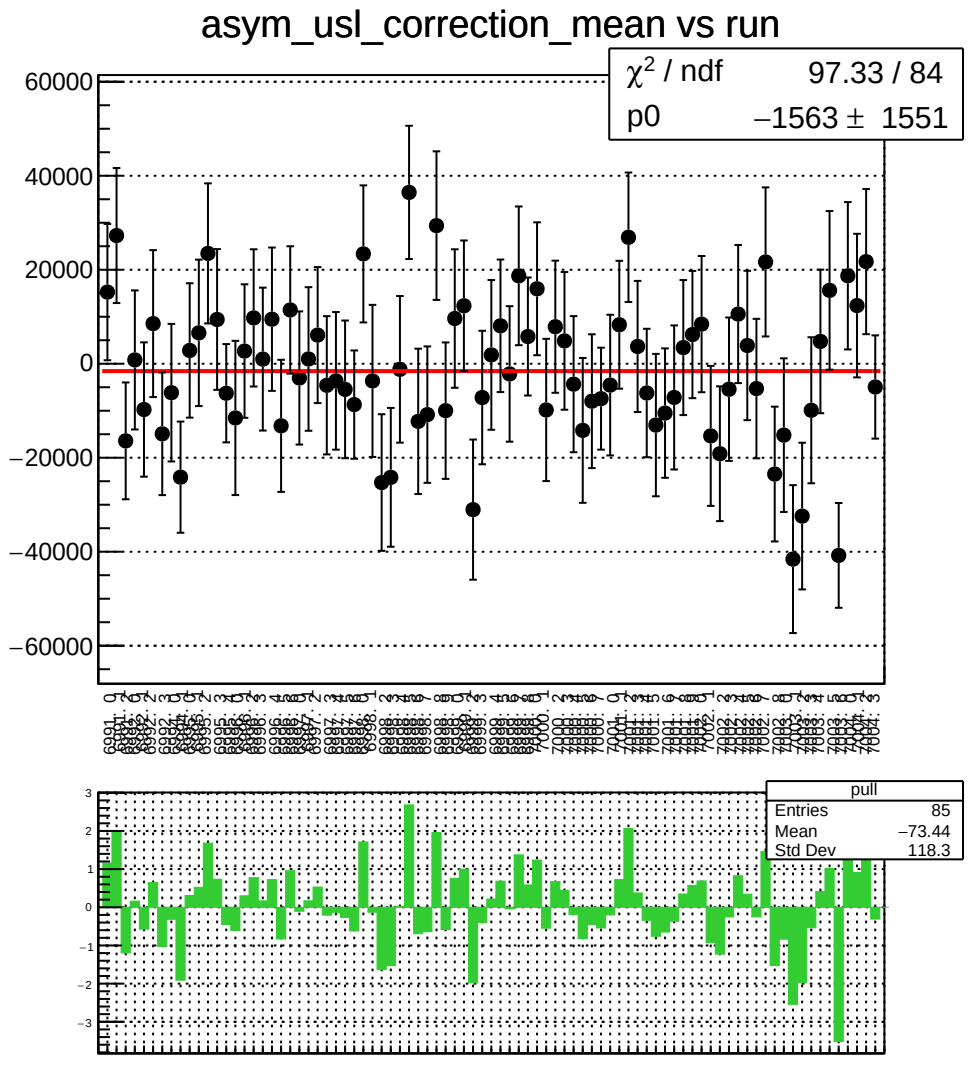

pull1D
Entries 85
Mean −0.00698
Std Dev 0.9959
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

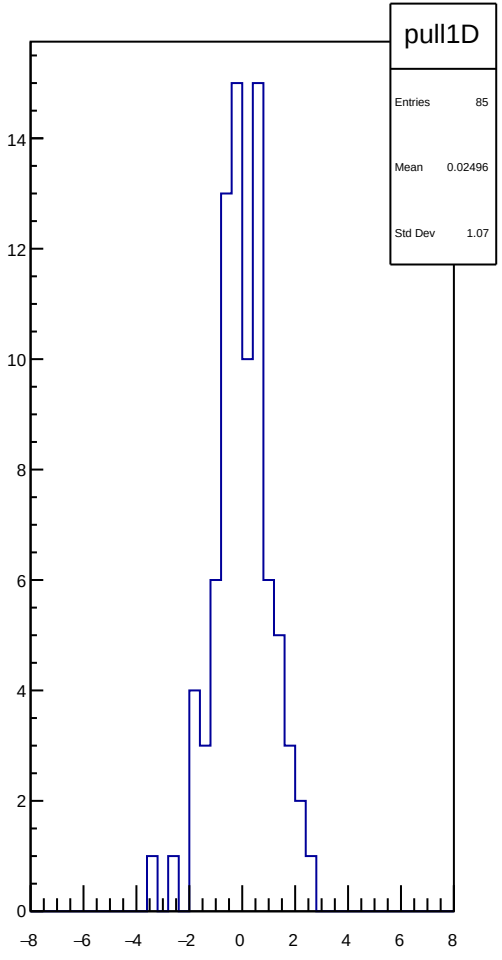

asym_ds_dd_rms vs run
χ² / ndf 135.8 / 84
p0 85.66 ± 0.06669
89
88
87
86
85
84
83

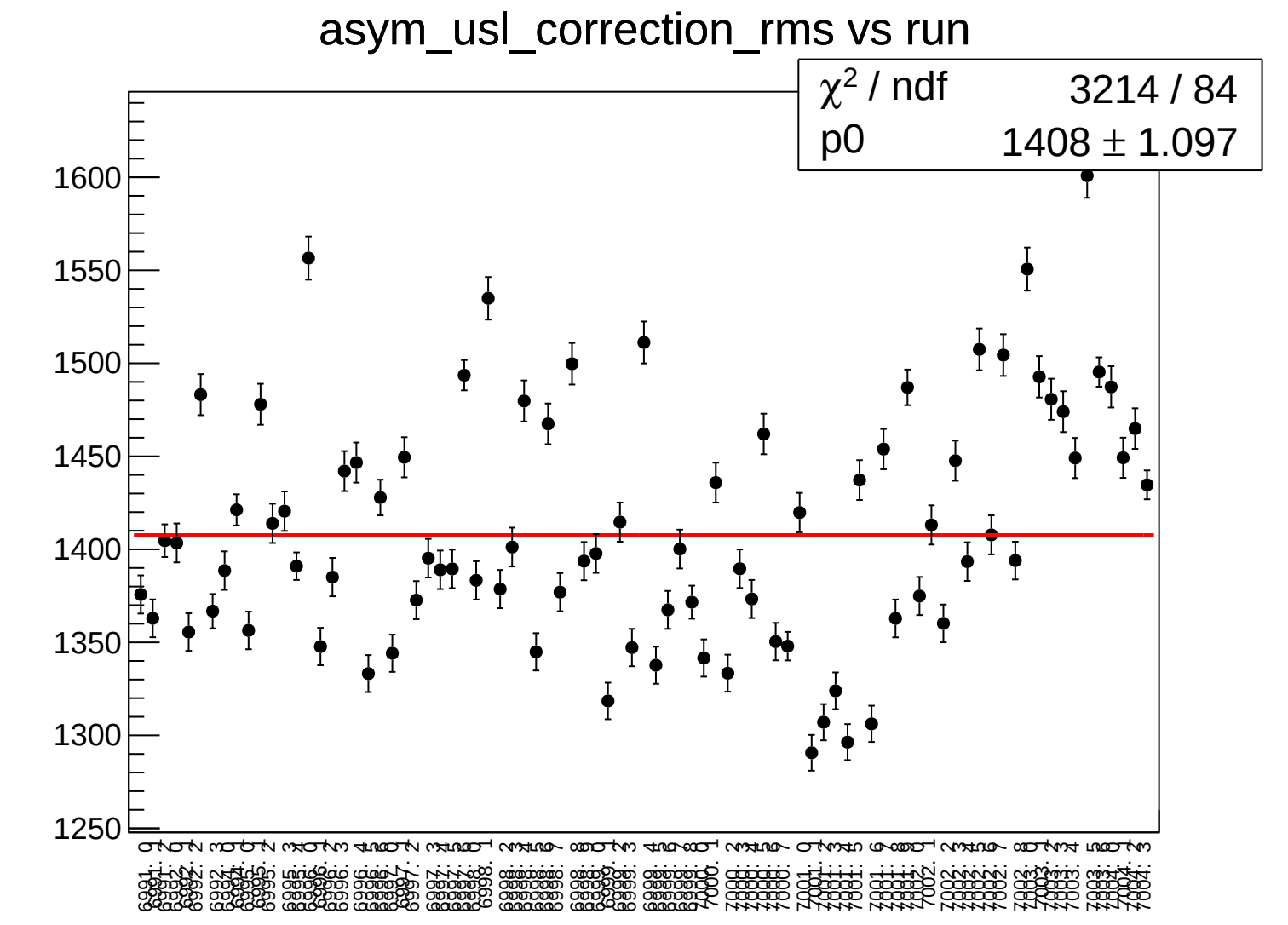

reg_asym_usl_mean vs run
χ² / ndf 77.19 / 84
p0 −2673 ± 1267
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −639.7
Std Dev 679.8
2
1
0
−1
−2

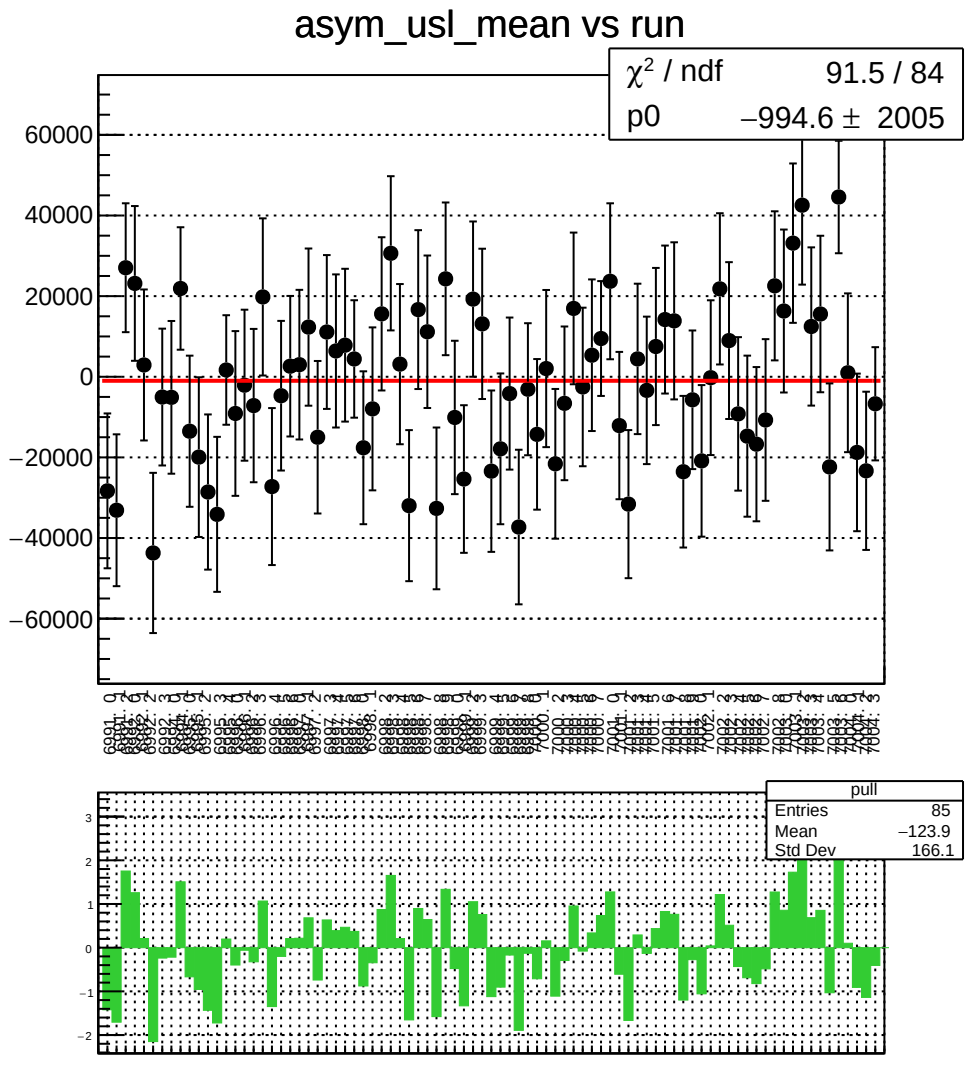

pull1D
Entries 85
Mean −0.004858
Std Dev 0.953
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

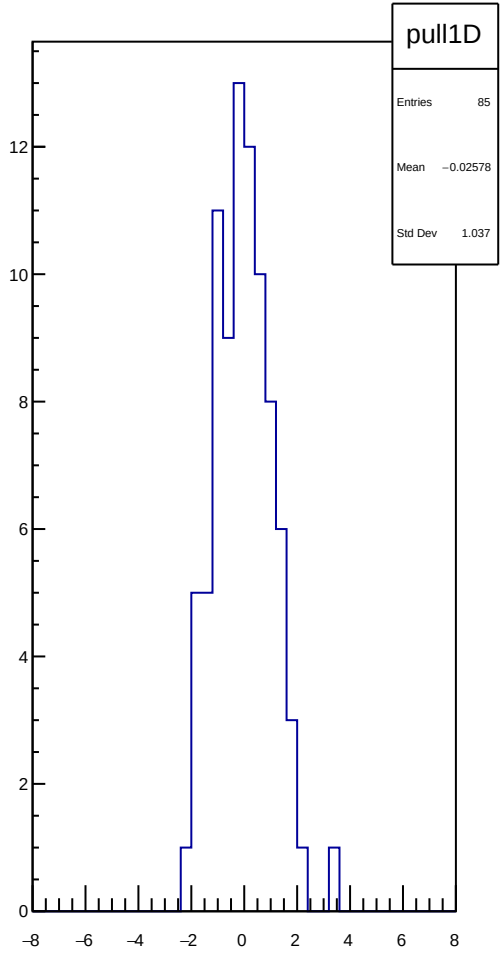

reg_asym_usl_rms vs run
χ² / ndf 162.5 / 84
p0 1151 ± 0.8958
1200
1180
1160
1140
1120

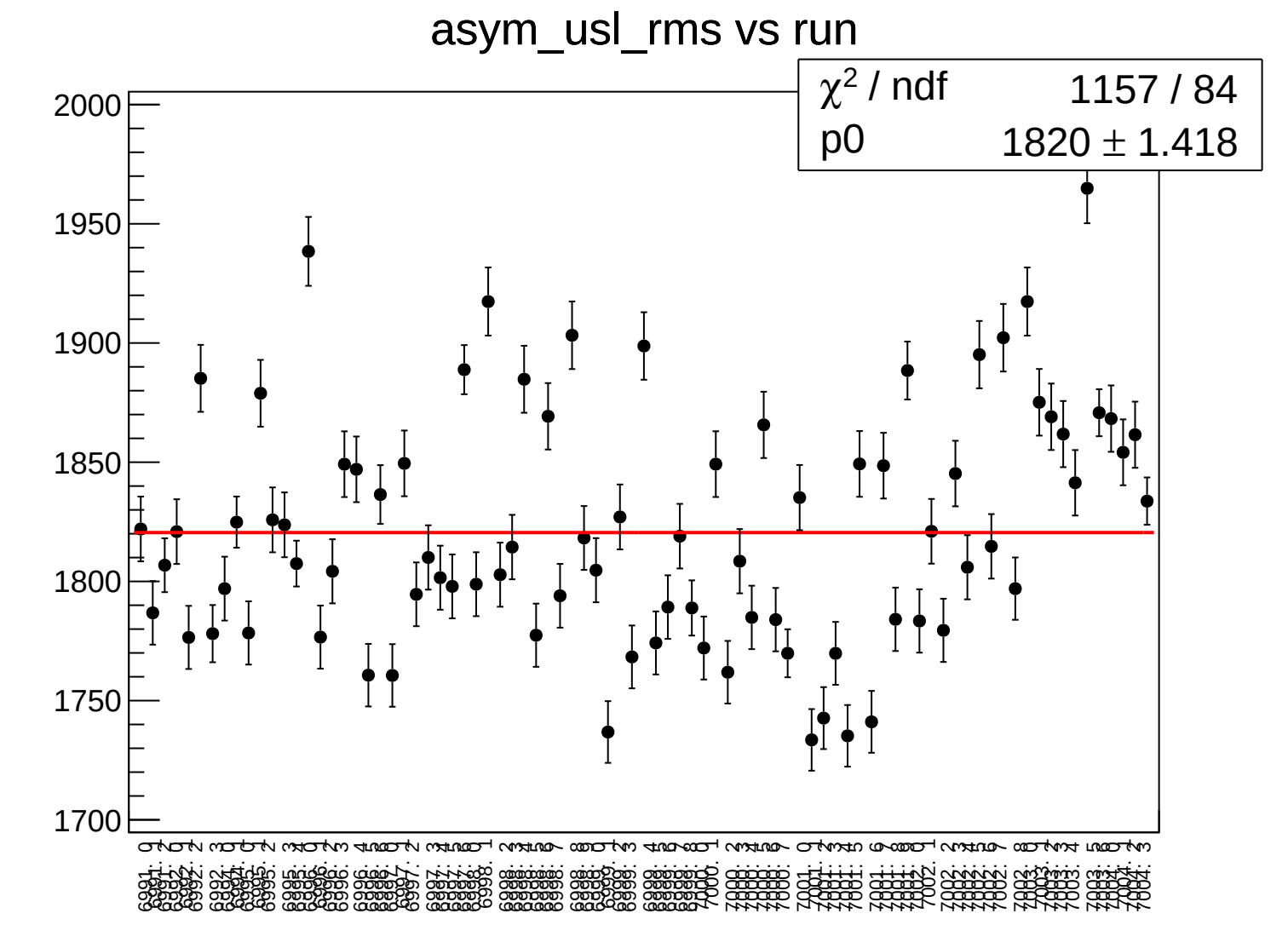

asym_usl_correction_mean vs run
χ² / ndf 97.33 / 84
p0 −1563 ± 1551
pull
Entries 85
Mean −73.44
Std Dev 118.3

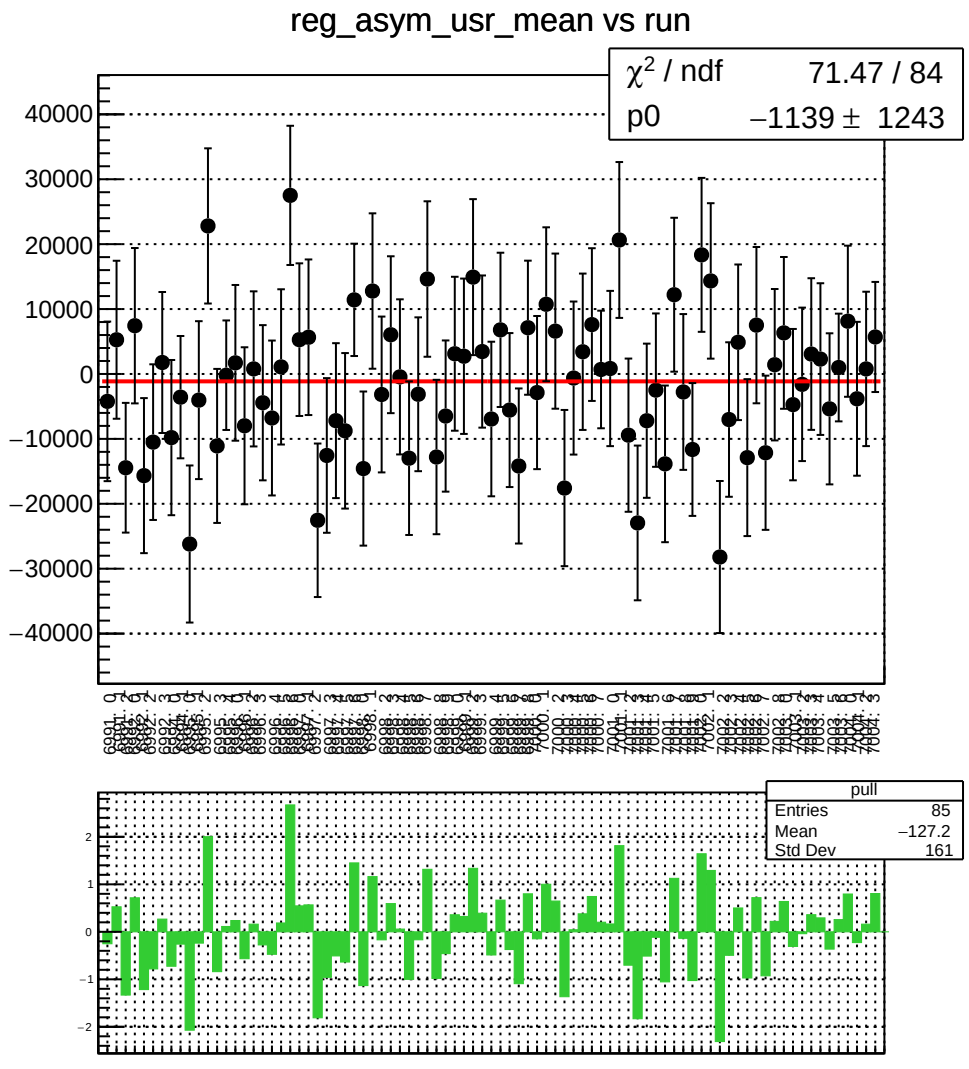

pull1D
Entries 85
Mean 0.02496
Std Dev 1.07

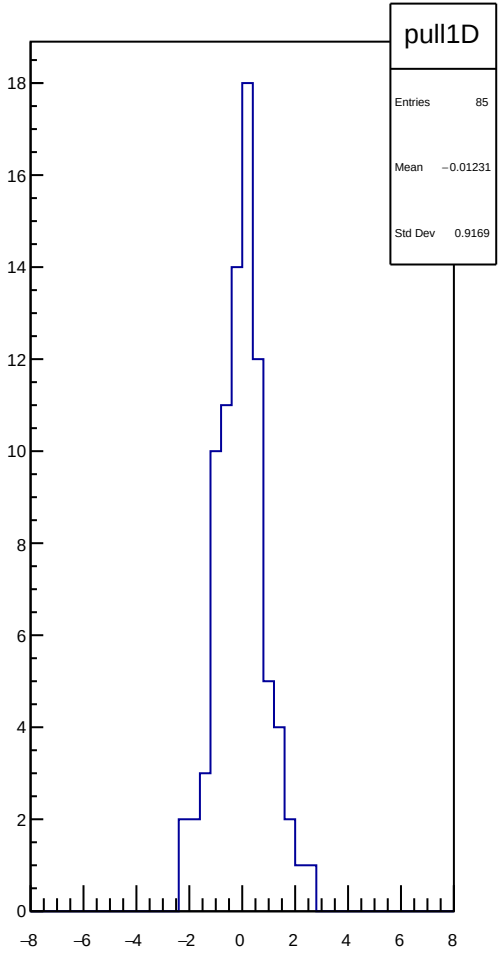

asym_usl_correction_rms vs run
χ² / ndf 3214 / 84
p0 1408 ± 1.097
1600
1550
1500
1450
1400
1350
1300
1250

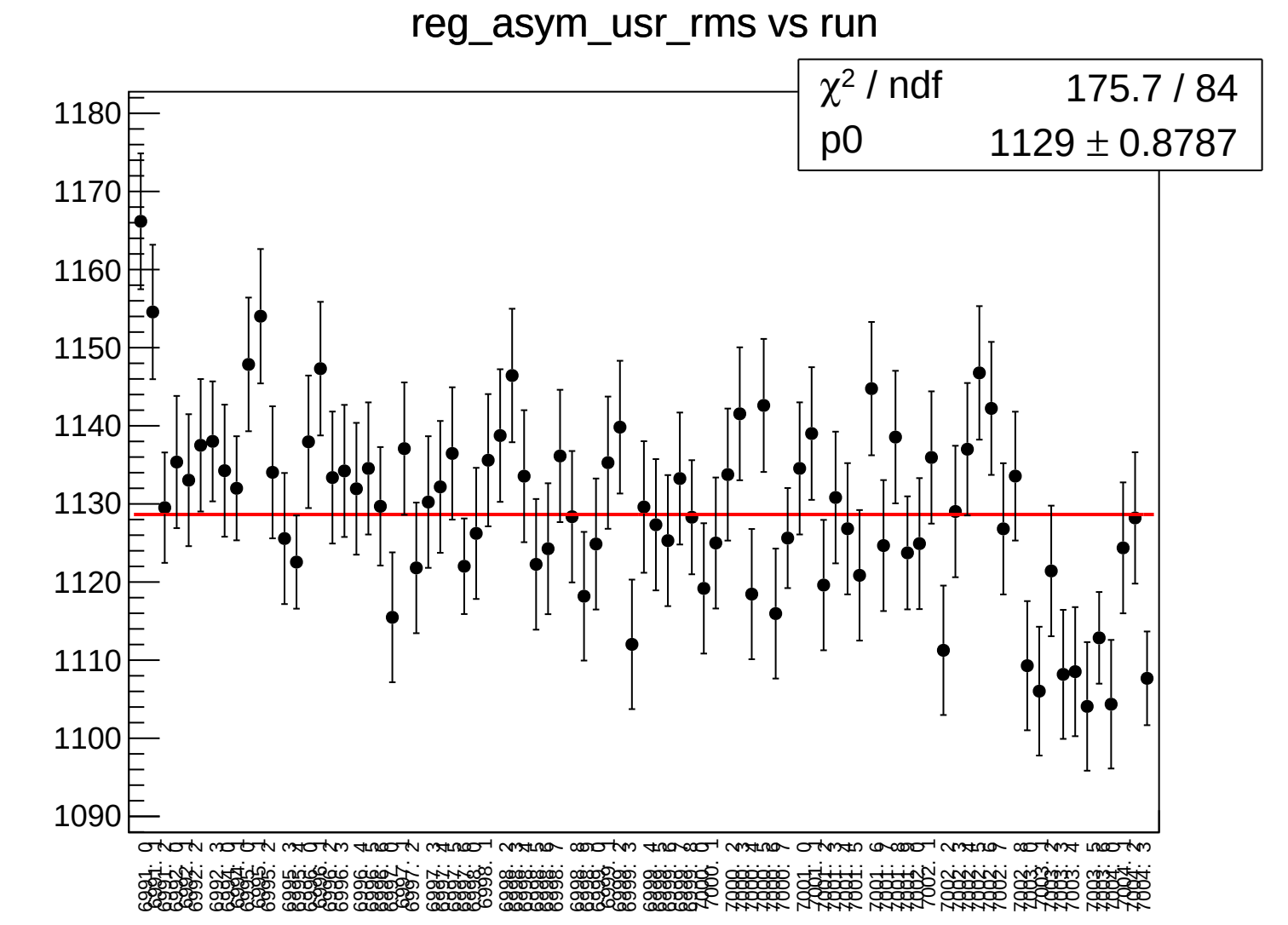

asym_usl_mean vs run
χ² / ndf 91.5 / 84
p0 −994.6 ± 2005
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −123.9
Std Dev 166.1
3
2
1
0
−1
−2

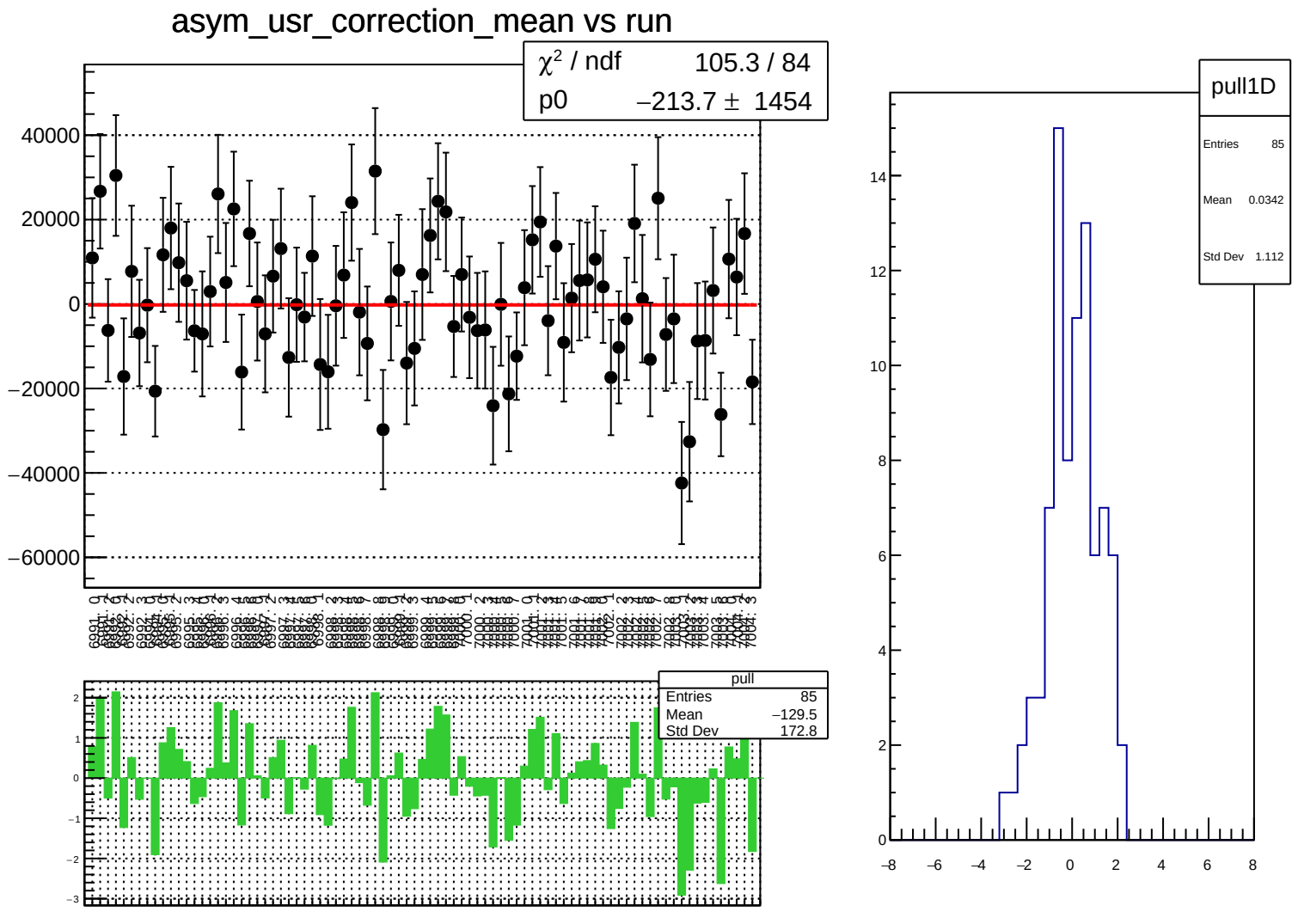

pull1D
Entries 85
Mean −0.02578
Std Dev 1.037
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

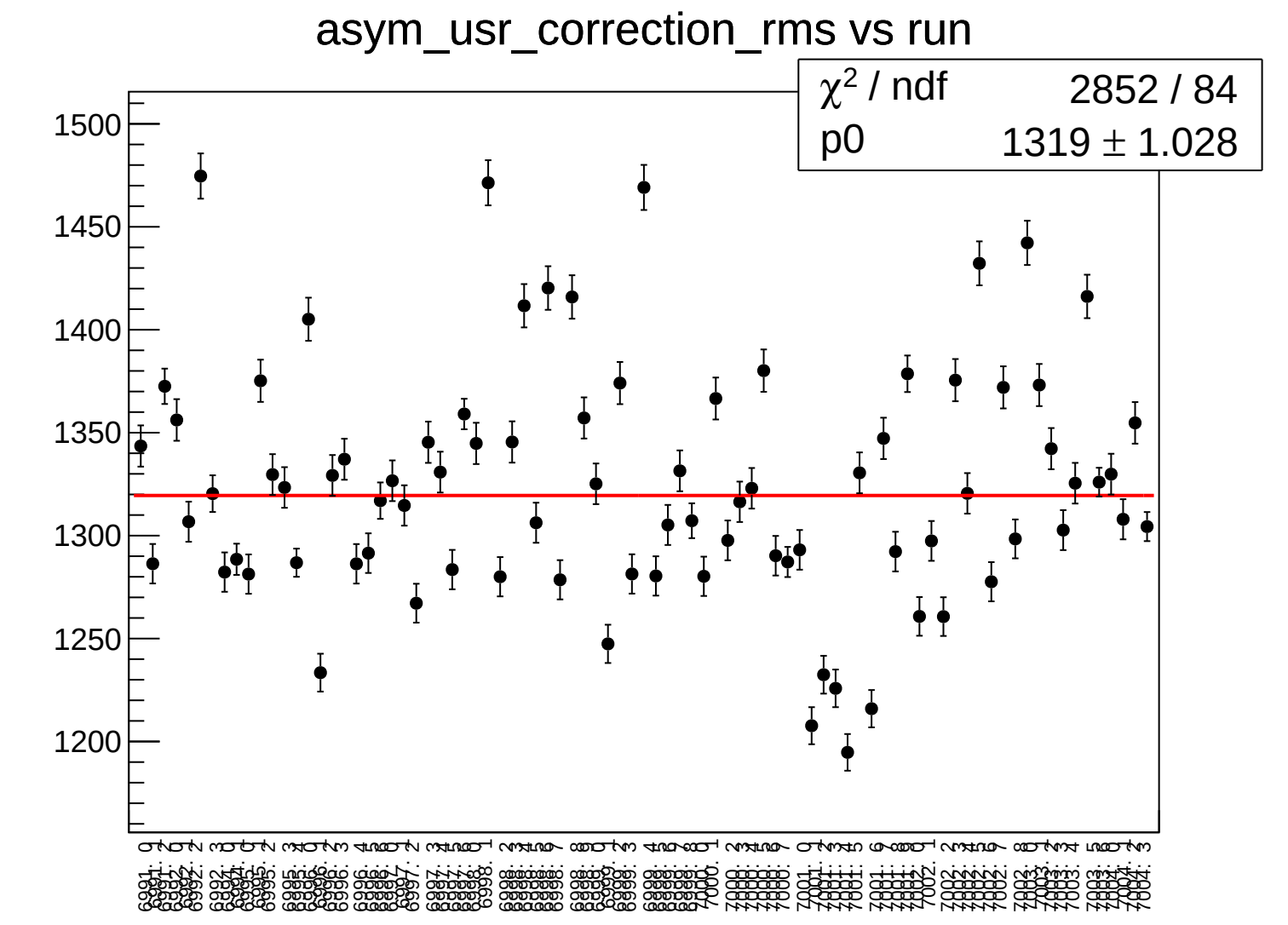

asym_usl_rms vs run
χ² / ndf 1157 / 84
p0 1820 ± 1.418
2000
1950
1900
1850
1800
1750
1700

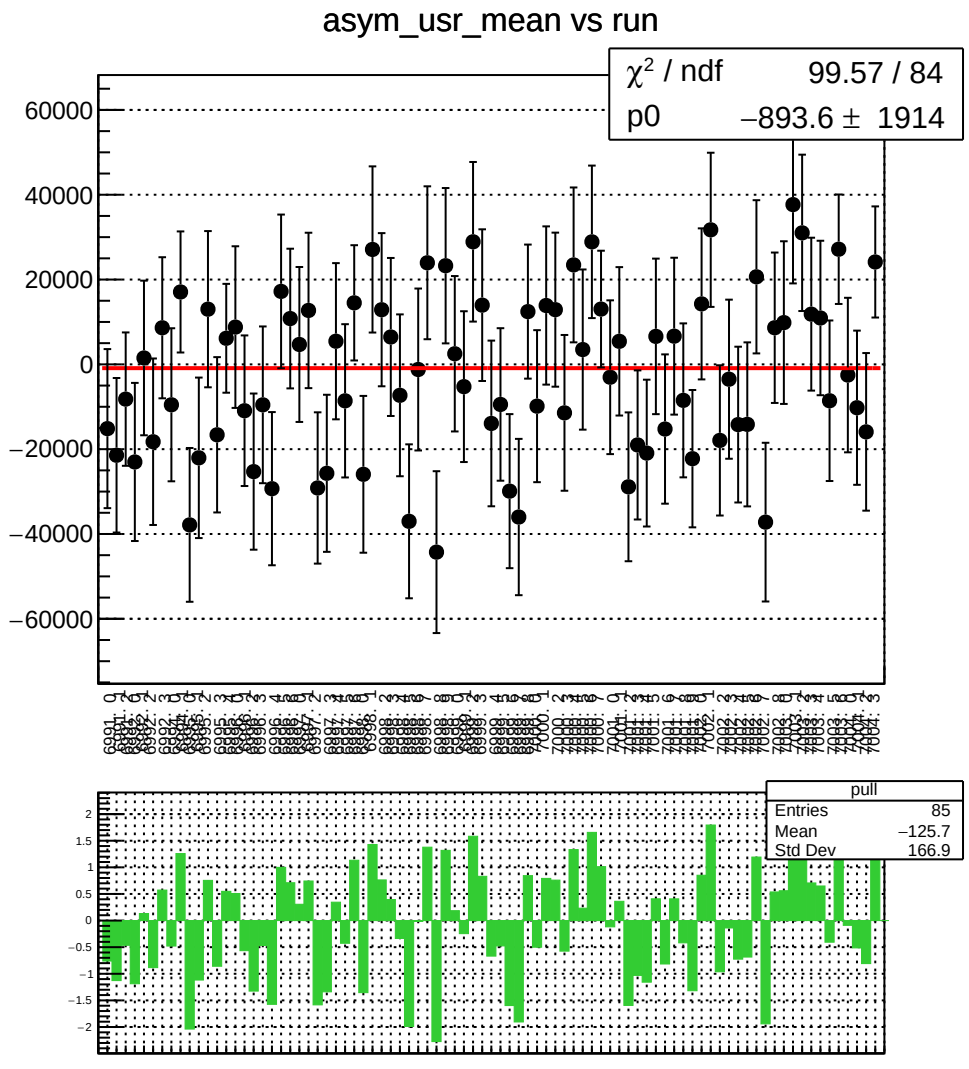

reg_asym_usr_mean vs run
χ² / ndf 71.47 / 84
p0 −1139 ± 1243
pull
Entries 85
Mean −127.2
Std Dev 161

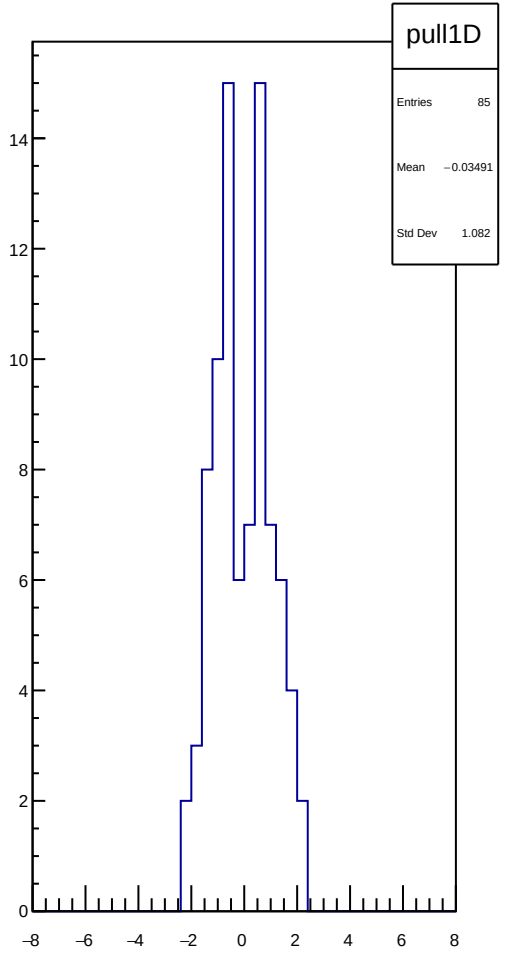

pull1D
Entries 85
Mean −0.01231
Std Dev 0.9169

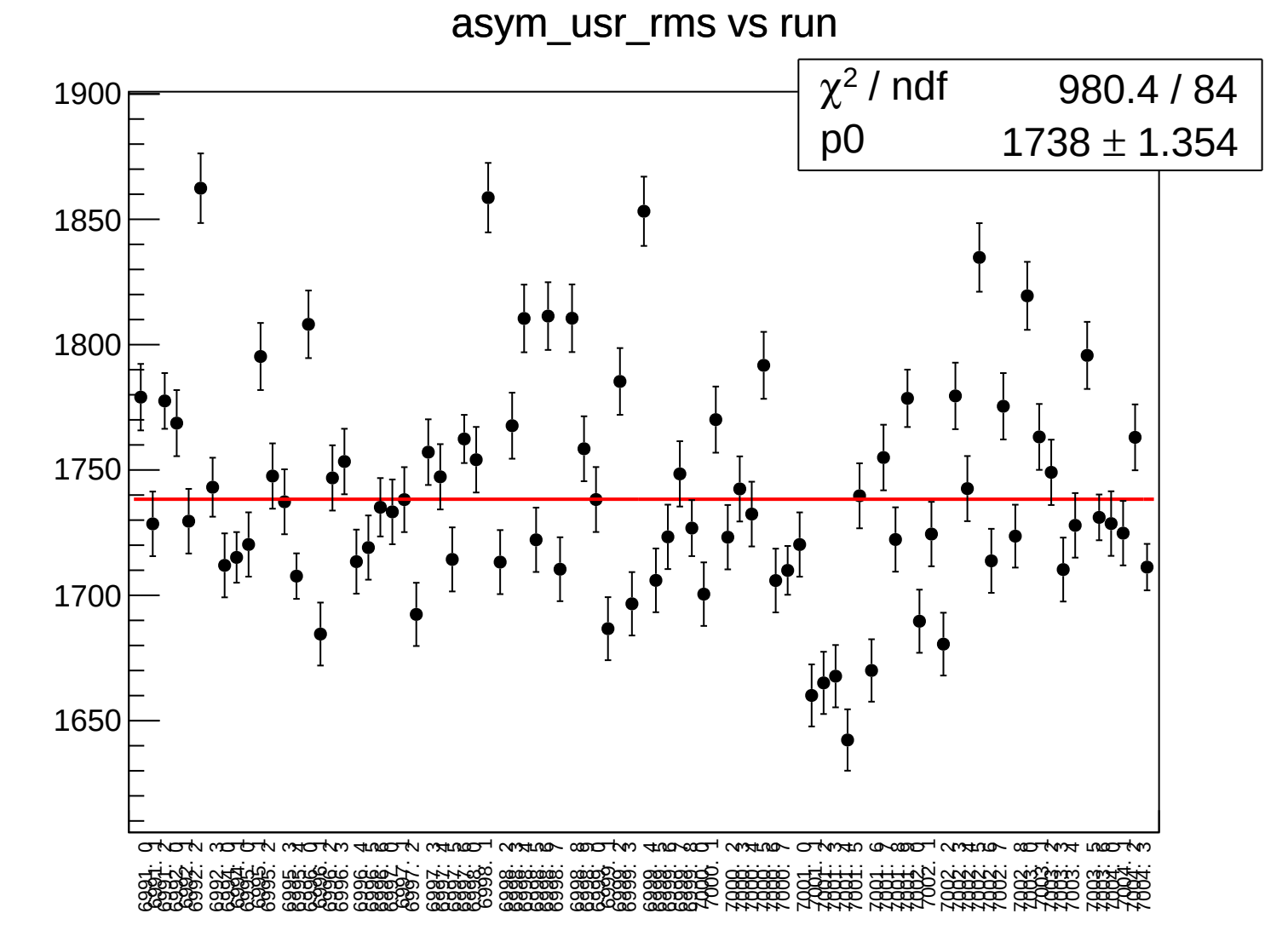

reg_asym_usr_rms vs run
χ² / ndf 175.7 / 84
p0 1129 ± 0.8787
1180
1170
1160
1150
1140
1130
1120
1110
1100
1090

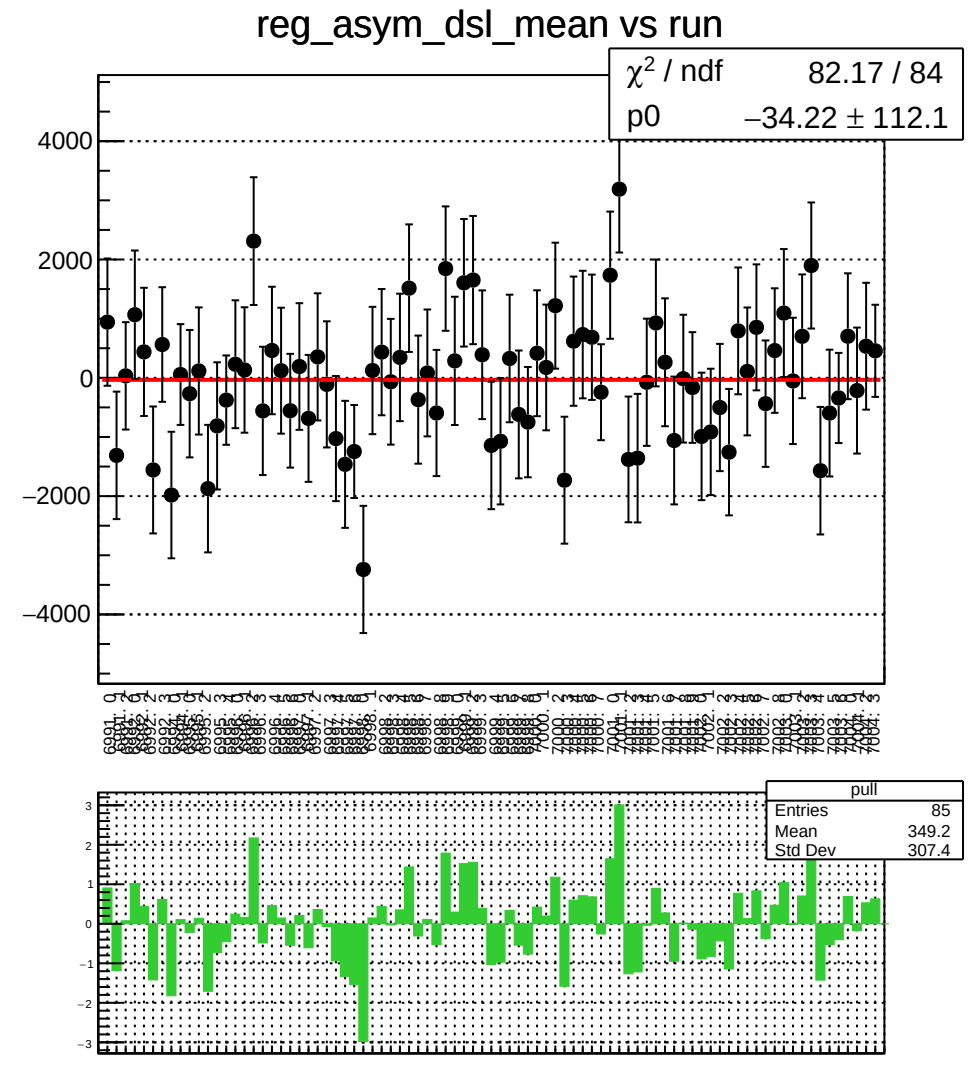

asym_usr_correction_mean vs run
χ² / ndf 105.3 / 84
p0 −213.7 ± 1454
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −129.5
Std Dev 172.8
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean 0.0342
Std Dev 1.112
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

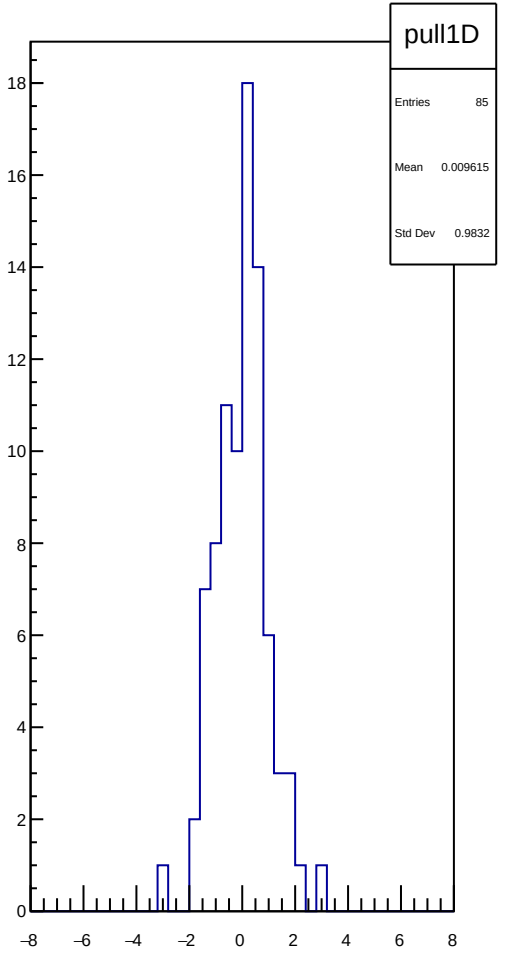

asym_usr_correction_rms vs run
χ² / ndf 2852 / 84
p0 1319 ± 1.028
1500
1450
1400
1350
1300
1250
1200

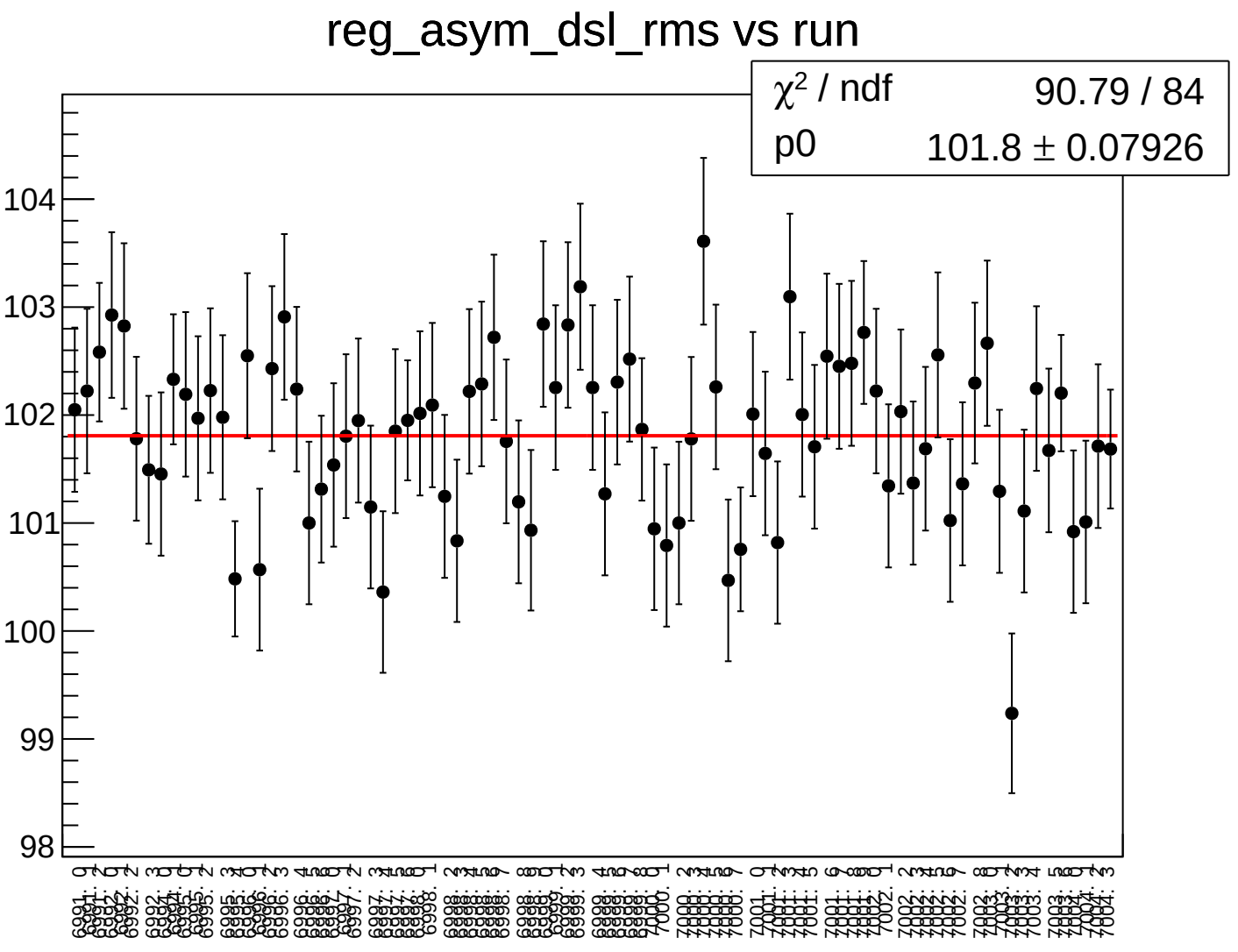

asym_usr_mean vs run
χ² / ndf 99.57 / 84
p0 −893.6 ± 1914
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −125.7
Std Dev 166.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

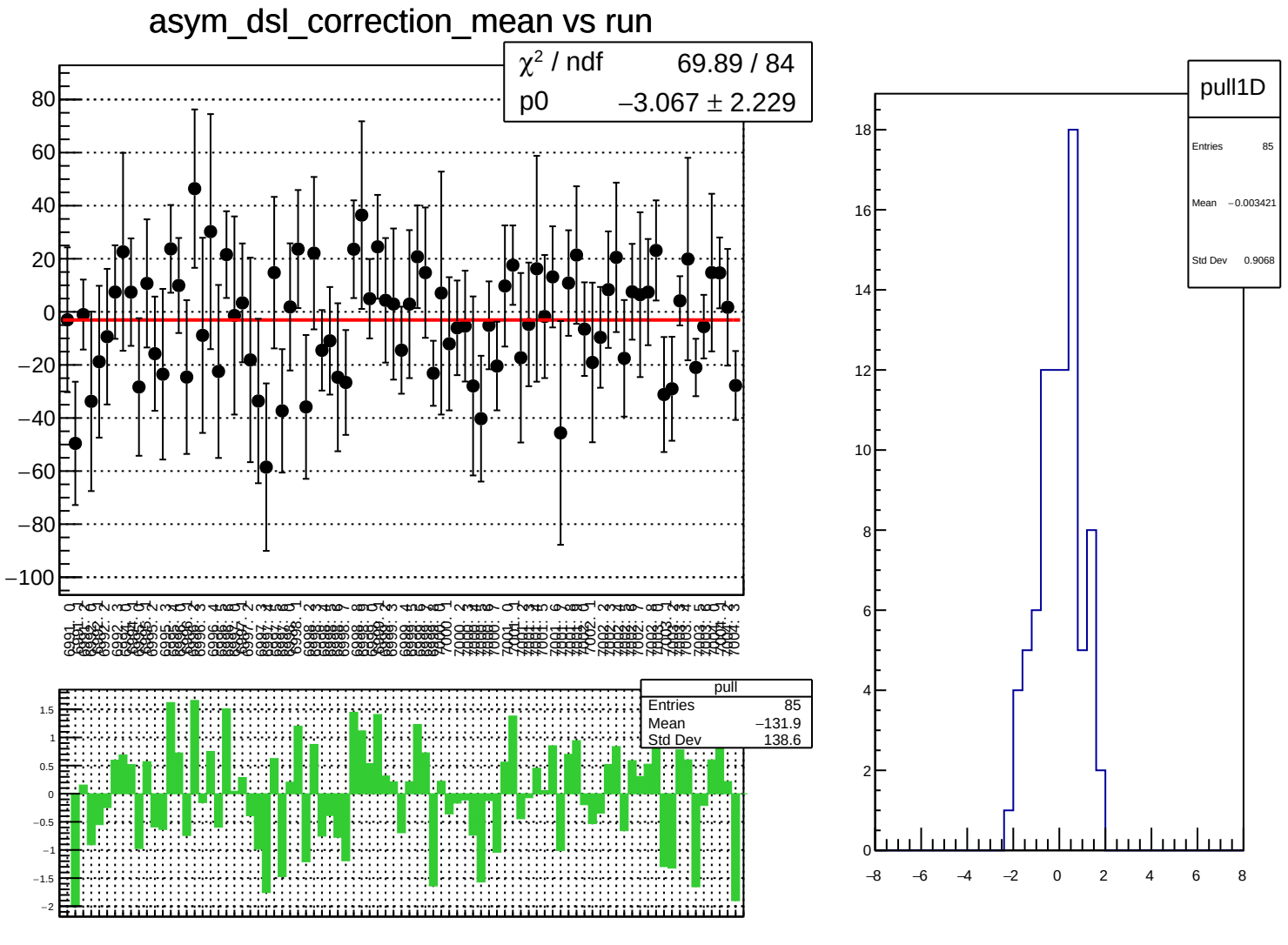

pull1D
Entries 85
Mean −0.03491
Std Dev 1.082
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

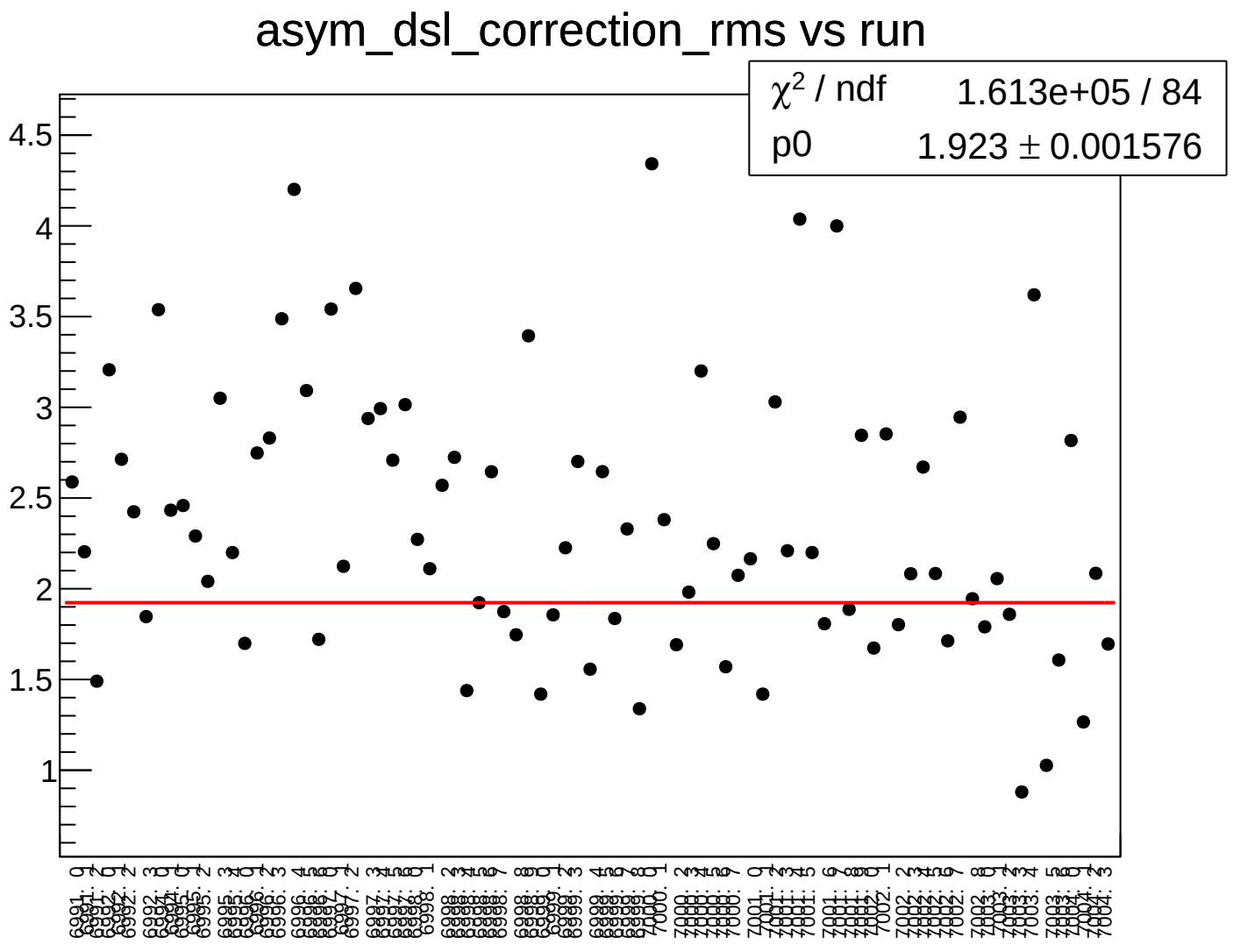

asym_usr_rms vs run
χ² / ndf 980.4 / 84
p0 1738 ± 1.354
1900
1850
1800
1750
1700
1650

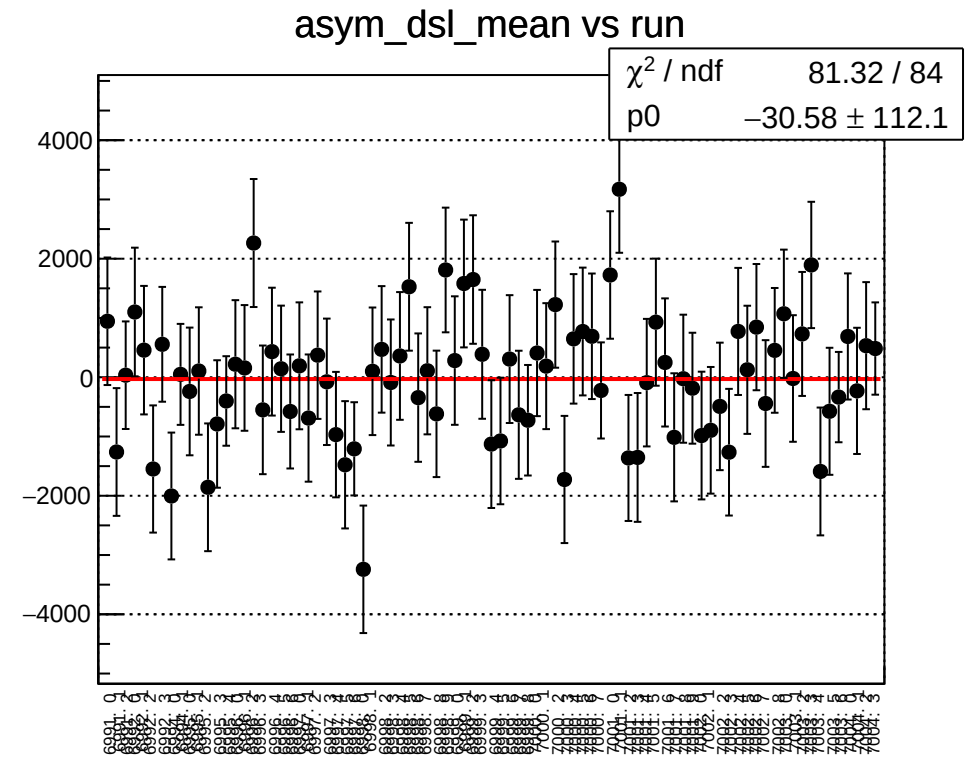

reg_asym_dsl_mean vs run
χ² / ndf 82.17 / 84
p0 −34.22 ± 112.1
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 349.2
Std Dev 307.4
3
2
1
0
−1
−2
−3

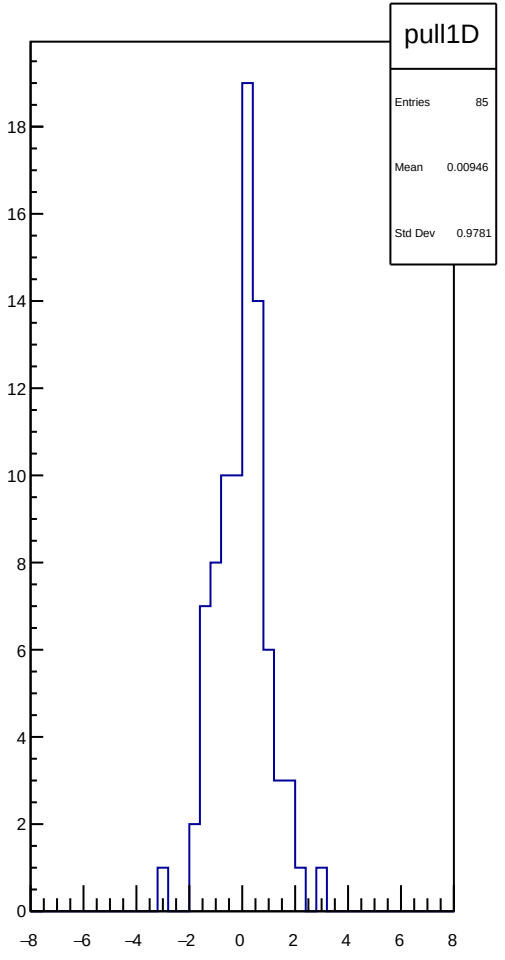

pull1D
Entries 85
Mean 0.009615
Std Dev 0.9832
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

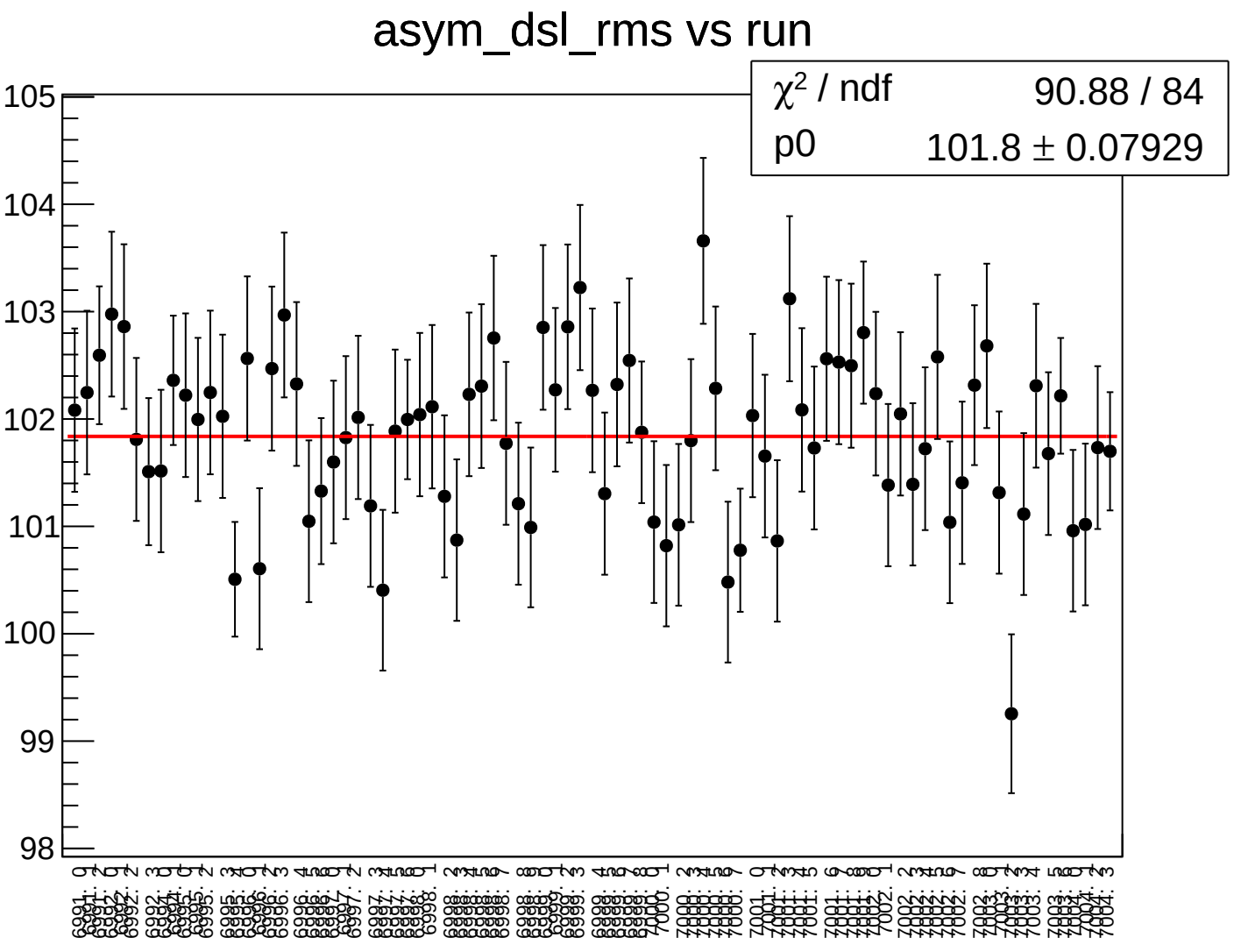

reg_asym_dsl_rms vs run
χ^2 / ndf 90.79 / 84
p0 101.8 ± 0.07926
104
103
102
101
100
99
98

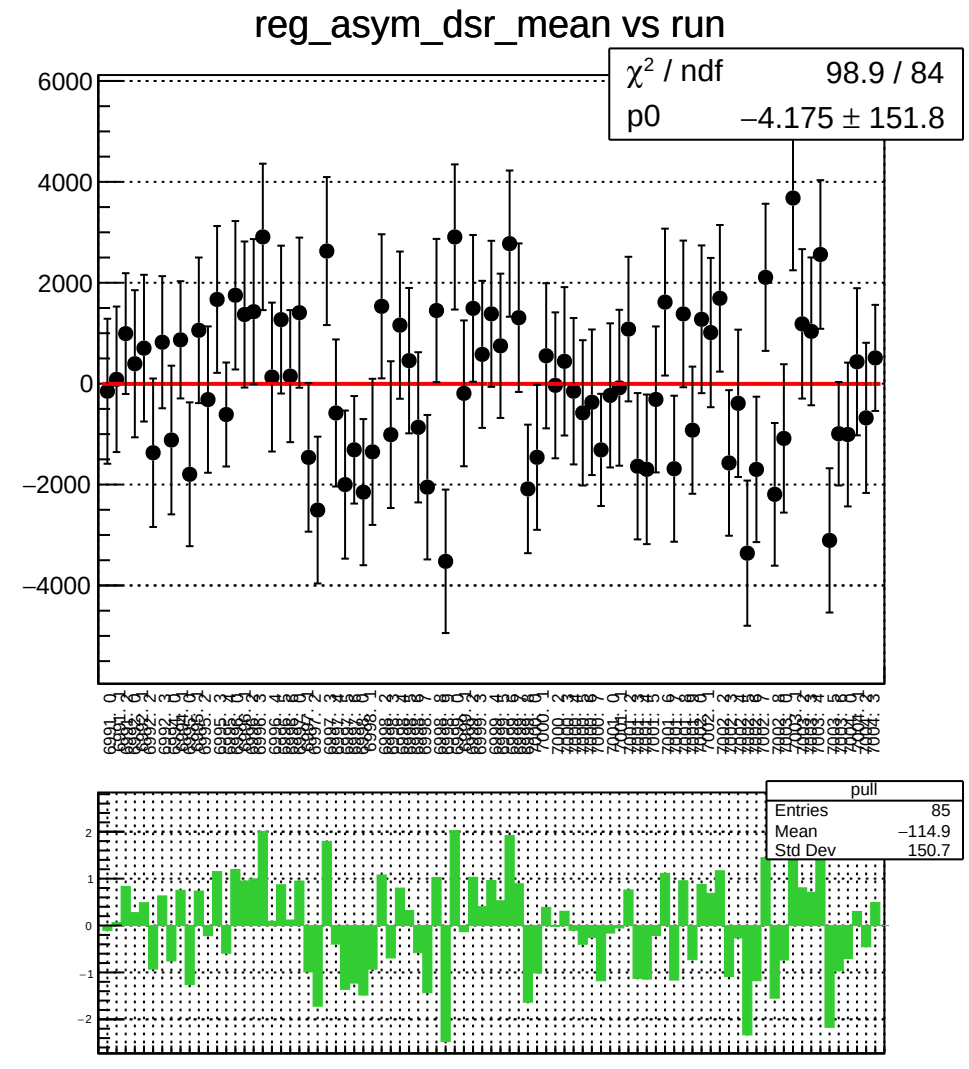

asym_dsl_correction_mean vs run
χ² / ndf 69.89 / 84
p0 −3.067 ± 2.229
pull
Entries 85
Mean −131.9
Std Dev 138.6
pull1D
Entries 85
Mean −0.003421
Std Dev 0.9068

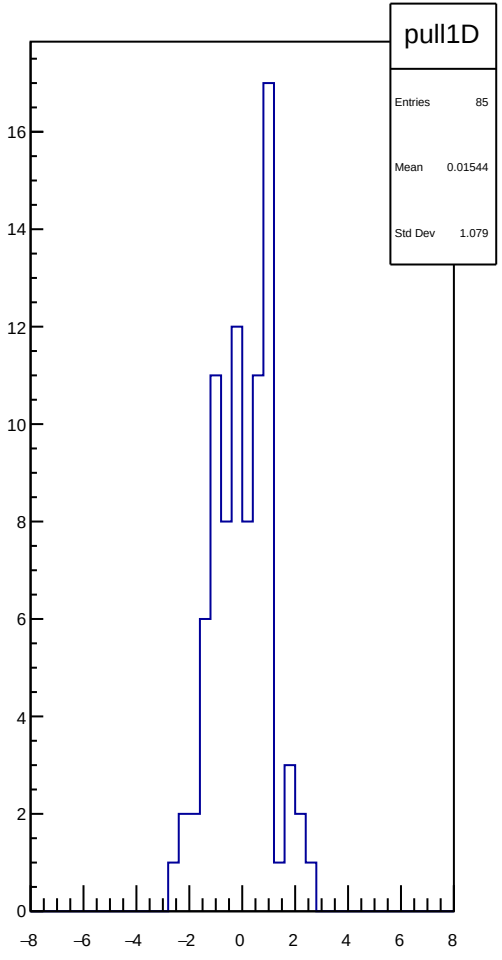

asym_dsl_correction_rms vs run
χ^2 / ndf 1.613e+05 / 84
p0 1.923 ± 0.001576
4.5
4
3.5
3
2.5
2
1.5
1

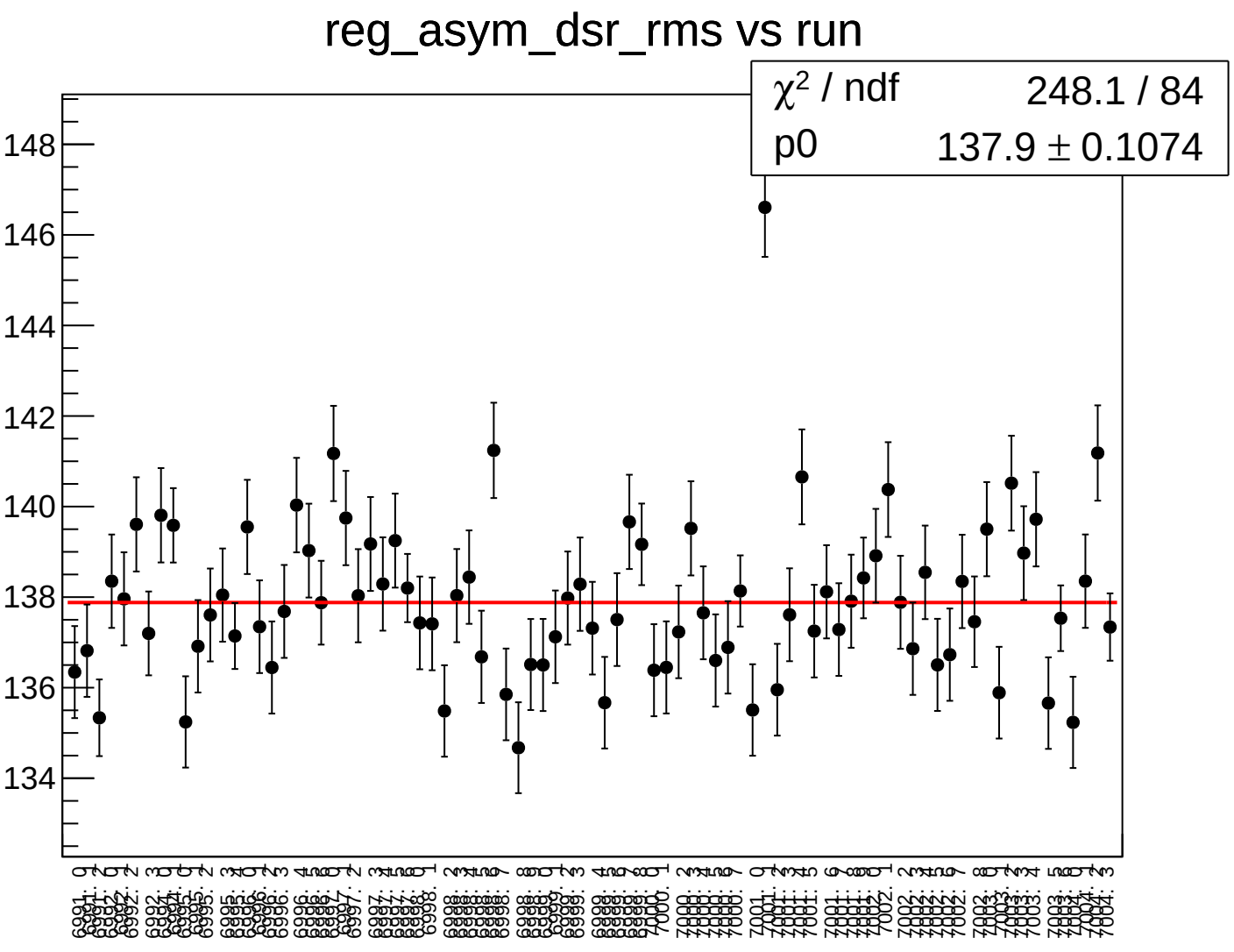

asym_dsl_mean vs run
χ² / ndf 81.32 / 84
p0 −30.58 ± 112.1
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 351.3
Std Dev 309.4
3
2
1
0
−1
−2
−3

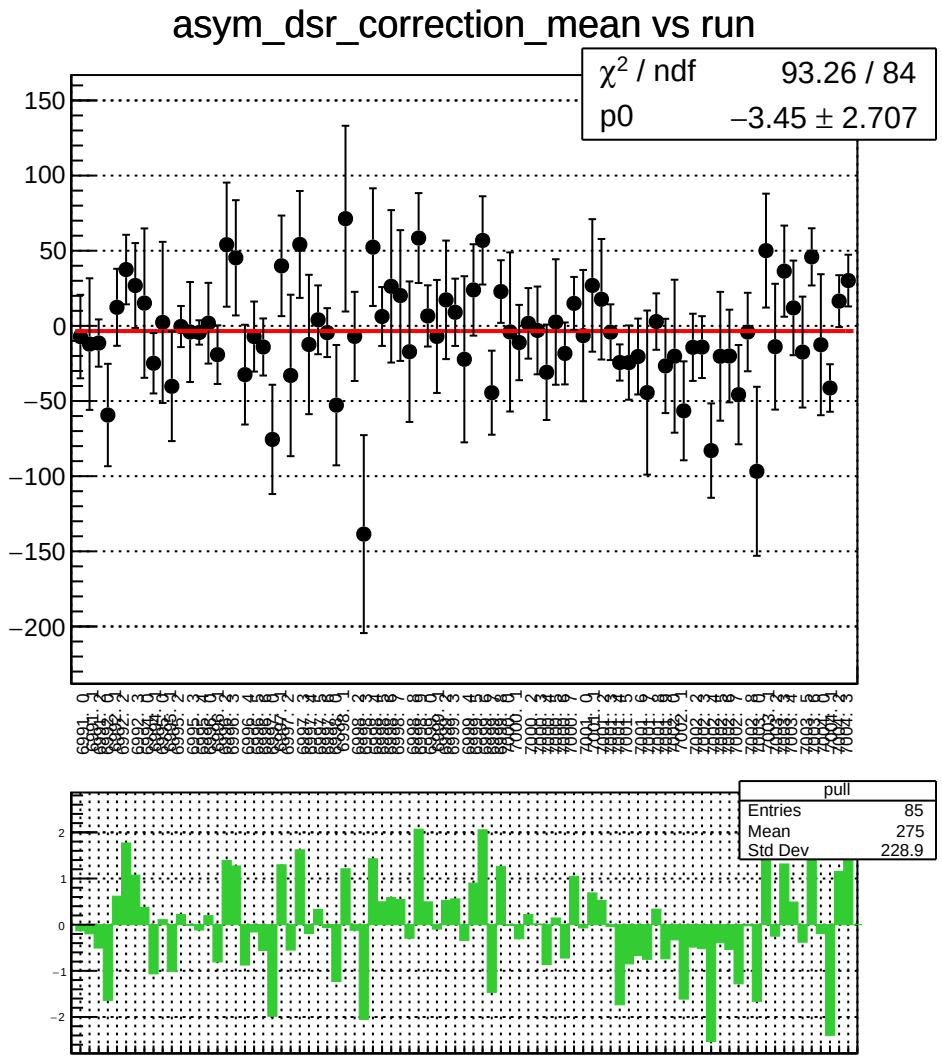

pull1D
Entries 85
Mean 0.00946
Std Dev 0.9781
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

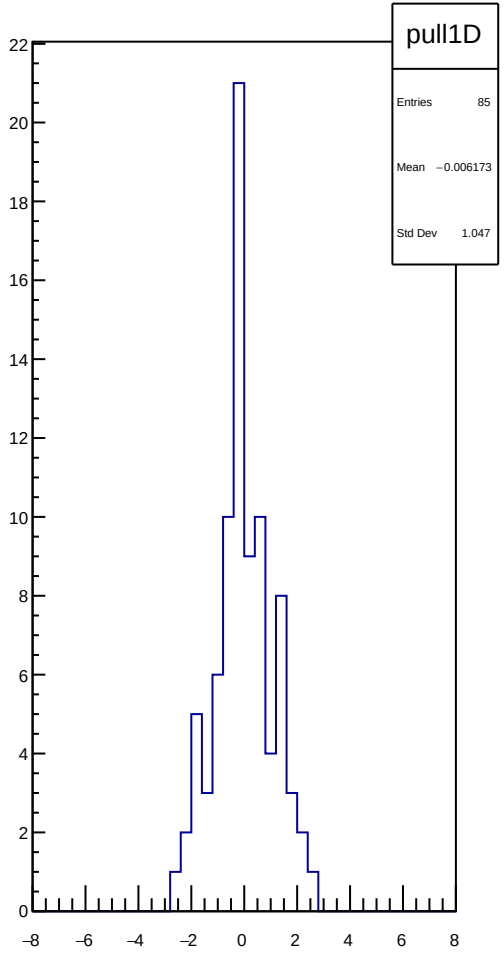

asym_dsl_rms vs run
χ^2 / ndf 90.88 / 84
p0 101.8 ± 0.07929
105
104
103
102
101
100
99
98

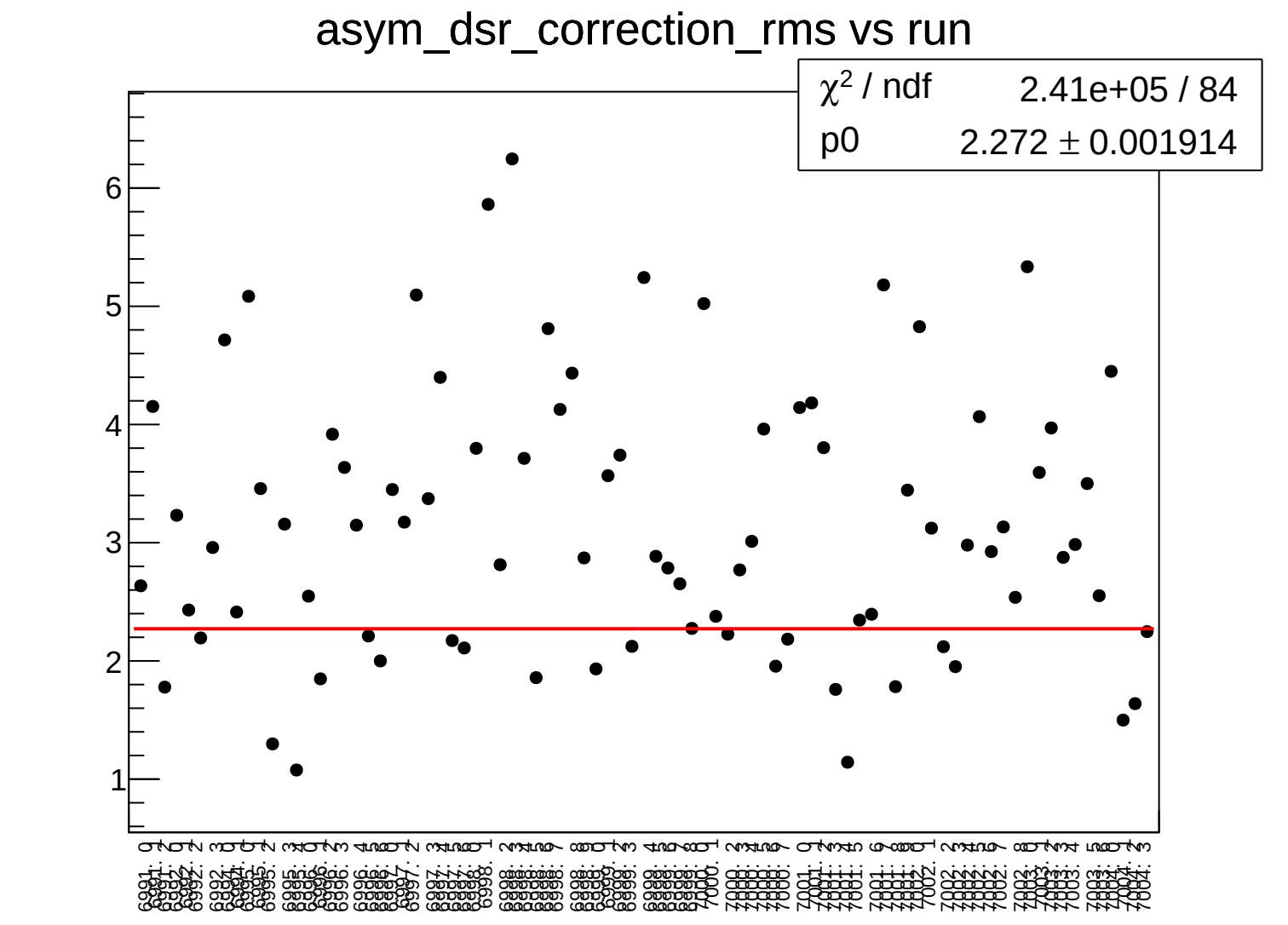

reg_asym_dsr_mean vs run
χ² / ndf 98.9 / 84
p0 −4.175 ± 151.8
6000
4000
2000
0
−2000
−4000
pull
Entries 85
Mean −114.9
Std Dev 150.7
2
1
0
−1
−2

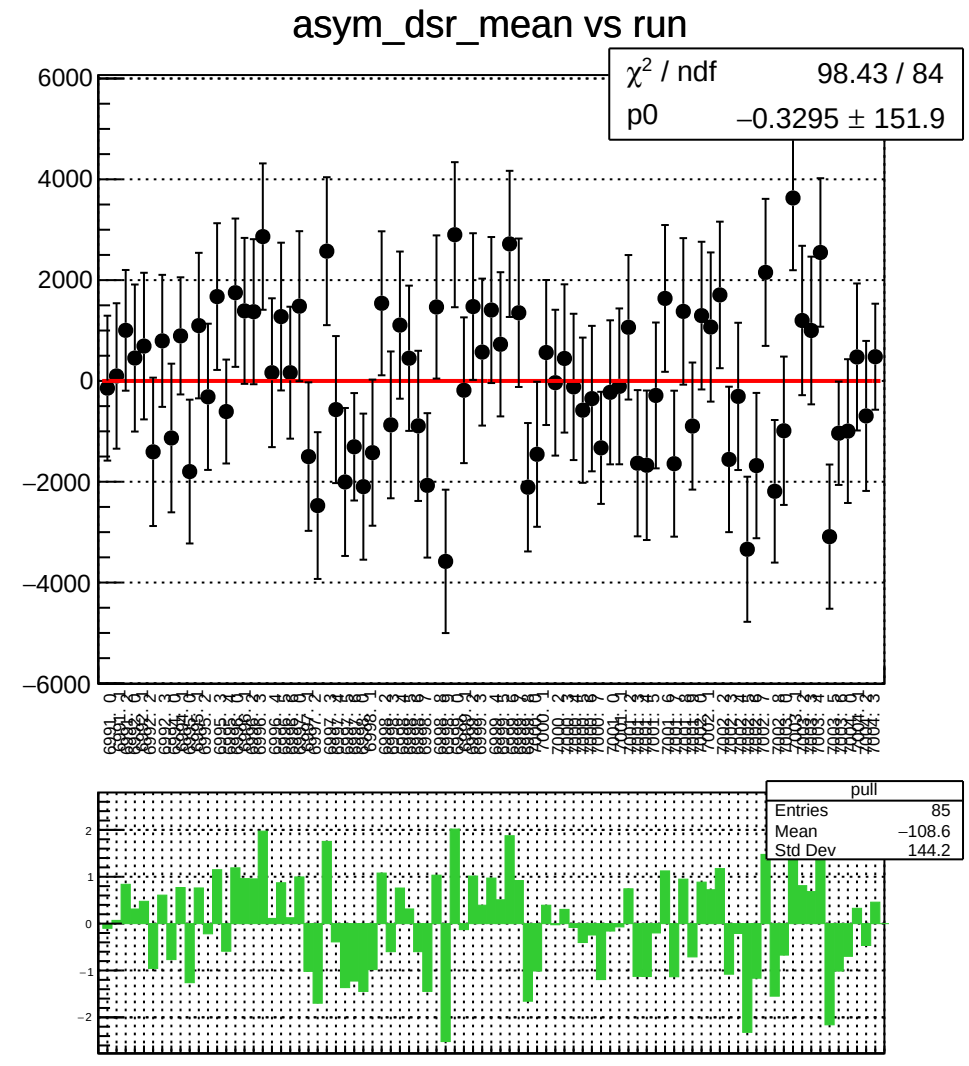

pull1D
Entries 85
Mean 0.01544
Std Dev 1.079
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

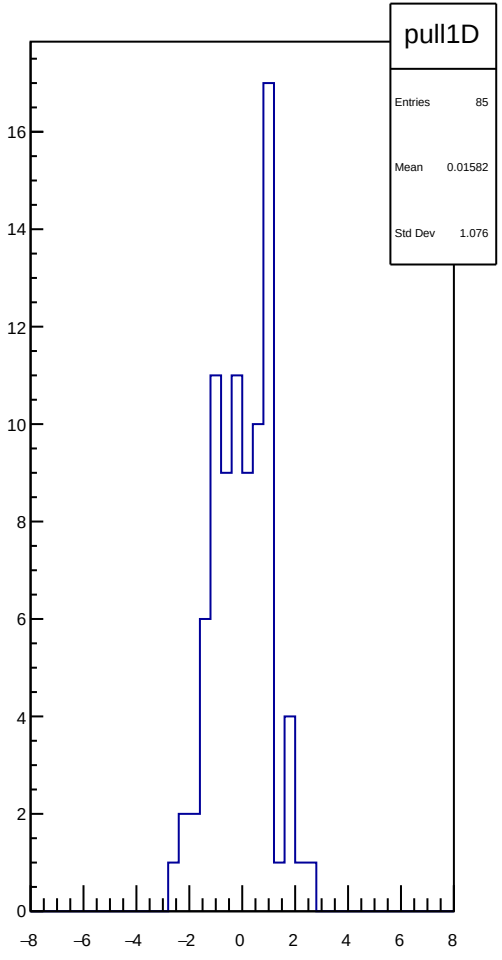

reg_asym_dsr_rms vs run
χ^2 / ndf 248.1 / 84
p0 137.9 ± 0.1074
148
146
144
142
140
138
136
134

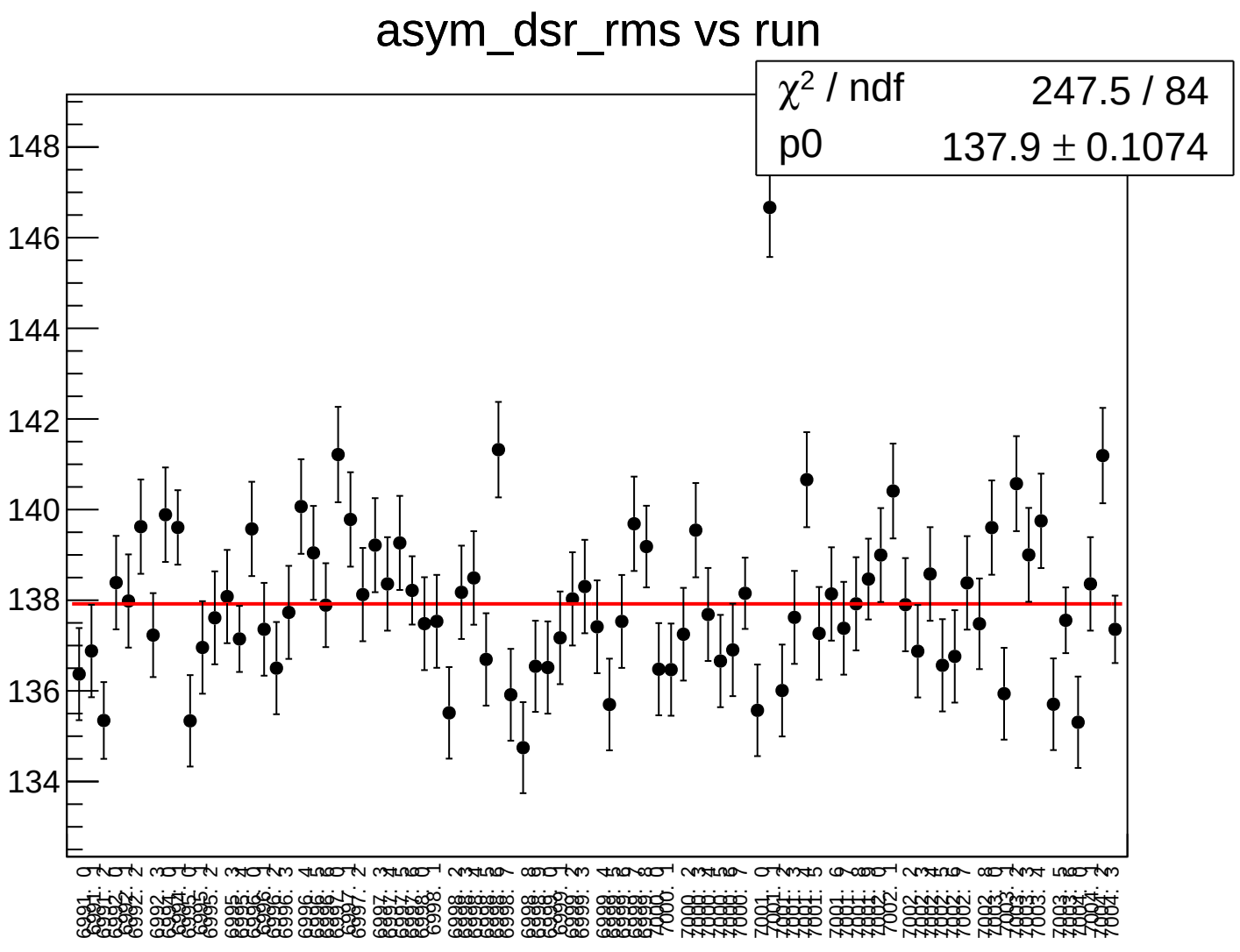

asym_dsr_correction_mean vs run
χ² / ndf 93.26 / 84
p0 −3.45 ± 2.707
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 275
Std Dev 228.9
2
1
0
−1
−2

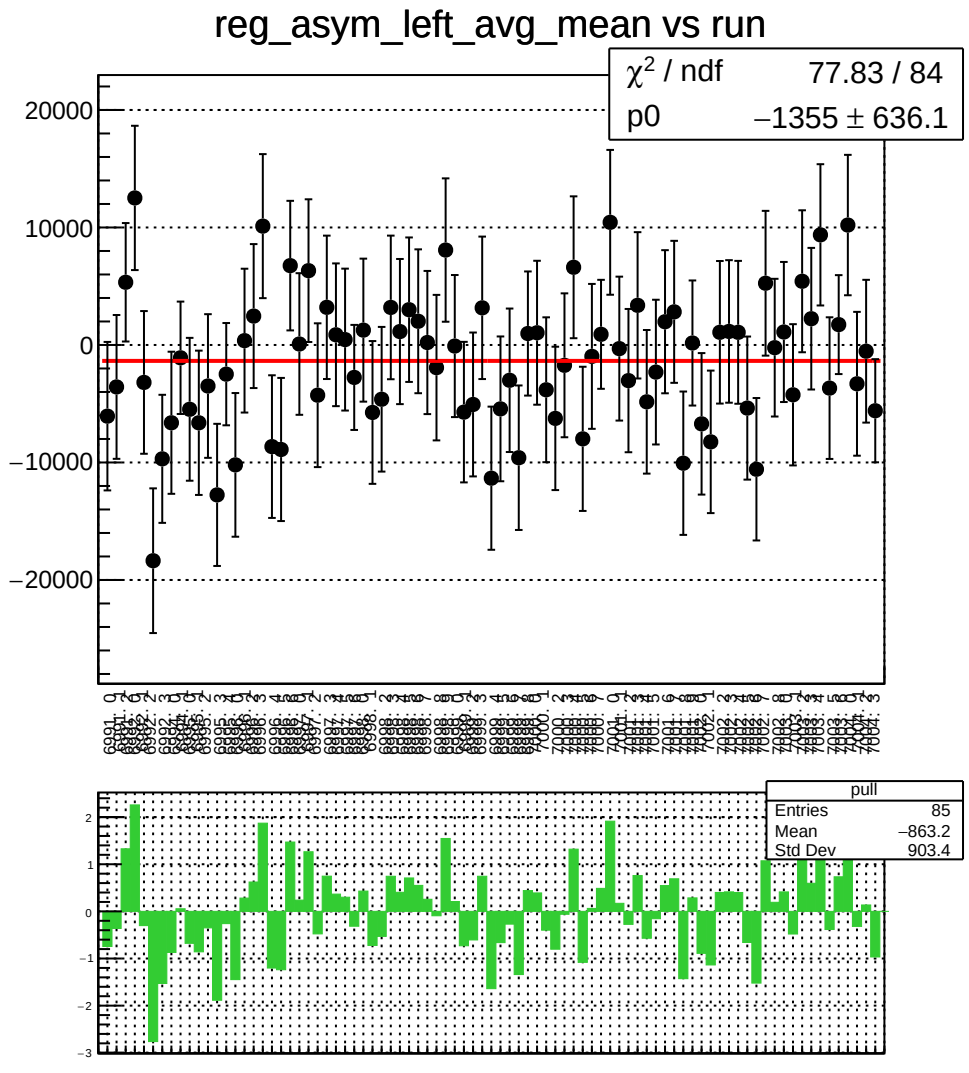

pull1D
Entries 85
Mean −0.006173
Std Dev 1.047
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

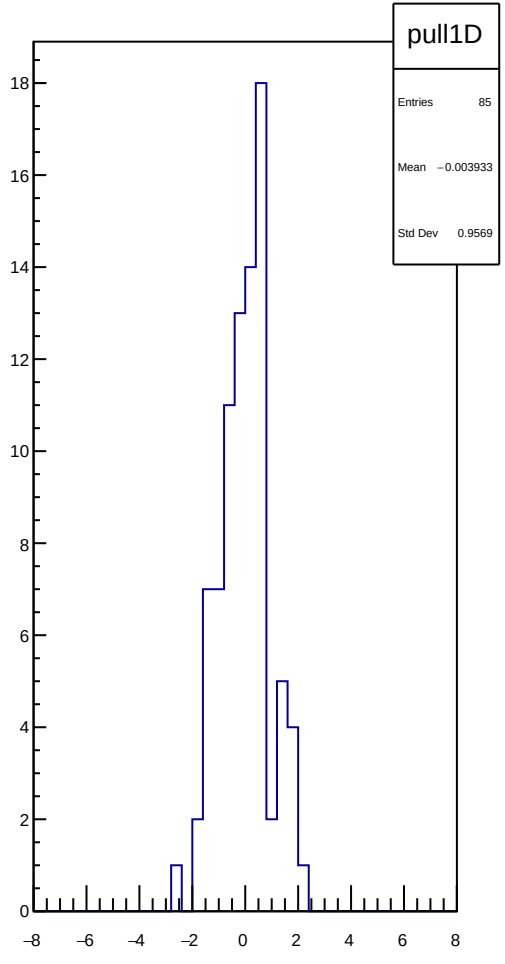

asym_dsr_correction_rms vs run
χ^2 / ndf 2.41e+05 / 84
p0 2.272 ± 0.001914
6
5
4
3
2
1

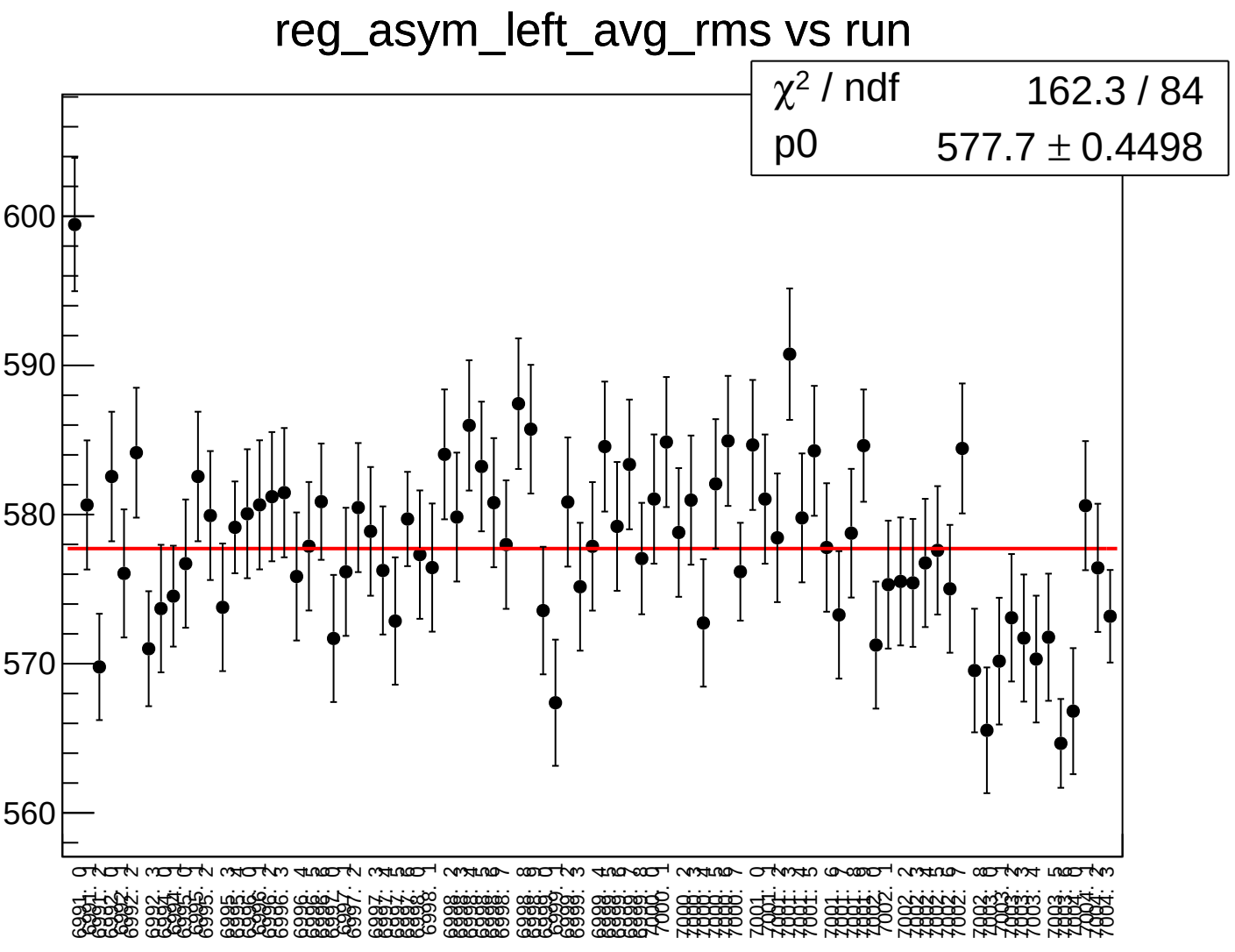

asym_dsr_mean vs run
χ² / ndf 98.43 / 84
p0 −0.3295 ± 151.9
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −108.6
Std Dev 144.2
2
1
0
−1
−2

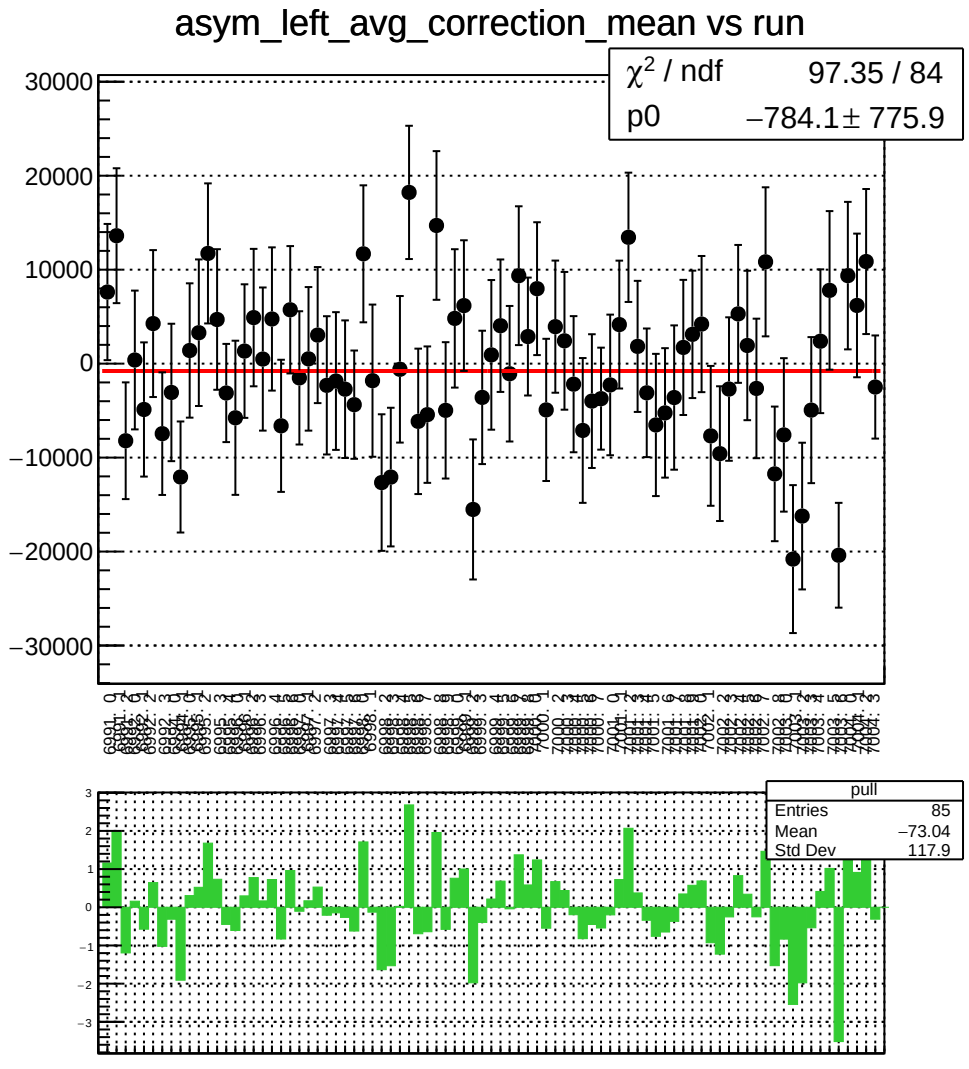

pull1D
Entries 85
Mean 0.01582
Std Dev 1.076
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

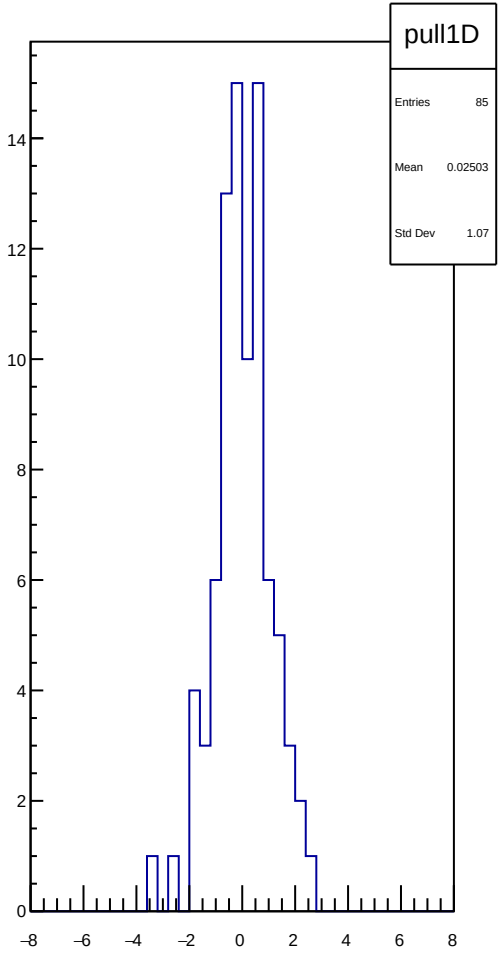

asym_dsr_rms vs run
χ^2 / ndf 247.5 / 84
p0 137.9 ± 0.1074
148
146
144
142
140
138
136
134

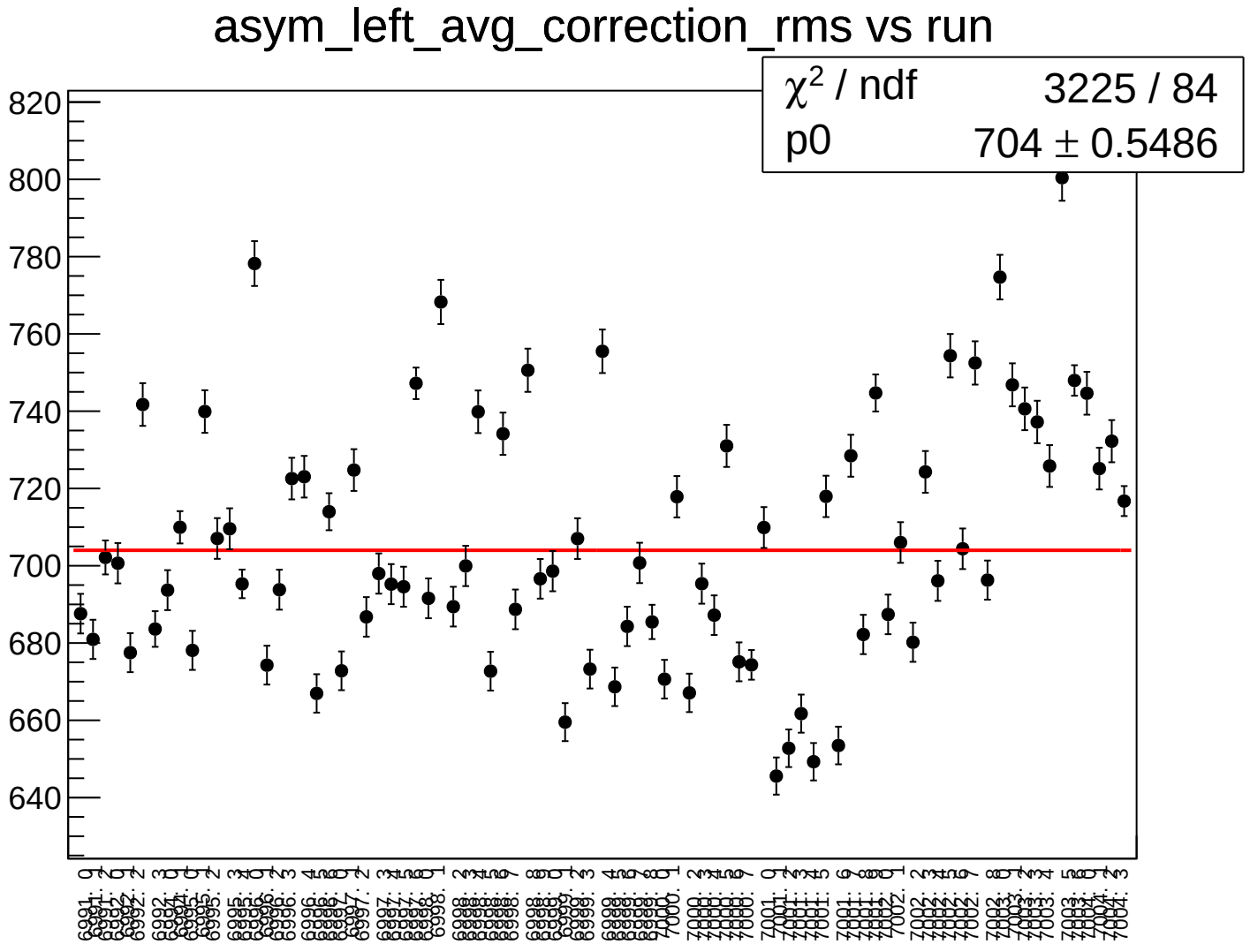

reg_asym_left_avg_mean vs run
χ² / ndf 77.83 / 84
p0 −1355 ± 636.1
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −863.2
Std Dev 903.4
2
1
0
−1
−2
−3

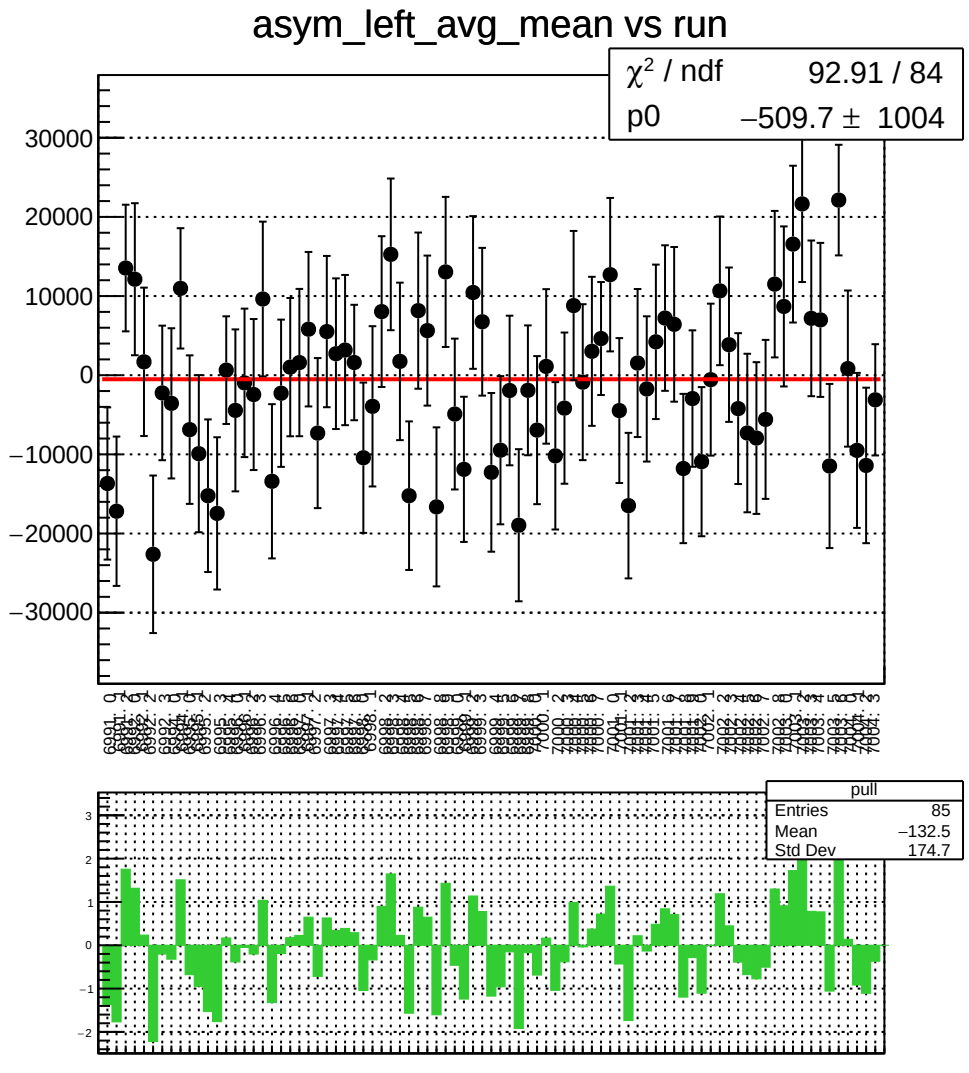

pull1D
Entries 85
Mean −0.003933
Std Dev 0.9569
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

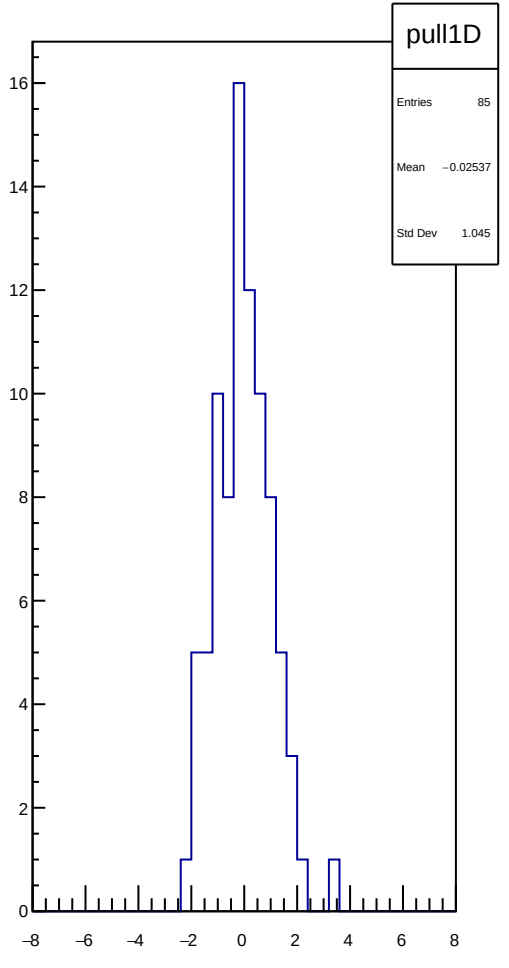

reg_asym_left_avg_rms vs run
χ² / ndf 162.3 / 84
p0 577.7 ± 0.4498
600
590
580
570
560

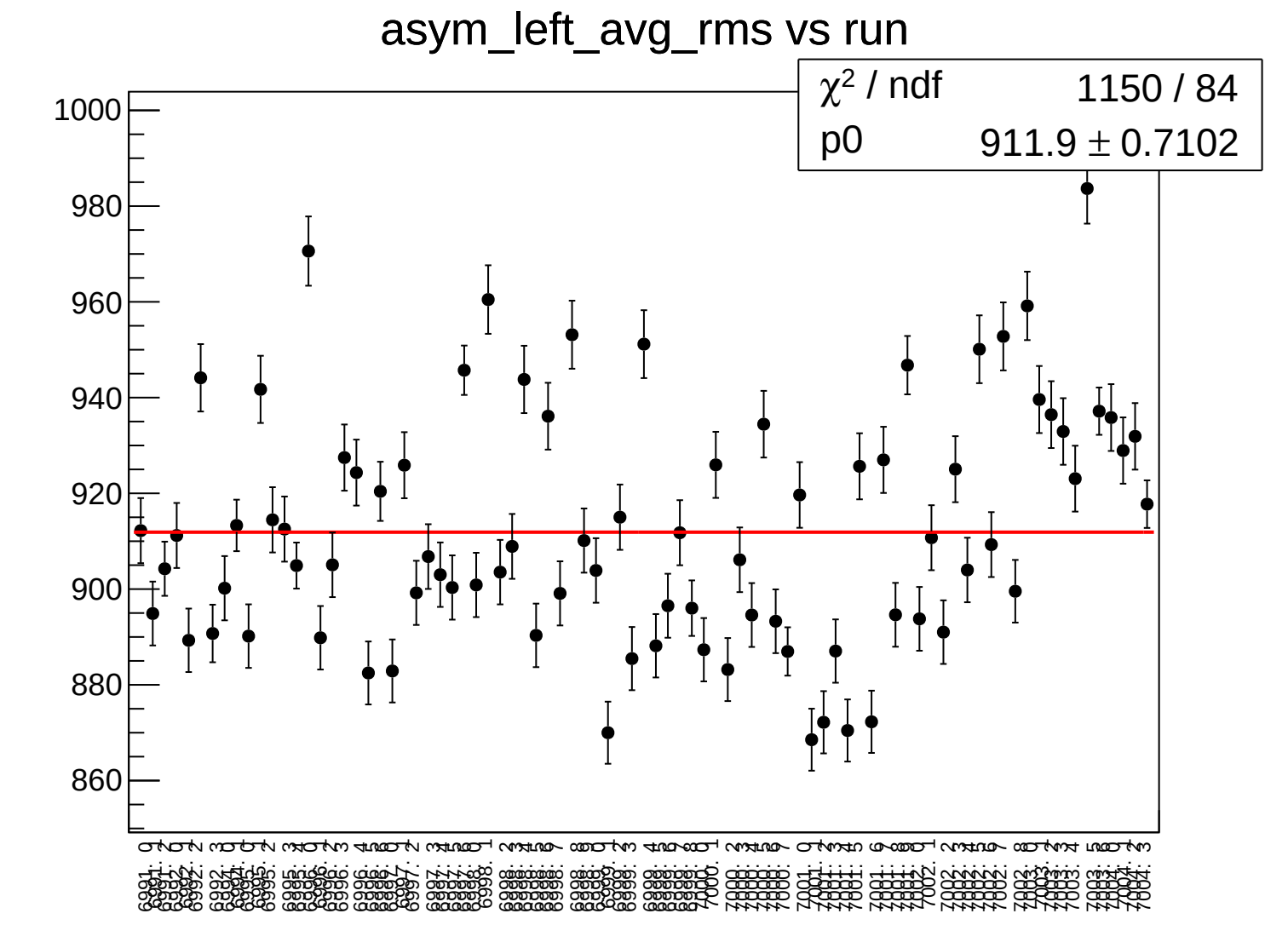

asym_left_avg_correction_mean vs run
χ² / ndf 97.35 / 84
p0 −784.1± 775.9
pull
Entries 85
Mean −73.04
Std Dev 117.9

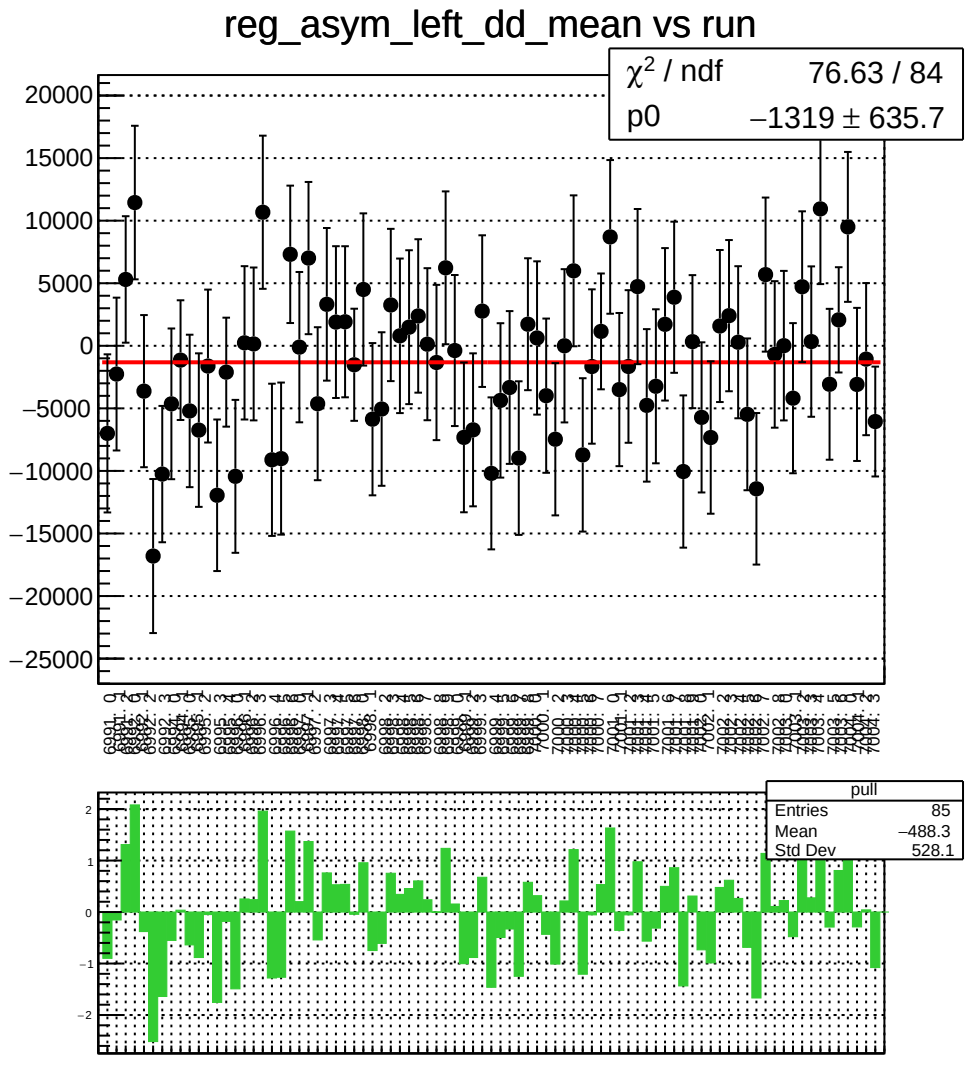

pull1D
Entries 85
Mean 0.02503
Std Dev 1.07

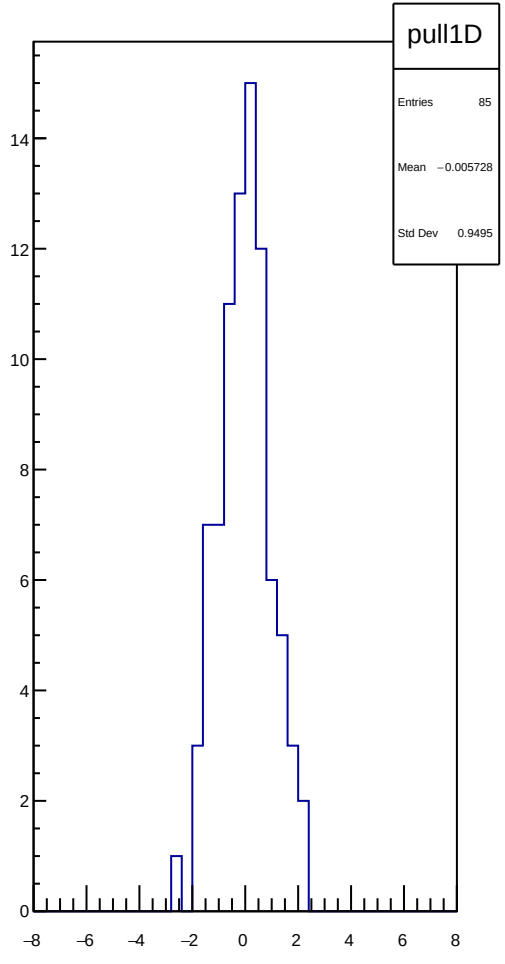

asym_left_avg_correction_rms vs run
χ² / ndf 3225 / 84
p0 704 ± 0.5486
820
800
780
760
740
720
700
680
660
640

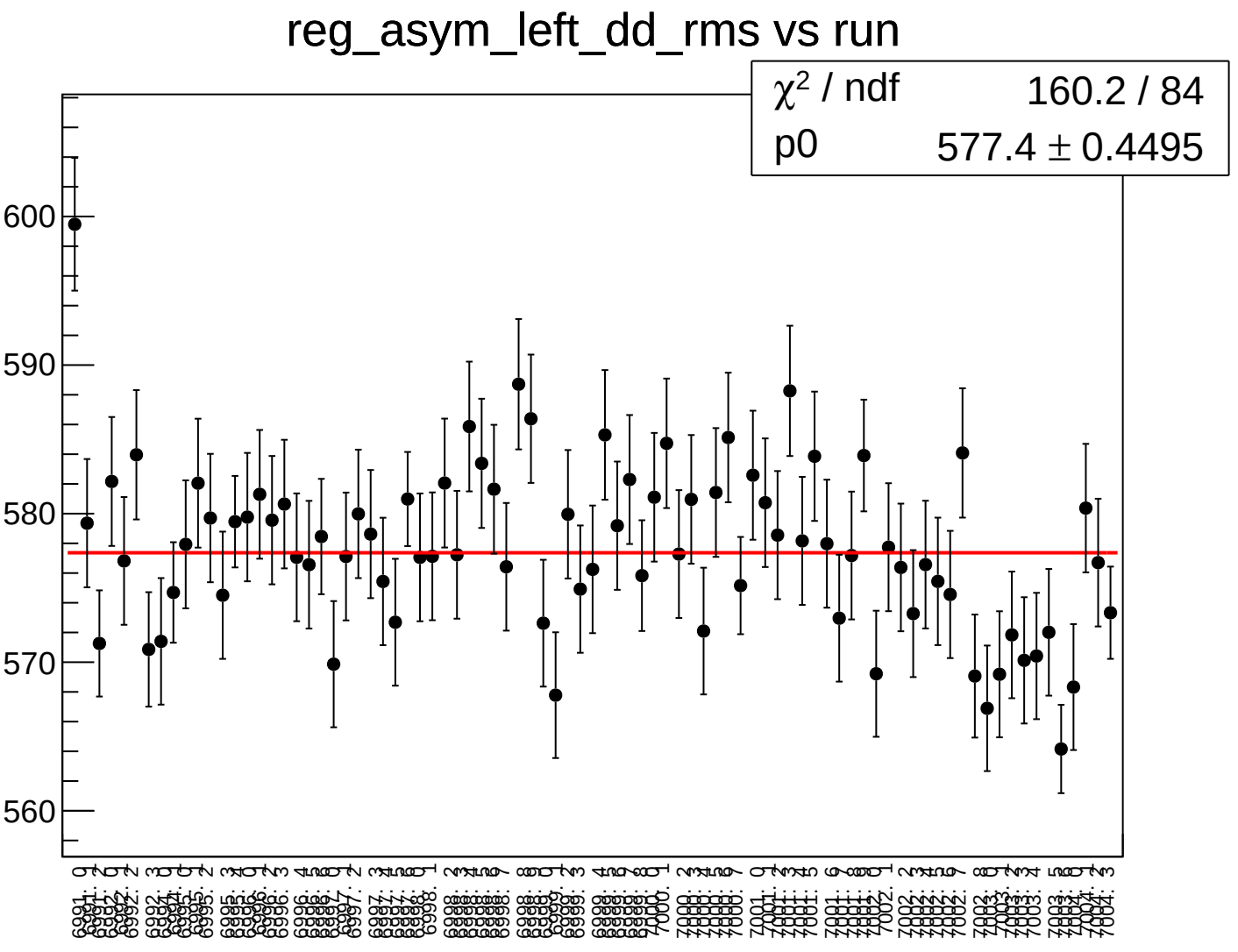

asym_left_avg_mean vs run
χ² / ndf 92.91 / 84
p0 −509.7 ± 1004
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −132.5
Std Dev 174.7
3
2
1
0
−1
−2

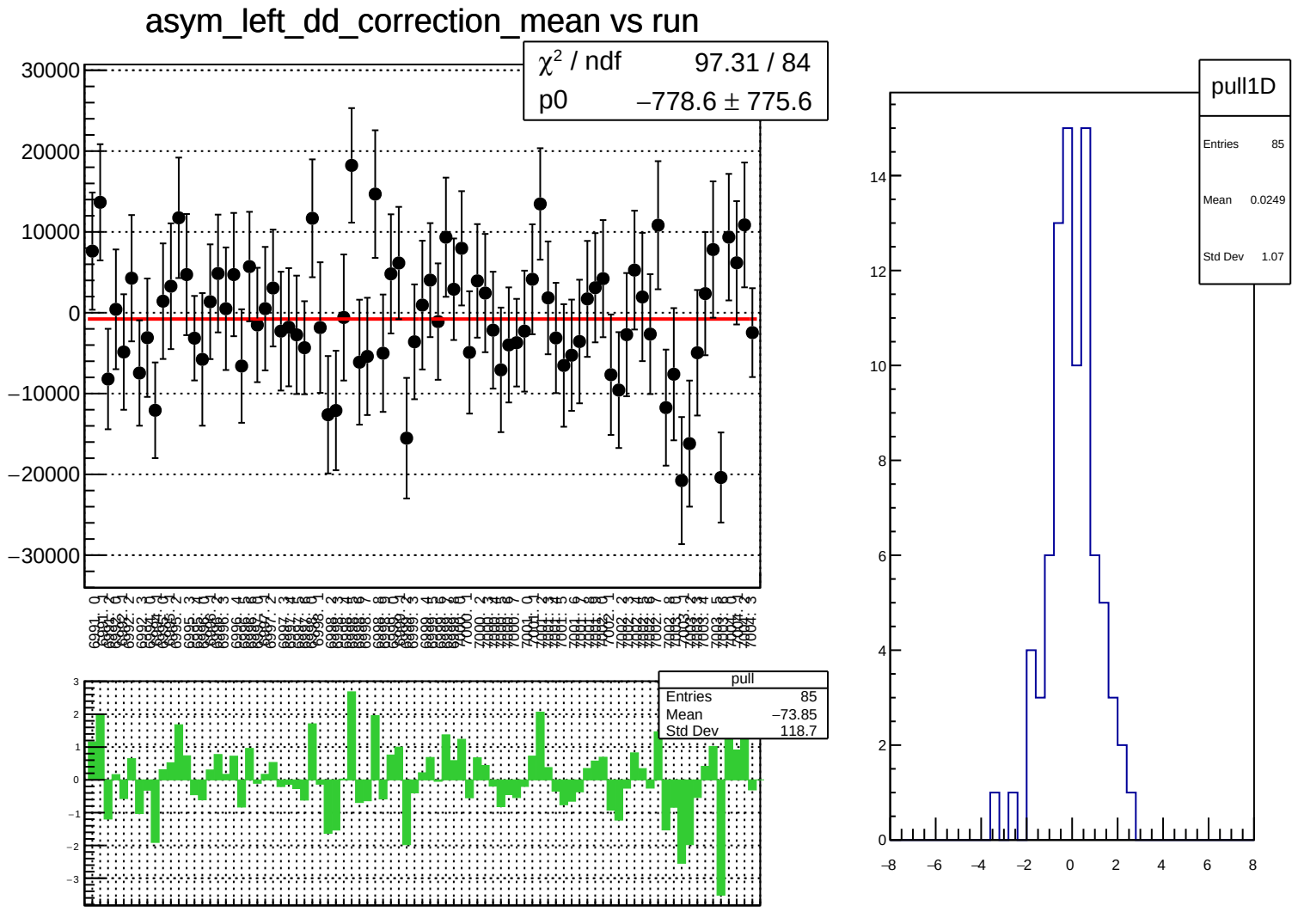

pull1D
Entries 85
Mean −0.02537
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

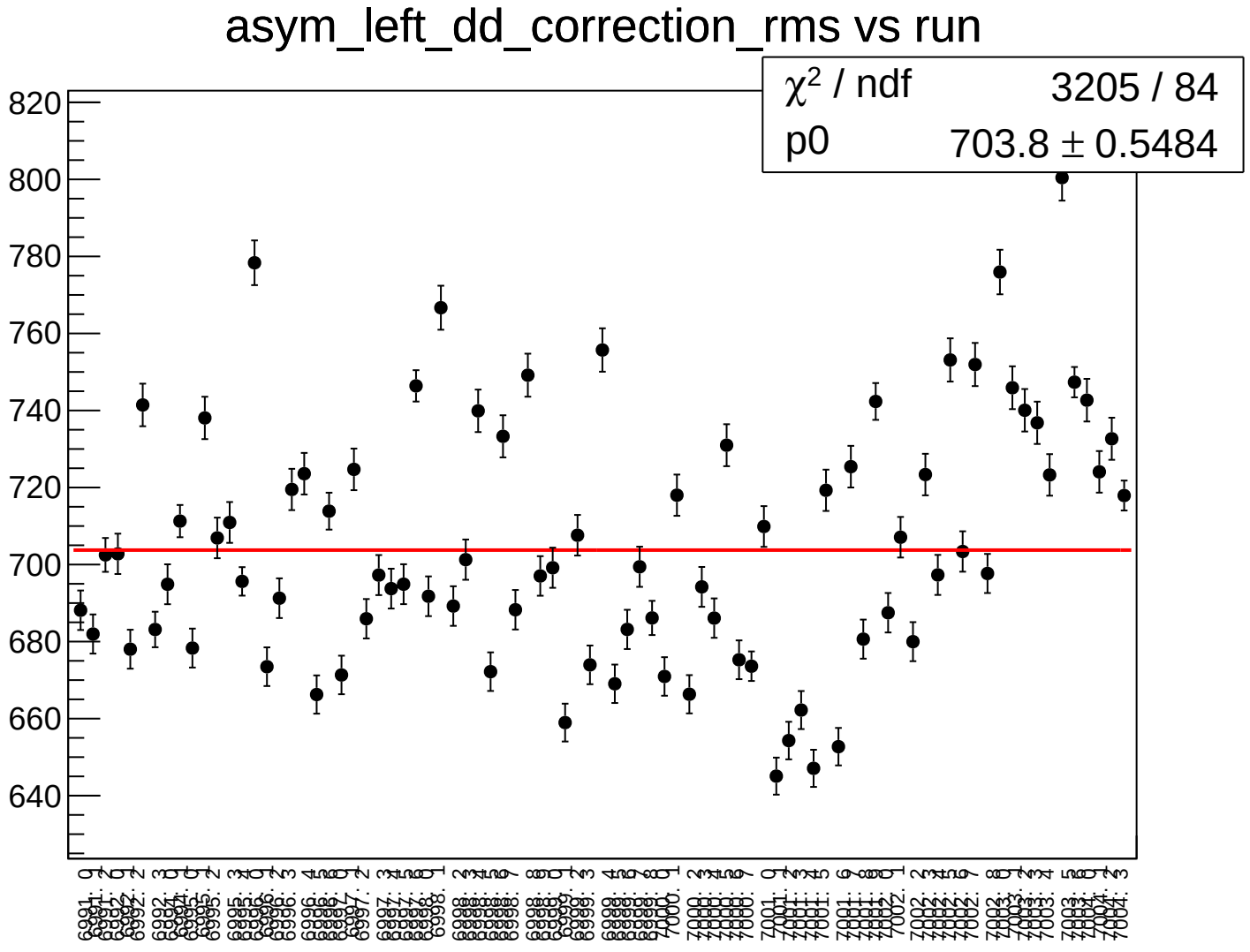

asym_left_avg_rms vs run
χ² / ndf 1150 / 84
p0 911.9 ± 0.7102
1000
980
960
940
920
900
880
860

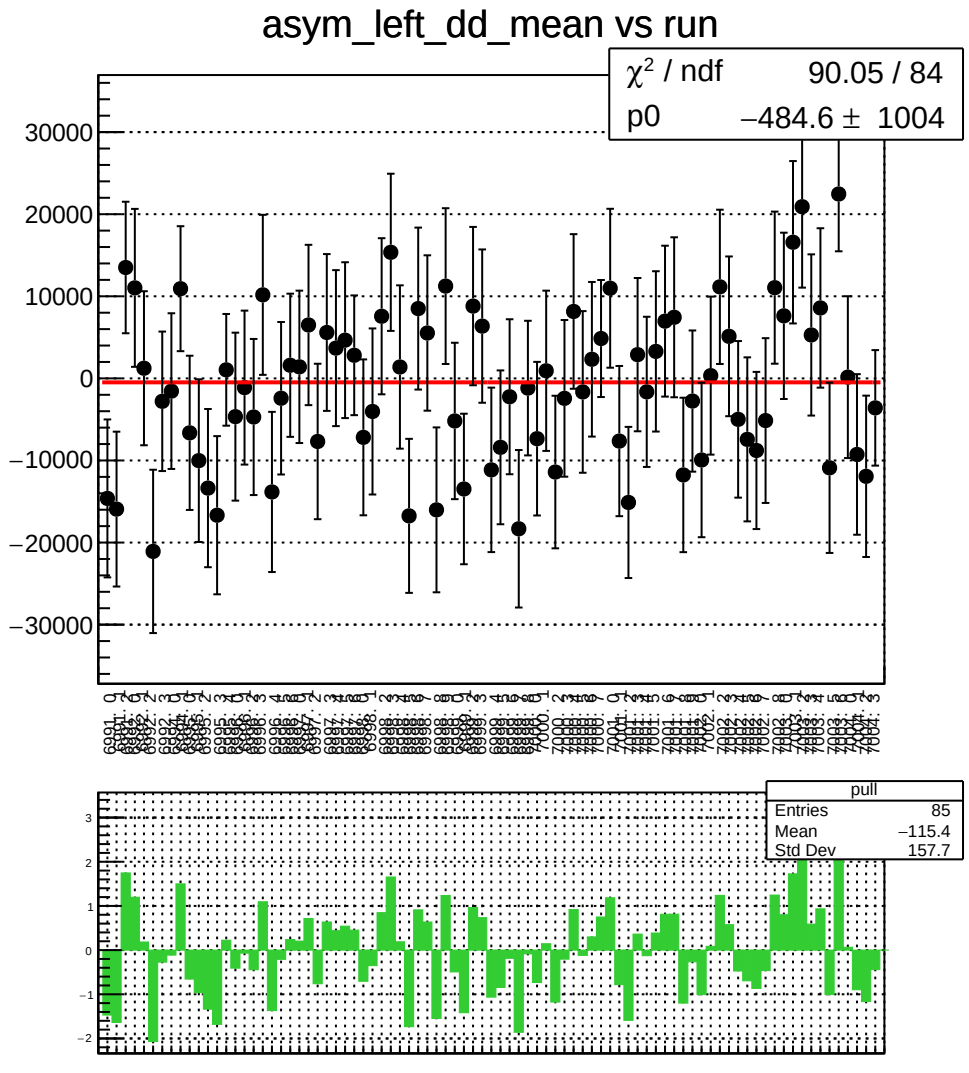

reg_asym_left_dd_mean vs run
χ² / ndf 76.63 / 84
p0 −1319 ± 635.7
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean −488.3
Std Dev 528.1
2
1
0
−1
−2

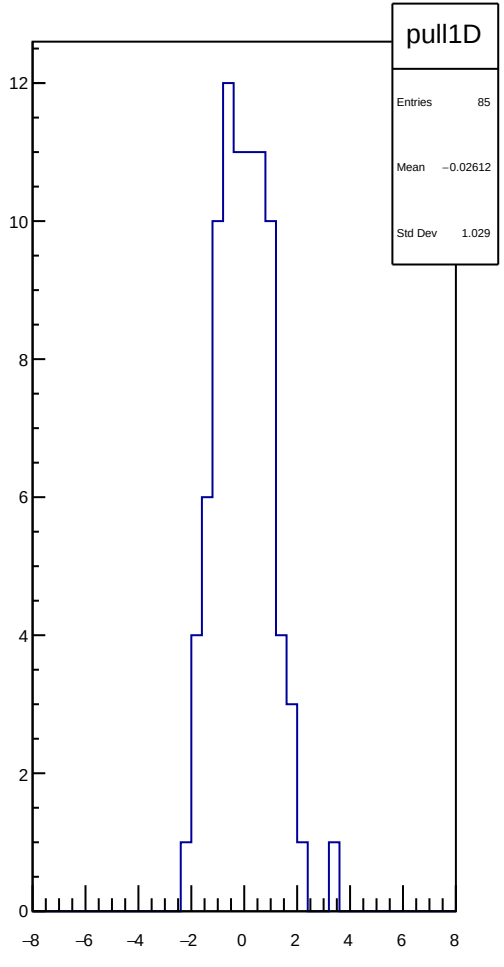

pull1D
Entries 85
Mean −0.005728
Std Dev 0.9495
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

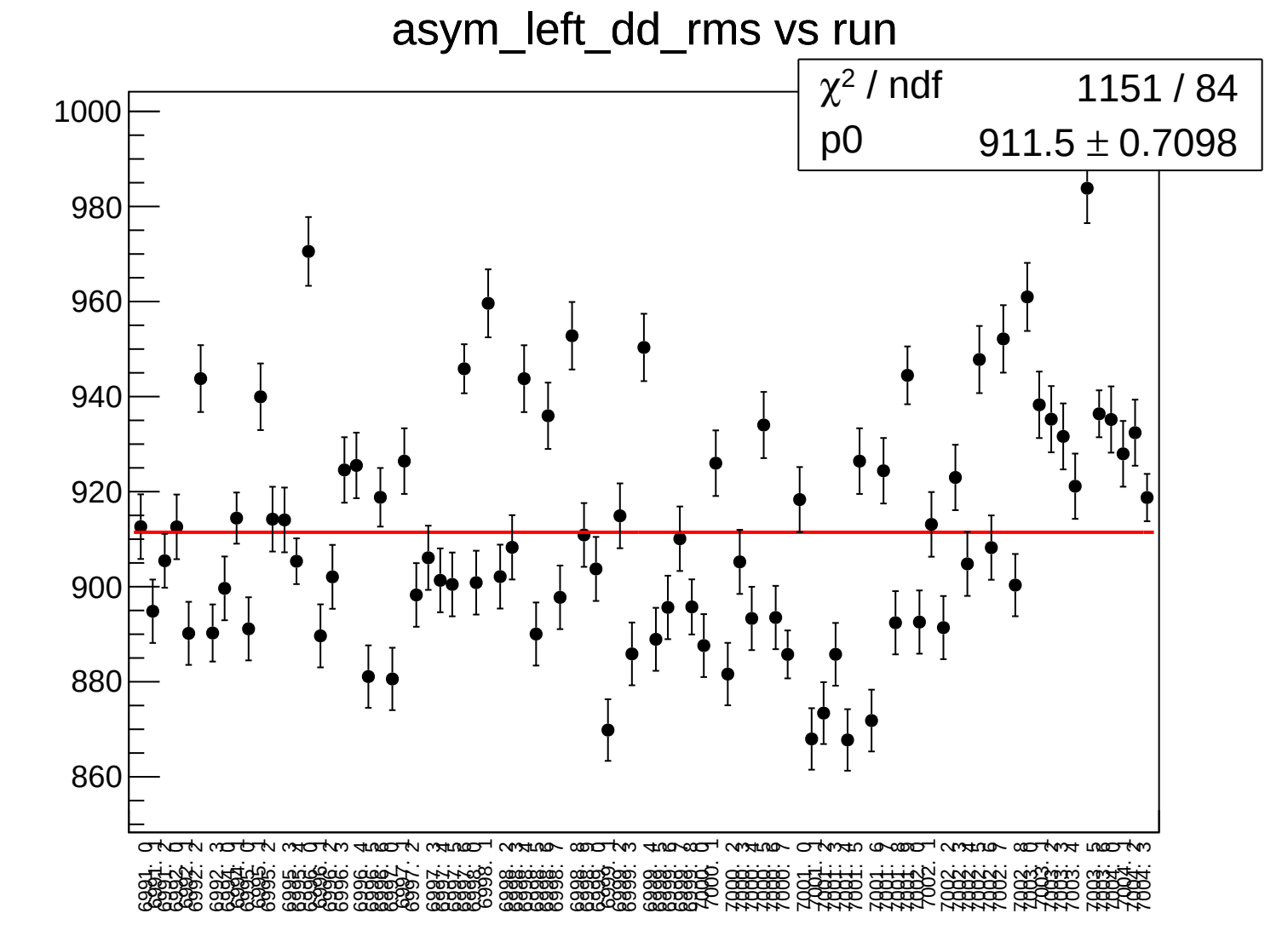

reg_asym_left_dd_rms vs run
χ² / ndf 160.2 / 84
p0 577.4 ± 0.4495
600
590
580
570
560

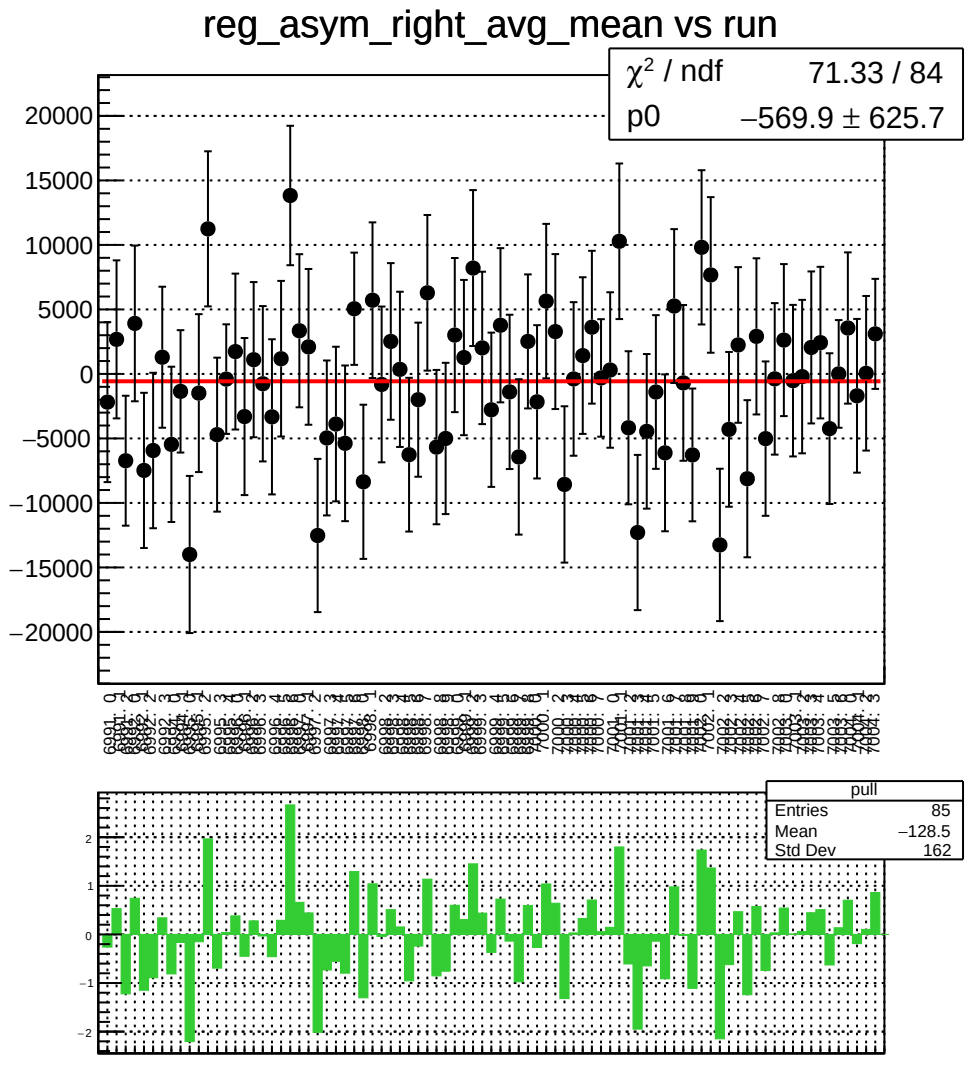

asym_left_dd_correction_mean vs run
χ² / ndf 97.31 / 84
p0 −778.6 ± 775.6
pull
Entries 85
Mean −73.85
Std Dev 118.7
pull1D
Entries 85
Mean 0.0249
Std Dev 1.07

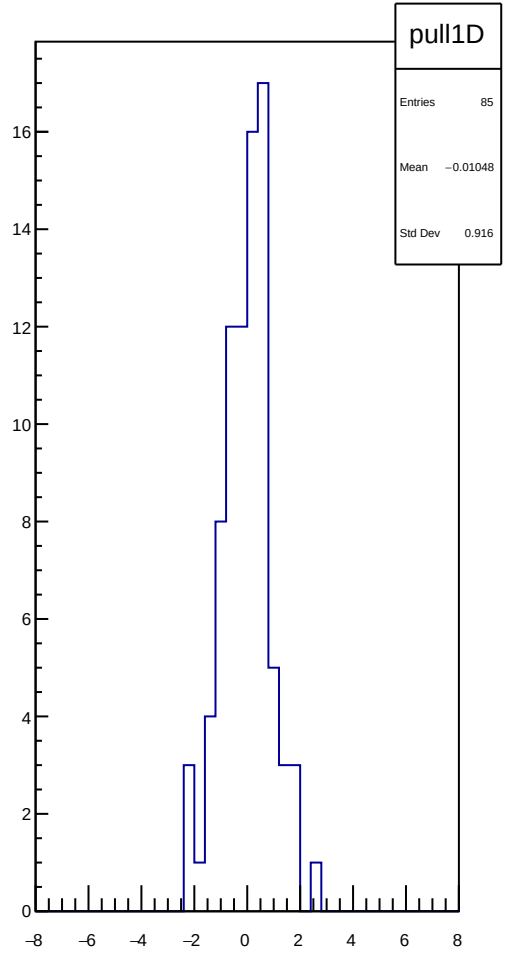

asym_left_dd_correction_rms vs run
χ² / ndf 3205 / 84
p0 703.8 ± 0.5484
820
800
780
760
740
720
700
680
660
640

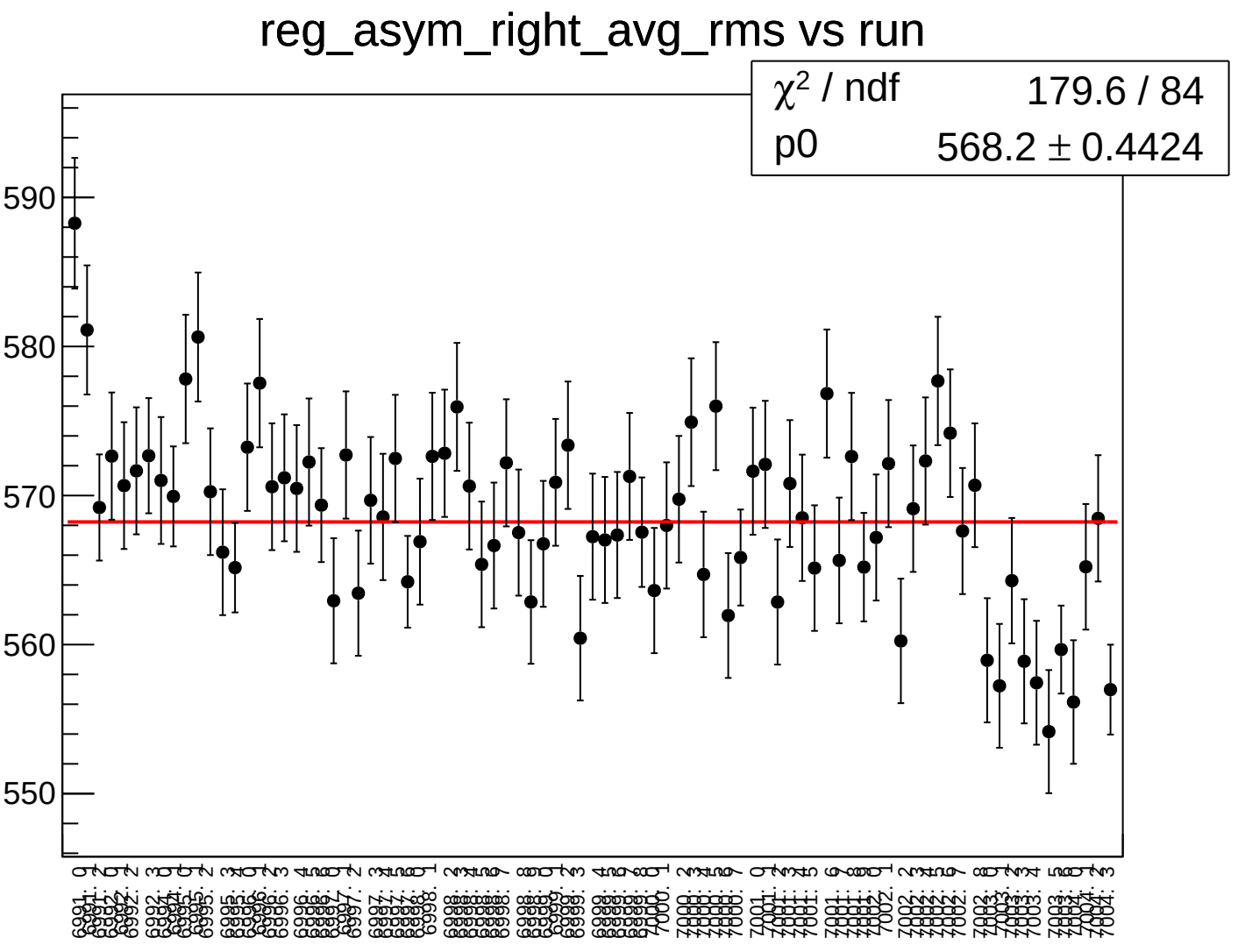

asym_left_dd_mean vs run
χ² / ndf 90.05 / 84
p0 −484.6 ± 1004
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −115.4
Std Dev 157.7
3
2
1
0
−1
−2

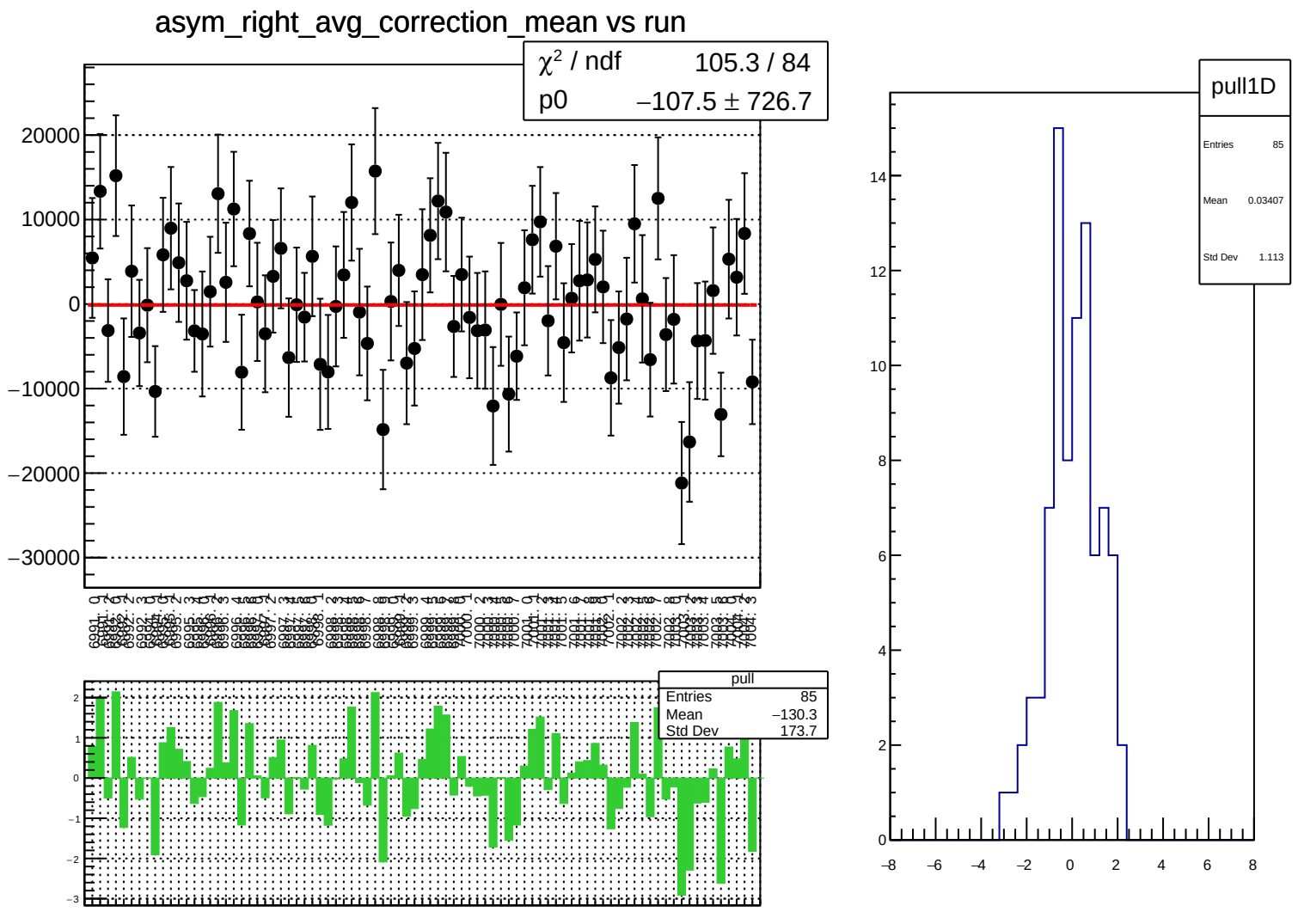

pull1D
Entries 85
Mean −0.02612
Std Dev 1.029
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

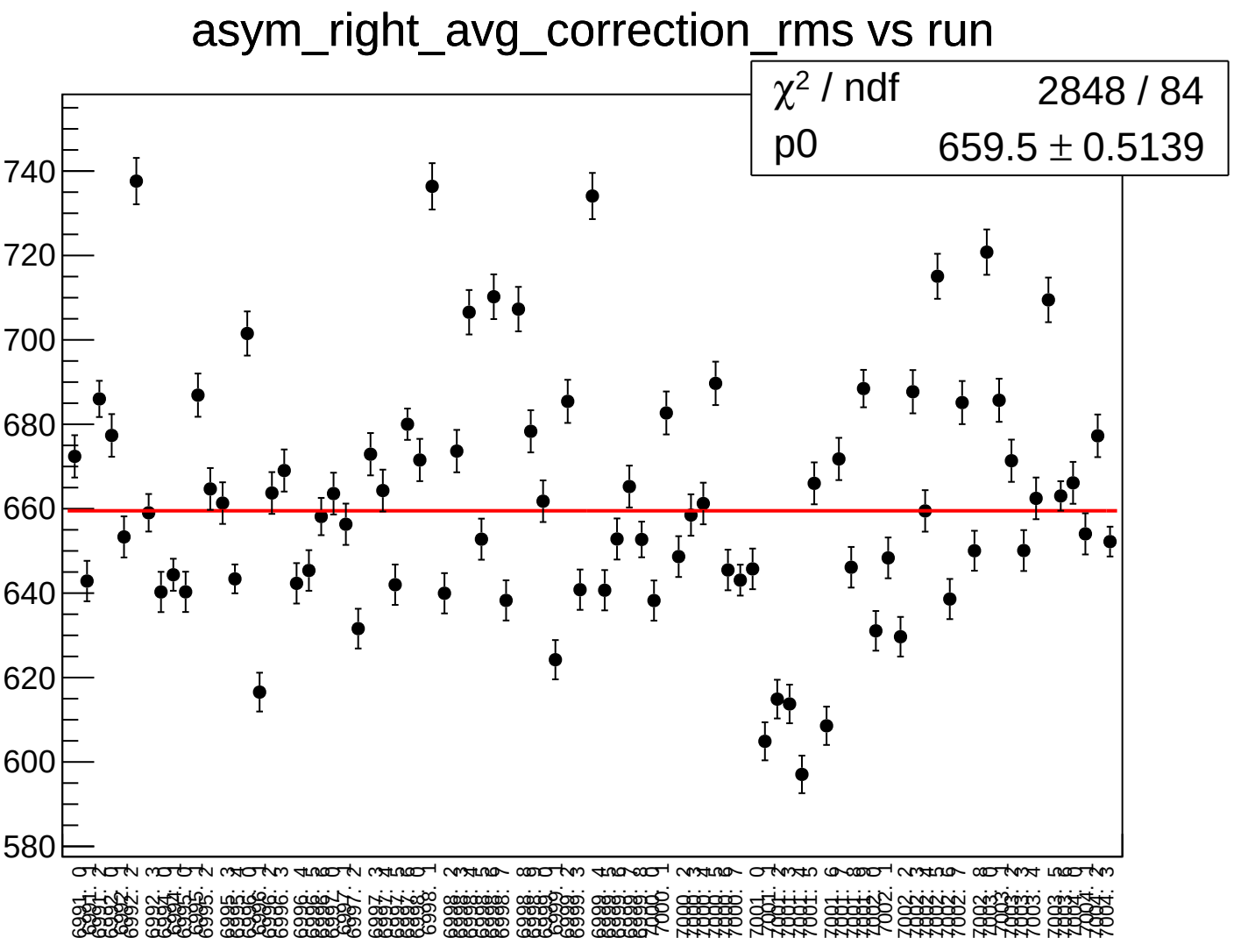

asym_left_dd_rms vs run
χ² / ndf 1151 / 84
p0 911.5 ± 0.7098
1000
980
960
940
920
900
880
860

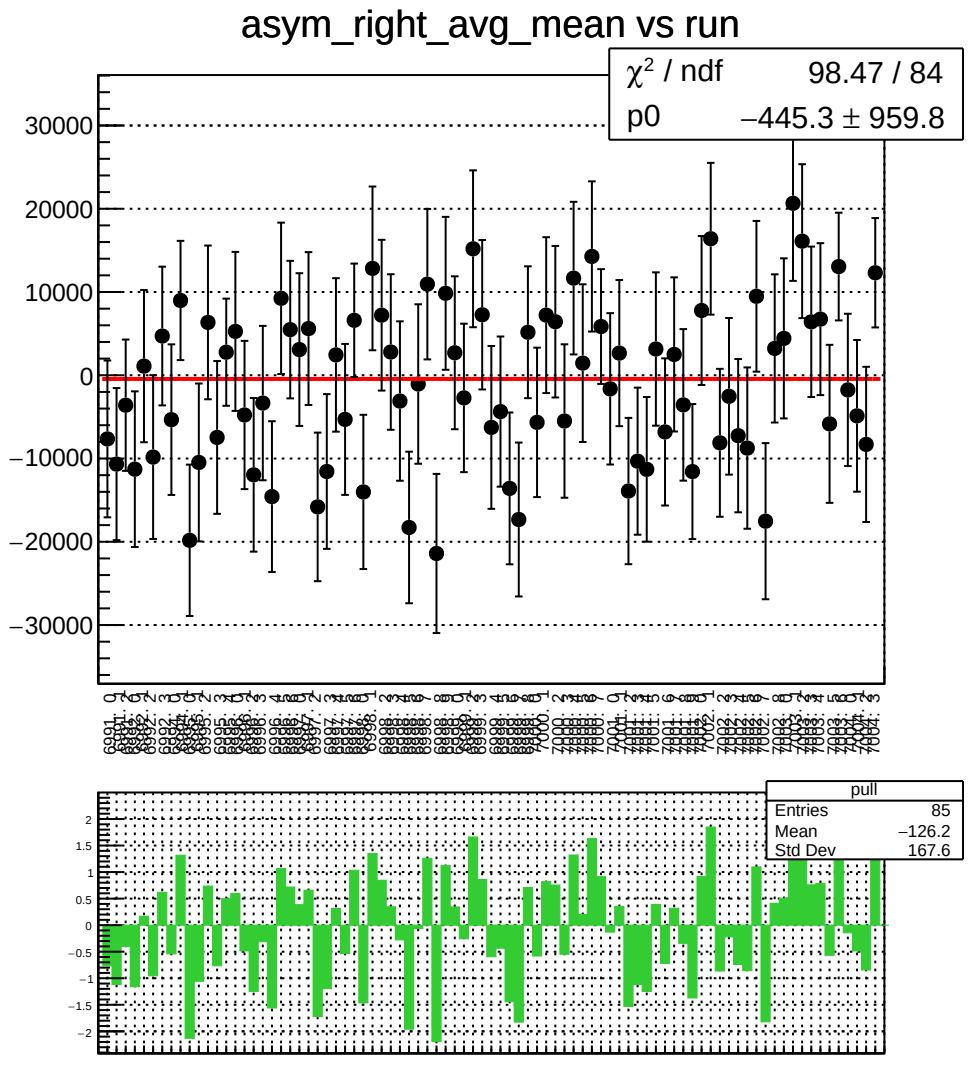

reg_asym_right_avg_mean vs run
χ² / ndf 71.33 / 84
p0 −569.9 ± 625.7
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 85
Mean −128.5
Std Dev 162
2
1
0
−1
−2

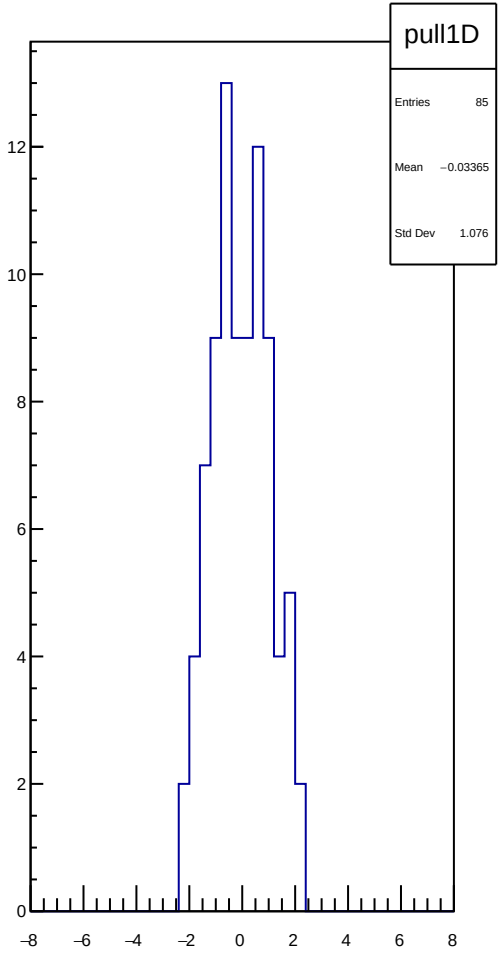

pull1D
Entries 85
Mean −0.01048
Std Dev 0.916
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

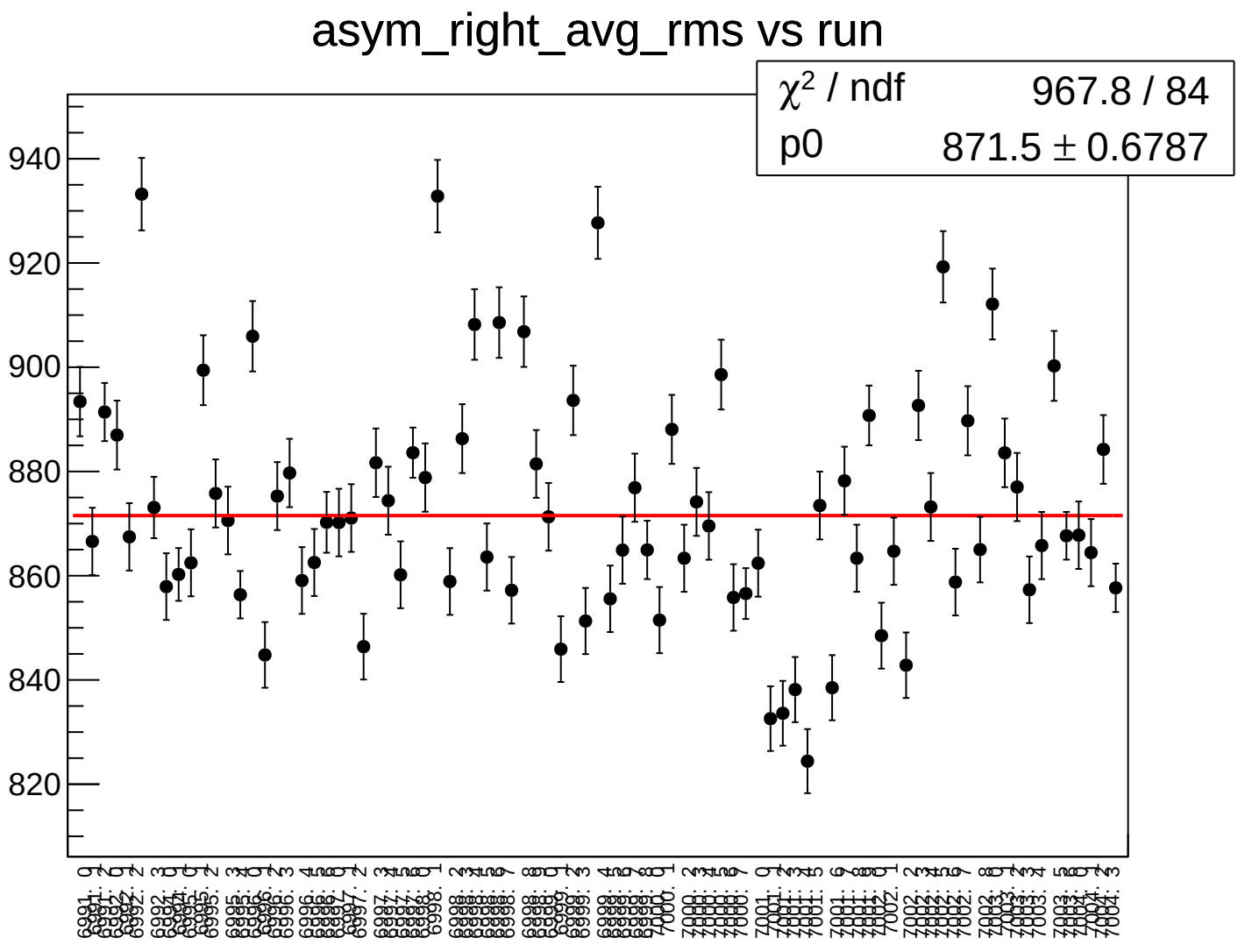

reg_asym_right_avg_rms vs run
χ² / ndf 179.6 / 84
p0 568.2 ± 0.4424
590
580
570
560
550

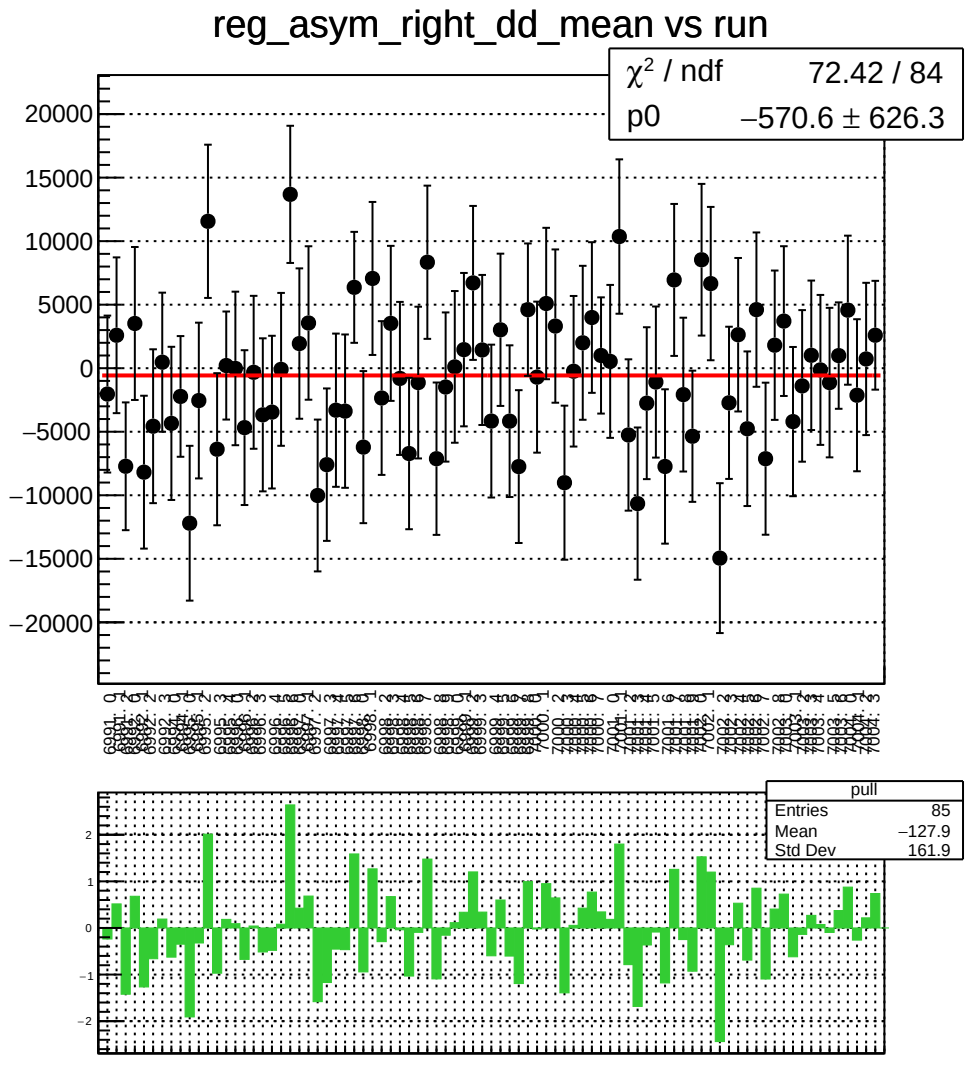

asym_right_avg_correction_mean vs run
χ² / ndf 105.3 / 84
p0 −107.5 ± 726.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −130.3
Std Dev 173.7
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean 0.03407
Std Dev 1.113
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

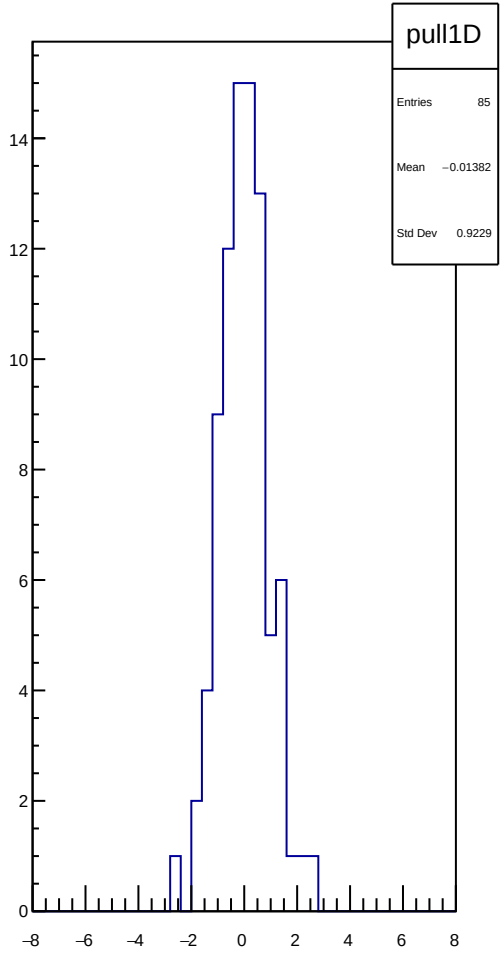

asym_right_avg_correction_rms vs run
χ² / ndf 2848 / 84
p0 659.5 ± 0.5139
740
720
700
680
660
640
620
600
580

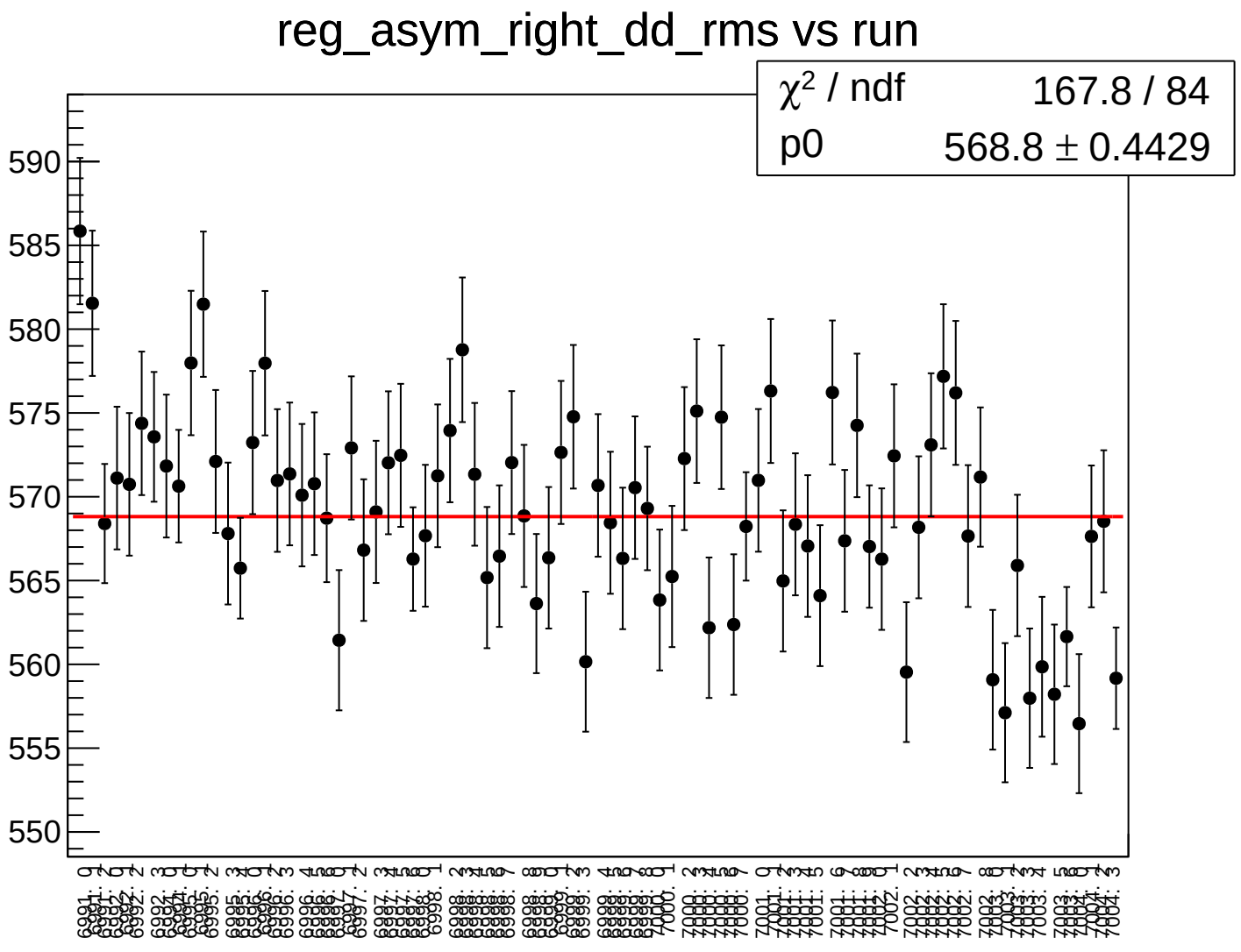

asym_right_avg_mean vs run
χ^2 / ndf 98.47 / 84
p0 −445.3 ± 959.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −126.2
Std Dev 167.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

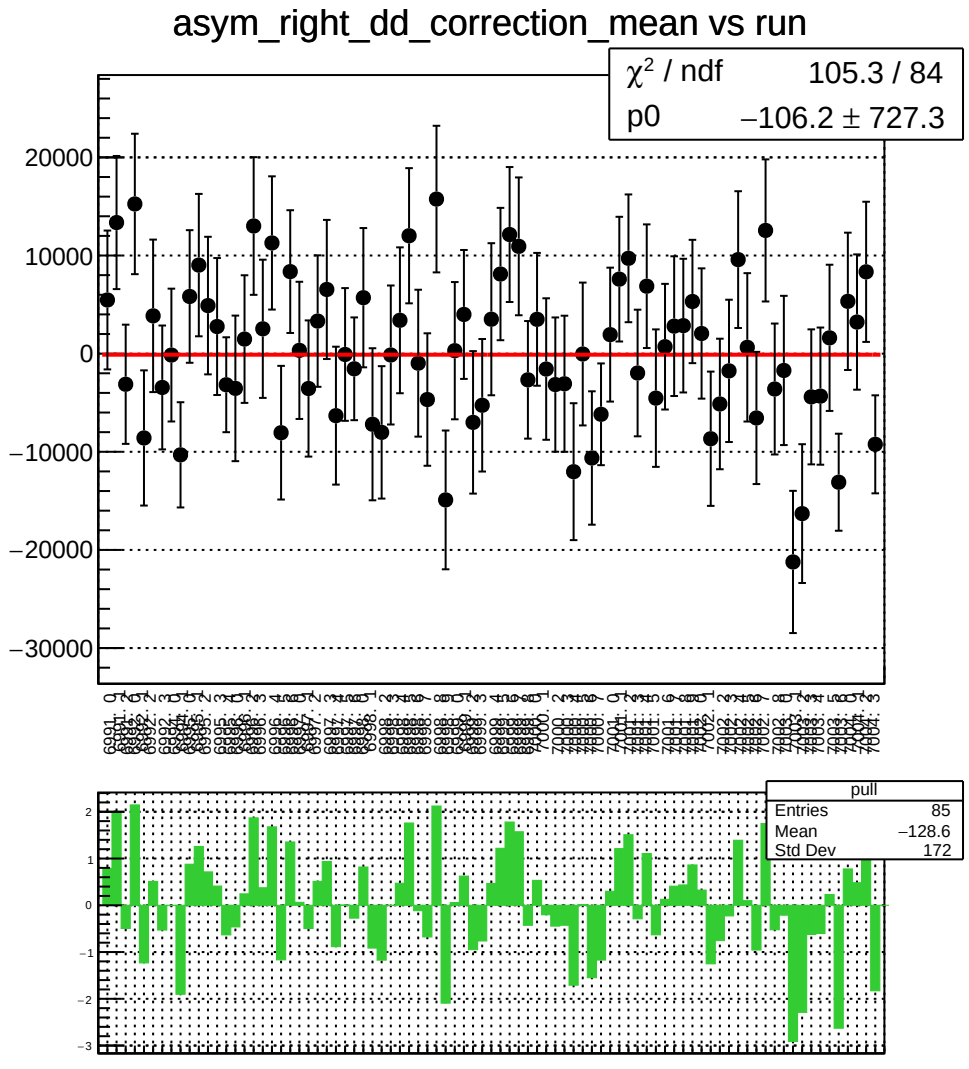

pull1D
Entries 85
Mean −0.03365
Std Dev 1.076
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

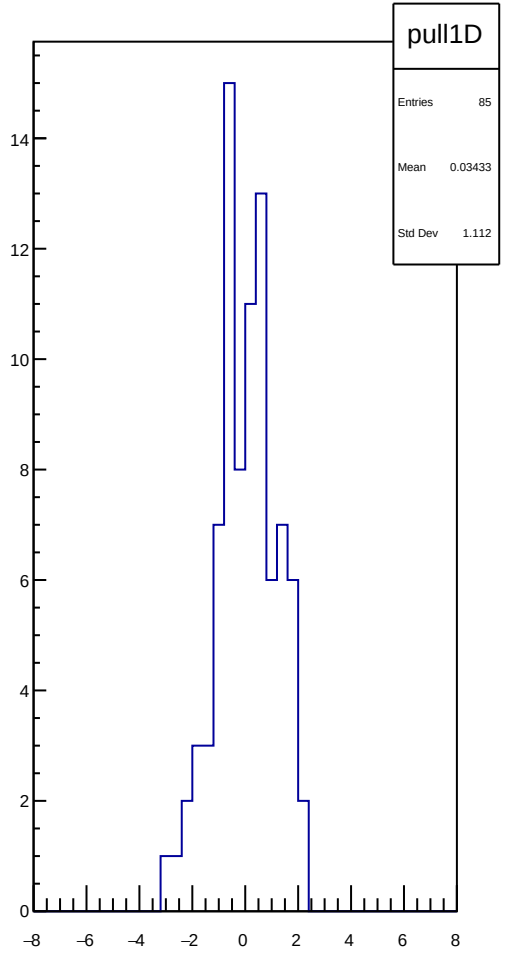

asym_right_avg_rms vs run
χ² / ndf 967.8 / 84
p0 871.5 ± 0.6787
940
920
900
880
860
840
820

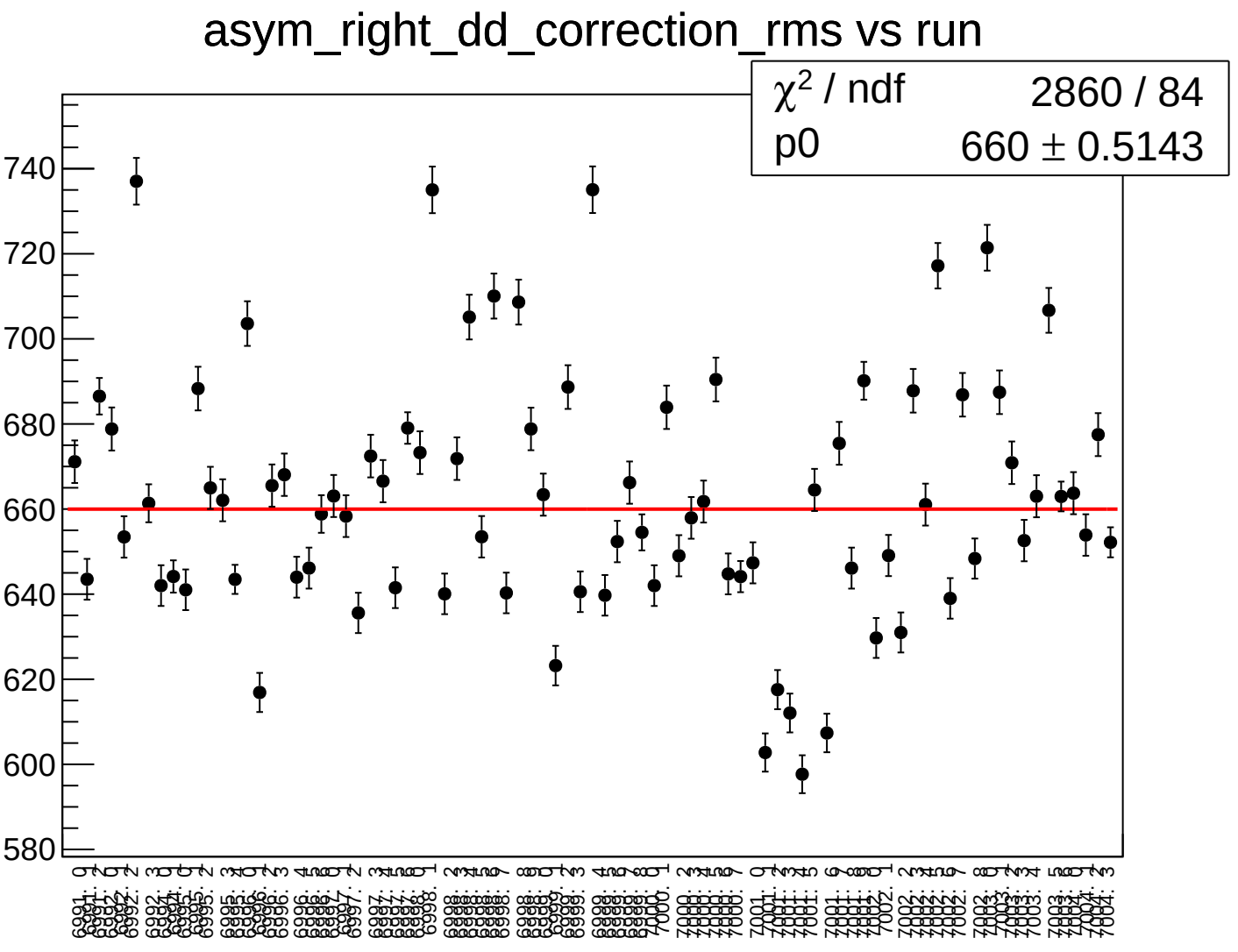

reg_asym_right_dd_mean vs run
χ² / ndf 72.42 / 84
p0 −570.6 ± 626.3
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 85
Mean −127.9
Std Dev 161.9
2
1
0
−1
−2

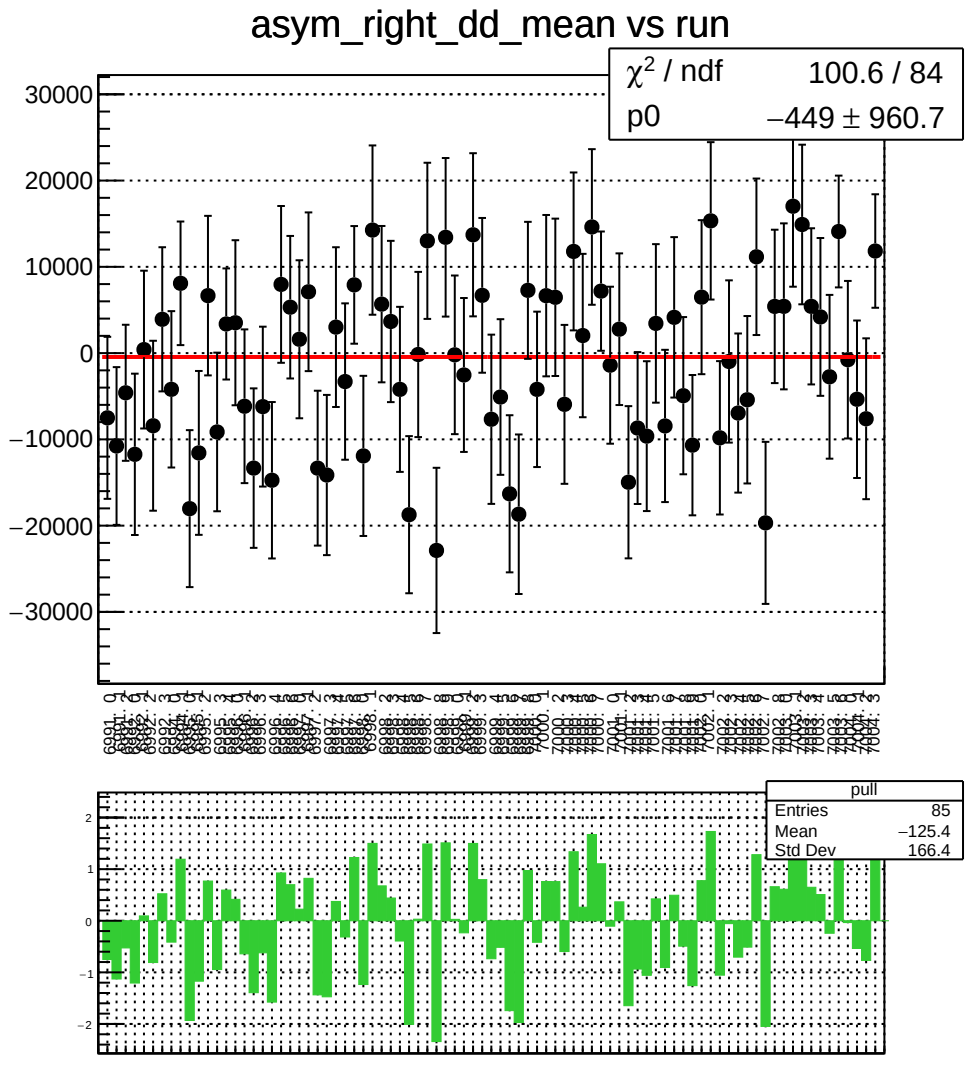

pull1D
Entries 85
Mean −0.01382
Std Dev 0.9229
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

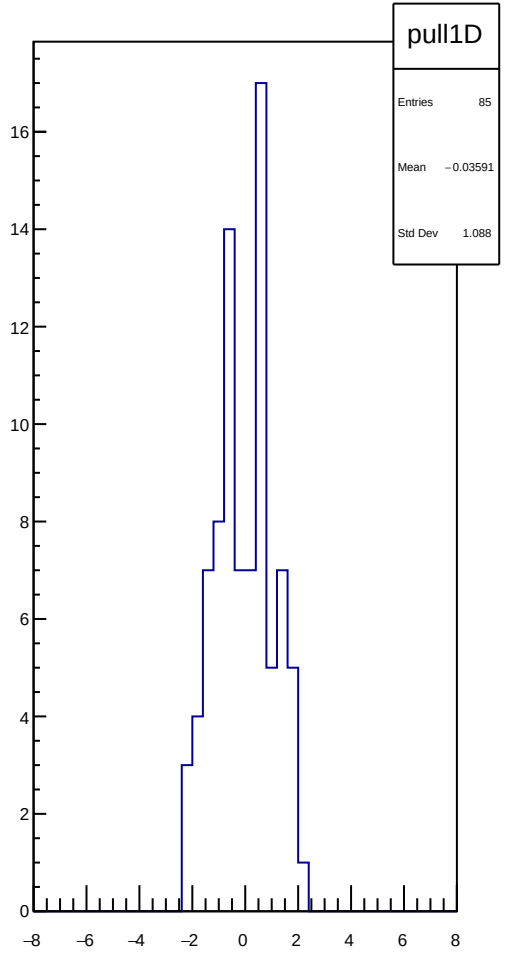

reg_asym_right_dd_rms vs run
χ² / ndf 167.8 / 84
p0 568.8 ± 0.4429
590
585
580
575
570
565
560
555
550

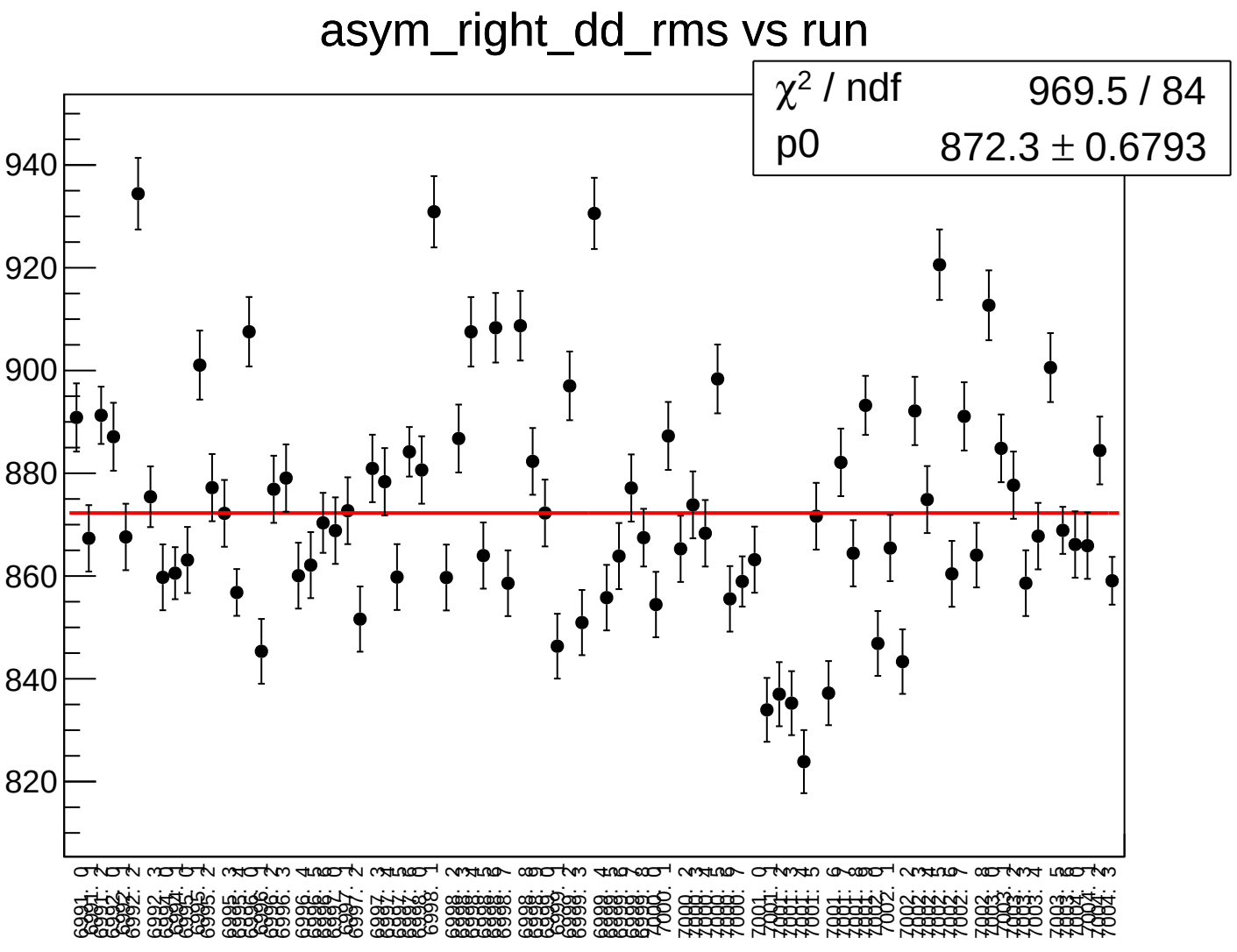

asym_right_dd_correction_mean vs run
χ² / ndf 105.3 / 84
p0 −106.2 ± 727.3
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −128.6
Std Dev 172
2
1
0
−1
−2
−3

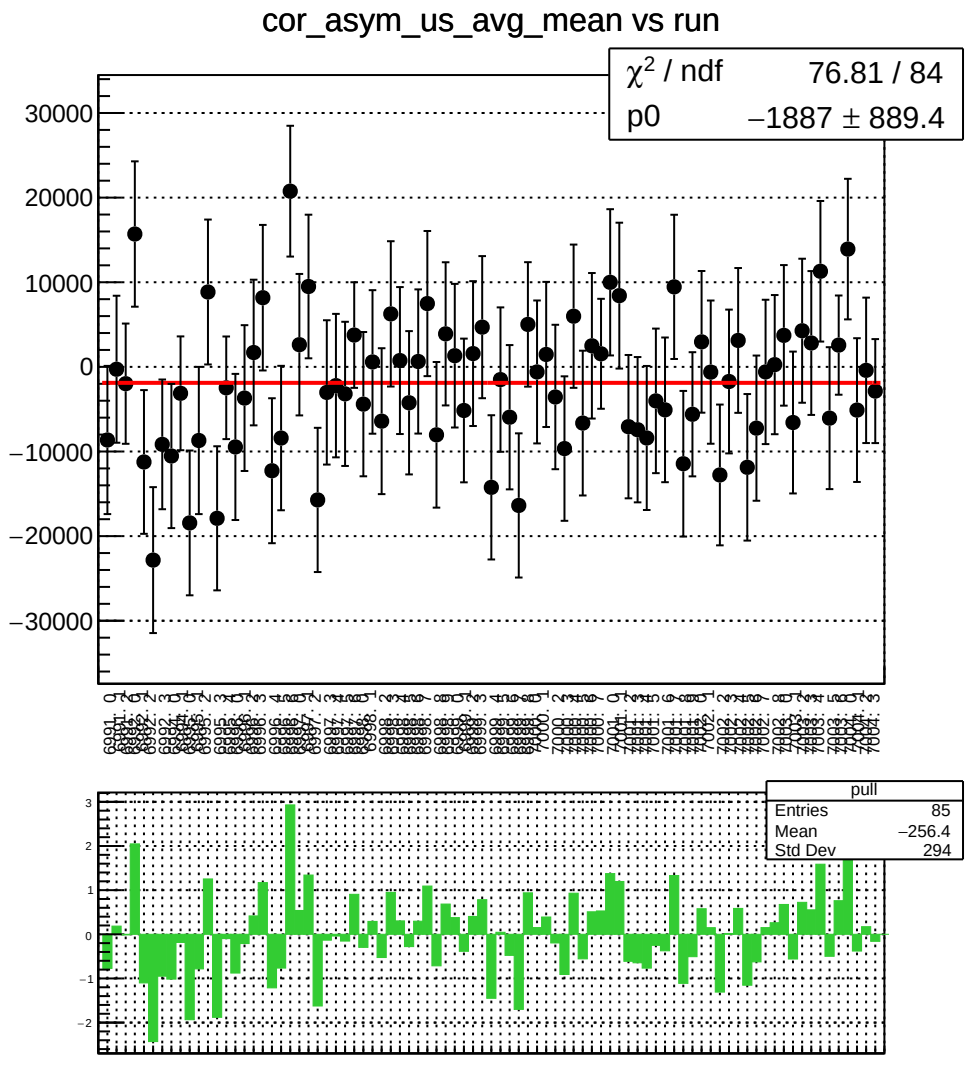

pull1D
Entries 85
Mean 0.03433
Std Dev 1.112
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

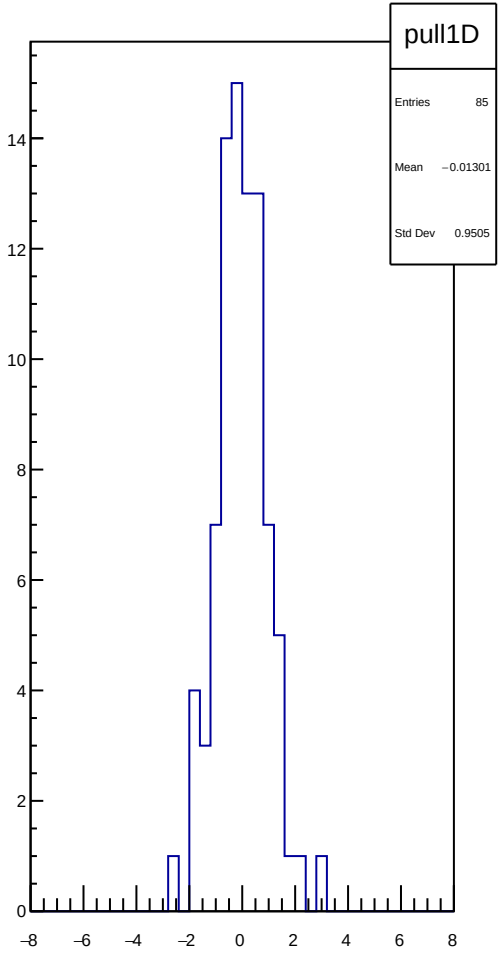

asym_right_dd_correction_rms vs run
χ^2 / ndf 2860 / 84
p0 660 ± 0.5143
740
720
700
680
660
640
620
600
580

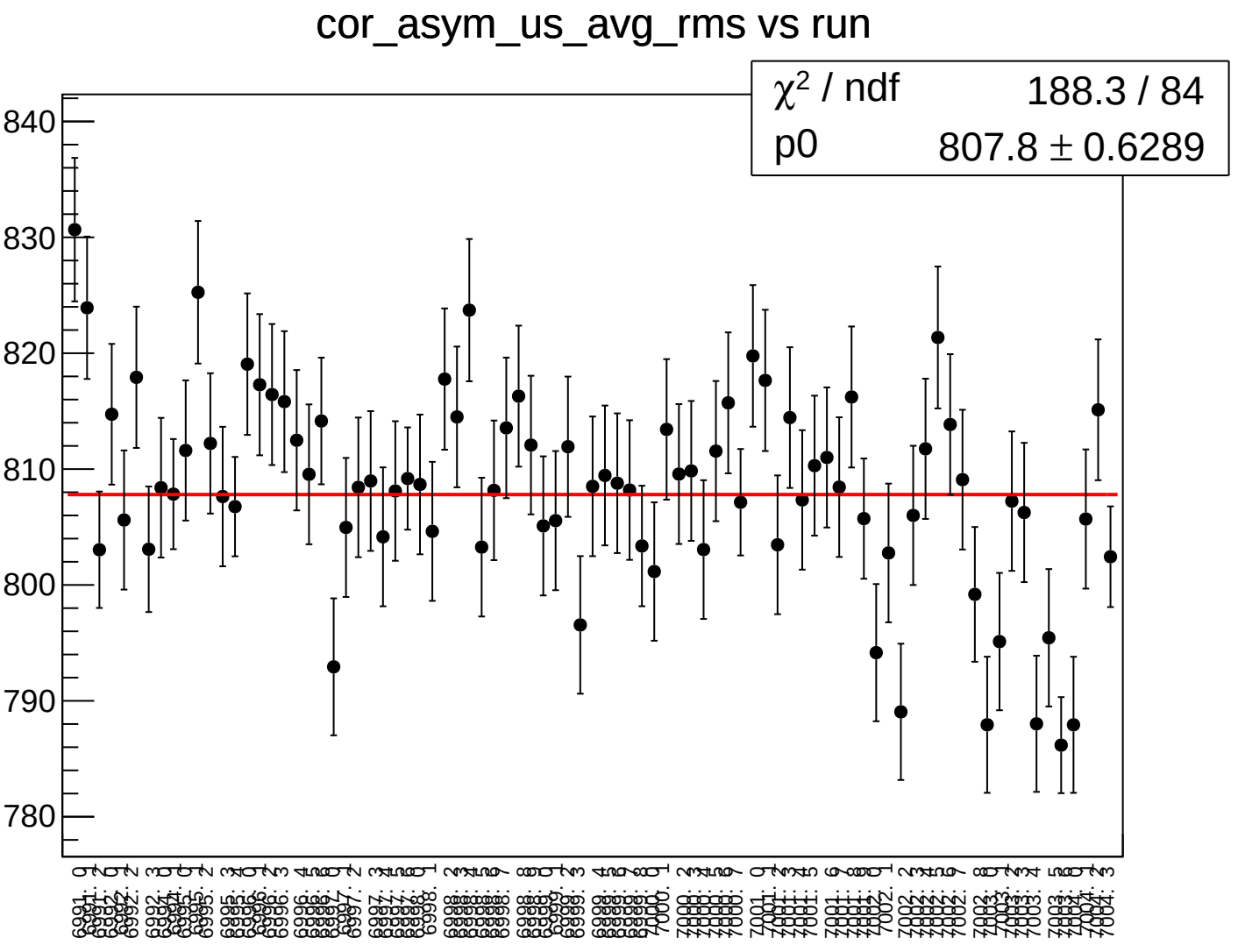

asym_right_dd_mean vs run
χ² / ndf 100.6 / 84
p0 −449 ± 960.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −125.4
Std Dev 166.4
2
1
0
−1
−2

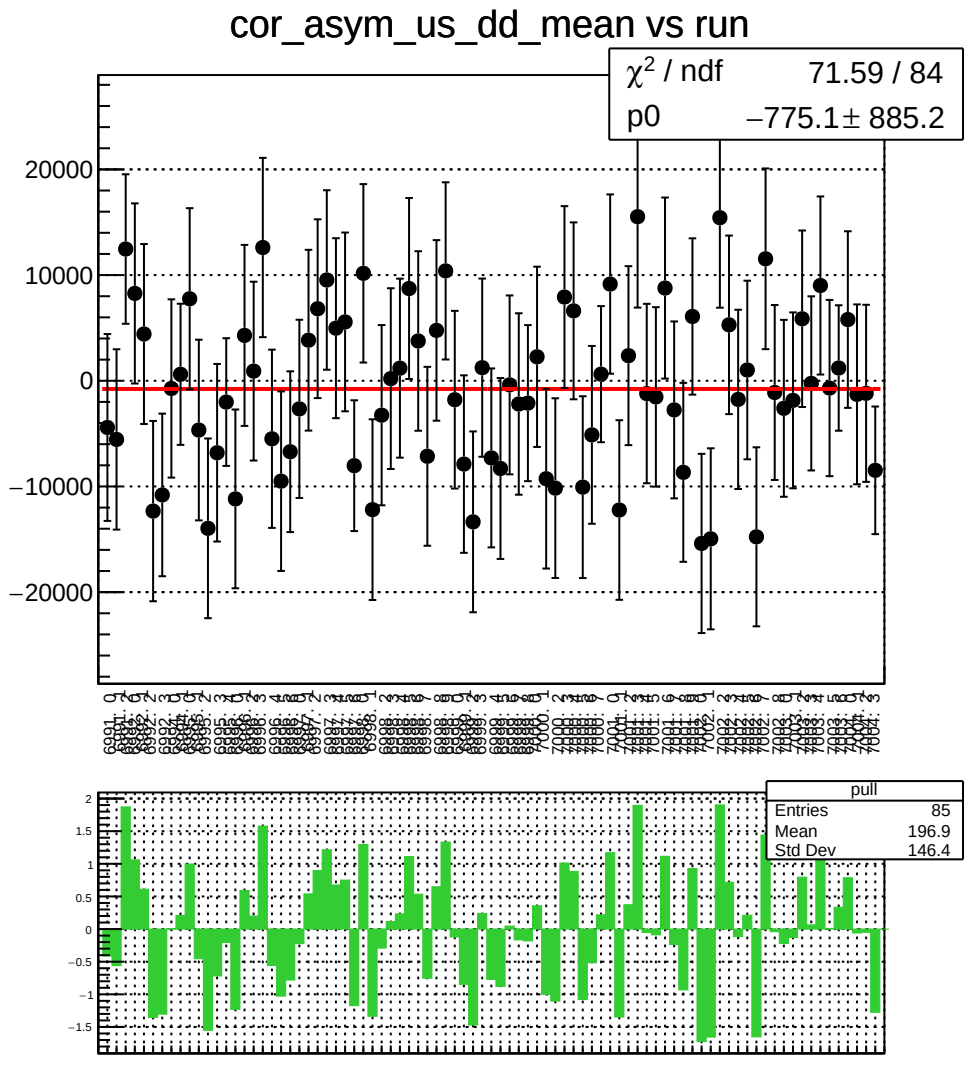

pull1D
Entries 85
Mean −0.03591
Std Dev 1.088
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

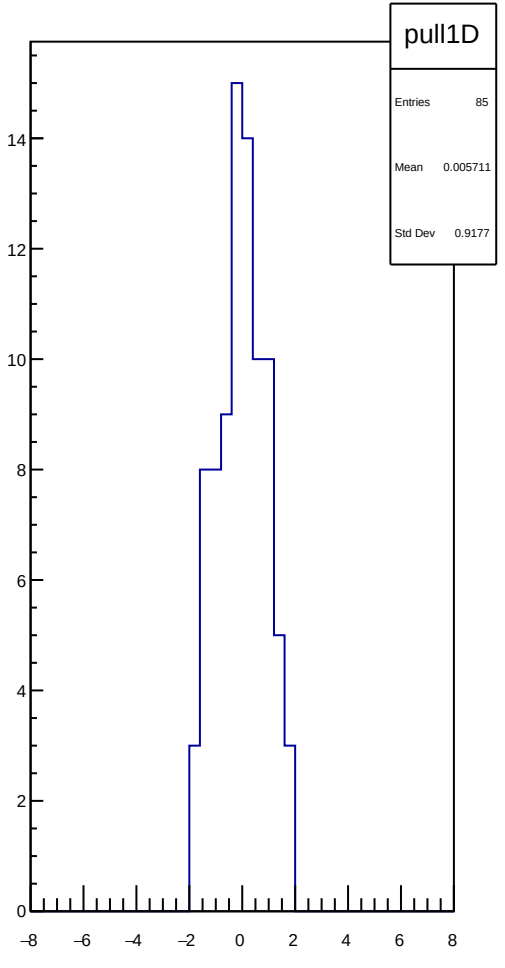

asym_right_dd_rms vs run
χ^2 / ndf 969.5 / 84
p0 872.3 ± 0.6793
940
920
900
880
860
840
820

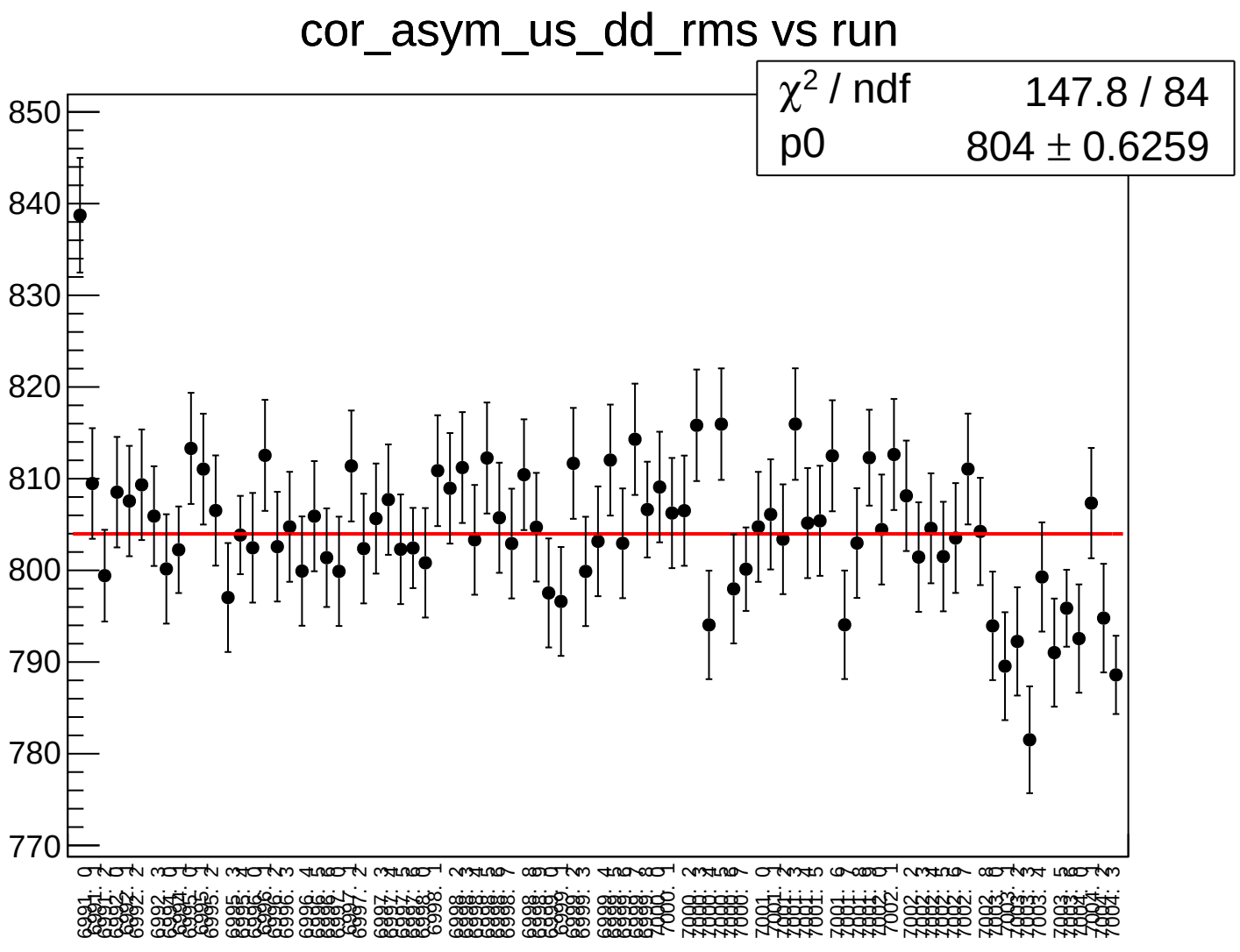

cor_asym_us_avg_mean vs run
χ² / ndf 76.81 / 84
p0 −1887 ± 889.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −256.4
Std Dev 294
3
2
1
0
−1
−2

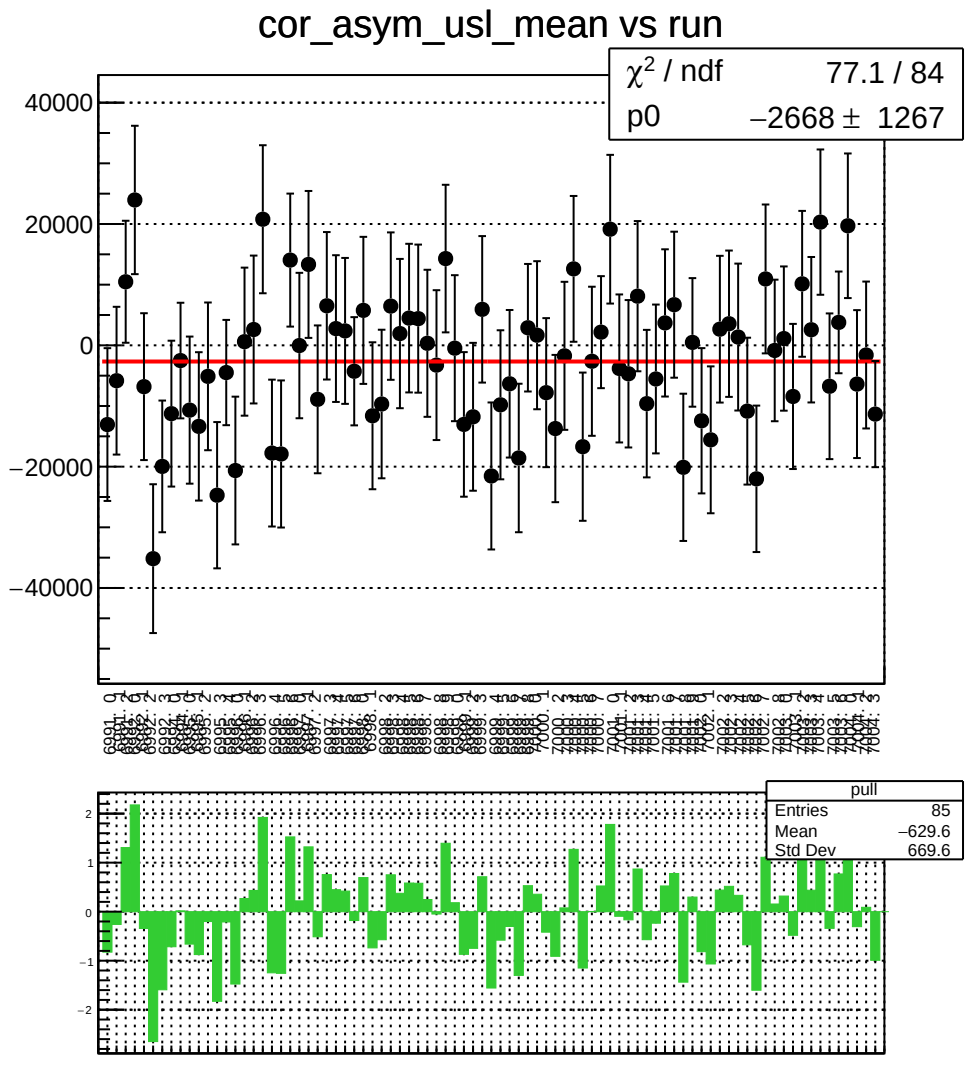

pull1D
Entries 85
Mean −0.01301
Std Dev 0.9505
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

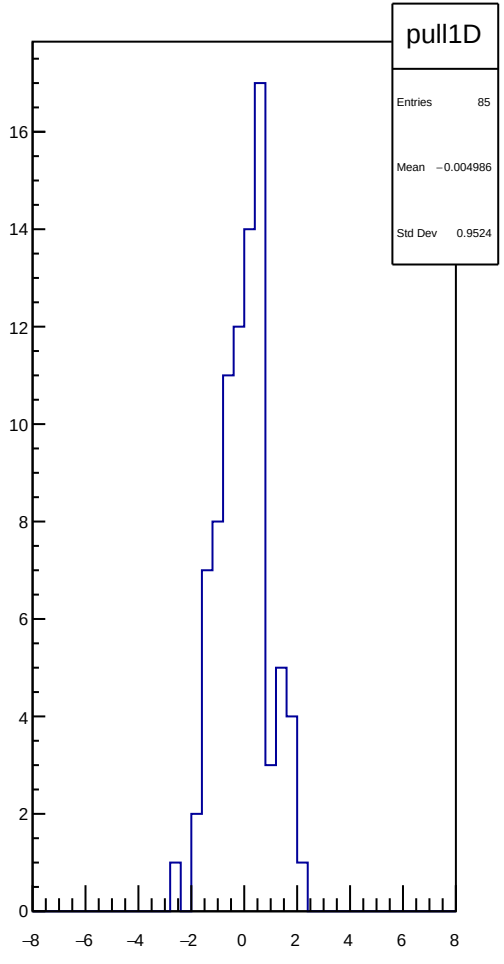

cor_asym_us_avg_rms vs run
χ² / ndf 188.3 / 84
p0 807.8 ± 0.6289
840
830
820
810
800
790
780

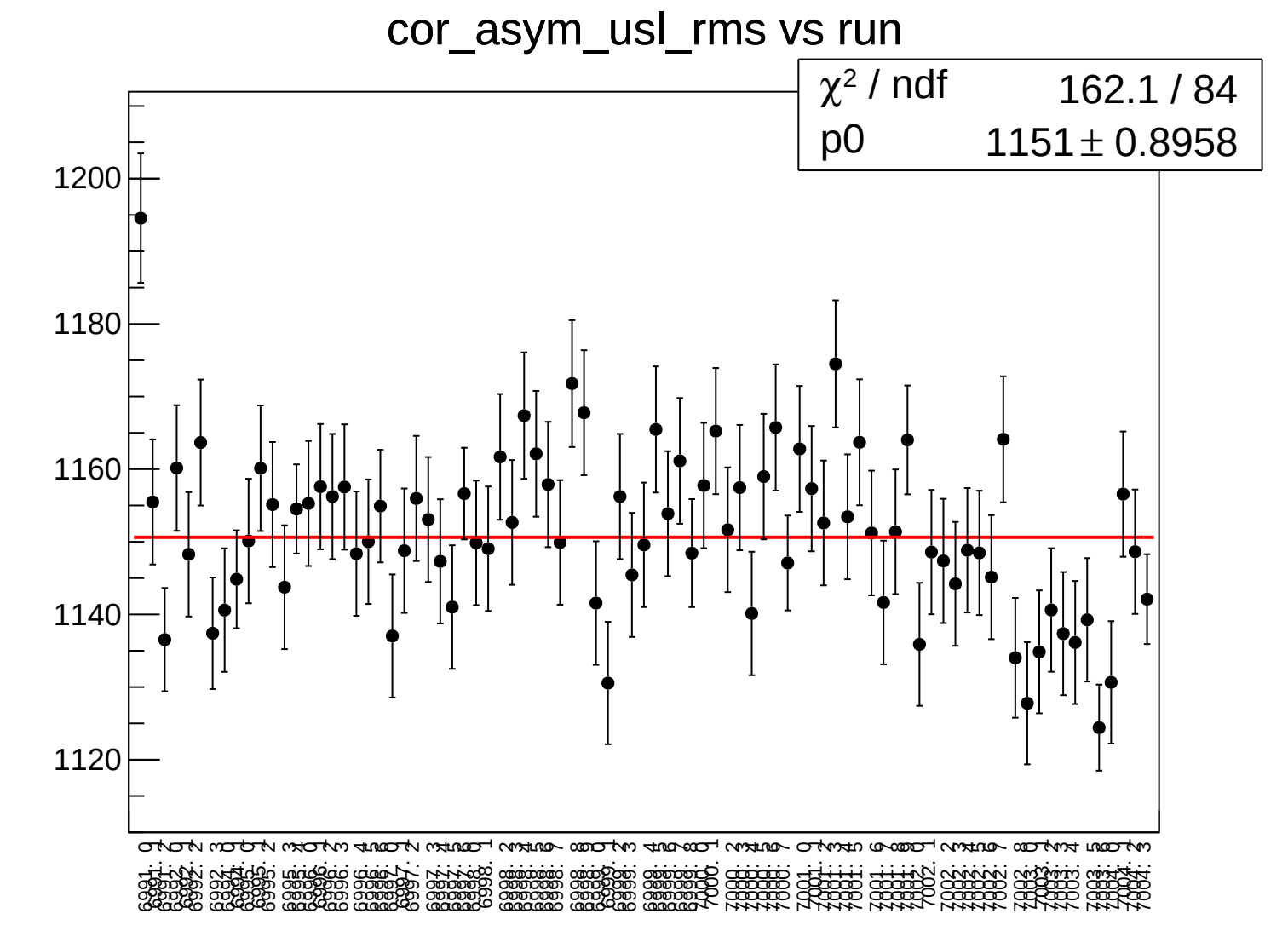

cor_asym_us_dd_mean vs run
χ² / ndf 71.59 / 84
p0 −775.1± 885.2
20000
10000
0
−10000
−20000
pull
Entries 85
Mean 196.9
Std Dev 146.4
2
1.5
1
0.5
0
−0.5
−1
−1.5

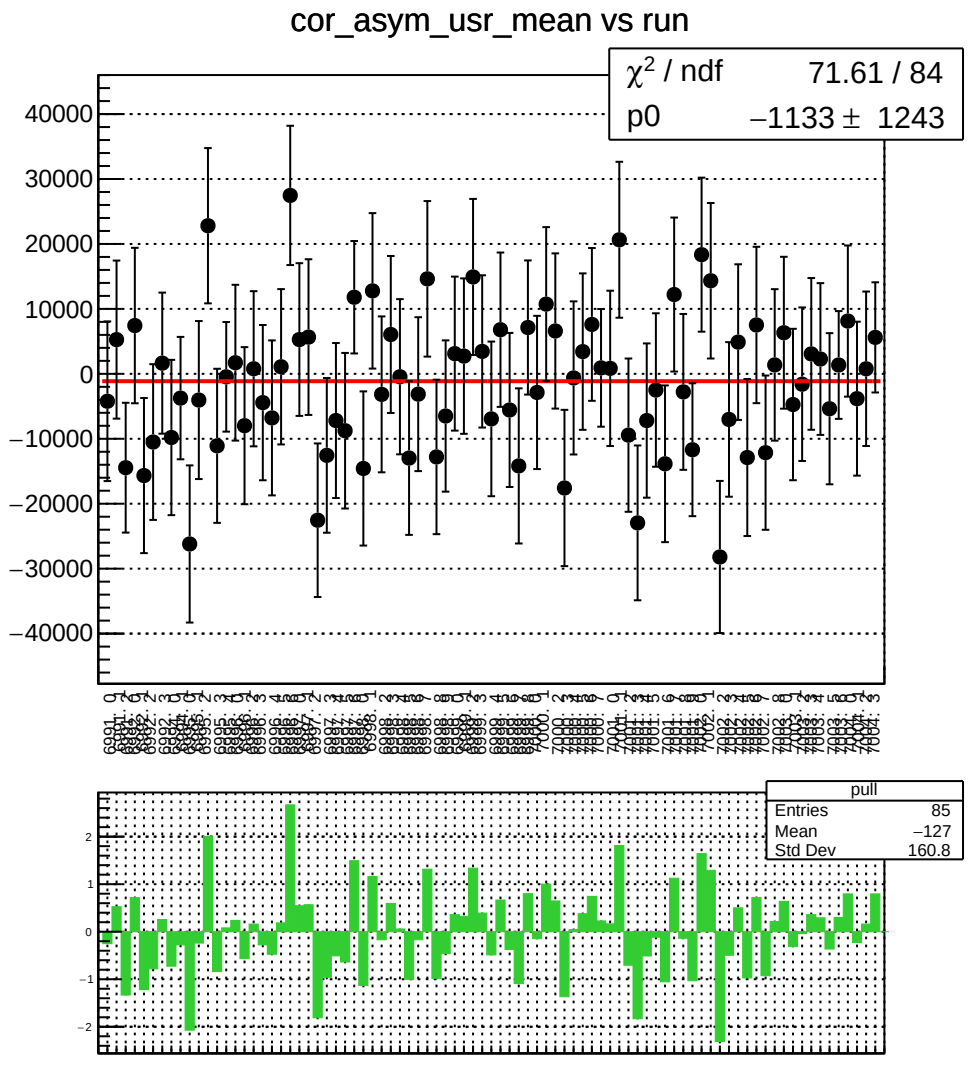

pull1D
Entries 85
Mean 0.005711
Std Dev 0.9177
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

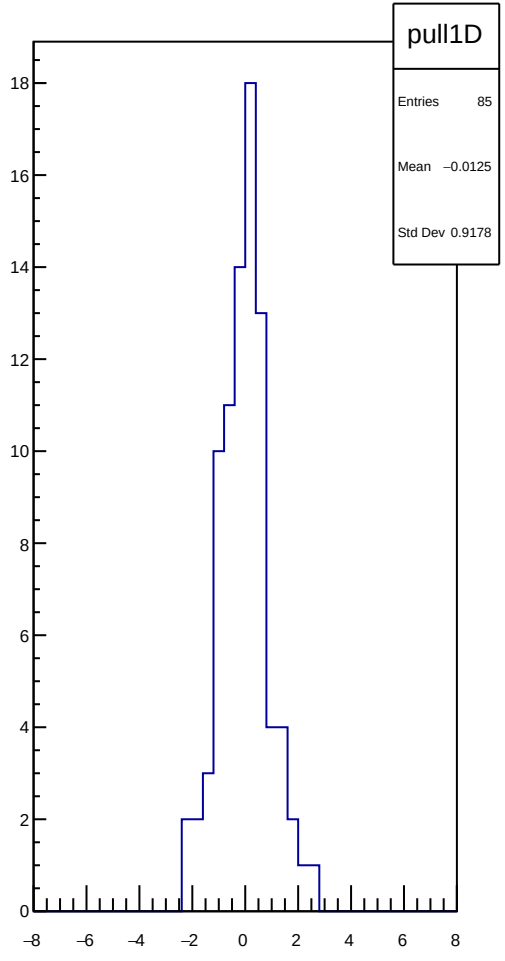

cor_asym_us_dd_rms vs run
χ² / ndf 147.8 / 84
p0 804 ± 0.6259
850
840
830
820
810
800
790
780
770

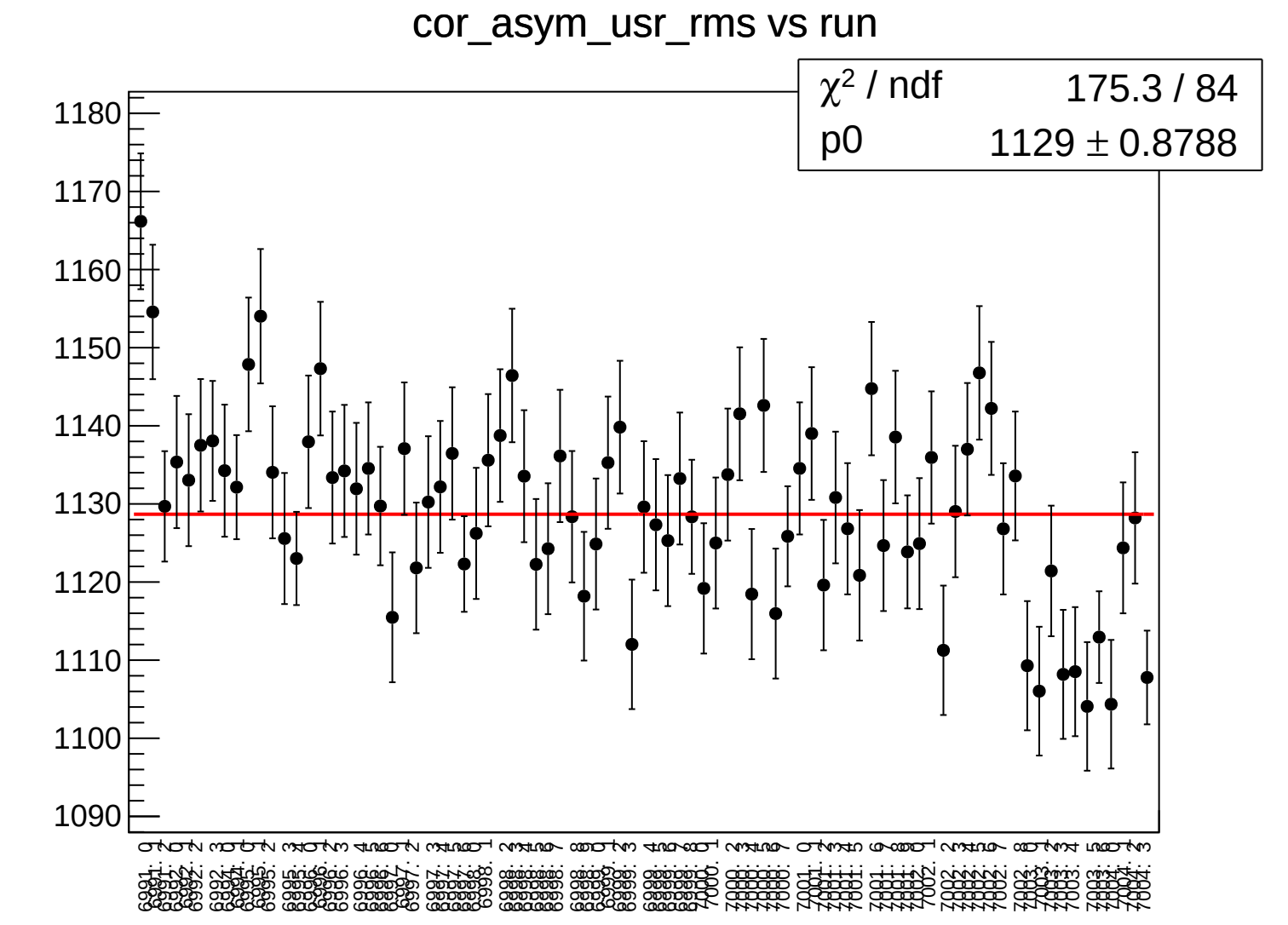

cor_asym_usl_mean vs run
χ² / ndf 77.1 / 84
p0 −2668 ± 1267
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −629.6
Std Dev 669.6
2
1
0
−1
−2

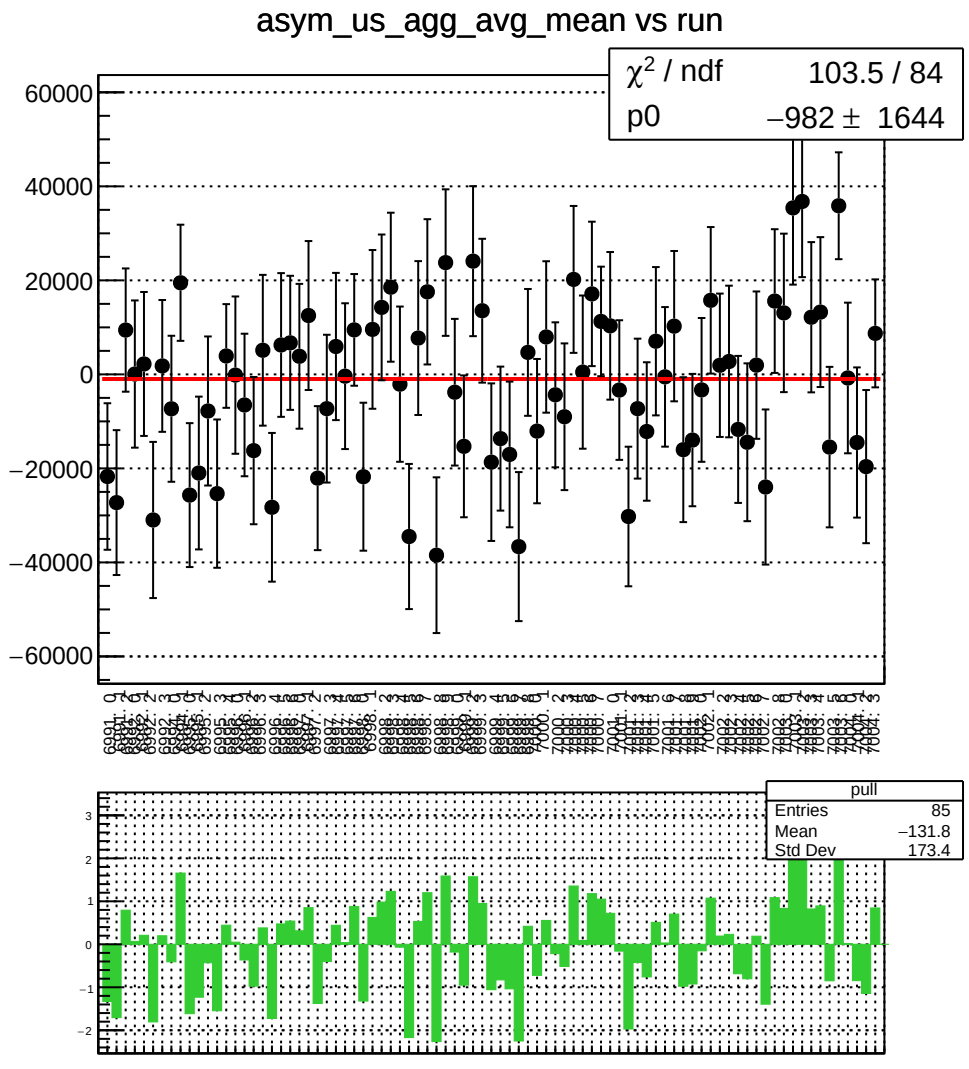

pull1D
Entries 85
Mean −0.004986
Std Dev 0.9524
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

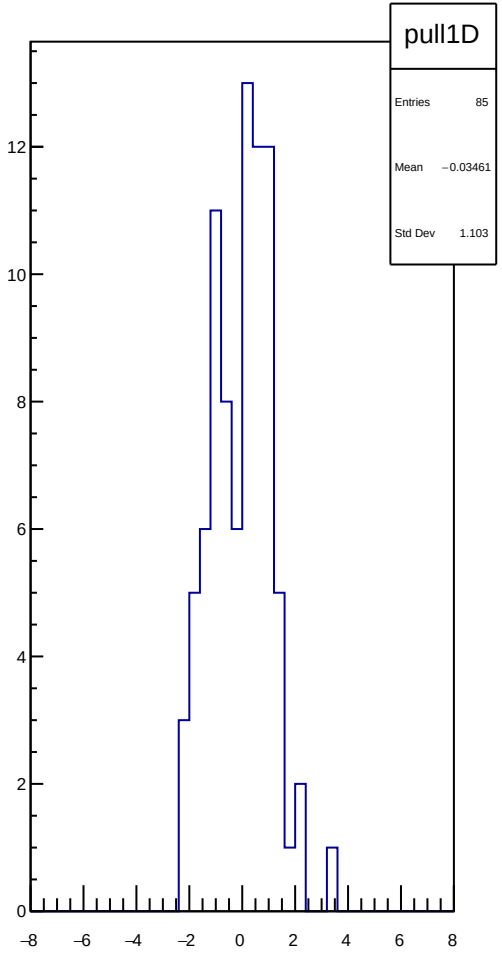

cor_asym_usl_rms vs run
χ² / ndf 162.1 / 84
p0 1151 ± 0.8958
1200
1180
1160
1140
1120

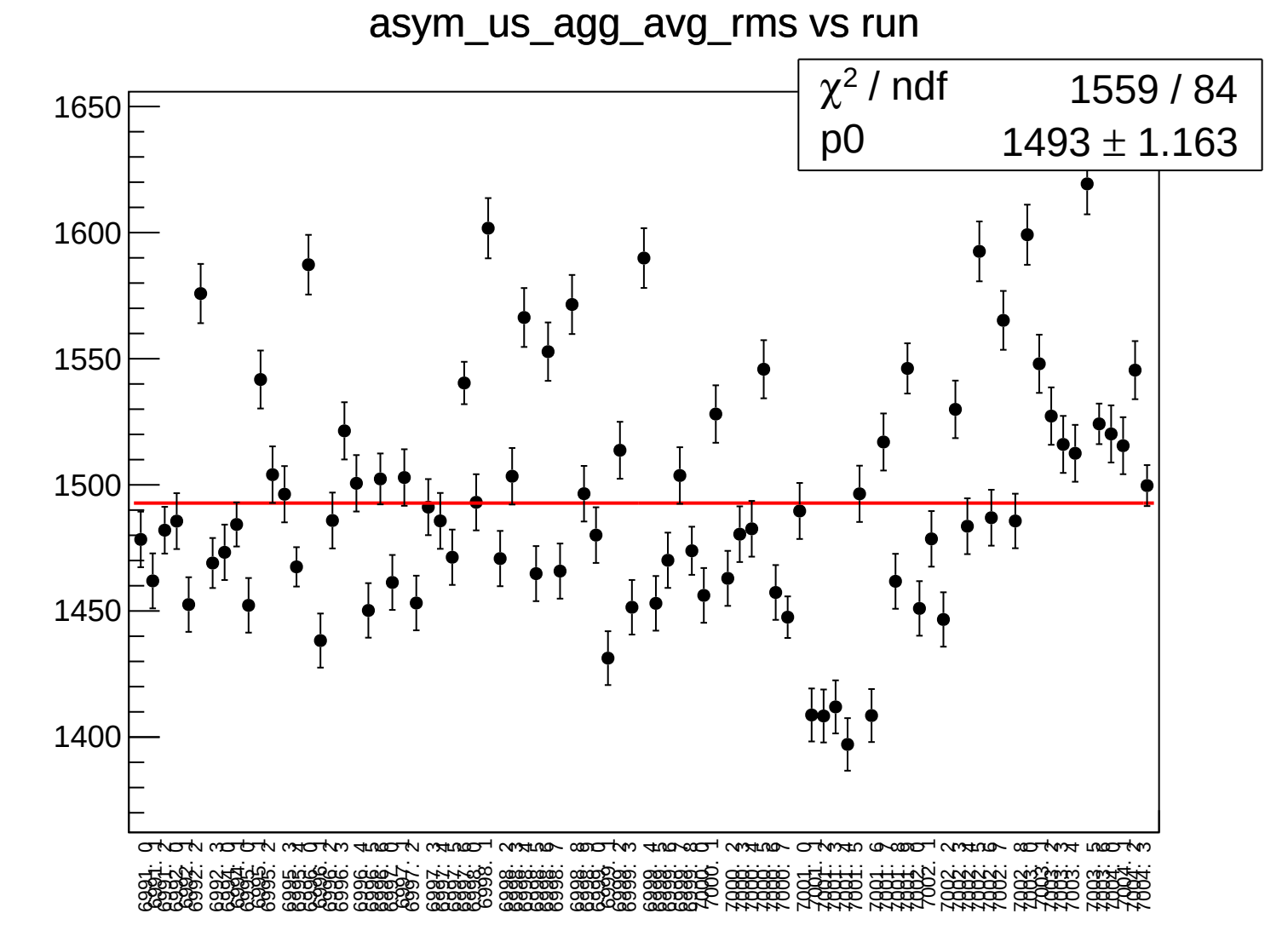

cor_asym_usr_mean vs run
χ² / ndf 71.61 / 84
p0 −1133 ± 1243
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −127
Std Dev 160.8
2
1
0
−1
−2

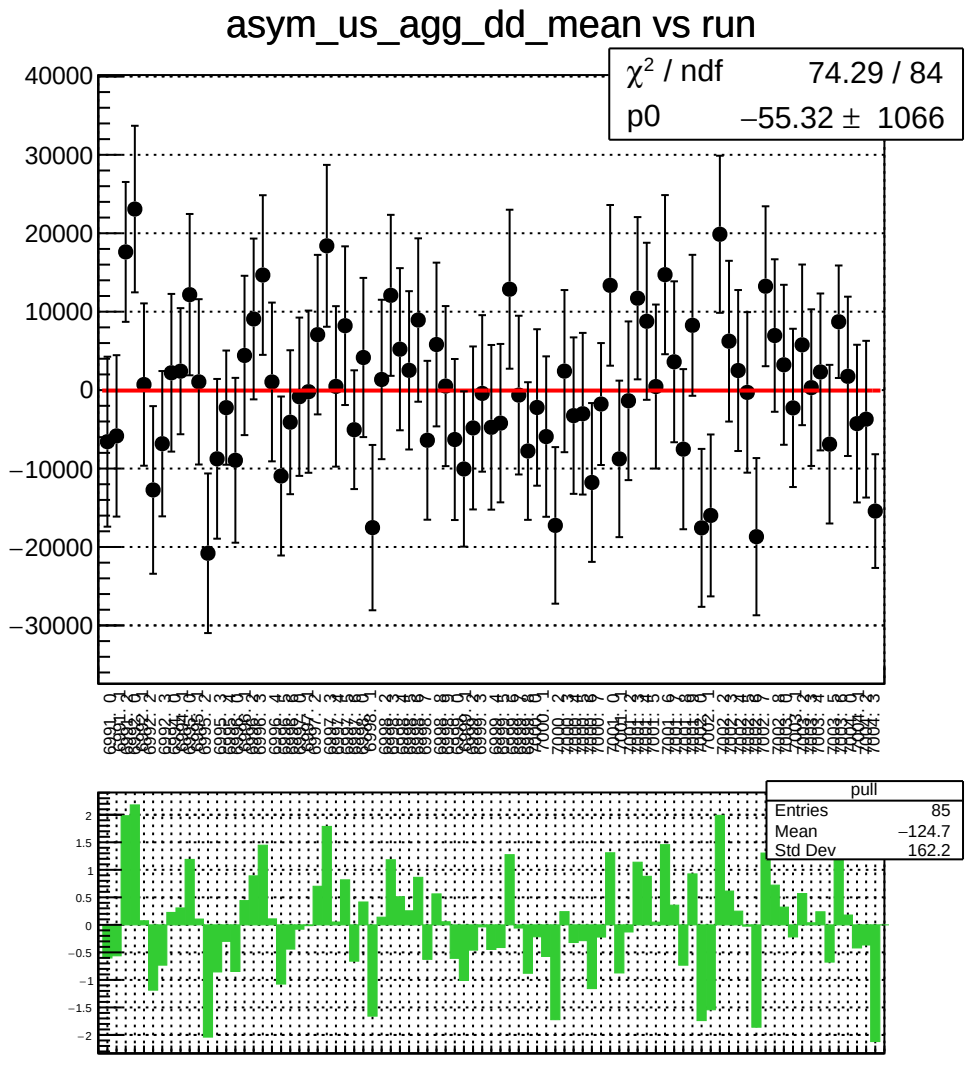

pull1D
Entries 85
Mean −0.0125
Std Dev 0.9178
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

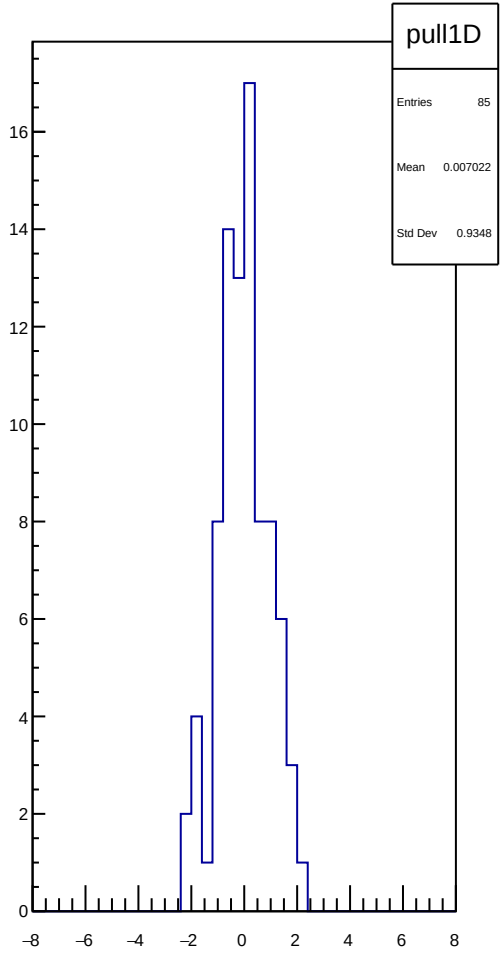

cor_asym_usr_rms vs run
χ² / ndf 175.3 / 84
p0 1129 ± 0.8788
1180
1170
1160
1150
1140
1130
1120
1110
1100
1090

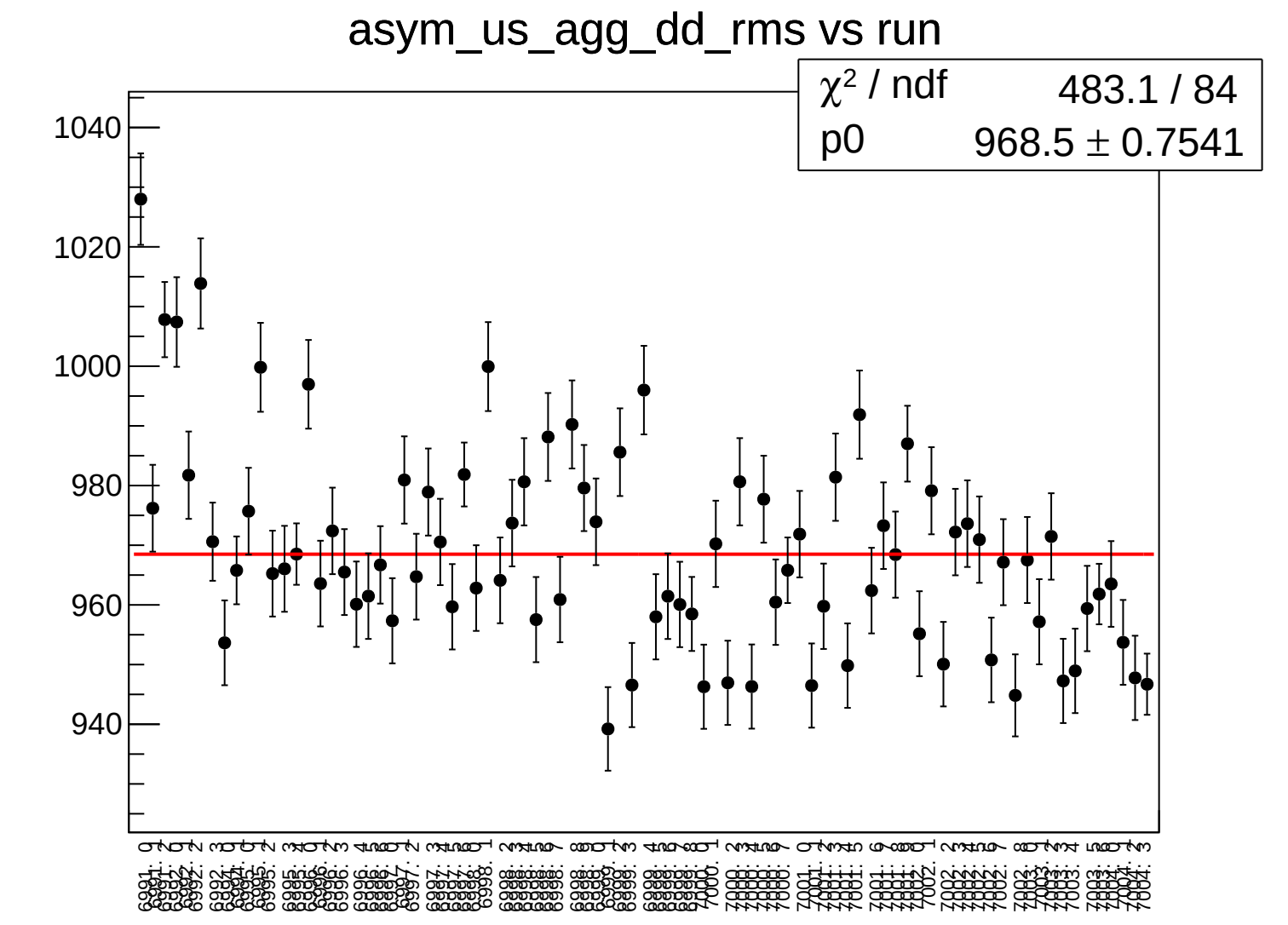

asym_us_agg_avg_mean vs run
χ² / ndf 103.5 / 84
p0 −982 ± 1644
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −131.8
Std Dev 173.4
3
2
1
0
−1
−2

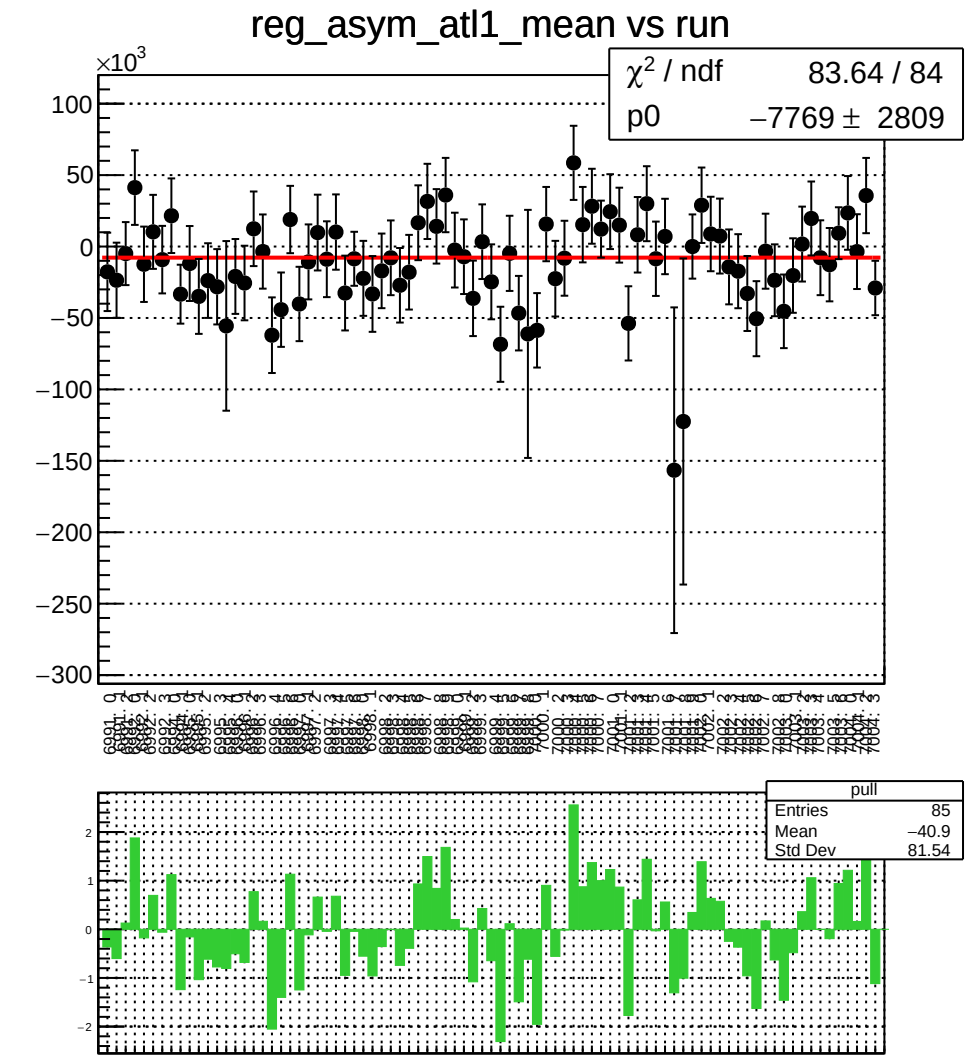

pull1D
Entries 85
Mean −0.03461
Std Dev 1.103
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

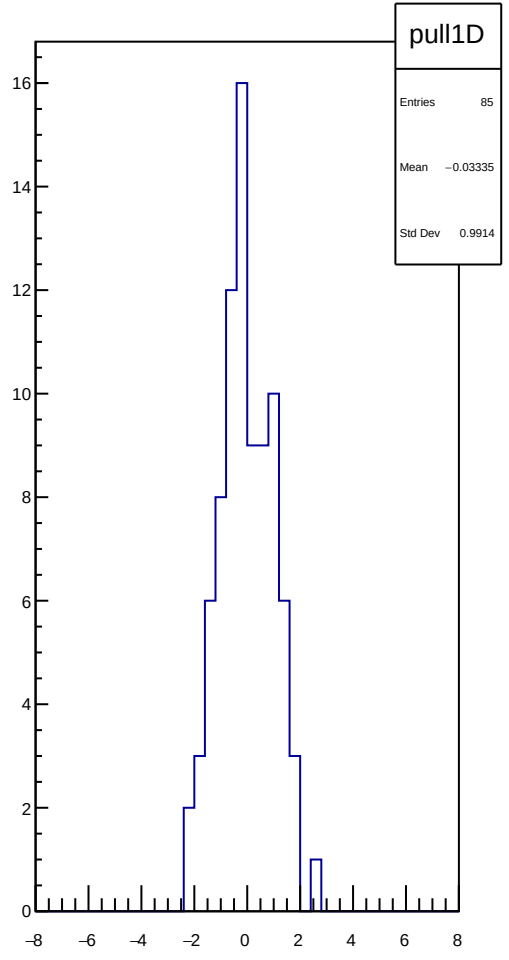

asym_us_agg_avg_rms vs run
χ² / ndf 1559 / 84
p0 1493 ± 1.163
1650
1600
1550
1500
1450
1400

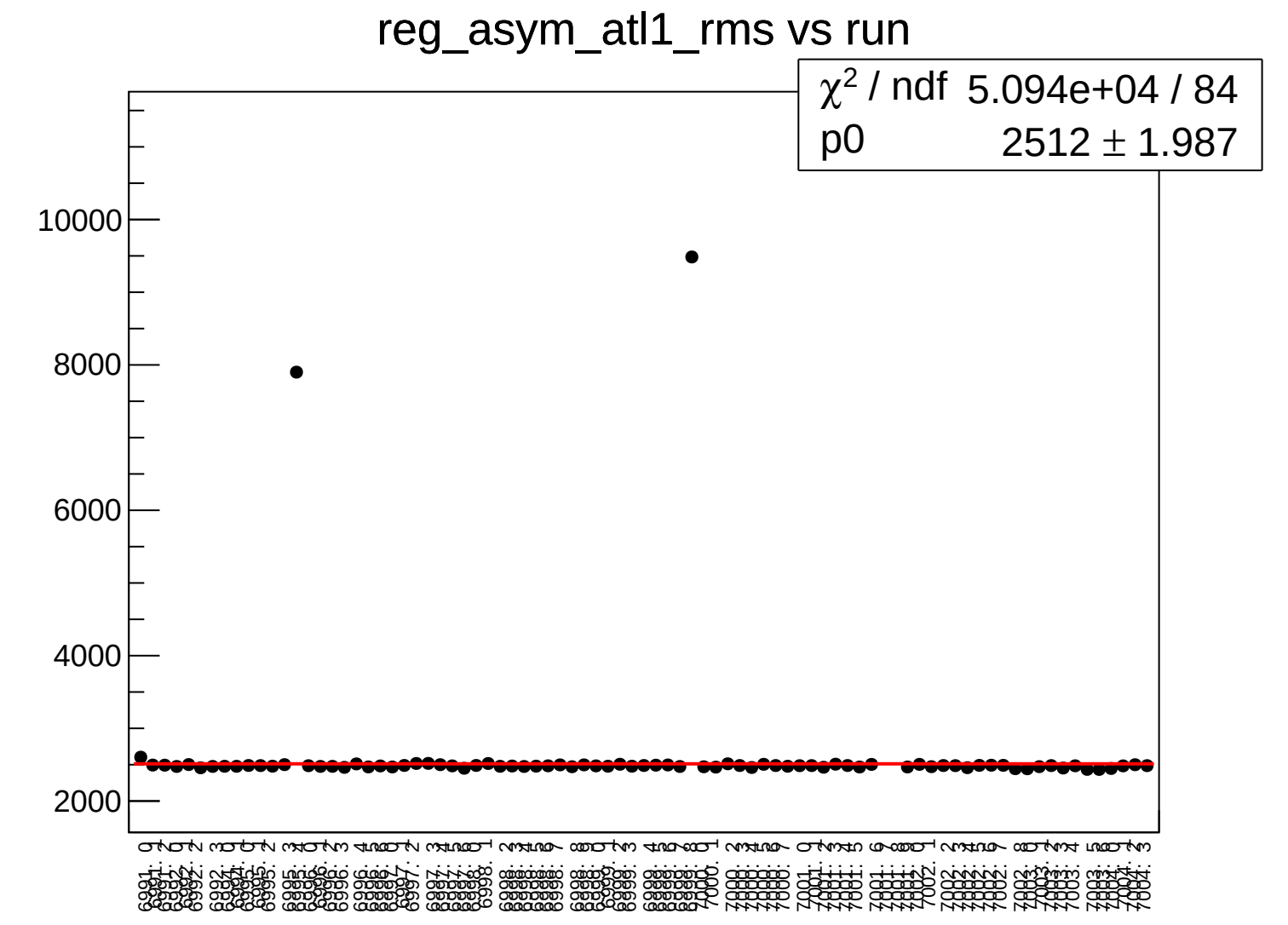

asym_us_agg_dd_mean vs run
χ² / ndf 74.29 / 84
p0 −55.32 ± 1066
pull
Entries 85
Mean −124.7
Std Dev 162.2

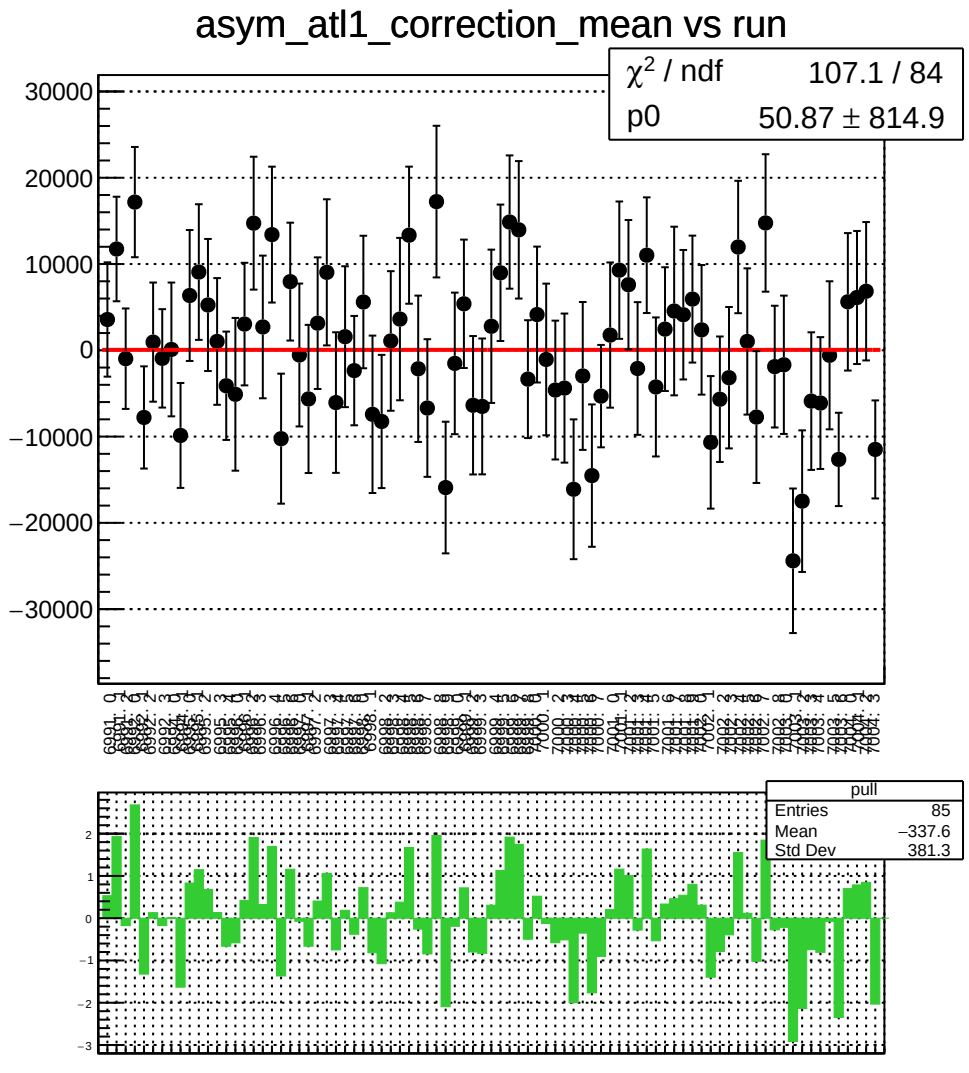

pull1D
Entries 85
Mean 0.007022
Std Dev 0.9348

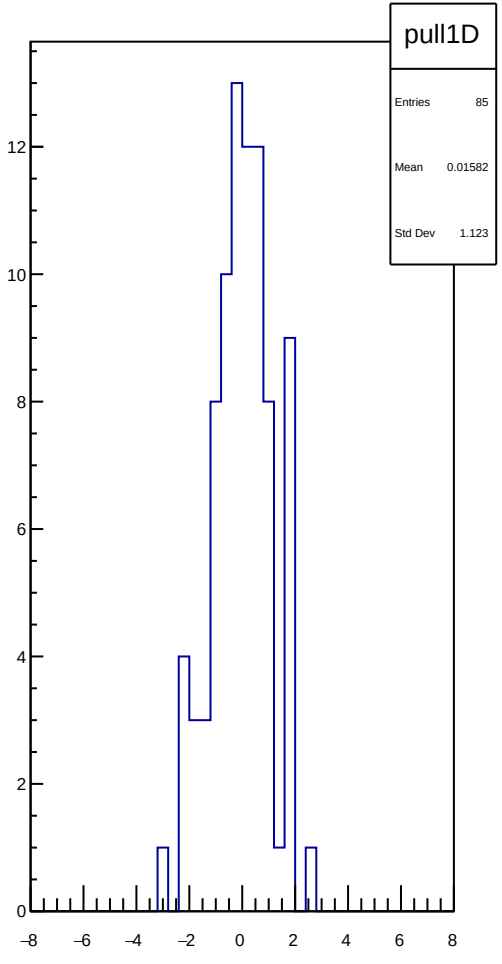

asym_us_agg_dd_rms vs run
χ² / ndf 483.1 / 84
p0 968.5 ± 0.7541
1040
1020
1000
980
960
940

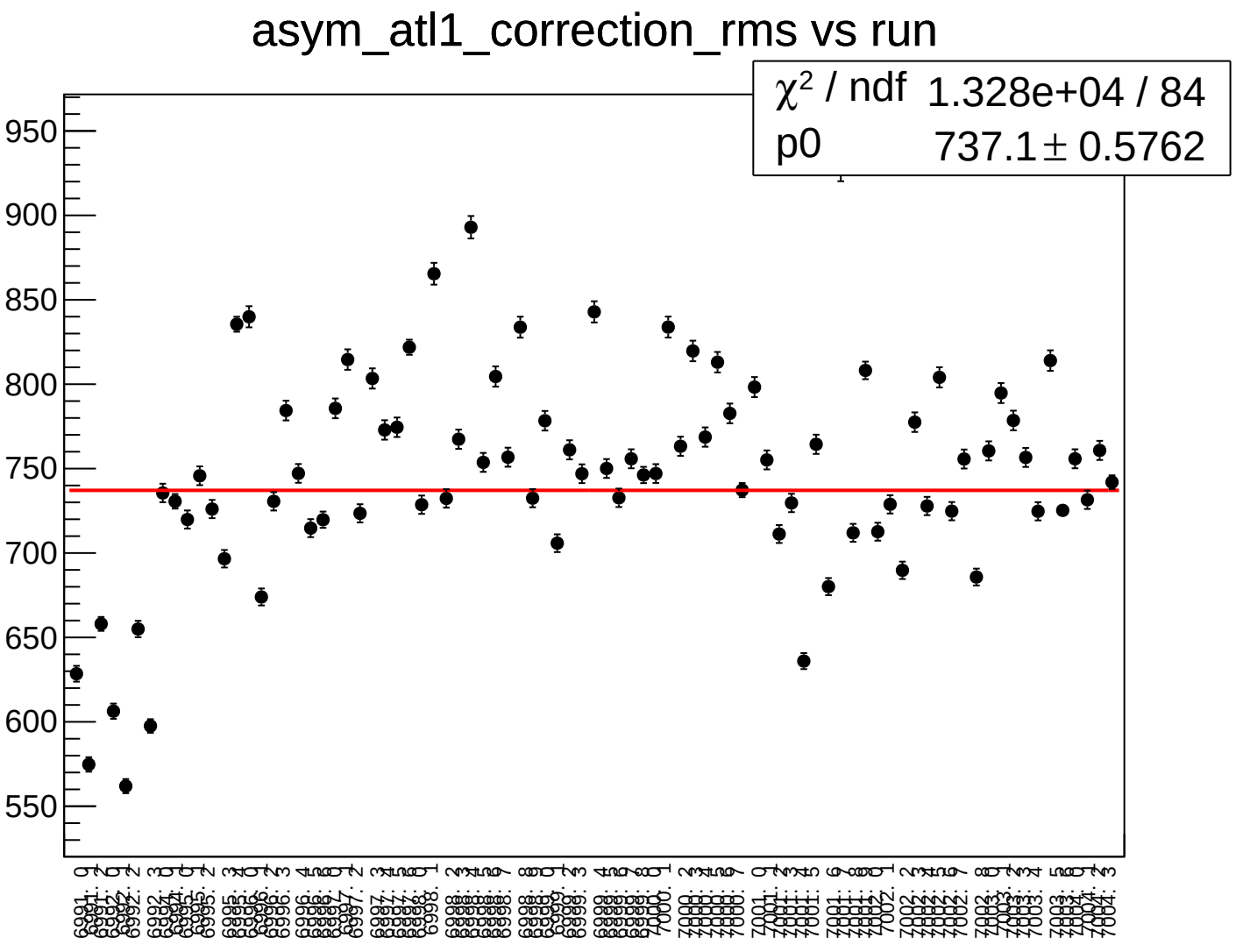

reg_asym_atl1_mean vs run
×10^3
χ² / ndf 83.64 / 84
p0 −7769 ± 2809
pull
Entries 85
Mean −40.9
Std Dev 81.54

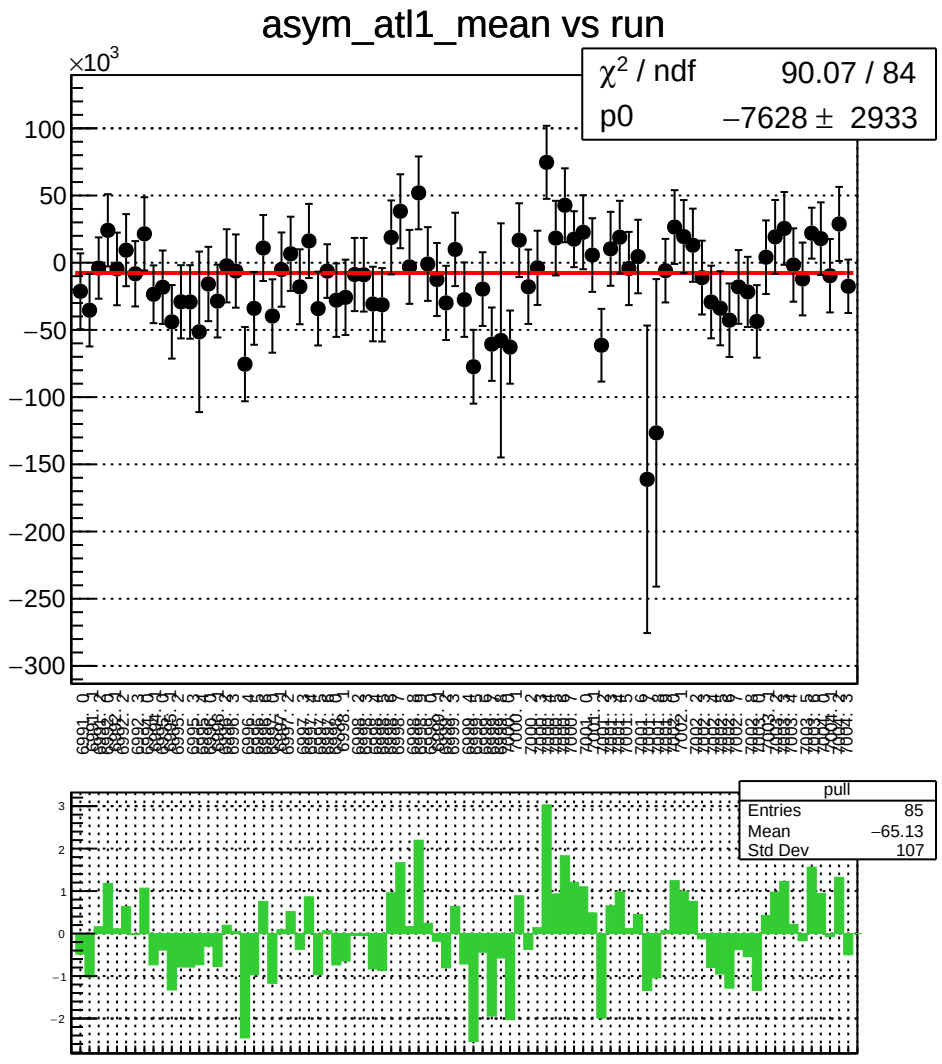

pull1D
Entries 85
Mean −0.03335
Std Dev 0.9914

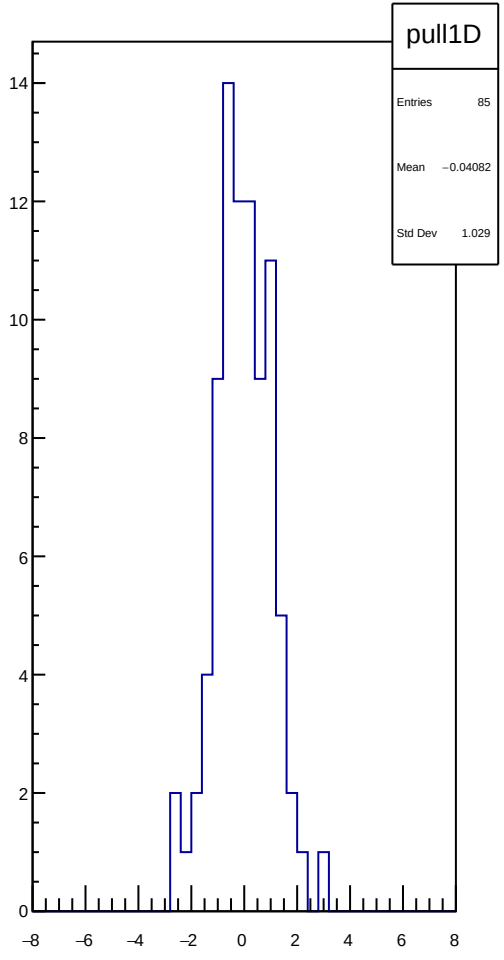

reg_asym_atl1_rms vs run
χ^2 / ndf 5.094e+04 / 84
p0 2512 ± 1.987
10000
8000
6000
4000
2000

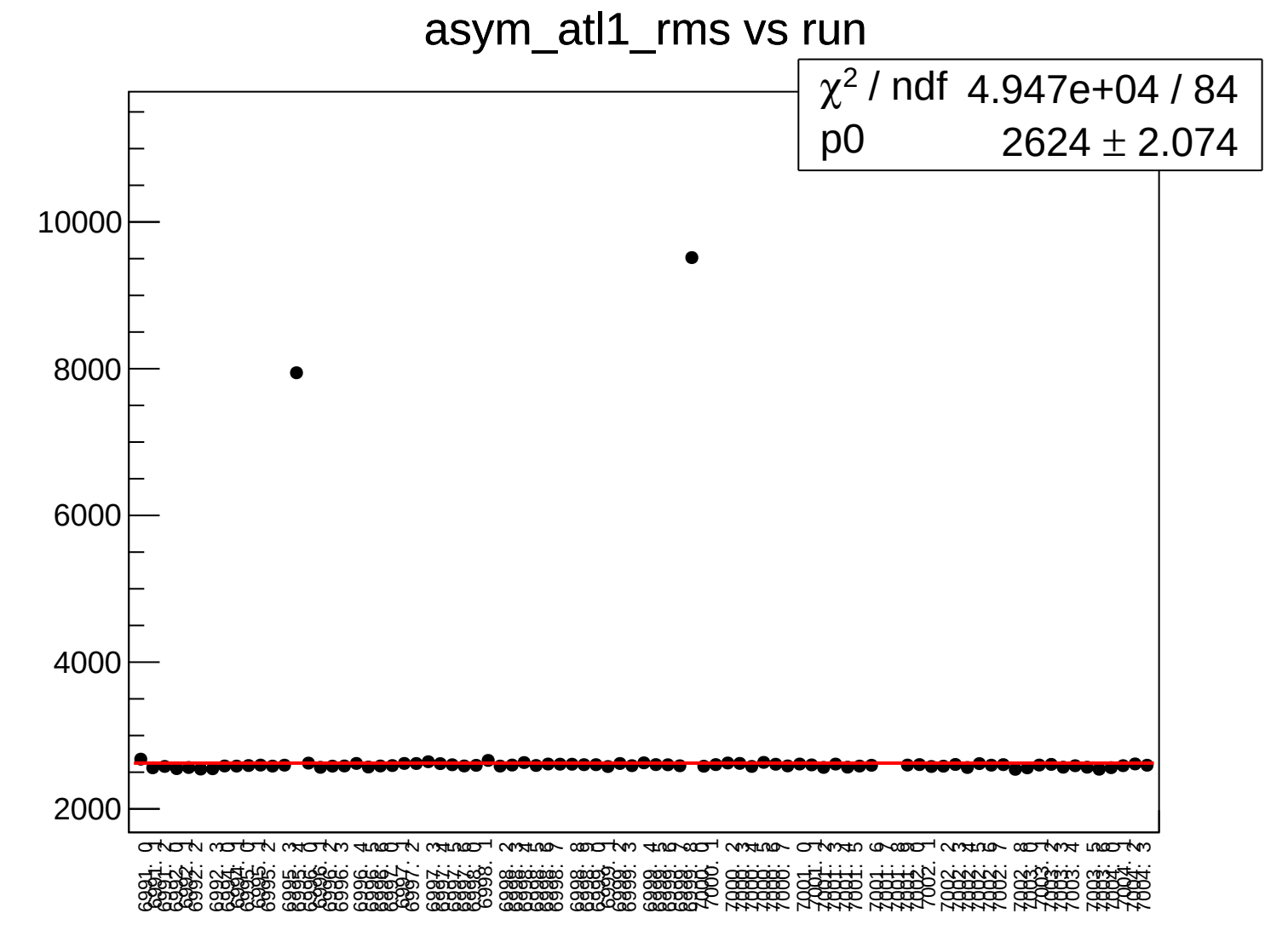

asym_atl1_correction_mean vs run
χ² / ndf 107.1 / 84
p0 50.87 ± 814.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −337.6
Std Dev 381.3
2
1
0
−1
−2
−3

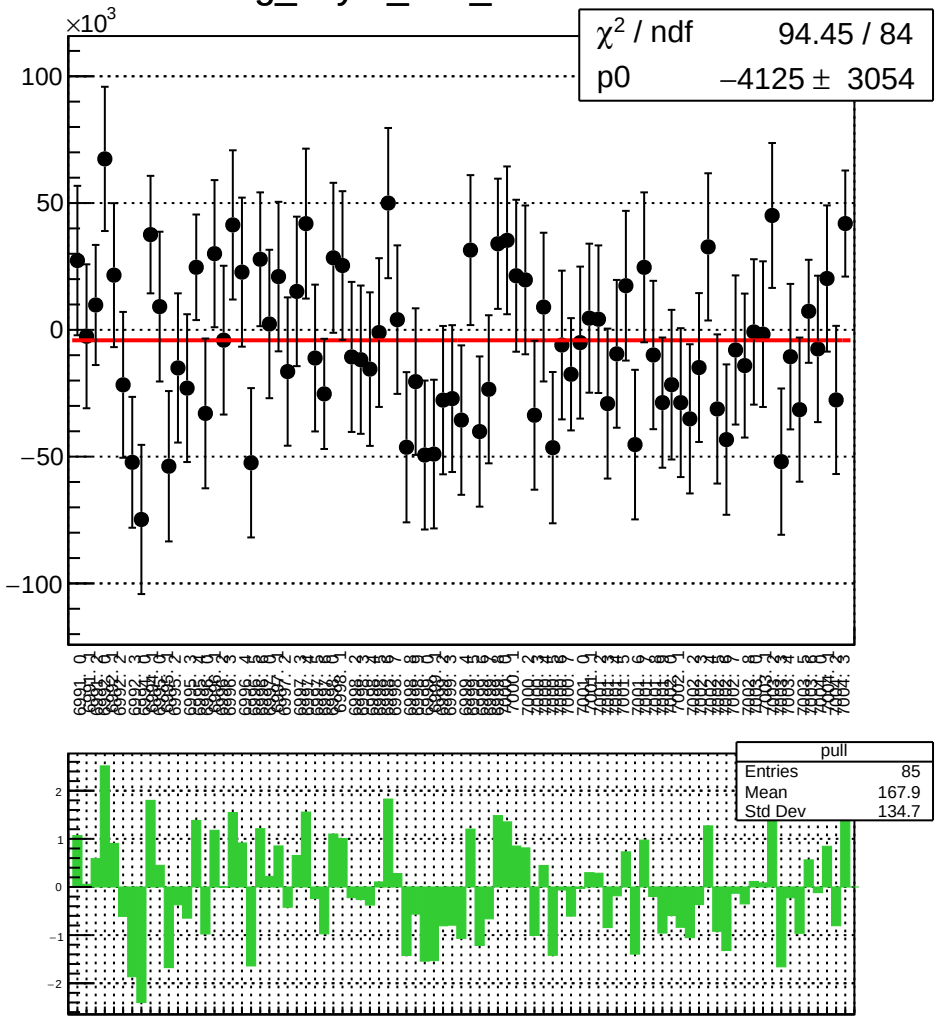

pull1D
Entries 85
Mean 0.01582
Std Dev 1.123
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

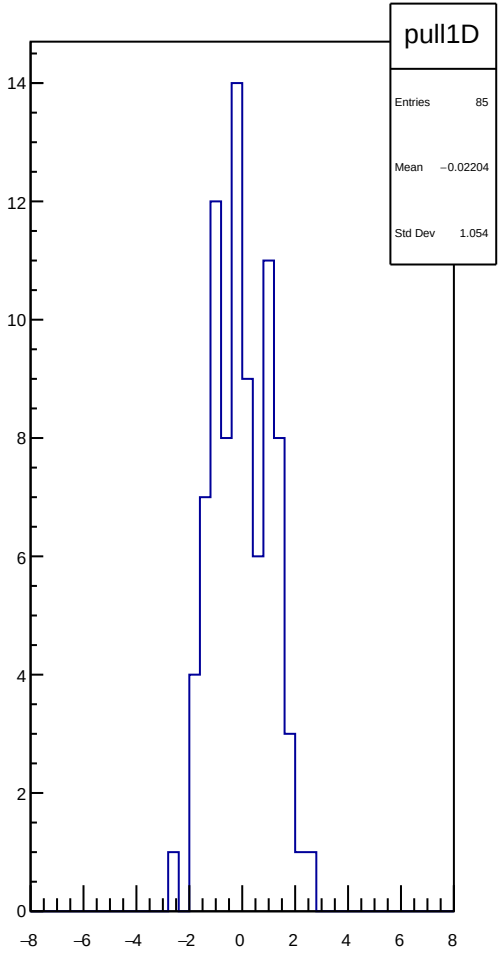

asym_atl1_correction_rms vs run
χ² / ndf 1.328e+04 / 84
p0 737.1 ± 0.5762
950
900
850
800
750
700
650
600
550

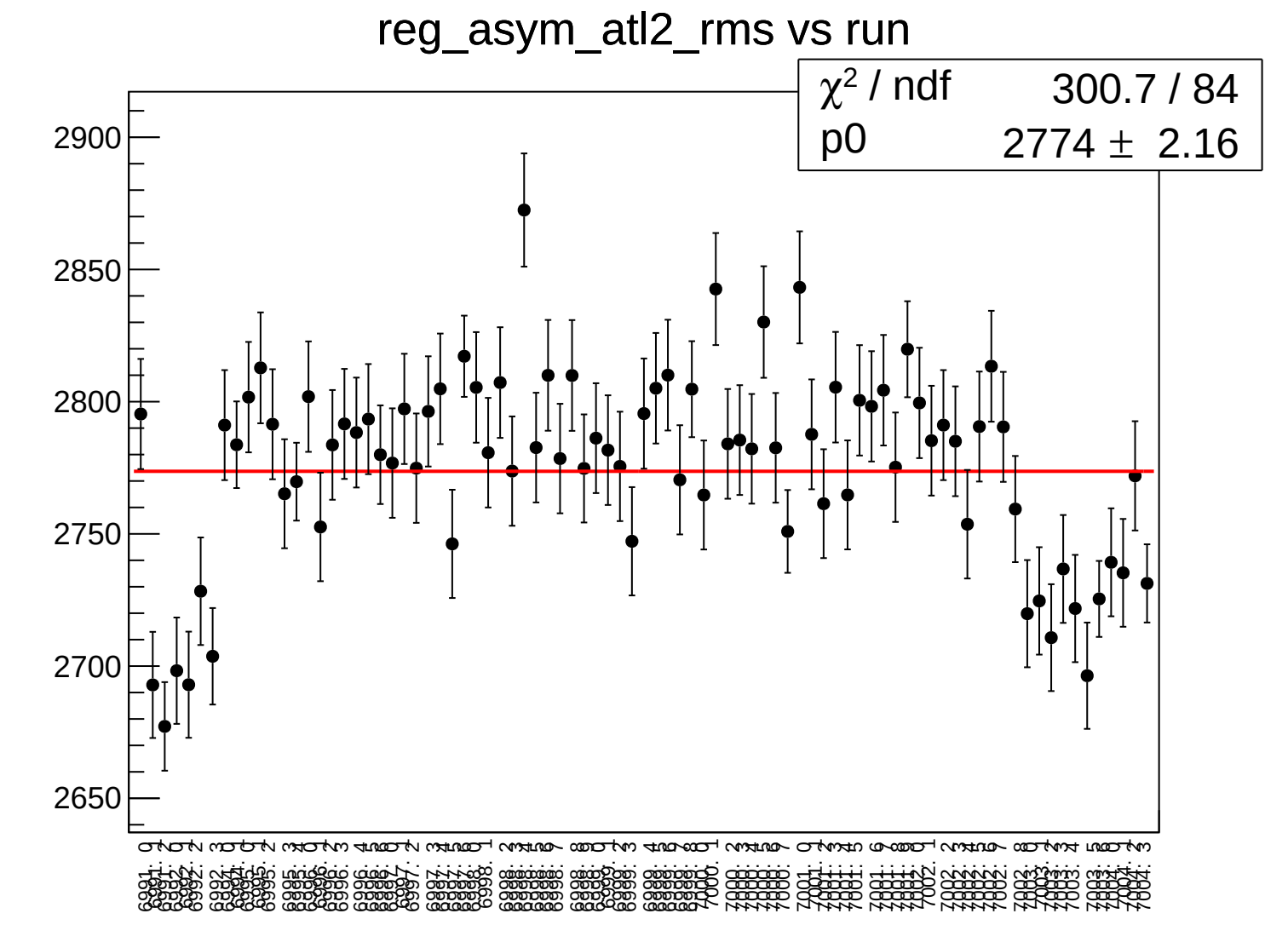

asym_atl1_mean vs run
×10^3
χ² / ndf 90.07 / 84
p0 −7628 ± 2933
100
50
0
−50
−100
−150
−200
−250
−300
pull
Entries 85
Mean −65.13
Std Dev 107
3
2
1
0
−1
−2

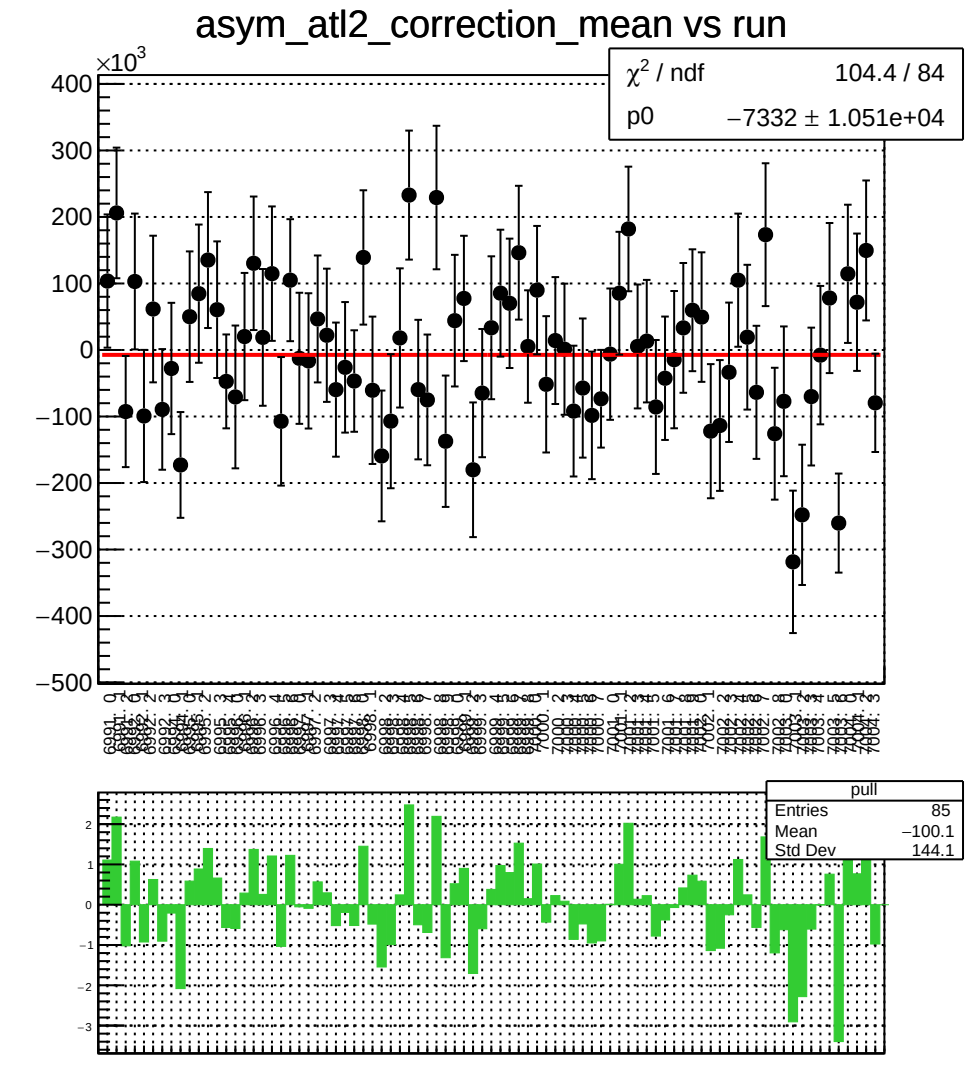

pull1D
Entries 85
Mean −0.04082
Std Dev 1.029
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

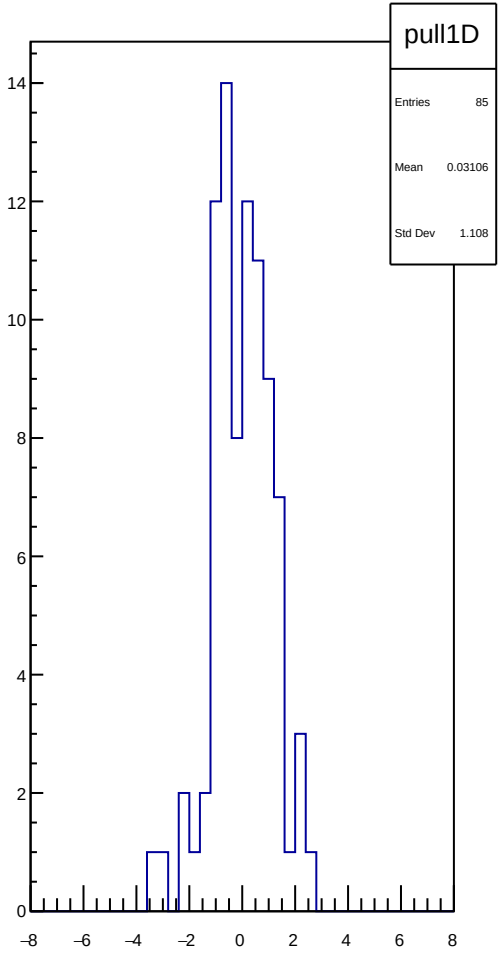

asym_atl1_rms vs run
χ² / ndf 4.947e+04 / 84
p0 2624 ± 2.074
10000
8000
6000
4000
2000

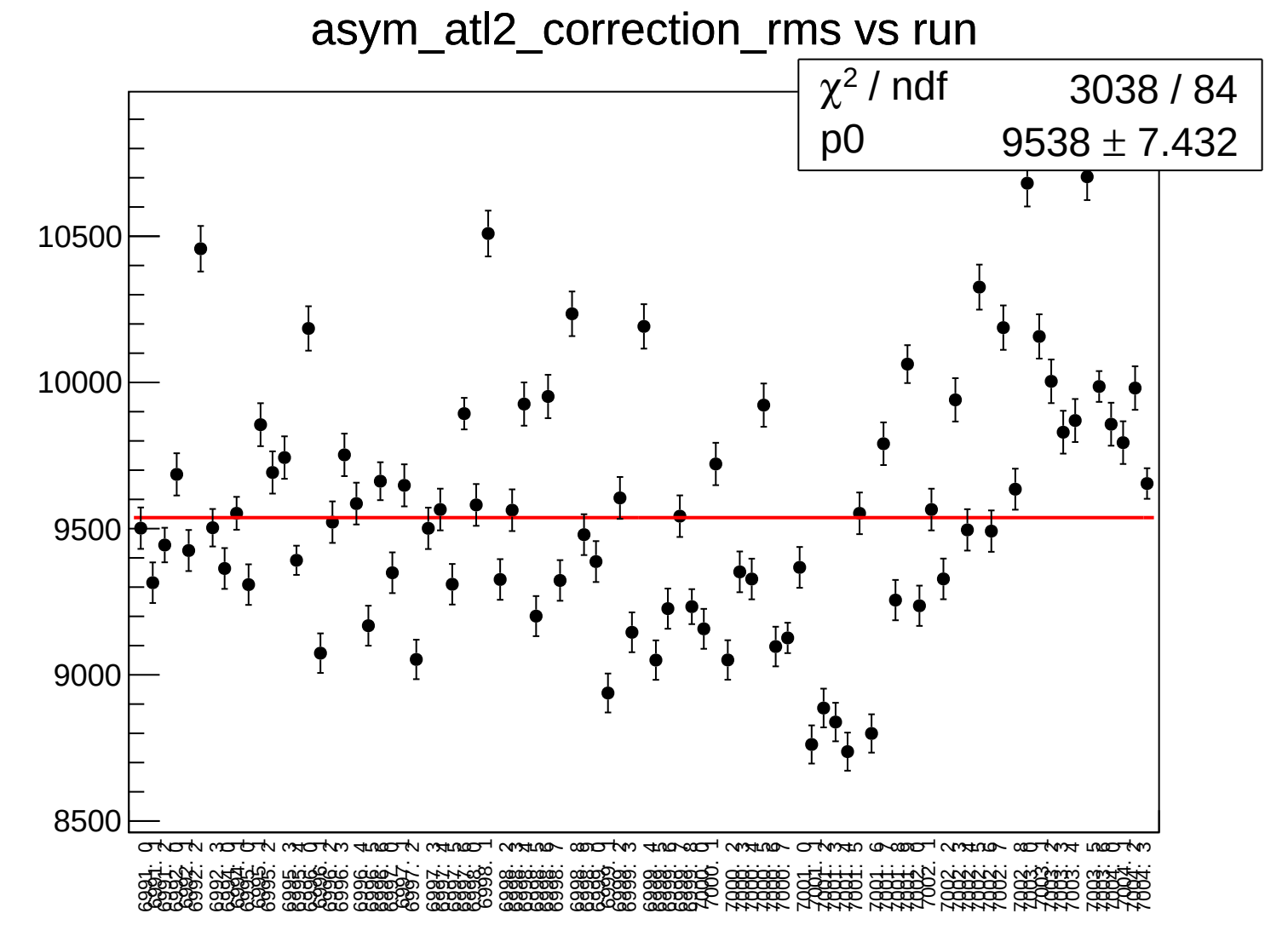

reg_asym_atl2_mean vs run
×10^3
χ² / ndf 94.45 / 84
p0 −4125 ± 3054
100
50
0
−50
−100
pull
Entries 85
Mean 167.9
Std Dev 134.7
2
1
0
−1
−2

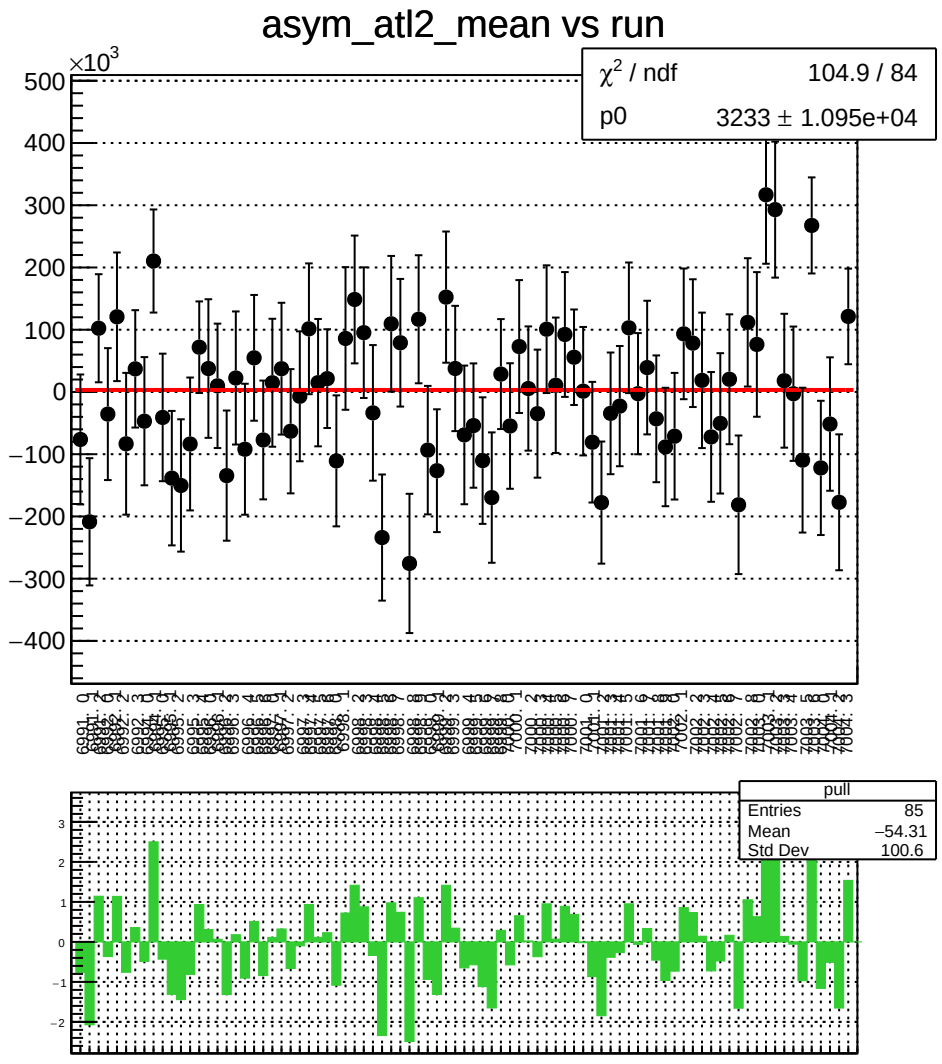

pull1D
Entries 85
Mean −0.02204
Std Dev 1.054
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

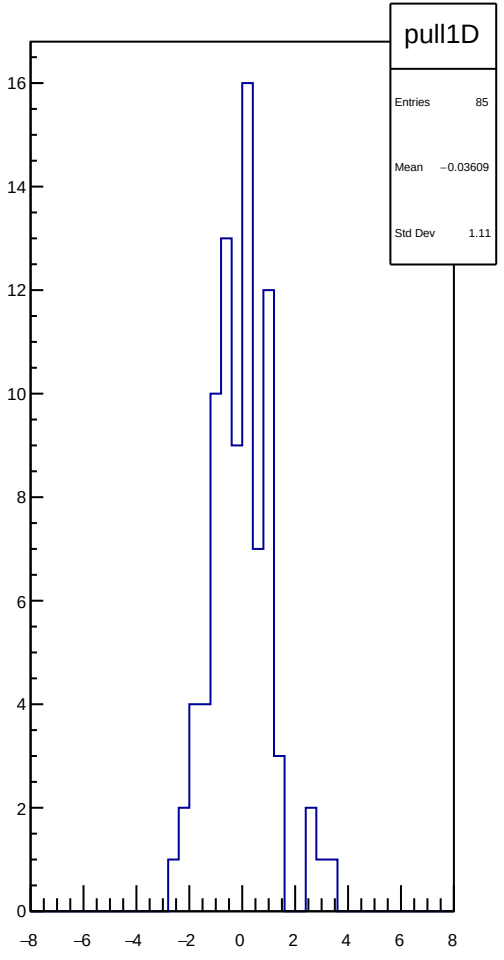

reg_asym_atl2_rms vs run
χ² / ndf 300.7 / 84
p0 2774 ± 2.16
2900
2850
2800
2750
2700
2650

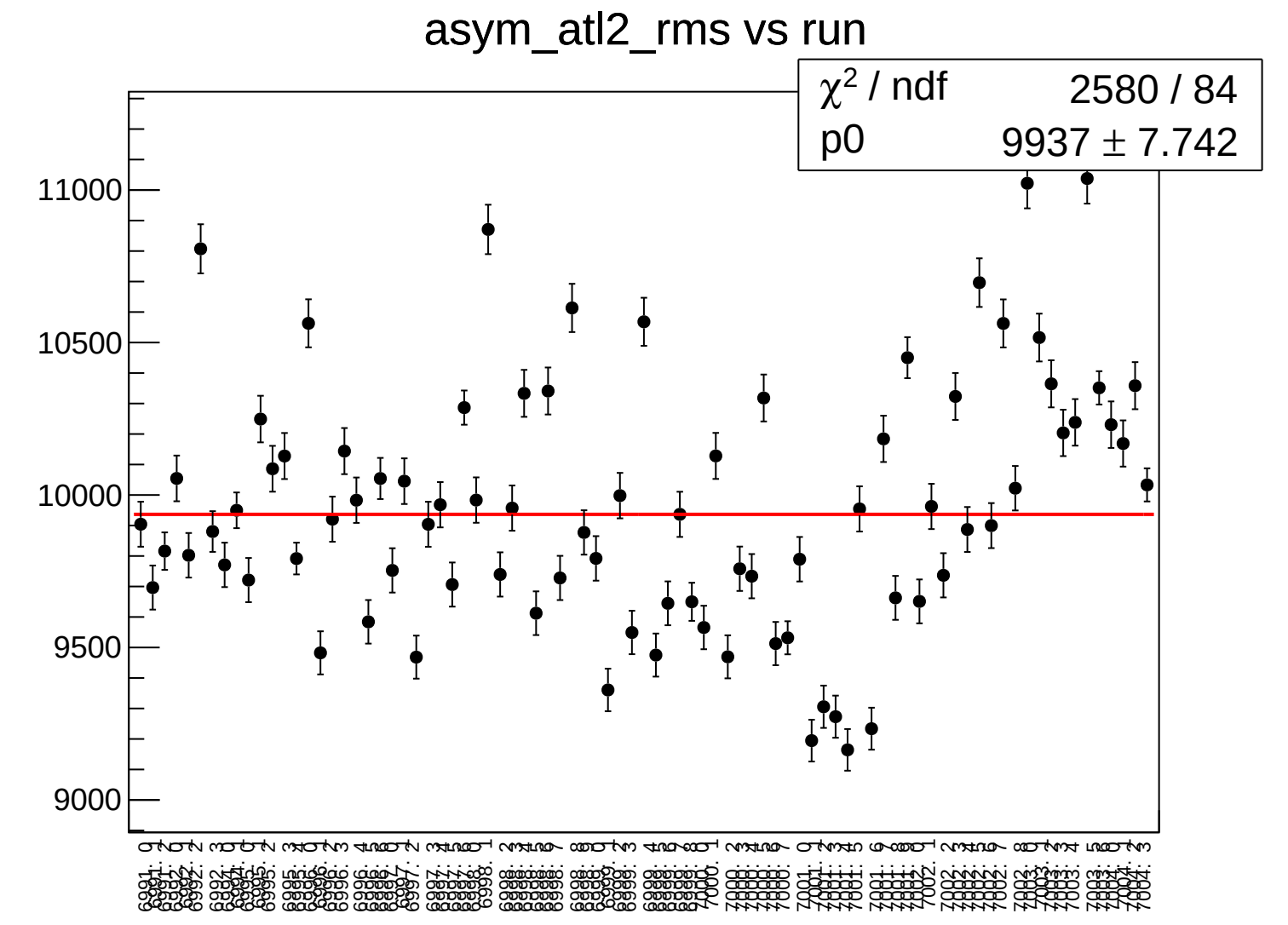

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 104.4 / 84
p0 −7332 ± 1.051e+04
pull
Entries 85
Mean −100.1
Std Dev 144.1

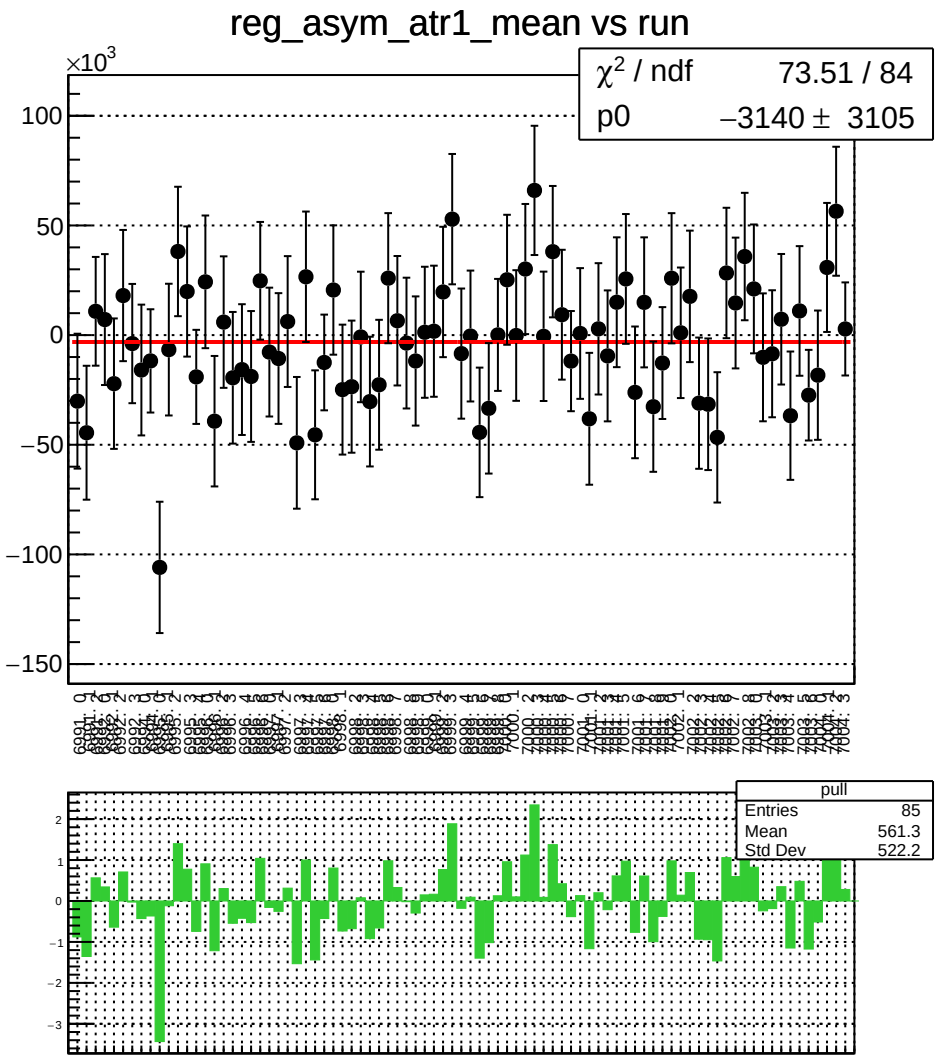

pull1D
Entries 85
Mean 0.03106
Std Dev 1.108

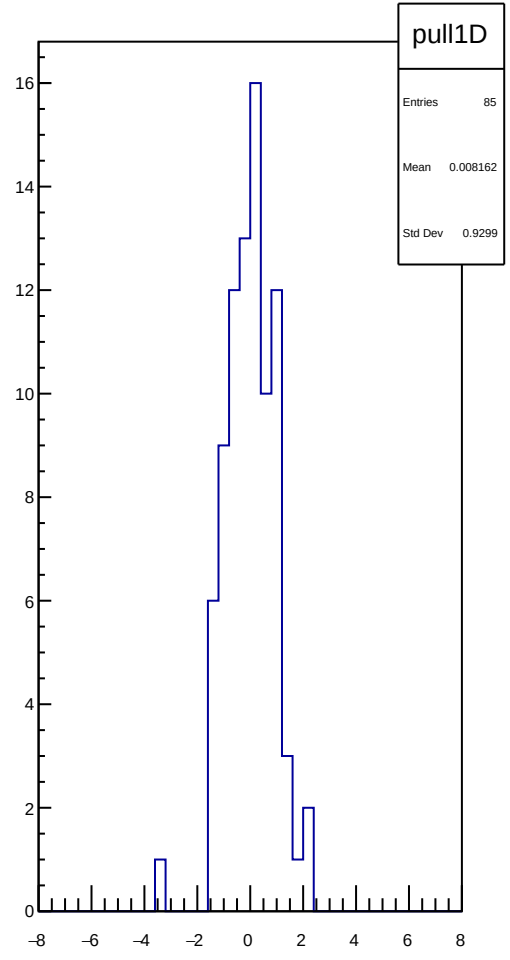

asym_atl2_correction_rms vs run
χ² / ndf 3038 / 84
p0 9538 ± 7.432
10500
10000
9500
9000
8500

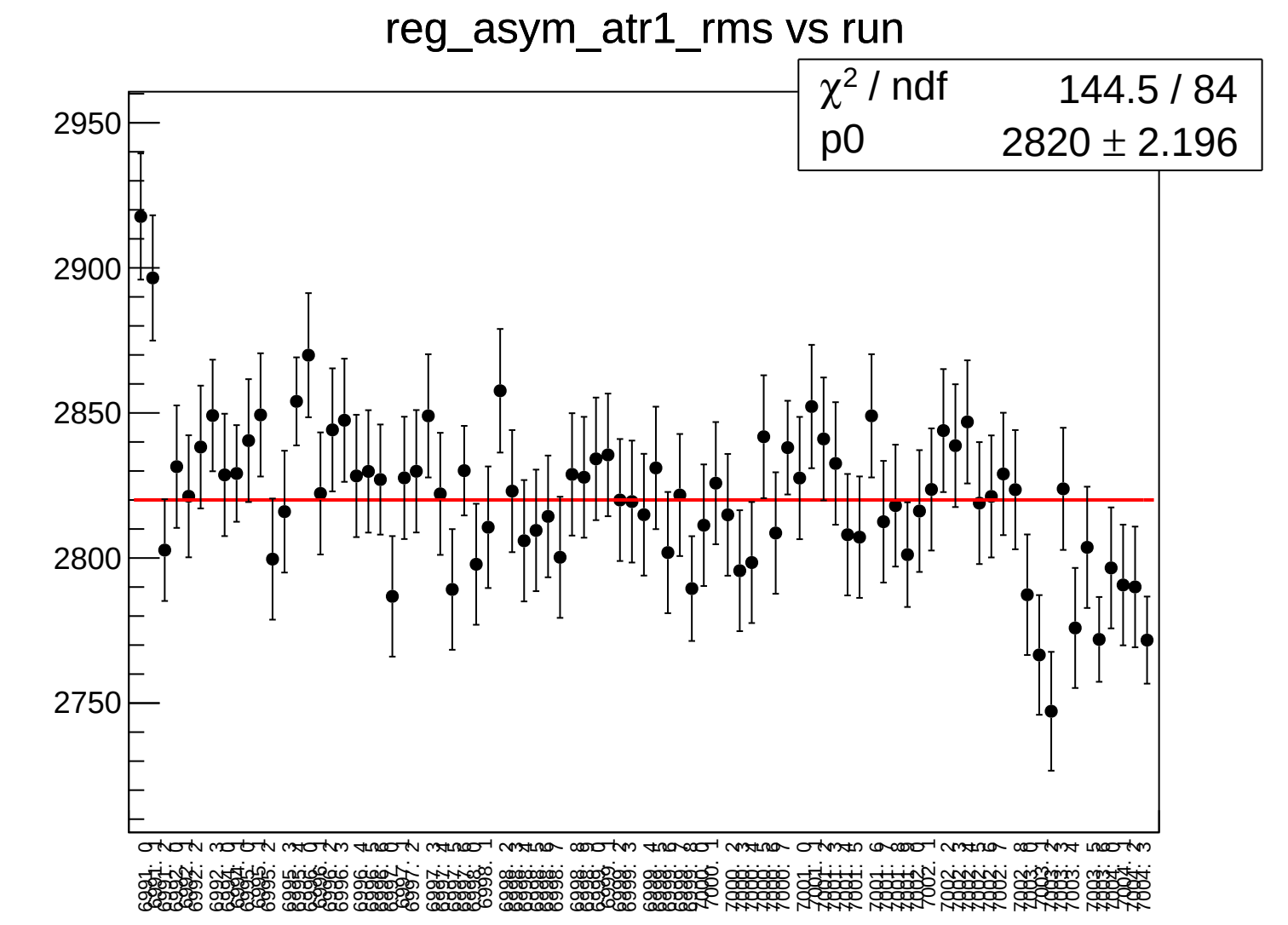

asym_atl2_mean vs run
×10^3
χ² / ndf 104.9 / 84
p0 3233 ± 1.095e+04
pull
Entries 85
Mean −54.31
Std Dev 100.6

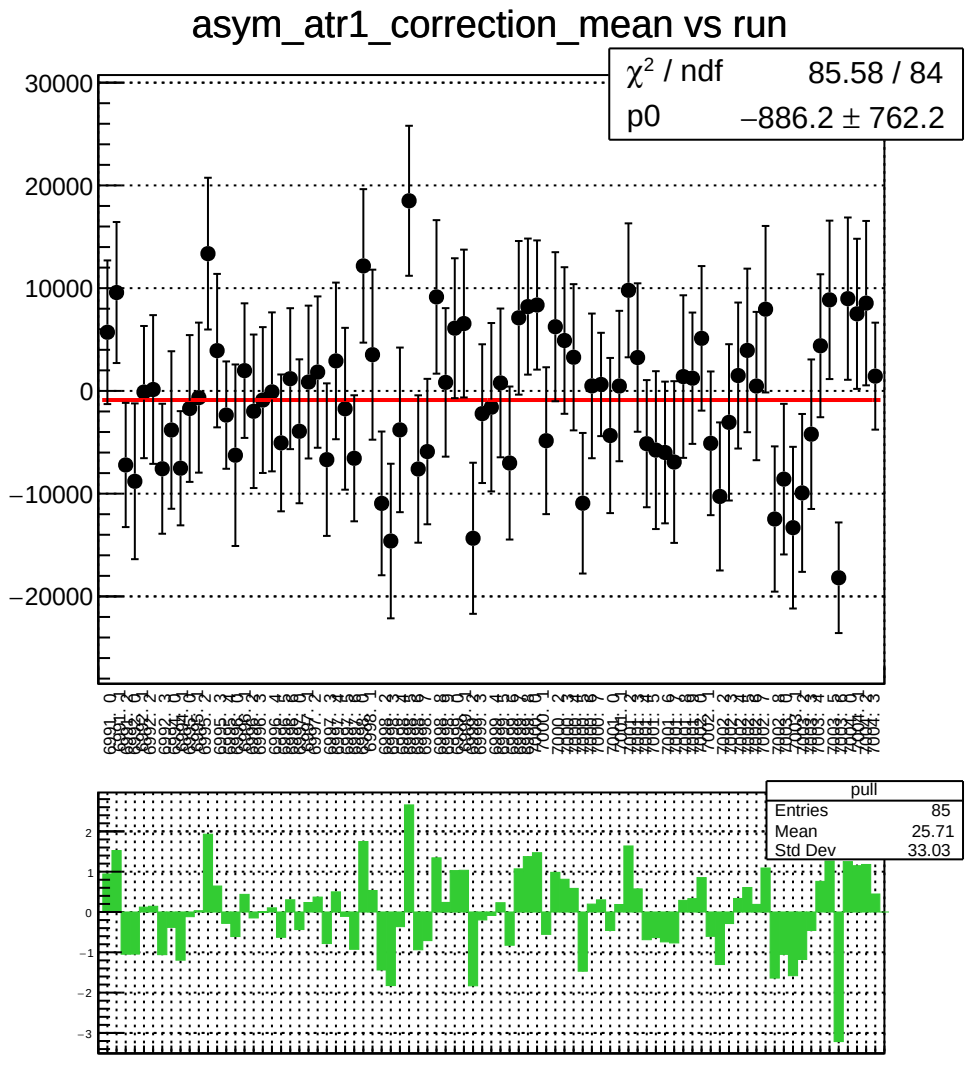

pull1D
Entries 85
Mean −0.03609
Std Dev 1.11

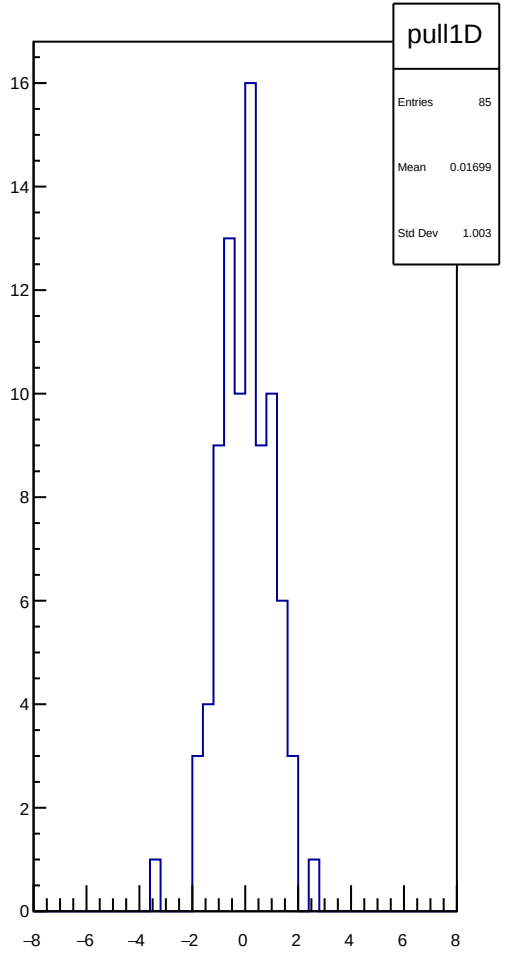

asym_atl2_rms vs run
χ² / ndf 2580 / 84
p0 9937 ± 7.742
11000
10500
10000
9500
9000

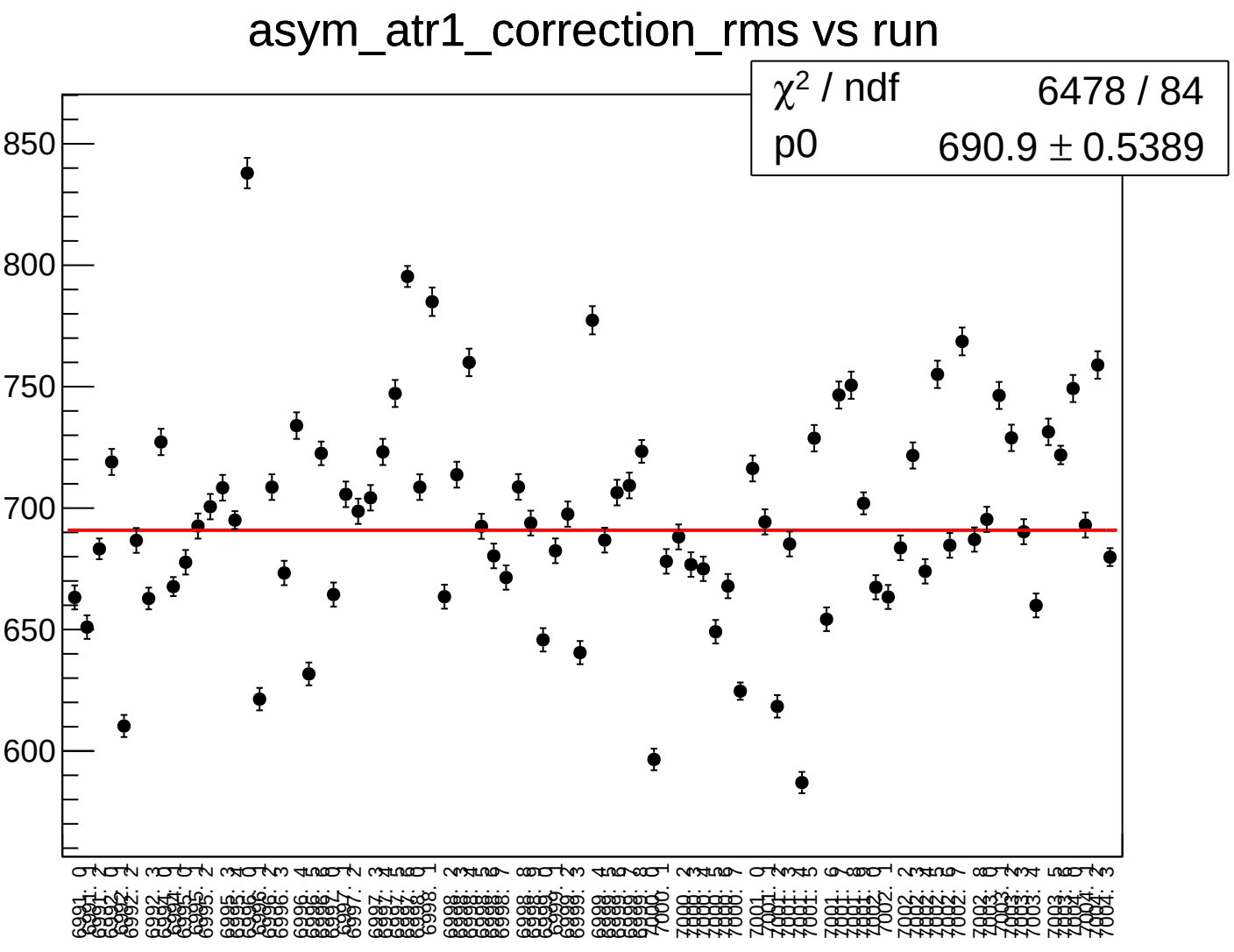

reg_asym_atr1_mean vs run
×10^3
χ^2 / ndf 73.51 / 84
p0 −3140 ± 3105
100
50
0
−50
−100
−150
pull
Entries 85
Mean 561.3
Std Dev 522.2
2
1
0
−1
−2
−3

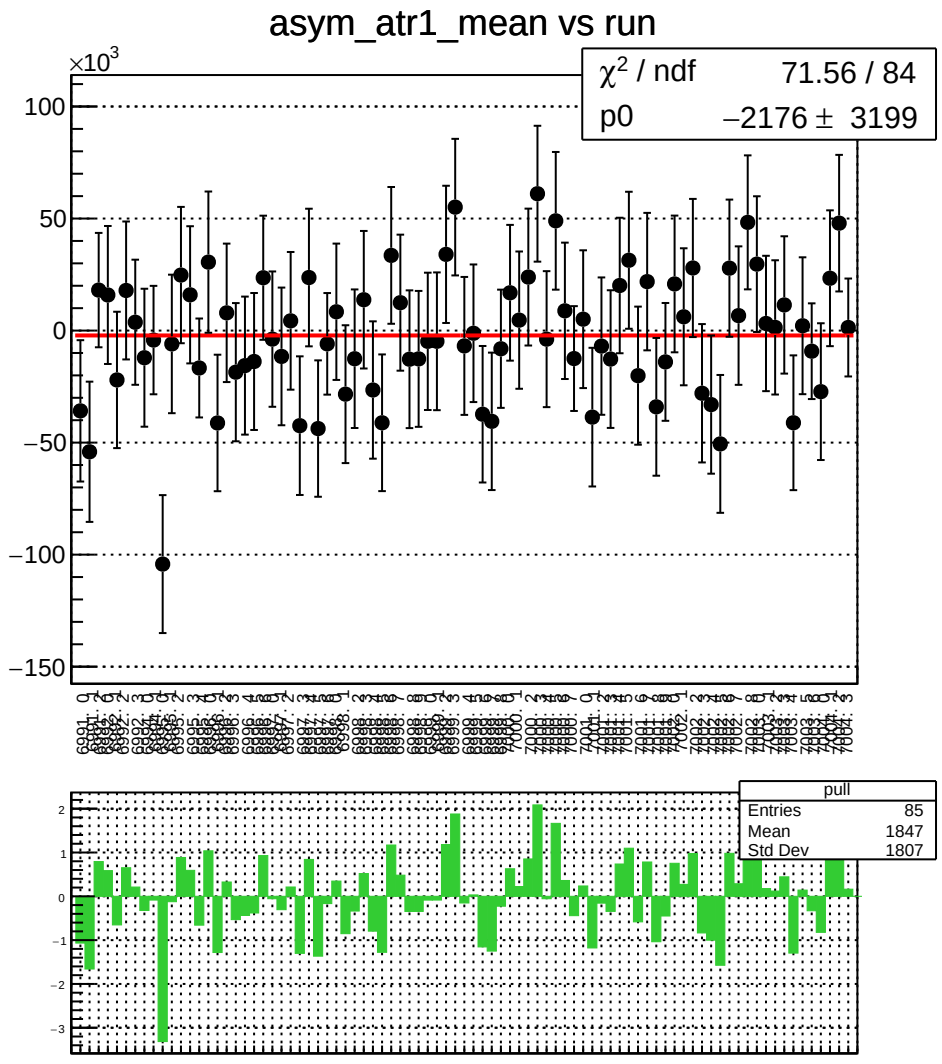

pull1D
Entries 85
Mean 0.008162
Std Dev 0.9299
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

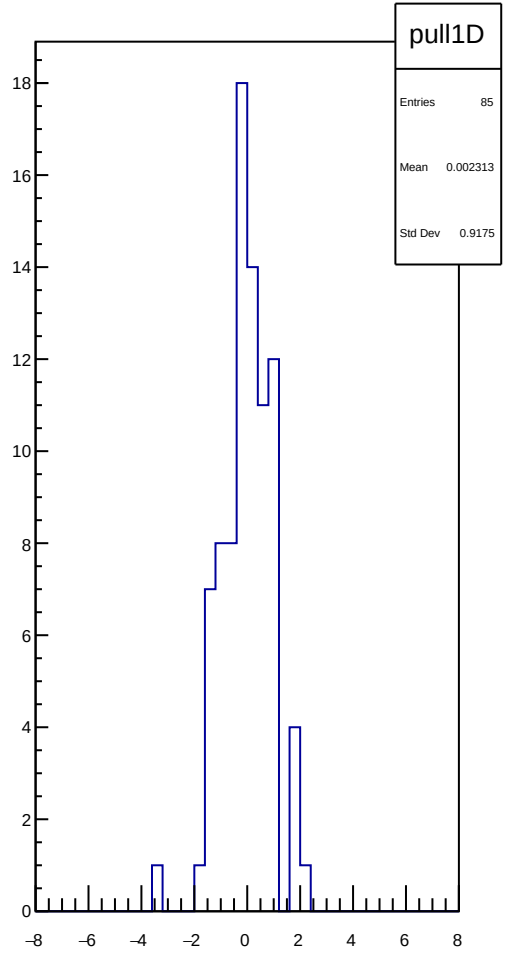

reg_asym_atr1_rms vs run
χ² / ndf 144.5 / 84
p0 2820 ± 2.196
2950
2900
2850
2800
2750

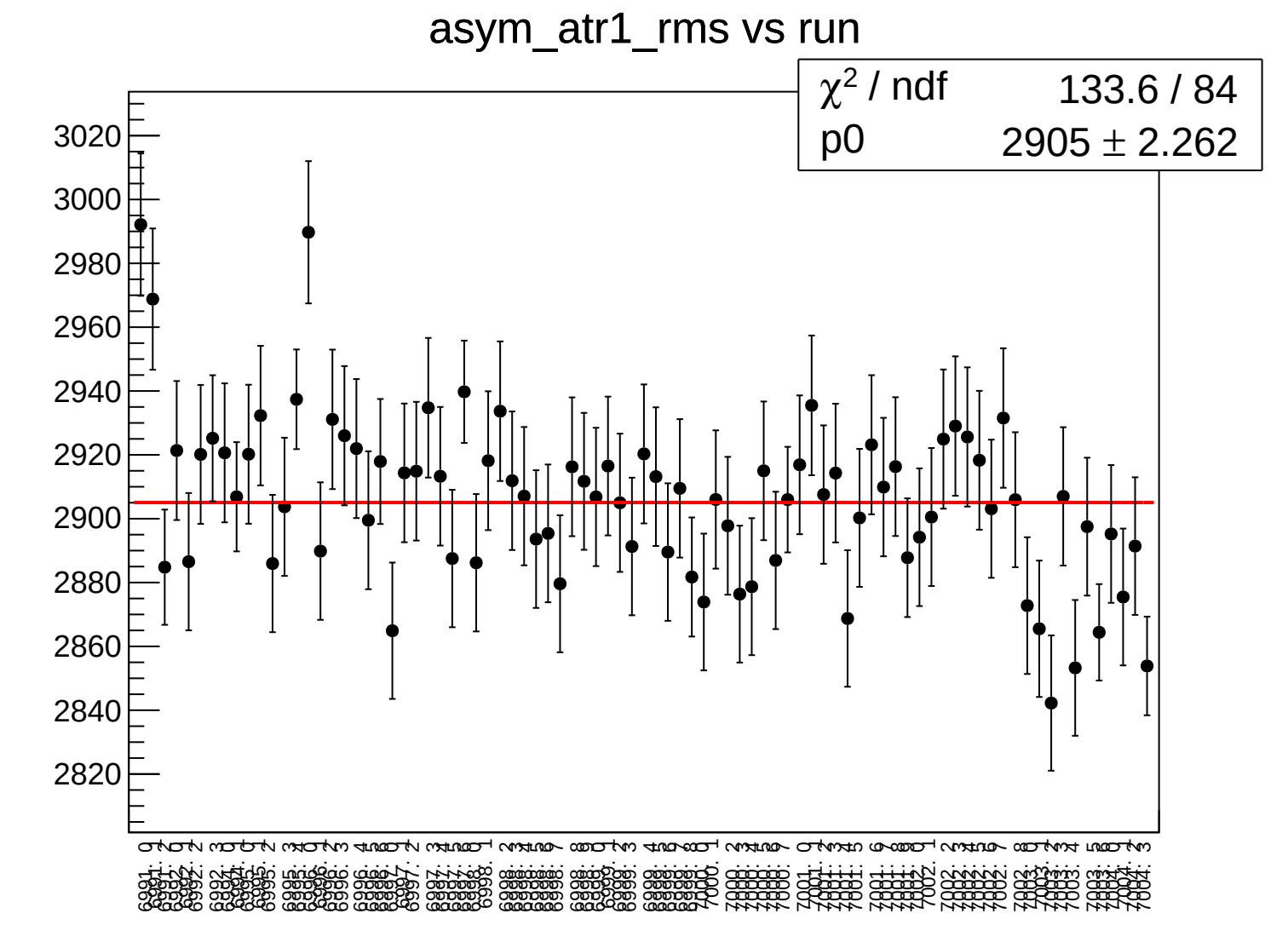

asym_atr1_correction_mean vs run
χ² / ndf 85.58 / 84
p0 −886.2 ± 762.2
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean 25.71
Std Dev 33.03
2
1
0
−1
−2
−3

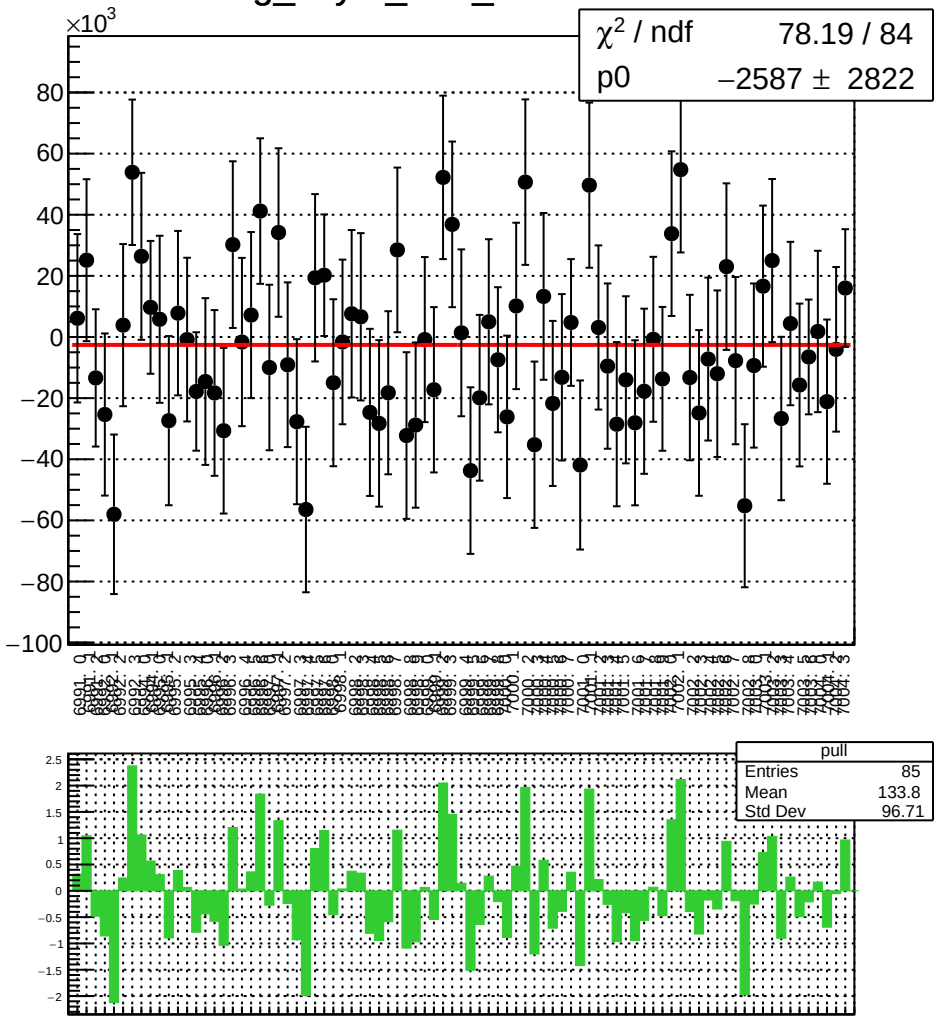

pull1D
Entries 85
Mean 0.01699
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

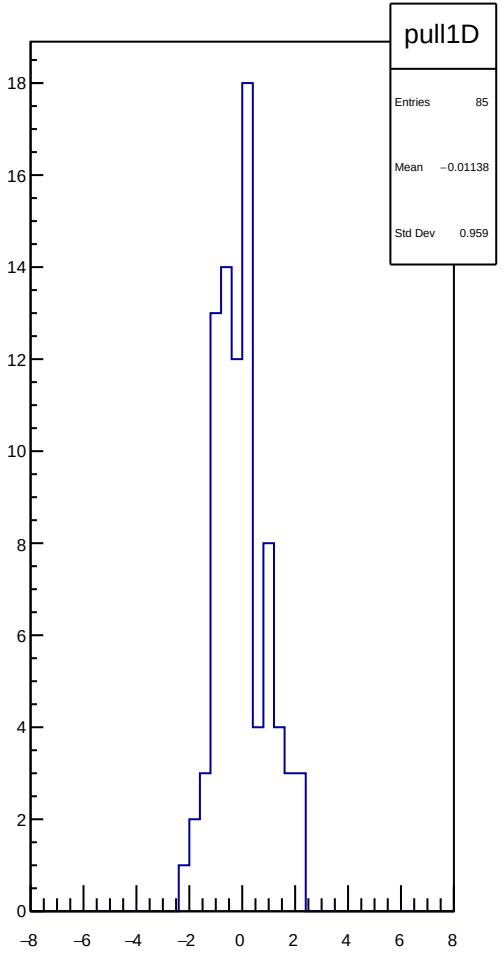

asym_atr1_correction_rms vs run
χ² / ndf 6478 / 84
p0 690.9 ± 0.5389
850
800
750
700
650
600

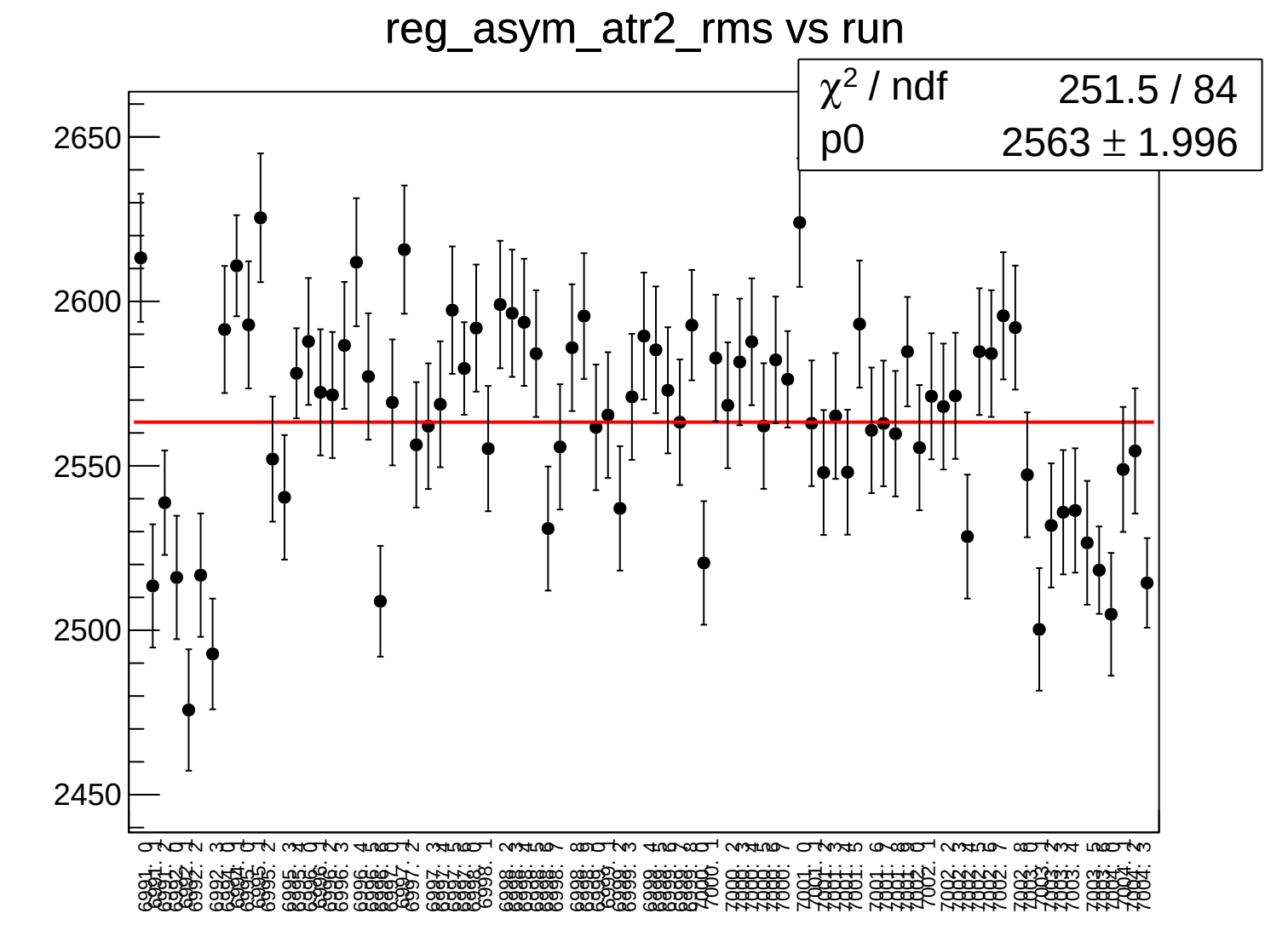

asym_atr1_mean vs run
×10^3
χ² / ndf 71.56 / 84
p0 −2176 ± 3199
100
50
0
−50
−100
−150
pull
Entries 85
Mean 1847
Std Dev 1807
2
1
0
−1
−2
−3

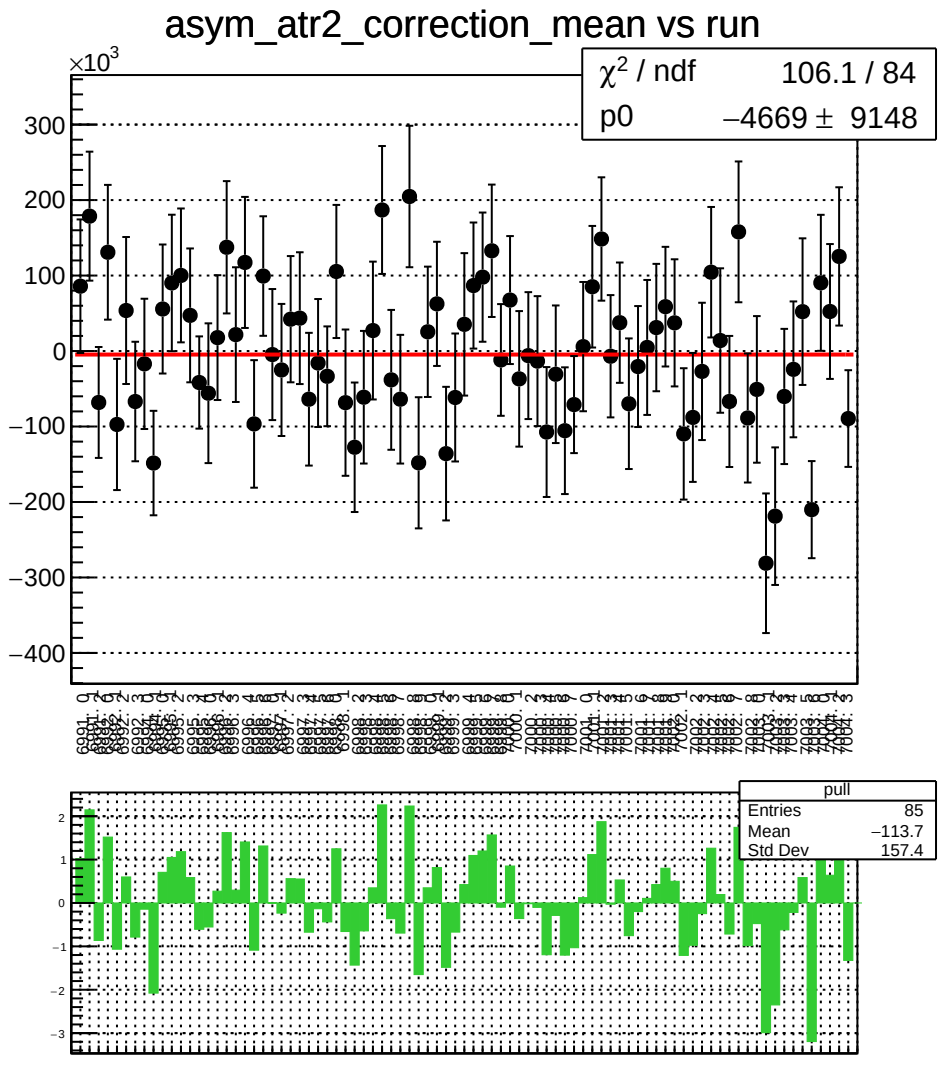

pull1D
Entries 85
Mean 0.002313
Std Dev 0.9175
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

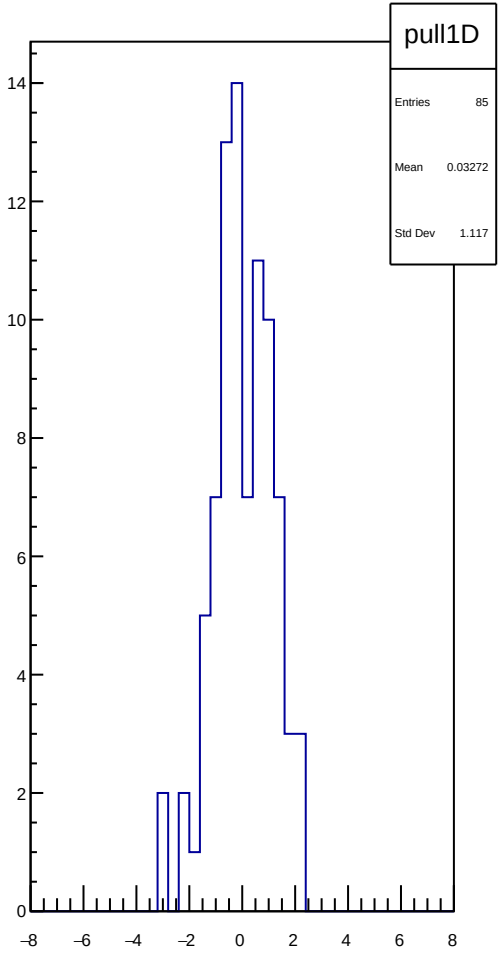

asym_atr1_rms vs run
χ^2 / ndf 133.6 / 84
p0 2905 ± 2.262
3020
3000
2980
2960
2940
2920
2900
2880
2860
2840
2820

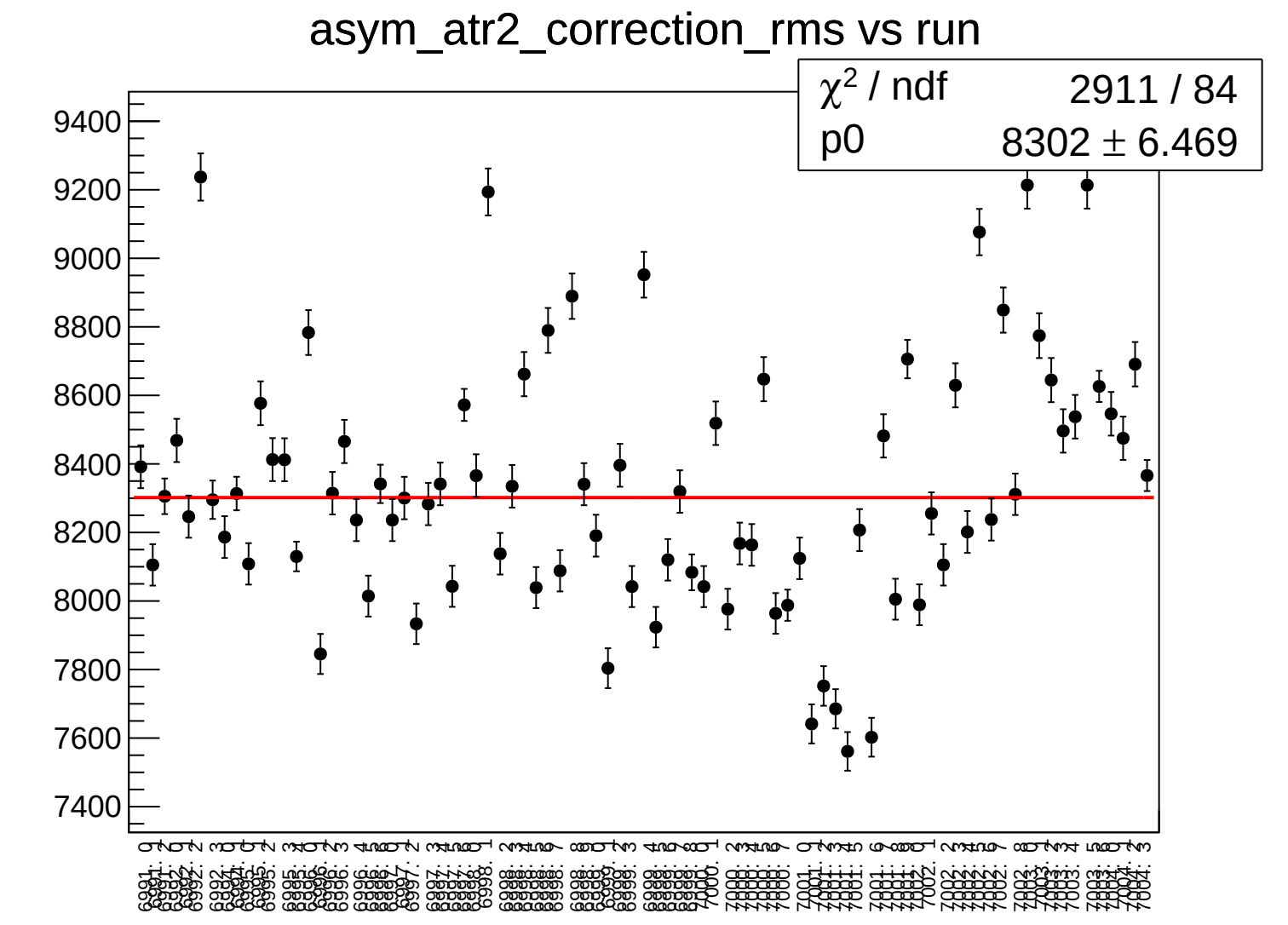

reg_asym_atr2_mean vs run
χ^2 / ndf 78.19 / 84
p0 −2587 ± 2822
×10^3
pull
Entries 85
Mean 133.8
Std Dev 96.71

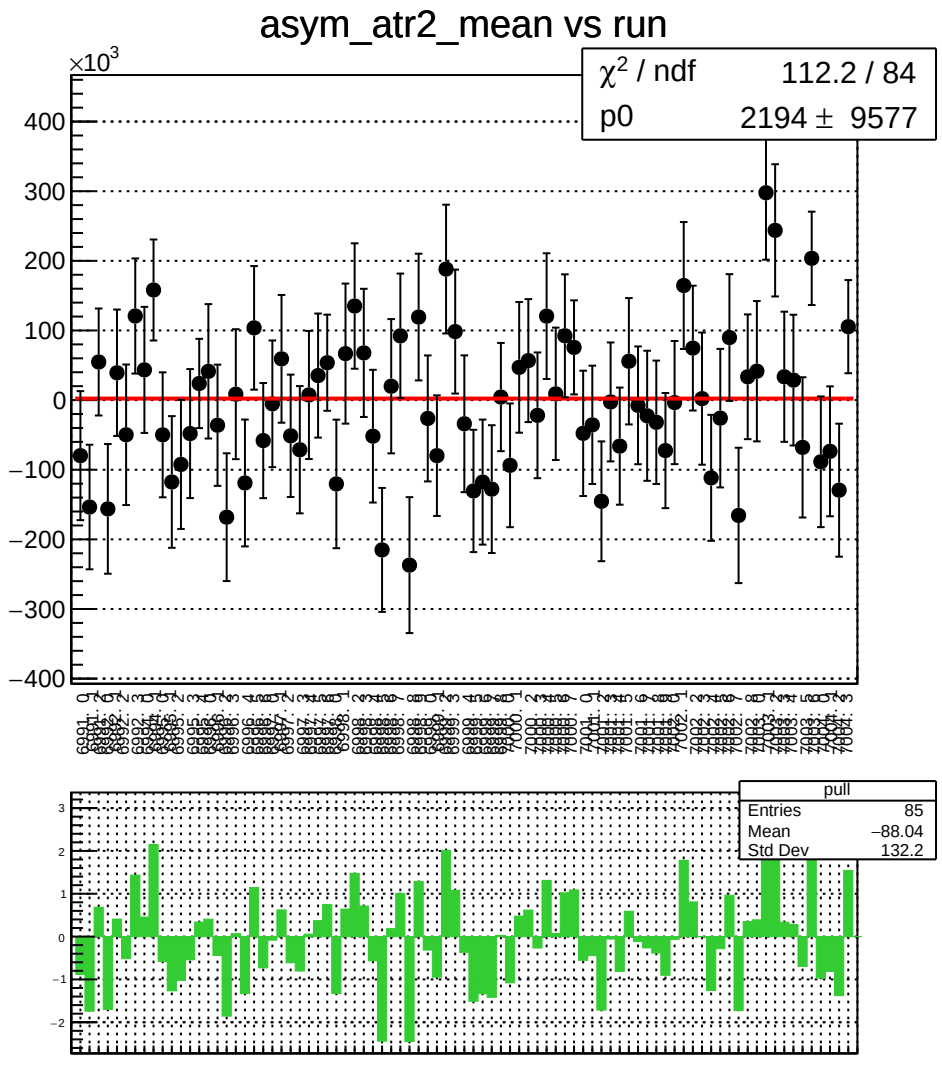

pull1D
Entries 85
Mean −0.01138
Std Dev 0.959

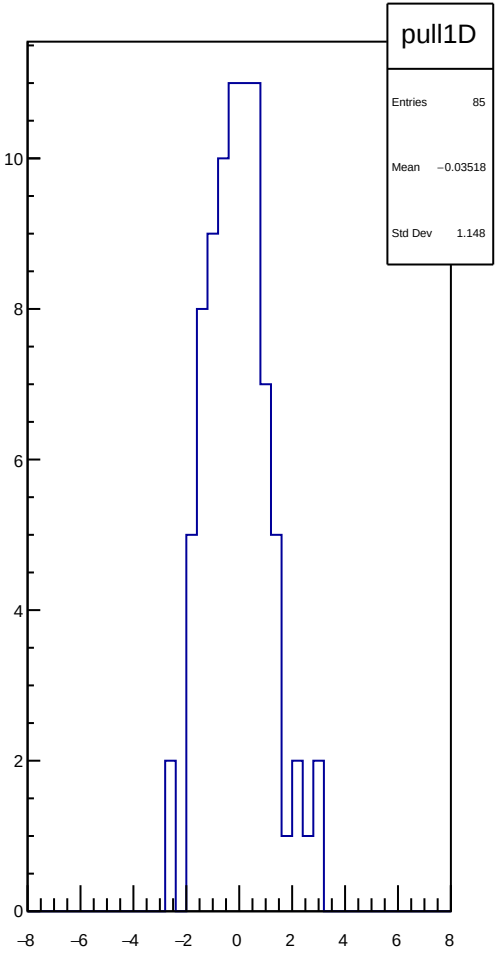

reg_asym_atr2_rms vs run
χ^2 / ndf 251.5 / 84
p0 2563 ± 1.996
2650
2600
2550
2500
2450

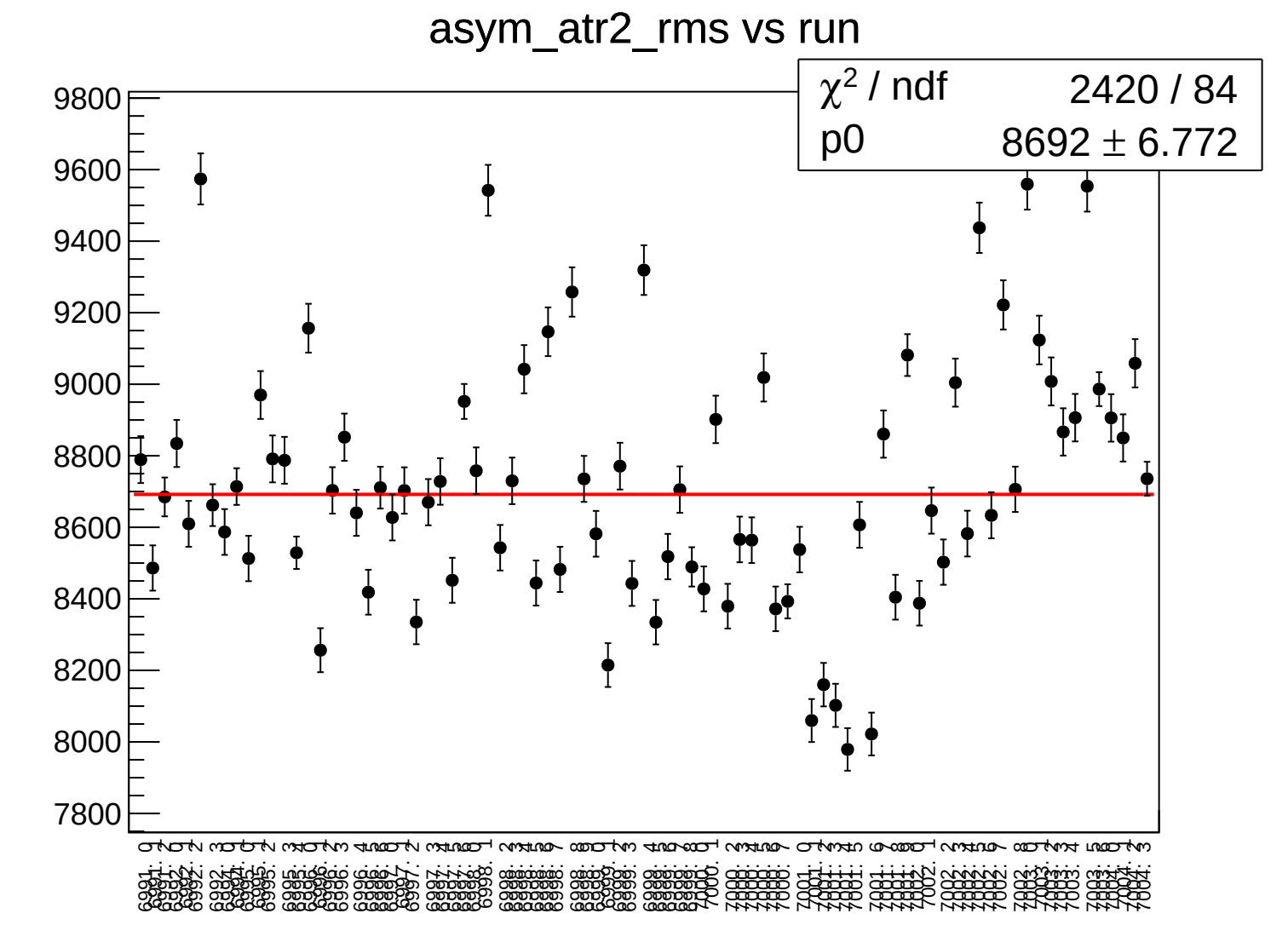

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 106.1 / 84
p0 −4669 ± 9148
300
200
100
0
−100
−200
−300
−400
pull
Entries 85
Mean −113.7
Std Dev 157.4
2
1
0
−1
−2
−3

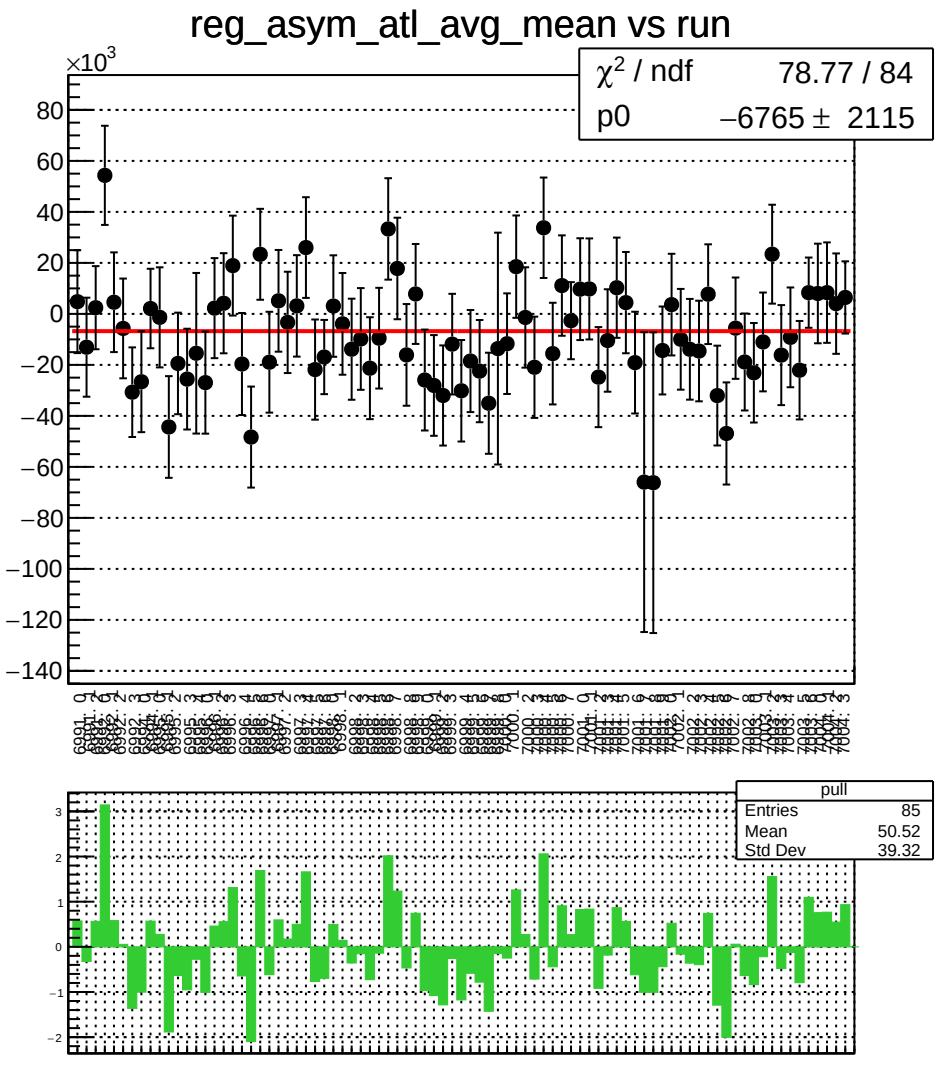

pull1D
Entries 85
Mean 0.03272
Std Dev 1.117
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

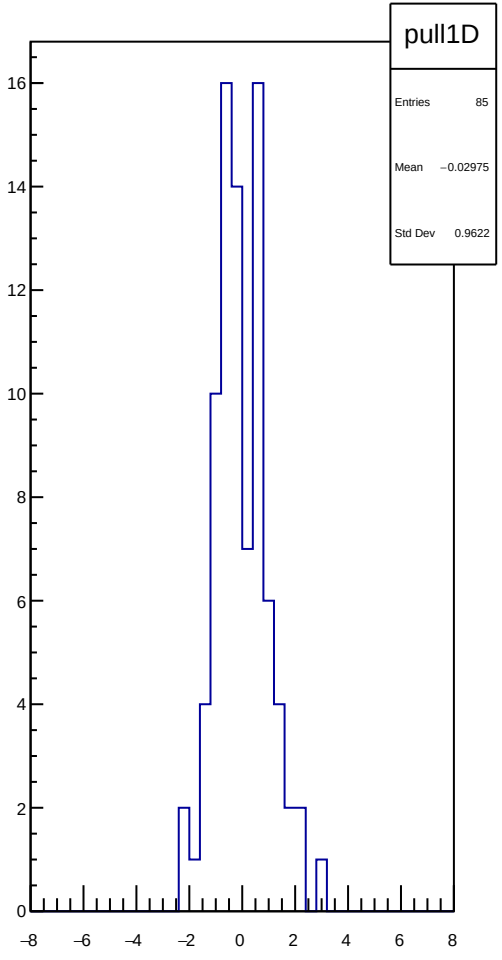

asym_atr2_correction_rms vs run
χ² / ndf 2911 / 84
p0 8302 ± 6.469
9400
9200
9000
8800
8600
8400
8200
8000
7800
7600
7400

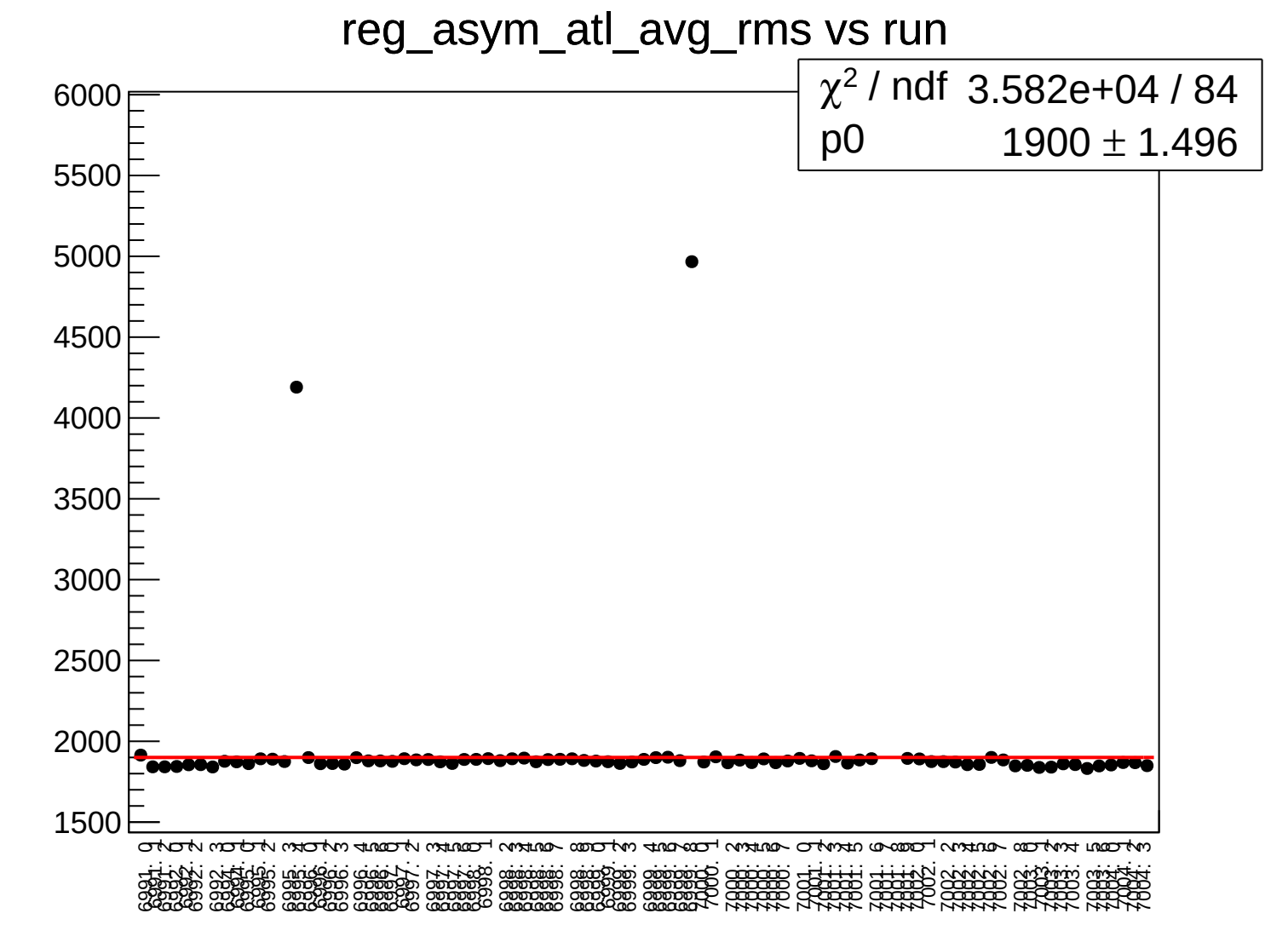

asym_atr2_mean vs run
×10^3
χ² / ndf 112.2 / 84
p0 2194 ± 9577
pull
Entries 85
Mean −88.04
Std Dev 132.2

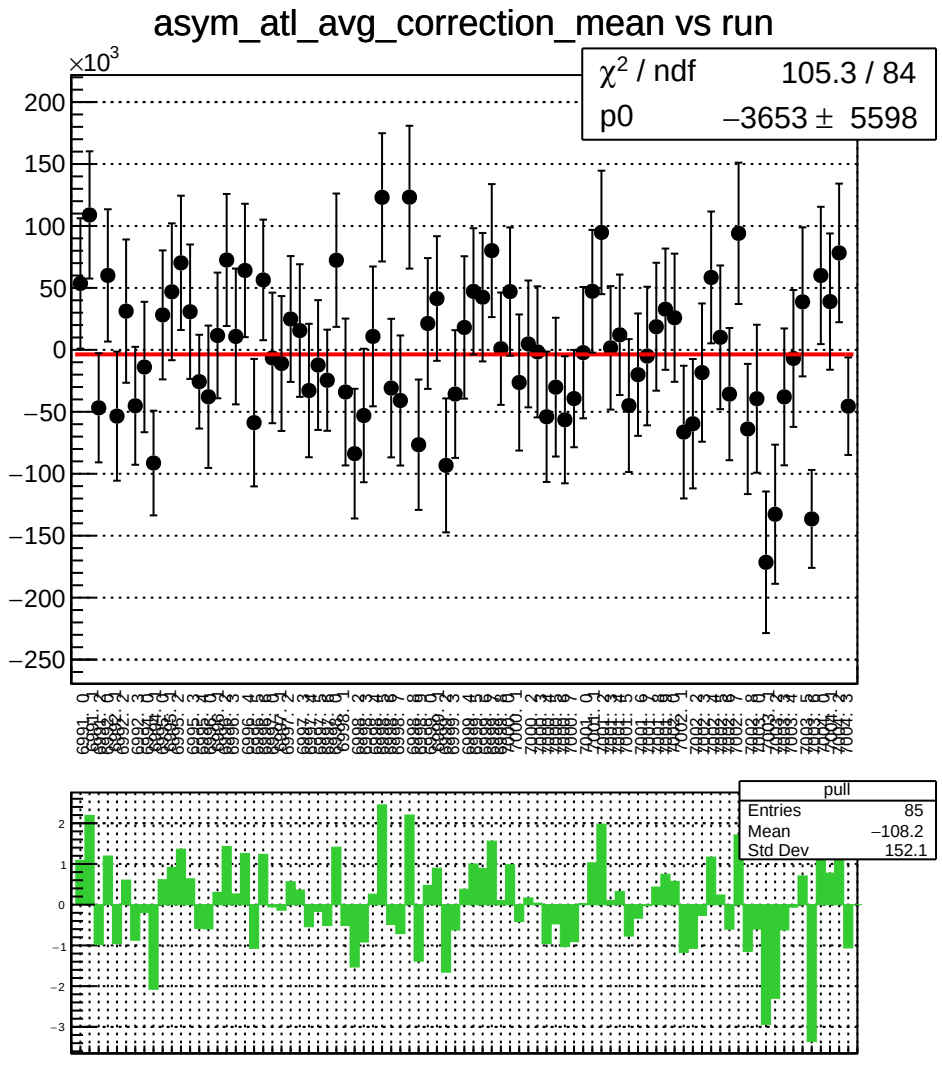

pull1D
Entries 85
Mean −0.03518
Std Dev 1.148

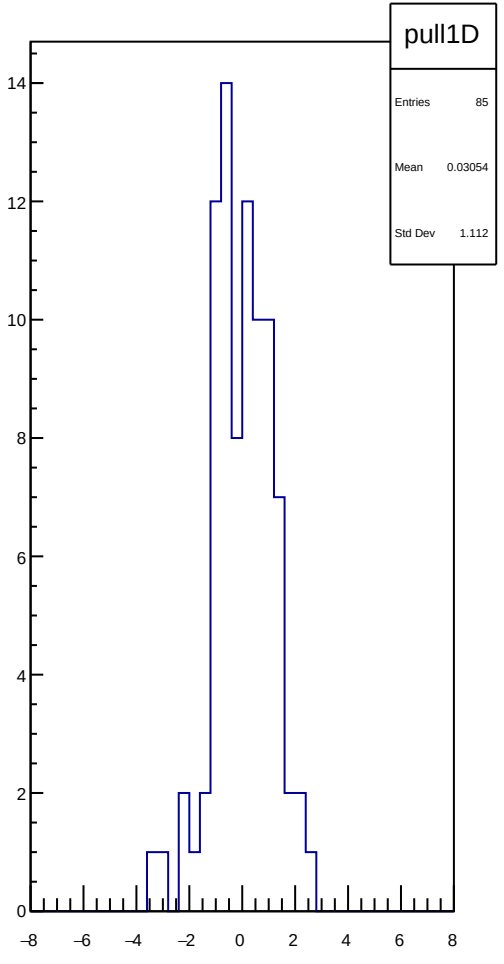

asym_atr2_rms vs run
χ^2 / ndf 2420 / 84
p0 8692 ± 6.772
9800
9600
9400
9200
9000
8800
8600
8400
8200
8000
7800

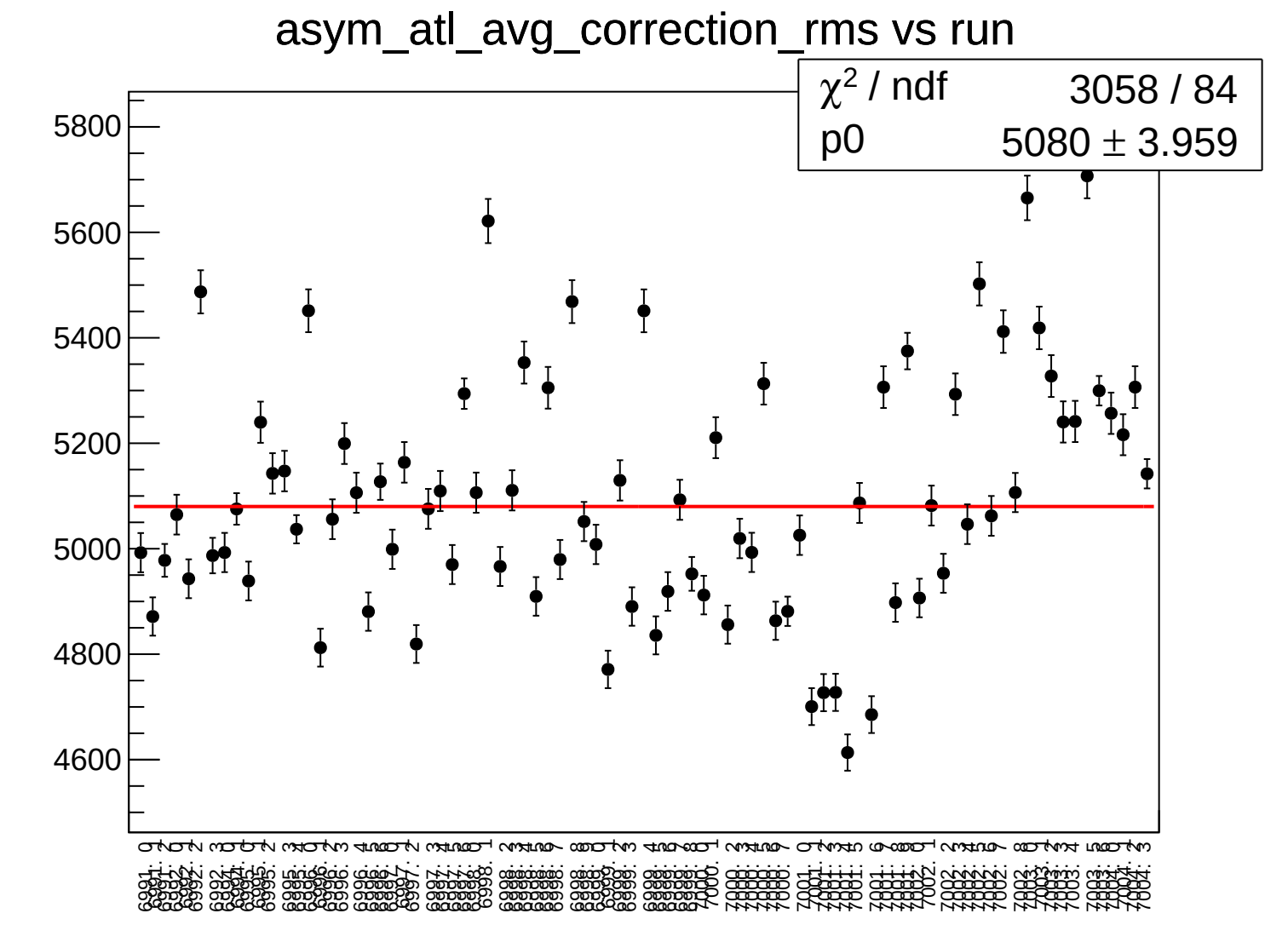

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 78.77 / 84
p0 −6765 ± 2115
pull
Entries 85
Mean 50.52
Std Dev 39.32

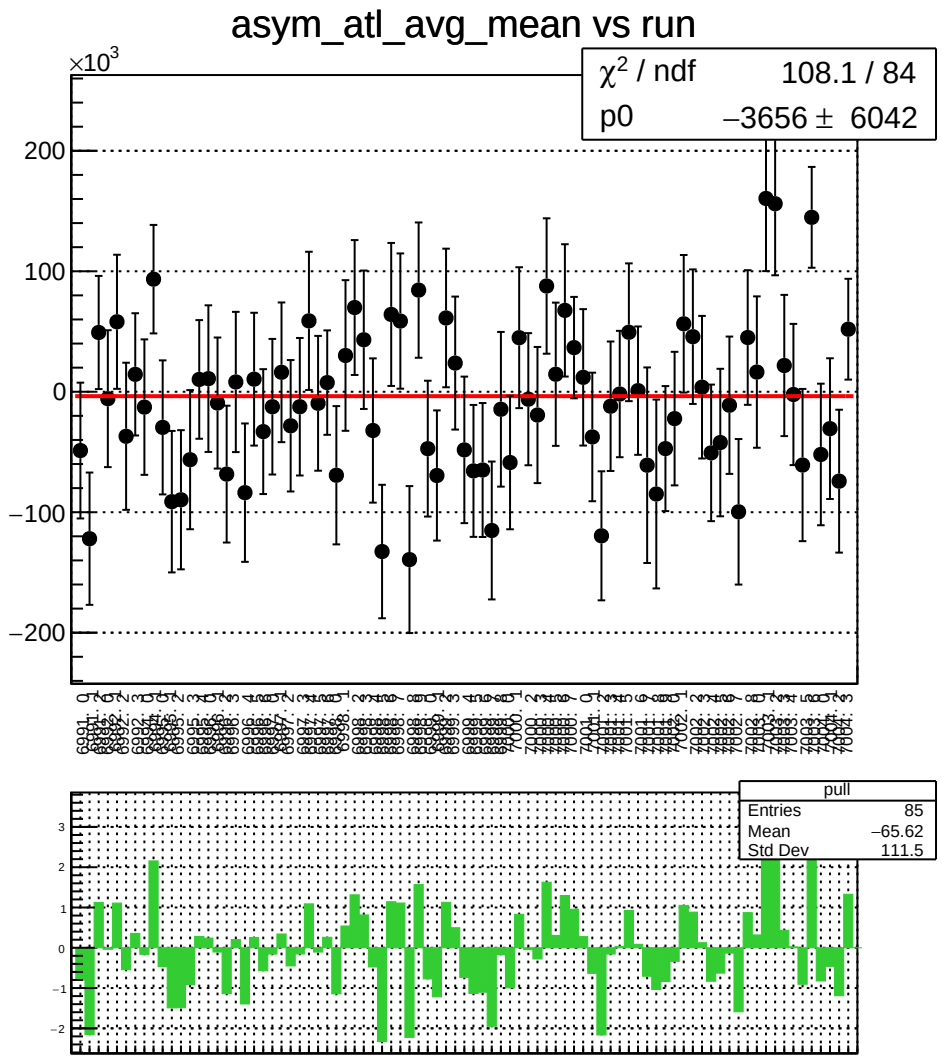

pull1D
Entries 85
Mean −0.02975
Std Dev 0.9622

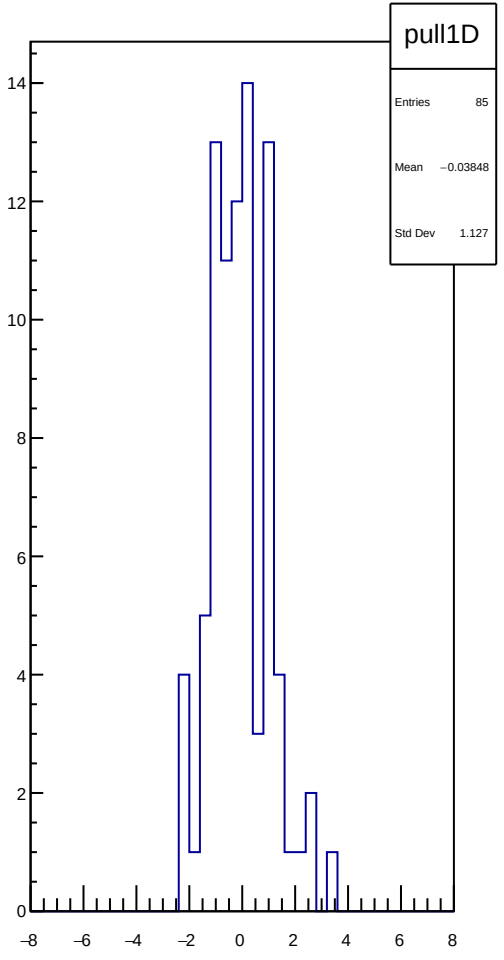

reg_asym_atl_avg_rms vs run
χ² / ndf 3.582e+04 / 84
p0 1900 ± 1.496
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

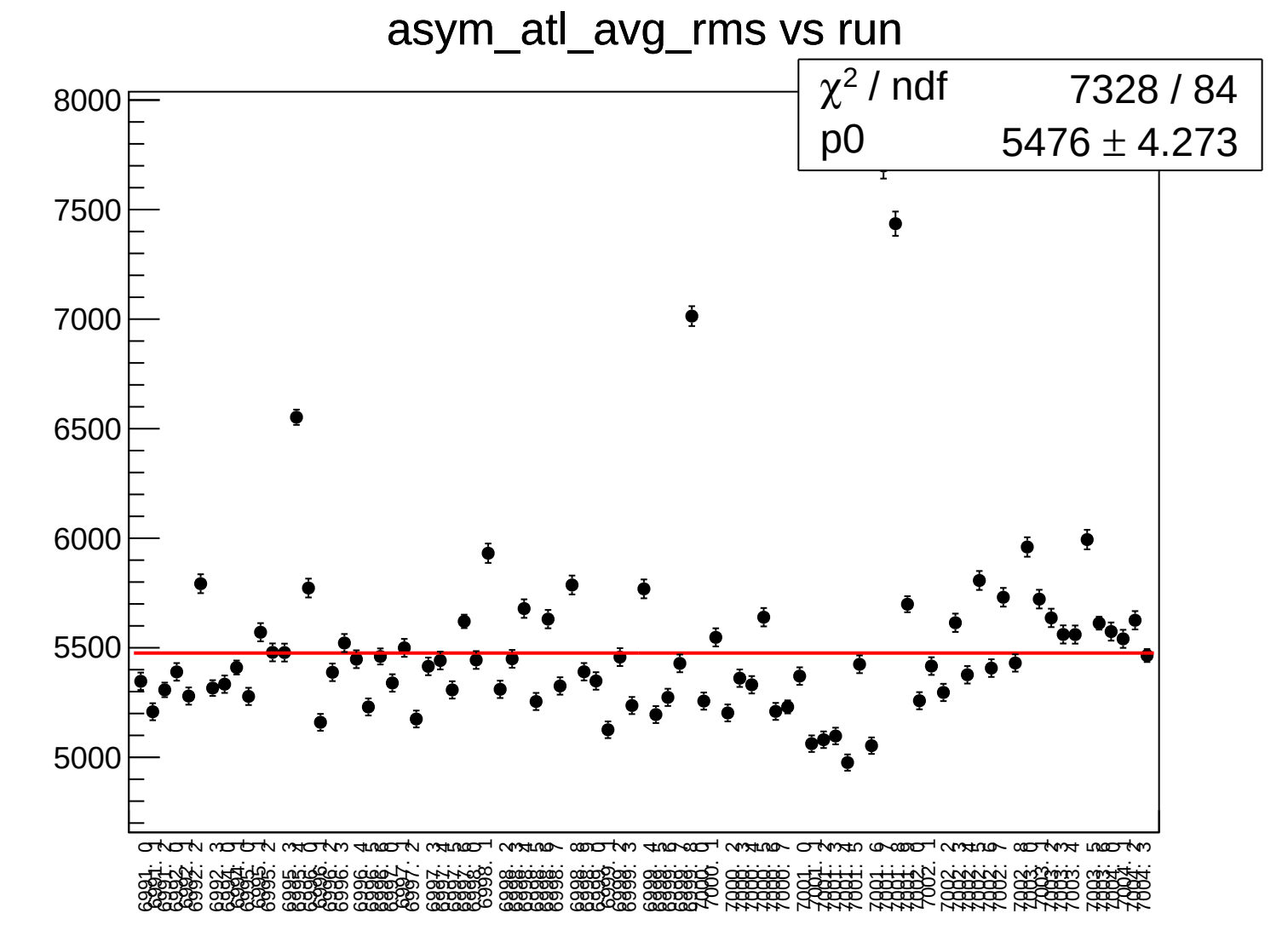

asym_atl_avg_correction_mean vs run
×10^3
χ^2 / ndf 105.3 / 84
p0 −3653 ± 5598
pull
Entries 85
Mean −108.2
Std Dev 152.1

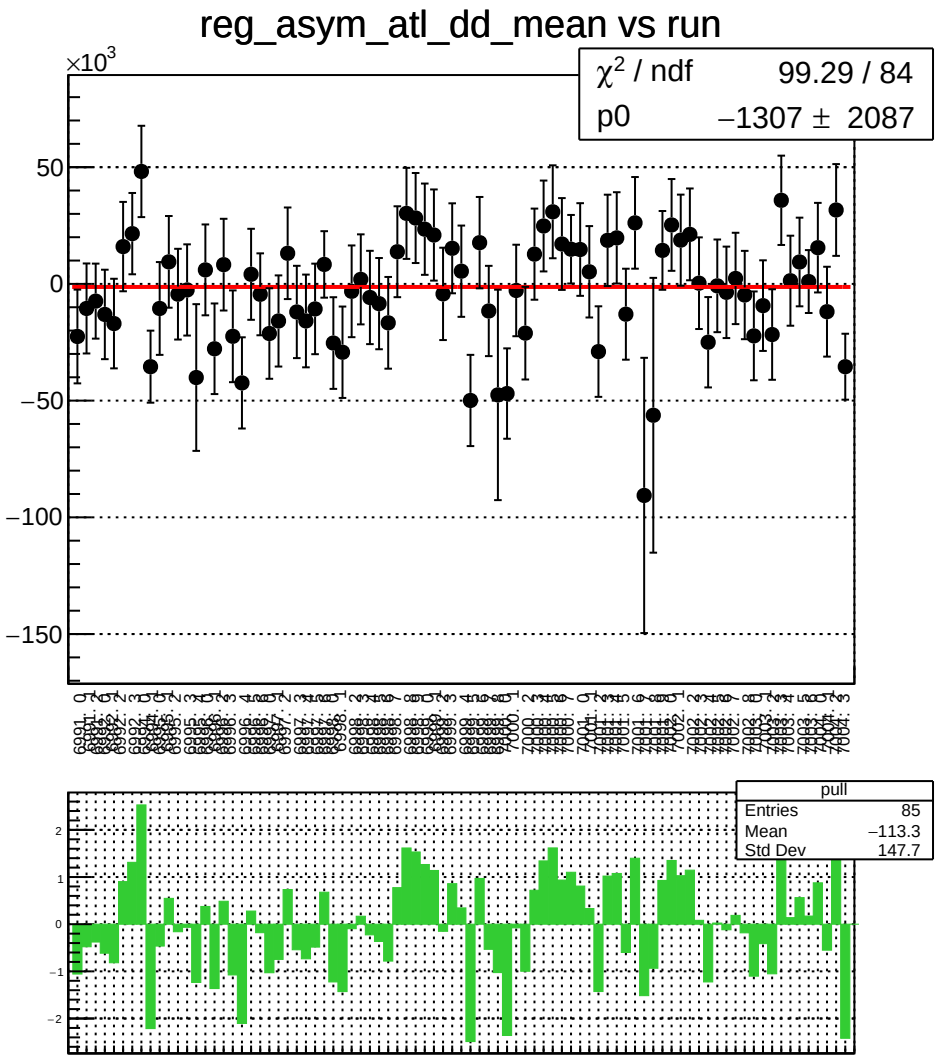

pull1D
Entries 85
Mean 0.03054
Std Dev 1.112

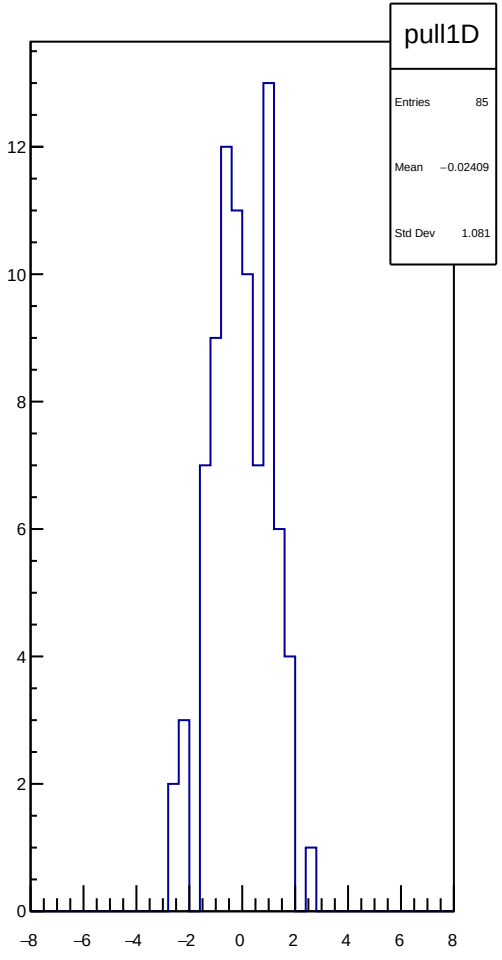

asym_atl_avg_correction_rms vs run
χ² / ndf 3058 / 84
p0 5080 ± 3.959
5800
5600
5400
5200
5000
4800
4600

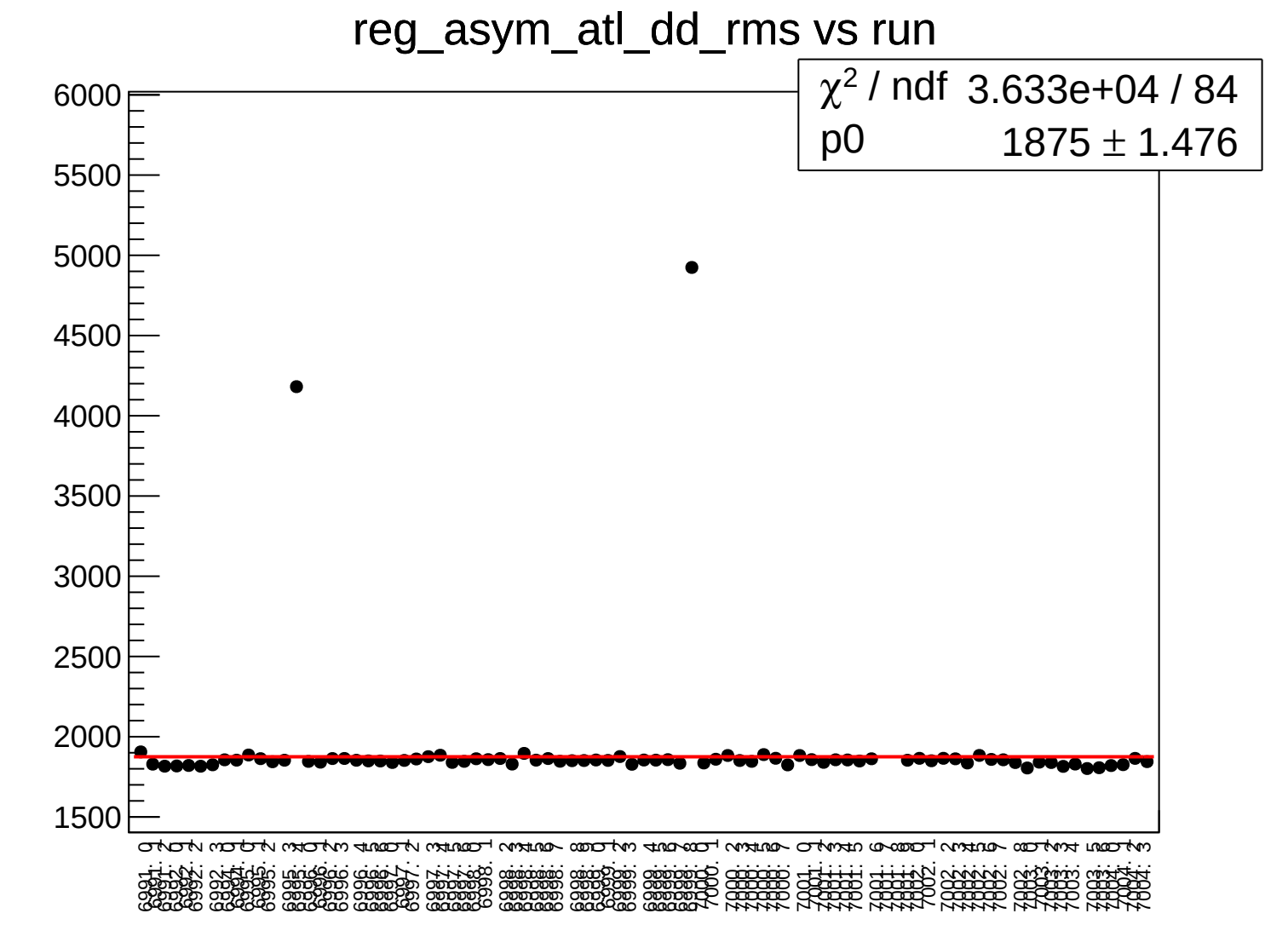

asym_atl_avg_mean vs run
×10^3
χ² / ndf 108.1 / 84
p0 −3656 ± 6042
200
100
0
−100
−200
pull
Entries 85
Mean −65.62
Std Dev 111.5
3
2
1
0
−1
−2

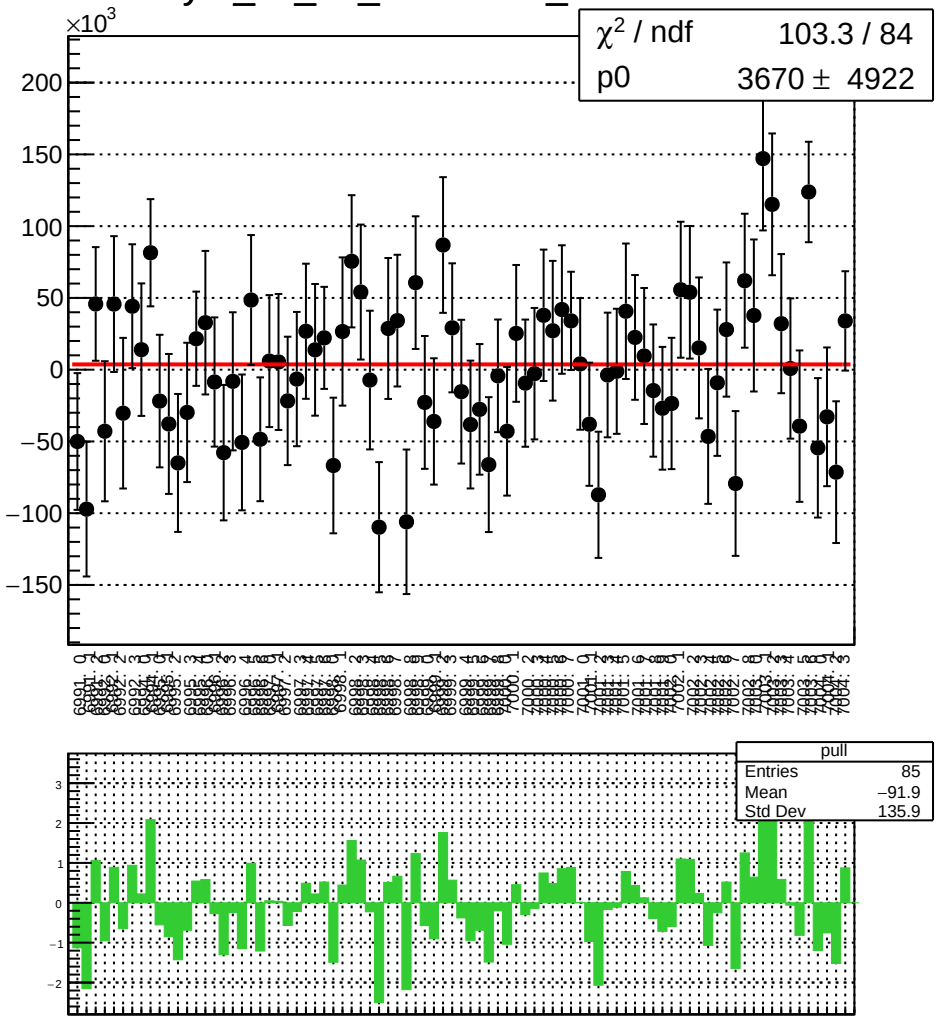

pull1D
Entries 85
Mean −0.03848
Std Dev 1.127
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

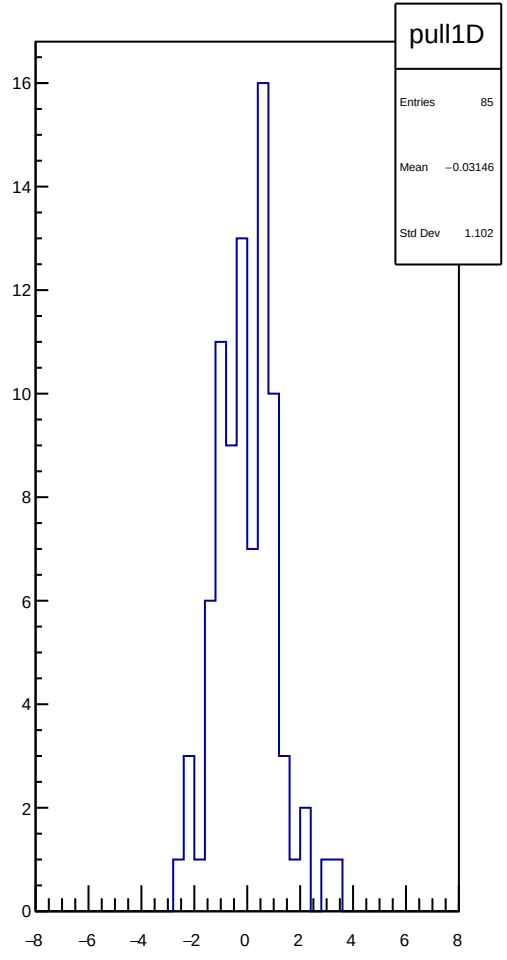

asym_atl_avg_rms vs run
χ^2 / ndf 7328 / 84
p0 5476 ± 4.273
8000
7500
7000
6500
6000
5500
5000

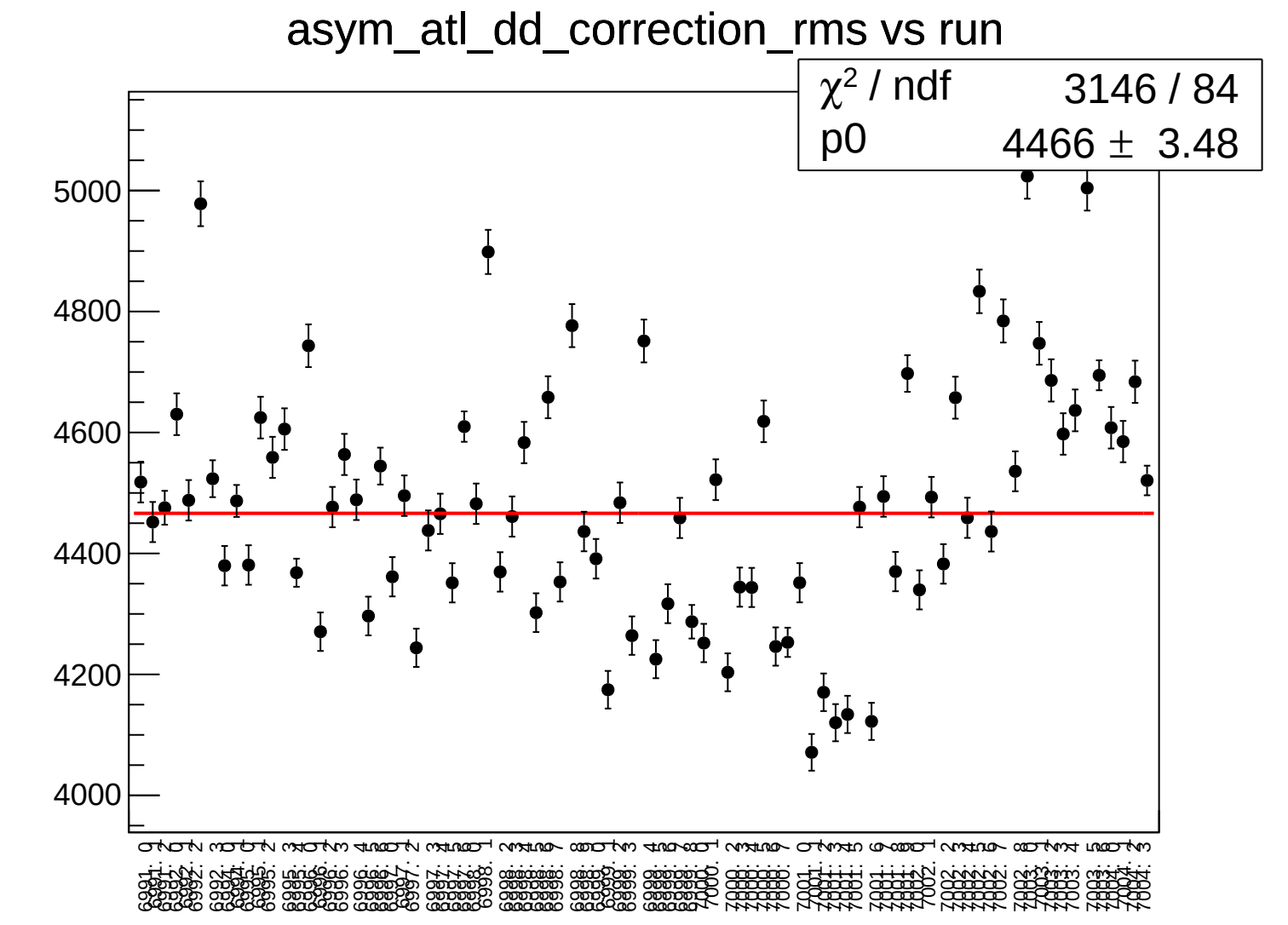

reg_asym_atl_dd_mean vs run
×10^3
χ² / ndf 99.29 / 84
p0 −1307 ± 2087
50
0
−50
−100
−150
pull
Entries 85
Mean −113.3
Std Dev 147.7
2
1
0
−1
−2

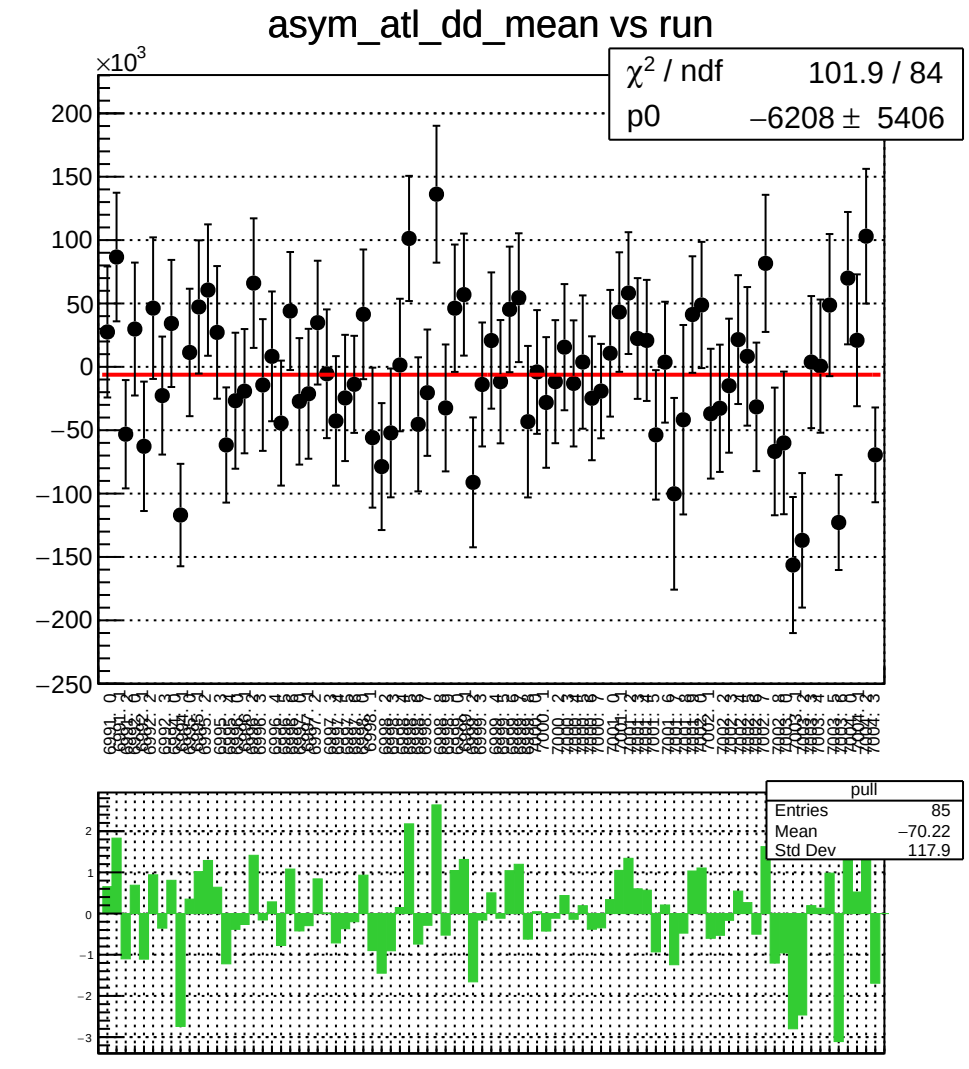

pull1D
Entries 85
Mean −0.02409
Std Dev 1.081
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

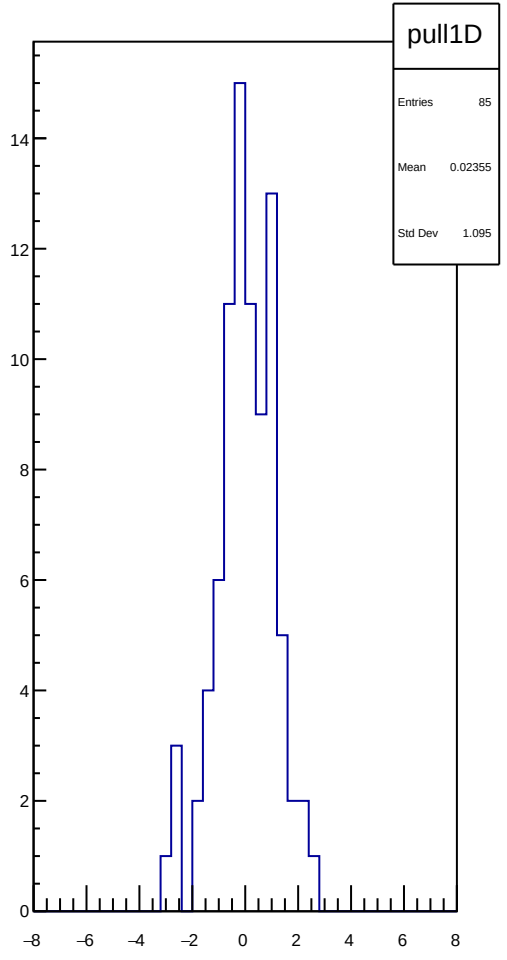

reg_asym_atl_dd_rms vs run
χ² / ndf 3.633e+04 / 84
p0 1875 ± 1.476
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

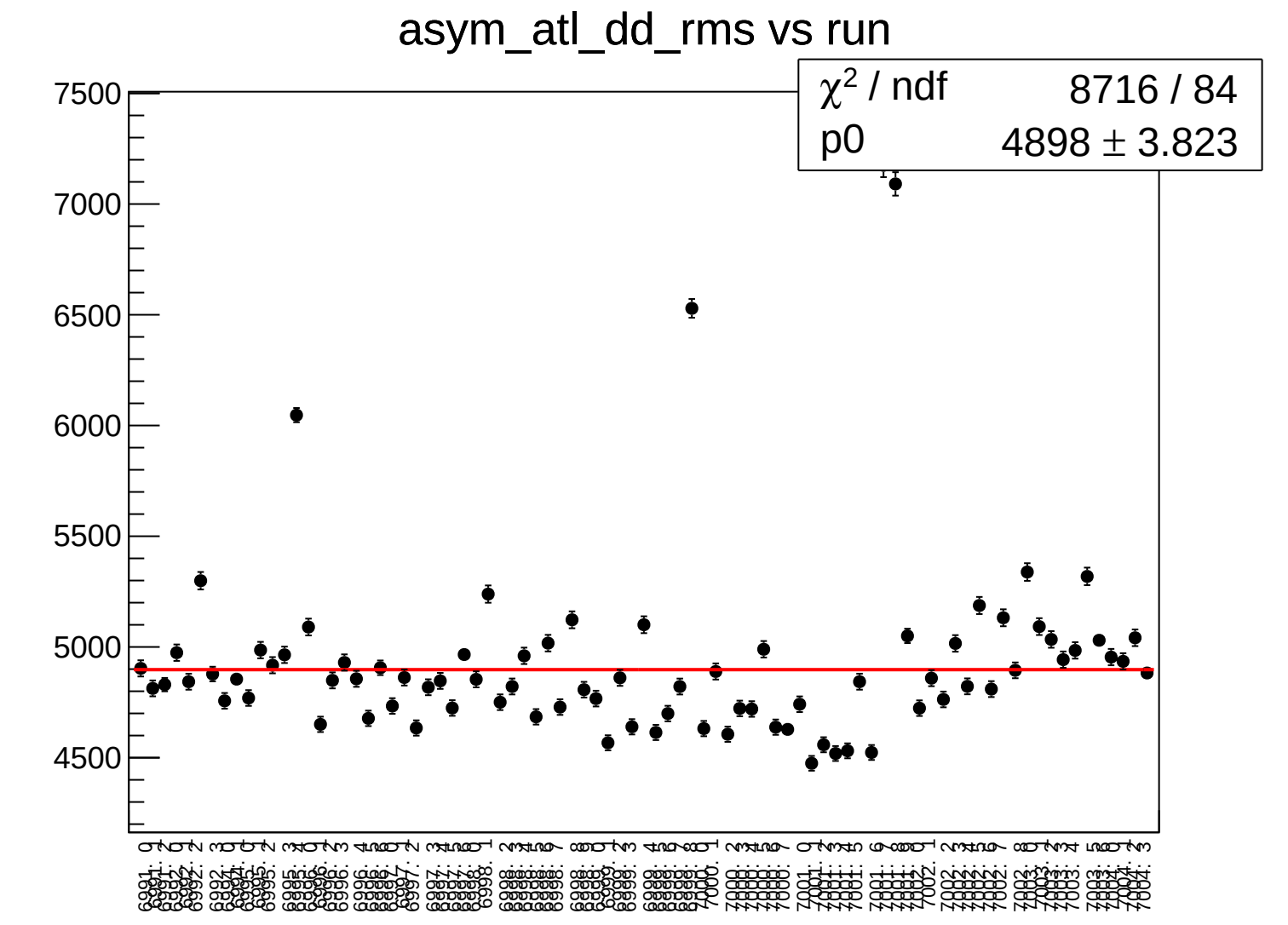

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 103.3 / 84
p0 3670 ± 4922
200
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −91.9
Std Dev 135.9
3
2
1
0
−1
−2

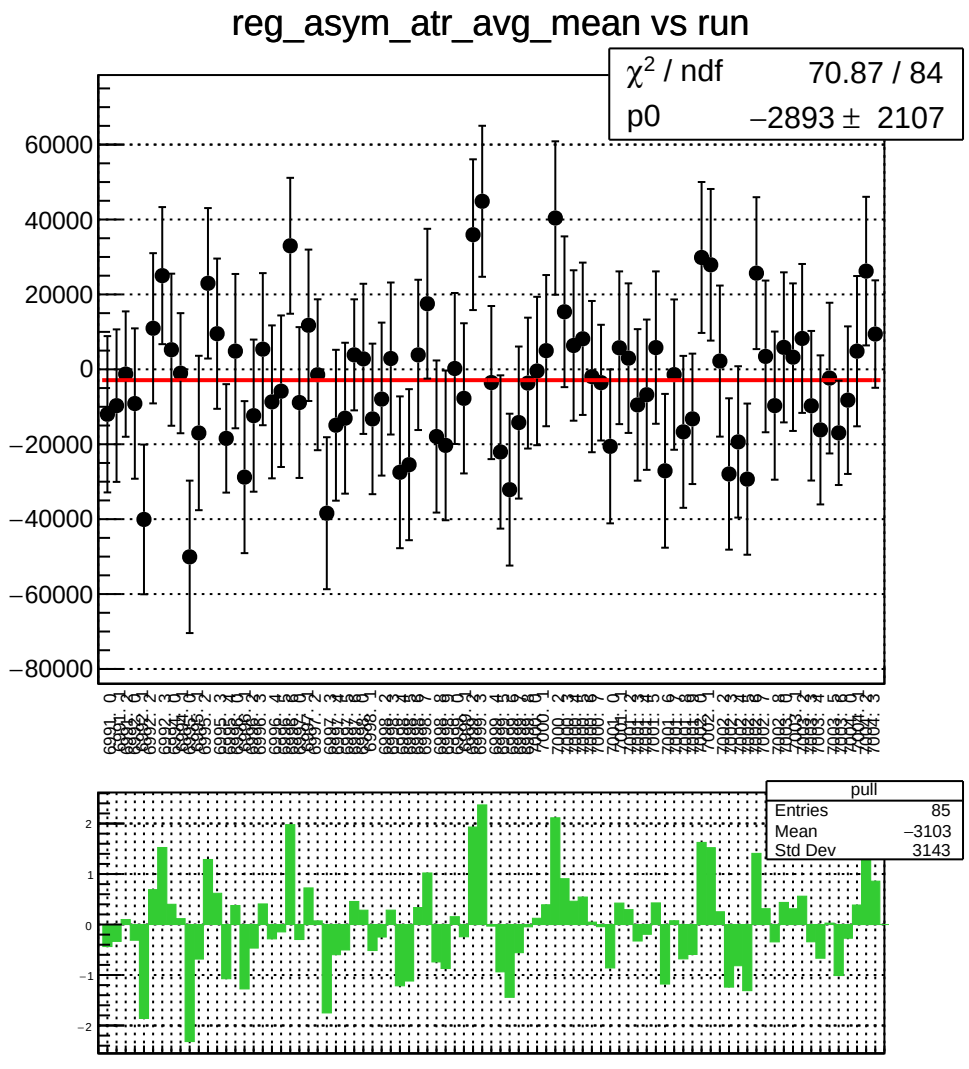

pull1D
Entries 85
Mean −0.03146
Std Dev 1.102
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

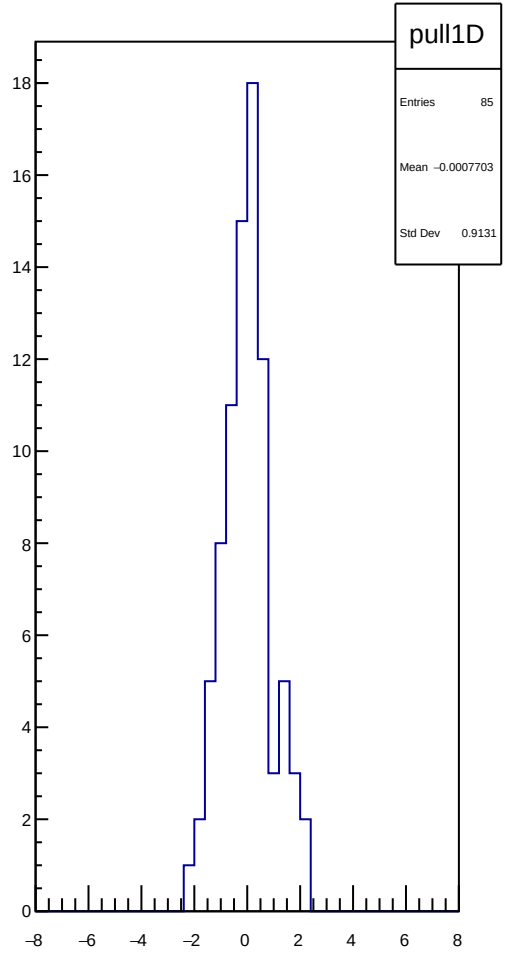

asym_atl_dd_correction_rms vs run
χ² / ndf 3146 / 84
p0 4466 ± 3.48
5000
4800
4600
4400
4200
4000

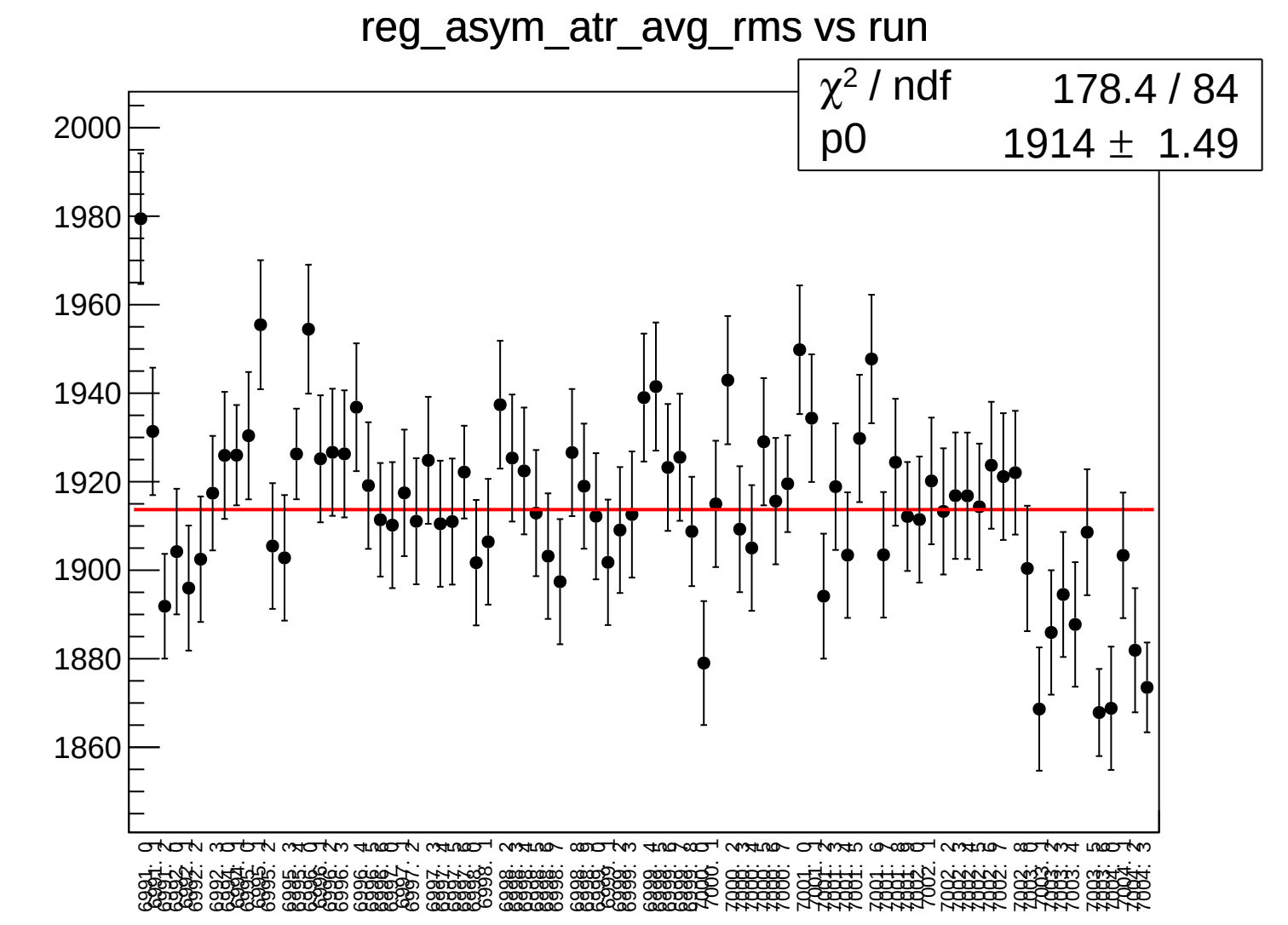

asym_atl_dd_mean vs run
×10^3
χ² / ndf 101.9 / 84
p0 −6208 ± 5406
pull
Entries 85
Mean −70.22
Std Dev 117.9

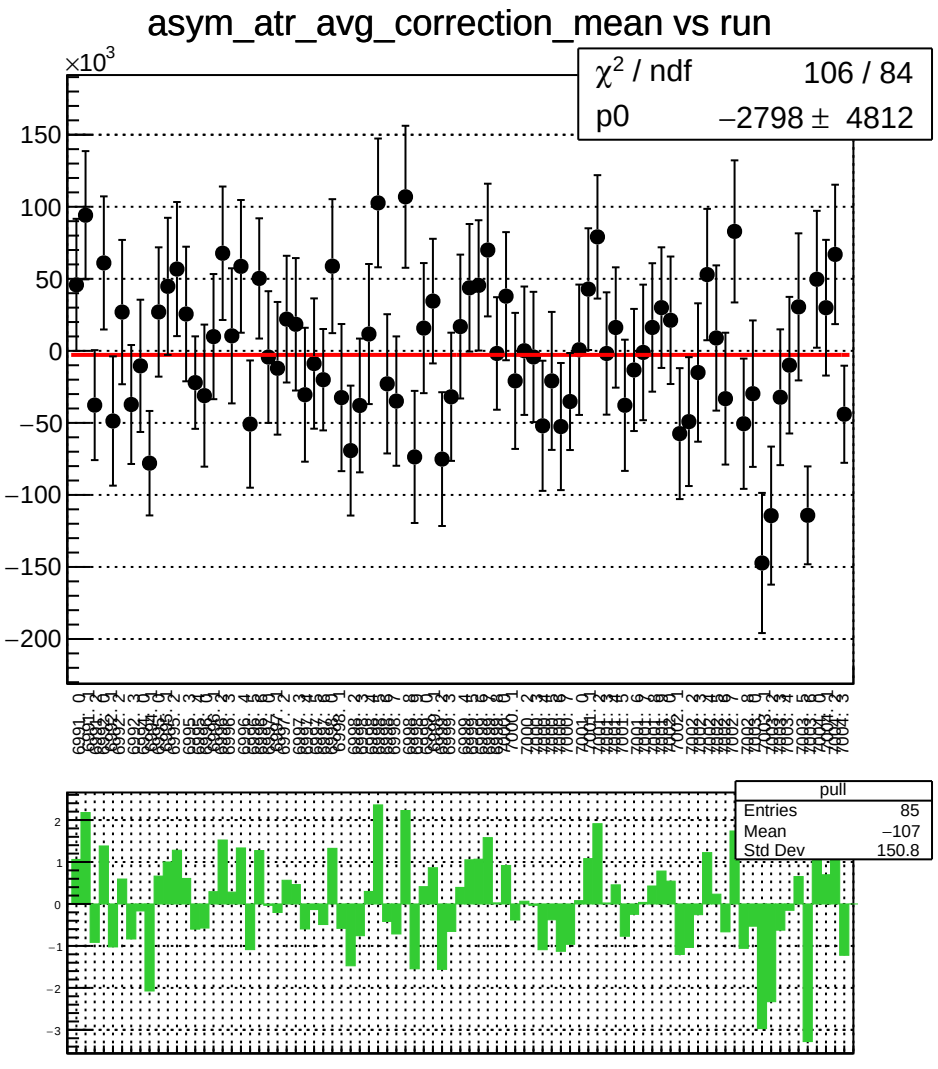

pull1D
Entries 85
Mean 0.02355
Std Dev 1.095

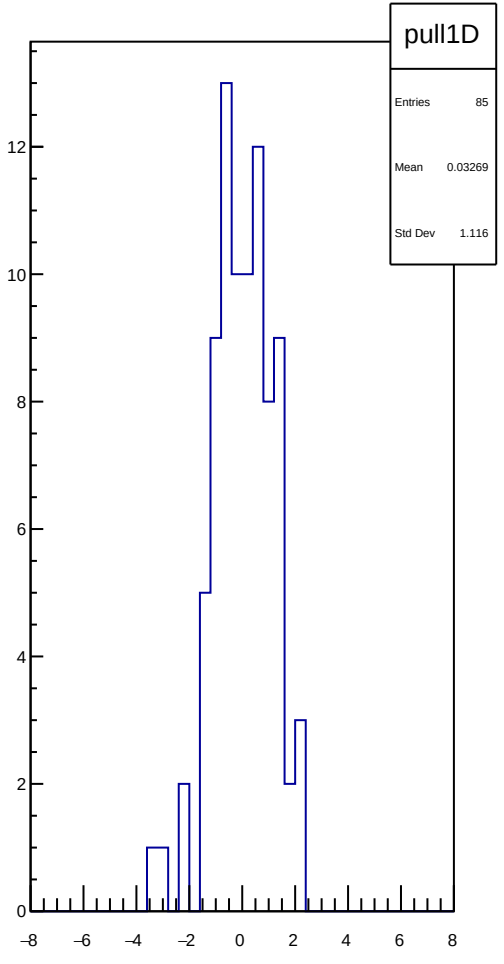

asym_atl_dd_rms vs run
χ^2 / ndf 8716 / 84
p0 4898 ± 3.823
7500
7000
6500
6000
5500
5000
4500

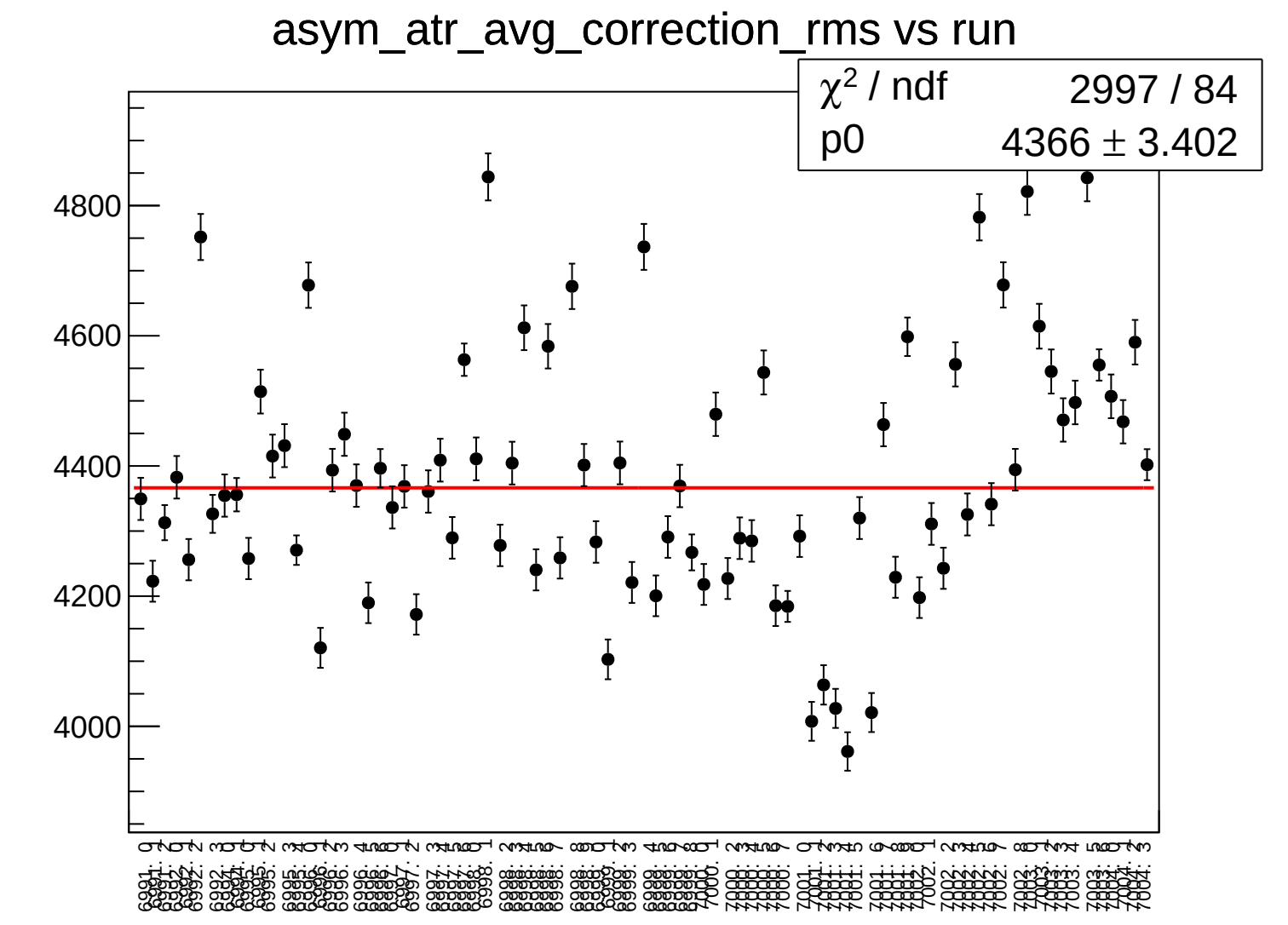

reg_asym_atr_avg_mean vs run
χ² / ndf 70.87 / 84
p0 −2893 ± 2107
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −3103
Std Dev 3143
2
1
0
−1
−2

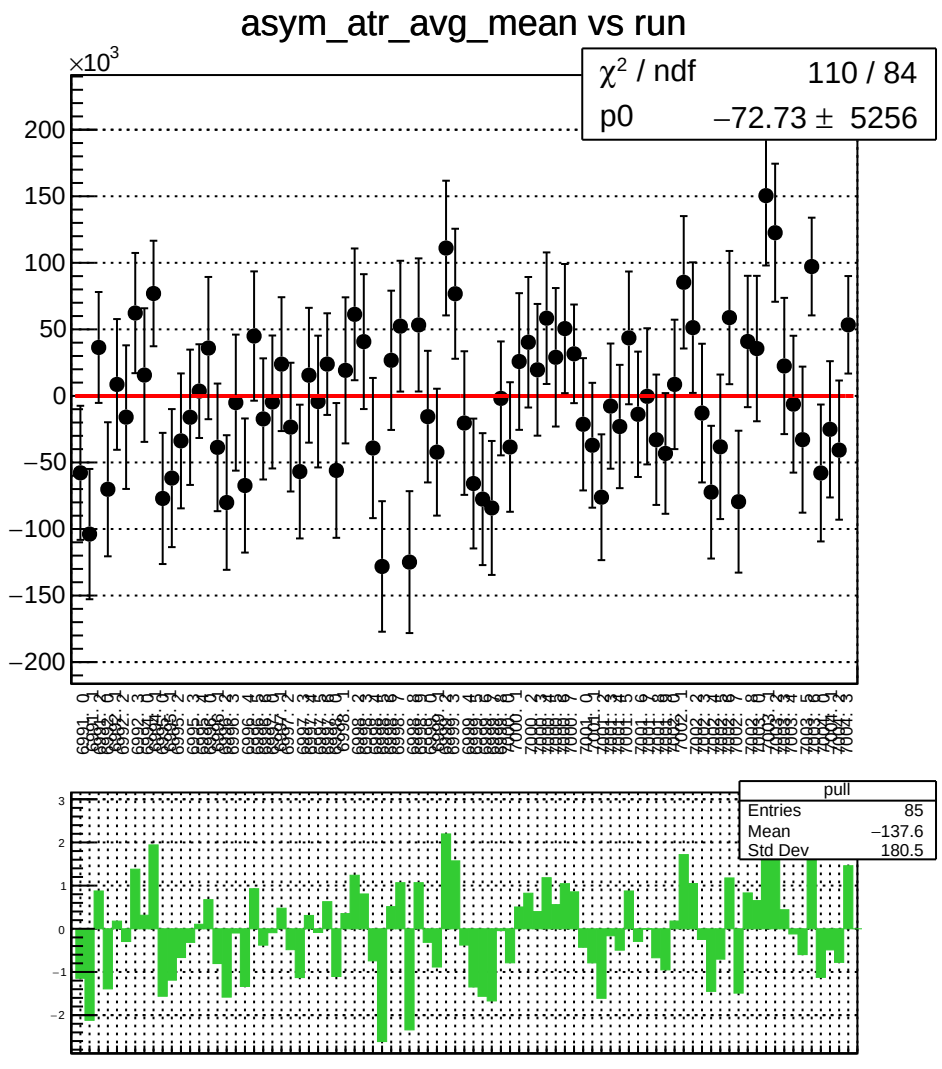

pull1D
Entries 85
Mean −0.0007703
Std Dev 0.9131
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

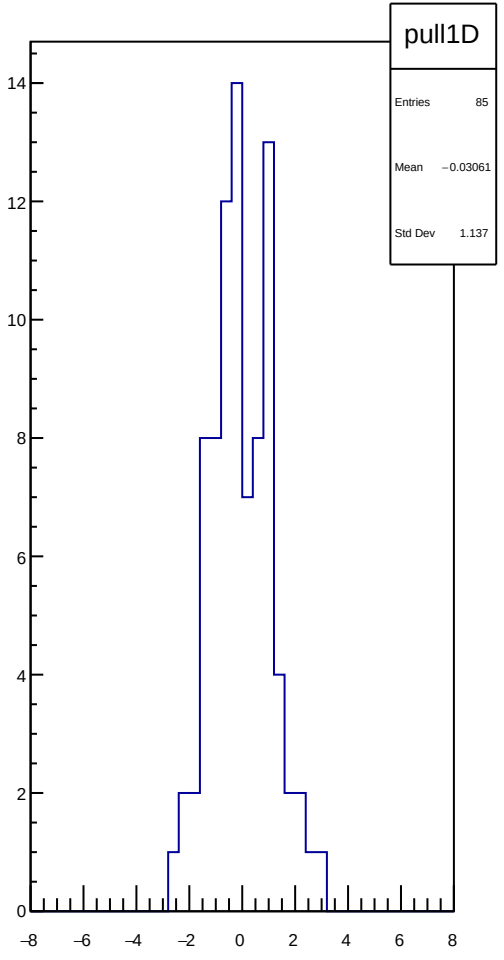

reg_asym_atr_avg_rms vs run
χ² / ndf 178.4 / 84
p0 1914 ± 1.49
2000
1980
1960
1940
1920
1900
1880
1860

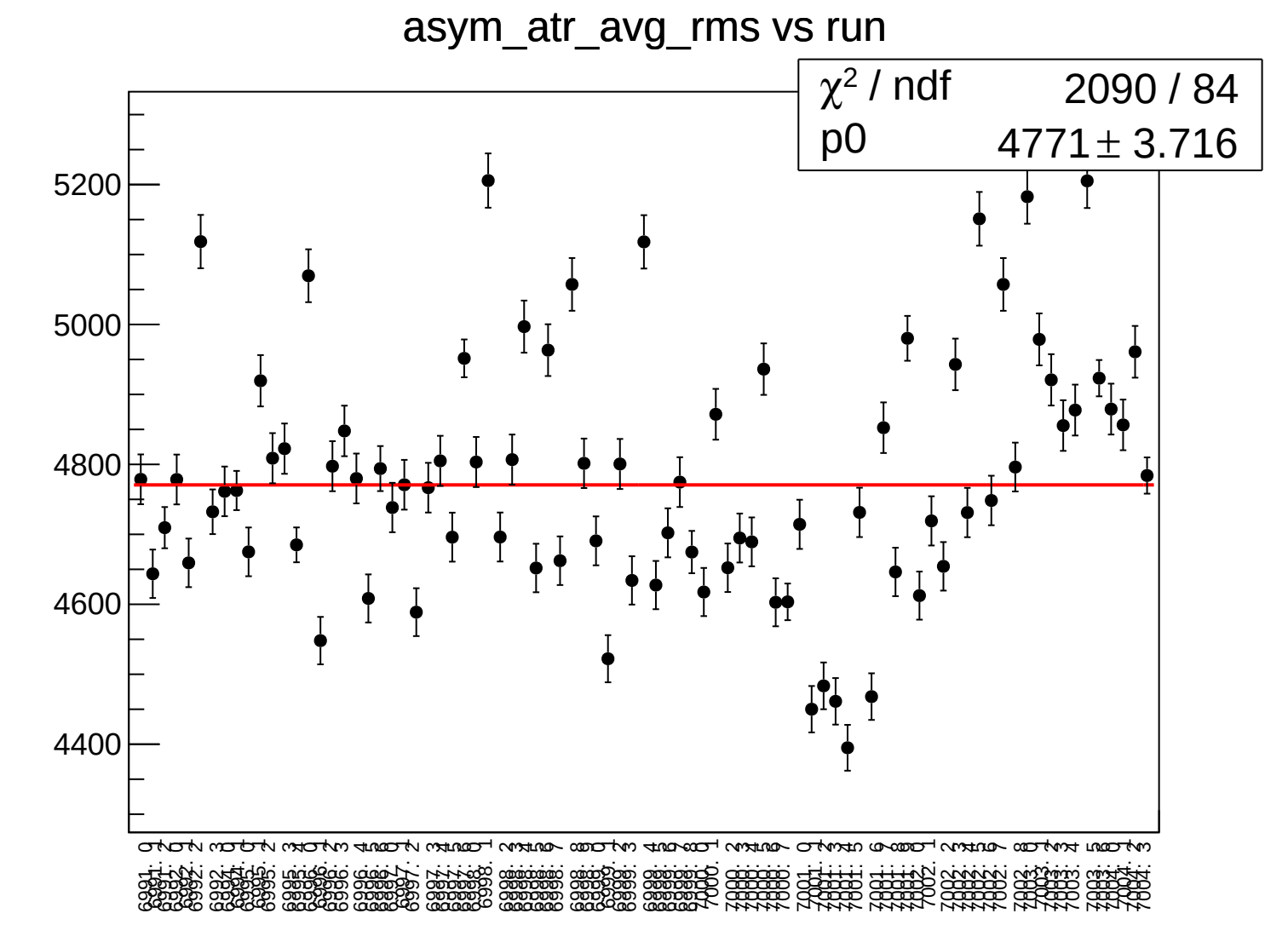

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 106 / 84
p0 −2798 ± 4812
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −107
Std Dev 150.8
2
1
0
−1
−2
−3

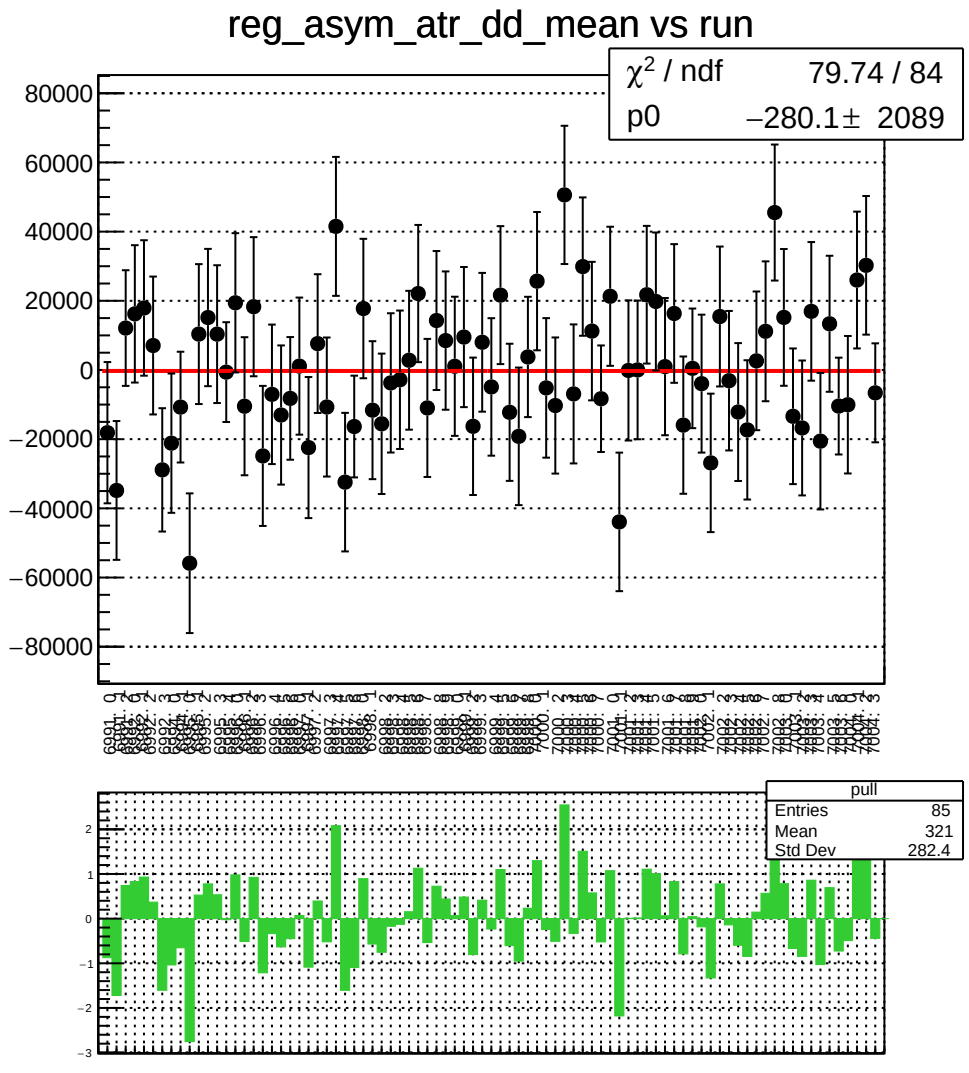

pull1D
Entries 85
Mean 0.03269
Std Dev 1.116
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

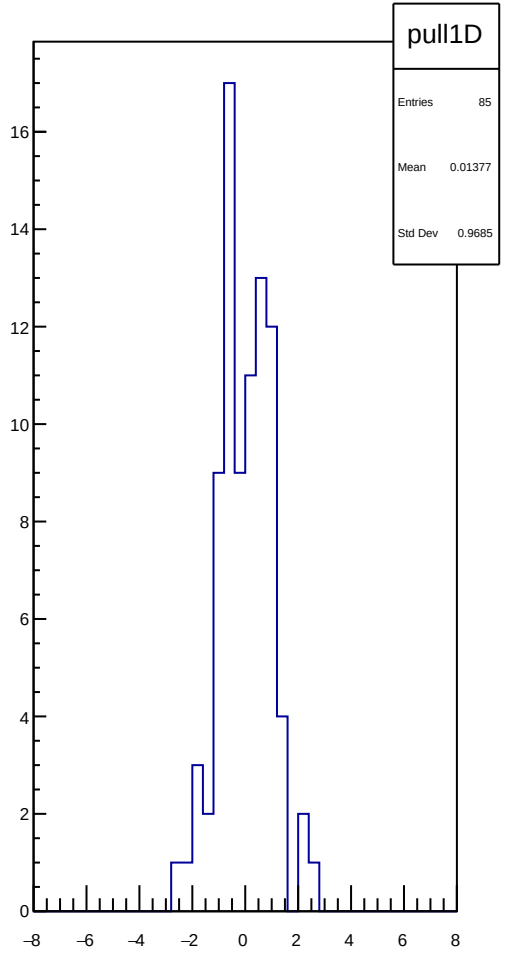

asym_atr_avg_correction_rms vs run
χ² / ndf 2997 / 84
p0 4366 ± 3.402
4800
4600
4400
4200
4000

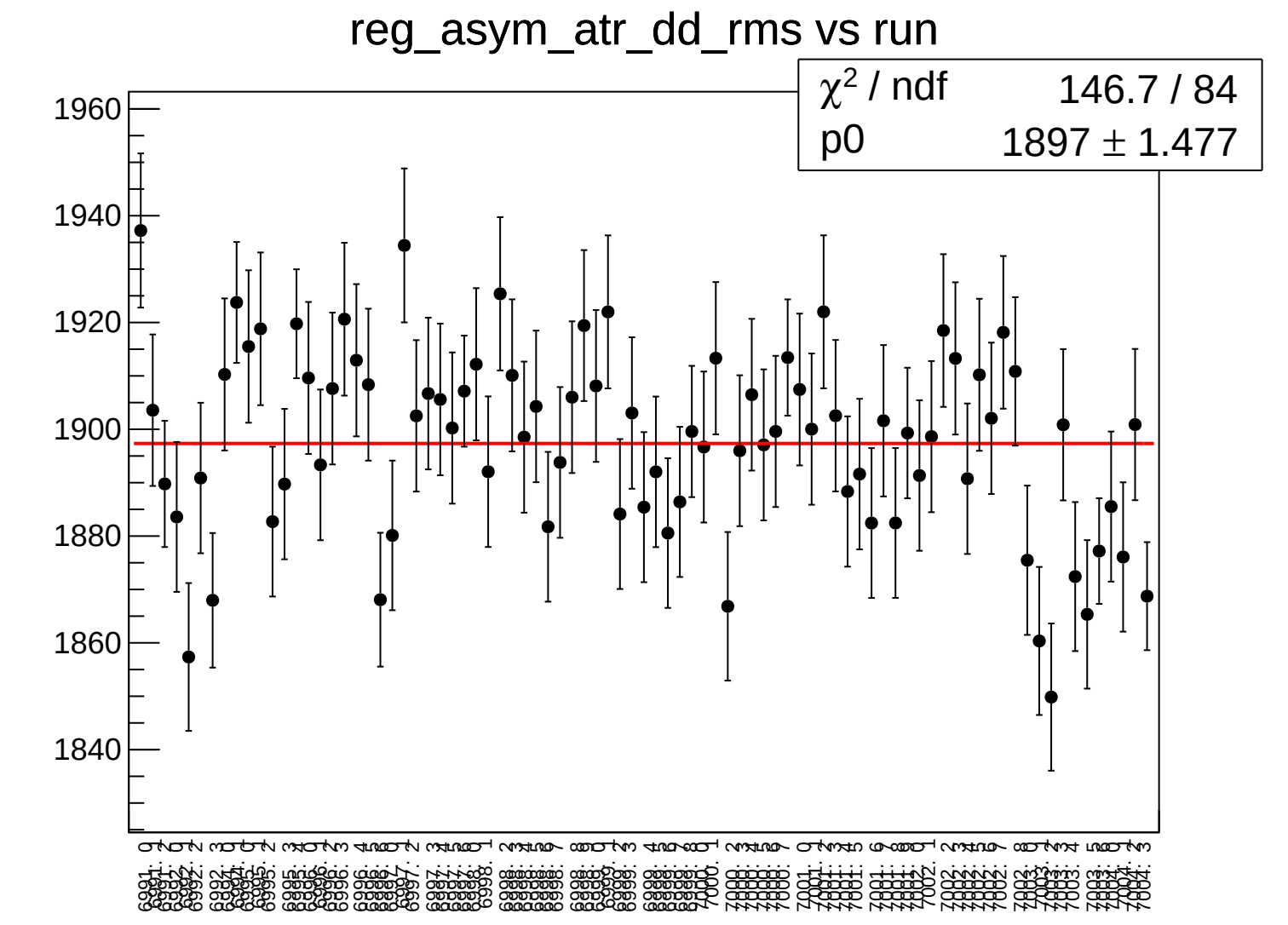

asym_atr_avg_mean vs run
×10^3
χ² / ndf 110 / 84
p0 −72.73 ± 5256
pull
Entries 85
Mean −137.6
Std Dev 180.5

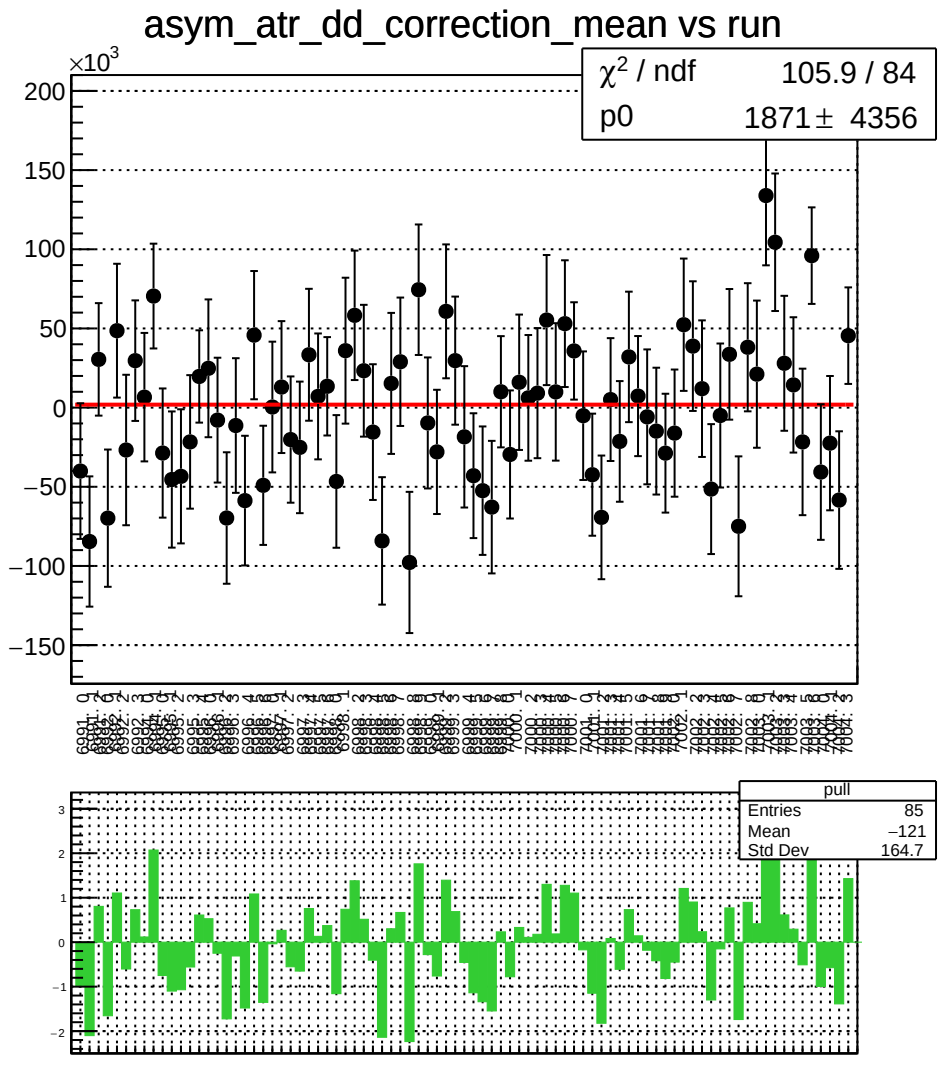

pull1D
Entries 85
Mean −0.03061
Std Dev 1.137

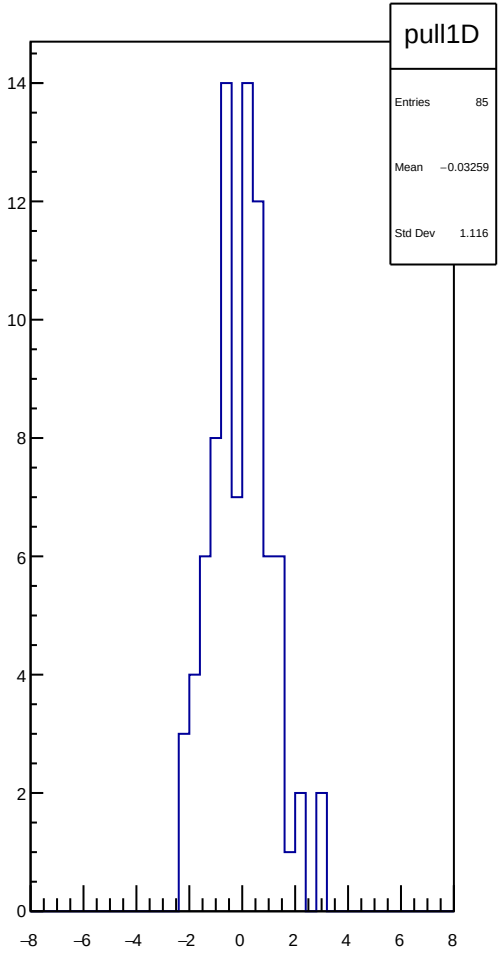

asym_atr_avg_rms vs run
χ^2 / ndf 2090 / 84
p0 4771 ± 3.716
5200
5000
4800
4600
4400

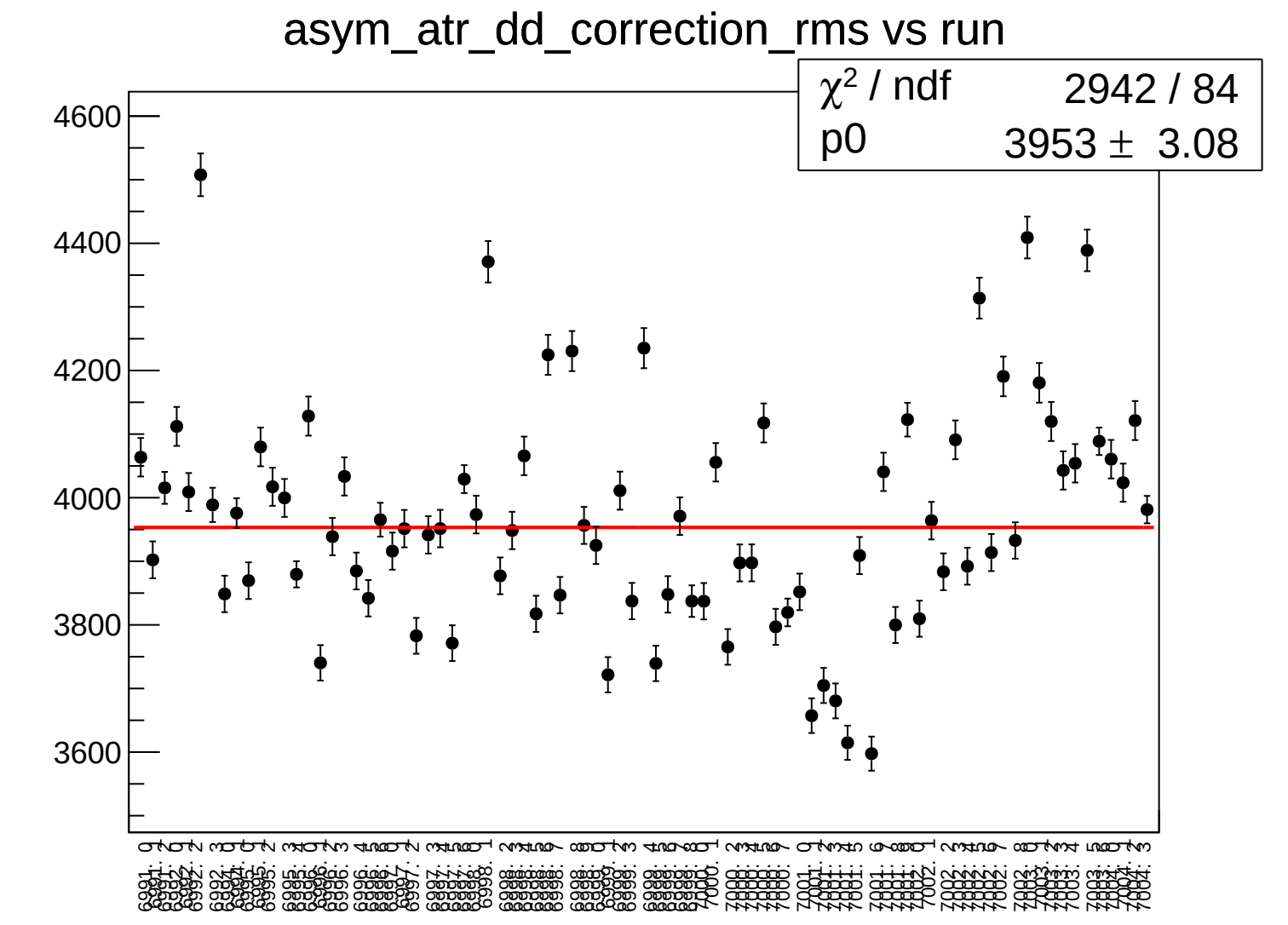

reg_asym_atr_dd_mean vs run
χ² / ndf 79.74 / 84
p0 −280.1± 2089
pull
Entries 85
Mean 321
Std Dev 282.4

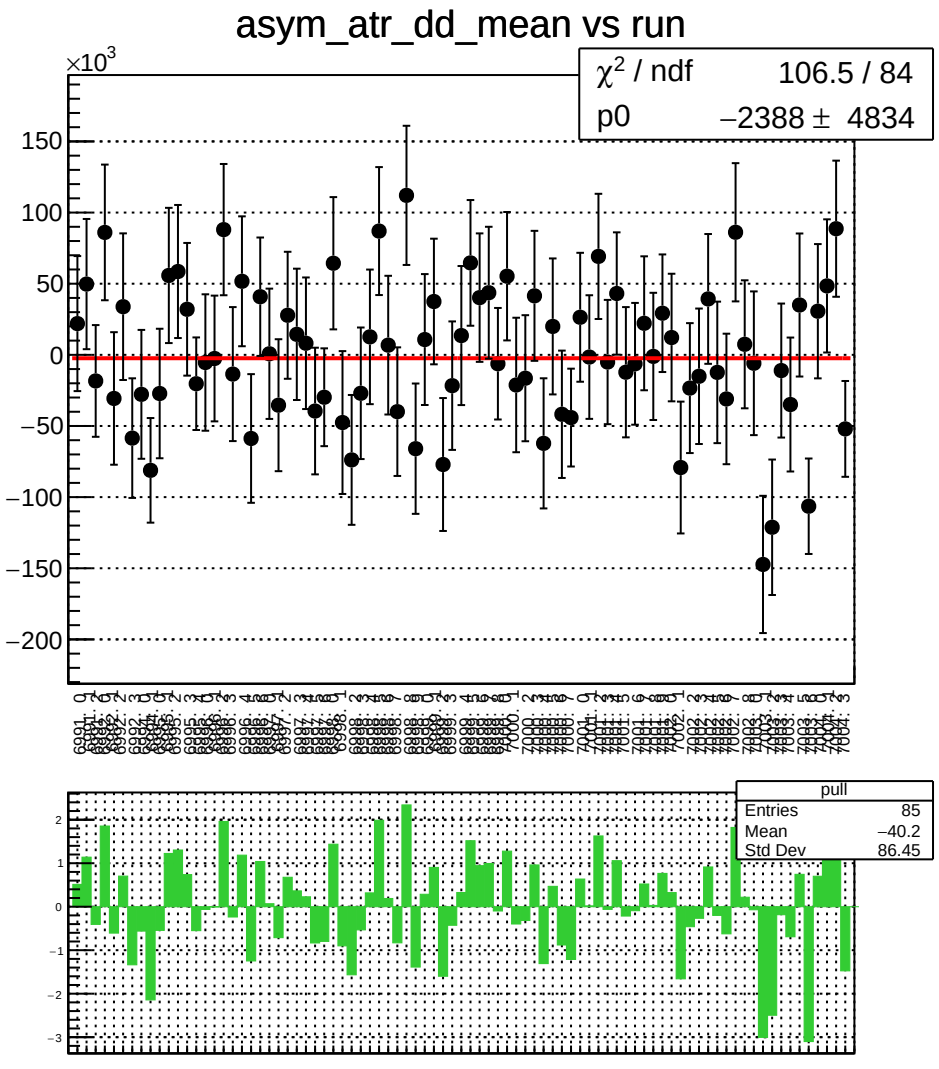

pull1D
Entries 85
Mean 0.01377
Std Dev 0.9685

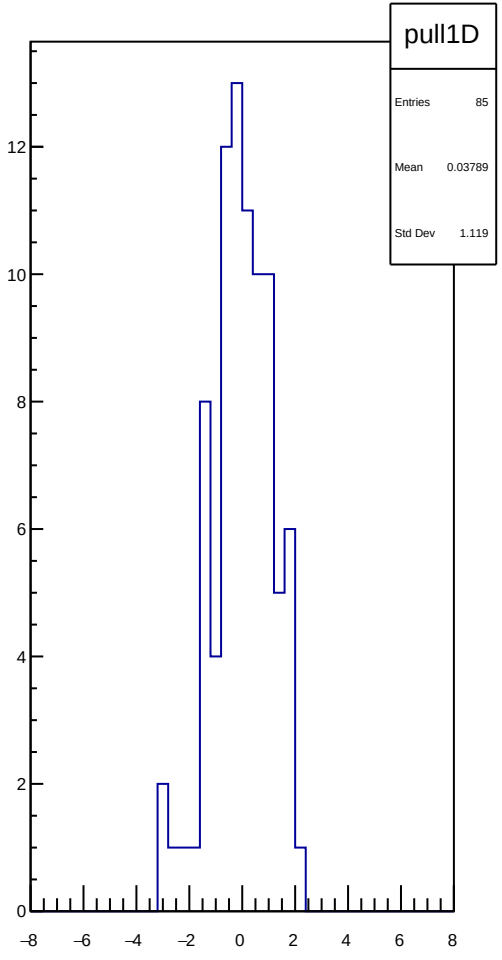

reg_asym_atr_dd_rms vs run
χ² / ndf 146.7 / 84
p0 1897 ± 1.477
1960
1940
1920
1900
1880
1860
1840

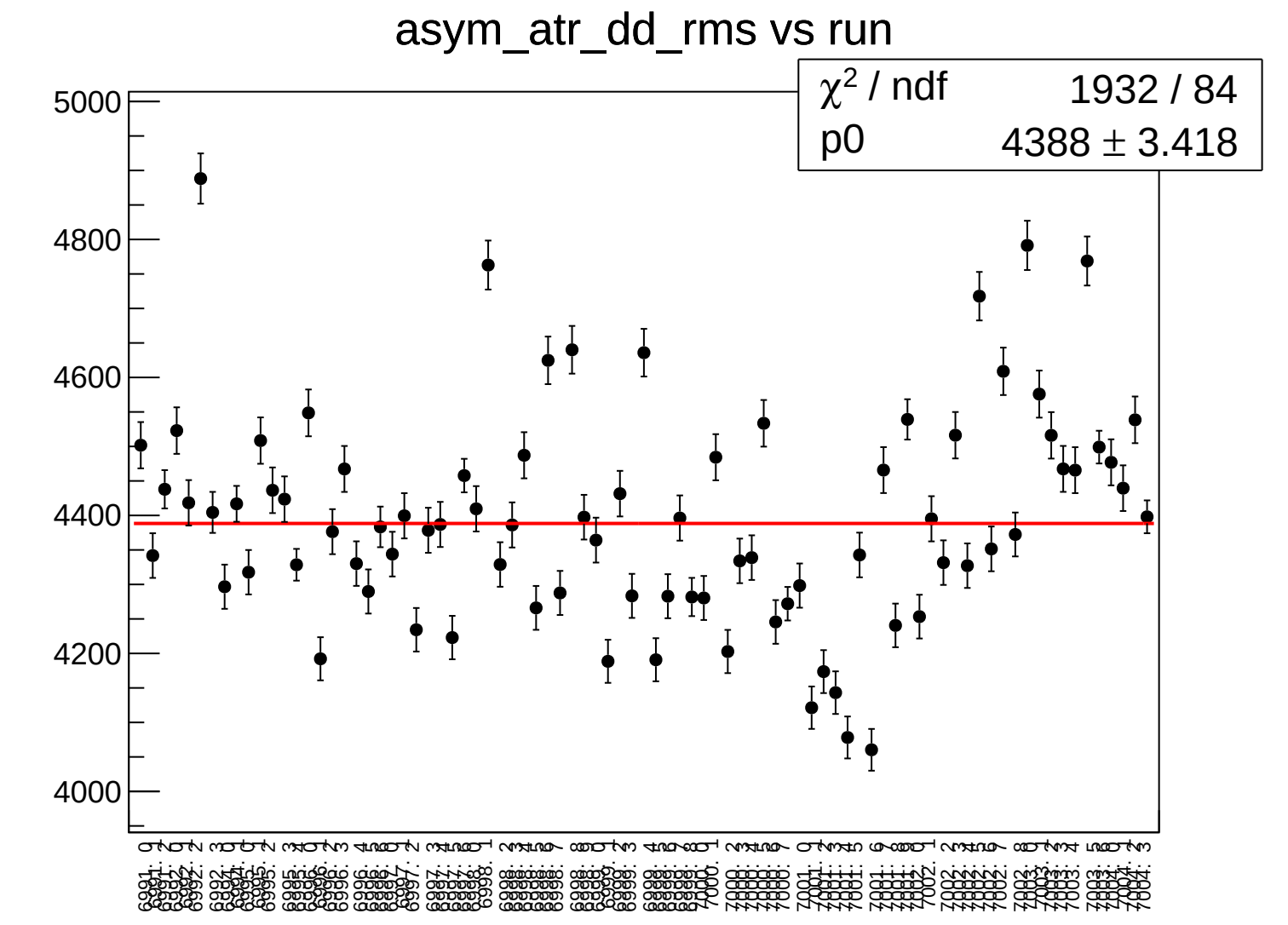

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 105.9 / 84
p0 1871 ± 4356
pull
Entries 85
Mean −121
Std Dev 164.7

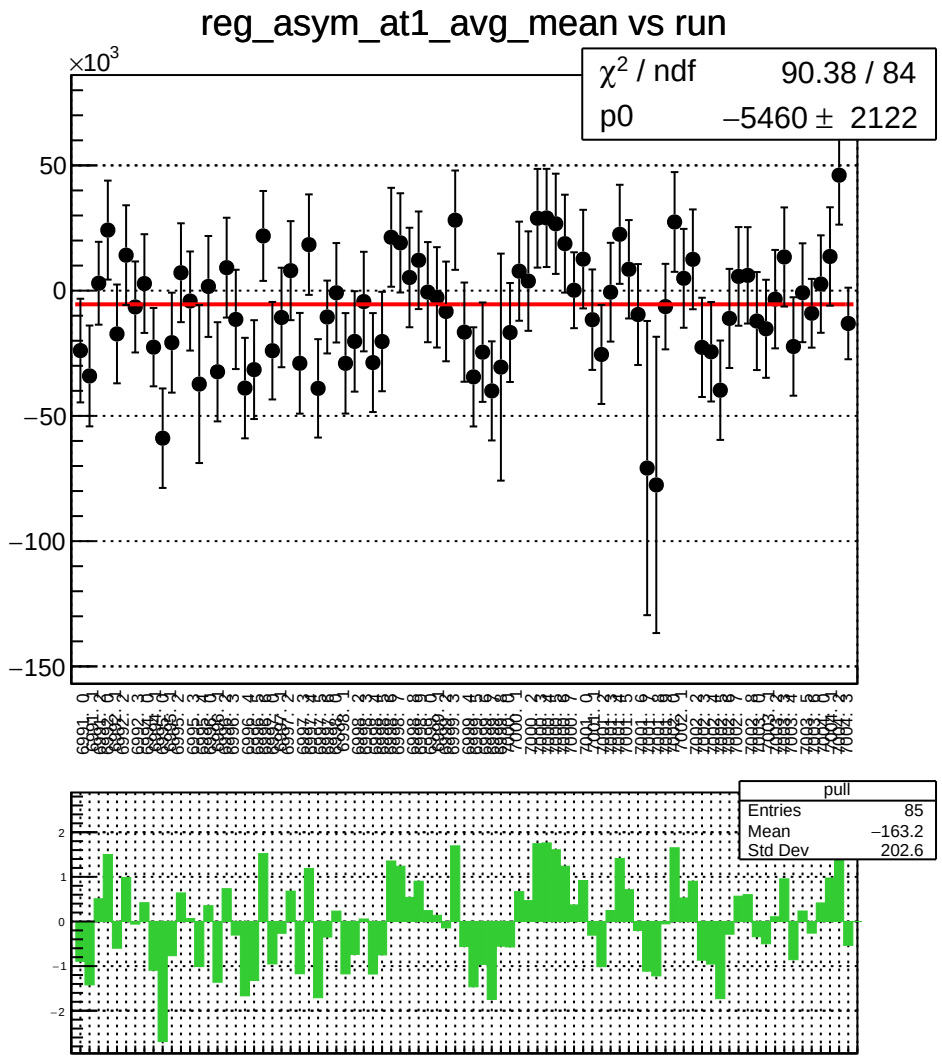

pull1D
Entries 85
Mean −0.03259
Std Dev 1.116

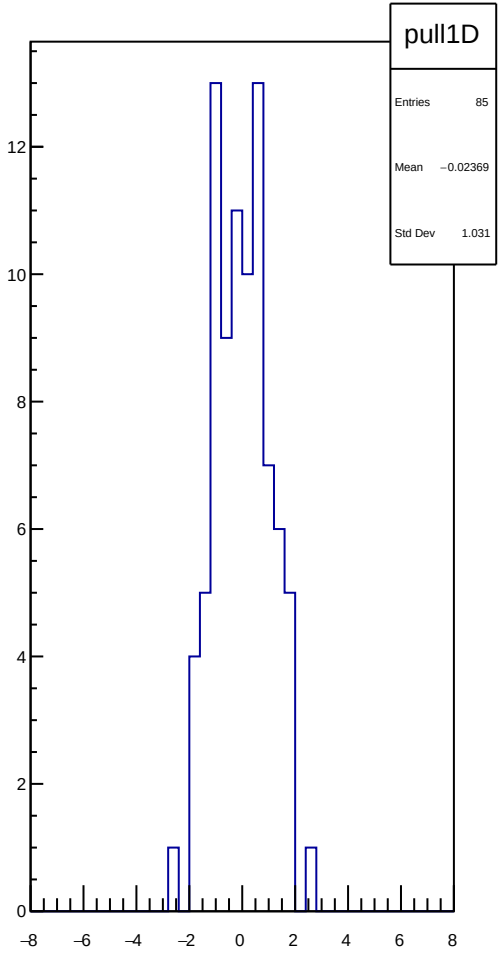

asym_atr_dd_correction_rms vs run
χ² / ndf 2942 / 84
p0 3953 ± 3.08
4600
4400
4200
4000
3800
3600

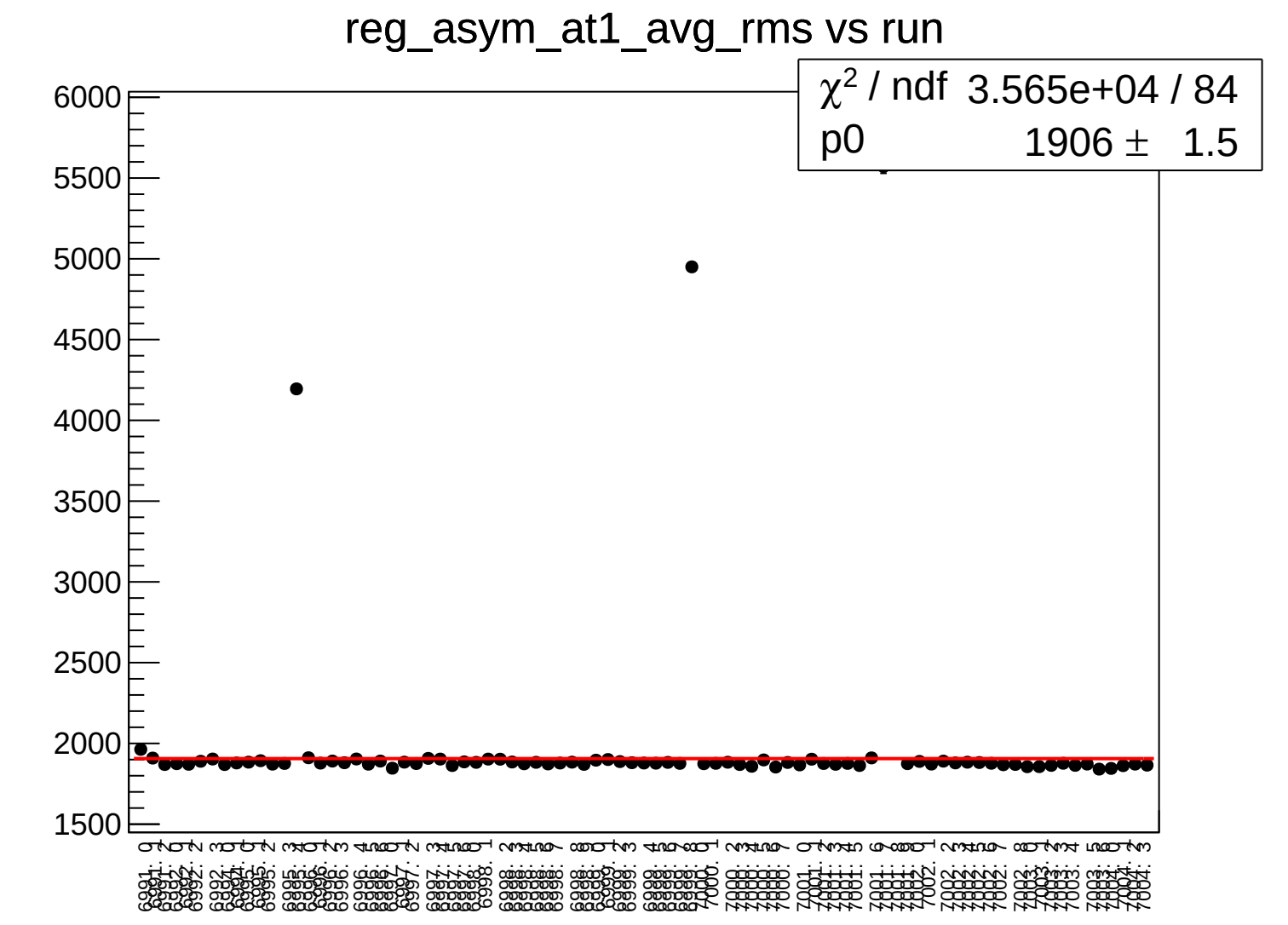

asym_atr_dd_mean vs run
×10^3
χ² / ndf 106.5 / 84
p0 −2388 ± 4834
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −40.2
Std Dev 86.45
2
1
0
−1
−2
−3

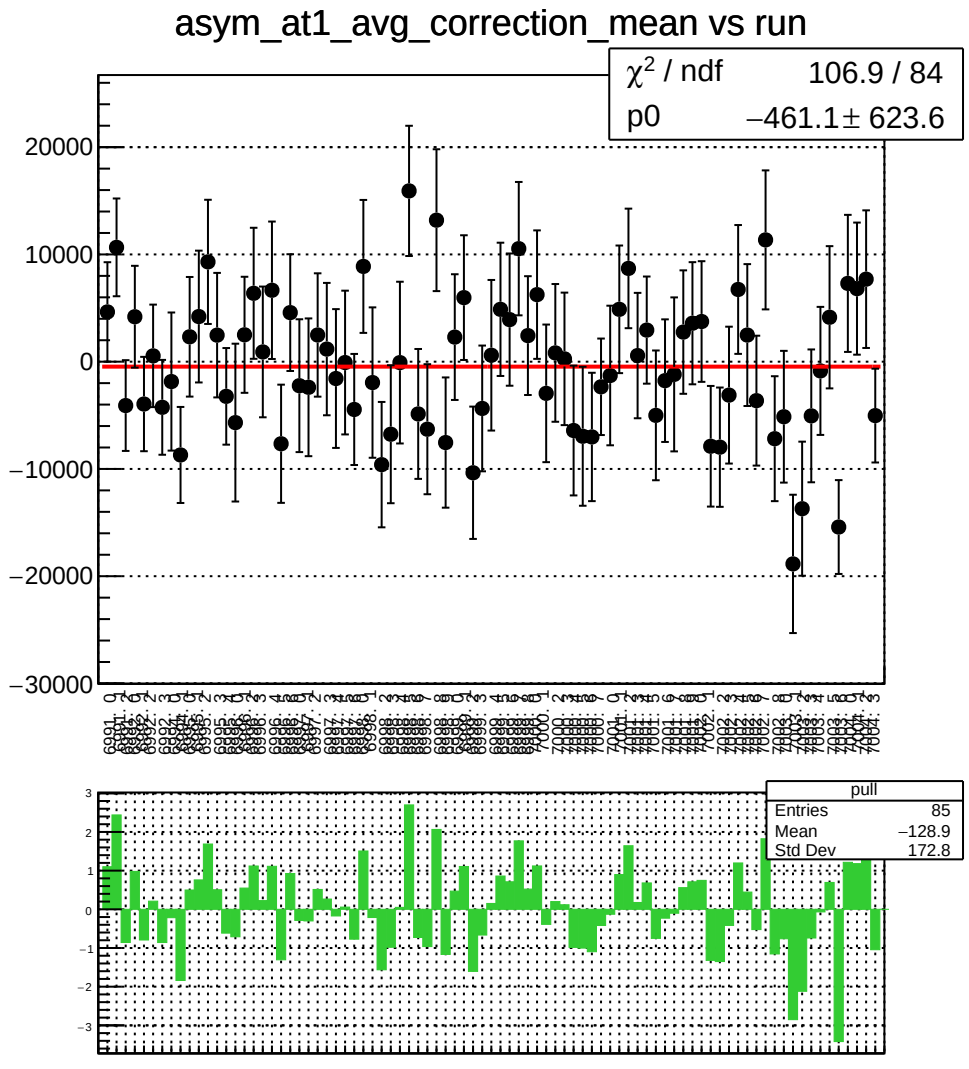

pull1D
Entries 85
Mean 0.03789
Std Dev 1.119
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

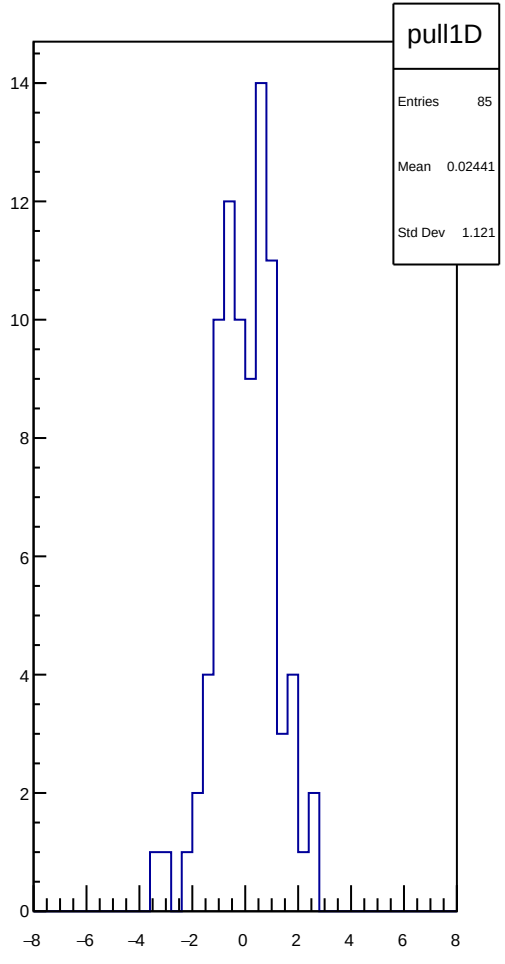

asym_atr_dd_rms vs run
χ² / ndf 1932 / 84
p0 4388 ± 3.418
5000
4800
4600
4400
4200
4000

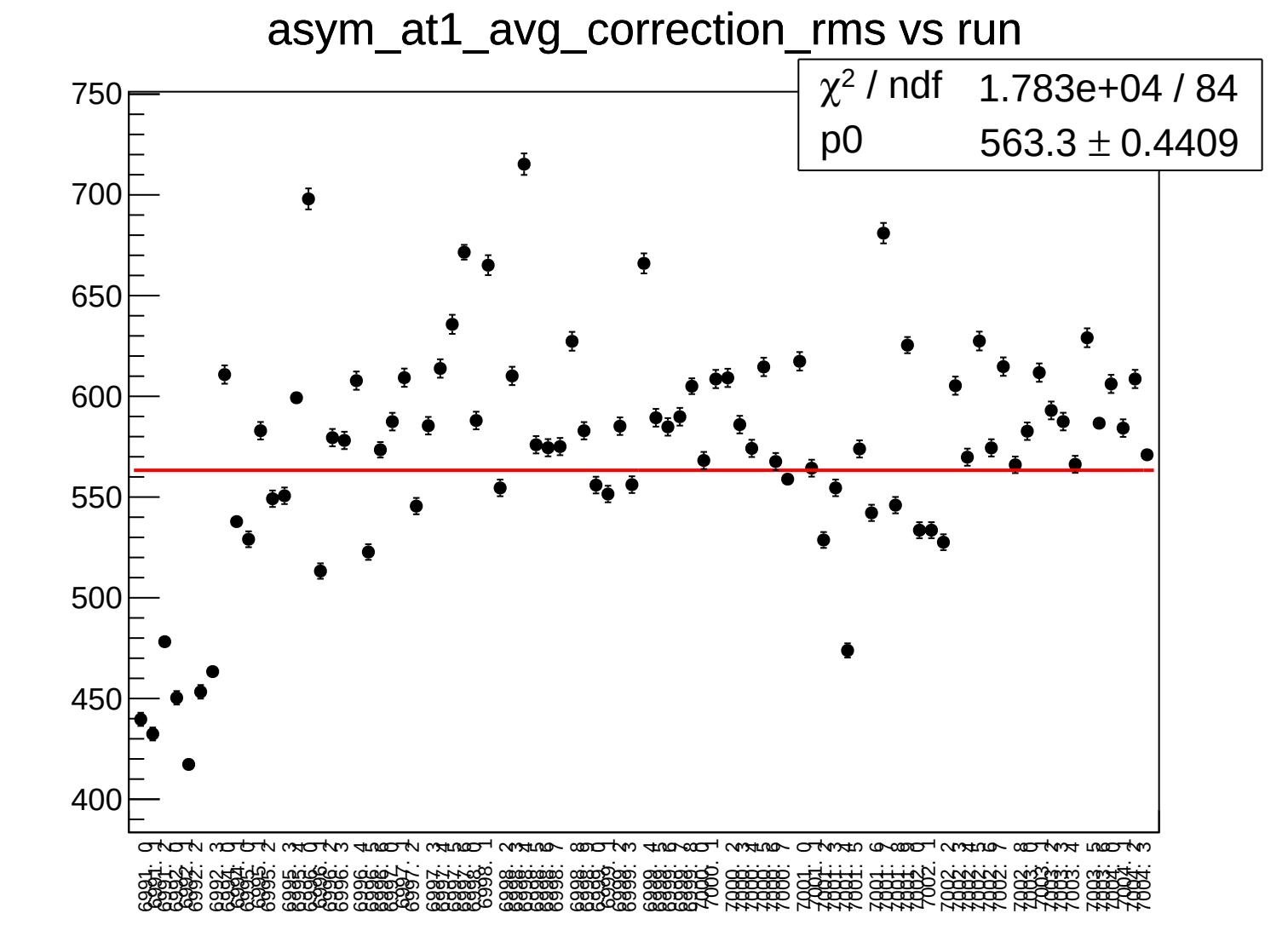

reg_asym_at1_avg_mean vs run
×10^3
χ² / ndf 90.38 / 84
p0 −5460 ± 2122
50
0
−50
−100
−150
pull
Entries 85
Mean −163.2
Std Dev 202.6
2
1
0
−1
−2

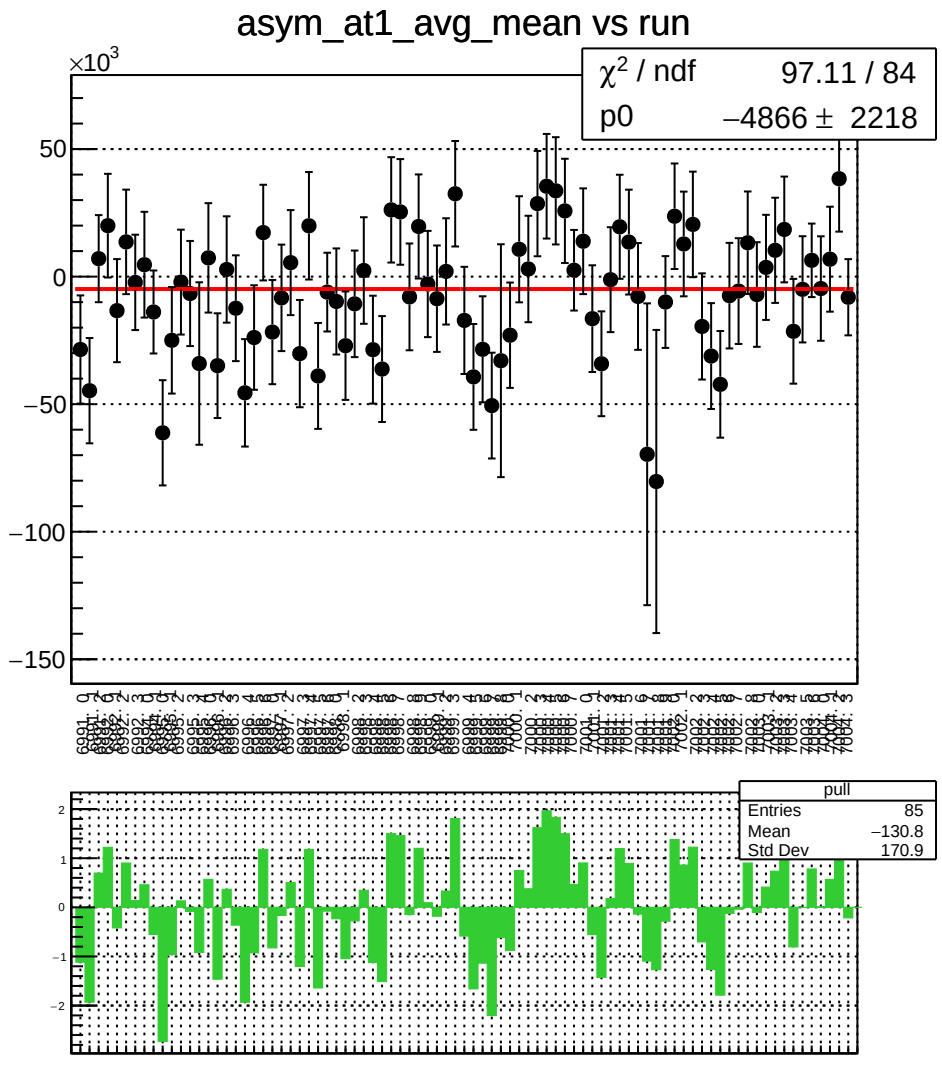

pull1D
Entries 85
Mean −0.02369
Std Dev 1.031
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

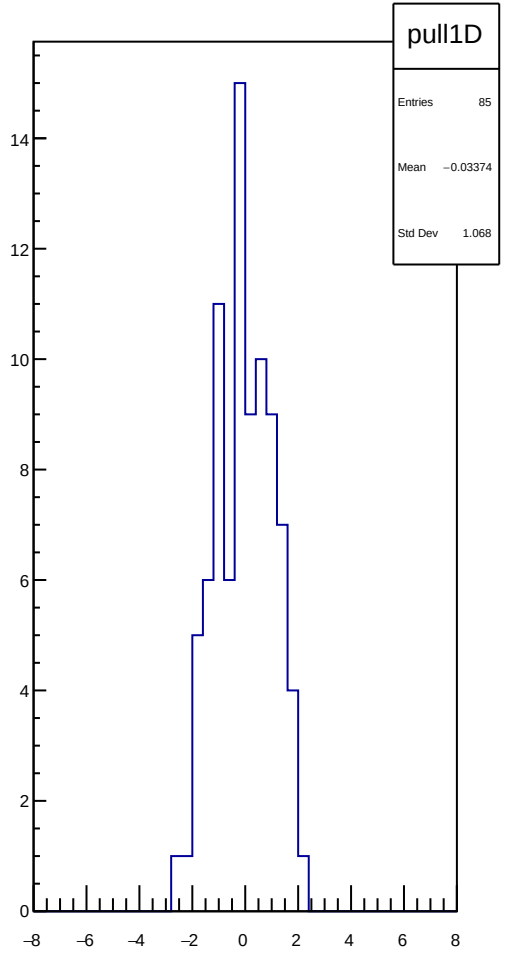

reg_asym_at1_avg_rms vs run
χ² / ndf 3.565e+04 / 84
p0 1906 ± 1.5
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

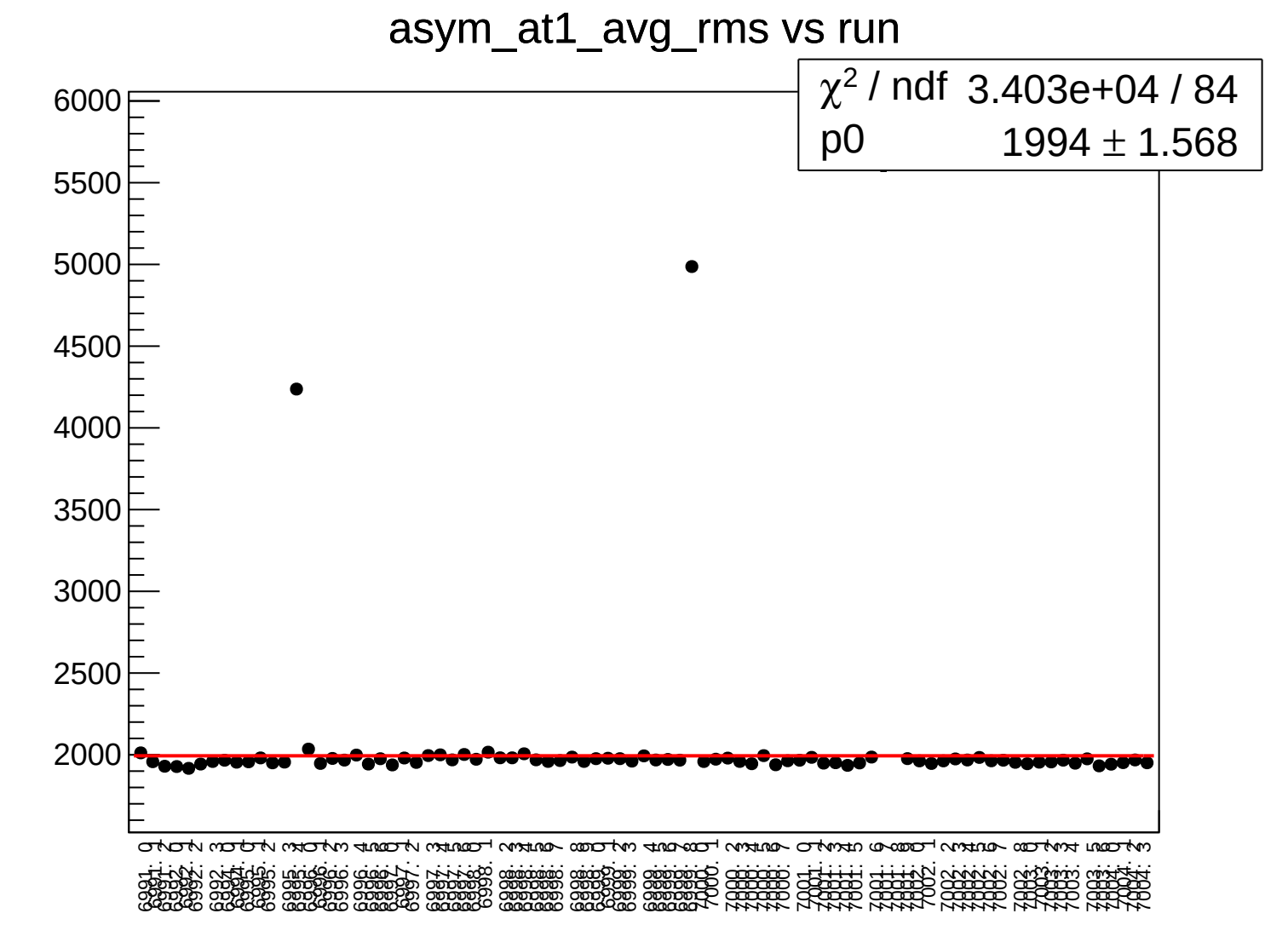

asym_at1_avg_correction_mean vs run
χ² / ndf 106.9 / 84
p0 −461.1 ± 623.6
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −128.9
Std Dev 172.8
3
2
1
0
−1
−2
−3

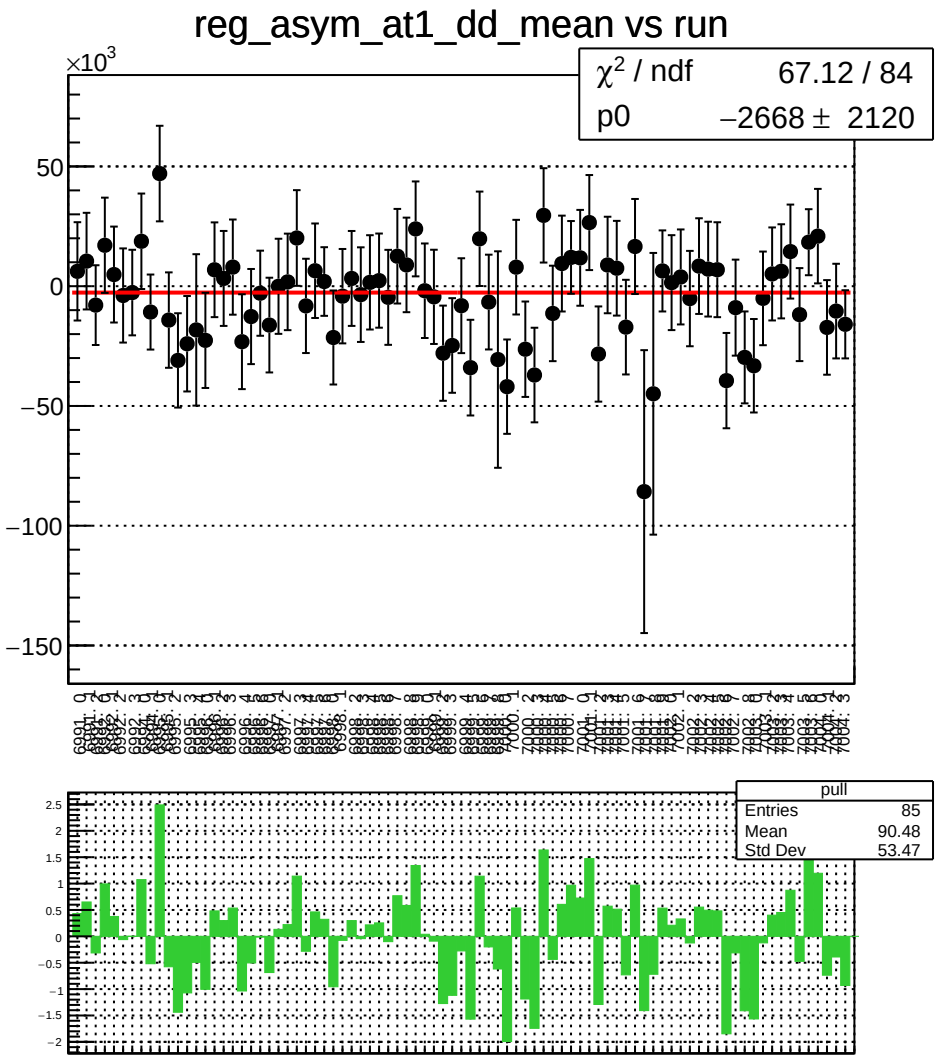

pull1D
Entries 85
Mean 0.02441
Std Dev 1.121
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

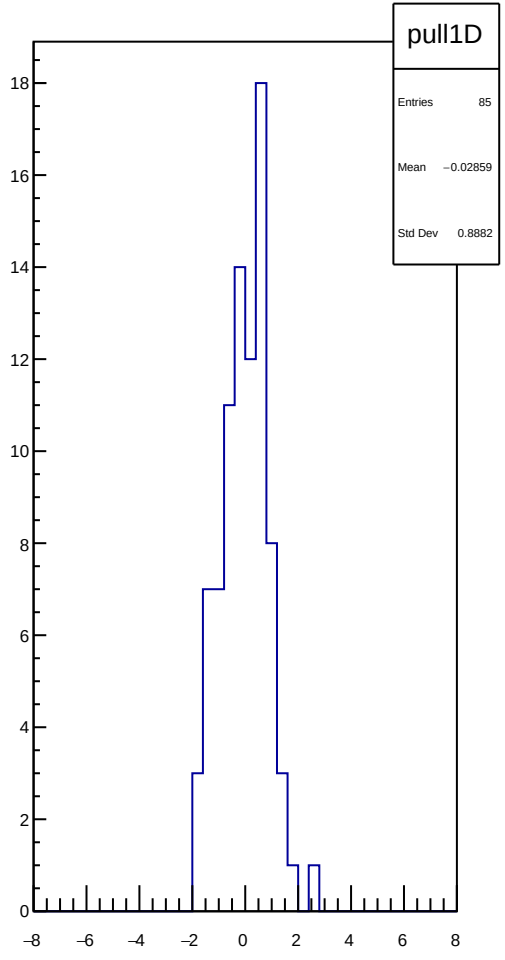

asym_at1_avg_correction_rms vs run
χ² / ndf 1.783e+04 / 84
p0 563.3 ± 0.4409
750
700
650
600
550
500
450
400

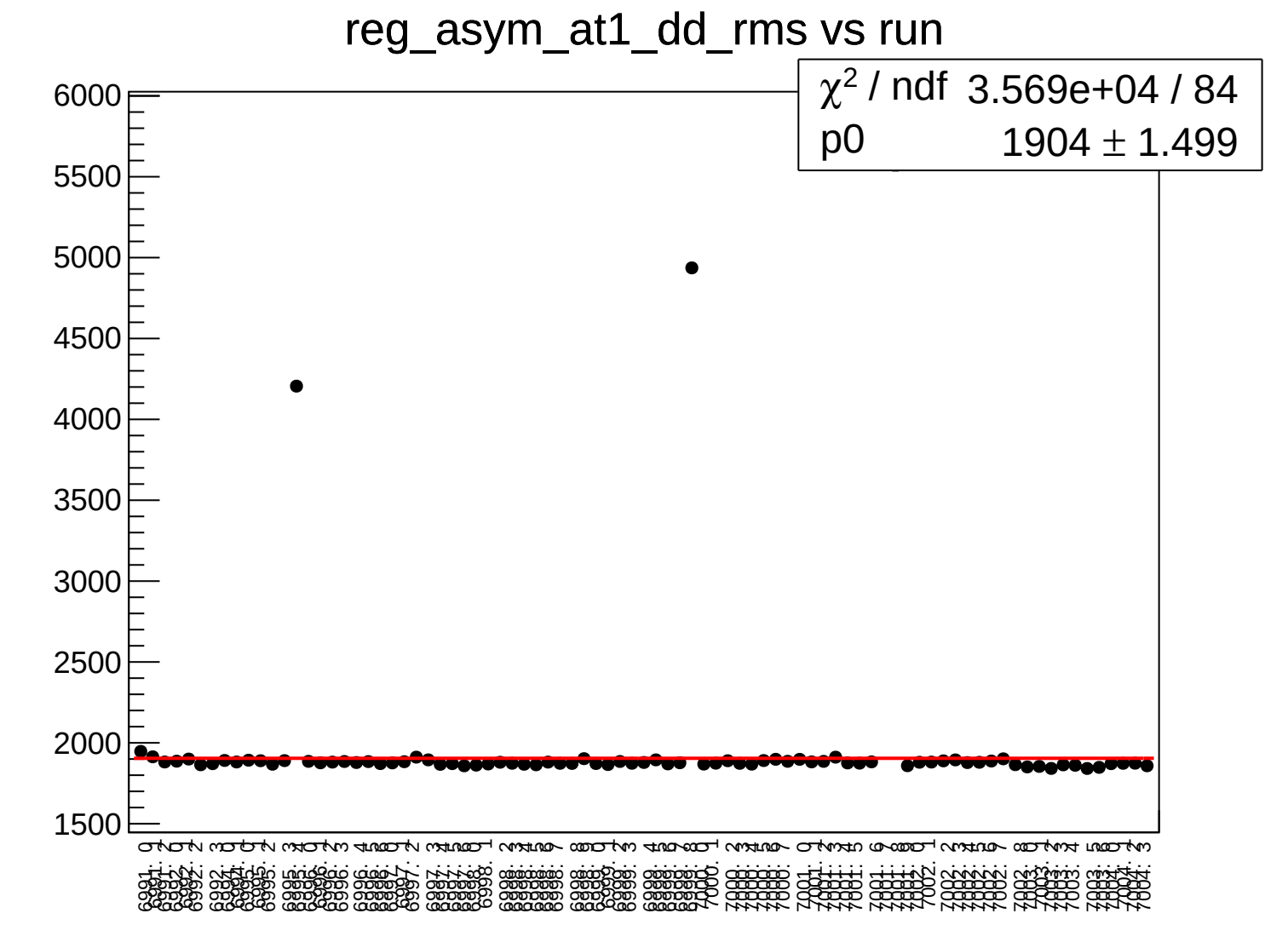

asym_at1_avg_mean vs run
×10^3
χ² / ndf 97.11 / 84
p0 −4866 ± 2218
50
0
−50
−100
−150
pull
Entries 85
Mean −130.8
Std Dev 170.9
2
1
0
−1
−2

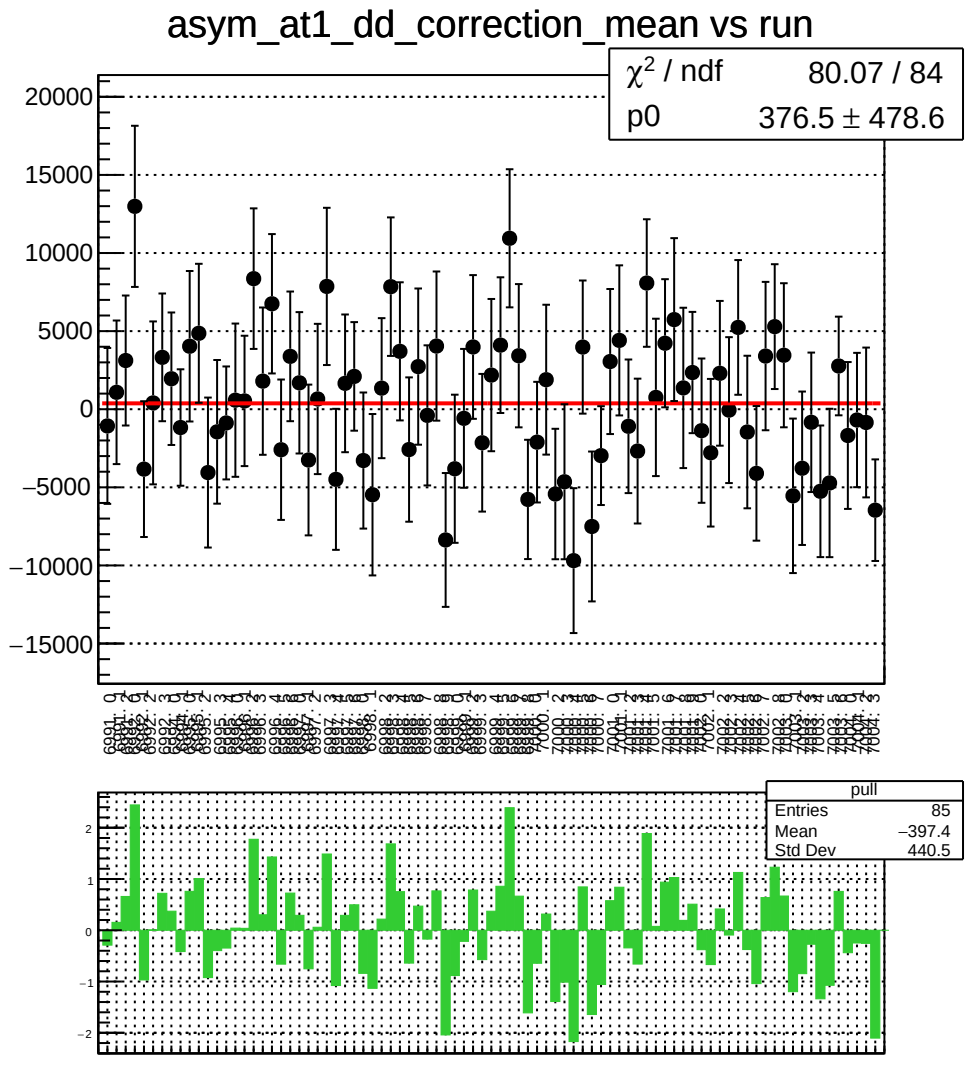

pull1D
Entries 85
Mean −0.03374
Std Dev 1.068
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

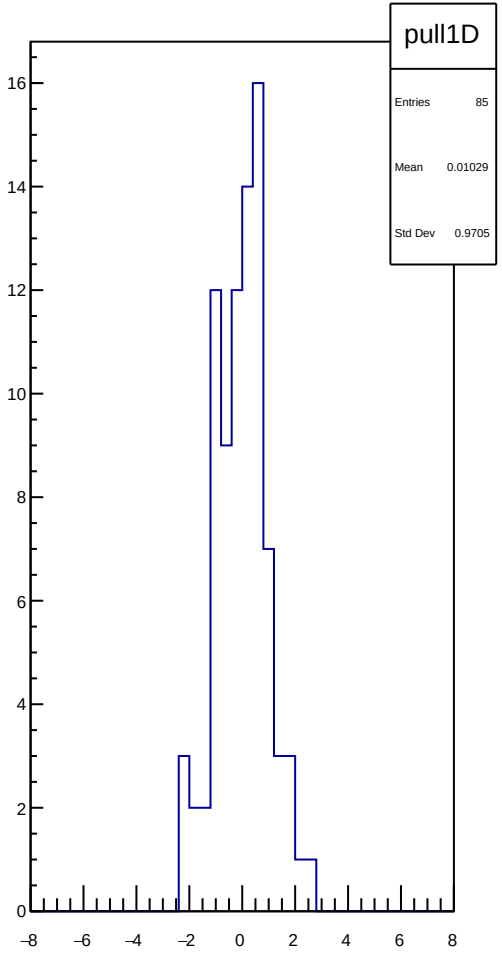

asym_at1_avg_rms vs run
χ² / ndf 3.403e+04 / 84
p0 1994 ± 1.568
6000
5500
5000
4500
4000
3500
3000
2500
2000

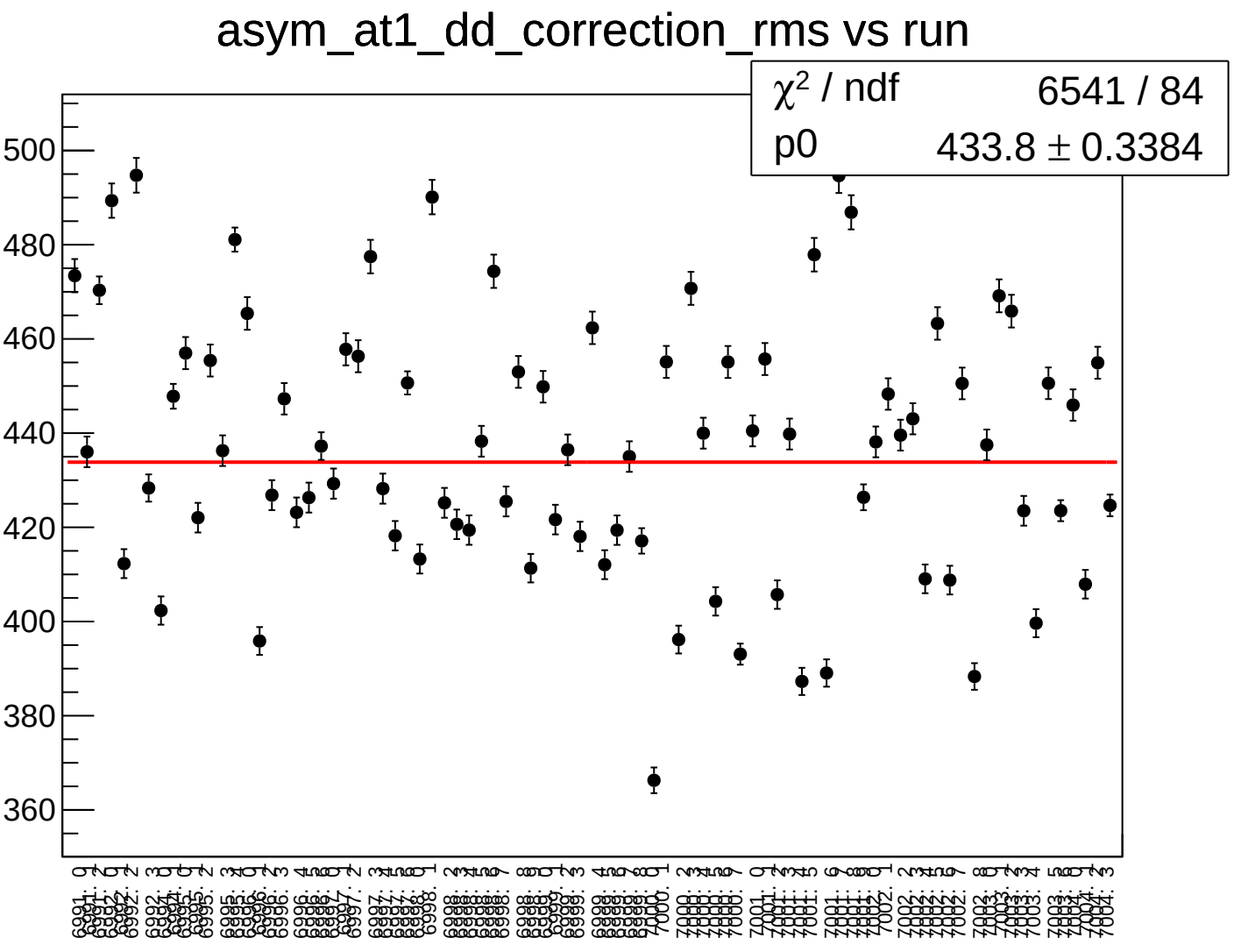

reg_asym_at1_dd_mean vs run
×10^3
χ^2 / ndf 67.12 / 84
p0 −2668 ± 2120
50
0
−50
−100
−150
pull
Entries 85
Mean 90.48
Std Dev 53.47
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

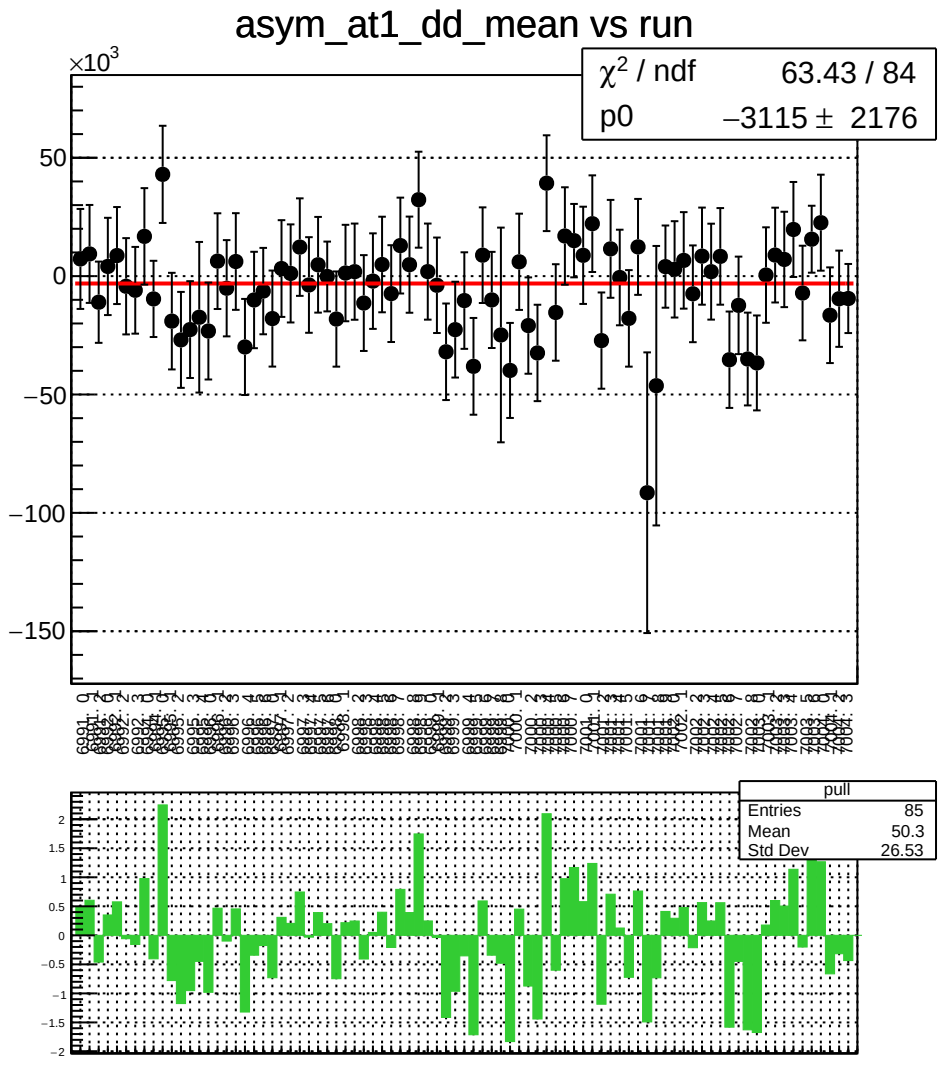

pull1D
Entries 85
Mean −0.02859
Std Dev 0.8882
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

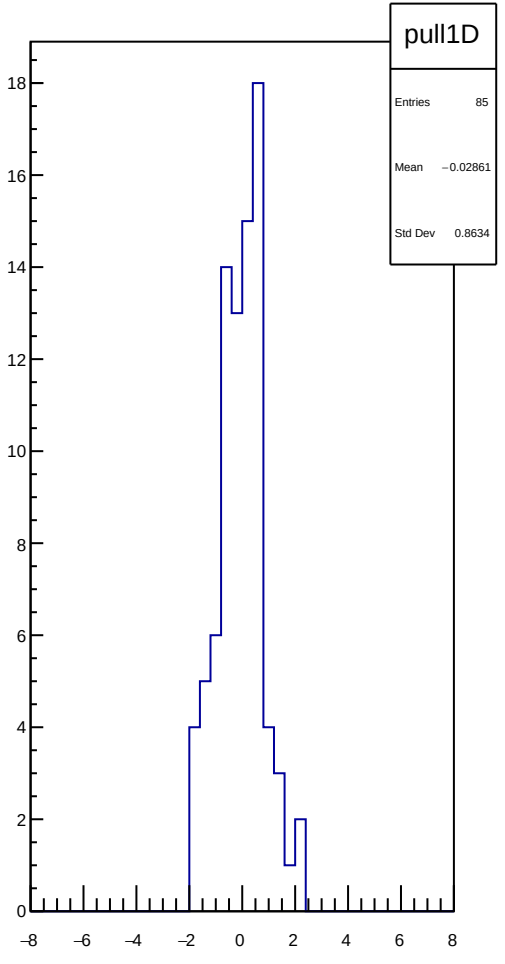

reg_asym_at1_dd_rms vs run
χ² / ndf 3.569e+04 / 84
p0 1904 ± 1.499
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

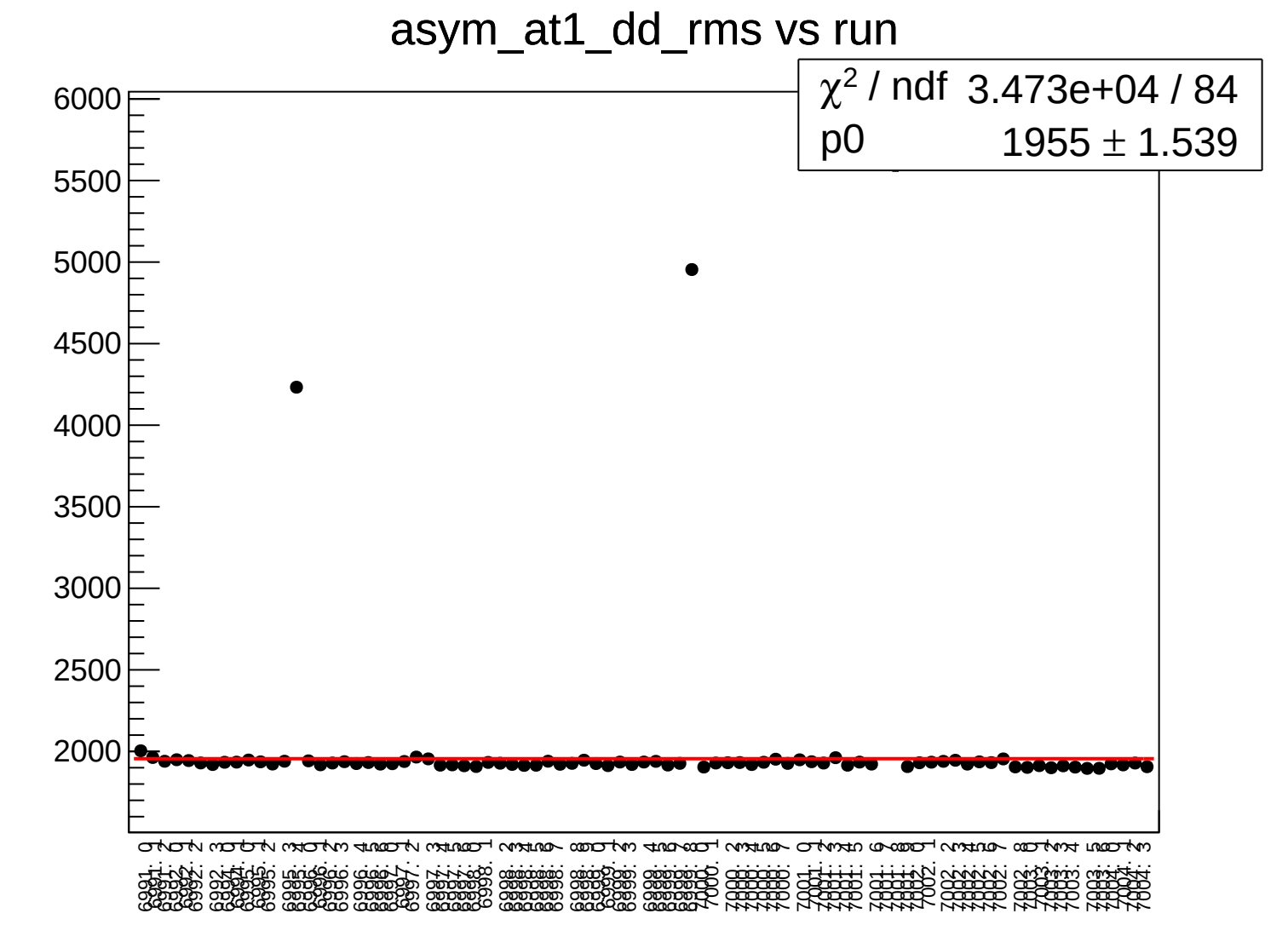

asym_at1_dd_correction_mean vs run
χ² / ndf 80.07 / 84
p0 376.5 ± 478.6
pull
Entries 85
Mean −397.4
Std Dev 440.5

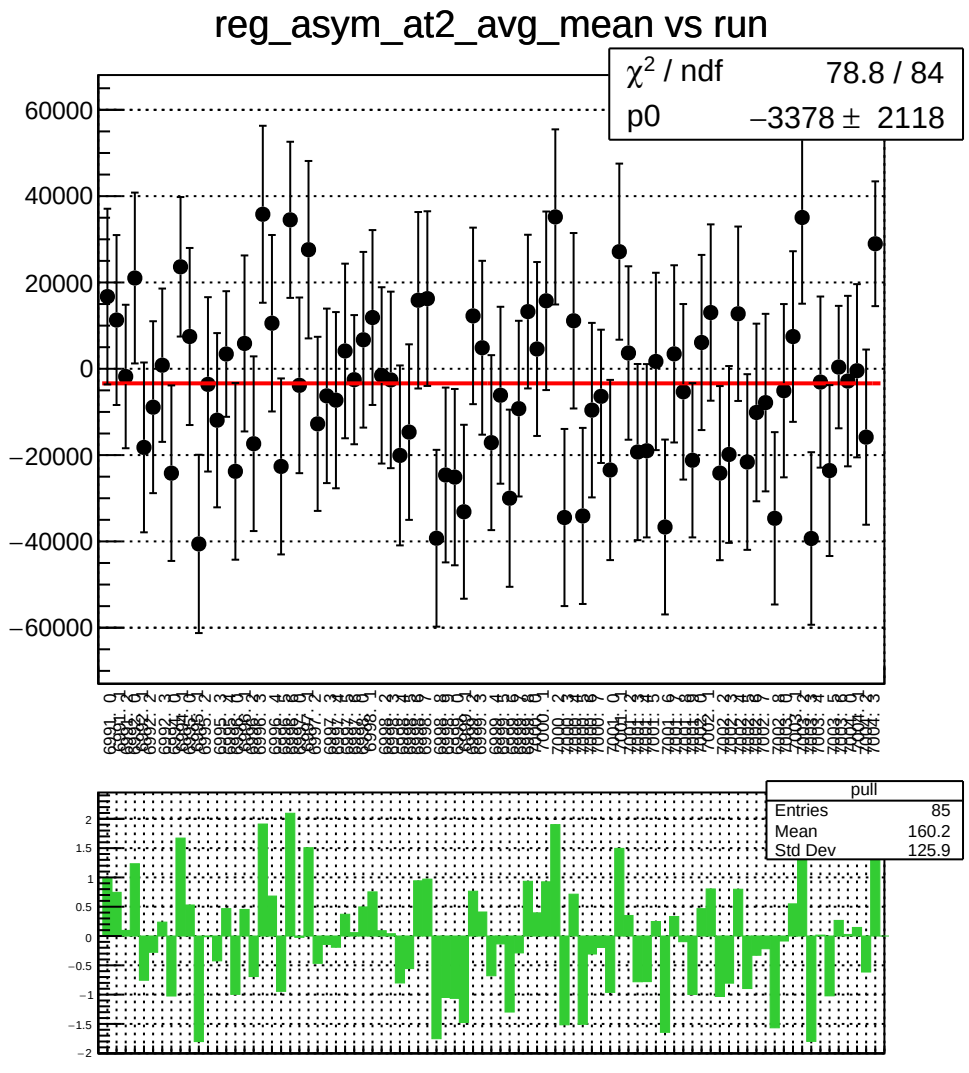

pull1D
Entries 85
Mean 0.01029
Std Dev 0.9705

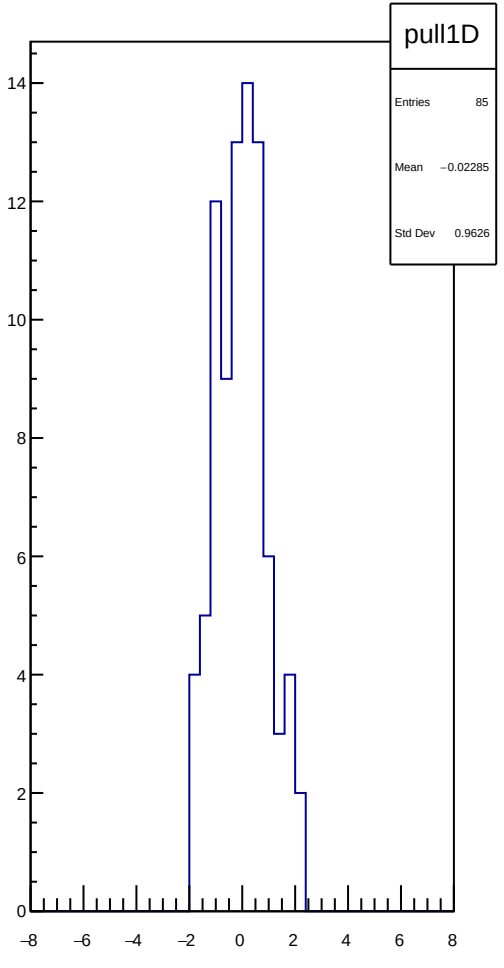

asym_at1_dd_correction_rms vs run
χ² / ndf 6541 / 84
p0 433.8 ± 0.3384
500
480
460
440
420
400
380
360

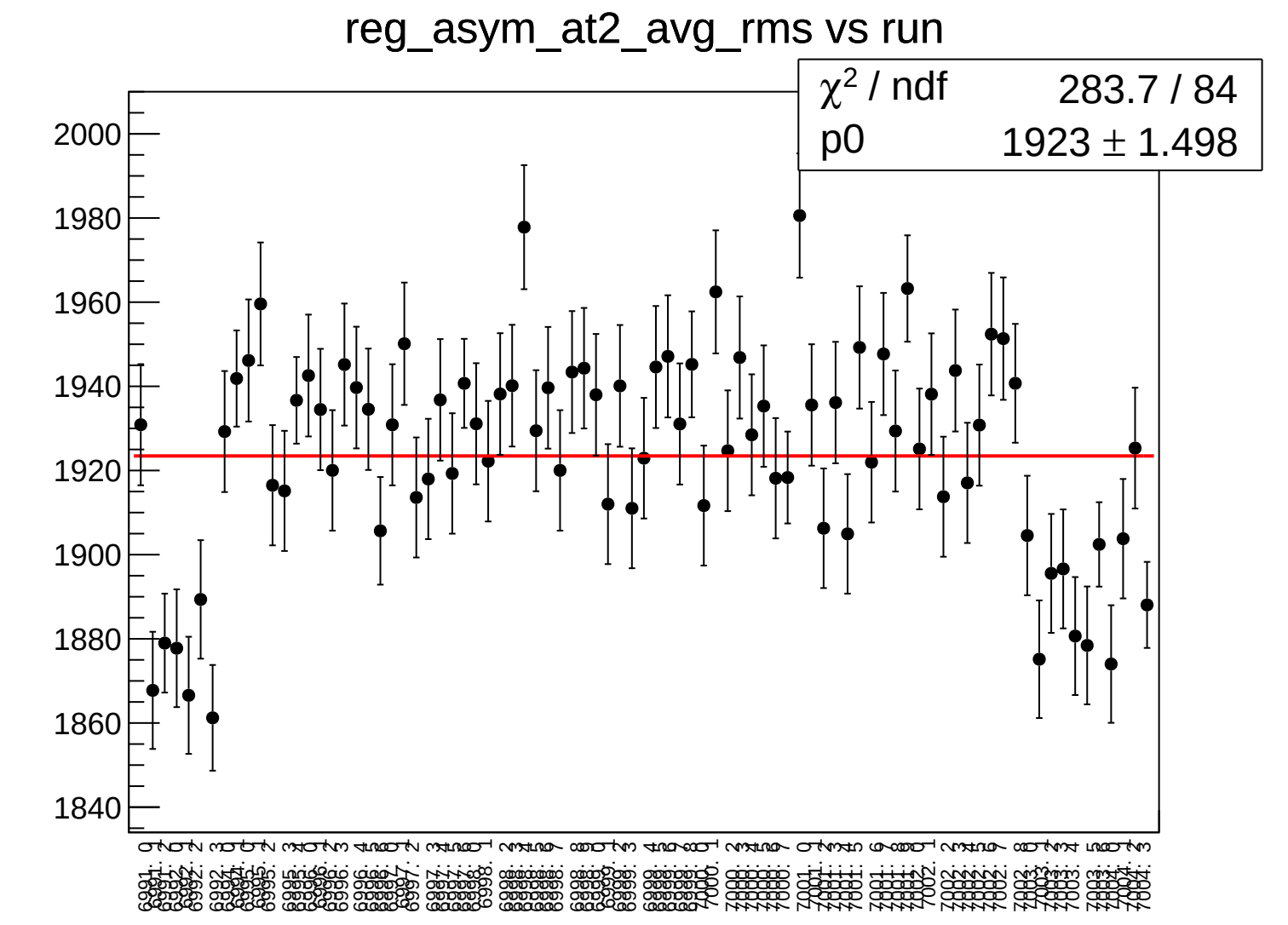

asym_at1_dd_mean vs run
×10^3
χ² / ndf 63.43 / 84
p0 −3115 ± 2176
50
0
−50
−100
−150
pull
Entries 85
Mean 50.3
Std Dev 26.53
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

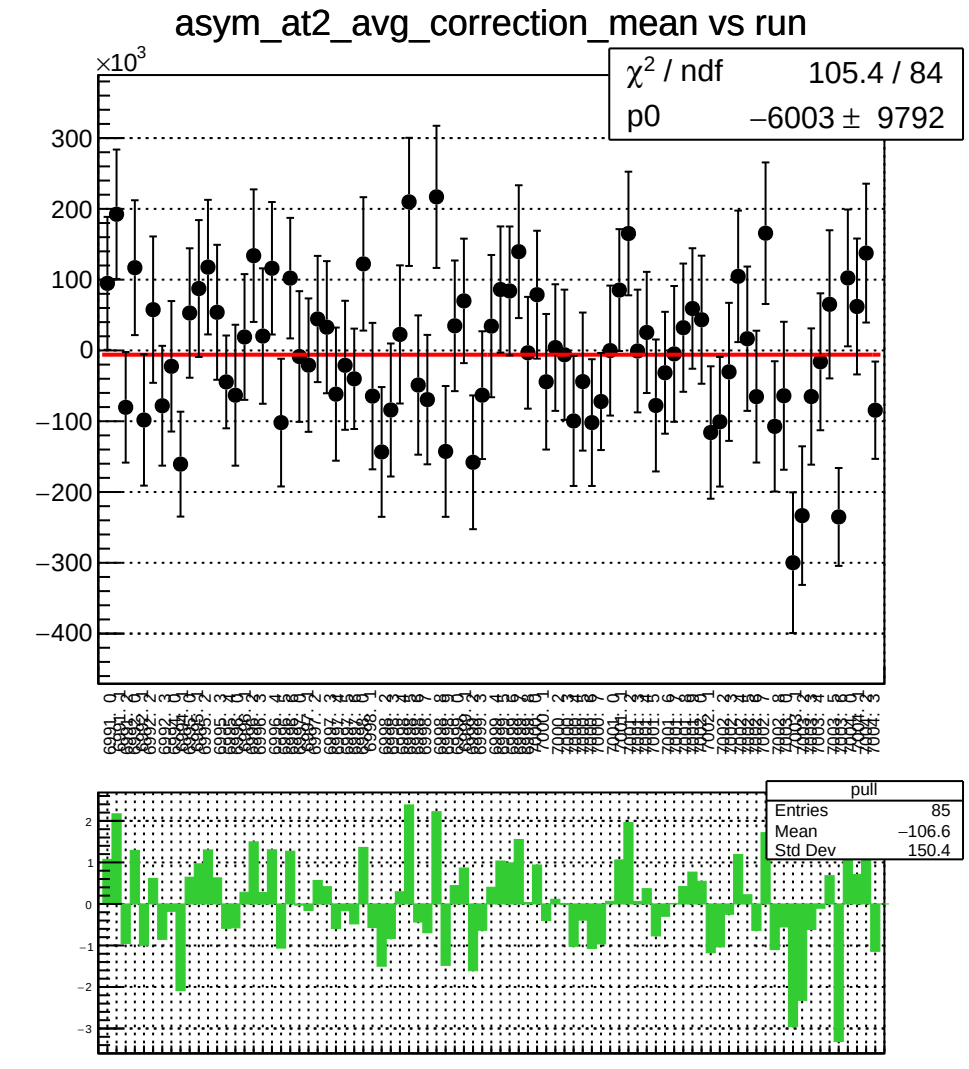

pull1D
Entries 85
Mean −0.02861
Std Dev 0.8634
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

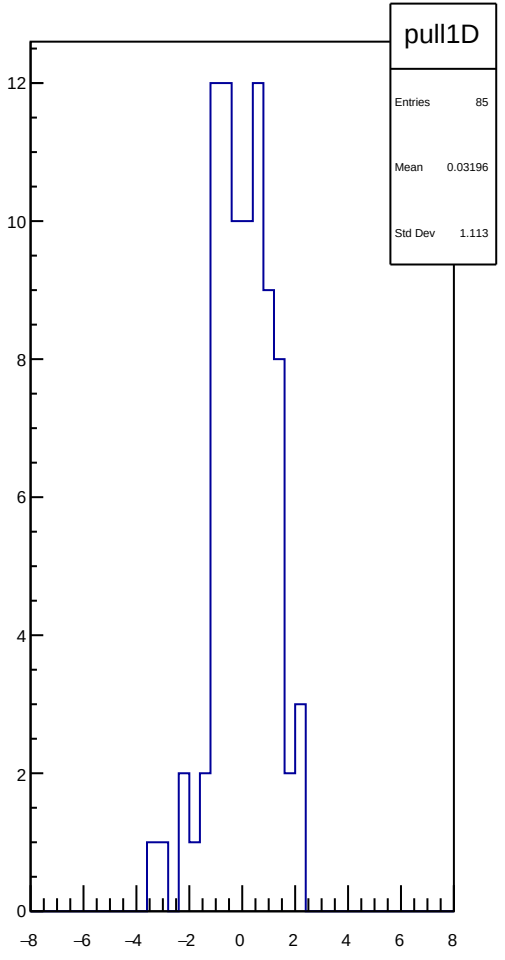

asym_at1_dd_rms vs run
χ² / ndf 3.473e+04 / 84
p0 1955 ± 1.539
6000
5500
5000
4500
4000
3500
3000
2500
2000

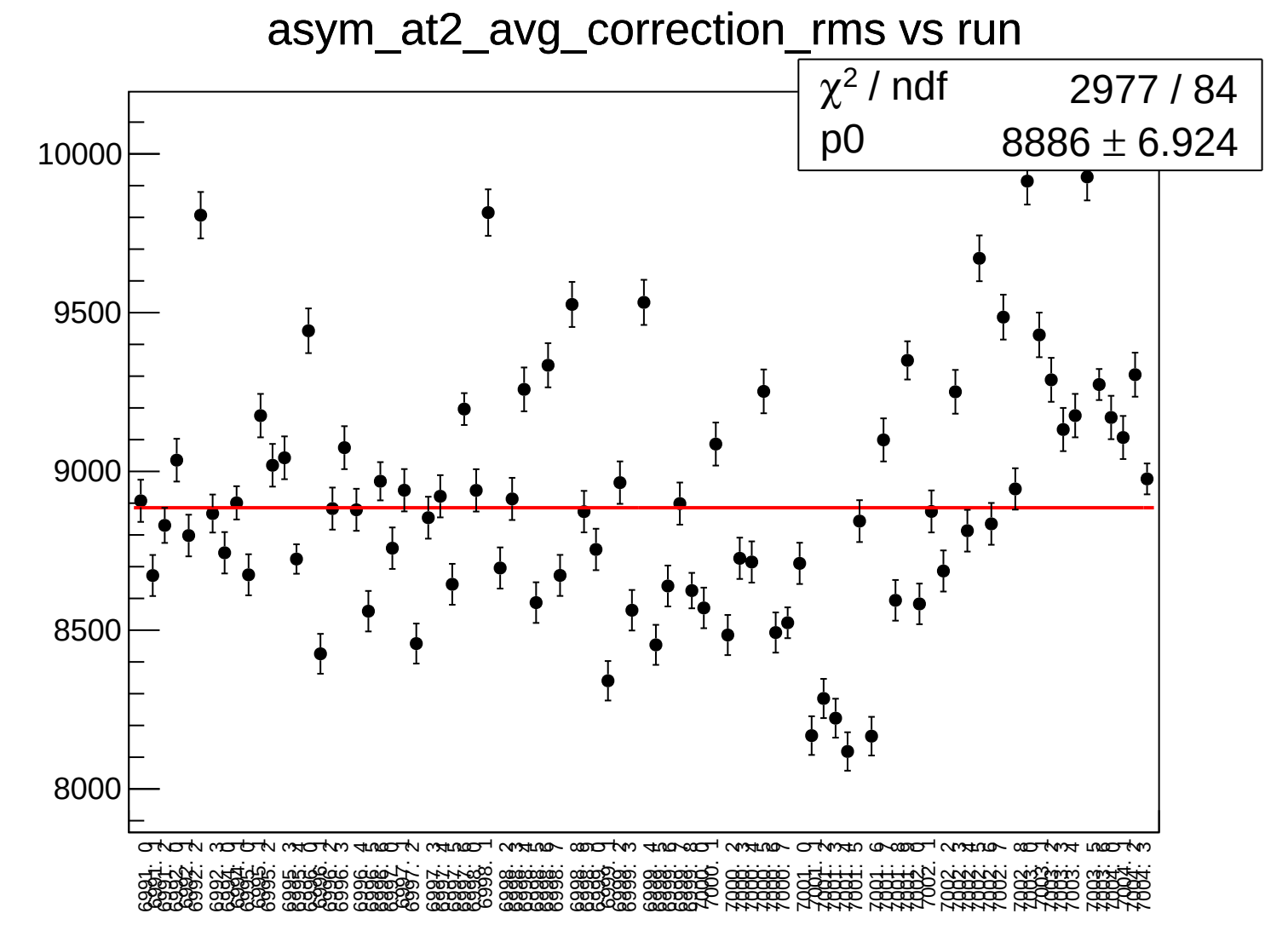

reg_asym_at2_avg_mean vs run
χ² / ndf 78.8 / 84
p0 −3378 ± 2118
pull
Entries 85
Mean 160.2
Std Dev 125.9

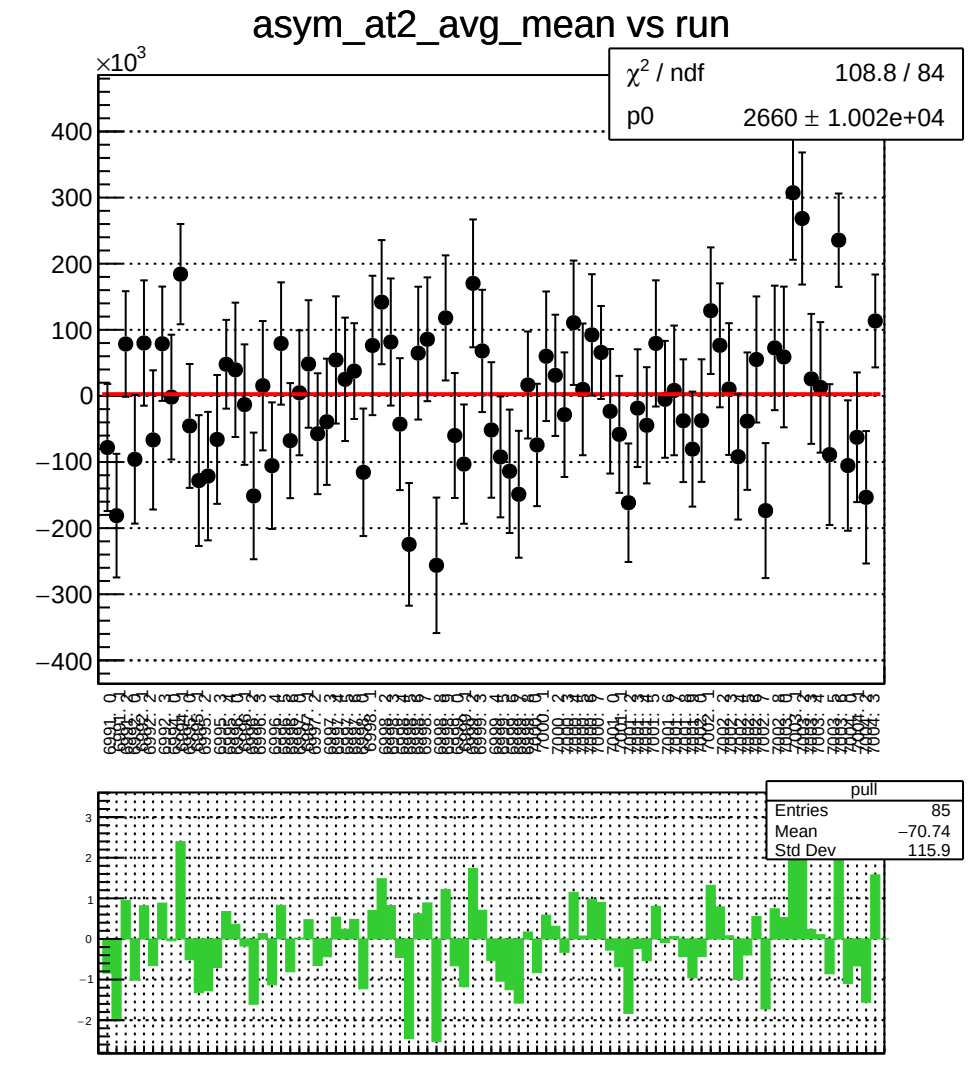

pull1D
Entries 85
Mean −0.02285
Std Dev 0.9626

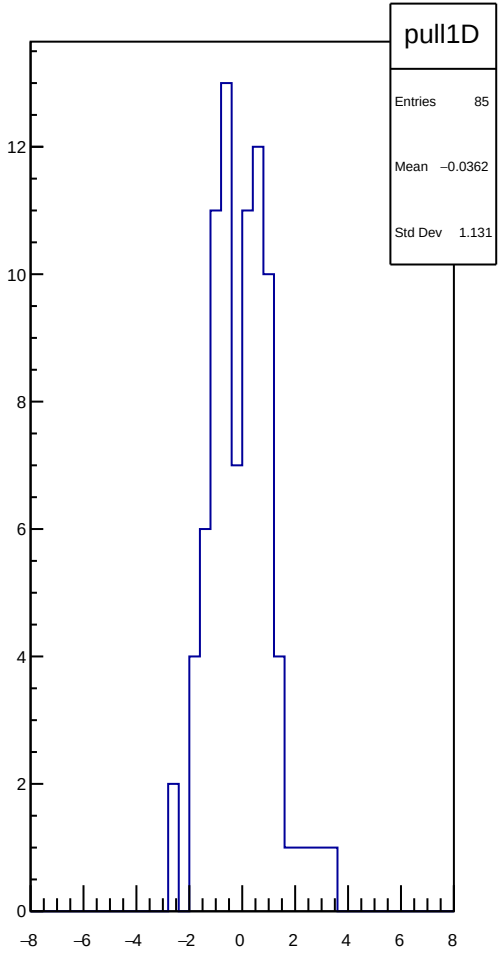

reg_asym_at2_avg_rms vs run
χ² / ndf 283.7 / 84
p0 1923 ± 1.498
2000
1980
1960
1940
1920
1900
1880
1860
1840

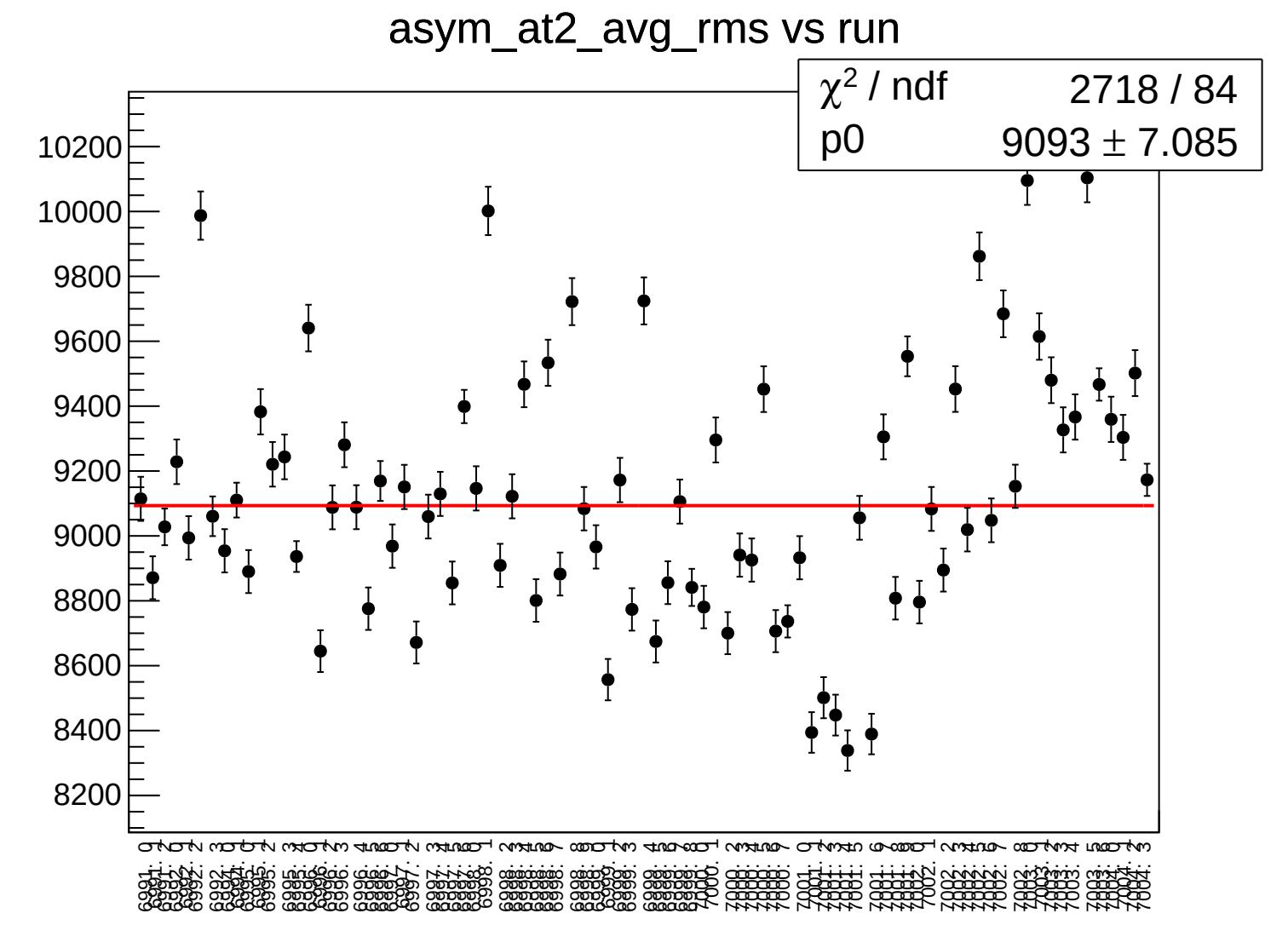

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 105.4 / 84
p0 −6003 ± 9792
300
200
100
0
−100
−200
−300
−400
pull
Entries 85
Mean −106.6
Std Dev 150.4
2
1
0
−1
−2
−3

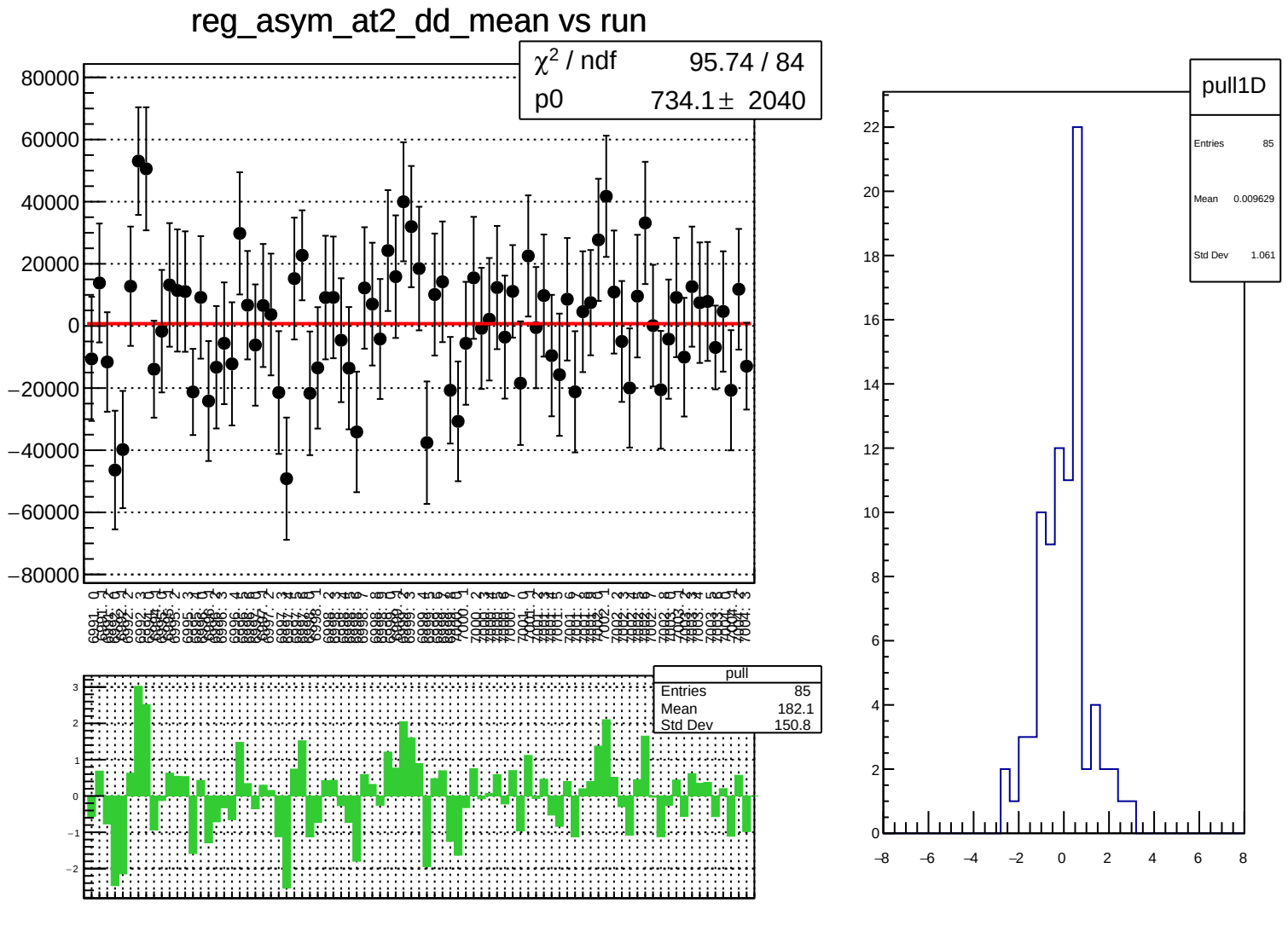

pull1D
Entries 85
Mean 0.03196
Std Dev 1.113
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

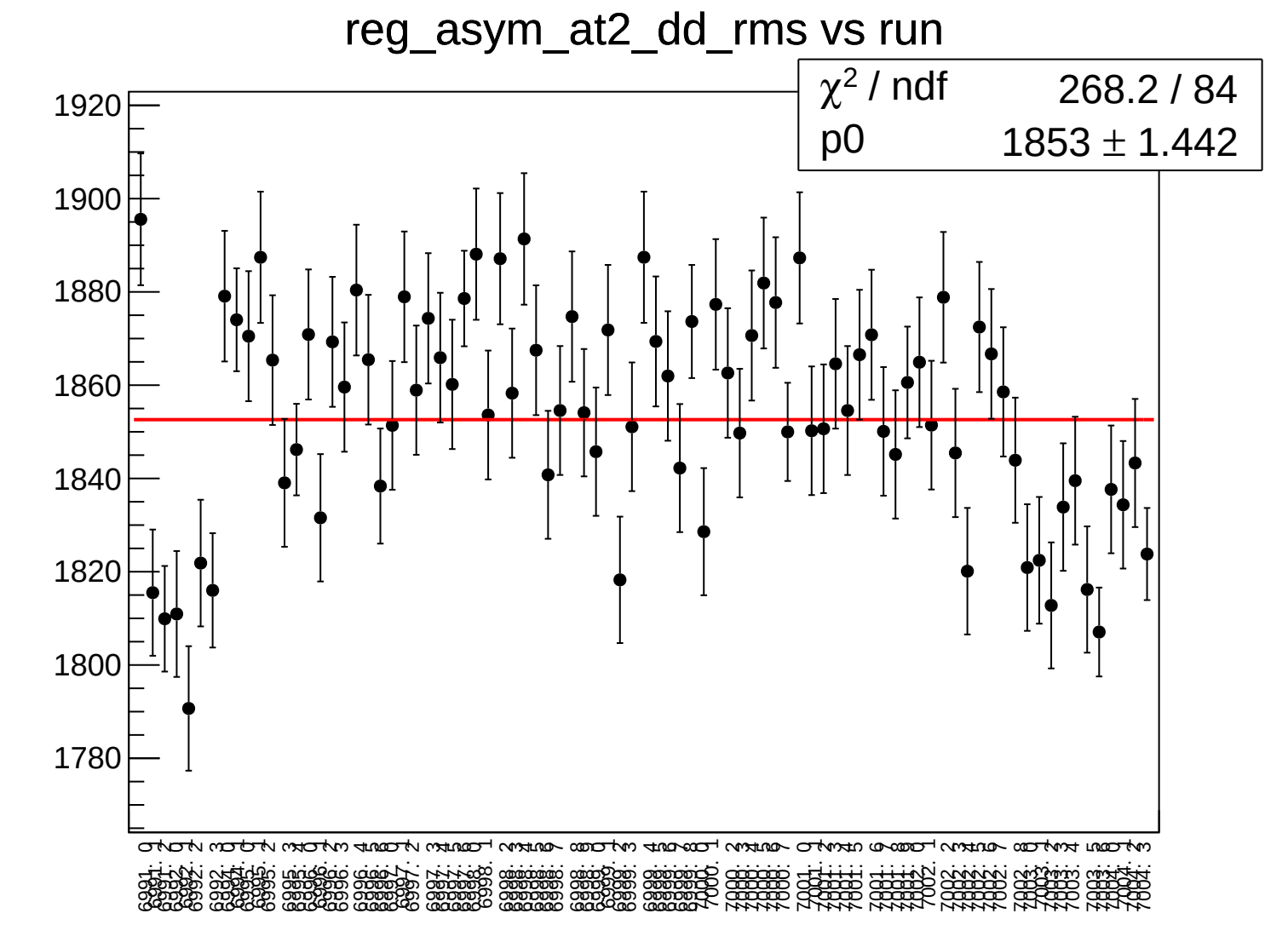

asym_at2_avg_correction_rms vs run
χ² / ndf 2977 / 84
p0 8886 ± 6.924
10000
9500
9000
8500
8000

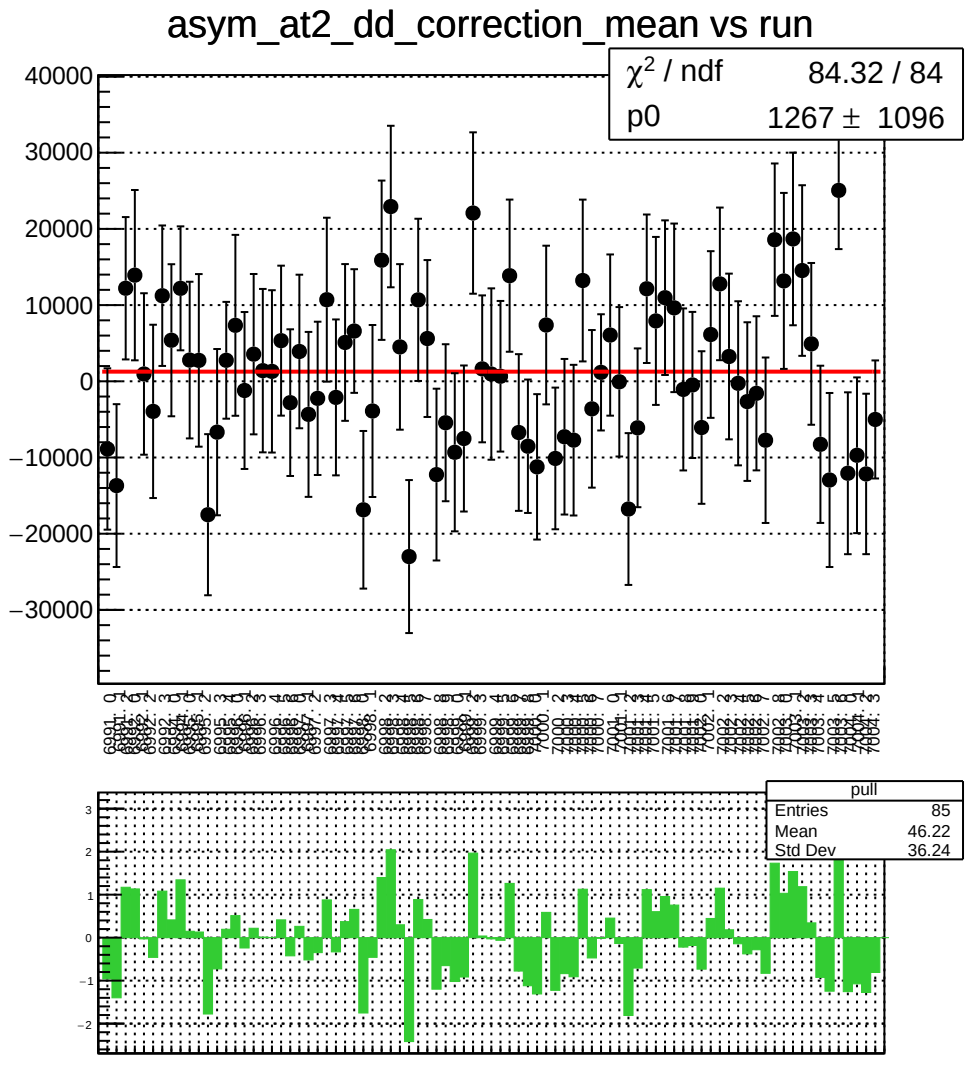

asym_at2_avg_mean vs run
×10^3
χ² / ndf 108.8 / 84
p0 2660 ± 1.002e+04
pull
Entries 85
Mean −70.74
Std Dev 115.9

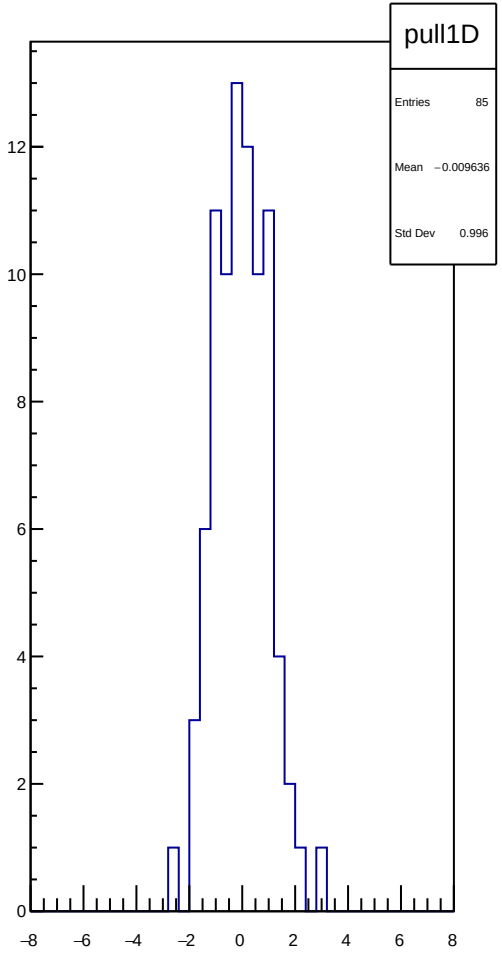

pull1D
Entries 85
Mean −0.0362
Std Dev 1.131

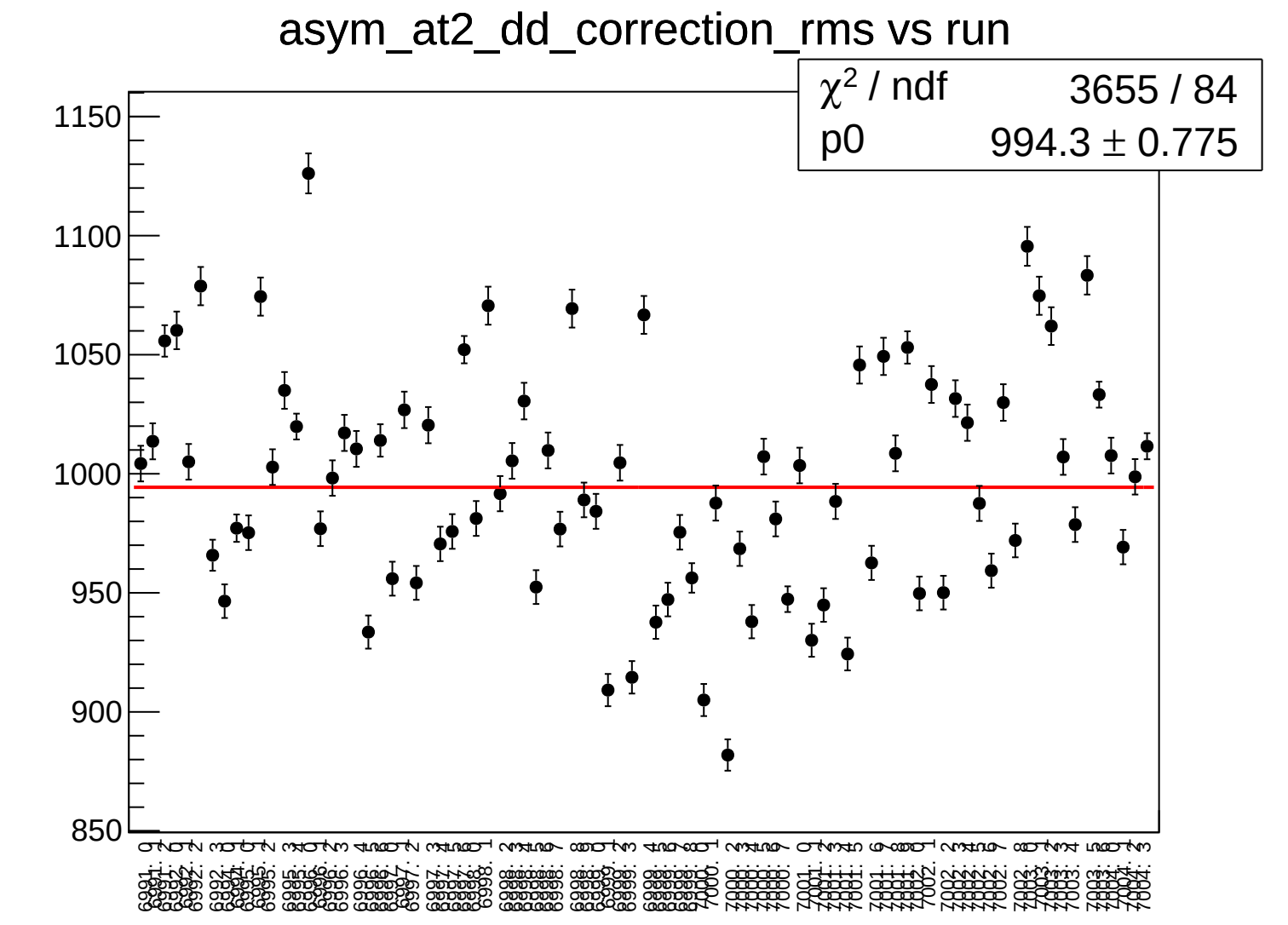

asym_at2_avg_rms vs run
χ^2 / ndf 2718 / 84
p0 9093 ± 7.085
10200
10000
9800
9600
9400
9200
9000
8800
8600
8400
8200

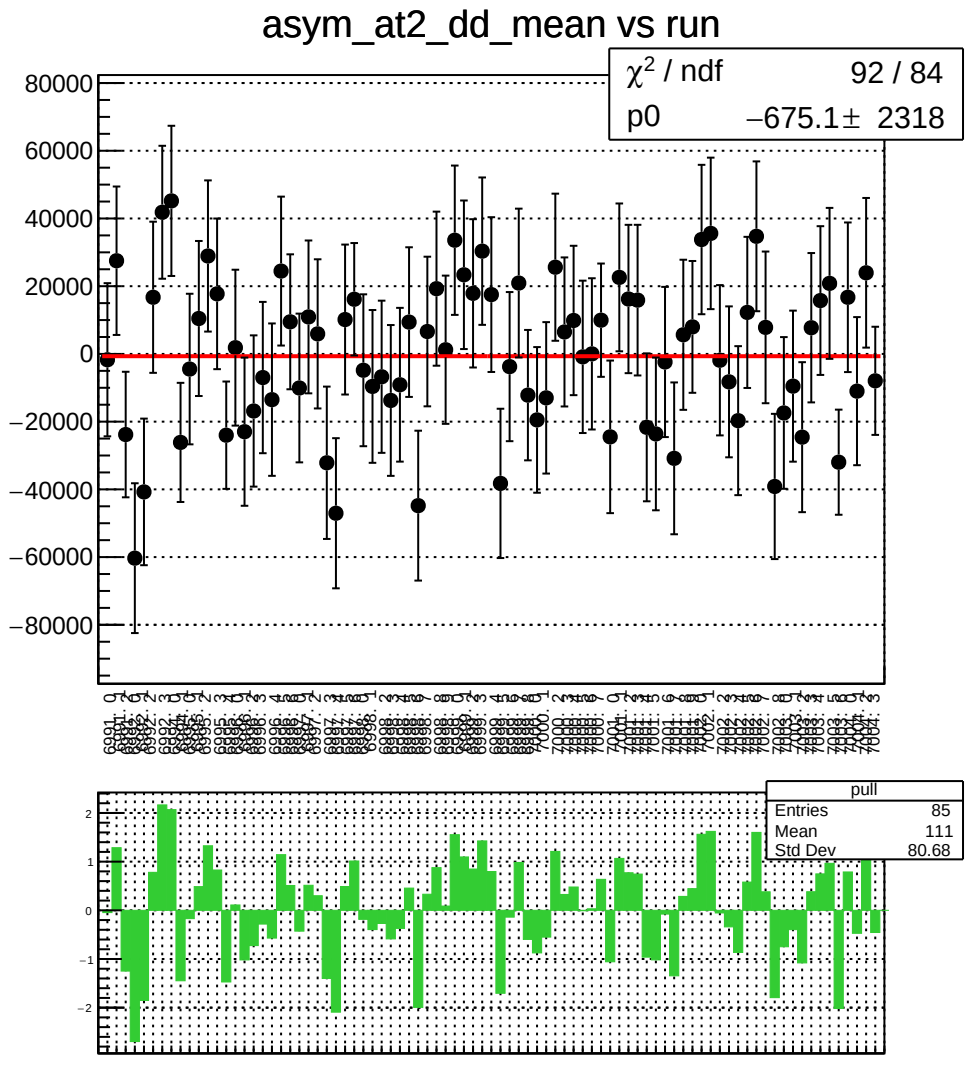

reg_asym_at2_dd_mean vs run
χ² / ndf 95.74 / 84
p0 734.1 ± 2040
pull
Entries 85
Mean 182.1
Std Dev 150.8
pull1D
Entries 85
Mean 0.009629
Std Dev 1.061

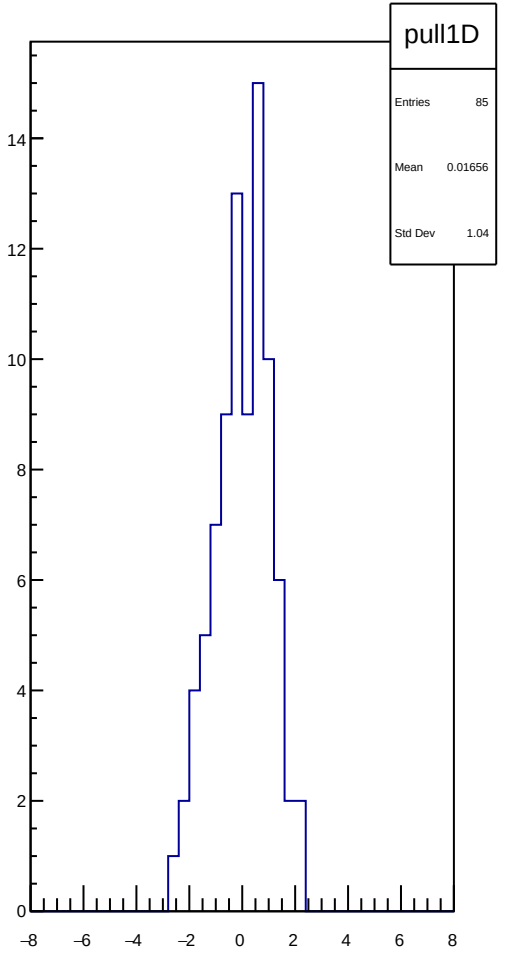

reg_asym_at2_dd_rms vs run
χ² / ndf 268.2 / 84
p0 1853 ± 1.442
1920
1900
1880
1860
1840
1820
1800
1780

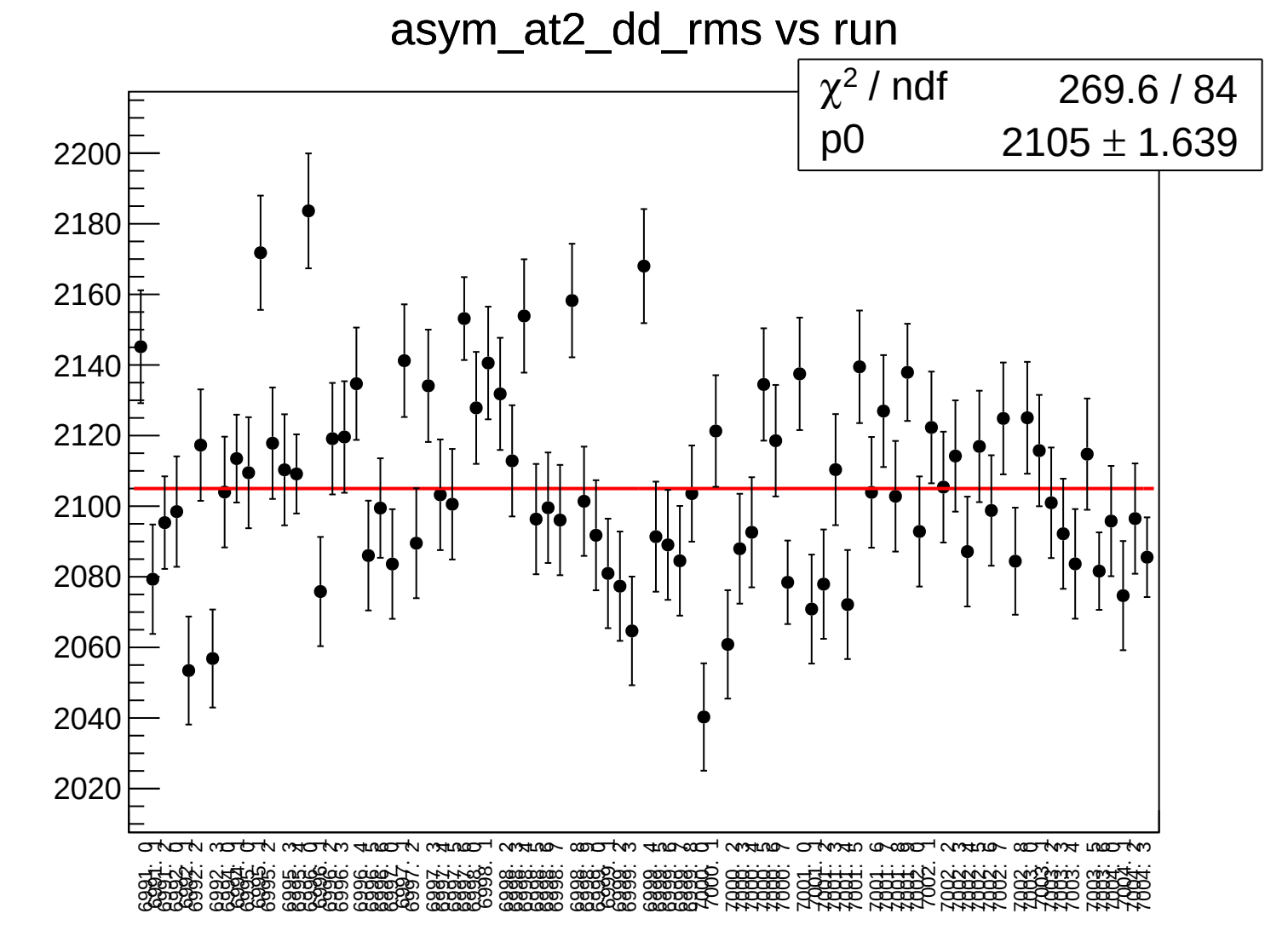

asym_at2_dd_correction_mean vs run
χ² / ndf 84.32 / 84
p0 1267 ± 1096
pull
Entries 85
Mean 46.22
Std Dev 36.24

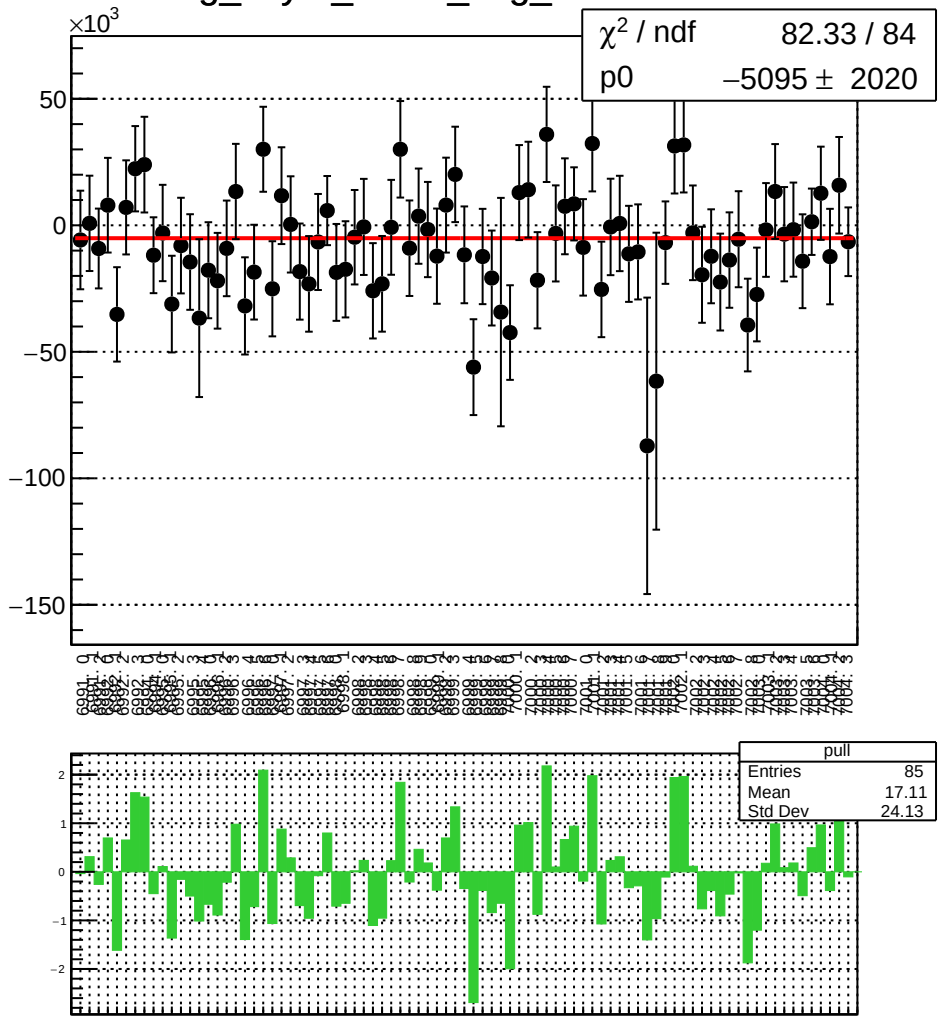

pull1D
Entries 85
Mean −0.009636
Std Dev 0.996

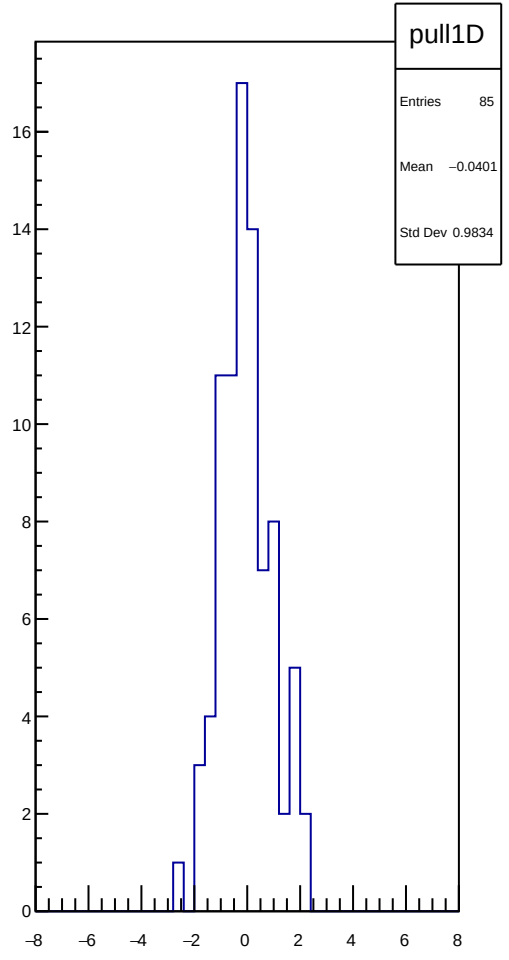

asym_at2_dd_correction_rms vs run
χ² / ndf 3655 / 84
p0 994.3 ± 0.775
1150
1100
1050
1000
950
900
850

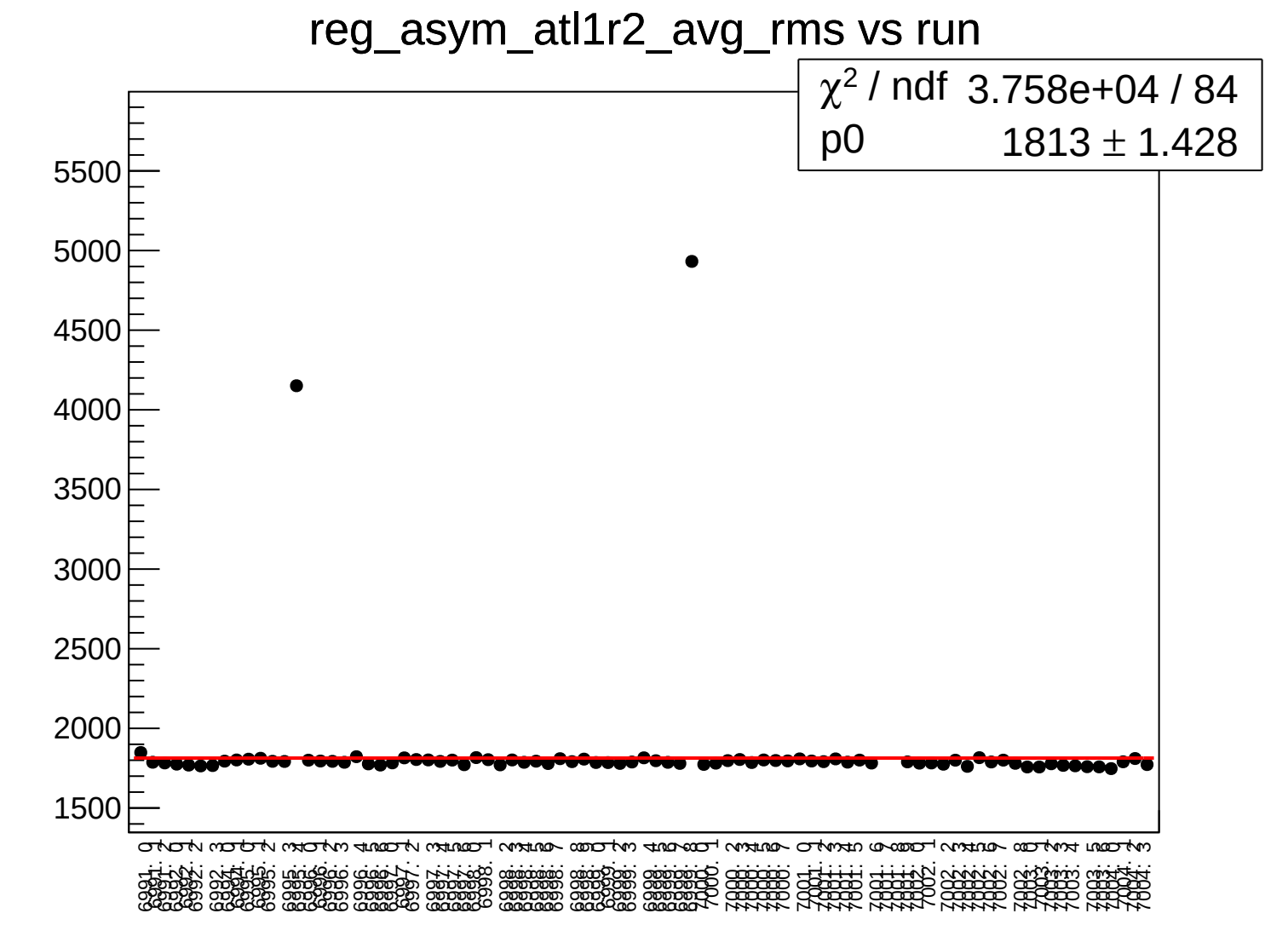

asym_at2_dd_mean vs run
χ² / ndf 92 / 84
p0 −675.1± 2318
pull
Entries 85
Mean 111
Std Dev 80.68

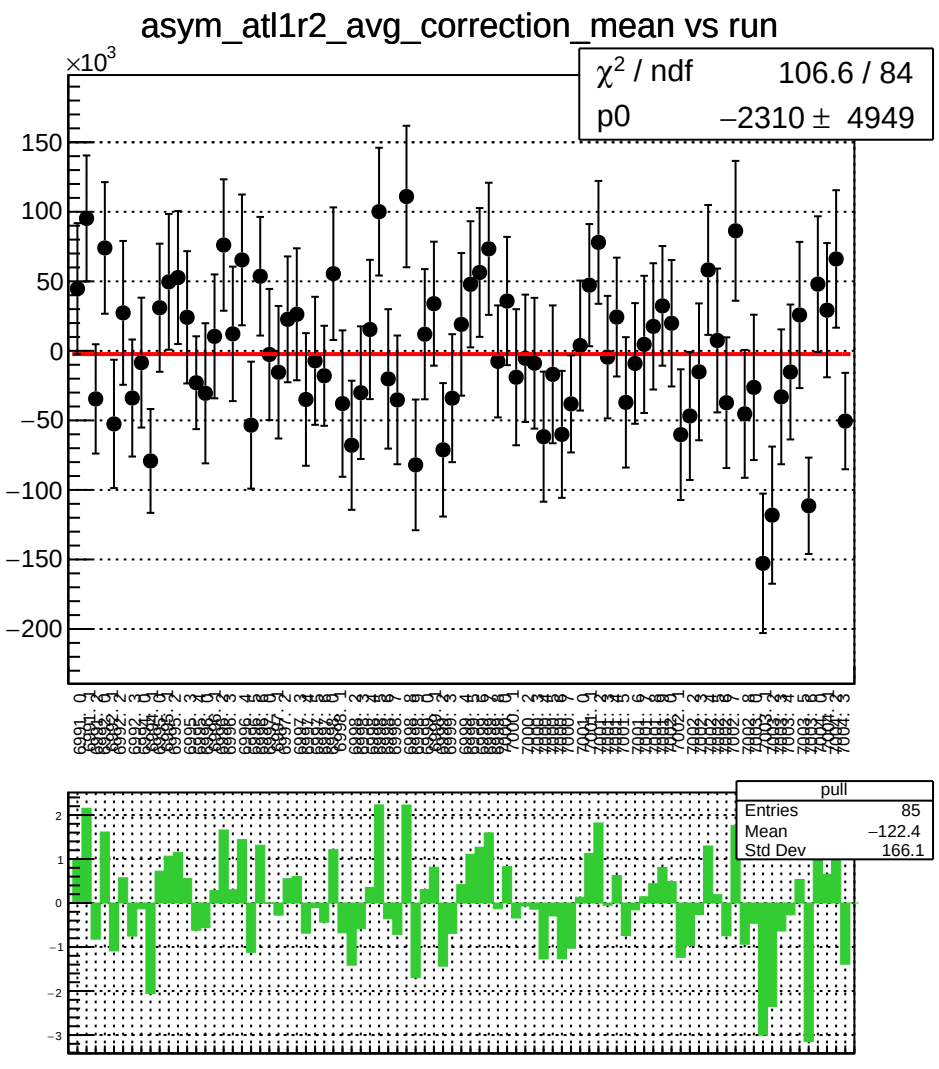

pull1D
Entries 85
Mean 0.01656
Std Dev 1.04

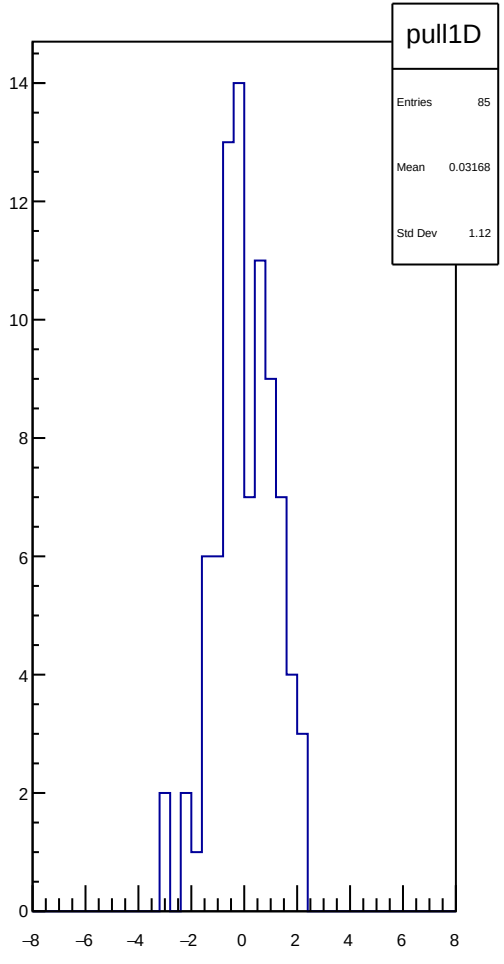

asym_at2_dd_rms vs run
χ^2 / ndf 269.6 / 84
p0 2105 ± 1.639
2200
2180
2160
2140
2120
2100
2080
2060
2040
2020

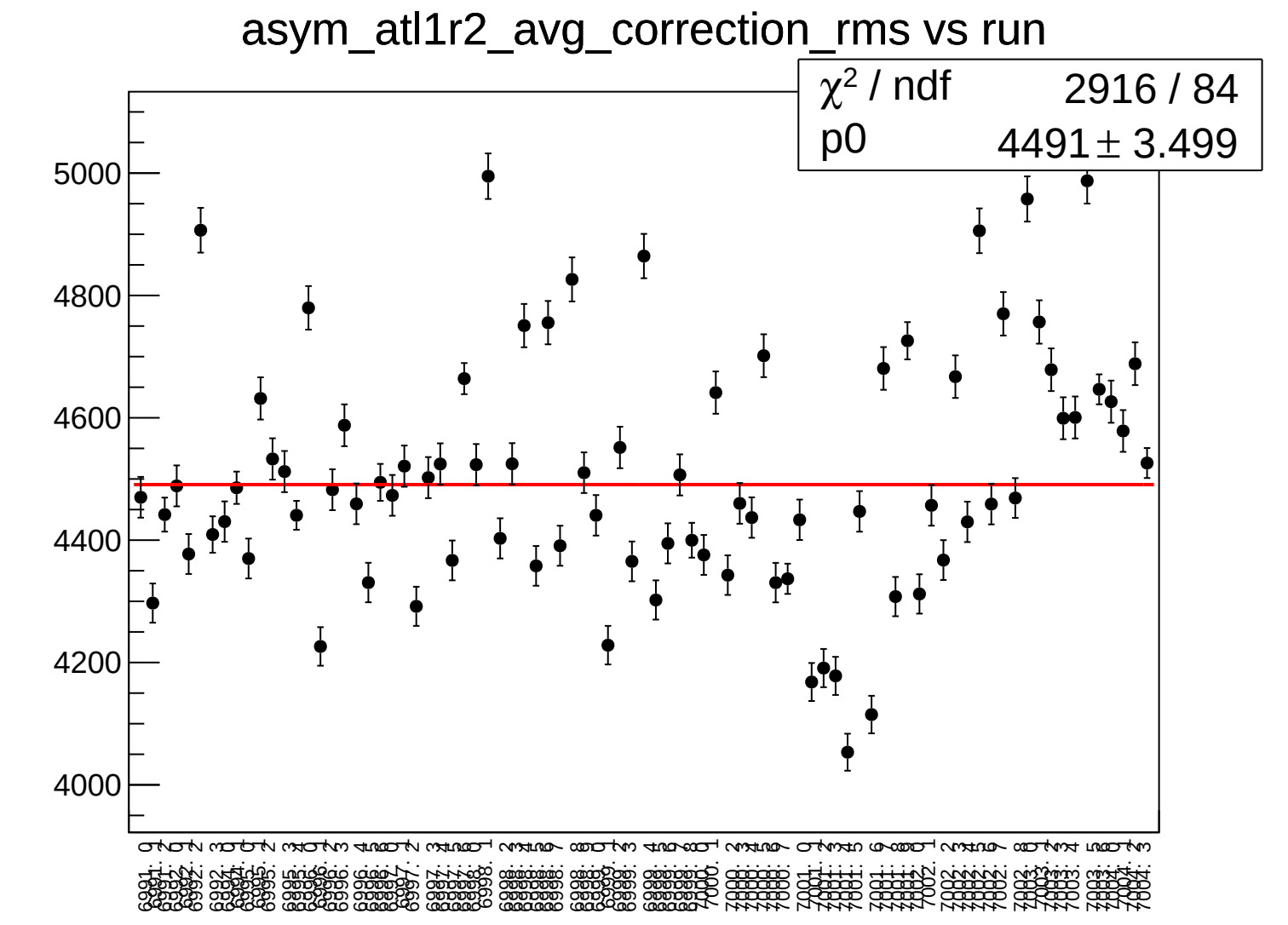

reg_asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 82.33 / 84
p0 −5095 ± 2020
50
0
−50
−100
−150
pull
Entries 85
Mean 17.11
Std Dev 24.13
2
1
0
−1
−2

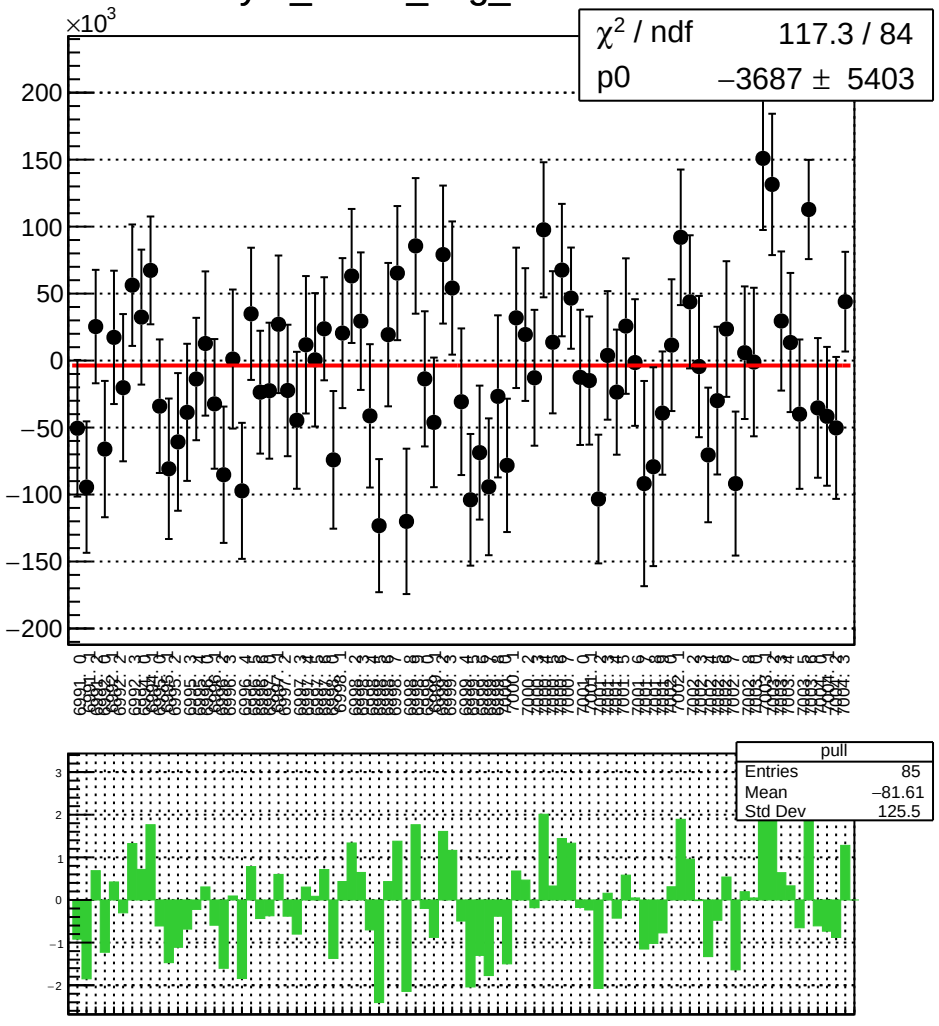

pull1D
Entries 85
Mean −0.0401
Std Dev 0.9834
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

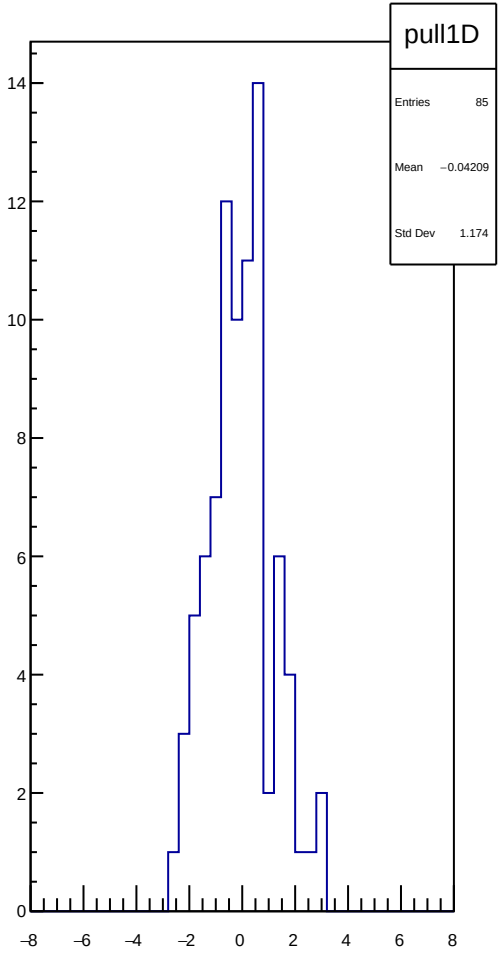

reg_asym_atl1r2_avg_rms vs run
χ^2 / ndf 3.758e+04 / 84
p0 1813 ± 1.428
5500
5000
4500
4000
3500
3000
2500
2000
1500

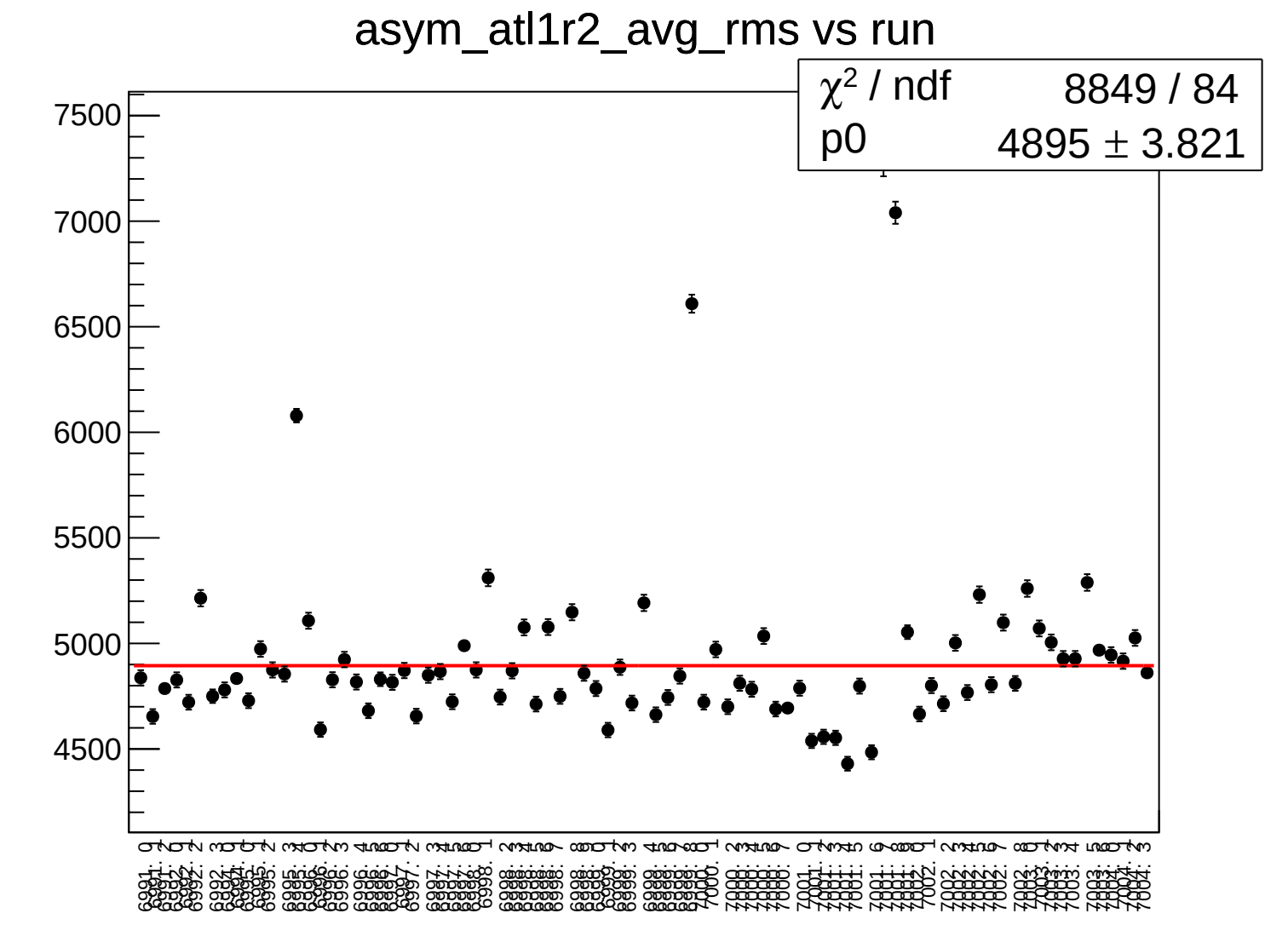

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 106.6 / 84
p0 −2310 ± 4949
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −122.4
Std Dev 166.1
2
1
0
−1
−2
−3

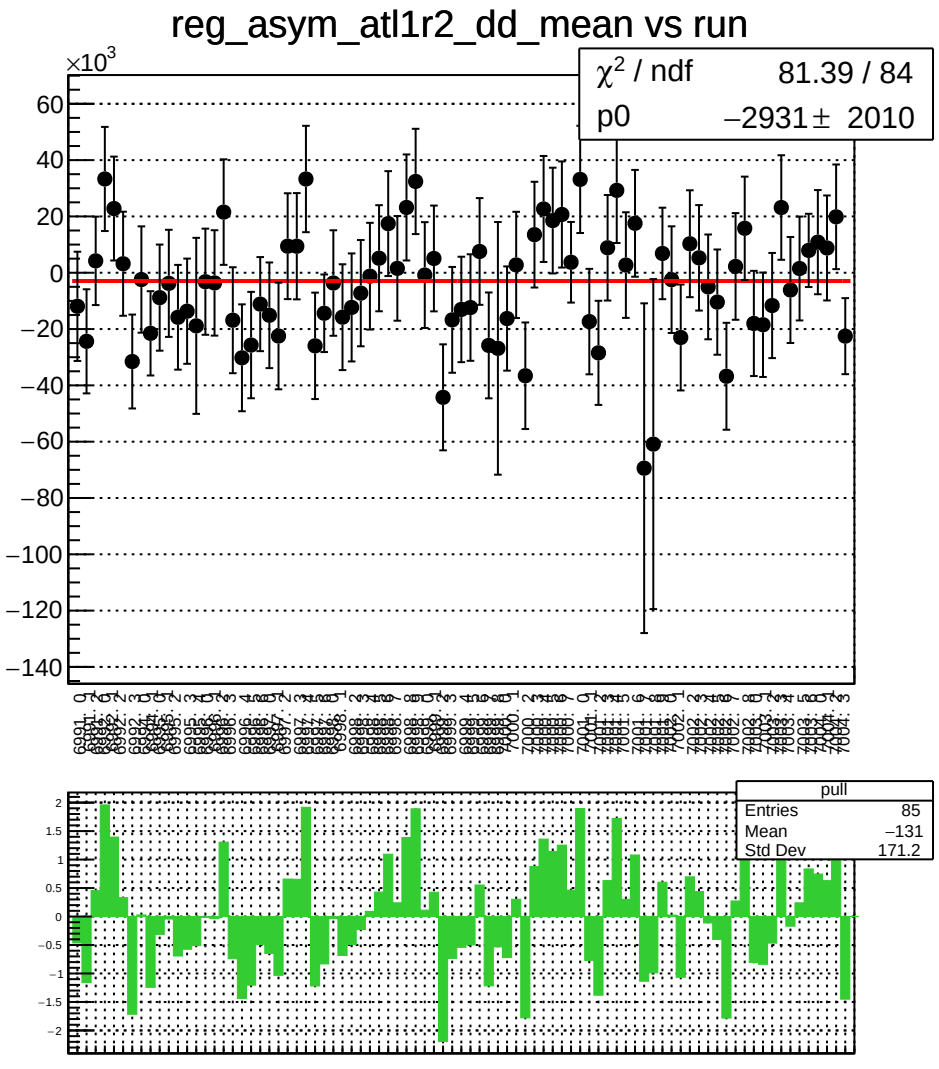

pull1D
Entries 85
Mean 0.03168
Std Dev 1.12
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

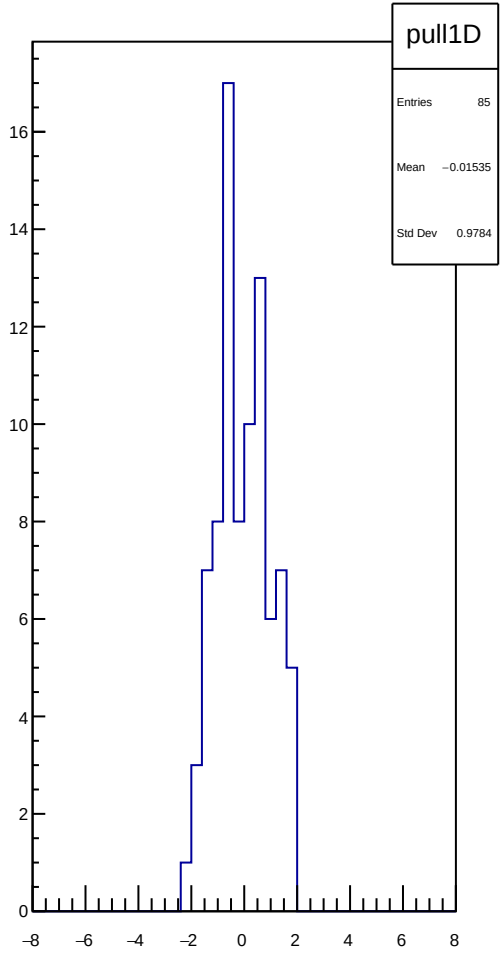

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 2916 / 84
p0 4491 ± 3.499
5000
4800
4600
4400
4200
4000

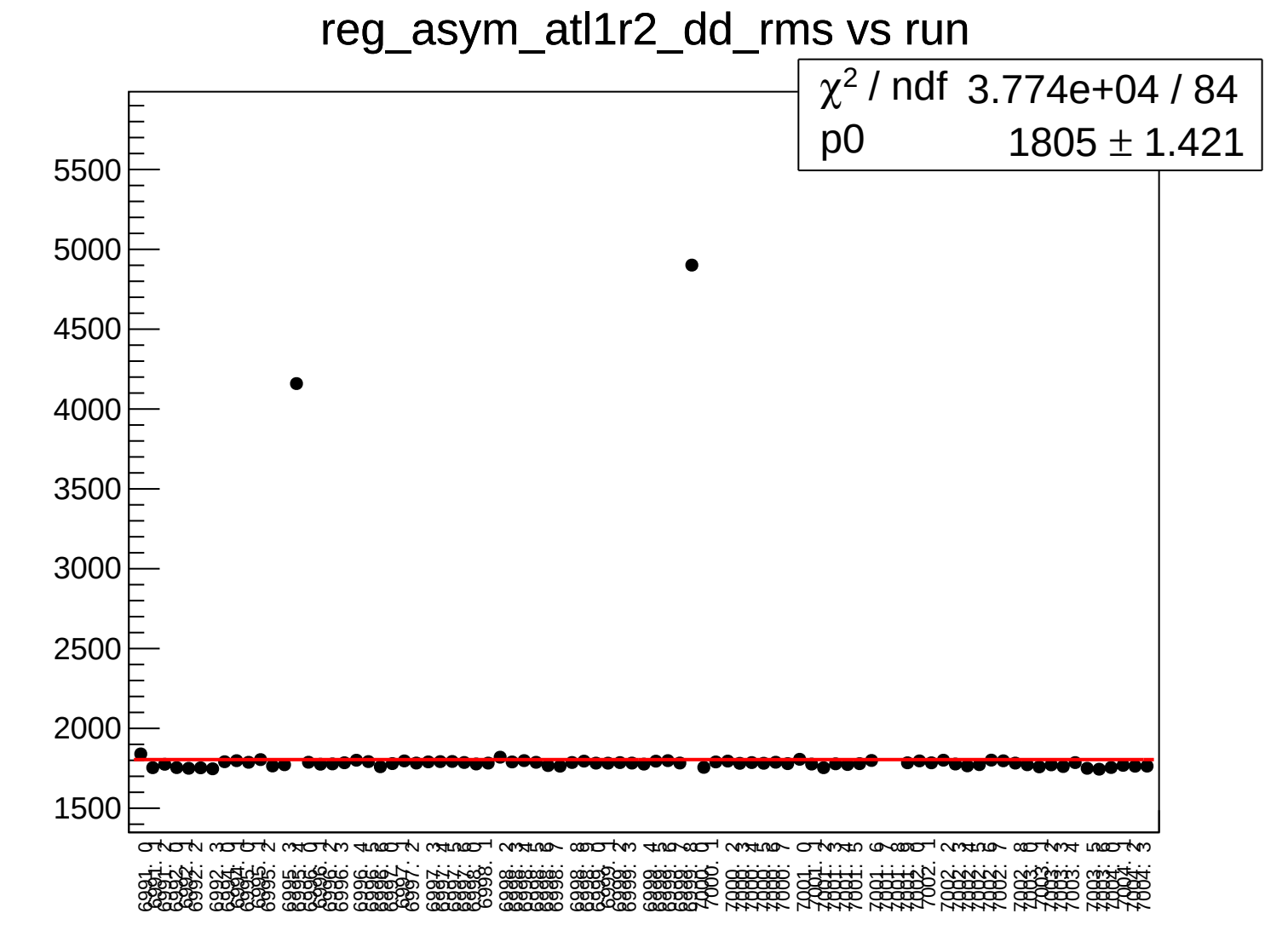

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 117.3 / 84
p0 −3687 ± 5403
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −81.61
Std Dev 125.5
3
2
1
0
−1
−2

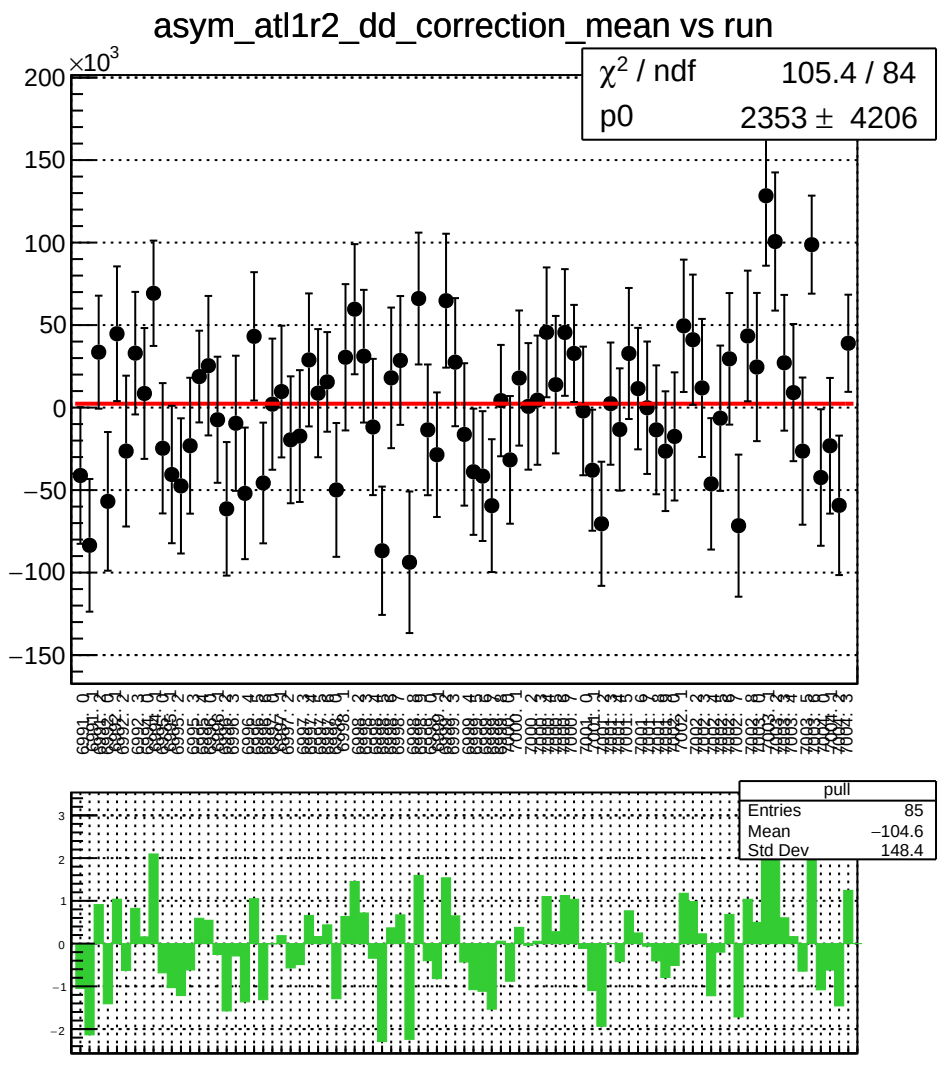

pull1D
Entries 85
Mean −0.04209
Std Dev 1.174
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

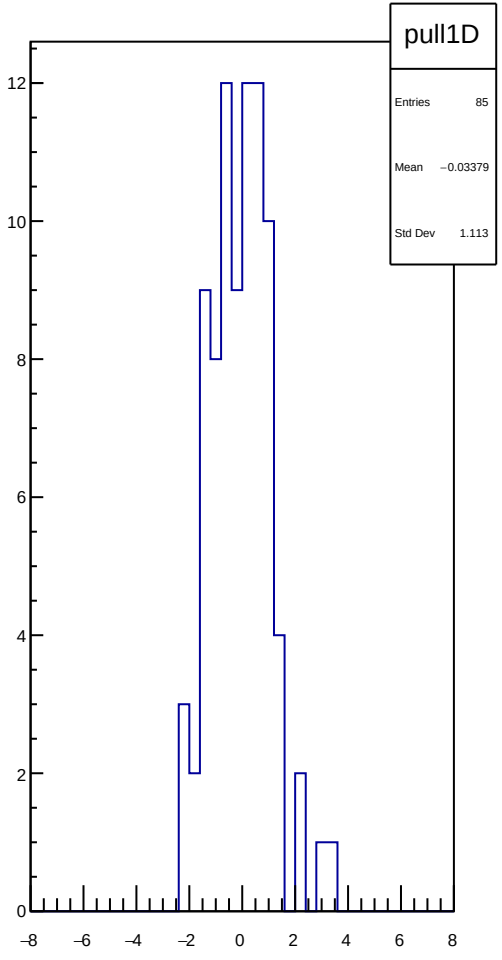

asym_atl1r2_avg_rms vs run
χ² / ndf 8849 / 84
p0 4895 ± 3.821
7500
7000
6500
6000
5500
5000
4500

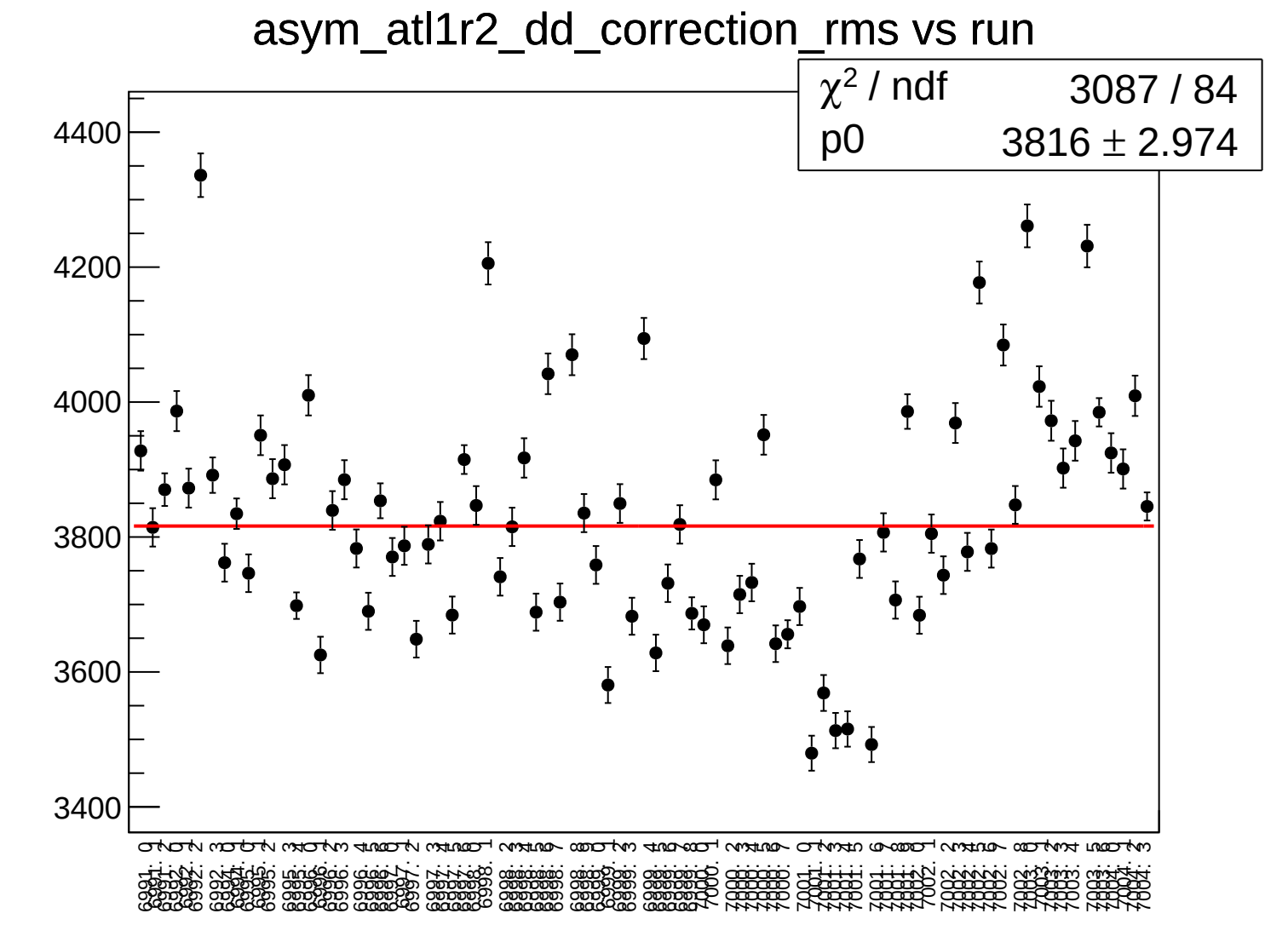

reg_asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 81.39 / 84
p0 −2931 ± 2010
pull
Entries 85
Mean −131
Std Dev 171.2

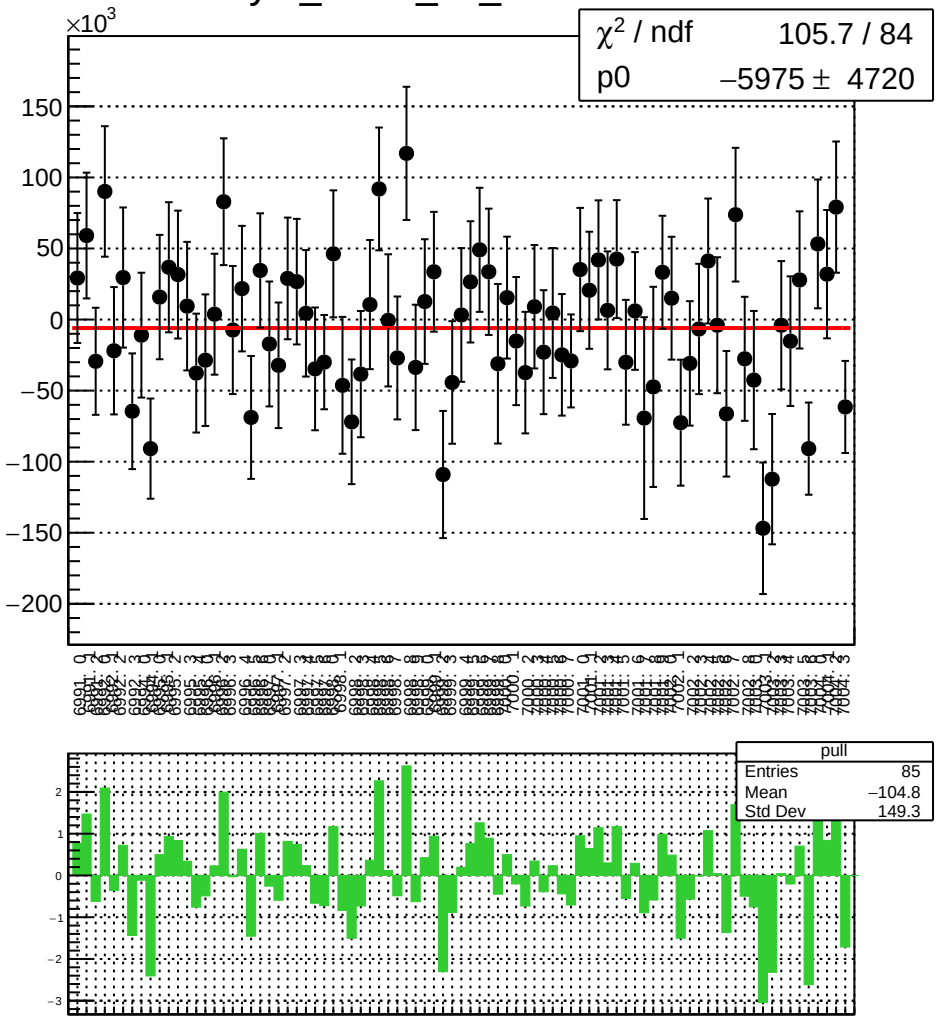

pull1D
Entries 85
Mean −0.01535
Std Dev 0.9784

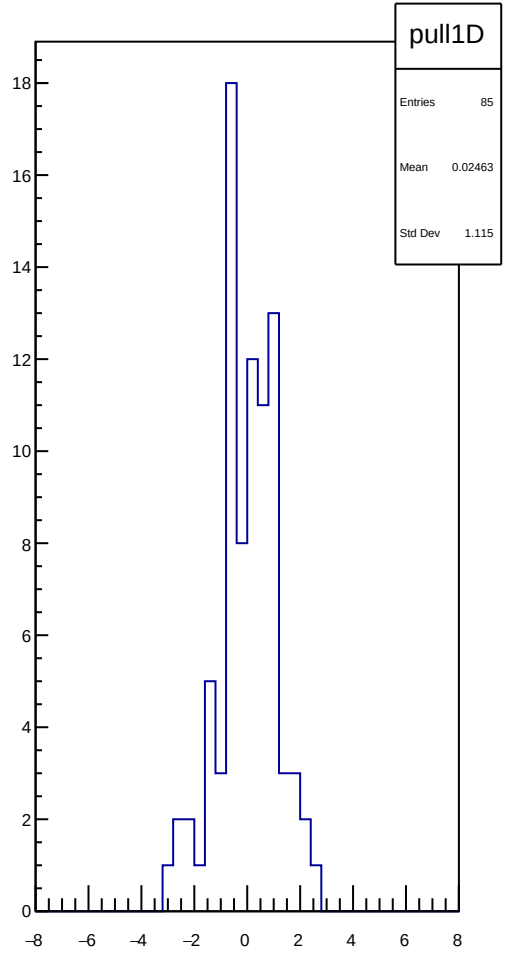

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 3.774e+04 / 84
p0 1805 ± 1.421
5500
5000
4500
4000
3500
3000
2500
2000
1500

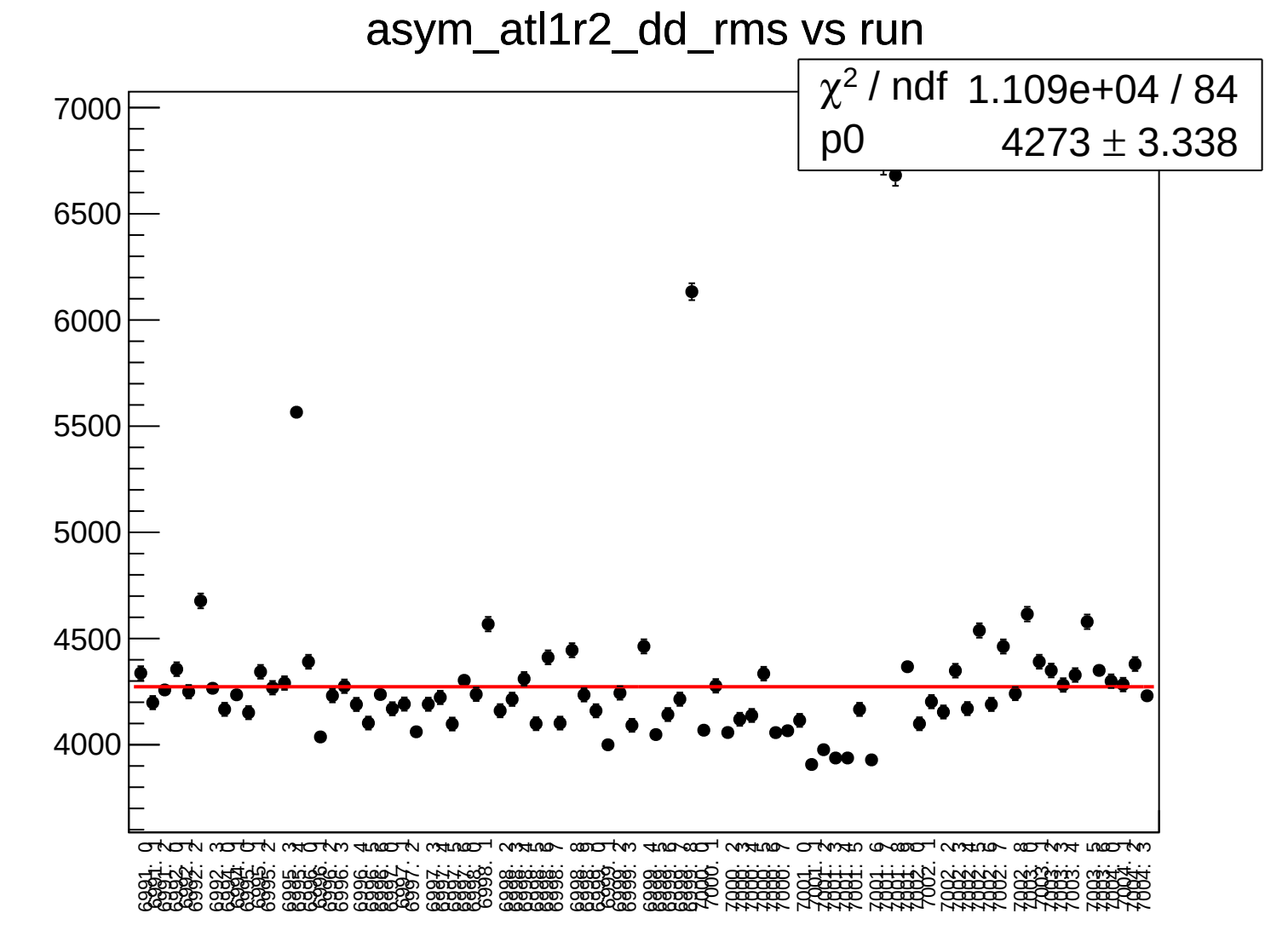

asym_atl1r2_dd_correction_mean vs run
χ² / ndf 105.4 / 84
p0 2353 ± 4206
×10³
pull
Entries 85
Mean −104.6
Std Dev 148.4

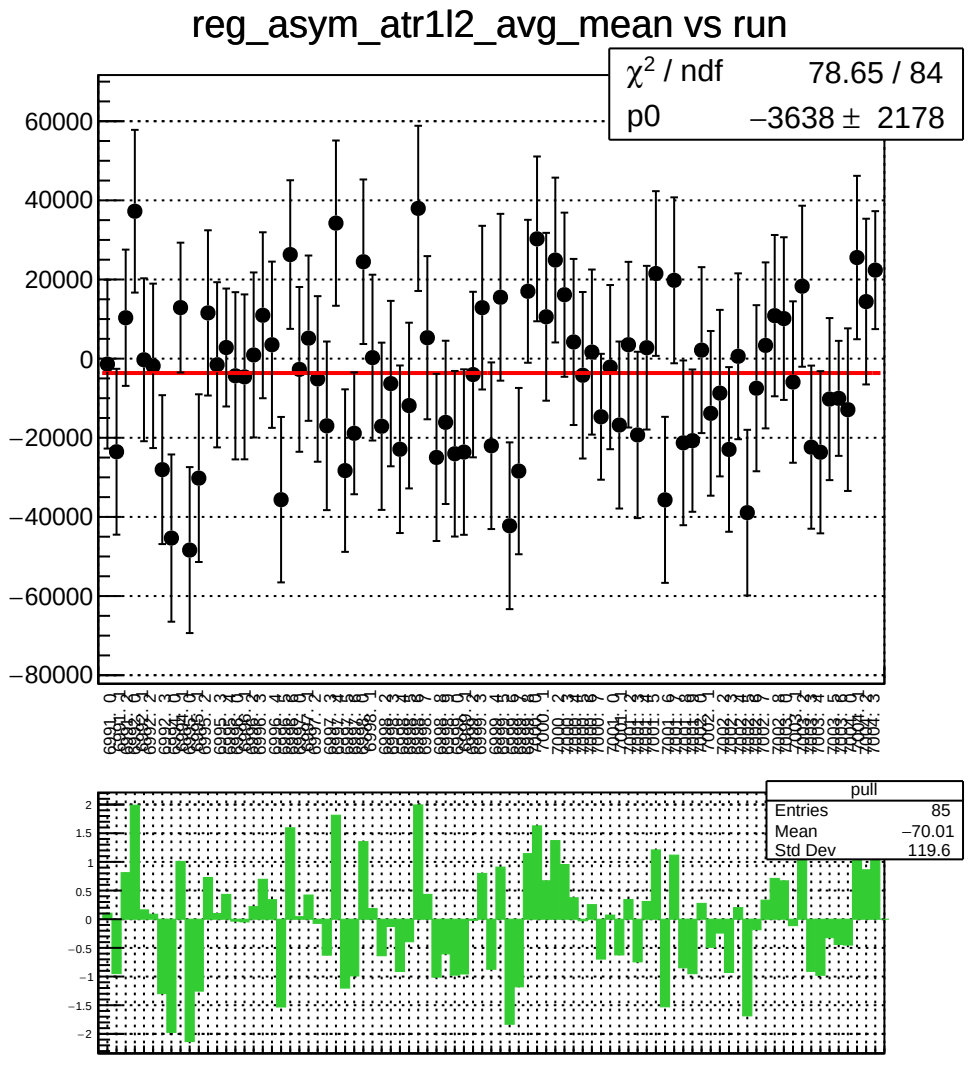

pull1D
Entries 85
Mean −0.03379
Std Dev 1.113

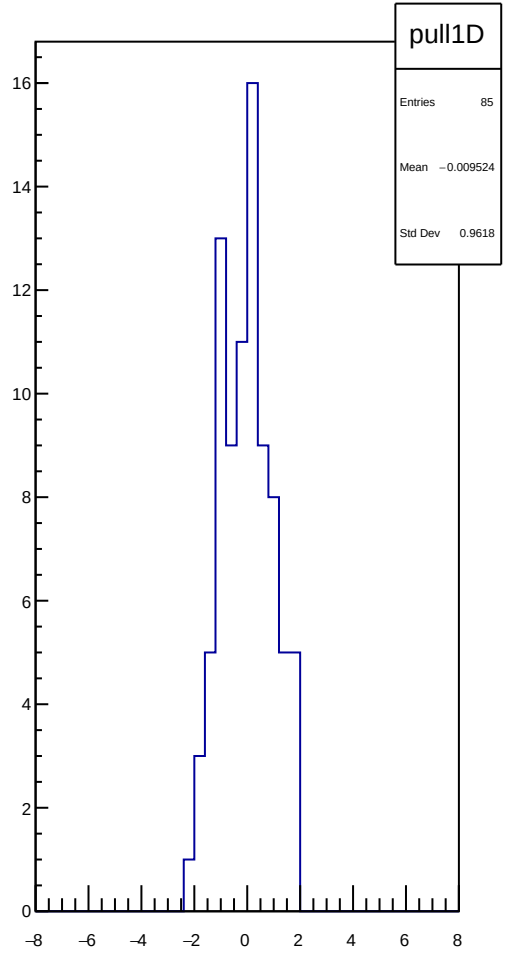

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 3087 / 84
p0 3816 ± 2.974
4400
4200
4000
3800
3600
3400

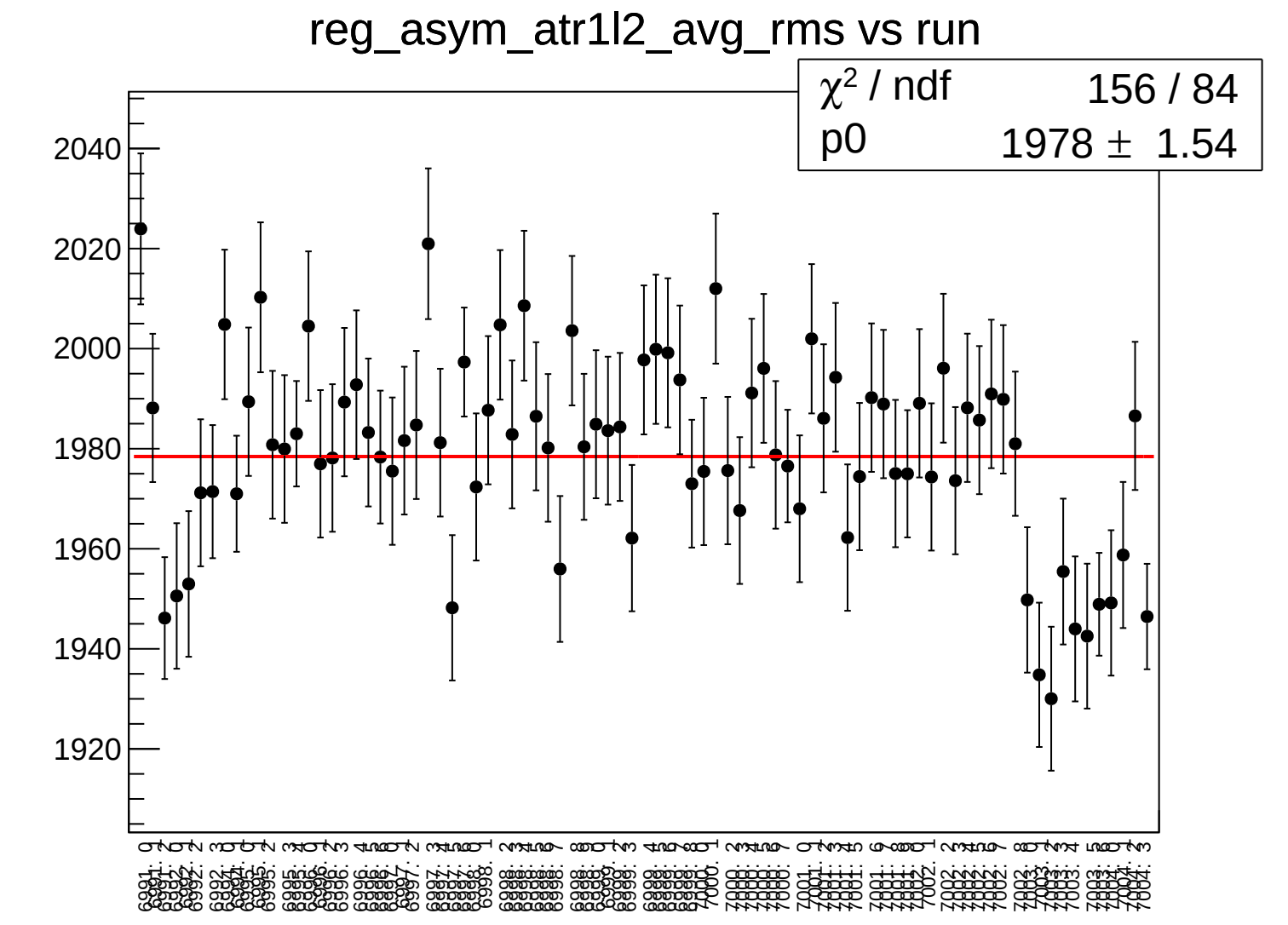

asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 105.7 / 84
p0 −5975 ± 4720
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −104.8
Std Dev 149.3
2
1
0
−1
−2
−3

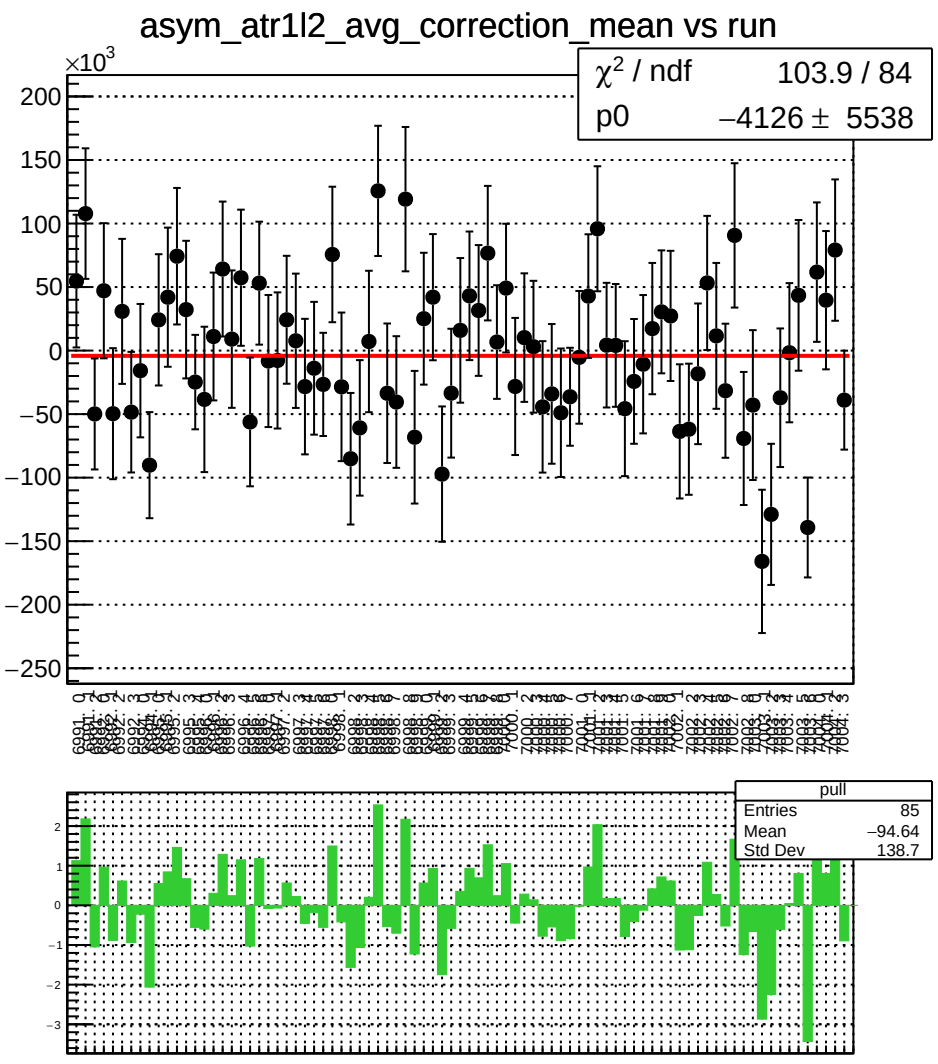

pull1D
Entries 85
Mean 0.02463
Std Dev 1.115
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

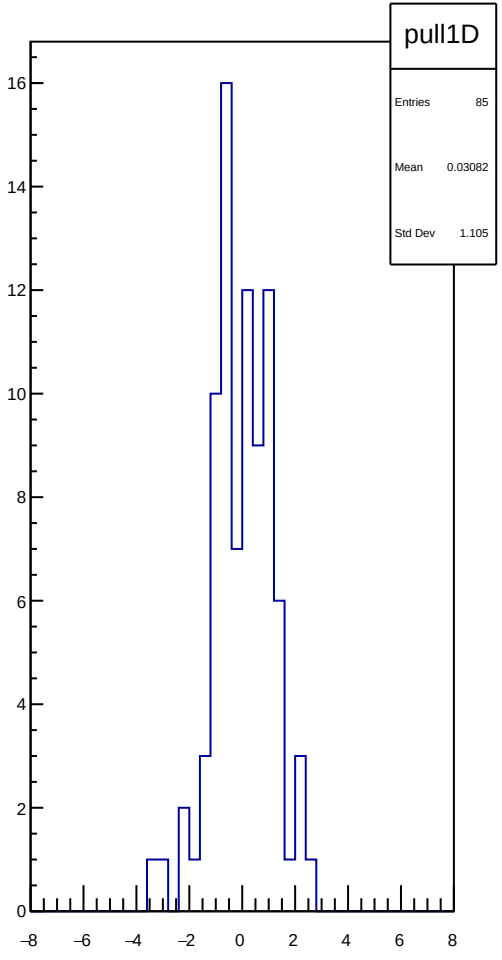

asym_atl1r2_dd_rms vs run
χ^2 / ndf 1.109e+04 / 84
p0 4273 ± 3.338
7000
6500
6000
5500
5000
4500
4000

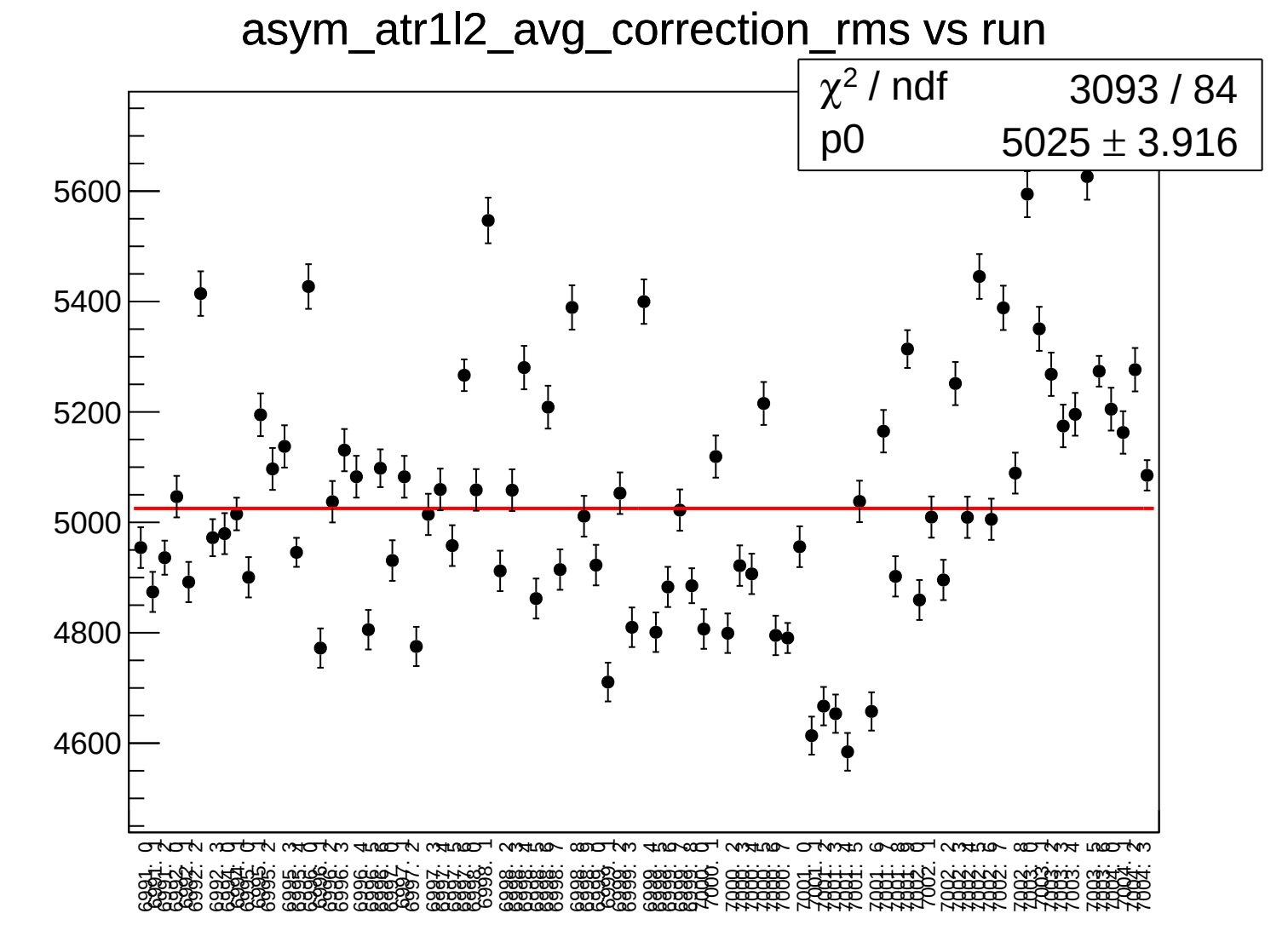

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 78.65 / 84
p0 −3638 ± 2178
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean −70.01
Std Dev 119.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

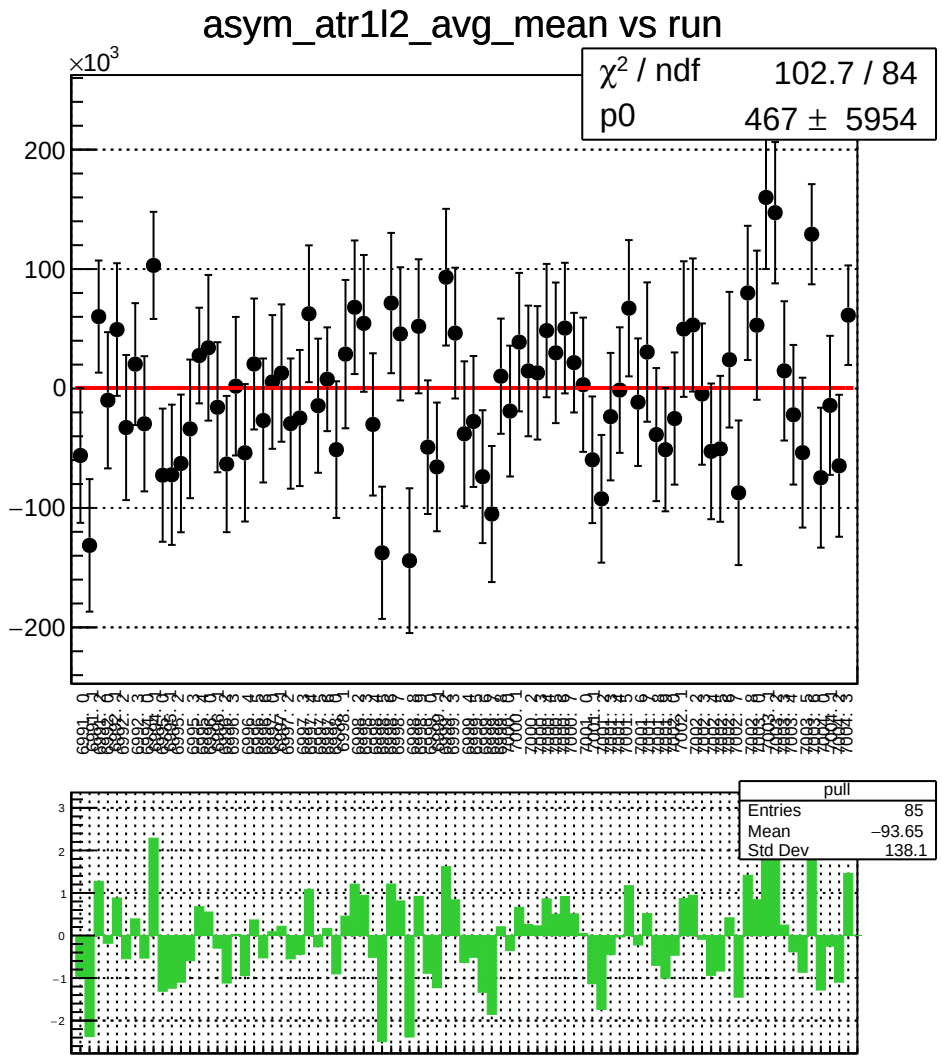

pull1D
Entries 85
Mean −0.009524
Std Dev 0.9618
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

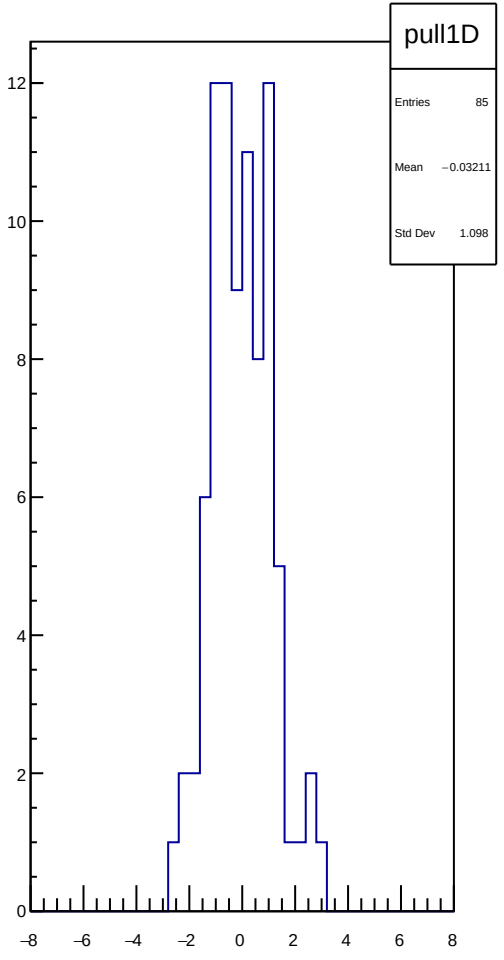

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 156 / 84
p0 1978 ± 1.54
2040
2020
2000
1980
1960
1940
1920

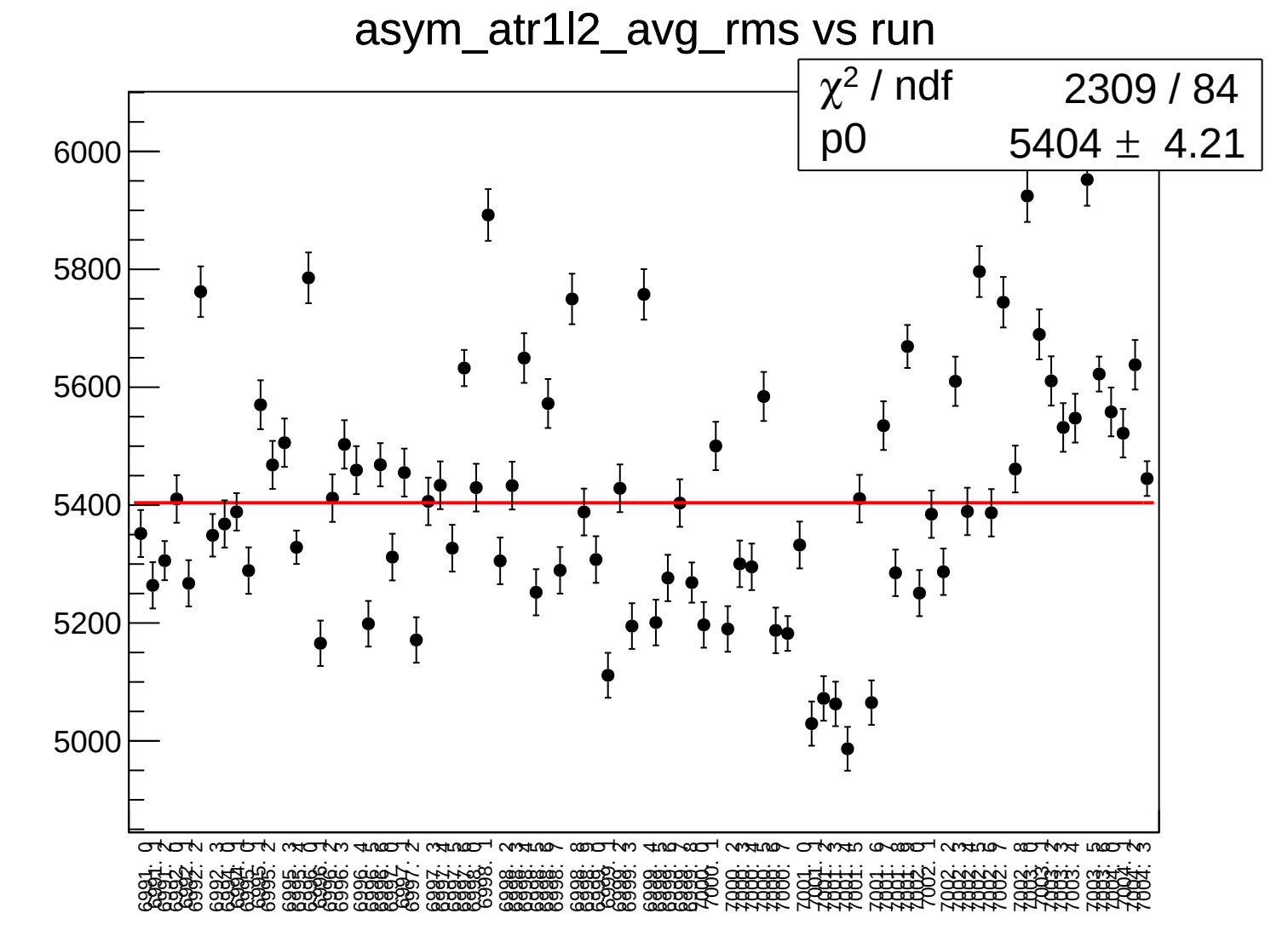

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 103.9 / 84
p0 −4126 ± 5538
pull
Entries 85
Mean −94.64
Std Dev 138.7

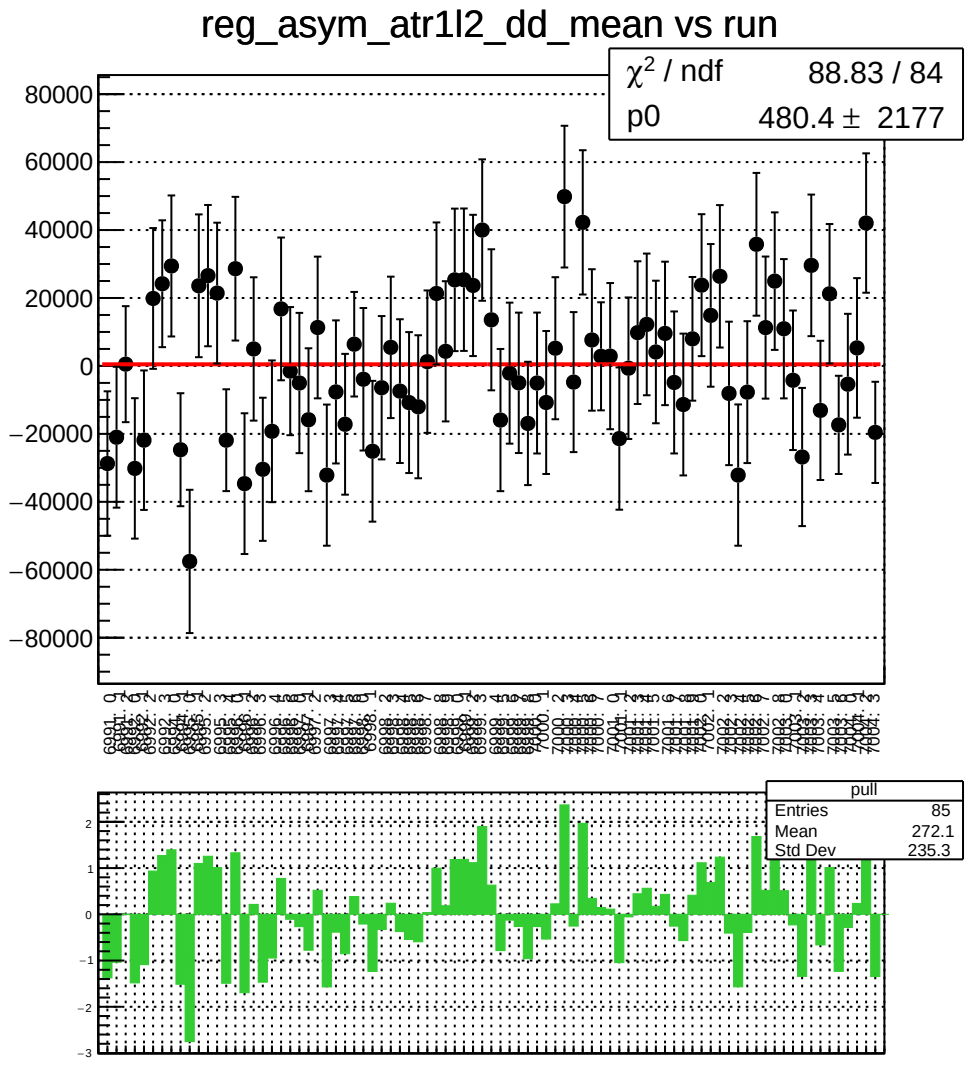

pull1D
Entries 85
Mean 0.03082
Std Dev 1.105

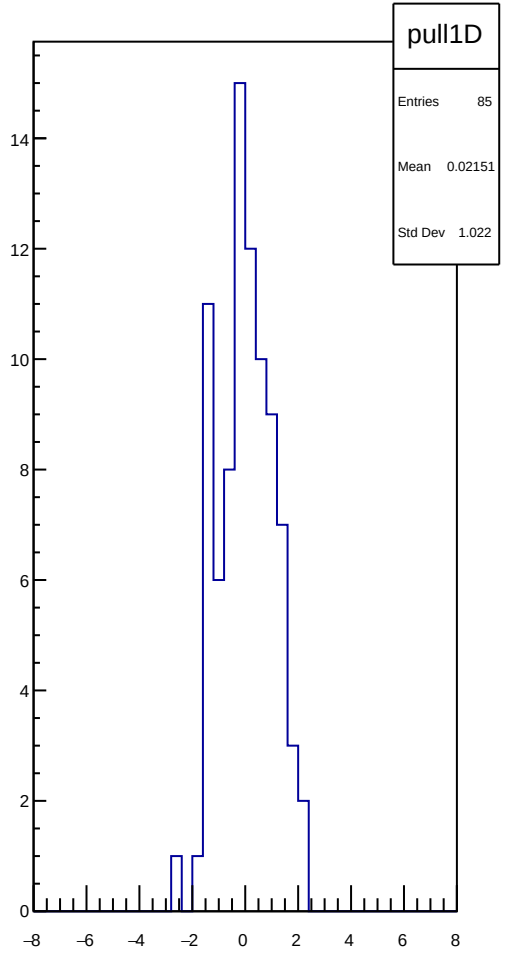

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 3093 / 84
p0 5025 ± 3.916
5600
5400
5200
5000
4800
4600

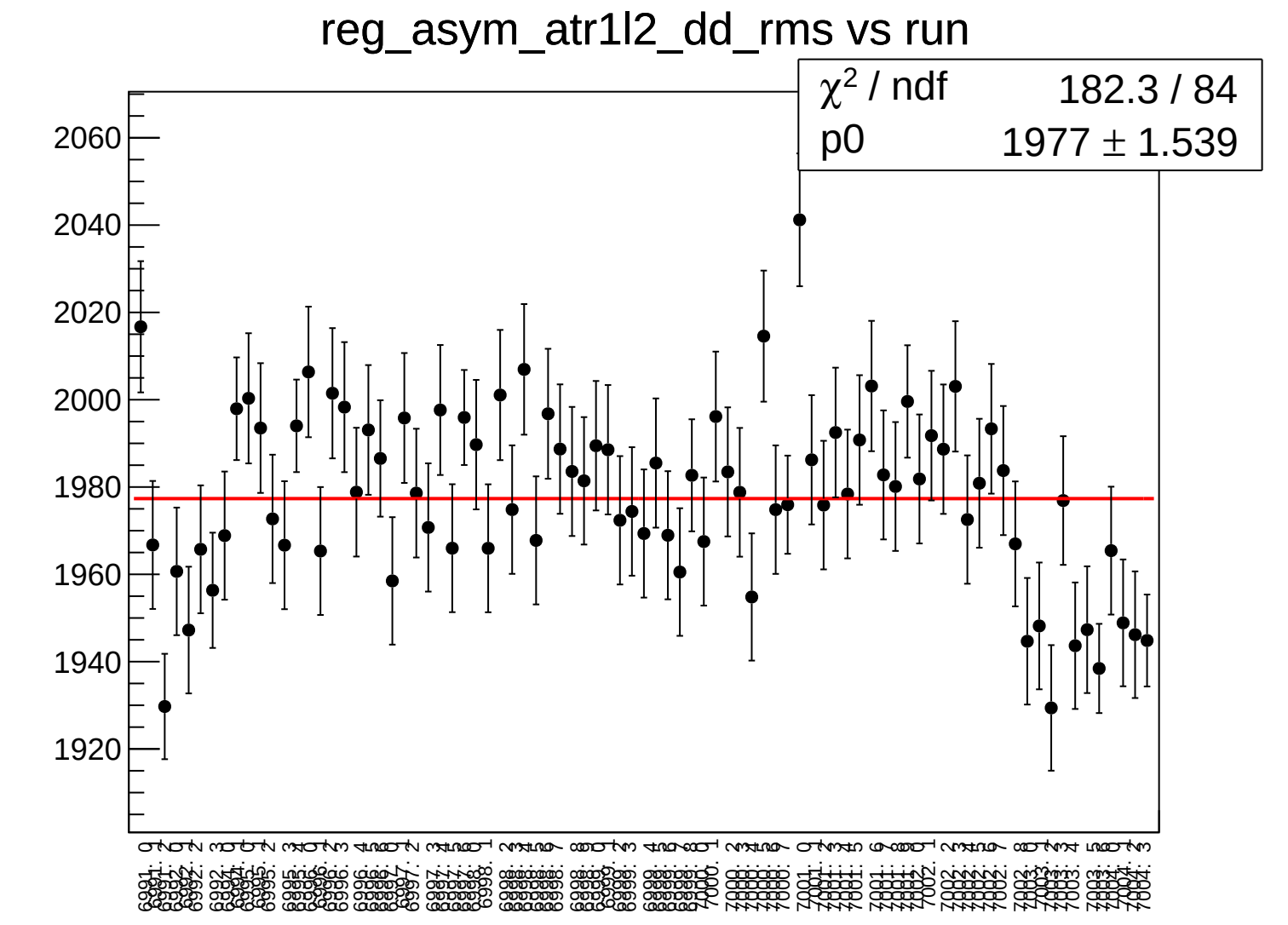

asym_atr1l2_avg_mean vs run
χ² / ndf 102.7 / 84
p0 467 ± 5954
×10³
200
100
0
−100
−200
pull
Entries 85
Mean −93.65
Std Dev 138.1
3
2
1
0
−1
−2

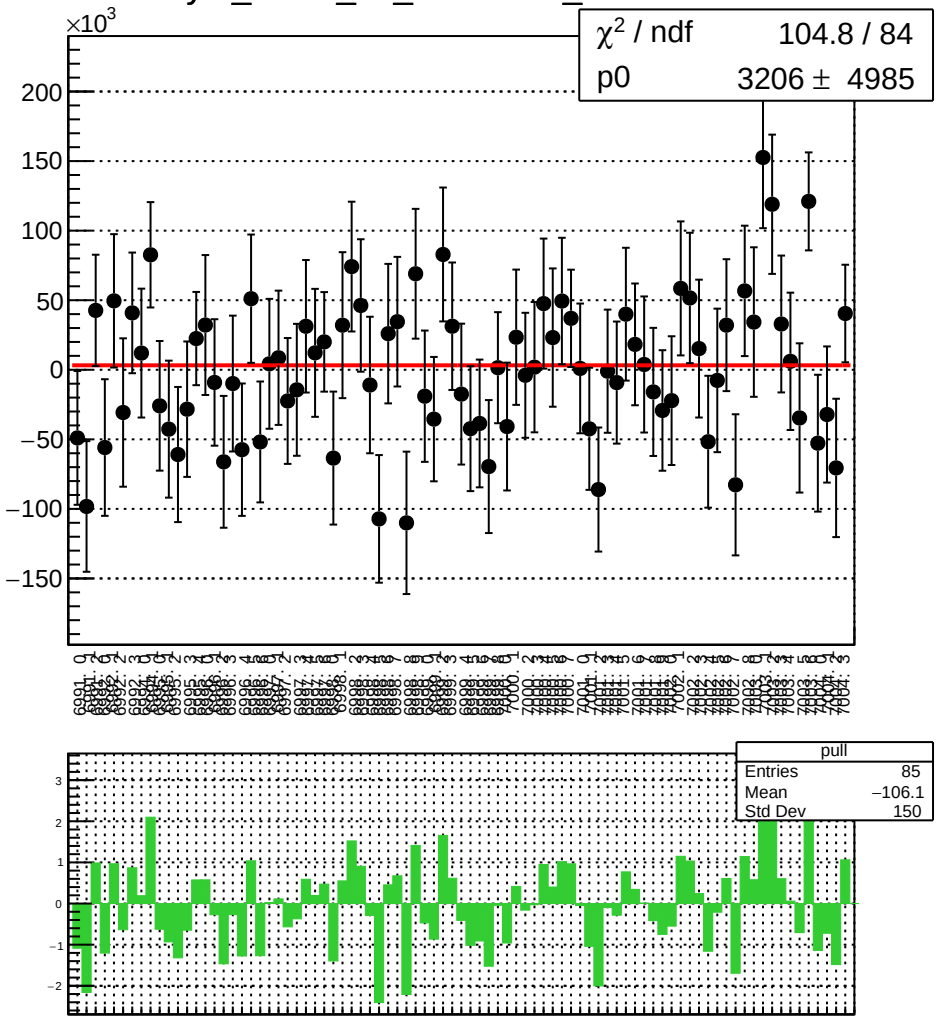

pull1D
Entries 85
Mean −0.03211
Std Dev 1.098
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

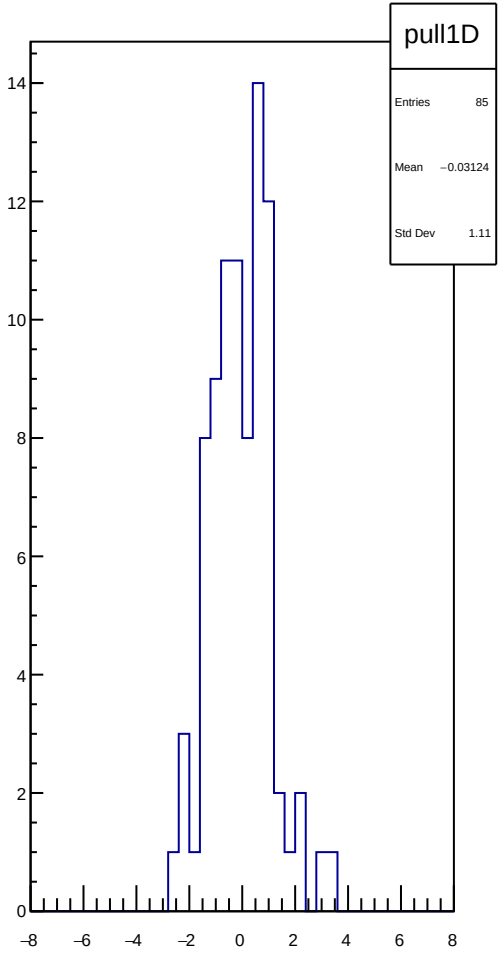

asym_atr1l2_avg_rms vs run
χ² / ndf 2309 / 84
p0 5404 ± 4.21
6000
5800
5600
5400
5200
5000

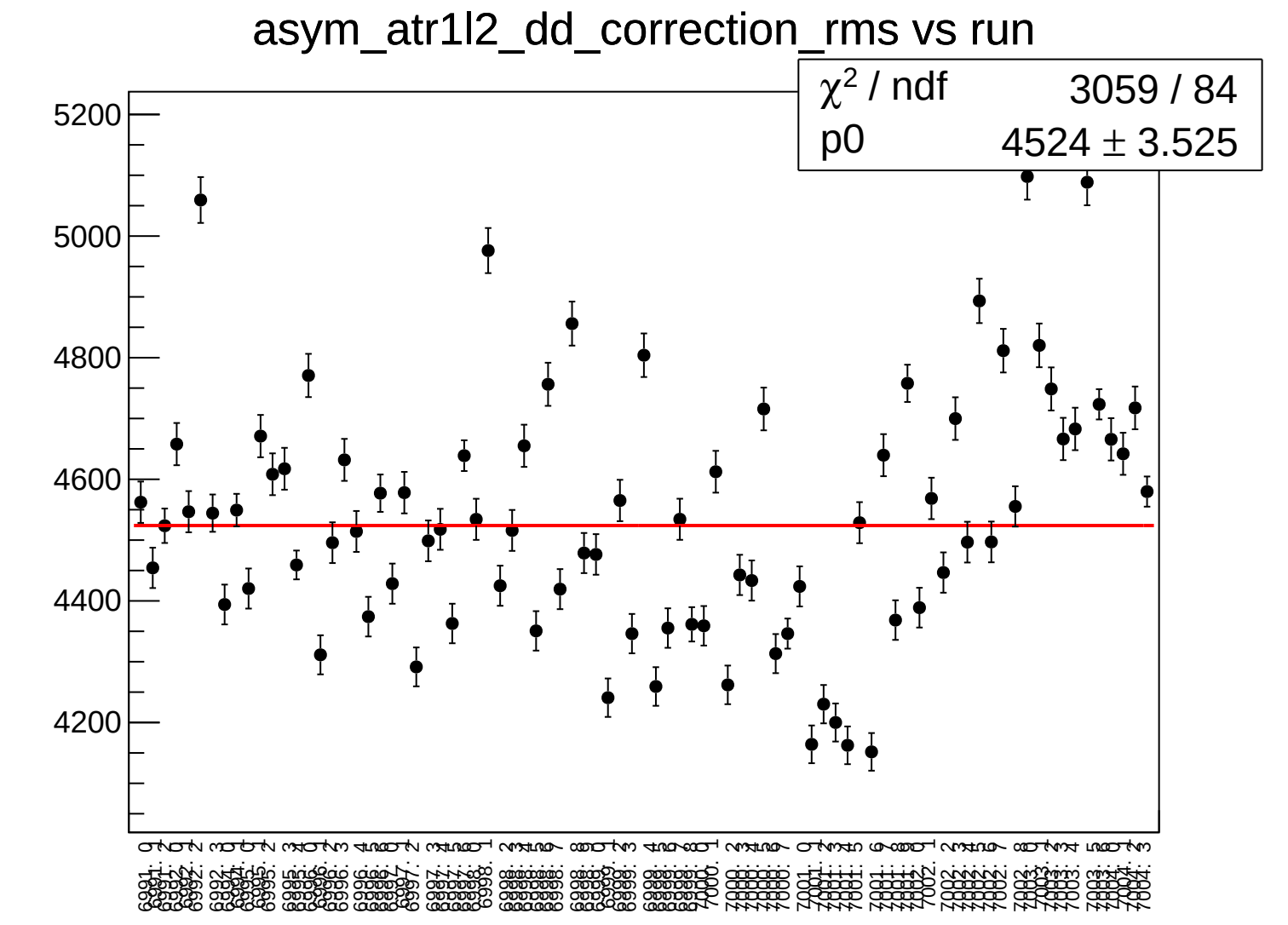

reg_asym_atr1l2_dd_mean vs run
χ² / ndf 88.83 / 84
p0 480.4 ± 2177
pull
Entries 85
Mean 272.1
Std Dev 235.3

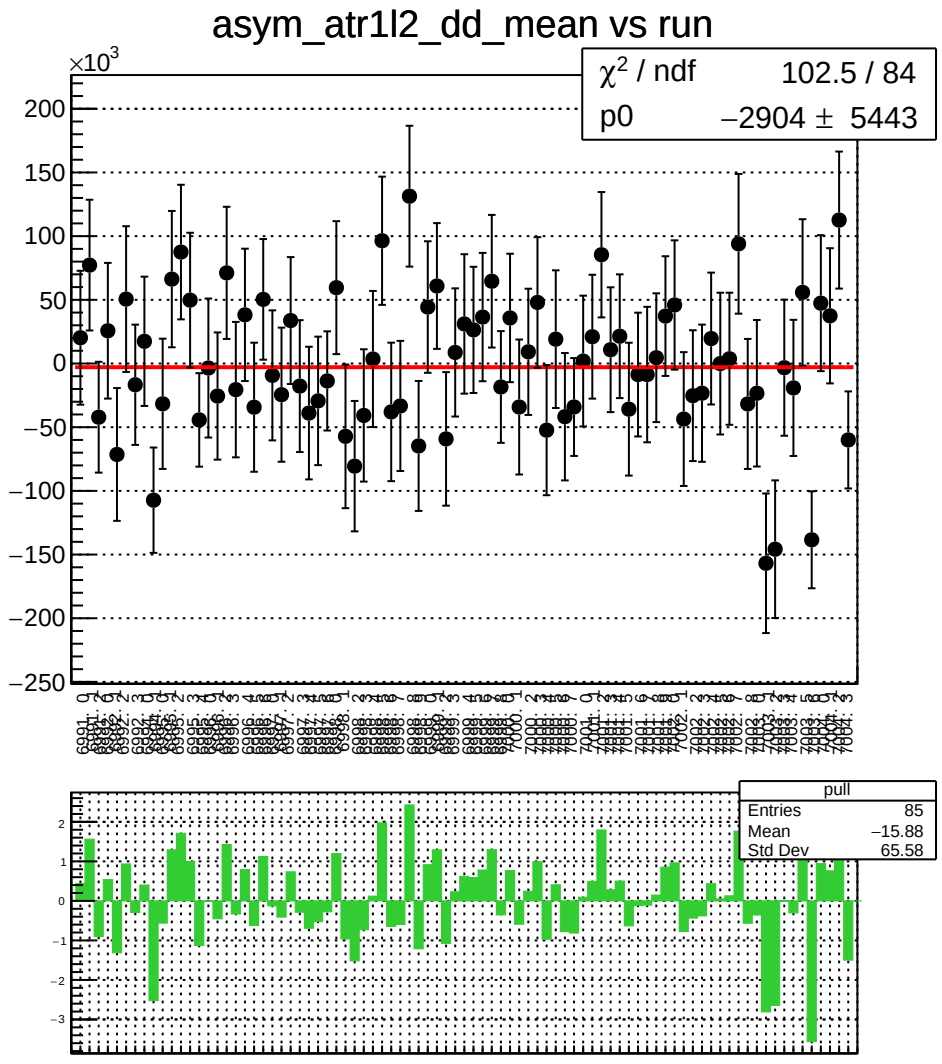

pull1D
Entries 85
Mean 0.02151
Std Dev 1.022

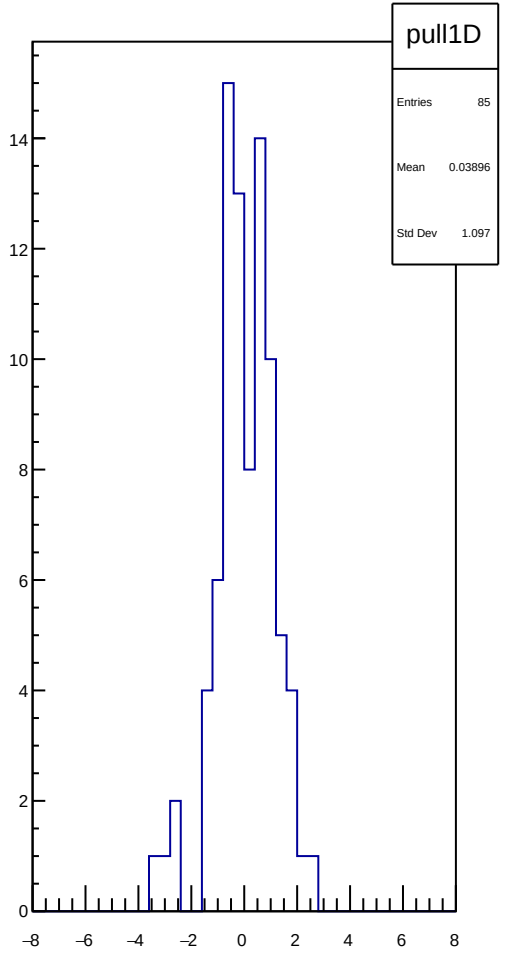

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 182.3 / 84
p0 1977 ± 1.539
2060
2040
2020
2000
1980
1960
1940
1920

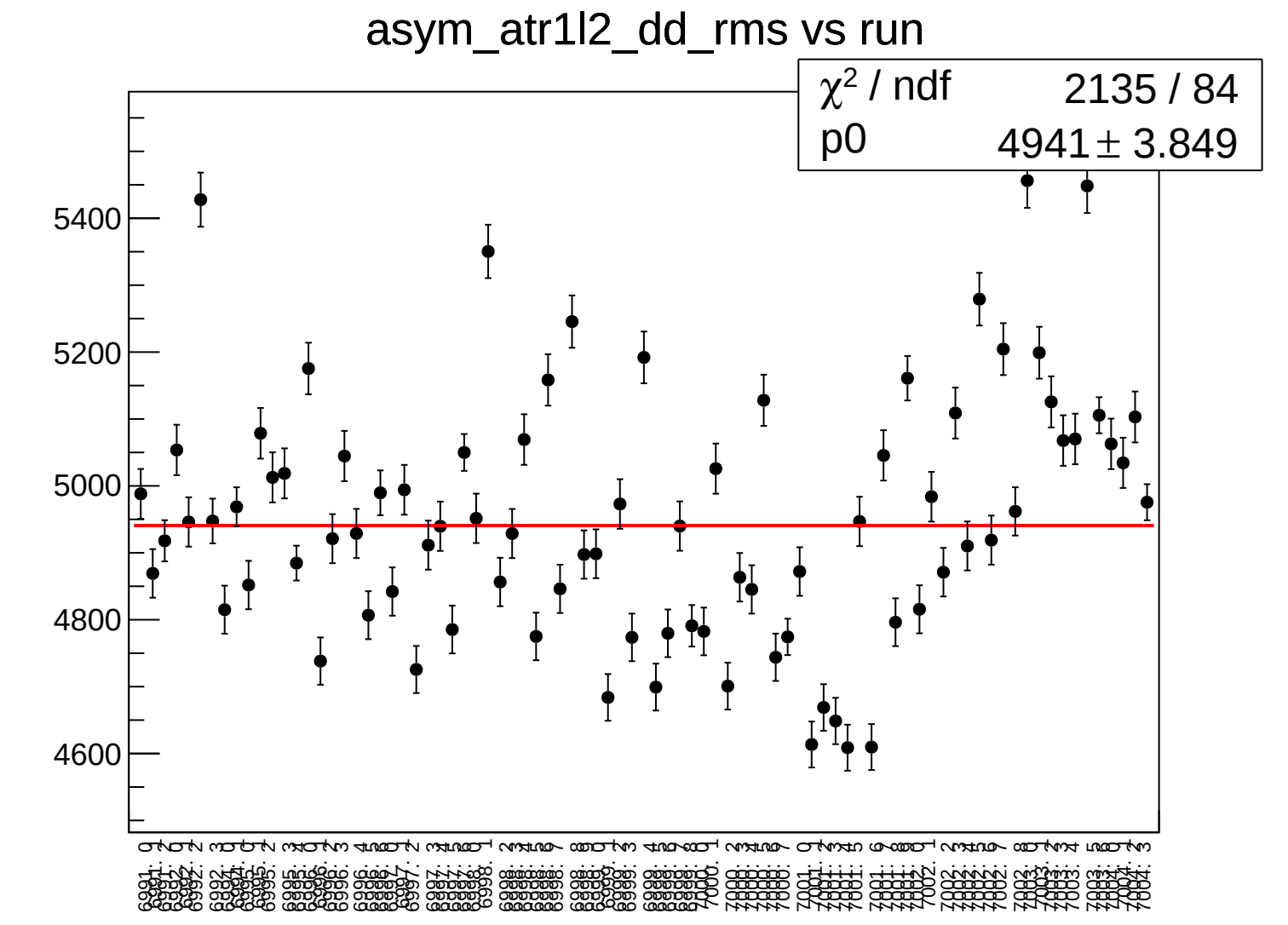

asym_atr1l2_dd_correction_mean vs run
χ² / ndf 104.8 / 84
p0 3206 ± 4985
pull
Entries 85
Mean −106.1
Std Dev 150

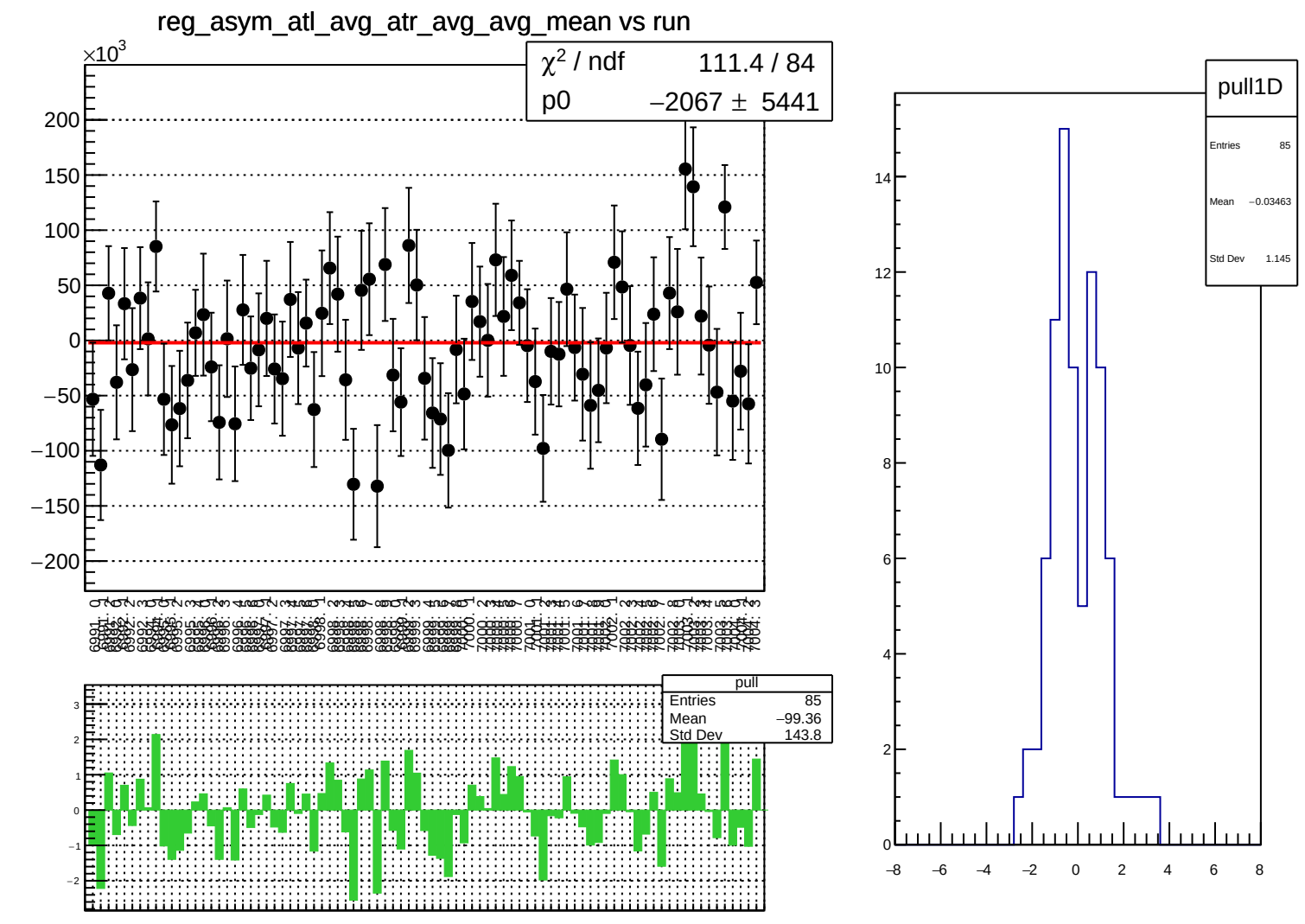

pull1D
Entries 85
Mean −0.03124
Std Dev 1.11

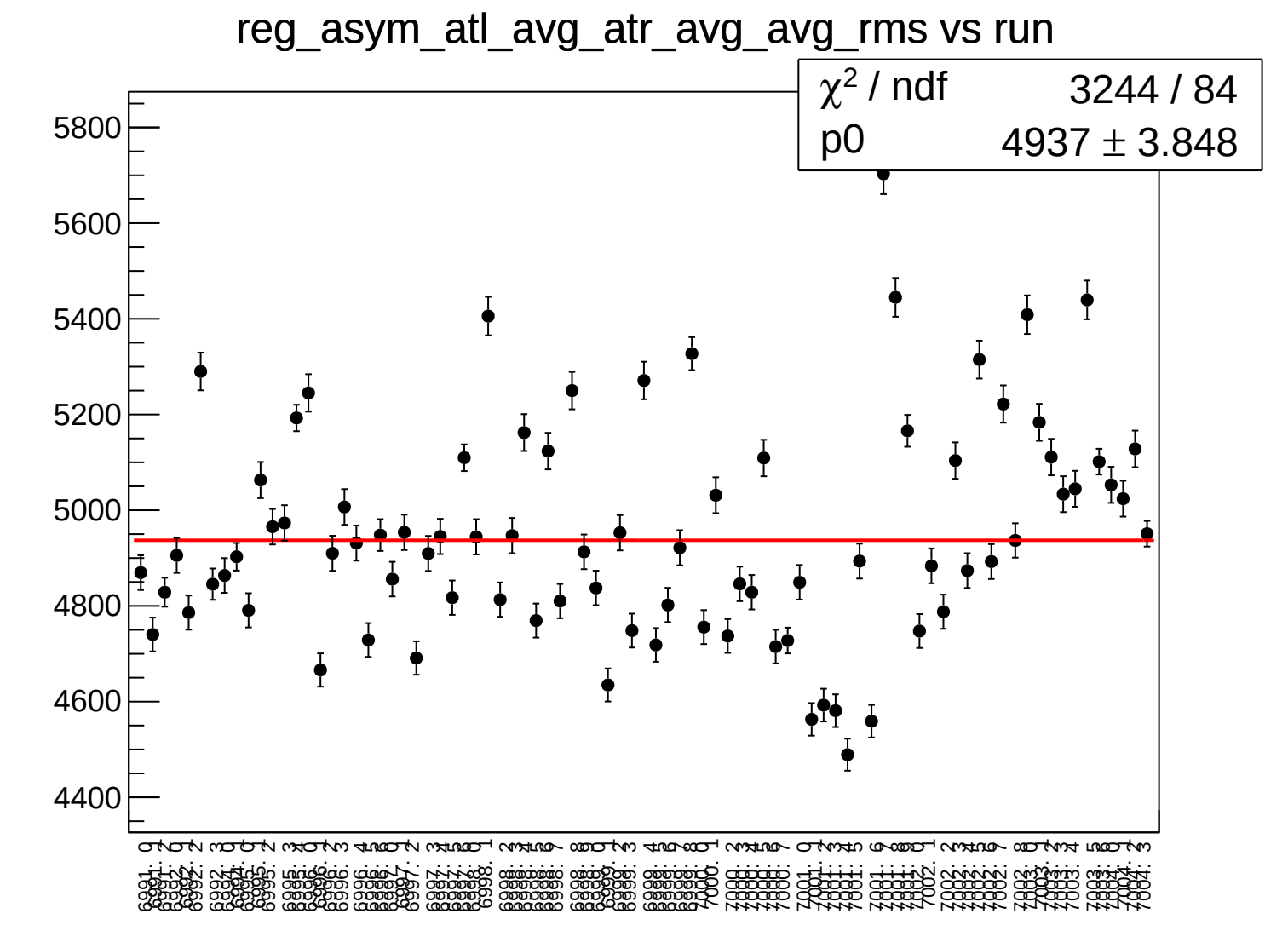

asym_atr1l2_dd_correction_rms vs run
χ^2 / ndf 3059 / 84
p0 4524 ± 3.525
5200
5000
4800
4600
4400
4200

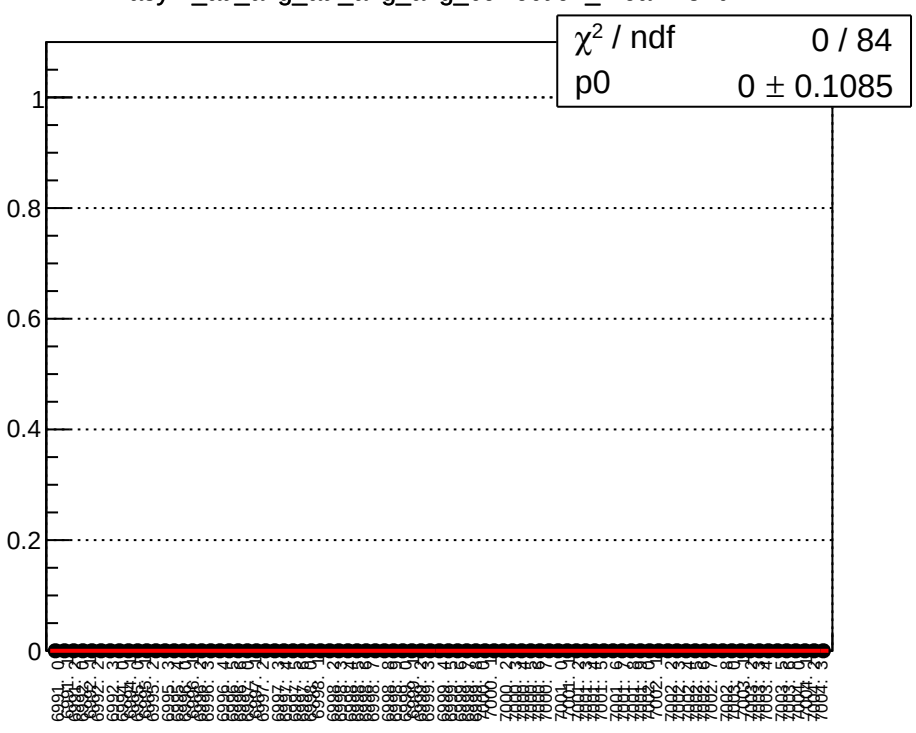

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 102.5 / 84
p0 −2904 ± 5443
pull
Entries 85
Mean −15.88
Std Dev 65.58

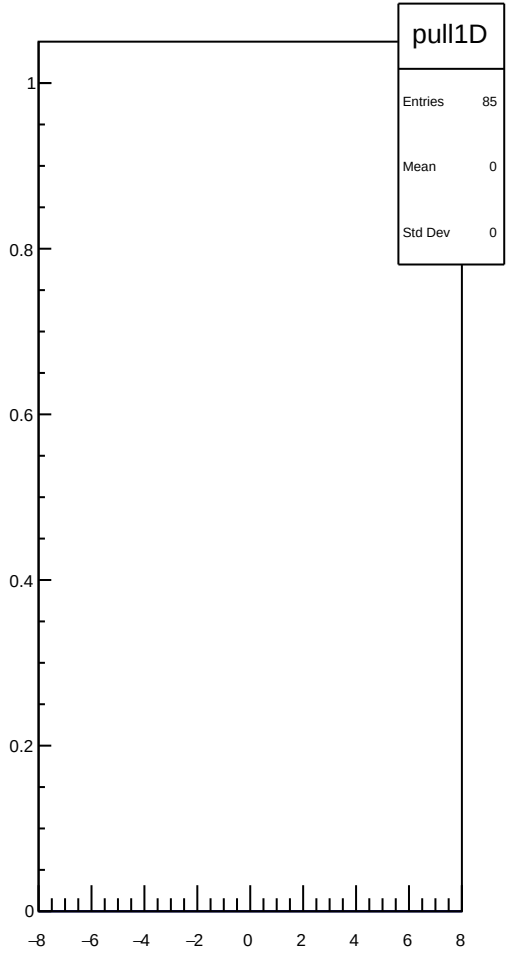

pull1D
Entries 85
Mean 0.03896
Std Dev 1.097

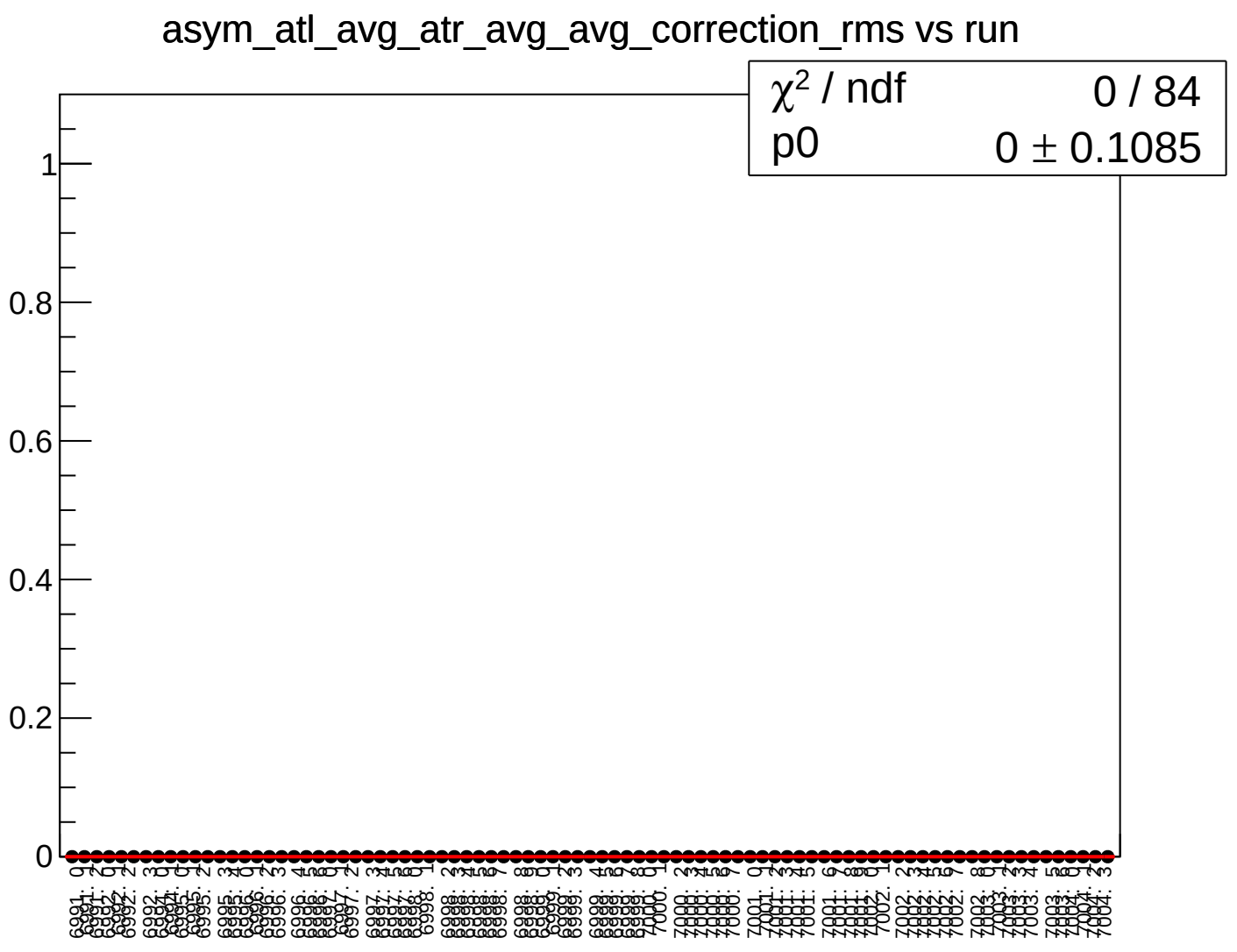

asym_atr1l2_dd_rms vs run
χ^2 / ndf 2135 / 84
p0 4941 ± 3.849
5400
5200
5000
4800
4600

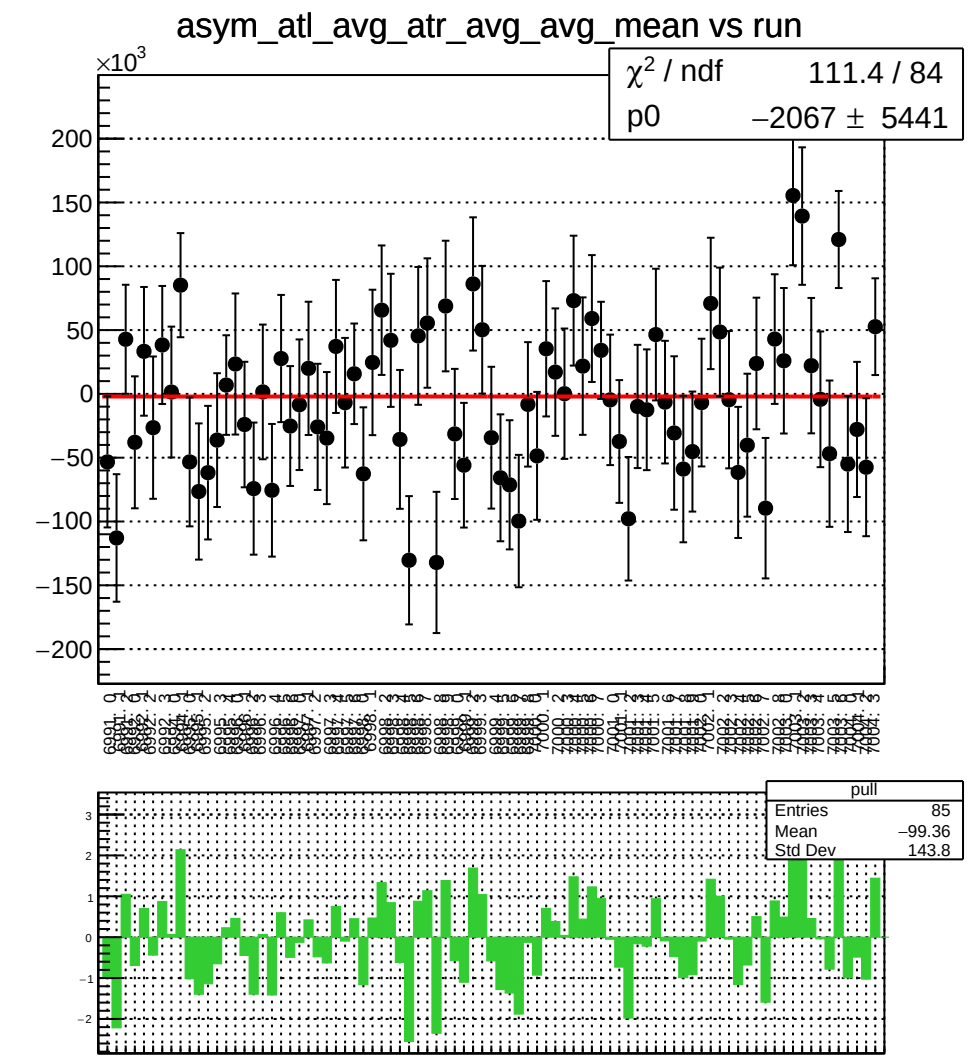

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 111.4 / 84
p0 −2067 ± 5441
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −99.36
Std Dev 143.8
3
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.03463
Std Dev 1.145
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

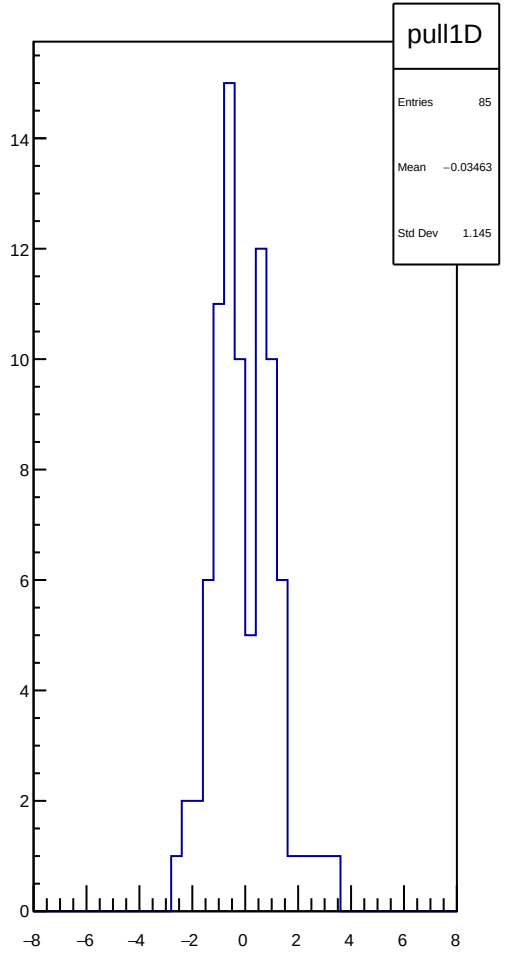

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 3244 / 84
p0 4937 ± 3.848
5800
5600
5400
5200
5000
4800
4600
4400

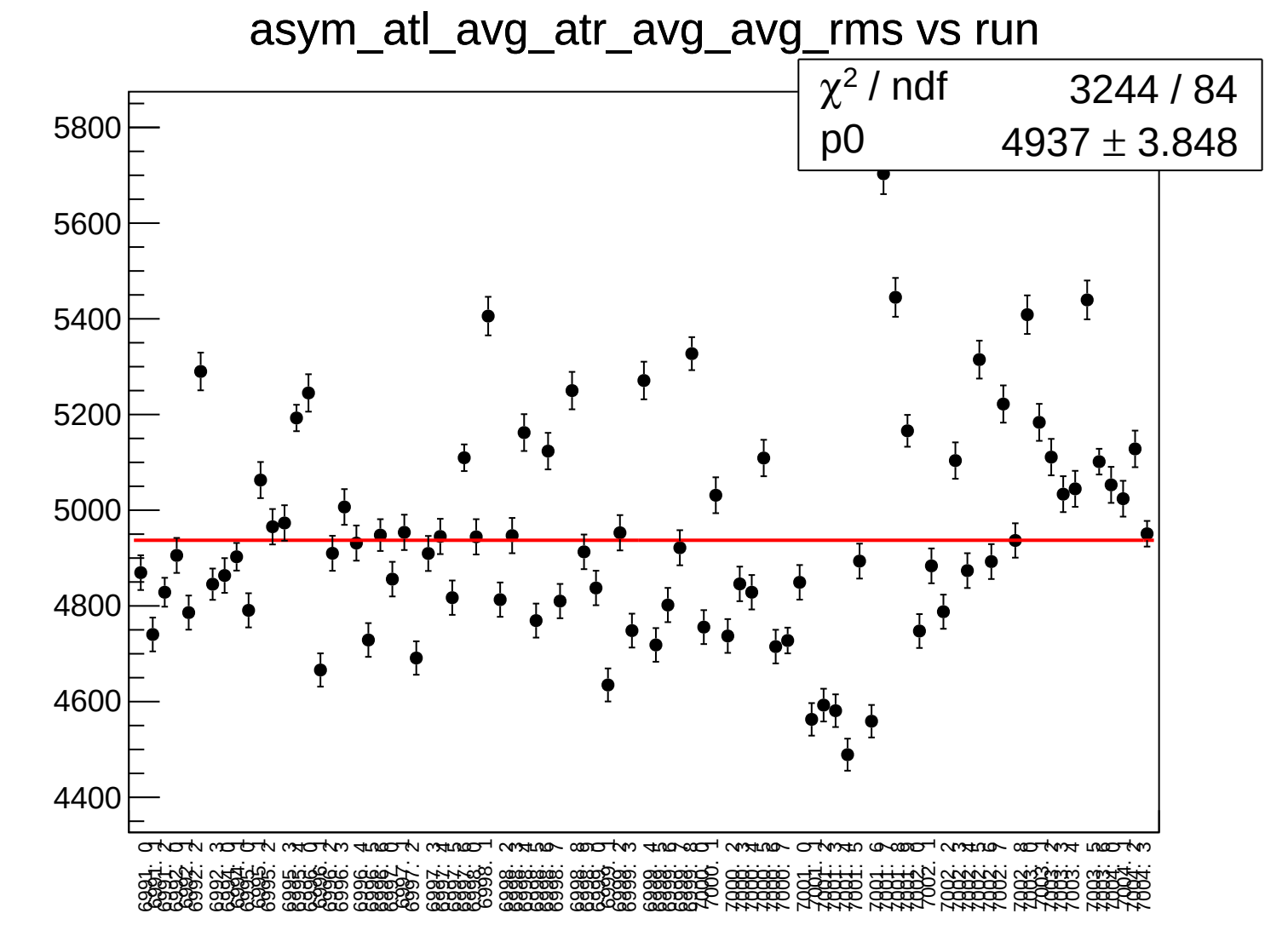

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

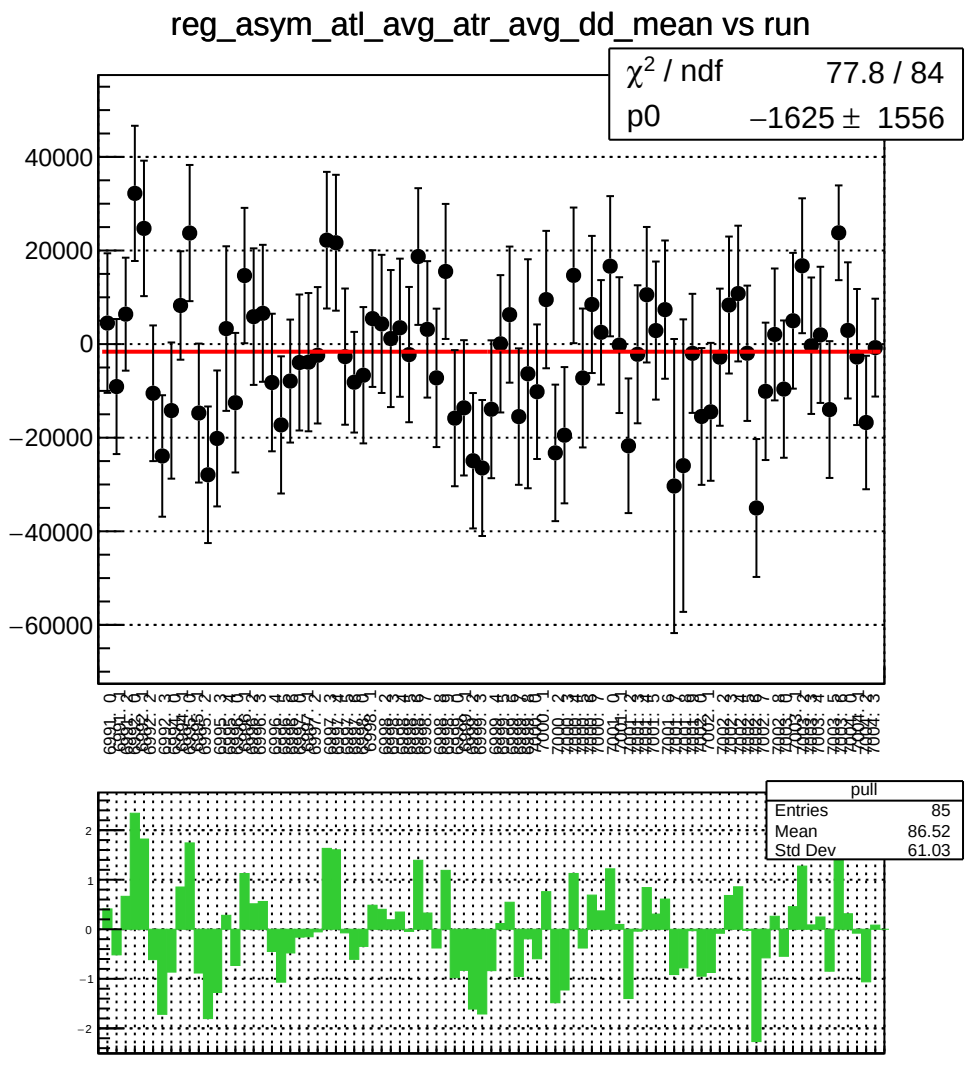

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

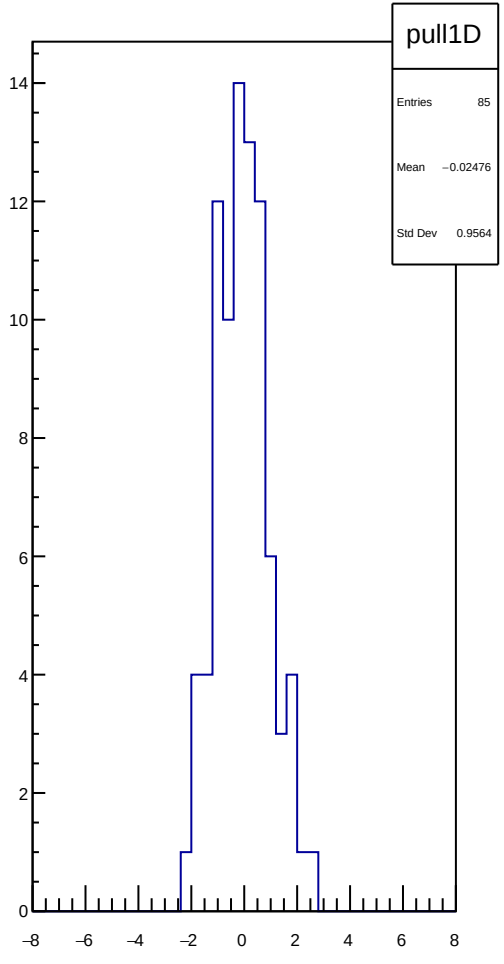

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

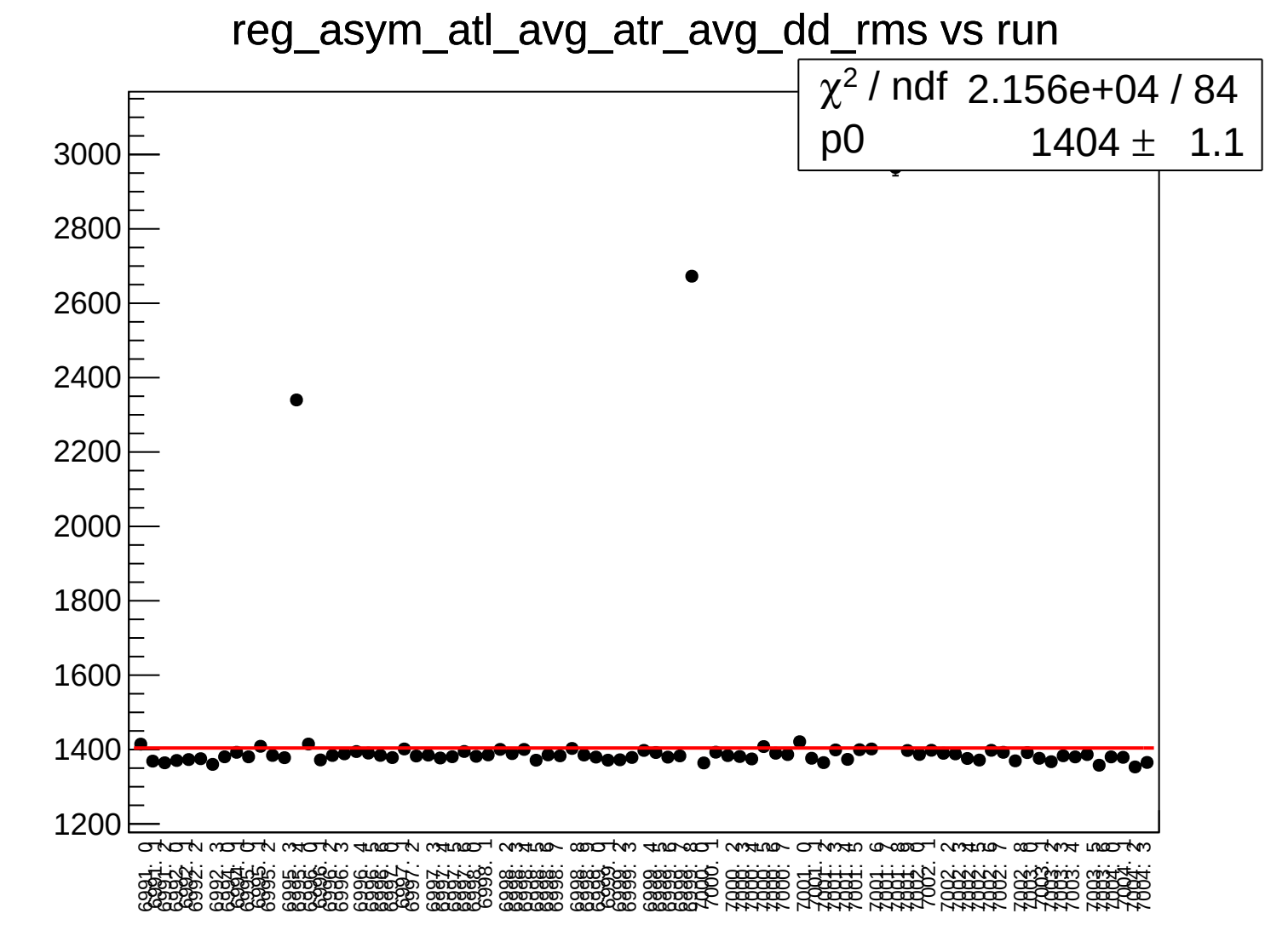

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 111.4 / 84
p0 −2067 ± 5441
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −99.36
Std Dev 143.8
3
2
1
0
−1
−2

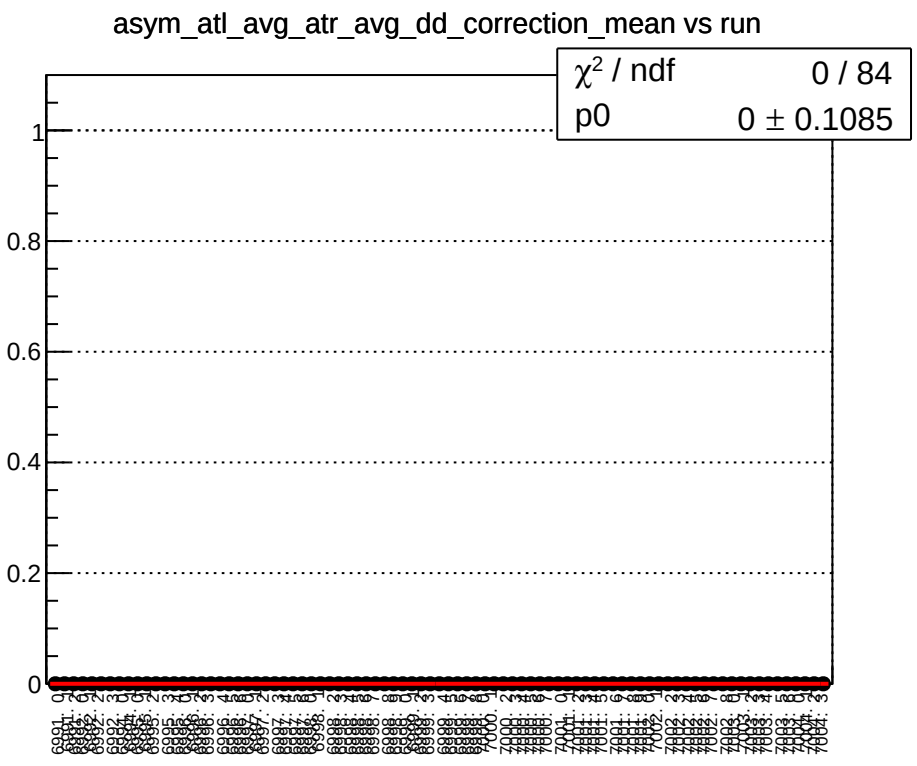

pull1D
Entries 85
Mean −0.03463
Std Dev 1.145
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

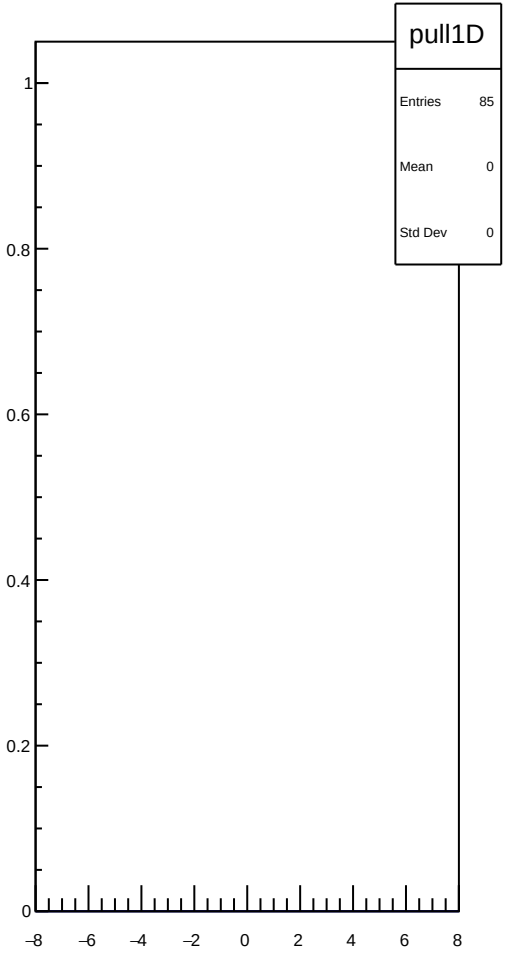

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 3244 / 84
p0 4937 ± 3.848
5800
5600
5400
5200
5000
4800
4600
4400

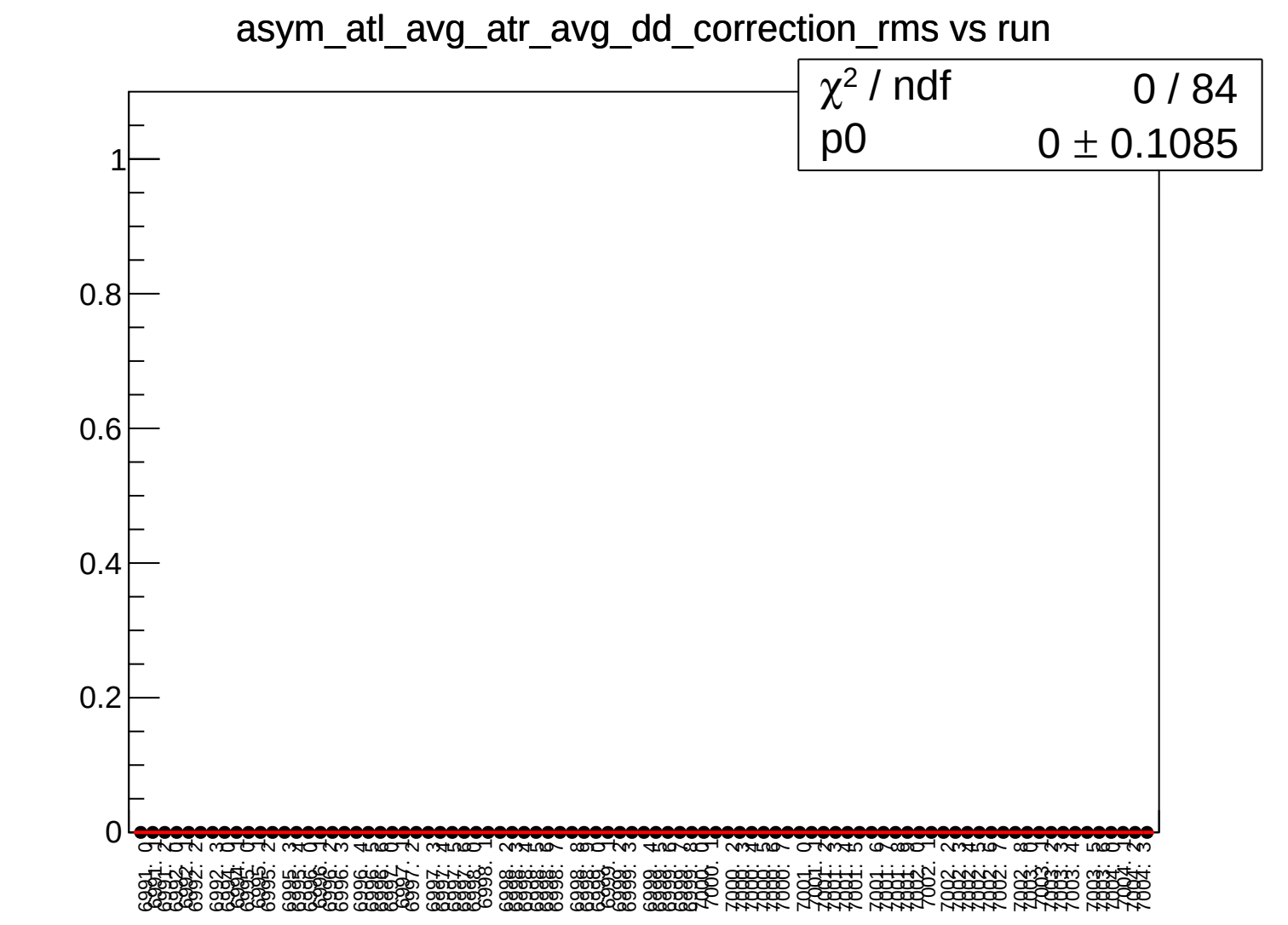

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 77.8 / 84
p0 −1625 ± 1556
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 86.52
Std Dev 61.03
2
1
0
−1
−2

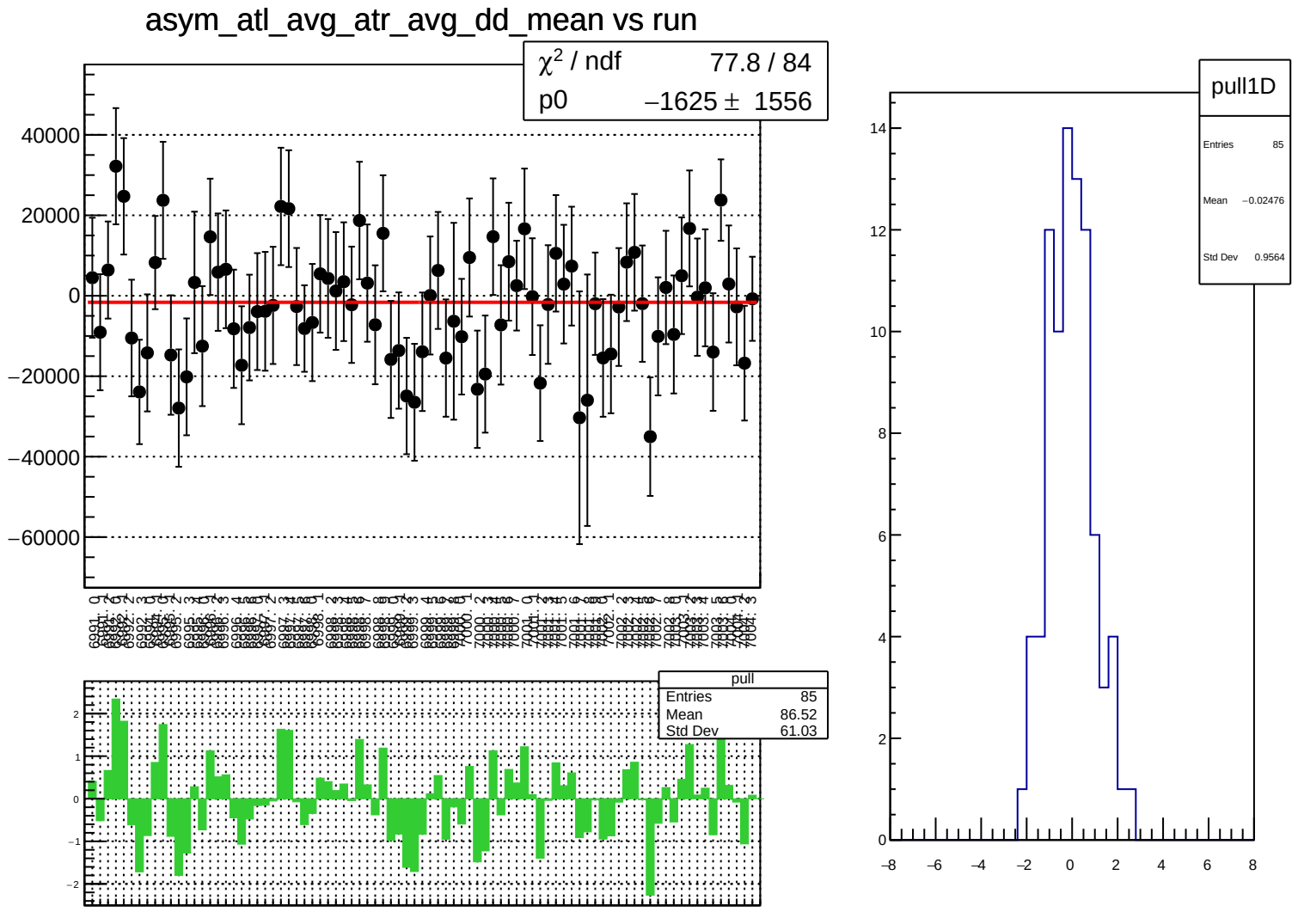

pull1D
Entries 85
Mean −0.02476
Std Dev 0.9564
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

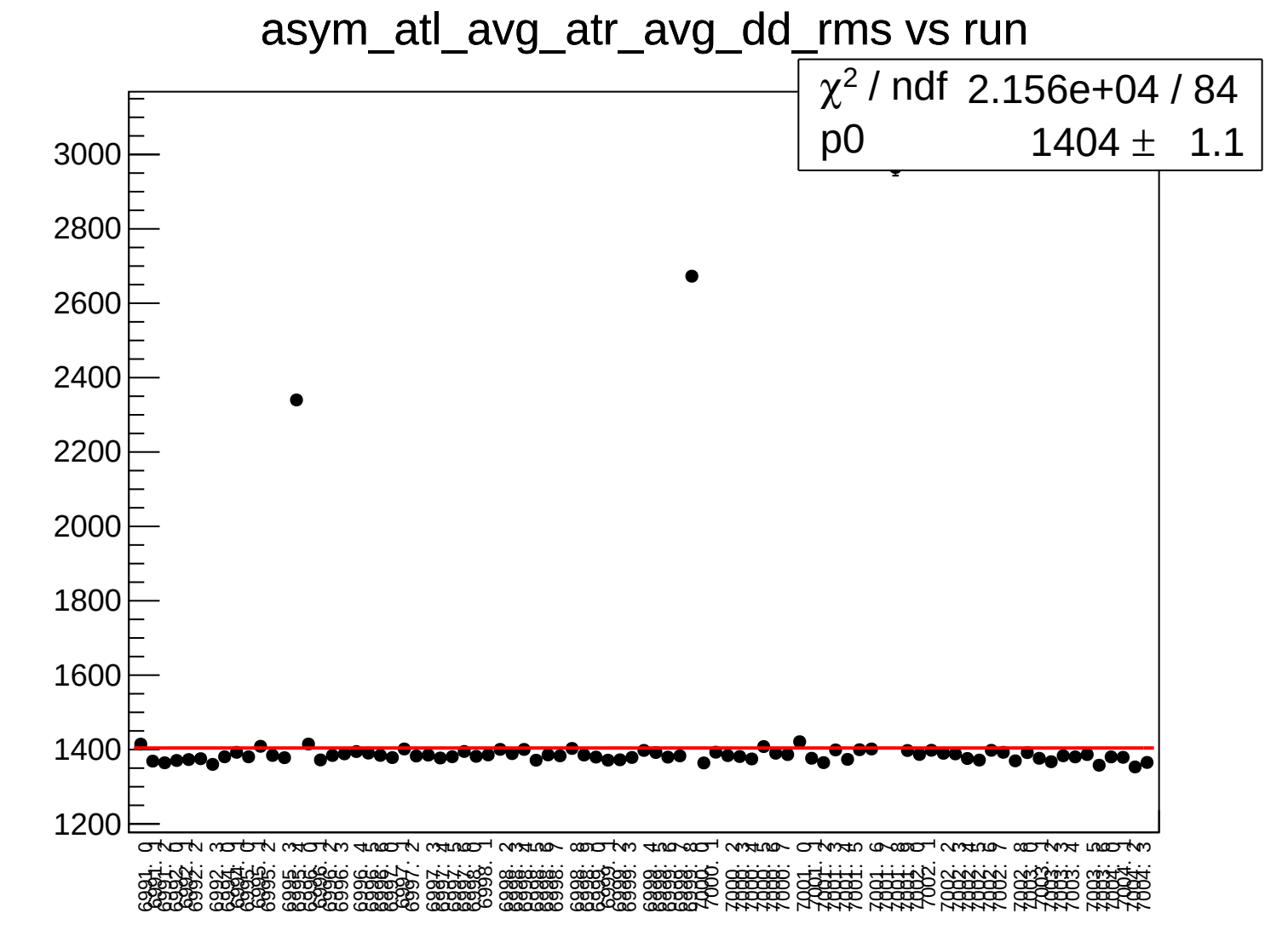

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.156e+04 / 84
p0 1404 ± 1.1
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

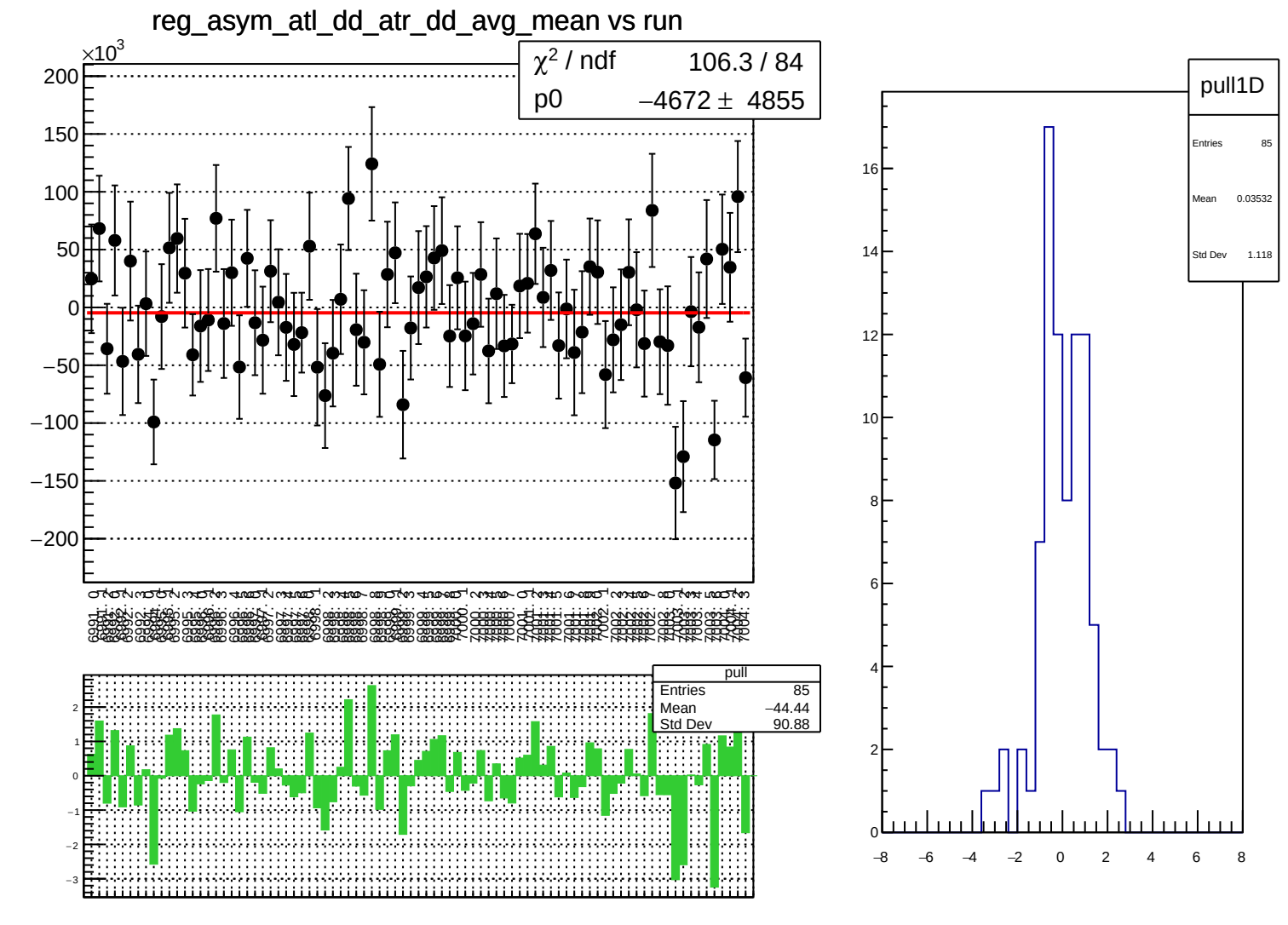

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

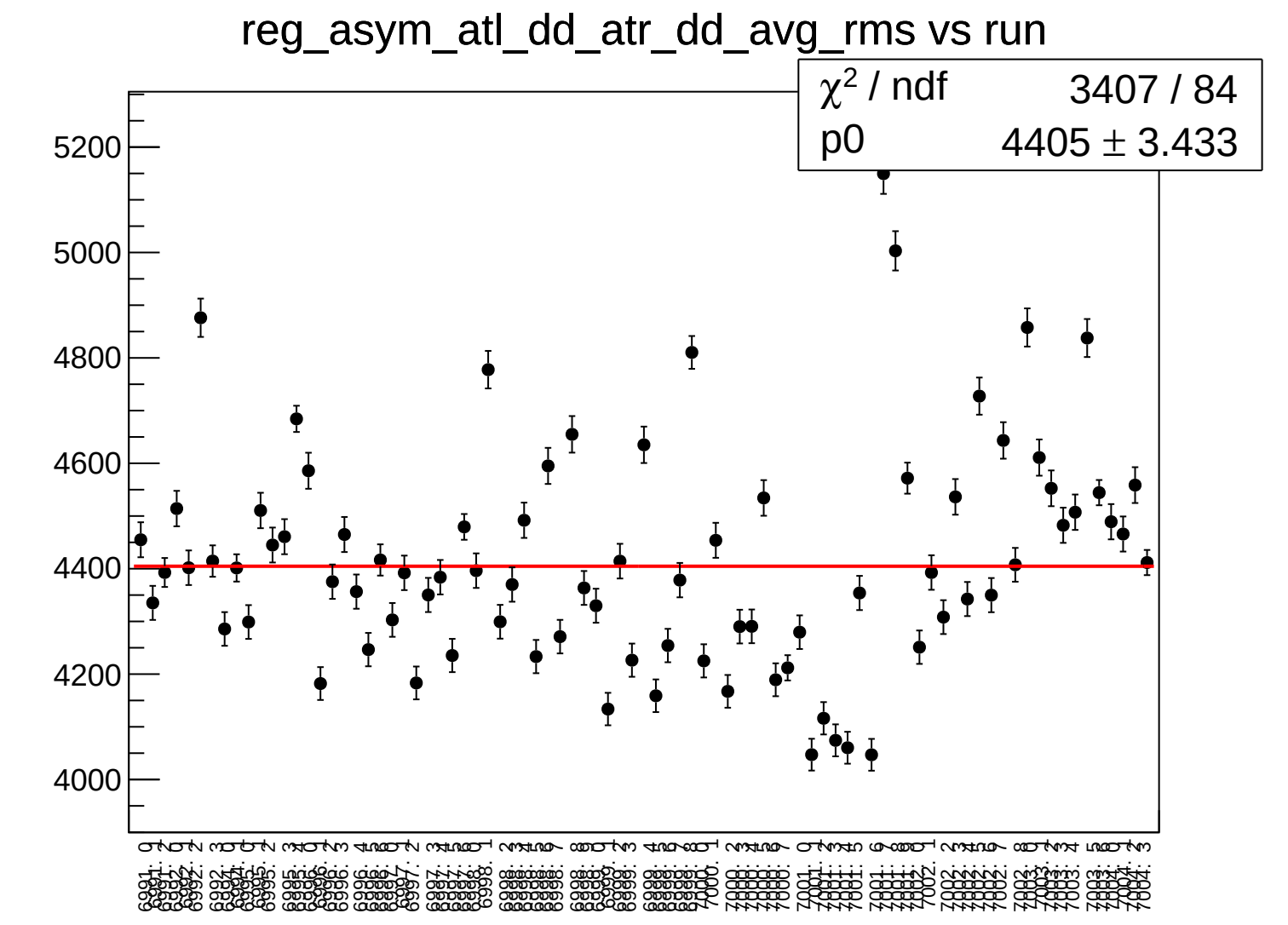

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

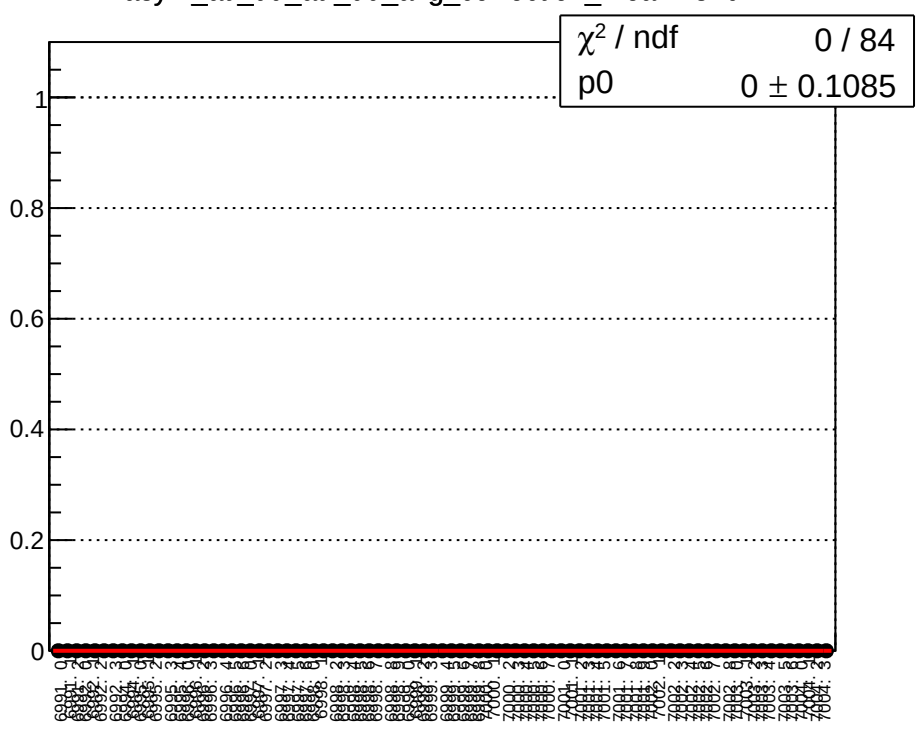

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

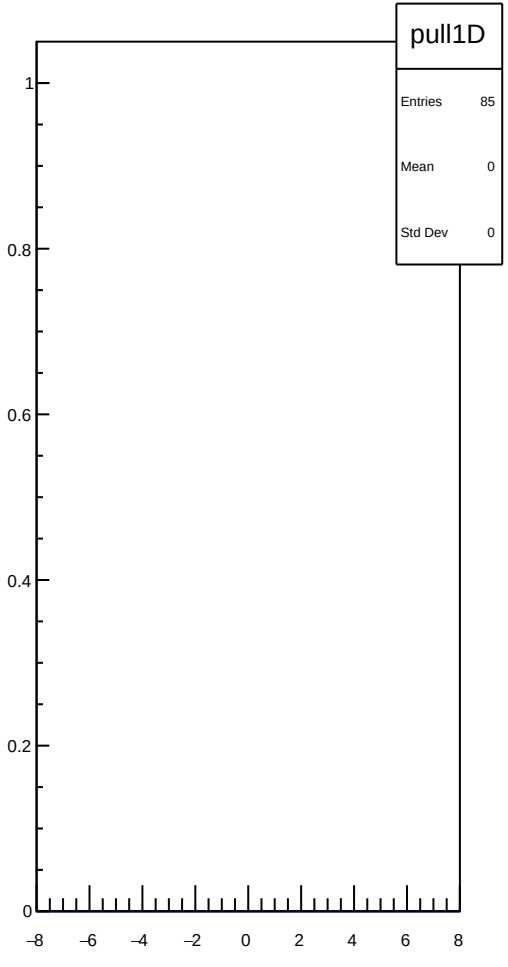

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 77.8 / 84
p0 −1625 ± 1556
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean 86.52
Std Dev 61.03
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.02476
Std Dev 0.9564
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

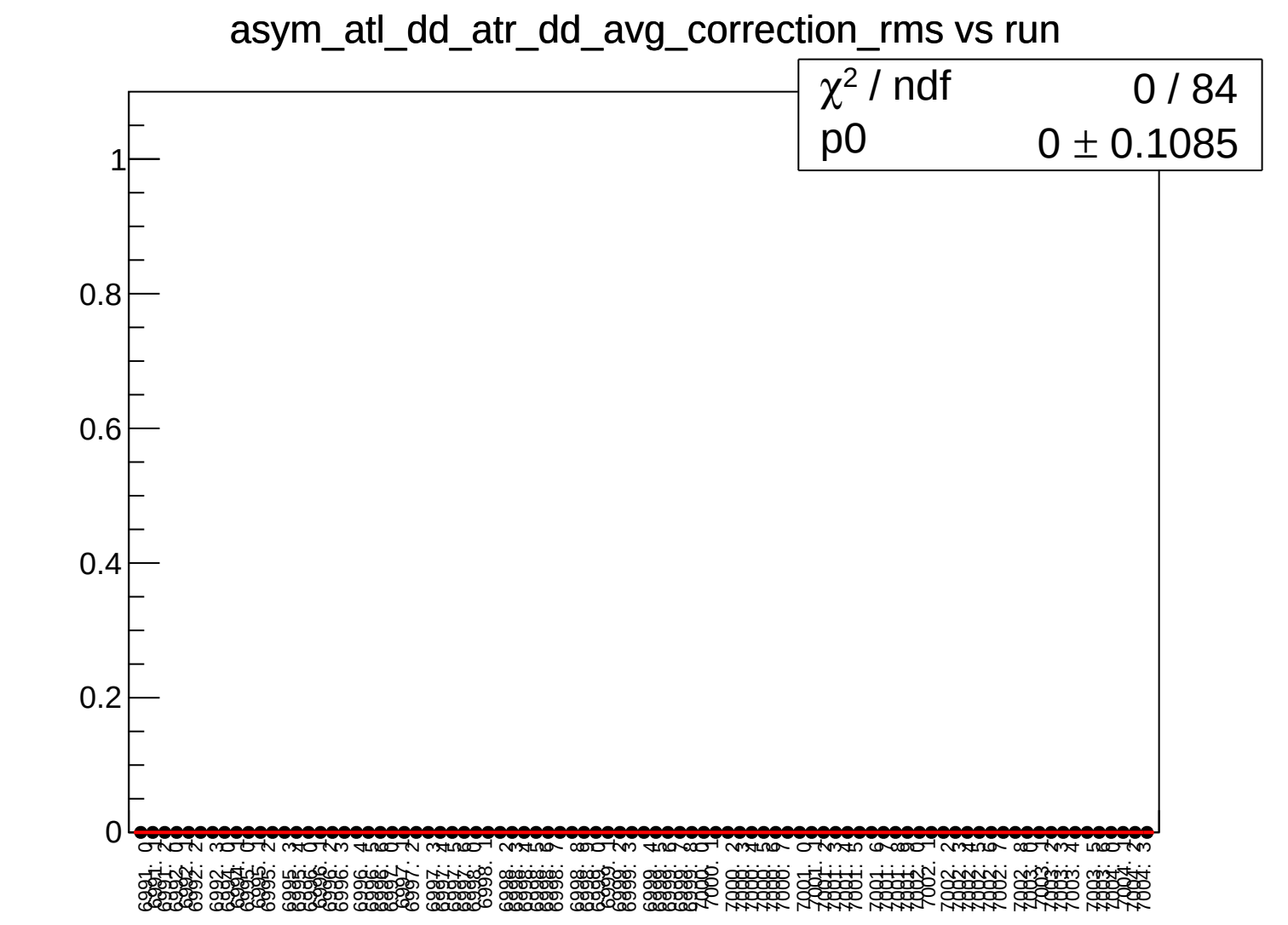

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.156e+04 / 84
p0 1404 ± 1.1
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

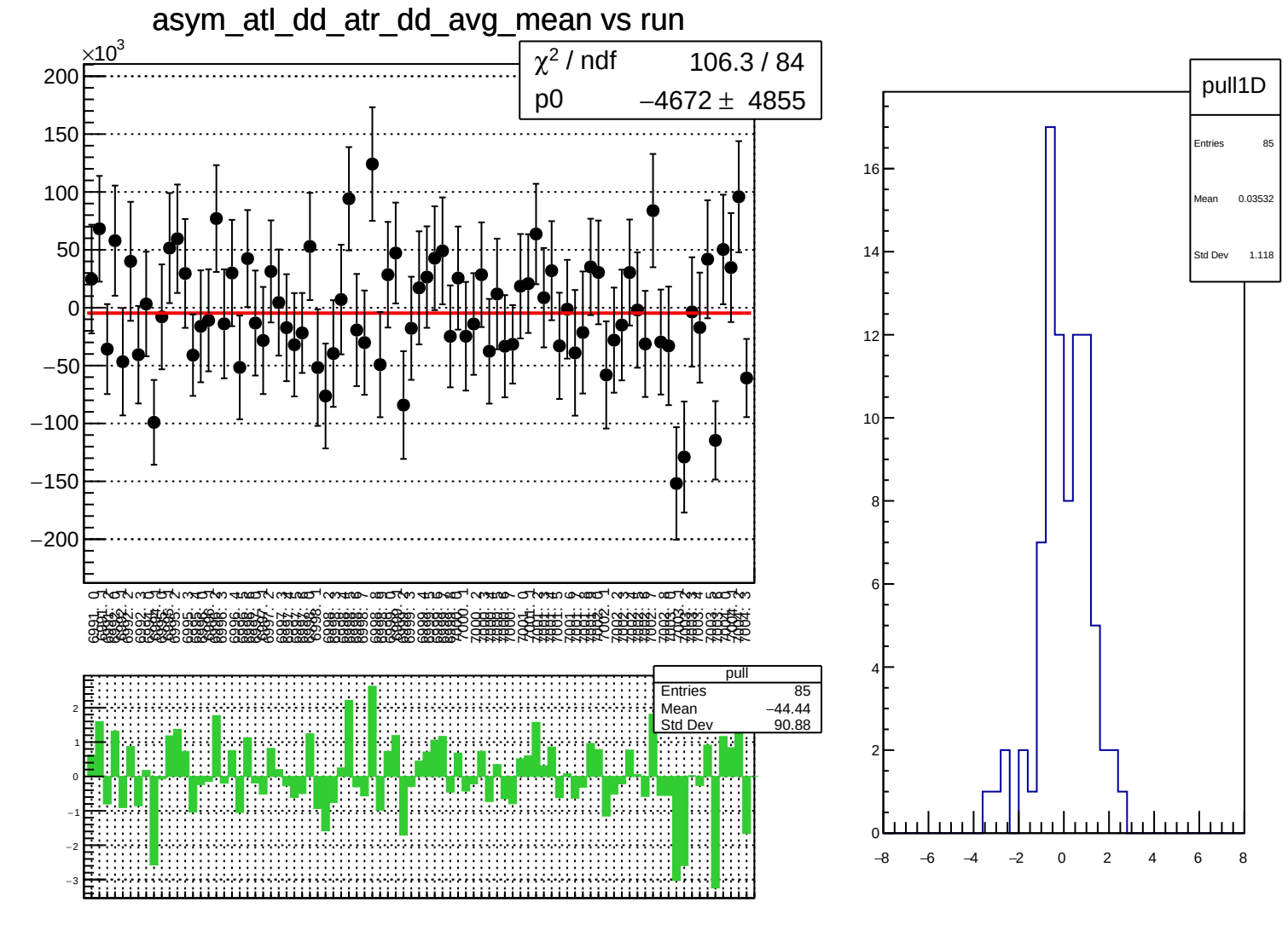

reg_asym_atl_dd_atr_dd_avg_mean vs run
χ² / ndf 106.3 / 84
p0 −4672 ± 4855
×10³
pull
Entries 85
Mean −44.44
Std Dev 90.88
pull1D
Entries 85
Mean 0.03532
Std Dev 1.118

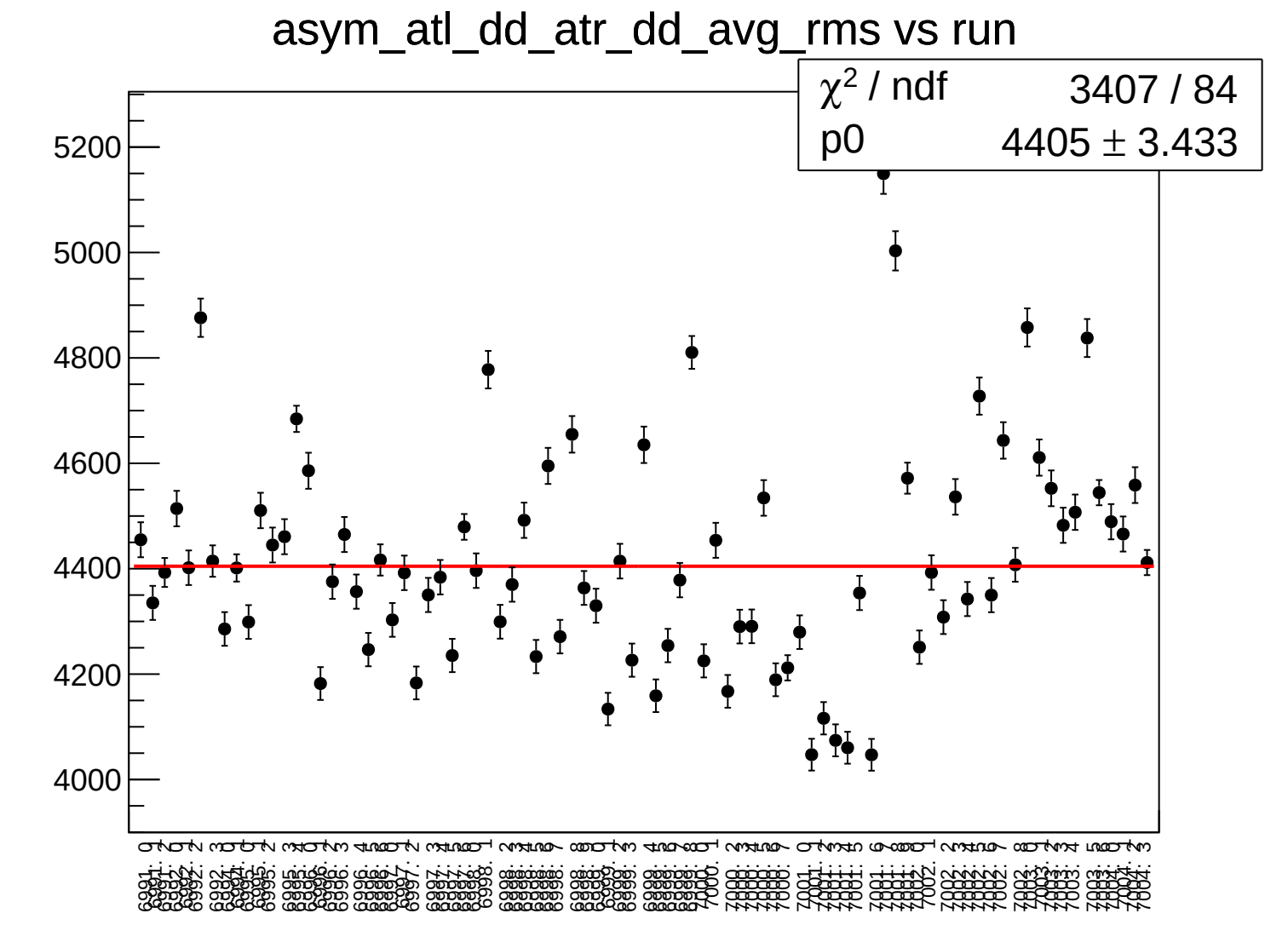

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 3407 / 84
p0 4405 ± 3.433
5200
5000
4800
4600
4400
4200
4000

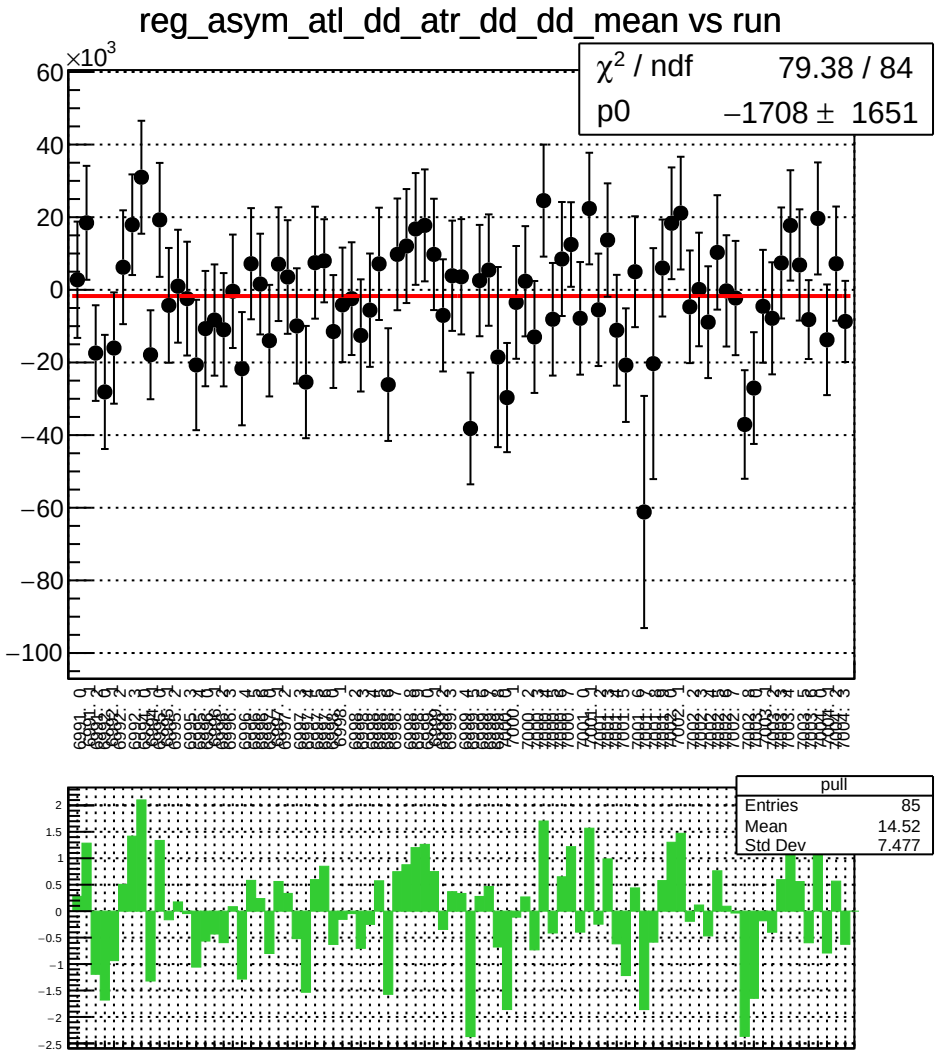

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

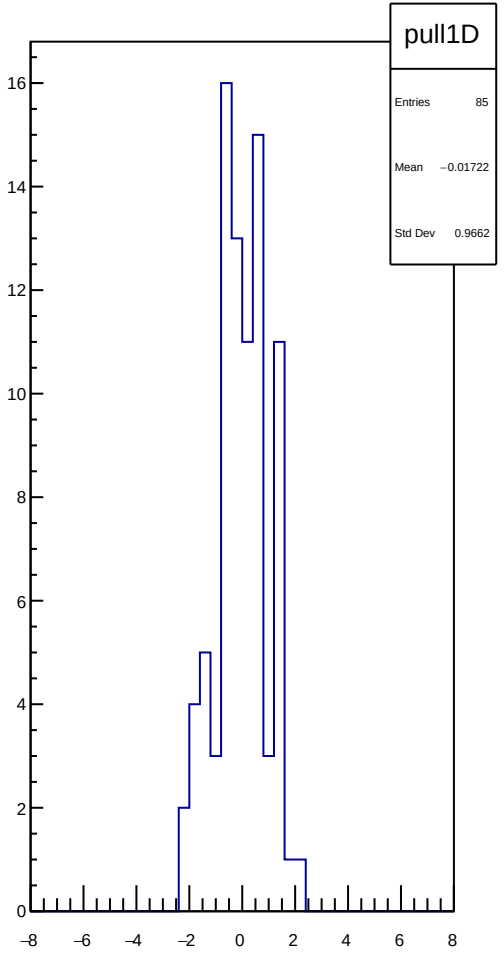

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

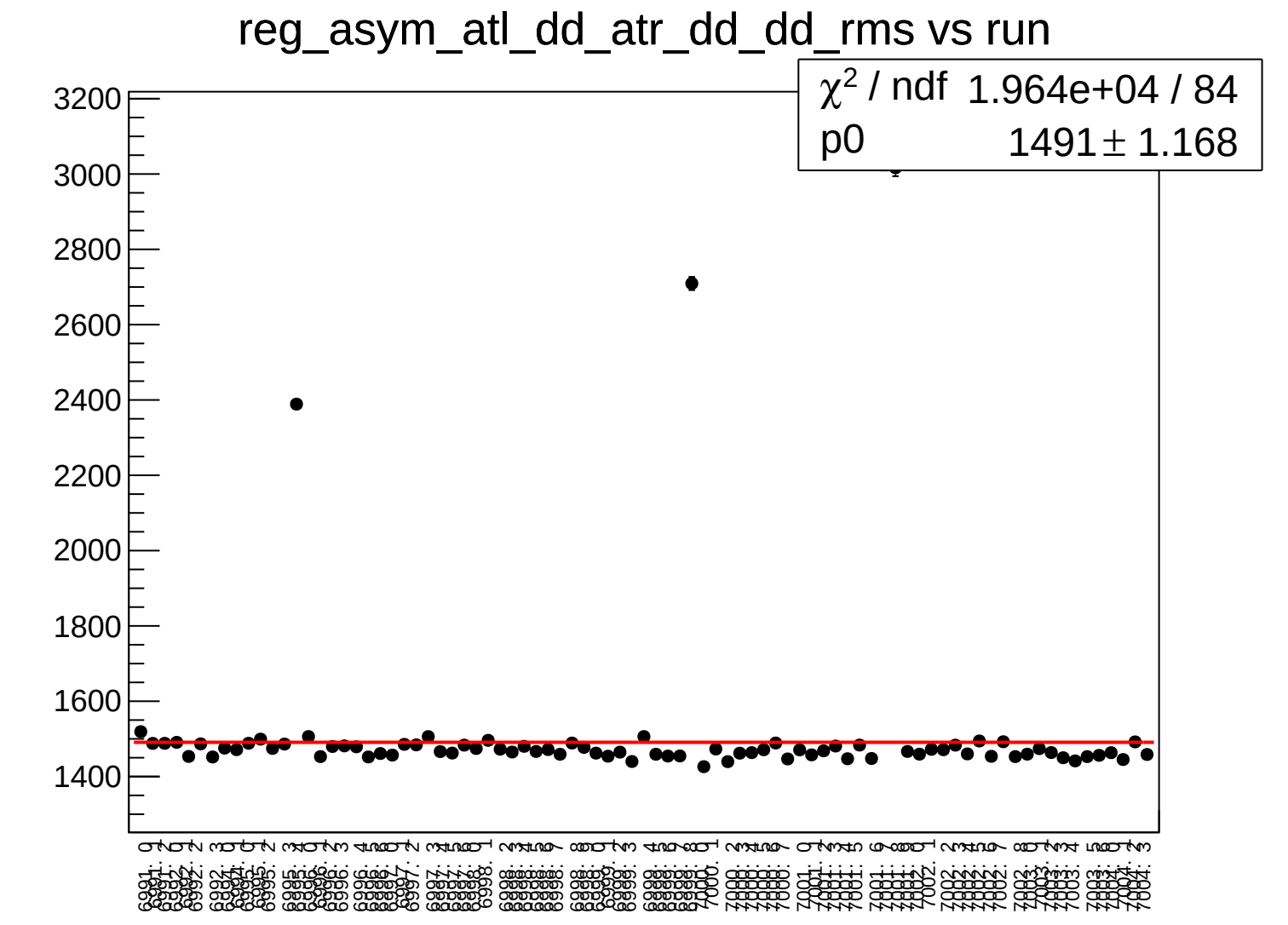

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

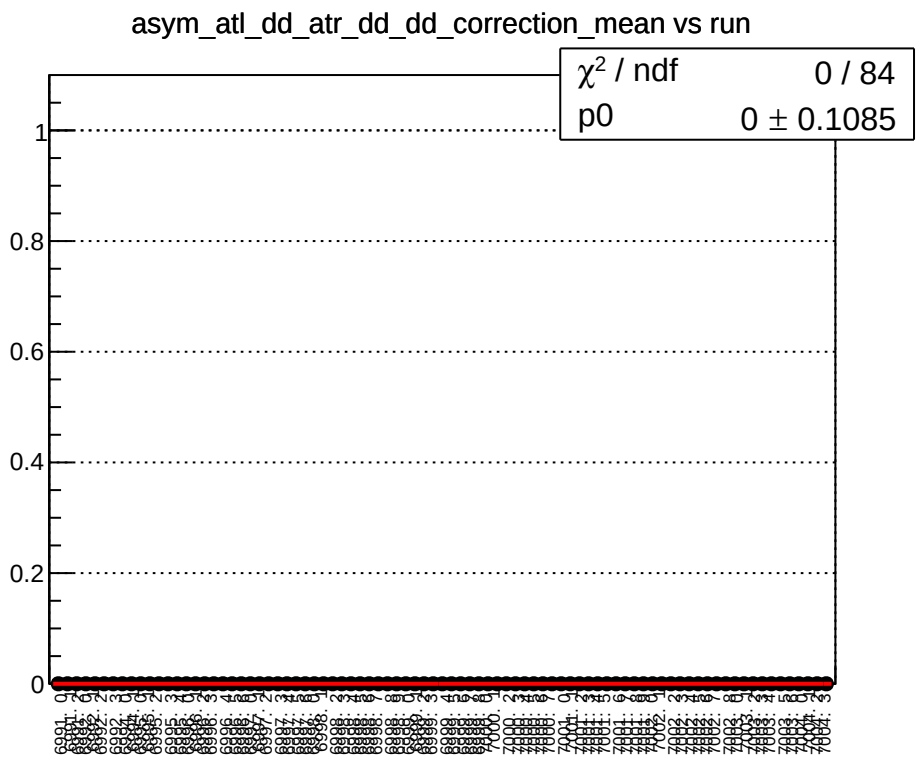

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ^2 / ndf 106.3 / 84
p0 −4672 ± 4855
pull
Entries 85
Mean −44.44
Std Dev 90.88
pull1D
Entries 85
Mean 0.03532
Std Dev 1.118

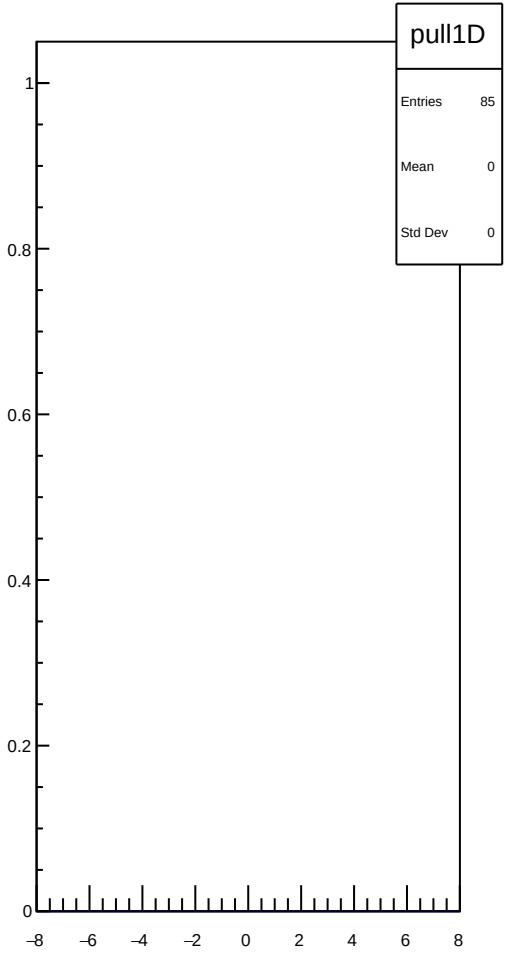

asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 3407 / 84
p0 4405 ± 3.433
5200
5000
4800
4600
4400
4200
4000

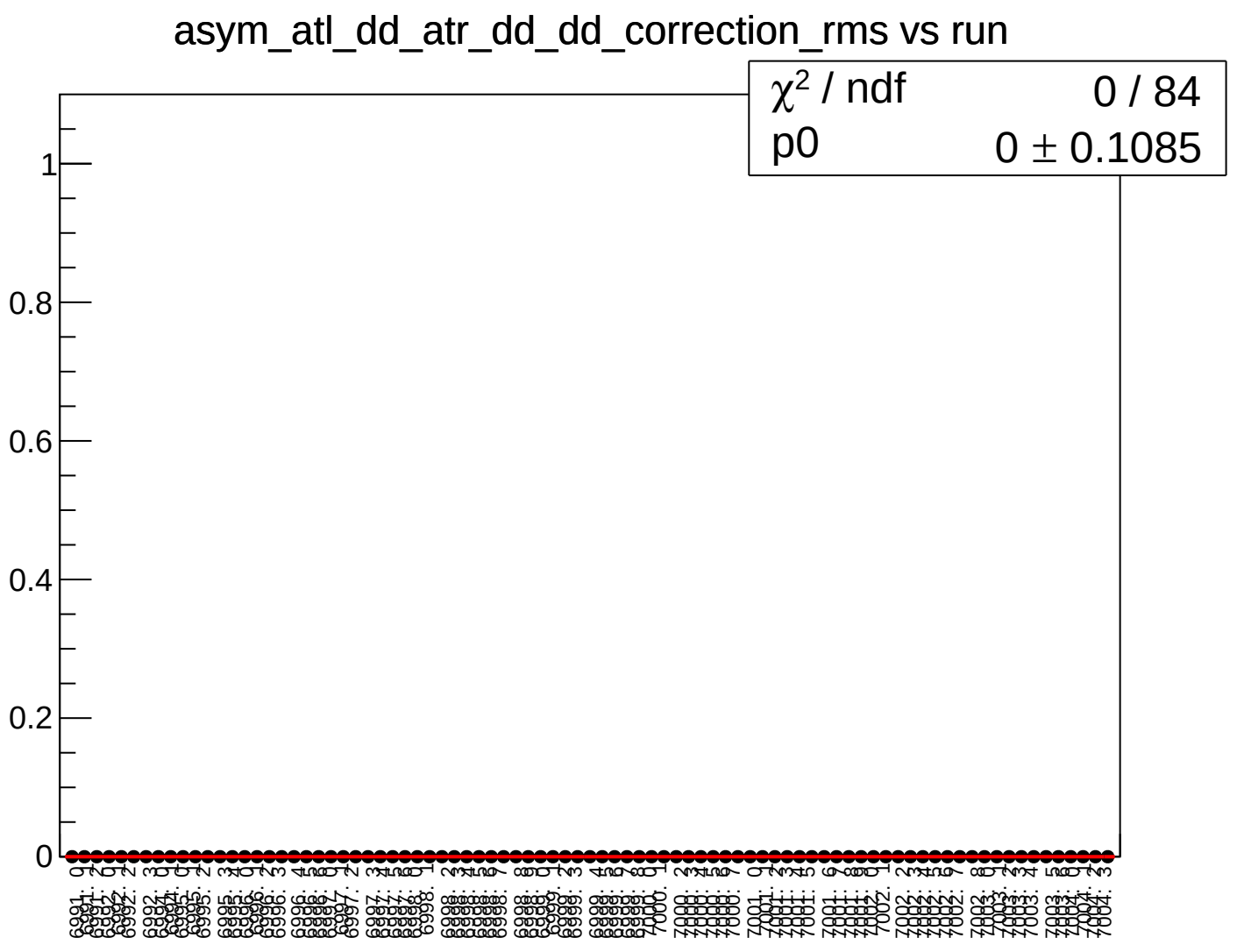

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 79.38 / 84
p0 −1708 ± 1651
×10³
pull
Entries 85
Mean 14.52
Std Dev 7.477

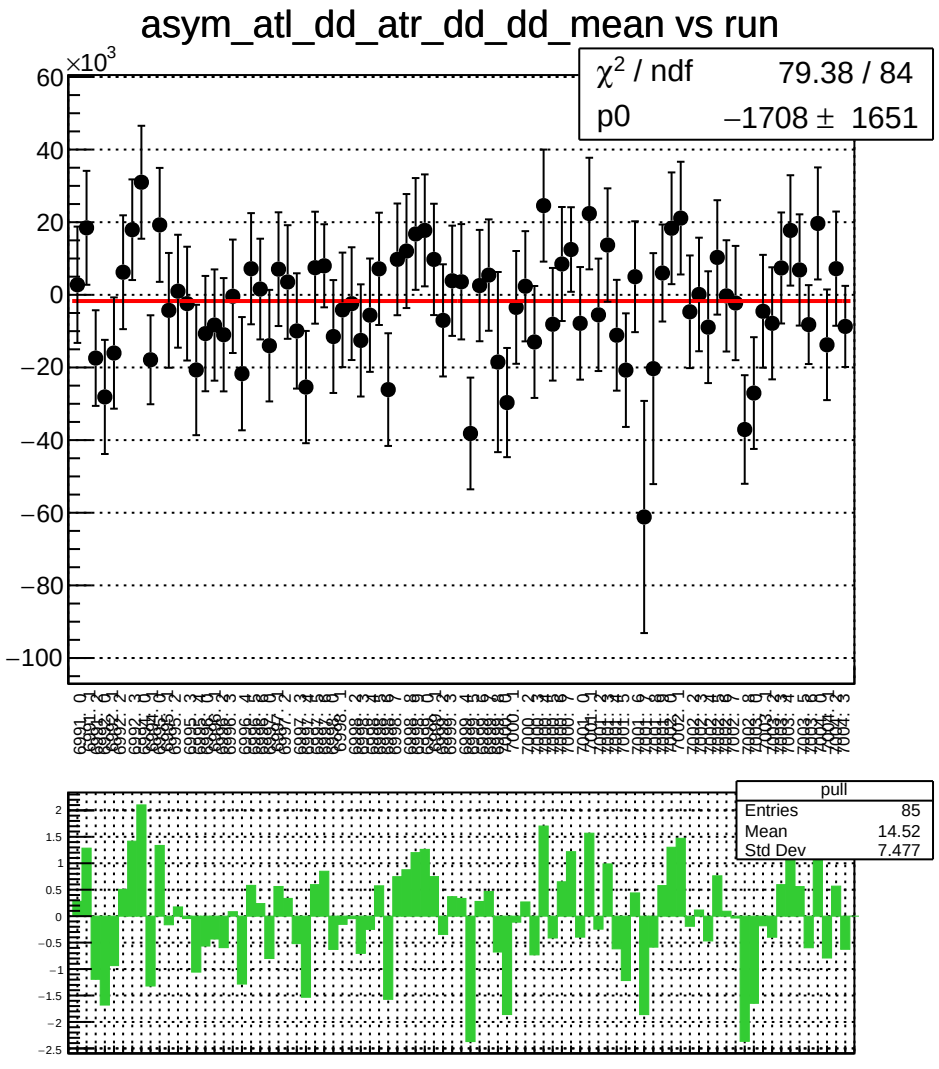

pull1D
Entries 85
Mean −0.01722
Std Dev 0.9662

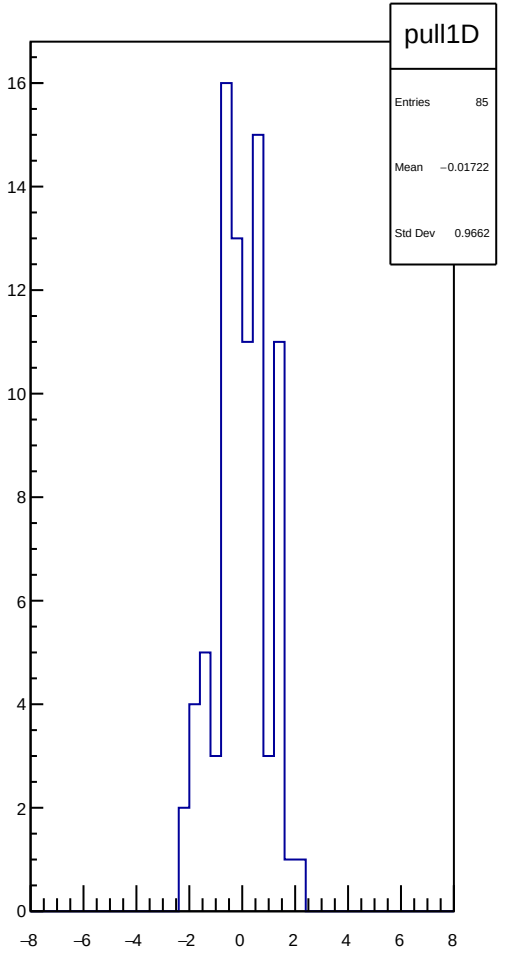

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.964e+04 / 84
p0 1491 ± 1.168
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

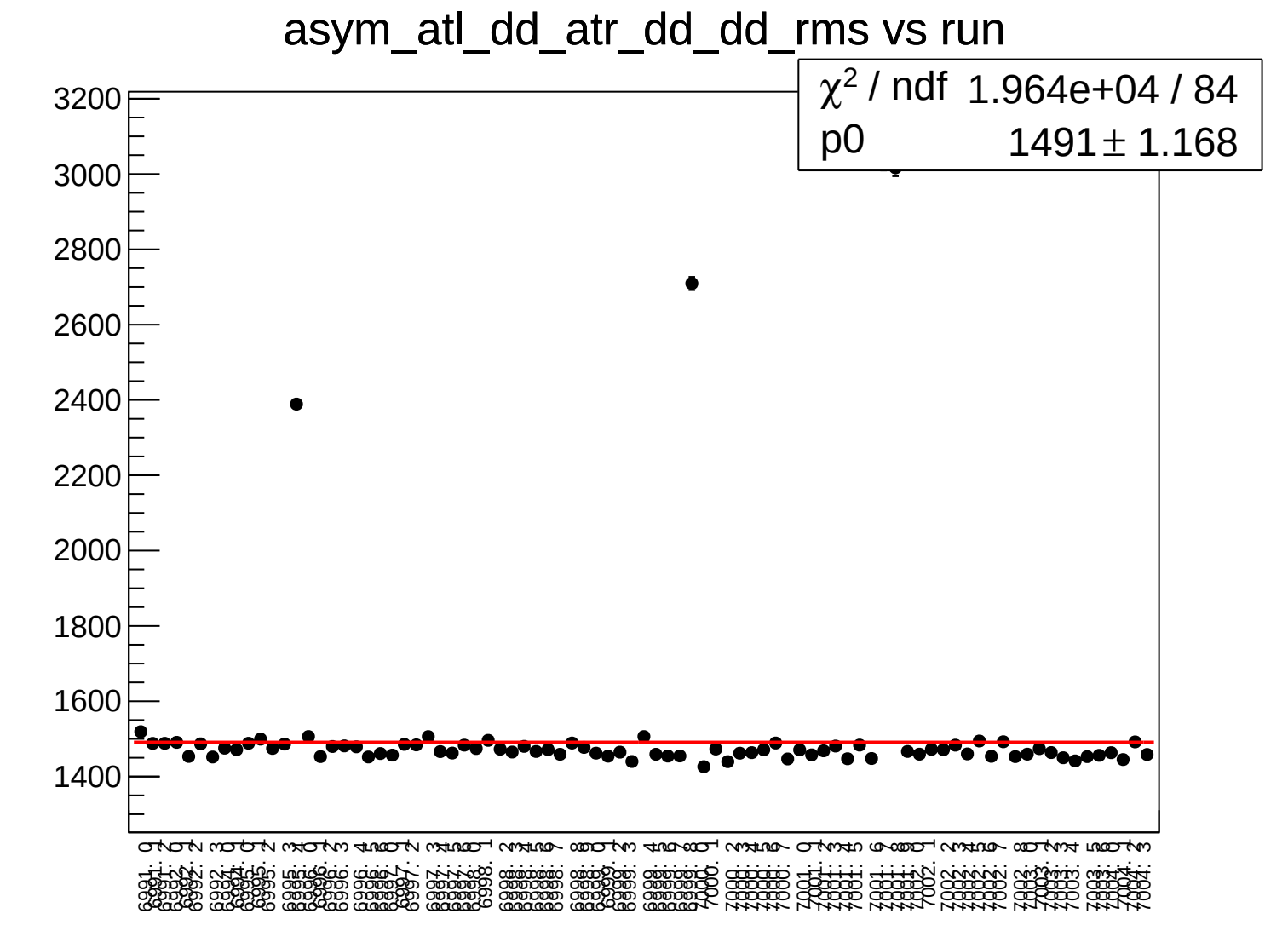

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

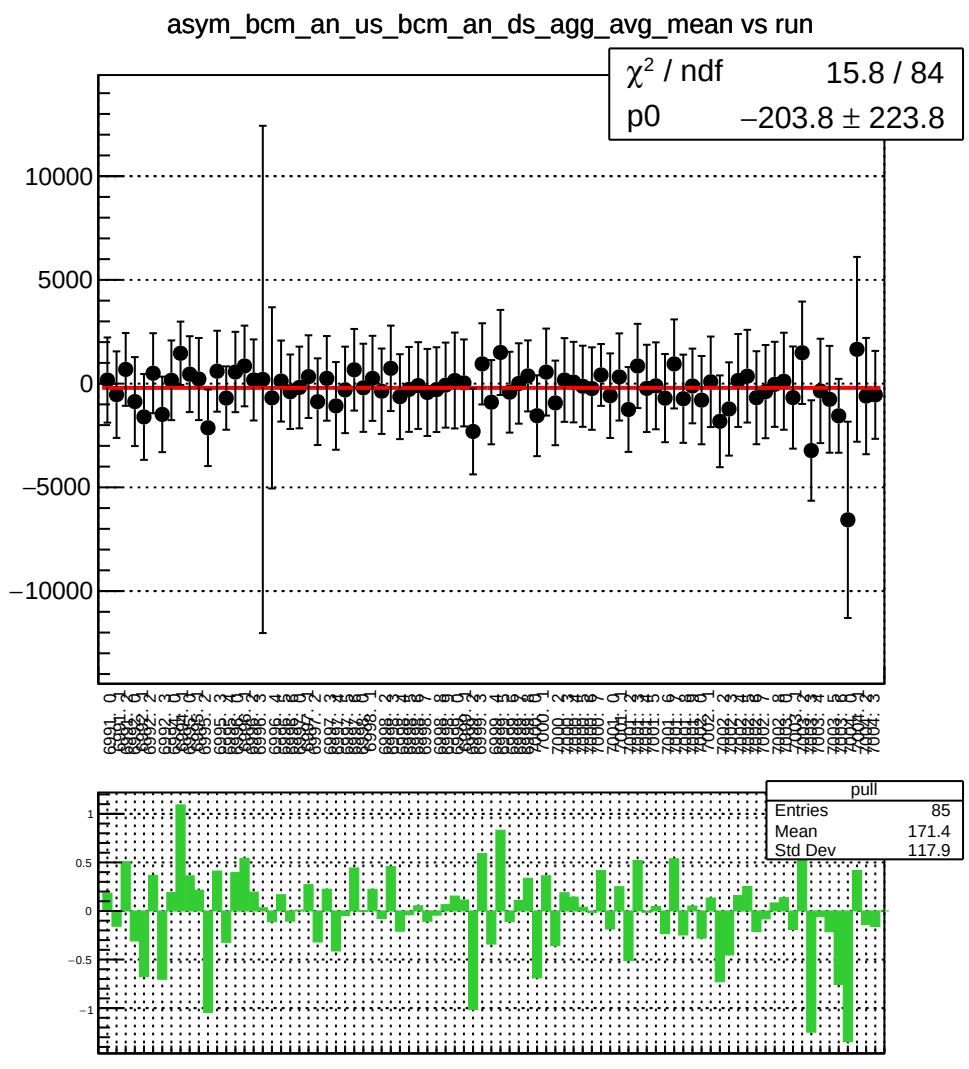

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

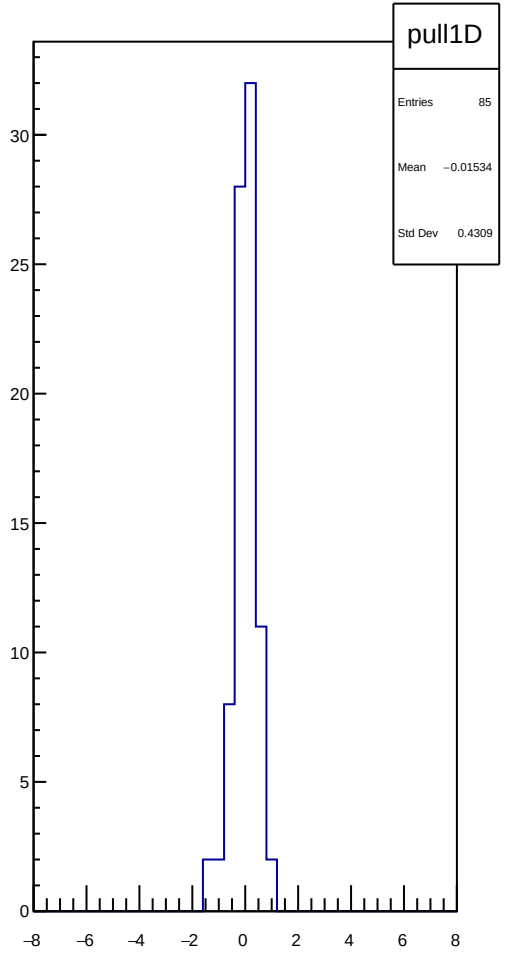

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 84
p0 0 ± 0.1085
1
0.8
0.6
0.4
0.2
0

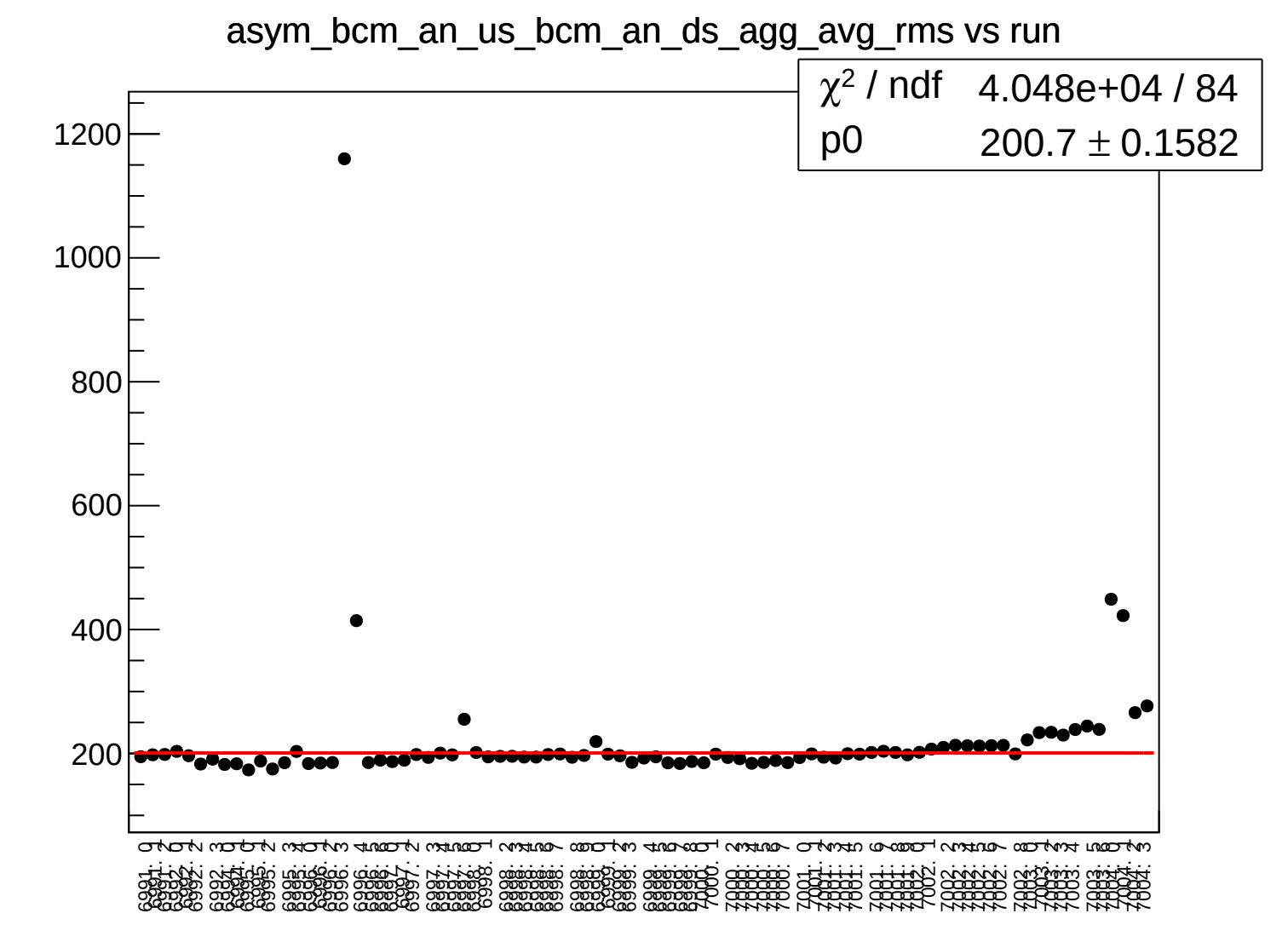

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 79.38 / 84
p0 −1708 ± 1651
×10³
pull
Entries 85
Mean 14.52
Std Dev 7.477

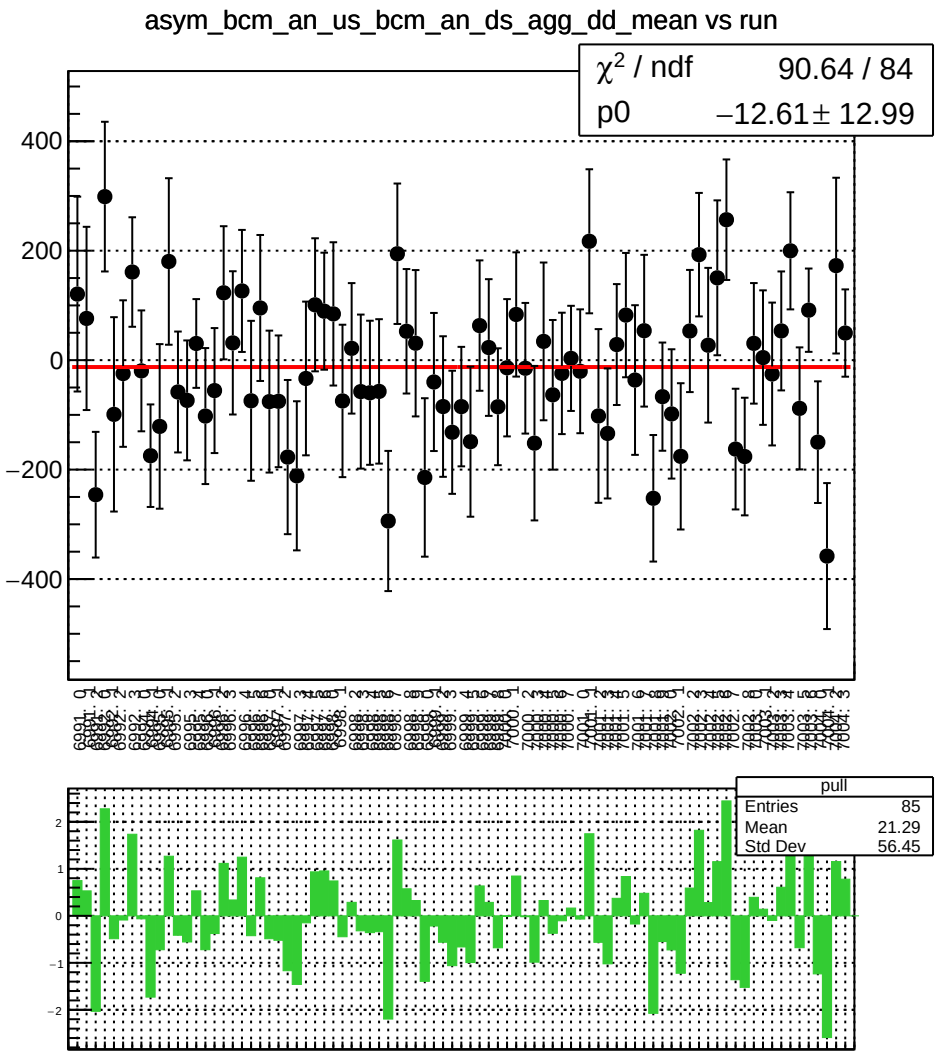

pull1D
Entries 85
Mean −0.01722
Std Dev 0.9662

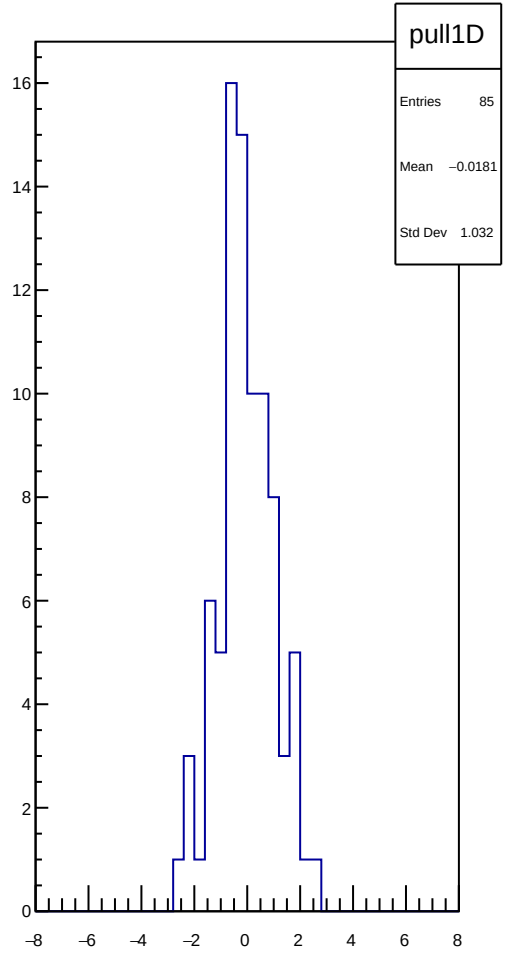

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.964e+04 / 84
p0 1491 ± 1.168
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

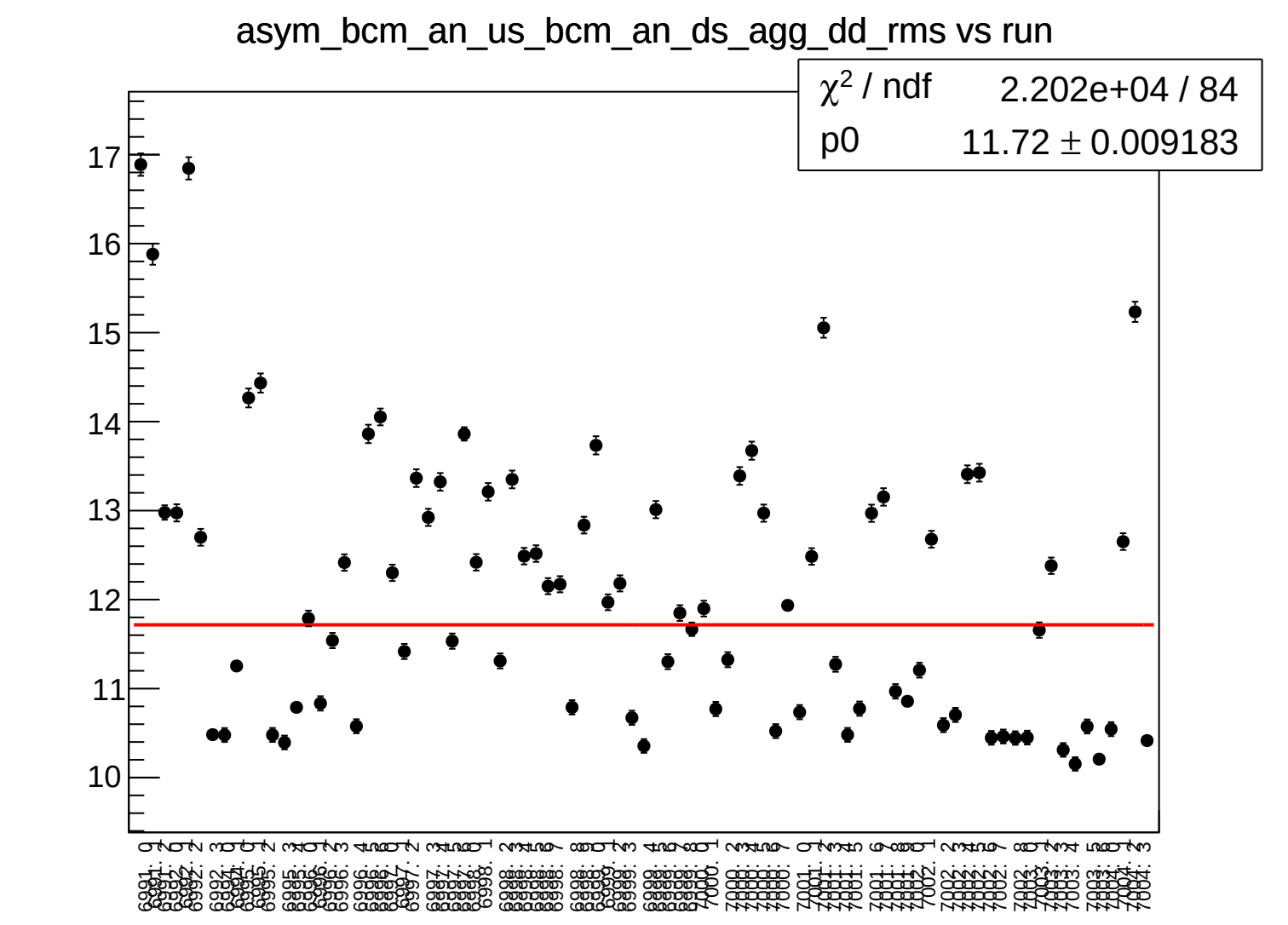

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.8 / 84
p0 −203.8 ± 223.8
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 171.4
Std Dev 117.9
1
0.5
0
−0.5
−1

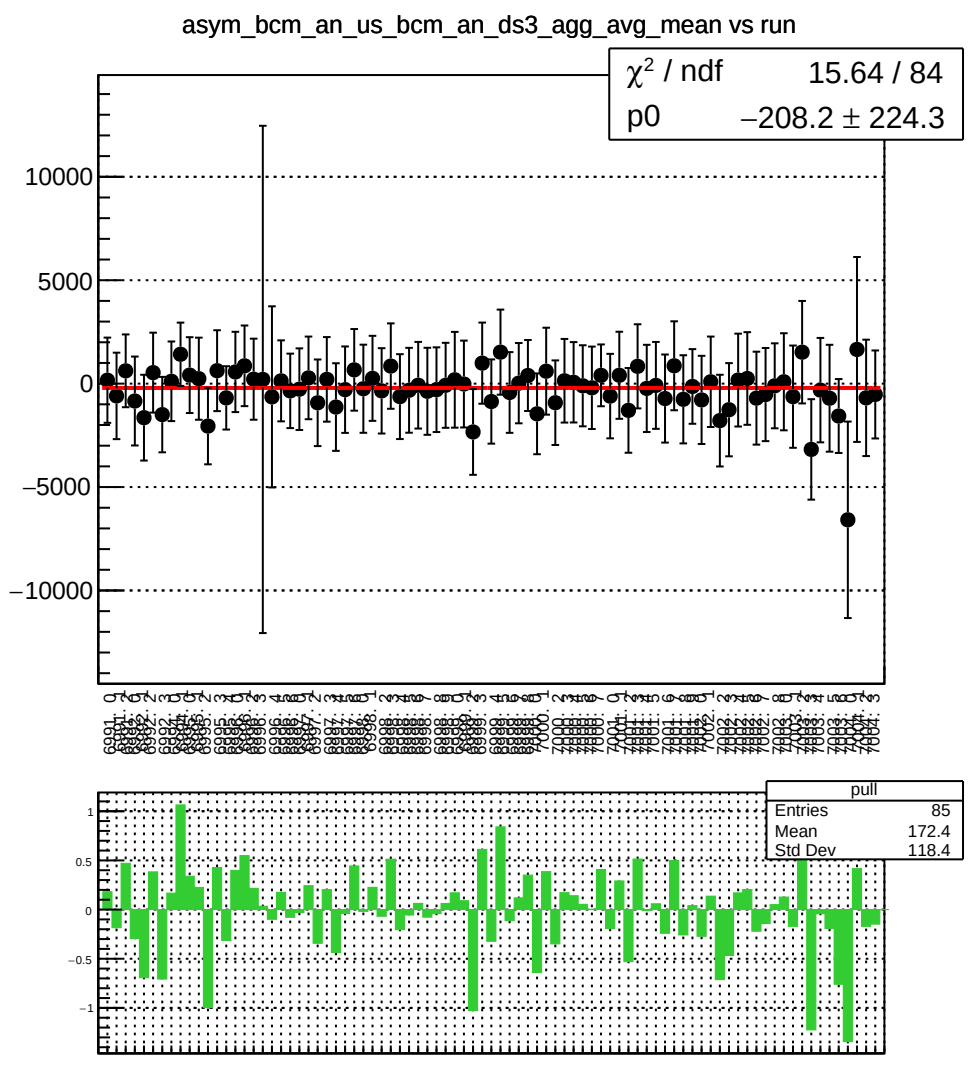

pull1D
Entries 85
Mean −0.01534
Std Dev 0.4309
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

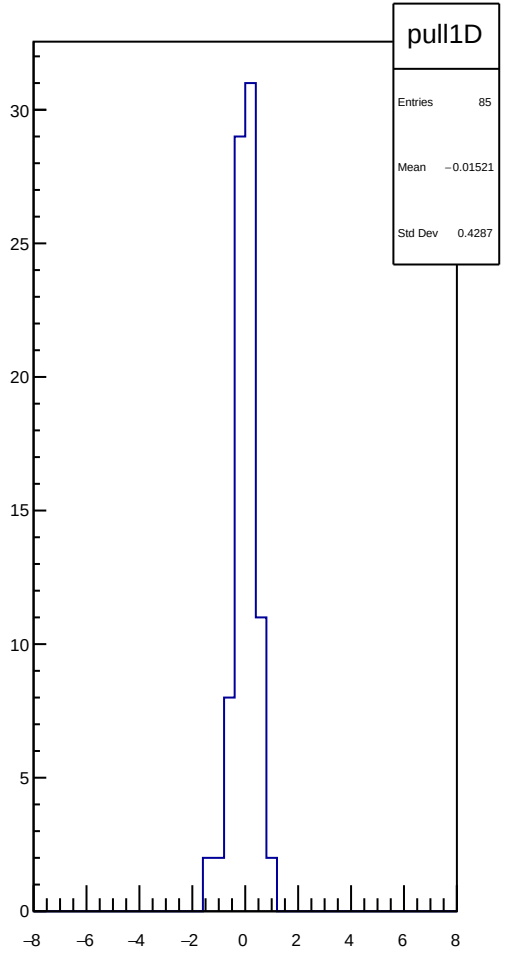

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4.048e+04 / 84
p0 200.7 ± 0.1582
1200
1000
800
600
400
200

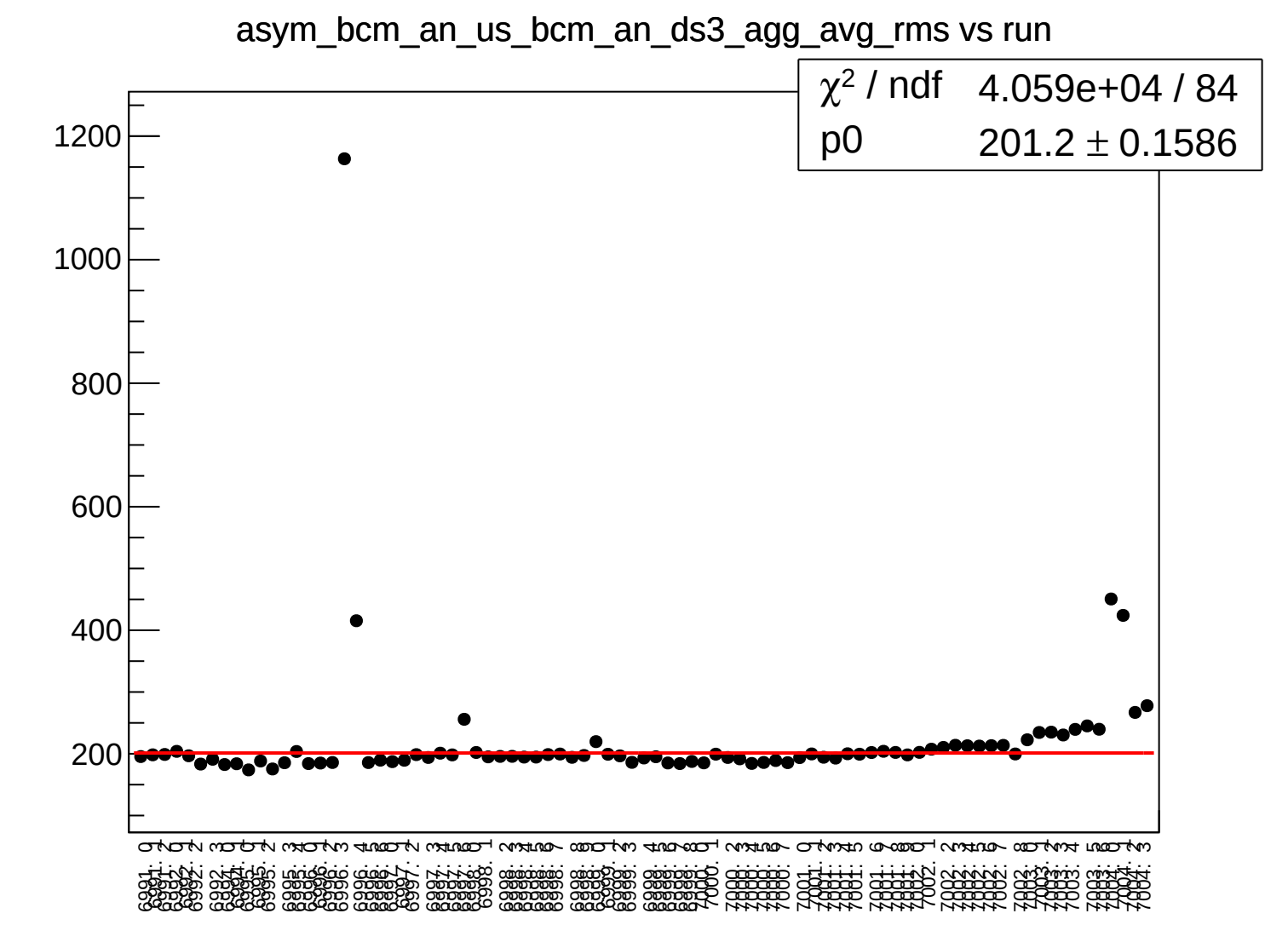

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 90.64 / 84
p0 −12.61± 12.99
400
200
0
−200
−400
pull
Entries 85
Mean 21.29
Std Dev 56.45
2
1
0
−1
−2

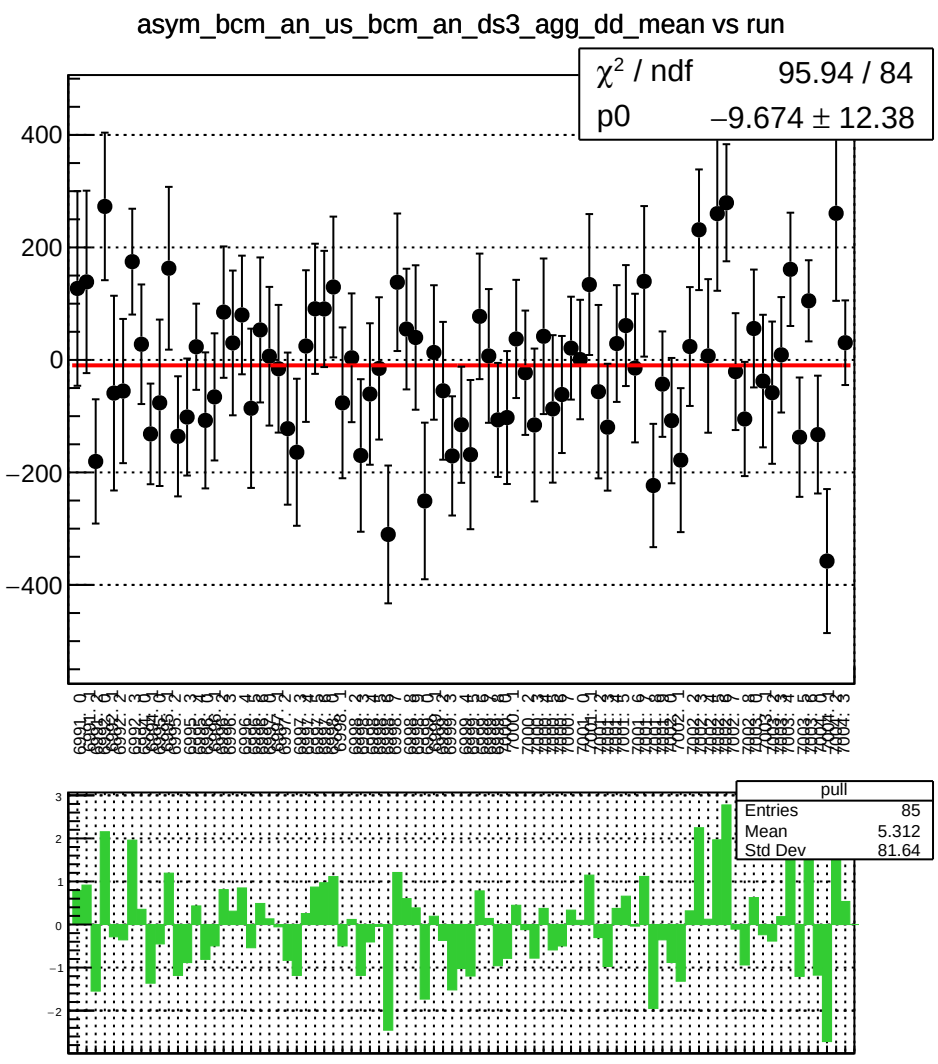

pull1D
Entries 85
Mean −0.0181
Std Dev 1.032
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

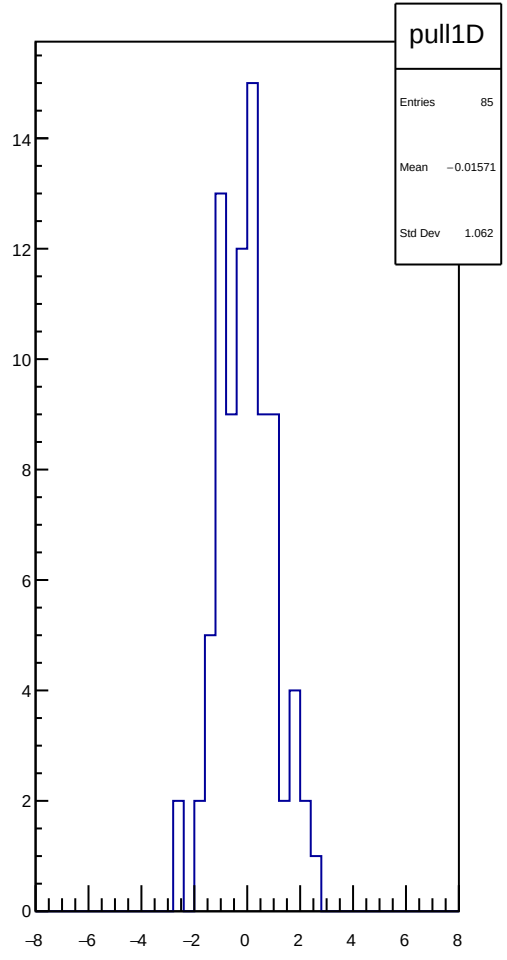

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.202e+04 / 84
p0 11.72 ± 0.009183
17
16
15
14
13
12
11
10

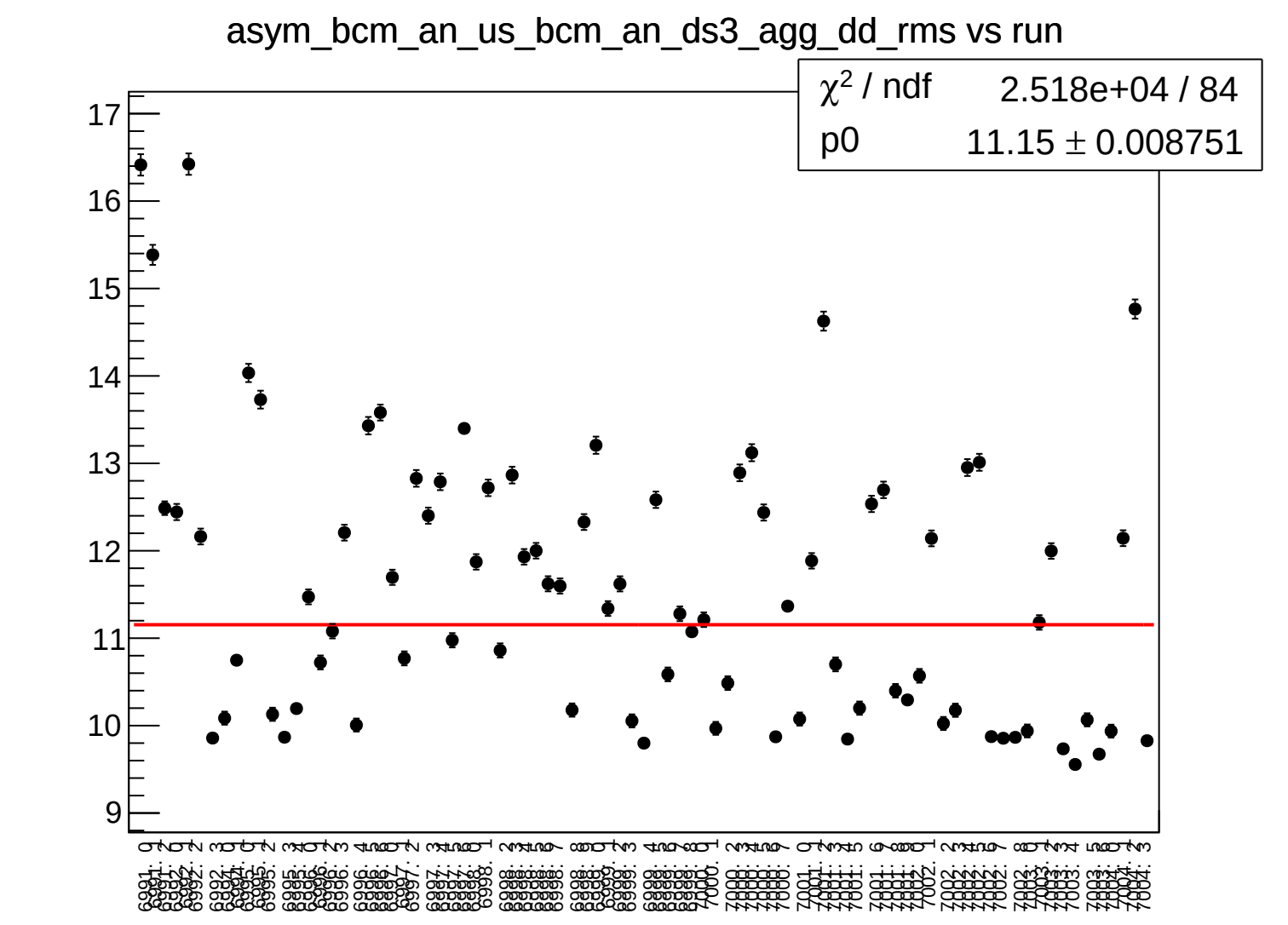

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 15.64 / 84
p0 −208.2 ± 224.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 172.4
Std Dev 118.4
1
0.5
0
−0.5
−1

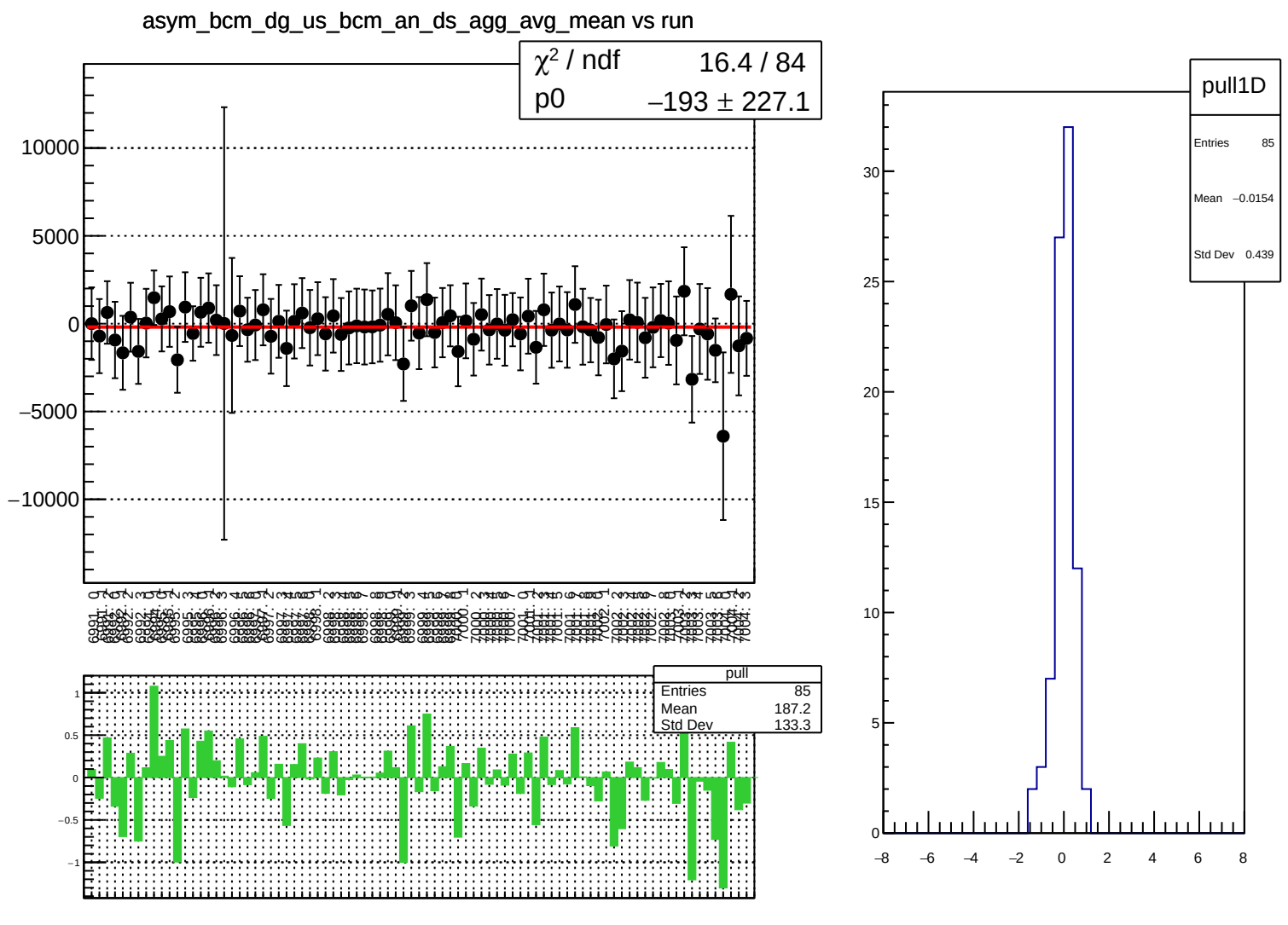

pull1D
Entries 85
Mean −0.01521
Std Dev 0.4287
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

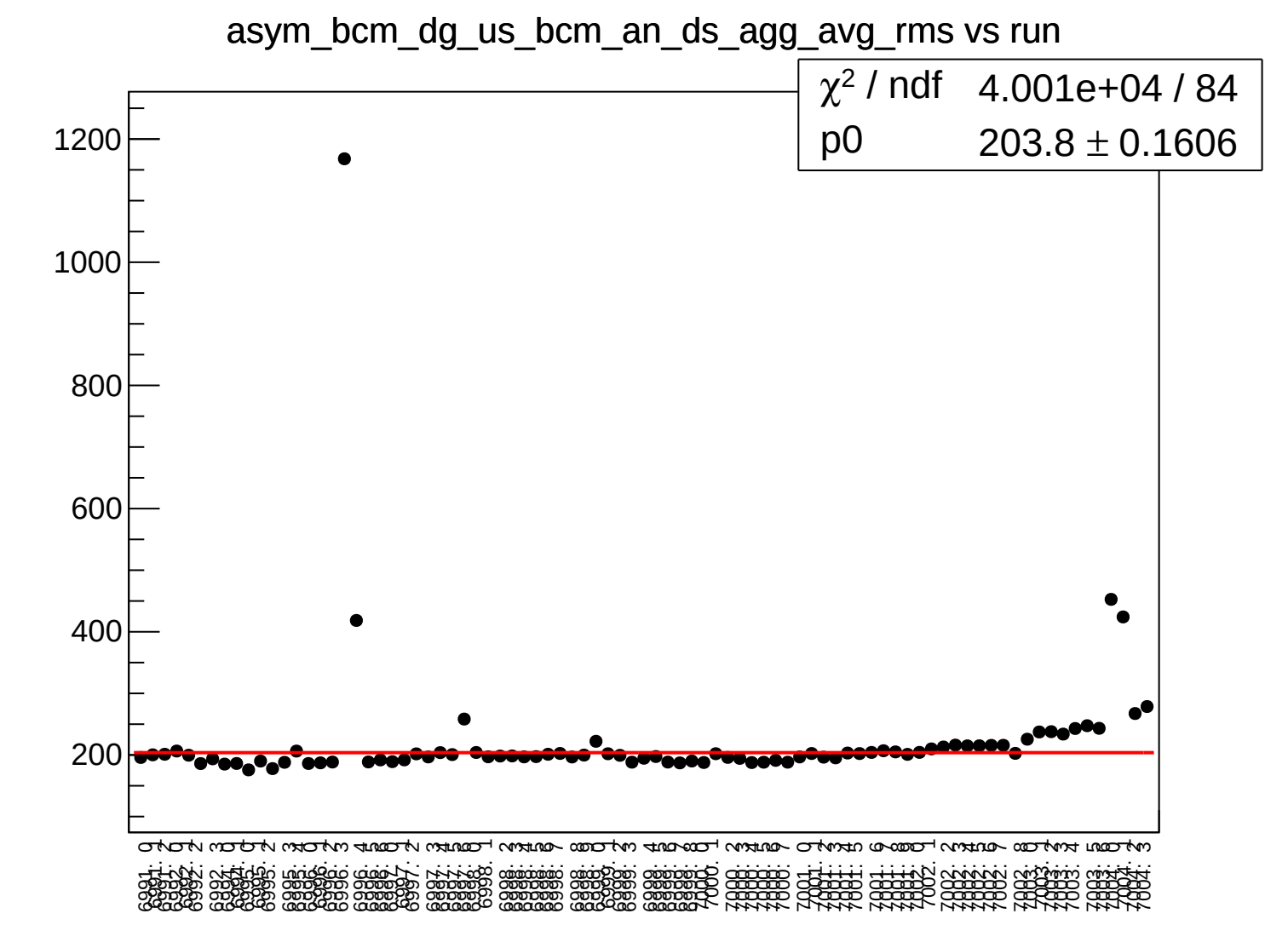

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 4.059e+04 / 84
p0 201.2 ± 0.1586
1200
1000
800
600
400
200

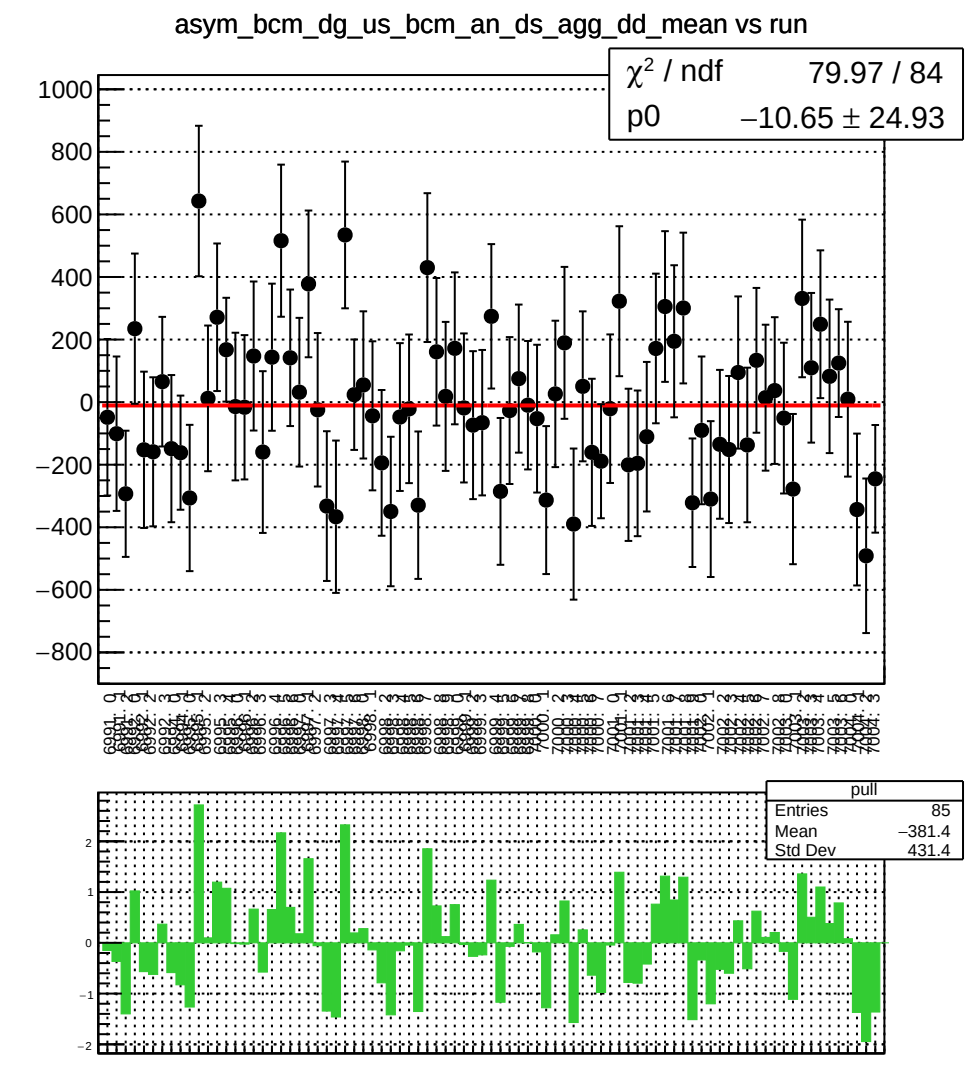

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 95.94 / 84
p0 −9.674 ± 12.38
400
200
0
−200
−400
pull
Entries 85
Mean 5.312
Std Dev 81.64
3
2
1
0
−1
−2

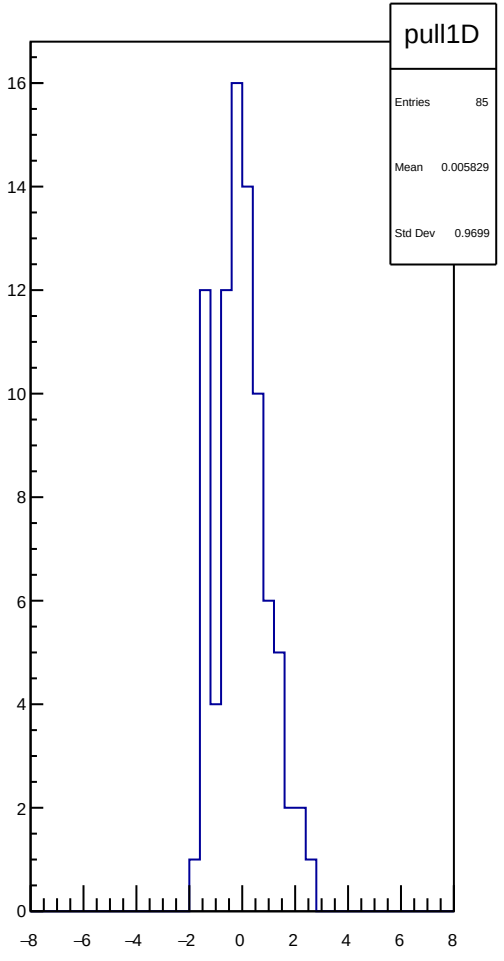

pull1D
Entries 85
Mean −0.01571
Std Dev 1.062
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

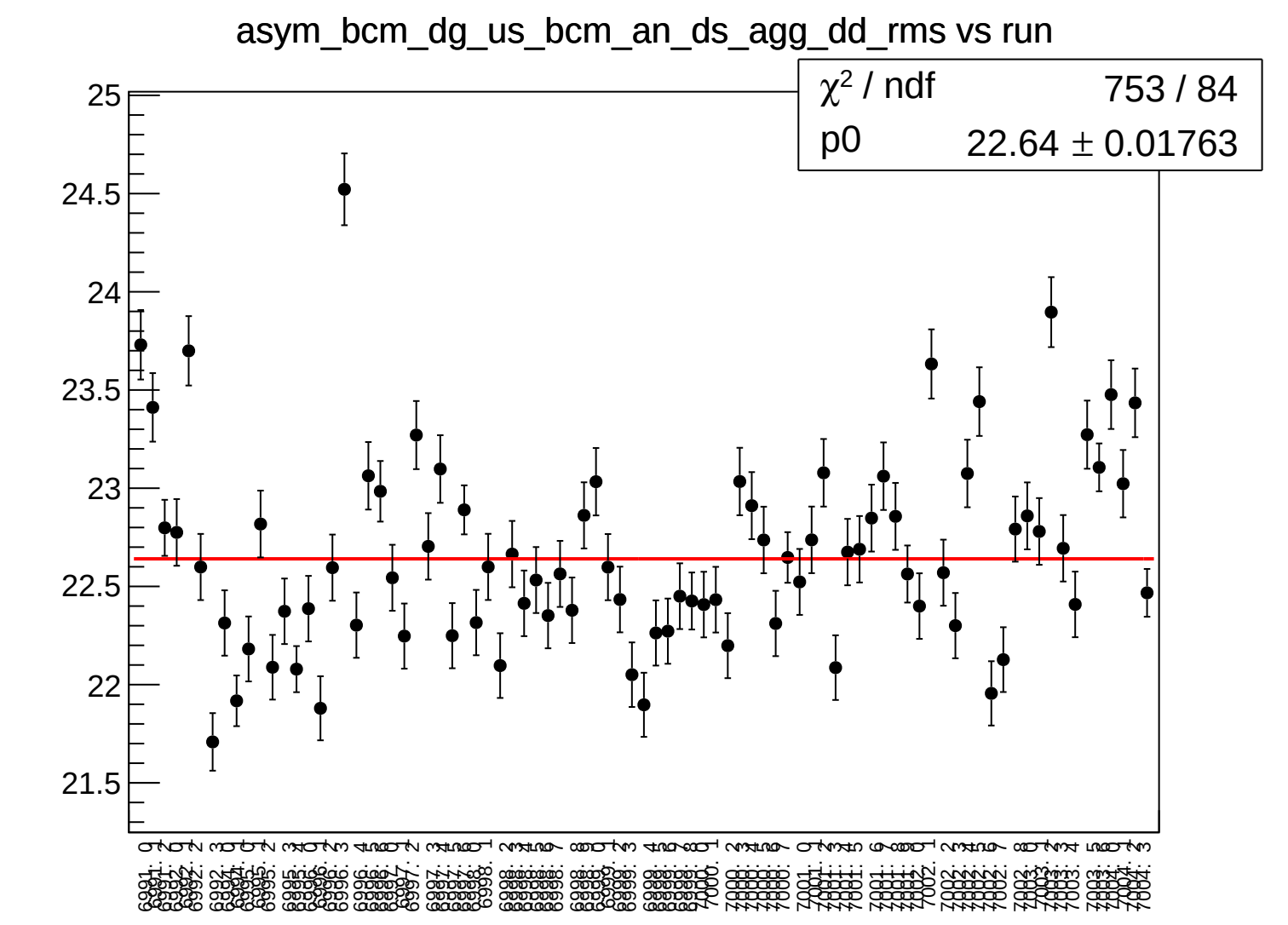

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.518e+04 / 84
p0 11.15 ± 0.008751
17
16
15
14
13
12
11
10
9

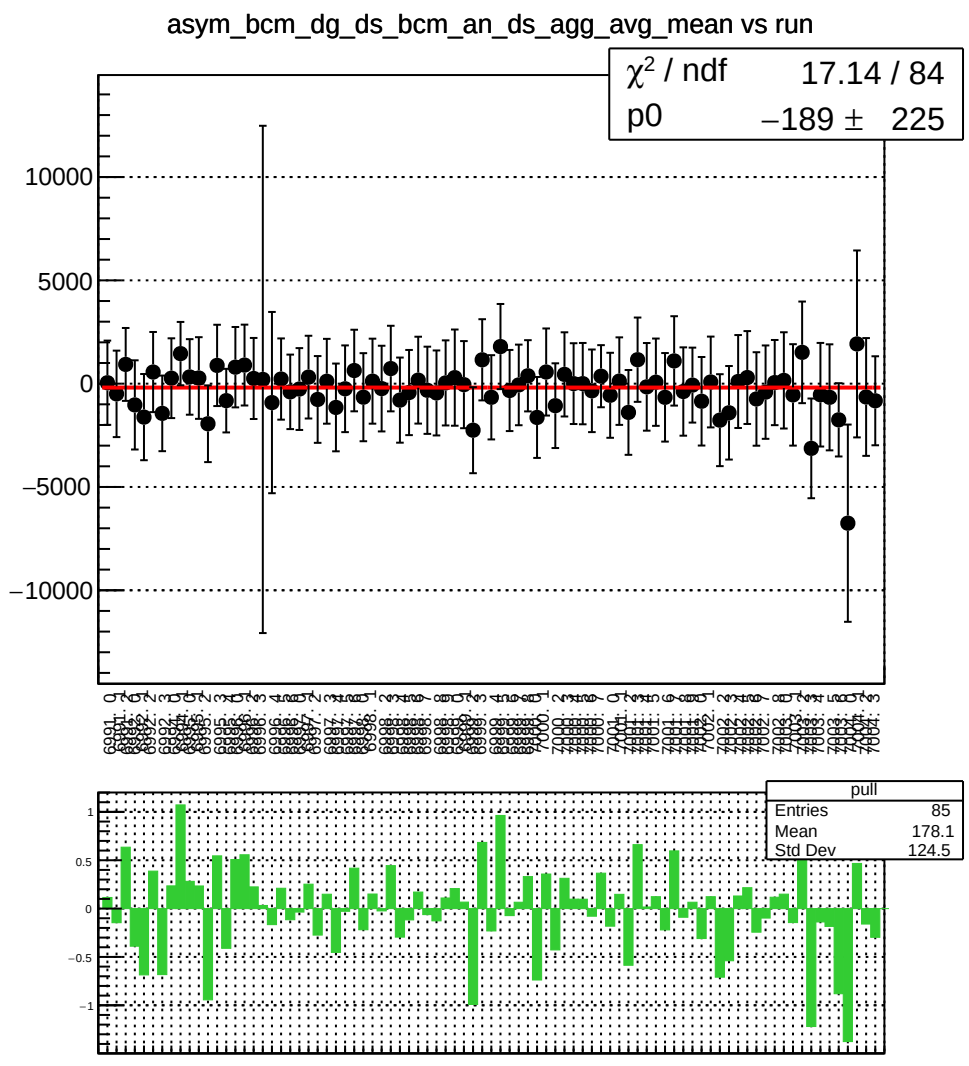

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.4 / 84
p0 −193 ± 227.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 187.2
Std Dev 133.3
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.0154
Std Dev 0.439
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

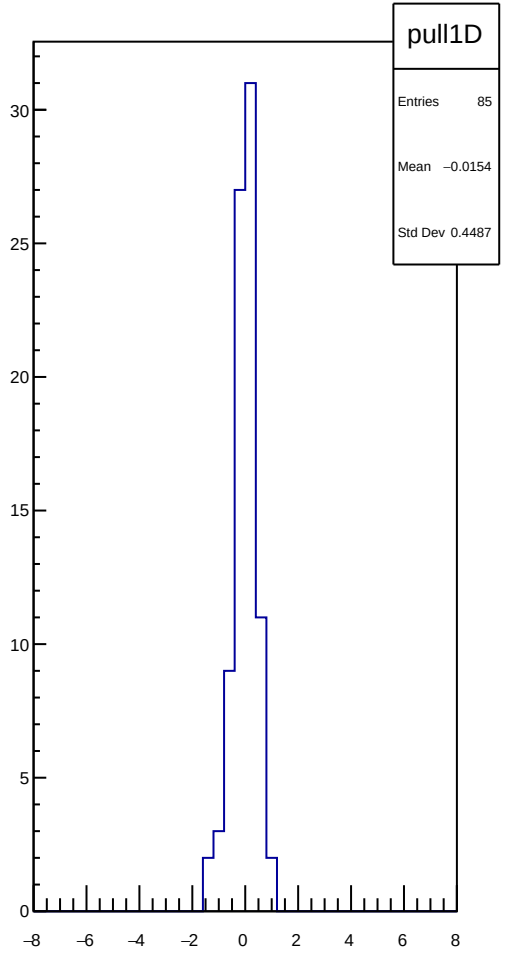

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4.001e+04 / 84
p0 203.8 ± 0.1606
1200
1000
800
600
400
200

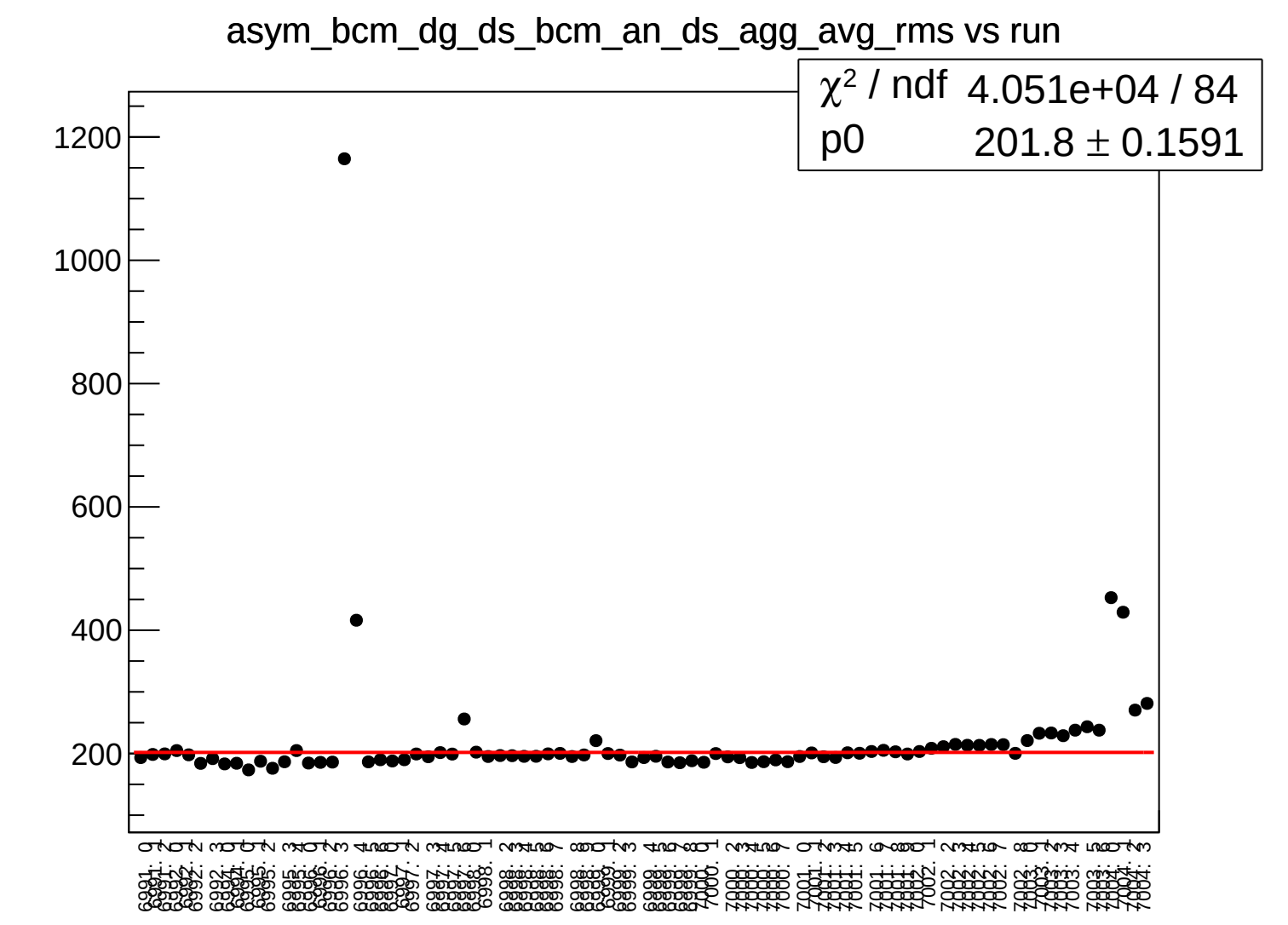

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 79.97 / 84
p0 −10.65 ± 24.93
pull
Entries 85
Mean −381.4
Std Dev 431.4

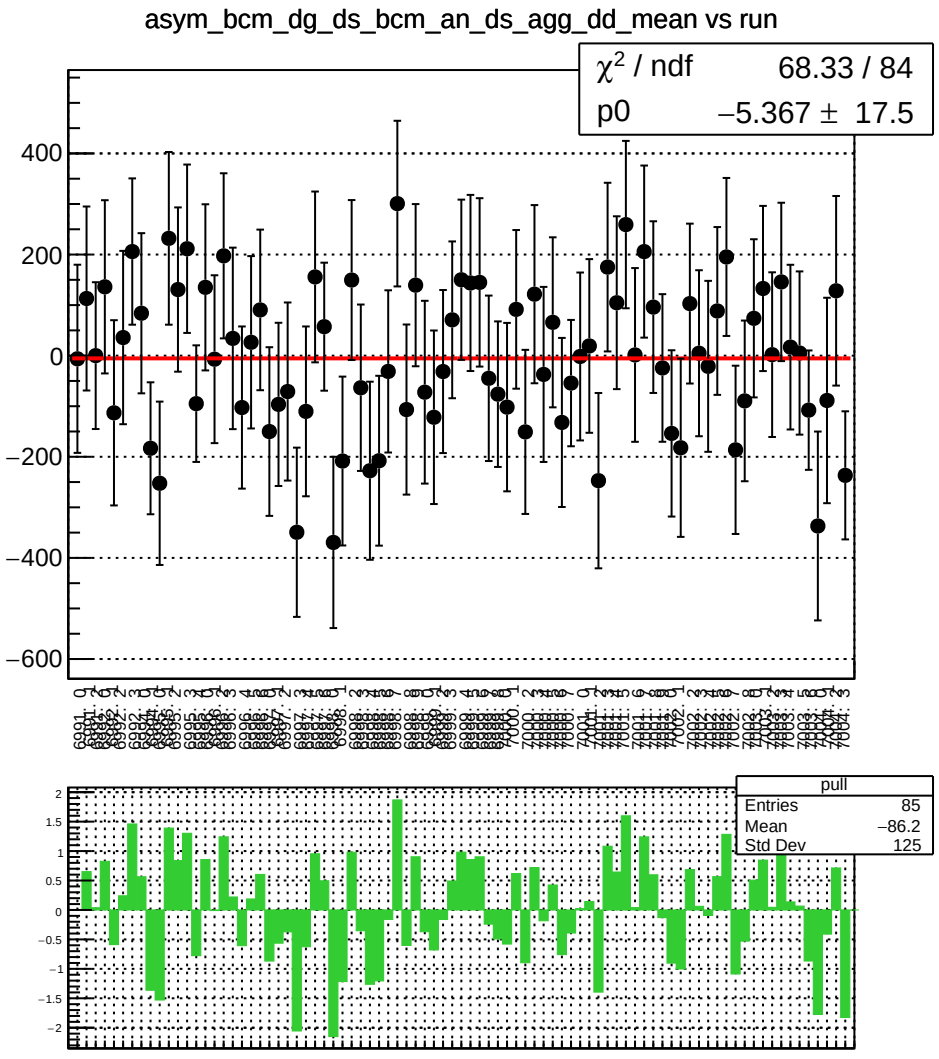

pull1D
Entries 85
Mean 0.005829
Std Dev 0.9699

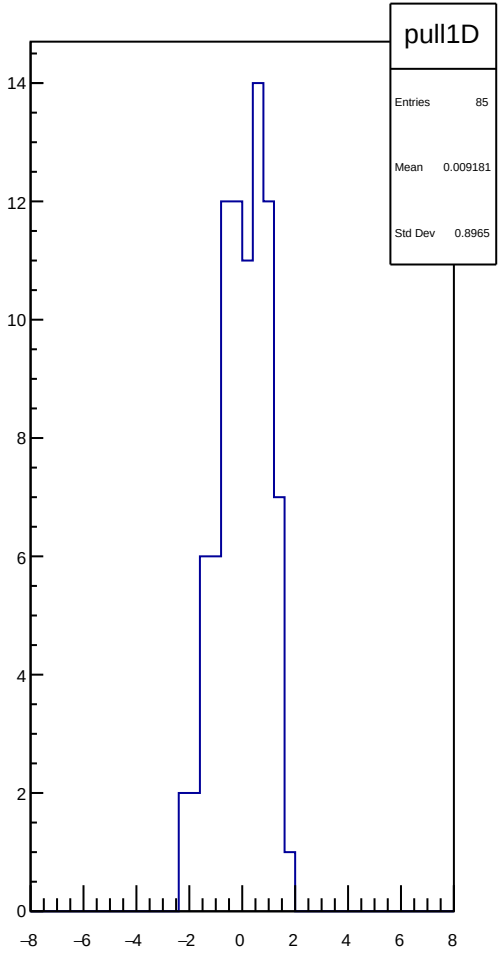

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 753 / 84
p0 22.64 ± 0.01763
25
24.5
24
23.5
23
22.5
22
21.5

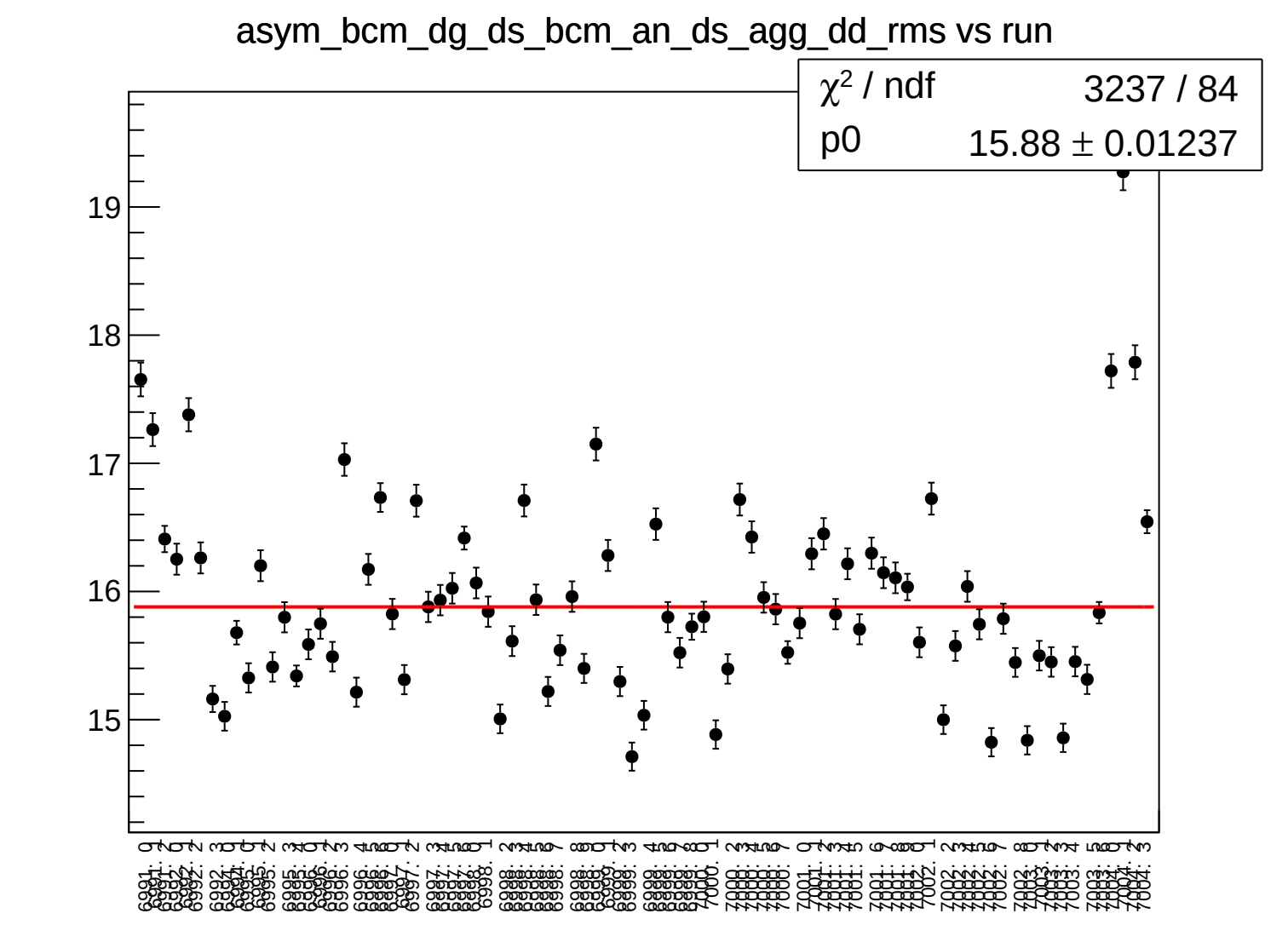

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.14 / 84
p0 −189 ± 225
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 178.1
Std Dev 124.5
1
0.5
0
−0.5
−1

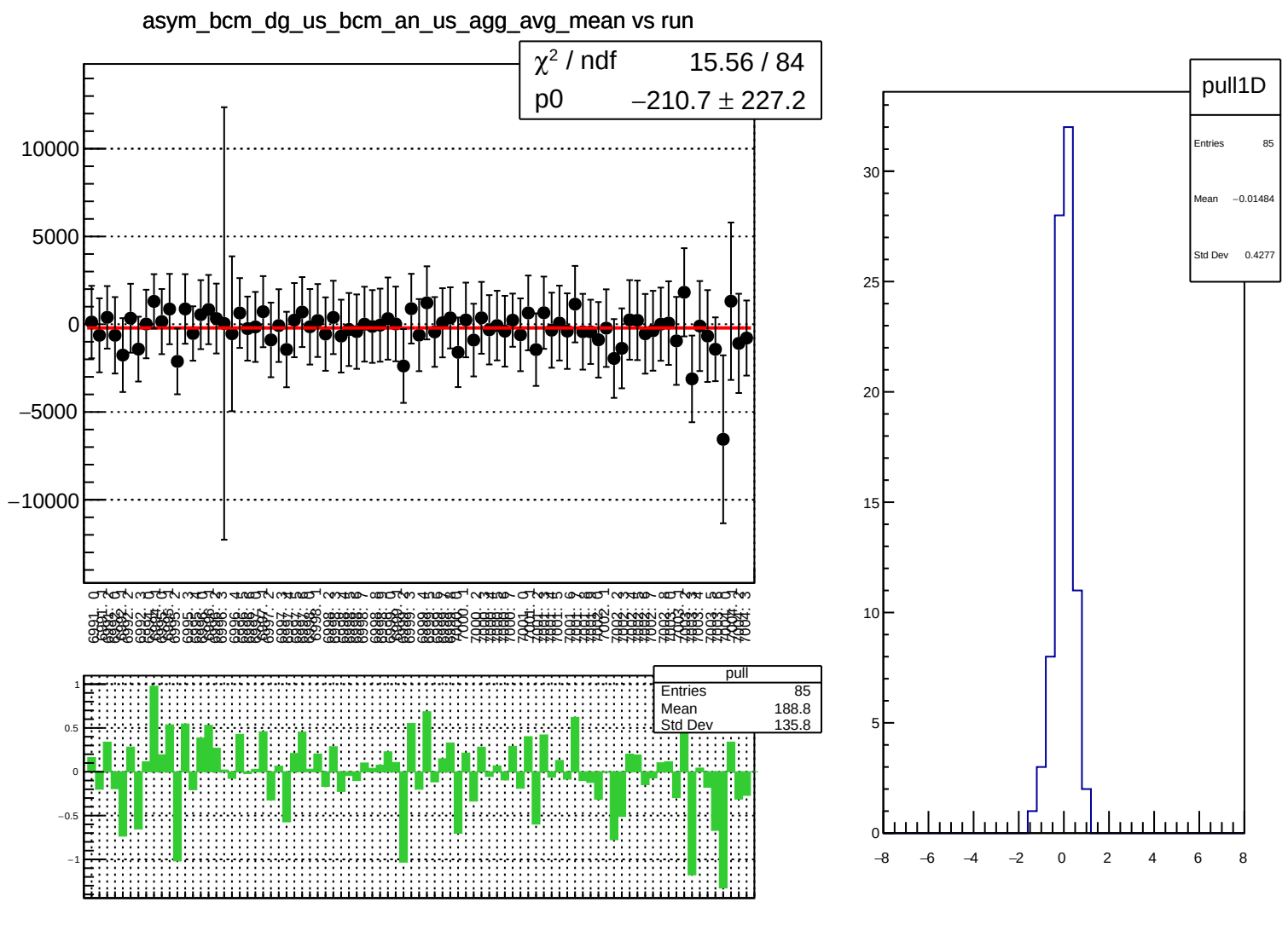

pull1D
Entries 85
Mean −0.0154
Std Dev 0.4487
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

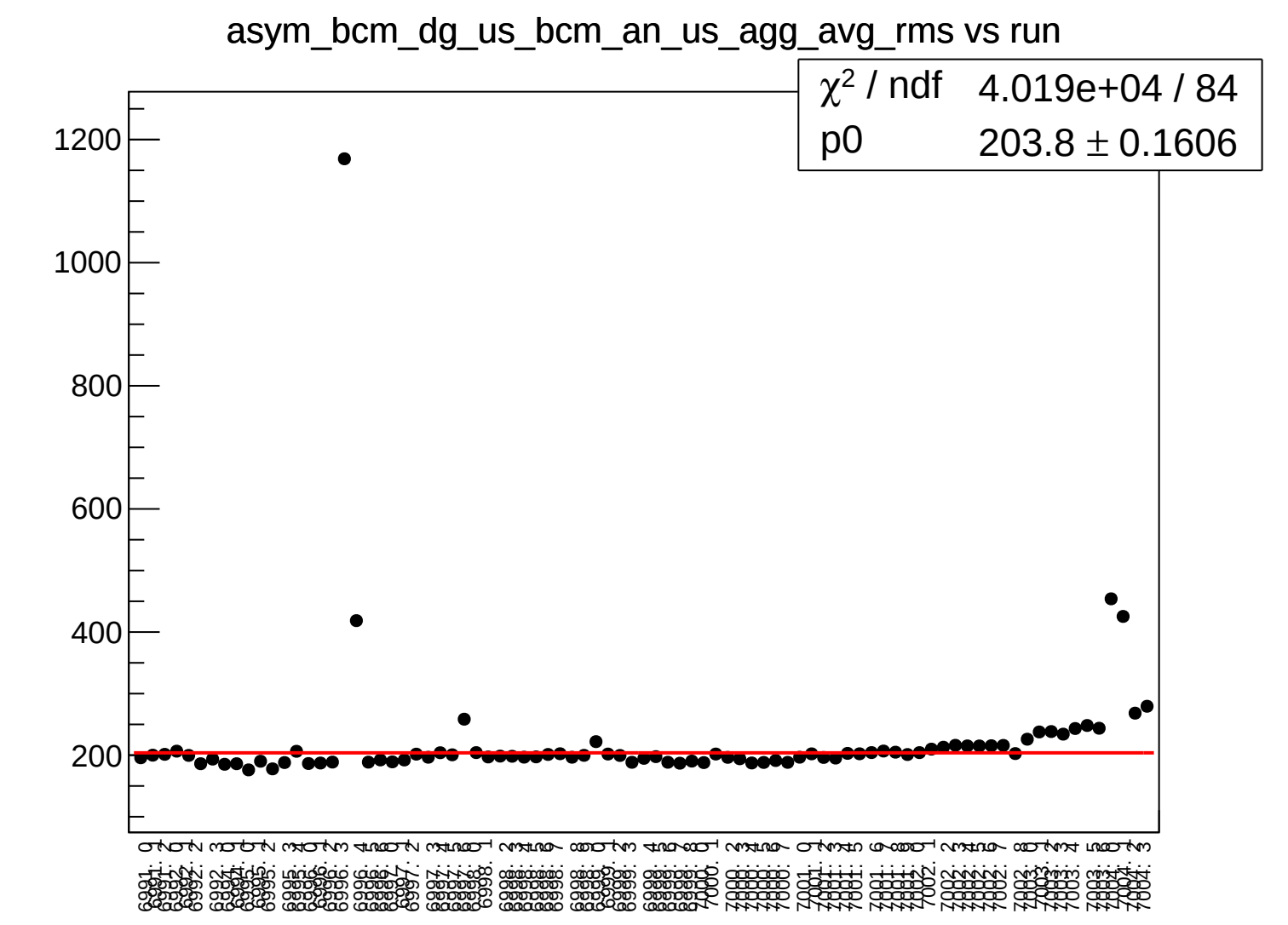

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4.051e+04 / 84
p0 201.8 ± 0.1591
1200
1000
800
600
400
200

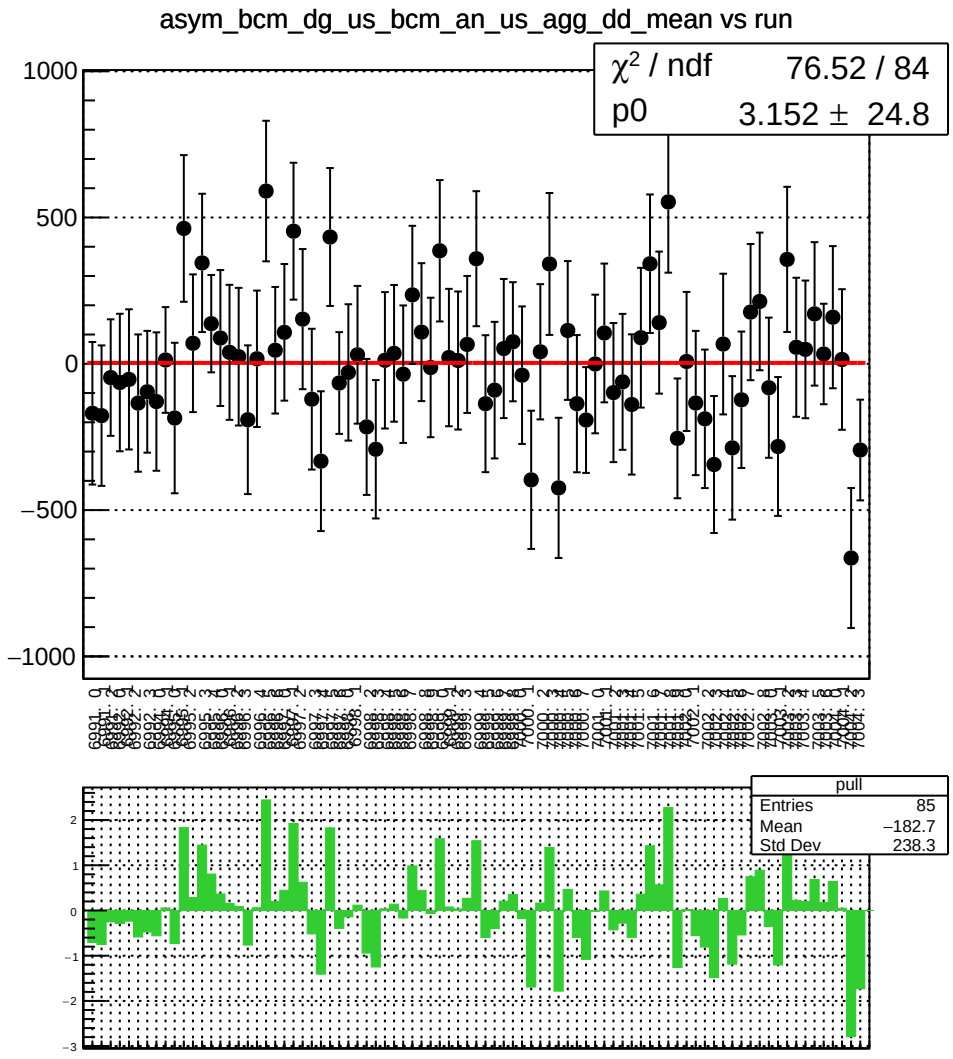

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.33 / 84
p0 −5.367 ± 17.5
400
200
0
−200
−400
−600
pull
Entries 85
Mean −86.2
Std Dev 125
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

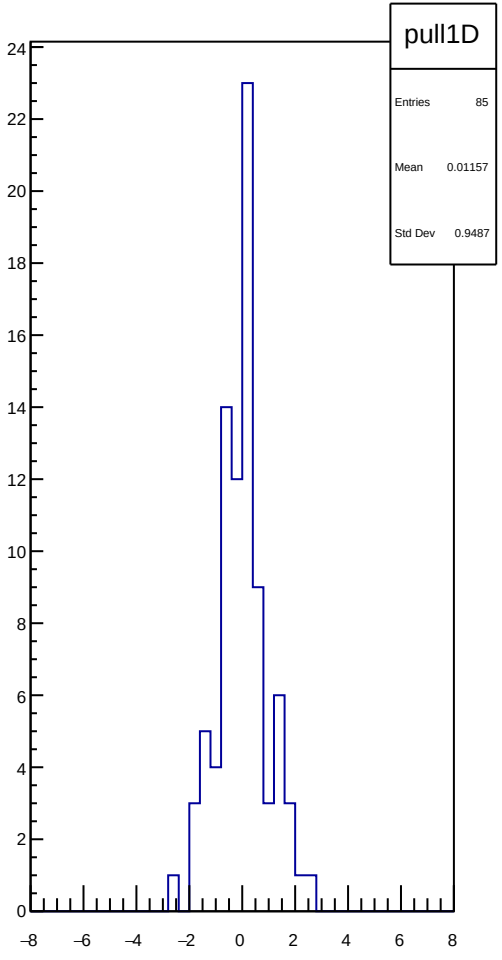

pull1D
Entries 85
Mean 0.009181
Std Dev 0.8965
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

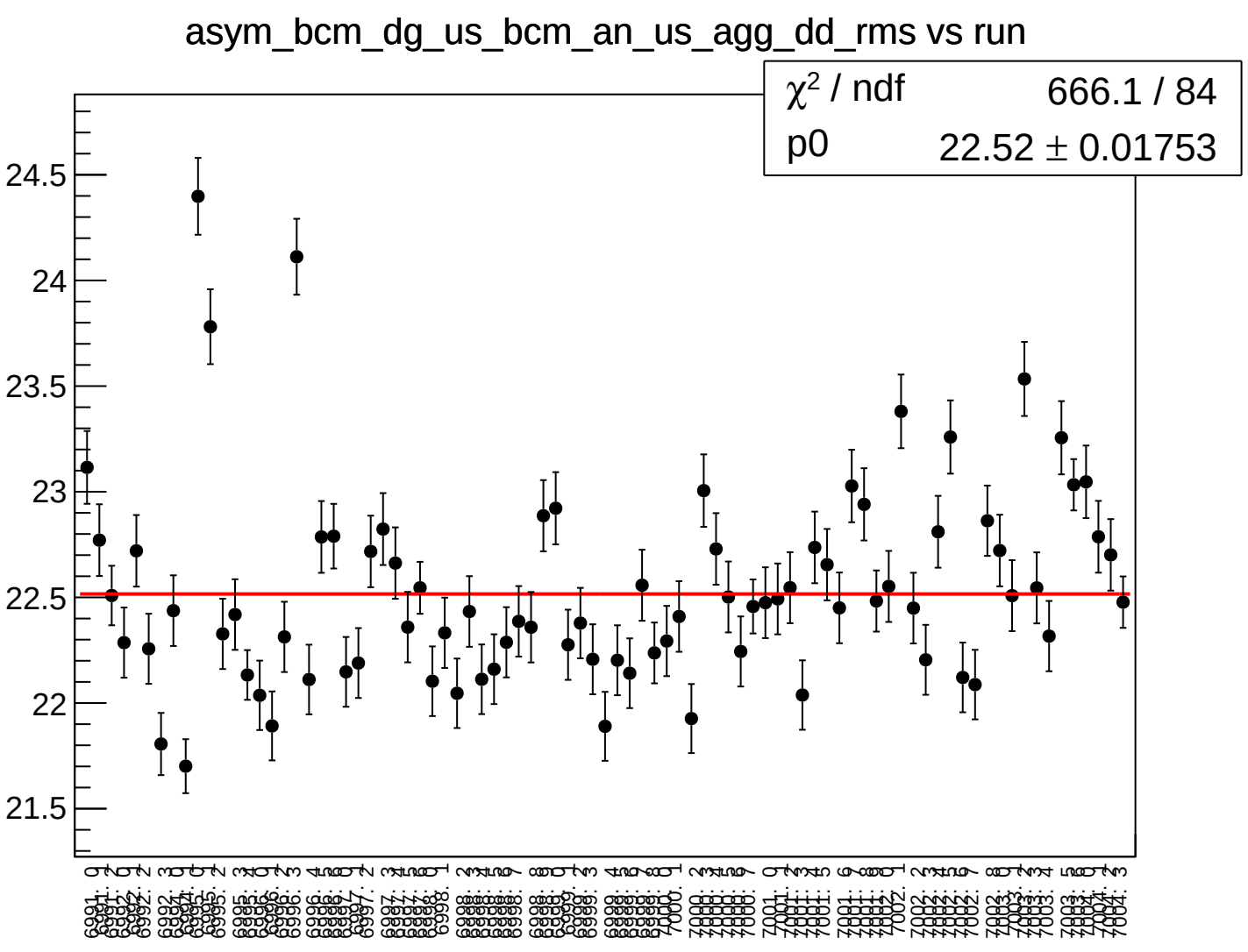

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3237 / 84
p0 15.88 ± 0.01237
19
18
17
16
15

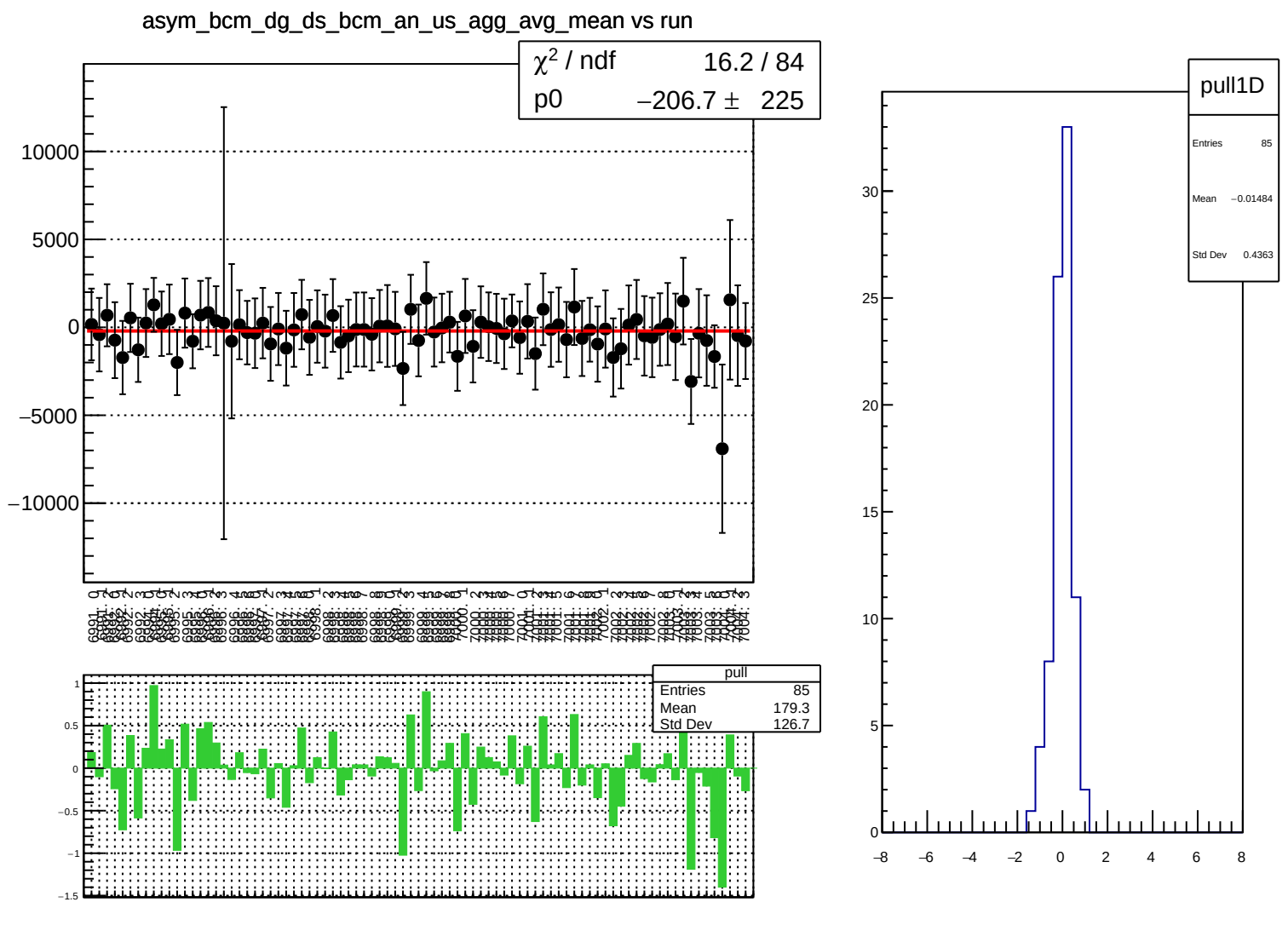

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.56 / 84
p0 −210.7 ± 227.2
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 188.8
Std Dev 135.8
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.01484
Std Dev 0.4277
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

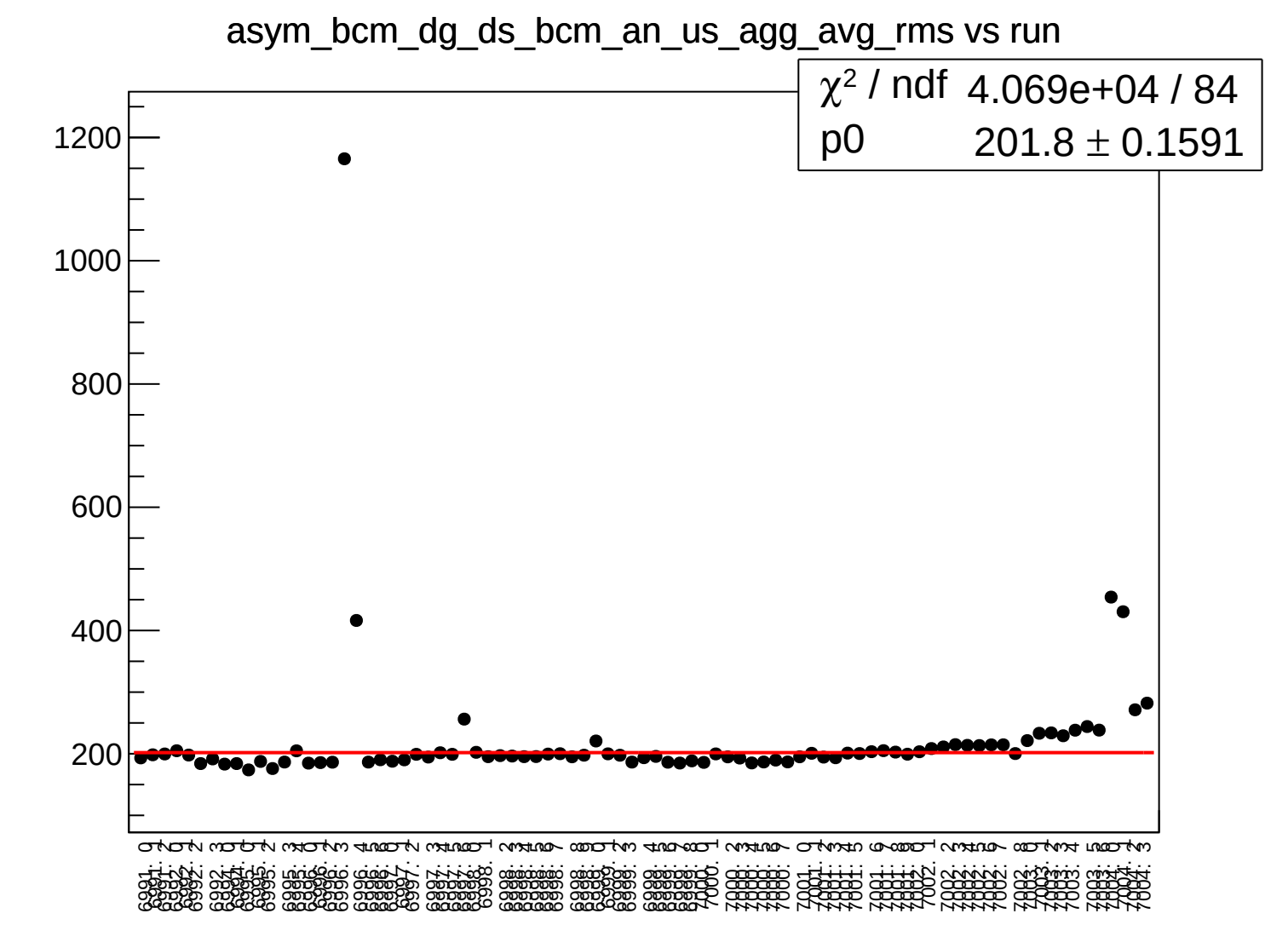

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4.019e+04 / 84
p0 203.8 ± 0.1606
1200
1000
800
600
400
200

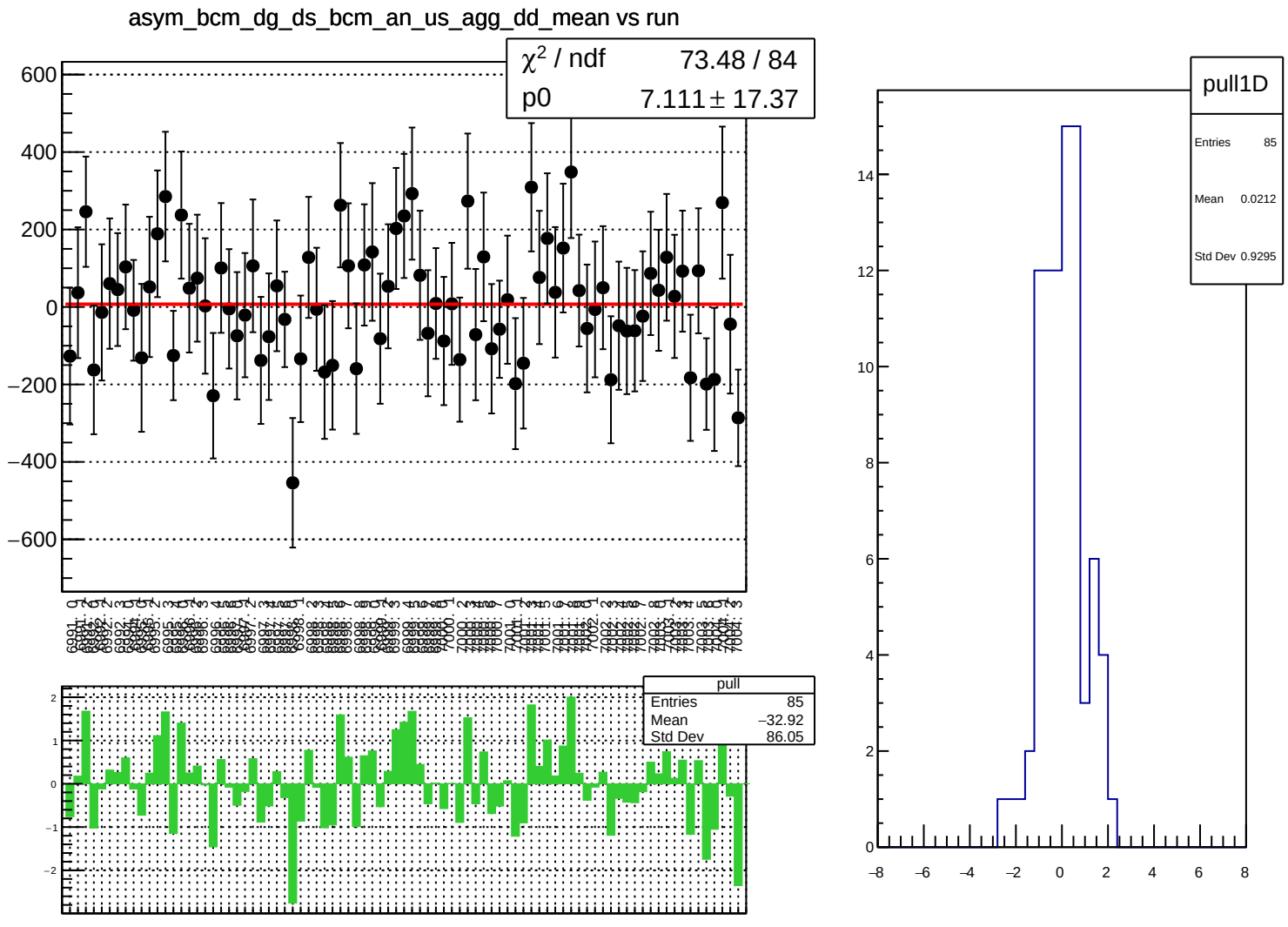

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 76.52 / 84
p0 3.152 ± 24.8
1000
500
0
−500
−1000
pull
Entries 85
Mean −182.7
Std Dev 238.3
2
1
0
−1
−2
−3

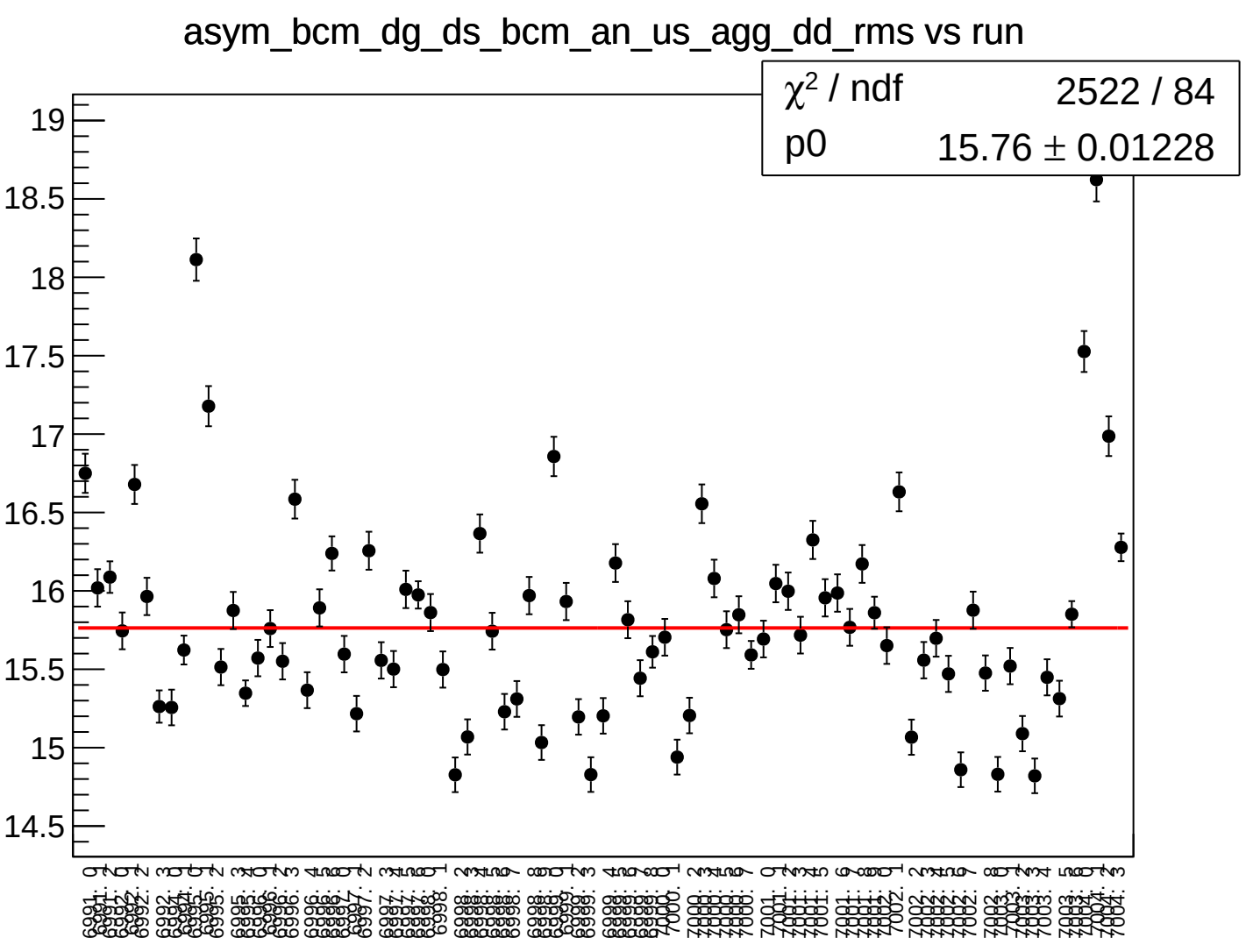

pull1D
Entries 85
Mean 0.01157
Std Dev 0.9487
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

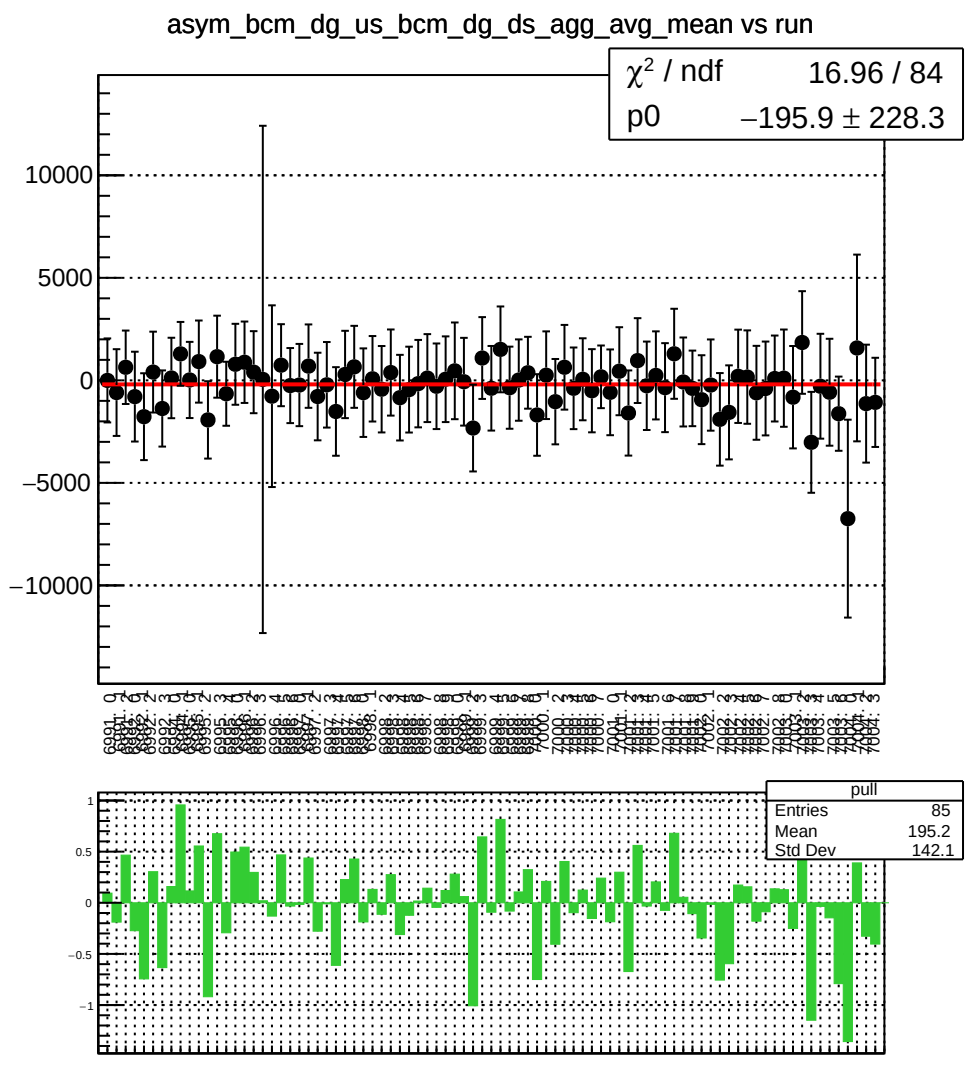

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 666.1 / 84
p0 22.52 ± 0.01753
24.5
24
23.5
23
22.5
22
21.5

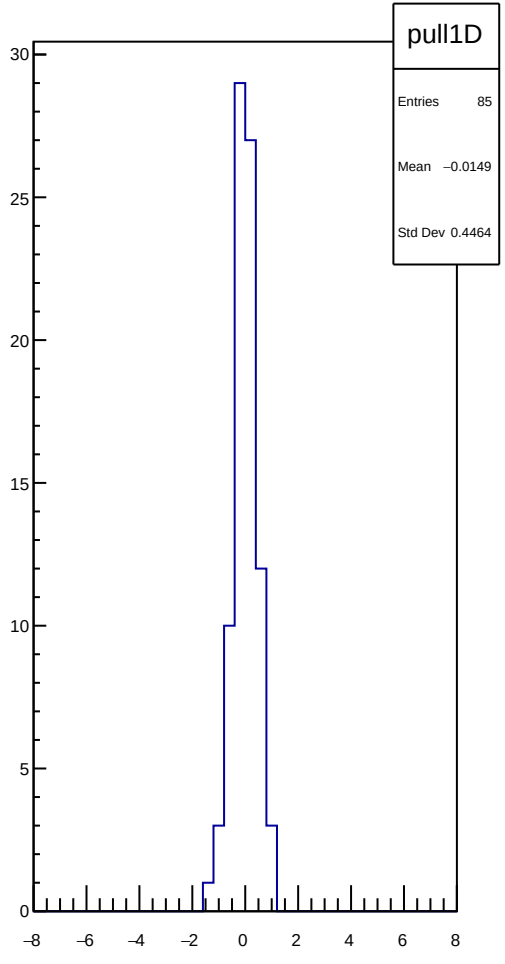

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.2 / 84
p0 −206.7 ± 225
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 179.3
Std Dev 126.7
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean −0.01484
Std Dev 0.4363
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

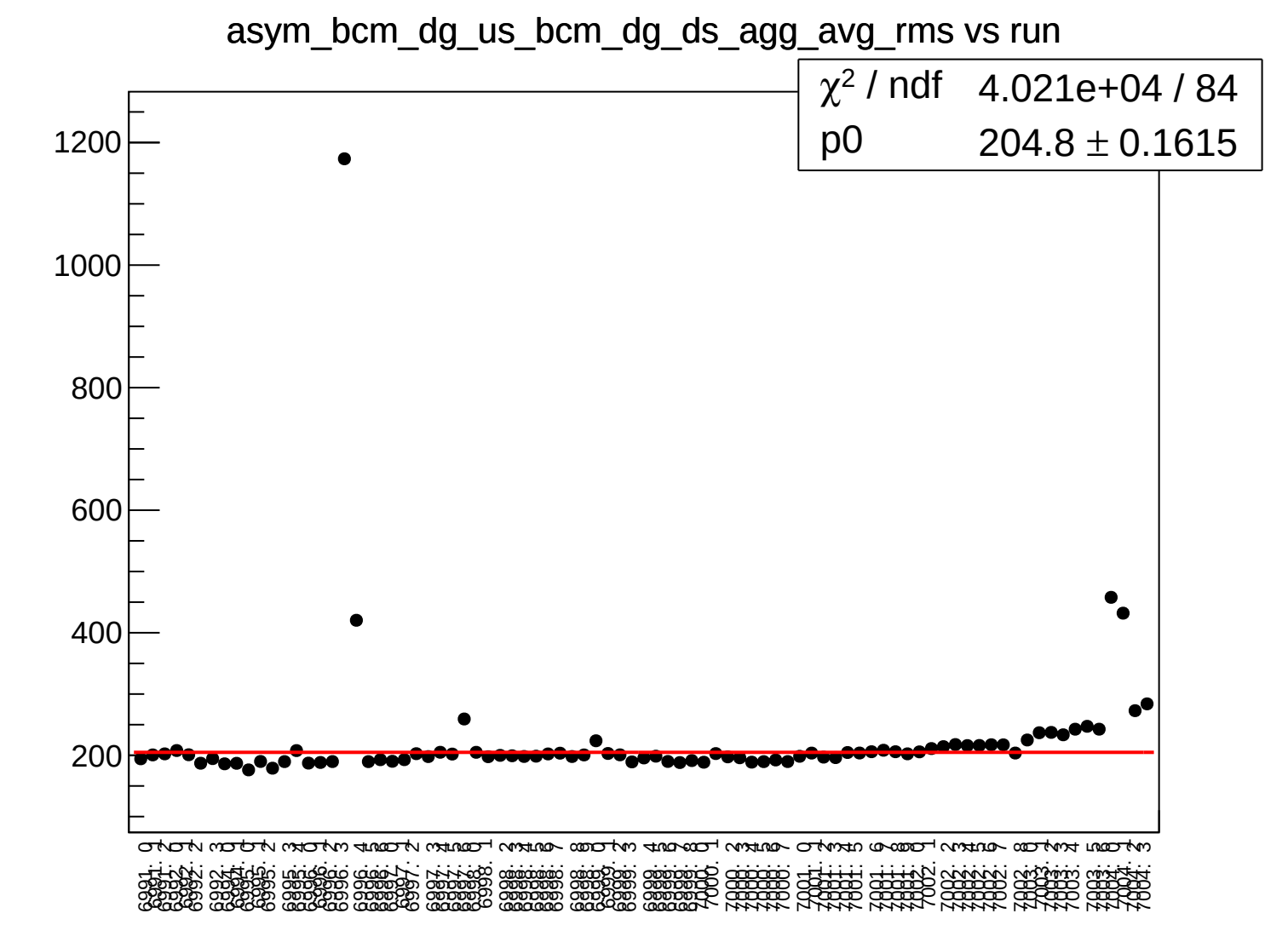

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4.069e+04 / 84
p0 201.8 ± 0.1591
1200
1000
800
600
400
200

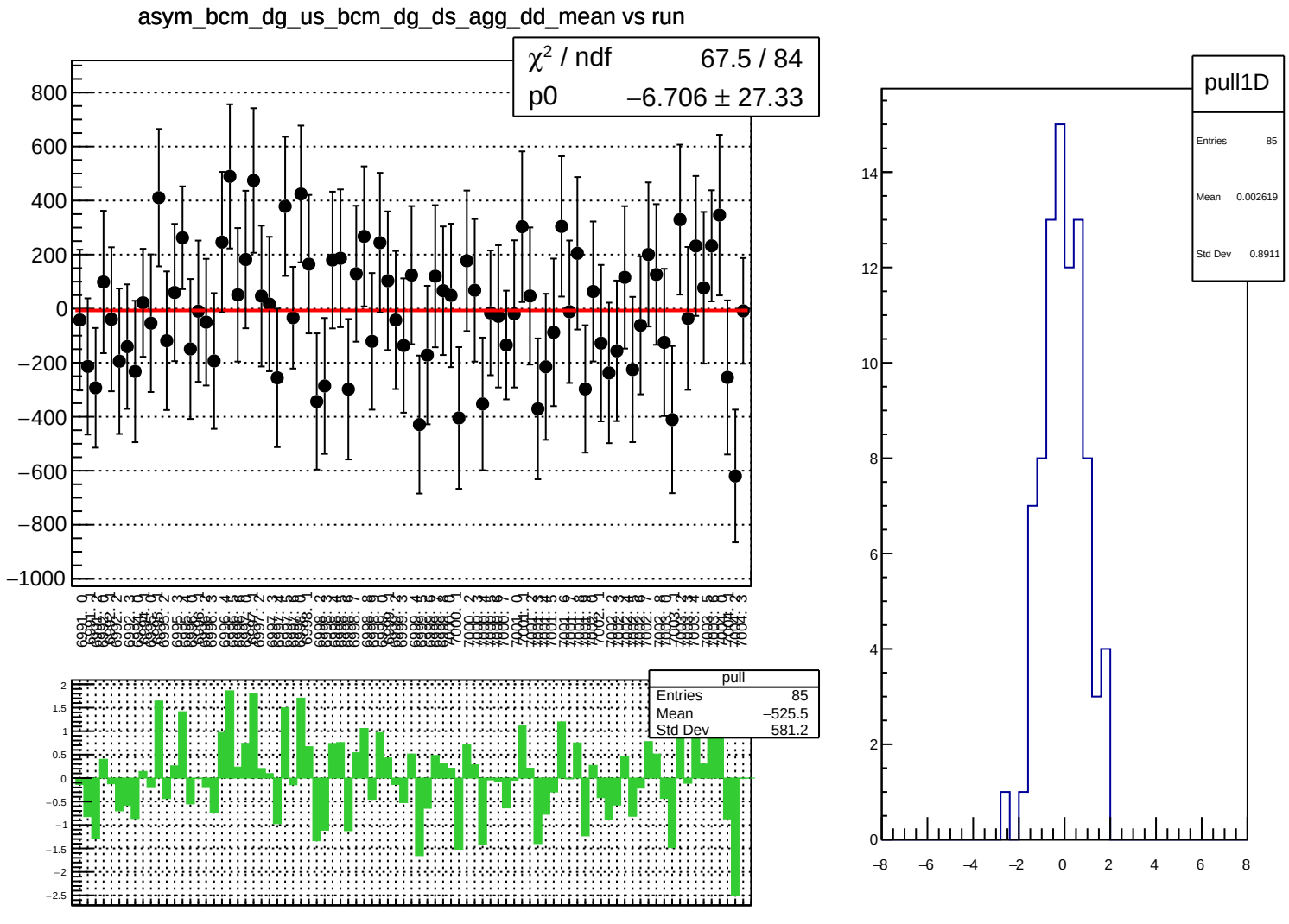

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 73.48 / 84
p0 7.111 ± 17.37
pull
Entries 85
Mean −32.92
Std Dev 86.05
pull1D
Entries 85
Mean 0.0212
Std Dev 0.9295

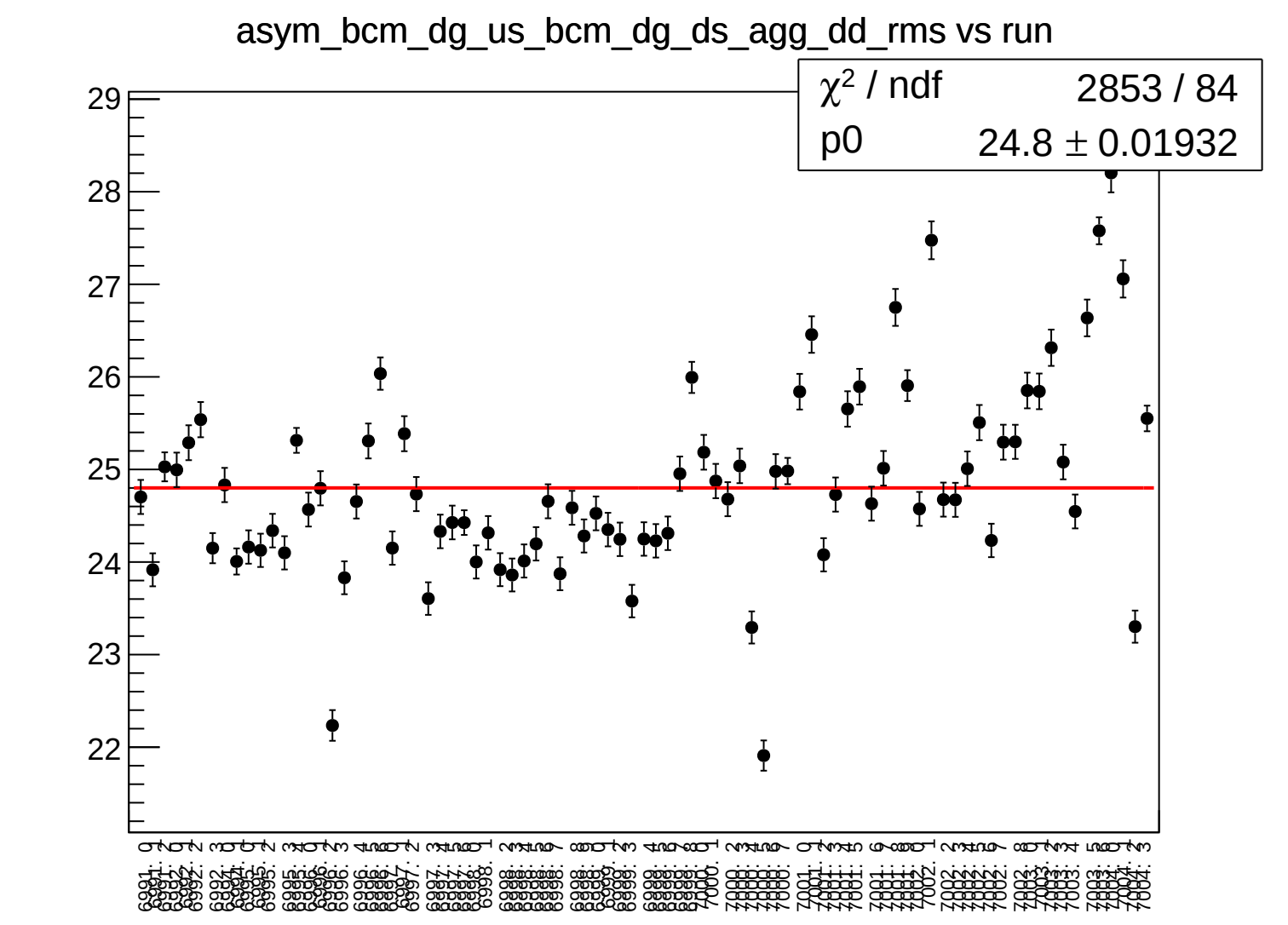

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ^2 / ndf 2522 / 84
p0 15.76 ± 0.01228
19
18.5
18
17.5
17
16.5
16
15.5
15
14.5

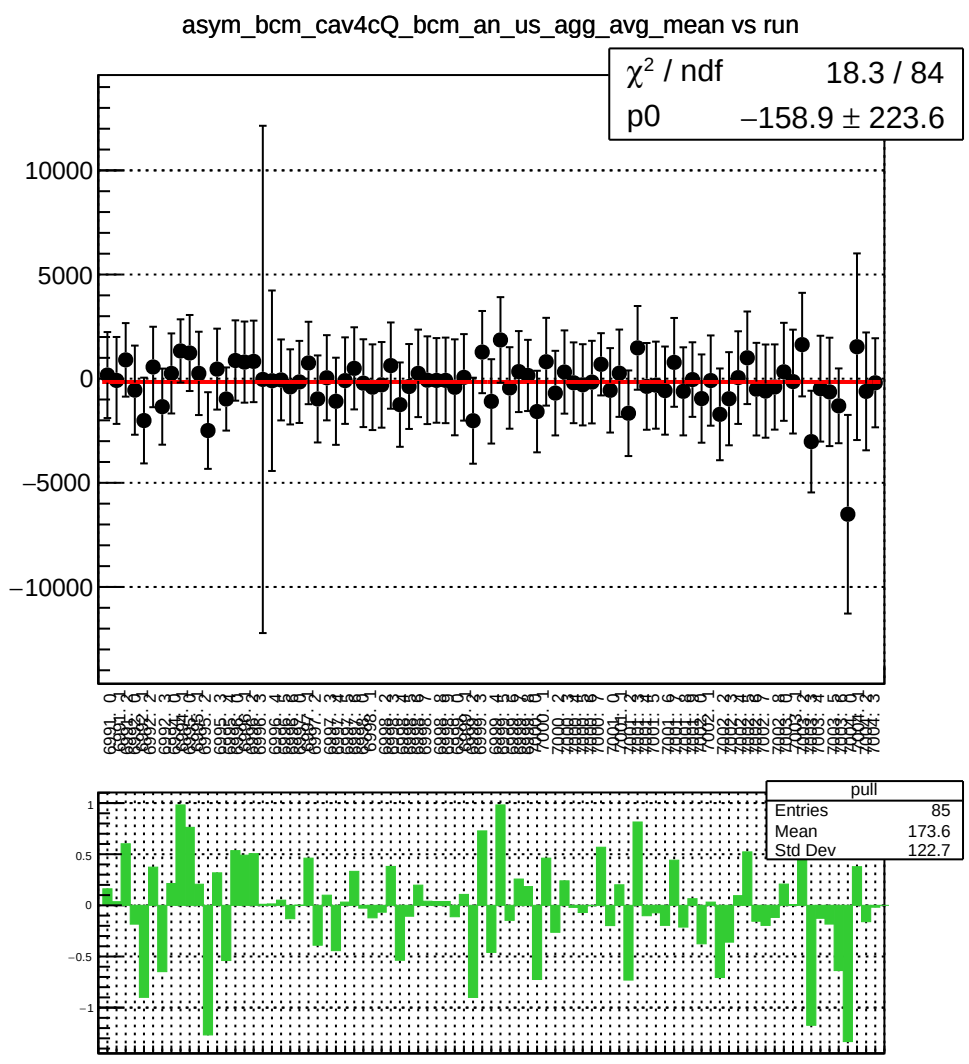

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 16.96 / 84
p0 −195.9 ± 228.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 195.2
Std Dev 142.1
1
0.5
0
−0.5
−1

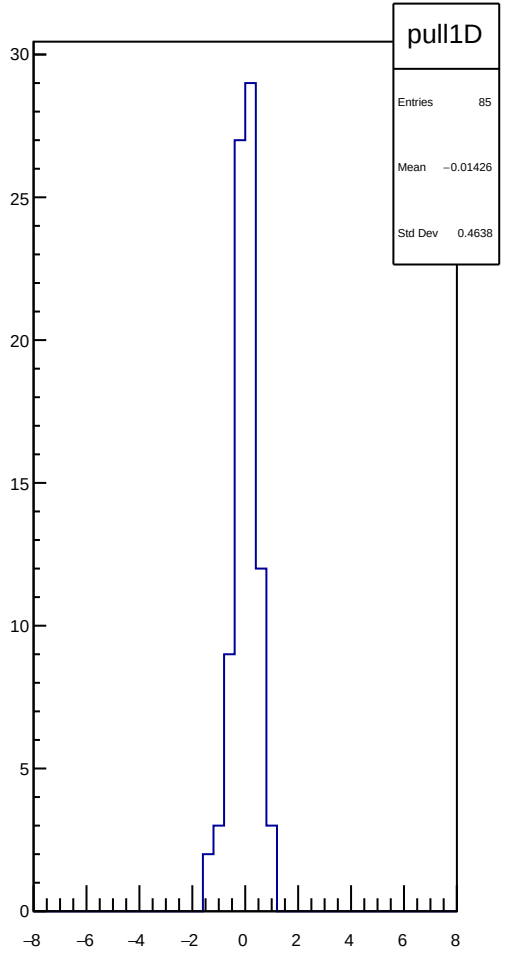

pull1D
Entries 85
Mean −0.0149
Std Dev 0.4464
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

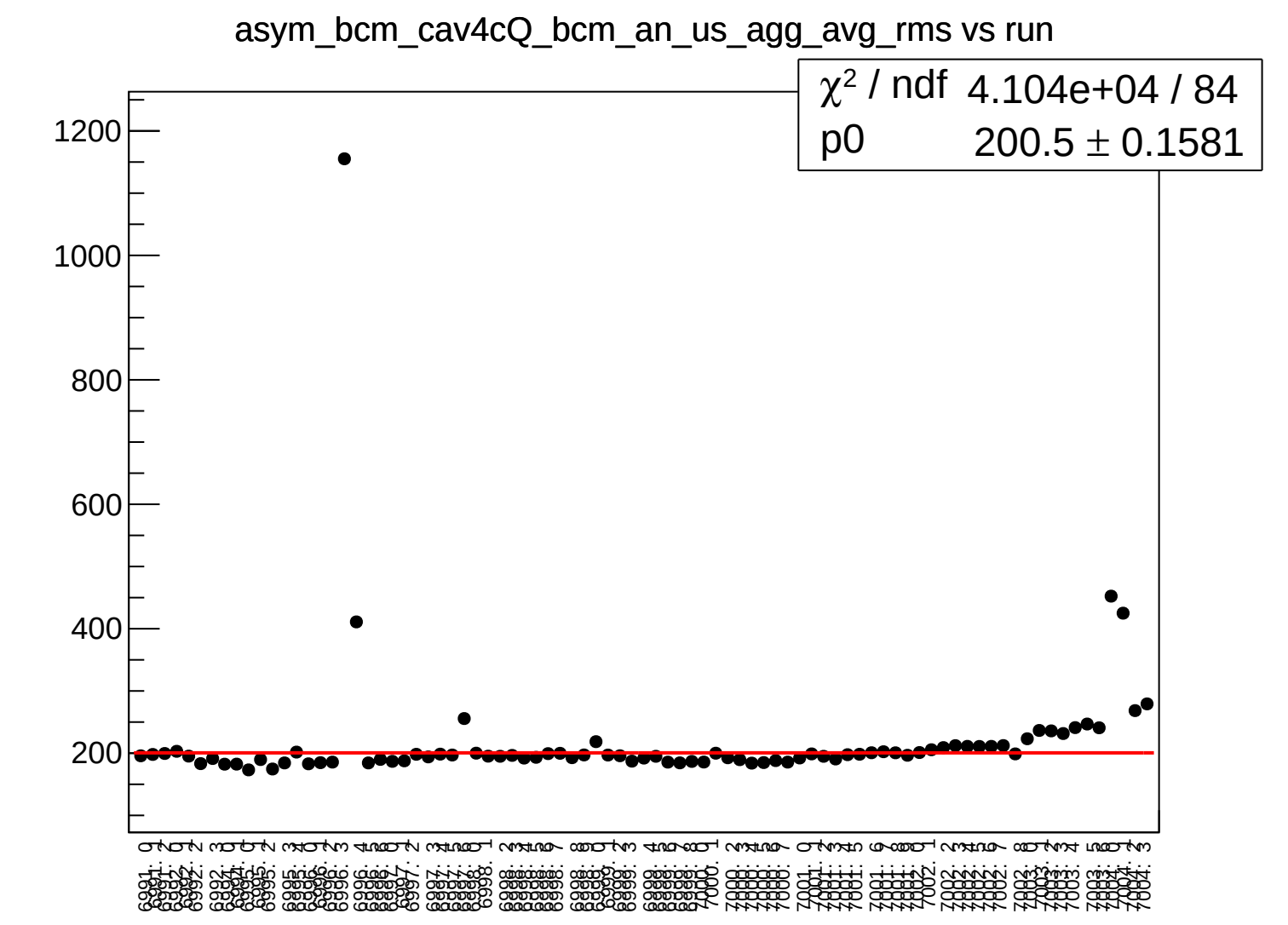

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 4.021e+04 / 84
p0 204.8 ± 0.1615
1200
1000
800
600
400
200

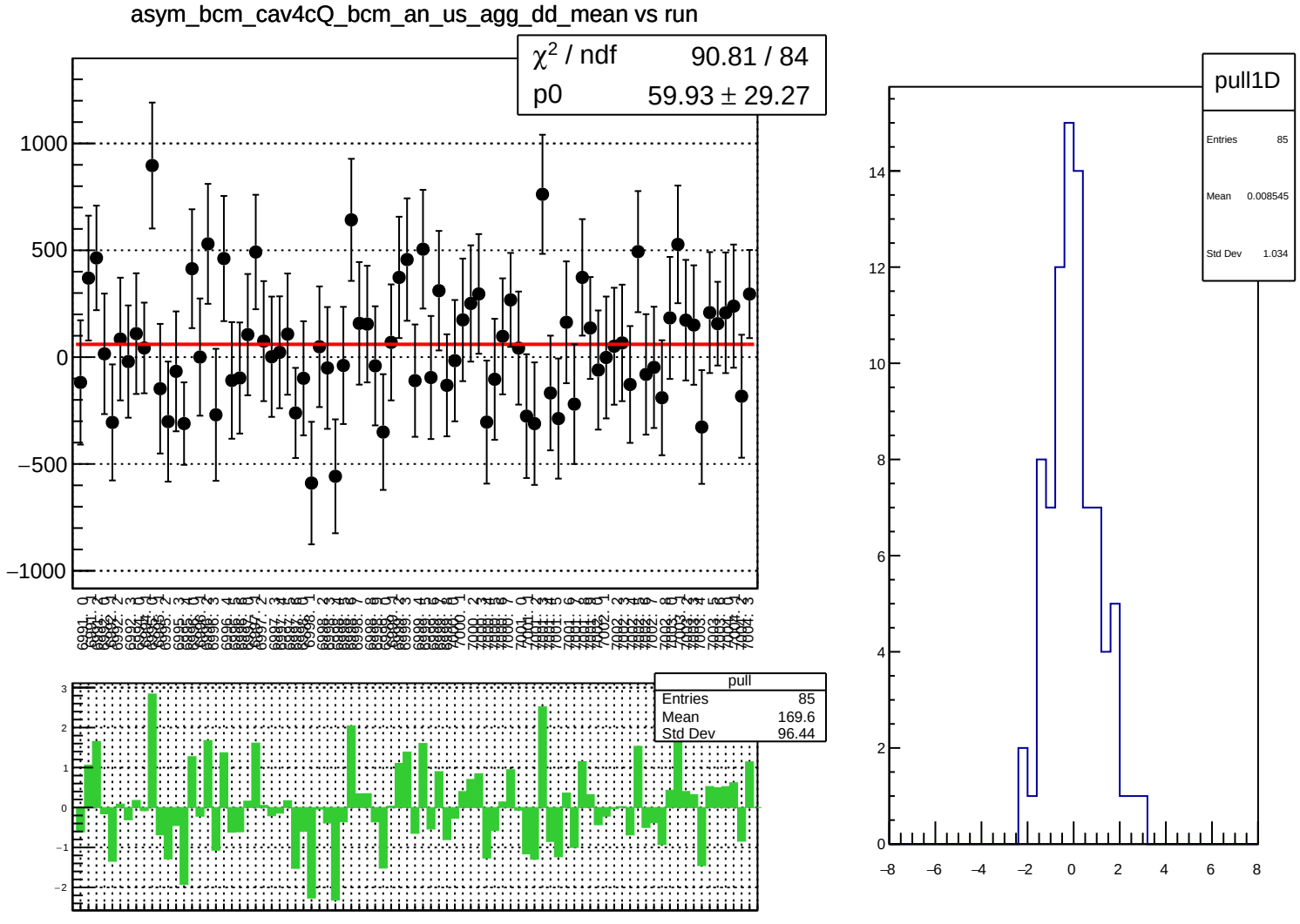

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 67.5 / 84
p0 −6.706 ± 27.33
pull
Entries 85
Mean −525.5
Std Dev 581.2
pull1D
Entries 85
Mean 0.002619
Std Dev 0.8911

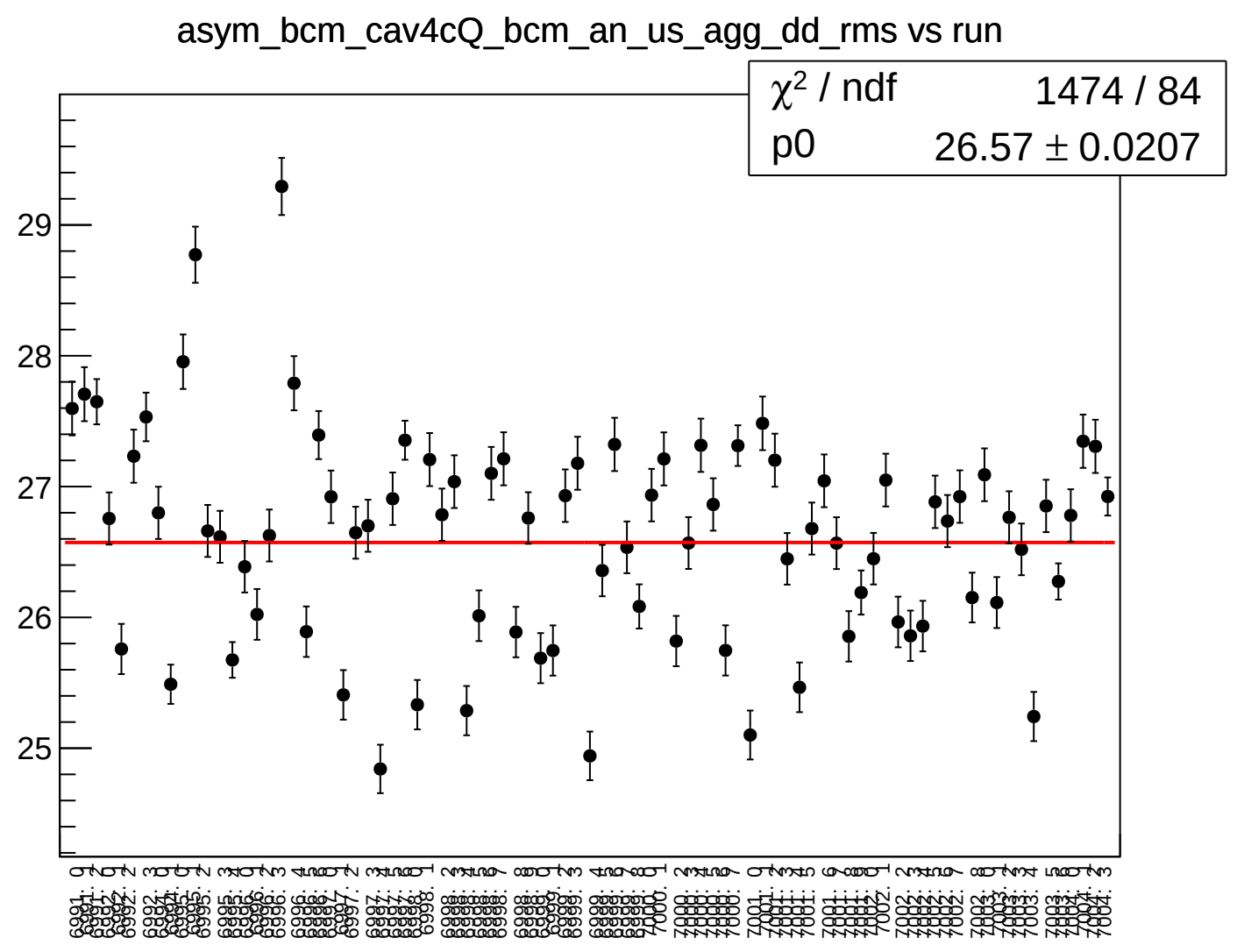

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2853 / 84
p0 24.8 ± 0.01932
29
28
27
26
25
24
23
22

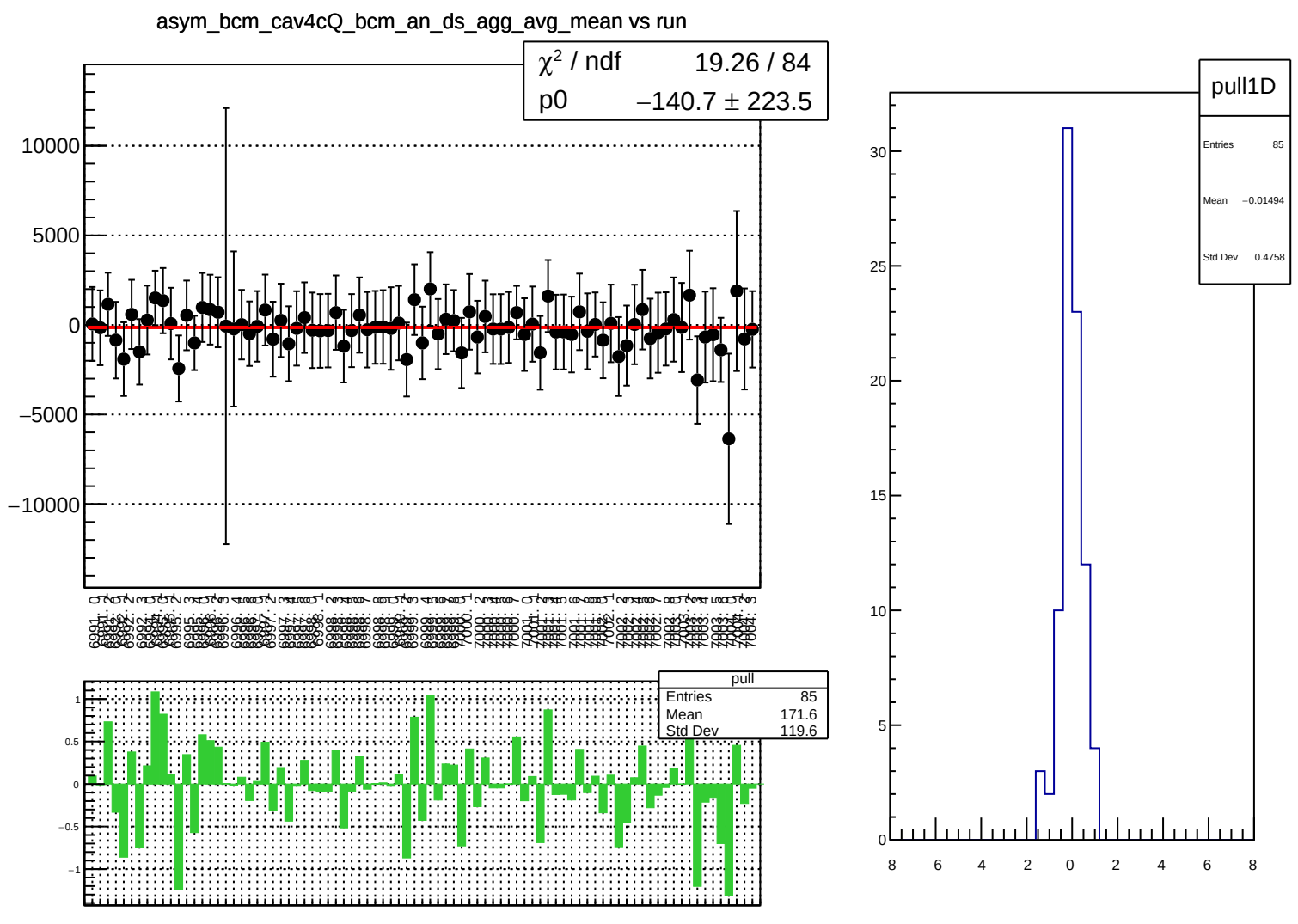

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.3 / 84
p0 −158.9 ± 223.6
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 173.6
Std Dev 122.7
1
0.5
0
−0.5
−1

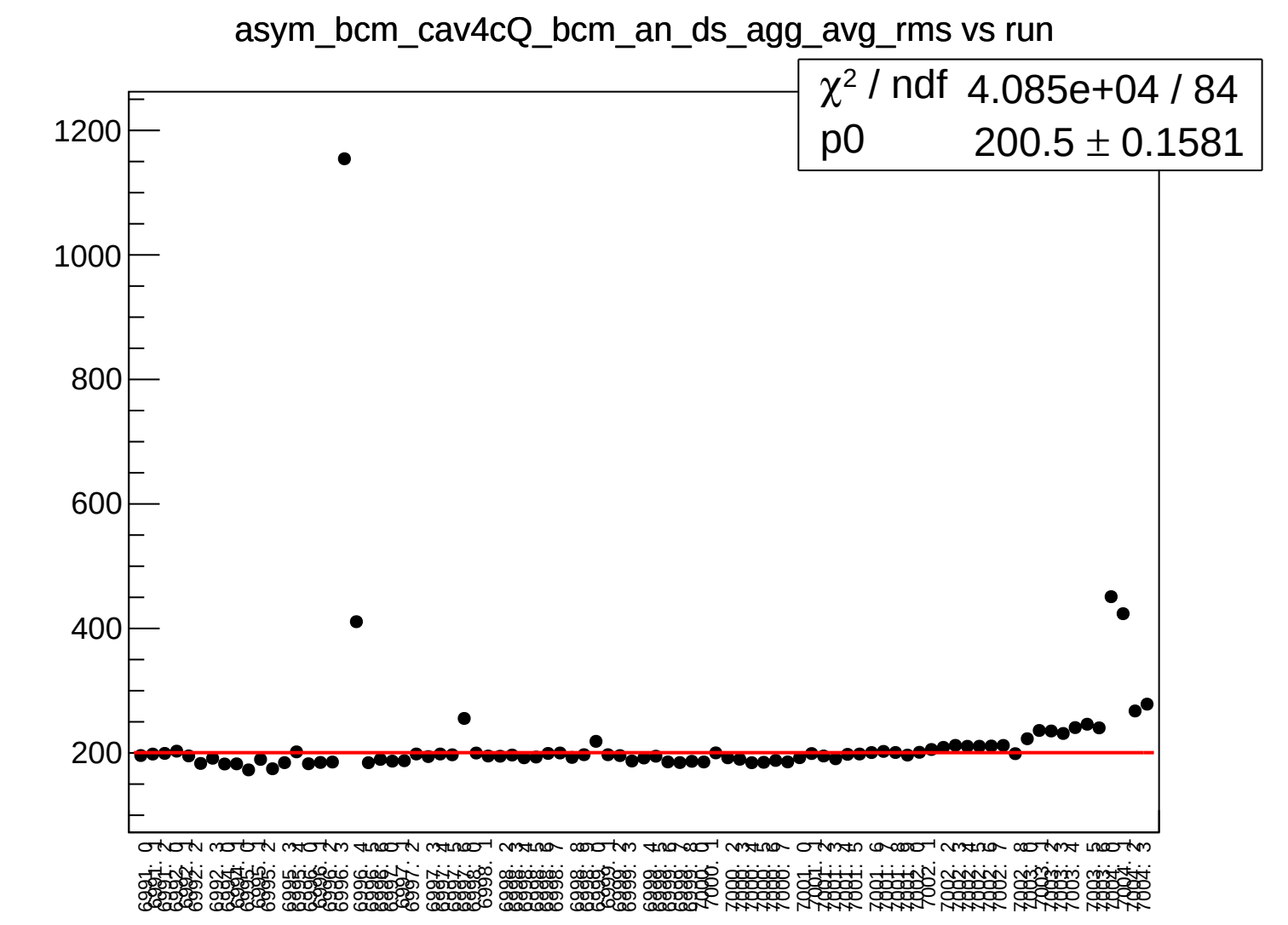

pull1D
Entries 85
Mean −0.01426
Std Dev 0.4638
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

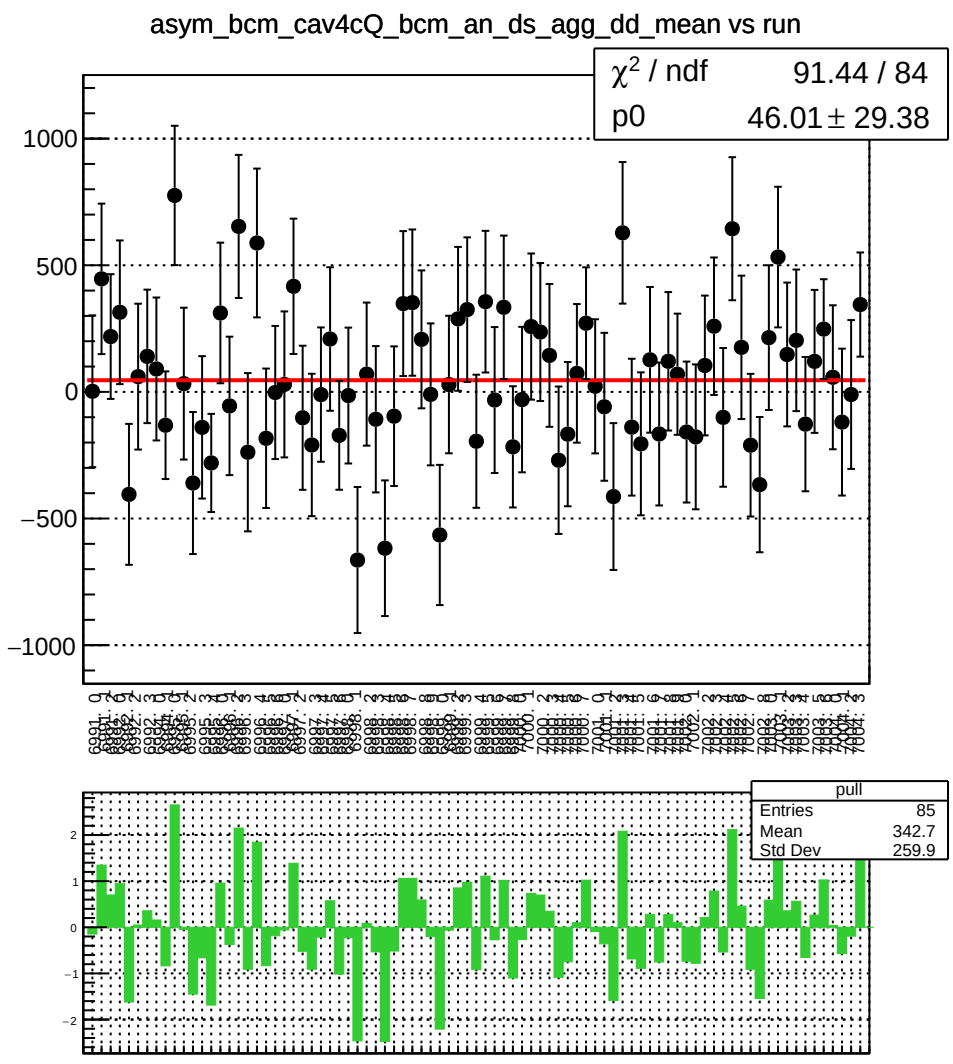

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4.104e+04 / 84
p0 200.5 ± 0.1581
1200
1000
800
600
400
200

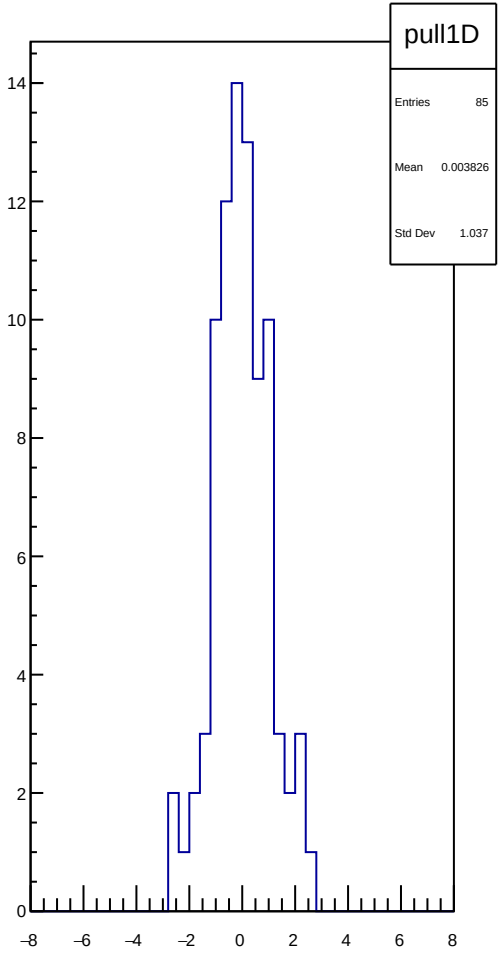

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 90.81 / 84
p0 59.93 ± 29.27
1000
500
0
−500
−1000
pull
Entries 85
Mean 169.6
Std Dev 96.44
3
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.008545
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

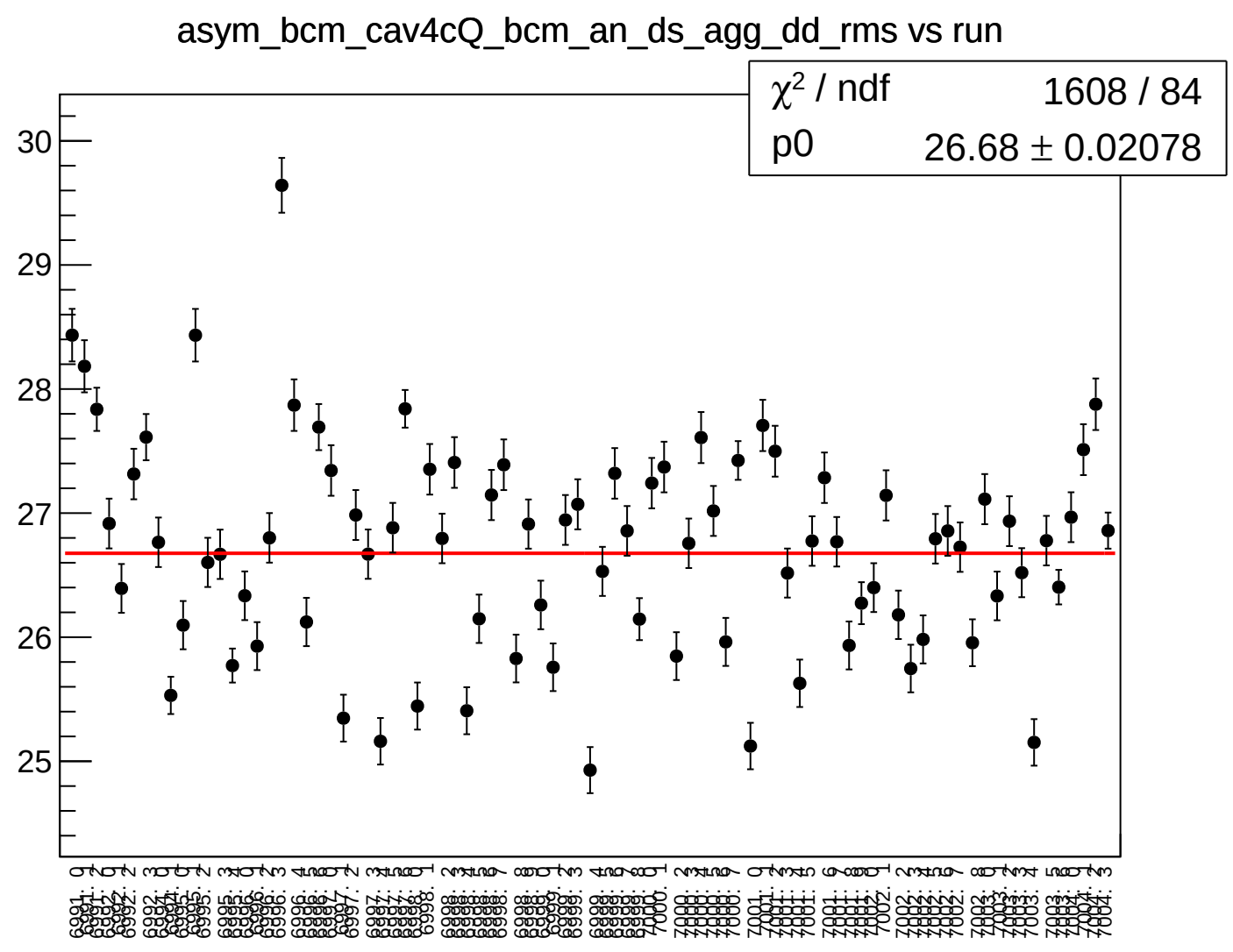

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1474 / 84
p0 26.57 ± 0.0207
29
28
27
26
25

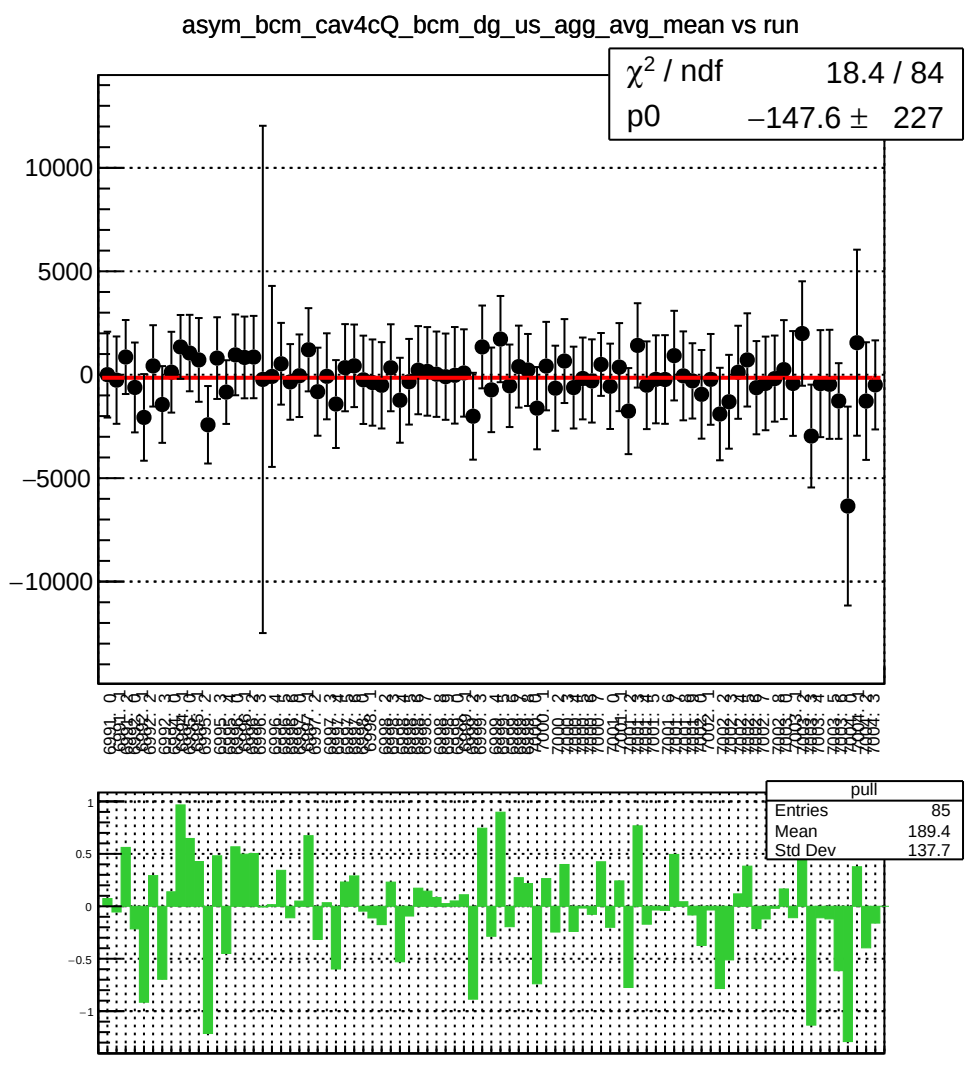

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.26 / 84
p0 −140.7 ± 223.5
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 171.6
Std Dev 119.6
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.01494
Std Dev 0.4758
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

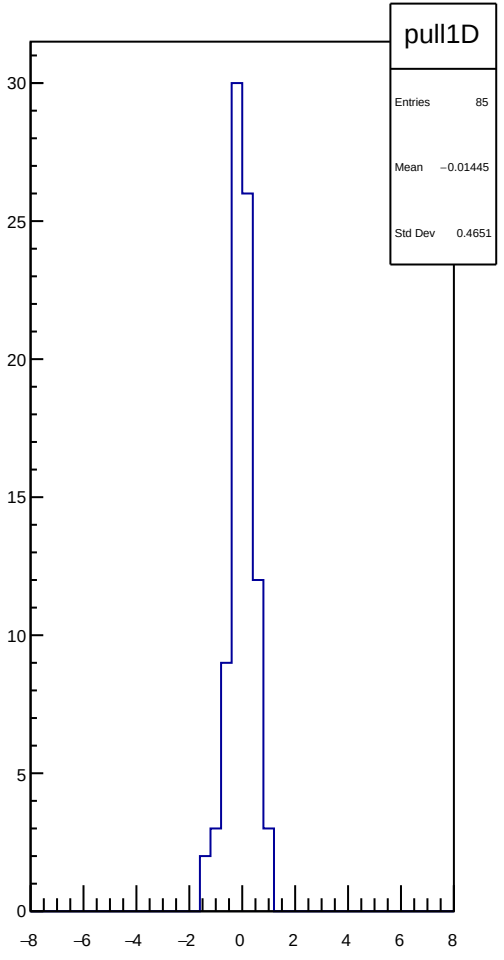

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4.085e+04 / 84
p0 200.5 ± 0.1581
1200
1000
800
600
400
200

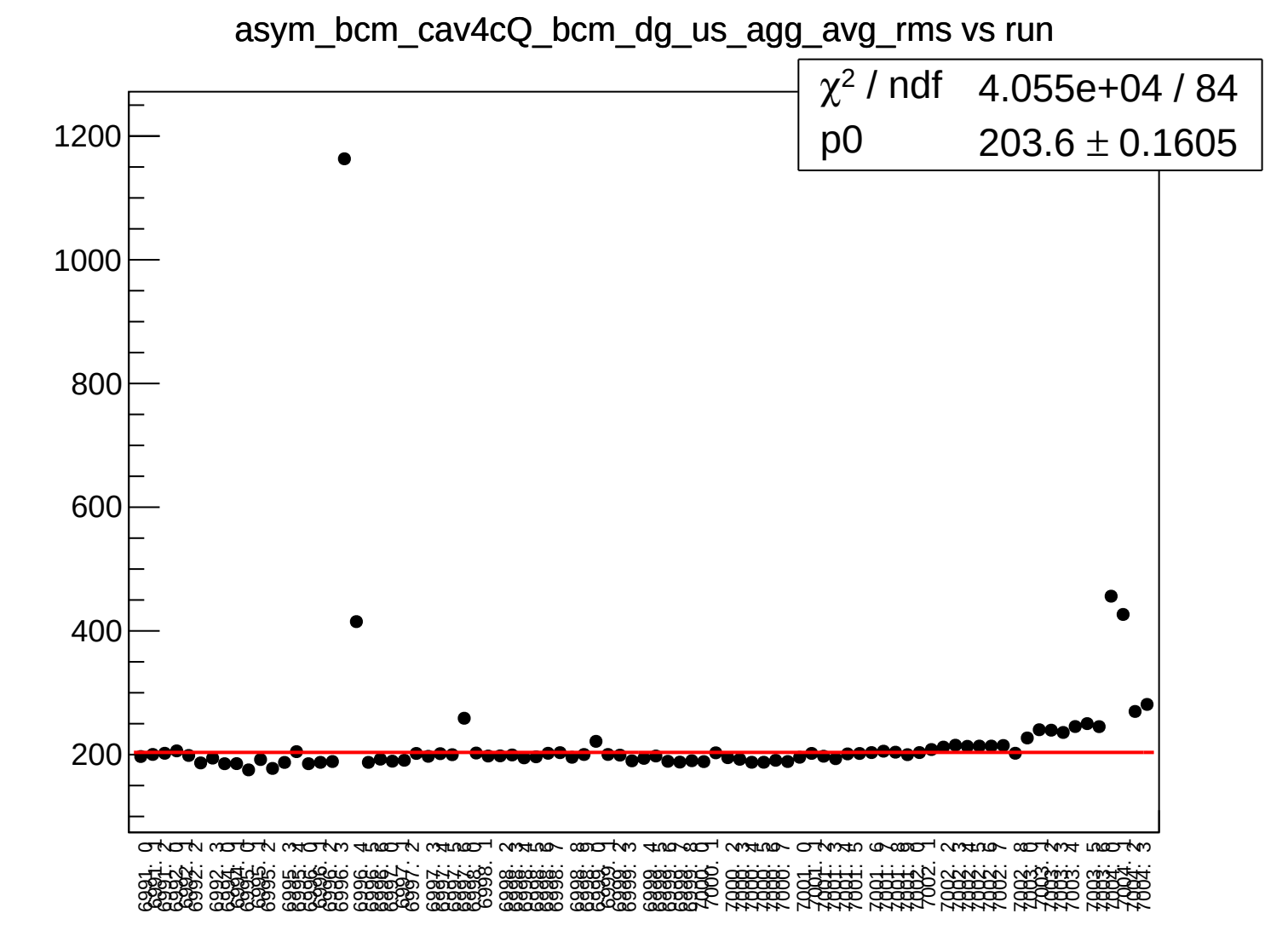

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.44 / 84
p0 46.01 ± 29.38
1000
500
0
−500
−1000
pull
Entries 85
Mean 342.7
Std Dev 259.9
2
1
0
−1
−2

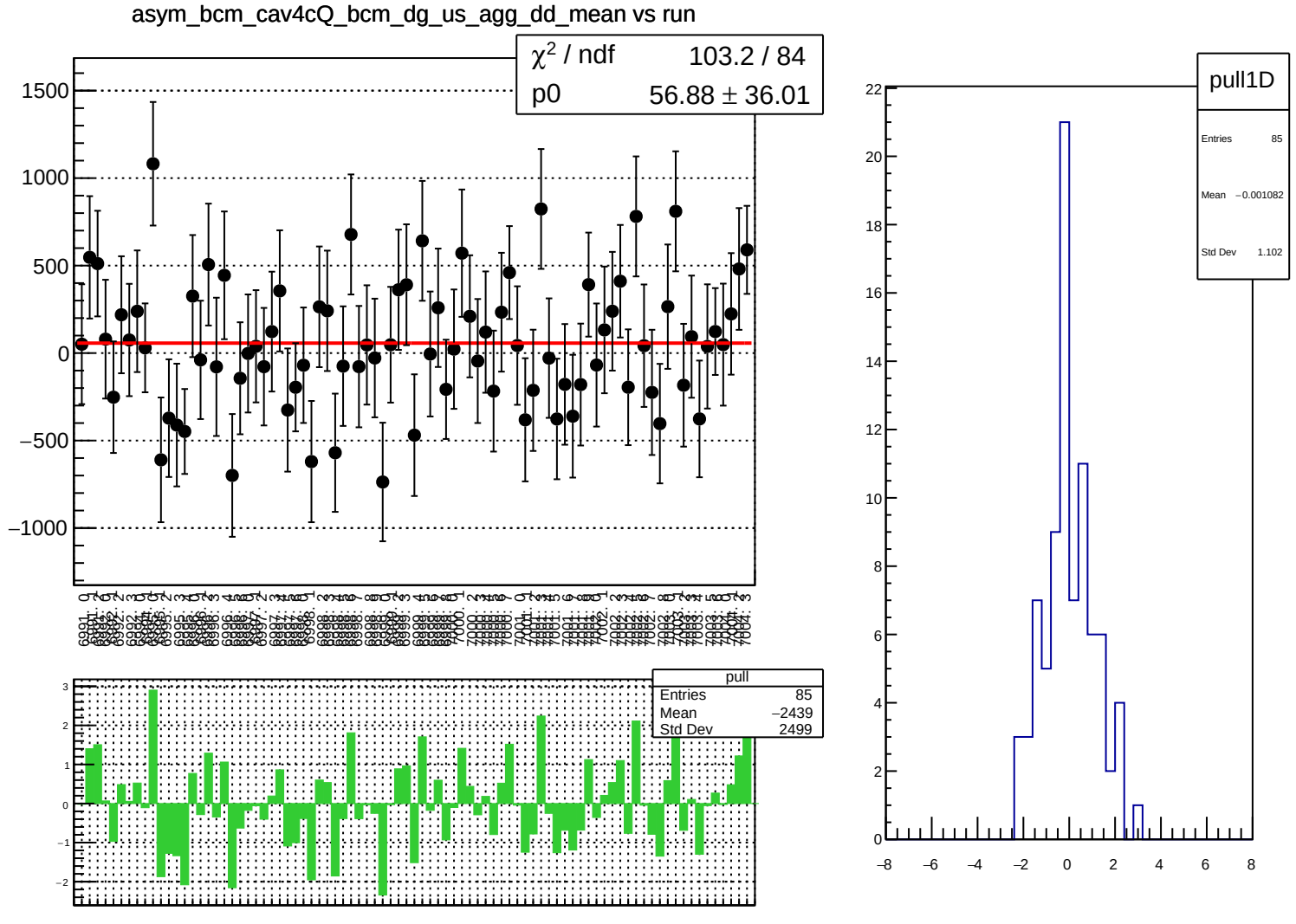

pull1D
Entries 85
Mean 0.003826
Std Dev 1.037
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

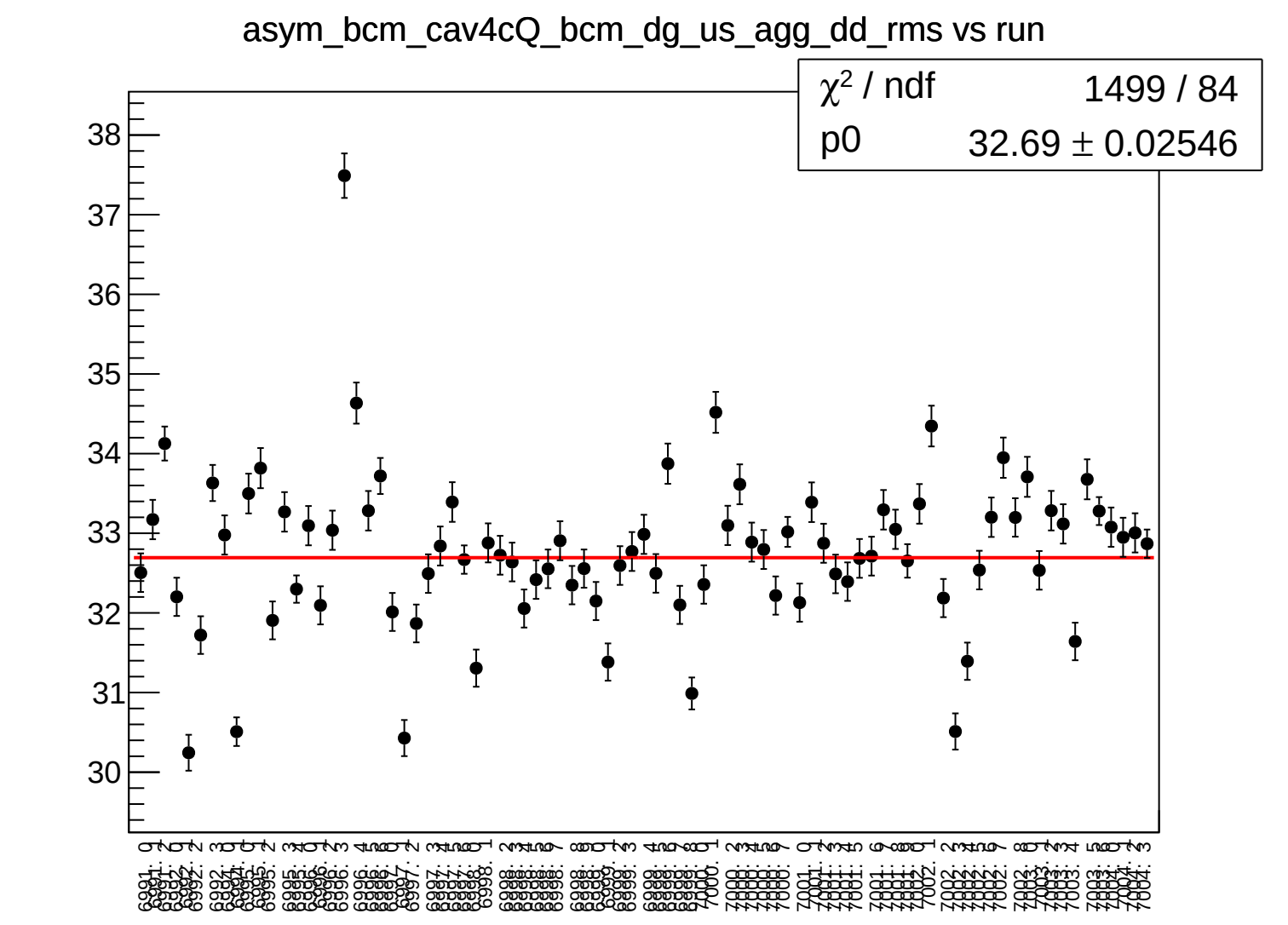

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1608 / 84
p0 26.68 ± 0.02078
30
29
28
27
26
25

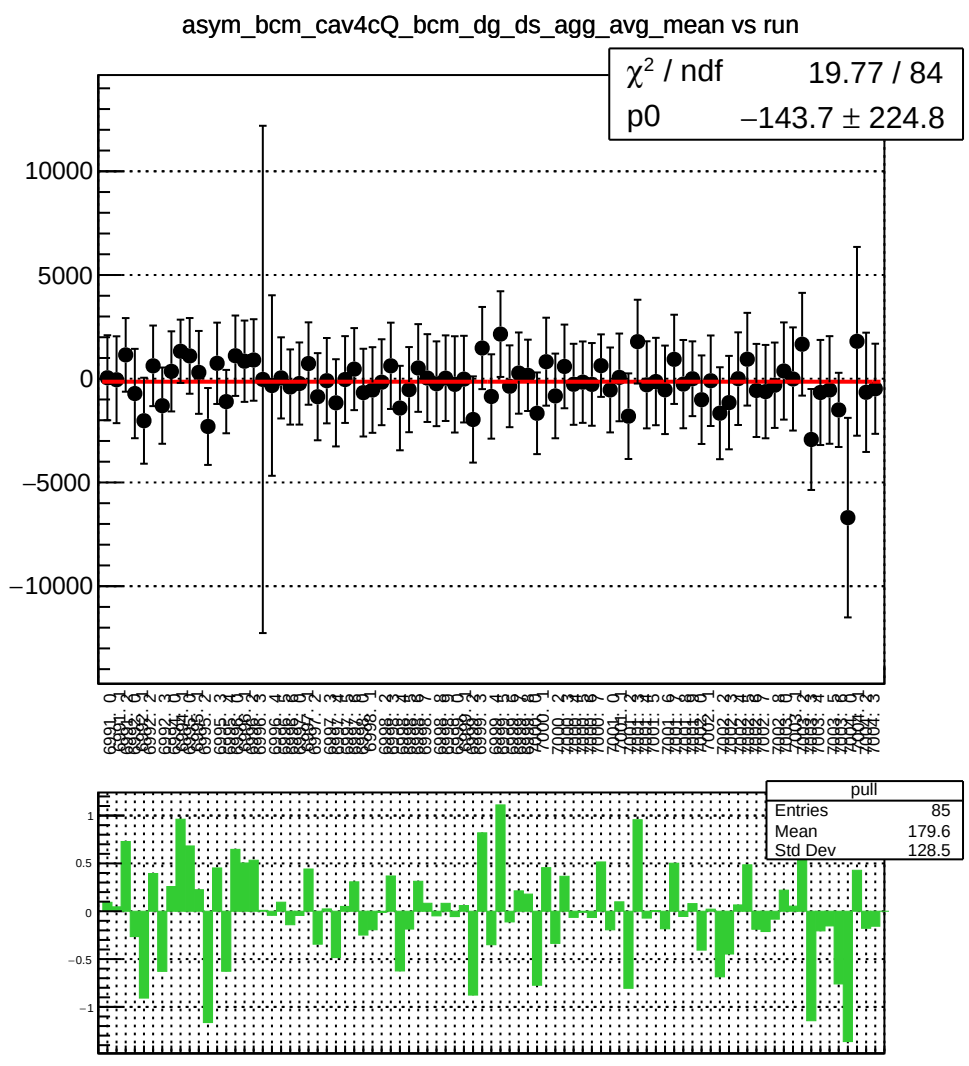

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 18.4 / 84
p0 −147.6 ± 227
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 189.4
Std Dev 137.7
1
0.5
0
−0.5
−1

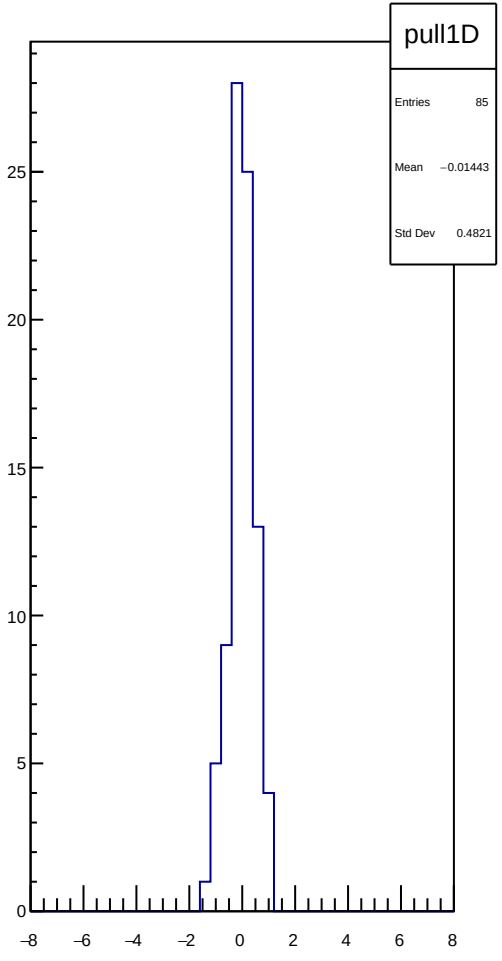

pull1D
Entries 85
Mean −0.01445
Std Dev 0.4651
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

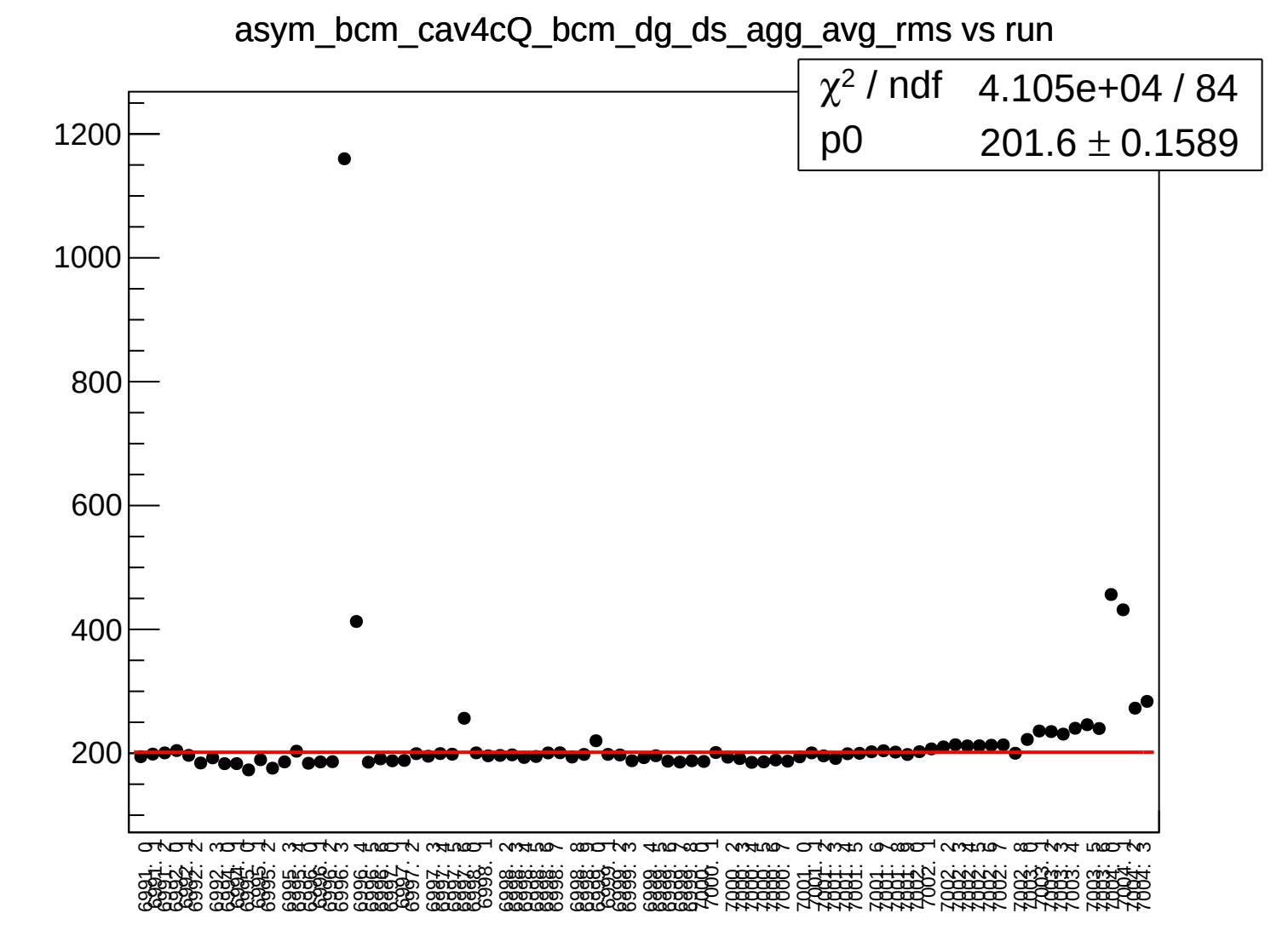

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 4.055e+04 / 84
p0 203.6 ± 0.1605
1200
1000
800
600
400
200

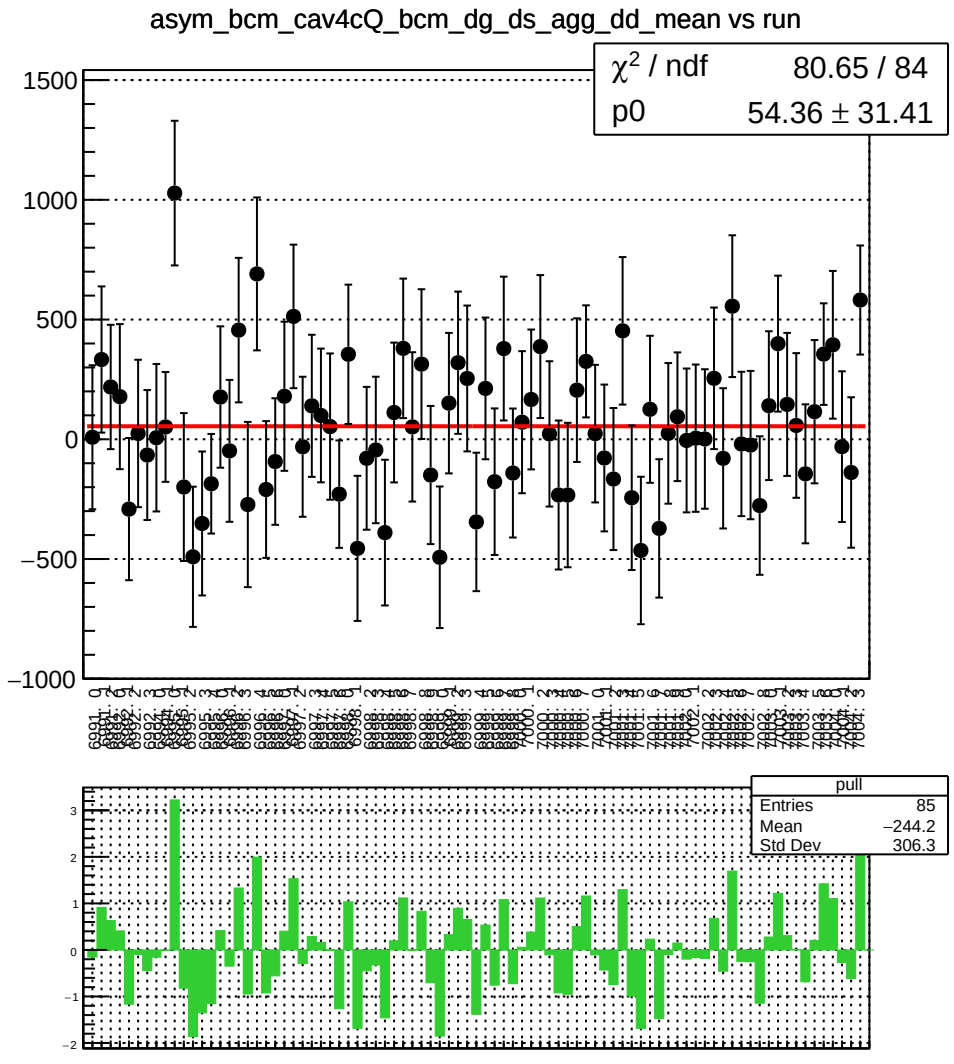

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 103.2 / 84
p0 56.88 ± 36.01
1500
1000
500
0
−500
−1000
pull
Entries 85
Mean −2439
Std Dev 2499
3
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.001082
Std Dev 1.102
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

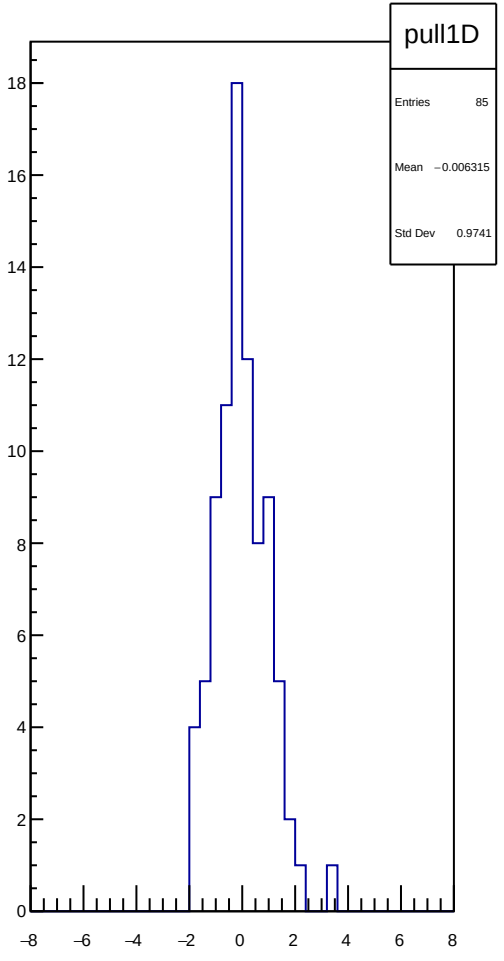

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1499 / 84
p0 32.69 ± 0.02546
38
37
36
35
34
33
32
31
30

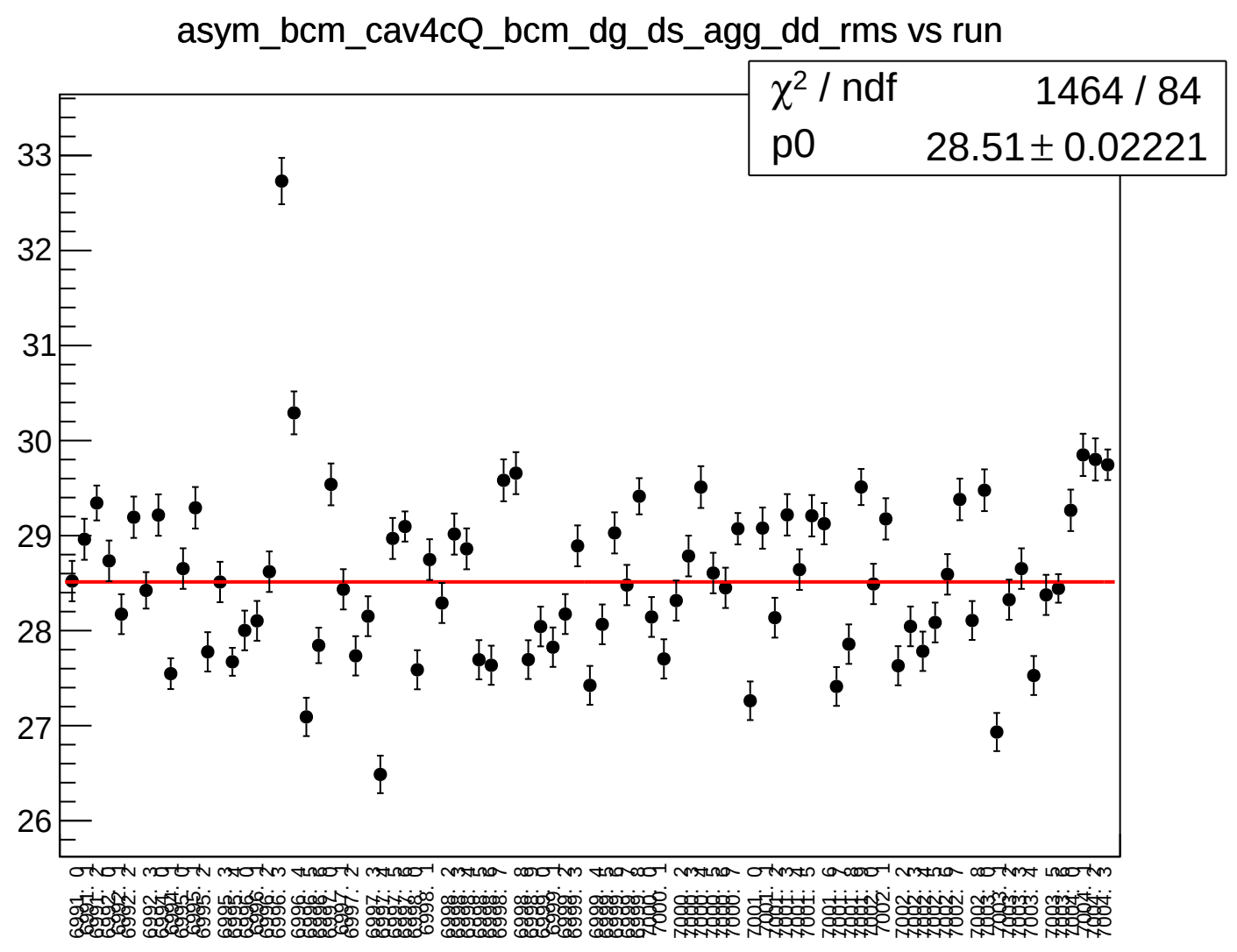

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 19.77 / 84
p0 −143.7 ± 224.8
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 179.6
Std Dev 128.5
1
0.5
0
−0.5
−1

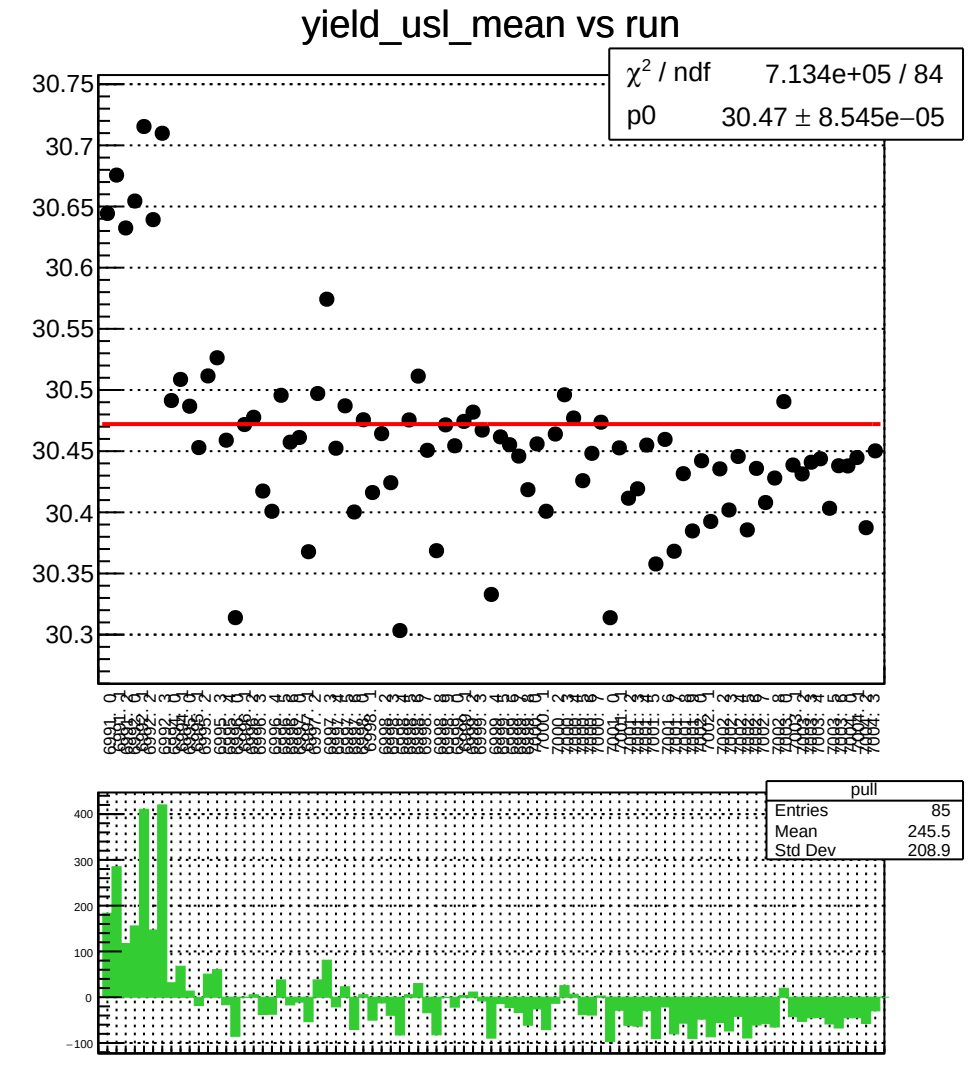

pull1D
Entries 85
Mean −0.01443
Std Dev 0.4821
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

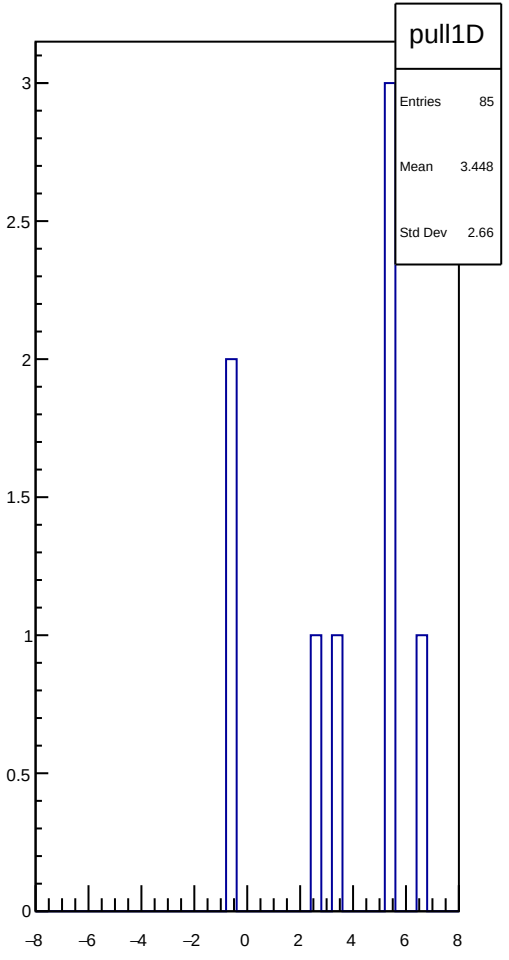

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 4.105e+04 / 84
p0 201.6 ± 0.1589
1200
1000
800
600
400
200

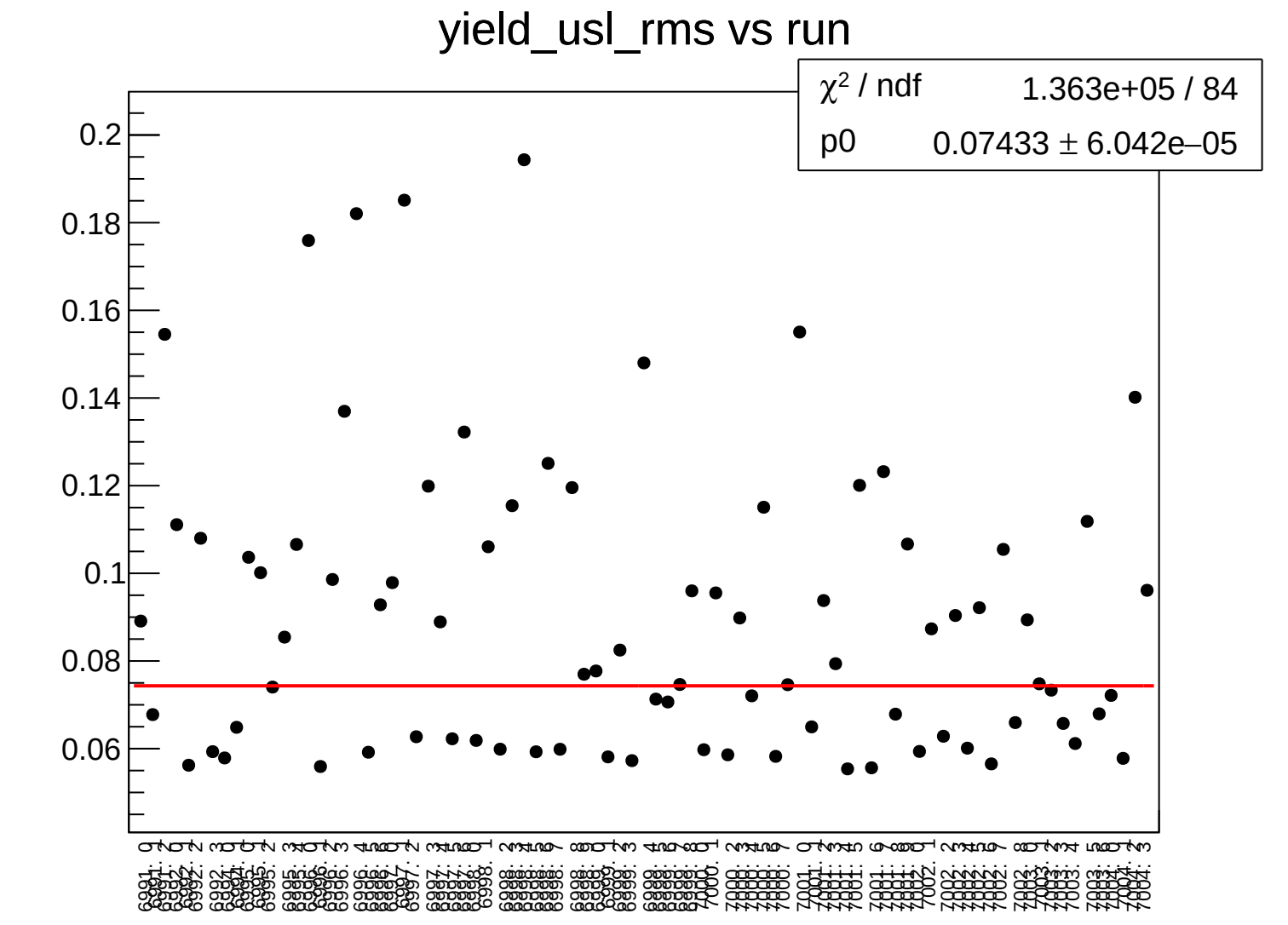

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 80.65 / 84
p0 54.36 ± 31.41
pull
Entries 85
Mean −244.2
Std Dev 306.3

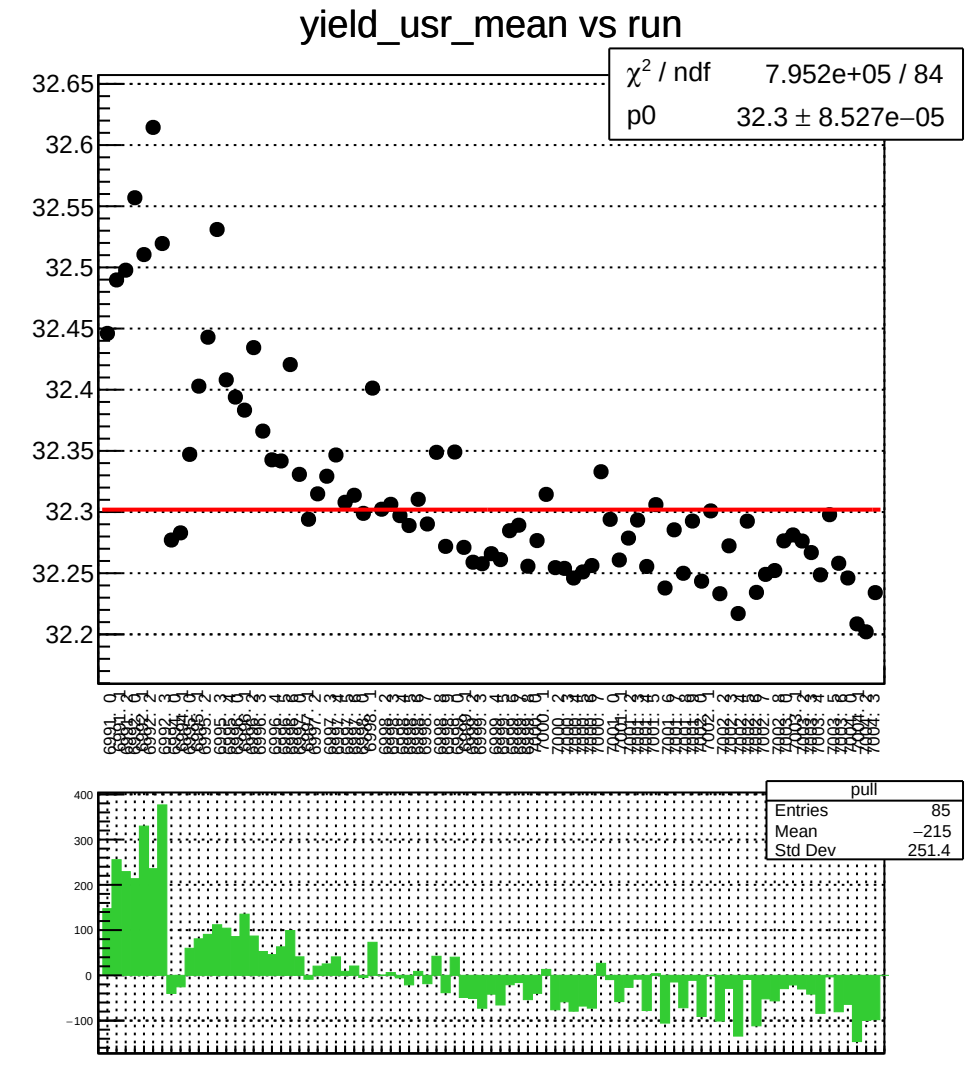

pull1D
Entries 85
Mean −0.006315
Std Dev 0.9741

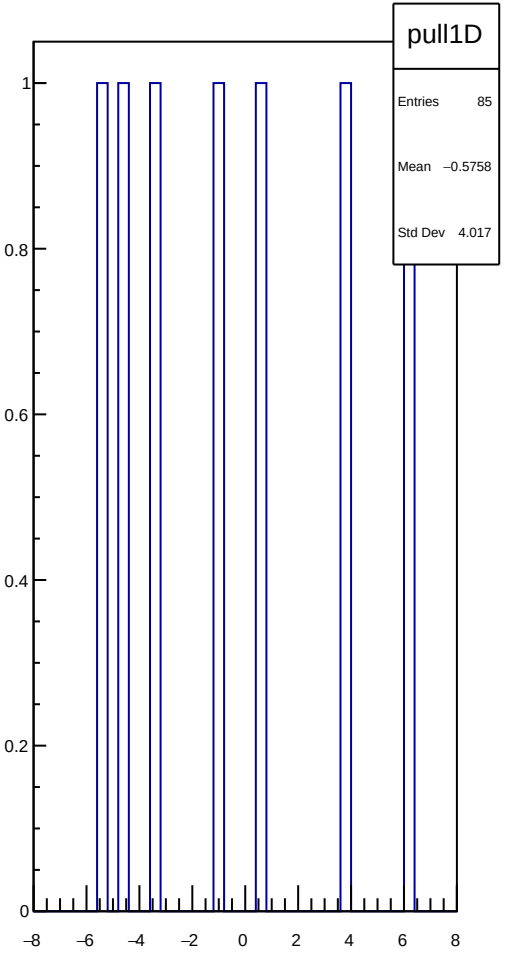

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1464 / 84
p0 28.51 ± 0.02221
33
32
31
30
29
28
27
26

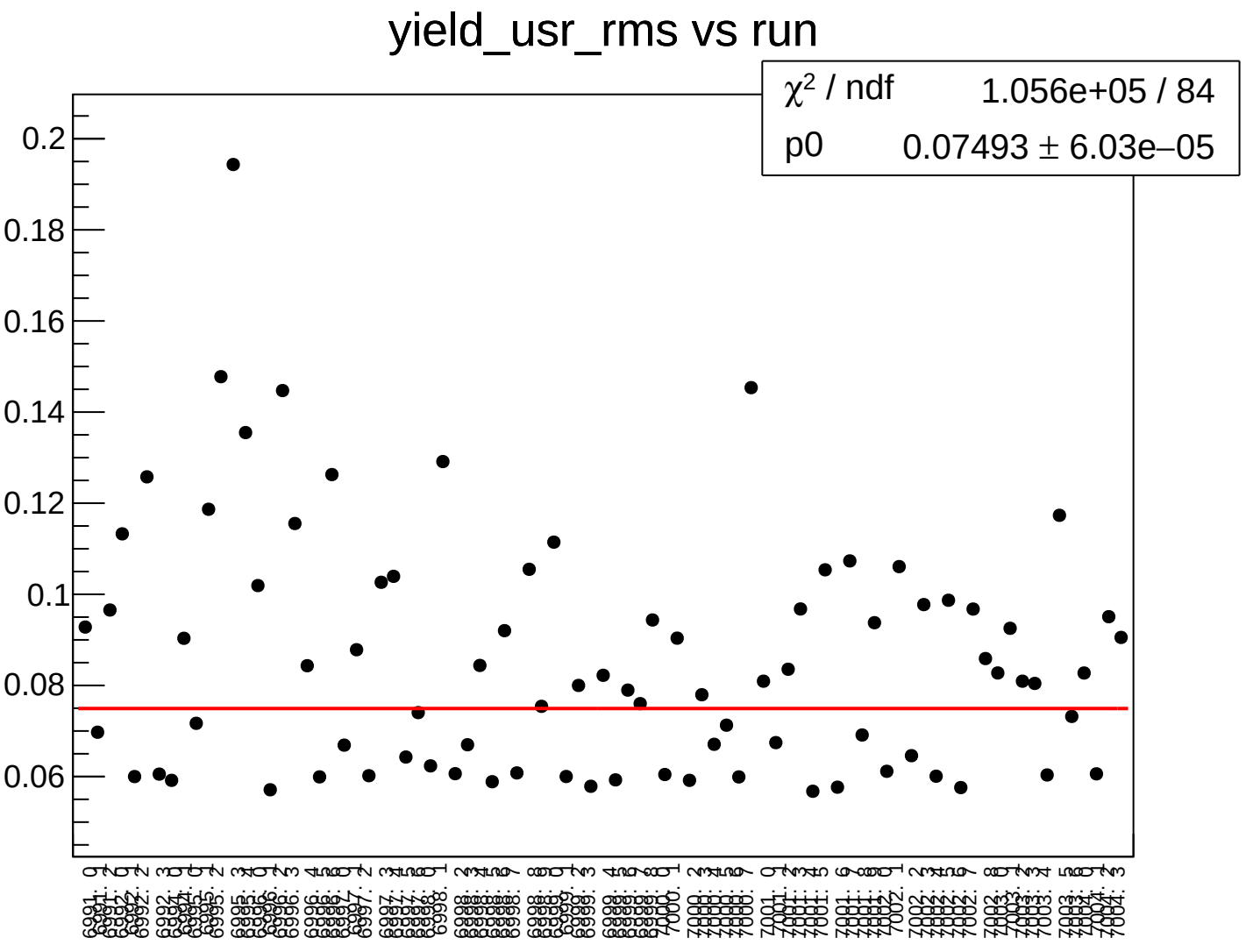

yield_usl_mean vs run
χ² / ndf 7.134e+05 / 84
p0 30.47 ± 8.545e−05
30.75
30.7
30.65
30.6
30.55
30.5
30.45
30.4
30.35
30.3
pull
Entries 85
Mean 245.5
Std Dev 208.9
400
300
200
100
0
−100

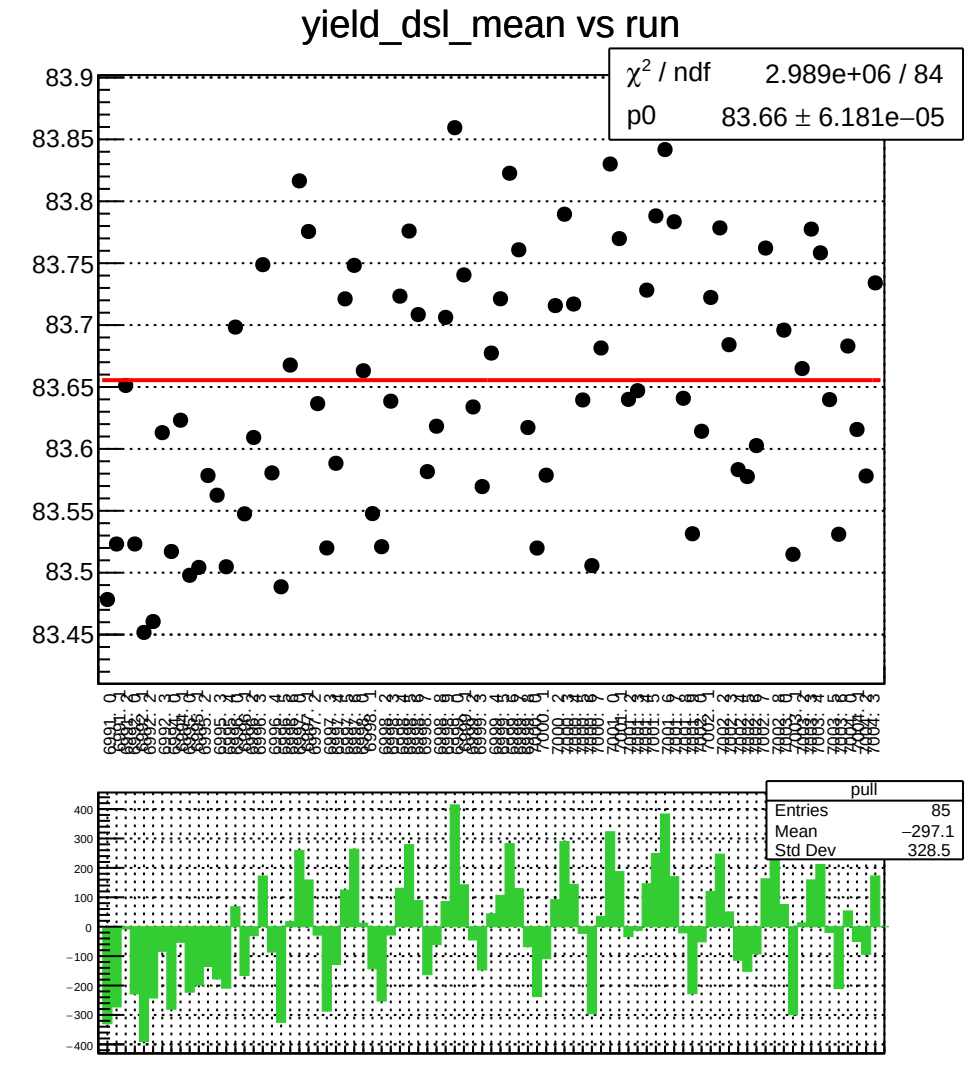

pull1D
Entries 85
Mean 3.448
Std Dev 2.66
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

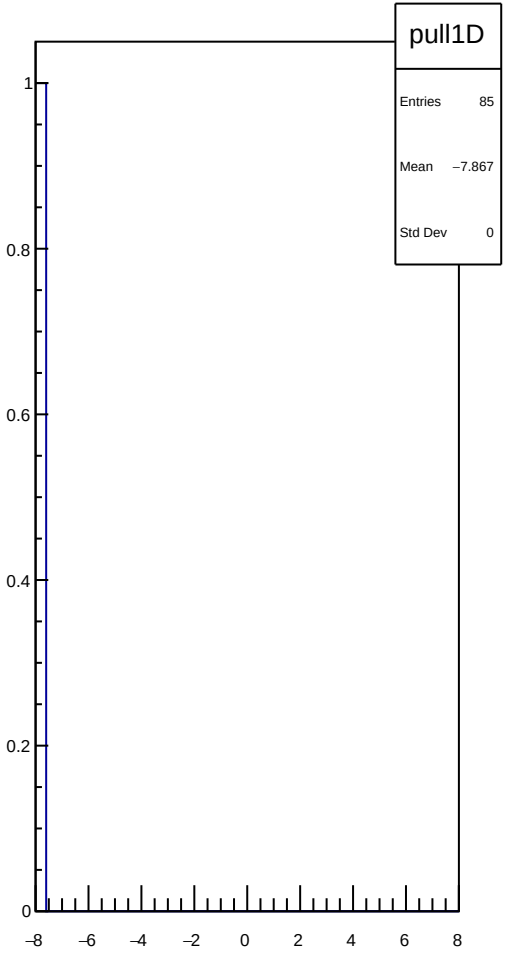

yield_usl_rms vs run
χ² / ndf 1.363e+05 / 84
p0 0.07433 ± 6.042e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

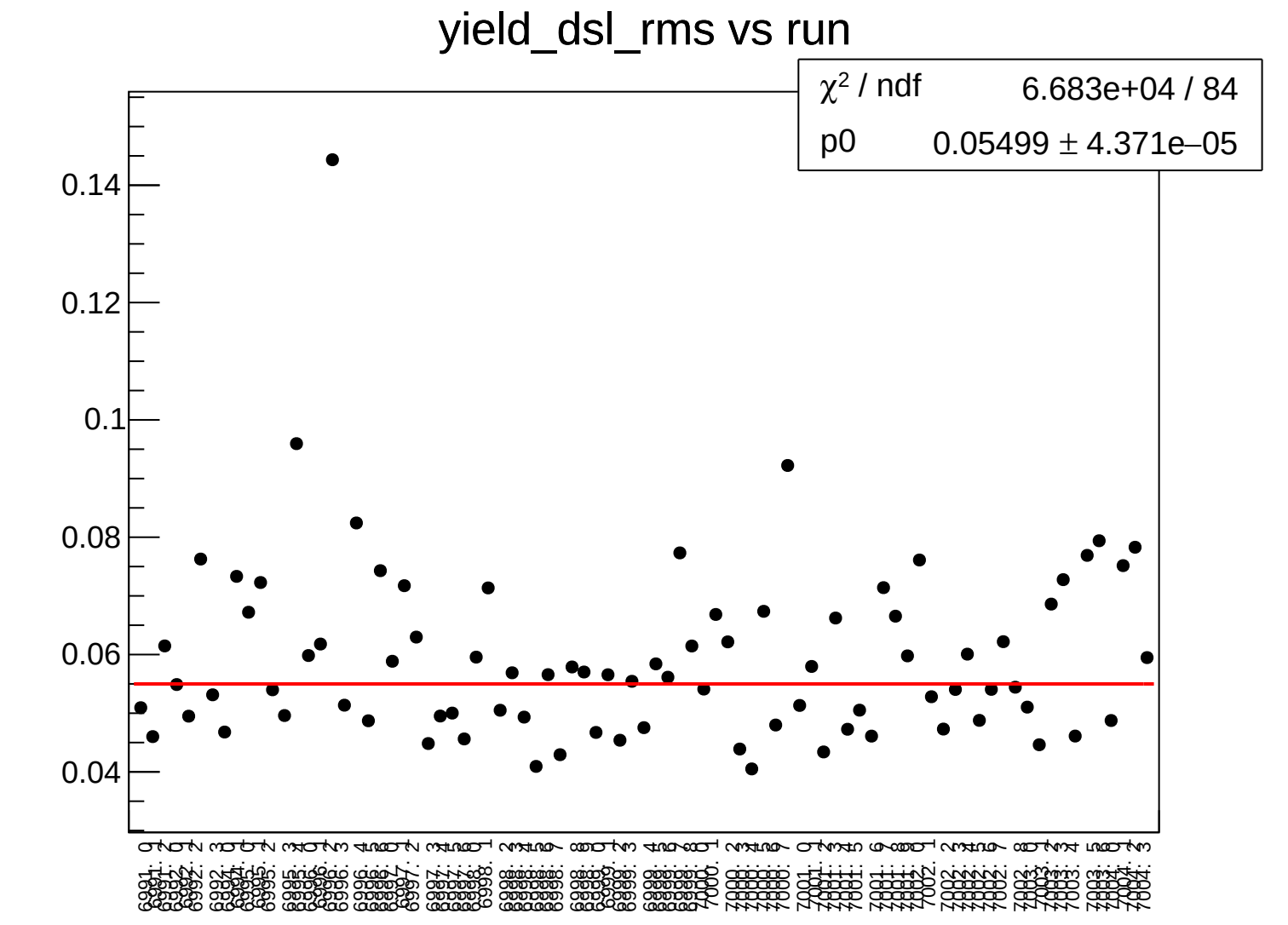

yield_usr_mean vs run
χ² / ndf 7.952e+05 / 84
p0 32.3 ± 8.527e−05
32.65
32.6
32.55
32.5
32.45
32.4
32.35
32.3
32.25
32.2
pull
Entries 85
Mean −215
Std Dev 251.4
400
300
200
100
0
−100

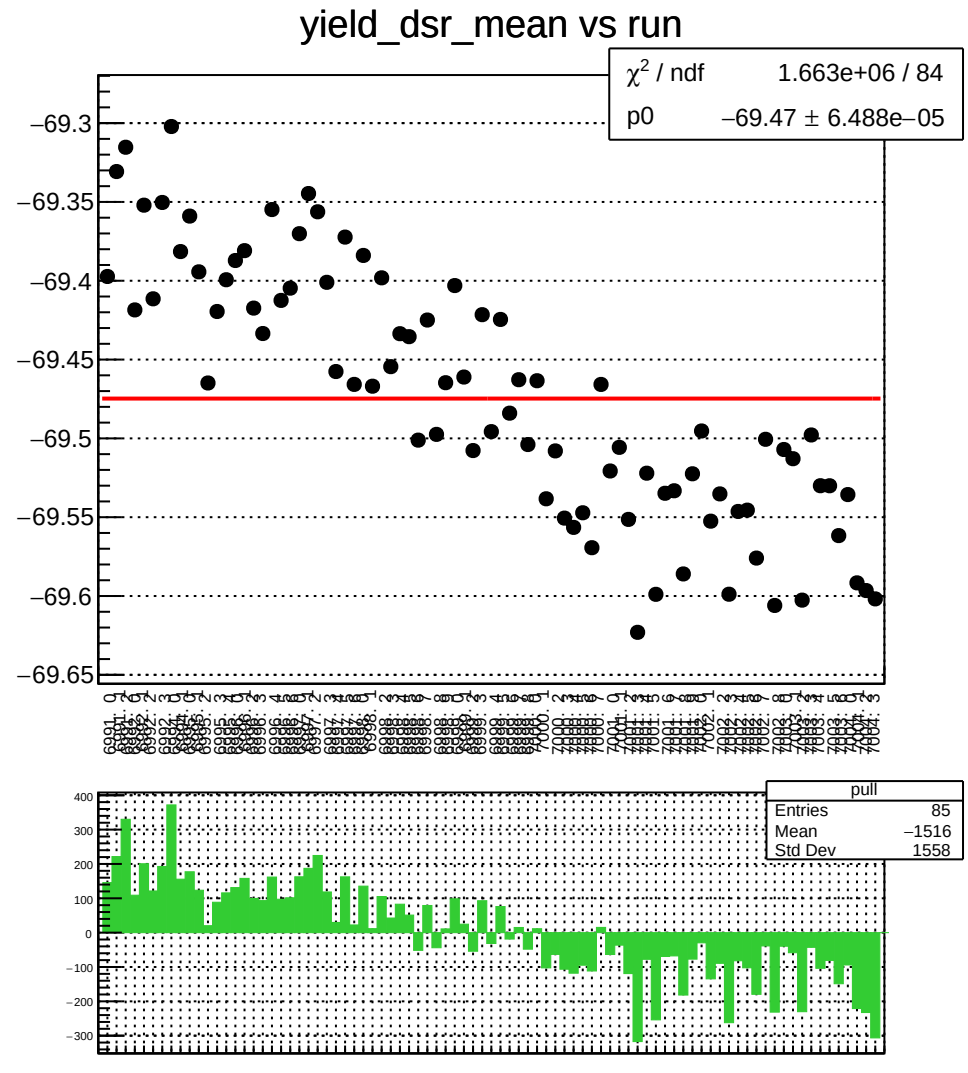

pull1D
Entries 85
Mean −0.5758
Std Dev 4.017
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

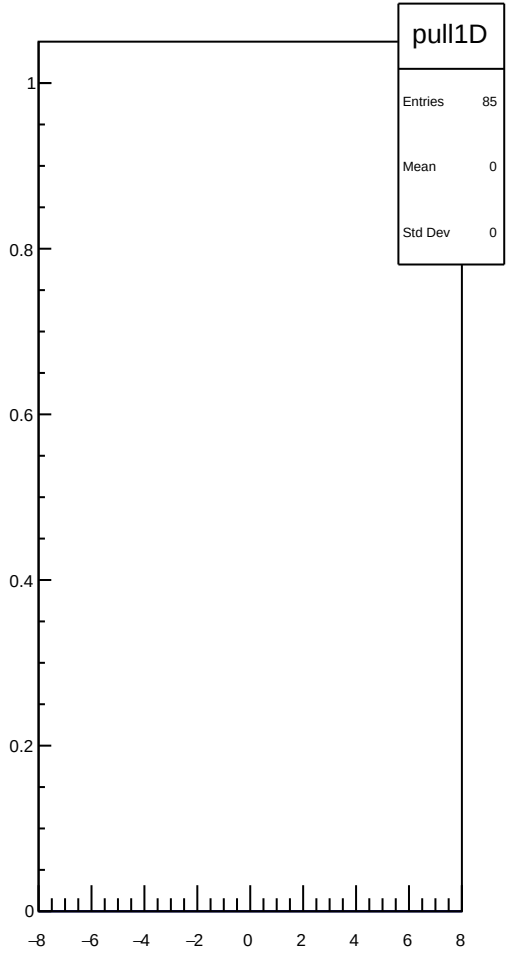

yield_usr_rms vs run
χ² / ndf 1.056e+05 / 84
p0 0.07493 ± 6.03e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

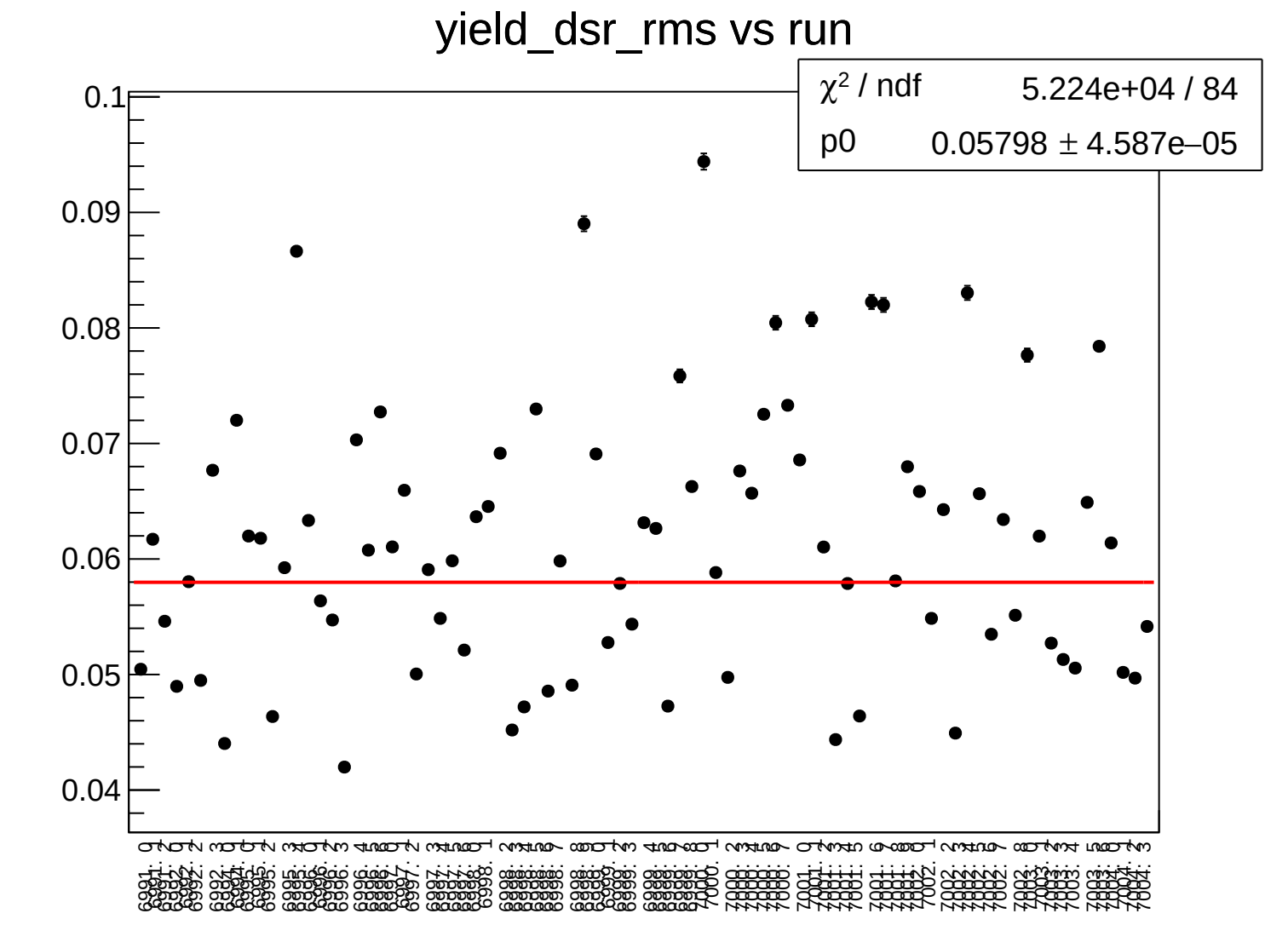

yield_dsl_mean vs run
χ² / ndf 2.989e+06 / 84
p0 83.66 ± 6.181e−05
83.9
83.85
83.8
83.75
83.7
83.65
83.6
83.55
83.5
83.45
pull
Entries 85
Mean −297.1
Std Dev 328.5
400
300
200
100
0
−100
−200
−300
−400

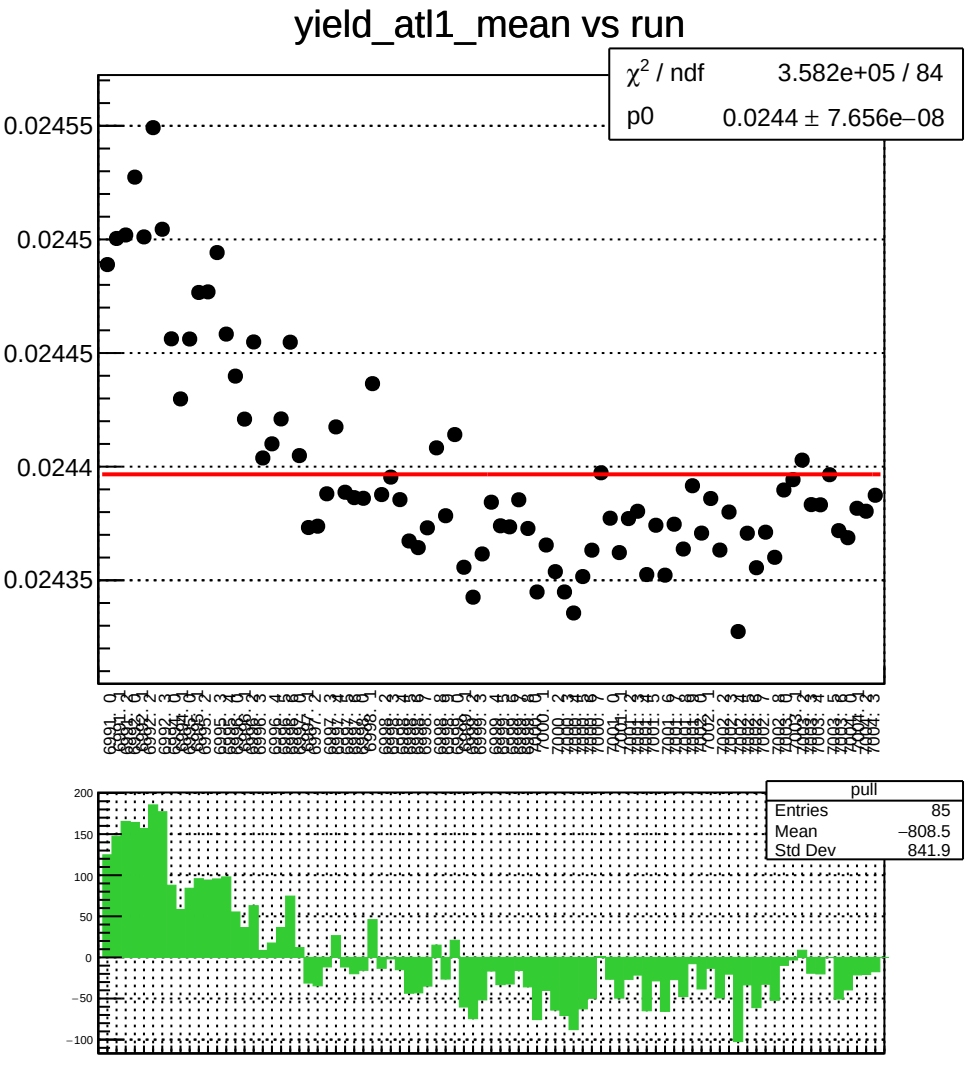

pull1D
Entries 85
Mean −7.867
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

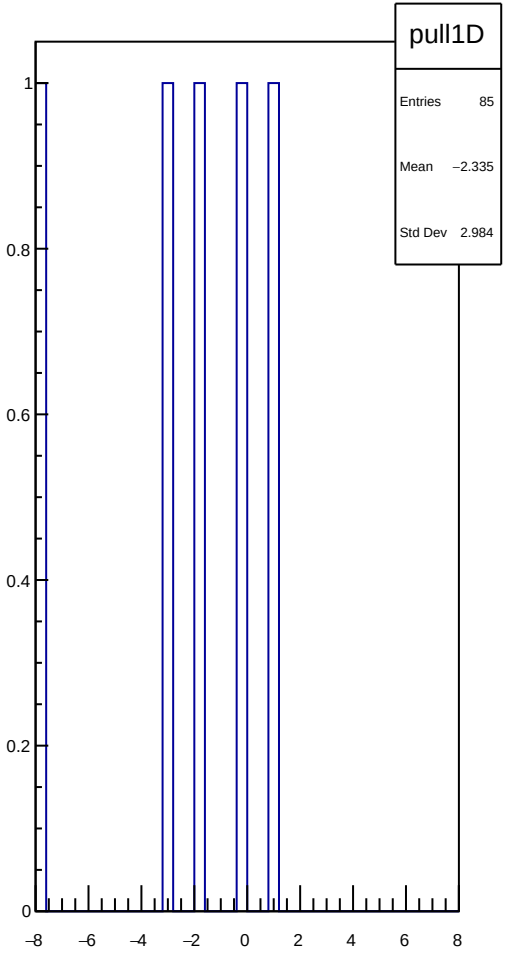

yield_dsl_rms vs run
χ² / ndf 6.683e+04 / 84
p0 0.05499 ± 4.371e−05
0.14
0.12
0.1
0.08
0.06
0.04

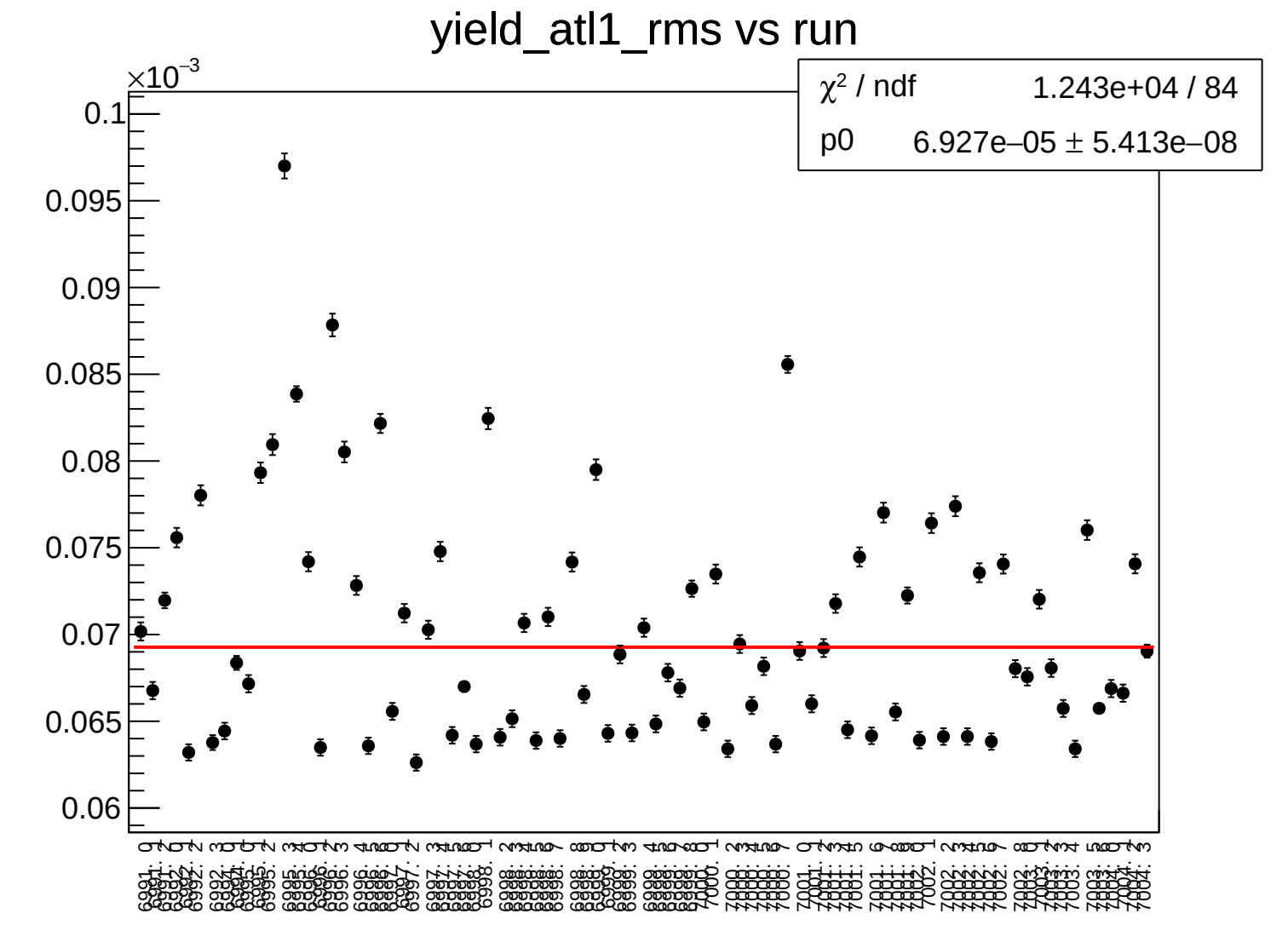

yield_dsr_mean vs run
χ² / ndf 1.663e+06 / 84
p0 −69.47 ± 6.488e−05
−69.3
−69.35
−69.4
−69.45
−69.5
−69.55
−69.6
−69.65
pull
Entries 85
Mean −1516
Std Dev 1558
400
300
200
100
0
−100
−200
−300

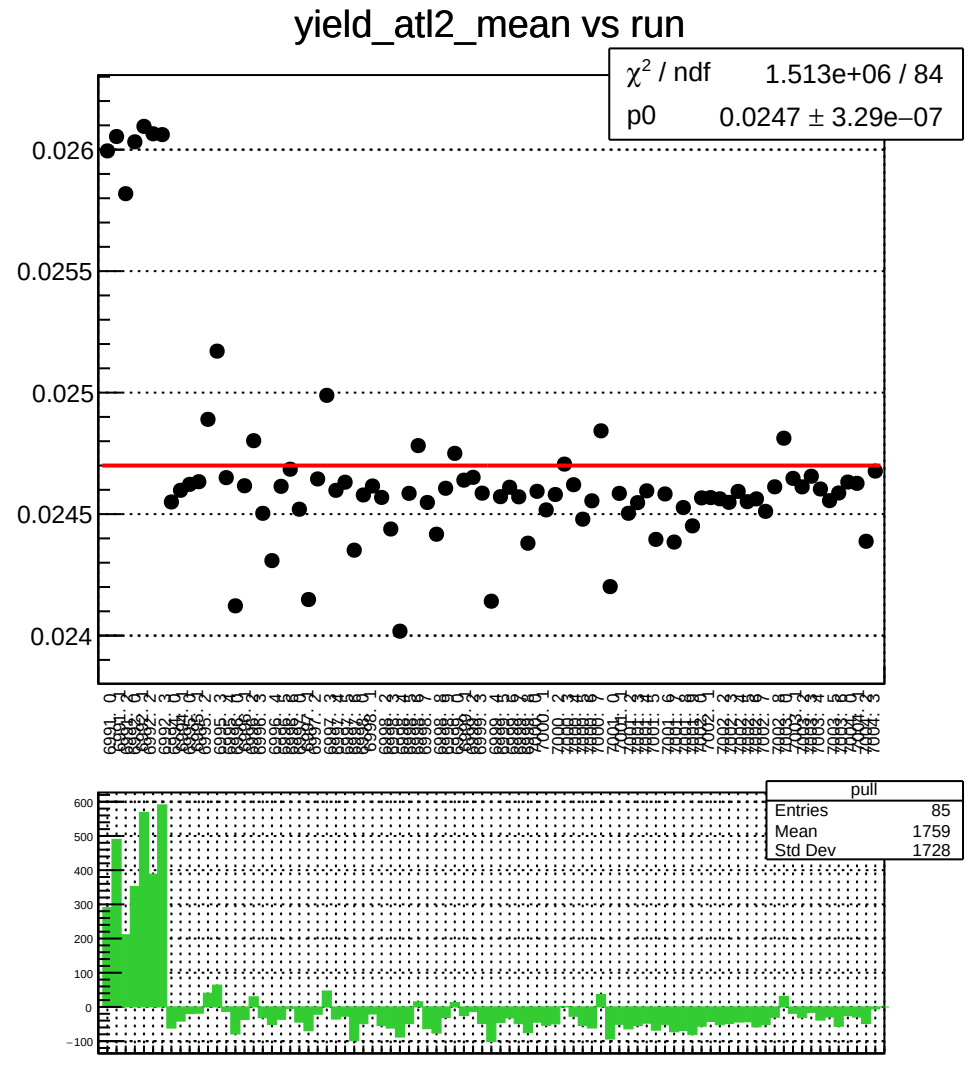

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

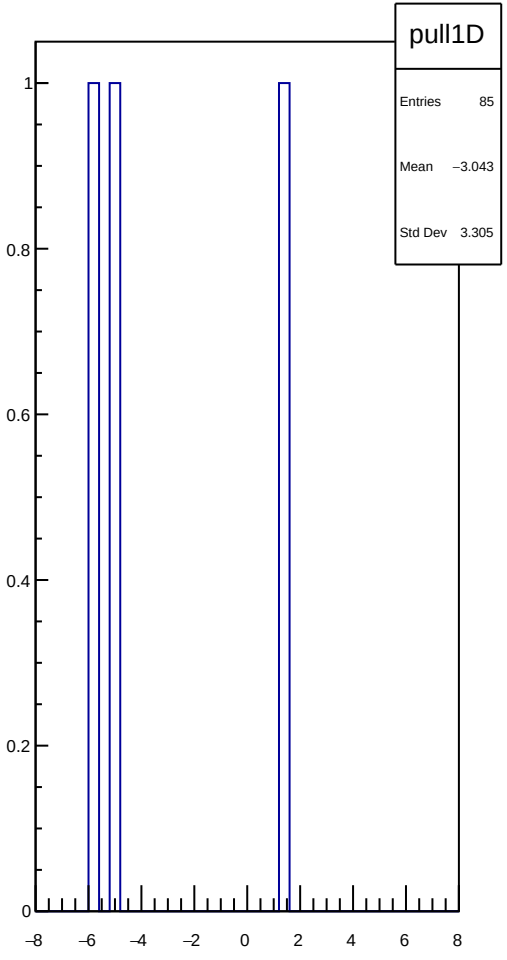

yield_dsr_rms vs run
χ² / ndf 5.224e+04 / 84
p0 0.05798 ± 4.587e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

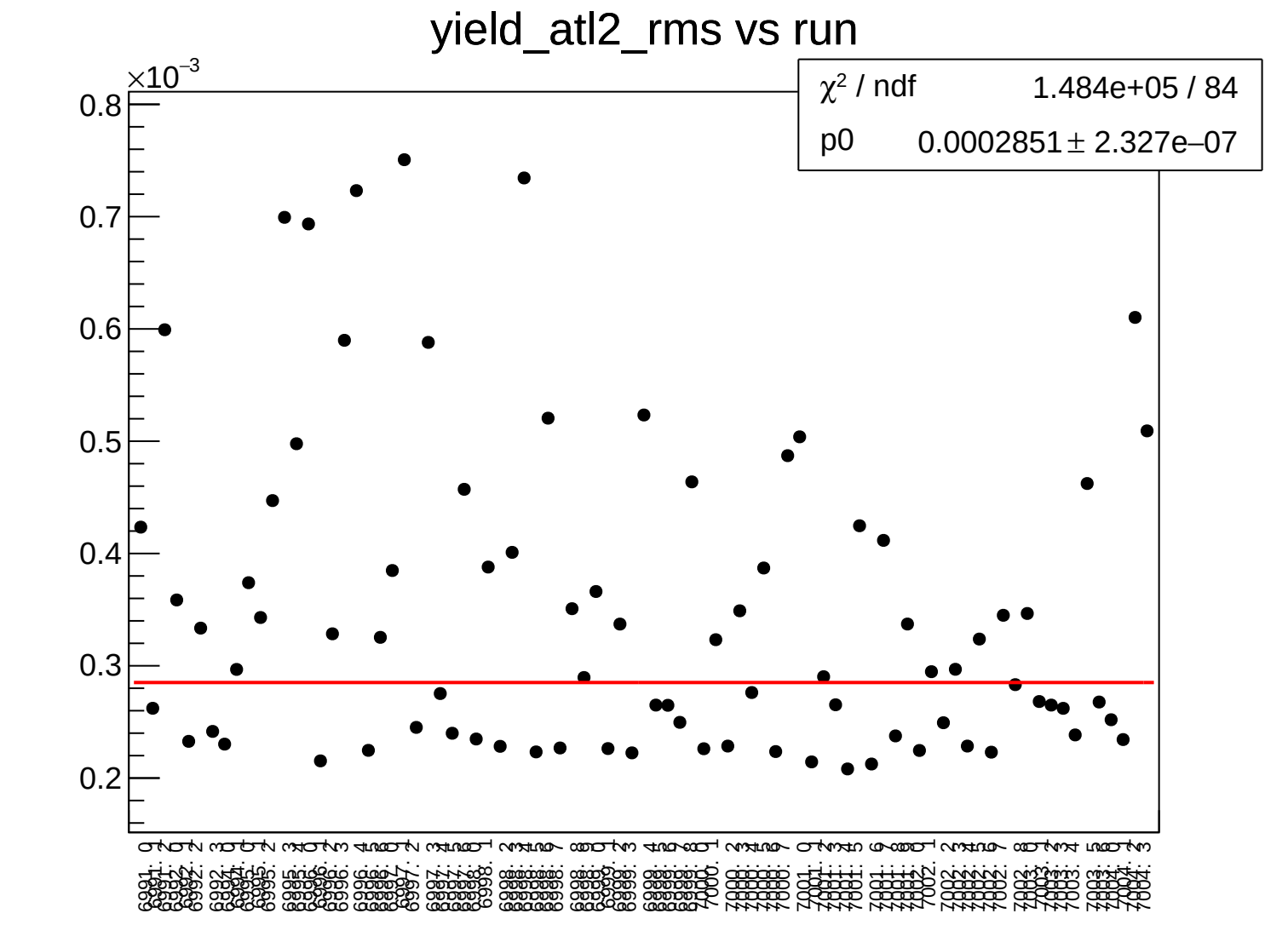

yield_atl1_mean vs run
χ² / ndf 3.582e+05 / 84
p0 0.0244 ± 7.656e−08
0.02455
0.0245
0.02445
0.0244
0.02435
pull
Entries 85
Mean −808.5
Std Dev 841.9
200
150
100
50
0
−50
−100

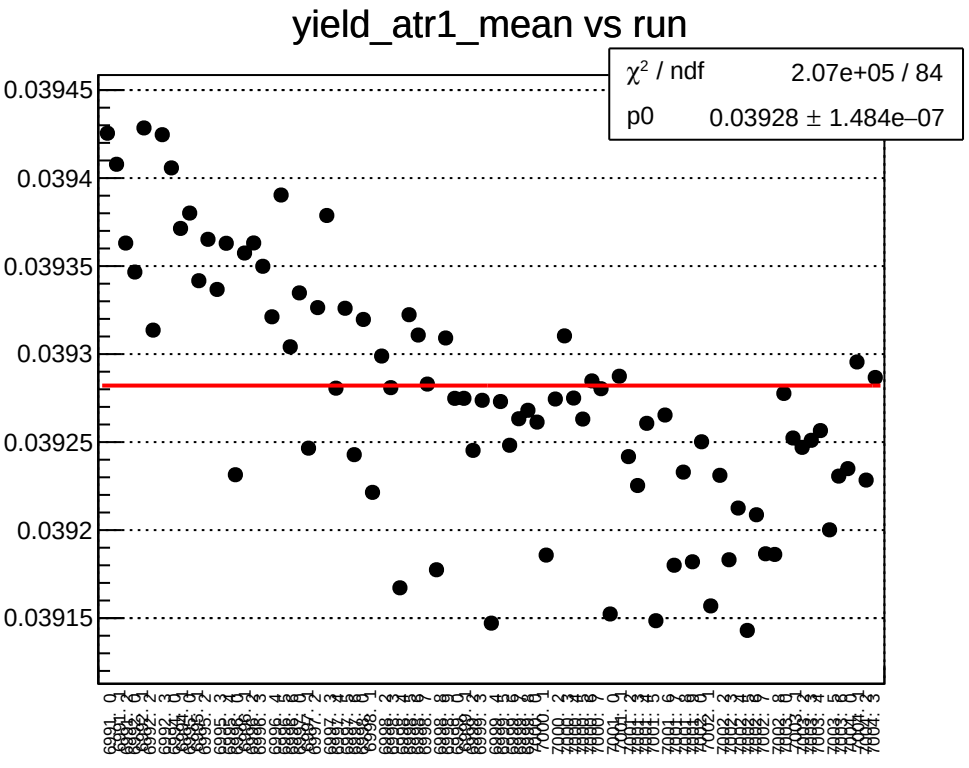

pull1D
Entries 85
Mean −2.335
Std Dev 2.984
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

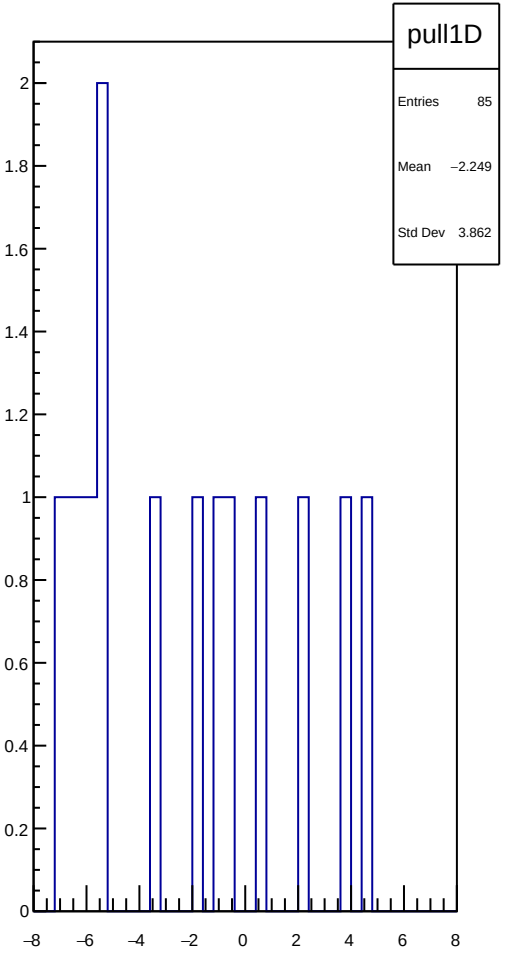

yield_atl1_rms vs run
×10⁻³
χ² / ndf 1.243e+04 / 84
p0 6.927e−05 ± 5.413e−08
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065
0.06

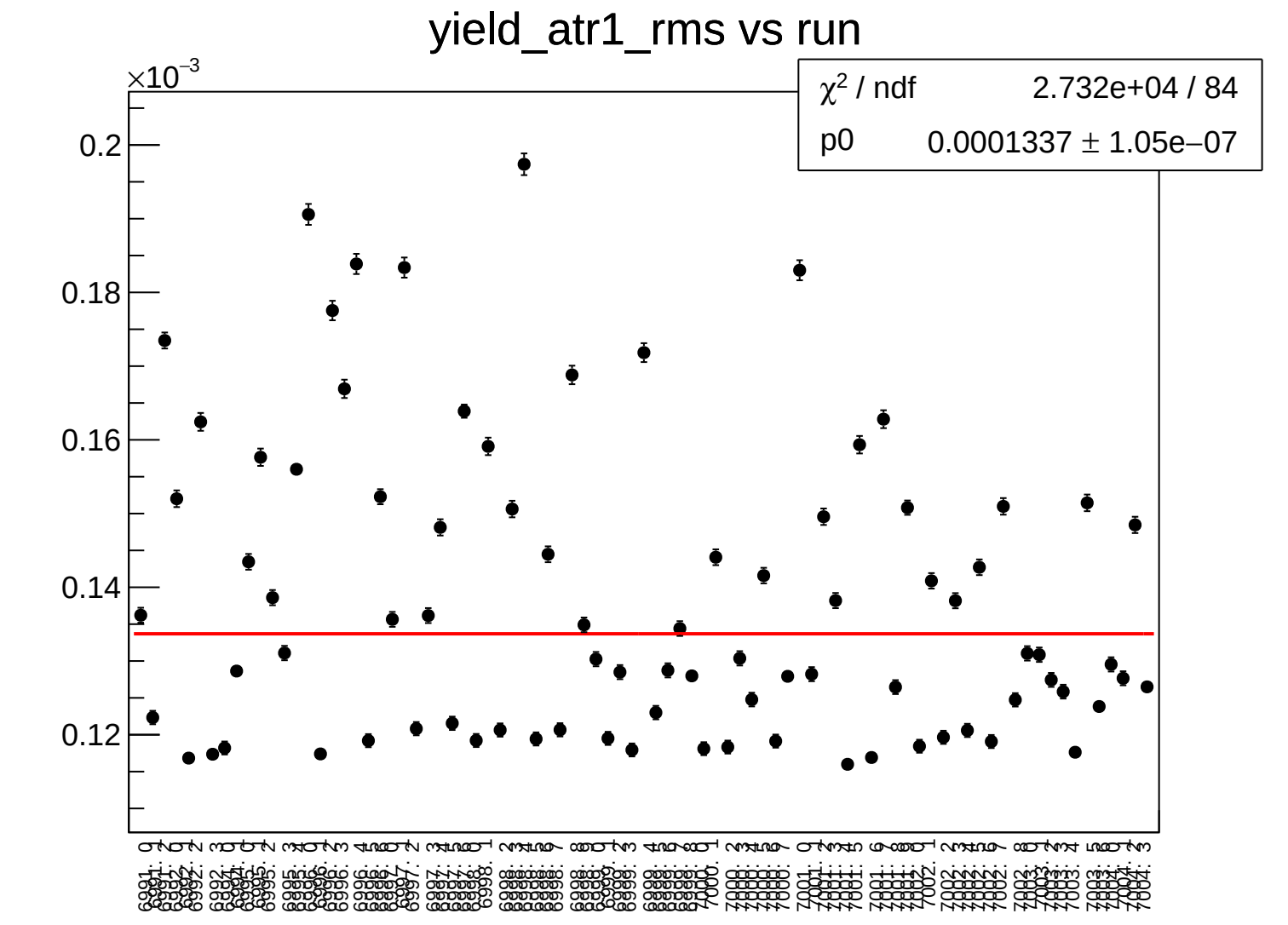

yield_atl2_mean vs run
χ² / ndf 1.513e+06 / 84
p0 0.0247 ± 3.29e−07
0.026
0.0255
0.025
0.0245
0.024
pull
Entries 85
Mean 1759
Std Dev 1728
600
500
400
300
200
100
0
−100

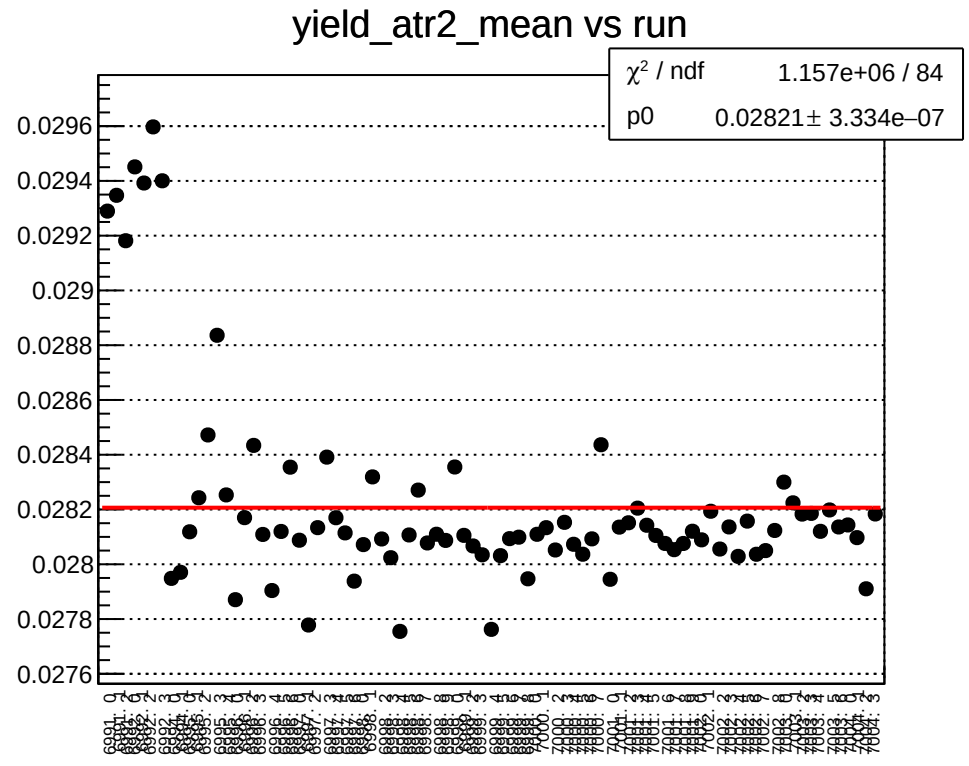

pull1D
Entries 85
Mean −3.043
Std Dev 3.305
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

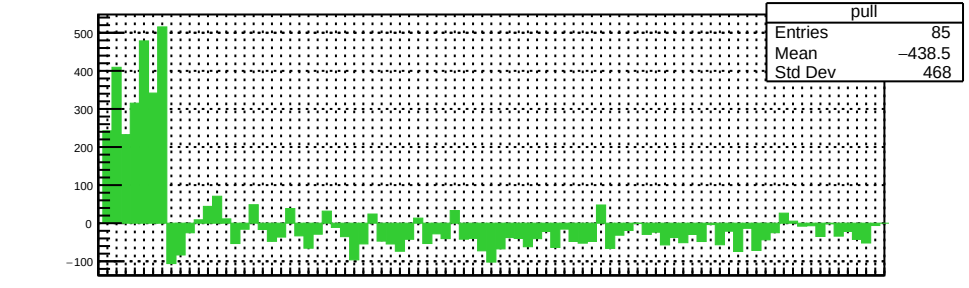

yield_atl2_rms vs run
×10⁻³
0.8
0.7
0.6
0.5
0.4
0.3
0.2
χ² / ndf 1.484e+05 / 84
p0 0.0002851 ± 2.327e−07

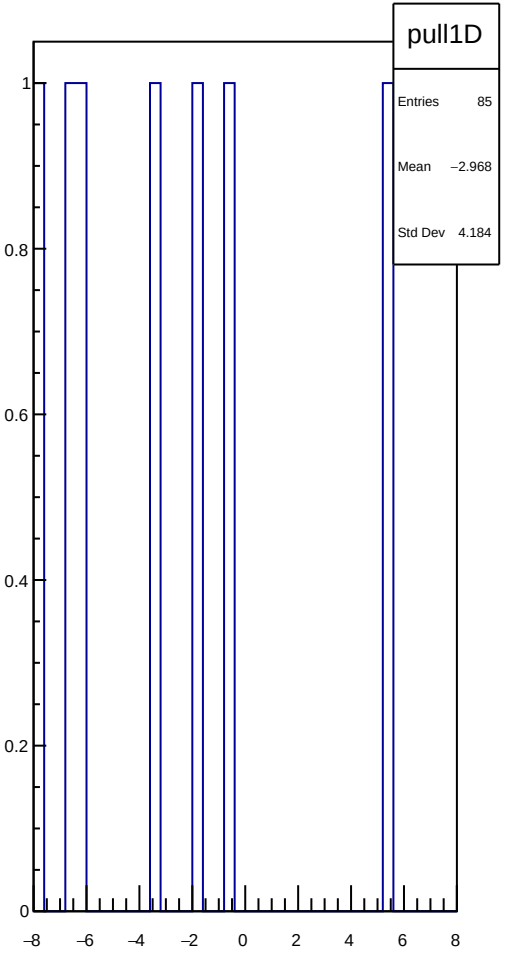

yield_atr1_mean vs run
χ² / ndf 2.07e+05 / 84
p0 0.03928 ± 1.484e−07
0.03945
0.0394
0.03935
0.0393
0.03925
0.0392
0.03915
pull
Entries 85
Mean 538.4
Std Dev 499.8
100
50
0
−50
−100

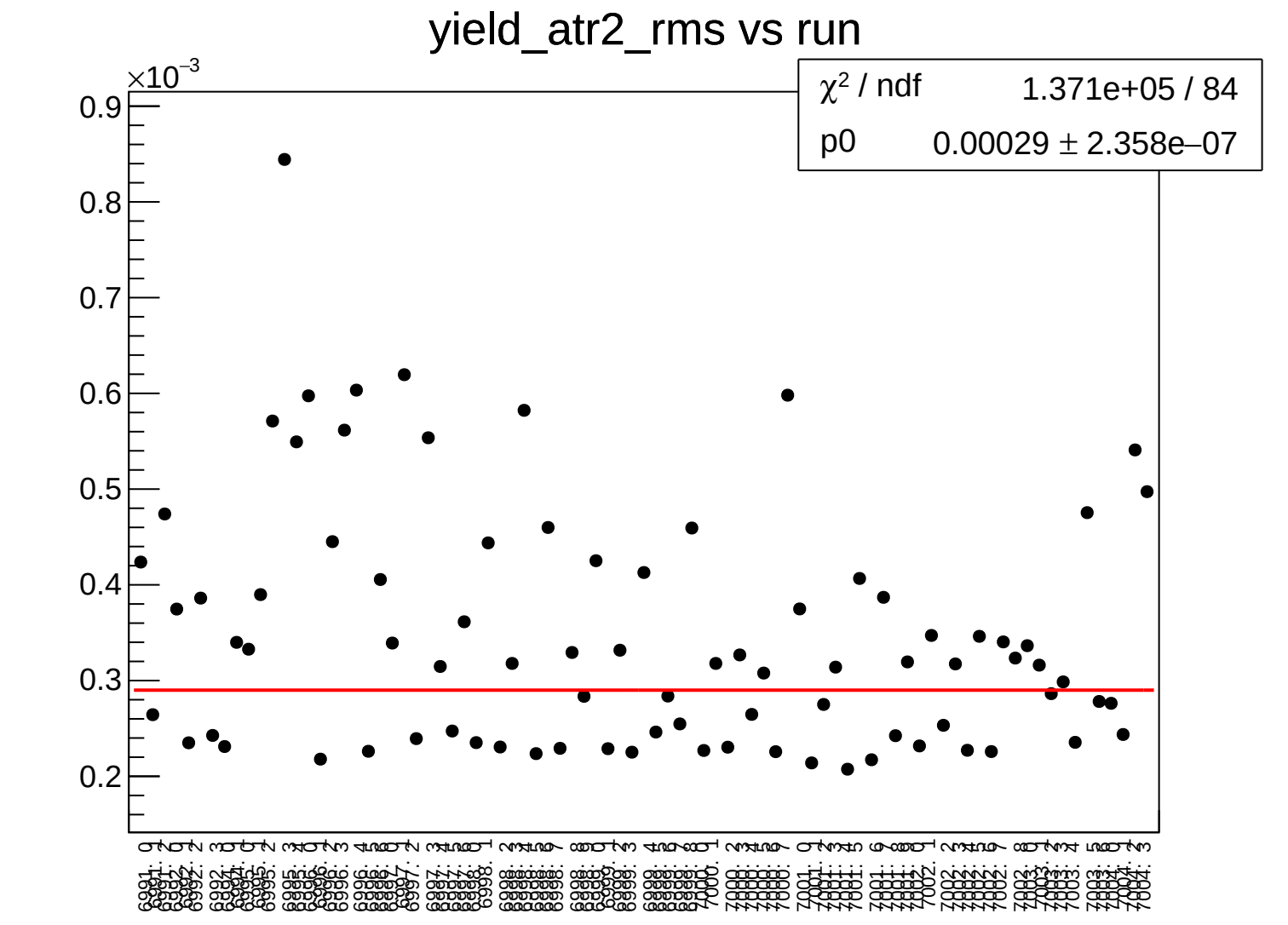

pull1D
Entries 85
Mean −2.249
Std Dev 3.862
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

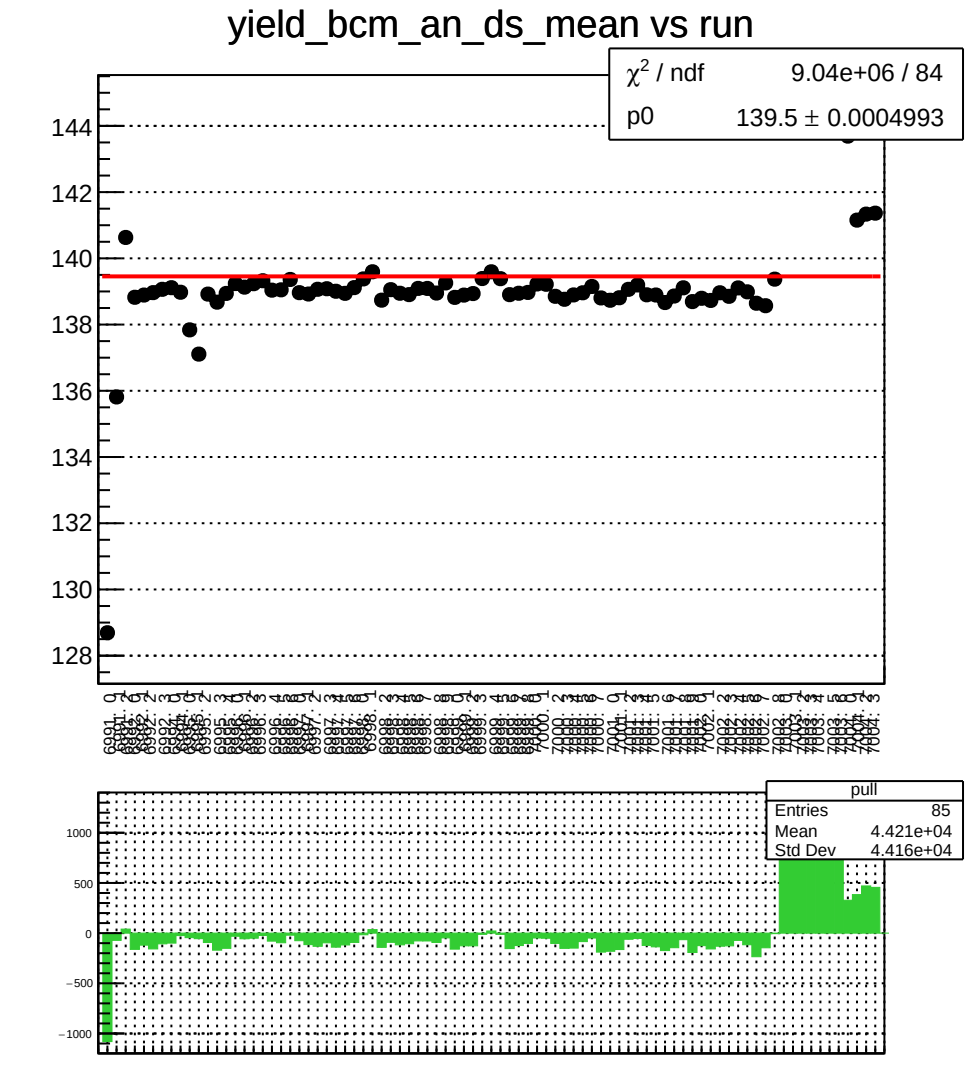

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.732e+04 / 84
p0 0.0001337 ± 1.05e−07
0.2
0.18
0.16
0.14
0.12

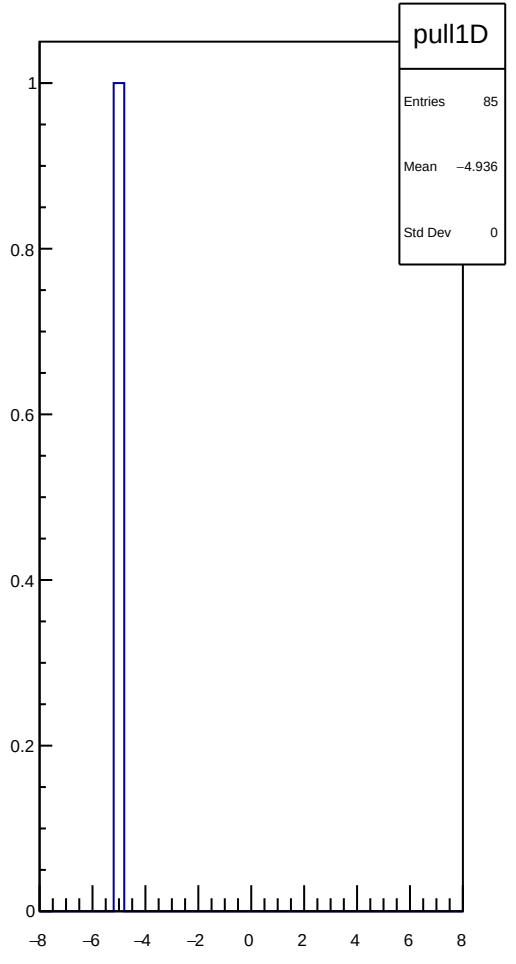

yield_atr2_mean vs run
χ² / ndf 1.157e+06 / 84
p0 0.02821± 3.334e–07
0.0296
0.0294
0.0292
0.029
0.0288
0.0286
0.0284
0.0282
0.028
0.0278
0.0276

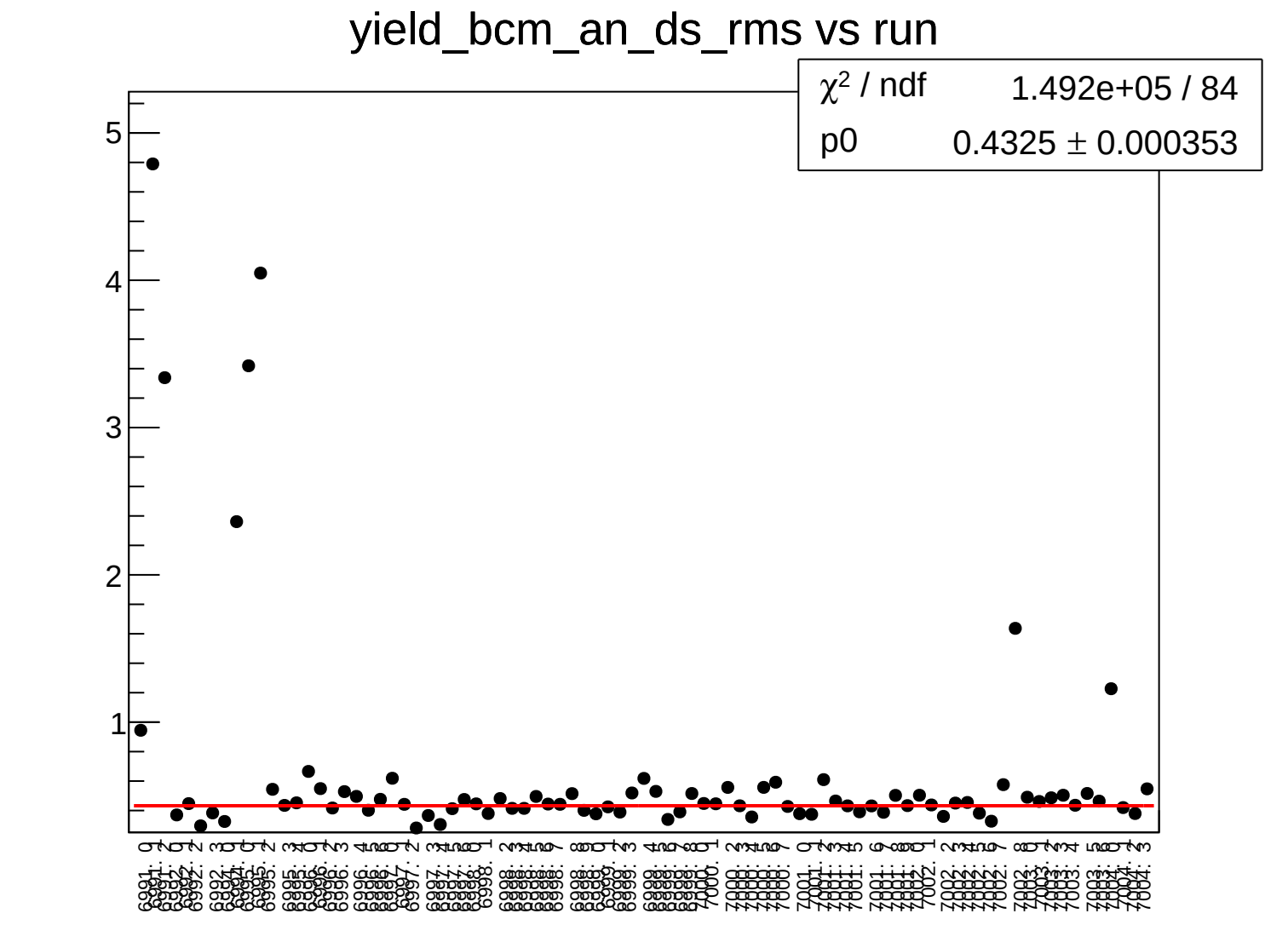

pull
Entries 85
Mean –438.5
Std Dev 468
500
400
300
200
100
0
–100

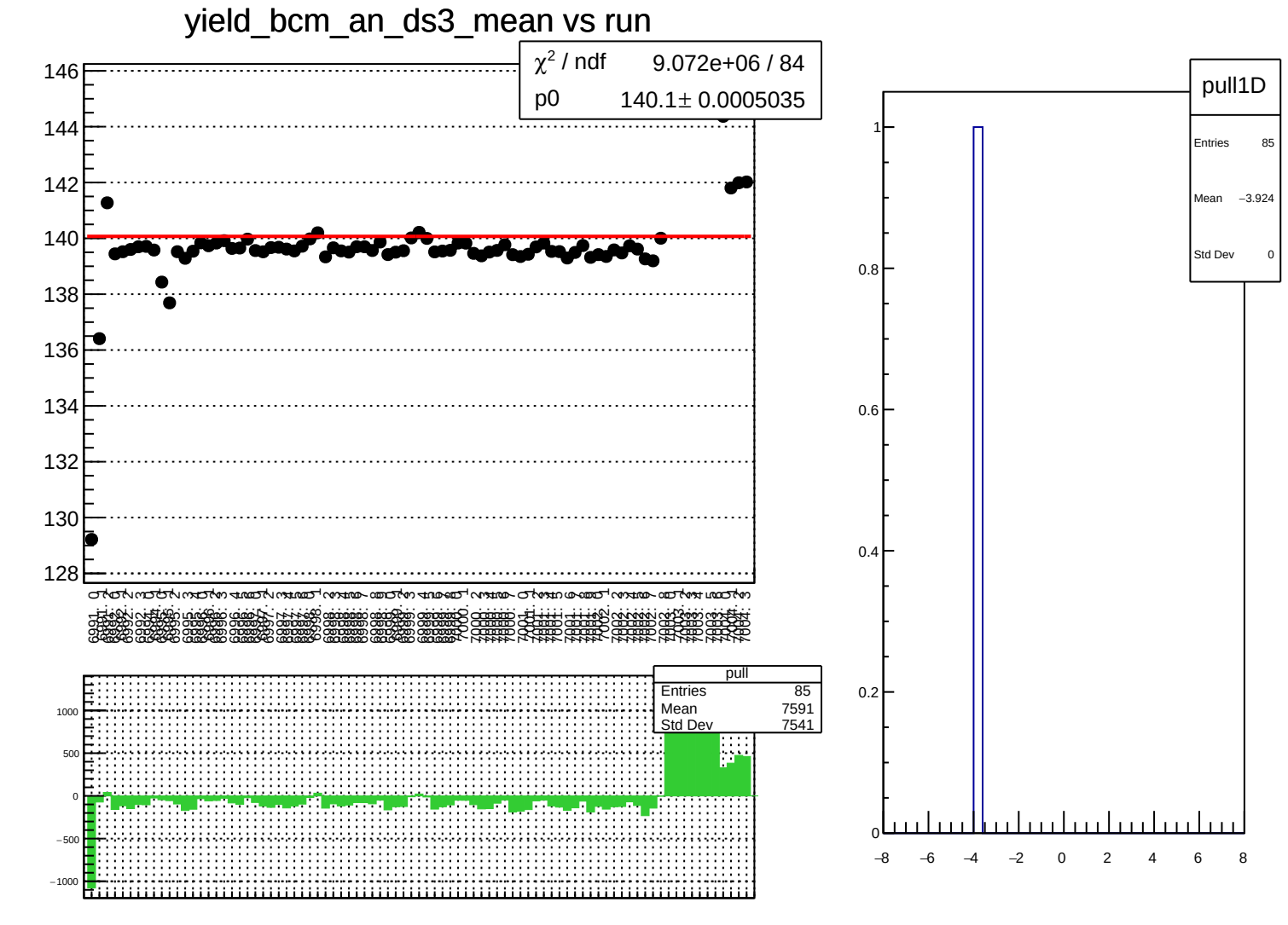

pull1D
Entries 85
Mean –2.968
Std Dev 4.184
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

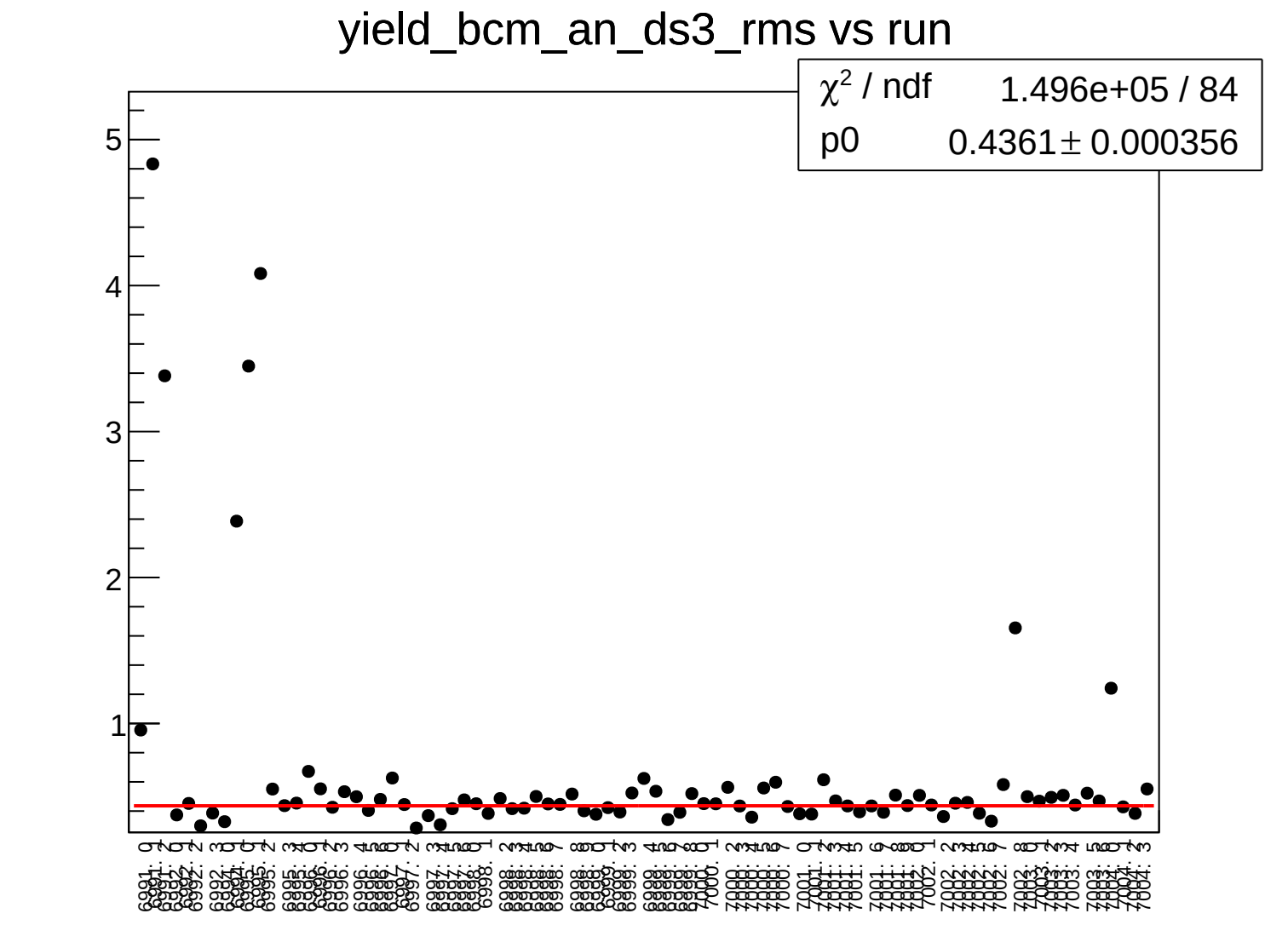

yield_atr2_rms vs run
×10⁻³
χ² / ndf 1.371e+05 / 84
p0 0.00029 ± 2.358e–07
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2

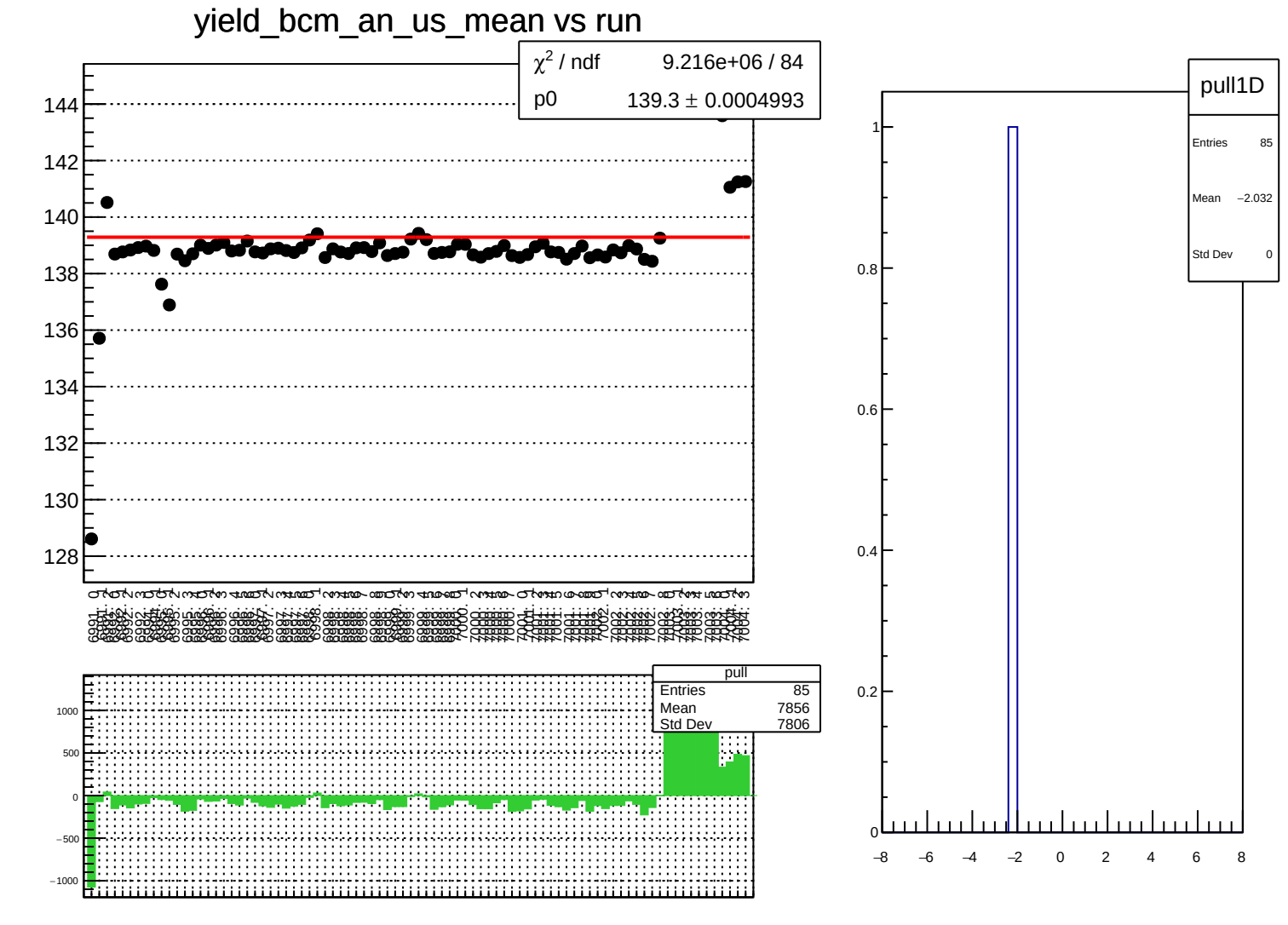

yield_bcm_an_ds_mean vs run
χ² / ndf 9.04e+06 / 84
p0 139.5 ± 0.0004993
144
142
140
138
136
134
132
130
128
pull
Entries 85
Mean 4.421e+04
Std Dev 4.416e+04
1000
500
0
−500
−1000

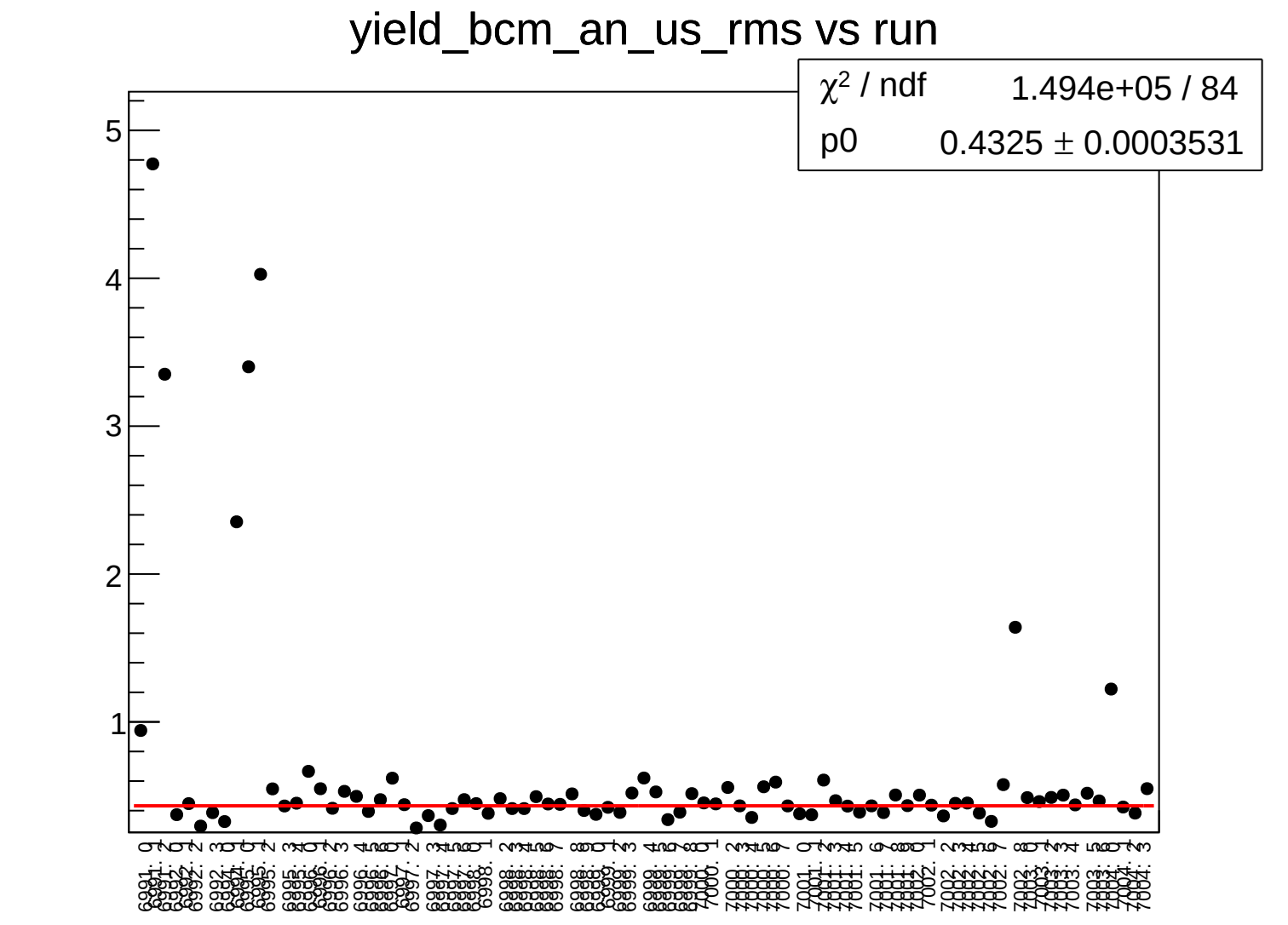

pull1D
Entries 85
Mean −4.936
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

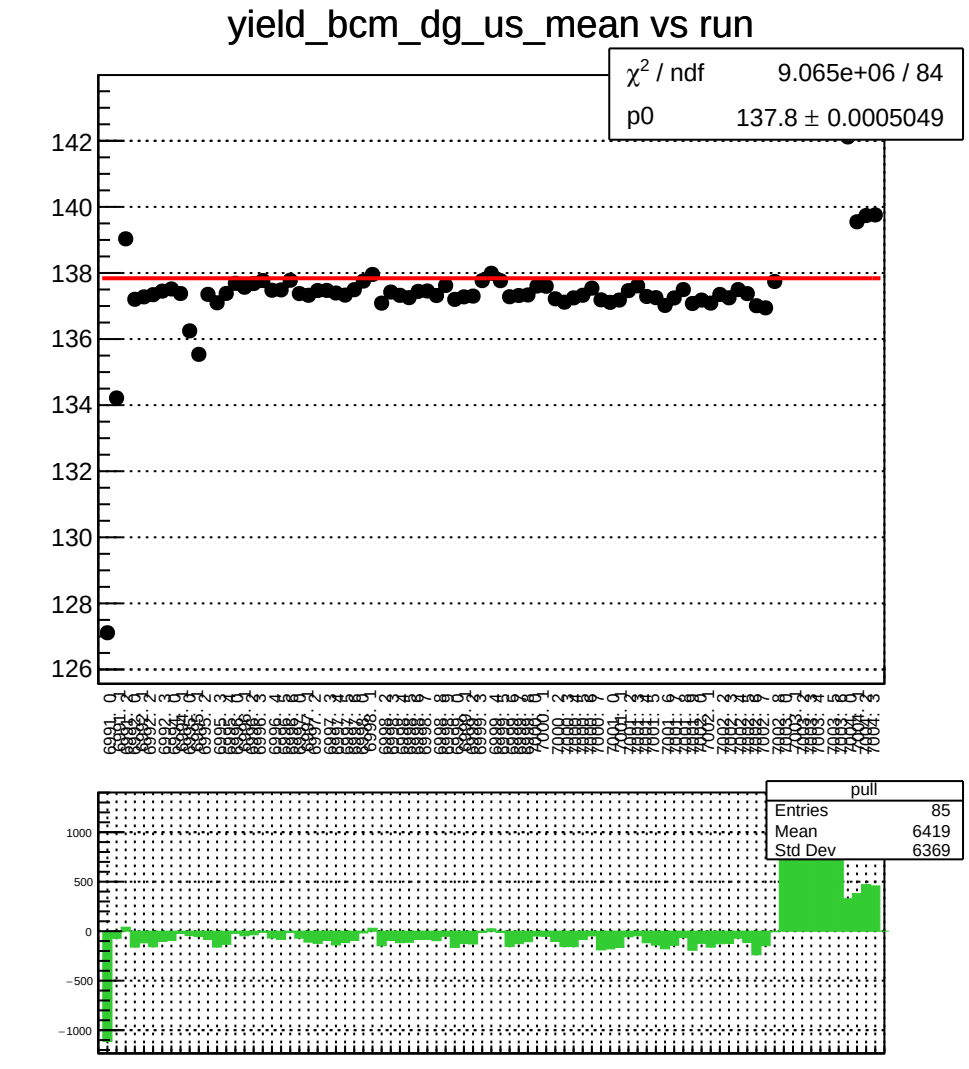

yield_bcm_an_ds_rms vs run
χ^2 / ndf 1.492e+05 / 84
p0 0.4325 ± 0.000353
5
4
3
2
1

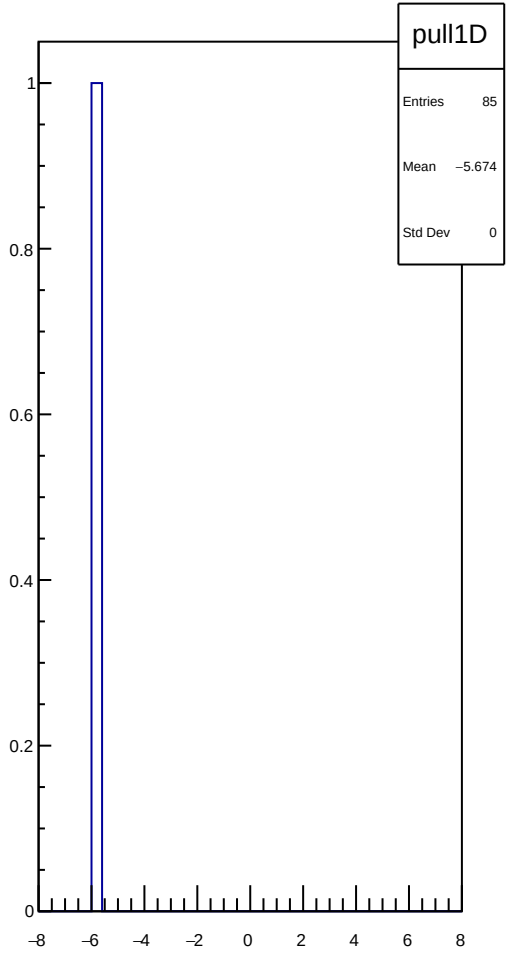

yield_bcm_an_ds3_mean vs run
χ² / ndf 9.072e+06 / 84
p0 140.1± 0.0005035
pull
Entries 85
Mean 7591
Std Dev 7541
pull1D
Entries 85
Mean −3.924
Std Dev 0

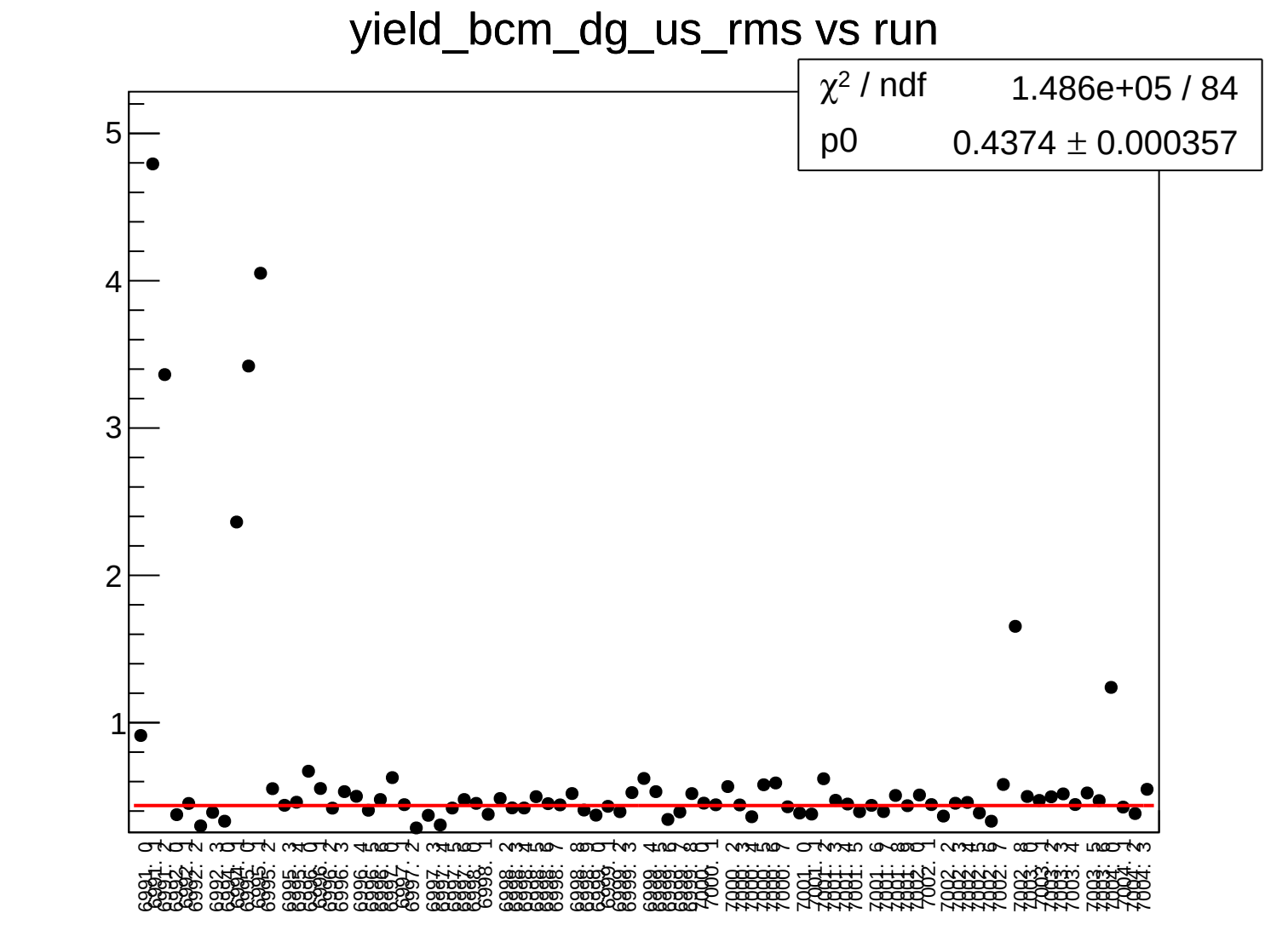

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 1.496e+05 / 84
p0 0.4361 ± 0.000356
5
4
3
2
1

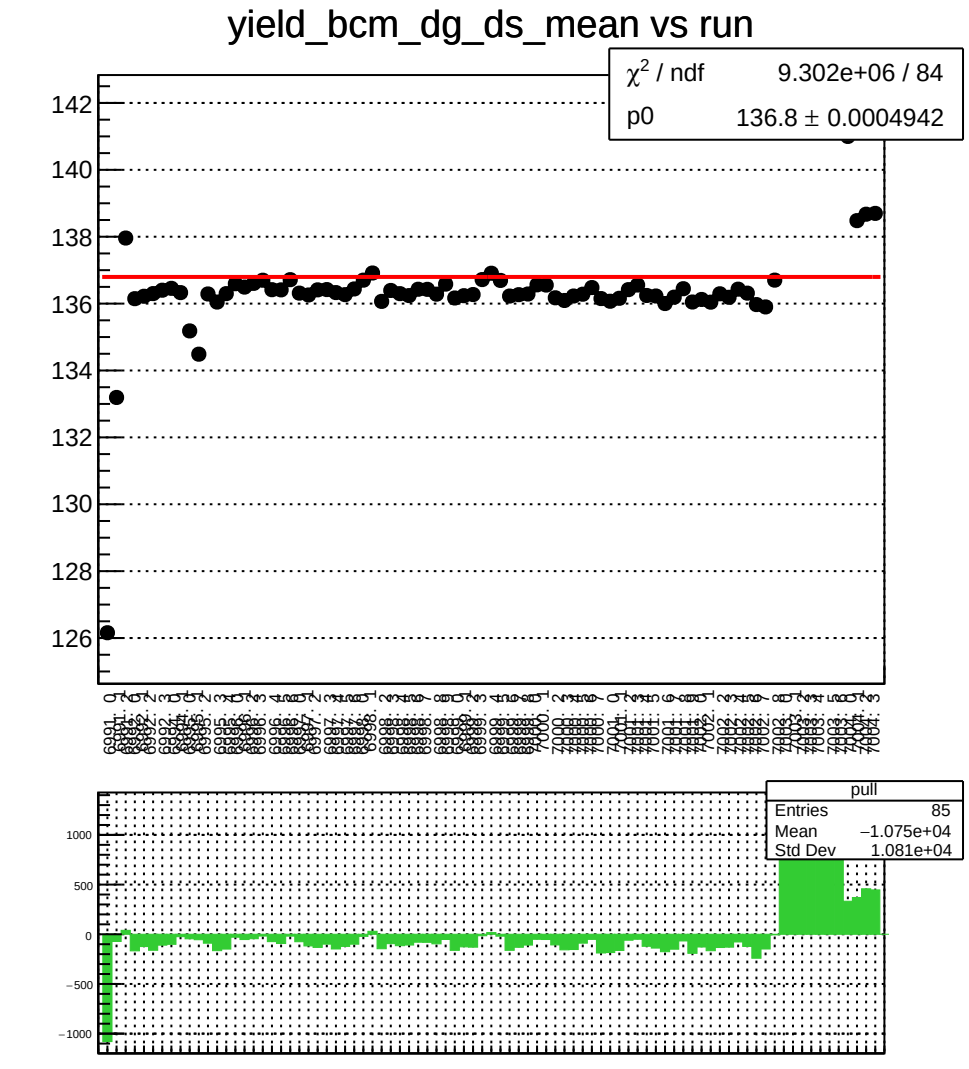

yield_bcm_an_us_mean vs run
χ² / ndf 9.216e+06 / 84
p0 139.3 ± 0.0004993
144
142
140
138
136
134
132
130
128
pull
Entries 85
Mean 7856
Std Dev 7806
1000
500
0
−500
−1000
pull1D
Entries 85
Mean −2.032
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

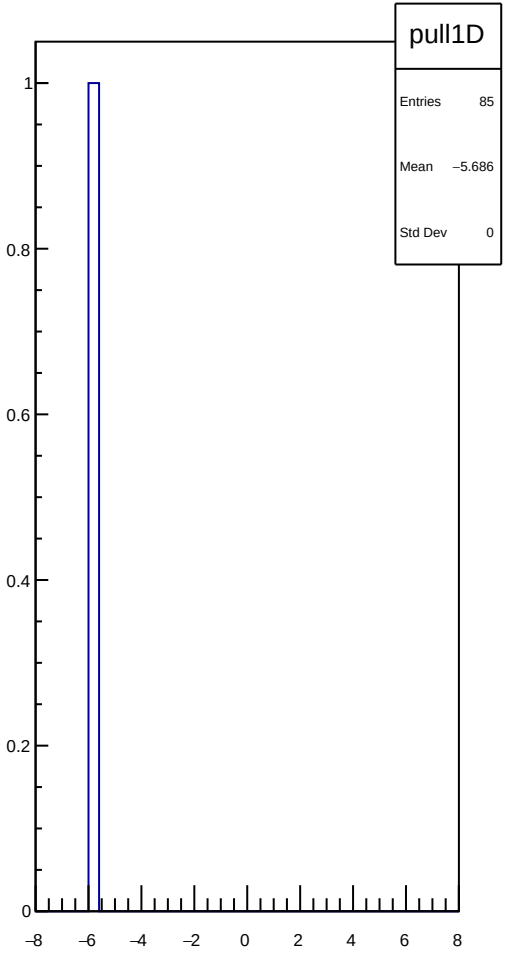

yield_bcm_an_us_rms vs run
χ² / ndf 1.494e+05 / 84
p0 0.4325 ± 0.0003531
5
4
3
2
1

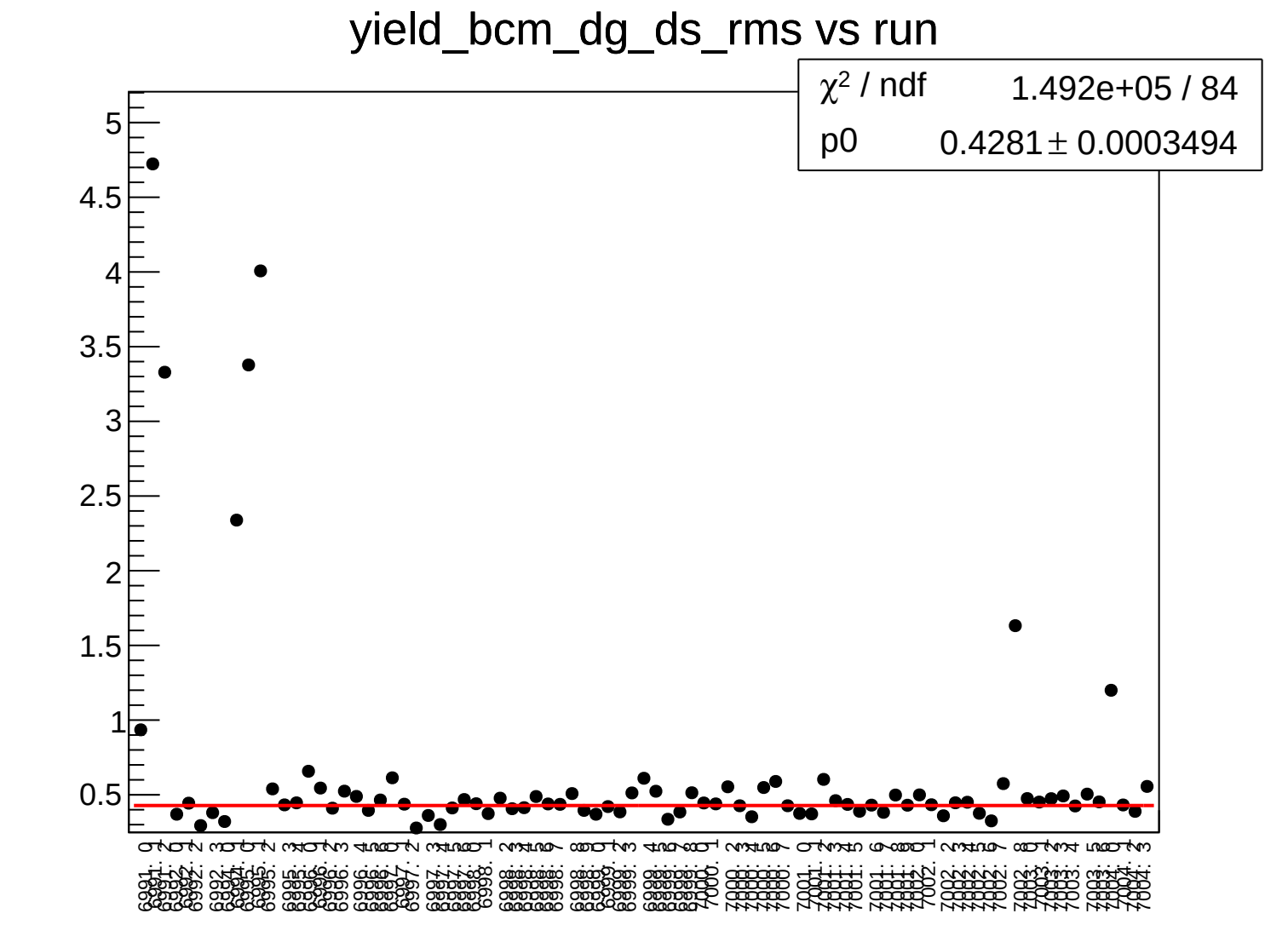

yield_bcm_dg_us_mean vs run
χ² / ndf 9.065e+06 / 84
p0 137.8 ± 0.0005049
142
140
138
136
134
132
130
128
126
pull
Entries 85
Mean 6419
Std Dev 6369
1000
500
0
−500
−1000

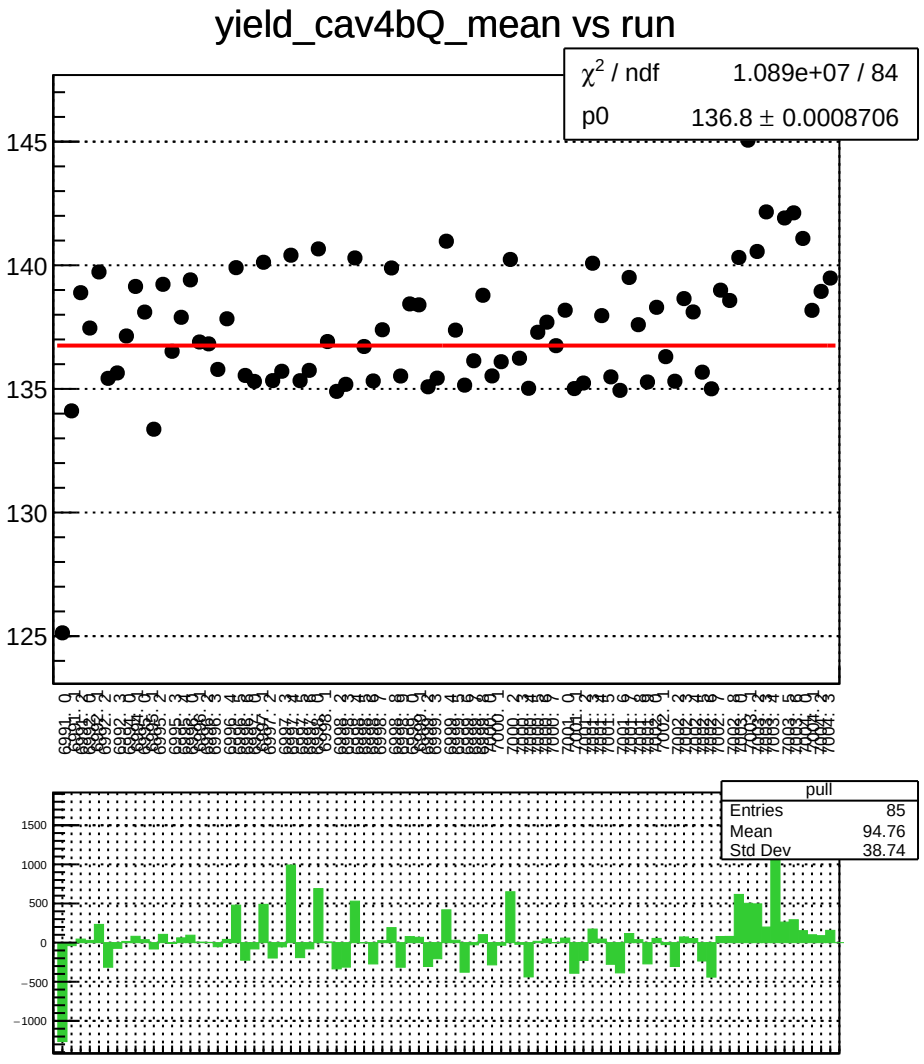

pull1D
Entries 85
Mean −5.674
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

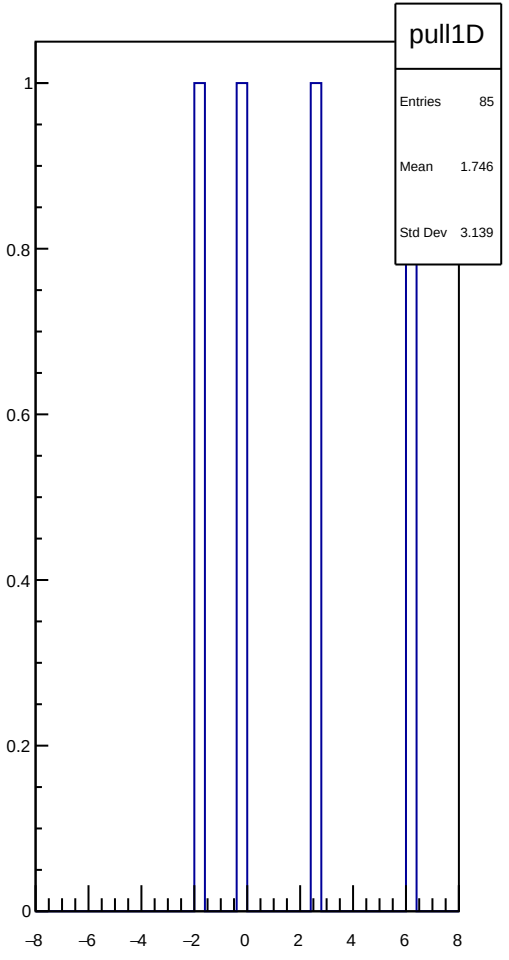

yield_bcm_dg_us_rms vs run
χ² / ndf 1.486e+05 / 84
p0 0.4374 ± 0.000357
5
4
3
2
1

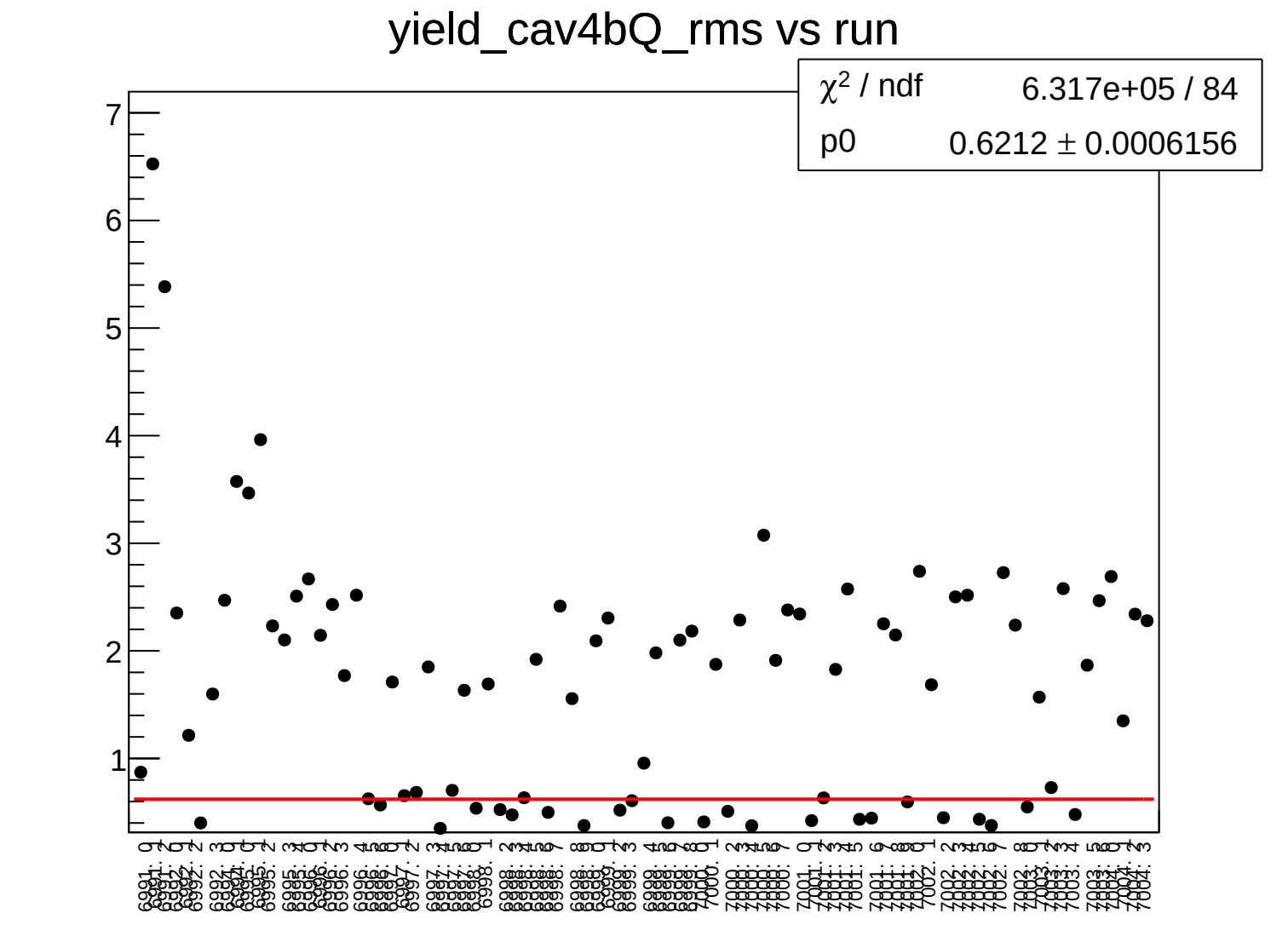

yield_bcm_dg_ds_mean vs run
χ² / ndf 9.302e+06 / 84
p0 136.8 ± 0.0004942
142
140
138
136
134
132
130
128
126
pull
Entries 85
Mean −1.075e+04
Std Dev 1.081e+04
1000
500
0
−500
−1000

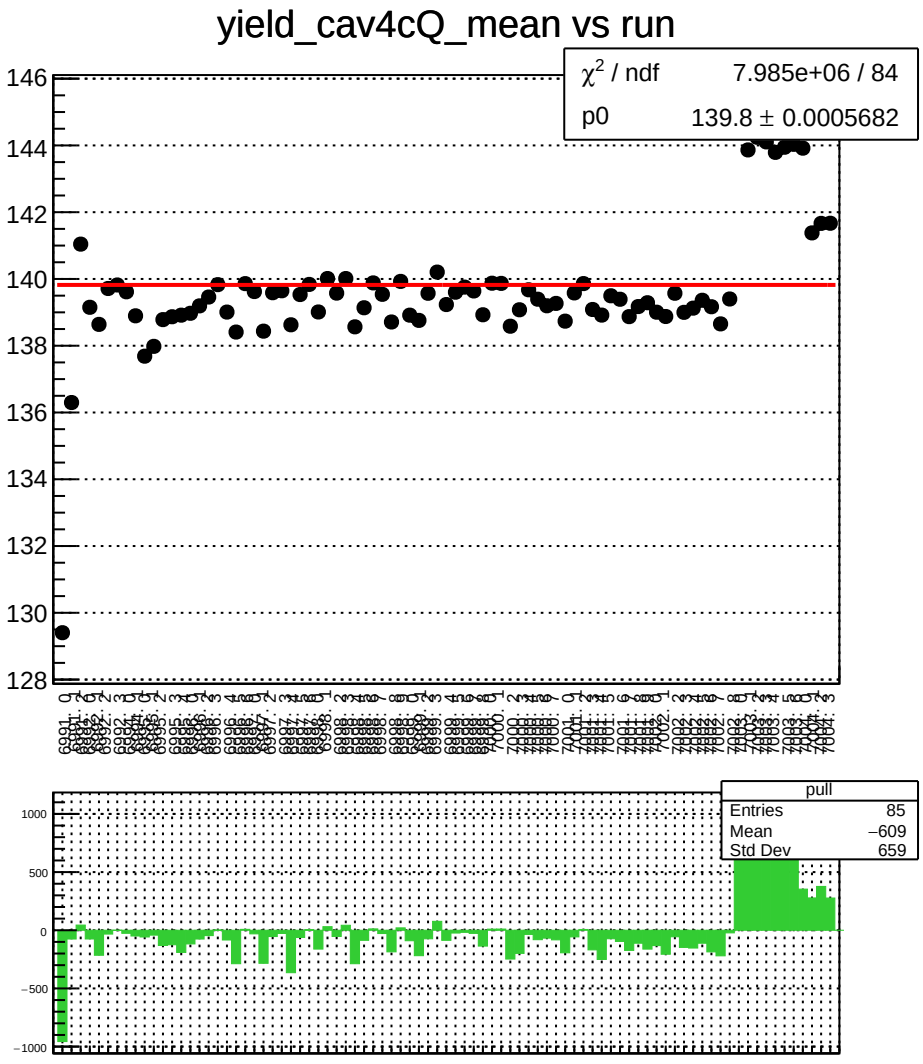

pull1D
Entries 85
Mean −5.686
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

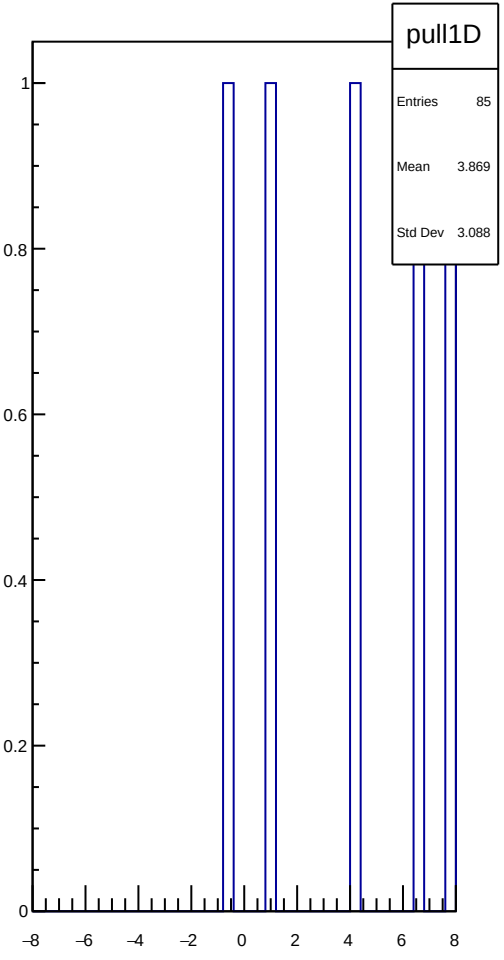

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.492e+05 / 84
p0 0.4281 ± 0.0003494
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

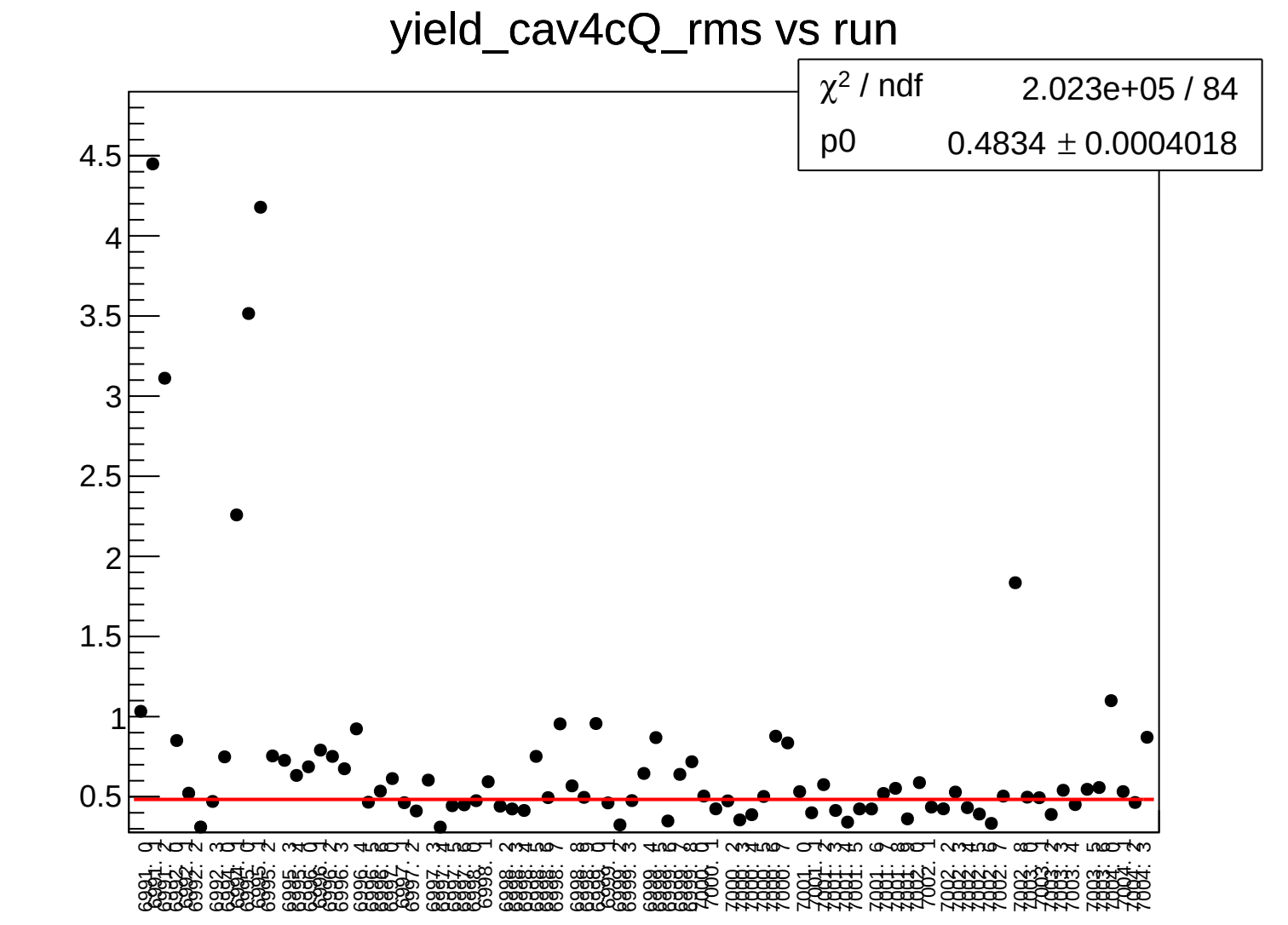

yield_cav4bQ_mean vs run
χ² / ndf 1.089e+07 / 84
p0 136.8 ± 0.0008706
145
140
135
130
125
pull
Entries 85
Mean 94.76
Std Dev 38.74
1500
1000
500
0
−500
−1000

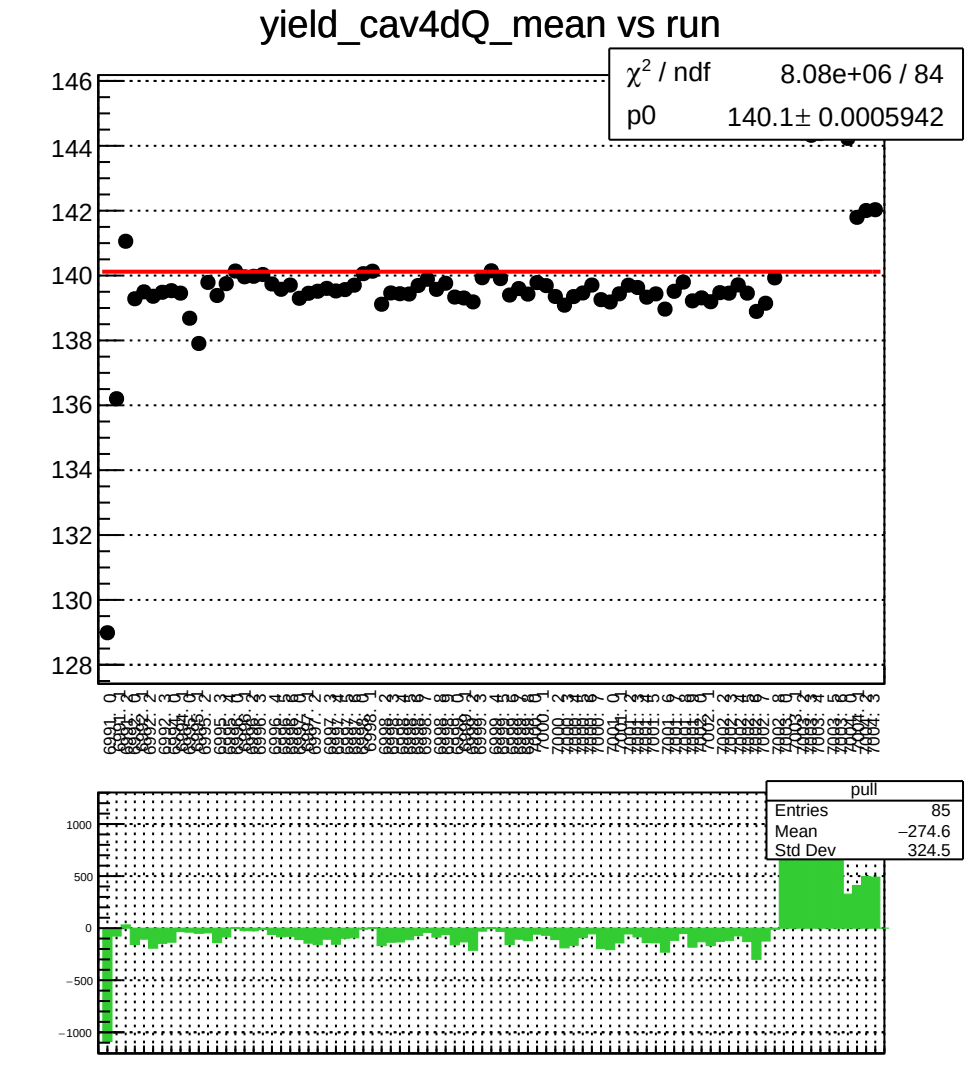

pull1D
Entries 85
Mean 1.746
Std Dev 3.139
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

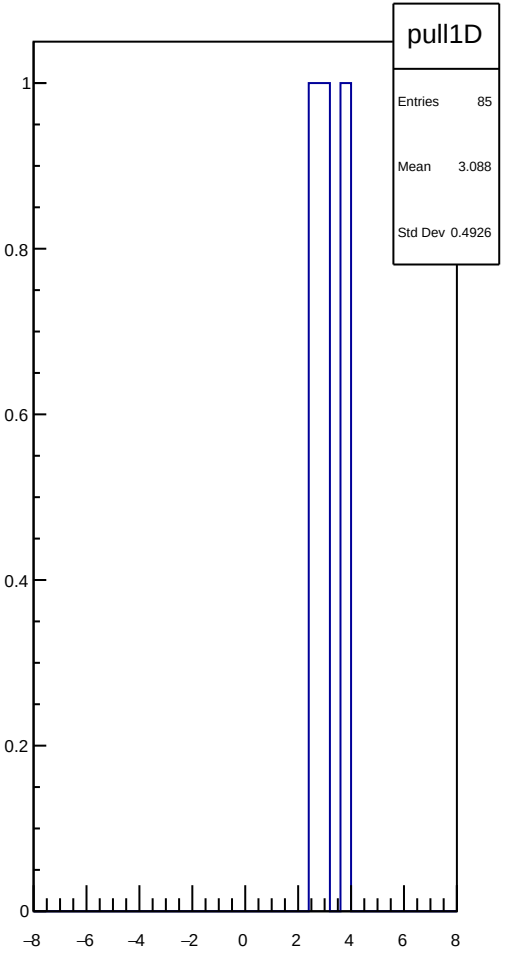

yield_cav4bQ_rms vs run
χ² / ndf 6.317e+05 / 84
p0 0.6212 ± 0.0006156
7
6
5
4
3
2
1

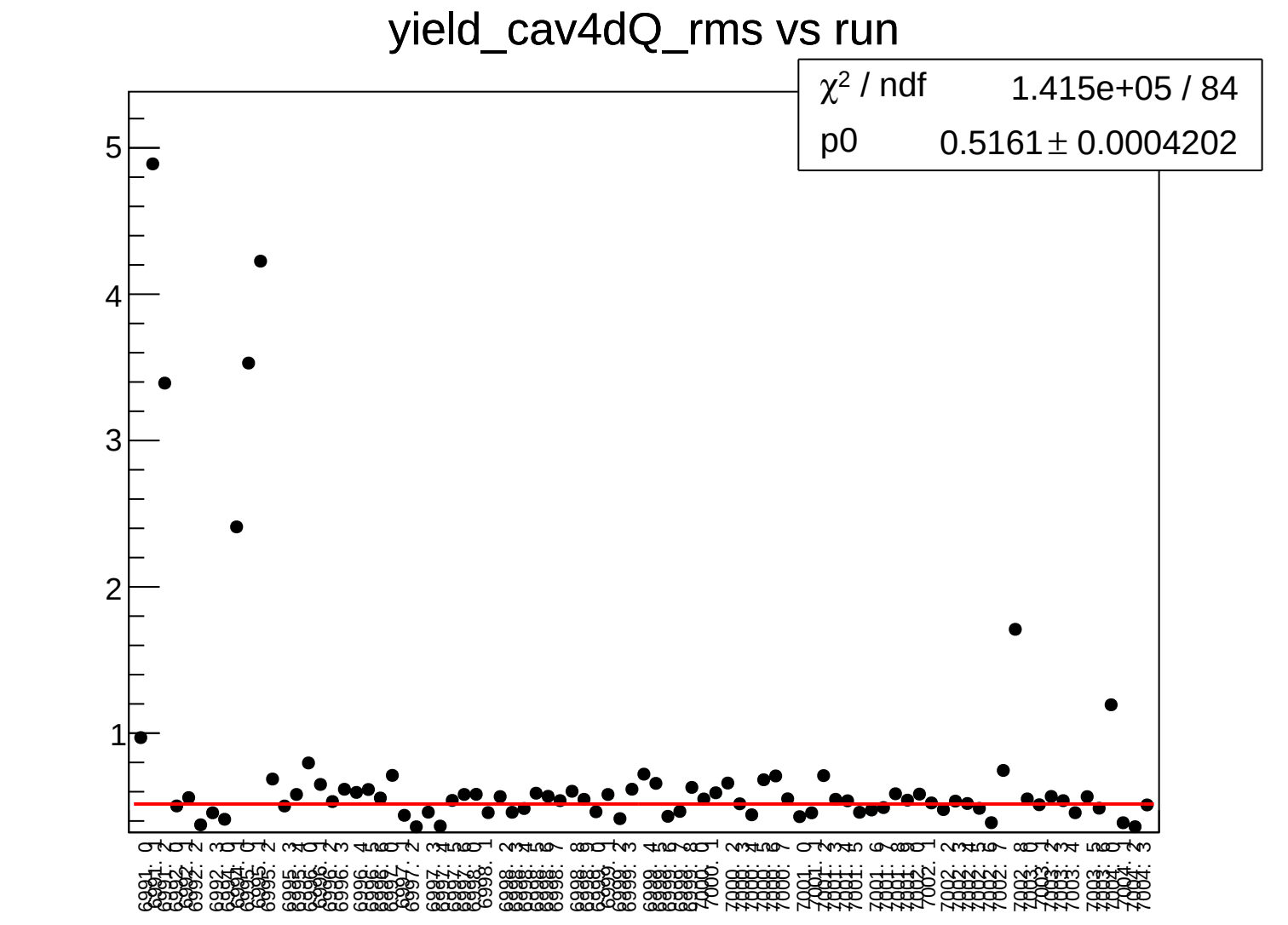

yield_cav4cQ_mean vs run
χ² / ndf 7.985e+06 / 84
p0 139.8 ± 0.0005682
pull
Entries 85
Mean −609
Std Dev 659

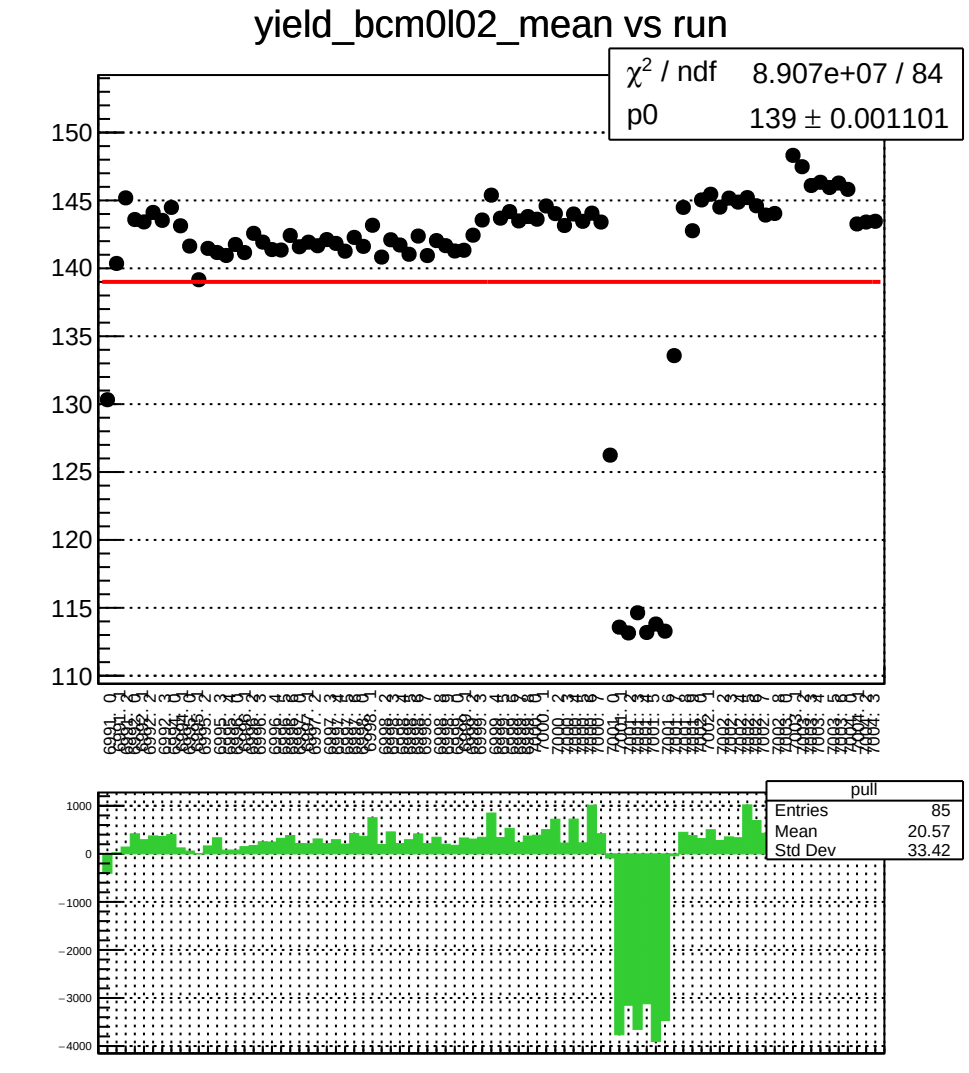

pull1D
Entries 85
Mean 3.869
Std Dev 3.088

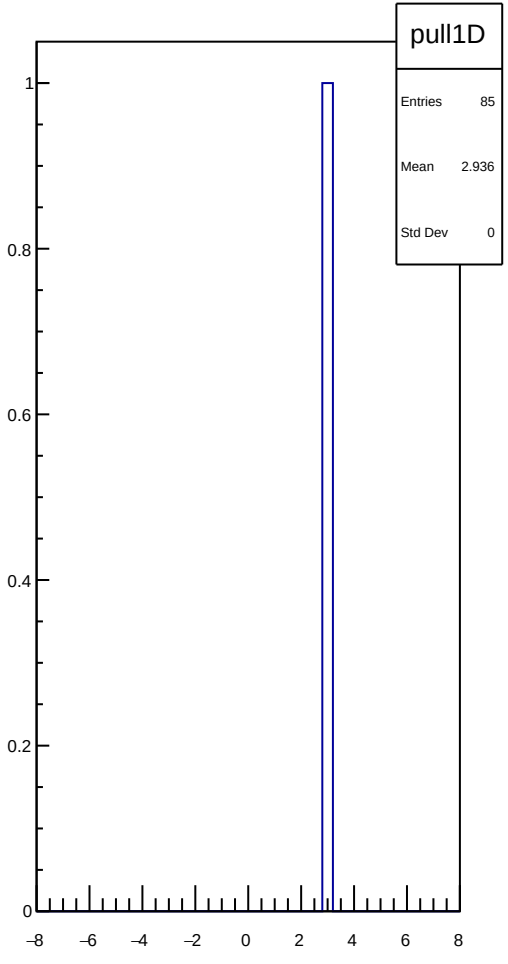

yield_cav4cQ_rms vs run
χ² / ndf 2.023e+05 / 84
p0 0.4834 ± 0.0004018
4.5
4
3.5
3
2.5
2
1.5
1
0.5

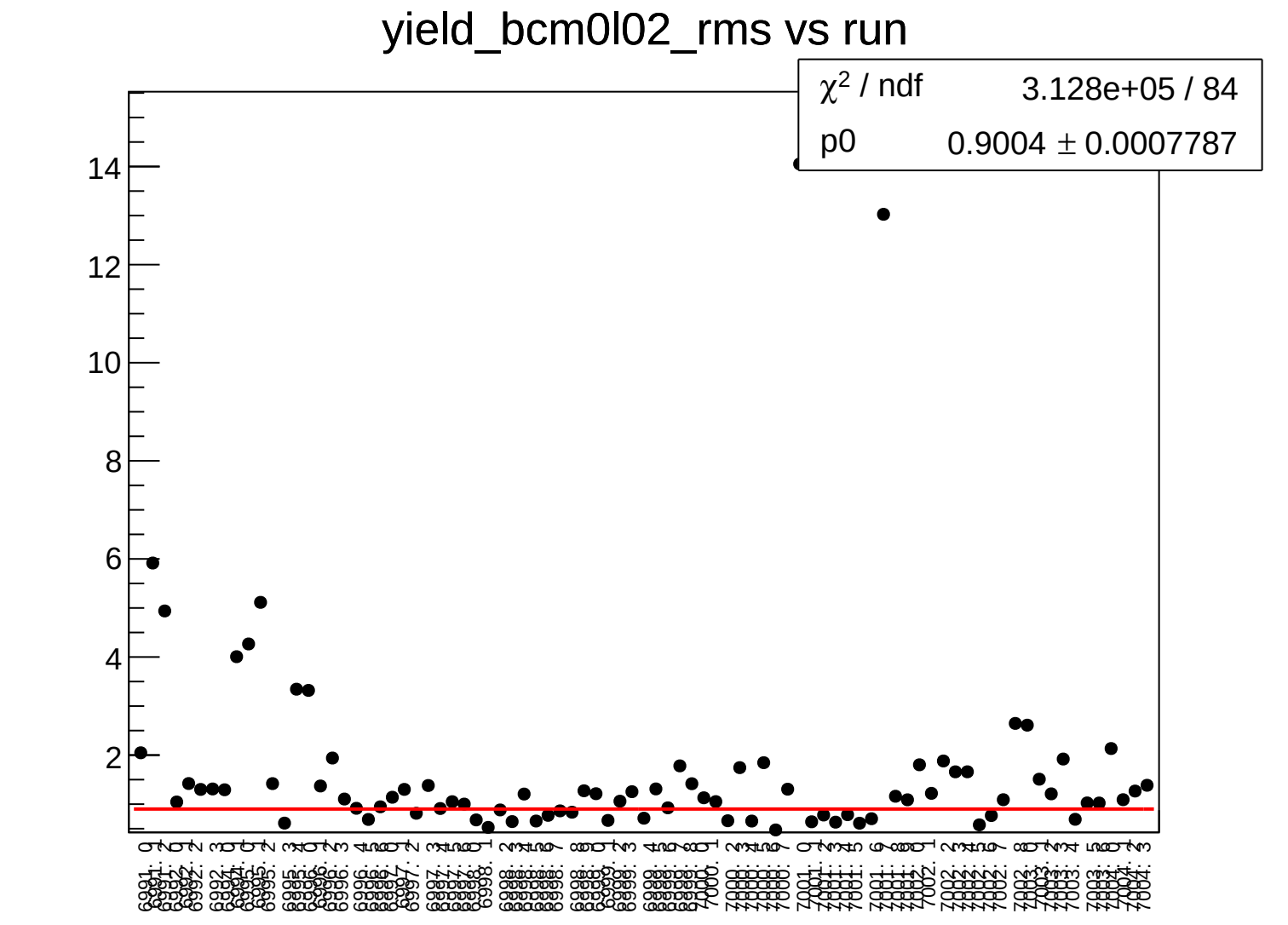

yield_cav4dQ_mean vs run
χ² / ndf 8.08e+06 / 84
p0 140.1± 0.0005942
pull
Entries 85
Mean −274.6
Std Dev 324.5

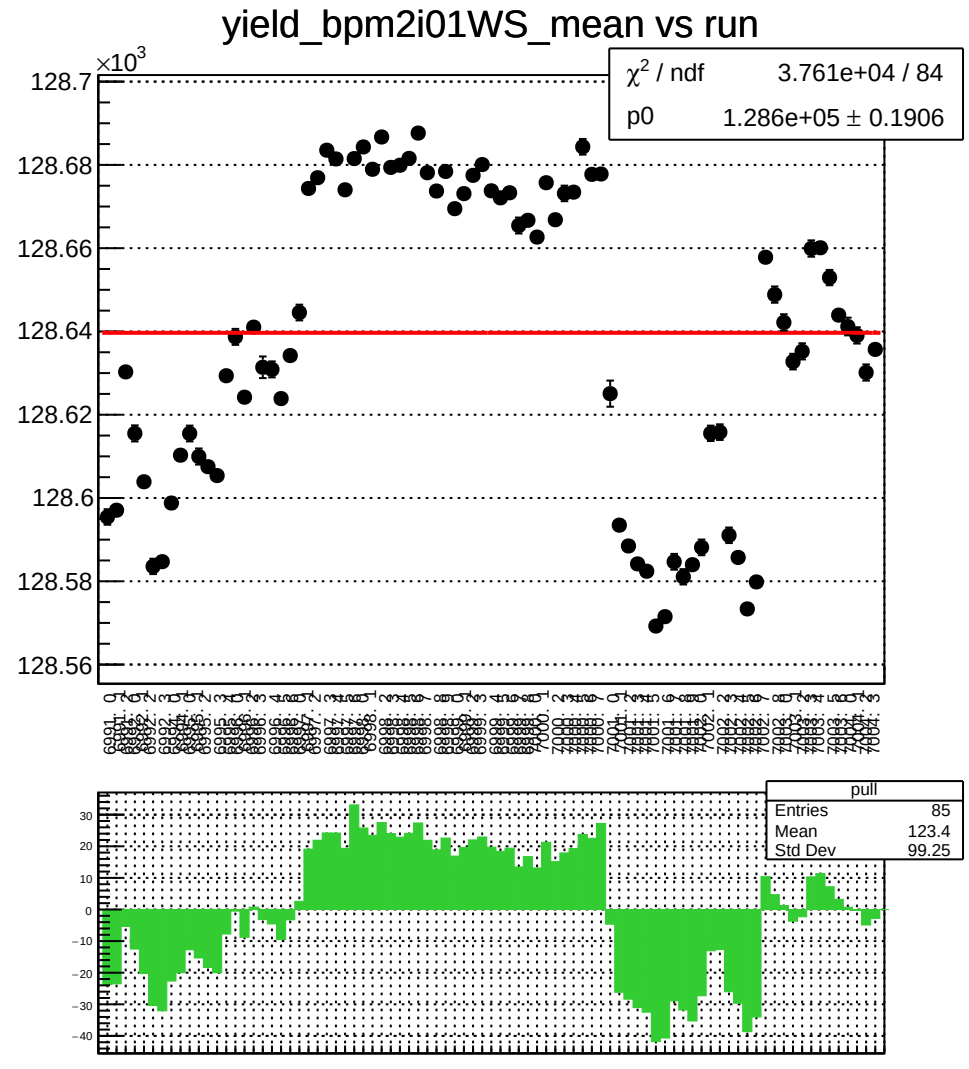

pull1D
Entries 85
Mean 3.088
Std Dev 0.4926

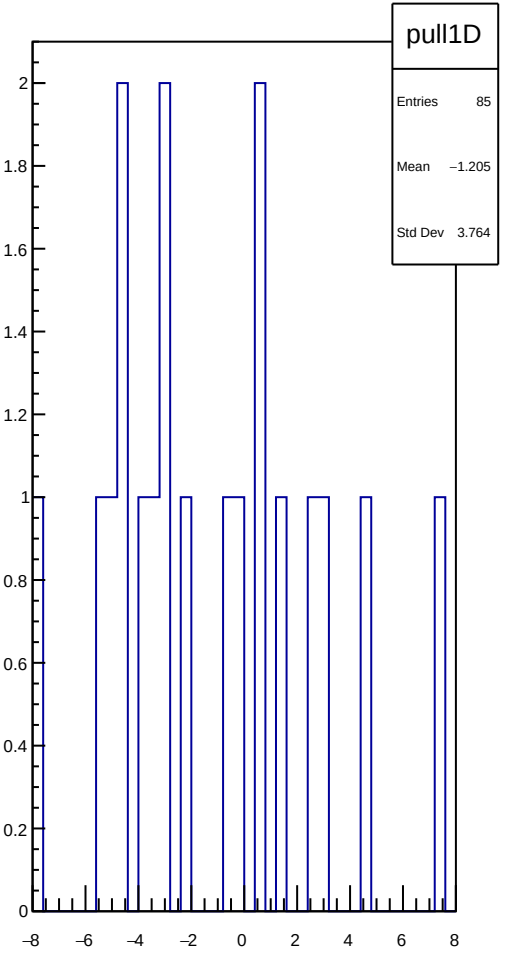

yield_cav4dQ_rms vs run
χ² / ndf 1.415e+05 / 84
p0 0.5161 ± 0.0004202
5
4
3
2
1

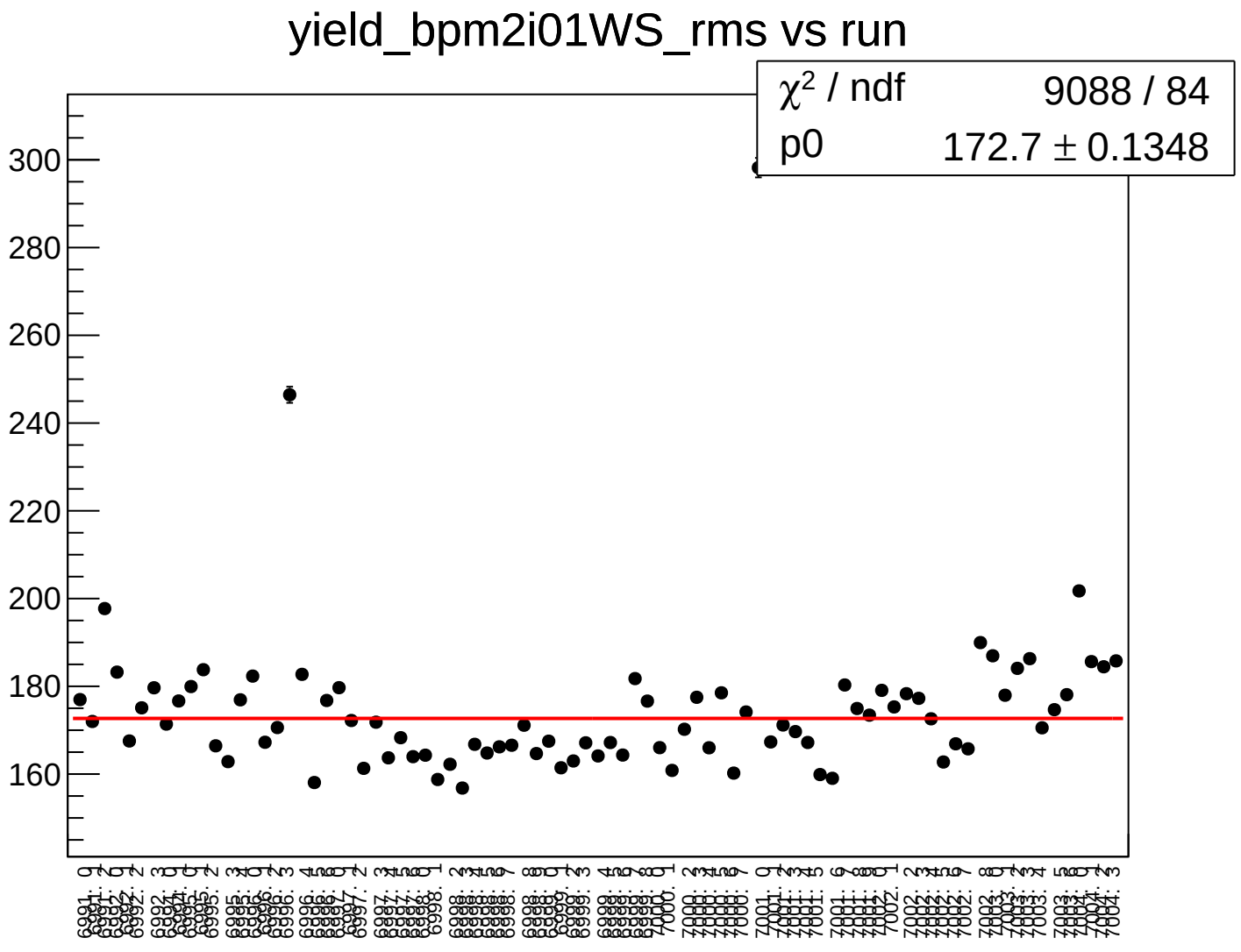

yield_bcm0l02_mean vs run
χ² / ndf 8.907e+07 / 84
p0 139 ± 0.001101
150
145
140
135
130
125
120
115
110
pull
Entries 85
Mean 20.57
Std Dev 33.42
1000
0
−1000
−2000
−3000
−4000

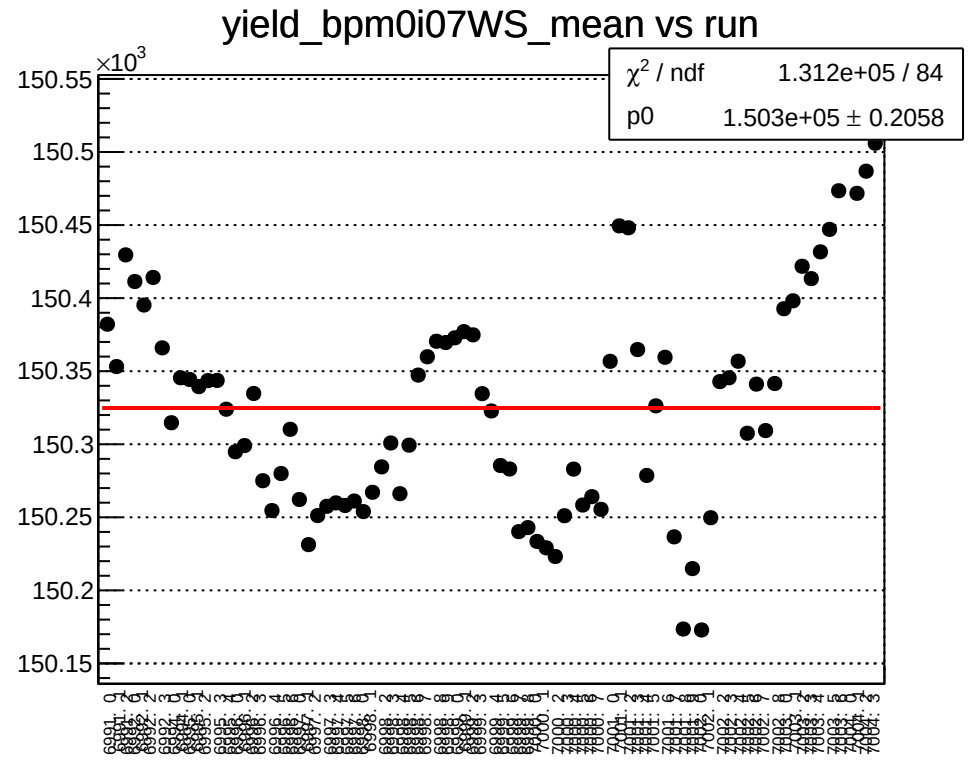

pull1D
Entries 85
Mean 2.936
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

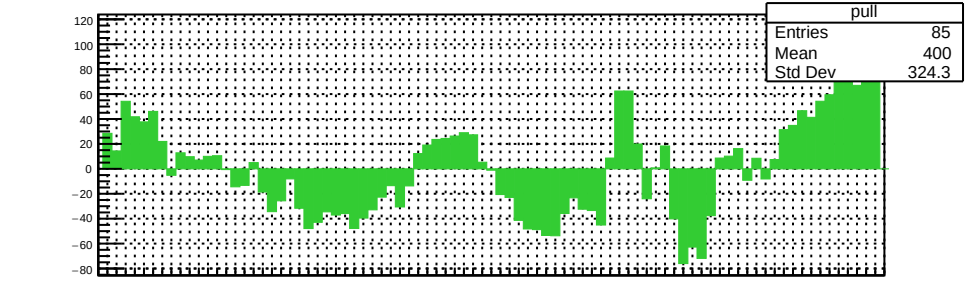

yield_bcm0l02_rms vs run
χ² / ndf 3.128e+05 / 84
p0 0.9004 ± 0.0007787
14
12
10
8
6
4
2

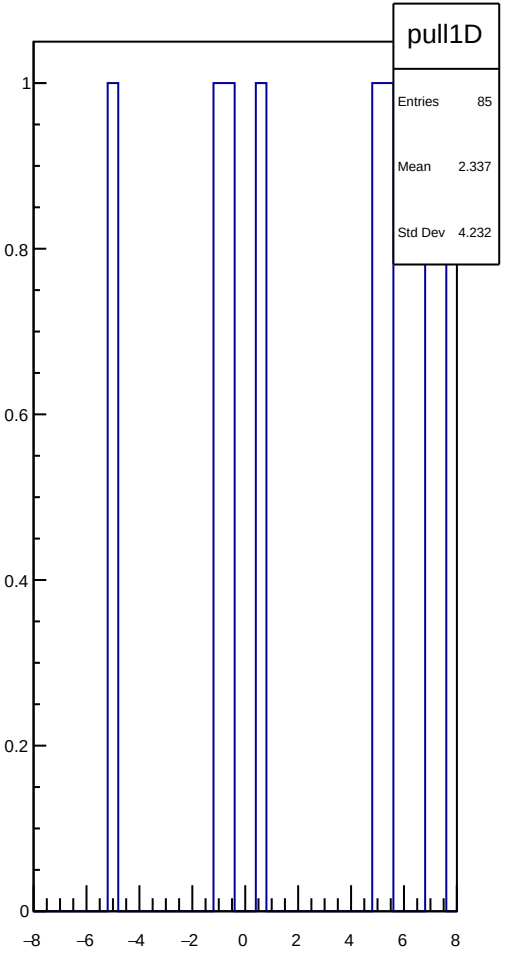

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 3.761e+04 / 84
p0 1.286e+05 ± 0.1906
128.7
128.68
128.66
128.64
128.62
128.6
128.58
128.56
pull
Entries 85
Mean 123.4
Std Dev 99.25
30
20
10
0
−10
−20
−30
−40

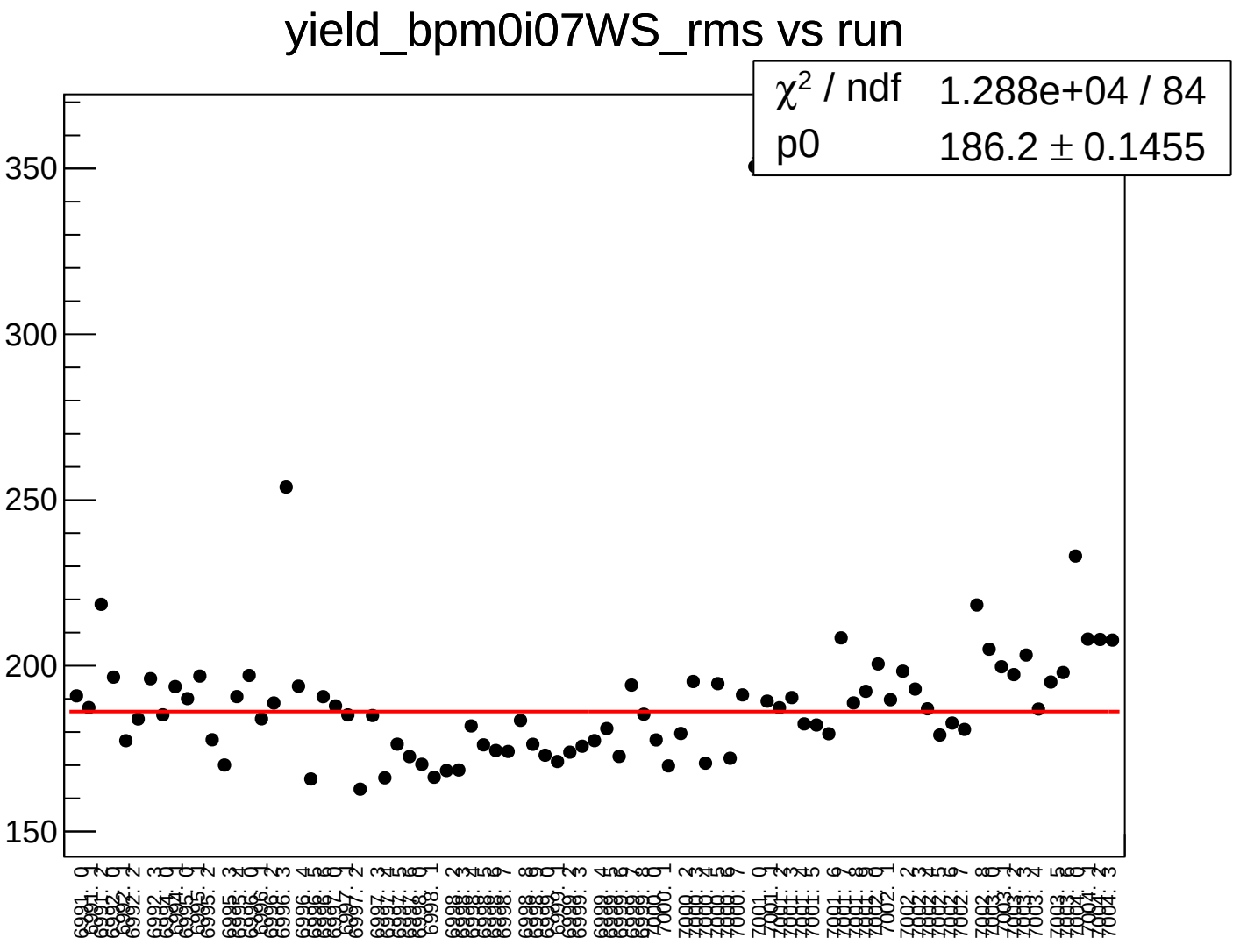

pull1D
Entries 85
Mean −1.205
Std Dev 3.764
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

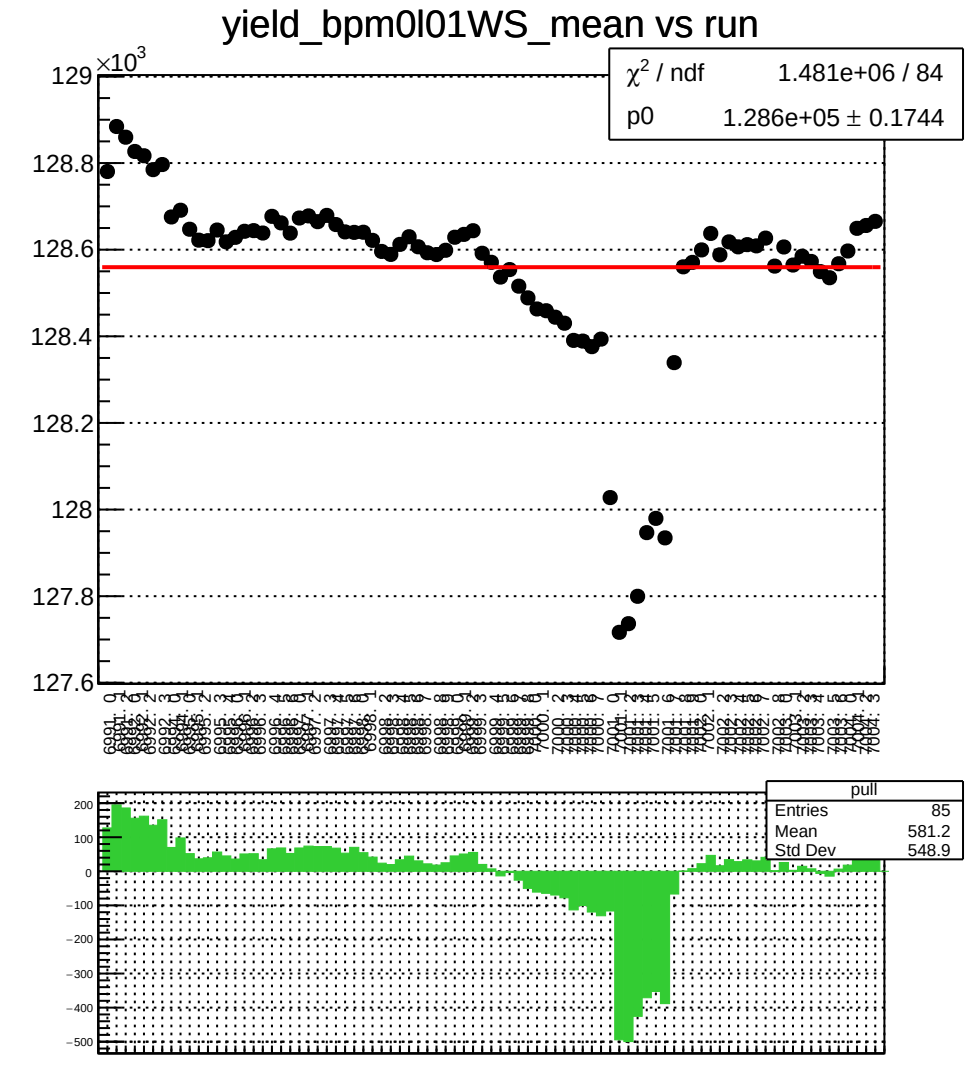

yield_bpm2i01WS_rms vs run
χ² / ndf 9088 / 84
p0 172.7 ± 0.1348
300
280
260
240
220
200
180
160

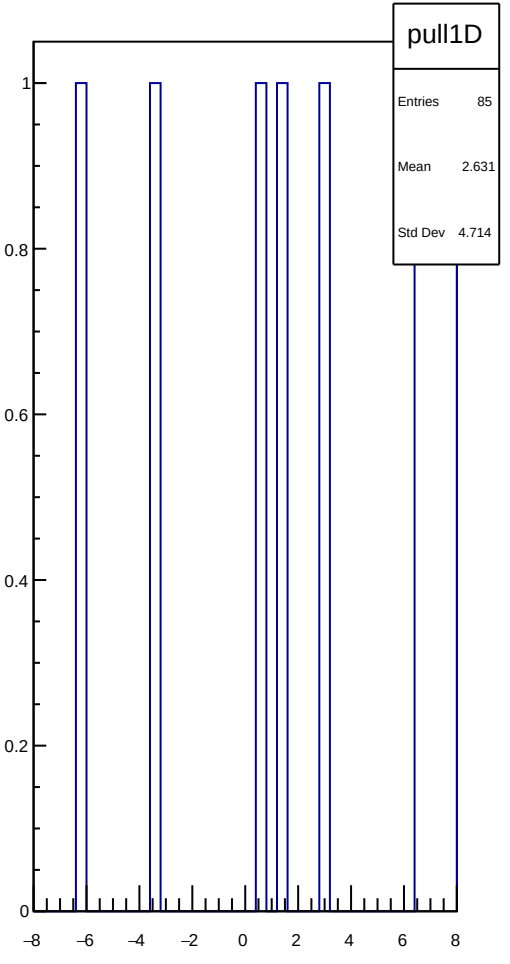

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 1.312e+05 / 84
p0 1.503e+05 ± 0.2058
150.55
150.5
150.45
150.4
150.35
150.3
150.25
150.2
150.15

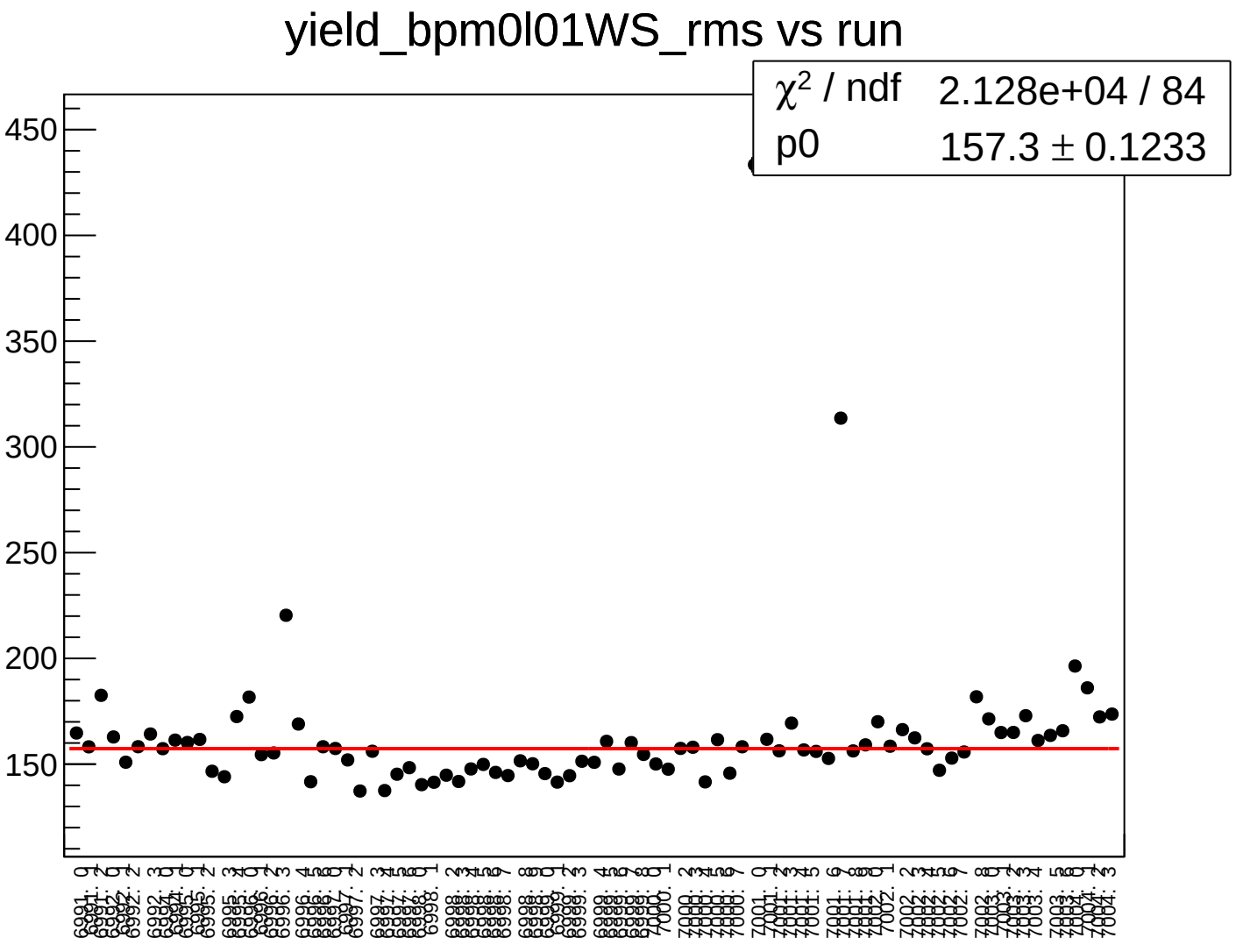

pull
Entries 85
Mean 400
Std Dev 324.3
120
100
80
60
40
20
0
−20
−40
−60
−80

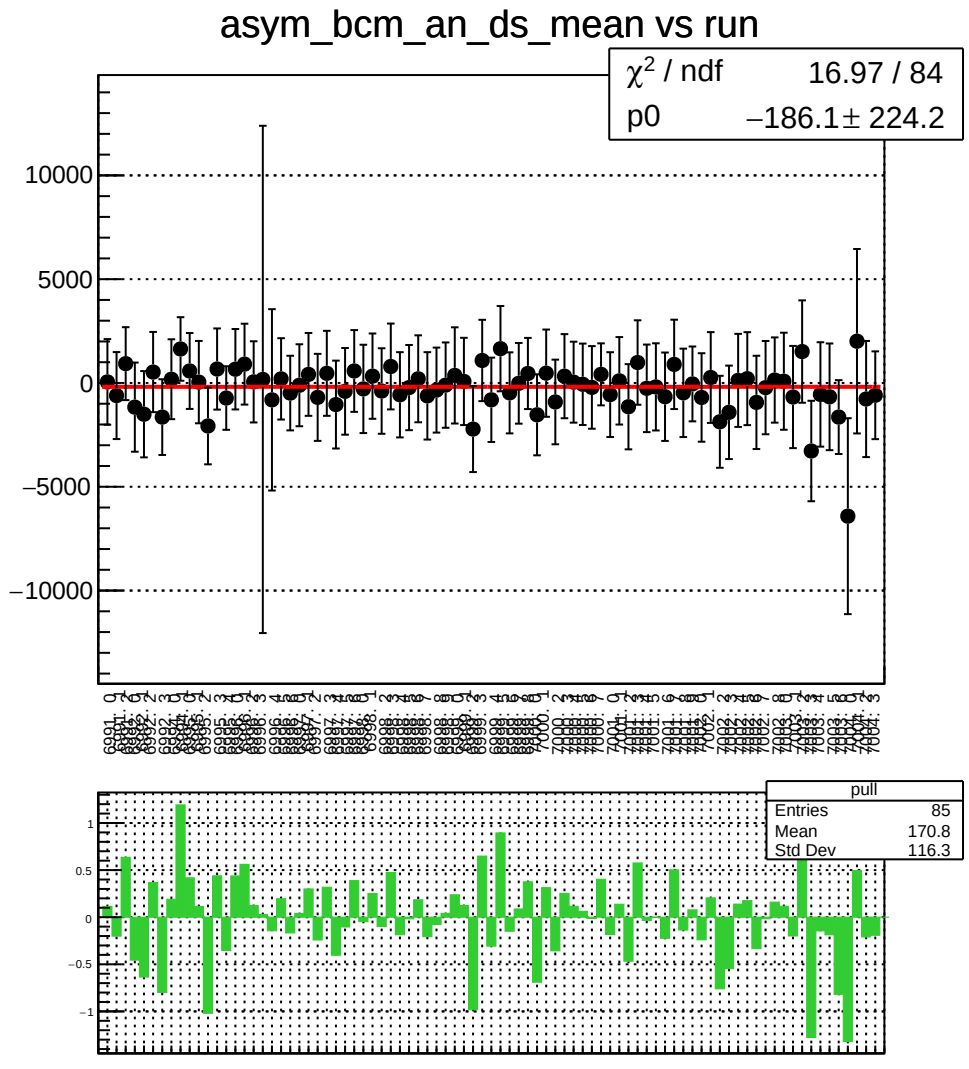

pull1D
Entries 85
Mean 2.337
Std Dev 4.232
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

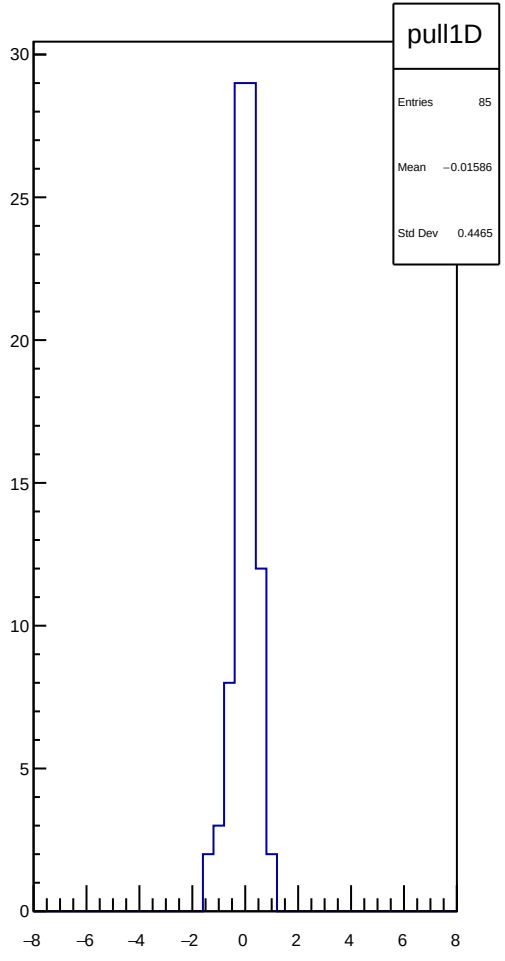

yield_bpm0i07WS_rms vs run
χ² / ndf 1.288e+04 / 84
p0 186.2 ± 0.1455
350
300
250
200
150

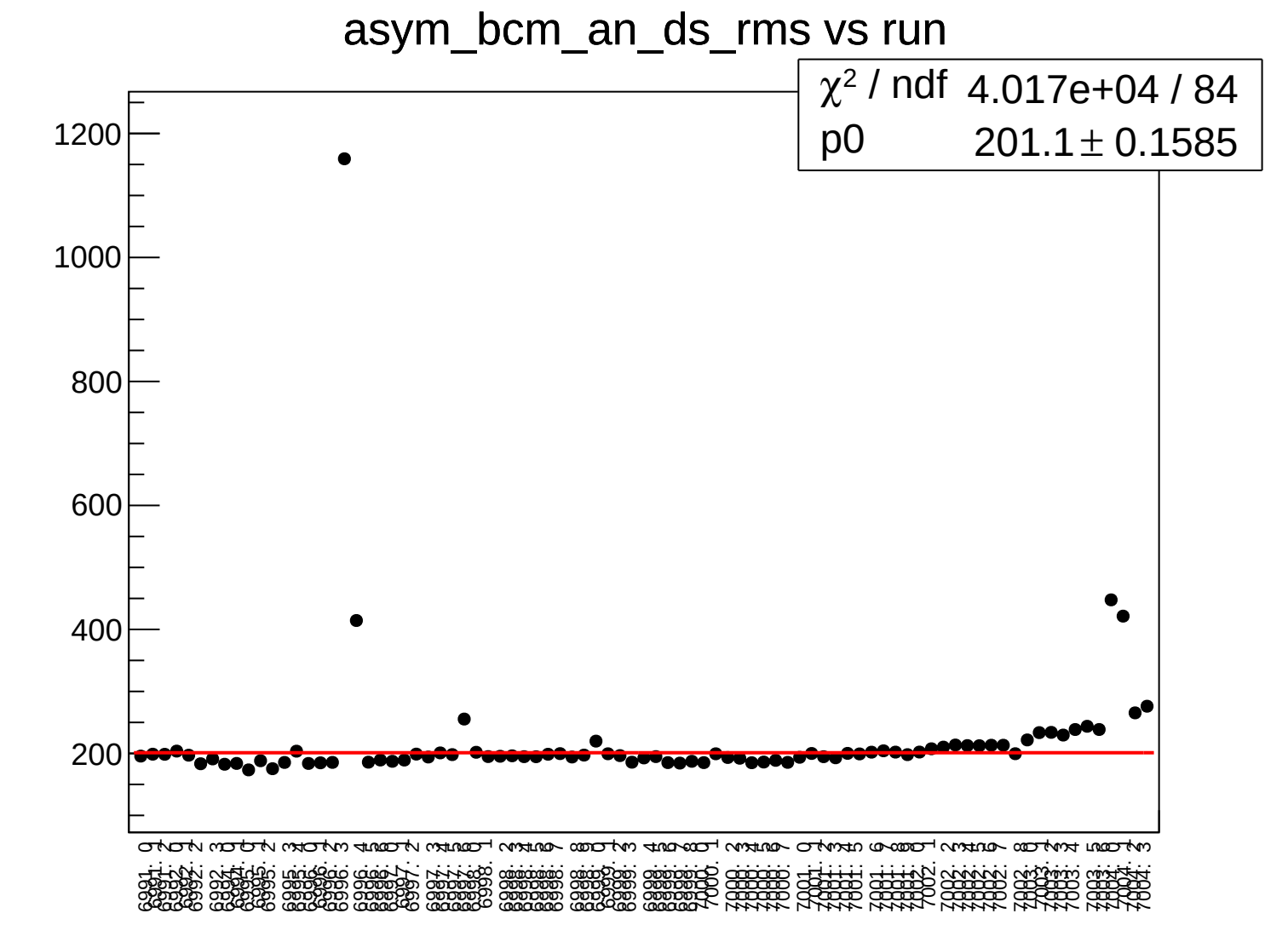

yield_bpm0l01WS_mean vs run
χ² / ndf 1.481e+06 / 84
p0 1.286e+05 ± 0.1744
×10³
129
128.8
128.6
128.4
128.2
128
127.8
127.6
pull
Entries 85
Mean 581.2
Std Dev 548.9
200
100
0
−100
−200
−300
−400
−500

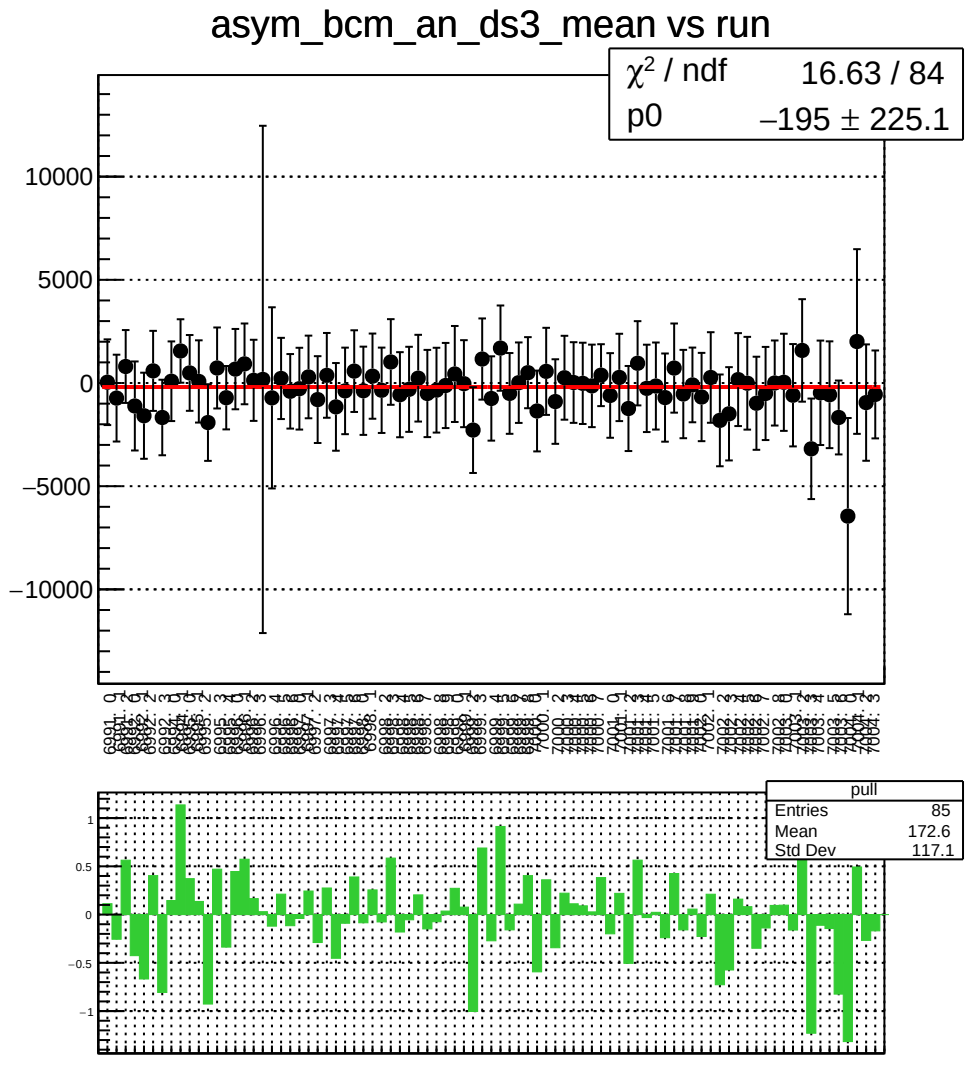

pull1D
Entries 85
Mean 2.631
Std Dev 4.714
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

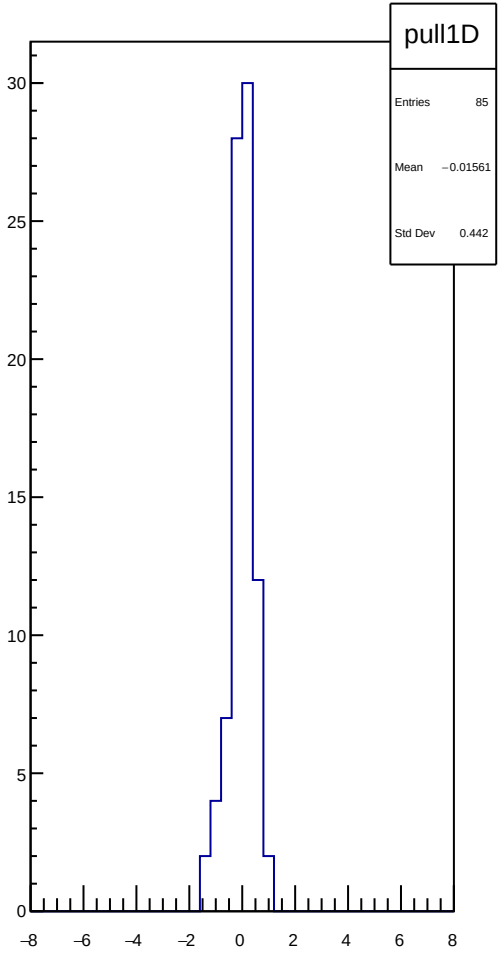

yield_bpm0l01WS_rms vs run
χ² / ndf 2.128e+04 / 84
p0 157.3 ± 0.1233
450
400
350
300
250
200
150

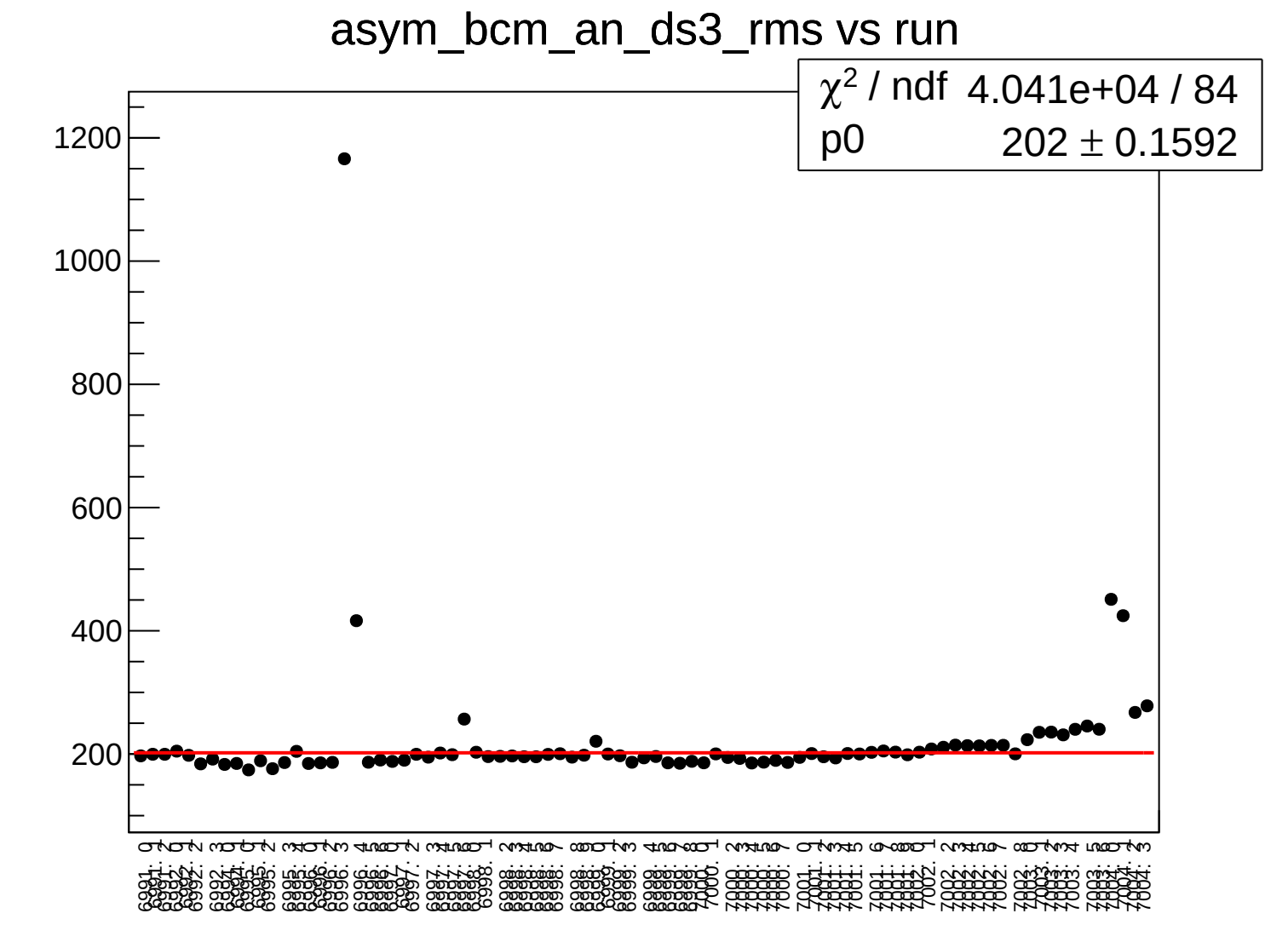

asym_bcm_an_ds_mean vs run
χ² / ndf 16.97 / 84
p0 −186.1± 224.2
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 170.8
Std Dev 116.3
1
0.5
0
−0.5
−1

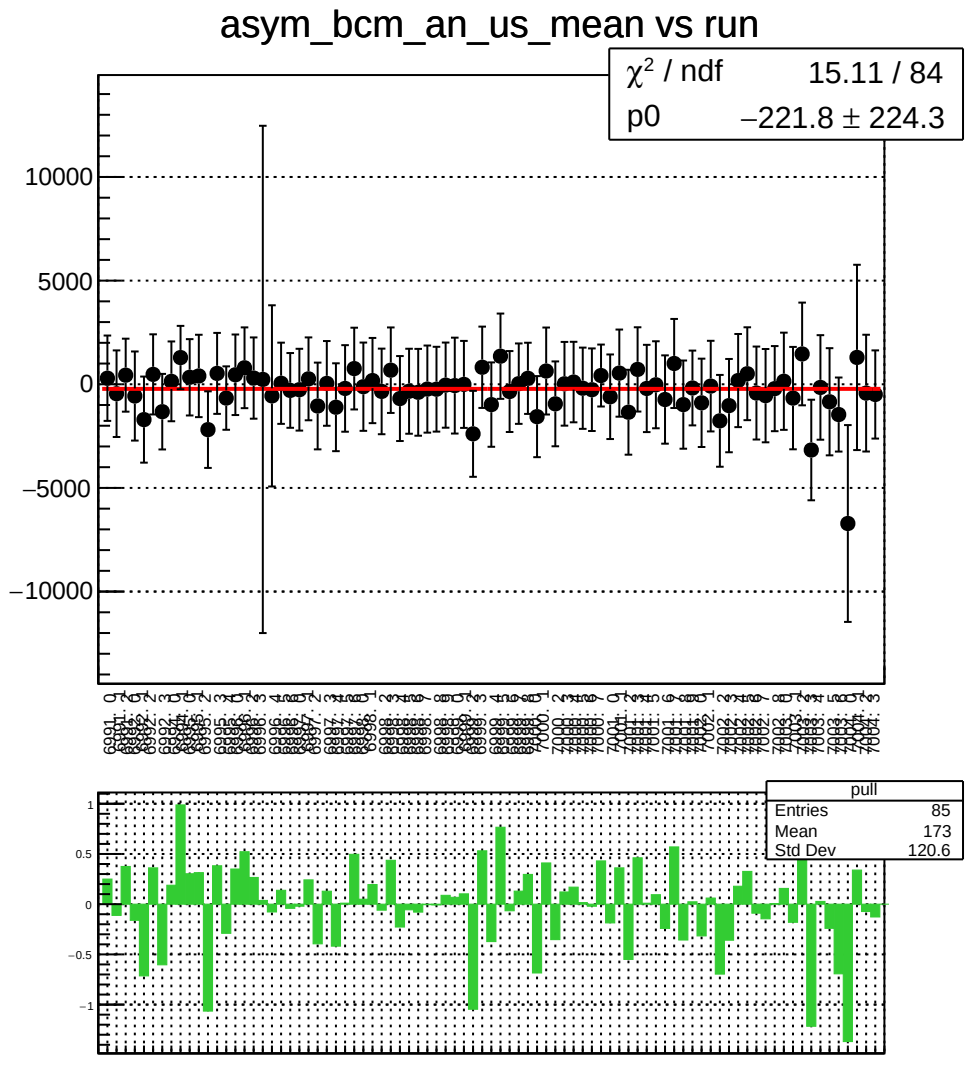

pull1D
Entries 85
Mean −0.01586
Std Dev 0.4465
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

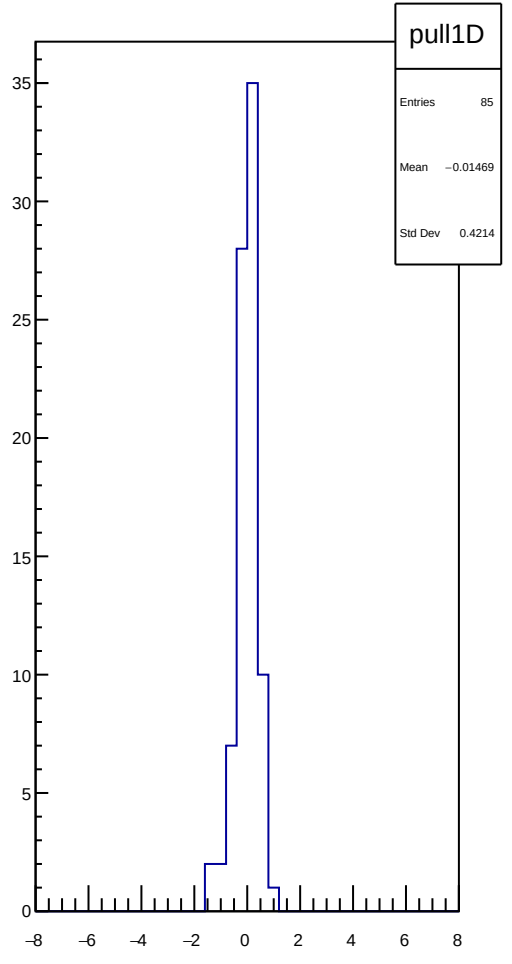

asym_bcm_an_ds_rms vs run
χ² / ndf 4.017e+04 / 84
p0 201.1 ± 0.1585
1200
1000
800
600
400
200

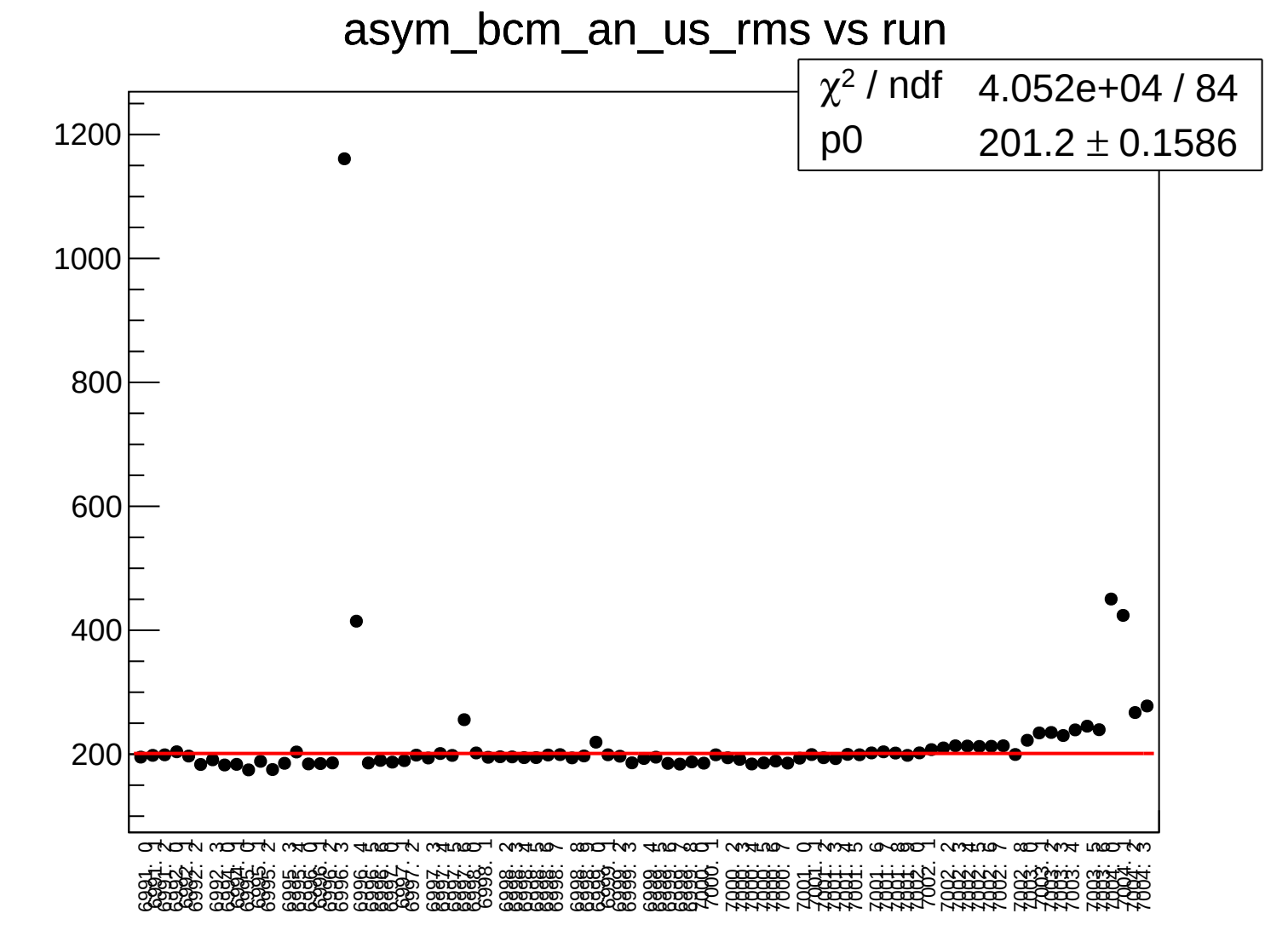

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.63 / 84
p0 −195 ± 225.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 172.6
Std Dev 117.1
1
0.5
0
−0.5
−1

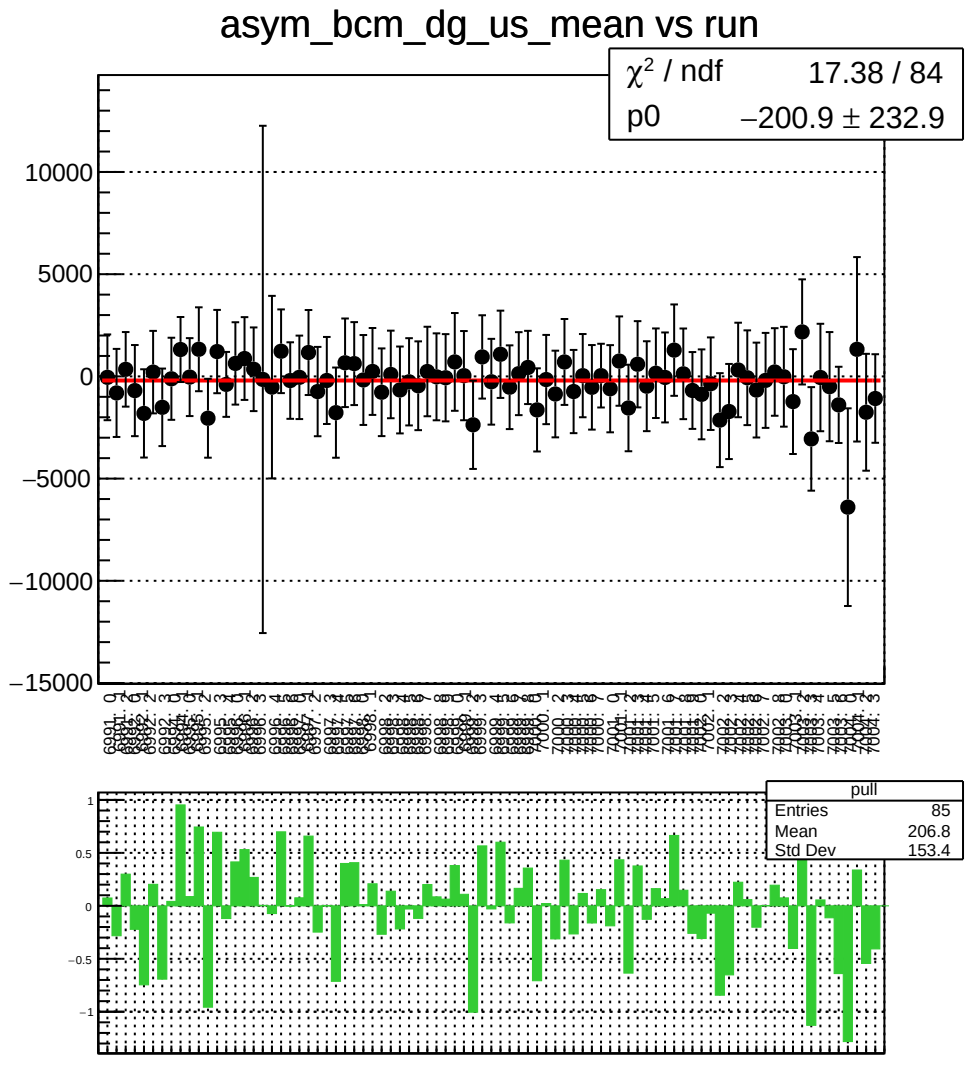

pull1D
Entries 85
Mean −0.01561
Std Dev 0.442
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

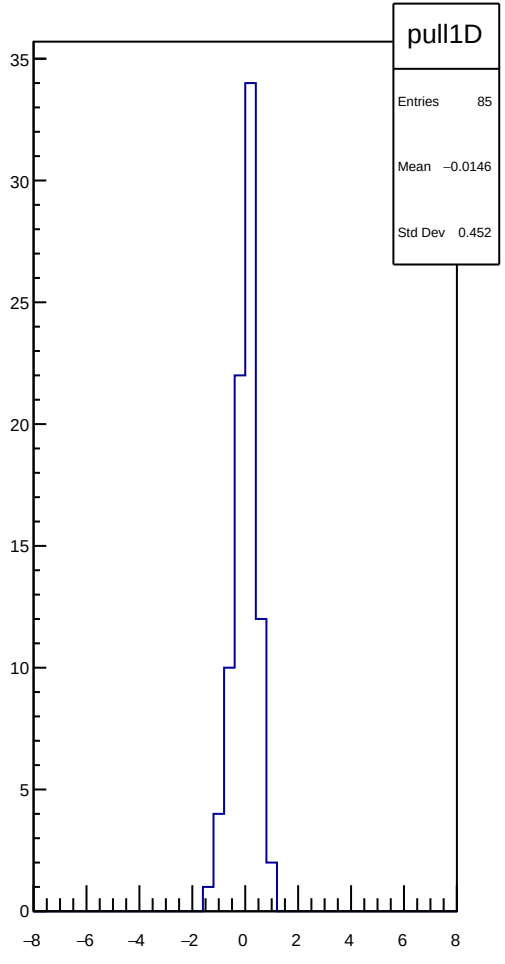

asym_bcm_an_ds3_rms vs run
χ² / ndf 4.041e+04 / 84
p0 202 ± 0.1592
1200
1000
800
600
400
200

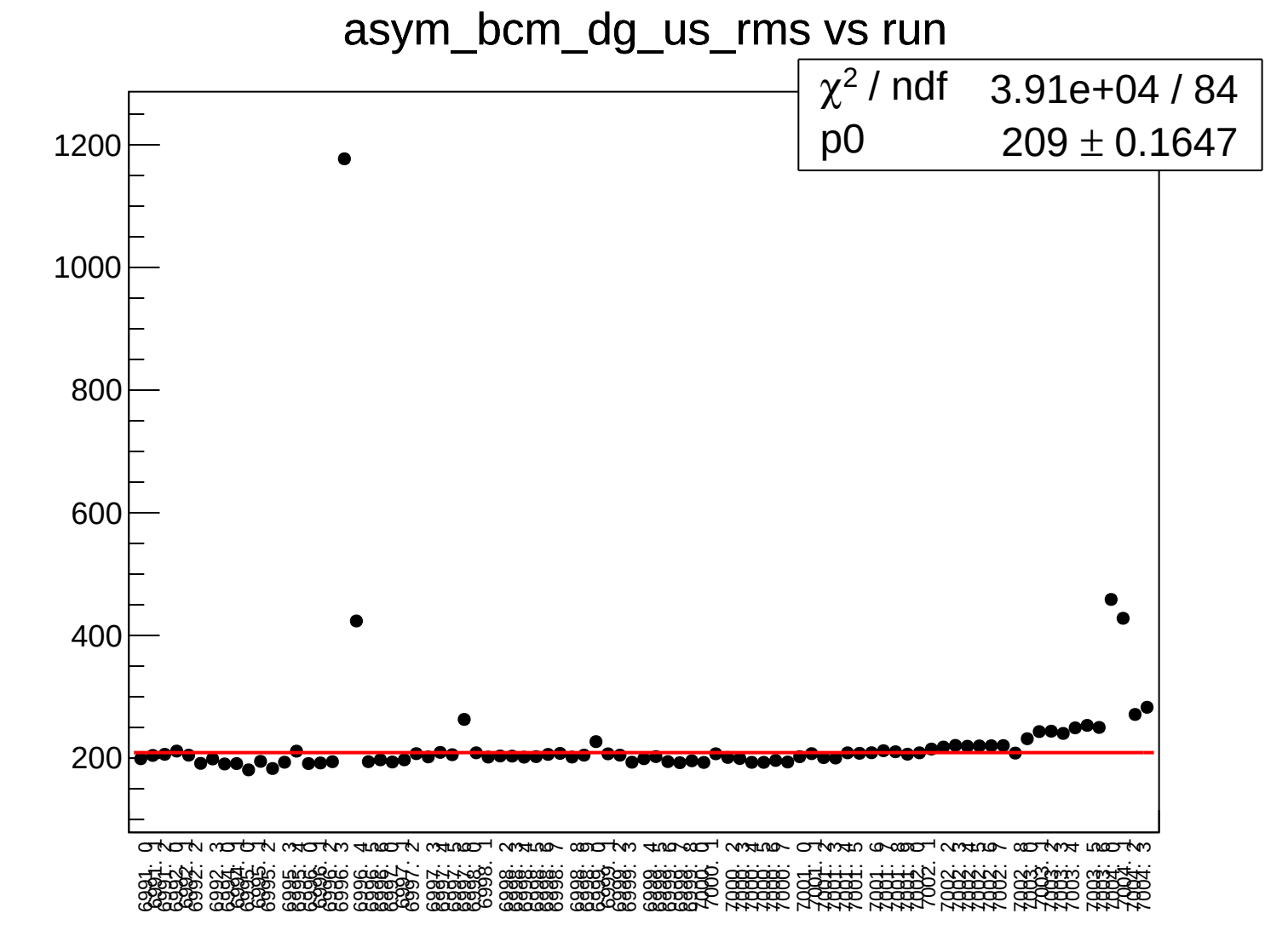

asym_bcm_an_us_mean vs run
χ² / ndf 15.11 / 84
p0 −221.8 ± 224.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 173
Std Dev 120.6
1
0.5
0
−0.5
−1

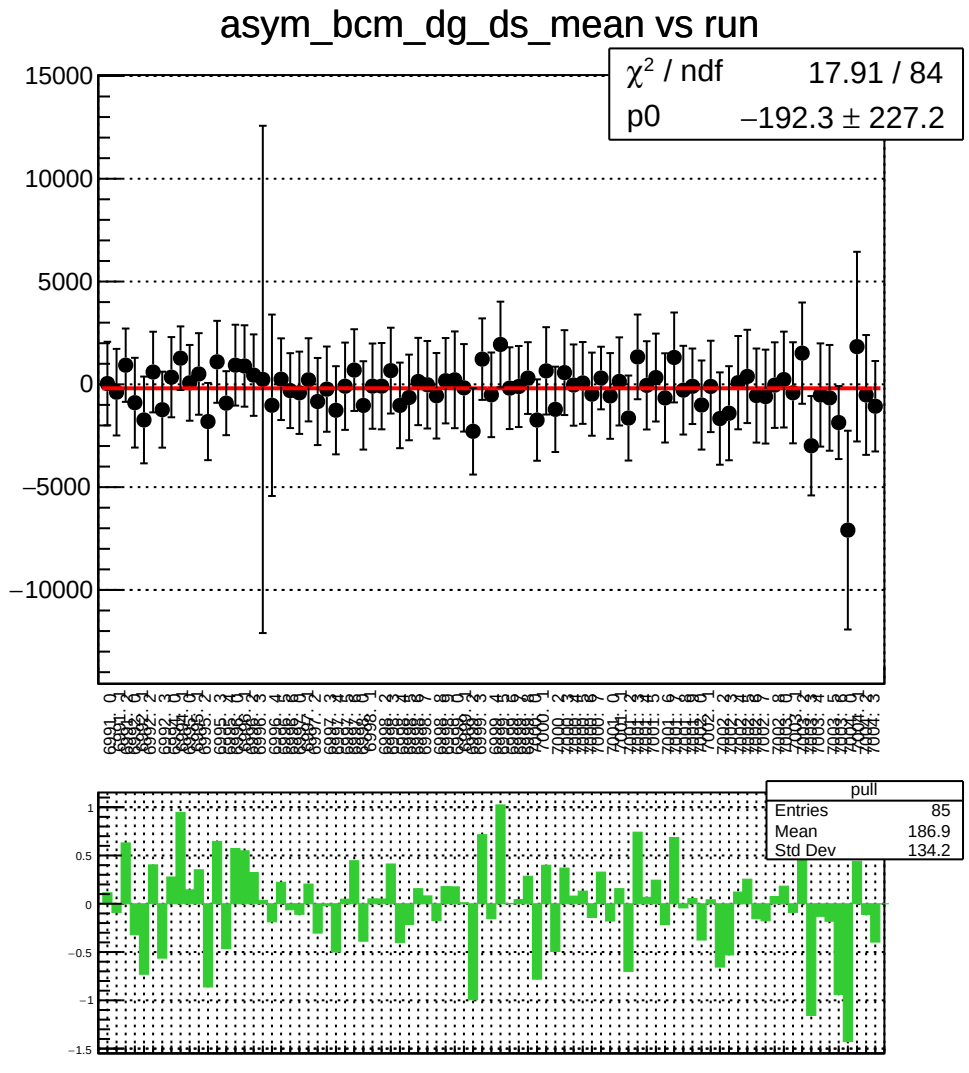

pull1D
Entries 85
Mean −0.01469
Std Dev 0.4214
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

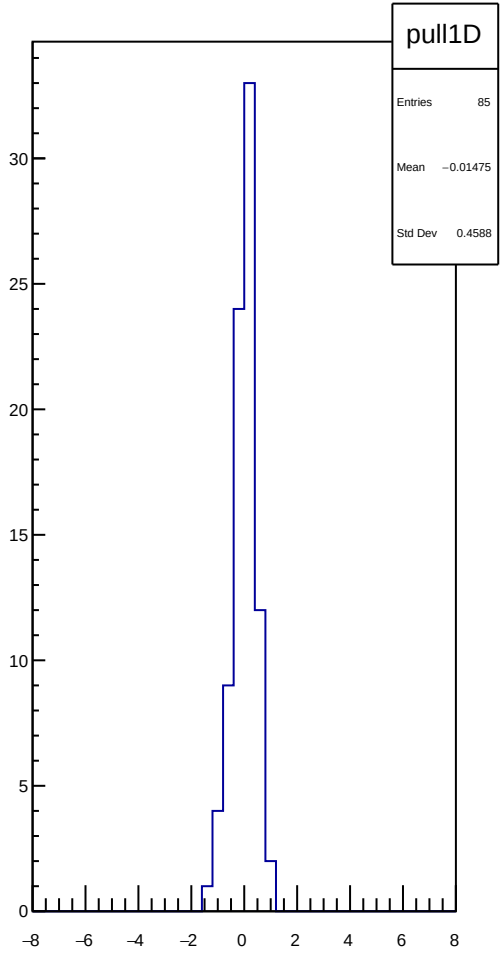

asym_bcm_an_us_rms vs run
χ² / ndf 4.052e+04 / 84
p0 201.2 ± 0.1586
1200
1000
800
600
400
200

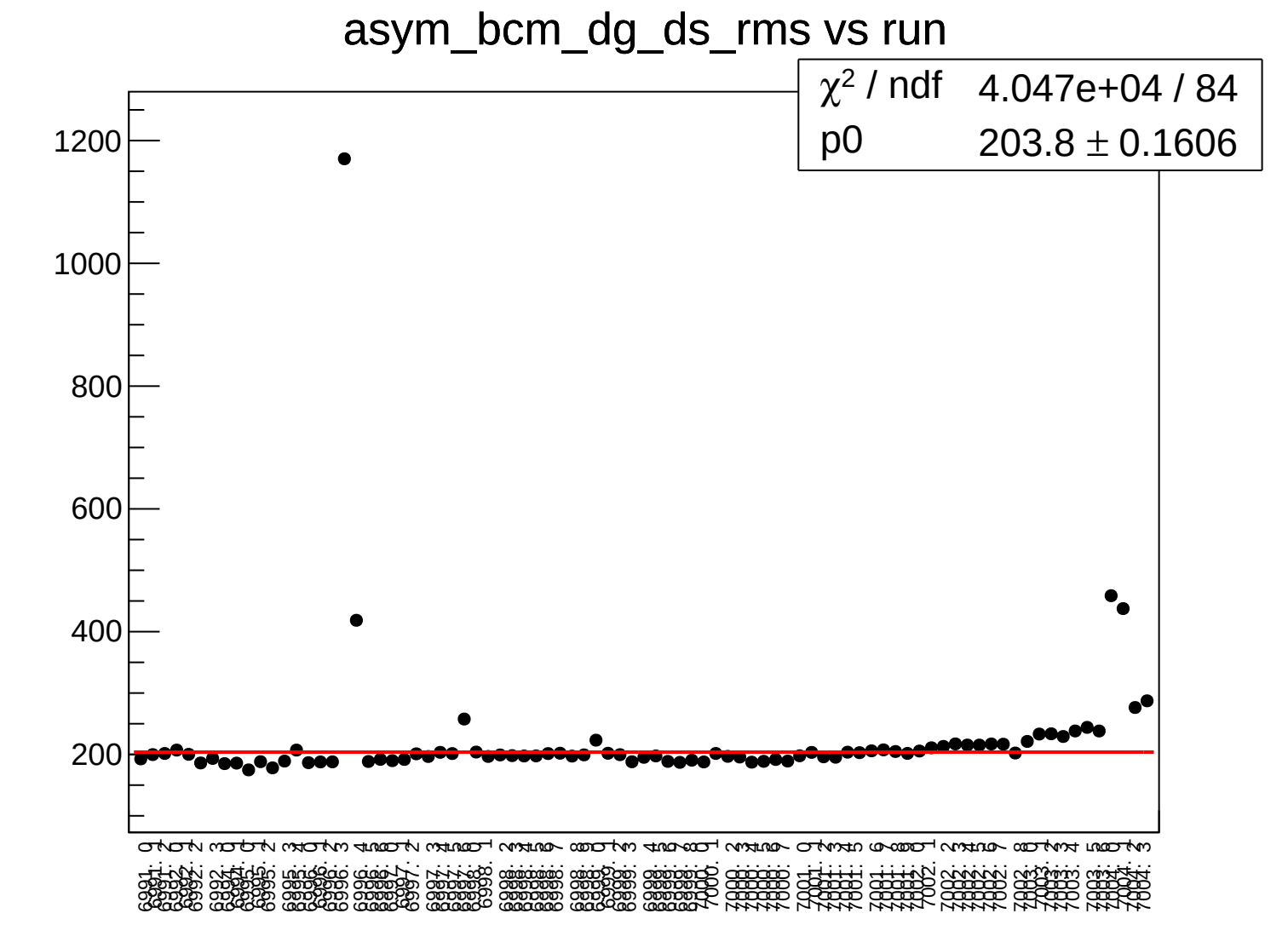

asym_bcm_dg_us_mean vs run
χ² / ndf 17.38 / 84
p0 −200.9 ± 232.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 206.8
Std Dev 153.4
1
0.5
0
−0.5
−1

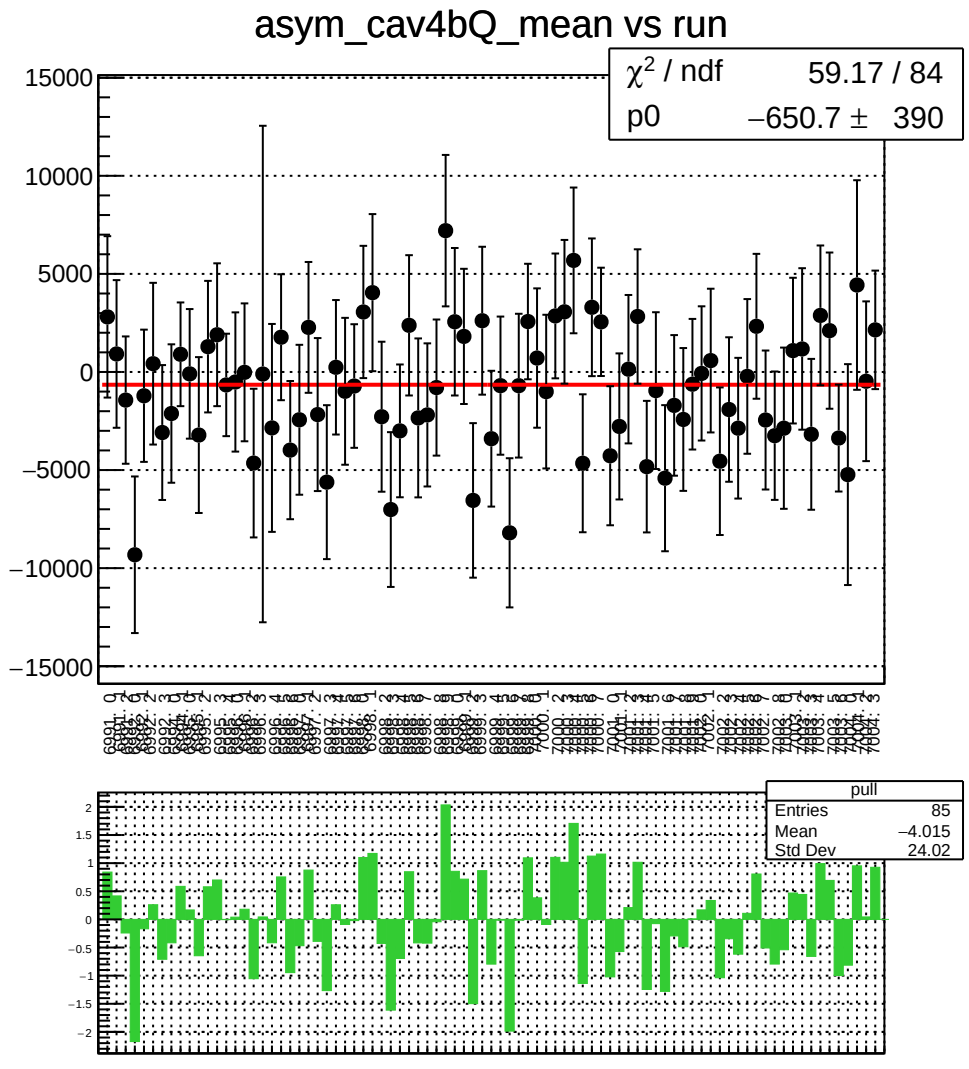

pull1D
Entries 85
Mean −0.0146
Std Dev 0.452
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

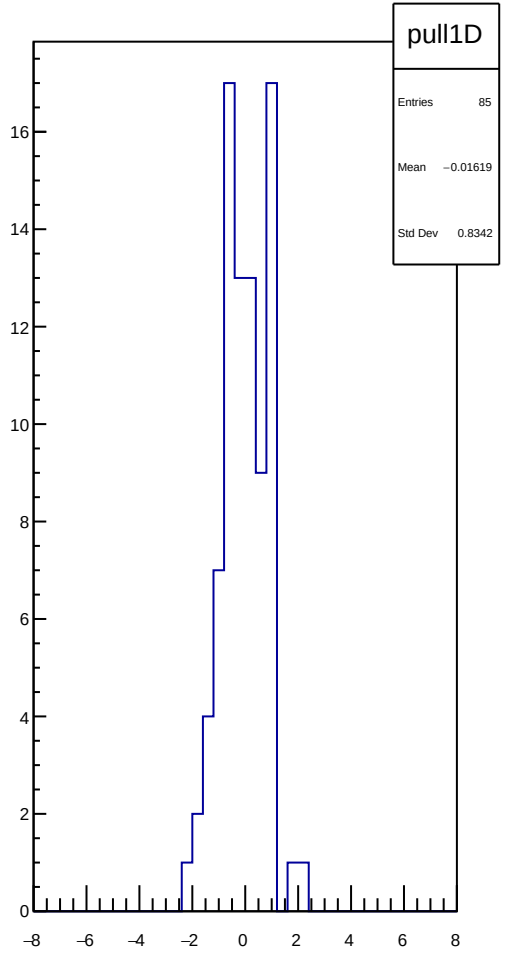

asym_bcm_dg_us_rms vs run
χ² / ndf 3.91e+04 / 84
p0 209 ± 0.1647
1200
1000
800
600
400
200

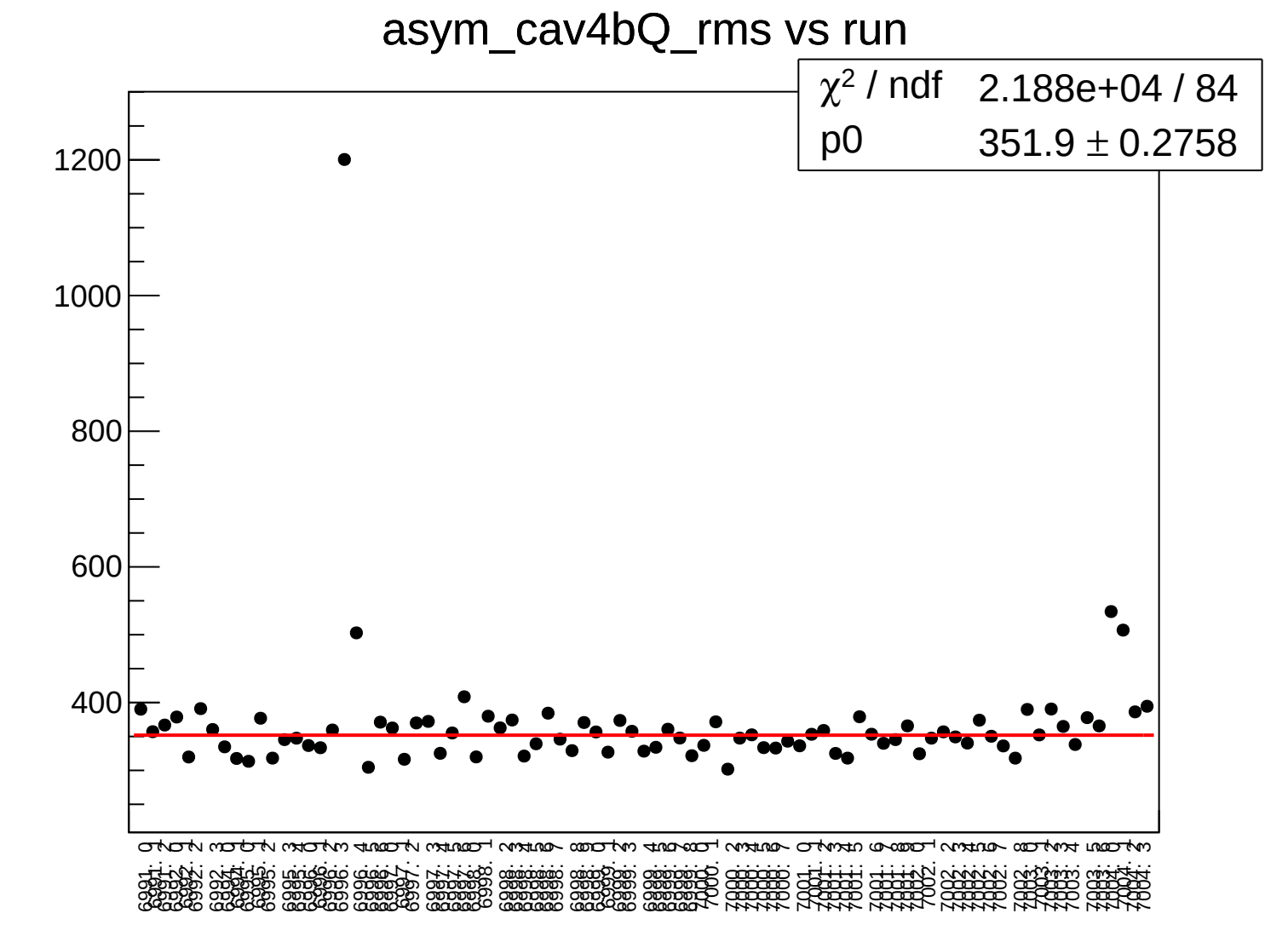

asym_bcm_dg_ds_mean vs run
χ² / ndf 17.91 / 84
p0 −192.3 ± 227.2
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 186.9
Std Dev 134.2
1
0.5
0
−0.5
−1
−1.5

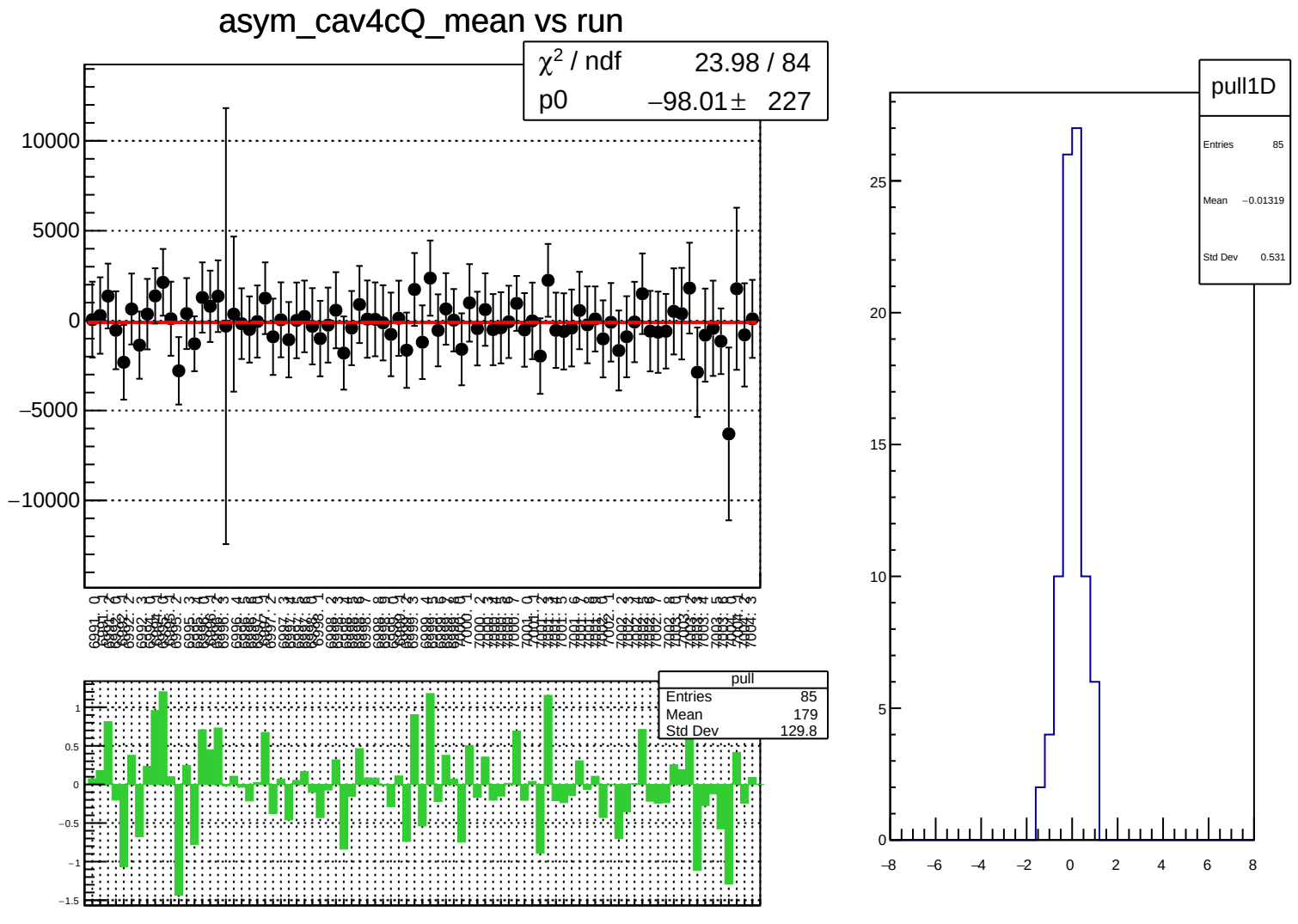

pull1D
Entries 85
Mean −0.01475
Std Dev 0.4588
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

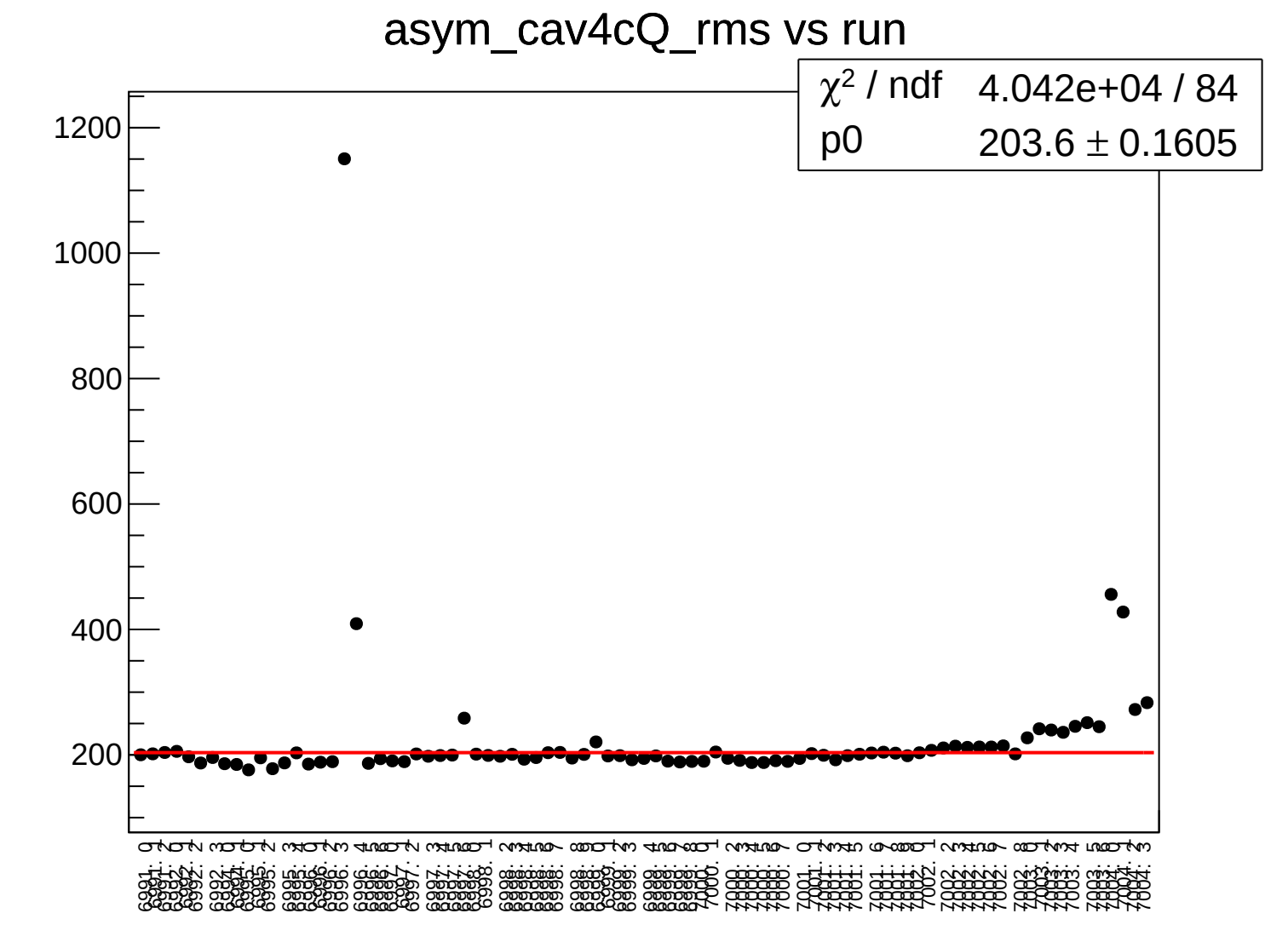

asym_bcm_dg_ds_rms vs run
χ² / ndf 4.047e+04 / 84
p0 203.8 ± 0.1606
1200
1000
800
600
400
200

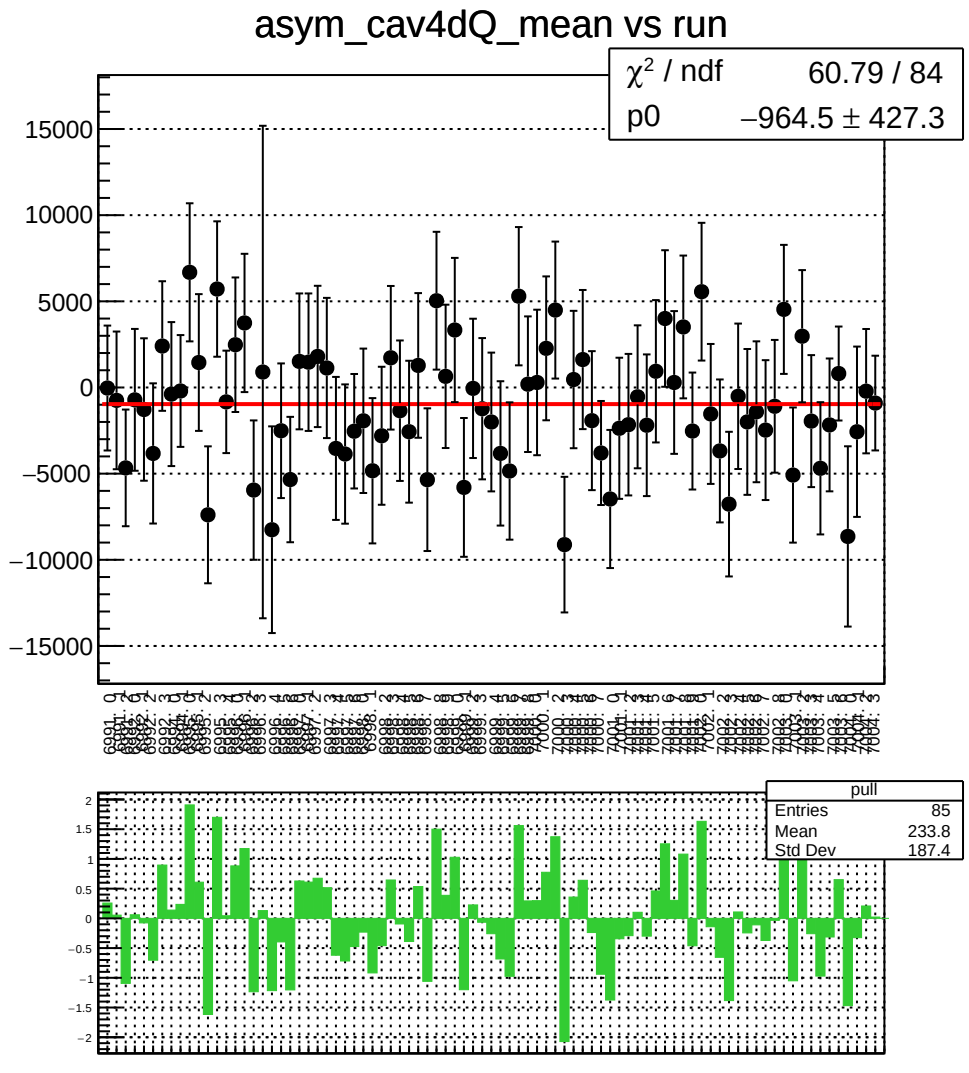

asym_cav4bQ_mean vs run
χ² / ndf 59.17 / 84
p0 −650.7 ± 390
pull
Entries 85
Mean −4.015
Std Dev 24.02

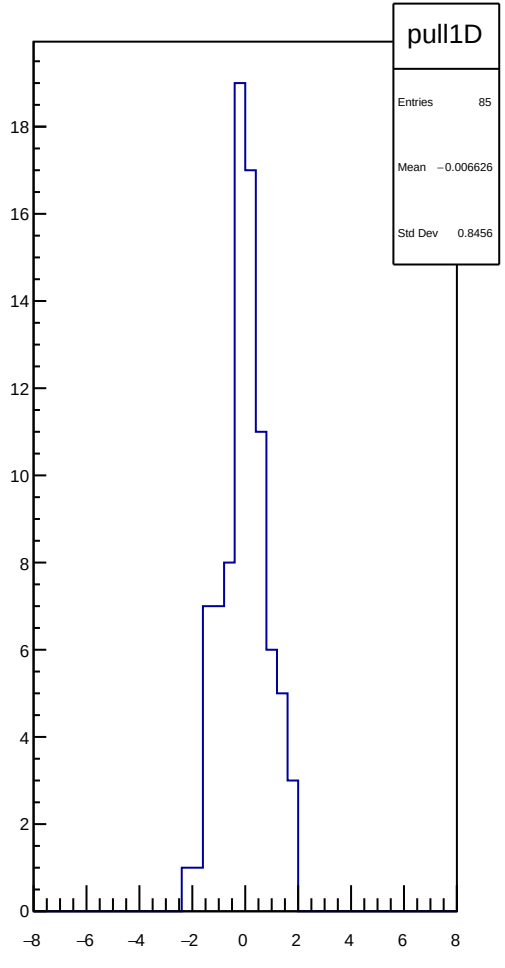

pull1D
Entries 85
Mean −0.01619
Std Dev 0.8342

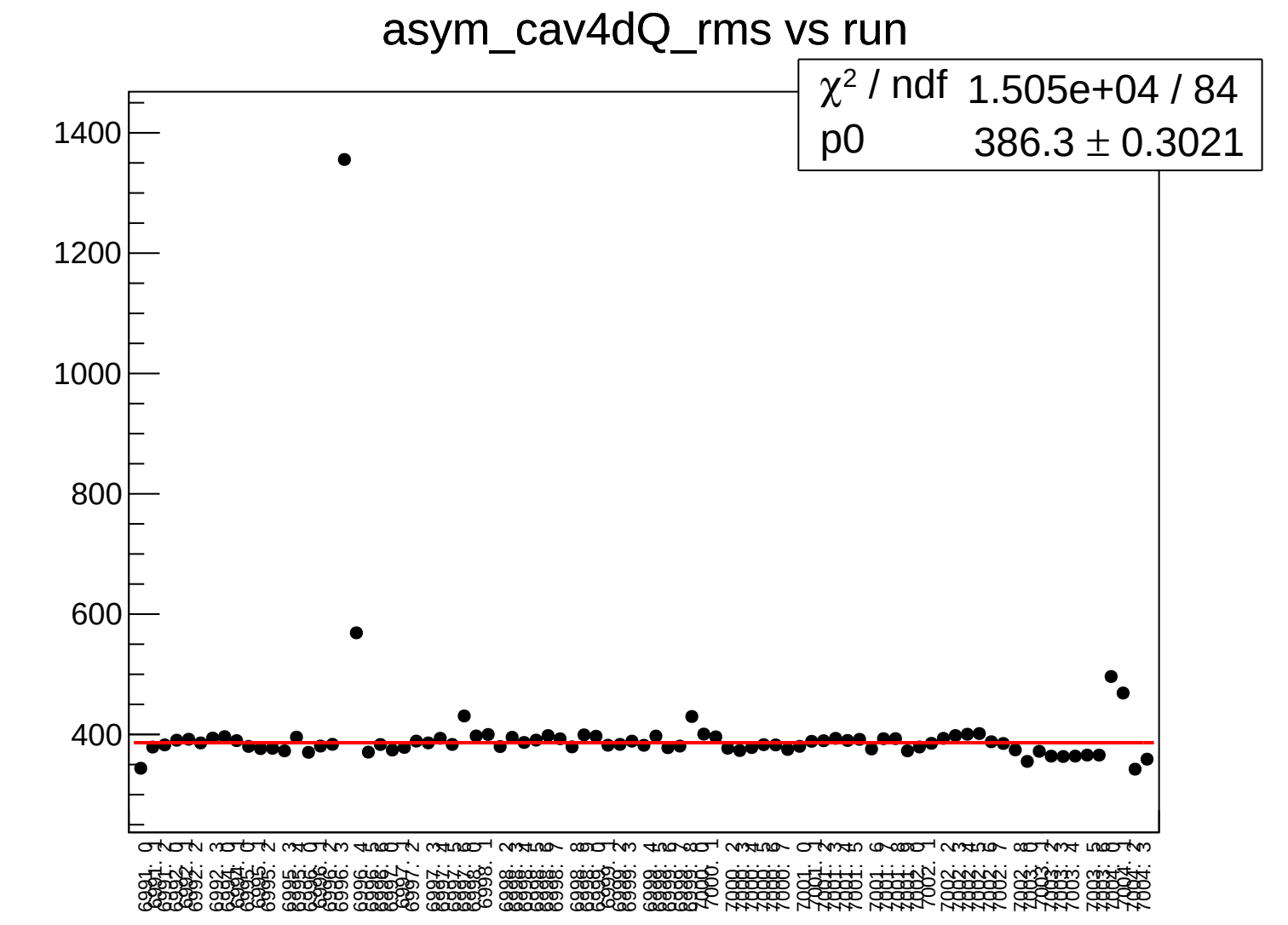

asym_cav4bQ_rms vs run
χ² / ndf 2.188e+04 / 84
p0 351.9 ± 0.2758
1200
1000
800
600
400

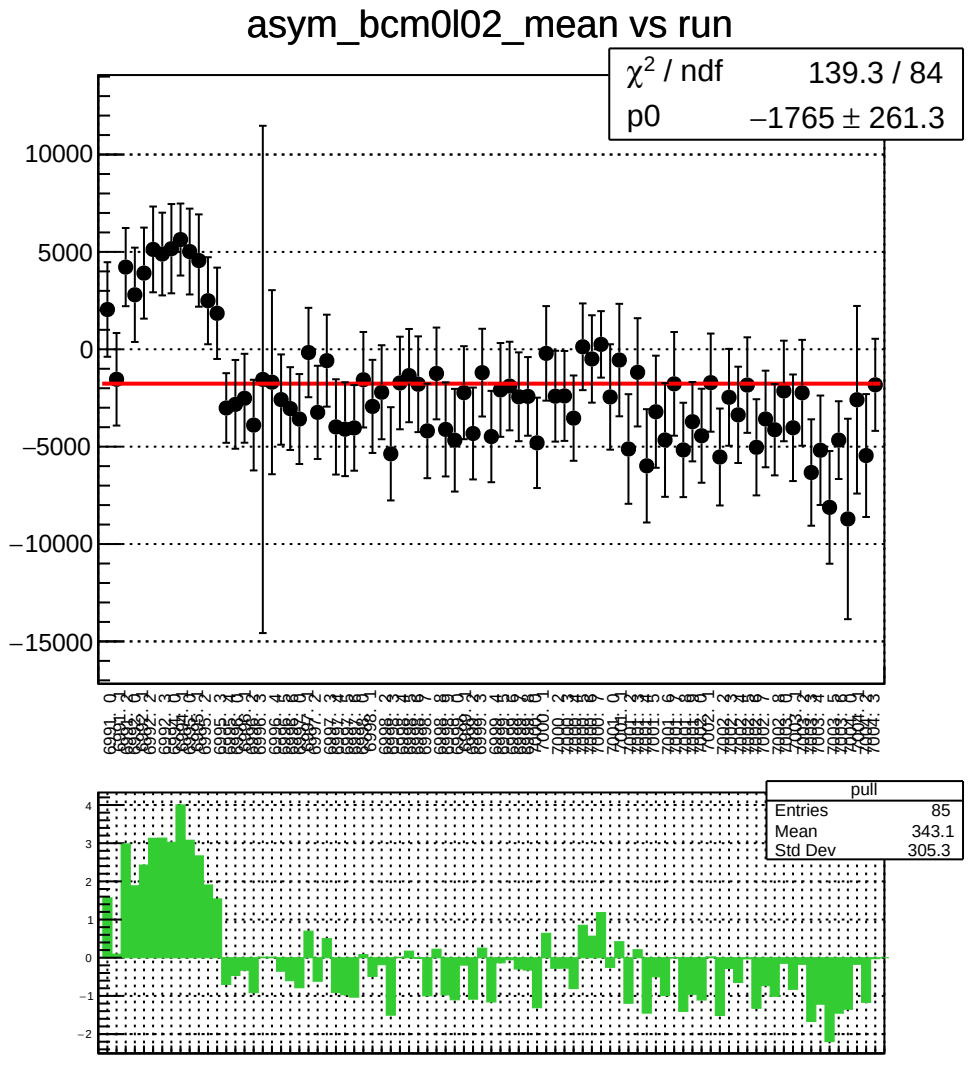

asym_cav4cQ_mean vs run
χ² / ndf 23.98 / 84
p0 −98.01 ± 227
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 179
Std Dev 129.8
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean −0.01319
Std Dev 0.531
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

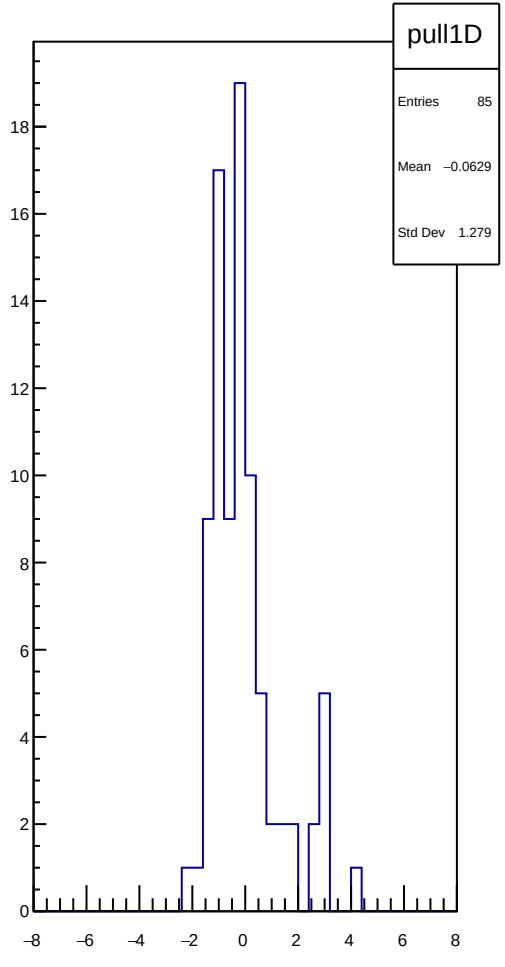

asym_cav4cQ_rms vs run
χ² / ndf 4.042e+04 / 84
p0 203.6 ± 0.1605
1200
1000
800
600
400
200

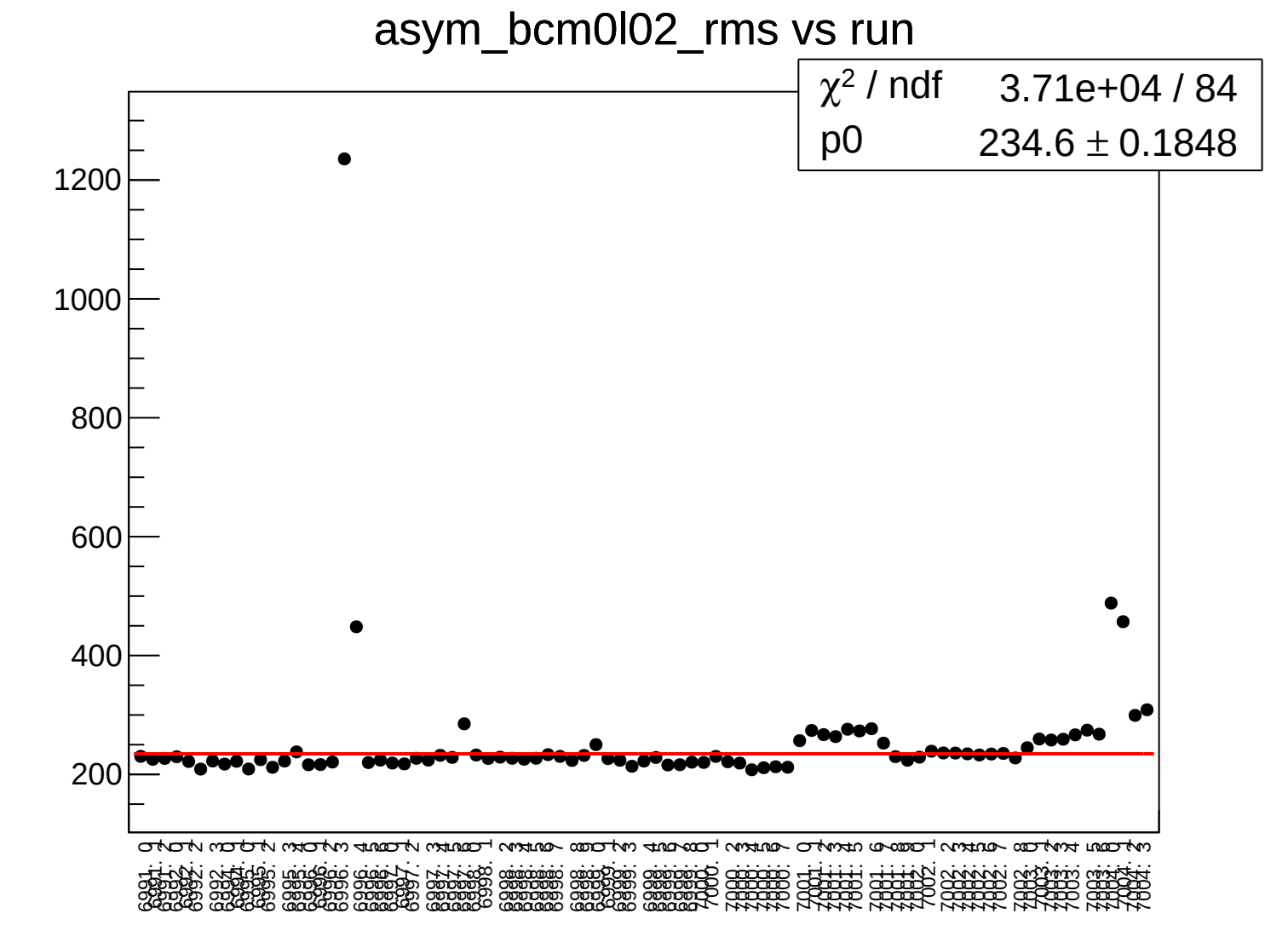

asym_cav4dQ_mean vs run
χ² / ndf 60.79 / 84
p0 −964.5 ± 427.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 233.8
Std Dev 187.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

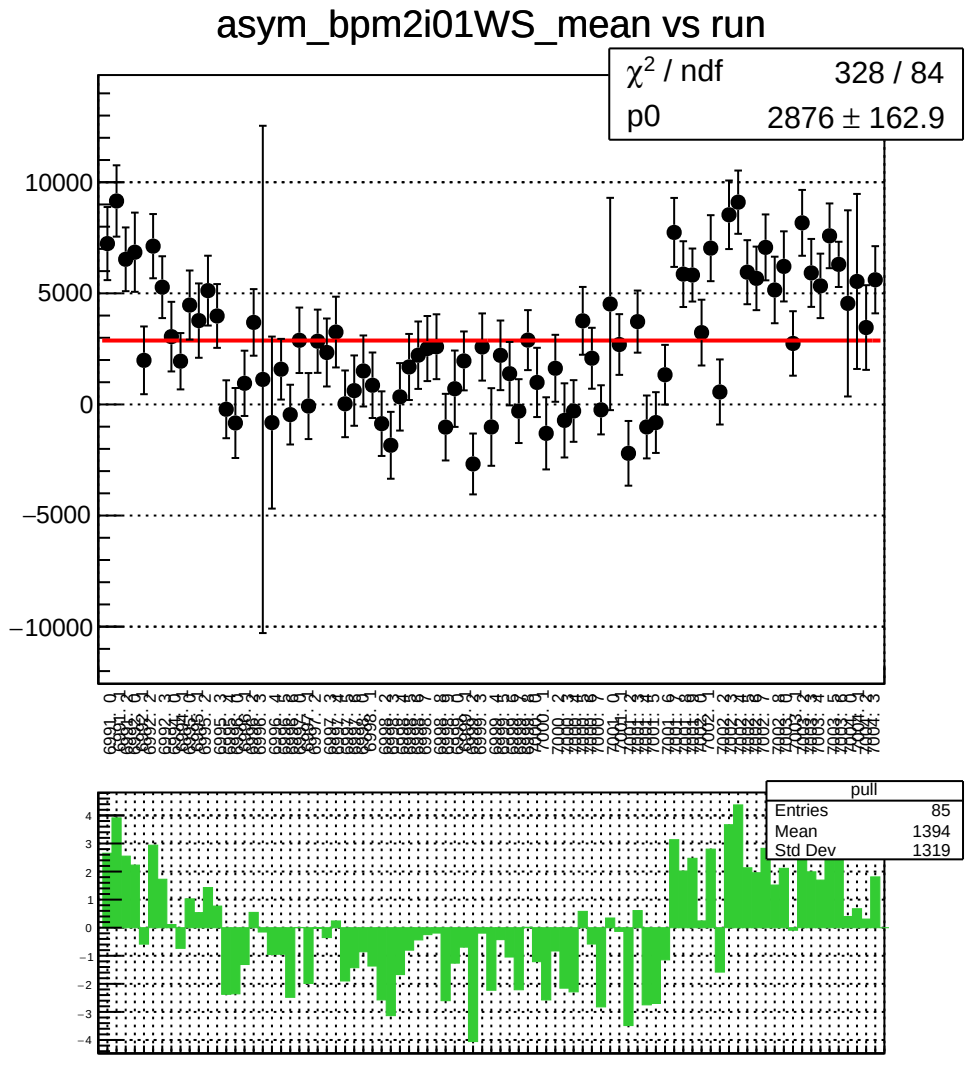

pull1D
Entries 85
Mean −0.006626
Std Dev 0.8456
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

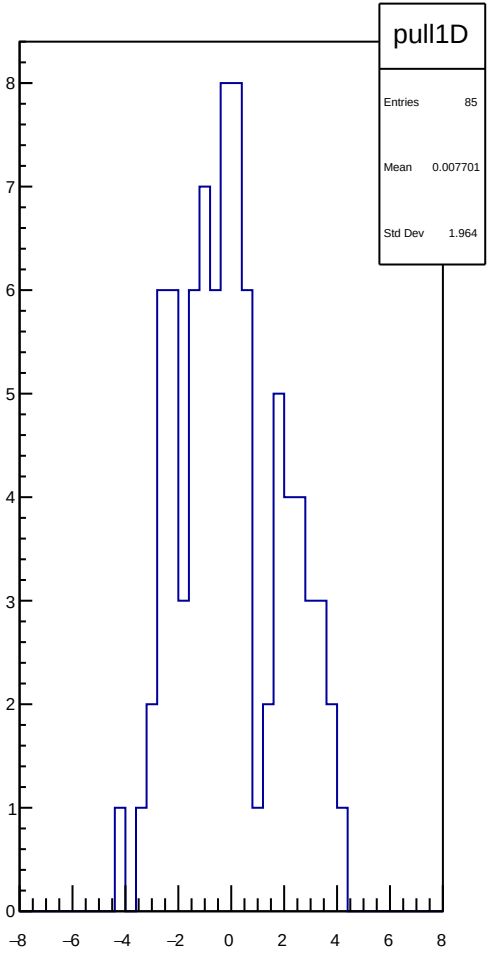

asym_cav4dQ_rms vs run
χ² / ndf 1.505e+04 / 84
p0 386.3 ± 0.3021
1400
1200
1000
800
600
400

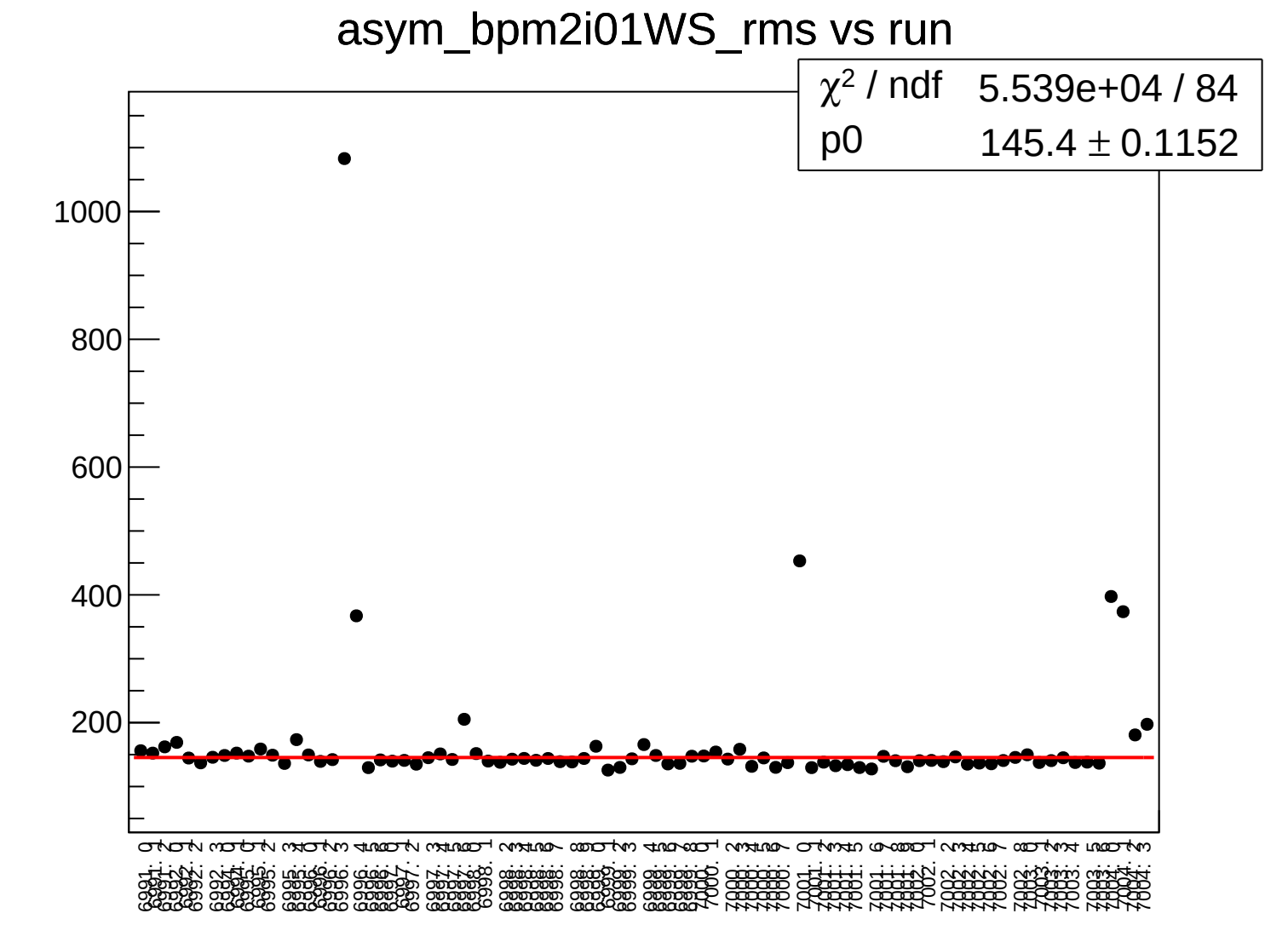

asym_bcm0l02_mean vs run
χ² / ndf 139.3 / 84
p0 −1765 ± 261.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 343.1
Std Dev 305.3
4
3
2
1
0
−1
−2

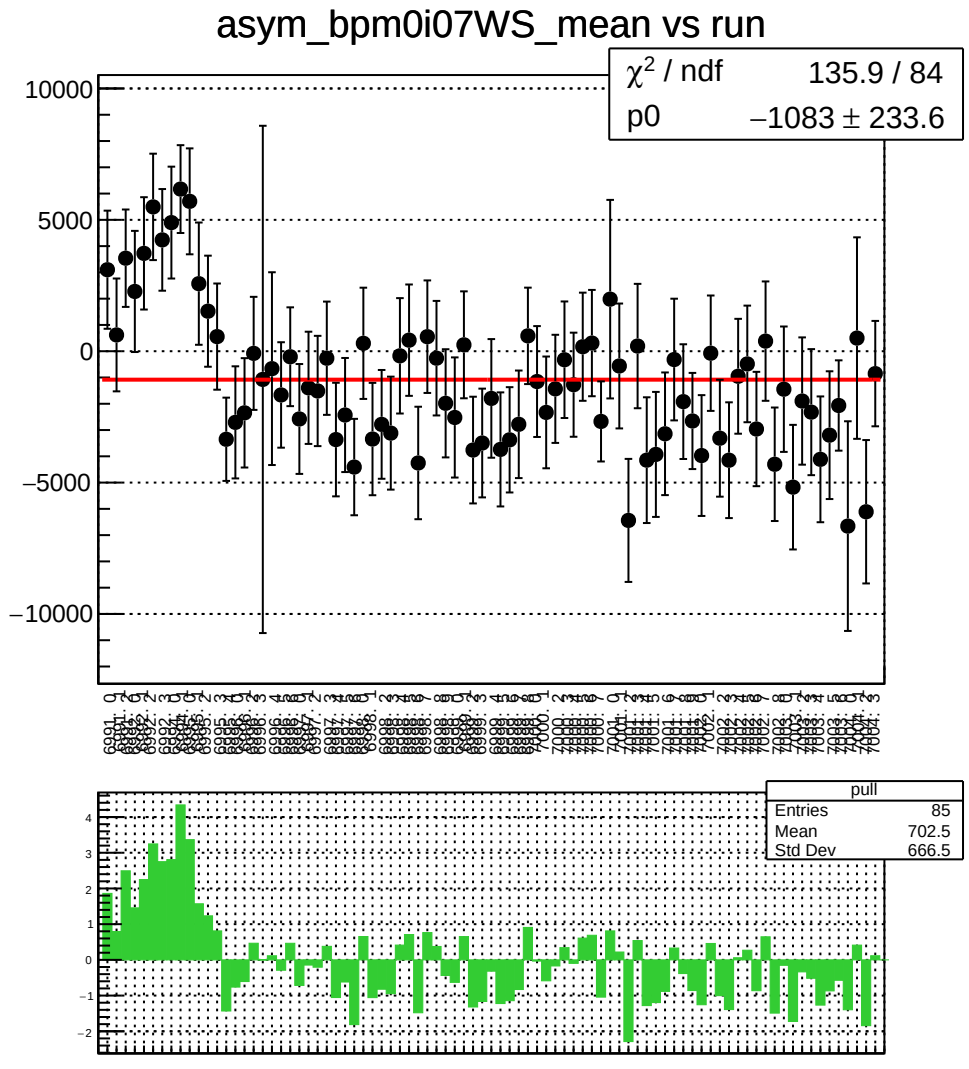

pull1D
Entries 85
Mean −0.0629
Std Dev 1.279
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

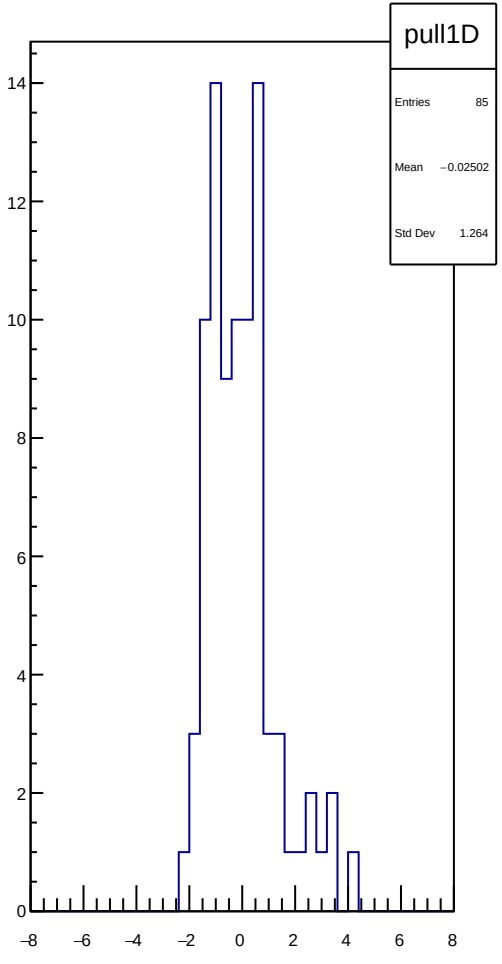

asym_bcm0l02_rms vs run
χ² / ndf 3.71e+04 / 84
p0 234.6 ± 0.1848
1200
1000
800
600
400
200

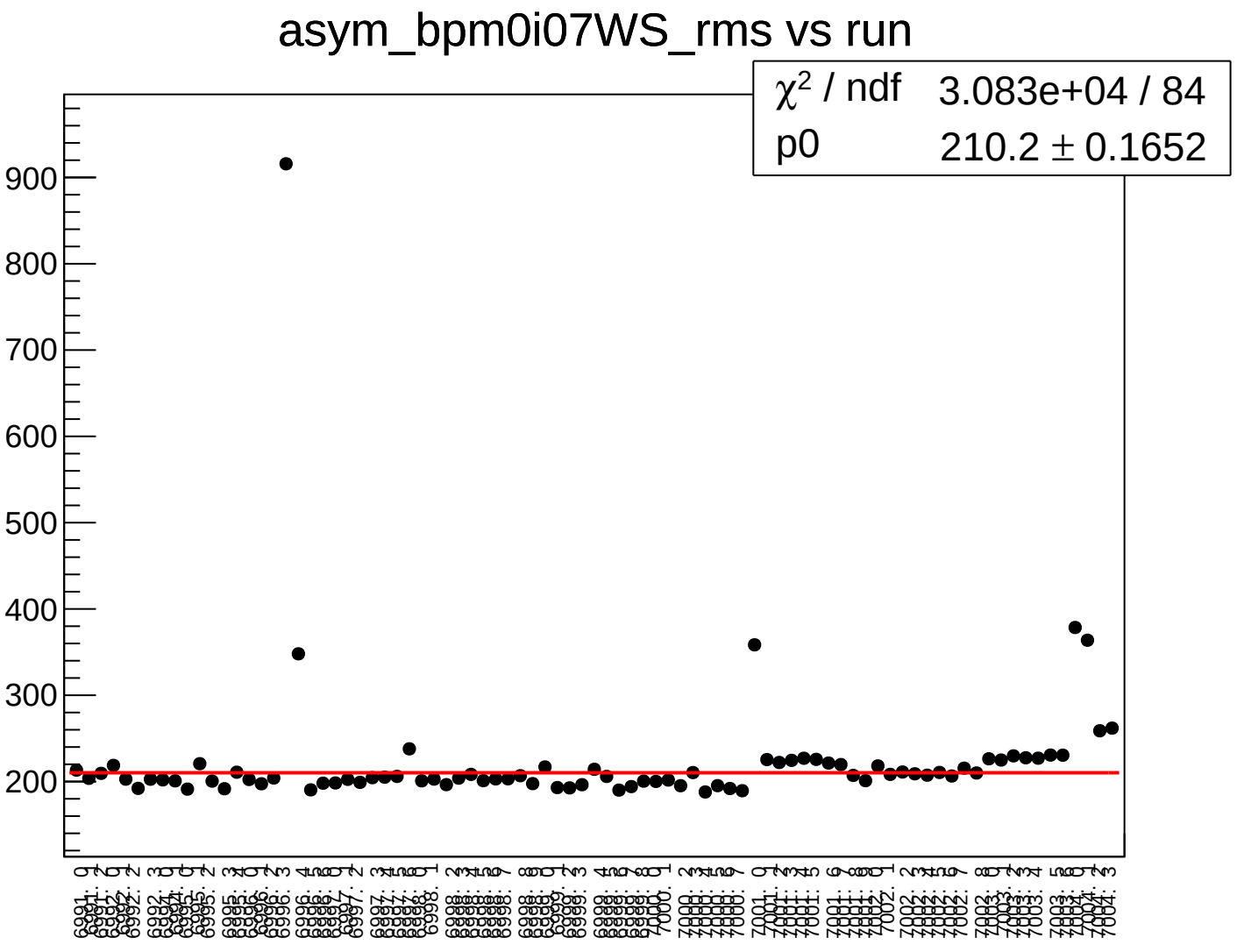

asym_bpm2i01WS_mean vs run
χ² / ndf 328 / 84
p0 2876 ± 162.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 1394
Std Dev 1319
4
3
2
1
0
−1
−2
−3
−4

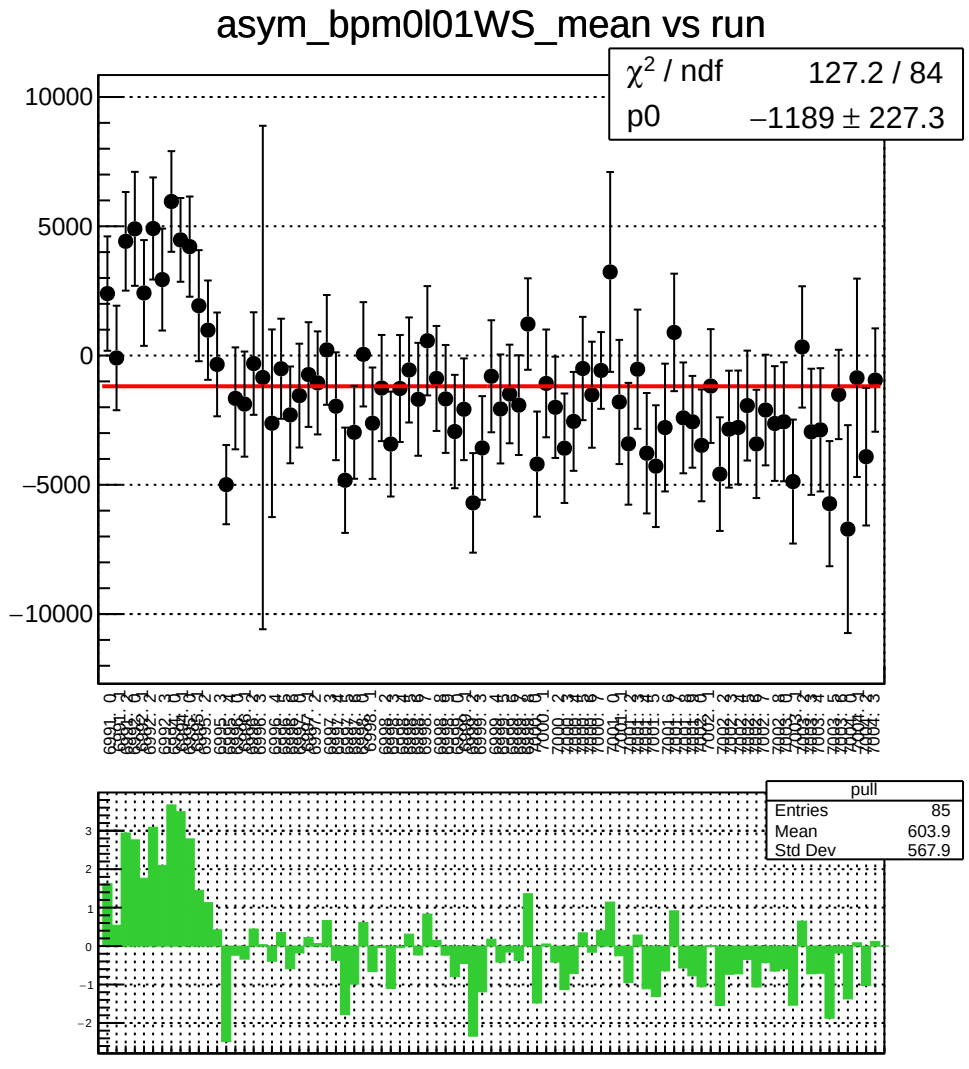

pull1D
Entries 85
Mean 0.007701
Std Dev 1.964
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

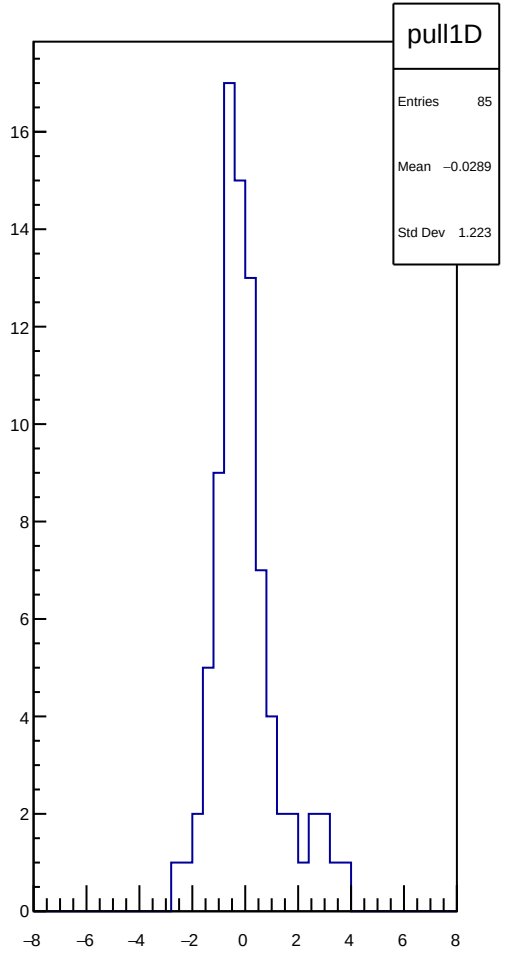

asym_bpm2i01WS_rms vs run
χ² / ndf 5.539e+04 / 84
p0 145.4 ± 0.1152
1000
800
600
400
200

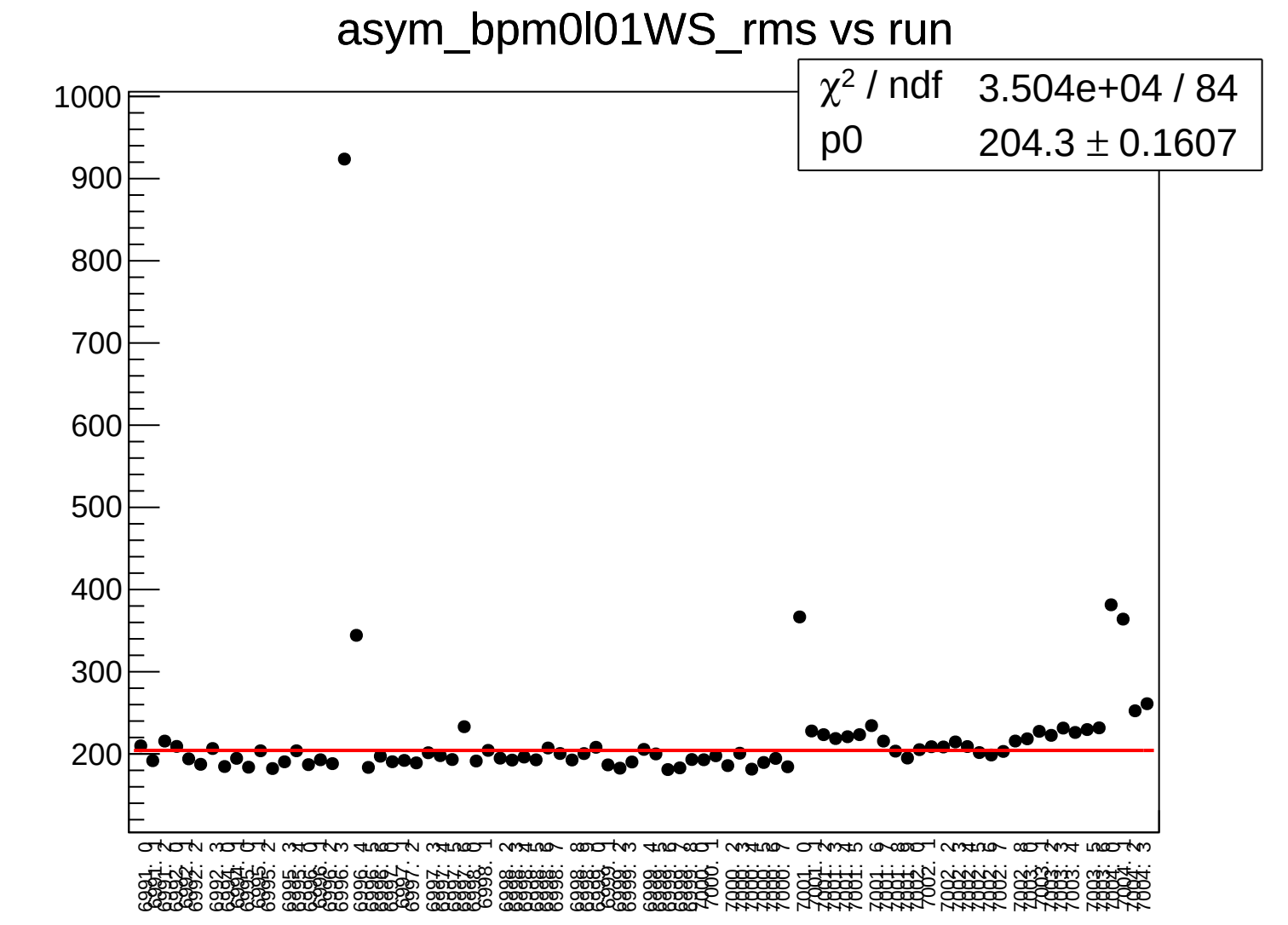

asym_bpm0i07WS_mean vs run
χ² / ndf 135.9 / 84
p0 −1083 ± 233.6
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 702.5
Std Dev 666.5
4
3
2
1
0
−1
−2

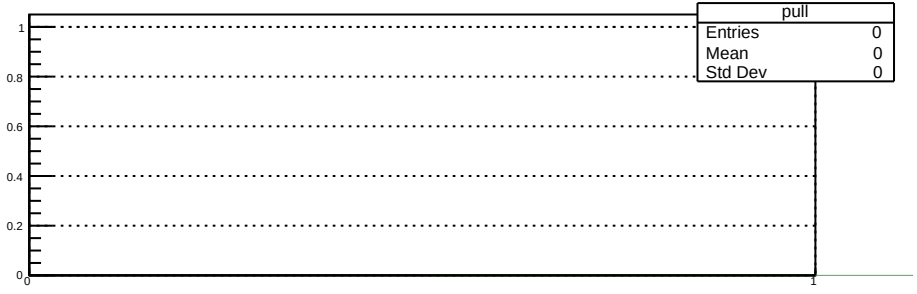

pull1D
Entries 85
Mean −0.02502
Std Dev 1.264
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

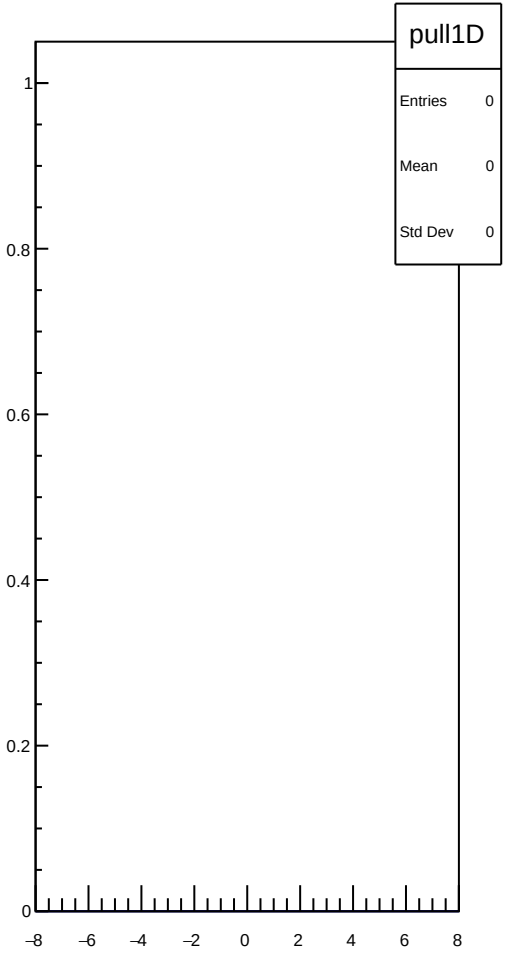

asym_bpm0i07WS_rms vs run
χ² / ndf 3.083e+04 / 84
p0 210.2 ± 0.1652
900
800
700
600
500
400
300
200

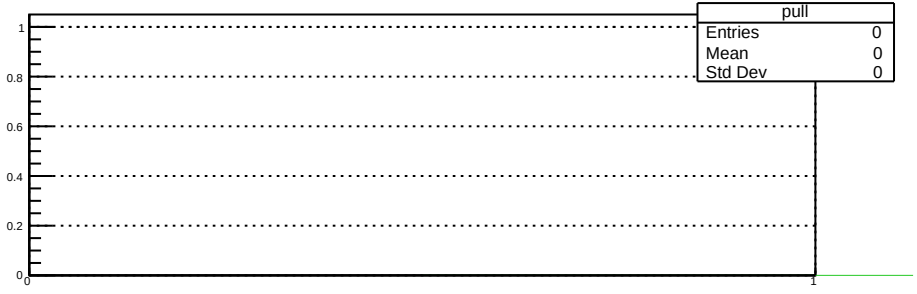

asym_bpm0l01WS_mean vs run
χ² / ndf 127.2 / 84
p0 −1189 ± 227.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 603.9
Std Dev 567.9
3
2
1
0
−1
−2

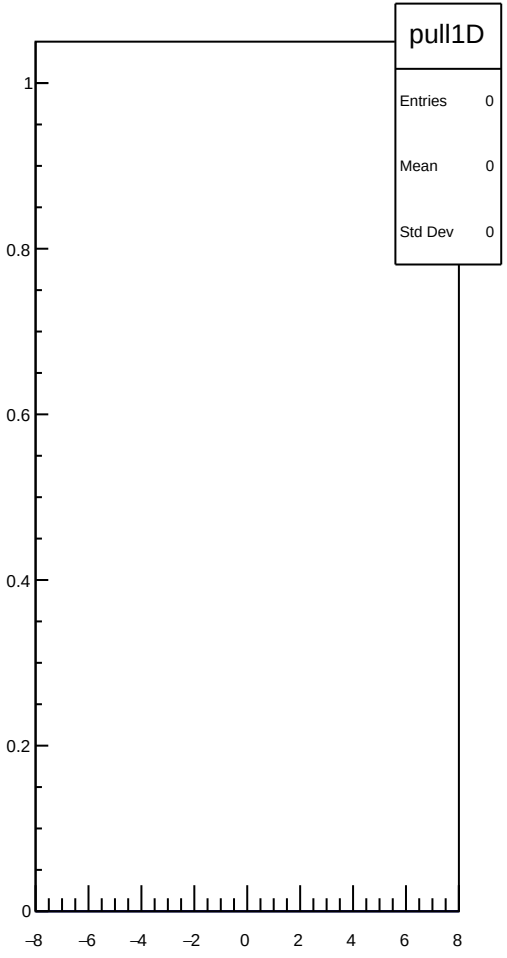

pull1D
Entries 85
Mean −0.0289
Std Dev 1.223
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

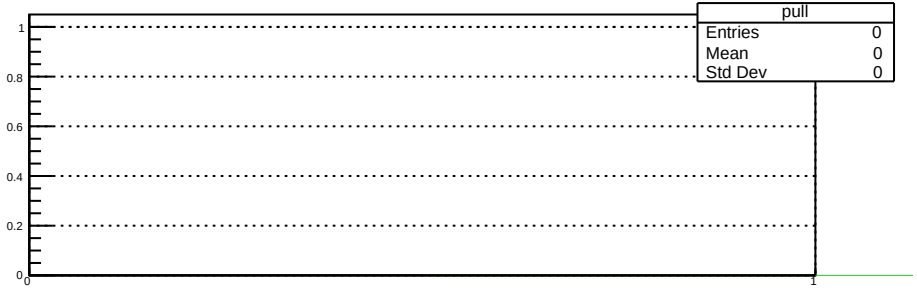

asym_bpm0l01WS_rms vs run
χ² / ndf 3.504e+04 / 84
p0 204.3 ± 0.1607
1000
900
800
700
600
500
400
300
200

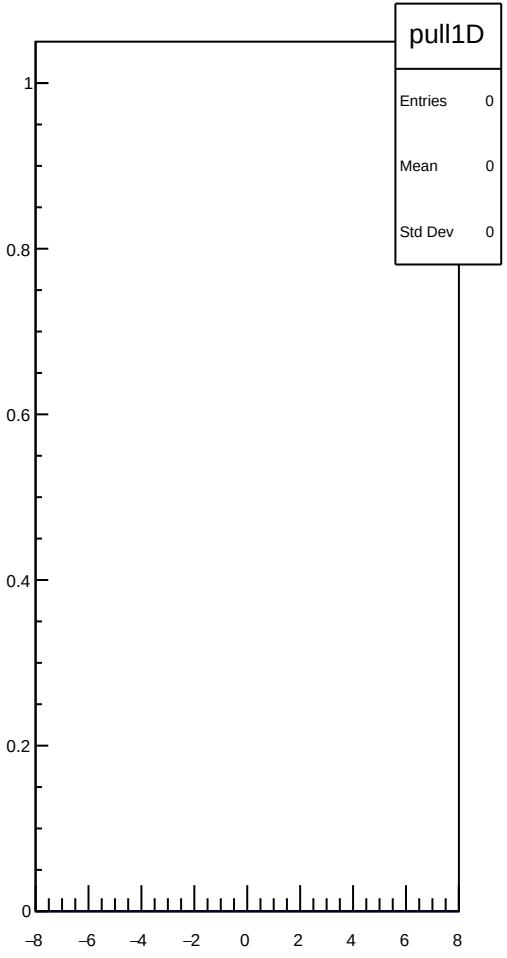

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

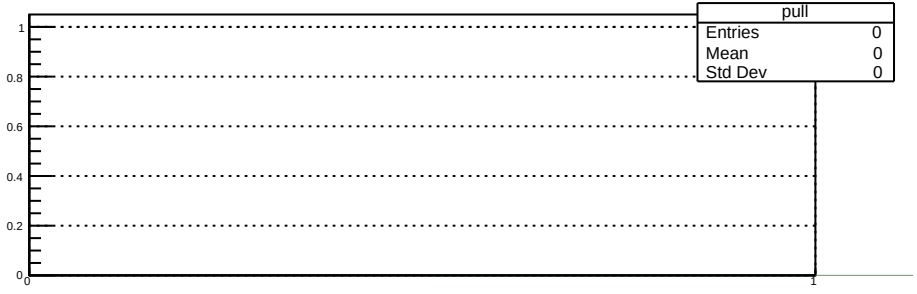

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

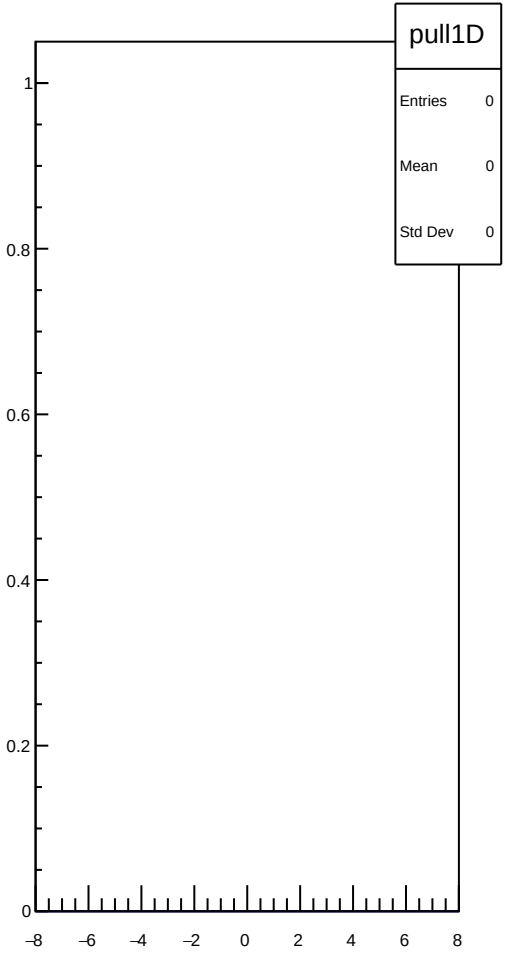

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

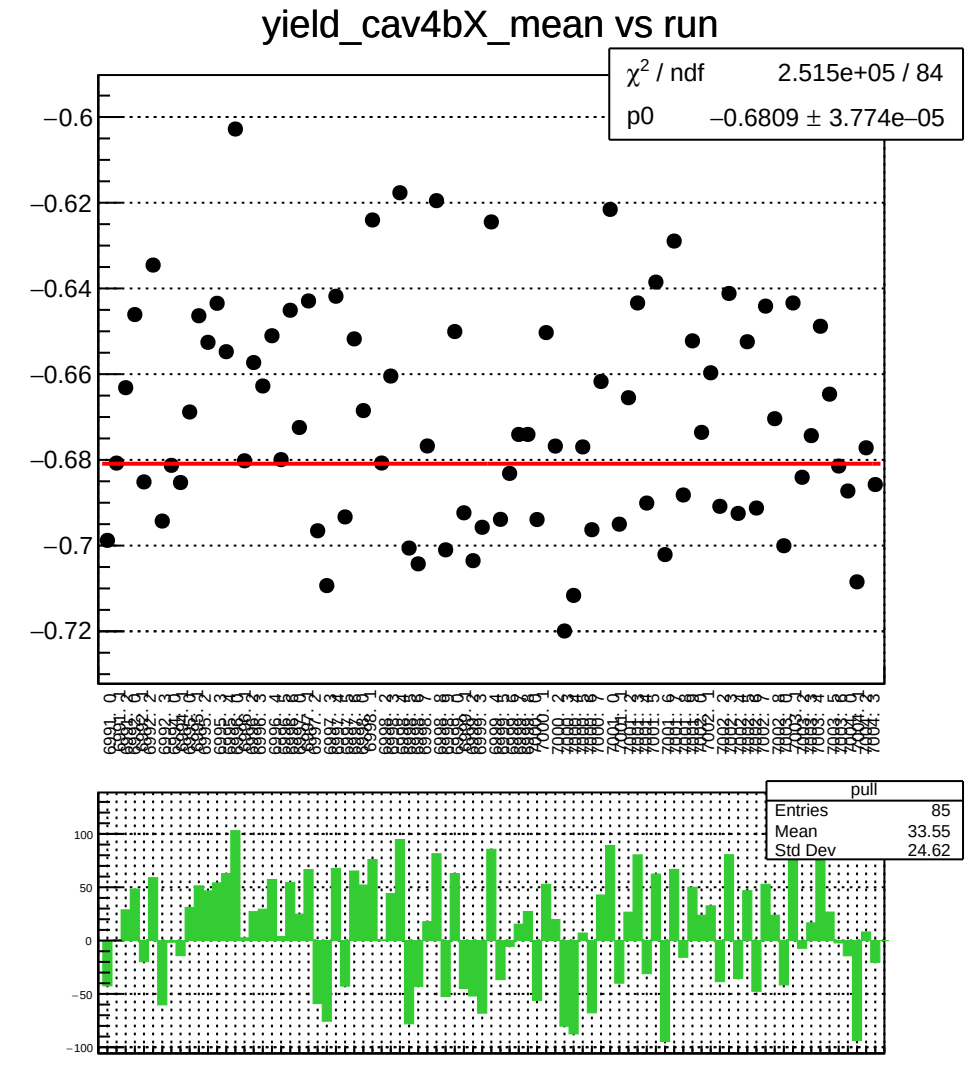

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

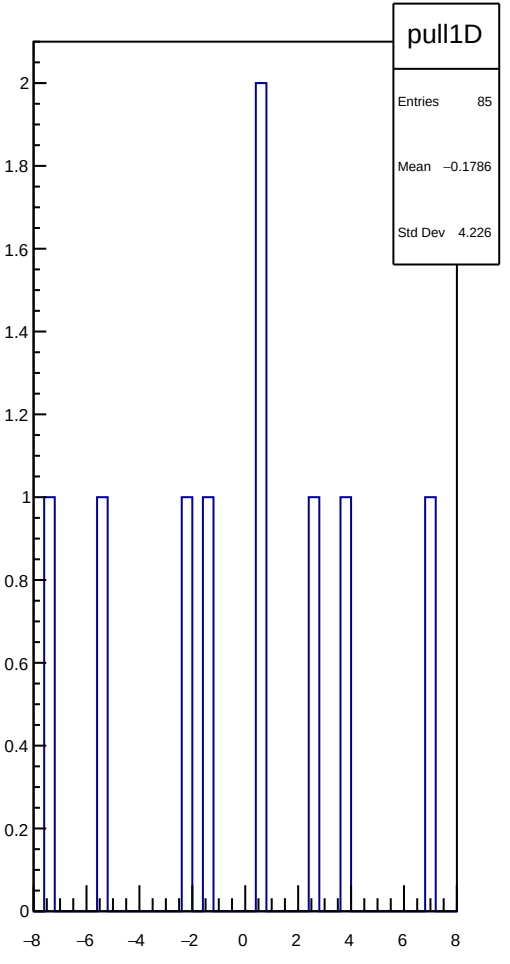

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

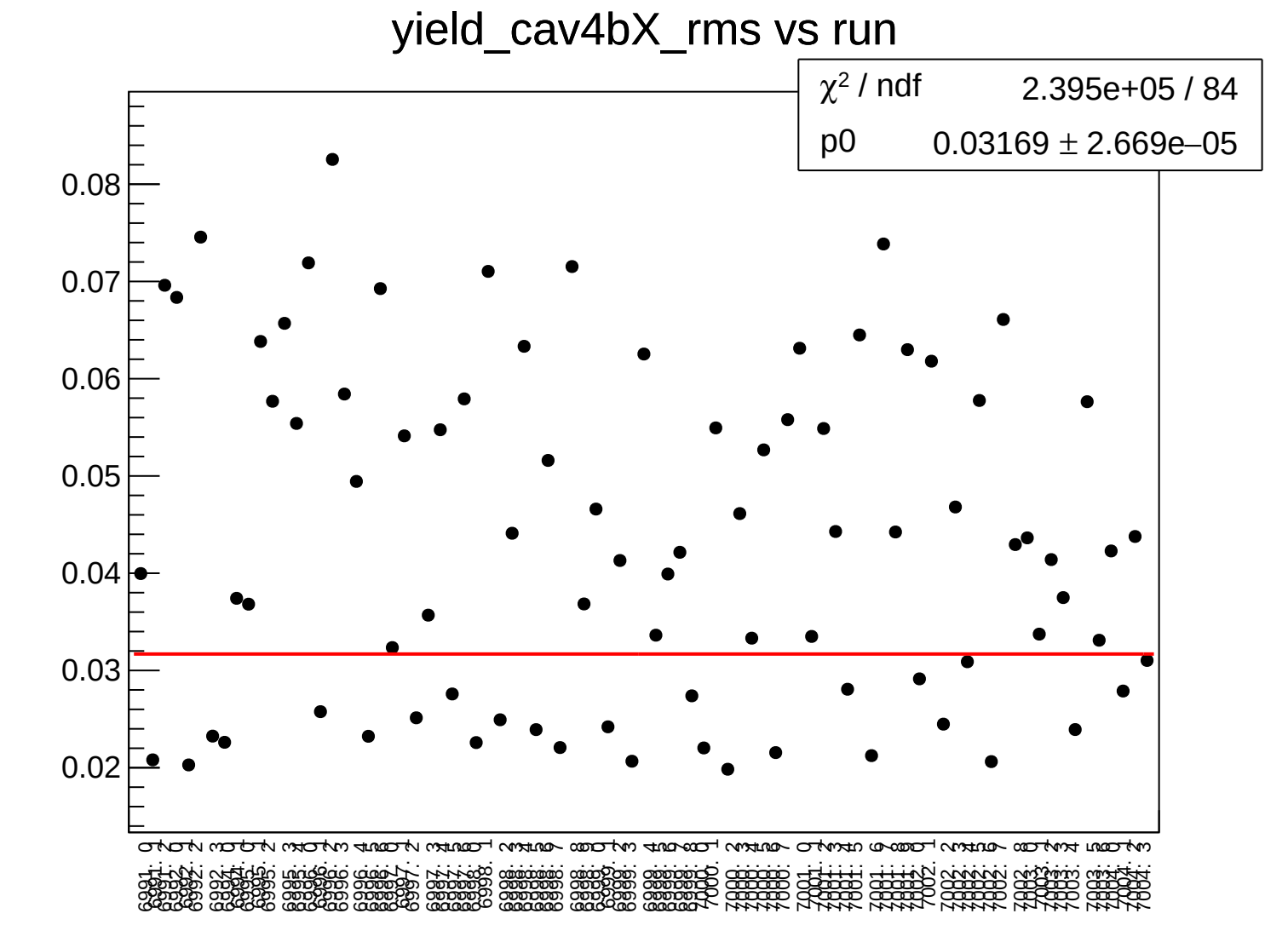

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

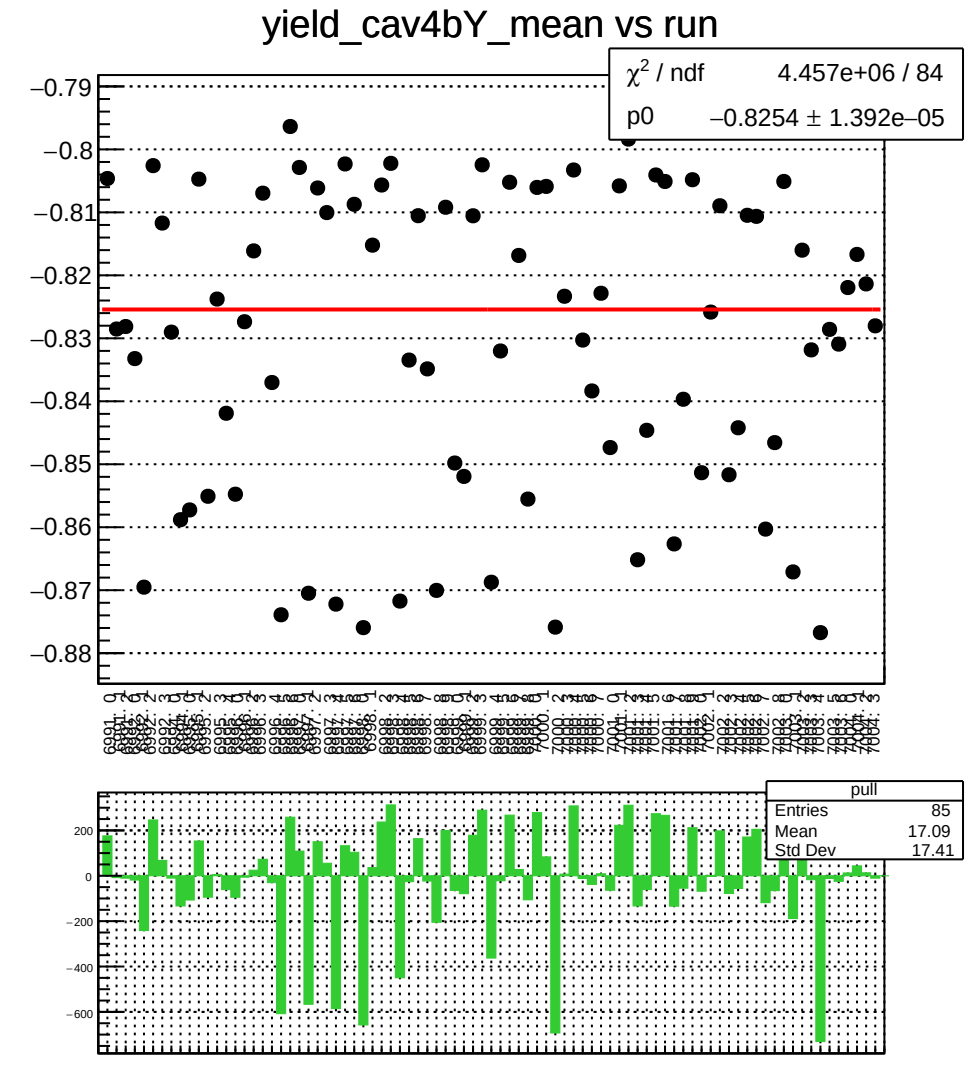

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

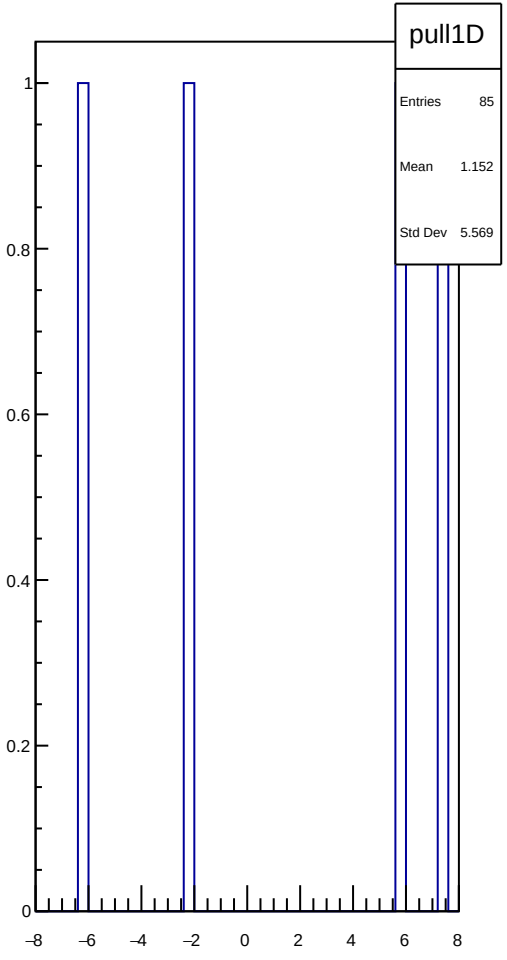

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

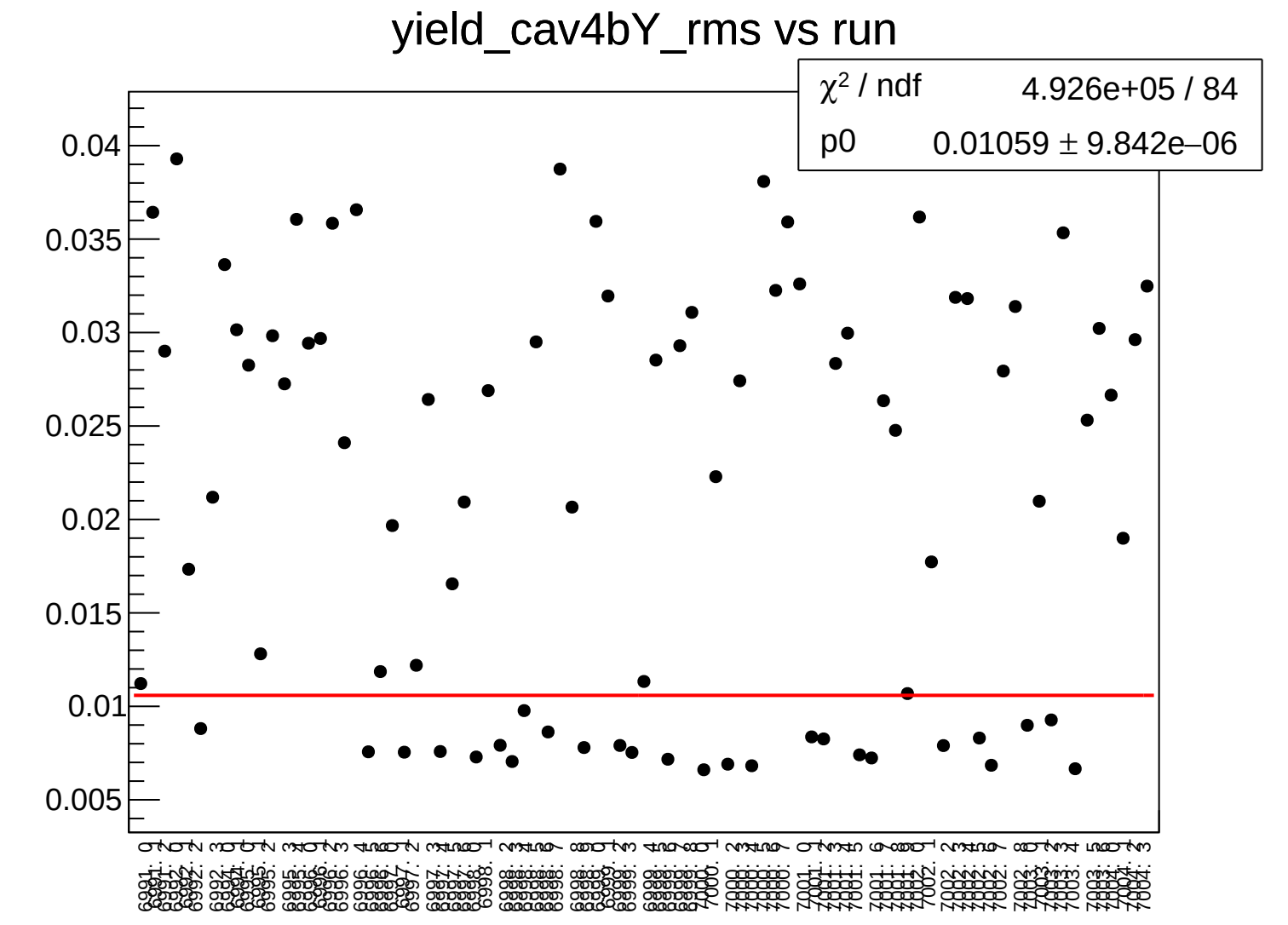

yield_cav4bX_mean vs run
χ² / ndf 2.515e+05 / 84
p0 −0.6809 ± 3.774e−05
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
pull
Entries 85
Mean 33.55
Std Dev 24.62
100
50
0
−50
−100

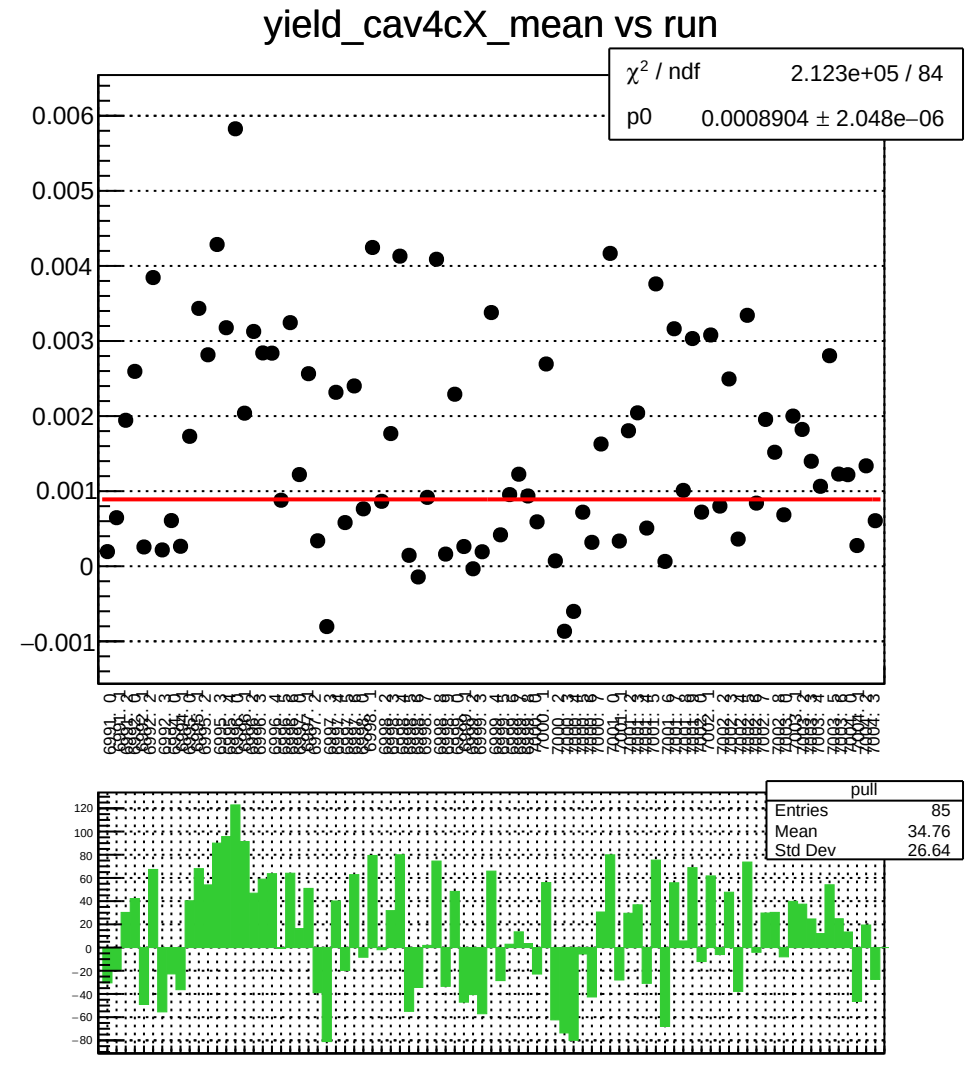

pull1D
Entries 85
Mean −0.1786
Std Dev 4.226
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

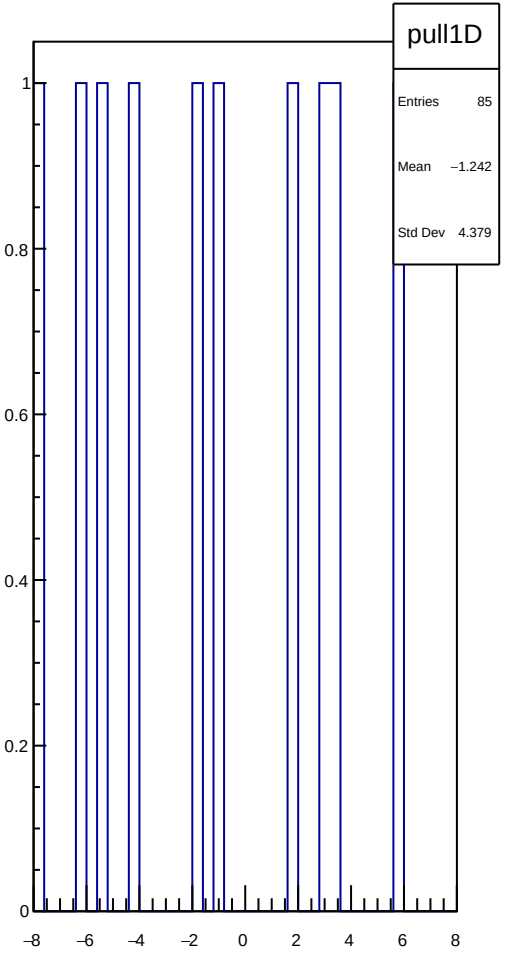

yield_cav4bX_rms vs run
χ² / ndf 2.395e+05 / 84
p0 0.03169 ± 2.669e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

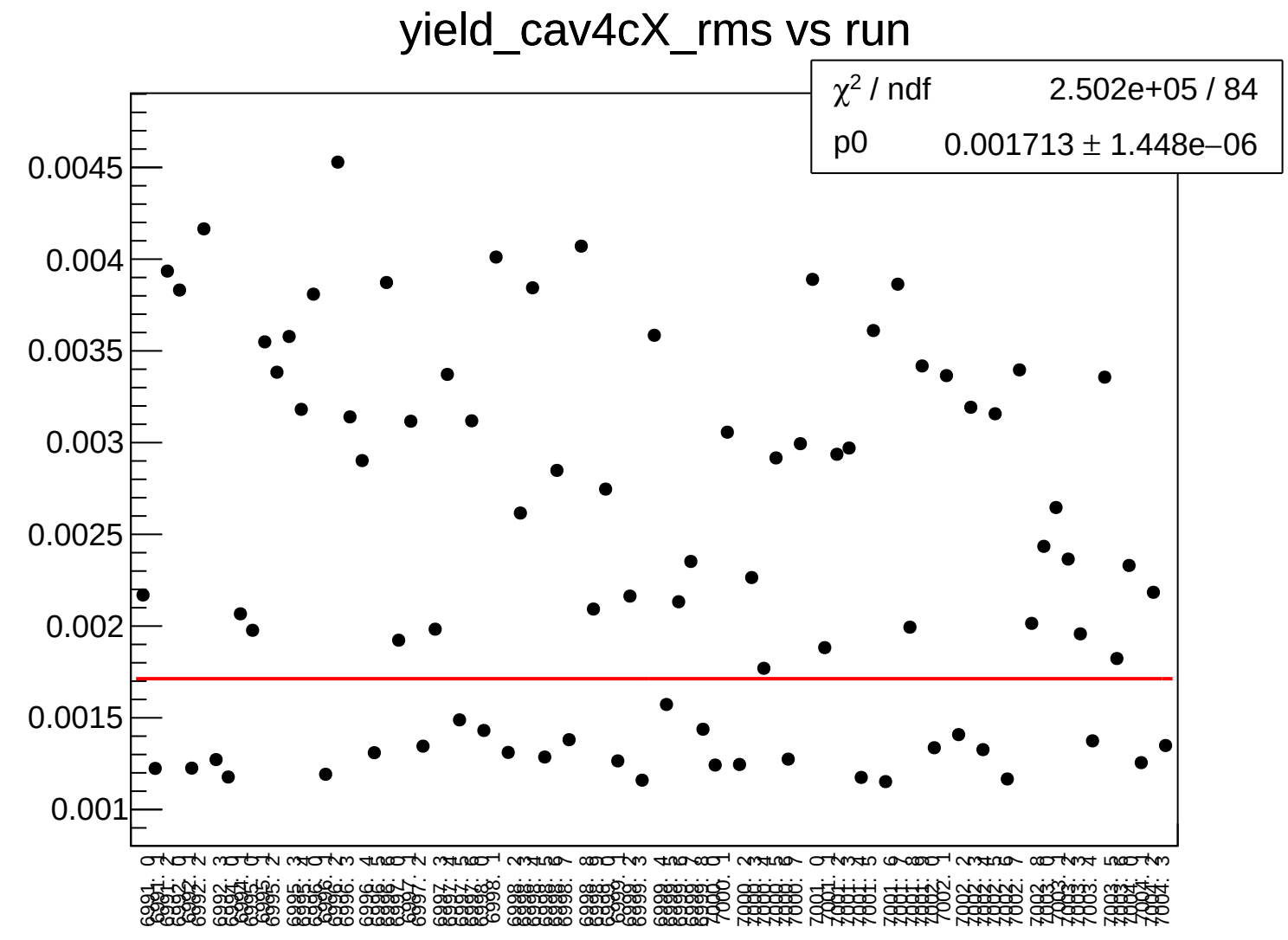

yield_cav4bY_mean vs run
χ² / ndf 4.457e+06 / 84
p0 −0.8254 ± 1.392e−05
−0.79
−0.8
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 85
Mean 17.09
Std Dev 17.41
200
0
−200
−400
−600

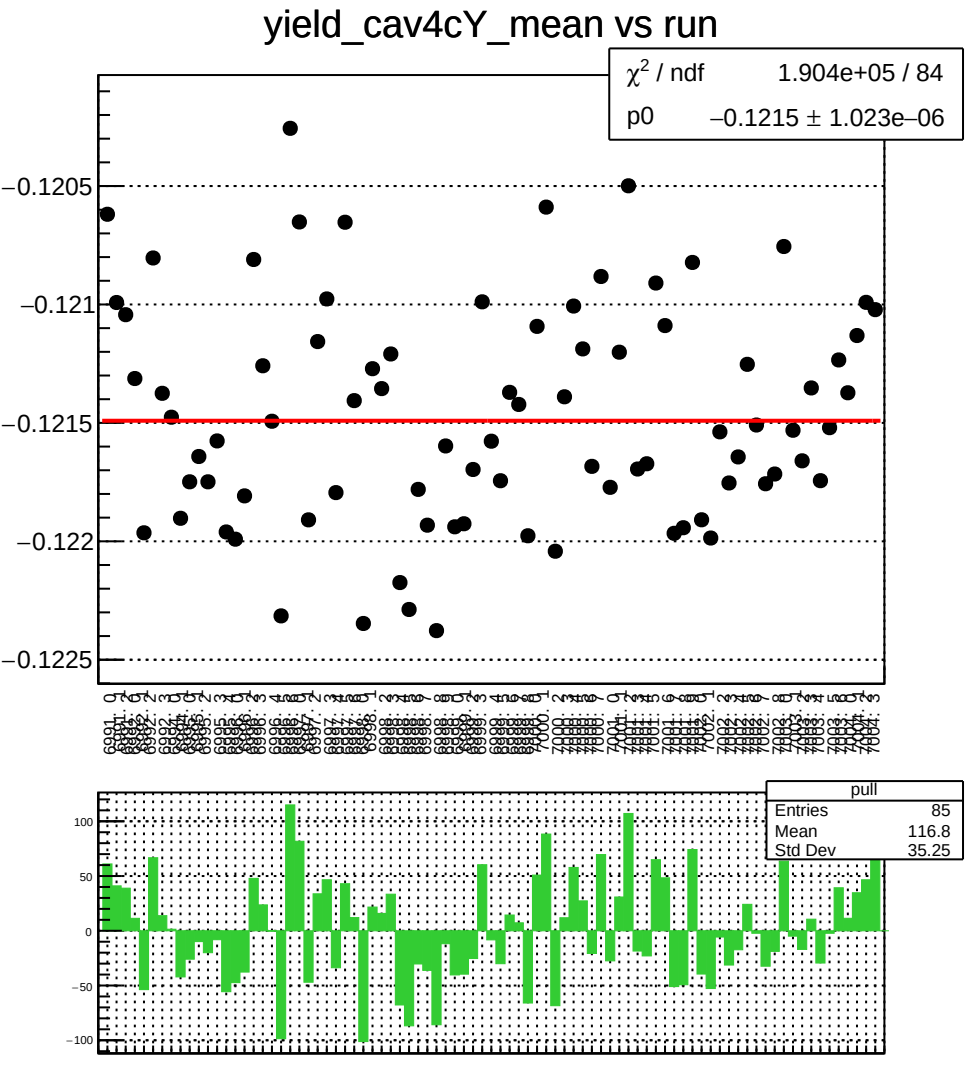

pull1D
Entries 85
Mean 1.152
Std Dev 5.569
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

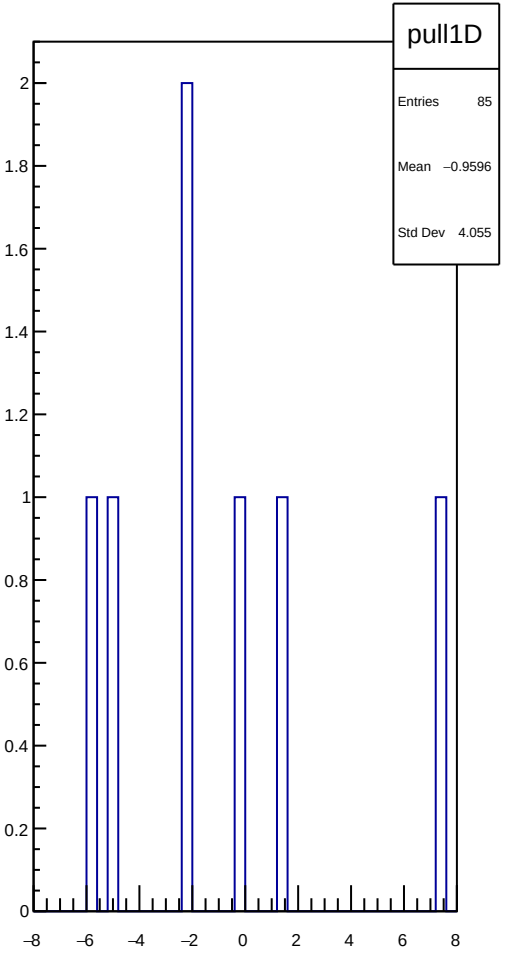

yield_cav4bY_rms vs run
χ² / ndf 4.926e+05 / 84
p0 0.01059 ± 9.842e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

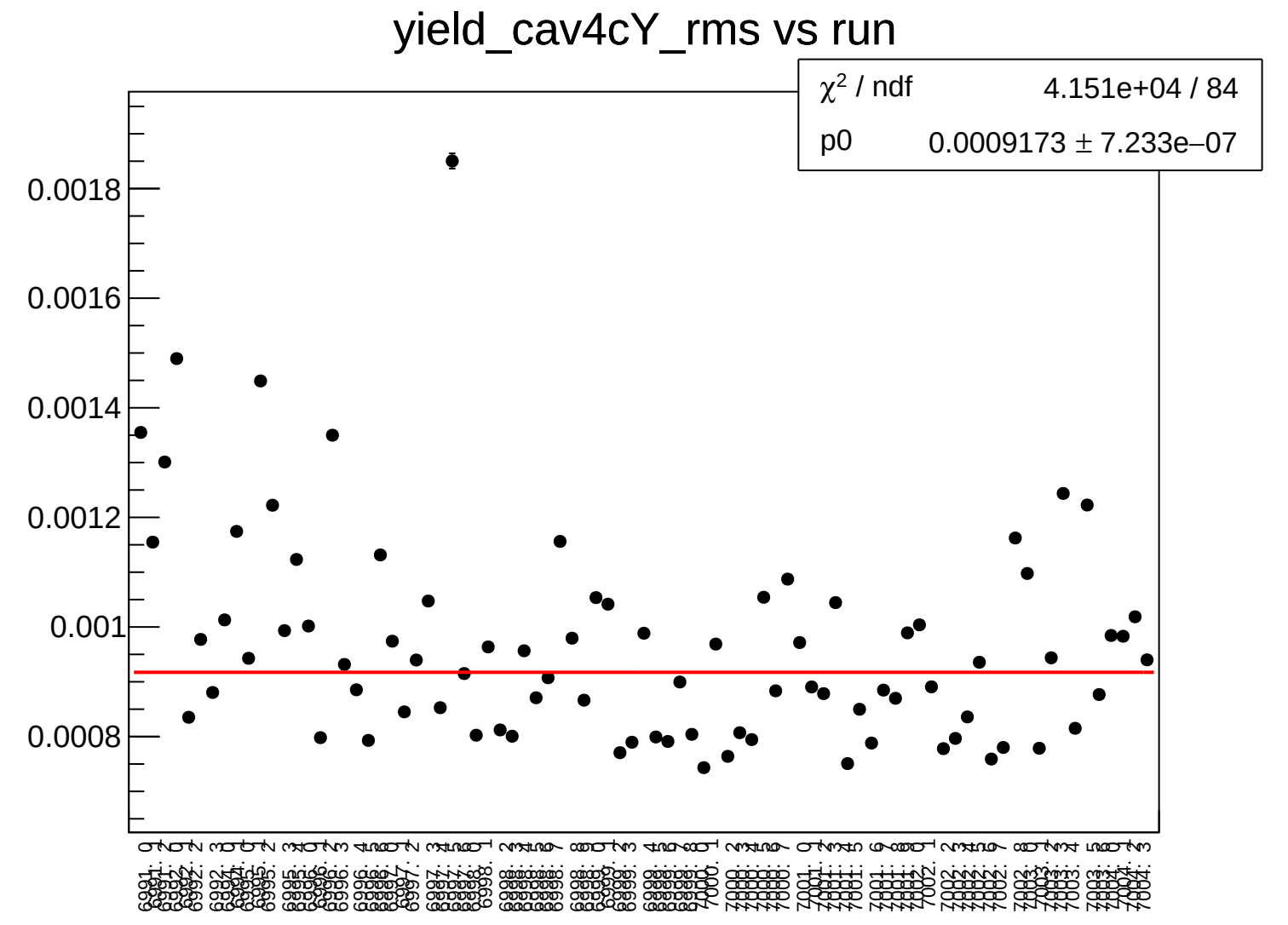

yield_cav4cX_mean vs run
χ² / ndf 2.123e+05 / 84
p0 0.0008904 ± 2.048e−06
0.006
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 85
Mean 34.76
Std Dev 26.64
120
100
80
60
40
20
0
−20
−40
−60
−80

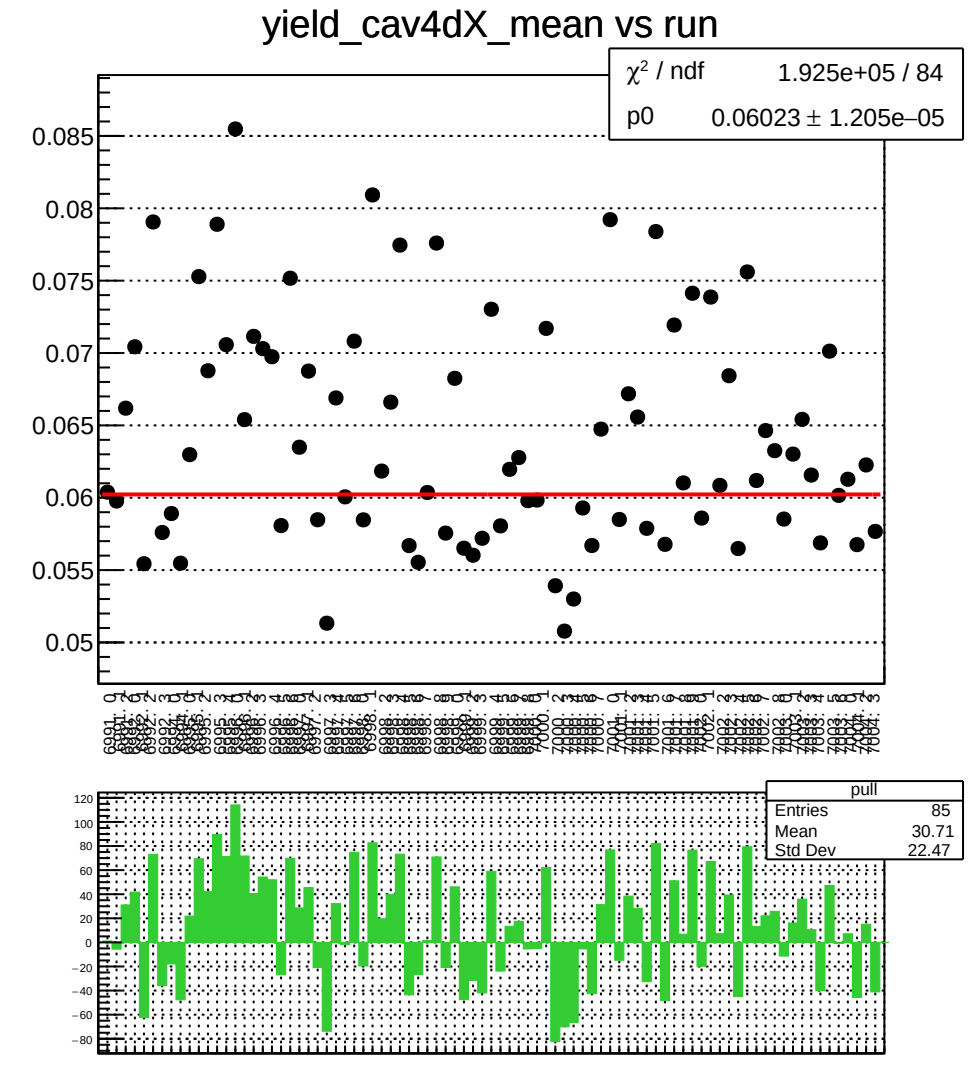

pull1D
Entries 85
Mean −1.242
Std Dev 4.379
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

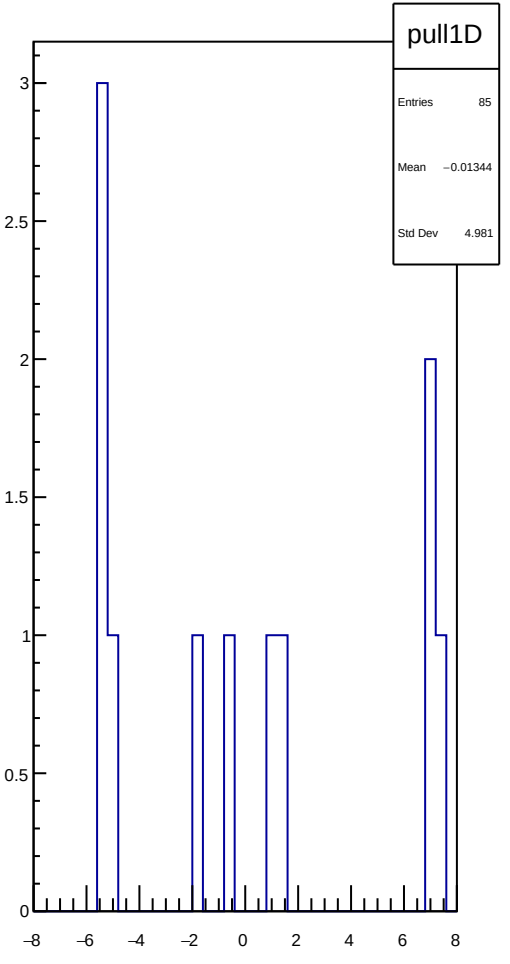

yield_cav4cX_rms vs run
χ² / ndf 2.502e+05 / 84
p0 0.001713 ± 1.448e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

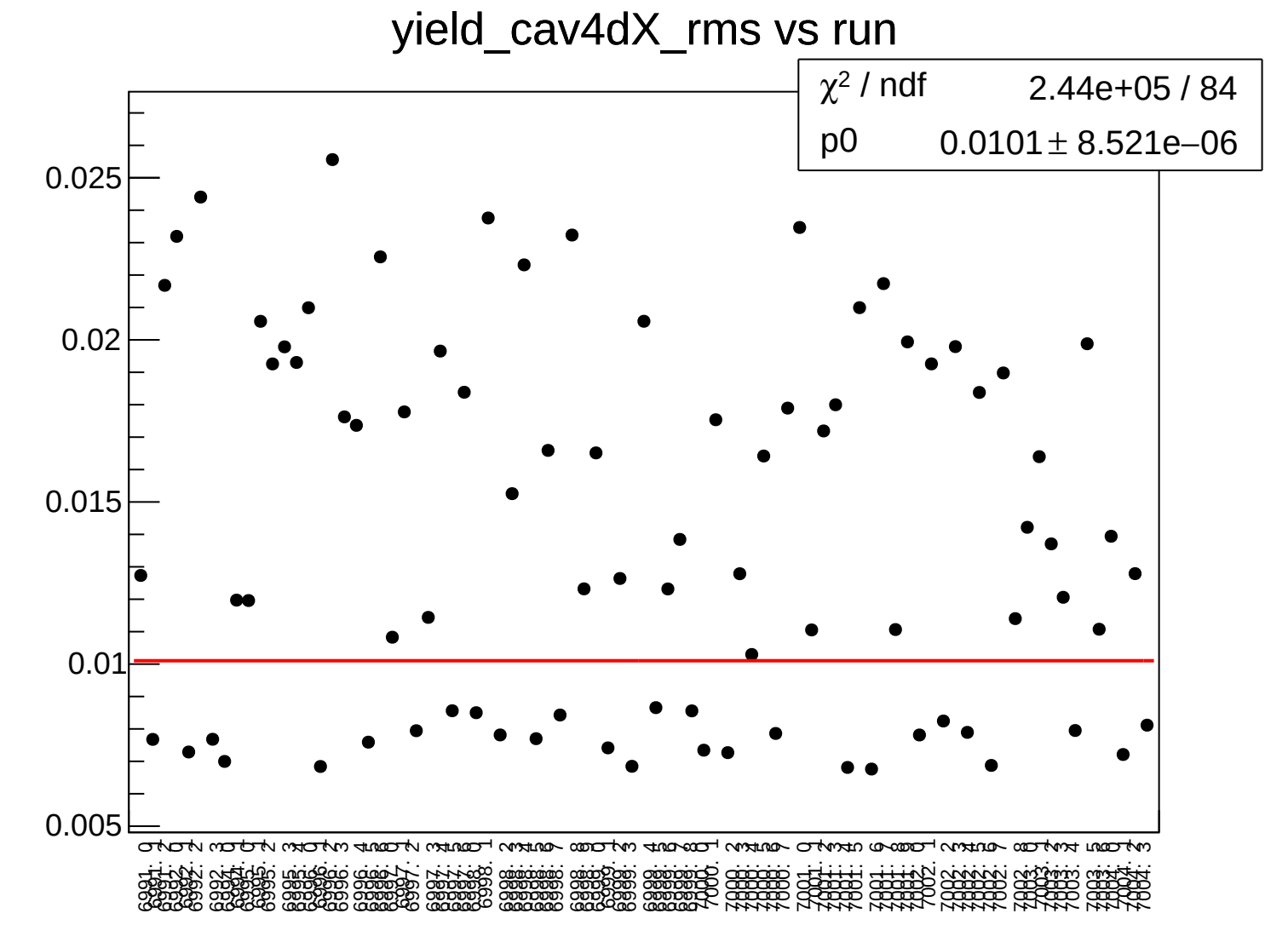

yield_cav4cY_mean vs run
χ² / ndf 1.904e+05 / 84
p0 −0.1215 ± 1.023e−06
−0.1205
−0.121
−0.1215
−0.122
−0.1225
pull
Entries 85
Mean 116.8
Std Dev 35.25
100
50
0
−50
−100

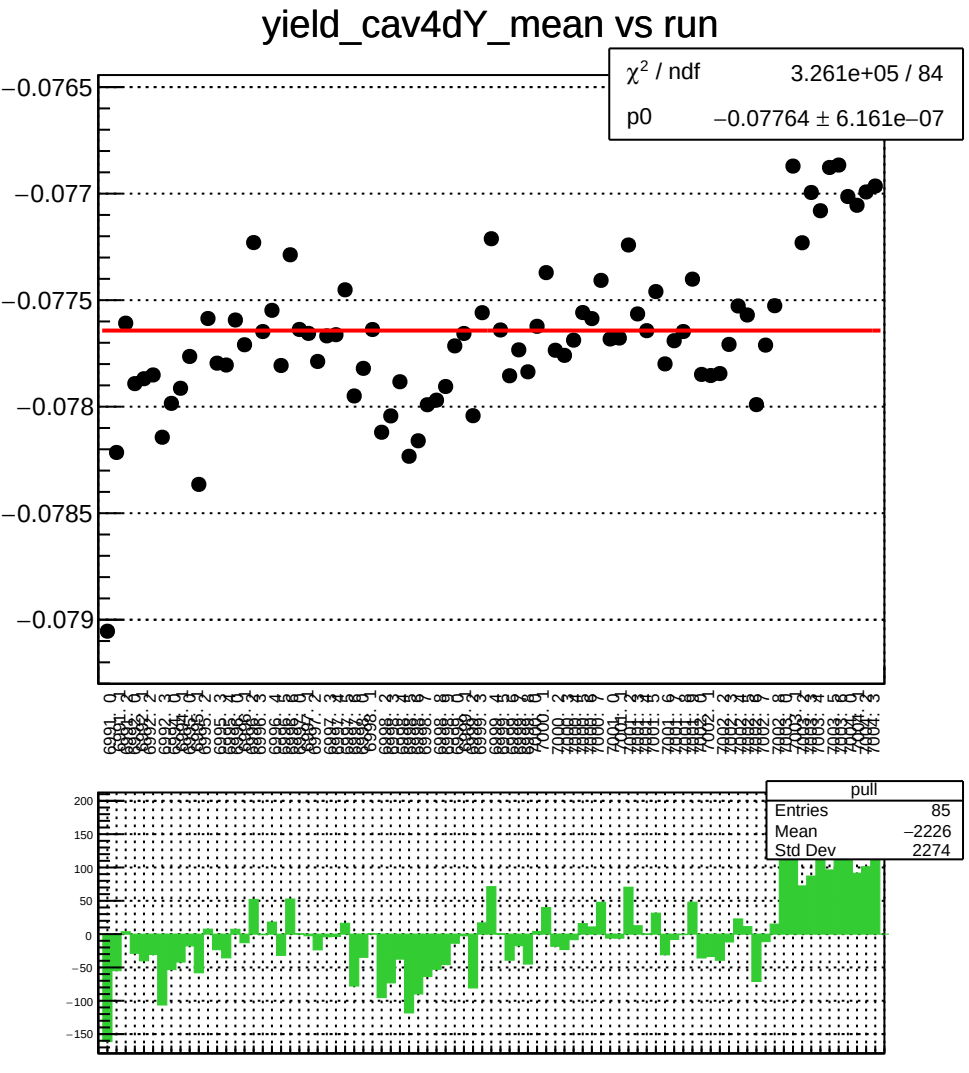

pull1D
Entries 85
Mean −0.9596
Std Dev 4.055
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

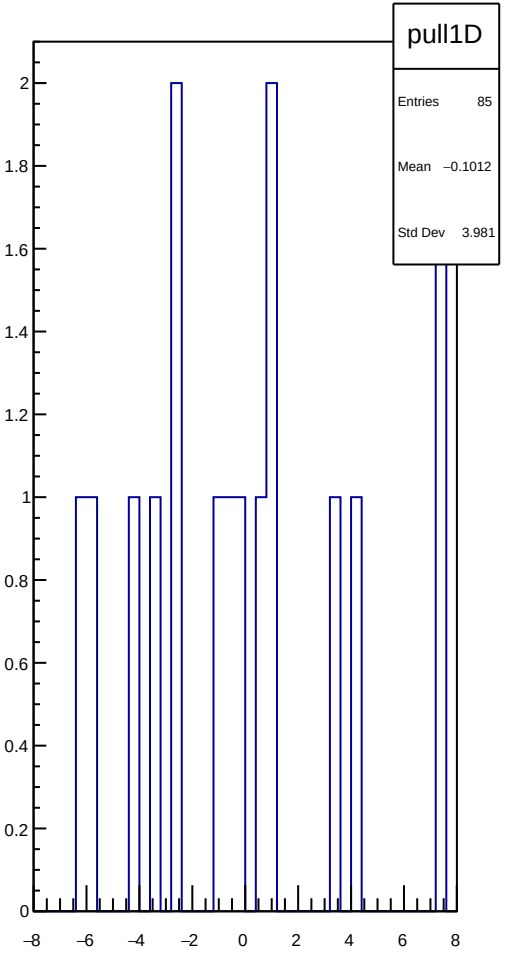

yield_cav4cY_rms vs run
χ² / ndf 4.151e+04 / 84
p0 0.0009173 ± 7.233e−07
0.0018
0.0016
0.0014
0.0012
0.001
0.0008

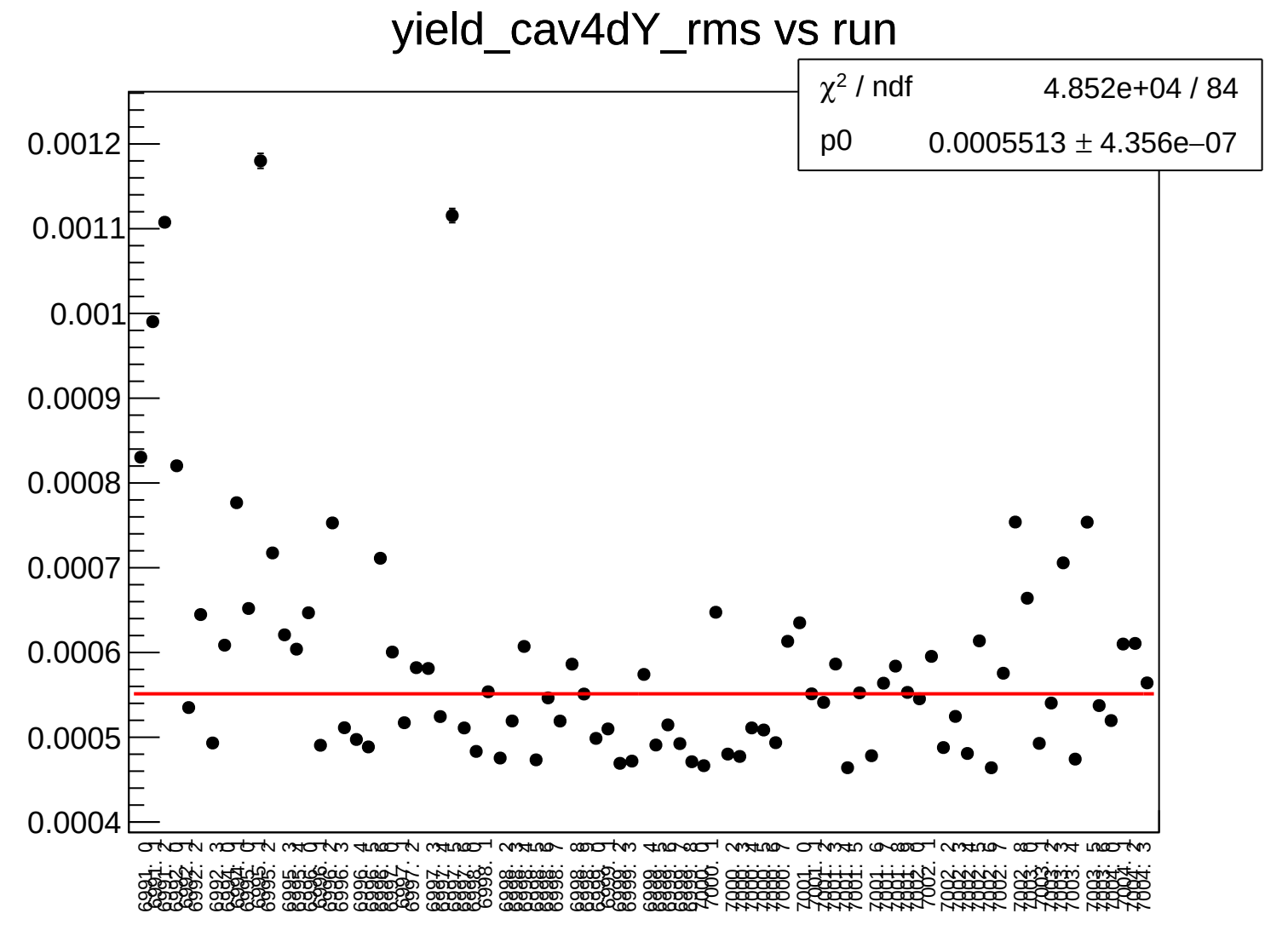

yield_cav4dX_mean vs run
χ² / ndf 1.925e+05 / 84
p0 0.06023 ± 1.205e−05
0.085
0.08
0.075
0.07
0.065
0.06
0.055
0.05
pull
Entries 85
Mean 30.71
Std Dev 22.47
120
100
80
60
40
20
0
−20
−40
−60
−80

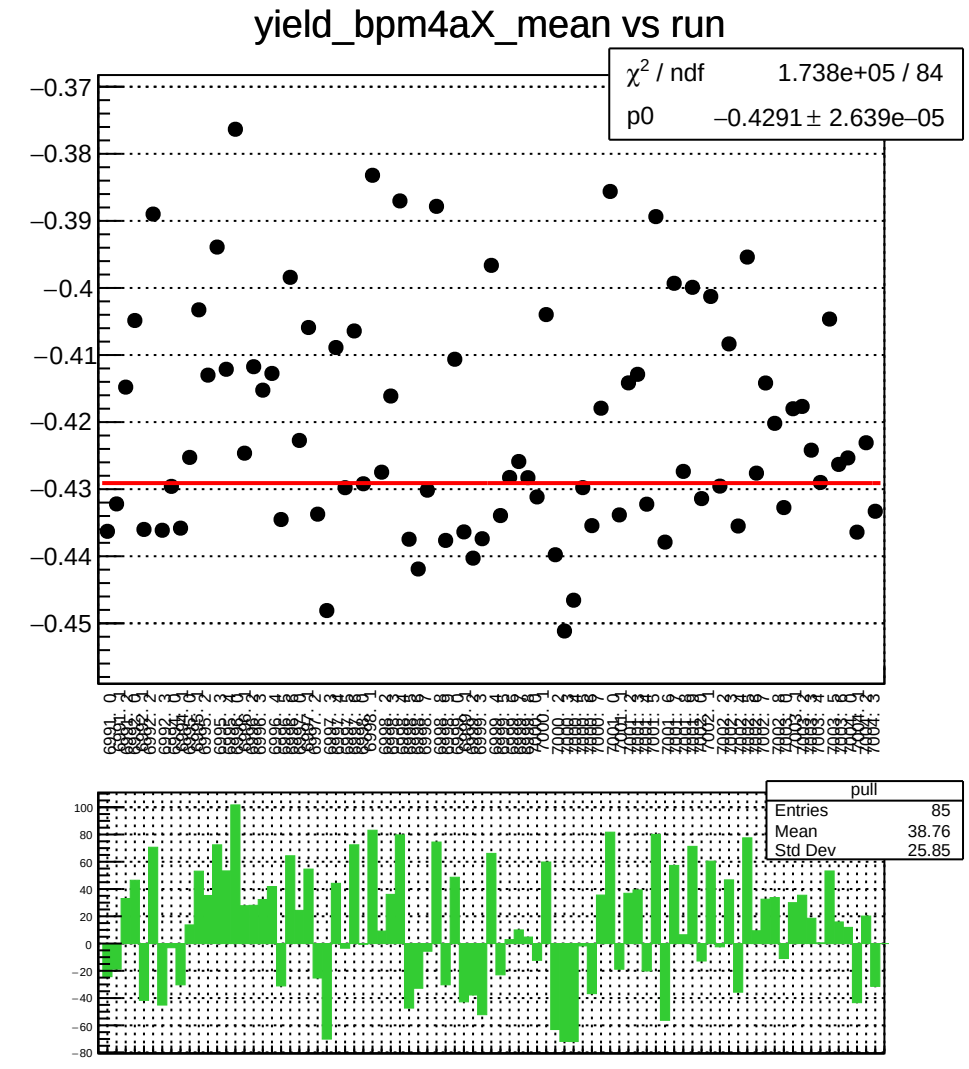

pull1D
Entries 85
Mean −0.01344
Std Dev 4.981
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

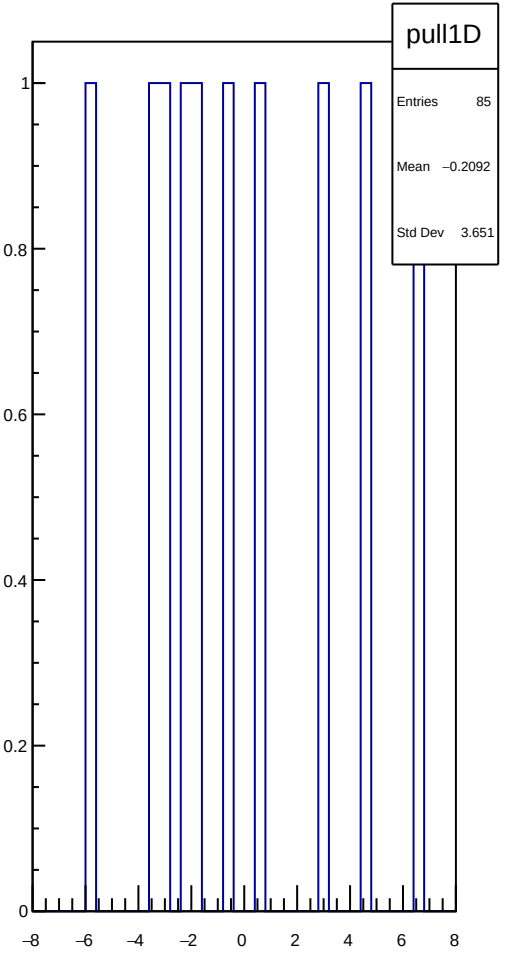

yield_cav4dX_rms vs run
χ² / ndf 2.44e+05 / 84
p0 0.0101 ± 8.521e−06
0.025
0.02
0.015
0.01
0.005

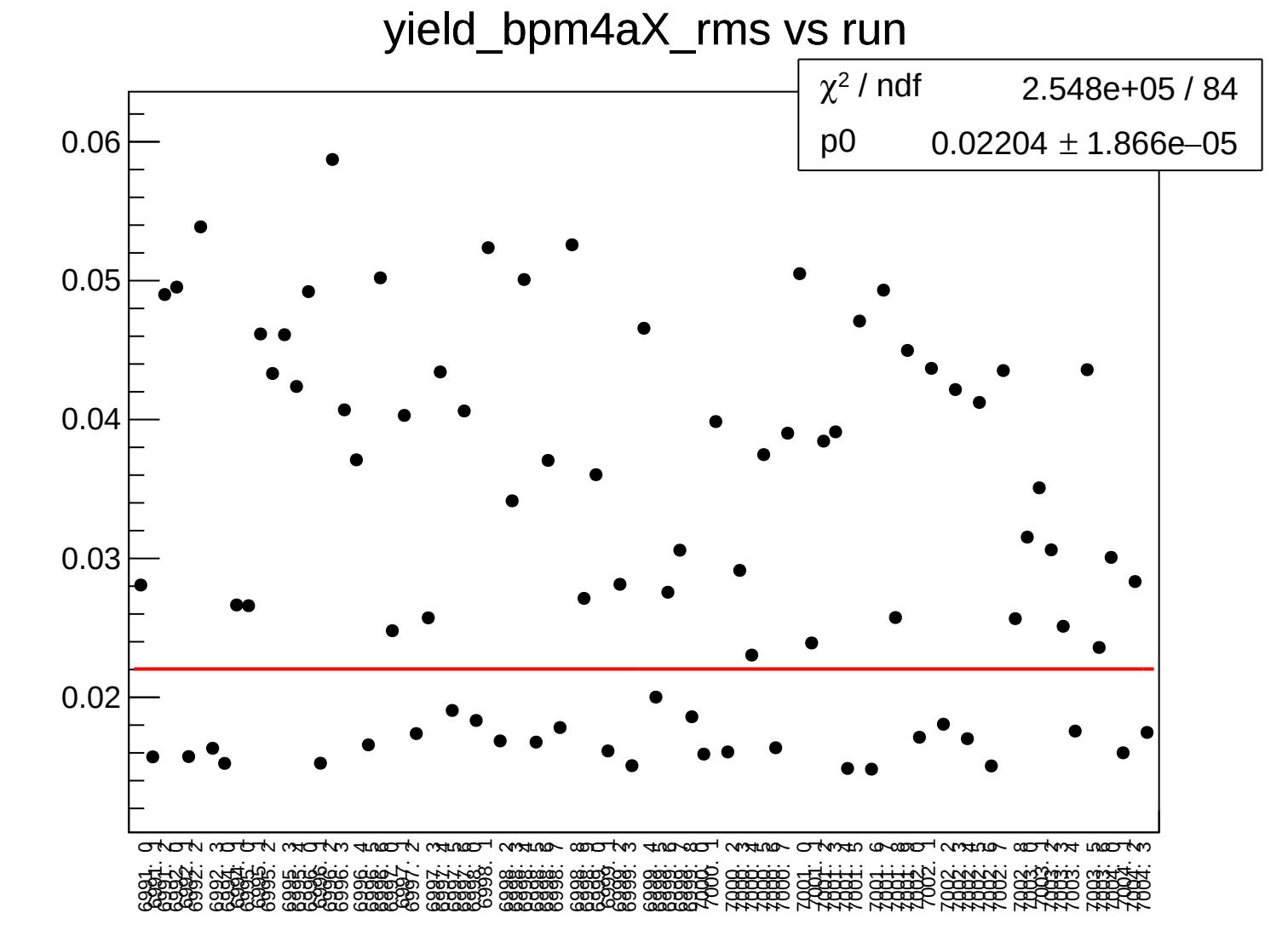

yield_cav4dY_mean vs run
χ² / ndf 3.261e+05 / 84
p0 −0.07764 ± 6.161e−07
−0.0765
−0.077
−0.0775
−0.078
−0.0785
−0.079
pull
Entries 85
Mean −2226
Std Dev 2274
200
150
100
50
0
−50
−100
−150

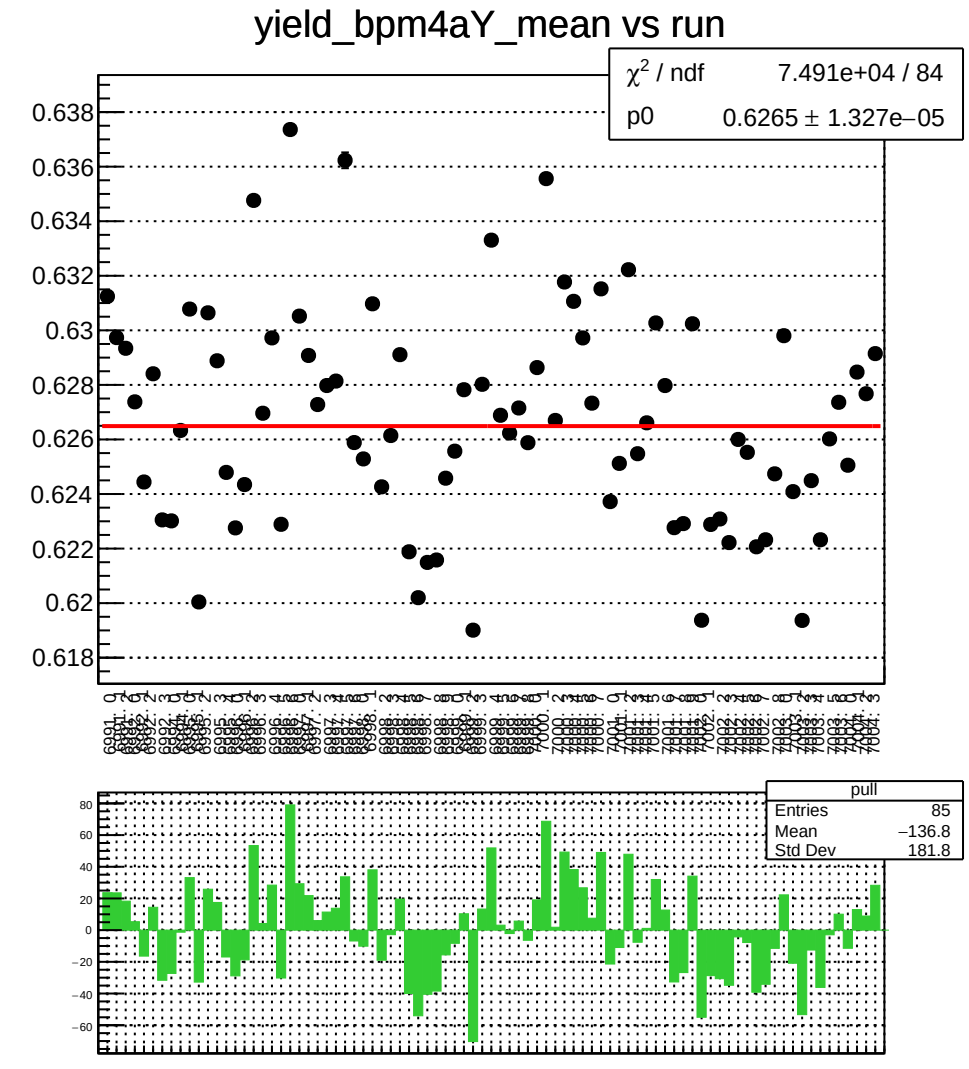

pull1D
Entries 85
Mean −0.1012
Std Dev 3.981
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

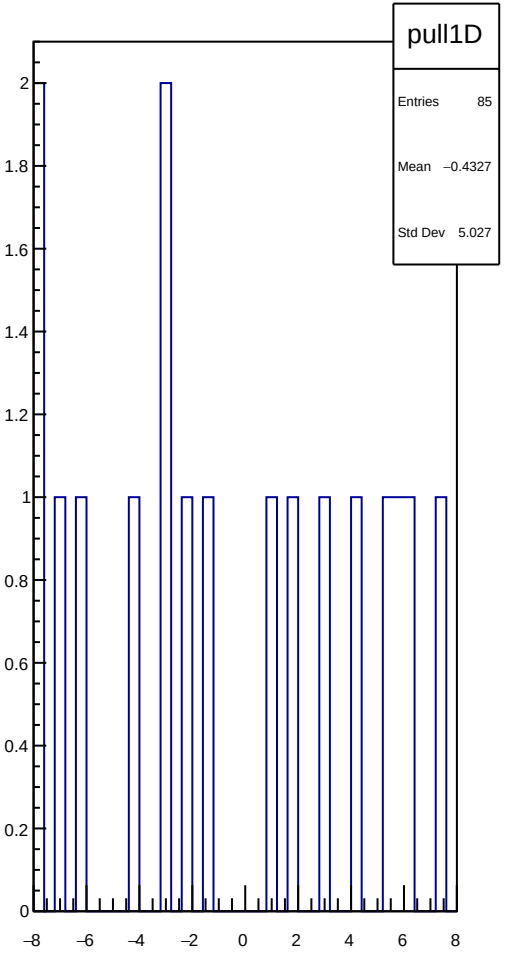

yield_cav4dY_rms vs run
χ² / ndf 4.852e+04 / 84
p0 0.0005513 ± 4.356e−07
0.0012
0.0011
0.001
0.0009
0.0008
0.0007
0.0006
0.0005
0.0004

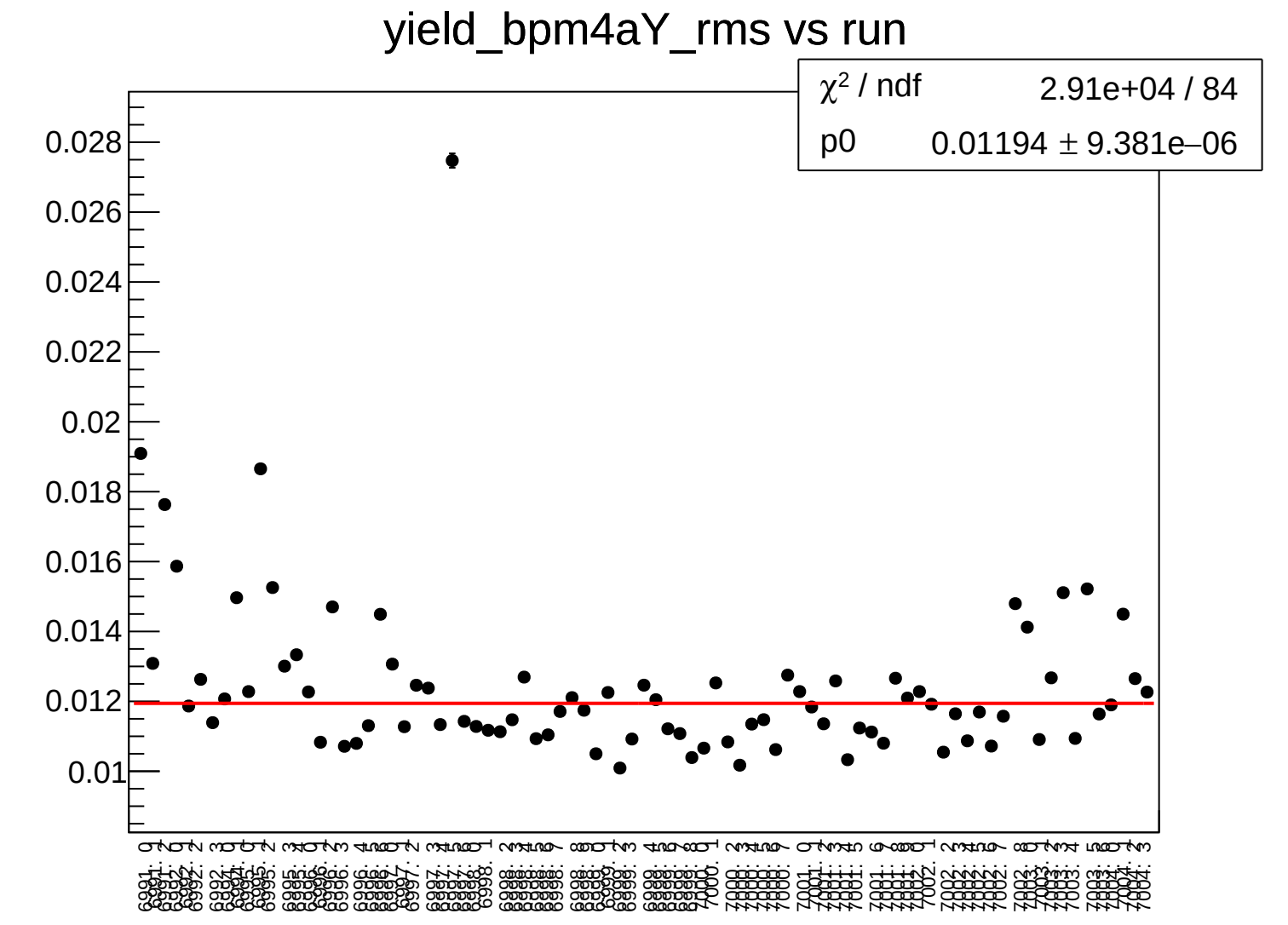

yield_bpm4aX_mean vs run
χ² / ndf 1.738e+05 / 84
p0 −0.4291 ± 2.639e−05
−0.37
−0.38
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
pull
Entries 85
Mean 38.76
Std Dev 25.85
100
80
60
40
20
0
−20
−40
−60
−80

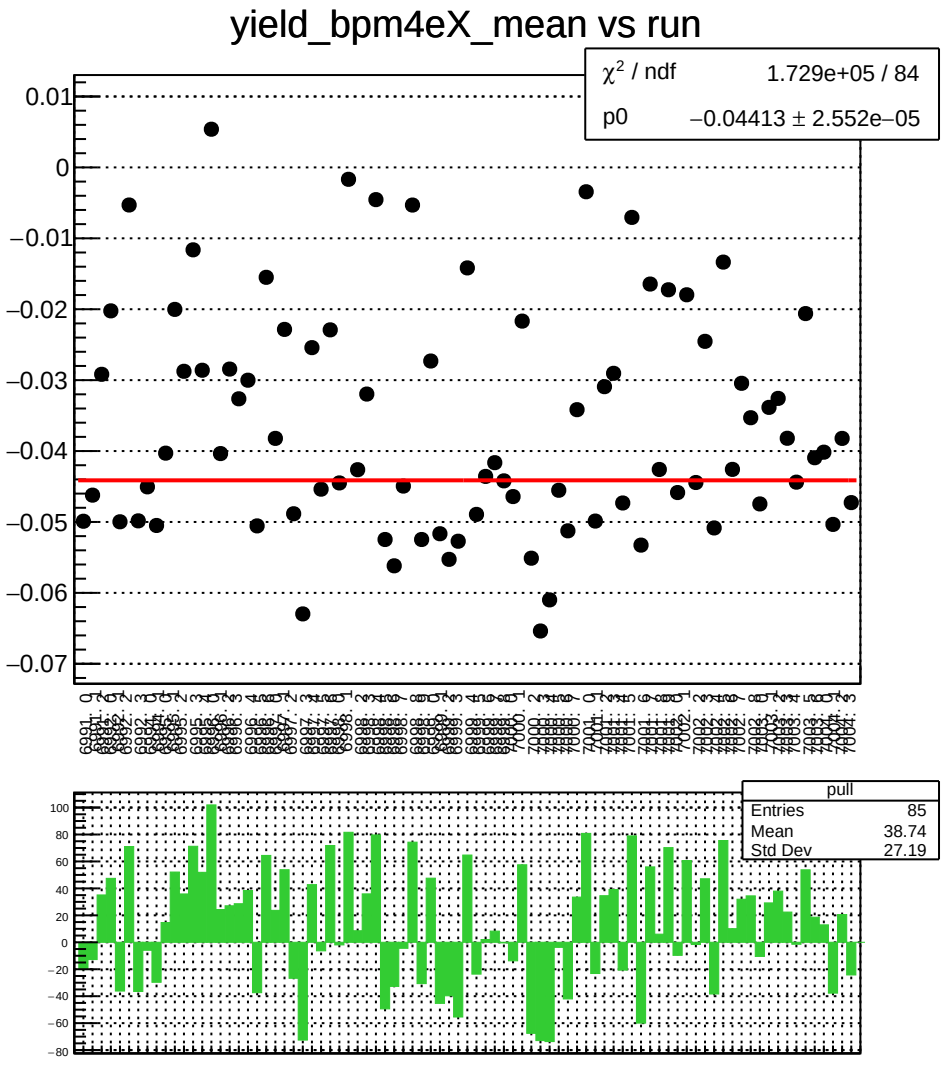

pull1D
Entries 85
Mean −0.2092
Std Dev 3.651
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

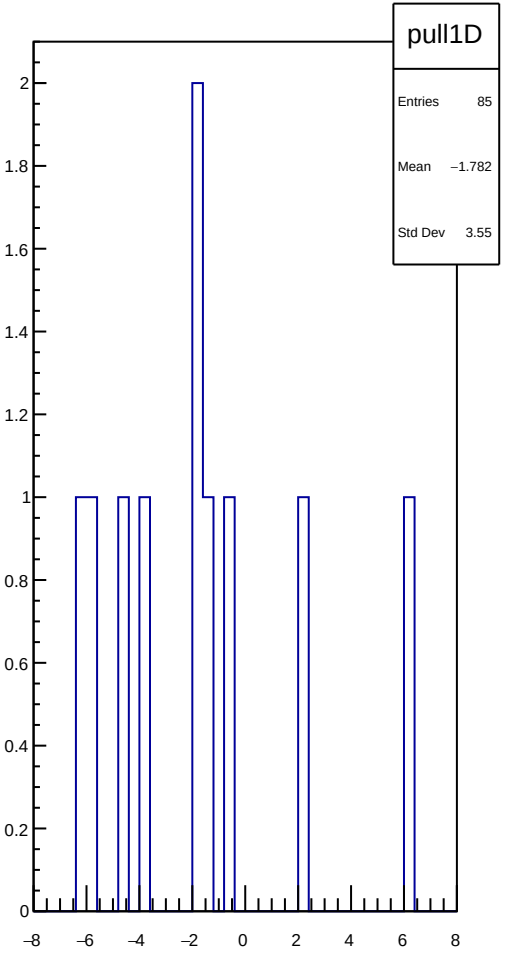

yield_bpm4aX_rms vs run
χ² / ndf 2.548e+05 / 84
p0 0.02204 ± 1.866e−05
0.06
0.05
0.04
0.03
0.02

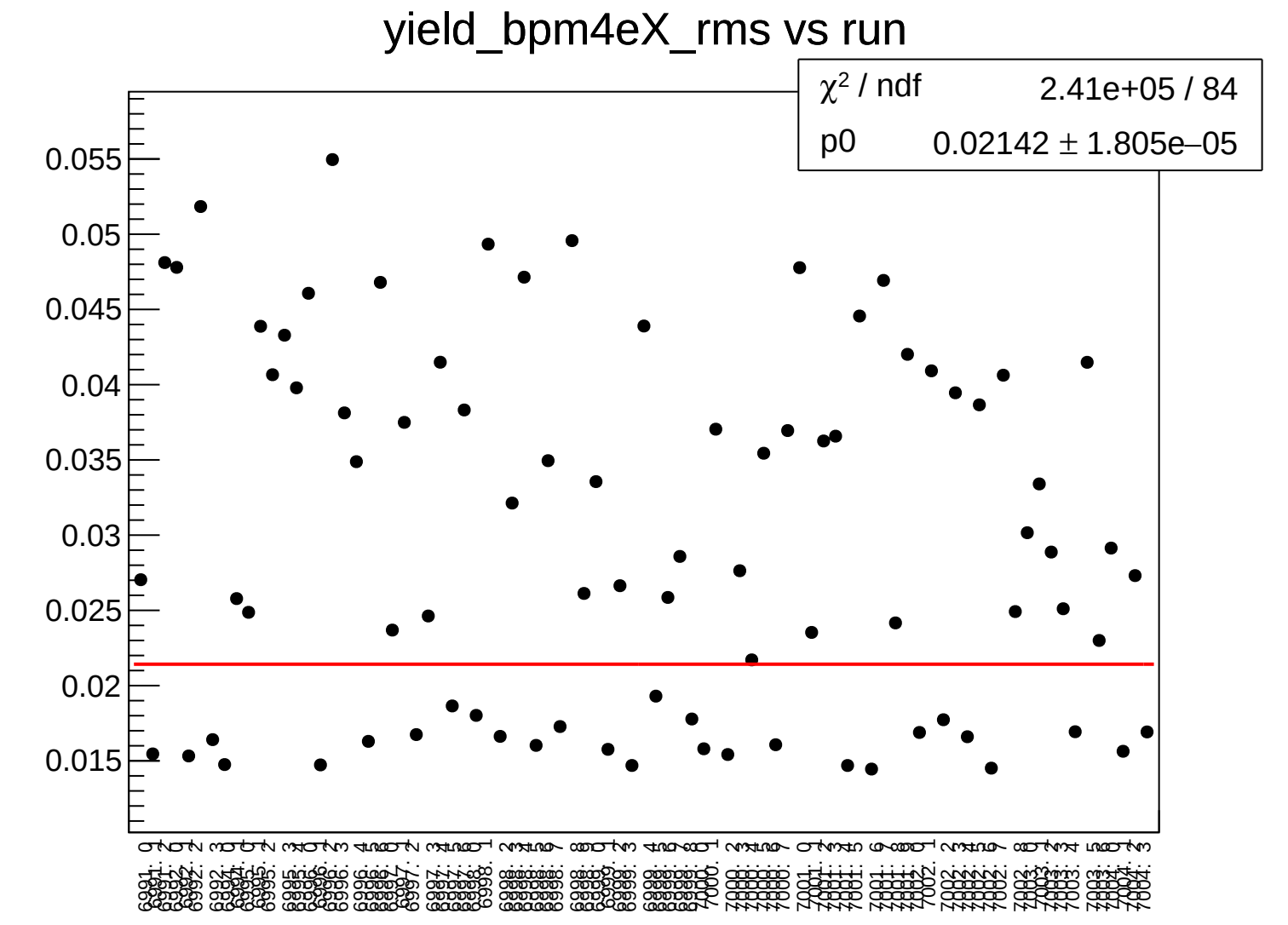

yield_bpm4aY_mean vs run
χ² / ndf 7.491e+04 / 84
p0 0.6265 ± 1.327e−05
pull
Entries 85
Mean −136.8
Std Dev 181.8

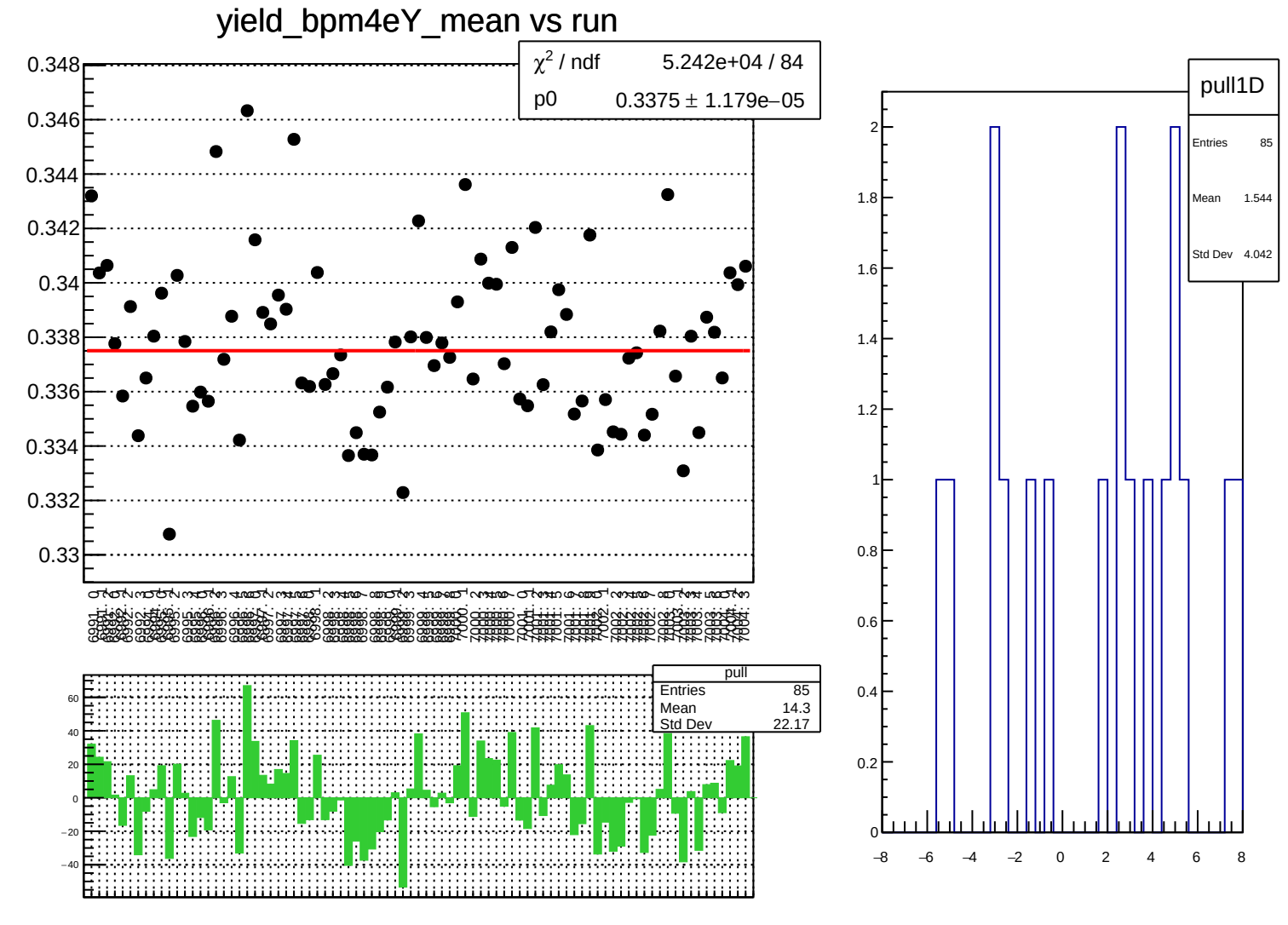

pull1D
Entries 85
Mean −0.4327
Std Dev 5.027

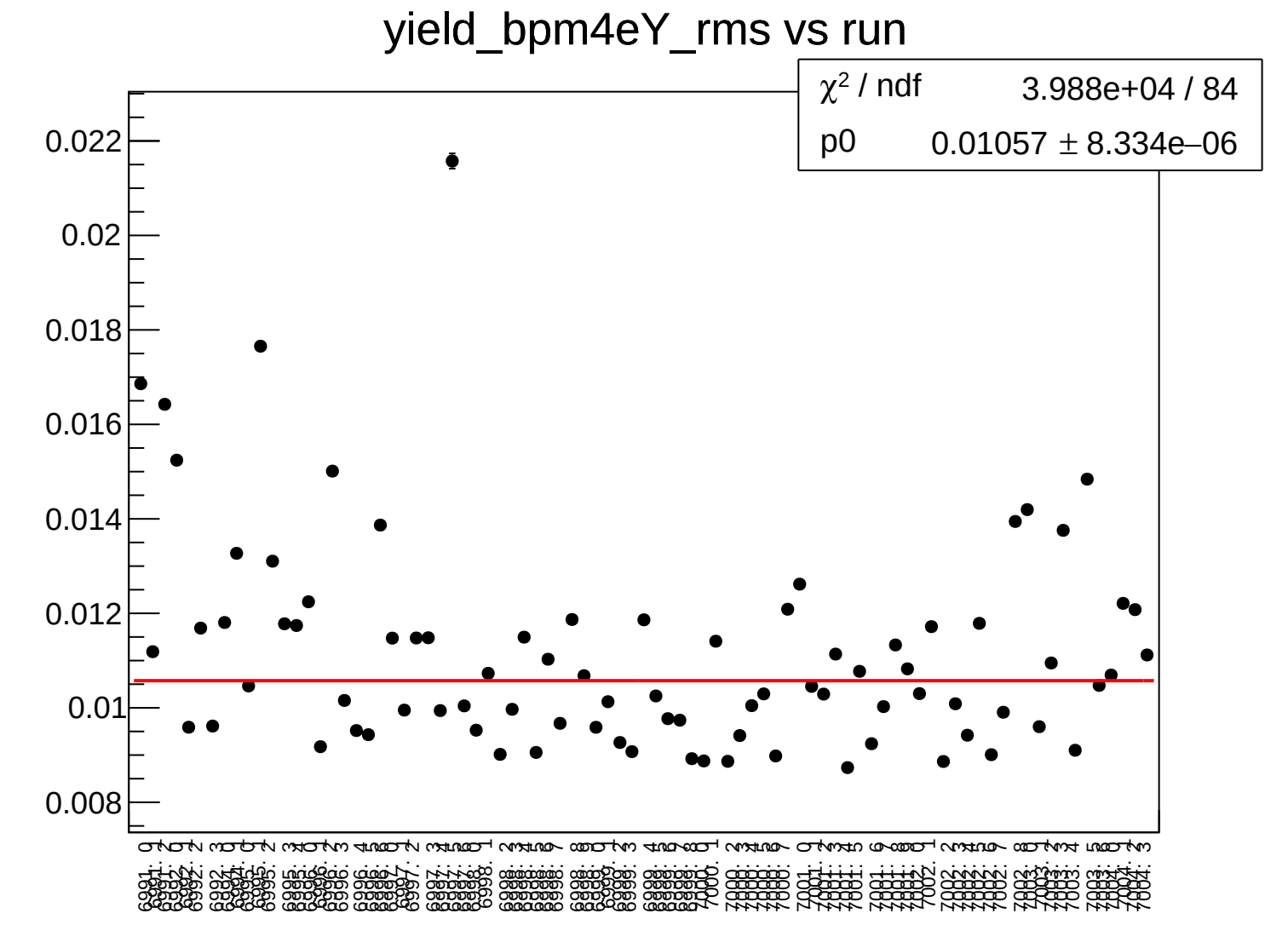

yield_bpm4aY_rms vs run
χ² / ndf 2.91e+04 / 84
p0 0.01194 ± 9.381e−06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

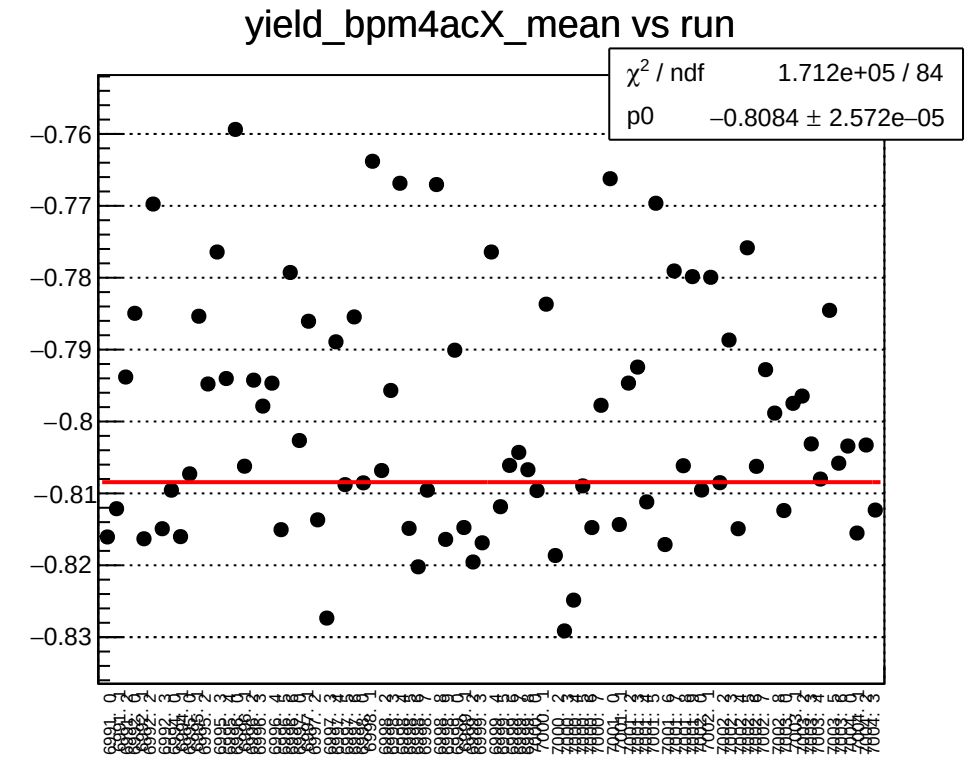

yield_bpm4eX_mean vs run
χ² / ndf 1.729e+05 / 84
p0 −0.04413 ± 2.552e−05
pull
Entries 85
Mean 38.74
Std Dev 27.19

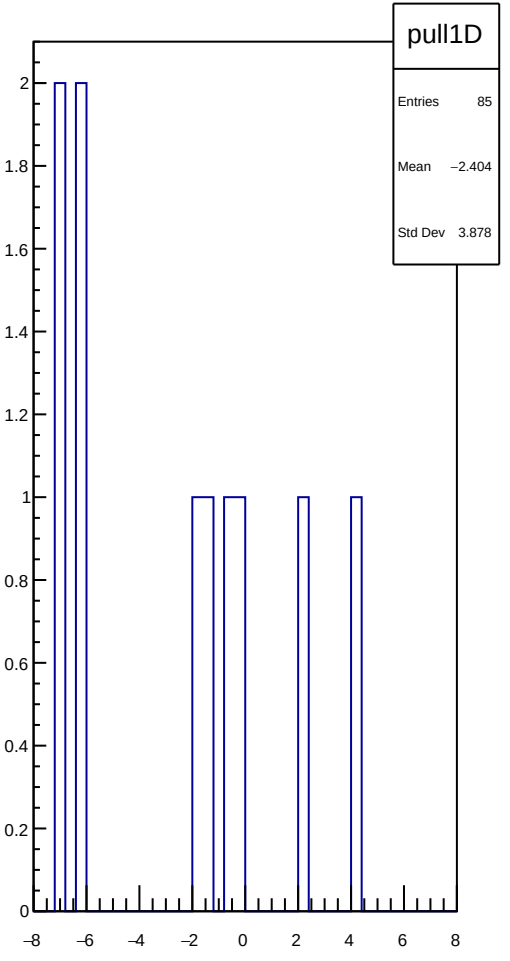

pull1D
Entries 85
Mean −1.782
Std Dev 3.55

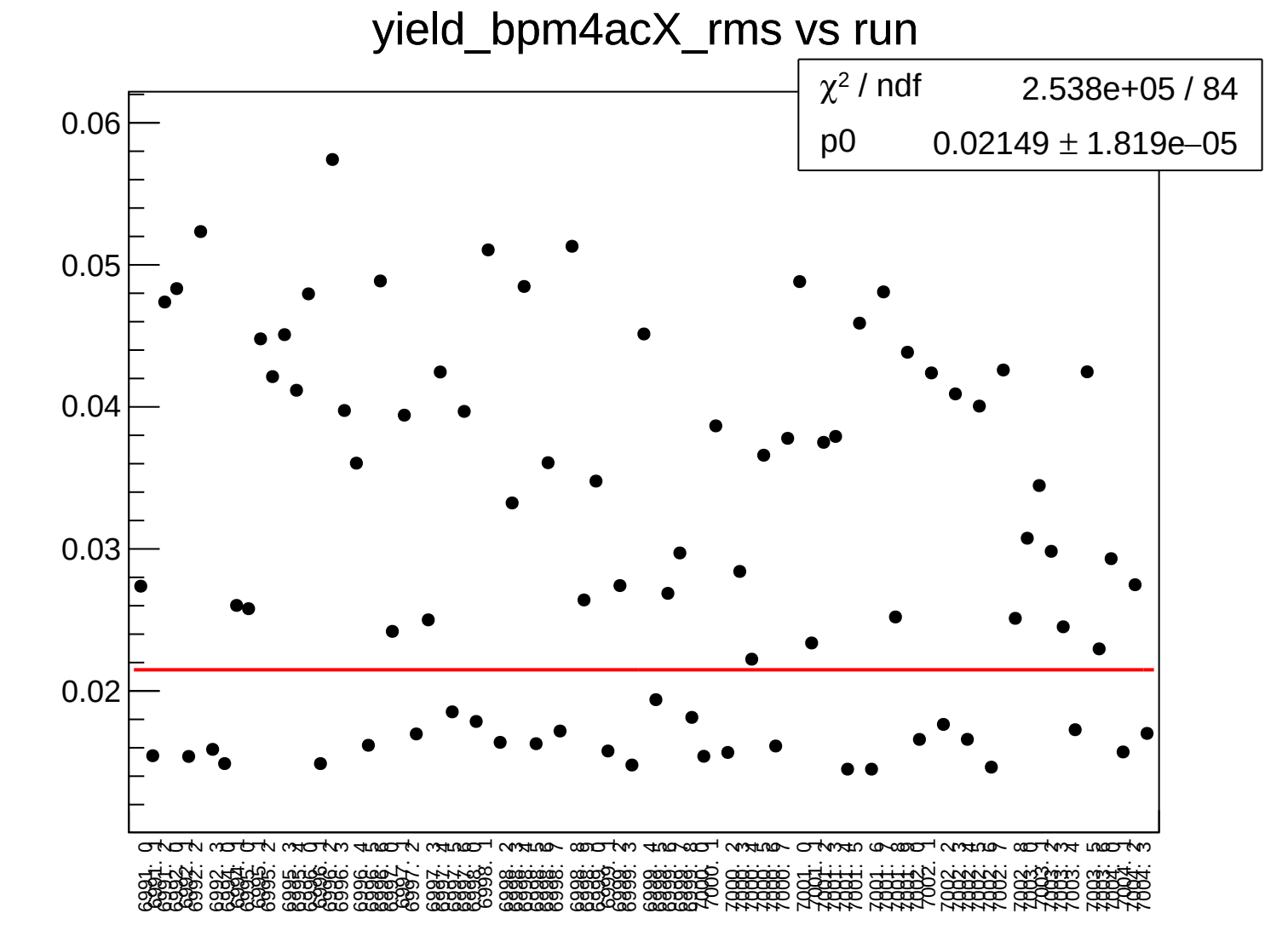

yield_bpm4eX_rms vs run
χ² / ndf 2.41e+05 / 84
p0 0.02142 ± 1.805e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

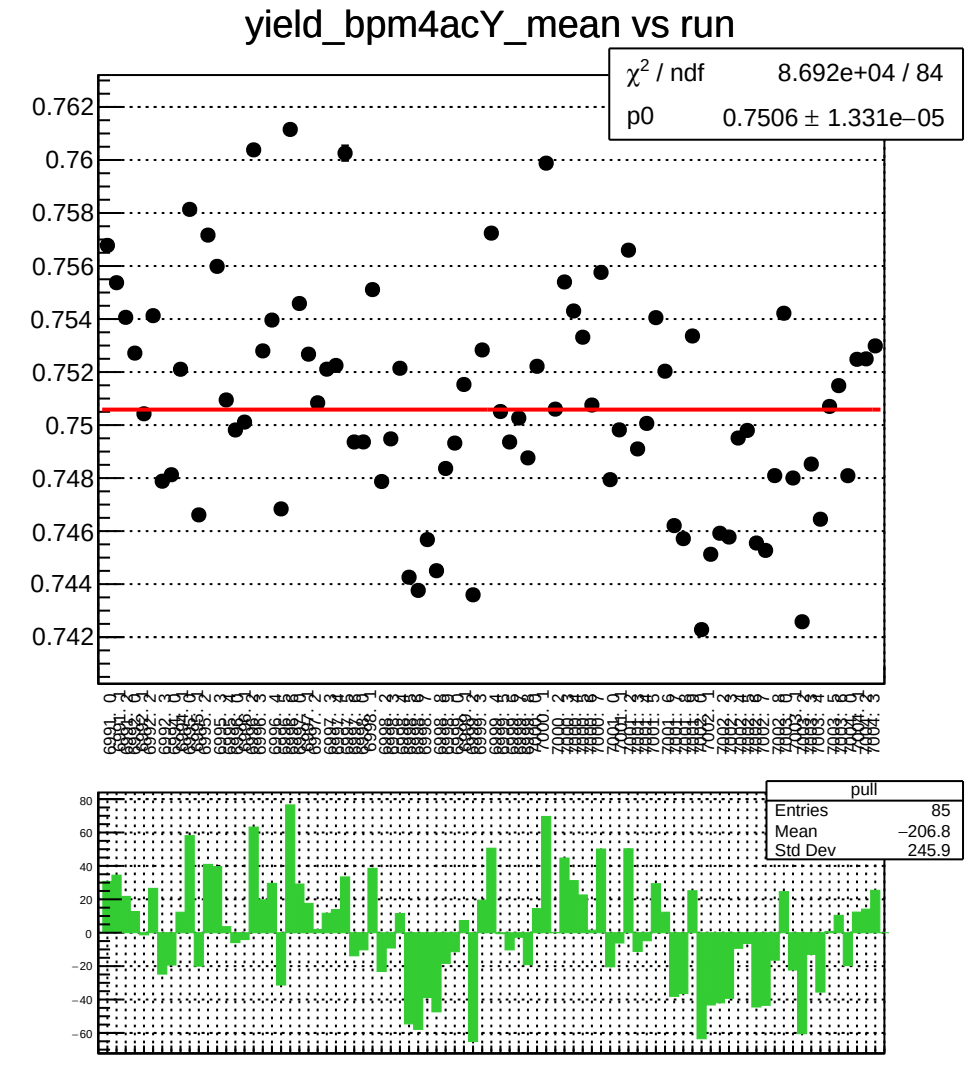

yield_bpm4eY_mean vs run
χ² / ndf 5.242e+04 / 84
p0 0.3375 ± 1.179e−05
0.348
0.346
0.344
0.342
0.34
0.338
0.336
0.334
0.332
0.33
pull
Entries 85
Mean 14.3
Std Dev 22.17
60
40
20
0
−20
−40
pull1D
Entries 85
Mean 1.544
Std Dev 4.042
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

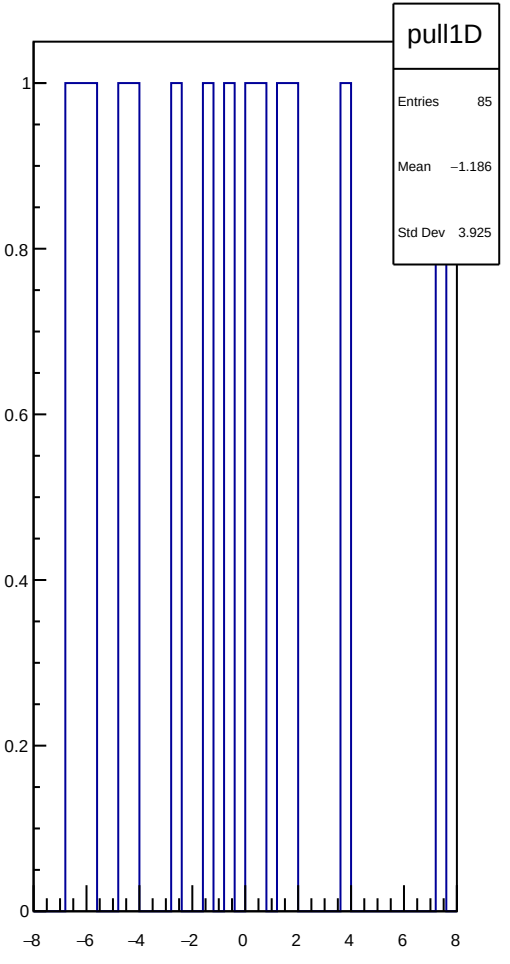

yield_bpm4eY_rms vs run
χ² / ndf 3.988e+04 / 84
p0 0.01057 ± 8.334e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

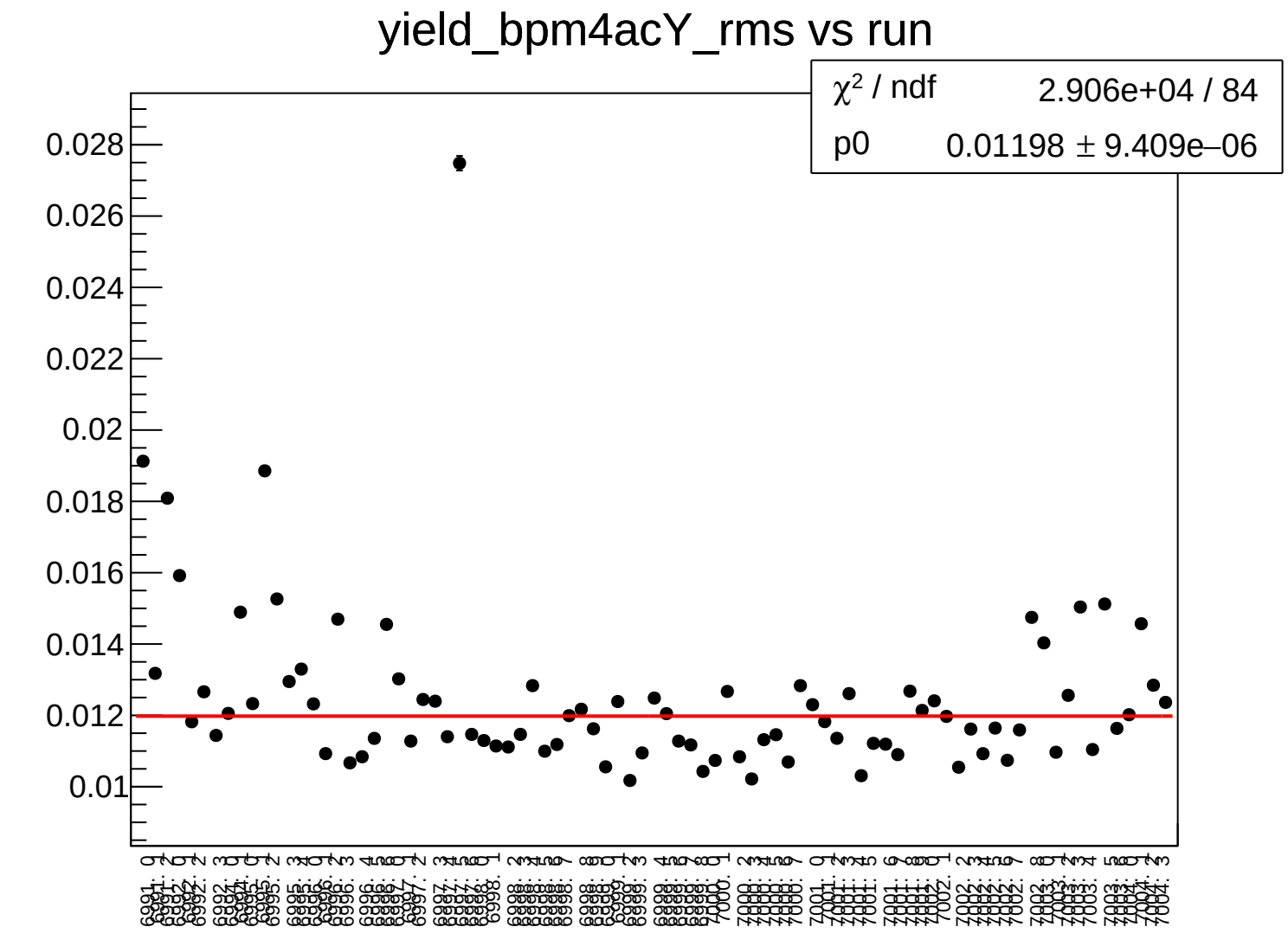

yield_bpm4acX_mean vs run
χ² / ndf 1.712e+05 / 84
p0 −0.8084 ± 2.572e−05
−0.76
−0.77
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
pull
Entries 85
Mean 42
Std Dev 25.33
100
80
60
40
20
0
−20
−40
−60
−80

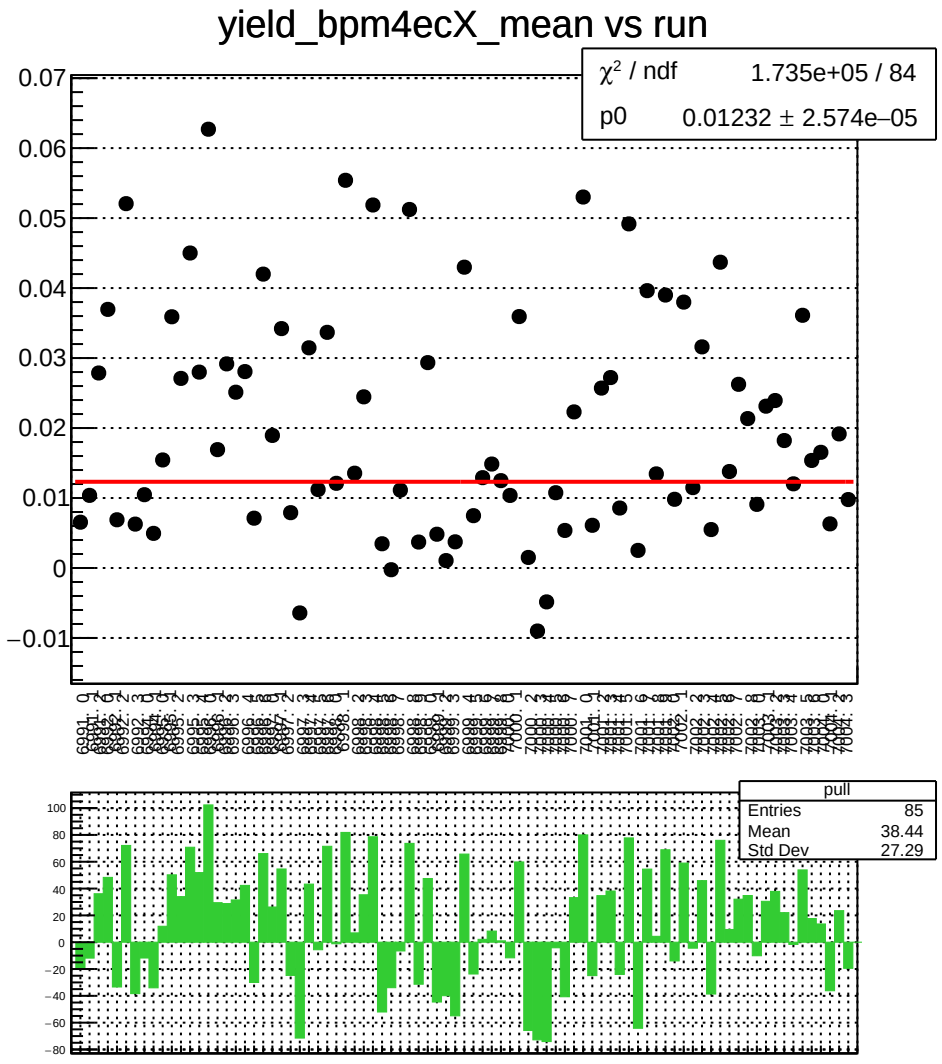

pull1D
Entries 85
Mean −2.404
Std Dev 3.878
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

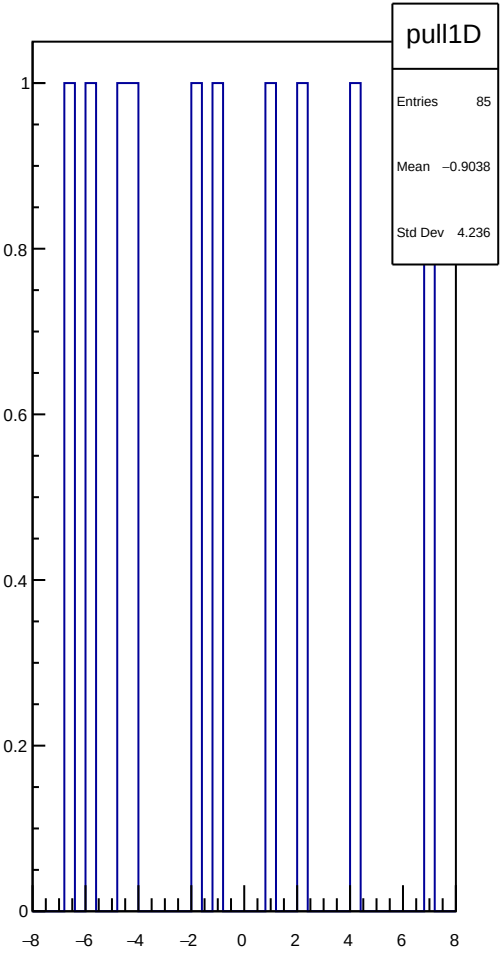

yield_bpm4acX_rms vs run
χ² / ndf 2.538e+05 / 84
p0 0.02149 ± 1.819e−05
0.06
0.05
0.04
0.03
0.02

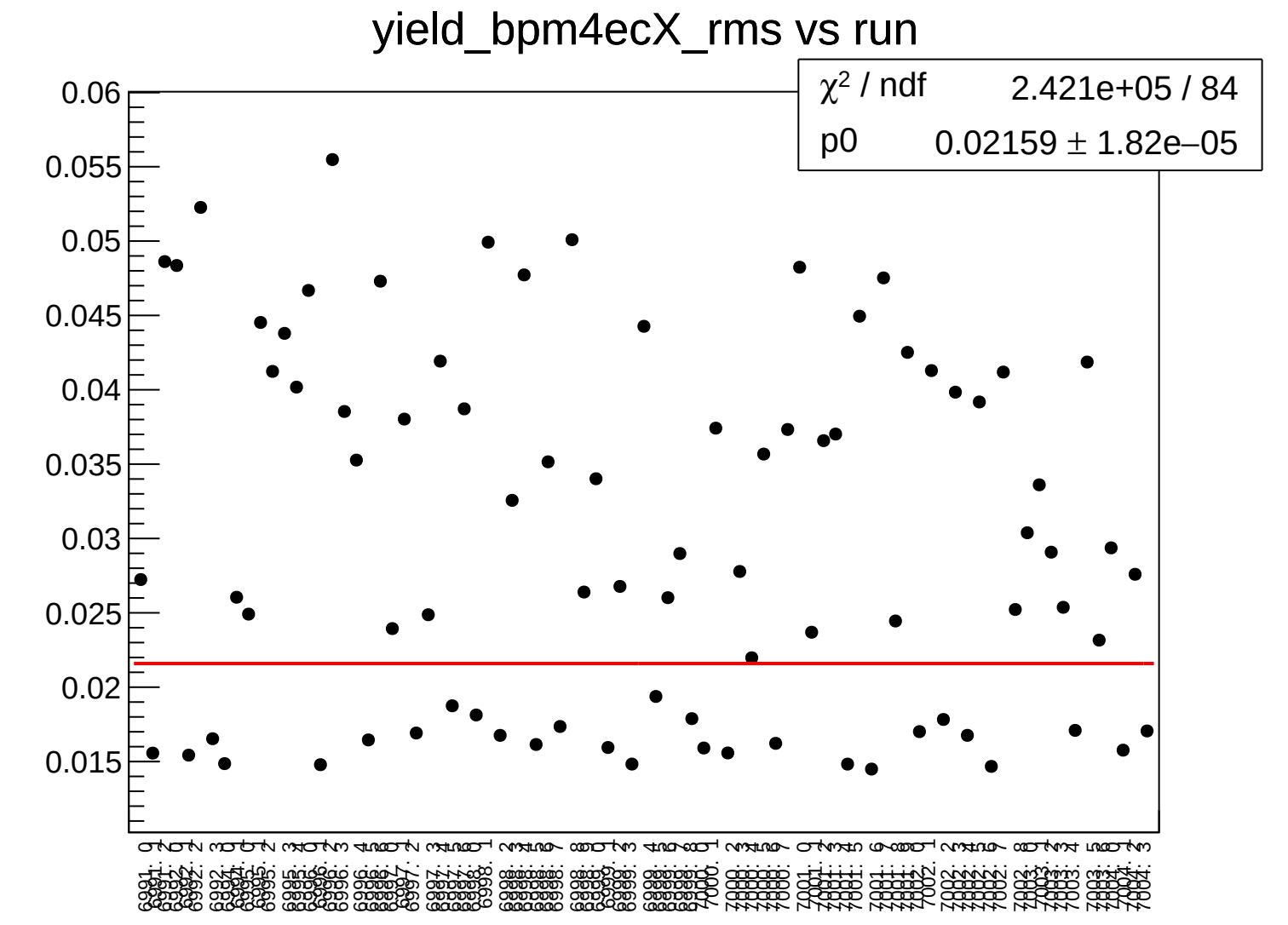

yield_bpm4acY_mean vs run
χ² / ndf 8.692e+04 / 84
p0 0.7506 ± 1.331e−05
0.762
0.76
0.758
0.756
0.754
0.752
0.75
0.748
0.746
0.744
0.742
pull
Entries 85
Mean −206.8
Std Dev 245.9
80
60
40
20
0
−20
−40
−60

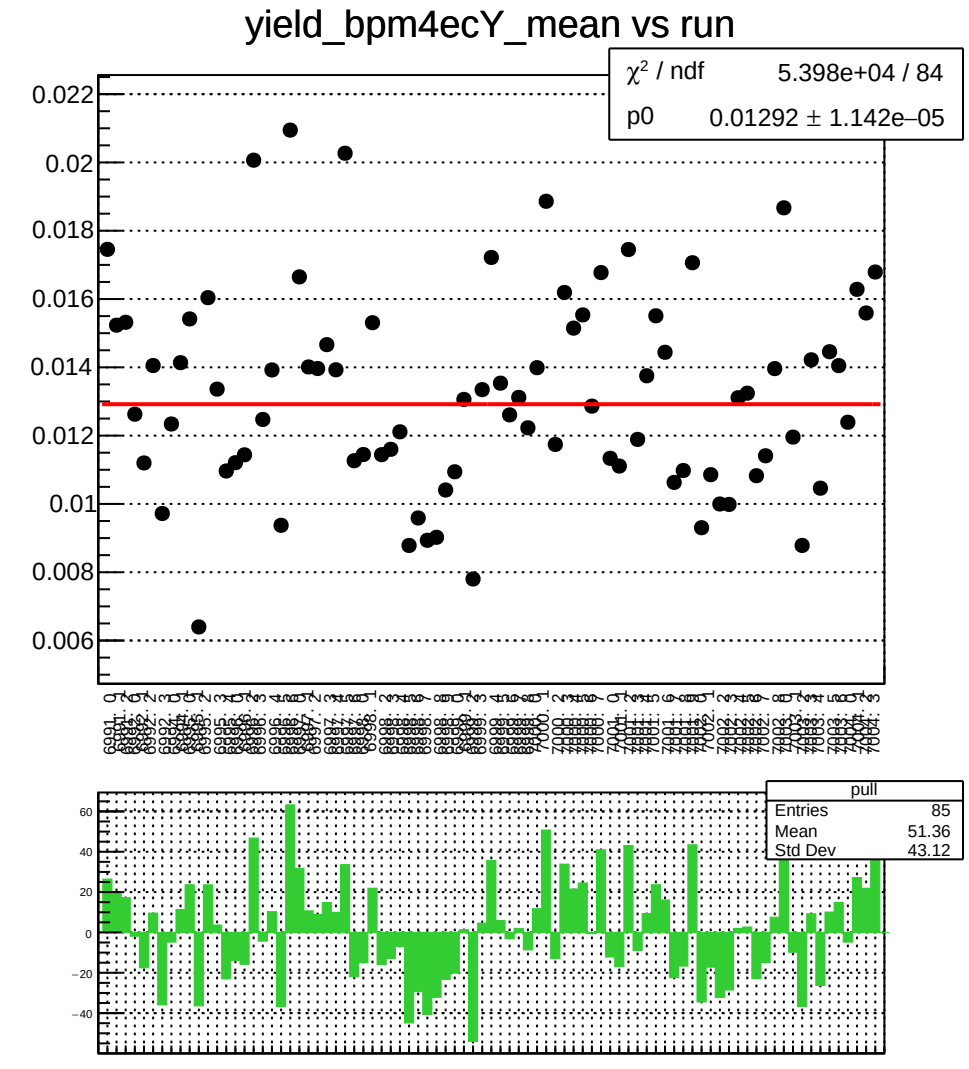

pull1D
Entries 85
Mean −1.186
Std Dev 3.925
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

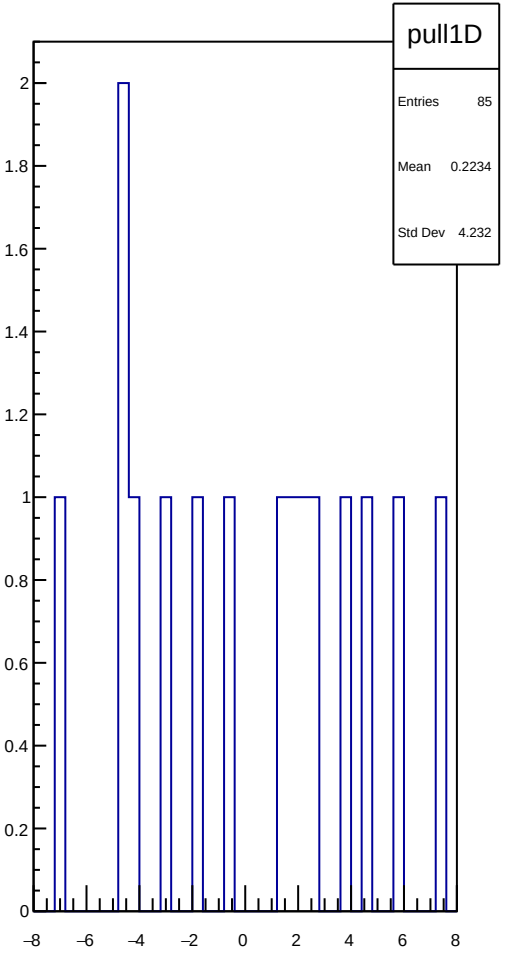

yield_bpm4acY_rms vs run
χ² / ndf 2.906e+04 / 84
p0 0.01198 ± 9.409e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

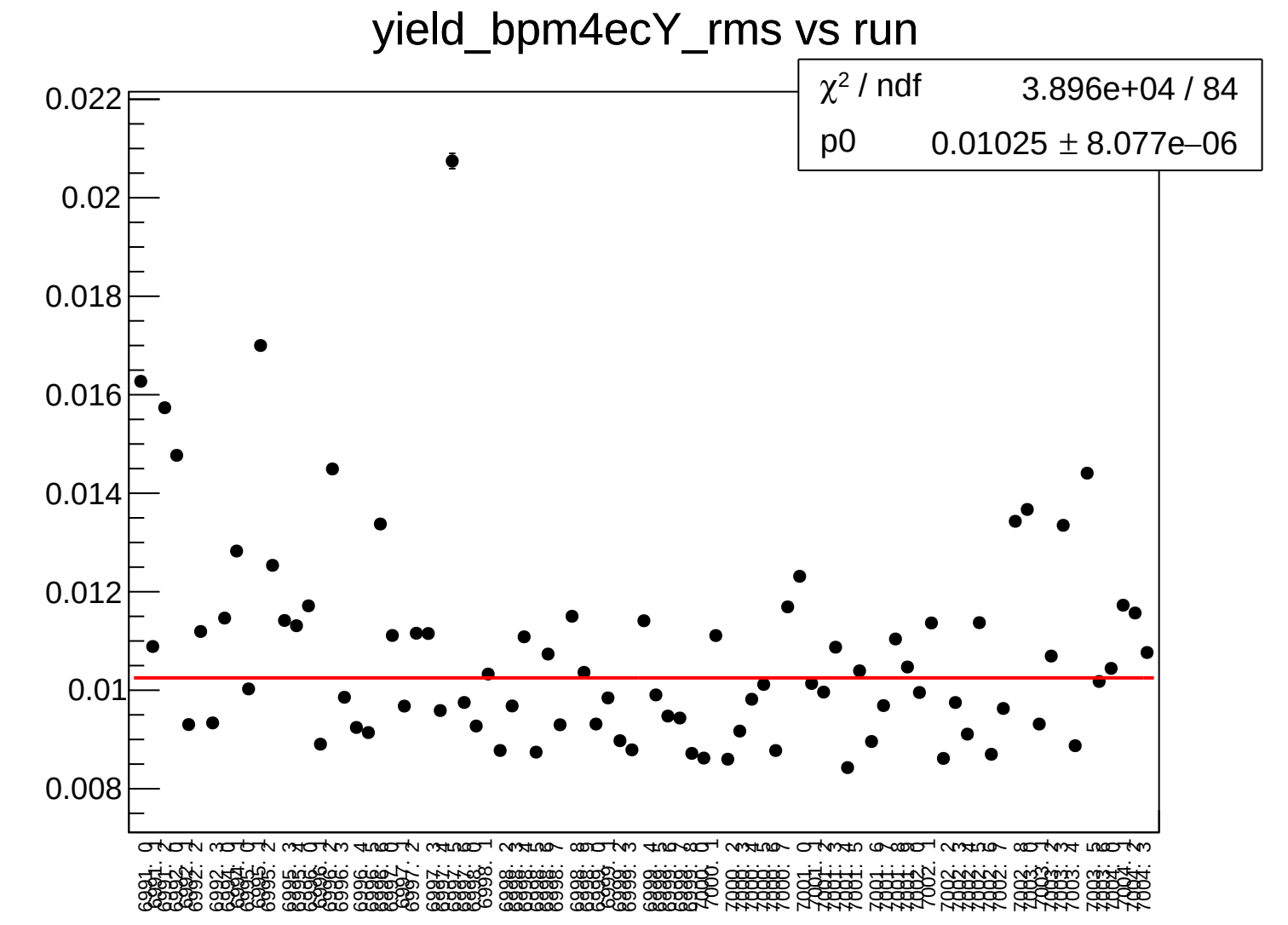

yield_bpm4ecX_mean vs run
χ² / ndf 1.735e+05 / 84
p0 0.01232 ± 2.574e−05
pull
Entries 85
Mean 38.44
Std Dev 27.29

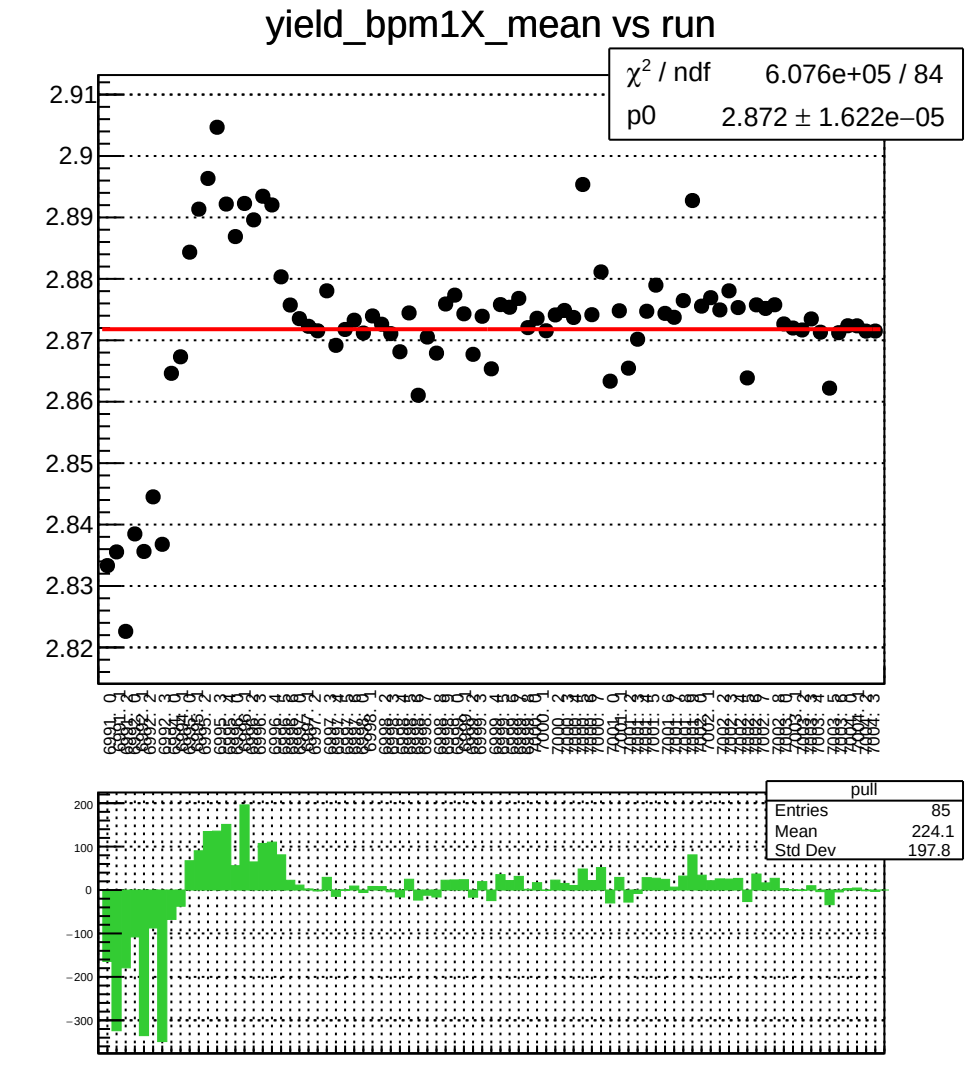

pull1D
Entries 85
Mean −0.9038
Std Dev 4.236

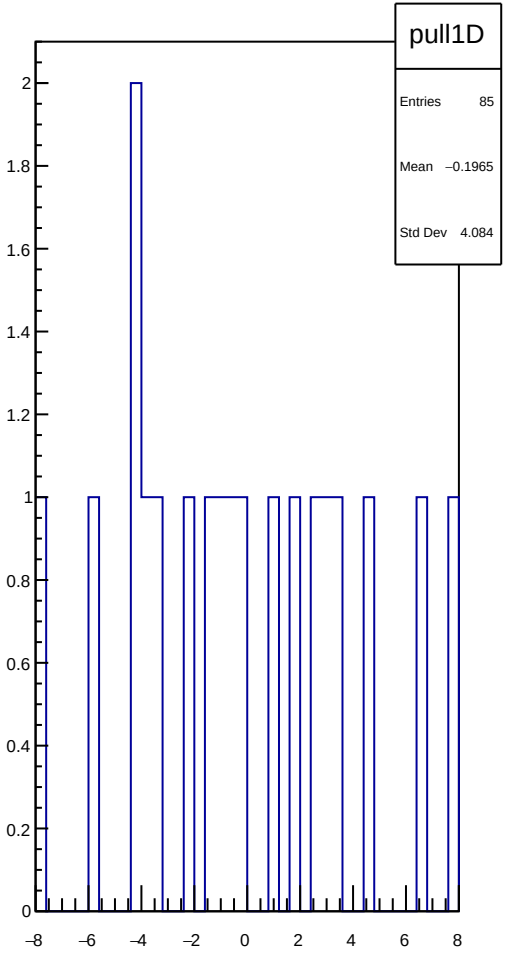

yield_bpm4ecX_rms vs run
χ² / ndf 2.421e+05 / 84
p0 0.02159 ± 1.82e−05
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

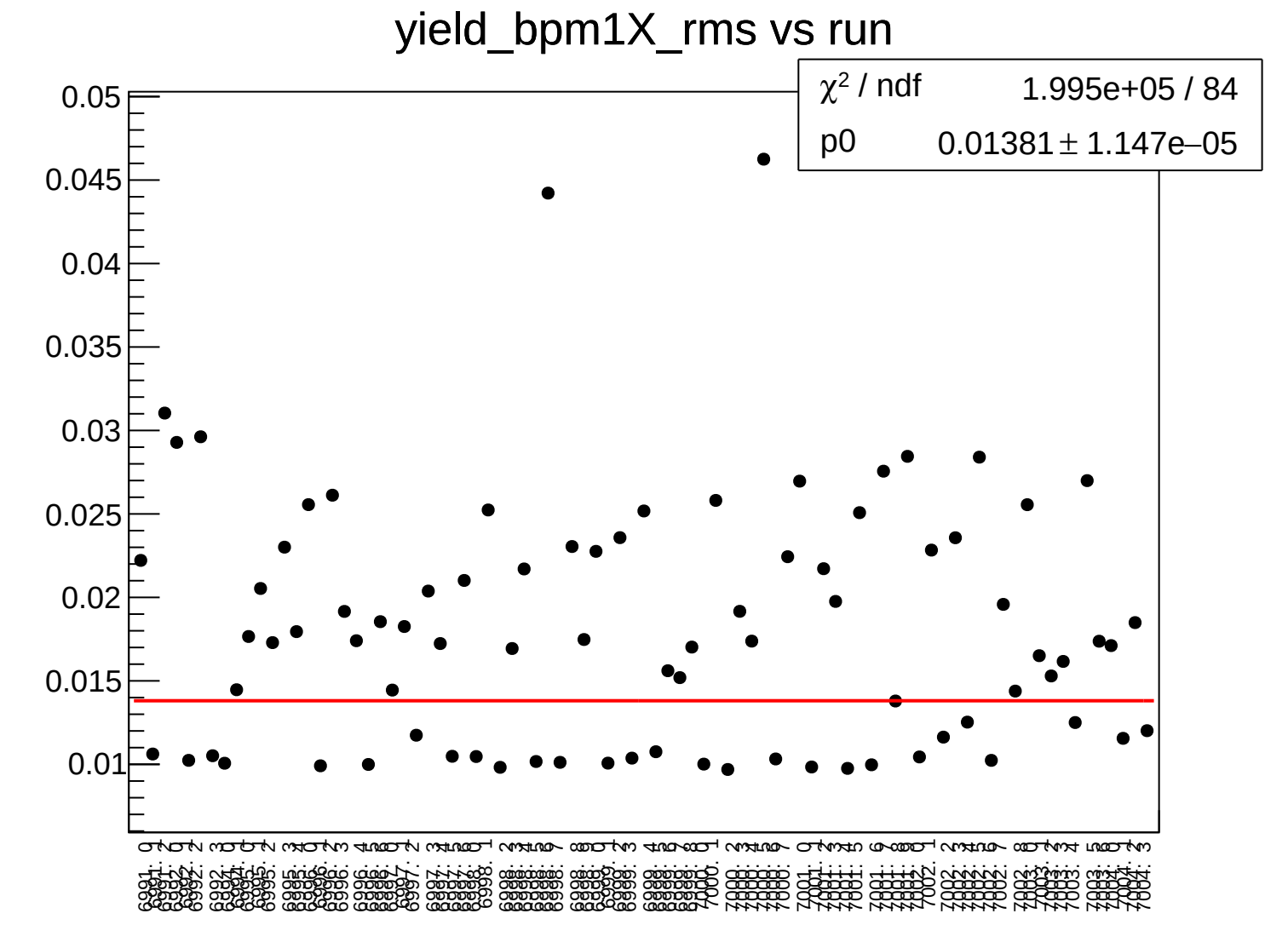

yield_bpm4ecY_mean vs run
χ² / ndf 5.398e+04 / 84
p0 0.01292 ± 1.142e−05
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
pull
Entries 85
Mean 51.36
Std Dev 43.12
60
40
20
0
−20
−40

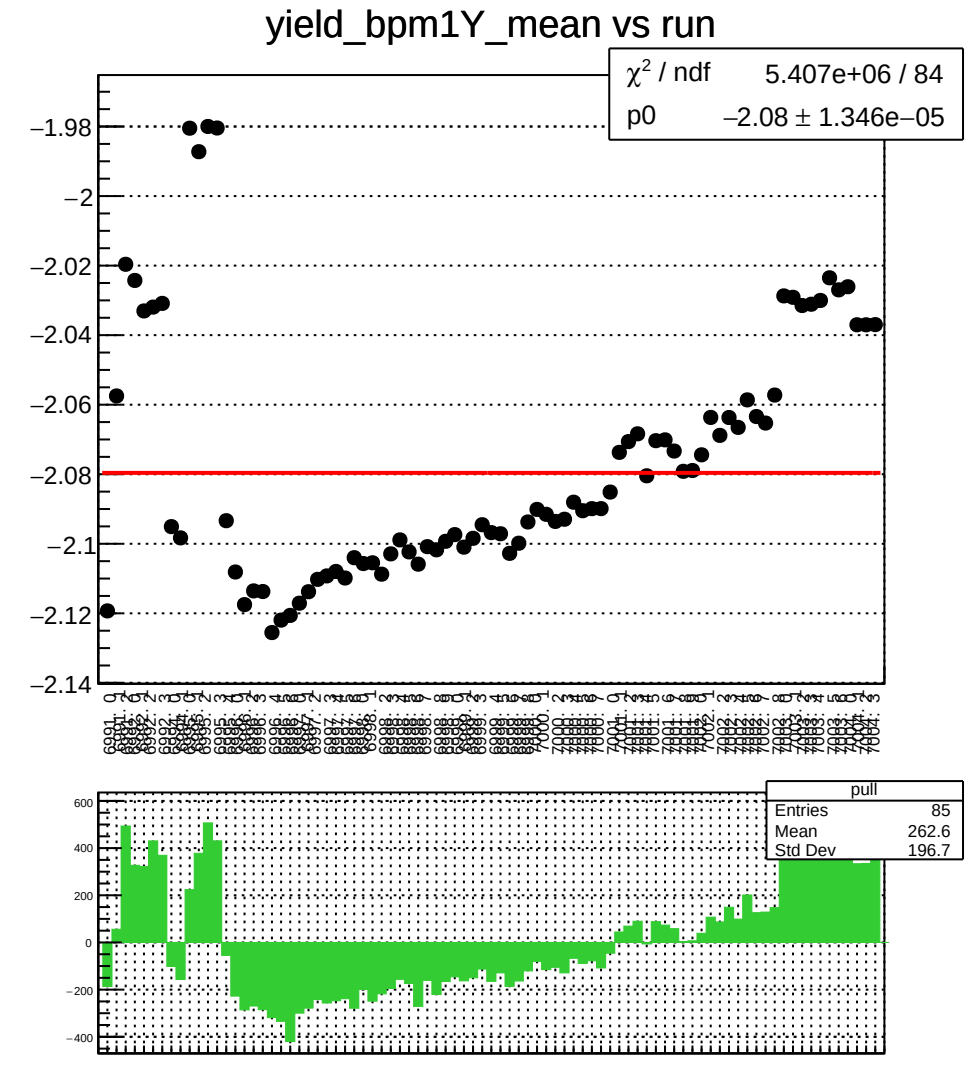

pull1D
Entries 85
Mean 0.2234
Std Dev 4.232
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

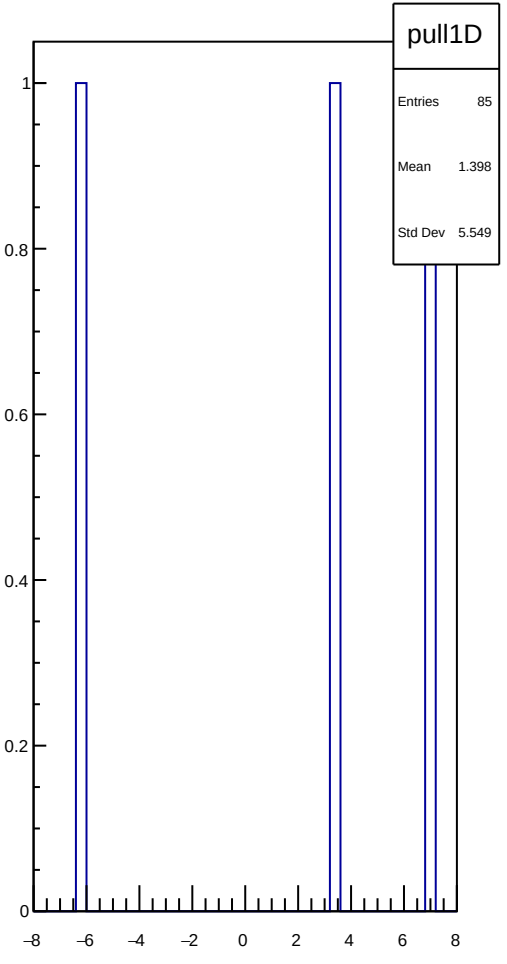

yield_bpm4ecY_rms vs run
χ² / ndf 3.896e+04 / 84
p0 0.01025 ± 8.077e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

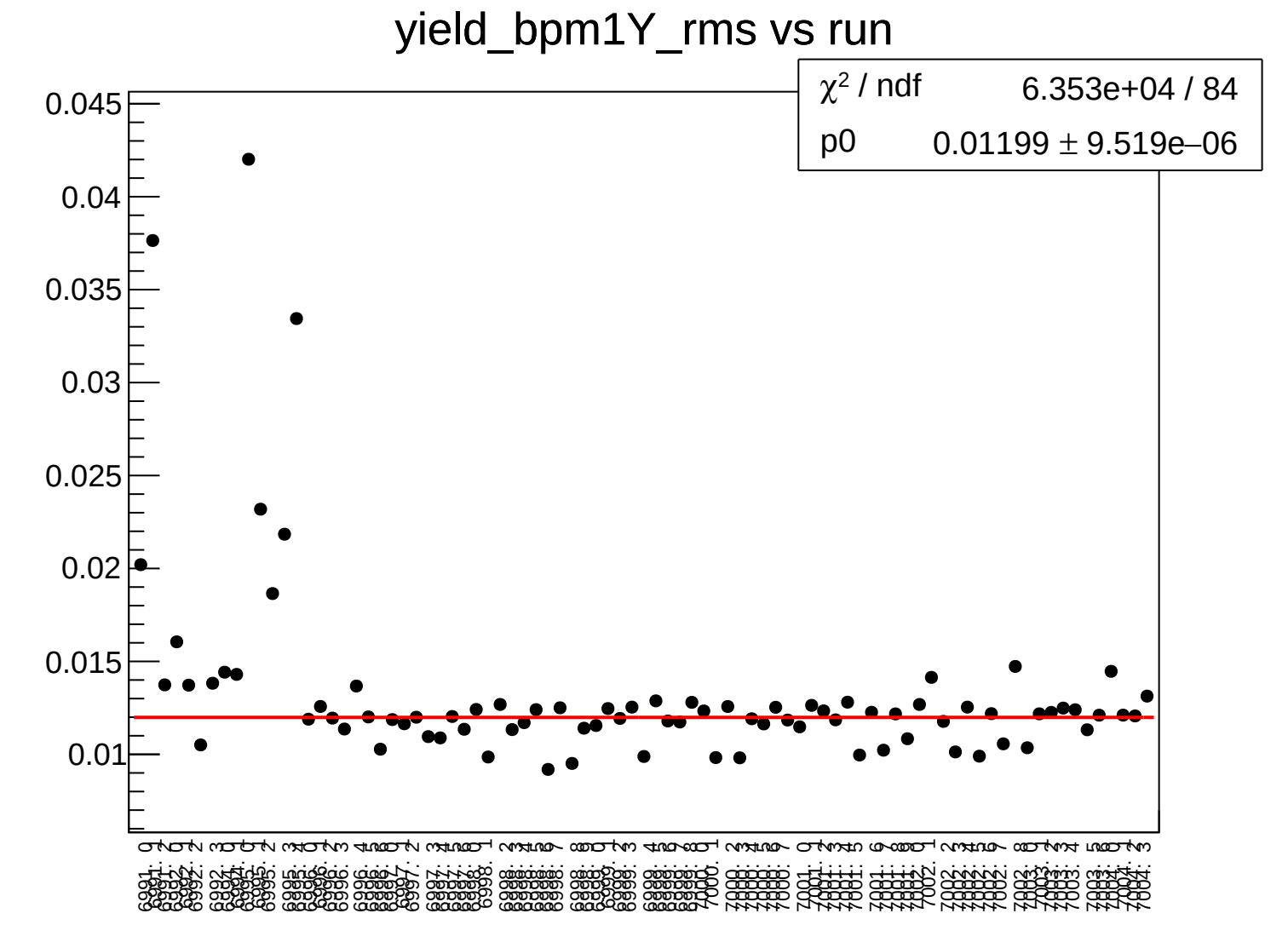

yield_bpm1X_mean vs run
χ² / ndf 6.076e+05 / 84
p0 2.872 ± 1.622e−05
2.91
2.9
2.89
2.88
2.87
2.86
2.85
2.84
2.83
2.82
pull
Entries 85
Mean 224.1
Std Dev 197.8
200
100
0
−100
−200
−300

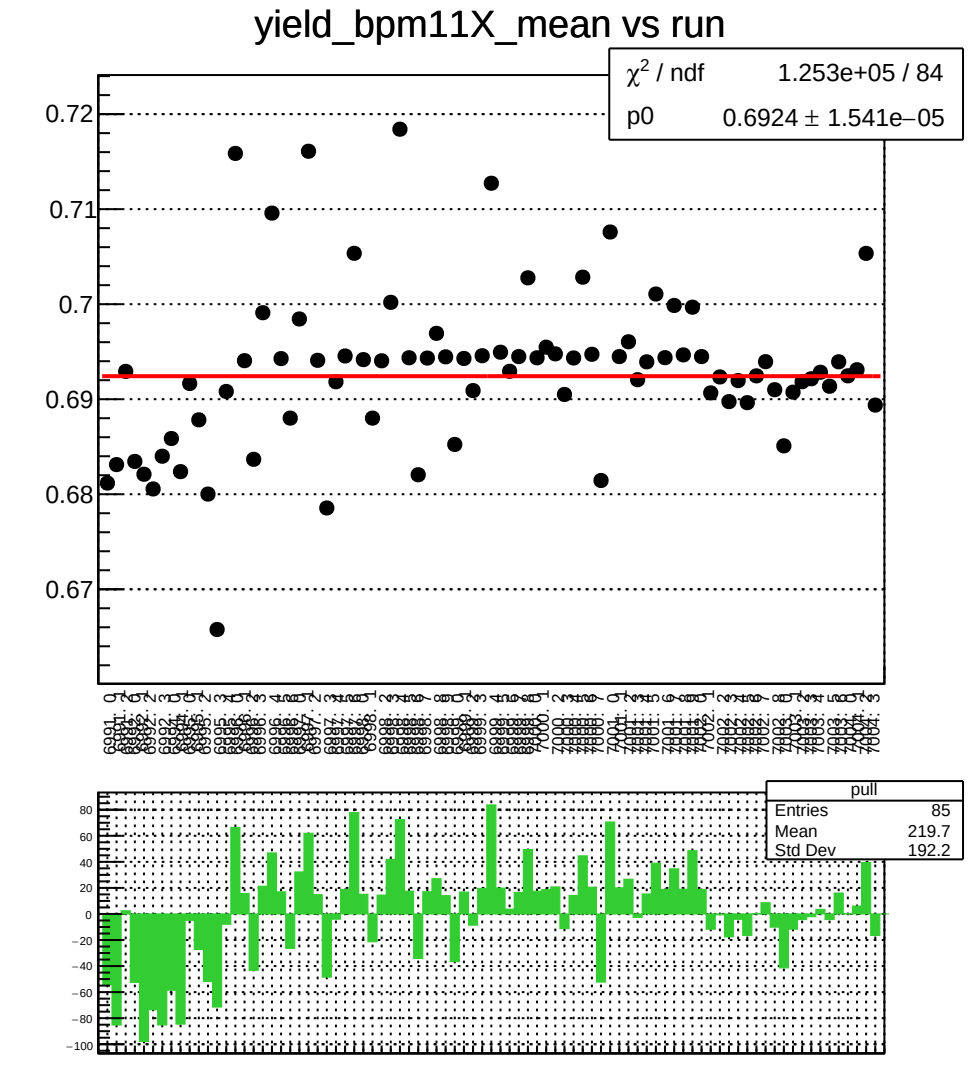

pull1D
Entries 85
Mean −0.1965
Std Dev 4.084
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

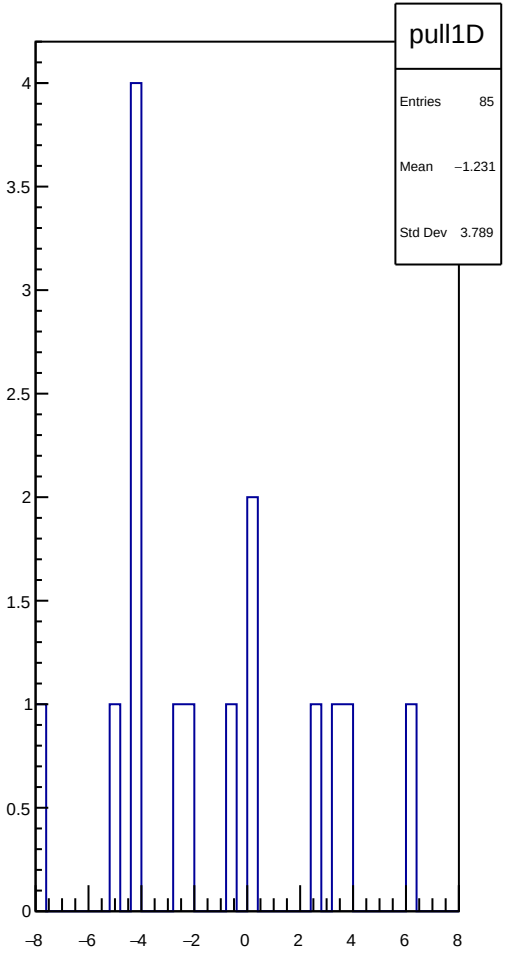

yield_bpm1X_rms vs run
χ² / ndf 1.995e+05 / 84
p0 0.01381 ± 1.147e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

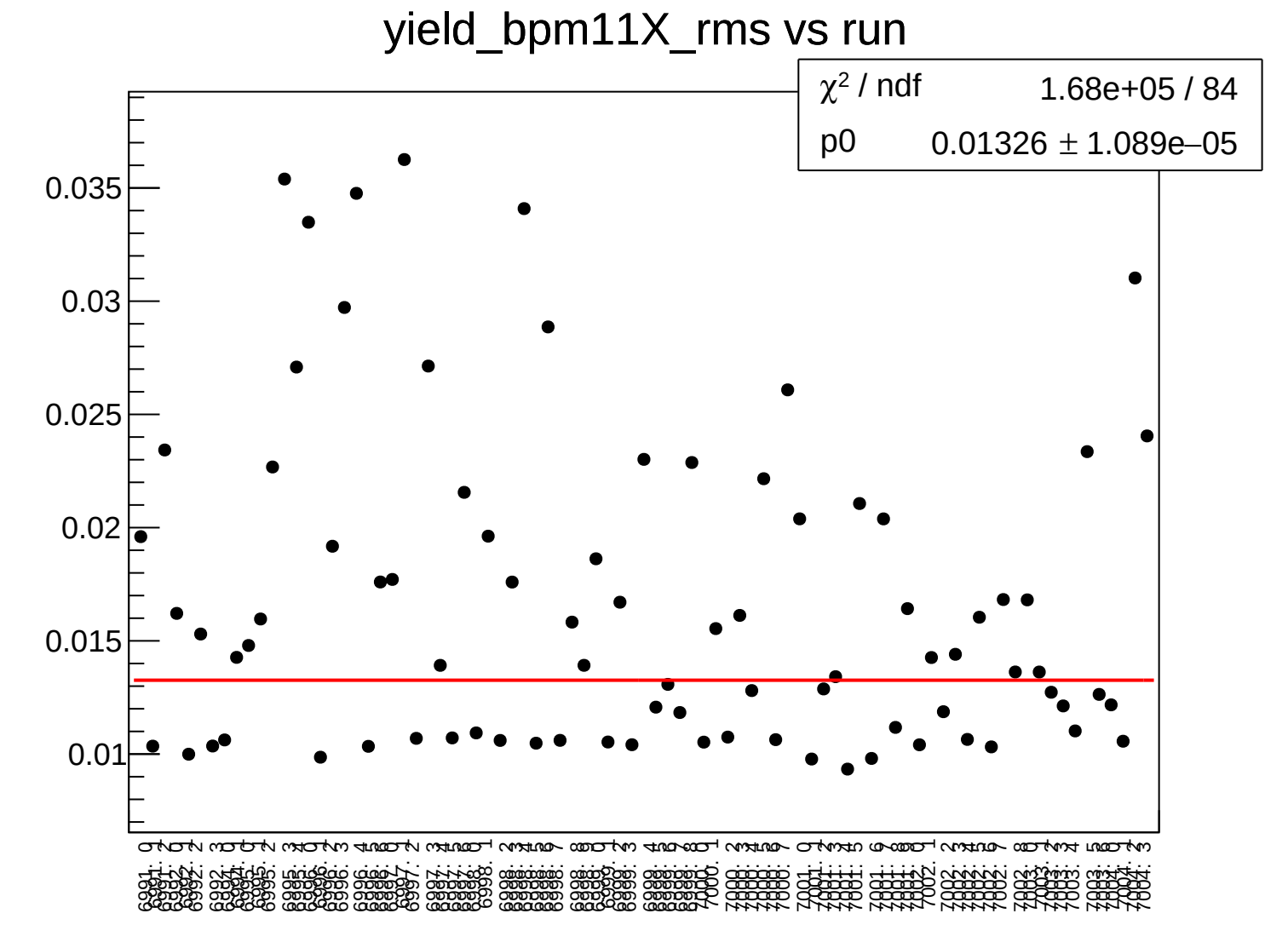

yield_bpm1Y_mean vs run
χ² / ndf 5.407e+06 / 84
p0 −2.08 ± 1.346e−05
−1.98
−2
−2.02
−2.04
−2.06
−2.08
−2.1
−2.12
−2.14
pull
Entries 85
Mean 262.6
Std Dev 196.7
600
400
200
0
−200
−400

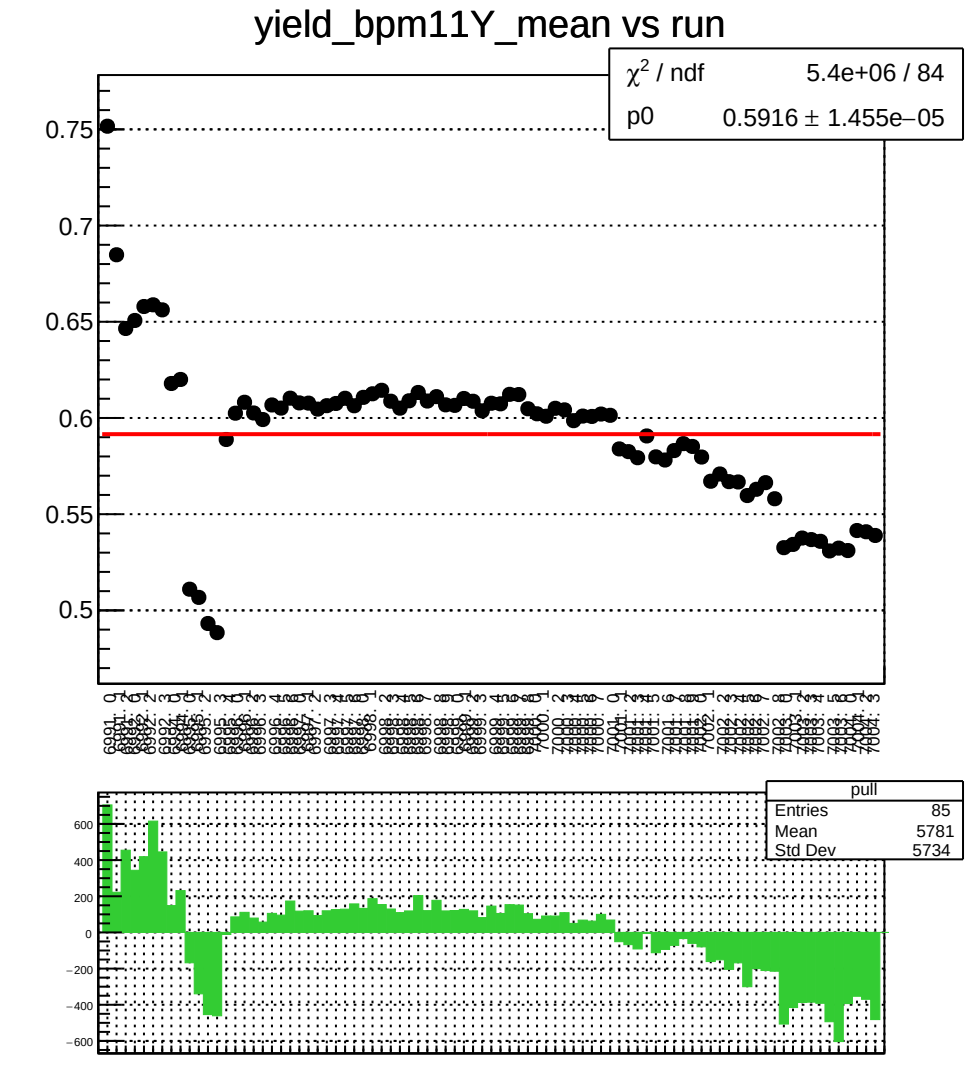

pull1D
Entries 85
Mean 1.398
Std Dev 5.549
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

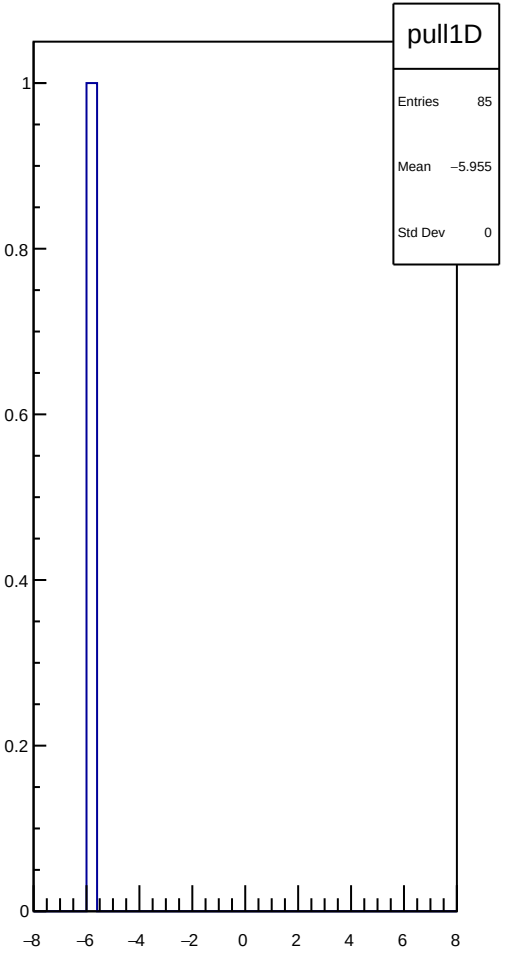

yield_bpm1Y_rms vs run
χ² / ndf 6.353e+04 / 84
p0 0.01199 ± 9.519e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

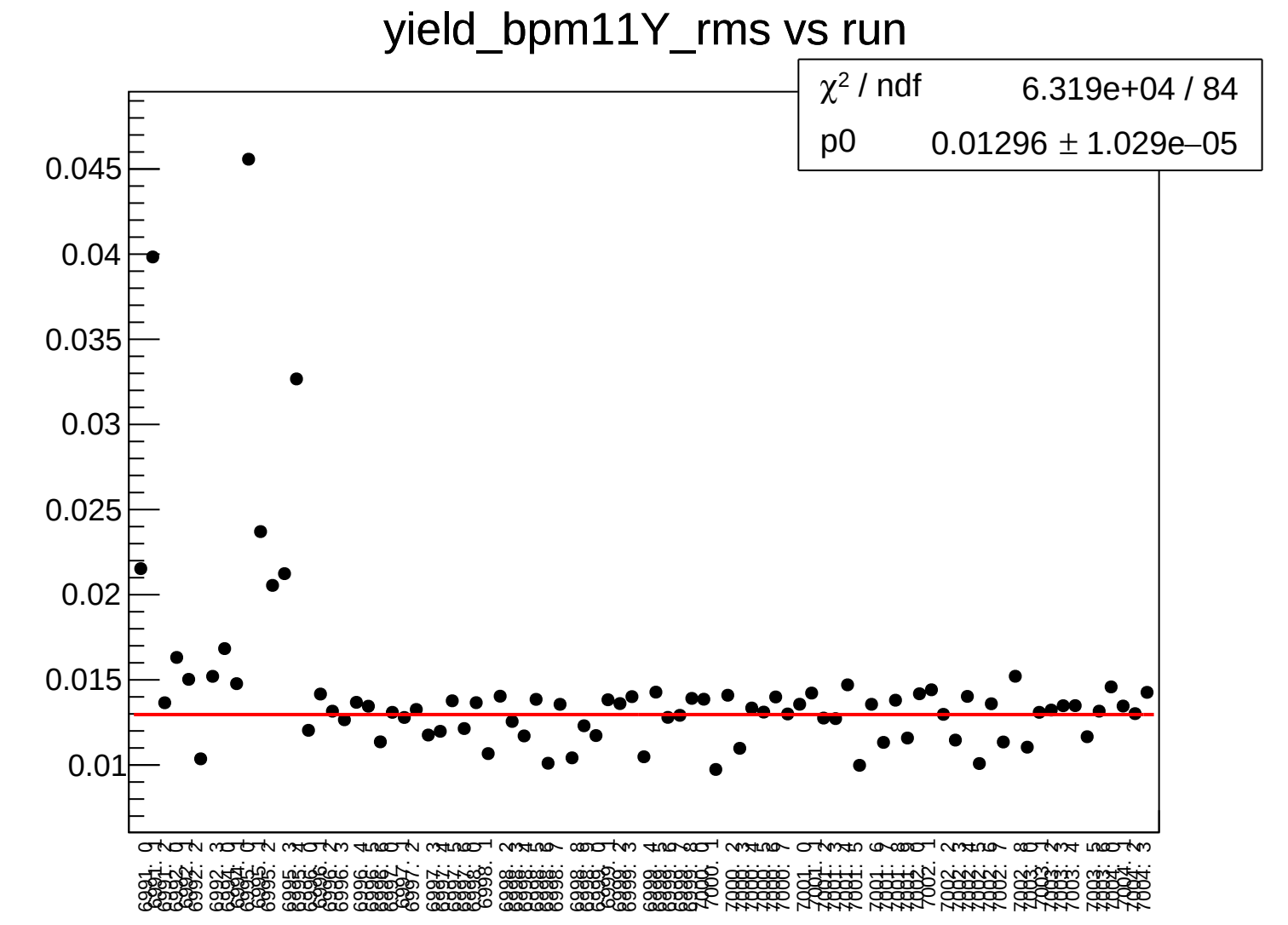

yield_bpm11X_mean vs run
χ² / ndf 1.253e+05 / 84
p0 0.6924 ± 1.541e−05
0.72
0.71
0.7
0.69
0.68
0.67
pull
Entries 85
Mean 219.7
Std Dev 192.2
80
60
40
20
0
−20
−40
−60
−80
−100

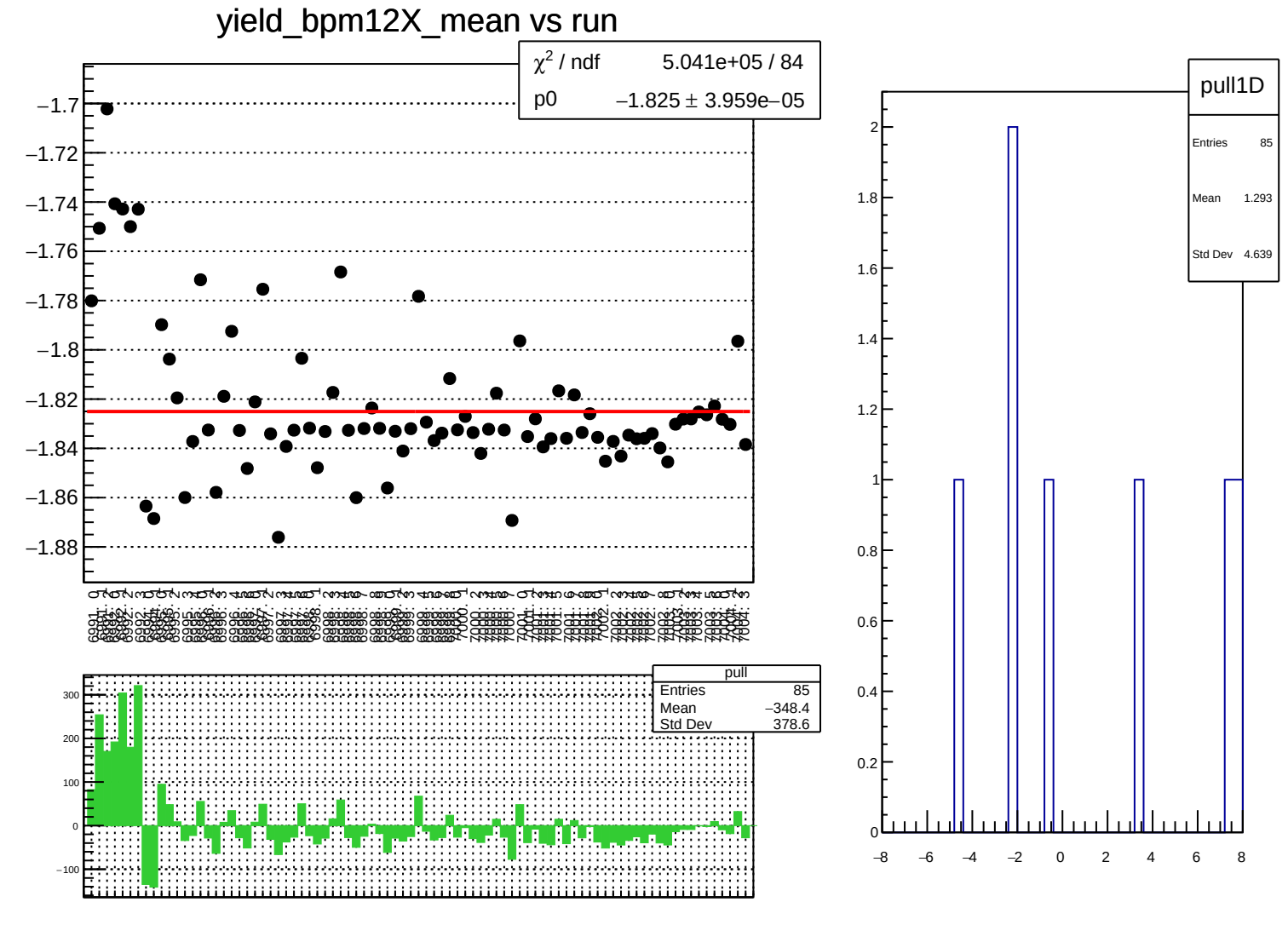

pull1D
Entries 85
Mean −1.231
Std Dev 3.789
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

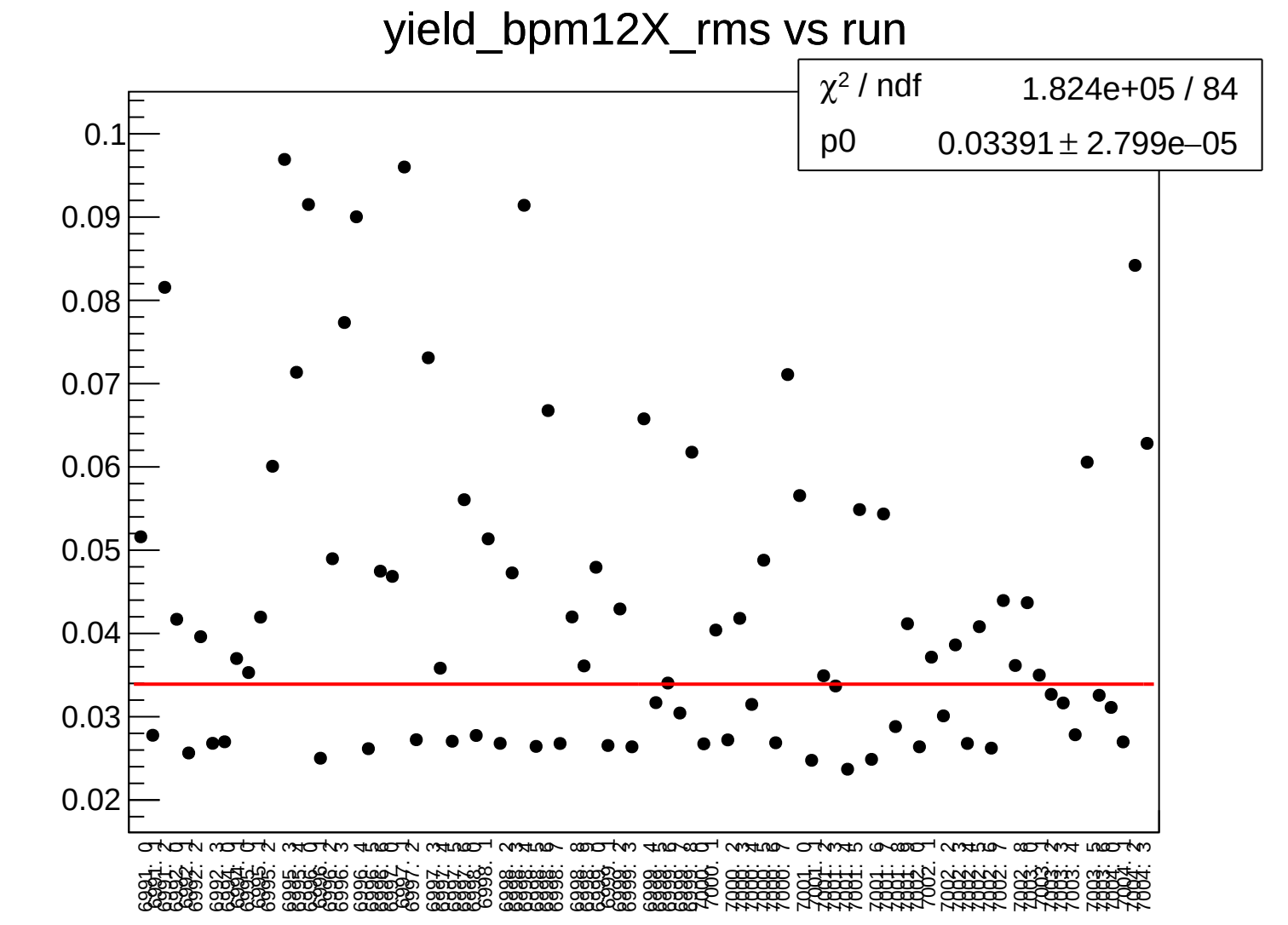

yield_bpm11X_rms vs run
χ² / ndf 1.68e+05 / 84
p0 0.01326 ± 1.089e−05
0.035
0.03
0.025
0.02
0.015
0.01

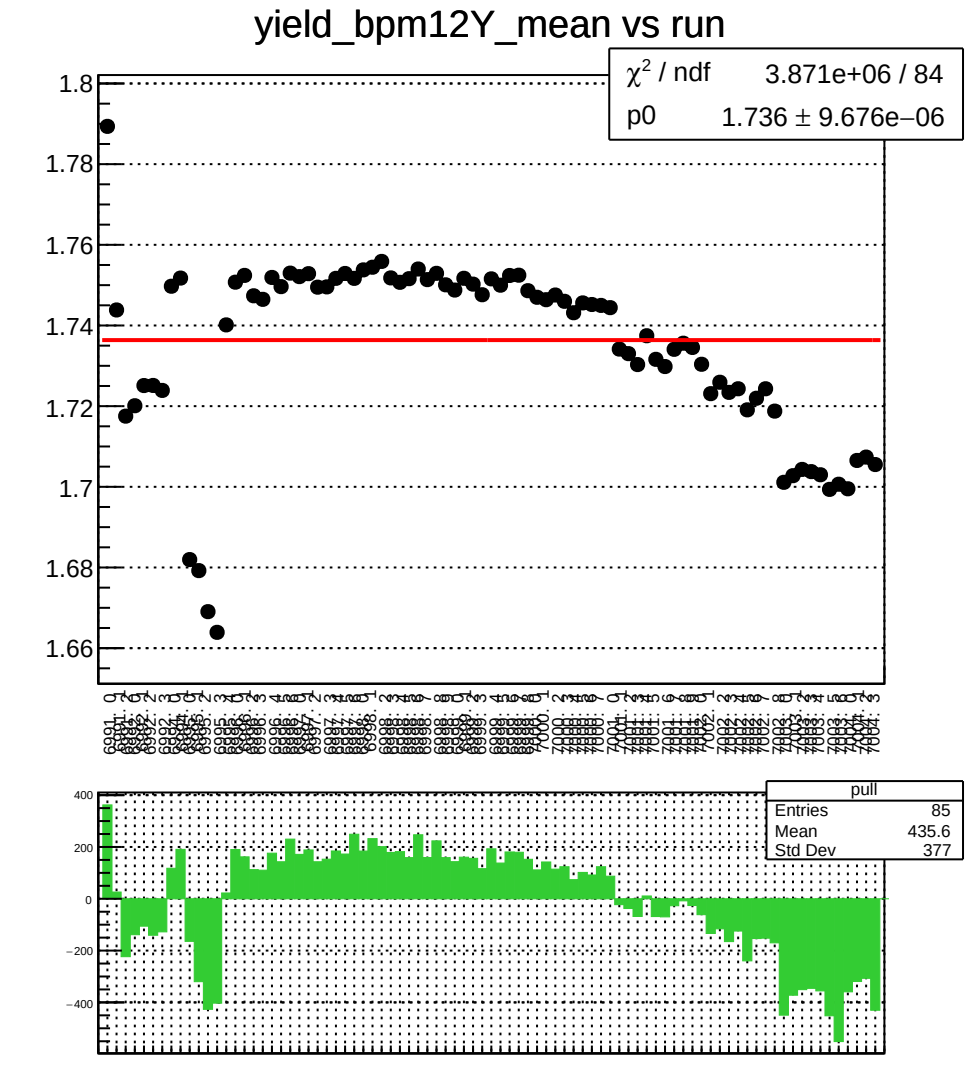

yield_bpm11Y_mean vs run
χ² / ndf 5.4e+06 / 84
p0 0.5916 ± 1.455e−05
0.75
0.7
0.65
0.6
0.55
0.5
pull
Entries 85
Mean 5781
Std Dev 5734
600
400
200
0
−200
−400
−600

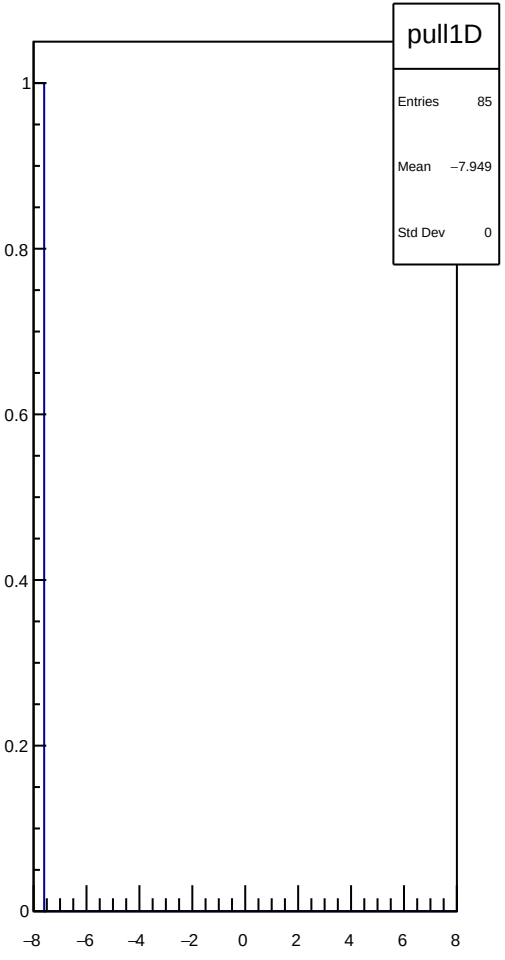

pull1D
Entries 85
Mean −5.955
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

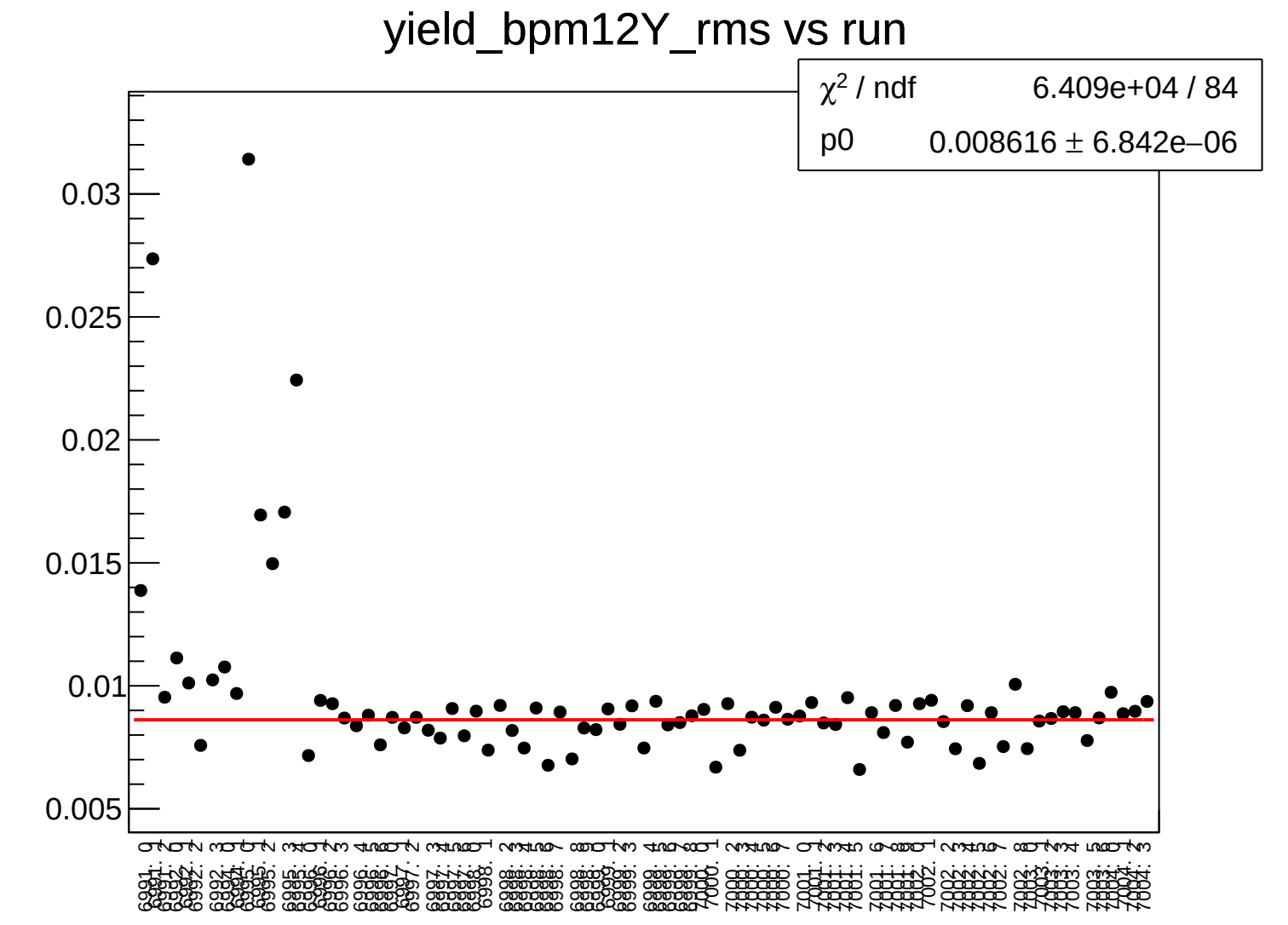

yield_bpm11Y_rms vs run
χ² / ndf 6.319e+04 / 84
p0 0.01296 ± 1.029e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

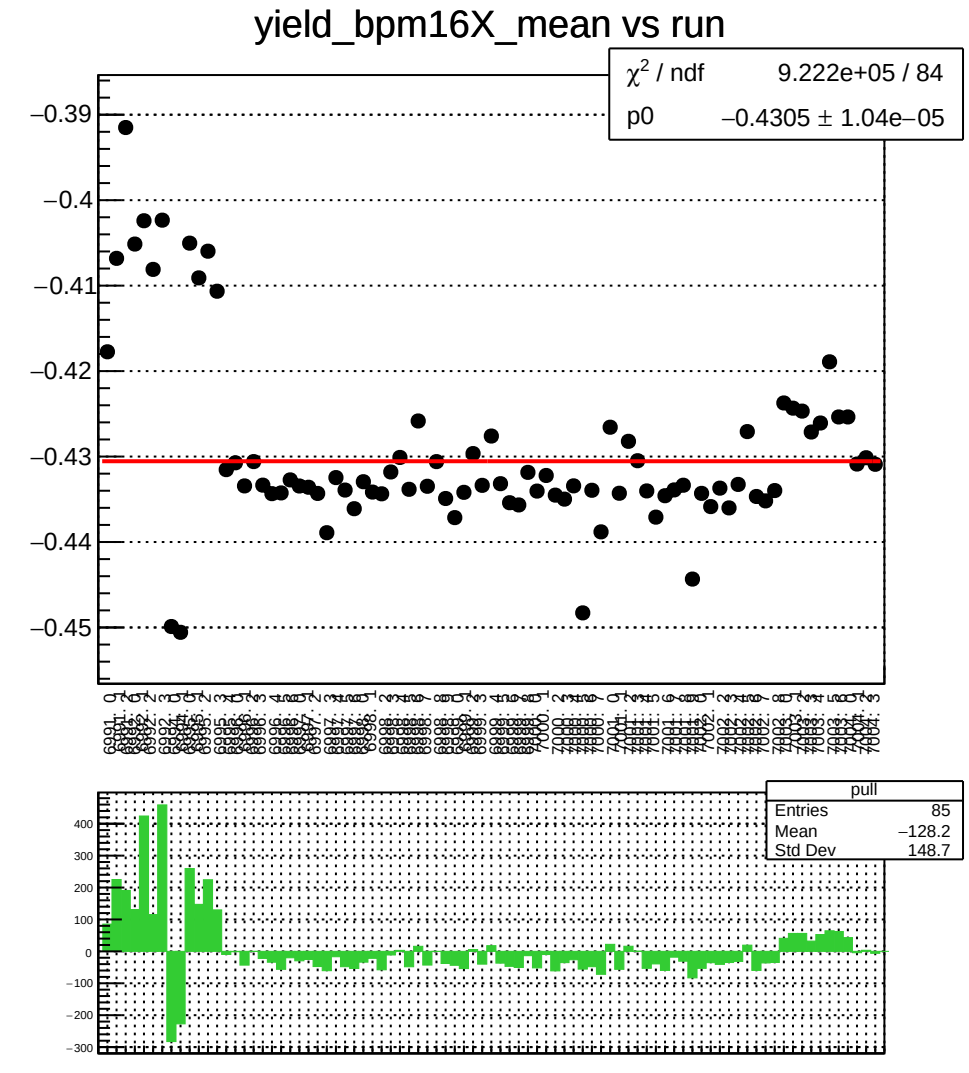

yield_bpm12X_mean vs run
χ² / ndf 5.041e+05 / 84
p0 −1.825 ± 3.959e−05
−1.7
−1.72
−1.74
−1.76
−1.78
−1.8
−1.82
−1.84
−1.86
−1.88
pull
Entries 85
Mean −348.4
Std Dev 378.6
300
200
100
0
−100
pull1D
Entries 85
Mean 1.293
Std Dev 4.639
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

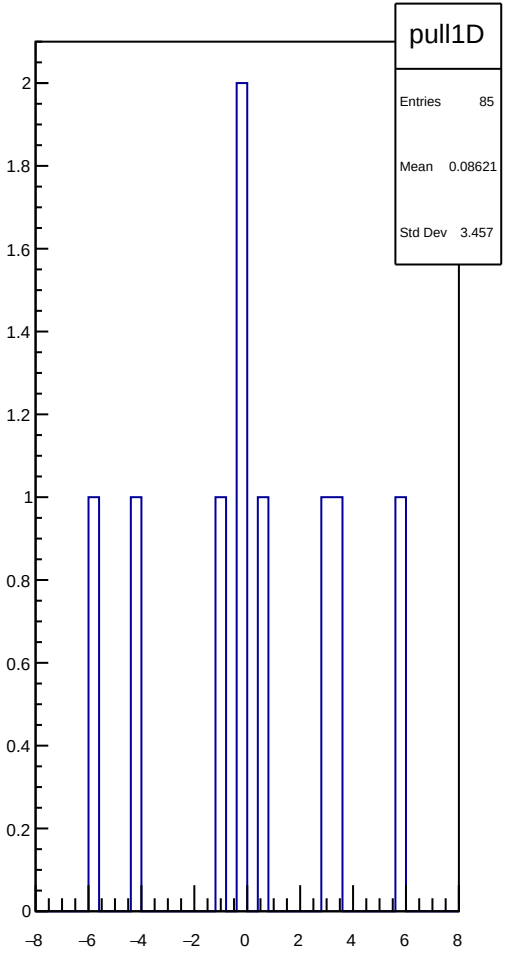

yield_bpm12X_rms vs run
χ^2 / ndf 1.824e+05 / 84
p0 0.03391 ± 2.799e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

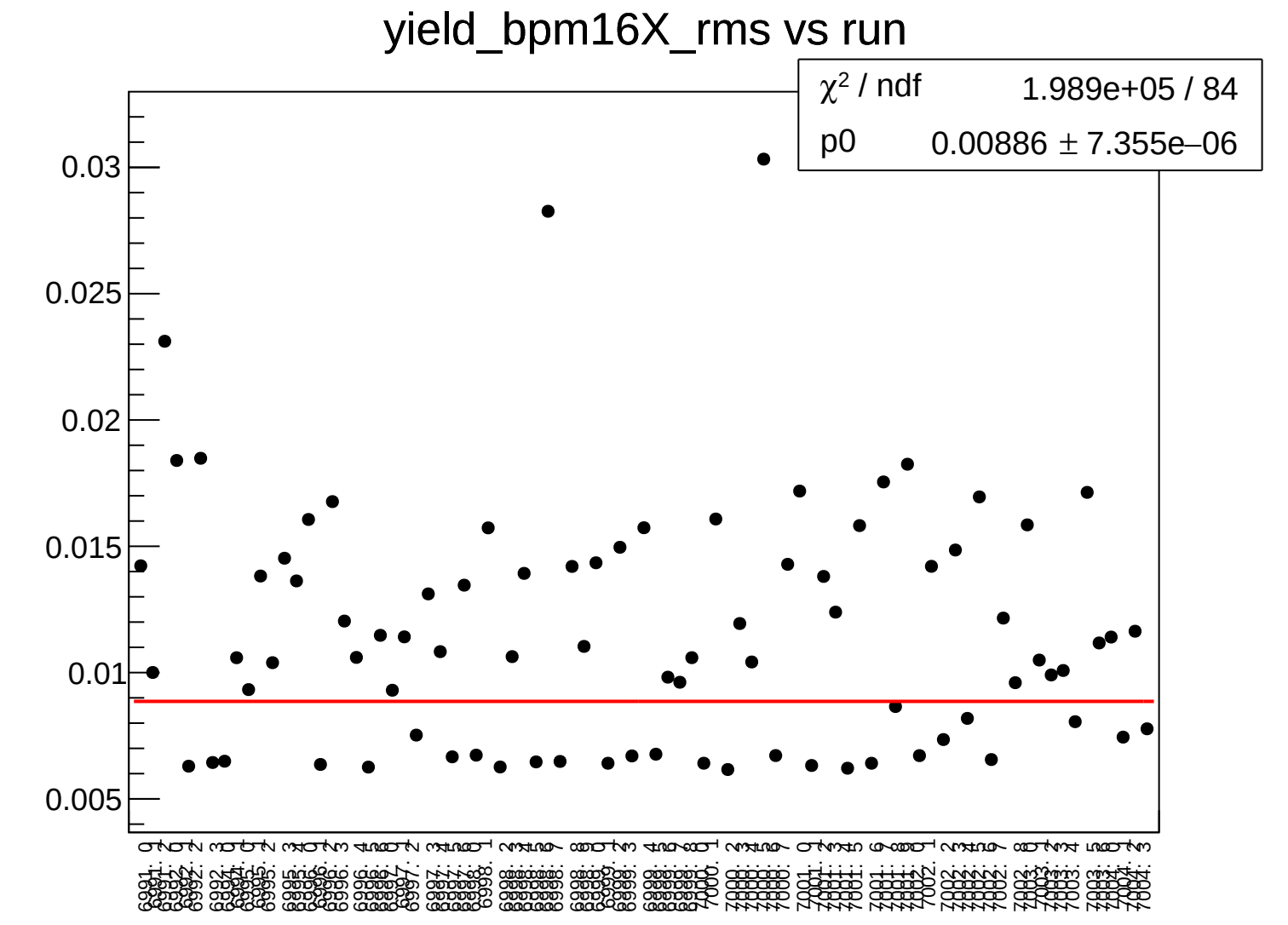

yield_bpm12Y_mean vs run
χ² / ndf 3.871e+06 / 84
p0 1.736 ± 9.676e−06
1.8
1.78
1.76
1.74
1.72
1.7
1.68
1.66
pull
Entries 85
Mean 435.6
Std Dev 377
400
200
0
−200
−400

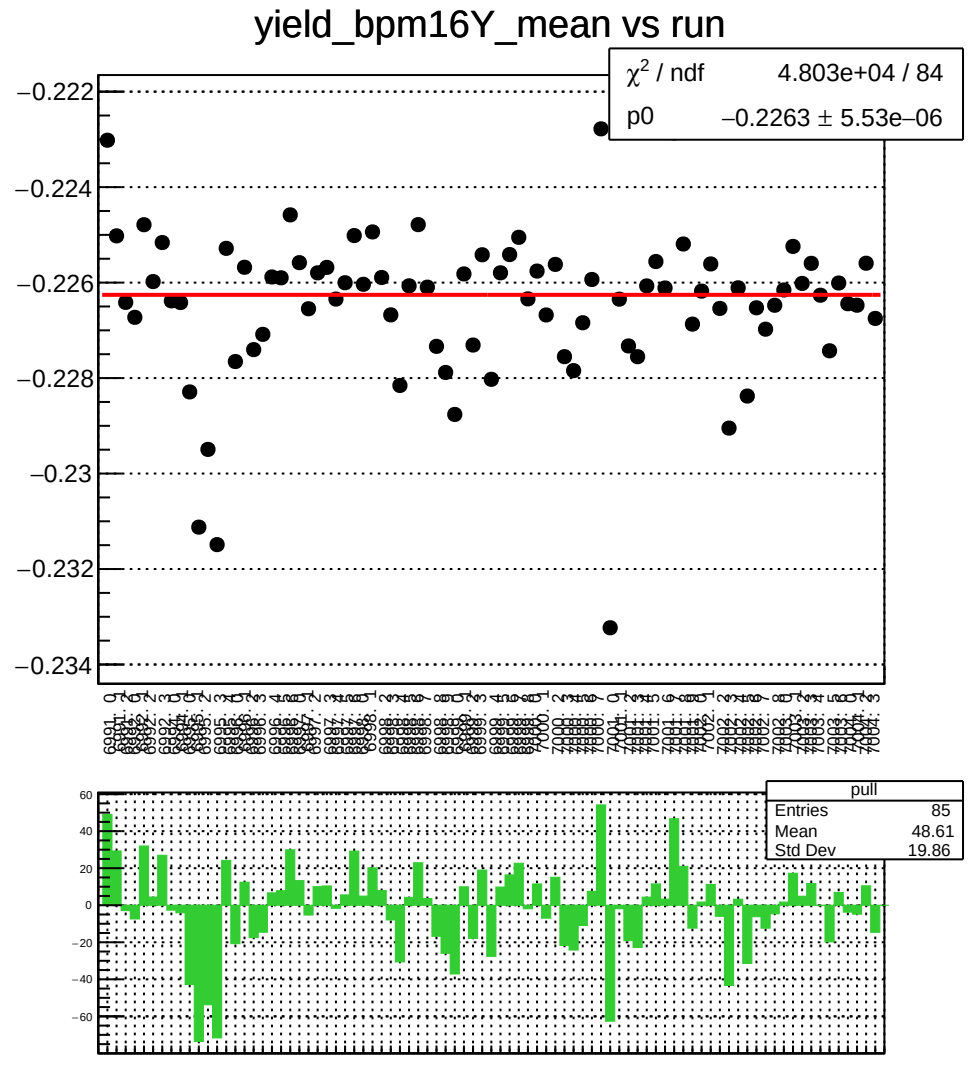

pull1D
Entries 85
Mean −7.949
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

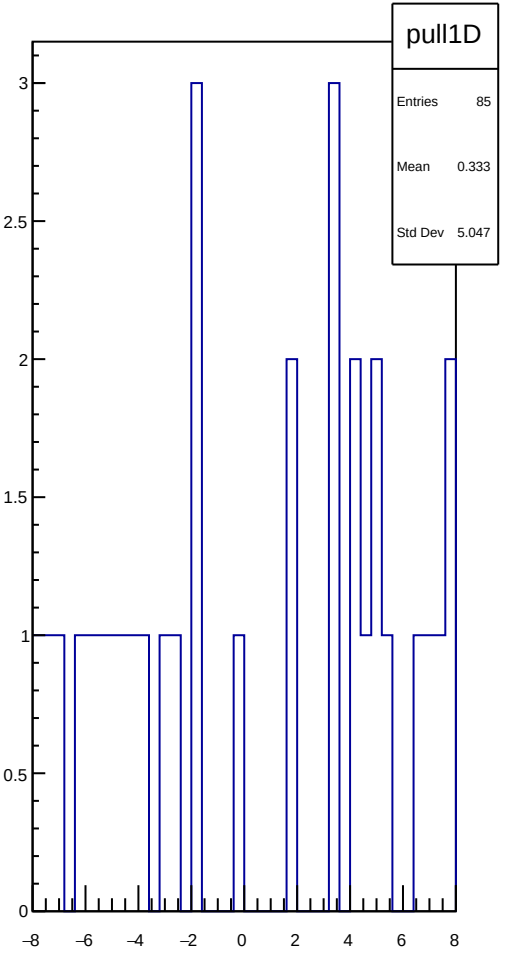

yield_bpm12Y_rms vs run
χ² / ndf 6.409e+04 / 84
p0 0.008616 ± 6.842e−06
0.03
0.025
0.02
0.015
0.01
0.005

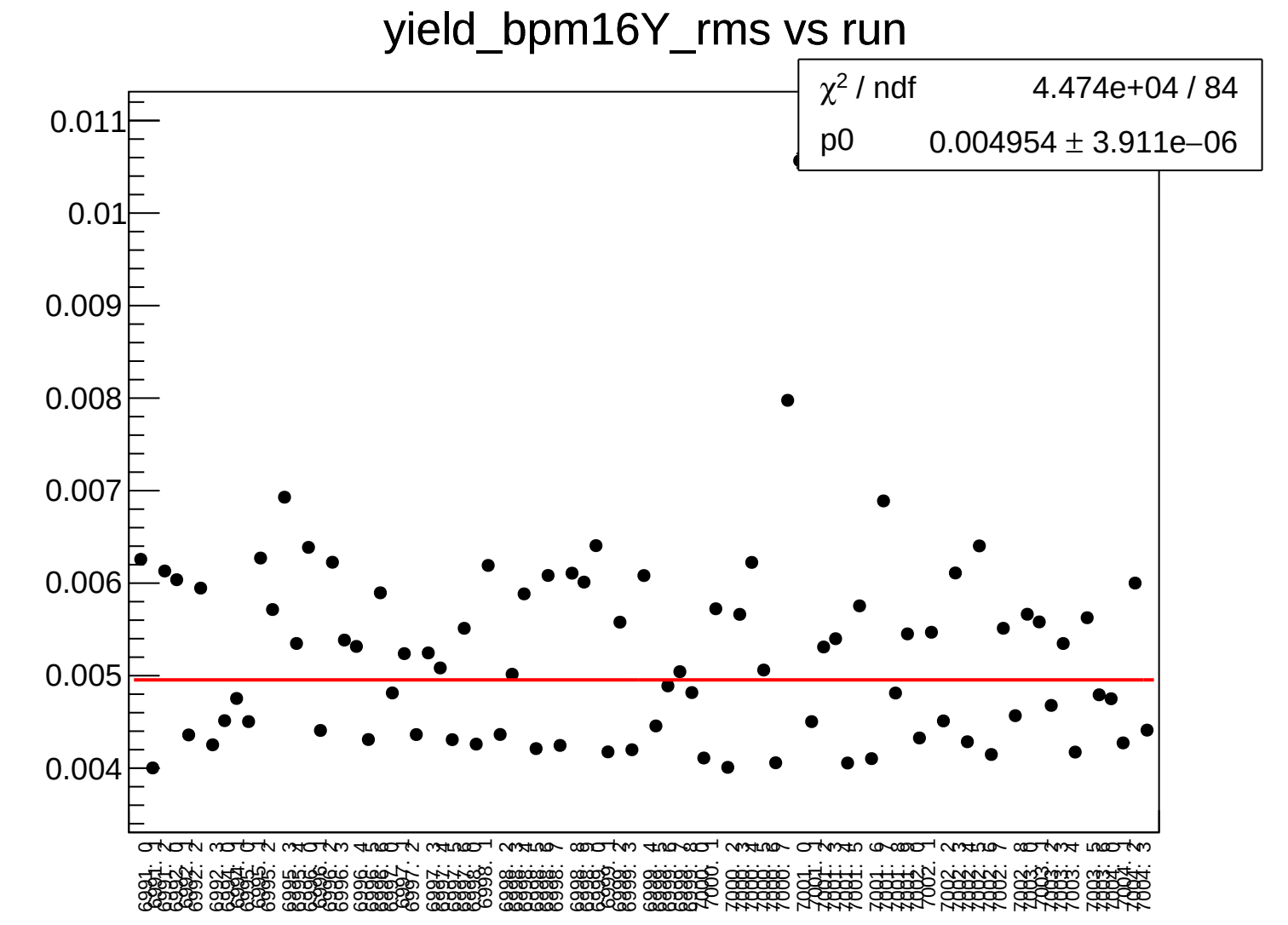

yield_bpm16X_mean vs run
χ² / ndf 9.222e+05 / 84
p0 −0.4305 ± 1.04e−05
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
pull
Entries 85
Mean −128.2
Std Dev 148.7
400
300
200
100
0
−100
−200
−300

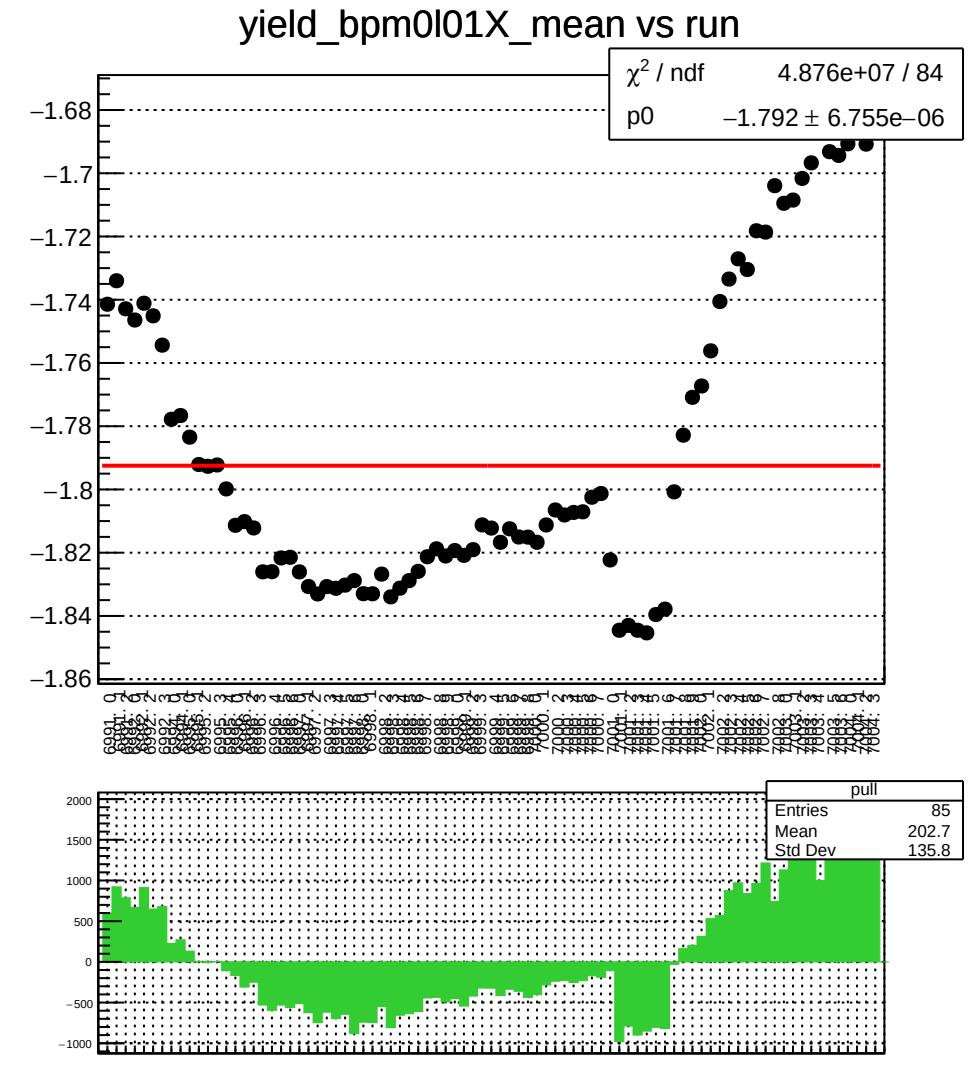

pull1D
Entries 85
Mean 0.08621
Std Dev 3.457
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

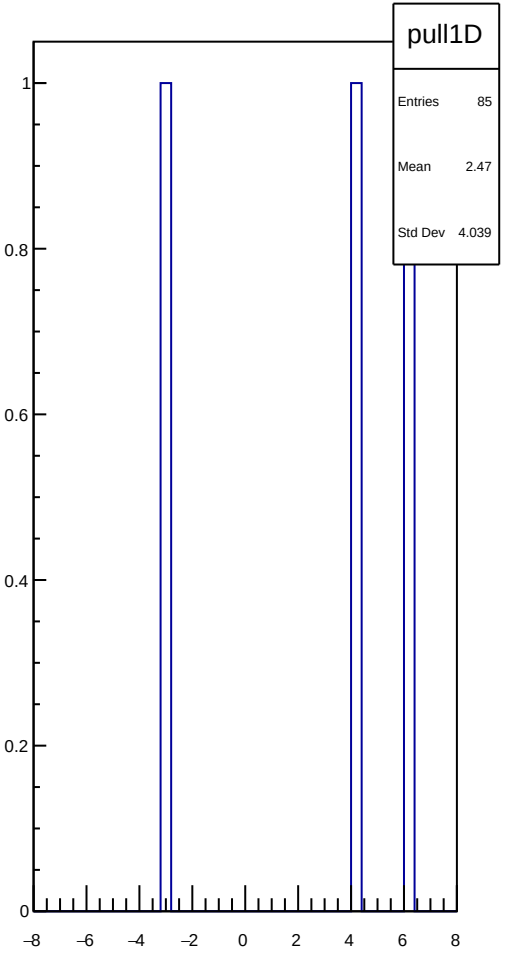

yield_bpm16X_rms vs run
χ² / ndf 1.989e+05 / 84
p0 0.00886 ± 7.355e–06
0.03
0.025
0.02
0.015
0.01
0.005

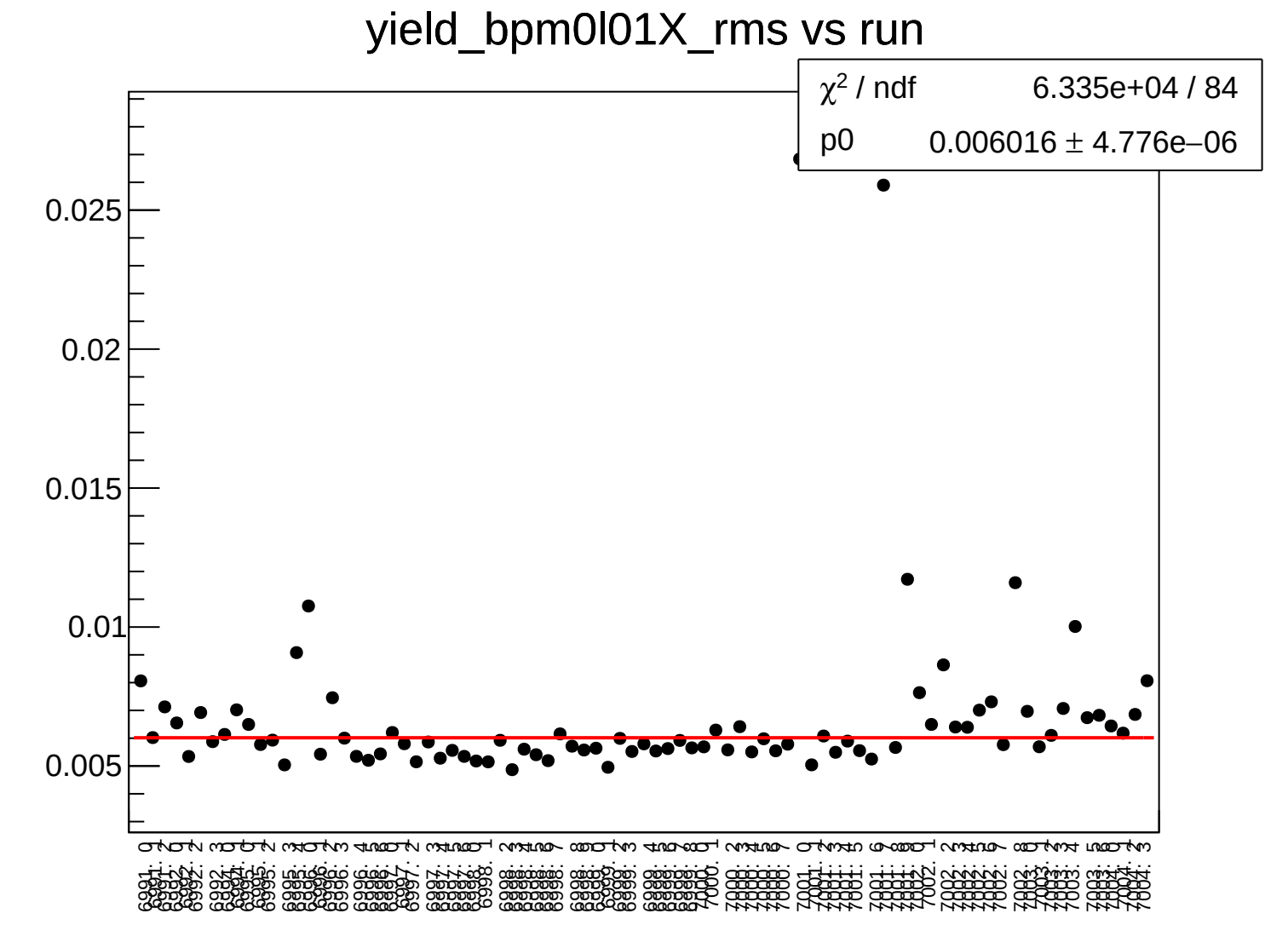

yield_bpm16Y_mean vs run
χ² / ndf 4.803e+04 / 84
p0 −0.2263 ± 5.53e−06
−0.222
−0.224
−0.226
−0.228
−0.23
−0.232
−0.234
pull
Entries 85
Mean 48.61
Std Dev 19.86
60
40
20
0
−20
−40
−60

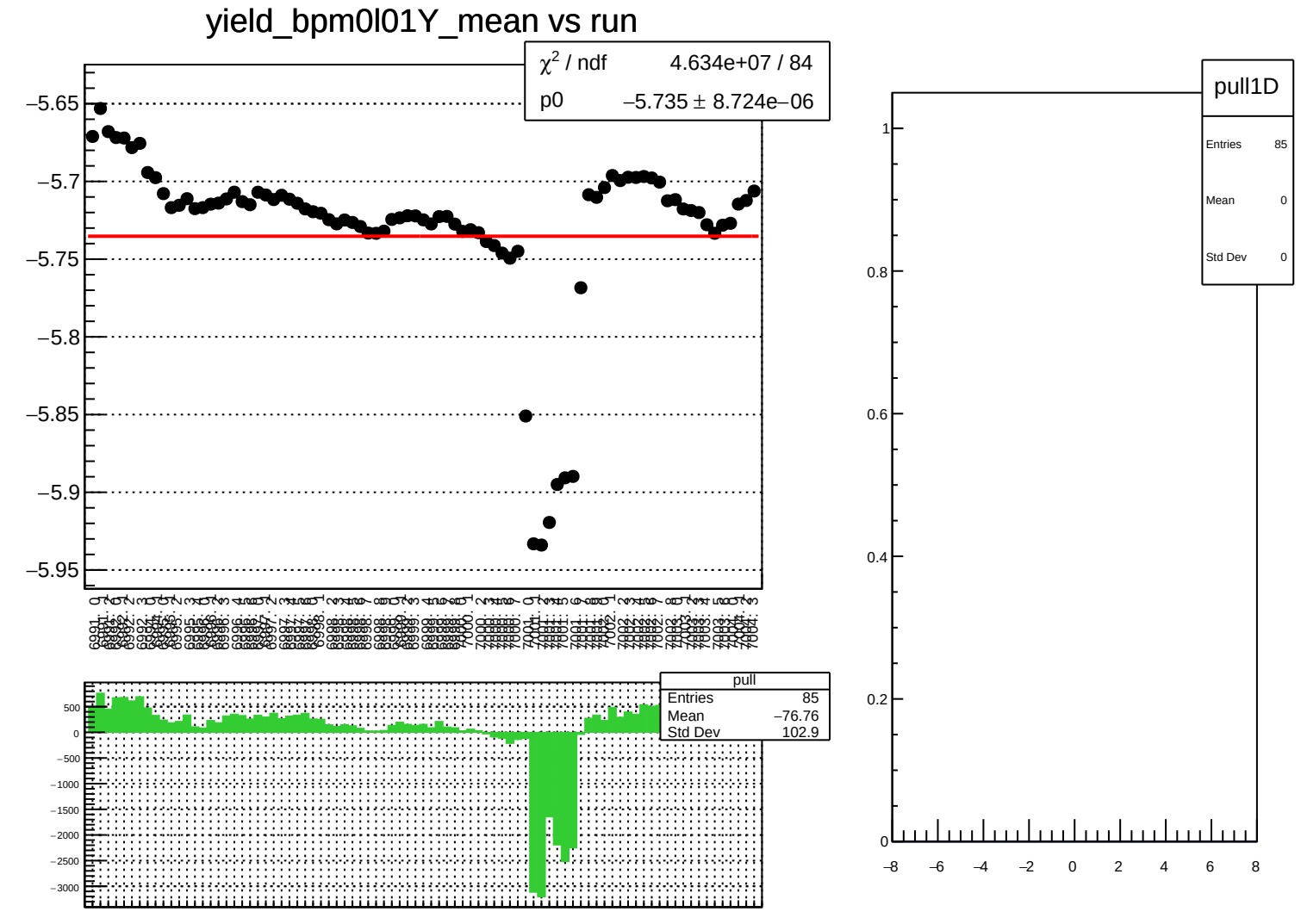

pull1D
Entries 85
Mean 0.333
Std Dev 5.047
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

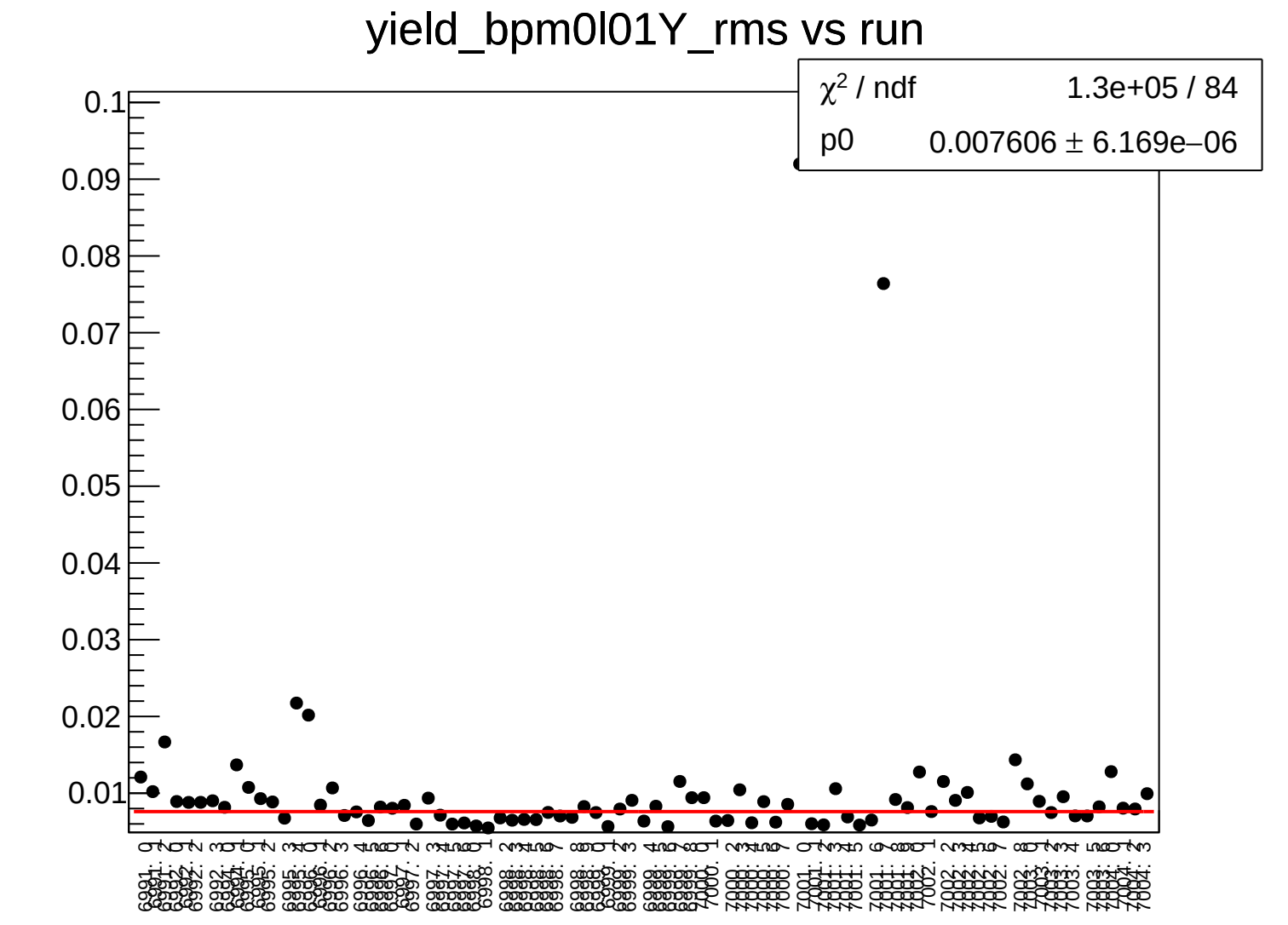

yield_bpm16Y_rms vs run
χ² / ndf 4.474e+04 / 84
p0 0.004954 ± 3.911e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

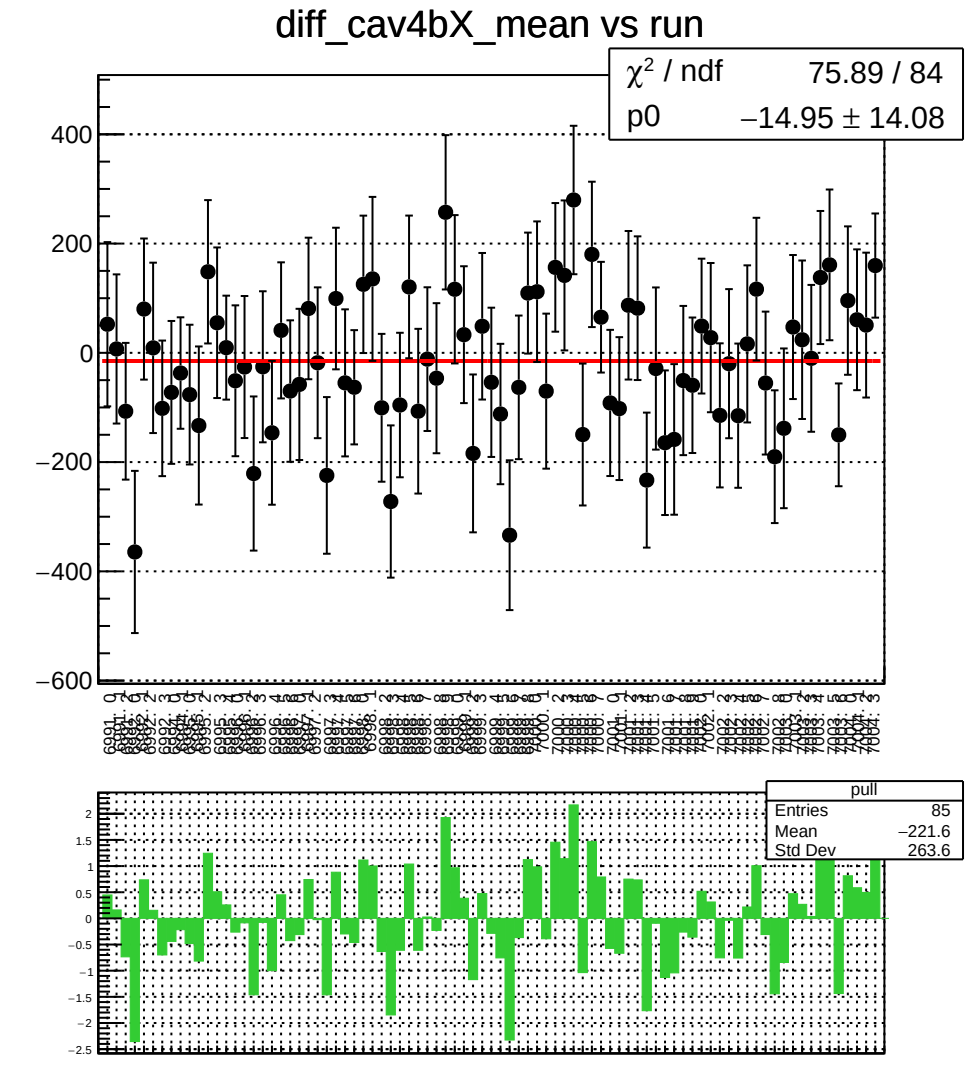

yield_bpm0l01X_mean vs run
χ² / ndf 4.876e+07 / 84
p0 −1.792 ± 6.755e−06
−1.68
−1.7
−1.72
−1.74
−1.76
−1.78
−1.8
−1.82
−1.84
−1.86
pull
Entries 85
Mean 202.7
Std Dev 135.8
2000
1500
1000
500
0
−500
−1000

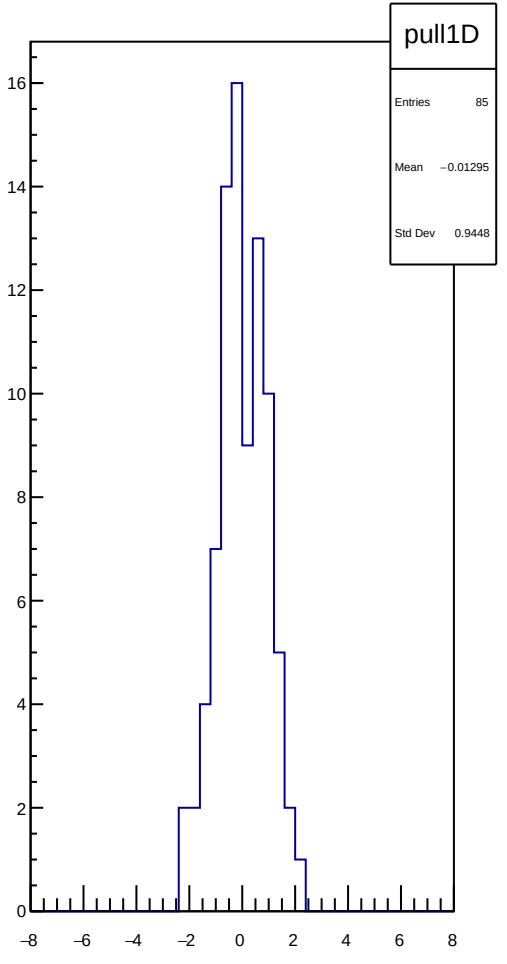

pull1D
Entries 85
Mean 2.47
Std Dev 4.039
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

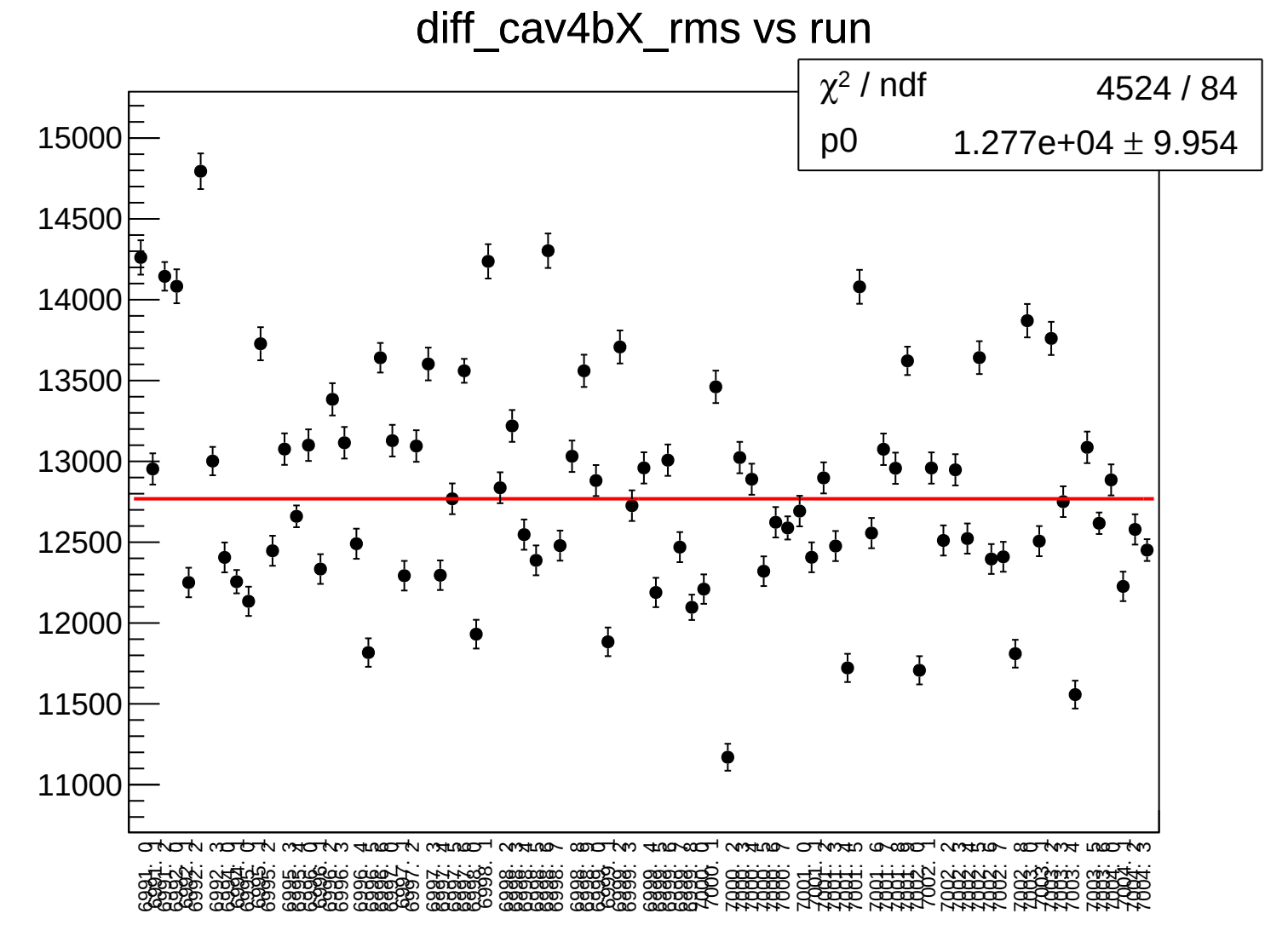

yield_bpm0l01X_rms vs run
χ² / ndf 6.335e+04 / 84
p0 0.006016 ± 4.776e−06
0.025
0.02
0.015
0.01
0.005

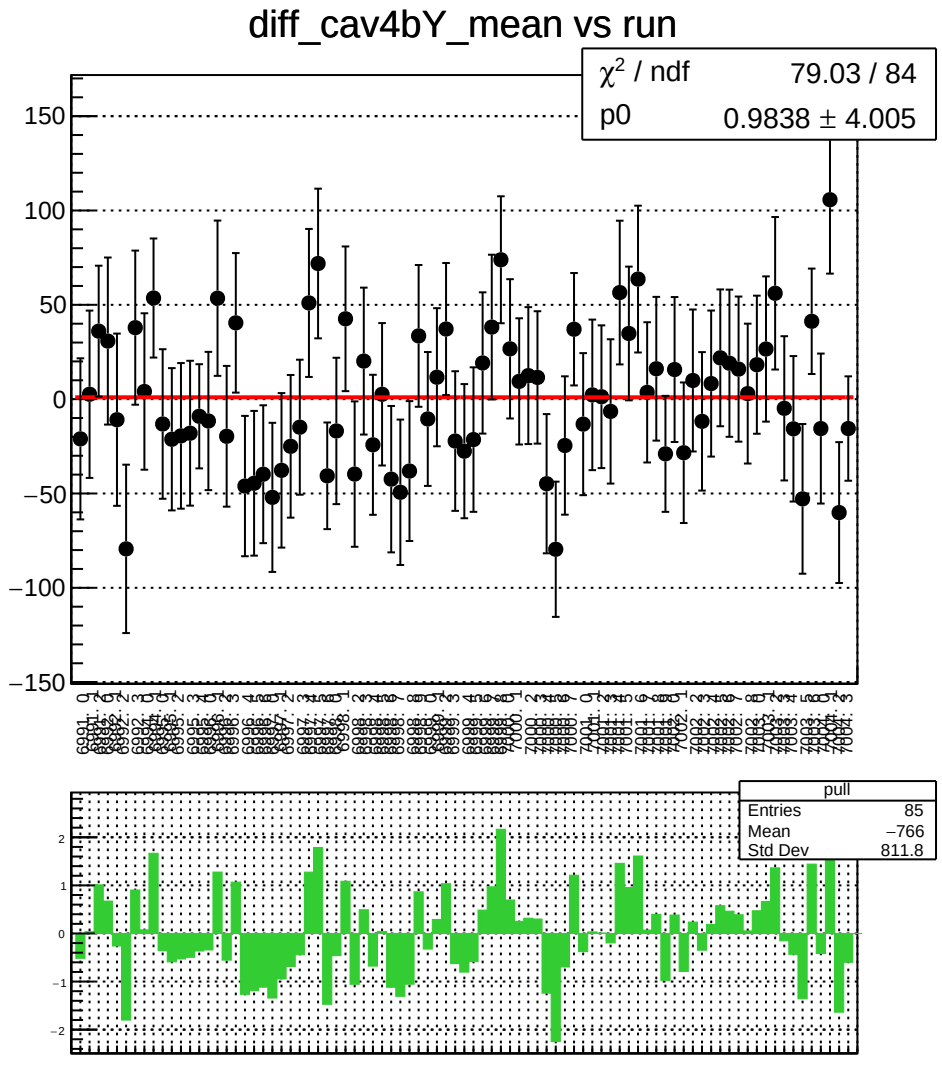

yield_bpm0l01Y_mean vs run
χ² / ndf 4.634e+07 / 84
p0 −5.735 ± 8.724e−06
−5.65
−5.7
−5.75
−5.8
−5.85
−5.9
−5.95
pull
Entries 85
Mean −76.76
Std Dev 102.9
500
0
−500
−1000
−1500
−2000
−2500
−3000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

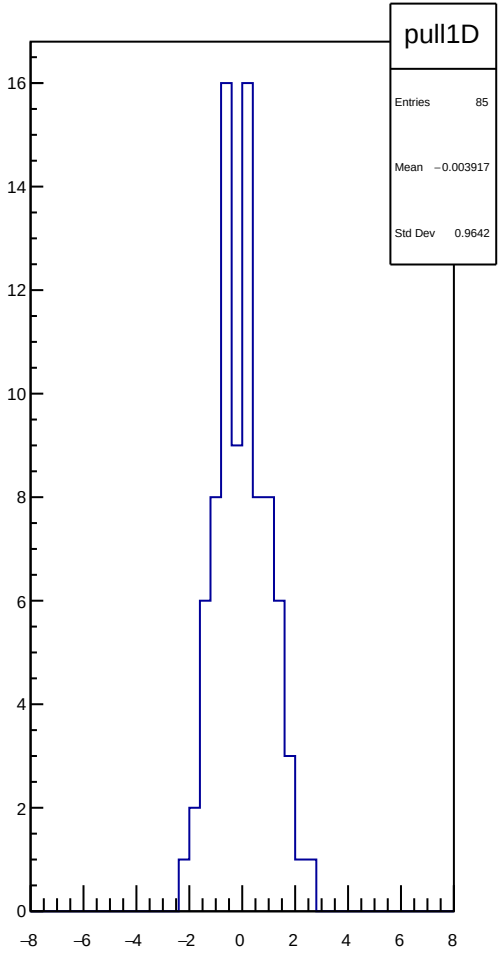

yield_bpm0l01Y_rms vs run
χ² / ndf 1.3e+05 / 84
p0 0.007606 ± 6.169e−06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

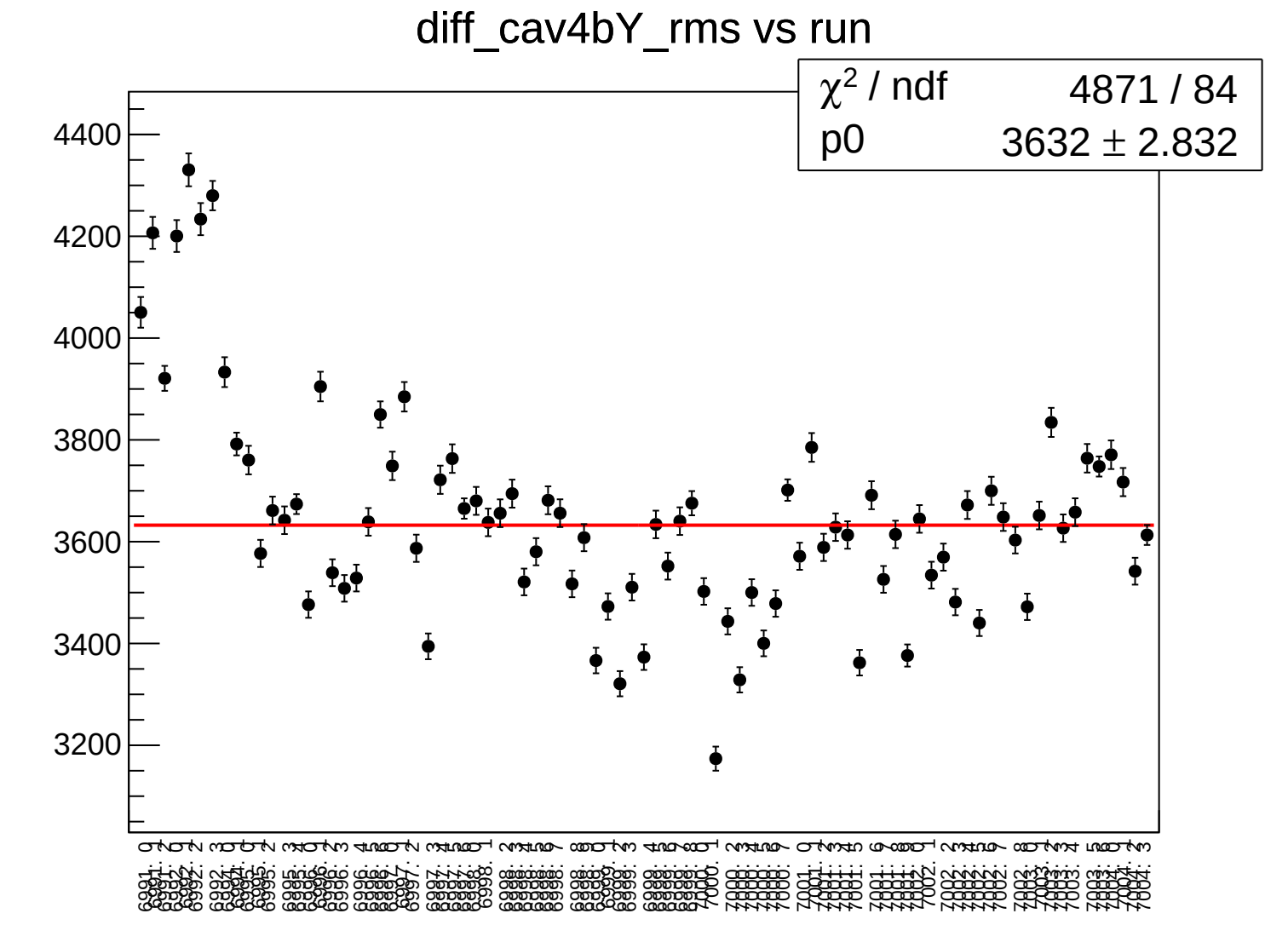

diff_cav4bX_mean vs run
χ² / ndf 75.89 / 84
p0 −14.95 ± 14.08
400
200
0
−200
−400
−600
pull
Entries 85
Mean −221.6
Std Dev 263.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

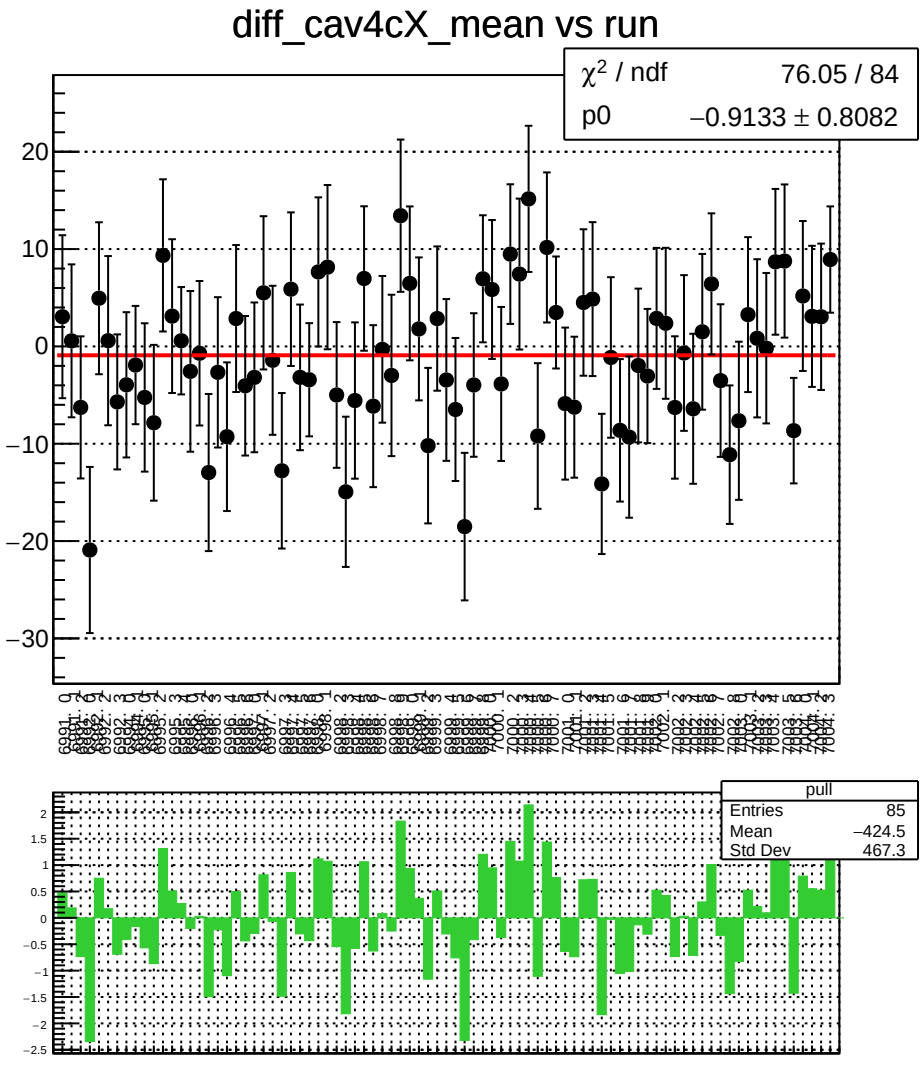

pull1D
Entries 85
Mean −0.01295
Std Dev 0.9448
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

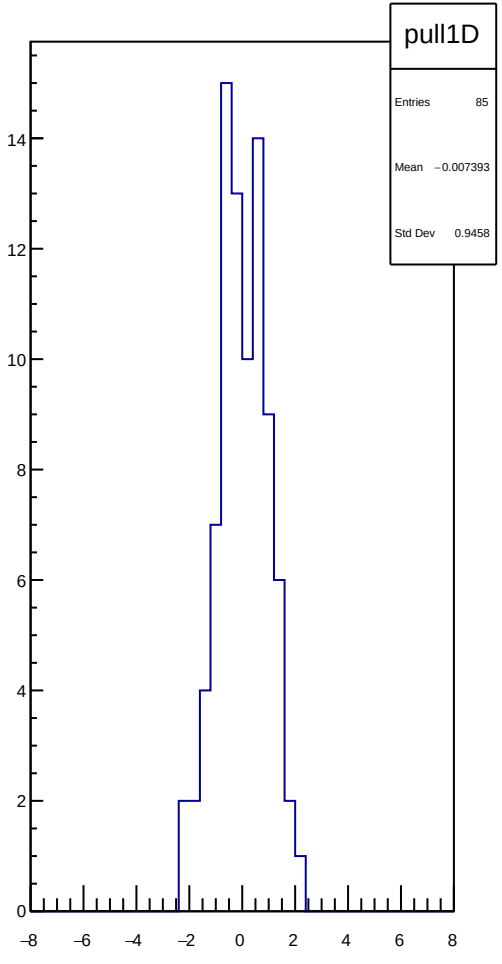

diff_cav4bX_rms vs run
χ² / ndf 4524 / 84
p0 1.277e+04 ± 9.954
15000
14500
14000
13500
13000
12500
12000
11500
11000

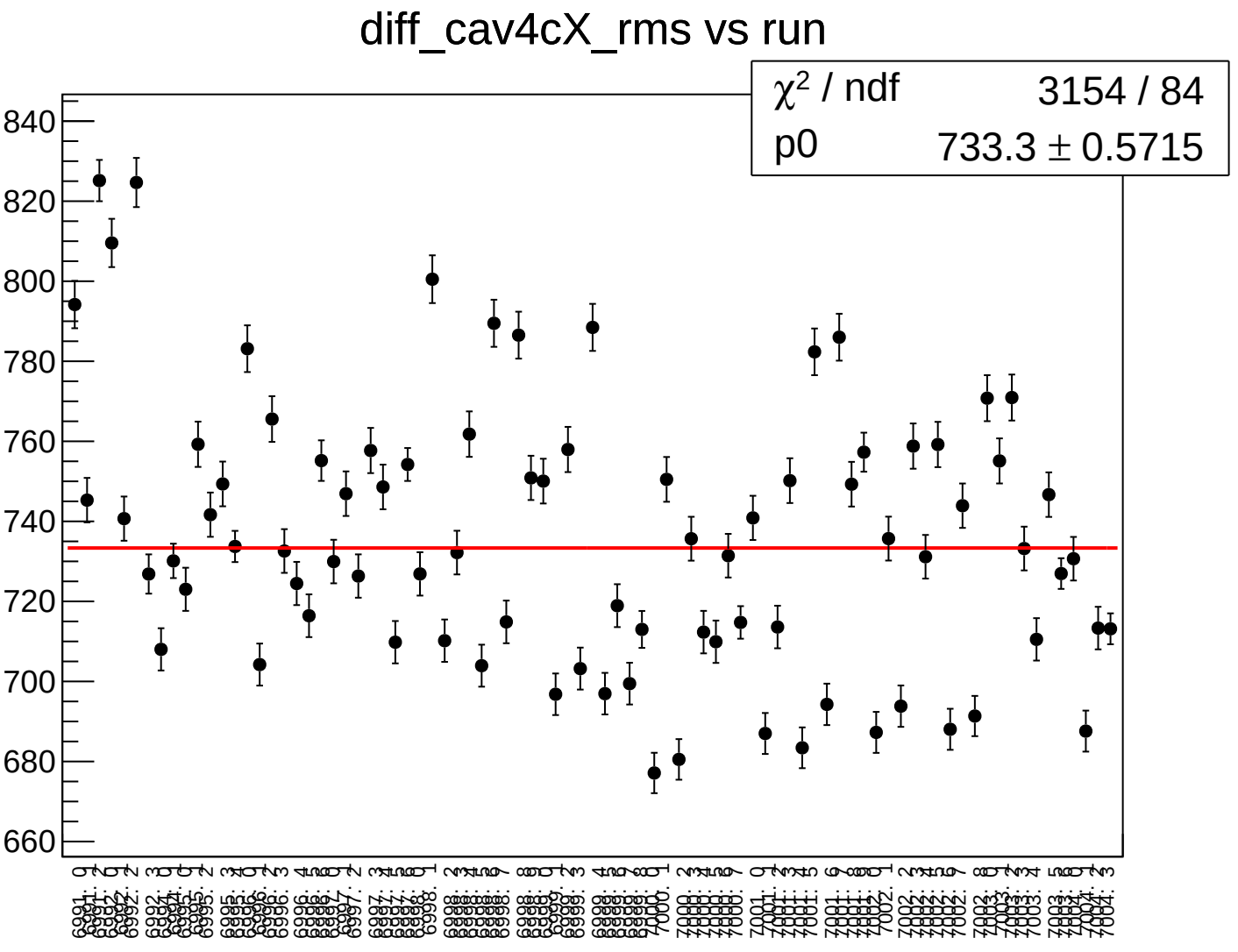

diff_cav4bY_mean vs run
χ^2 / ndf 79.03 / 84
p0 0.9838 ± 4.005
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −766
Std Dev 811.8
2
1
0
−1
−2

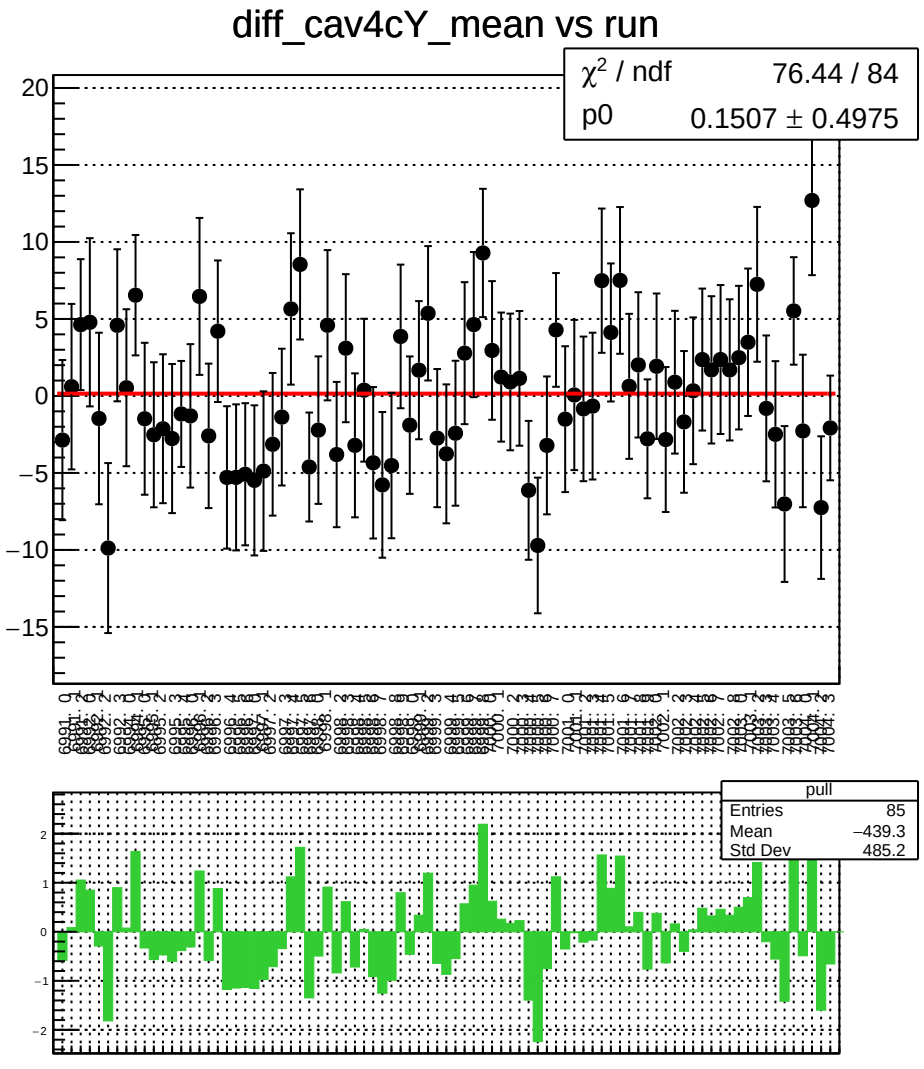

pull1D
Entries 85
Mean −0.003917
Std Dev 0.9642
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

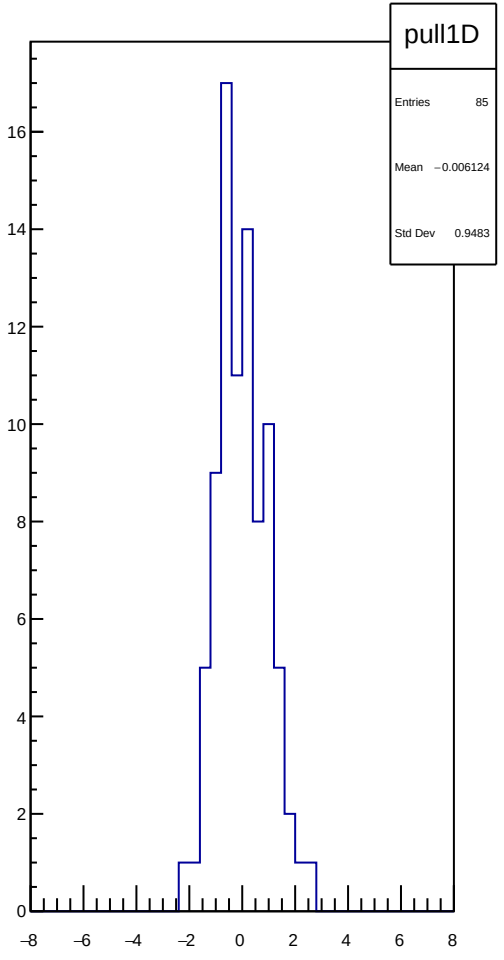

diff_cav4bY_rms vs run
χ² / ndf 4871 / 84
p0 3632 ± 2.832
4400
4200
4000
3800
3600
3400
3200

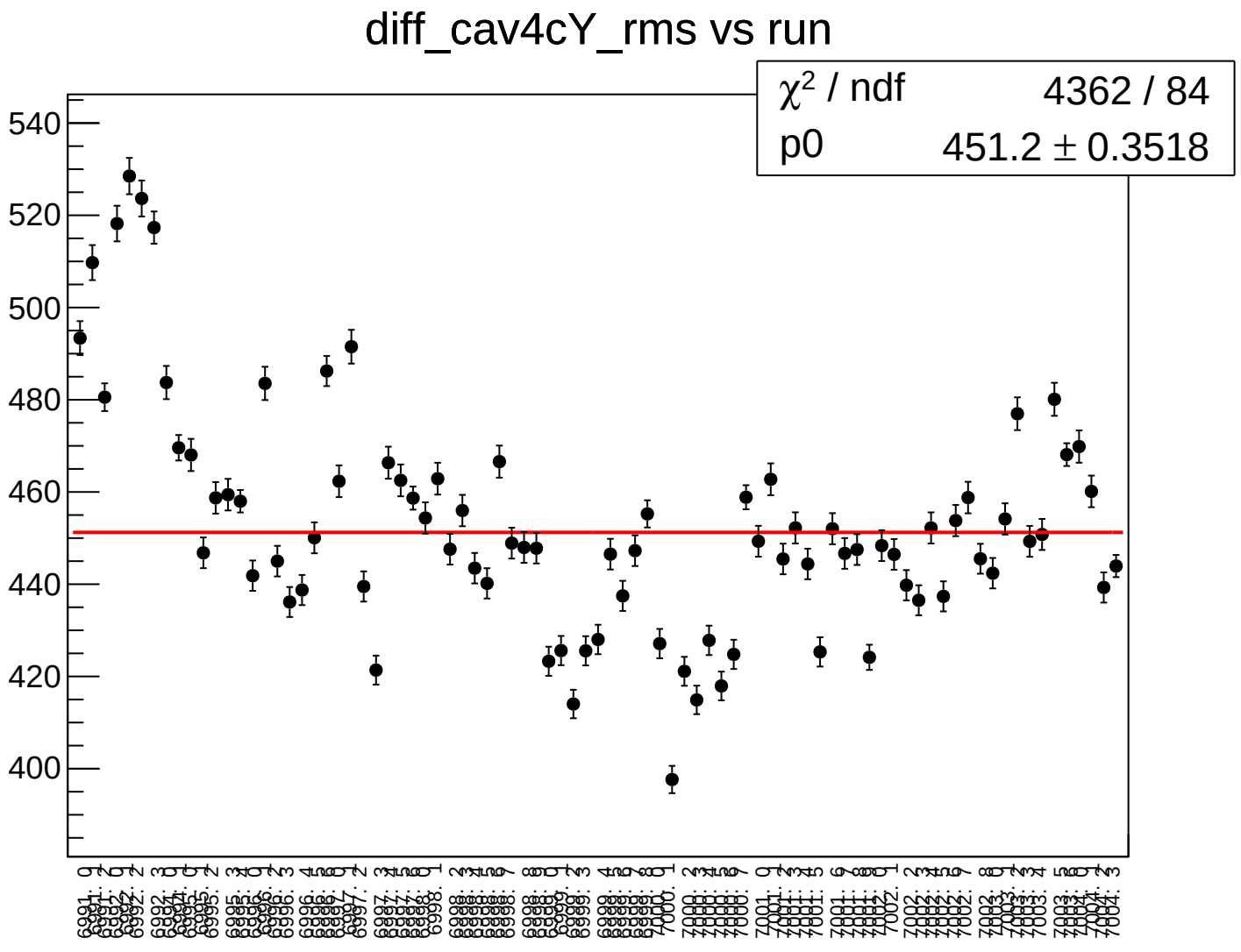

diff_cav4cX_mean vs run
χ² / ndf 76.05 / 84
p0 −0.9133 ± 0.8082
pull
Entries 85
Mean −424.5
Std Dev 467.3

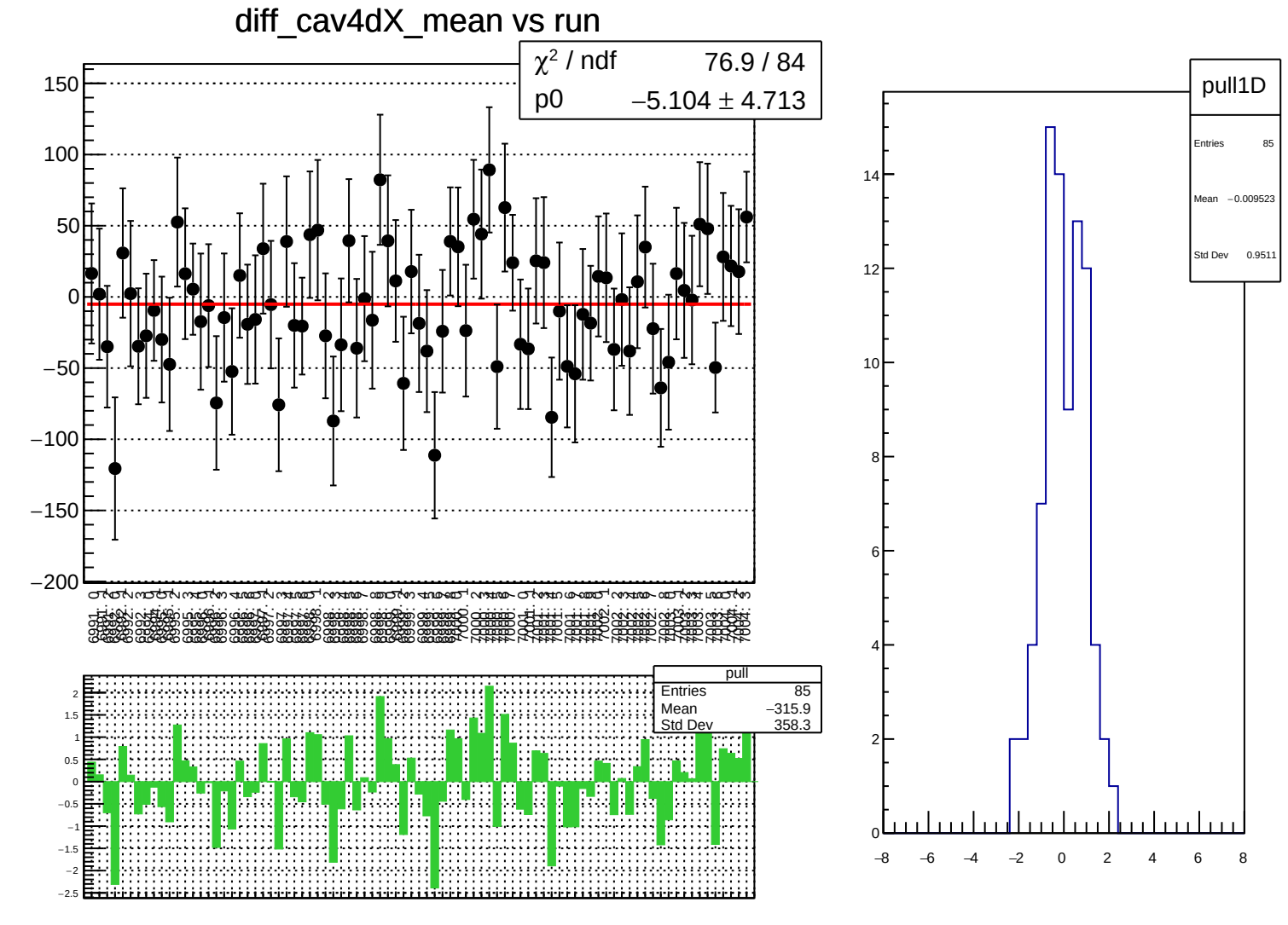

pull1D
Entries 85
Mean −0.007393
Std Dev 0.9458

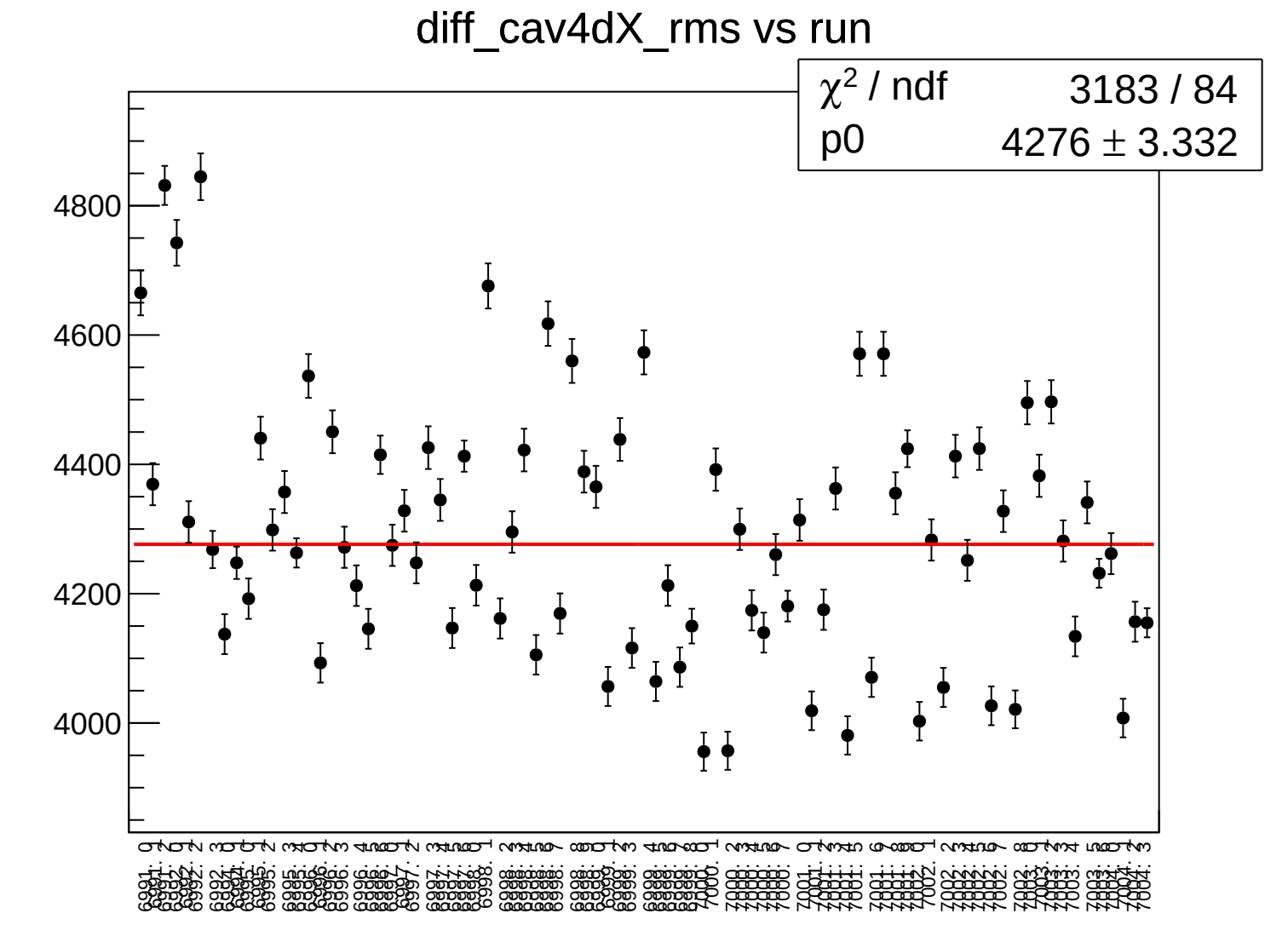

diff_cav4cX_rms vs run
χ² / ndf 3154 / 84
p0 733.3 ± 0.5715
840
820
800
780
760
740
720
700
680
660

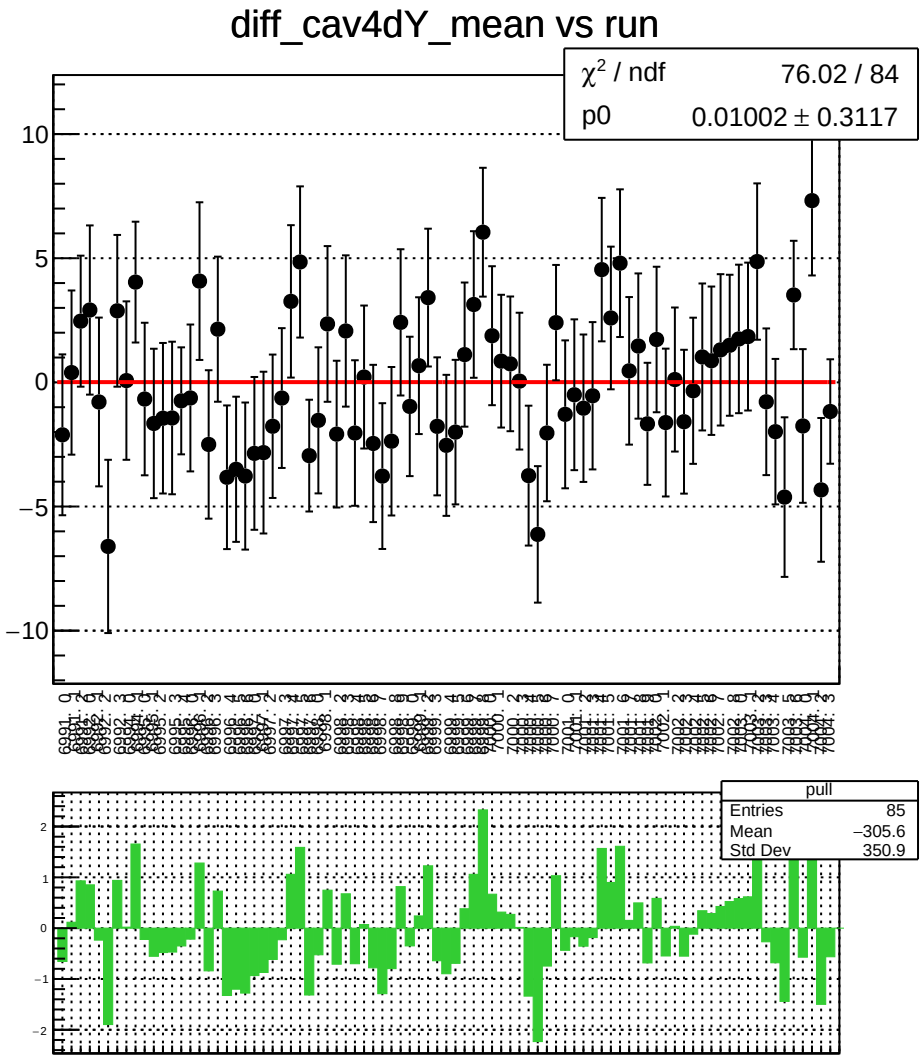

diff_cav4cY_mean vs run
χ² / ndf 76.44 / 84
p0 0.1507 ± 0.4975
pull
Entries 85
Mean −439.3
Std Dev 485.2

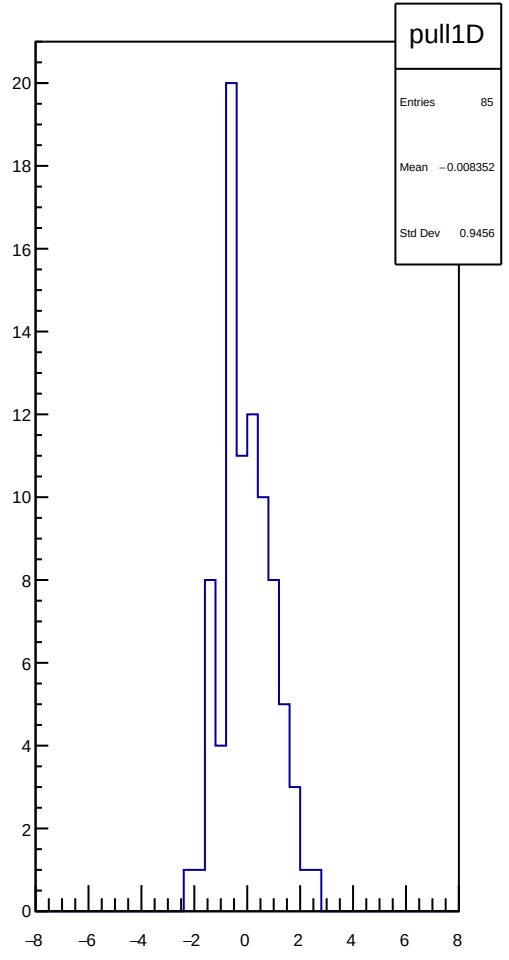

pull1D
Entries 85
Mean −0.006124
Std Dev 0.9483

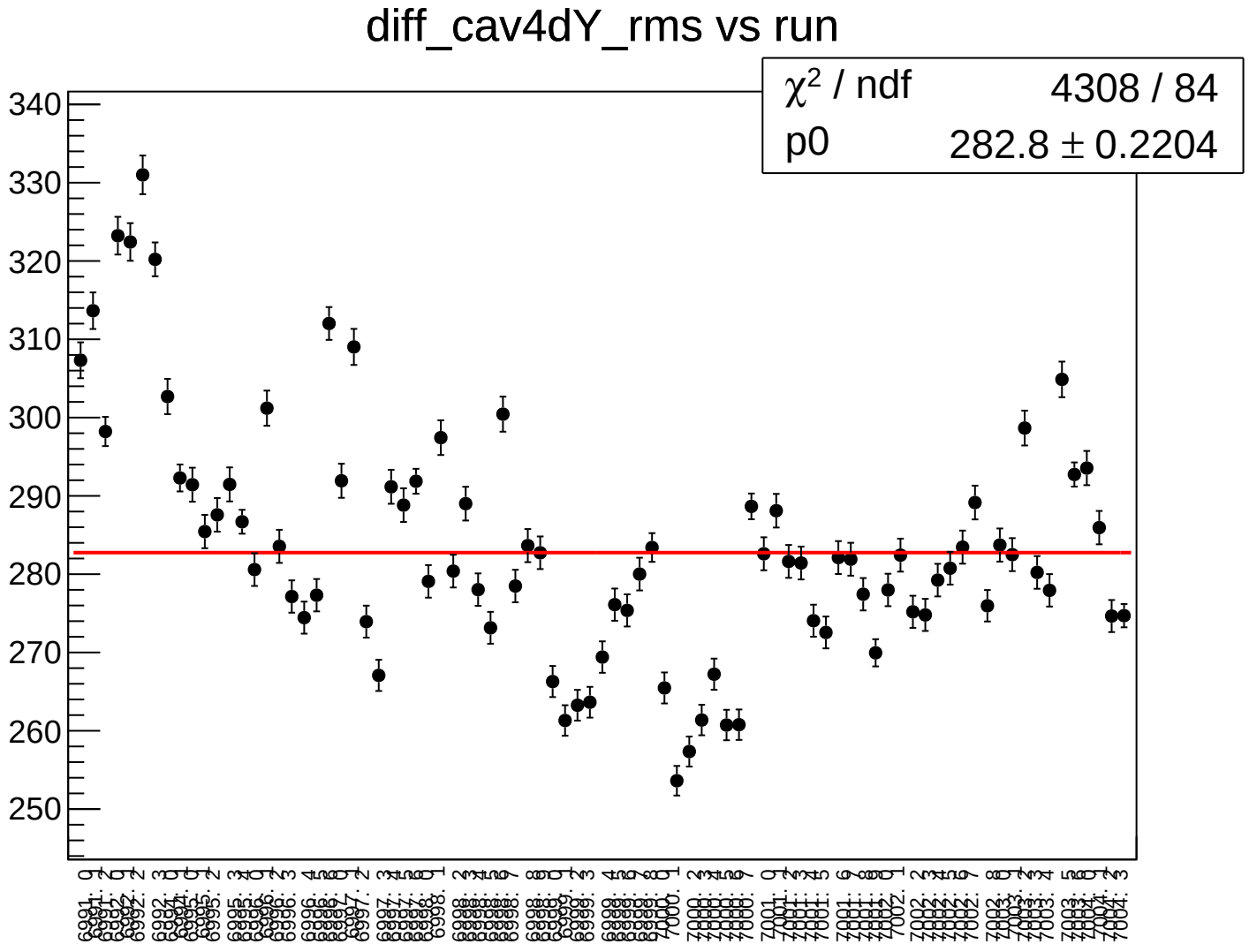

diff_cav4cY_rms vs run
χ² / ndf 4362 / 84
p0 451.2 ± 0.3518
540
520
500
480
460
440
420
400

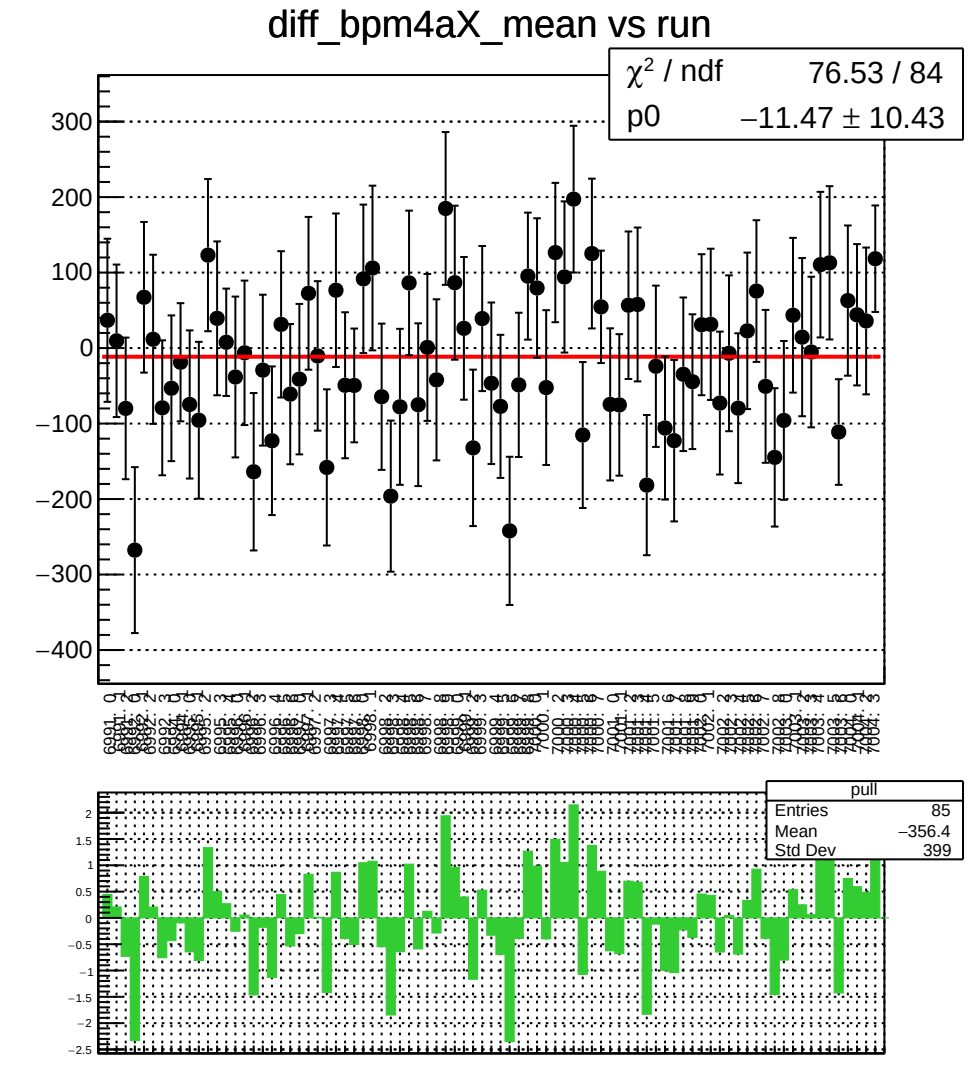

diff_cav4dX_mean vs run
χ² / ndf 76.9 / 84
p0 −5.104 ± 4.713
pull
Entries 85
Mean −315.9
Std Dev 358.3
pull1D
Entries 85
Mean −0.009523
Std Dev 0.9511

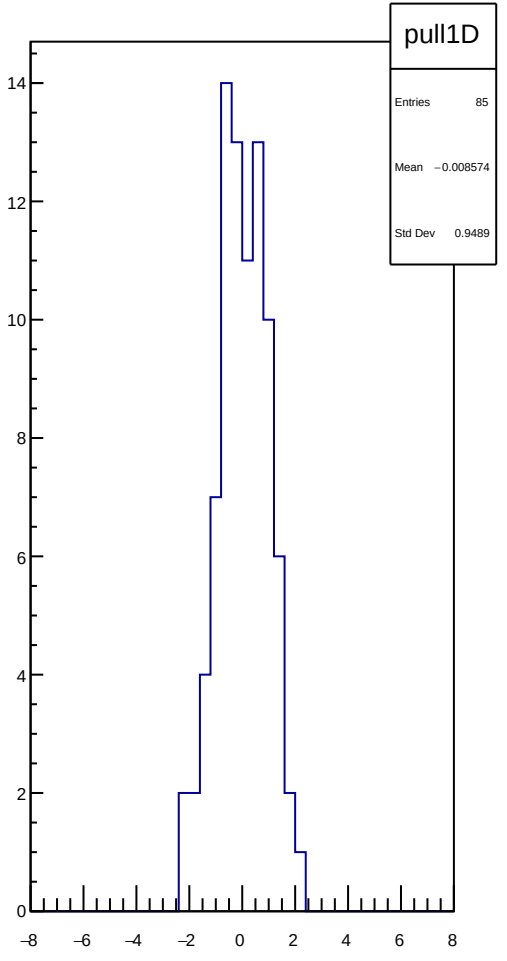

diff_cav4dX_rms vs run
χ² / ndf 3183 / 84
p0 4276 ± 3.332
4800
4600
4400
4200
4000

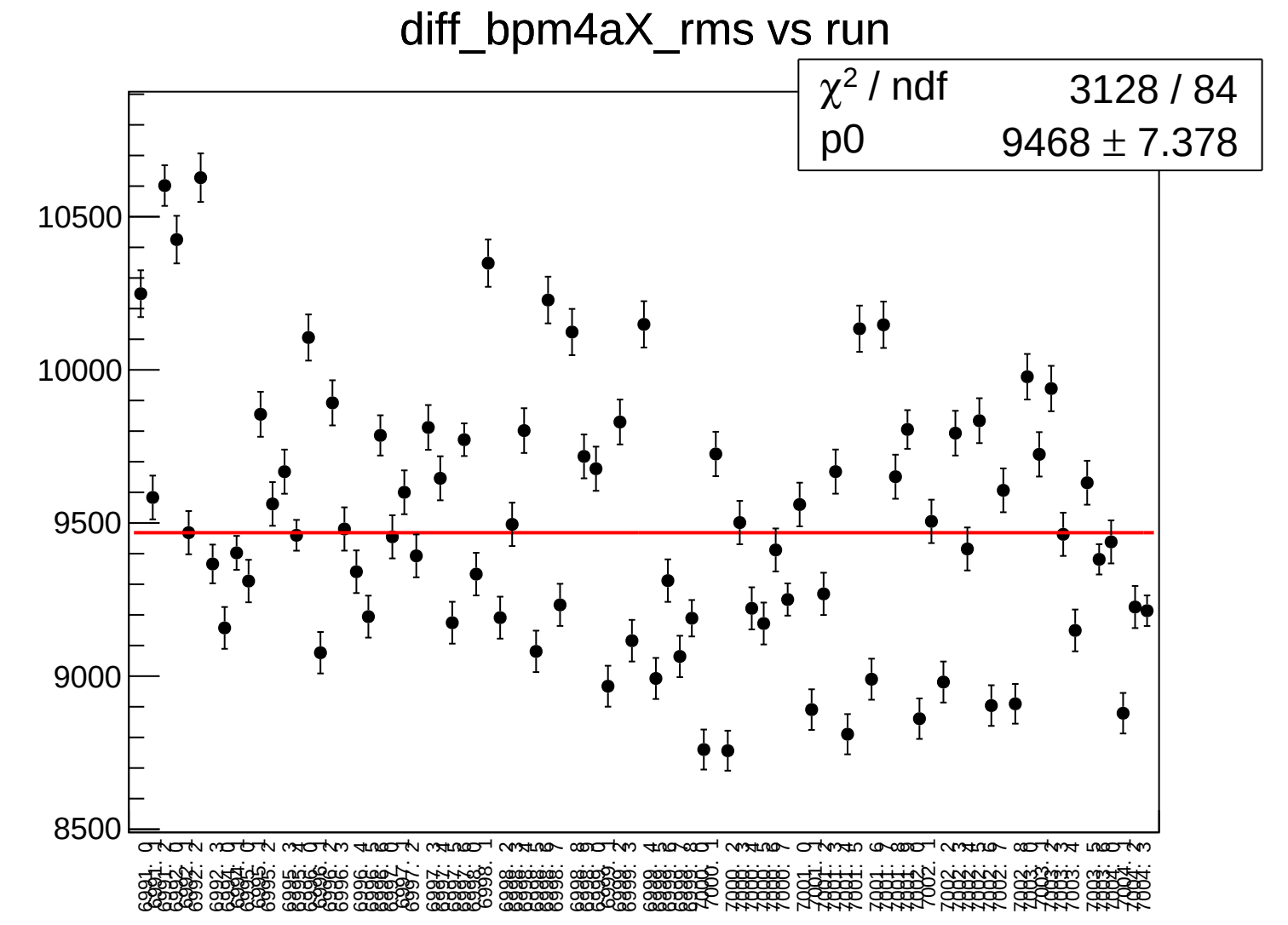

diff_cav4dY_mean vs run
χ^2 / ndf 76.02 / 84
p0 0.01002 ± 0.3117
pull
Entries 85
Mean −305.6
Std Dev 350.9

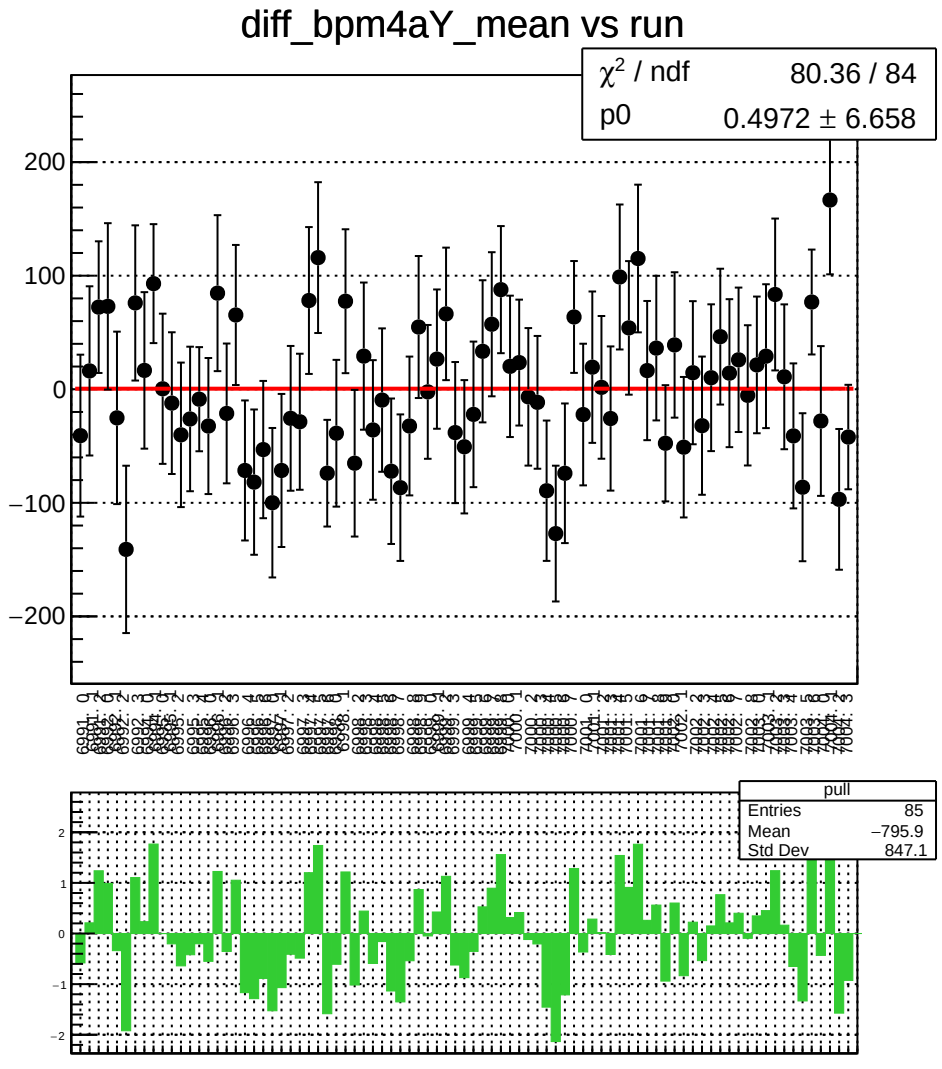

pull1D
Entries 85
Mean −0.008352
Std Dev 0.9456

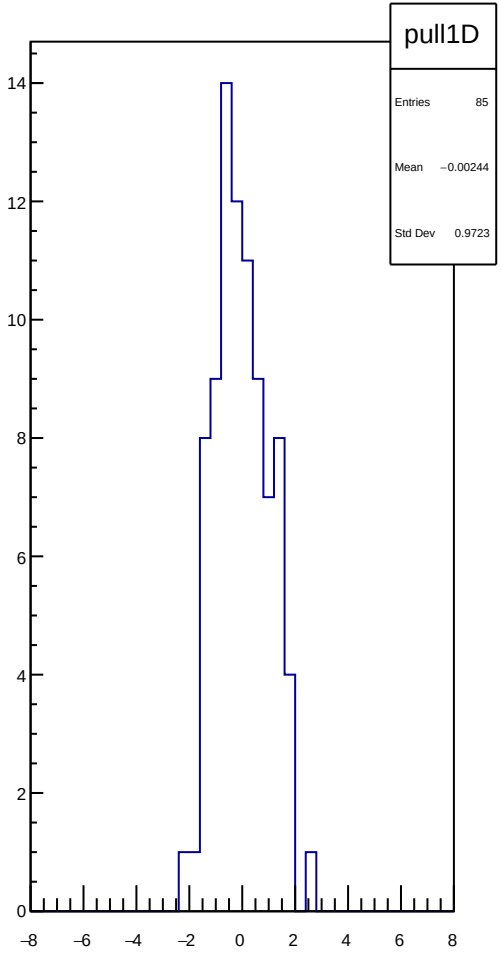

diff_cav4dY_rms vs run
χ² / ndf 4308 / 84
p0 282.8 ± 0.2204
340
330
320
310
300
290
280
270
260
250

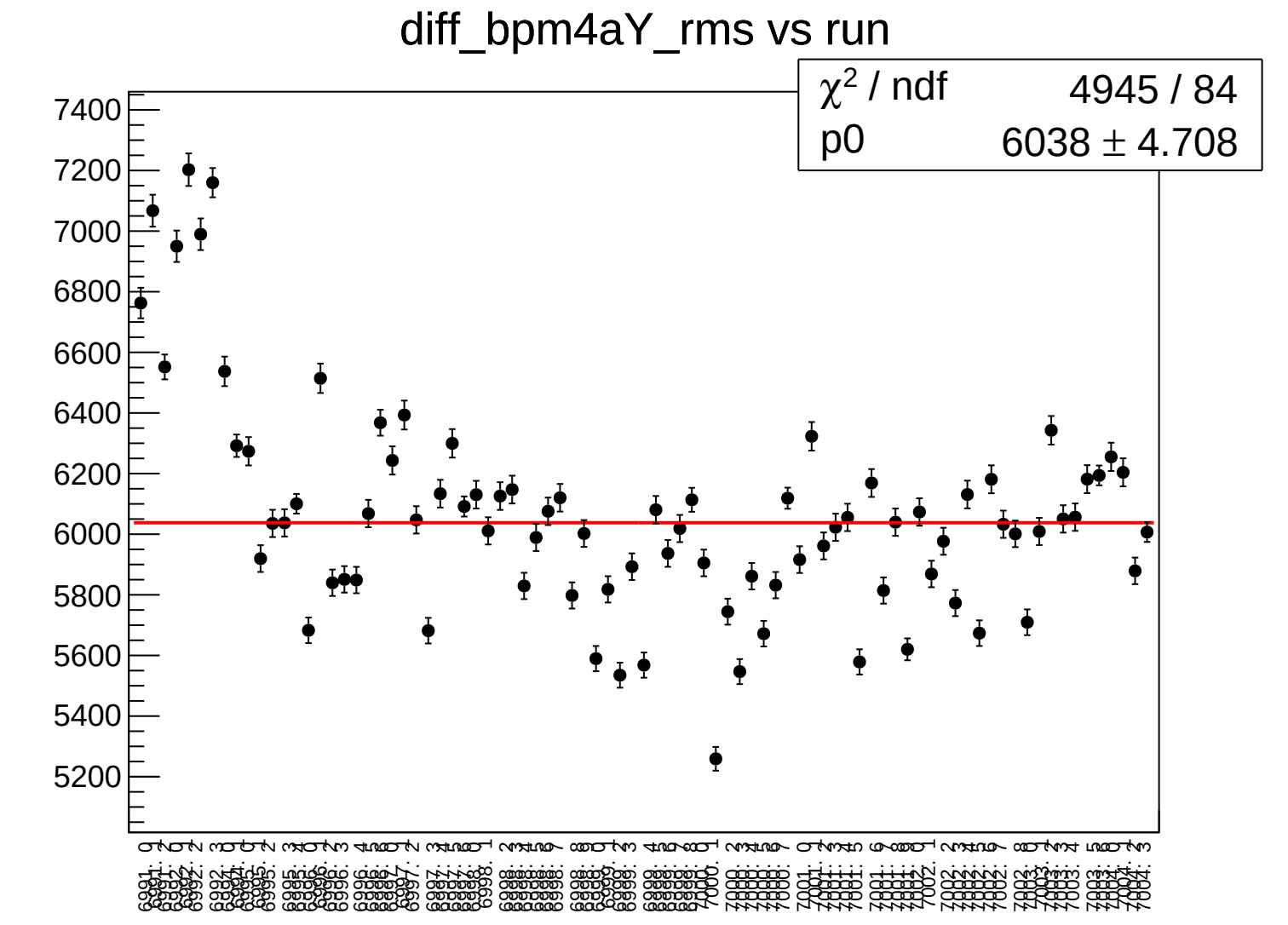

diff_bpm4aX_mean vs run
χ² / ndf 76.53 / 84
p0 −11.47 ± 10.43
pull
Entries 85
Mean −356.4
Std Dev 399

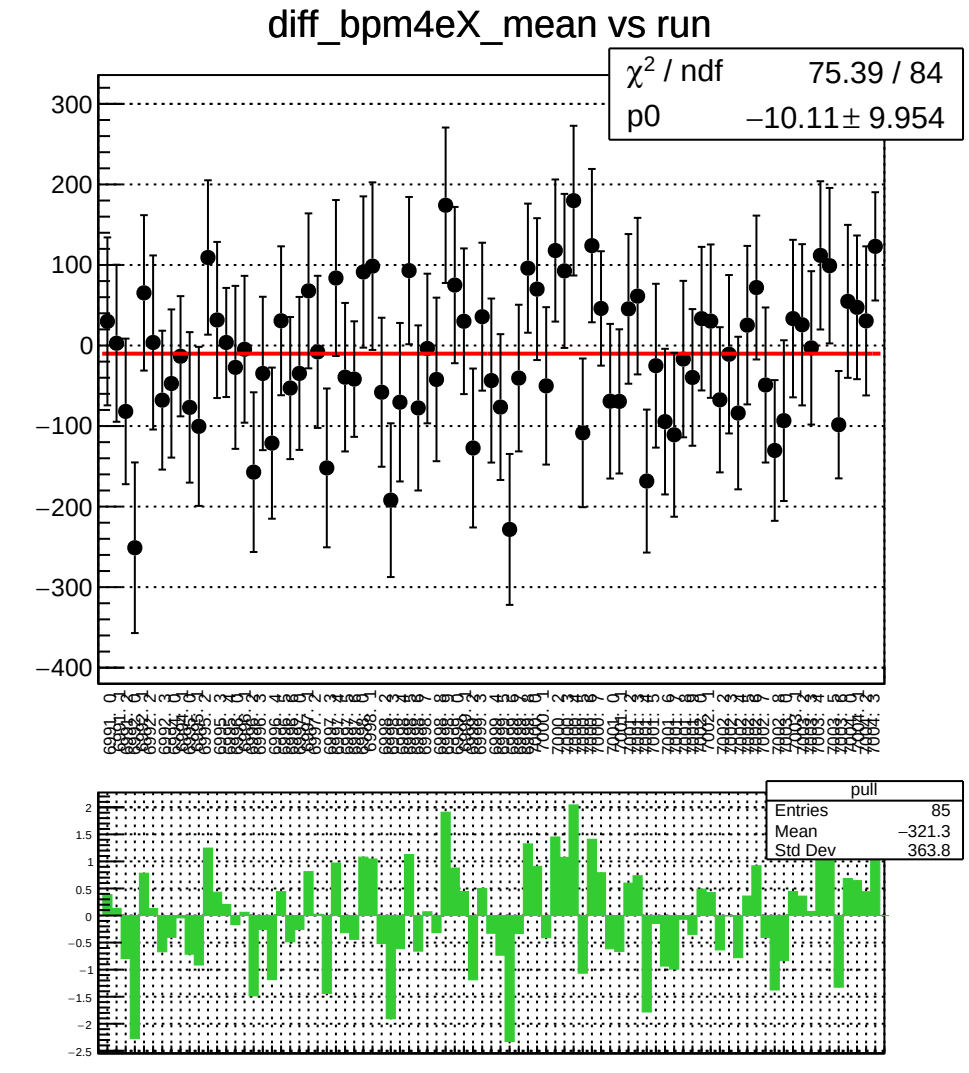

pull1D
Entries 85
Mean −0.008574
Std Dev 0.9489

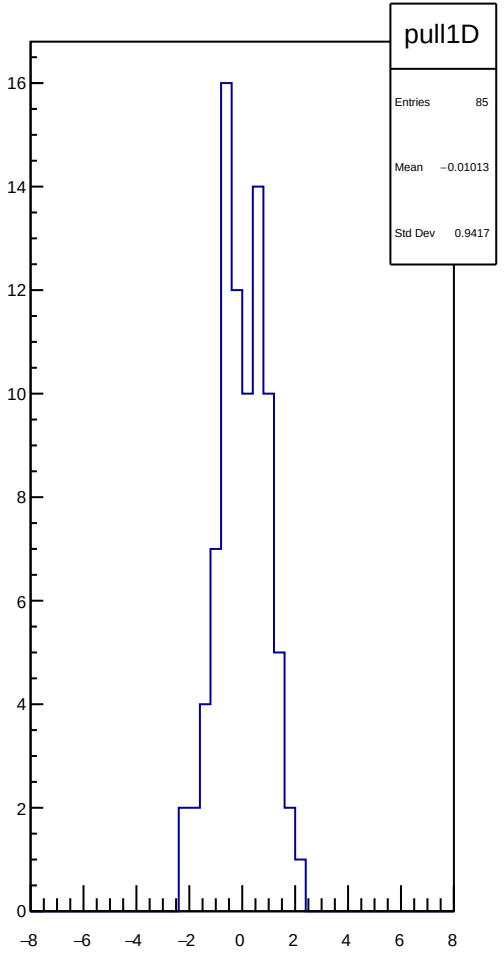

diff_bpm4aX_rms vs run
χ² / ndf 3128 / 84
p0 9468 ± 7.378
10500
10000
9500
9000
8500

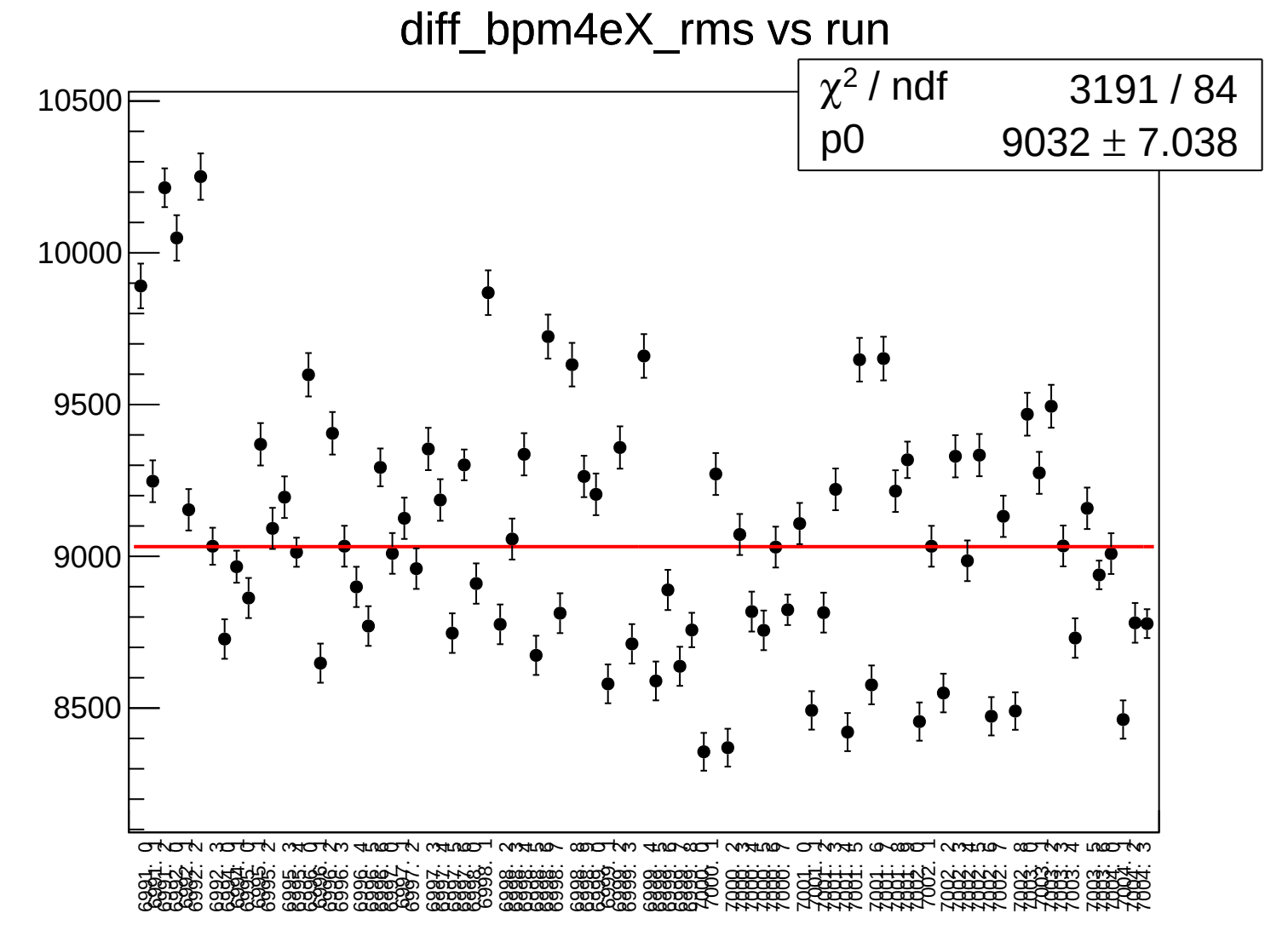

diff_bpm4aY_mean vs run
χ² / ndf 80.36 / 84
p0 0.4972 ± 6.658
200
100
0
−100
−200
pull
Entries 85
Mean −795.9
Std Dev 847.1
2
1
0
−1
−2

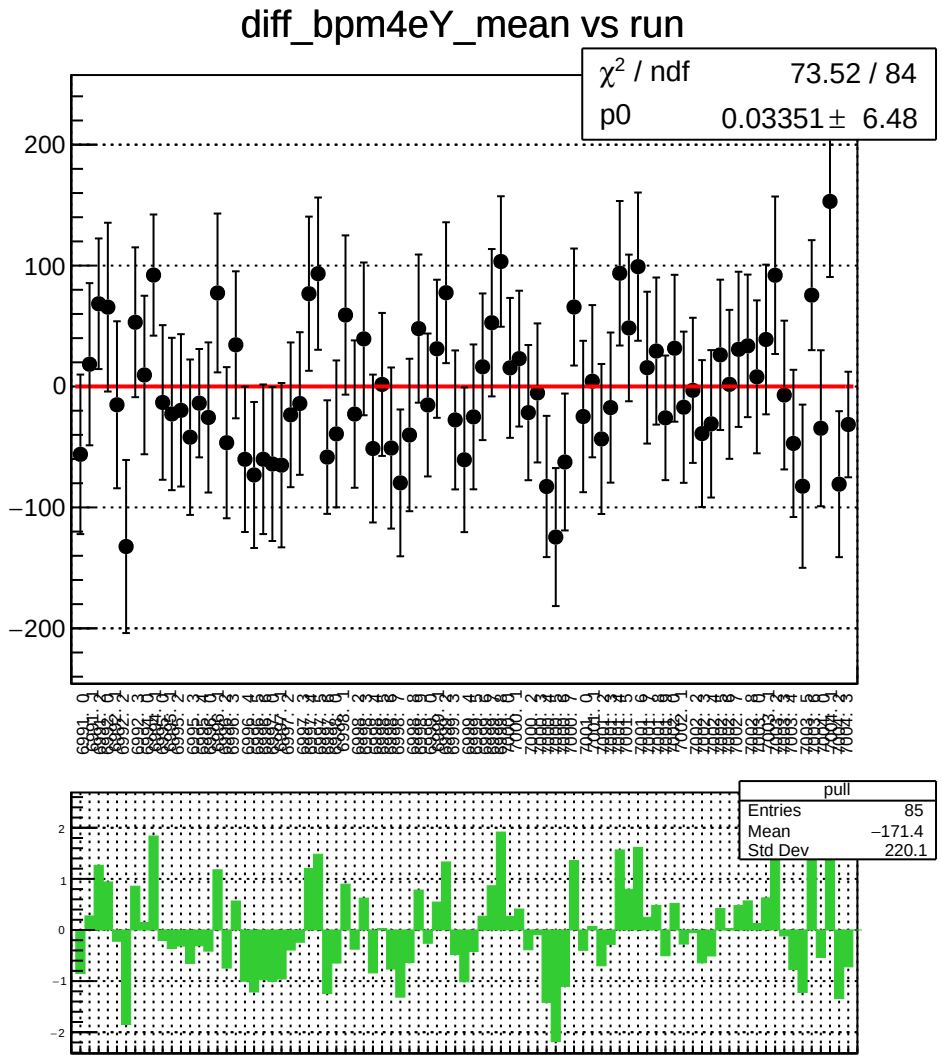

pull1D
Entries 85
Mean −0.00244
Std Dev 0.9723
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

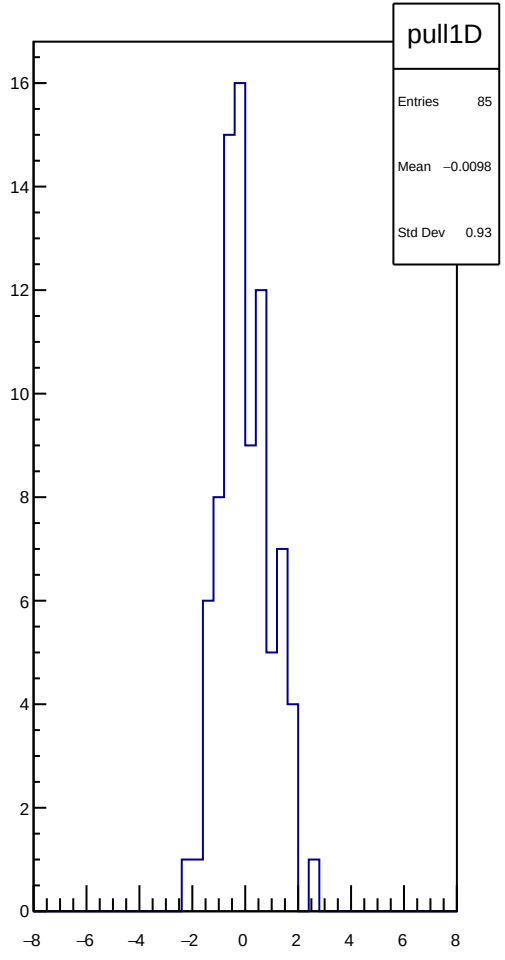

diff_bpm4aY_rms vs run
χ² / ndf 4945 / 84
p0 6038 ± 4.708
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600
5400
5200

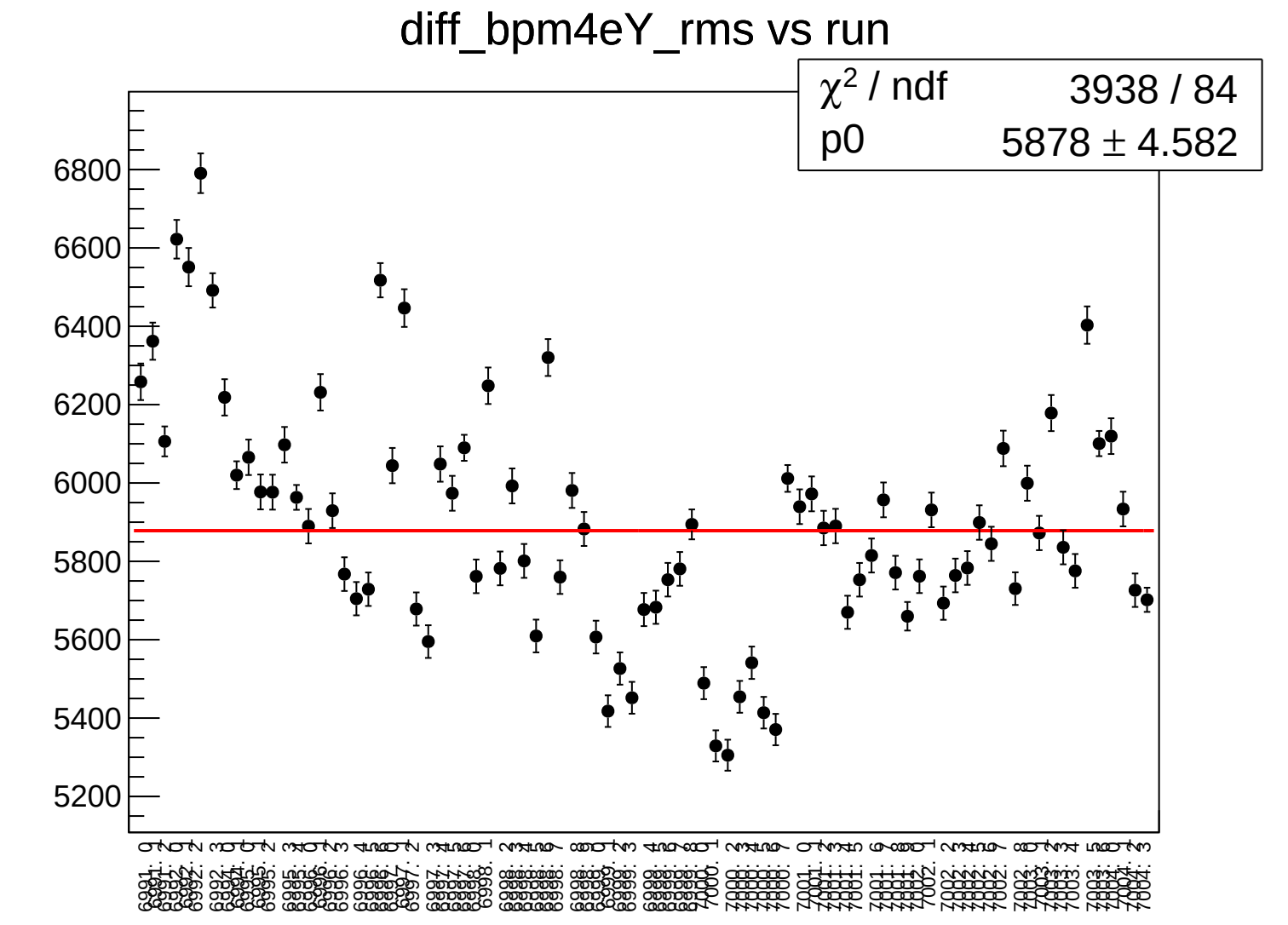

diff_bpm4eX_mean vs run
χ² / ndf 75.39 / 84
p0 −10.11 ± 9.954
pull
Entries 85
Mean −321.3
Std Dev 363.8

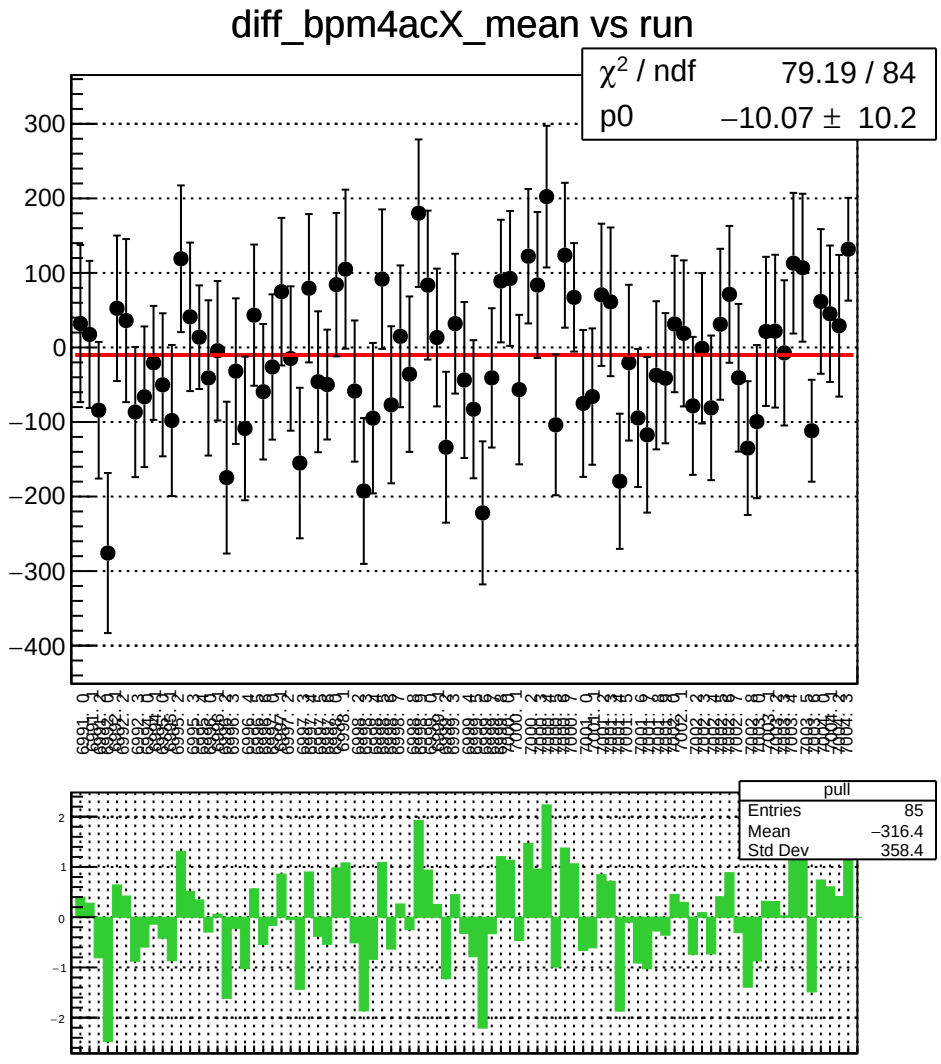

pull1D
Entries 85
Mean −0.01013
Std Dev 0.9417

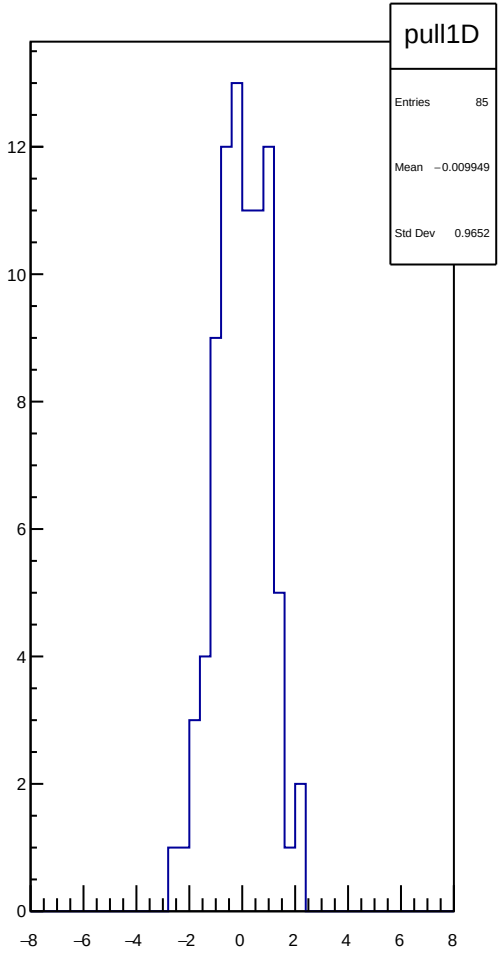

diff_bpm4eX_rms vs run
χ^2 / ndf 3191 / 84
p0 9032 ± 7.038
10500
10000
9500
9000
8500

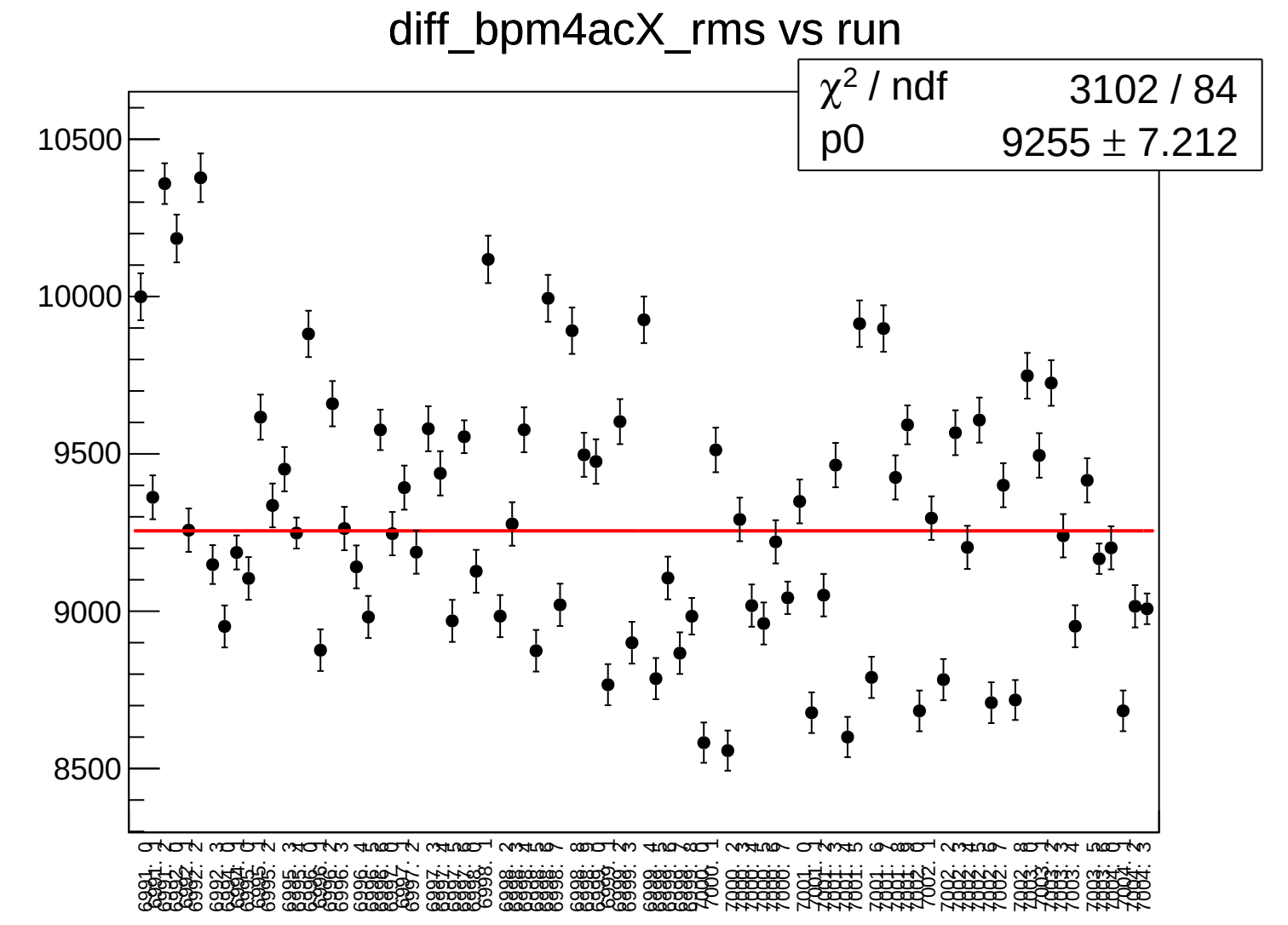

diff_bpm4eY_mean vs run
χ² / ndf 73.52 / 84
p0 0.03351 ± 6.48
200
100
0
−100
−200
pull
Entries 85
Mean −171.4
Std Dev 220.1
2
1
0
−1
−2

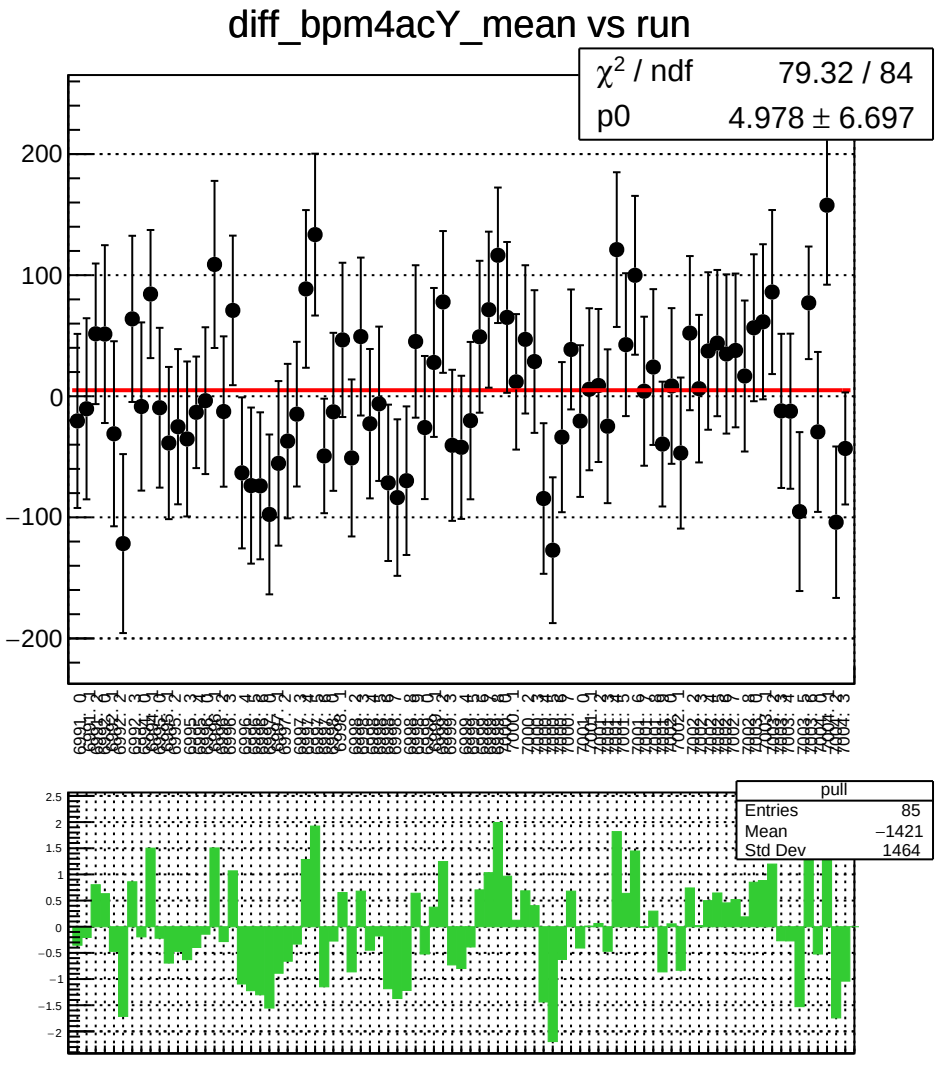

pull1D
Entries 85
Mean −0.0098
Std Dev 0.93
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

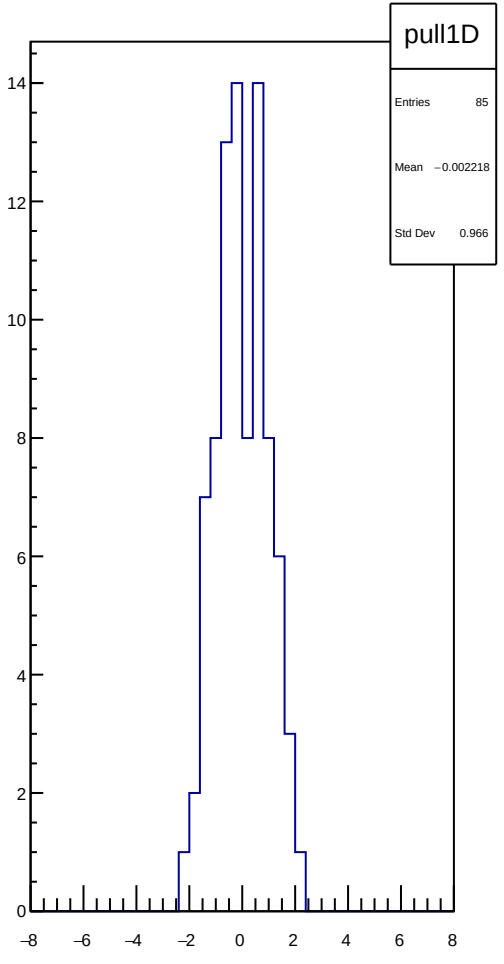

diff_bpm4eY_rms vs run
χ^2 / ndf 3938 / 84
p0 5878 ± 4.582
6800
6600
6400
6200
6000
5800
5600
5400
5200

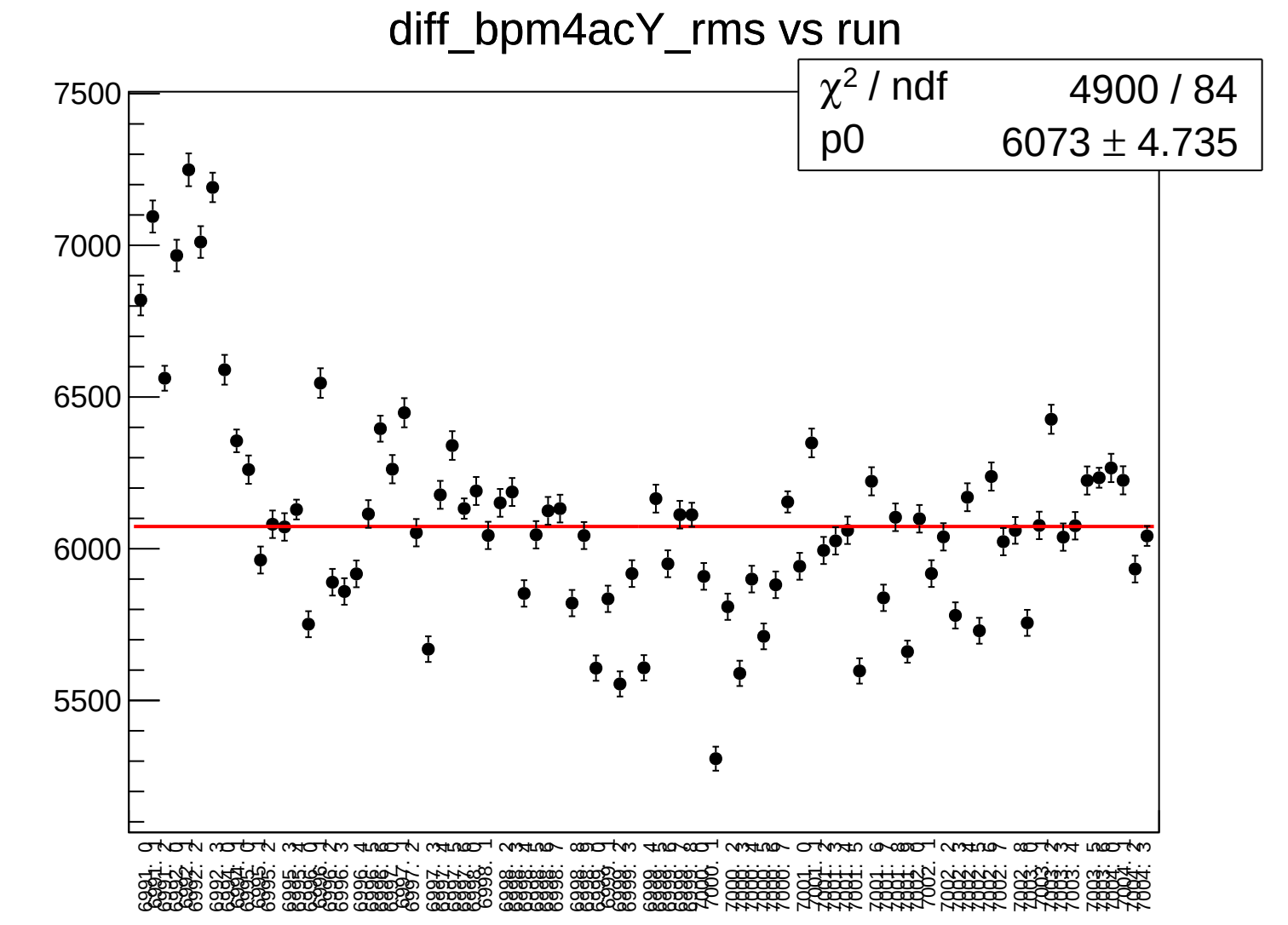

diff_bpm4acX_mean vs run
χ² / ndf 79.19 / 84
p0 −10.07 ± 10.2
pull
Entries 85
Mean −316.4
Std Dev 358.4

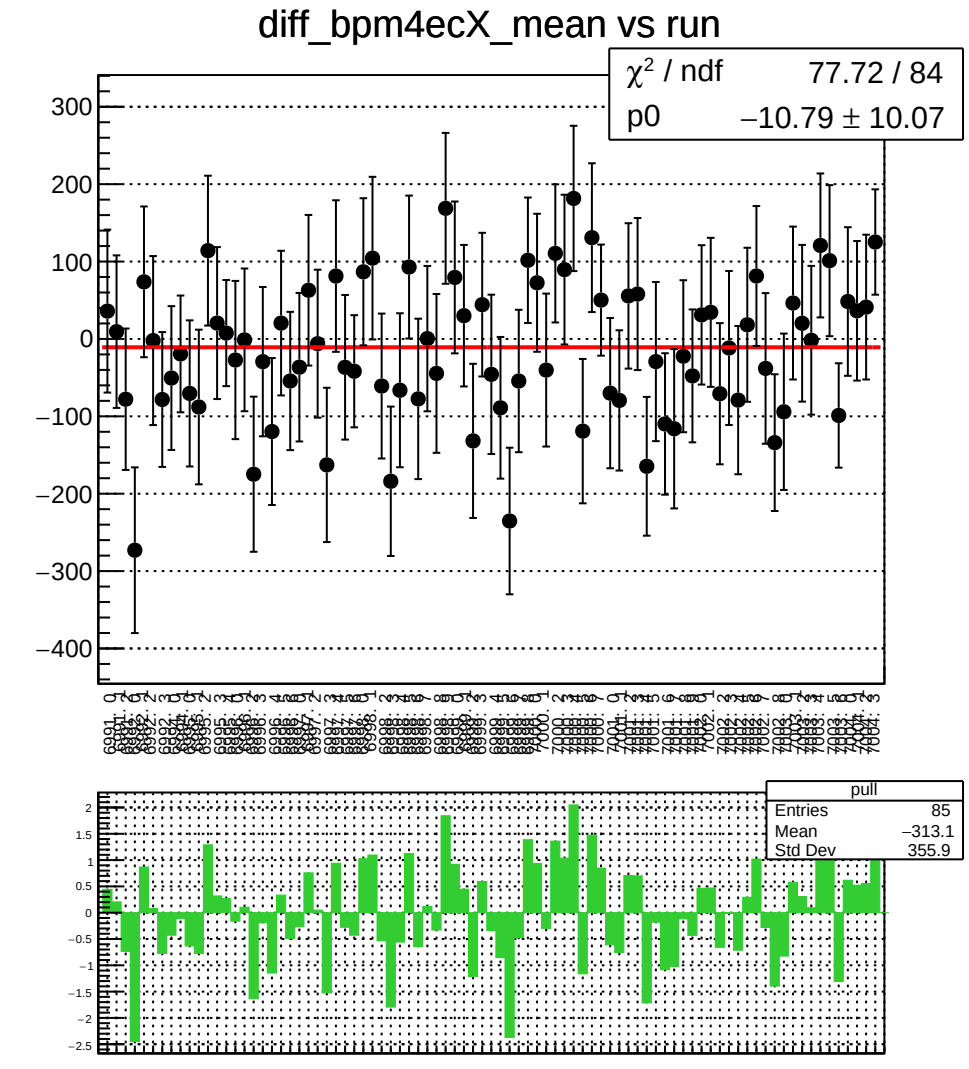

pull1D
Entries 85
Mean −0.009949
Std Dev 0.9652

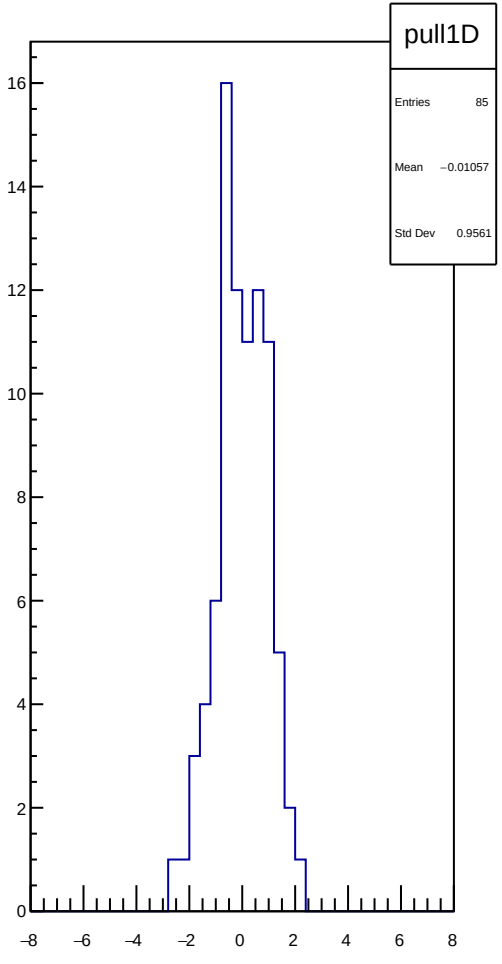

diff_bpm4acX_rms vs run
χ² / ndf 3102 / 84
p0 9255 ± 7.212
10500
10000
9500
9000
8500

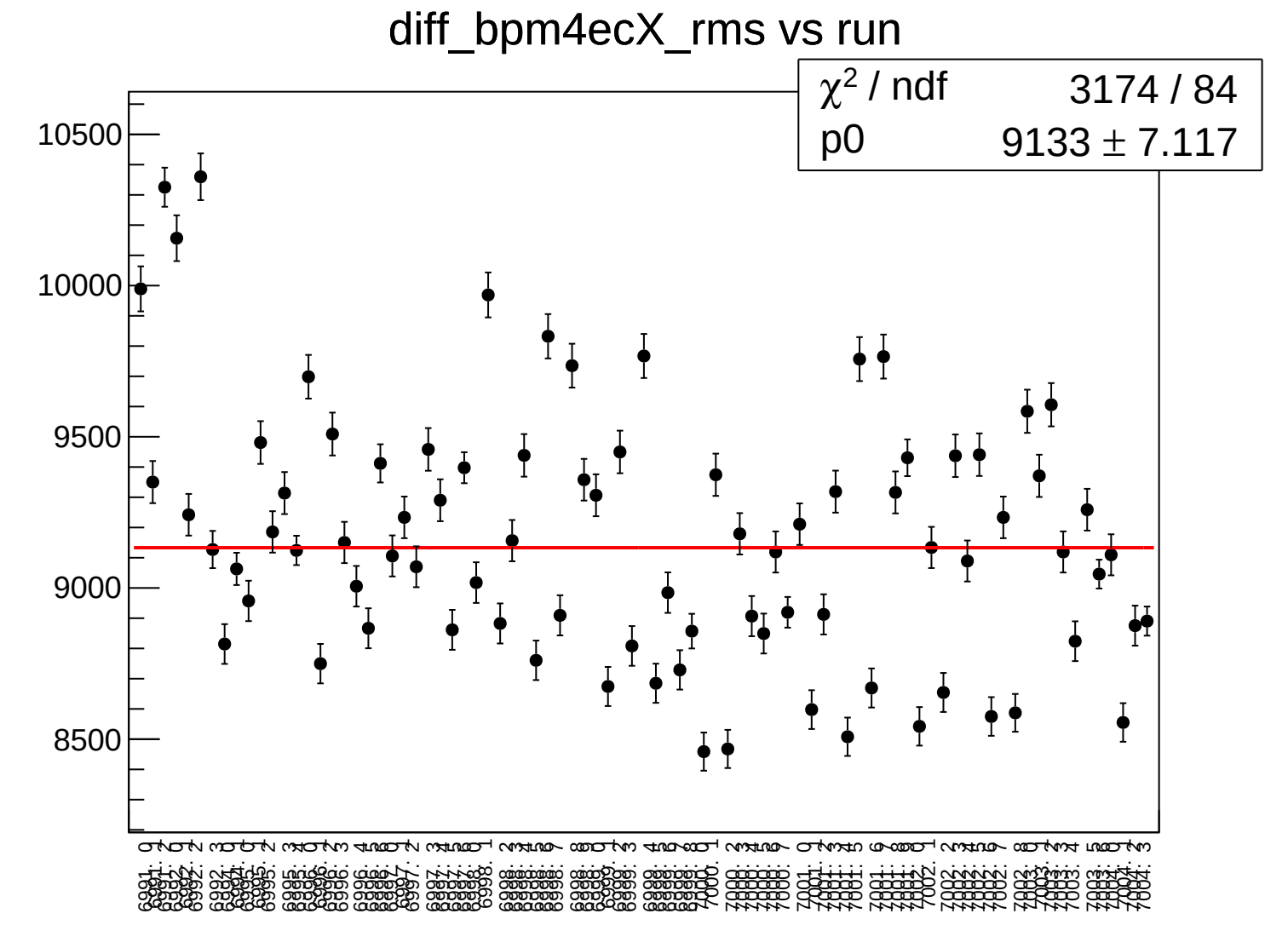

diff_bpm4acY_mean vs run
χ² / ndf 79.32 / 84
p0 4.978 ± 6.697
200
100
0
−100
−200
pull
Entries 85
Mean −1421
Std Dev 1464
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

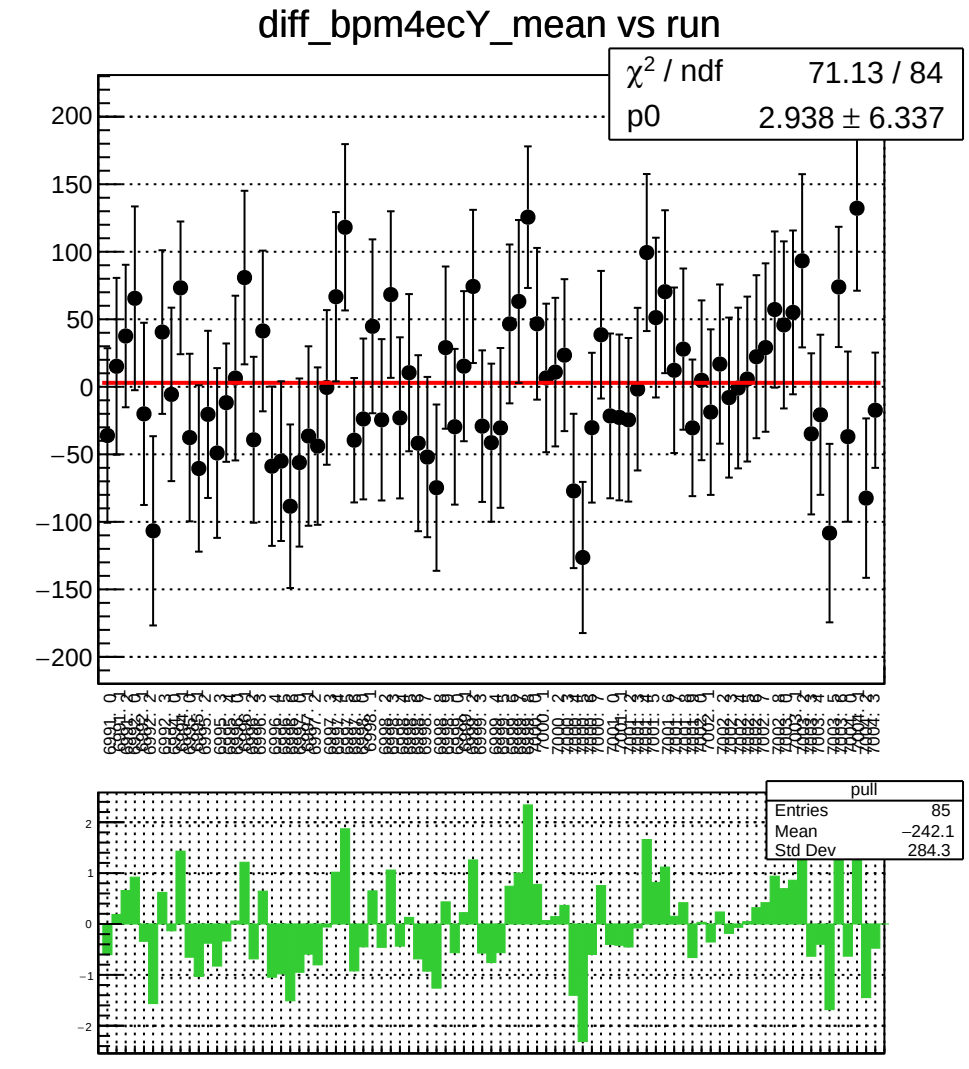

pull1D
Entries 85
Mean −0.002218
Std Dev 0.966
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

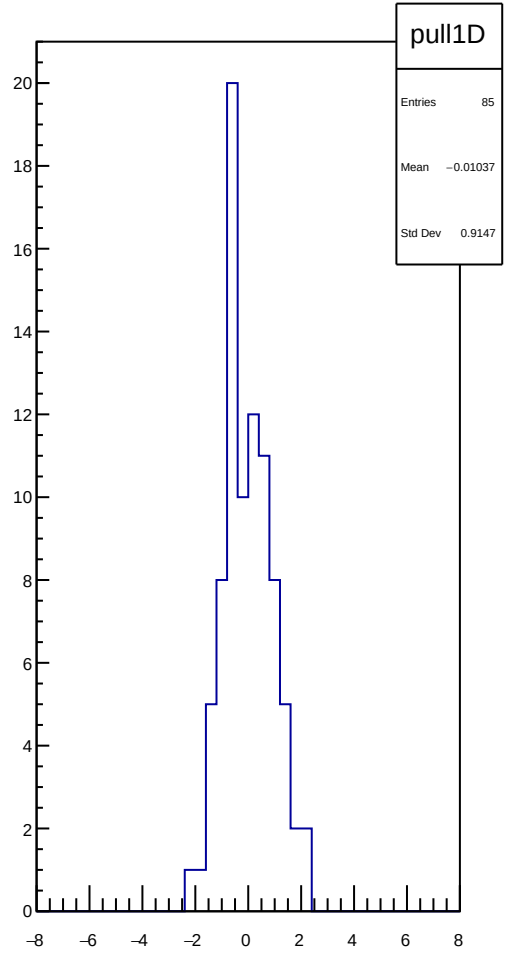

diff_bpm4acY_rms vs run
χ^2 / ndf 4900 / 84
p0 6073 ± 4.735
7500
7000
6500
6000
5500

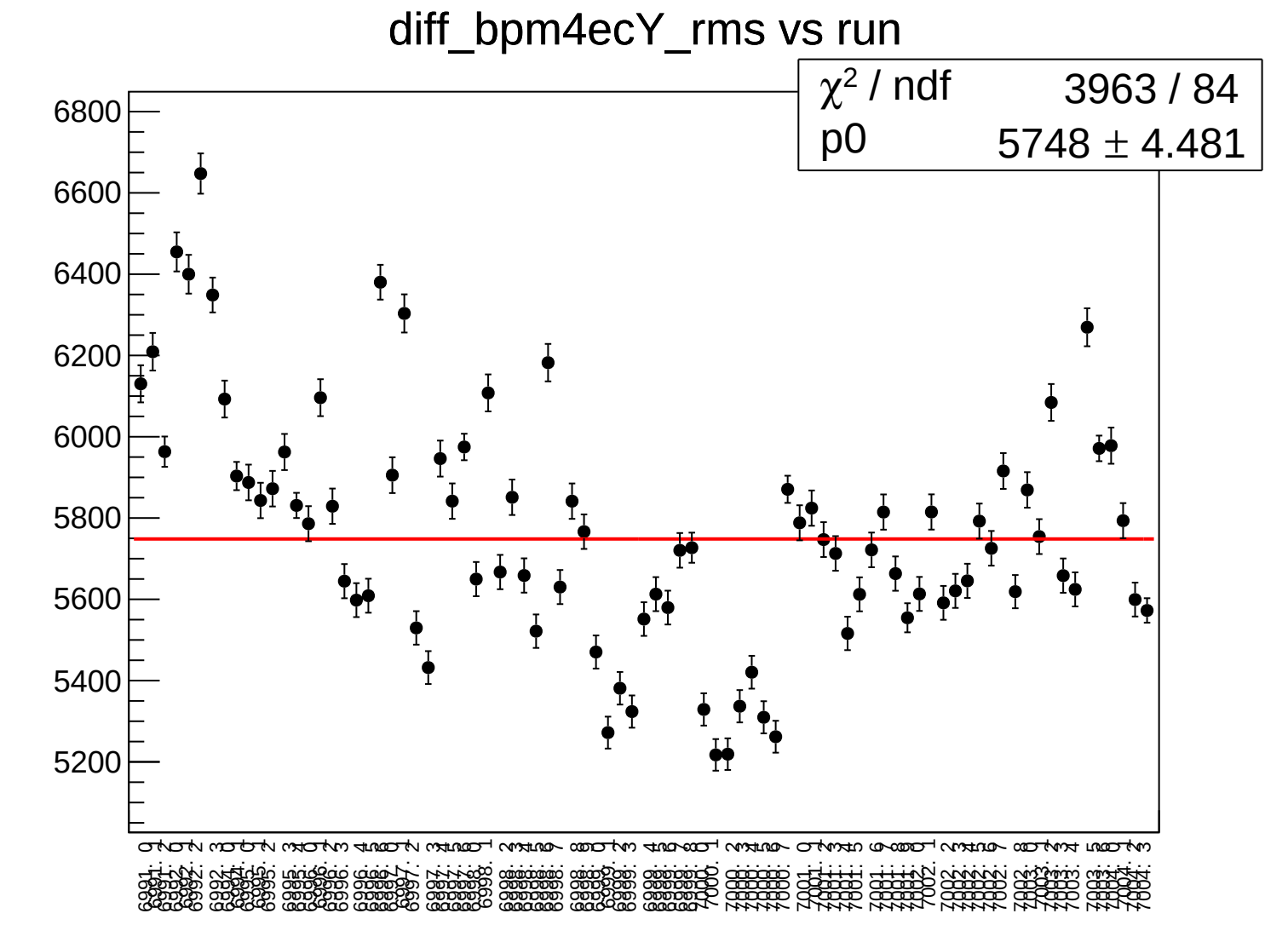

diff_bpm4ecX_mean vs run
χ² / ndf 77.72 / 84
p0 −10.79 ± 10.07
pull
Entries 85
Mean −313.1
Std Dev 355.9

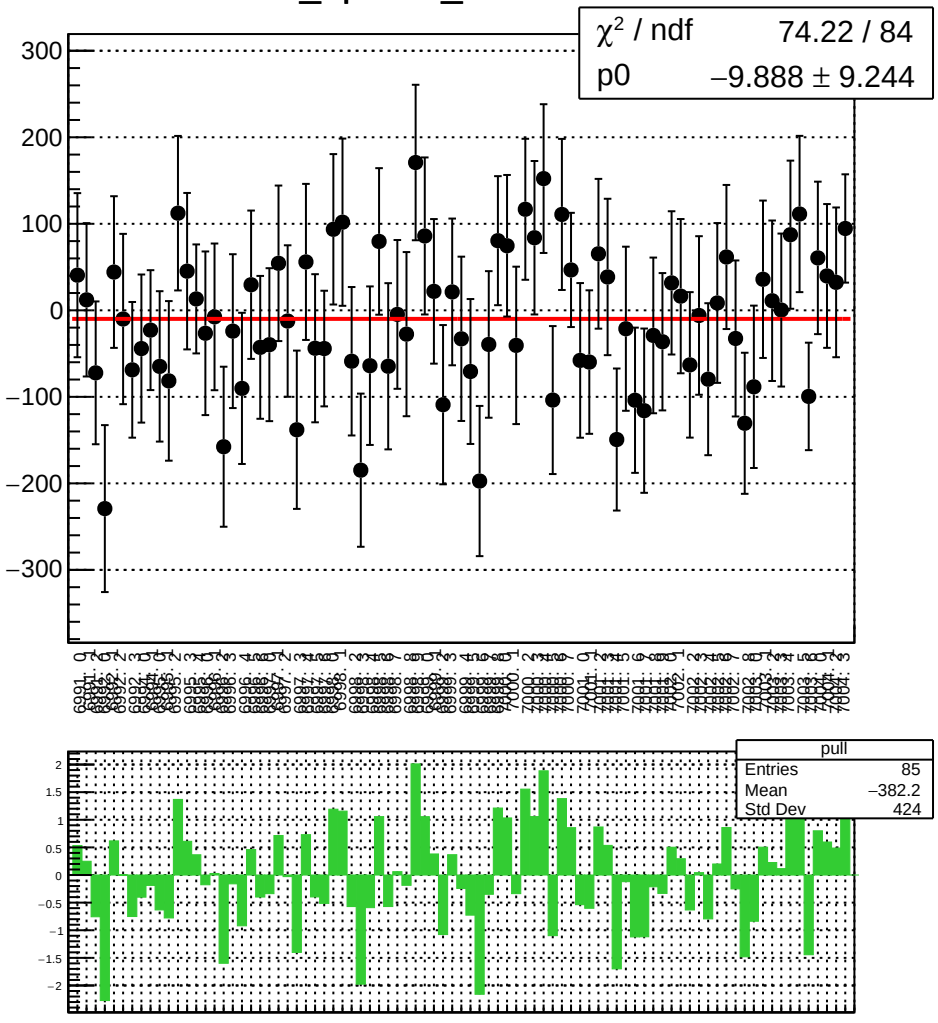

pull1D
Entries 85
Mean −0.01057
Std Dev 0.9561

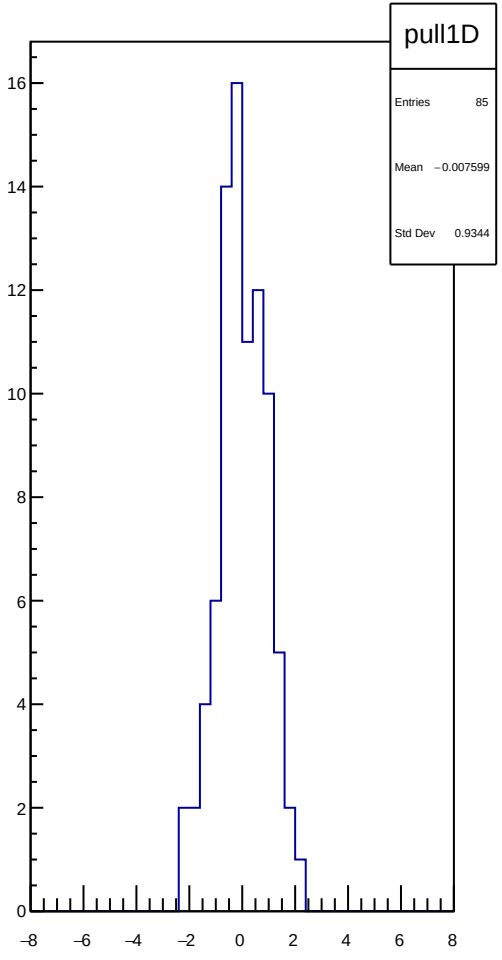

diff_bpm4ecX_rms vs run
χ² / ndf 3174 / 84
p0 9133 ± 7.117
10500
10000
9500
9000
8500

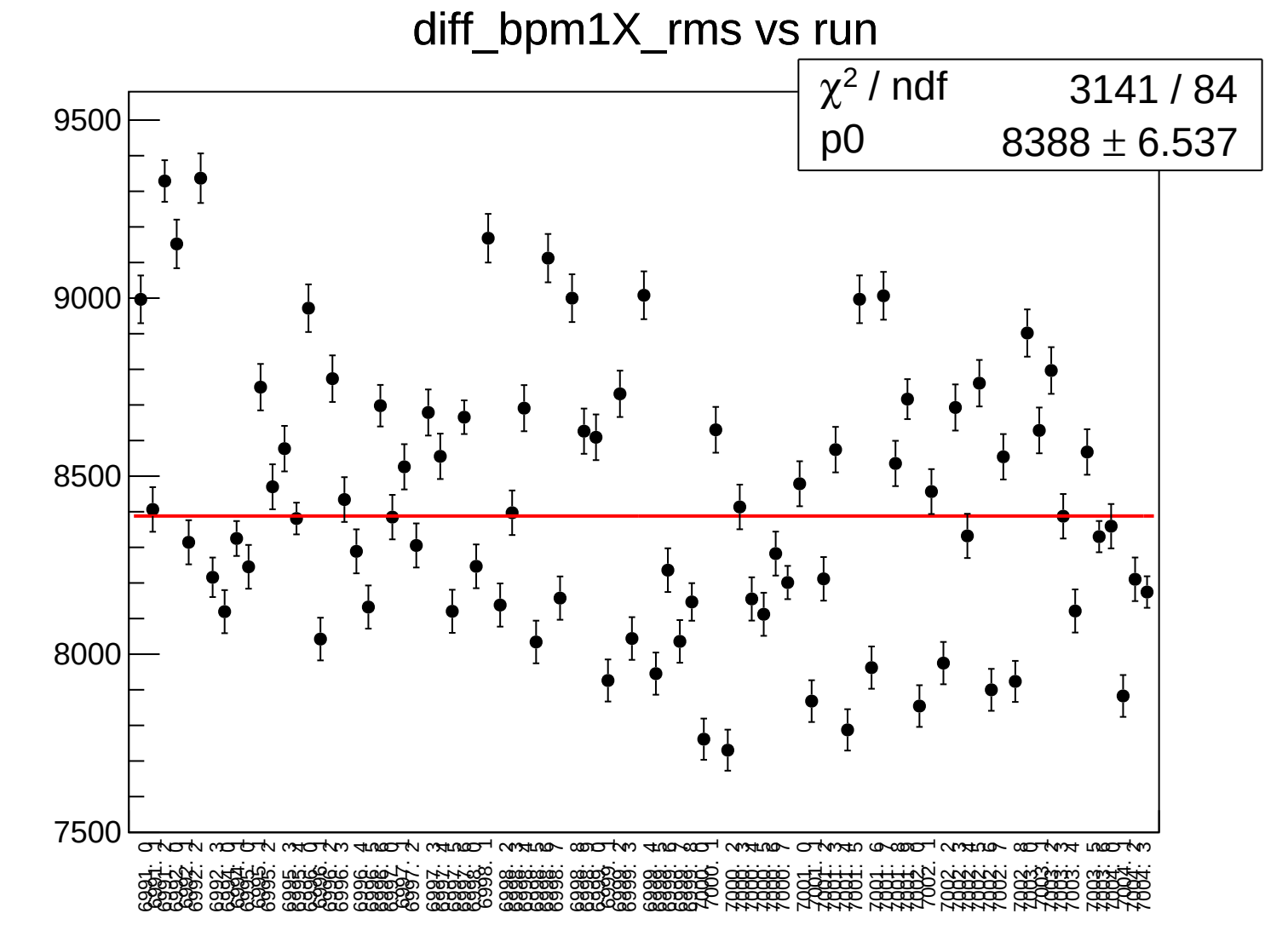

diff_bpm4ecY_mean vs run
χ² / ndf 71.13 / 84
p0 2.938 ± 6.337
pull
Entries 85
Mean −242.1
Std Dev 284.3

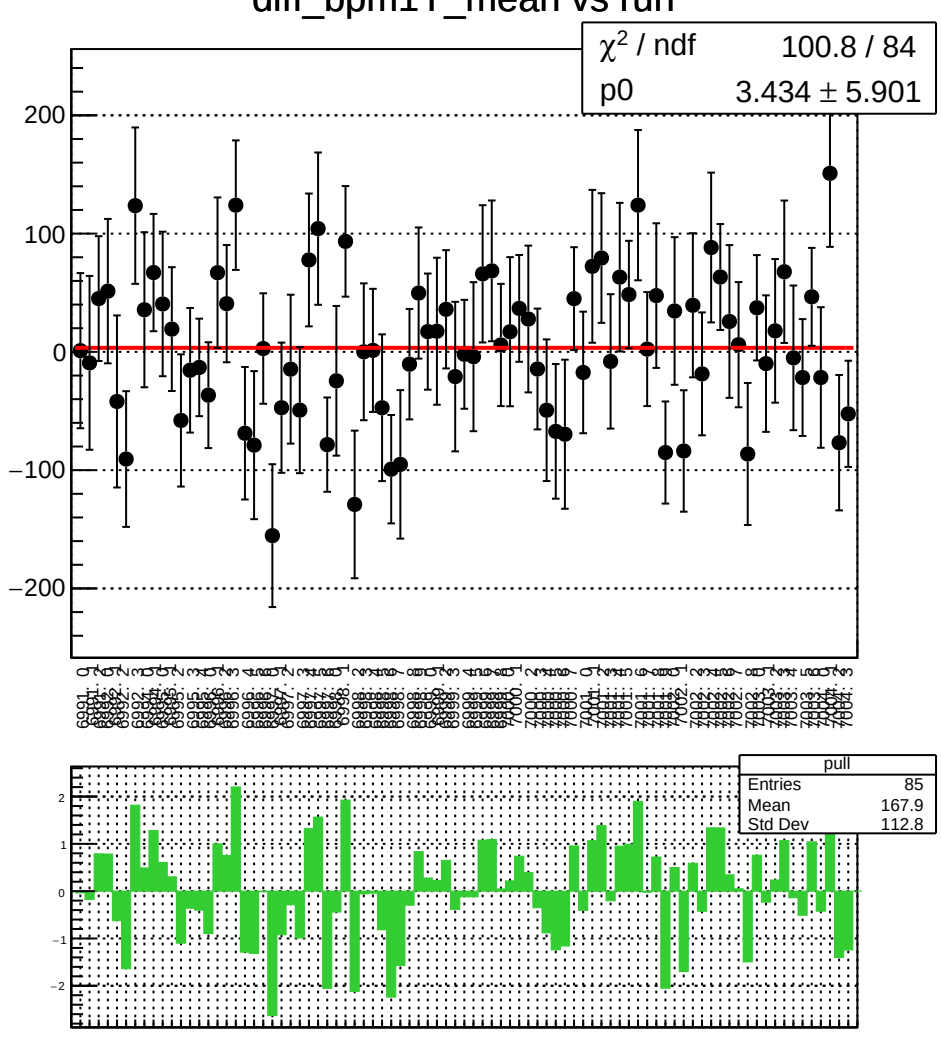

pull1D
Entries 85
Mean −0.01037
Std Dev 0.9147

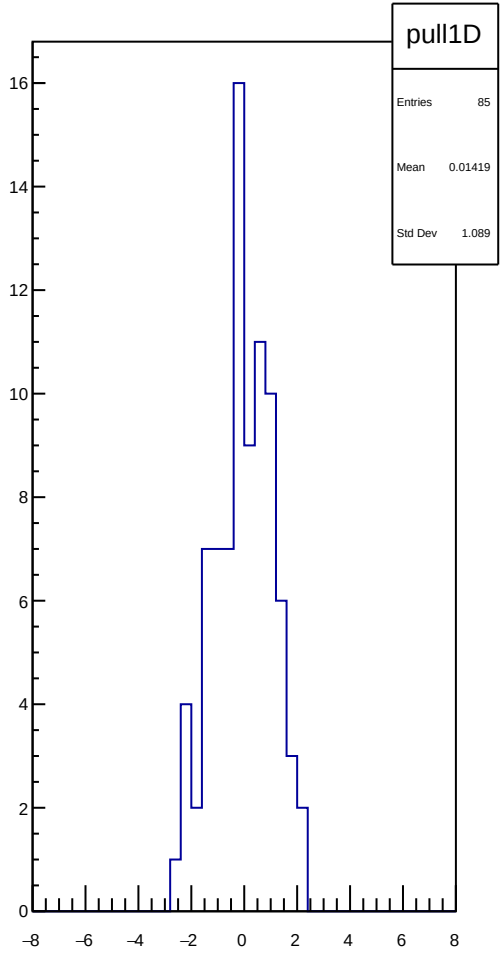

diff_bpm4ecY_rms vs run
χ² / ndf 3963 / 84
p0 5748 ± 4.481
6800
6600
6400
6200
6000
5800
5600
5400
5200

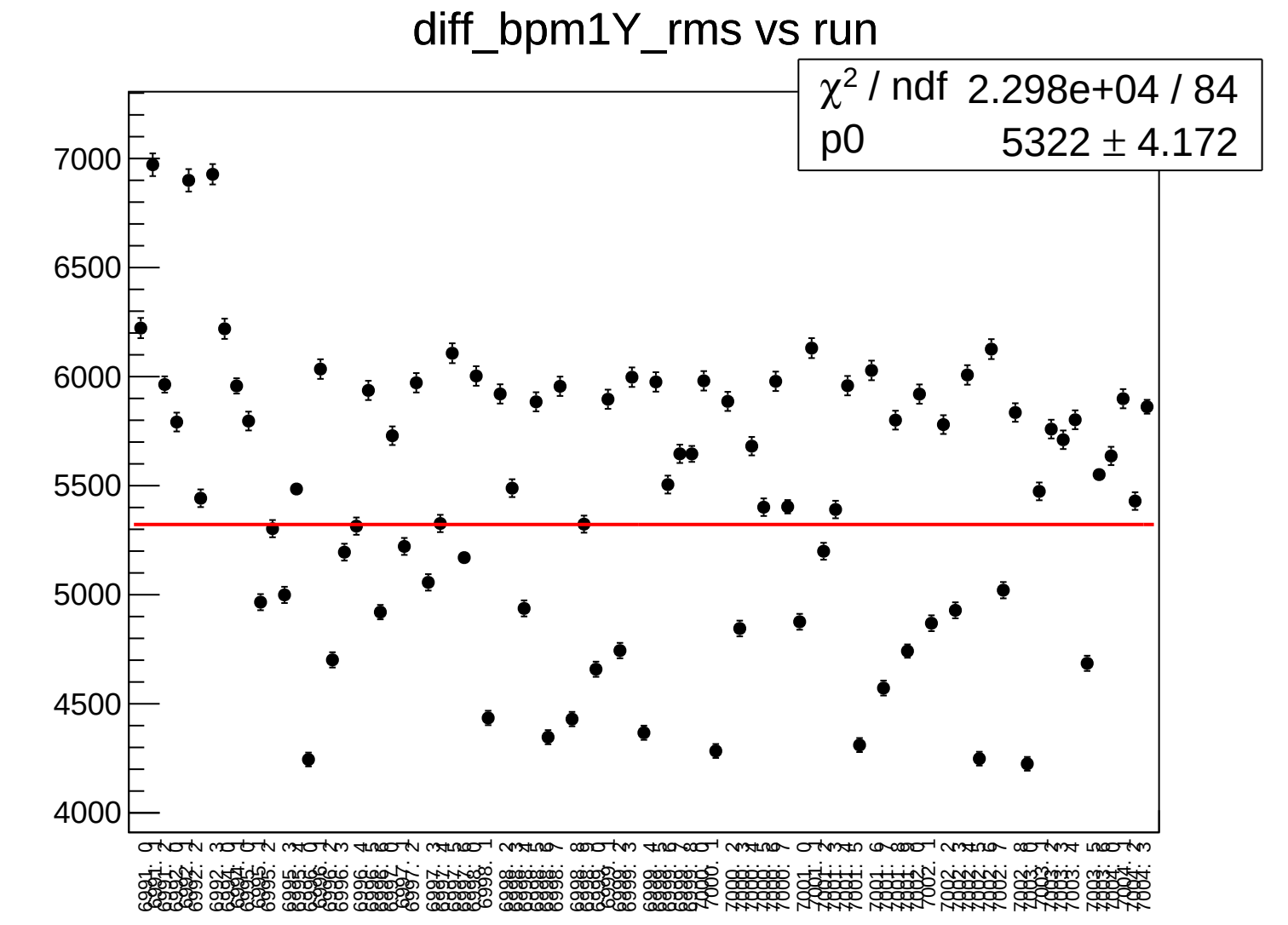

diff_bpm1X_mean vs run
χ² / ndf 74.22 / 84
p0 −9.888 ± 9.244
pull
Entries 85
Mean −382.2
Std Dev 424

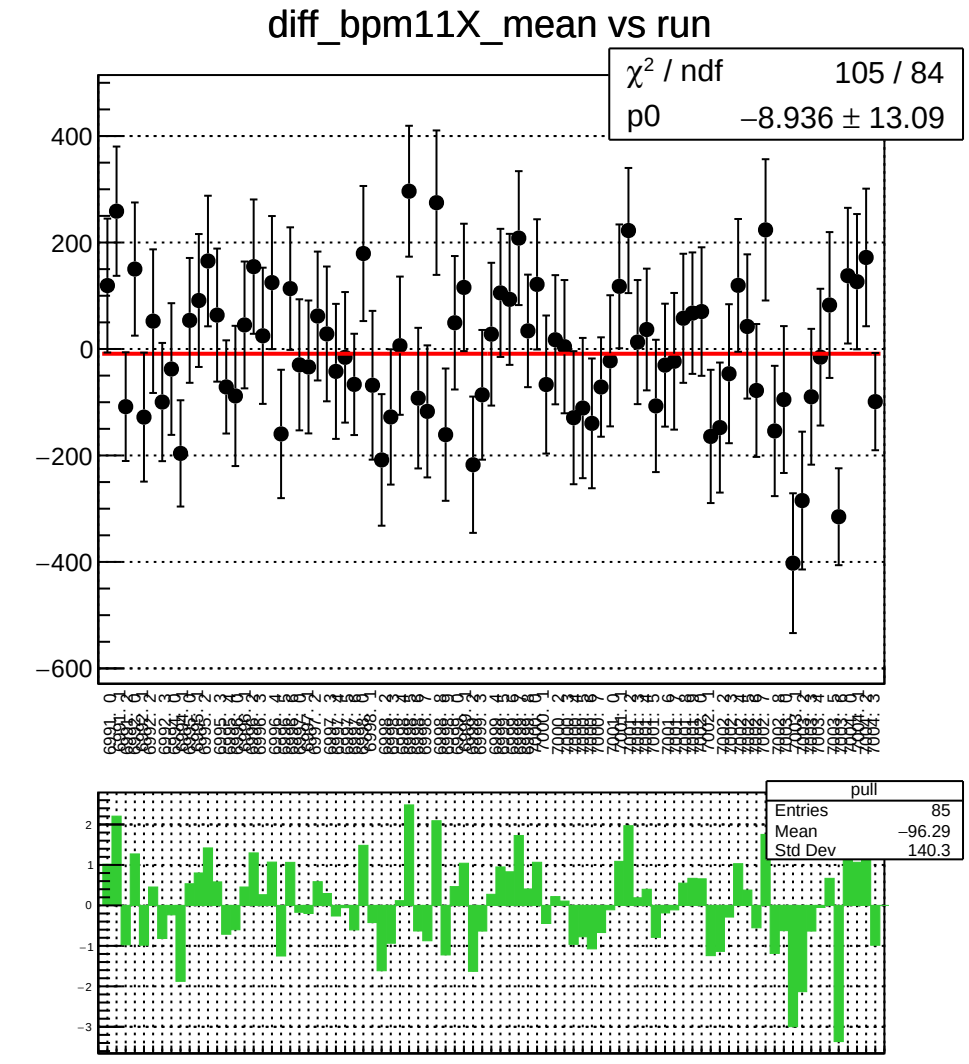

pull1D
Entries 85
Mean −0.007599
Std Dev 0.9344

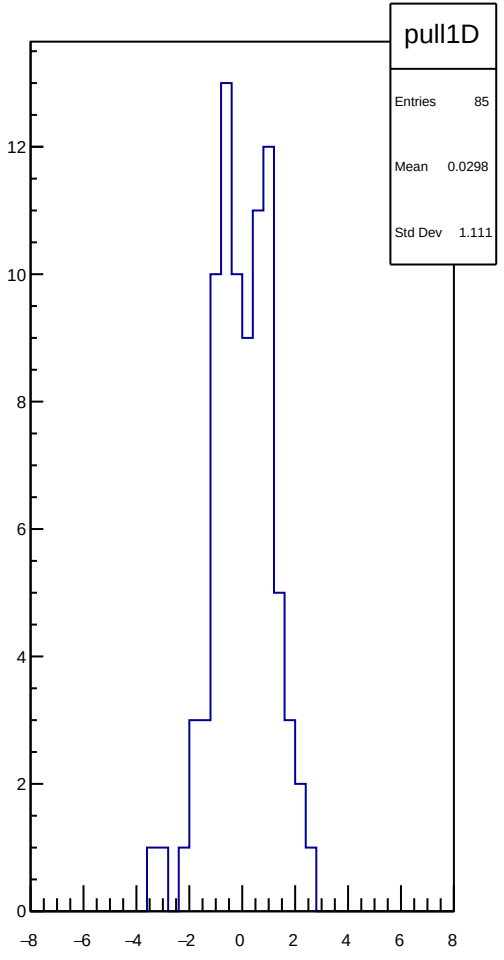

diff_bpm1X_rms vs run
χ^2 / ndf 3141 / 84
p0 8388 ± 6.537
9500
9000
8500
8000
7500

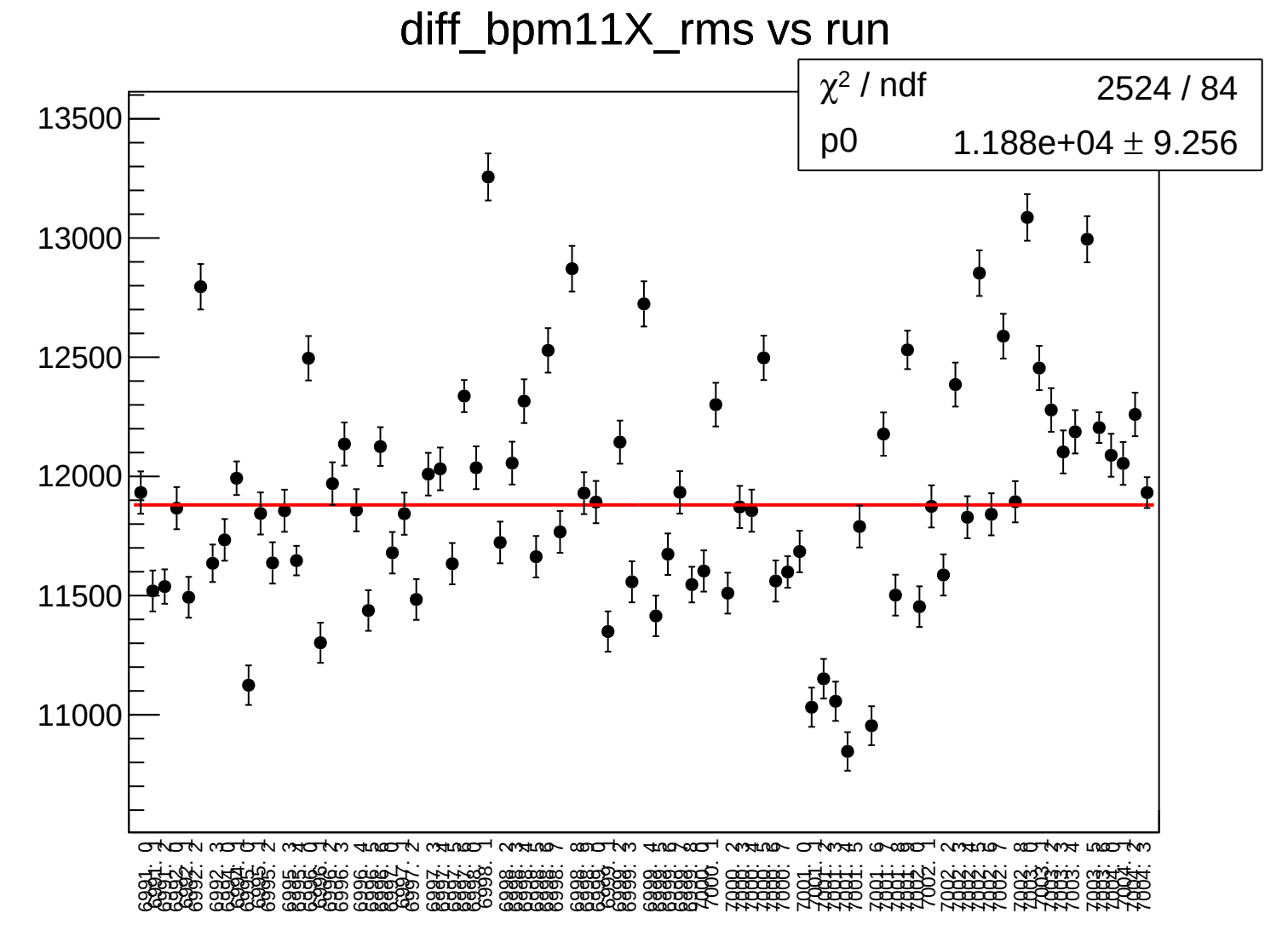

diff_bpm1Y_mean vs run
χ^2 / ndf 100.8 / 84
p0 3.434 ± 5.901
200
100
0
−100
−200
pull
Entries 85
Mean 167.9
Std Dev 112.8
2
1
0
−1
−2

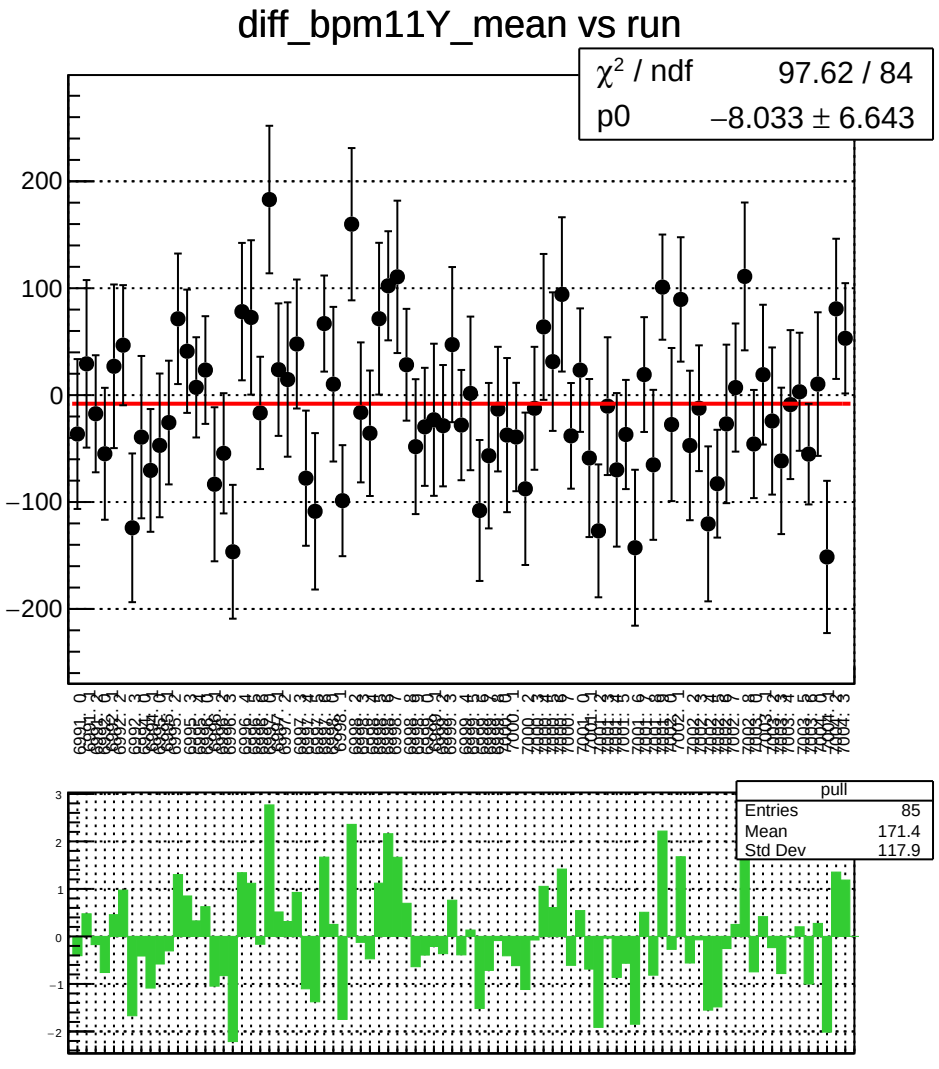

pull1D
Entries 85
Mean 0.01419
Std Dev 1.089
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

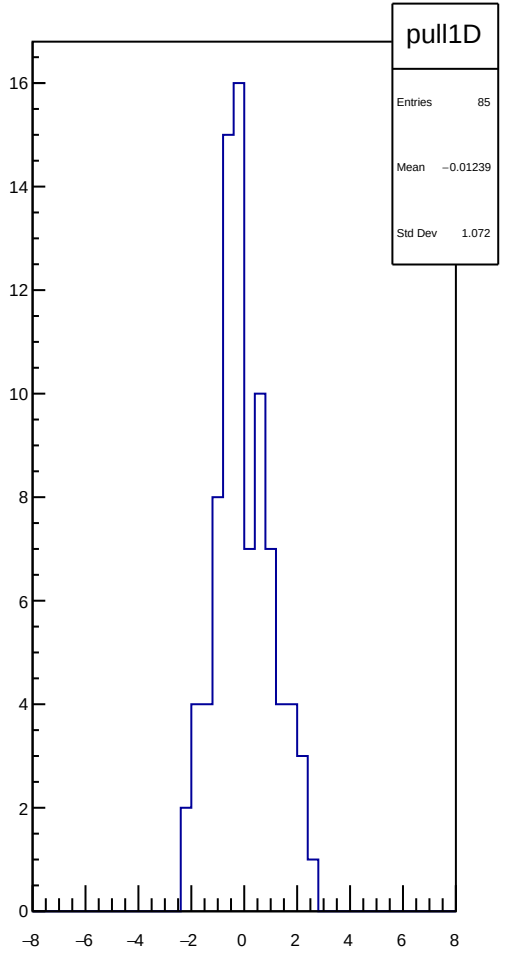

diff_bpm1Y_rms vs run
χ² / ndf 2.298e+04 / 84
p0 5322 ± 4.172
7000
6500
6000
5500
5000
4500
4000

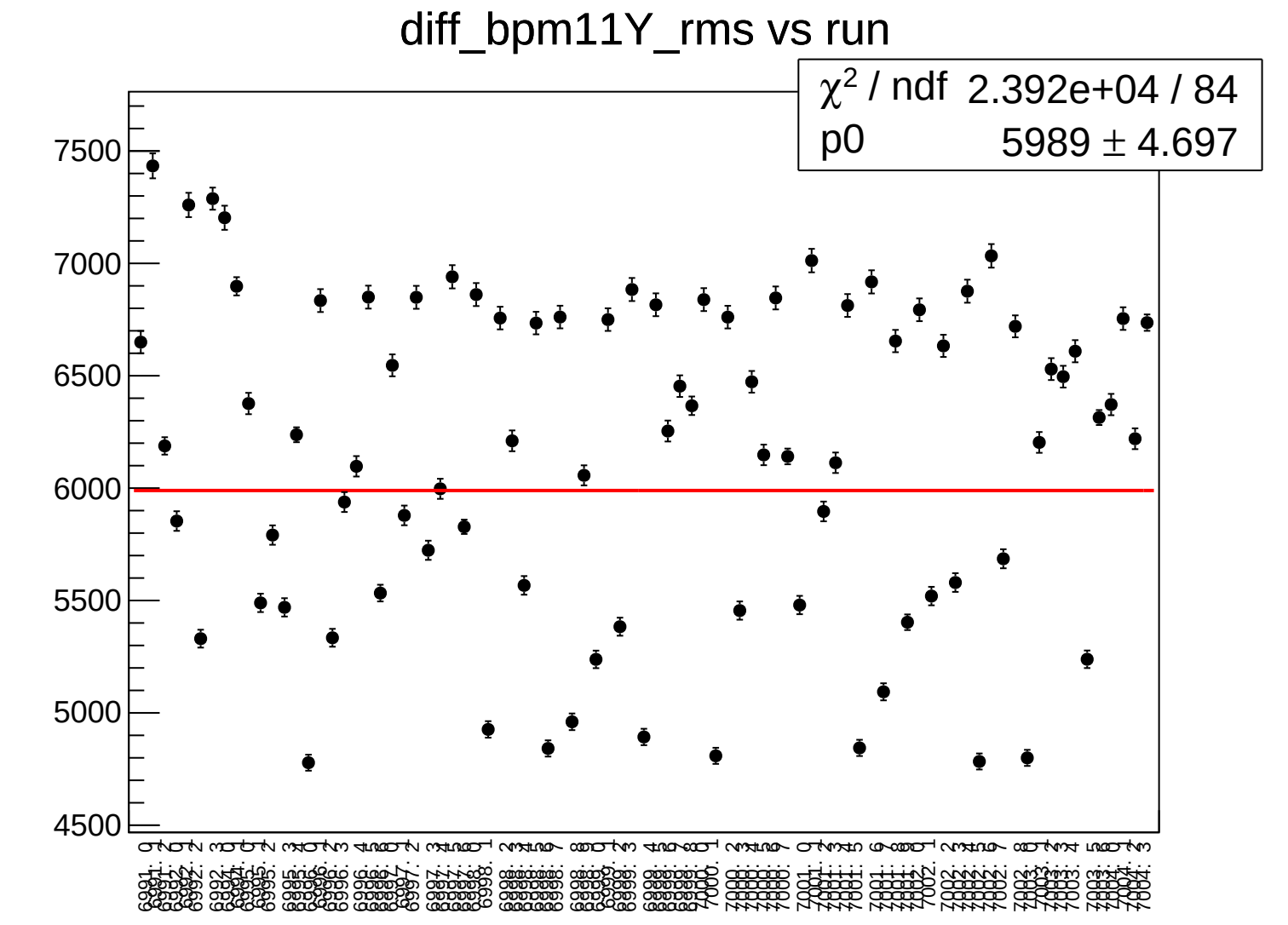

diff_bpm11X_mean vs run
χ² / ndf 105 / 84
p0 −8.936 ± 13.09
400
200
0
−200
−400
−600
pull
Entries 85
Mean −96.29
Std Dev 140.3
2
1
0
−1
−2
−3

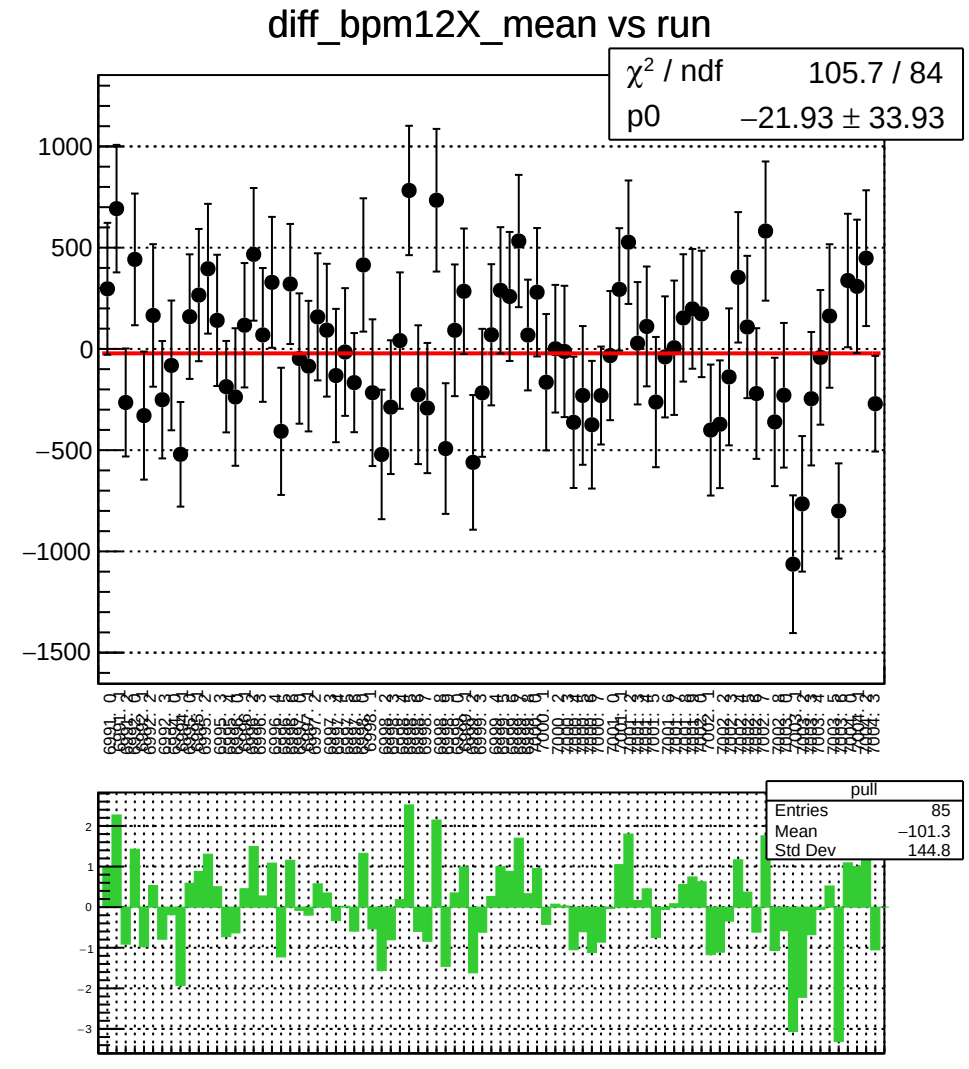

pull1D
Entries 85
Mean 0.0298
Std Dev 1.111
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

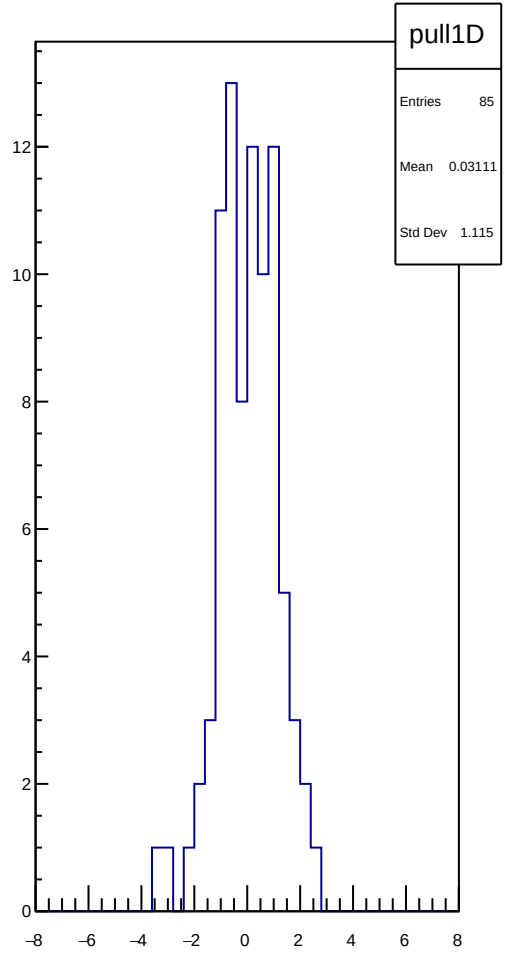

diff_bpm11X_rms vs run
χ² / ndf 2524 / 84
p0 1.188e+04 ± 9.256
13500
13000
12500
12000
11500
11000

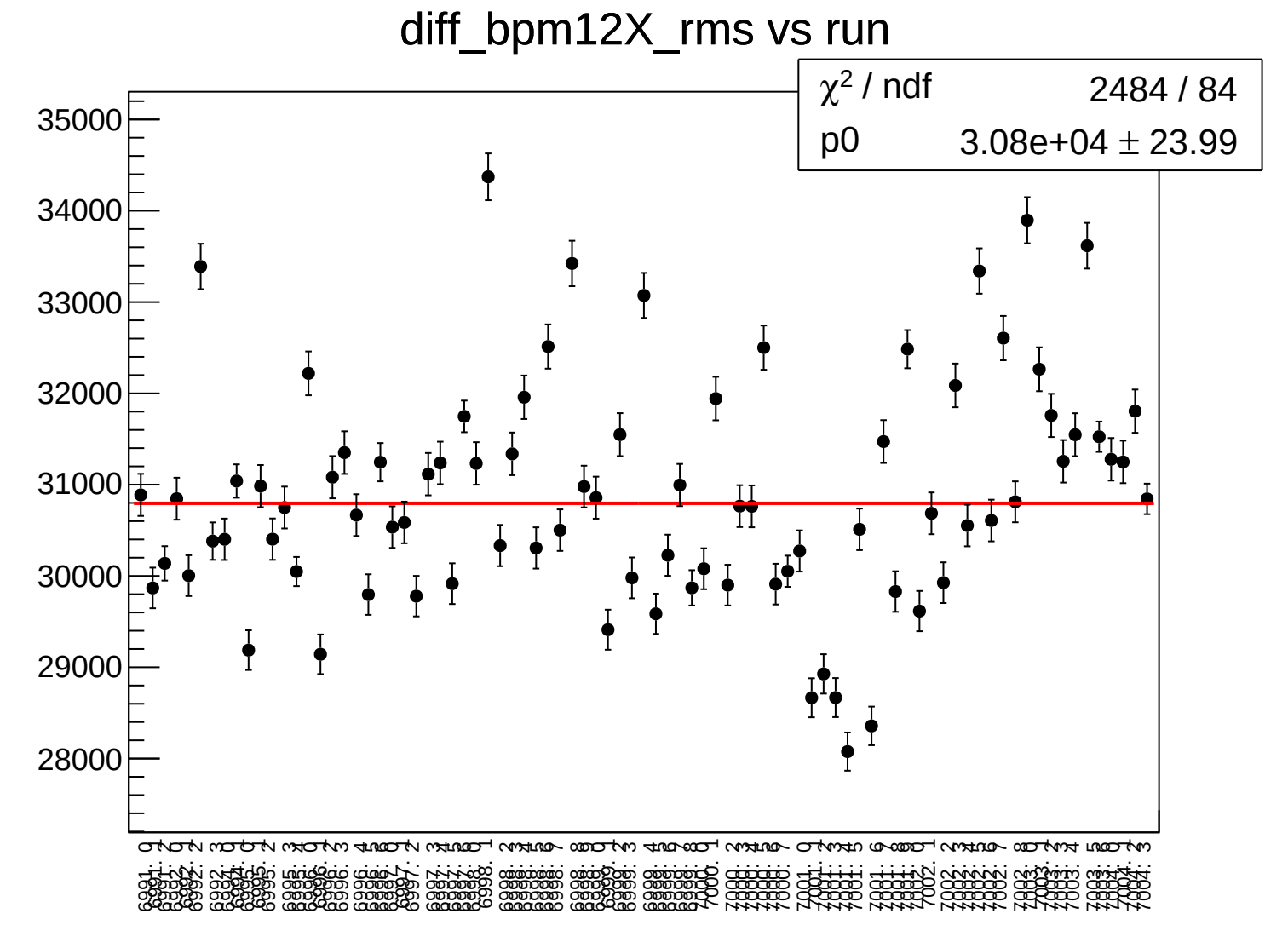

diff_bpm11Y_mean vs run
χ² / ndf 97.62 / 84
p0 −8.033 ± 6.643
200
100
0
−100
−200
pull
Entries 85
Mean 171.4
Std Dev 117.9
3
2
1
0
−1
−2

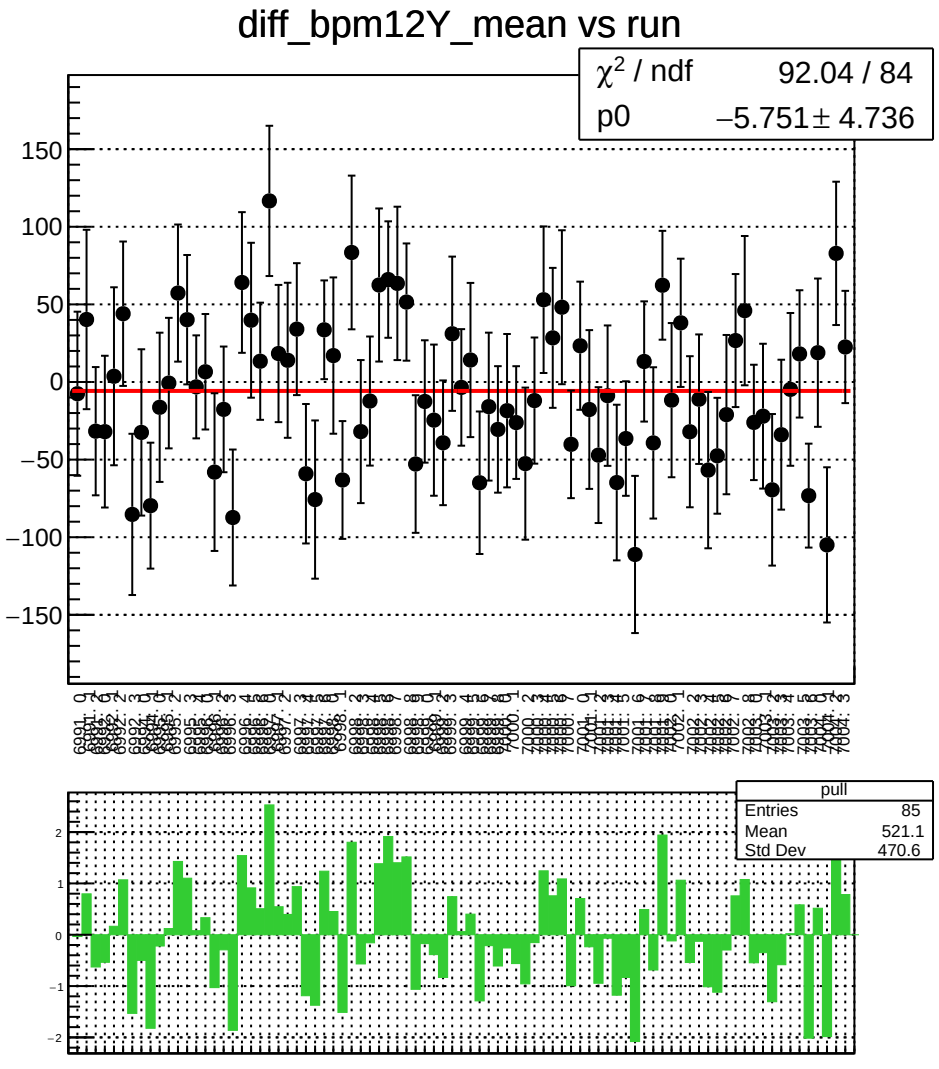

pull1D
Entries 85
Mean −0.01239
Std Dev 1.072
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

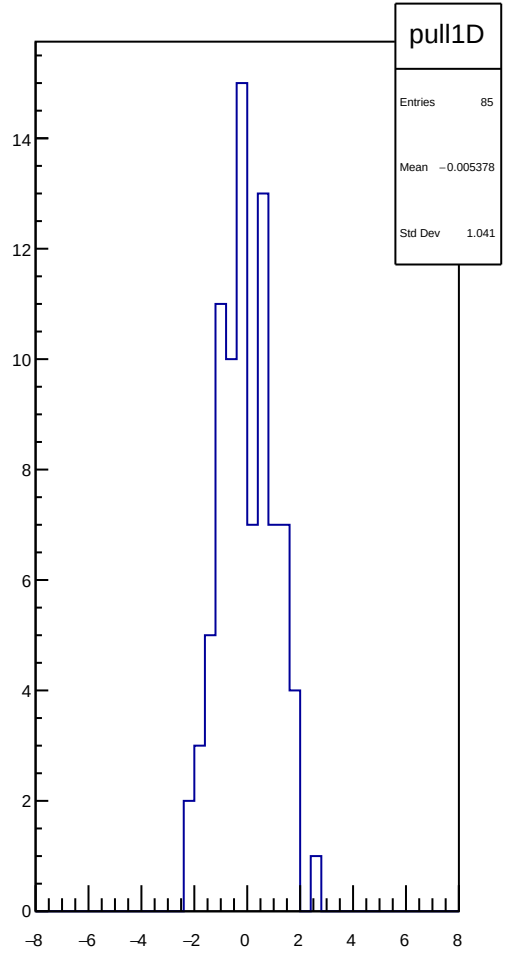

diff_bpm11Y_rms vs run
χ² / ndf 2.392e+04 / 84
p0 5989 ± 4.697
7500
7000
6500
6000
5500
5000
4500

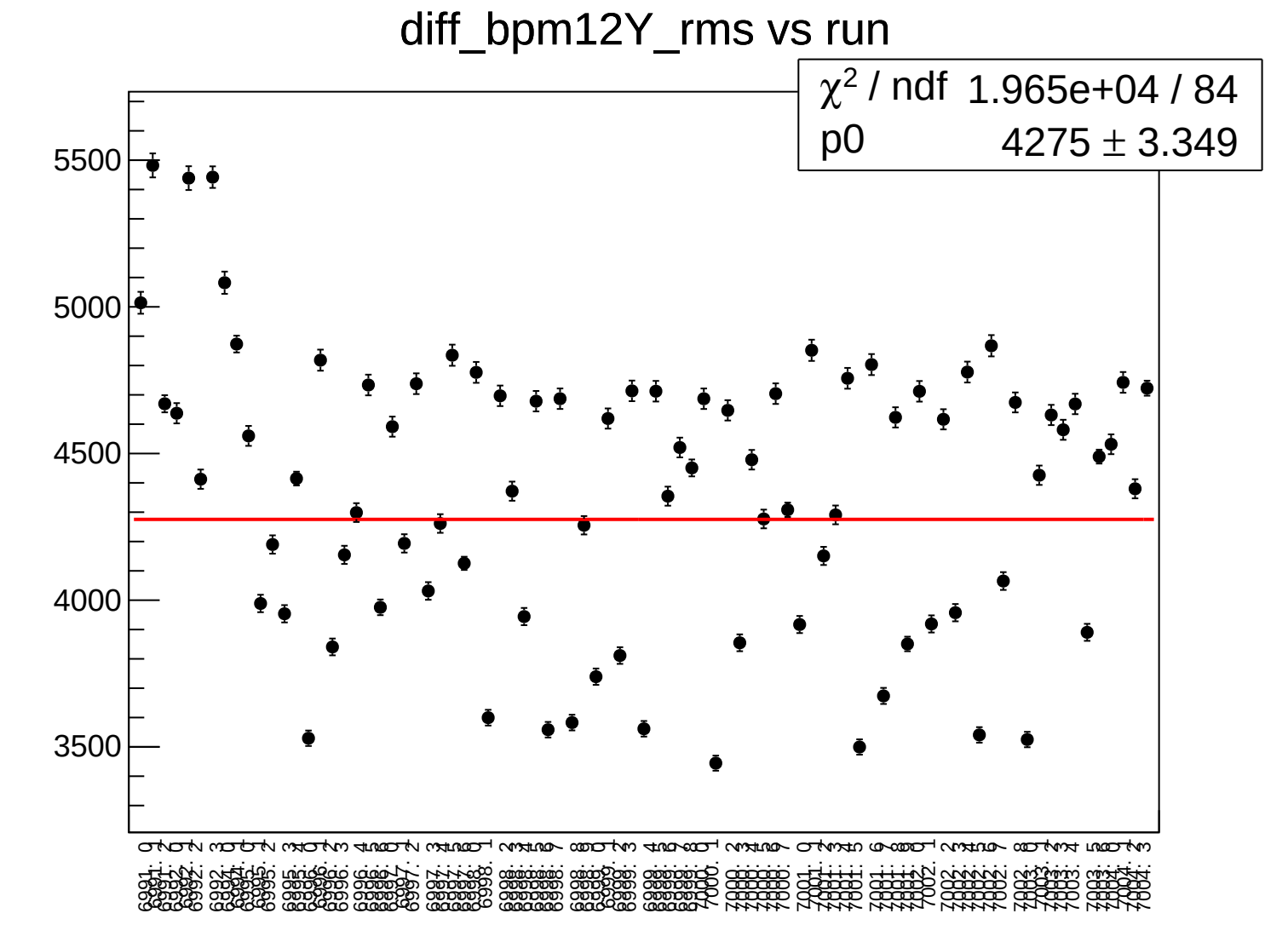

diff_bpm12X_mean vs run
χ² / ndf 105.7 / 84
p0 −21.93 ± 33.93
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −101.3
Std Dev 144.8
2
1
0
−1
−2
−3

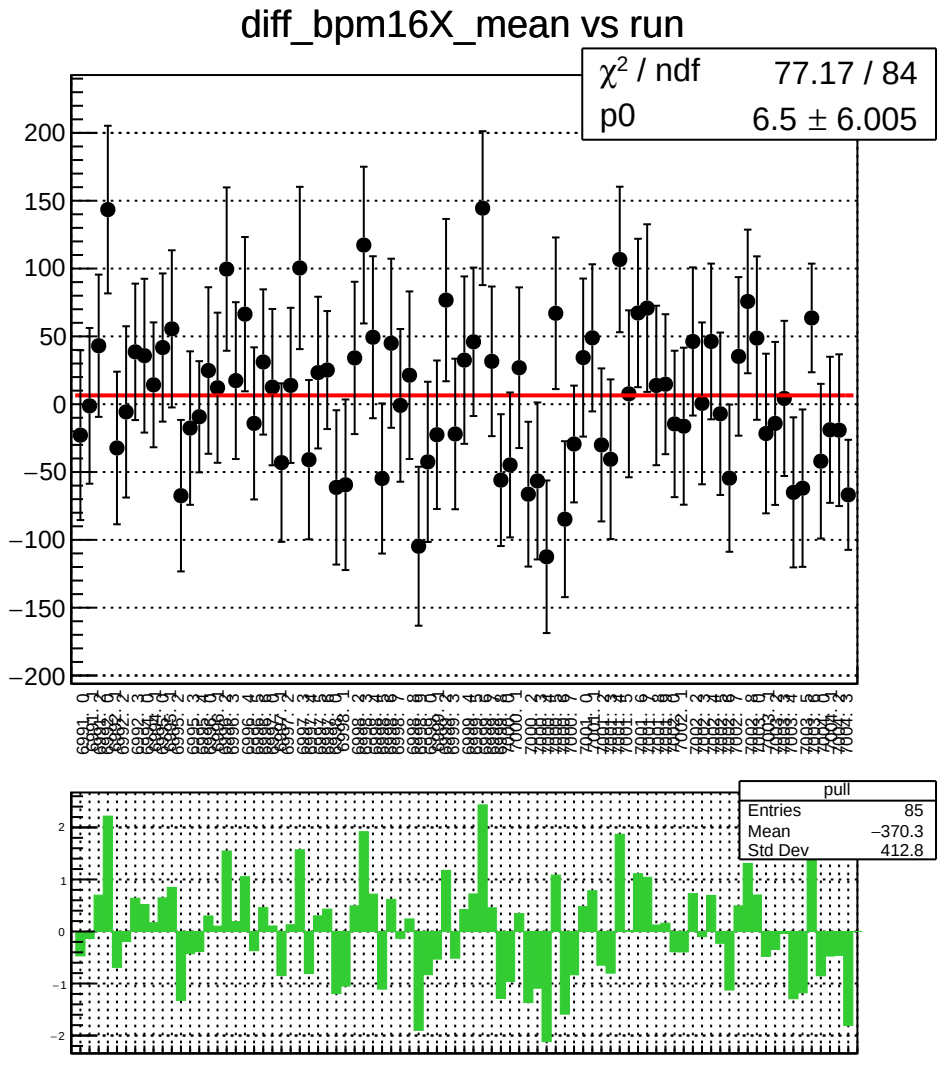

pull1D
Entries 85
Mean 0.03111
Std Dev 1.115
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

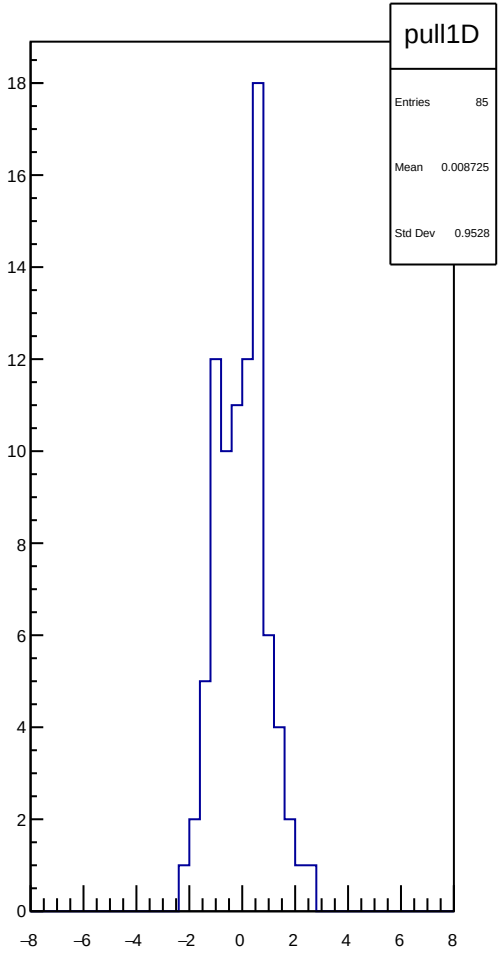

diff_bpm12X_rms vs run
χ² / ndf 2484 / 84
p0 3.08e+04 ± 23.99
35000
34000
33000
32000
31000
30000
29000
28000

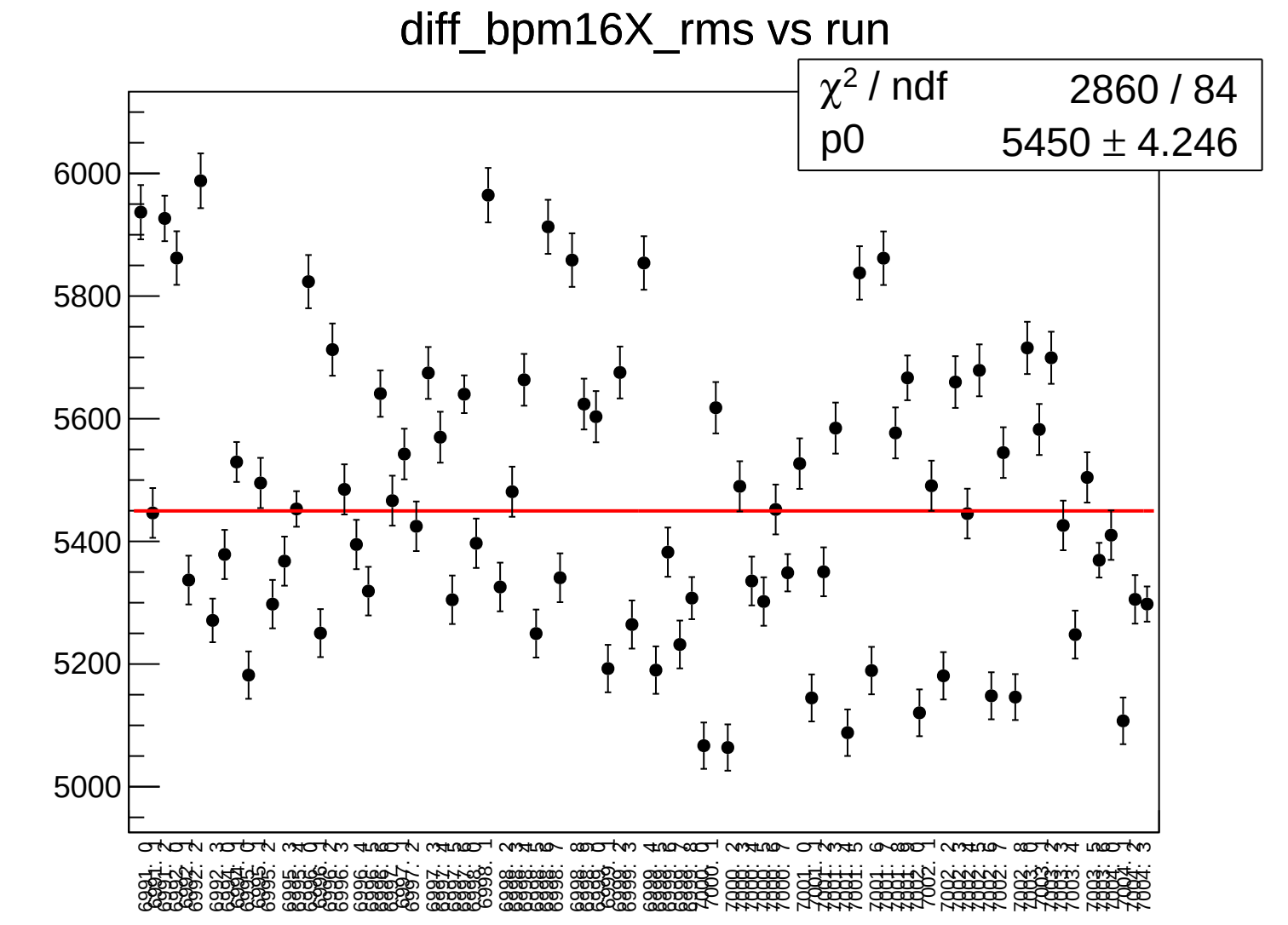

diff_bpm12Y_mean vs run
χ^2 / ndf 92.04 / 84
p0 −5.751 ± 4.736
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 521.1
Std Dev 470.6
2
1
0
−1
−2

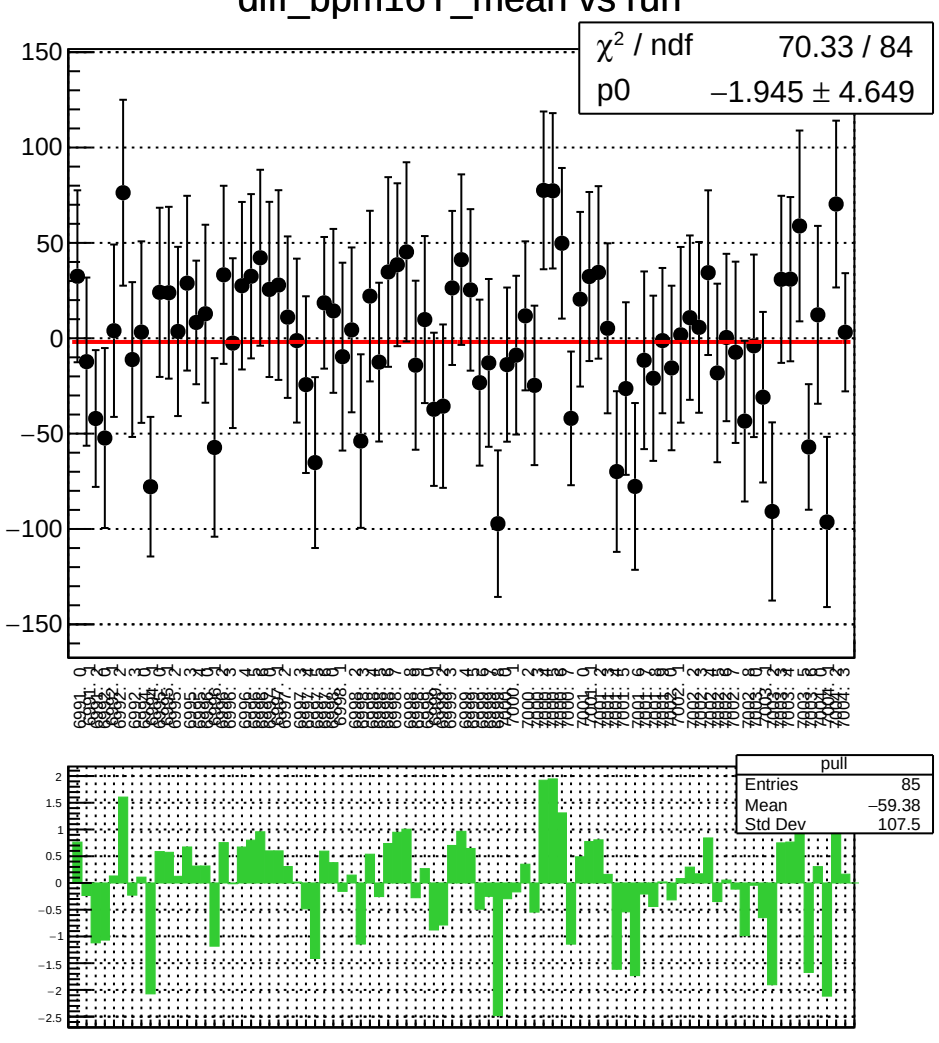

pull1D
Entries 85
Mean −0.005378
Std Dev 1.041
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

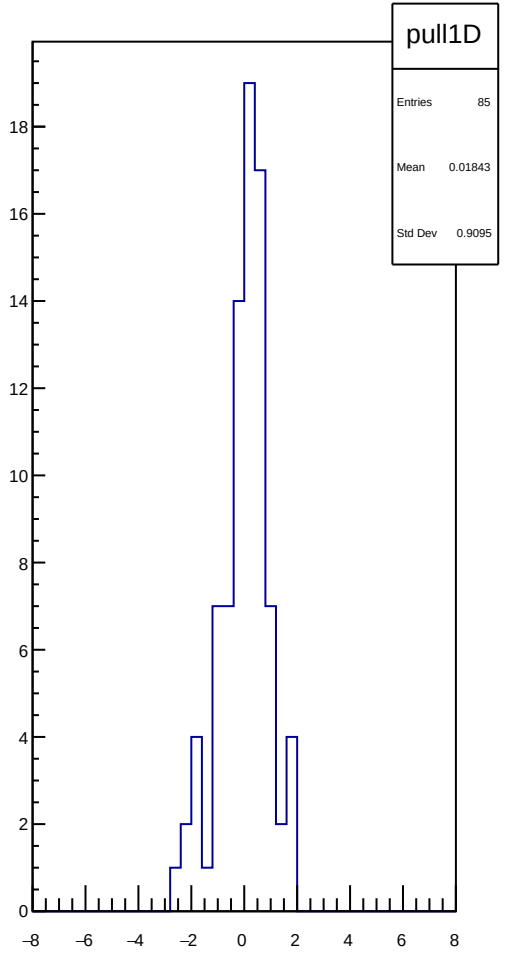

diff_bpm12Y_rms vs run
χ² / ndf 1.965e+04 / 84
p0 4275 ± 3.349
5500
5000
4500
4000
3500

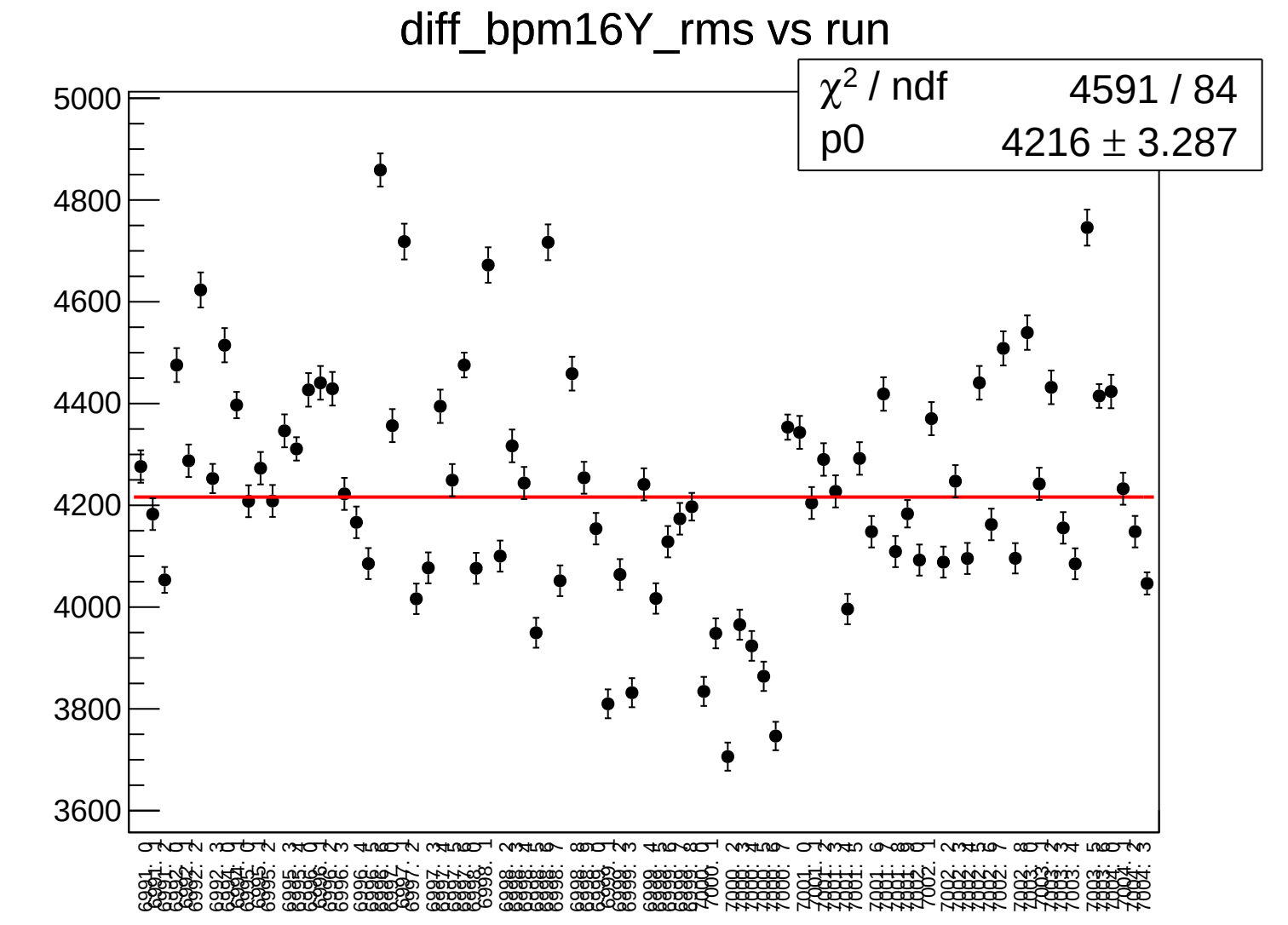

diff_bpm16X_mean vs run
χ² / ndf 77.17 / 84
p0 6.5 ± 6.005
pull
Entries 85
Mean −370.3
Std Dev 412.8

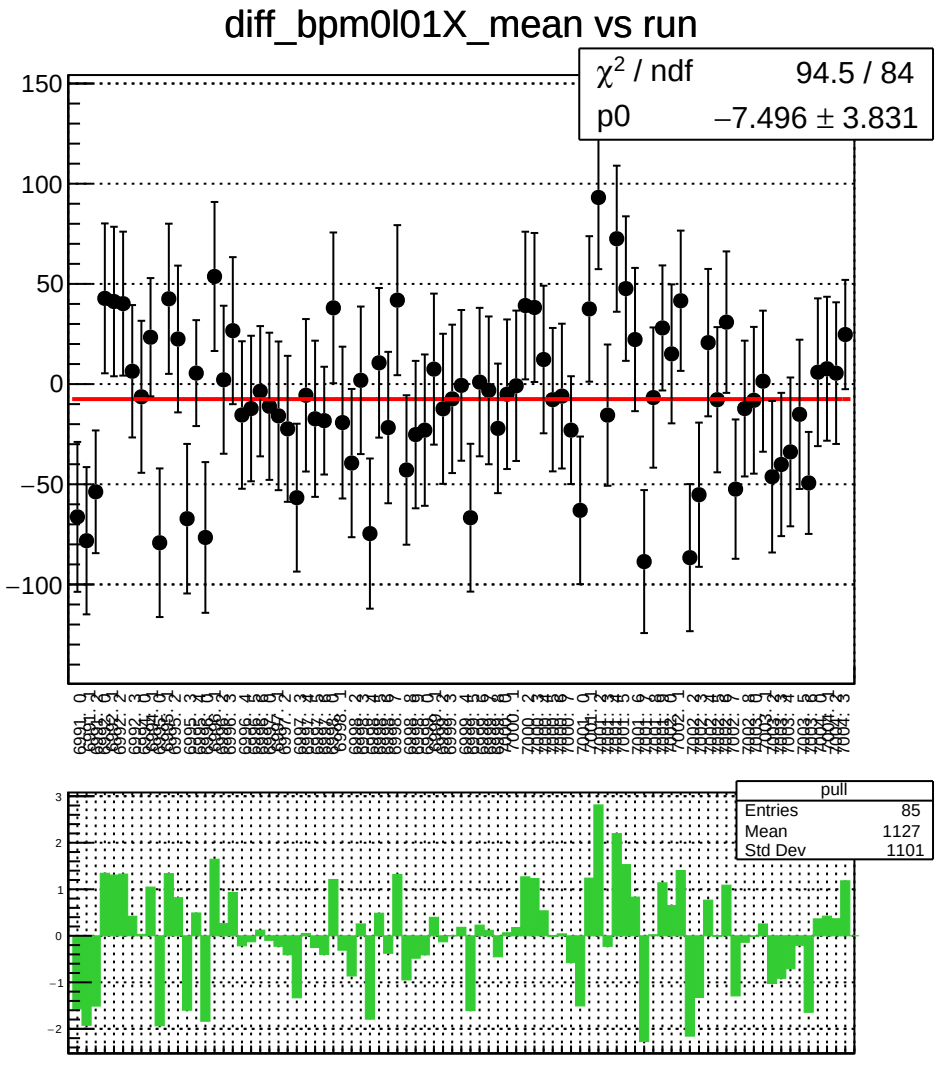

pull1D
Entries 85
Mean 0.008725
Std Dev 0.9528

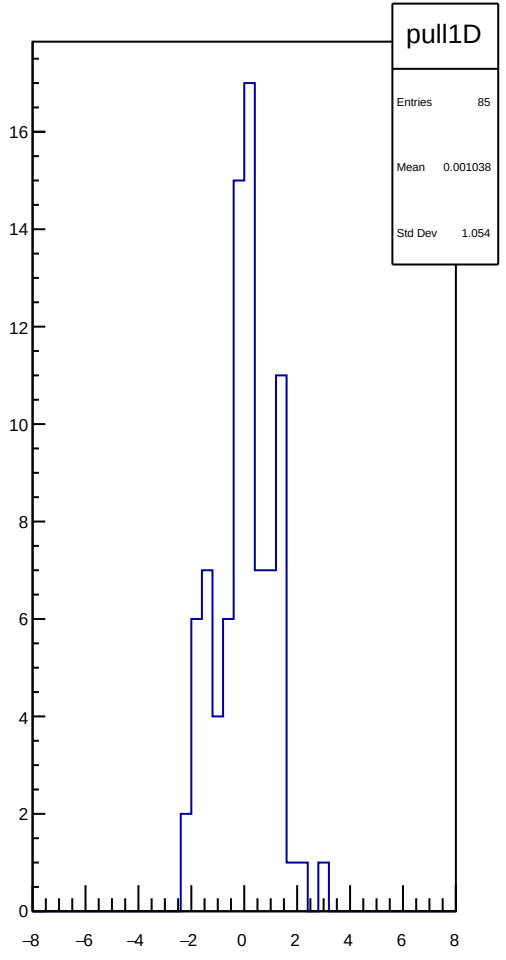

diff_bpm16X_rms vs run
χ² / ndf 2860 / 84
p0 5450 ± 4.246
6000
5800
5600
5400
5200
5000

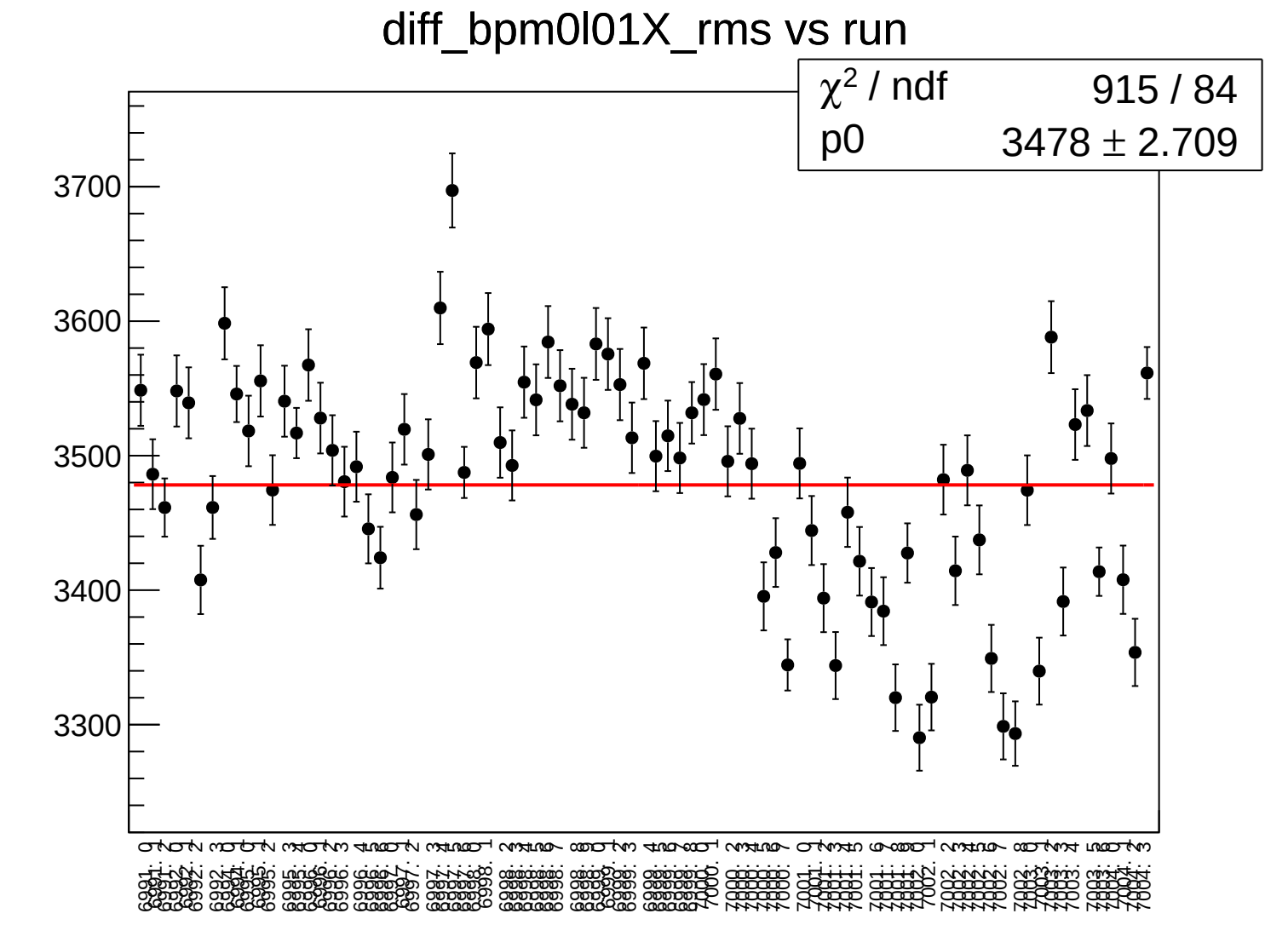

diff_bpm16Y_mean vs run
χ^2 / ndf 70.33 / 84
p0 −1.945 ± 4.649
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −59.38
Std Dev 107.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

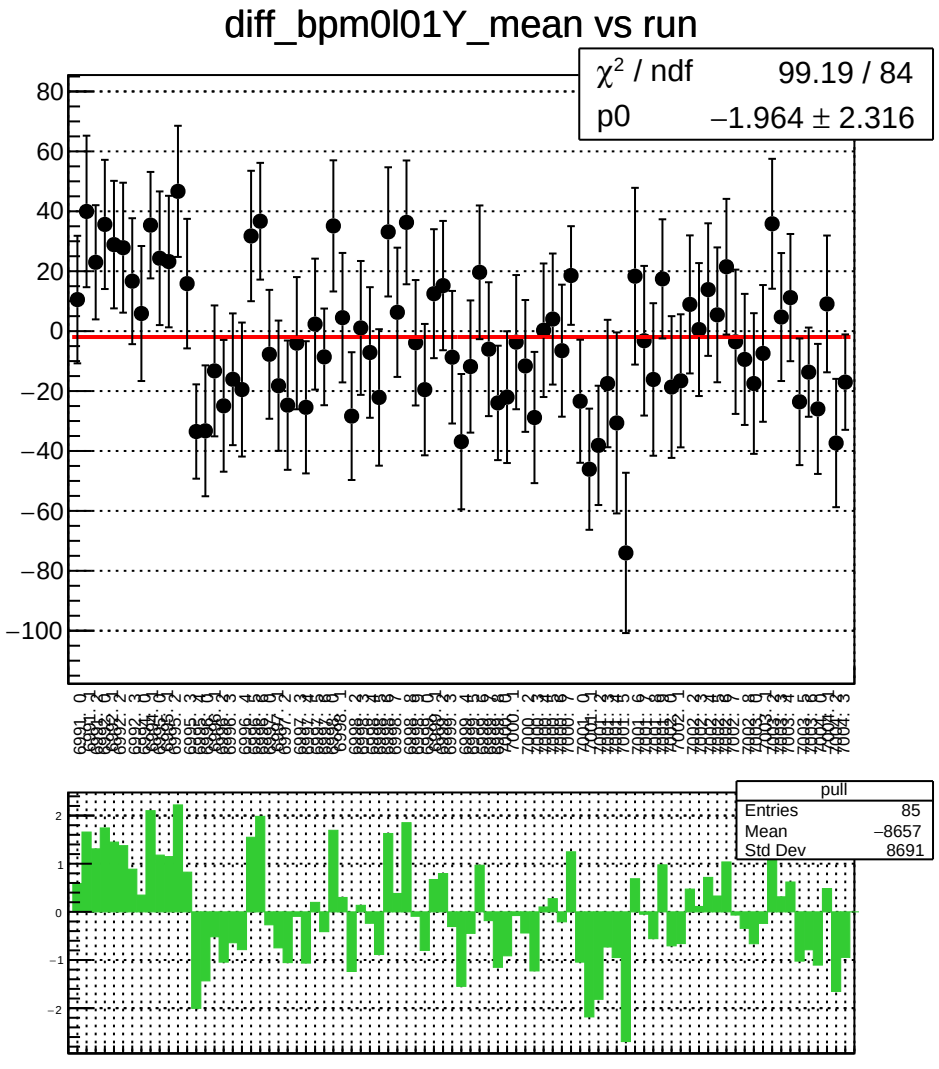

pull1D
Entries 85
Mean 0.01843
Std Dev 0.9095
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

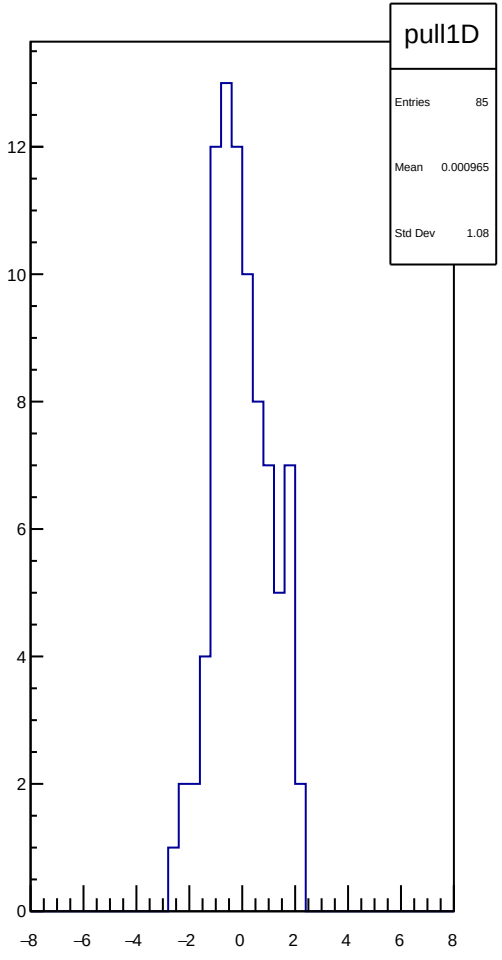

diff_bpm16Y_rms vs run
χ² / ndf 4591 / 84
p0 4216 ± 3.287
5000
4800
4600
4400
4200
4000
3800
3600

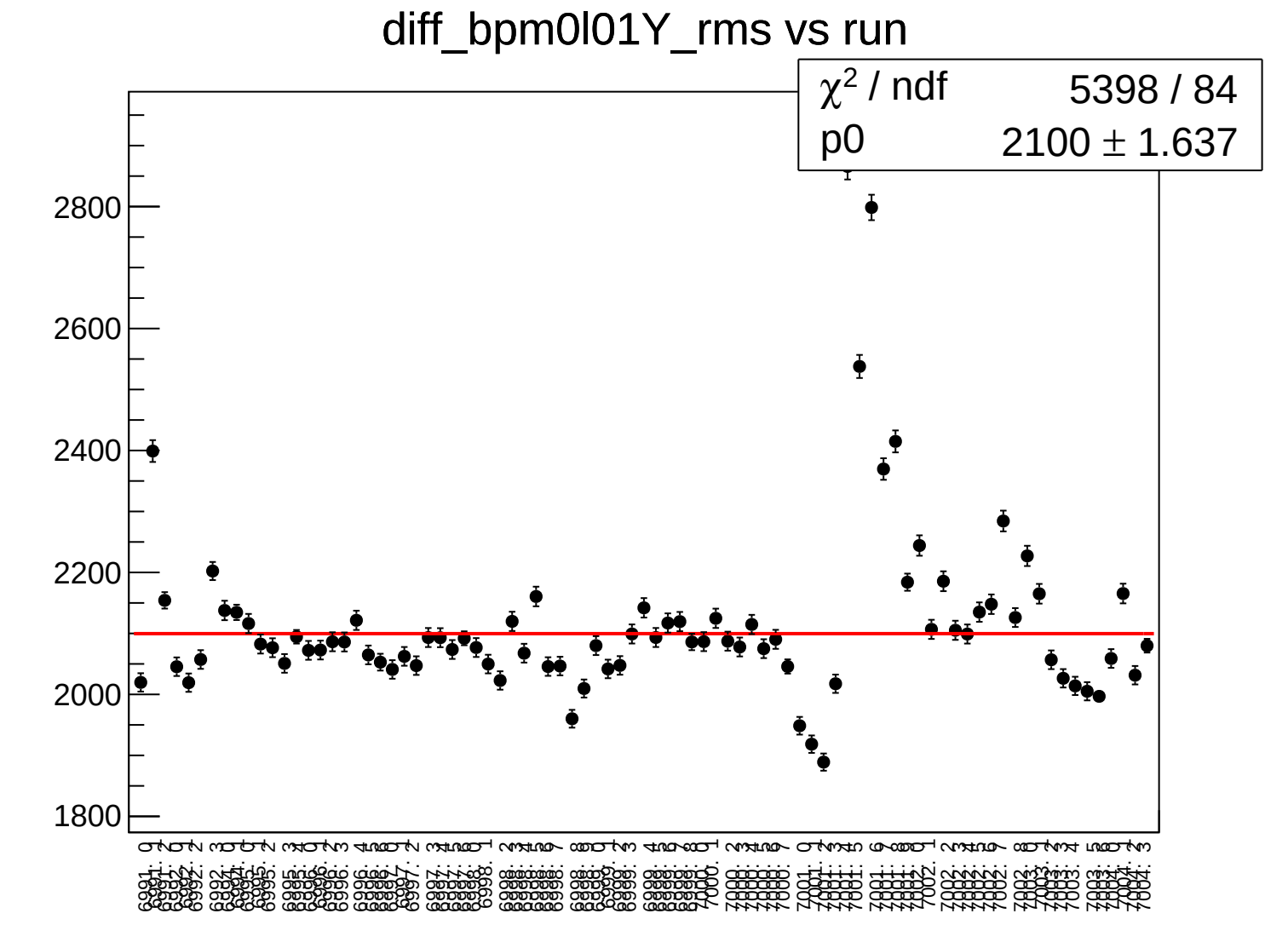

diff_bpm0l01X_mean vs run
χ² / ndf 94.5 / 84
p0 −7.496 ± 3.831
150
100
50
0
−50
−100
pull
Entries 85
Mean 1127
Std Dev 1101
3
2
1
0
−1
−2

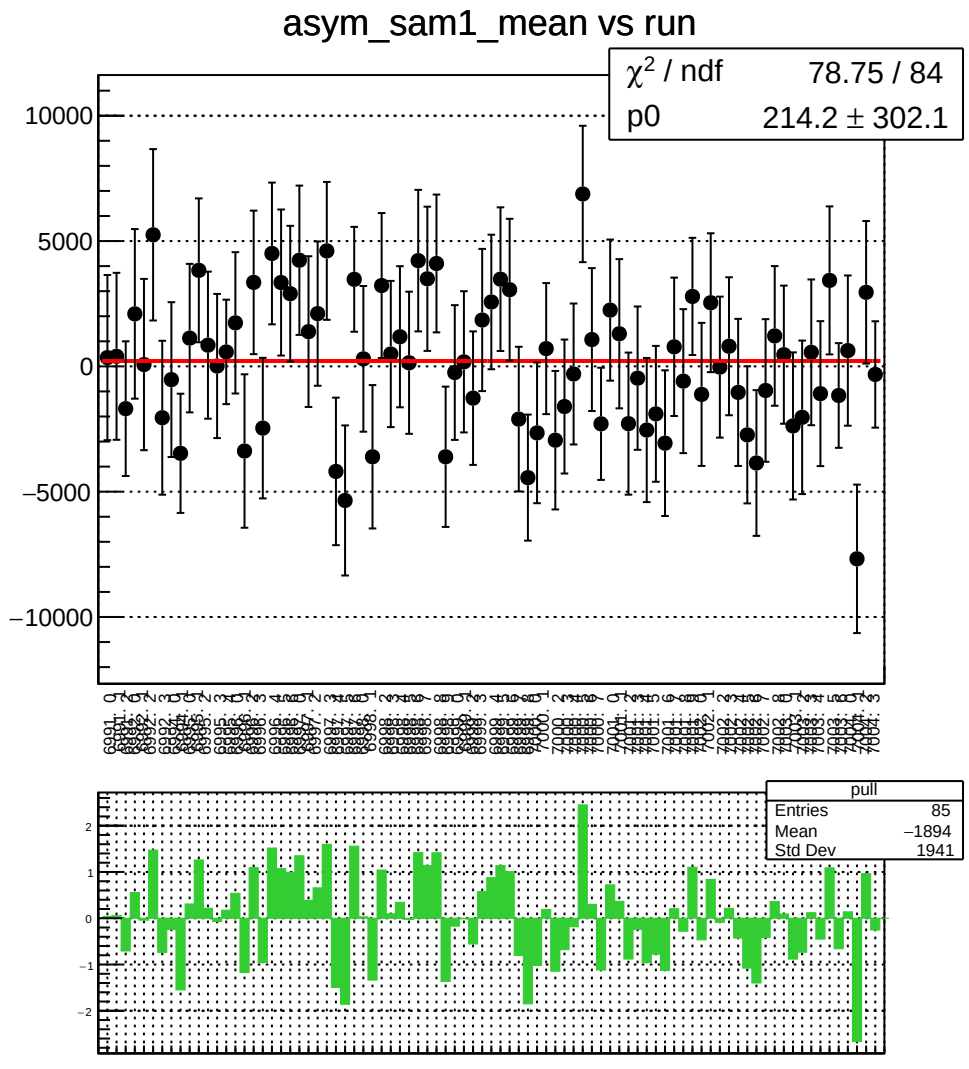

pull1D
Entries 85
Mean 0.001038
Std Dev 1.054
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

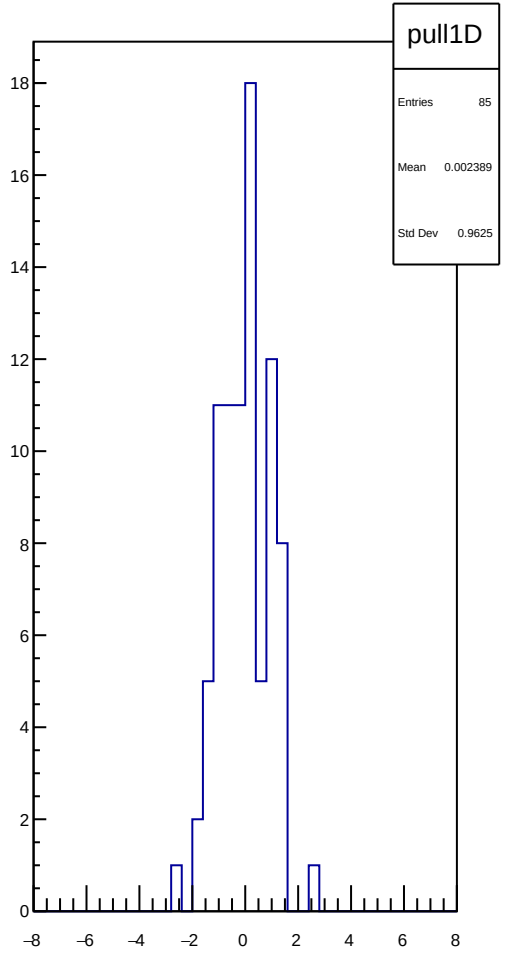

diff_bpm0l01X_rms vs run
χ² / ndf 915 / 84
p0 3478 ± 2.709
3700
3600
3500
3400
3300

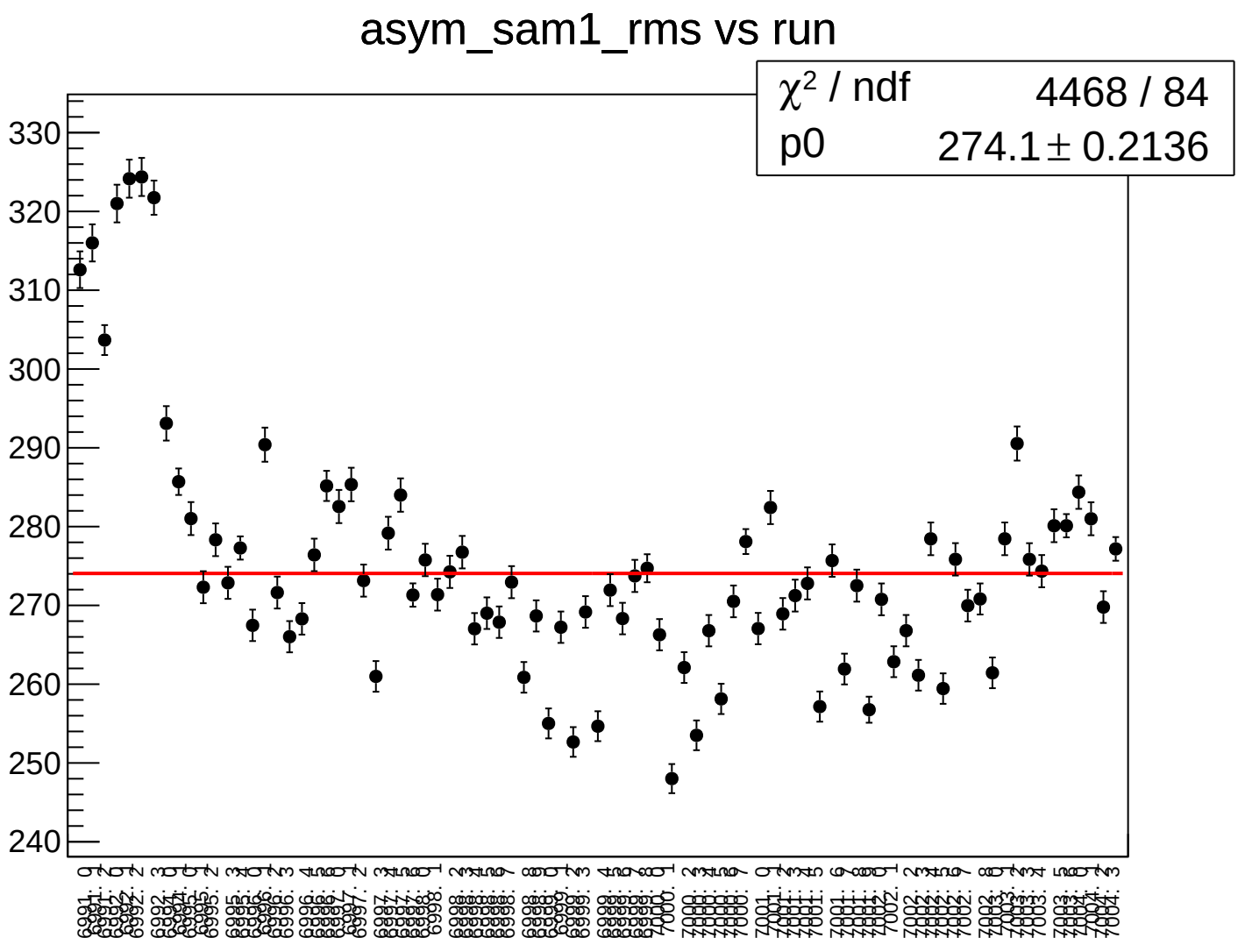

diff_bpm0l01Y_mean vs run
χ² / ndf 99.19 / 84
p0 −1.964 ± 2.316
pull
Entries 85
Mean −8657
Std Dev 8691

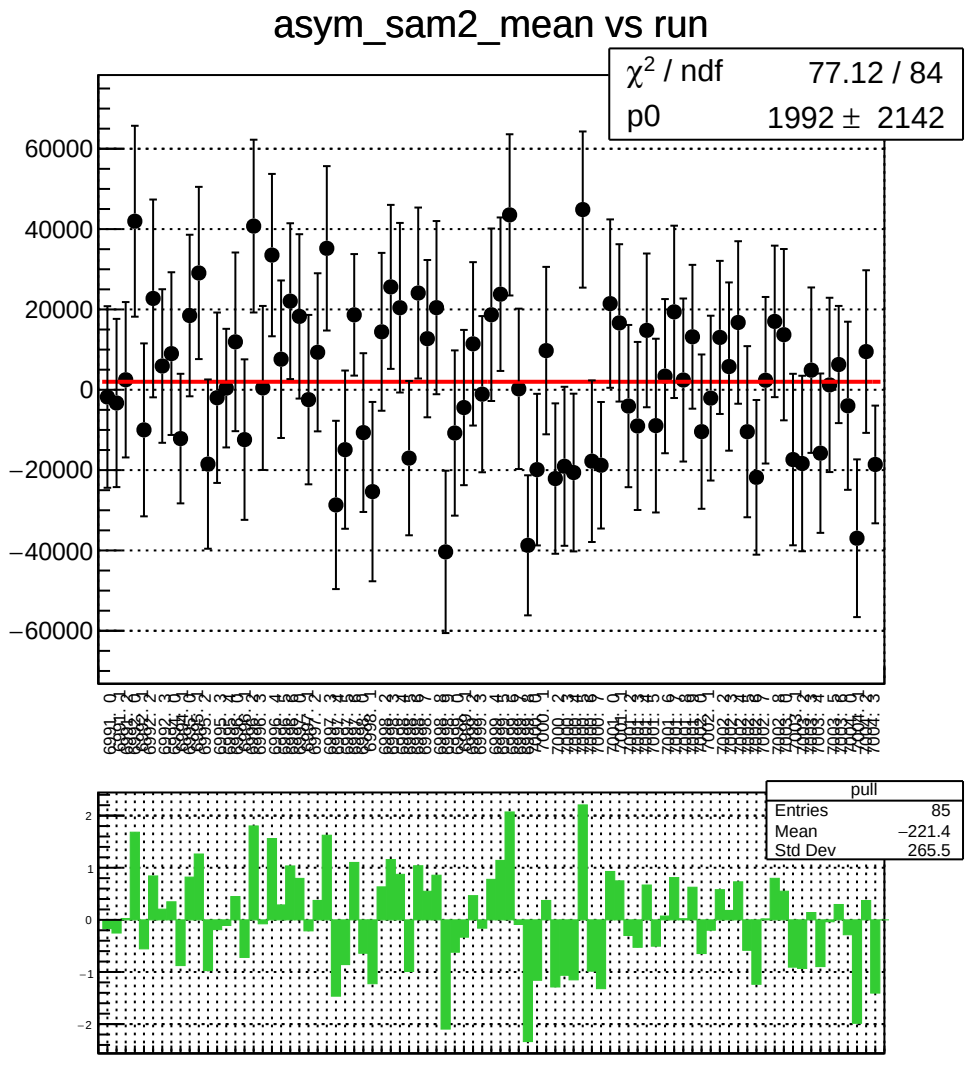

pull1D
Entries 85
Mean 0.000965
Std Dev 1.08

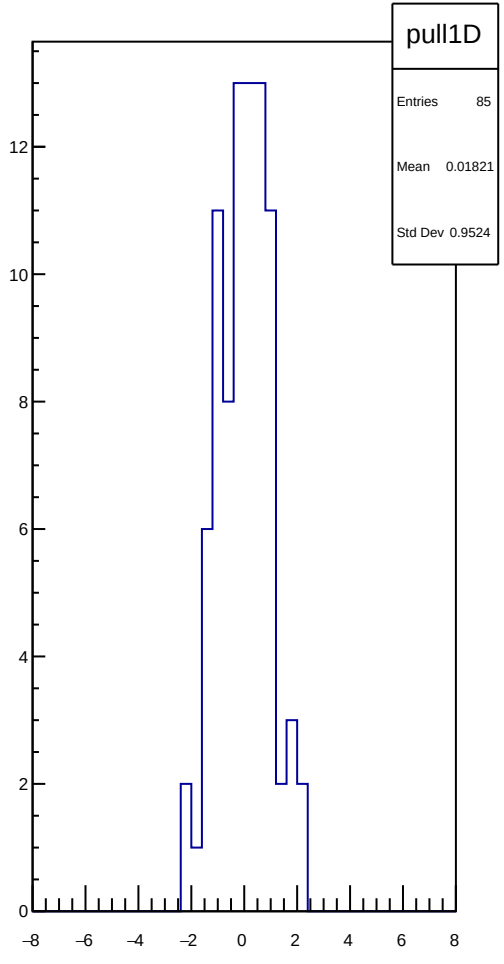

diff_bpm0l01Y_rms vs run
χ² / ndf 5398 / 84
p0 2100 ± 1.637
2800
2600
2400
2200
2000
1800

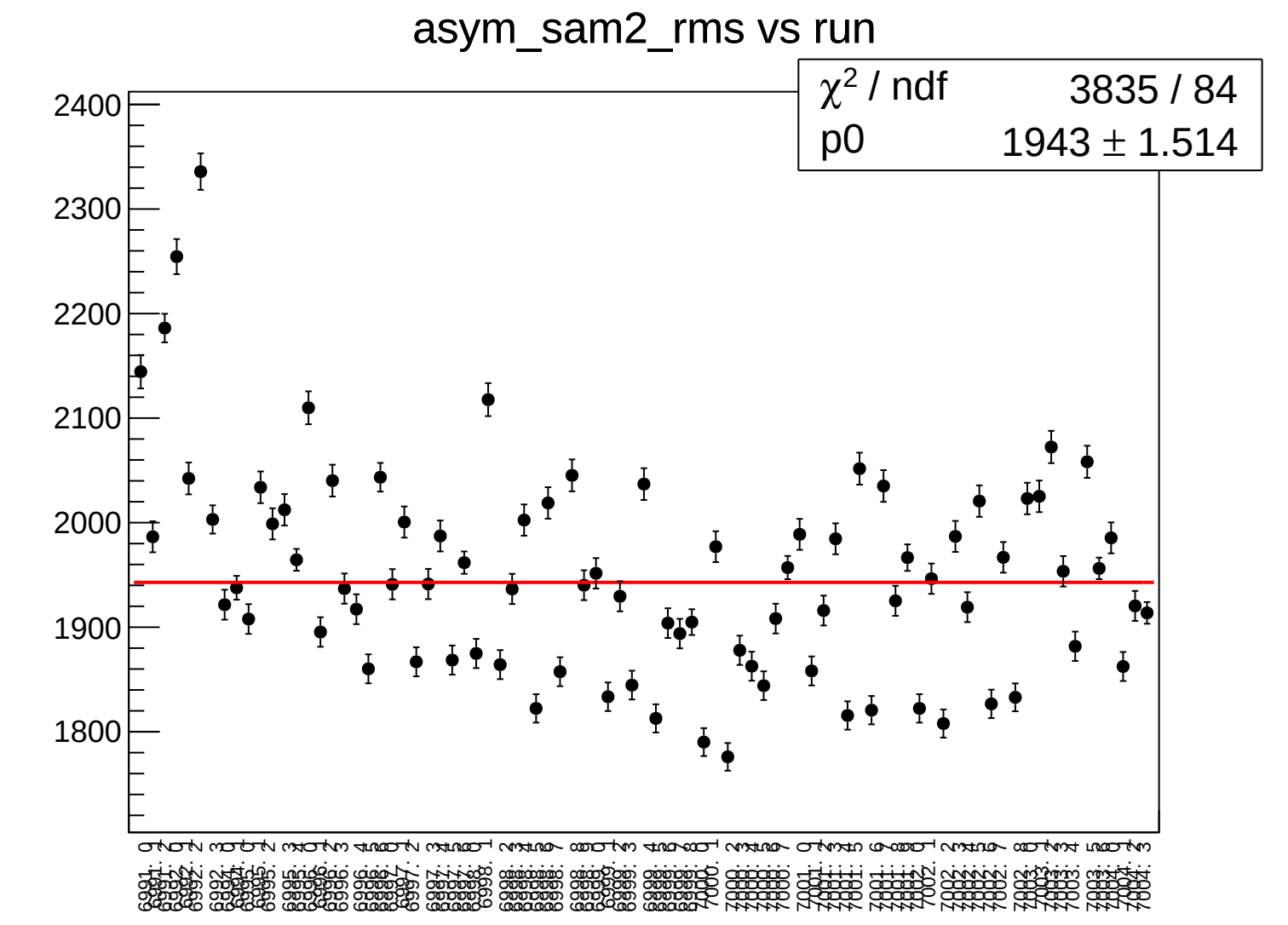

asym_sam1_mean vs run
χ² / ndf 78.75 / 84
p0 214.2 ± 302.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −1894
Std Dev 1941
2
1
0
−1
−2

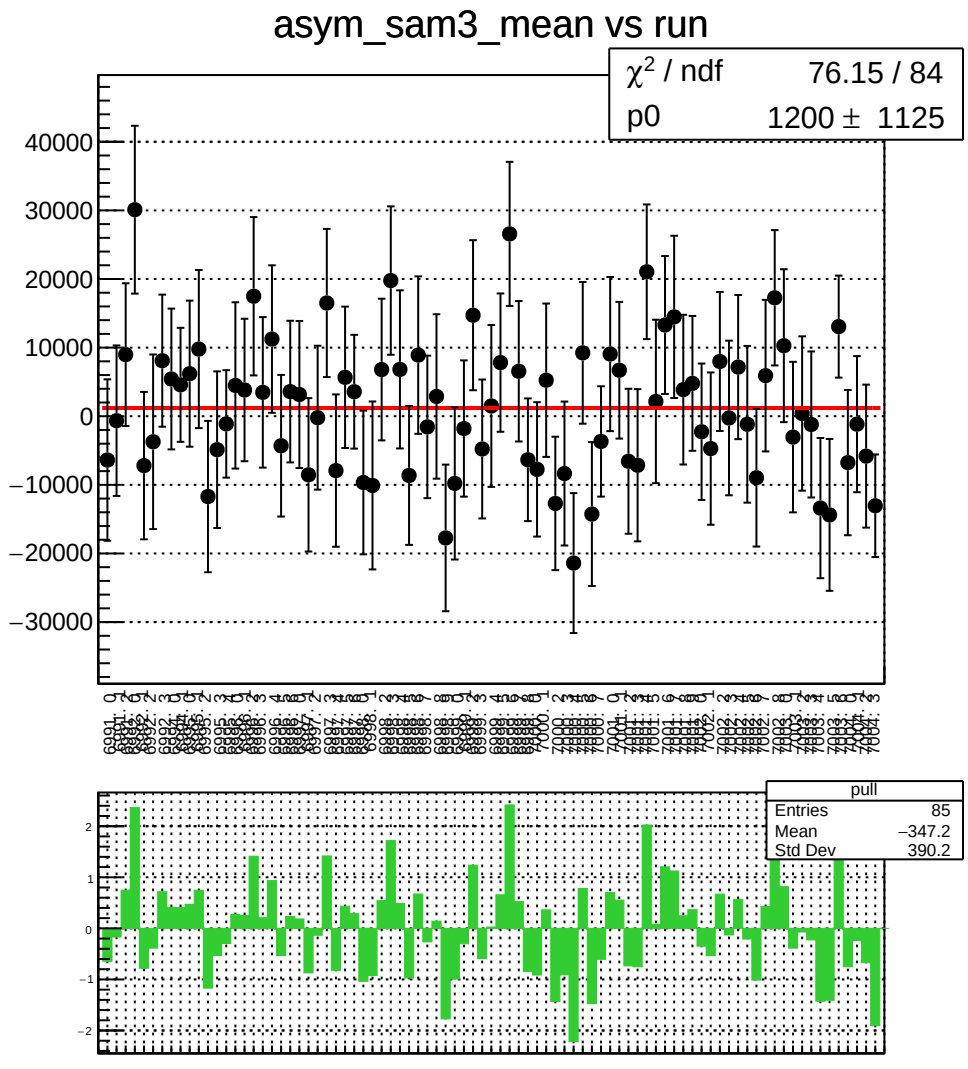

pull1D
Entries 85
Mean 0.002389
Std Dev 0.9625
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

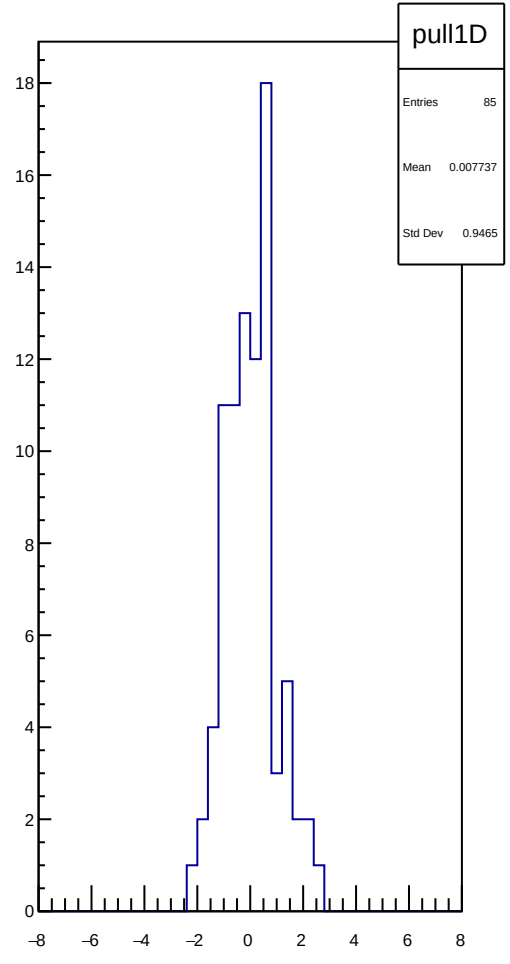

asym_sam1_rms vs run
χ² / ndf 4468 / 84
p0 274.1 ± 0.2136
330
320
310
300
290
280
270
260
250
240

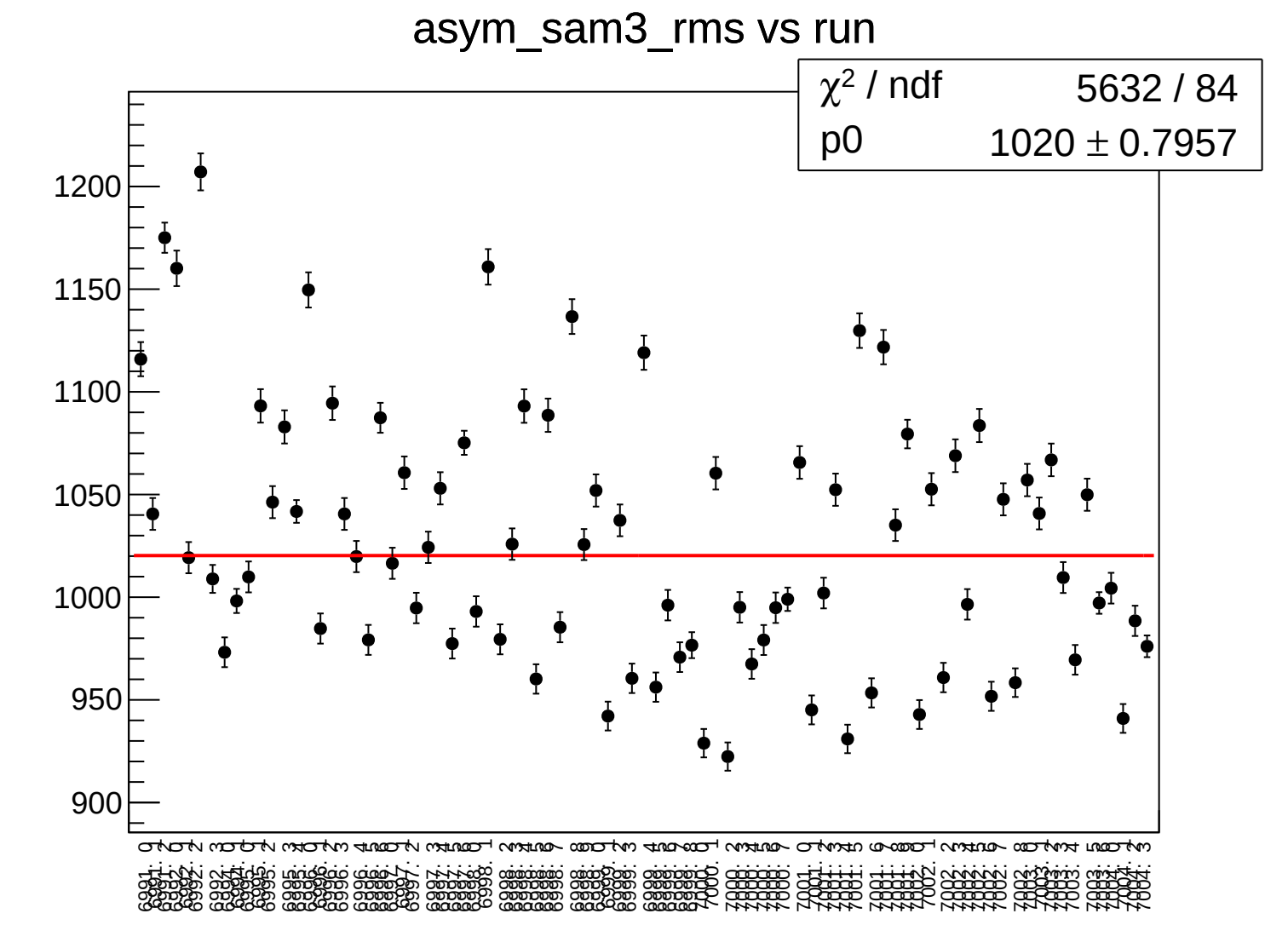

asym_sam2_mean vs run
χ² / ndf 77.12 / 84
p0 1992 ± 2142
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −221.4
Std Dev 265.5
2
1
0
−1
−2

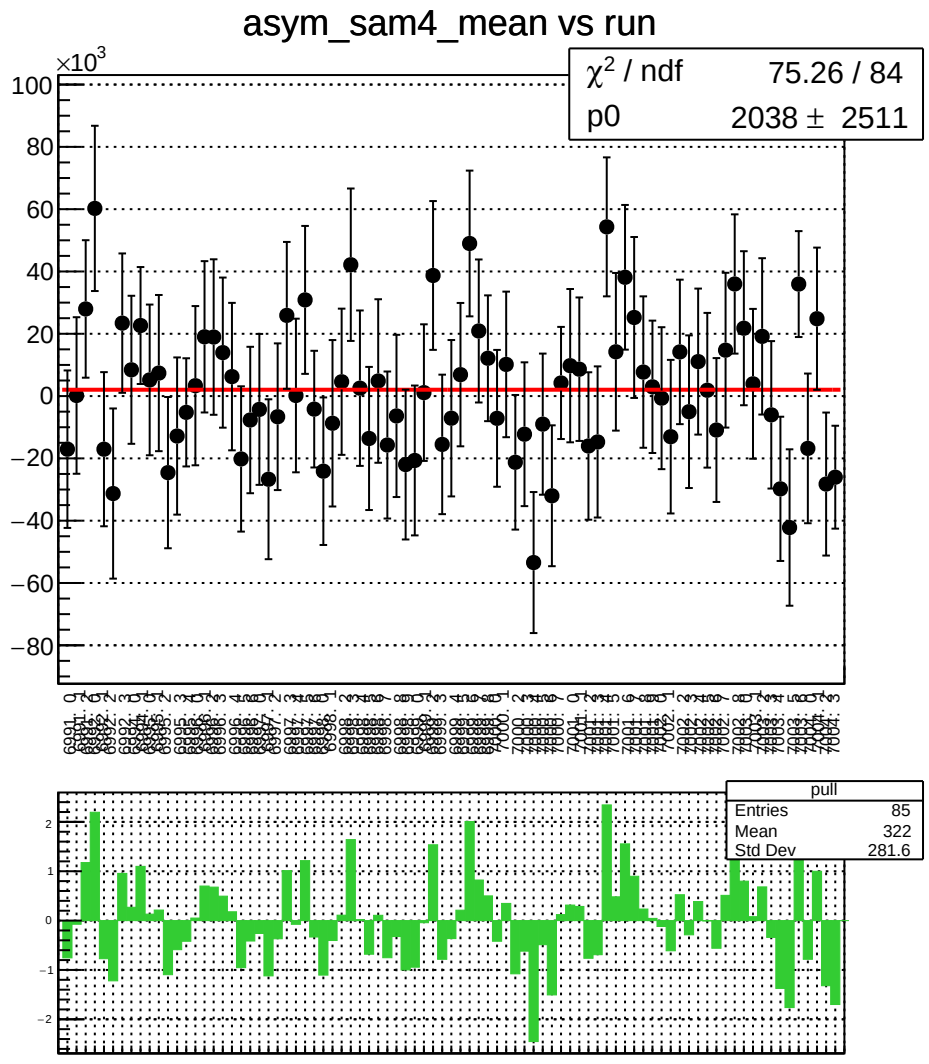

pull1D
Entries 85
Mean 0.01821
Std Dev 0.9524
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

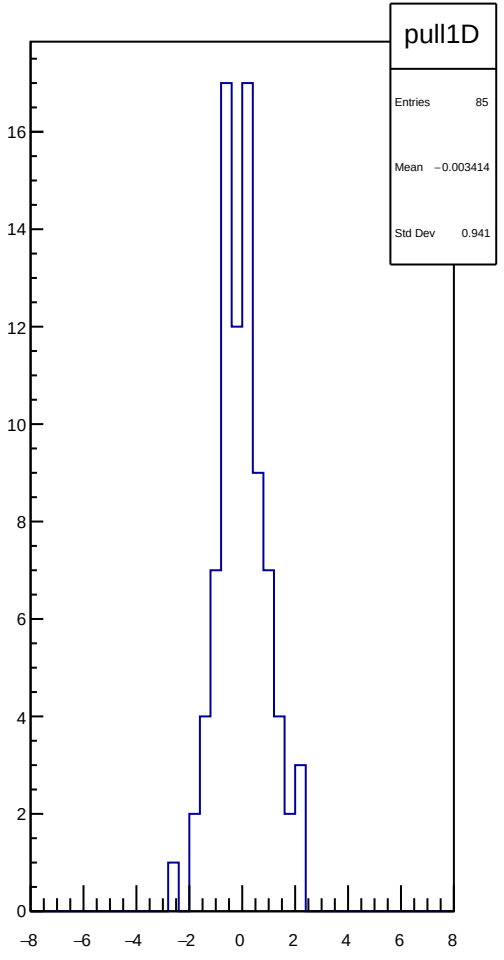

asym_sam2_rms vs run
χ² / ndf 3835 / 84
p0 1943 ± 1.514
2400
2300
2200
2100
2000
1900
1800

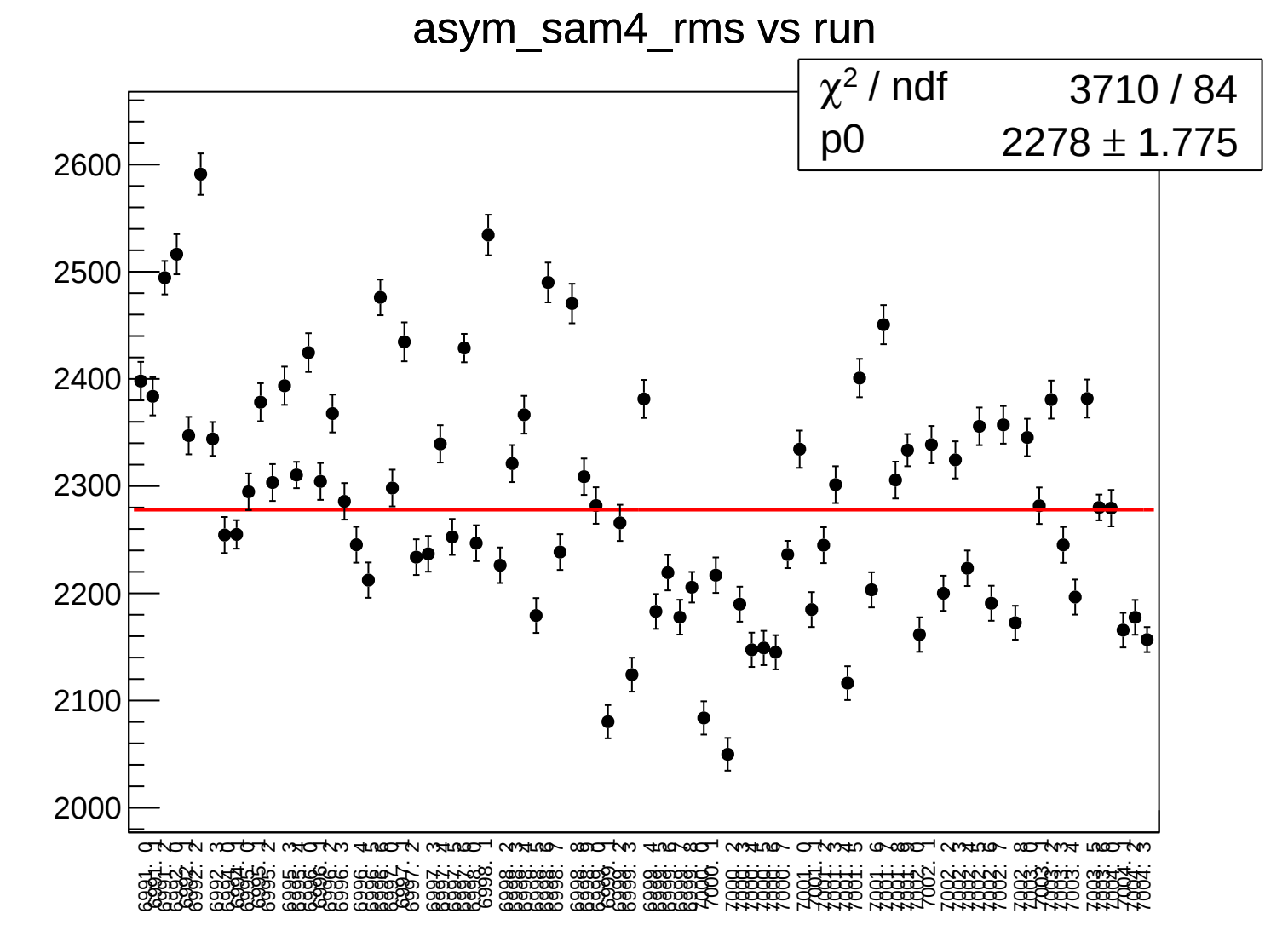

asym_sam3_mean vs run
χ² / ndf 76.15 / 84
p0 1200 ± 1125
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −347.2
Std Dev 390.2
2
1
0
−1
−2

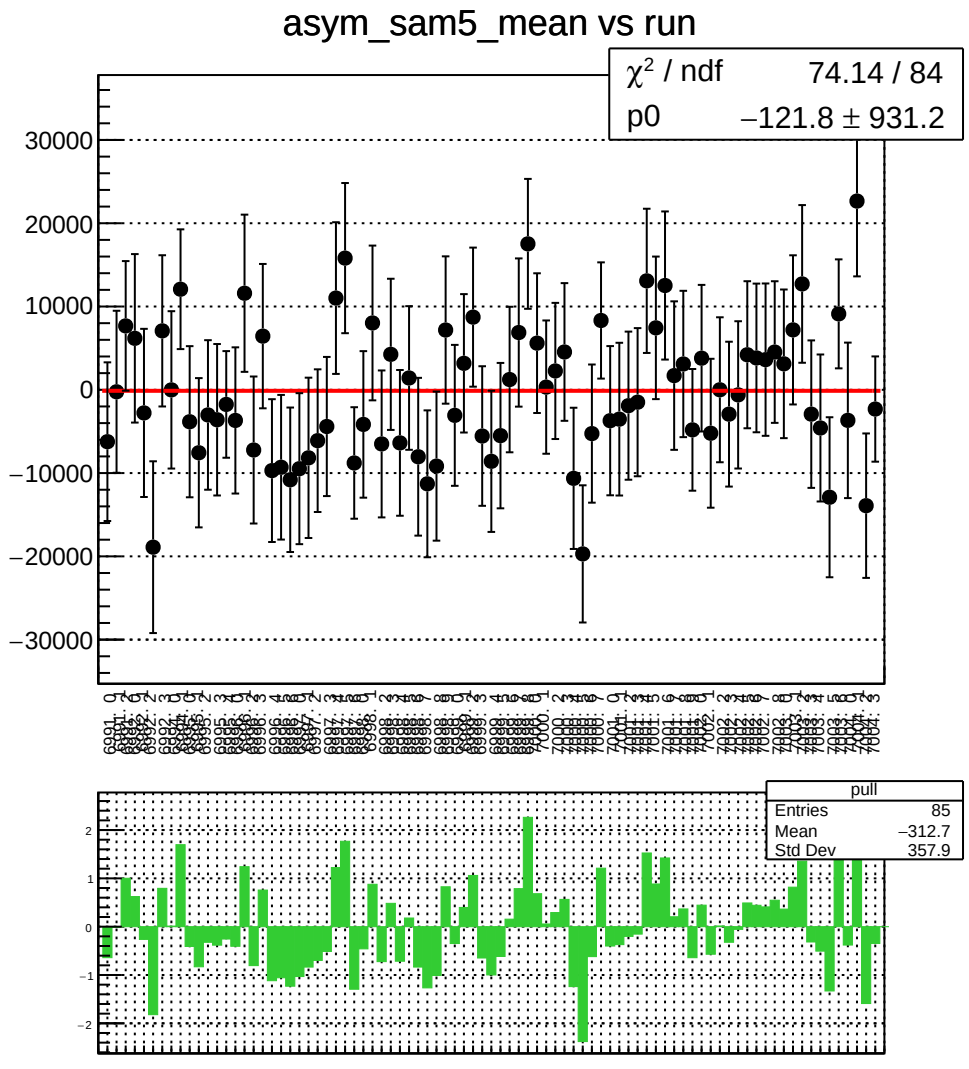

pull1D
Entries 85
Mean 0.007737
Std Dev 0.9465
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

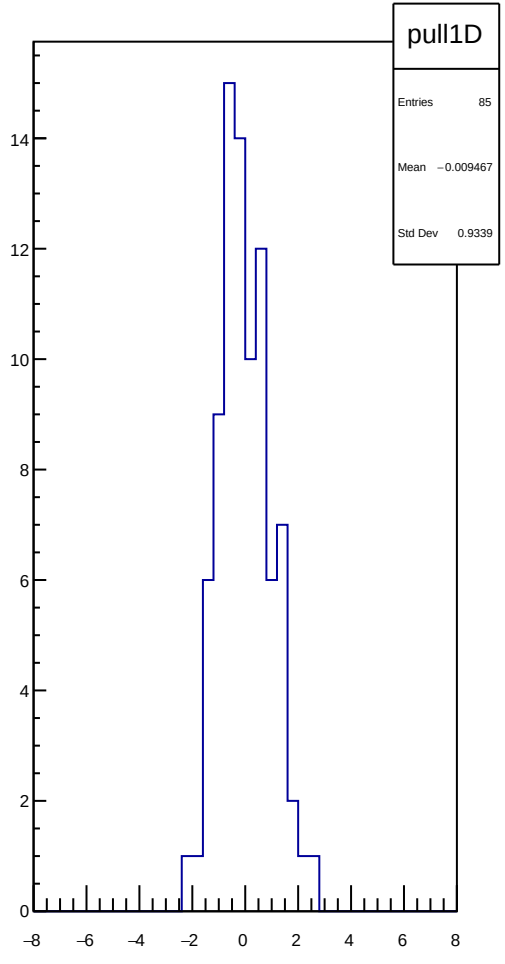

asym_sam3_rms vs run
χ² / ndf 5632 / 84
p0 1020 ± 0.7957
1200
1150
1100
1050
1000
950
900

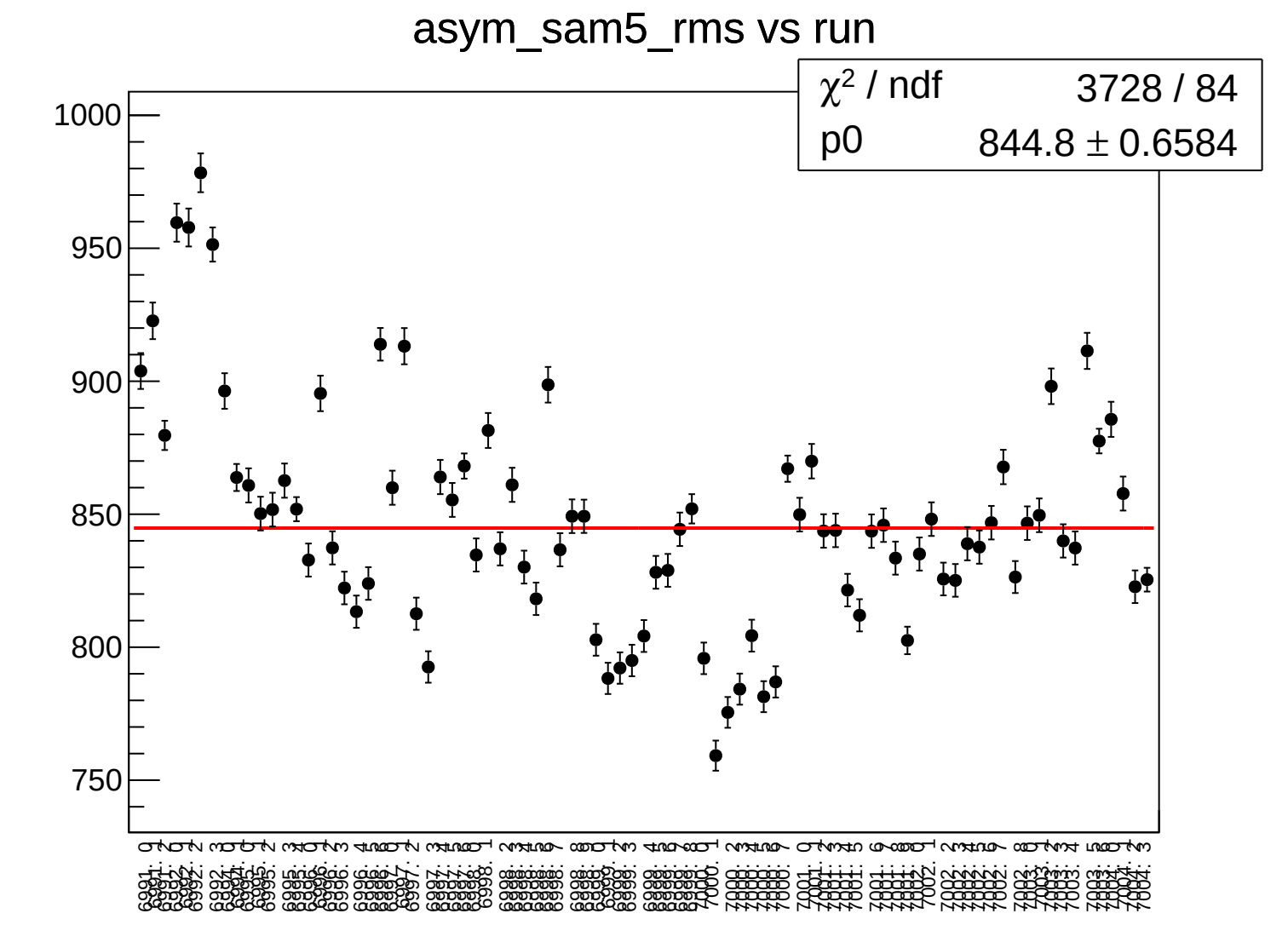

asym_sam4_mean vs run
×10^3
χ² / ndf 75.26 / 84
p0 2038 ± 2511
pull
Entries 85
Mean 322
Std Dev 281.6

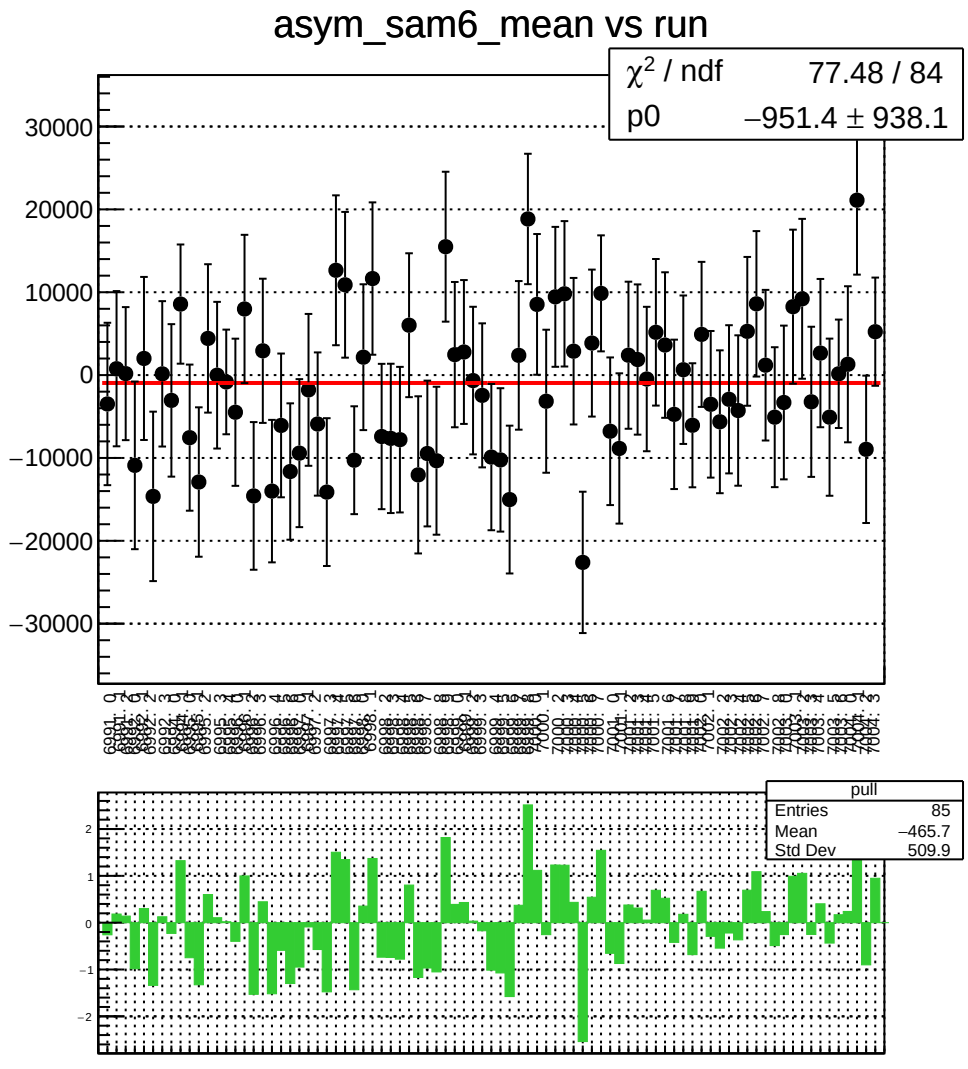

pull1D
Entries 85
Mean −0.003414
Std Dev 0.941

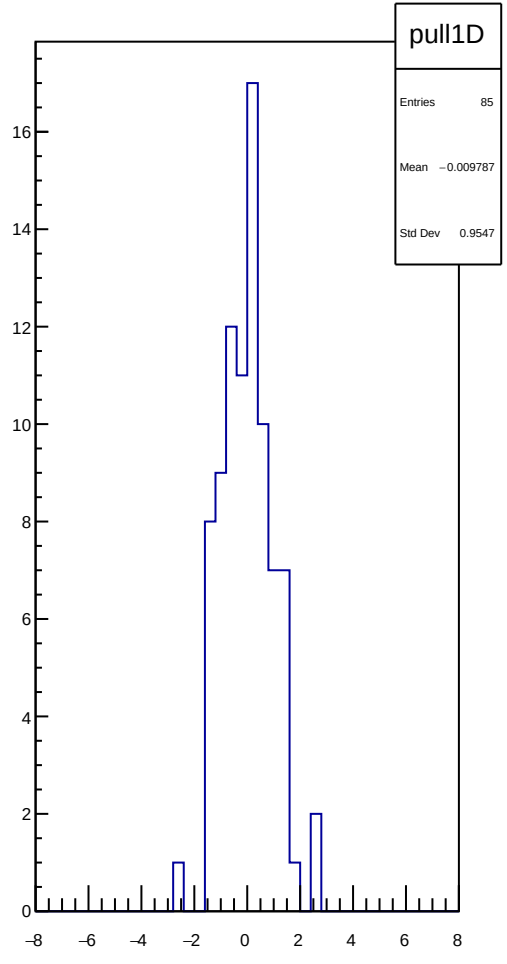

asym_sam4_rms vs run
χ² / ndf 3710 / 84
p0 2278 ± 1.775
2600
2500
2400
2300
2200
2100
2000

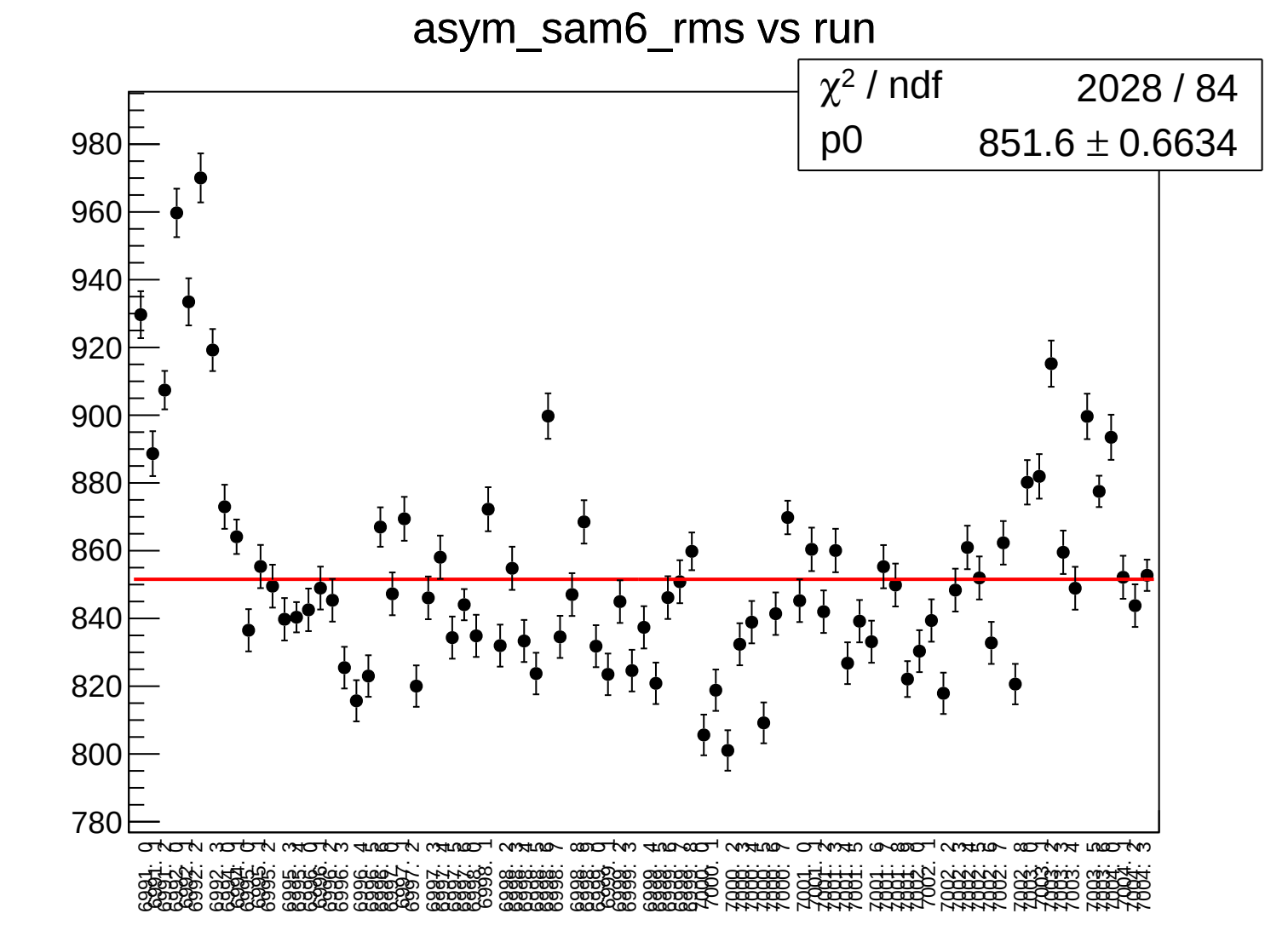

asym_sam5_mean vs run
χ² / ndf 74.14 / 84
p0 −121.8 ± 931.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −312.7
Std Dev 357.9
2
1
0
−1
−2

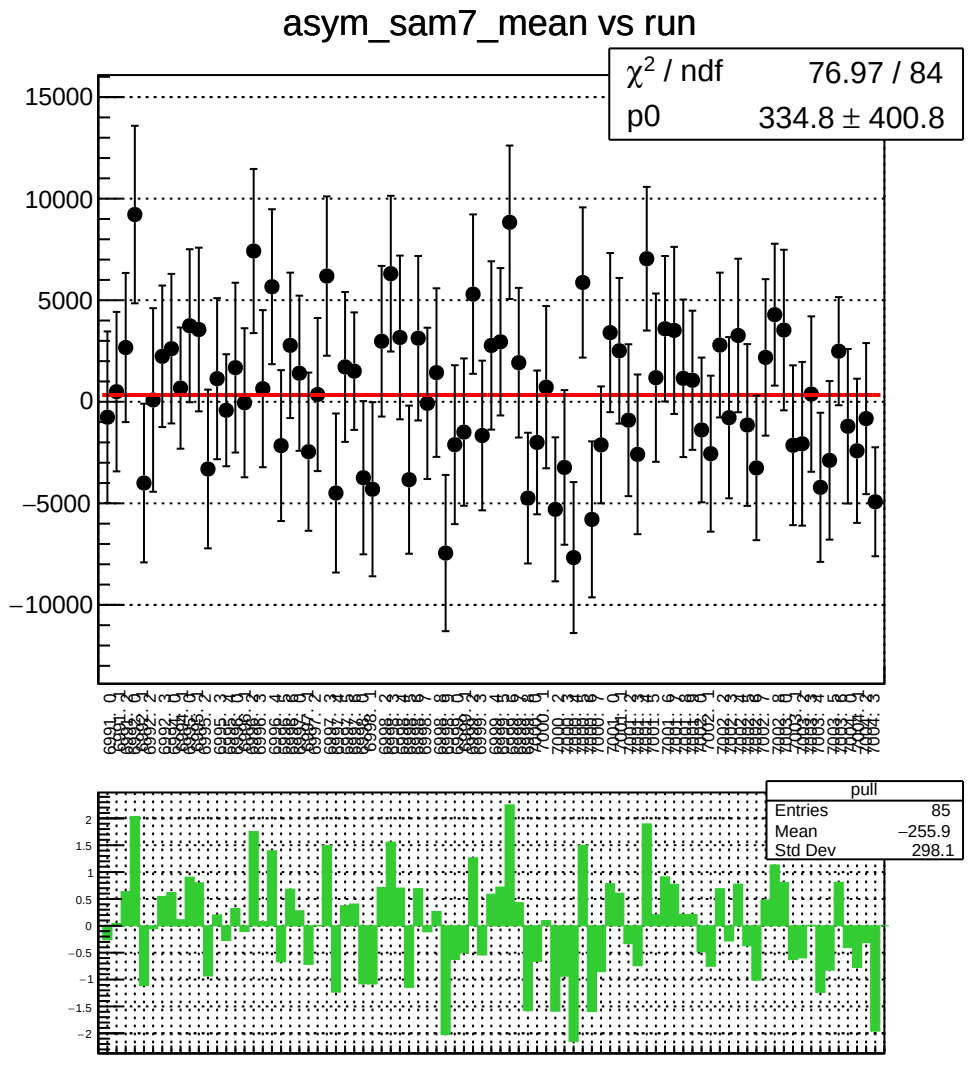

pull1D
Entries 85
Mean −0.009467
Std Dev 0.9339
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

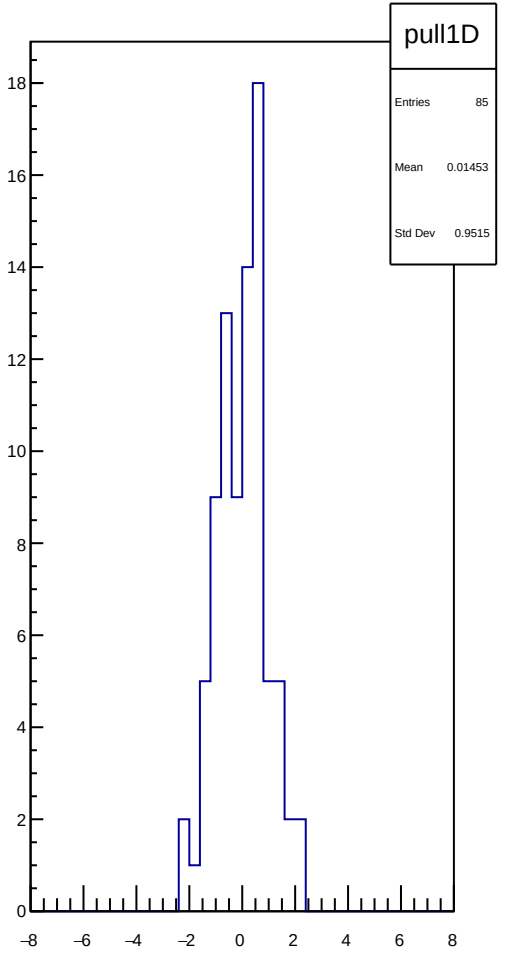

asym_sam5_rms vs run
χ² / ndf 3728 / 84
p0 844.8 ± 0.6584
1000
950
900
850
800
750

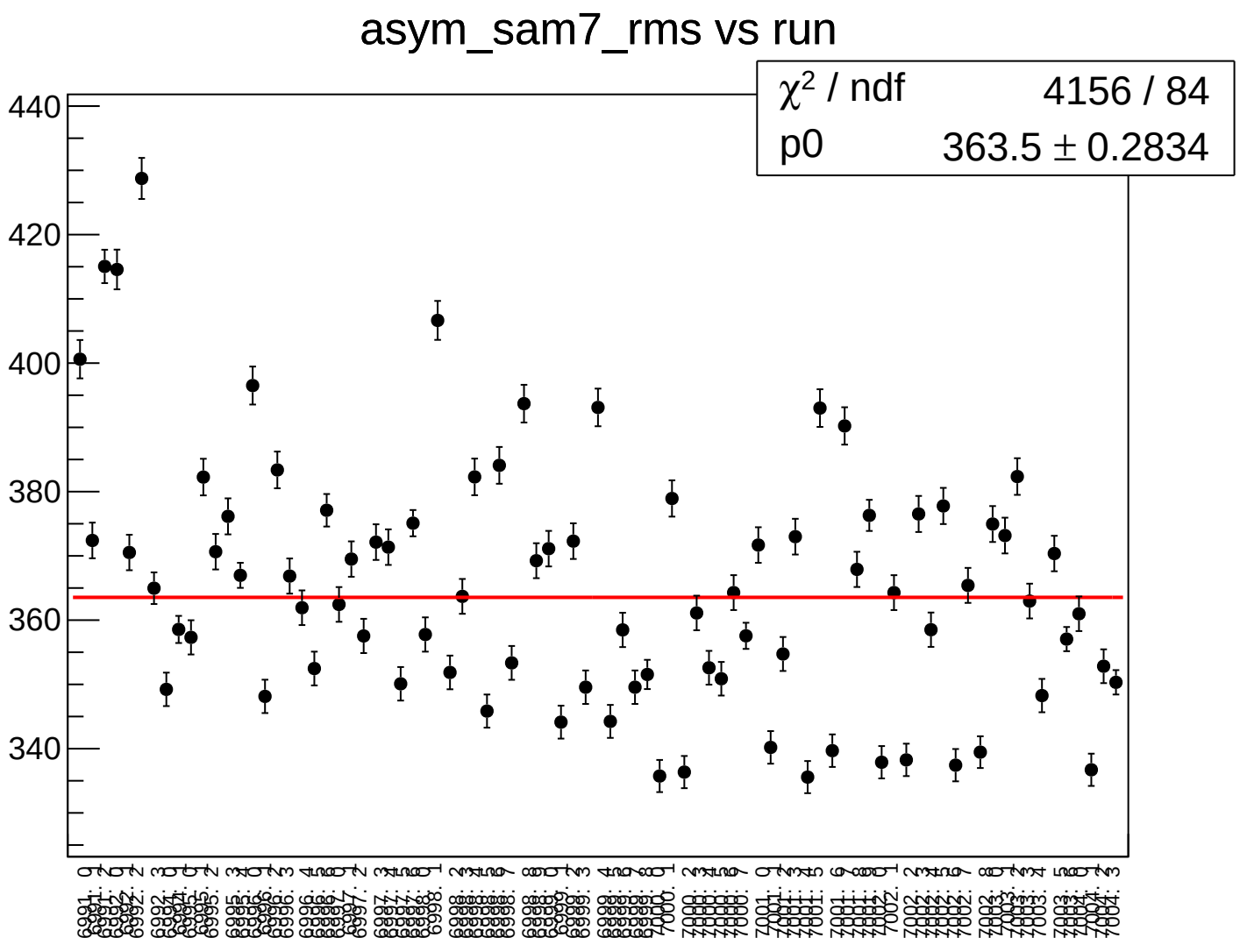

asym_sam6_mean vs run
χ^2 / ndf 77.48 / 84
p0 −951.4 ± 938.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −465.7
Std Dev 509.9
2
1
0
−1
−2

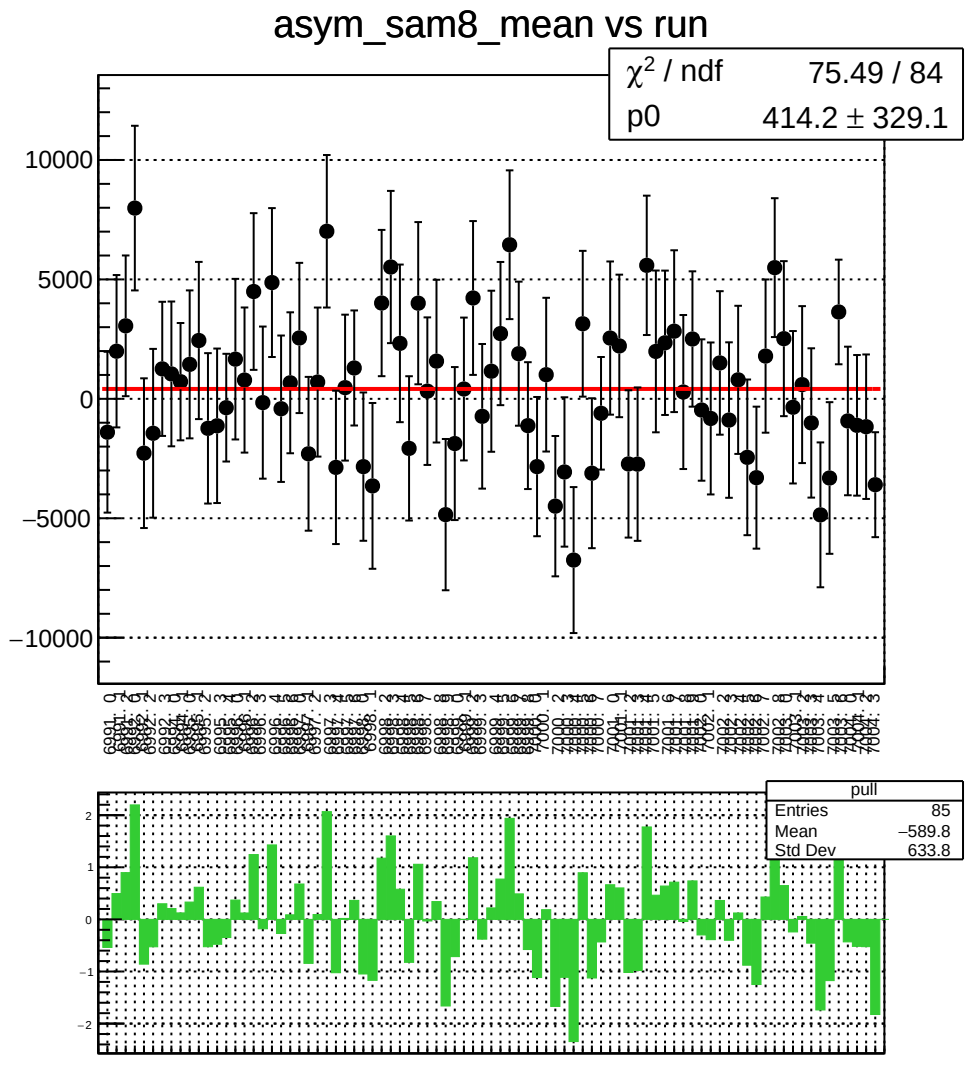

pull1D
Entries 85
Mean −0.009787
Std Dev 0.9547
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

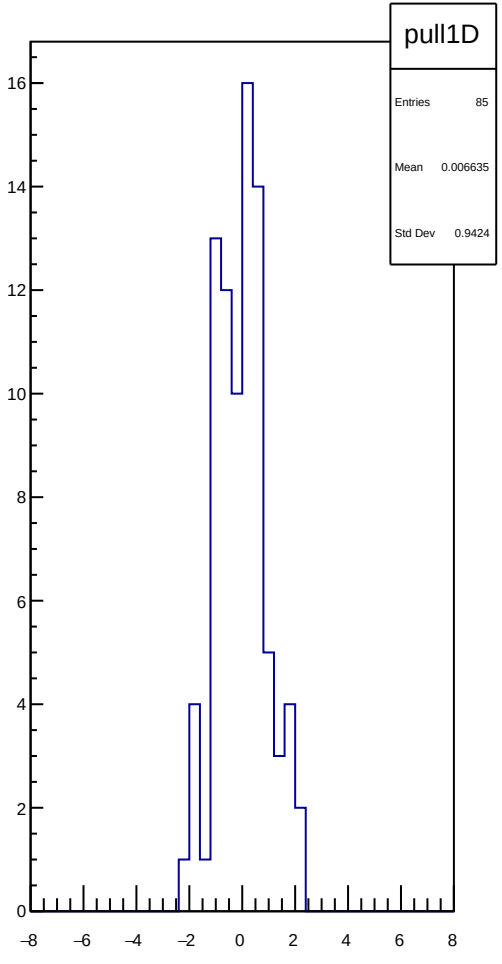

asym_sam6_rms vs run
χ^2 / ndf 2028 / 84
p0 851.6 ± 0.6634
980
960
940
920
900
880
860
840
820
800
780

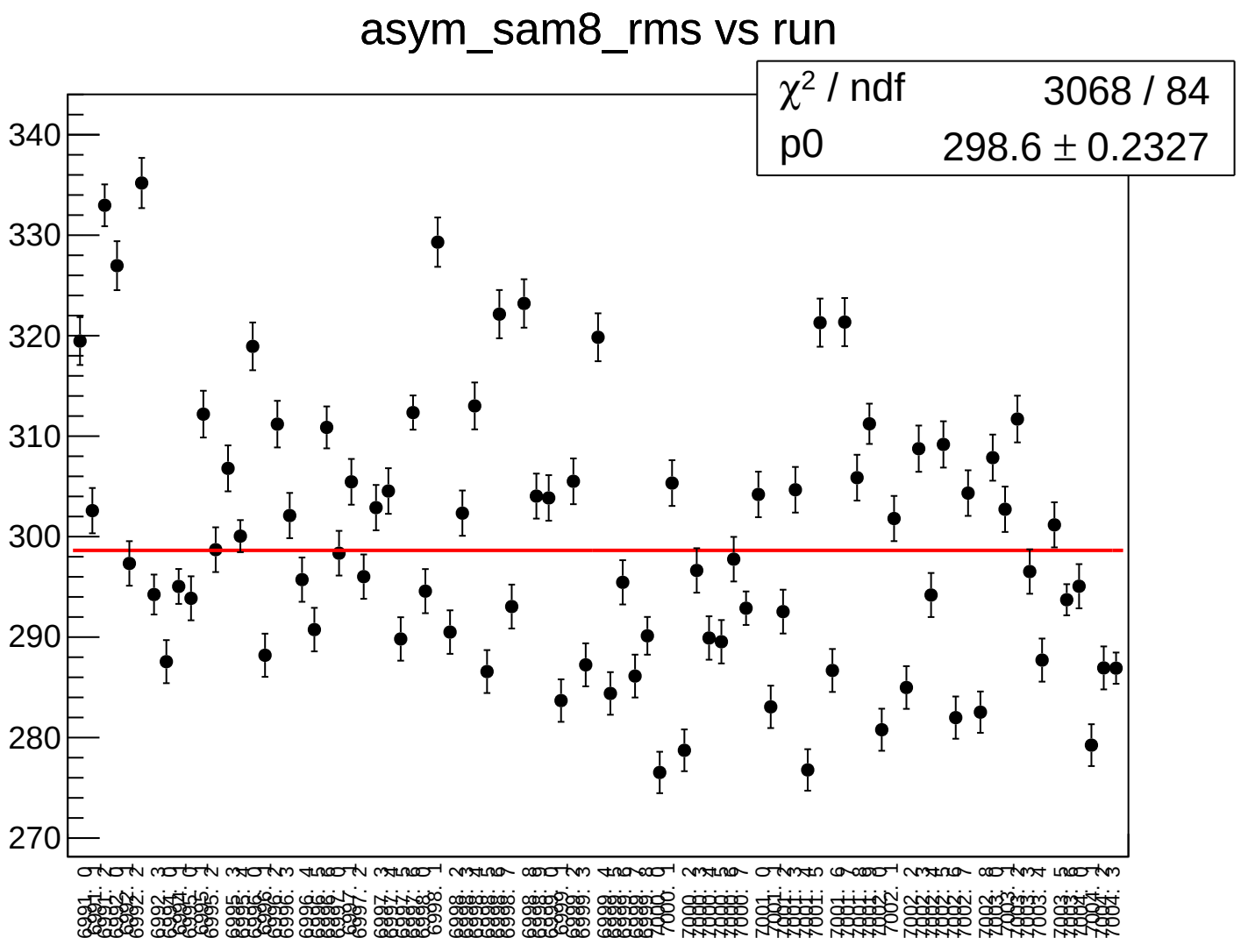

asym_sam7_mean vs run
χ² / ndf 76.97 / 84
p0 334.8 ± 400.8
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −255.9
Std Dev 298.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

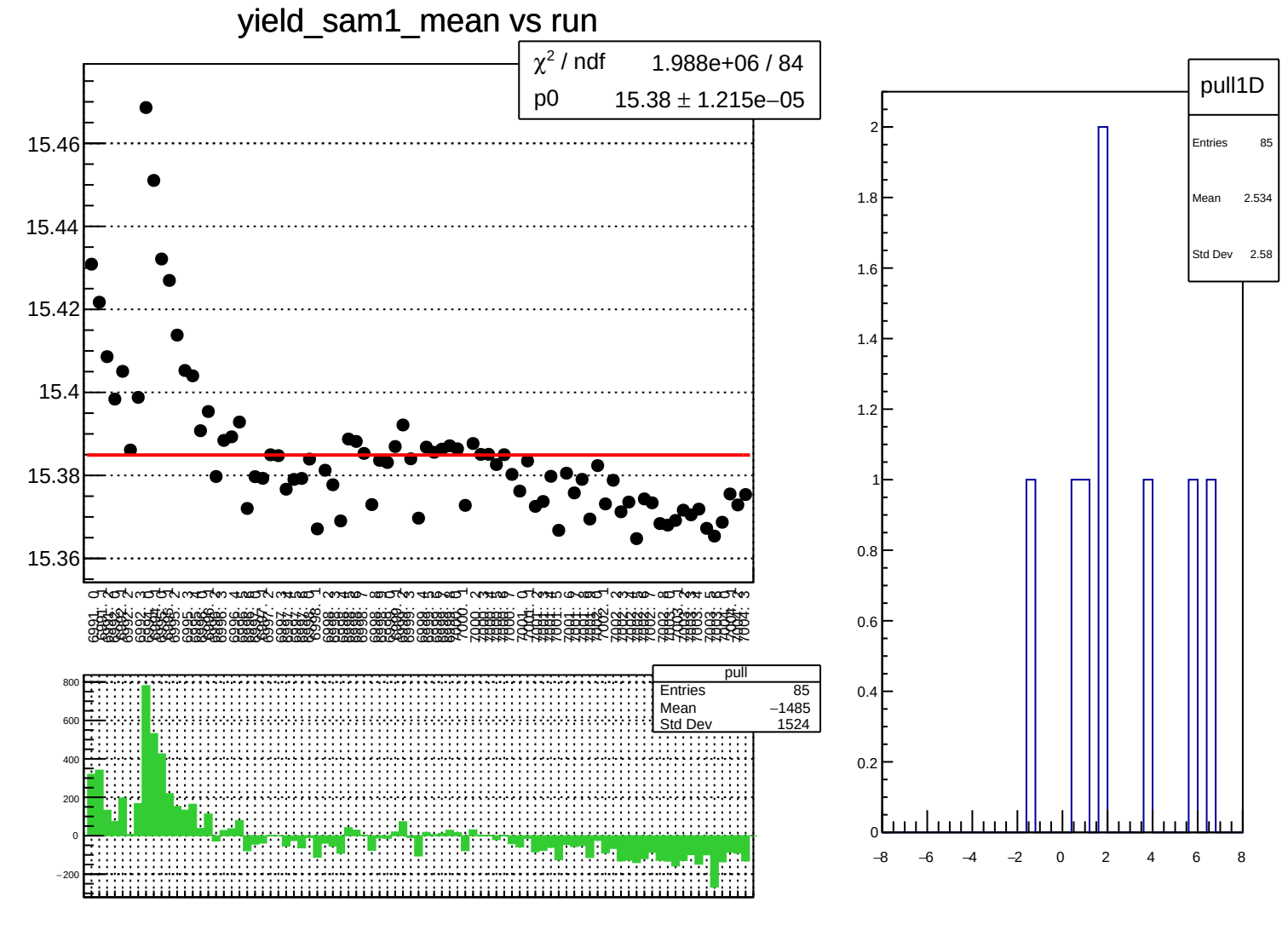

pull1D
Entries 85
Mean 0.01453
Std Dev 0.9515
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

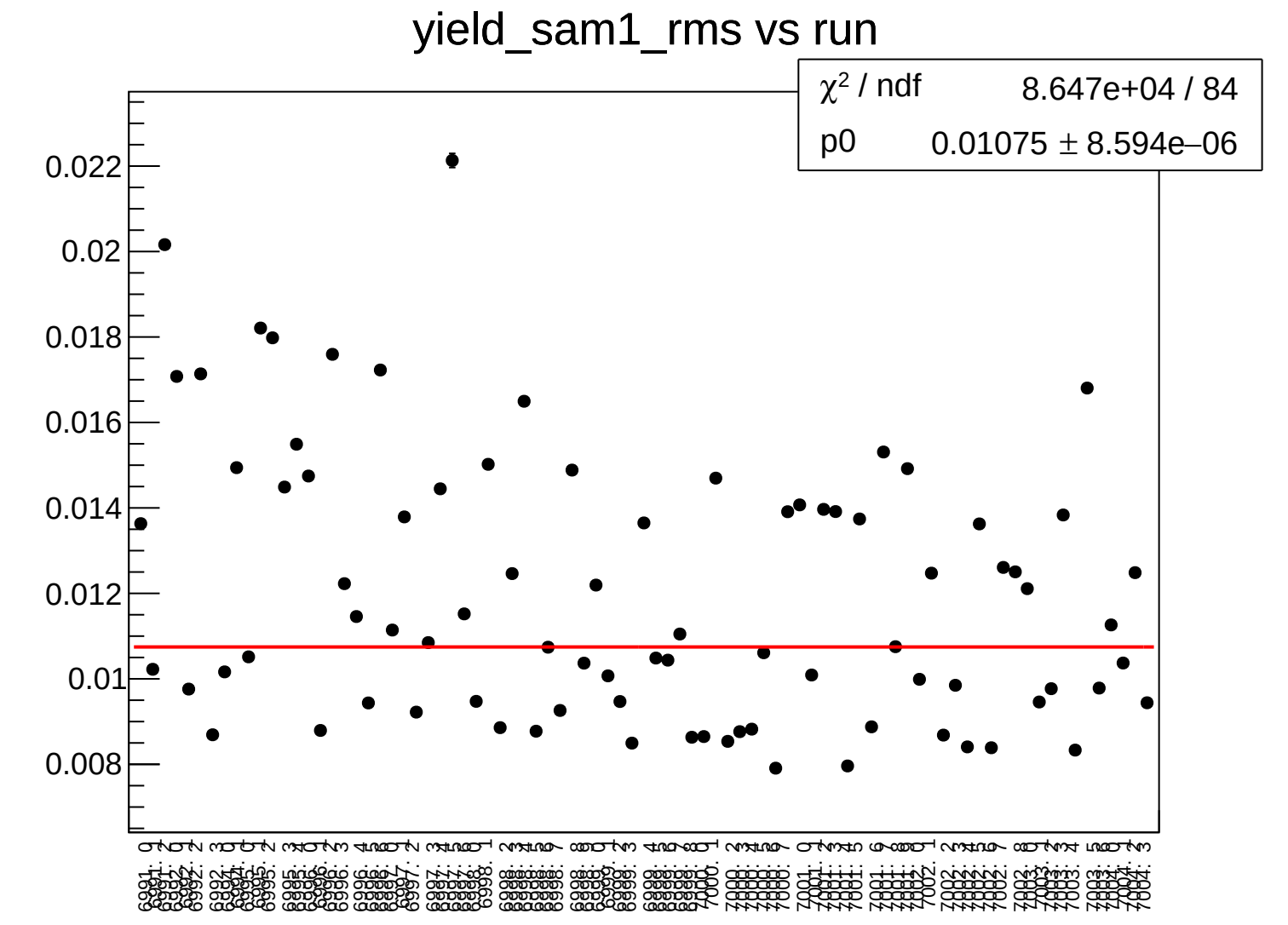

asym_sam7_rms vs run
χ² / ndf 4156 / 84
p0 363.5 ± 0.2834
440
420
400
380
360
340

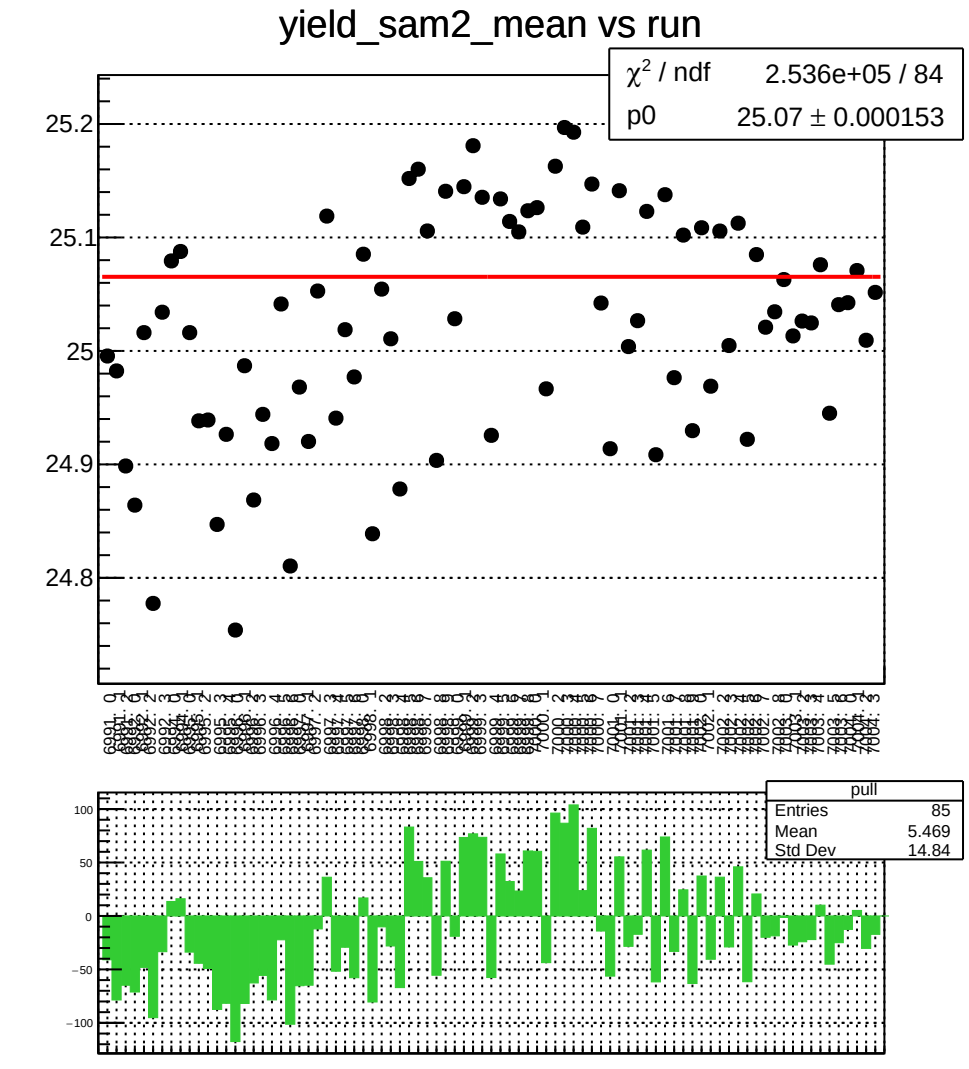

asym_sam8_mean vs run
χ² / ndf 75.49 / 84
p0 414.2 ± 329.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −589.8
Std Dev 633.8
2
1
0
−1
−2

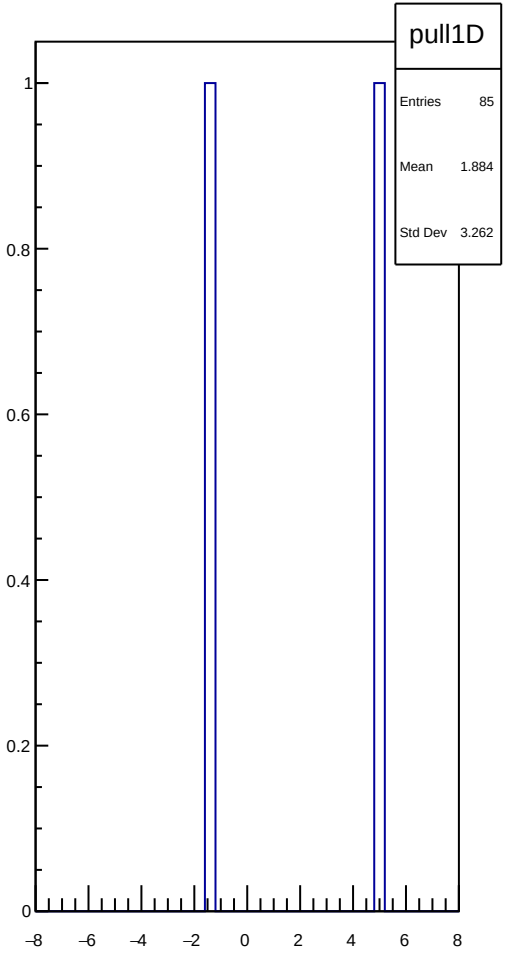

pull1D
Entries 85
Mean 0.006635
Std Dev 0.9424
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

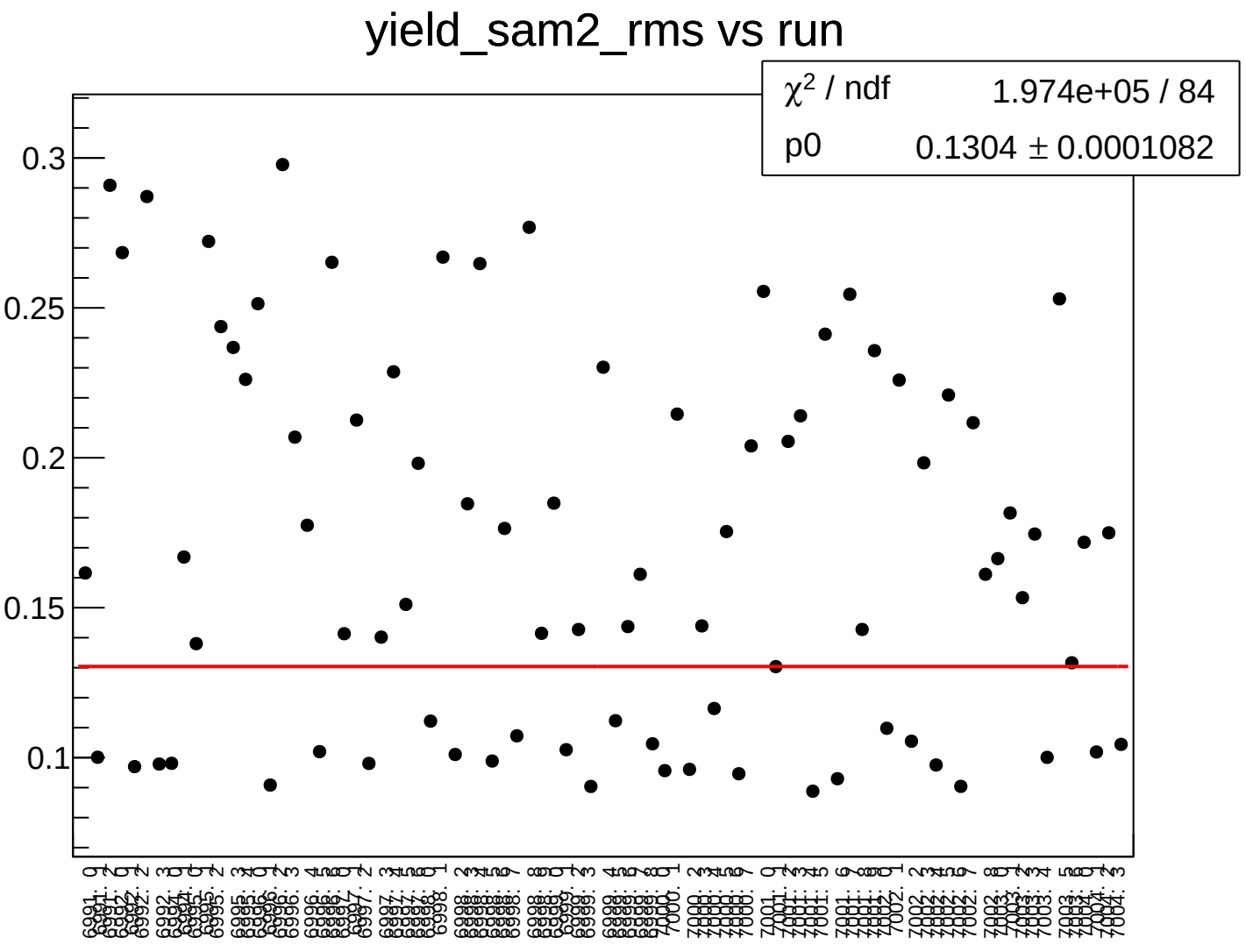

asym_sam8_rms vs run
χ² / ndf 3068 / 84
p0 298.6 ± 0.2327
340
330
320
310
300
290
280
270

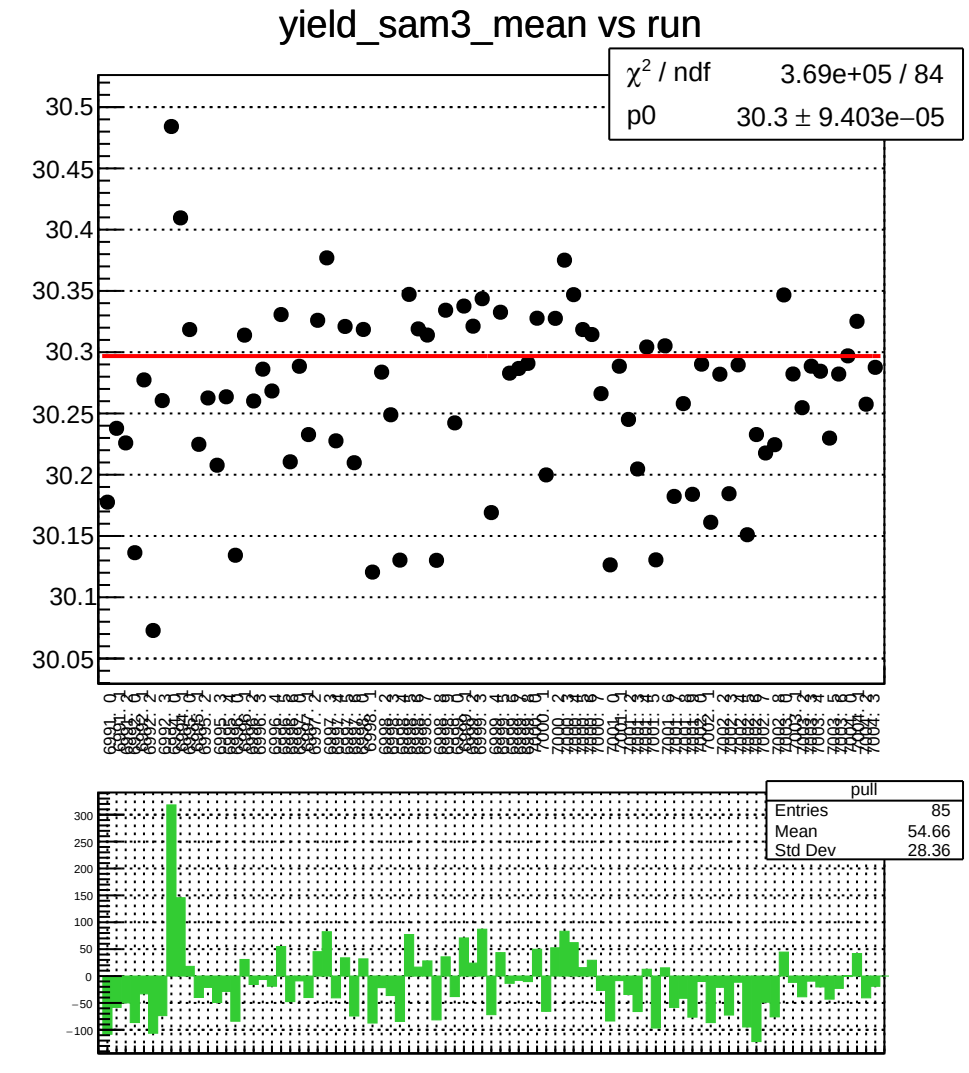

yield_sam1_mean vs run
χ² / ndf 1.988e+06 / 84
p0 15.38 ± 1.215e−05
15.46
15.44
15.42
15.4
15.38
15.36
pull
Entries 85
Mean −1485
Std Dev 1524
800
600
400
200
0
−200
pull1D
Entries 85
Mean 2.534
Std Dev 2.58
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

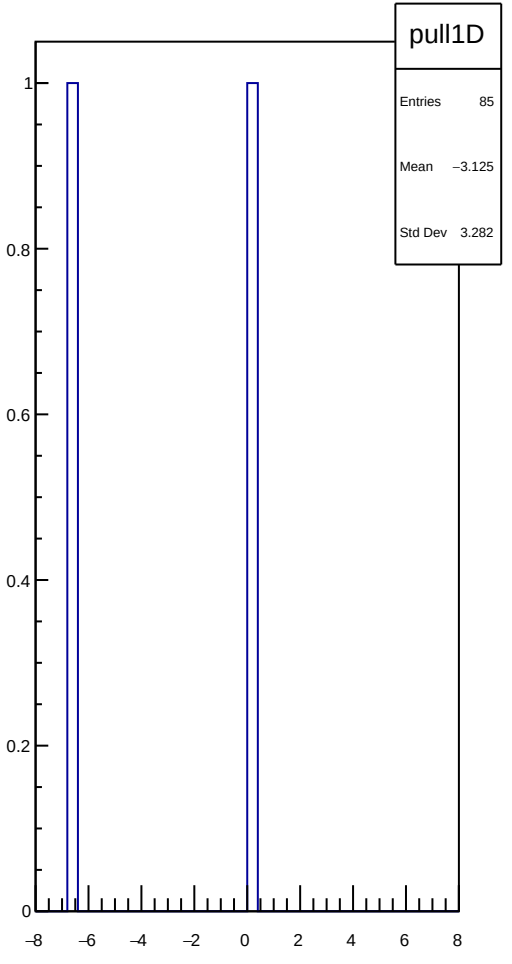

yield_sam1_rms vs run
χ² / ndf 8.647e+04 / 84
p0 0.01075 ± 8.594e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

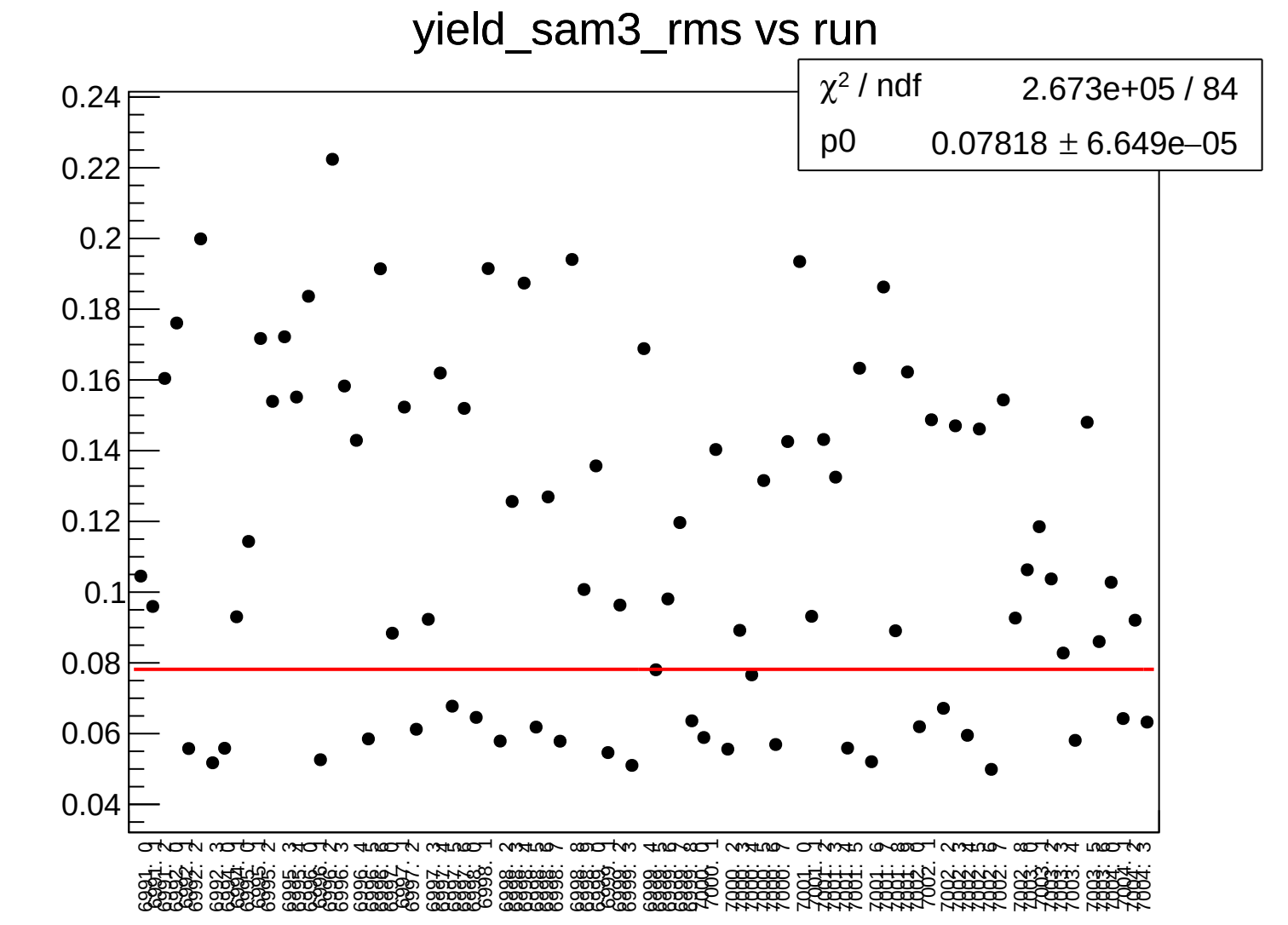

yield_sam2_mean vs run
χ² / ndf 2.536e+05 / 84
p0 25.07 ± 0.000153
25.2
25.1
25
24.9
24.8
pull
Entries 85
Mean 5.469
Std Dev 14.84
100
50
0
−50
−100

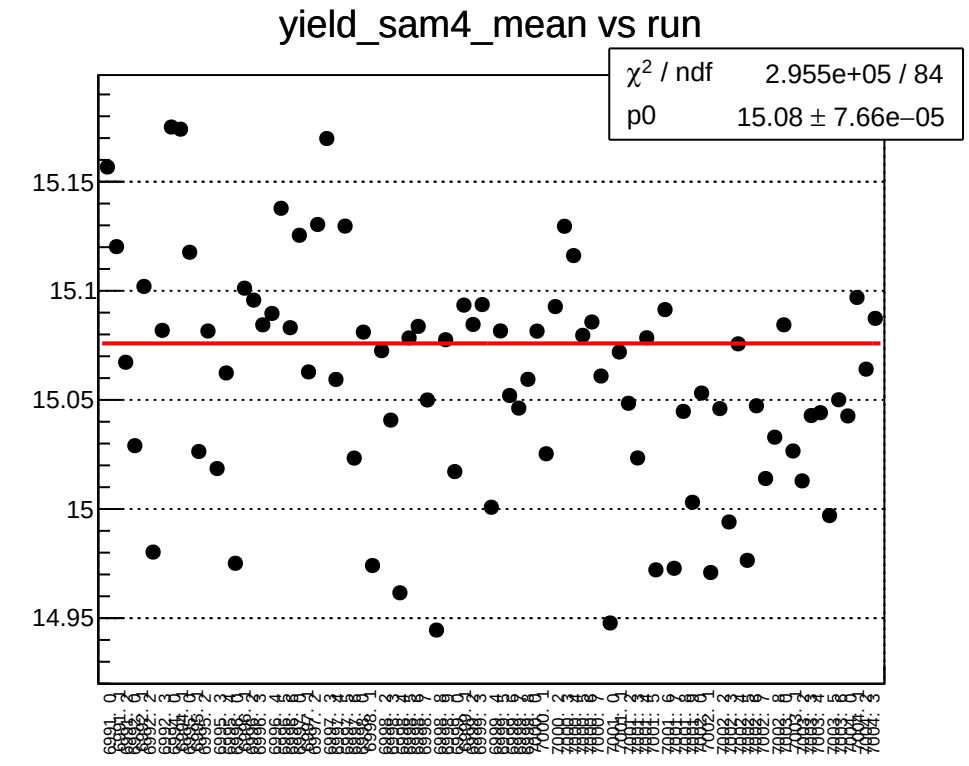

pull1D
Entries 85
Mean 1.884
Std Dev 3.262
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

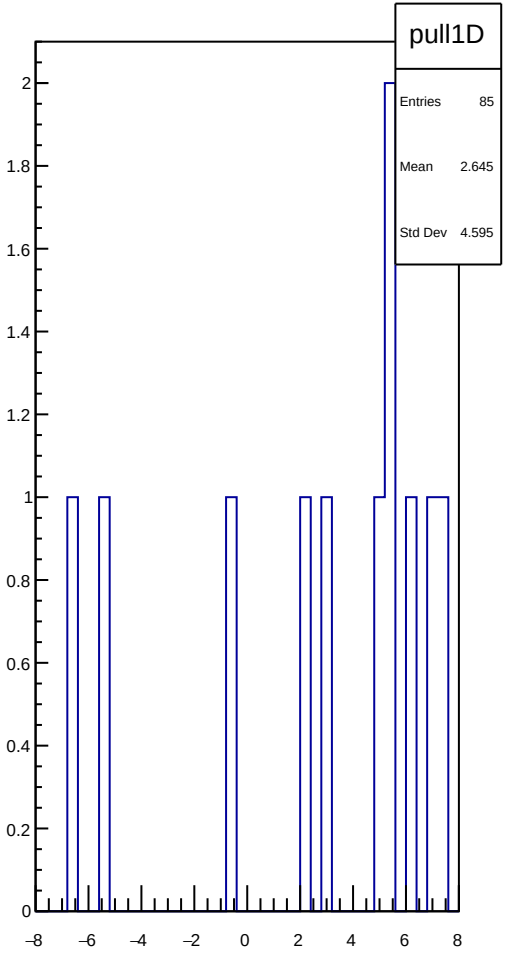

yield_sam2_rms vs run
χ² / ndf 1.974e+05 / 84
p0 0.1304 ± 0.0001082
0.3
0.25
0.2
0.15
0.1

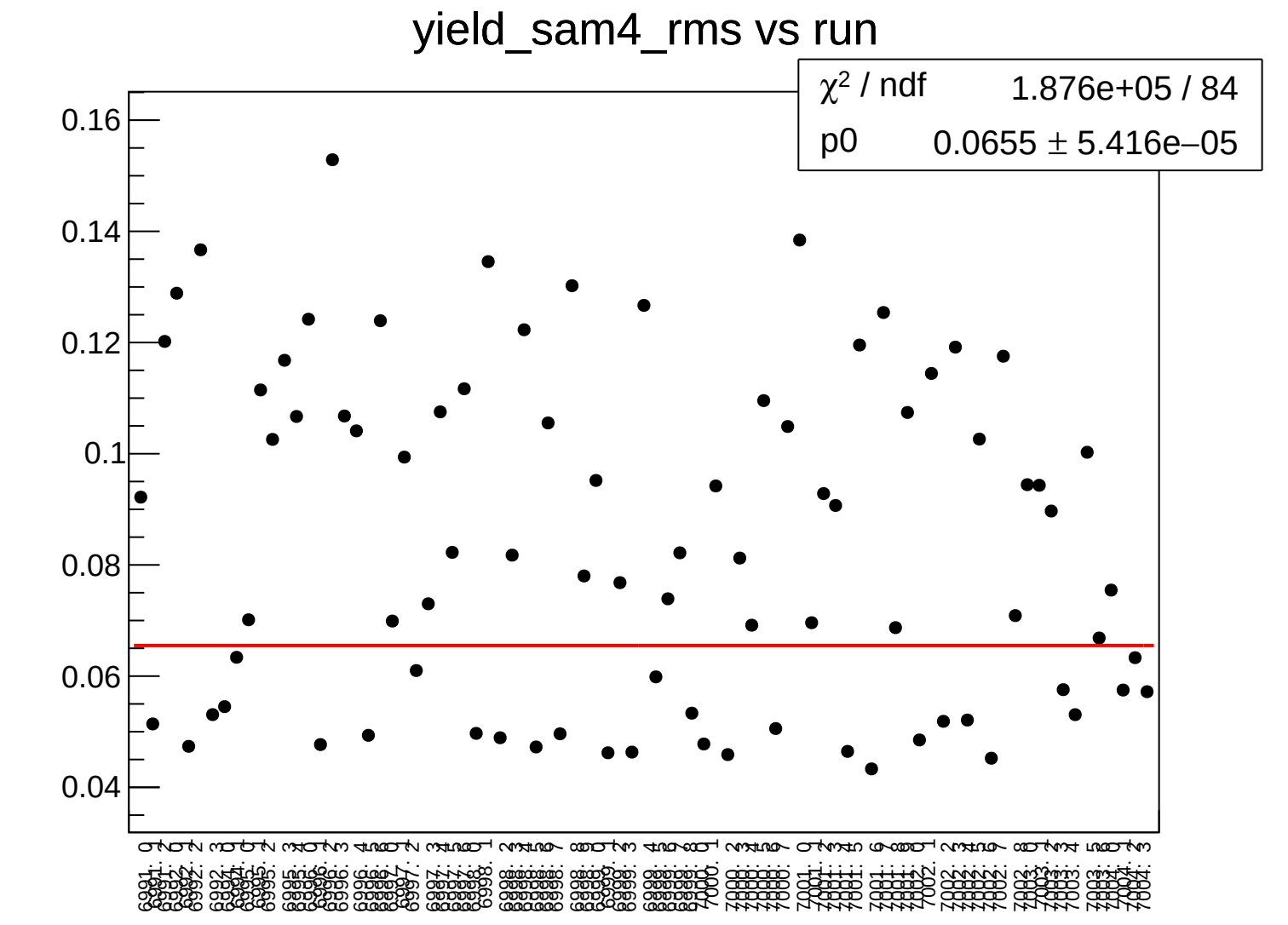

yield_sam3_mean vs run
χ² / ndf 3.69e+05 / 84
p0 30.3 ± 9.403e−05
30.5
30.45
30.4
30.35
30.3
30.25
30.2
30.15
30.1
30.05
pull
Entries 85
Mean 54.66
Std Dev 28.36
300
250
200
150
100
50
0
−50
−100

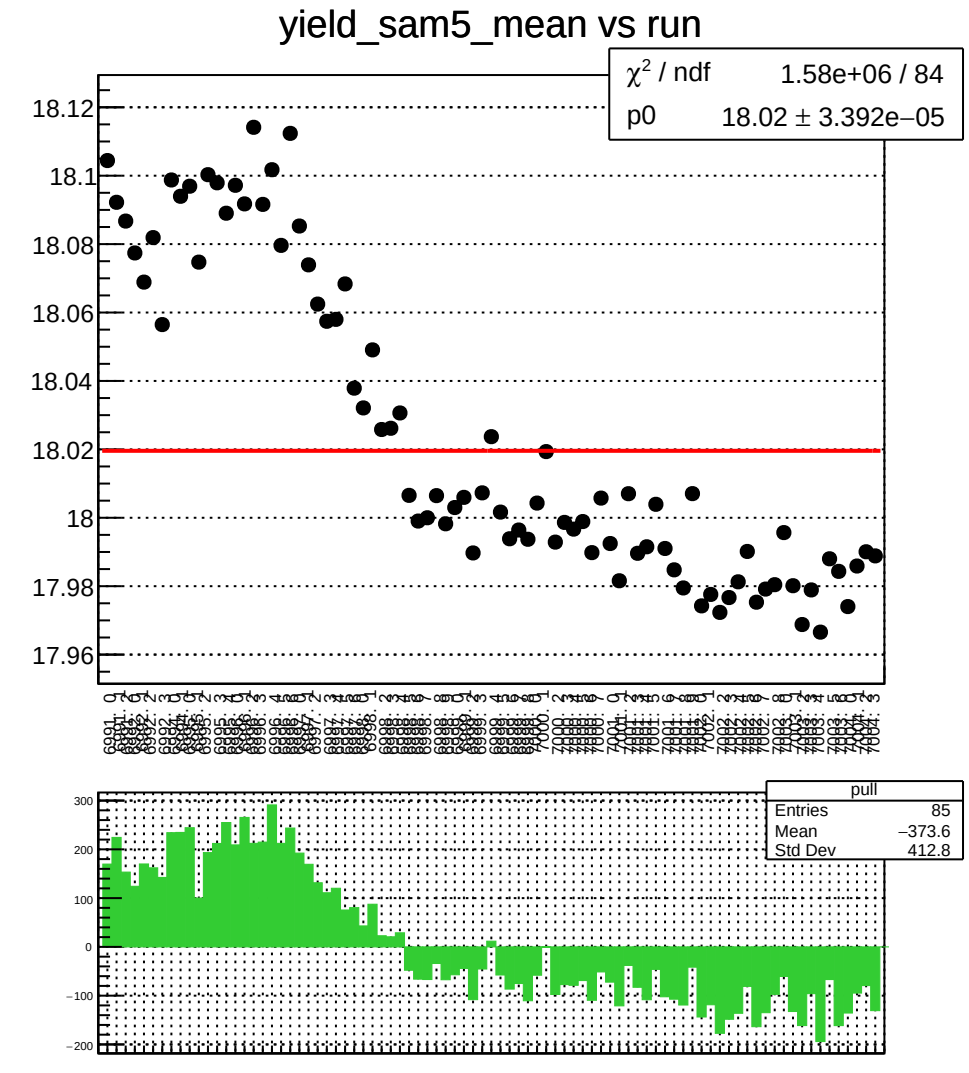

pull1D
Entries 85
Mean −3.125
Std Dev 3.282
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

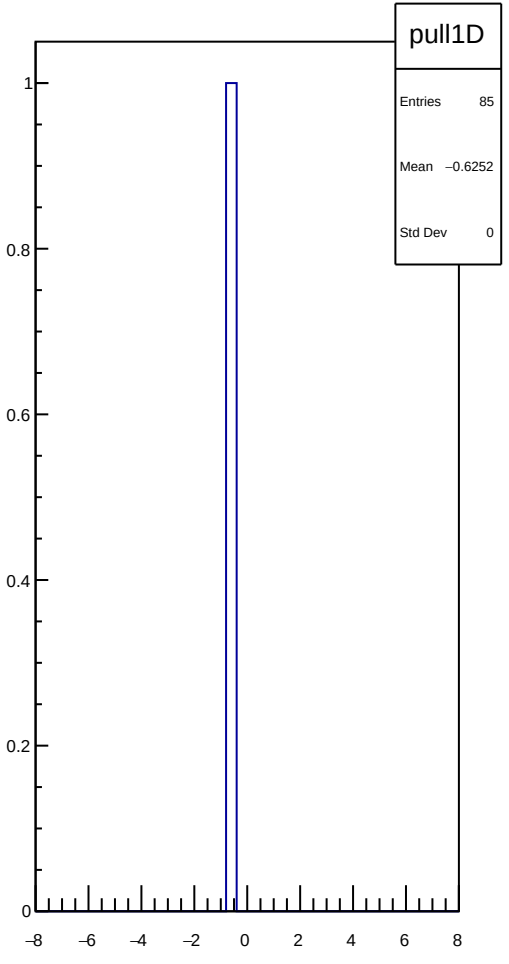

yield_sam3_rms vs run
χ² / ndf 2.673e+05 / 84
p0 0.07818 ± 6.649e−05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

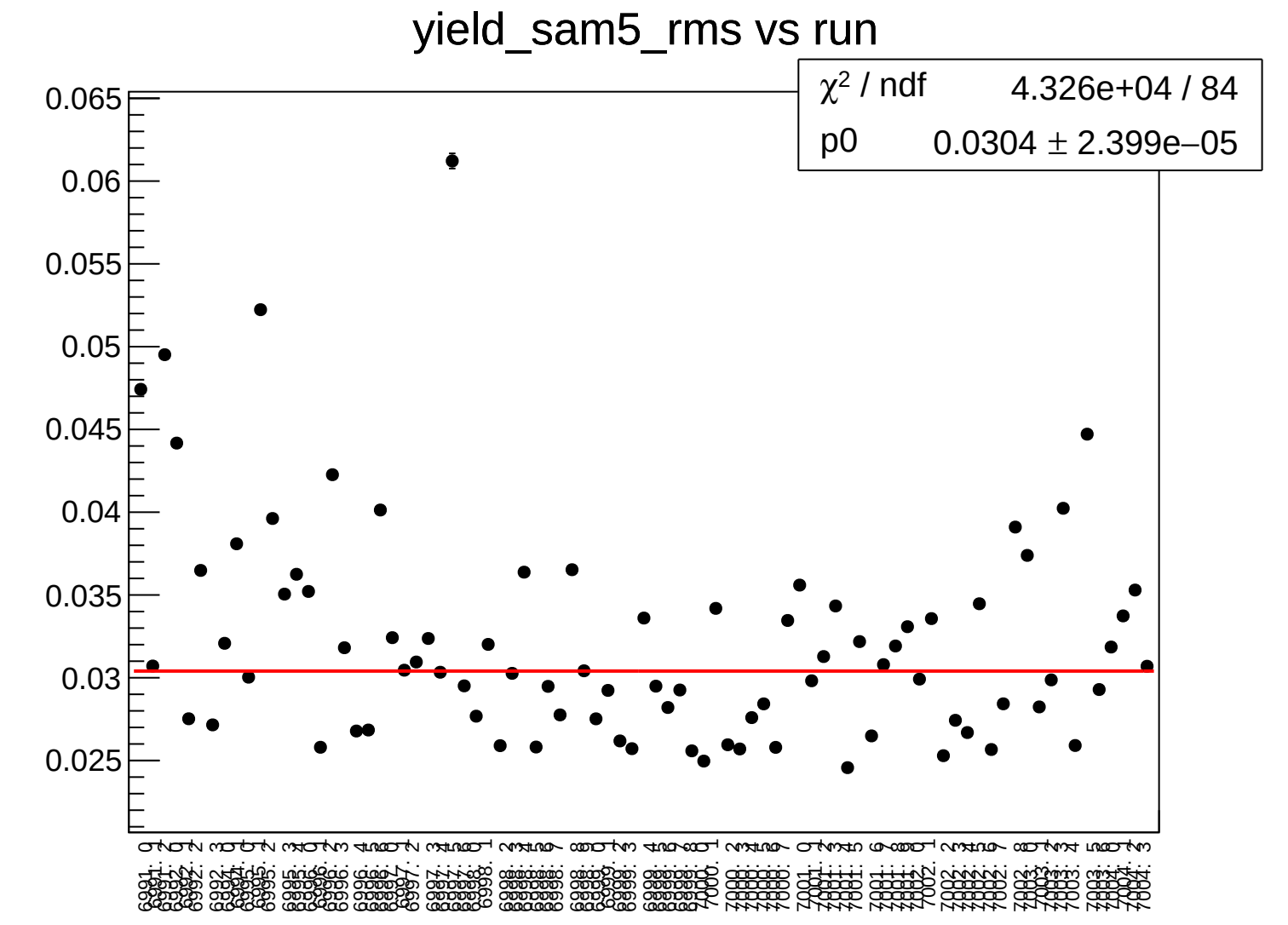

yield_sam4_mean vs run
χ² / ndf 2.955e+05 / 84
p0 15.08 ± 7.66e−05
15.15
15.1
15.05
15
14.95
pull
Entries 85
Mean 110.1
Std Dev 65.68
200
150
100
50
0
−50
−100

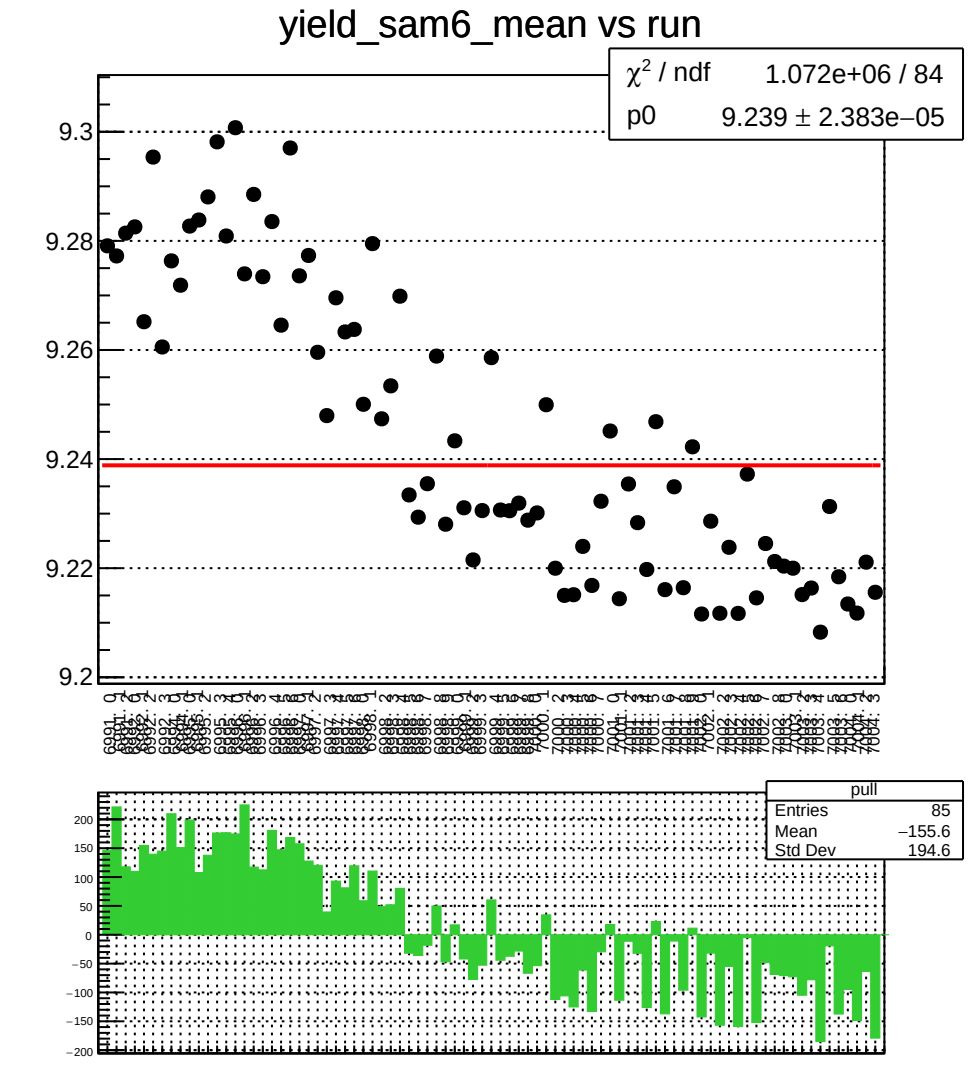

pull1D
Entries 85
Mean 2.645
Std Dev 4.595
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

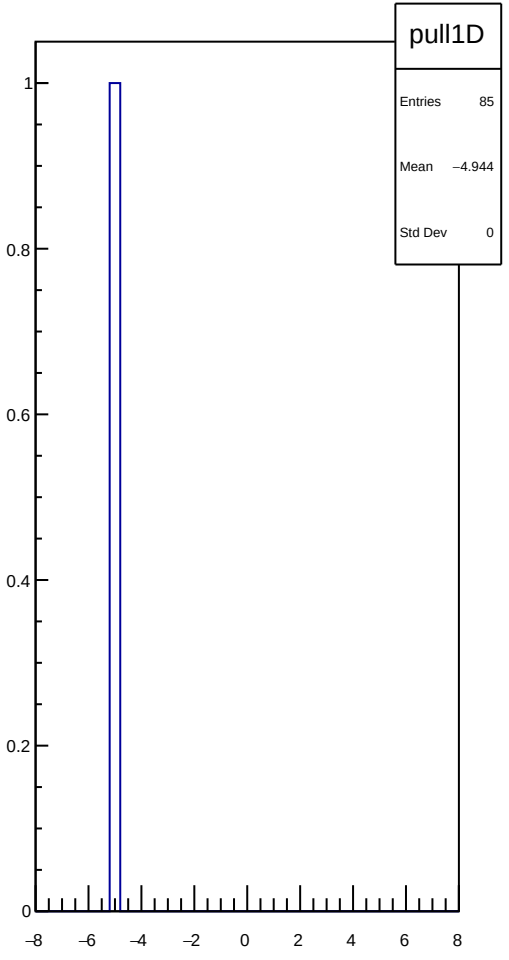

yield_sam4_rms vs run
χ² / ndf 1.876e+05 / 84
p0 0.0655 ± 5.416e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

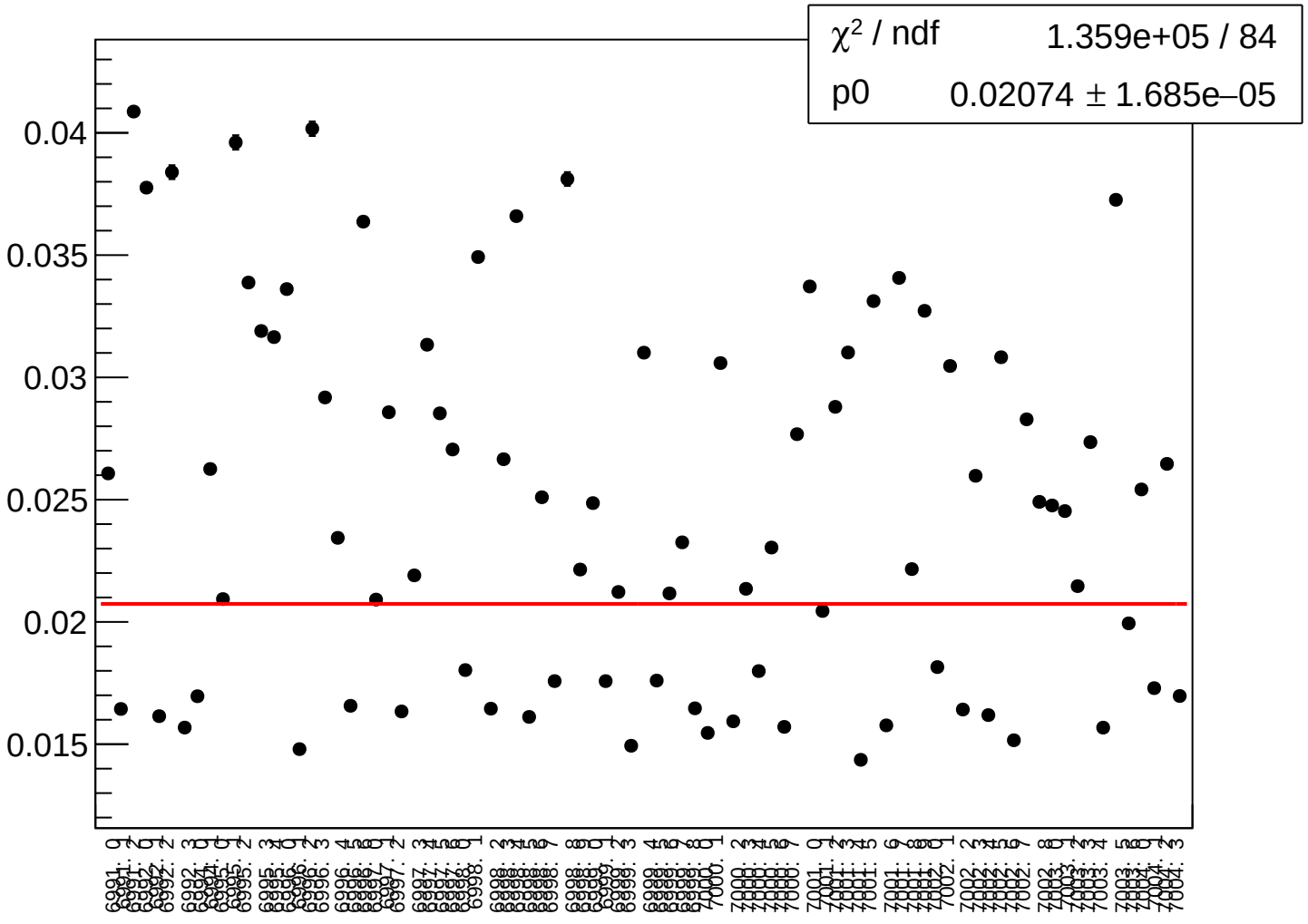

yield_sam5_mean vs run
χ² / ndf 1.58e+06 / 84
p0 18.02 ± 3.392e−05
18.12
18.1
18.08
18.06
18.04
18.02
18
17.98
17.96
pull
Entries 85
Mean −373.6
Std Dev 412.8
300
200
100
0
−100
−200

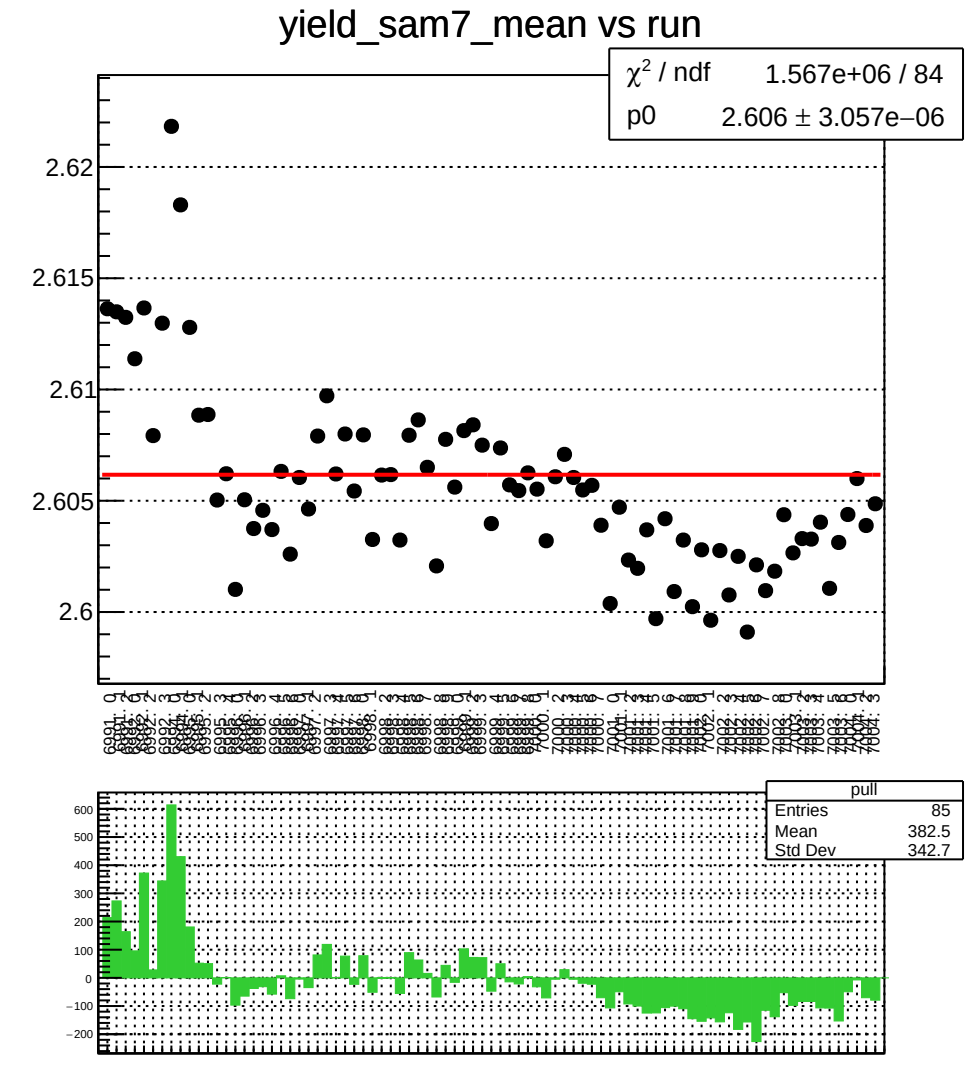

pull1D
Entries 85
Mean −0.6252
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

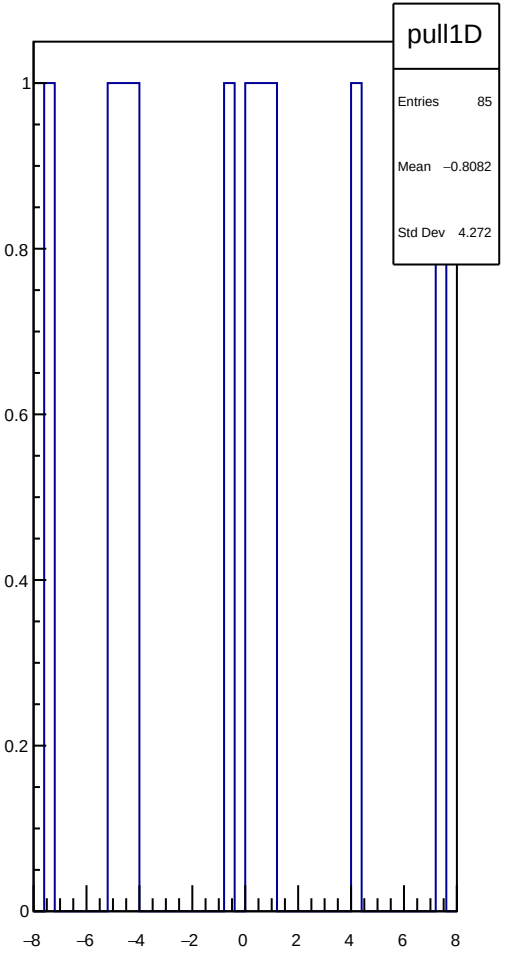

yield_sam5_rms vs run
χ² / ndf 4.326e+04 / 84
p0 0.0304 ± 2.399e−05
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025

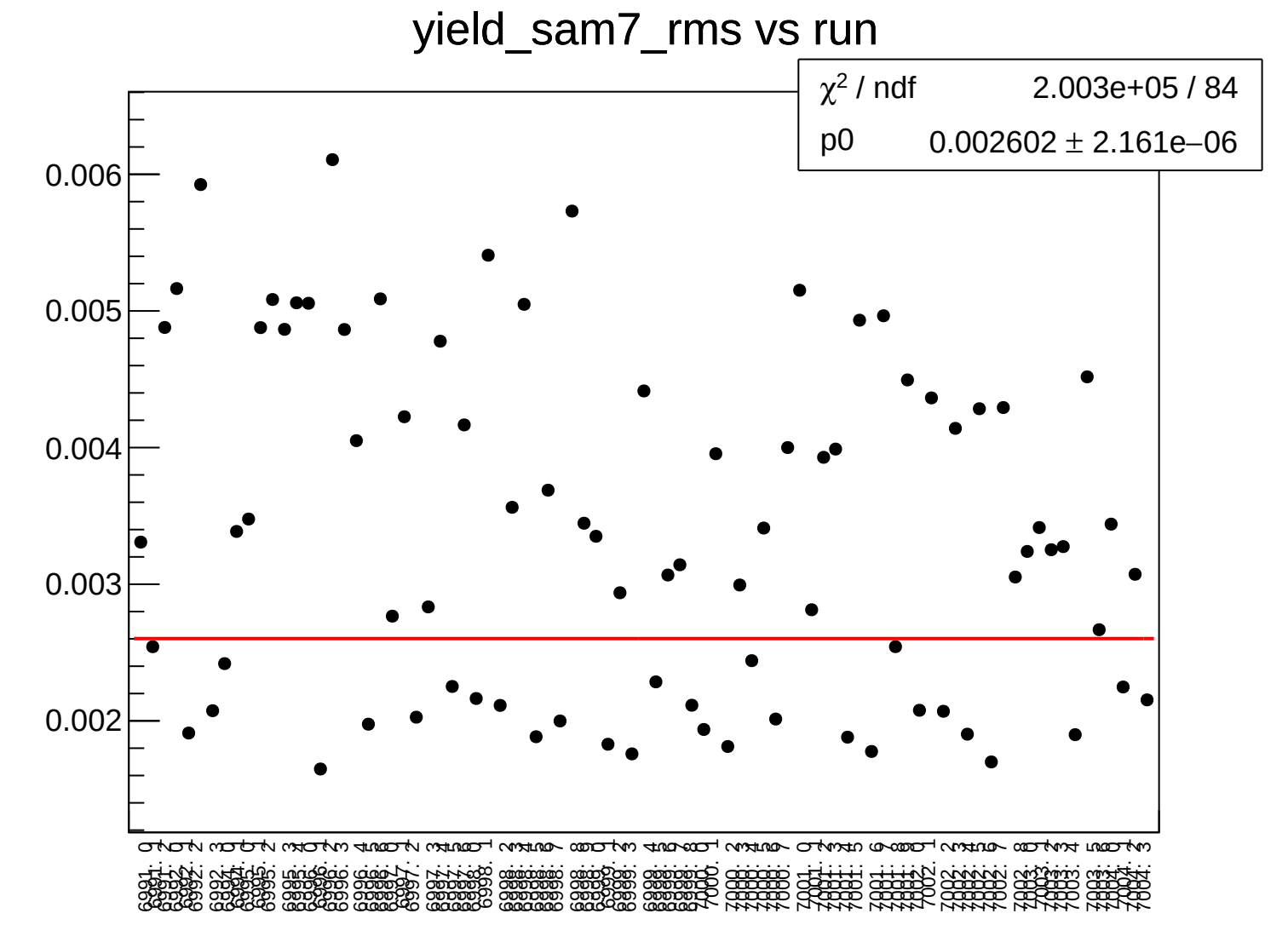

yield_sam6_mean vs run
χ² / ndf 1.072e+06 / 84
p0 9.239 ± 2.383e−05
9.3
9.28
9.26
9.24
9.22
9.2
pull
Entries 85
Mean −155.6
Std Dev 194.6
200
150
100
50
0
−50
−100
−150
−200

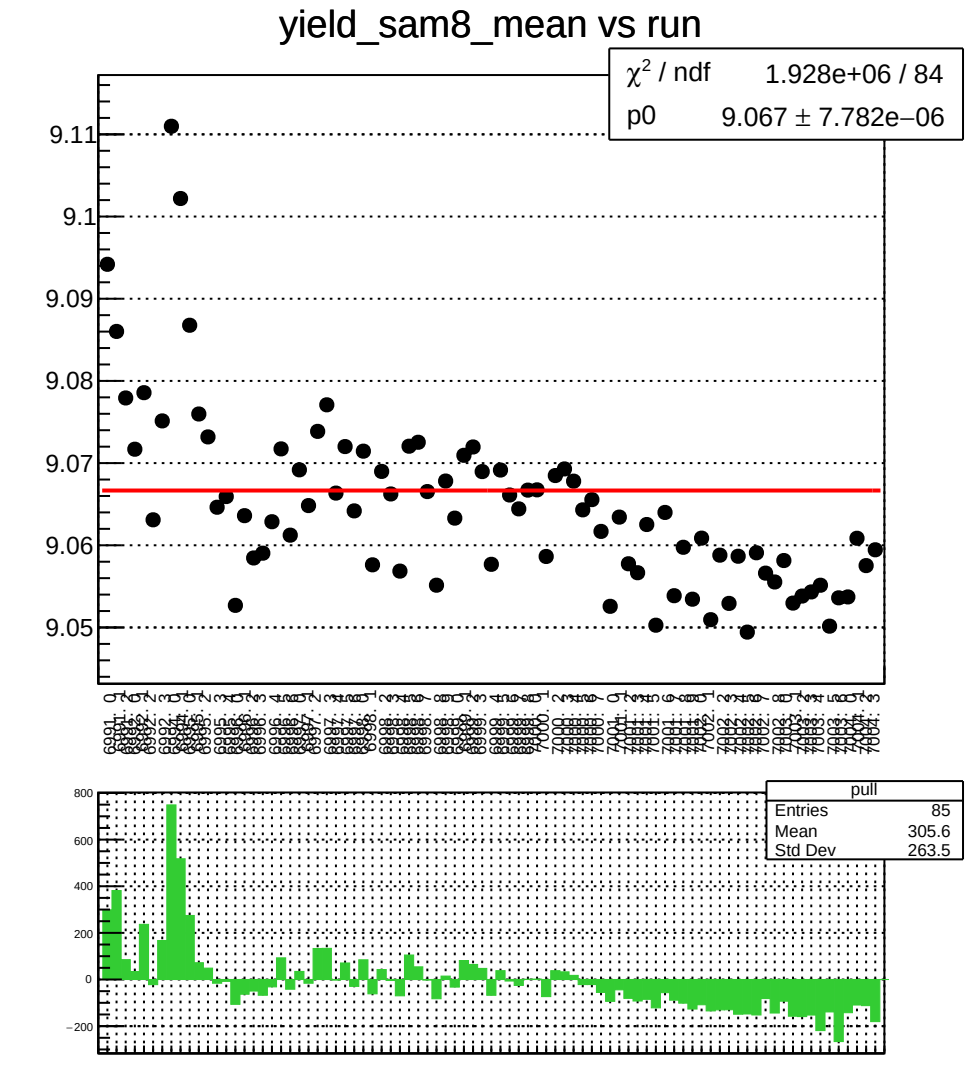

pull1D
Entries 85
Mean −4.944
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

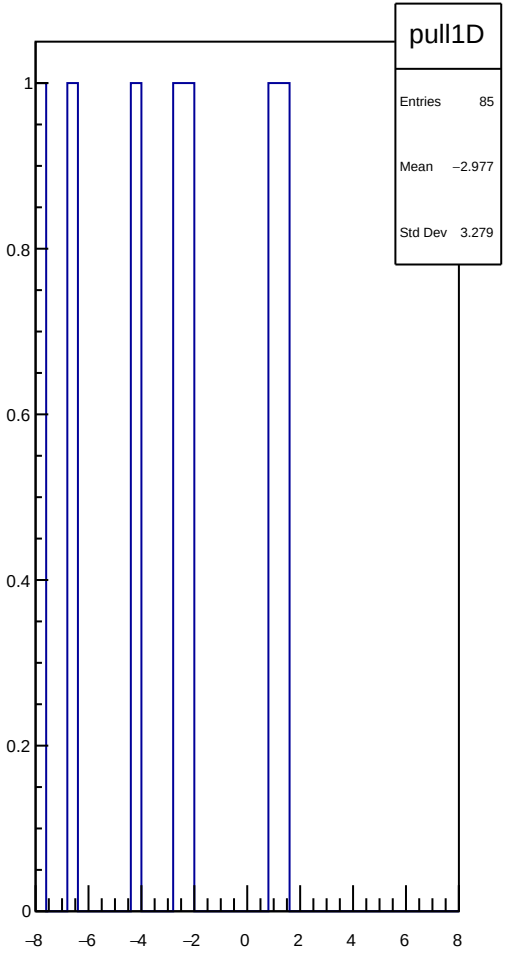

yield_sam6_rms vs run
χ² / ndf 1.359e+05 / 84
p0 0.02074 ± 1.685e−05
0.04
0.035
0.03
0.025
0.02
0.015

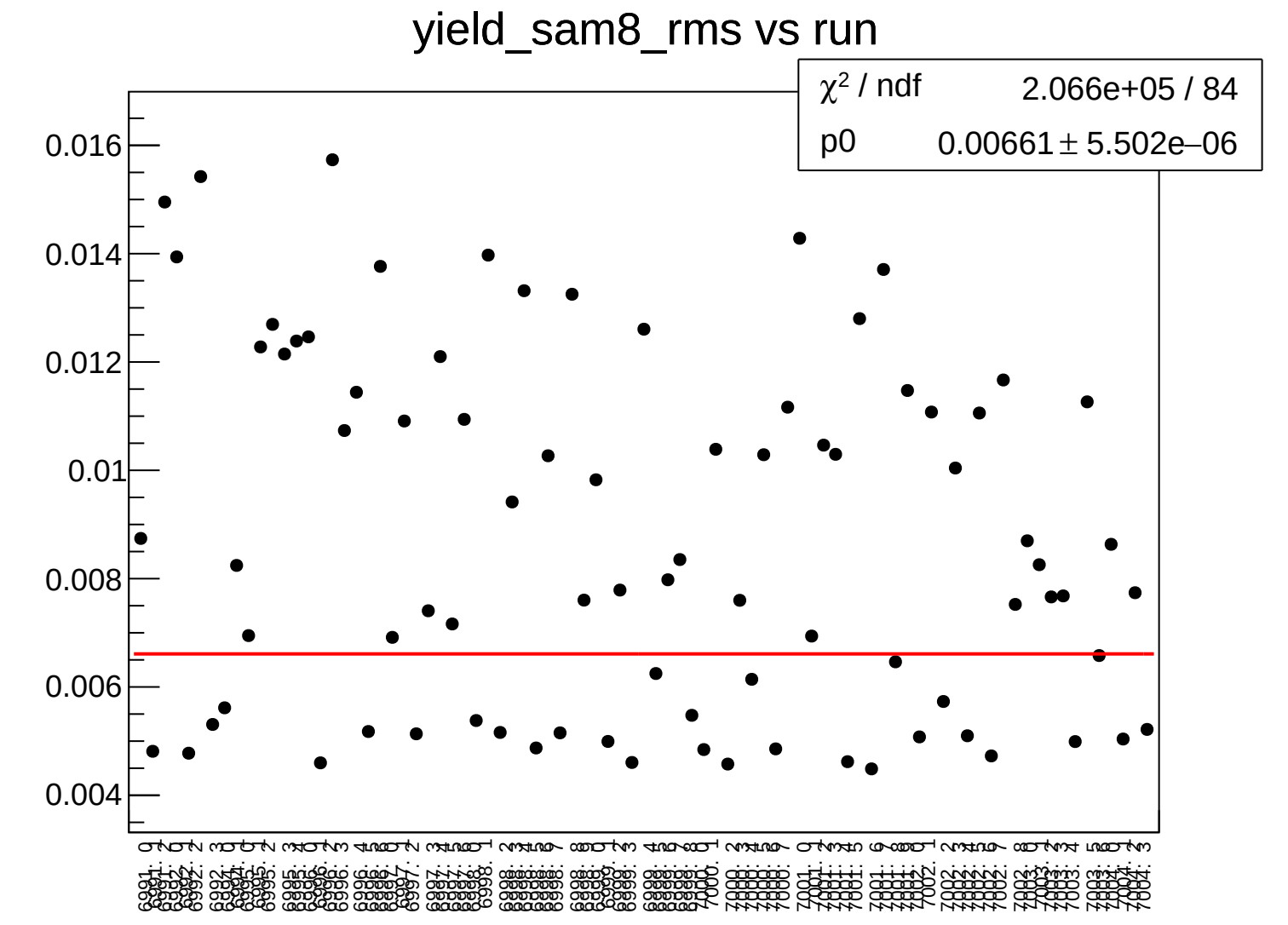

yield_sam7_mean vs run
χ² / ndf 1.567e+06 / 84
p0 2.606 ± 3.057e−06
2.62
2.615
2.61
2.605
2.6
pull
Entries 85
Mean 382.5
Std Dev 342.7
600
500
400
300
200
100
0
−100
−200

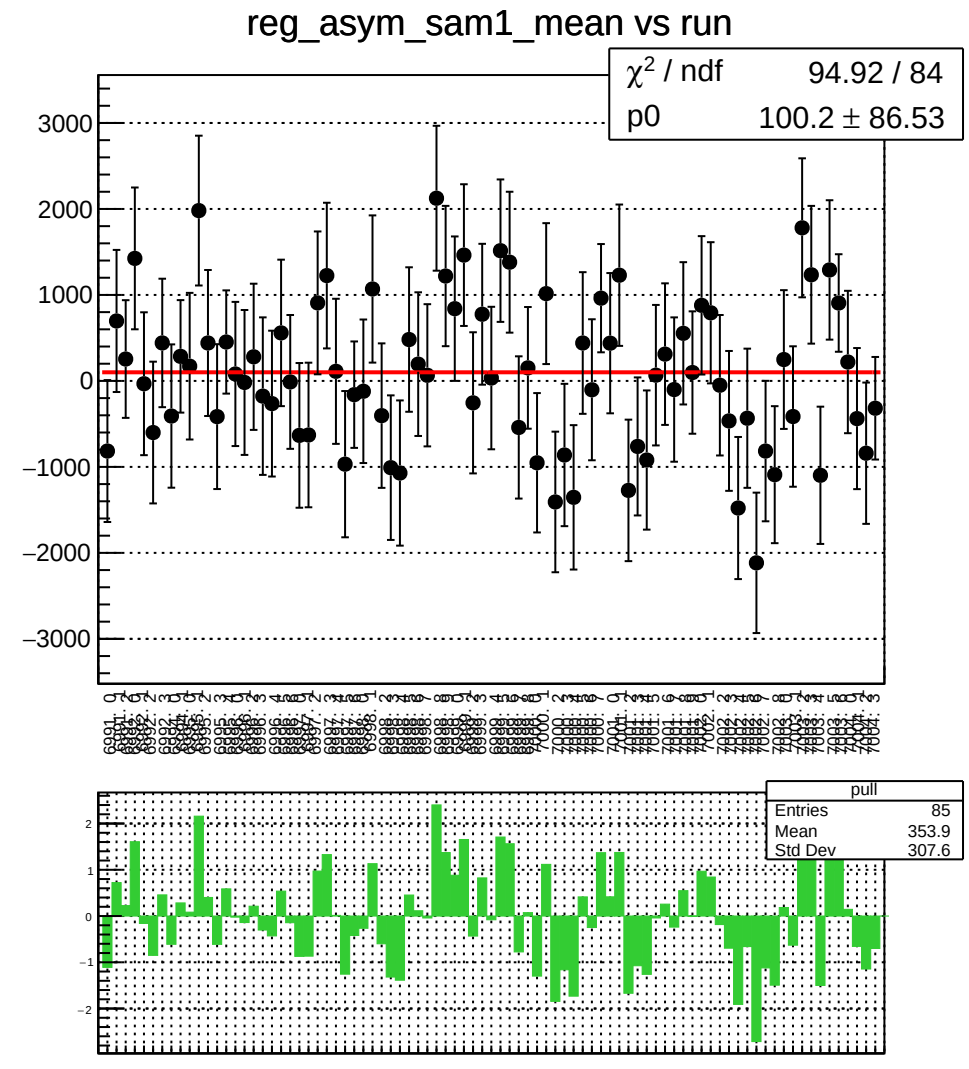

pull1D
Entries 85
Mean −0.8082
Std Dev 4.272
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

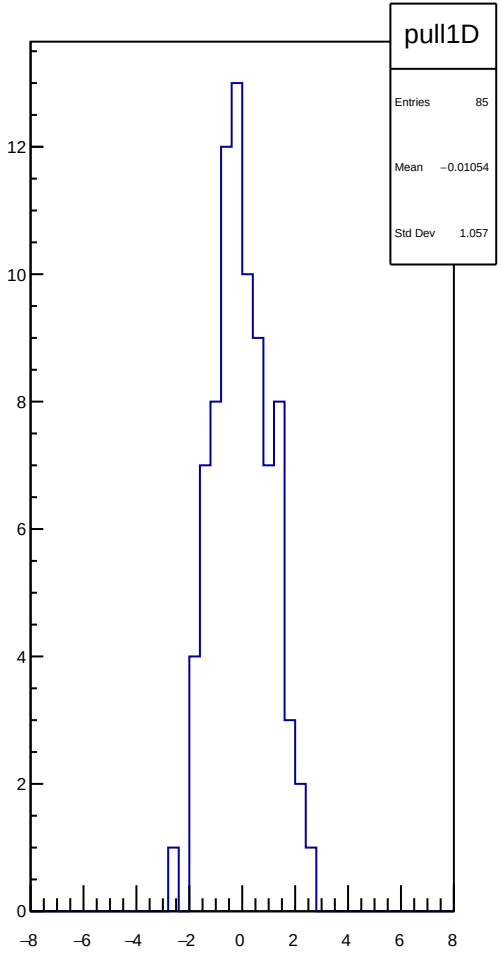

yield_sam7_rms vs run
χ² / ndf 2.003e+05 / 84
p0 0.002602 ± 2.161e−06
0.006
0.005
0.004
0.003
0.002

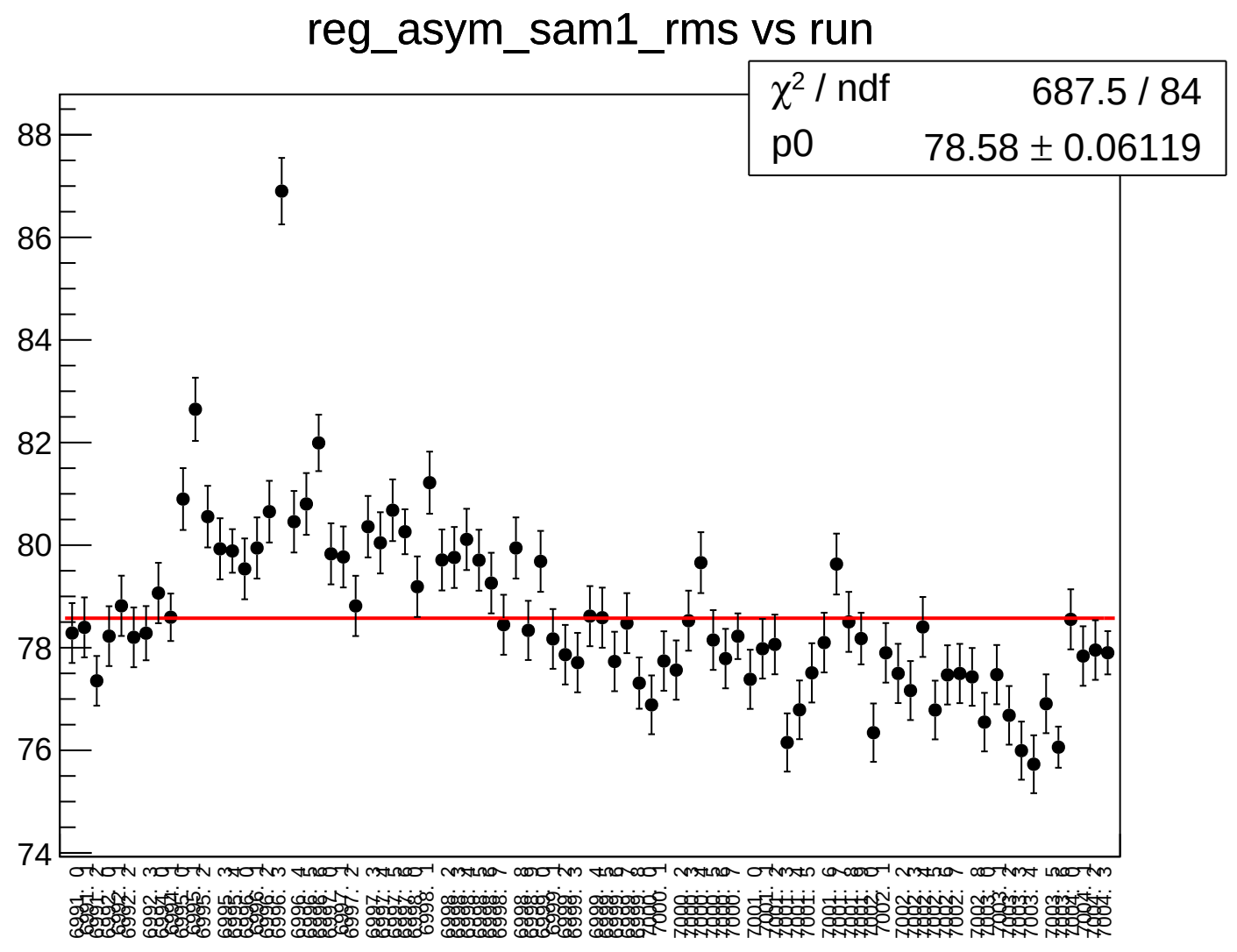

yield_sam8_mean vs run
χ² / ndf 1.928e+06 / 84
p0 9.067 ± 7.782e−06
9.11
9.1
9.09
9.08
9.07
9.06
9.05
pull
Entries 85
Mean 305.6
Std Dev 263.5
800
600
400
200
0
−200

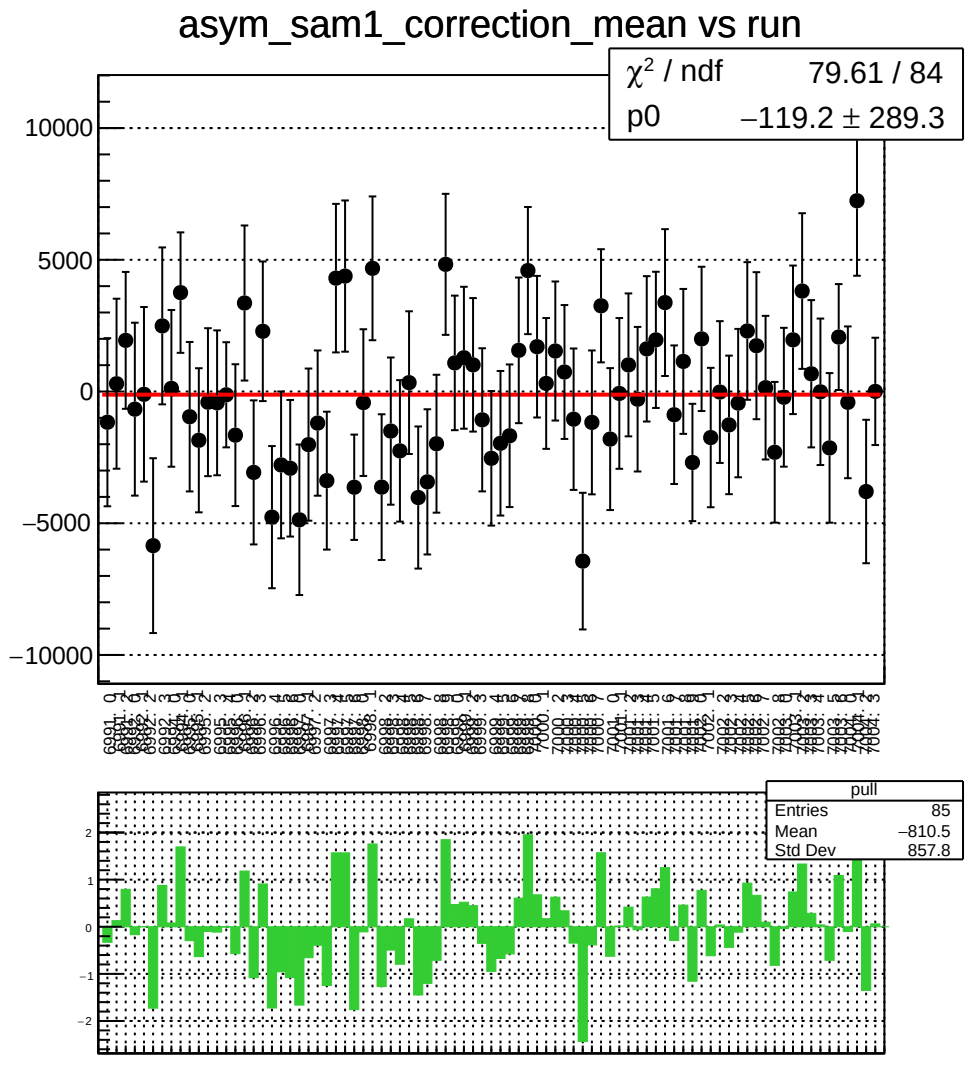

pull1D
Entries 85
Mean −2.977
Std Dev 3.279
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

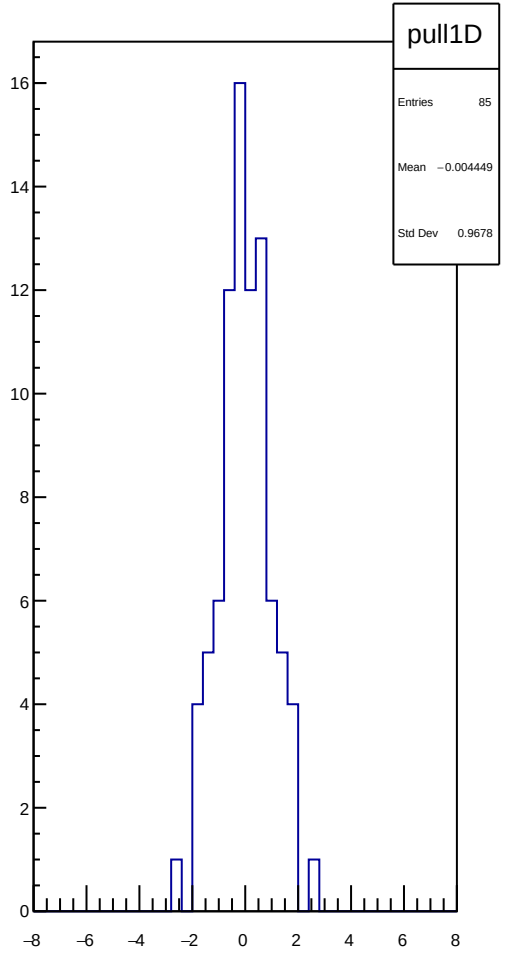

yield_sam8_rms vs run
χ² / ndf 2.066e+05 / 84
p0 0.00661 ± 5.502e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004

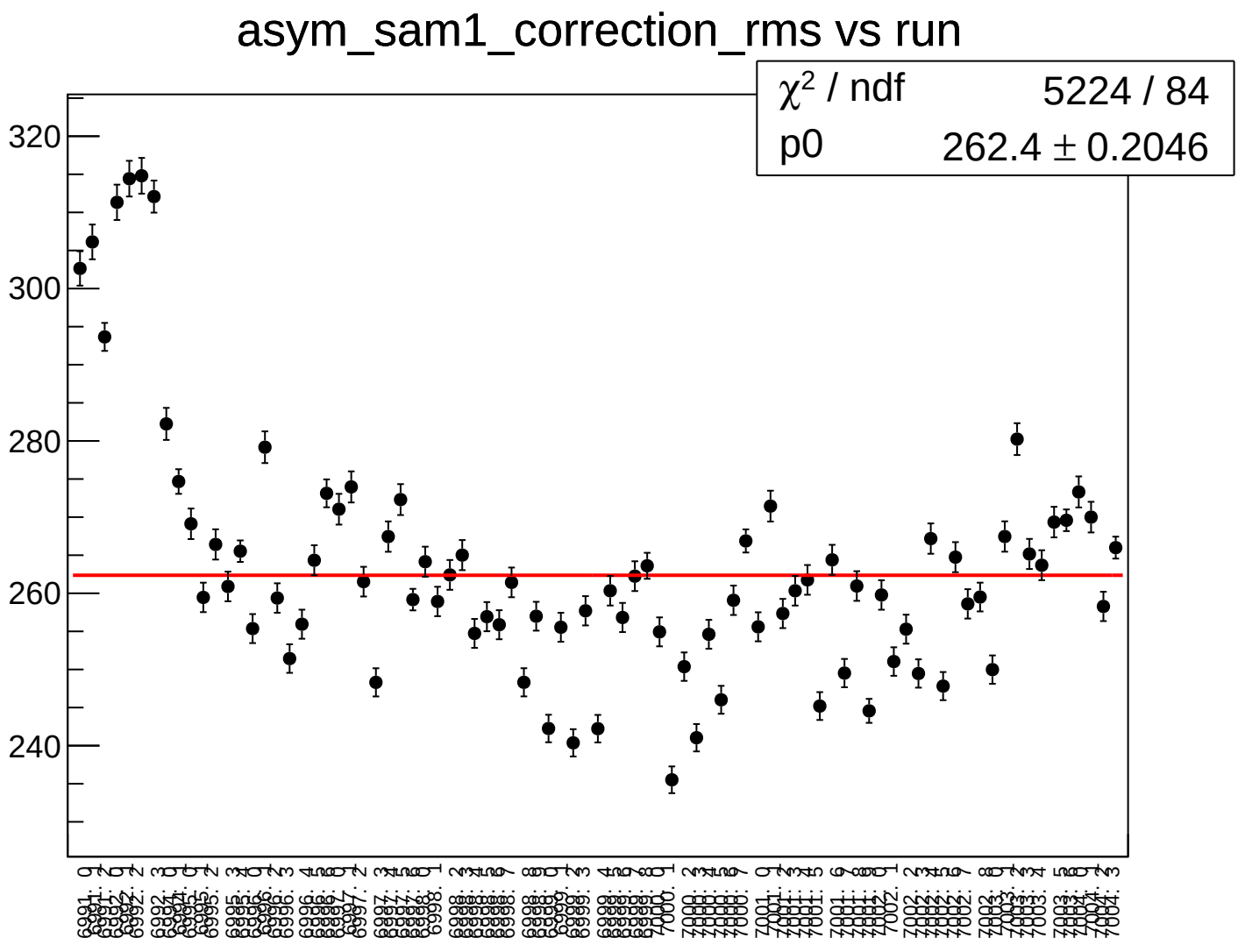

reg_asym_sam1_mean vs run
χ^2 / ndf 94.92 / 84
p0 100.2 ± 86.53
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean 353.9
Std Dev 307.6
2
1
0
−1
−2

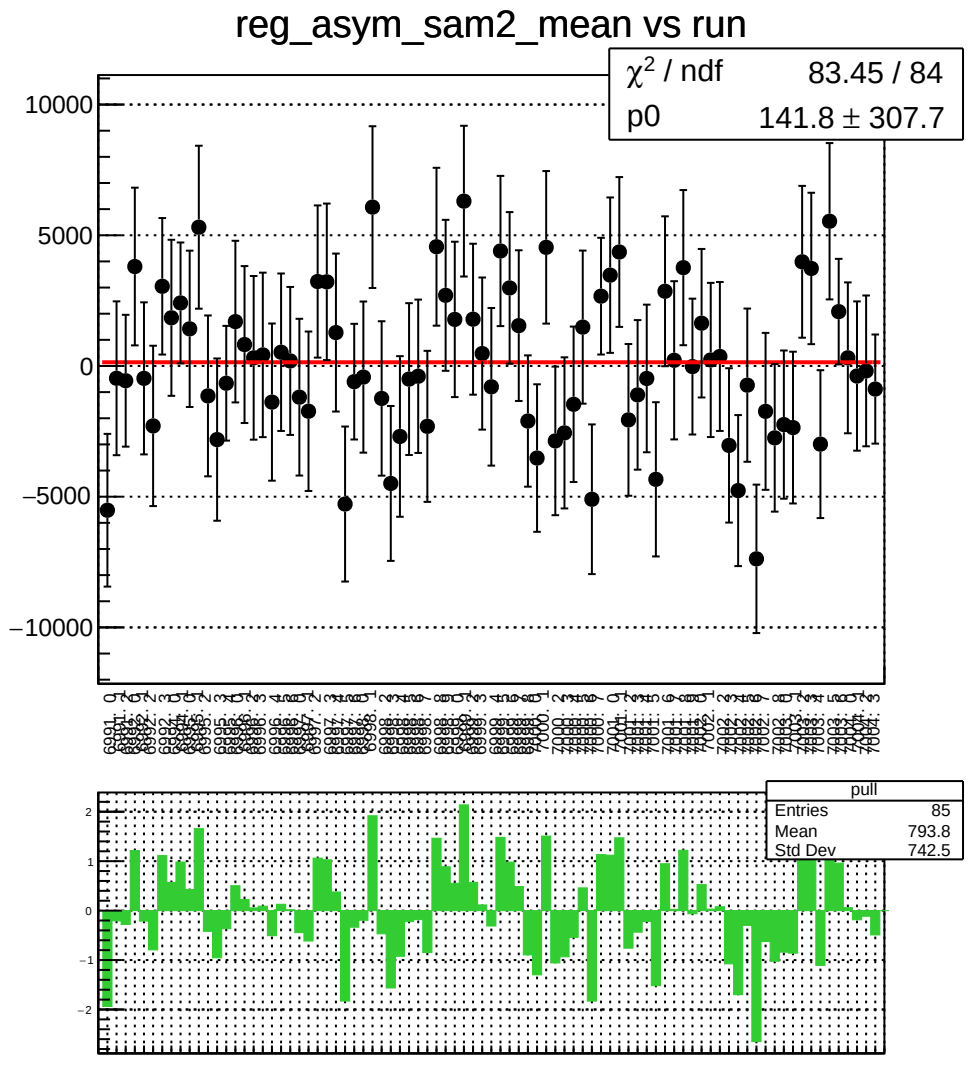

pull1D
Entries 85
Mean −0.01054
Std Dev 1.057
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

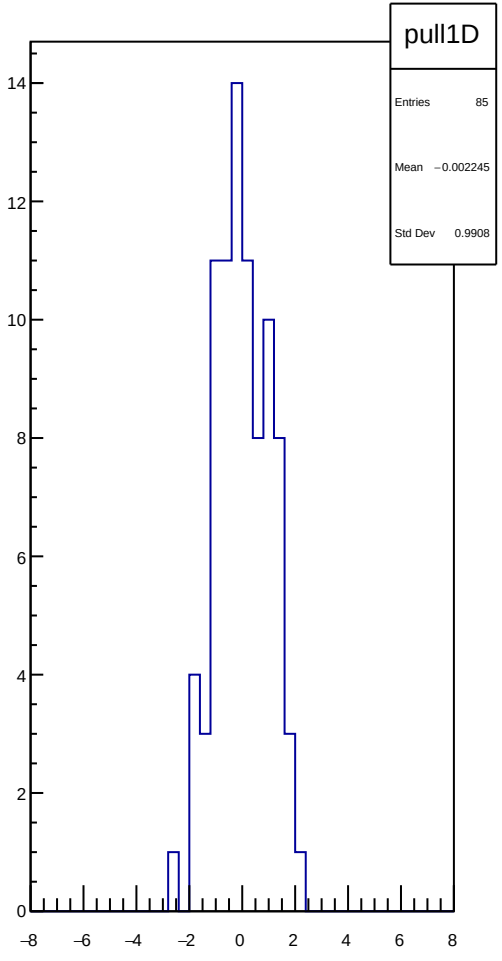

reg_asym_sam1_rms vs run
χ² / ndf 687.5 / 84
p0 78.58 ± 0.06119
88
86
84
82
80
78
76
74

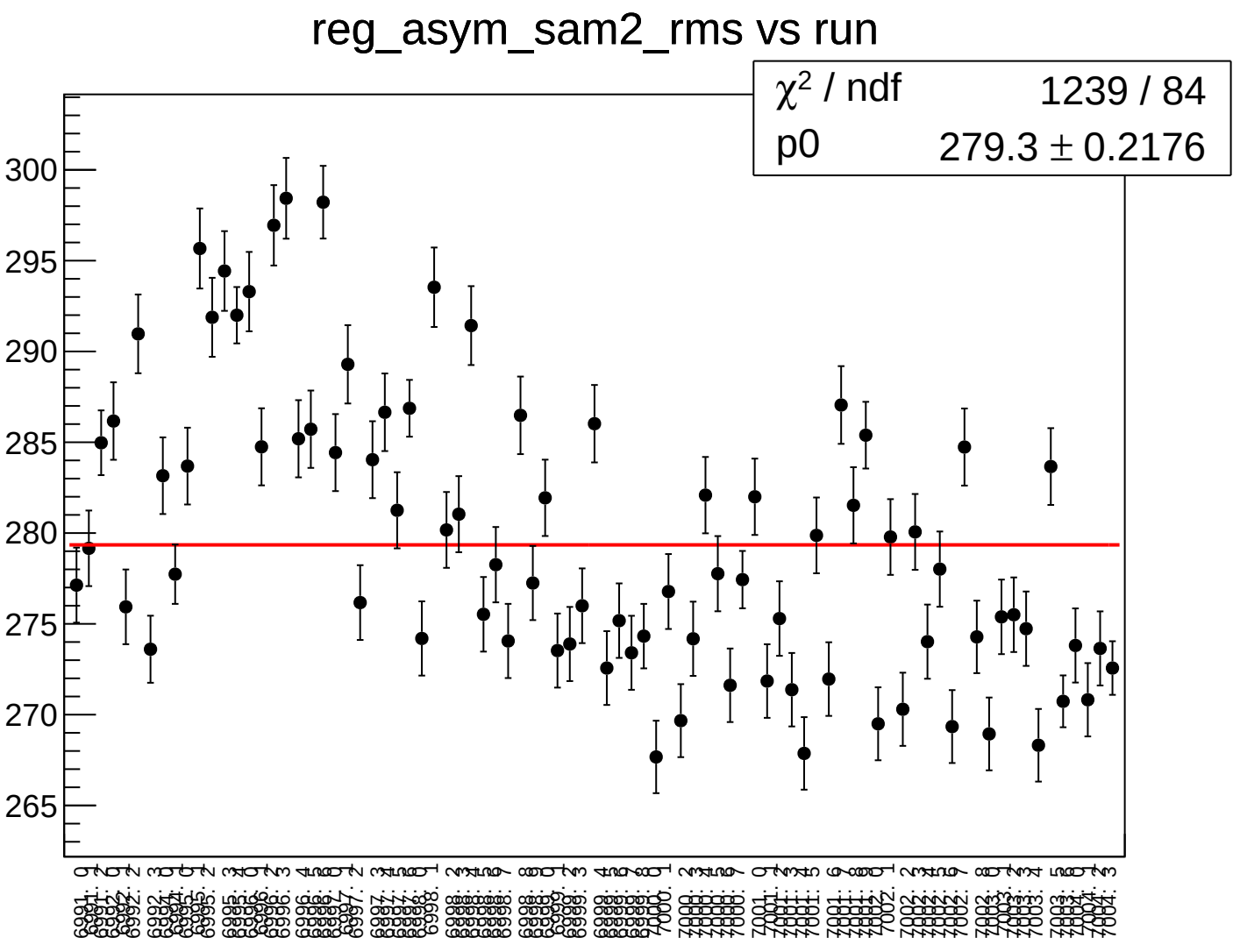

asym_sam1_correction_mean vs run
χ² / ndf 79.61 / 84
p0 −119.2 ± 289.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −810.5
Std Dev 857.8
2
1
0
−1
−2

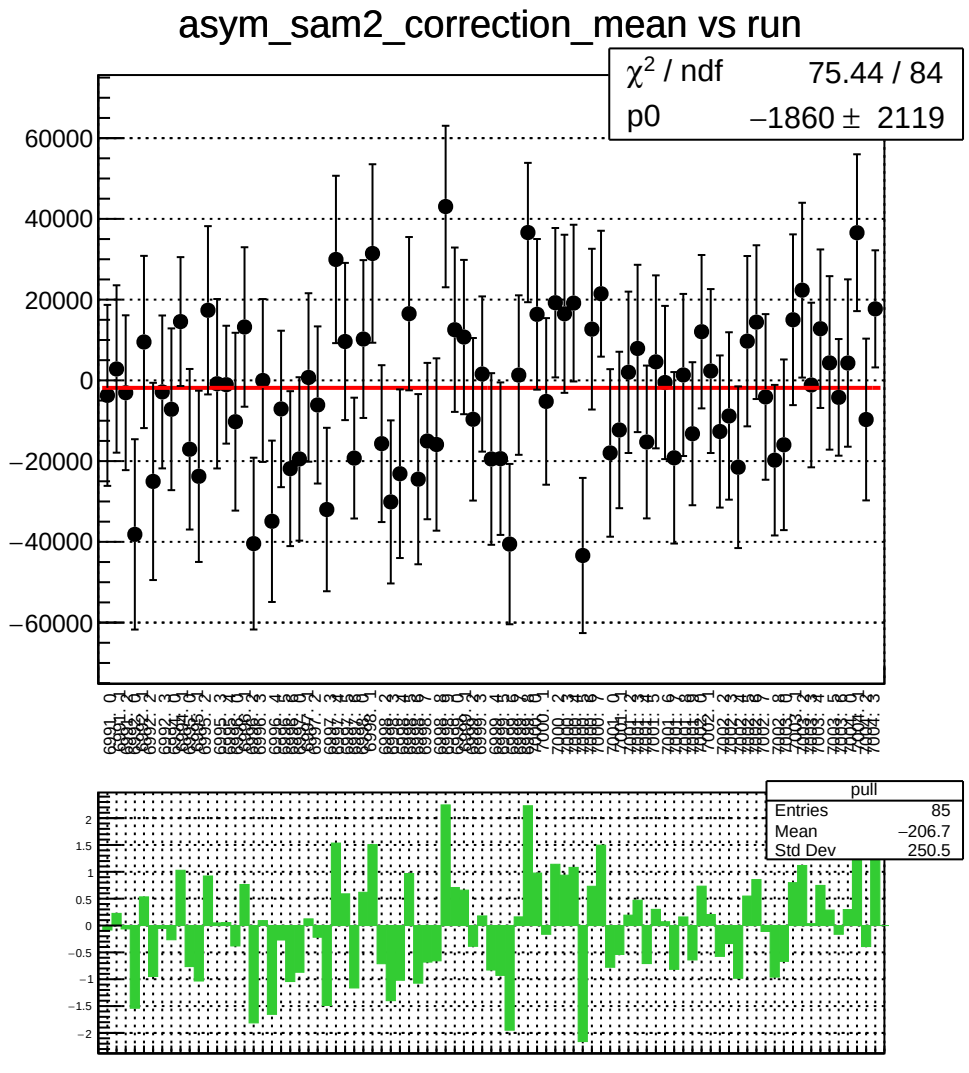

pull1D
Entries 85
Mean −0.004449
Std Dev 0.9678
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

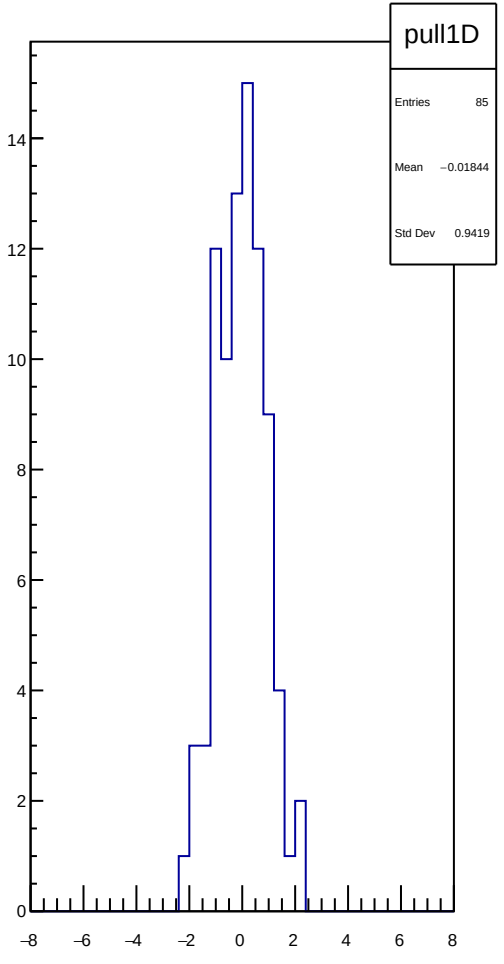

asym_sam1_correction_rms vs run
χ² / ndf 5224 / 84
p0 262.4 ± 0.2046
320
300
280
260
240


reg_asym_sam2_mean vs run
χ² / ndf 83.45 / 84
p0 141.8 ± 307.7
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 793.8
Std Dev 742.5
2
1
0
−1
−2

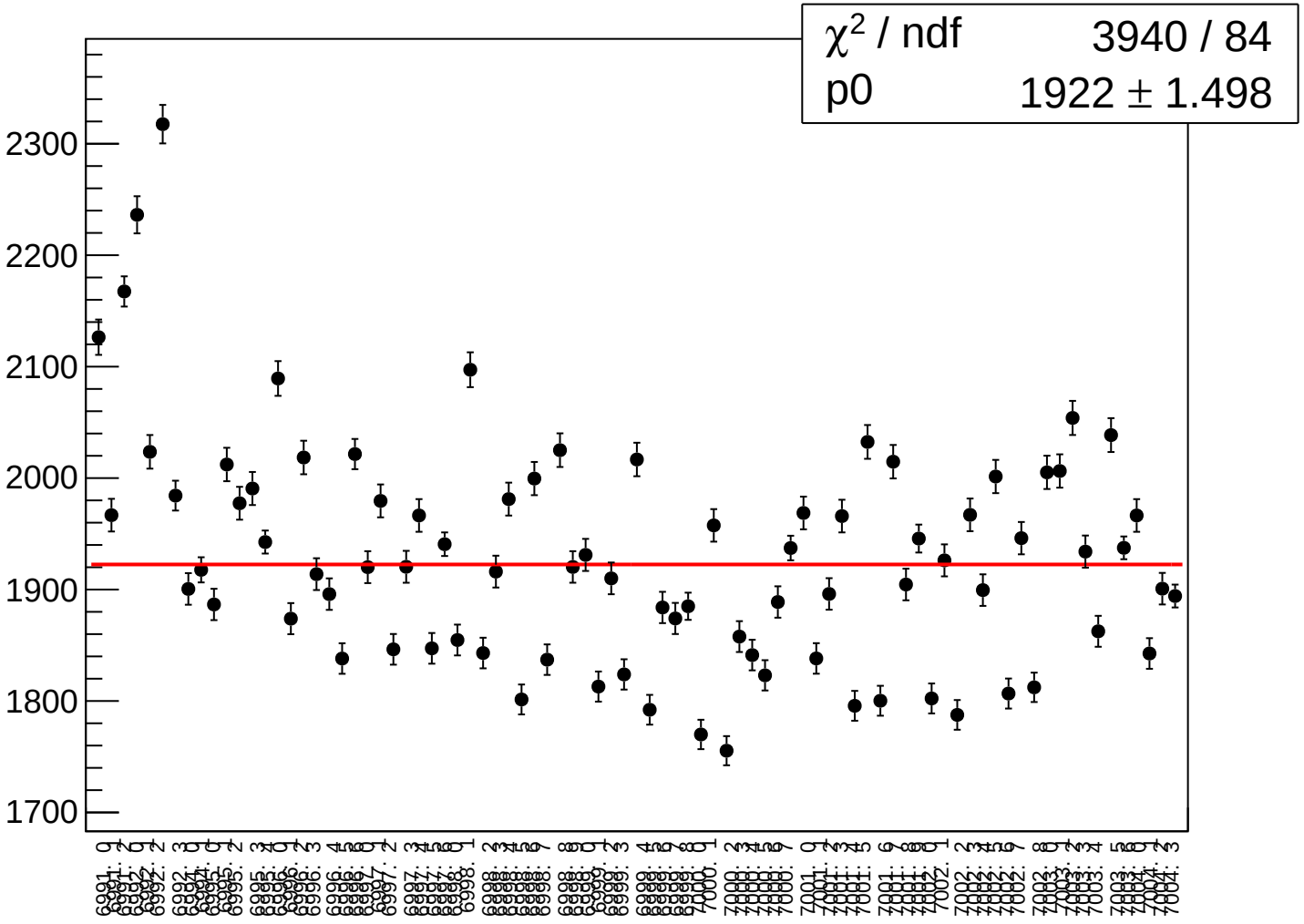

pull1D
Entries 85
Mean −0.002245
Std Dev 0.9908
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

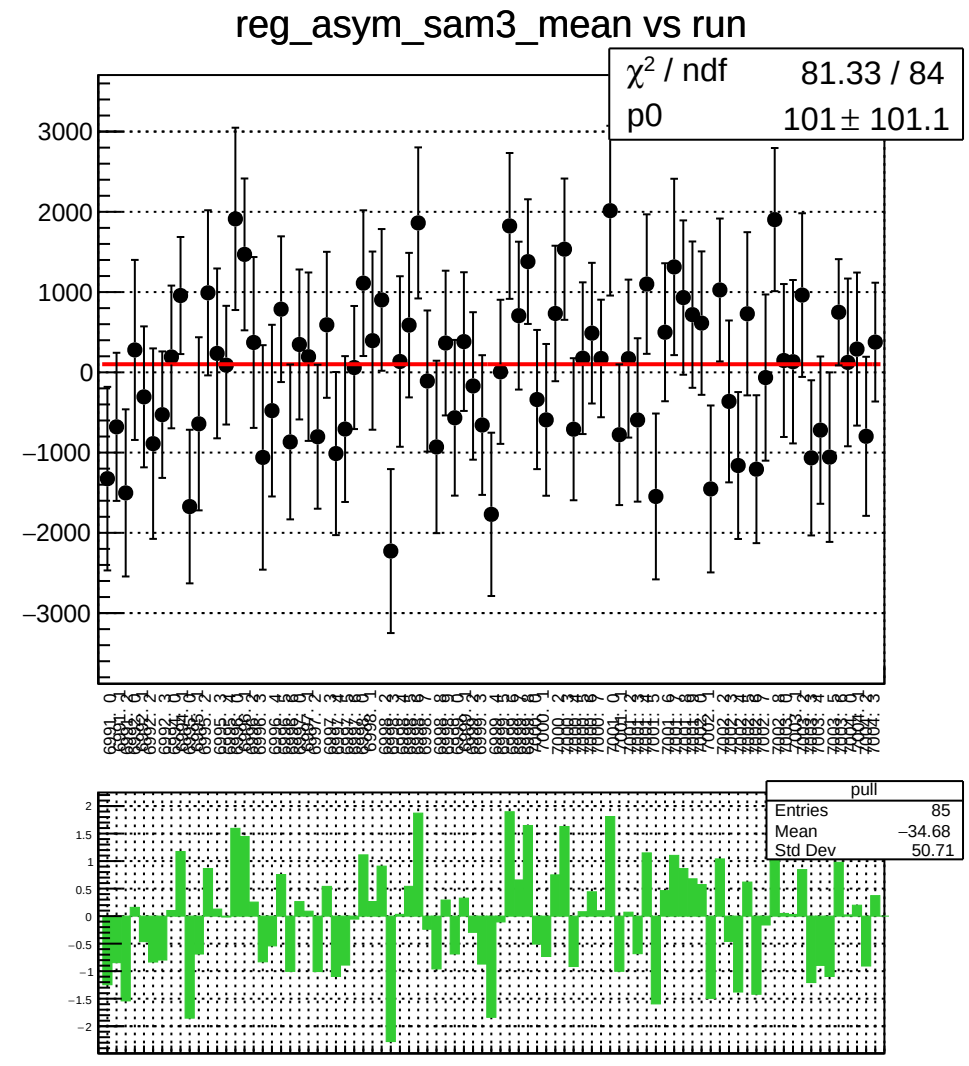

reg_asym_sam2_rms vs run
χ² / ndf 1239 / 84
p0 279.3 ± 0.2176
300
295
290
285
280
275
270
265

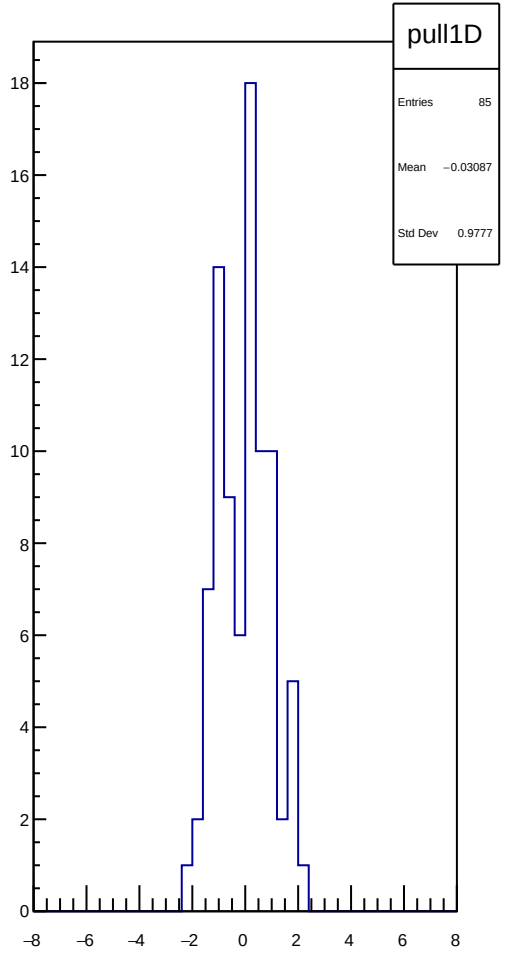

asym_sam2_correction_mean vs run
χ² / ndf 75.44 / 84
p0 −1860 ± 2119
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 85
Mean −206.7
Std Dev 250.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

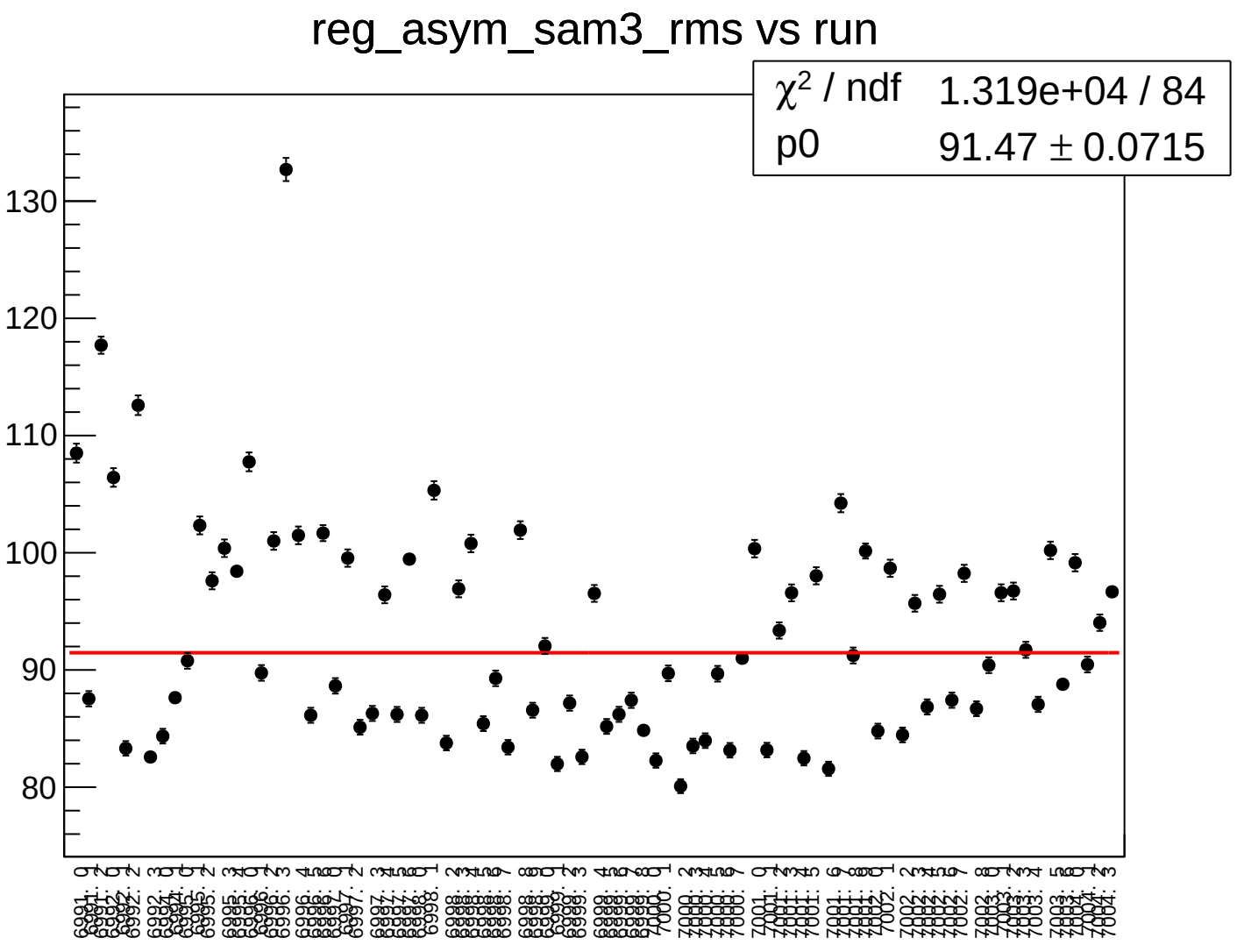

pull1D
Entries 85
Mean −0.01844
Std Dev 0.9419
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

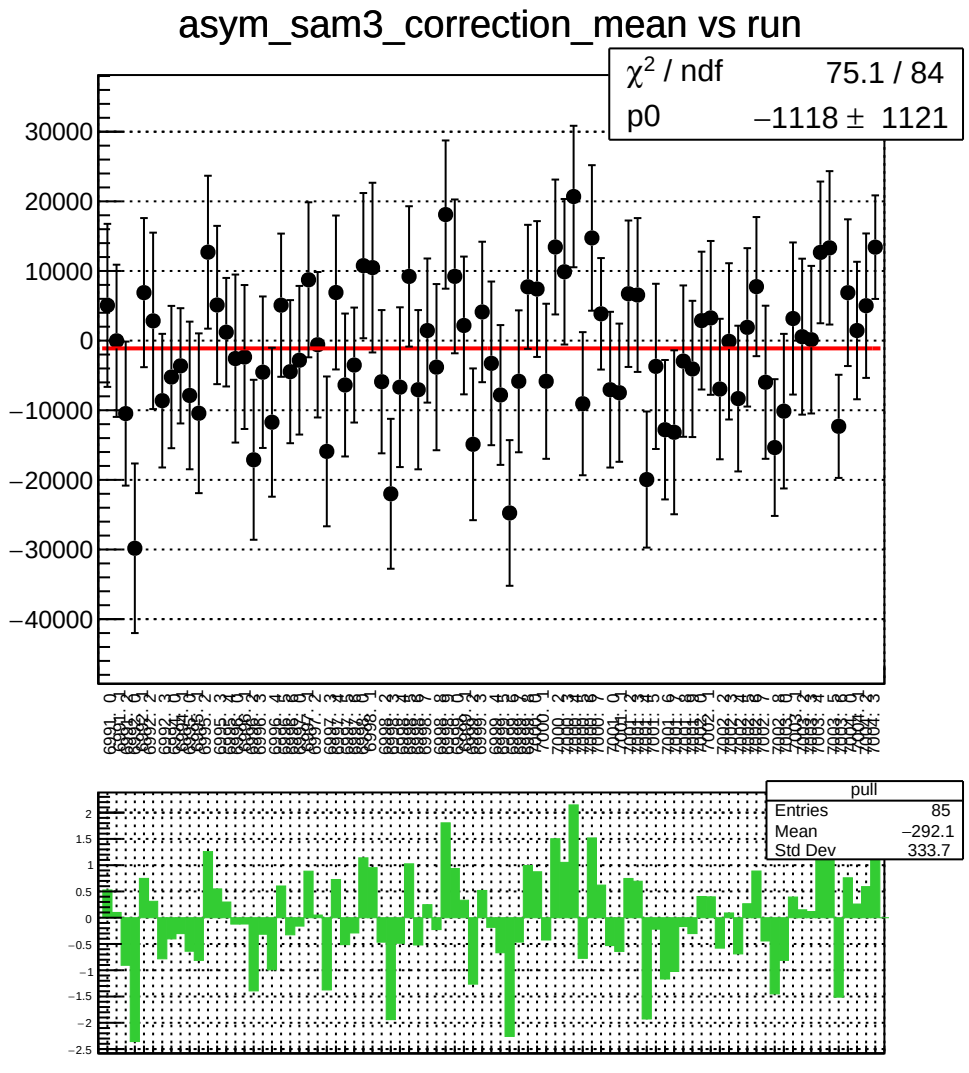
asym_sam2_correction_rms vs run

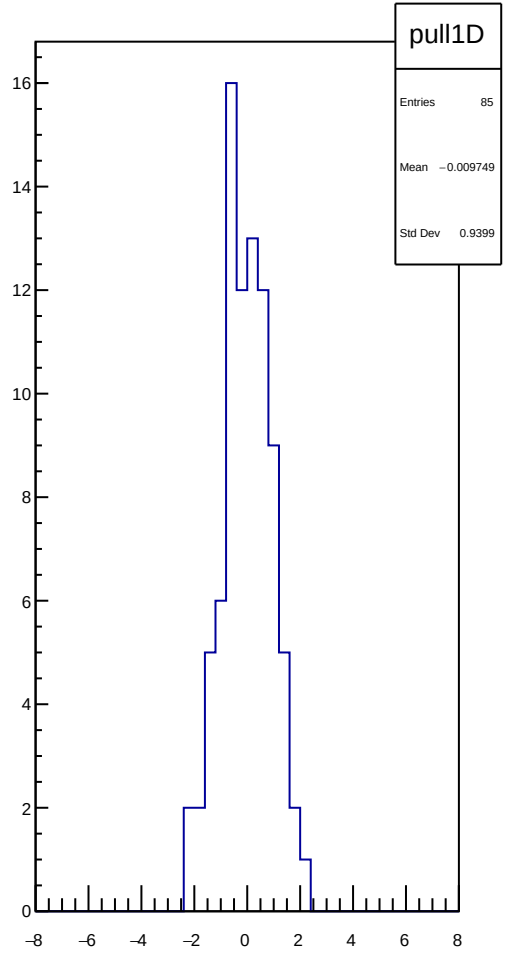


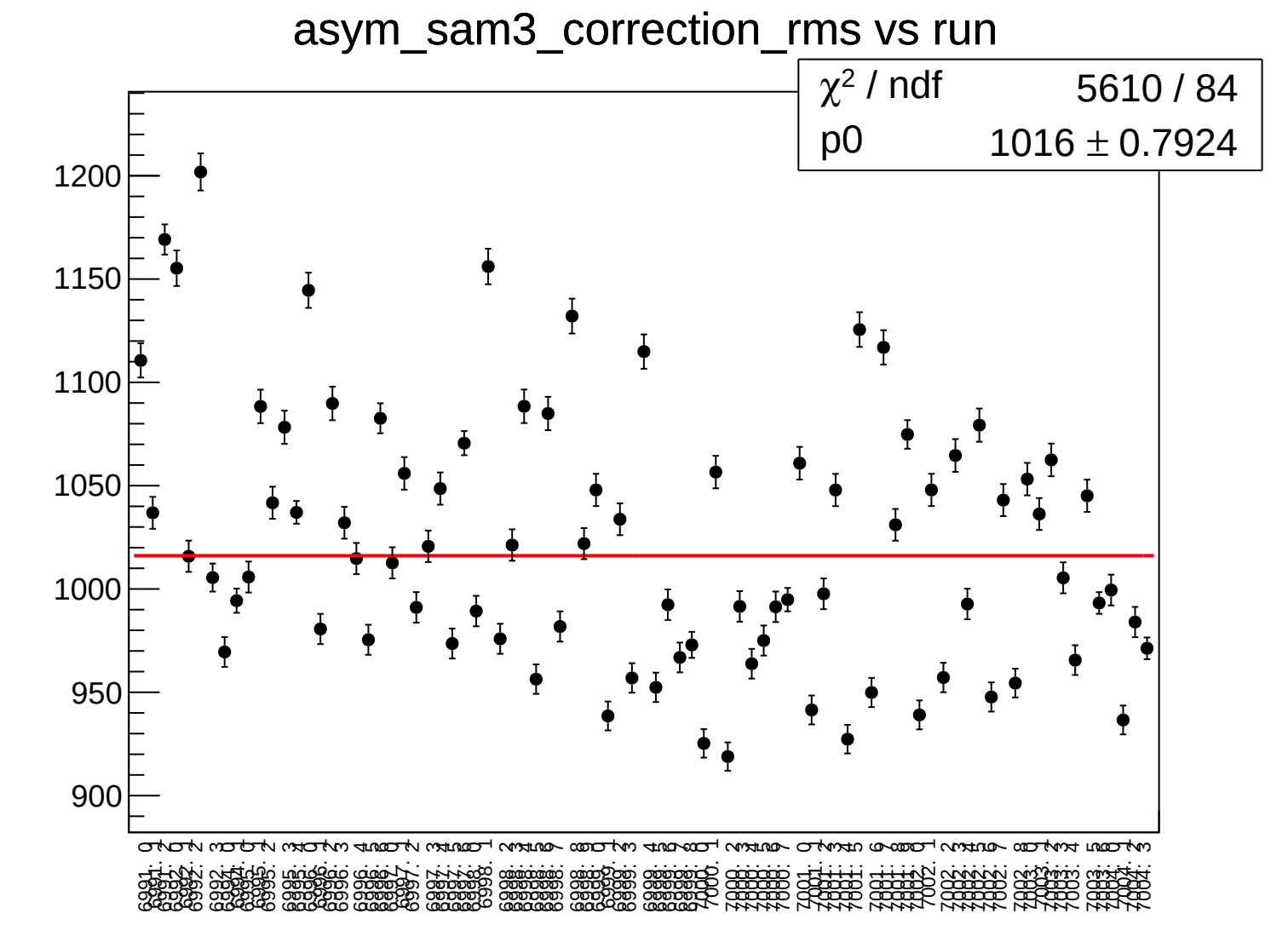

reg_asym_sam3_mean vs run
χ² / ndf 81.33 / 84
p0 101 ± 101.1
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean −34.68
Std Dev 50.71
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

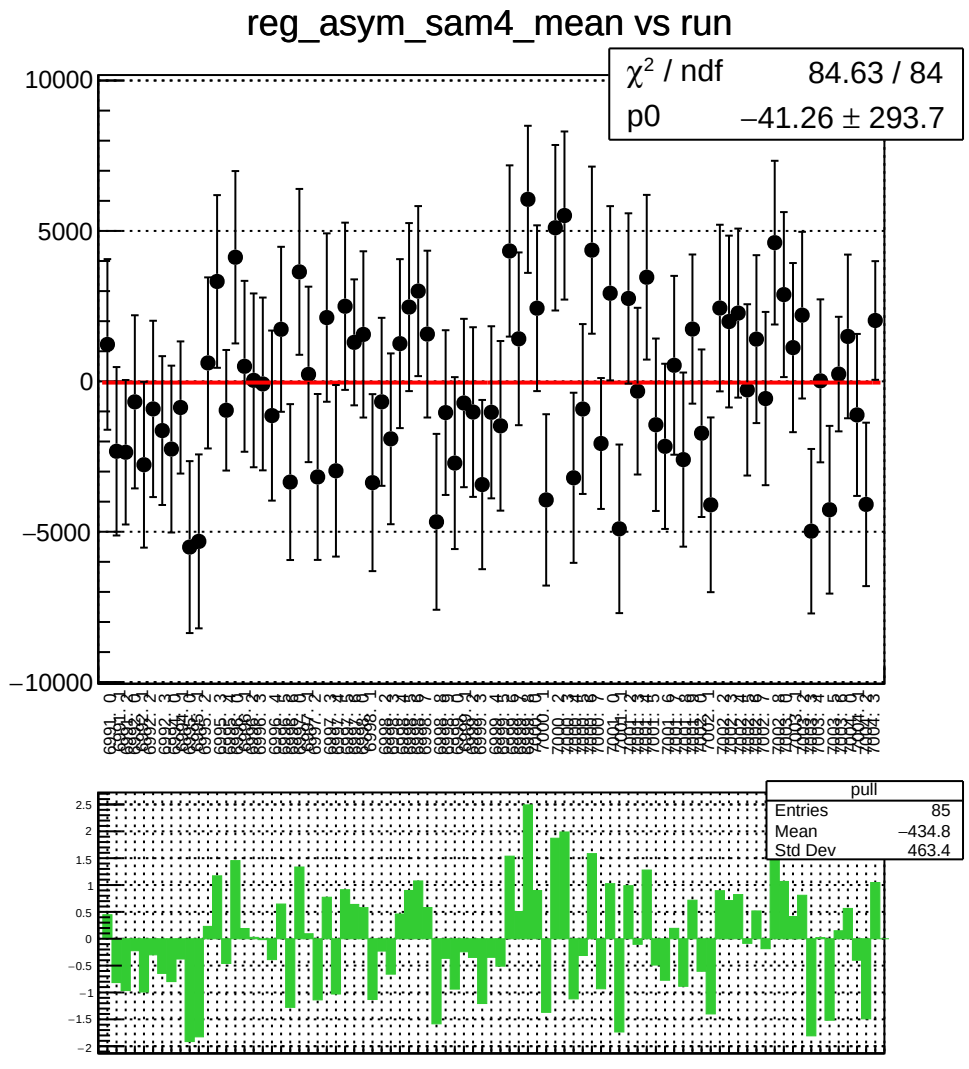

pull1D
Entries 85
Mean −0.03087
Std Dev 0.9777
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

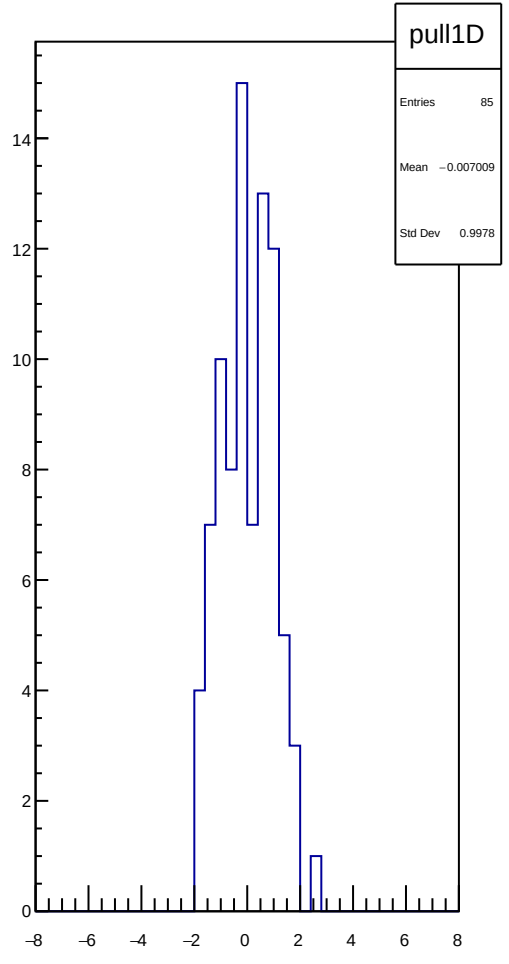

reg_asym_sam3_rms vs run
χ² / ndf 1.319e+04 / 84
p0 91.47 ± 0.0715
130
120
110
100
90
80

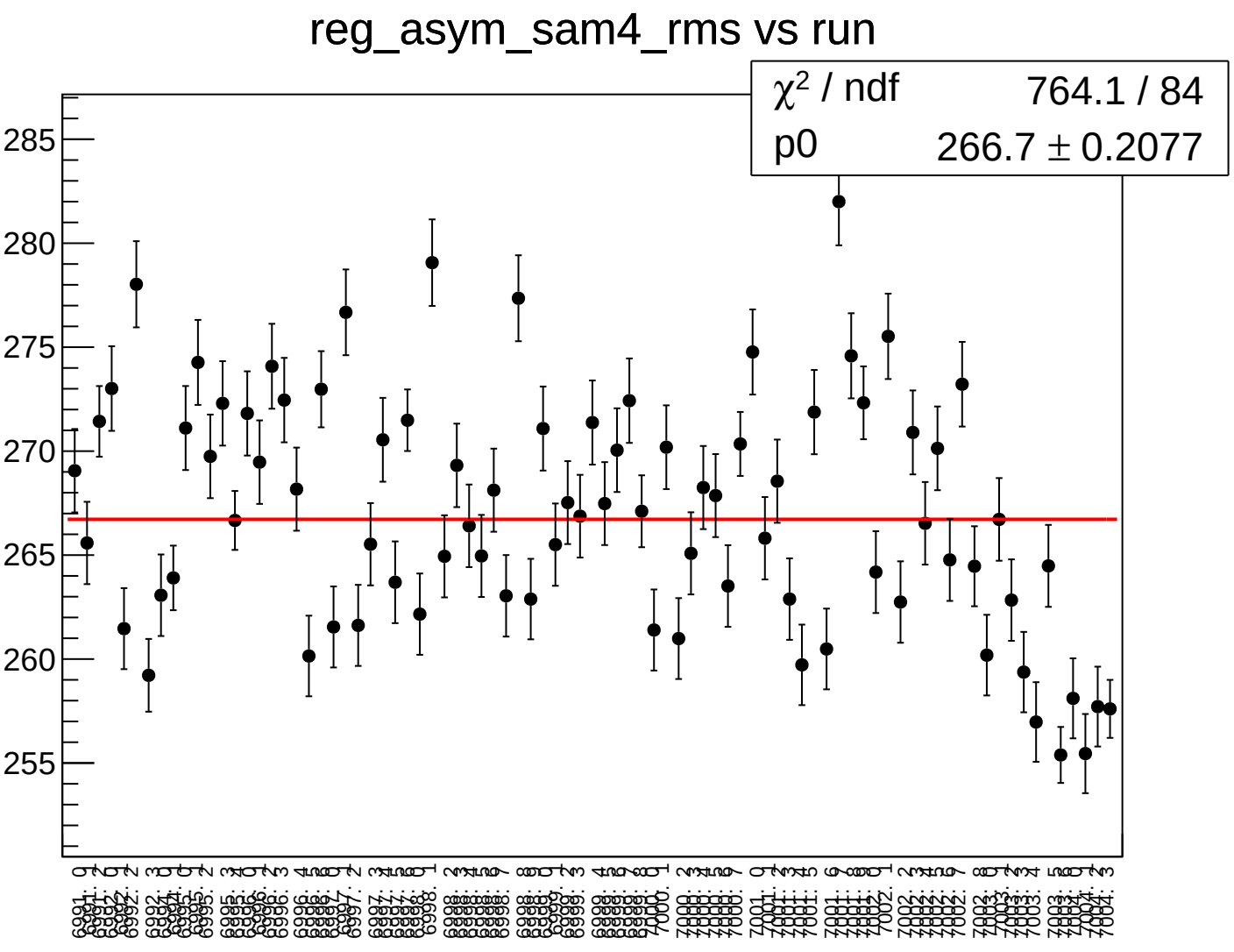

asym_sam3_correction_mean vs run
χ² / ndf 75.1 / 84
p0 −1118 ± 1121
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −292.1
Std Dev 333.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

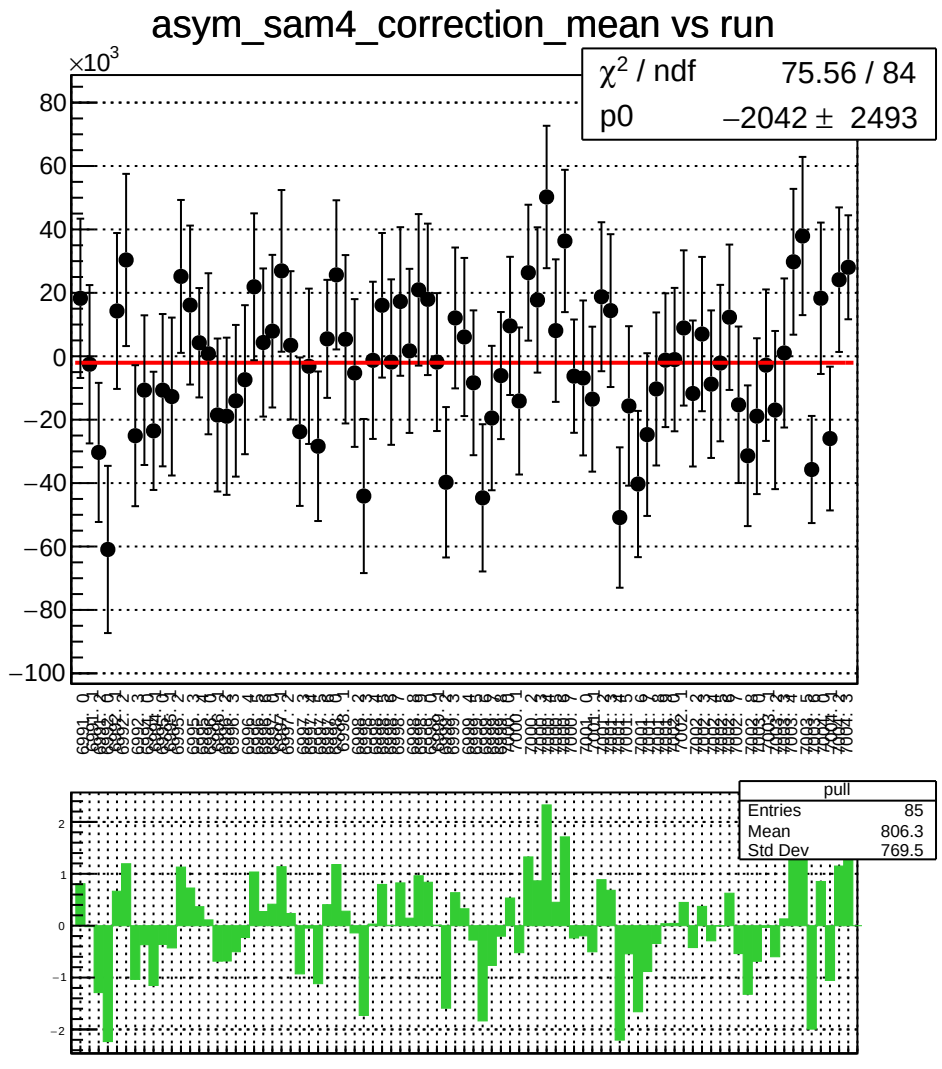

pull1D
Entries 85
Mean −0.009749
Std Dev 0.9399
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

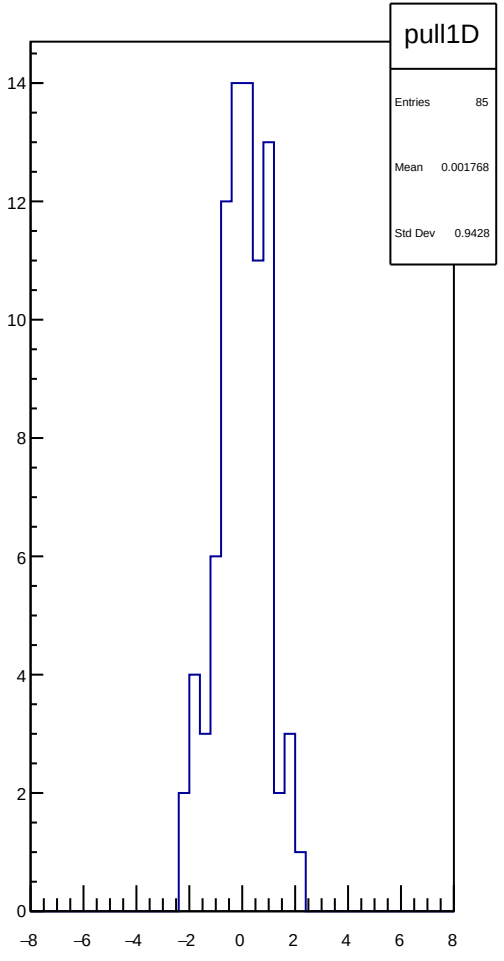

asym_sam3_correction_rms vs run
χ² / ndf 5610 / 84
p0 1016 ± 0.7924
1200
1150
1100
1050
1000
950
900

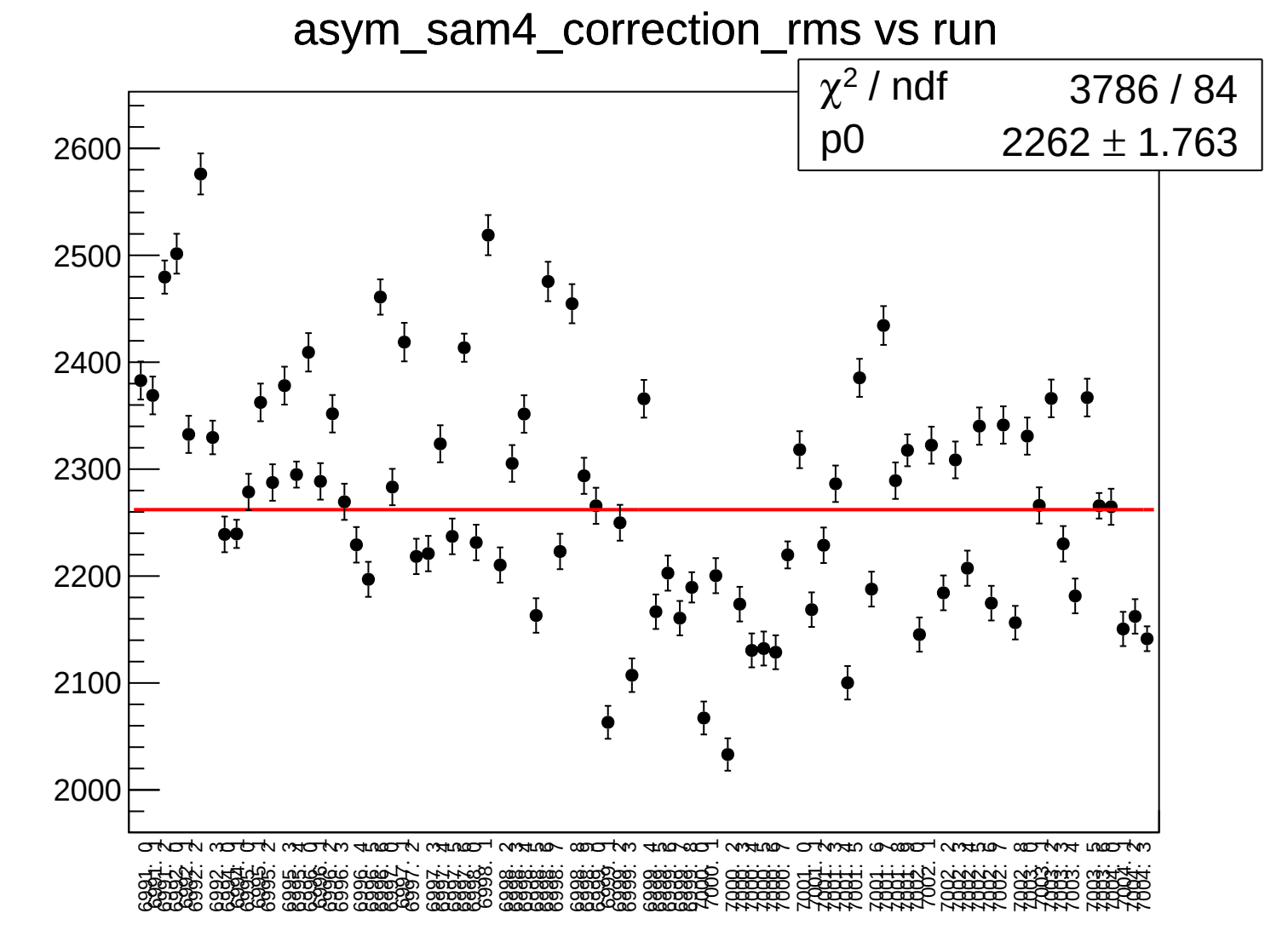

reg_asym_sam4_mean vs run
χ² / ndf 84.63 / 84
p0 −41.26 ± 293.7
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −434.8
Std Dev 463.4
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

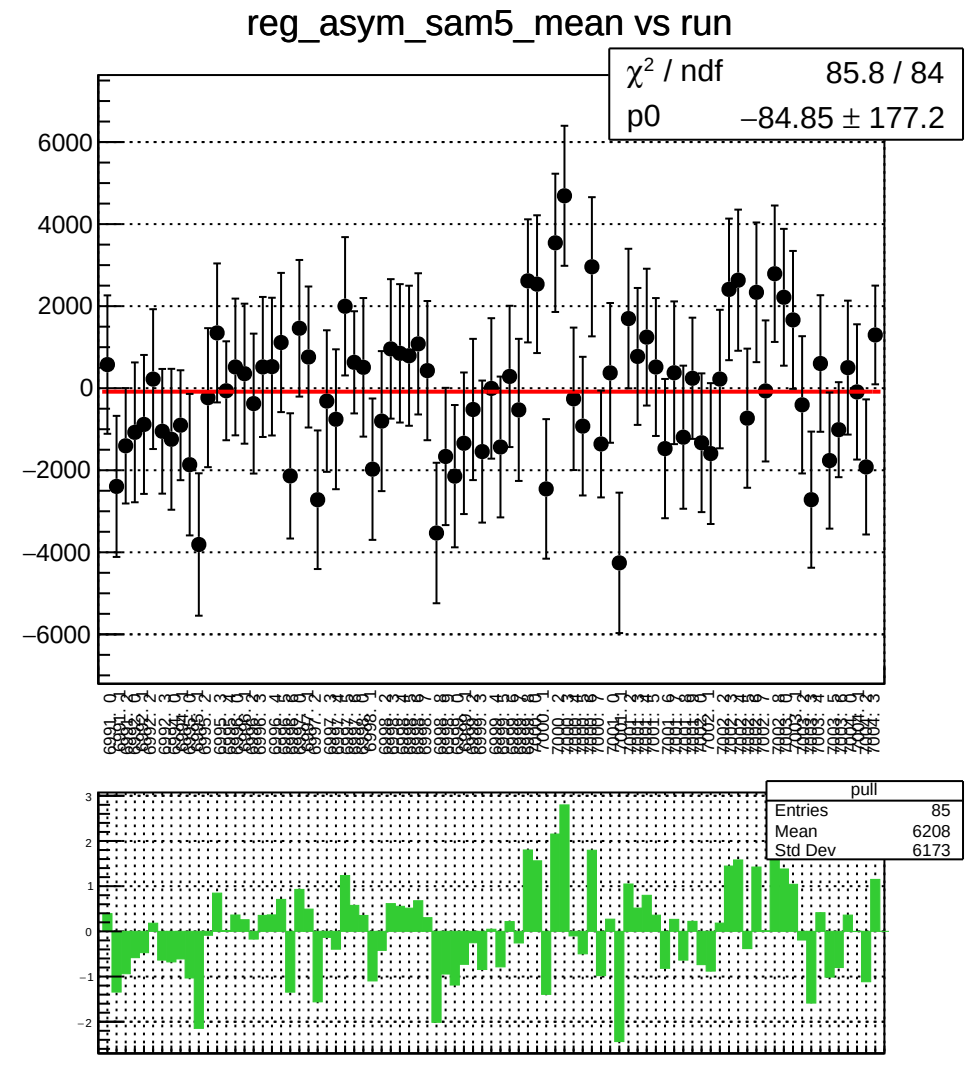

pull1D
Entries 85
Mean −0.007009
Std Dev 0.9978
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

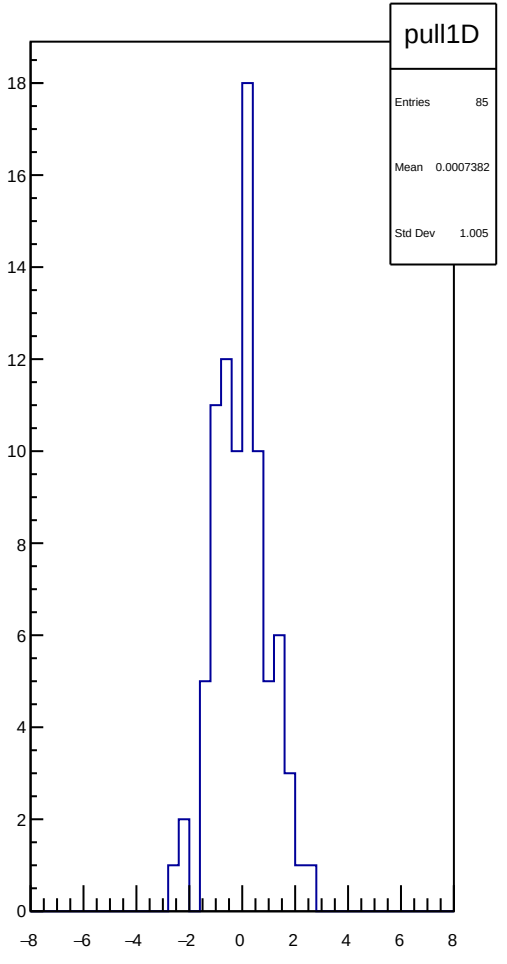

reg_asym_sam4_rms vs run
χ² / ndf 764.1 / 84
p0 266.7 ± 0.2077
285
280
275
270
265
260
255

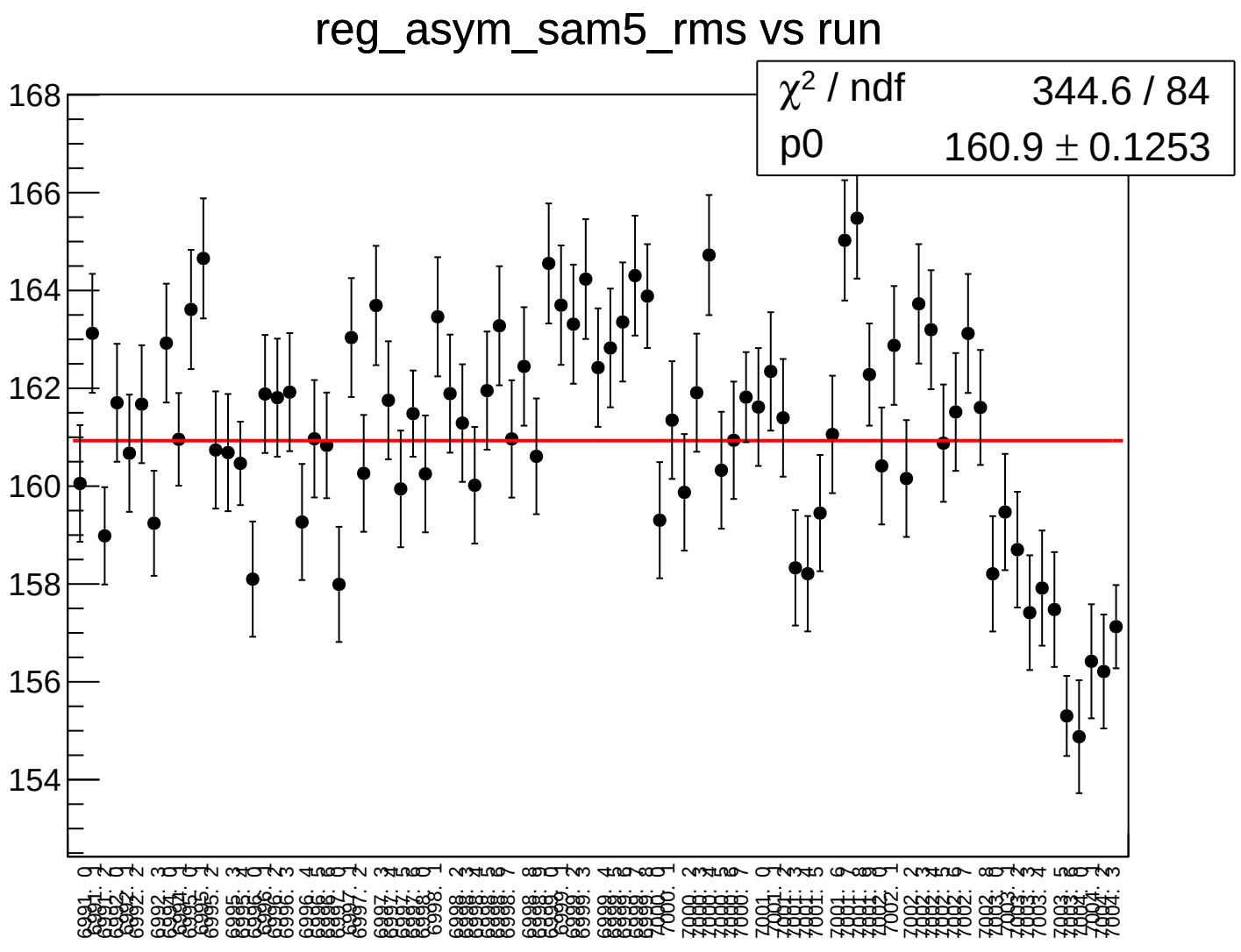

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 75.56 / 84
p0 −2042 ± 2493
pull
Entries 85
Mean 806.3
Std Dev 769.5

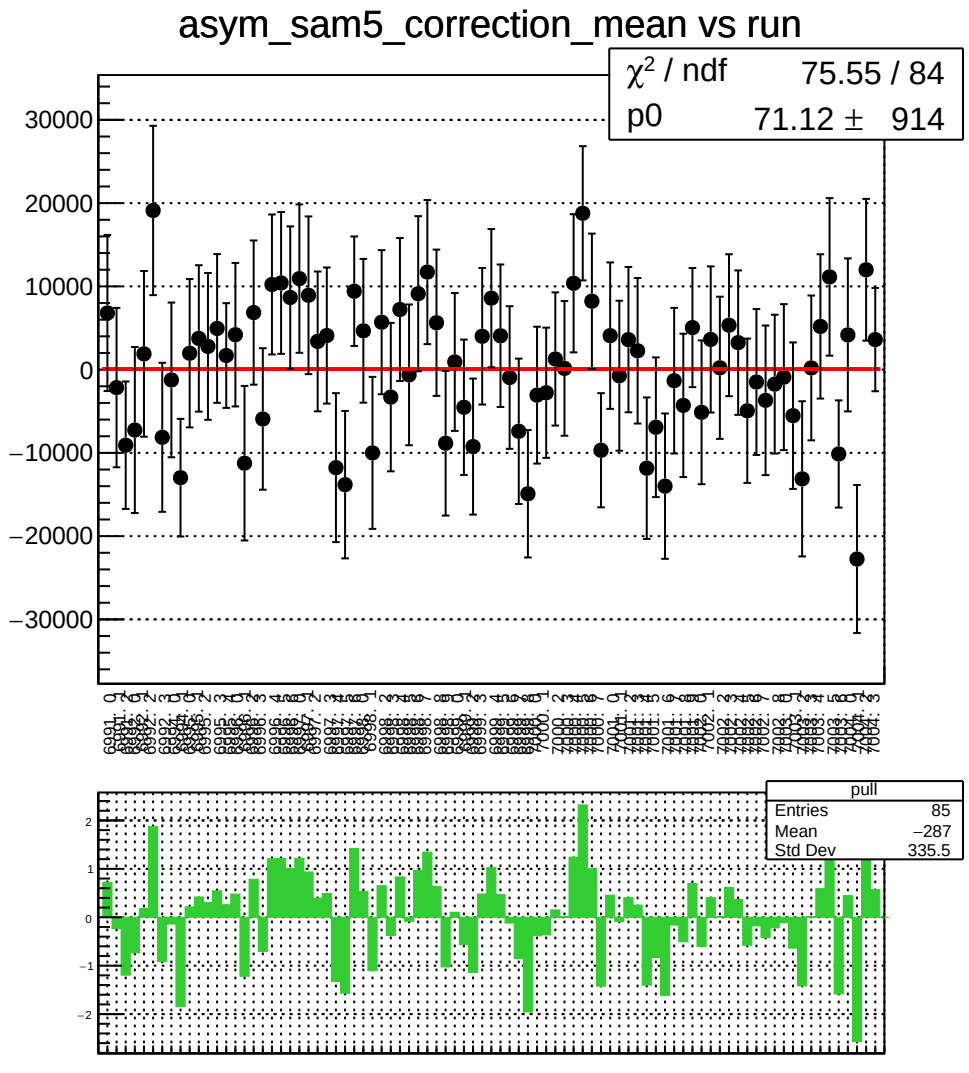

pull1D
Entries 85
Mean 0.001768
Std Dev 0.9428

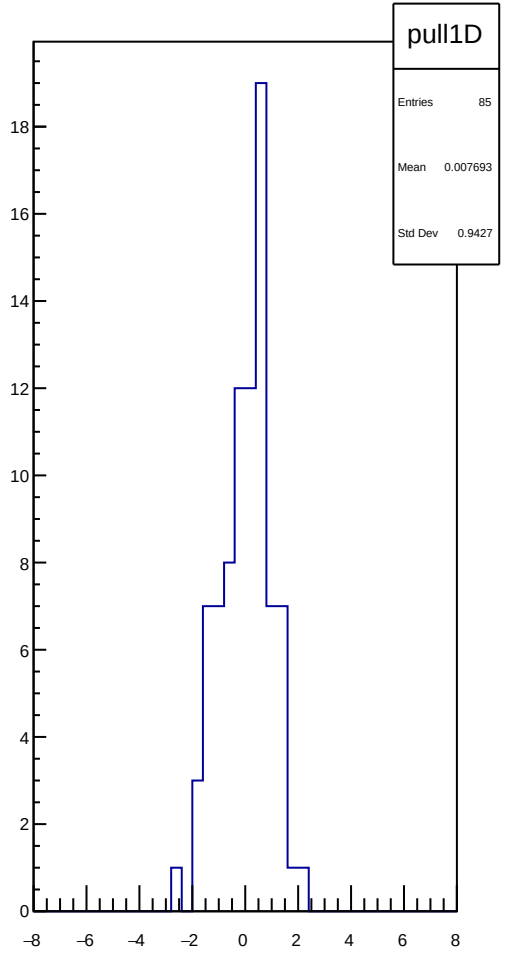

asym_sam4_correction_rms vs run
χ² / ndf 3786 / 84
p0 2262 ± 1.763
2600
2500
2400
2300
2200
2100
2000

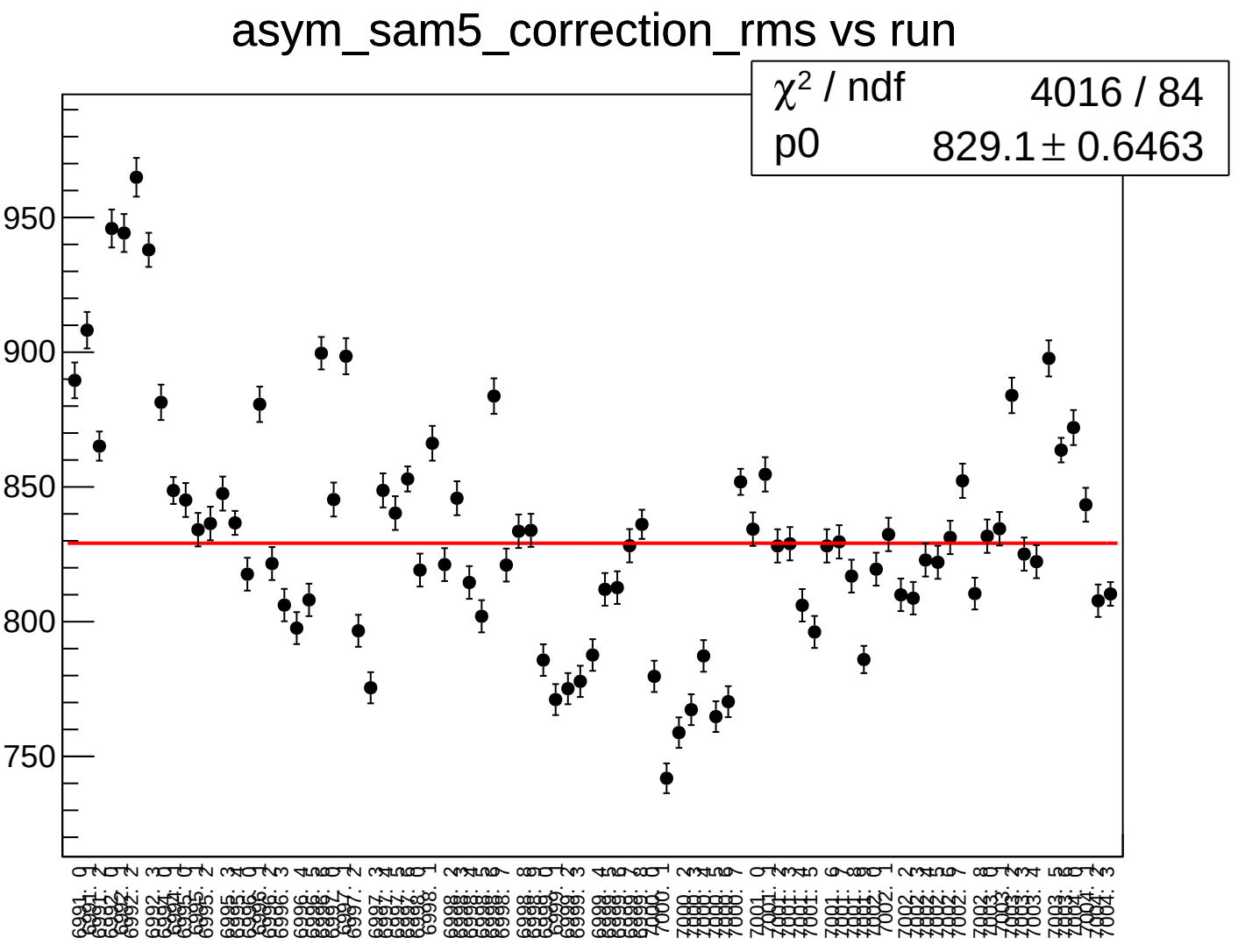

reg_asym_sam5_mean vs run
χ² / ndf 85.8 / 84
p0 −84.85 ± 177.2
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 6208
Std Dev 6173
3
2
1
0
−1
−2

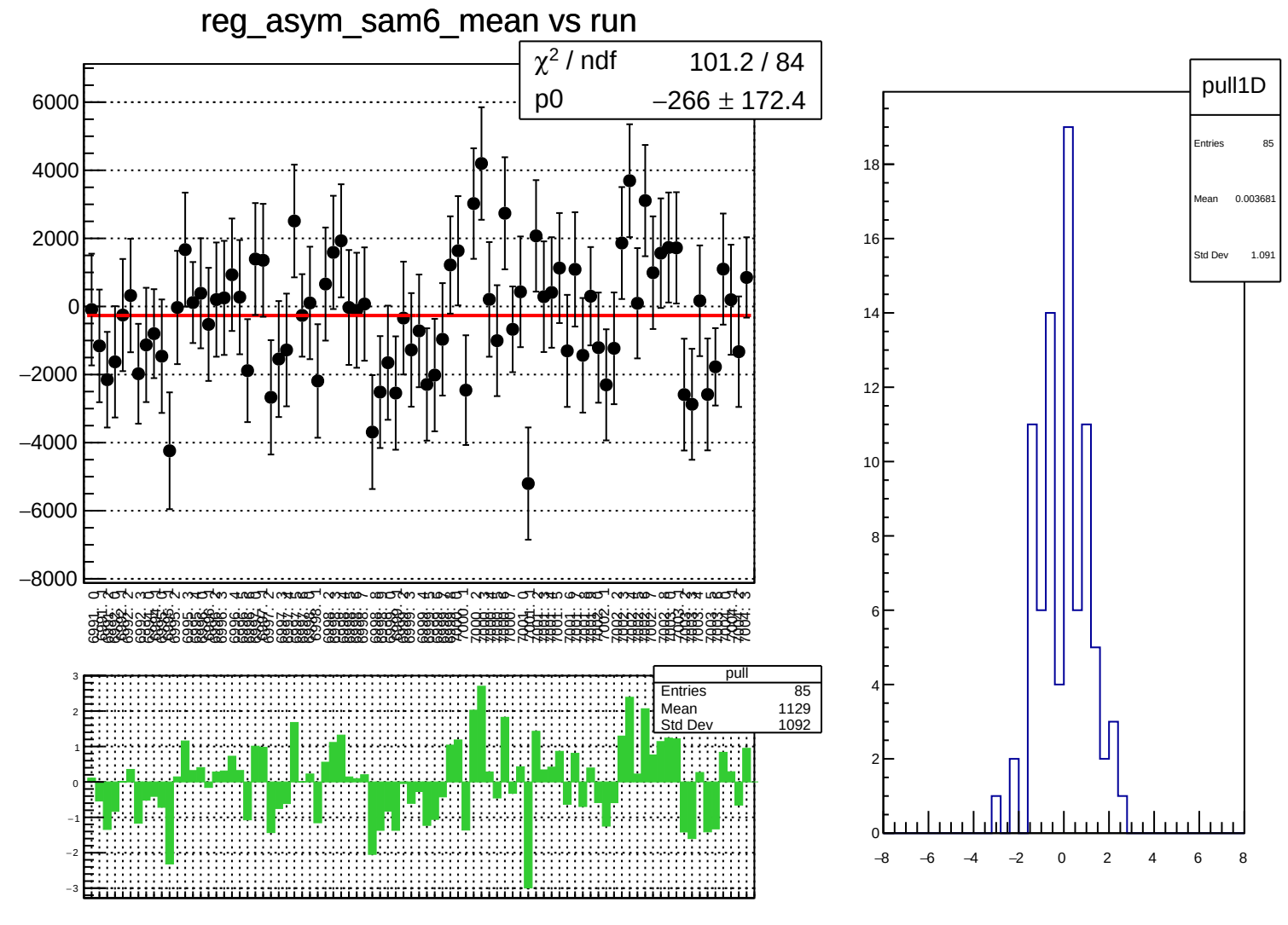

pull1D
Entries 85
Mean 0.0007382
Std Dev 1.005
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

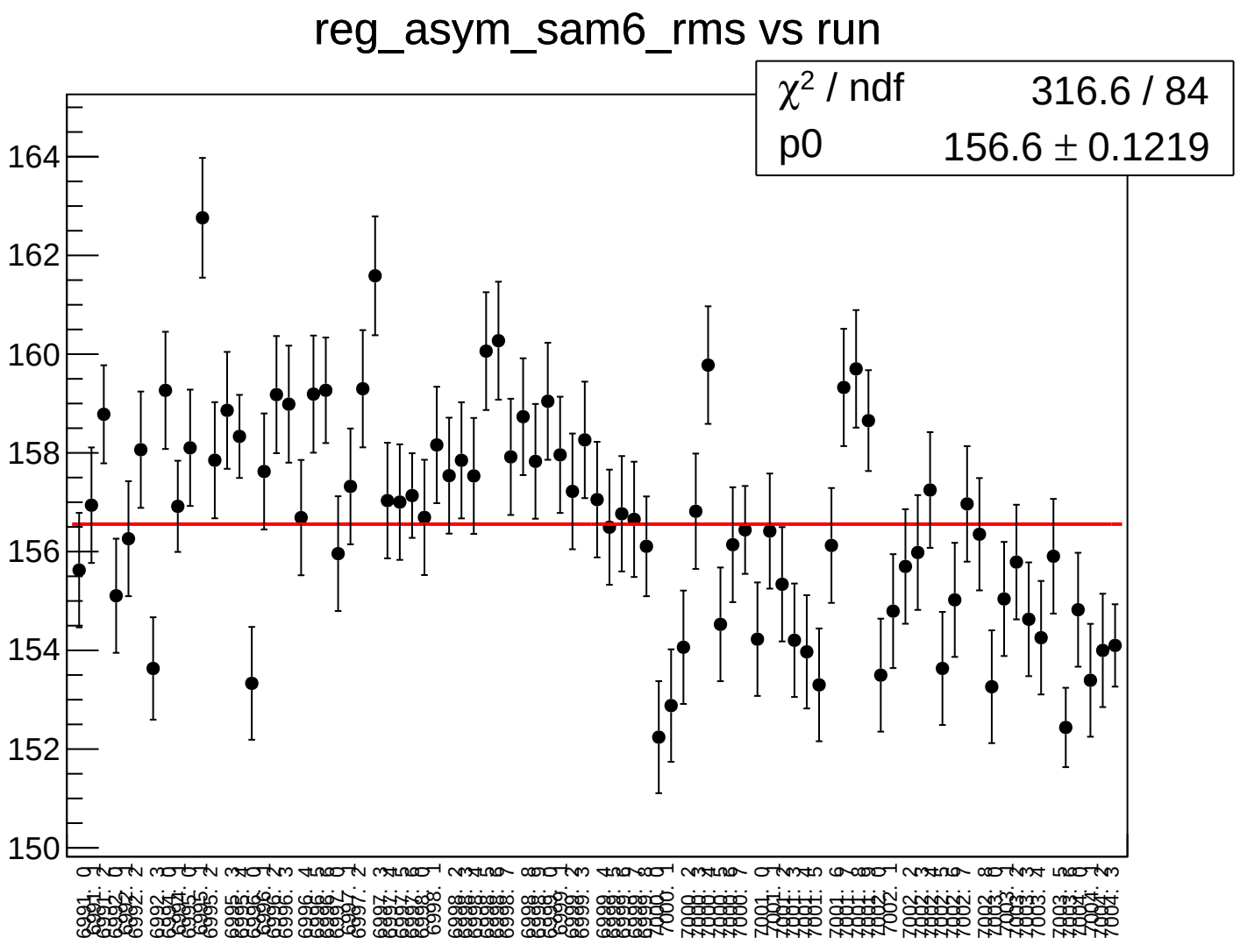

reg_asym_sam5_rms vs run
χ² / ndf 344.6 / 84
p0 160.9 ± 0.1253
168
166
164
162
160
158
156
154

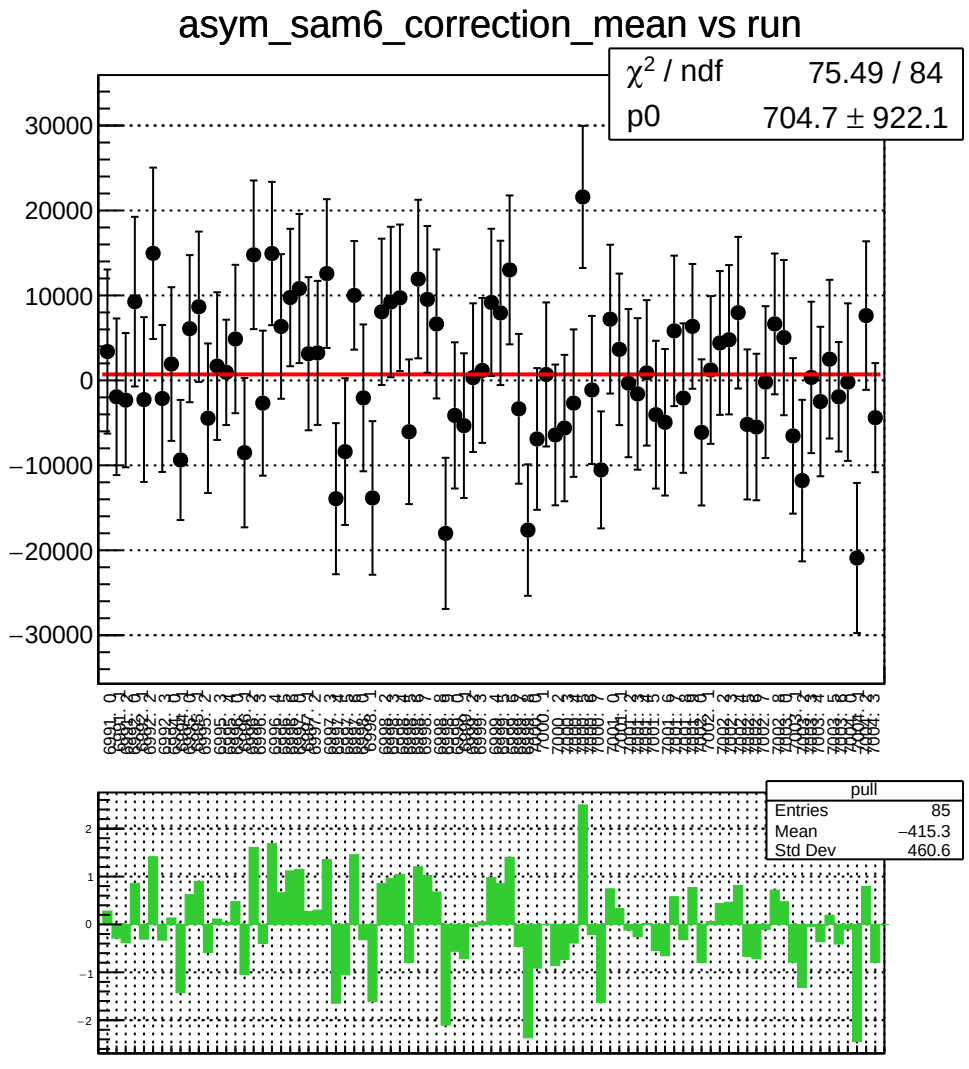

asym_sam5_correction_mean vs run
χ² / ndf 75.55 / 84
p0 71.12 ± 914
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −287
Std Dev 335.5
2
1
0
−1
−2

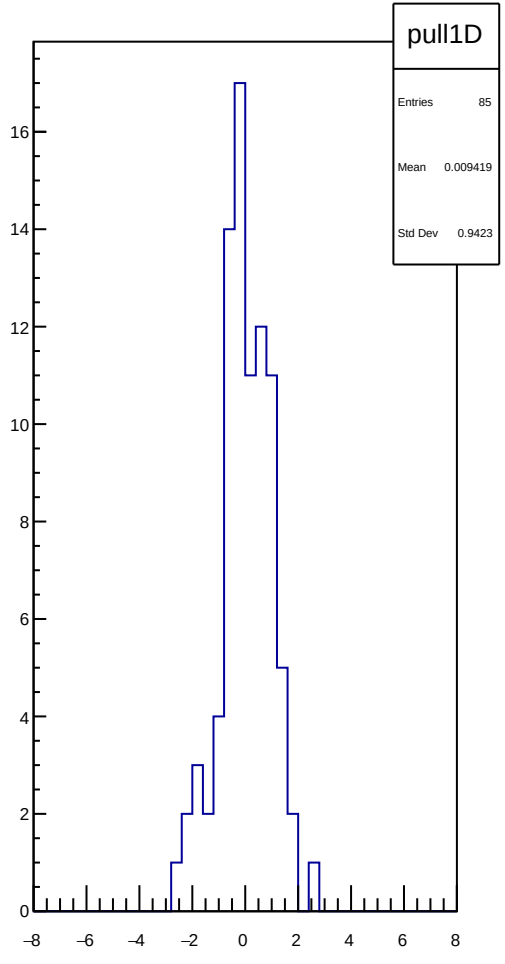

pull1D
Entries 85
Mean 0.007693
Std Dev 0.9427
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

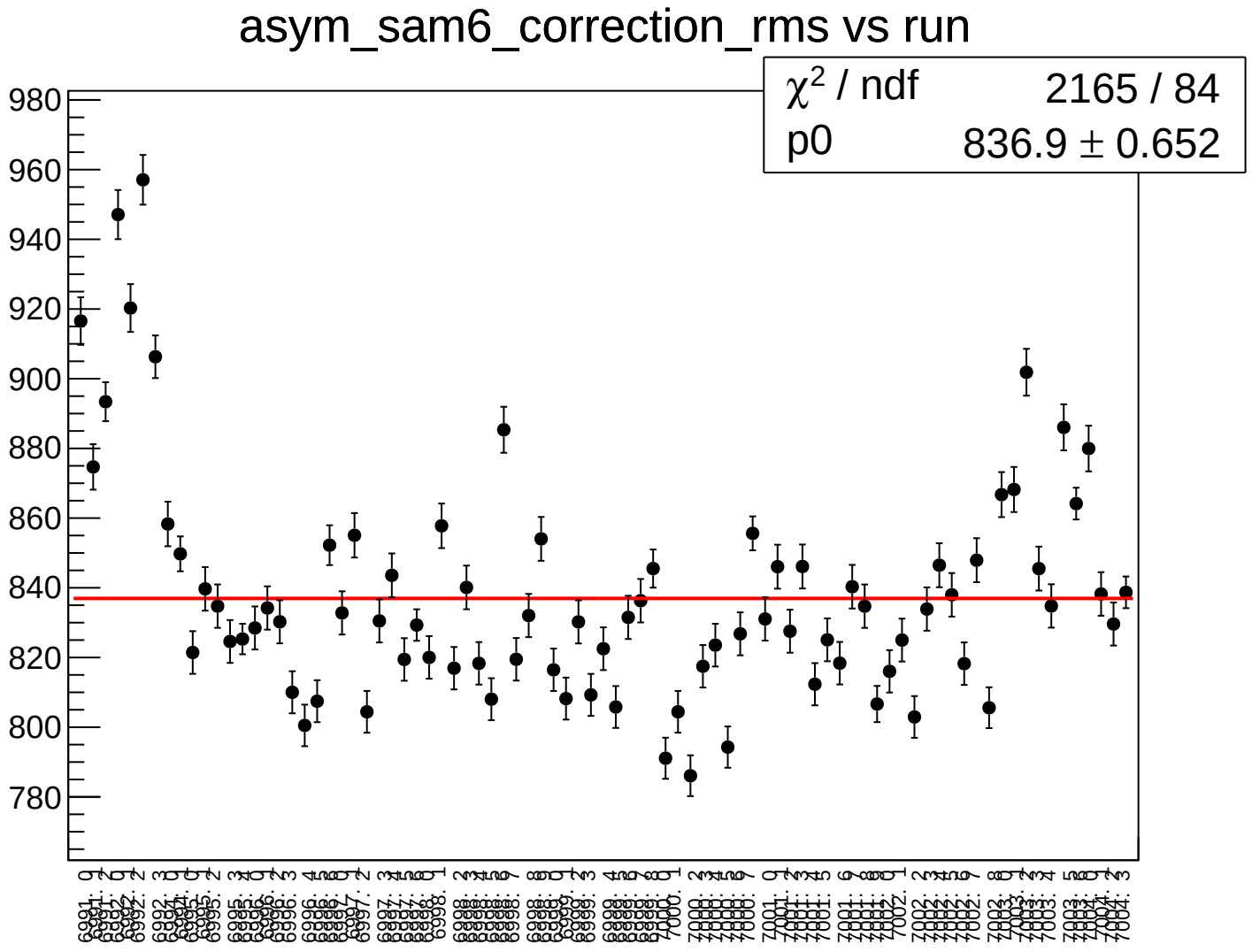

asym_sam5_correction_rms vs run
χ² / ndf 4016 / 84
p0 829.1 ± 0.6463
950
900
850
800
750

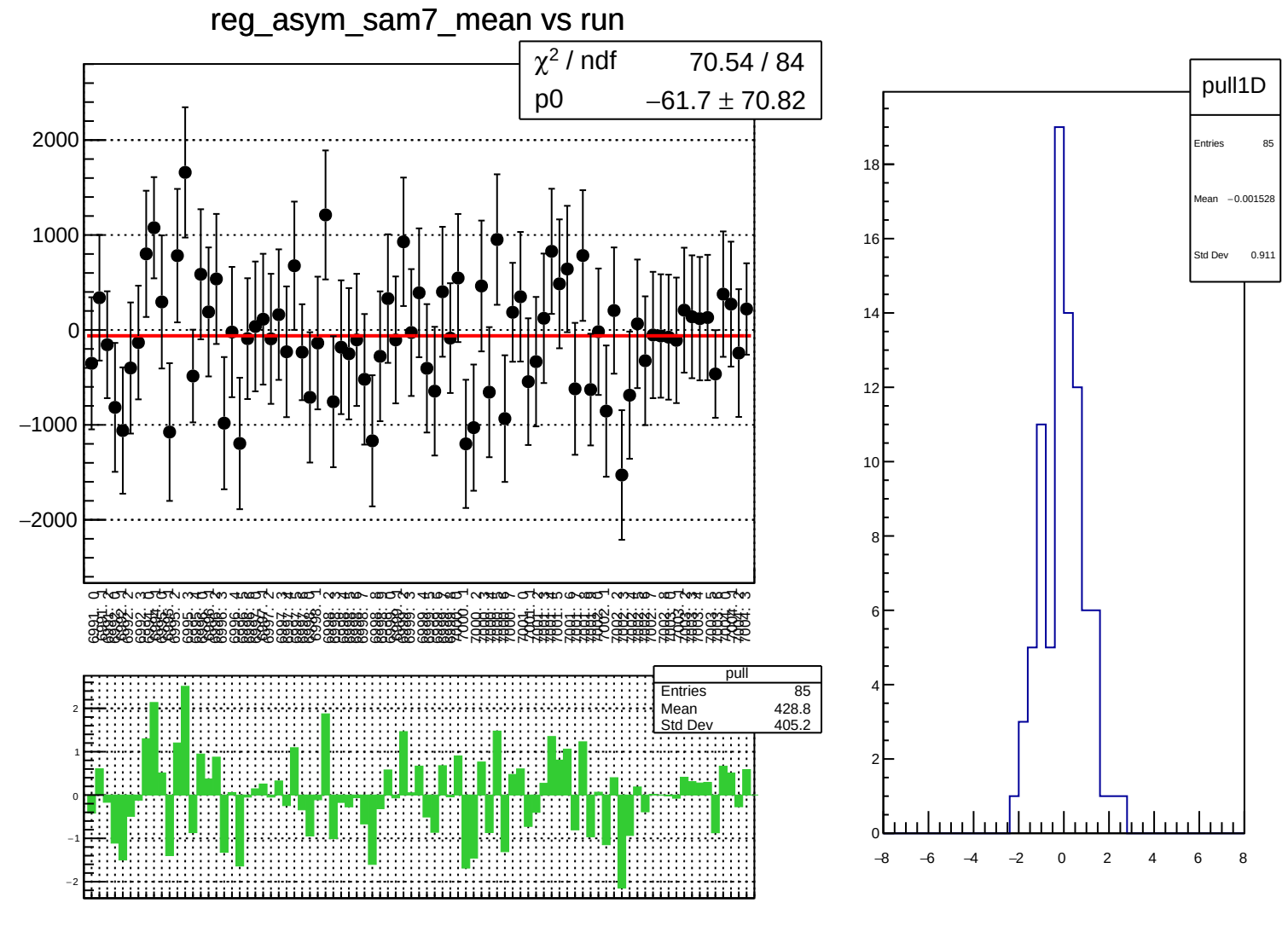

reg_asym_sam6_mean vs run
χ^2 / ndf 101.2 / 84
p0 −266 ± 172.4
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 1129
Std Dev 1092
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean 0.003681
Std Dev 1.091
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

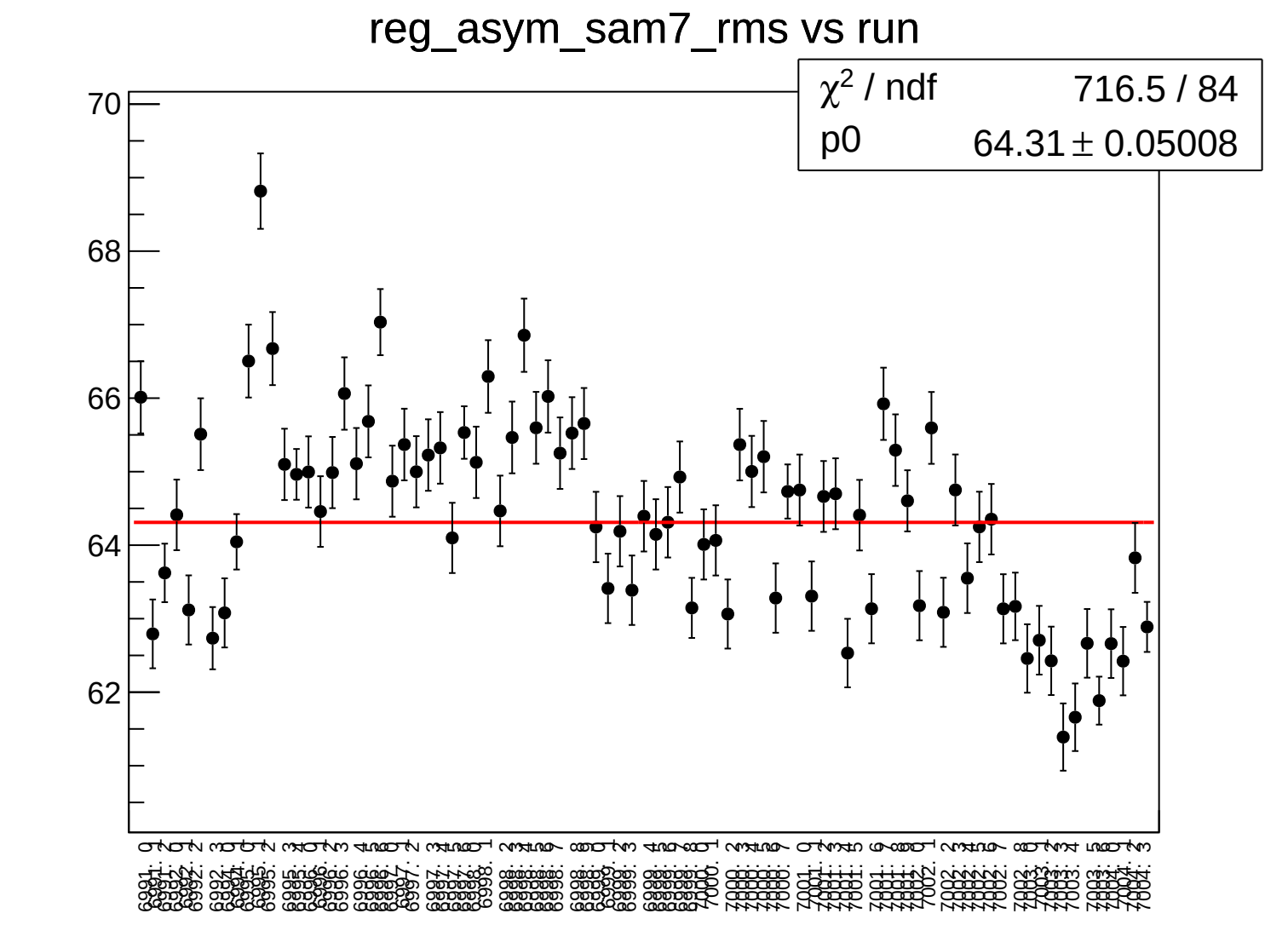

reg_asym_sam6_rms vs run
χ² / ndf 316.6 / 84
p0 156.6 ± 0.1219
164
162
160
158
156
154
152
150

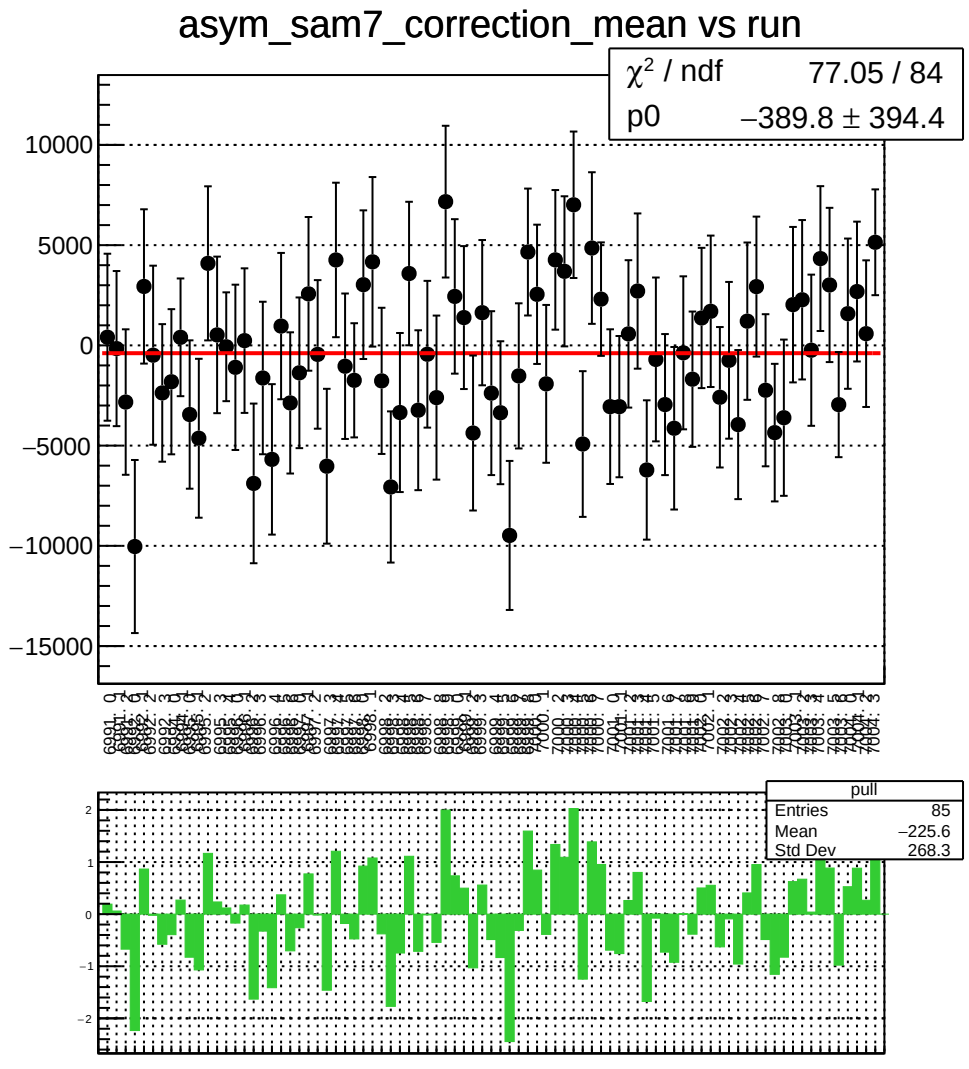

asym_sam6_correction_mean vs run
χ² / ndf 75.49 / 84
p0 704.7 ± 922.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −415.3
Std Dev 460.6
2
1
0
−1
−2

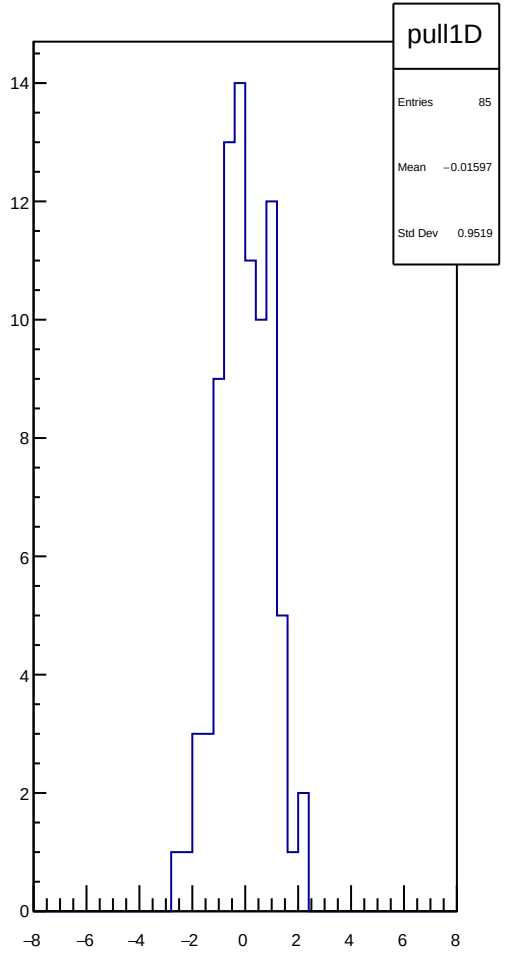

pull1D
Entries 85
Mean 0.009419
Std Dev 0.9423
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

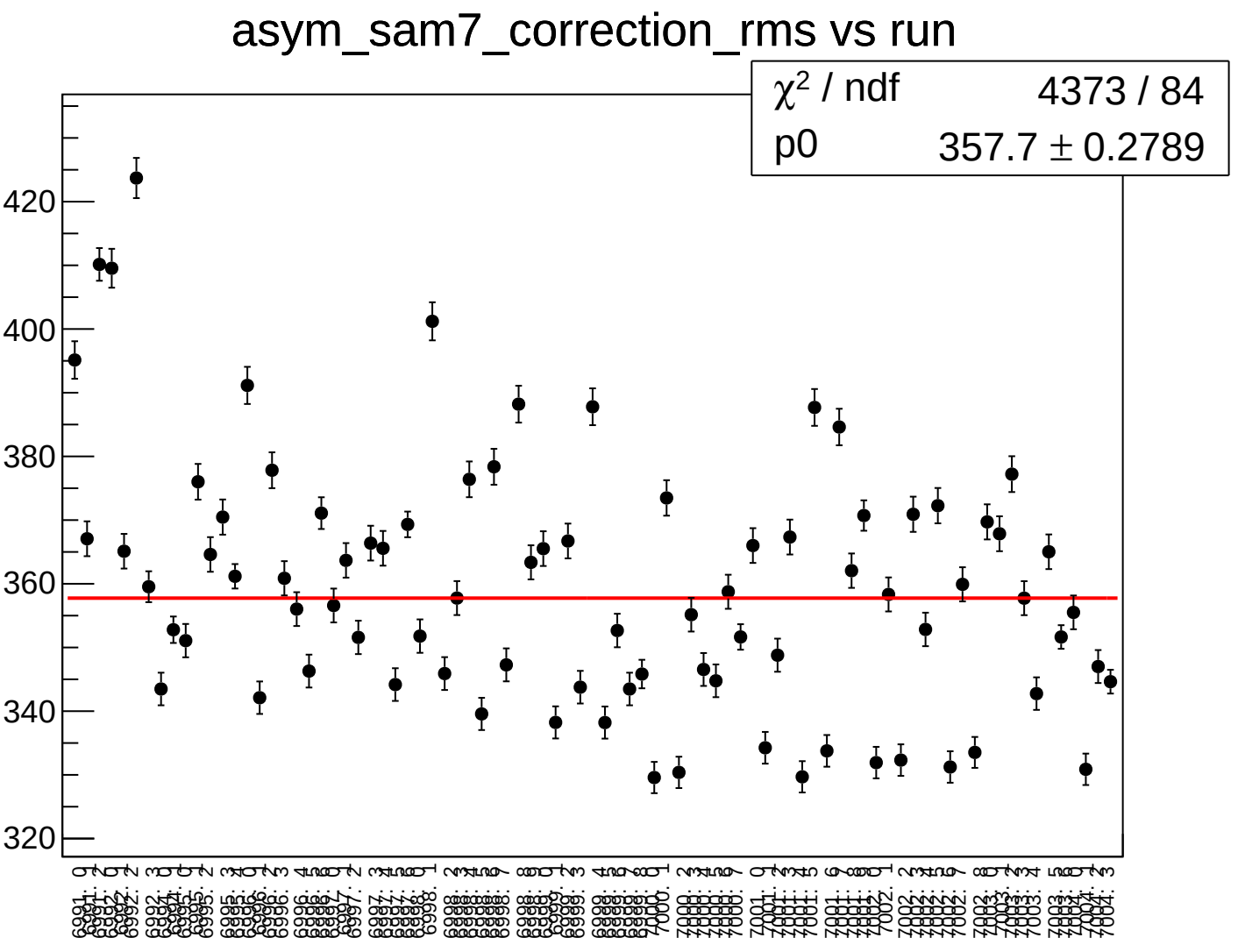

asym_sam6_correction_rms vs run
χ² / ndf 2165 / 84
p0 836.9 ± 0.652
980
960
940
920
900
880
860
840
820
800
780

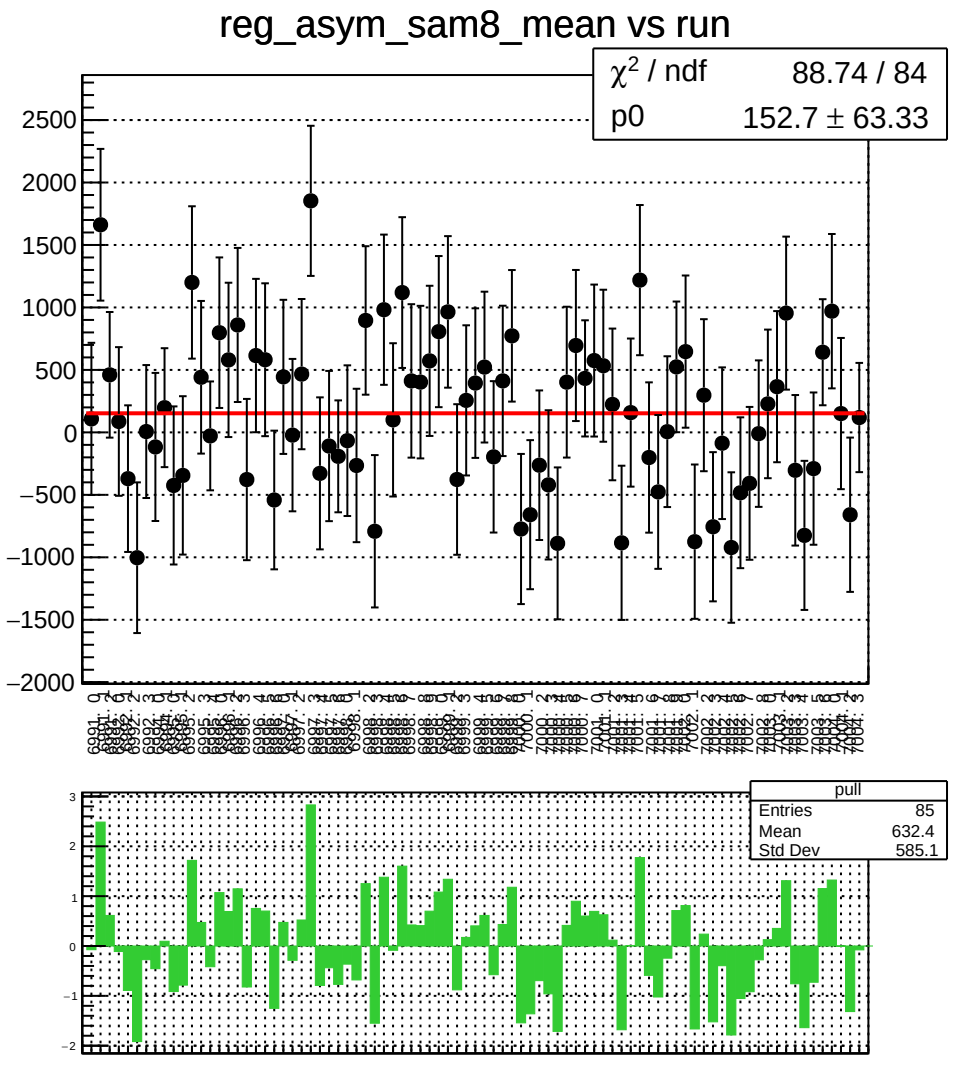

reg_asym_sam7_mean vs run
χ² / ndf 70.54 / 84
p0 −61.7 ± 70.82
2000
1000
0
−1000
−2000
pull
Entries 85
Mean 428.8
Std Dev 405.2
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.001528
Std Dev 0.911
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

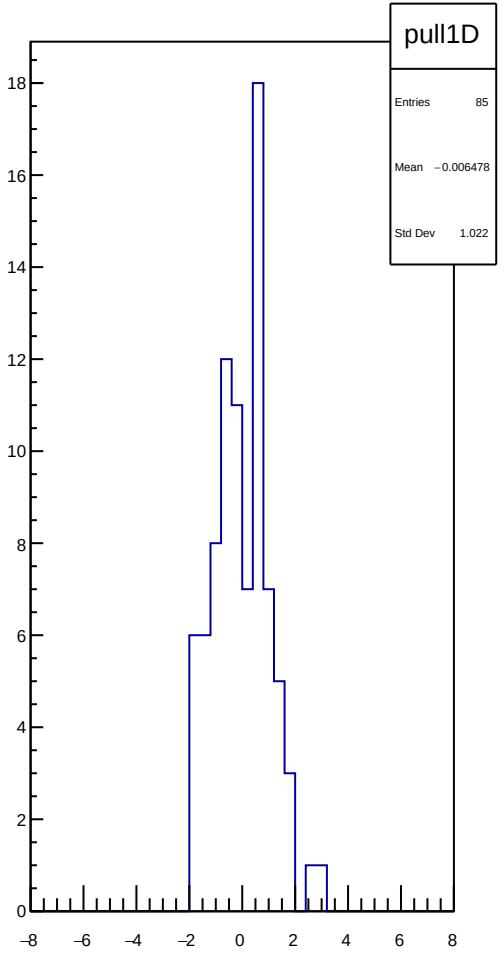

reg_asym_sam7_rms vs run
χ^2 / ndf 716.5 / 84
p0 64.31 ± 0.05008
70
68
66
64
62

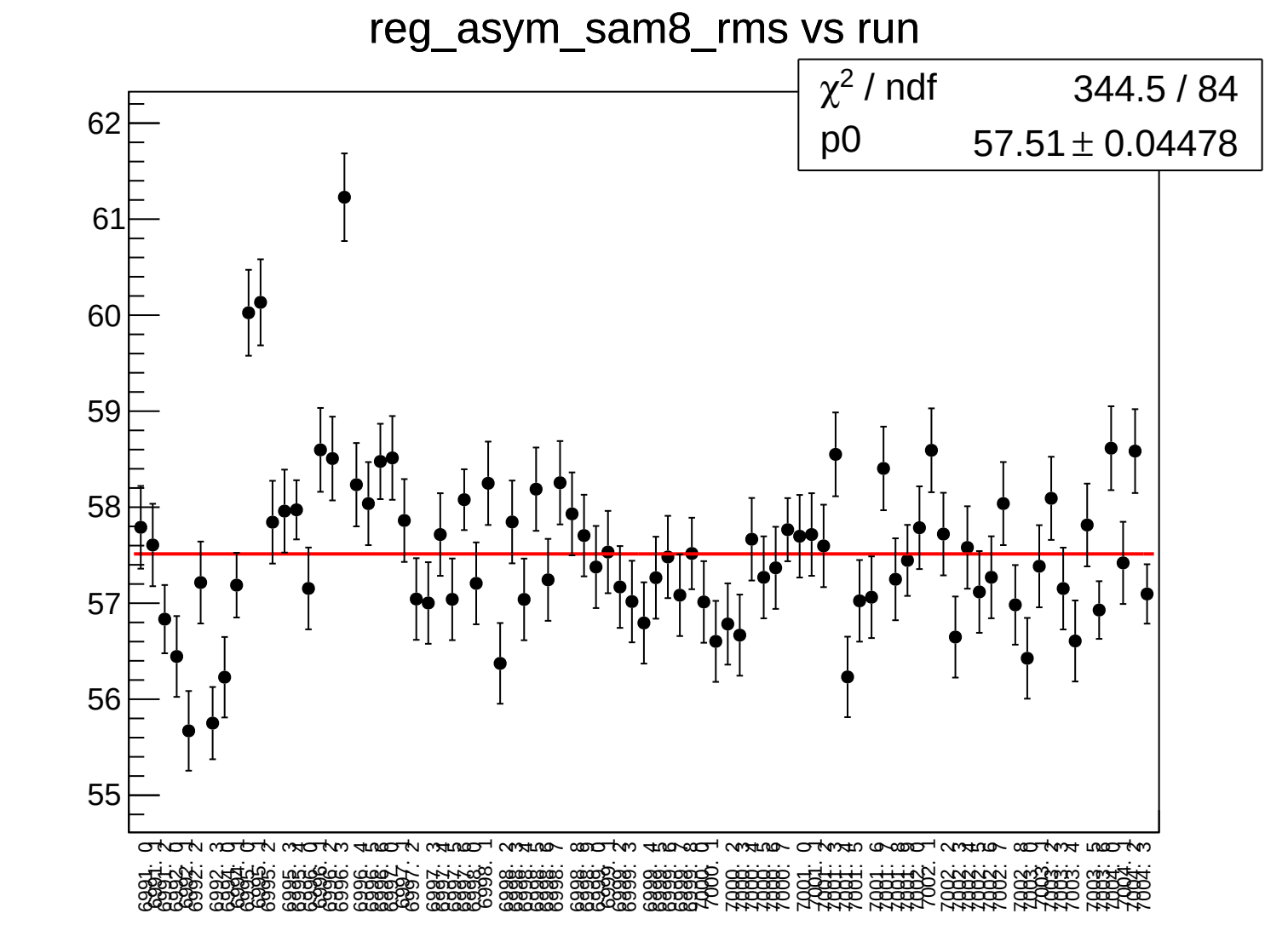

asym_sam7_correction_mean vs run
χ² / ndf 77.05 / 84
p0 −389.8 ± 394.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −225.6
Std Dev 268.3
2
1
0
−1
−2

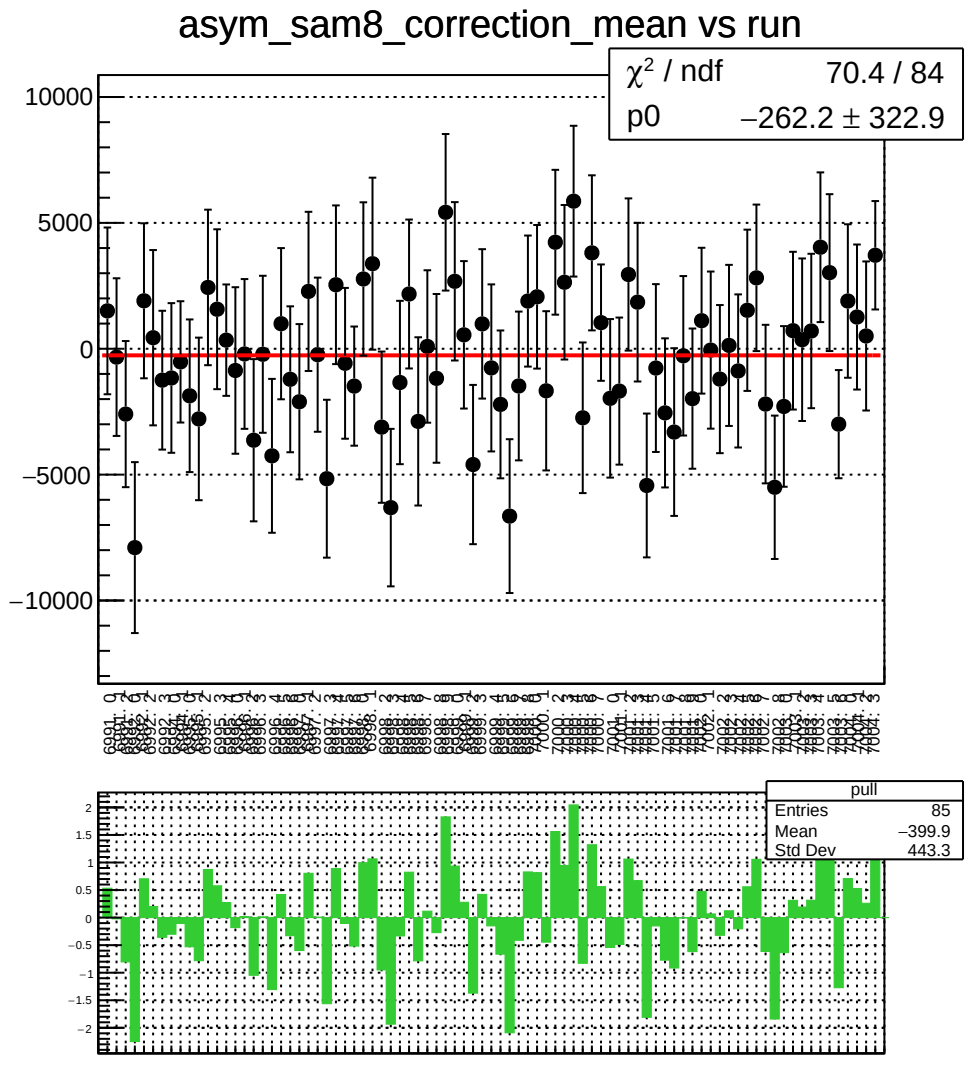

pull1D
Entries 85
Mean −0.01597
Std Dev 0.9519
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

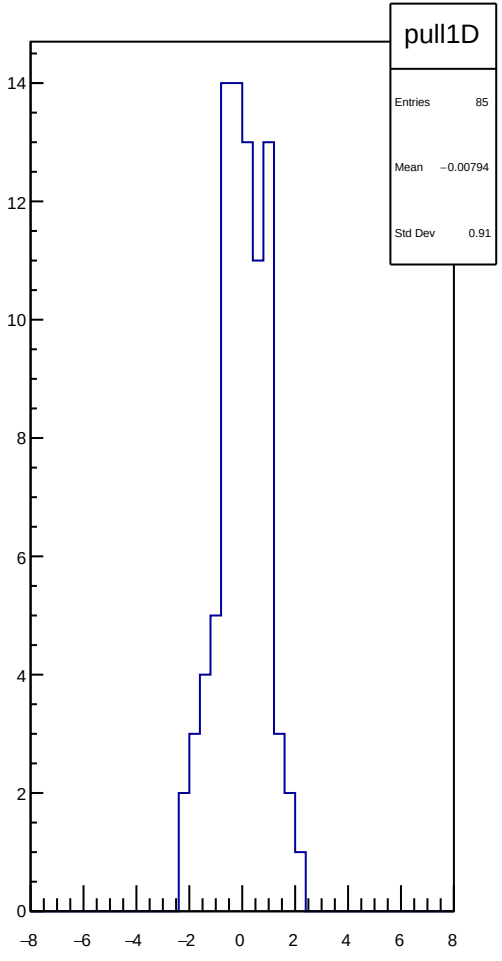

asym_sam7_correction_rms vs run
χ² / ndf 4373 / 84
p0 357.7 ± 0.2789
420
400
380
360
340
320

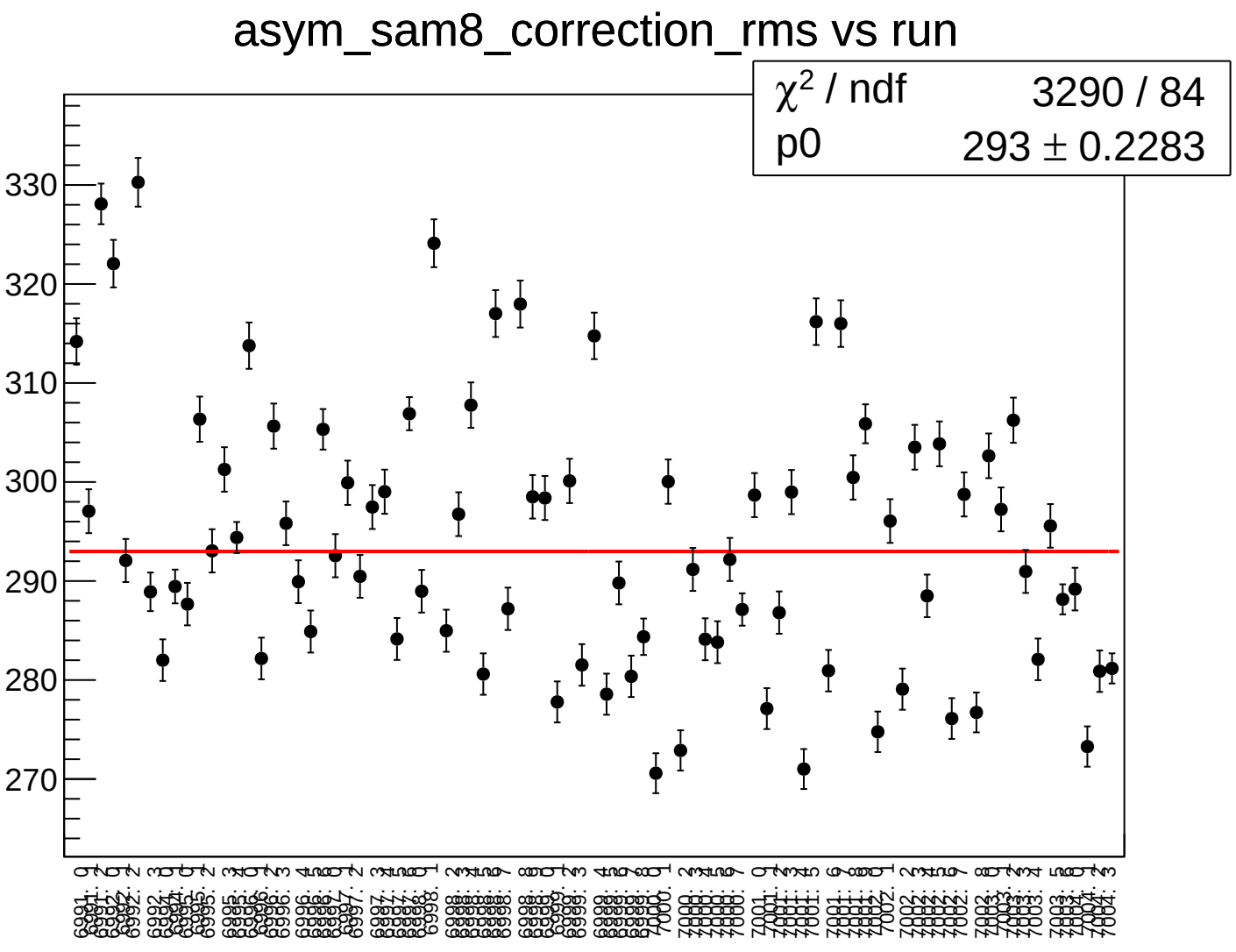

reg_asym_sam8_mean vs run
χ² / ndf 88.74 / 84
p0 152.7 ± 63.33
pull
Entries 85
Mean 632.4
Std Dev 585.1

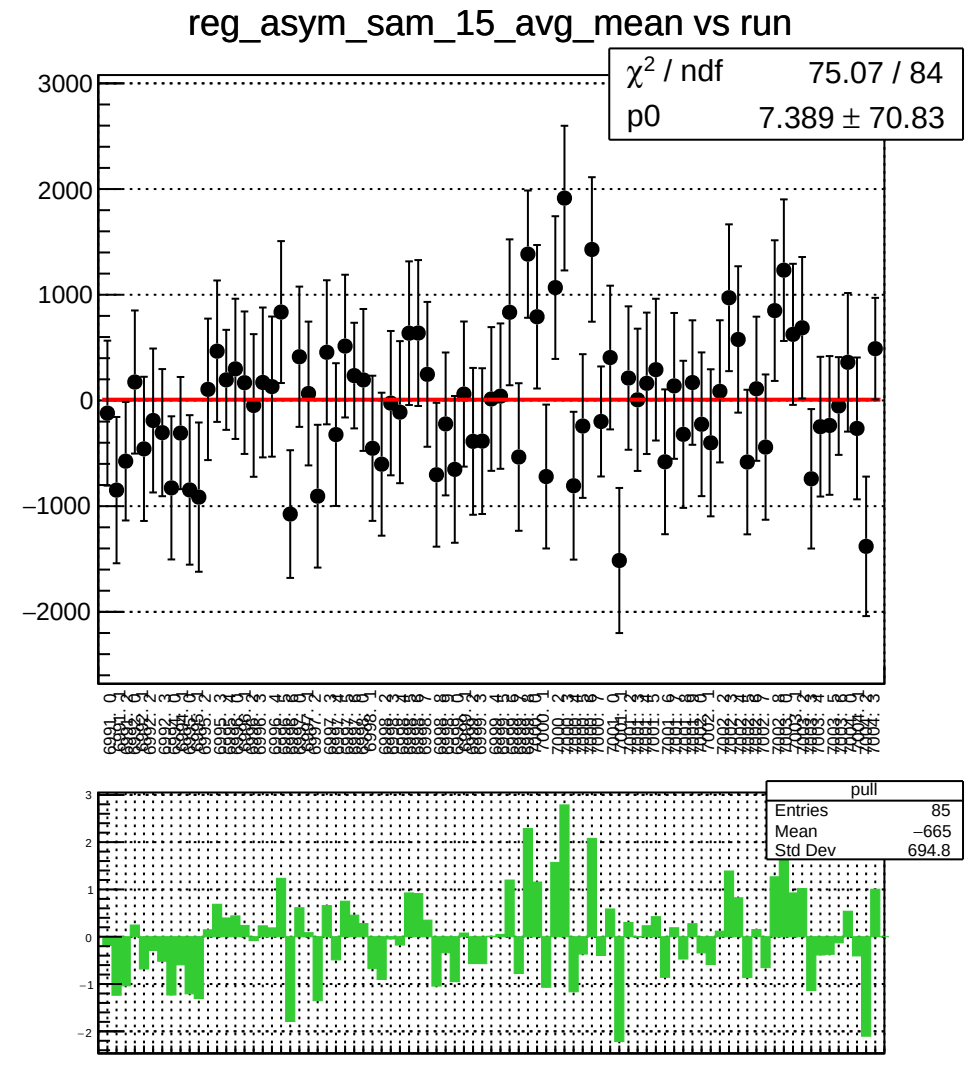

pull1D
Entries 85
Mean −0.006478
Std Dev 1.022

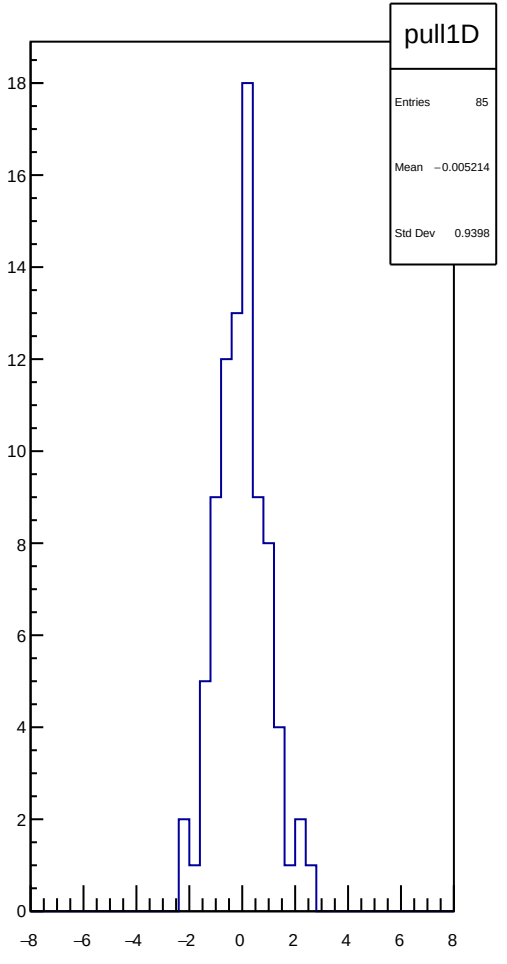

reg_asym_sam8_rms vs run
χ² / ndf 344.5 / 84
p0 57.51 ± 0.04478
62
61
60
59
58
57
56
55

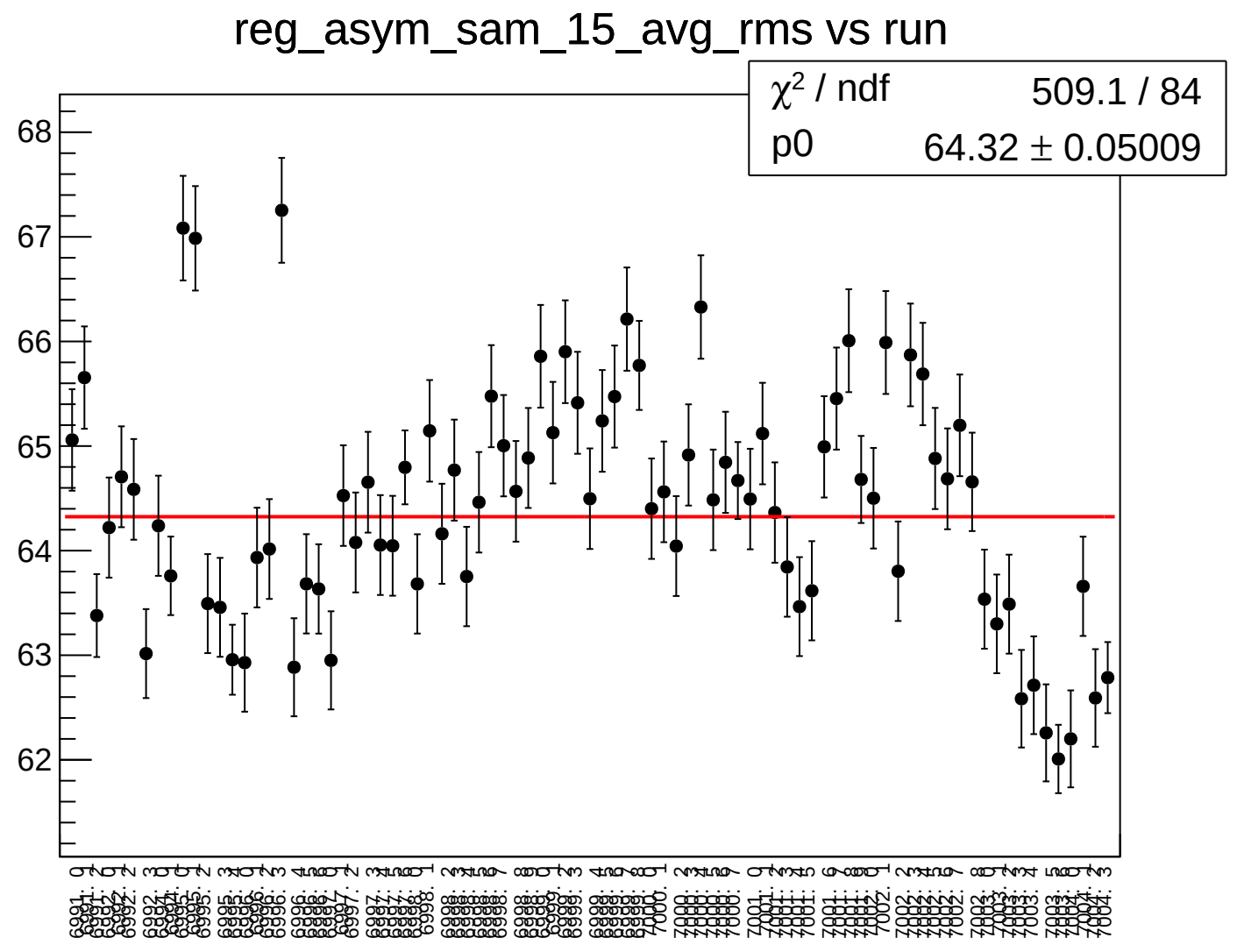

asym_sam8_correction_mean vs run
χ² / ndf 70.4 / 84
p0 −262.2 ± 322.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −399.9
Std Dev 443.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

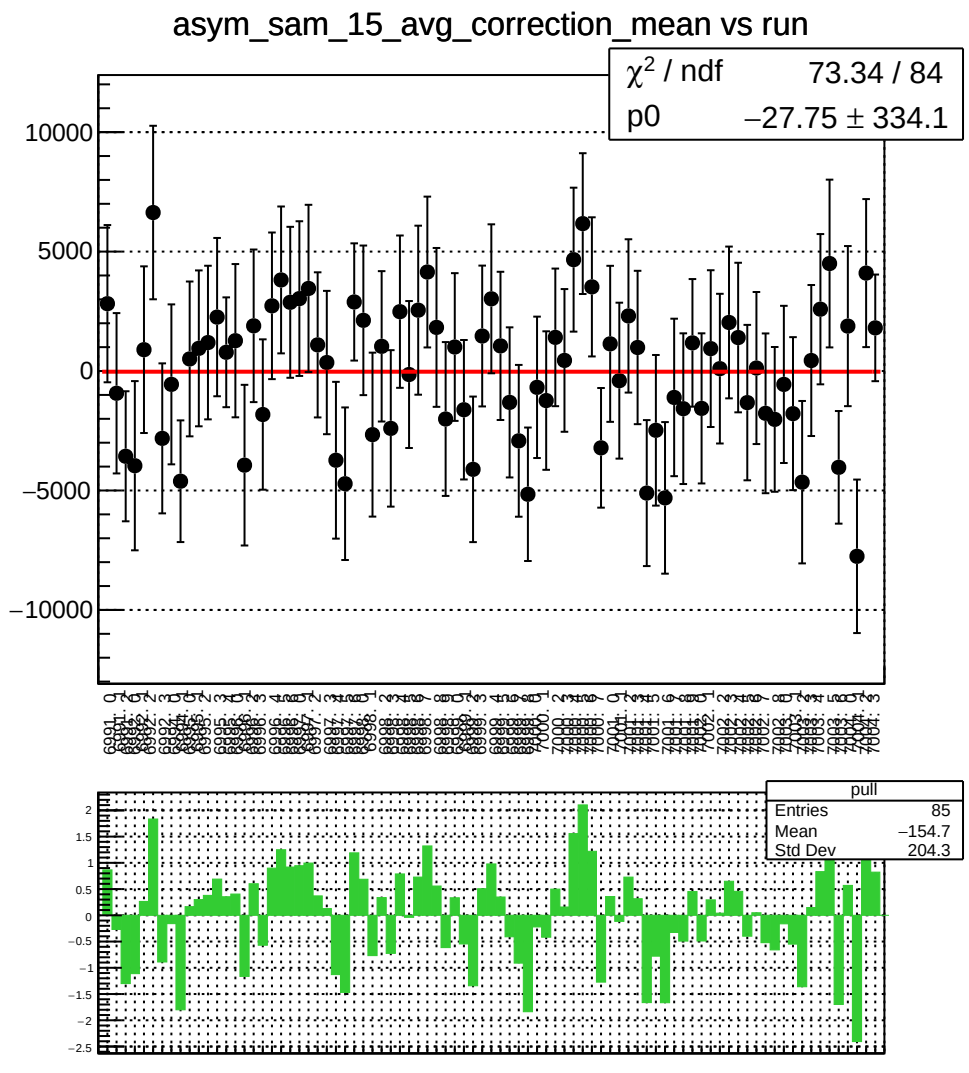

pull1D
Entries 85
Mean −0.00794
Std Dev 0.91
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

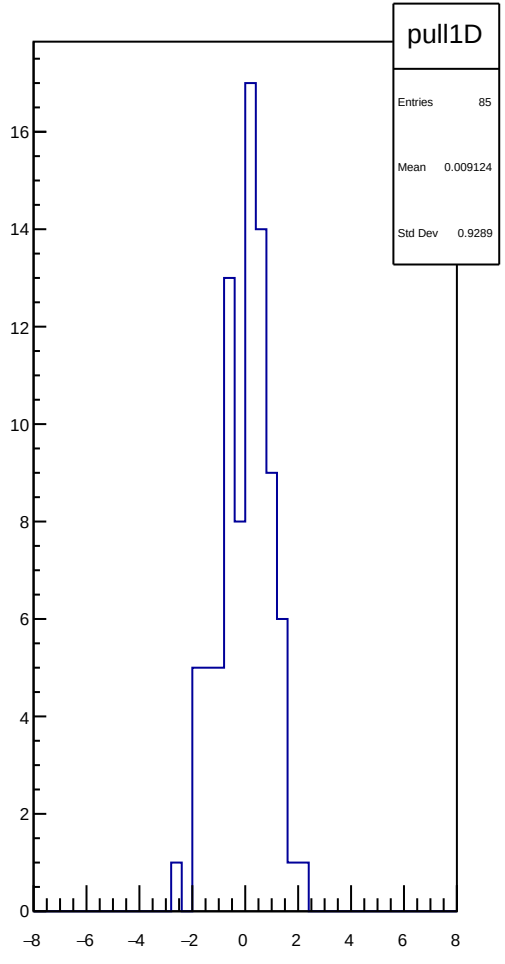

asym_sam8_correction_rms vs run
χ² / ndf 3290 / 84
p0 293 ± 0.2283
330
320
310
300
290
280
270

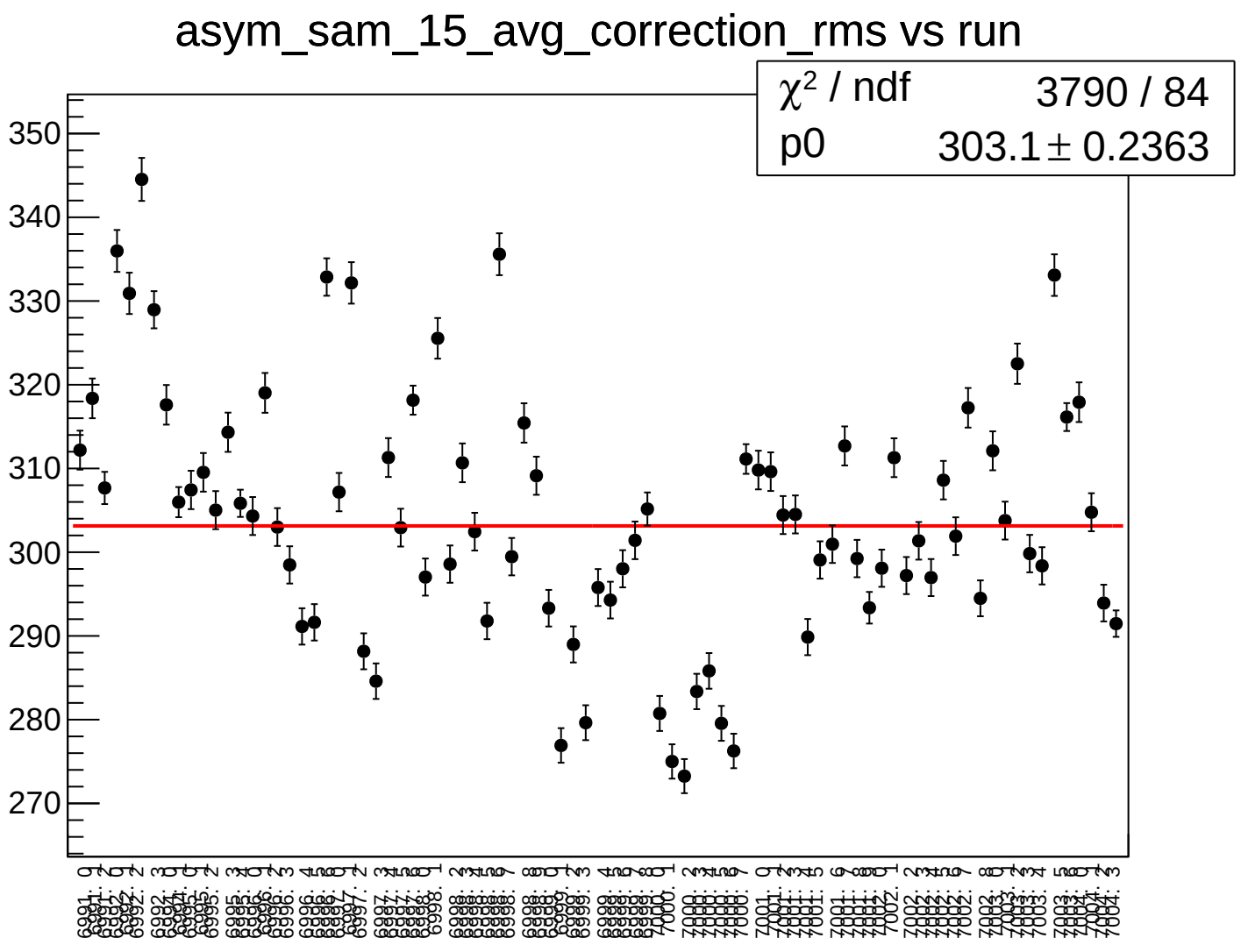

reg_asym_sam_15_avg_mean vs run
χ² / ndf 75.07 / 84
p0 7.389 ± 70.83
pull
Entries 85
Mean −665
Std Dev 694.8

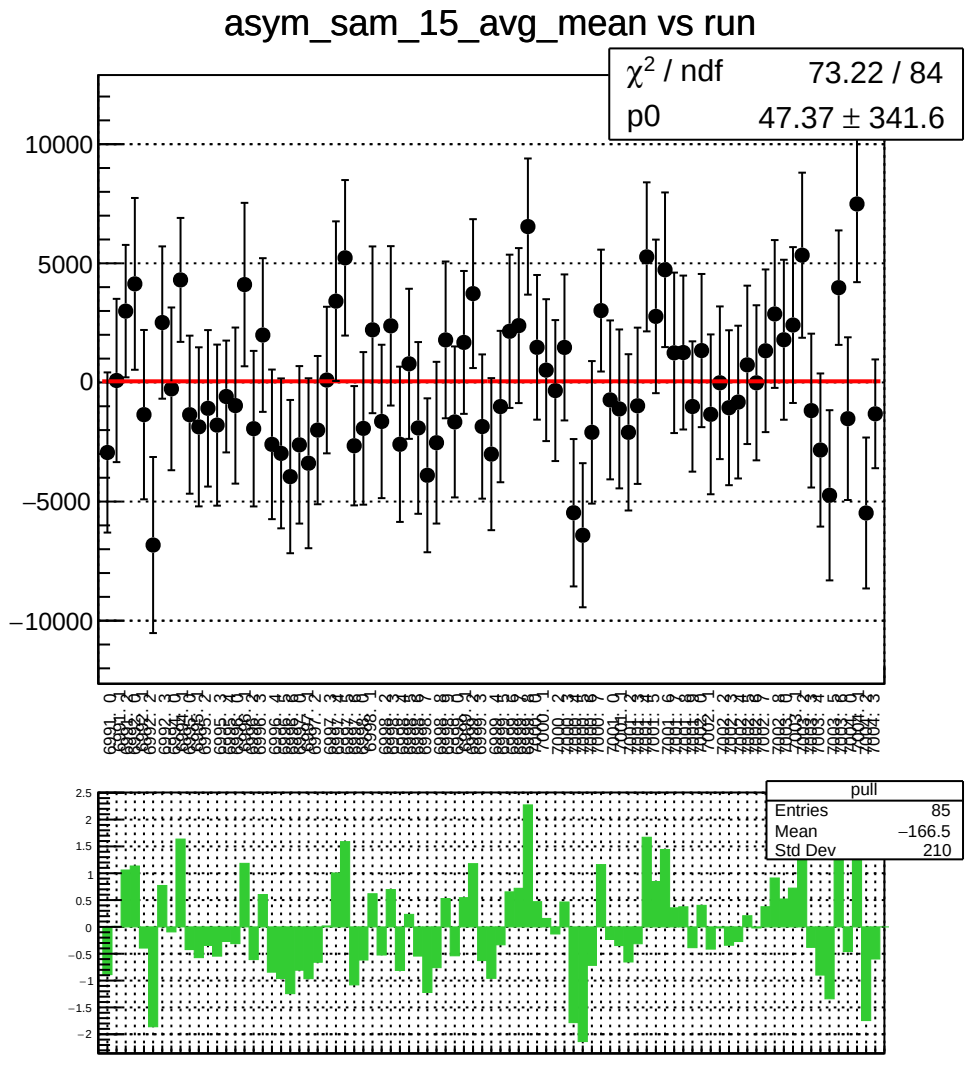

pull1D
Entries 85
Mean −0.005214
Std Dev 0.9398

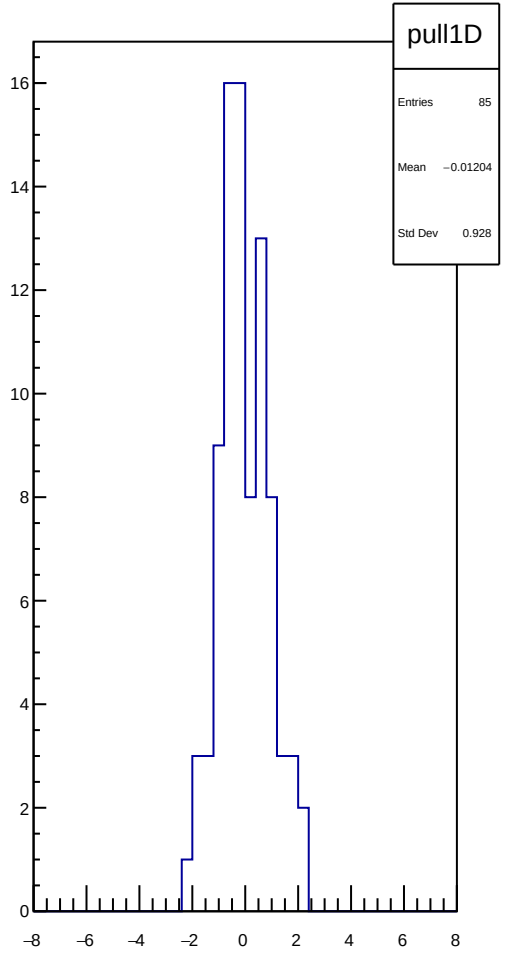

reg_asym_sam_15_avg_rms vs run
χ² / ndf 509.1 / 84
p0 64.32 ± 0.05009
68
67
66
65
64
63
62

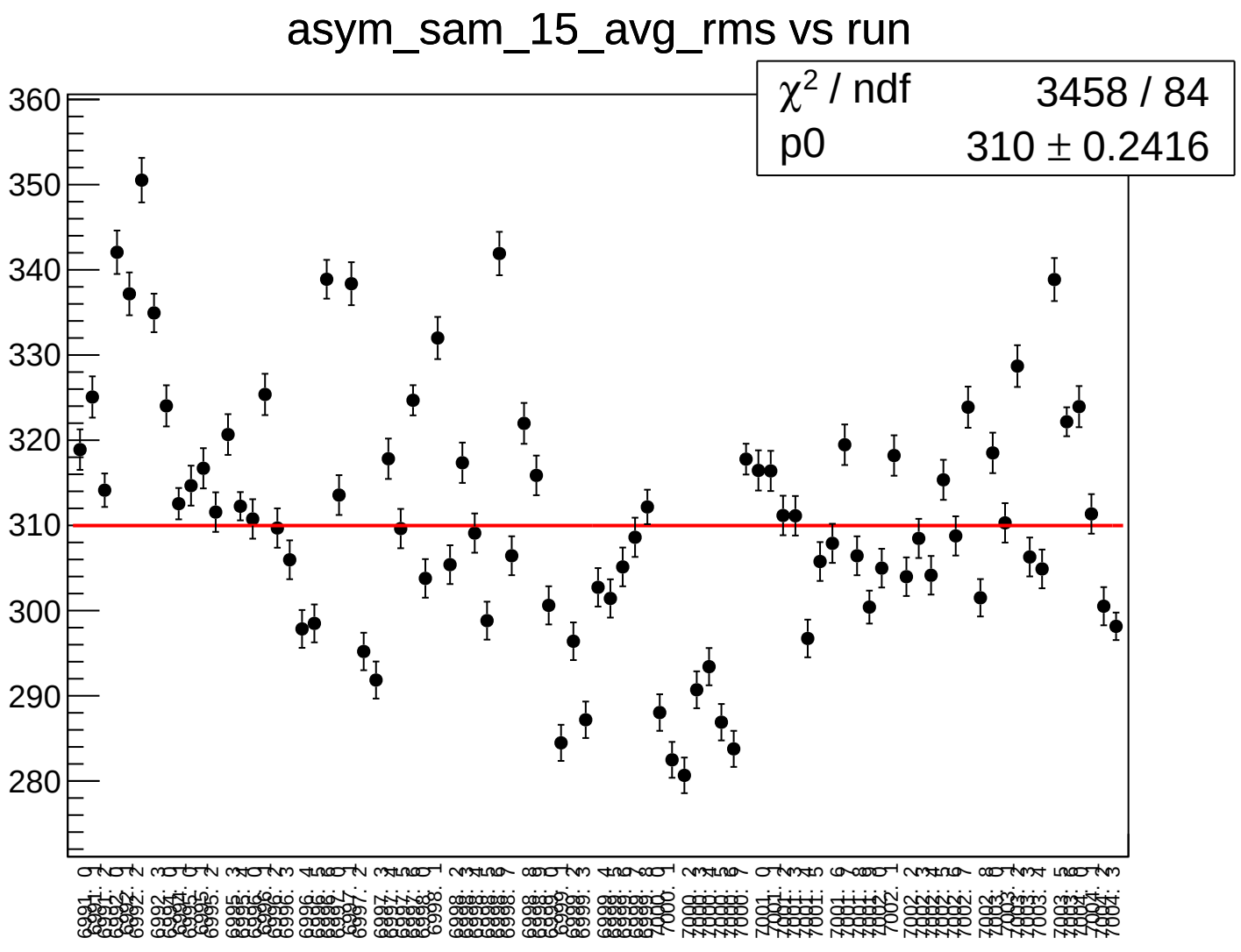

asym_sam_15_avg_correction_mean vs run
χ² / ndf 73.34 / 84
p0 −27.75 ± 334.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −154.7
Std Dev 204.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

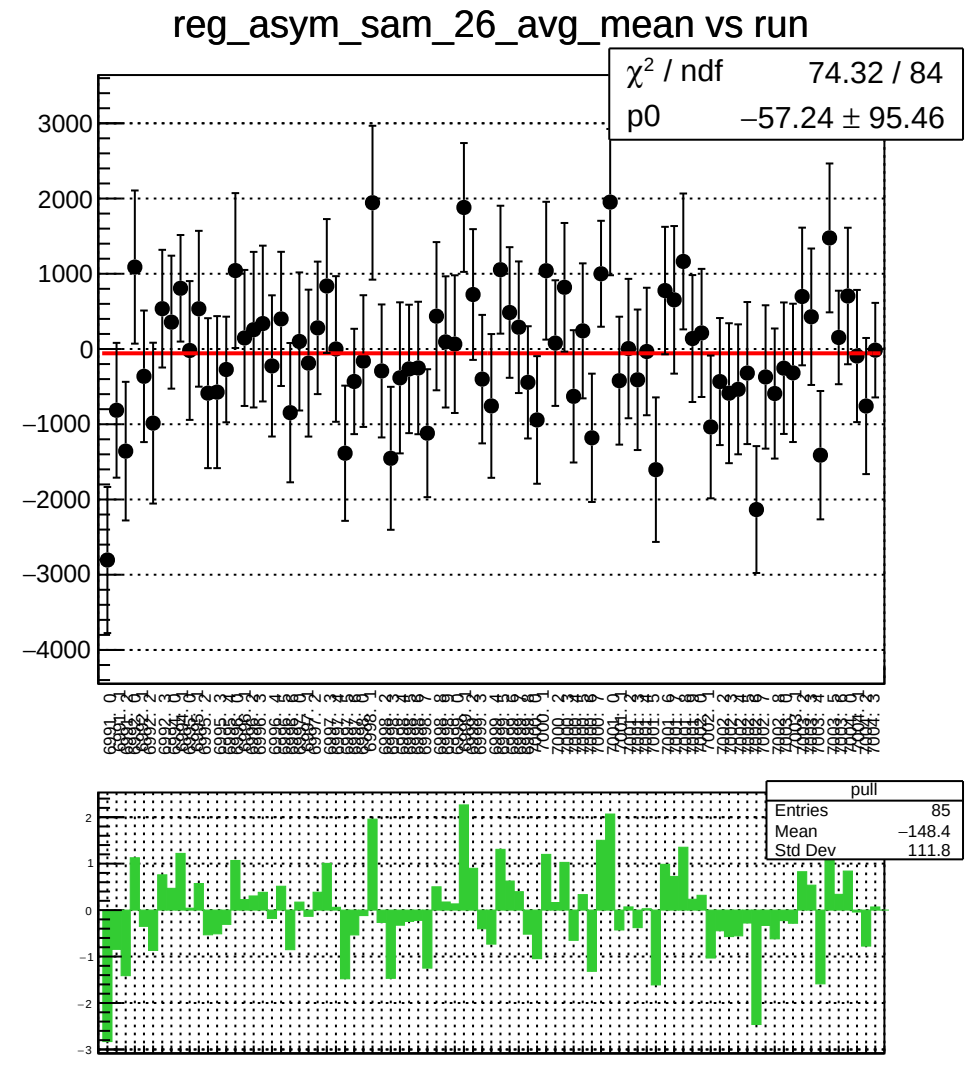

pull1D
Entries 85
Mean 0.009124
Std Dev 0.9289
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

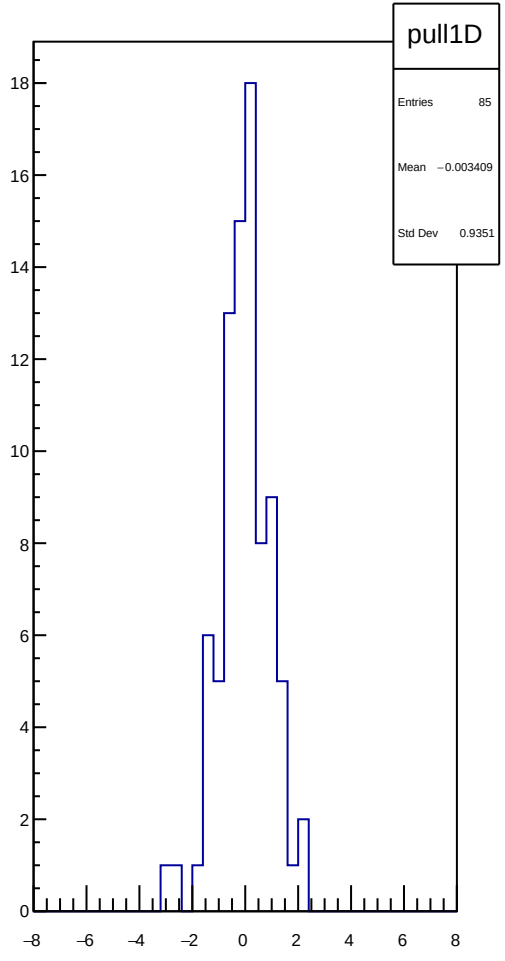

asym_sam_15_avg_correction_rms vs run
χ² / ndf 3790 / 84
p0 303.1 ± 0.2363
350
340
330
320
310
300
290
280
270

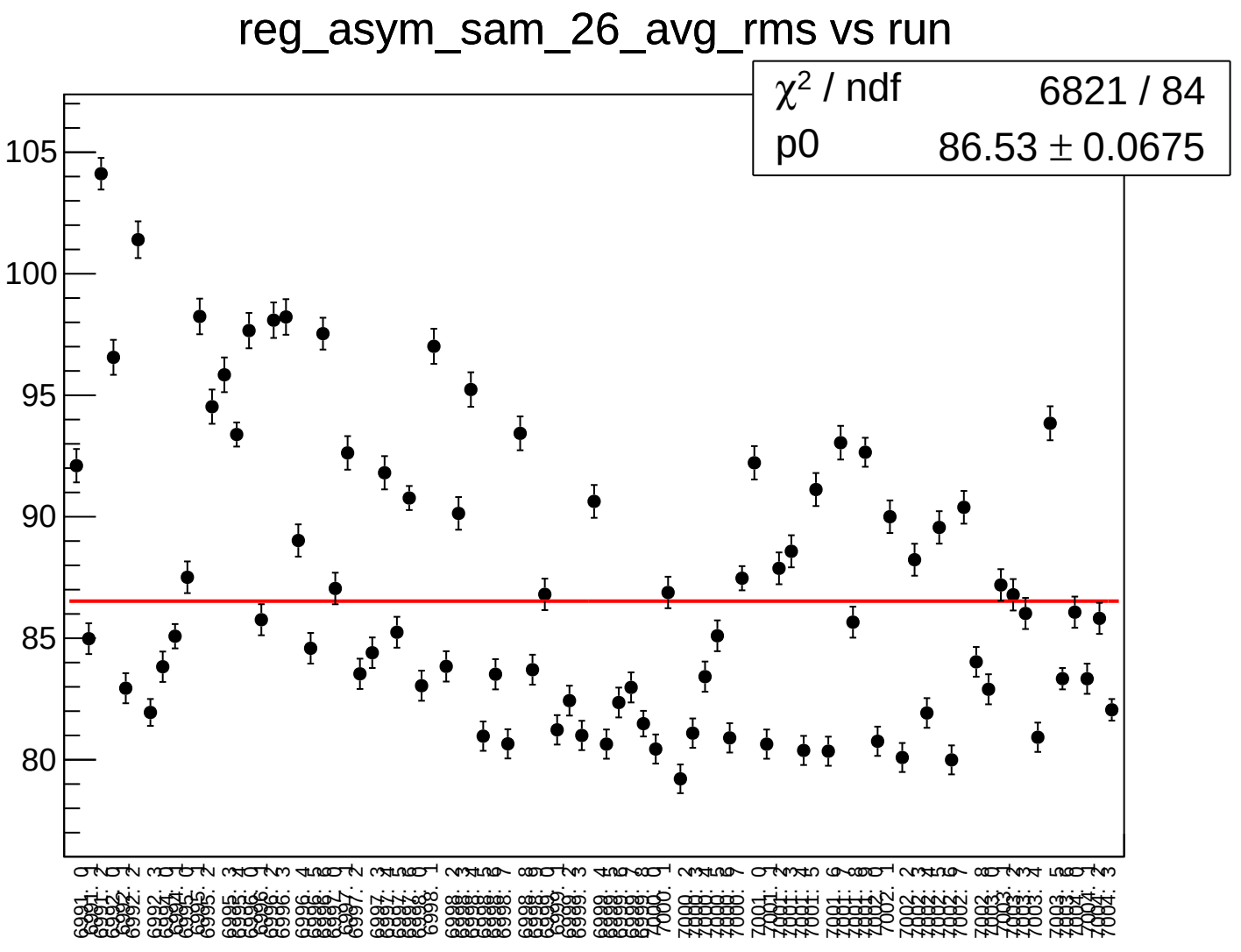

asym_sam_15_avg_mean vs run
χ^2 / ndf 73.22 / 84
p0 47.37 ± 341.6
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −166.5
Std Dev 210
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

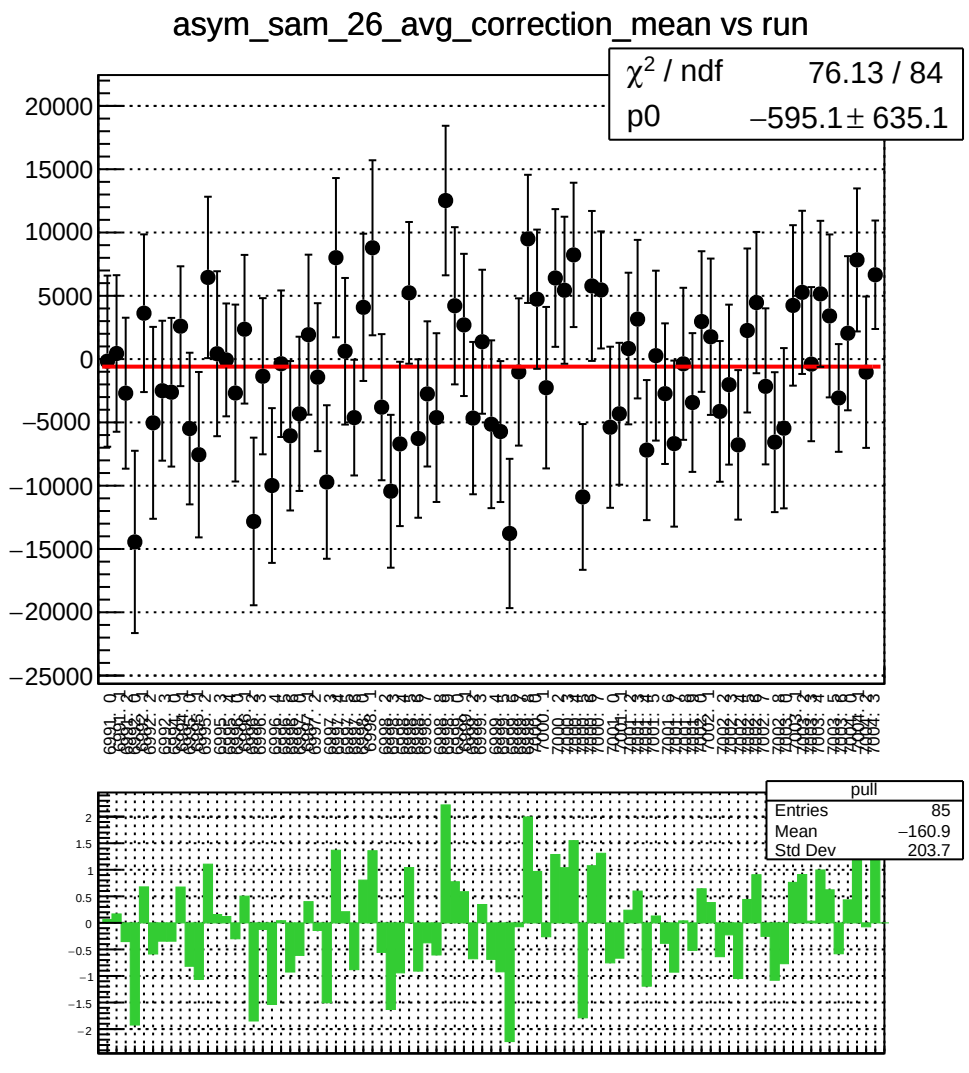

pull1D
Entries 85
Mean −0.01204
Std Dev 0.928
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

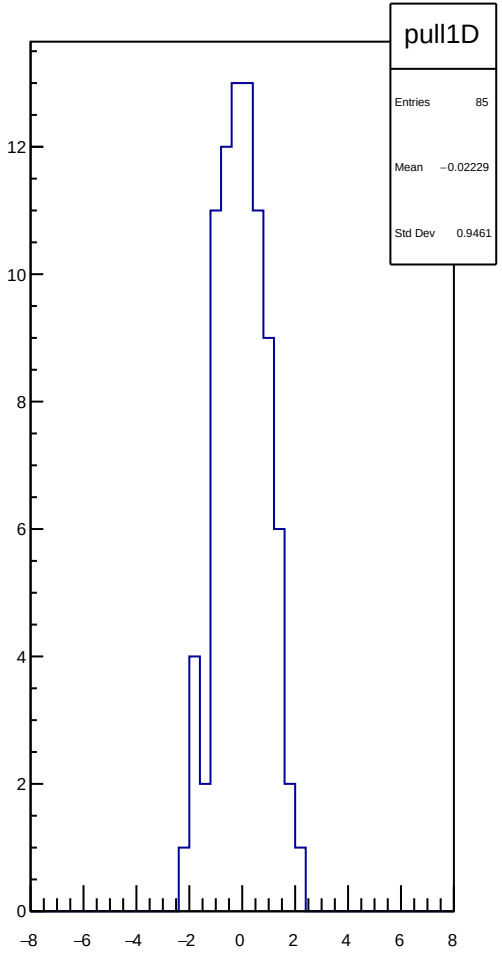

asym_sam_15_avg_rms vs run
χ^2 / ndf 3458 / 84
p0 310 ± 0.2416
360
350
340
330
320
310
300
290
280

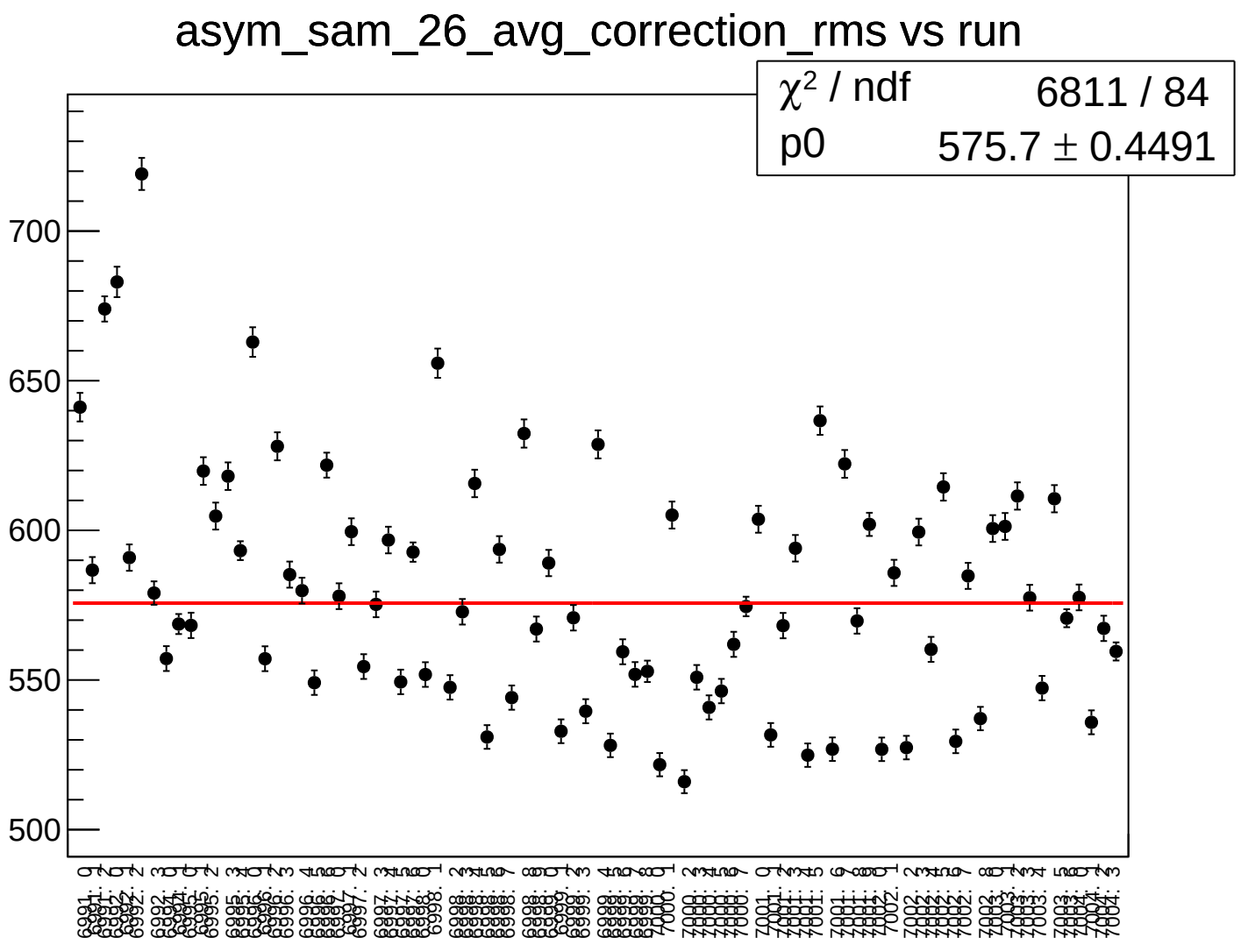

reg_asym_sam_26_avg_mean vs run
χ² / ndf 74.32 / 84
p0 −57.24 ± 95.46
pull
Entries 85
Mean −148.4
Std Dev 111.8

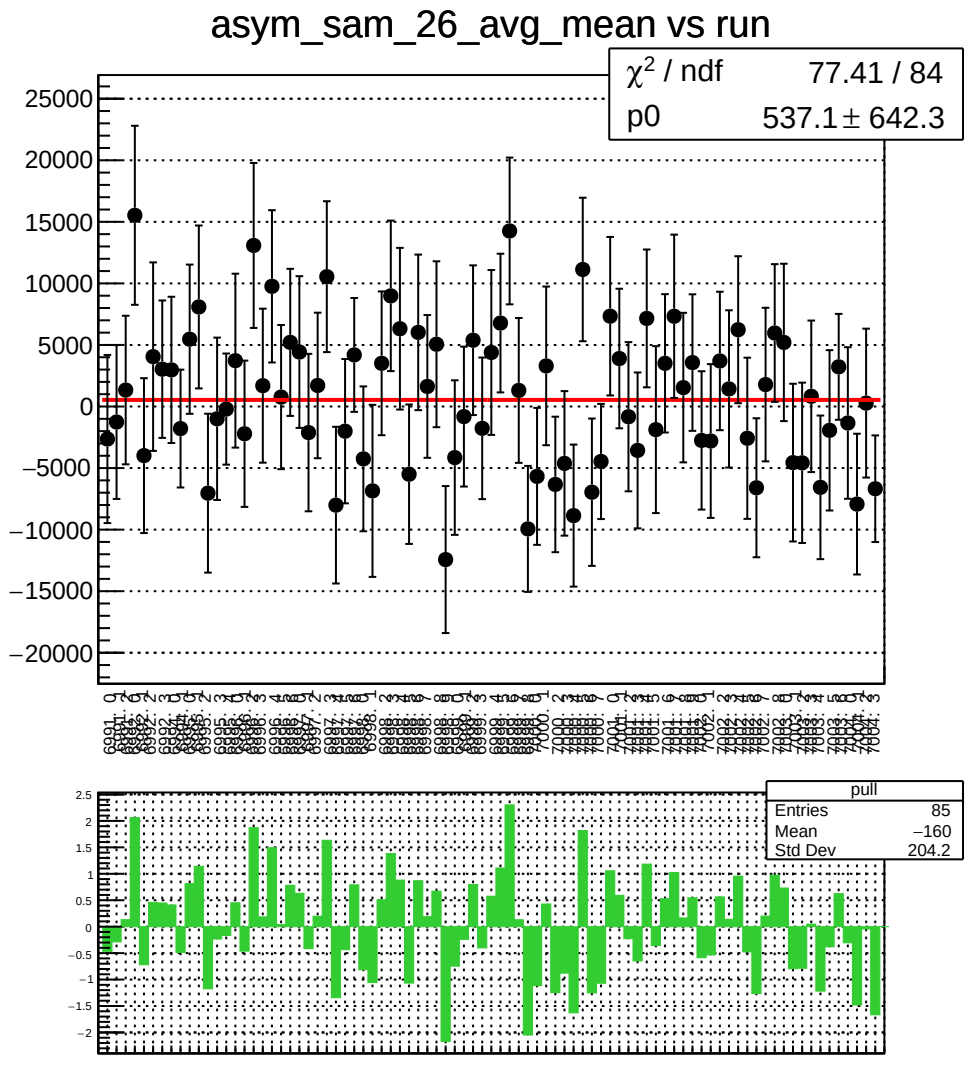

pull1D
Entries 85
Mean −0.003409
Std Dev 0.9351

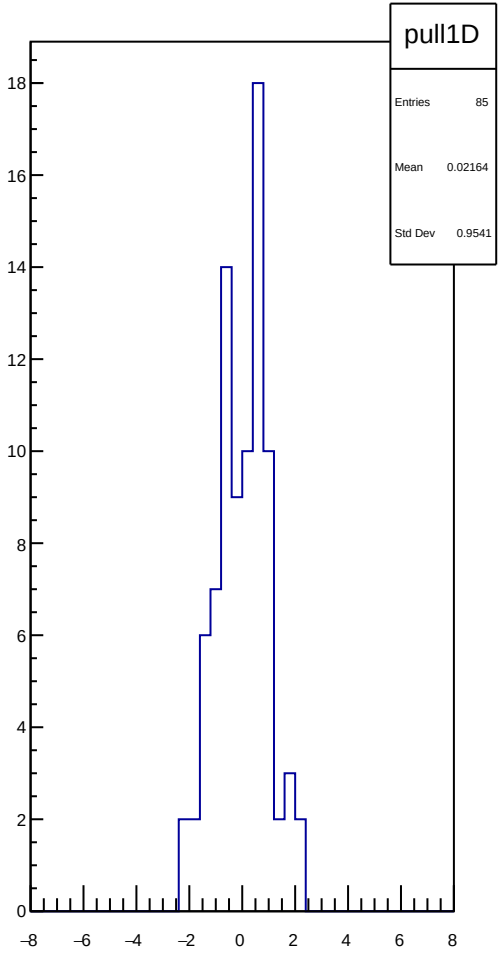

reg_asym_sam_26_avg_rms vs run
χ² / ndf 6821 / 84
p0 86.53 ± 0.0675
105
100
95
90
85
80

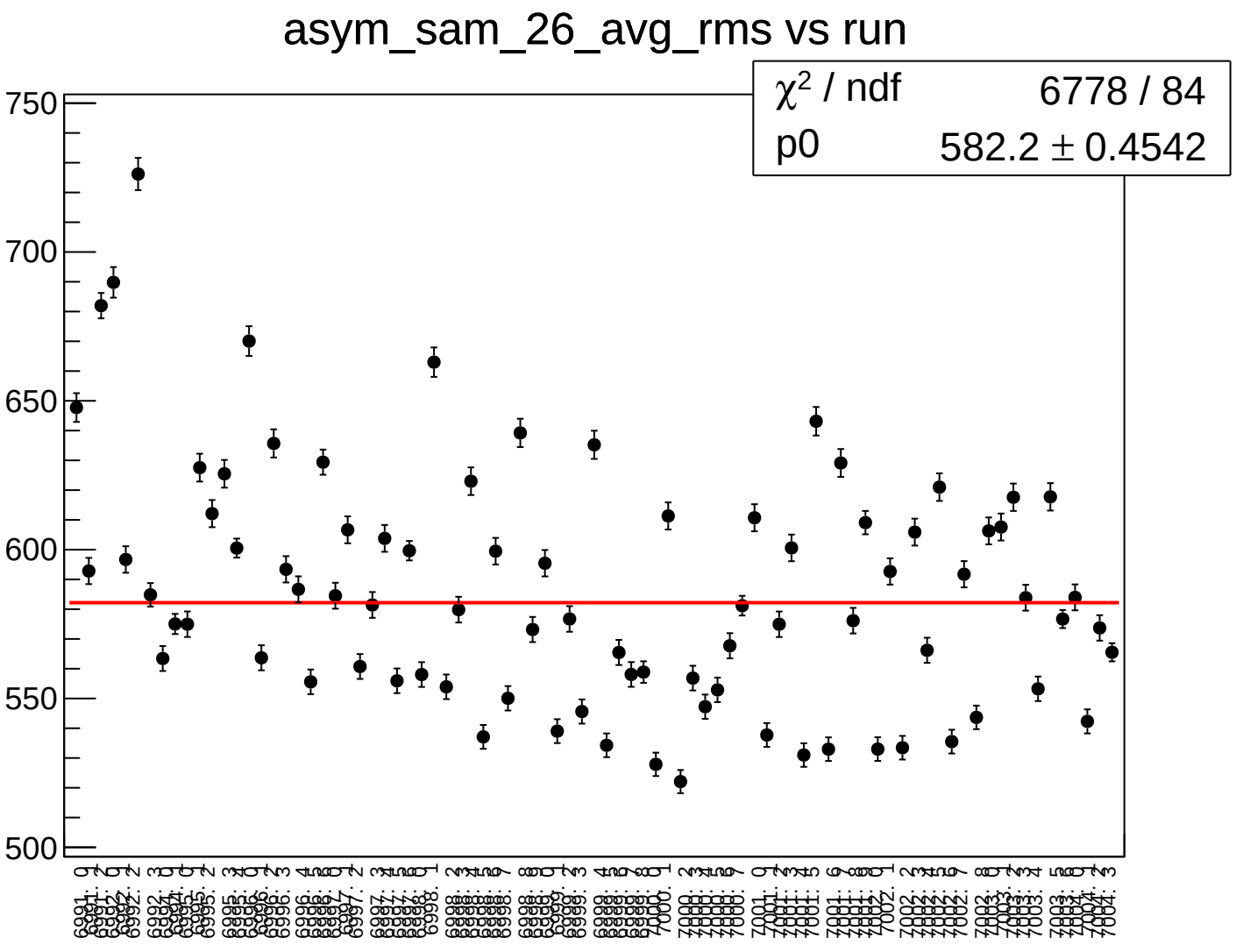

asym_sam_26_avg_correction_mean vs run
χ² / ndf 76.13 / 84
p0 −595.1 ± 635.1
pull
Entries 85
Mean −160.9
Std Dev 203.7

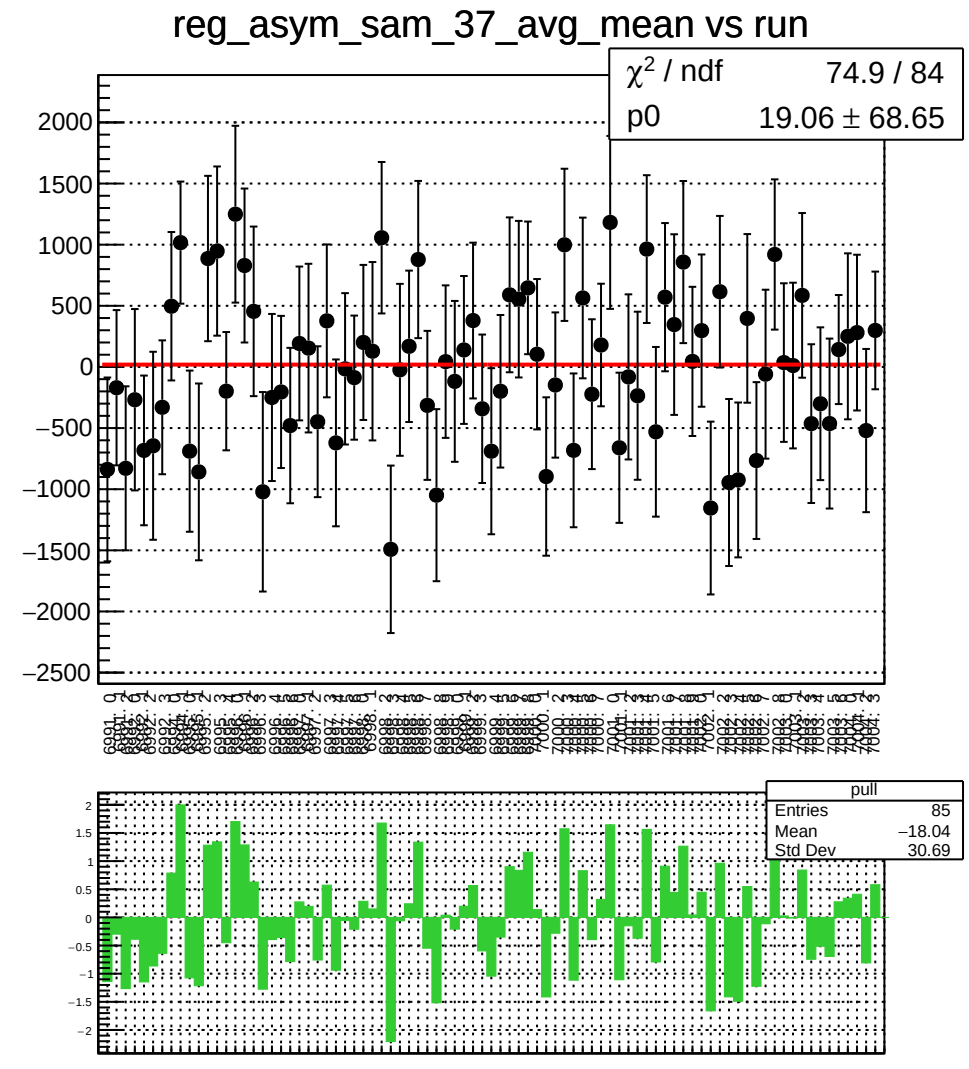

pull1D
Entries 85
Mean −0.02229
Std Dev 0.9461

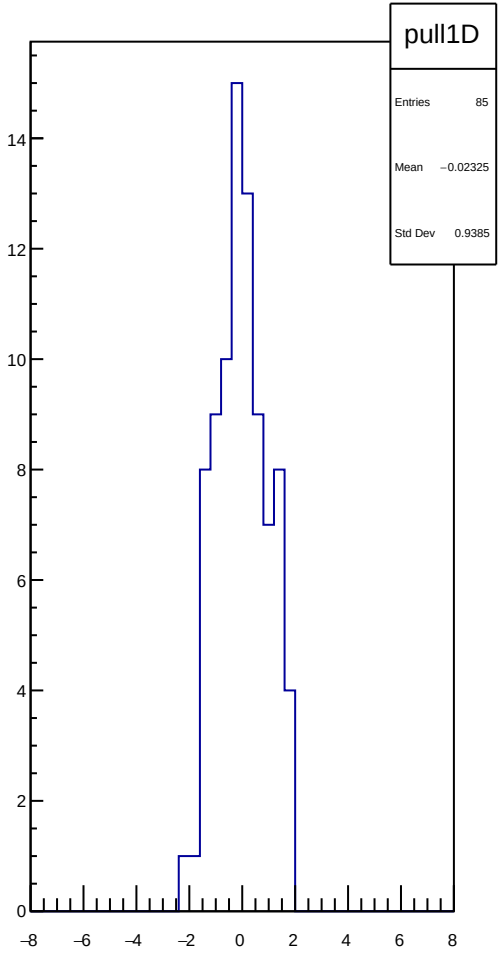

asym_sam_26_avg_correction_rms vs run
χ² / ndf 6811 / 84
p0 575.7 ± 0.4491
700
650
600
550
500

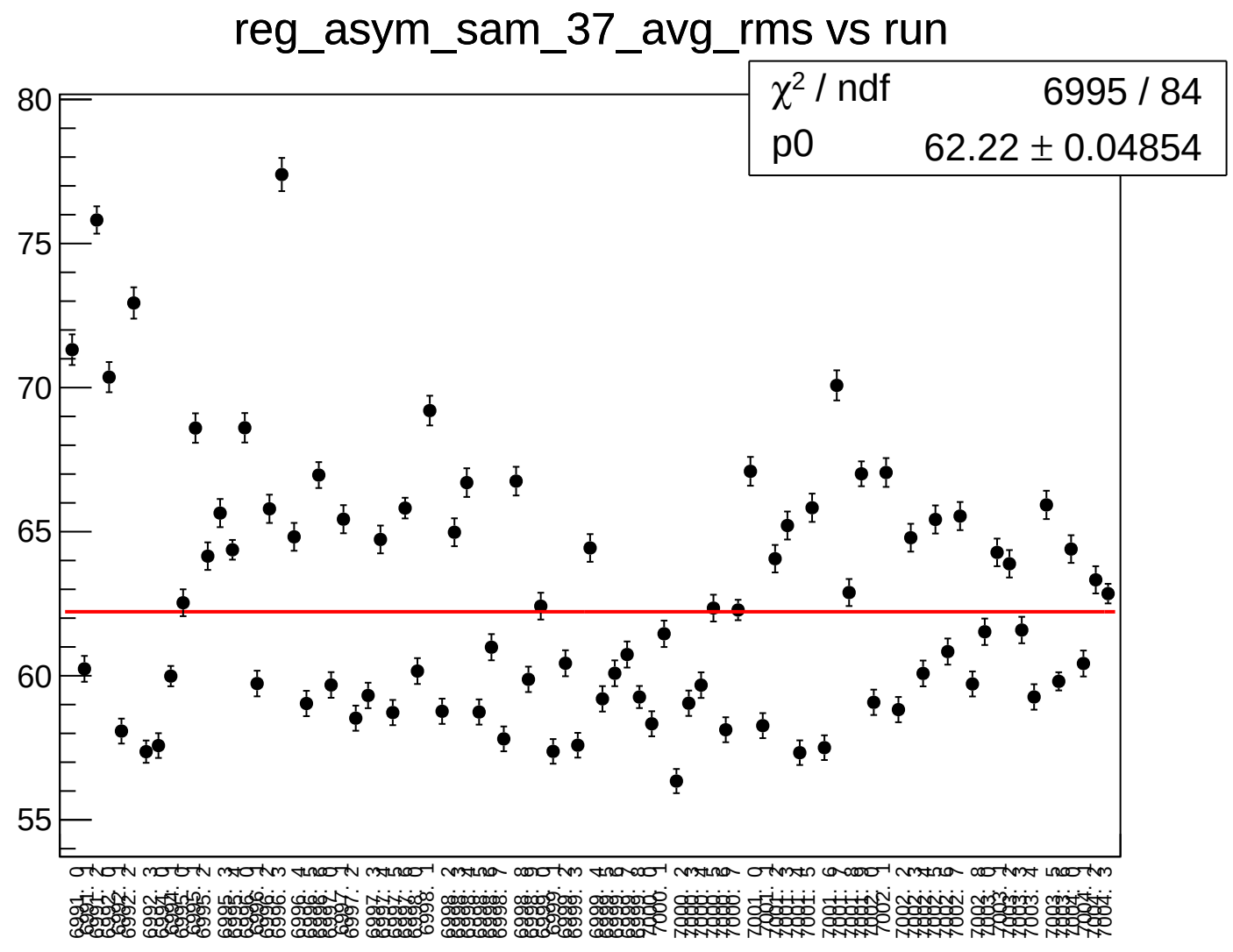

asym_sam_26_avg_mean vs run
χ² / ndf 77.41 / 84
p0 537.1 ± 642.3
pull
Entries 85
Mean −160
Std Dev 204.2

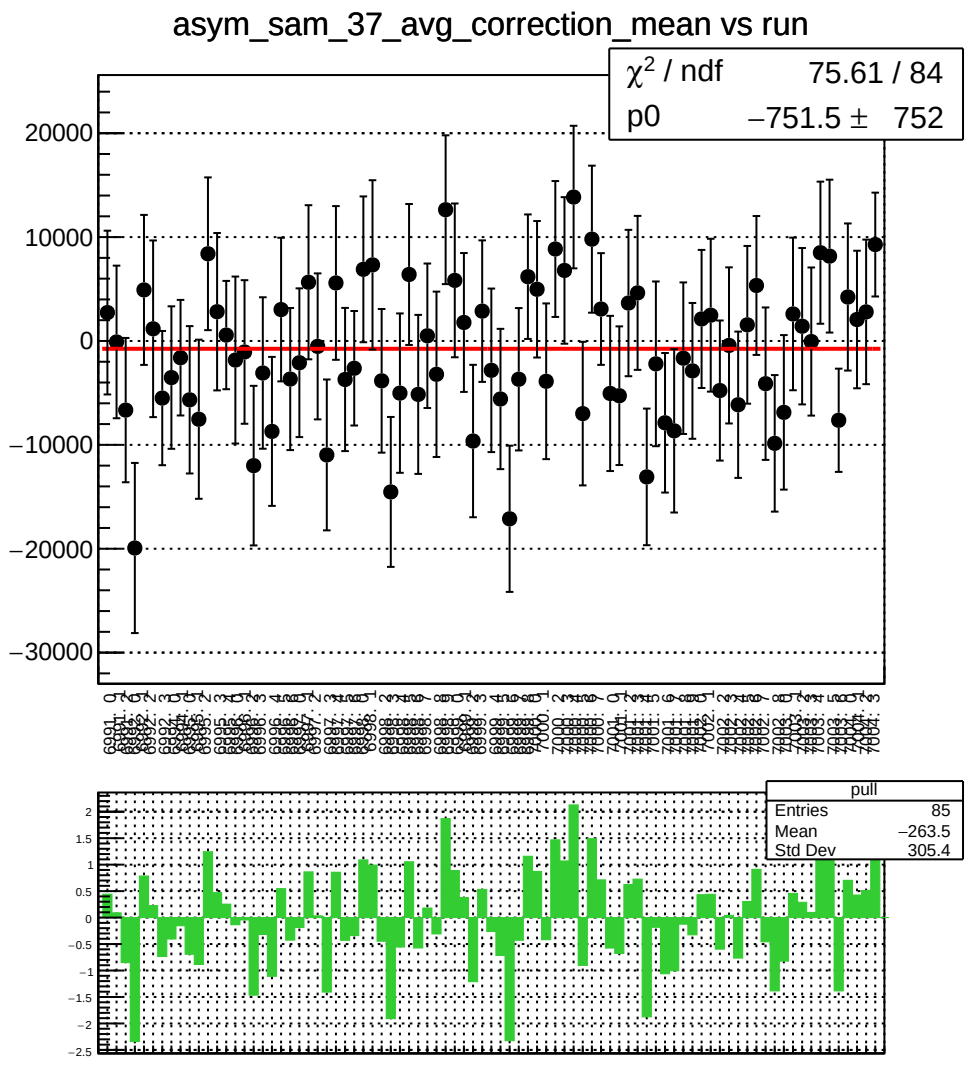

pull1D
Entries 85
Mean 0.02164
Std Dev 0.9541

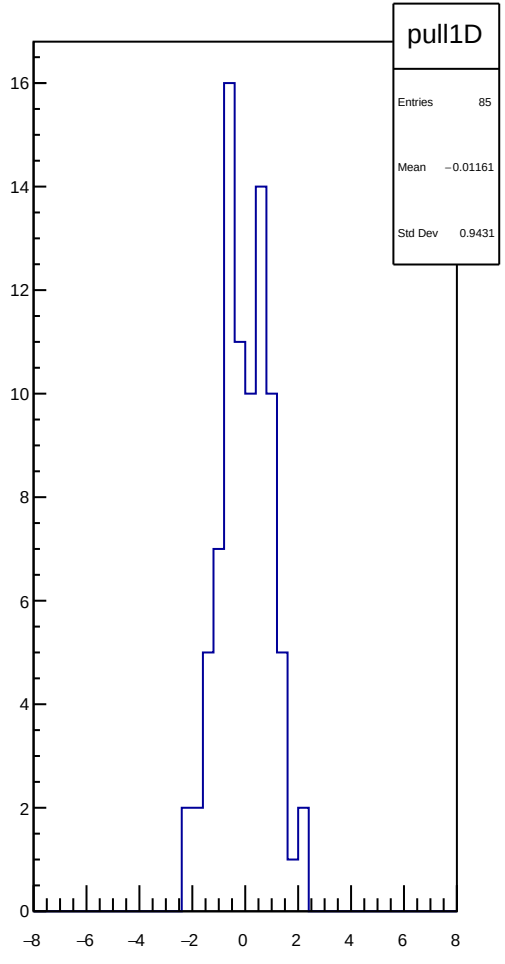

asym_sam_26_avg_rms vs run
χ² / ndf 6778 / 84
p0 582.2 ± 0.4542
750
700
650
600
550
500

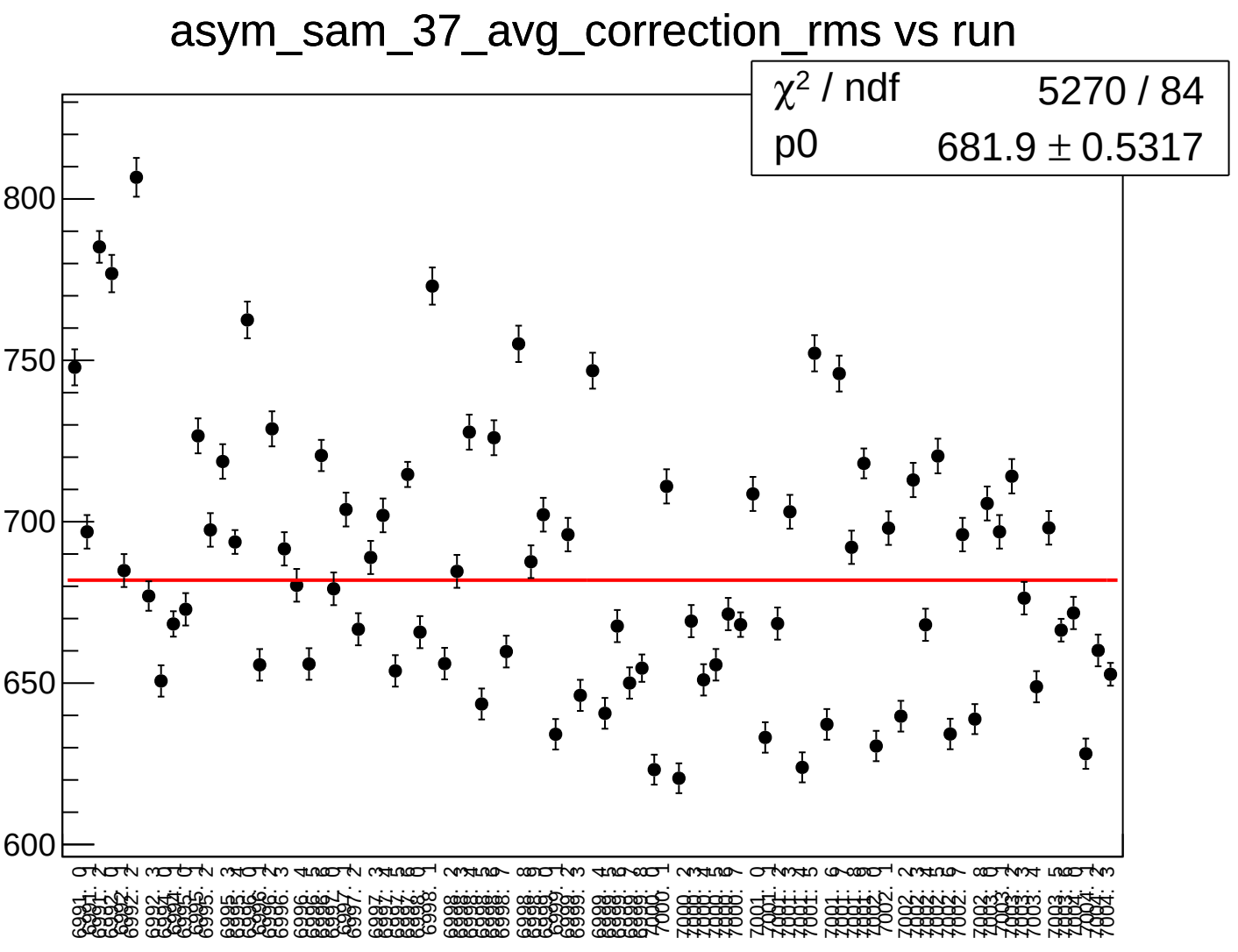

reg_asym_sam_37_avg_mean vs run
χ² / ndf 74.9 / 84
p0 19.06 ± 68.65
pull
Entries 85
Mean −18.04
Std Dev 30.69

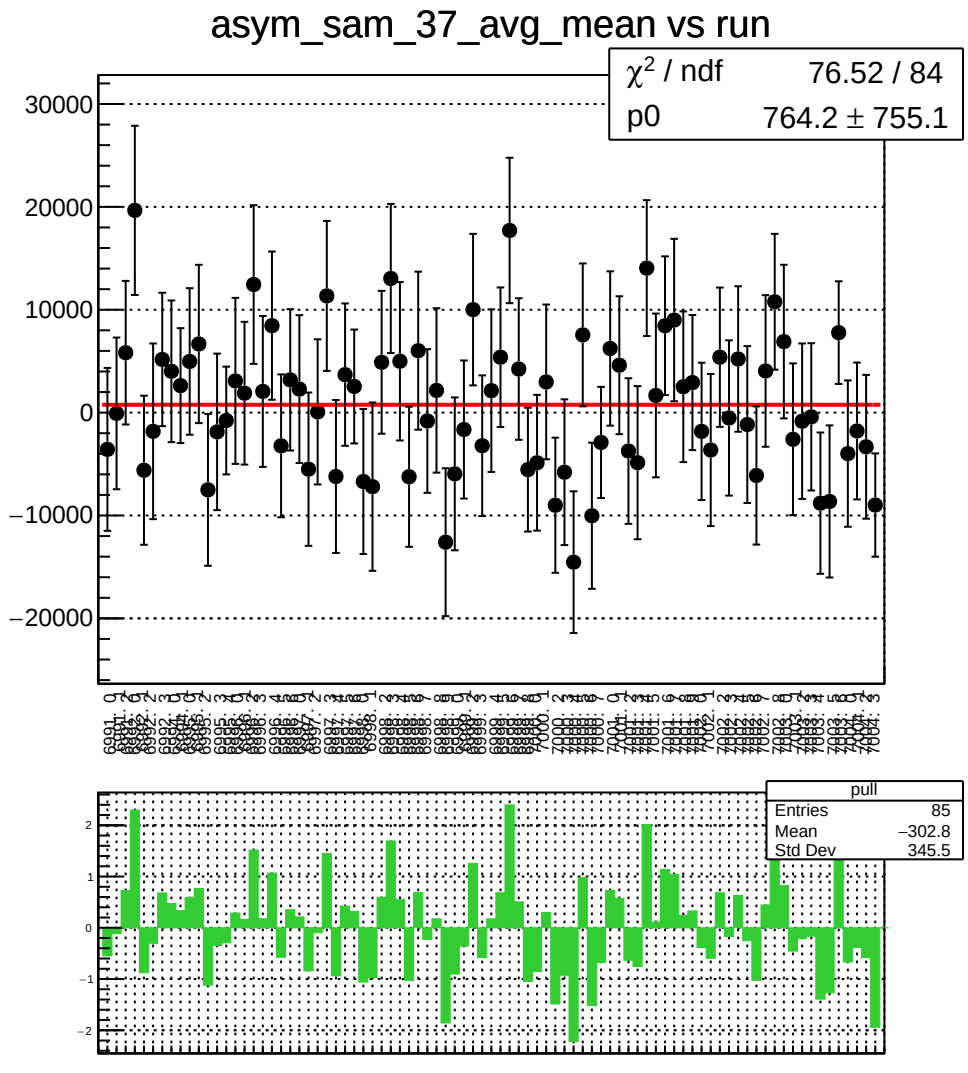

pull1D
Entries 85
Mean −0.02325
Std Dev 0.9385

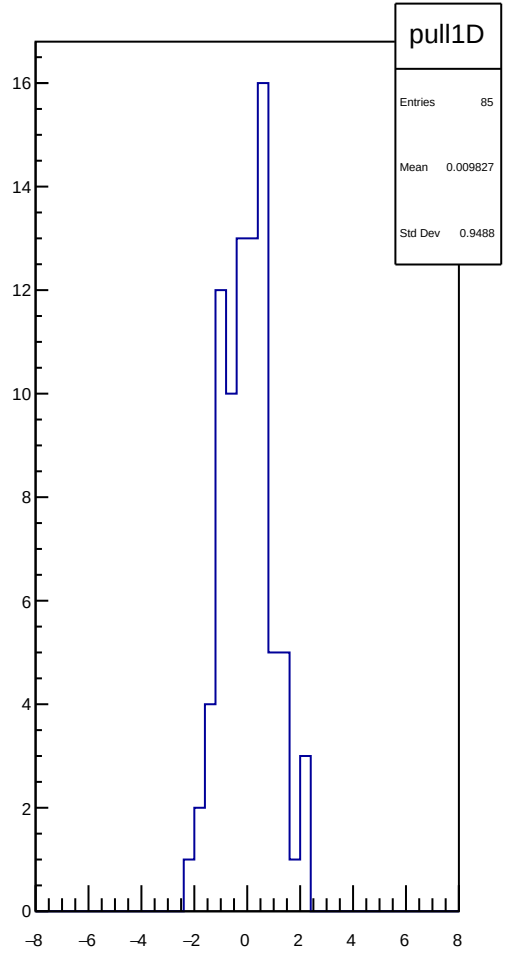

reg_asym_sam_37_avg_rms vs run
χ² / ndf 6995 / 84
p0 62.22 ± 0.04854
80
75
70
65
60
55

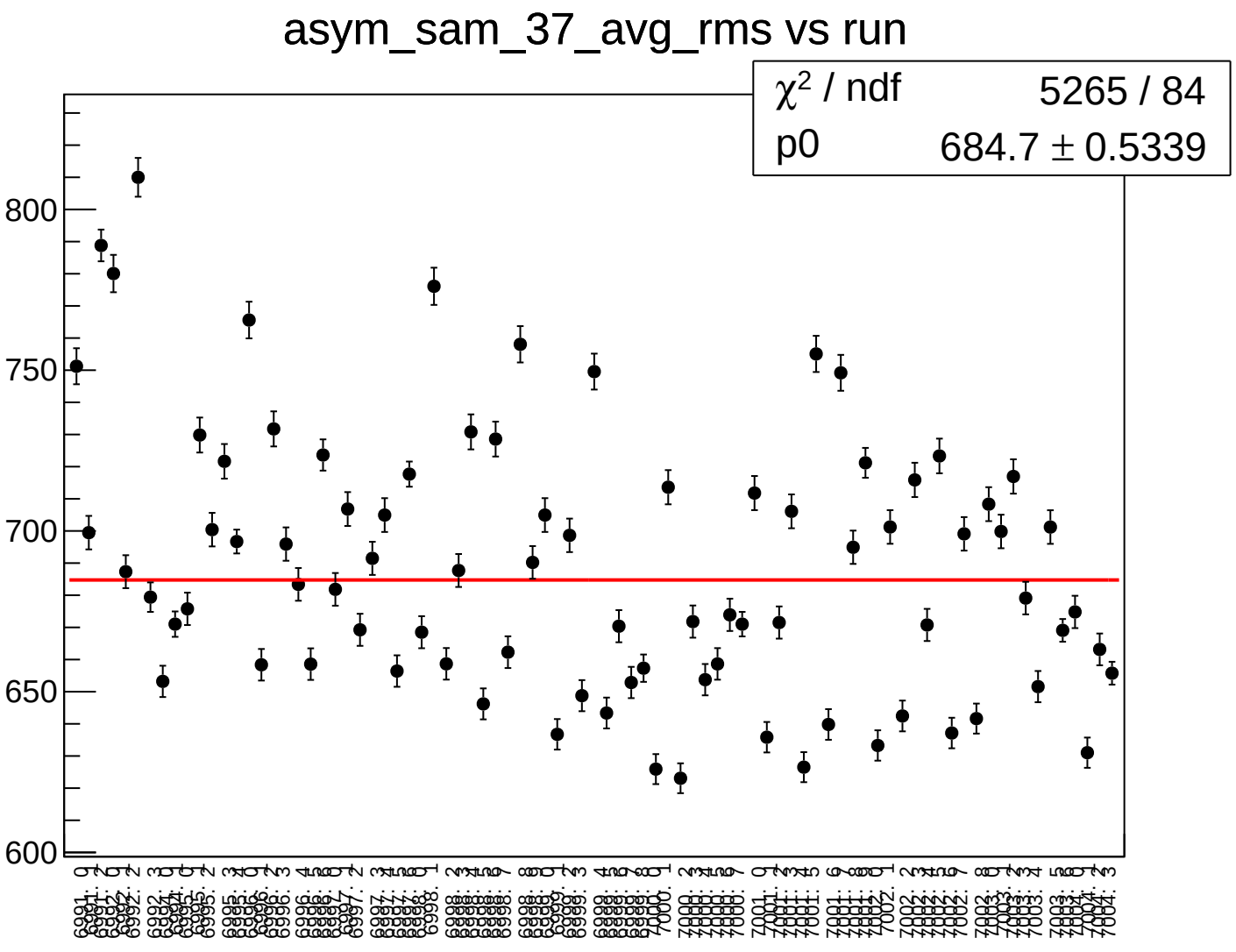

asym_sam_37_avg_correction_mean vs run
χ² / ndf 75.61 / 84
p0 −751.5 ± 752
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −263.5
Std Dev 305.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

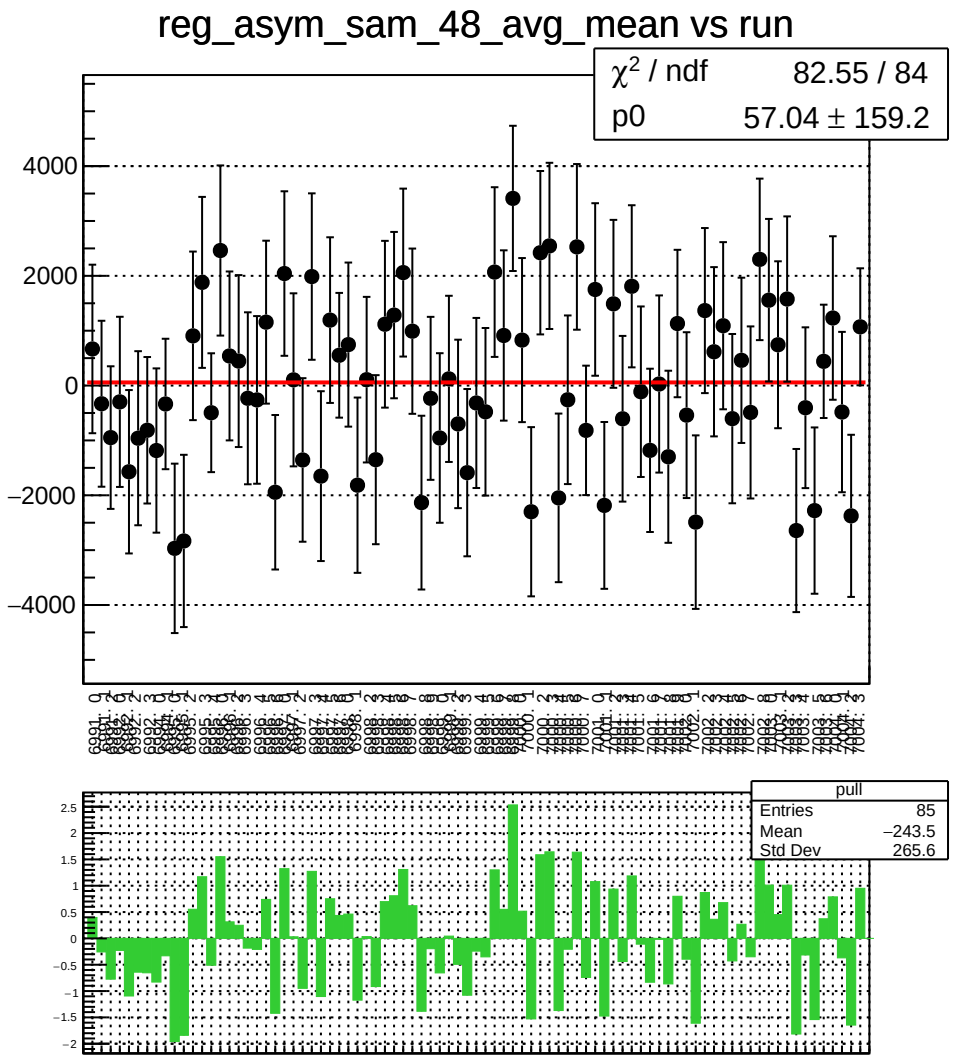

pull1D
Entries 85
Mean −0.01161
Std Dev 0.9431
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

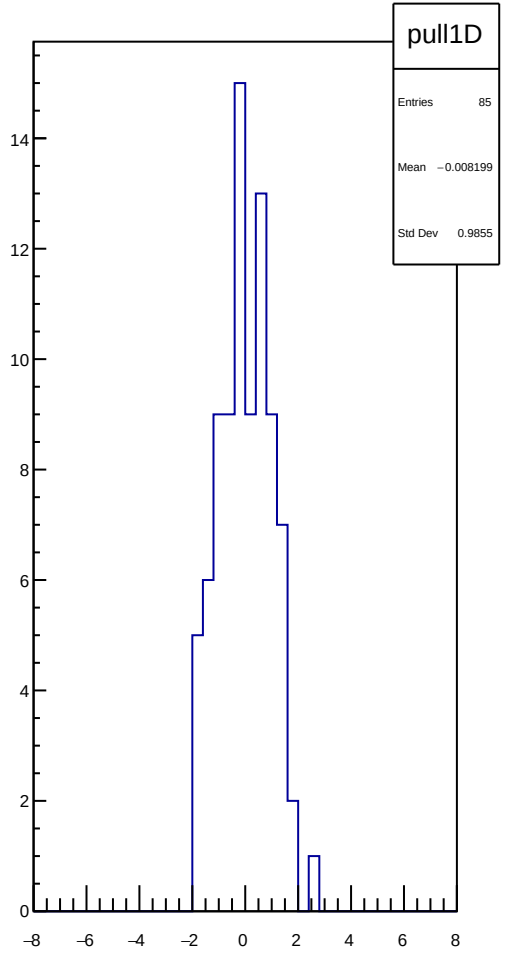

asym_sam_37_avg_correction_rms vs run
χ² / ndf 5270 / 84
p0 681.9 ± 0.5317
800
750
700
650
600

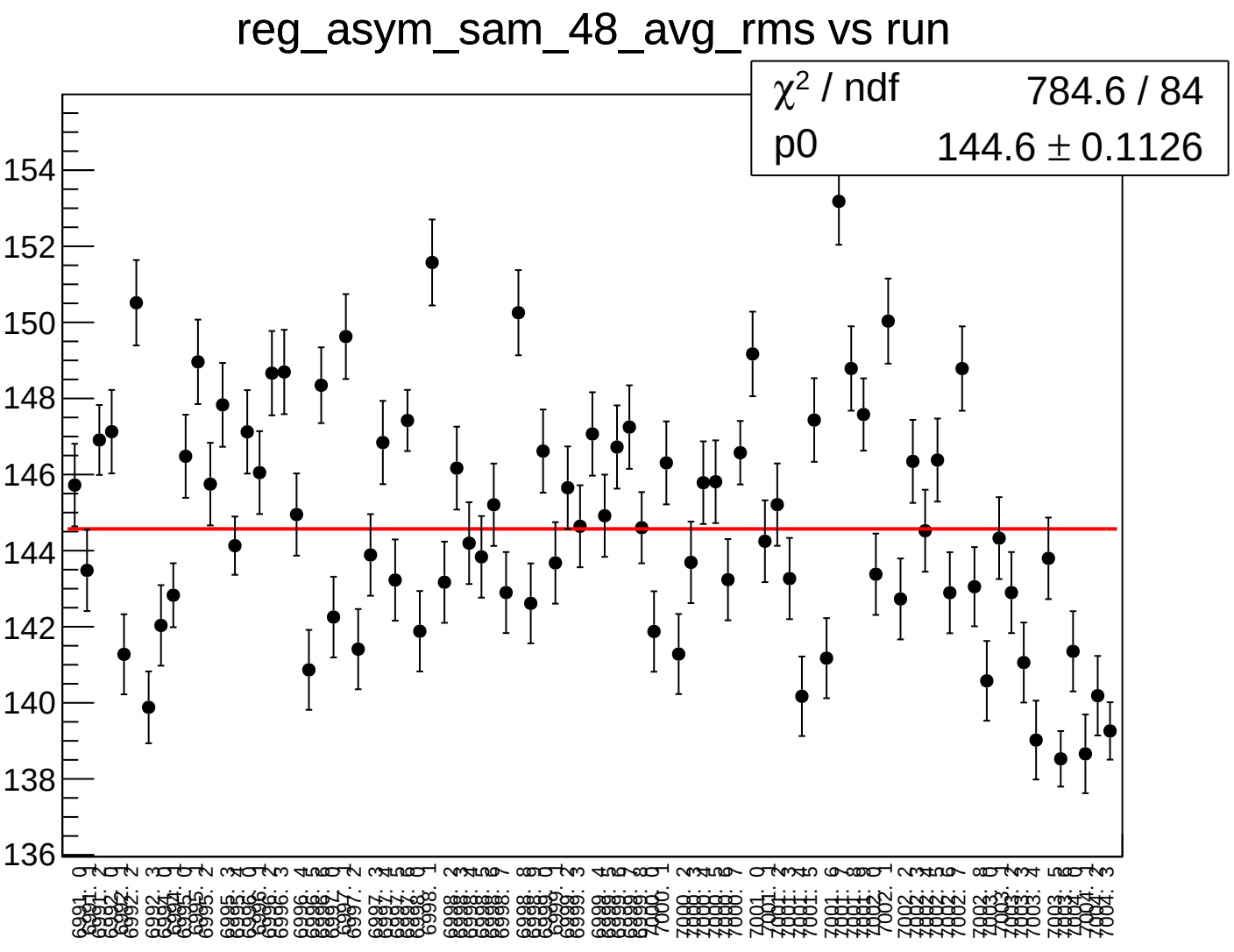

asym_sam_37_avg_mean vs run
χ² / ndf 76.52 / 84
p0 764.2 ± 755.1
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −302.8
Std Dev 345.5
2
1
0
−1
−2

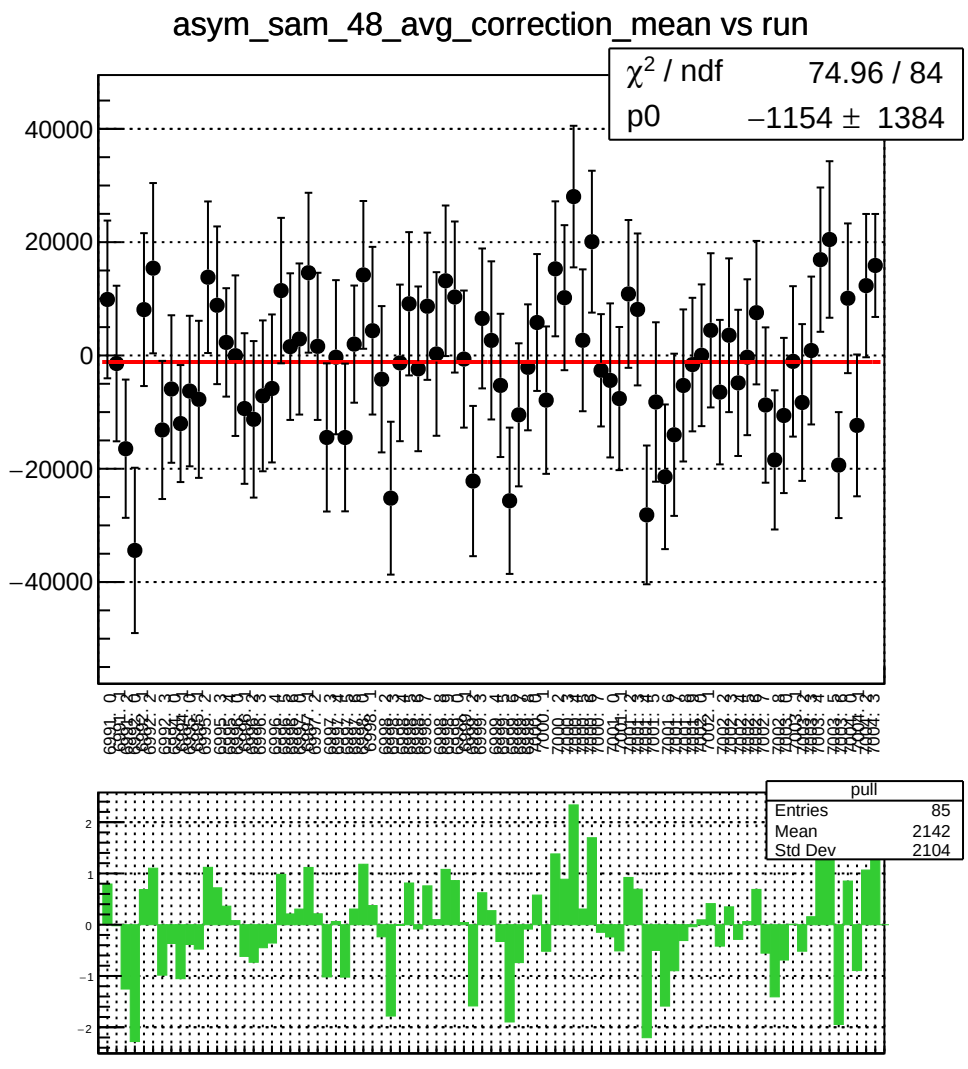

pull1D
Entries 85
Mean 0.009827
Std Dev 0.9488
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

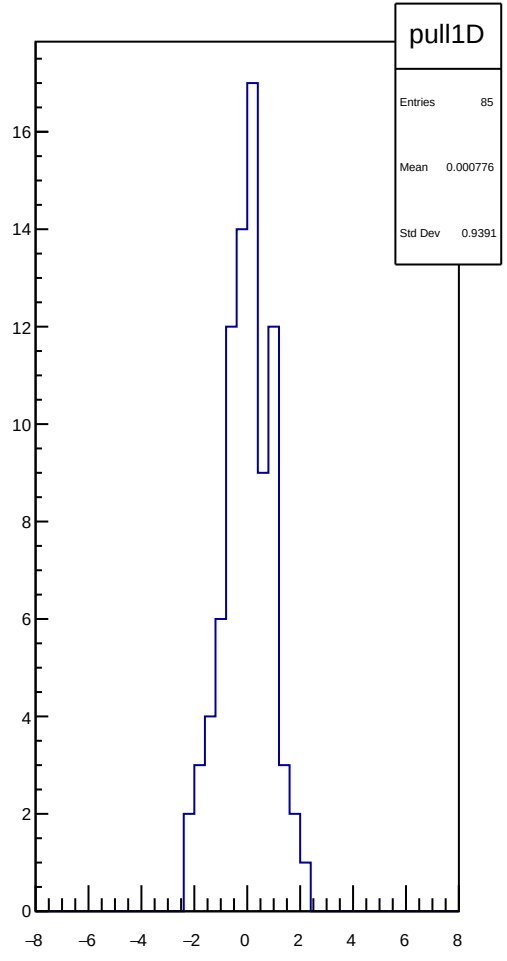

asym_sam_37_avg_rms vs run
χ² / ndf 5265 / 84
p0 684.7 ± 0.5339
800
750
700
650
600

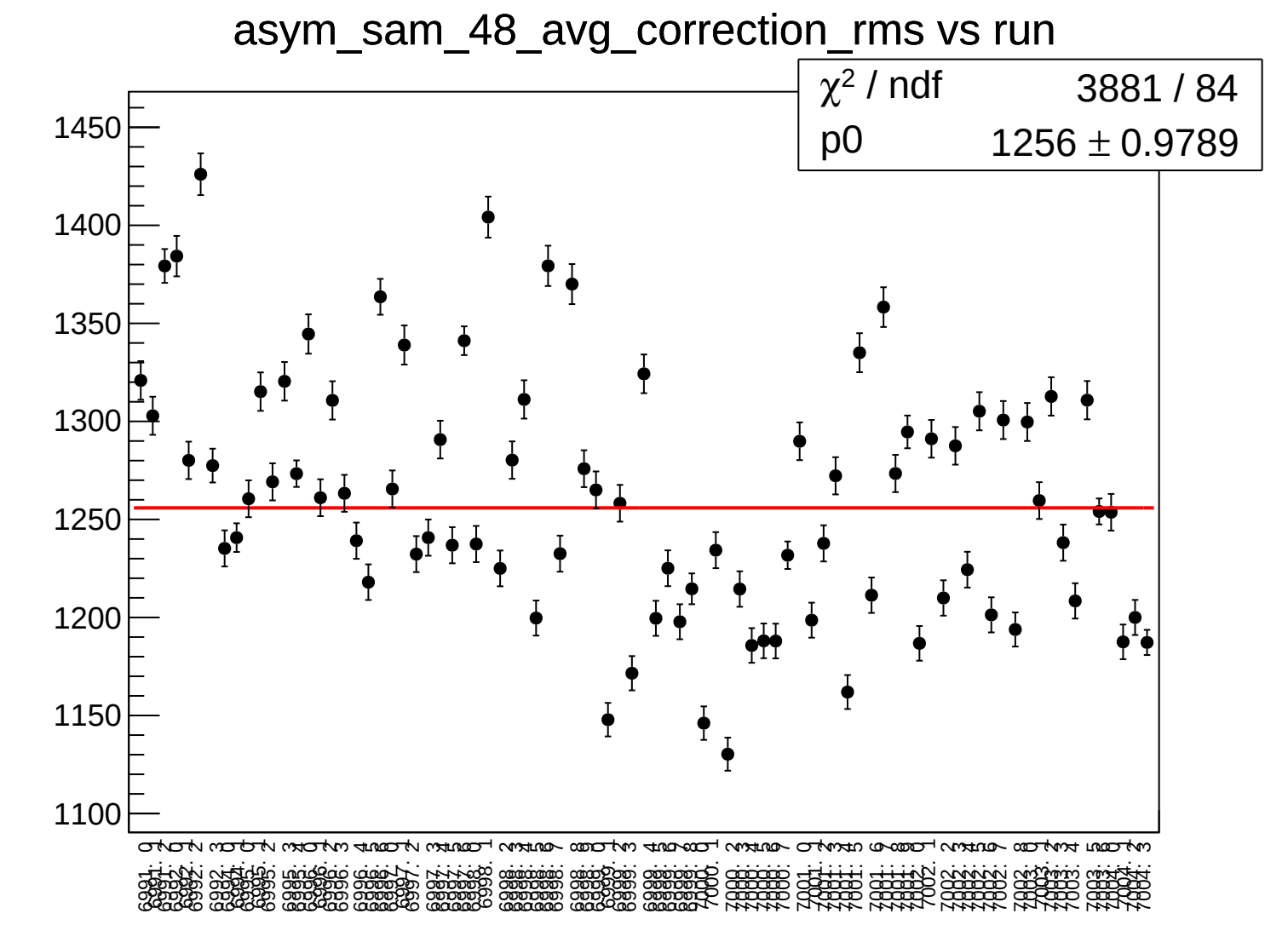

reg_asym_sam_48_avg_mean vs run
χ² / ndf 82.55 / 84
p0 57.04 ± 159.2
4000
2000
0
−2000
−4000
pull
Entries 85
Mean −243.5
Std Dev 265.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

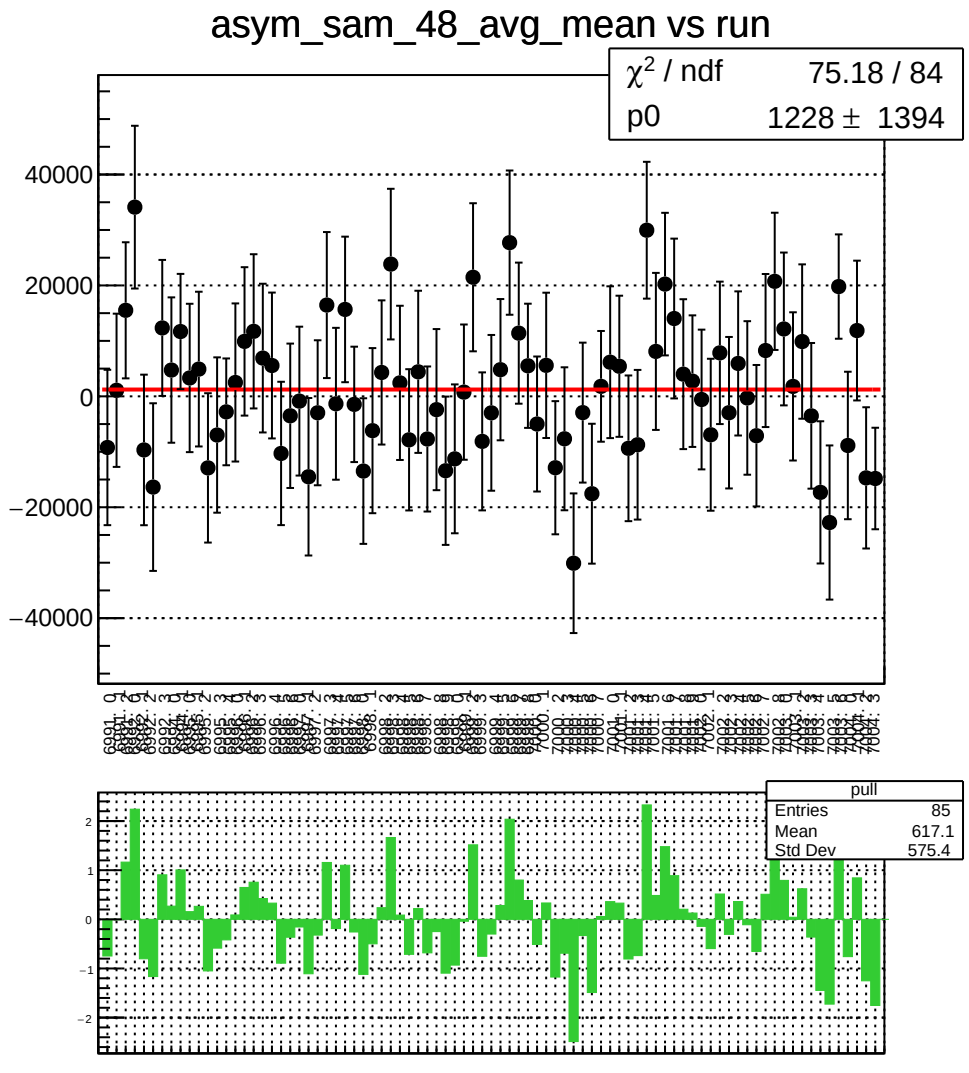

pull1D
Entries 85
Mean −0.008199
Std Dev 0.9855
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

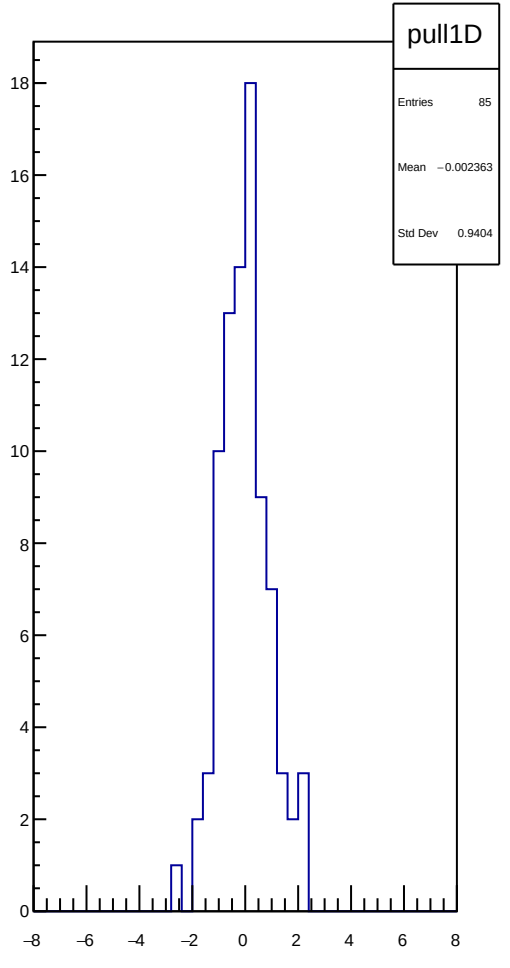

reg_asym_sam_48_avg_rms vs run
χ² / ndf 784.6 / 84
p0 144.6 ± 0.1126
154
152
150
148
146
144
142
140
138
136

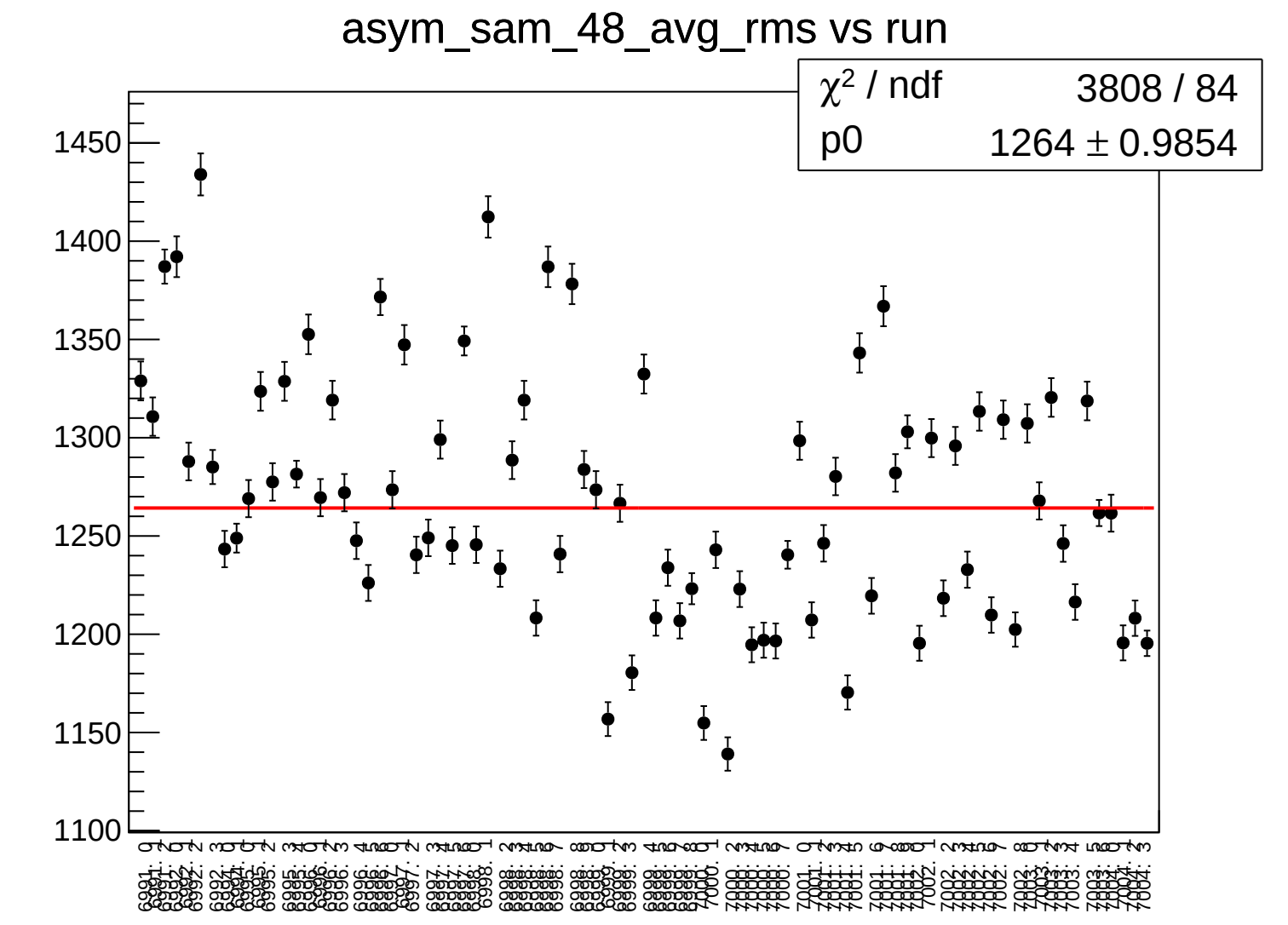

asym_sam_48_avg_correction_mean vs run
χ² / ndf 74.96 / 84
p0 −1154 ± 1384
40000
20000
0
−20000
−40000
pull
Entries 85
Mean 2142
Std Dev 2104
2
1
0
−1
−2

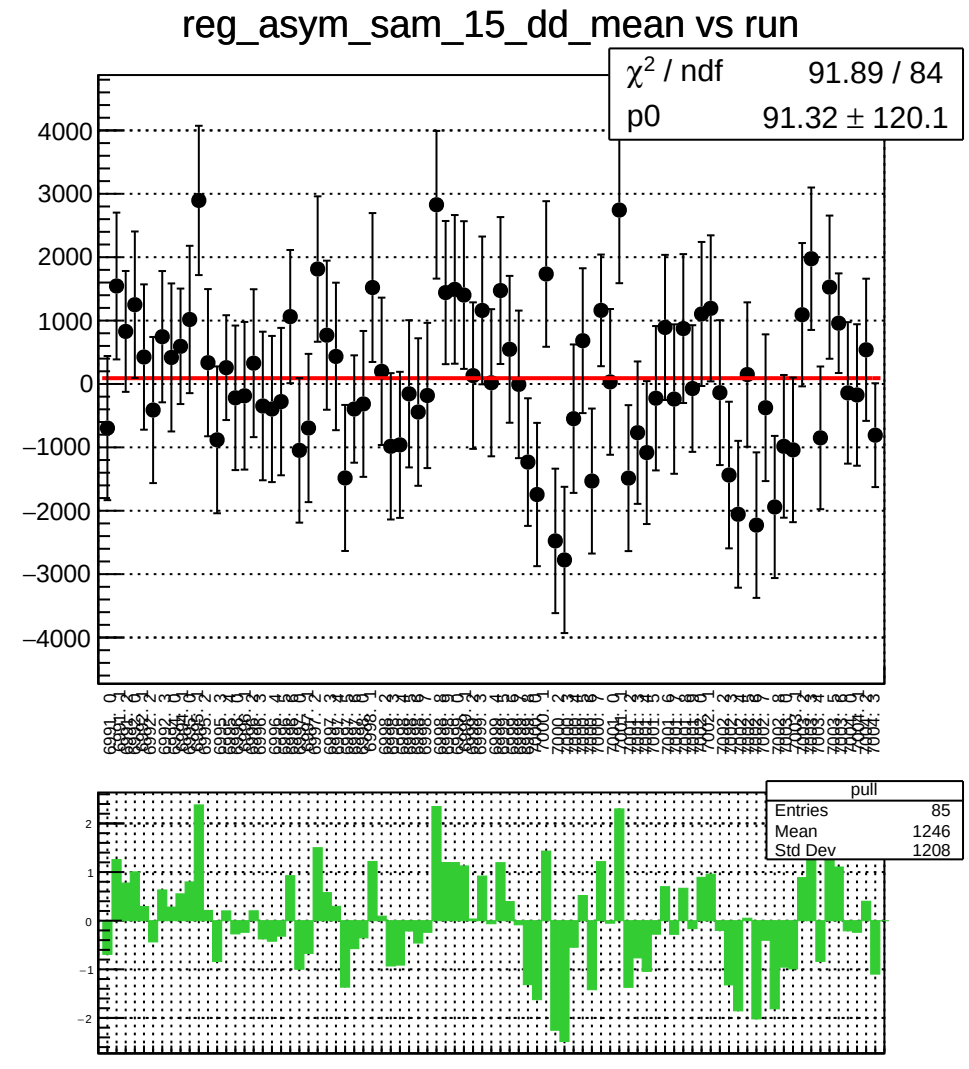

pull1D
Entries 85
Mean 0.000776
Std Dev 0.9391
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

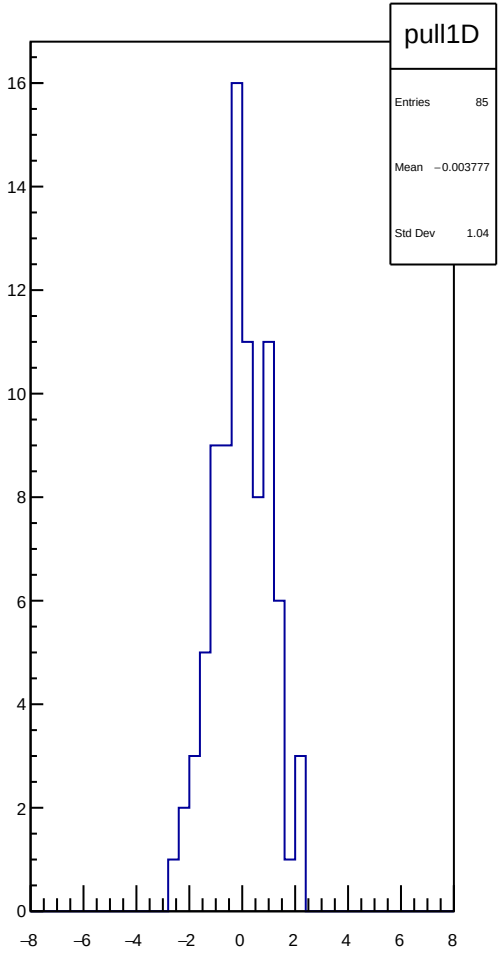

asym_sam_48_avg_correction_rms vs run
χ² / ndf 3881 / 84
p0 1256 ± 0.9789
1450
1400
1350
1300
1250
1200
1150
1100

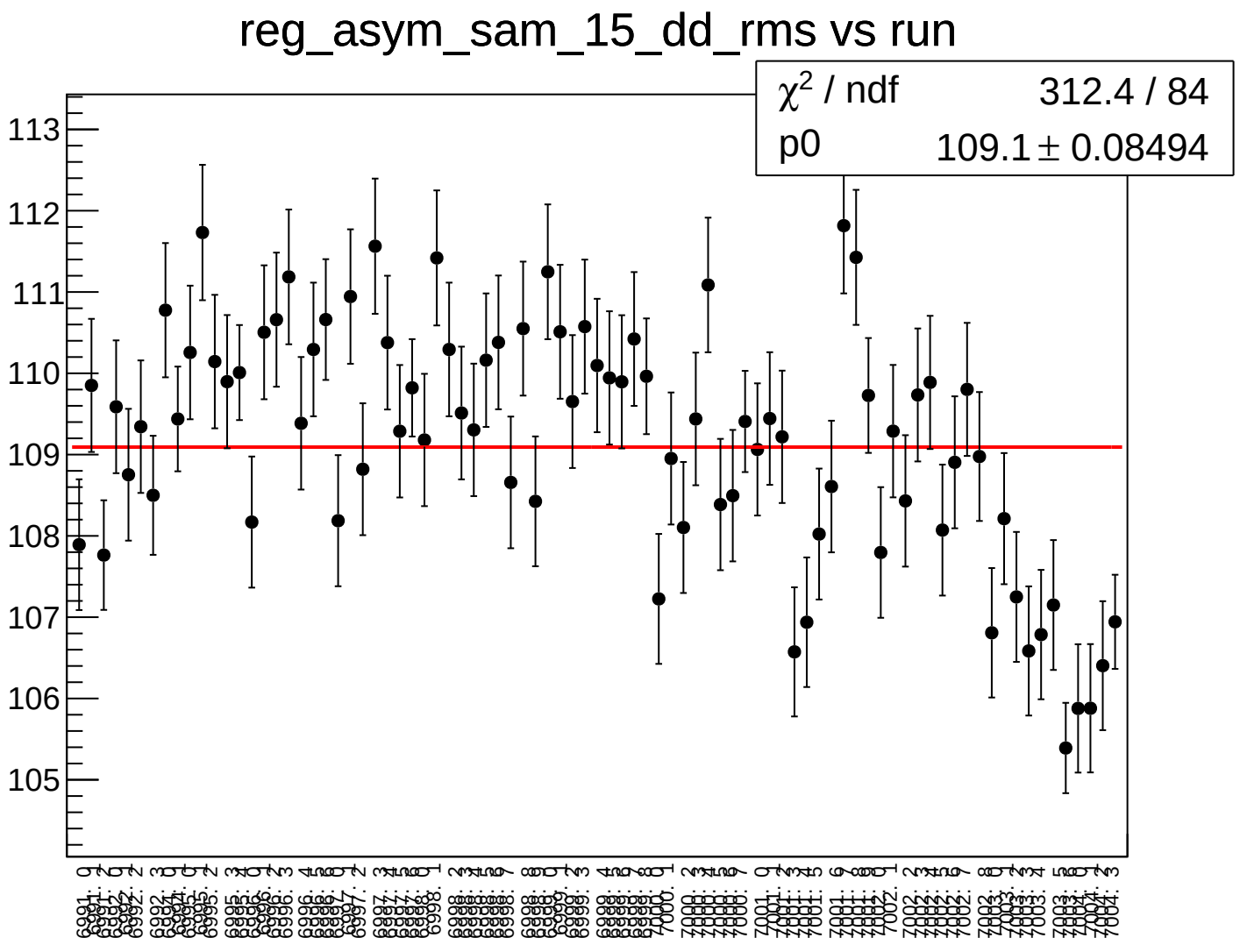

asym_sam_48_avg_mean vs run
χ² / ndf 75.18 / 84
p0 1228 ± 1394
40000
20000
0
−20000
−40000
pull
Entries 85
Mean 617.1
Std Dev 575.4
2
1
0
−1
−2

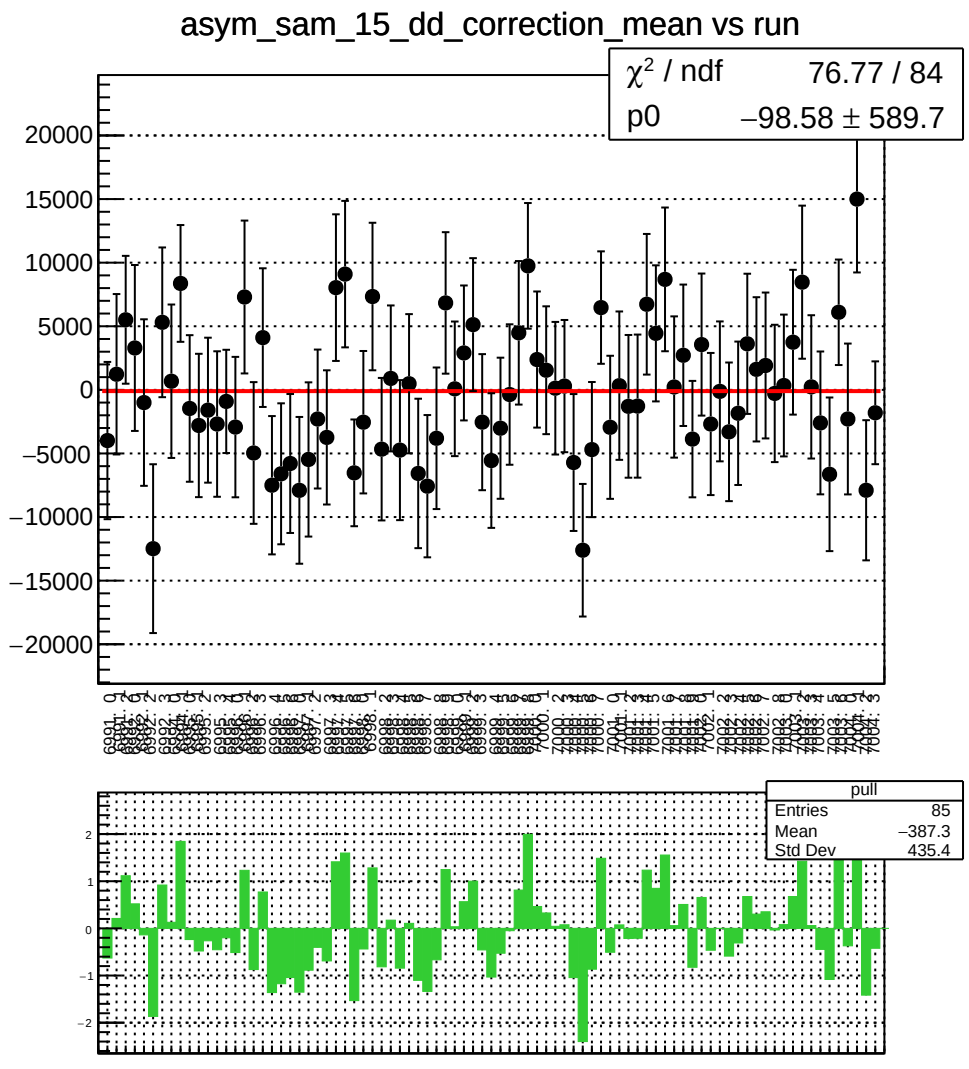

pull1D
Entries 85
Mean −0.002363
Std Dev 0.9404
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

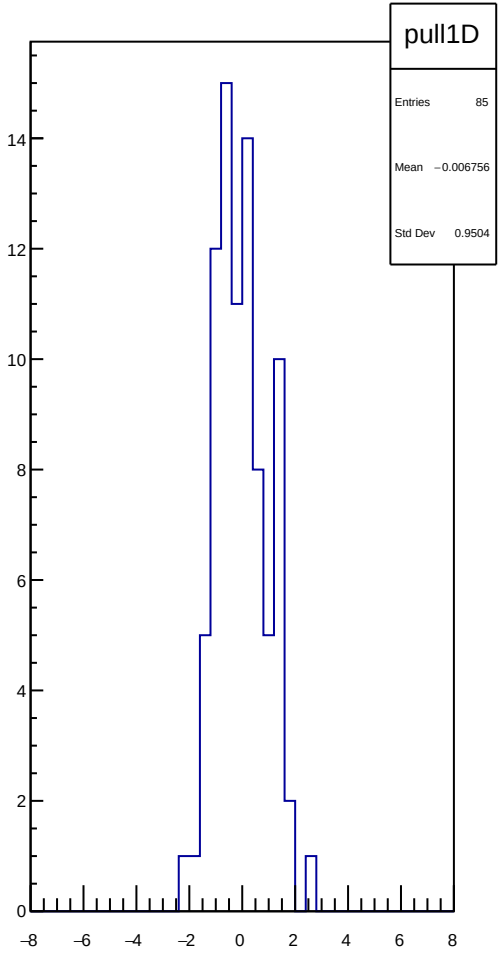

asym_sam_48_avg_rms vs run
χ² / ndf 3808 / 84
p0 1264 ± 0.9854
1450
1400
1350
1300
1250
1200
1150
1100

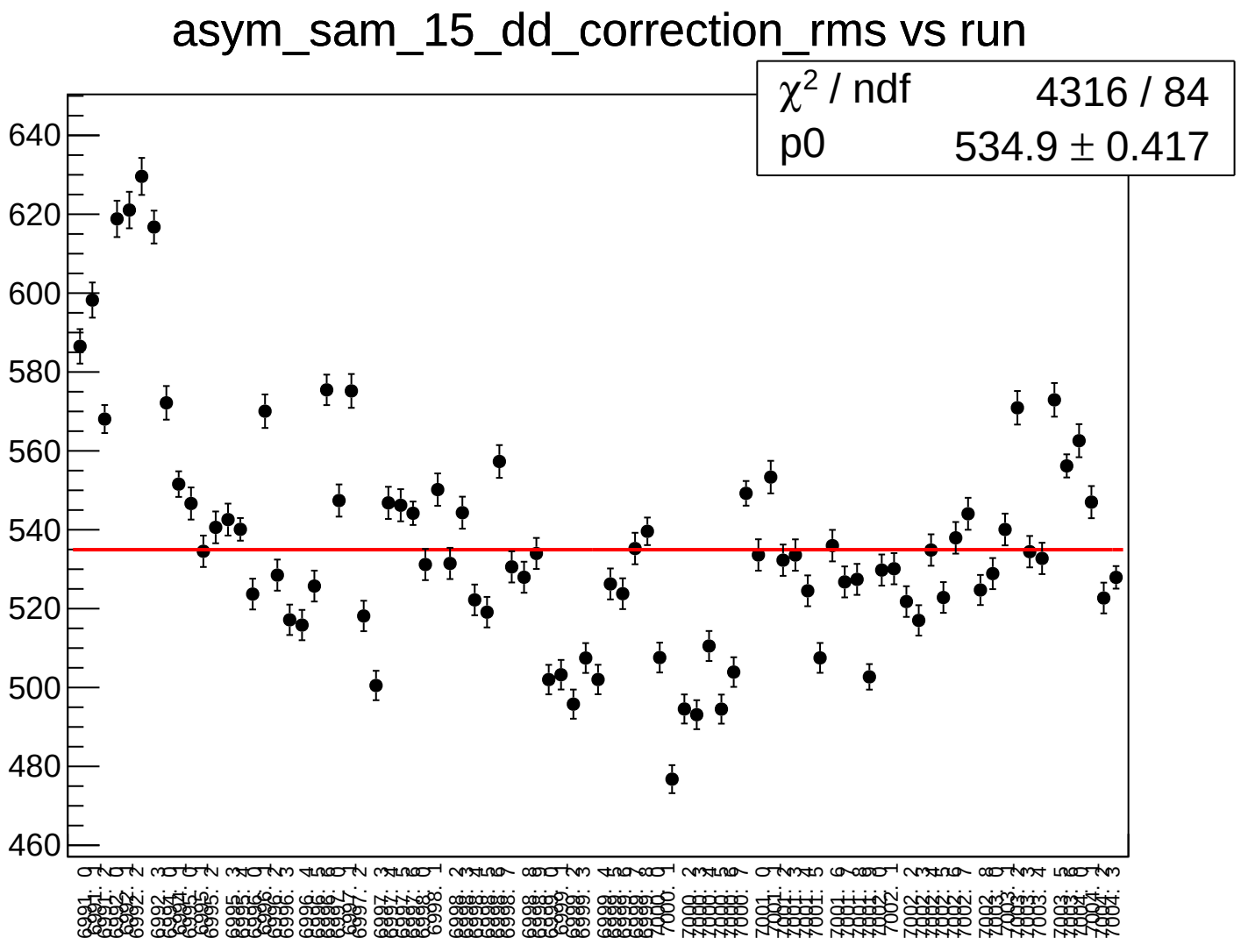

reg_asym_sam_15_dd_mean vs run
χ² / ndf 91.89 / 84
p0 91.32 ± 120.1
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 85
Mean 1246
Std Dev 1208
2
1
0
−1
−2

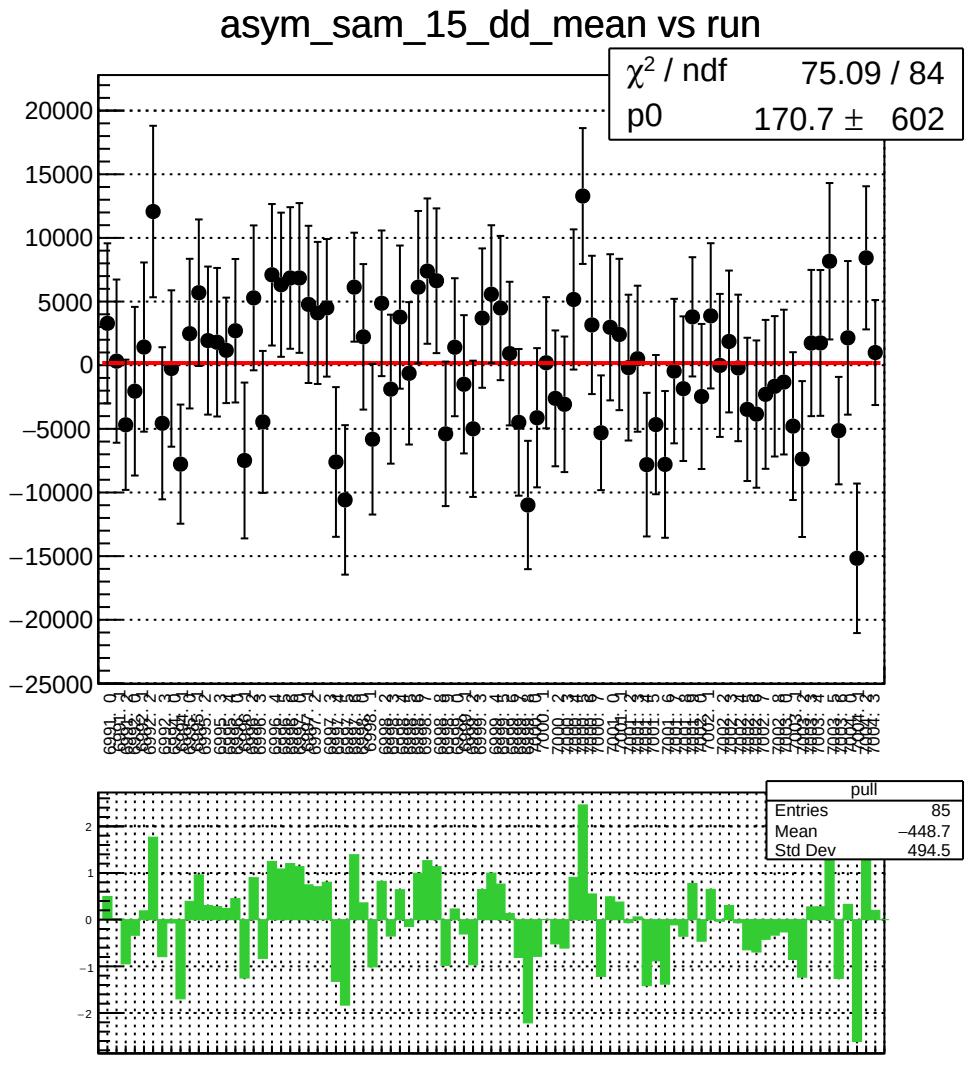

pull1D
Entries 85
Mean −0.003777
Std Dev 1.04
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

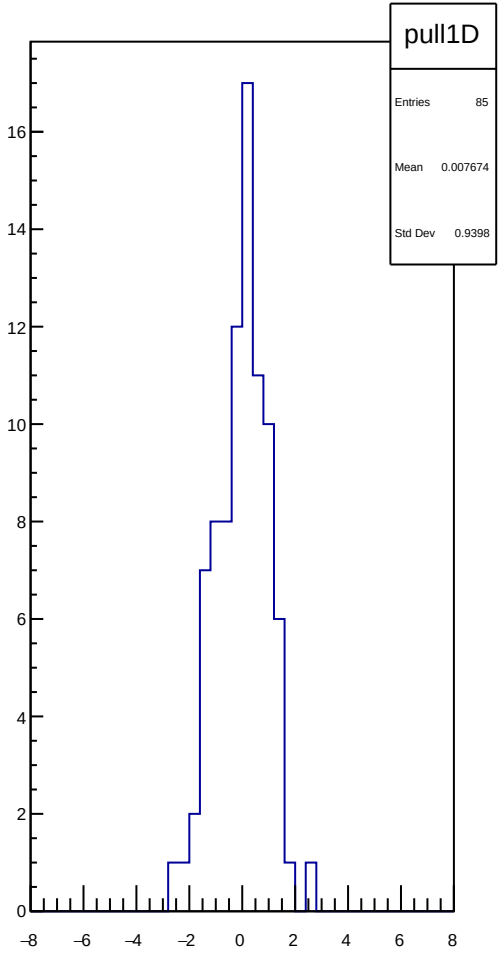

reg_asym_sam_15_dd_rms vs run
χ^2 / ndf 312.4 / 84
p0 109.1 ± 0.08494
113
112
111
110
109
108
107
106
105

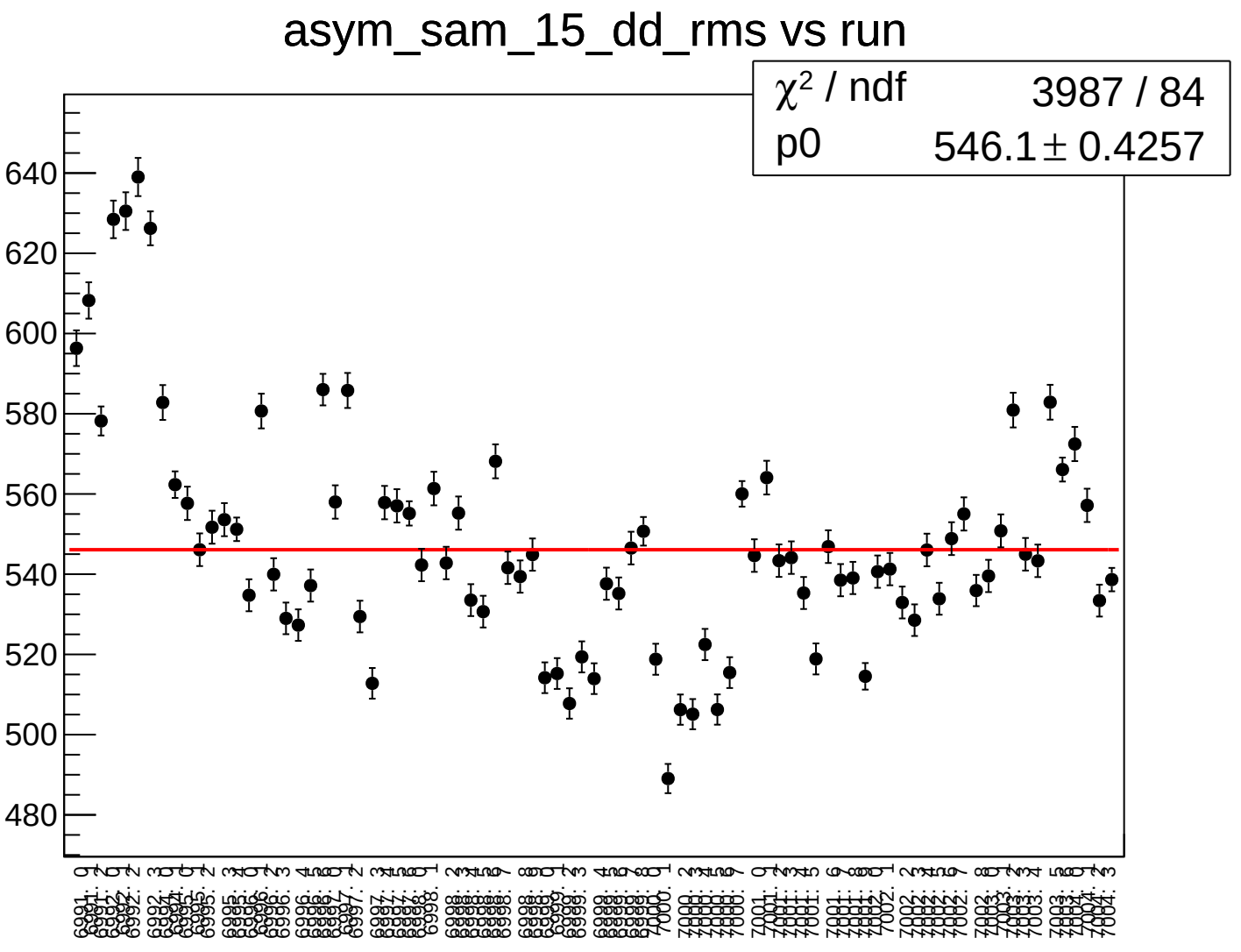

asym_sam_15_dd_correction_mean vs run
χ² / ndf 76.77 / 84
p0 −98.58 ± 589.7
pull
Entries 85
Mean −387.3
Std Dev 435.4

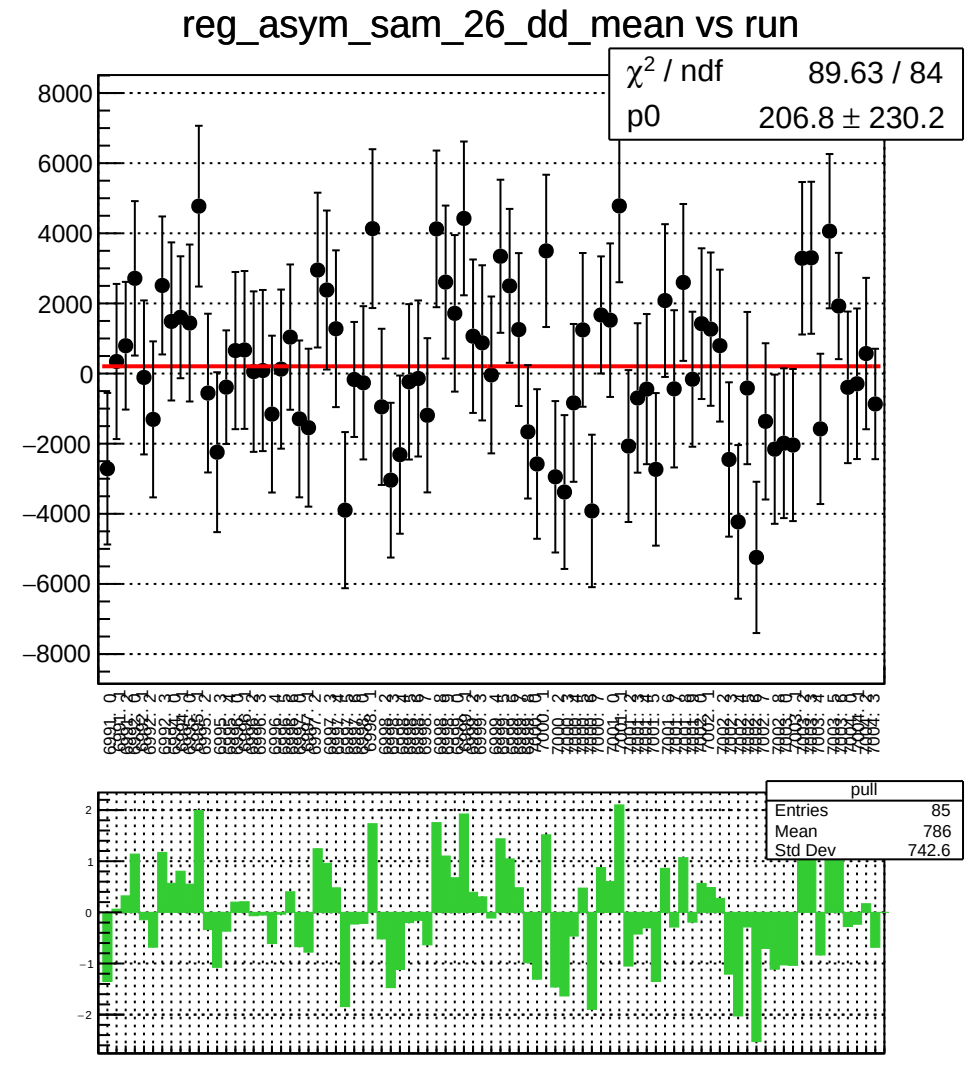

pull1D
Entries 85
Mean −0.006756
Std Dev 0.9504

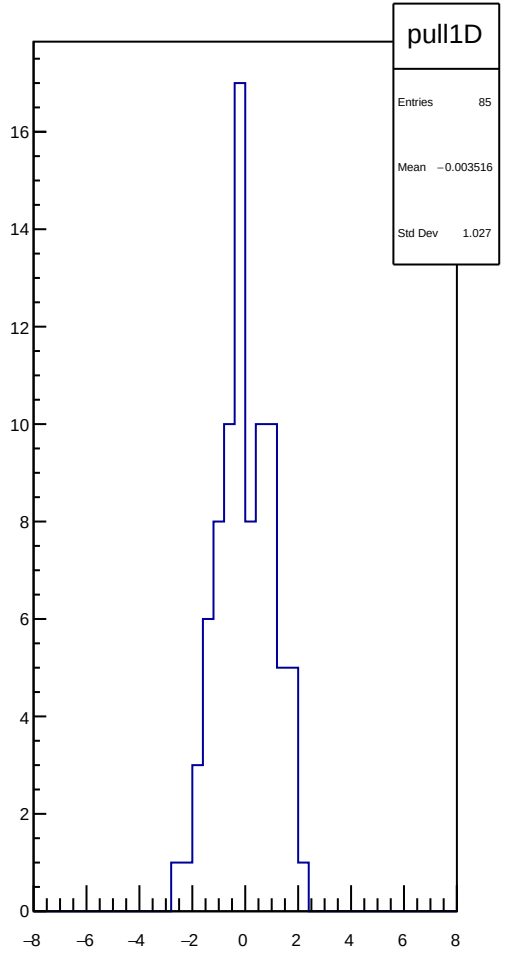

asym_sam_15_dd_correction_rms vs run
χ² / ndf 4316 / 84
p0 534.9 ± 0.417
640
620
600
580
560
540
520
500
480
460

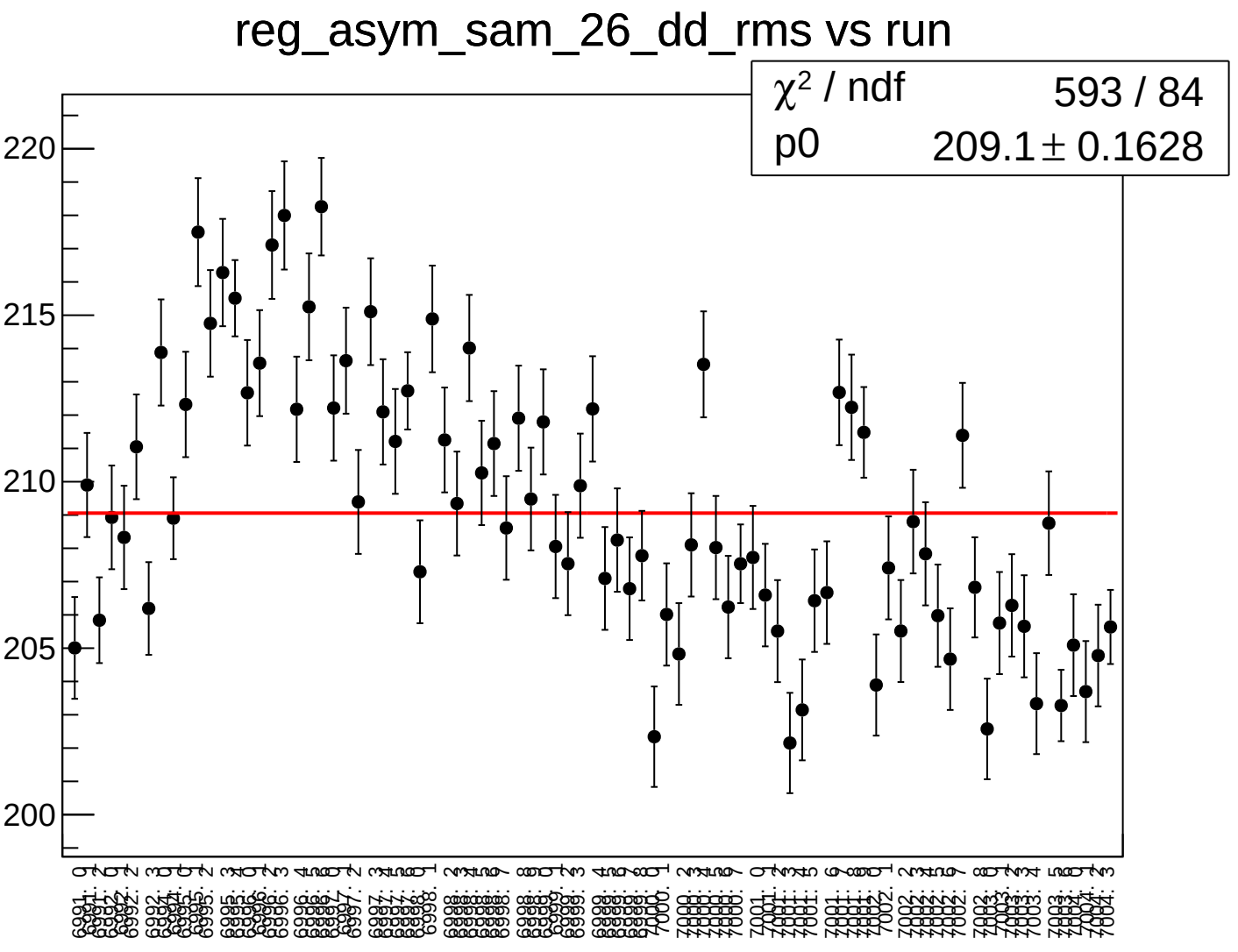

asym_sam_15_dd_mean vs run
χ² / ndf 75.09 / 84
p0 170.7 ± 602
pull
Entries 85
Mean −448.7
Std Dev 494.5

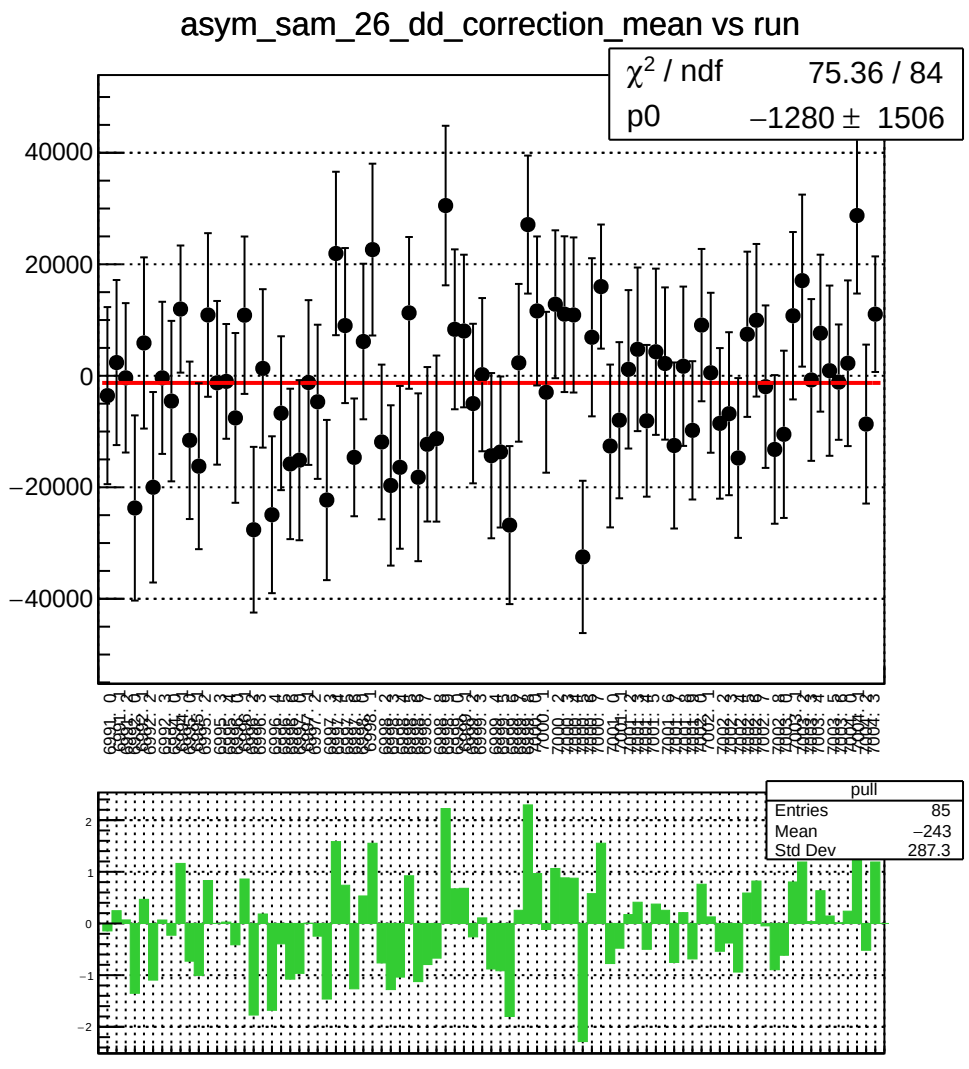

pull1D
Entries 85
Mean 0.007674
Std Dev 0.9398

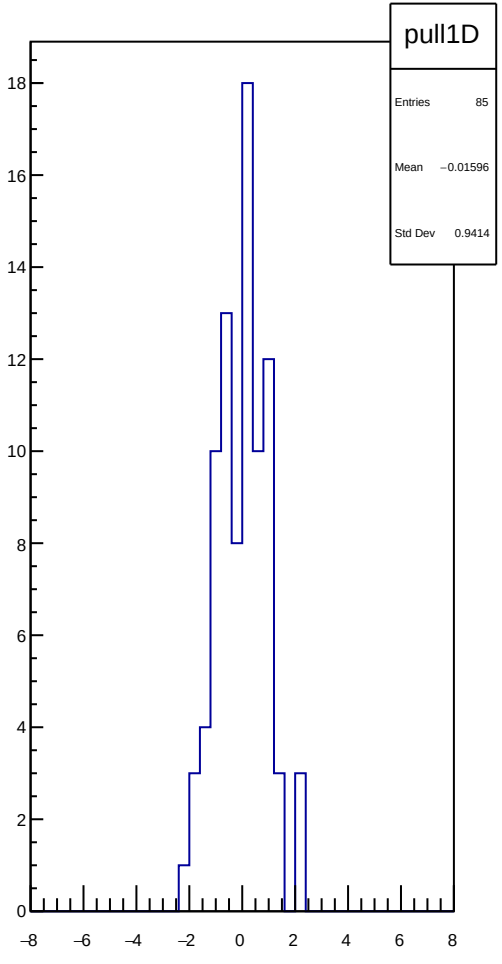

asym_sam_15_dd_rms vs run
χ² / ndf 3987 / 84
p0 546.1 ± 0.4257
640
620
600
580
560
540
520
500
480

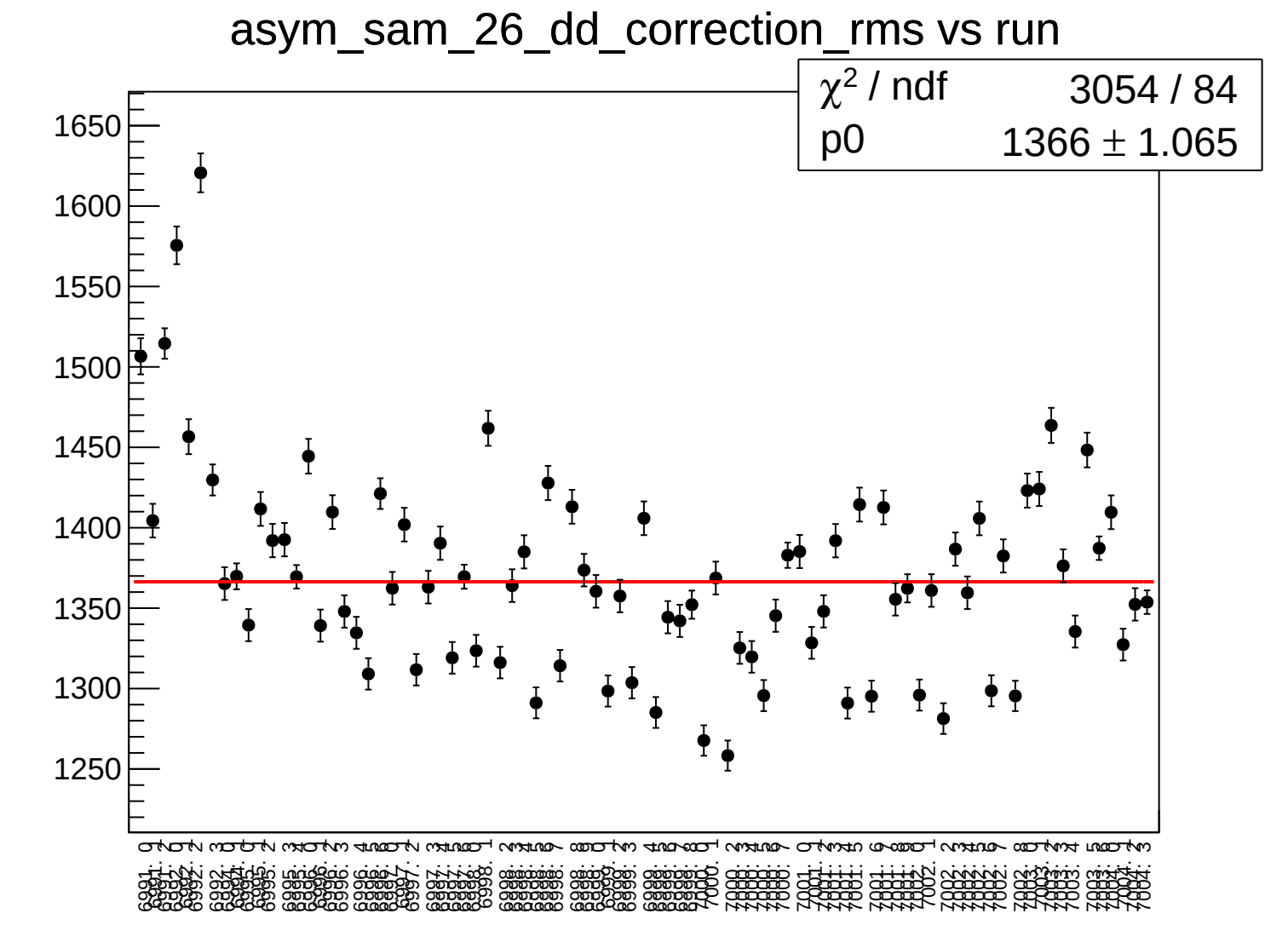

reg_asym_sam_26_dd_mean vs run
χ² / ndf 89.63 / 84
p0 206.8 ± 230.2
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 786
Std Dev 742.6
2
1
0
−1
−2

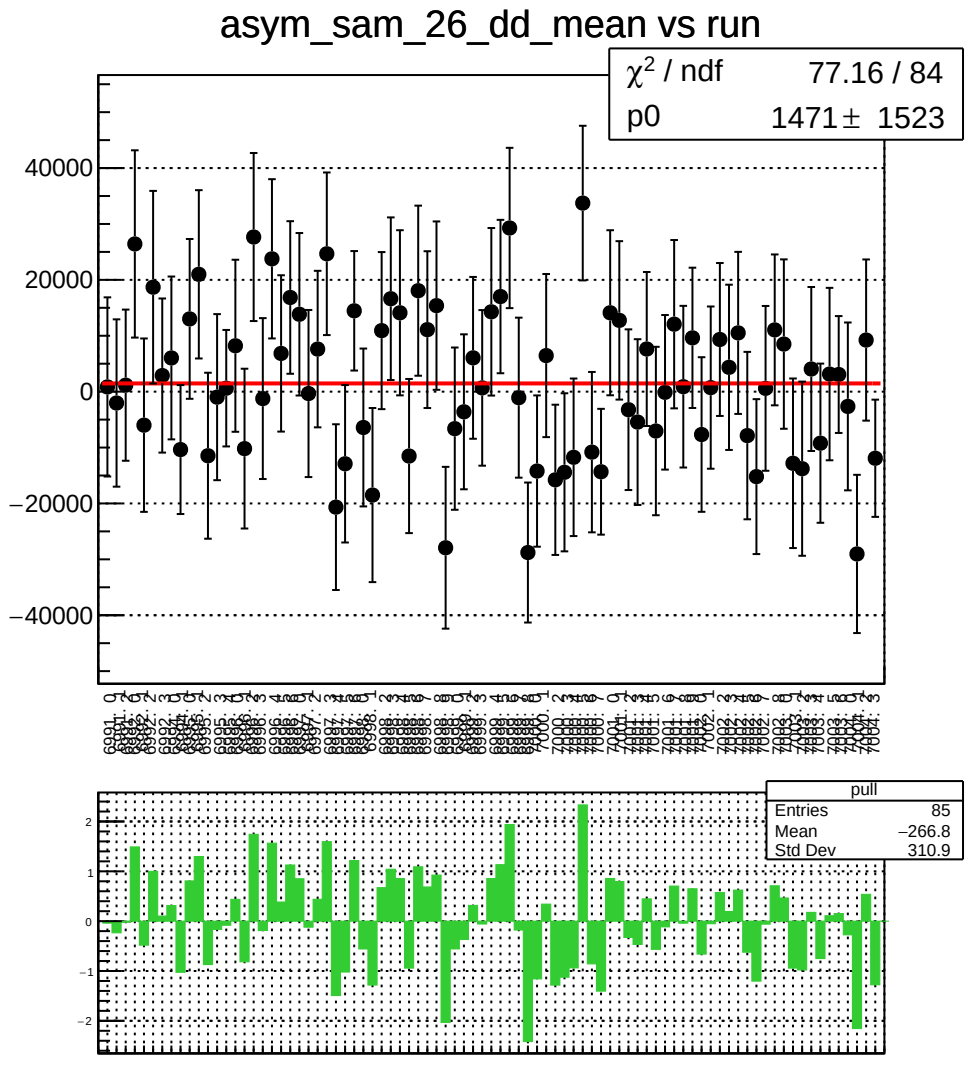

pull1D
Entries 85
Mean −0.003516
Std Dev 1.027
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

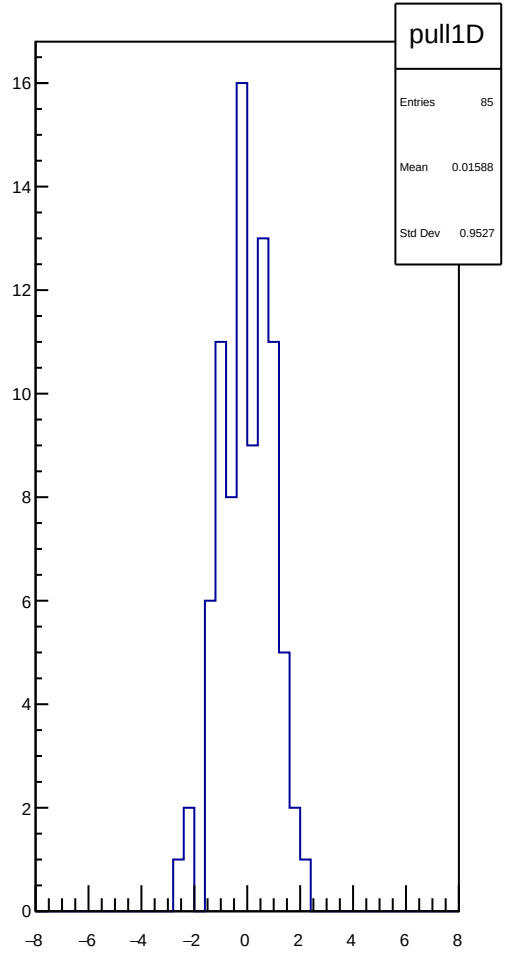

reg_asym_sam_26_dd_rms vs run
χ² / ndf 593 / 84
p0 209.1 ± 0.1628
220
215
210
205
200

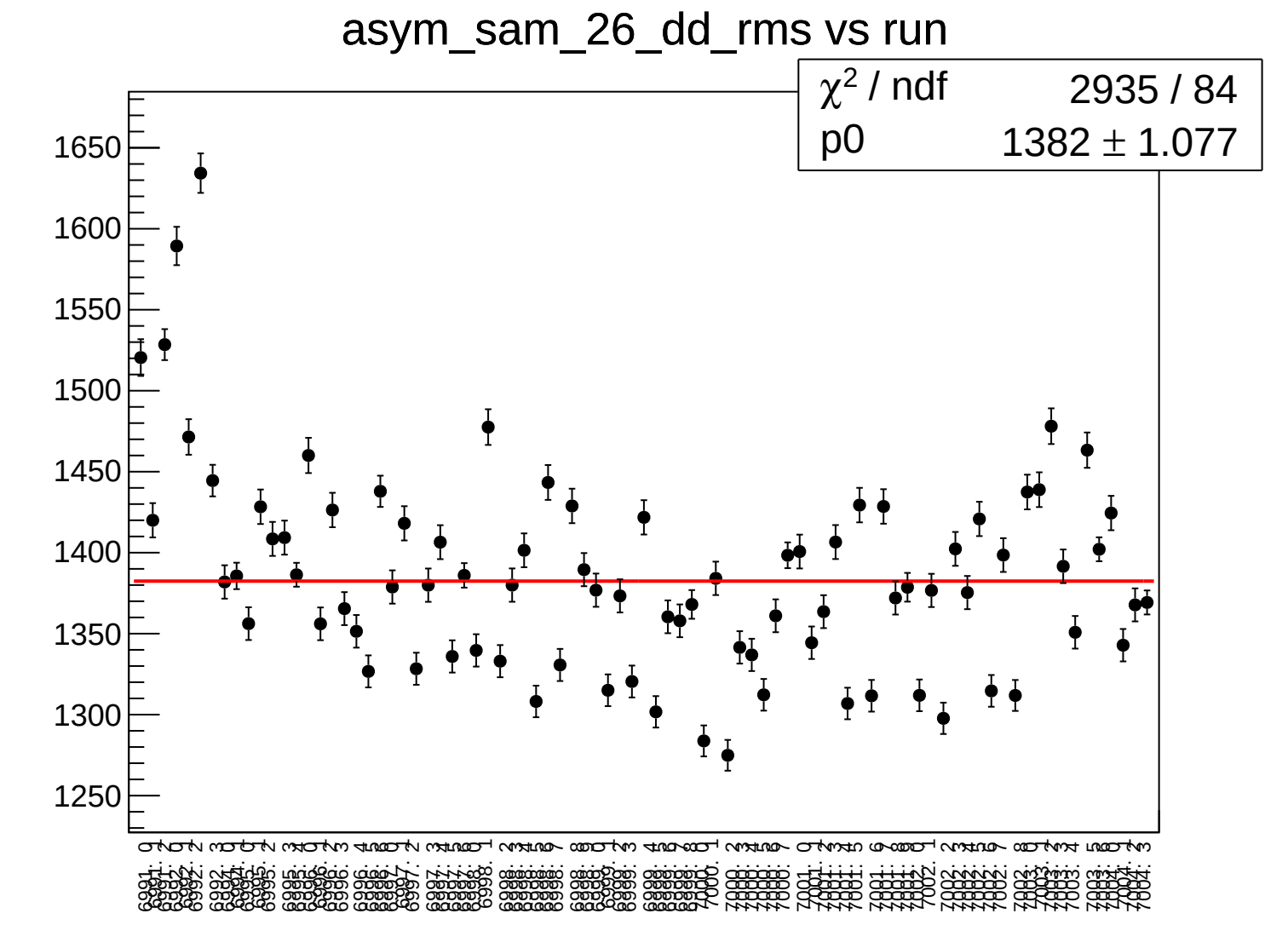

asym_sam_26_dd_correction_mean vs run
χ² / ndf 75.36 / 84
p0 −1280 ± 1506
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −243
Std Dev 287.3
2
1
0
−1
−2

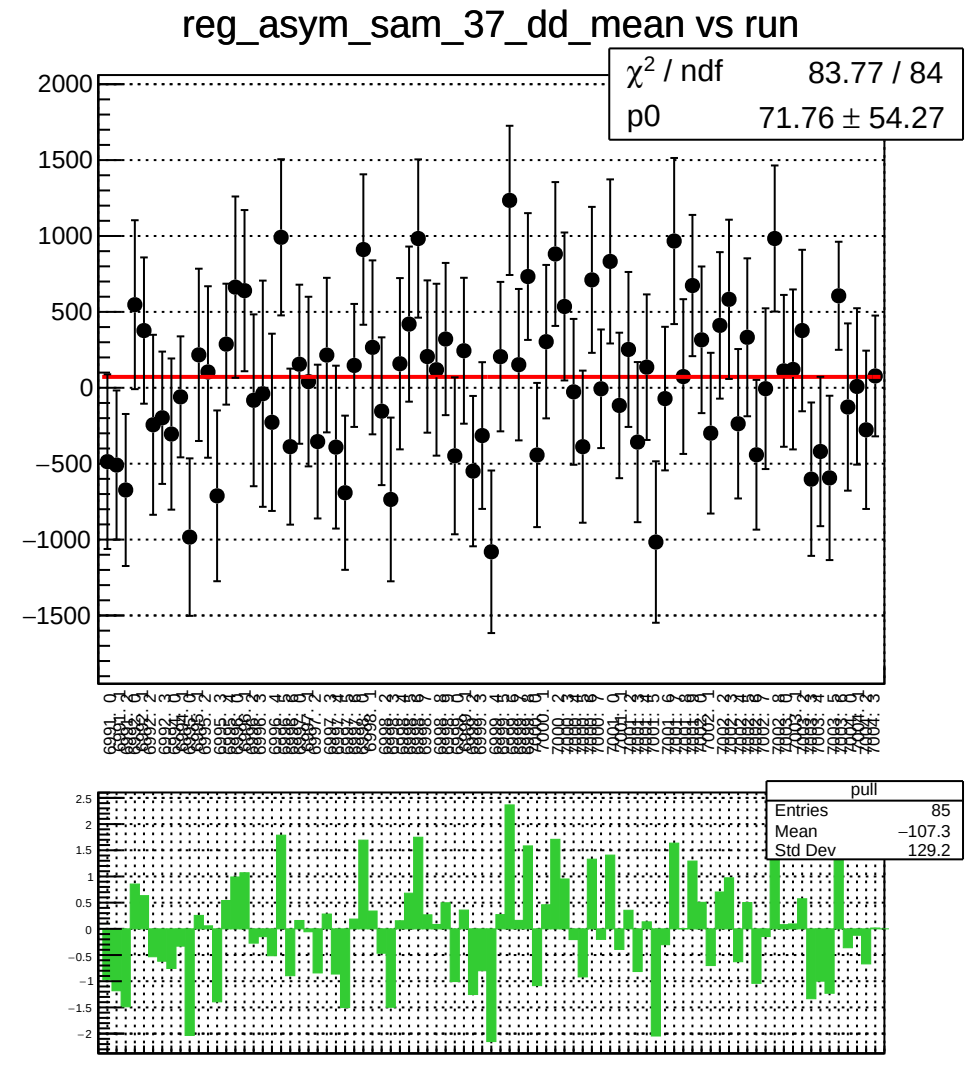

pull1D
Entries 85
Mean −0.01596
Std Dev 0.9414
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

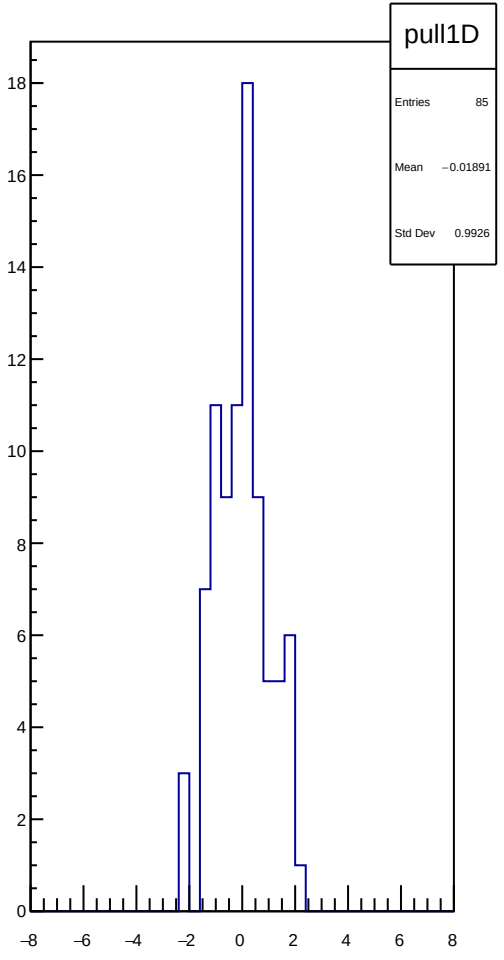

asym_sam_26_dd_correction_rms vs run
χ² / ndf 3054 / 84
p0 1366 ± 1.065
1650
1600
1550
1500
1450
1400
1350
1300
1250

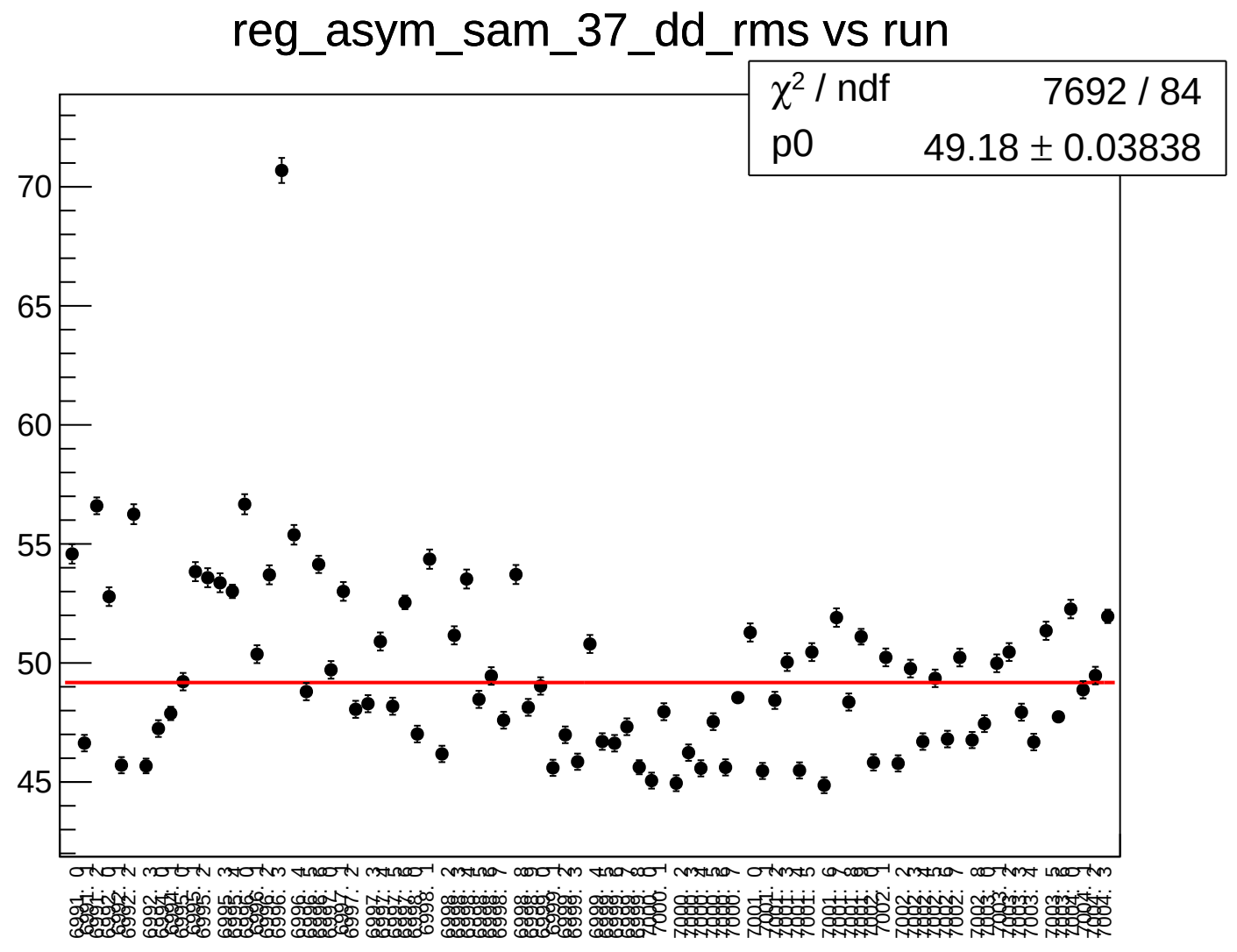

asym_sam_26_dd_mean vs run
χ² / ndf 77.16 / 84
p0 1471 ± 1523
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −266.8
Std Dev 310.9
2
1
0
−1
−2

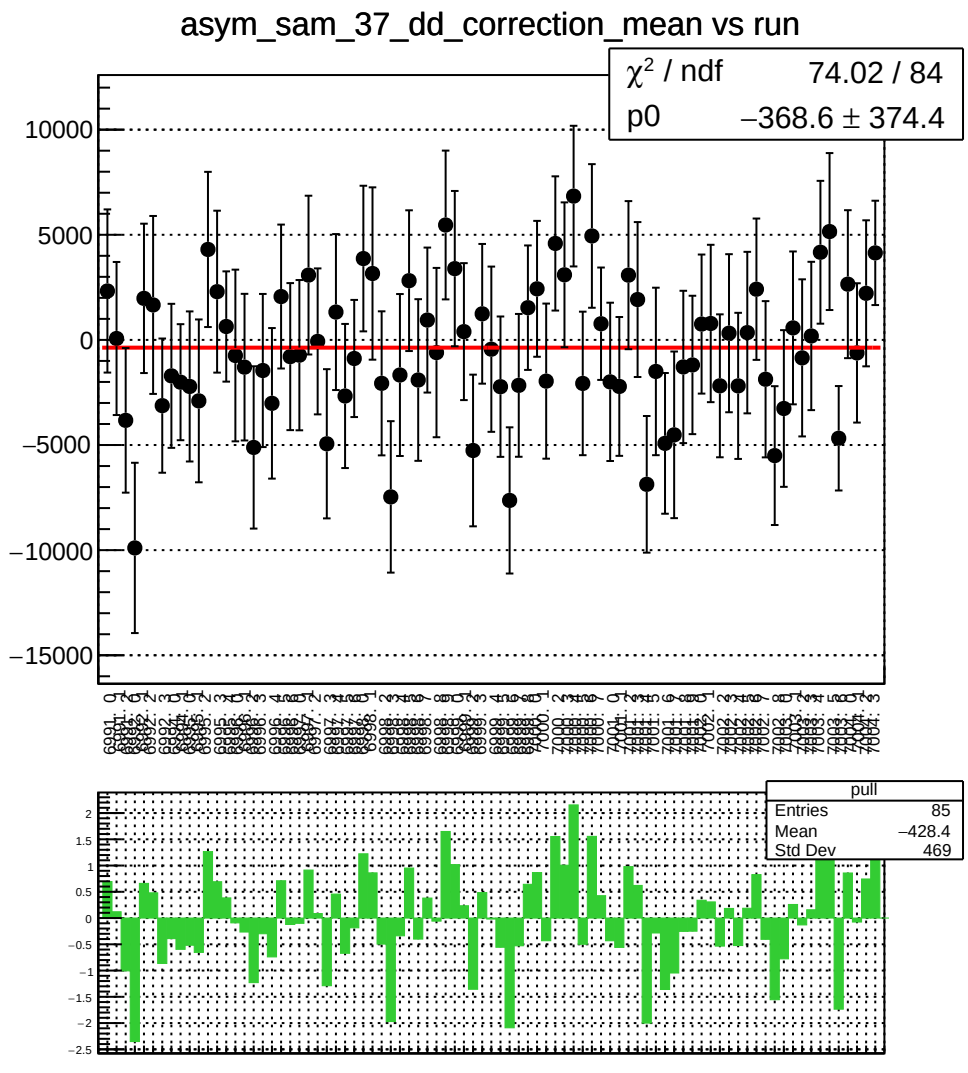

pull1D
Entries 85
Mean 0.01588
Std Dev 0.9527
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

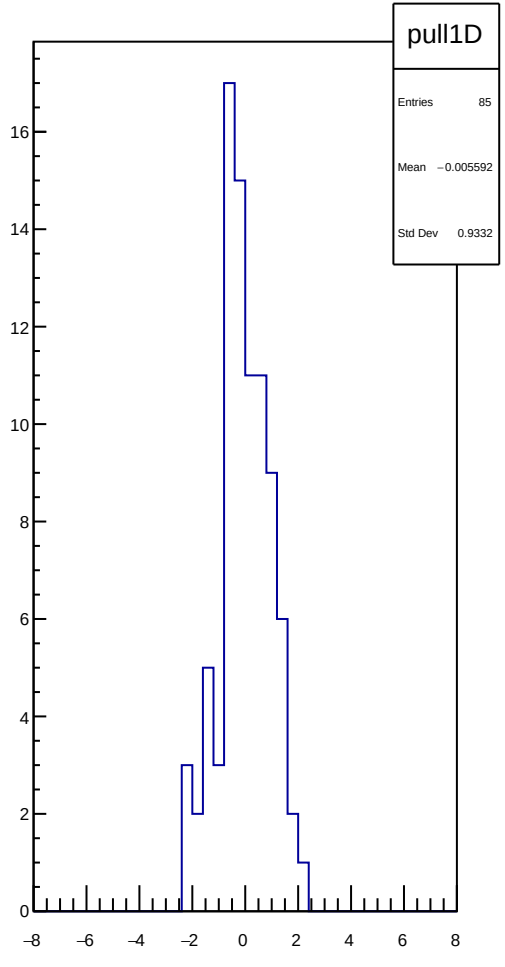

asym_sam_26_dd_rms vs run
χ² / ndf 2935 / 84
p0 1382 ± 1.077
1650
1600
1550
1500
1450
1400
1350
1300
1250

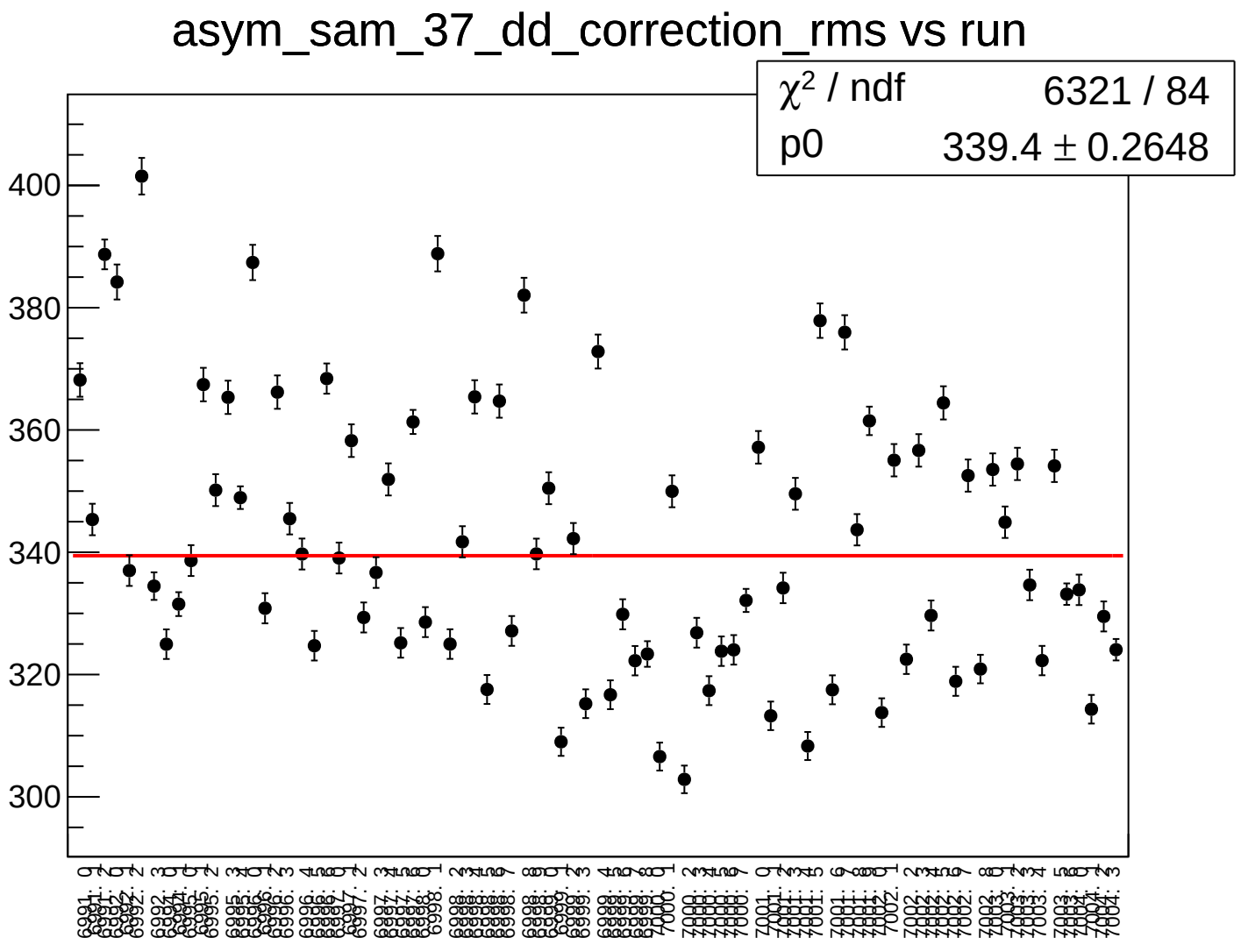

reg_asym_sam_37_dd_mean vs run
χ² / ndf 83.77 / 84
p0 71.76 ± 54.27
pull
Entries 85
Mean −107.3
Std Dev 129.2

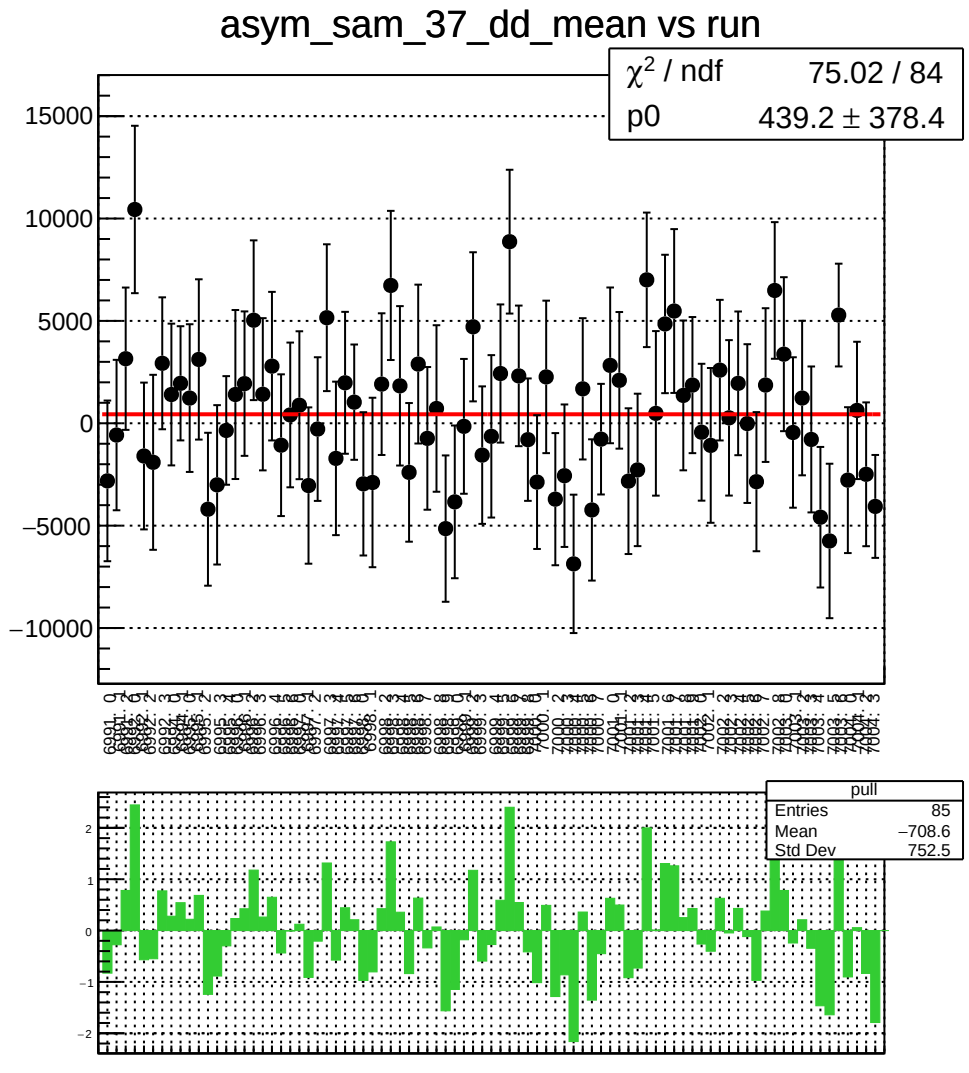

pull1D
Entries 85
Mean −0.01891
Std Dev 0.9926

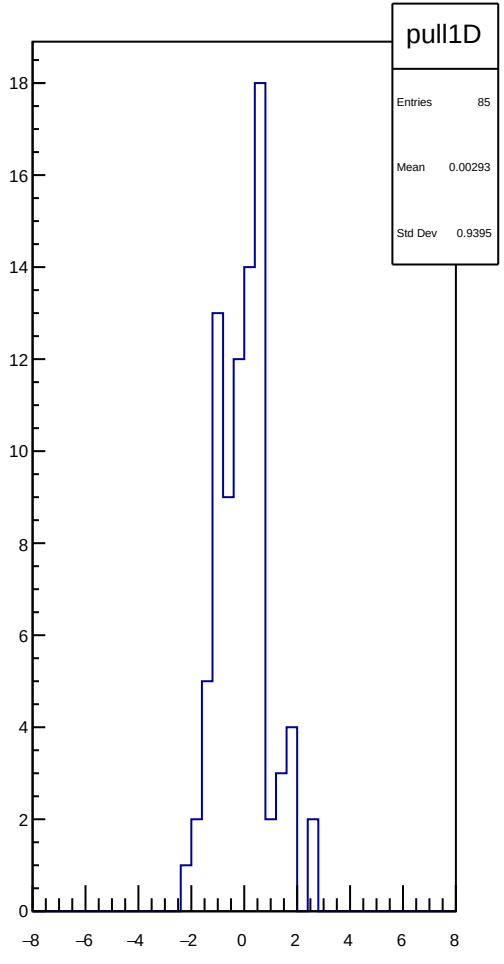

reg_asym_sam_37_dd_rms vs run
χ² / ndf 7692 / 84
p0 49.18 ± 0.03838
70
65
60
55
50
45

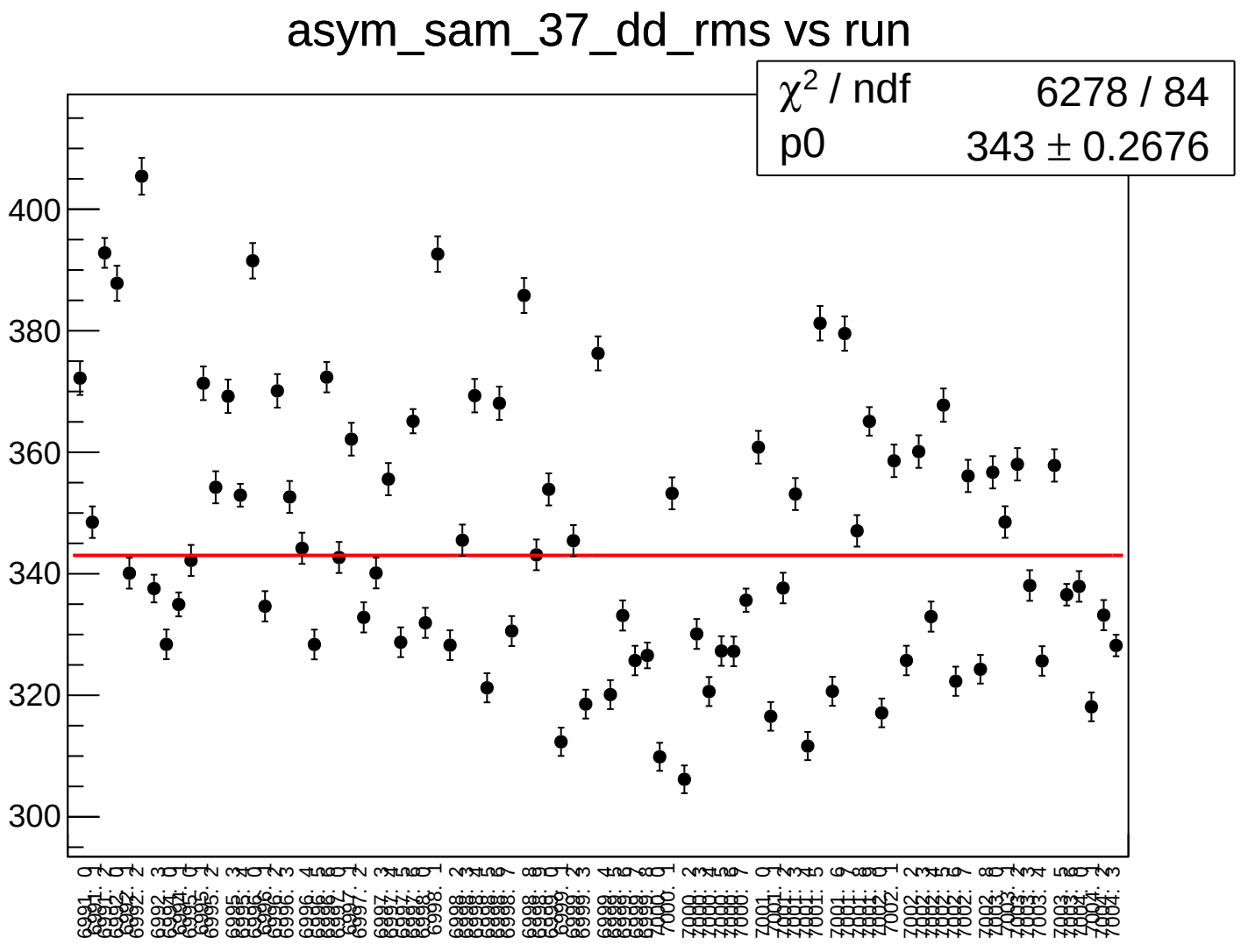

asym_sam_37_dd_correction_mean vs run
χ² / ndf 74.02 / 84
p0 −368.6 ± 374.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −428.4
Std Dev 469
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

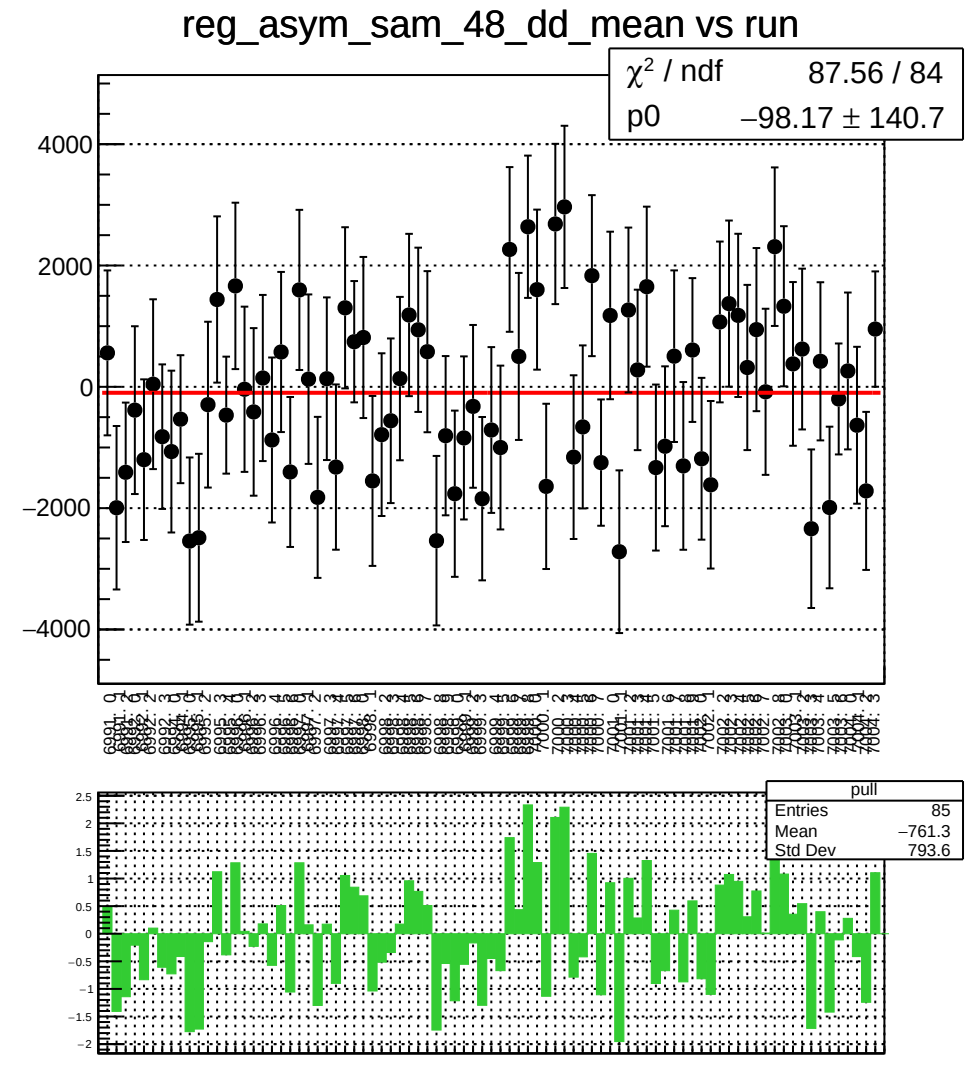

pull1D
Entries 85
Mean −0.005592
Std Dev 0.9332
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

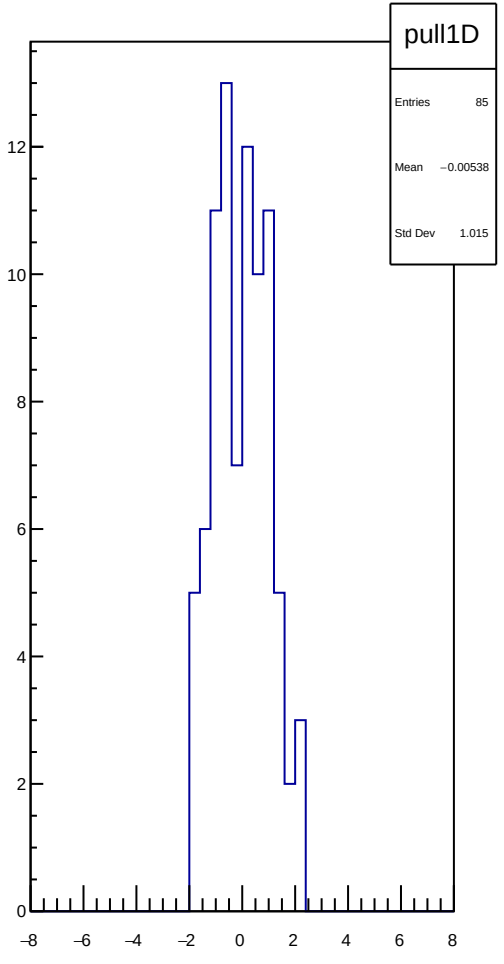

asym_sam_37_dd_correction_rms vs run
χ² / ndf 6321 / 84
p0 339.4 ± 0.2648
400
380
360
340
320
300

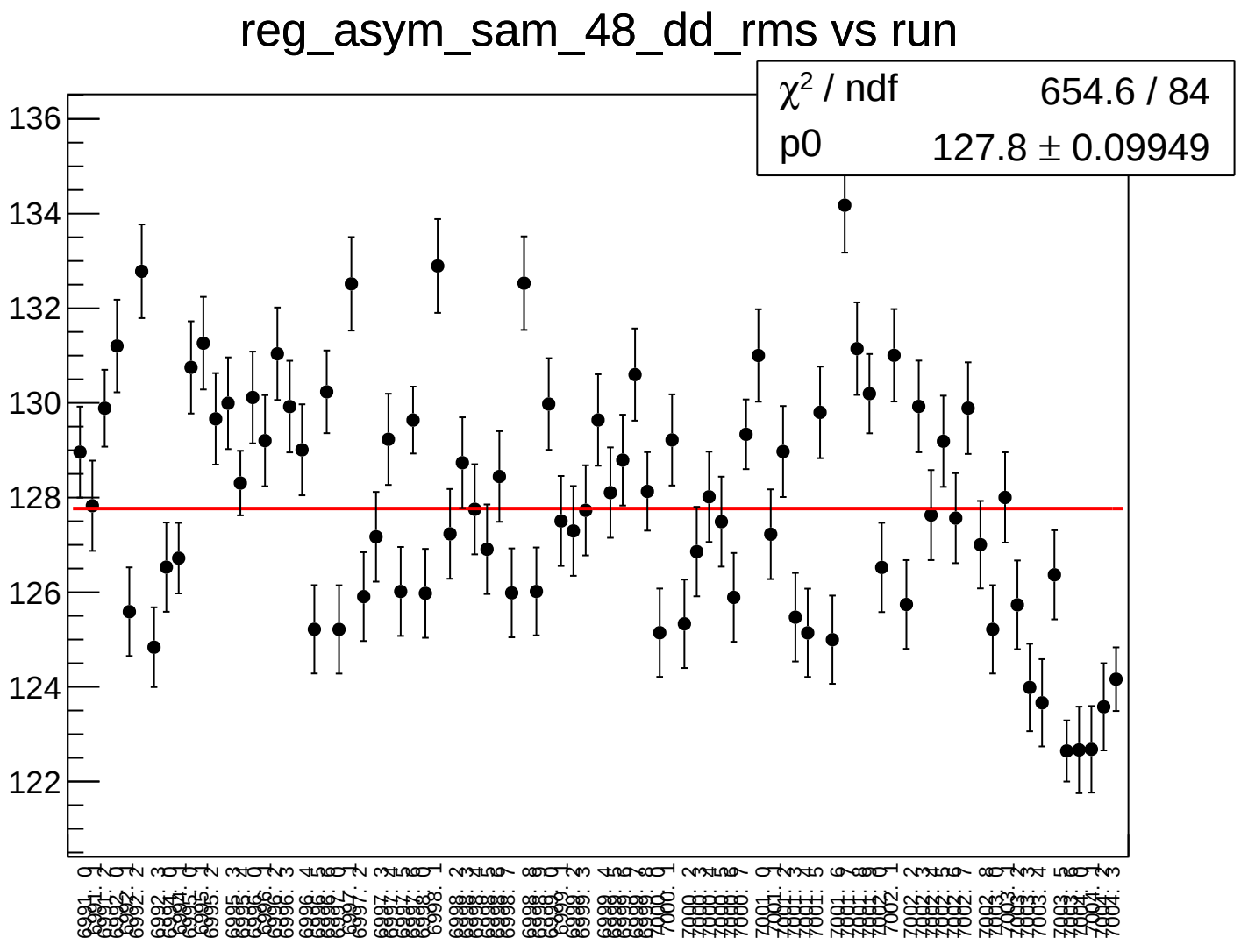

asym_sam_37_dd_mean vs run
χ^2 / ndf 75.02 / 84
p0 439.2 ± 378.4
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −708.6
Std Dev 752.5
2
1
0
−1
−2

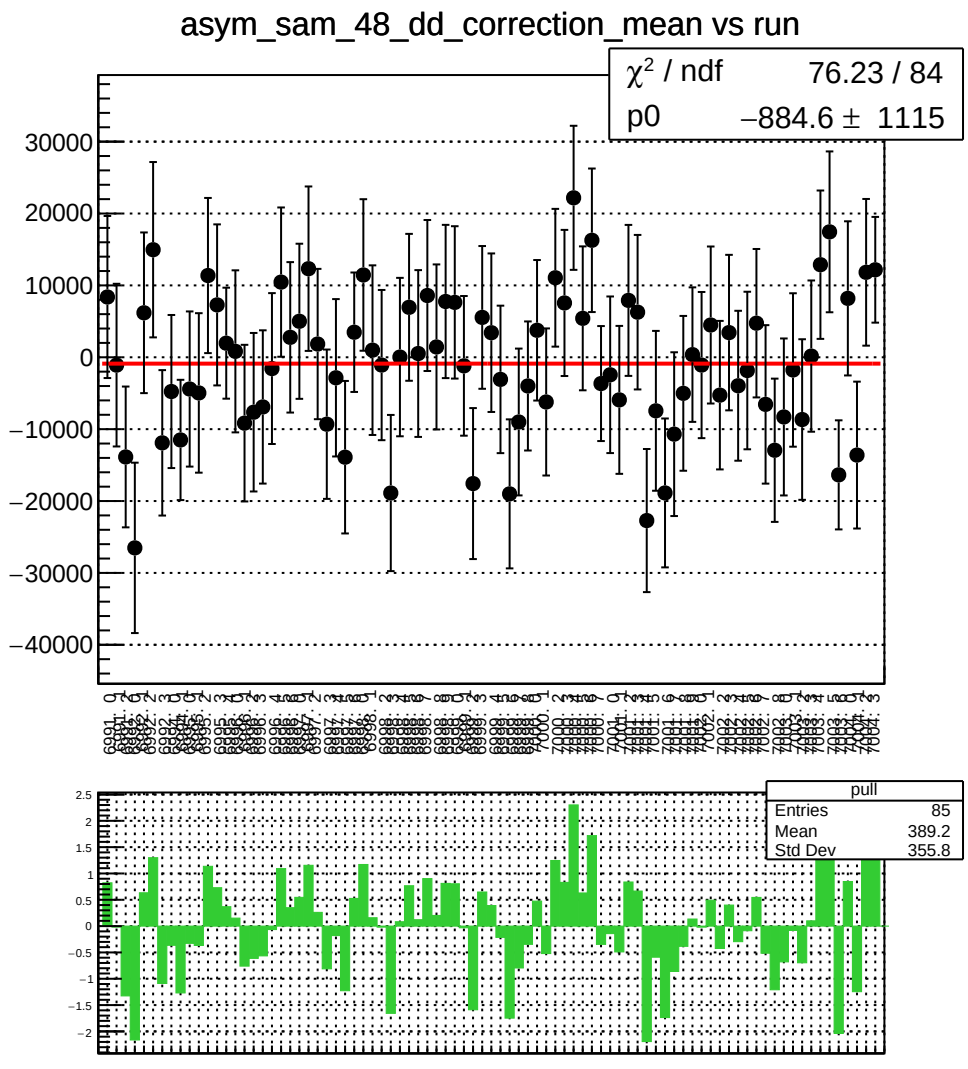

pull1D
Entries 85
Mean 0.00293
Std Dev 0.9395
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

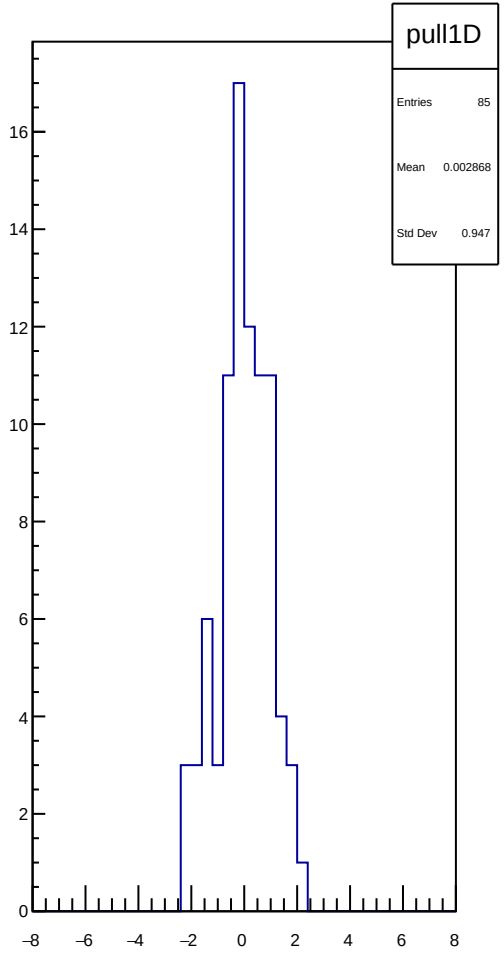

asym_sam_37_dd_rms vs run
χ² / ndf 6278 / 84
p0 343 ± 0.2676
400
380
360
340
320
300

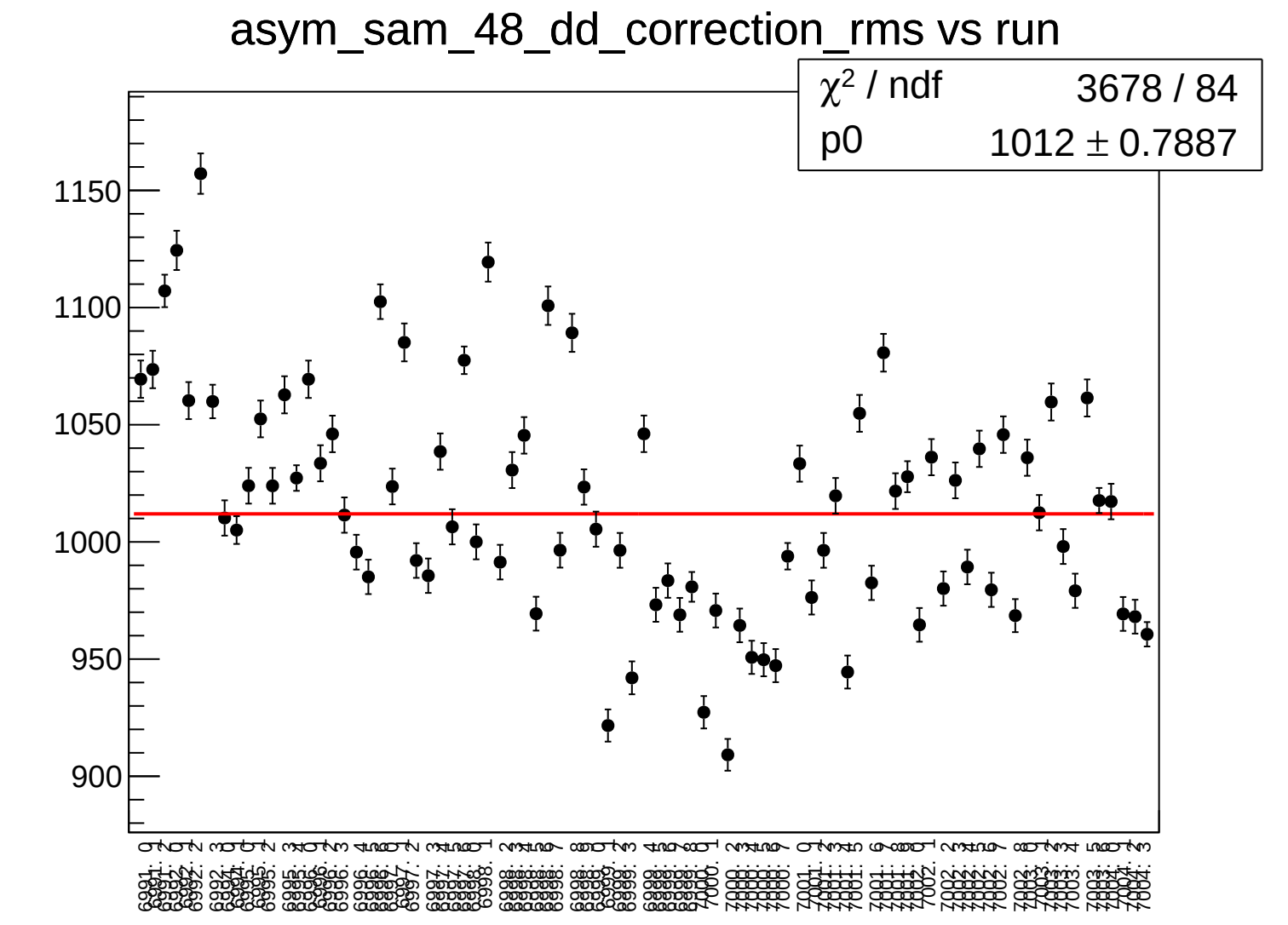

reg_asym_sam_48_dd_mean vs run
χ² / ndf 87.56 / 84
p0 −98.17 ± 140.7
4000
2000
0
−2000
−4000
pull
Entries 85
Mean −761.3
Std Dev 793.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

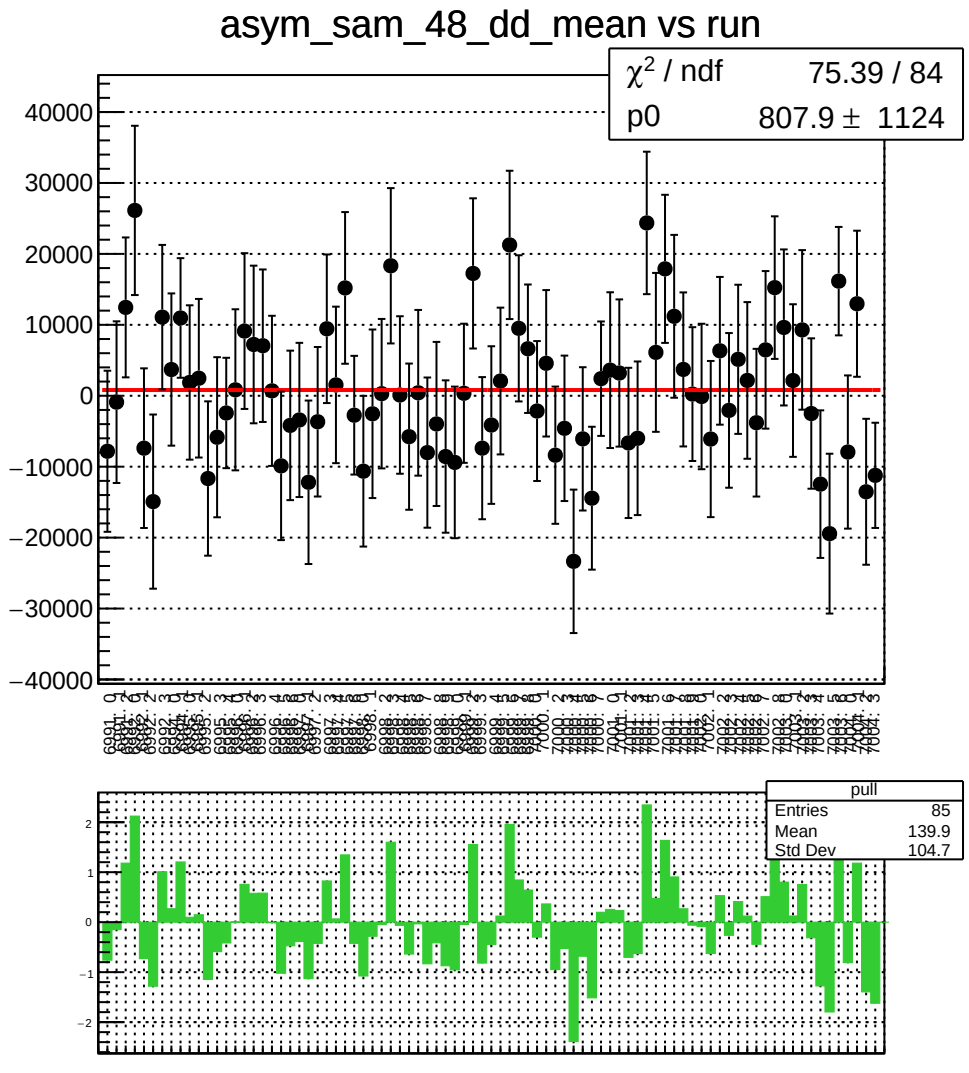

pull1D
Entries 85
Mean −0.00538
Std Dev 1.015
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

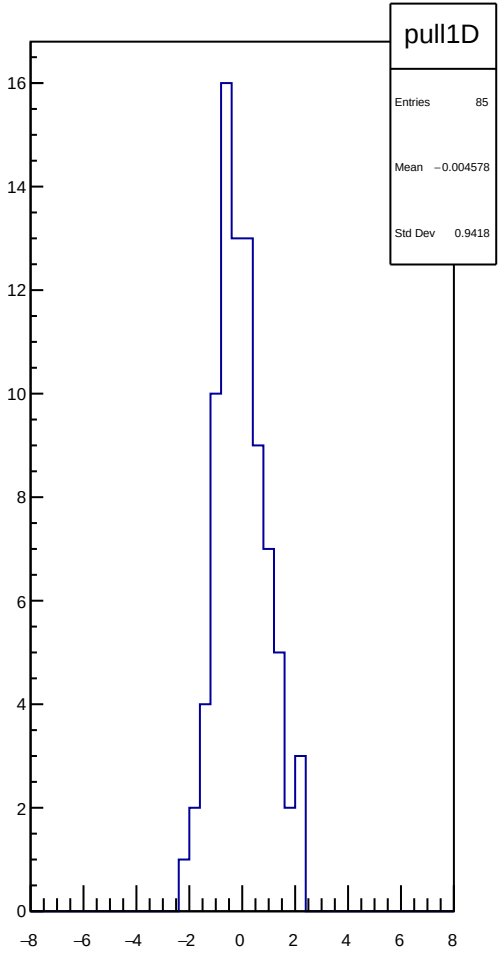

reg_asym_sam_48_dd_rms vs run
χ² / ndf 654.6 / 84
p0 127.8 ± 0.09949
136
134
132
130
128
126
124
122

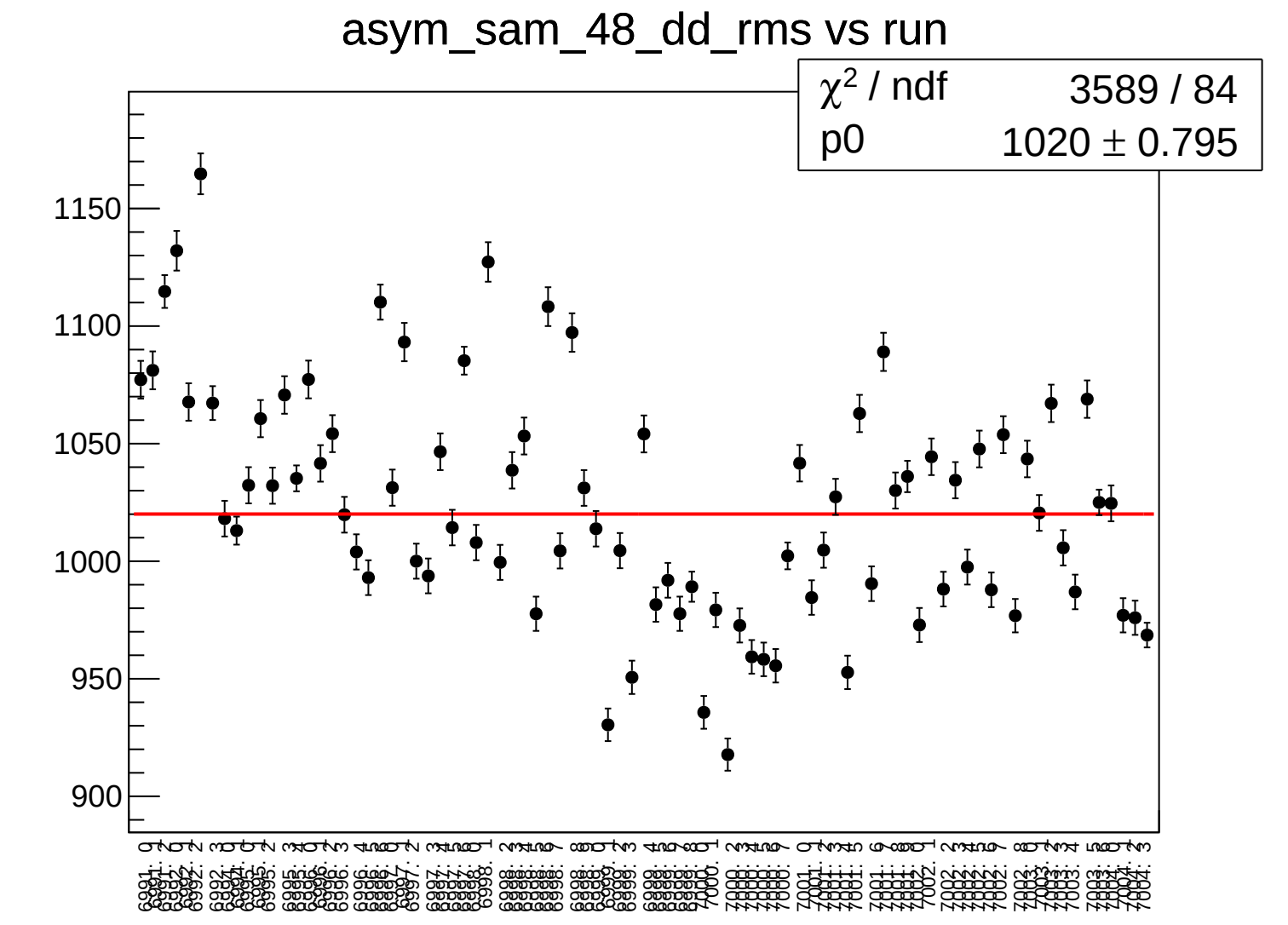

asym_sam_48_dd_correction_mean vs run
χ² / ndf 76.23 / 84
p0 −884.6 ± 1115
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean 389.2
Std Dev 355.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

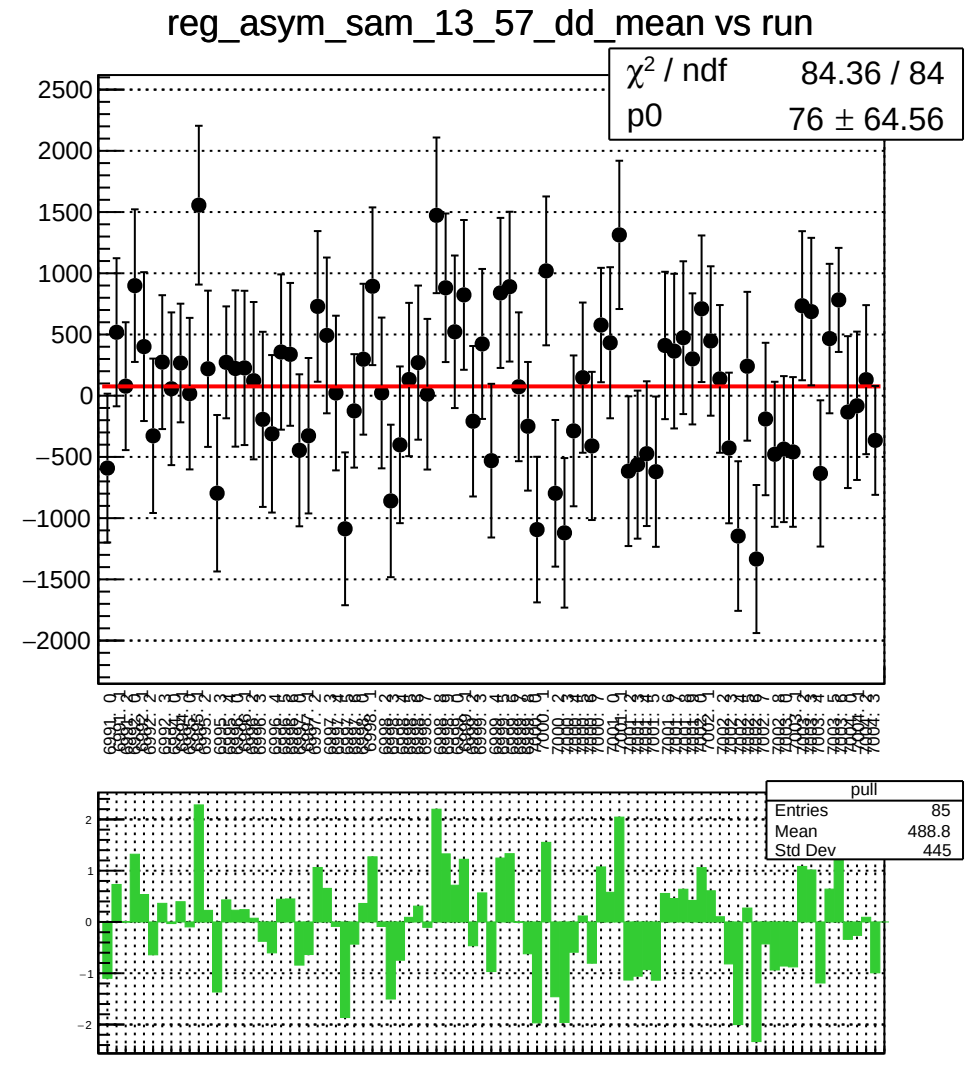

pull1D
Entries 85
Mean 0.002868
Std Dev 0.947
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

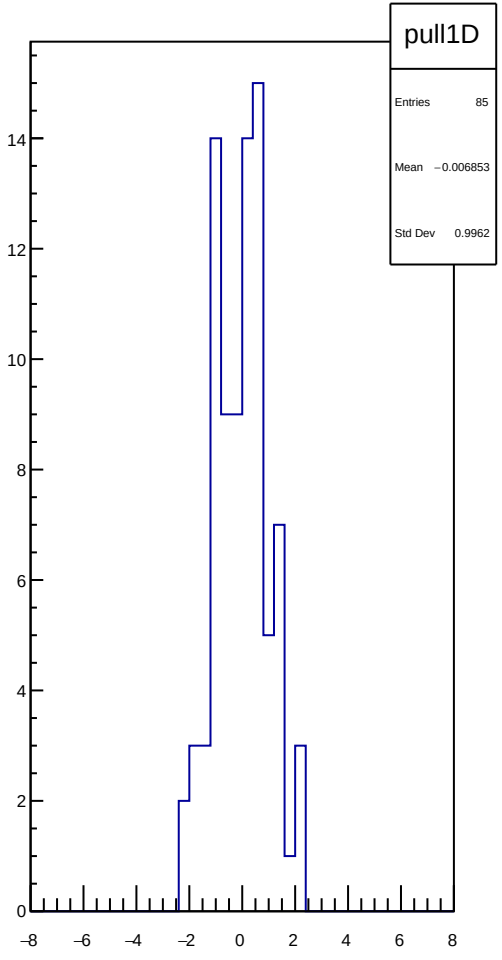

asym_sam_48_dd_correction_rms vs run
χ² / ndf 3678 / 84
p0 1012 ± 0.7887
1150
1100
1050
1000
950
900

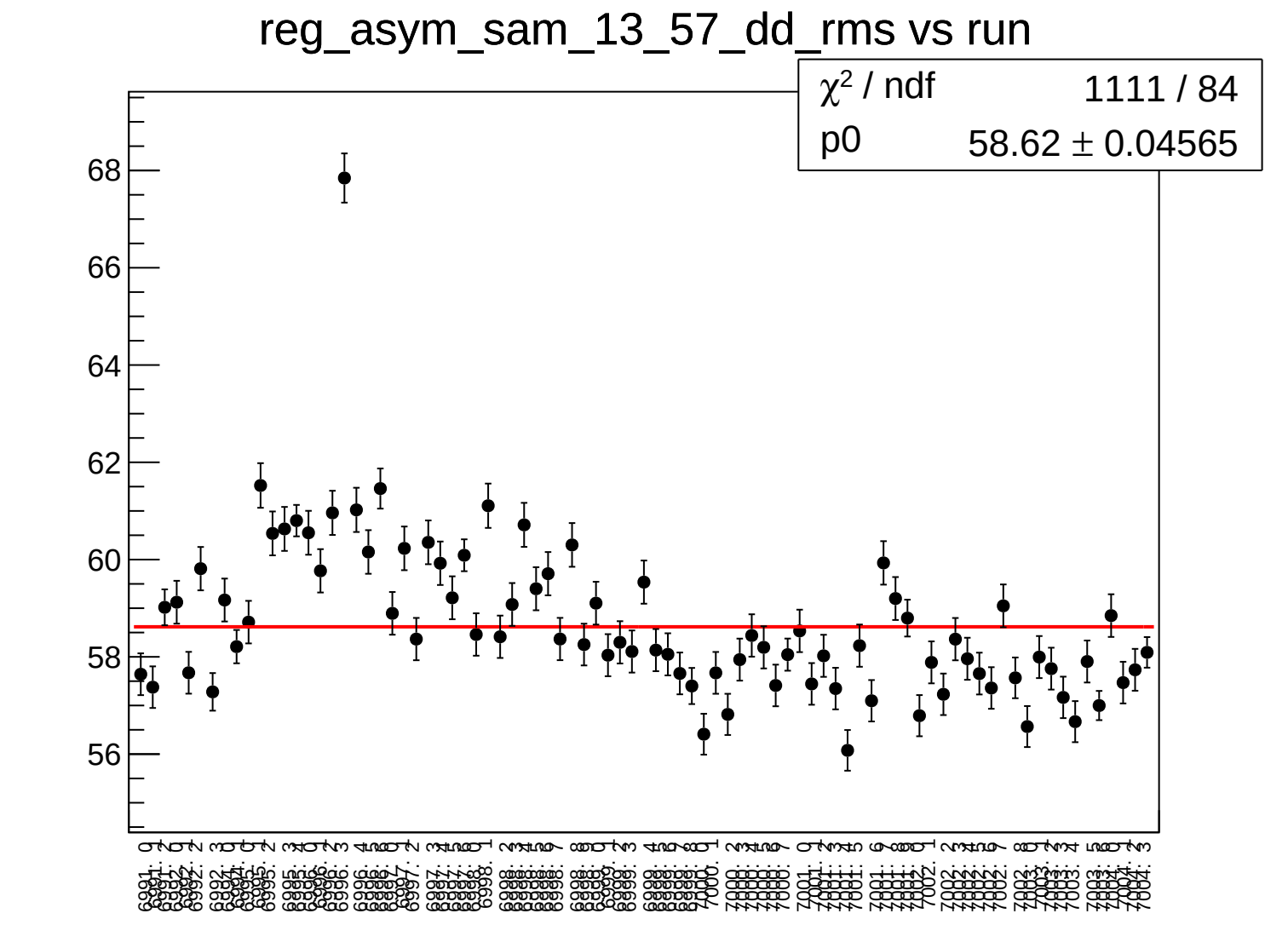

asym_sam_48_dd_mean vs run
χ² / ndf 75.39 / 84
p0 807.9 ± 1124
pull
Entries 85
Mean 139.9
Std Dev 104.7

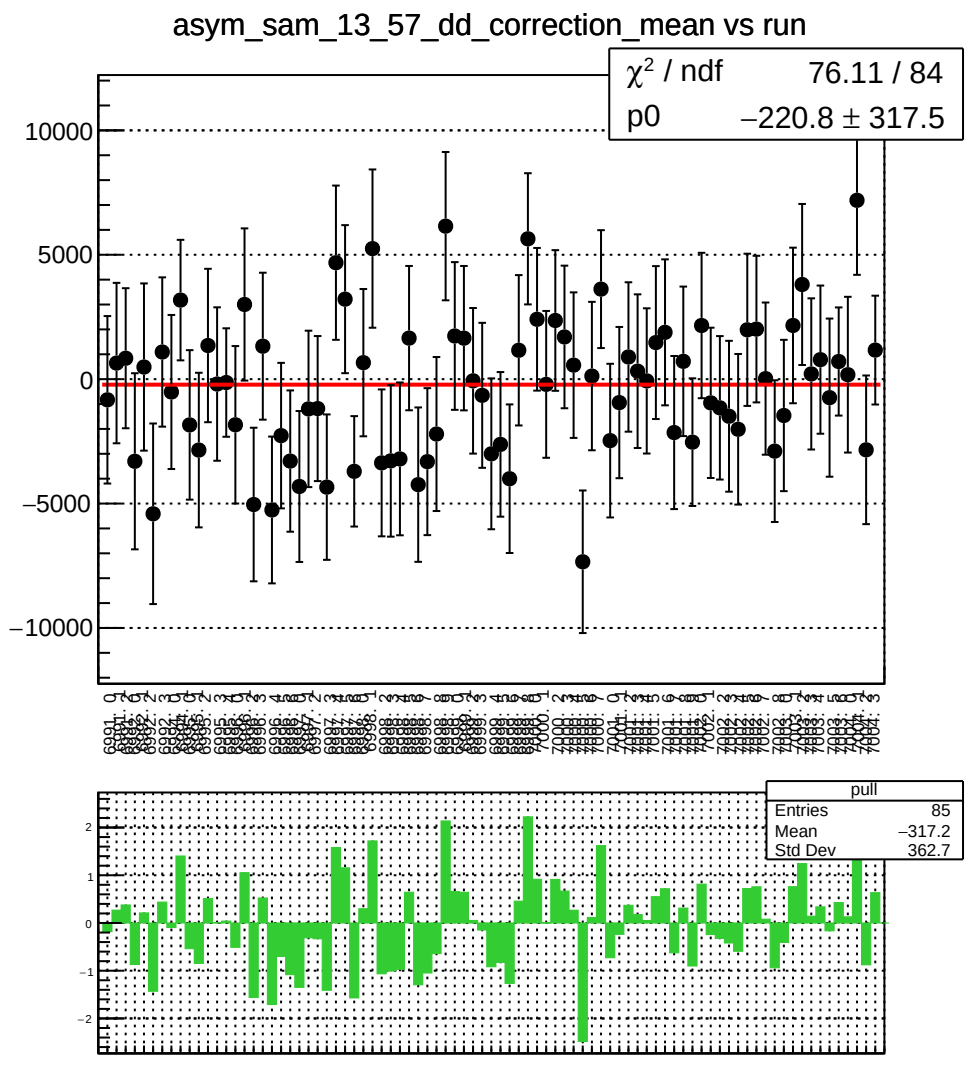

pull1D
Entries 85
Mean −0.004578
Std Dev 0.9418

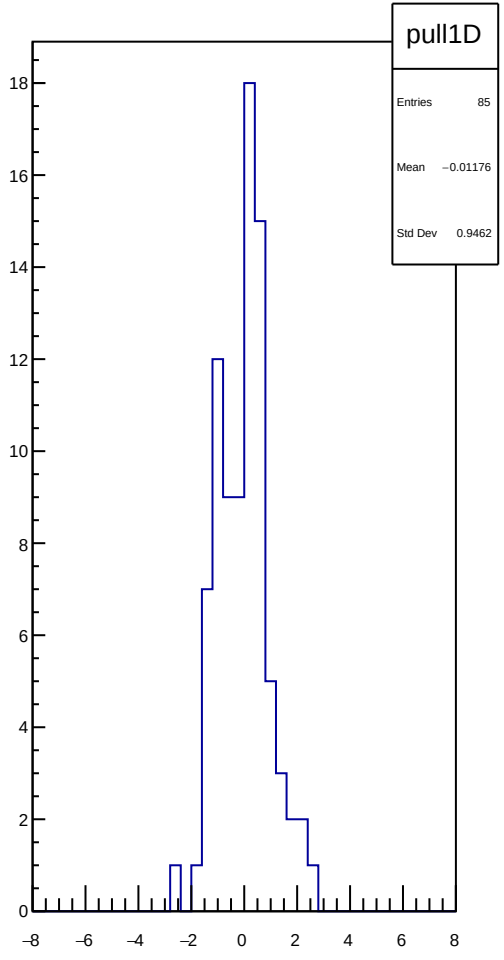

asym_sam_48_dd_rms vs run
χ² / ndf 3589 / 84
p0 1020 ± 0.795
1150
1100
1050
1000
950
900

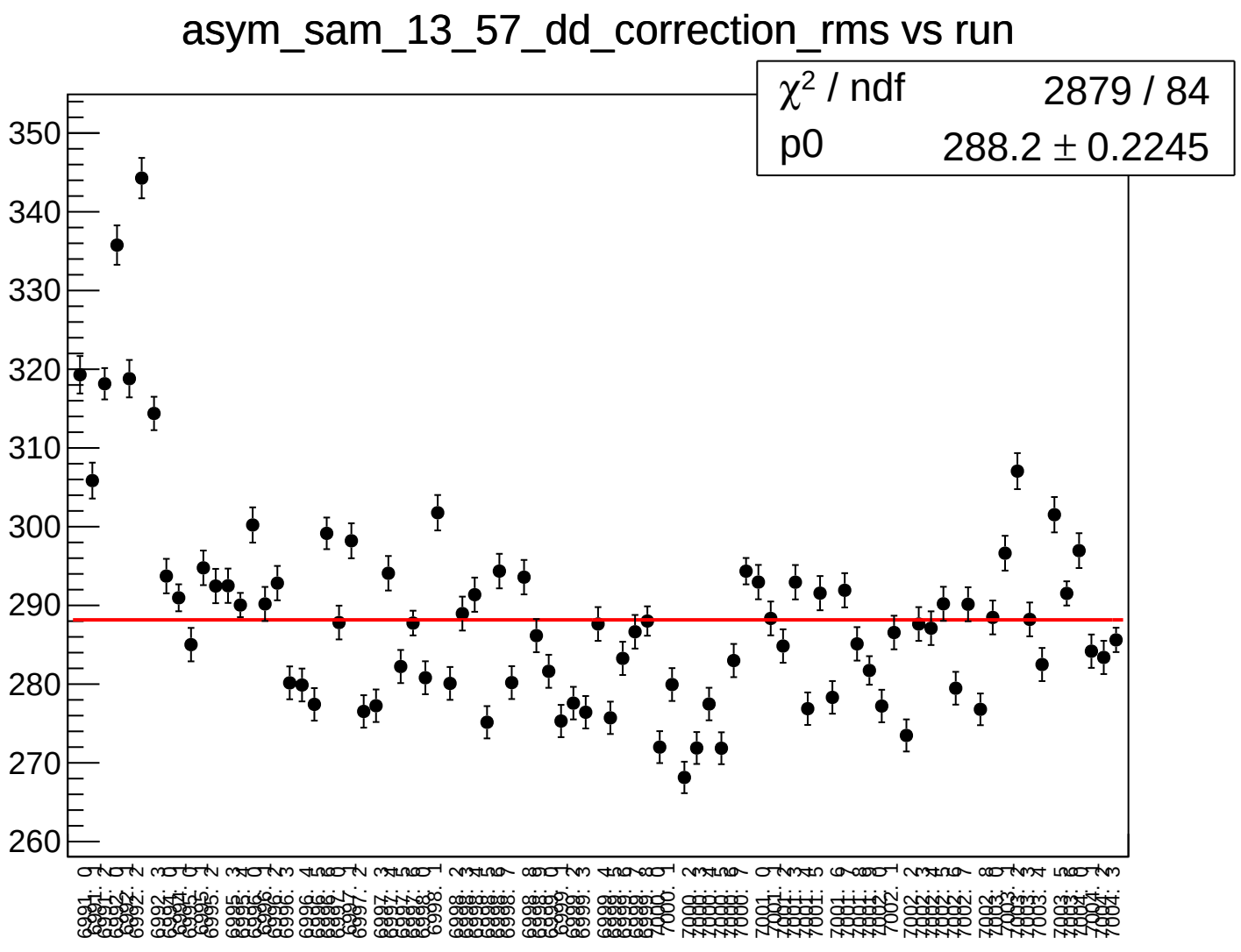

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 84.36 / 84
p0 76 ± 64.56
pull
Entries 85
Mean 488.8
Std Dev 445

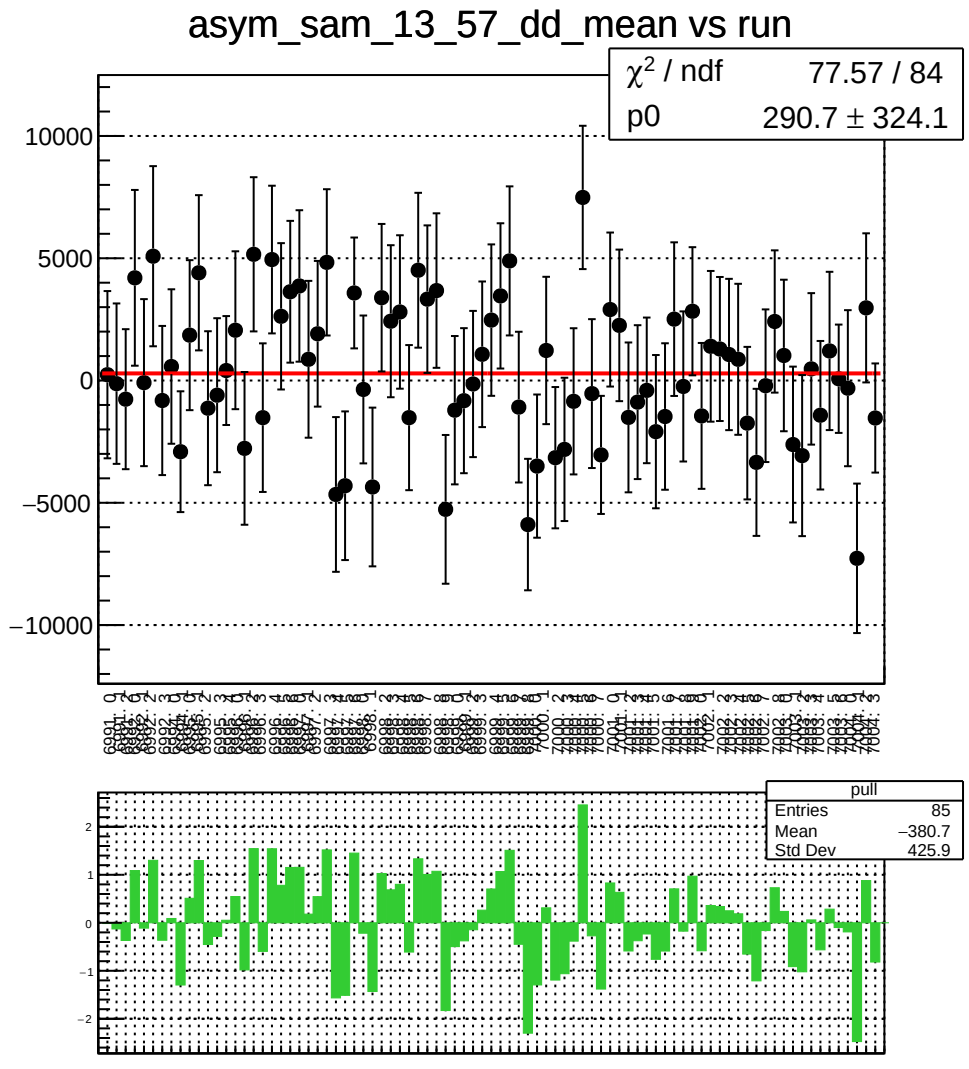

pull1D
Entries 85
Mean −0.006853
Std Dev 0.9962

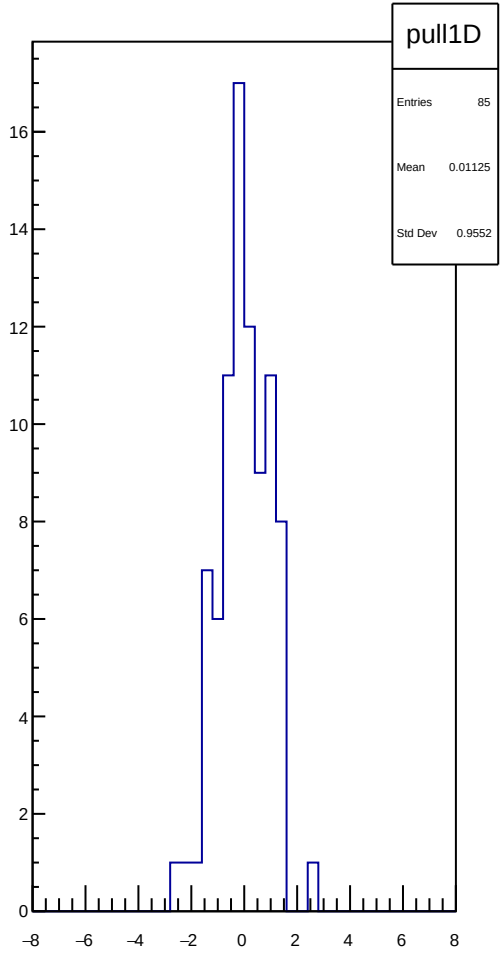

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 1111 / 84
p0 58.62 ± 0.04565
68
66
64
62
60
58
56

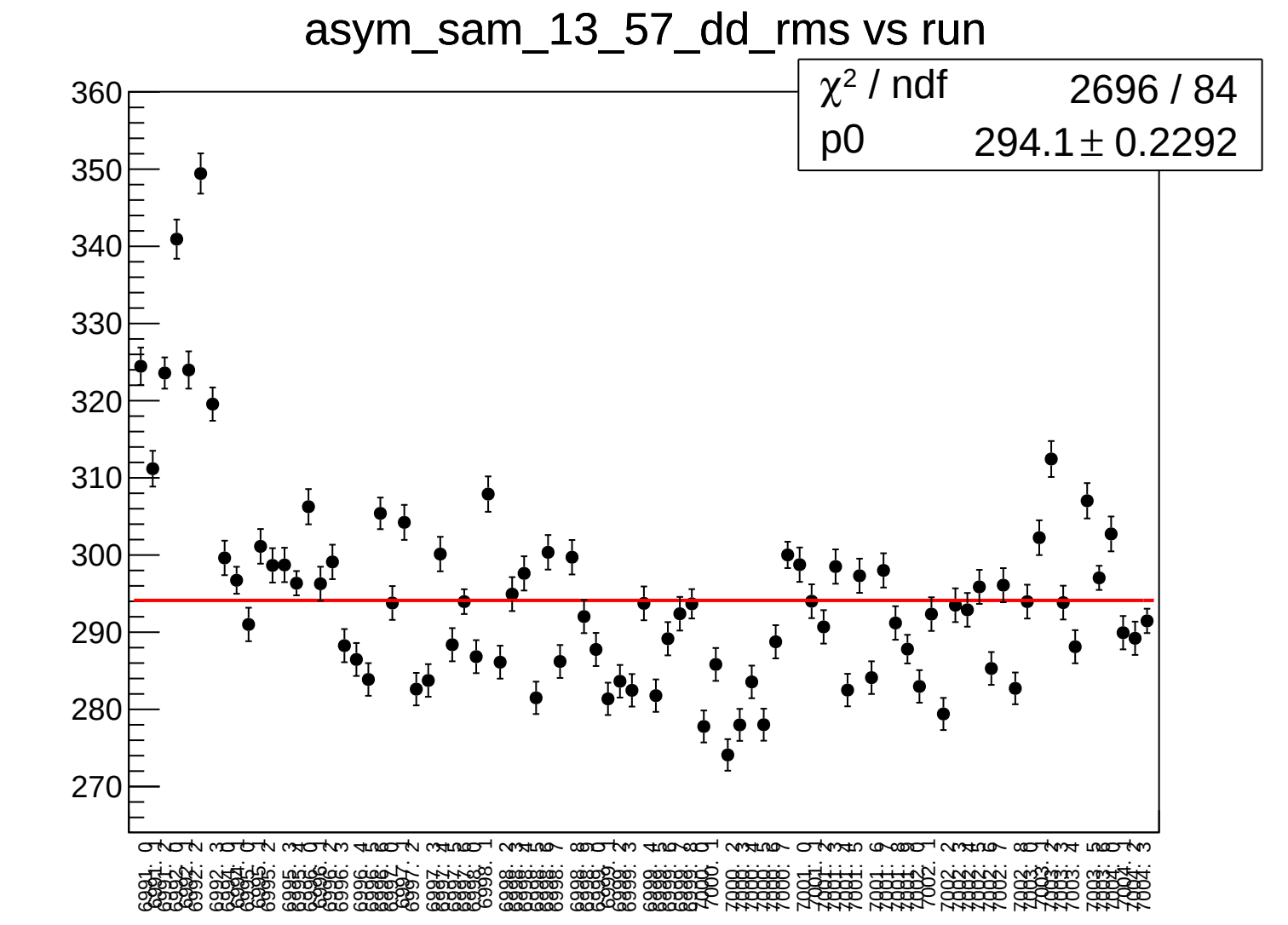

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 76.11 / 84
p0 −220.8 ± 317.5
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −317.2
Std Dev 362.7
2
1
0
−1
−2

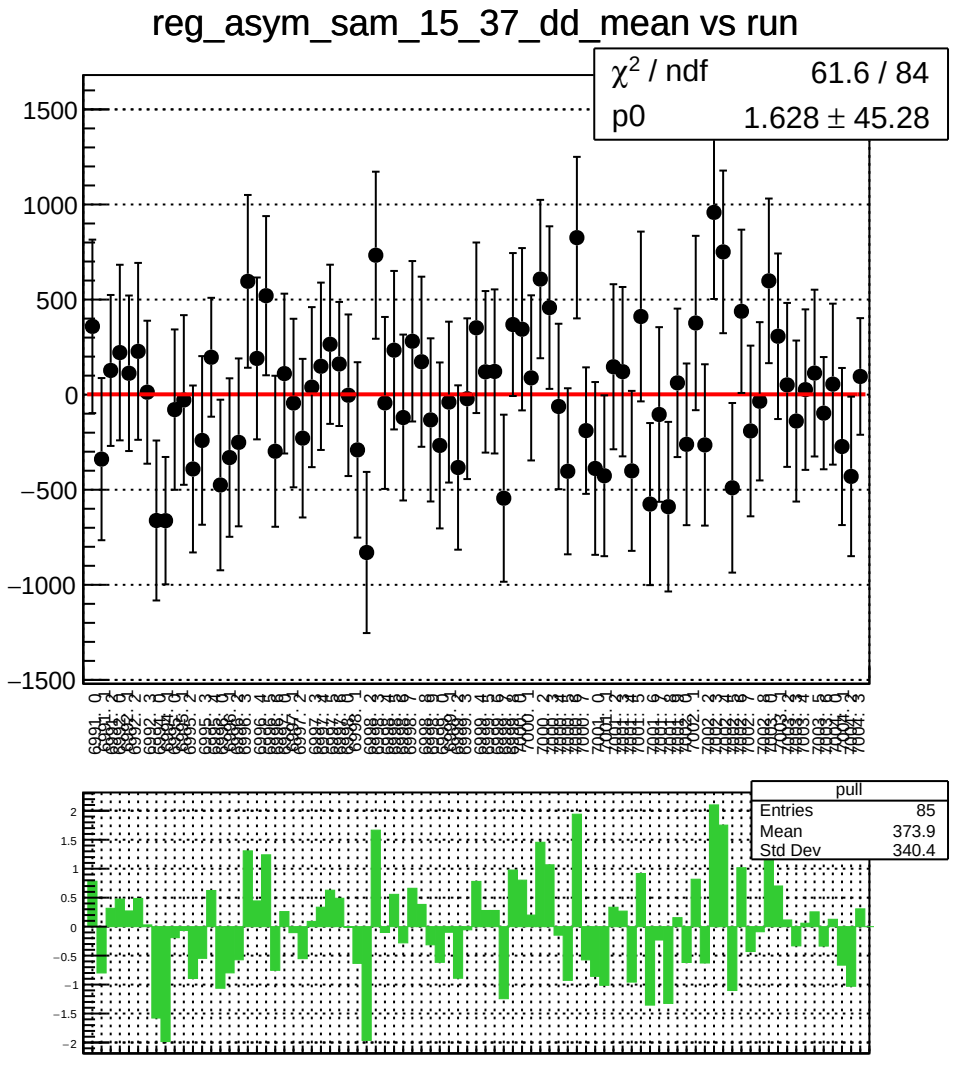

pull1D
Entries 85
Mean −0.01176
Std Dev 0.9462
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

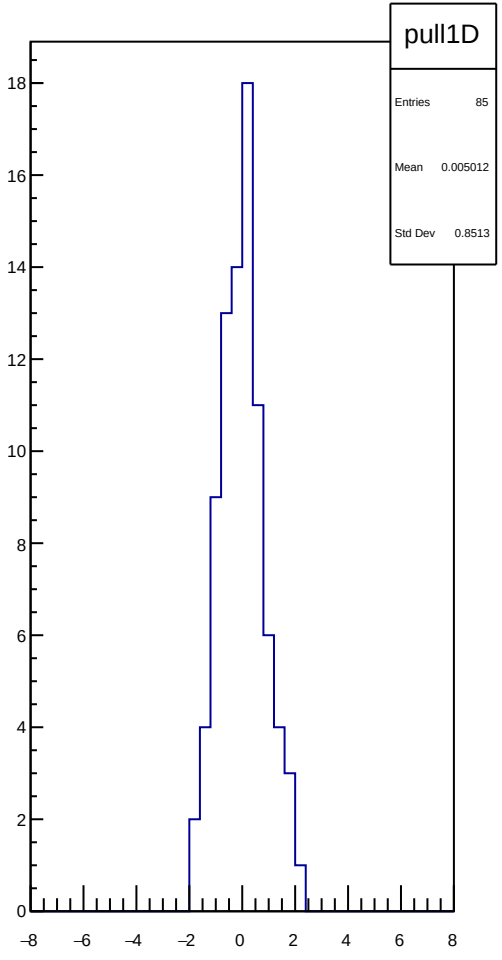

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 2879 / 84
p0 288.2 ± 0.2245
350
340
330
320
310
300
290
280
270
260

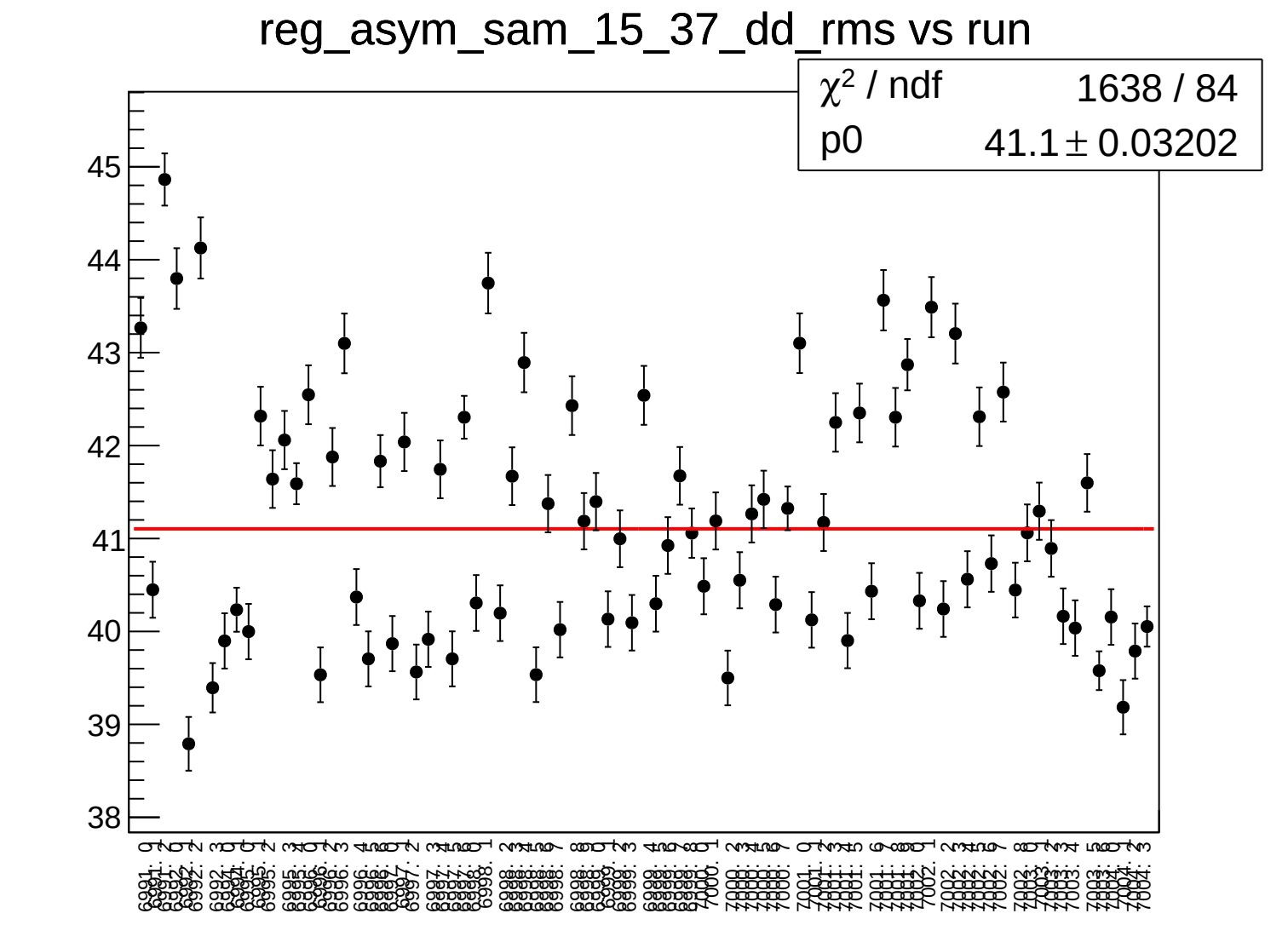

asym_sam_13_57_dd_mean vs run
χ^2 / ndf 77.57 / 84
p0 290.7 ± 324.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −380.7
Std Dev 425.9
2
1
0
−1
−2

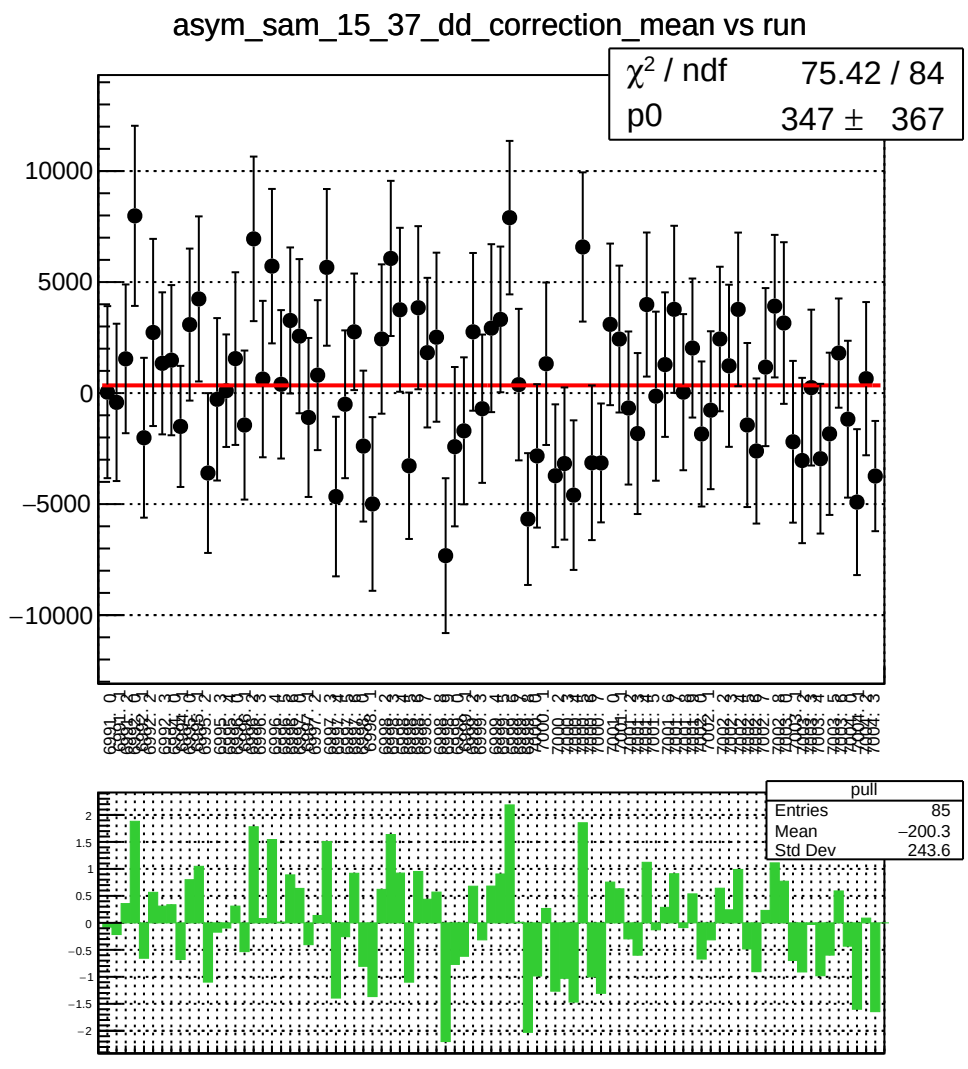

pull1D
Entries 85
Mean 0.01125
Std Dev 0.9552
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

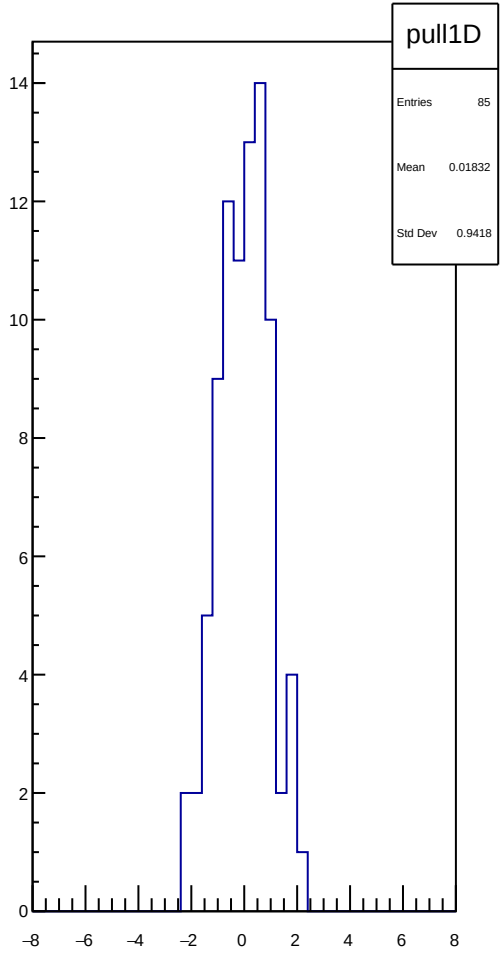

asym_sam_13_57_dd_rms vs run
χ² / ndf 2696 / 84
p0 294.1 ± 0.2292
360
350
340
330
320
310
300
290
280
270

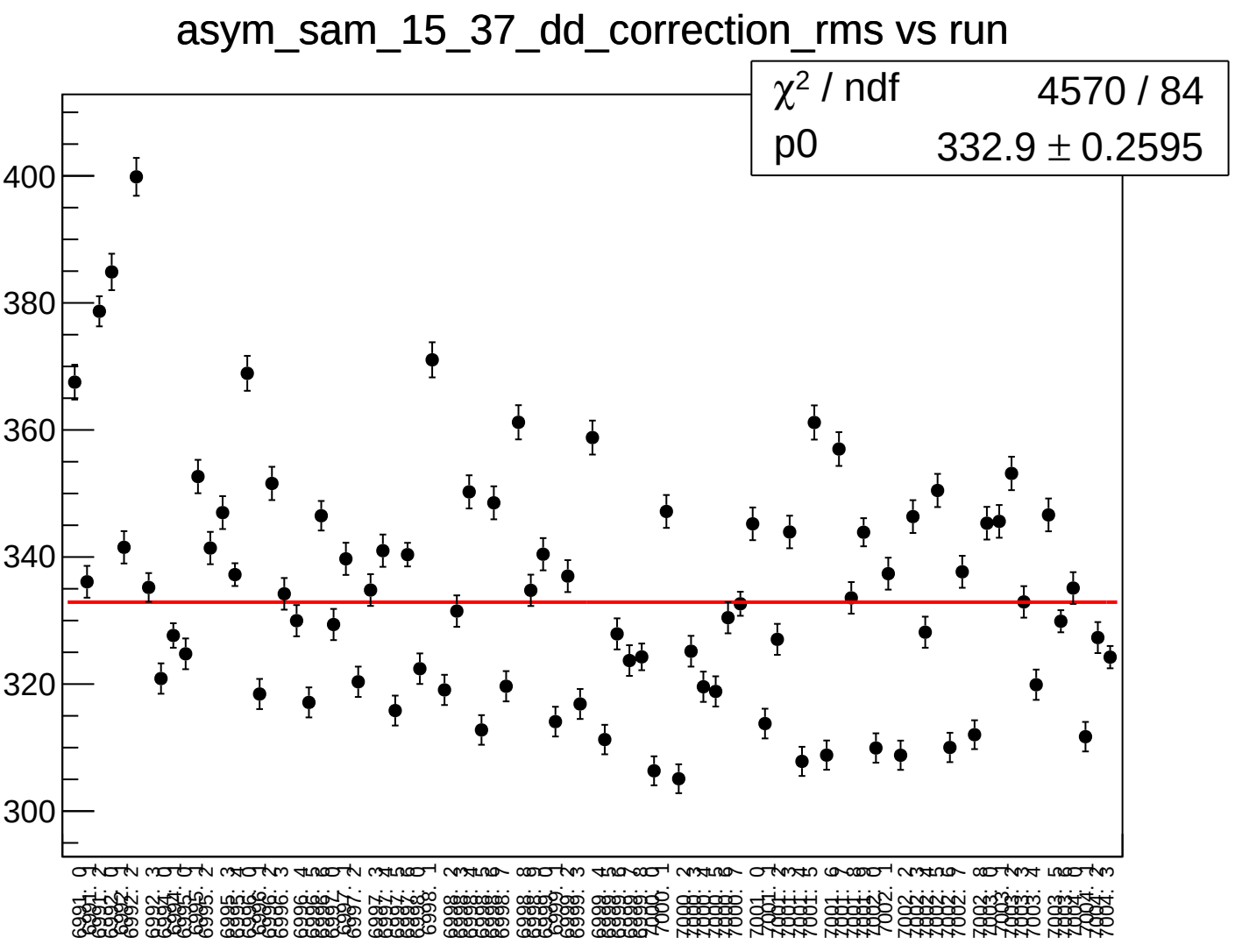

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 61.6 / 84
p0 1.628 ± 45.28
pull
Entries 85
Mean 373.9
Std Dev 340.4

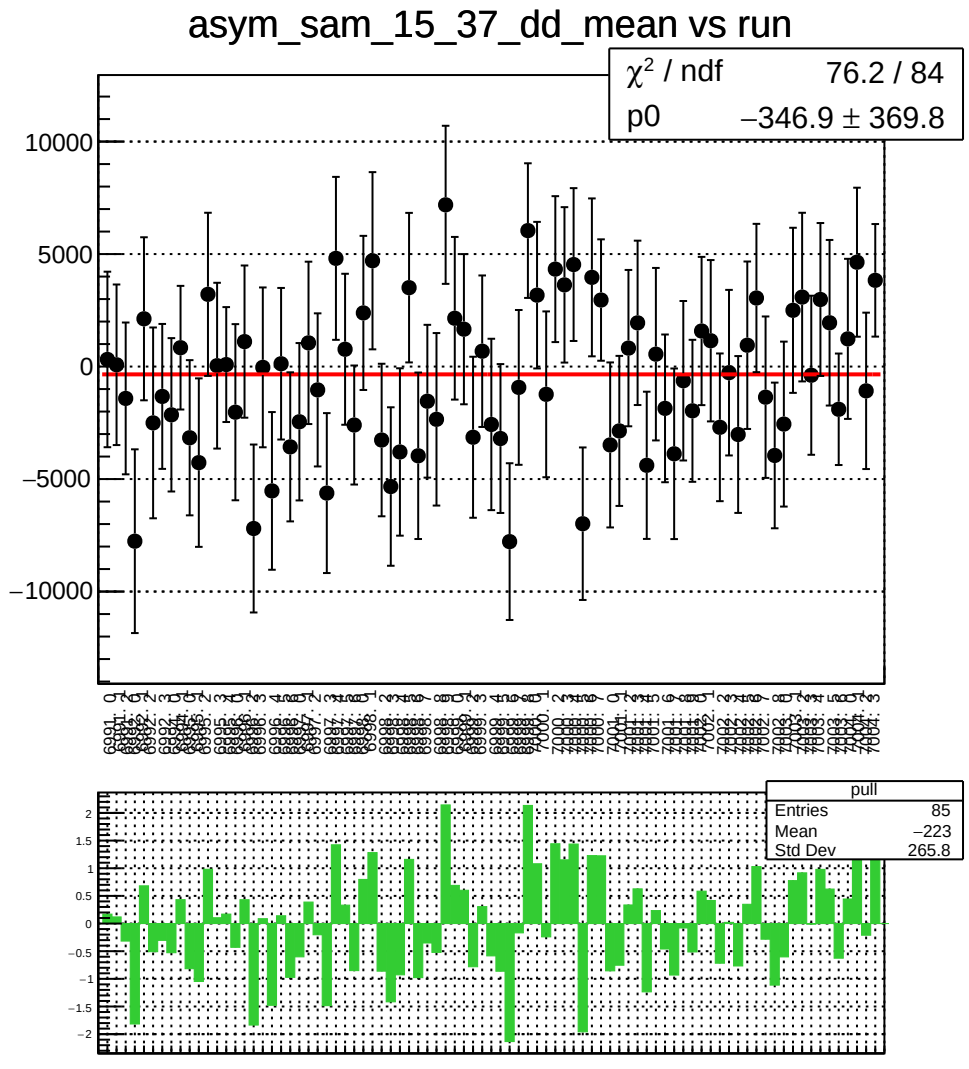

pull1D
Entries 85
Mean 0.005012
Std Dev 0.8513

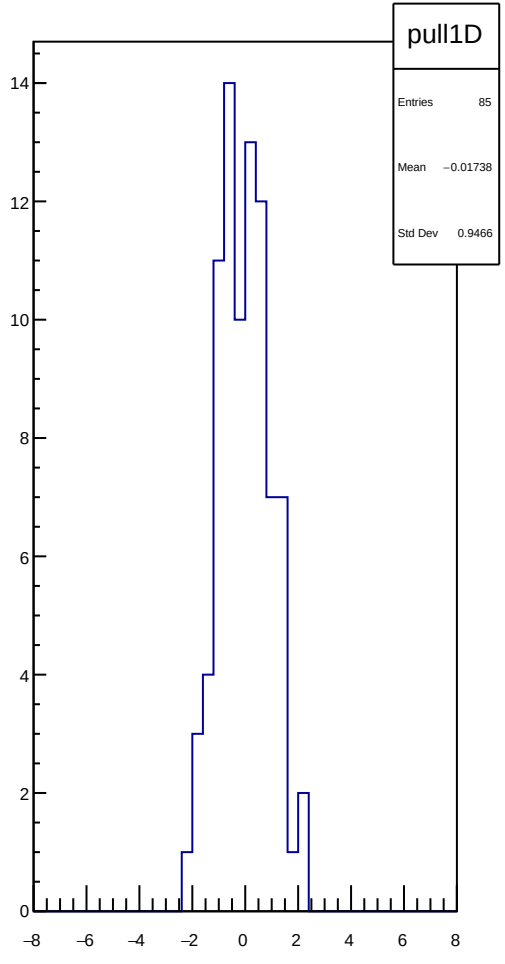

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 1638 / 84
p0 41.1 ± 0.03202
45
44
43
42
41
40
39
38

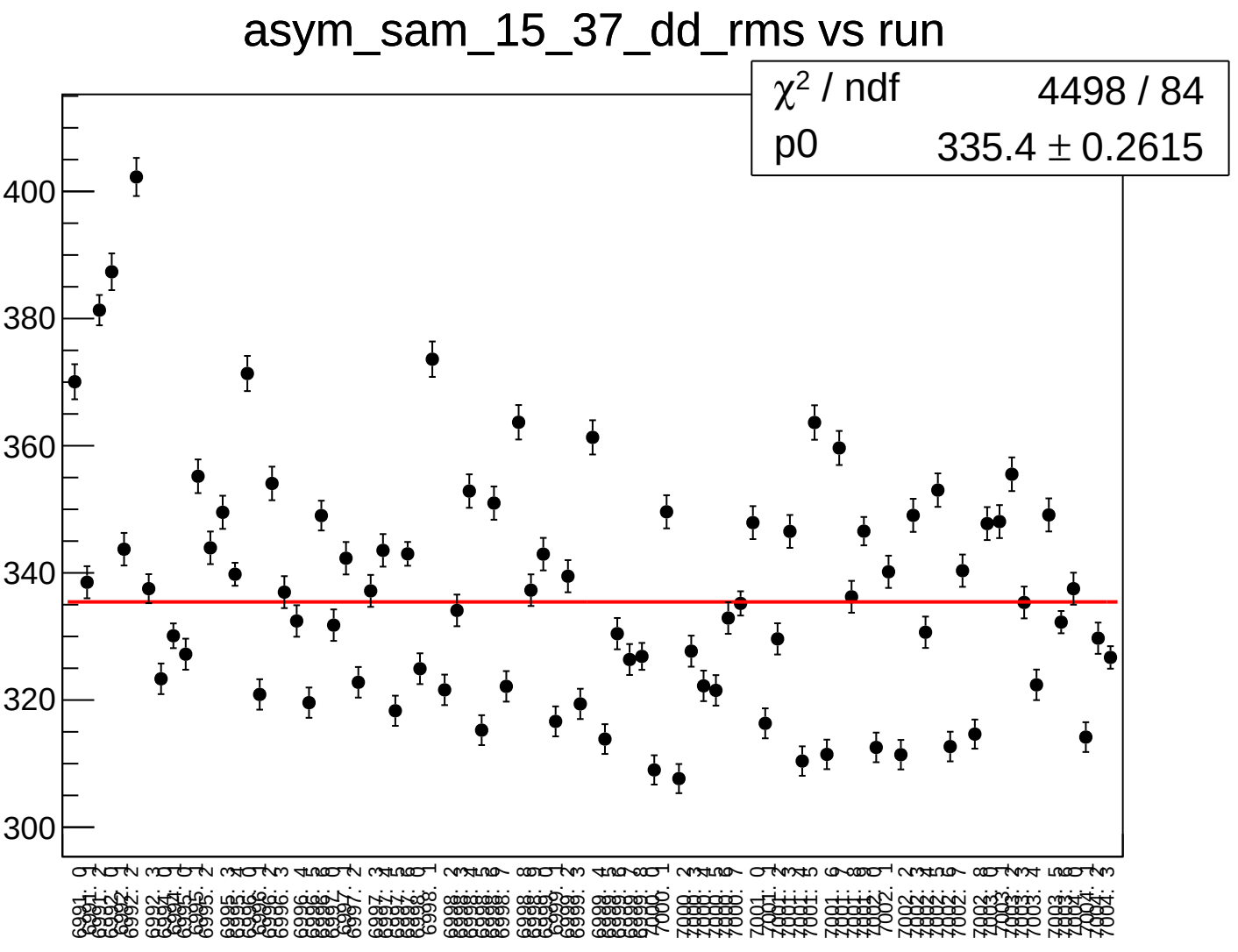

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 75.42 / 84
p0 347 ± 367
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −200.3
Std Dev 243.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

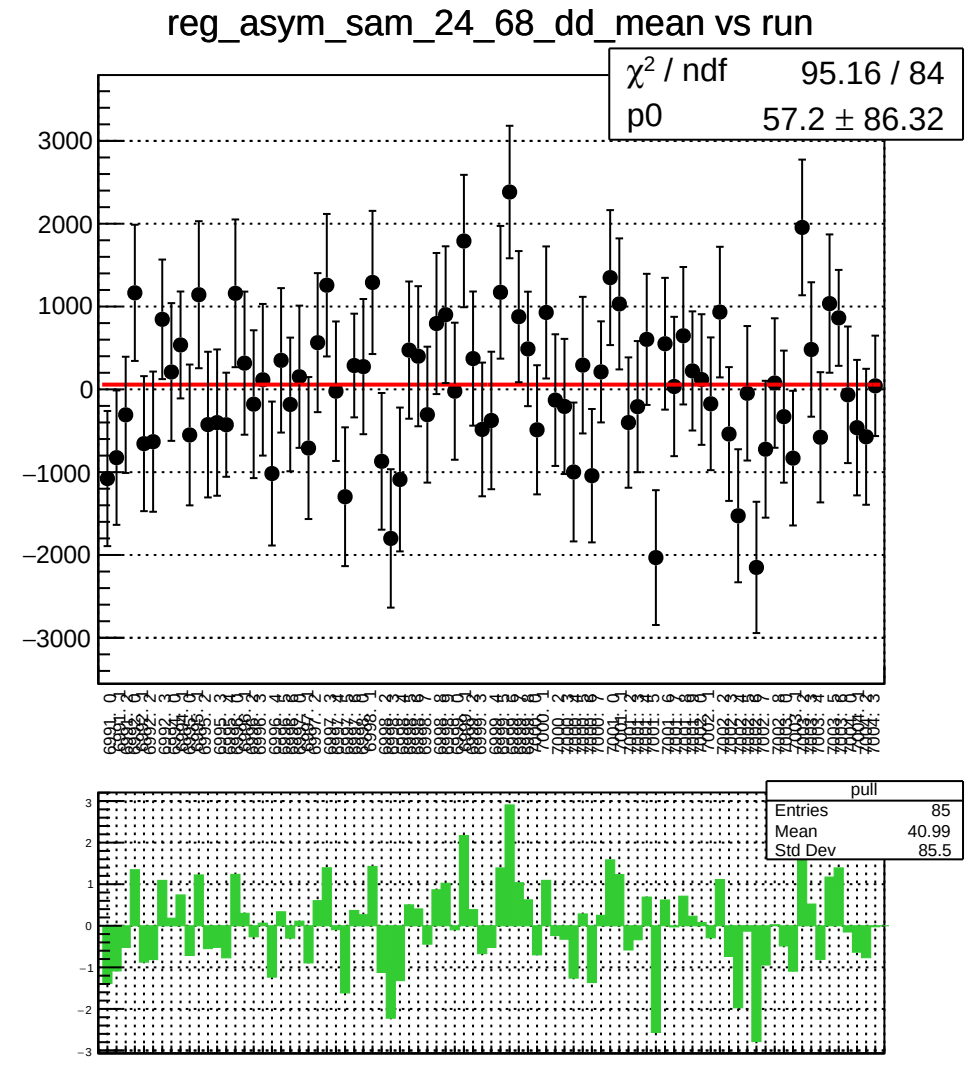

pull1D
Entries 85
Mean 0.01832
Std Dev 0.9418
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

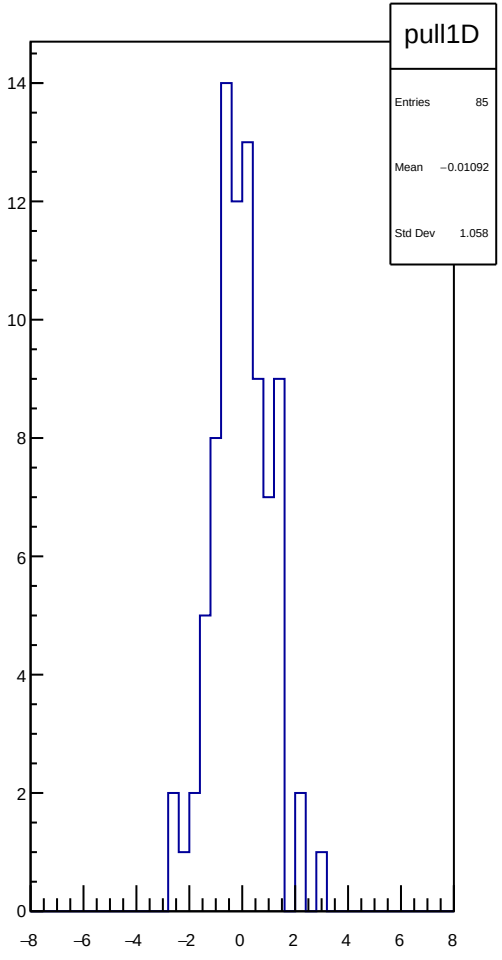

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 4570 / 84
p0 332.9 ± 0.2595
400
380
360
340
320
300

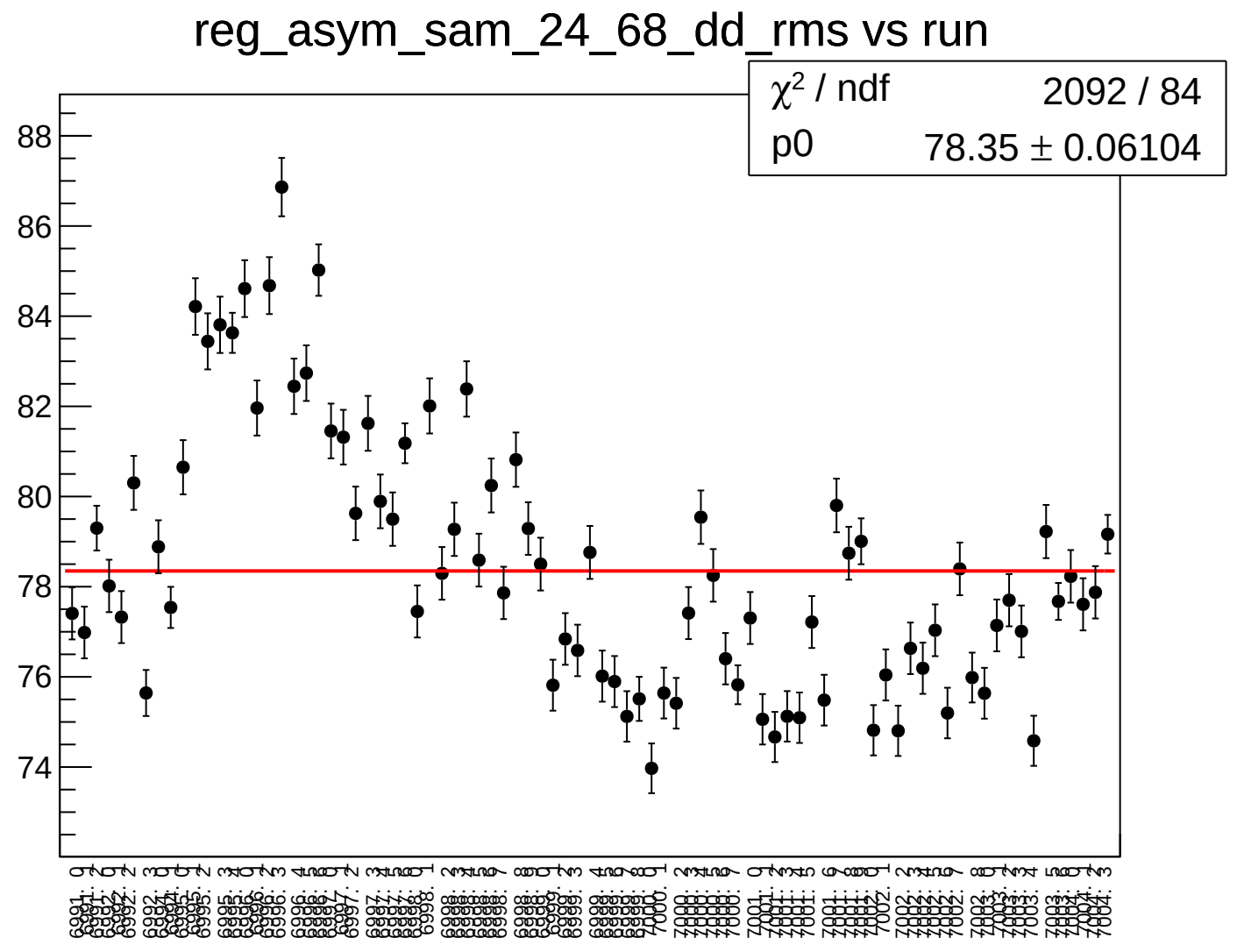

asym_sam_15_37_dd_mean vs run
χ² / ndf 76.2 / 84
p0 −346.9 ± 369.8
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −223
Std Dev 265.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

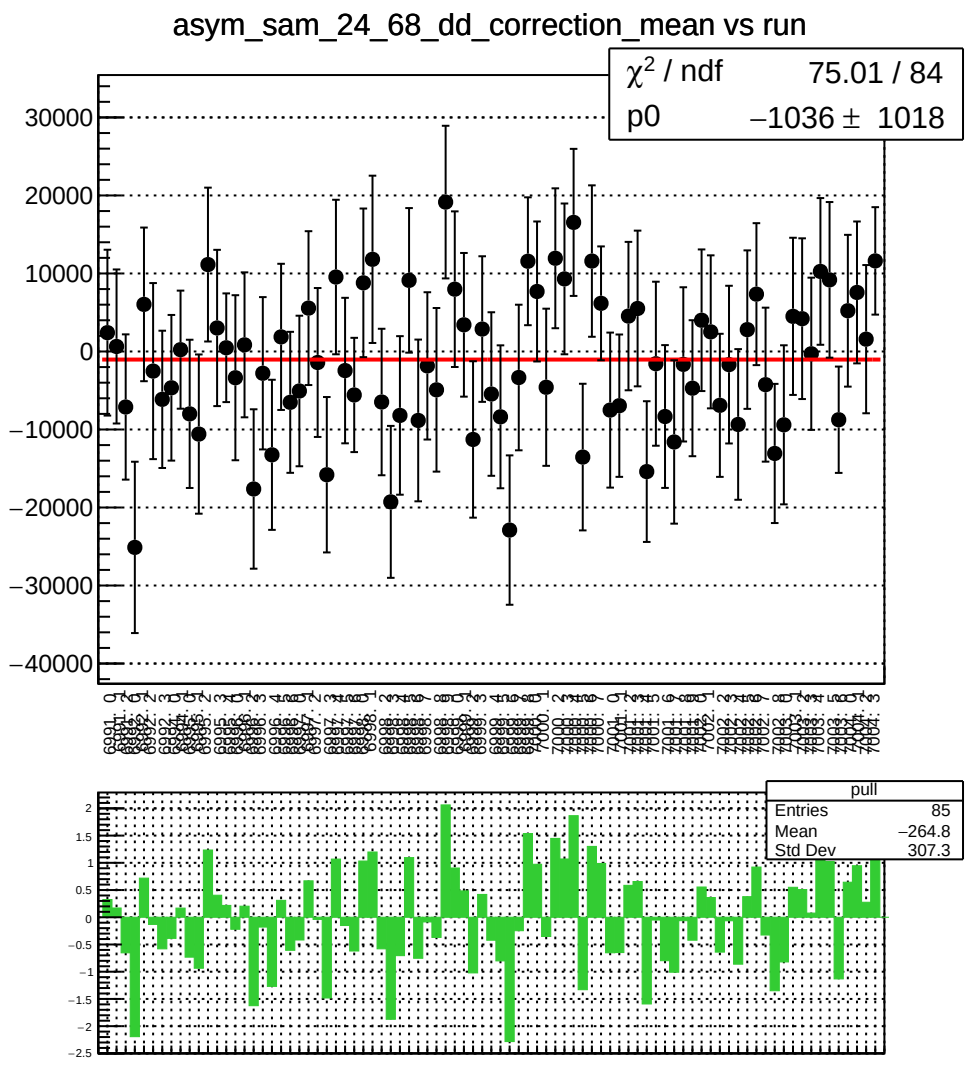

pull1D
Entries 85
Mean −0.01738
Std Dev 0.9466
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

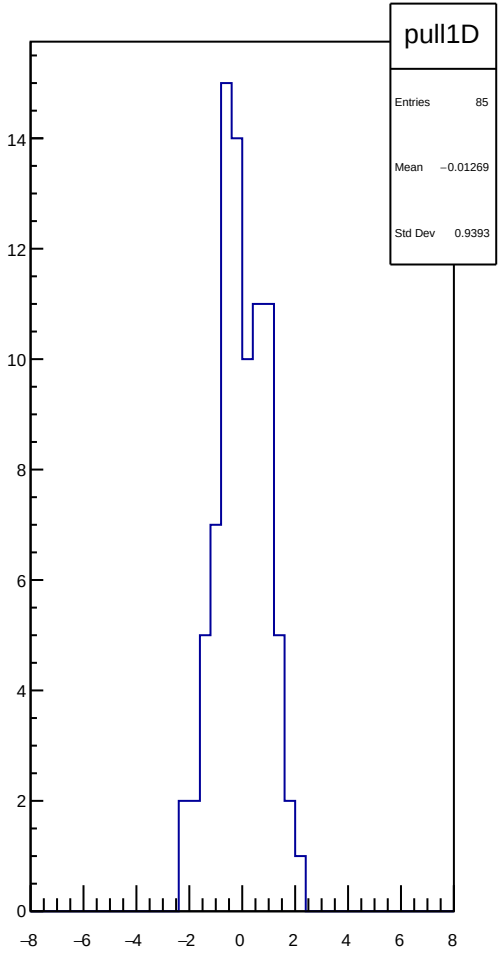

asym_sam_15_37_dd_rms vs run
χ² / ndf 4498 / 84
p0 335.4 ± 0.2615
400
380
360
340
320
300

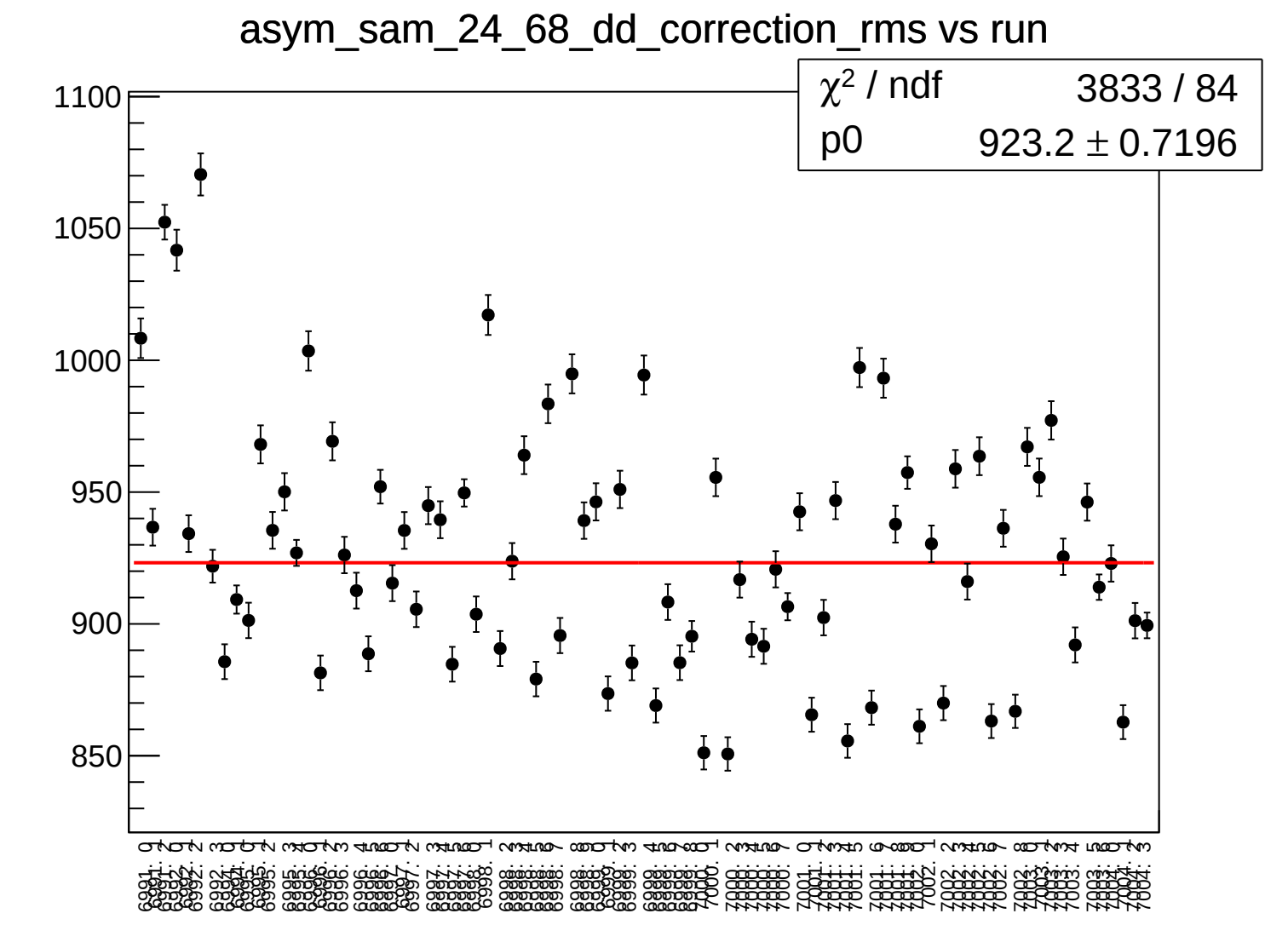

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 95.16 / 84
p0 57.2 ± 86.32
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean 40.99
Std Dev 85.5
3
2
1
0
−1
−2
−3

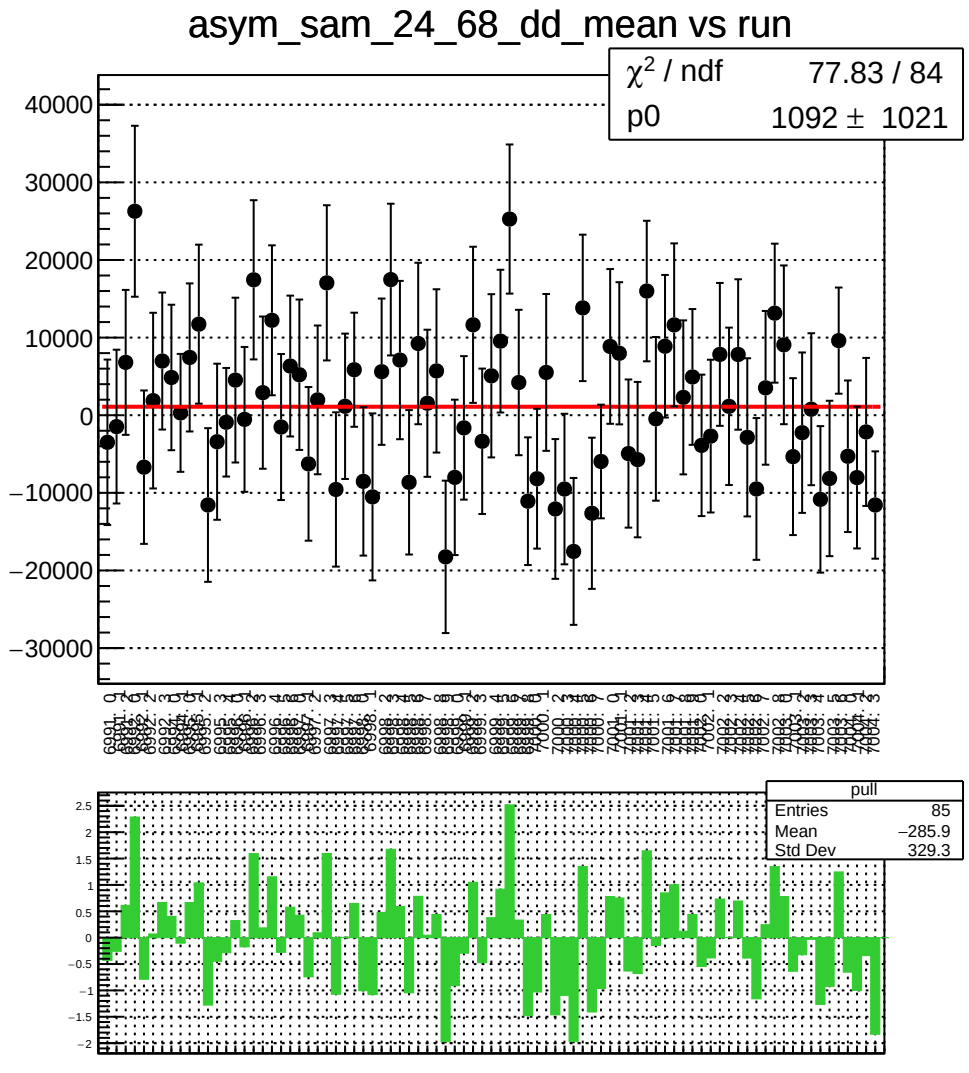

pull1D
Entries 85
Mean −0.01092
Std Dev 1.058
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

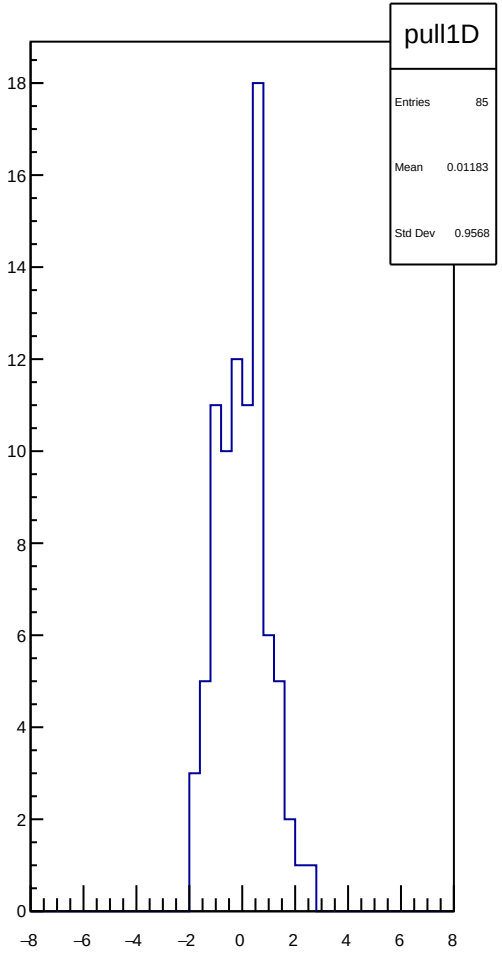

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 2092 / 84
p0 78.35 ± 0.06104
88
86
84
82
80
78
76
74

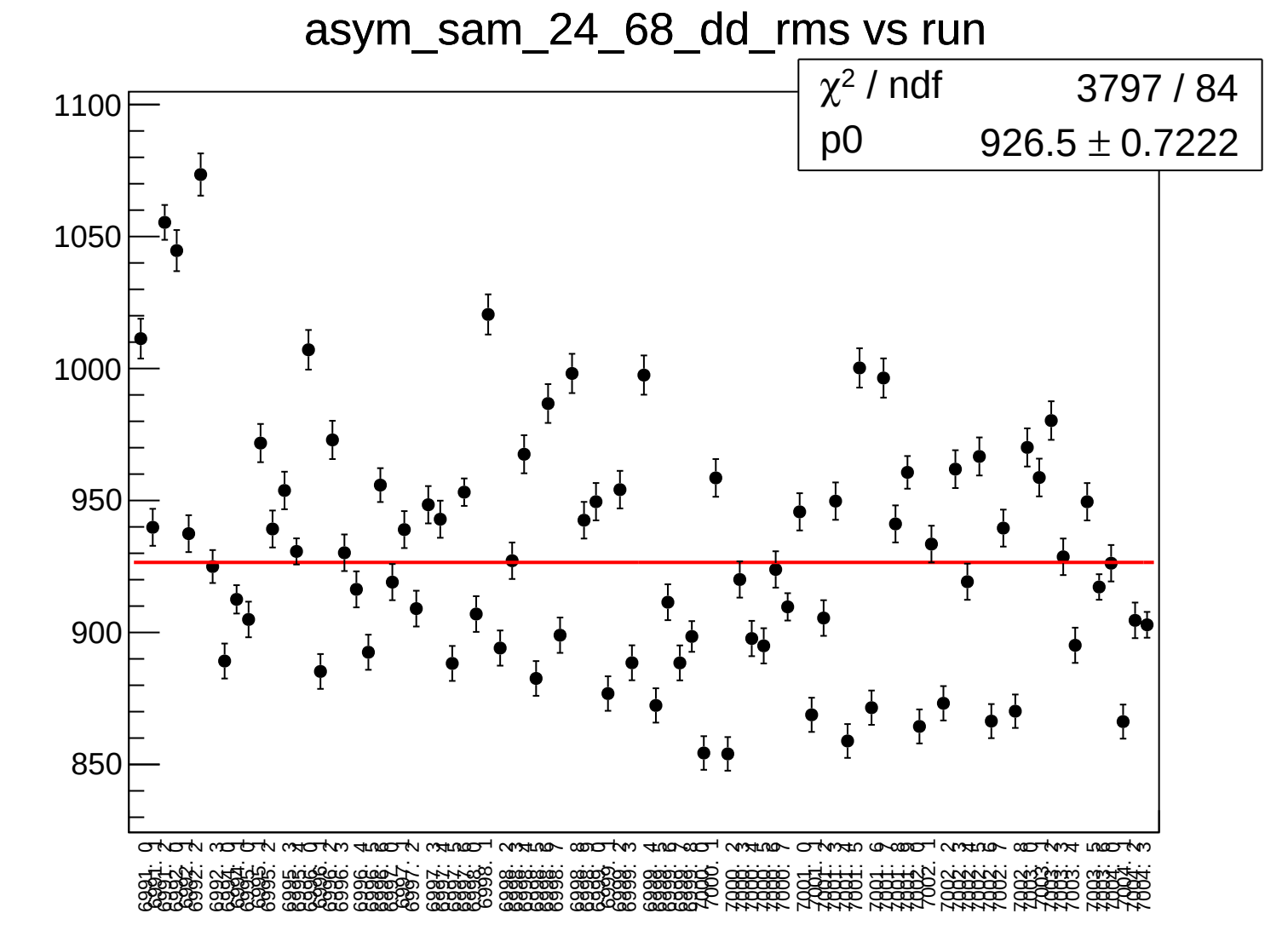

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 75.01 / 84
p0 −1036 ± 1018
pull
Entries 85
Mean −264.8
Std Dev 307.3

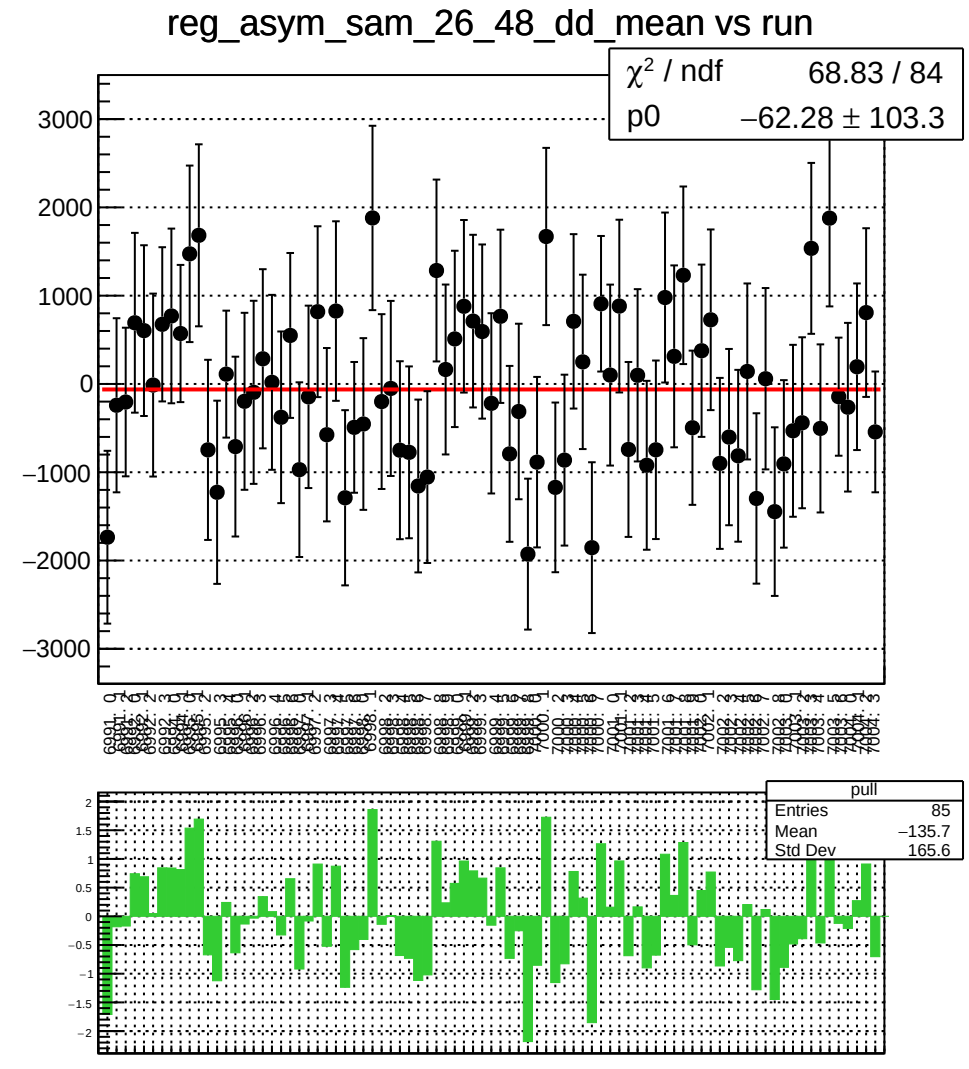

pull1D
Entries 85
Mean −0.01269
Std Dev 0.9393

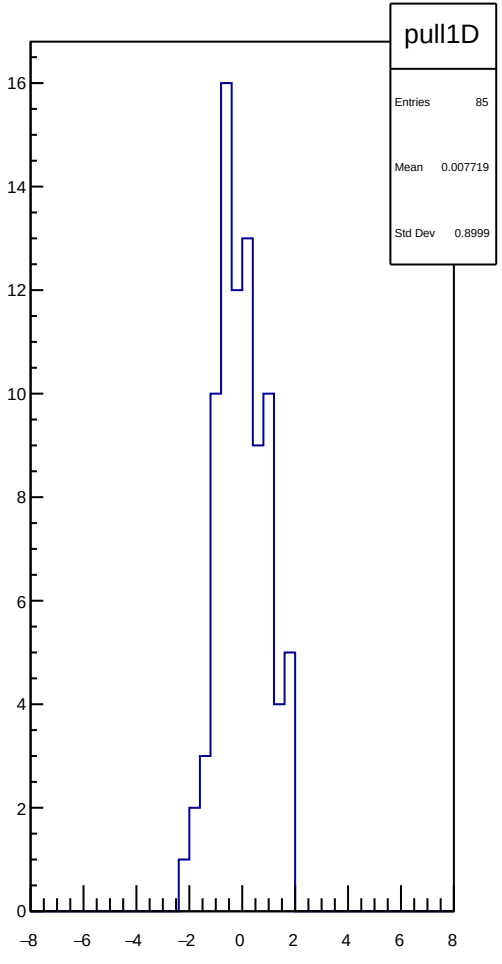

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 3833 / 84
p0 923.2 ± 0.7196
1100
1050
1000
950
900
850

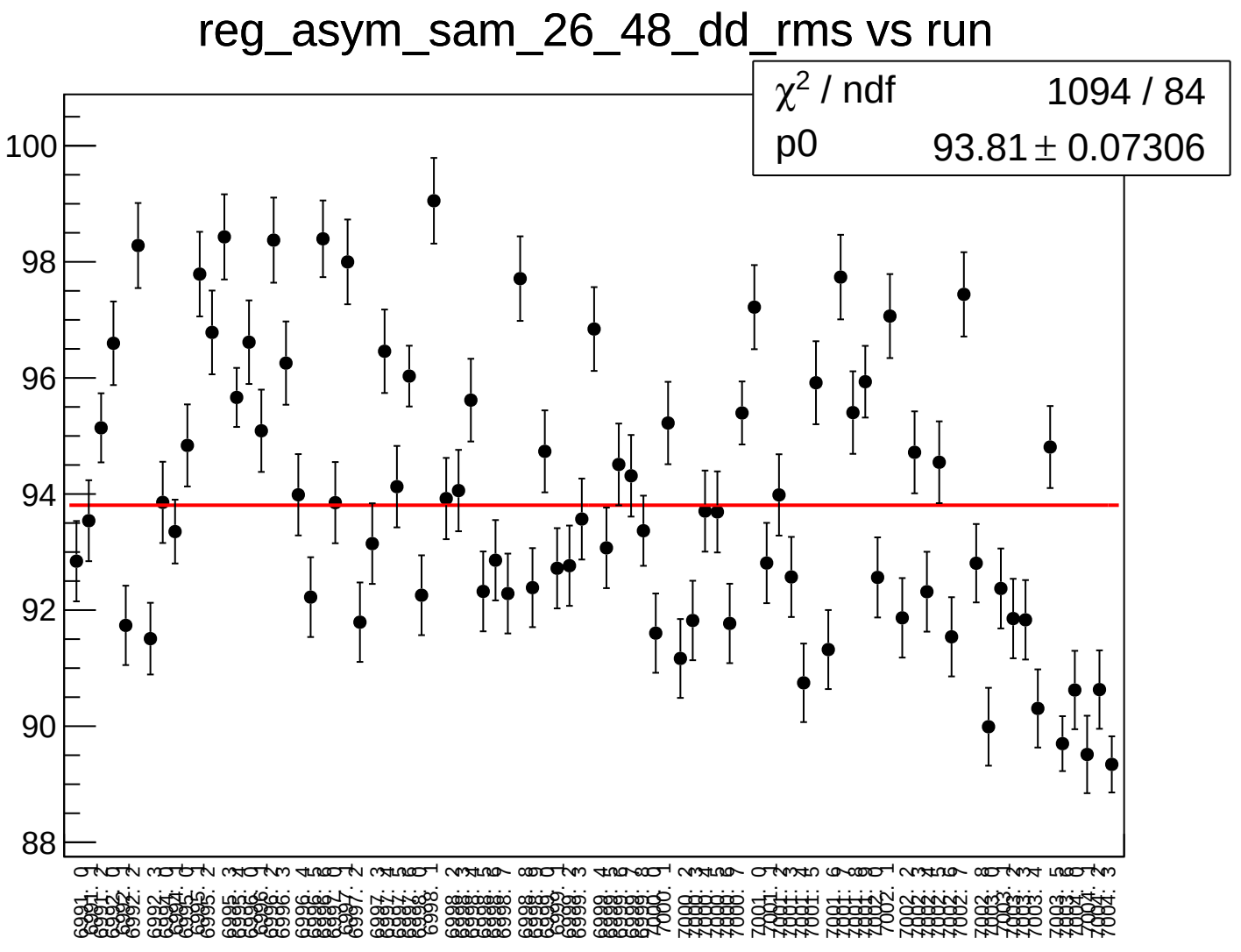

asym_sam_24_68_dd_mean vs run
χ² / ndf 77.83 / 84
p0 1092 ± 1021
pull
Entries 85
Mean −285.9
Std Dev 329.3

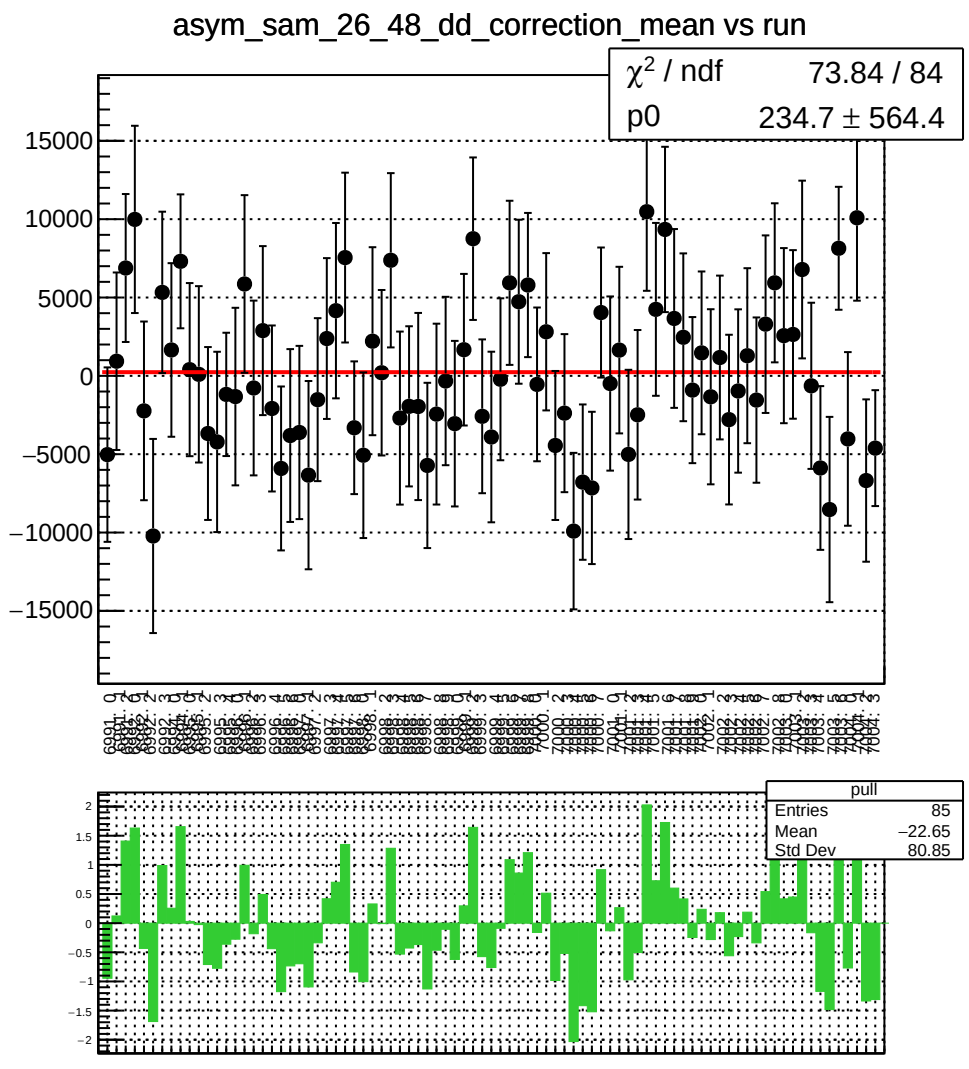

pull1D
Entries 85
Mean 0.01183
Std Dev 0.9568

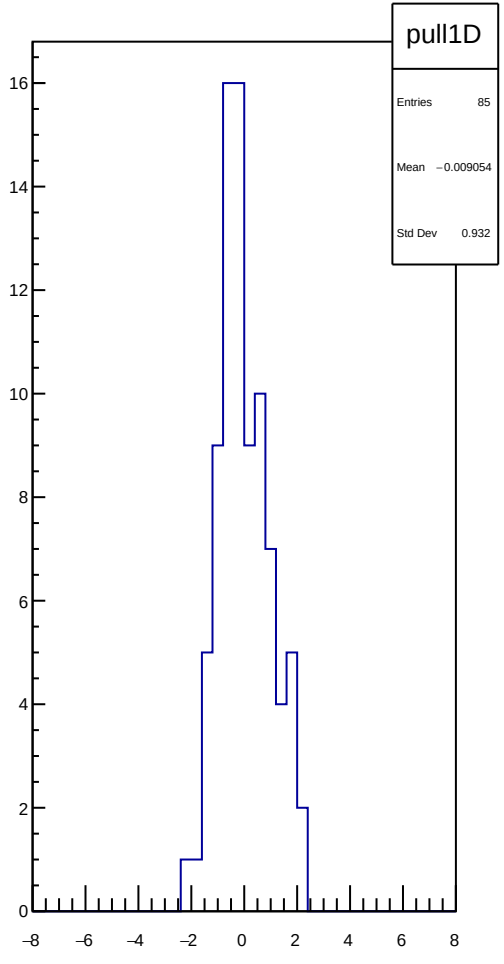

asym_sam_24_68_dd_rms vs run
χ² / ndf 3797 / 84
p0 926.5 ± 0.7222
1100
1050
1000
950
900
850

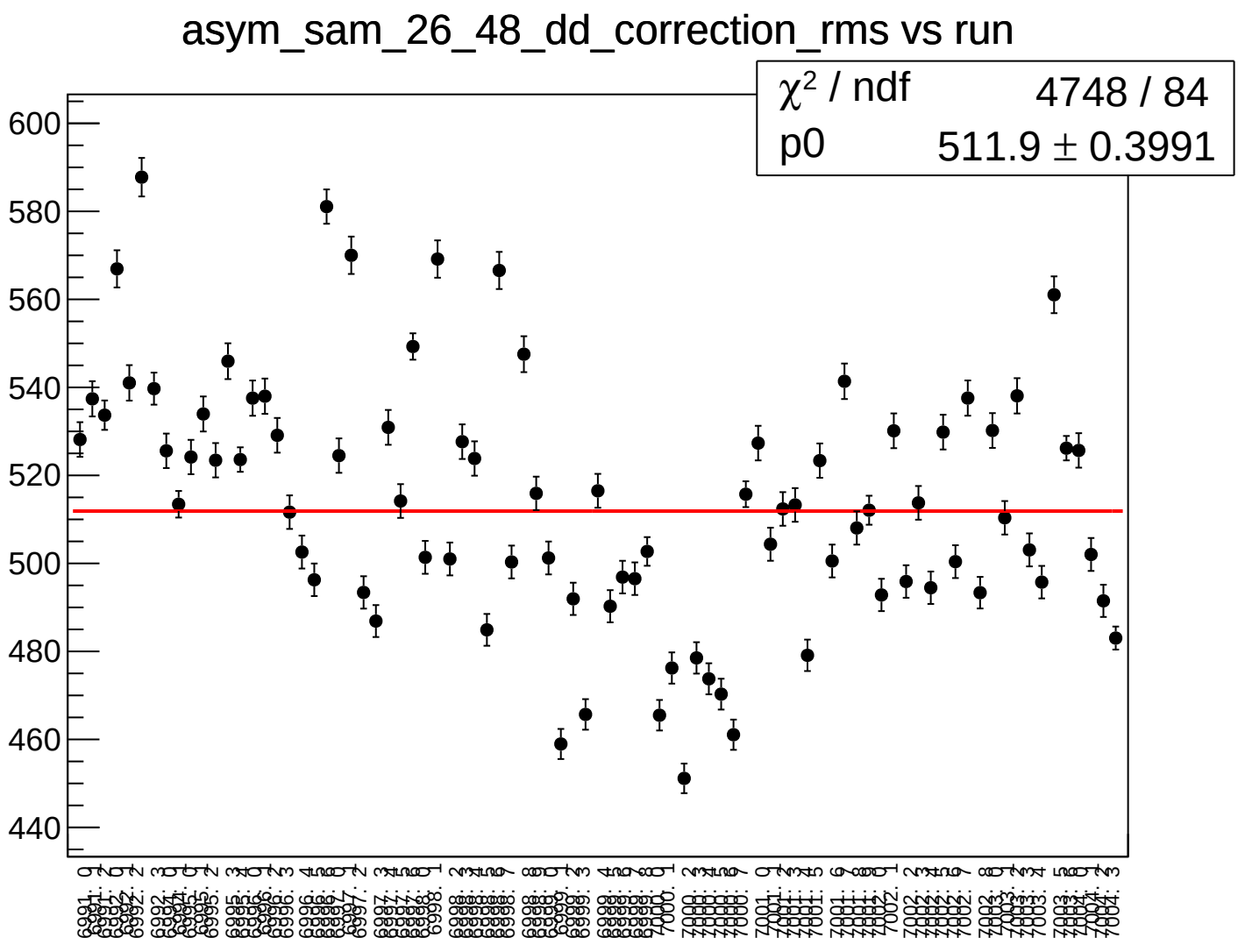

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 68.83 / 84
p0 −62.28 ± 103.3
pull
Entries 85
Mean −135.7
Std Dev 165.6

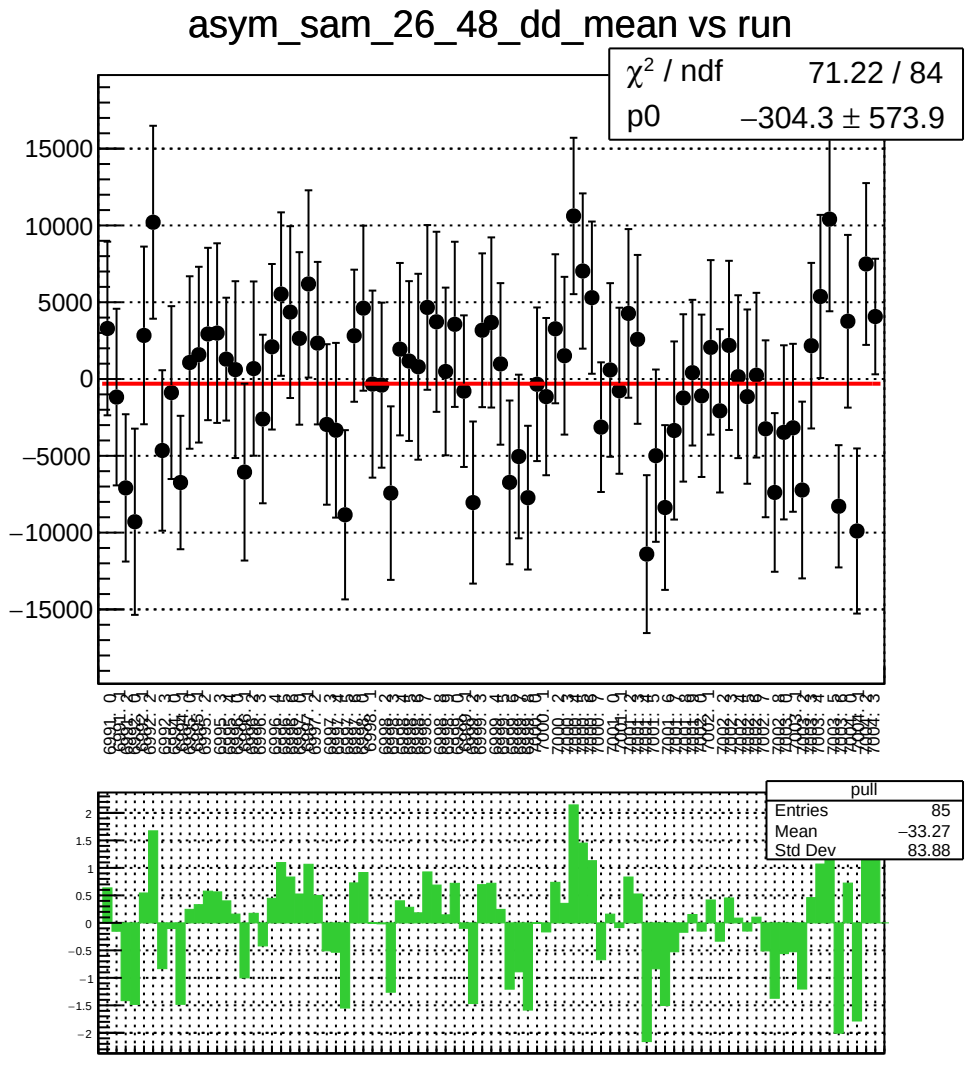

pull1D
Entries 85
Mean 0.007719
Std Dev 0.8999

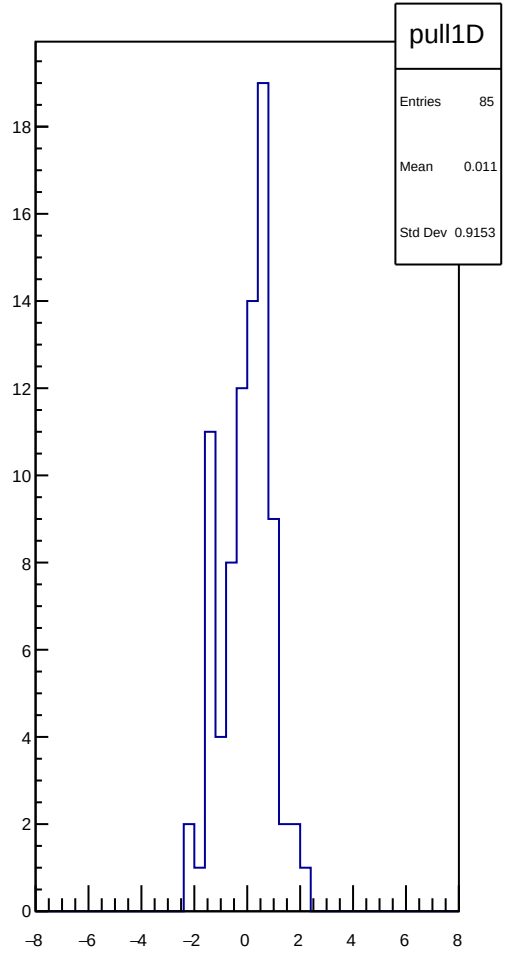

reg_asym_sam_26_48_dd_rms vs run
χ^2 / ndf 1094 / 84
p0 93.81 ± 0.07306
100
98
96
94
92
90
88

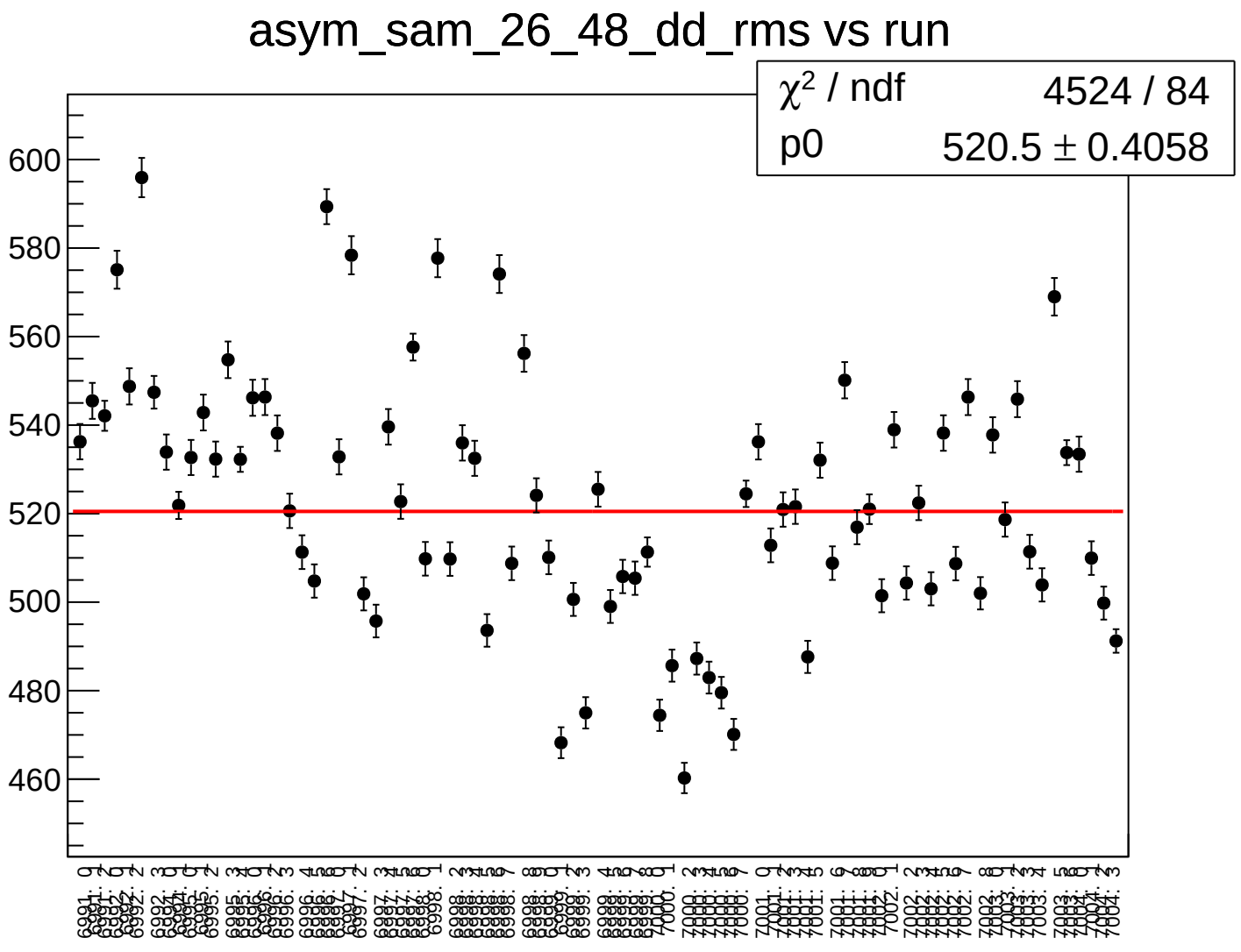

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 73.84 / 84
p0 234.7 ± 564.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −22.65
Std Dev 80.85
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

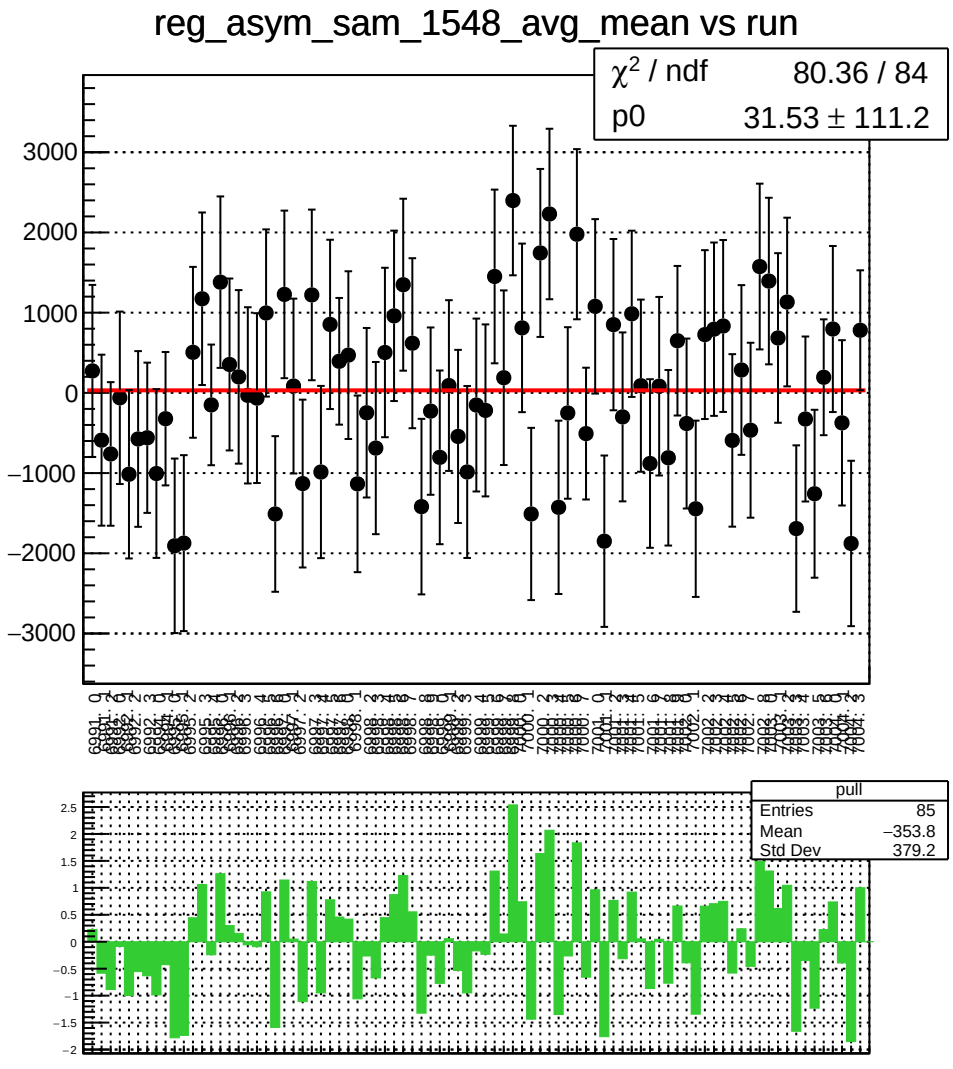

pull1D
Entries 85
Mean −0.009054
Std Dev 0.932
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

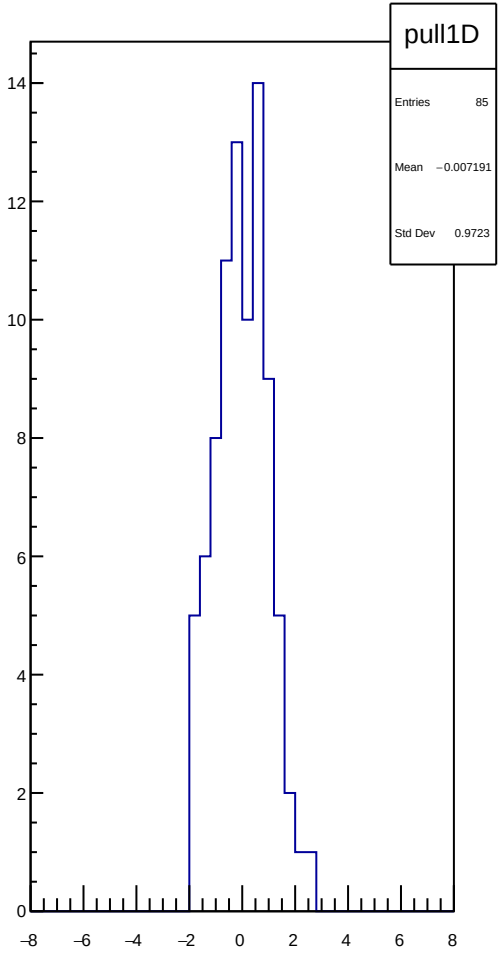

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 4748 / 84
p0 511.9 ± 0.3991
600
580
560
540
520
500
480
460
440

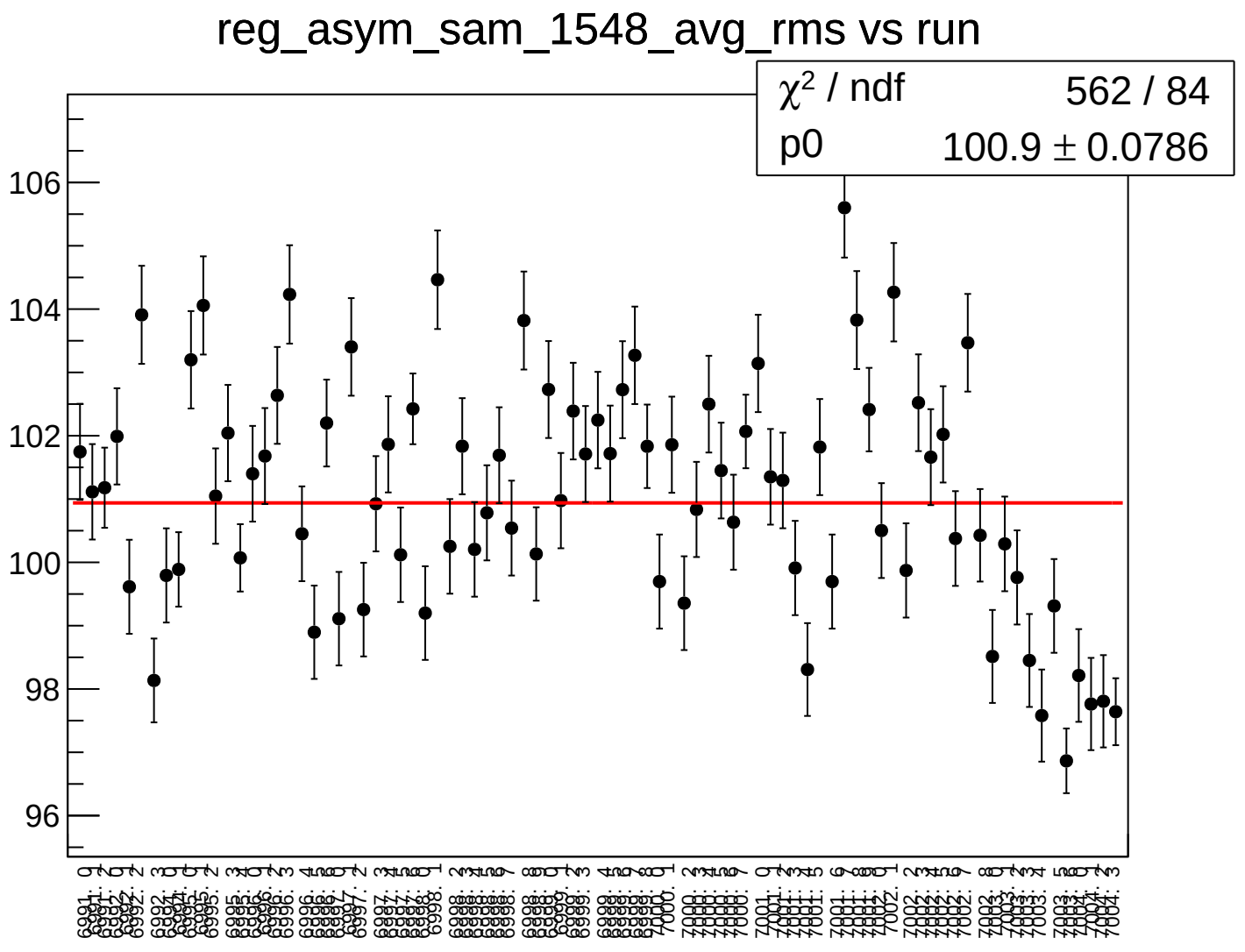

asym_sam_26_48_dd_mean vs run
χ² / ndf 71.22 / 84
p0 −304.3 ± 573.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −33.27
Std Dev 83.88
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

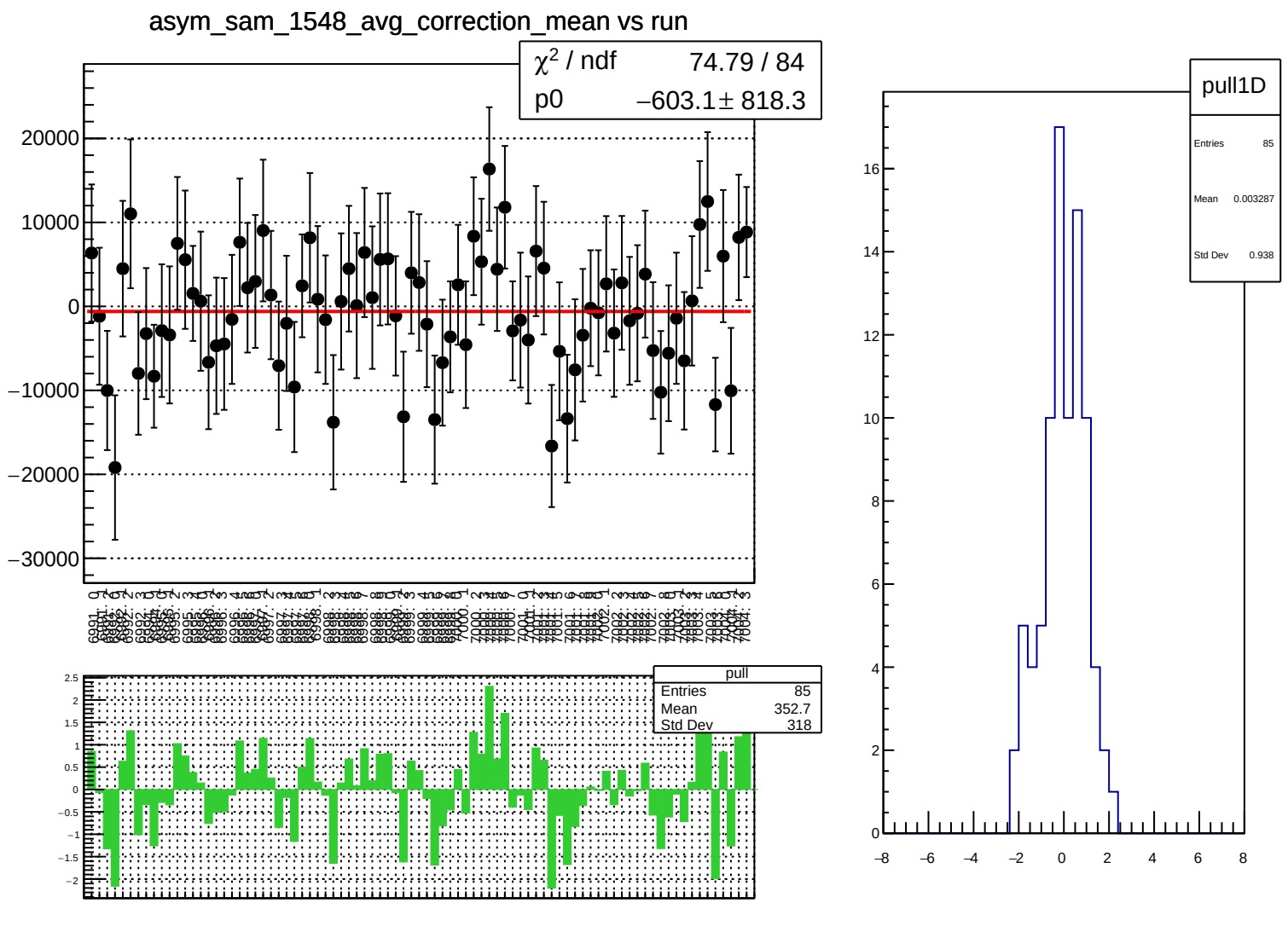

pull1D
Entries 85
Mean 0.011
Std Dev 0.9153
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

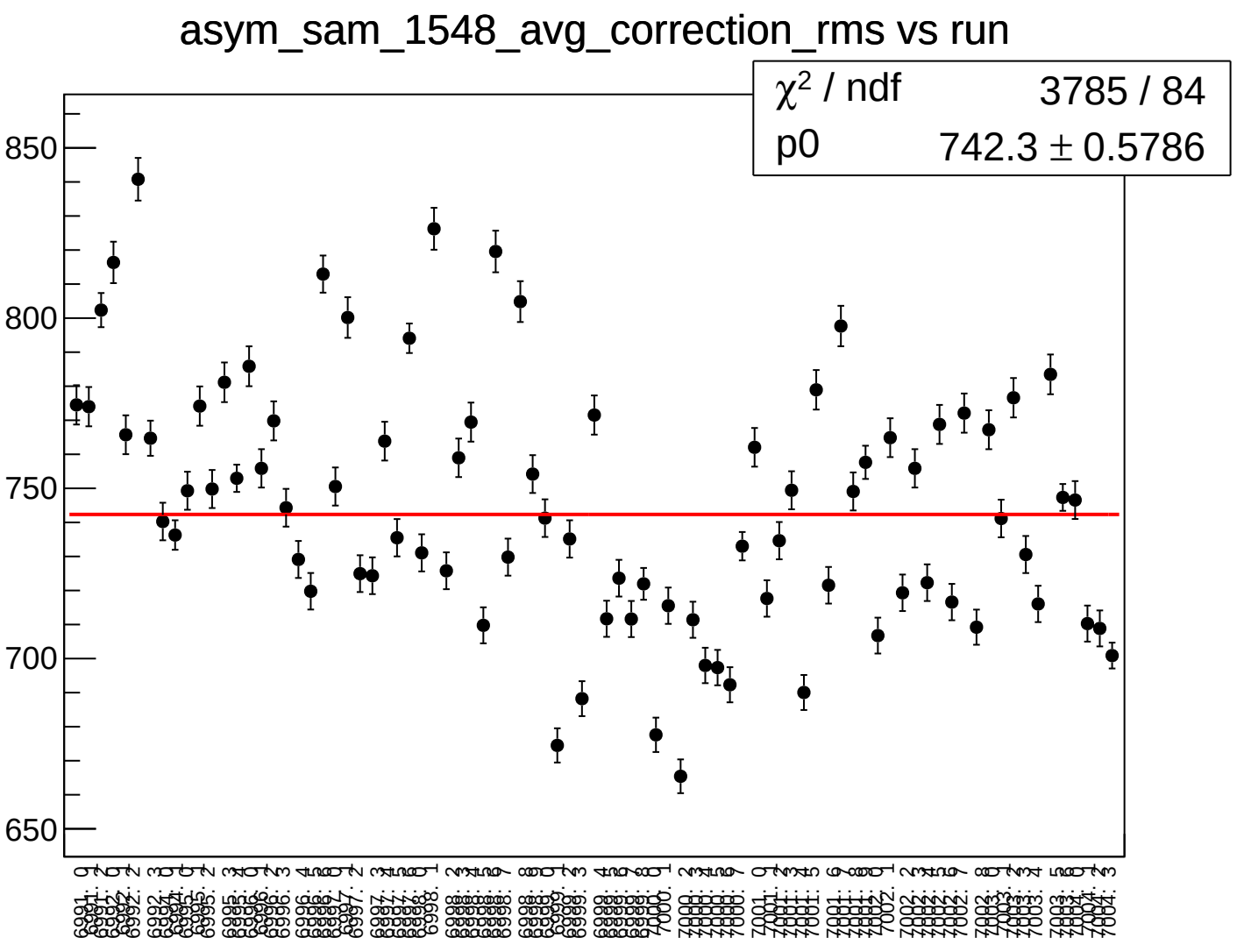

asym_sam_26_48_dd_rms vs run
χ² / ndf 4524 / 84
p0 520.5 ± 0.4058
600
580
560
540
520
500
480
460

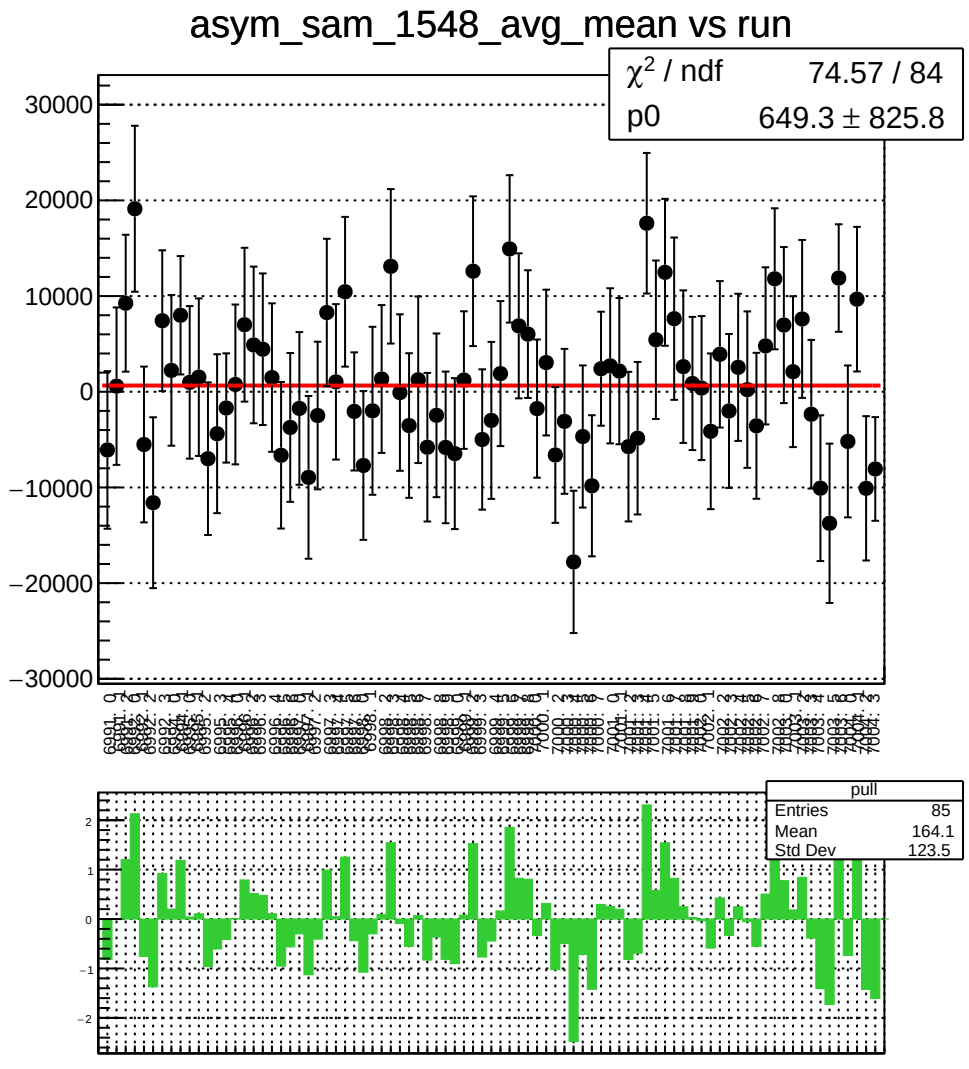

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 80.36 / 84
p0 31.53 ± 111.2
pull
Entries 85
Mean −353.8
Std Dev 379.2

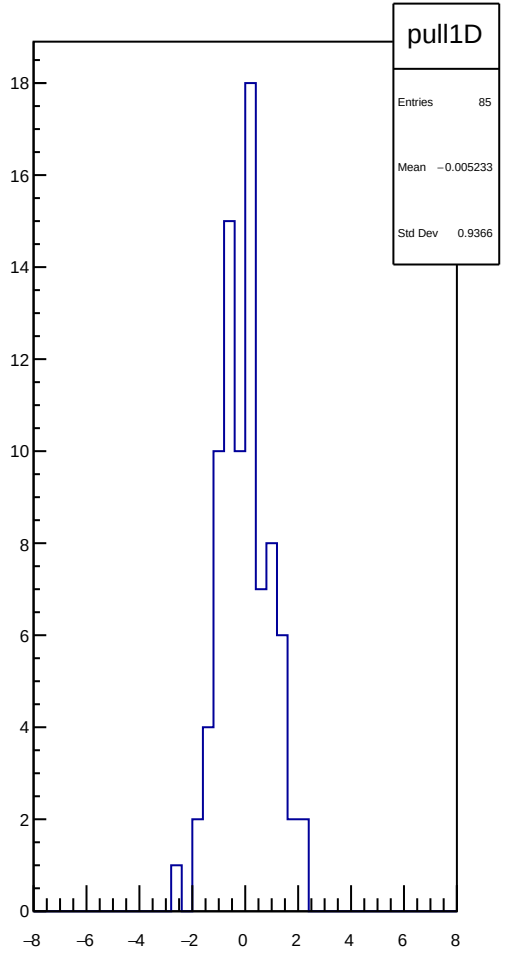

pull1D
Entries 85
Mean −0.007191
Std Dev 0.9723

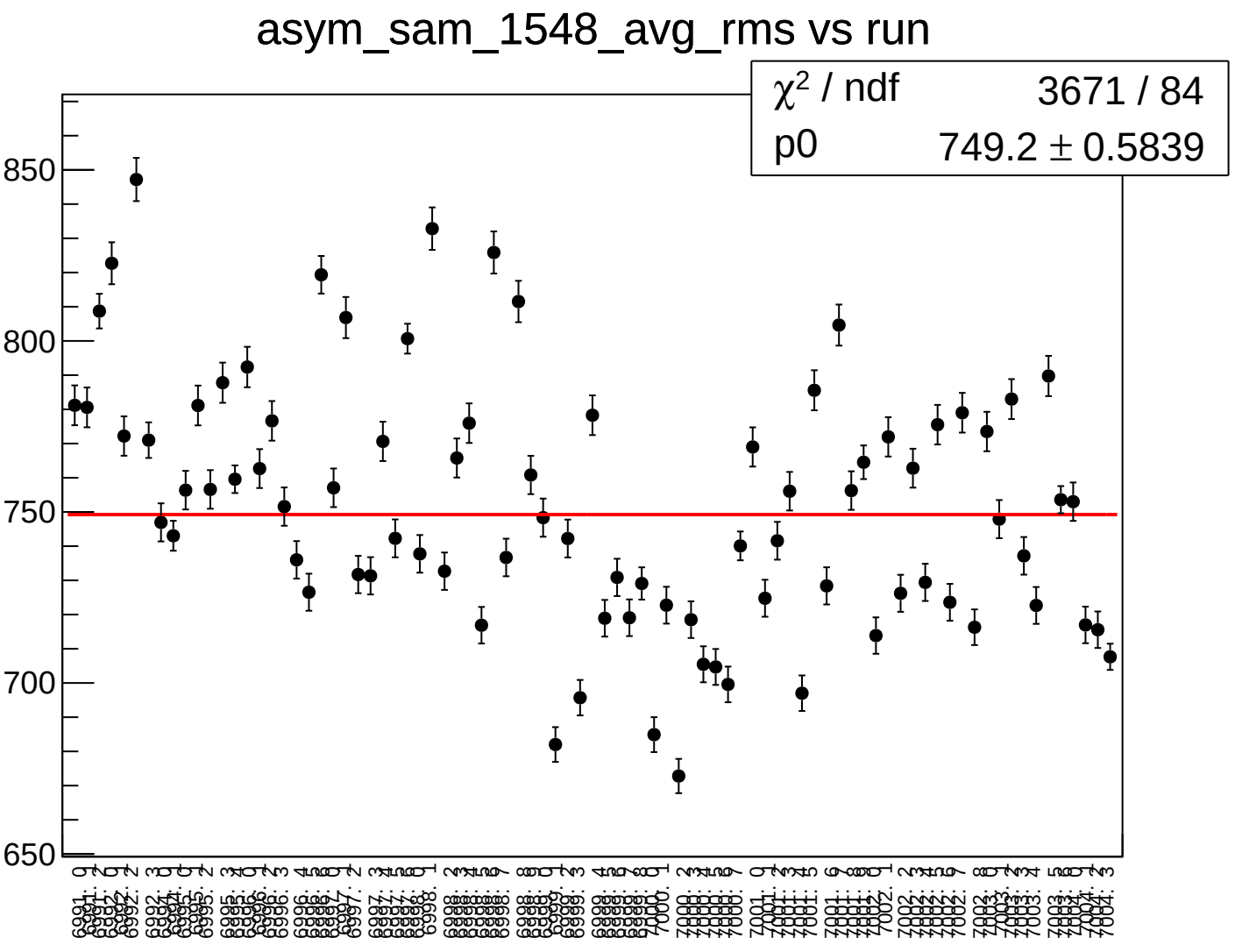

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 562 / 84
p0 100.9 ± 0.0786
106
104
102
100
98
96

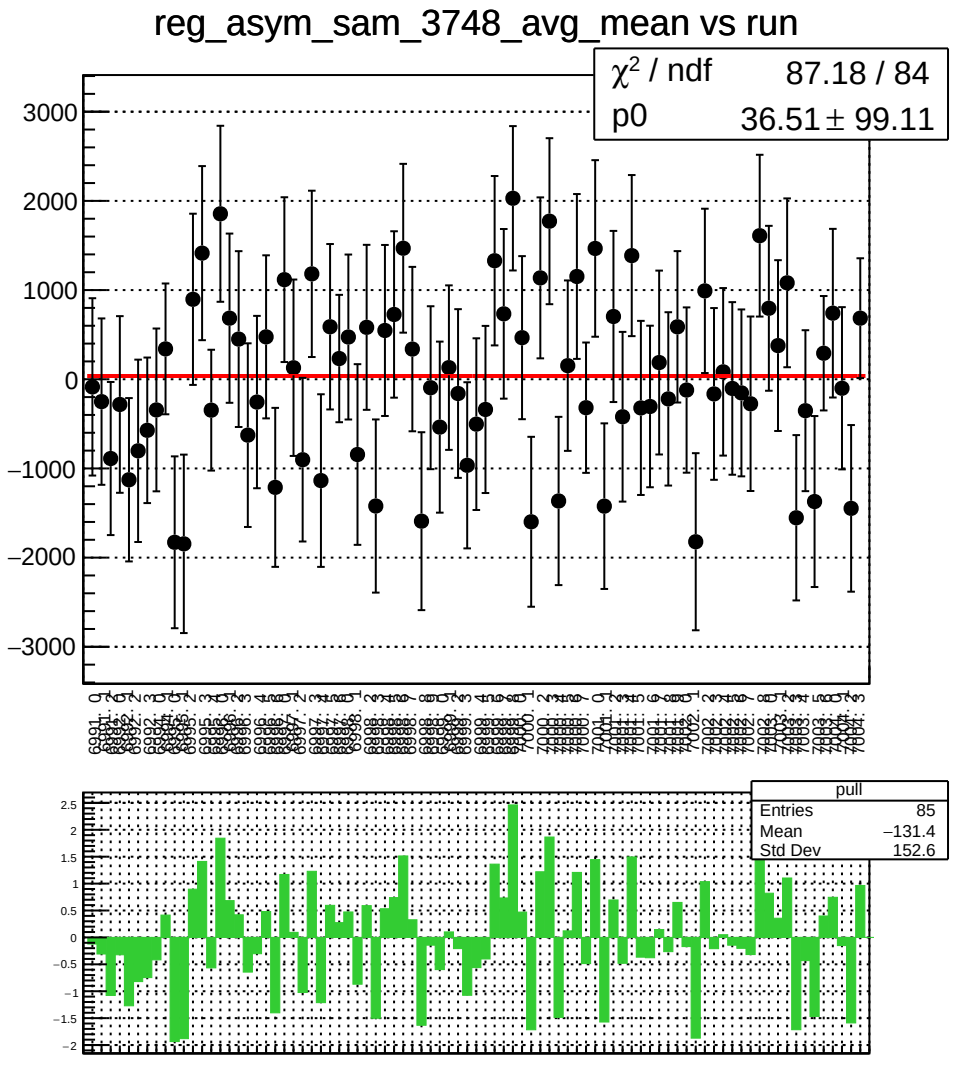

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 74.79 / 84
p0 −603.1 ± 818.3
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean 352.7
Std Dev 318
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.003287
Std Dev 0.938
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

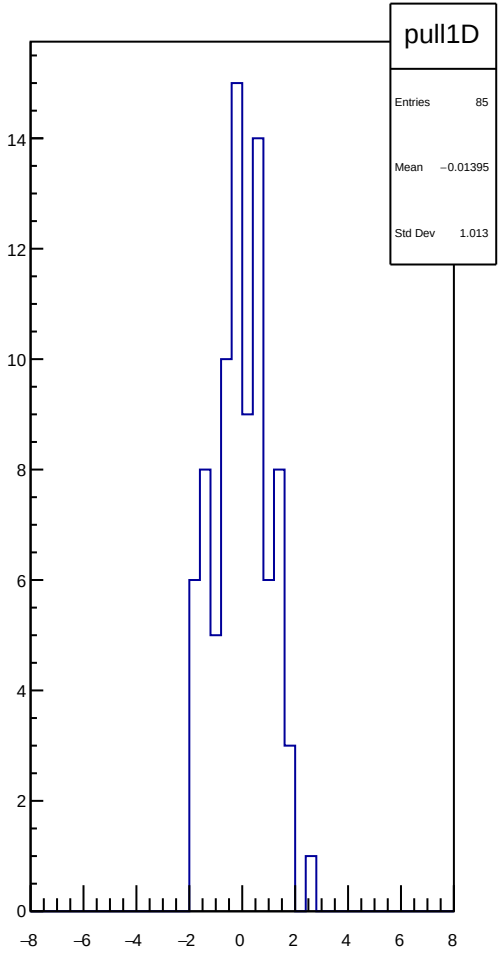

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 3785 / 84
p0 742.3 ± 0.5786
850
800
750
700
650

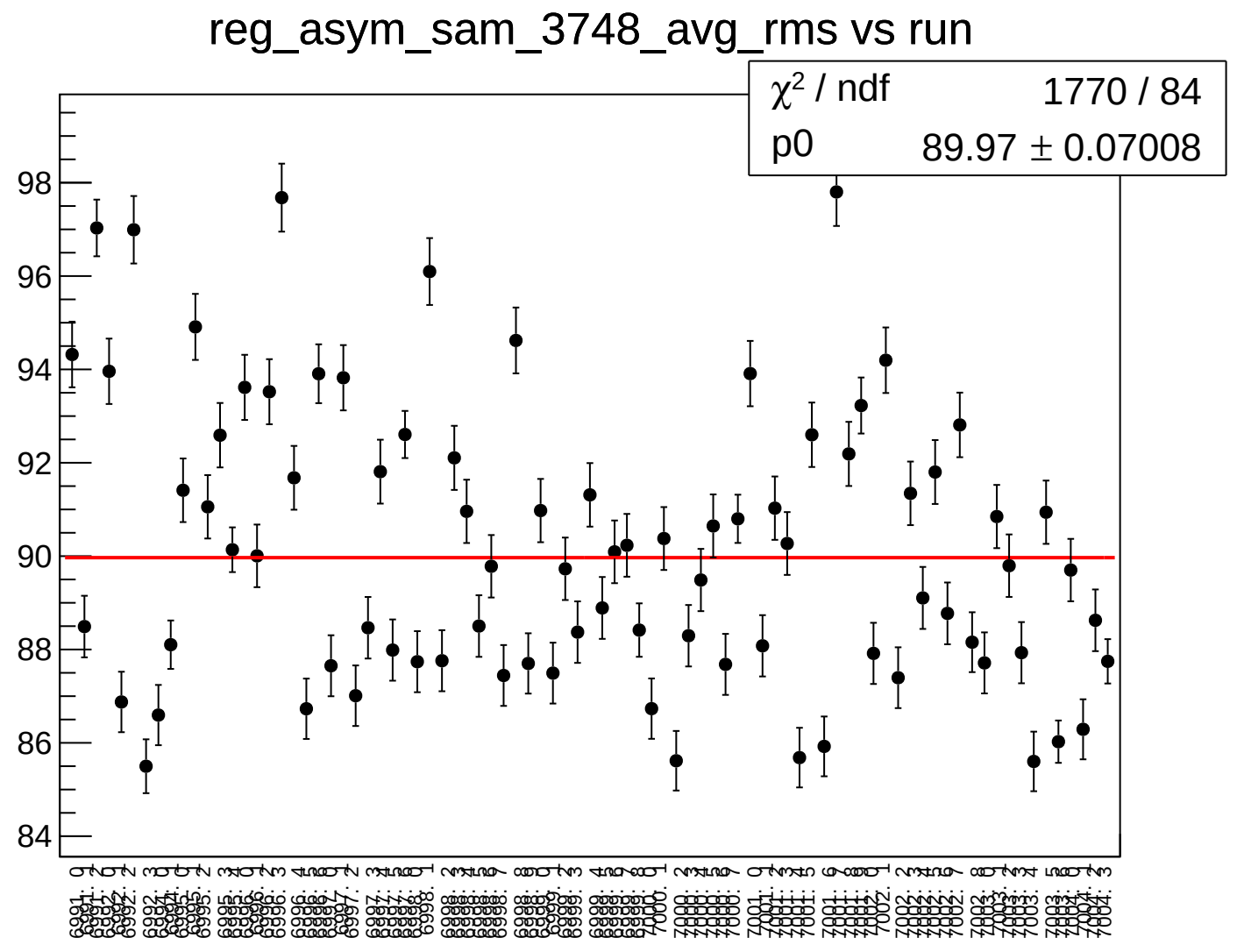

asym_sam_1548_avg_mean vs run
χ² / ndf 74.57 / 84
p0 649.3 ± 825.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean 164.1
Std Dev 123.5
2
1
0
−1
−2

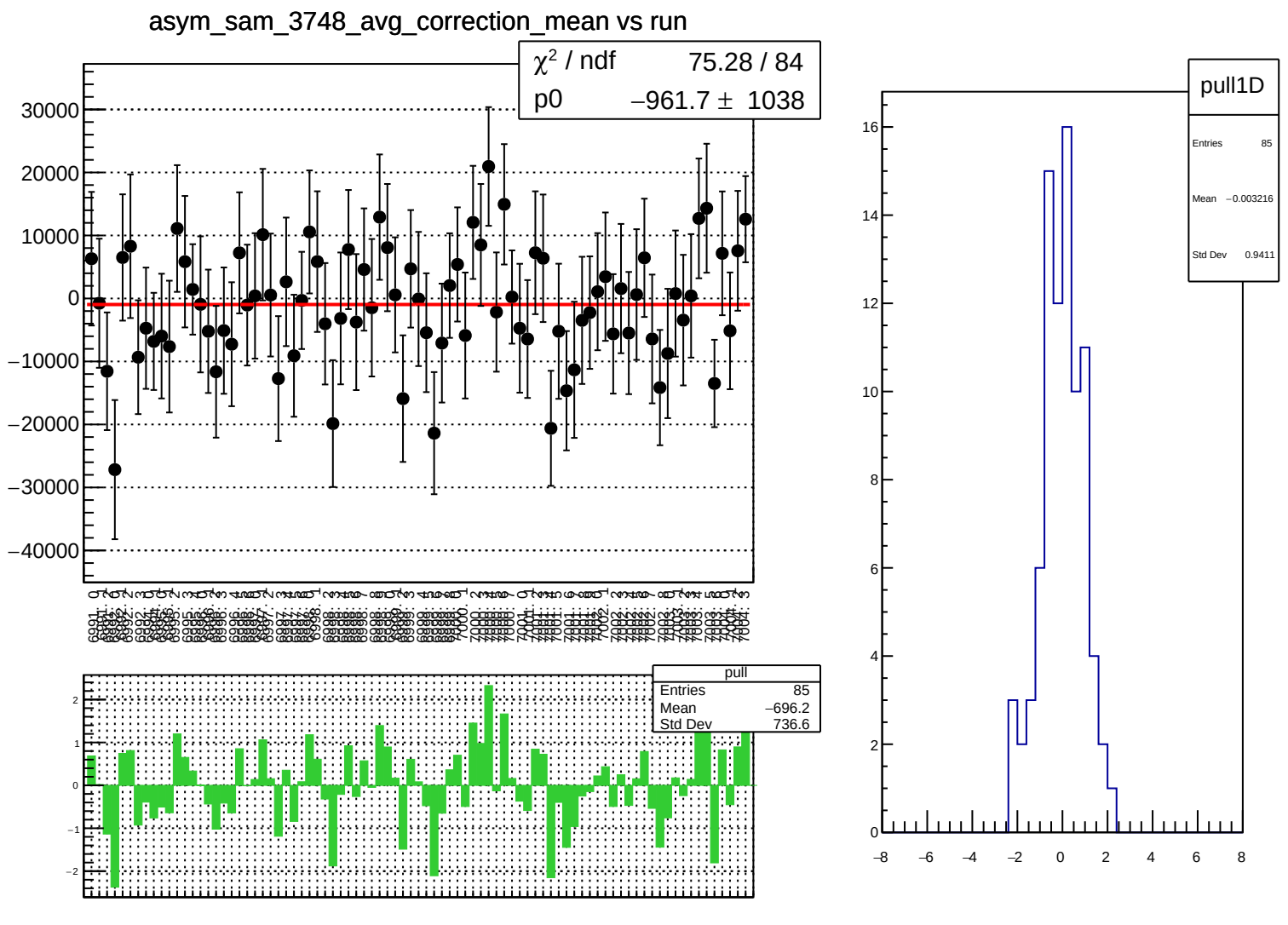

pull1D
Entries 85
Mean −0.005233
Std Dev 0.9366
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

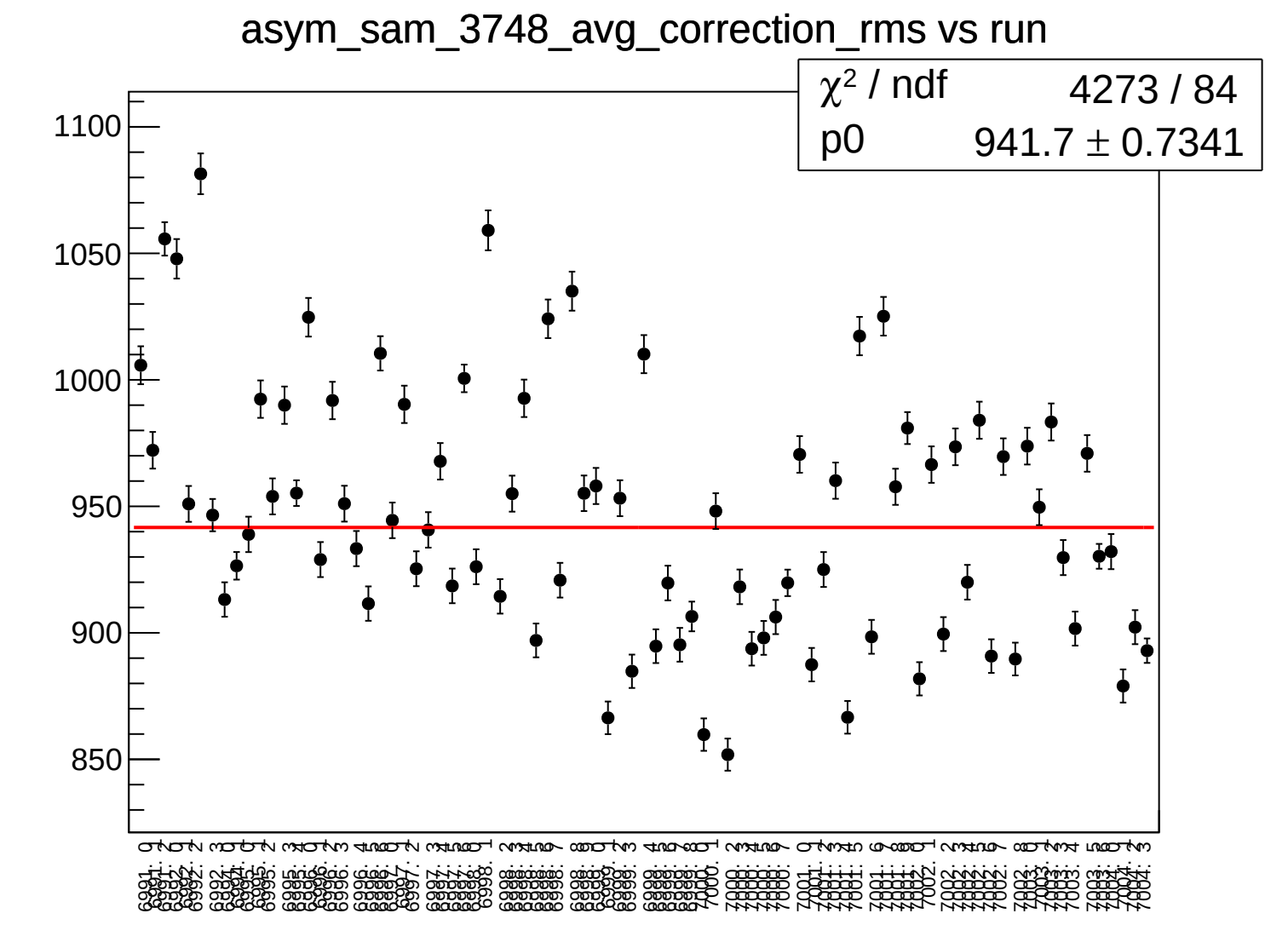

asym_sam_1548_avg_rms vs run
χ² / ndf 3671 / 84
p0 749.2 ± 0.5839
850
800
750
700
650

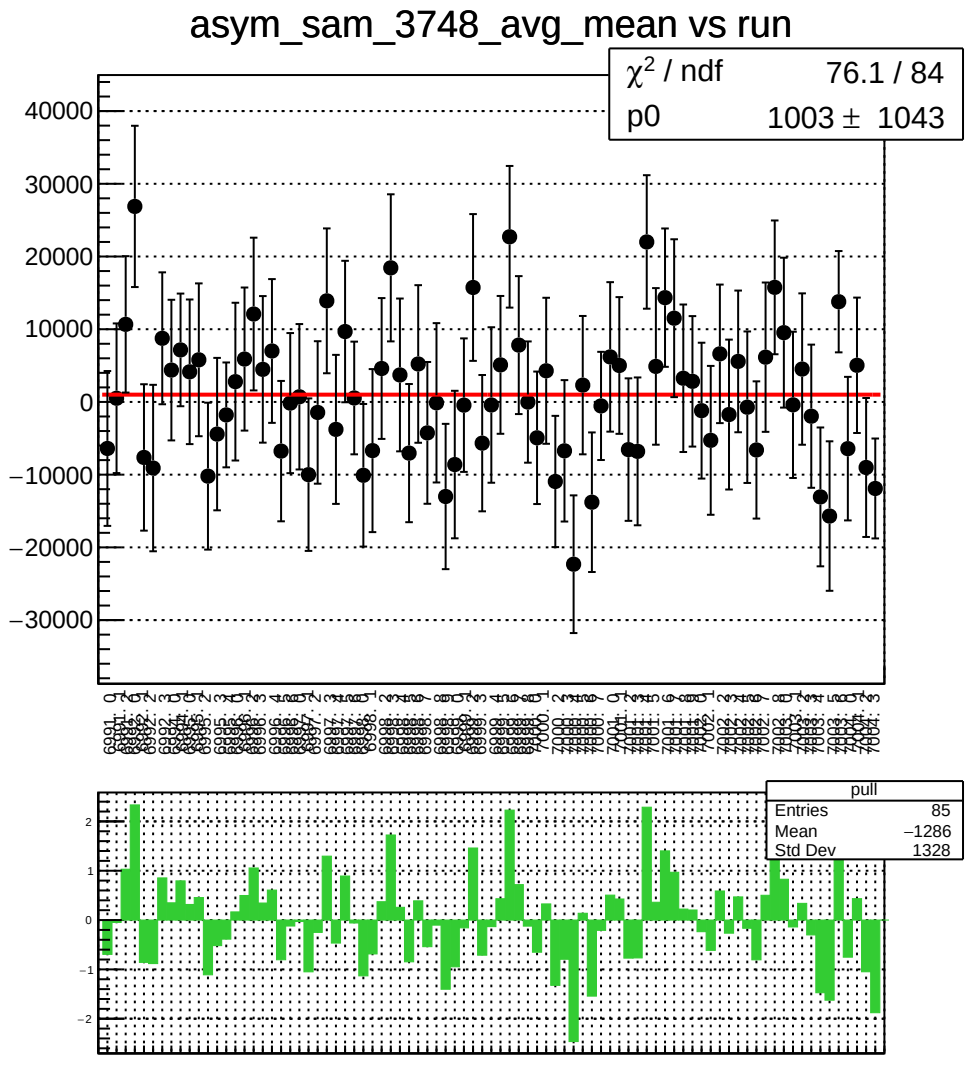

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 87.18 / 84
p0 36.51 ± 99.11
pull
Entries 85
Mean −131.4
Std Dev 152.6

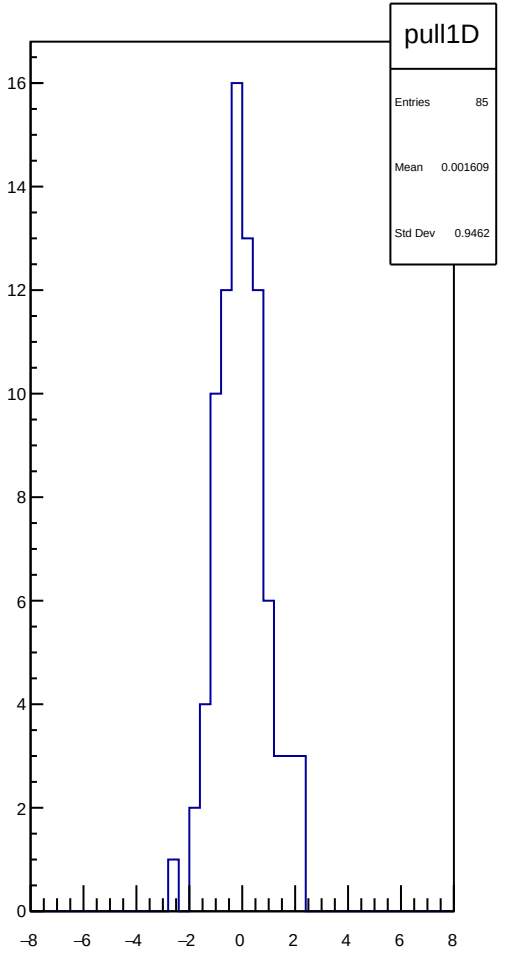

pull1D
Entries 85
Mean −0.01395
Std Dev 1.013

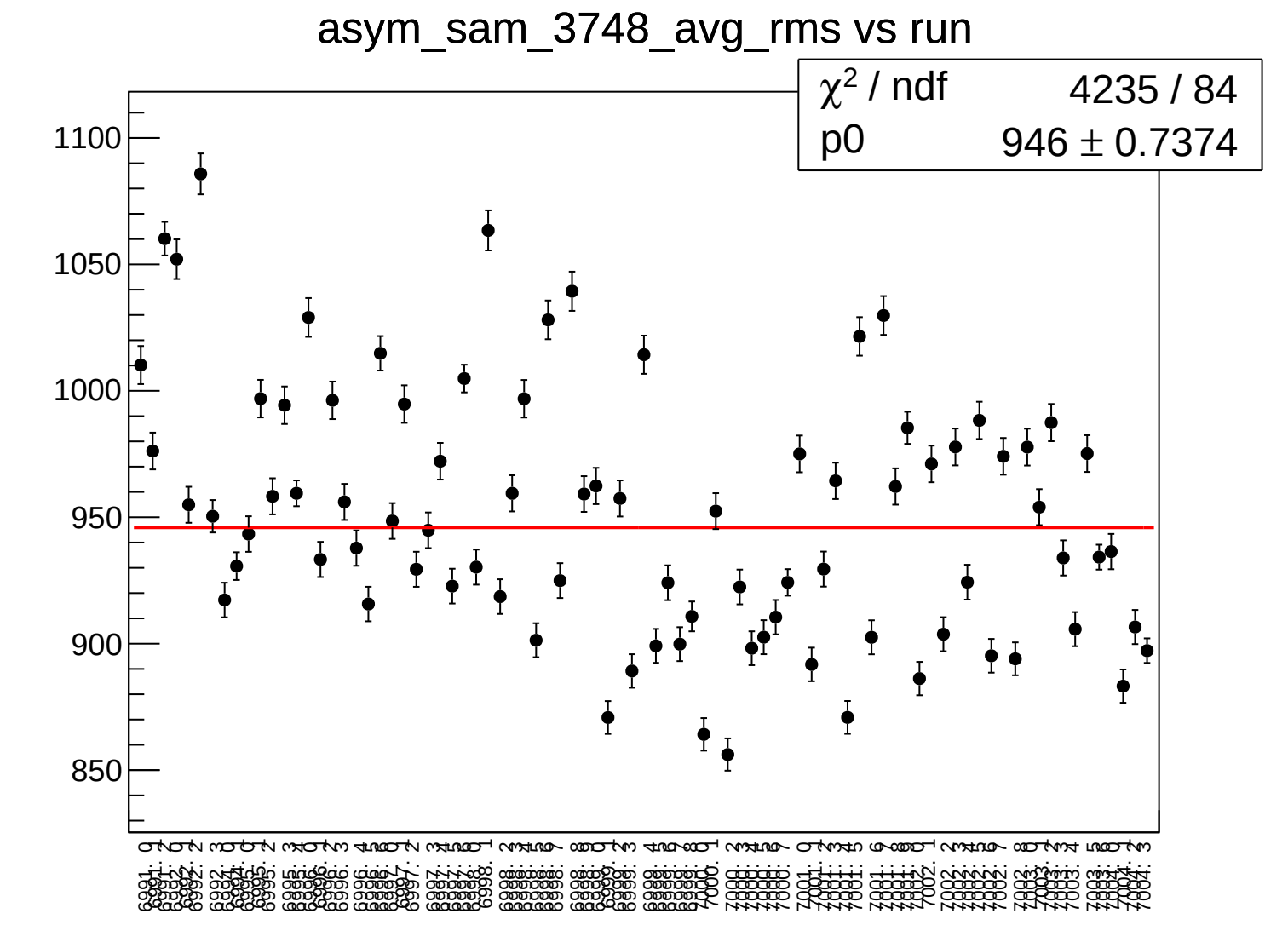

reg_asym_sam_3748_avg_rms vs run
χ^2 / ndf 1770 / 84
p0 89.97 ± 0.07008
98
96
94
92
90
88
86
84

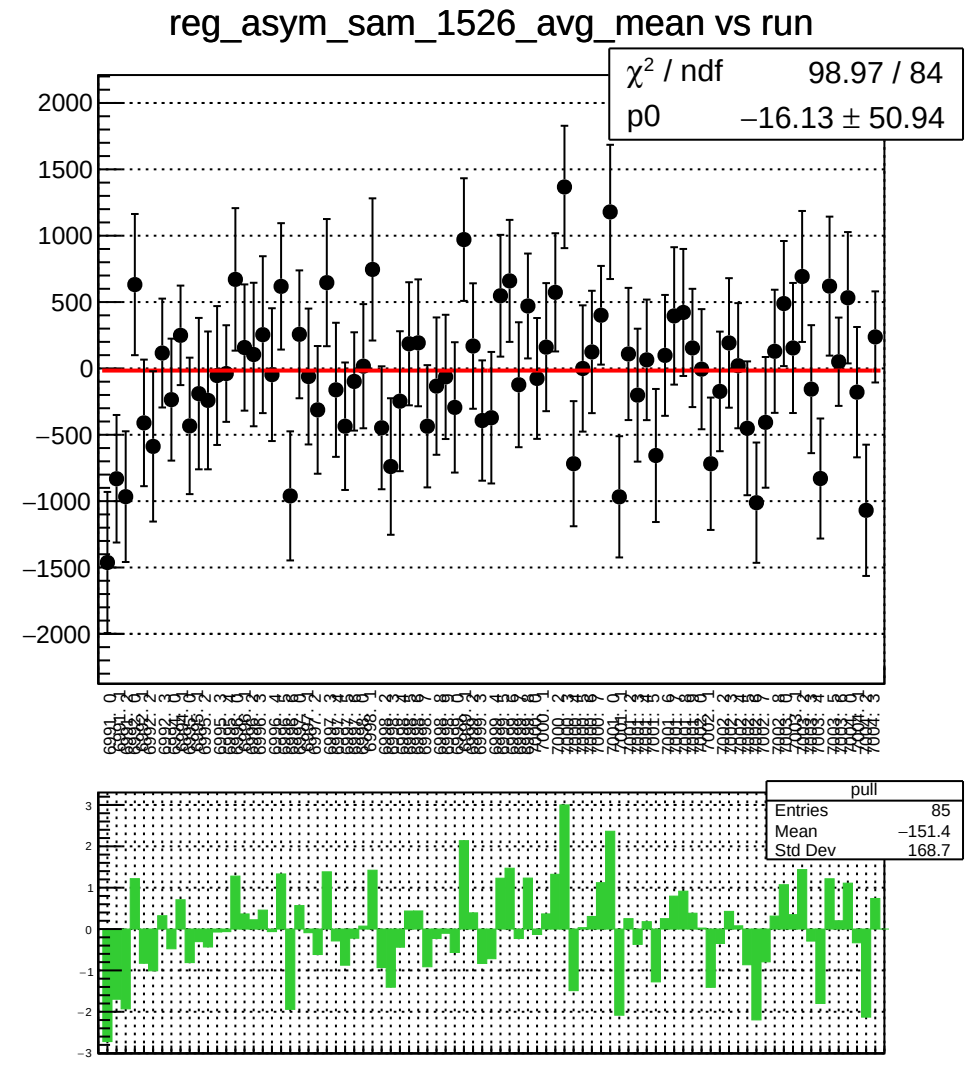

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 75.28 / 84
p0 −961.7 ± 1038
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −696.2
Std Dev 736.6
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.003216
Std Dev 0.9411
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

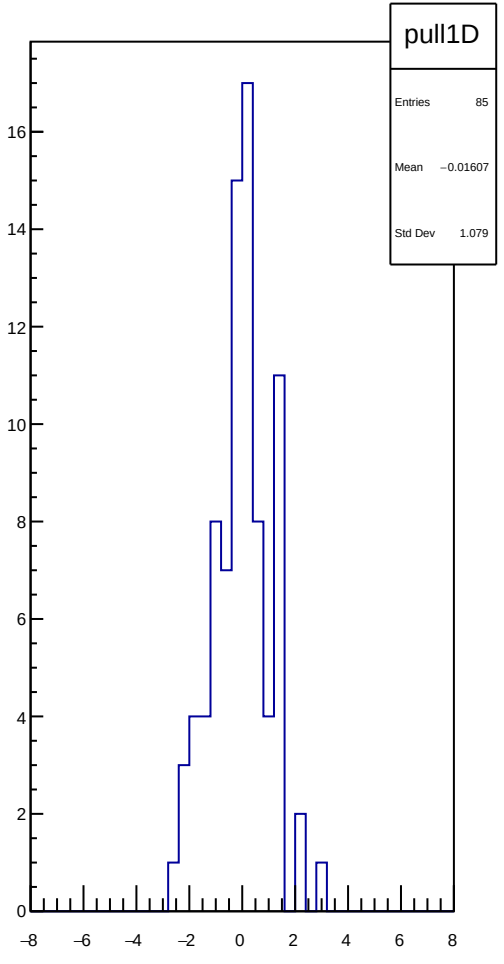

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 4273 / 84
p0 941.7 ± 0.7341
1100
1050
1000
950
900
850

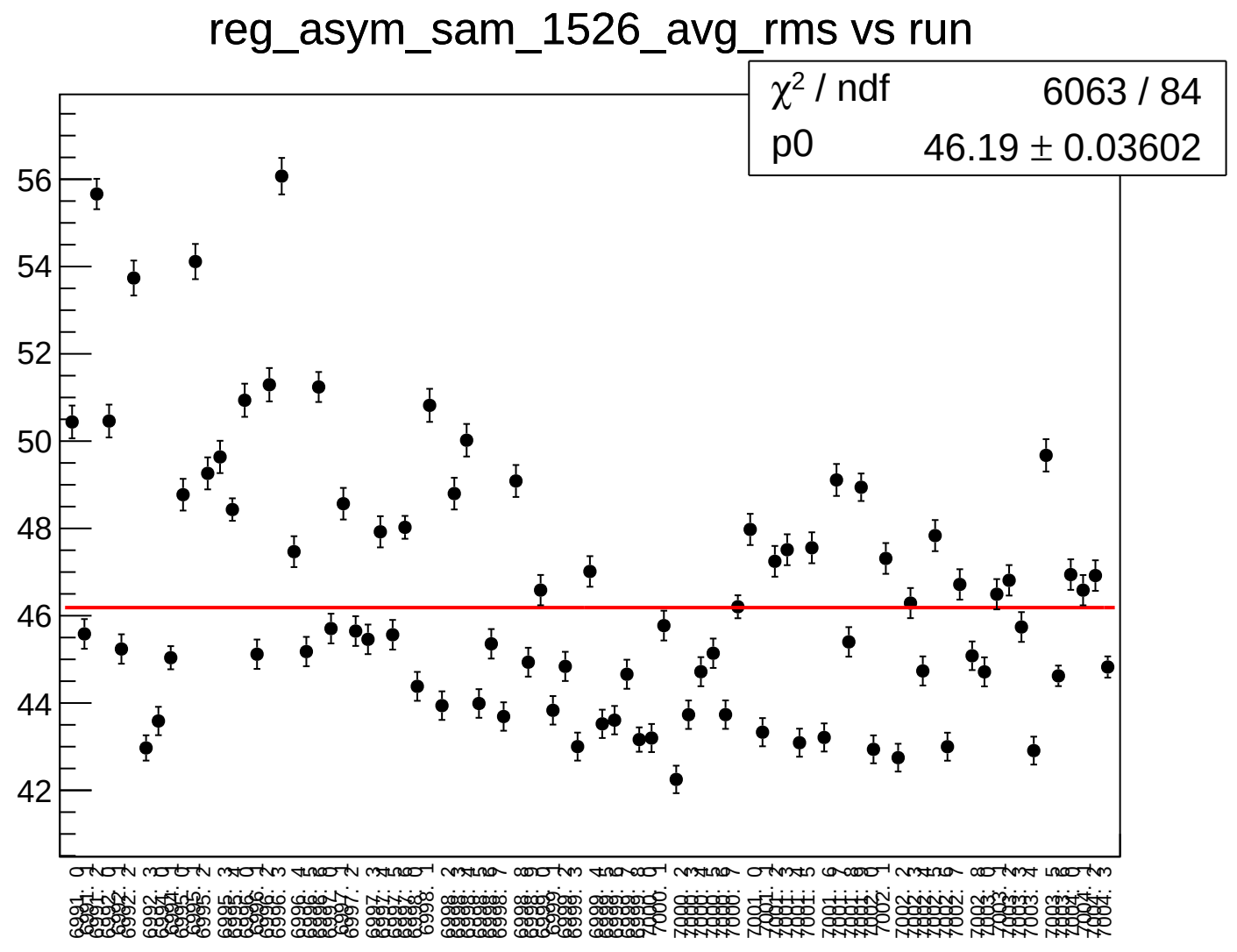

asym_sam_3748_avg_mean vs run
χ² / ndf 76.1 / 84
p0 1003 ± 1043
pull
Entries 85
Mean −1286
Std Dev 1328

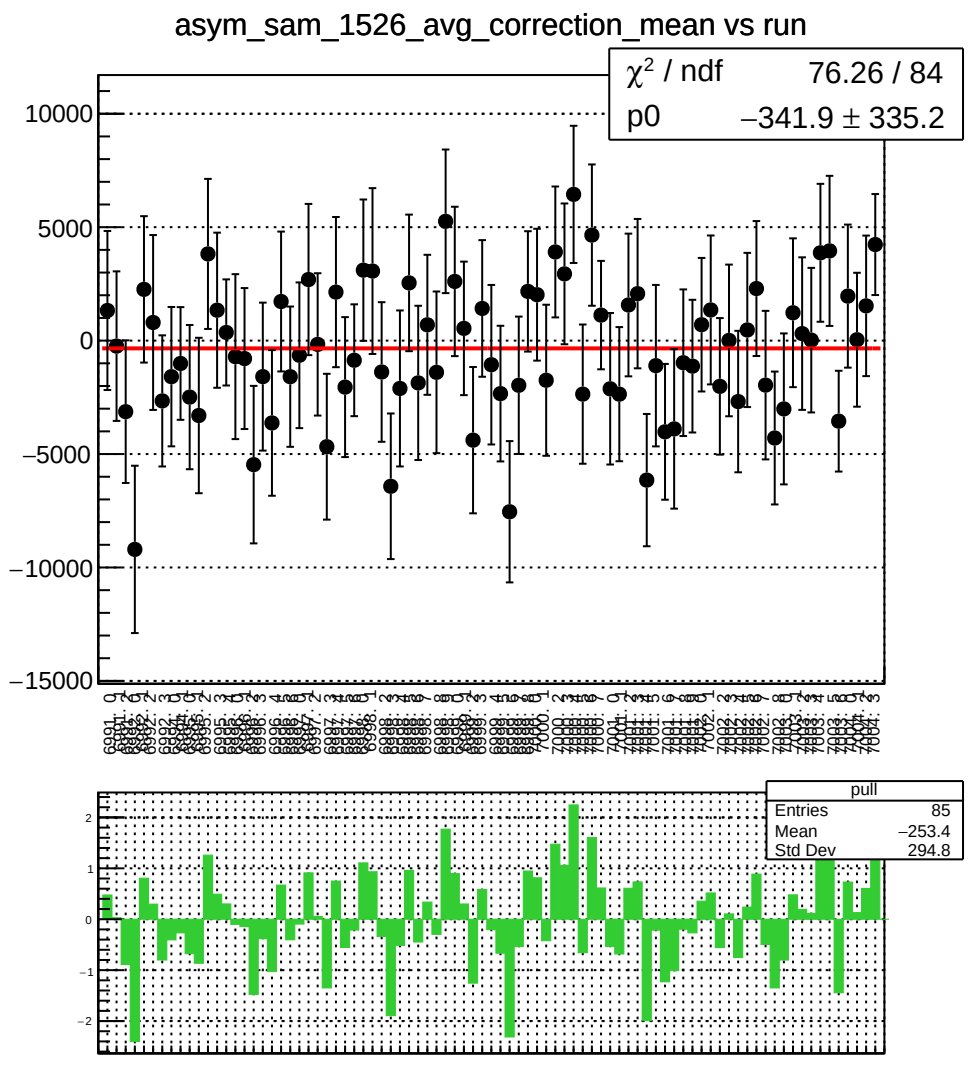

pull1D
Entries 85
Mean 0.001609
Std Dev 0.9462

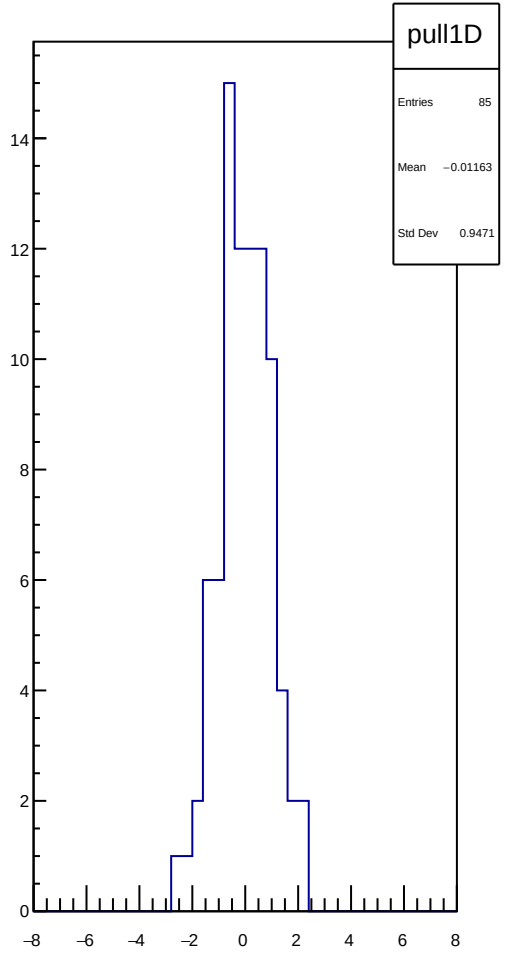

asym_sam_3748_avg_rms vs run
χ² / ndf 4235 / 84
p0 946 ± 0.7374
1100
1050
1000
950
900
850

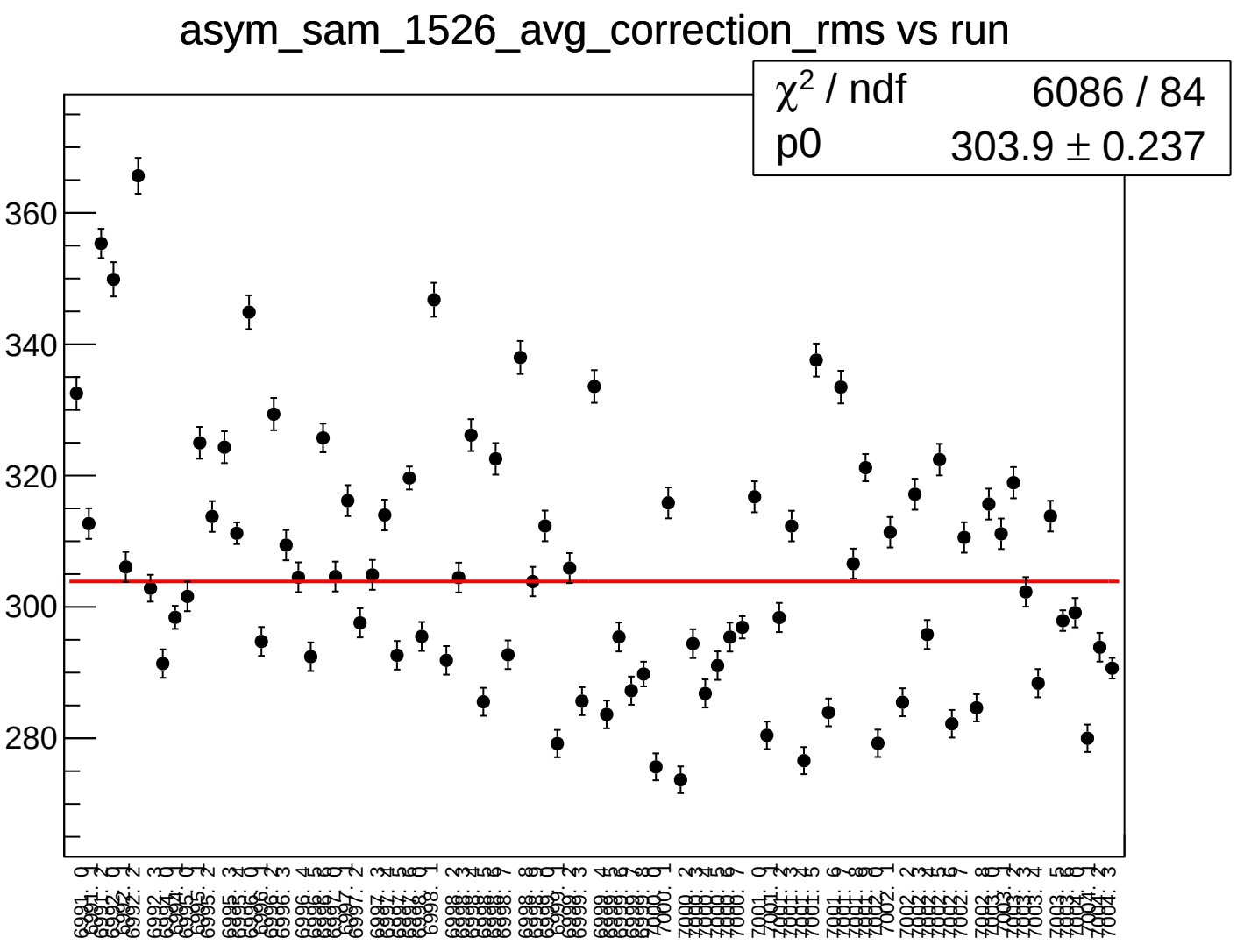

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 98.97 / 84
p0 −16.13 ± 50.94
pull
Entries 85
Mean −151.4
Std Dev 168.7

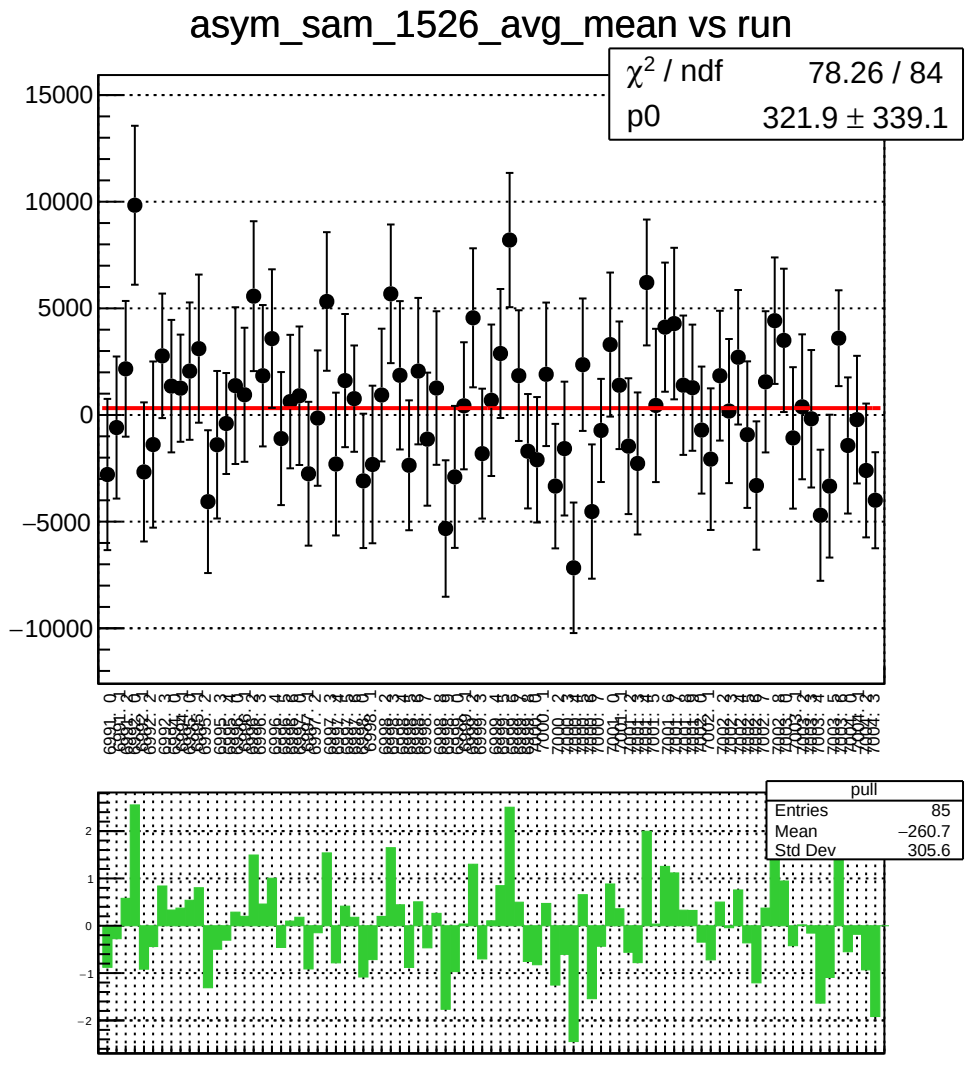

pull1D
Entries 85
Mean −0.01607
Std Dev 1.079

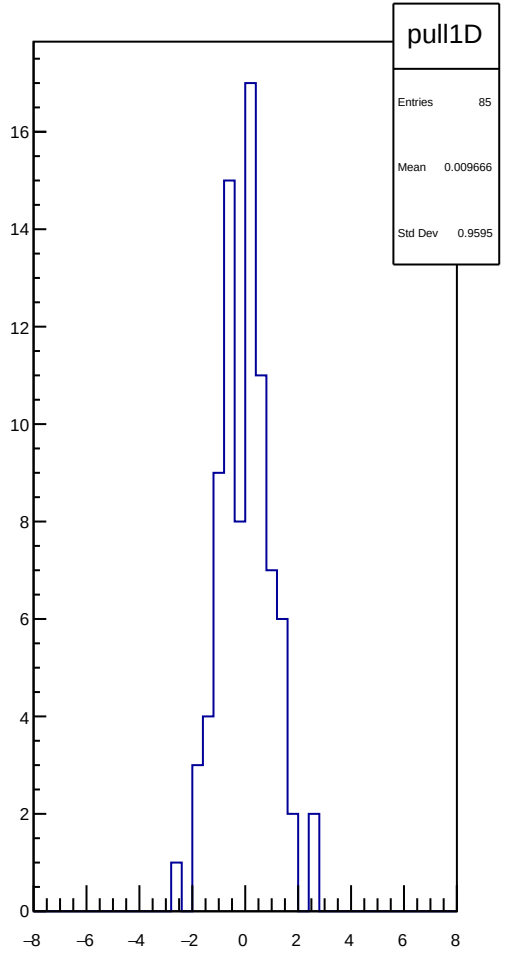

reg_asym_sam_1526_avg_rms vs run
χ² / ndf 6063 / 84
p0 46.19 ± 0.03602
56
54
52
50
48
46
44
42

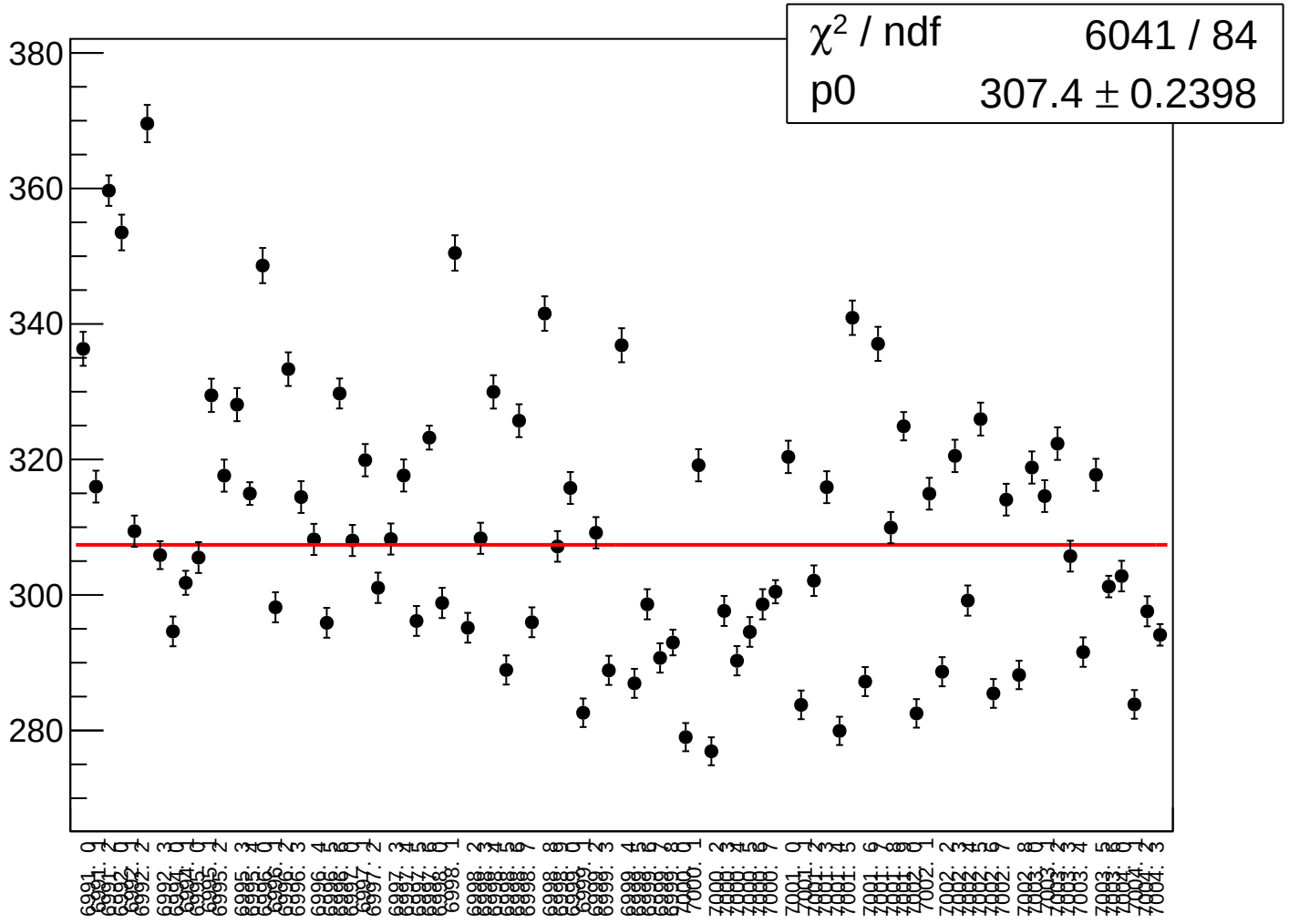

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 76.26 / 84
p0 −341.9 ± 335.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −253.4
Std Dev 294.8
2
1
0
−1
−2

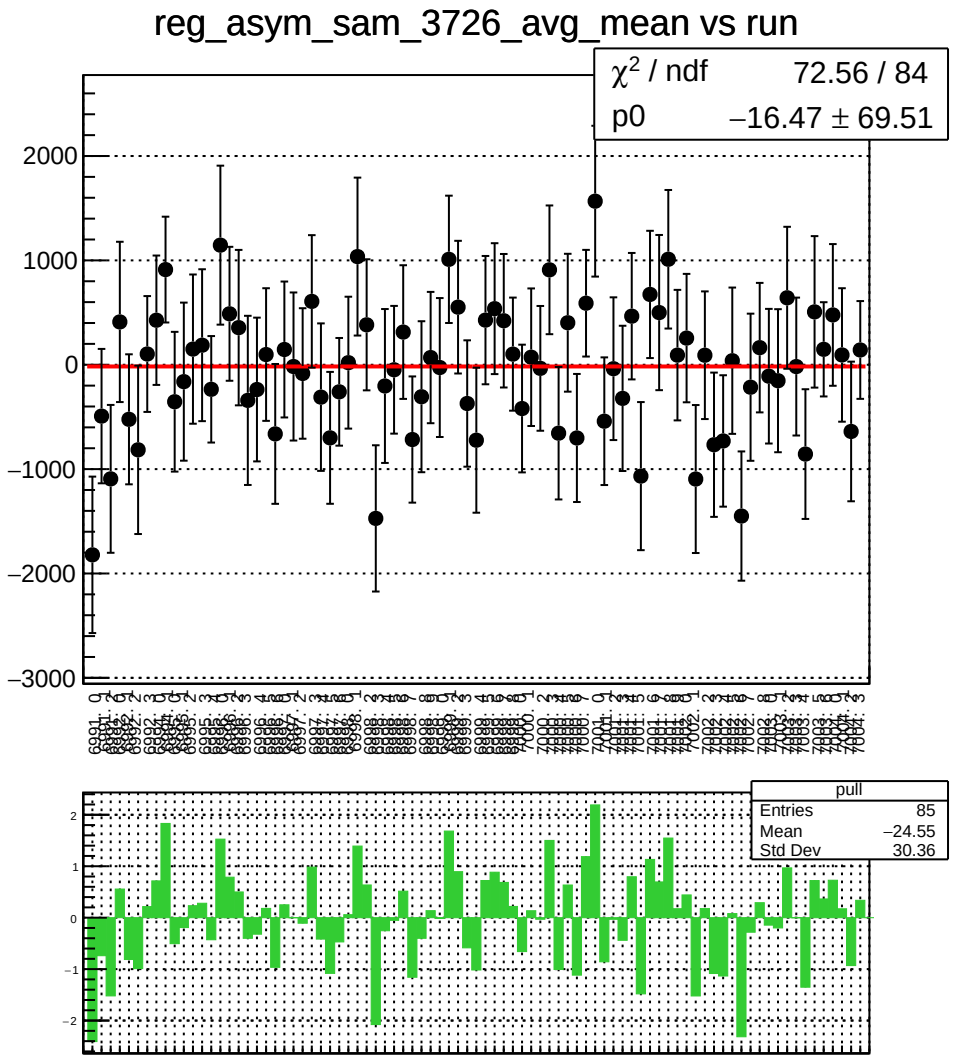

pull1D
Entries 85
Mean −0.01163
Std Dev 0.9471
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

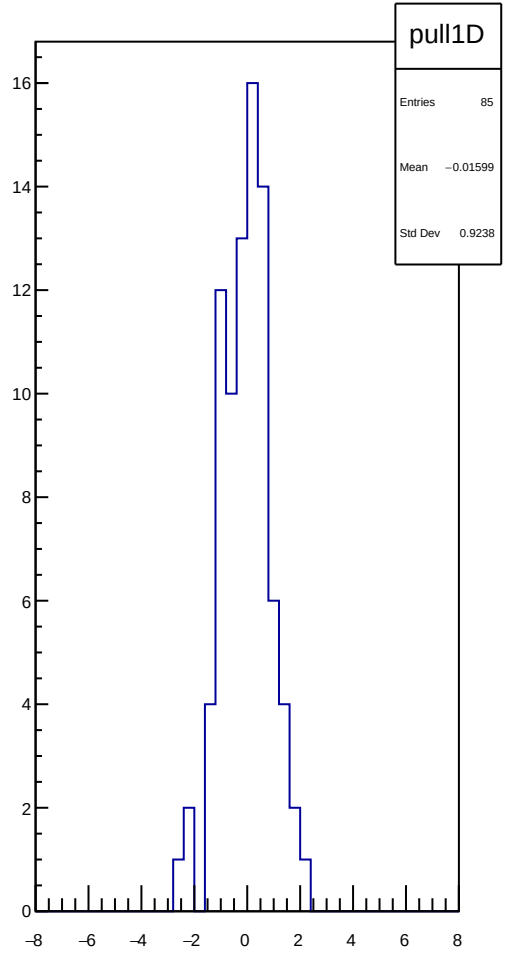

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 6086 / 84
p0 303.9 ± 0.237
360
340
320
300
280

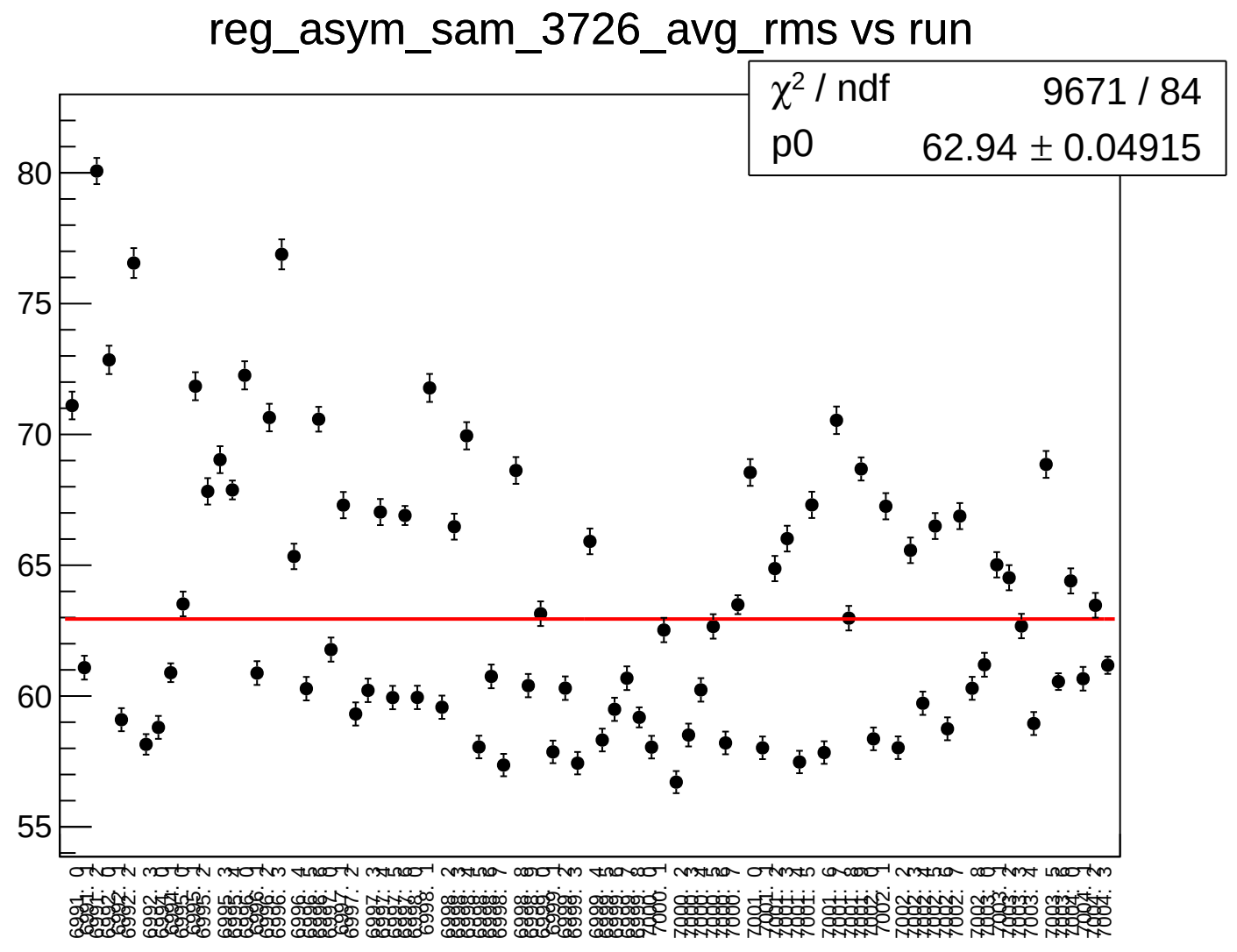

asym_sam_1526_avg_mean vs run
χ² / ndf 78.26 / 84
p0 321.9 ± 339.1
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −260.7
Std Dev 305.6
2
1
0
−1
−2

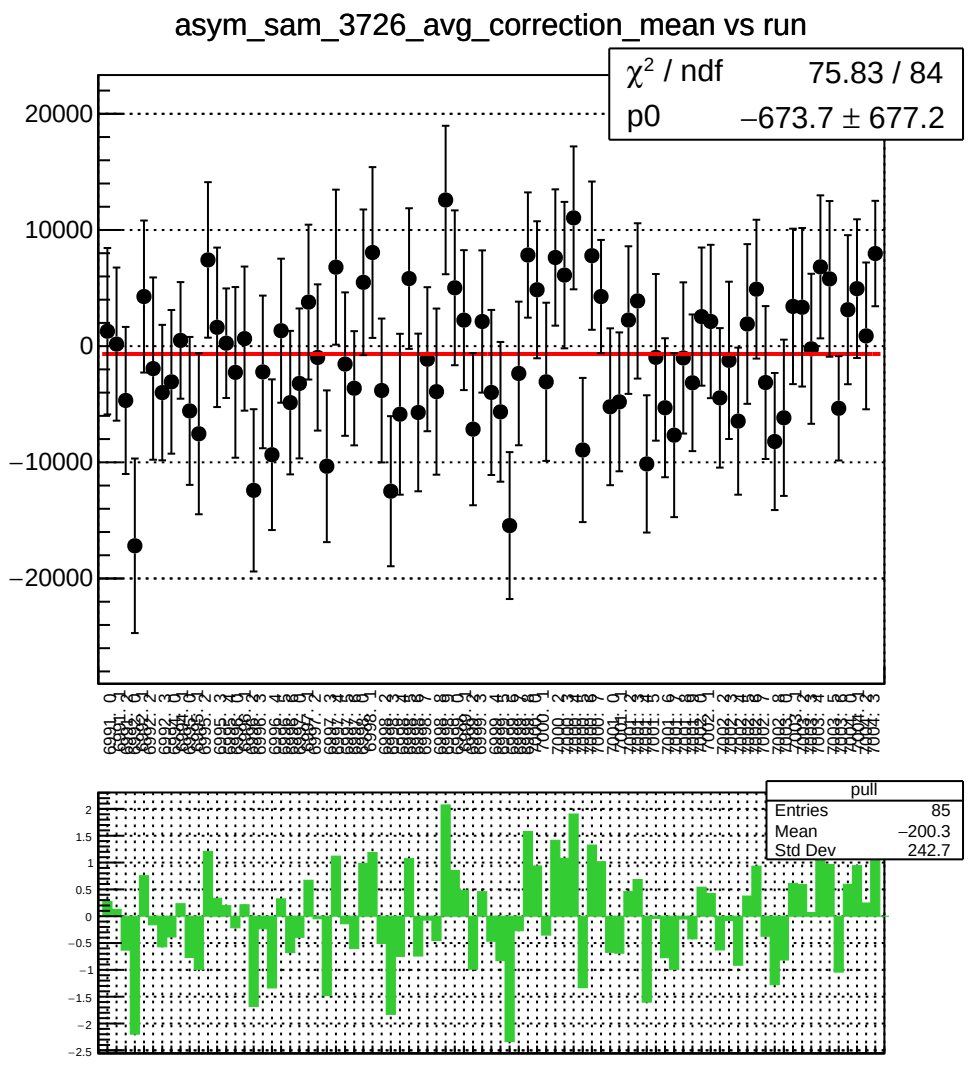

pull1D
Entries 85
Mean 0.009666
Std Dev 0.9595
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

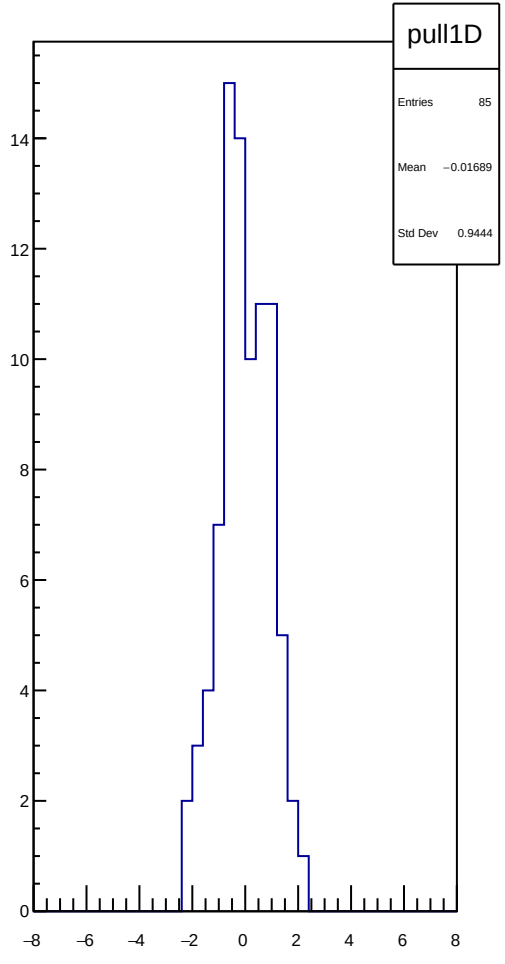

asym_sam_1526_avg_rms vs run
χ² / ndf 6041 / 84
p0 307.4 ± 0.2398
380
360
340
320
300
280

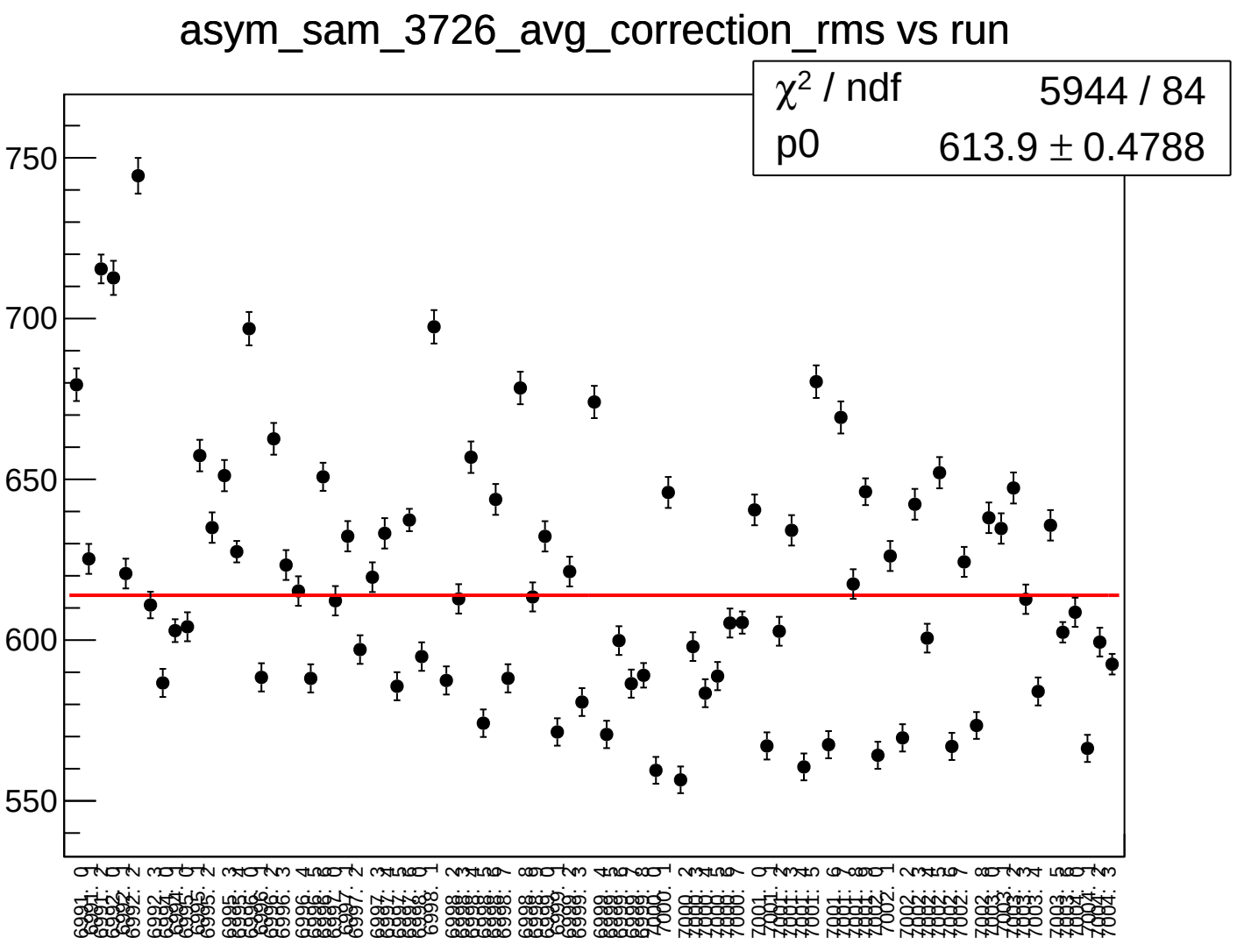

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 72.56 / 84
p0 −16.47 ± 69.51
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean −24.55
Std Dev 30.36
2
1
0
−1
−2

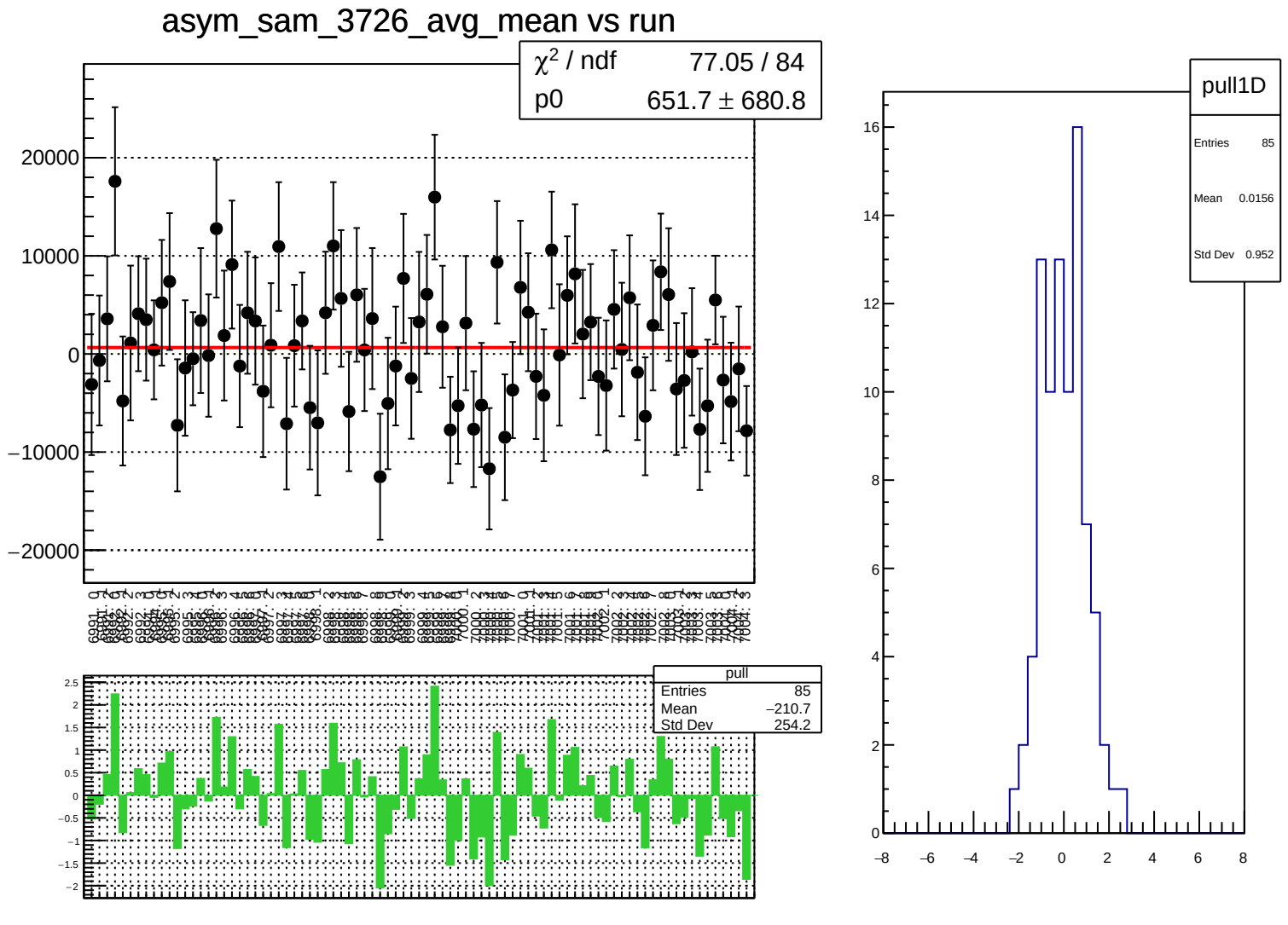

pull1D
Entries 85
Mean −0.01599
Std Dev 0.9238
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

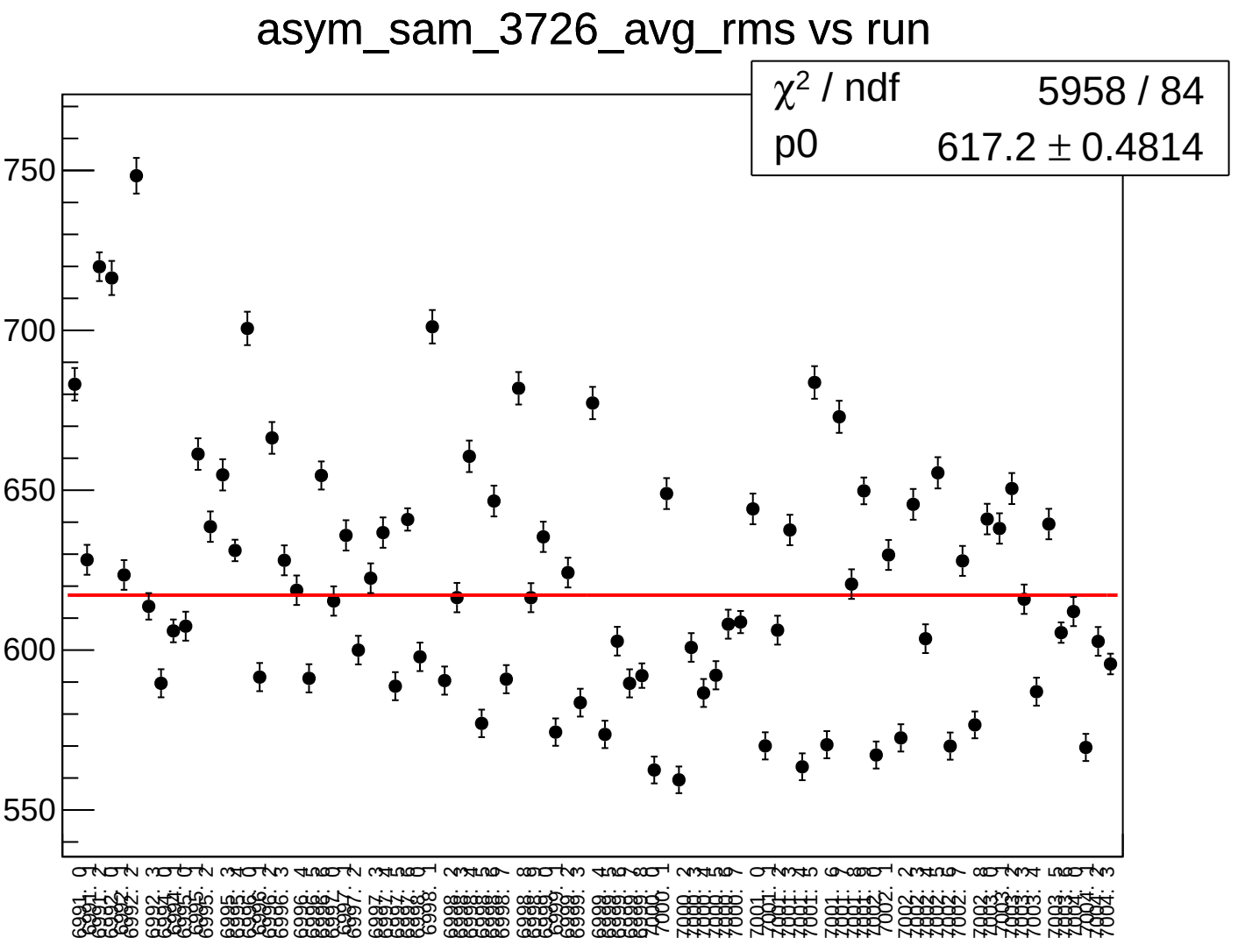

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 9671 / 84
p0 62.94 ± 0.04915
80
75
70
65
60
55

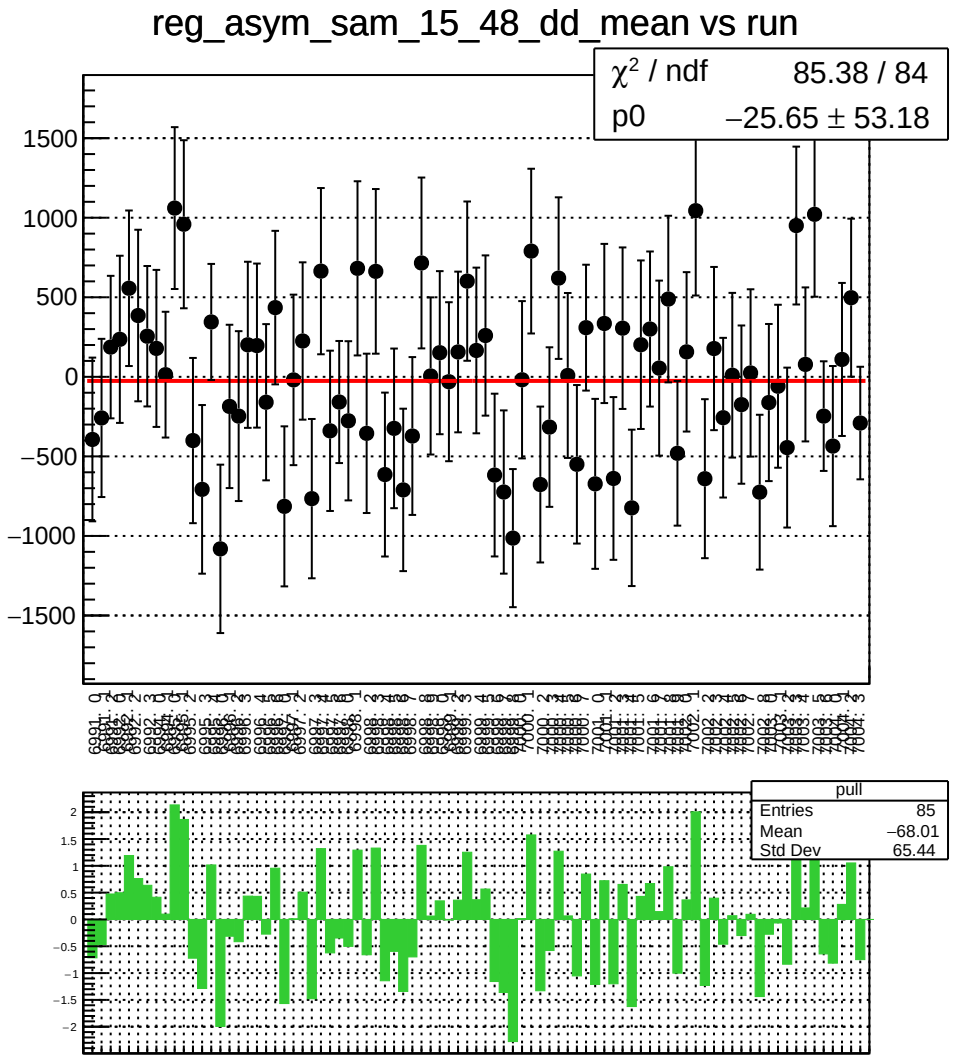

asym_sam_3726_avg_correction_mean vs run
χ^2 / ndf 75.83 / 84
p0 −673.7 ± 677.2
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −200.3
Std Dev 242.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

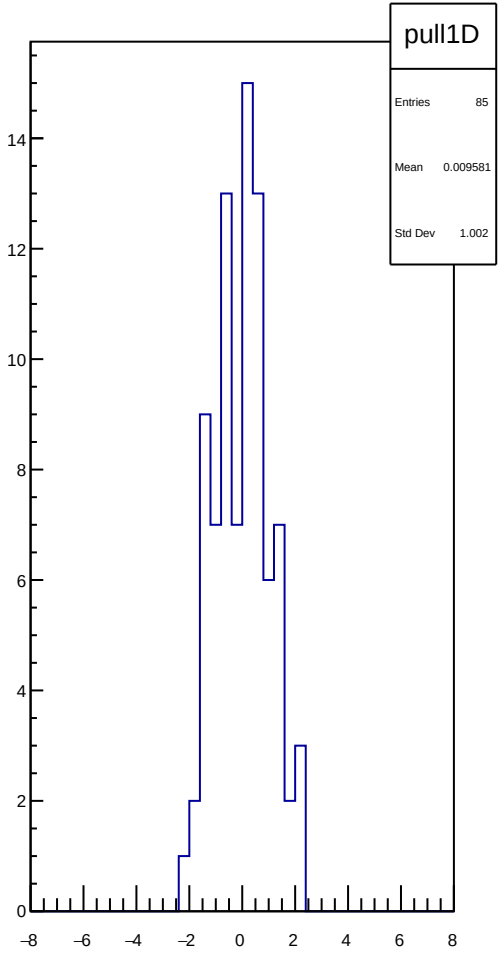

pull1D
Entries 85
Mean −0.01689
Std Dev 0.9444
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

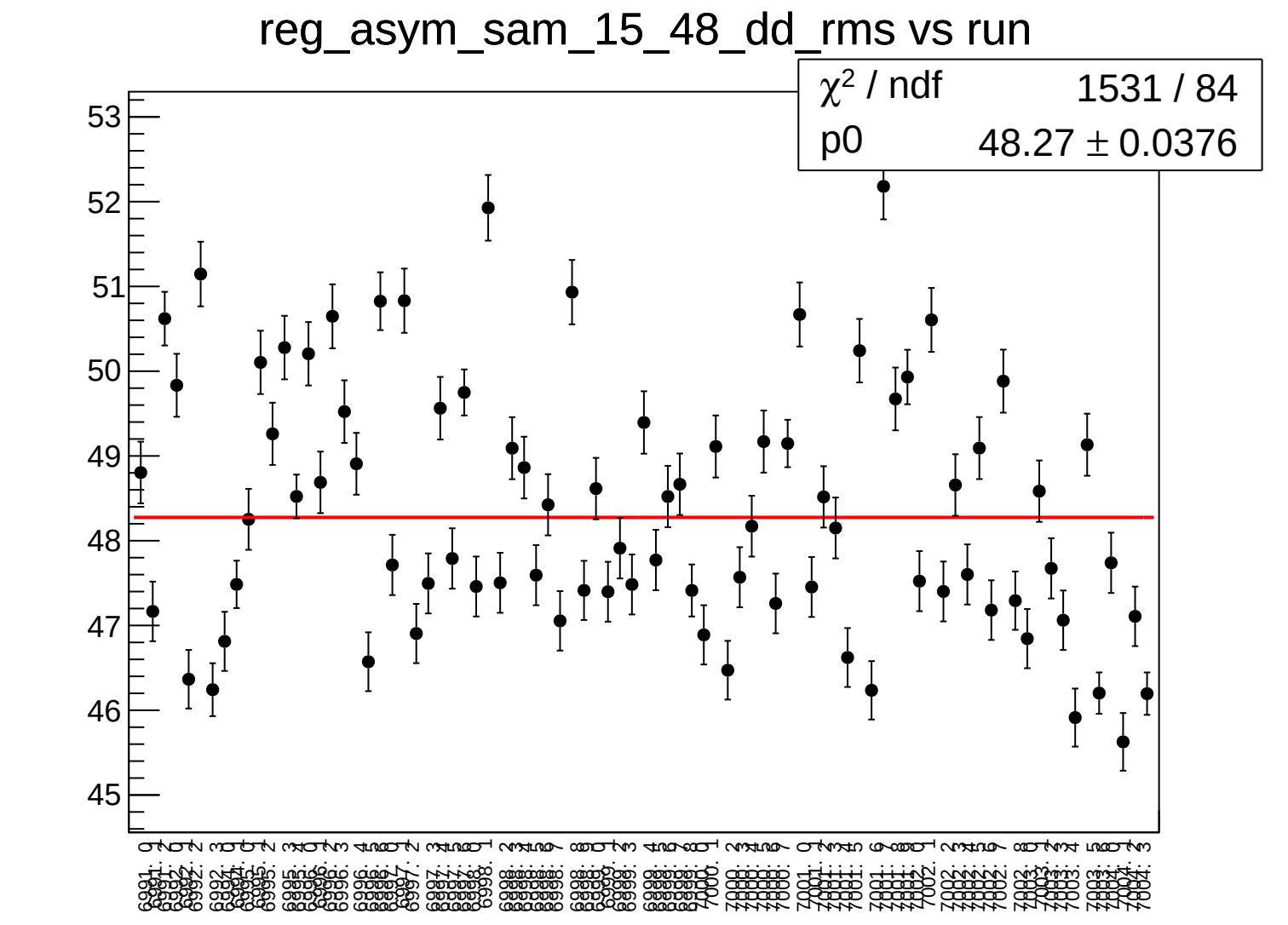

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 5944 / 84
p0 613.9 ± 0.4788
750
700
650
600
550

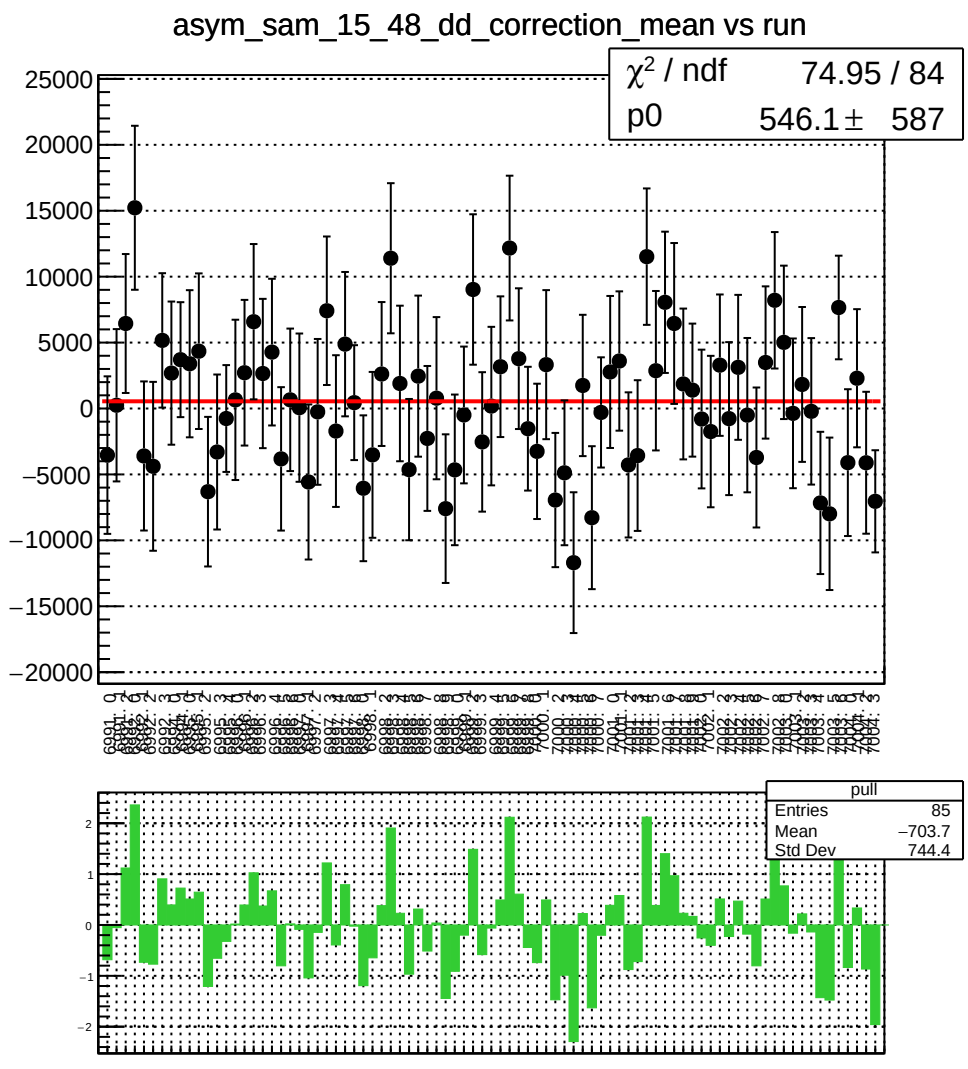

asym_sam_3726_avg_mean vs run
χ^2 / ndf 77.05 / 84
p0 651.7 ± 680.8
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −210.7
Std Dev 254.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.0156
Std Dev 0.952
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

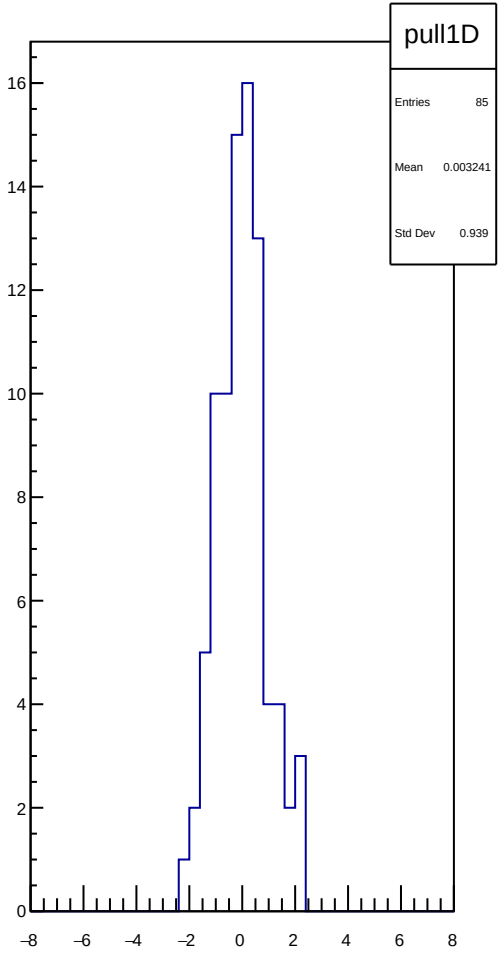

asym_sam_3726_avg_rms vs run
χ² / ndf 5958 / 84
p0 617.2 ± 0.4814
750
700
650
600
550

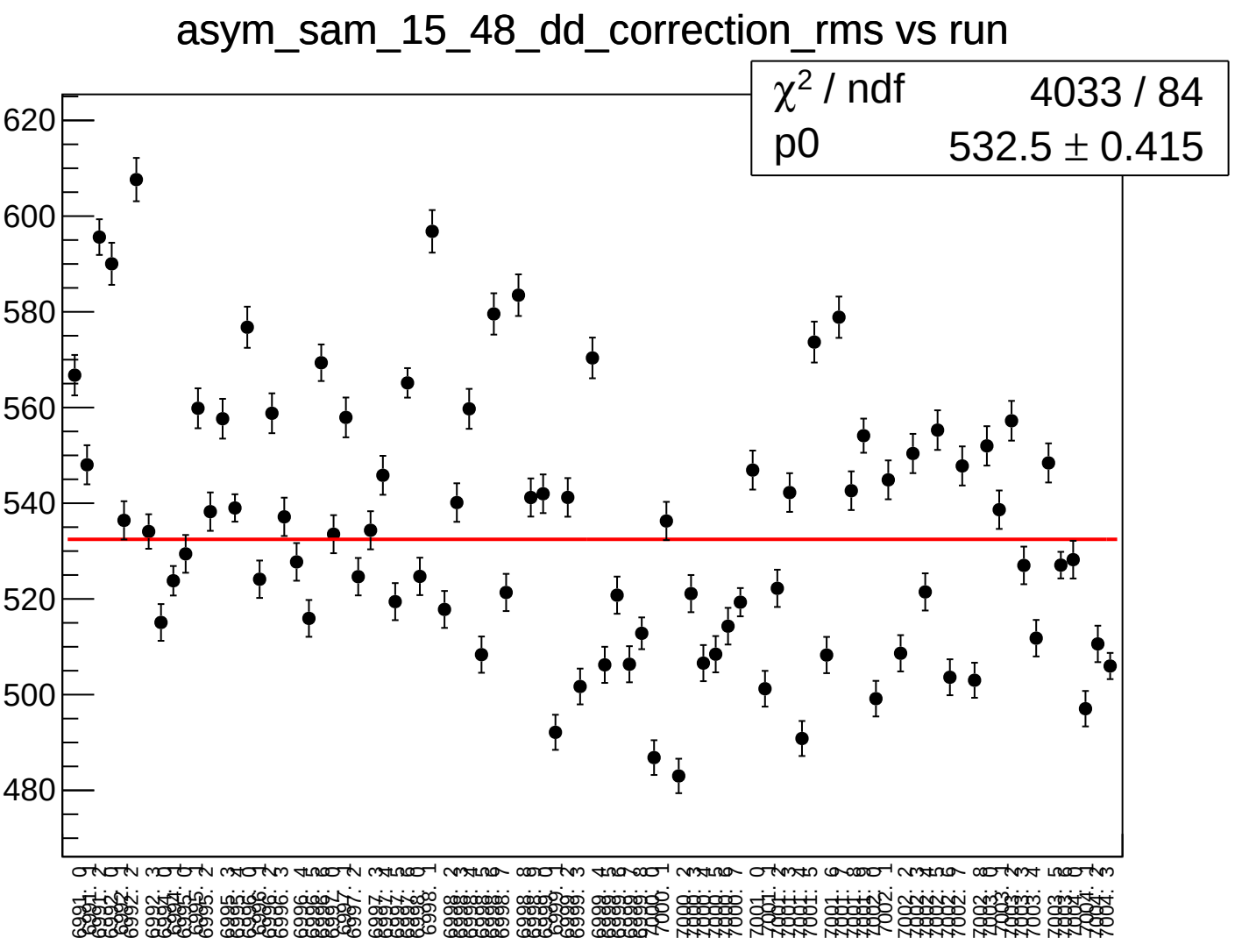

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 85.38 / 84
p0 −25.65 ± 53.18
pull
Entries 85
Mean −68.01
Std Dev 65.44

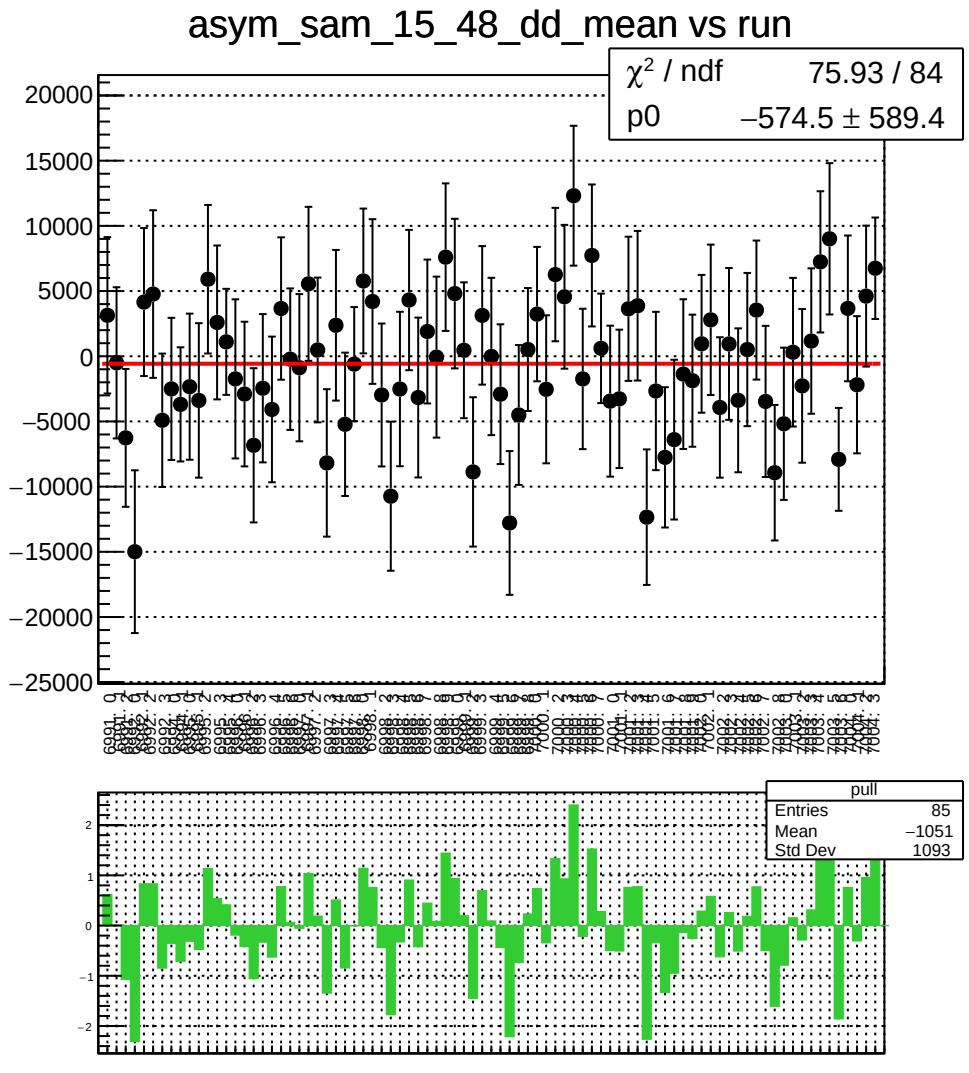

pull1D
Entries 85
Mean 0.009581
Std Dev 1.002

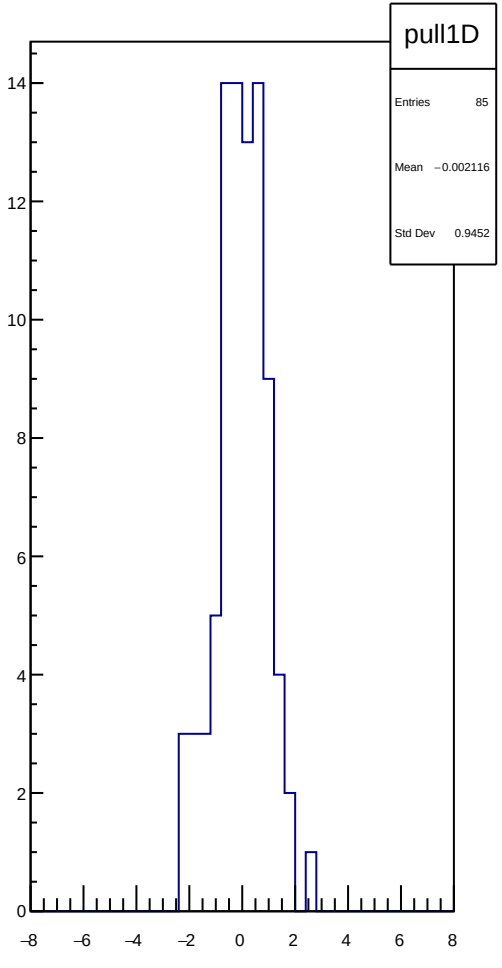

reg_asym_sam_15_48_dd_rms vs run
χ² / ndf 1531 / 84
p0 48.27 ± 0.0376
53
52
51
50
49
48
47
46
45

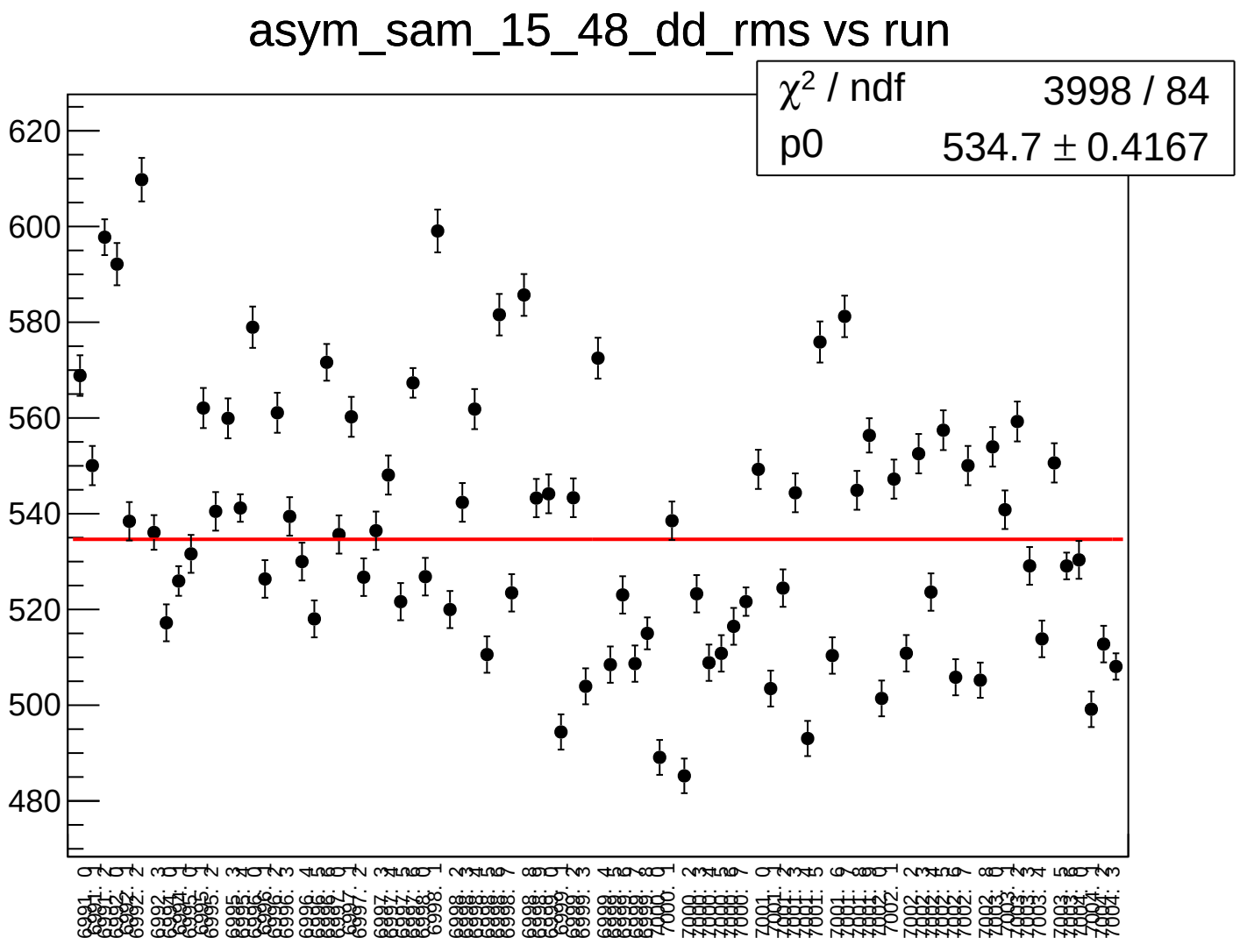

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 74.95 / 84
p0 546.1 ± 587
pull
Entries 85
Mean −703.7
Std Dev 744.4

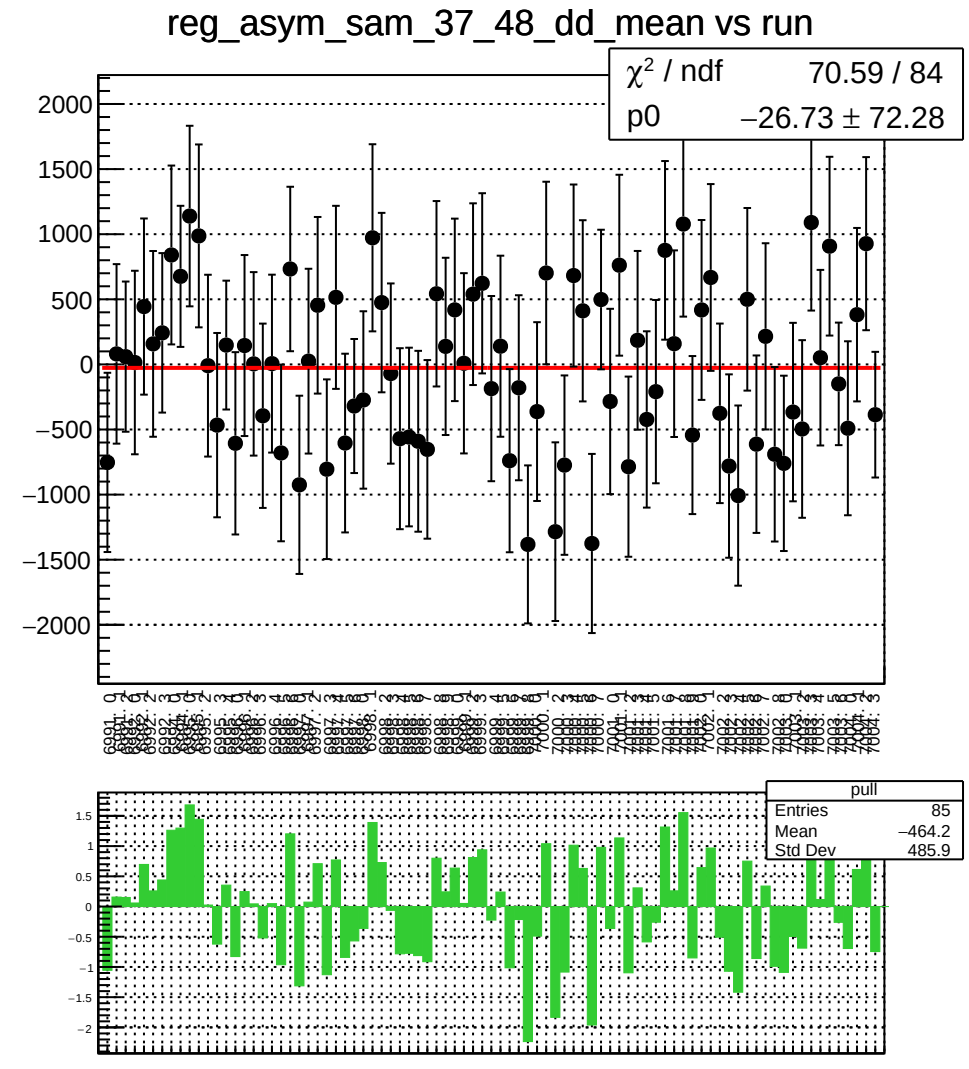

pull1D
Entries 85
Mean 0.003241
Std Dev 0.939

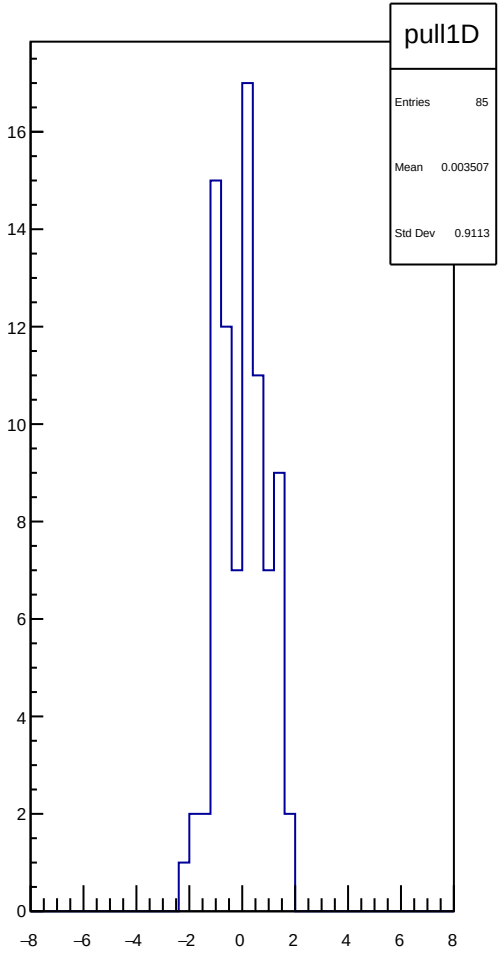

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 4033 / 84
p0 532.5 ± 0.415
620
600
580
560
540
520
500
480

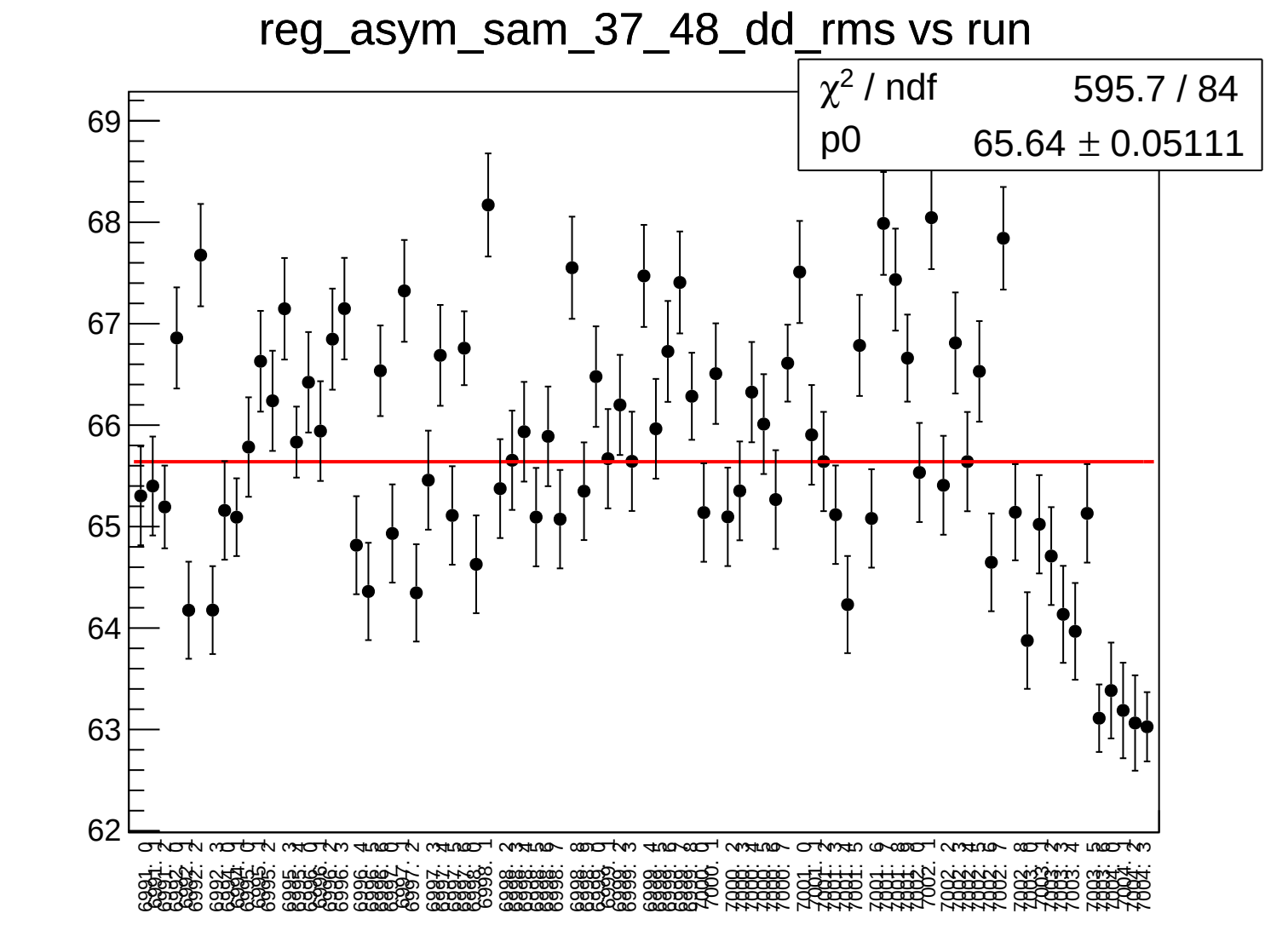

asym_sam_15_48_dd_mean vs run
χ² / ndf 75.93 / 84
p0 −574.5 ± 589.4
pull
Entries 85
Mean −1051
Std Dev 1093

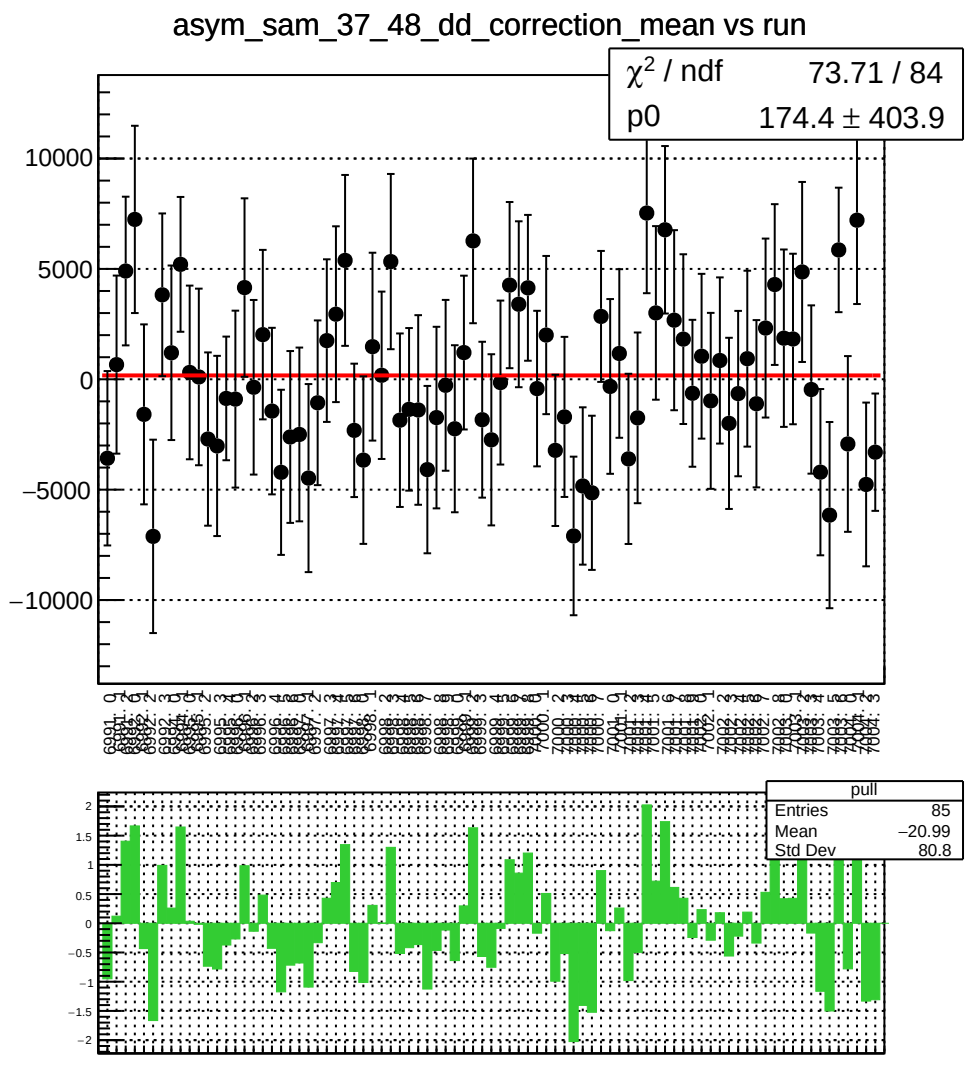

pull1D
Entries 85
Mean −0.002116
Std Dev 0.9452

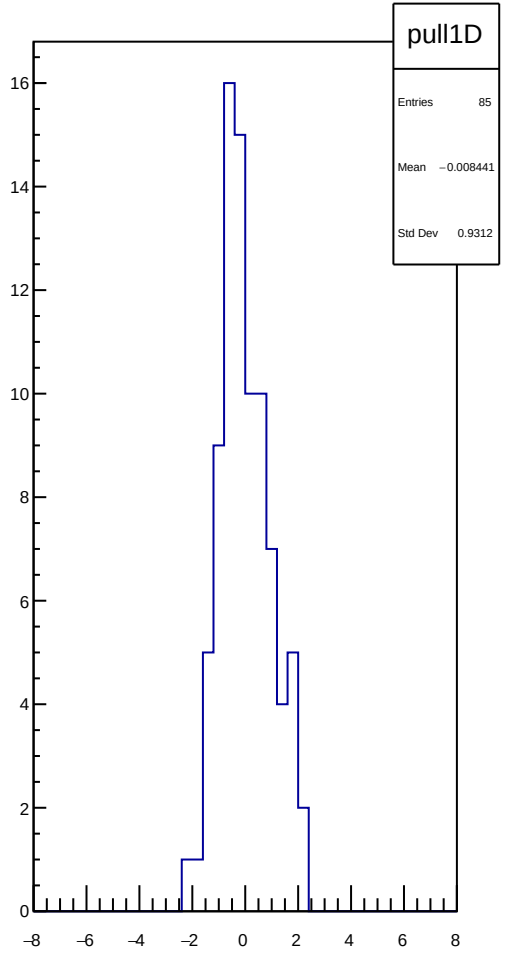

asym_sam_15_48_dd_rms vs run
χ² / ndf 3998 / 84
p0 534.7 ± 0.4167
620
600
580
560
540
520
500
480

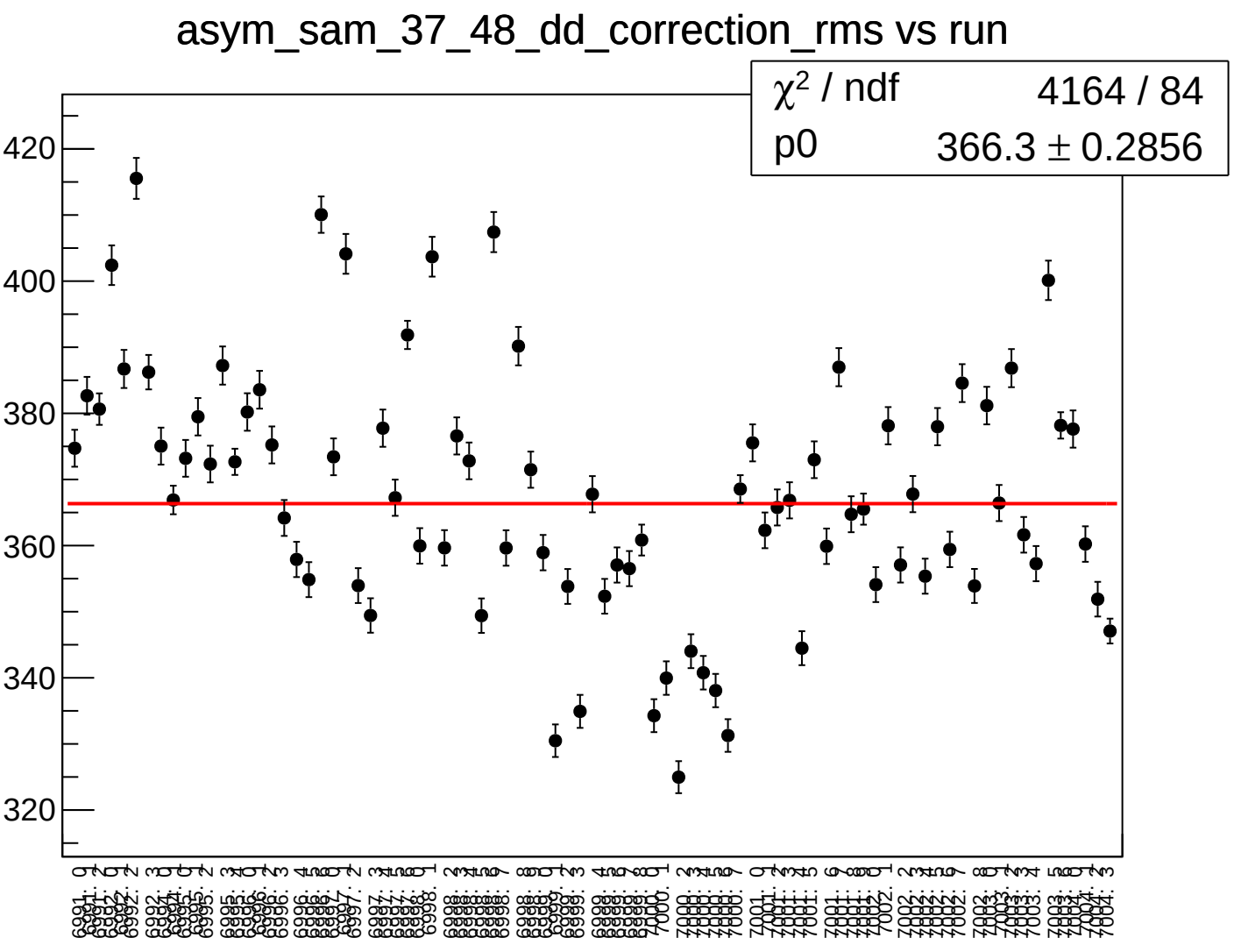

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 70.59 / 84
p0 −26.73 ± 72.28
pull
Entries 85
Mean −464.2
Std Dev 485.9

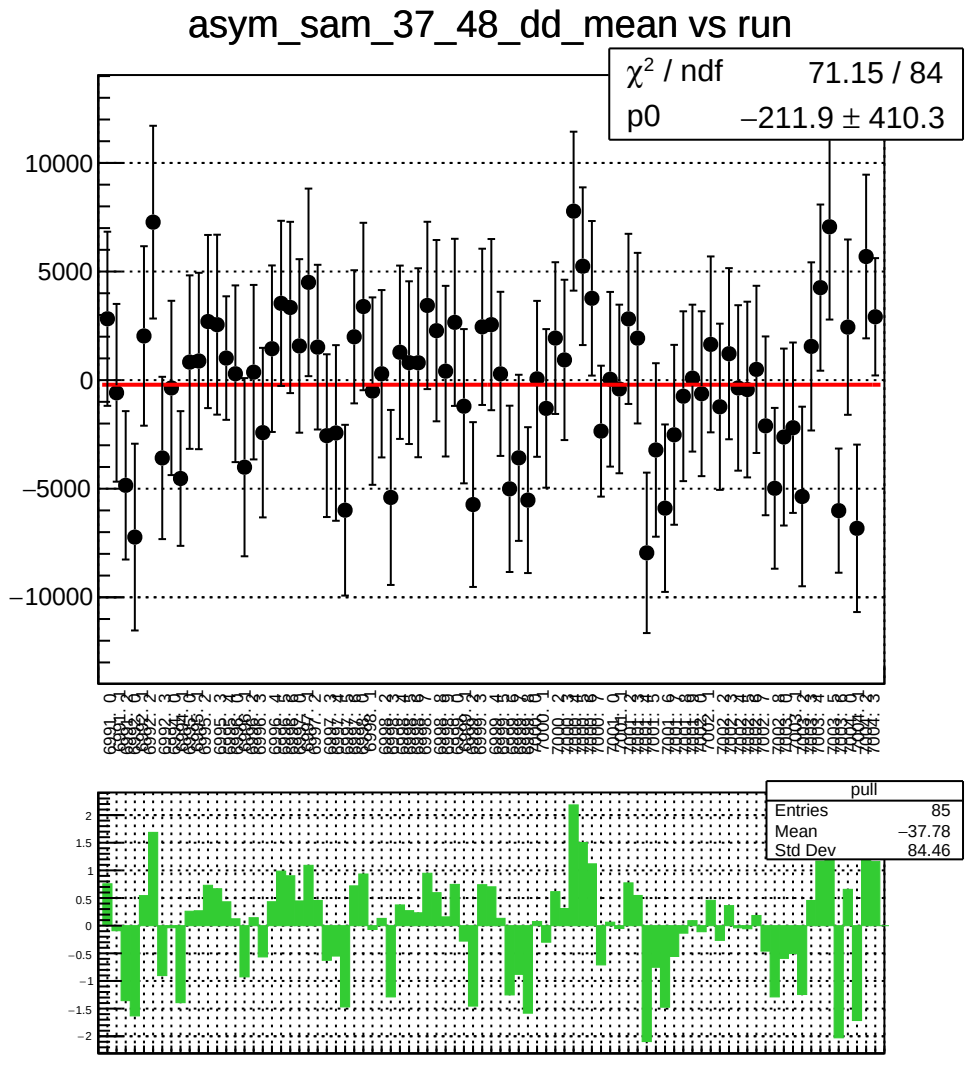

pull1D
Entries 85
Mean 0.003507
Std Dev 0.9113

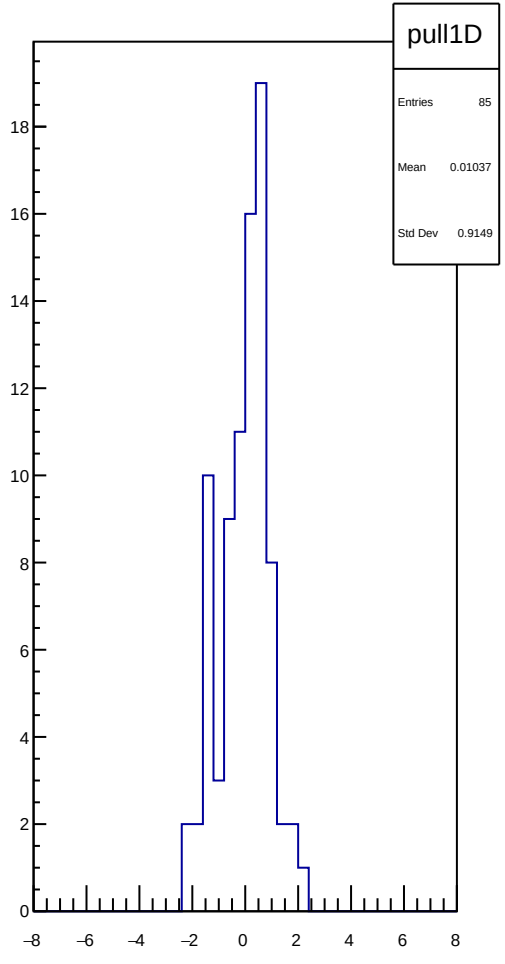

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 595.7 / 84
p0 65.64 ± 0.05111
69
68
67
66
65
64
63
62

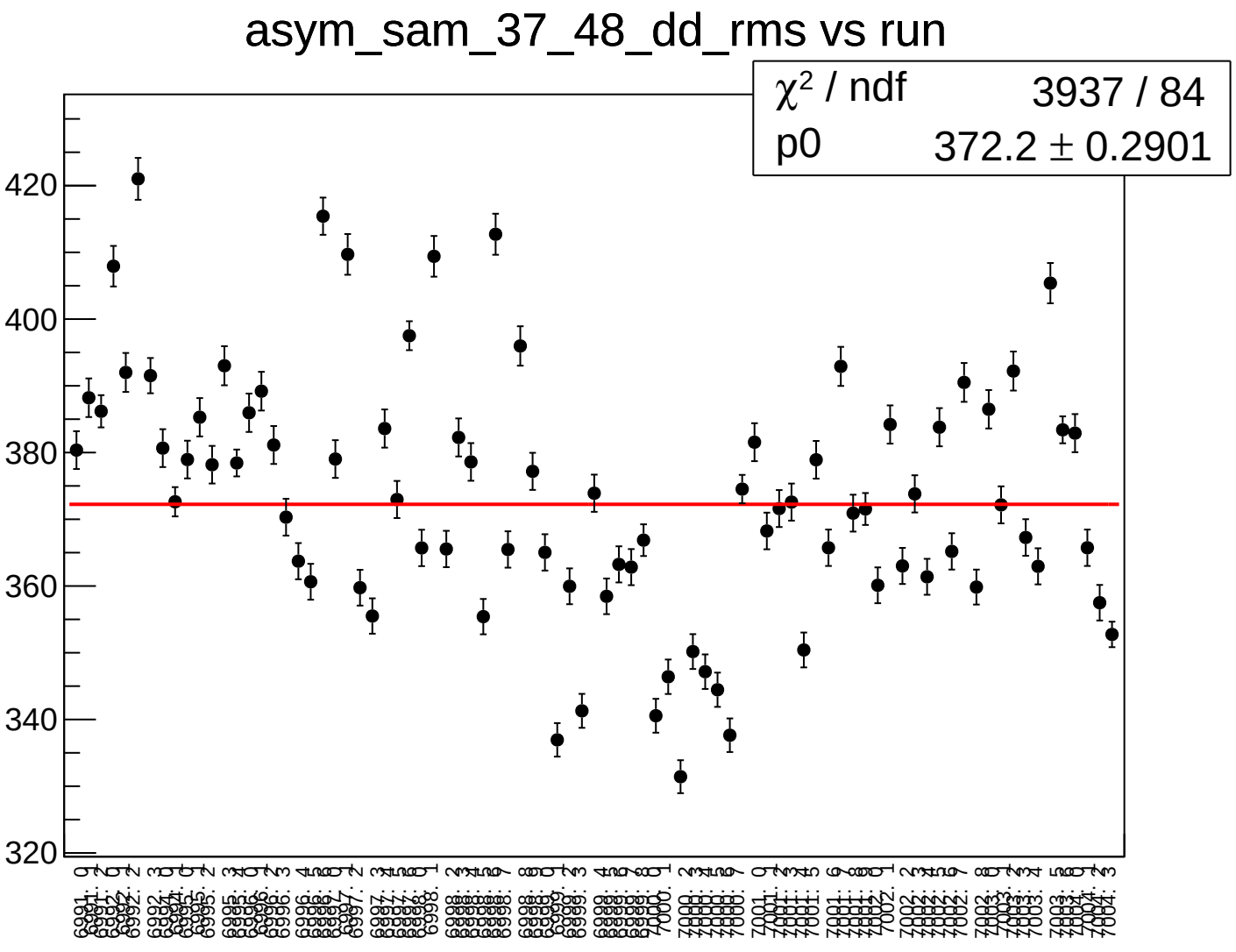

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 73.71 / 84
p0 174.4 ± 403.9
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −20.99
Std Dev 80.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

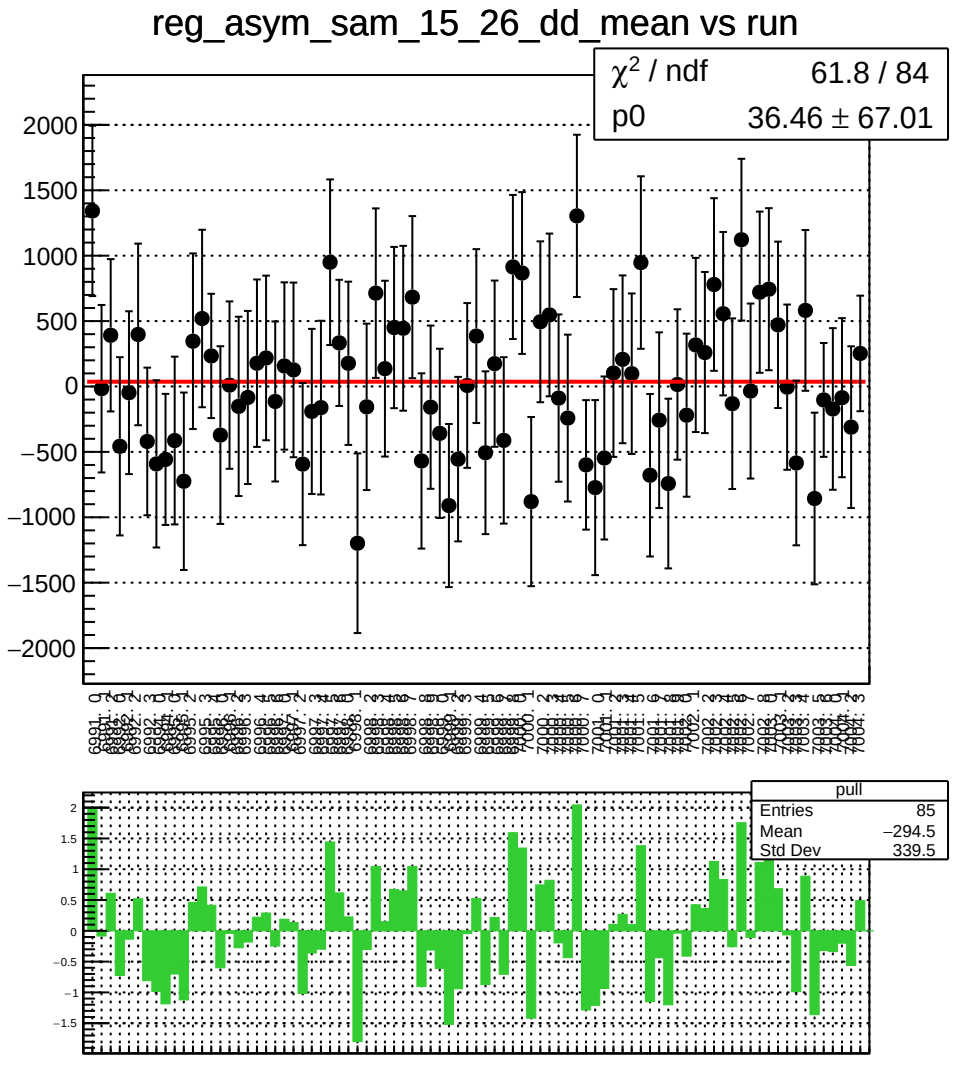

pull1D
Entries 85
Mean −0.008441
Std Dev 0.9312
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

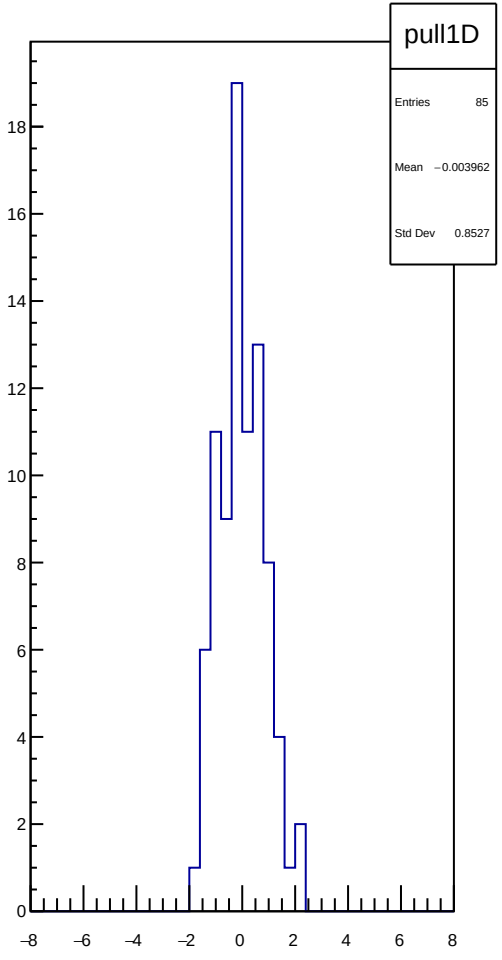

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 4164 / 84
p0 366.3 ± 0.2856
420
400
380
360
340
320

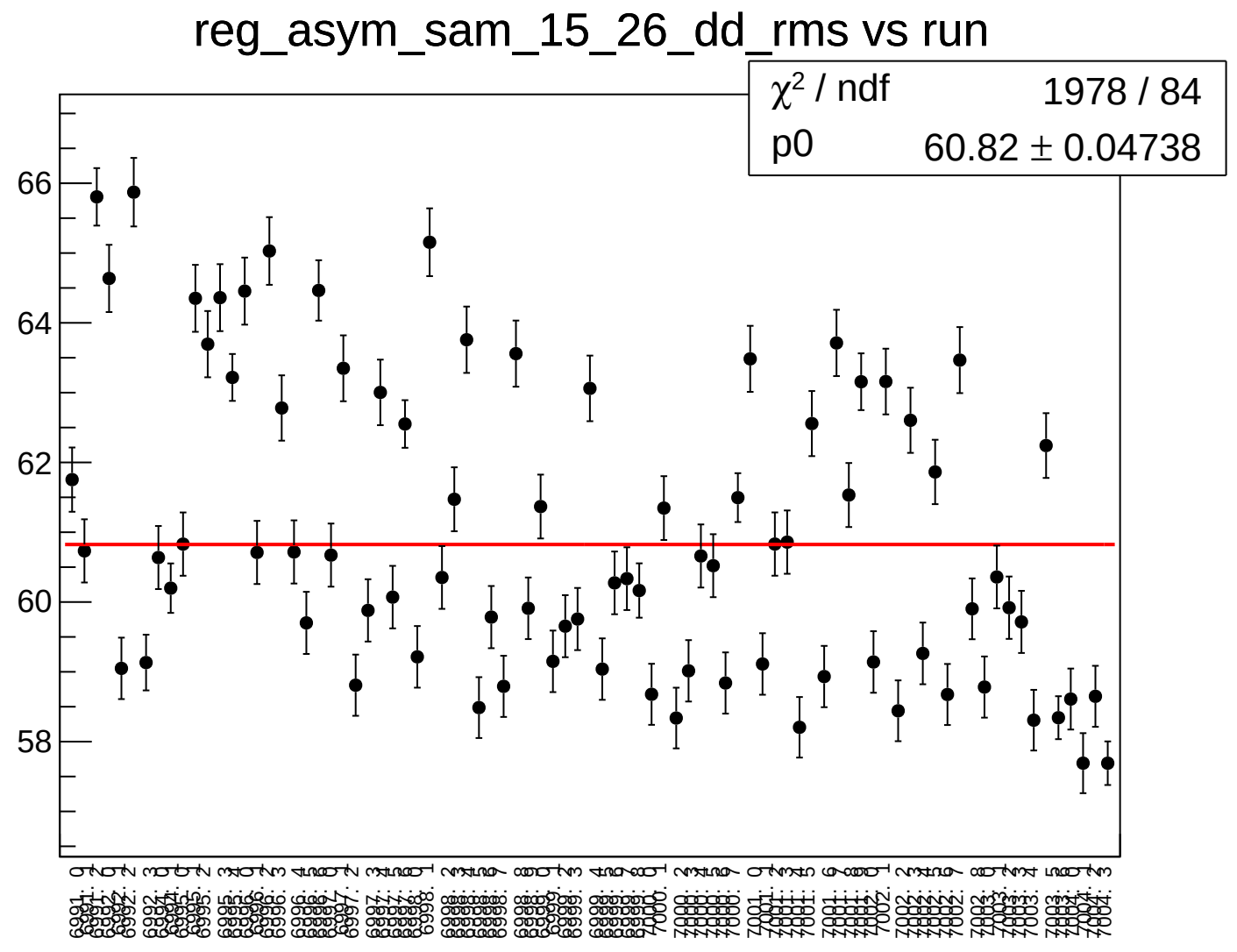

asym_sam_37_48_dd_mean vs run
χ² / ndf 71.15 / 84
p0 −211.9 ± 410.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −37.78
Std Dev 84.46
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

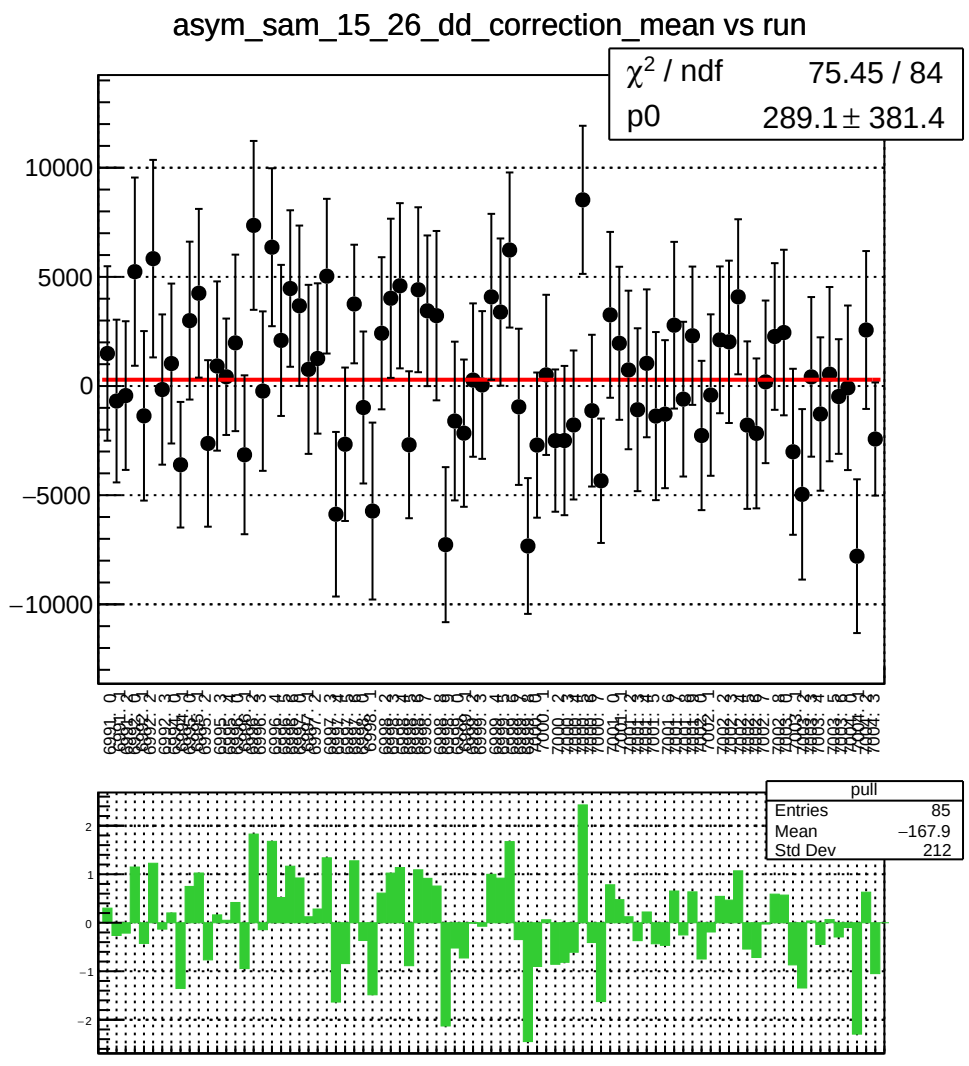

pull1D
Entries 85
Mean 0.01037
Std Dev 0.9149
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

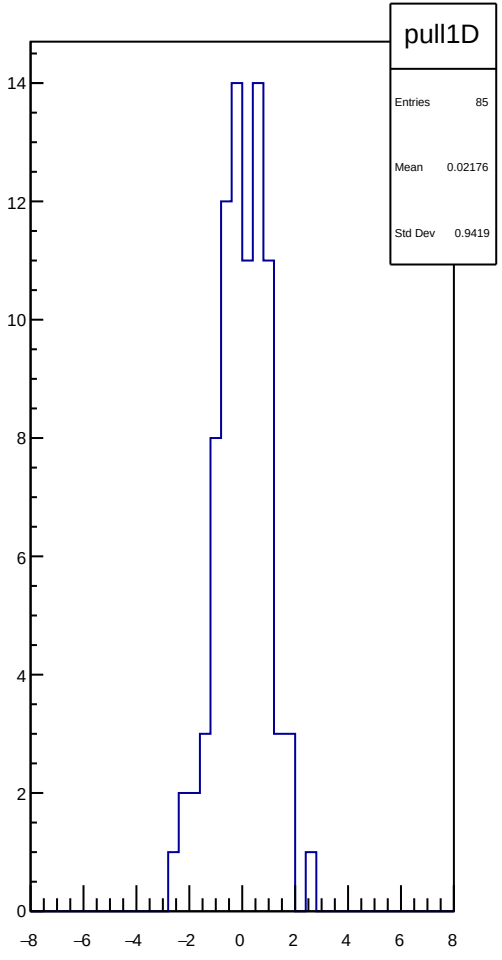

asym_sam_37_48_dd_rms vs run
χ² / ndf 3937 / 84
p0 372.2 ± 0.2901
420
400
380
360
340
320

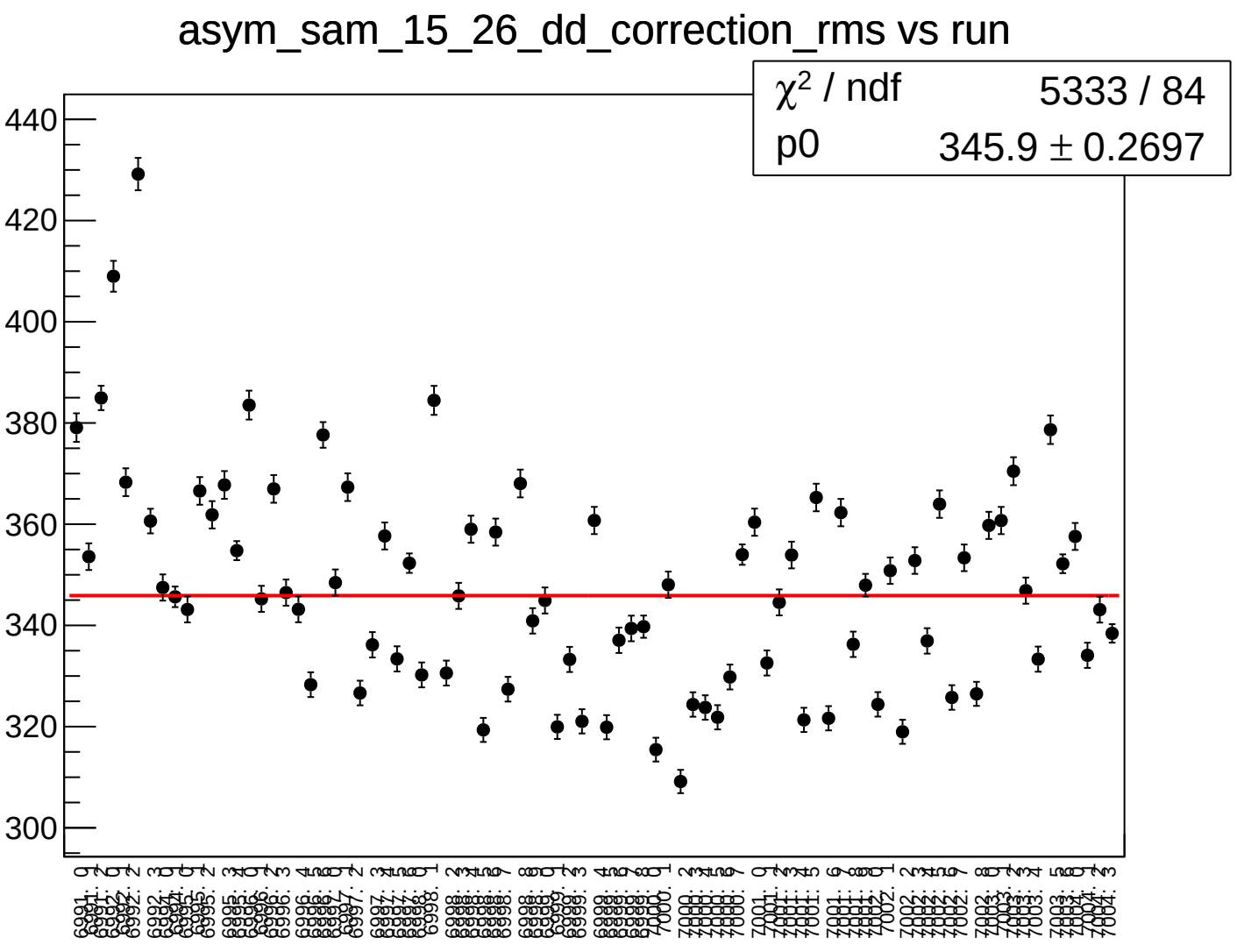

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 61.8 / 84
p0 36.46 ± 67.01
pull
Entries 85
Mean −294.5
Std Dev 339.5

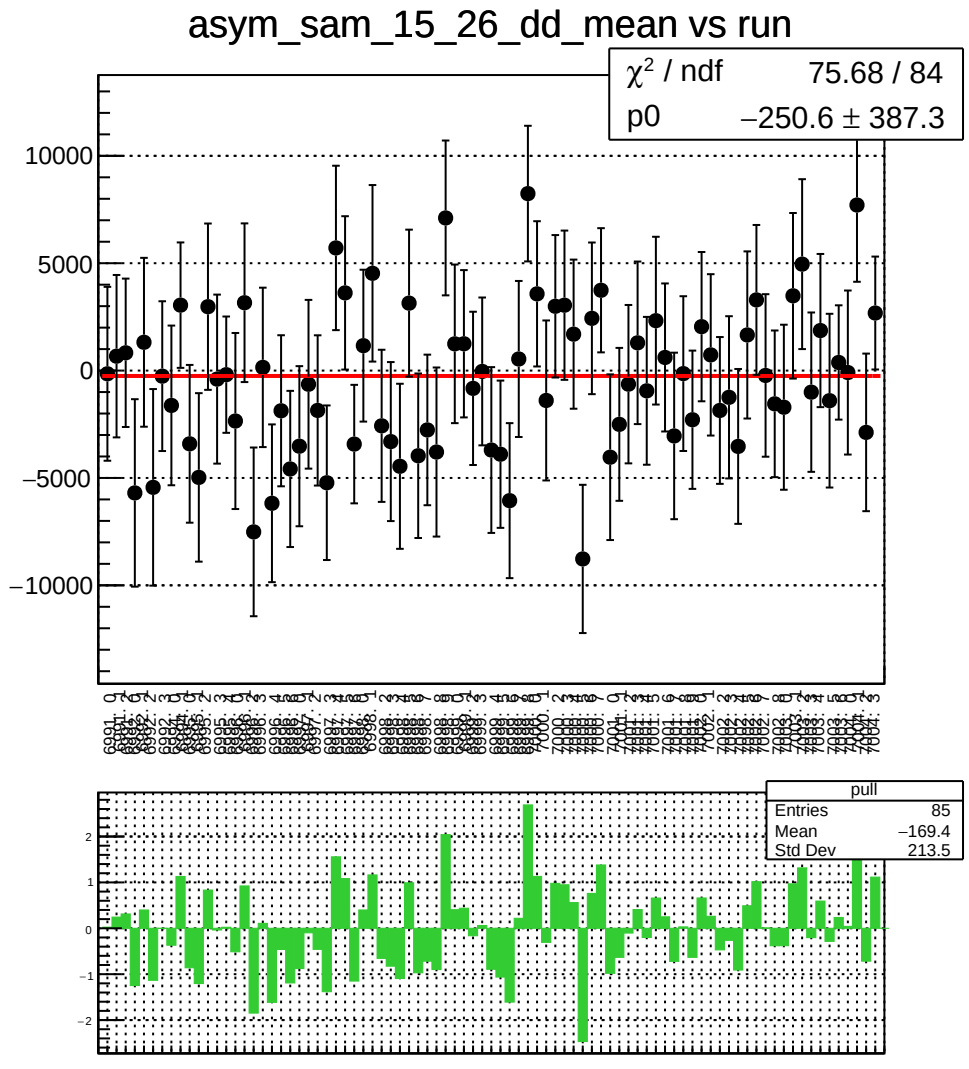

pull1D
Entries 85
Mean −0.003962
Std Dev 0.8527

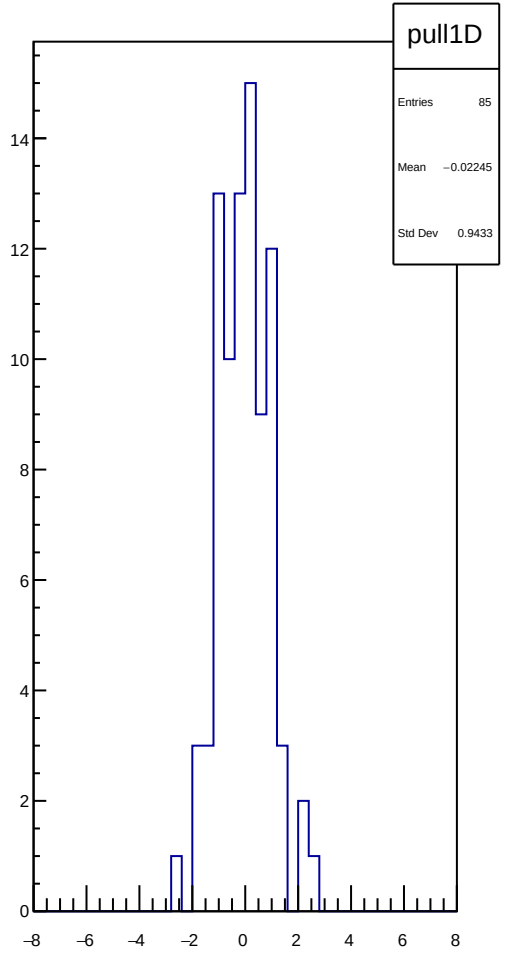

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 1978 / 84
p0 60.82 ± 0.04738
66
64
62
60
58

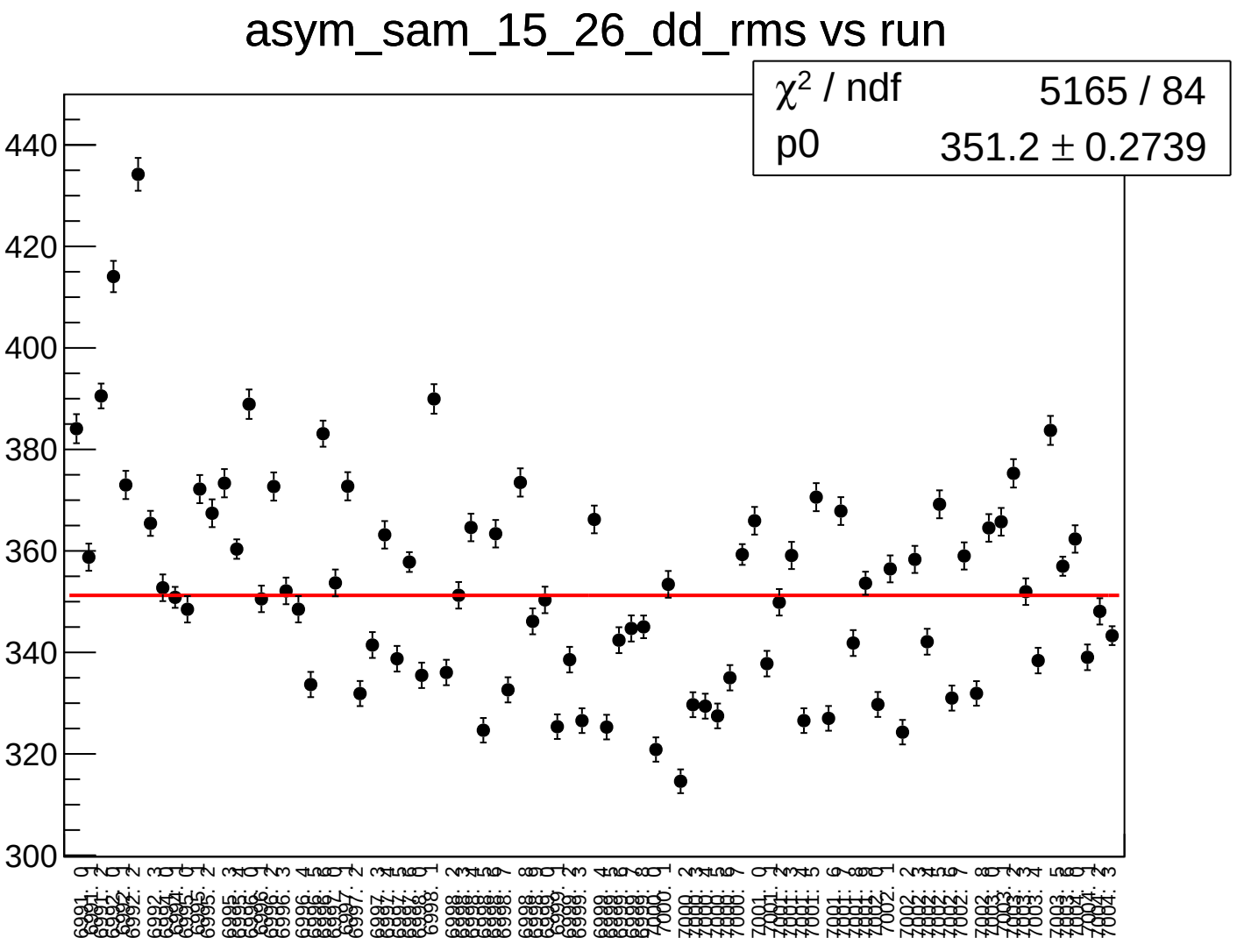

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 75.45 / 84
p0 289.1 ± 381.4
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −167.9
Std Dev 212
2
1
0
−1
−2

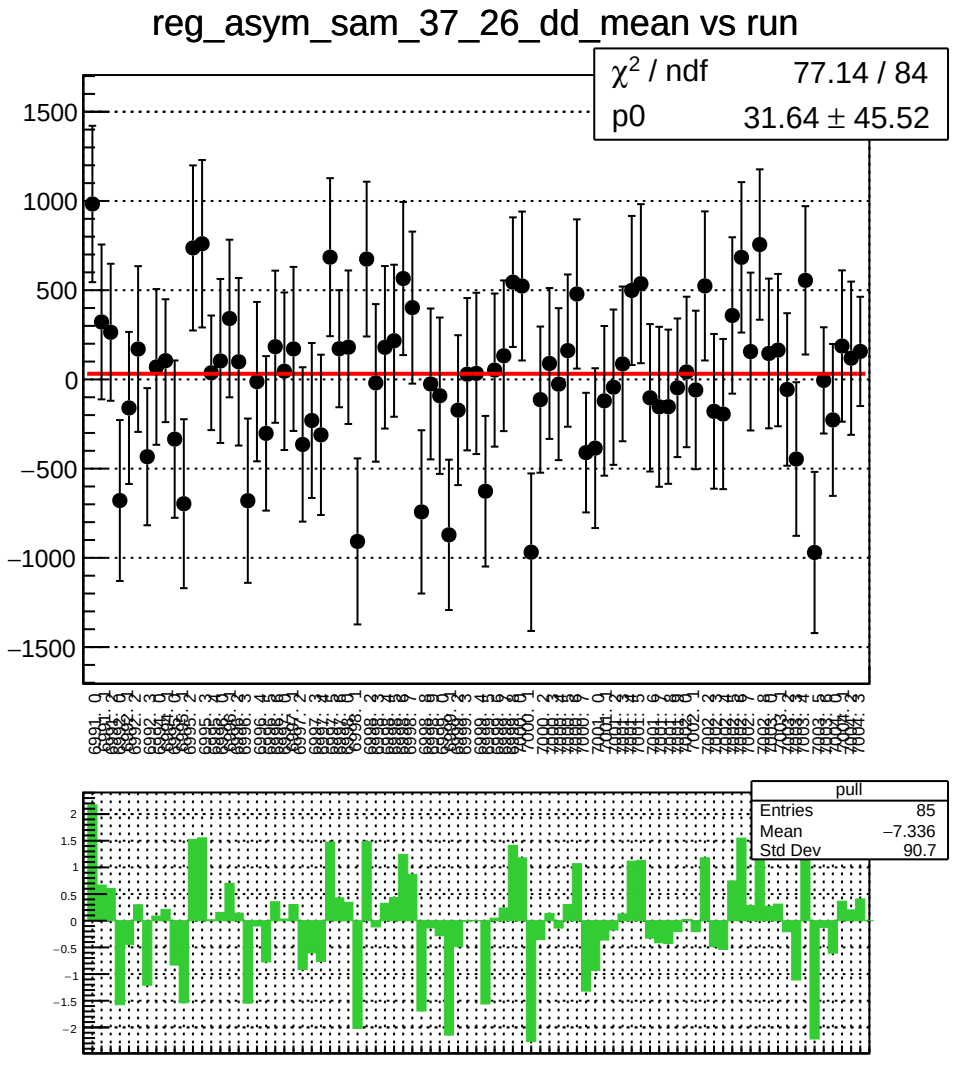

pull1D
Entries 85
Mean 0.02176
Std Dev 0.9419
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

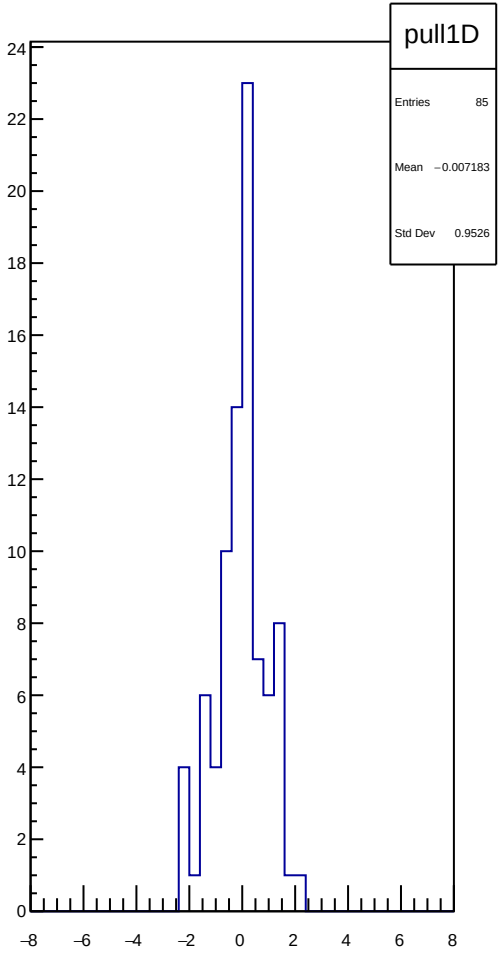

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 5333 / 84
p0 345.9 ± 0.2697
440
420
400
380
360
340
320
300

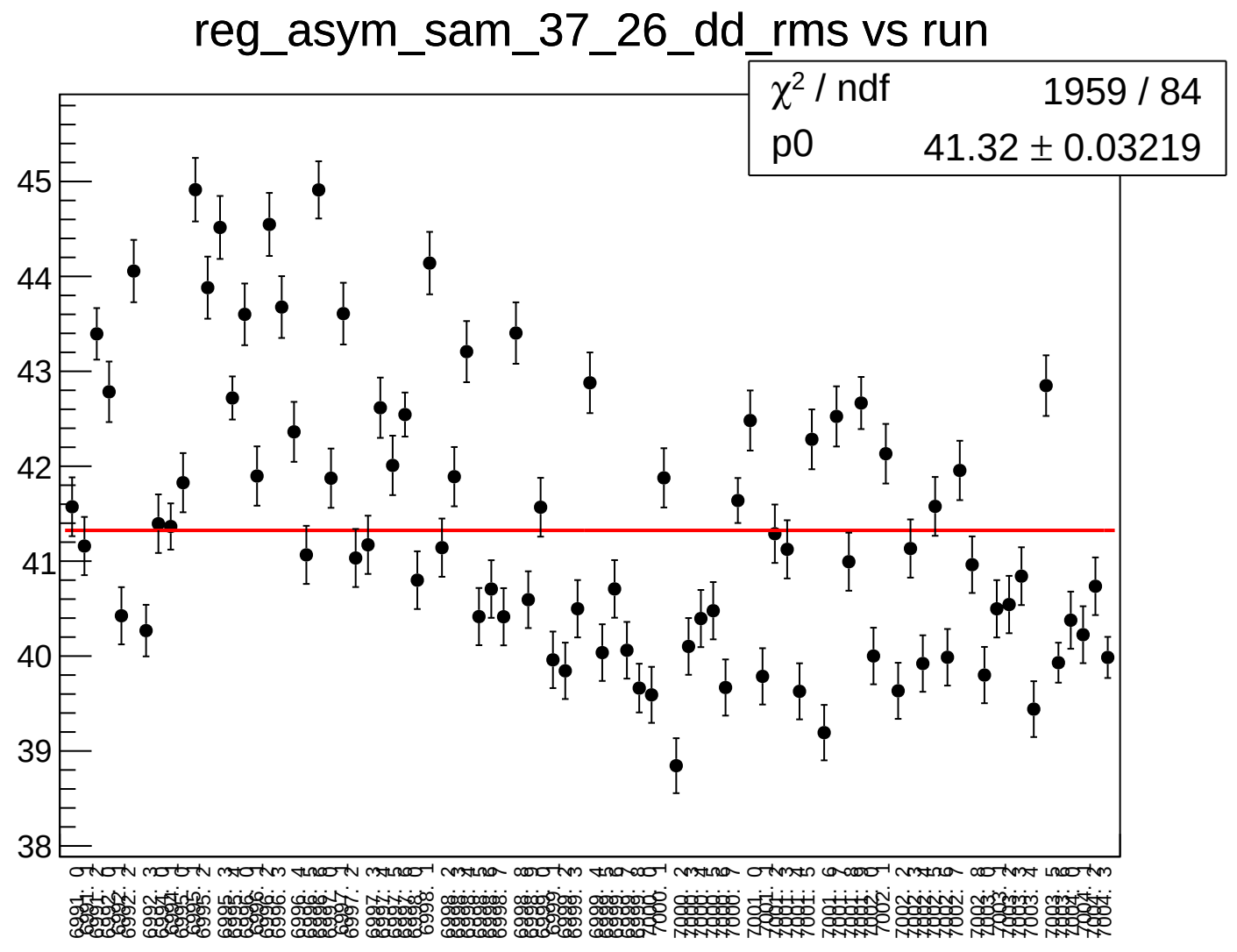

asym_sam_15_26_dd_mean vs run
χ² / ndf 75.68 / 84
p0 −250.6 ± 387.3
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −169.4
Std Dev 213.5
2
1
0
−1
−2

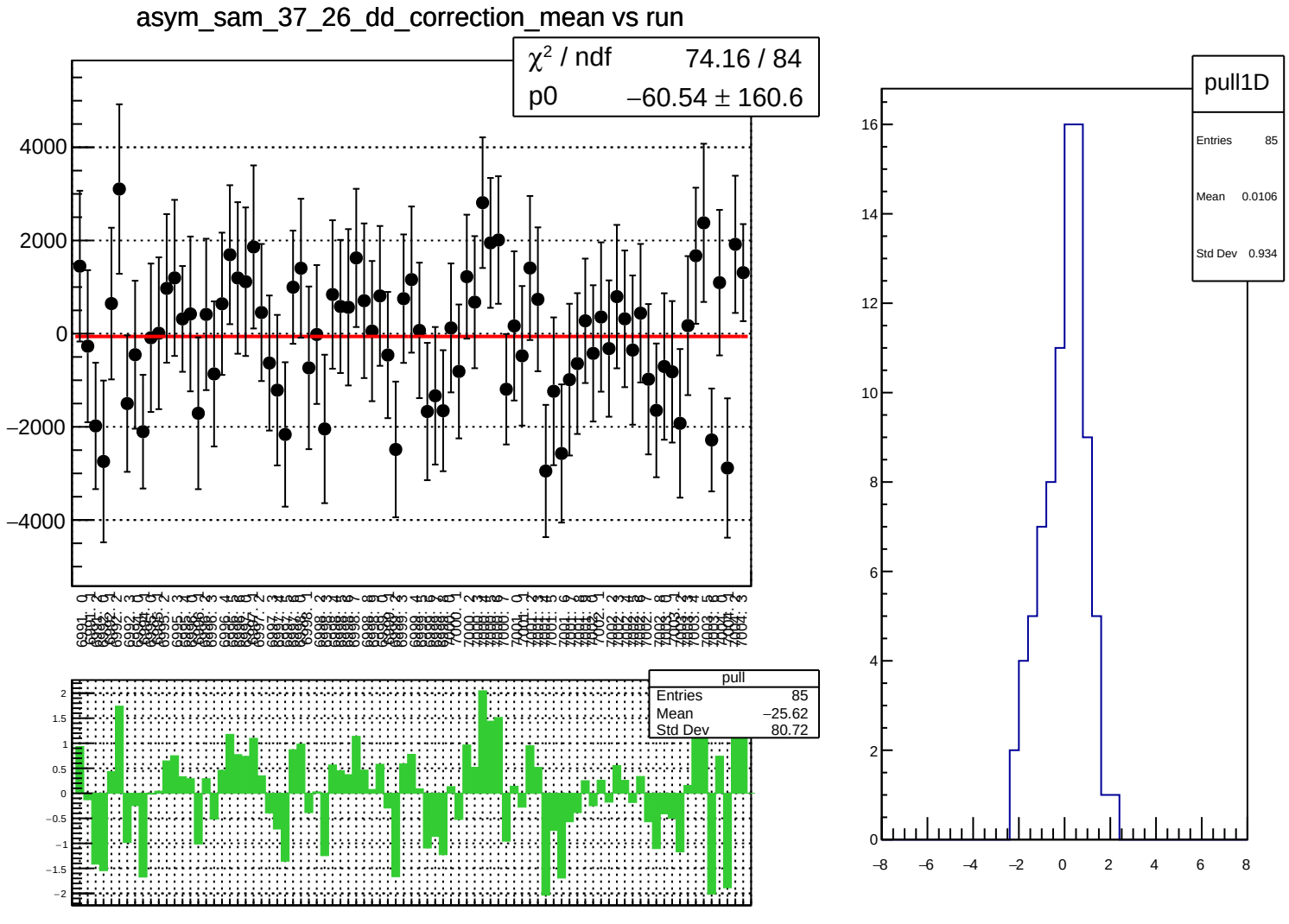

pull1D
Entries 85
Mean −0.02245
Std Dev 0.9433
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

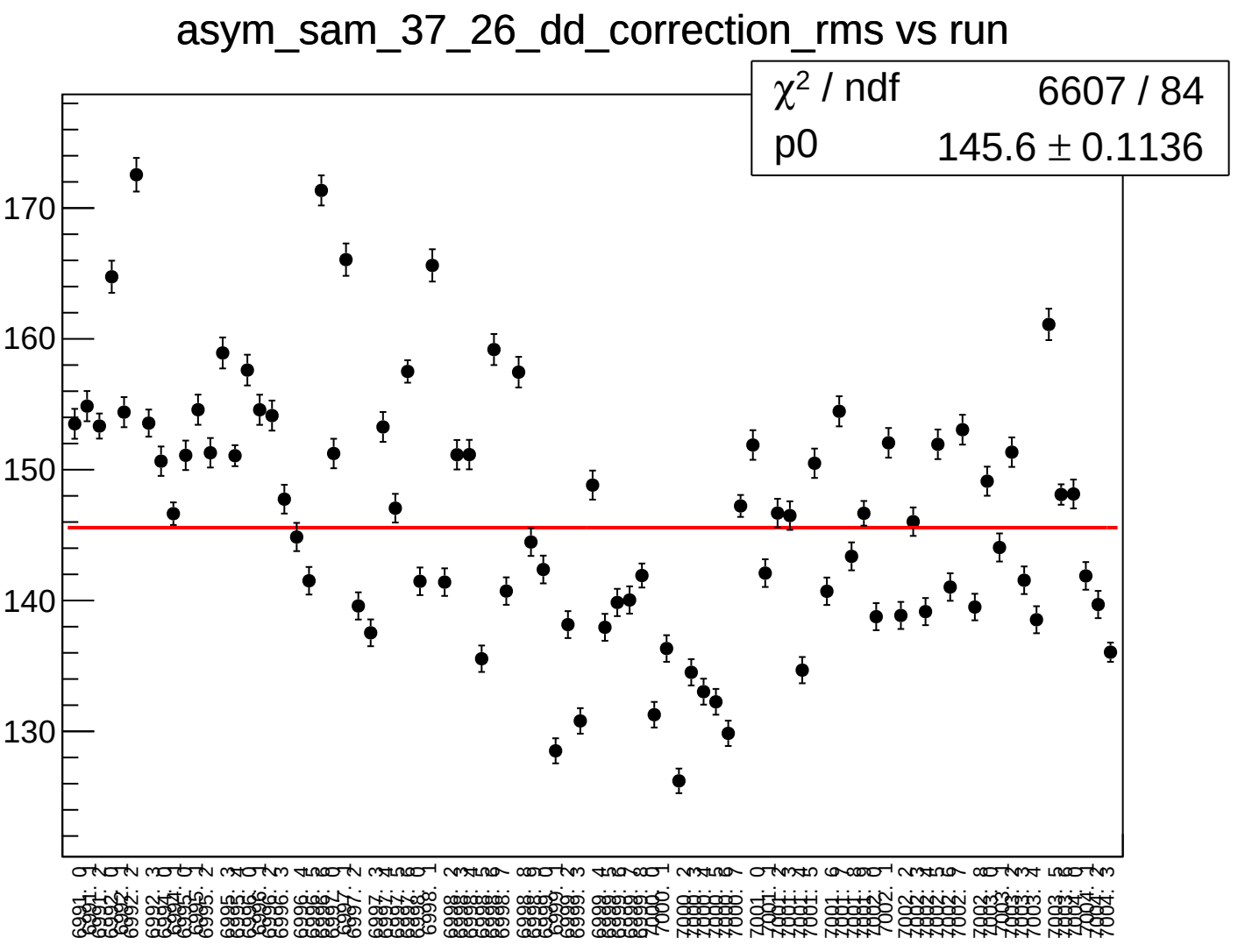

asym_sam_15_26_dd_rms vs run
χ^2 / ndf 5165 / 84
p0 351.2 ± 0.2739
440
420
400
380
360
340
320
300

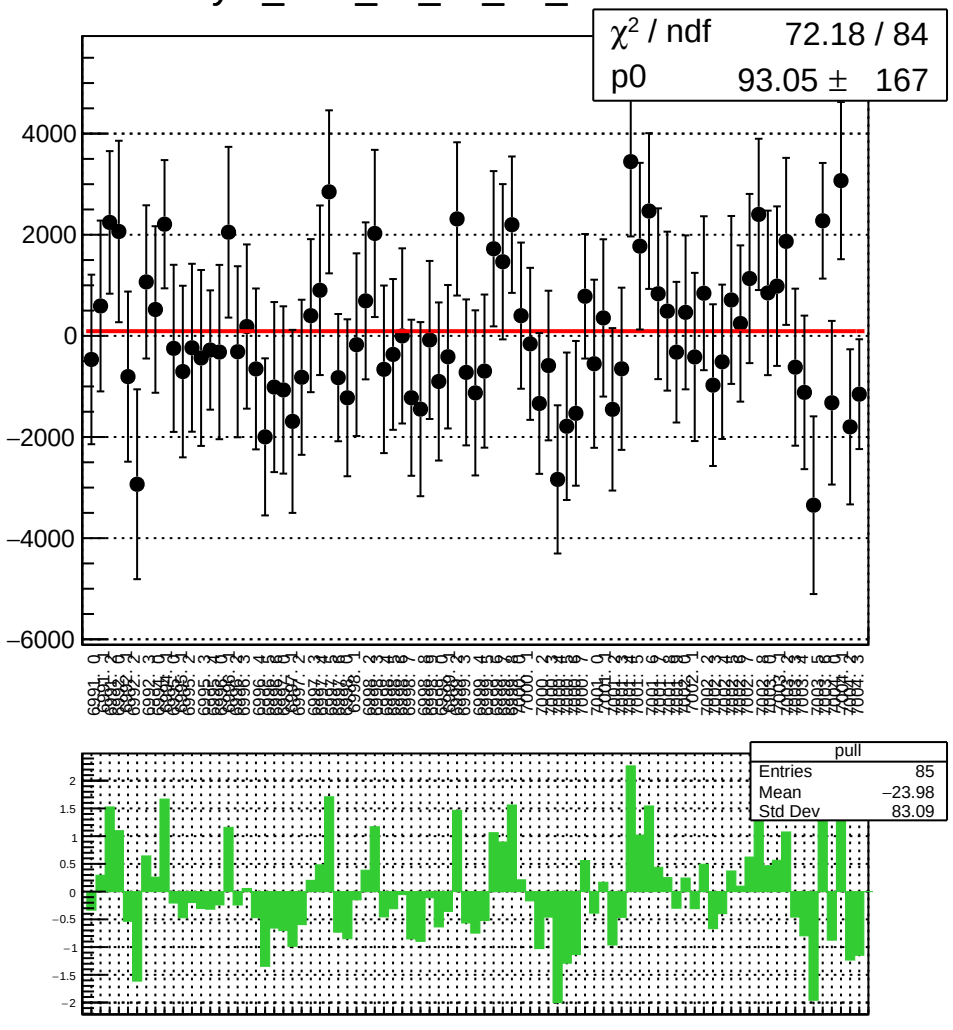

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 77.14 / 84
p0 31.64 ± 45.52
1500
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −7.336
Std Dev 90.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

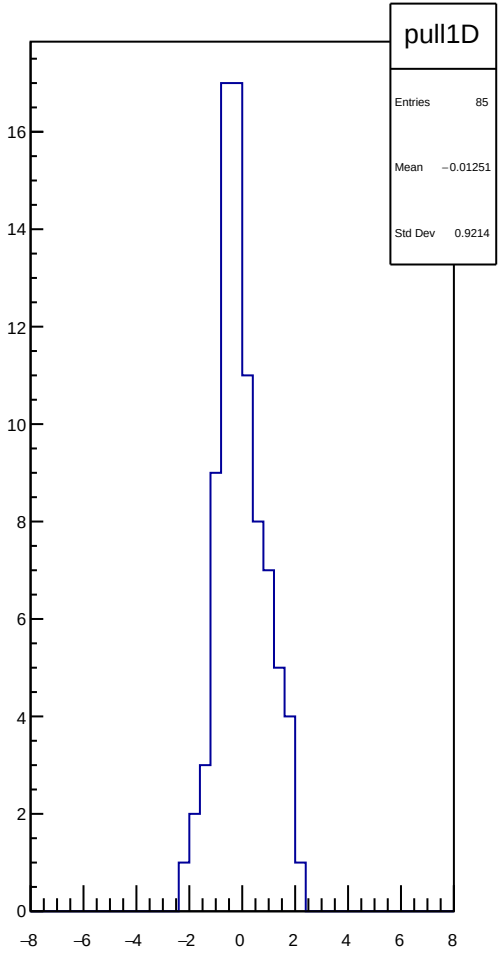

pull1D
Entries 85
Mean −0.007183
Std Dev 0.9526
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

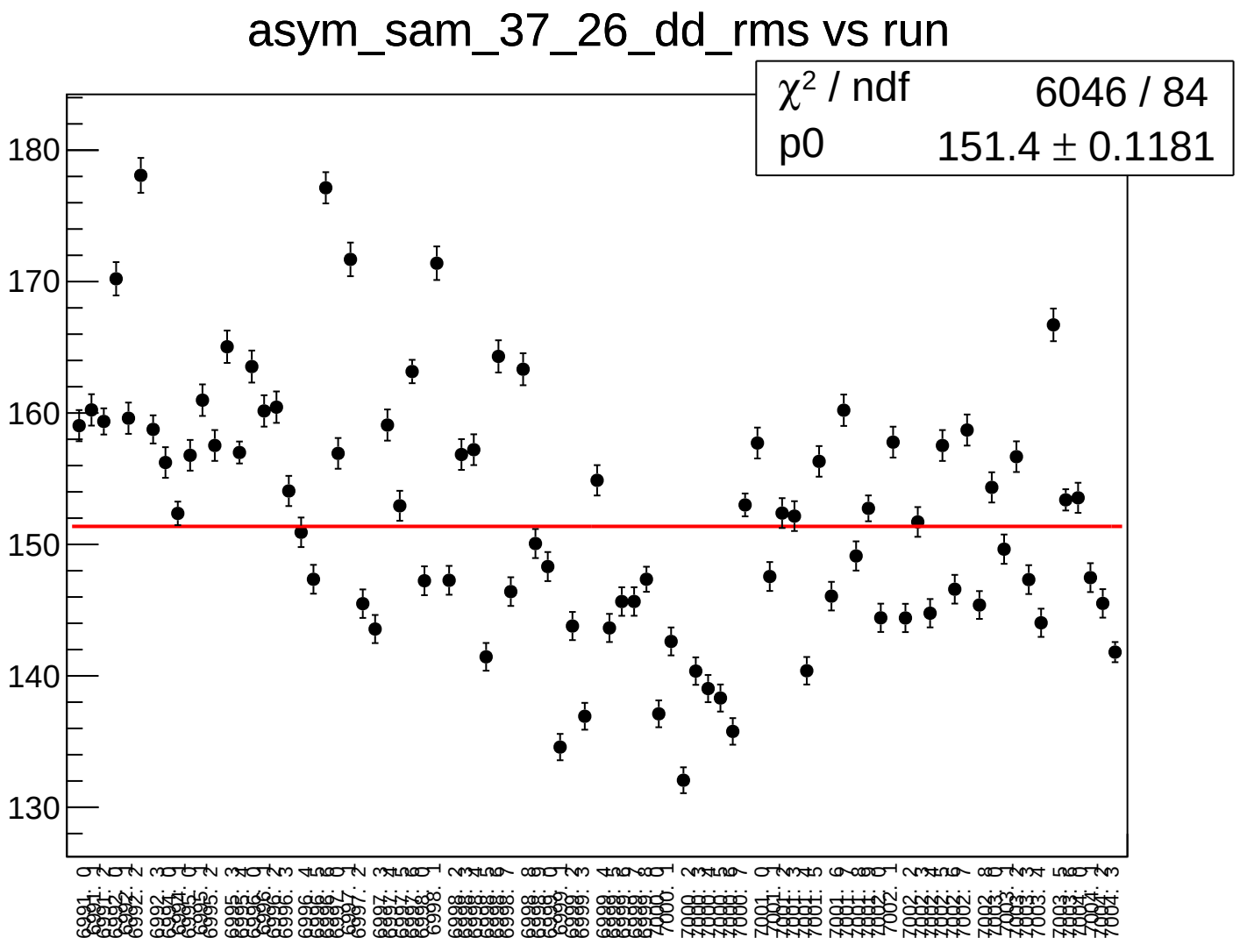

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 1959 / 84
p0 41.32 ± 0.03219
45
44
43
42
41
40
39
38

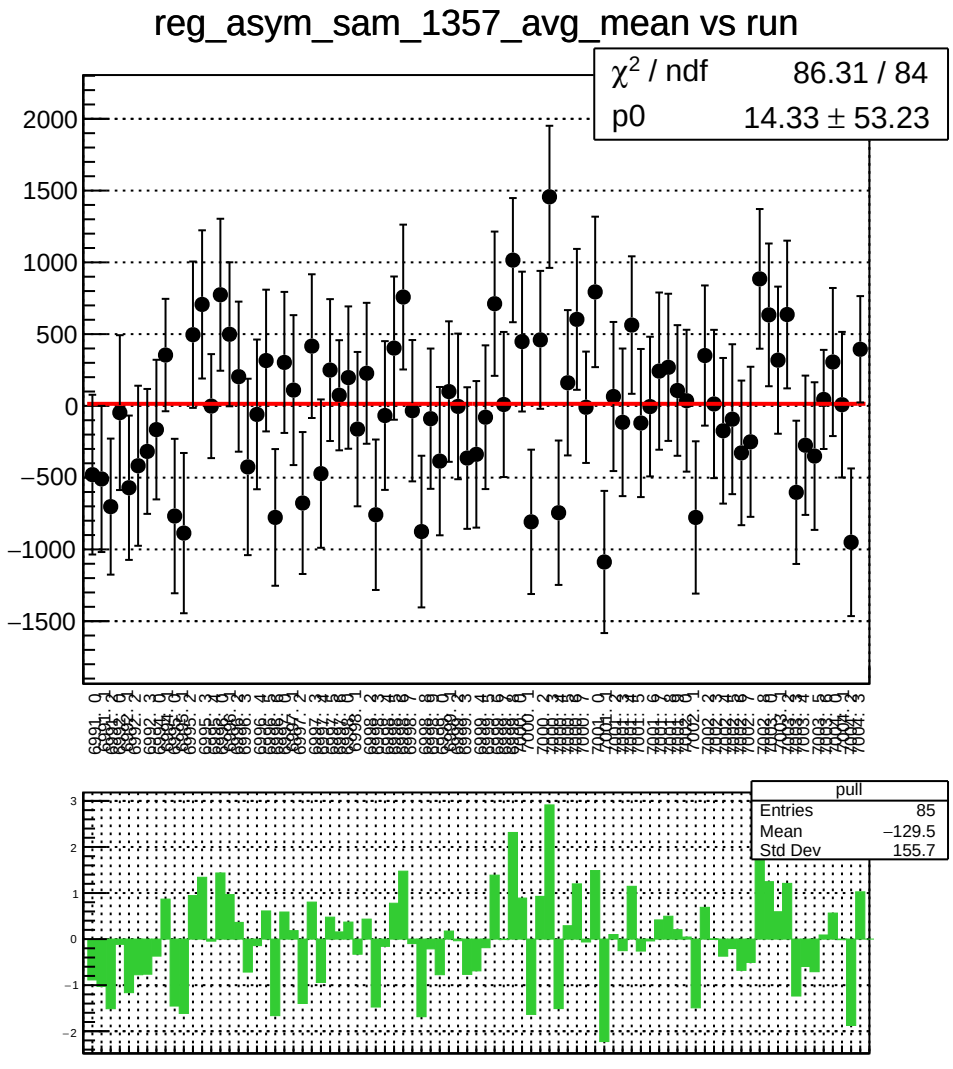

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 74.16 / 84
p0 −60.54 ± 160.6
4000
2000
0
−2000
−4000
pull
Entries 85
Mean −25.62
Std Dev 80.72
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.0106
Std Dev 0.934
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

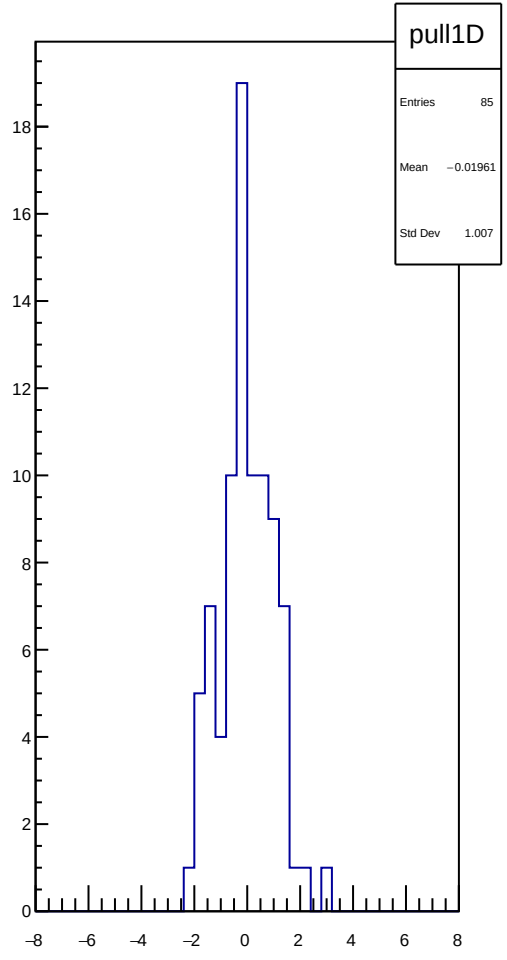

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 6607 / 84
p0 145.6 ± 0.1136
170
160
150
140
130

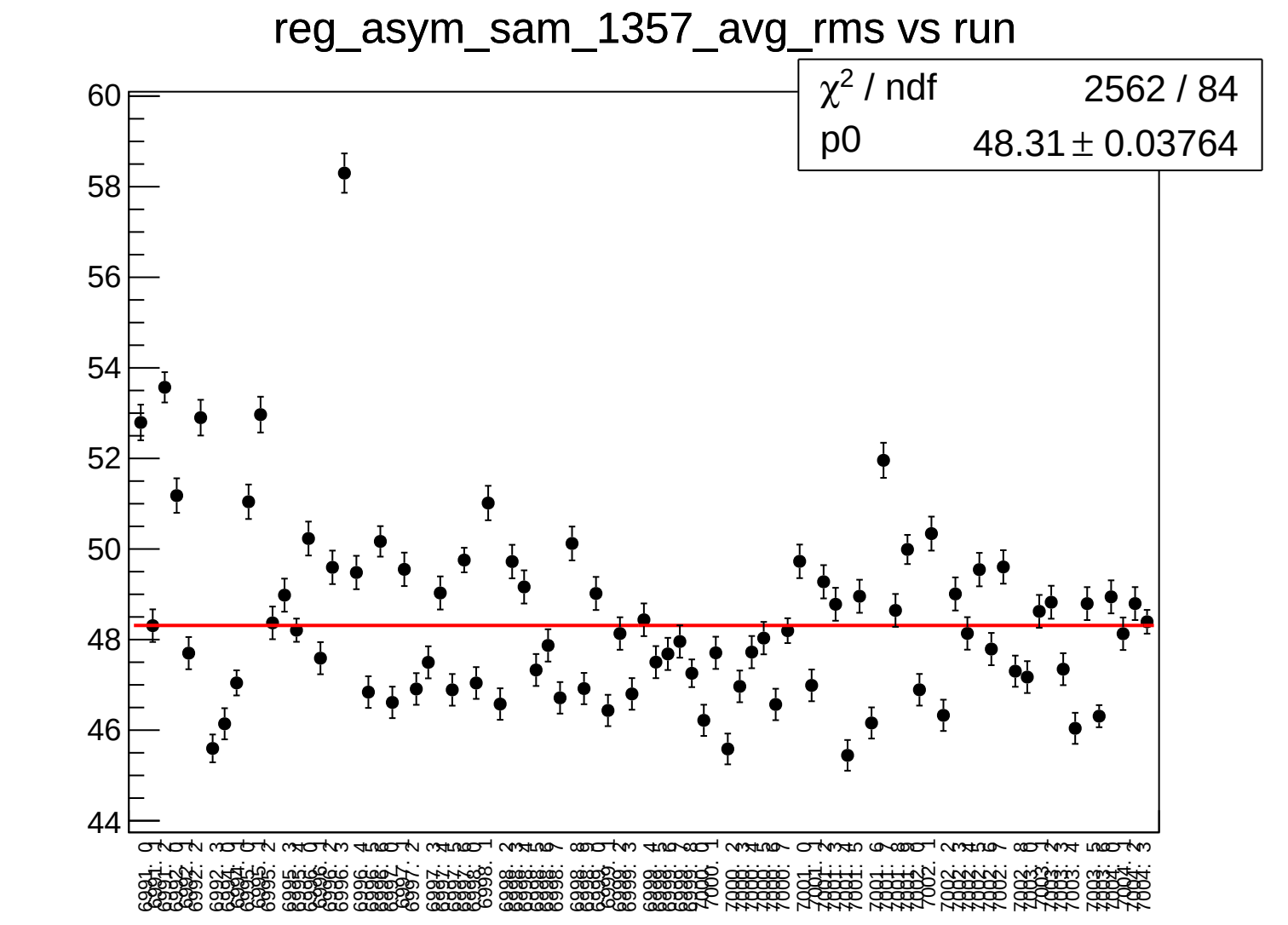

asym_sam_37_26_dd_mean vs run
χ² / ndf 72.18 / 84
p0 93.05 ± 167
pull
Entries 85
Mean −23.98
Std Dev 83.09

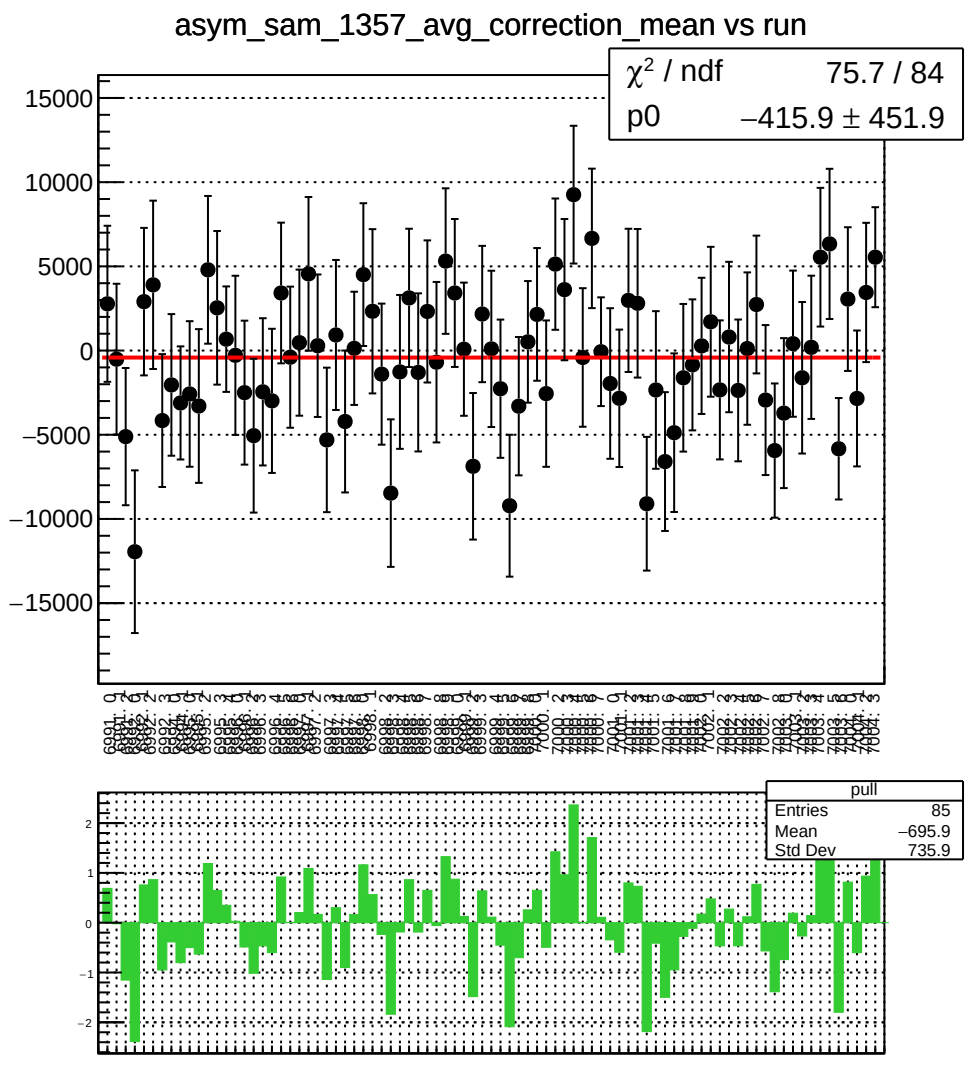

pull1D
Entries 85
Mean −0.01251
Std Dev 0.9214

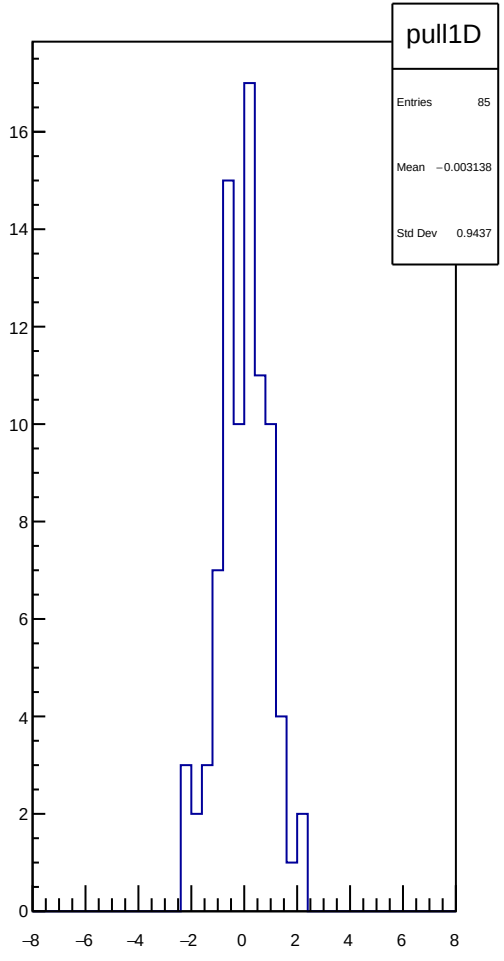

asym_sam_37_26_dd_rms vs run
χ² / ndf 6046 / 84
p0 151.4 ± 0.1181
180
170
160
150
140
130

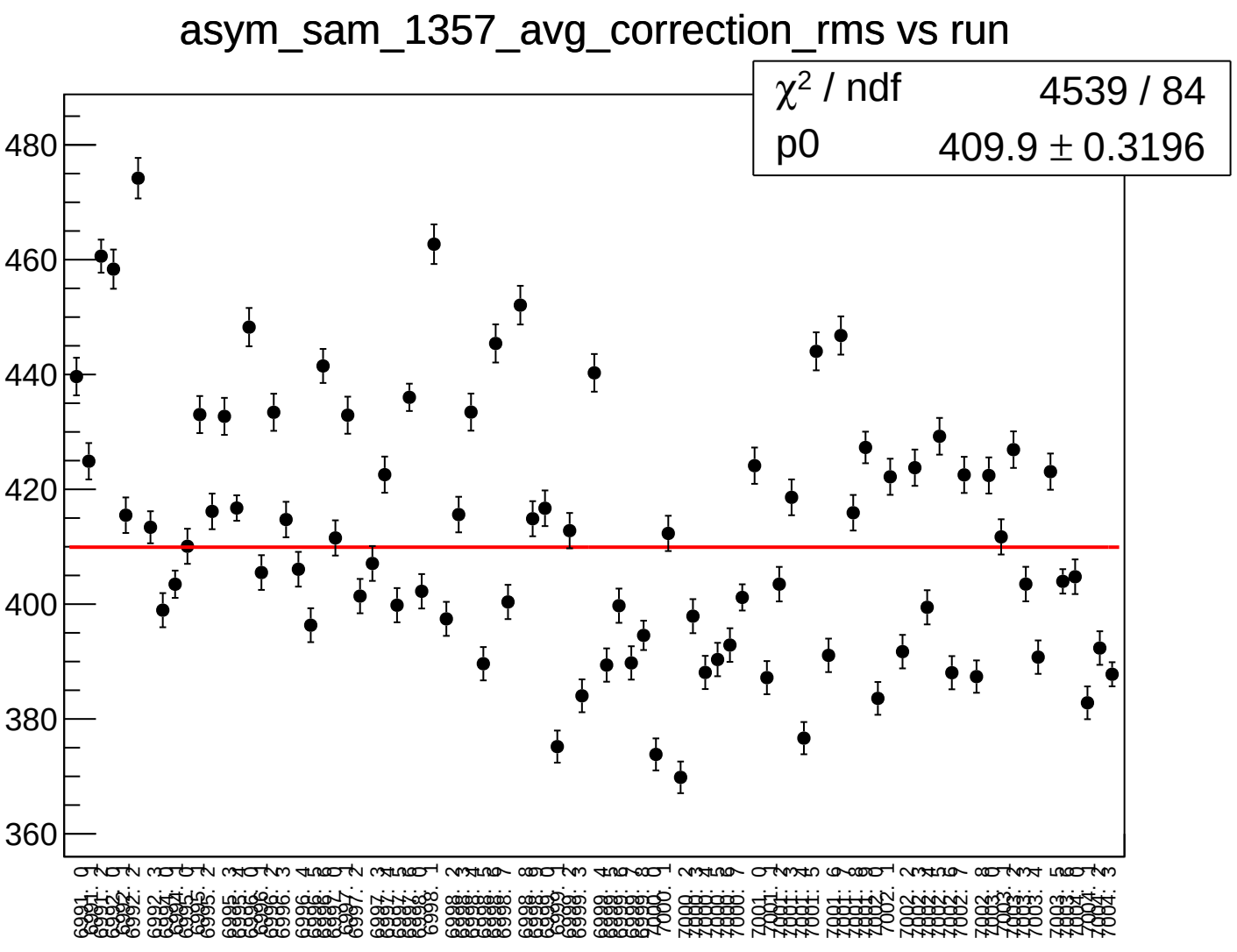

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 86.31 / 84
p0 14.33 ± 53.23
2000
1500
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −129.5
Std Dev 155.7
3
2
1
0
−1
−2

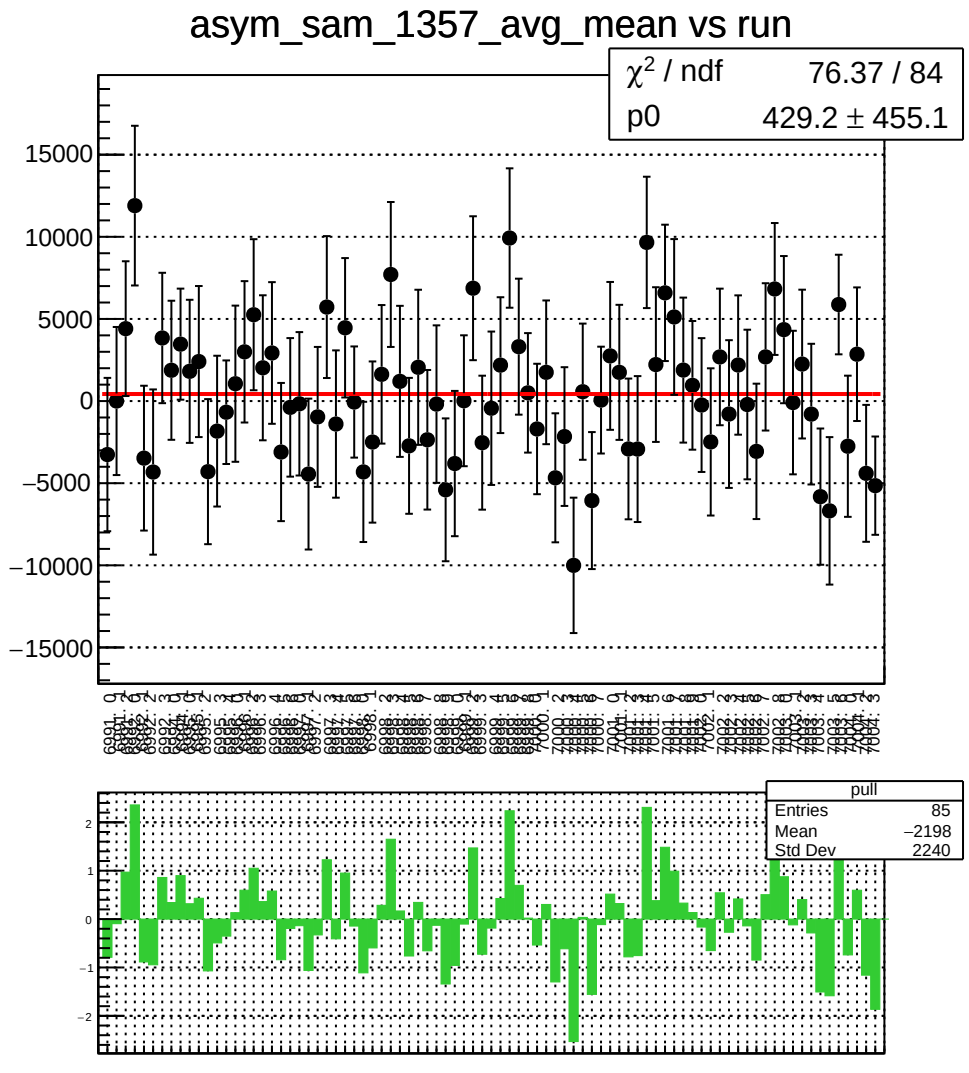

pull1D
Entries 85
Mean −0.01961
Std Dev 1.007
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

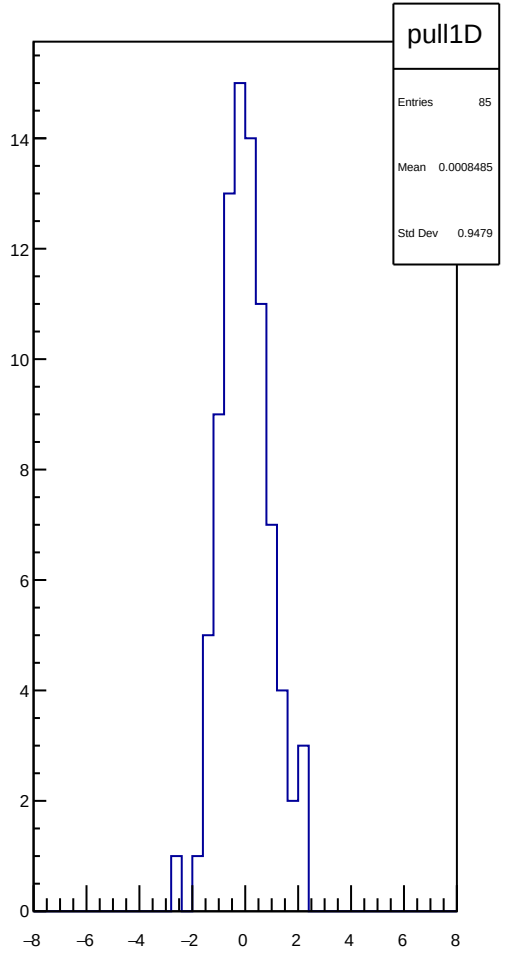

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 2562 / 84
p0 48.31 ± 0.03764
60
58
56
54
52
50
48
46
44

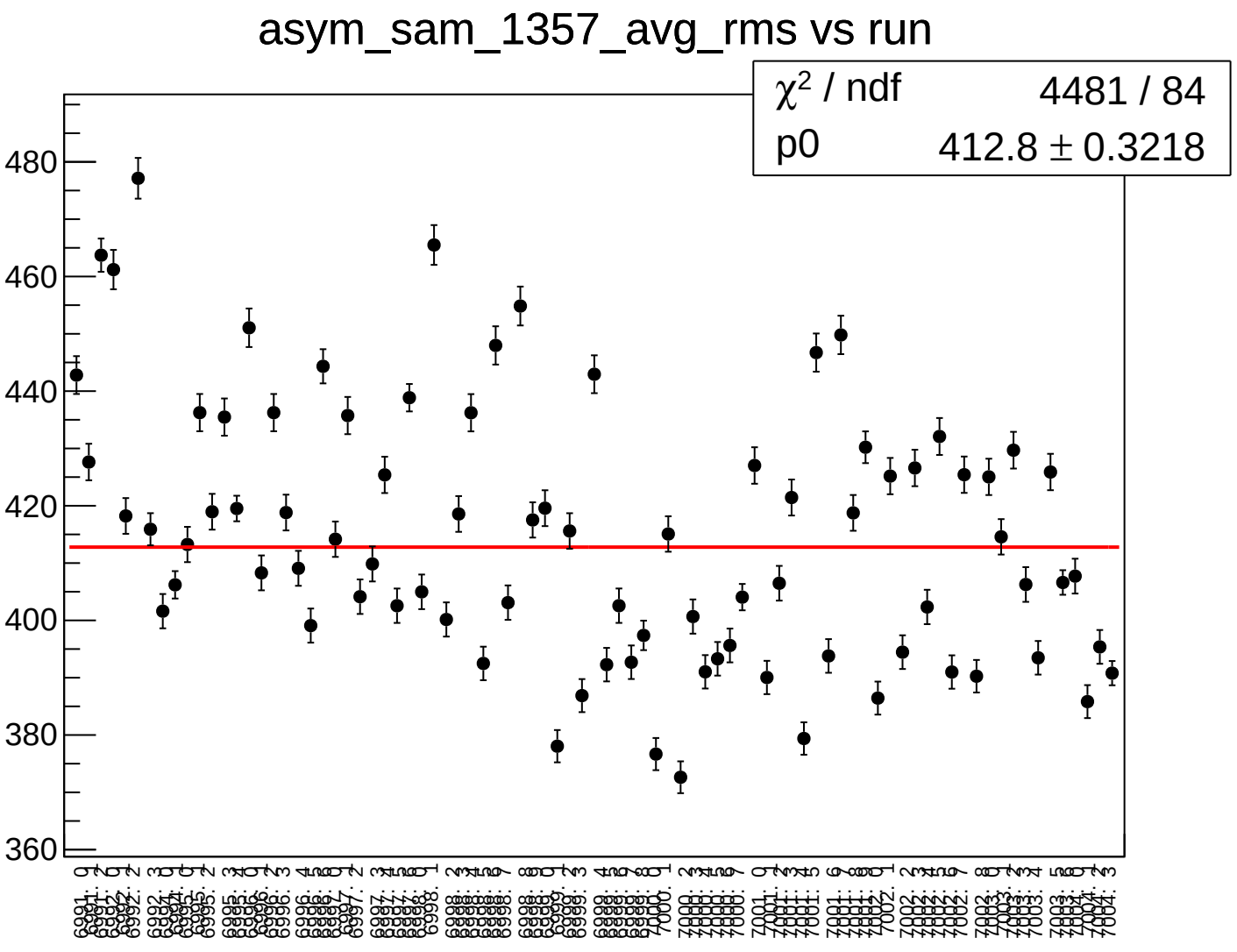

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 75.7 / 84
p0 −415.9 ± 451.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −695.9
Std Dev 735.9
2
1
0
−1
−2

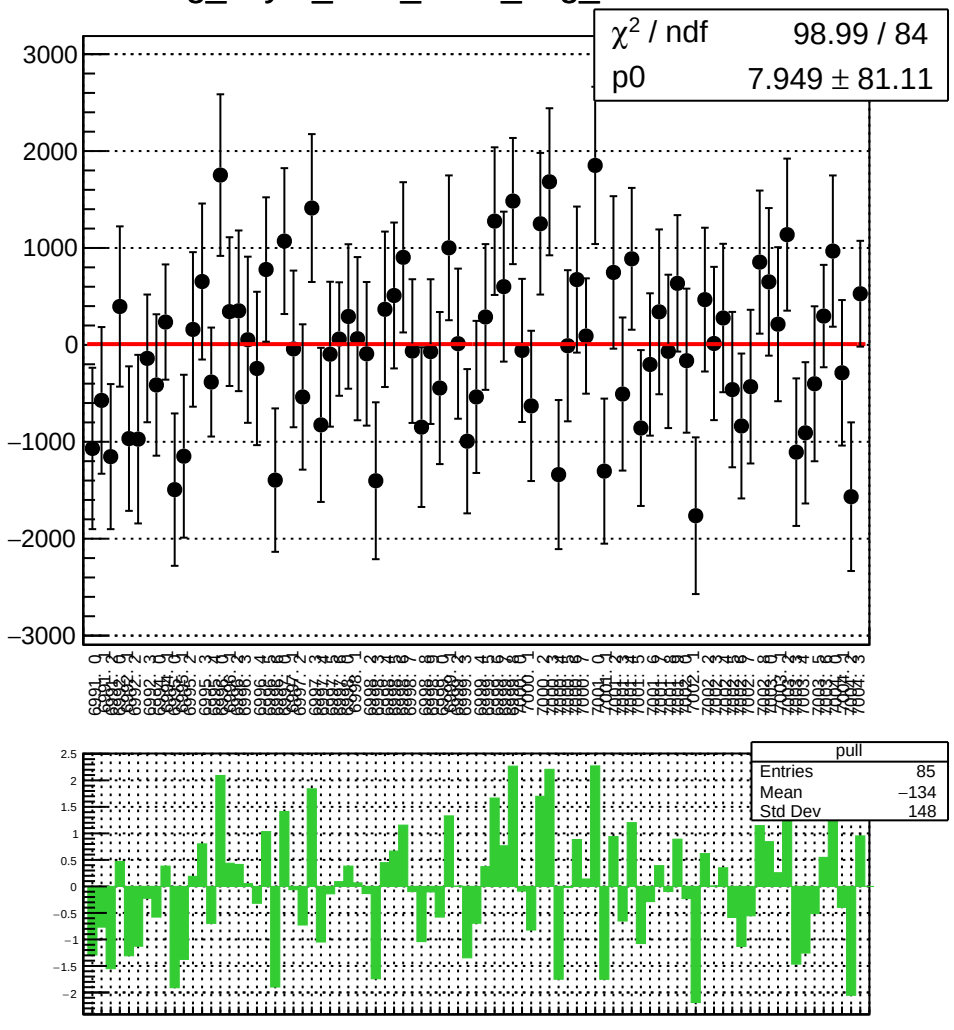

pull1D
Entries 85
Mean −0.003138
Std Dev 0.9437
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

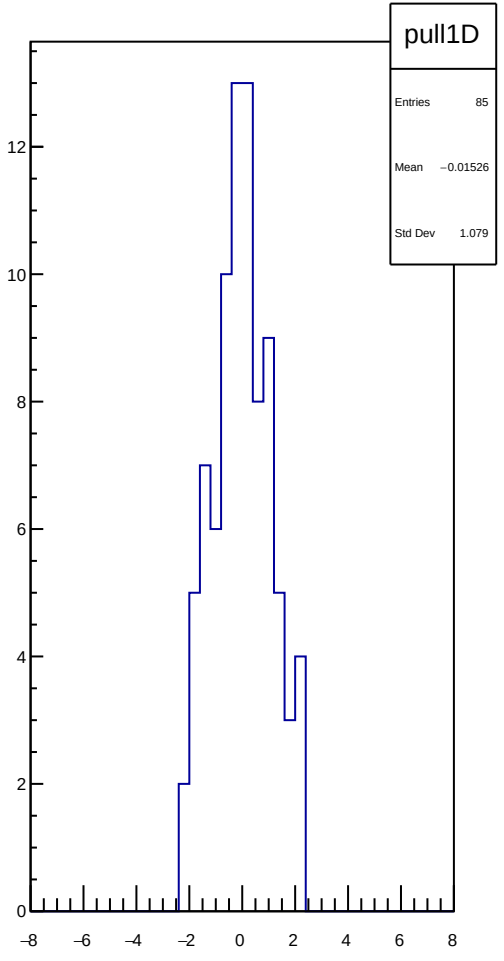

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 4539 / 84
p0 409.9 ± 0.3196
480
460
440
420
400
380
360

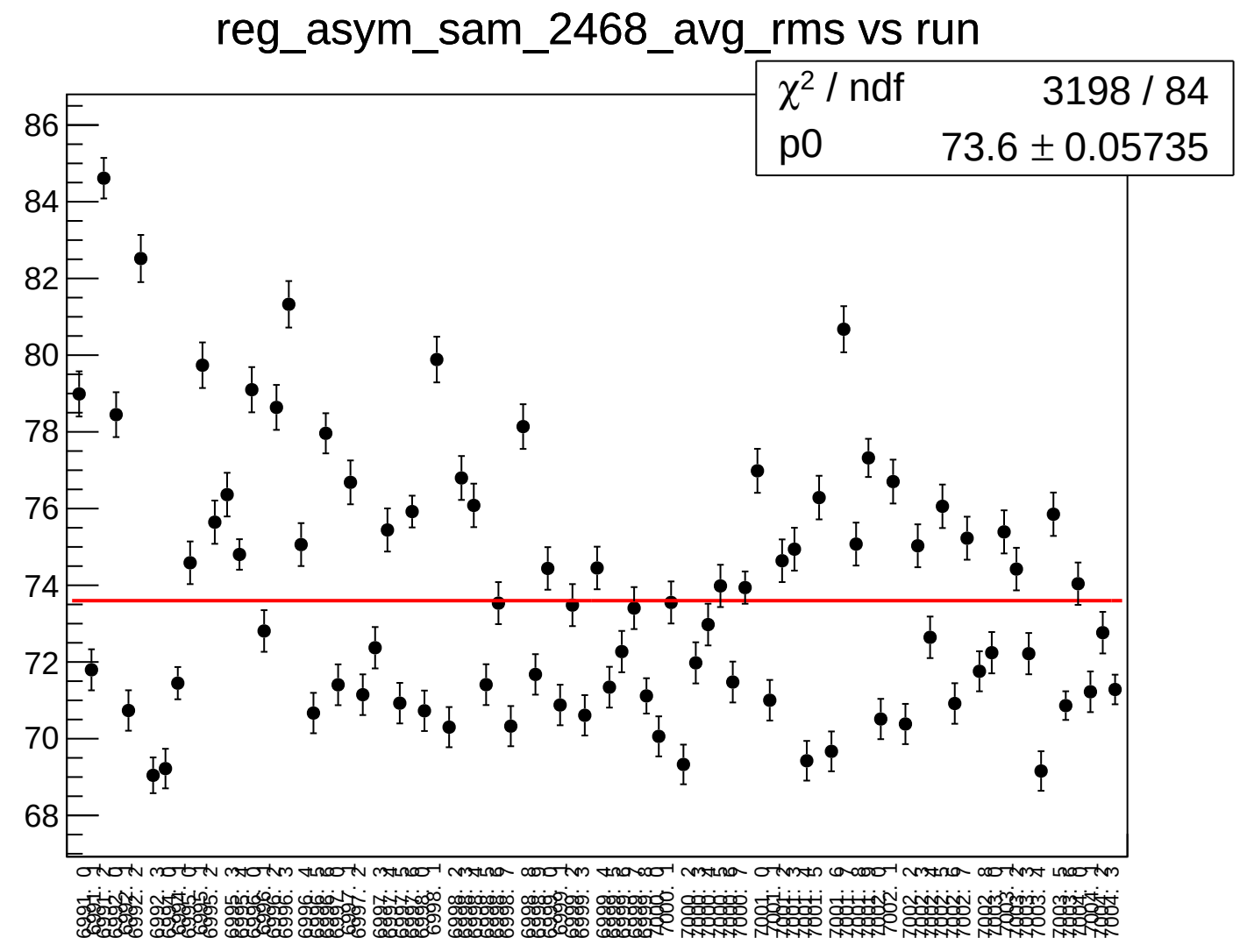

asym_sam_1357_avg_mean vs run
χ² / ndf 76.37 / 84
p0 429.2 ± 455.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −2198
Std Dev 2240
2
1
0
−1
−2

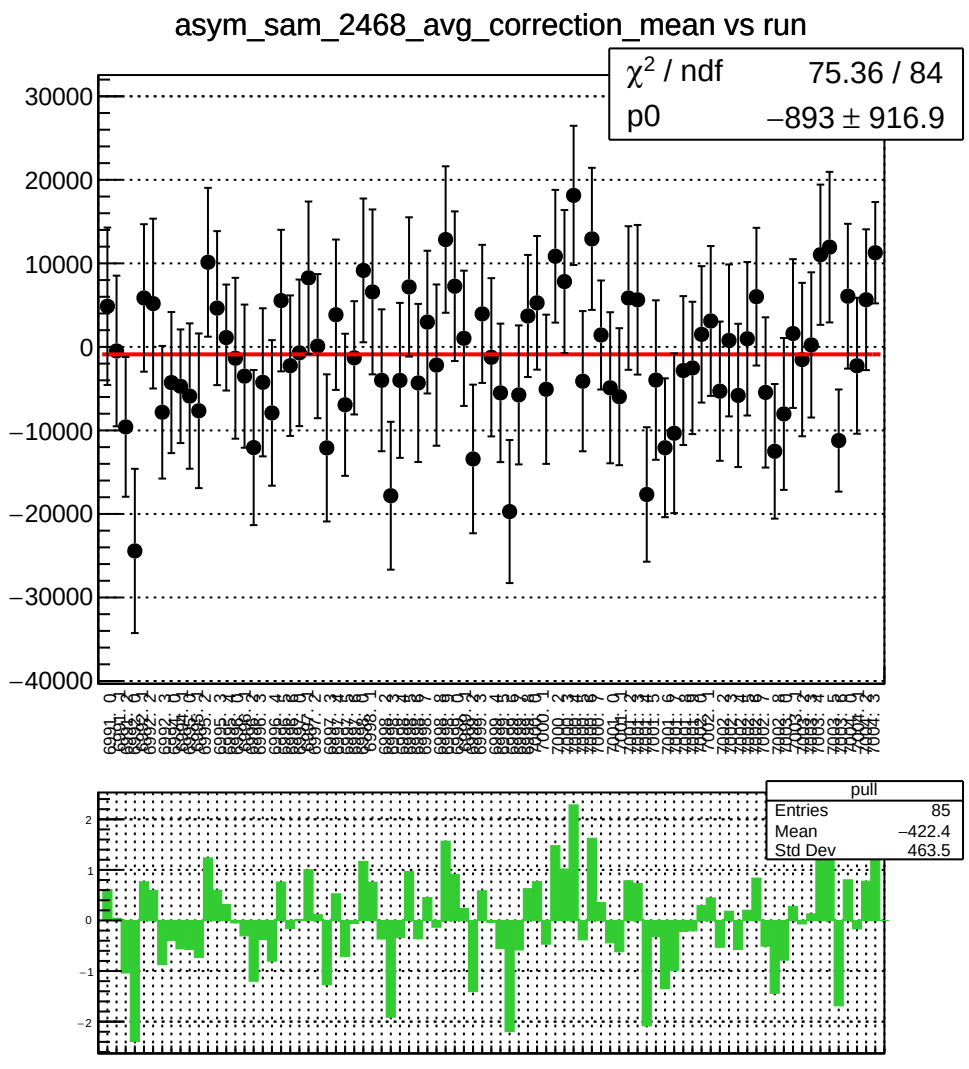

pull1D
Entries 85
Mean 0.0008485
Std Dev 0.9479
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

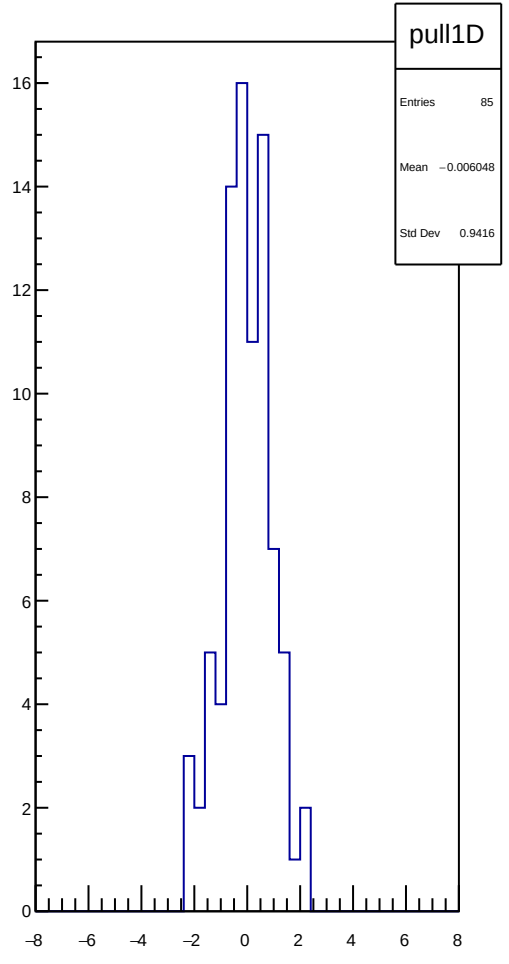

asym_sam_1357_avg_rms vs run
χ² / ndf 4481 / 84
p0 412.8 ± 0.3218
480
460
440
420
400
380
360

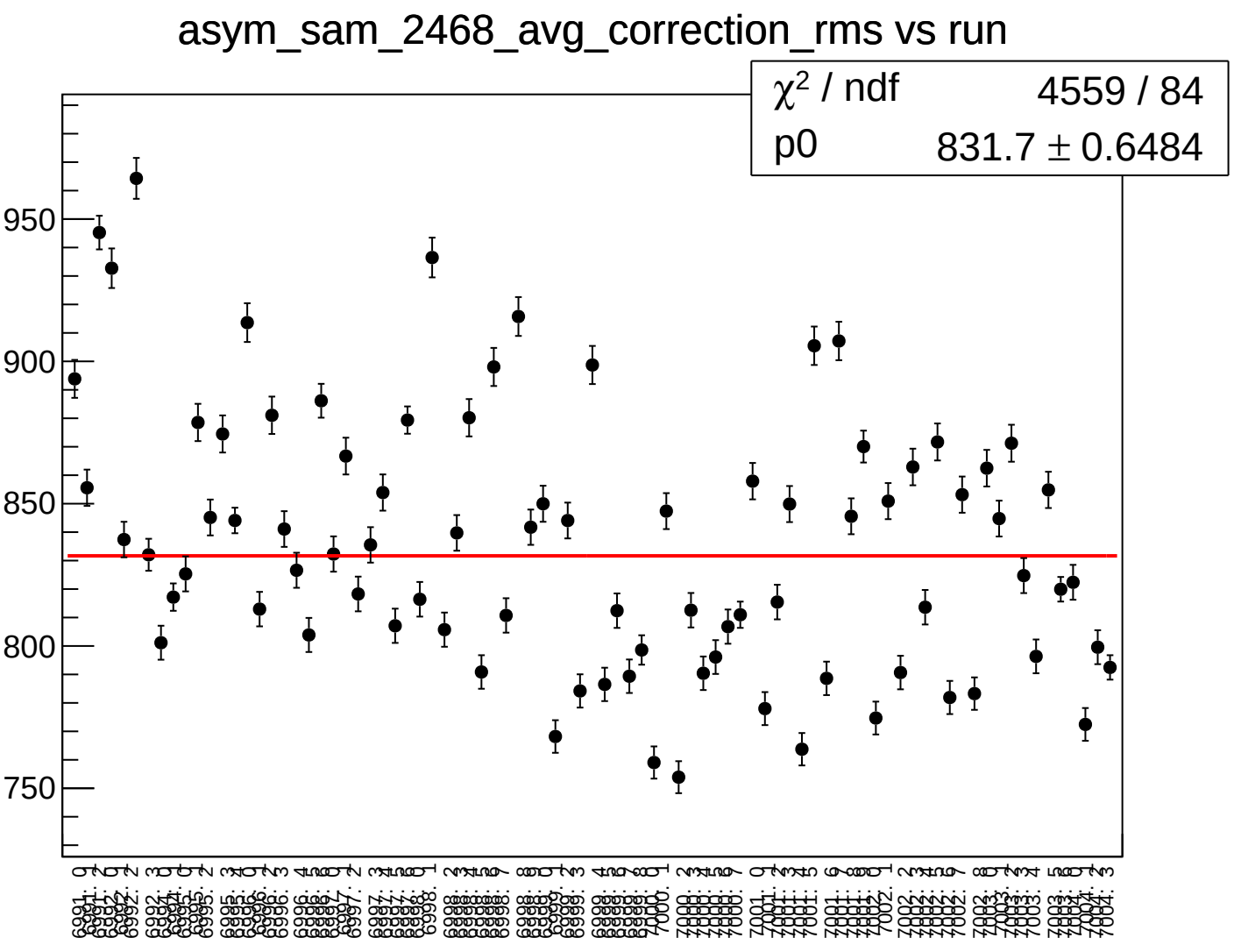

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 98.99 / 84
p0 7.949 ± 81.11
pull
Entries 85
Mean −134
Std Dev 148

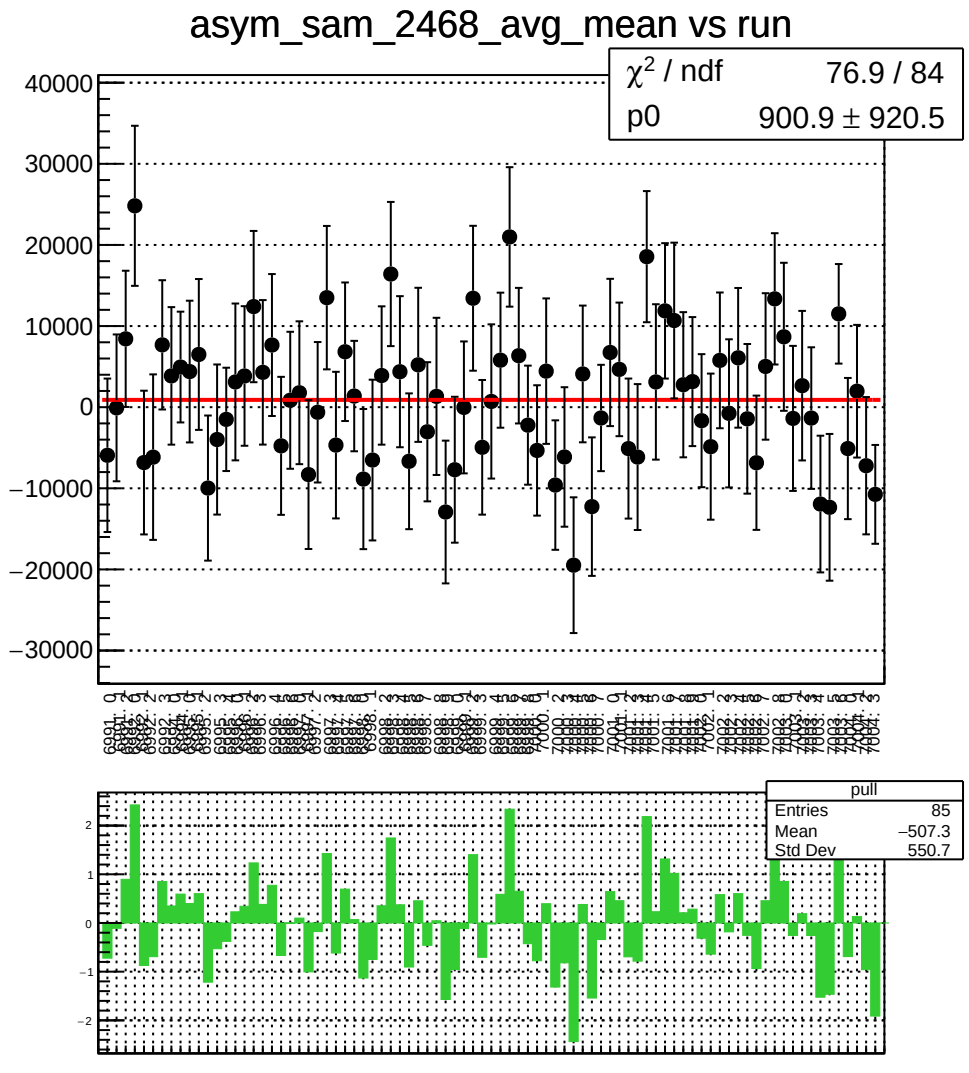

pull1D
Entries 85
Mean −0.01526
Std Dev 1.079

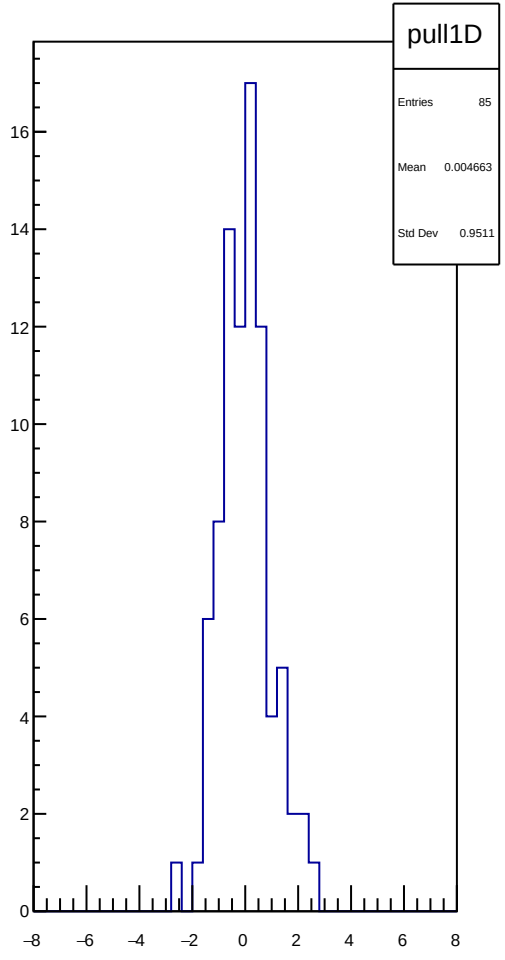

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 3198 / 84
p0 73.6 ± 0.05735
86
84
82
80
78
76
74
72
70
68

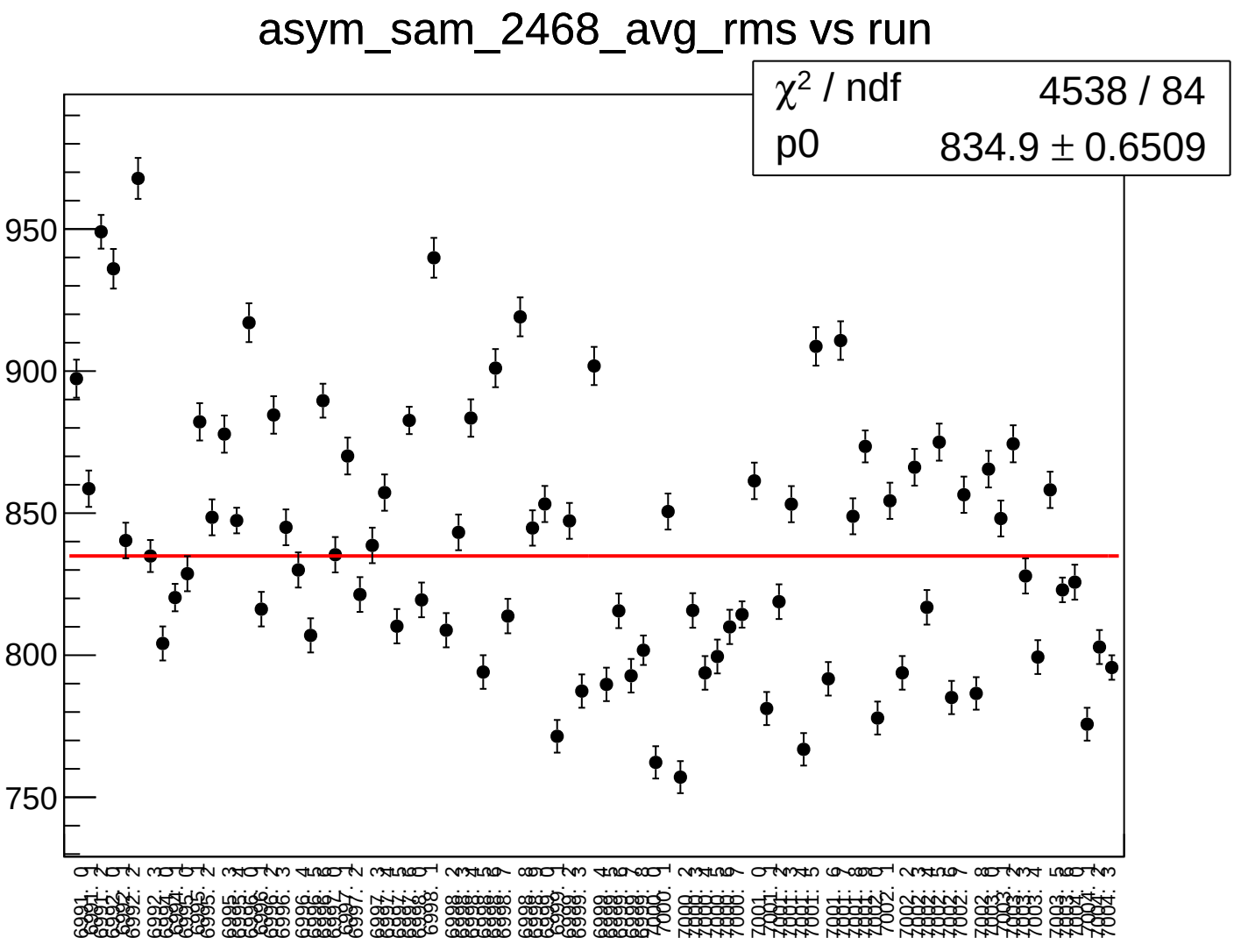

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 75.36 / 84
p0 −893 ± 916.9
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −422.4
Std Dev 463.5
2
1
0
−1
−2

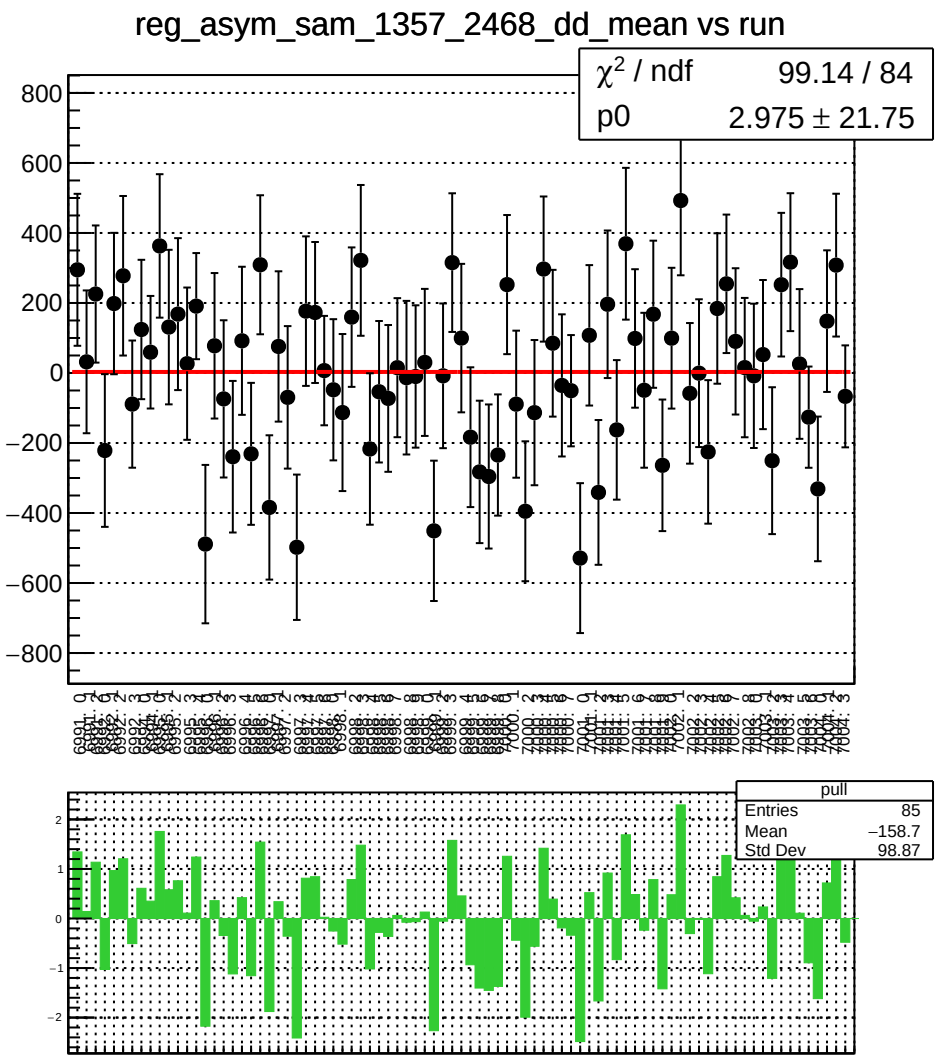

pull1D
Entries 85
Mean −0.006048
Std Dev 0.9416
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

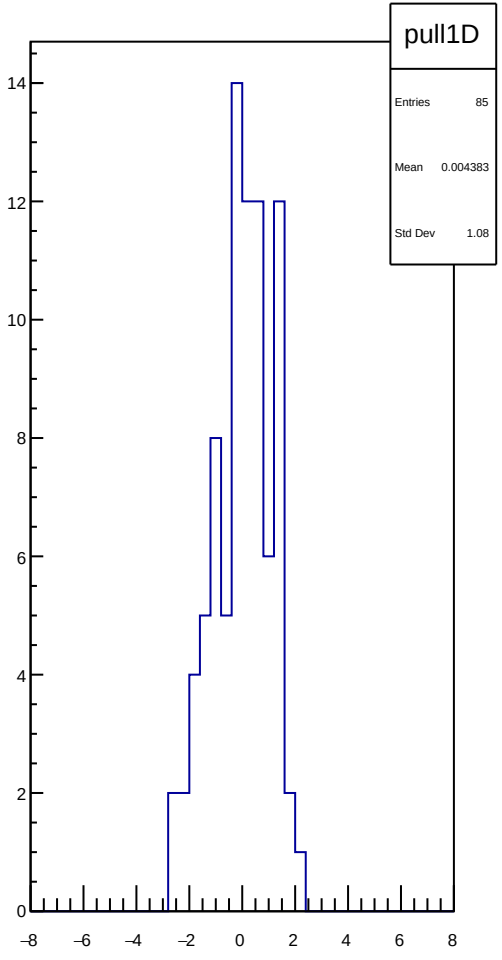

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 4559 / 84
p0 831.7 ± 0.6484
950
900
850
800
750

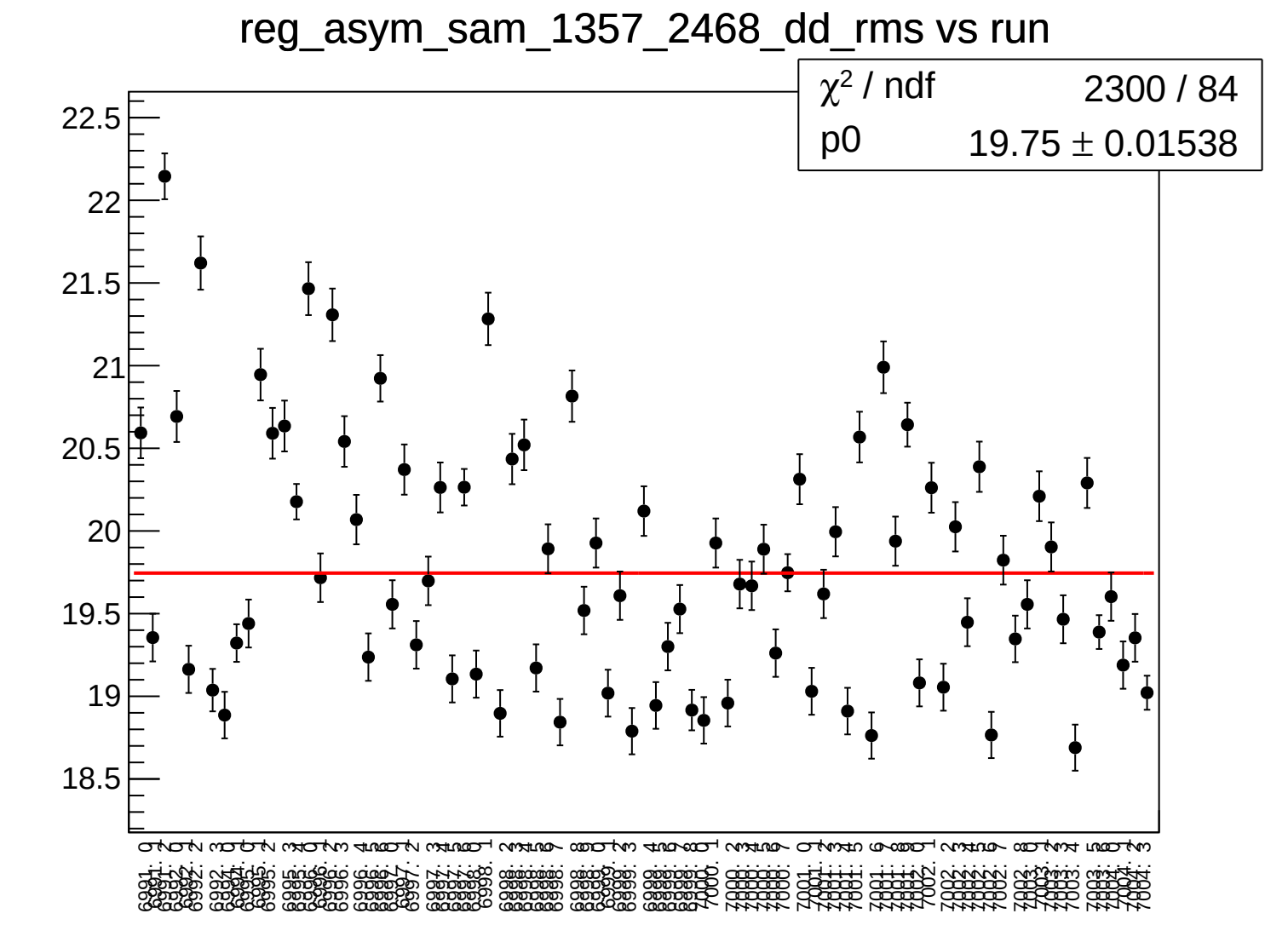

asym_sam_2468_avg_mean vs run
χ^2 / ndf 76.9 / 84
p0 900.9 ± 920.5
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −507.3
Std Dev 550.7
2
1
0
−1
−2

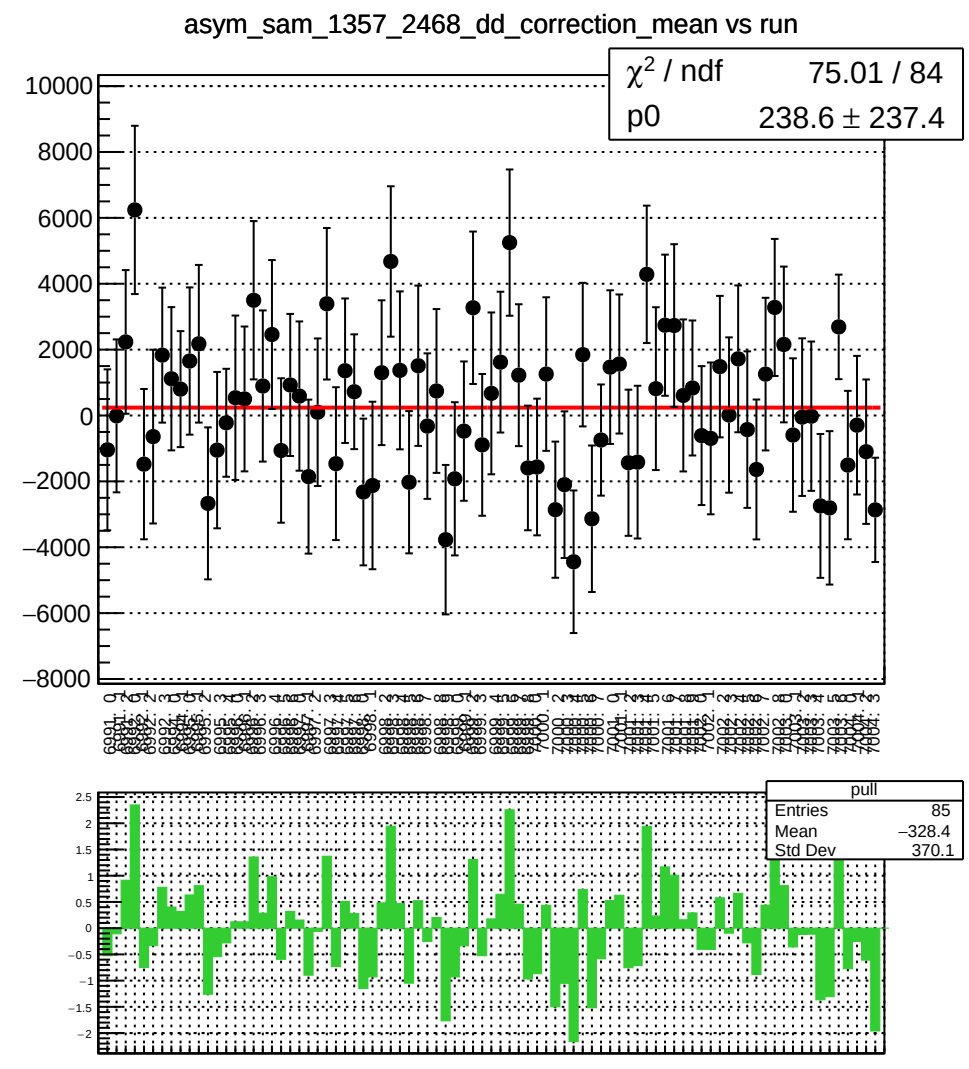

pull1D
Entries 85
Mean 0.004663
Std Dev 0.9511
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

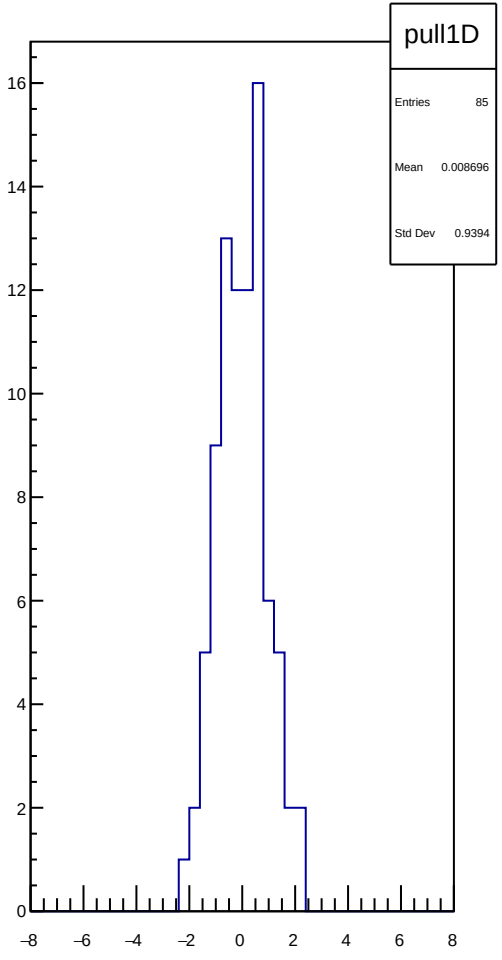

asym_sam_2468_avg_rms vs run
χ² / ndf 4538 / 84
p0 834.9 ± 0.6509
950
900
850
800
750

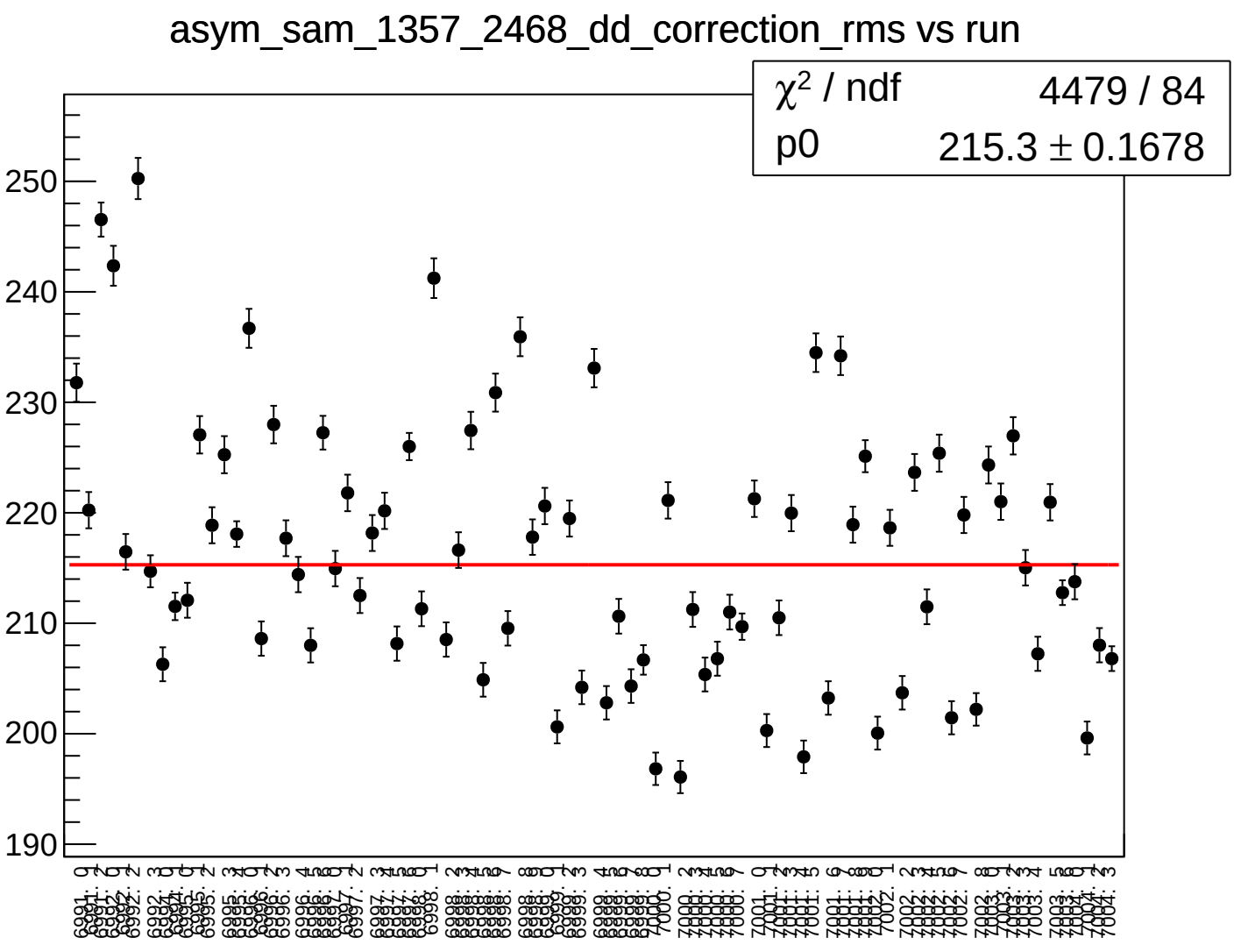

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 99.14 / 84
p0 2.975 ± 21.75
pull
Entries 85
Mean −158.7
Std Dev 98.87

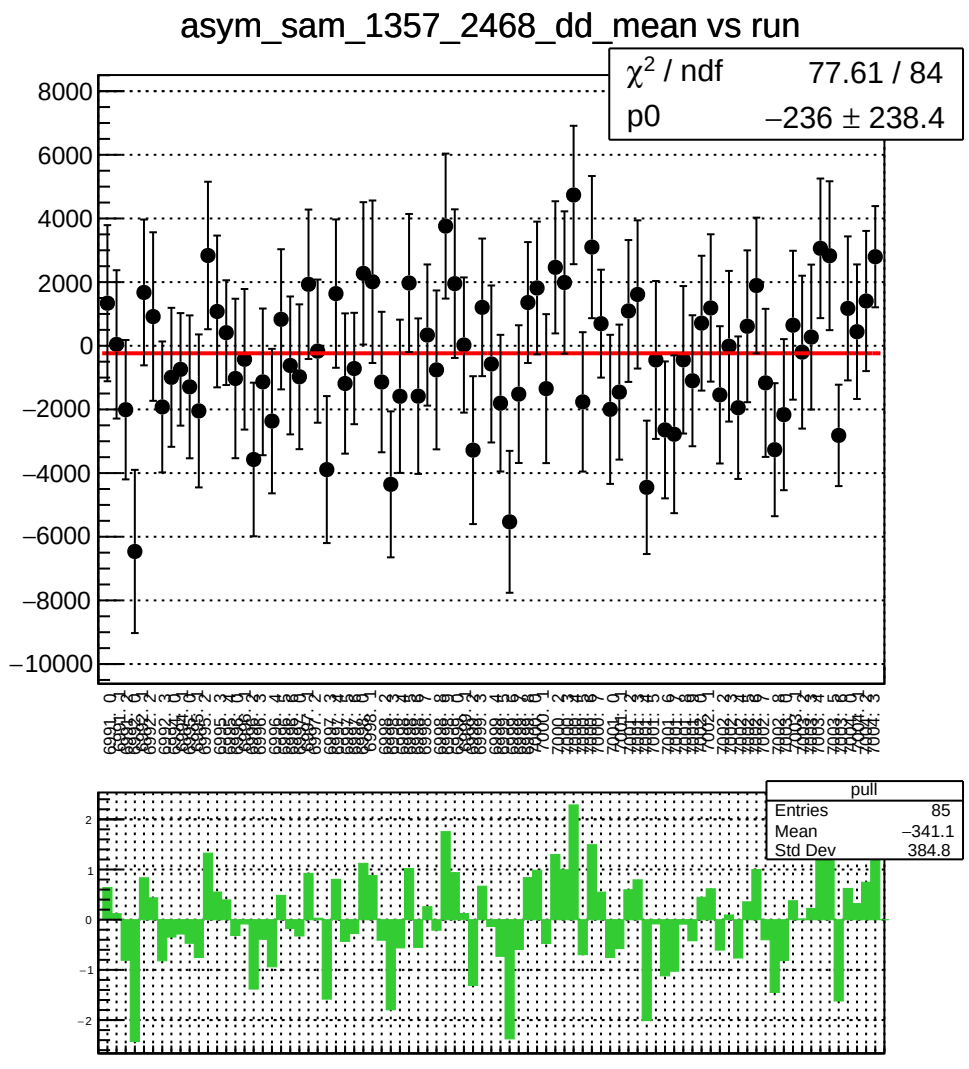

pull1D
Entries 85
Mean 0.004383
Std Dev 1.08

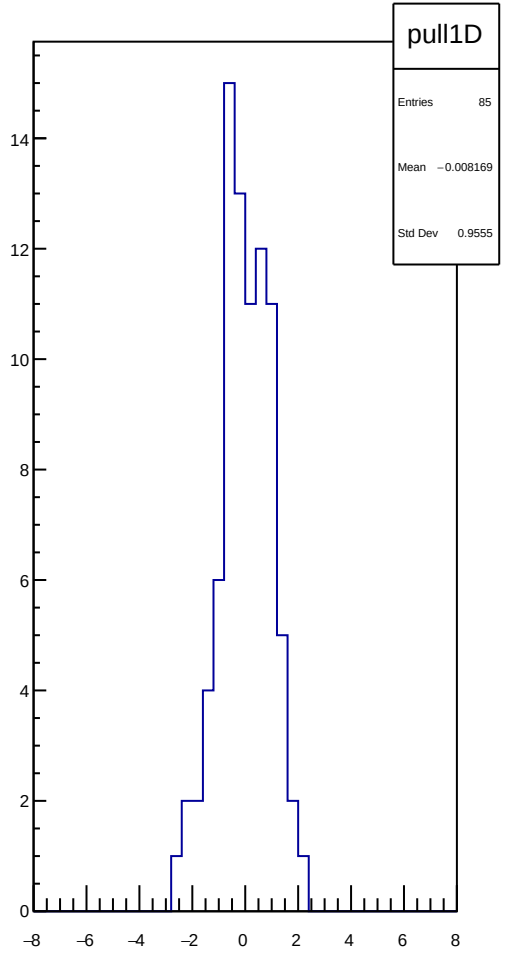

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 2300 / 84
p0 19.75 ± 0.01538
22.5
22
21.5
21
20.5
20
19.5
19
18.5

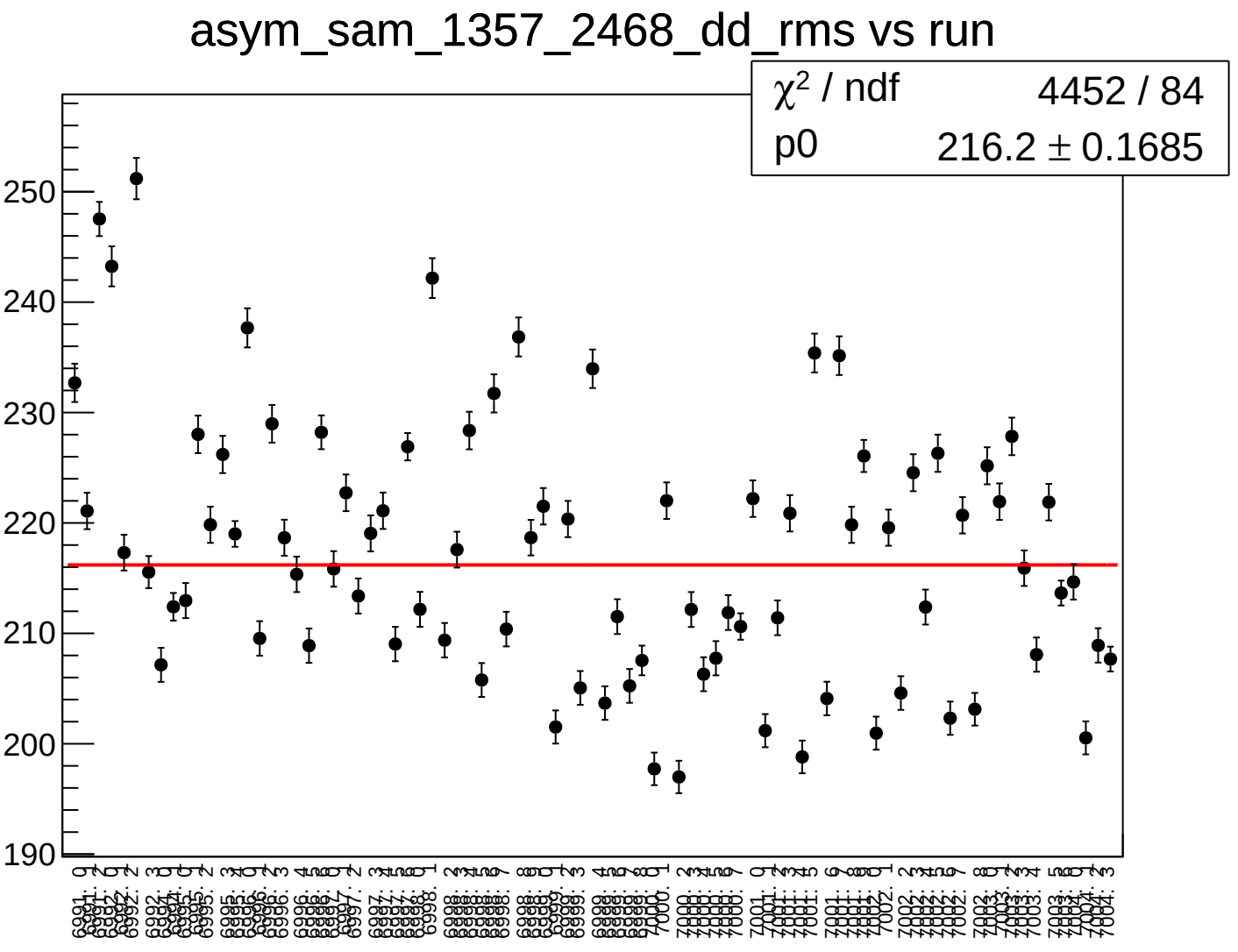

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 75.01 / 84
p0 238.6 ± 237.4
pull
Entries 85
Mean −328.4
Std Dev 370.1

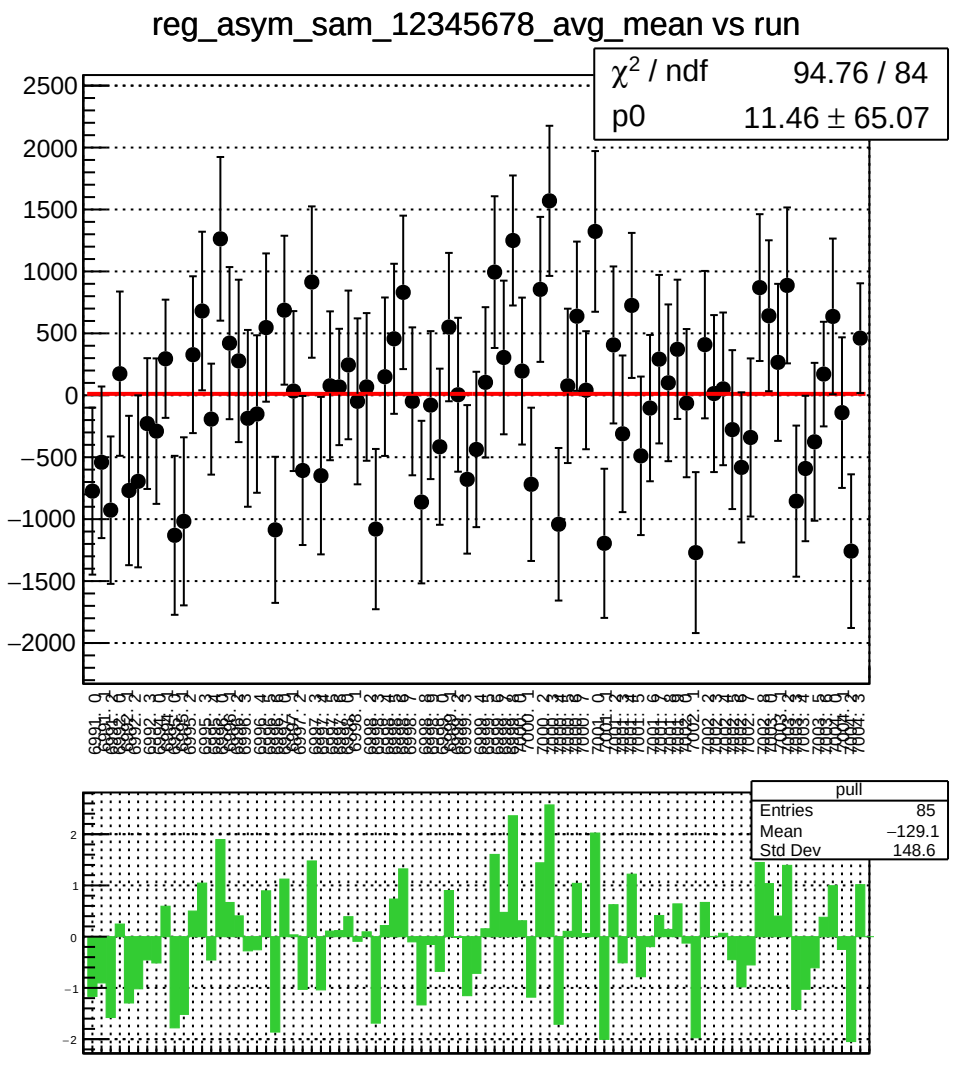

pull1D
Entries 85
Mean 0.008696
Std Dev 0.9394

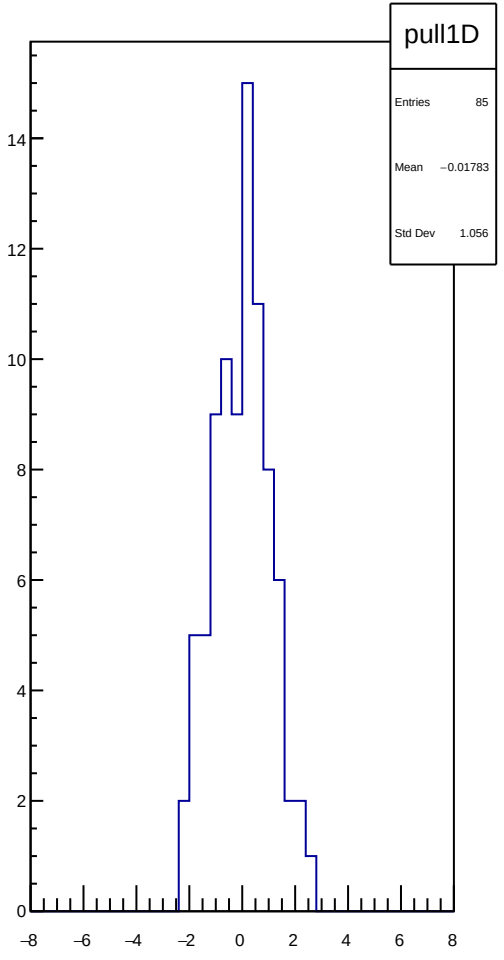

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 4479 / 84
p0 215.3 ± 0.1678
250
240
230
220
210
200
190

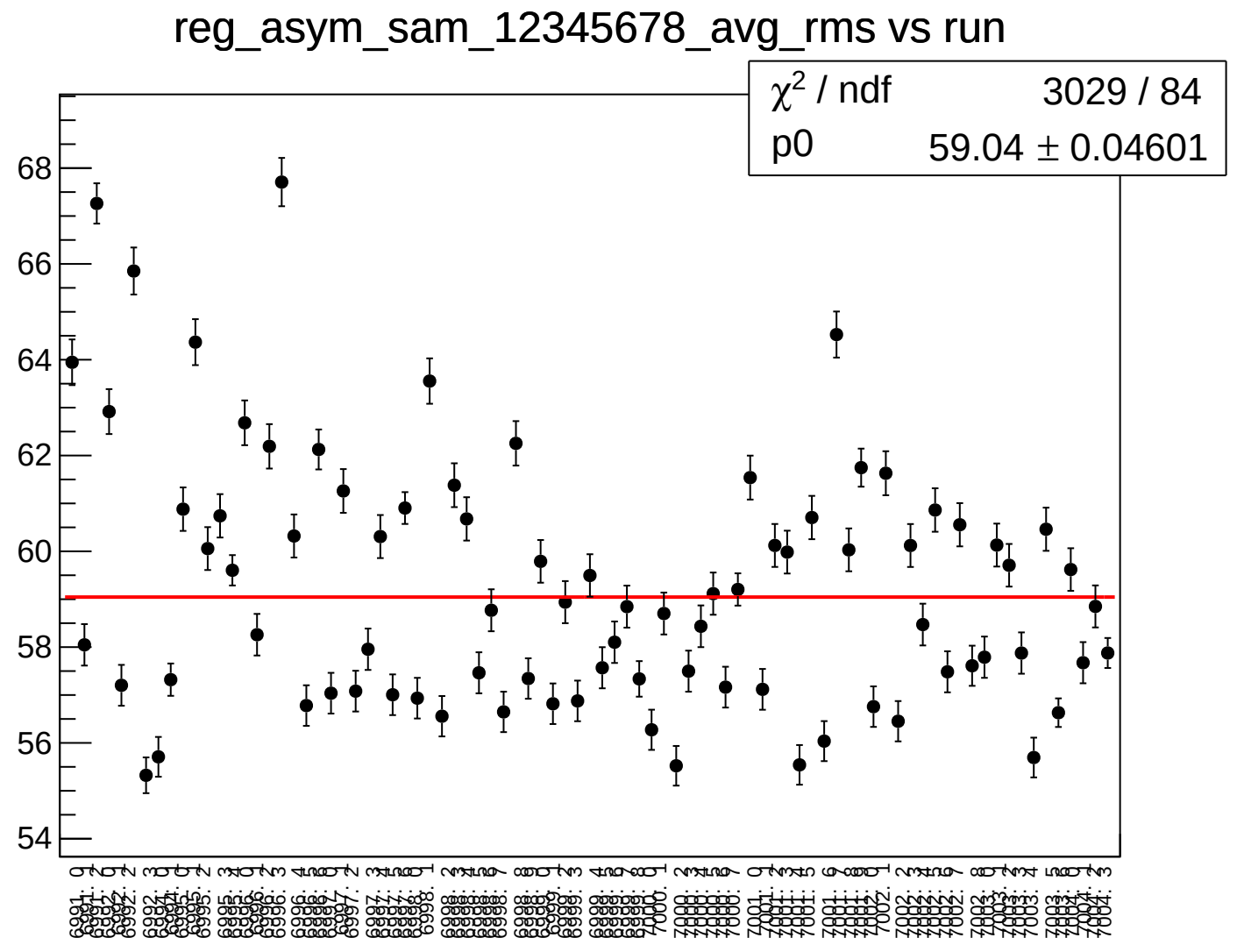

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 77.61 / 84
p0 −236 ± 238.4
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
pull
Entries 85
Mean −341.1
Std Dev 384.8
2
1
0
−1
−2

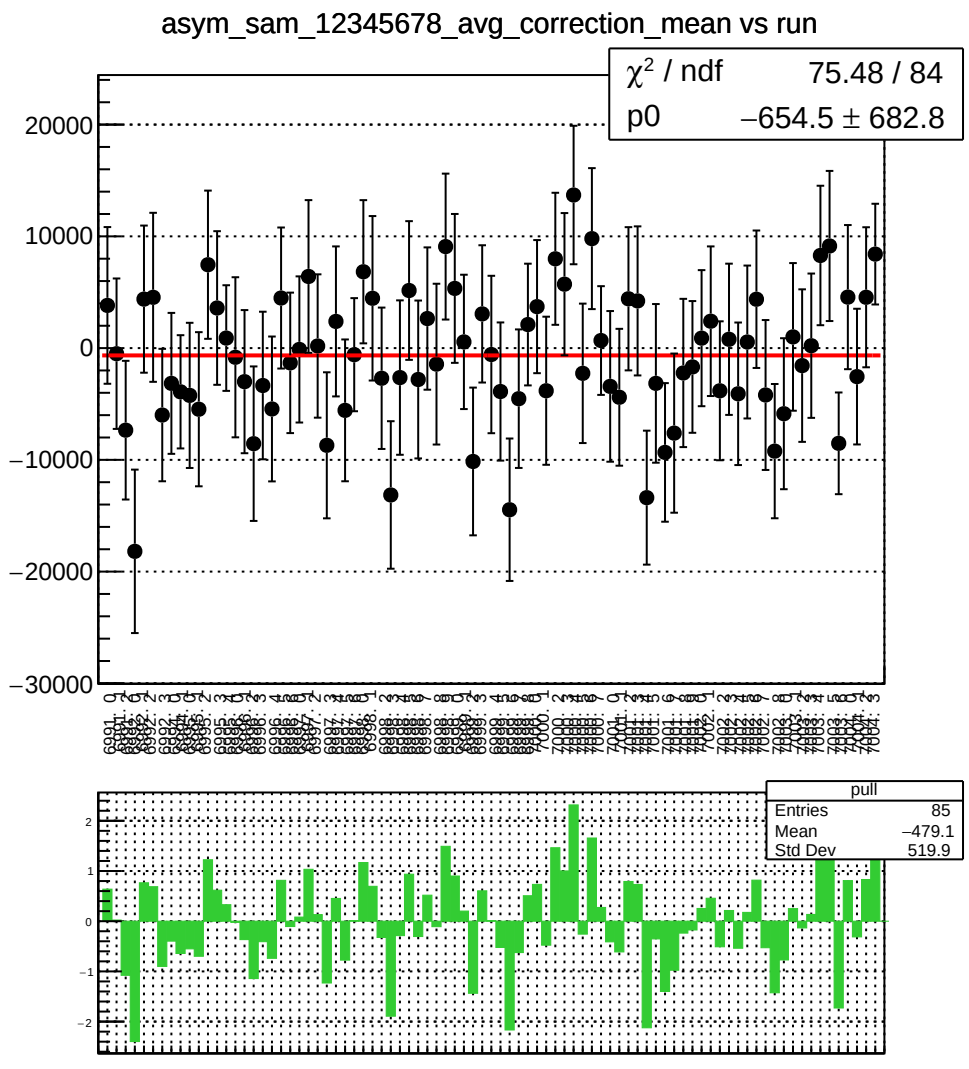

pull1D
Entries 85
Mean −0.008169
Std Dev 0.9555
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

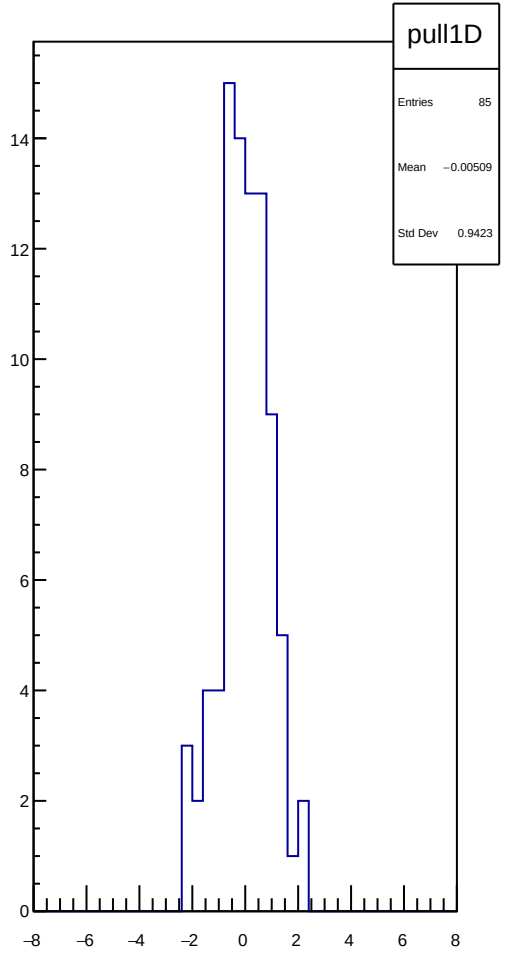

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 4452 / 84
p0 216.2 ± 0.1685
250
240
230
220
210
200
190

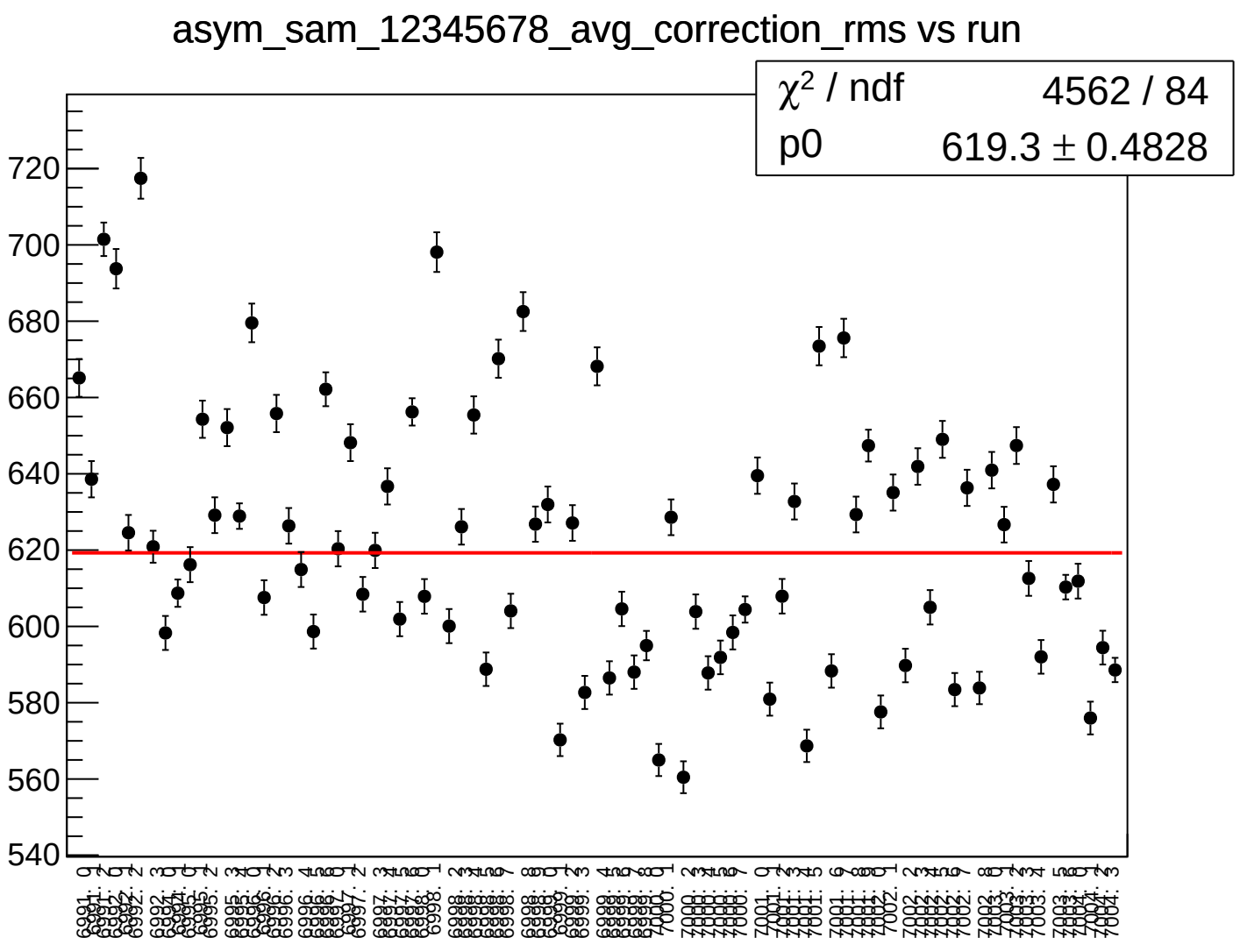

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 94.76 / 84
p0 11.46 ± 65.07
pull
Entries 85
Mean −129.1
Std Dev 148.6

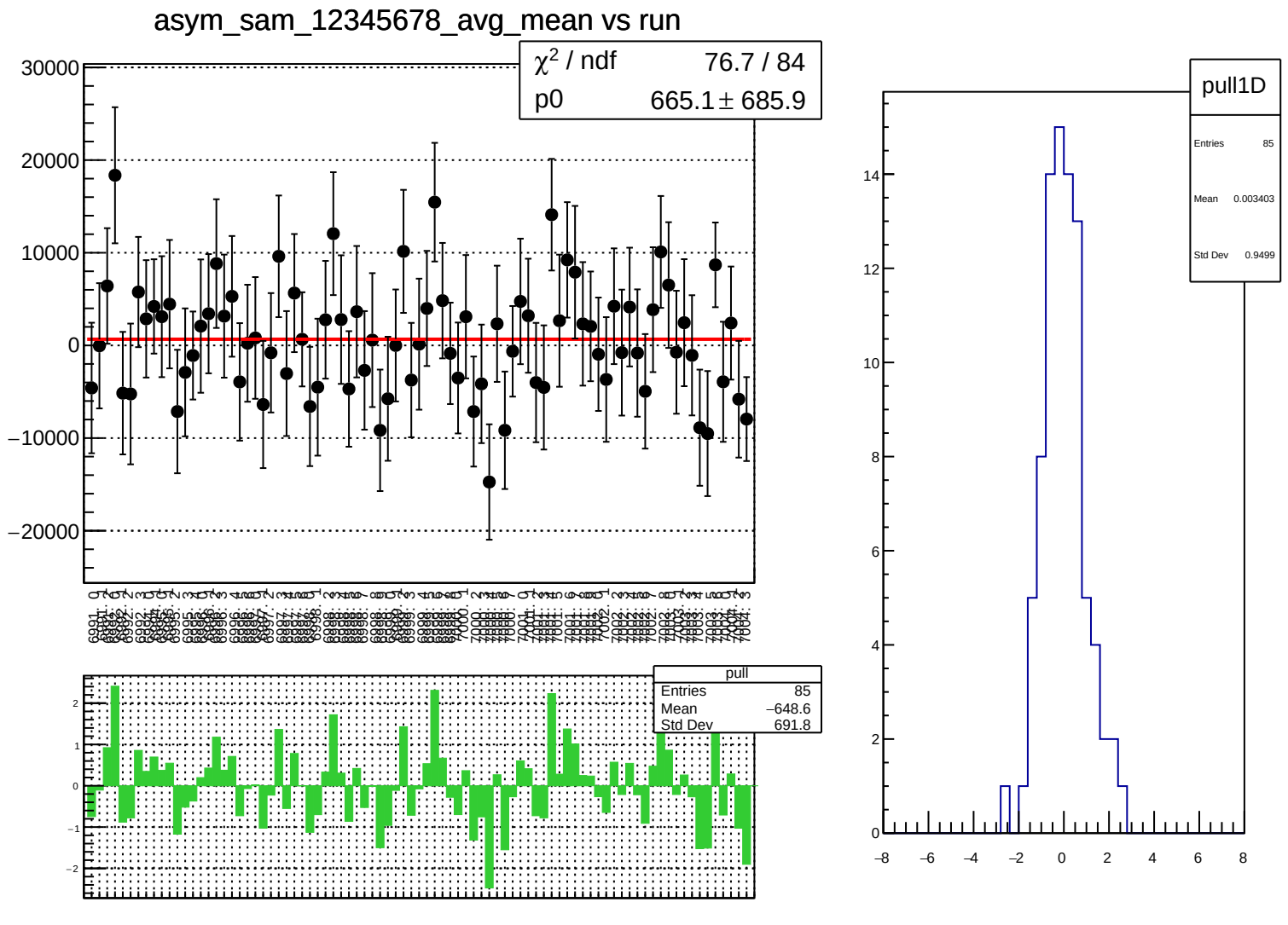

pull1D
Entries 85
Mean −0.01783
Std Dev 1.056

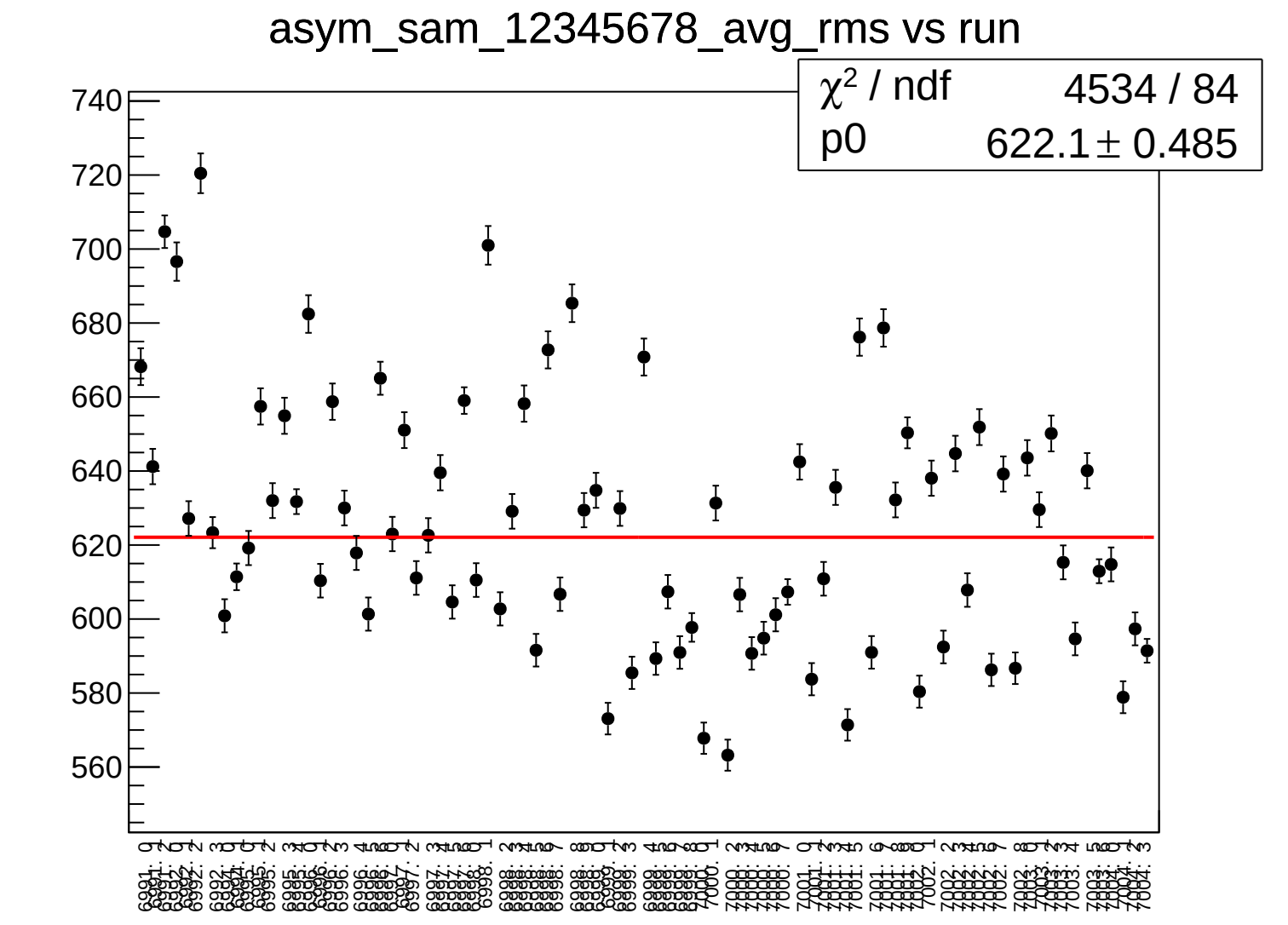

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 3029 / 84
p0 59.04 ± 0.04601
68
66
64
62
60
58
56
54

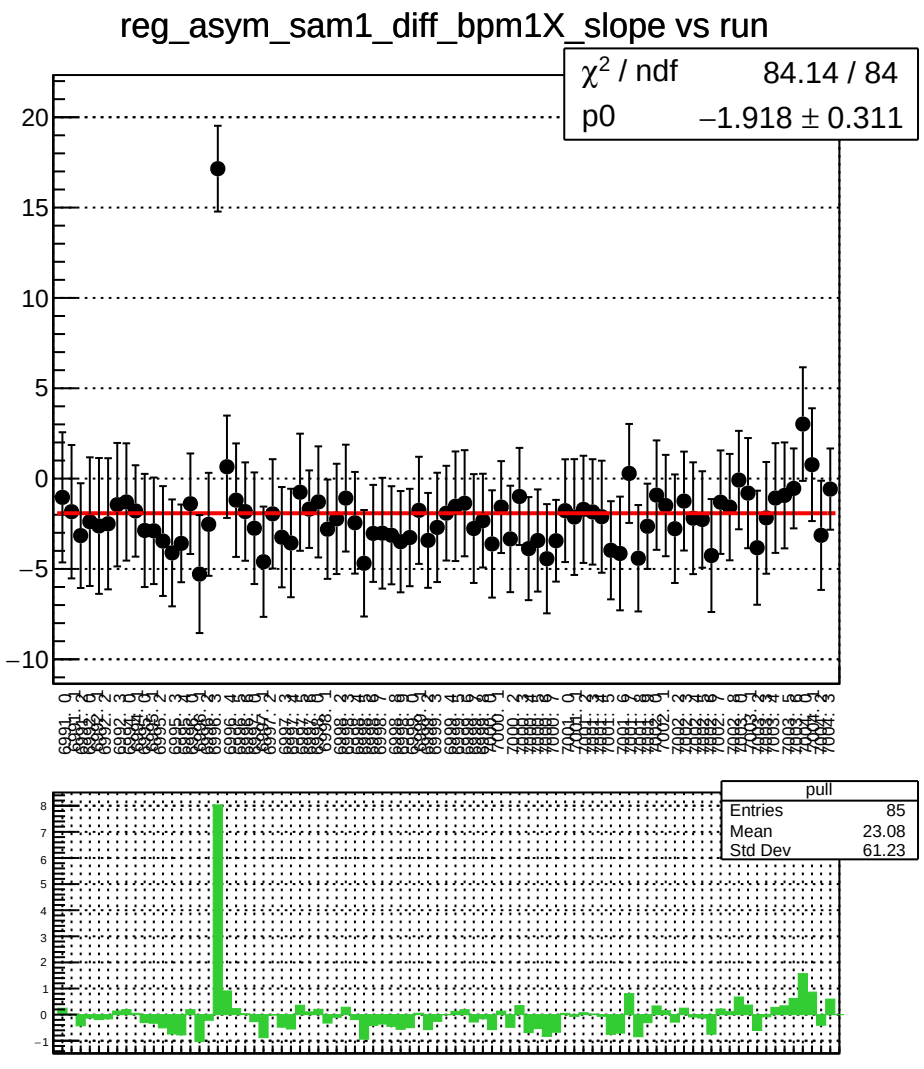

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 75.48 / 84
p0 −654.5 ± 682.8
pull
Entries 85
Mean −479.1
Std Dev 519.9

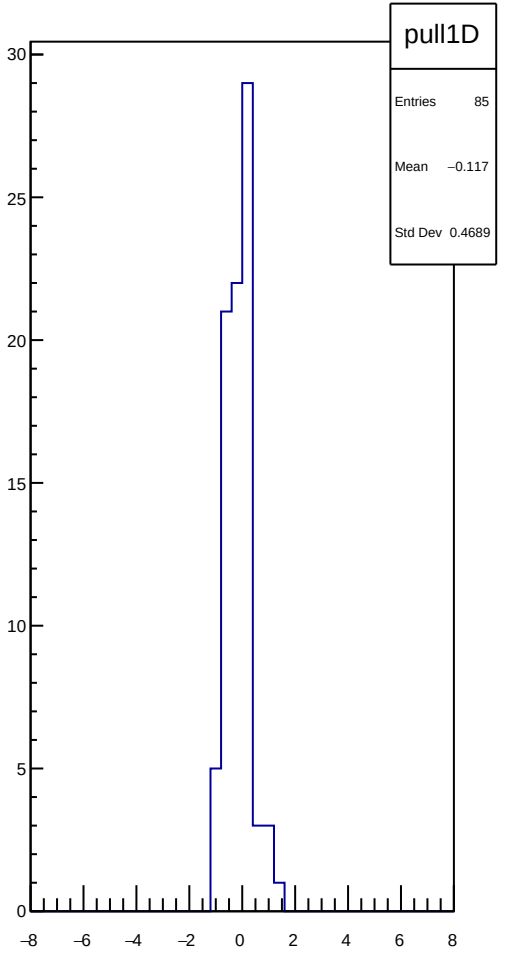

pull1D
Entries 85
Mean −0.00509
Std Dev 0.9423

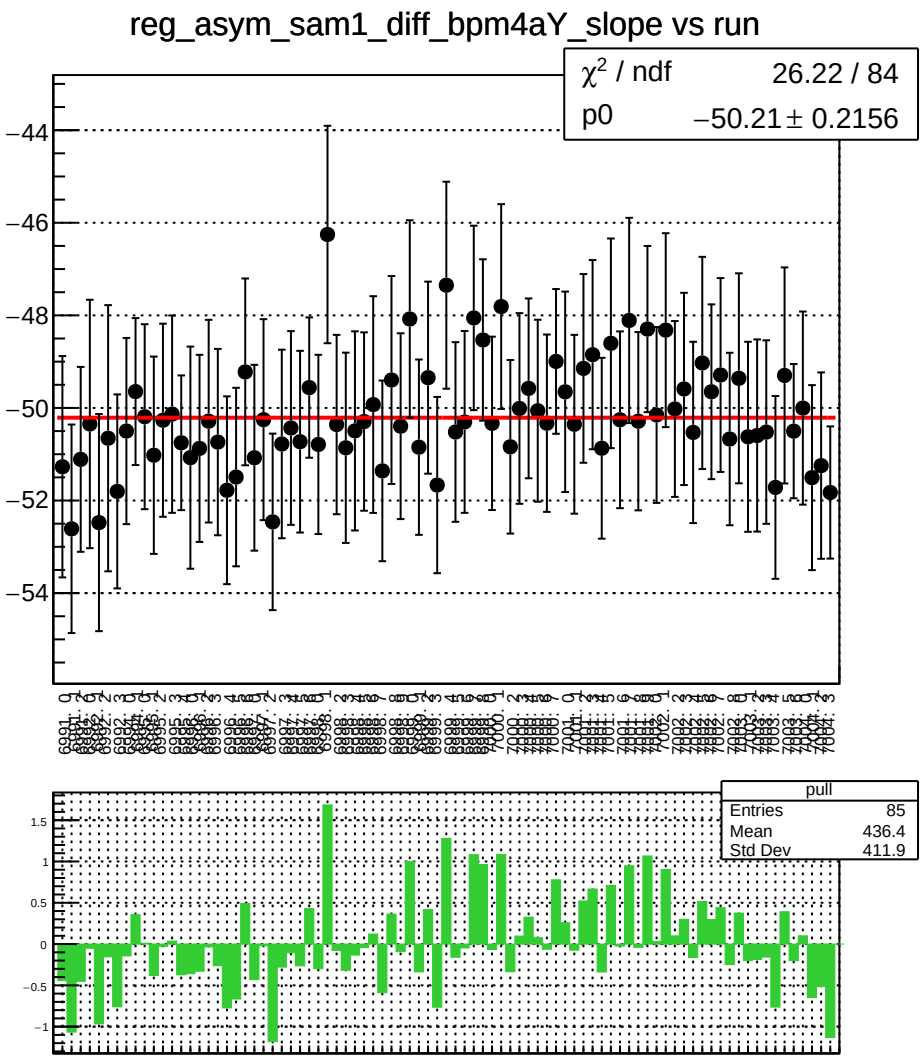

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 4562 / 84
p0 619.3 ± 0.4828
720
700
680
660
640
620
600
580
560
540

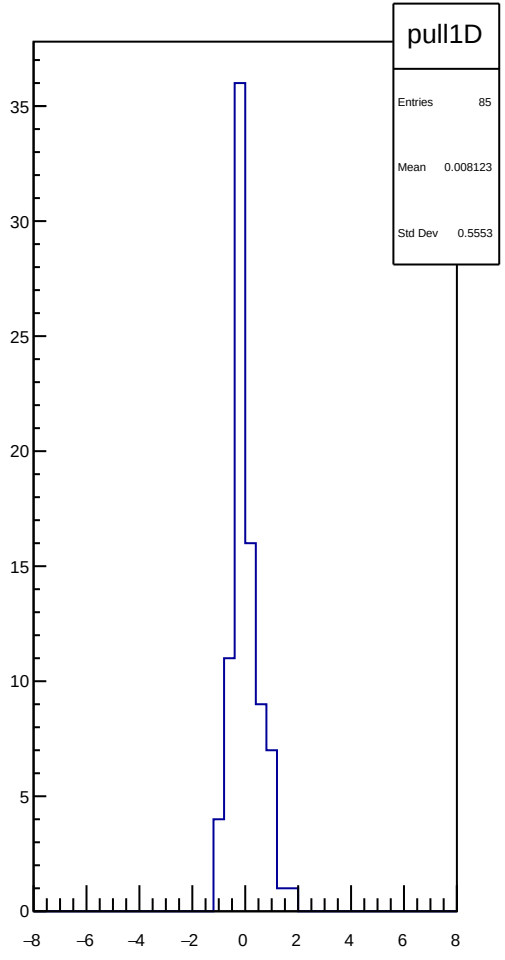

asym_sam_12345678_avg_mean vs run
χ² / ndf 76.7 / 84
p0 665.1 ± 685.9
30000
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −648.6
Std Dev 691.8
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.003403
Std Dev 0.9499
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

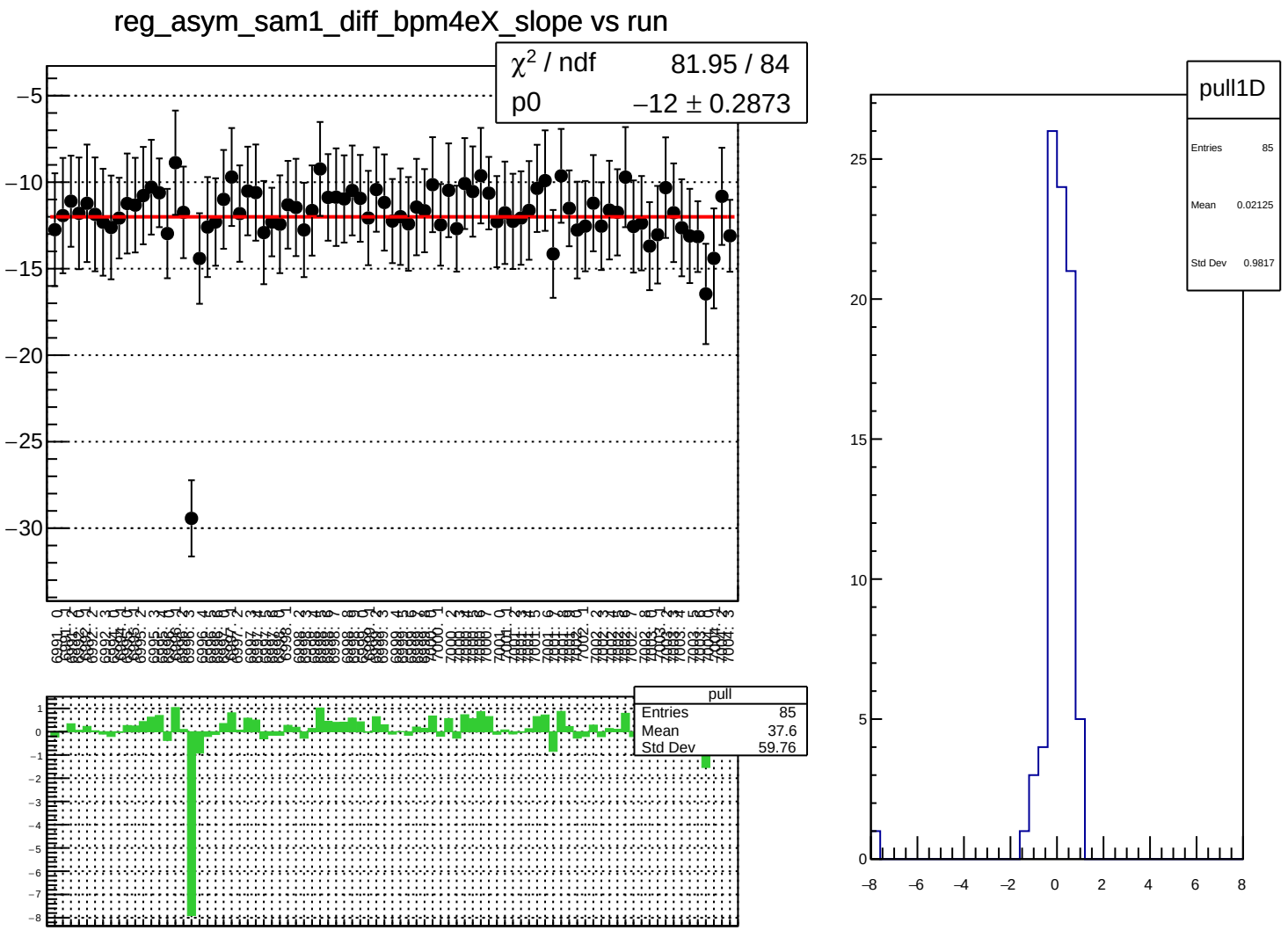

asym_sam_12345678_avg_rms vs run
χ² / ndf 4534 / 84
p0 622.1 ± 0.485
740
720
700
680
660
640
620
600
580
560

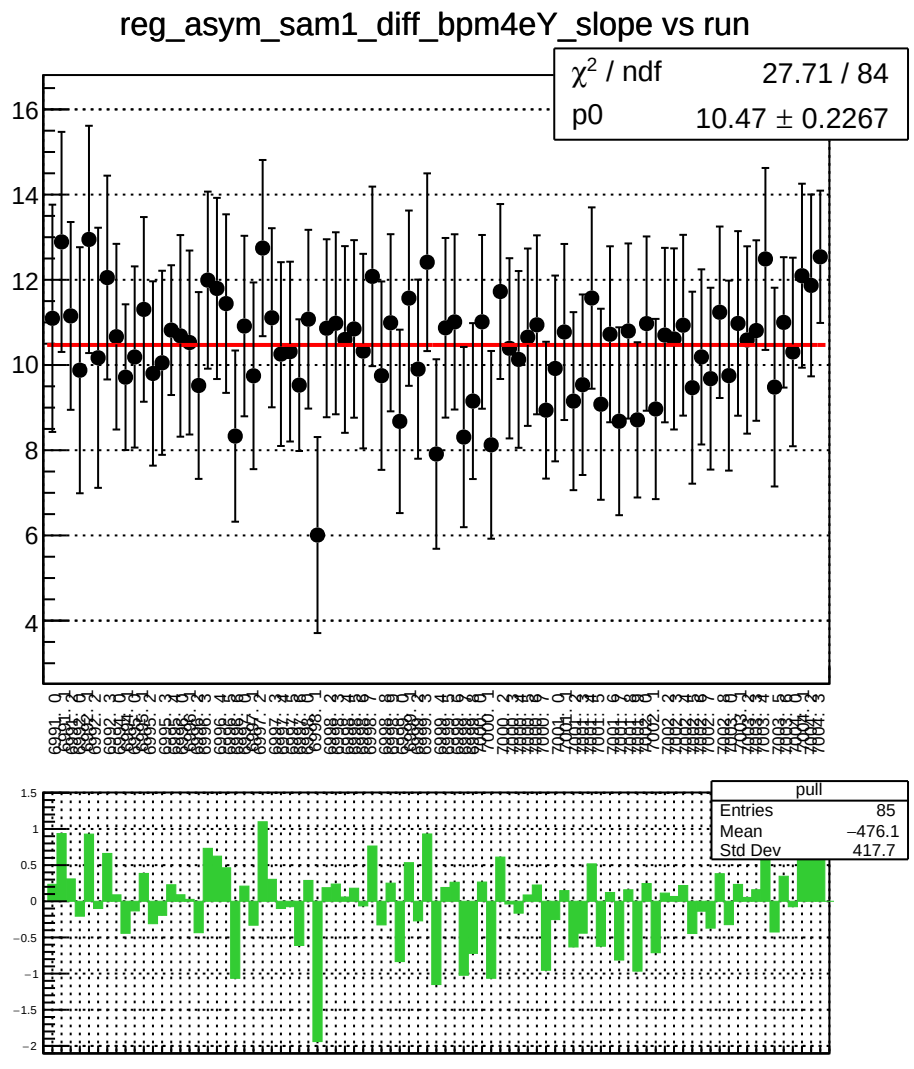

reg_asym_sam1_diff_bpm1X_slope vs run
χ^2 / ndf 84.14 / 84
p0 −1.918 ± 0.311
pull
Entries 85
Mean 23.08
Std Dev 61.23

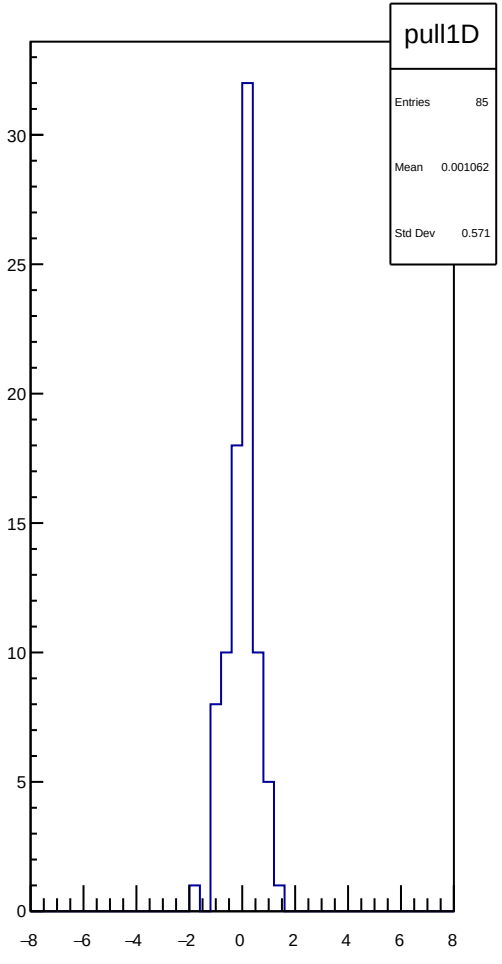

pull1D
Entries 85
Mean −0.117
Std Dev 0.4689

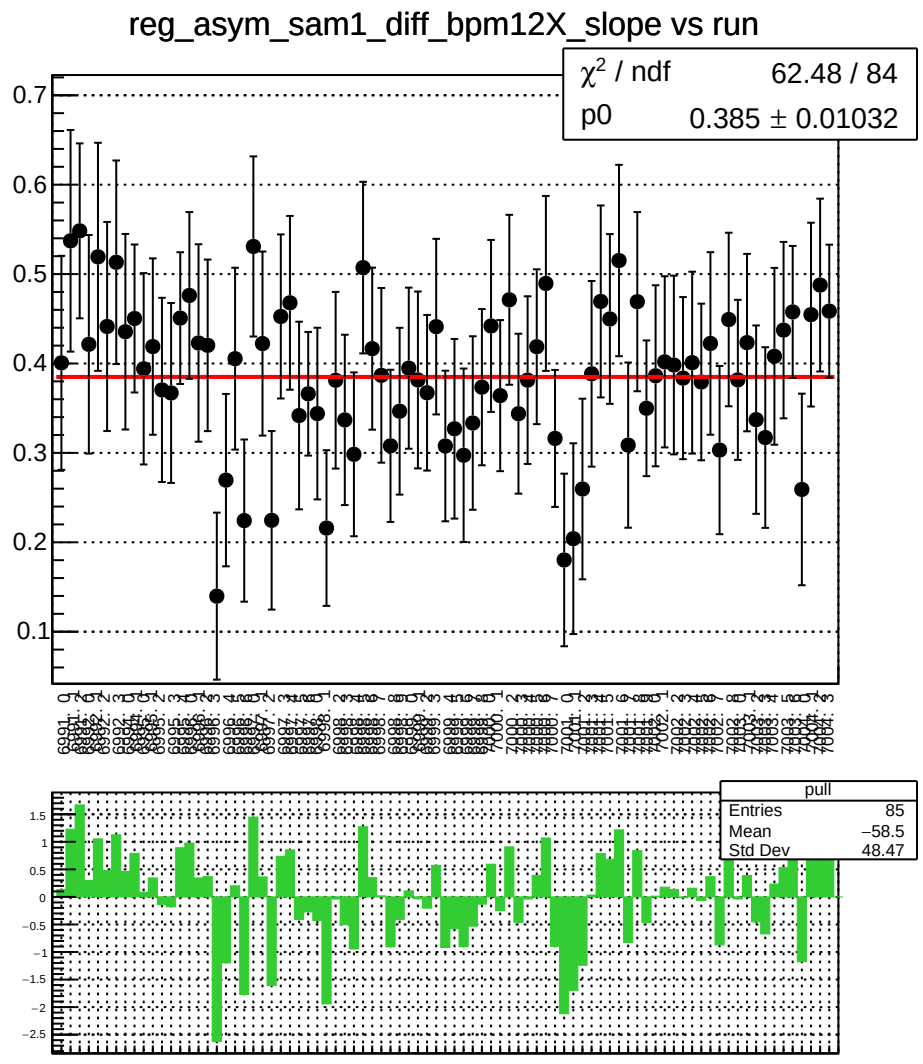

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 26.22 / 84
p0 −50.21 ± 0.2156
−44
−46
−48
−50
−52
−54
pull
Entries 85
Mean 436.4
Std Dev 411.9
1.5
1
0.5
0
−0.5
−1

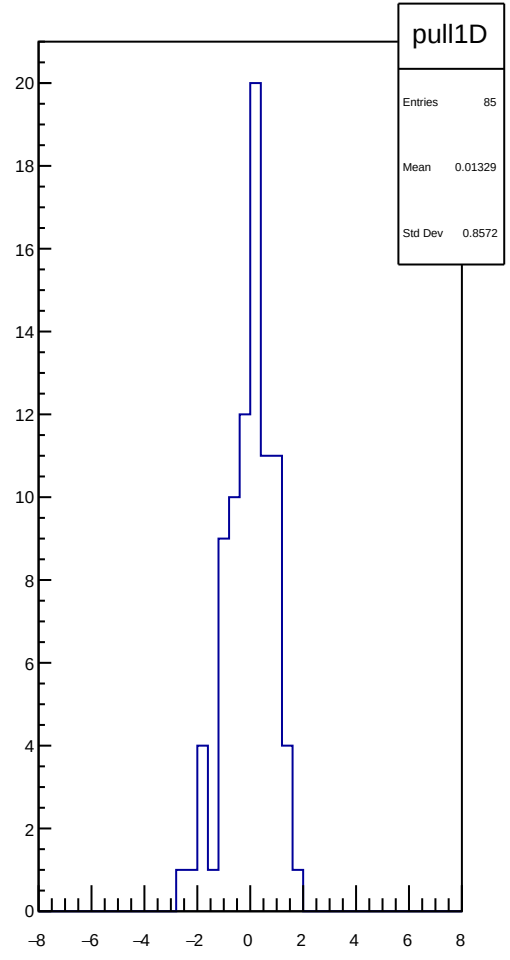

pull1D
Entries 85
Mean 0.008123
Std Dev 0.5553
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

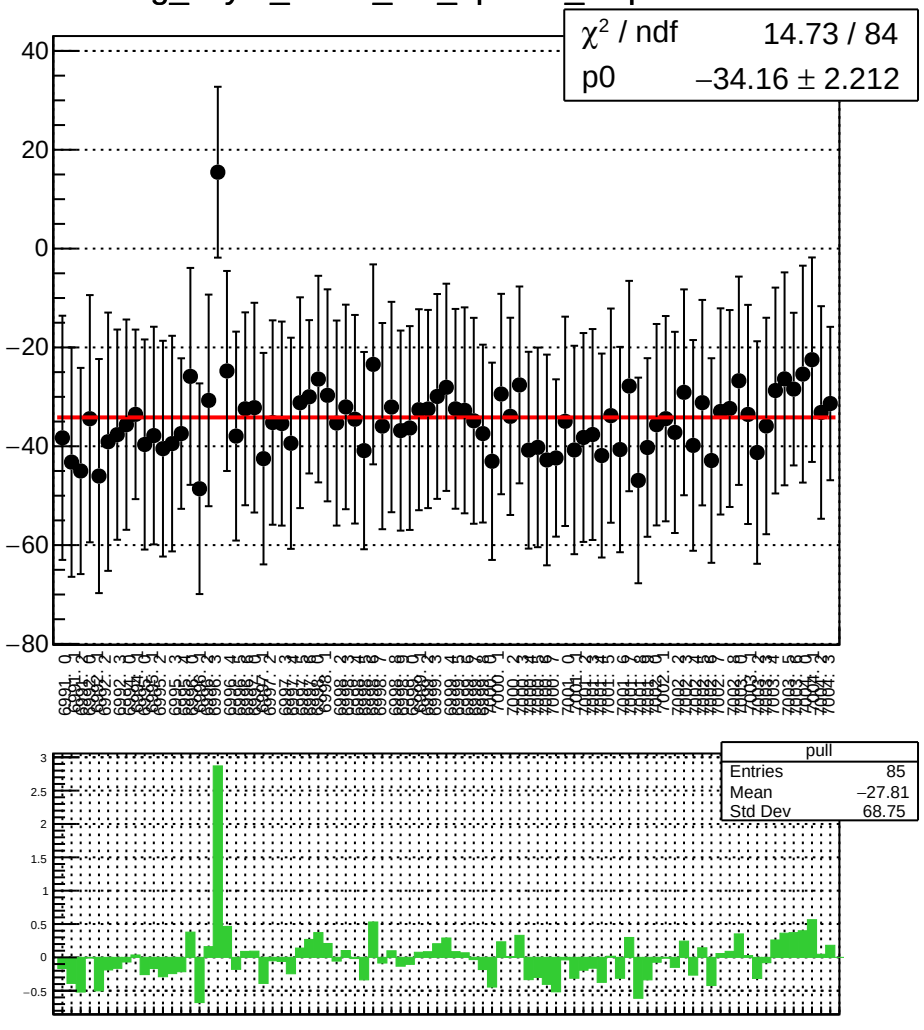

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 81.95 / 84
p0 −12 ± 0.2873
pull
Entries 85
Mean 37.6
Std Dev 59.76
pull1D
Entries 85
Mean 0.02125
Std Dev 0.9817

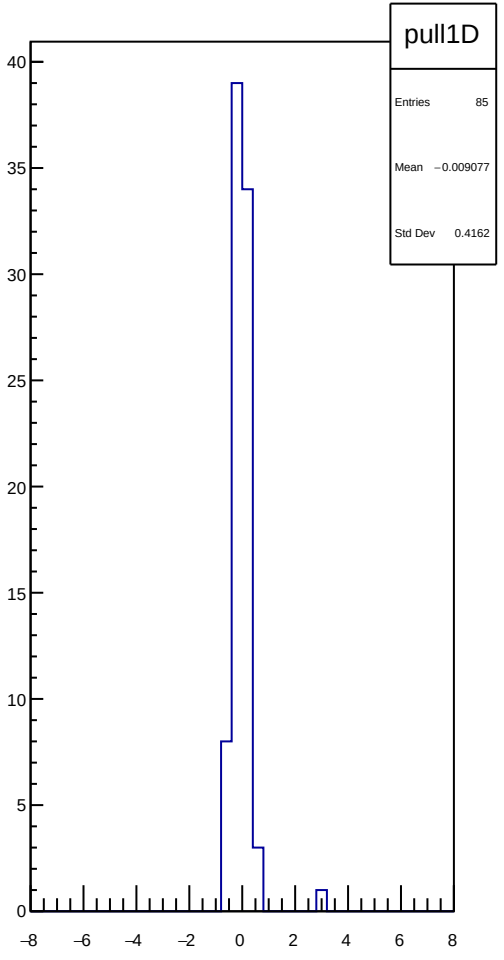

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 27.71 / 84
p0 10.47 ± 0.2267
pull
Entries 85
Mean −476.1
Std Dev 417.7

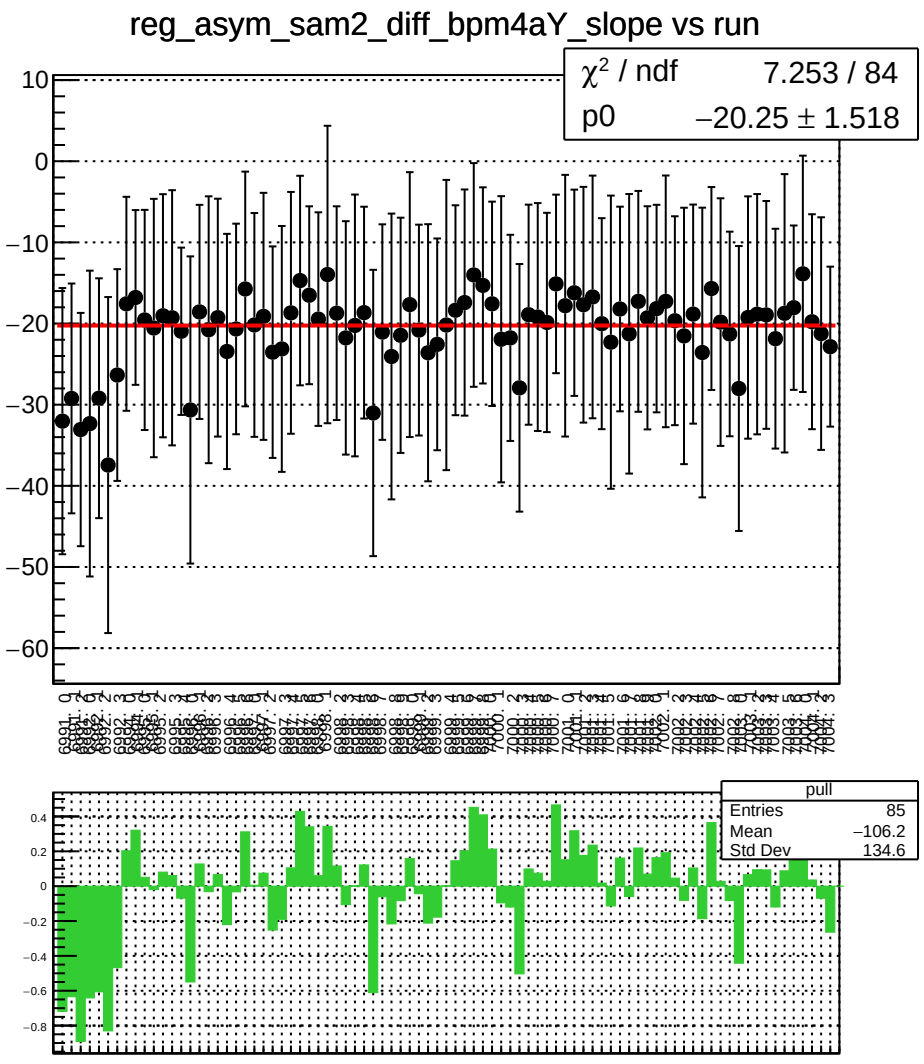

pull1D
Entries 85
Mean 0.001062
Std Dev 0.571

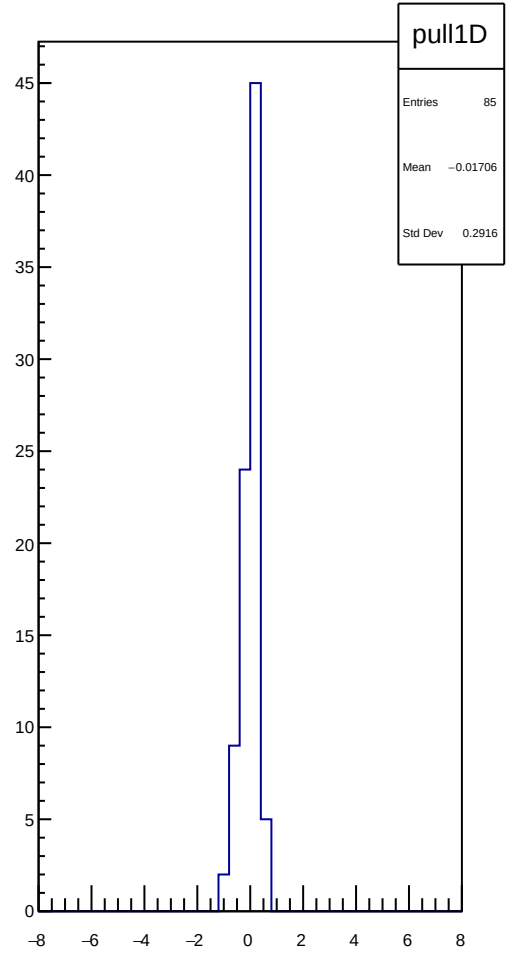

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 62.48 / 84
p0 0.385 ± 0.01032
pull
Entries 85
Mean −58.5
Std Dev 48.47

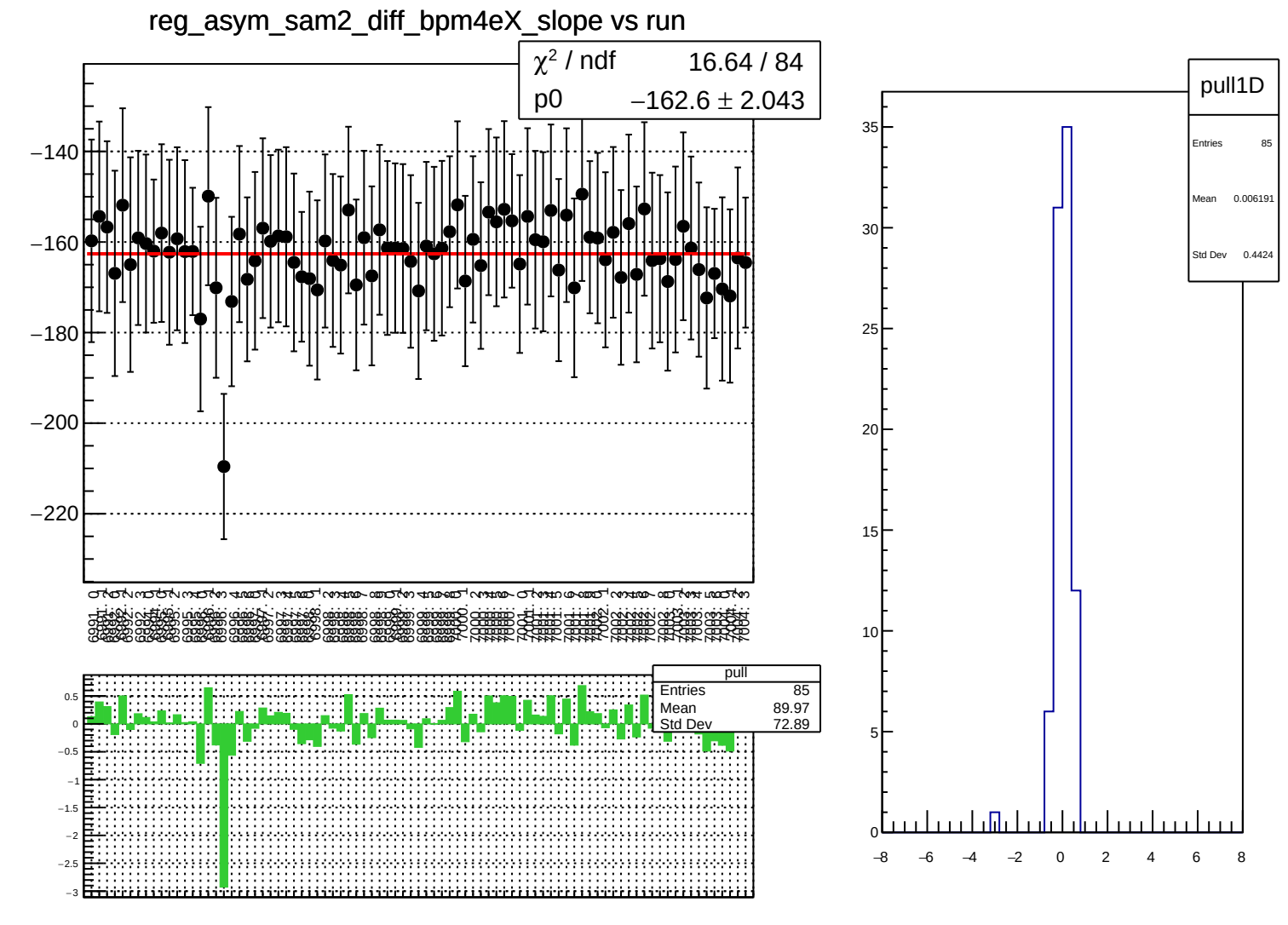

pull1D
Entries 85
Mean 0.01329
Std Dev 0.8572

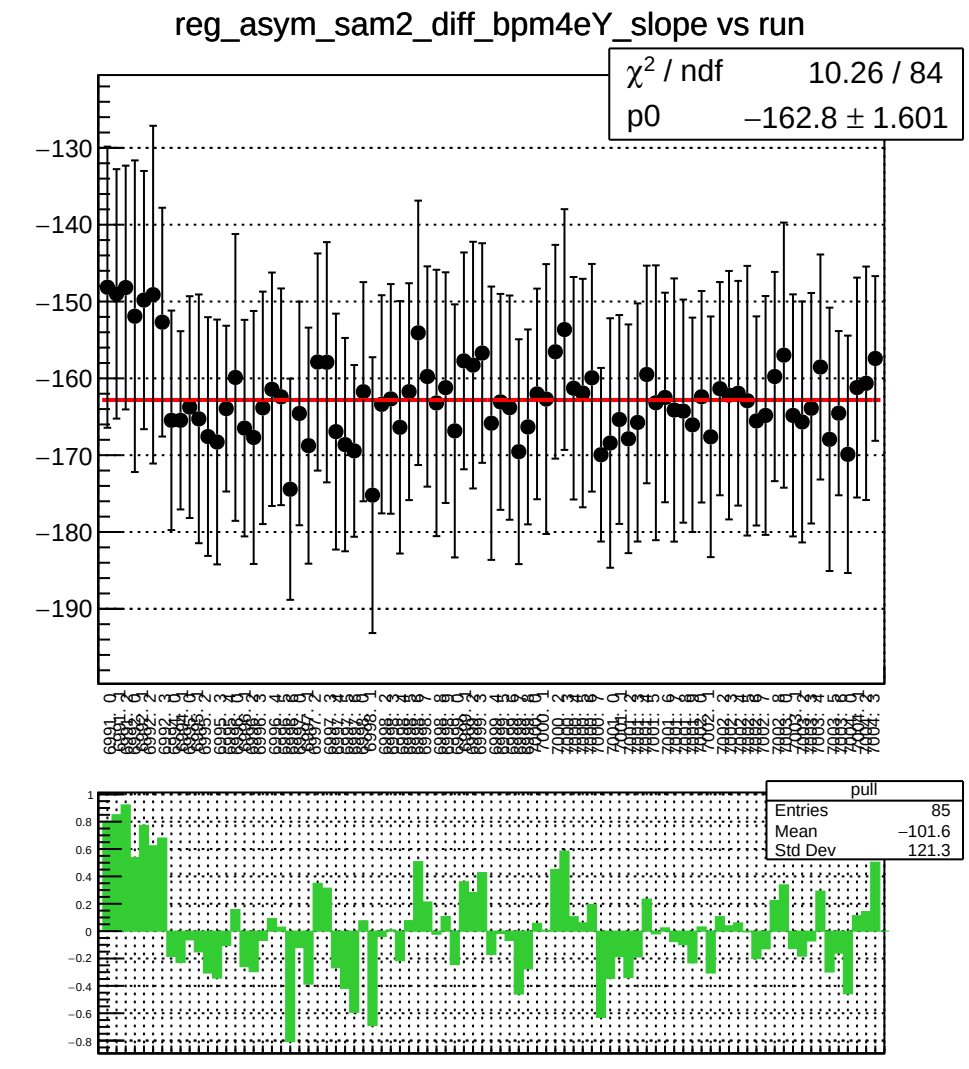

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 14.73 / 84
p0 −34.16 ± 2.212
pull
Entries 85
Mean −27.81
Std Dev 68.75

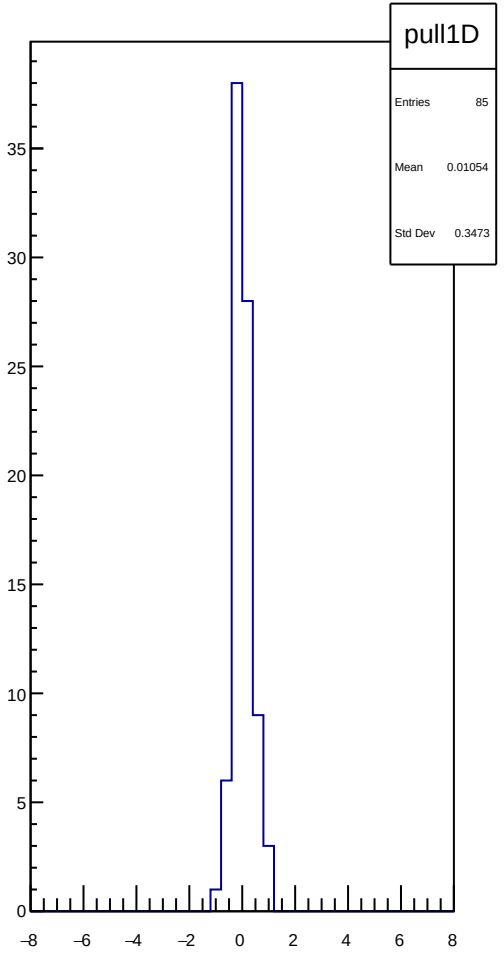

pull1D
Entries 85
Mean −0.009077
Std Dev 0.4162

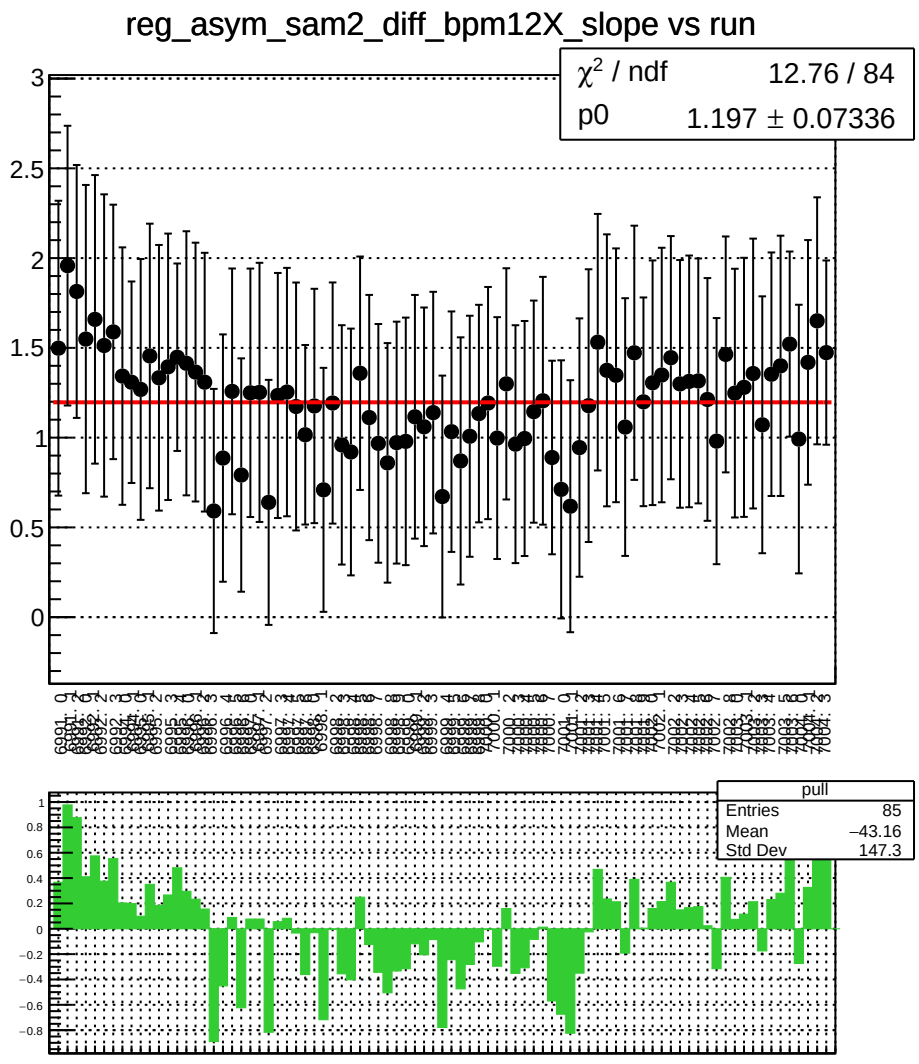

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 7.253 / 84
p0 −20.25 ± 1.518
pull
Entries 85
Mean −106.2
Std Dev 134.6

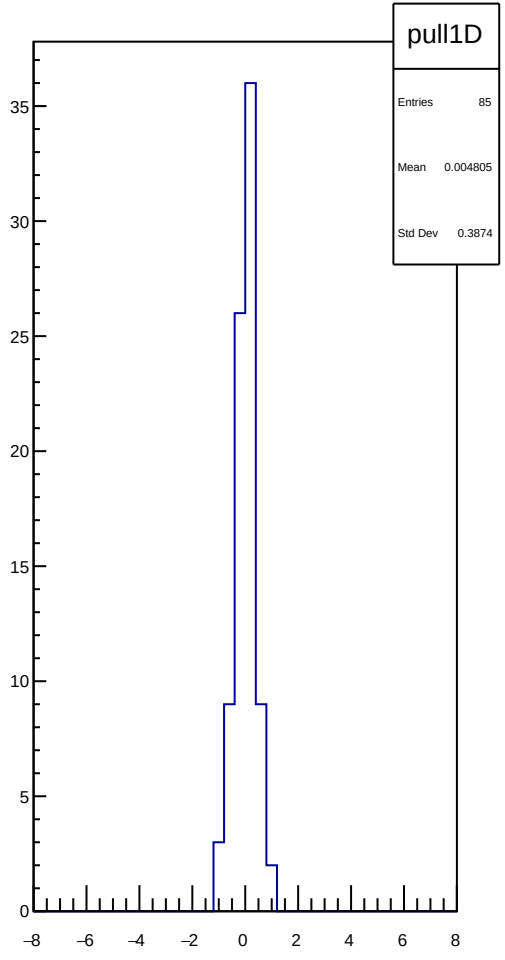

pull1D
Entries 85
Mean −0.01706
Std Dev 0.2916

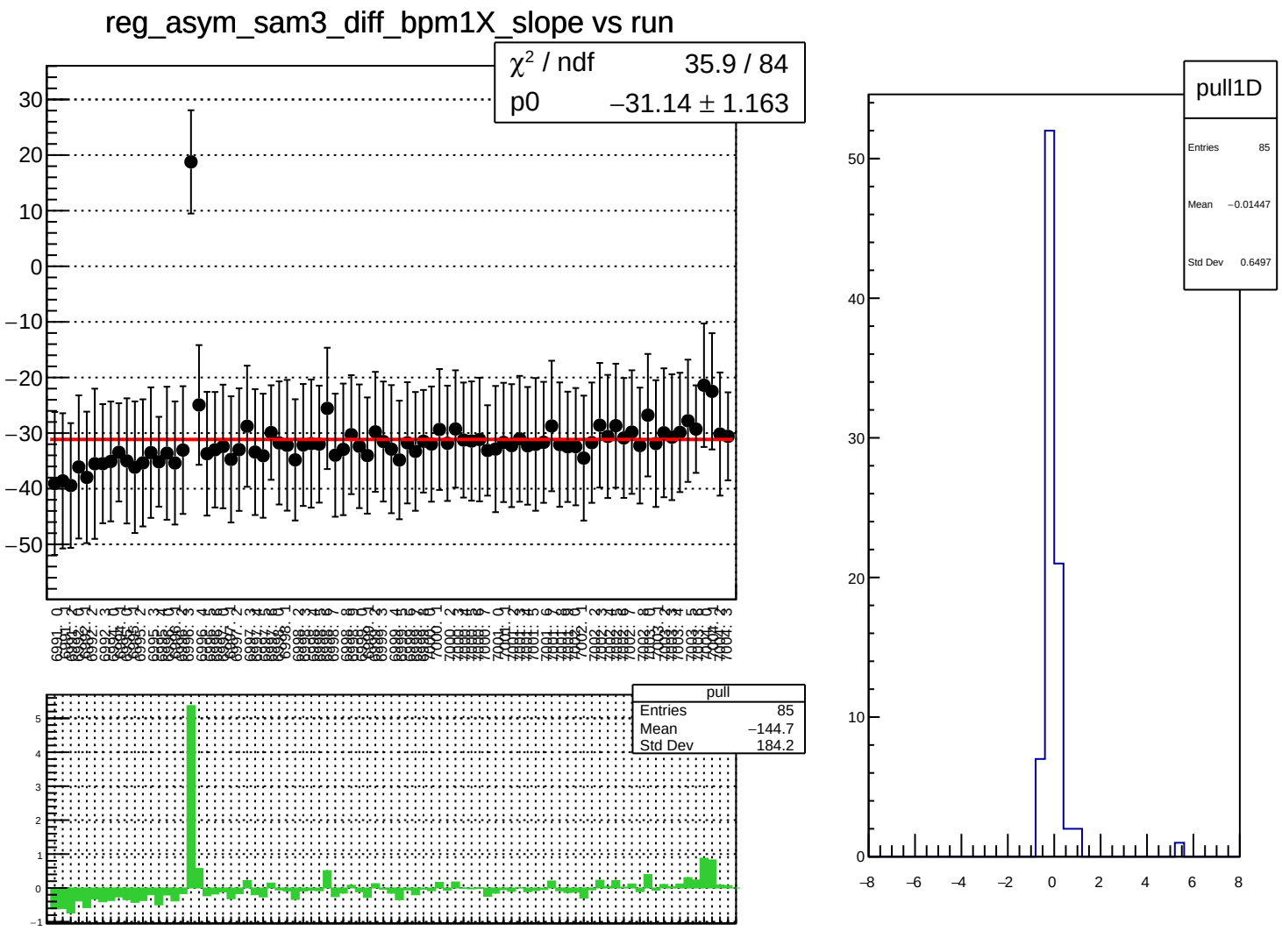

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 16.64 / 84
p0 −162.6 ± 2.043
−140
−160
−180
−200
−220
pull
Entries 85
Mean 89.97
Std Dev 72.89
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
pull1D
Entries 85
Mean 0.006191
Std Dev 0.4424
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

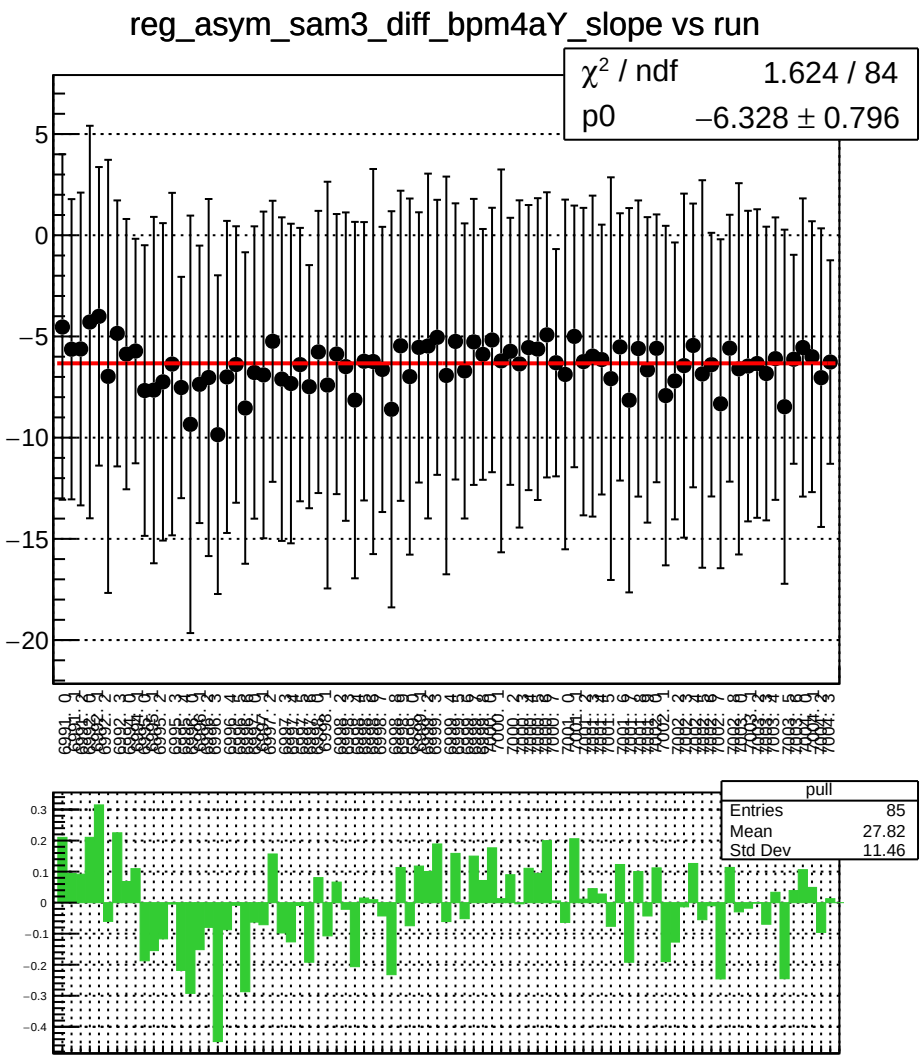

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 10.26 / 84
p0 −162.8 ± 1.601
−130
−140
−150
−160
−170
−180
−190
pull
Entries 85
Mean −101.6
Std Dev 121.3
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

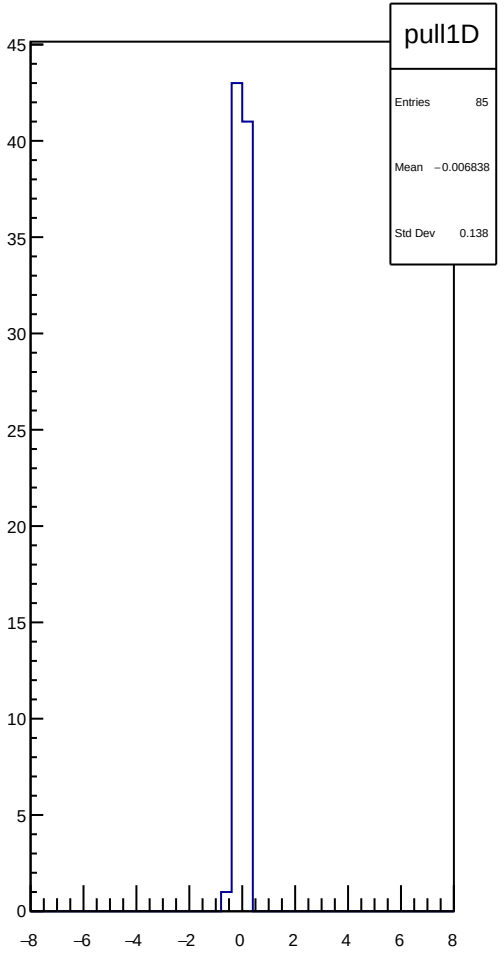

pull1D
Entries 85
Mean 0.01054
Std Dev 0.3473
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

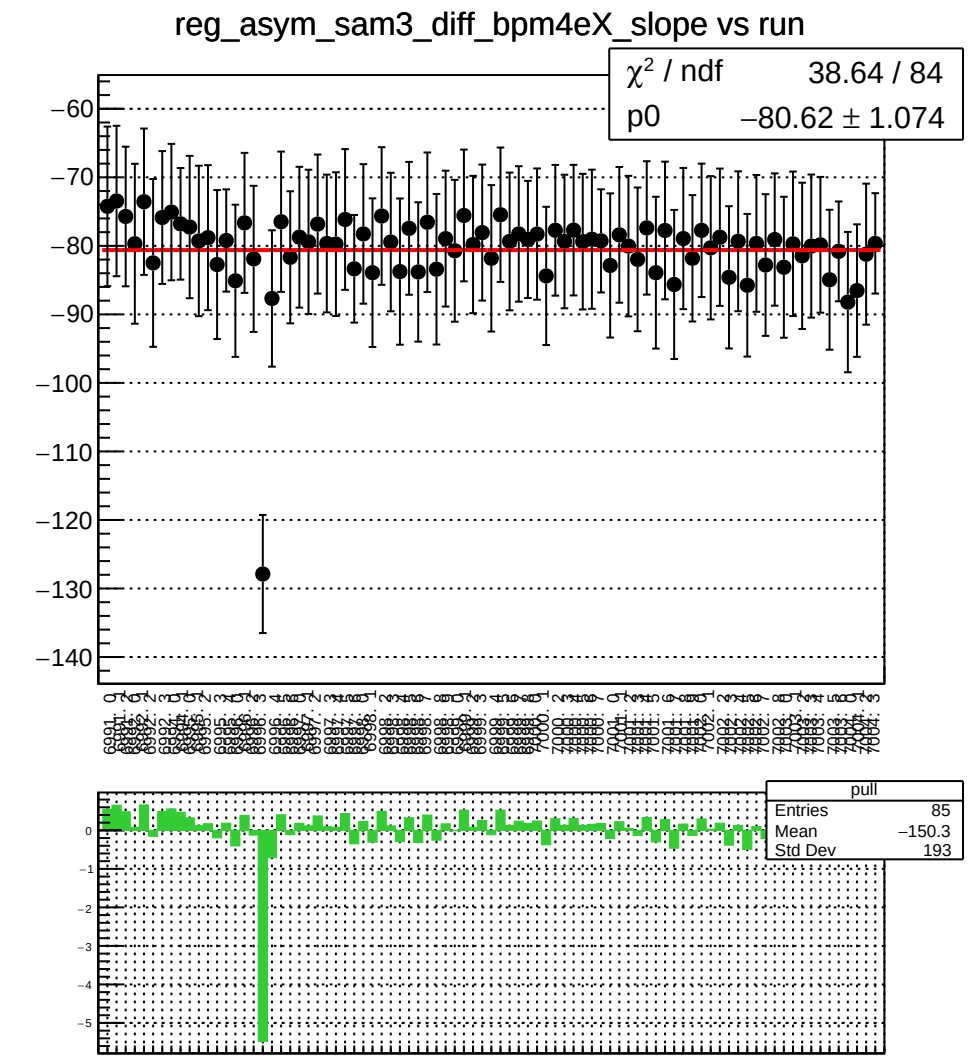

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 12.76 / 84
p0 1.197 ± 0.07336
pull
Entries 85
Mean −43.16
Std Dev 147.3

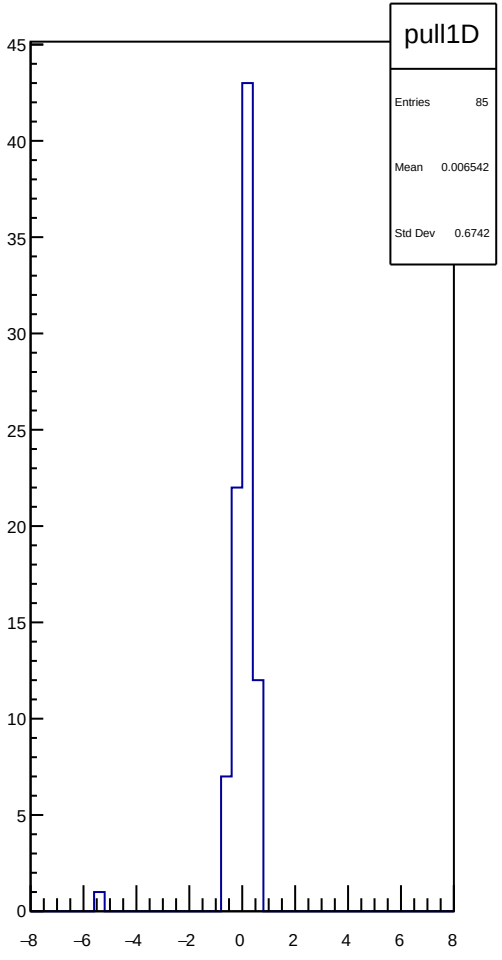

pull1D
Entries 85
Mean 0.004805
Std Dev 0.3874

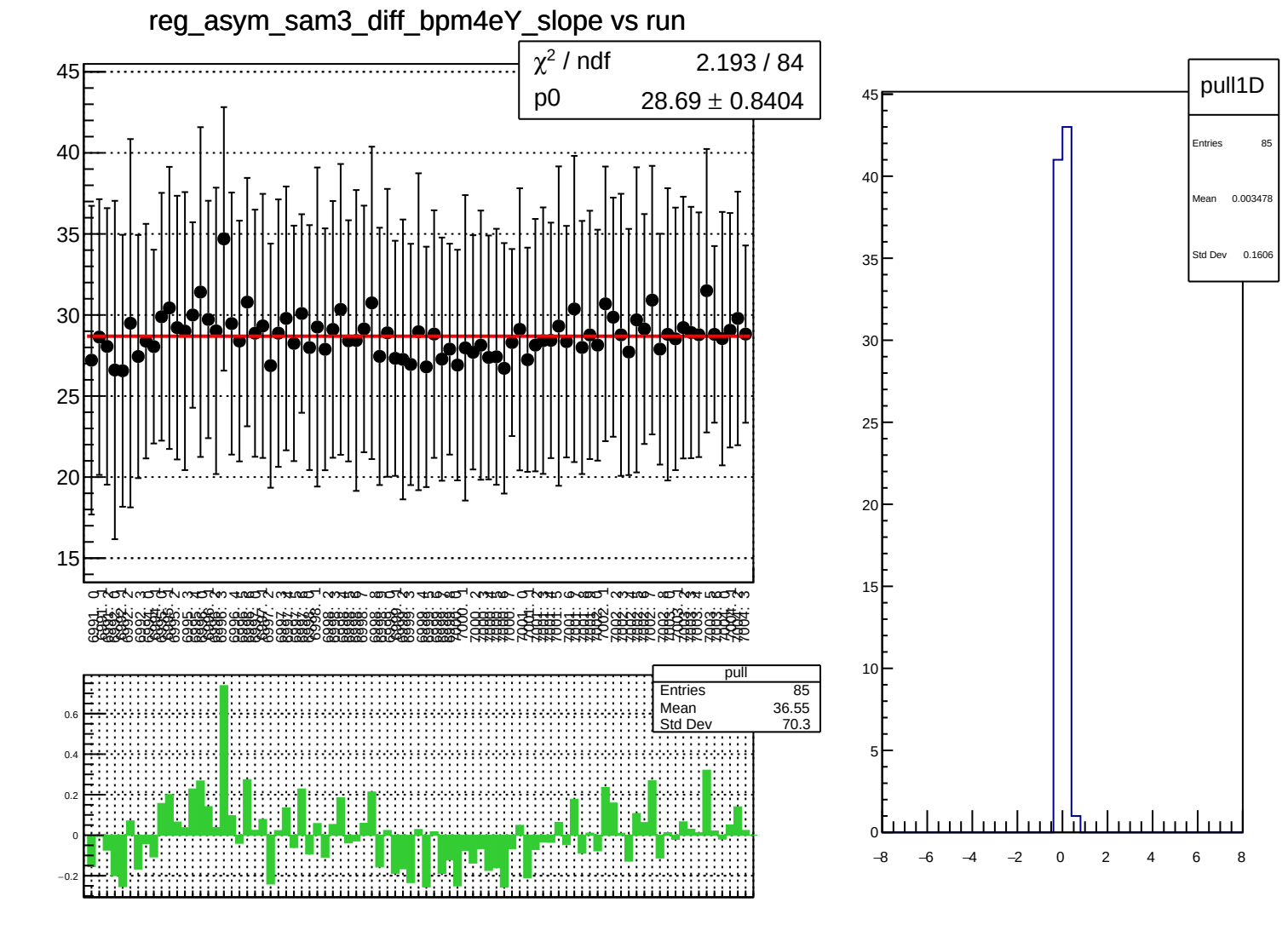

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 35.9 / 84
p0 −31.14 ± 1.163
pull
Entries 85
Mean −144.7
Std Dev 184.2
pull1D
Entries 85
Mean −0.01447
Std Dev 0.6497

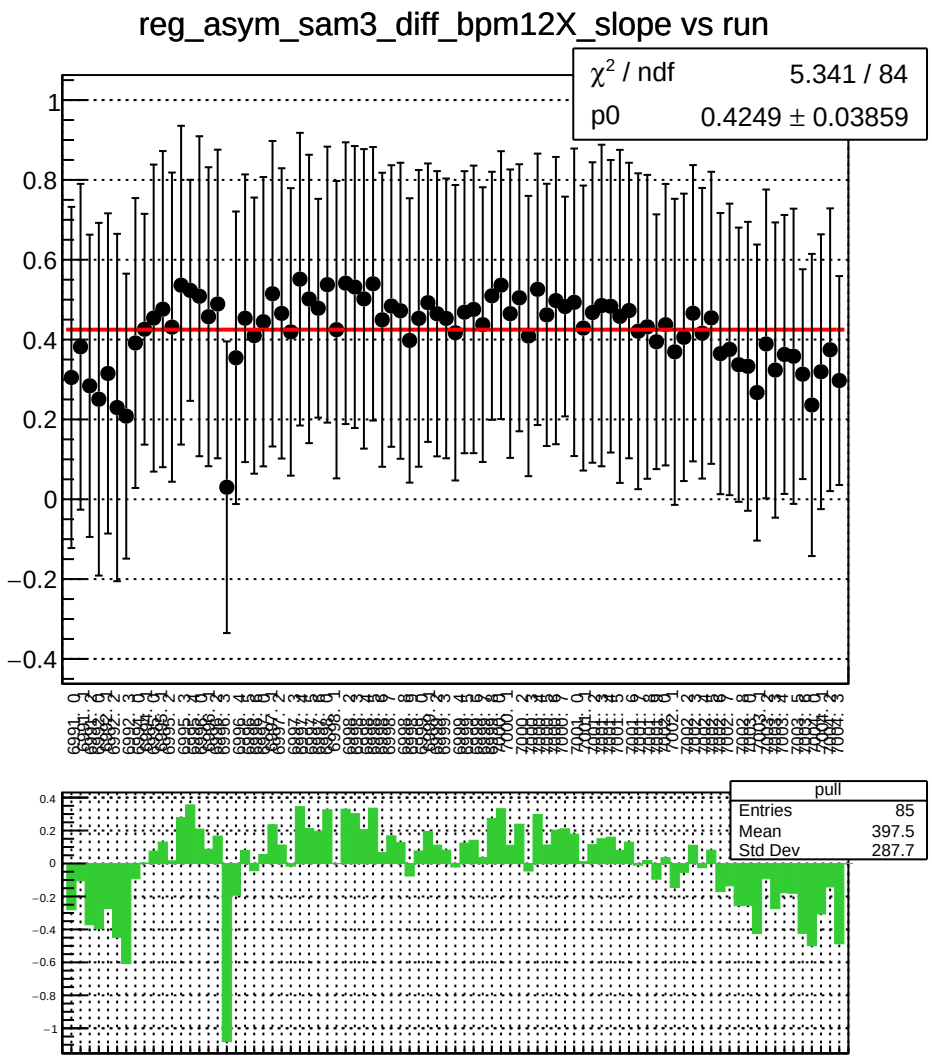

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 1.624 / 84
p0 −6.328 ± 0.796
pull
Entries 85
Mean 27.82
Std Dev 11.46

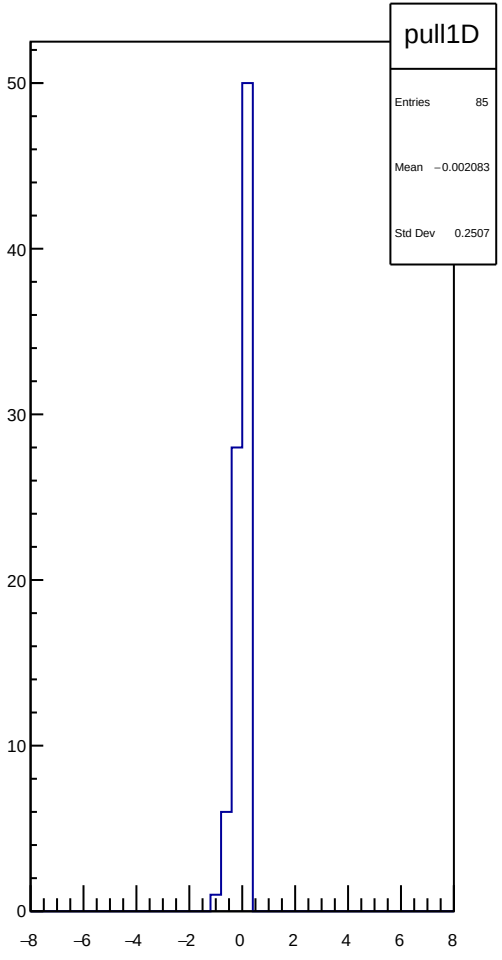

pull1D
Entries 85
Mean −0.006838
Std Dev 0.138

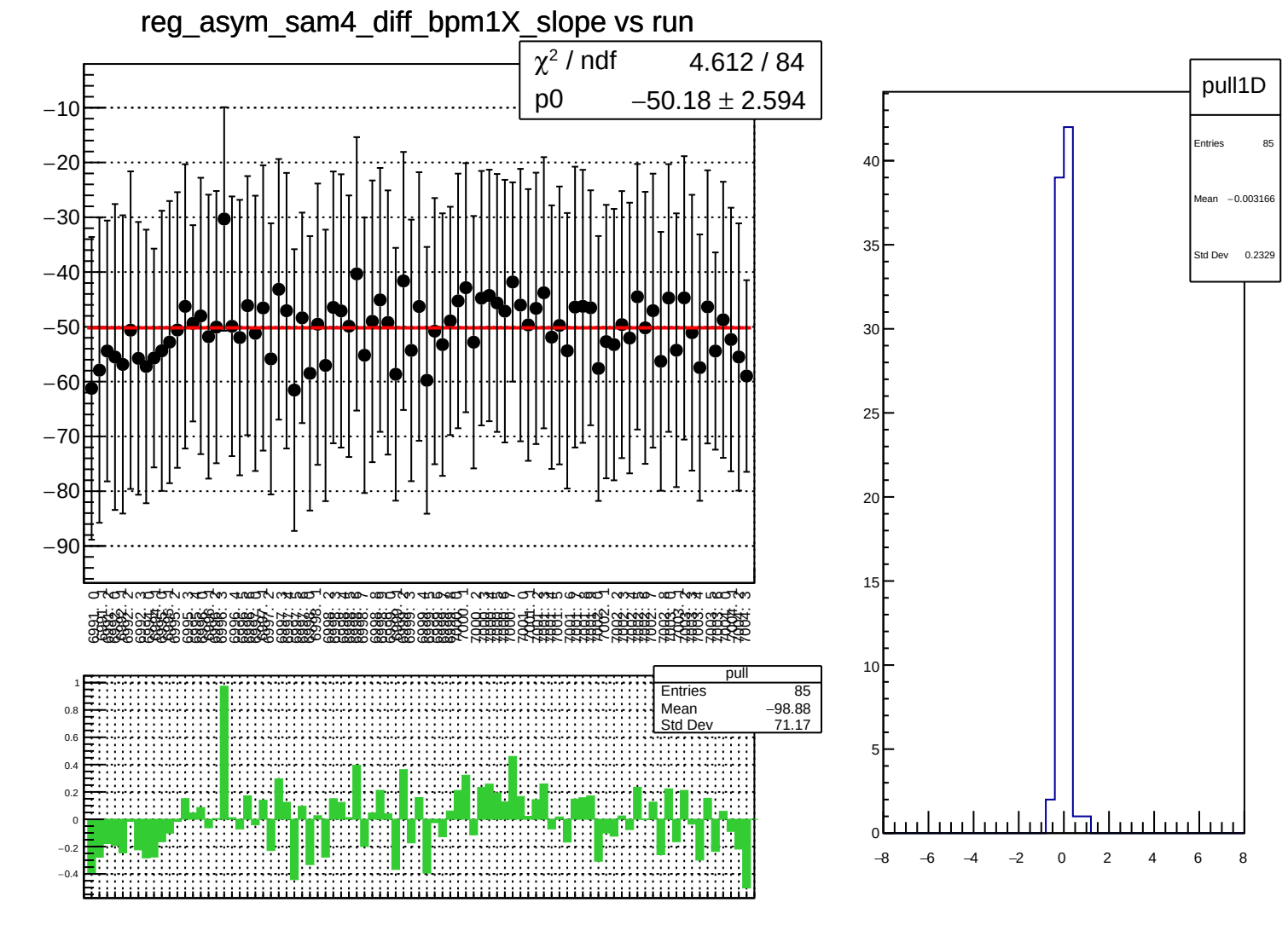

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 38.64 / 84
p0 −80.62 ± 1.074
pull
Entries 85
Mean −150.3
Std Dev 193

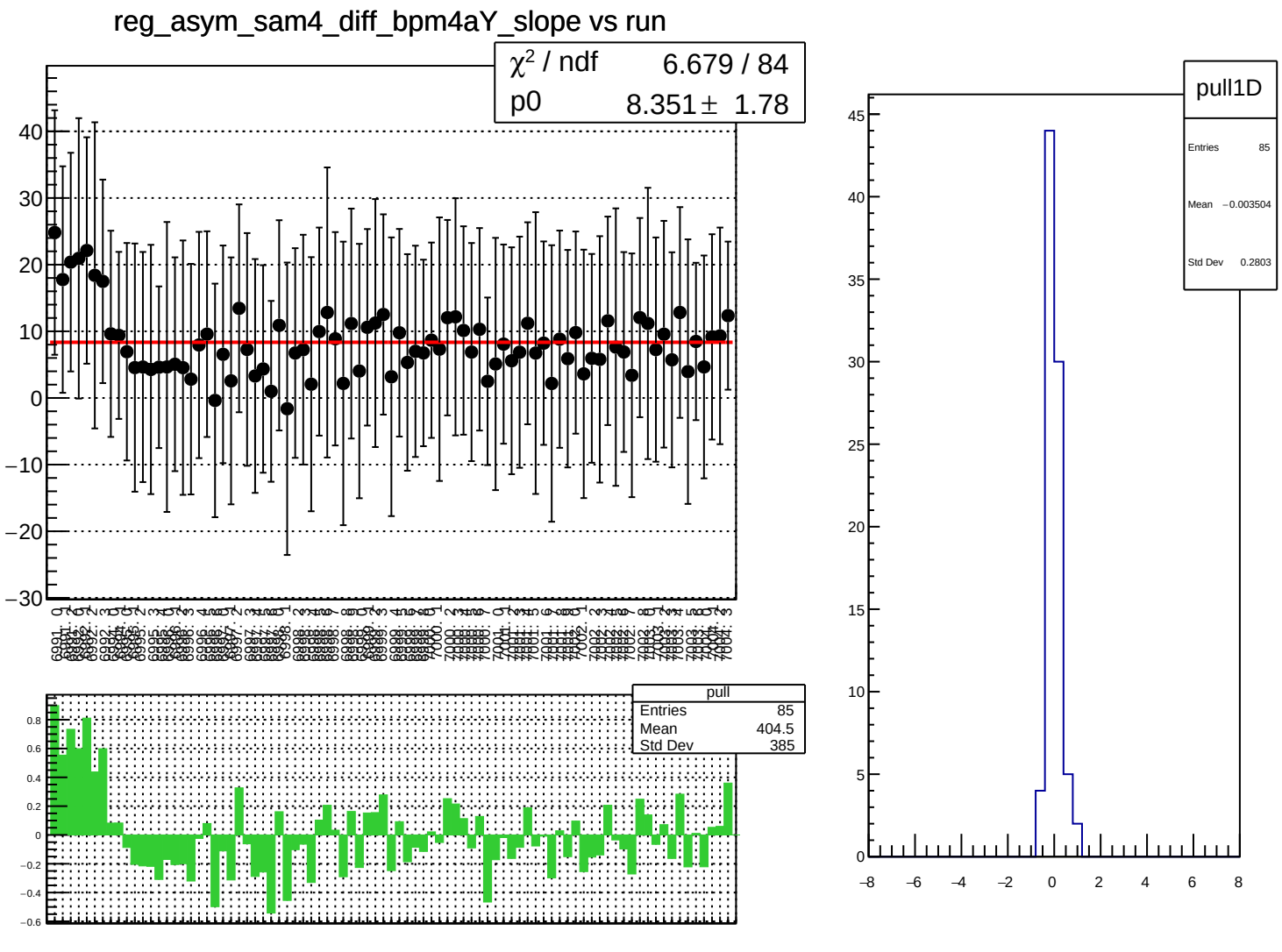

pull1D
Entries 85
Mean 0.006542
Std Dev 0.6742

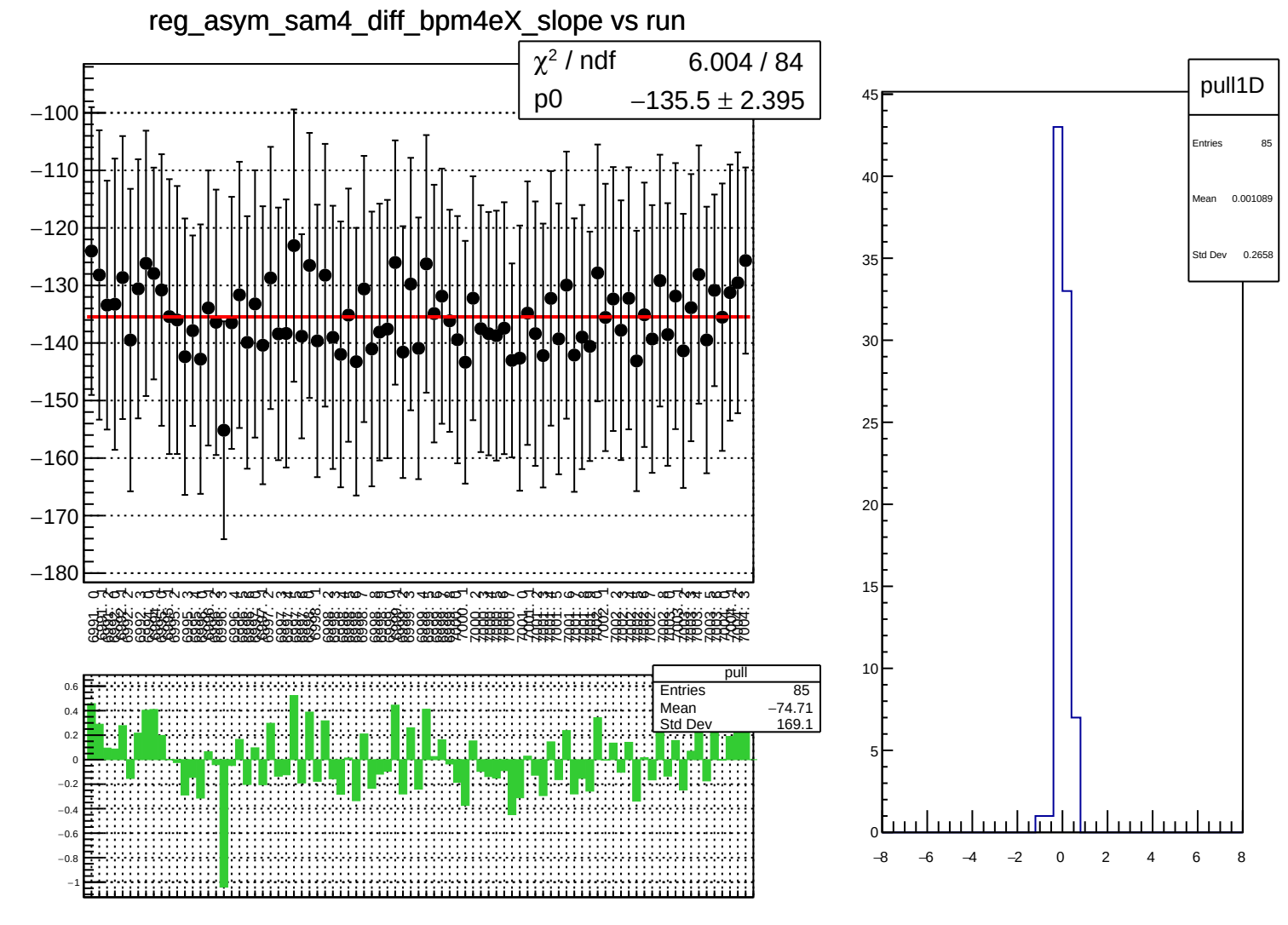

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 2.193 / 84
p0 28.69 ± 0.8404
pull
Entries 85
Mean 36.55
Std Dev 70.3
pull1D
Entries 85
Mean 0.003478
Std Dev 0.1606

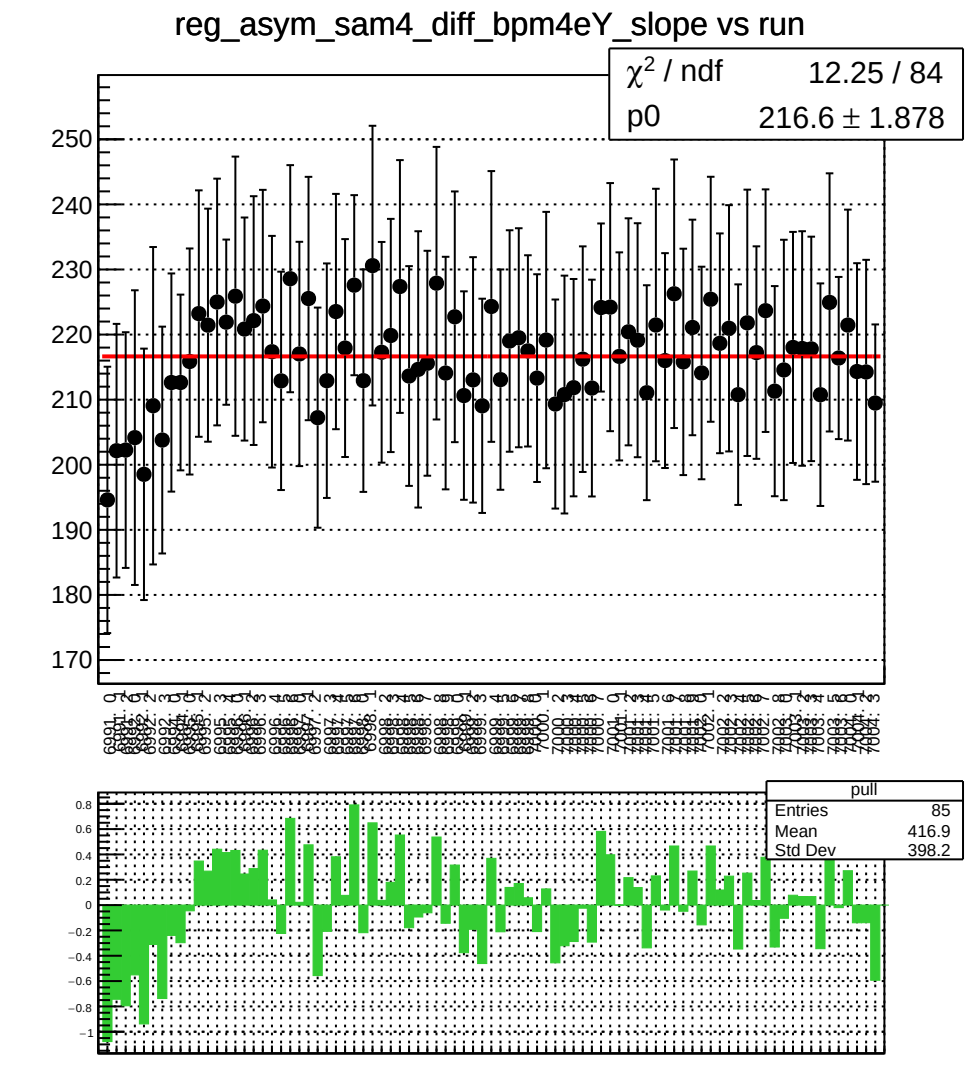

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 5.341 / 84
p0 0.4249 ± 0.03859
pull
Entries 85
Mean 397.5
Std Dev 287.7

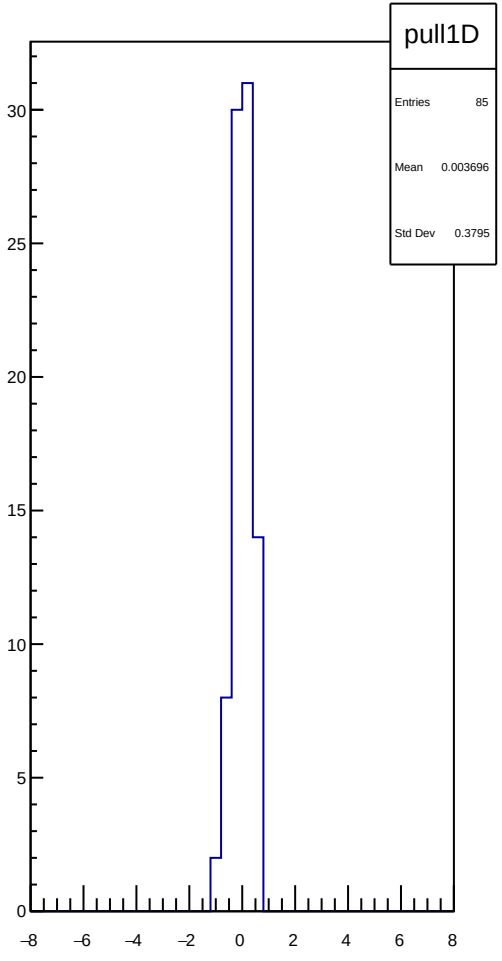

pull1D
Entries 85
Mean −0.002083
Std Dev 0.2507

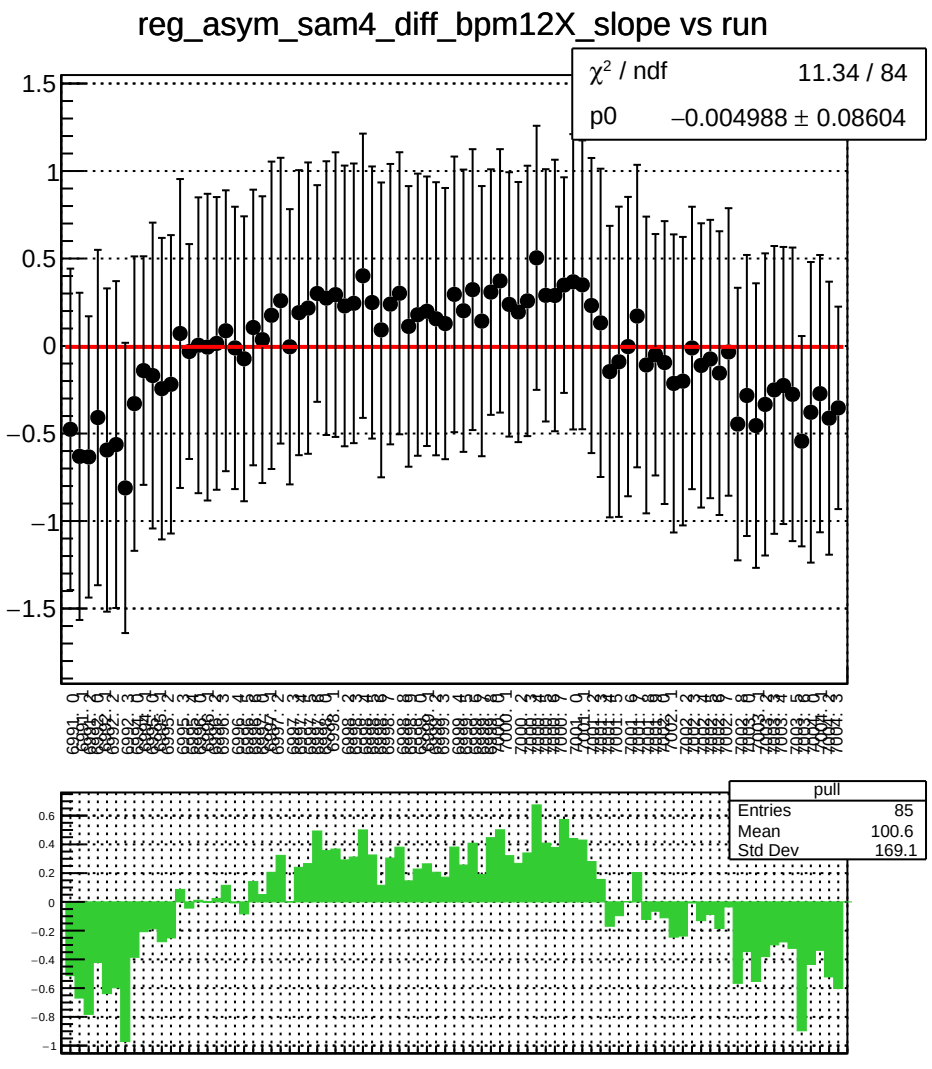

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 4.612 / 84
p0 −50.18 ± 2.594
pull
Entries 85
Mean −98.88
Std Dev 71.17
pull1D
Entries 85
Mean −0.003166
Std Dev 0.2329

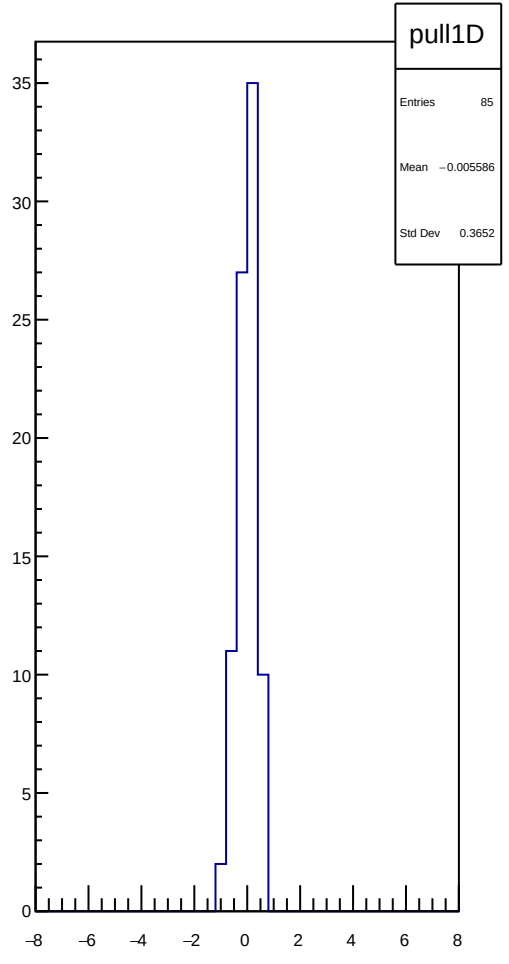

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 6.679 / 84
p0 8.351 ± 1.78
pull
Entries 85
Mean 404.5
Std Dev 385
pull1D
Entries 85
Mean −0.003504
Std Dev 0.2803

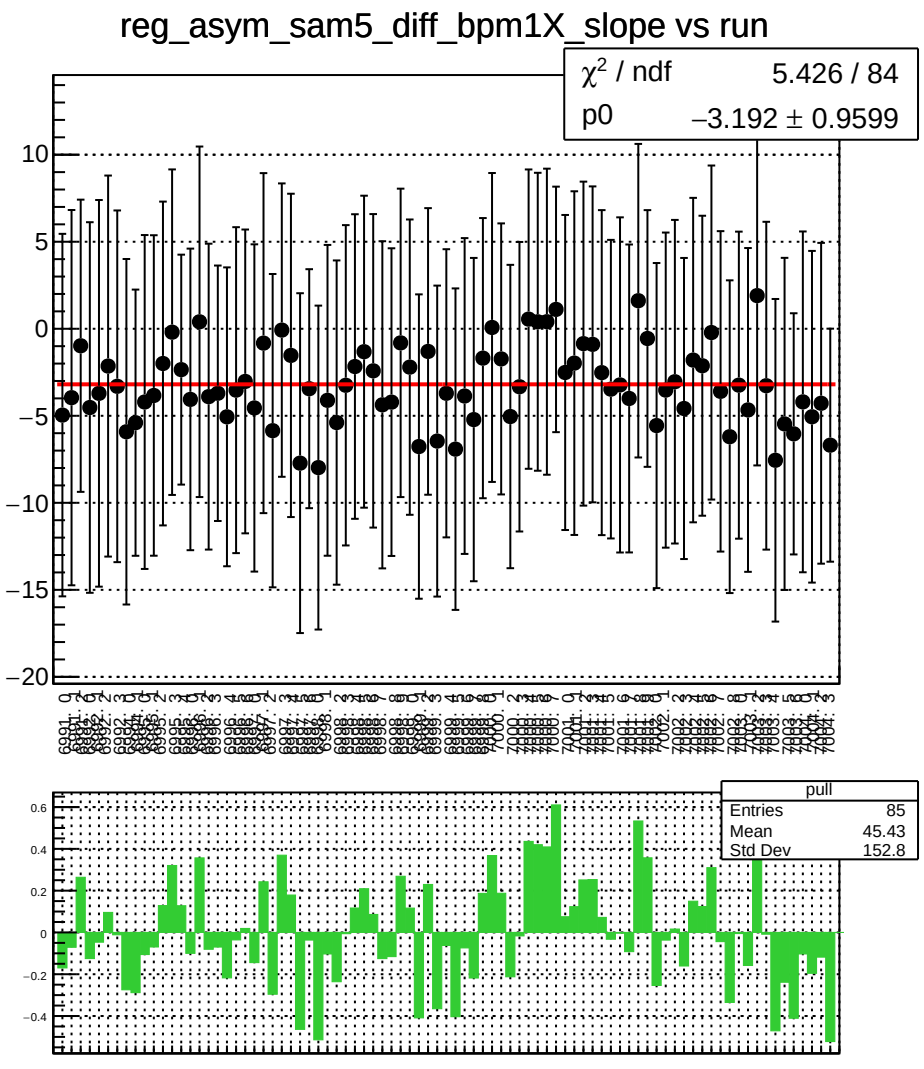

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 6.004 / 84
p0 −135.5 ± 2.395
pull
Entries 85
Mean −74.71
Std Dev 169.1
pull1D
Entries 85
Mean 0.001089
Std Dev 0.2658

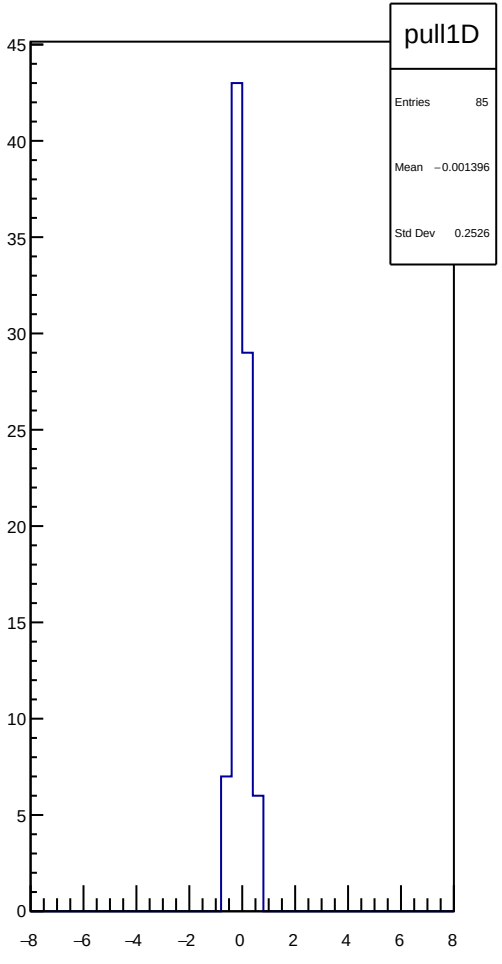

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 12.25 / 84
p0 216.6 ± 1.878
pull
Entries 85
Mean 416.9
Std Dev 398.2

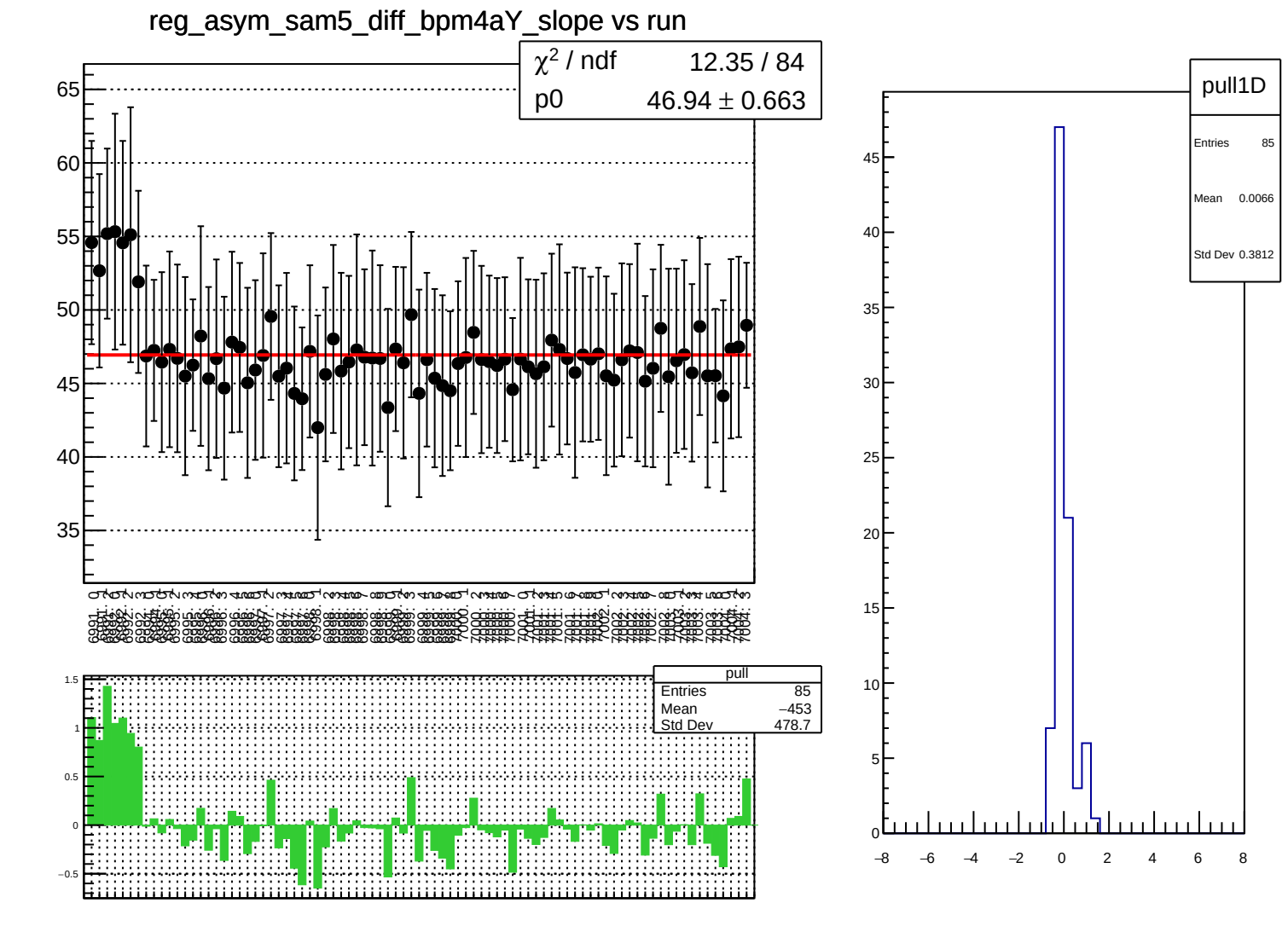

pull1D
Entries 85
Mean 0.003696
Std Dev 0.3795

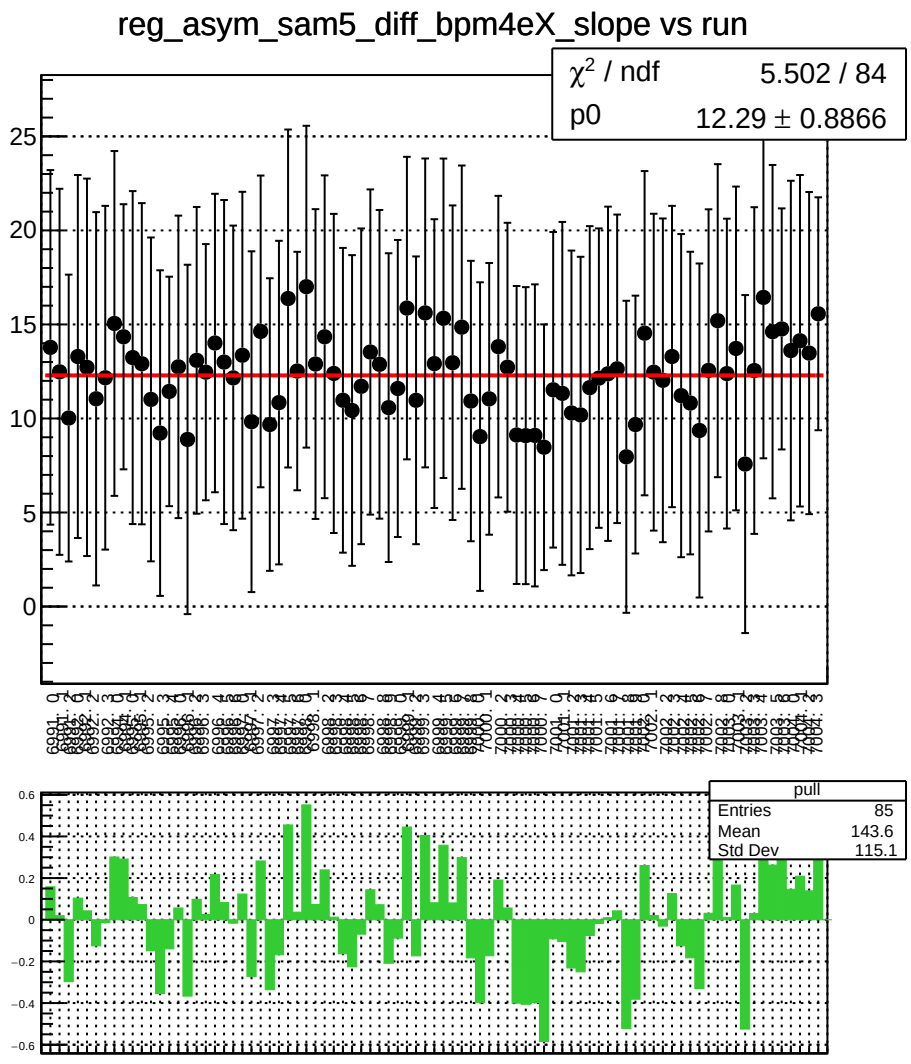

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 11.34 / 84
p0 −0.004988 ± 0.08604
pull
Entries 85
Mean 100.6
Std Dev 169.1

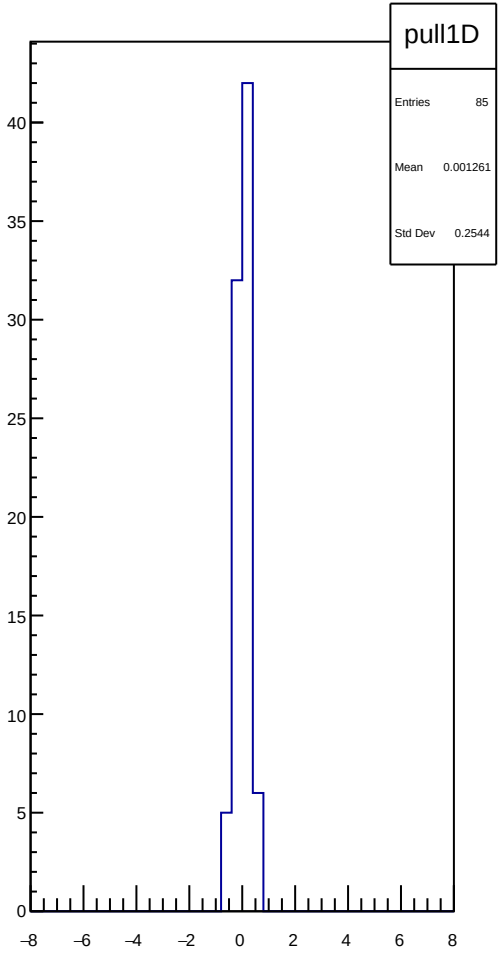

pull1D
Entries 85
Mean −0.005586
Std Dev 0.3652

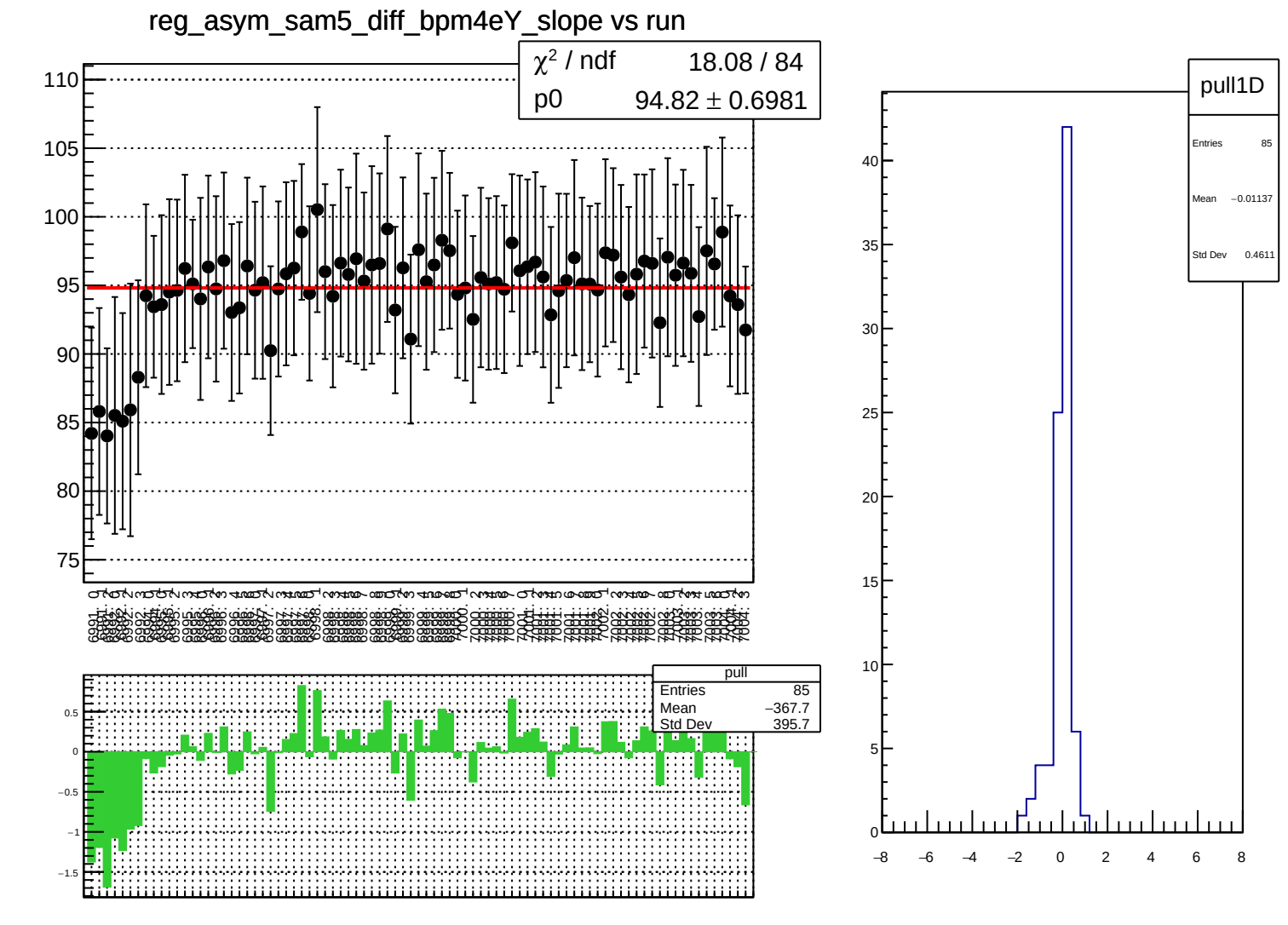

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 5.426 / 84
p0 −3.192 ± 0.9599
pull
Entries 85
Mean 45.43
Std Dev 152.8

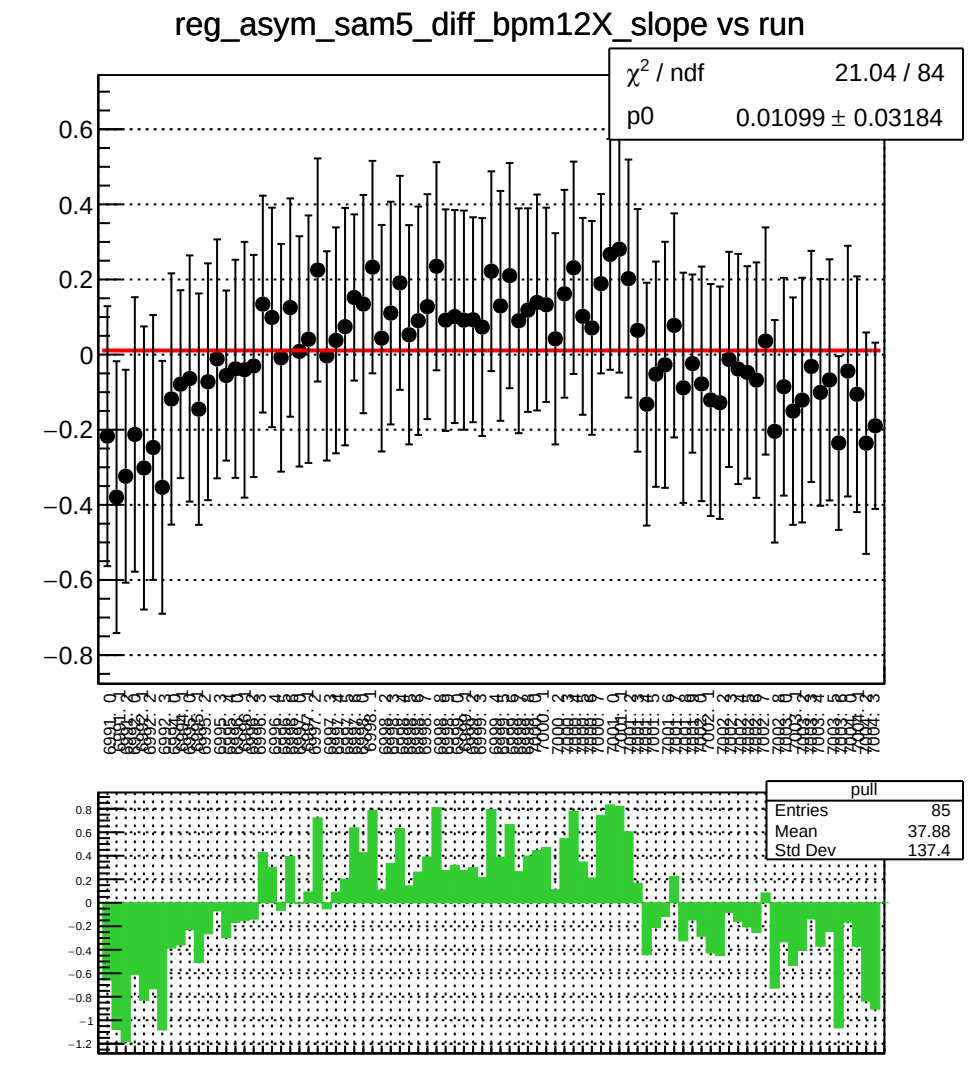

pull1D
Entries 85
Mean −0.001396
Std Dev 0.2526

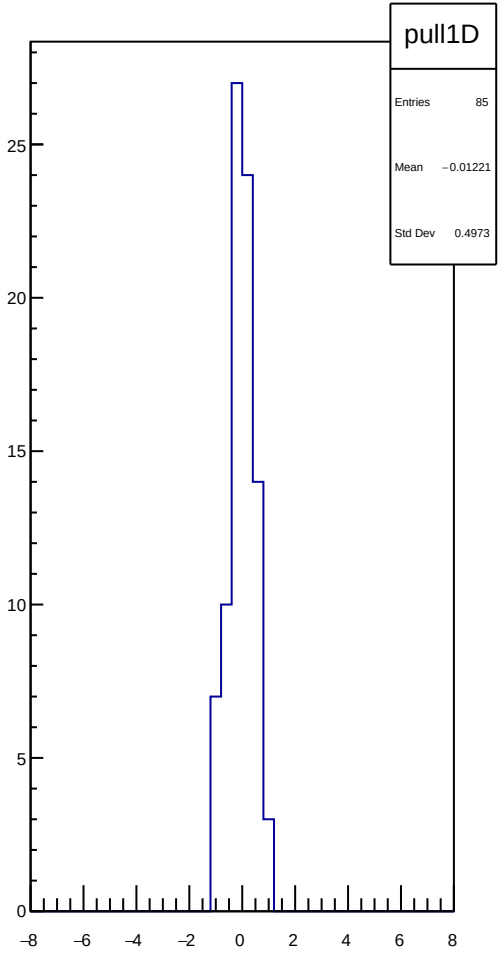

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 12.35 / 84
p0 46.94 ± 0.663
pull
Entries 85
Mean −453
Std Dev 478.7
pull1D
Entries 85
Mean 0.0066
Std Dev 0.3812

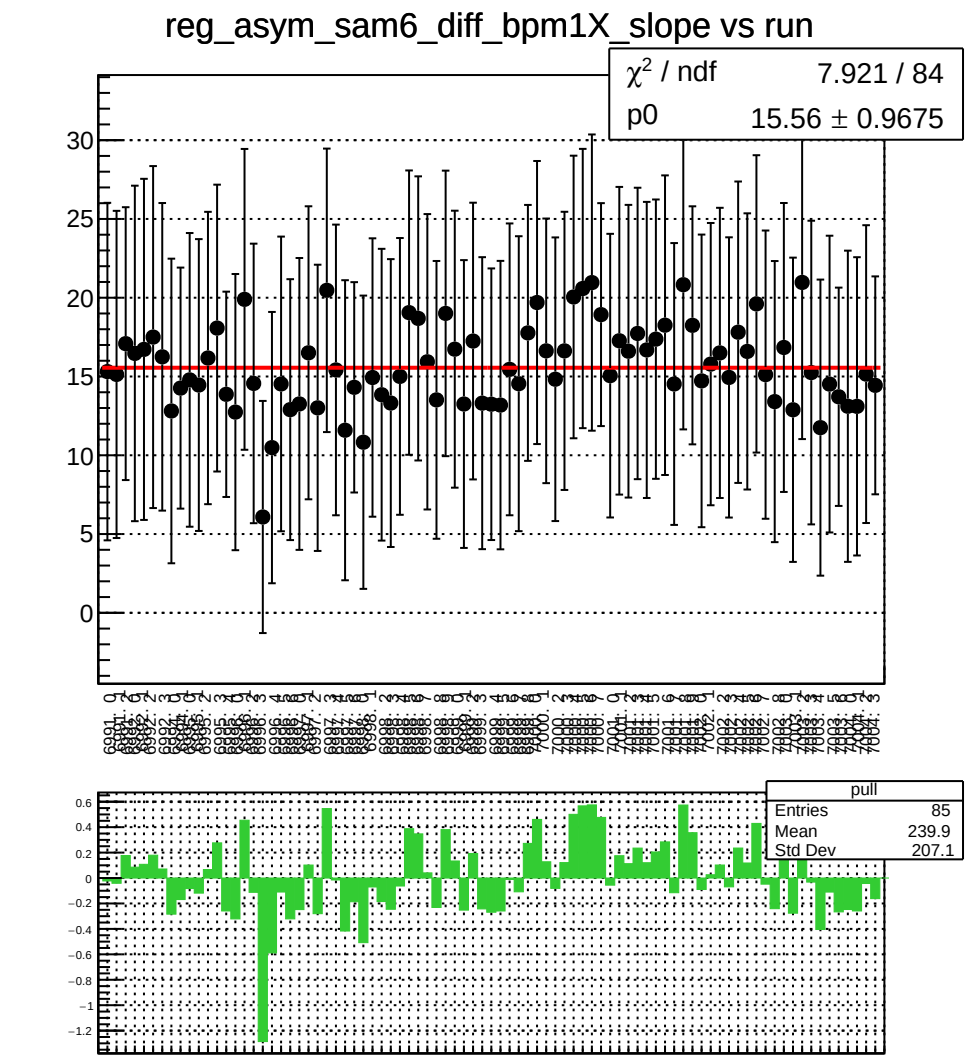

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 5.502 / 84
p0 12.29 ± 0.8866
pull
Entries 85
Mean 143.6
Std Dev 115.1

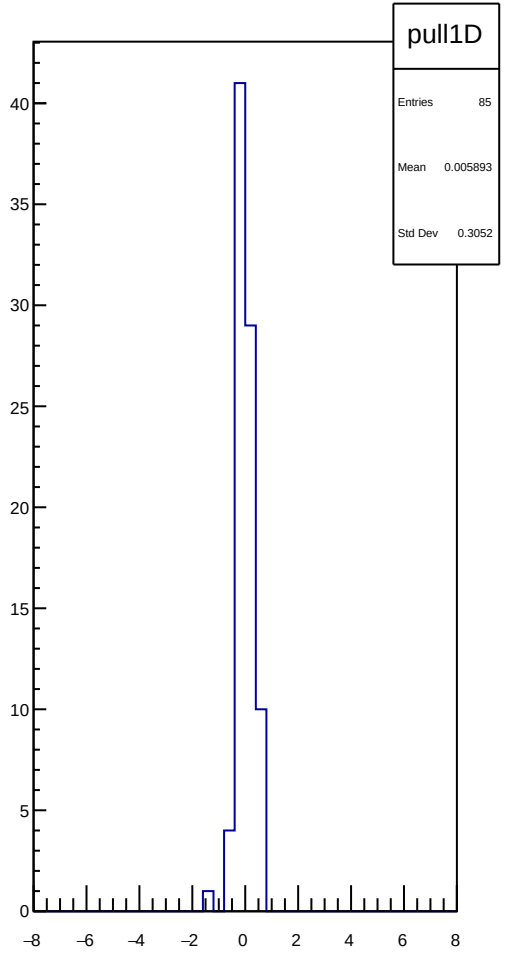

pull1D
Entries 85
Mean 0.001261
Std Dev 0.2544

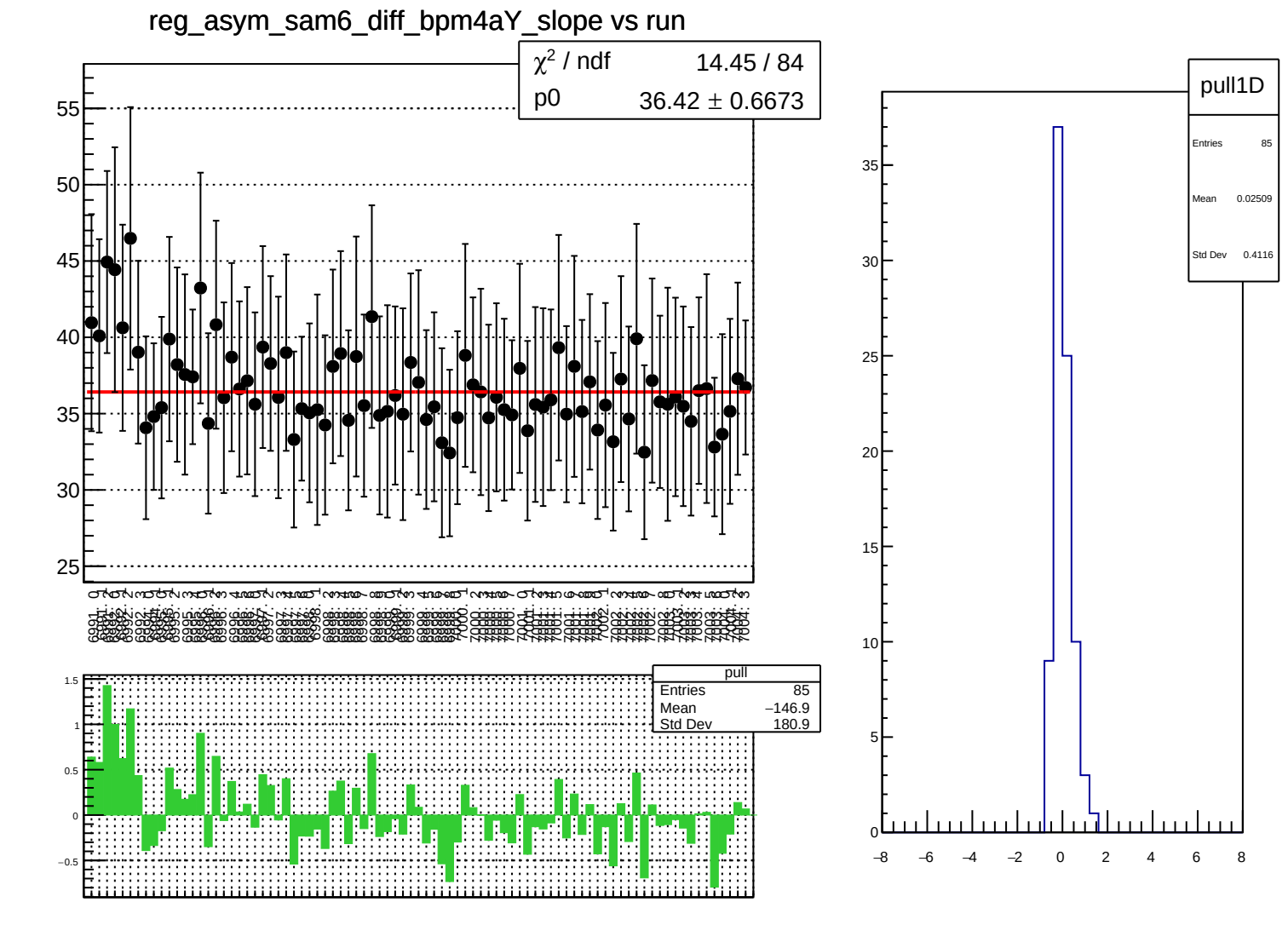

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 18.08 / 84
p0 94.82 ± 0.6981
pull
Entries 85
Mean −367.7
Std Dev 395.7
pull1D
Entries 85
Mean −0.01137
Std Dev 0.4611

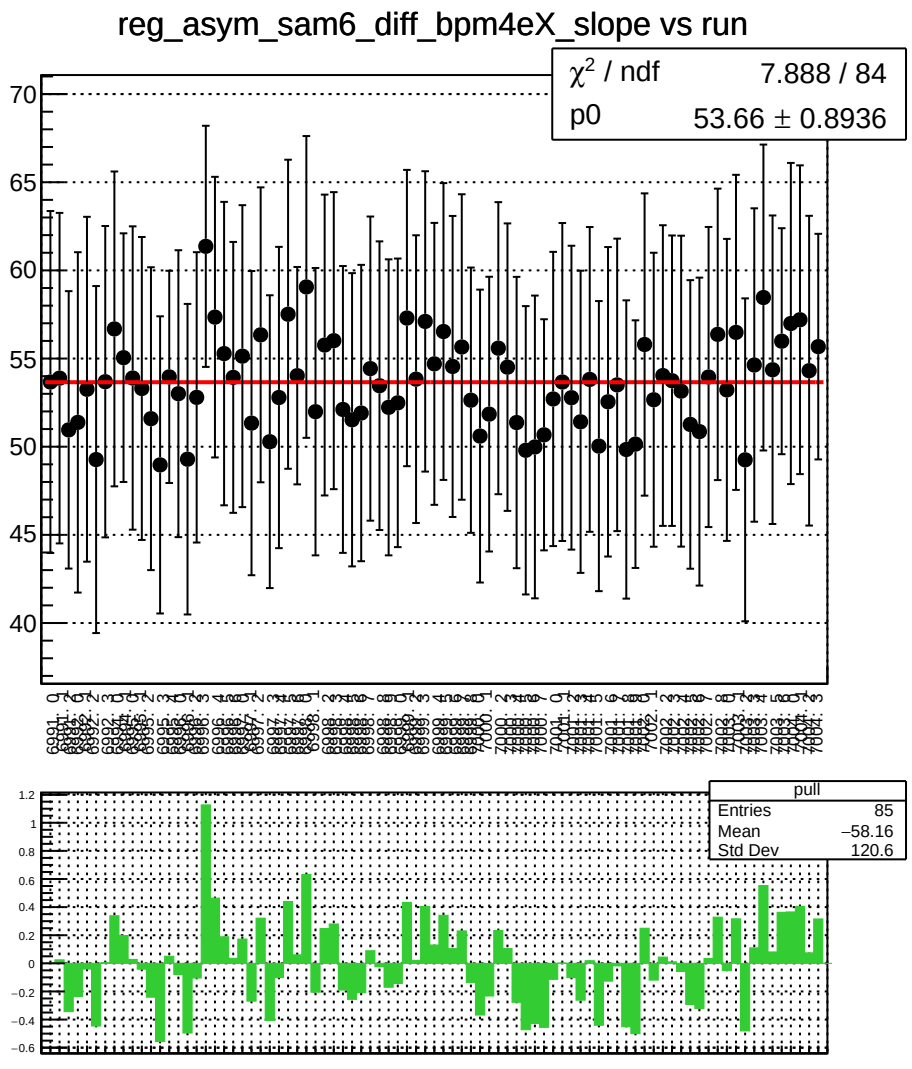

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 21.04 / 84
p0 0.01099 ± 0.03184
pull
Entries 85
Mean 37.88
Std Dev 137.4

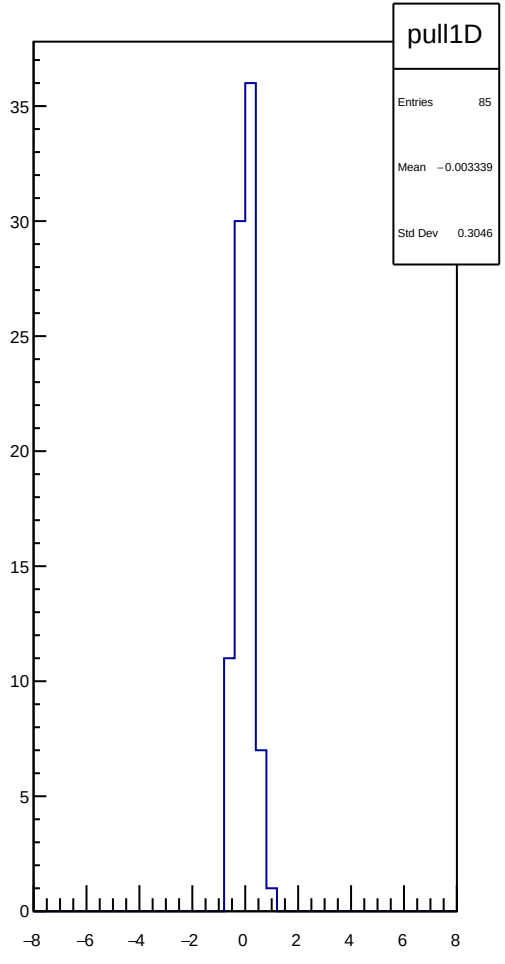

pull1D
Entries 85
Mean −0.01221
Std Dev 0.4973

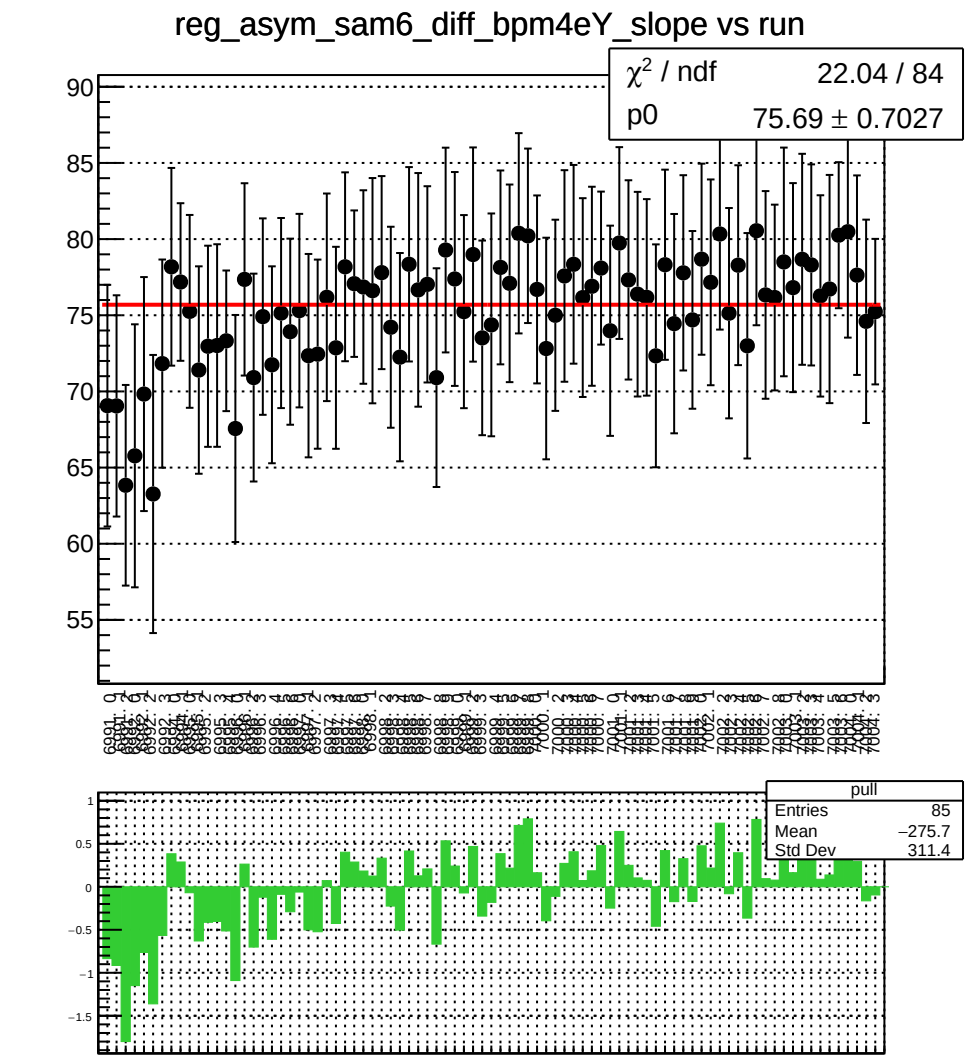

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 7.921 / 84
p0 15.56 ± 0.9675
pull
Entries 85
Mean 239.9
Std Dev 207.1

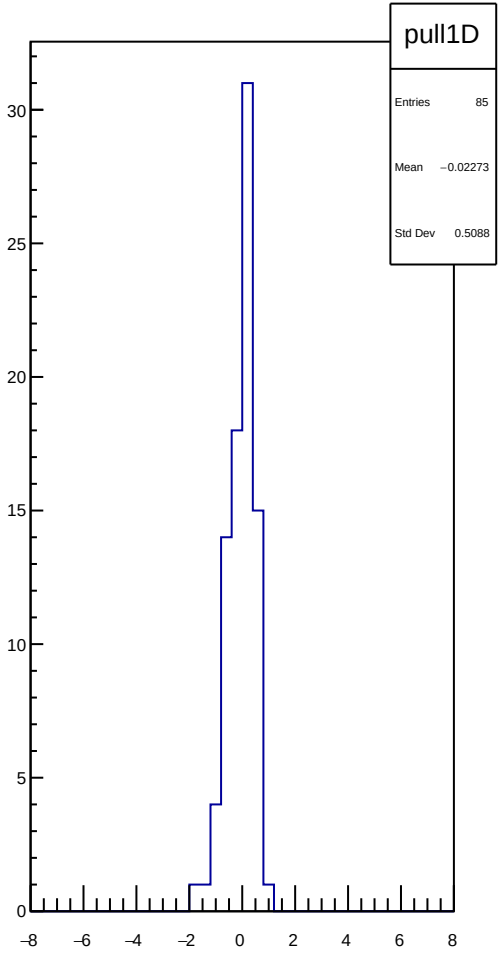

pull1D
Entries 85
Mean 0.005893
Std Dev 0.3052

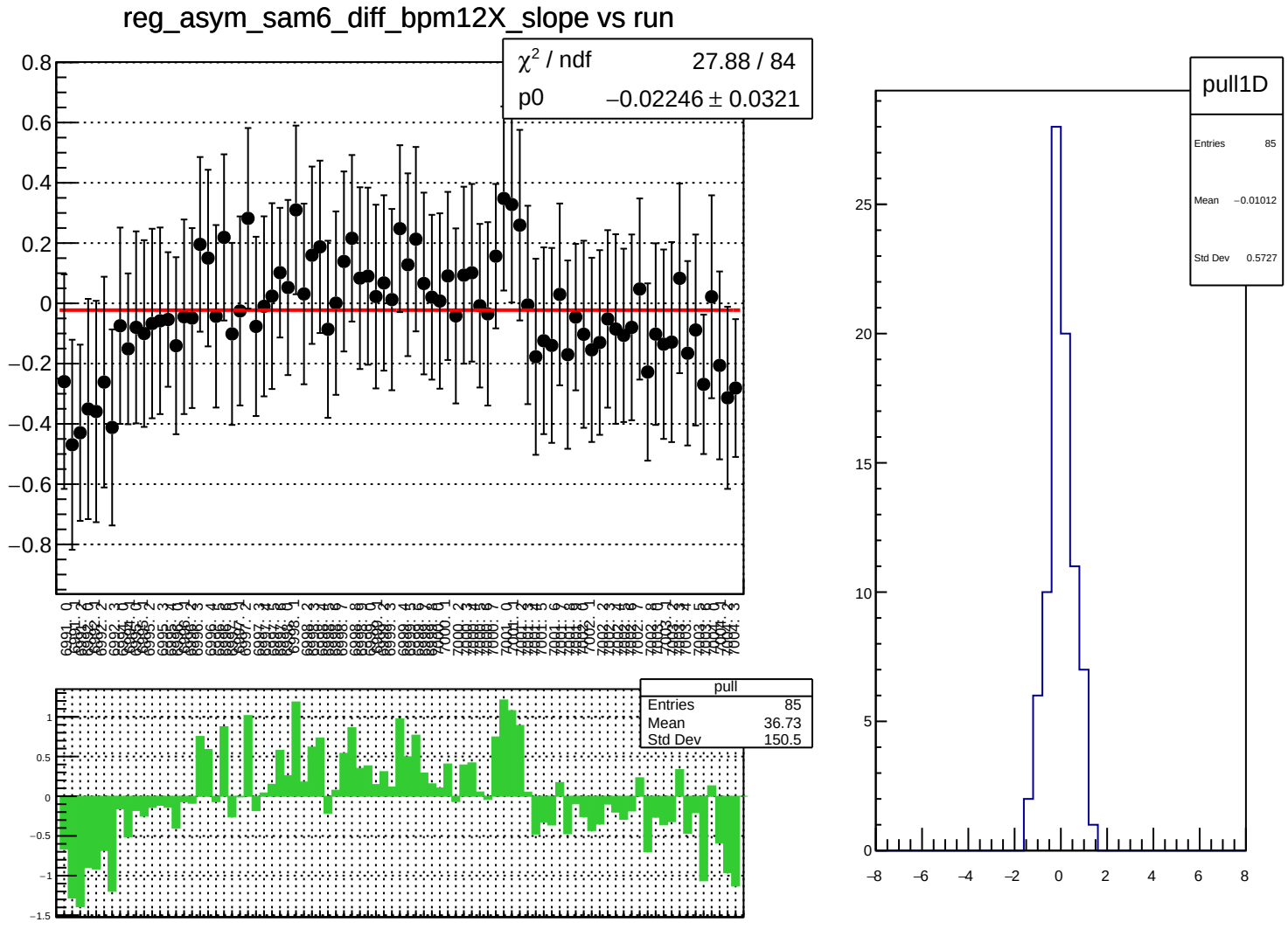

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 14.45 / 84
p0 36.42 ± 0.6673
pull
Entries 85
Mean −146.9
Std Dev 180.9
pull1D
Entries 85
Mean 0.02509
Std Dev 0.4116

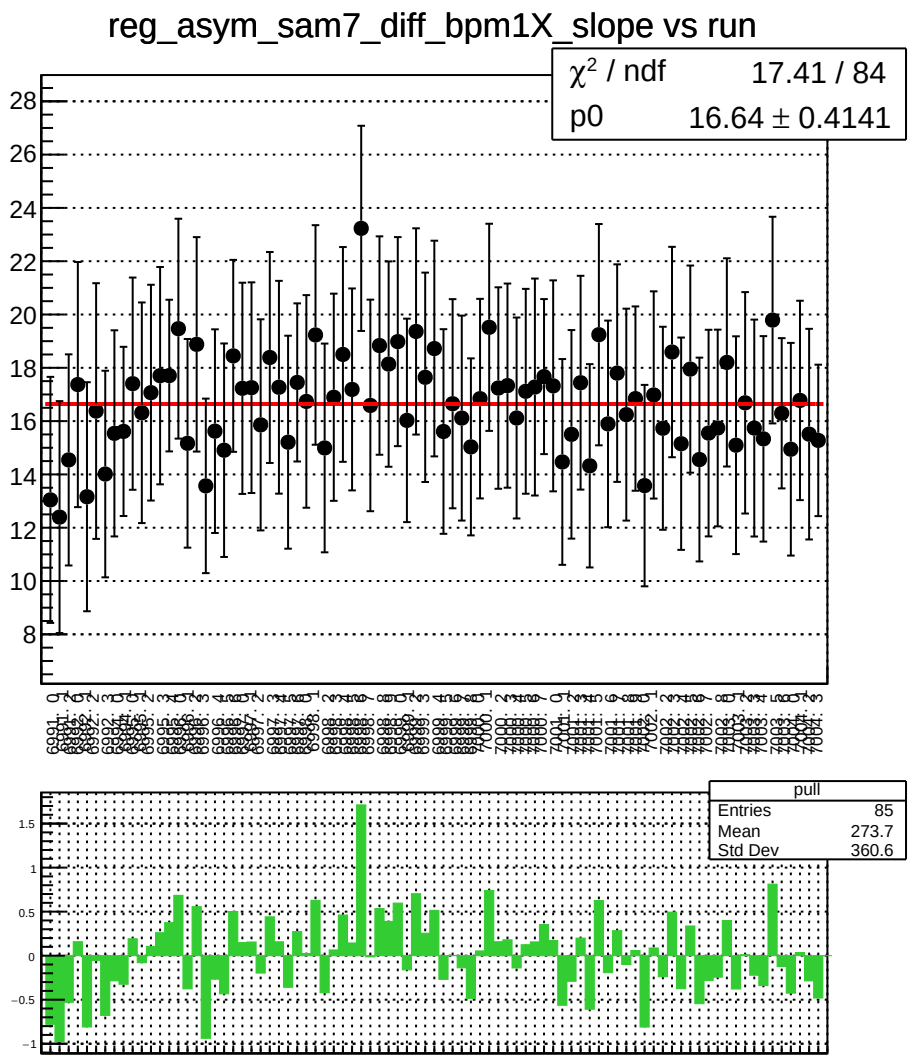

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 7.888 / 84
p0 53.66 ± 0.8936
pull
Entries 85
Mean −58.16
Std Dev 120.6

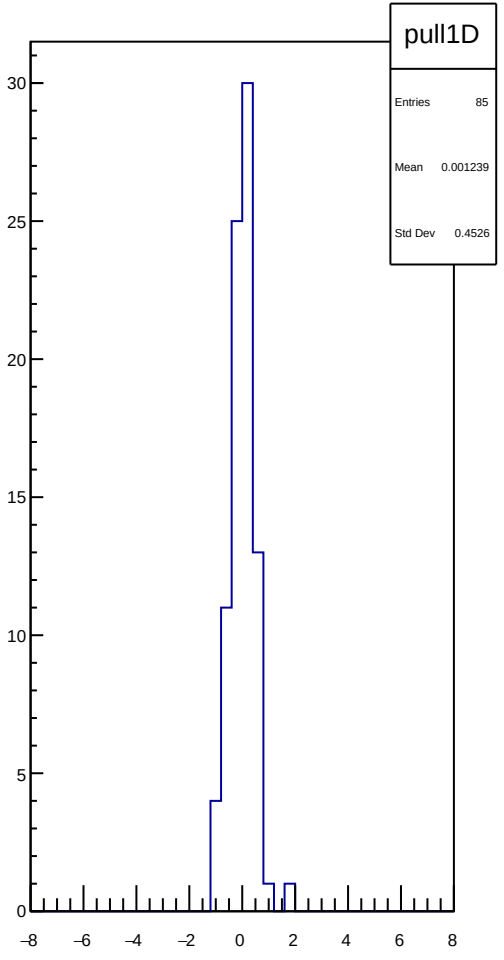

pull1D
Entries 85
Mean −0.003339
Std Dev 0.3046

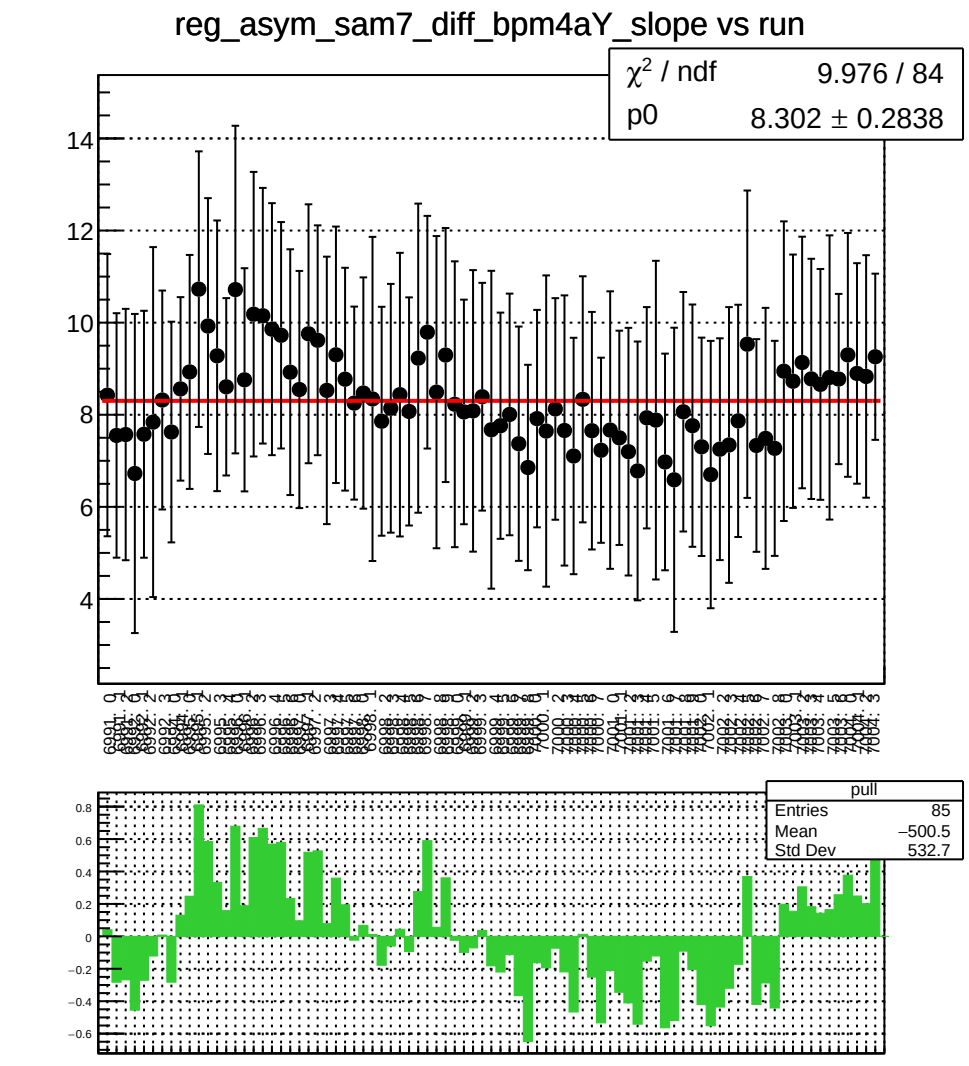

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 22.04 / 84
p0 75.69 ± 0.7027
pull
Entries 85
Mean −275.7
Std Dev 311.4

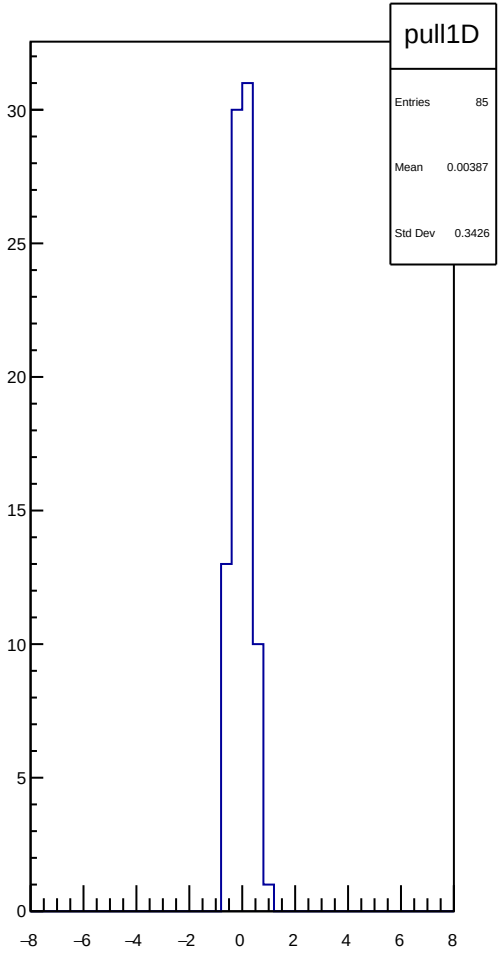

pull1D
Entries 85
Mean −0.02273
Std Dev 0.5088

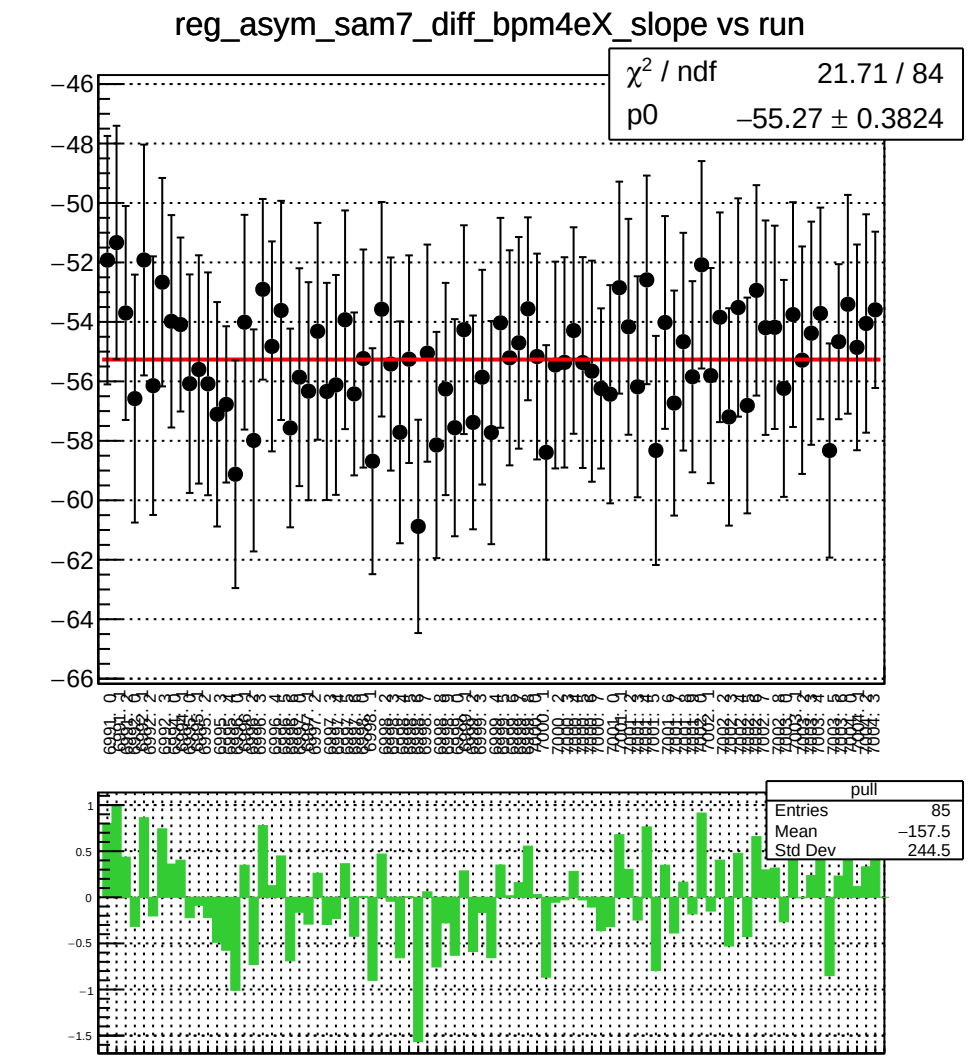

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 27.88 / 84
p0 −0.02246 ± 0.0321
pull
Entries 85
Mean 36.73
Std Dev 150.5
pull1D
Entries 85
Mean −0.01012
Std Dev 0.5727

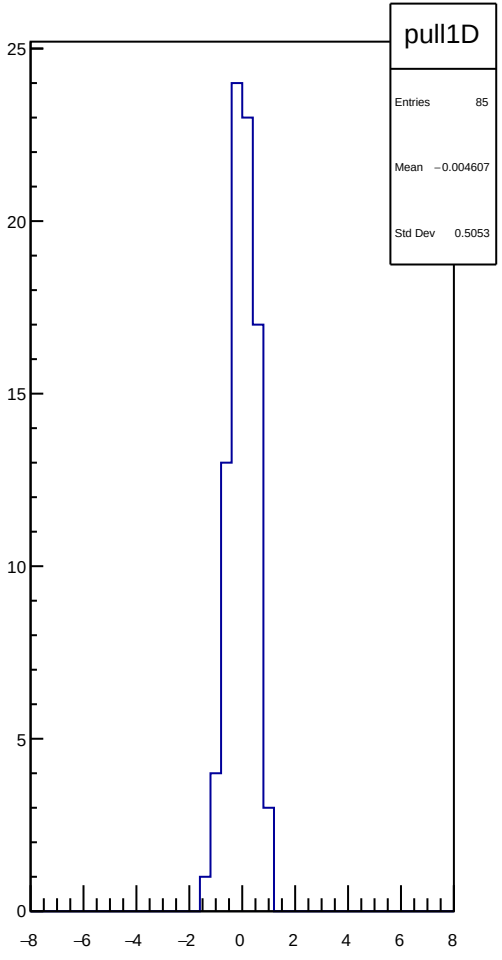

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 17.41 / 84
p0 16.64 ± 0.4141
pull
Entries 85
Mean 273.7
Std Dev 360.6

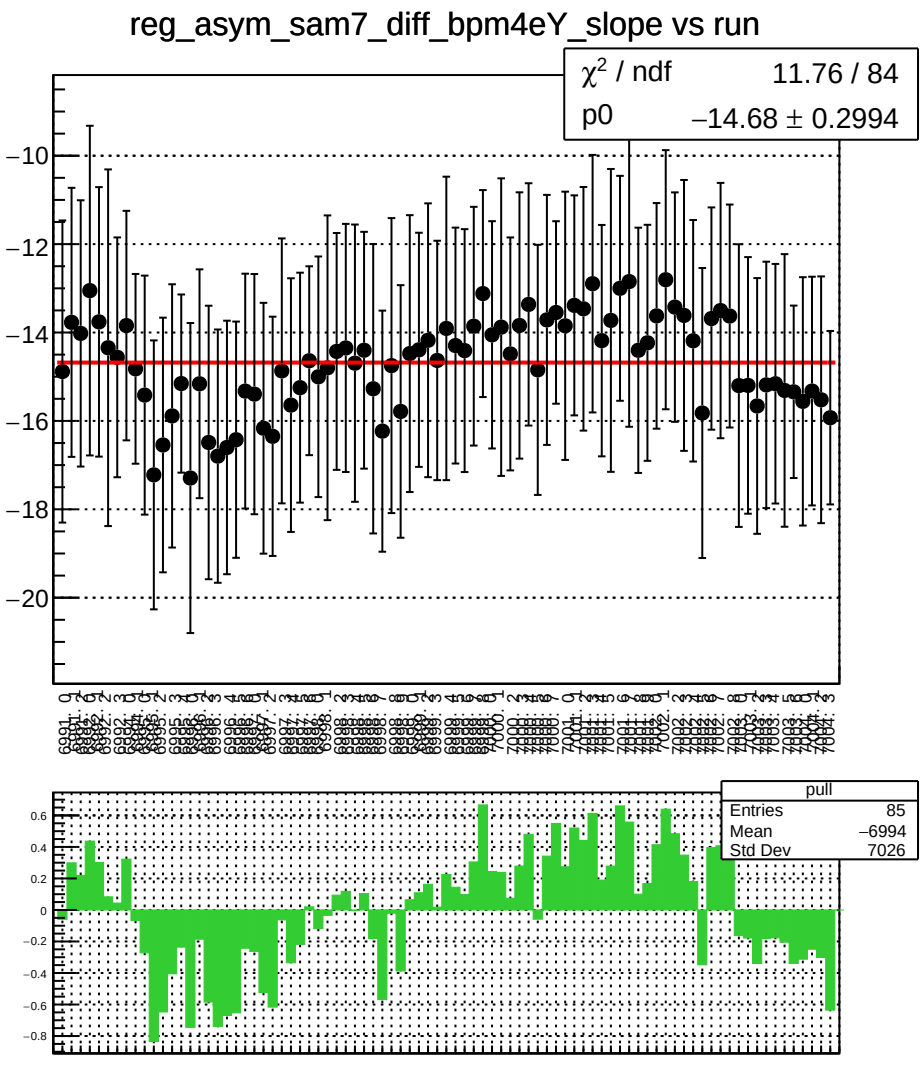

pull1D
Entries 85
Mean 0.001239
Std Dev 0.4526

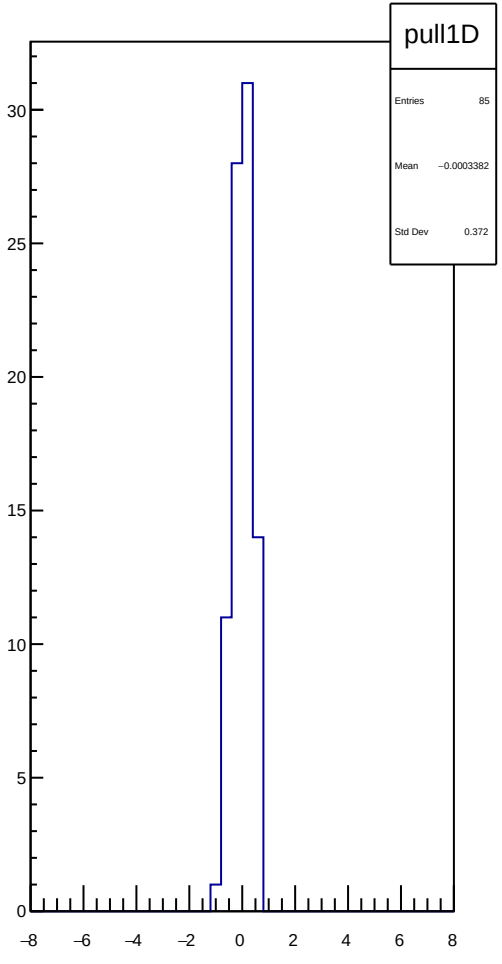

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 9.976 / 84
p0 8.302 ± 0.2838
pull
Entries 85
Mean −500.5
Std Dev 532.7

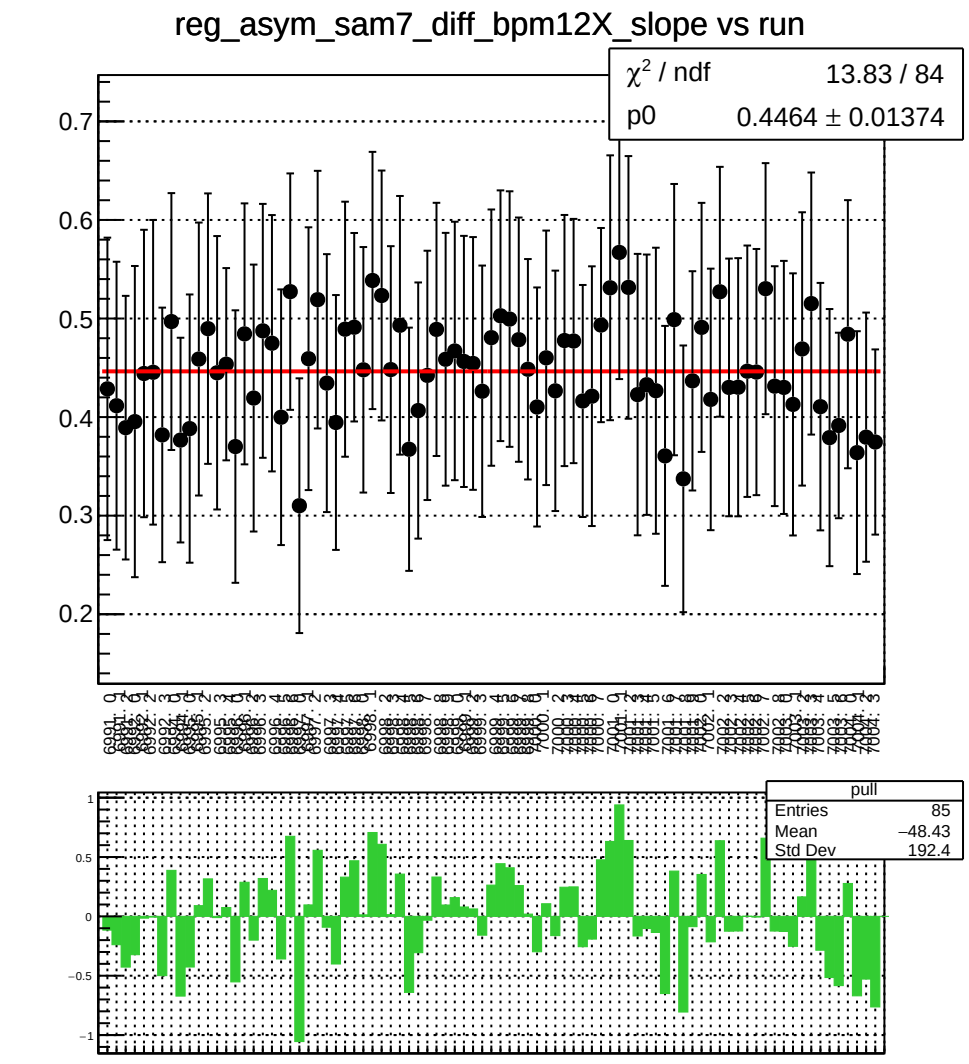

pull1D
Entries 85
Mean 0.00387
Std Dev 0.3426

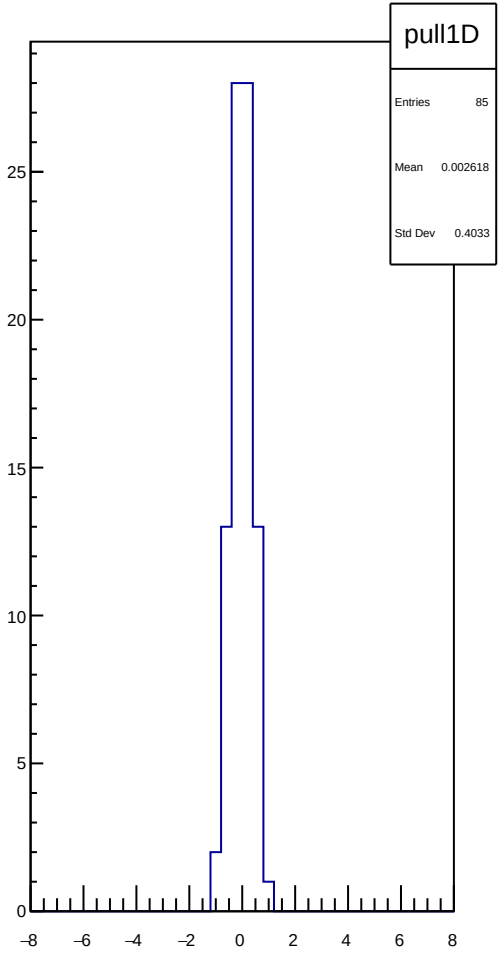

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 21.71 / 84
p0 −55.27 ± 0.3824
pull
Entries 85
Mean −157.5
Std Dev 244.5

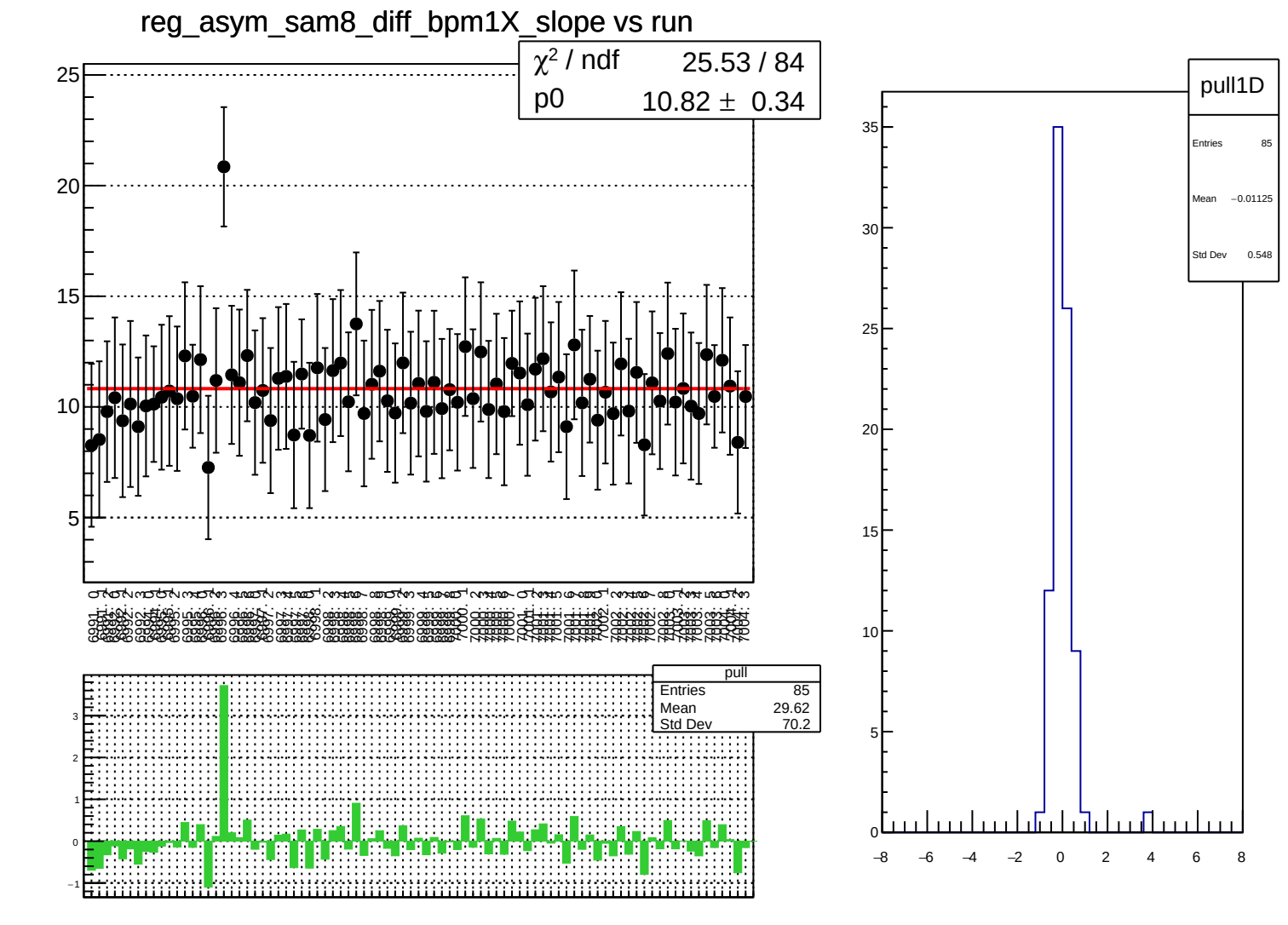

pull1D
Entries 85
Mean −0.004607
Std Dev 0.5053

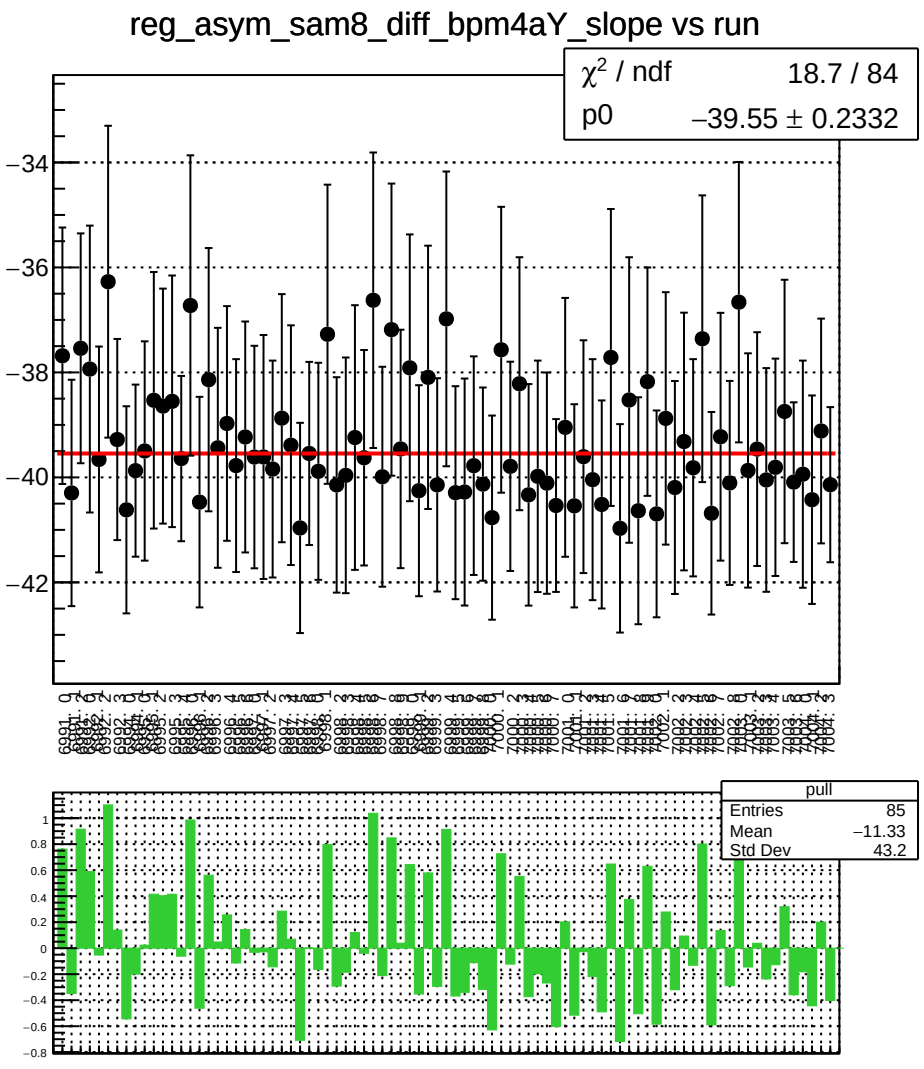

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 11.76 / 84
p0 −14.68 ± 0.2994
pull
Entries 85
Mean −6994
Std Dev 7026

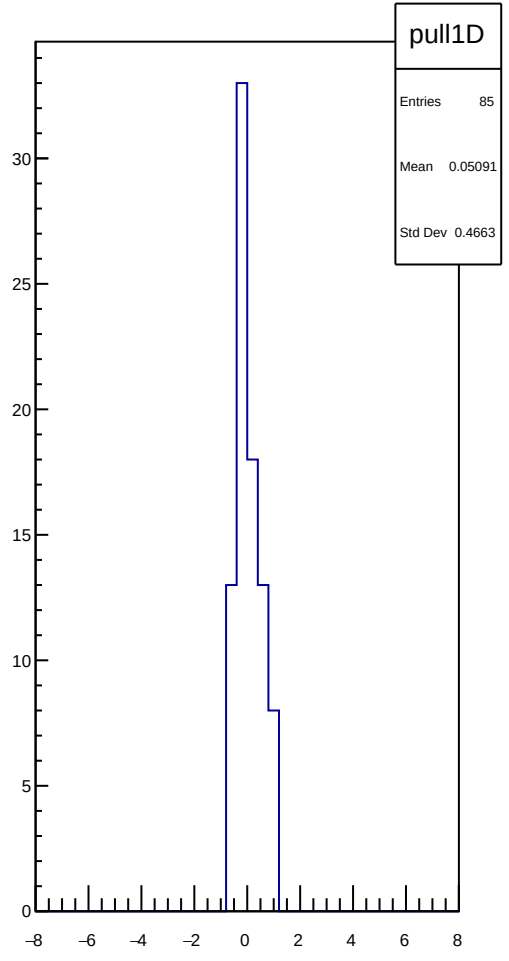

pull1D
Entries 85
Mean −0.0003382
Std Dev 0.372

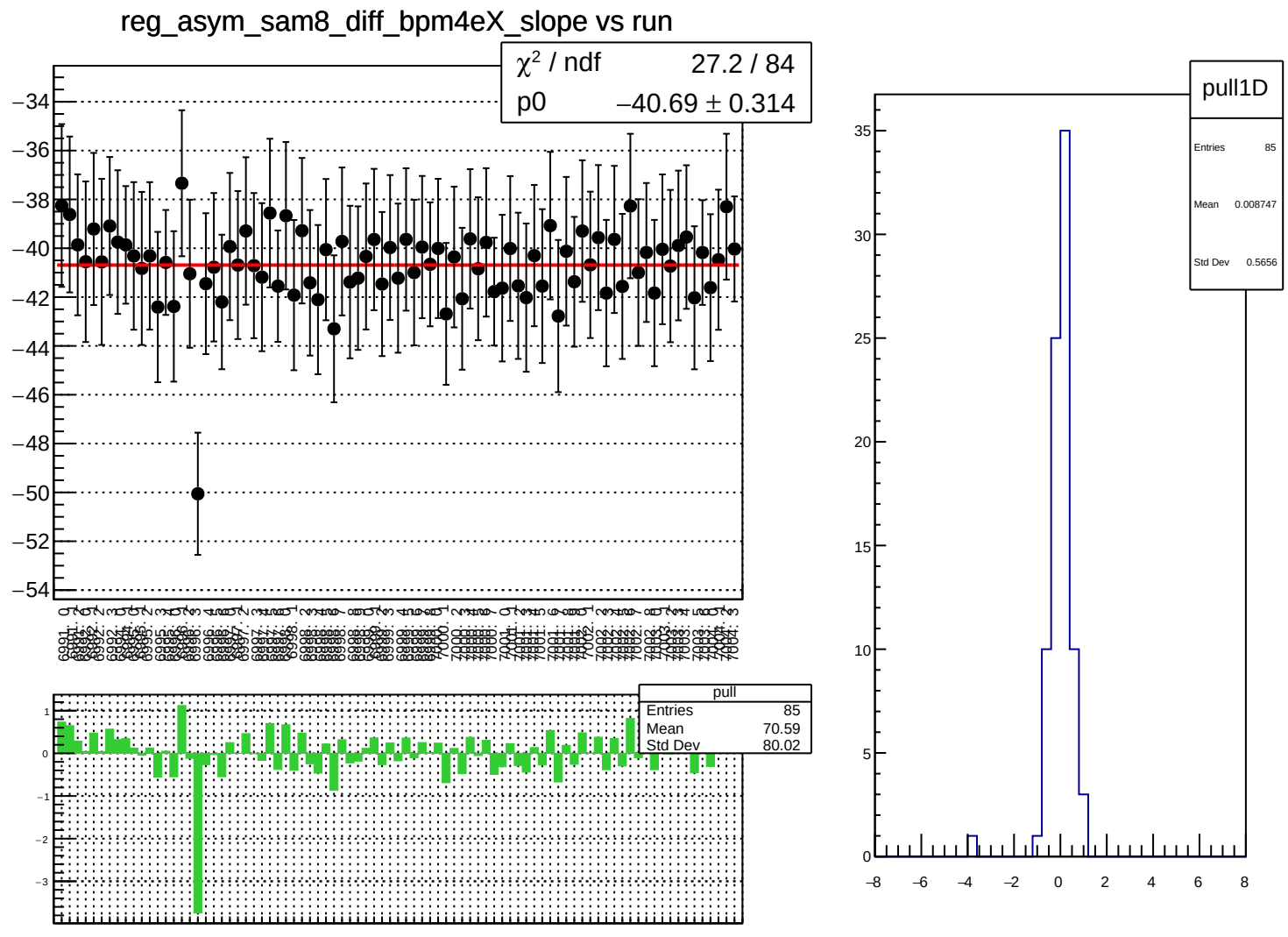

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 13.83 / 84
p0 0.4464 ± 0.01374
0.7
0.6
0.5
0.4
0.3
0.2
pull
Entries 85
Mean −48.43
Std Dev 192.4
1
0.5
0
−0.5
−1

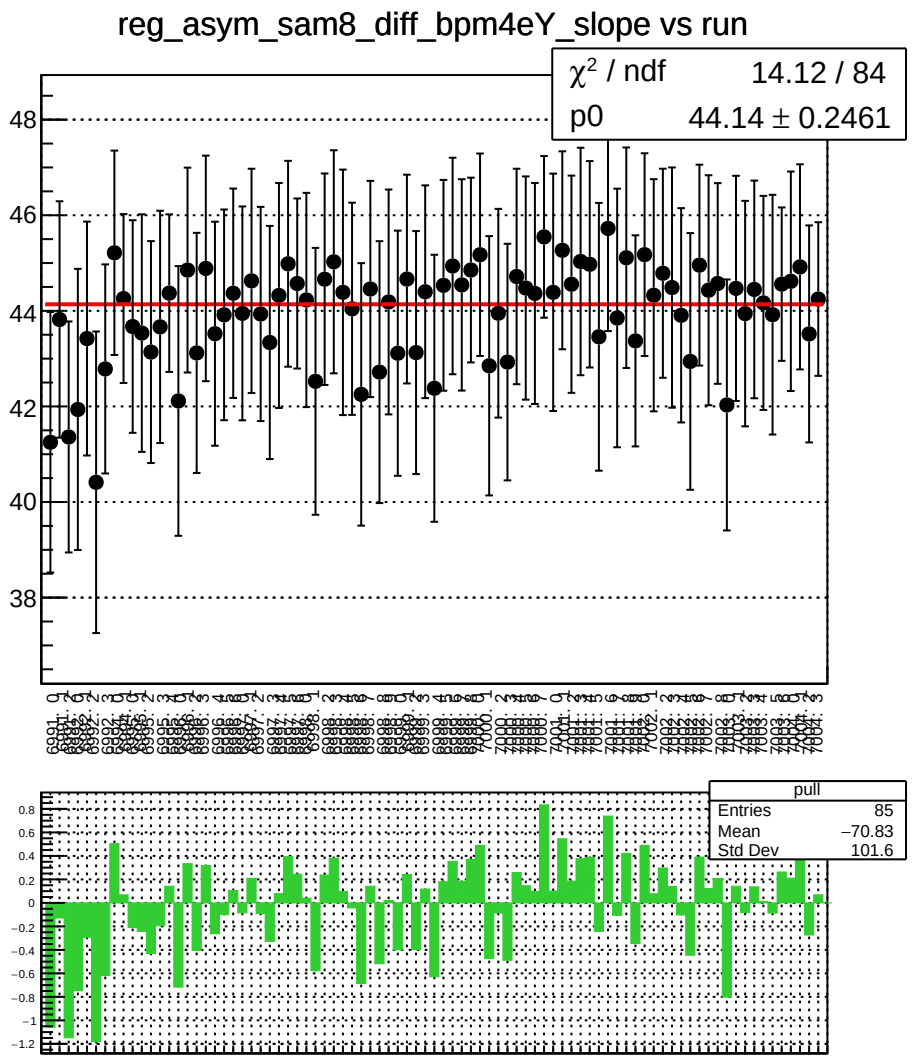

pull1D
Entries 85
Mean 0.002618
Std Dev 0.4033
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

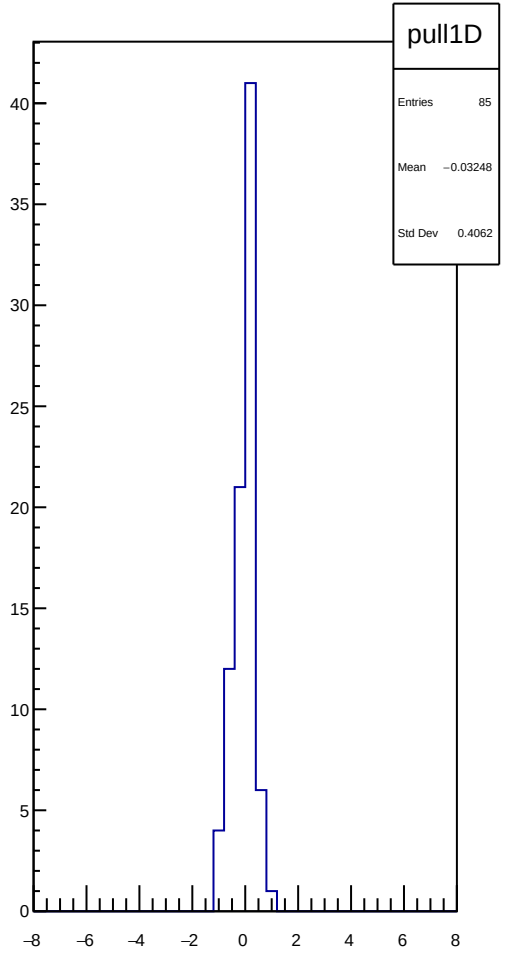

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 25.53 / 84
p0 10.82 ± 0.34
pull
Entries 85
Mean 29.62
Std Dev 70.2
pull1D
Entries 85
Mean −0.01125
Std Dev 0.548

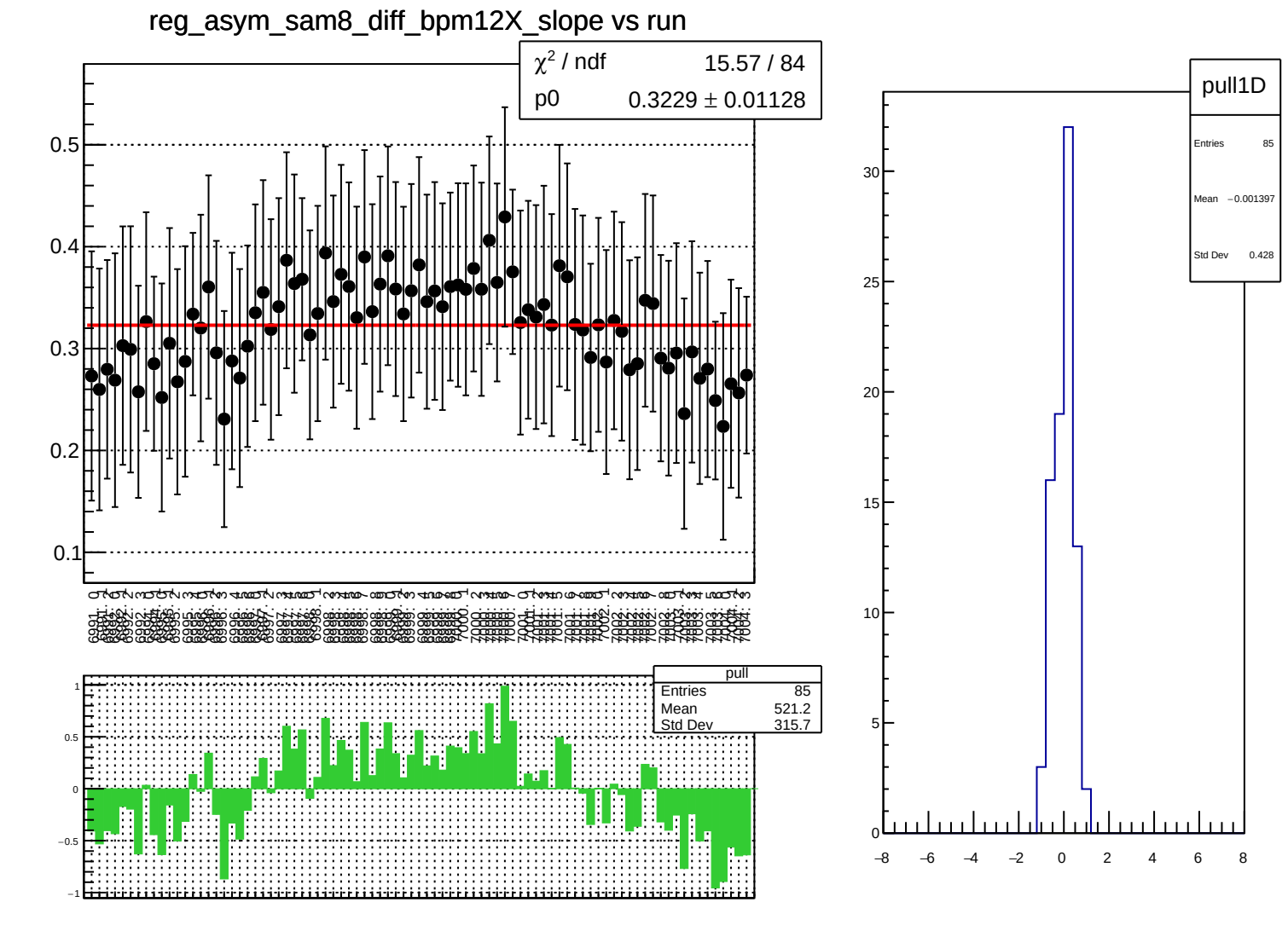

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 18.7 / 84
p0 −39.55 ± 0.2332
−34
−36
−38
−40
−42
pull
Entries 85
Mean −11.33
Std Dev 43.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

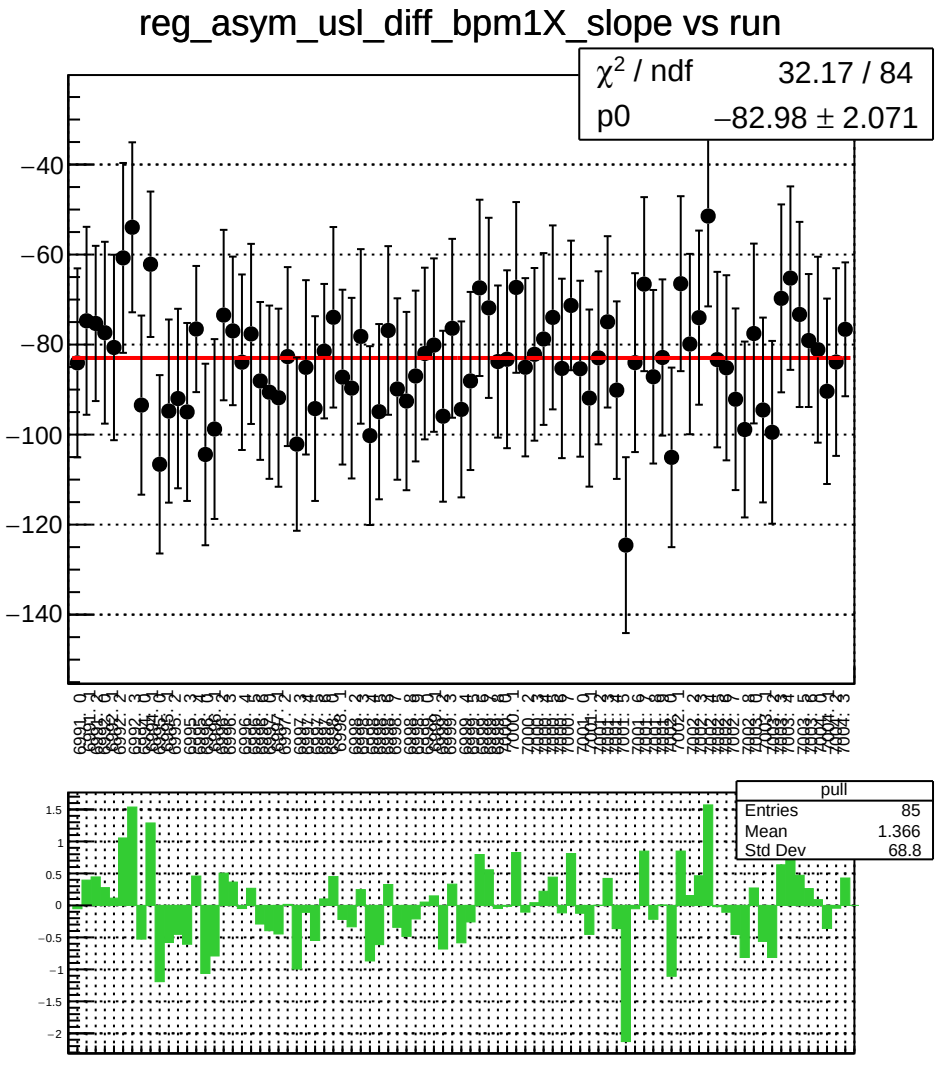

pull1D
Entries 85
Mean 0.05091
Std Dev 0.4663
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

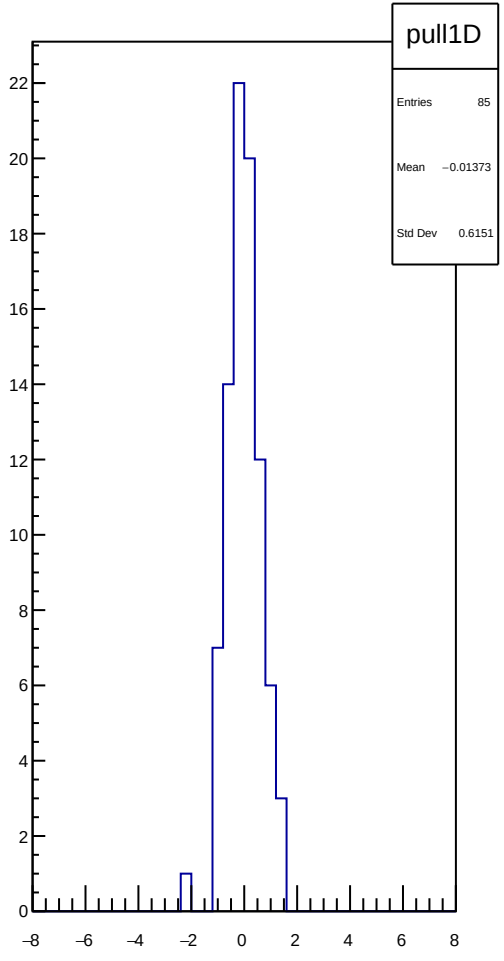

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 27.2 / 84
p0 −40.69 ± 0.314
pull
Entries 85
Mean 70.59
Std Dev 80.02
pull1D
Entries 85
Mean 0.008747
Std Dev 0.5656

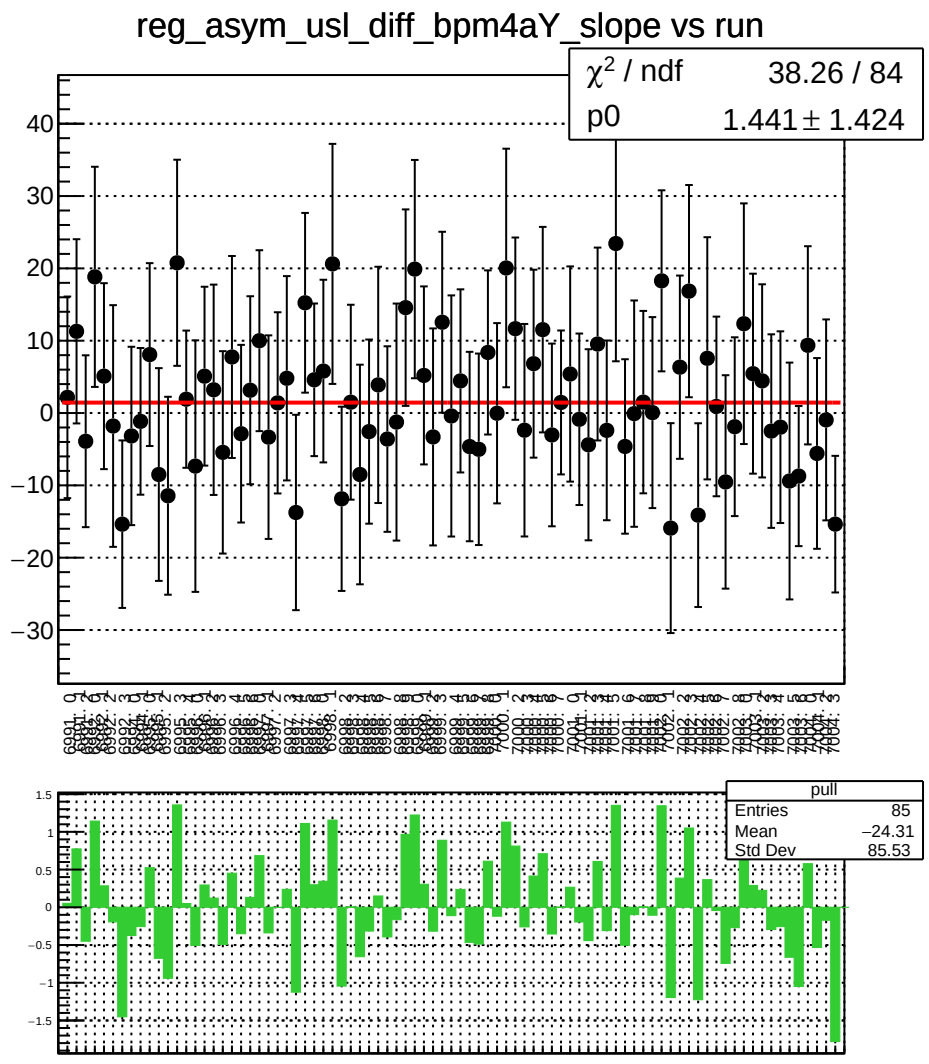

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 14.12 / 84
p0 44.14 ± 0.2461
pull
Entries 85
Mean −70.83
Std Dev 101.6

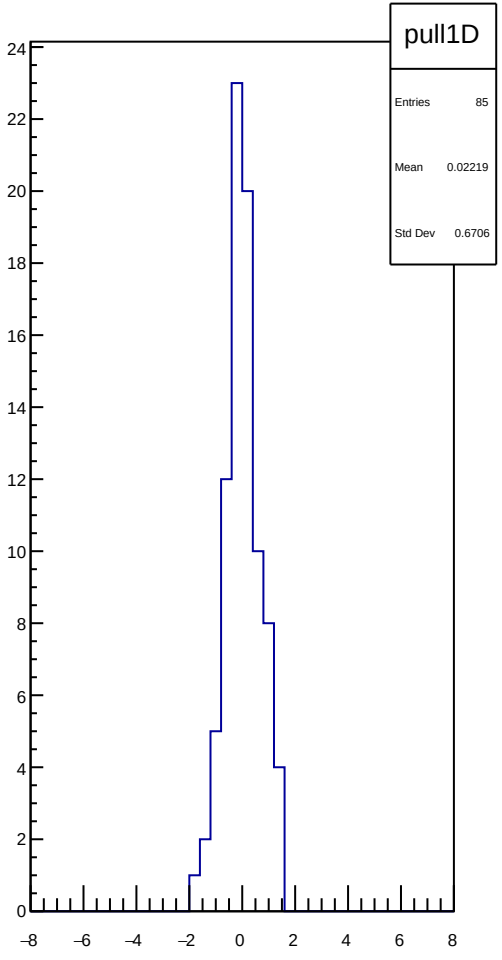

pull1D
Entries 85
Mean −0.03248
Std Dev 0.4062

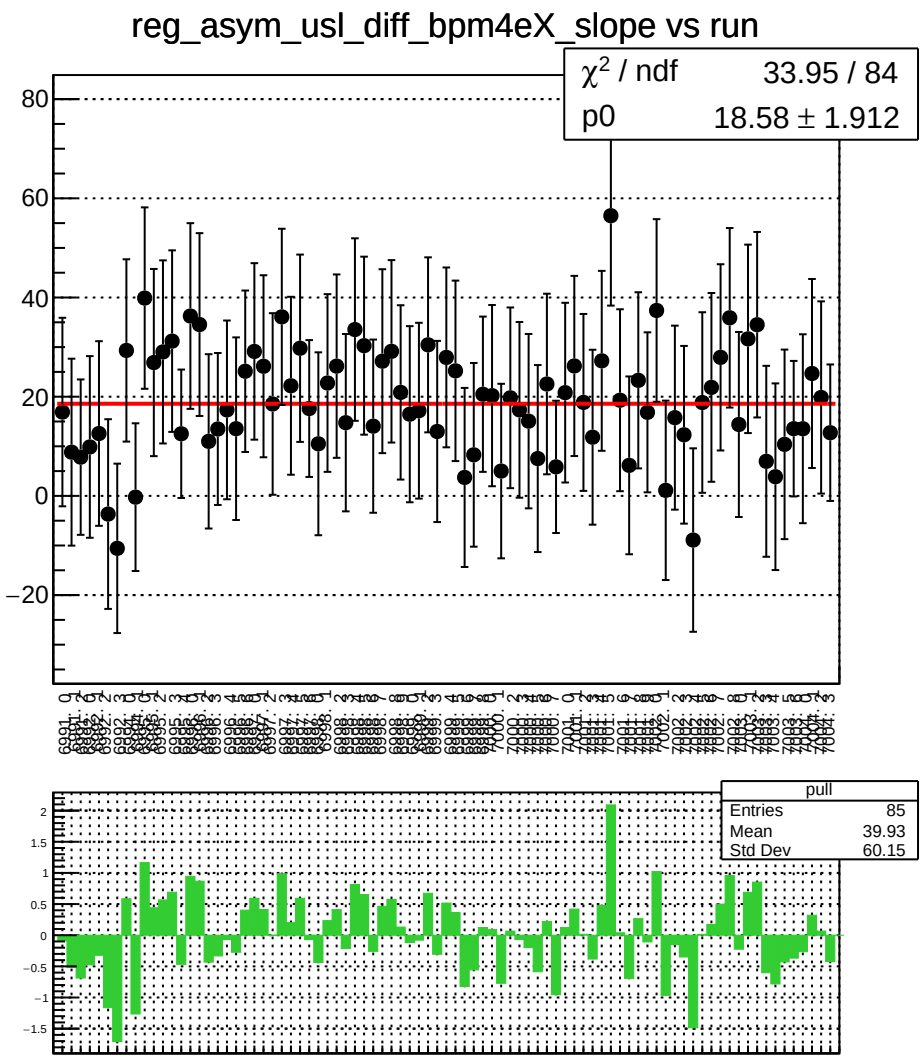

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 15.57 / 84
p0 0.3229 ± 0.01128
0.5
0.4
0.3
0.2
0.1
pull
Entries 85
Mean 521.2
Std Dev 315.7
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.001397
Std Dev 0.428
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

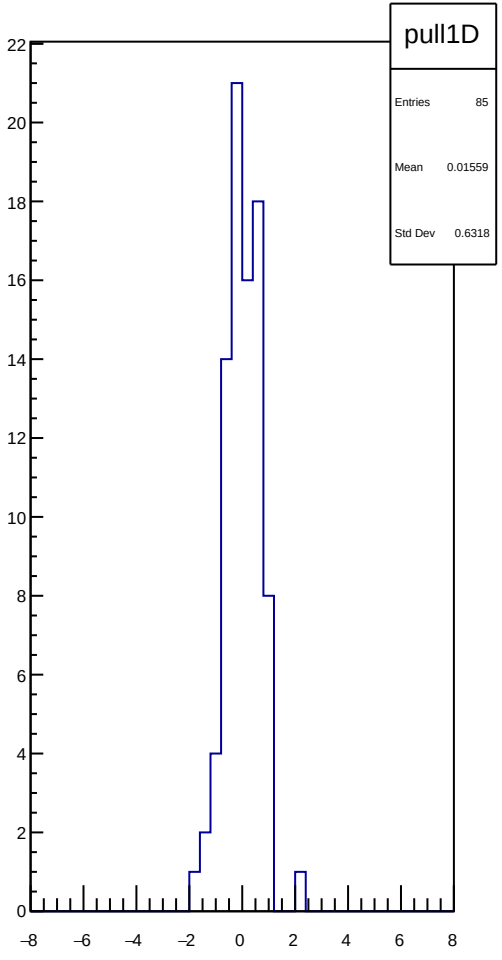

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 32.17 / 84
p0 −82.98 ± 2.071
−40
−60
−80
−100
−120
−140
pull
Entries 85
Mean 1.366
Std Dev 68.8
1.5
1
0.5
0
−0.5
−1
−1.5
−2

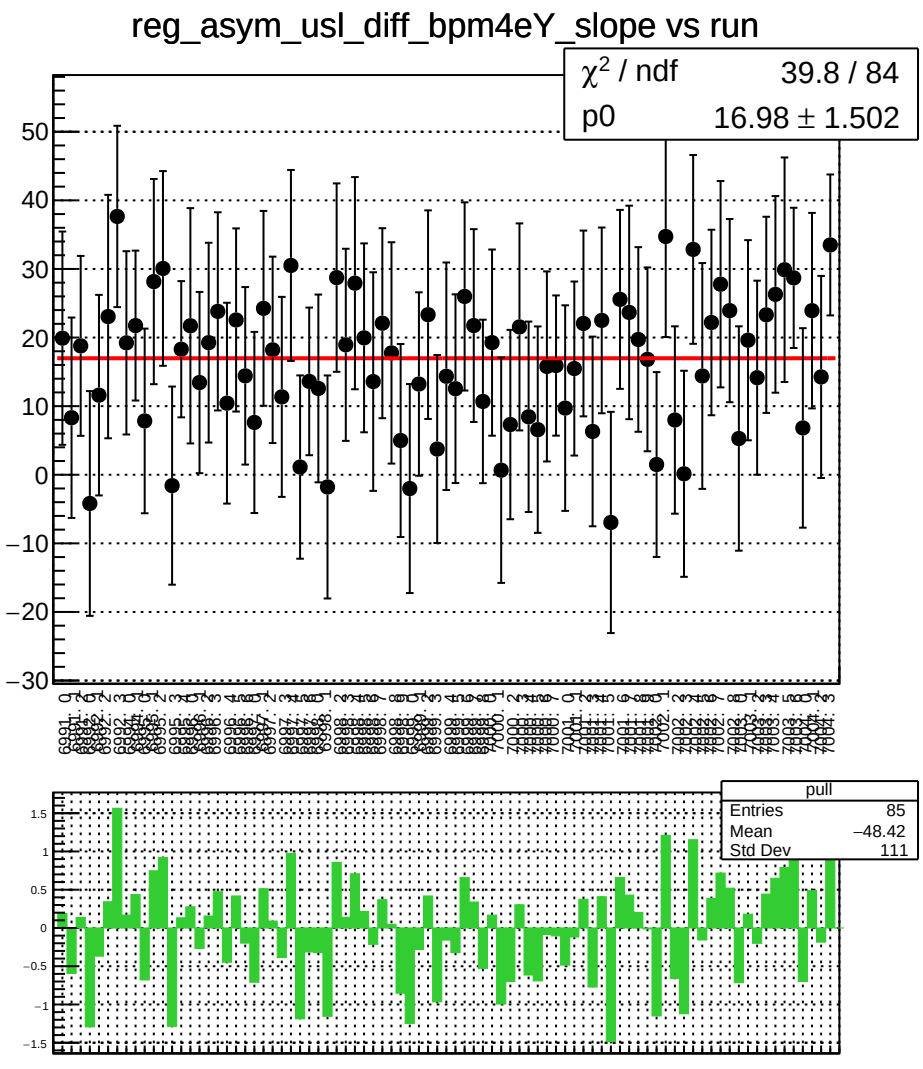

pull1D
Entries 85
Mean −0.01373
Std Dev 0.6151
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

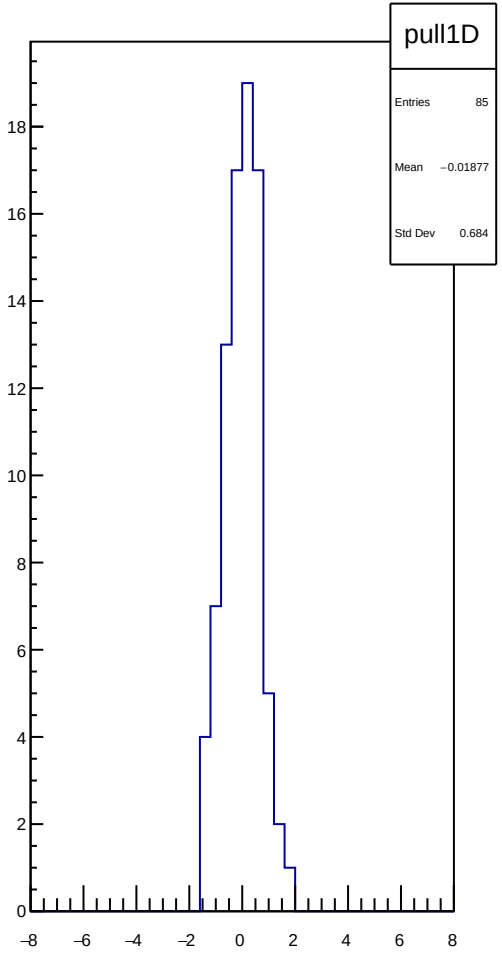

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 38.26 / 84
p0 1.441 ± 1.424
pull
Entries 85
Mean −24.31
Std Dev 85.53

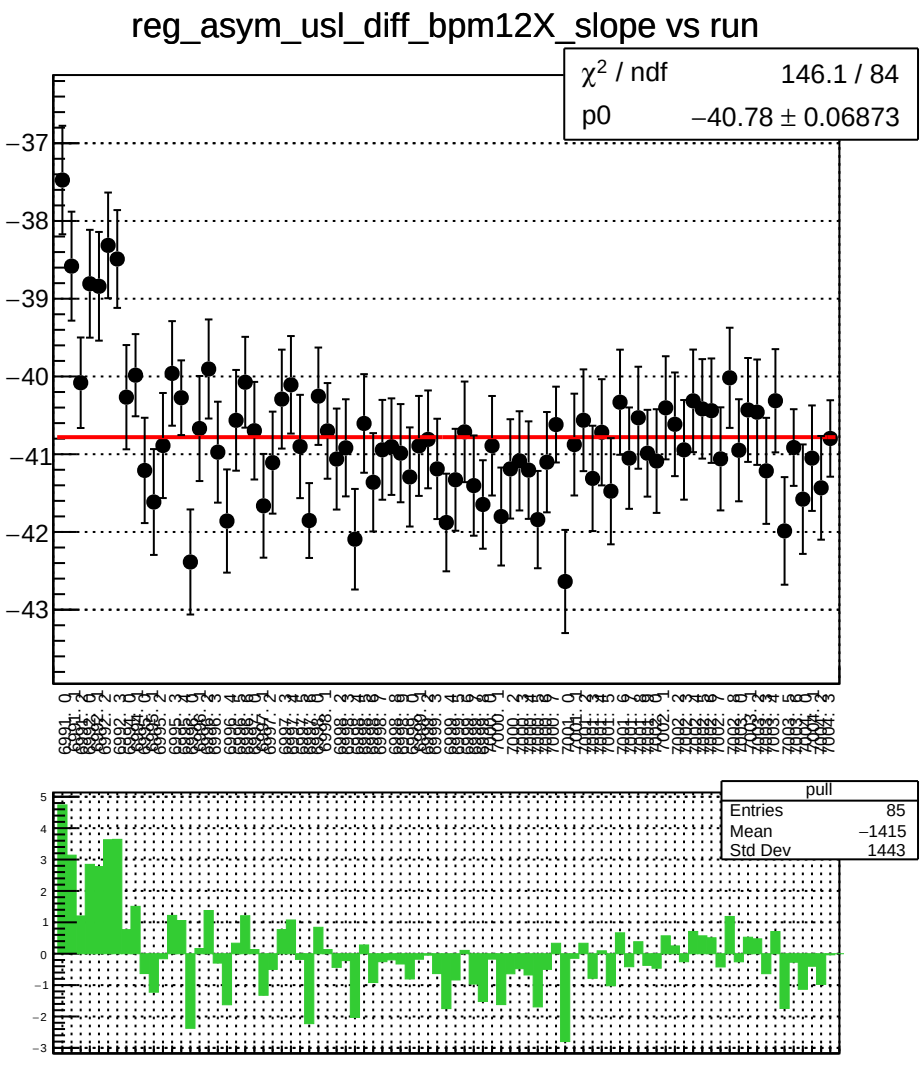

pull1D
Entries 85
Mean 0.02219
Std Dev 0.6706

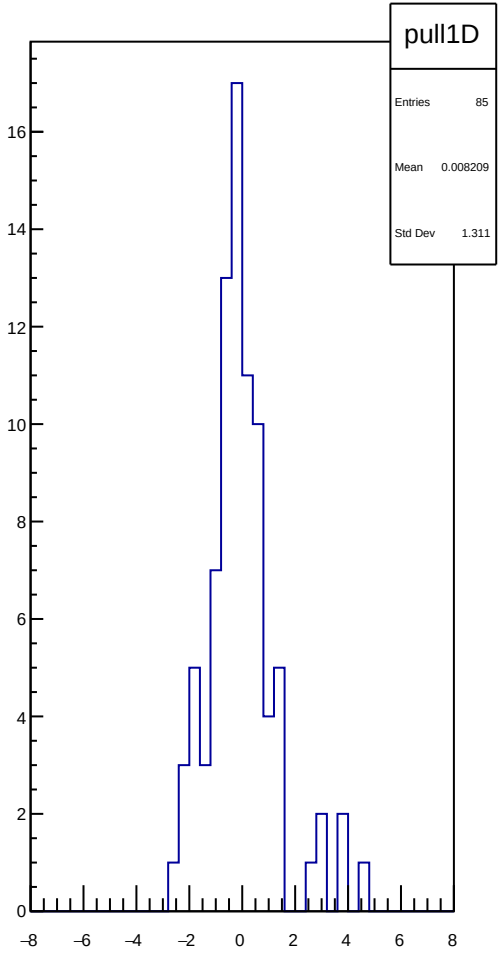

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 33.95 / 84
p0 18.58 ± 1.912
pull
Entries 85
Mean 39.93
Std Dev 60.15

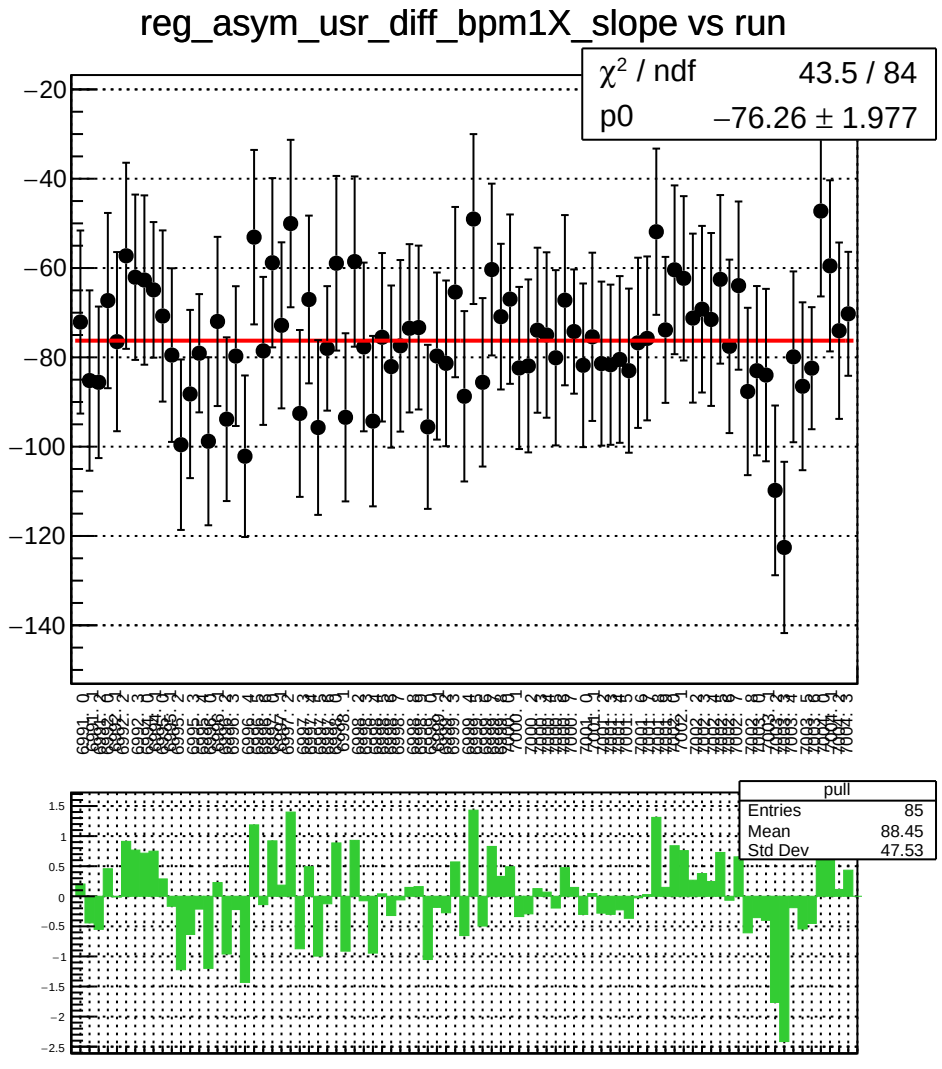

pull1D
Entries 85
Mean 0.01559
Std Dev 0.6318

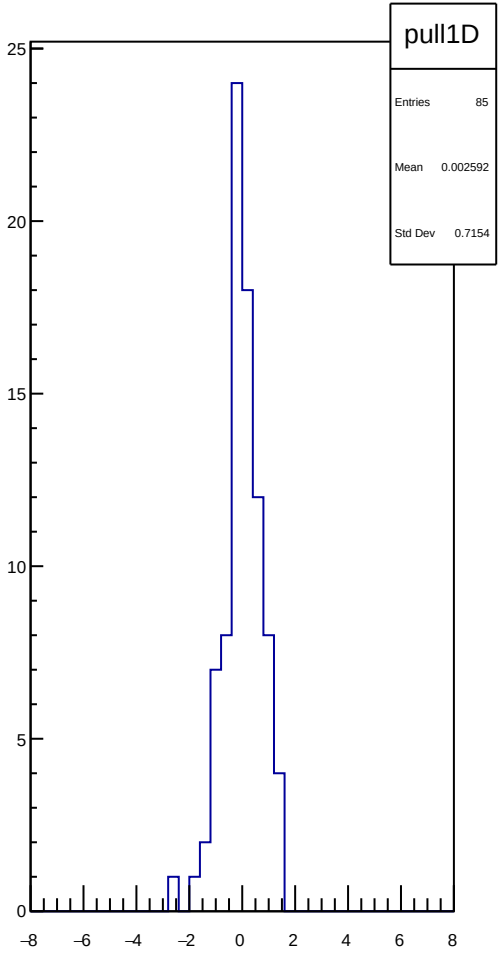

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 39.8 / 84
p0 16.98 ± 1.502
pull
Entries 85
Mean −48.42
Std Dev 111

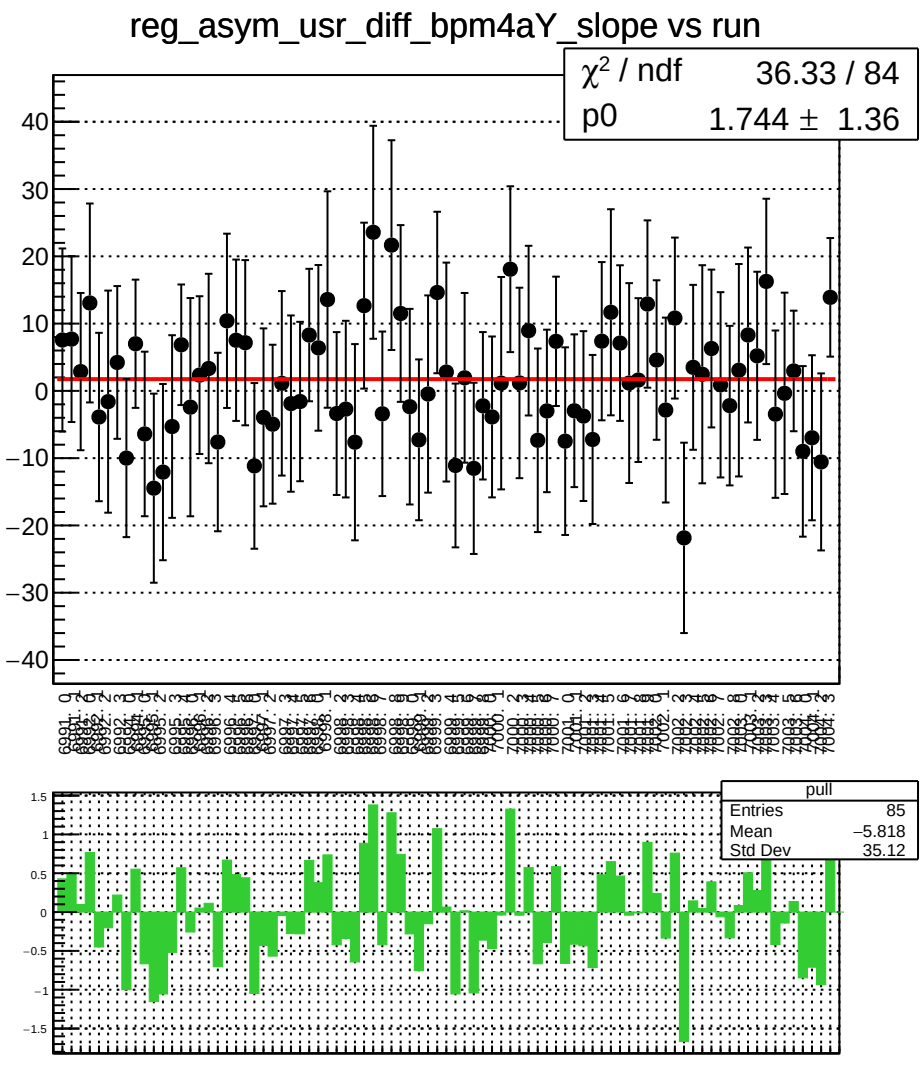

pull1D
Entries 85
Mean −0.01877
Std Dev 0.684

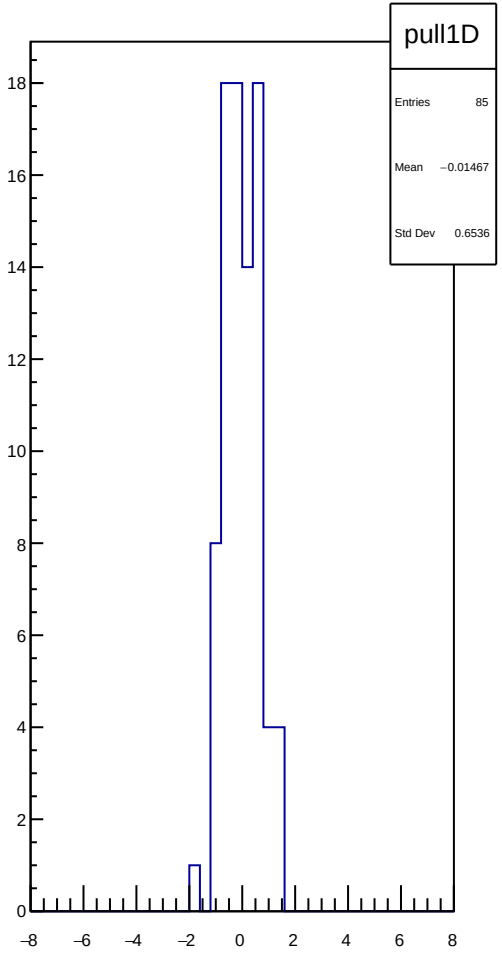

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 146.1 / 84
p0 −40.78 ± 0.06873
pull
Entries 85
Mean −1415
Std Dev 1443

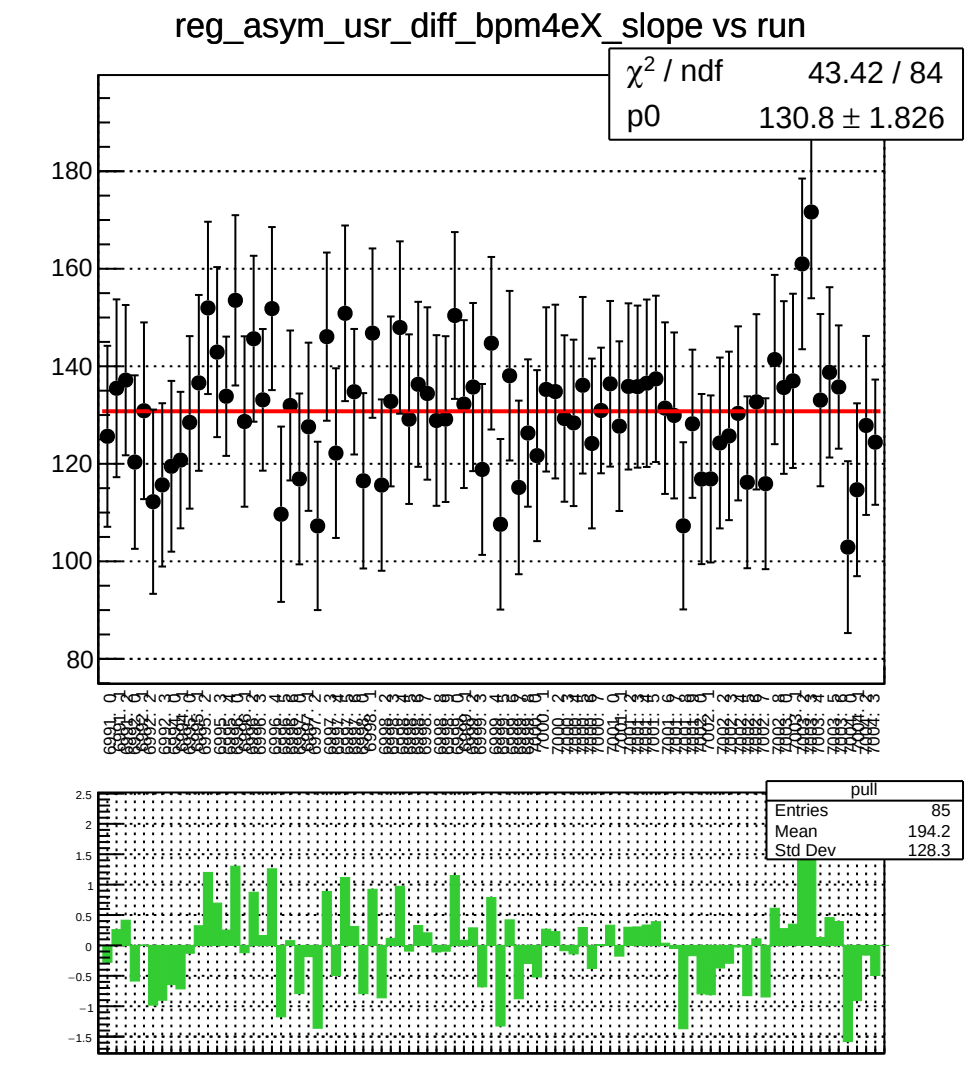

pull1D
Entries 85
Mean 0.008209
Std Dev 1.311

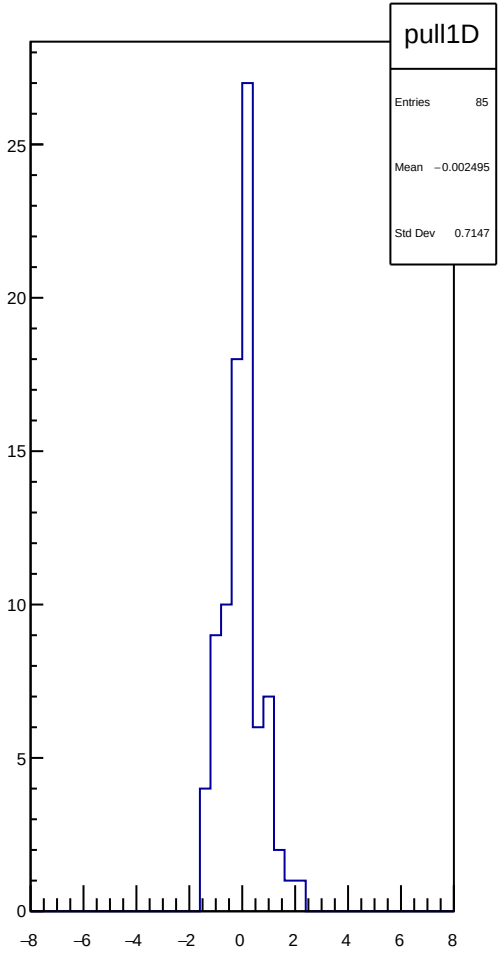

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 43.5 / 84
p0 −76.26 ± 1.977
pull
Entries 85
Mean 88.45
Std Dev 47.53

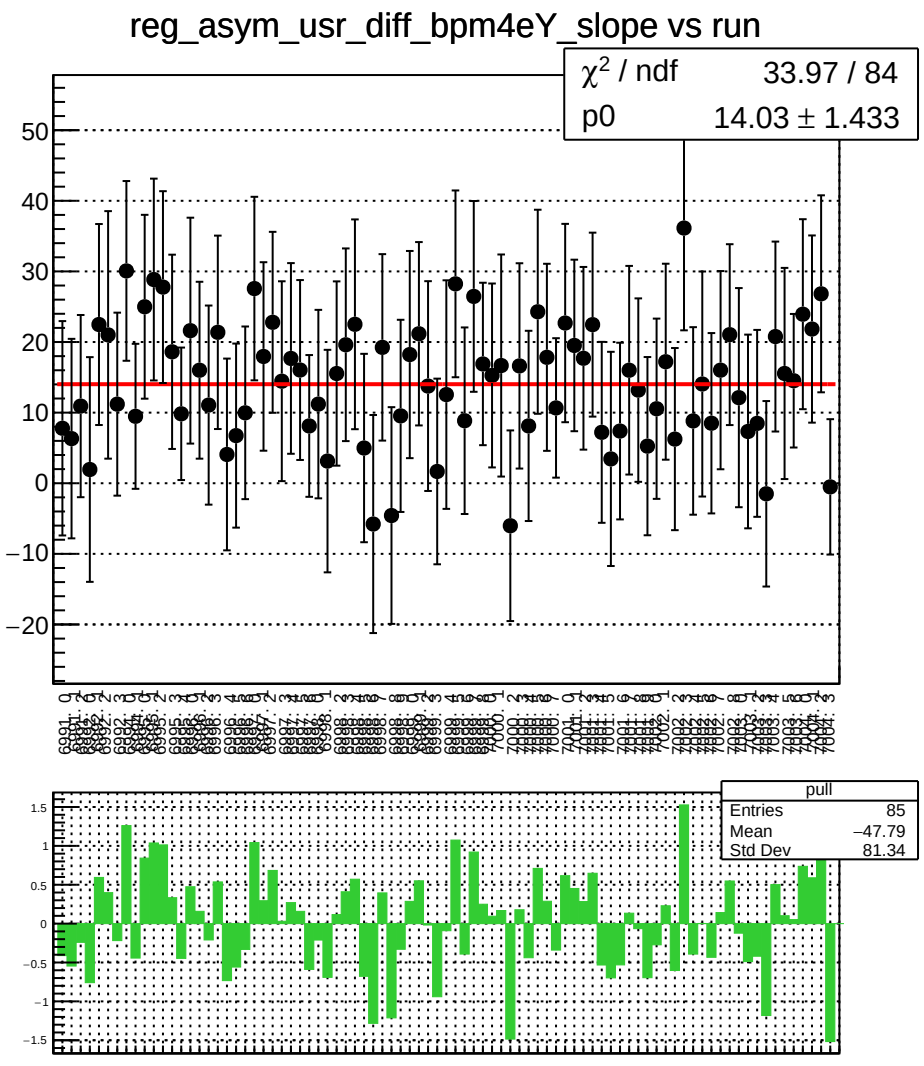

pull1D
Entries 85
Mean 0.002592
Std Dev 0.7154

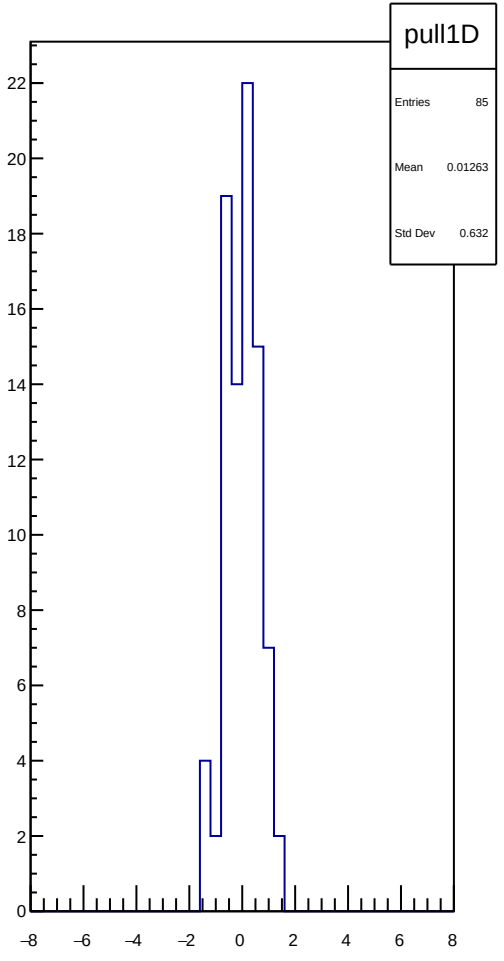

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 36.33 / 84
p0 1.744 ± 1.36
pull
Entries 85
Mean −5.818
Std Dev 35.12

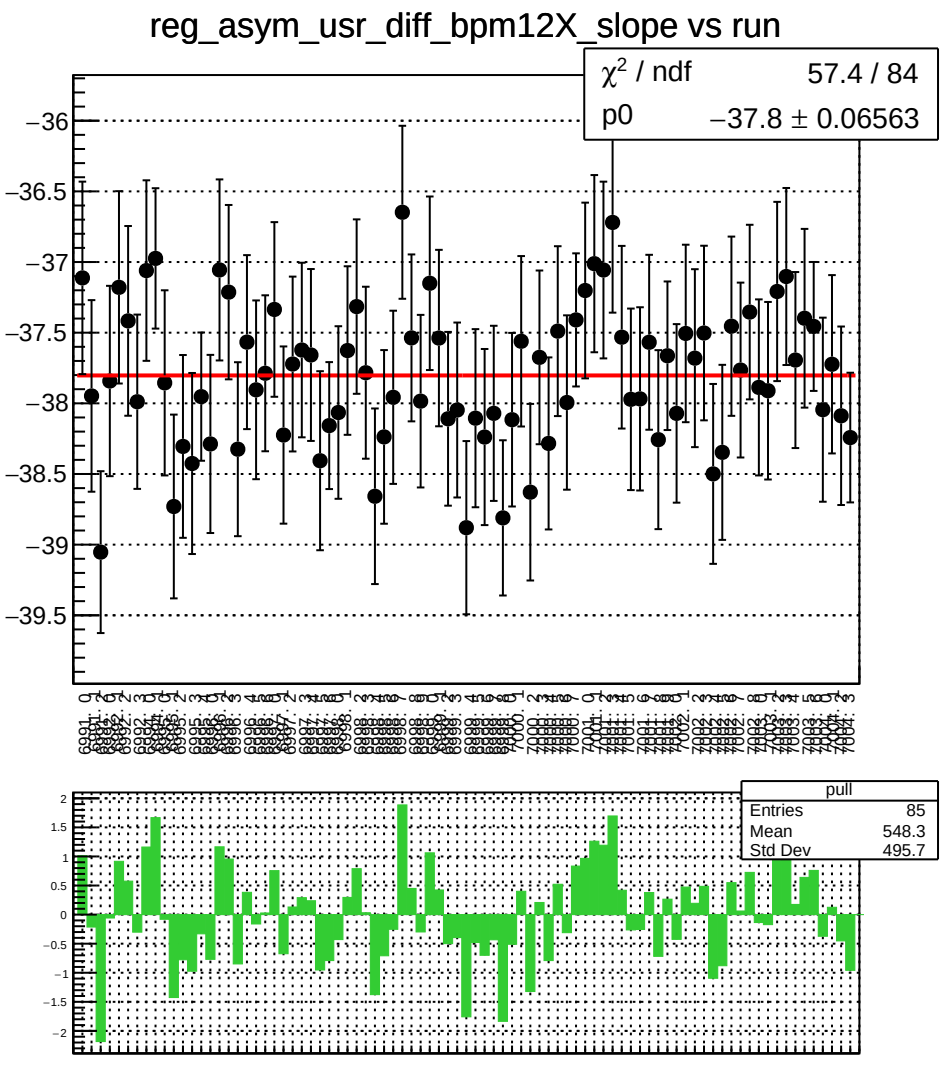

pull1D
Entries 85
Mean −0.01467
Std Dev 0.6536

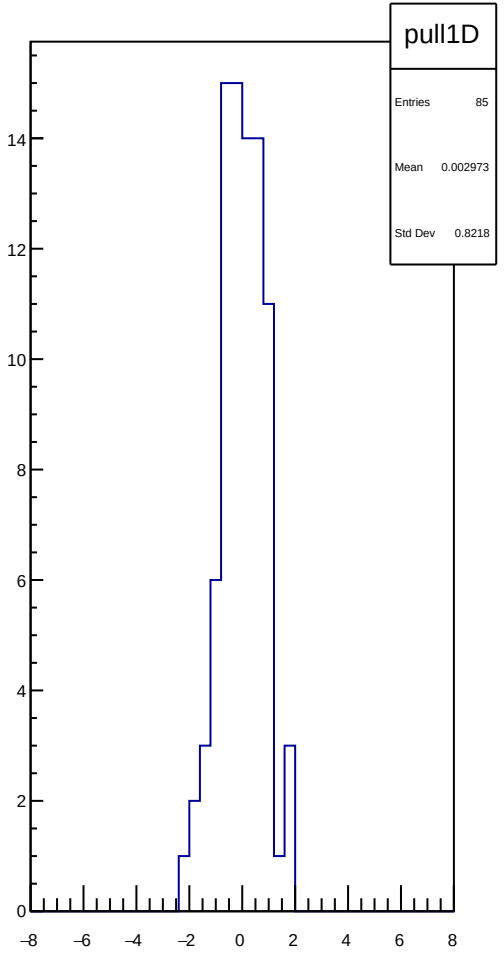

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 43.42 / 84
p0 130.8 ± 1.826
pull
Entries 85
Mean 194.2
Std Dev 128.3

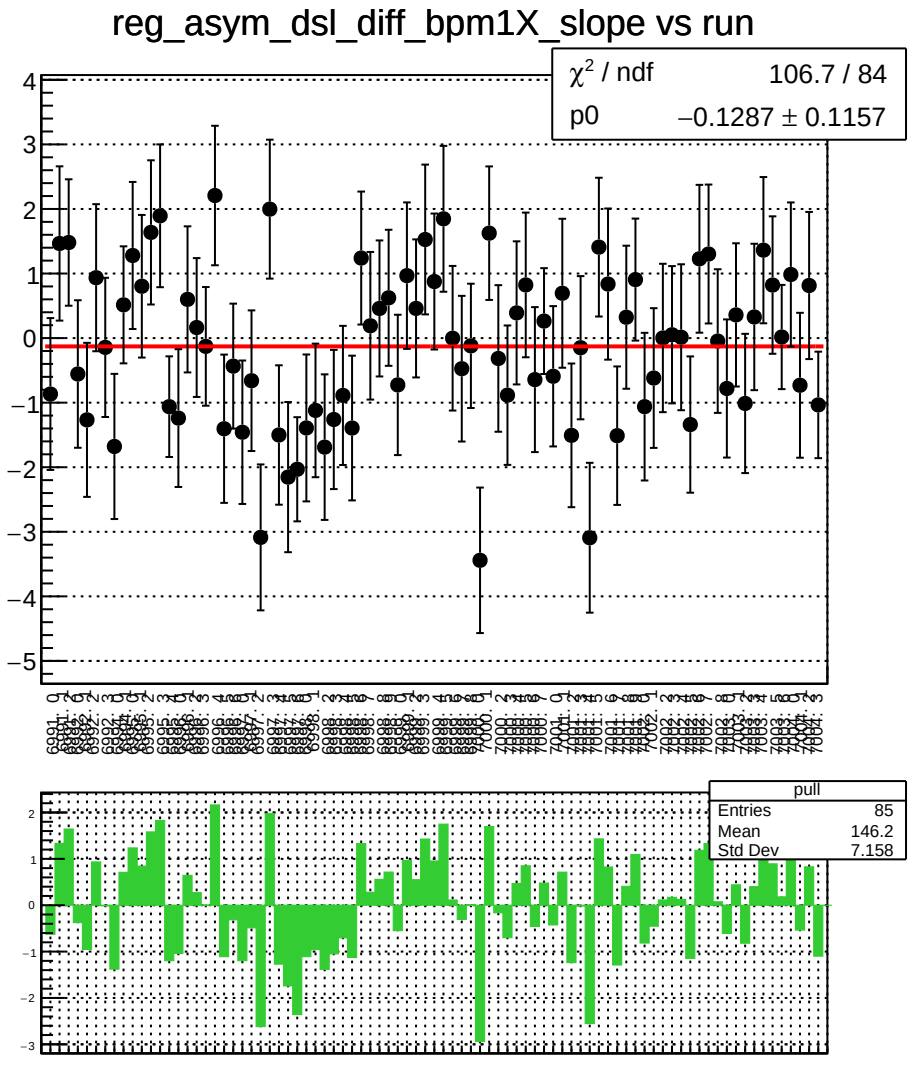

pull1D
Entries 85
Mean −0.002495
Std Dev 0.7147

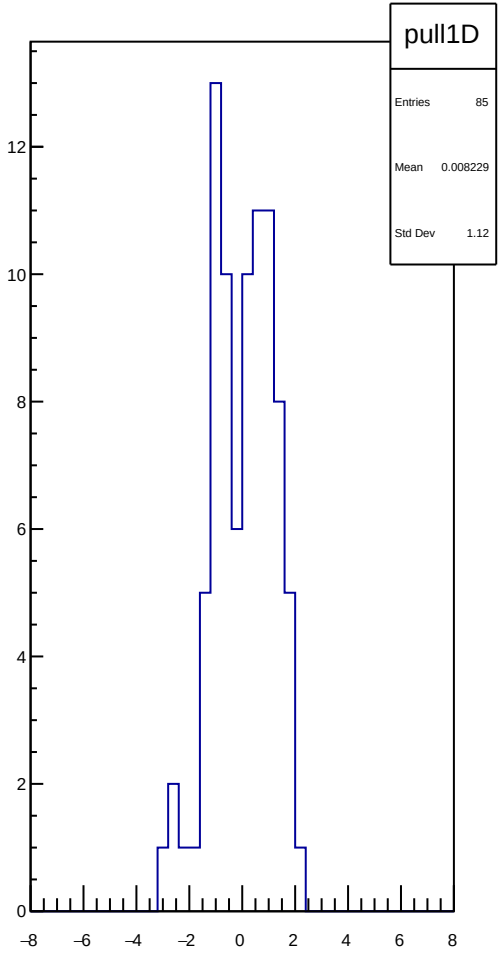

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 33.97 / 84
p0 14.03 ± 1.433
pull
Entries 85
Mean −47.79
Std Dev 81.34

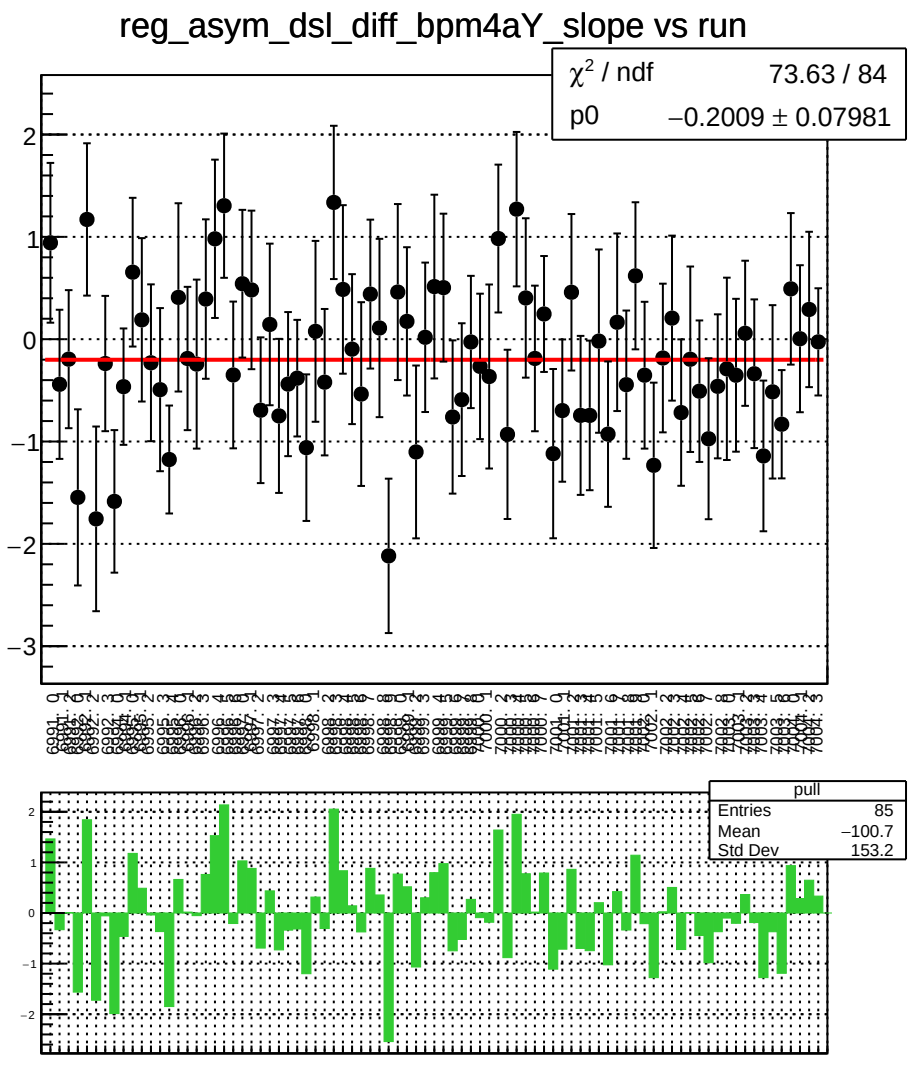

pull1D
Entries 85
Mean 0.01263
Std Dev 0.632

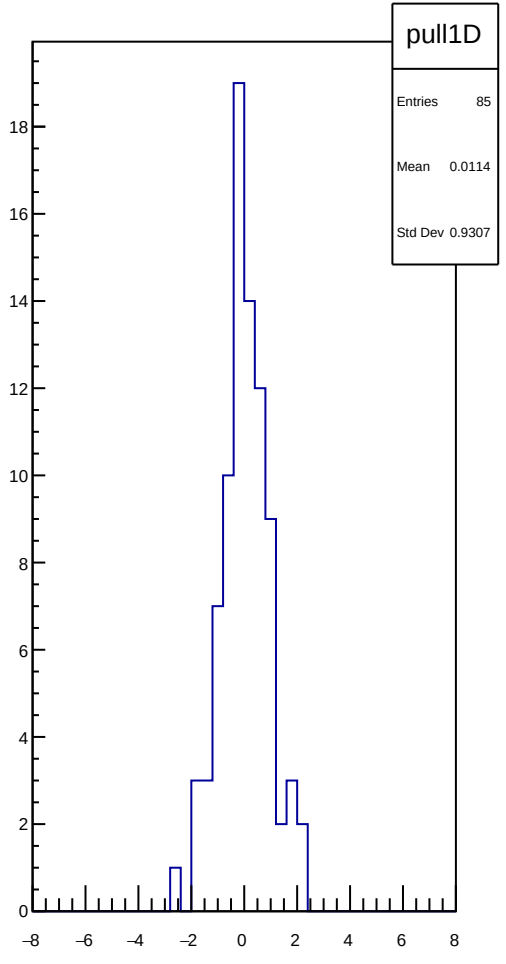

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 57.4 / 84
p0 −37.8 ± 0.06563
−36
−36.5
−37
−37.5
−38
−38.5
−39
−39.5
pull
Entries 85
Mean 548.3
Std Dev 495.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

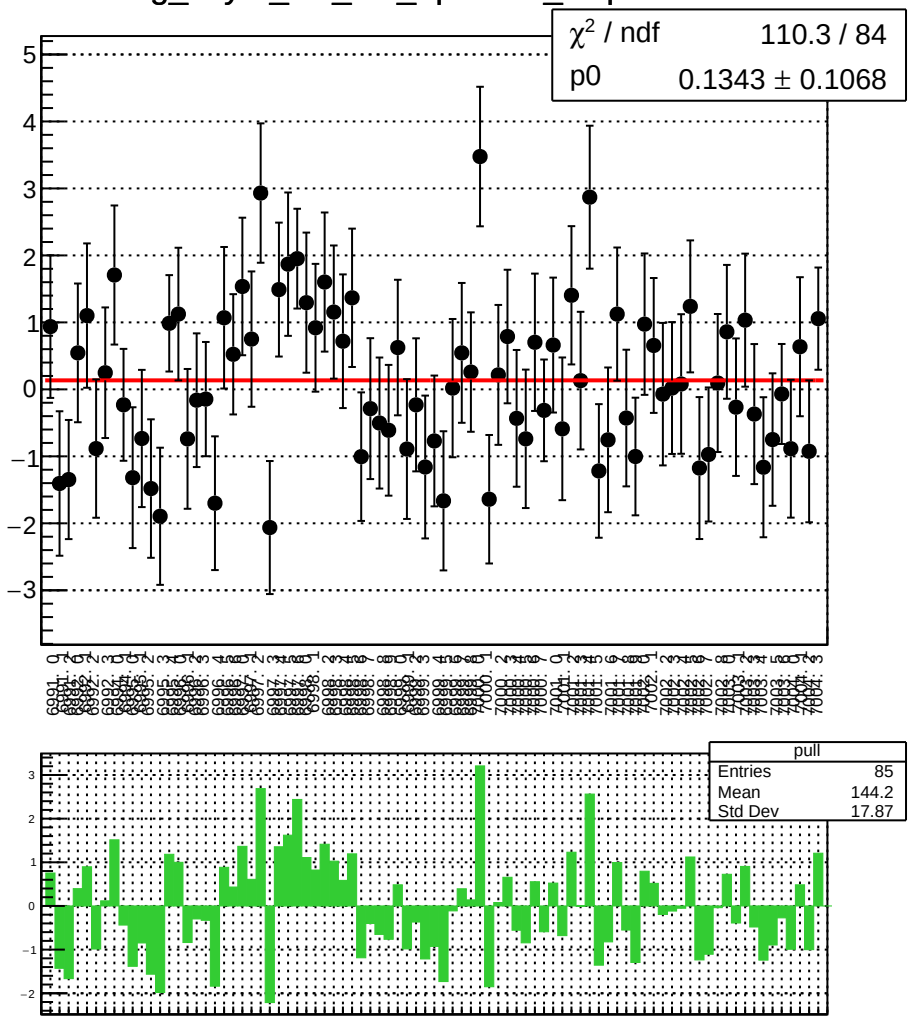

pull1D
Entries 85
Mean 0.002973
Std Dev 0.8218
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

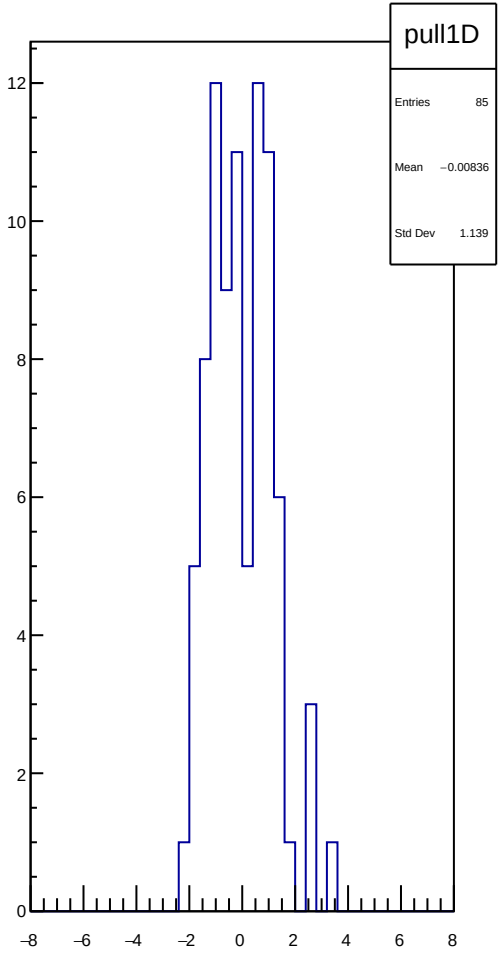

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 106.7 / 84
p0 −0.1287 ± 0.1157
pull
Entries 85
Mean 146.2
Std Dev 7.158

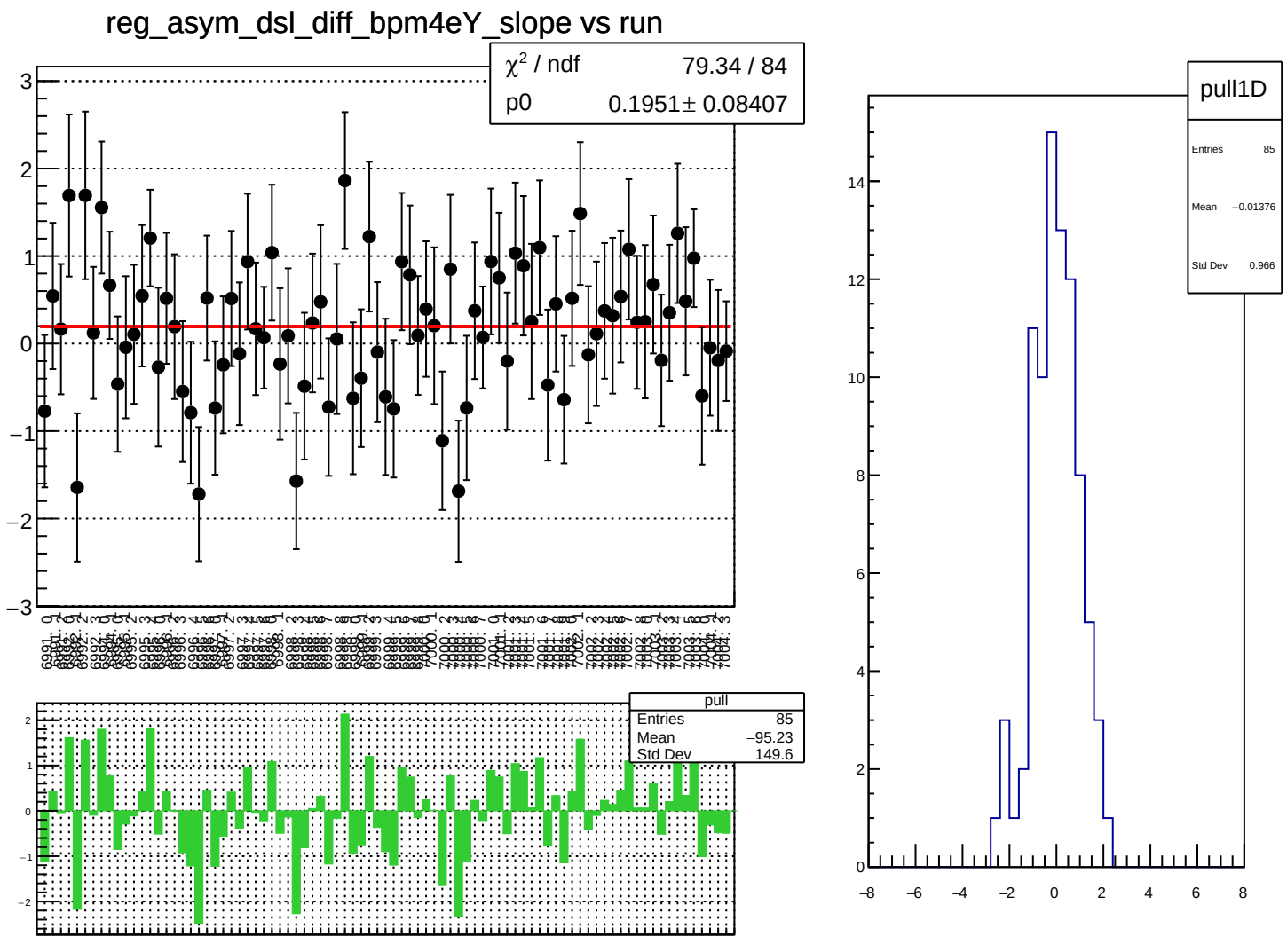

pull1D
Entries 85
Mean 0.008229
Std Dev 1.12

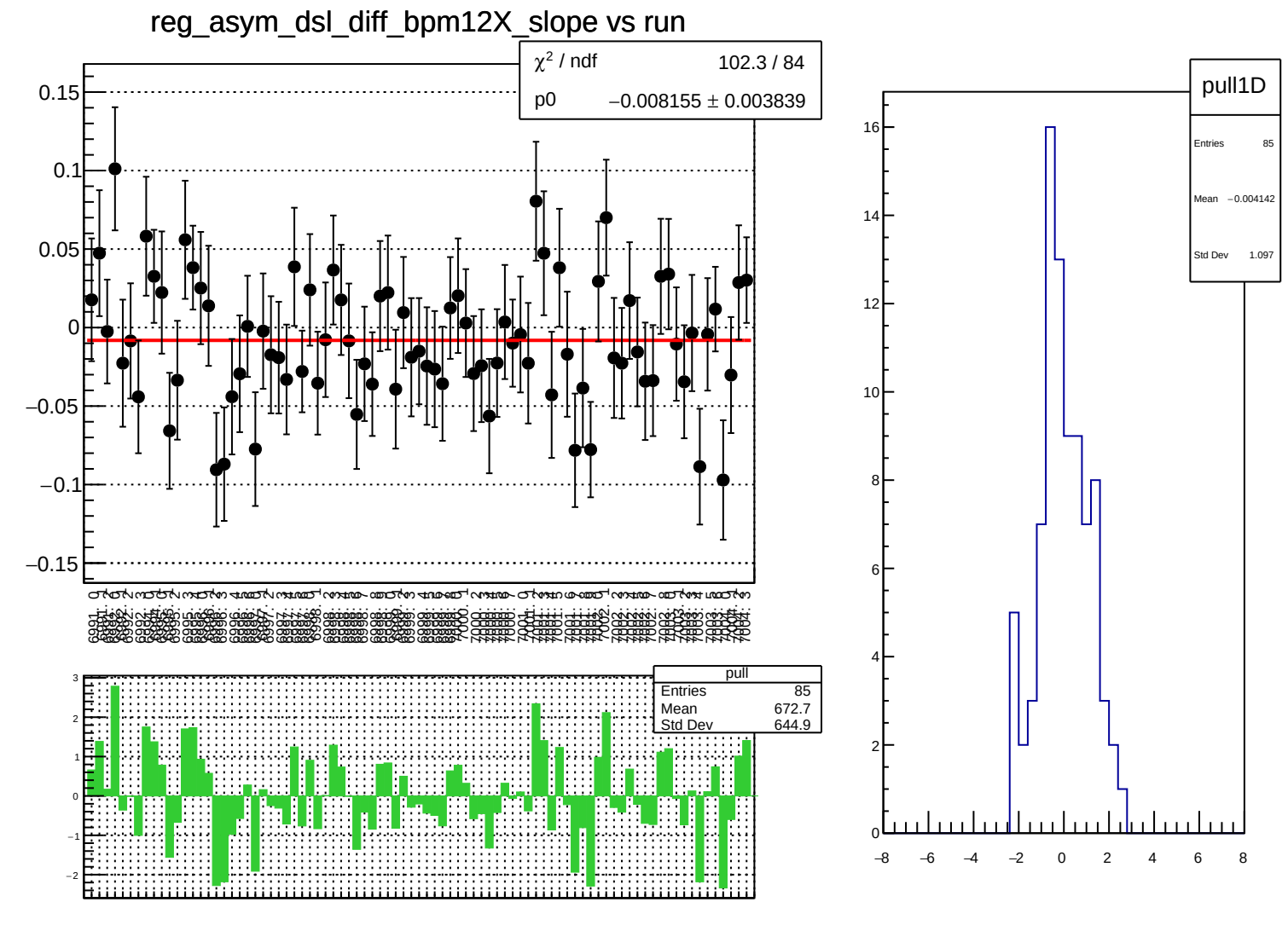

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 73.63 / 84
p0 −0.2009 ± 0.07981
pull
Entries 85
Mean −100.7
Std Dev 153.2

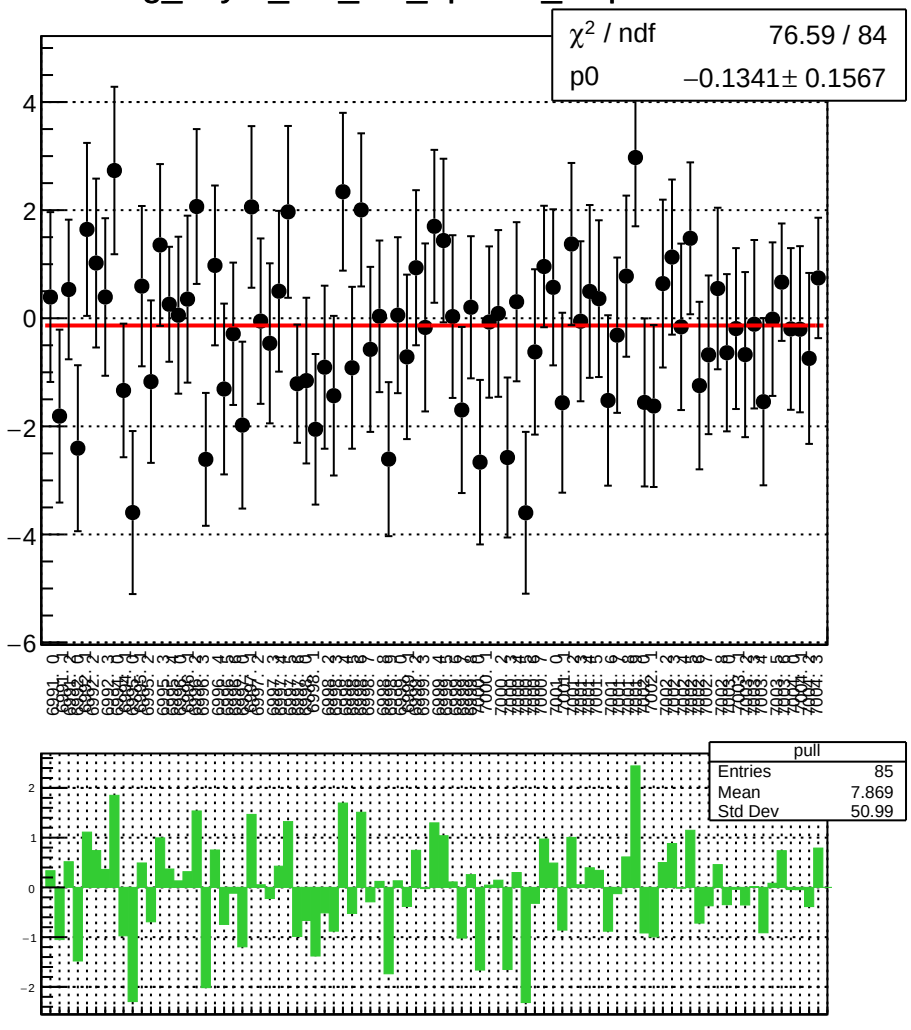

pull1D
Entries 85
Mean 0.0114
Std Dev 0.9307

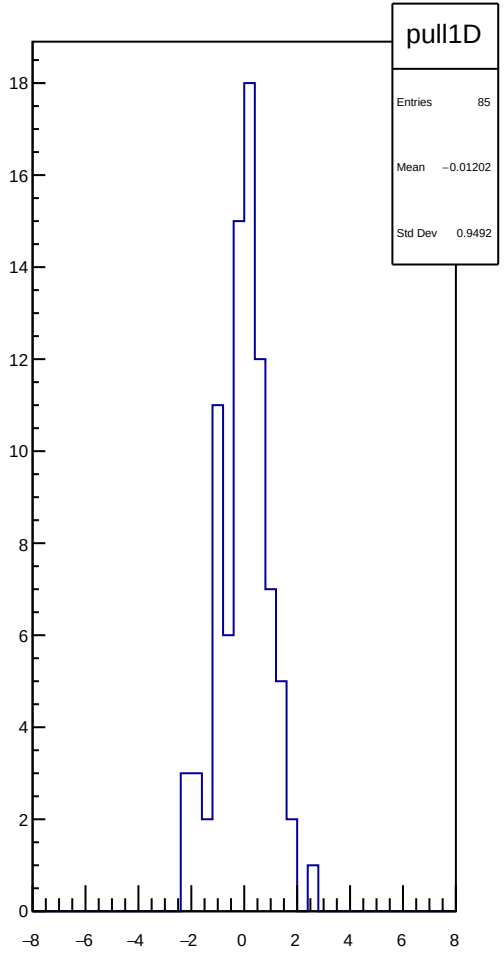

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 110.3 / 84
p0 0.1343 ± 0.1068
pull
Entries 85
Mean 144.2
Std Dev 17.87

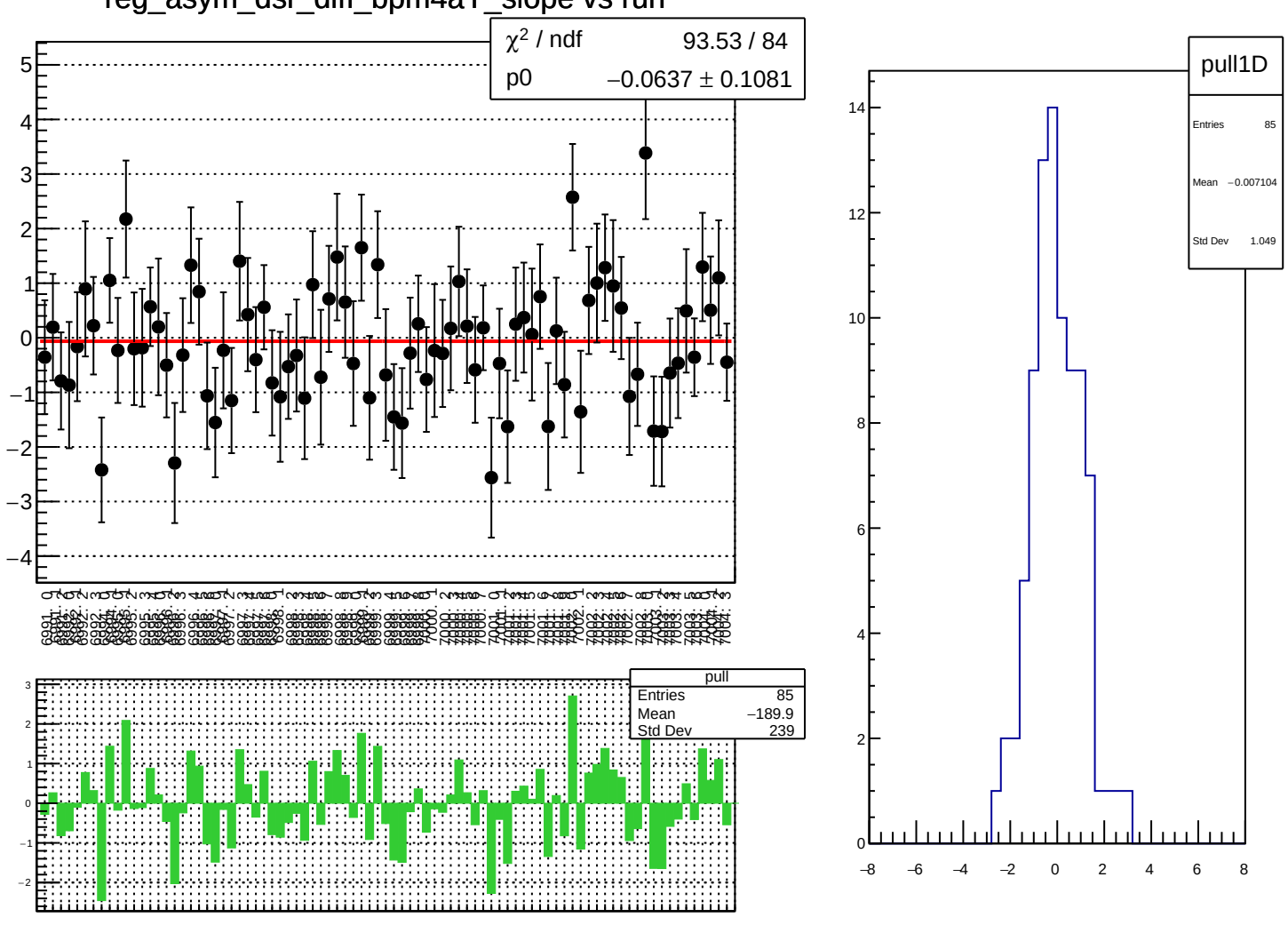

pull1D
Entries 85
Mean −0.00836
Std Dev 1.139

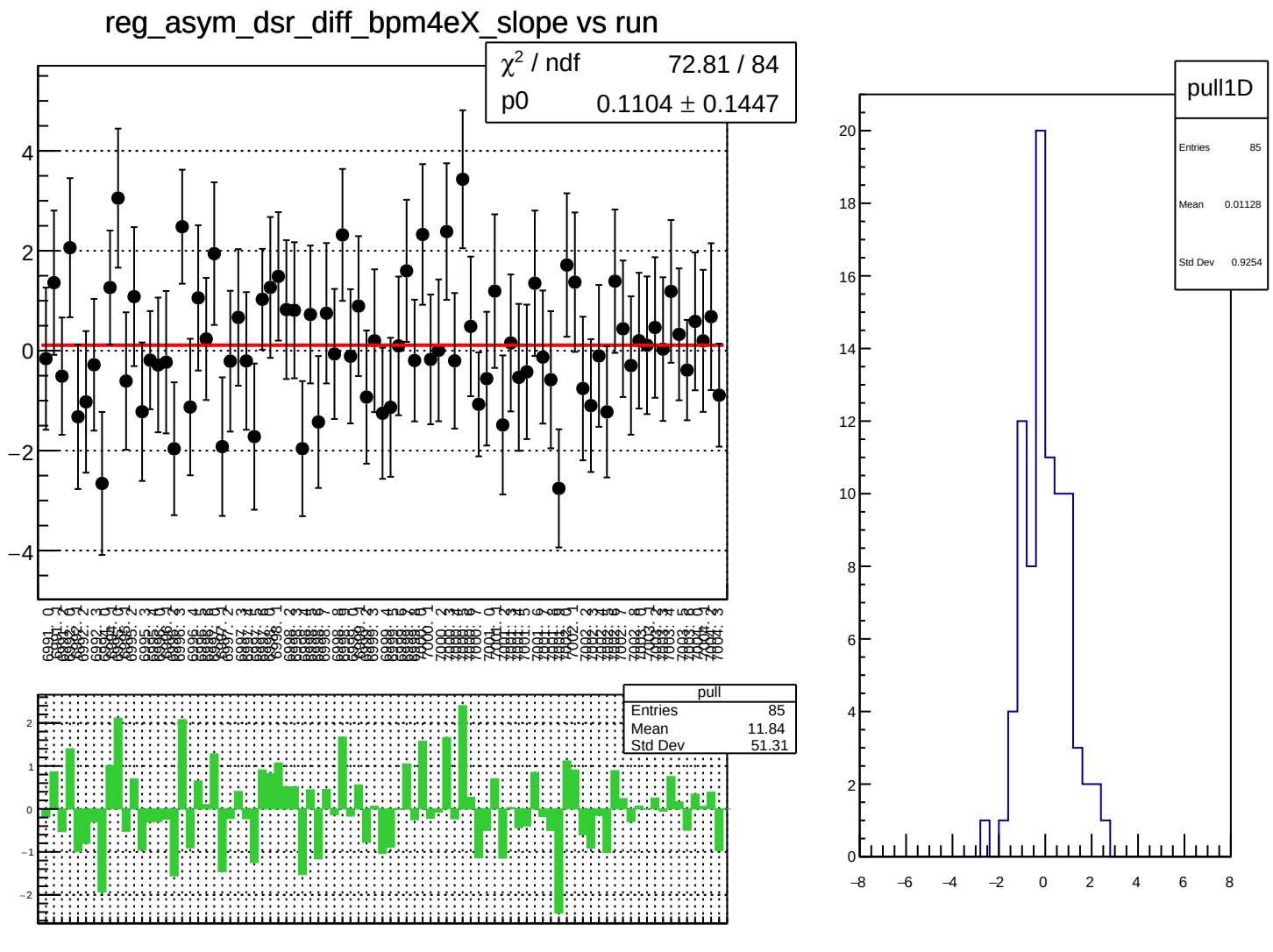

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 79.34 / 84
p0 0.1951± 0.08407
pull
Entries 85
Mean −95.23
Std Dev 149.6
pull1D
Entries 85
Mean −0.01376
Std Dev 0.966

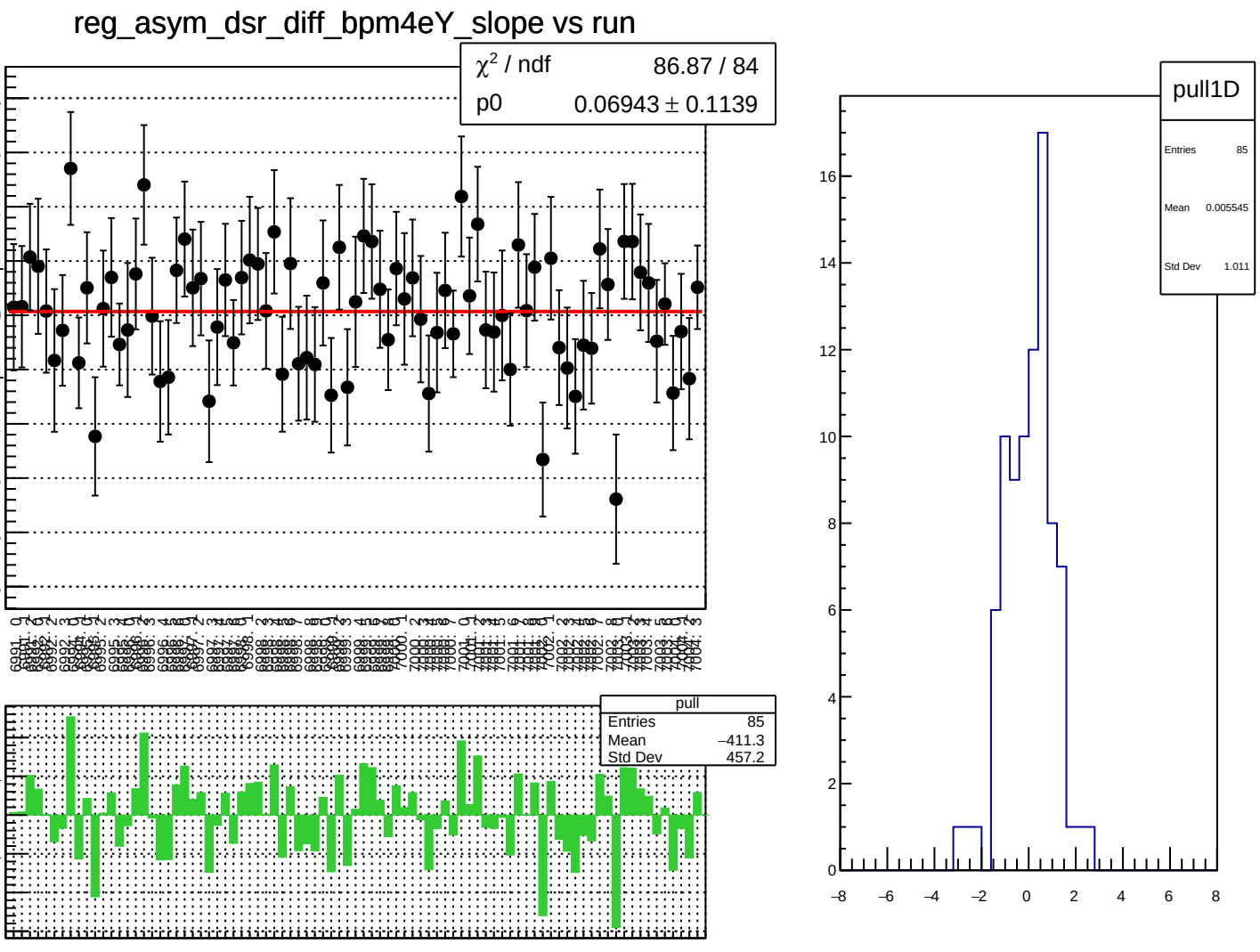

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 102.3 / 84
p0 −0.008155 ± 0.003839
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull
Entries 85
Mean 672.7
Std Dev 644.9
3
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.004142
Std Dev 1.097
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

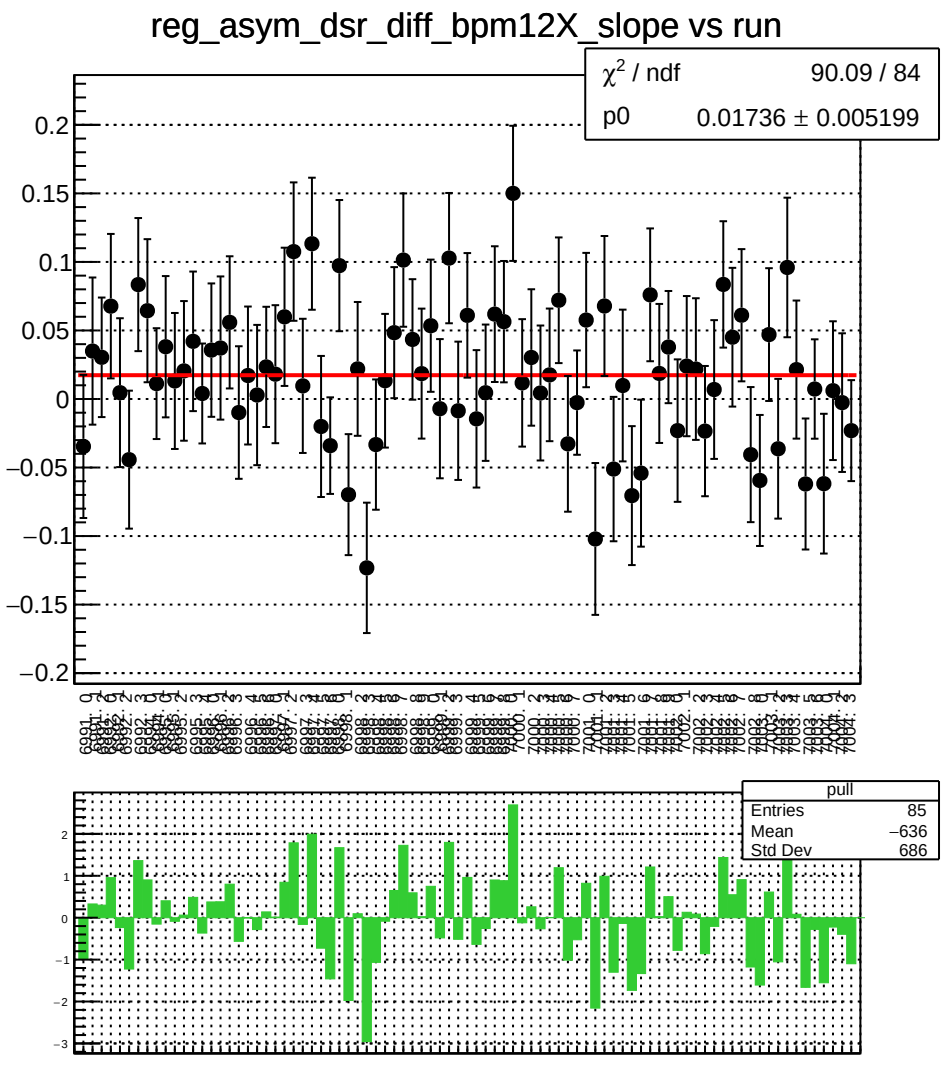

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 76.59 / 84
p0 −0.1341± 0.1567
pull
Entries 85
Mean 7.869
Std Dev 50.99

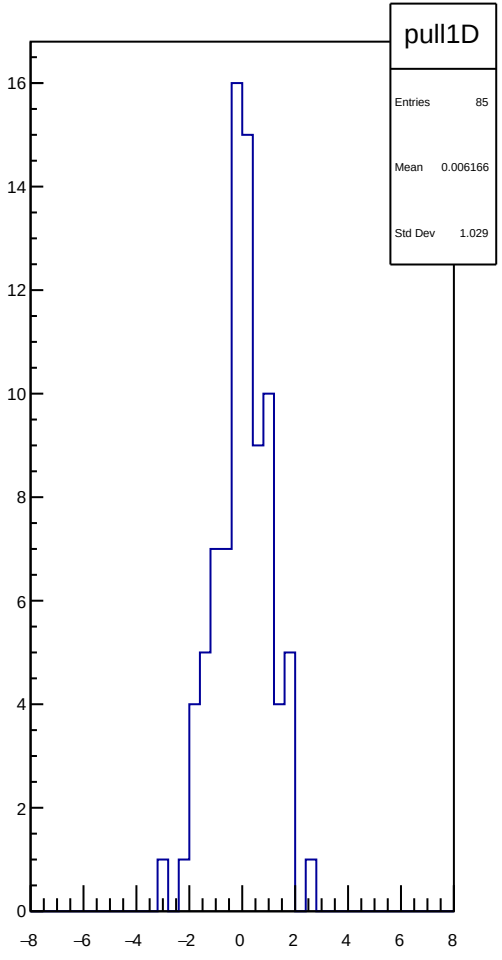

pull1D
Entries 85
Mean −0.01202
Std Dev 0.9492

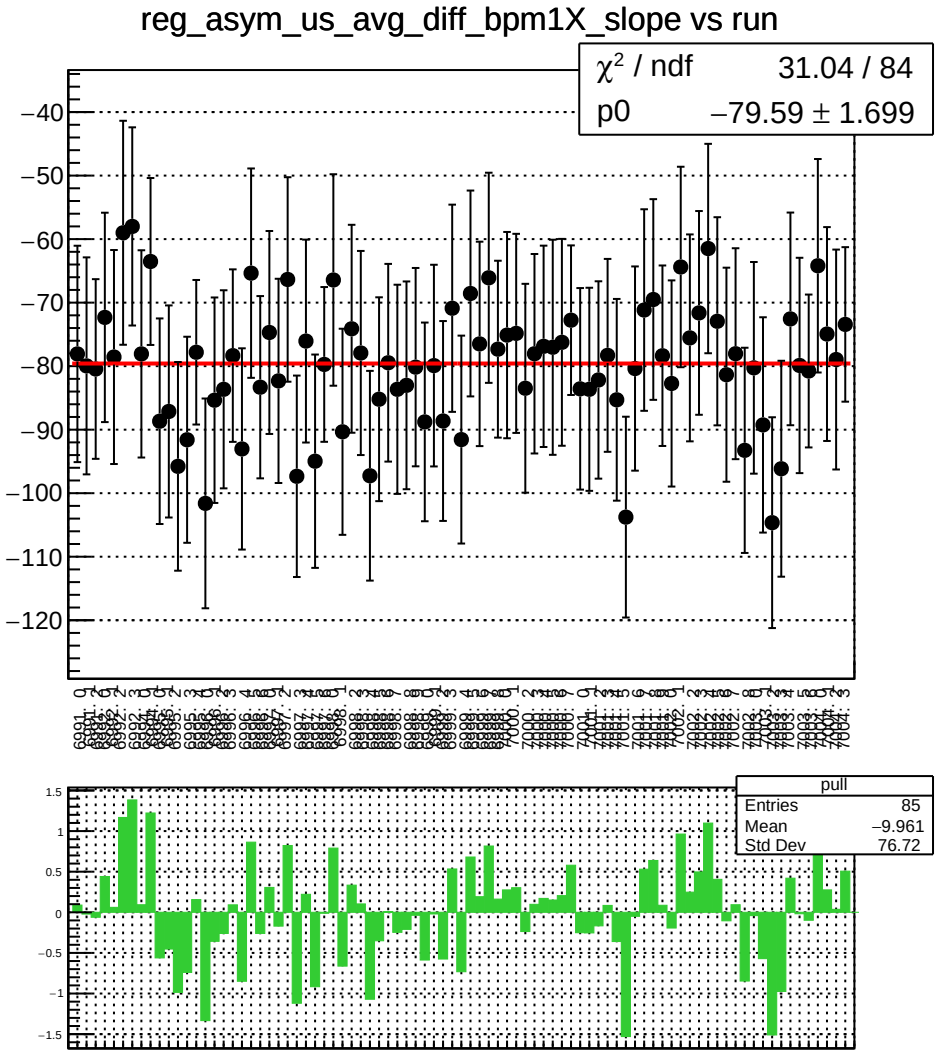

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 93.53 / 84
p0 −0.0637 ± 0.1081
pull
Entries 85
Mean −189.9
Std Dev 239
pull1D
Entries 85
Mean −0.007104
Std Dev 1.049

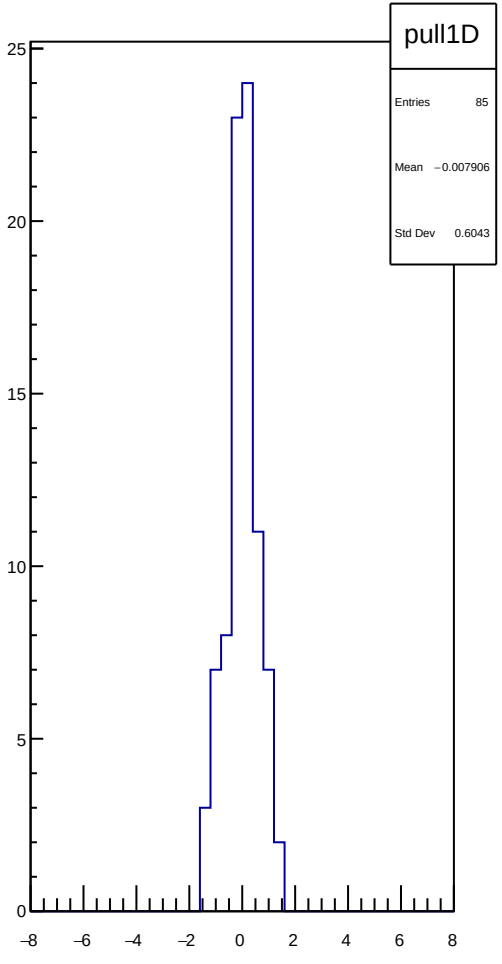

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 72.81 / 84
p0 0.1104 ± 0.1447
pull
Entries 85
Mean 11.84
Std Dev 51.31
pull1D
Entries 85
Mean 0.01128
Std Dev 0.9254

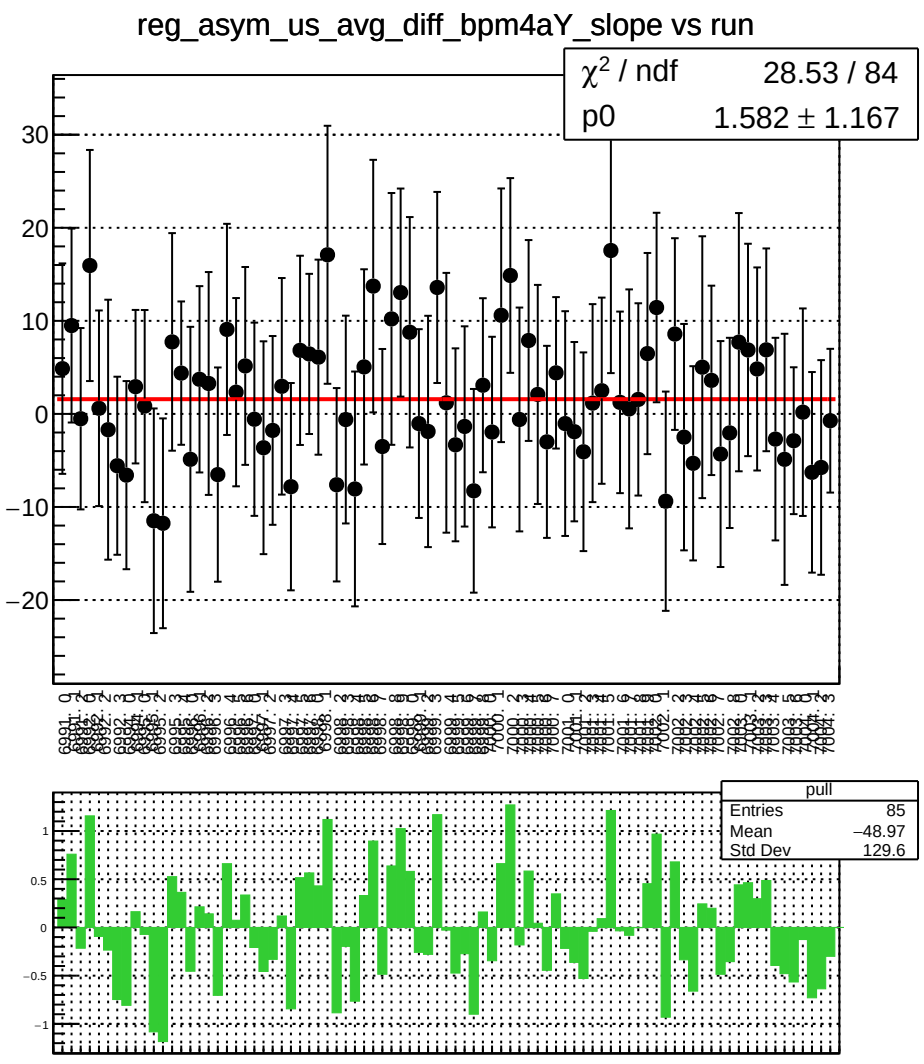

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 86.87 / 84
p0 0.06943 ± 0.1139
pull
Entries 85
Mean −411.3
Std Dev 457.2
pull1D
Entries 85
Mean 0.005545
Std Dev 1.011

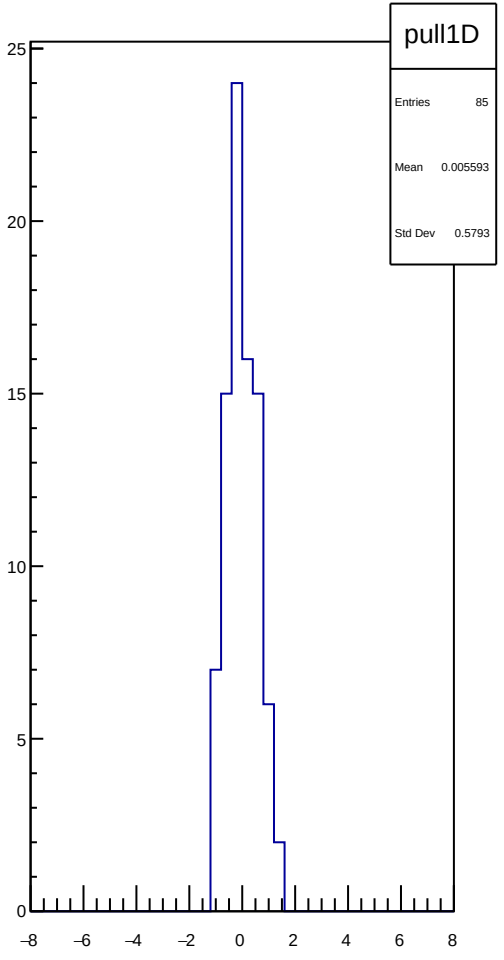

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 90.09 / 84
p0 0.01736 ± 0.005199
pull
Entries 85
Mean −636
Std Dev 686

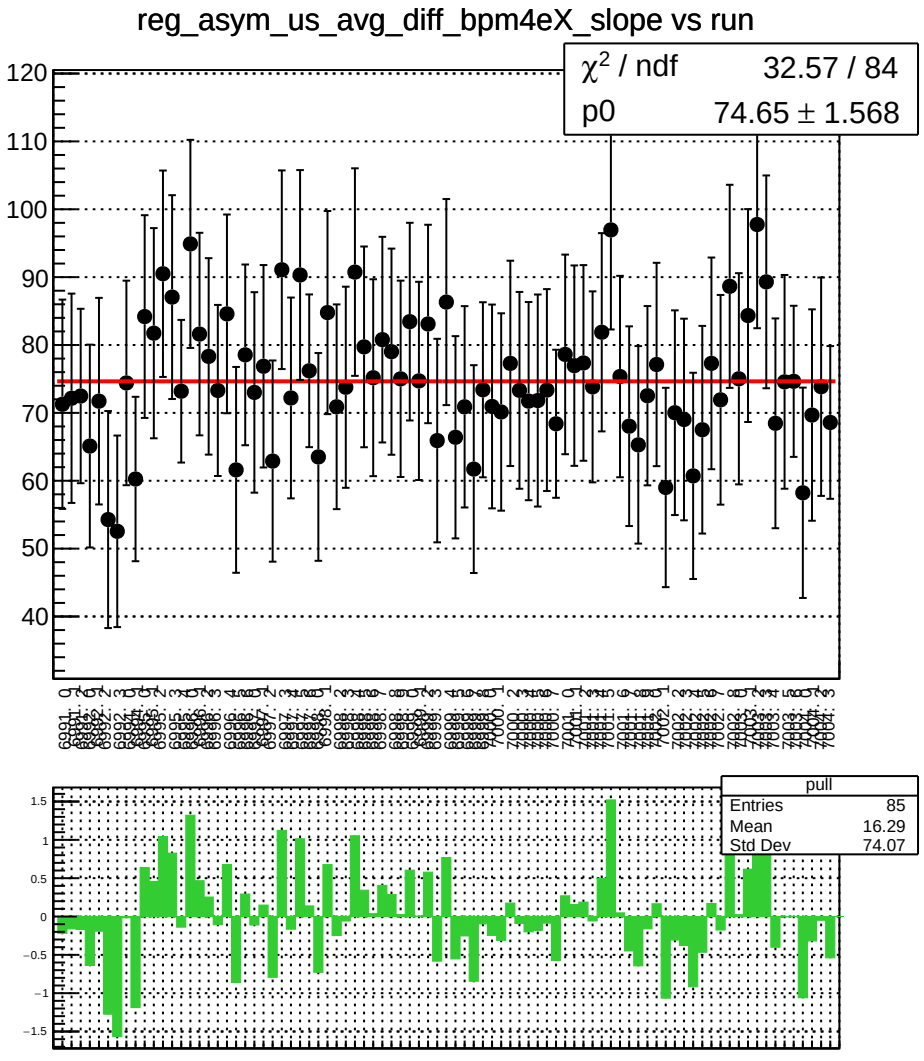

pull1D
Entries 85
Mean 0.006166
Std Dev 1.029

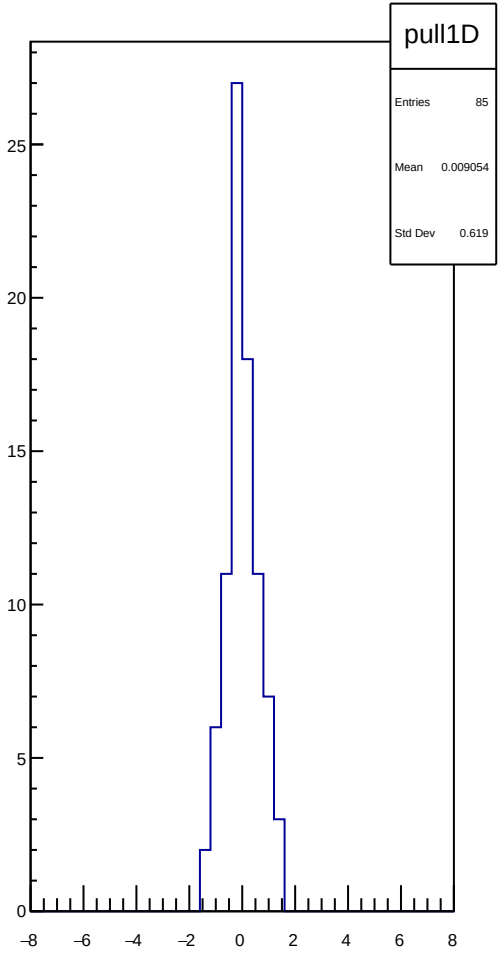

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 31.04 / 84
p0 −79.59 ± 1.699
pull
Entries 85
Mean −9.961
Std Dev 76.72

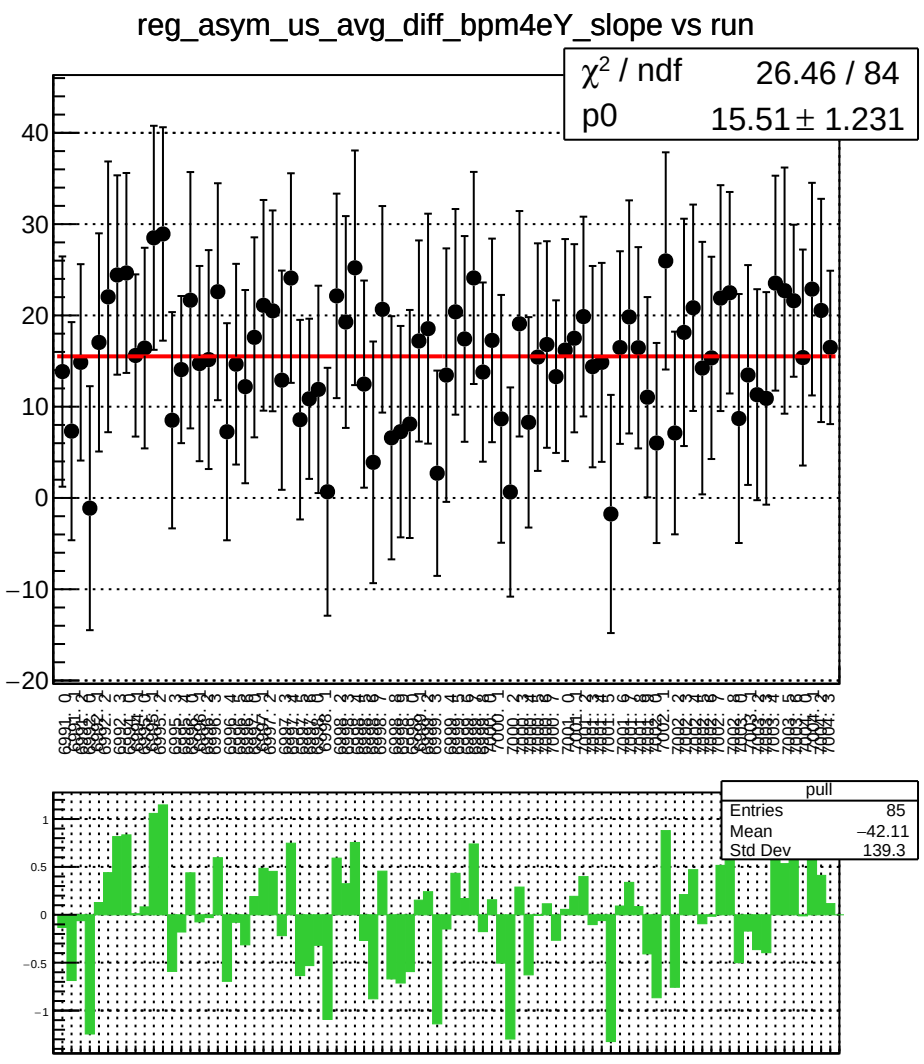

pull1D
Entries 85
Mean −0.007906
Std Dev 0.6043

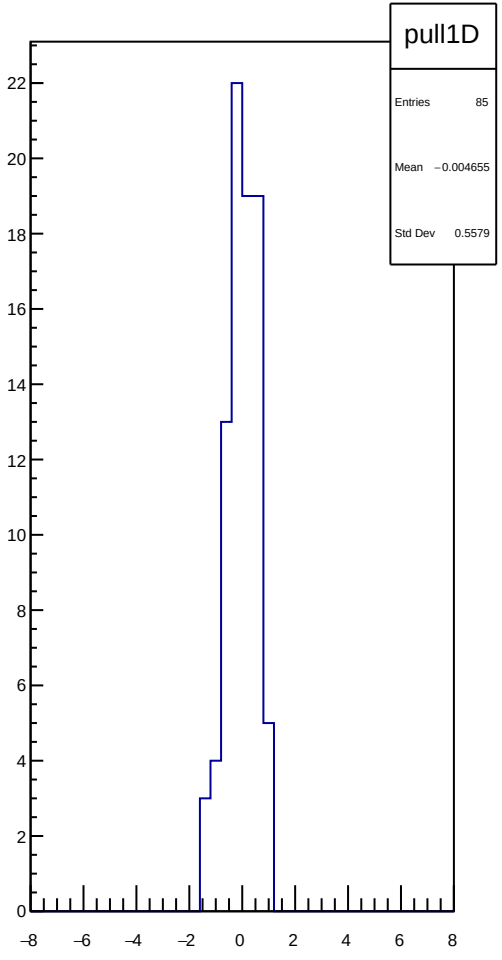

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 28.53 / 84
p0 1.582 ± 1.167
pull
Entries 85
Mean −48.97
Std Dev 129.6

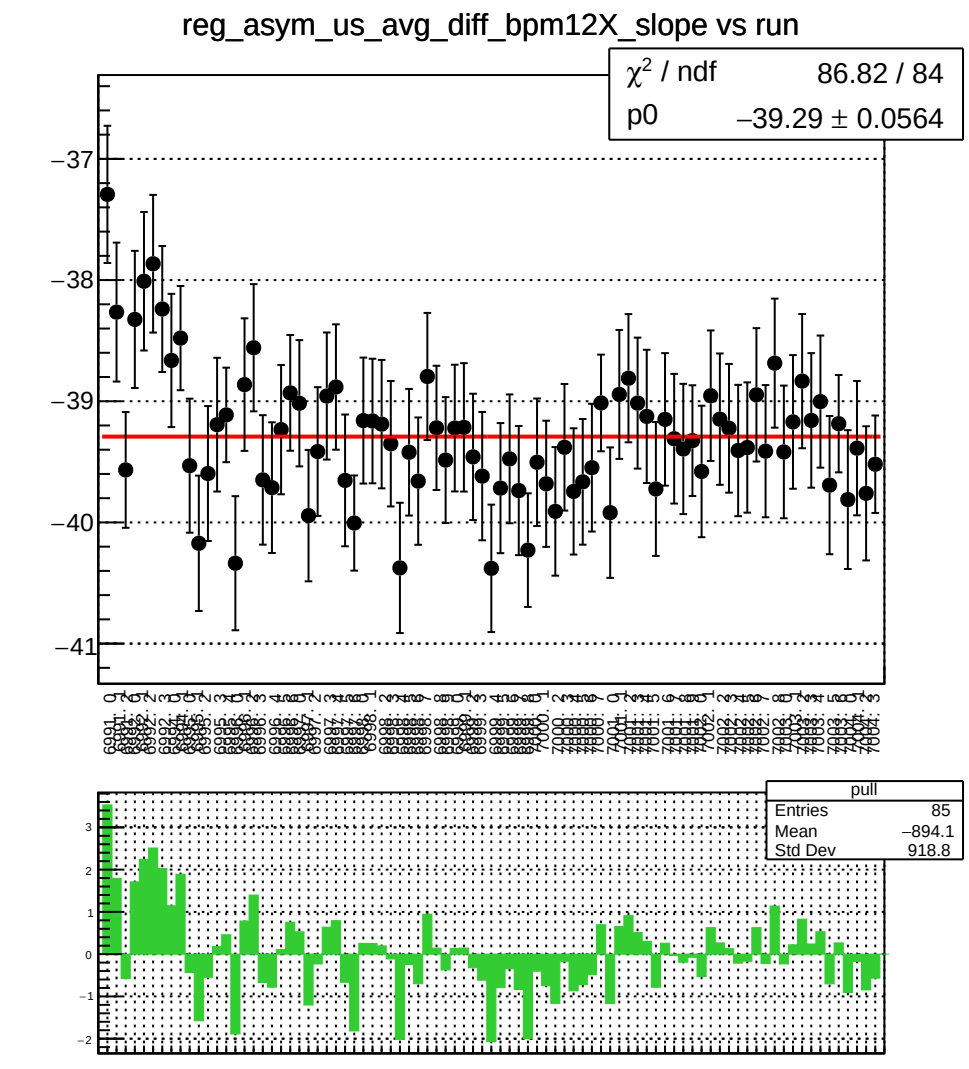

pull1D
Entries 85
Mean 0.005593
Std Dev 0.5793

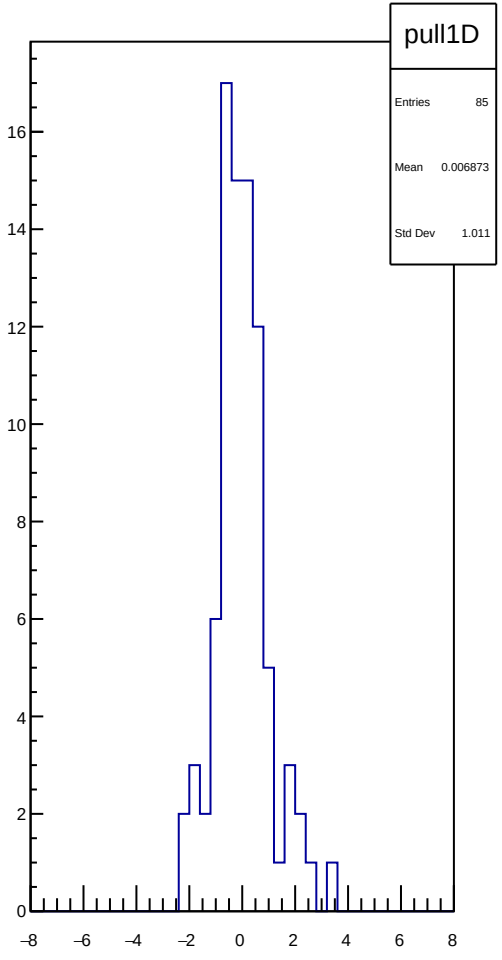

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 32.57 / 84
p0 74.65 ± 1.568
pull
Entries 85
Mean 16.29
Std Dev 74.07

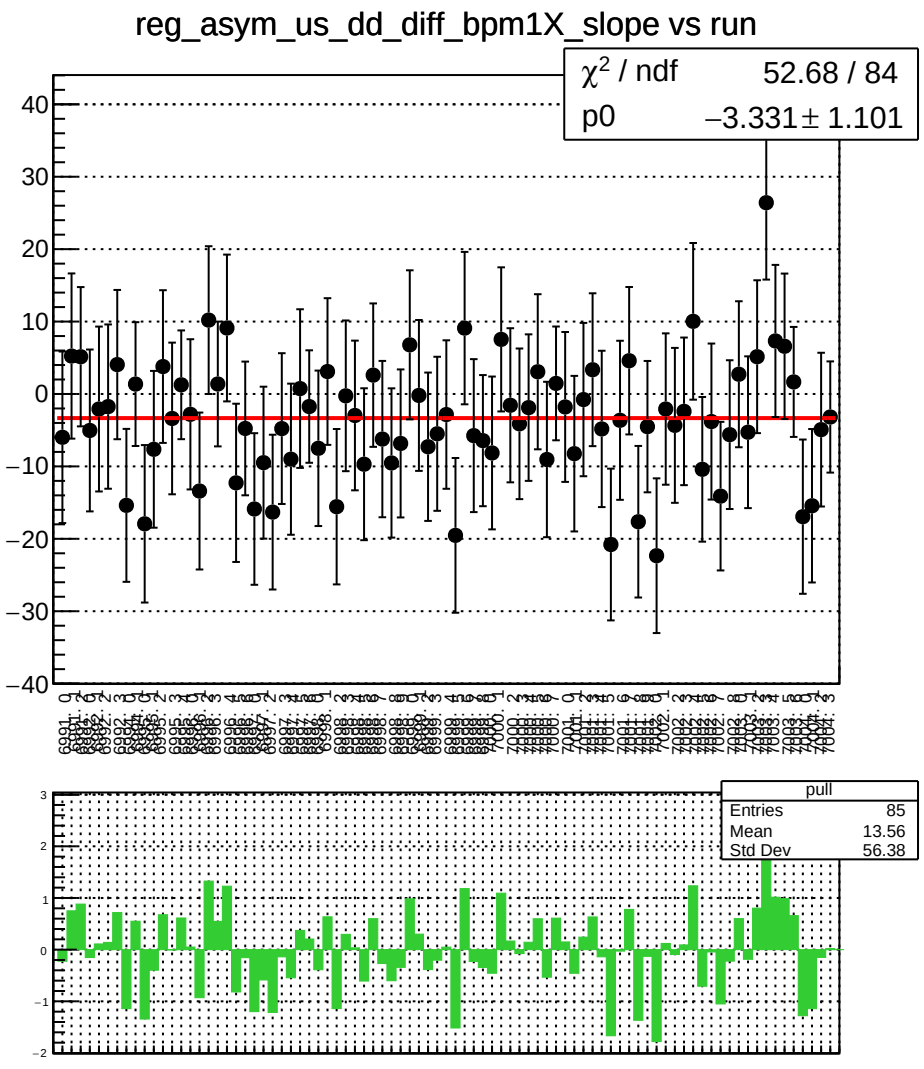

pull1D
Entries 85
Mean 0.009054
Std Dev 0.619

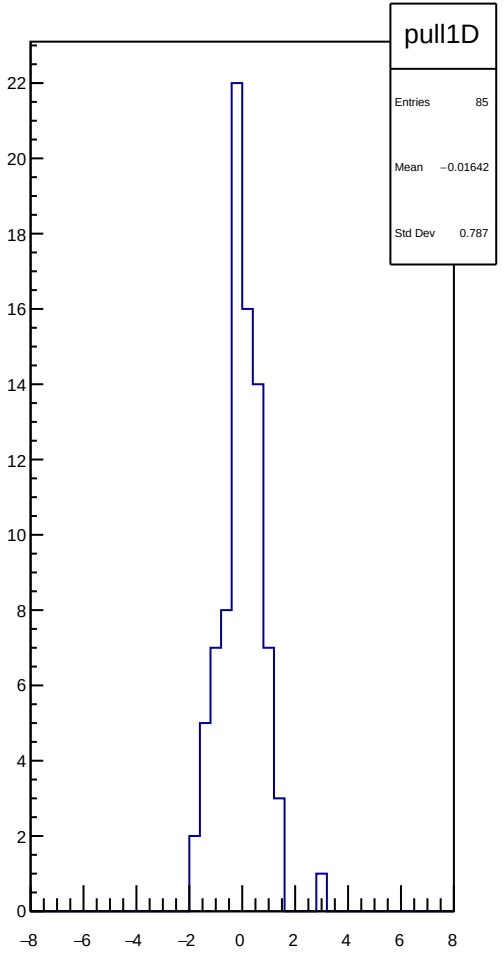

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 26.46 / 84
p0 15.51 ± 1.231
pull
Entries 85
Mean −42.11
Std Dev 139.3

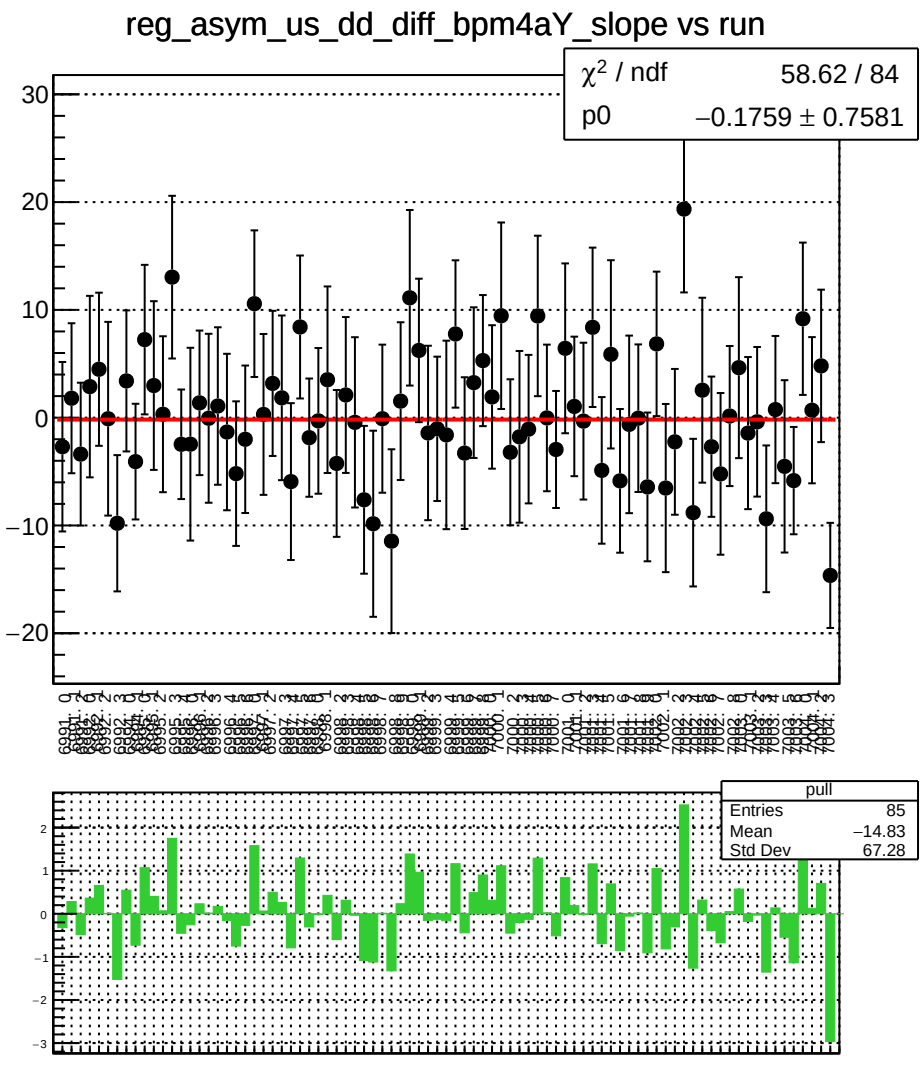

pull1D
Entries 85
Mean −0.004655
Std Dev 0.5579

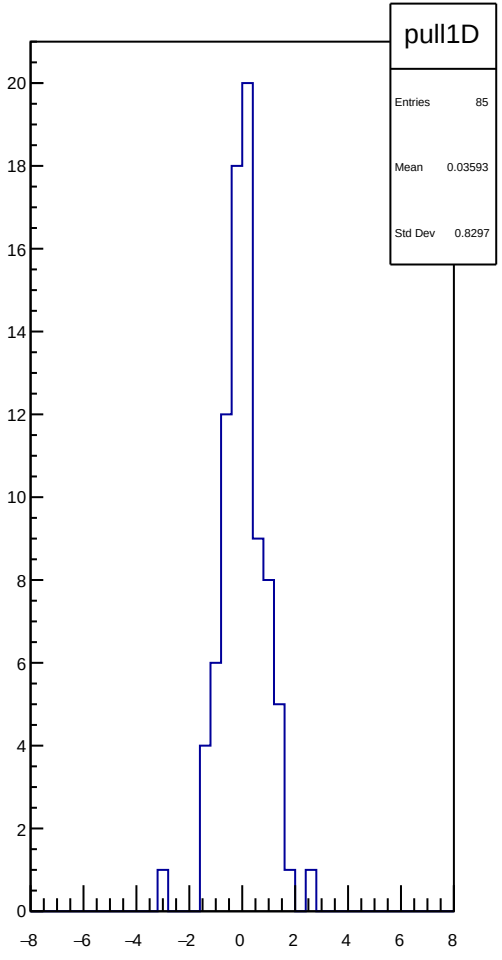

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 86.82 / 84
p0 −39.29 ± 0.0564
pull
Entries 85
Mean −894.1
Std Dev 918.8

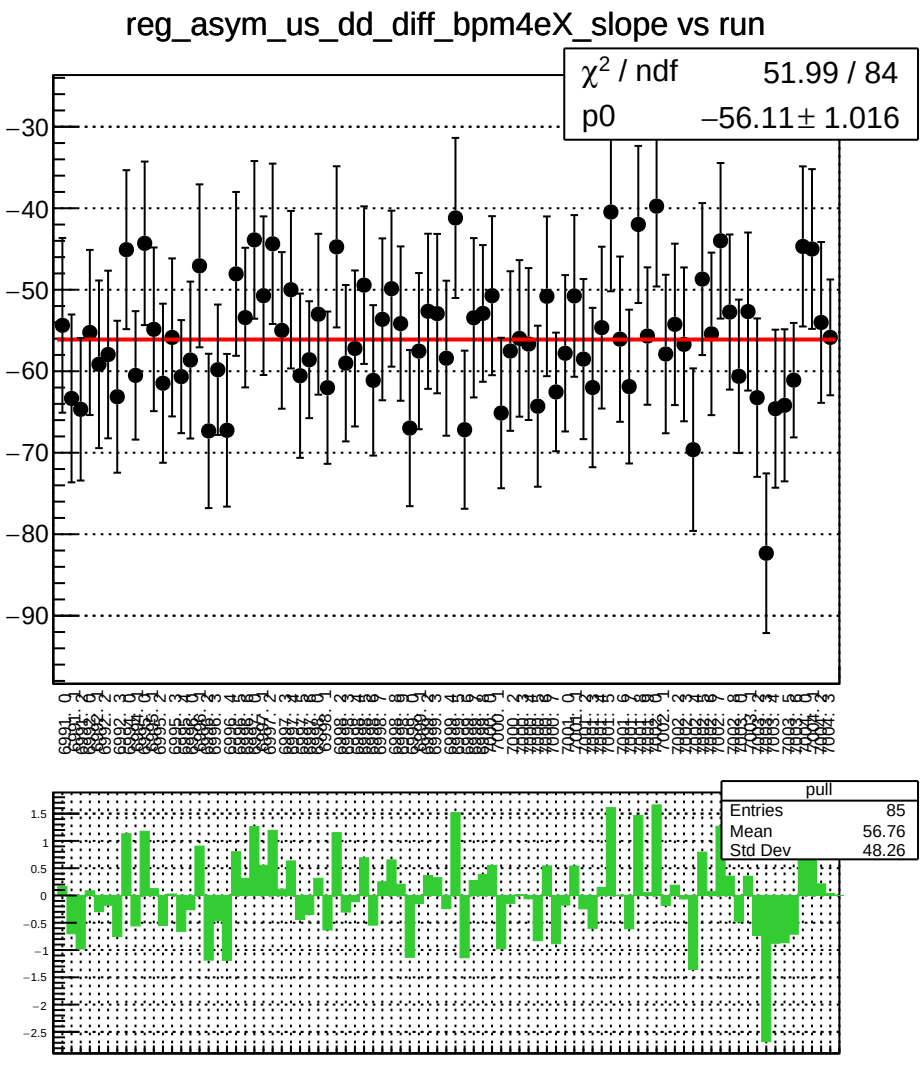

pull1D
Entries 85
Mean 0.006873
Std Dev 1.011

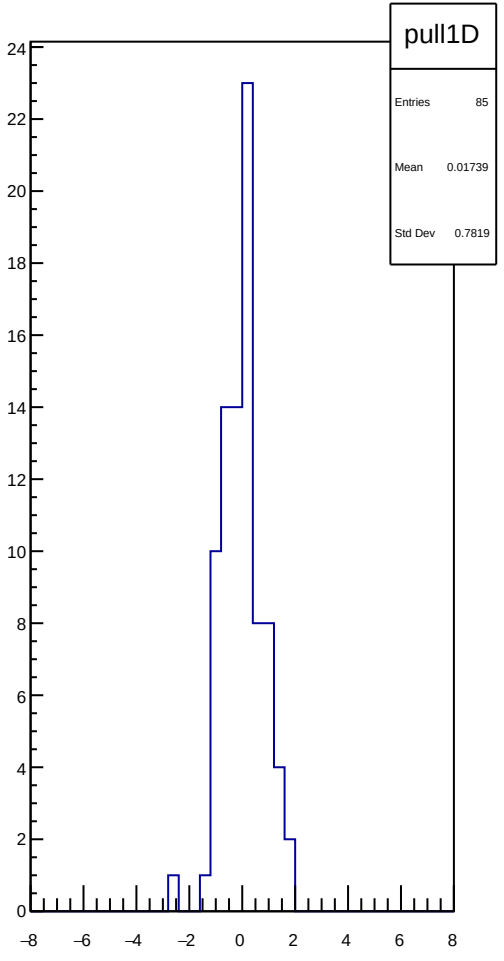

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 52.68 / 84
p0 −3.331 ± 1.101
pull
Entries 85
Mean 13.56
Std Dev 56.38

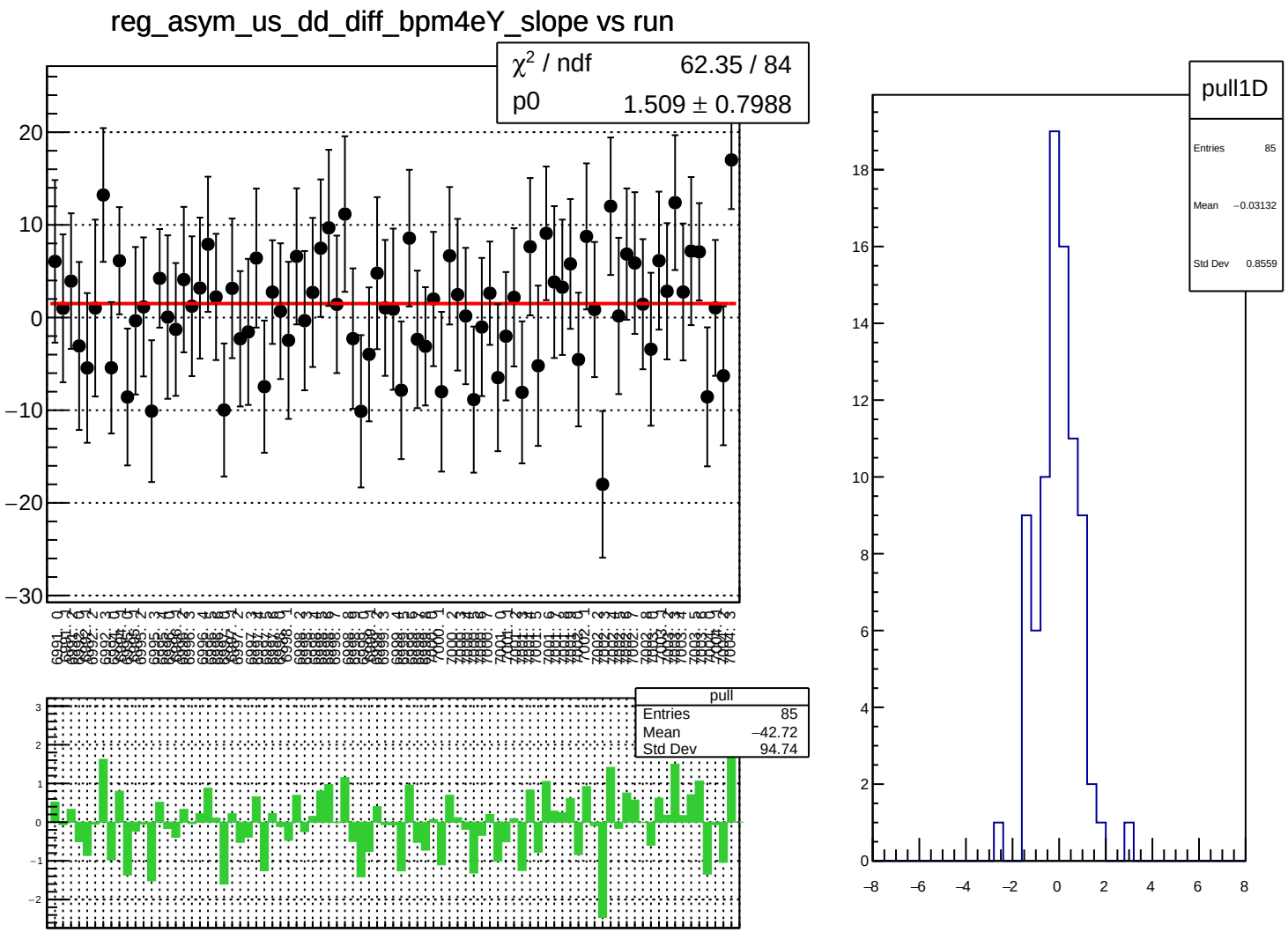

pull1D
Entries 85
Mean −0.01642
Std Dev 0.787

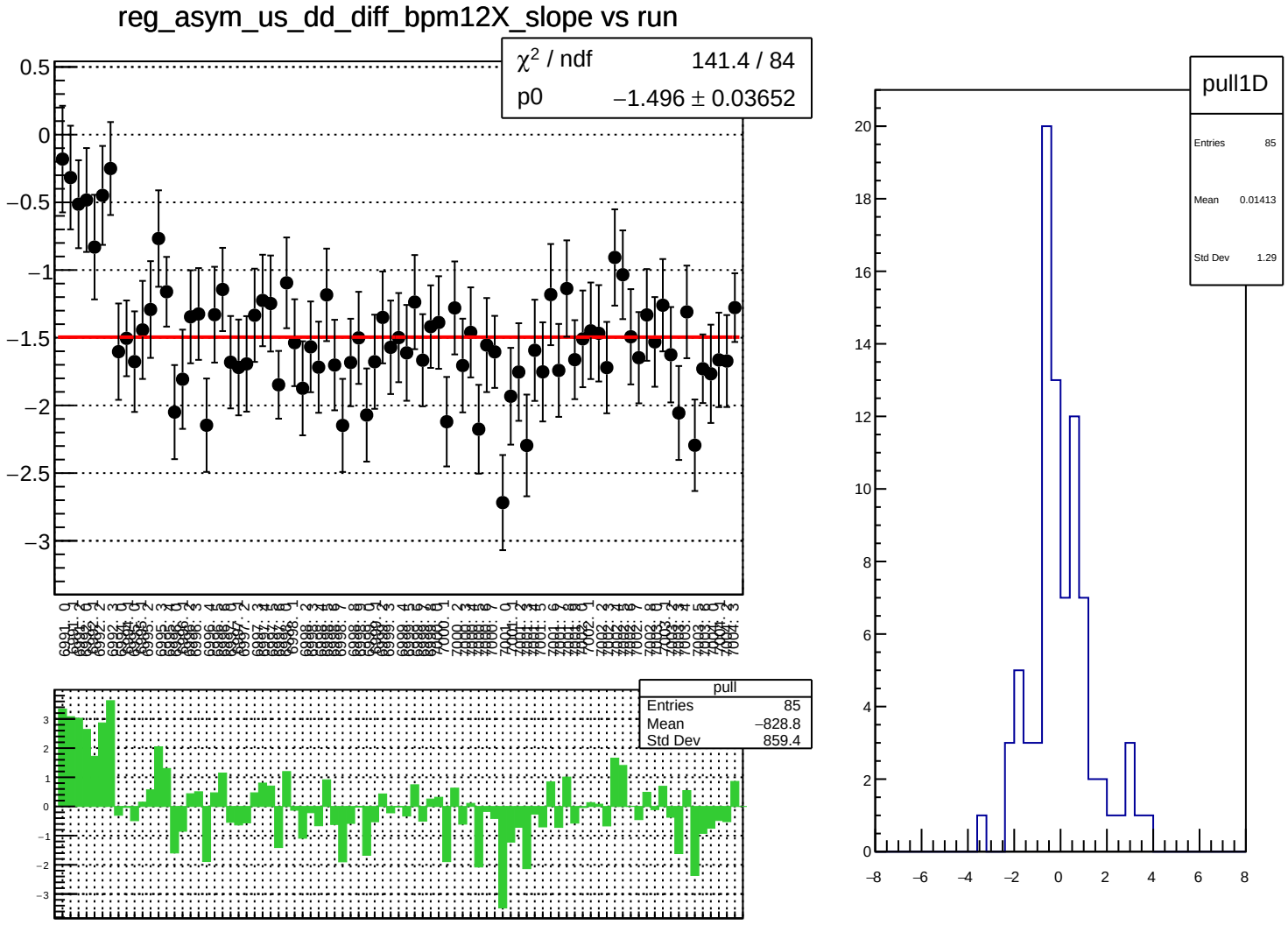

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 58.62 / 84
p0 −0.1759 ± 0.7581
pull
Entries 85
Mean −14.83
Std Dev 67.28

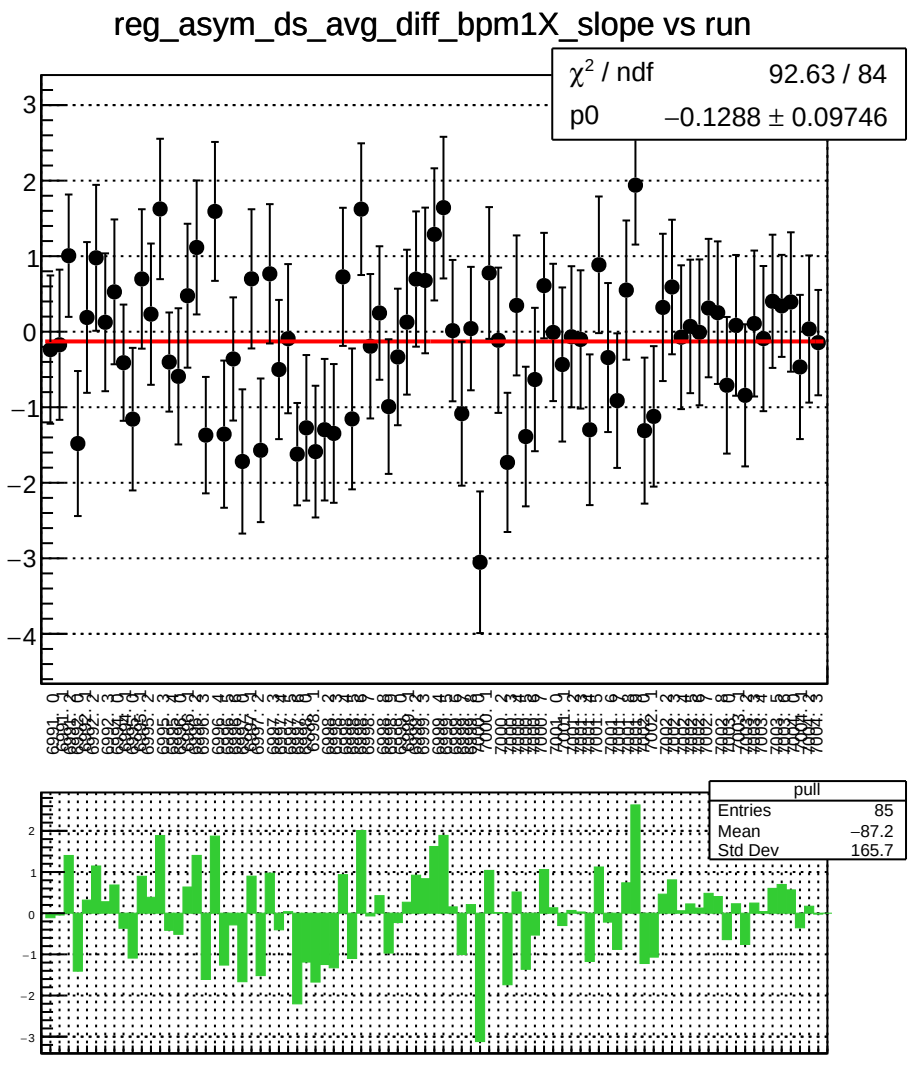

pull1D
Entries 85
Mean 0.03593
Std Dev 0.8297

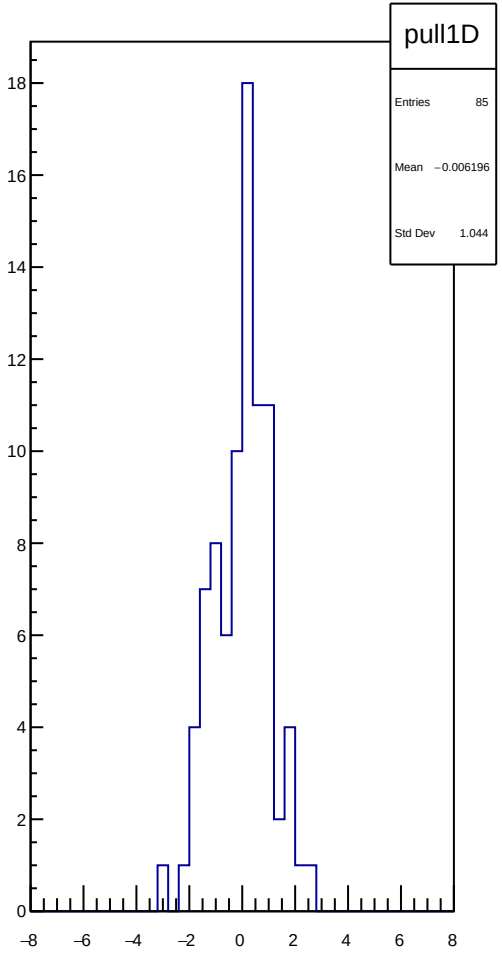

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 51.99 / 84
p0 −56.11 ± 1.016
−30
−40
−50
−60
−70
−80
−90
pull
Entries 85
Mean 56.76
Std Dev 48.26
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

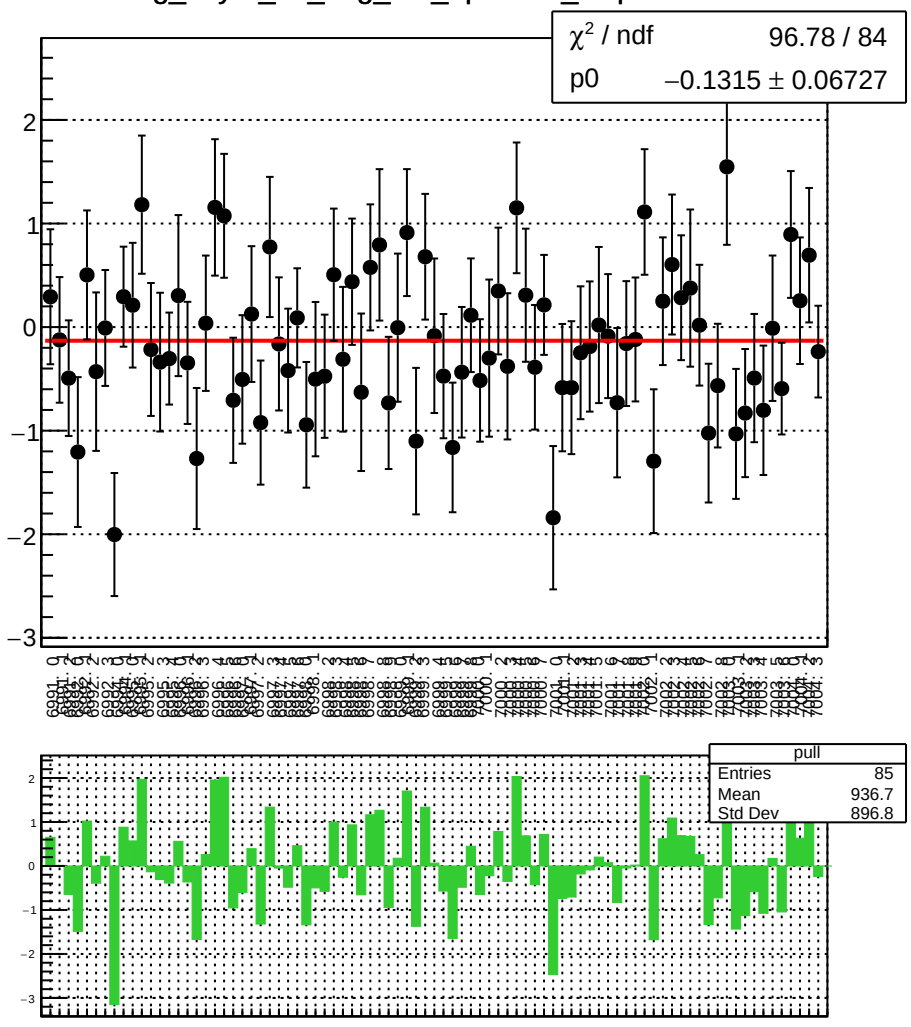

pull1D
Entries 85
Mean 0.01739
Std Dev 0.7819
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

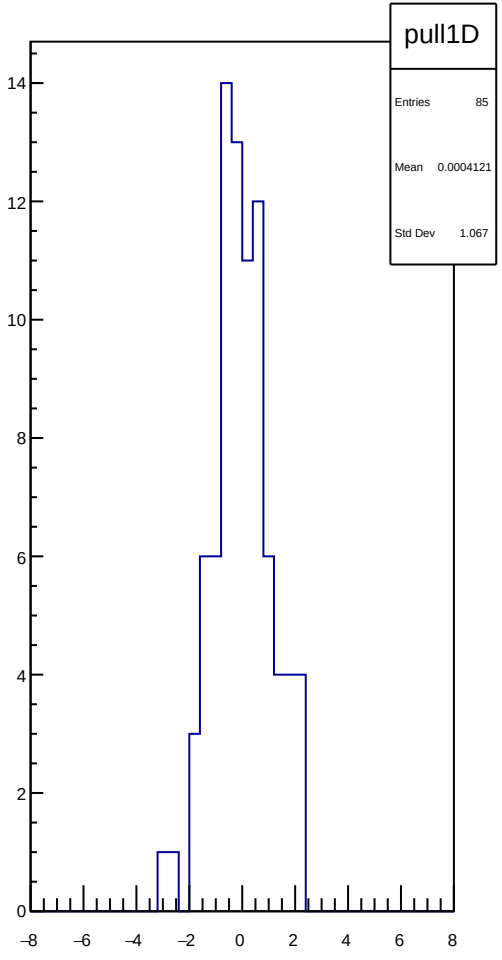

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 62.35 / 84
p0 1.509 ± 0.7988
pull
Entries 85
Mean −42.72
Std Dev 94.74
pull1D
Entries 85
Mean −0.03132
Std Dev 0.8559

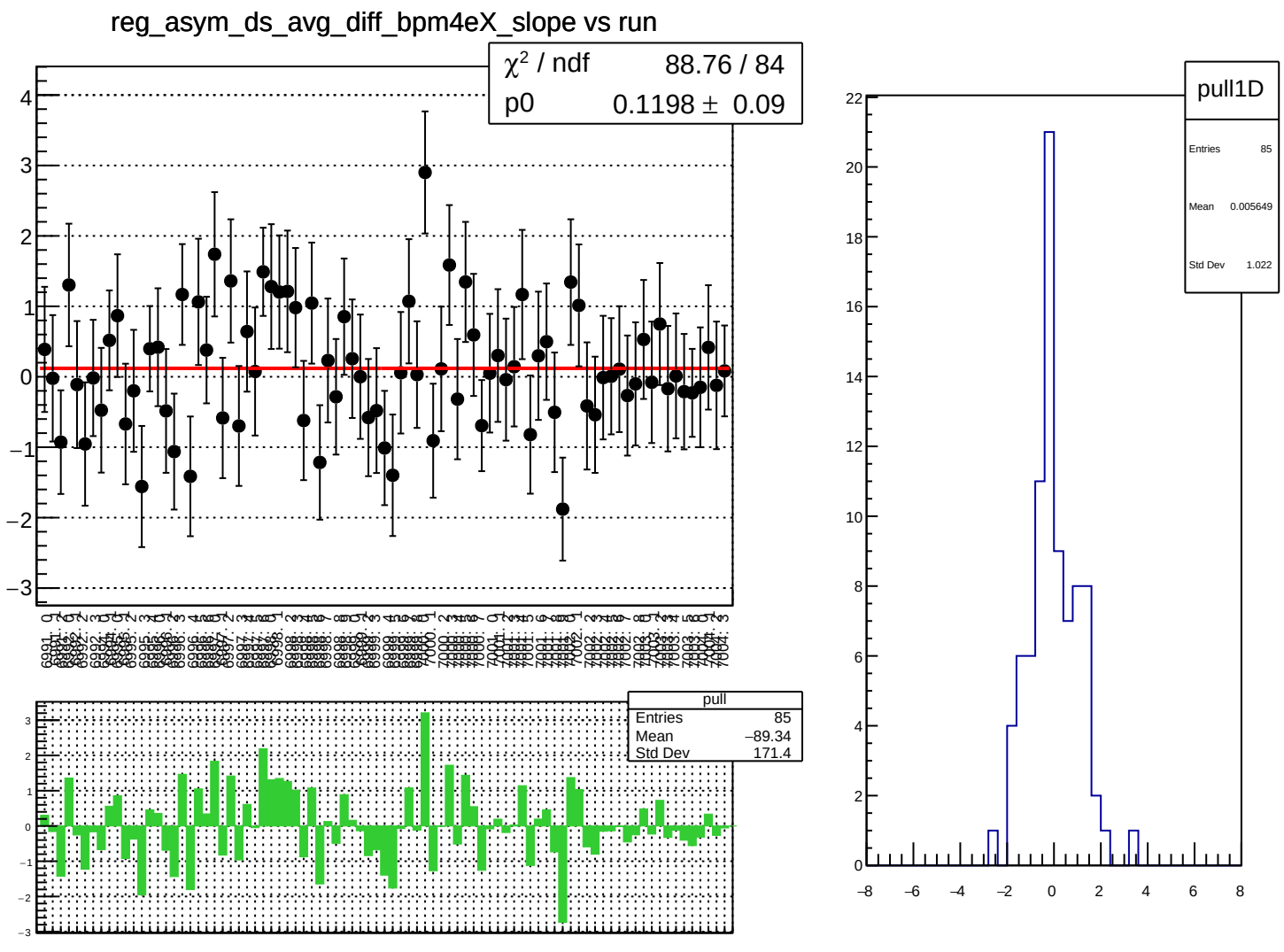

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 141.4 / 84
p0 −1.496 ± 0.03652
pull
Entries 85
Mean −828.8
Std Dev 859.4
pull1D
Entries 85
Mean 0.01413
Std Dev 1.29

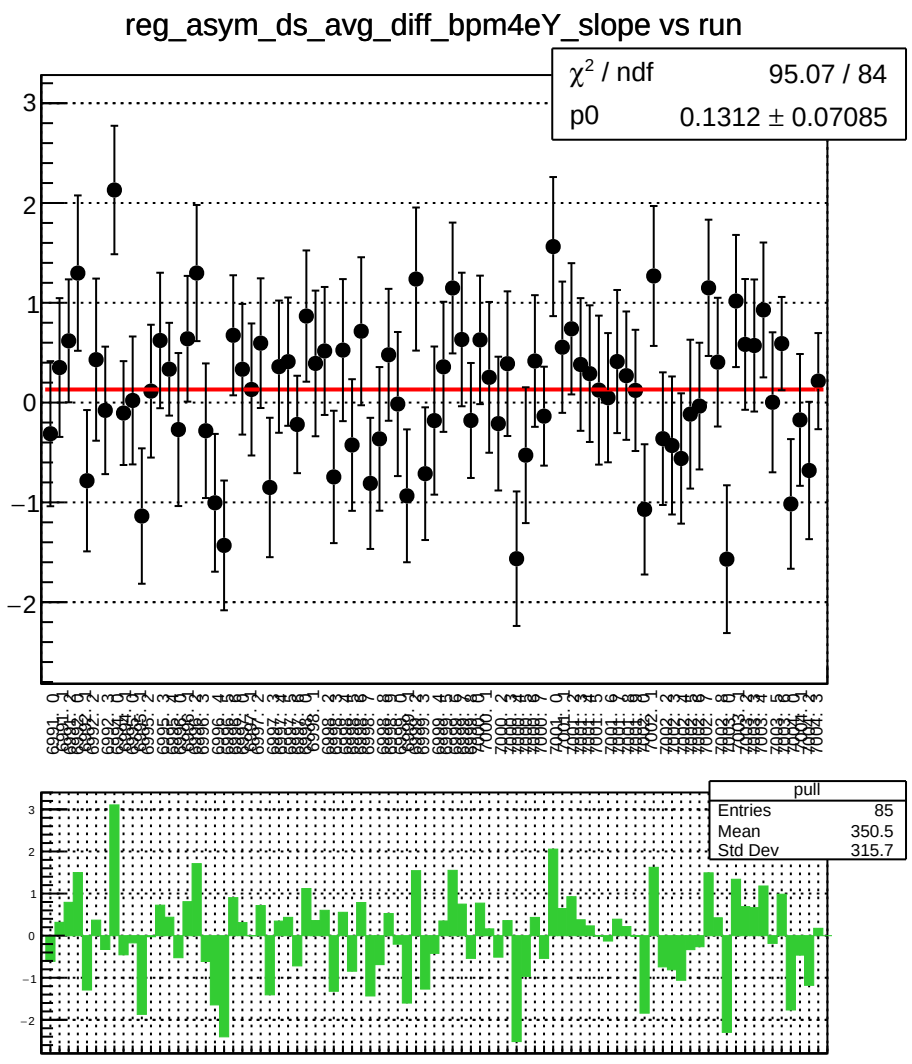

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 92.63 / 84
p0 −0.1288 ± 0.09746
pull
Entries 85
Mean −87.2
Std Dev 165.7

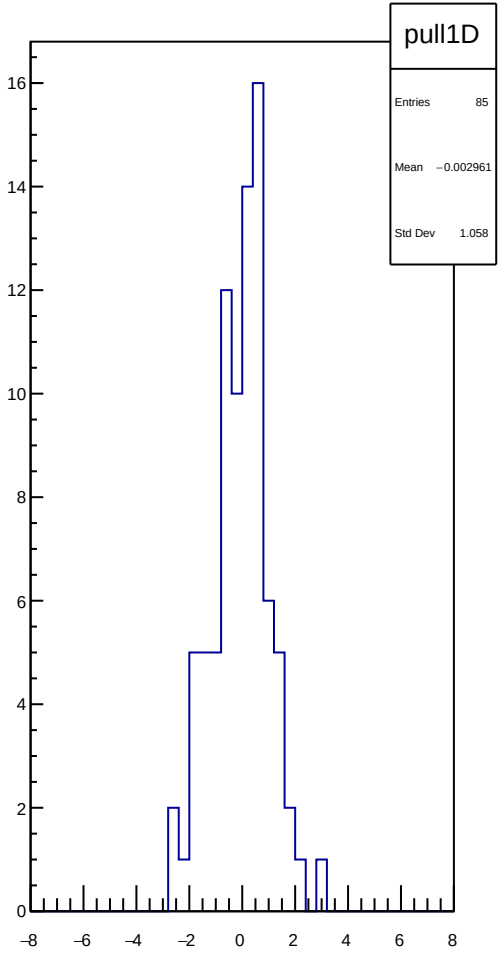

pull1D
Entries 85
Mean −0.006196
Std Dev 1.044

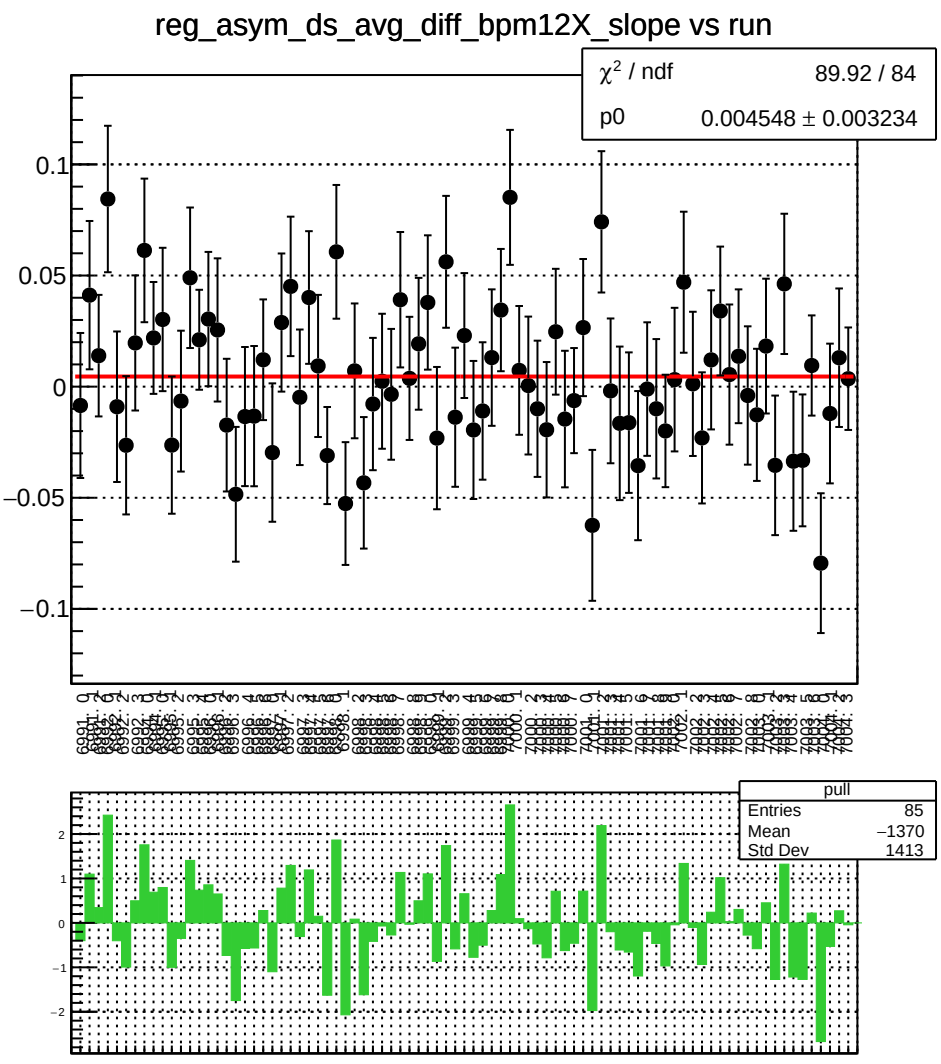

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 96.78 / 84
p0 −0.1315 ± 0.06727
pull
Entries 85
Mean 936.7
Std Dev 896.8

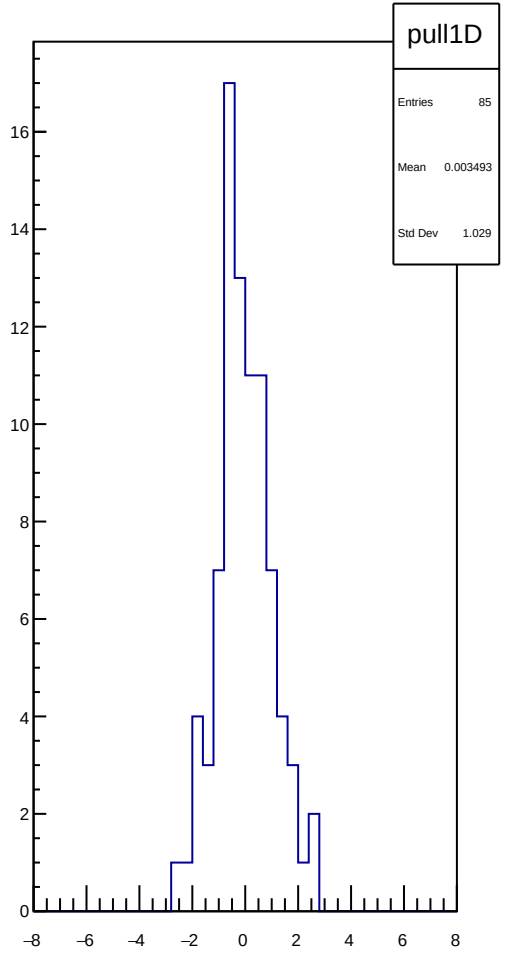

pull1D
Entries 85
Mean 0.0004121
Std Dev 1.067

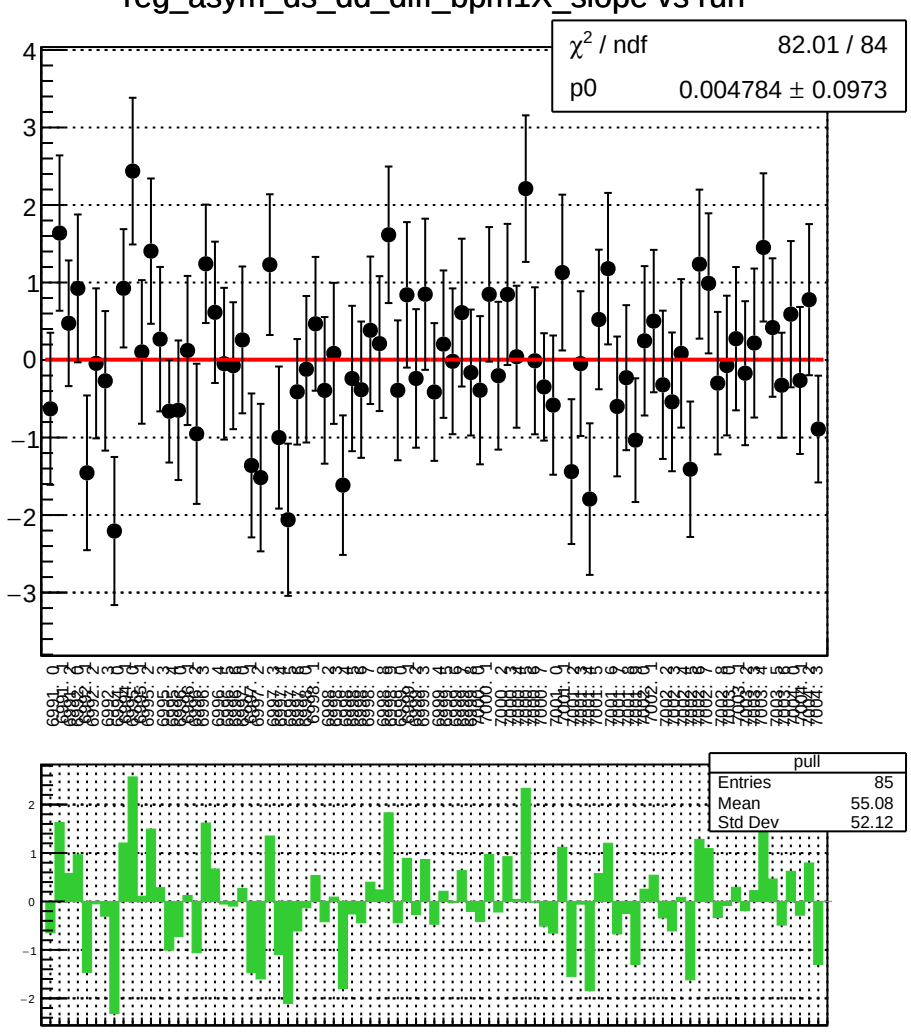

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 88.76 / 84
p0 0.1198 ± 0.09
pull
Entries 85
Mean −89.34
Std Dev 171.4
pull1D
Entries 85
Mean 0.005649
Std Dev 1.022

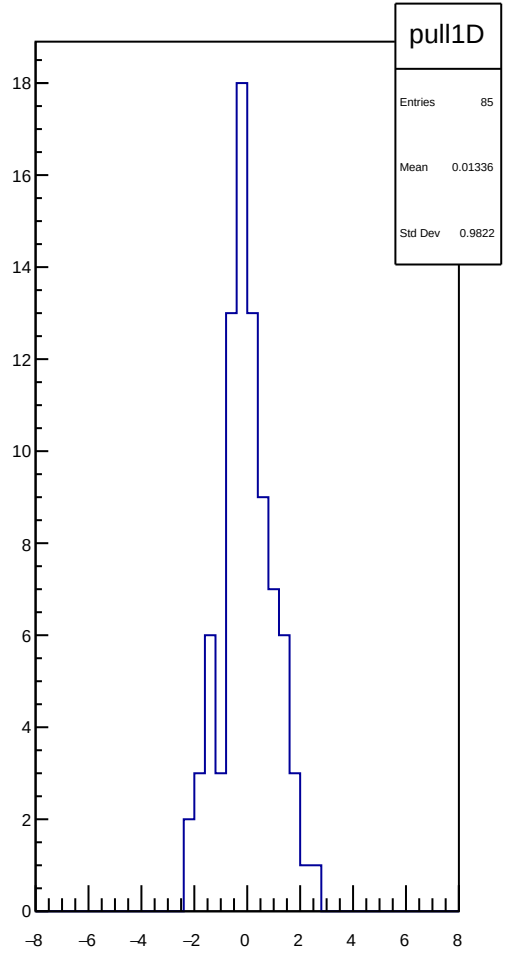

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 95.07 / 84
p0 0.1312 ± 0.07085
pull
Entries 85
Mean 350.5
Std Dev 315.7

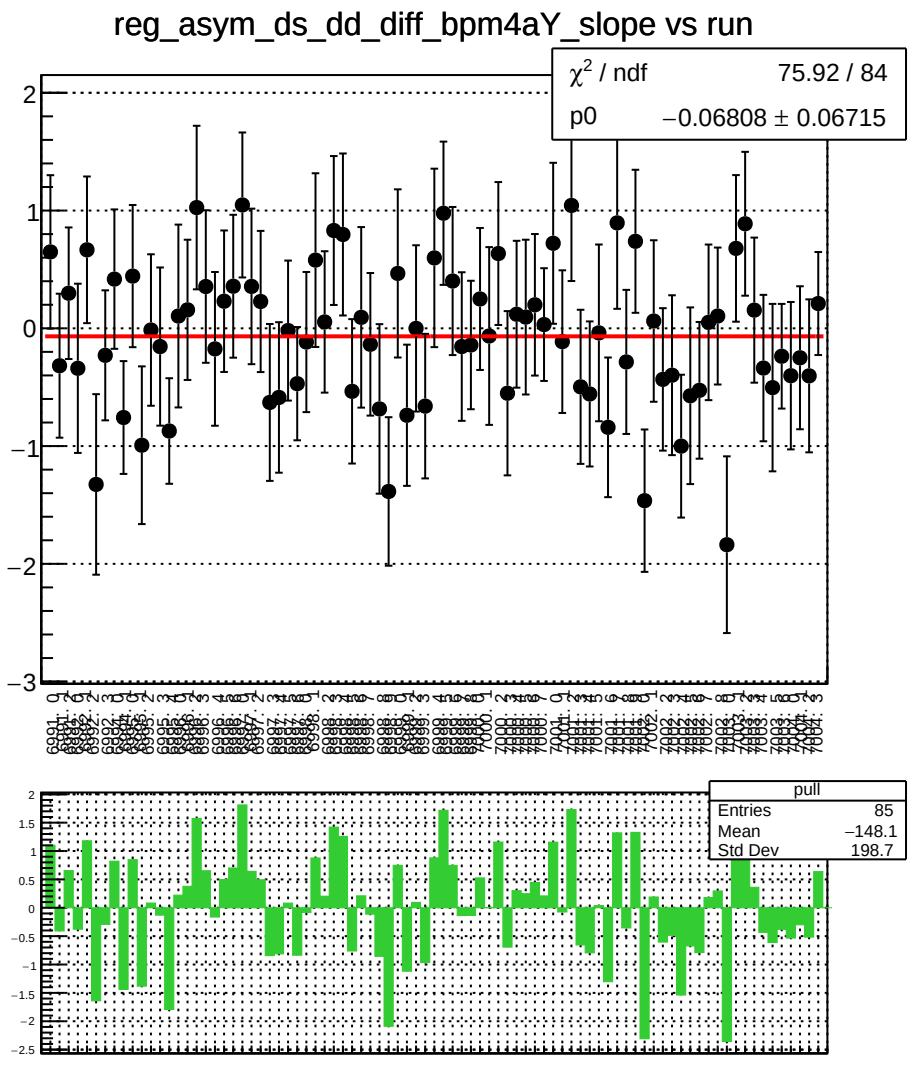

pull1D
Entries 85
Mean −0.002961
Std Dev 1.058

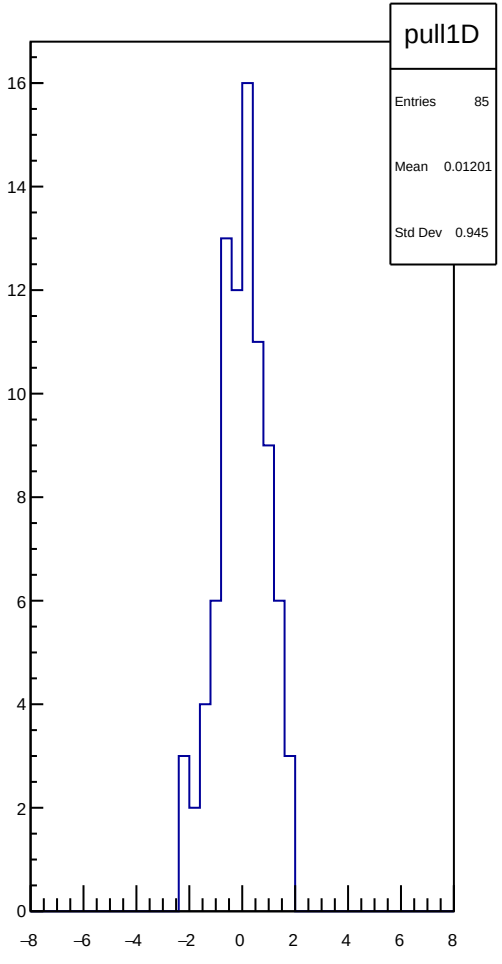

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 89.92 / 84
p0 0.004548 ± 0.003234
0.1
0.05
0
−0.05
−0.1
pull
Entries 85
Mean −1370
Std Dev 1413
2
1
0
−1
−2

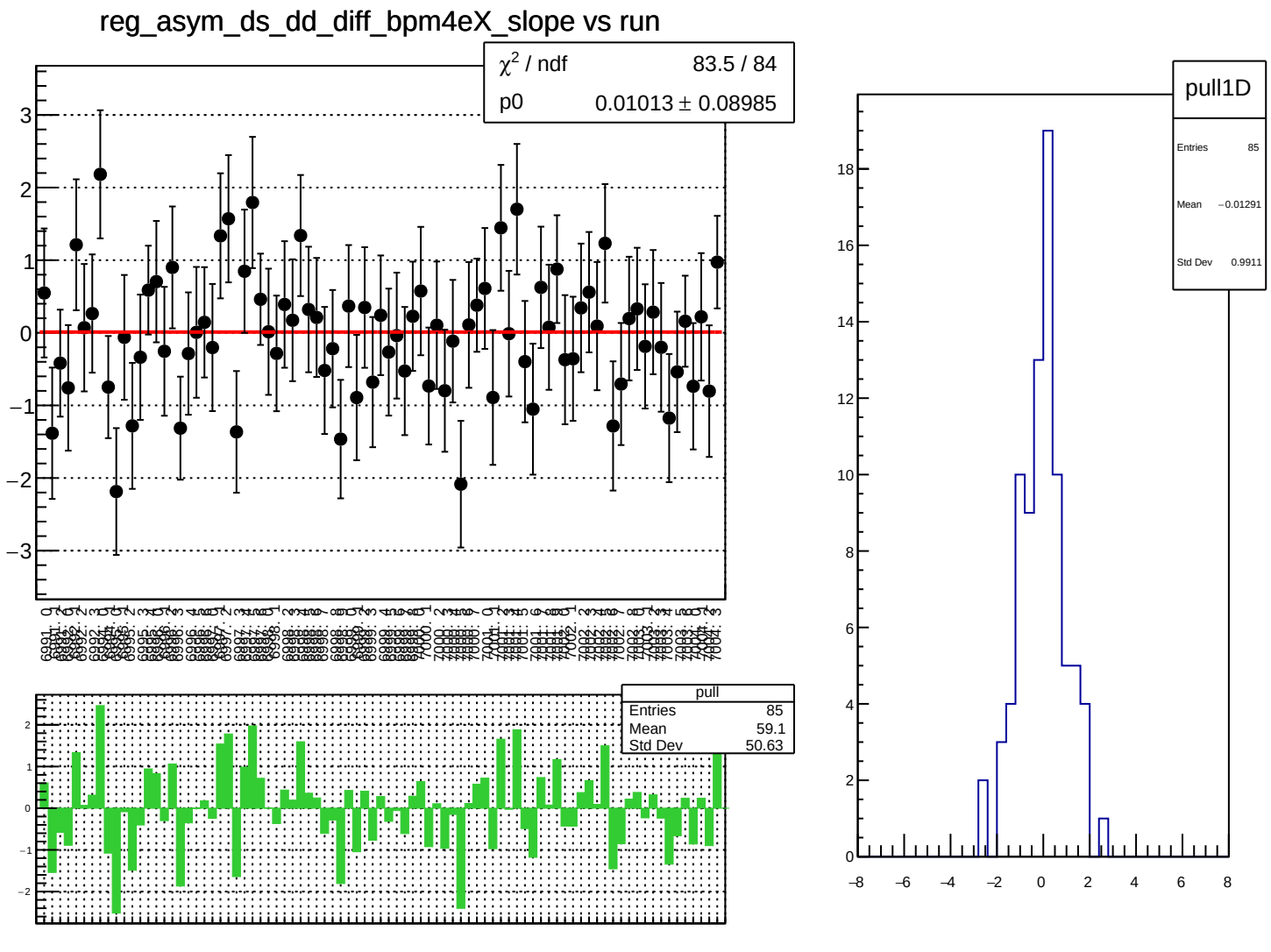

pull1D
Entries 85
Mean 0.003493
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

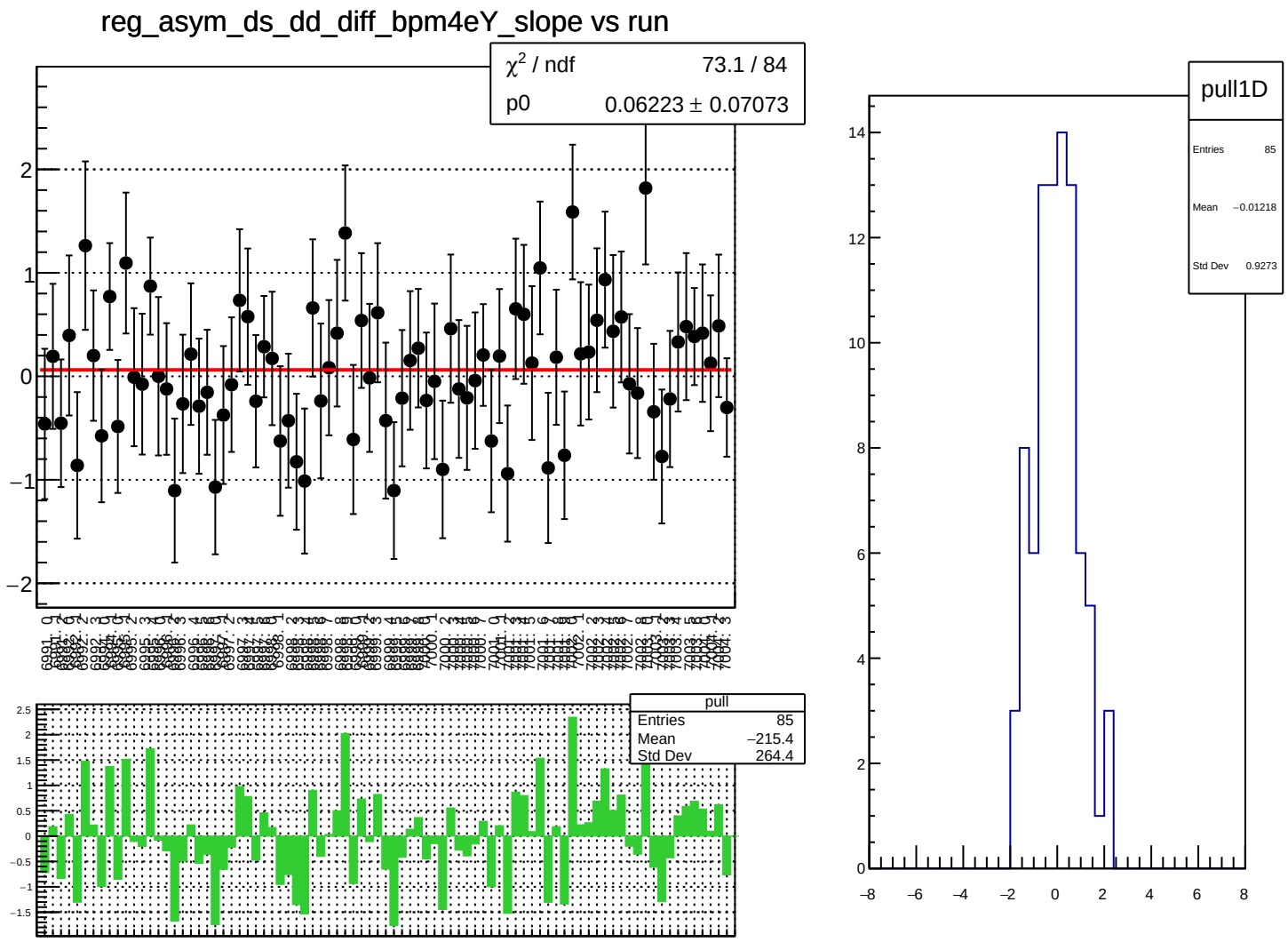

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 82.01 / 84
p0 0.004784 ± 0.0973
pull
Entries 85
Mean 55.08
Std Dev 52.12

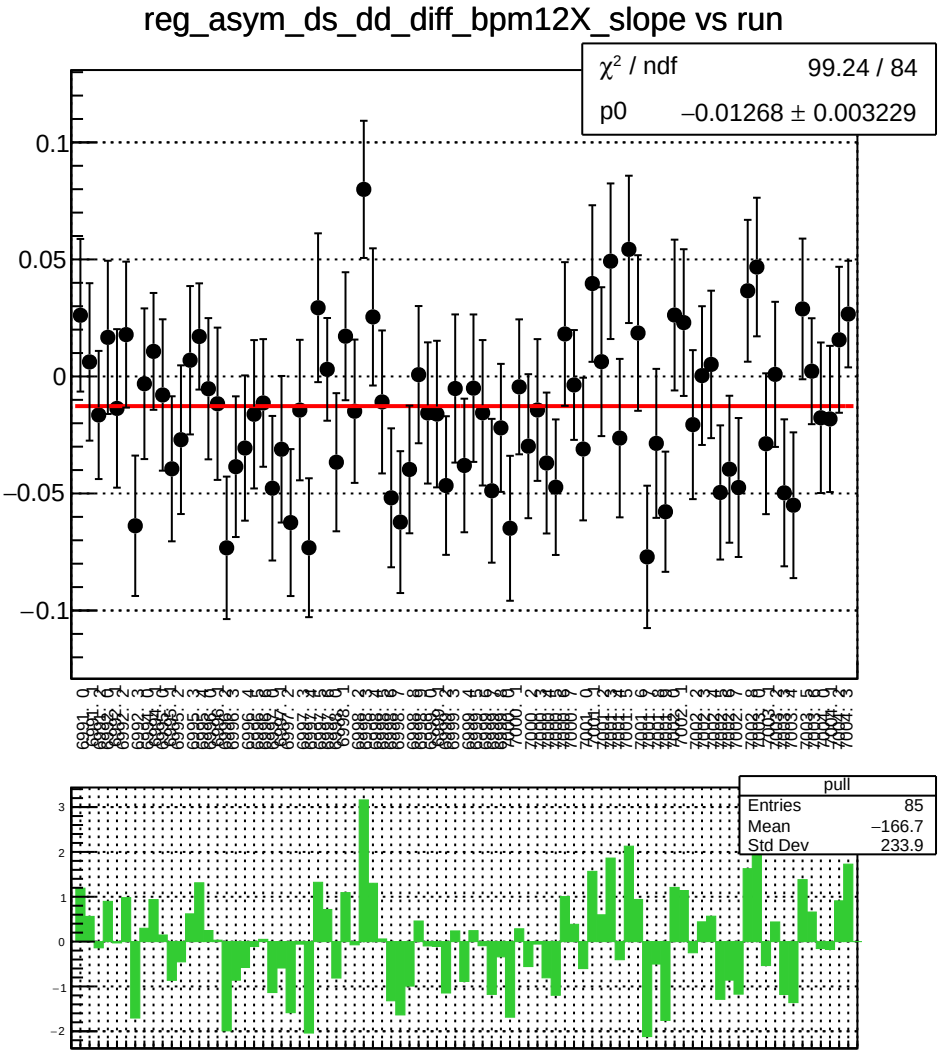

pull1D
Entries 85
Mean 0.01336
Std Dev 0.9822

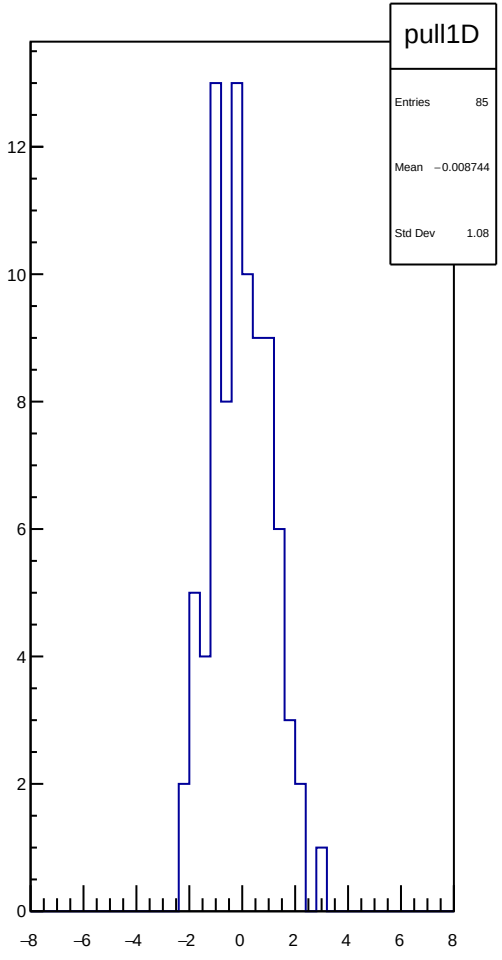

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 75.92 / 84
p0 −0.06808 ± 0.06715
pull
Entries 85
Mean −148.1
Std Dev 198.7

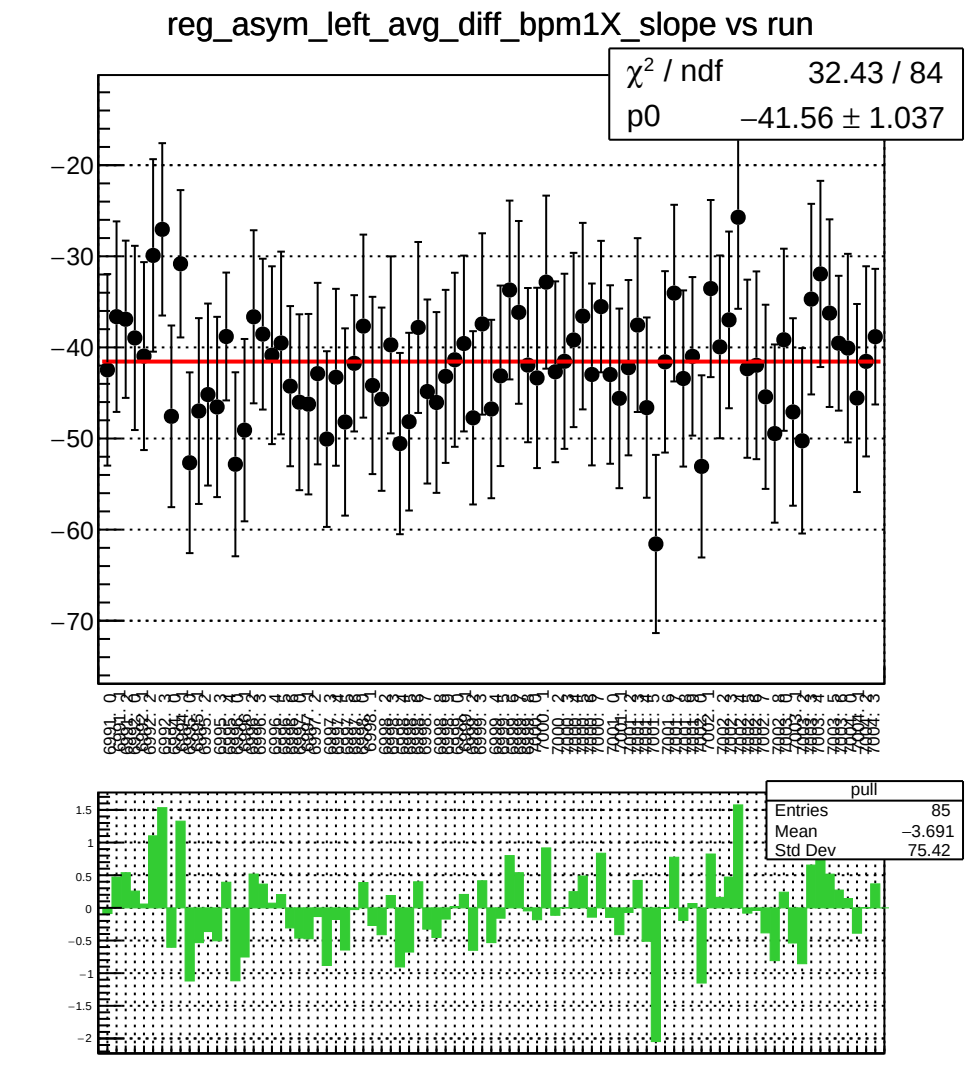

pull1D
Entries 85
Mean 0.01201
Std Dev 0.945

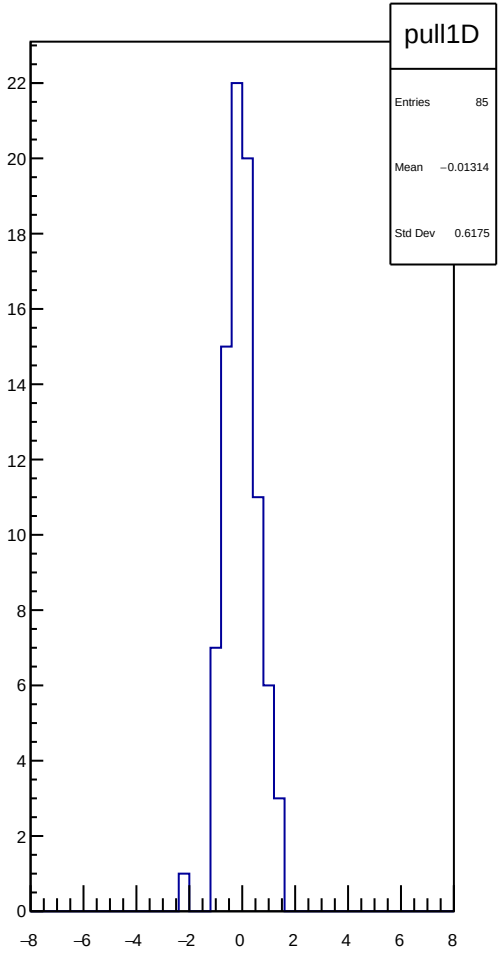

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 83.5 / 84
p0 0.01013 ± 0.08985
pull
Entries 85
Mean 59.1
Std Dev 50.63
pull1D
Entries 85
Mean −0.01291
Std Dev 0.9911

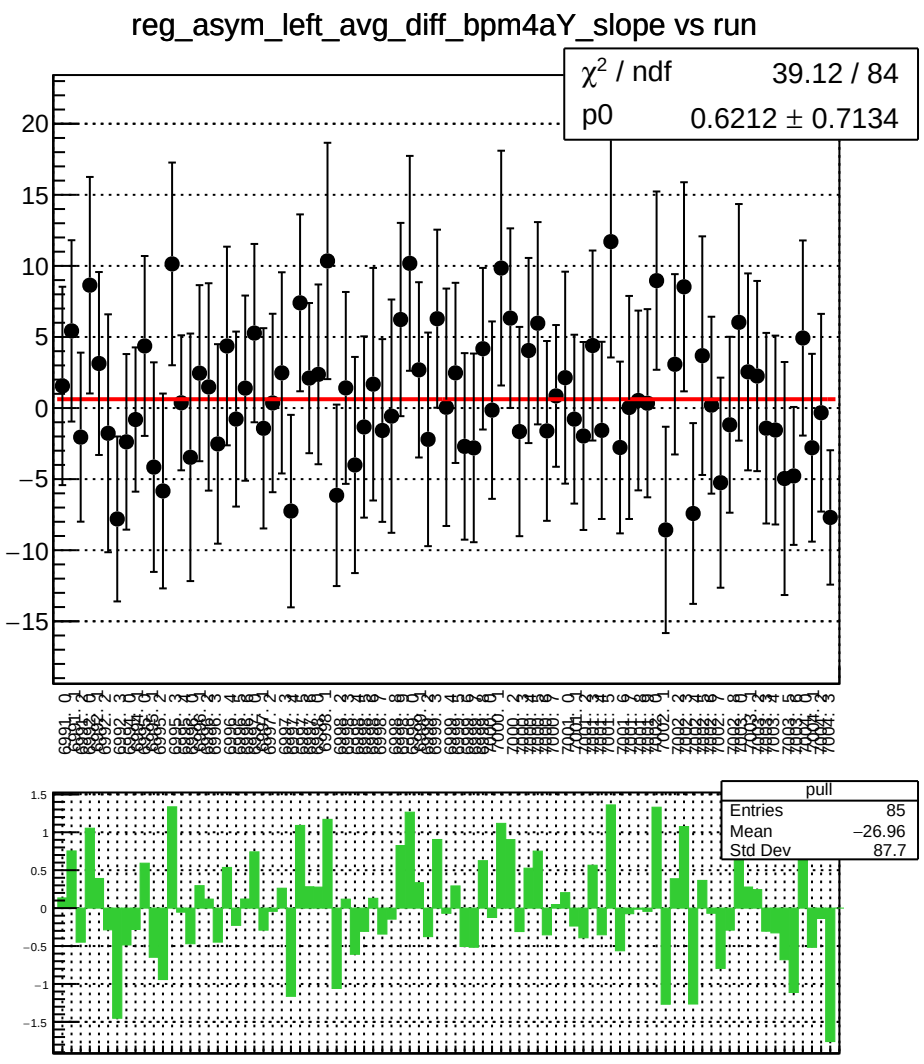

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 73.1 / 84
p0 0.06223 ± 0.07073
pull
Entries 85
Mean −215.4
Std Dev 264.4
pull1D
Entries 85
Mean −0.01218
Std Dev 0.9273

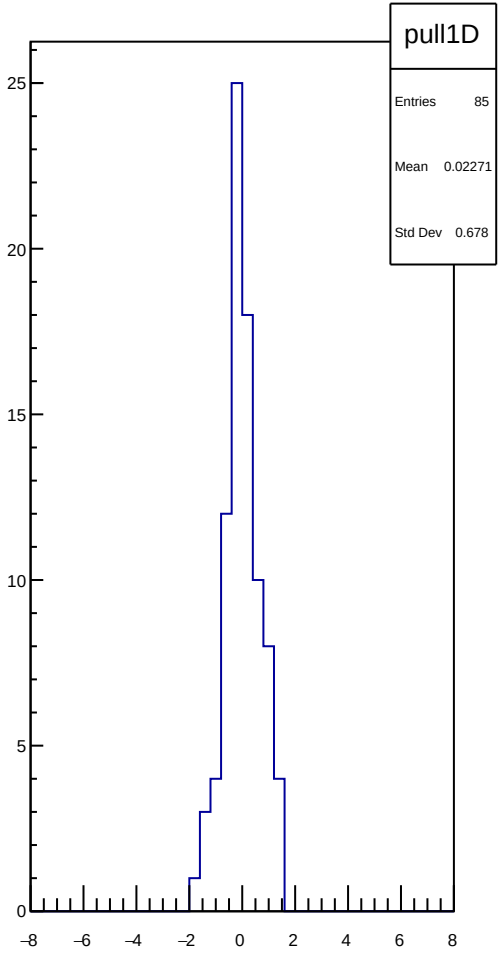

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 99.24 / 84
p0 −0.01268 ± 0.003229
0.1
0.05
0
−0.05
−0.1
pull
Entries 85
Mean −166.7
Std Dev 233.9
3
2
1
0
−1
−2

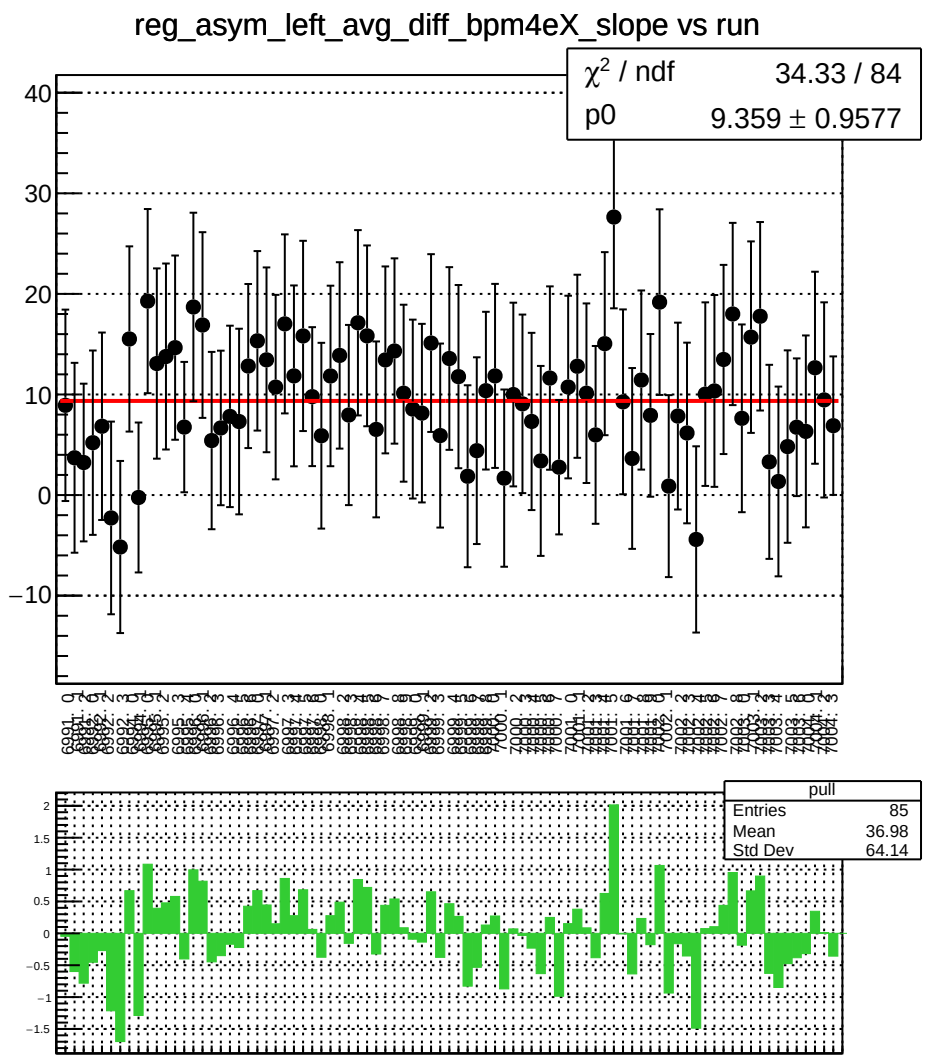

pull1D
Entries 85
Mean −0.008744
Std Dev 1.08
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

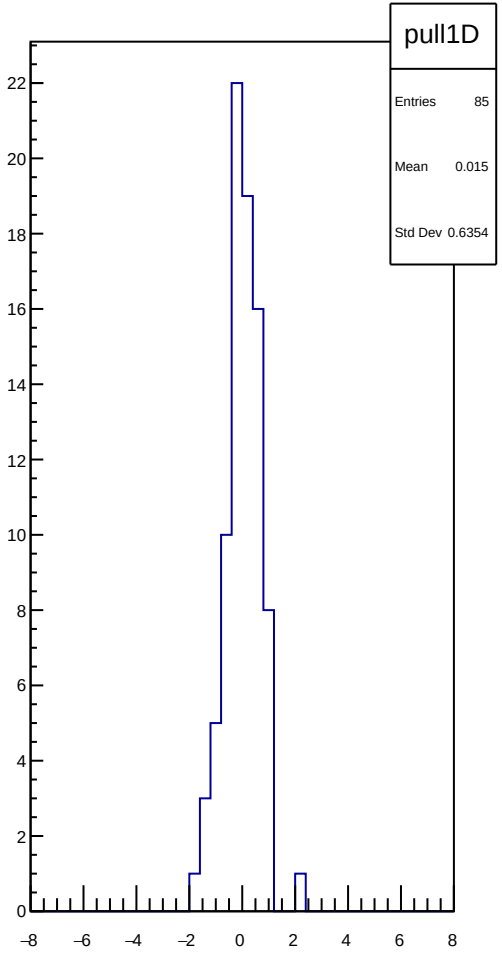

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 32.43 / 84
p0 −41.56 ± 1.037
pull
Entries 85
Mean −3.691
Std Dev 75.42

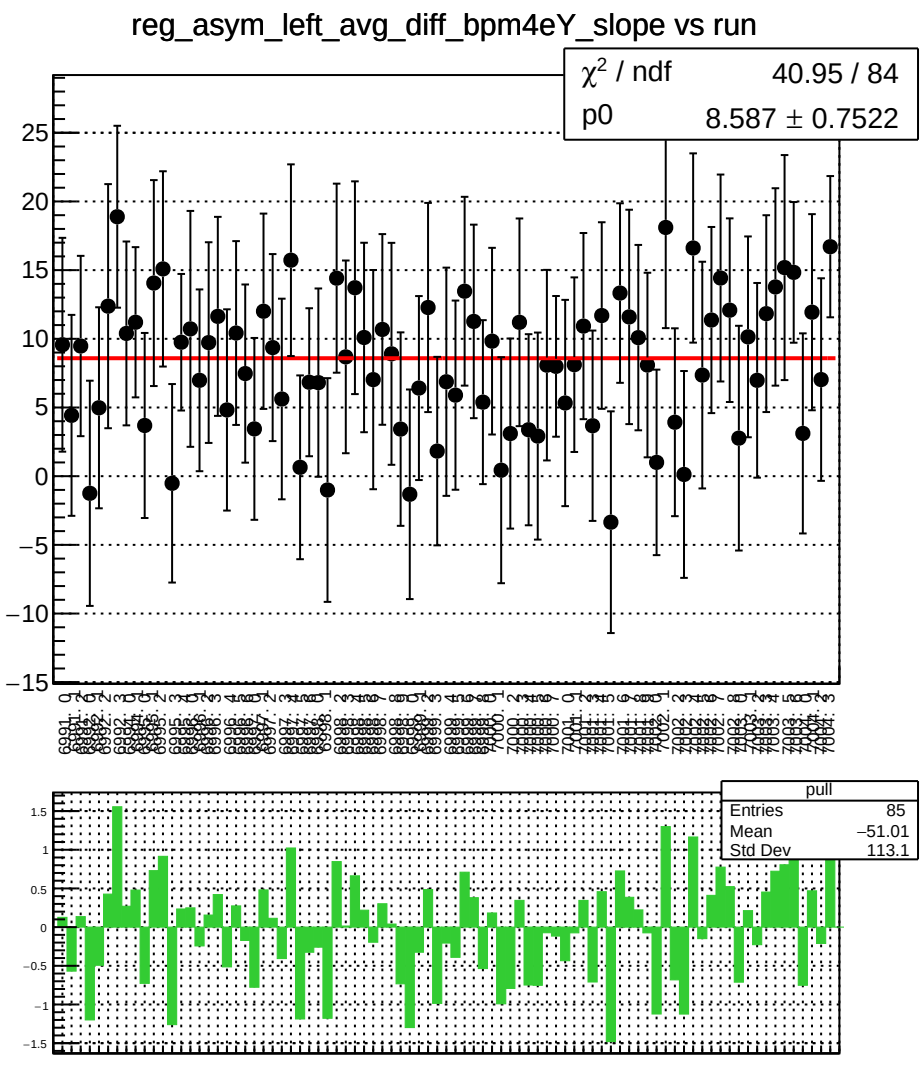

pull1D
Entries 85
Mean −0.01314
Std Dev 0.6175

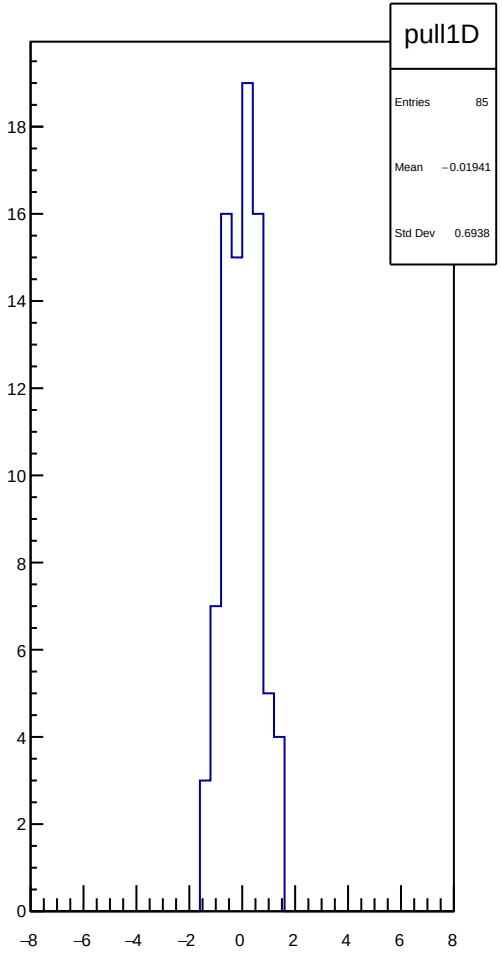

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 39.12 / 84
p0 0.6212 ± 0.7134
pull
Entries 85
Mean −26.96
Std Dev 87.7

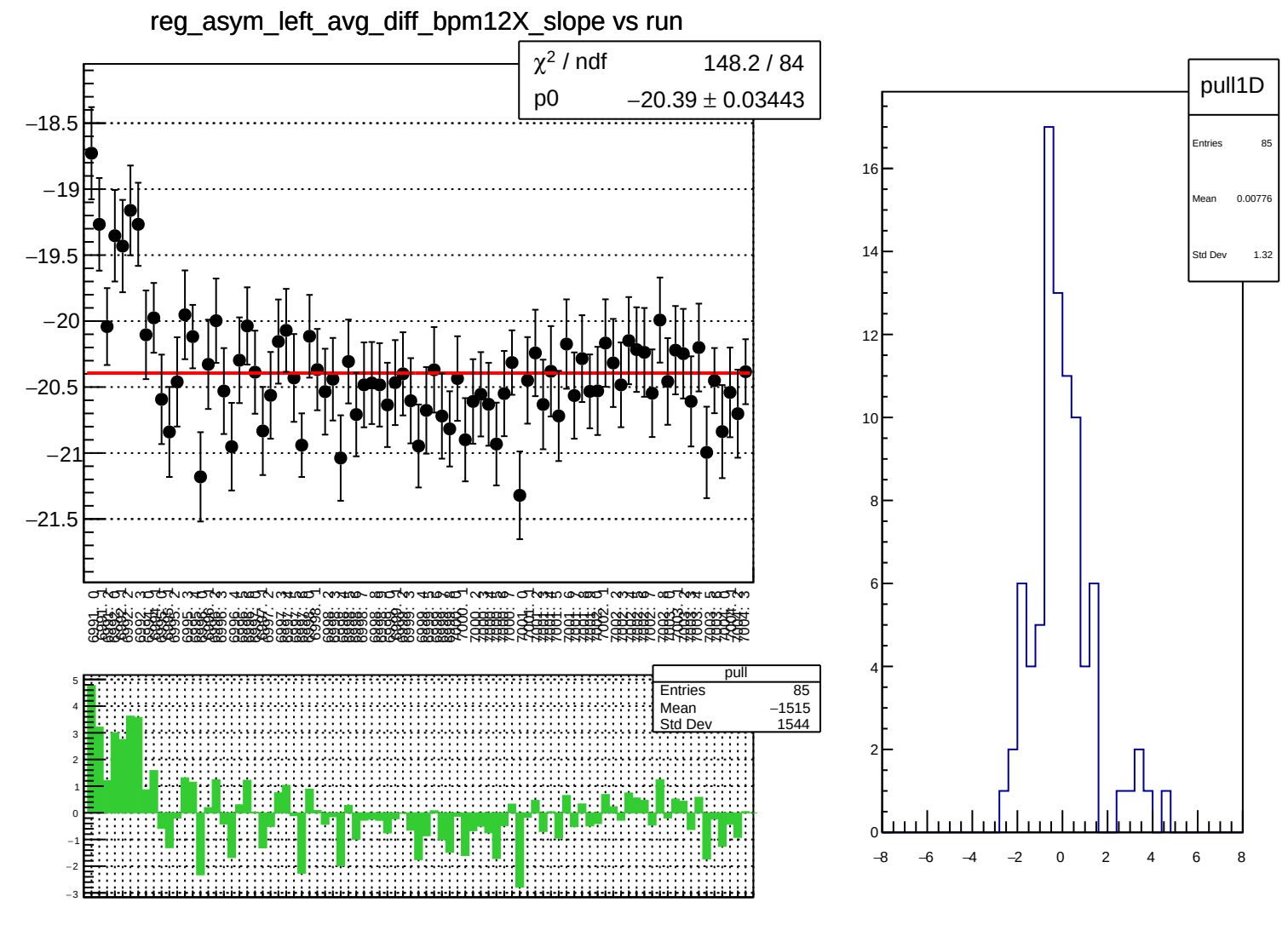

pull1D
Entries 85
Mean 0.02271
Std Dev 0.678

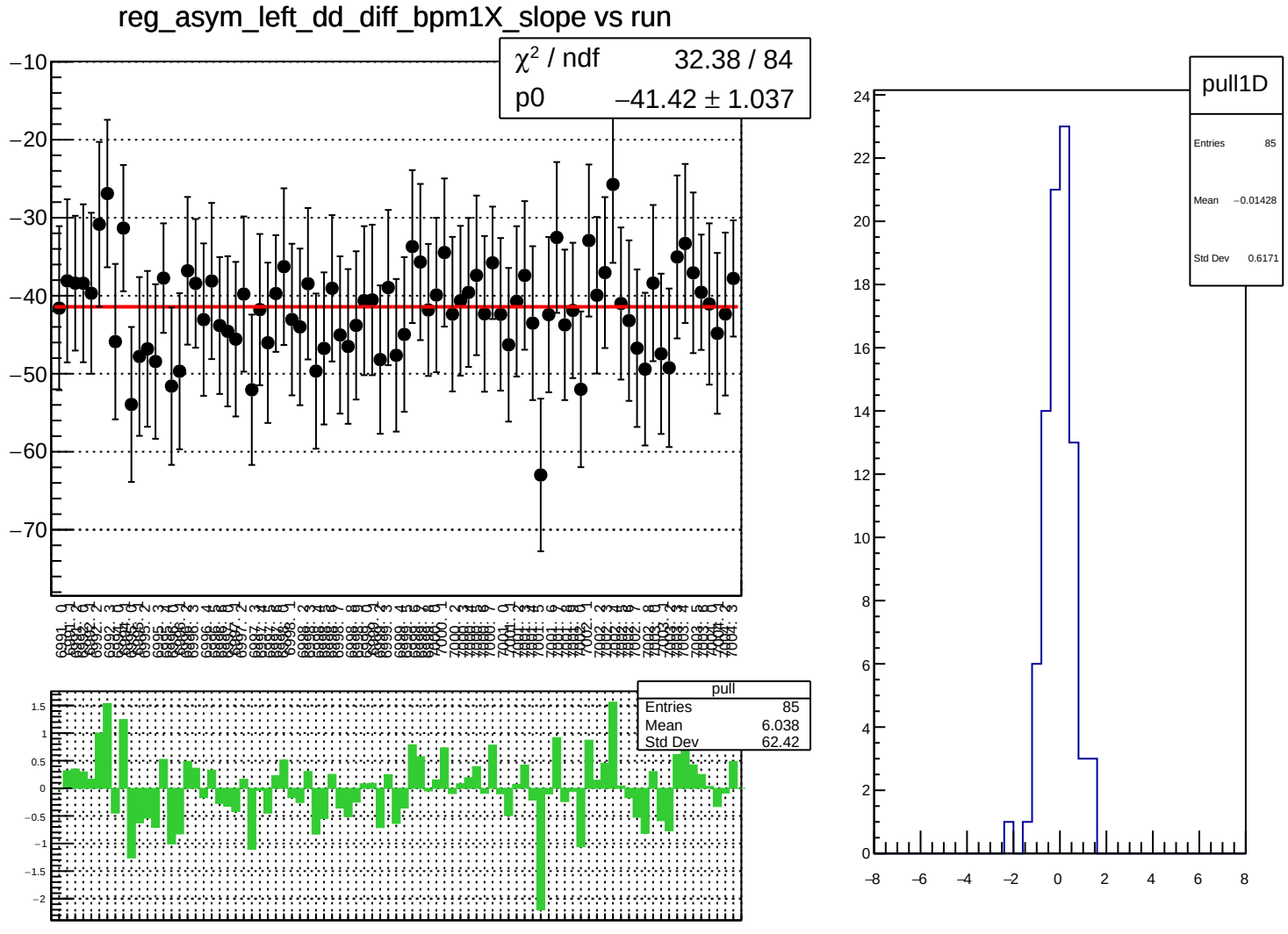

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 34.33 / 84
p0 9.359 ± 0.9577
pull
Entries 85
Mean 36.98
Std Dev 64.14

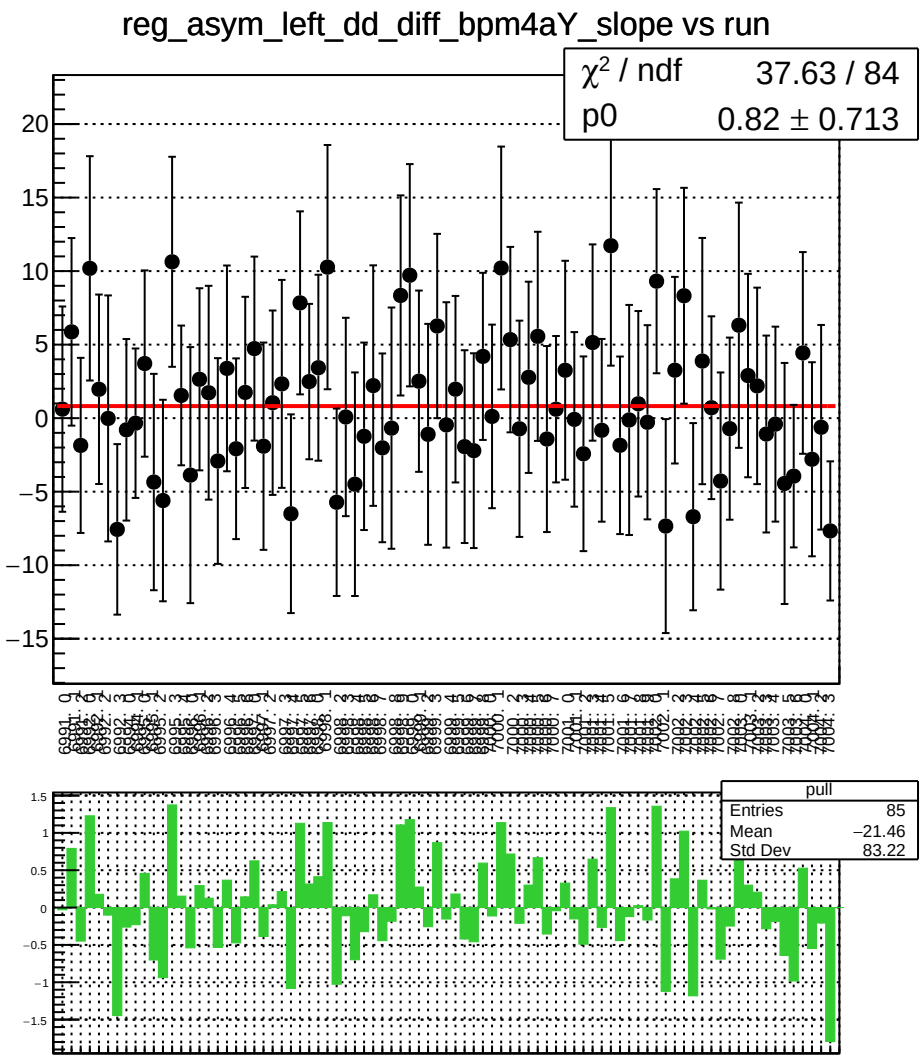

pull1D
Entries 85
Mean 0.015
Std Dev 0.6354

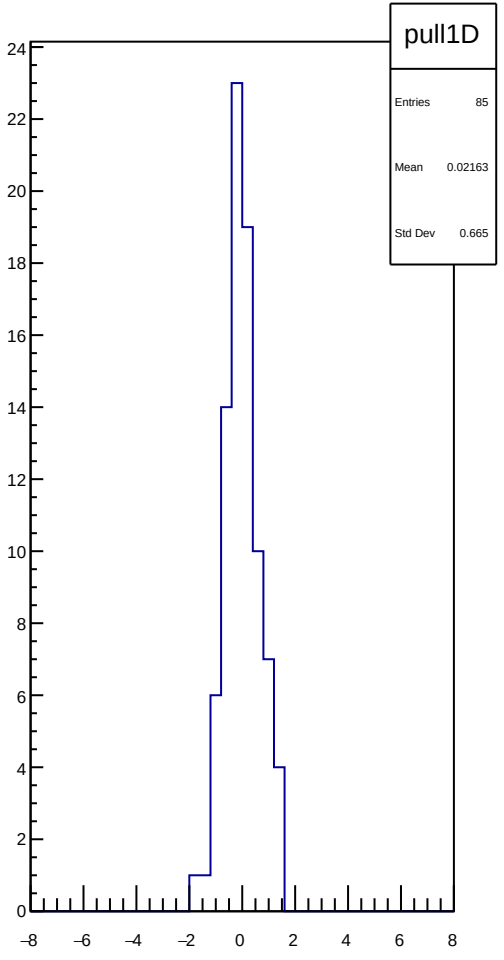

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 40.95 / 84
p0 8.587 ± 0.7522
pull
Entries 85
Mean −51.01
Std Dev 113.1

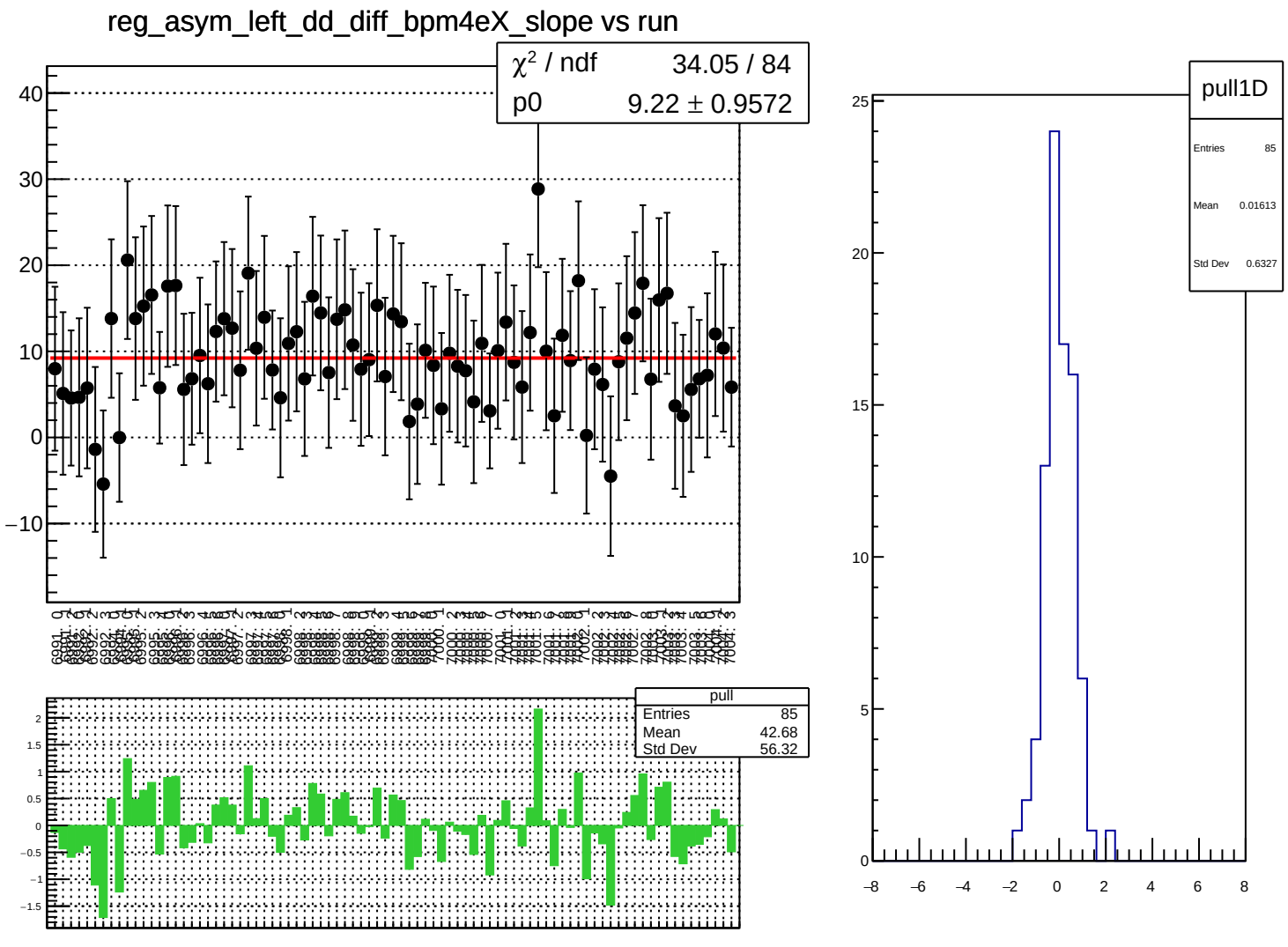

pull1D
Entries 85
Mean −0.01941
Std Dev 0.6938

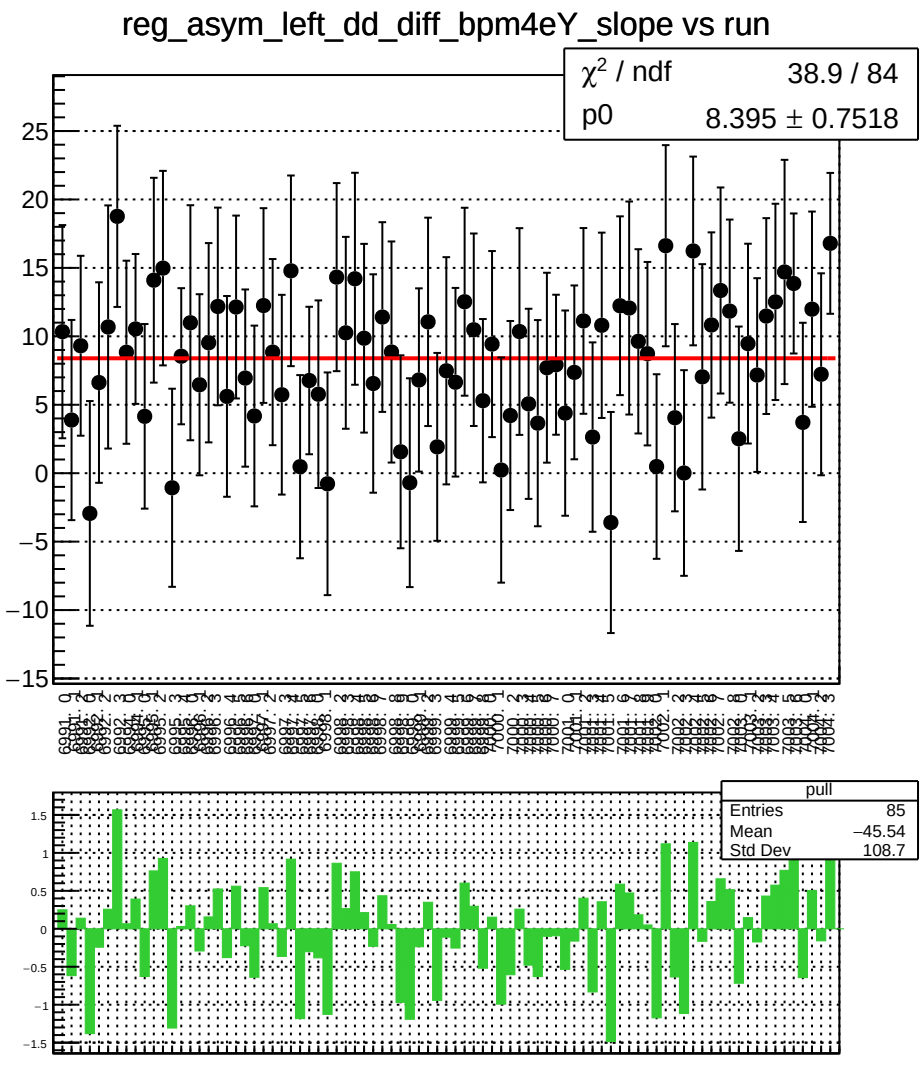

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 148.2 / 84
p0 −20.39 ± 0.03443
pull
Entries 85
Mean −1515
Std Dev 1544
pull1D
Entries 85
Mean 0.00776
Std Dev 1.32

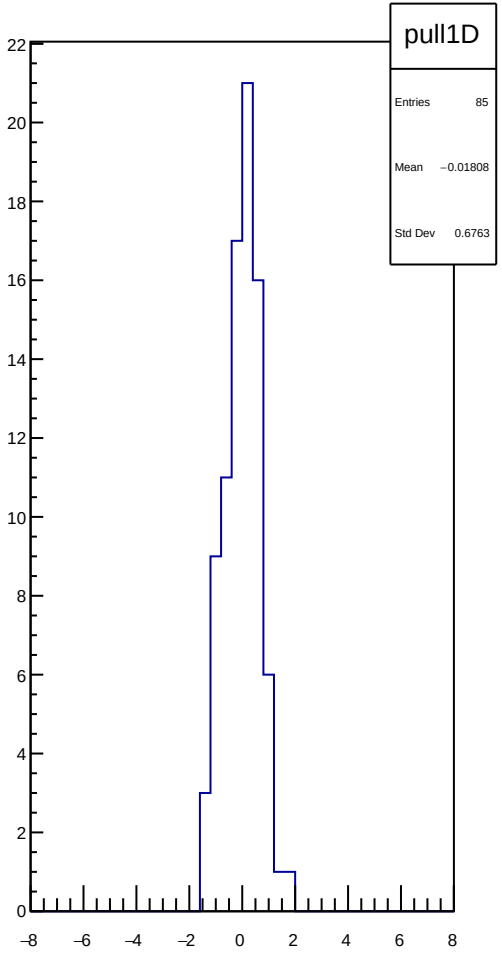

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 32.38 / 84
p0 −41.42 ± 1.037
pull
Entries 85
Mean 6.038
Std Dev 62.42
pull1D
Entries 85
Mean −0.01428
Std Dev 0.6171

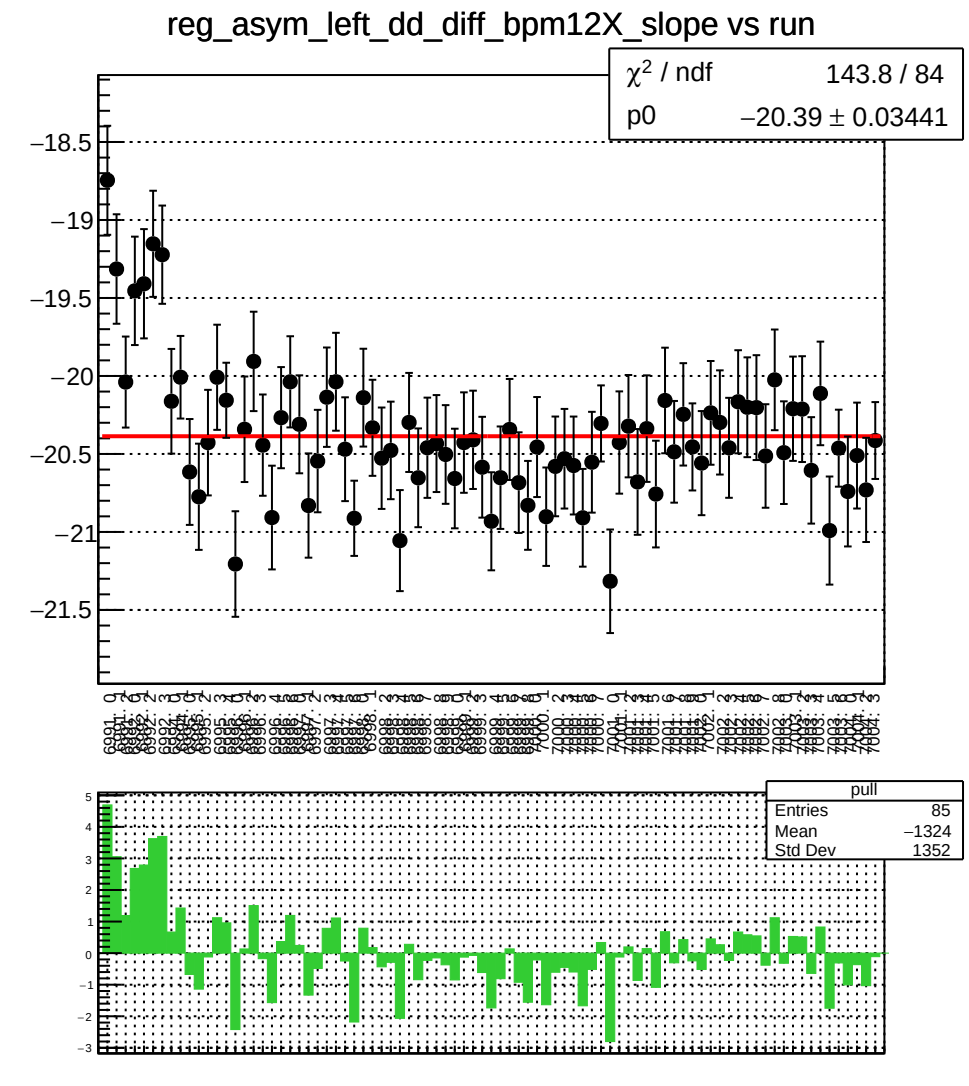

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 37.63 / 84
p0 0.82 ± 0.713
pull
Entries 85
Mean −21.46
Std Dev 83.22

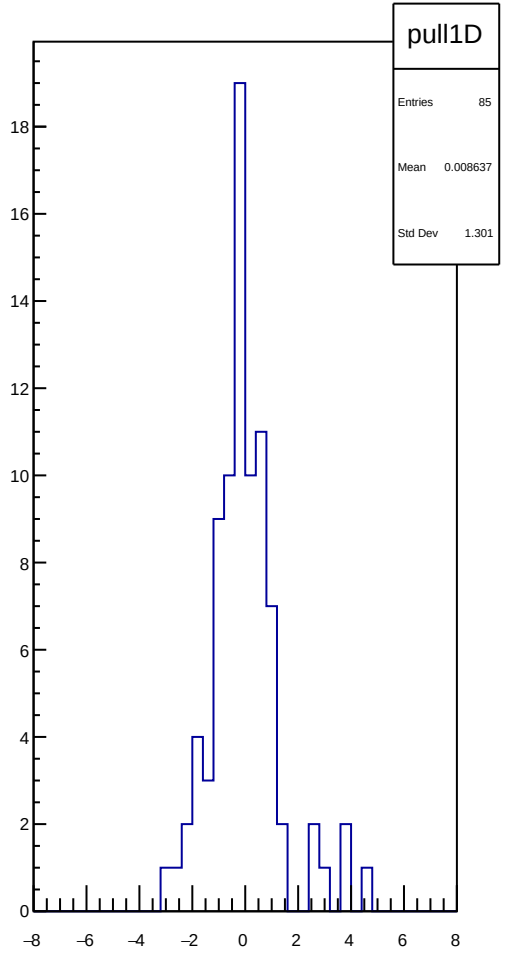

pull1D
Entries 85
Mean 0.02163
Std Dev 0.665

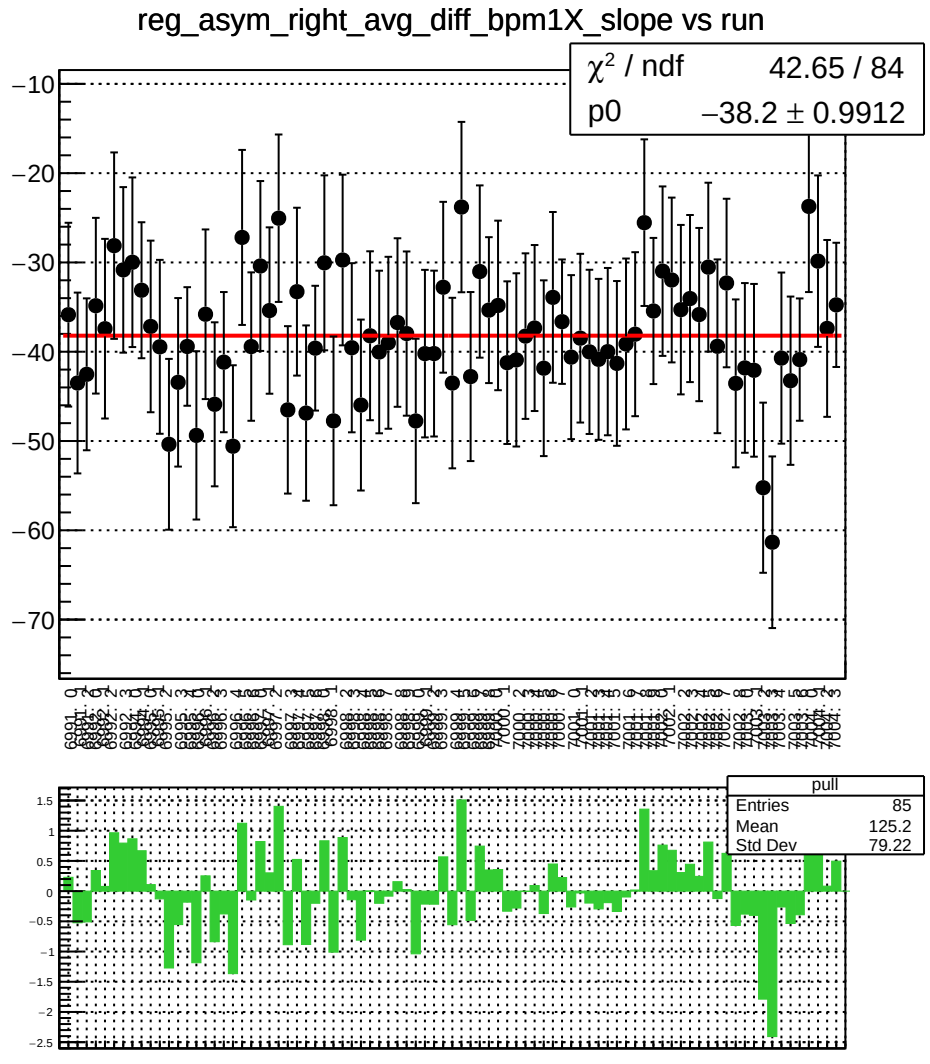

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 34.05 / 84
p0 9.22 ± 0.9572
pull
Entries 85
Mean 42.68
Std Dev 56.32
pull1D
Entries 85
Mean 0.01613
Std Dev 0.6327

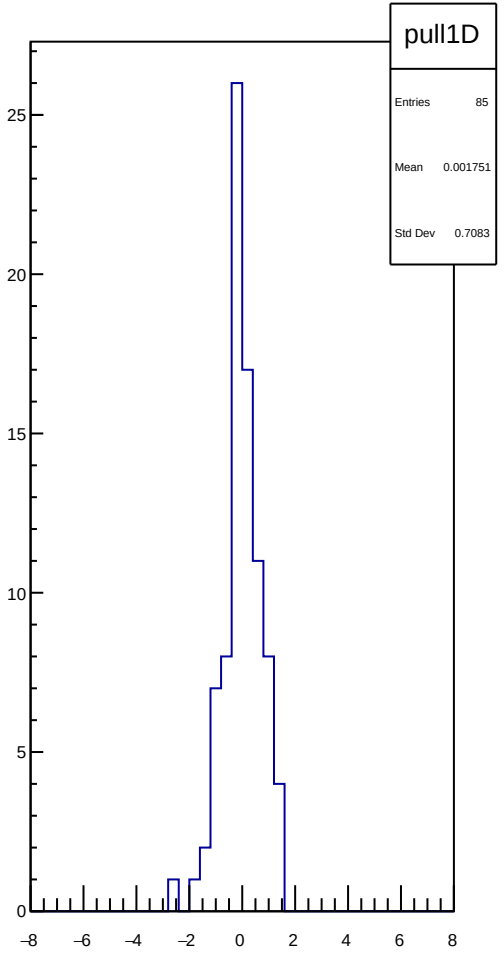

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 38.9 / 84
p0 8.395 ± 0.7518
pull
Entries 85
Mean −45.54
Std Dev 108.7

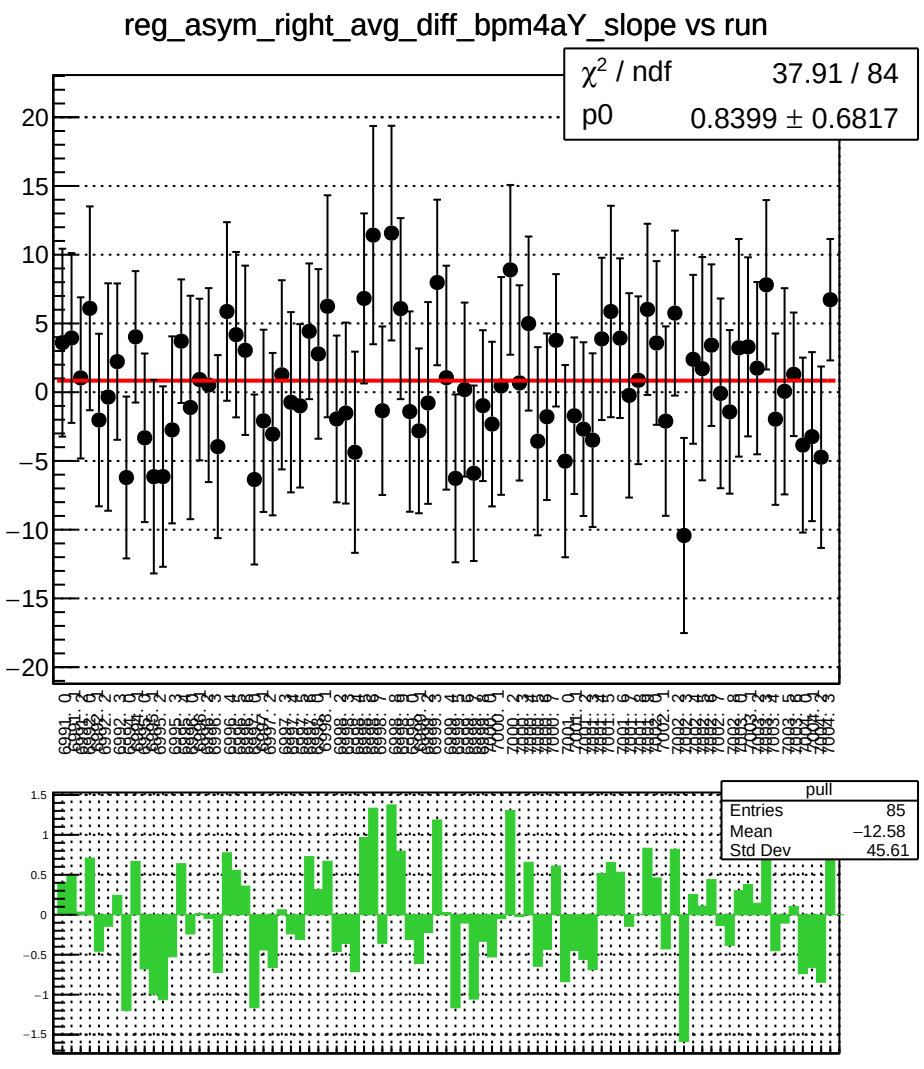

pull1D
Entries 85
Mean −0.01808
Std Dev 0.6763

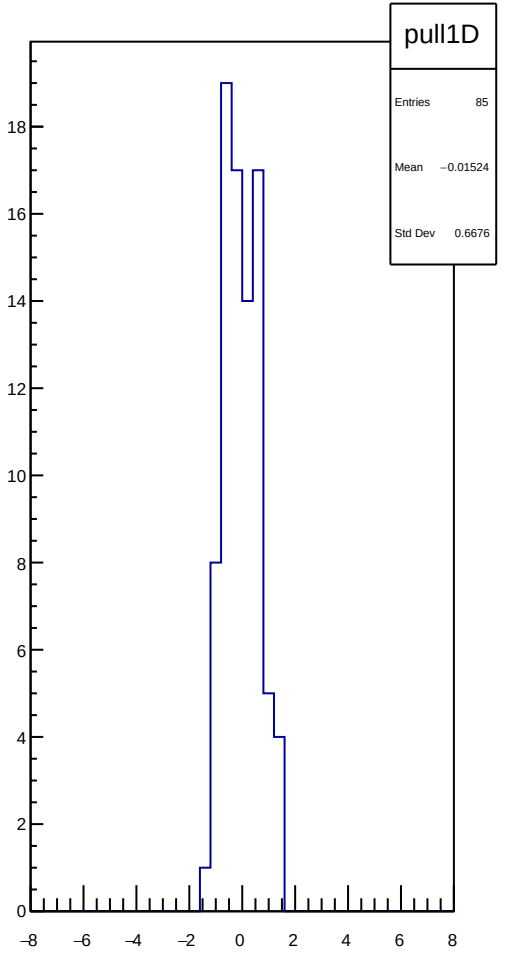

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 143.8 / 84
p0 −20.39 ± 0.03441
−18.5
−19
−19.5
−20
−20.5
−21
−21.5
pull
Entries 85
Mean −1324
Std Dev 1352
5
4
3
2
1
0
−1
−2
−3

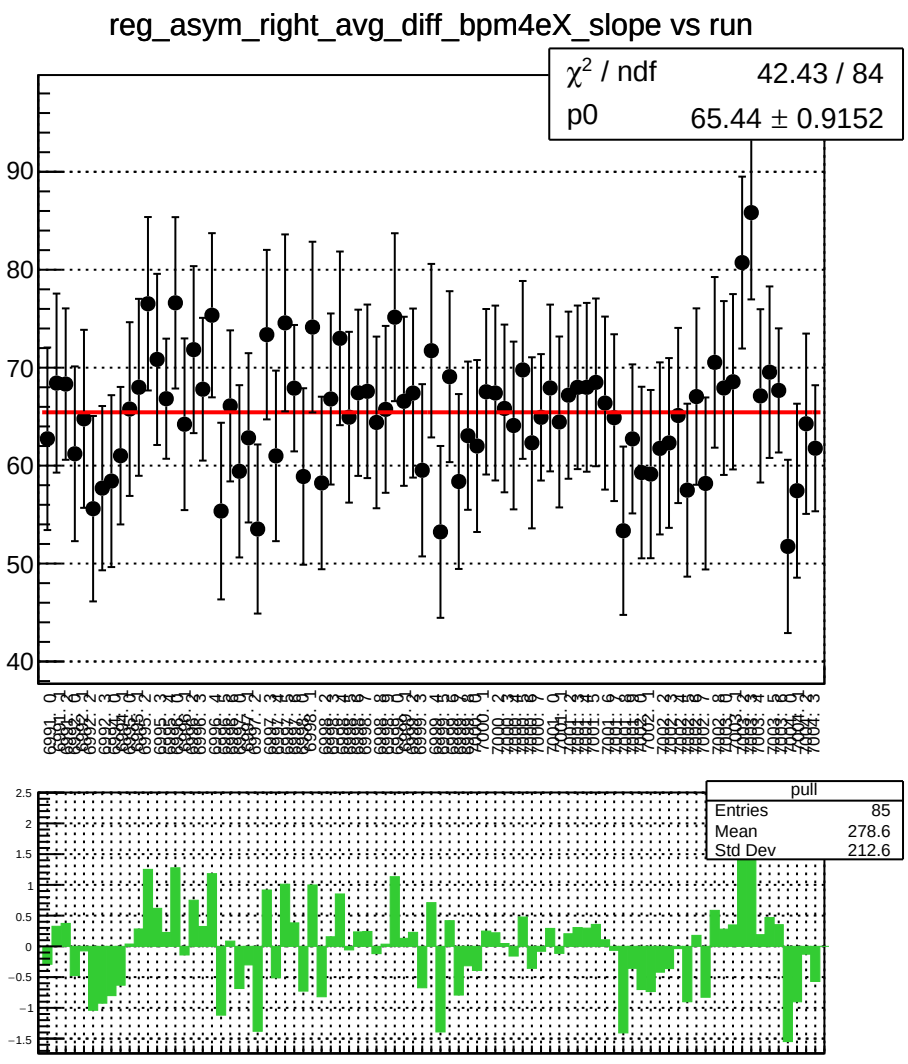

pull1D
Entries 85
Mean 0.008637
Std Dev 1.301
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

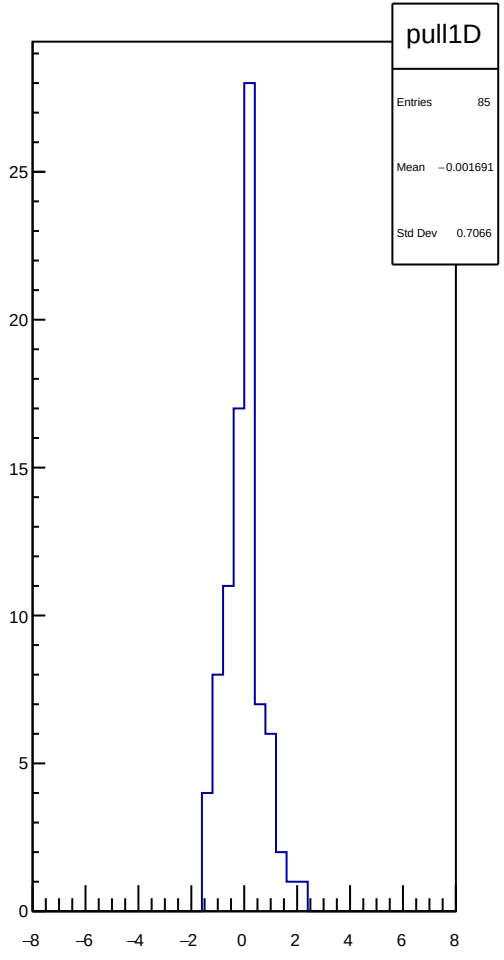

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 42.65 / 84
p0 −38.2 ± 0.9912
pull
Entries 85
Mean 125.2
Std Dev 79.22

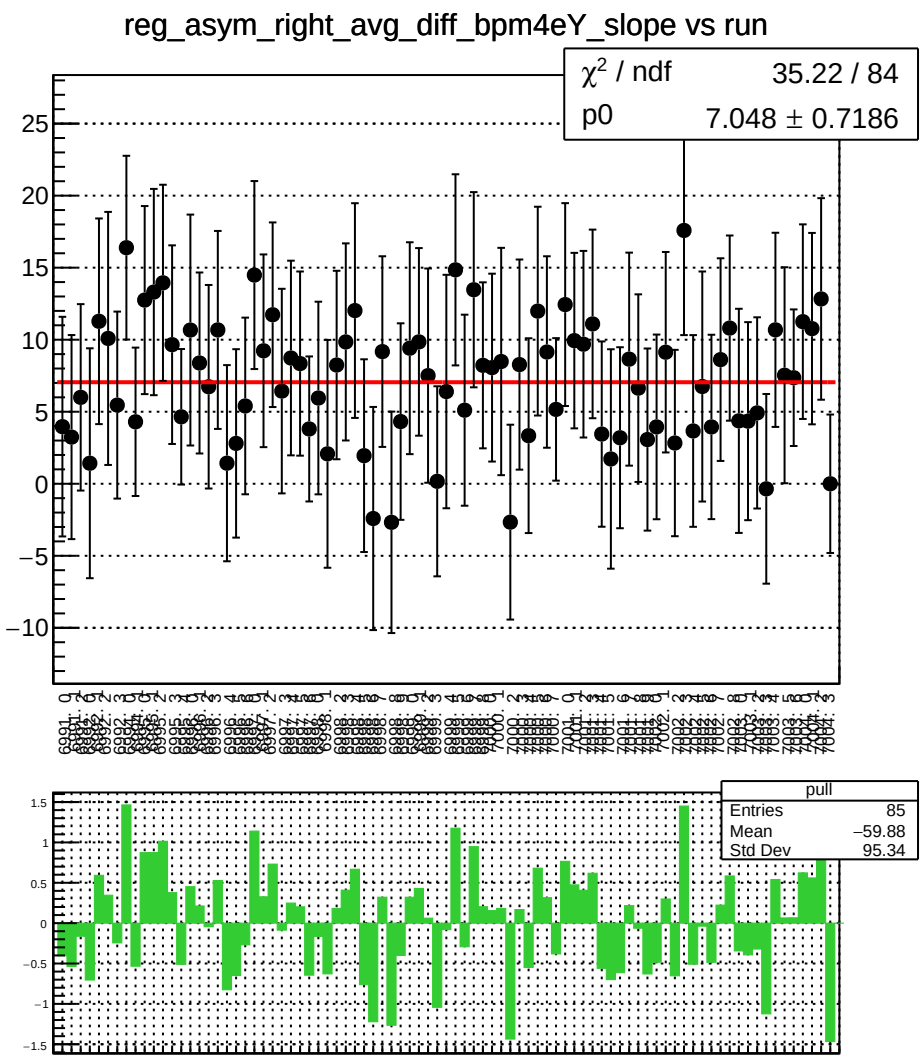

pull1D
Entries 85
Mean 0.001751
Std Dev 0.7083

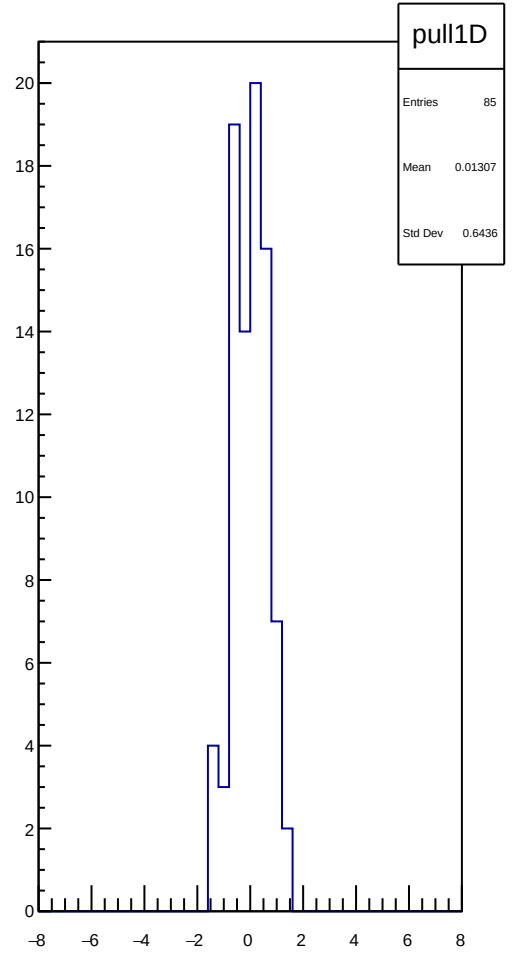

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 37.91 / 84
p0 0.8399 ± 0.6817
pull
Entries 85
Mean −12.58
Std Dev 45.61

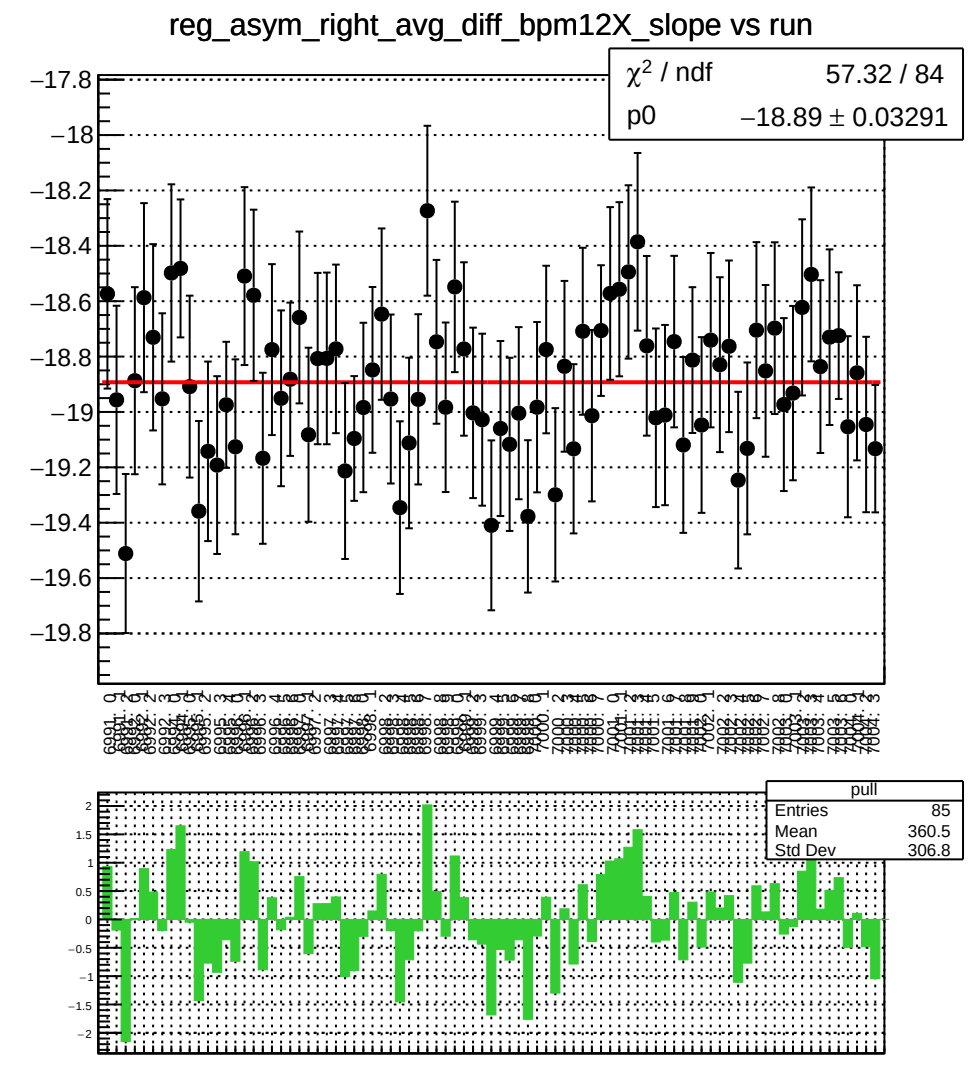

pull1D
Entries 85
Mean −0.01524
Std Dev 0.6676

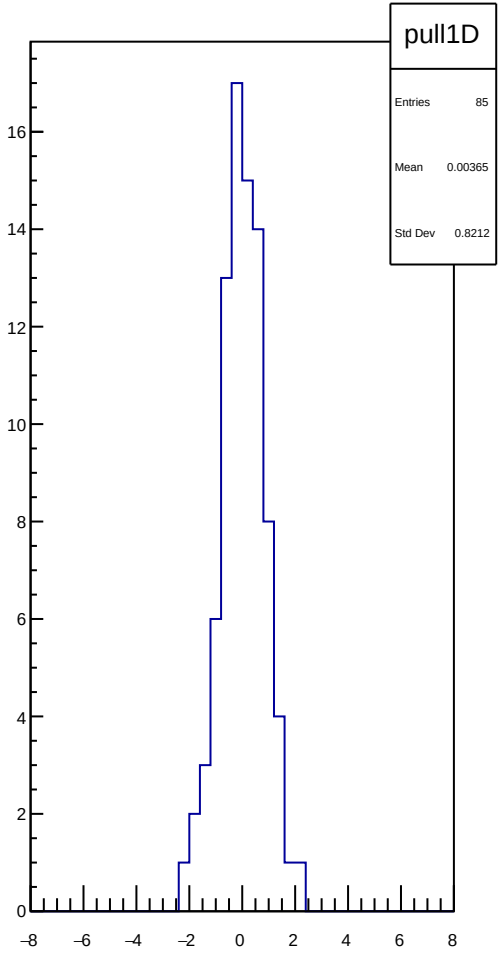

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 42.43 / 84
p0 65.44 ± 0.9152
90
80
70
60
50
40
pull
Entries 85
Mean 278.6
Std Dev 212.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

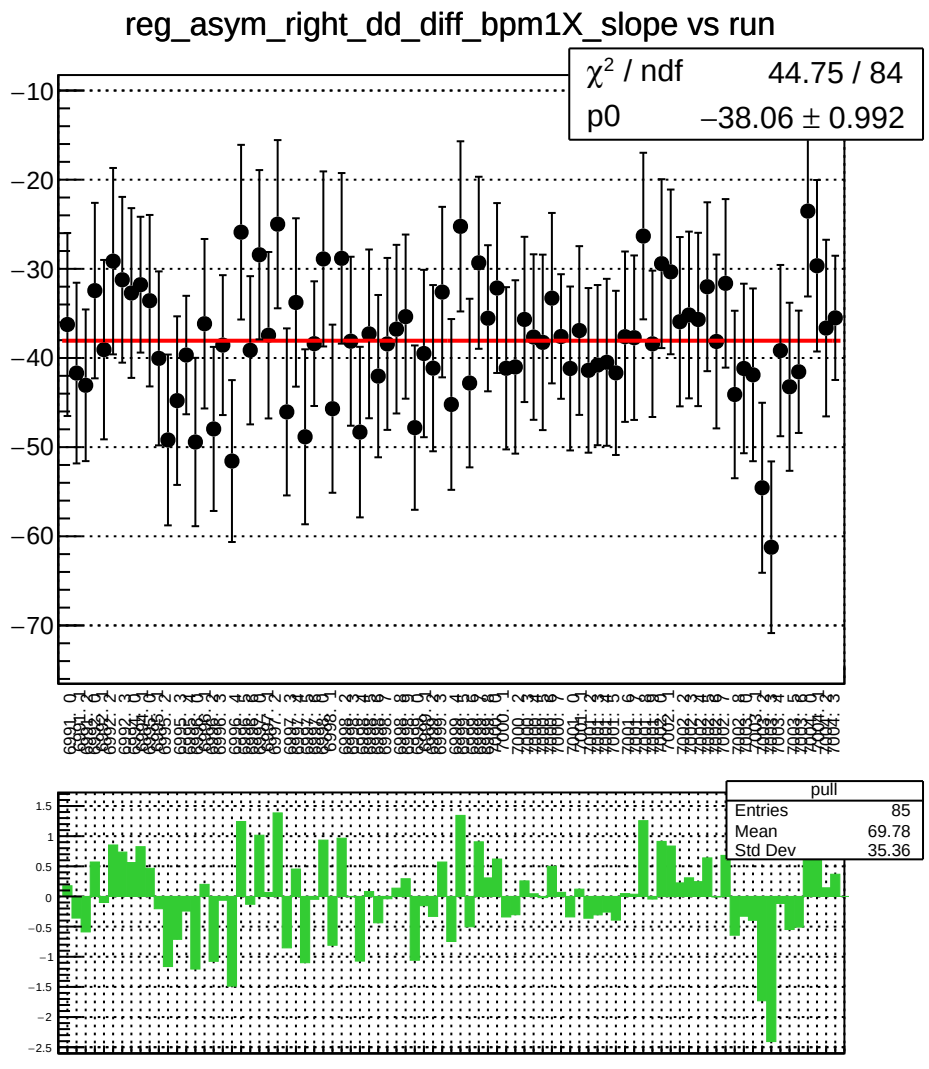

pull1D
Entries 85
Mean −0.001691
Std Dev 0.7066
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

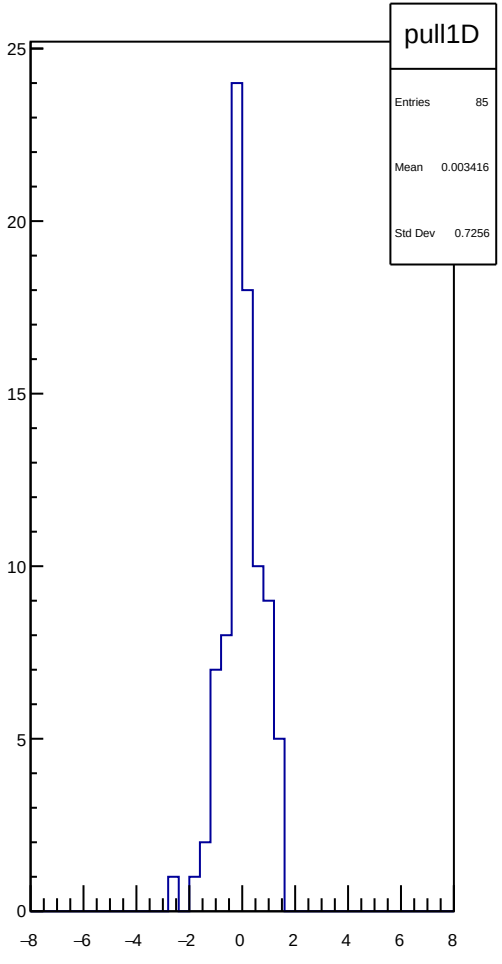

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 35.22 / 84
p0 7.048 ± 0.7186
pull
Entries 85
Mean −59.88
Std Dev 95.34

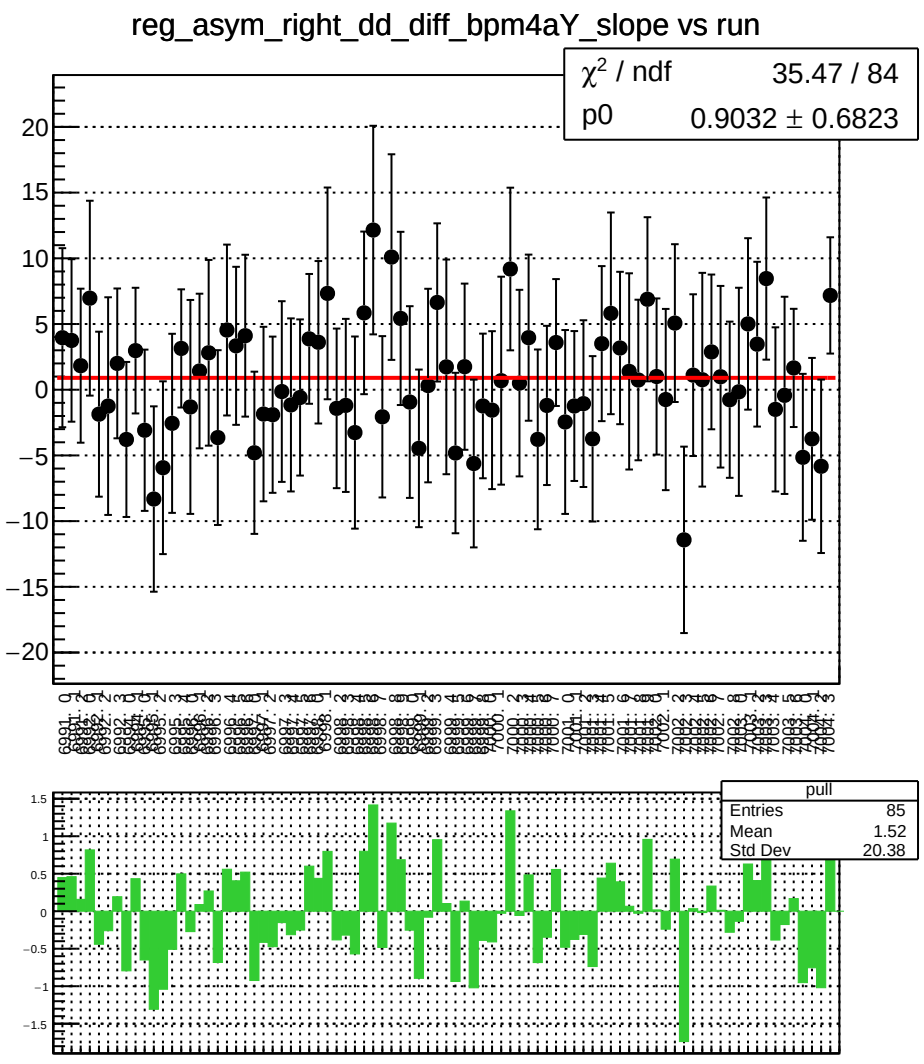

pull1D
Entries 85
Mean 0.01307
Std Dev 0.6436

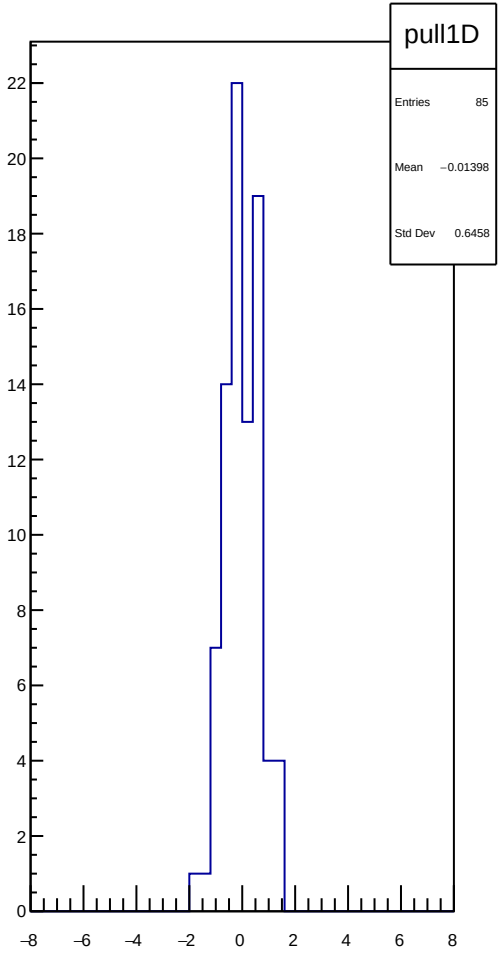

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 57.32 / 84
p0 −18.89 ± 0.03291
pull
Entries 85
Mean 360.5
Std Dev 306.8

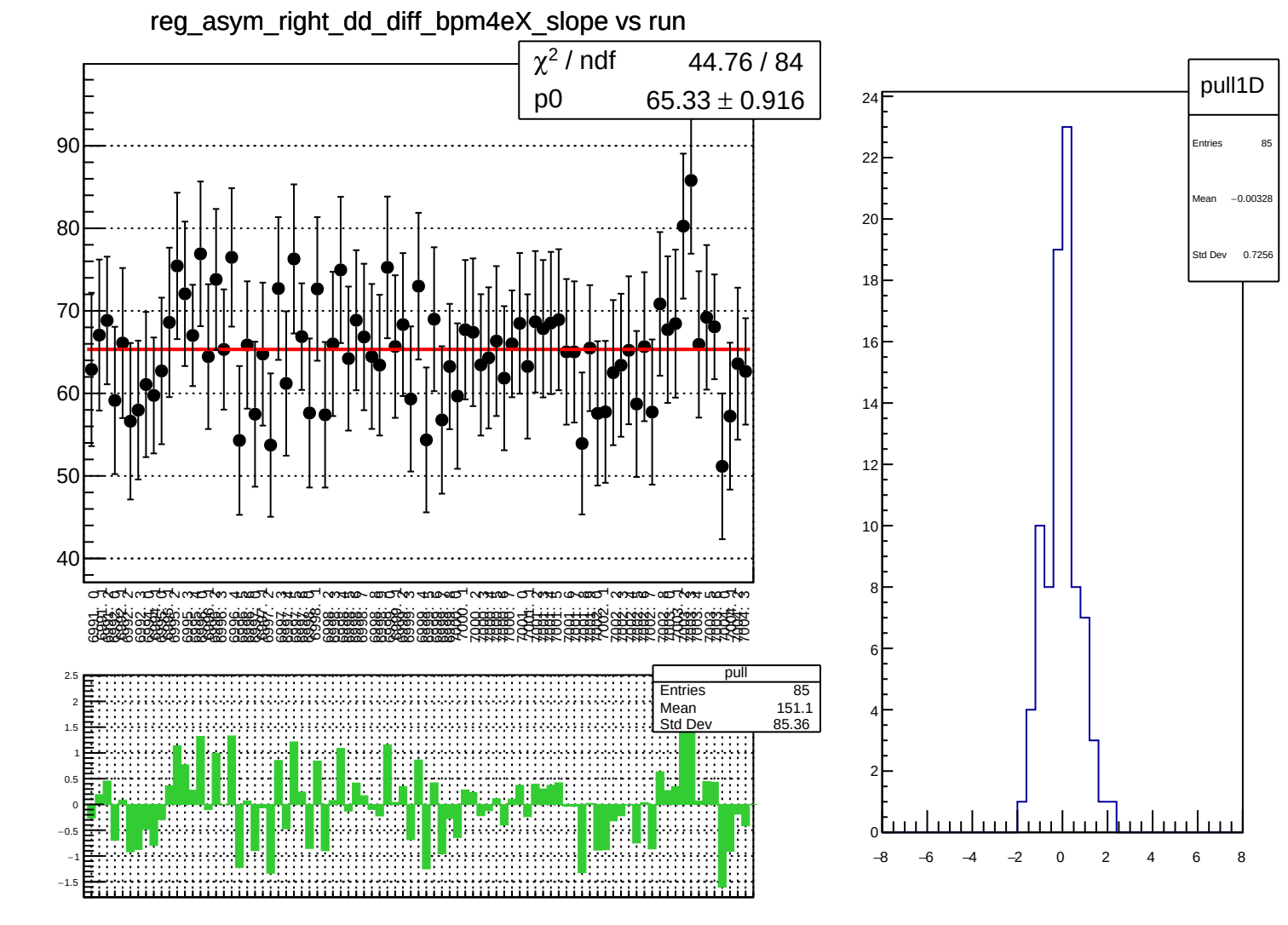

pull1D
Entries 85
Mean 0.00365
Std Dev 0.8212

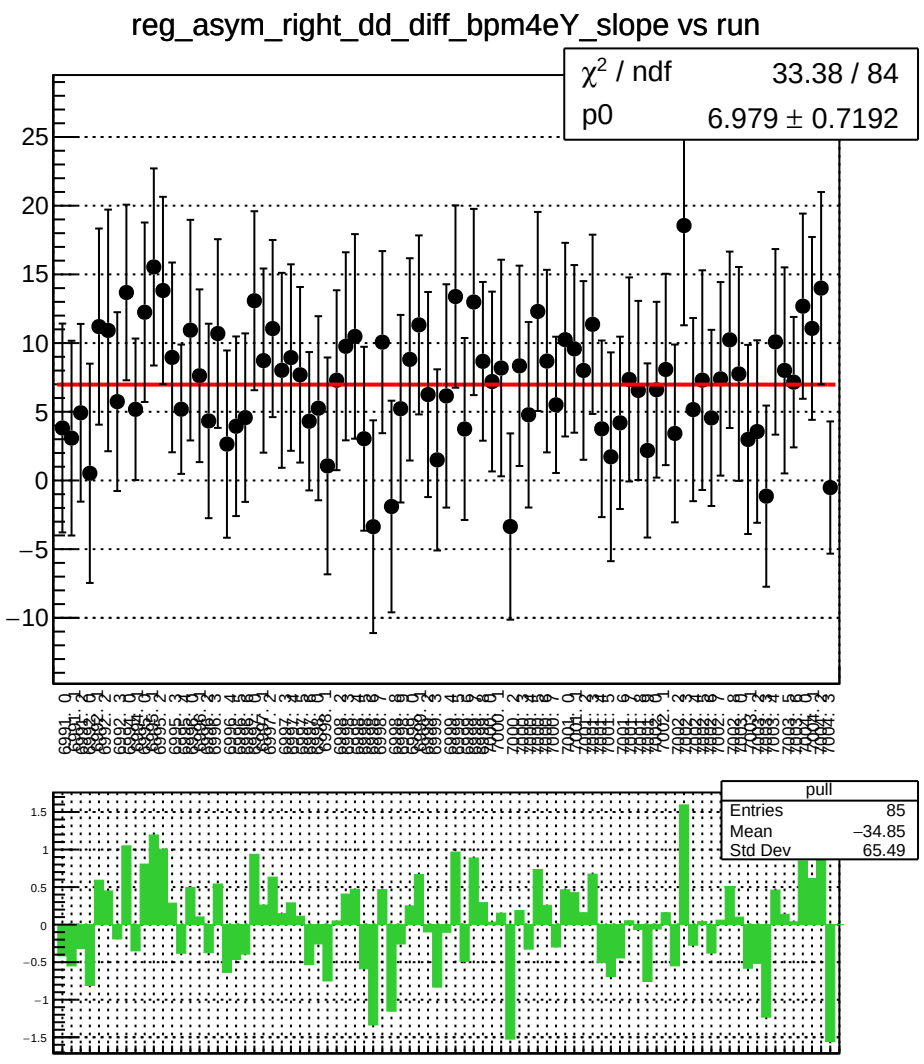

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 44.75 / 84
p0 −38.06 ± 0.992
pull
Entries 85
Mean 69.78
Std Dev 35.36

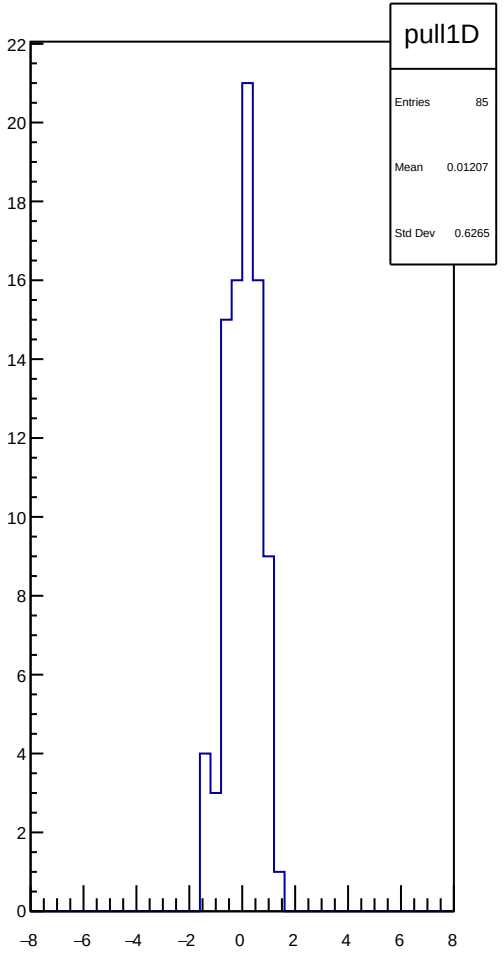

pull1D
Entries 85
Mean 0.003416
Std Dev 0.7256

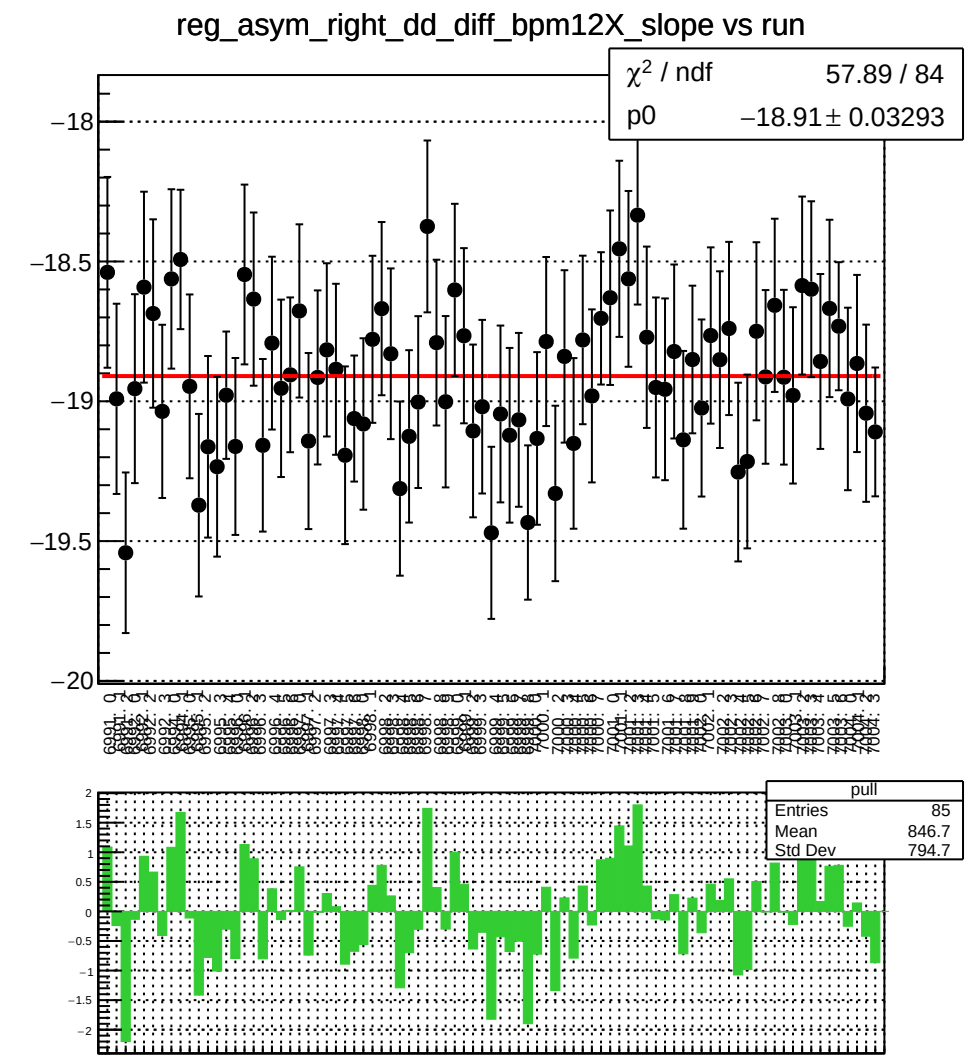

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 35.47 / 84
p0 0.9032 ± 0.6823
pull
Entries 85
Mean 1.52
Std Dev 20.38

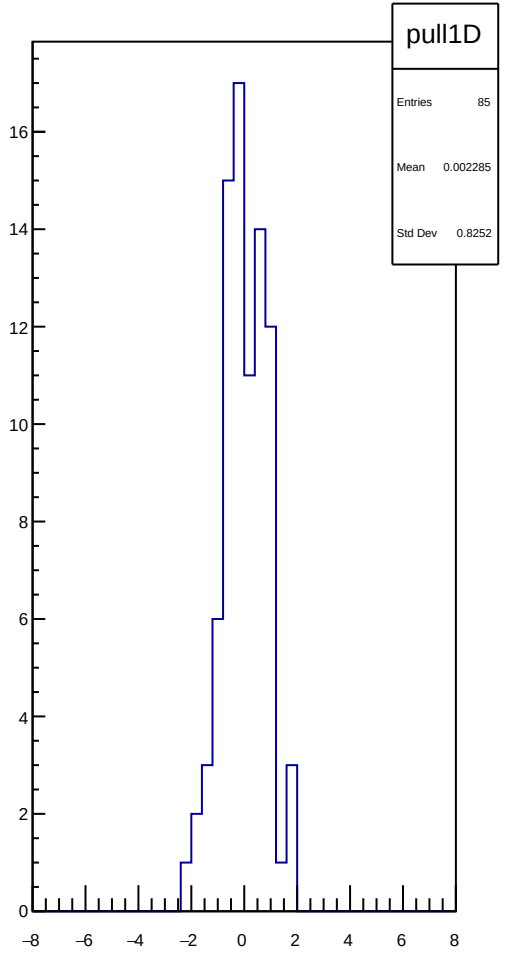

pull1D
Entries 85
Mean −0.01398
Std Dev 0.6458

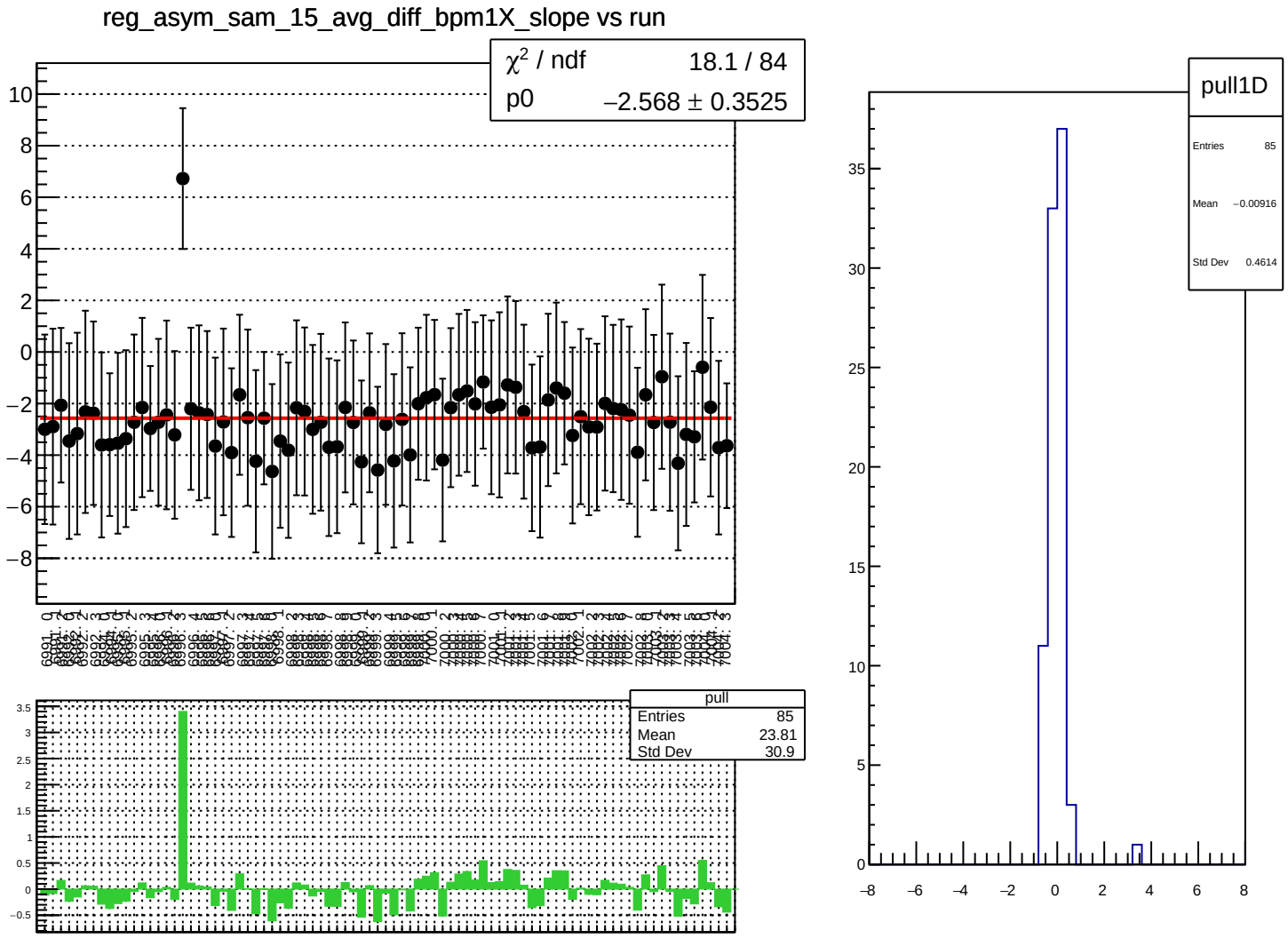

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 44.76 / 84
p0 65.33 ± 0.916
pull
Entries 85
Mean 151.1
Std Dev 85.36
pull1D
Entries 85
Mean −0.00328
Std Dev 0.7256

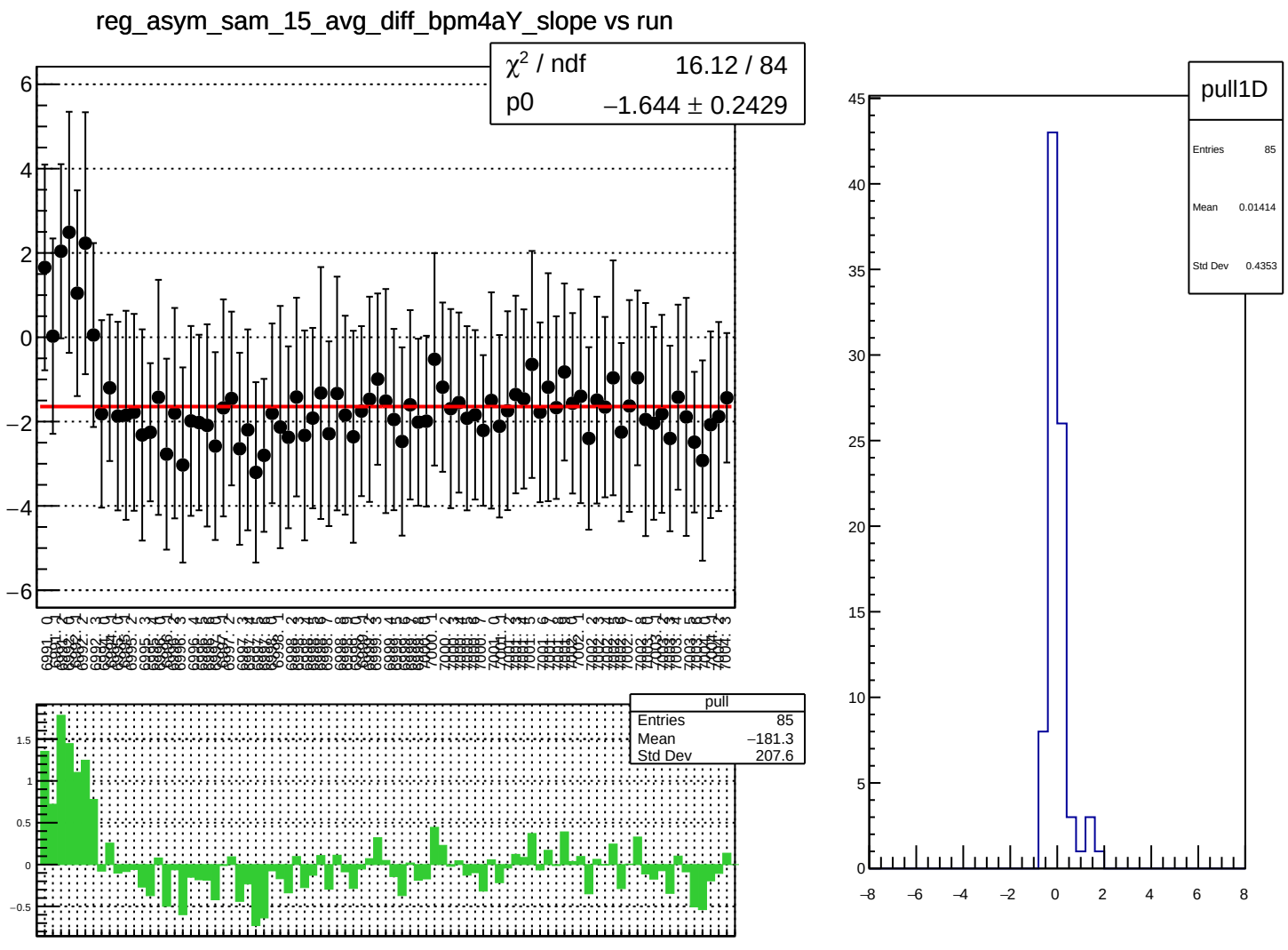

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 33.38 / 84
p0 6.979 ± 0.7192
pull
Entries 85
Mean −34.85
Std Dev 65.49

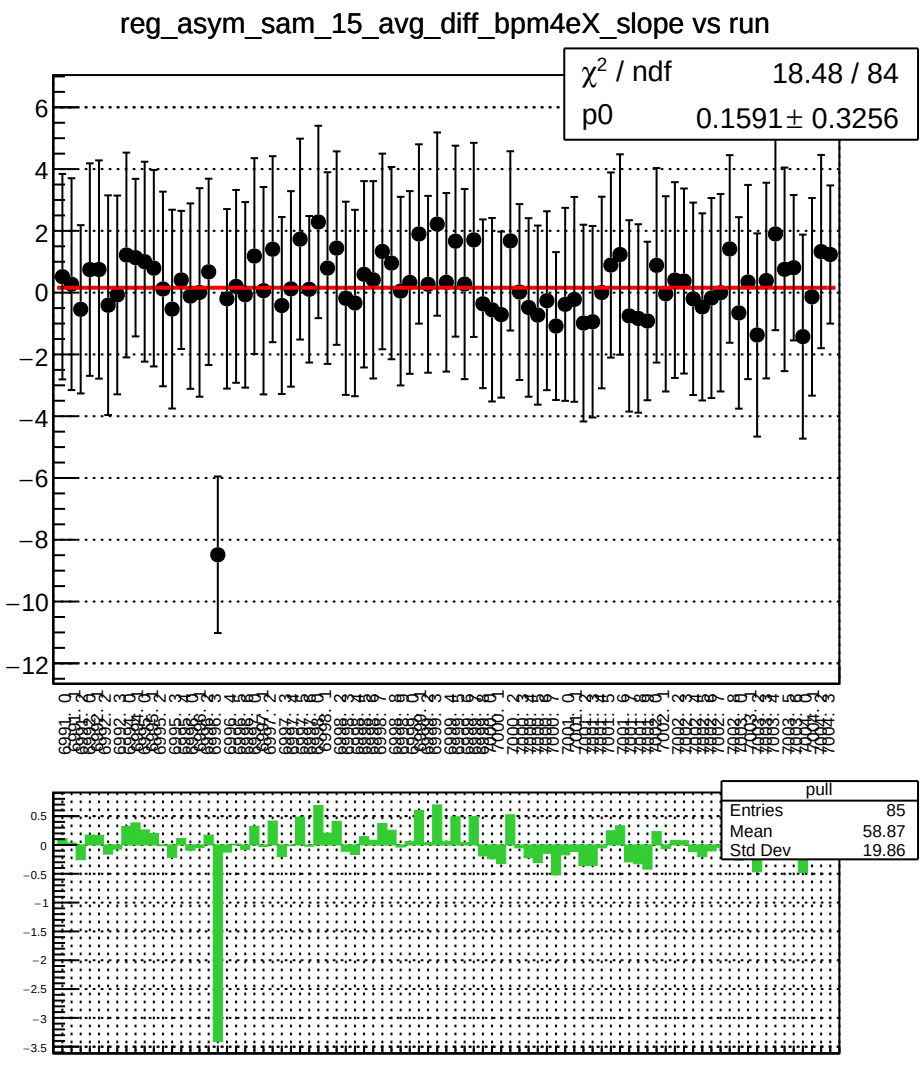

pull1D
Entries 85
Mean 0.01207
Std Dev 0.6265

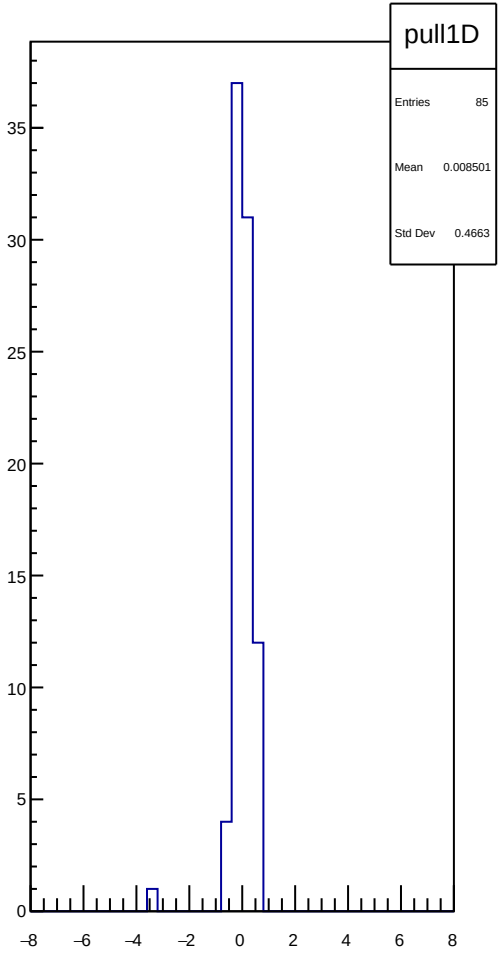

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 57.89 / 84
p0 −18.91 ± 0.03293
−18
−18.5
−19
−19.5
−20
pull
Entries 85
Mean 846.7
Std Dev 794.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

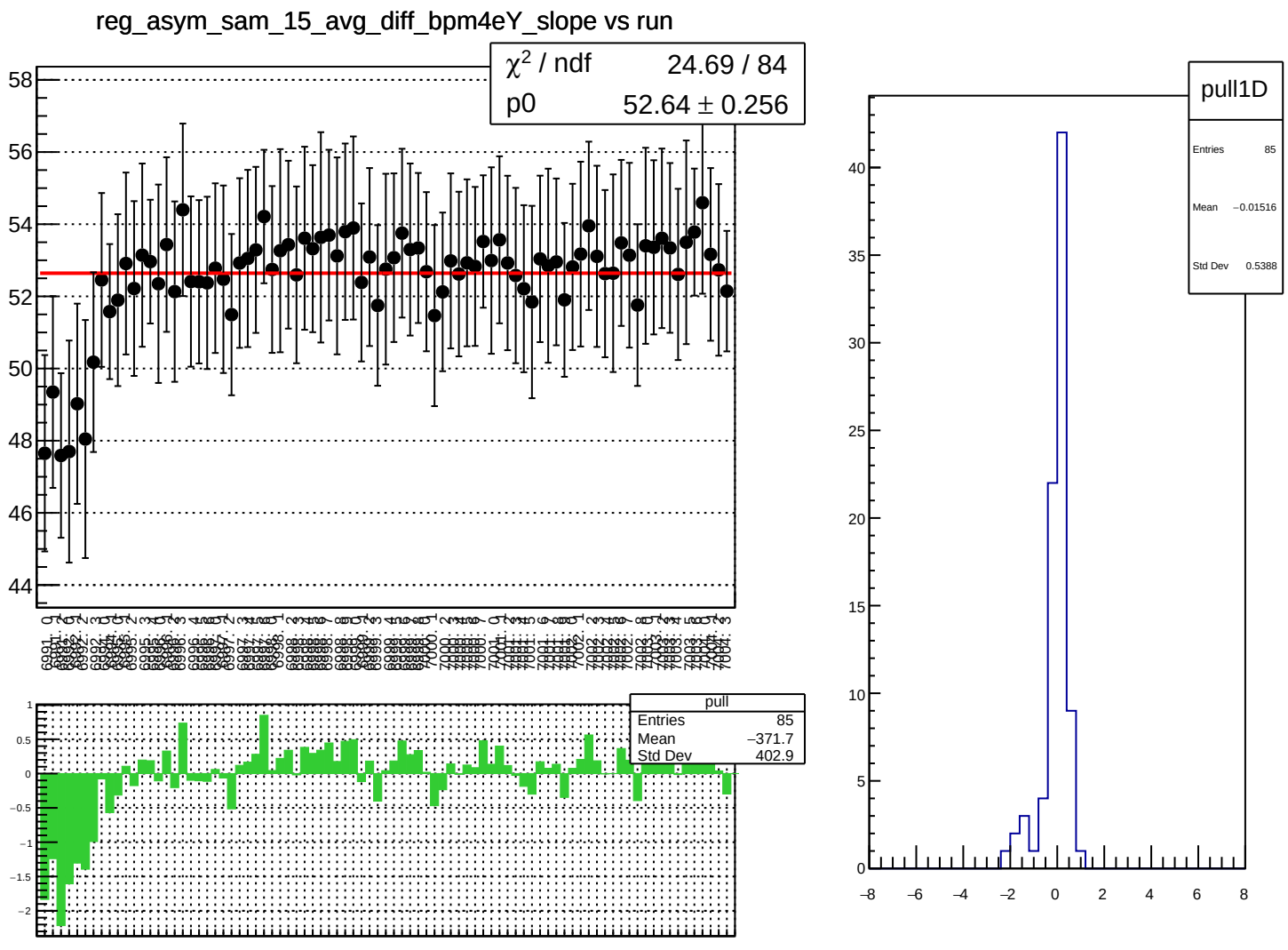

pull1D
Entries 85
Mean 0.002285
Std Dev 0.8252
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

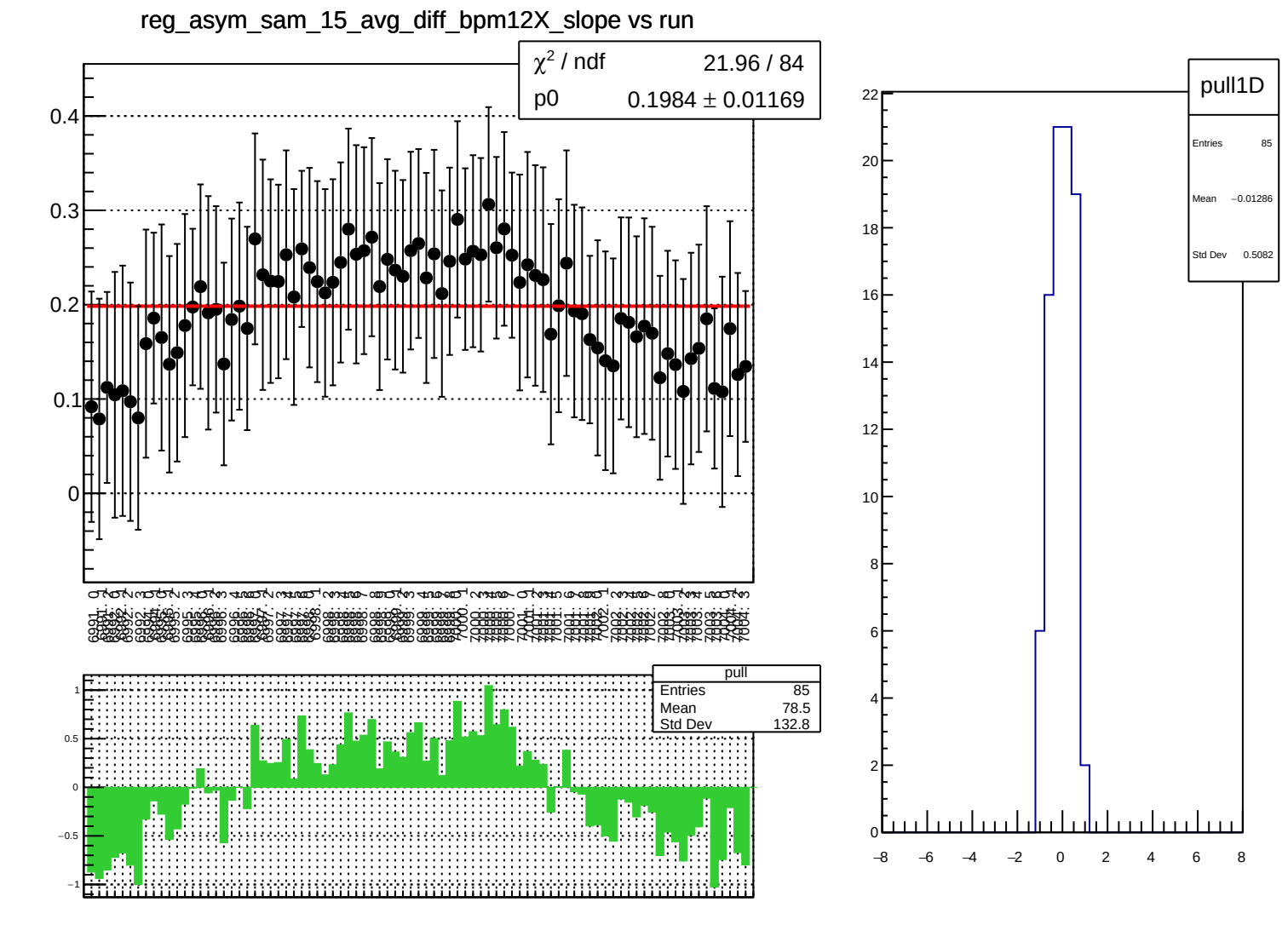

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 18.1 / 84
p0 −2.568 ± 0.3525
pull
Entries 85
Mean 23.81
Std Dev 30.9
pull1D
Entries 85
Mean −0.00916
Std Dev 0.4614

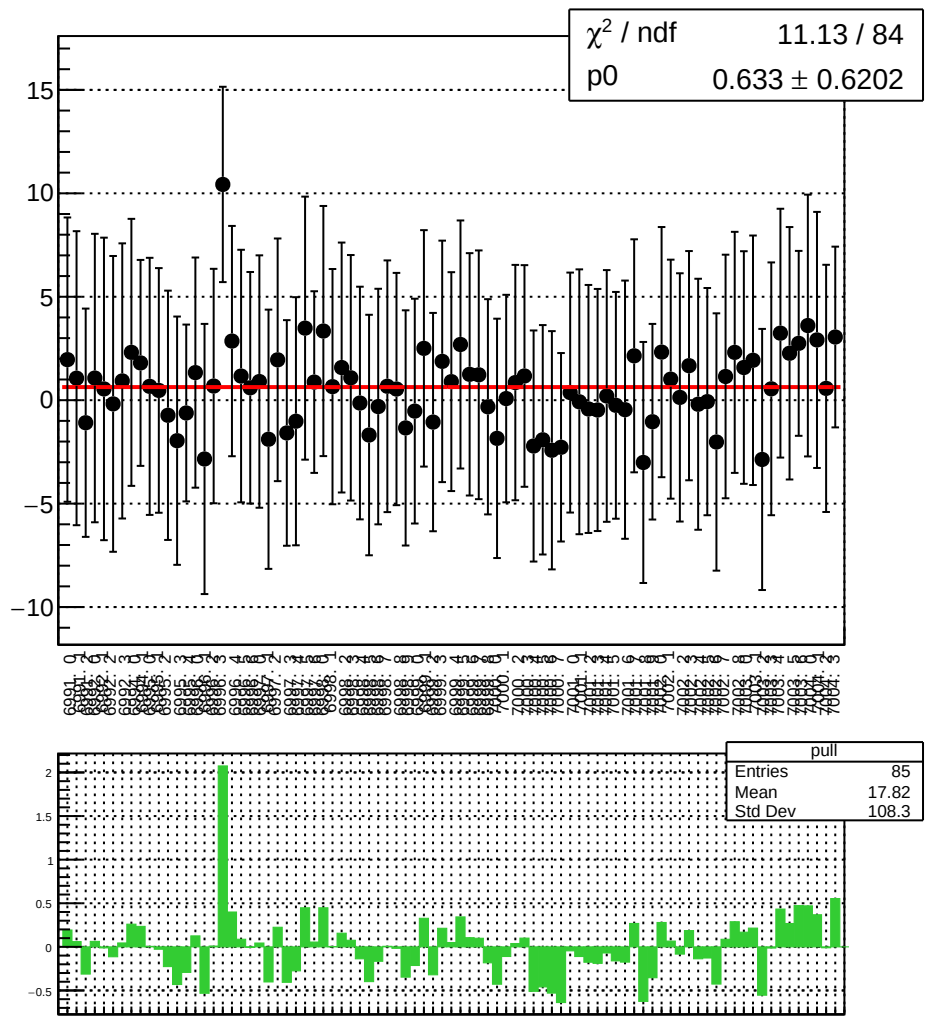

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 16.12 / 84
p0 −1.644 ± 0.2429
pull
Entries 85
Mean −181.3
Std Dev 207.6
pull1D
Entries 85
Mean 0.01414
Std Dev 0.4353

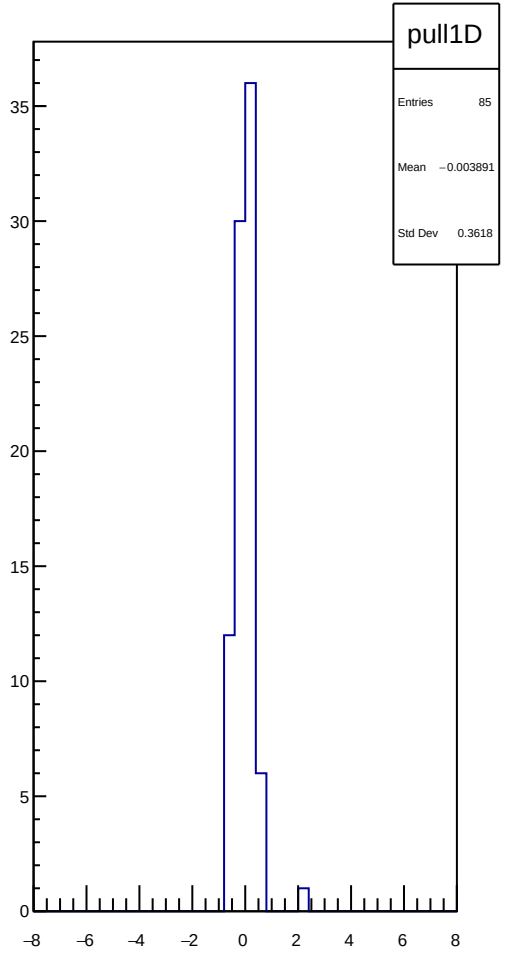

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 18.48 / 84
p0 0.1591 ± 0.3256
pull
Entries 85
Mean 58.87
Std Dev 19.86

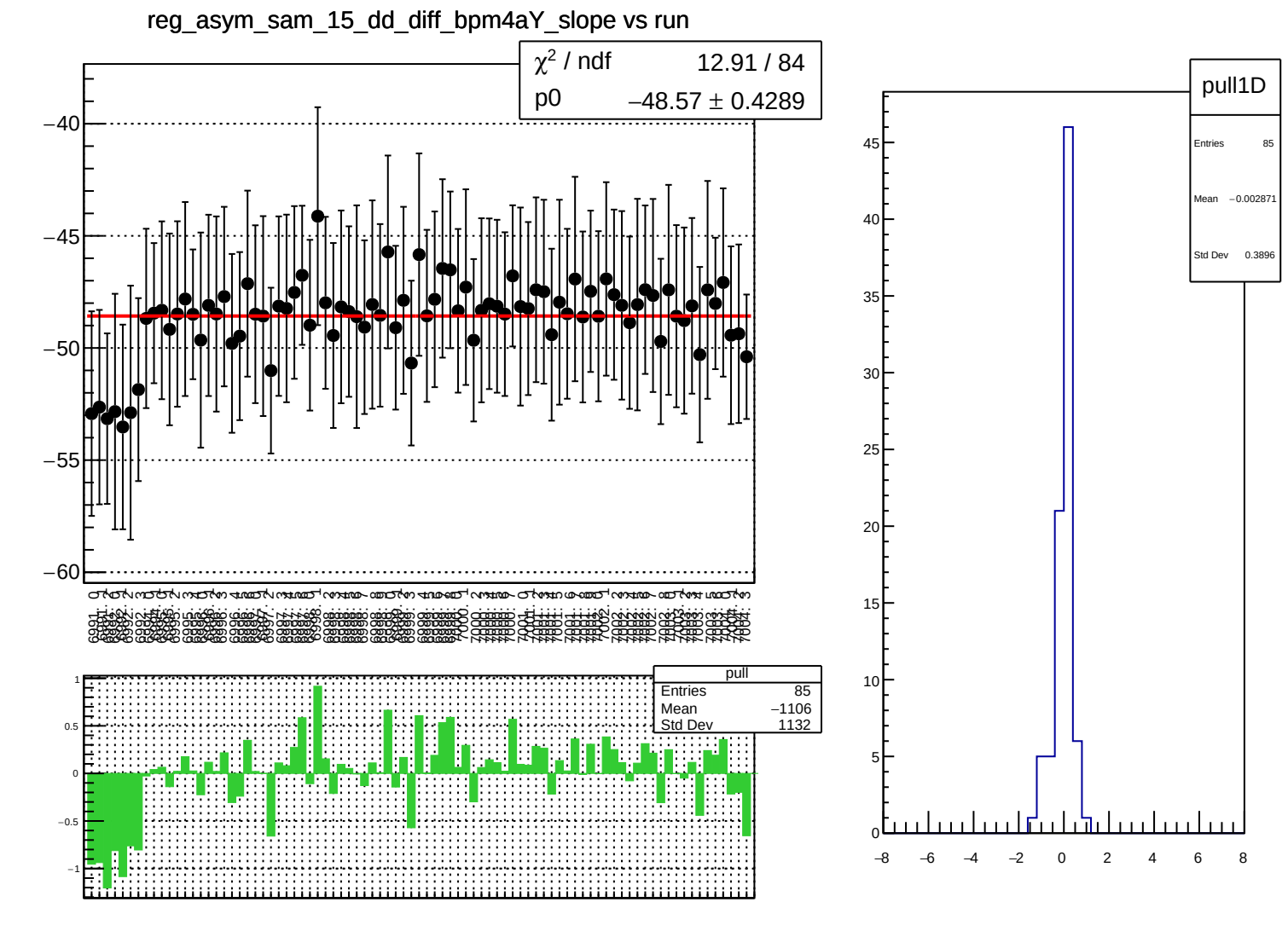

pull1D
Entries 85
Mean 0.008501
Std Dev 0.4663

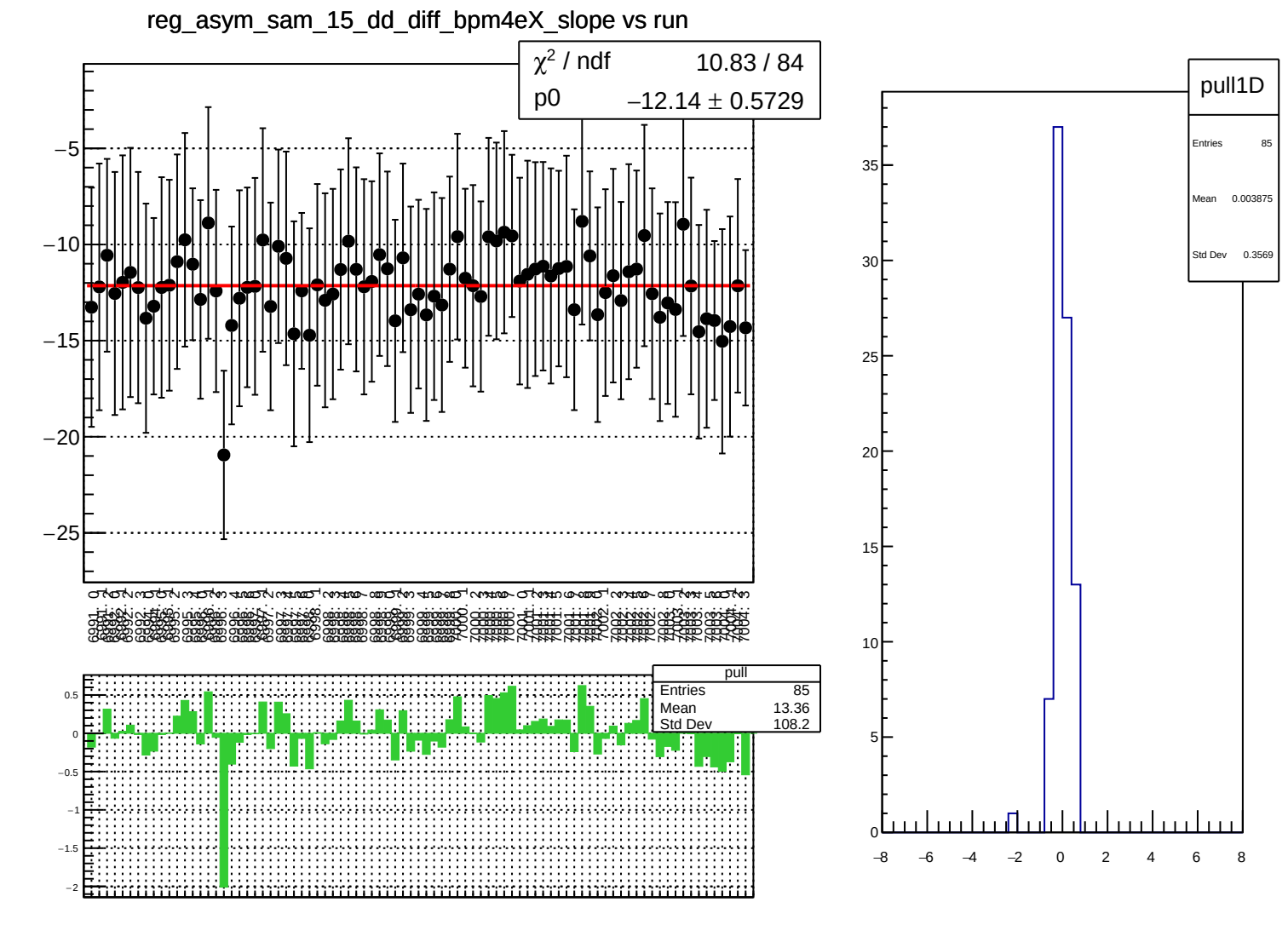

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 24.69 / 84
p0 52.64 ± 0.256
pull
Entries 85
Mean −371.7
Std Dev 402.9
pull1D
Entries 85
Mean −0.01516
Std Dev 0.5388

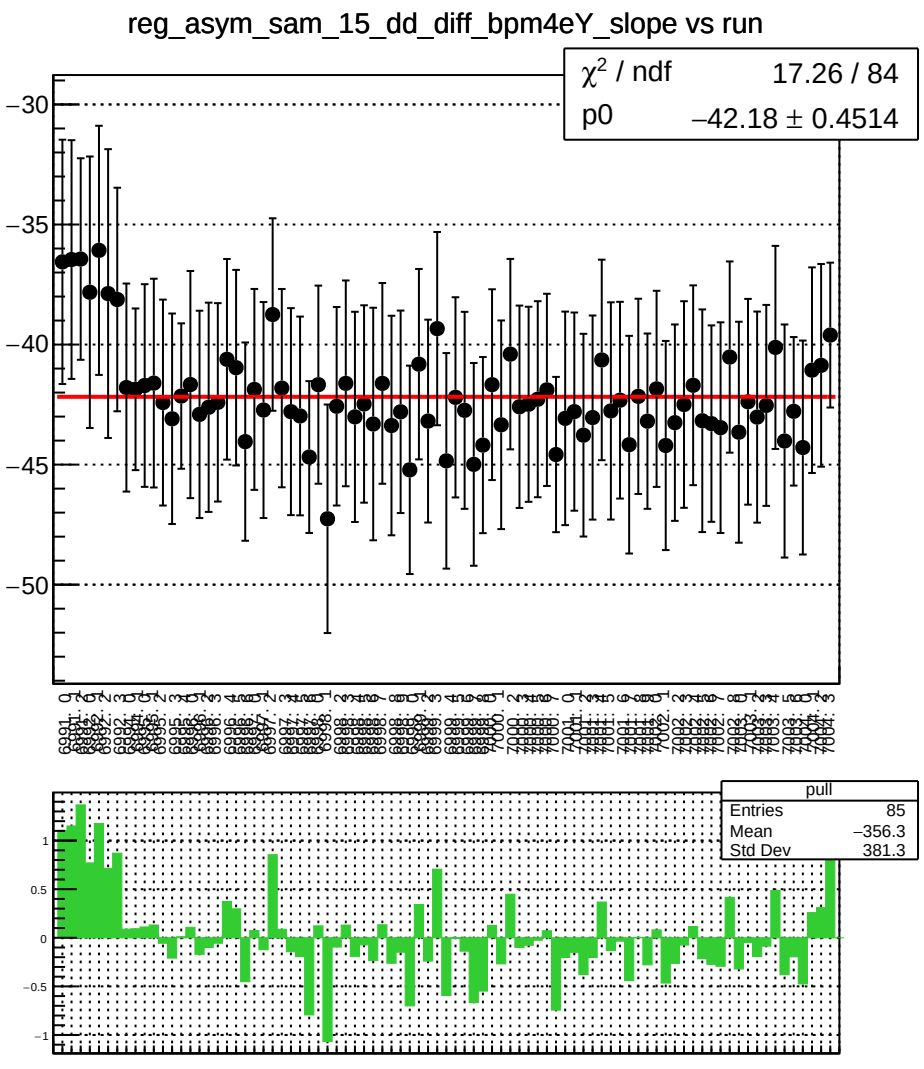

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 21.96 / 84
p0 0.1984 ± 0.01169
pull
Entries 85
Mean 78.5
Std Dev 132.8
pull1D
Entries 85
Mean −0.01286
Std Dev 0.5082

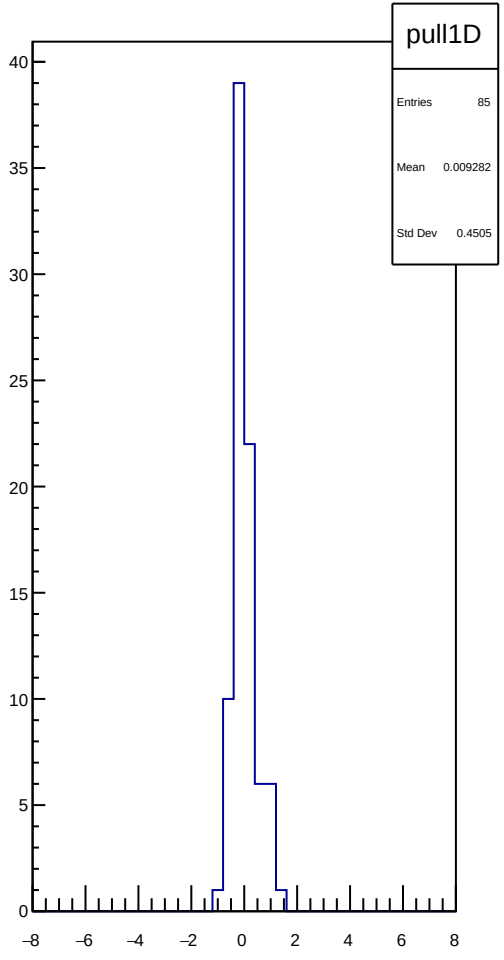

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 11.13 / 84
p0 0.633 ± 0.6202
pull
Entries 85
Mean 17.82
Std Dev 108.3

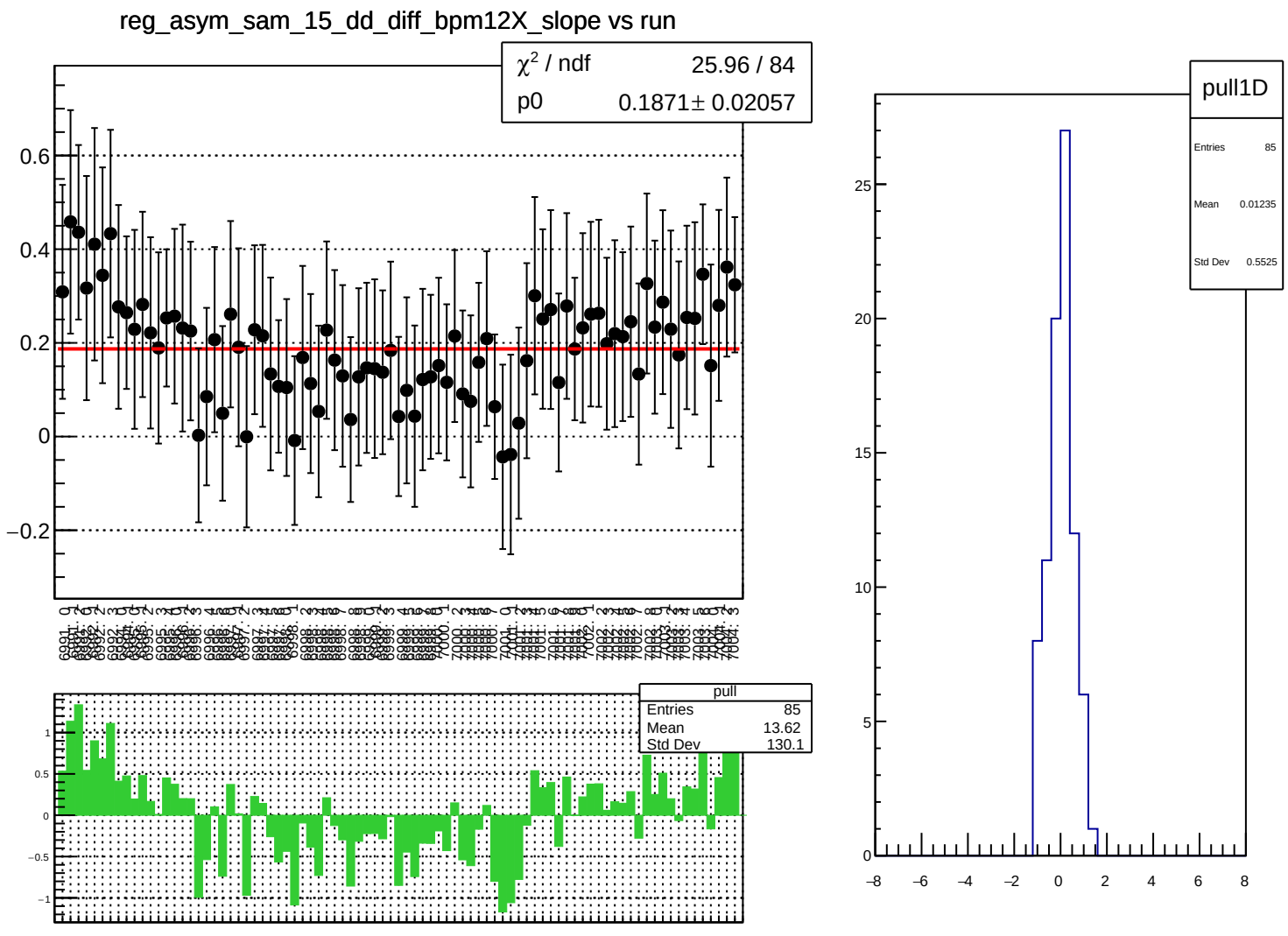

pull1D
Entries 85
Mean −0.003891
Std Dev 0.3618

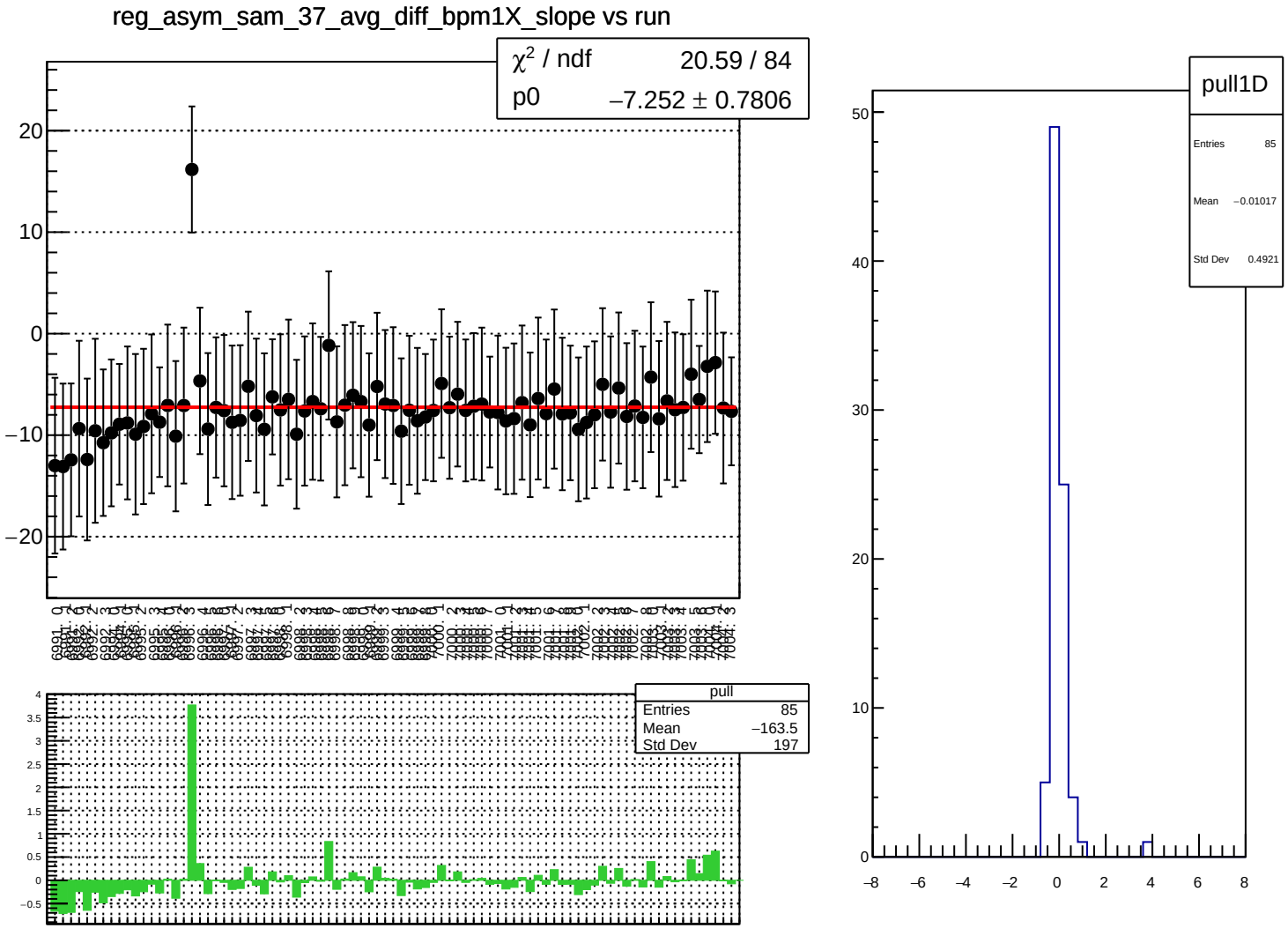

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 12.91 / 84
p0 −48.57 ± 0.4289
−40
−45
−50
−55
−60
pull
Entries 85
Mean −1106
Std Dev 1132
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.002871
Std Dev 0.3896
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

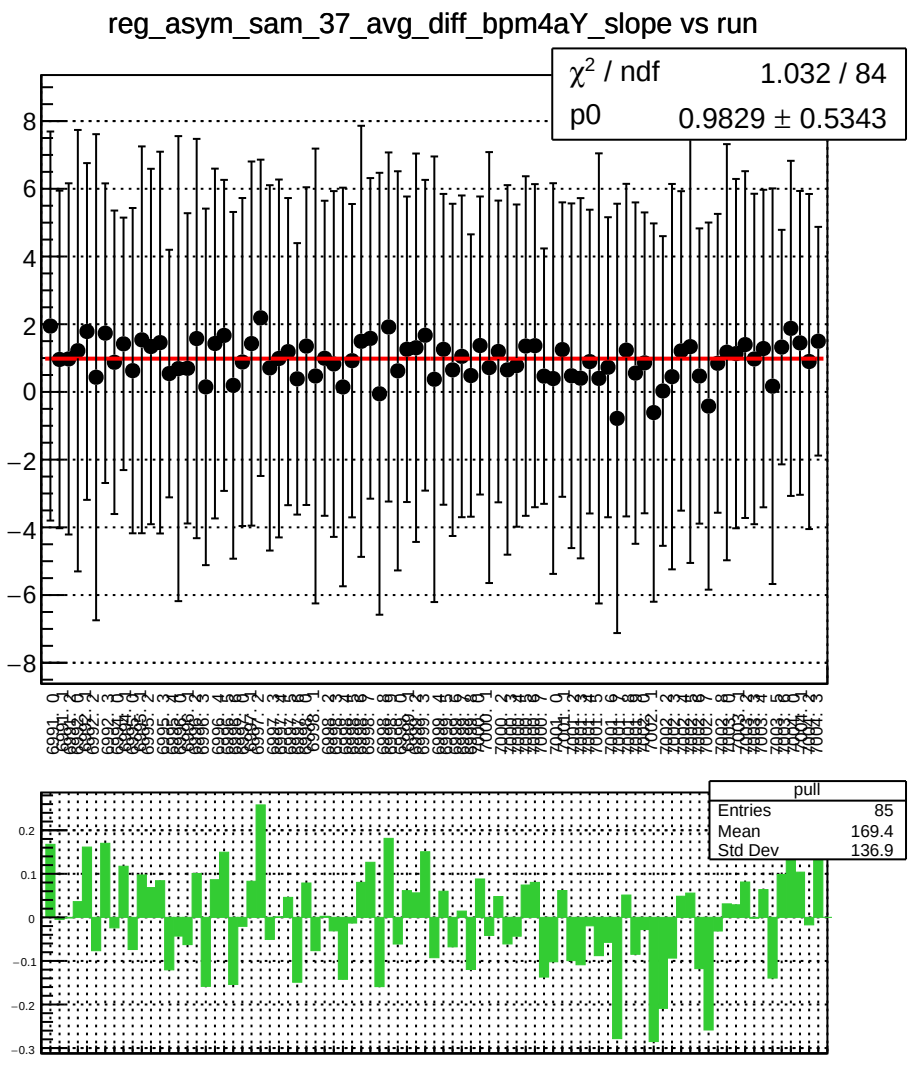

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 10.83 / 84
p0 −12.14 ± 0.5729
pull
Entries 85
Mean 13.36
Std Dev 108.2
pull1D
Entries 85
Mean 0.003875
Std Dev 0.3569

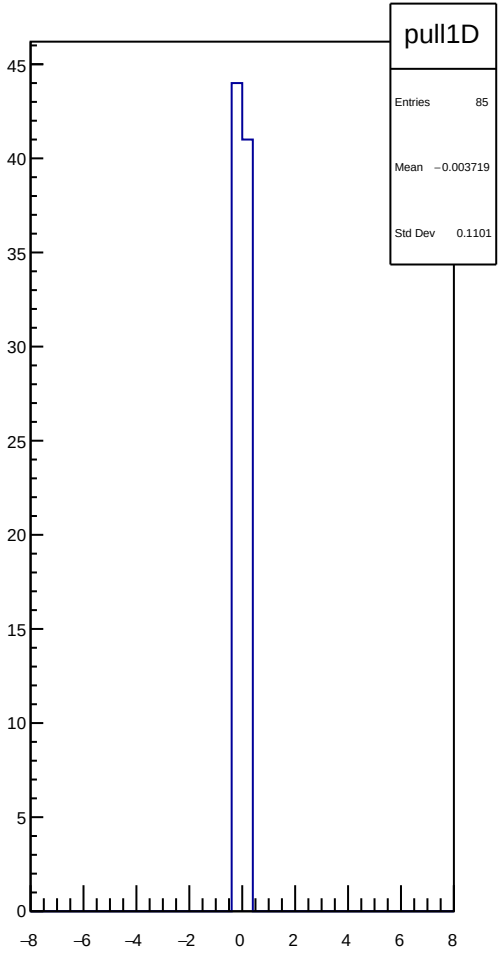

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 17.26 / 84
p0 −42.18 ± 0.4514
−30
−35
−40
−45
−50
pull
Entries 85
Mean −356.3
Std Dev 381.3
1
0.5
0
−0.5
−1

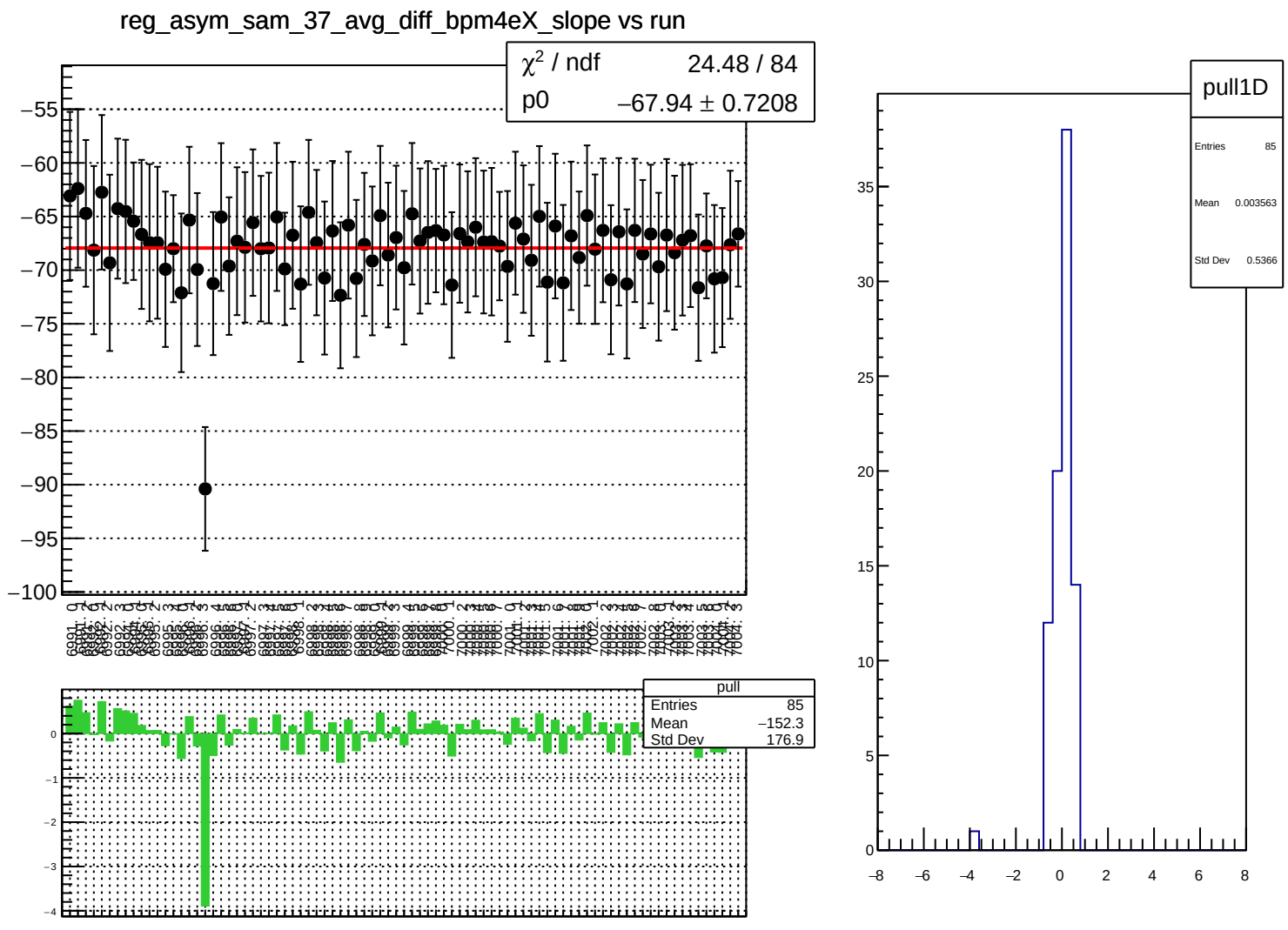

pull1D
Entries 85
Mean 0.009282
Std Dev 0.4505
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

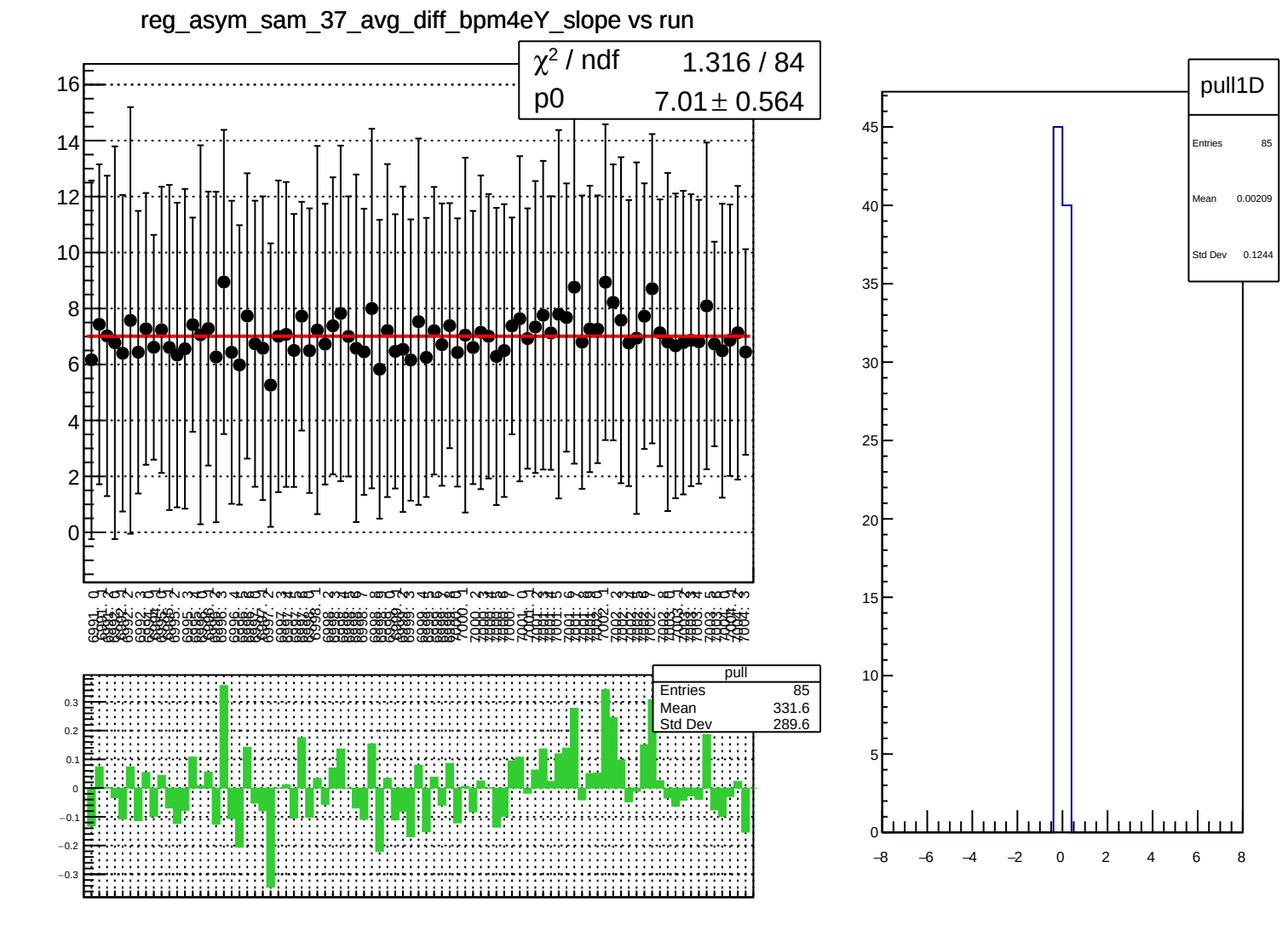

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 25.96 / 84
p0 0.1871± 0.02057
0.6
0.4
0.2
0
−0.2
pull
Entries 85
Mean 13.62
Std Dev 130.1
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean 0.01235
Std Dev 0.5525
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

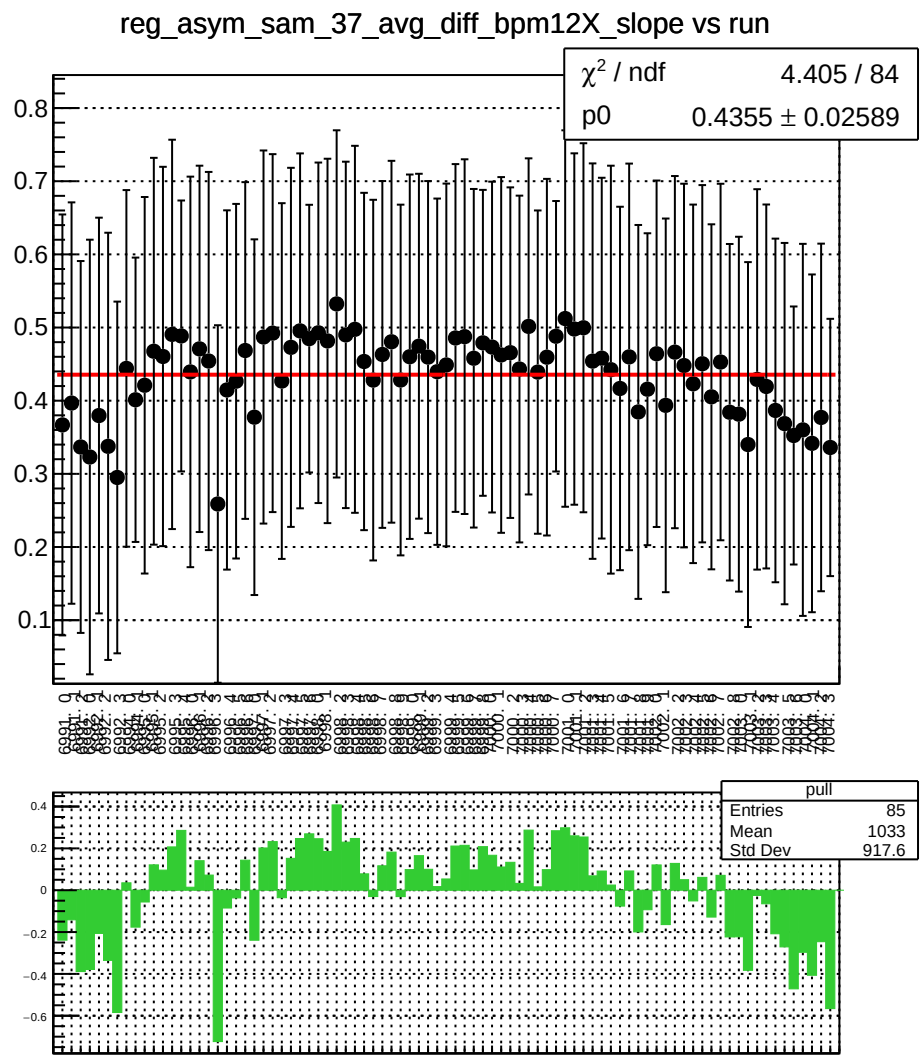

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 20.59 / 84
p0 −7.252 ± 0.7806
pull
Entries 85
Mean −163.5
Std Dev 197
pull1D
Entries 85
Mean −0.01017
Std Dev 0.4921

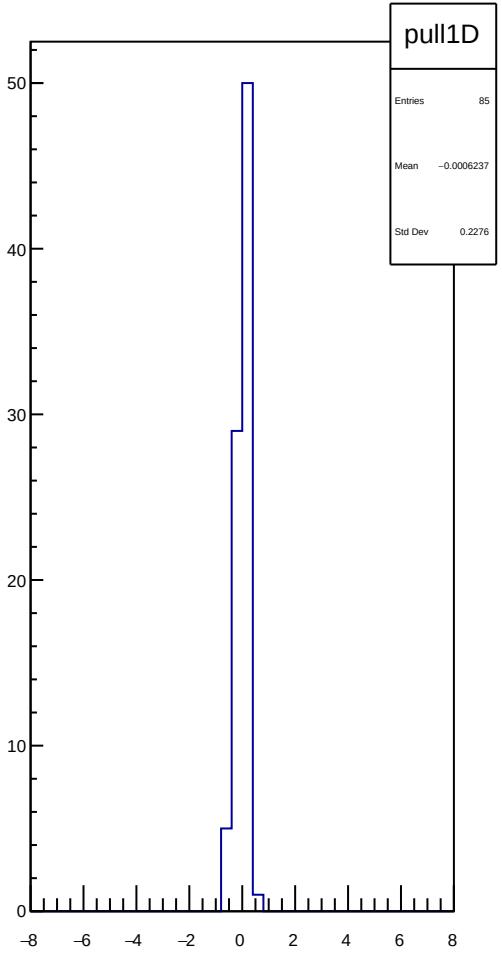

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.032 / 84
p0 0.9829 ± 0.5343
pull
Entries 85
Mean 169.4
Std Dev 136.9

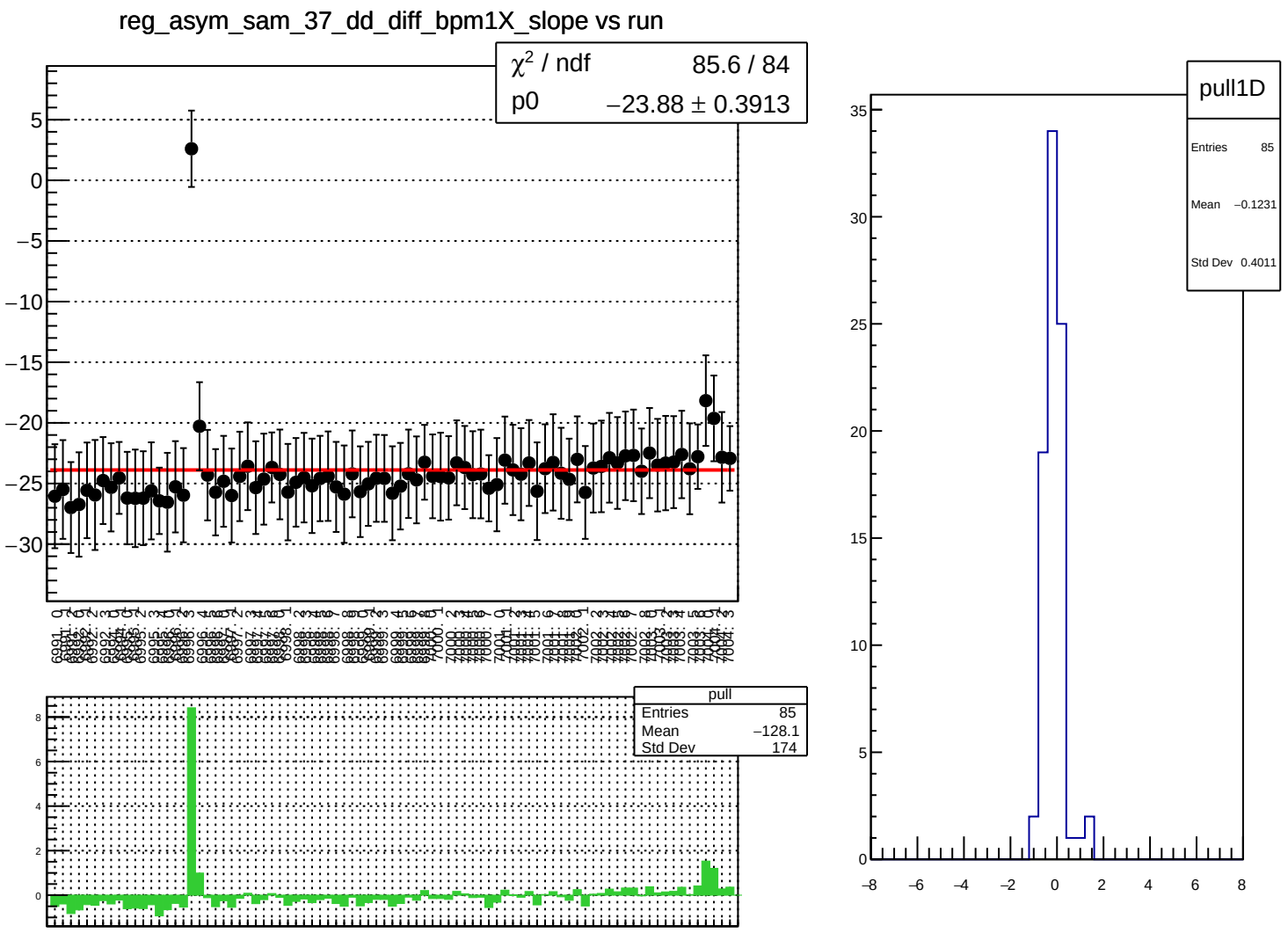

pull1D
Entries 85
Mean −0.003719
Std Dev 0.1101

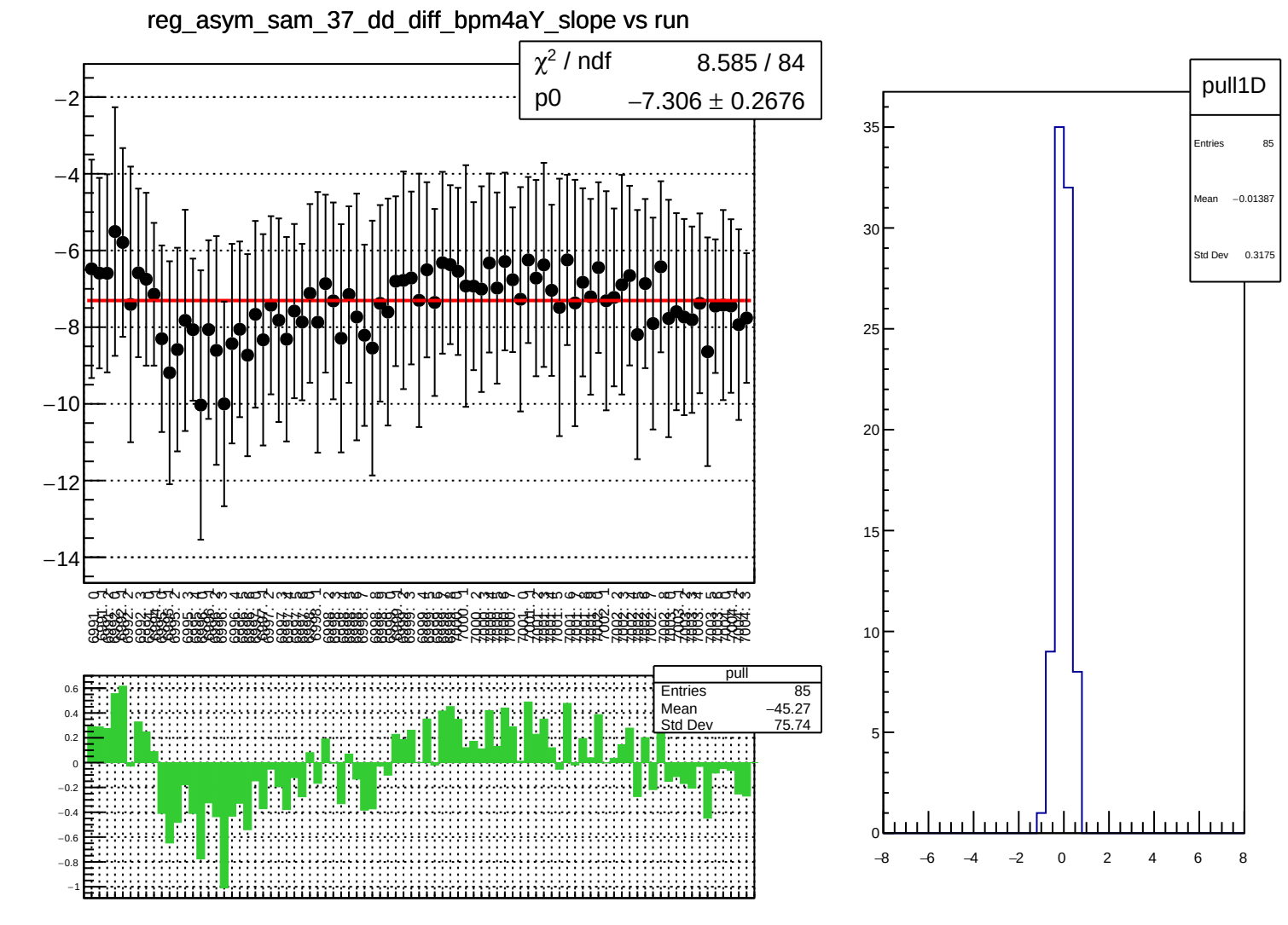

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 24.48 / 84
p0 −67.94 ± 0.7208
pull
Entries 85
Mean −152.3
Std Dev 176.9
pull1D
Entries 85
Mean 0.003563
Std Dev 0.5366

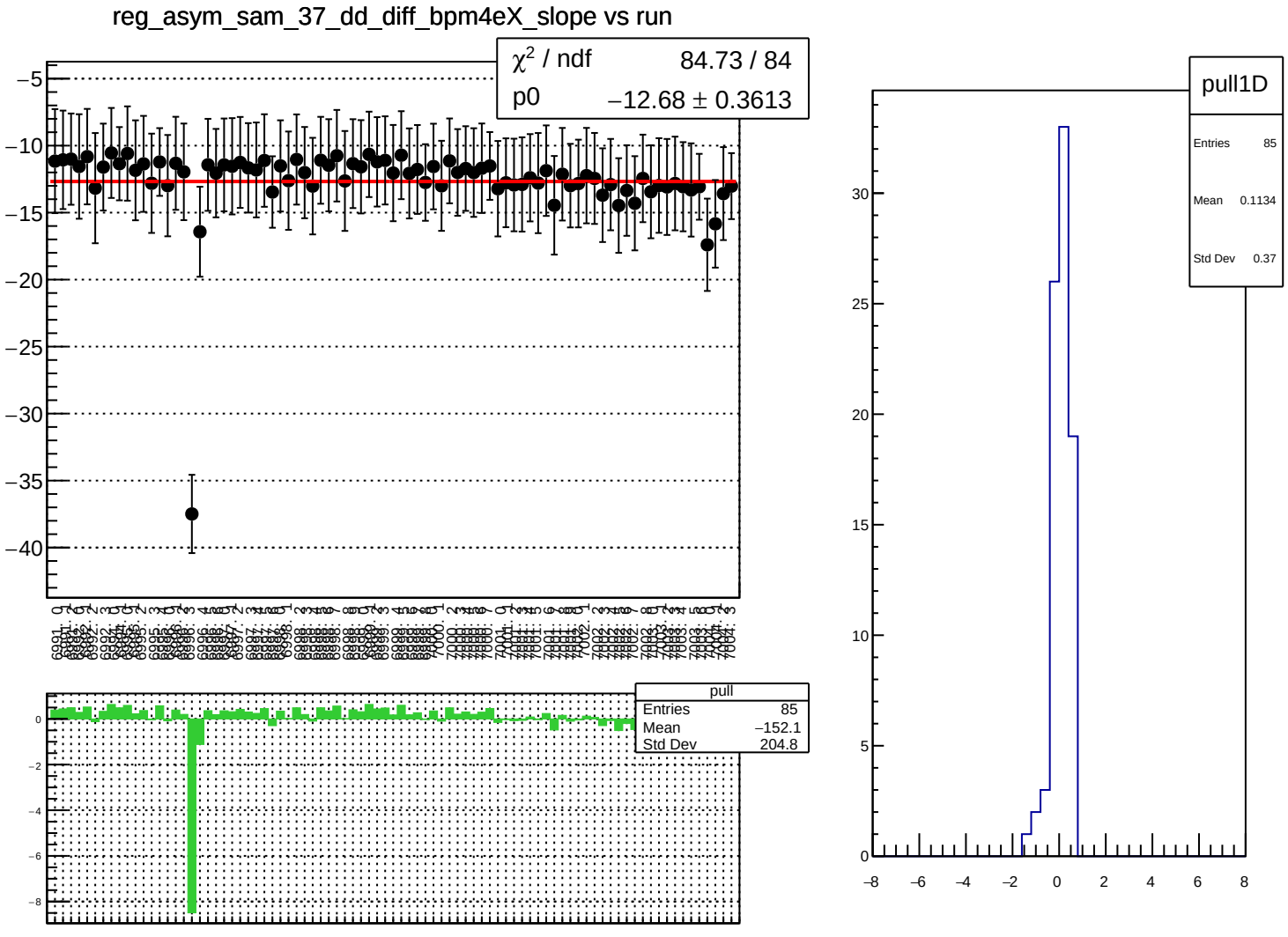

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.316 / 84
p0 7.01 ± 0.564
pull
Entries 85
Mean 331.6
Std Dev 289.6
pull1D
Entries 85
Mean 0.00209
Std Dev 0.1244

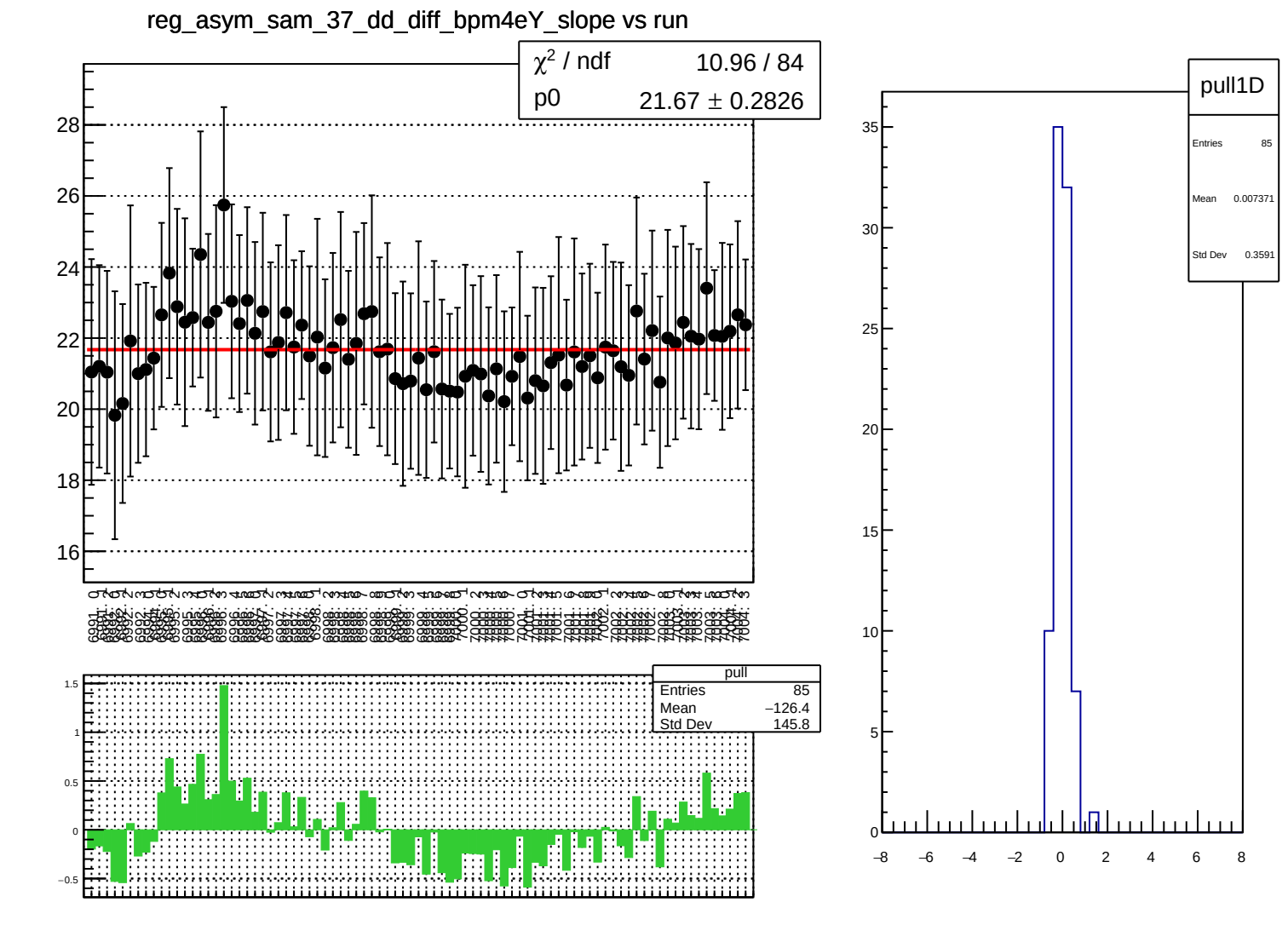

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 4.405 / 84
p0 0.4355 ± 0.02589
pull
Entries 85
Mean 1033
Std Dev 917.6

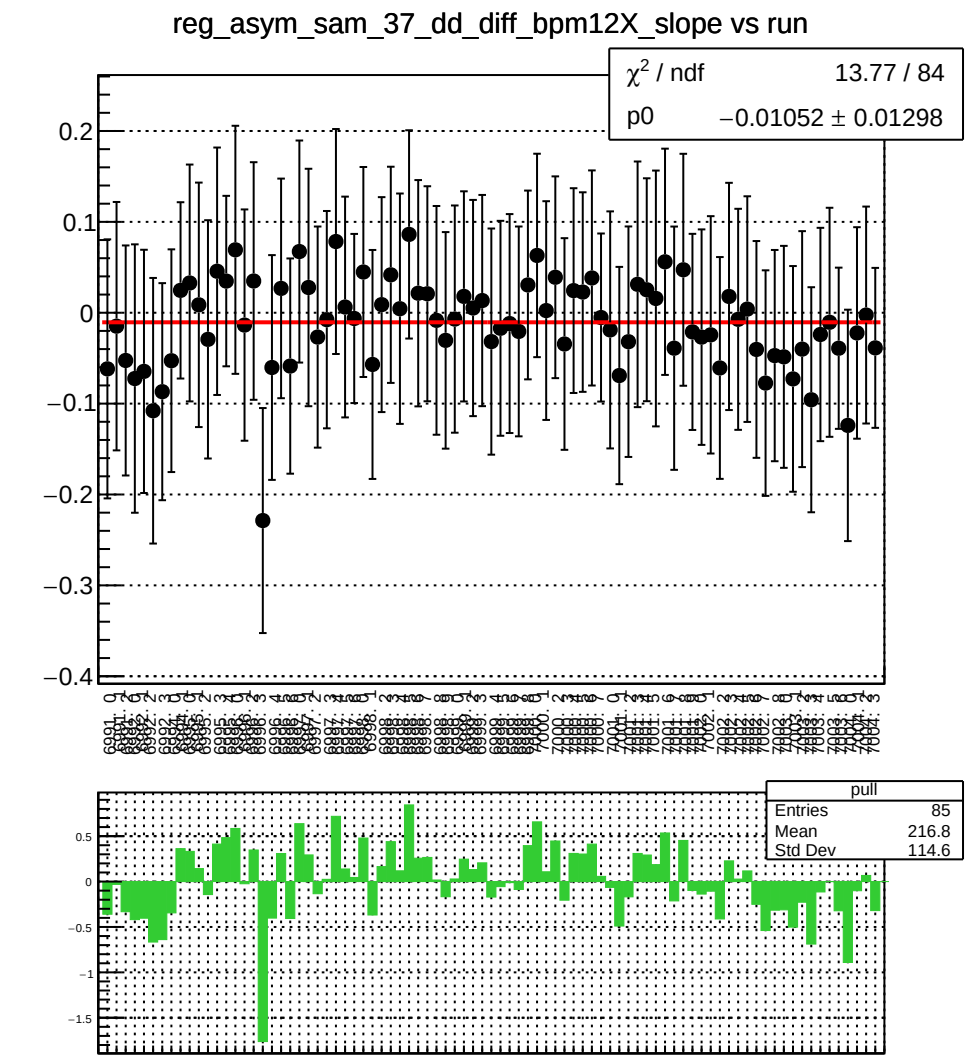

pull1D
Entries 85
Mean −0.0006237
Std Dev 0.2276

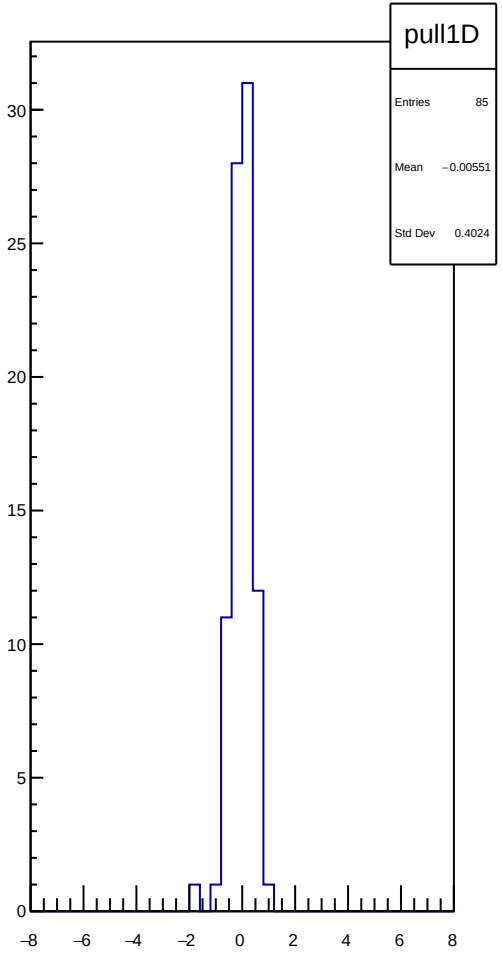

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 85.6 / 84
p0 −23.88 ± 0.3913
pull
Entries 85
Mean −128.1
Std Dev 174
pull1D
Entries 85
Mean −0.1231
Std Dev 0.4011

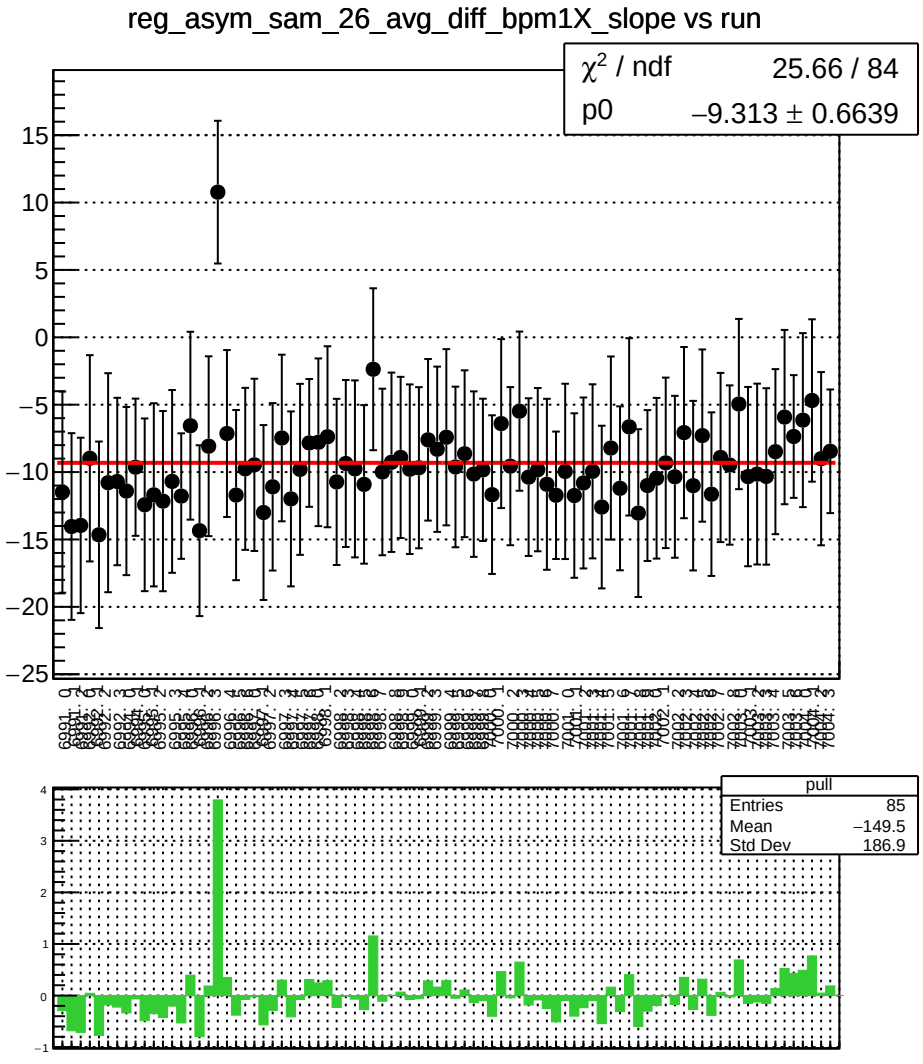

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.585 / 84
p0 −7.306 ± 0.2676
pull
Entries 85
Mean −45.27
Std Dev 75.74
pull1D
Entries 85
Mean −0.01387
Std Dev 0.3175

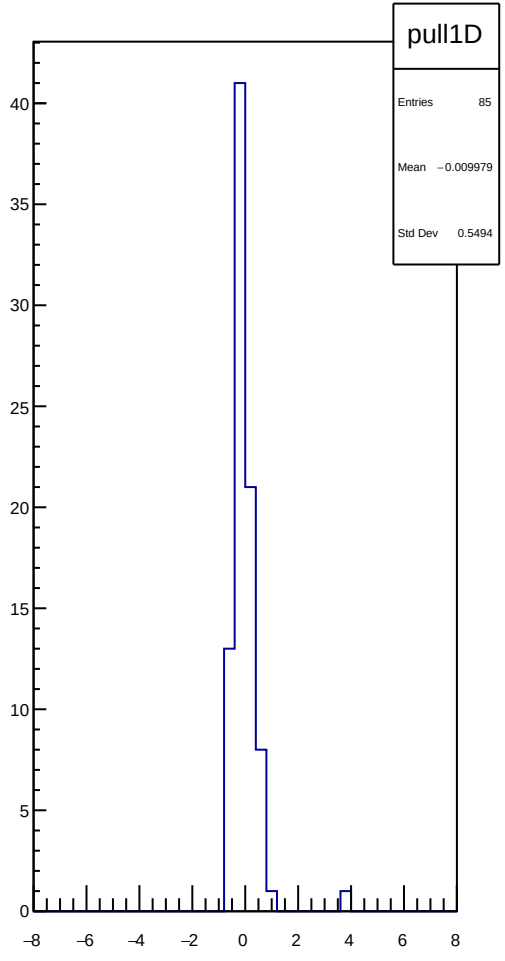

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 84.73 / 84
p0 −12.68 ± 0.3613
pull
Entries 85
Mean −152.1
Std Dev 204.8
pull1D
Entries 85
Mean 0.1134
Std Dev 0.37

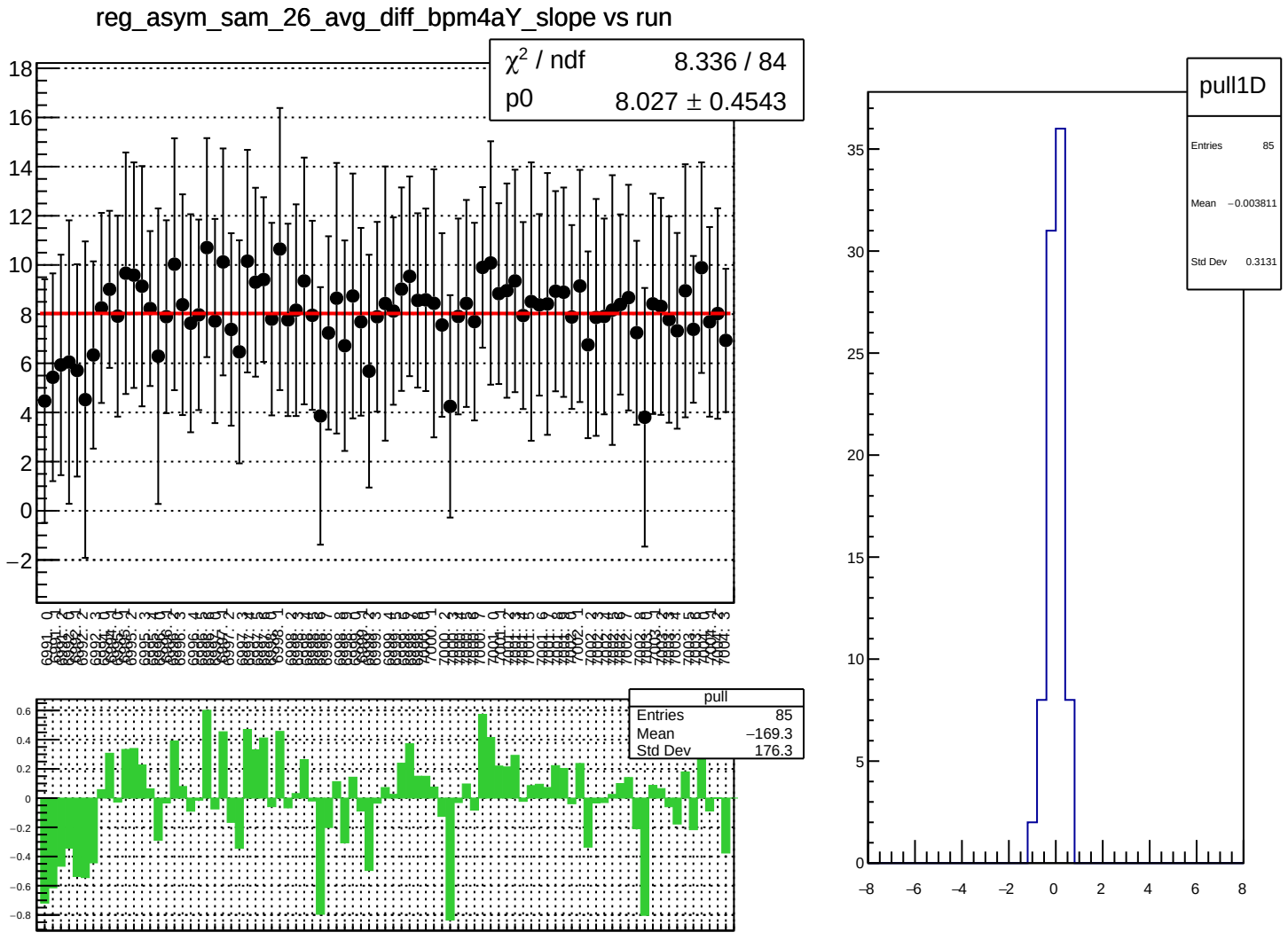

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.96 / 84
p0 21.67 ± 0.2826
pull
Entries 85
Mean −126.4
Std Dev 145.8
pull1D
Entries 85
Mean 0.007371
Std Dev 0.3591

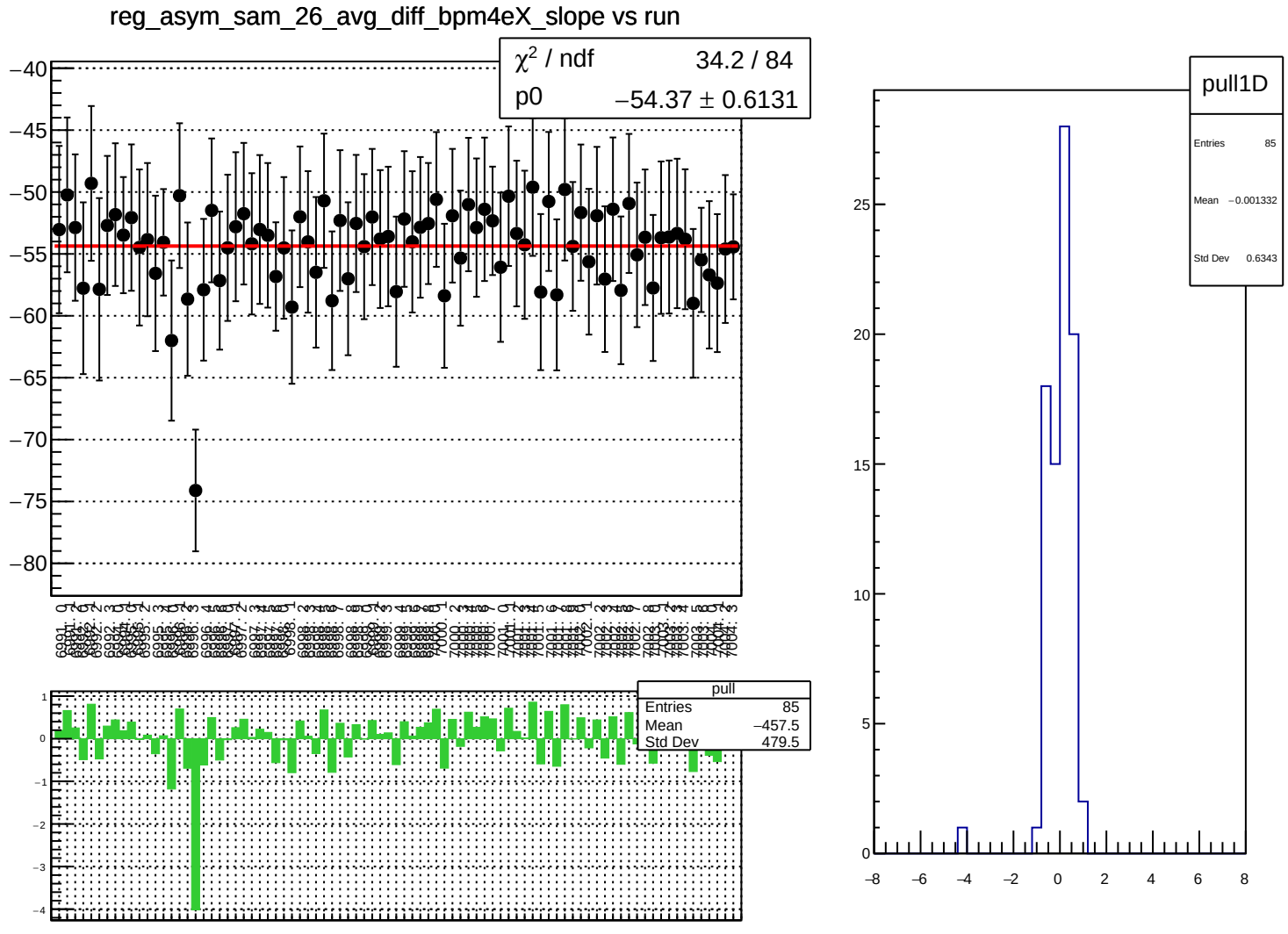

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 13.77 / 84
p0 −0.01052 ± 0.01298
pull
Entries 85
Mean 216.8
Std Dev 114.6

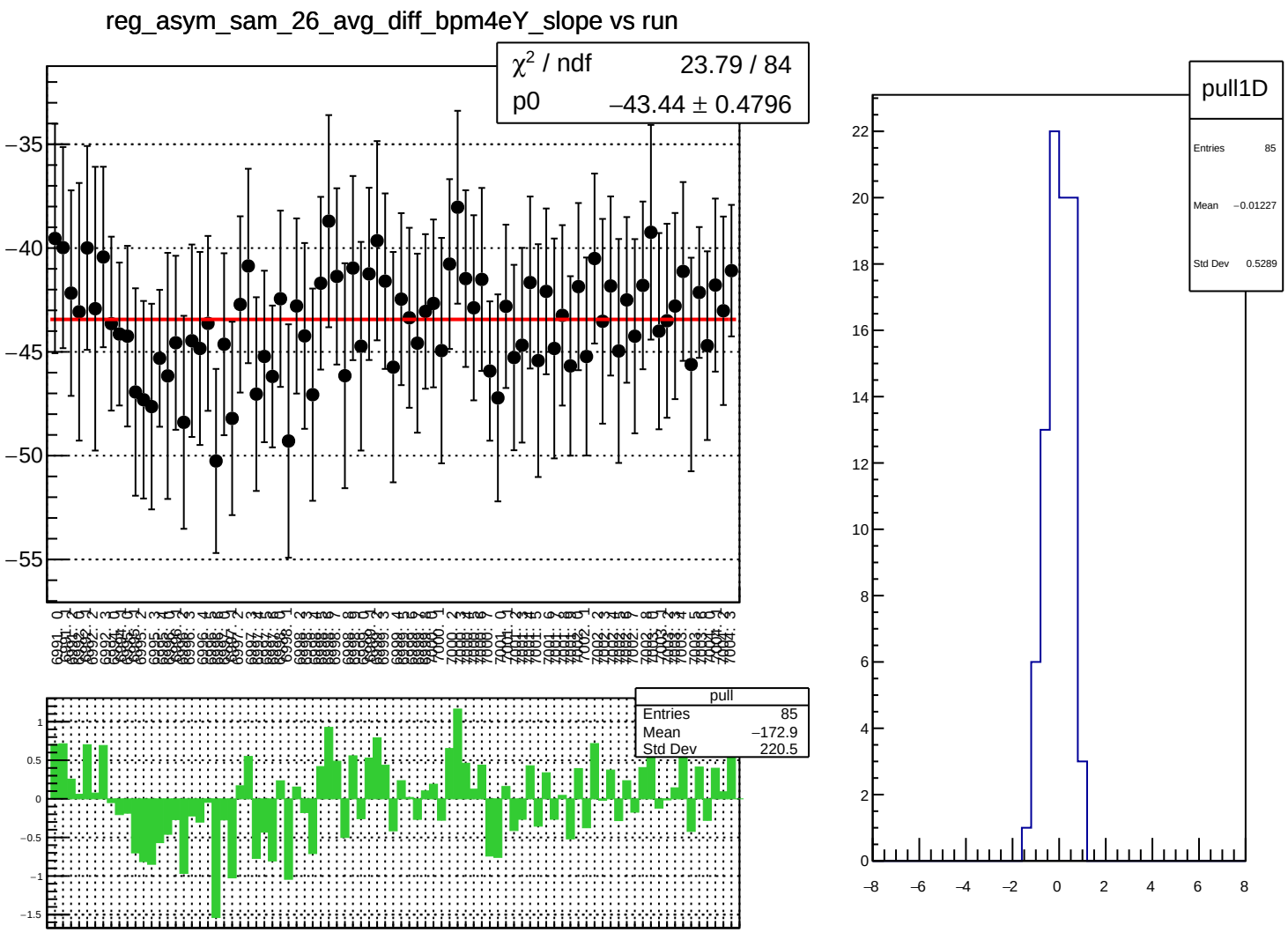

pull1D
Entries 85
Mean −0.00551
Std Dev 0.4024

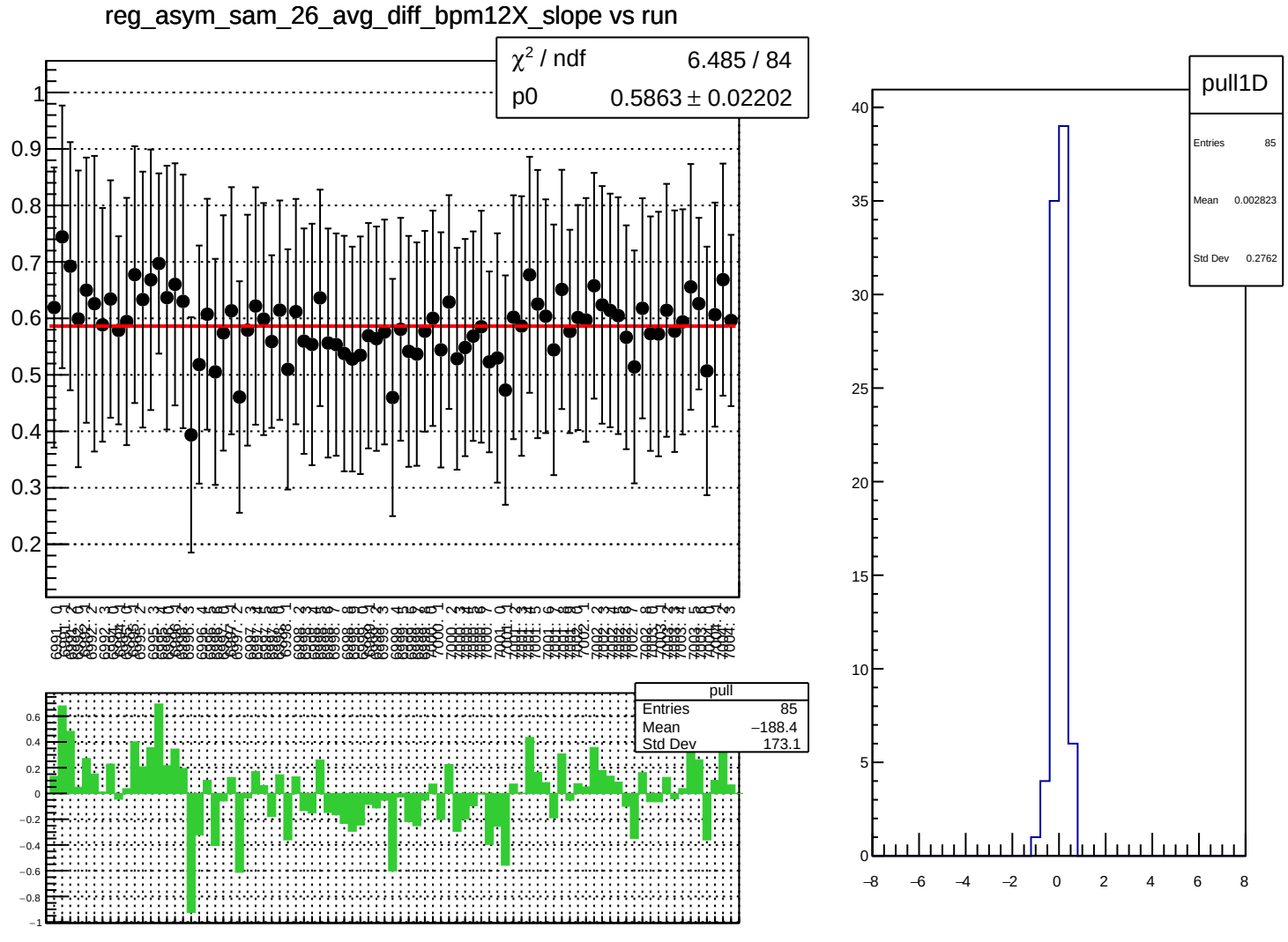

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 25.66 / 84
p0 −9.313 ± 0.6639
pull
Entries 85
Mean −149.5
Std Dev 186.9

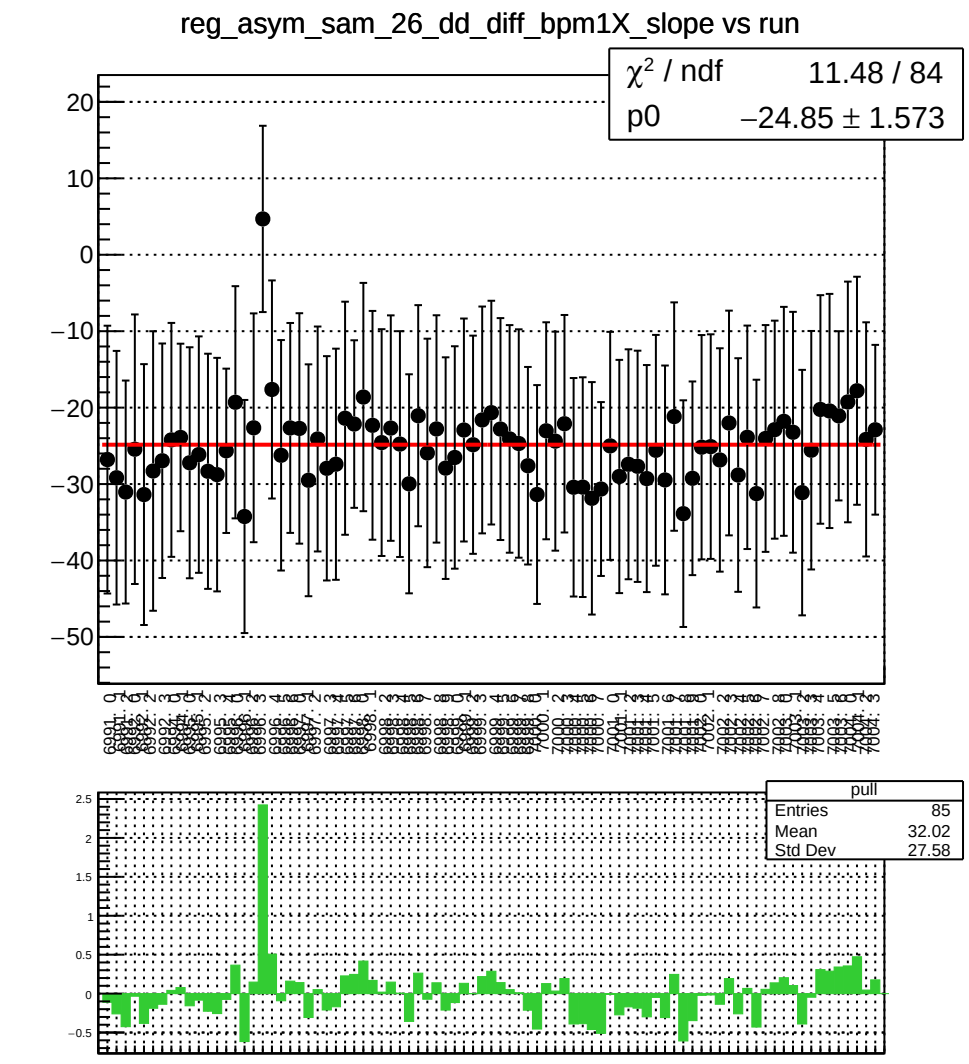

pull1D
Entries 85
Mean −0.009979
Std Dev 0.5494

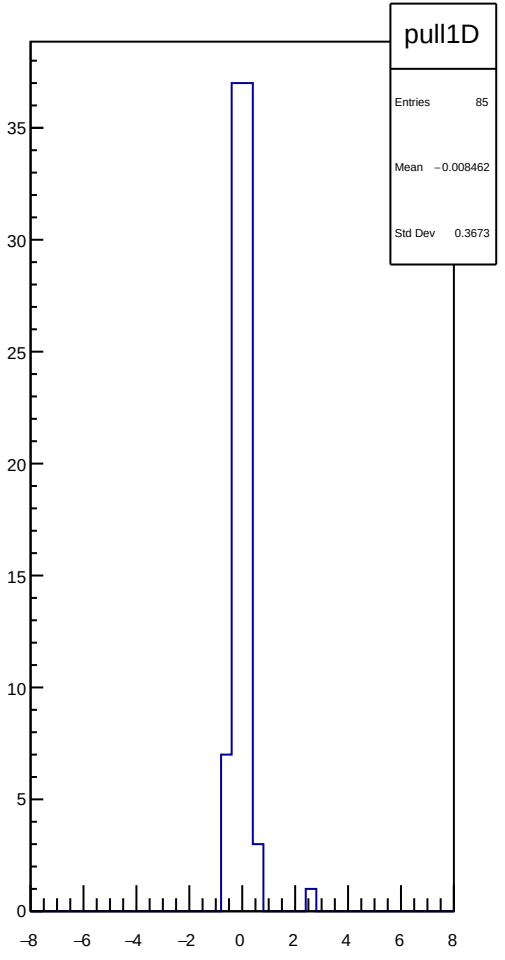

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.336 / 84
p0 8.027 ± 0.4543
pull
Entries 85
Mean −169.3
Std Dev 176.3
pull1D
Entries 85
Mean −0.003811
Std Dev 0.3131

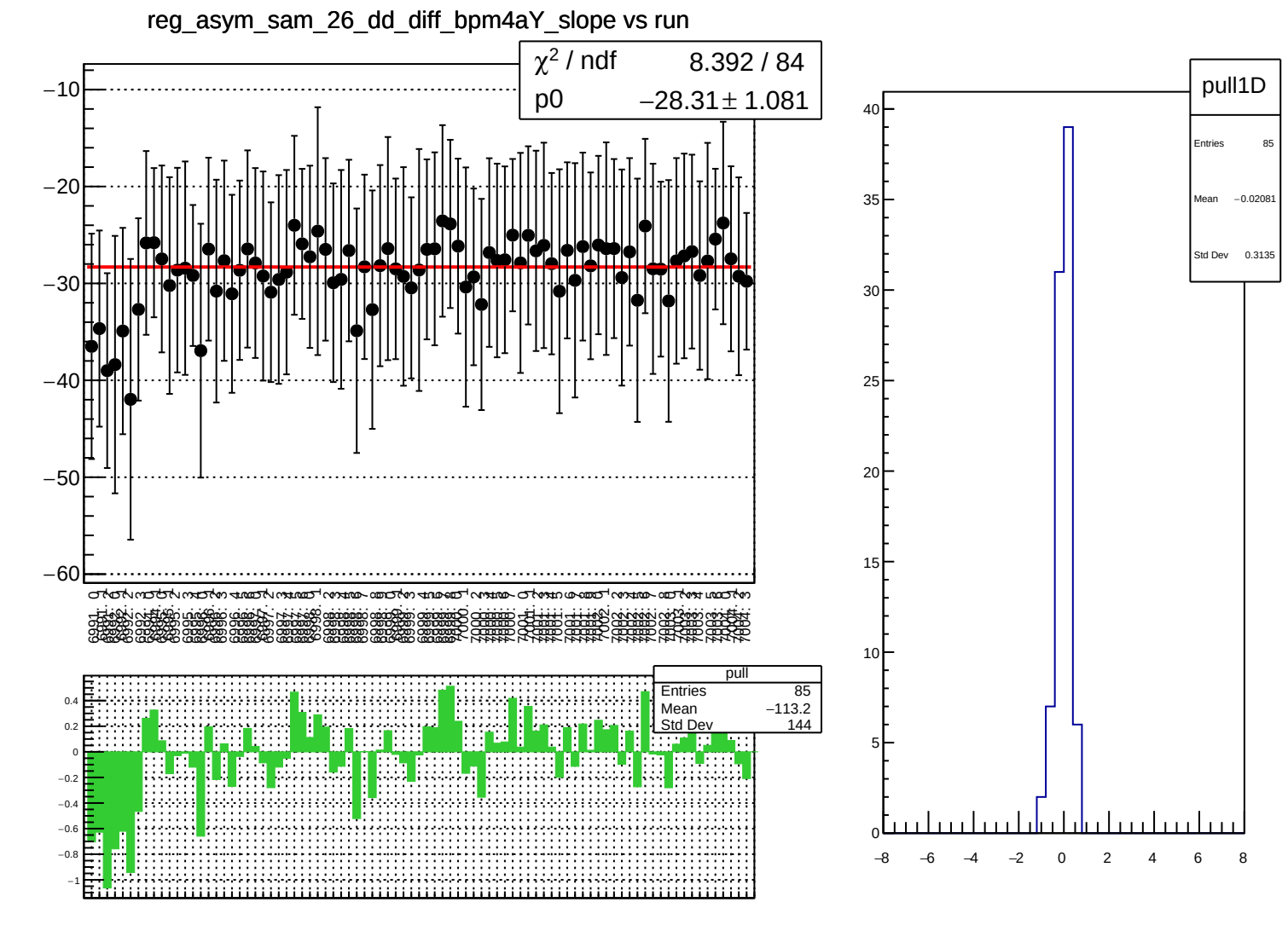

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 34.2 / 84
p0 −54.37 ± 0.6131
pull
Entries 85
Mean −457.5
Std Dev 479.5
pull1D
Entries 85
Mean −0.001332
Std Dev 0.6343

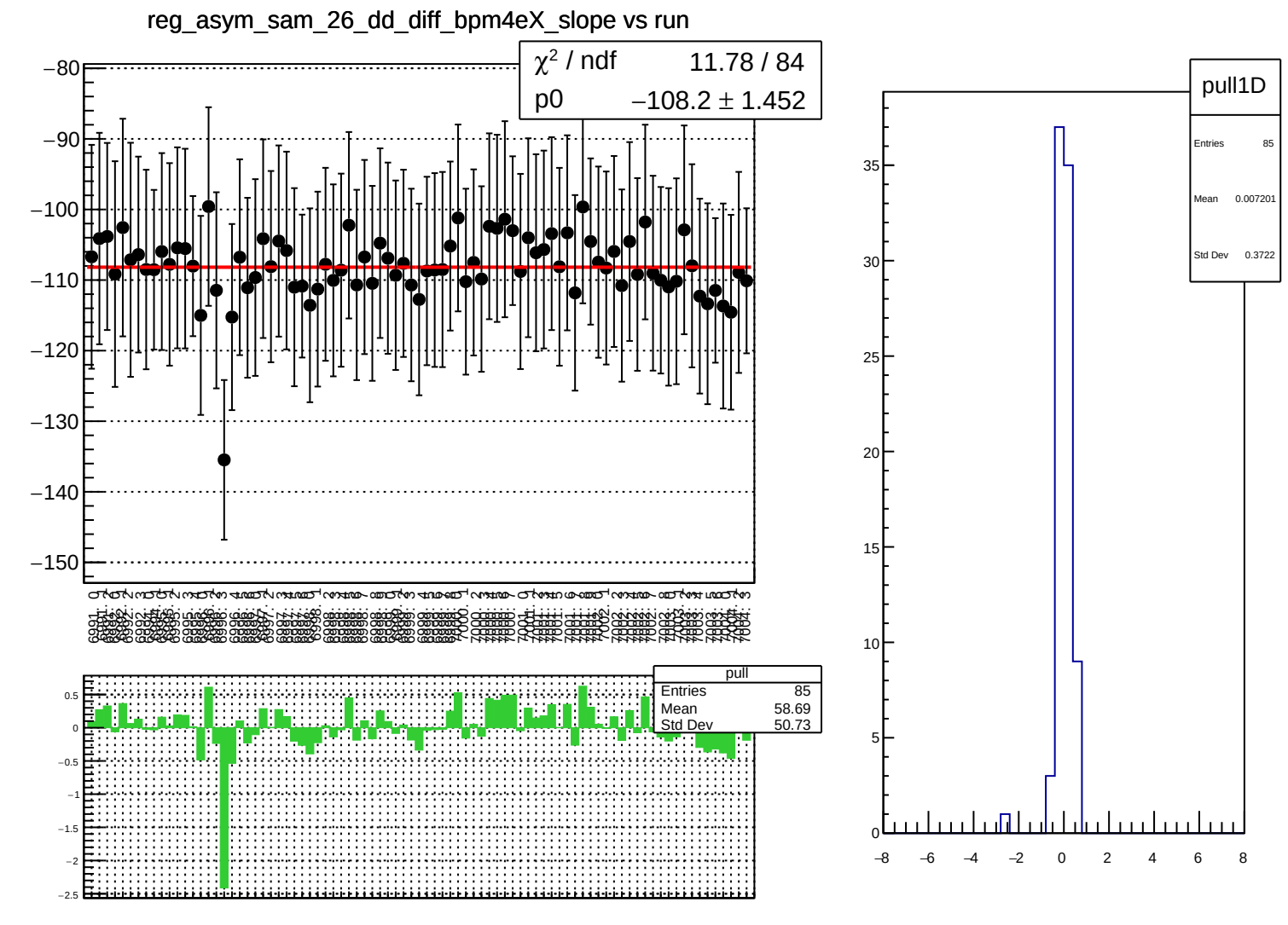

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 23.79 / 84
p0 −43.44 ± 0.4796
pull
Entries 85
Mean −172.9
Std Dev 220.5
pull1D
Entries 85
Mean −0.01227
Std Dev 0.5289

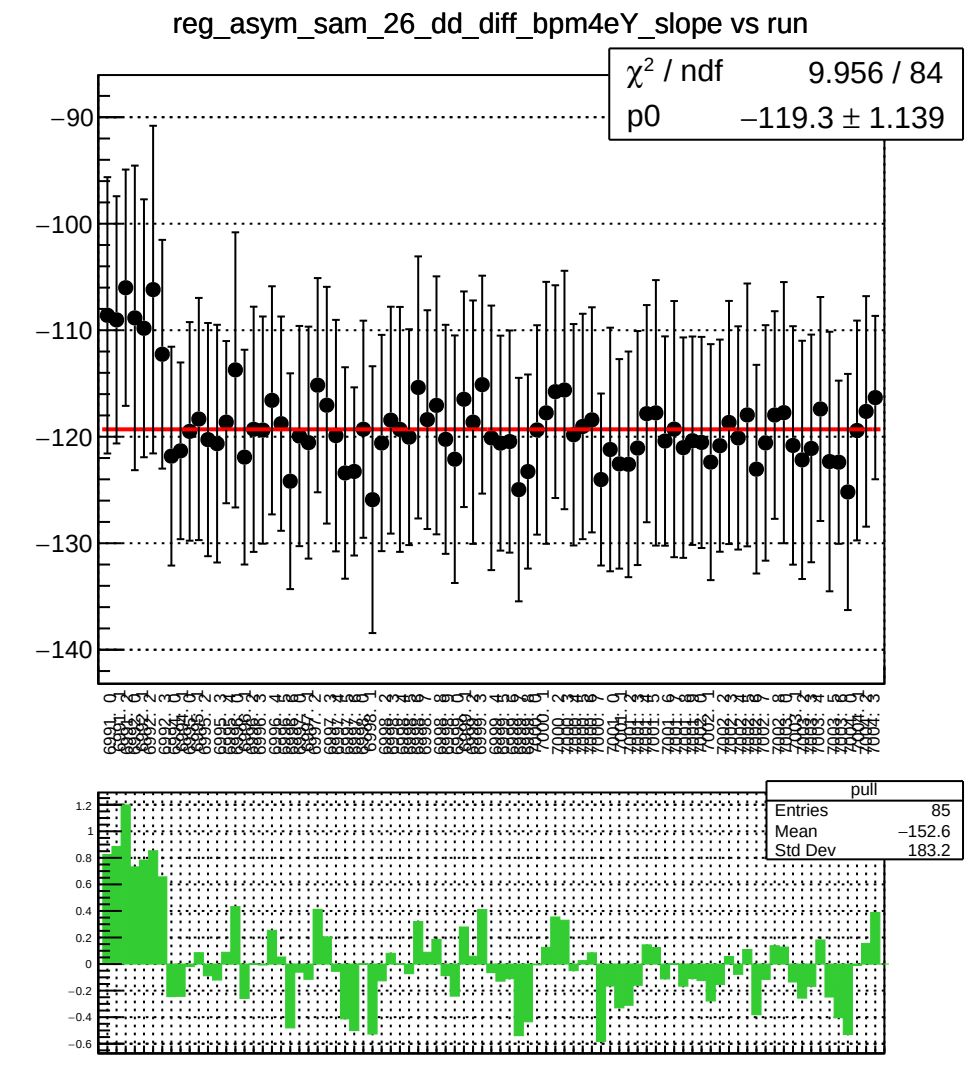

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 6.485 / 84
p0 0.5863 ± 0.02202
pull
Entries 85
Mean −188.4
Std Dev 173.1
pull1D
Entries 85
Mean 0.002823
Std Dev 0.2762

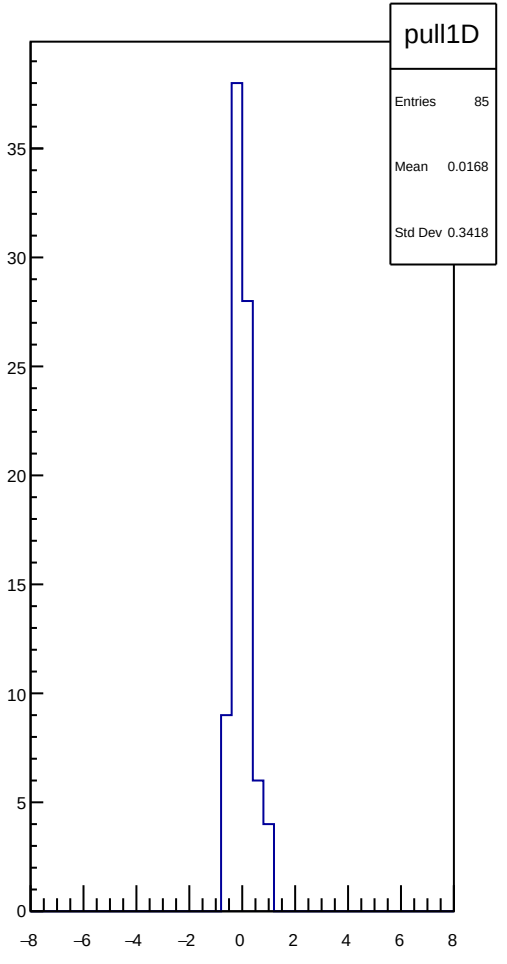

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 11.48 / 84
p0 −24.85 ± 1.573
pull
Entries 85
Mean 32.02
Std Dev 27.58

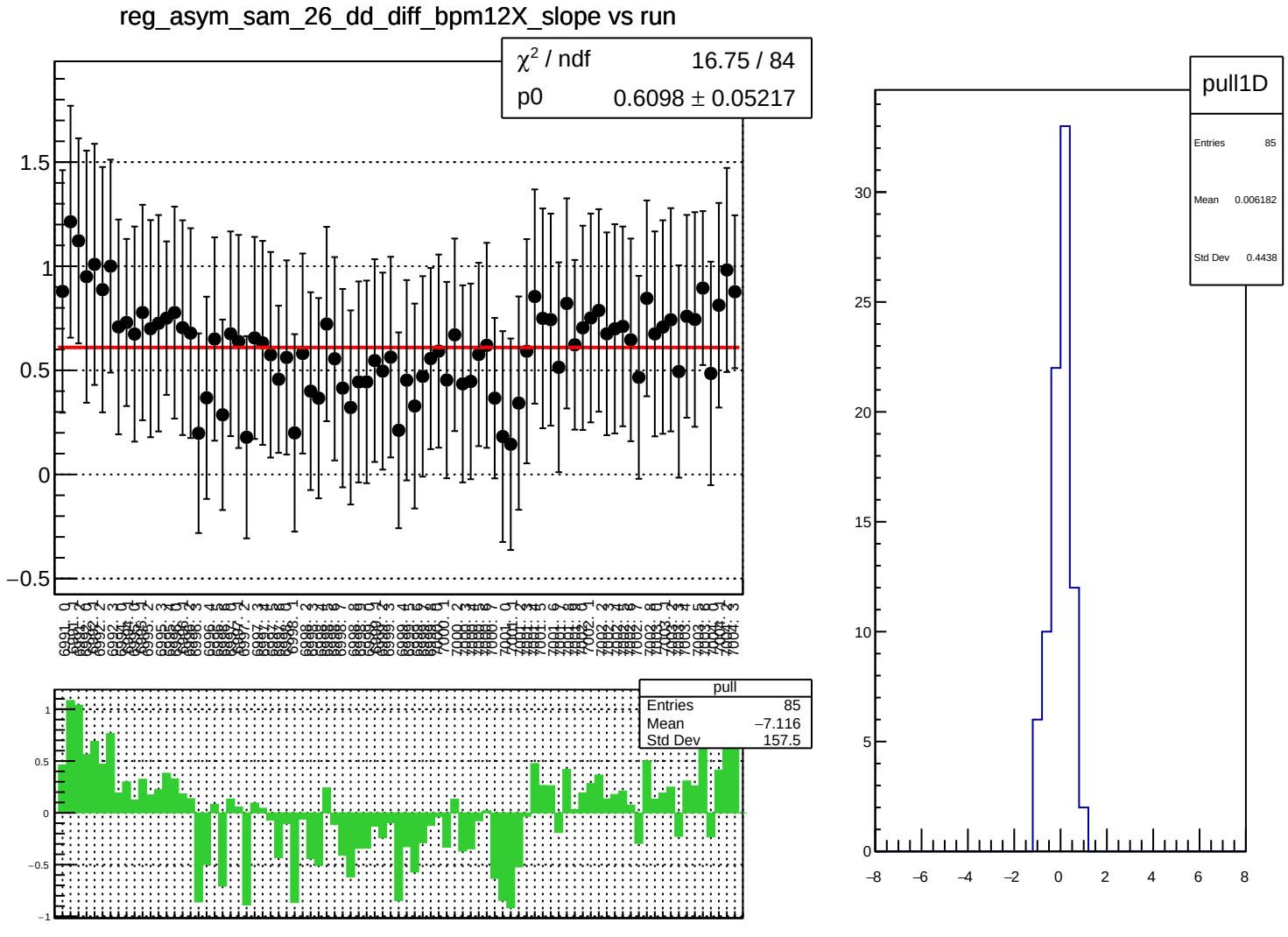

pull1D
Entries 85
Mean −0.008462
Std Dev 0.3673

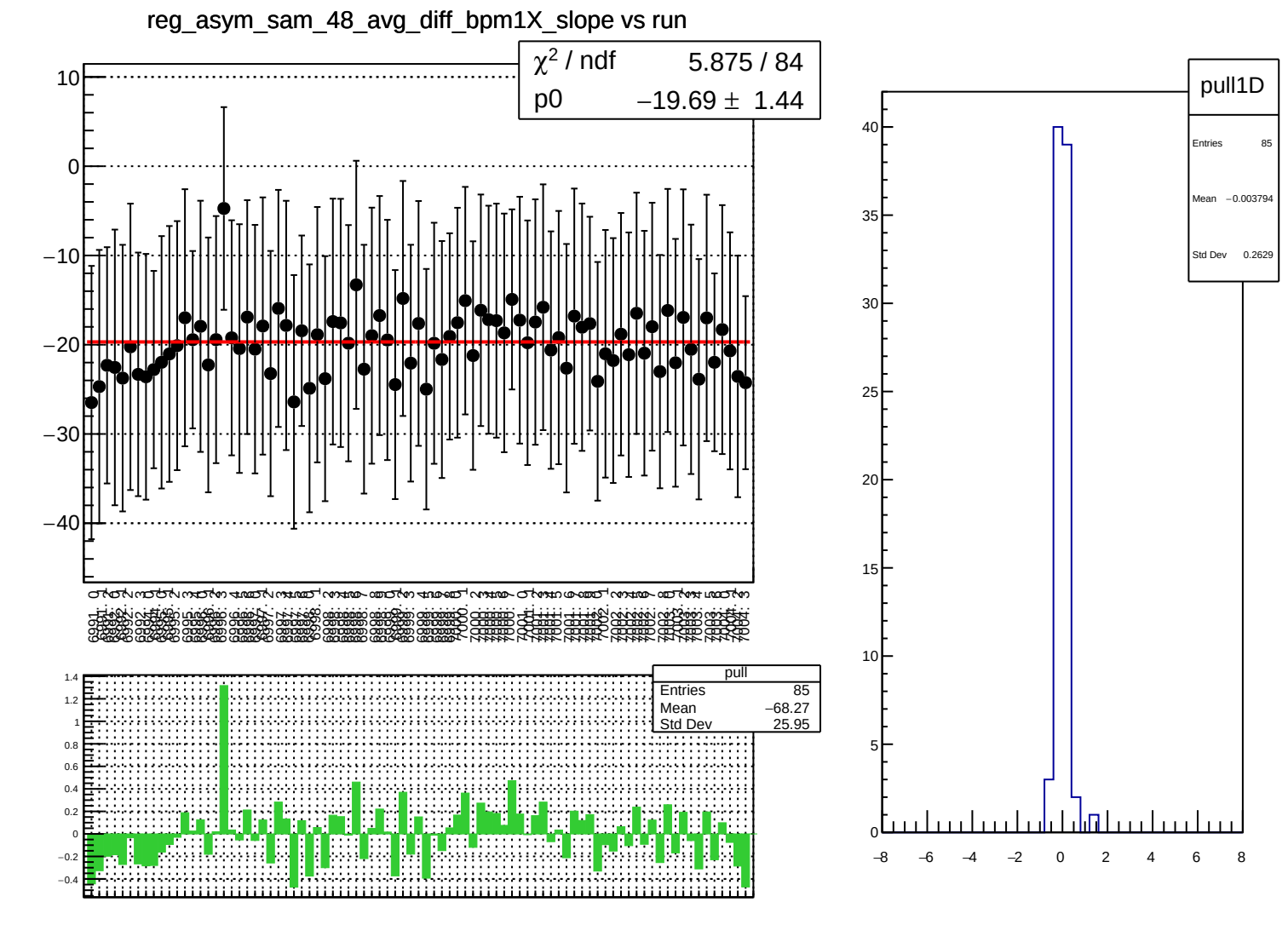

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.392 / 84
p0 −28.31 ± 1.081
−10
−20
−30
−40
−50
−60
pull
Entries 85
Mean −113.2
Std Dev 144
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean −0.02081
Std Dev 0.3135
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

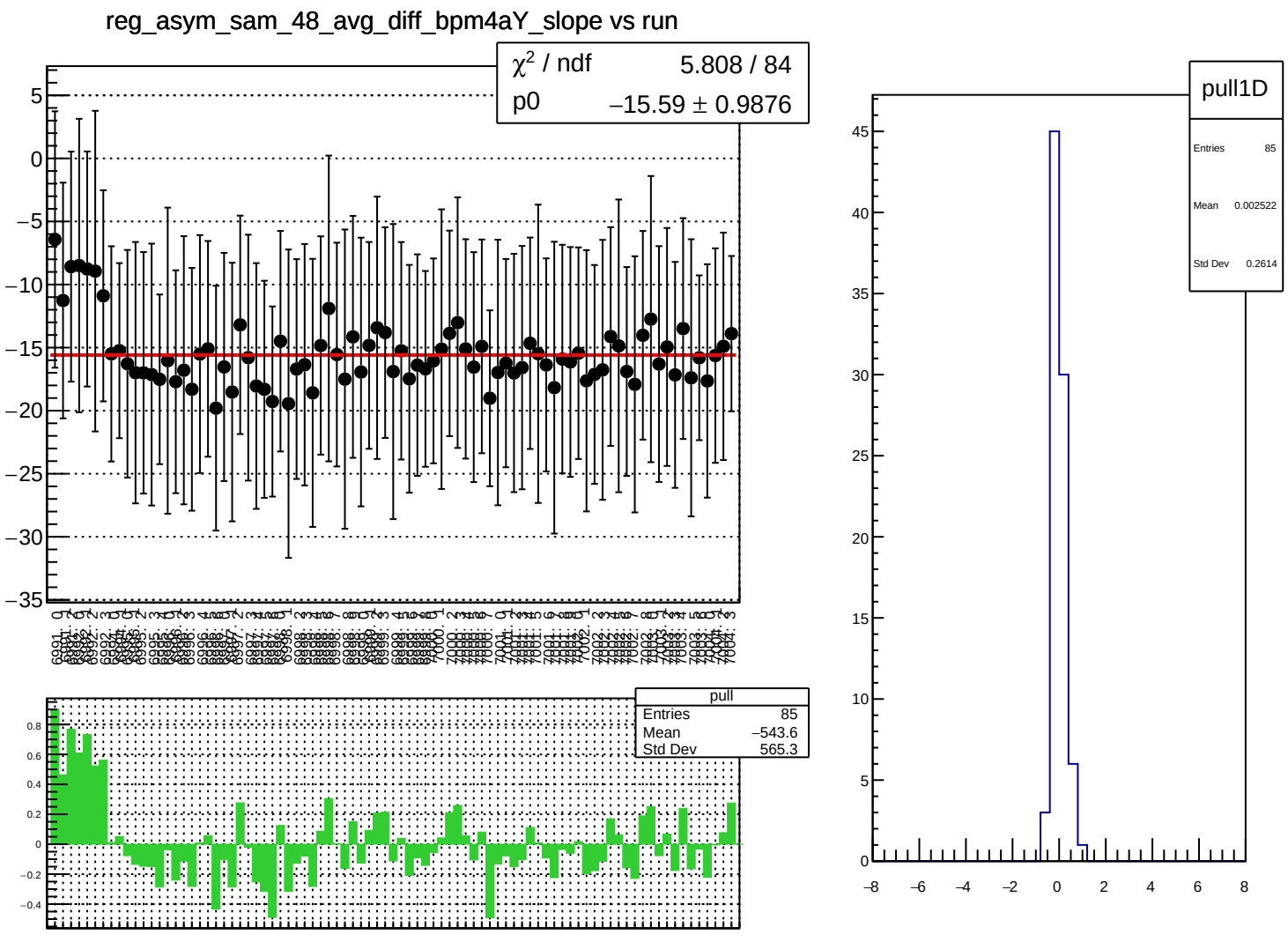

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 11.78 / 84
p0 −108.2 ± 1.452
pull
Entries 85
Mean 58.69
Std Dev 50.73
pull1D
Entries 85
Mean 0.007201
Std Dev 0.3722

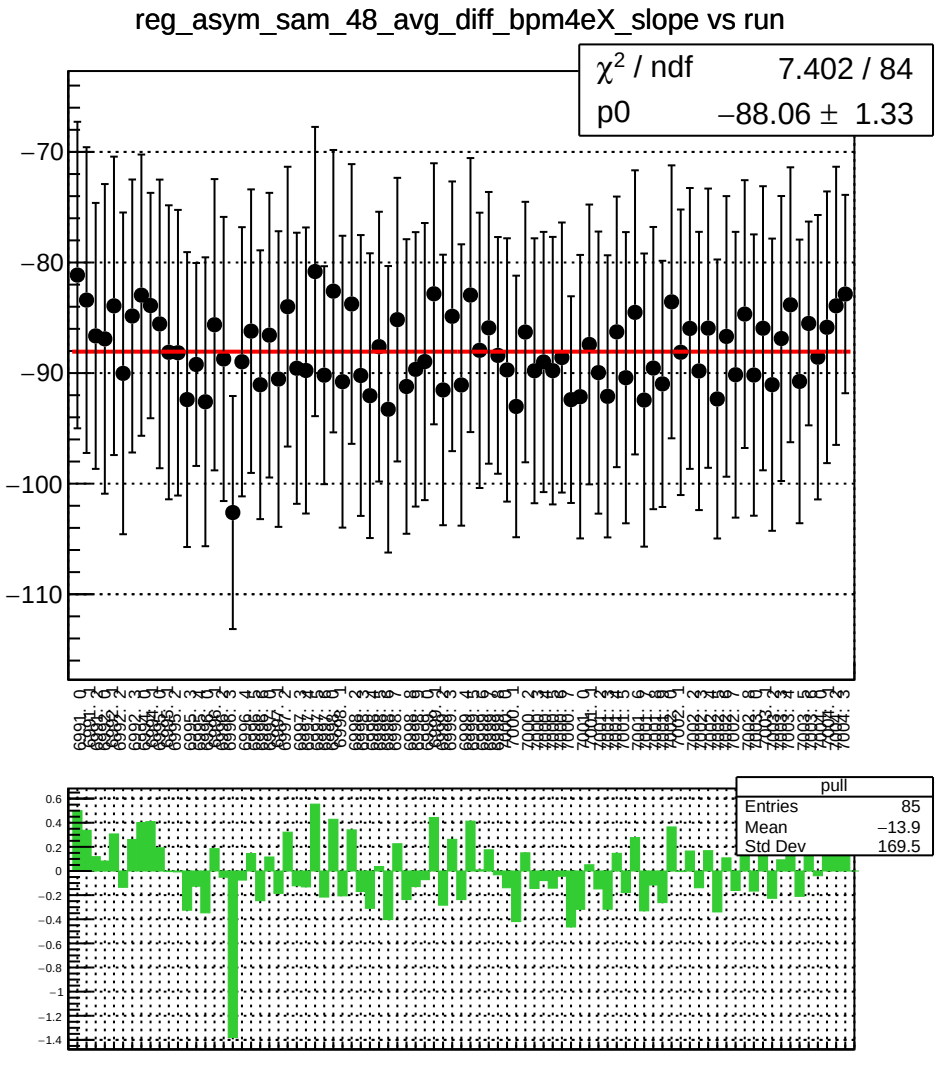

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 9.956 / 84
p0 −119.3 ± 1.139
−90
−100
−110
−120
−130
−140
pull
Entries 85
Mean −152.6
Std Dev 183.2
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

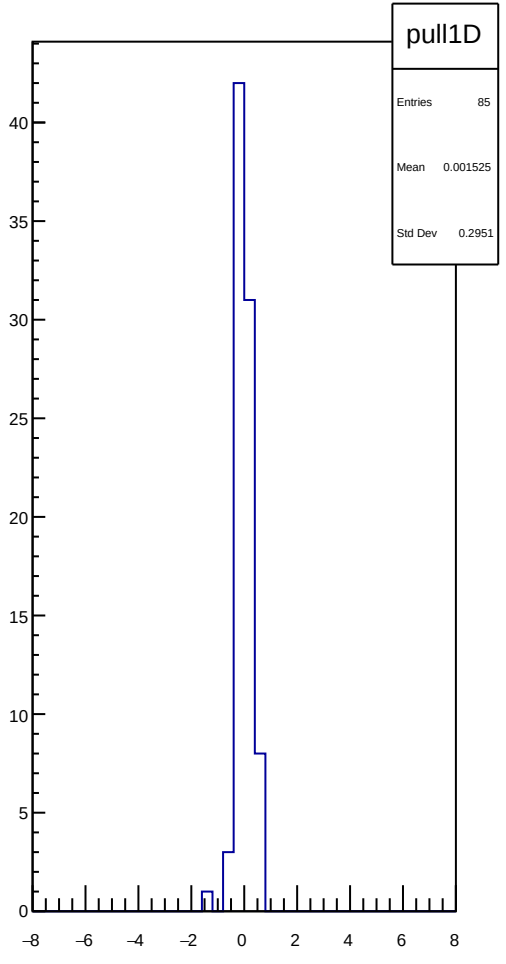

pull1D
Entries 85
Mean 0.0168
Std Dev 0.3418
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

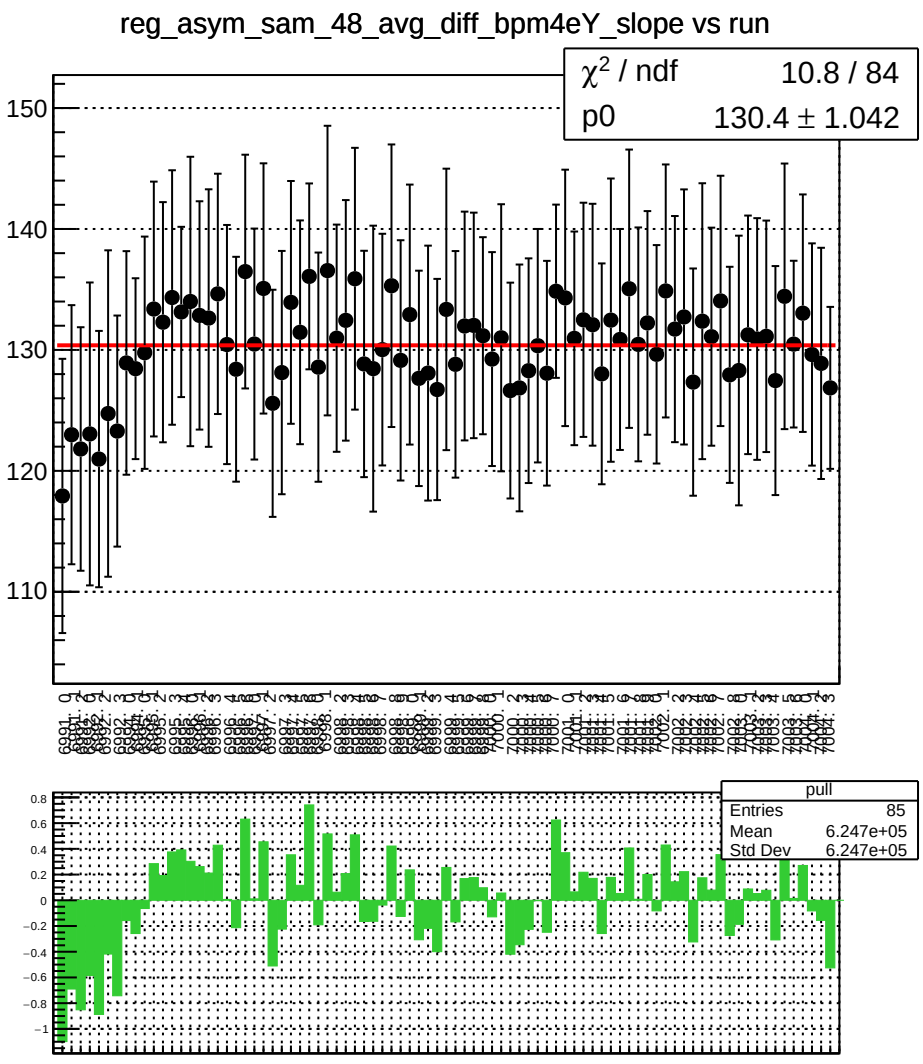

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 16.75 / 84
p0 0.6098 ± 0.05217
pull
Entries 85
Mean −7.116
Std Dev 157.5
pull1D
Entries 85
Mean 0.006182
Std Dev 0.4438

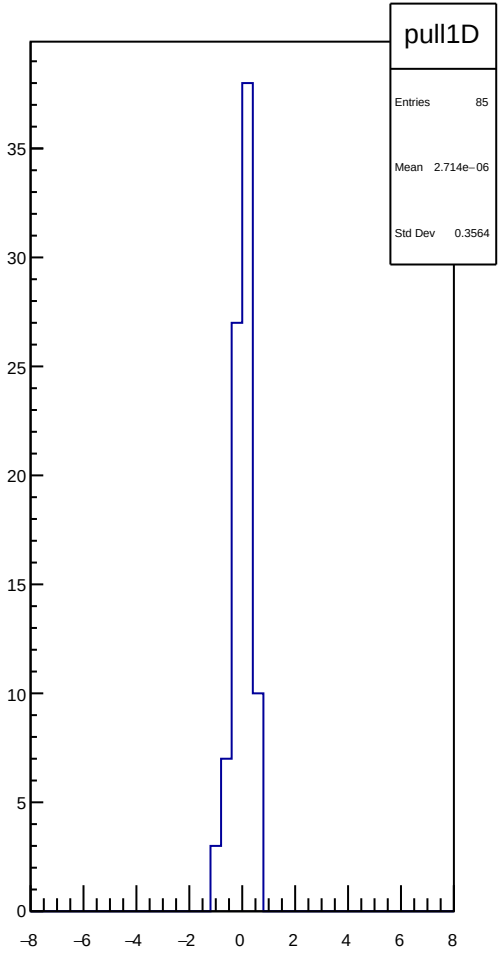

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 5.875 / 84
p0 −19.69 ± 1.44
pull
Entries 85
Mean −68.27
Std Dev 25.95
pull1D
Entries 85
Mean −0.003794
Std Dev 0.2629

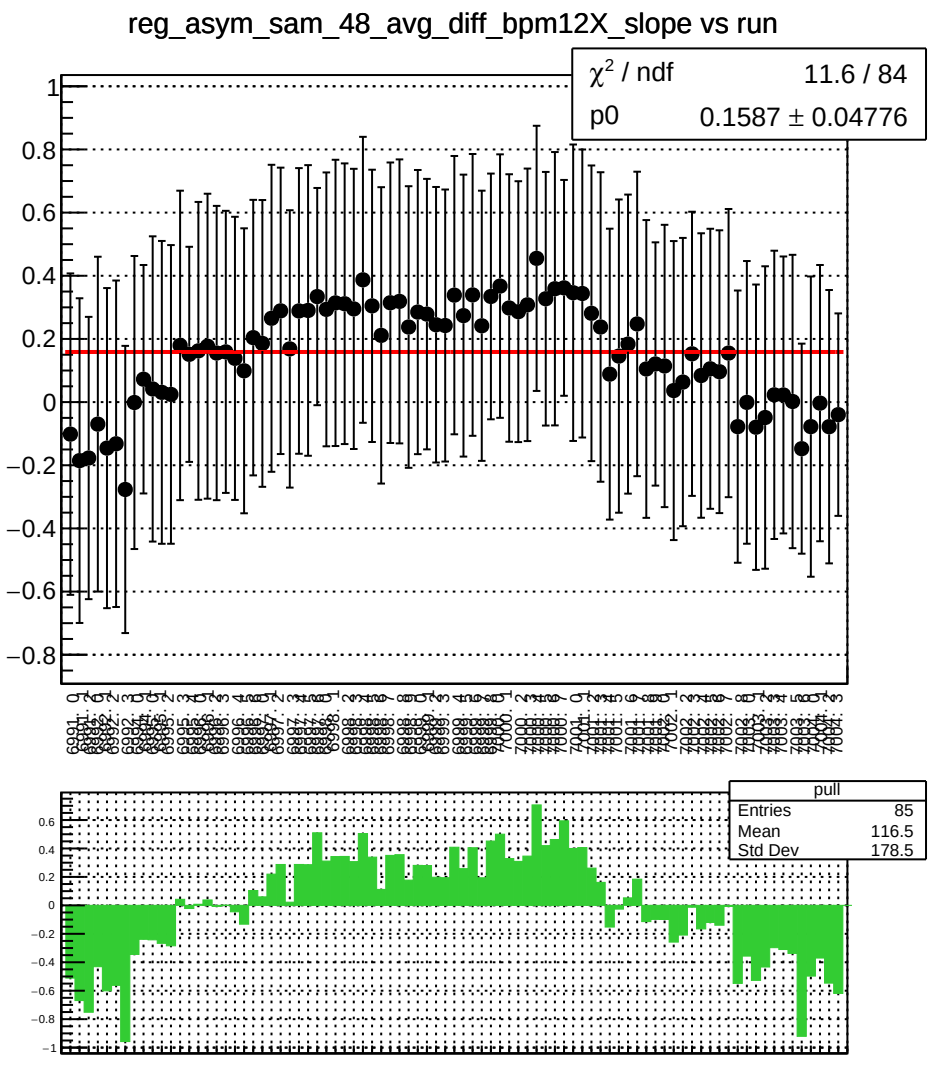

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.808 / 84
p0 −15.59 ± 0.9876
pull
Entries 85
Mean −543.6
Std Dev 565.3
pull1D
Entries 85
Mean 0.002522
Std Dev 0.2614

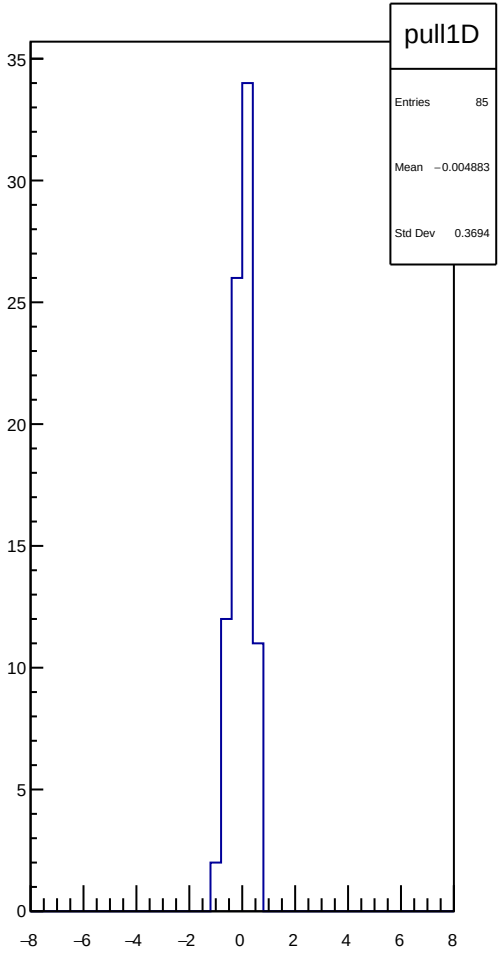

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.402 / 84
p0 −88.06 ± 1.33
−70
−80
−90
−100
−110
pull
Entries 85
Mean −13.9
Std Dev 169.5
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

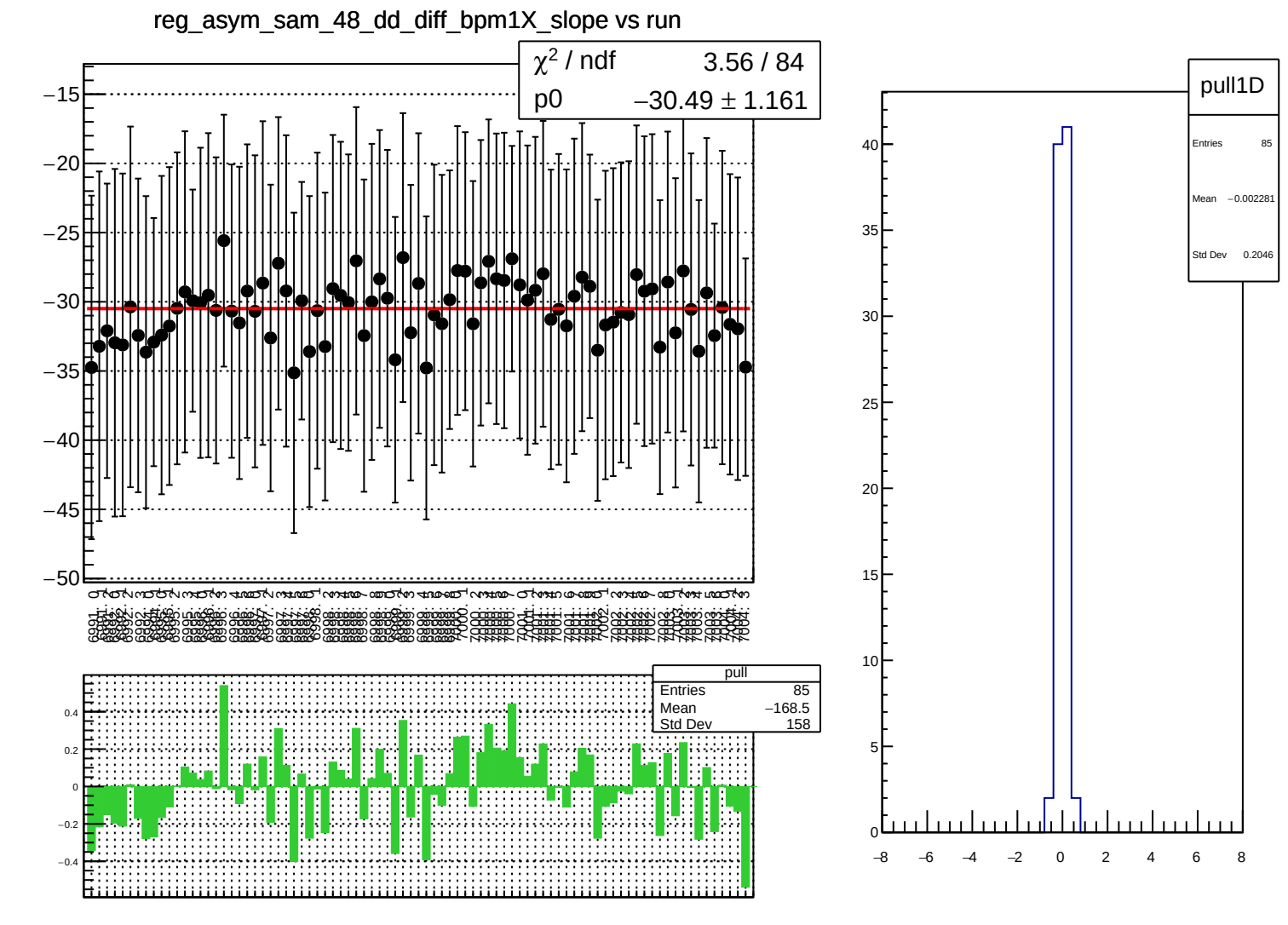

pull1D
Entries 85
Mean 0.001525
Std Dev 0.2951
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

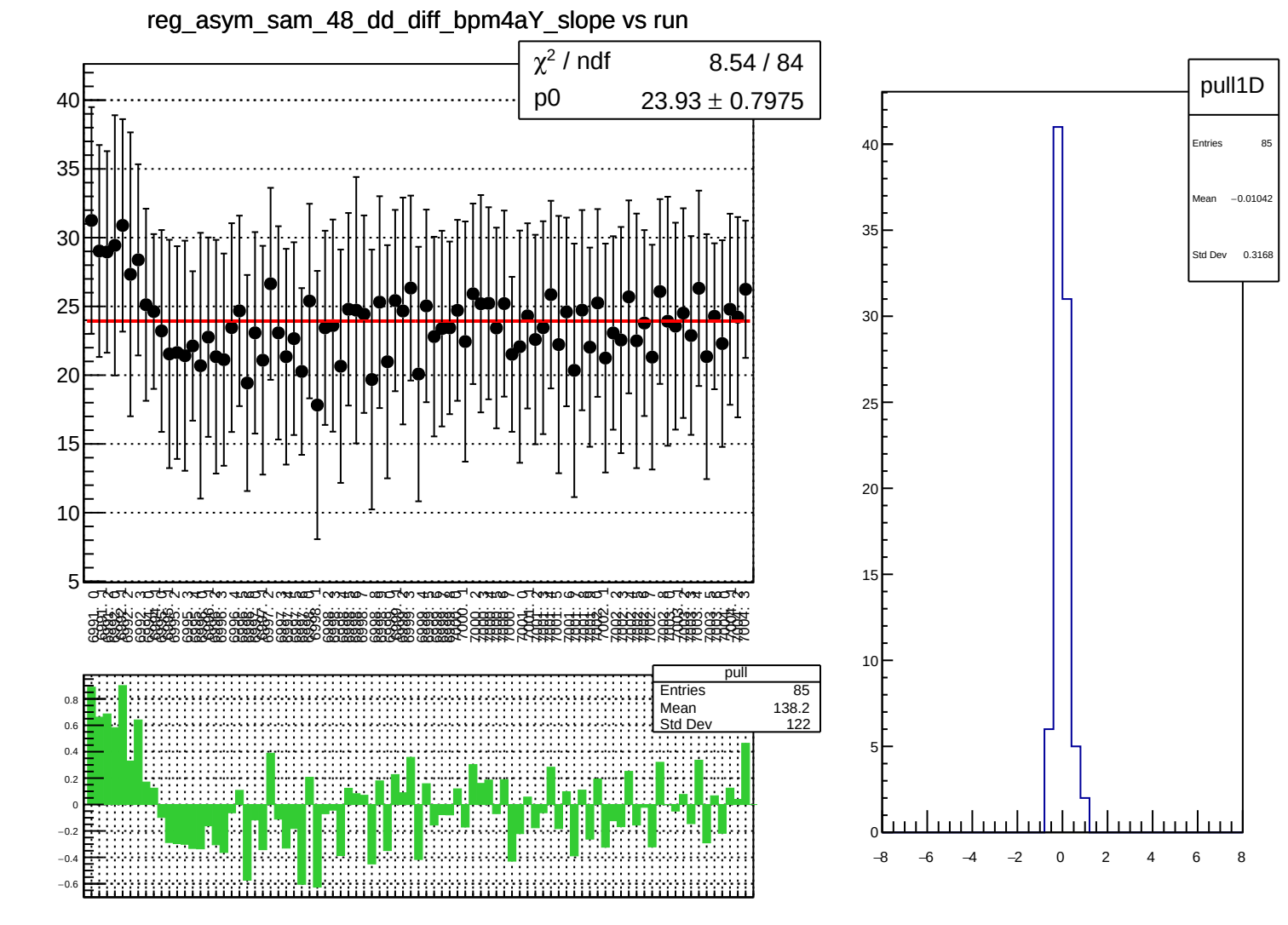

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.8 / 84
p0 130.4 ± 1.042
150
140
130
120
110
pull
Entries 85
Mean 6.247e+05
Std Dev 6.247e+05
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

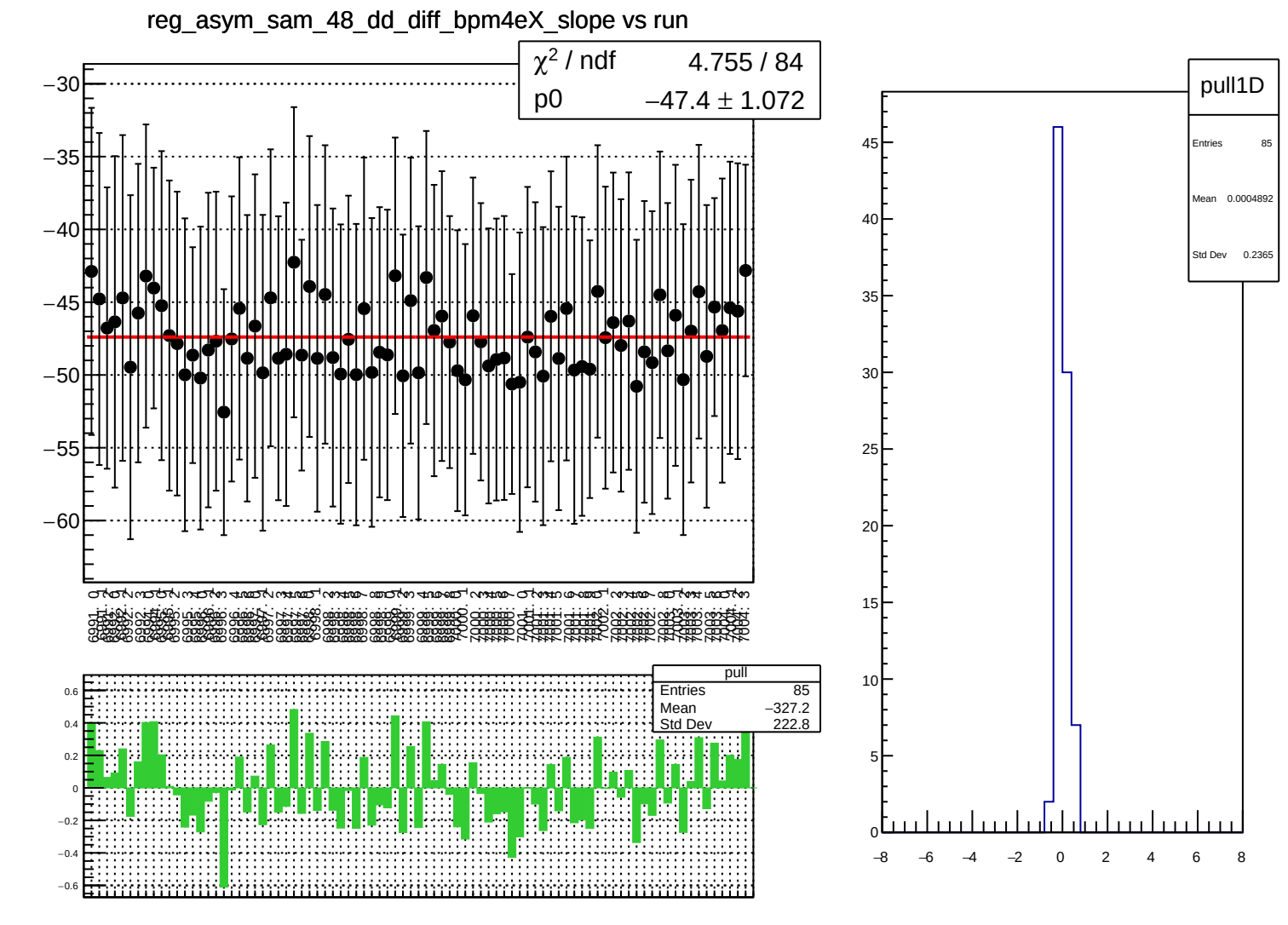

pull1D
Entries 85
Mean 2.714e−06
Std Dev 0.3564
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

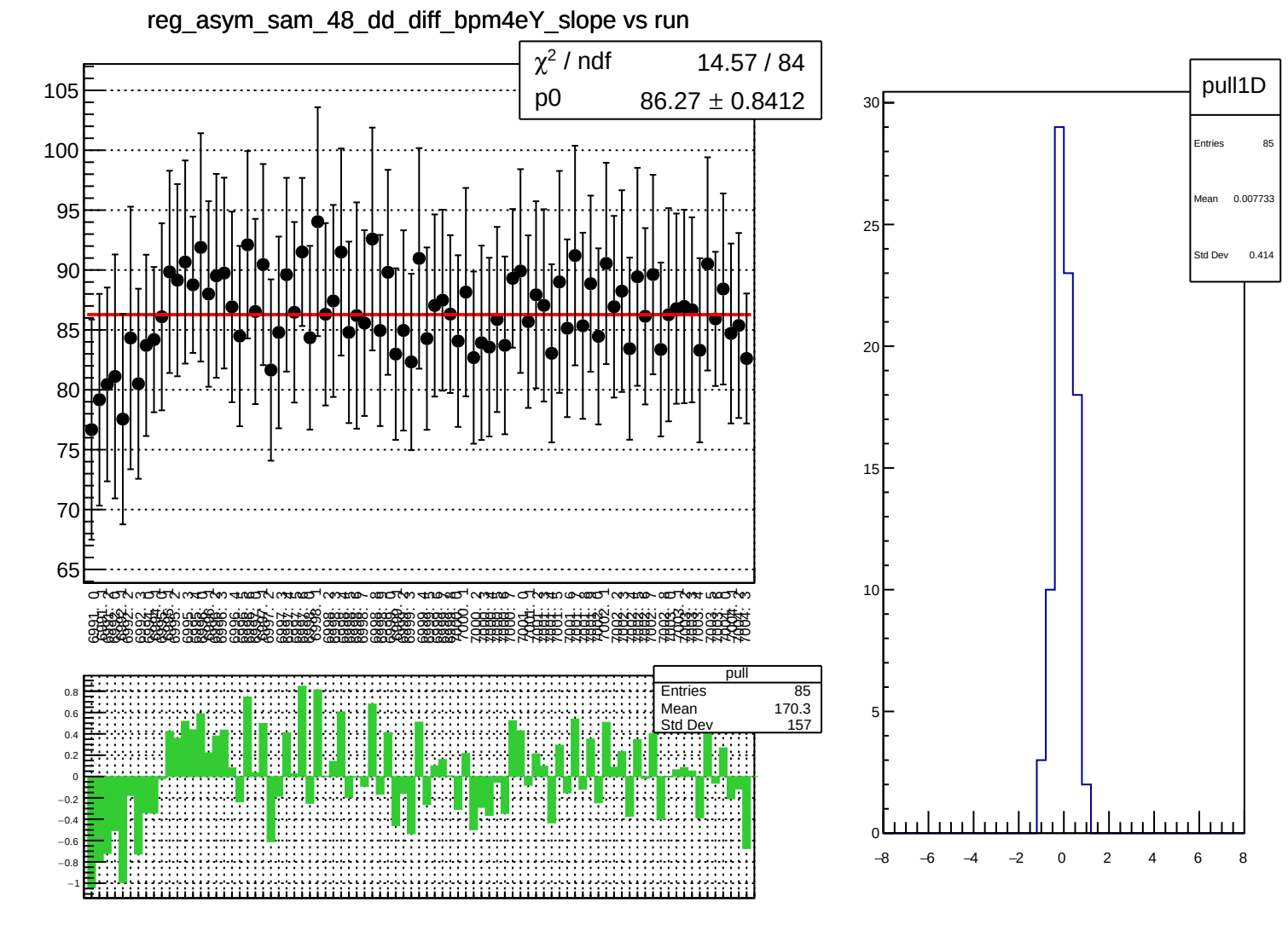

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 11.6 / 84
p0 0.1587 ± 0.04776
pull
Entries 85
Mean 116.5
Std Dev 178.5

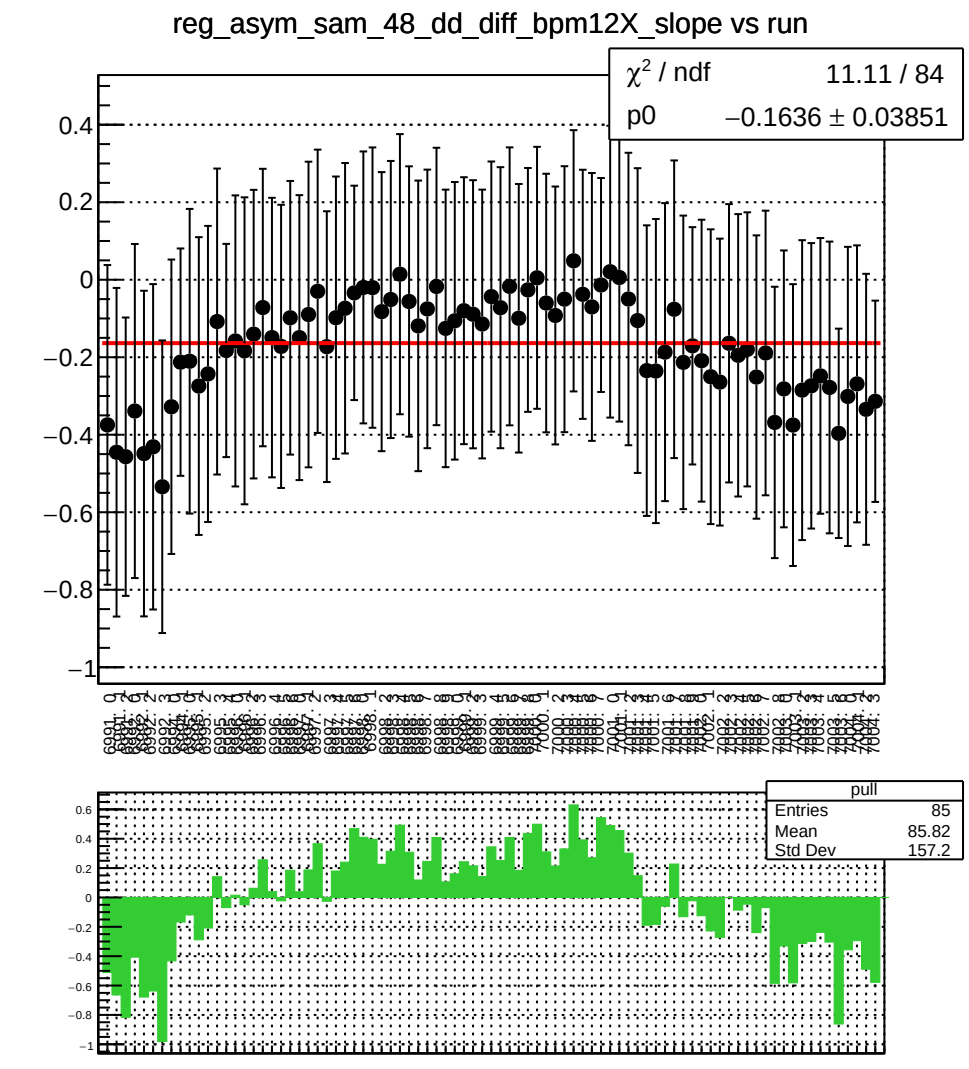

pull1D
Entries 85
Mean −0.004883
Std Dev 0.3694

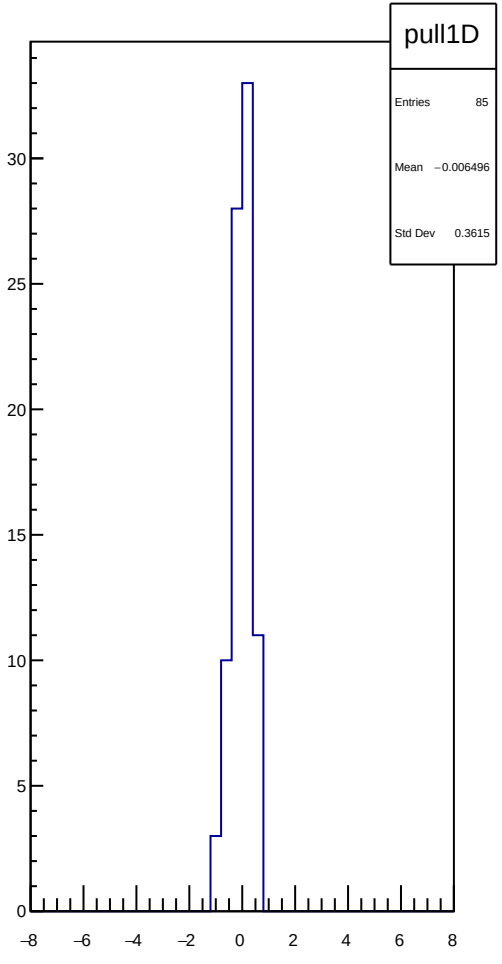

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 3.56 / 84
p0 −30.49 ± 1.161
pull
Entries 85
Mean −168.5
Std Dev 158
pull1D
Entries 85
Mean −0.002281
Std Dev 0.2046

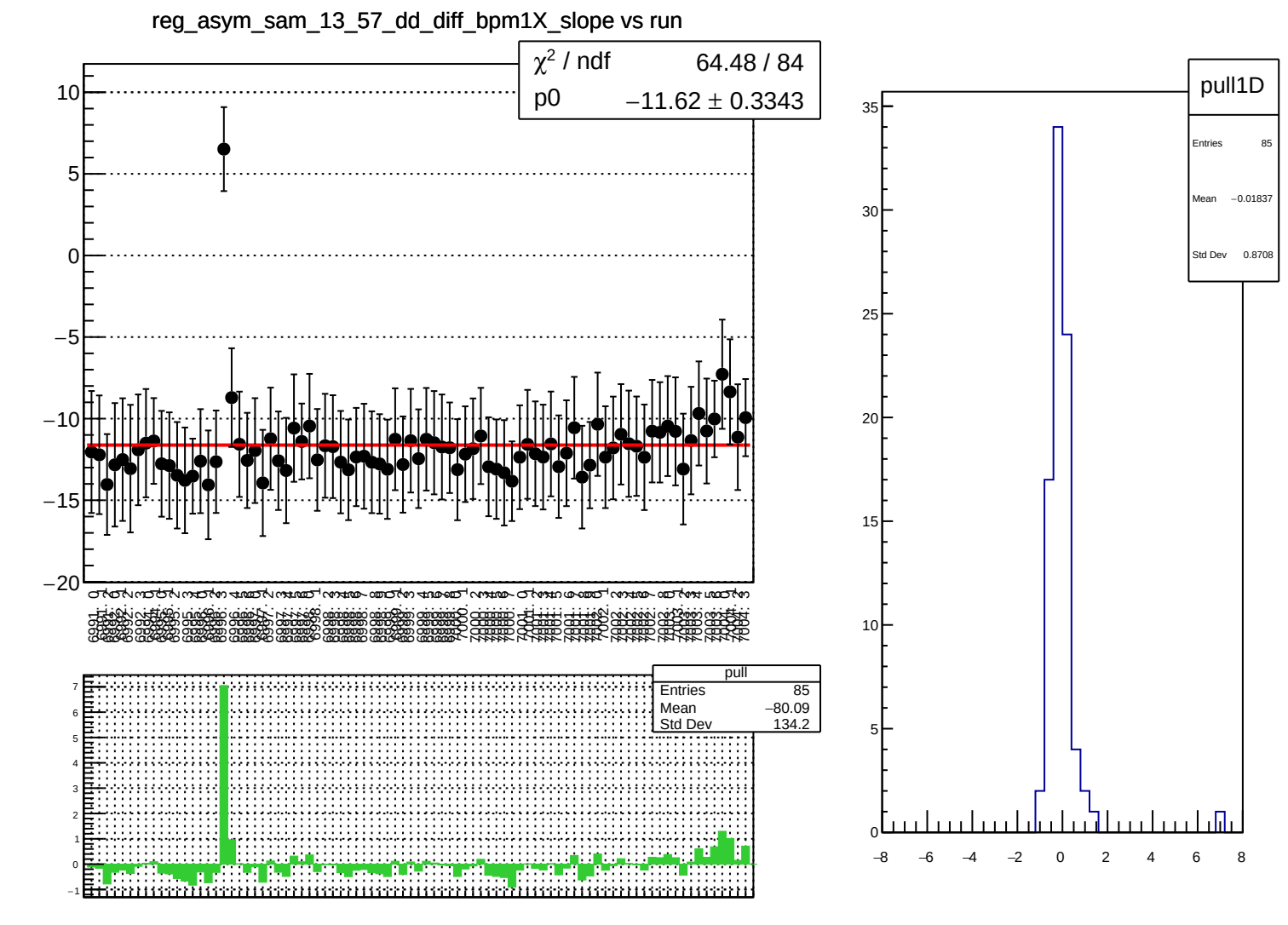

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.54 / 84
p0 23.93 ± 0.7975
pull
Entries 85
Mean 138.2
Std Dev 122
pull1D
Entries 85
Mean −0.01042
Std Dev 0.3168

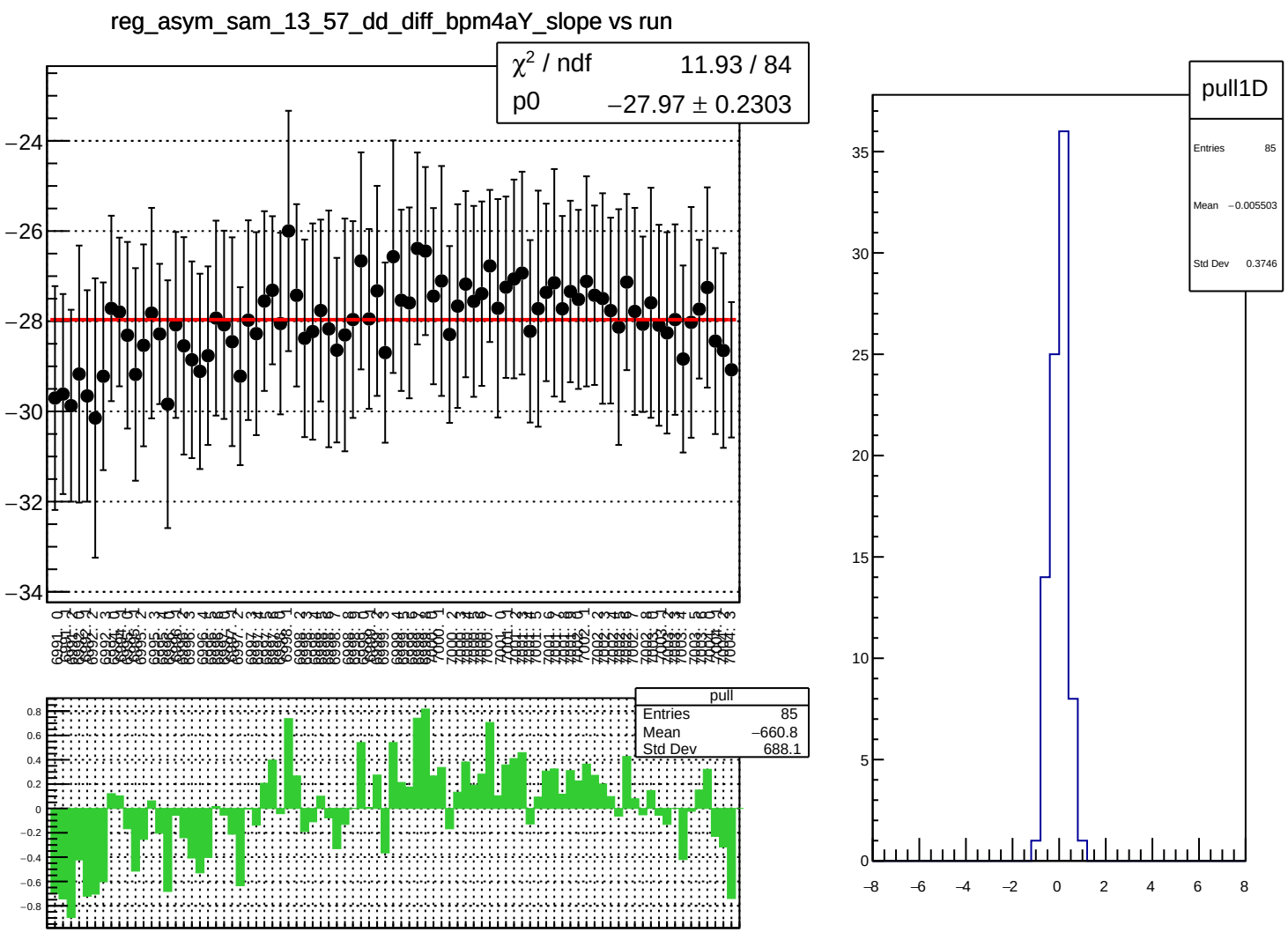

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.755 / 84
p0 −47.4 ± 1.072
−30
−35
−40
−45
−50
−55
−60
pull
Entries 85
Mean −327.2
Std Dev 222.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 85
Mean 0.0004892
Std Dev 0.2365
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

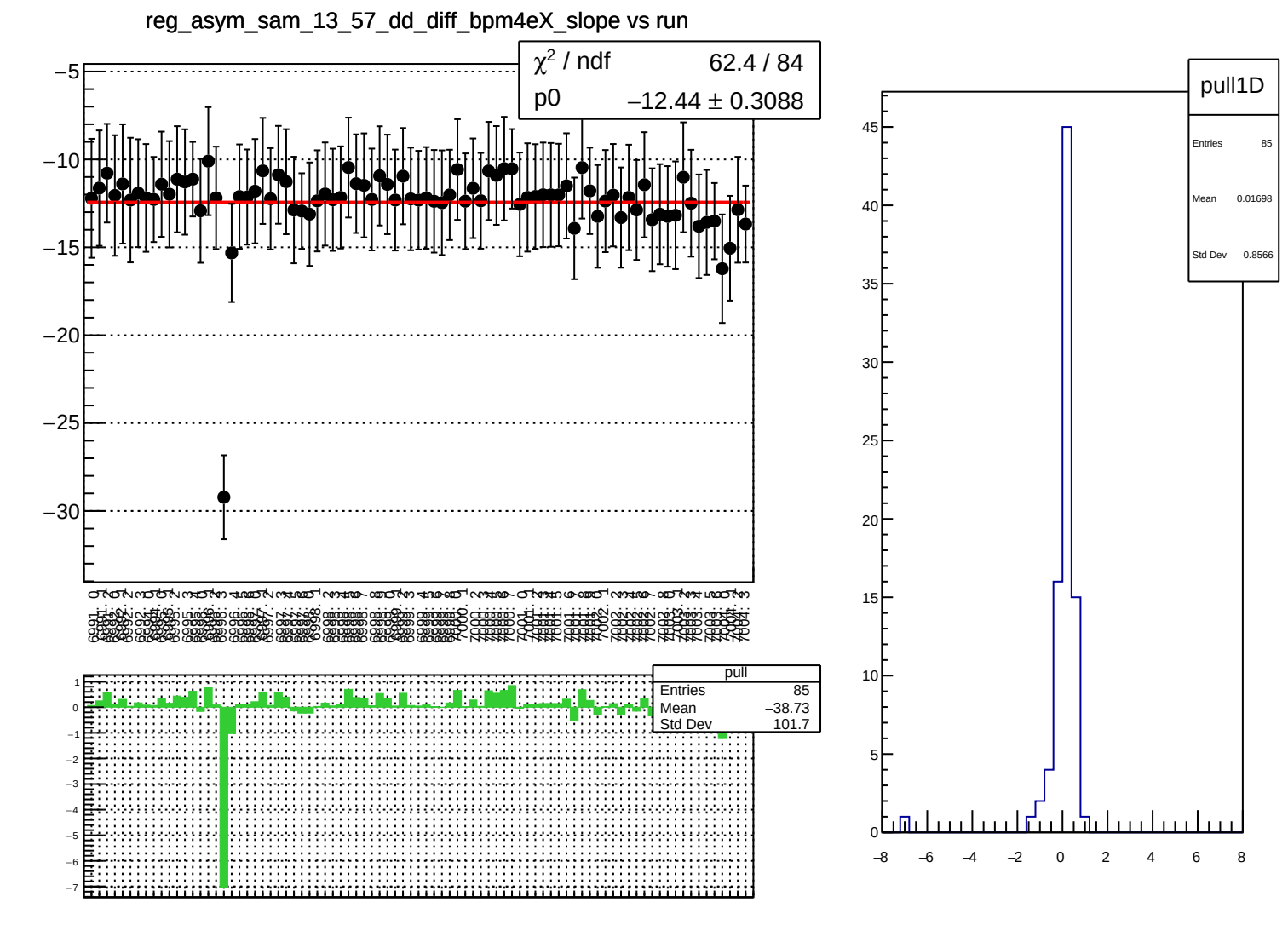

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.57 / 84
p0 86.27 ± 0.8412
pull
Entries 85
Mean 170.3
Std Dev 157
pull1D
Entries 85
Mean 0.007733
Std Dev 0.414

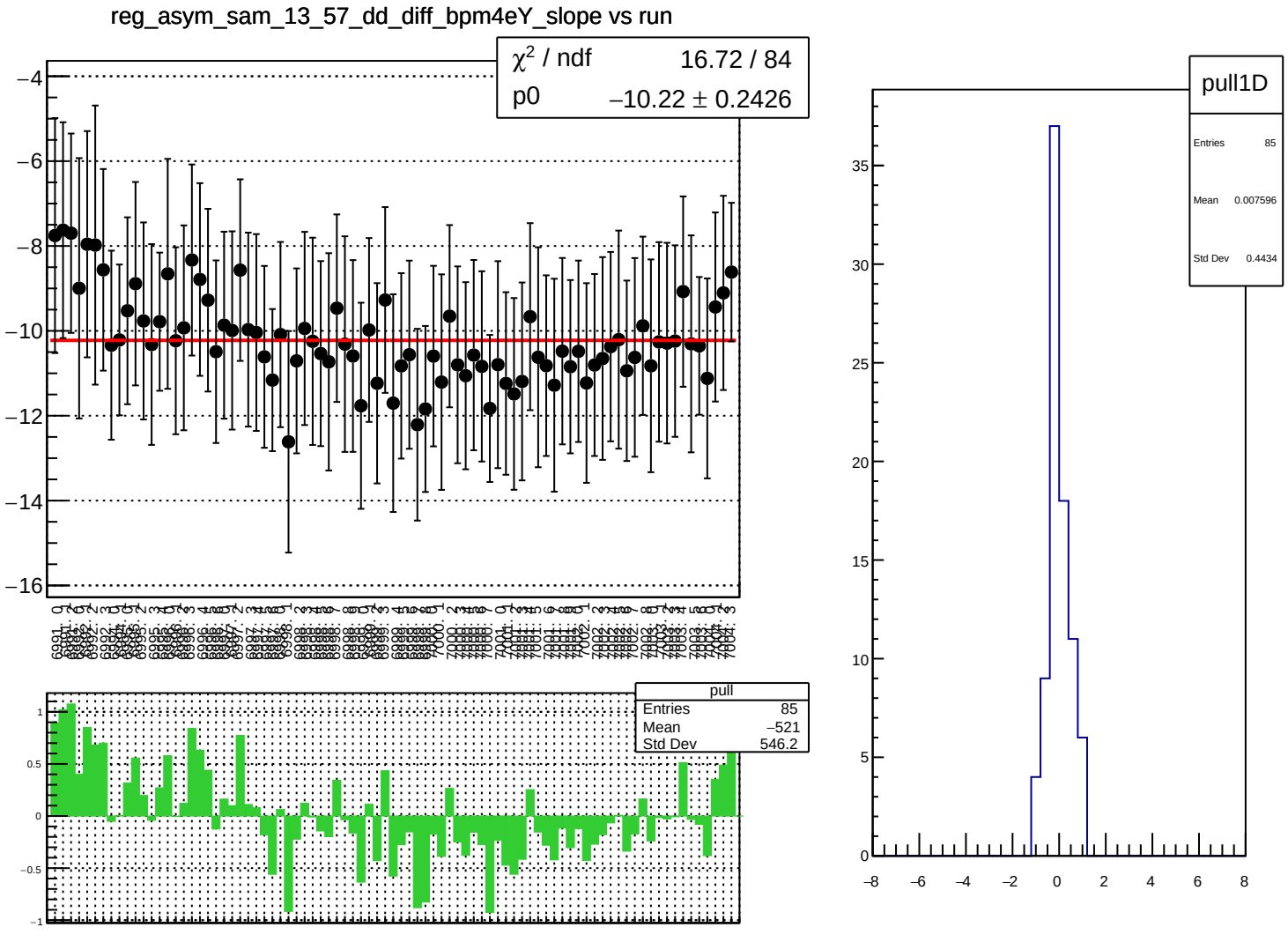

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 11.11 / 84
p0 −0.1636 ± 0.03851
pull
Entries 85
Mean 85.82
Std Dev 157.2

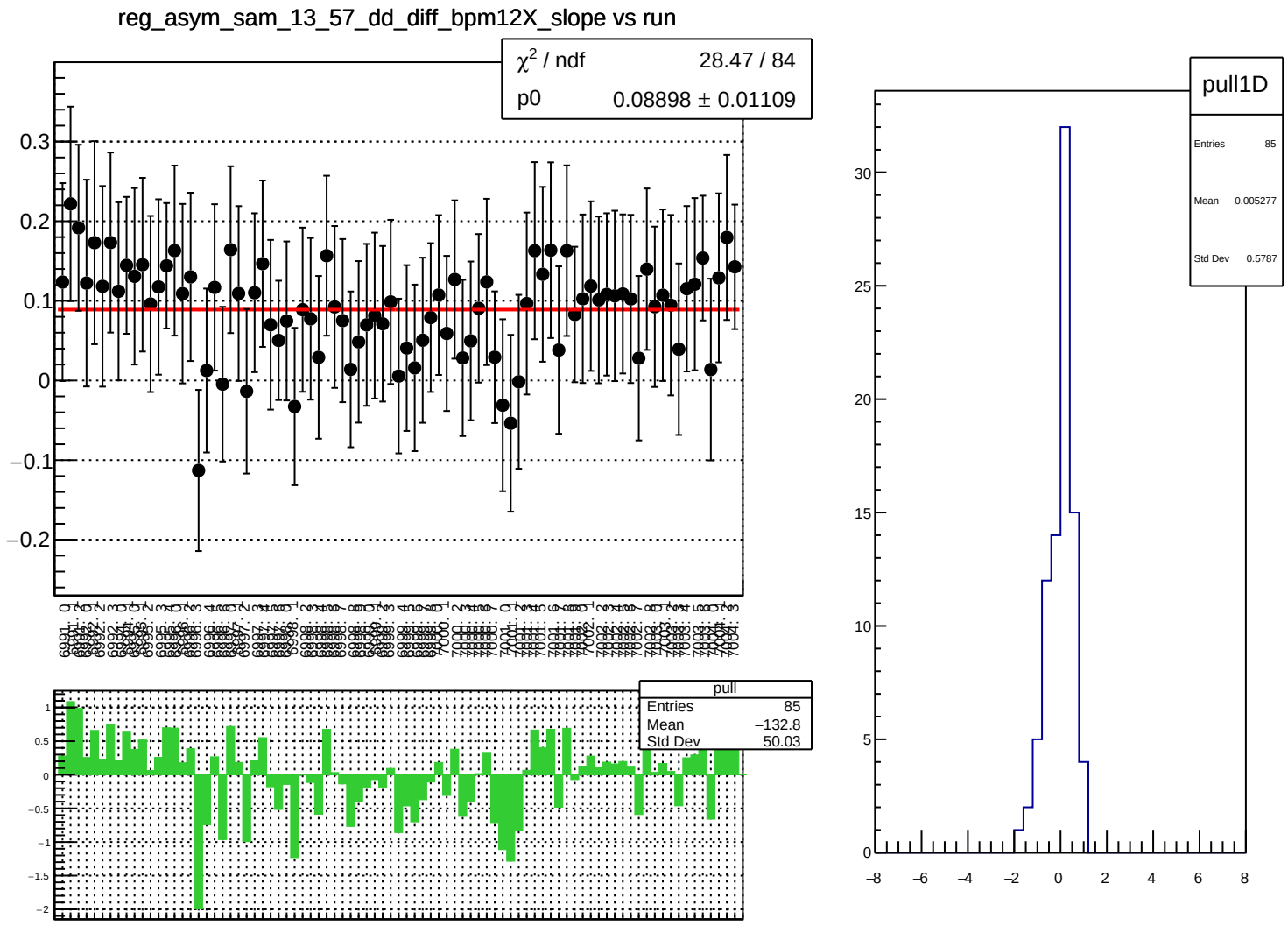

pull1D
Entries 85
Mean −0.006496
Std Dev 0.3615

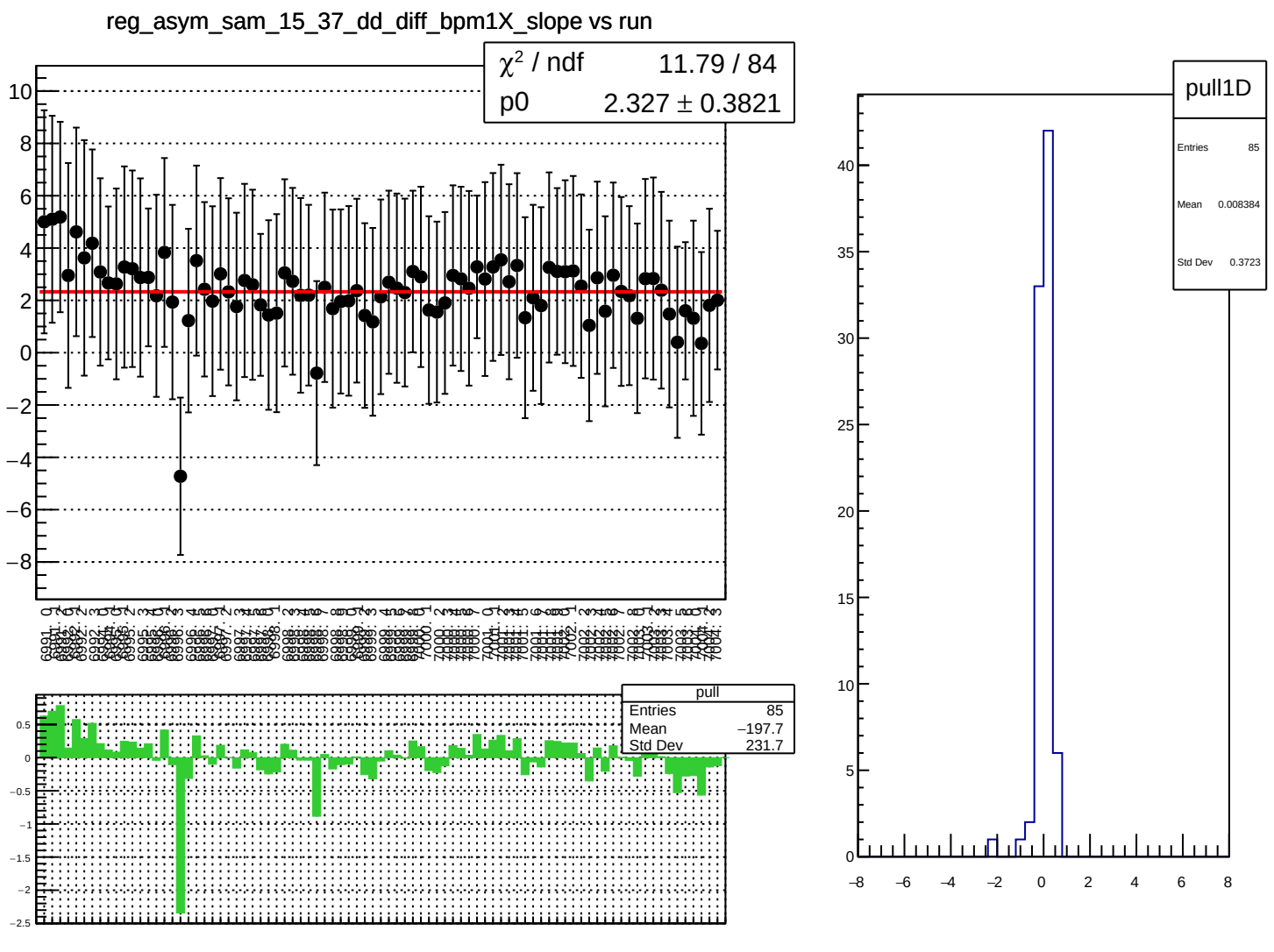

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 64.48 / 84
p0 −11.62 ± 0.3343
pull
Entries 85
Mean −80.09
Std Dev 134.2
pull1D
Entries 85
Mean −0.01837
Std Dev 0.8708

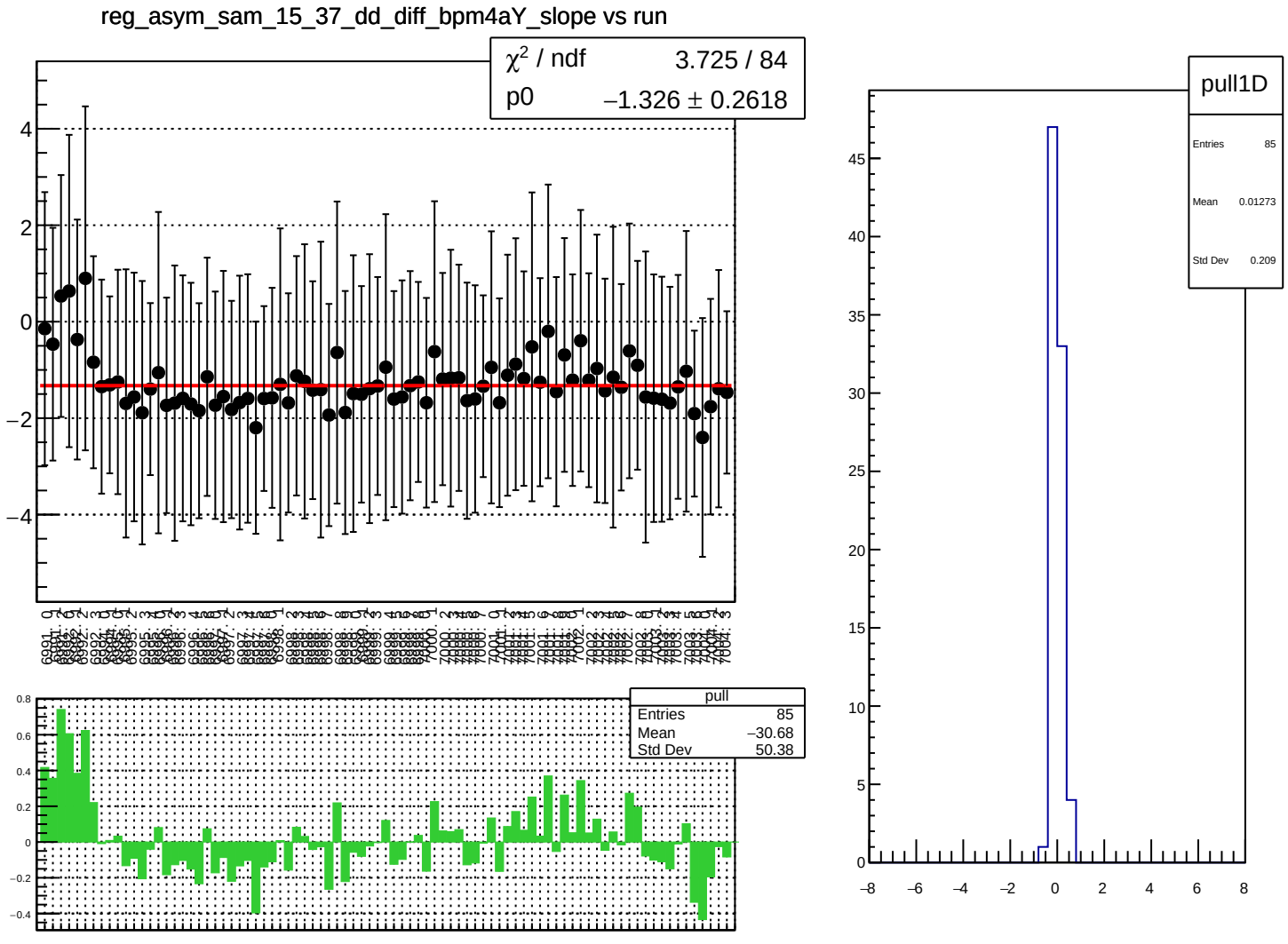

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.93 / 84
p0 −27.97 ± 0.2303
−24
−26
−28
−30
−32
−34
pull
Entries 85
Mean −660.8
Std Dev 688.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean −0.005503
Std Dev 0.3746
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

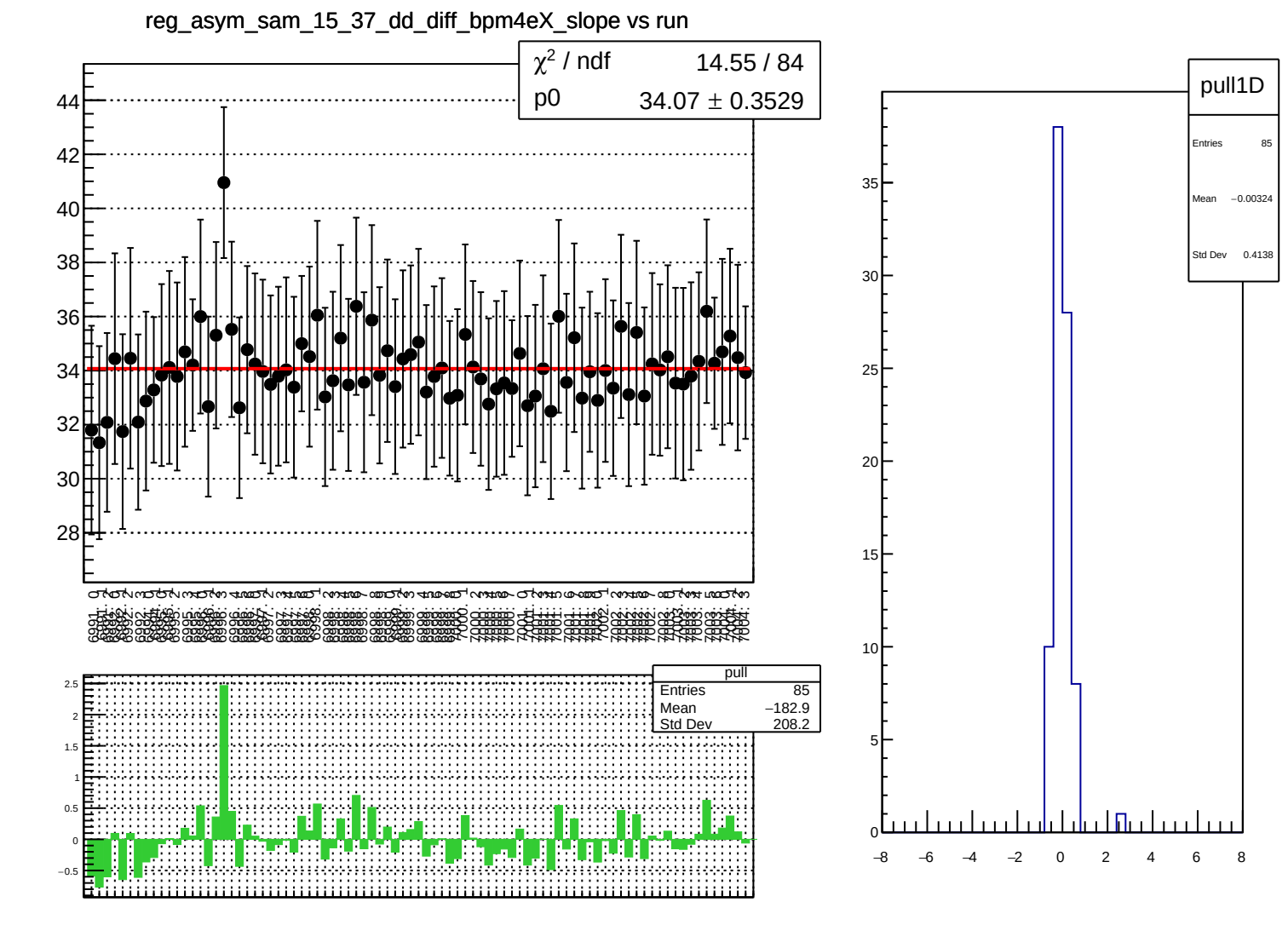

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 62.4 / 84
p0 −12.44 ± 0.3088
pull
Entries 85
Mean −38.73
Std Dev 101.7
pull1D
Entries 85
Mean 0.01698
Std Dev 0.8566

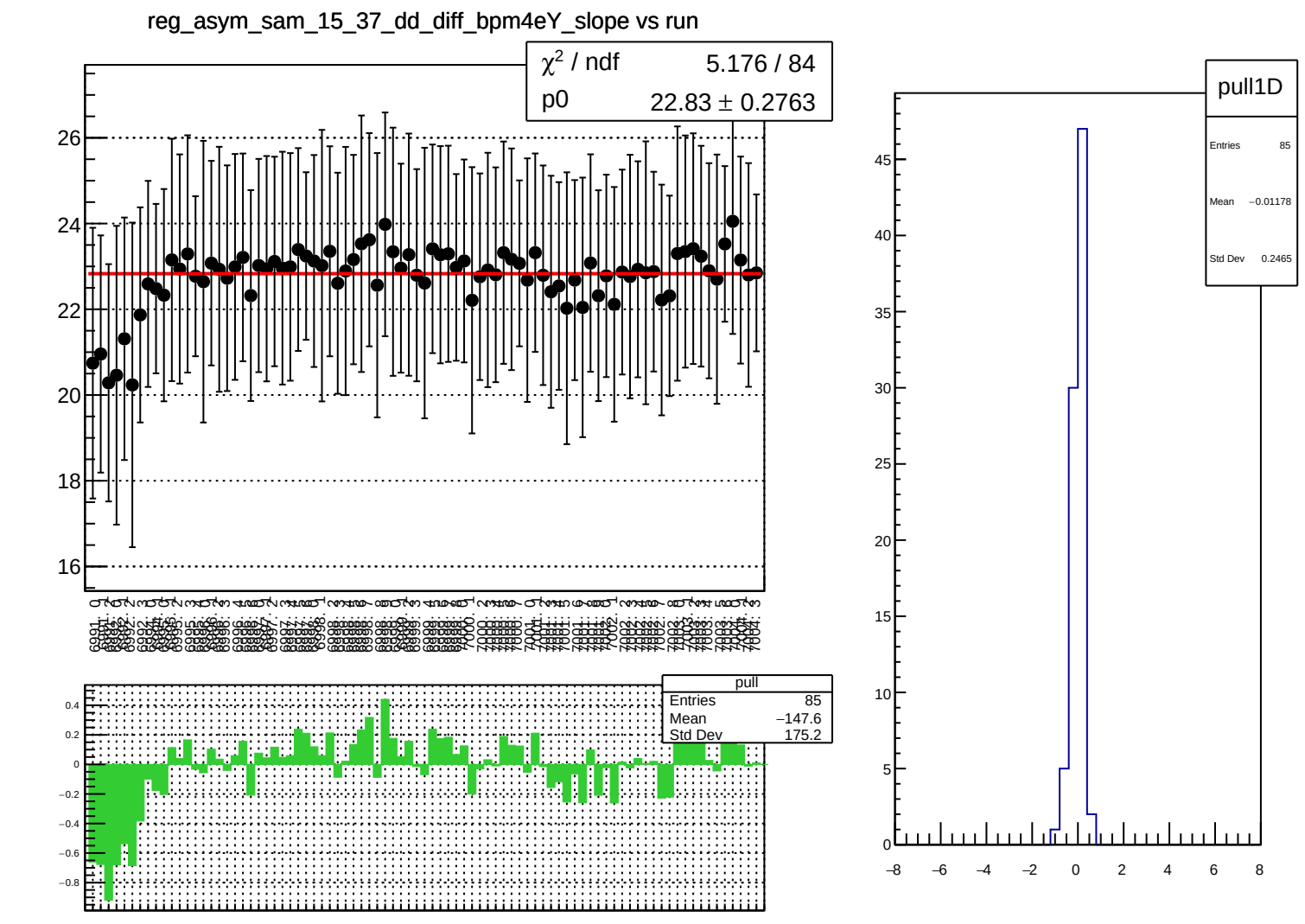

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 16.72 / 84
p0 −10.22 ± 0.2426
pull
Entries 85
Mean −521
Std Dev 546.2
pull1D
Entries 85
Mean 0.007596
Std Dev 0.4434

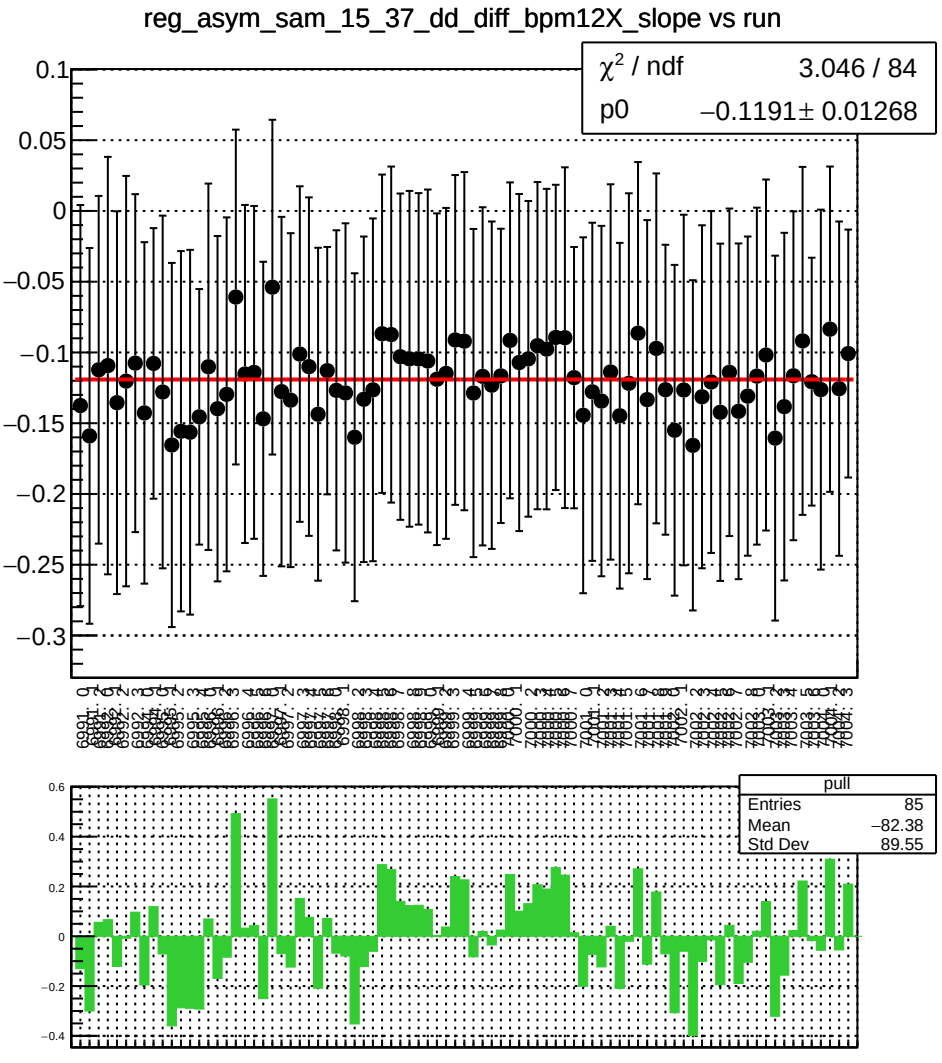

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 28.47 / 84
p0 0.08898 ± 0.01109
0.3
0.2
0.1
0
−0.1
−0.2
pull
Entries 85
Mean −132.8
Std Dev 50.03
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.005277
Std Dev 0.5787
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

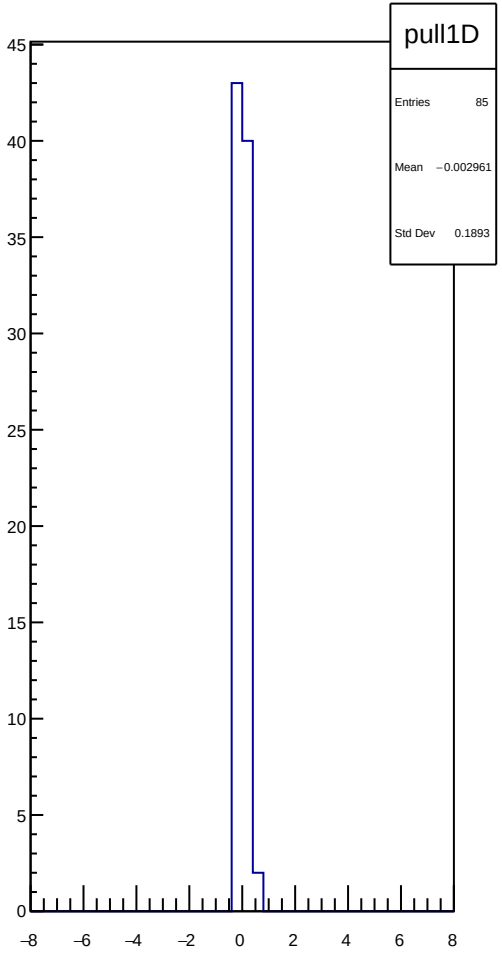

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 11.79 / 84
p0 2.327 ± 0.3821
pull
Entries 85
Mean −197.7
Std Dev 231.7
pull1D
Entries 85
Mean 0.008384
Std Dev 0.3723

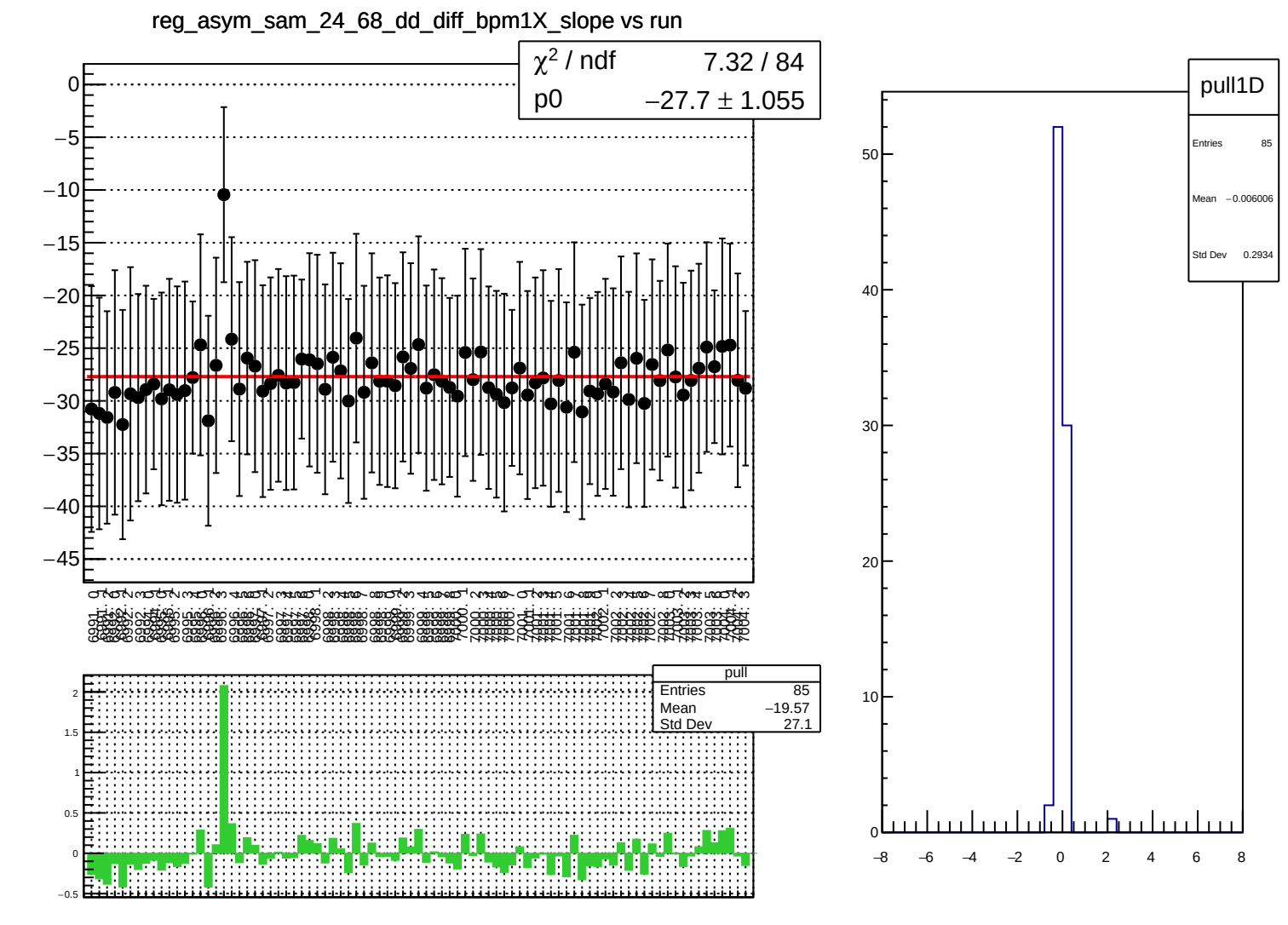

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.725 / 84
p0 −1.326 ± 0.2618
pull
Entries 85
Mean −30.68
Std Dev 50.38
pull1D
Entries 85
Mean 0.01273
Std Dev 0.209

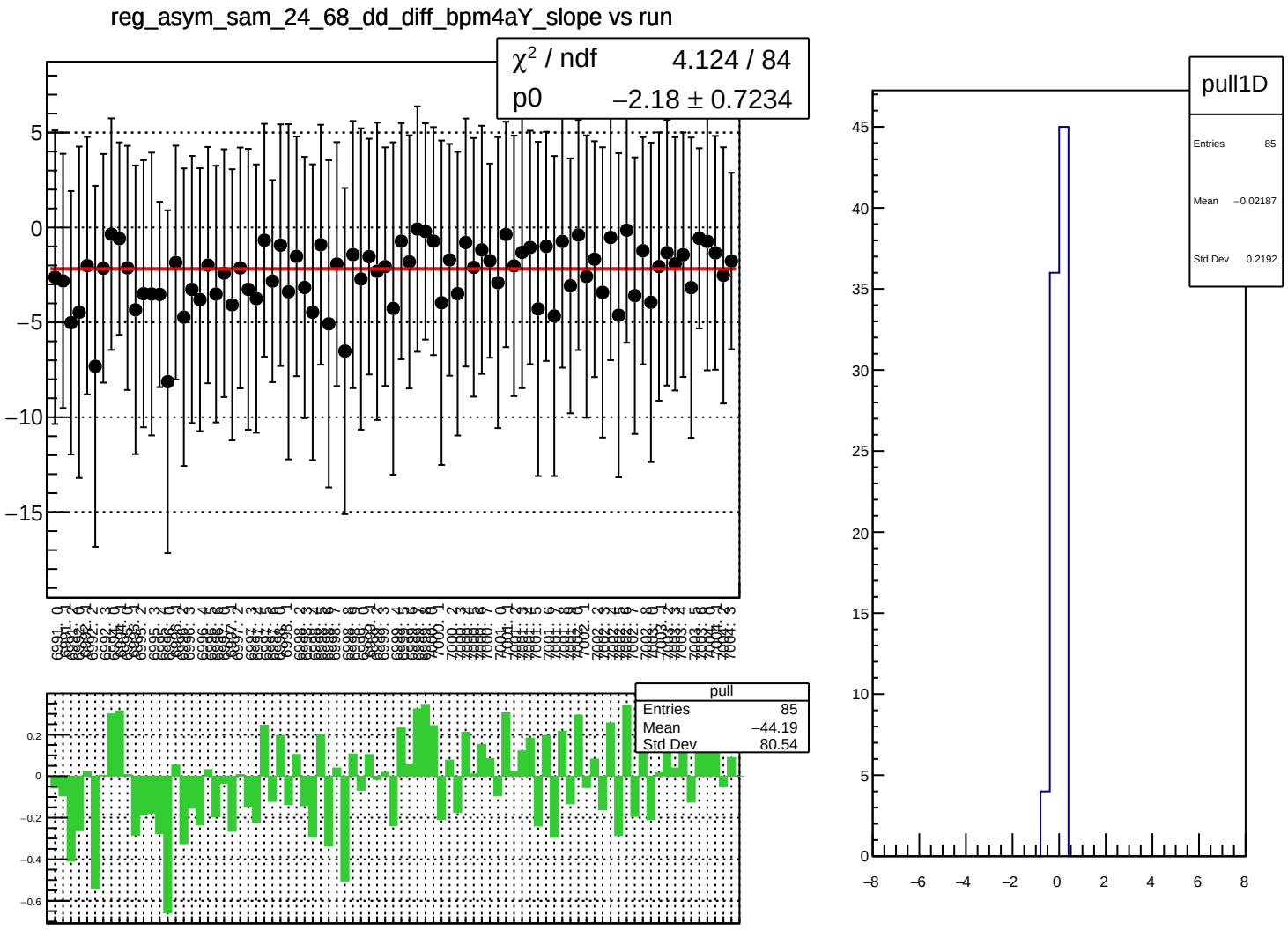

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 14.55 / 84
p0 34.07 ± 0.3529
pull
Entries 85
Mean −182.9
Std Dev 208.2
pull1D
Entries 85
Mean −0.00324
Std Dev 0.4138

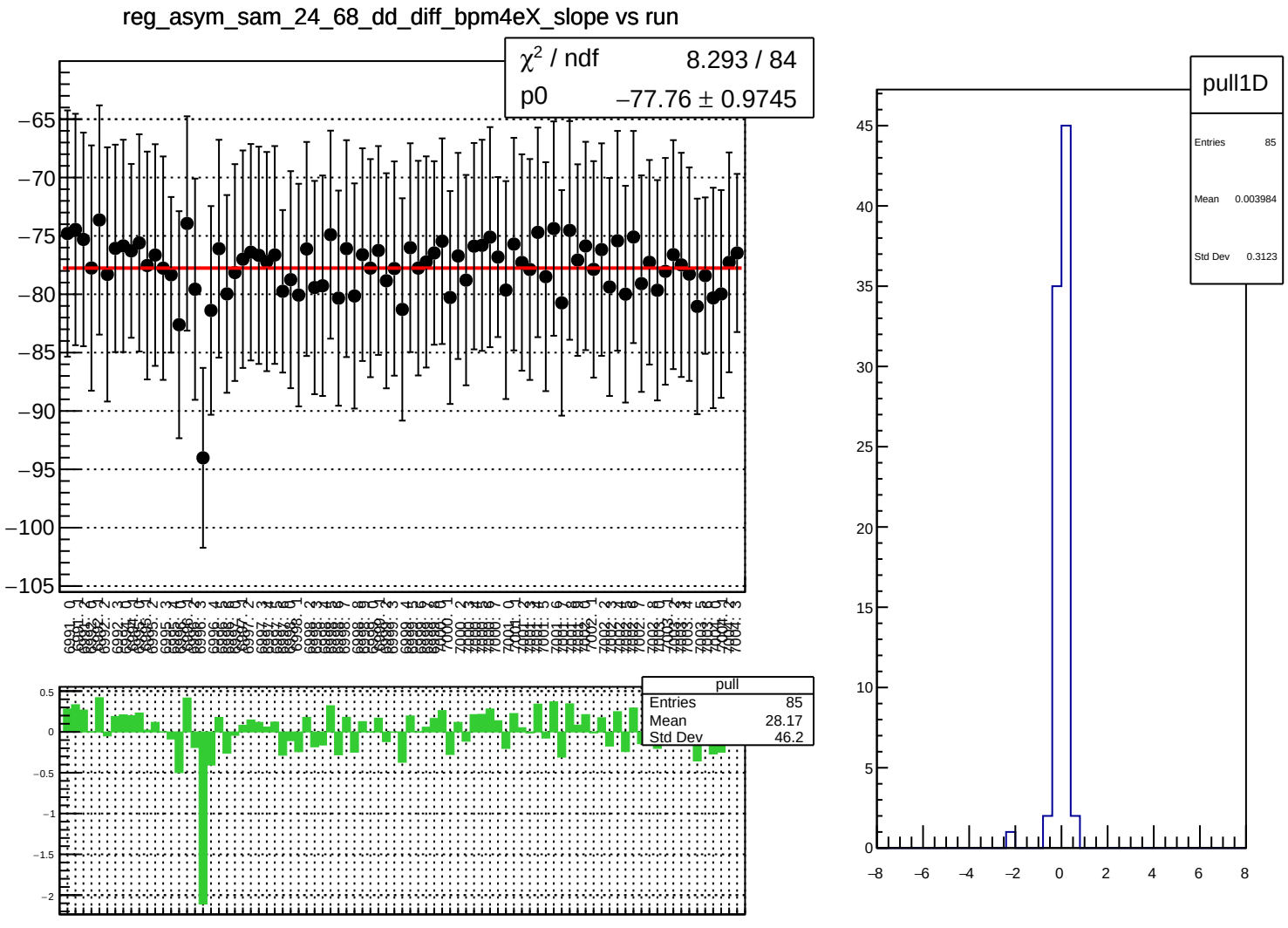

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.176 / 84
p0 22.83 ± 0.2763
pull
Entries 85
Mean −147.6
Std Dev 175.2
pull1D
Entries 85
Mean −0.01178
Std Dev 0.2465

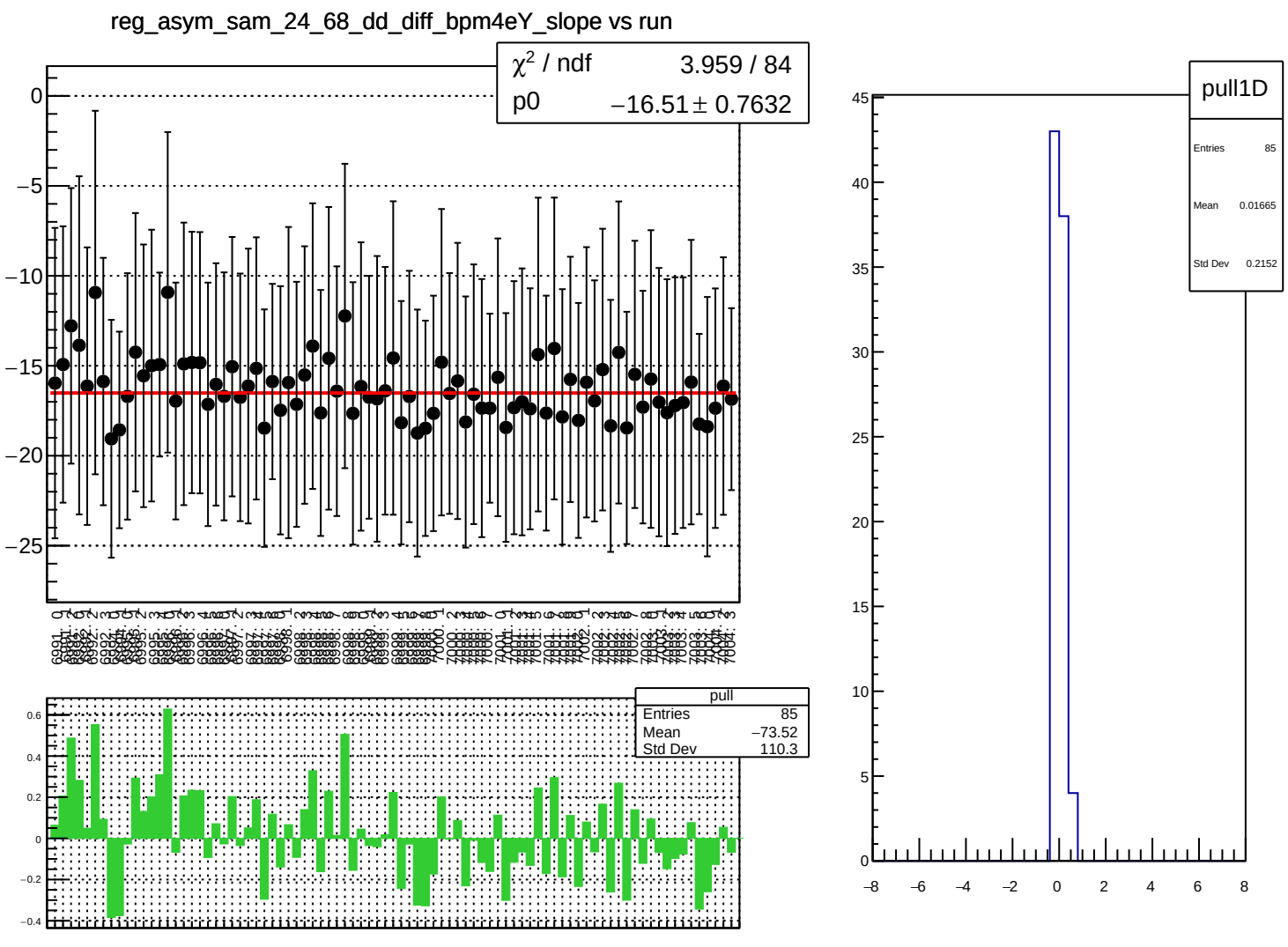

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 3.046 / 84
p0 −0.1191 ± 0.01268
pull
Entries 85
Mean −82.38
Std Dev 89.55

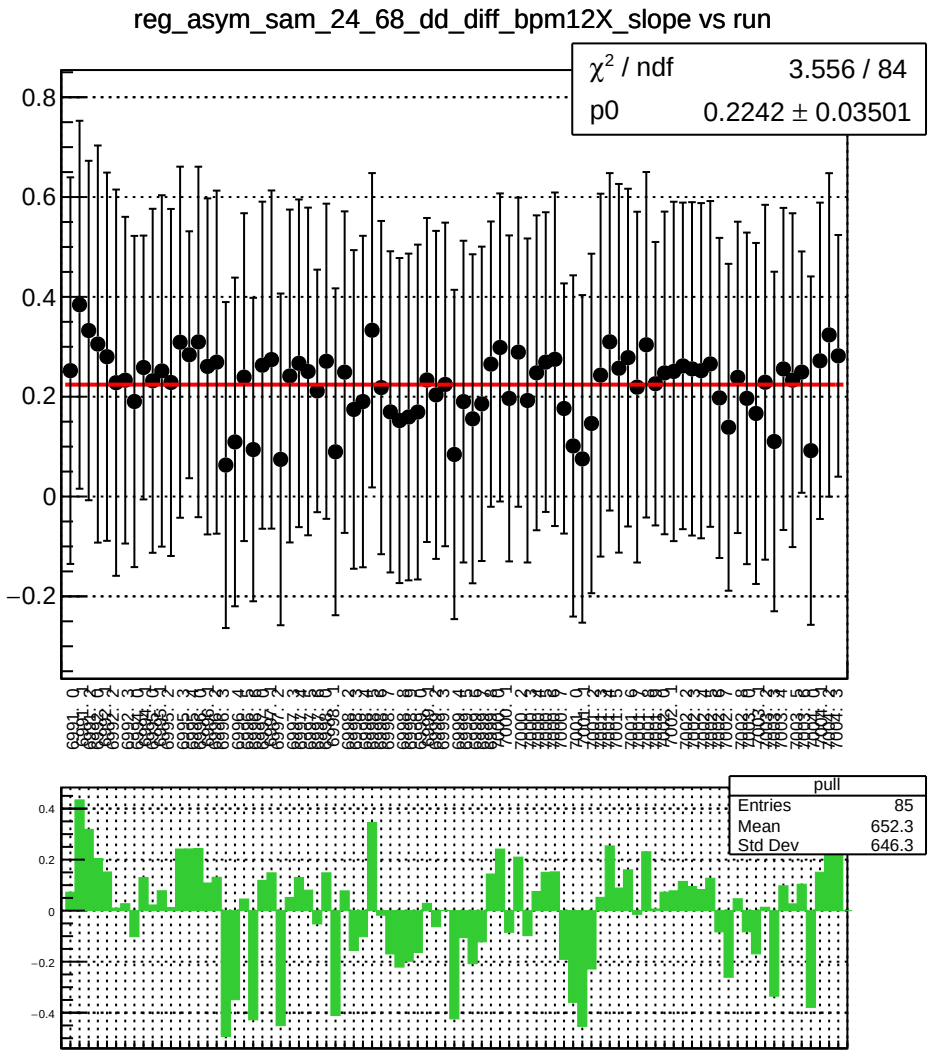

pull1D
Entries 85
Mean −0.002961
Std Dev 0.1893

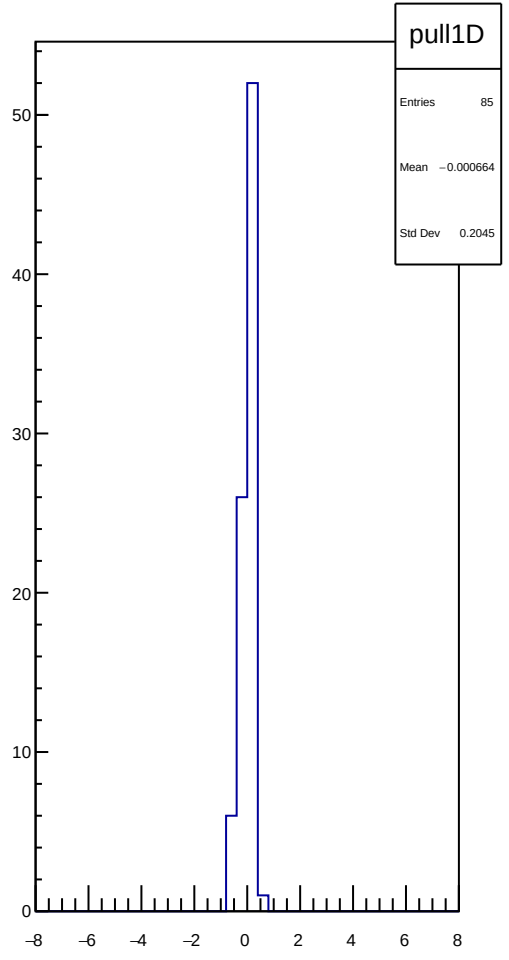

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 7.32 / 84
p0 −27.7 ± 1.055
pull
Entries 85
Mean −19.57
Std Dev 27.1
pull1D
Entries 85
Mean −0.006006
Std Dev 0.2934

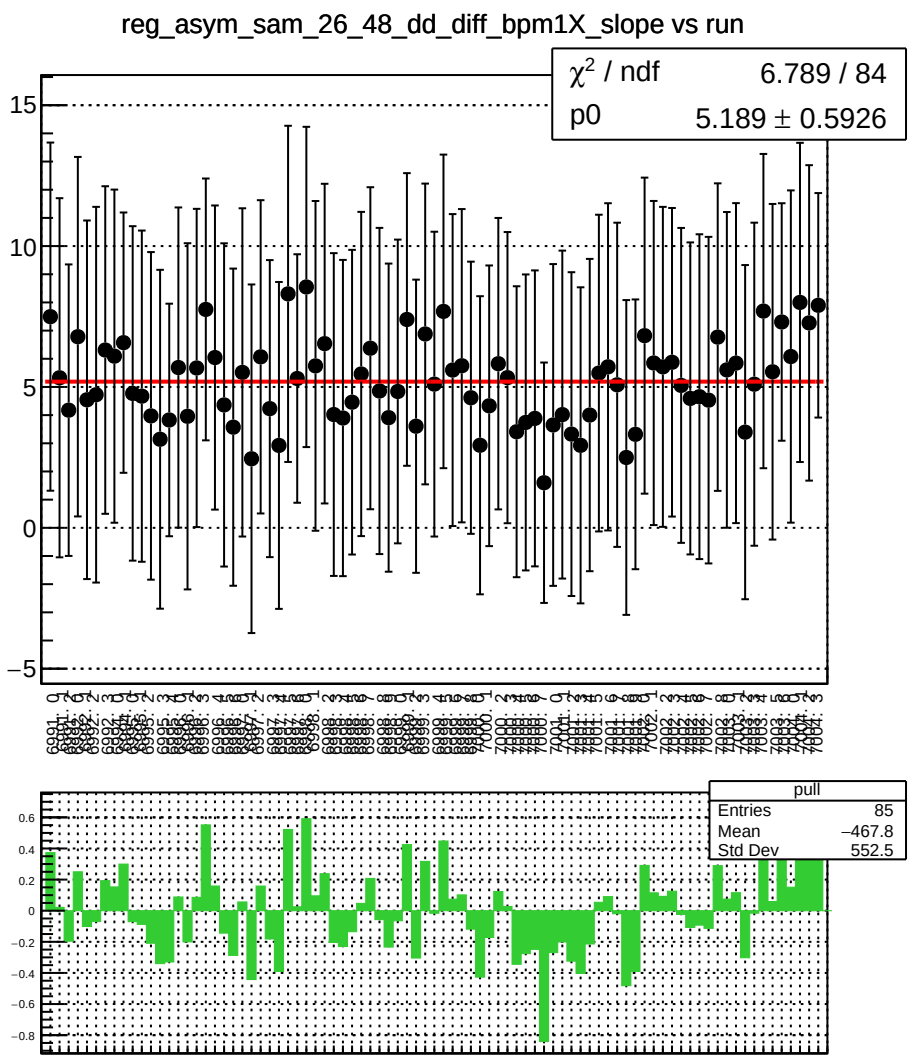

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.124 / 84
p0 −2.18 ± 0.7234
pull
Entries 85
Mean −44.19
Std Dev 80.54
pull1D
Entries 85
Mean −0.02187
Std Dev 0.2192

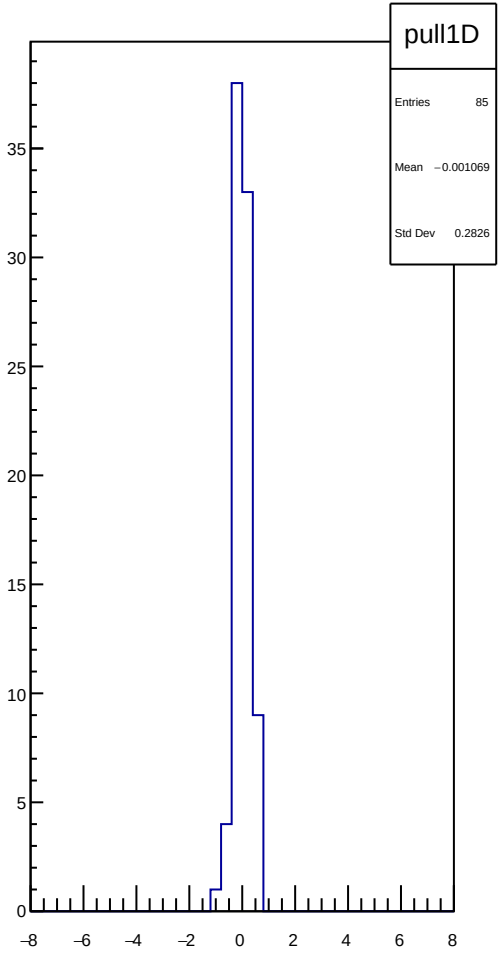

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 8.293 / 84
p0 −77.76 ± 0.9745
pull
Entries 85
Mean 28.17
Std Dev 46.2
pull1D
Entries 85
Mean 0.003984
Std Dev 0.3123

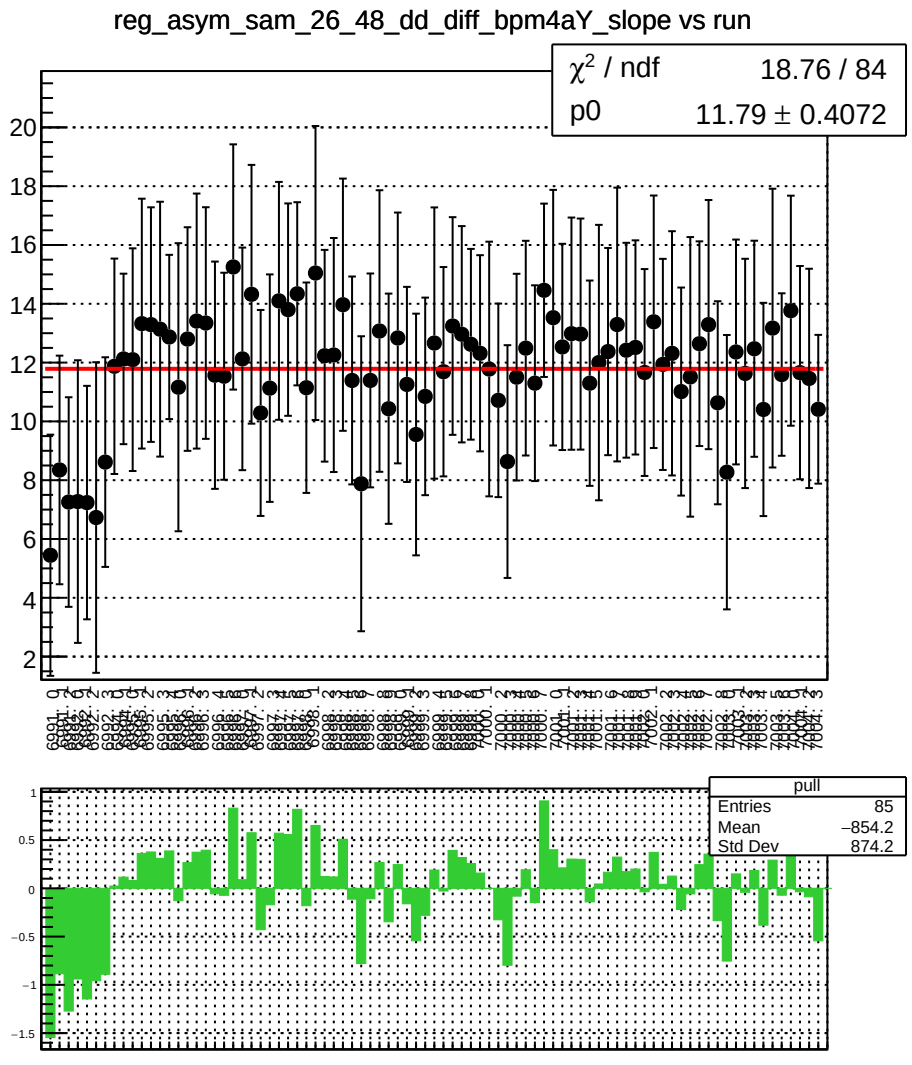

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.959 / 84
p0 −16.51 ± 0.7632
pull
Entries 85
Mean −73.52
Std Dev 110.3
pull1D
Entries 85
Mean 0.01665
Std Dev 0.2152

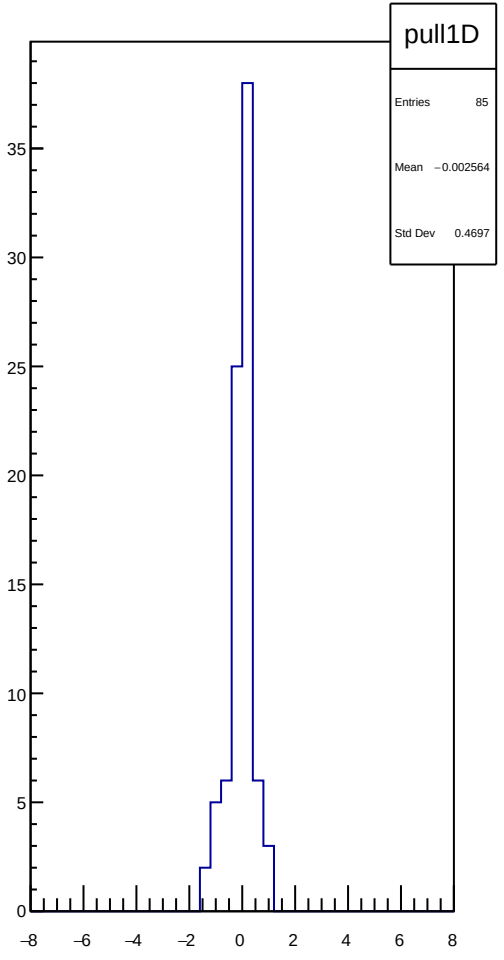

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 3.556 / 84
p0 0.2242 ± 0.03501
pull
Entries 85
Mean 652.3
Std Dev 646.3

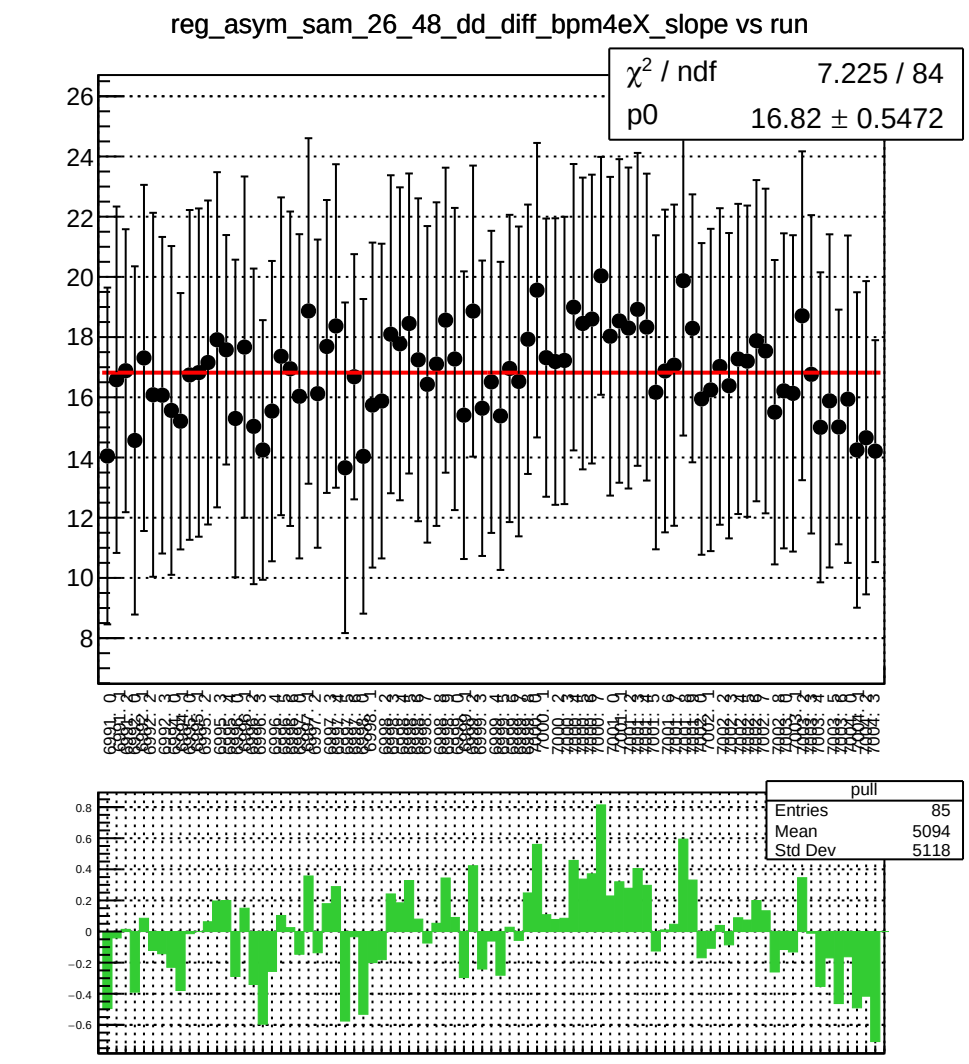

pull1D
Entries 85
Mean −0.000664
Std Dev 0.2045

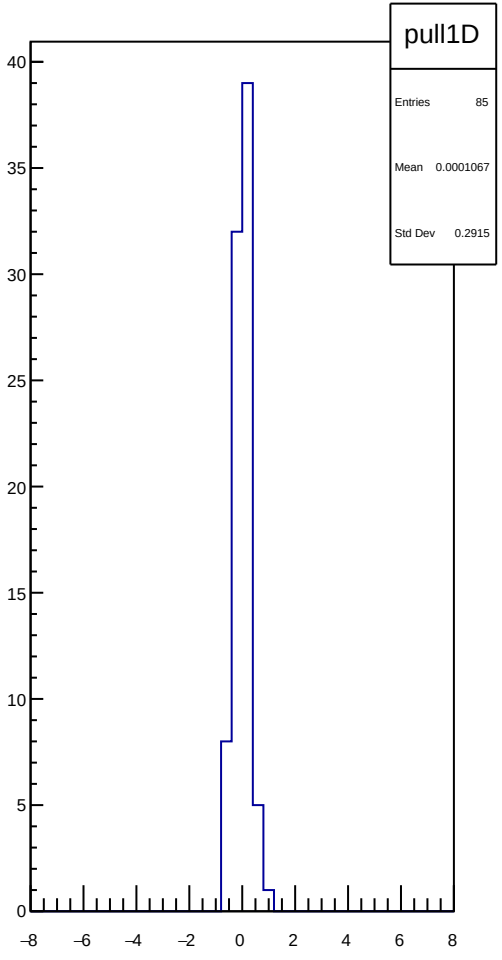

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 6.789 / 84
p0 5.189 ± 0.5926
pull
Entries 85
Mean −467.8
Std Dev 552.5

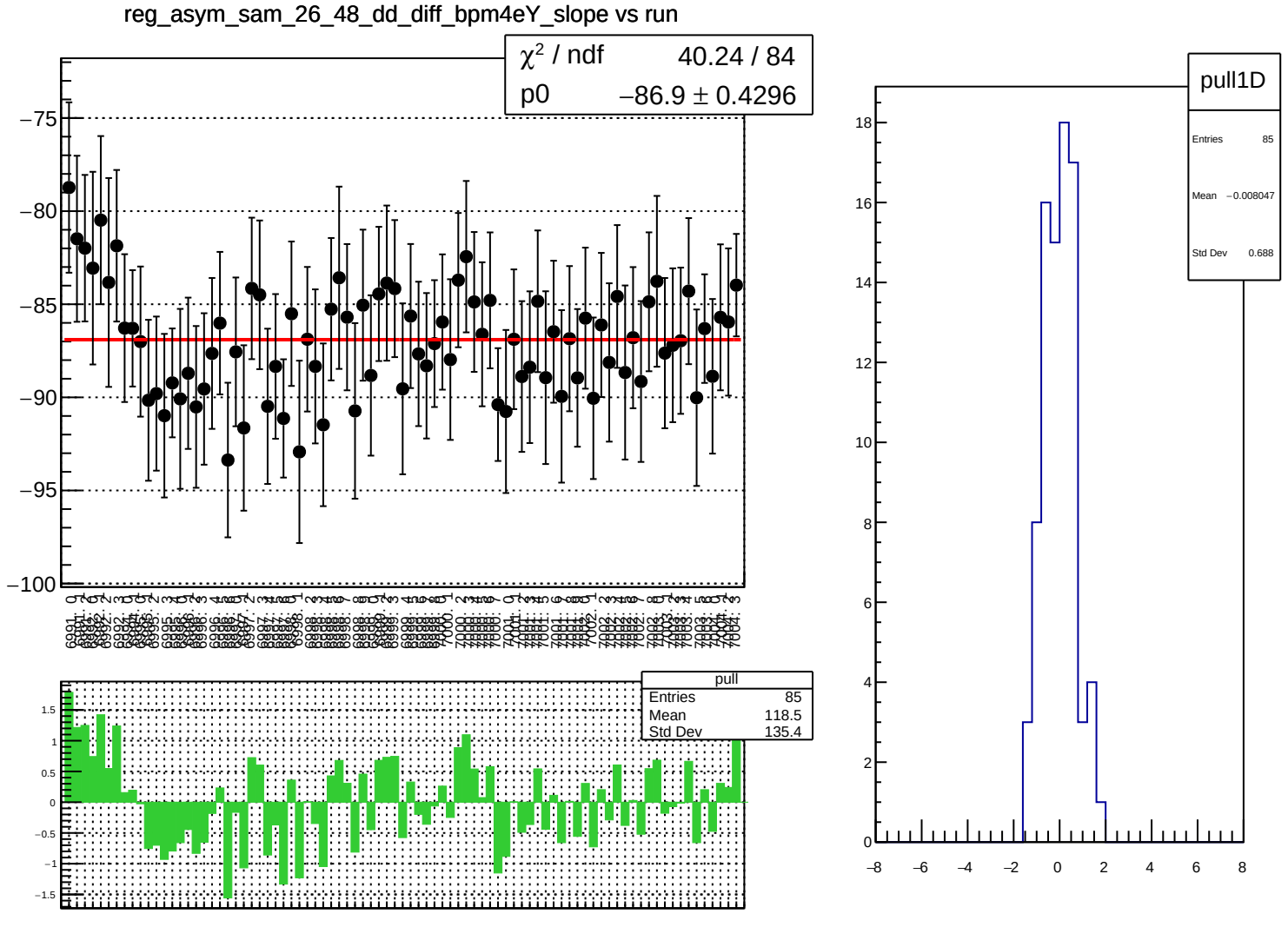

pull1D
Entries 85
Mean −0.001069
Std Dev 0.2826

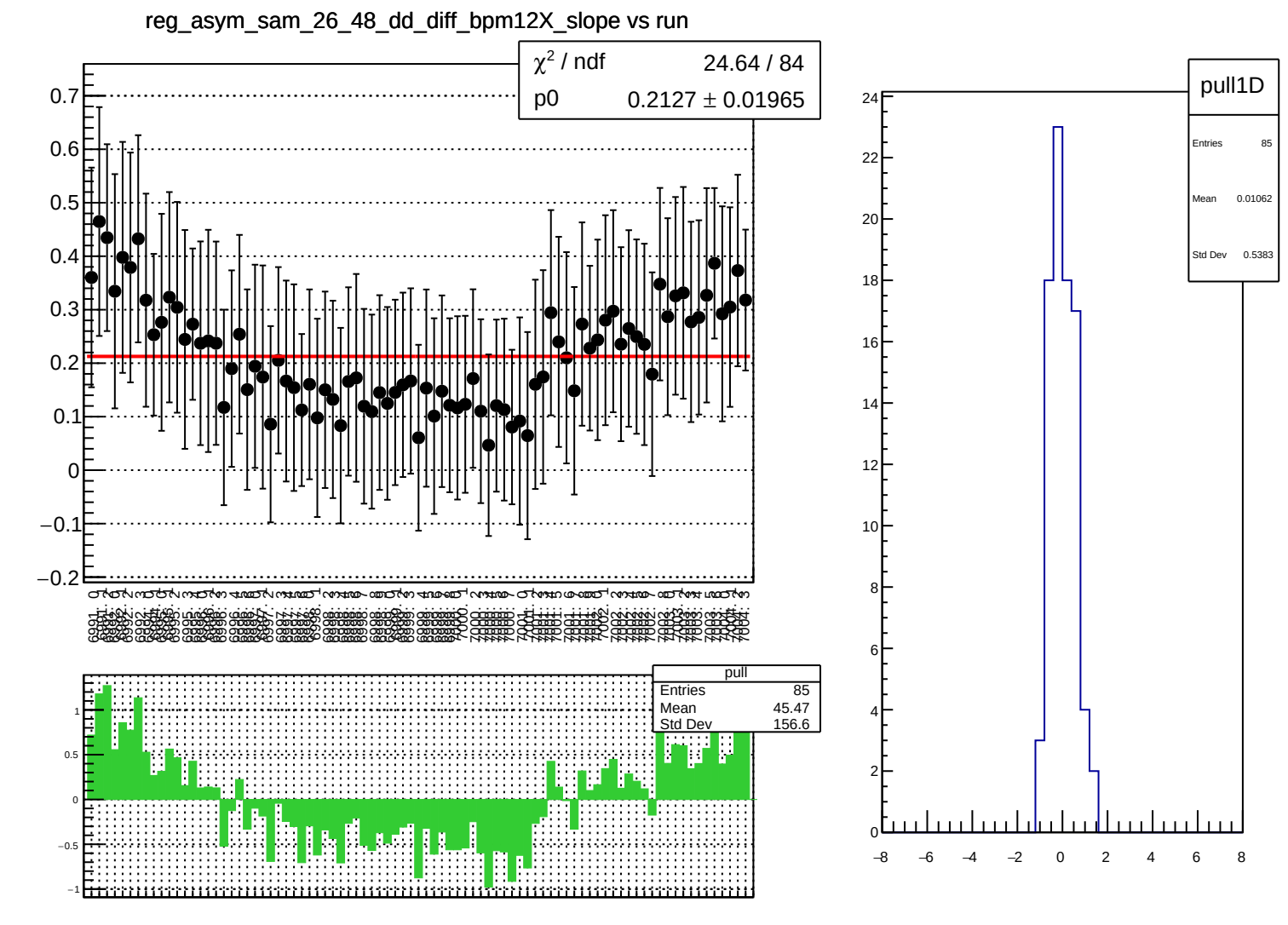

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.76 / 84
p0 11.79 ± 0.4072
pull
Entries 85
Mean −854.2
Std Dev 874.2

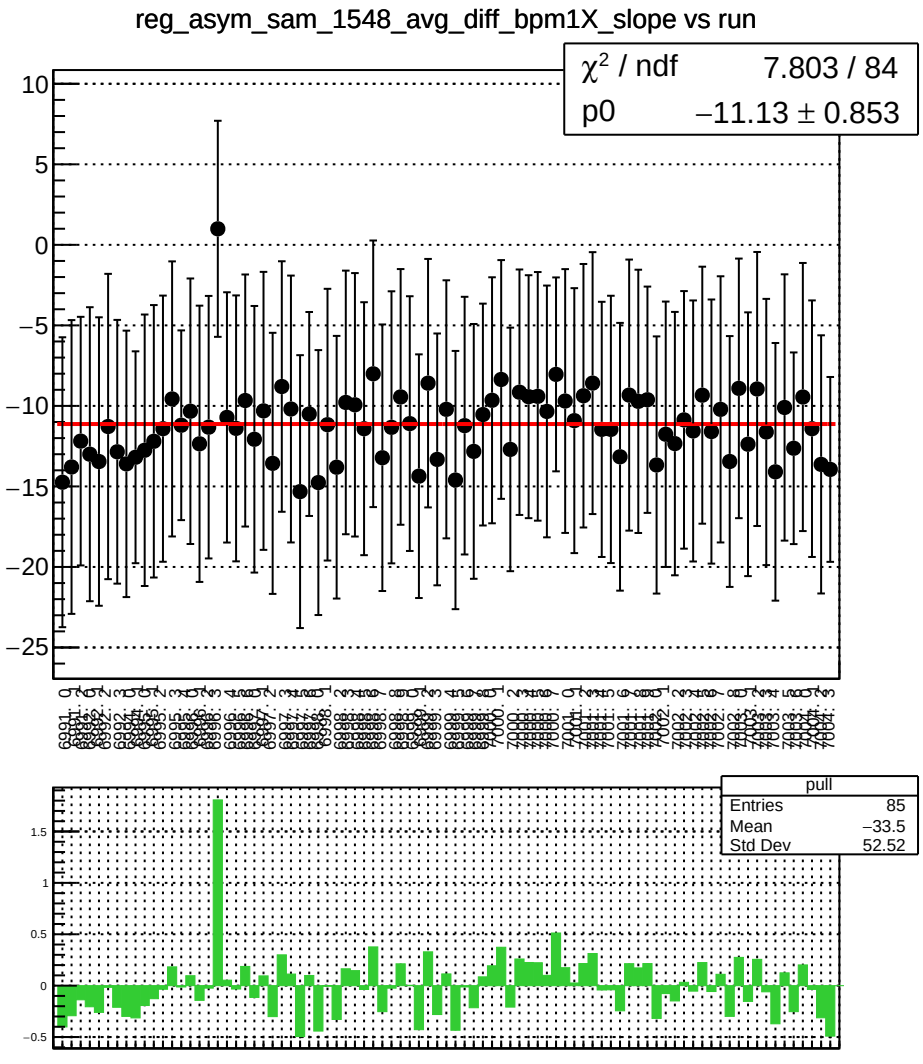

pull1D
Entries 85
Mean −0.002564
Std Dev 0.4697

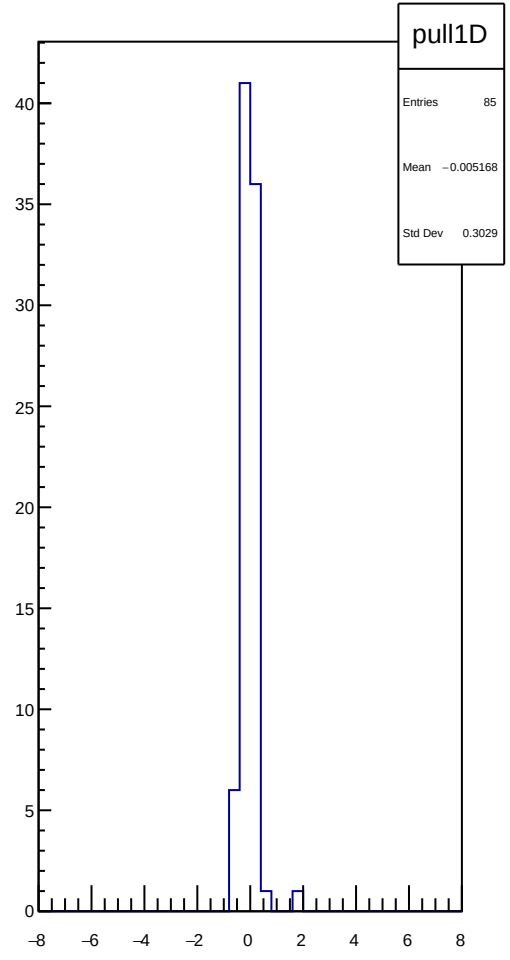

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 7.225 / 84
p0 16.82 ± 0.5472
pull
Entries 85
Mean 5094
Std Dev 5118

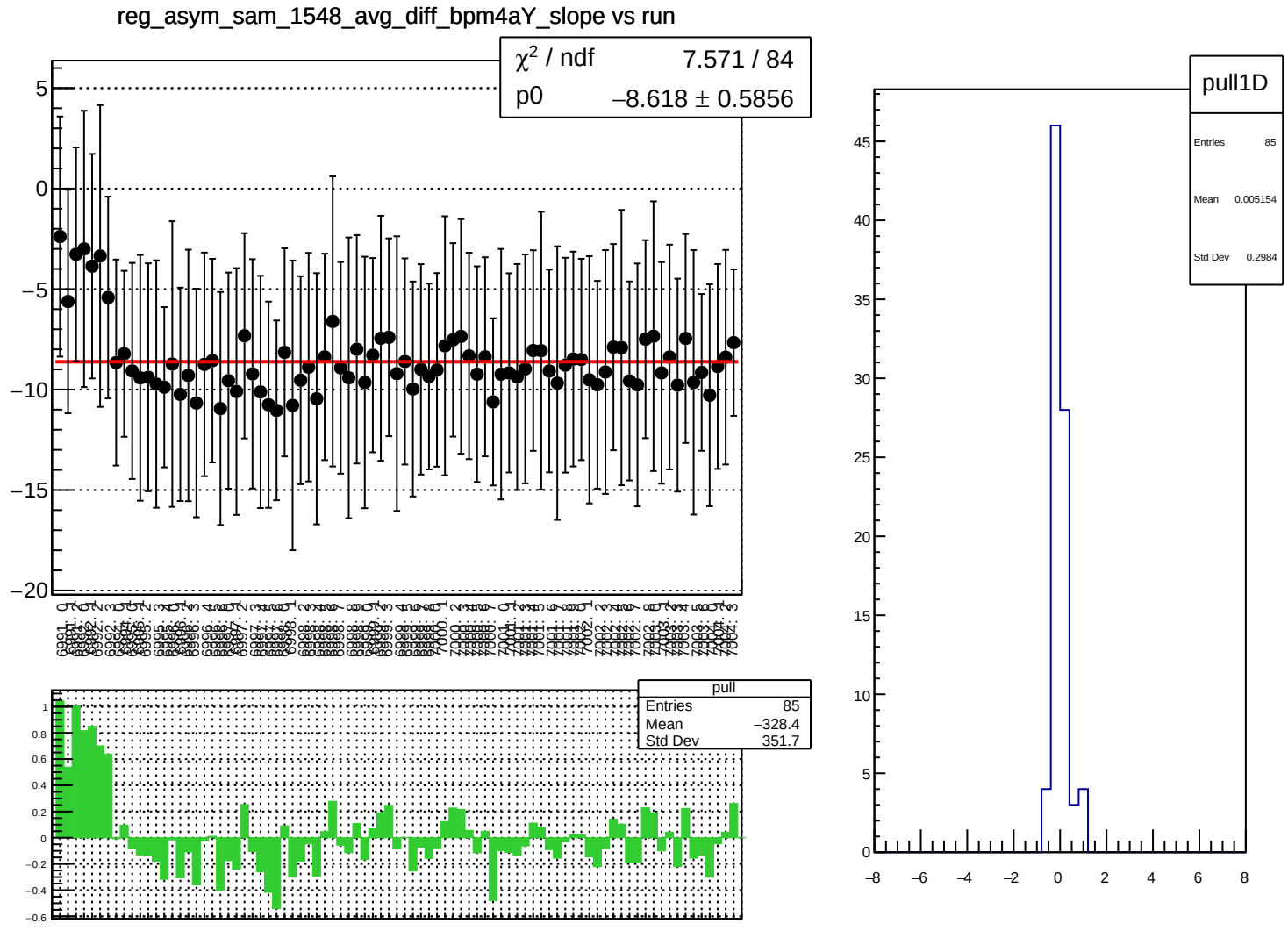

pull1D
Entries 85
Mean 0.0001067
Std Dev 0.2915

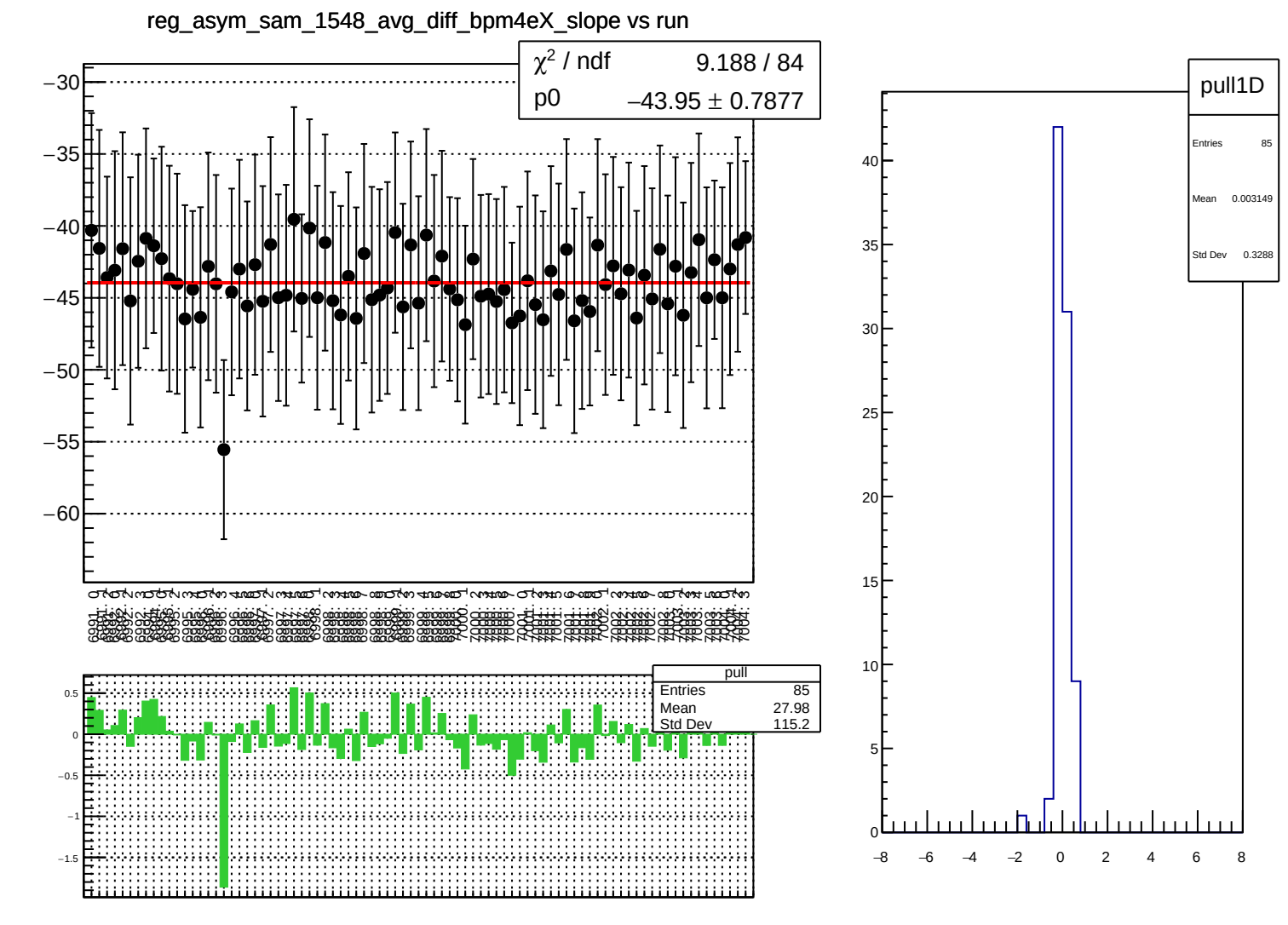

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 40.24 / 84
p0 −86.9 ± 0.4296
pull
Entries 85
Mean 118.5
Std Dev 135.4
pull1D
Entries 85
Mean −0.008047
Std Dev 0.688

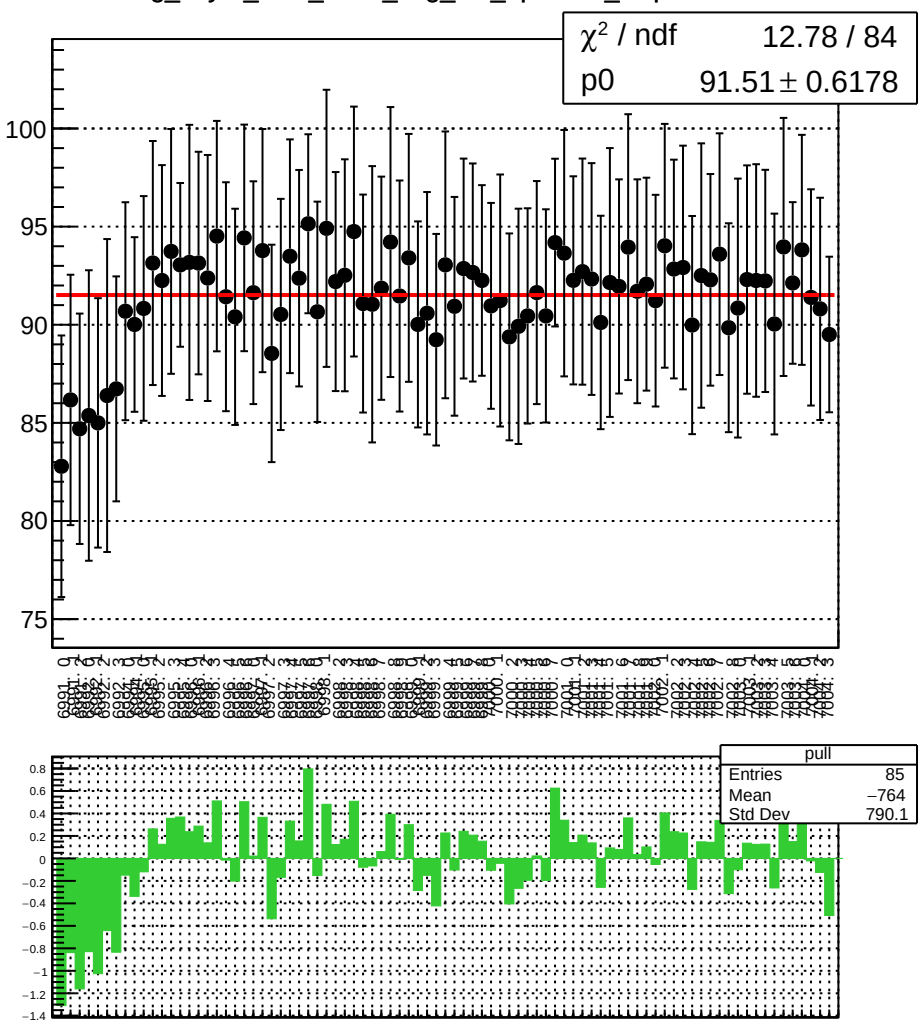

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 24.64 / 84
p0 0.2127 ± 0.01965
pull
Entries 85
Mean 45.47
Std Dev 156.6
pull1D
Entries 85
Mean 0.01062
Std Dev 0.5383

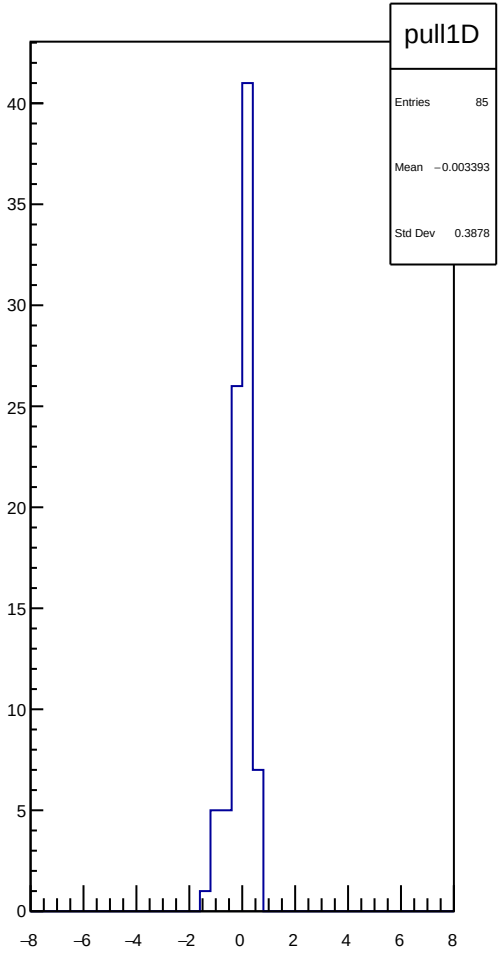

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 7.803 / 84
p0 −11.13 ± 0.853
pull
Entries 85
Mean −33.5
Std Dev 52.52

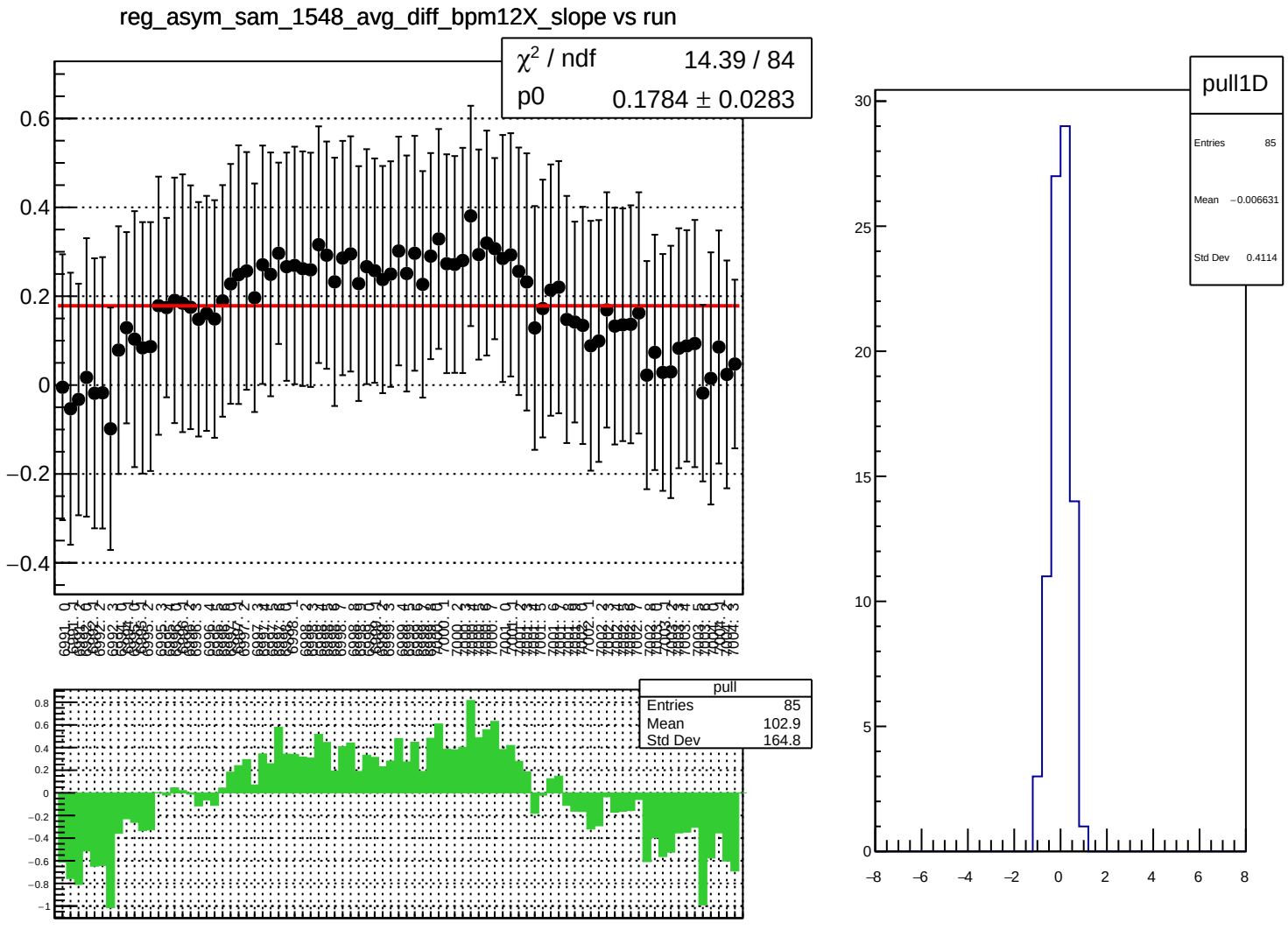

pull1D
Entries 85
Mean −0.005168
Std Dev 0.3029

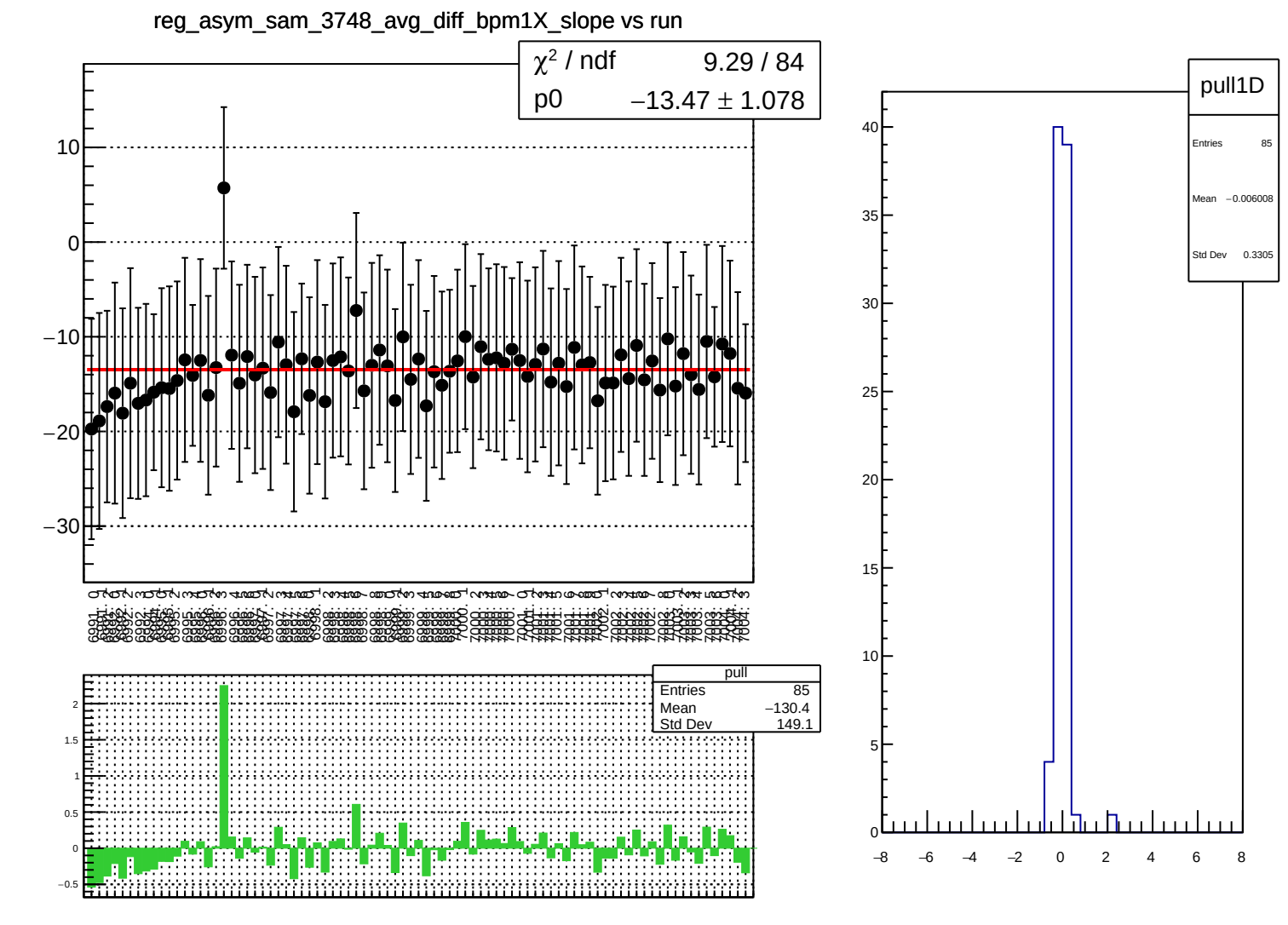

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.571 / 84
p0 −8.618 ± 0.5856
pull
Entries 85
Mean −328.4
Std Dev 351.7
pull1D
Entries 85
Mean 0.005154
Std Dev 0.2984

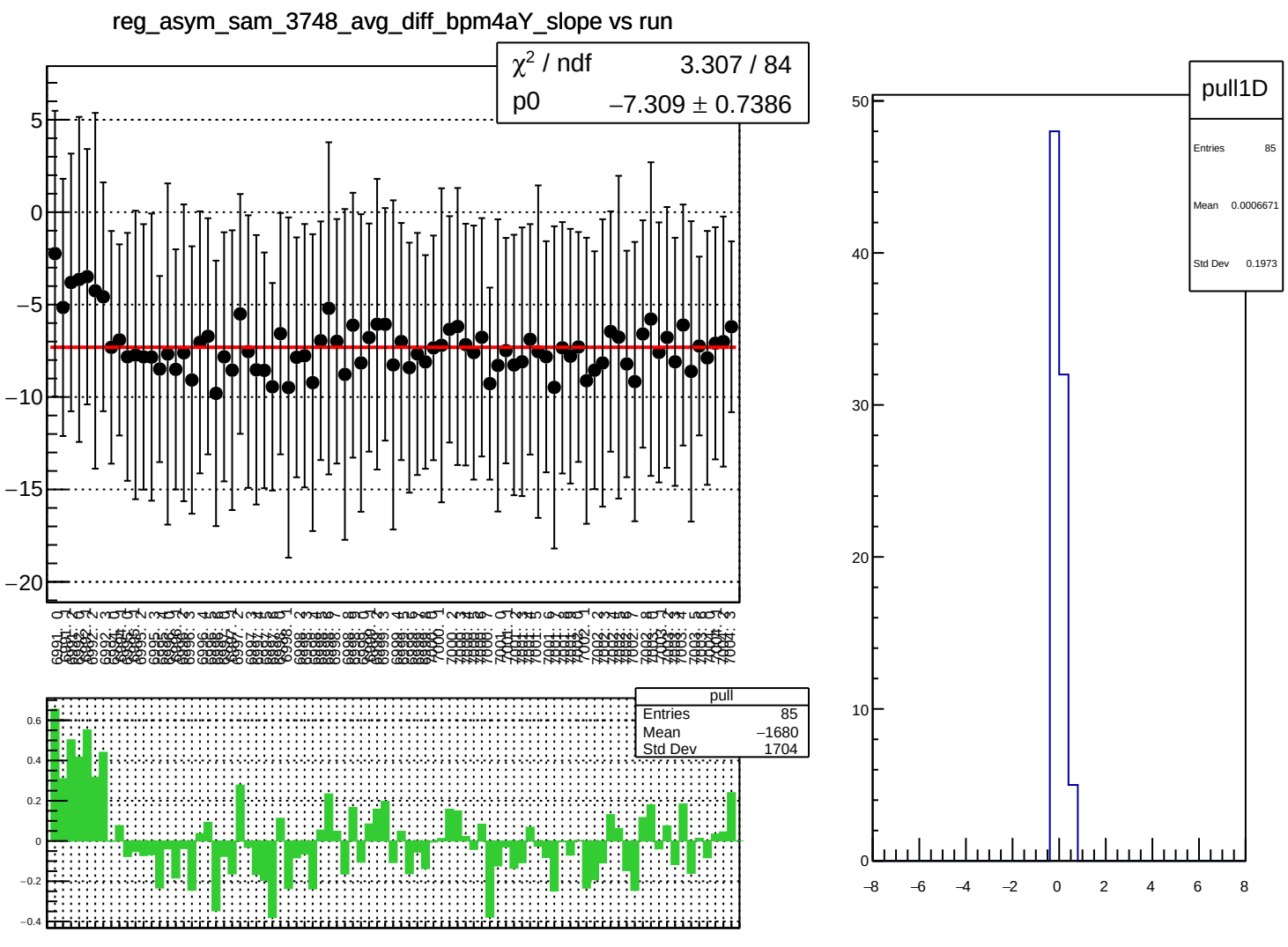

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.188 / 84
p0 −43.95 ± 0.7877
pull
Entries 85
Mean 27.98
Std Dev 115.2
pull1D
Entries 85
Mean 0.003149
Std Dev 0.3288

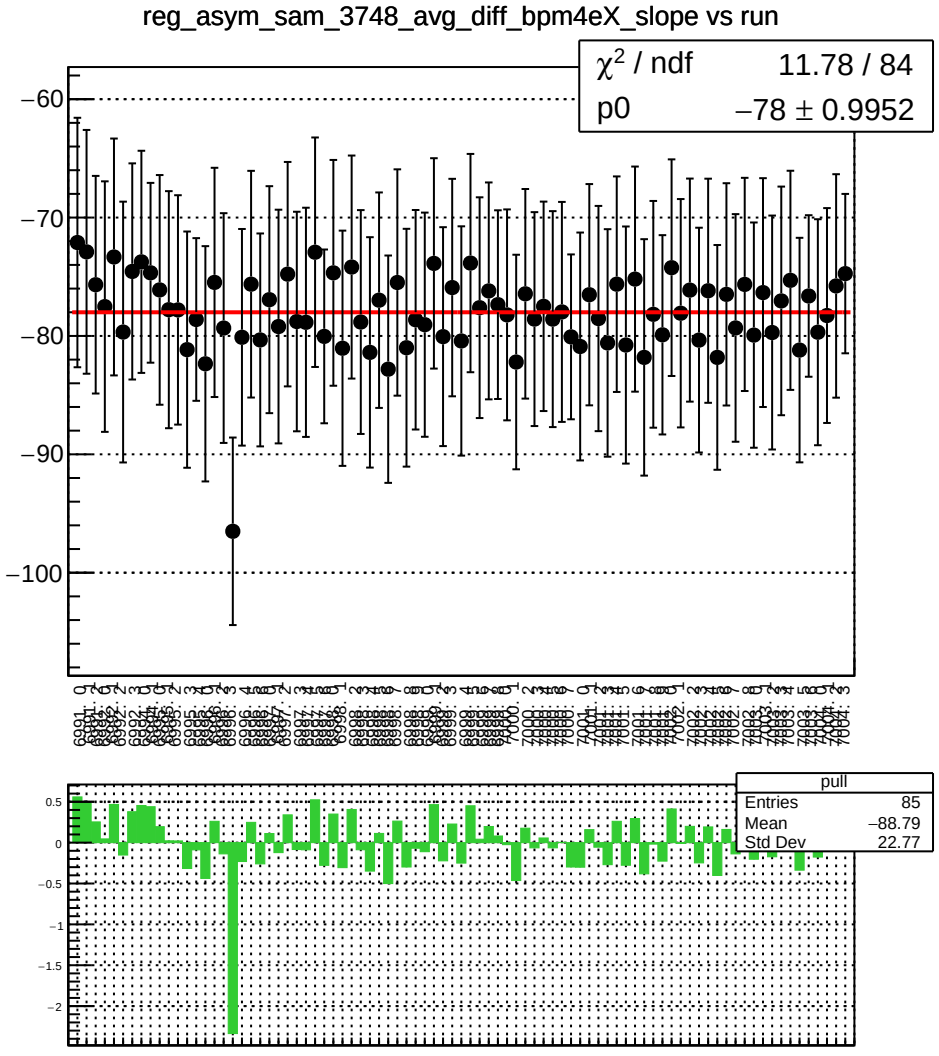

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 12.78 / 84
p0 91.51 ± 0.6178
pull
Entries 85
Mean −764
Std Dev 790.1

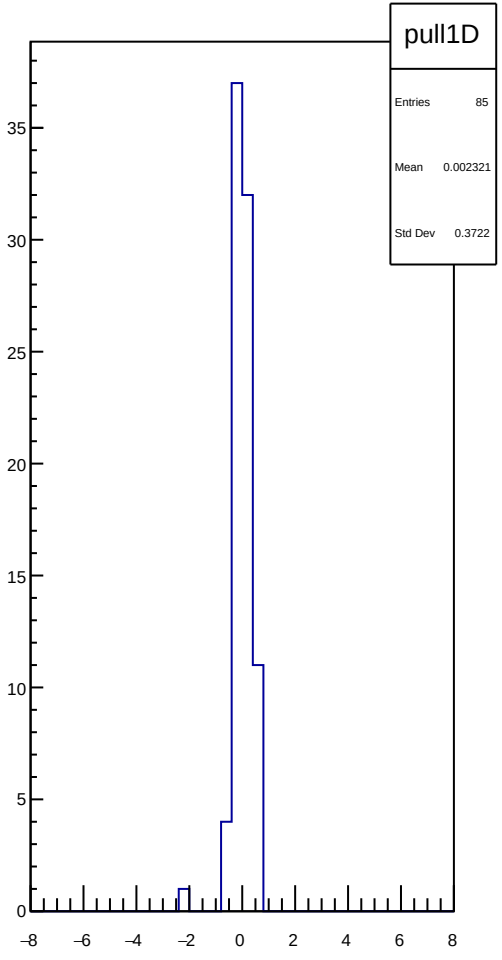

pull1D
Entries 85
Mean −0.003393
Std Dev 0.3878

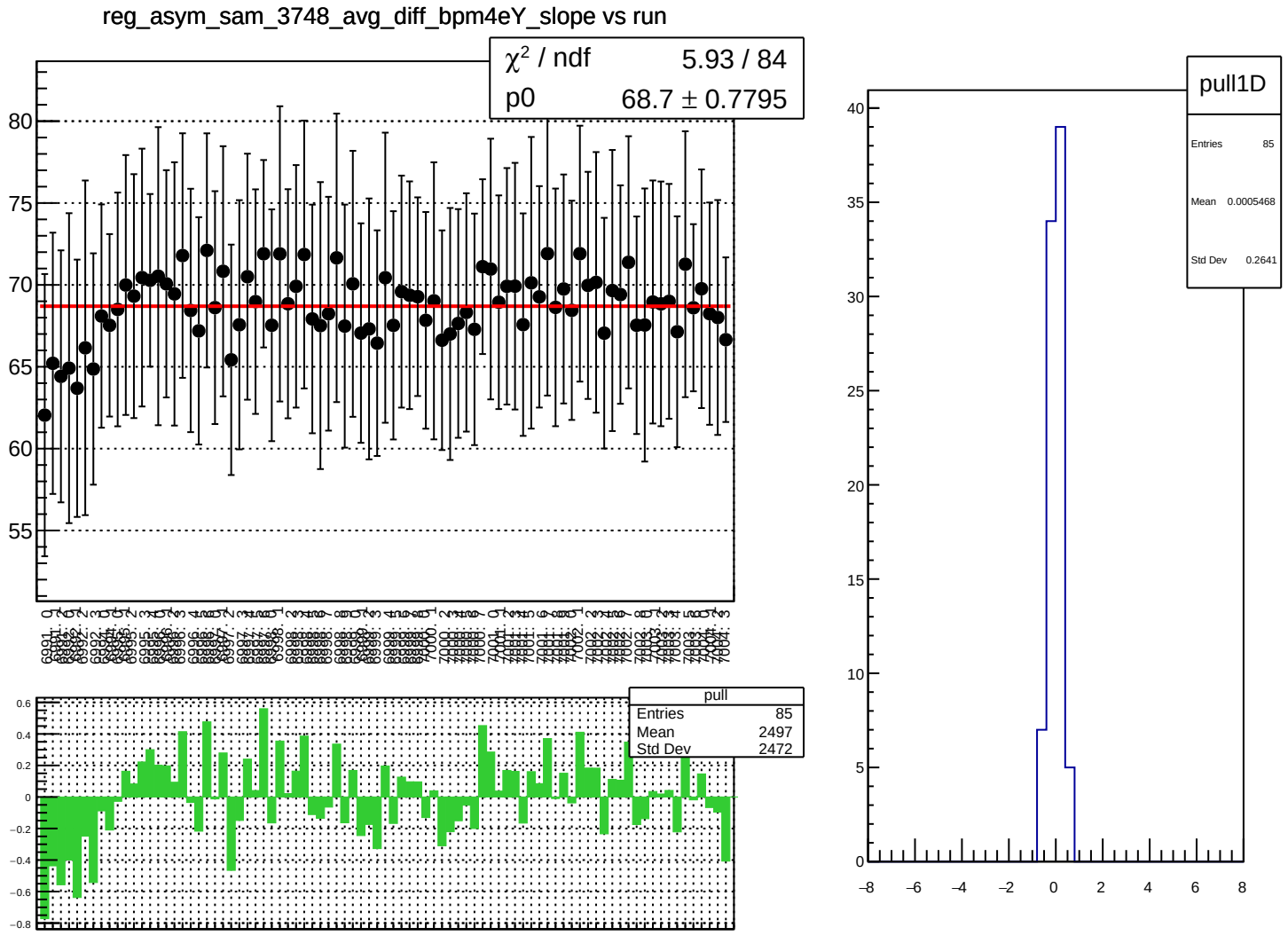

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 14.39 / 84
p0 0.1784 ± 0.0283
pull
Entries 85
Mean 102.9
Std Dev 164.8
pull1D
Entries 85
Mean −0.006631
Std Dev 0.4114

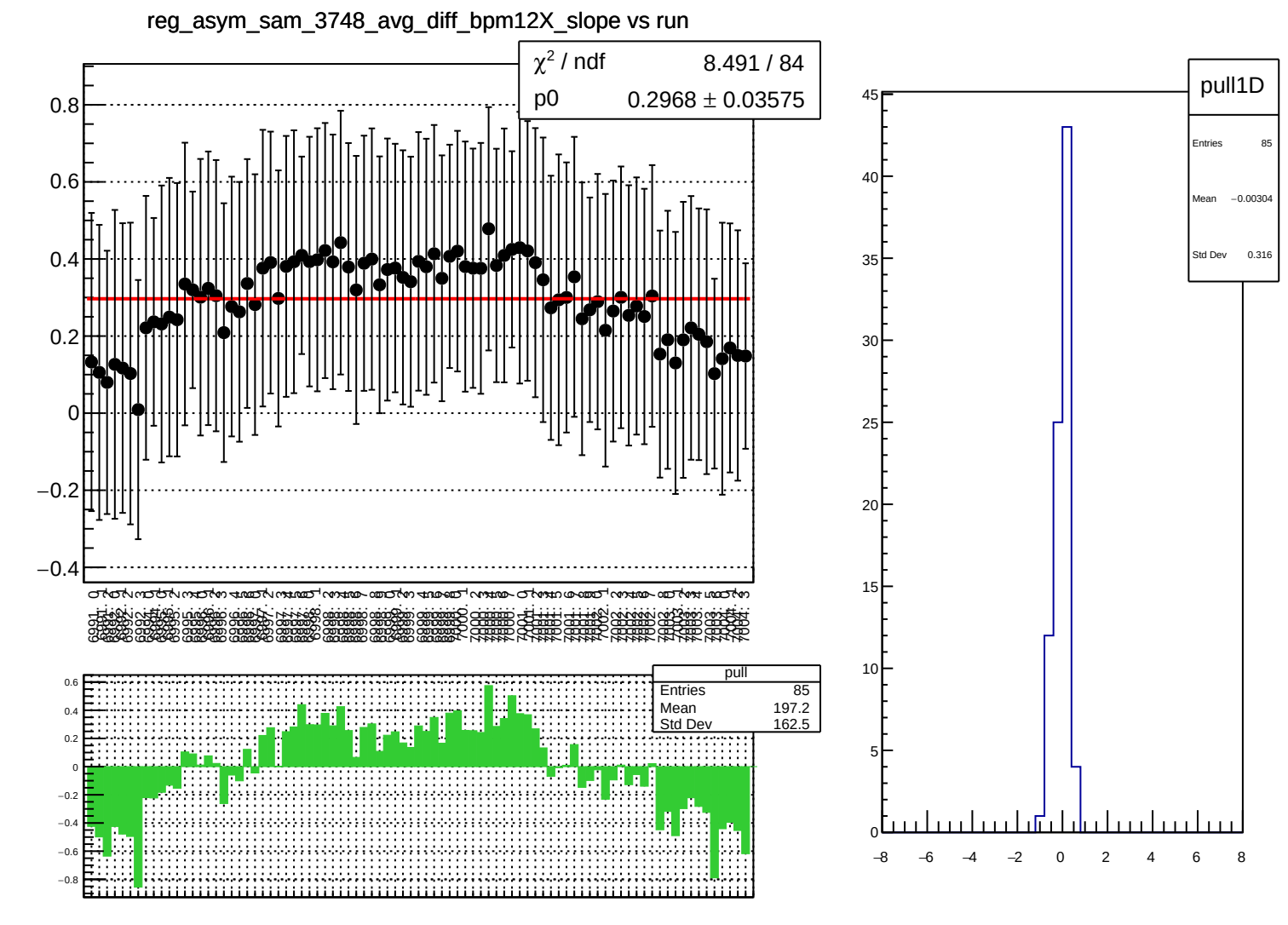

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 9.29 / 84
p0 −13.47 ± 1.078
10
0
−10
−20
−30
pull
Entries 85
Mean −130.4
Std Dev 149.1
2
1.5
1
0.5
0
−0.5
pull1D
Entries 85
Mean −0.006008
Std Dev 0.3305
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

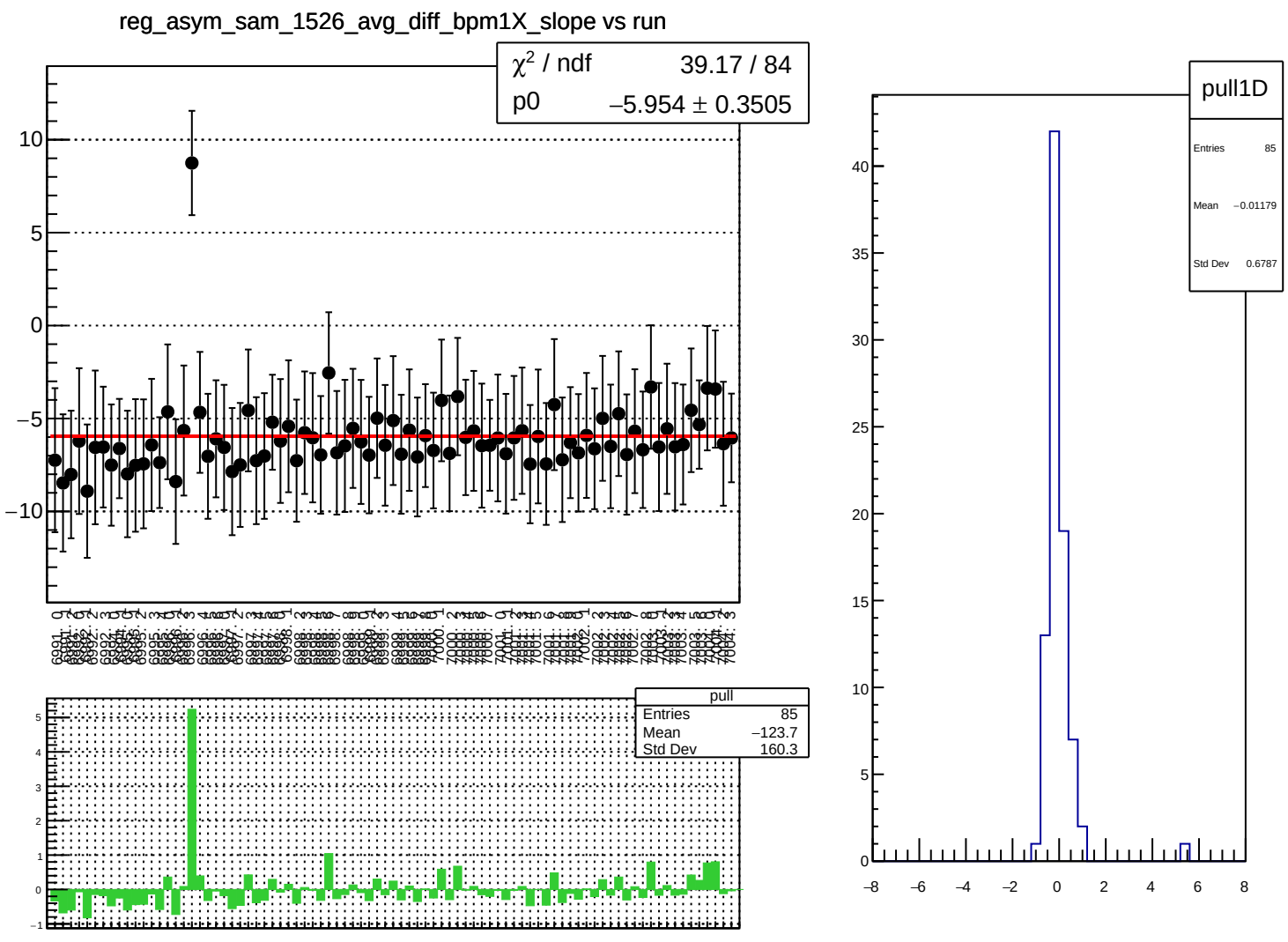

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.307 / 84
p0 −7.309 ± 0.7386
pull
Entries 85
Mean −1680
Std Dev 1704
pull1D
Entries 85
Mean 0.0006671
Std Dev 0.1973

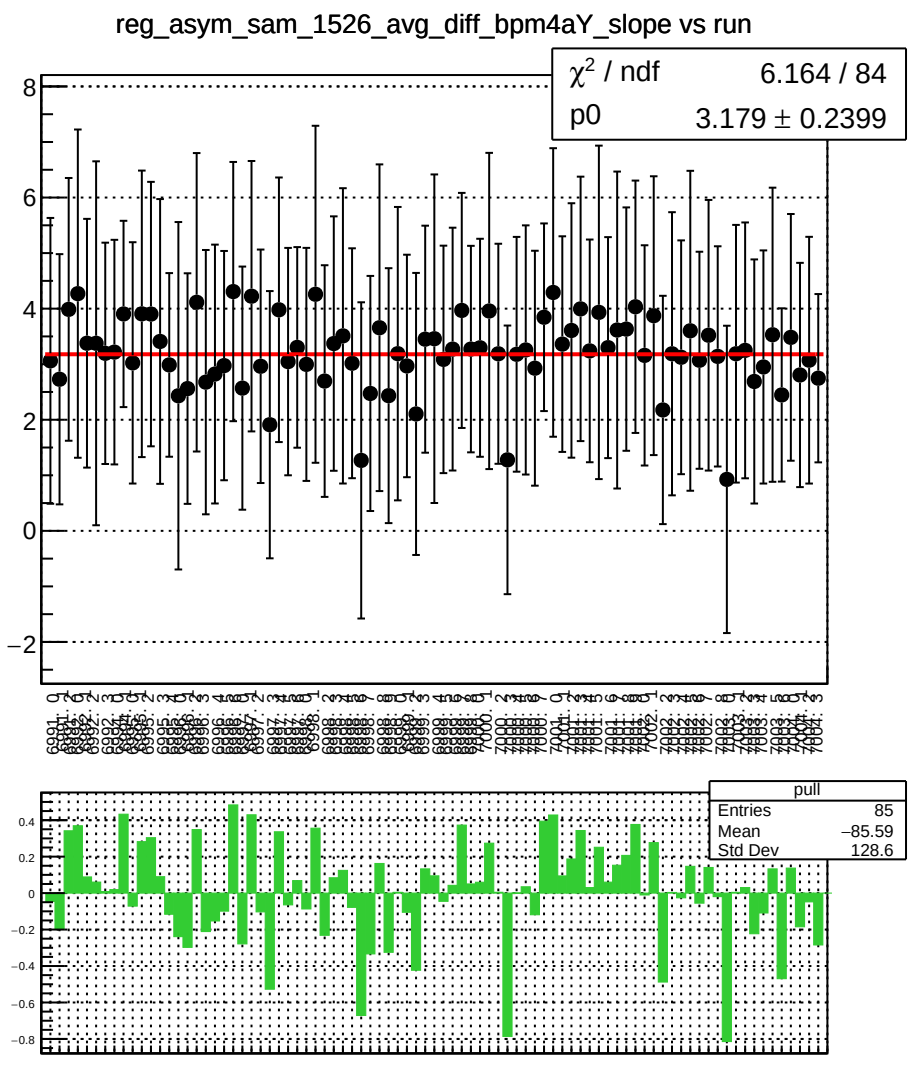

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 11.78 / 84
p0 −78 ± 0.9952
−60
−70
−80
−90
−100
pull
Entries 85
Mean −88.79
Std Dev 22.77
0.5
0
−0.5
−1
−1.5
−2

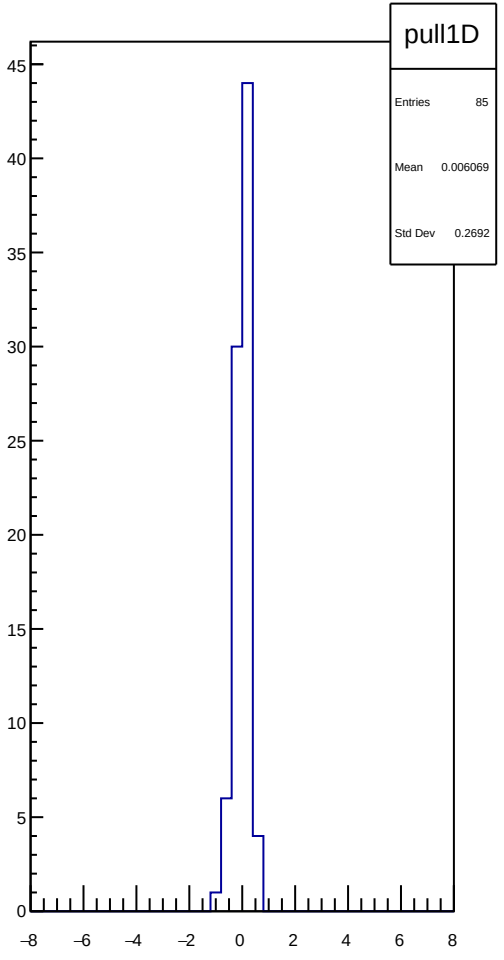

pull1D
Entries 85
Mean 0.002321
Std Dev 0.3722
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

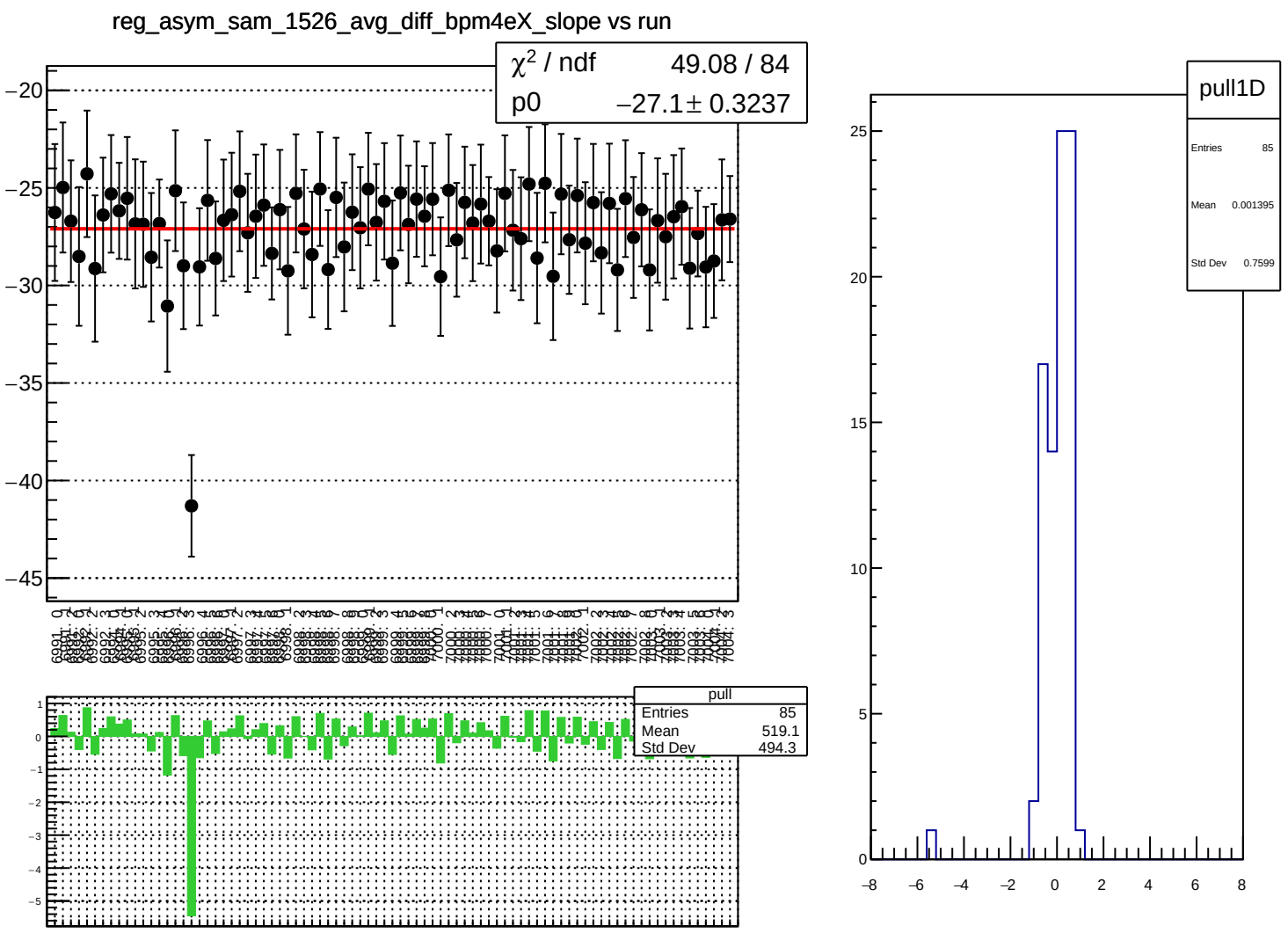

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.93 / 84
p0 68.7 ± 0.7795
pull
Entries 85
Mean 2497
Std Dev 2472
pull1D
Entries 85
Mean 0.0005468
Std Dev 0.2641

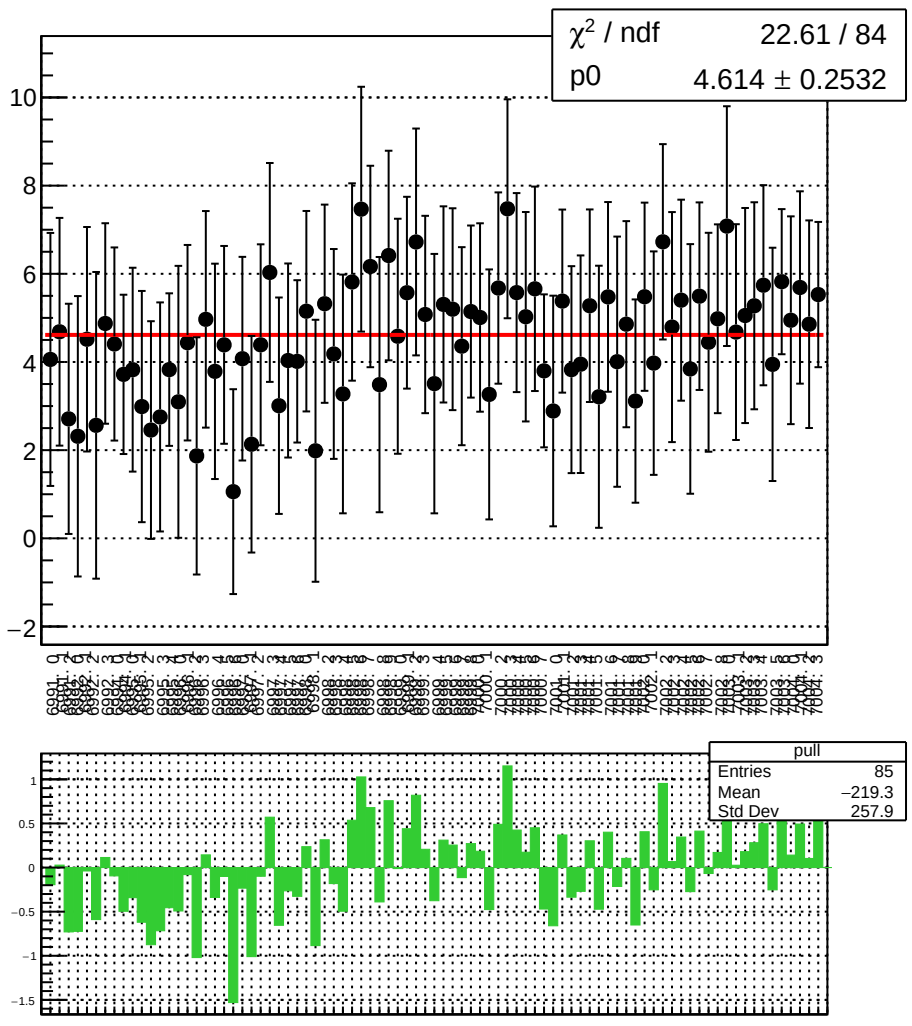

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 8.491 / 84
p0 0.2968 ± 0.03575
pull
Entries 85
Mean 197.2
Std Dev 162.5
pull1D
Entries 85
Mean −0.00304
Std Dev 0.316

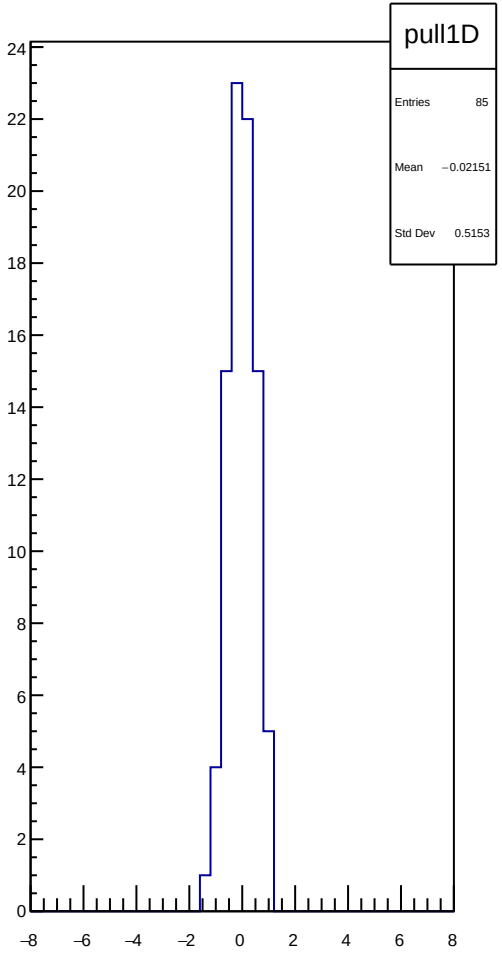

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 39.17 / 84
p0 −5.954 ± 0.3505
pull
Entries 85
Mean −123.7
Std Dev 160.3
pull1D
Entries 85
Mean −0.01179
Std Dev 0.6787

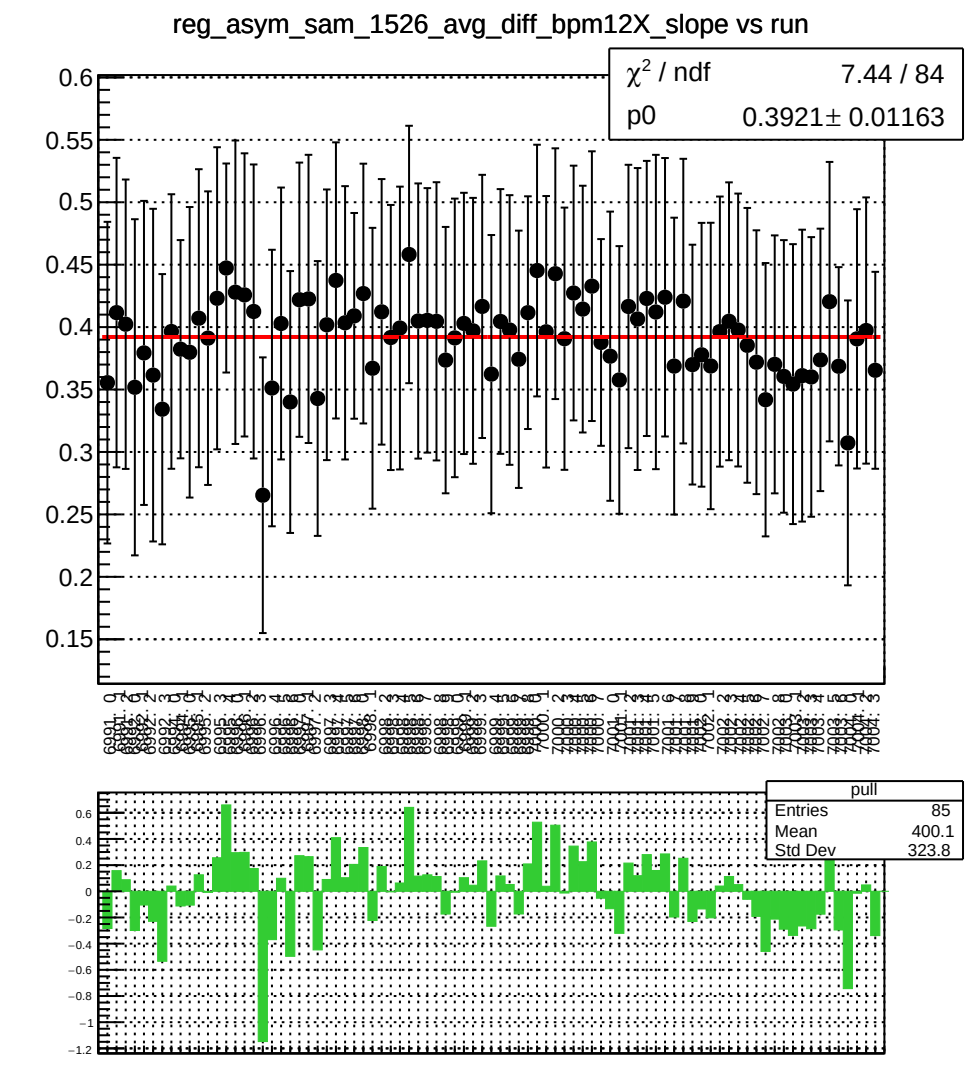

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.164 / 84
p0 3.179 ± 0.2399
pull
Entries 85
Mean −85.59
Std Dev 128.6

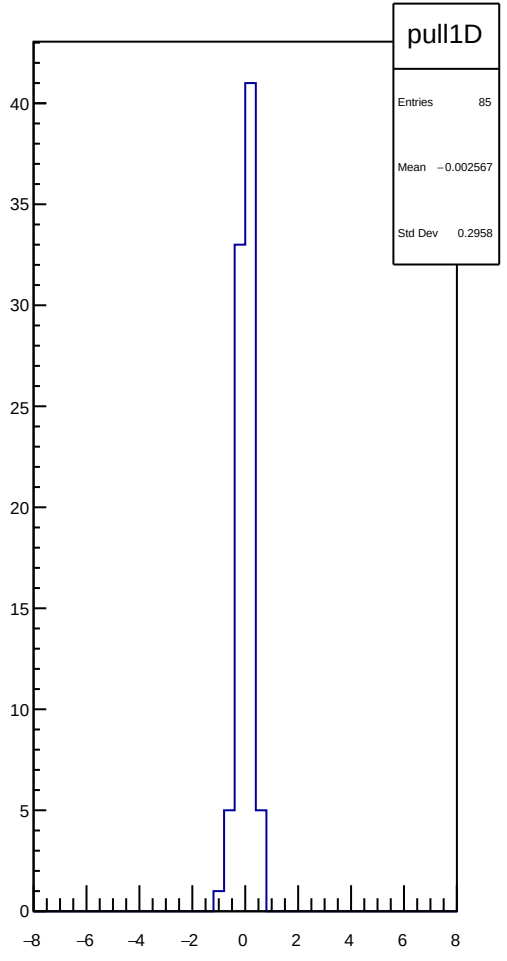

pull1D
Entries 85
Mean 0.006069
Std Dev 0.2692

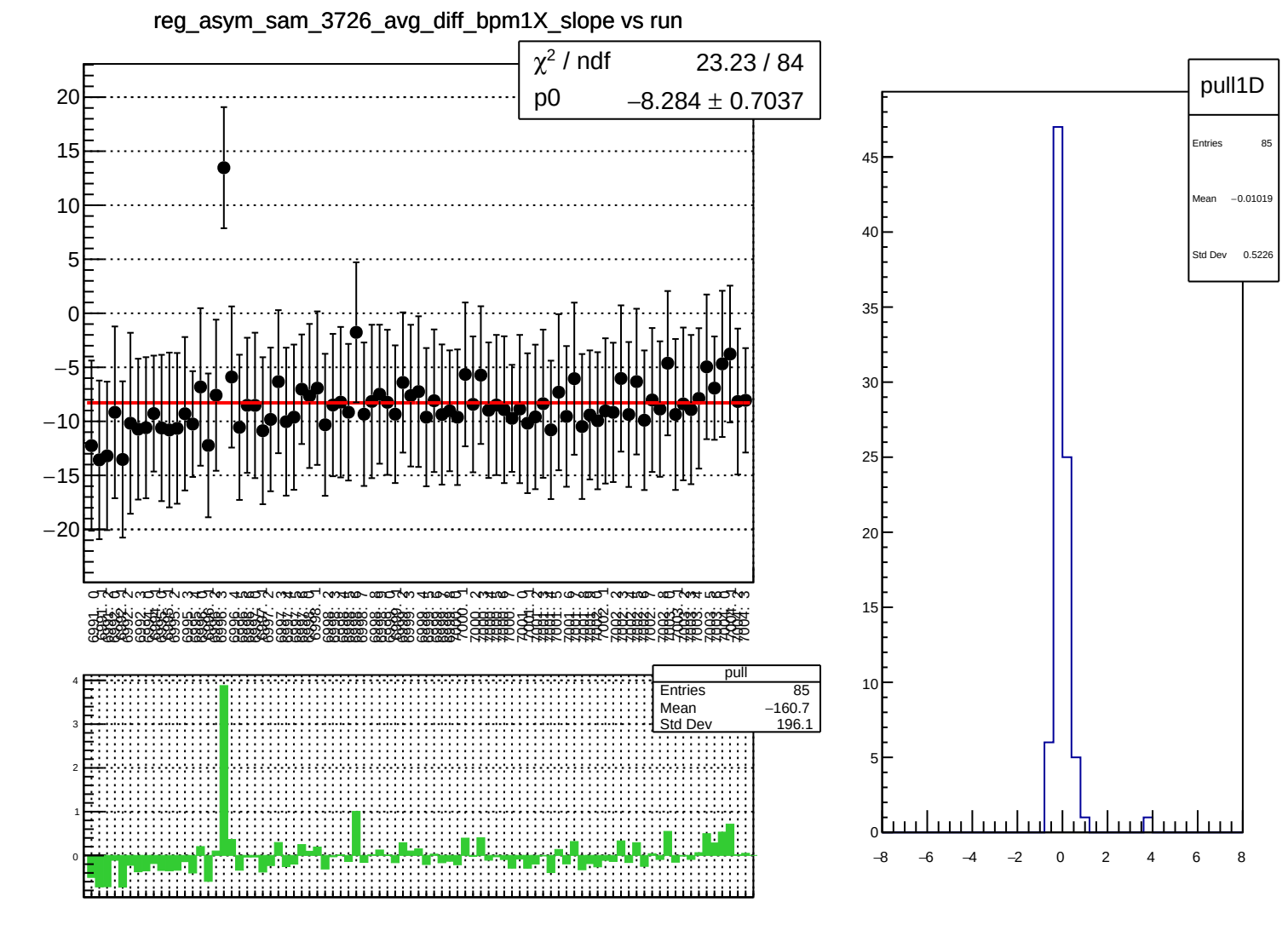

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 49.08 / 84
p0 −27.1 ± 0.3237
pull
Entries 85
Mean 519.1
Std Dev 494.3
pull1D
Entries 85
Mean 0.001395
Std Dev 0.7599

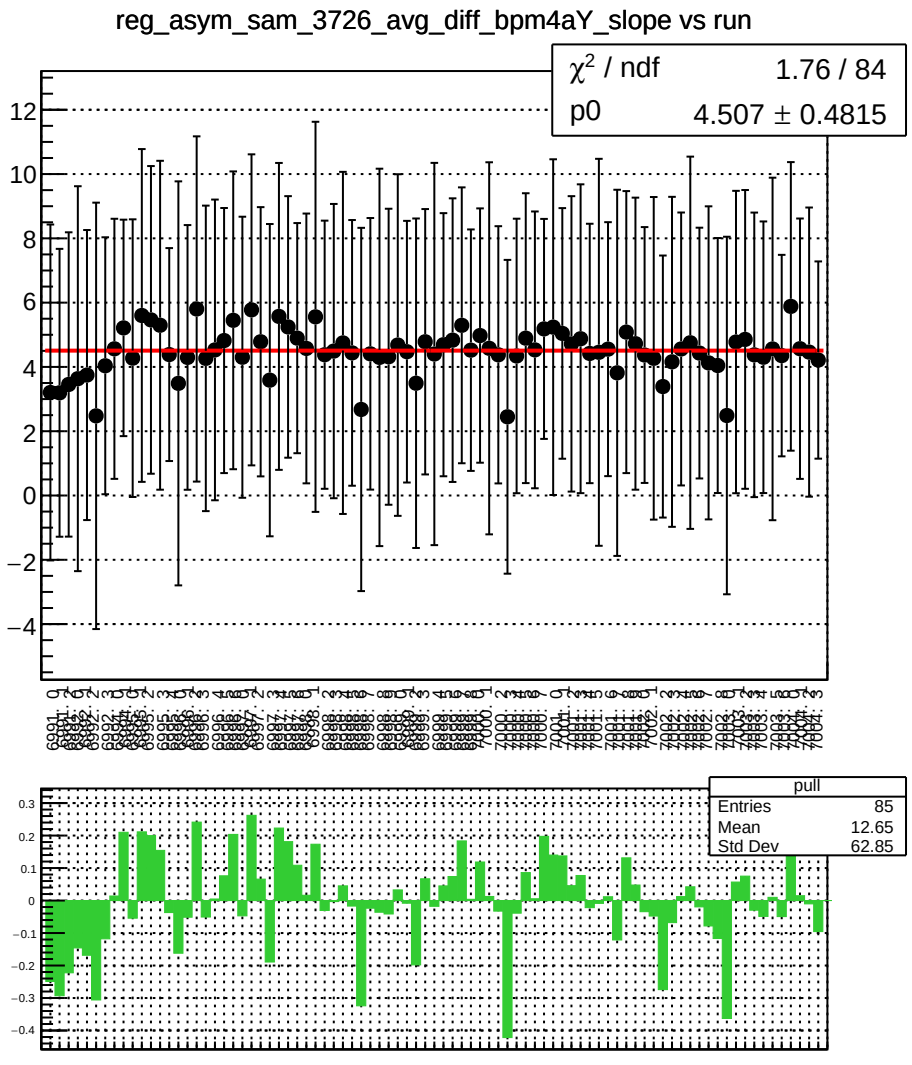

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 22.61 / 84
p0 4.614 ± 0.2532
pull
Entries 85
Mean −219.3
Std Dev 257.9

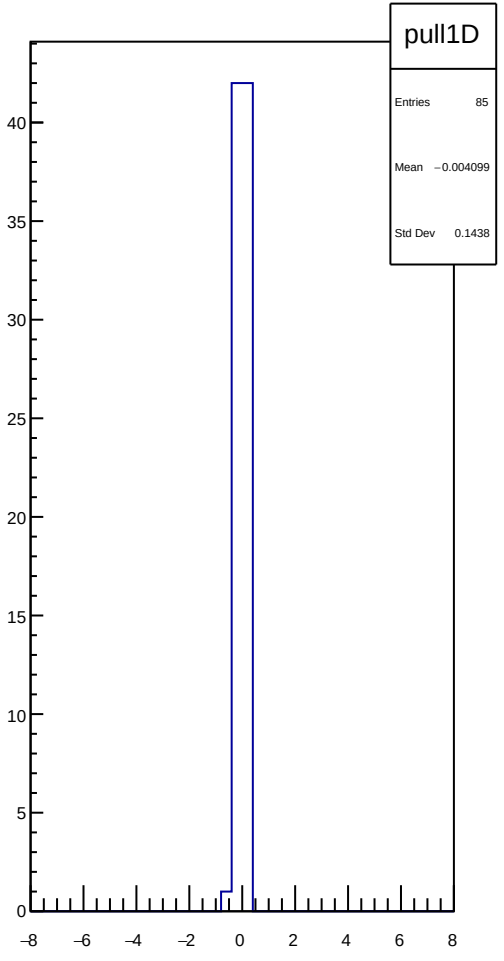

pull1D
Entries 85
Mean −0.02151
Std Dev 0.5153

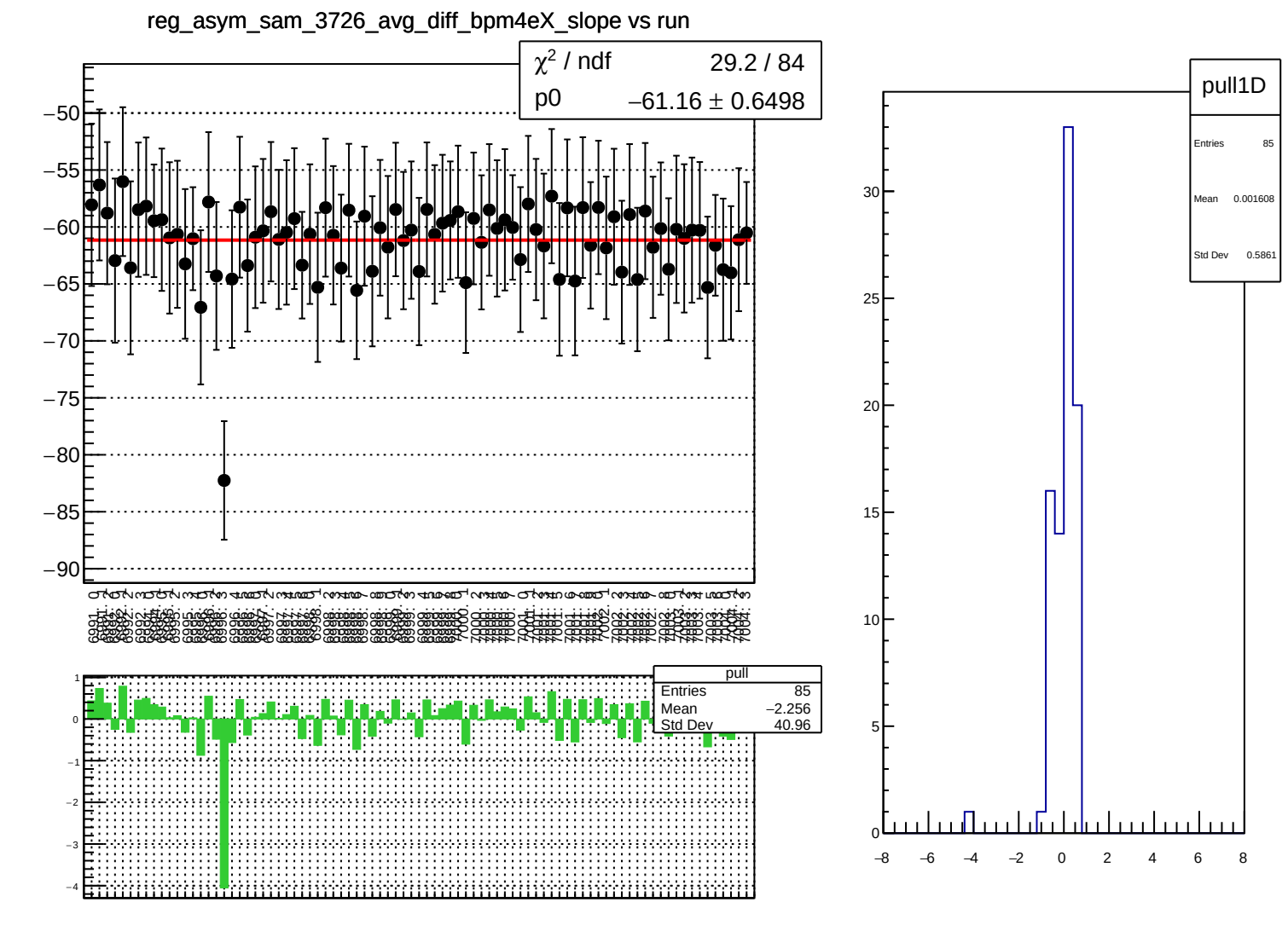

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 7.44 / 84
p0 0.3921± 0.01163
pull
Entries 85
Mean 400.1
Std Dev 323.8

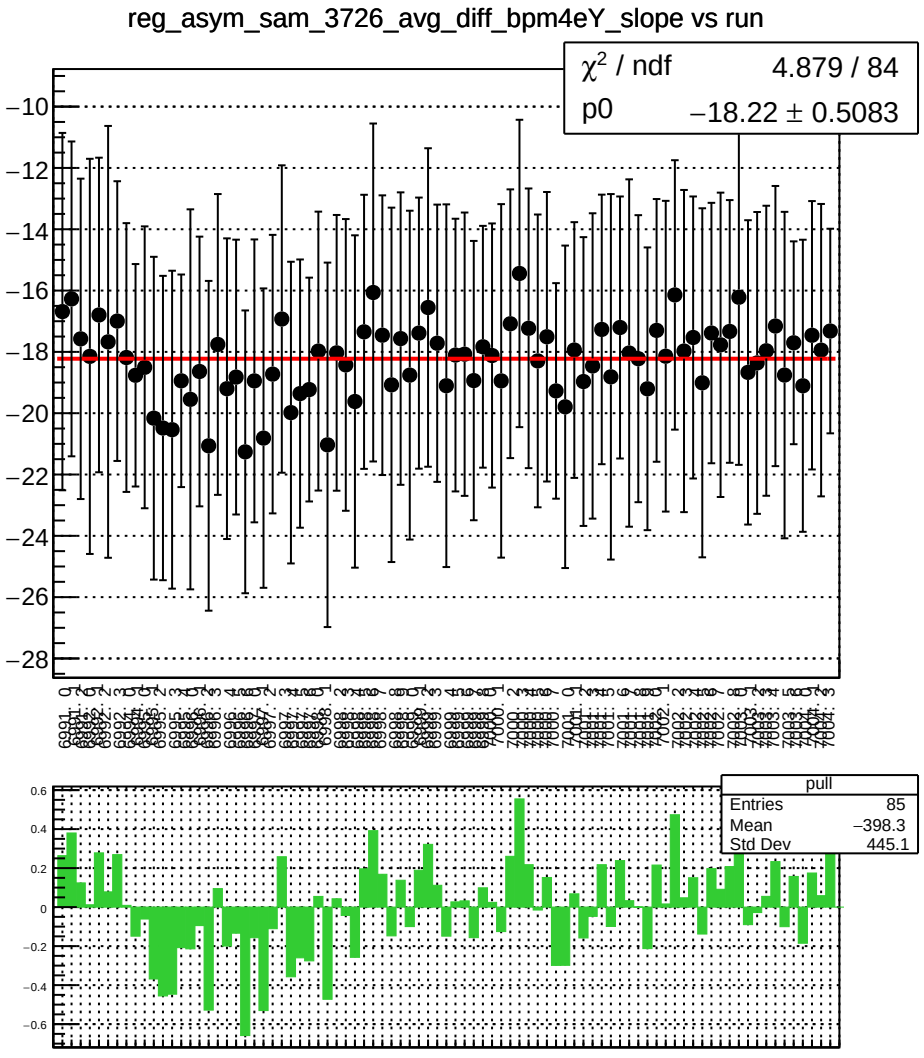

pull1D
Entries 85
Mean −0.002567
Std Dev 0.2958

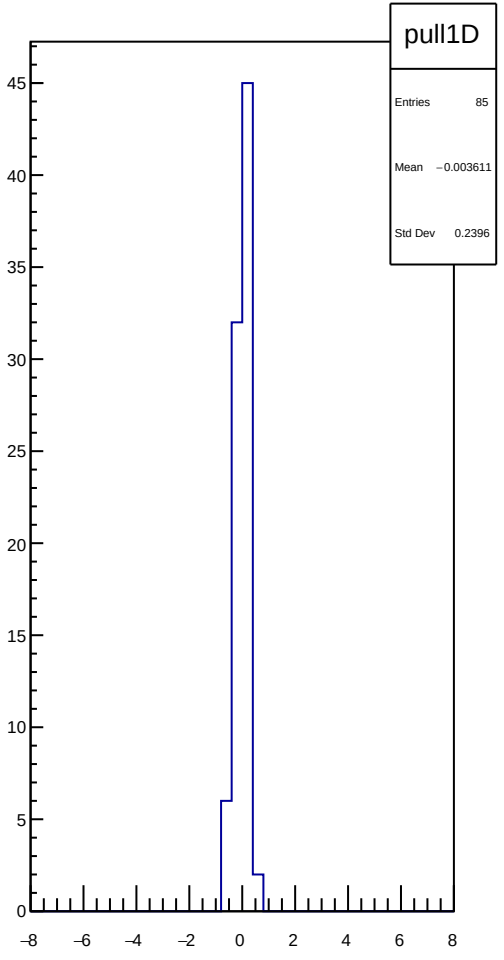

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 23.23 / 84
p0 −8.284 ± 0.7037
pull
Entries 85
Mean −160.7
Std Dev 196.1
pull1D
Entries 85
Mean −0.01019
Std Dev 0.5226

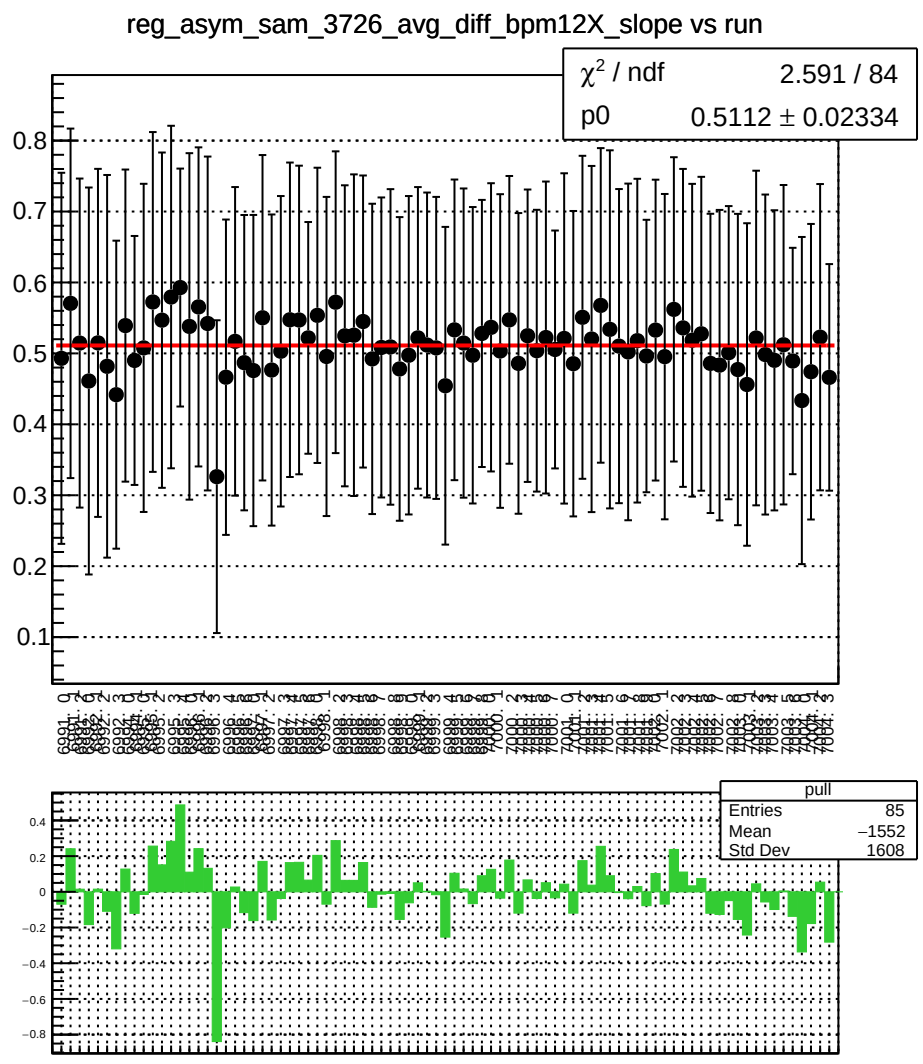

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.76 / 84
p0 4.507 ± 0.4815
pull
Entries 85
Mean 12.65
Std Dev 62.85

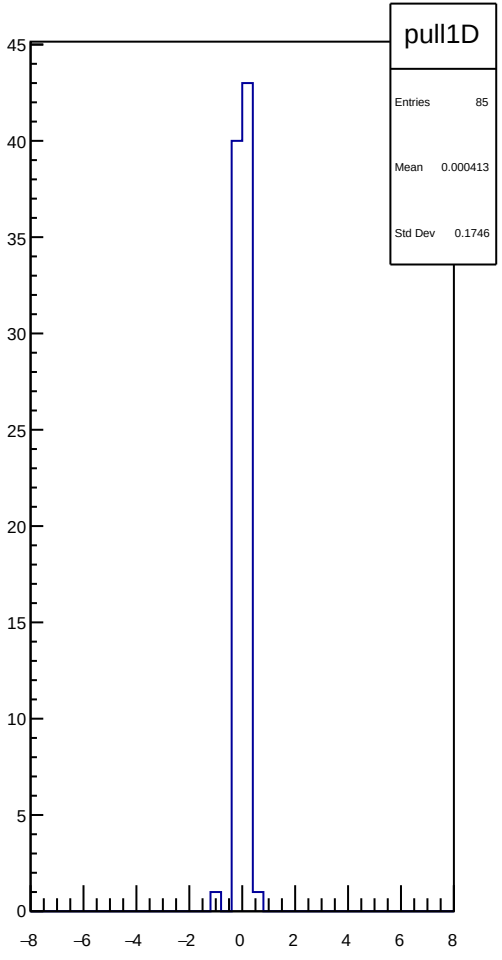

pull1D
Entries 85
Mean −0.004099
Std Dev 0.1438

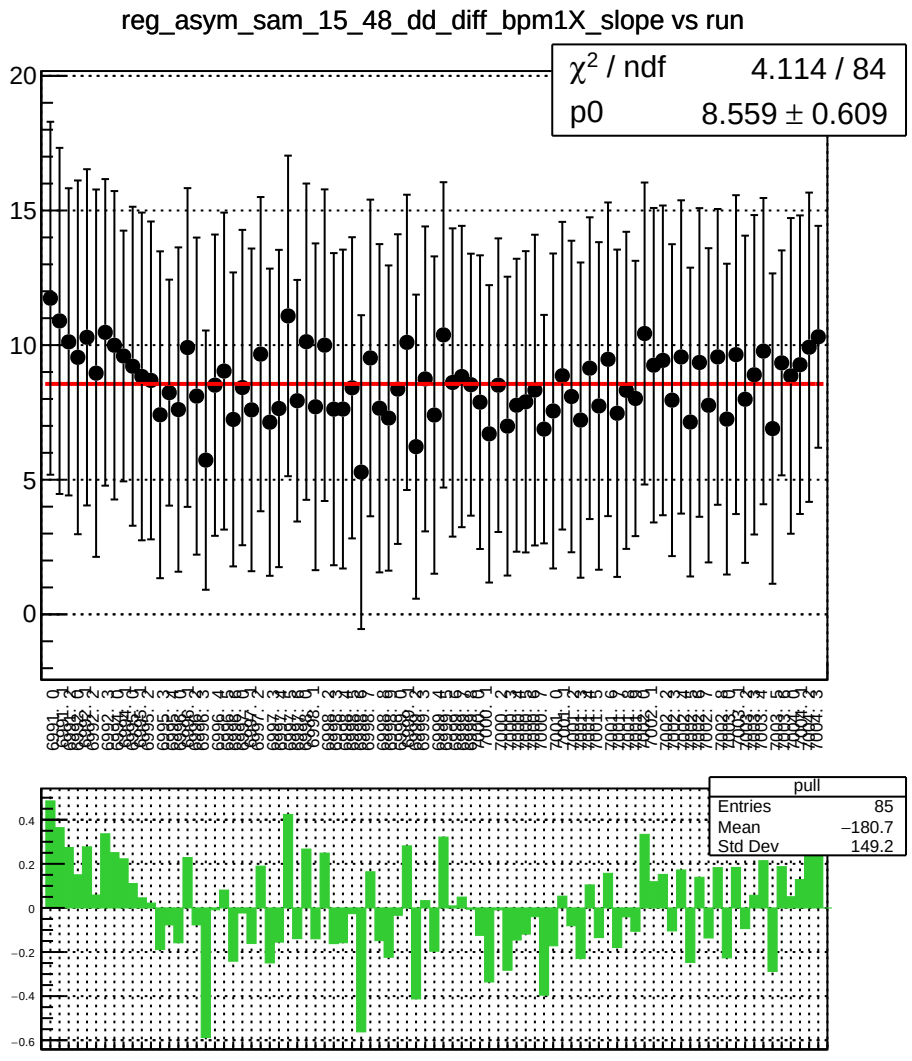

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 29.2 / 84
p0 −61.16 ± 0.6498
pull
Entries 85
Mean −2.256
Std Dev 40.96
pull1D
Entries 85
Mean 0.001608
Std Dev 0.5861

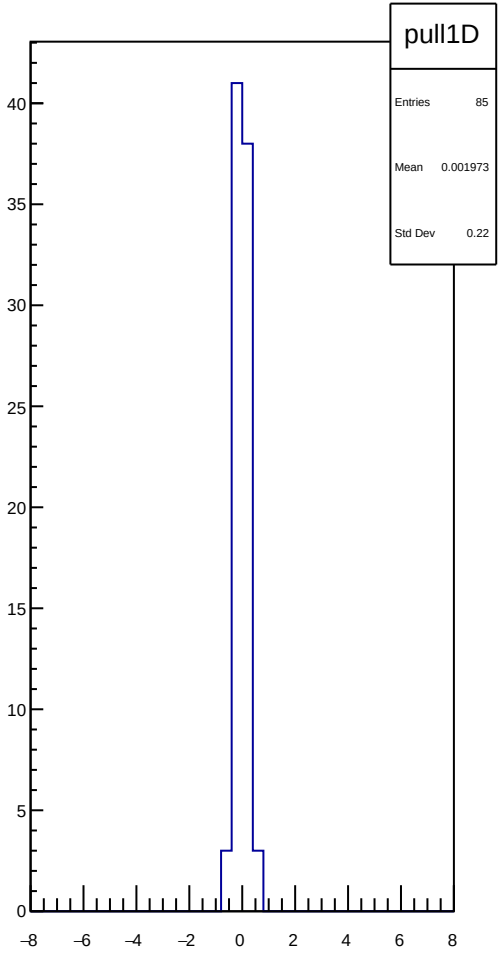

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.879 / 84
p0 −18.22 ± 0.5083
pull
Entries 85
Mean −398.3
Std Dev 445.1

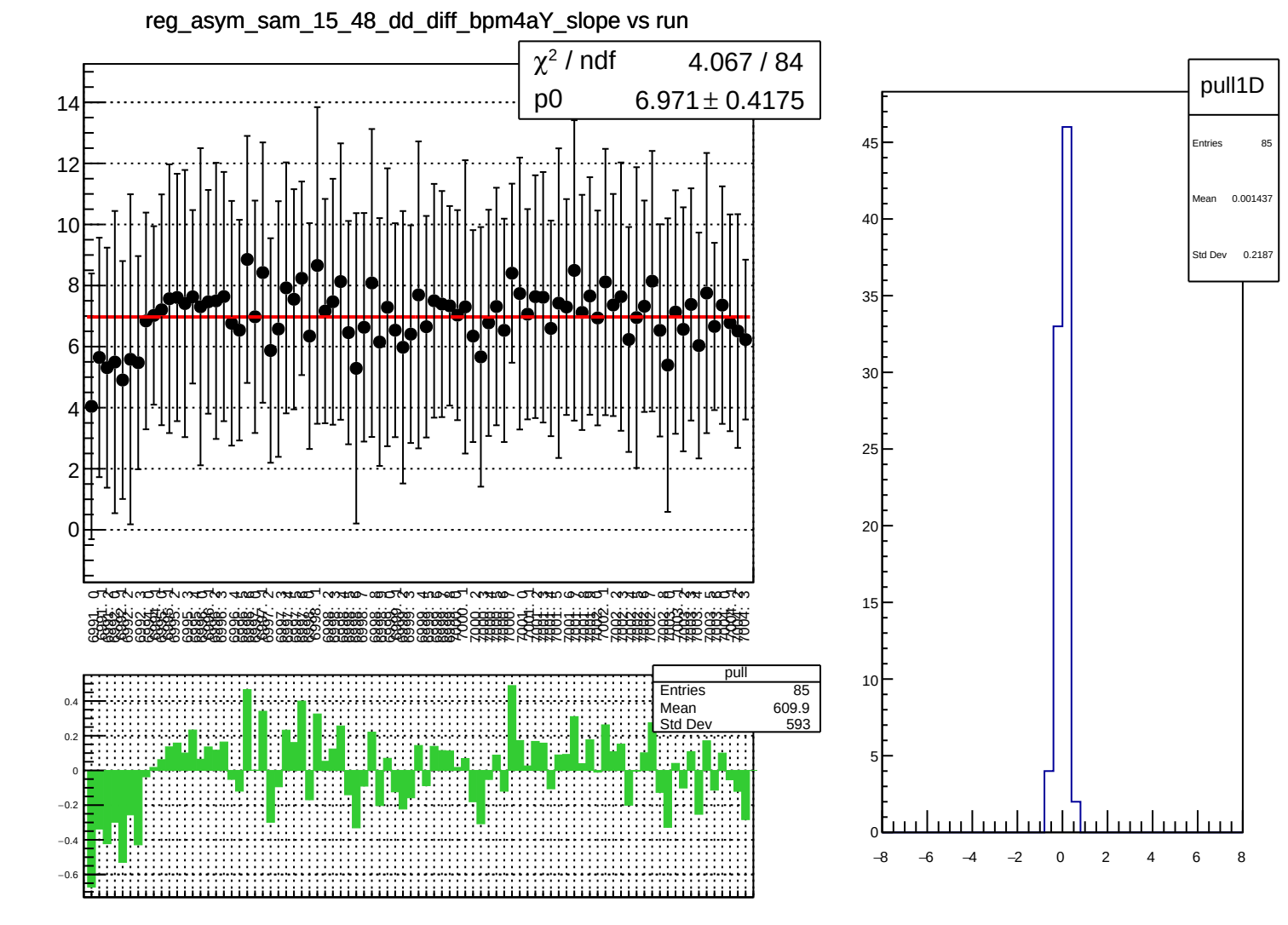

pull1D
Entries 85
Mean −0.003611
Std Dev 0.2396

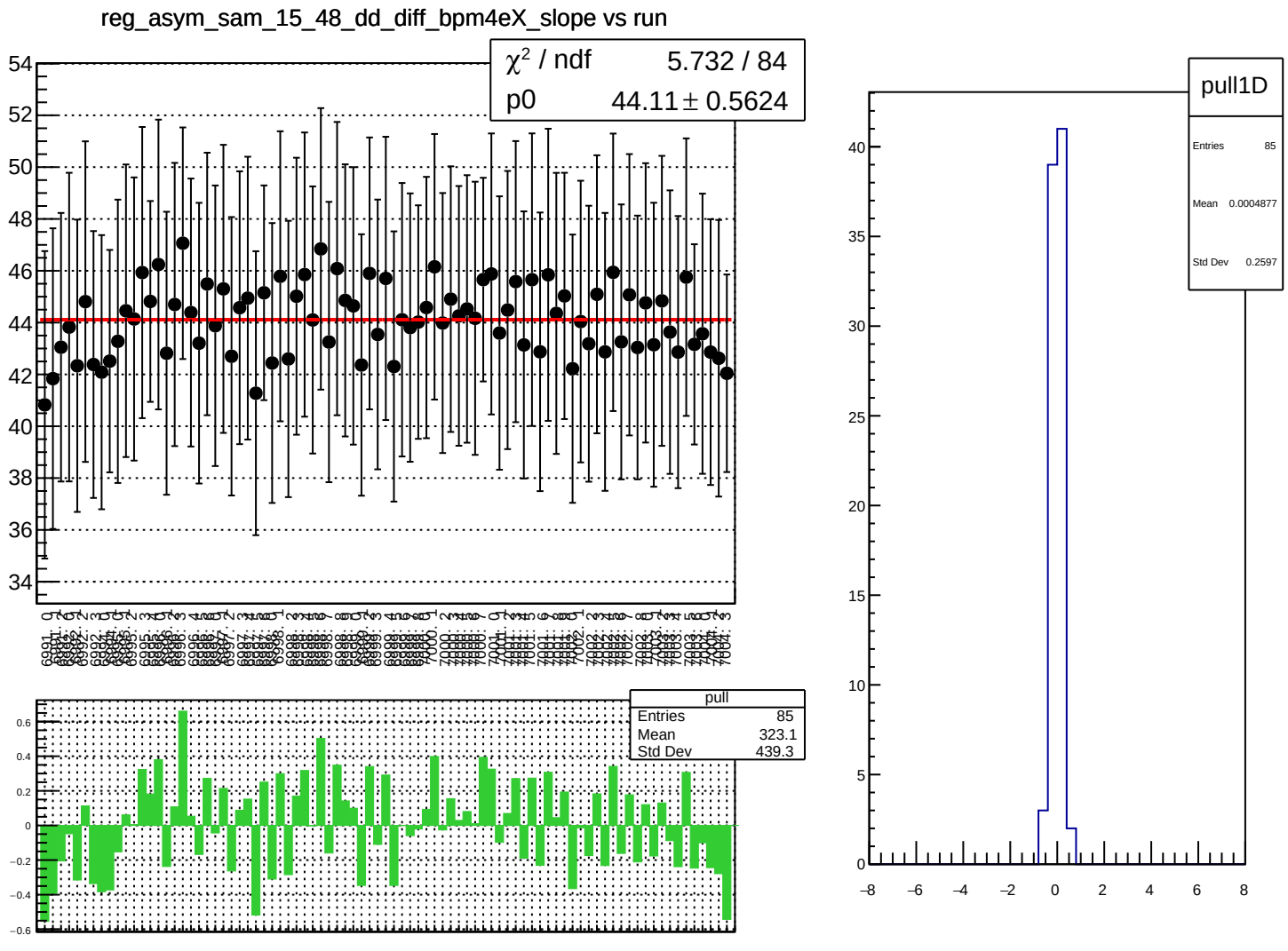

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 2.591 / 84
p0 0.5112 ± 0.02334
pull
Entries 85
Mean −1552
Std Dev 1608

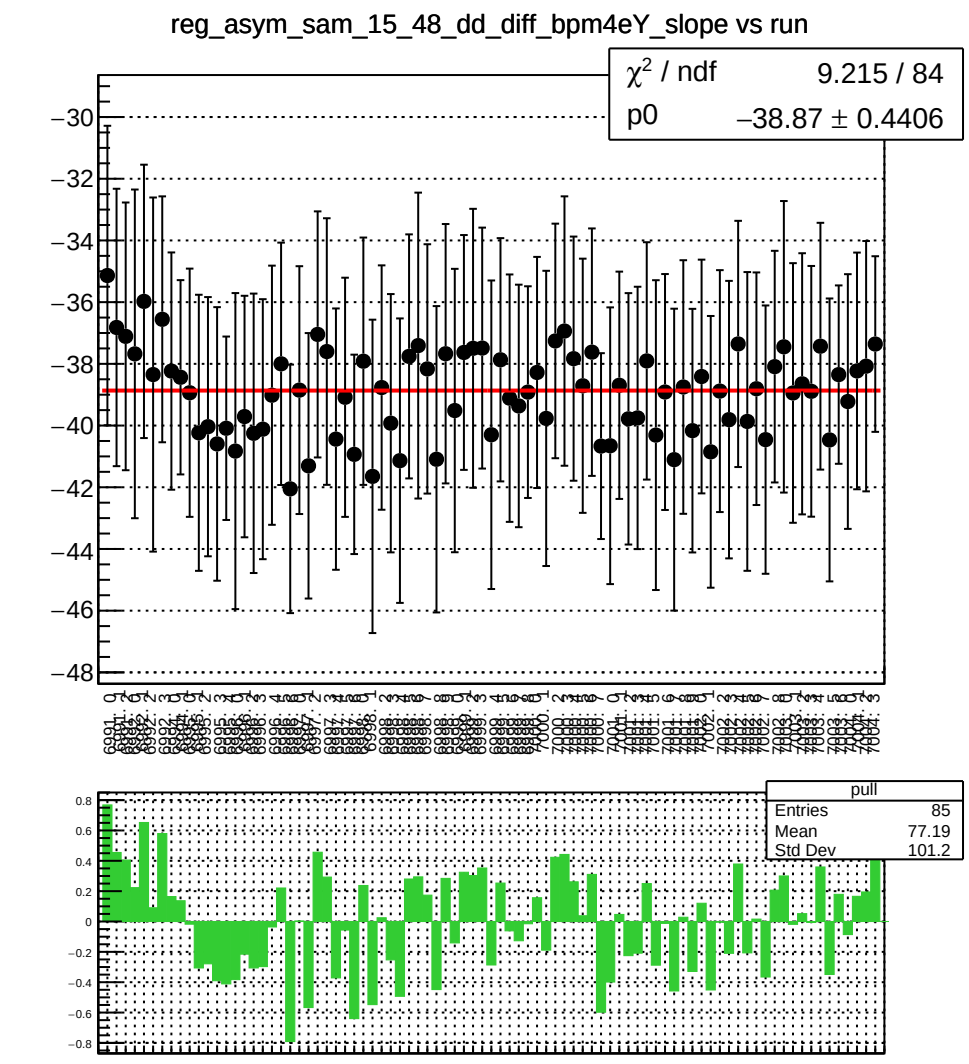

pull1D
Entries 85
Mean 0.000413
Std Dev 0.1746

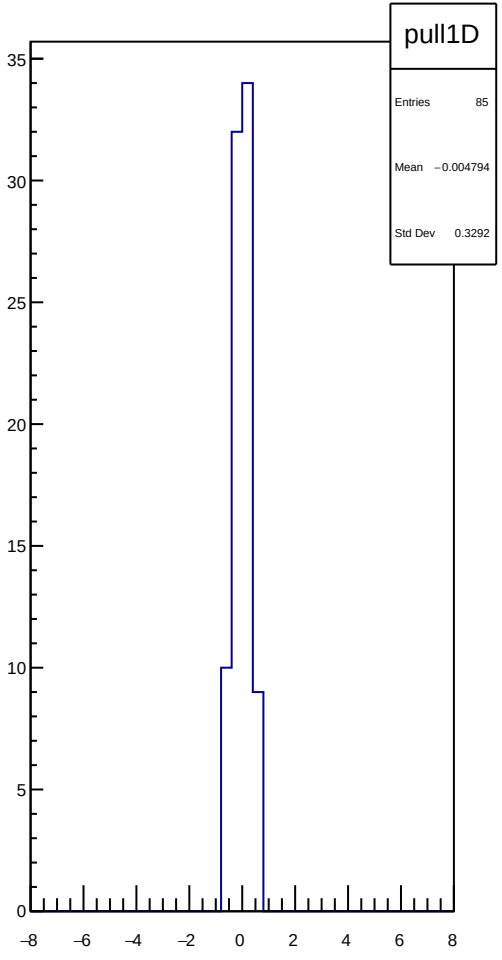

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 4.114 / 84
p0 8.559 ± 0.609
pull
Entries 85
Mean −180.7
Std Dev 149.2

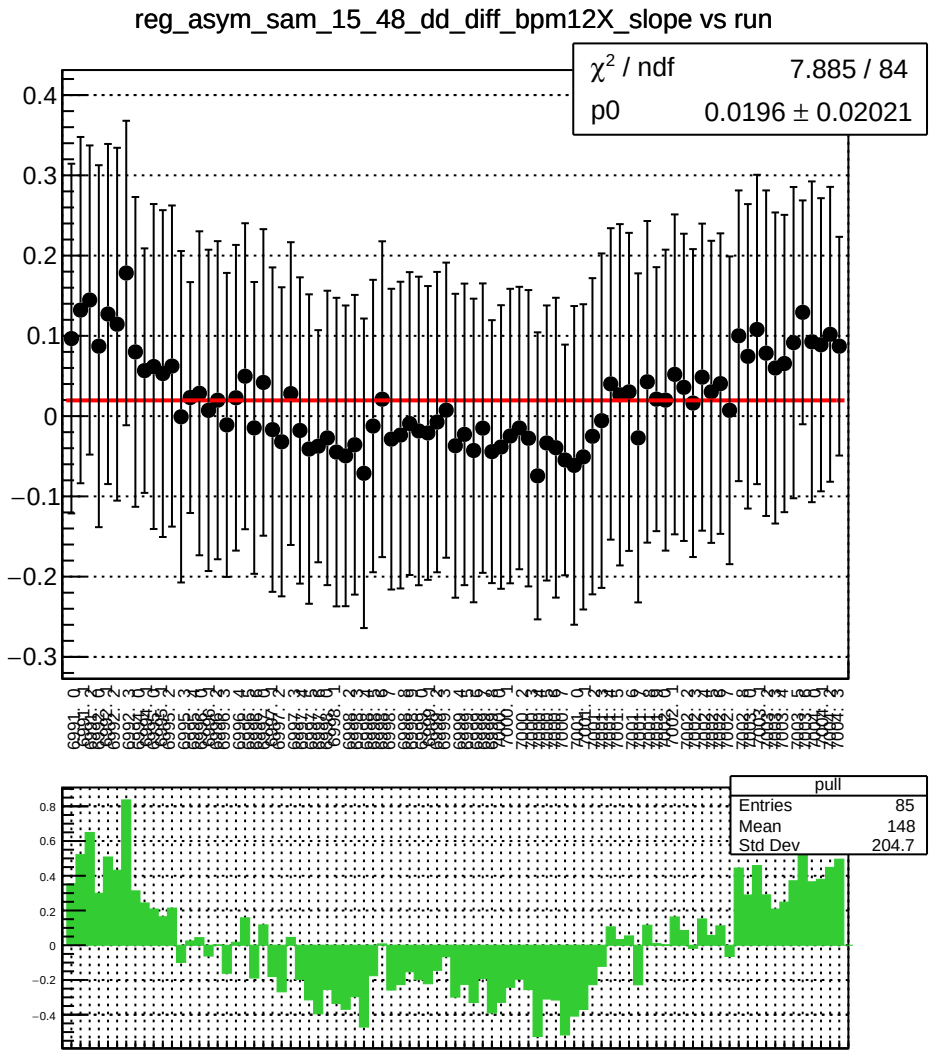

pull1D
Entries 85
Mean 0.001973
Std Dev 0.22

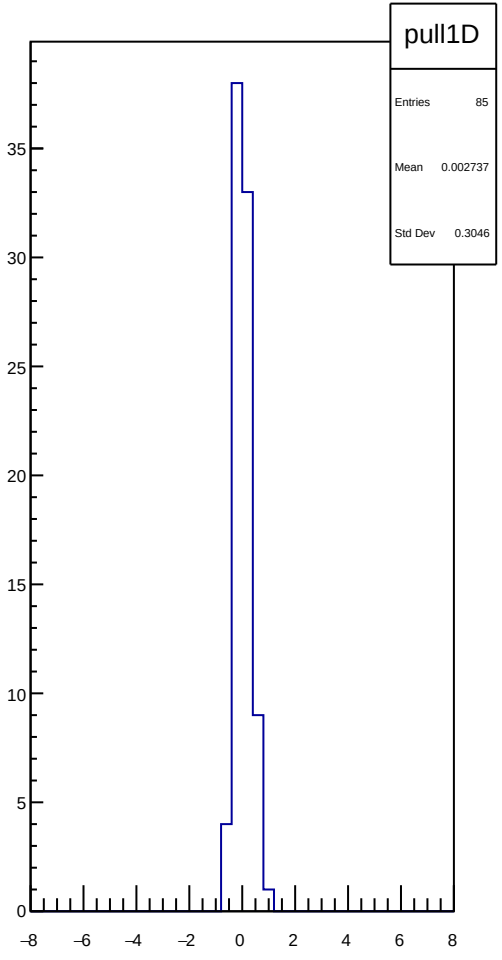

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.067 / 84
p0 6.971 ± 0.4175
pull
Entries 85
Mean 609.9
Std Dev 593
pull1D
Entries 85
Mean 0.001437
Std Dev 0.2187

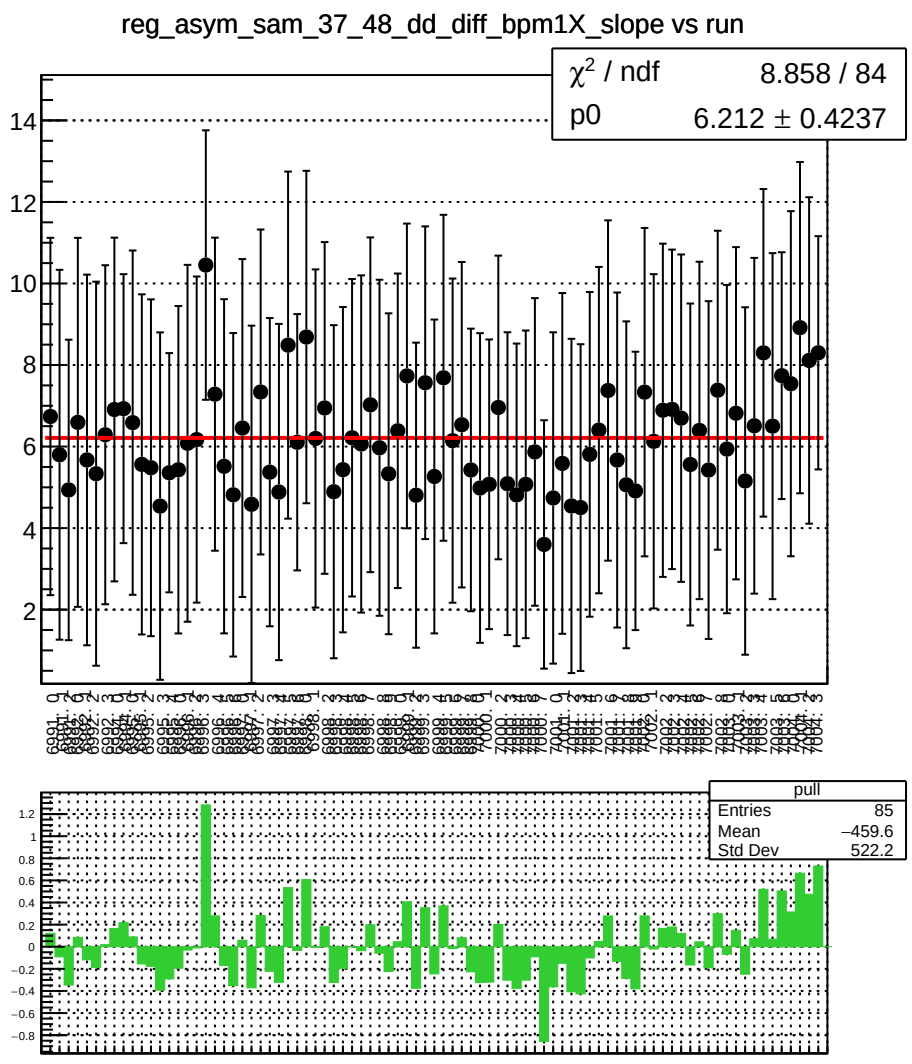

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.732 / 84
p0 44.11 ± 0.5624
pull
Entries 85
Mean 323.1
Std Dev 439.3
pull1D
Entries 85
Mean 0.0004877
Std Dev 0.2597

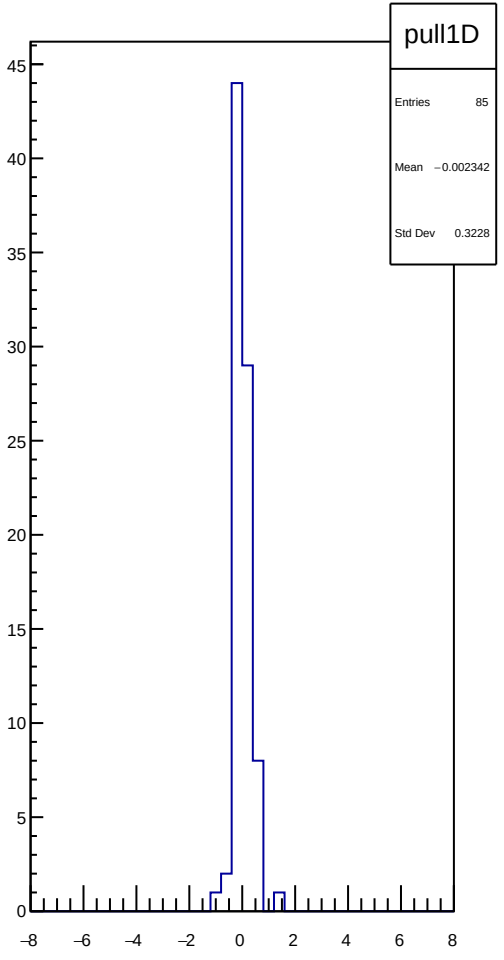

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 9.215 / 84
p0 −38.87 ± 0.4406
pull
Entries 85
Mean 77.19
Std Dev 101.2

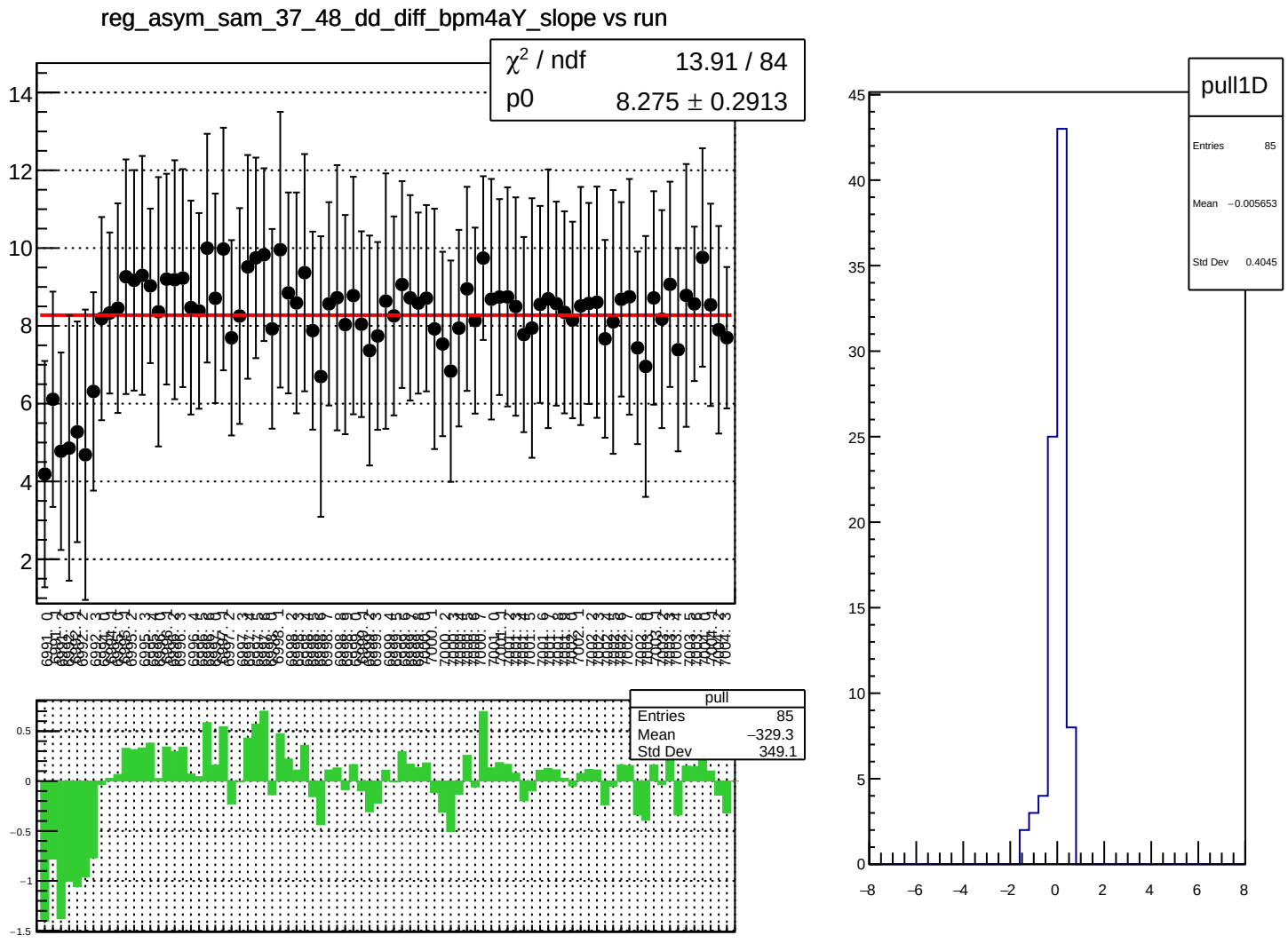

pull1D
Entries 85
Mean −0.004794
Std Dev 0.3292

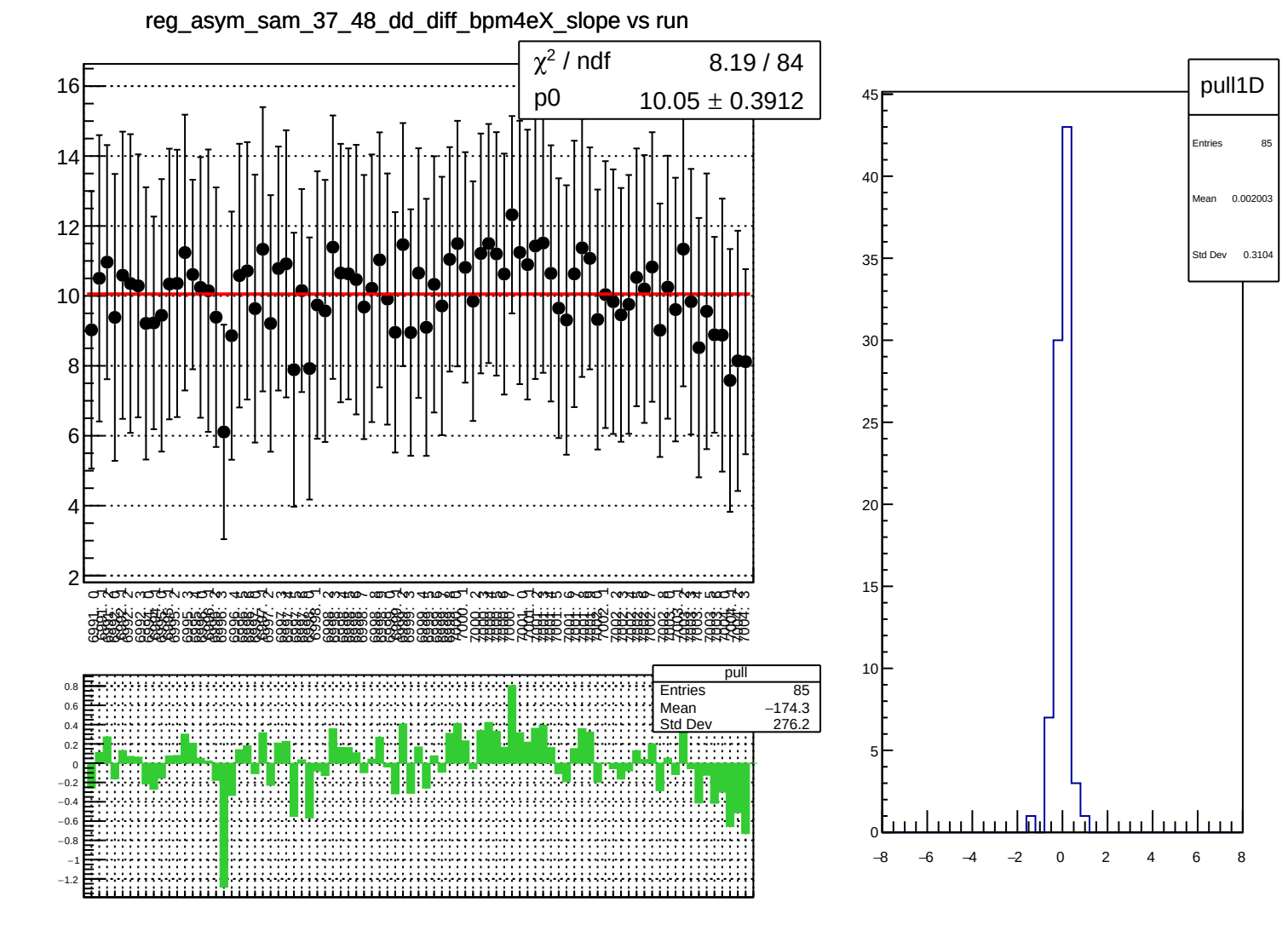

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 7.885 / 84
p0 0.0196 ± 0.02021
pull
Entries 85
Mean 148
Std Dev 204.7

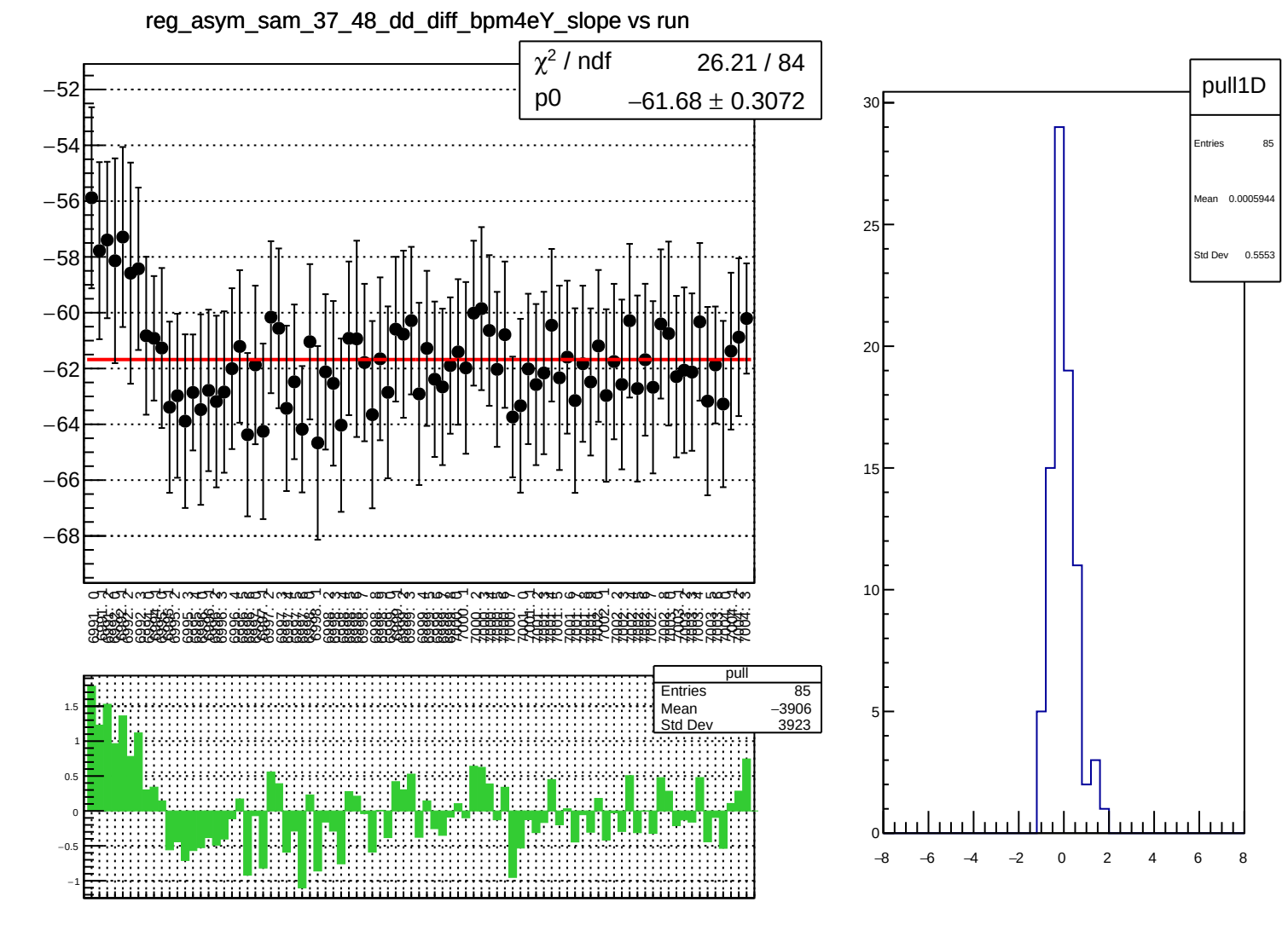

pull1D
Entries 85
Mean 0.002737
Std Dev 0.3046

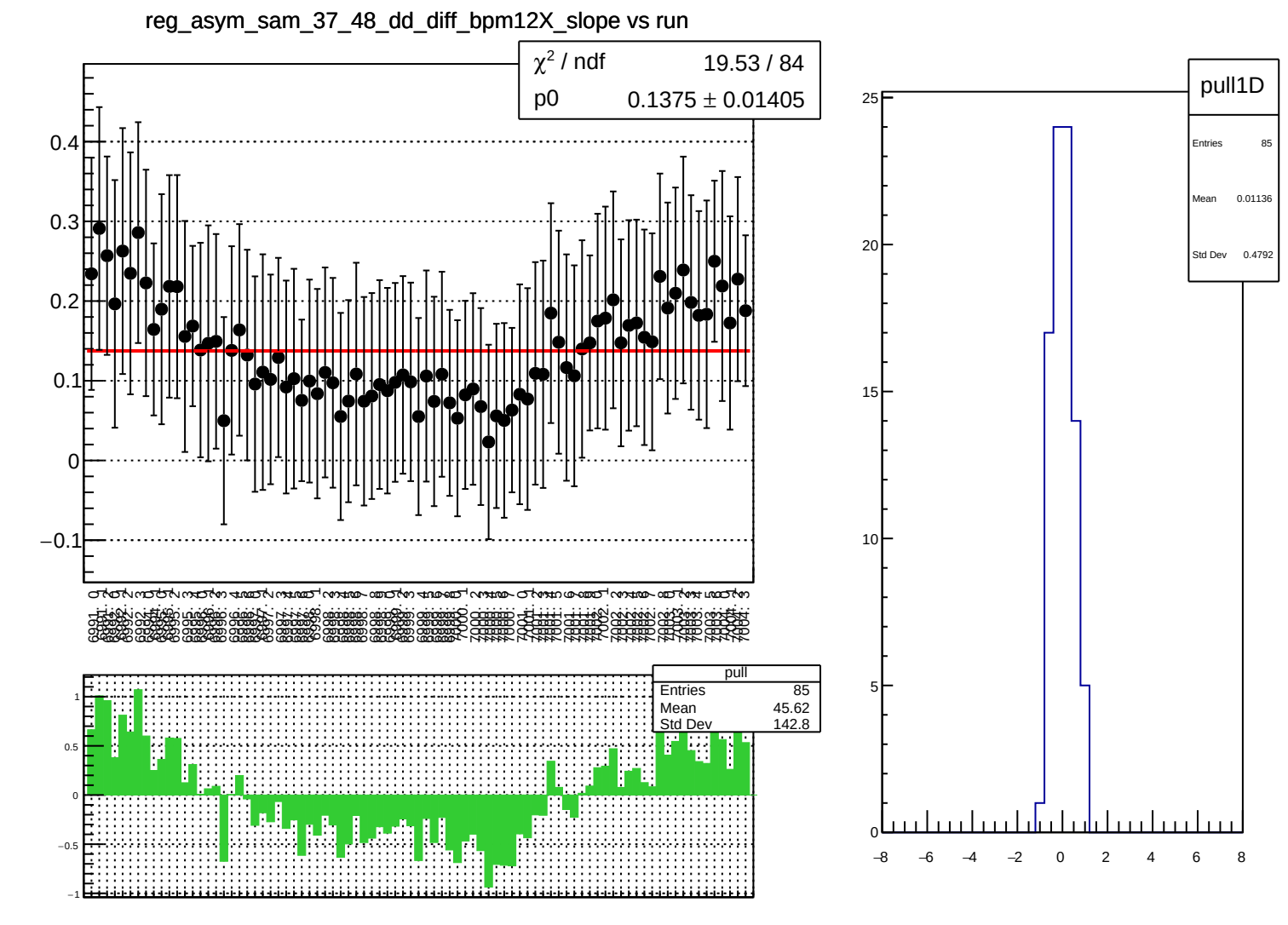

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 8.858 / 84
p0 6.212 ± 0.4237
pull
Entries 85
Mean −459.6
Std Dev 522.2

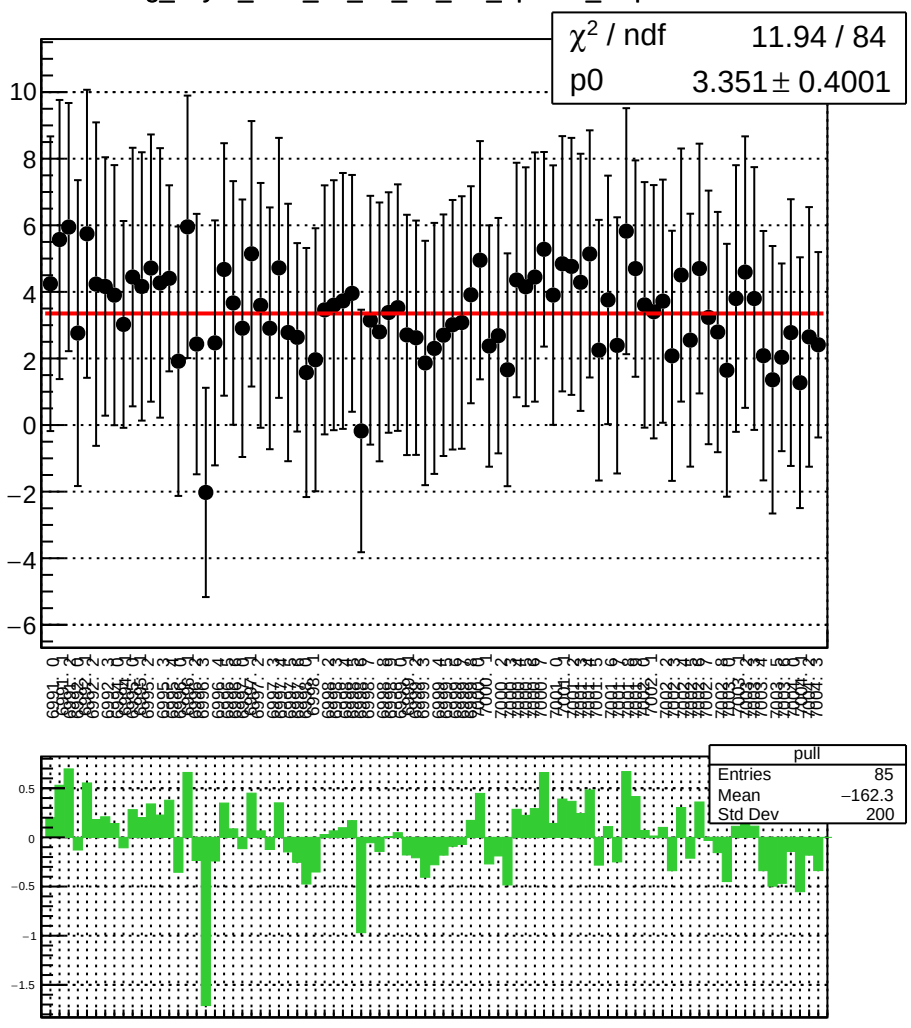

pull1D
Entries 85
Mean −0.002342
Std Dev 0.3228

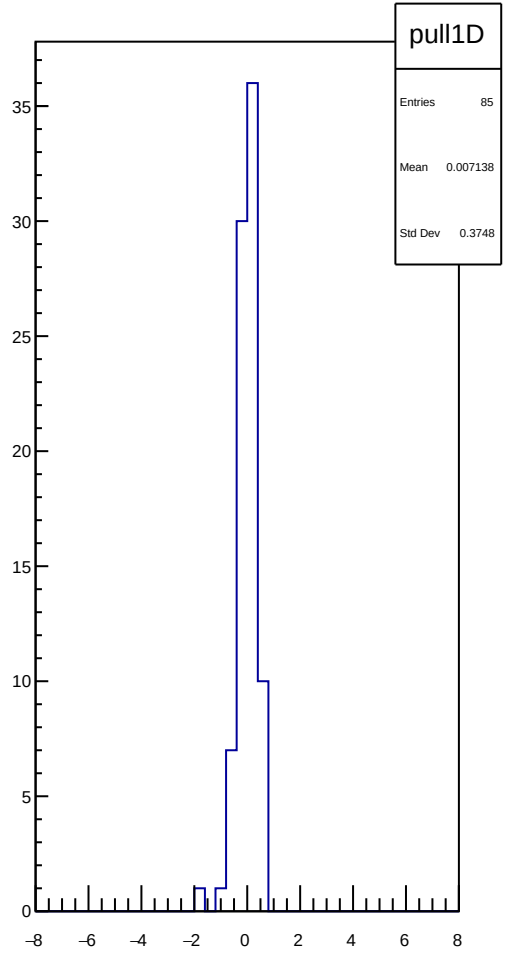

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.91 / 84
p0 8.275 ± 0.2913
pull
Entries 85
Mean −329.3
Std Dev 349.1
pull1D
Entries 85
Mean −0.005653
Std Dev 0.4045

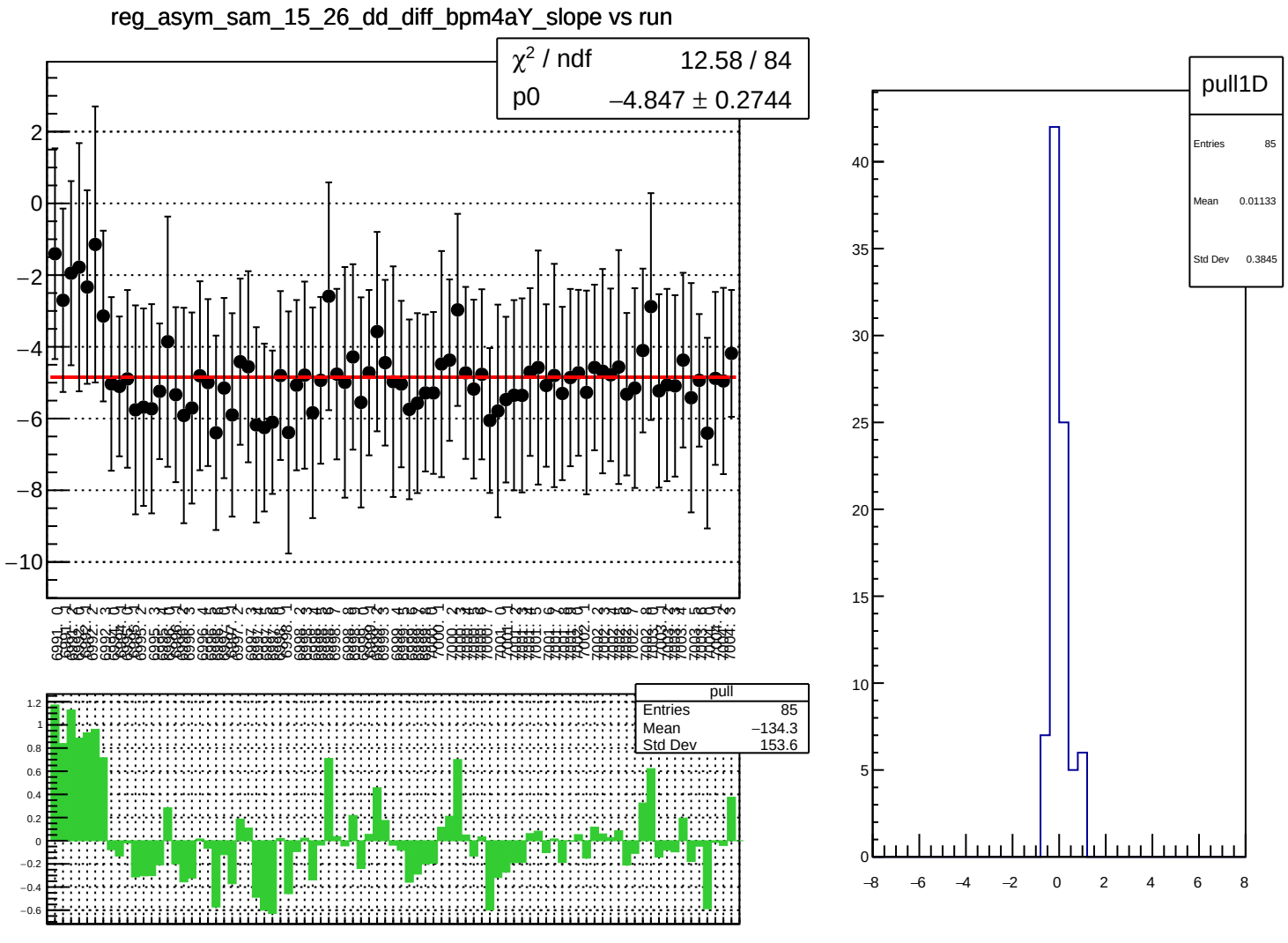

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 8.19 / 84
p0 10.05 ± 0.3912
pull
Entries 85
Mean −174.3
Std Dev 276.2
pull1D
Entries 85
Mean 0.002003
Std Dev 0.3104

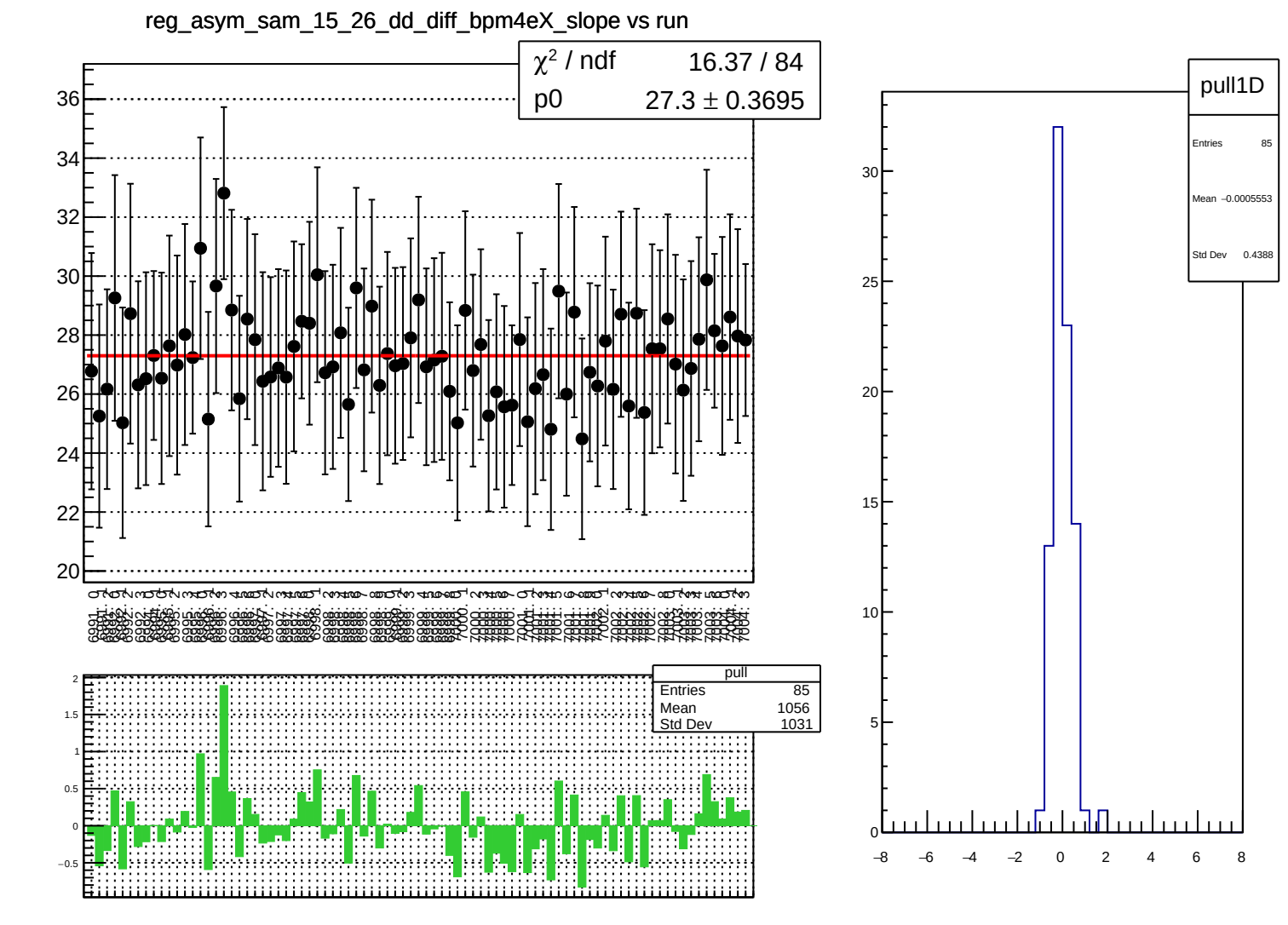

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 26.21 / 84
p0 −61.68 ± 0.3072
pull
Entries 85
Mean −3906
Std Dev 3923
pull1D
Entries 85
Mean 0.0005944
Std Dev 0.5553

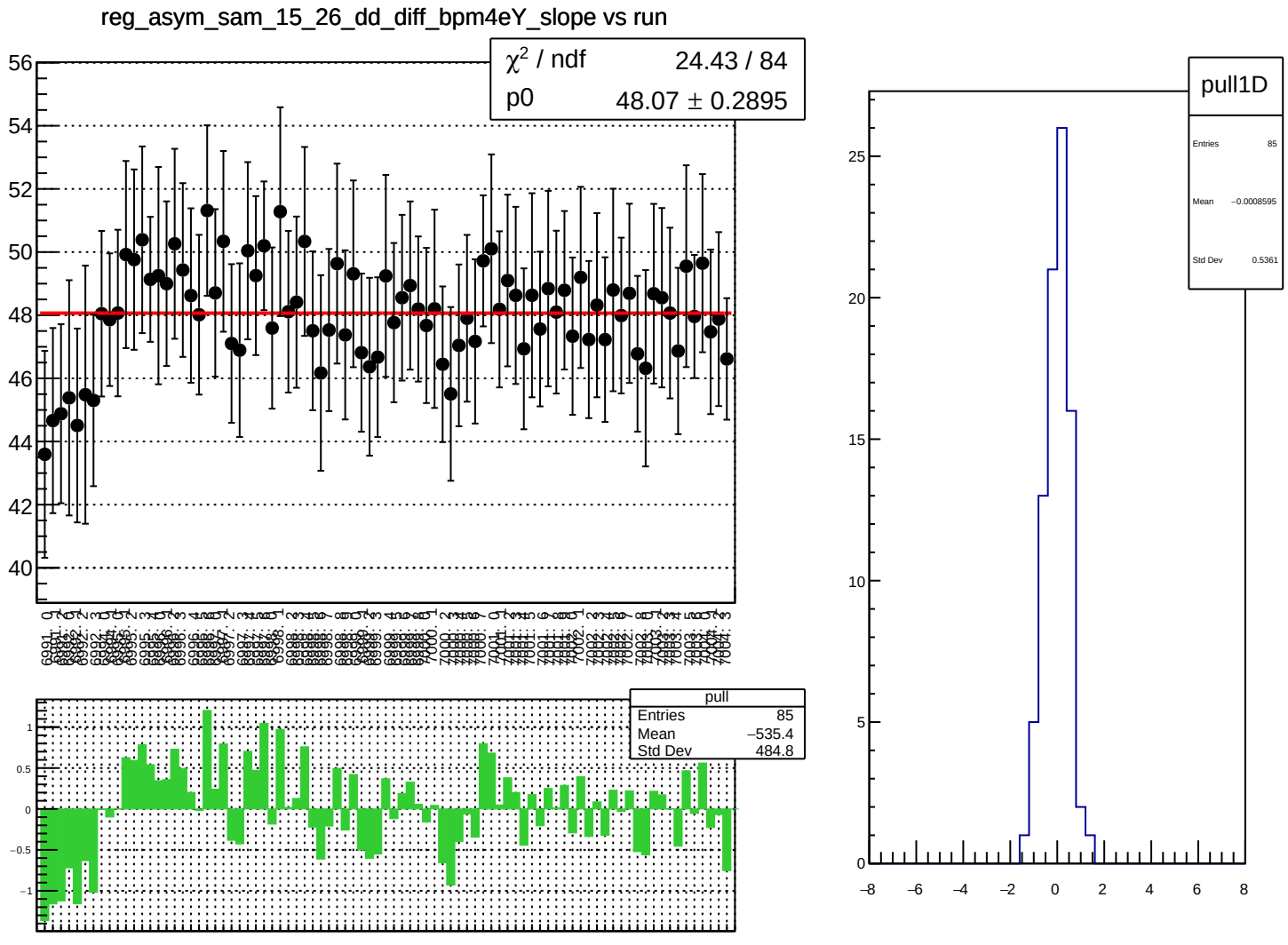

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 19.53 / 84
p0 0.1375 ± 0.01405
pull
Entries 85
Mean 45.62
Std Dev 142.8
pull1D
Entries 85
Mean 0.01136
Std Dev 0.4792

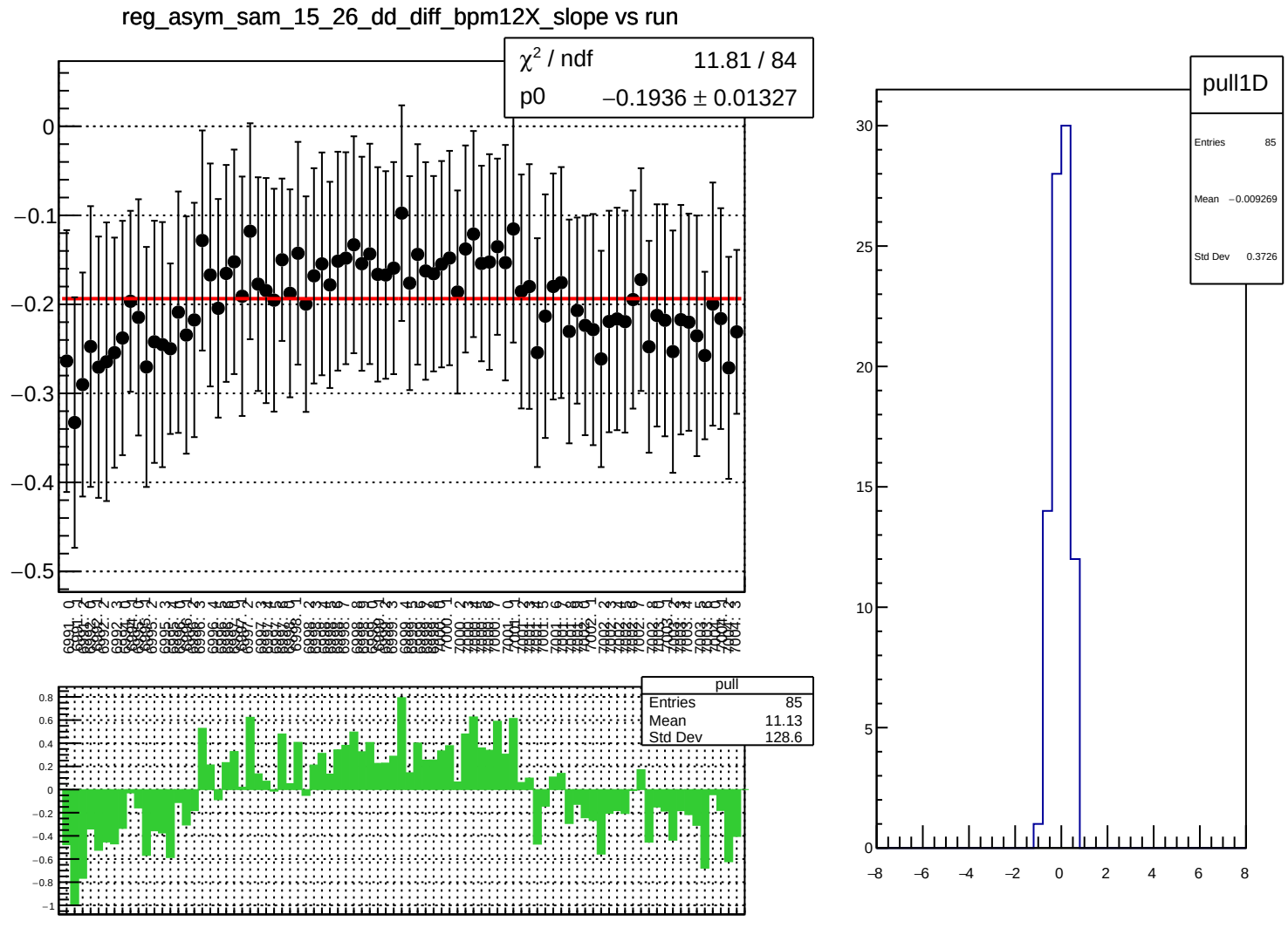

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 11.94 / 84
p0 3.351 ± 0.4001
pull
Entries 85
Mean −162.3
Std Dev 200

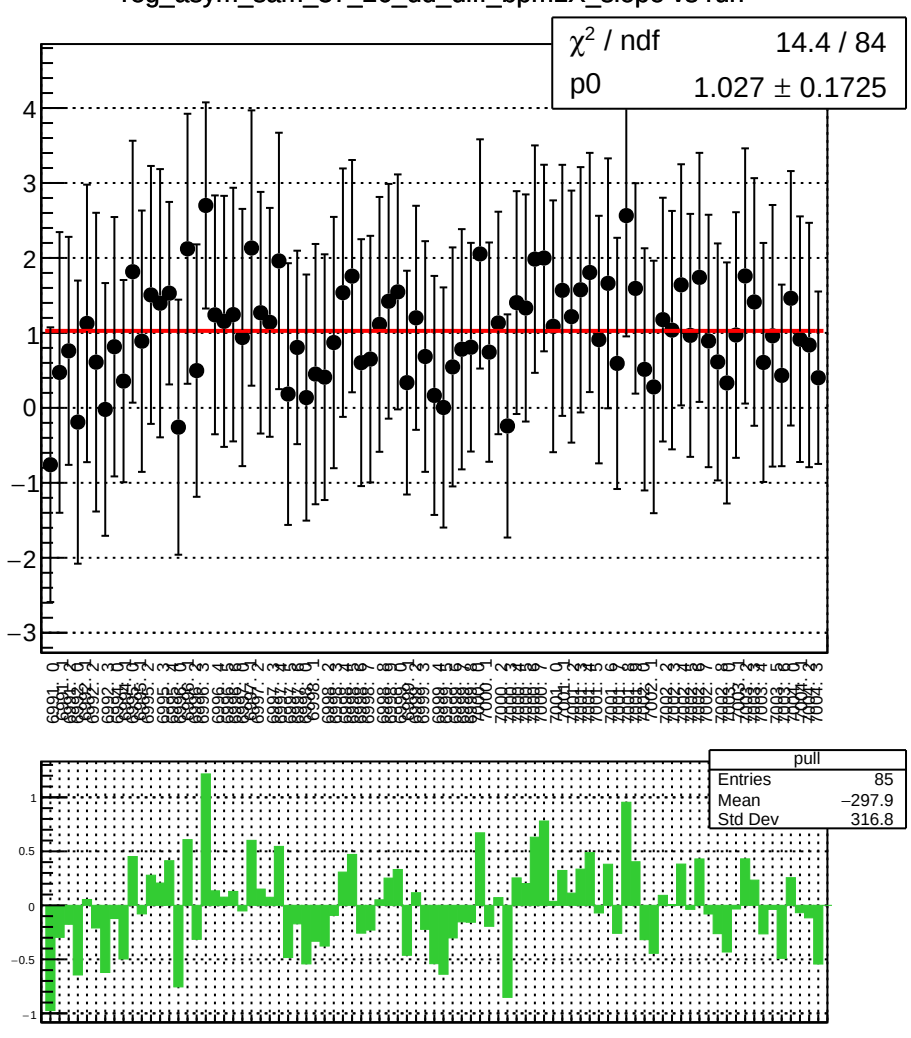

pull1D
Entries 85
Mean 0.007138
Std Dev 0.3748

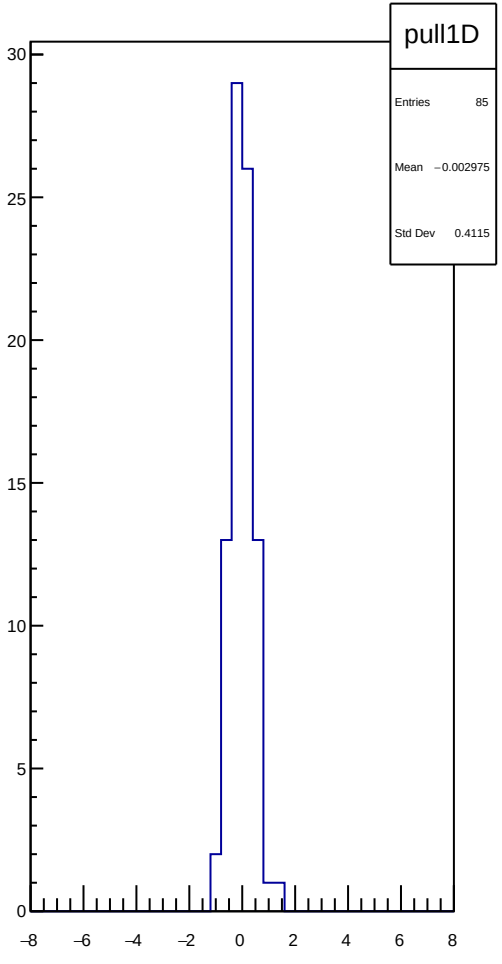

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 12.58 / 84
p0 −4.847 ± 0.2744
pull
Entries 85
Mean −134.3
Std Dev 153.6
pull1D
Entries 85
Mean 0.01133
Std Dev 0.3845

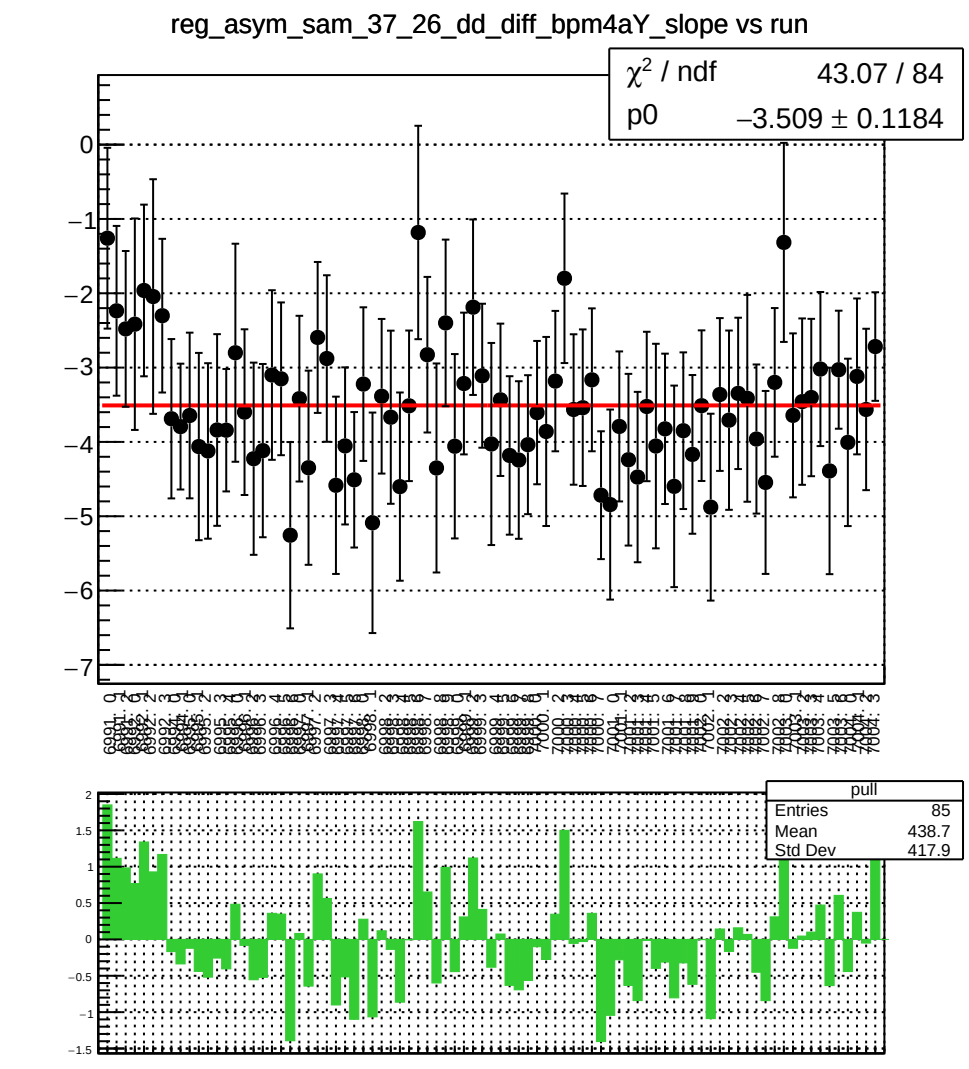

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 16.37 / 84
p0 27.3 ± 0.3695
pull
Entries 85
Mean 1056
Std Dev 1031
pull1D
Entries 85
Mean −0.0005553
Std Dev 0.4388

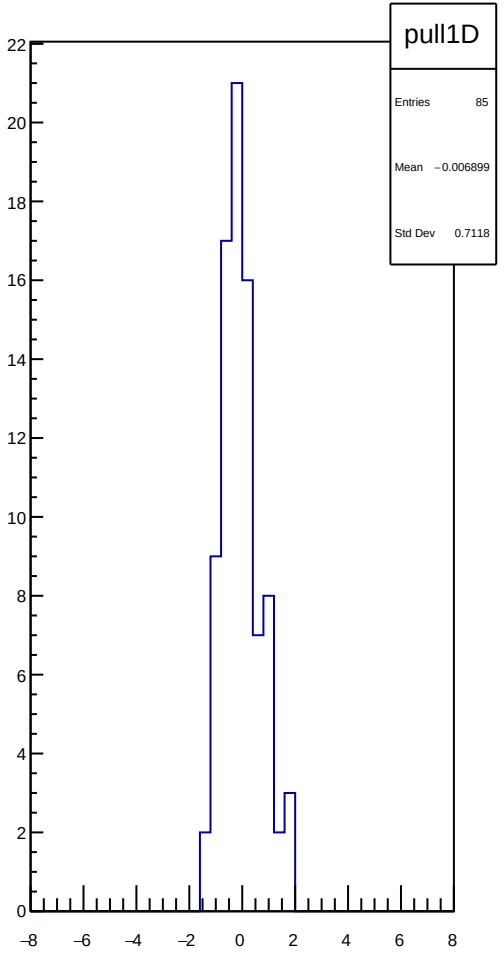

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 24.43 / 84
p0 48.07 ± 0.2895
pull
Entries 85
Mean −535.4
Std Dev 484.8
pull1D
Entries 85
Mean −0.0008595
Std Dev 0.5361

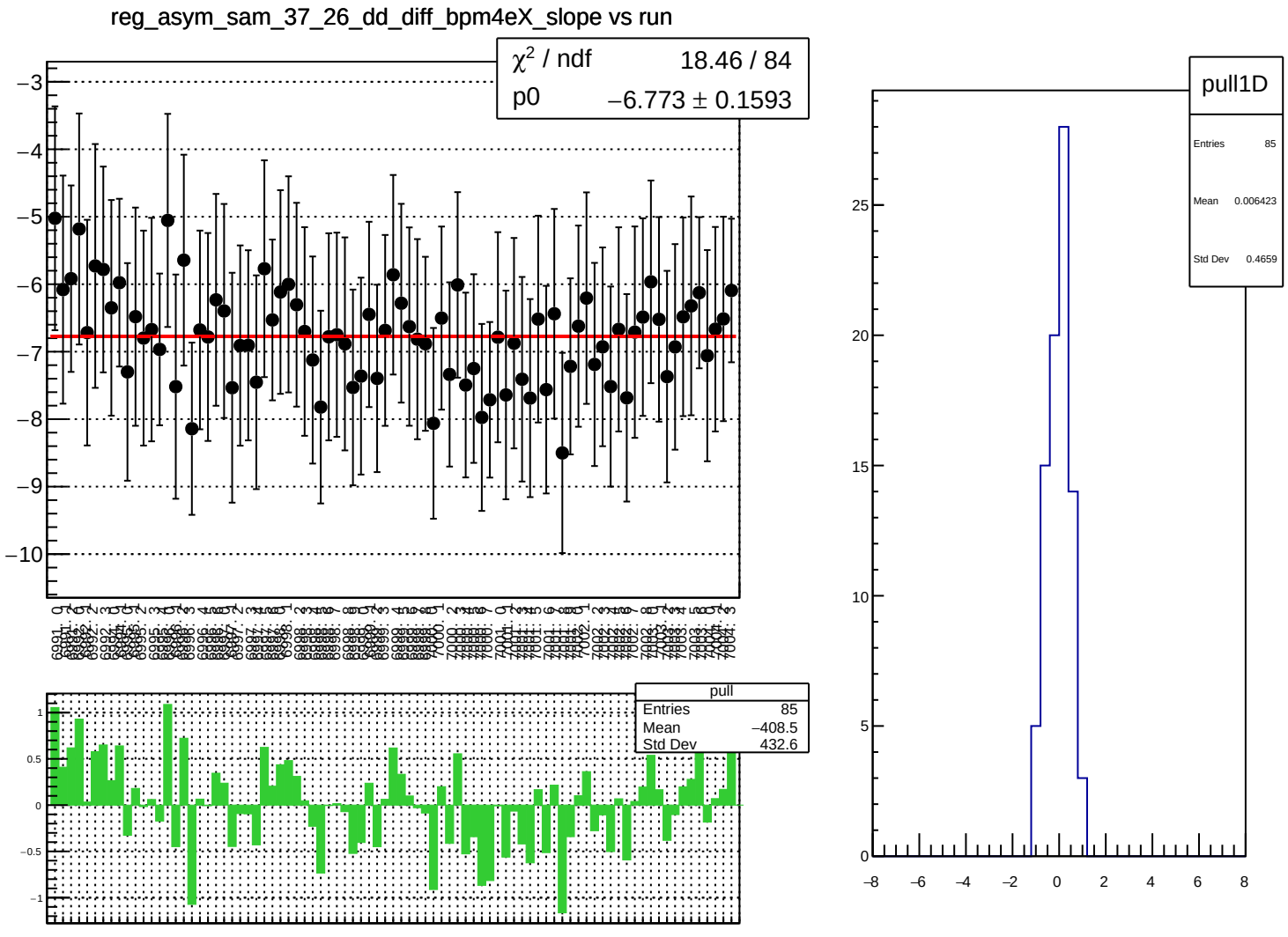

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 11.81 / 84
p0 −0.1936 ± 0.01327
pull
Entries 85
Mean 11.13
Std Dev 128.6
pull1D
Entries 85
Mean −0.009269
Std Dev 0.3726

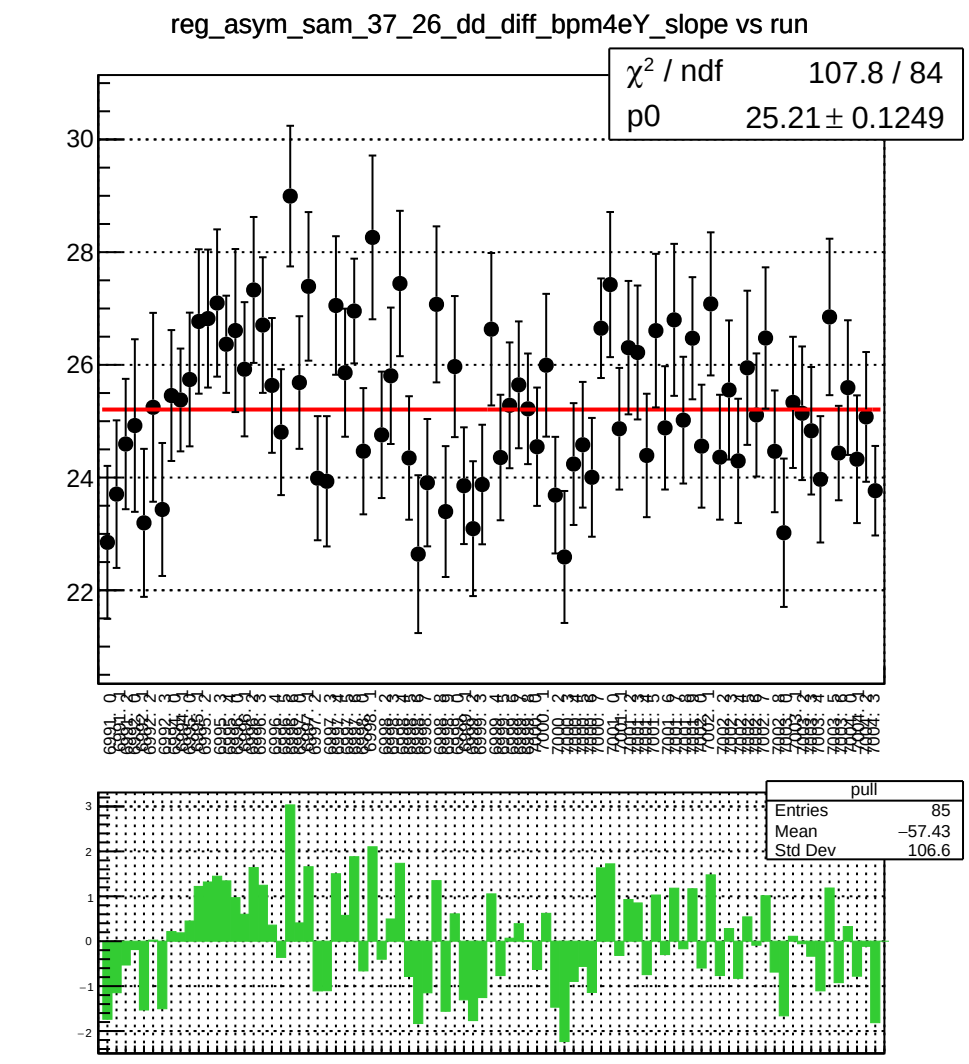

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 14.4 / 84
p0 1.027 ± 0.1725
pull
Entries 85
Mean −297.9
Std Dev 316.8

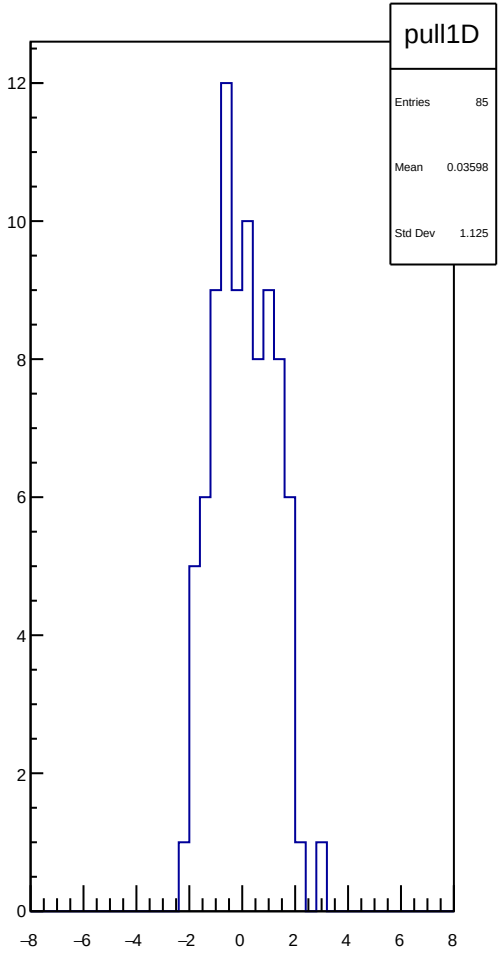

pull1D
Entries 85
Mean −0.002975
Std Dev 0.4115

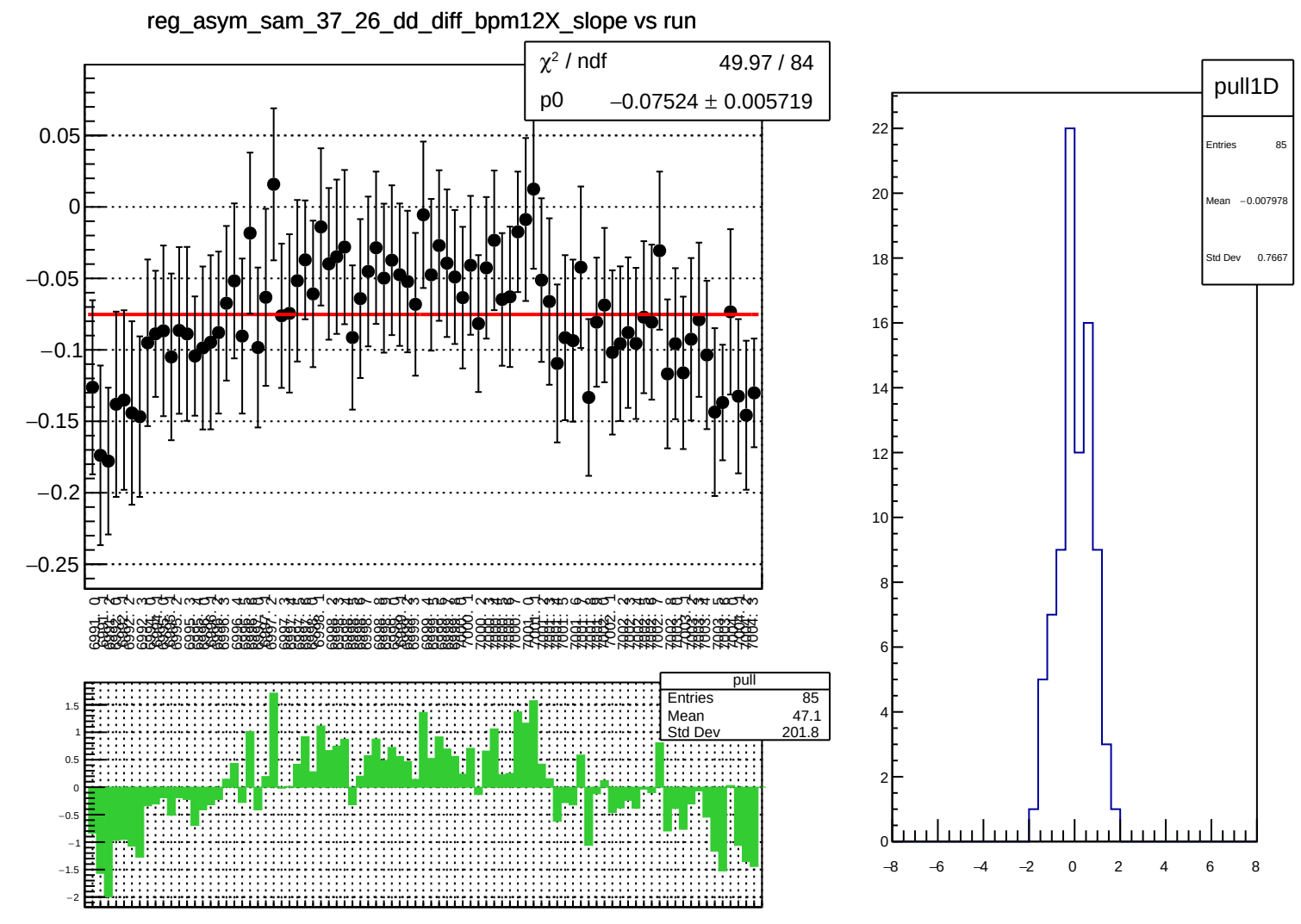

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 43.07 / 84
p0 −3.509 ± 0.1184
pull
Entries 85
Mean 438.7
Std Dev 417.9

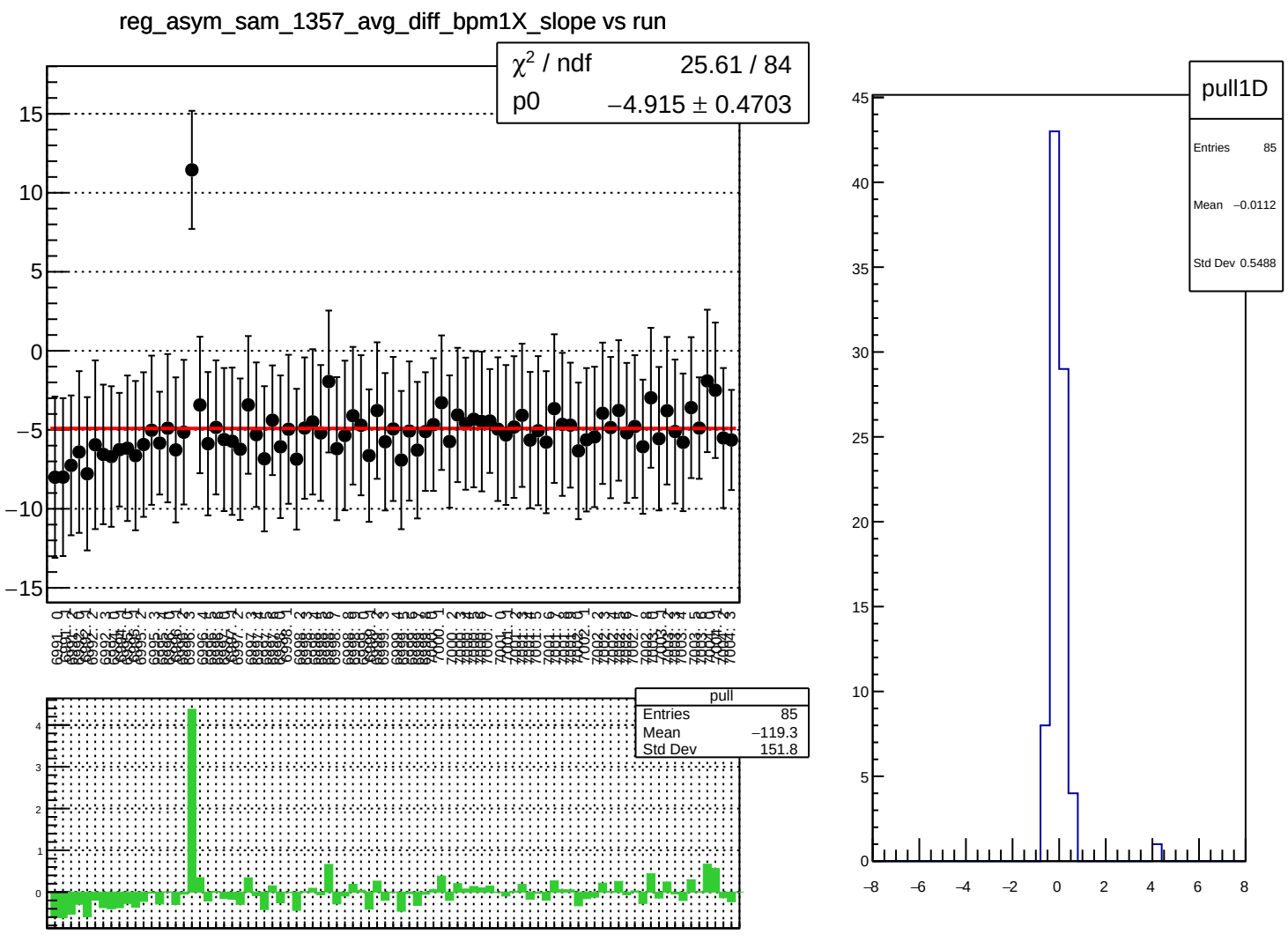

pull1D
Entries 85
Mean −0.006899
Std Dev 0.7118

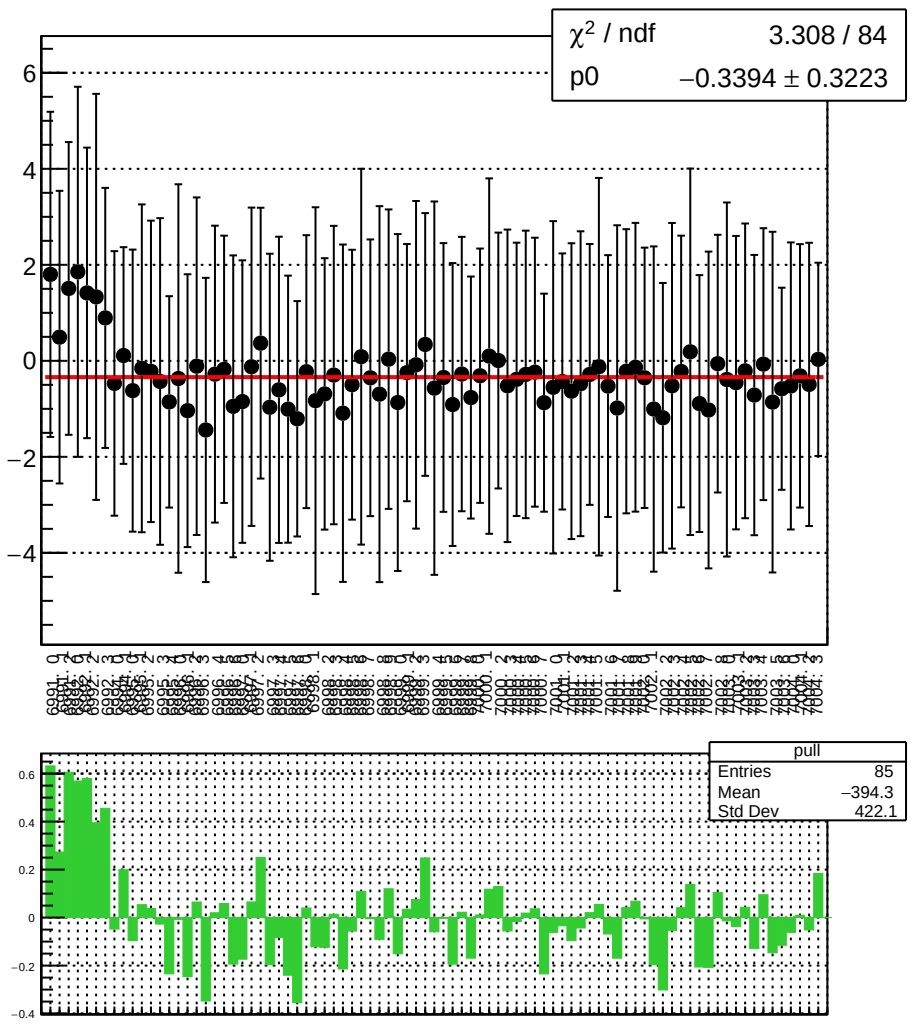

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.46 / 84
p0 −6.773 ± 0.1593
pull
Entries 85
Mean −408.5
Std Dev 432.6
pull1D
Entries 85
Mean 0.006423
Std Dev 0.4659

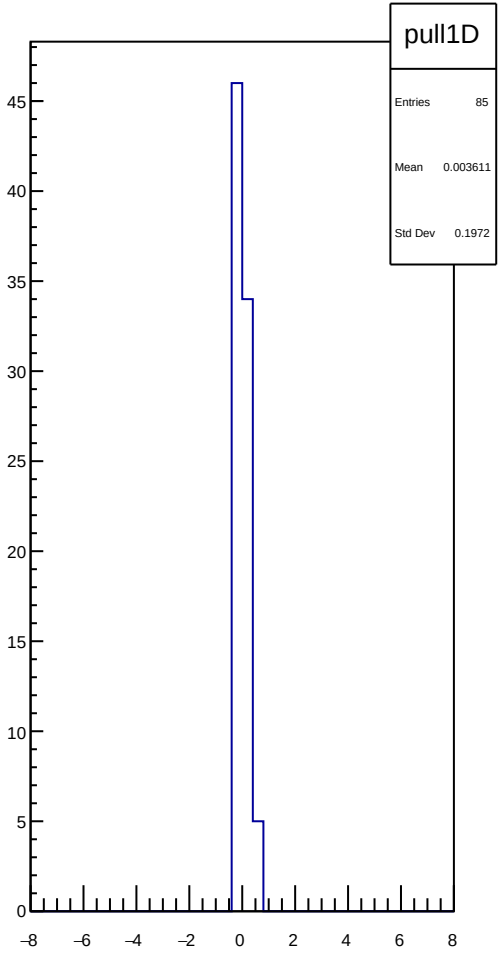

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 107.8 / 84
p0 25.21 ± 0.1249
30
28
26
24
22
pull
Entries 85
Mean −57.43
Std Dev 106.6
3
2
1
0
−1
−2

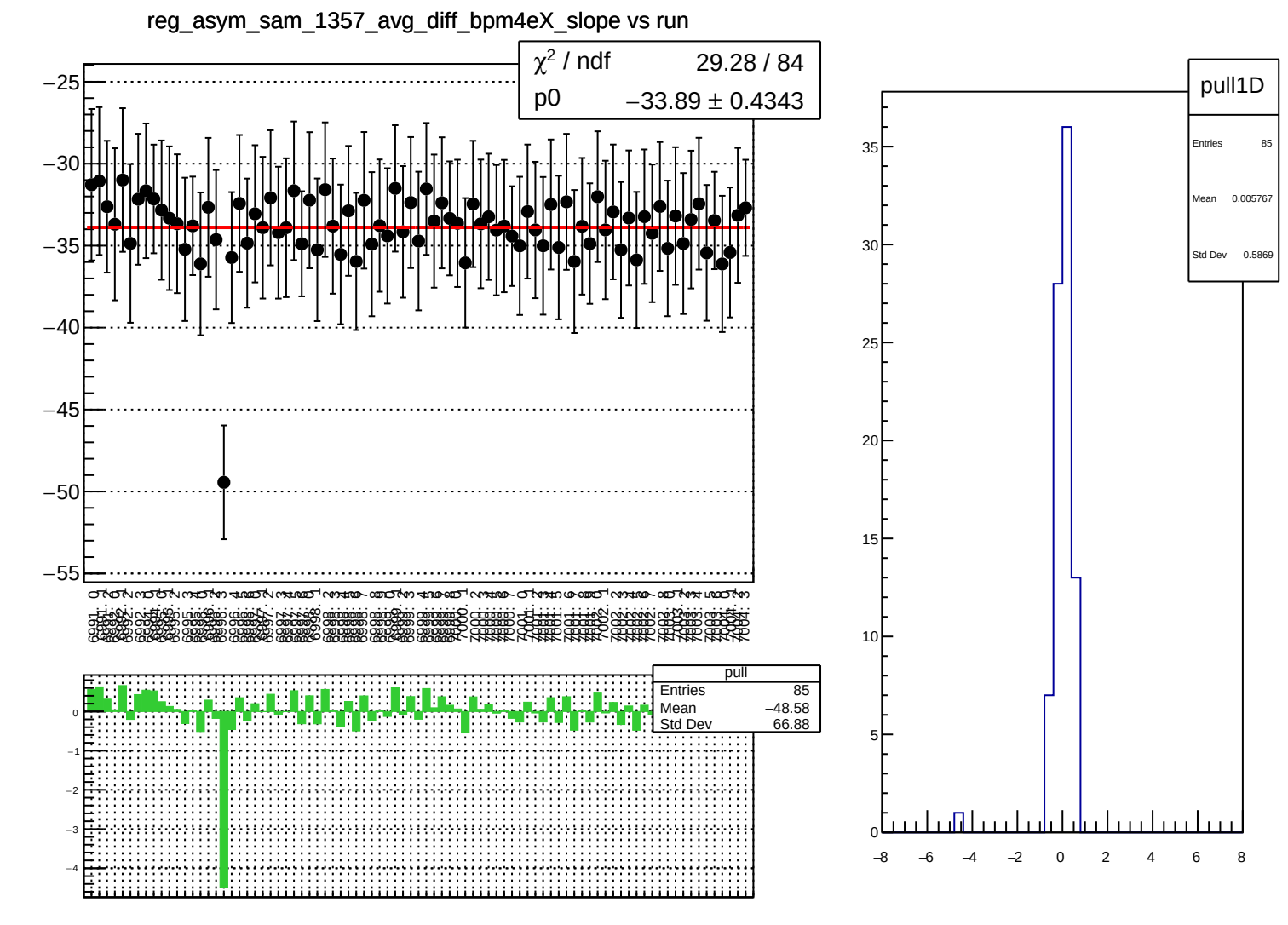

pull1D
Entries 85
Mean 0.03598
Std Dev 1.125
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

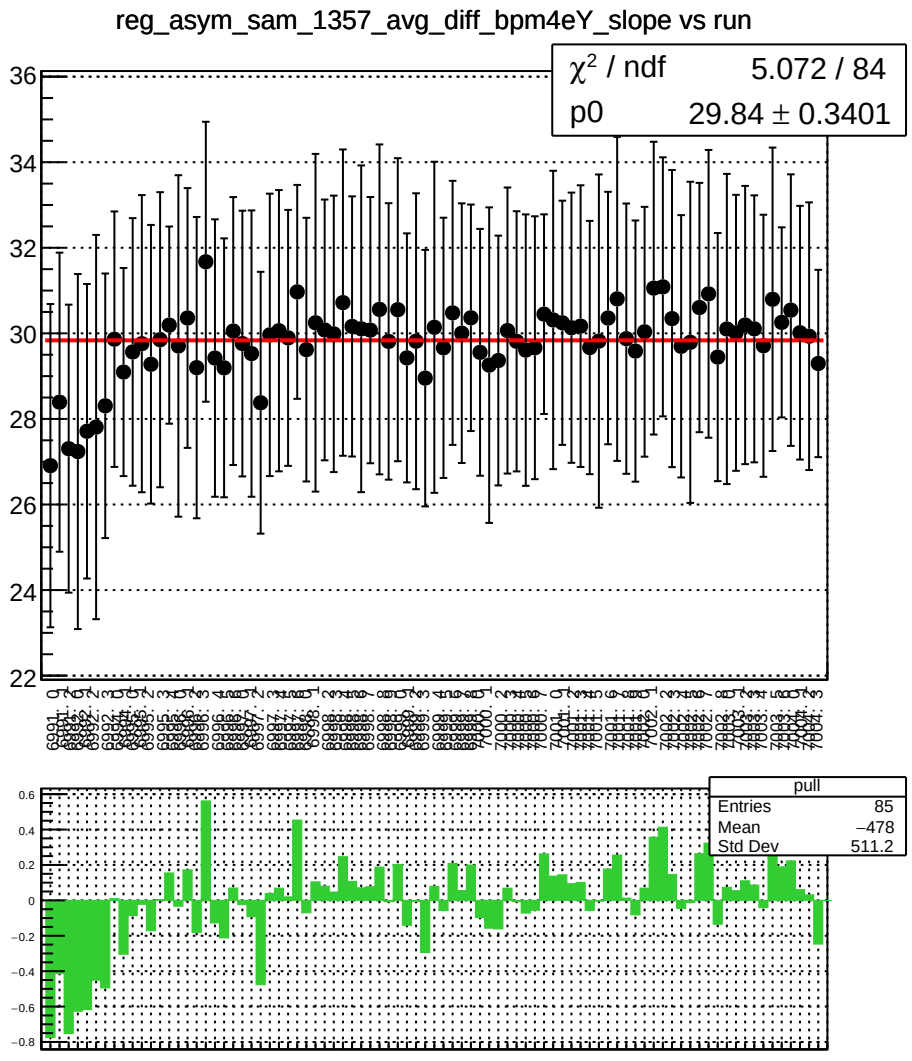

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 49.97 / 84
p0 −0.07524 ± 0.005719
pull
Entries 85
Mean 47.1
Std Dev 201.8
pull1D
Entries 85
Mean −0.007978
Std Dev 0.7667

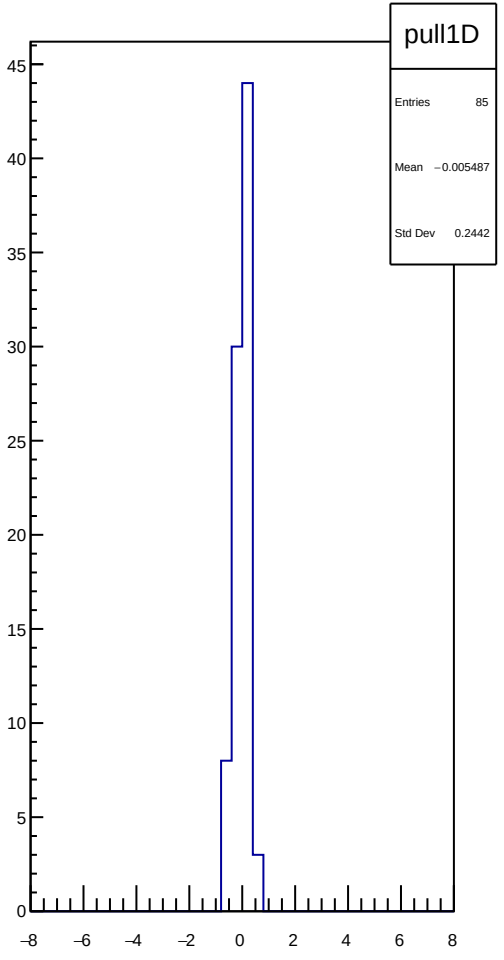

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 25.61 / 84
p0 −4.915 ± 0.4703
pull
Entries 85
Mean −119.3
Std Dev 151.8
pull1D
Entries 85
Mean −0.0112
Std Dev 0.5488

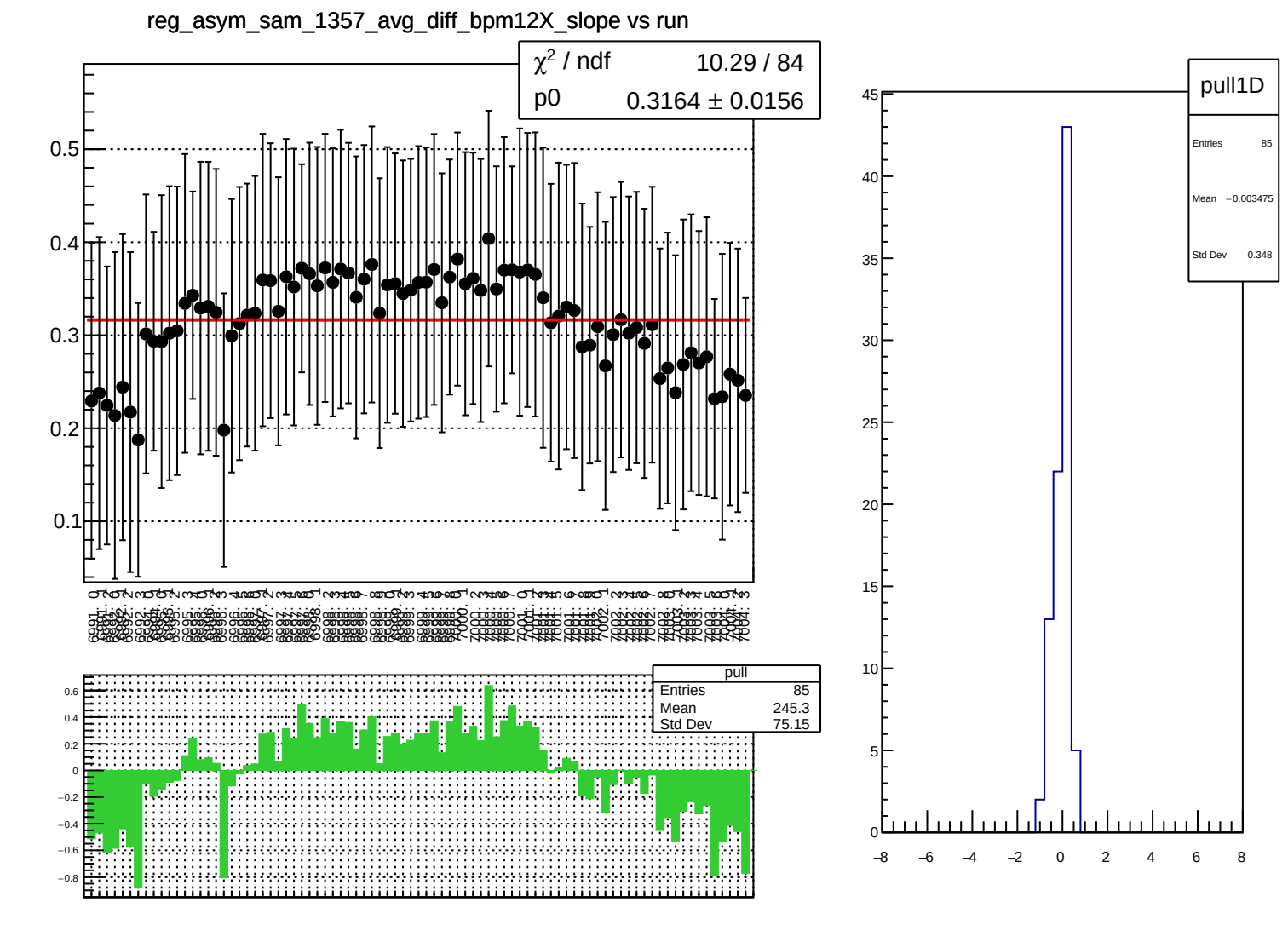

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.308 / 84
p0 −0.3394 ± 0.3223
pull
Entries 85
Mean −394.3
Std Dev 422.1

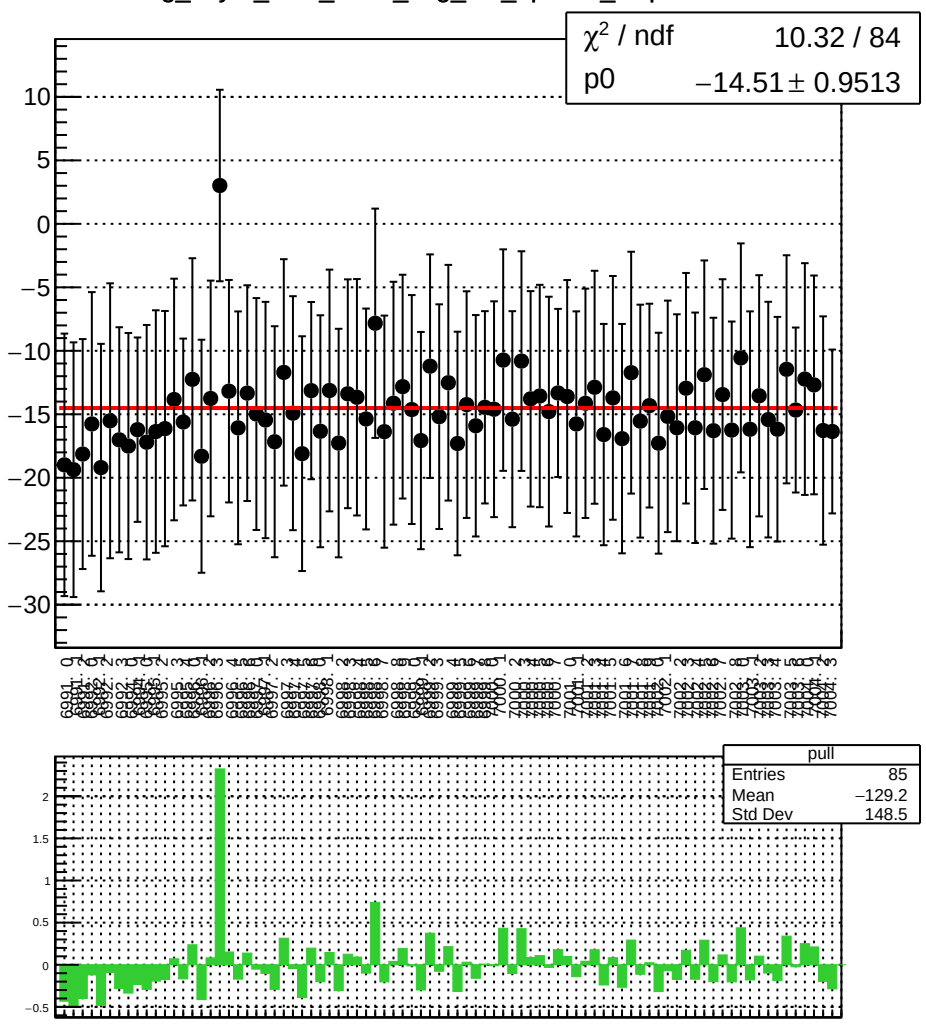

pull1D
Entries 85
Mean 0.003611
Std Dev 0.1972

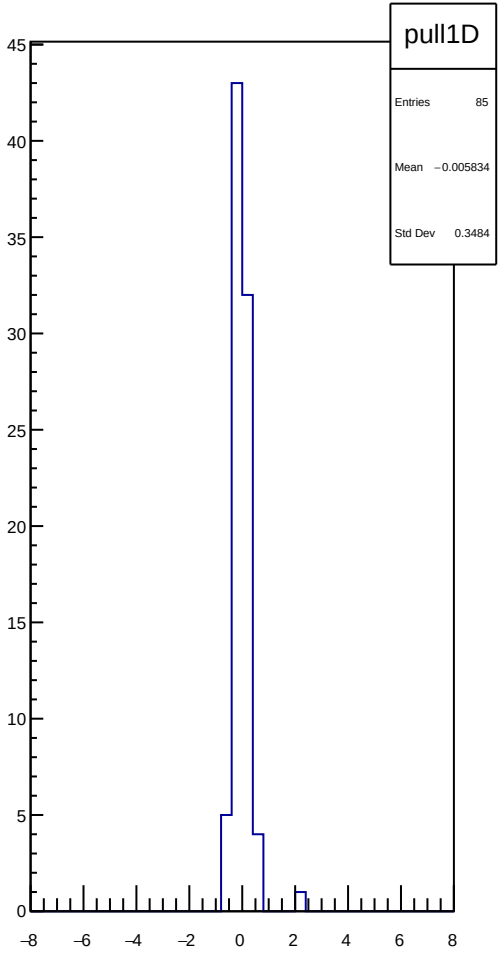

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 29.28 / 84
p0 −33.89 ± 0.4343
pull
Entries 85
Mean −48.58
Std Dev 66.88
pull1D
Entries 85
Mean 0.005767
Std Dev 0.5869

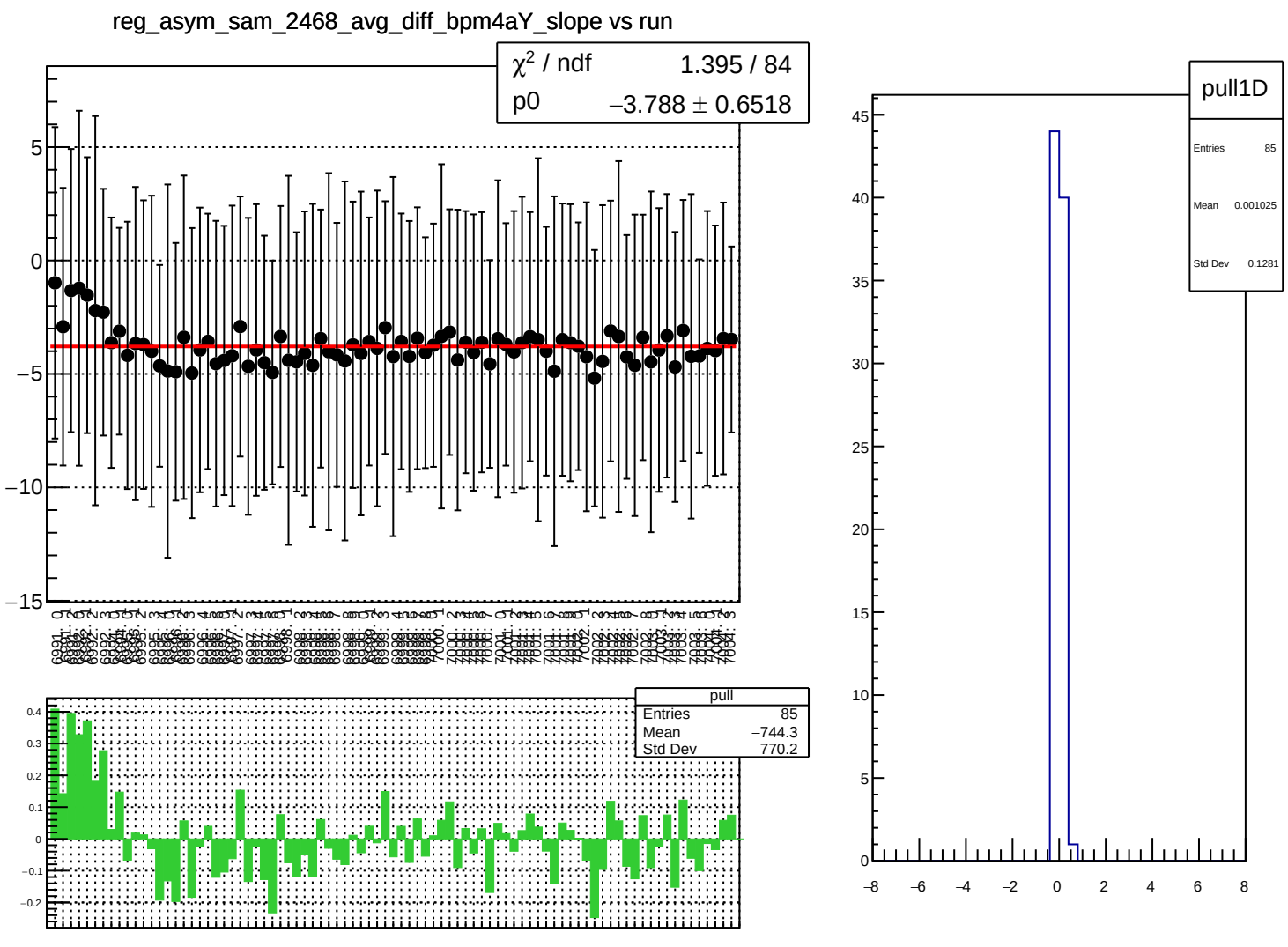

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.072 / 84
p0 29.84 ± 0.3401
pull
Entries 85
Mean −478
Std Dev 511.2

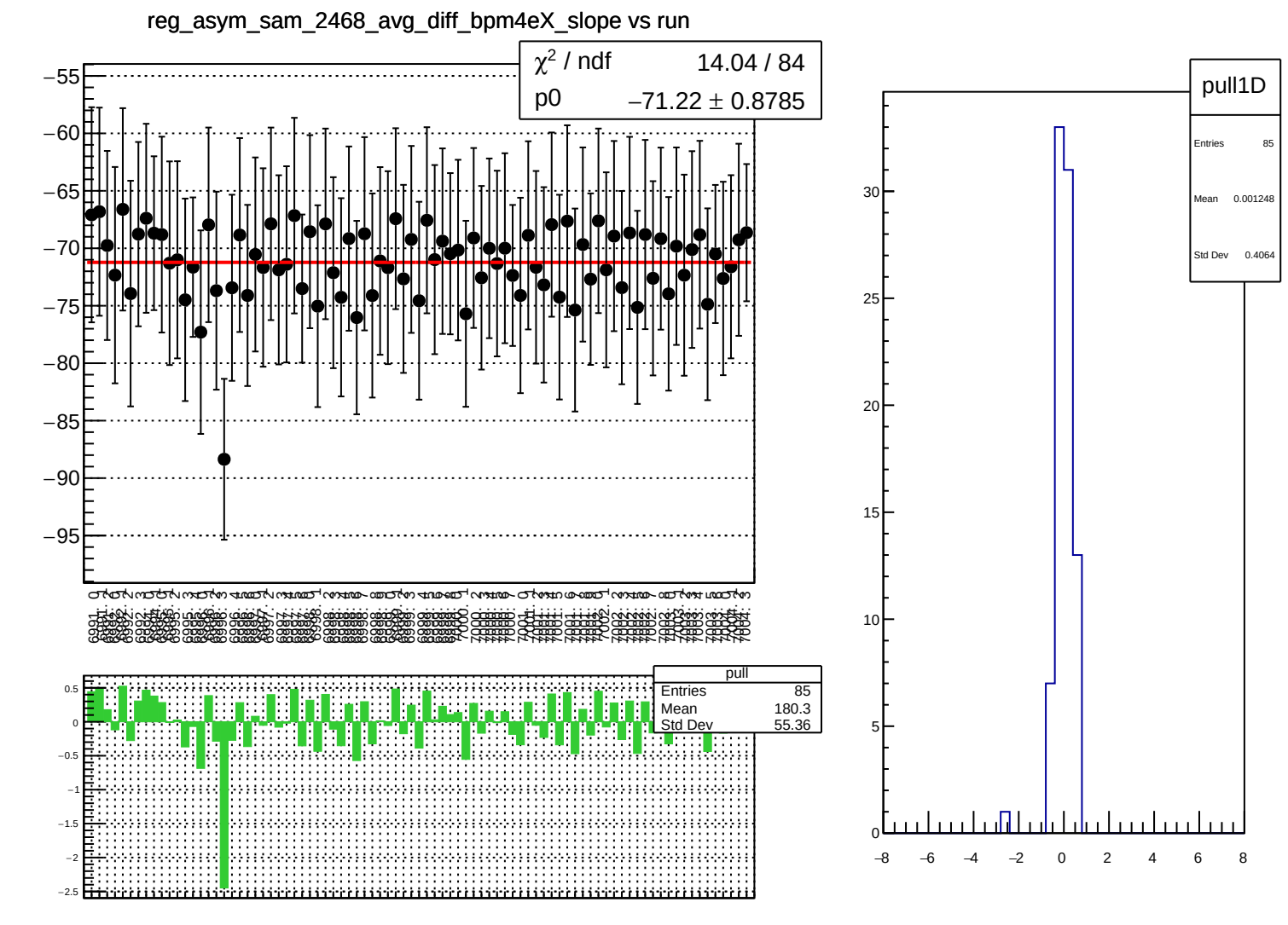

pull1D
Entries 85
Mean −0.005487
Std Dev 0.2442

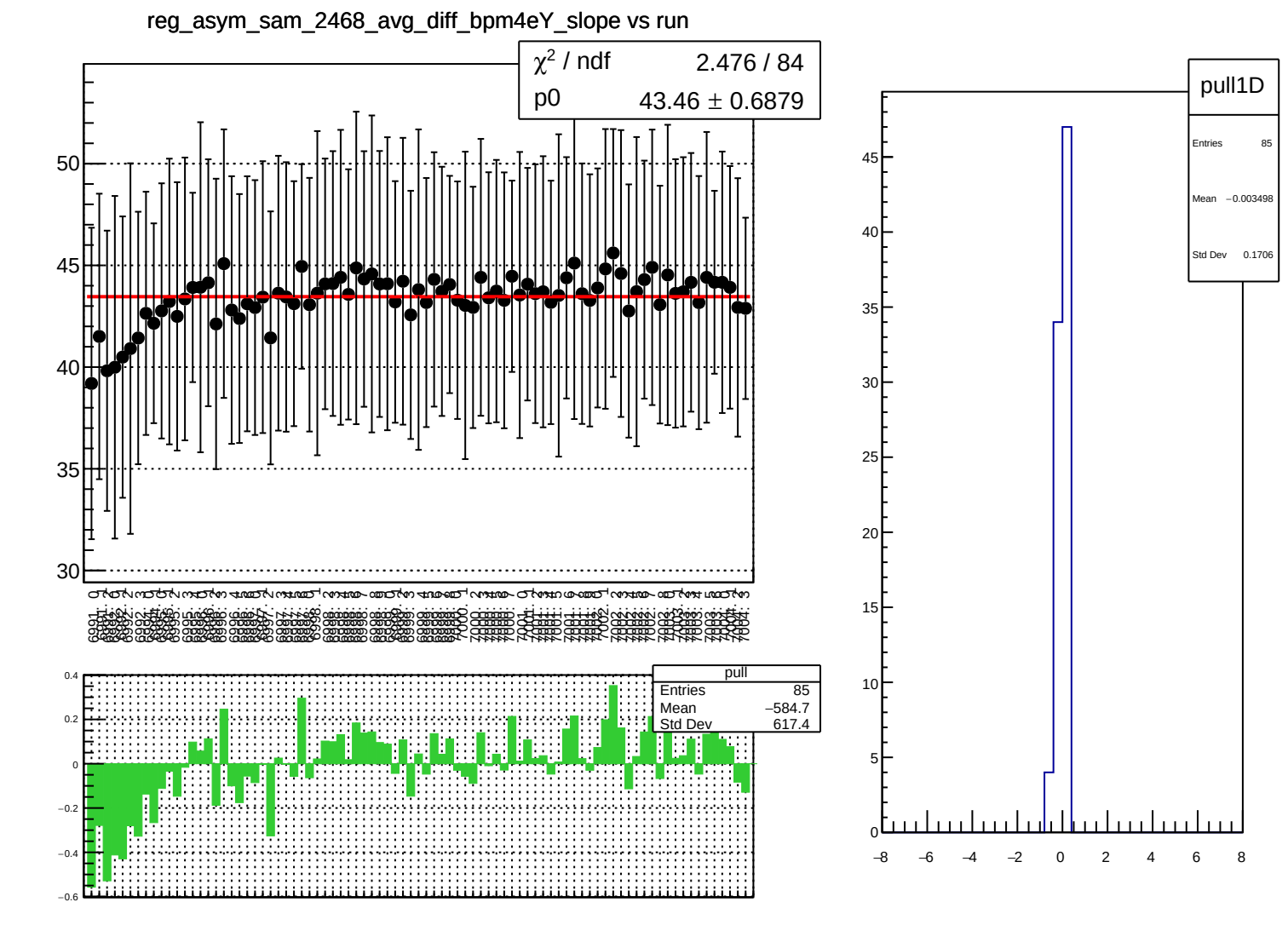

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 10.29 / 84
p0 0.3164 ± 0.0156
pull
Entries 85
Mean 245.3
Std Dev 75.15
pull1D
Entries 85
Mean −0.003475
Std Dev 0.348

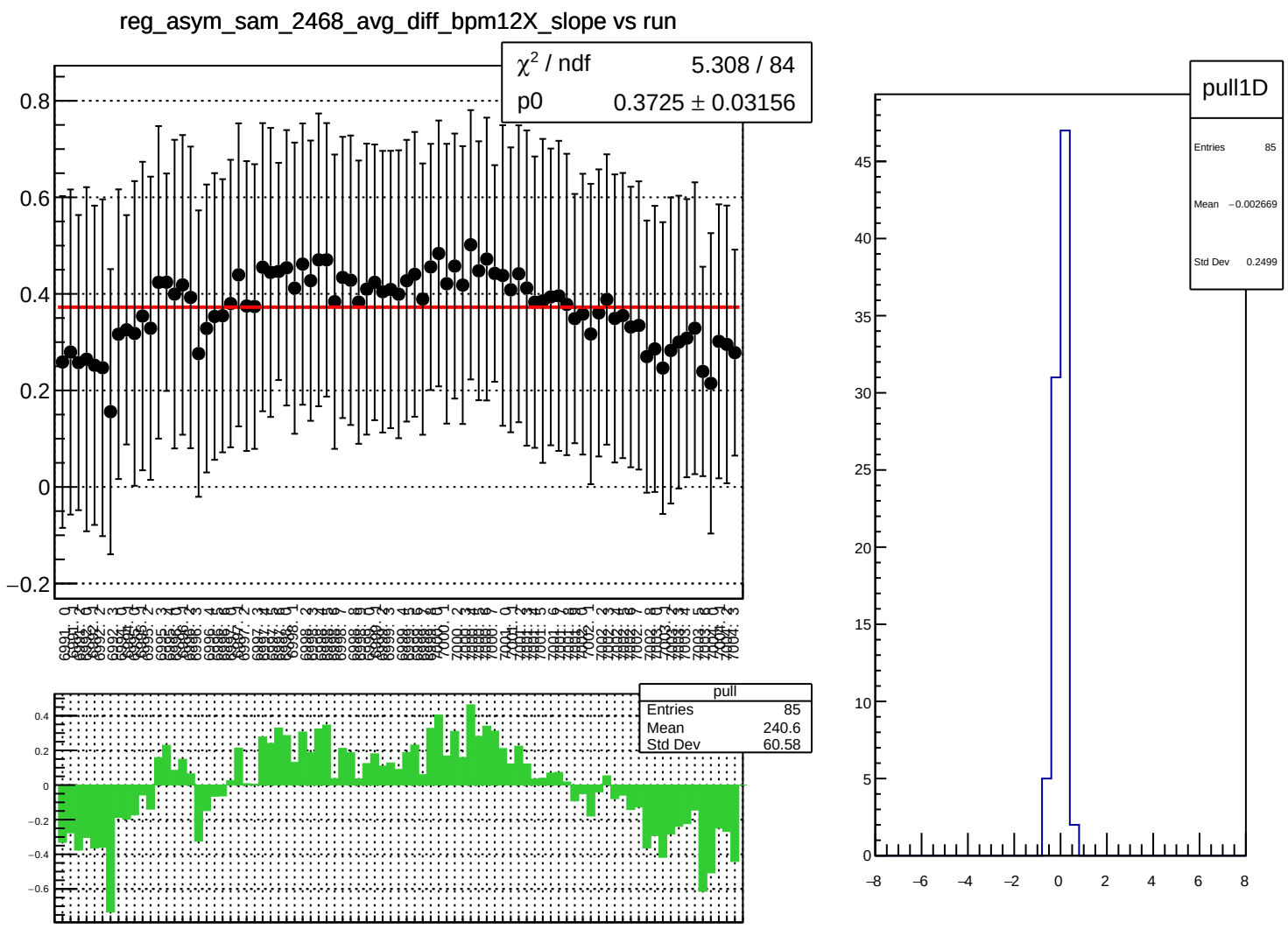

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 10.32 / 84
p0 −14.51 ± 0.9513
pull
Entries 85
Mean −129.2
Std Dev 148.5

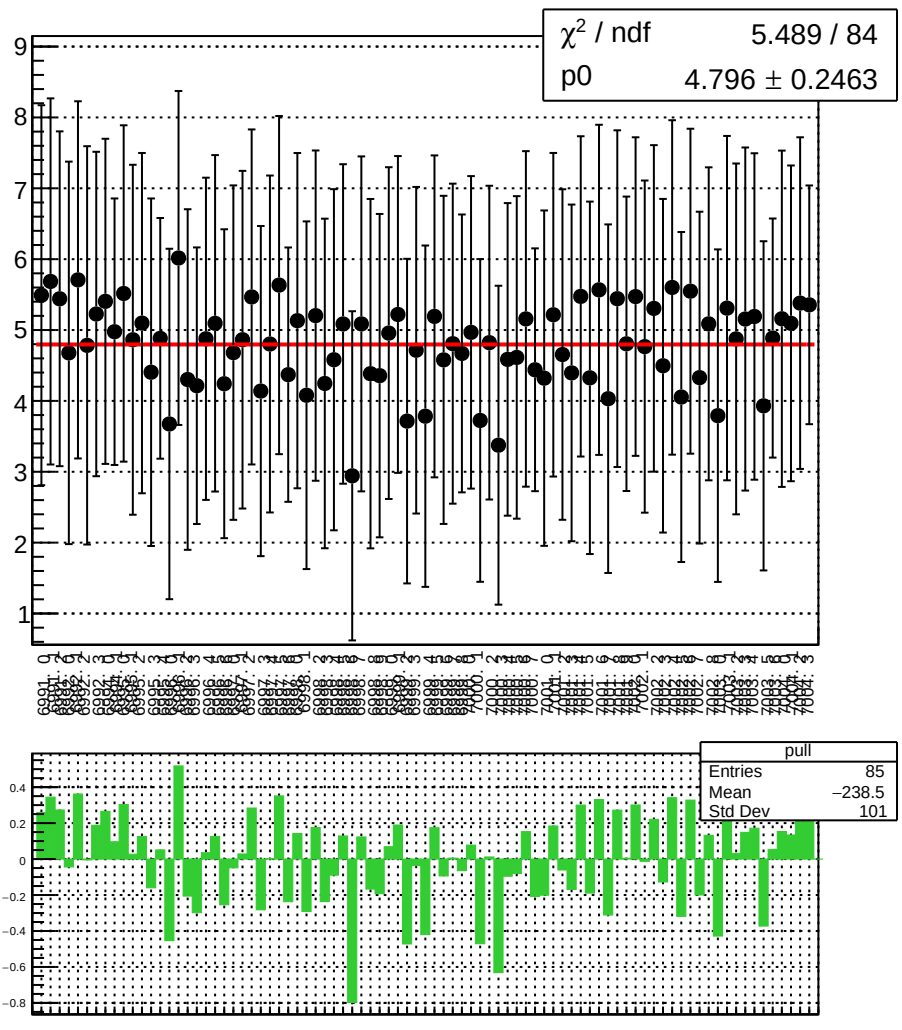

pull1D
Entries 85
Mean −0.005834
Std Dev 0.3484

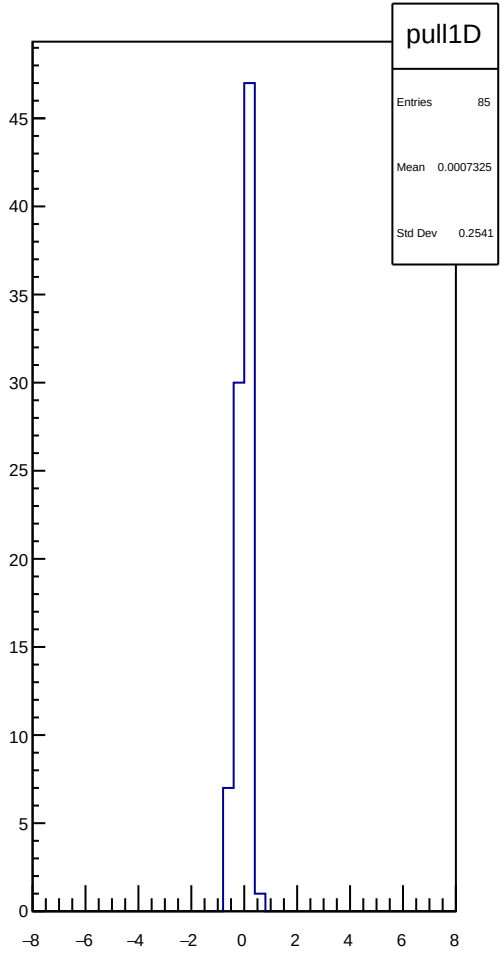

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.395 / 84
p0 −3.788 ± 0.6518
pull
Entries 85
Mean −744.3
Std Dev 770.2
pull1D
Entries 85
Mean 0.001025
Std Dev 0.1281

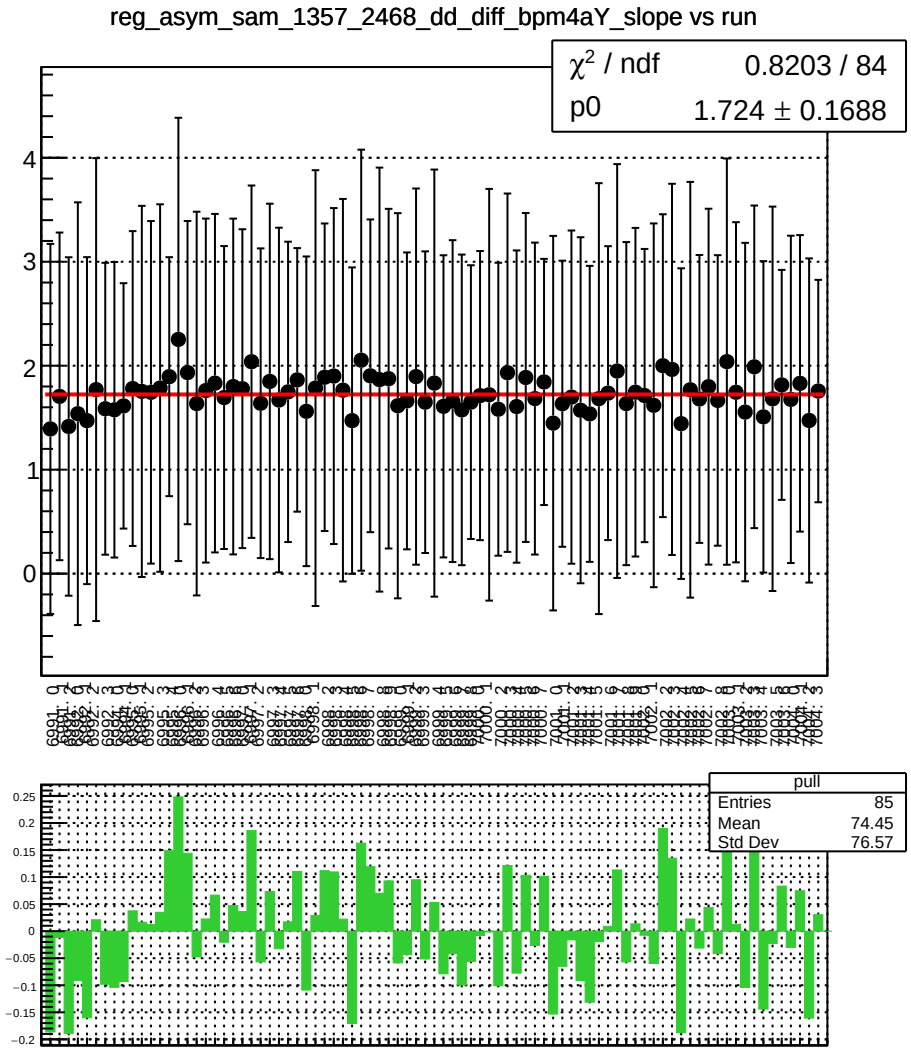

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.04 / 84
p0 −71.22 ± 0.8785
pull
Entries 85
Mean 180.3
Std Dev 55.36
pull1D
Entries 85
Mean 0.001248
Std Dev 0.4064

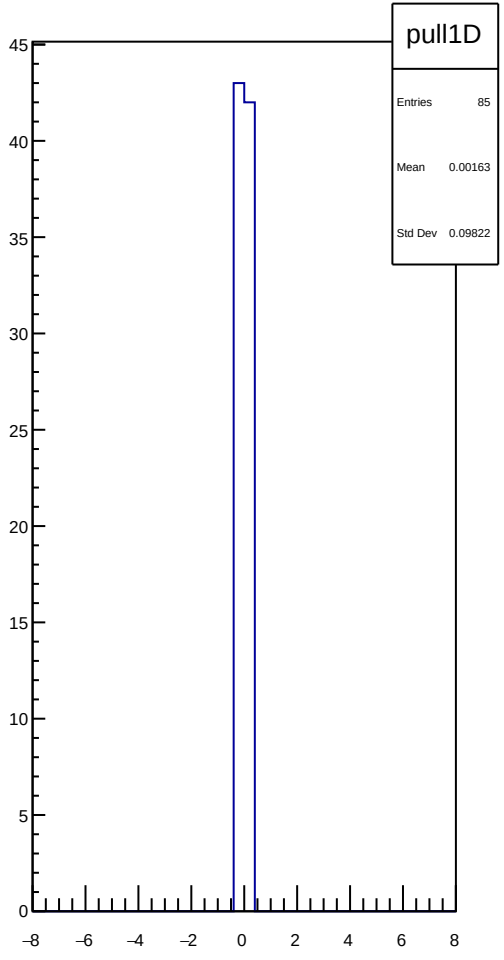

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.476 / 84
p0 43.46 ± 0.6879
pull
Entries 85
Mean −584.7
Std Dev 617.4
pull1D
Entries 85
Mean −0.003498
Std Dev 0.1706

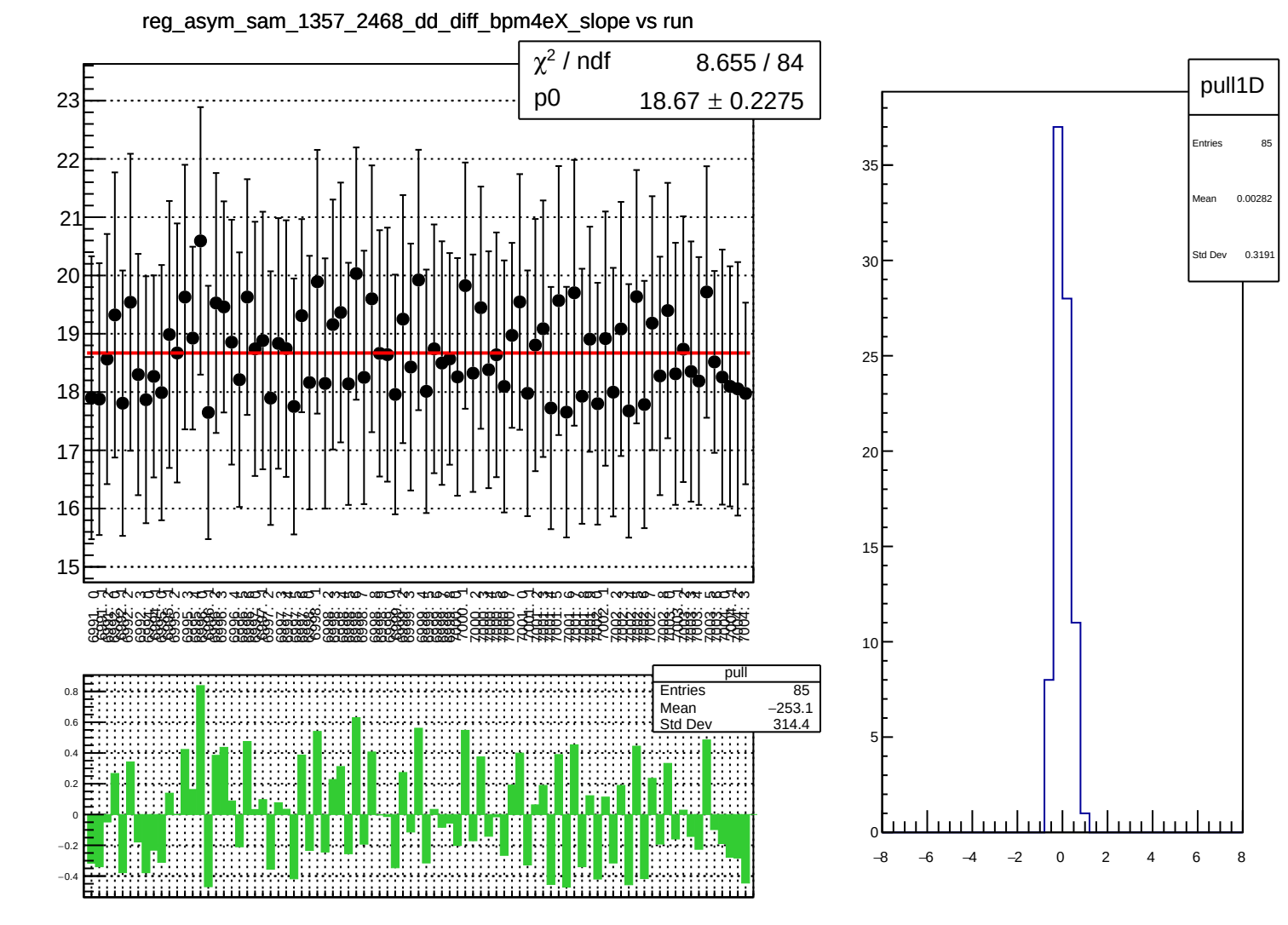

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 5.308 / 84
p0 0.3725 ± 0.03156
pull
Entries 85
Mean 240.6
Std Dev 60.58
pull1D
Entries 85
Mean −0.002669
Std Dev 0.2499

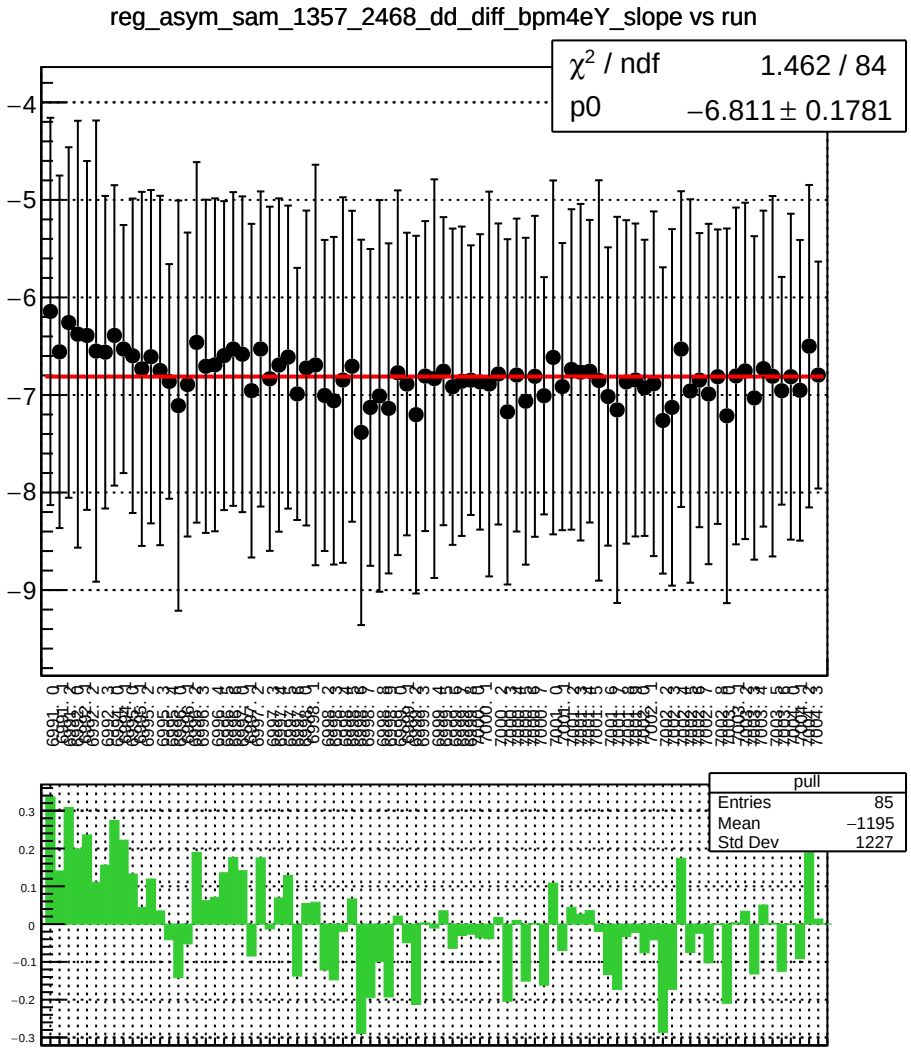

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 5.489 / 84
p0 4.796 ± 0.2463
pull
Entries 85
Mean −238.5
Std Dev 101

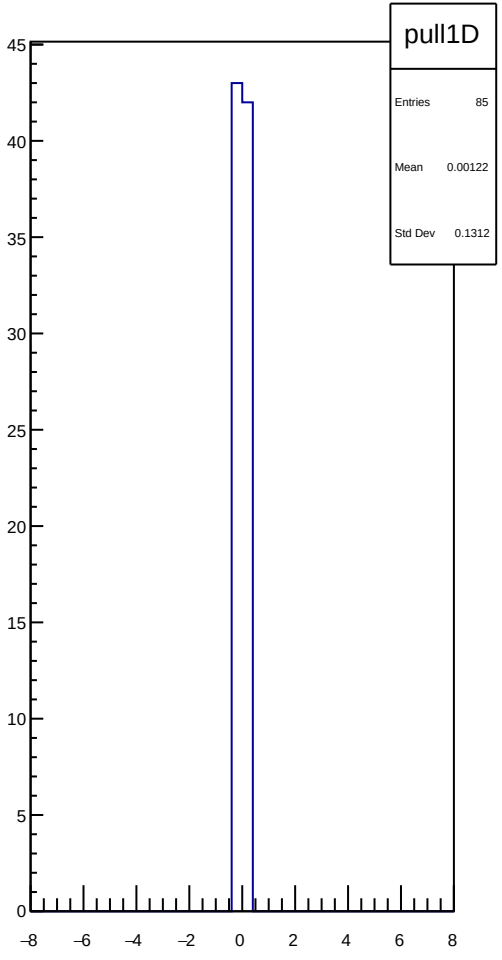

pull1D
Entries 85
Mean 0.0007325
Std Dev 0.2541

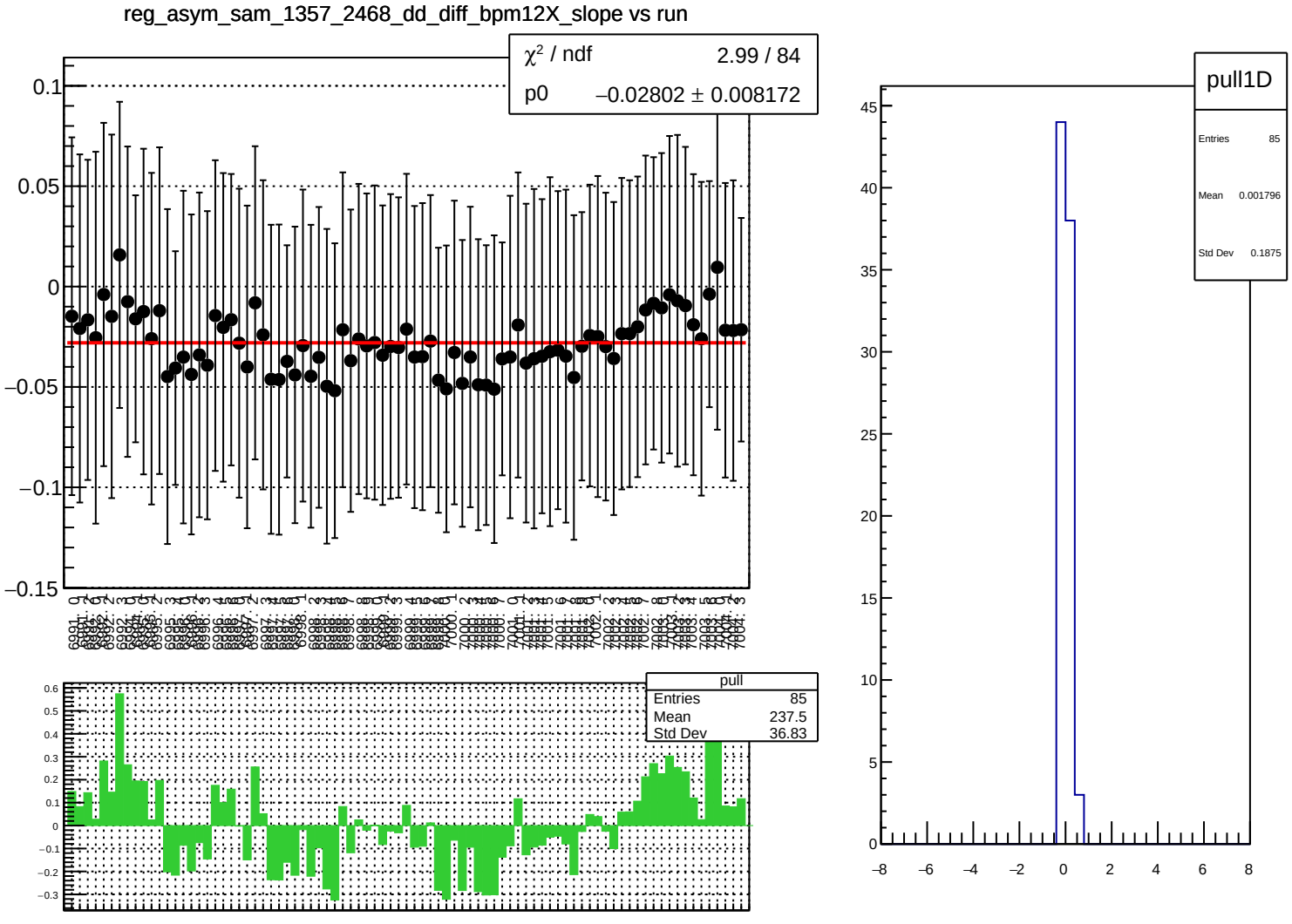

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.8203 / 84
p0 1.724 ± 0.1688
pull
Entries 85
Mean 74.45
Std Dev 76.57

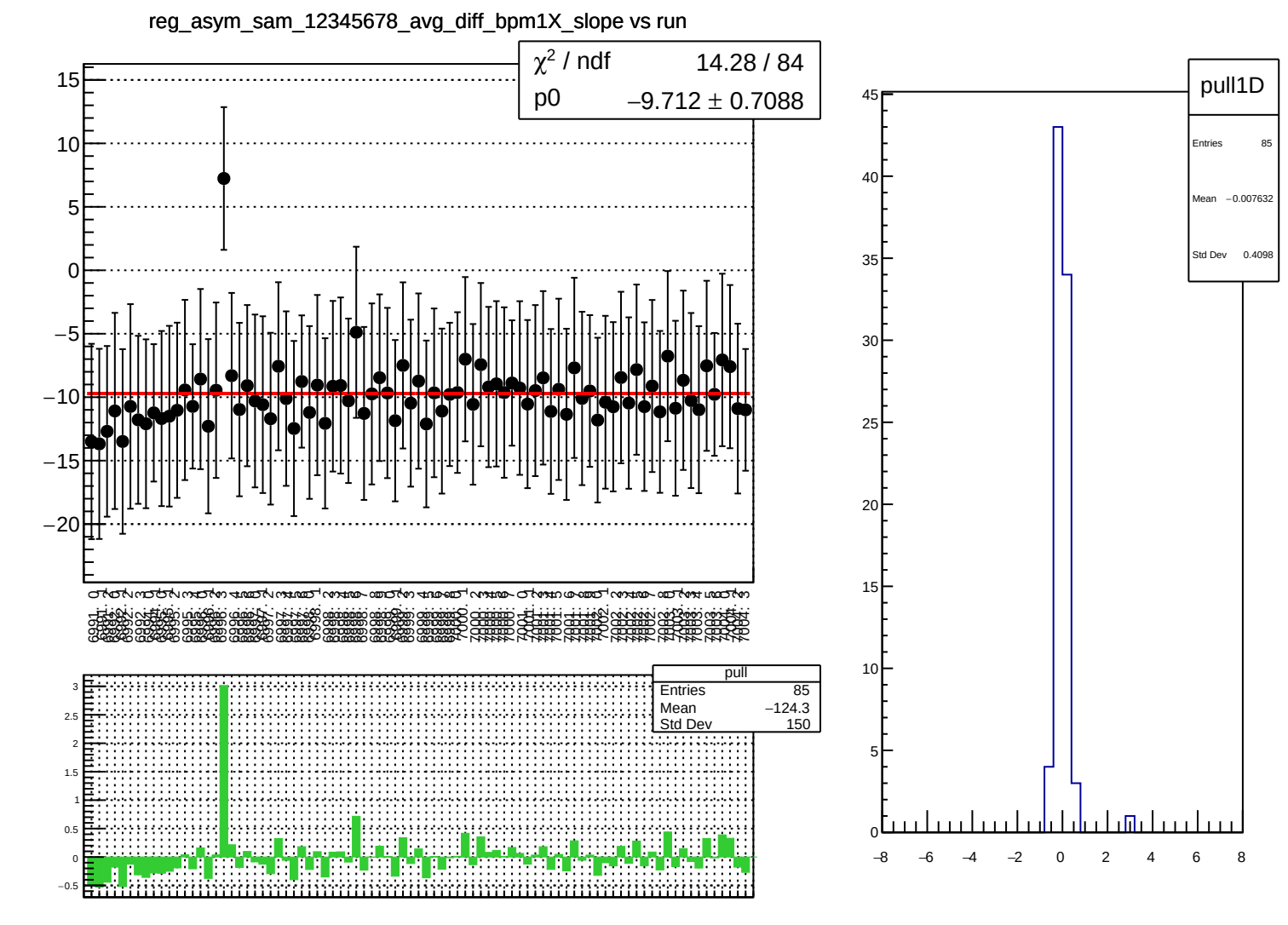

pull1D
Entries 85
Mean 0.00163
Std Dev 0.09822

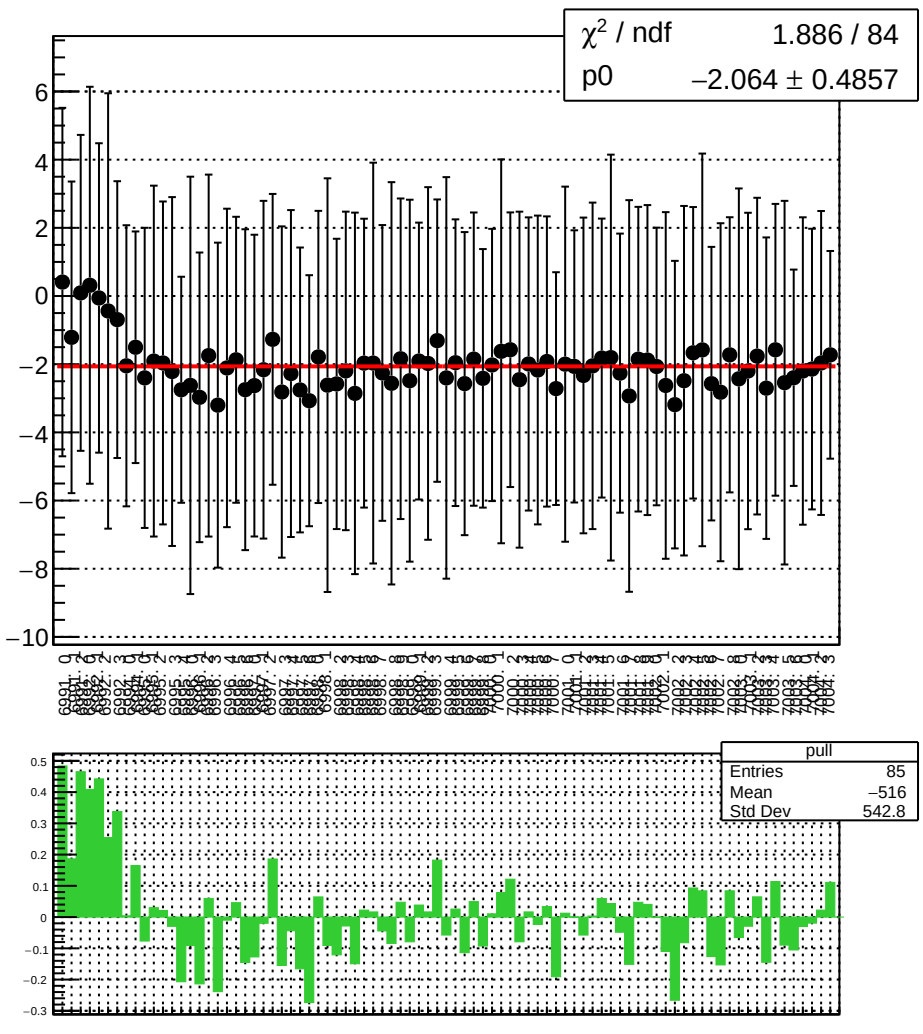

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 8.655 / 84
p0 18.67 ± 0.2275
pull
Entries 85
Mean −253.1
Std Dev 314.4
pull1D
Entries 85
Mean 0.00282
Std Dev 0.3191

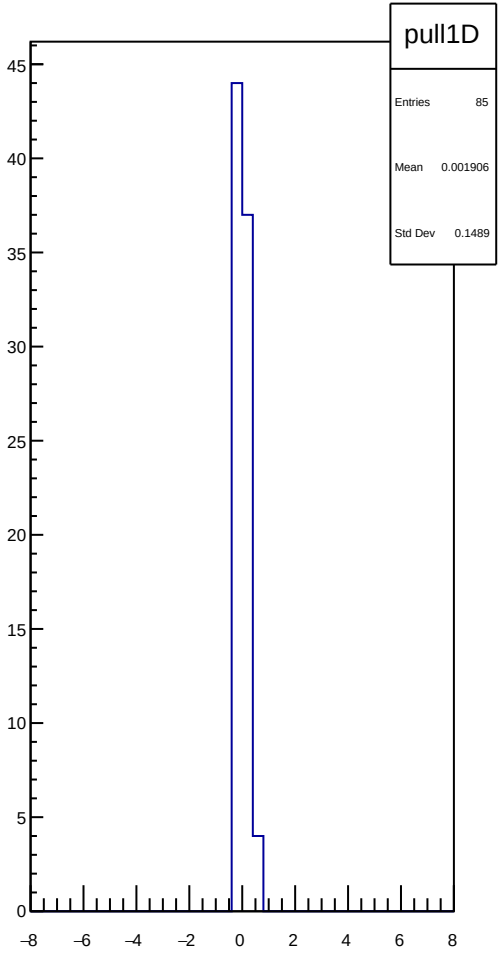

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.462 / 84
p0 −6.811 ± 0.1781
pull
Entries 85
Mean −1195
Std Dev 1227

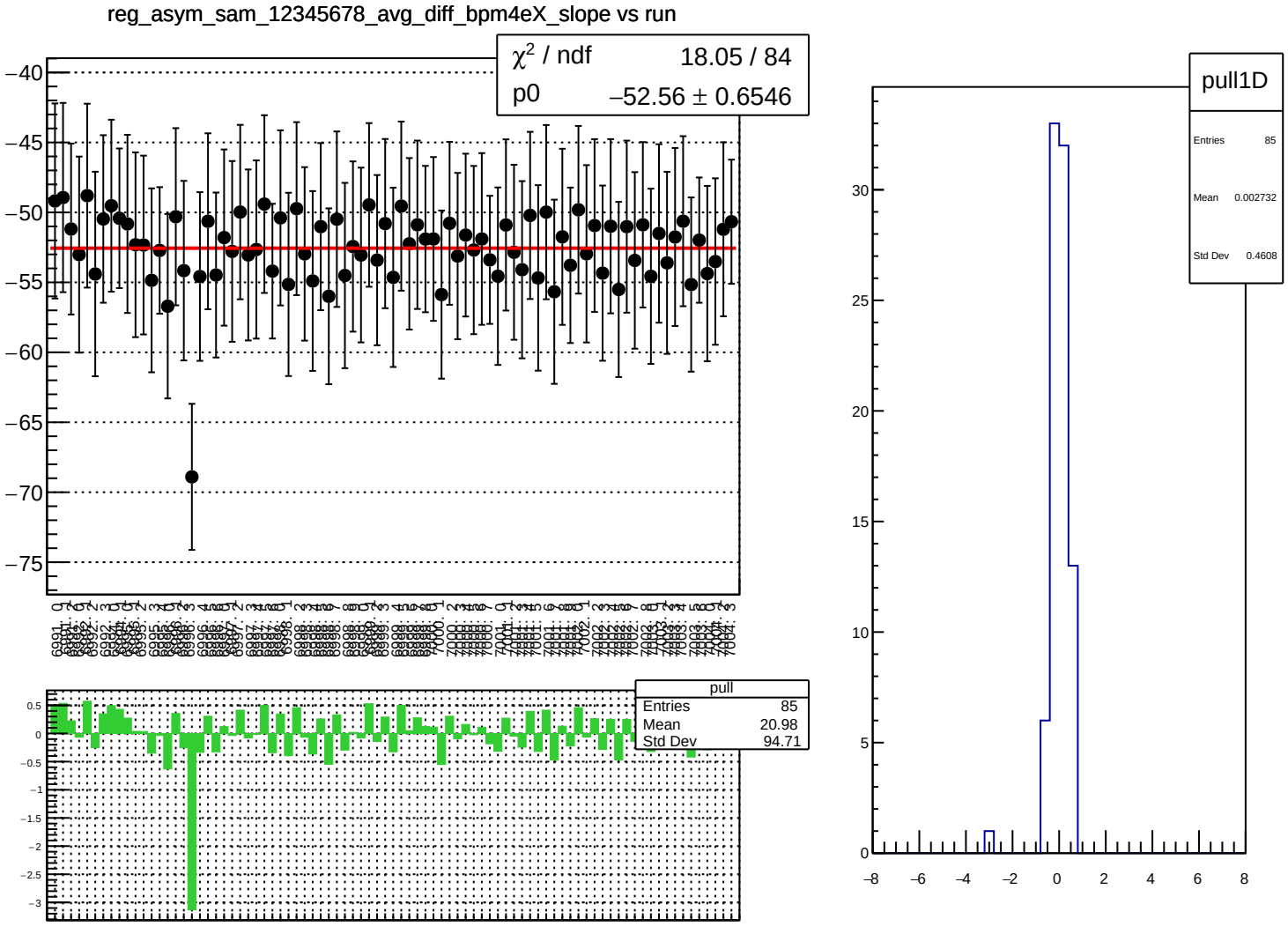

pull1D
Entries 85
Mean 0.00122
Std Dev 0.1312

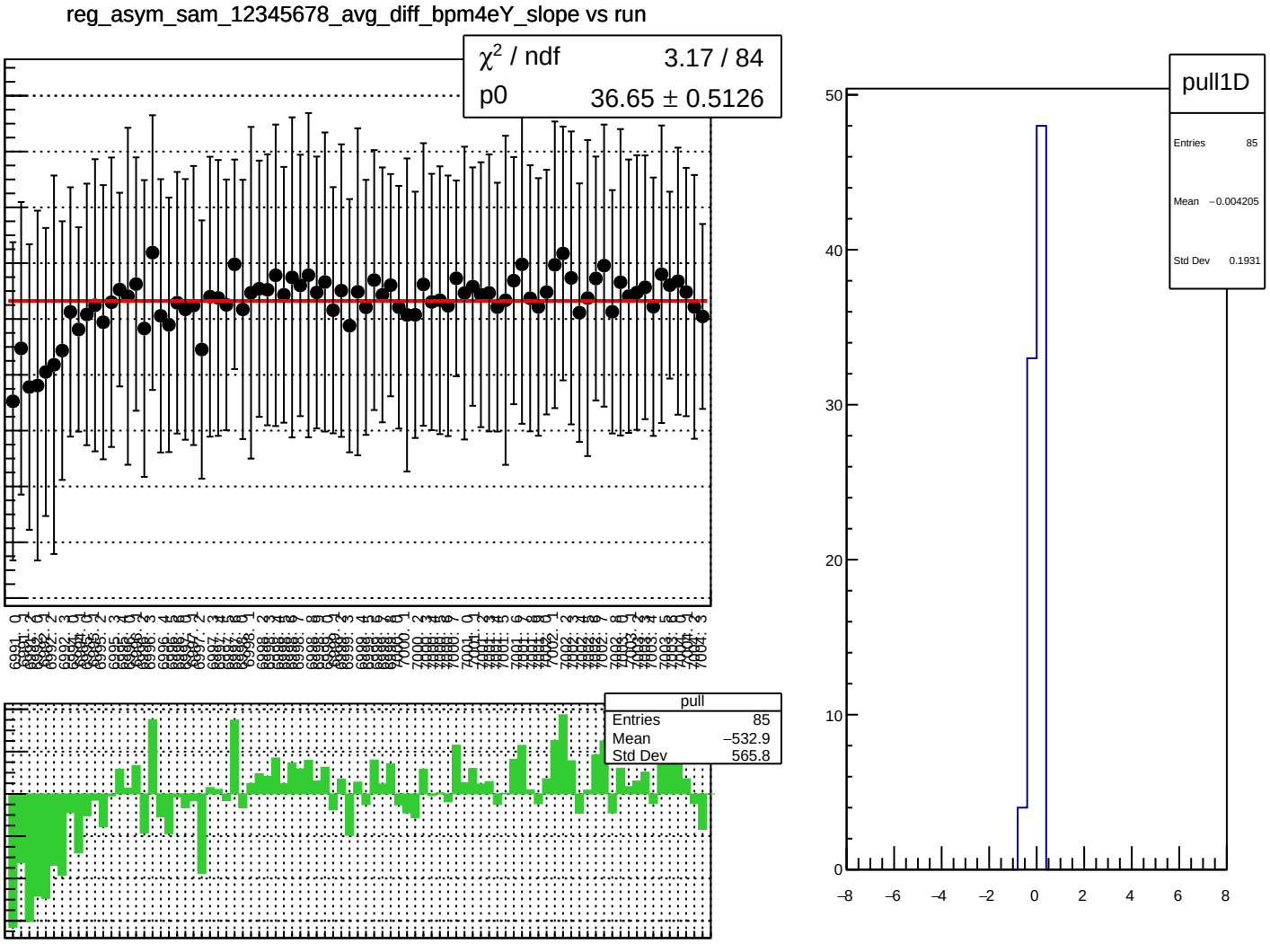

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 2.99 / 84
p0 −0.02802 ± 0.008172
0.1
0.05
0
−0.05
−0.1
−0.15
pull
Entries 85
Mean 237.5
Std Dev 36.83
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 85
Mean 0.001796
Std Dev 0.1875
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

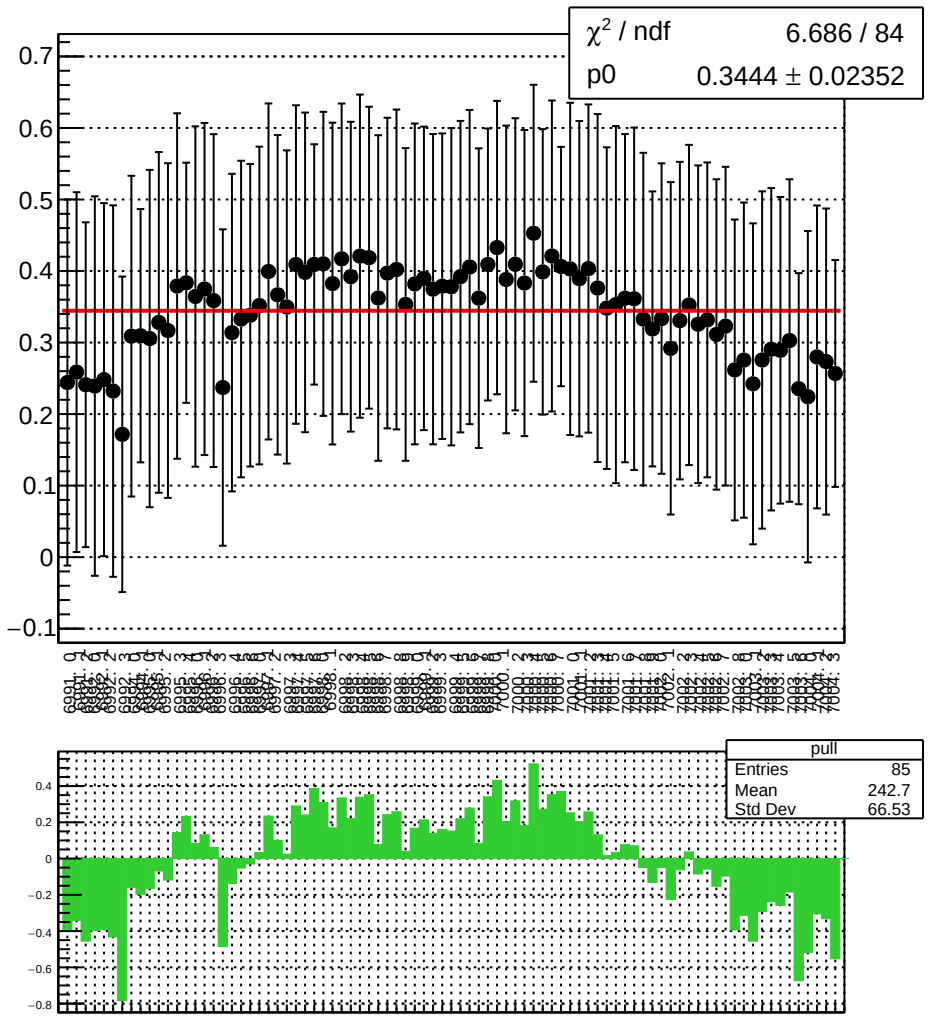

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 14.28 / 84
p0 −9.712 ± 0.7088
pull
Entries 85
Mean −124.3
Std Dev 150
pull1D
Entries 85
Mean −0.007632
Std Dev 0.4098

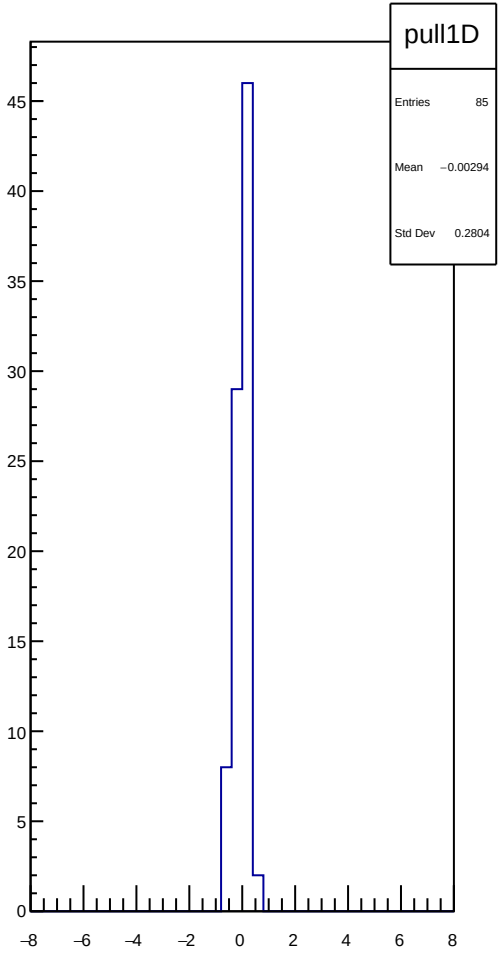

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.886 / 84
p0 −2.064 ± 0.4857
pull
Entries 85
Mean −516
Std Dev 542.8

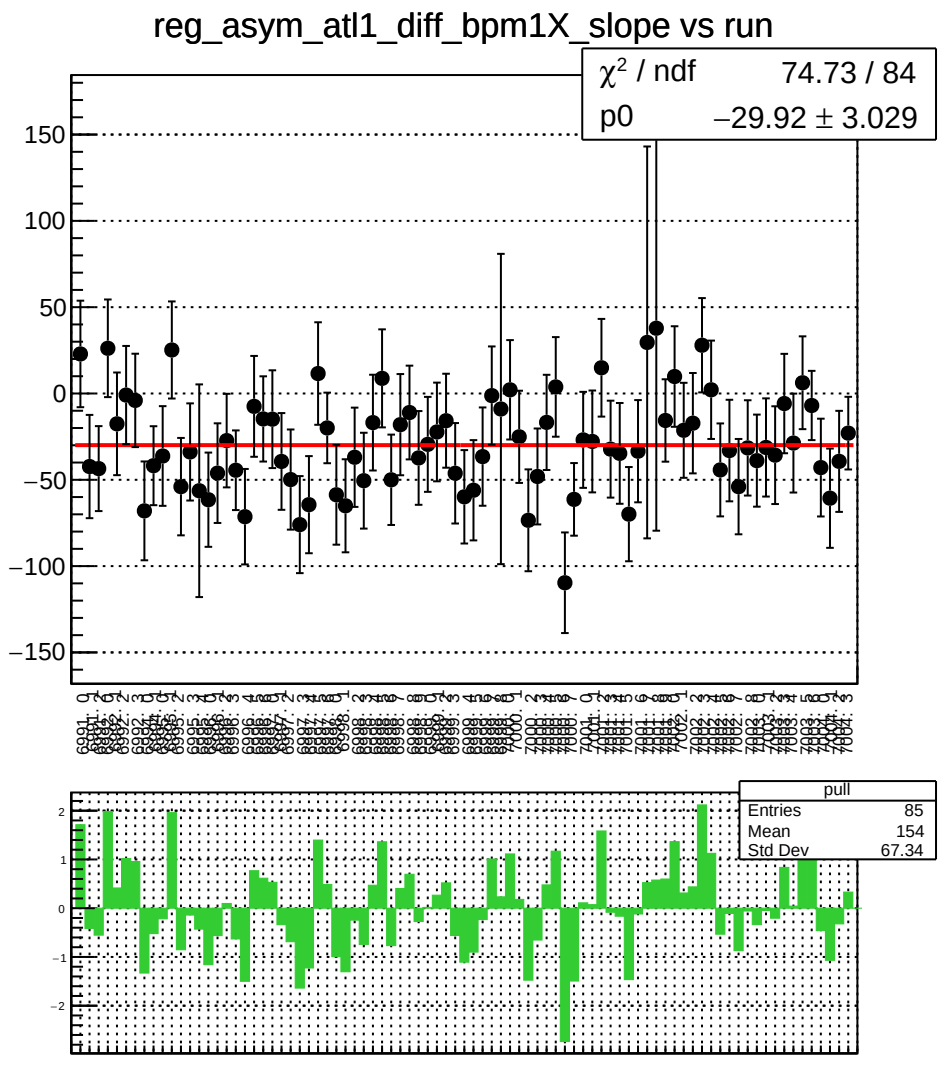

pull1D
Entries 85
Mean 0.001906
Std Dev 0.1489

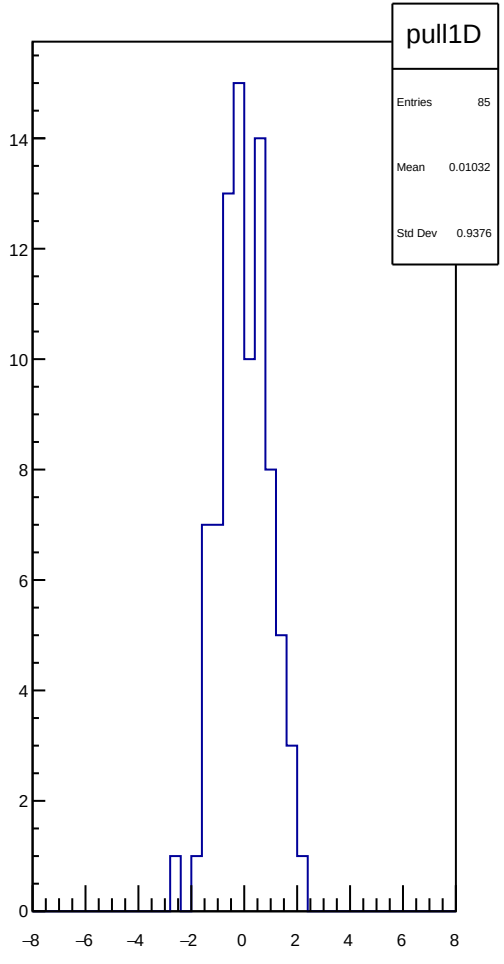

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 18.05 / 84
p0 −52.56 ± 0.6546
pull
Entries 85
Mean 20.98
Std Dev 94.71
pull1D
Entries 85
Mean 0.002732
Std Dev 0.4608

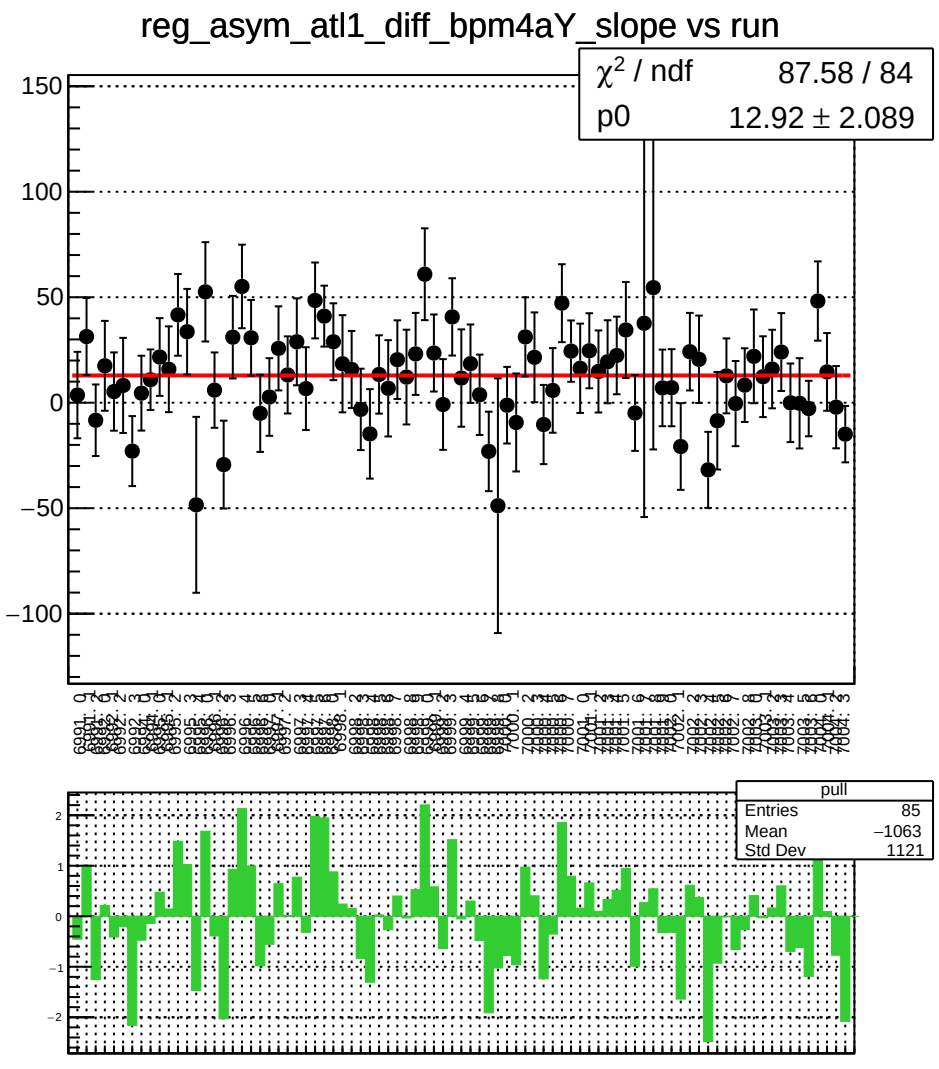

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.17 / 84
p0 36.65 ± 0.5126
pull
Entries 85
Mean −532.9
Std Dev 565.8
pull1D
Entries 85
Mean −0.004205
Std Dev 0.1931

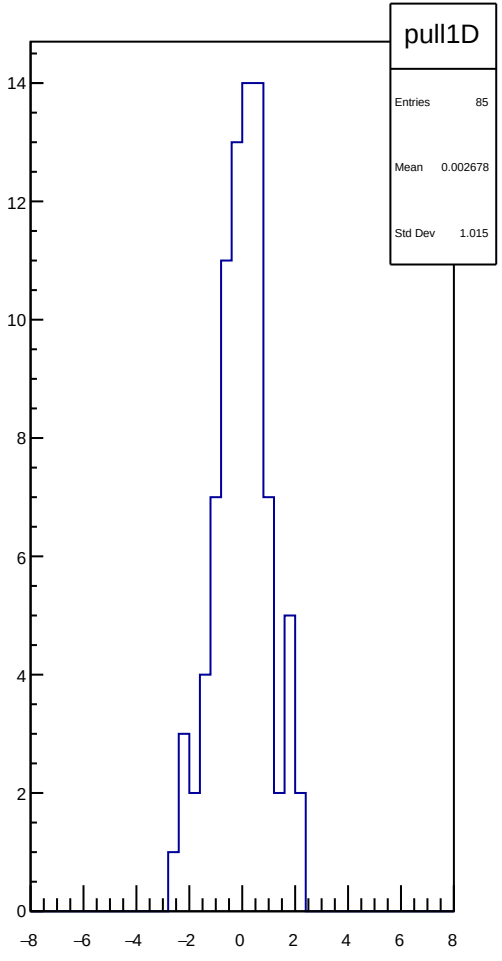

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 6.686 / 84
p0 0.3444 ± 0.02352
pull
Entries 85
Mean 242.7
Std Dev 66.53

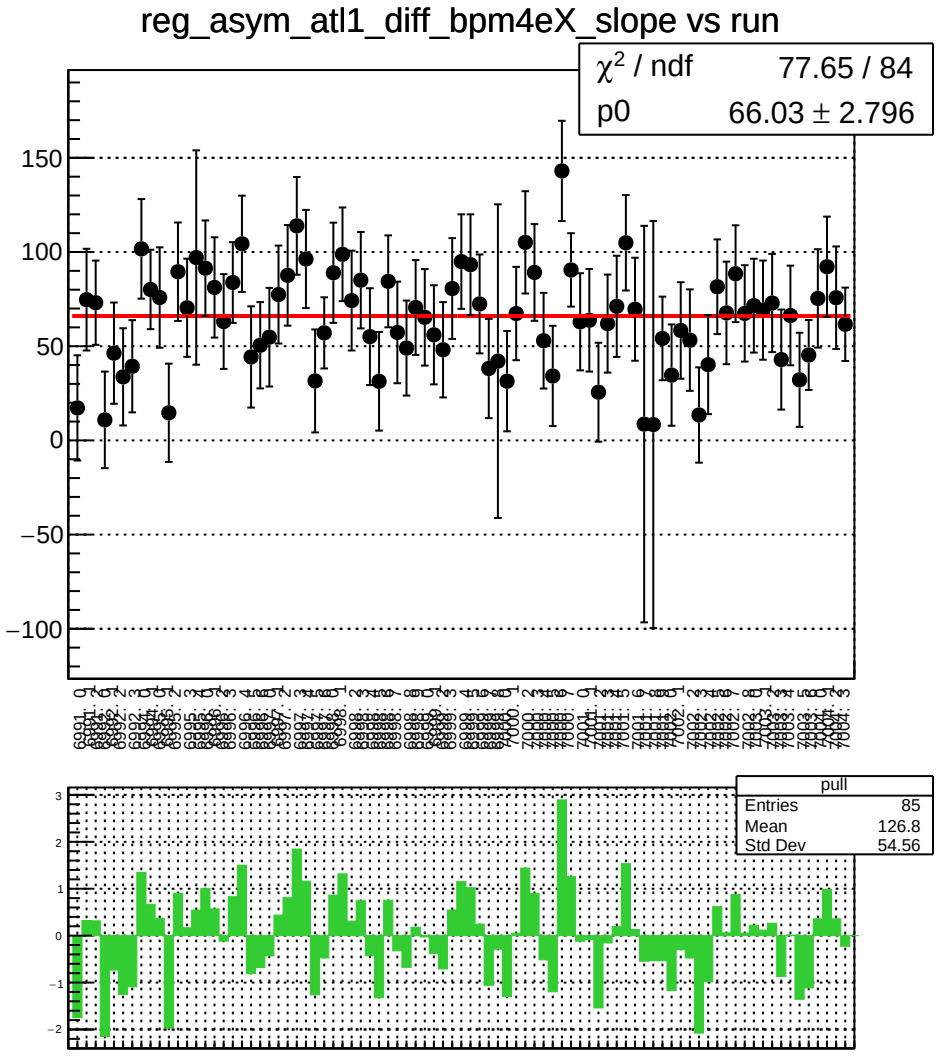

pull1D
Entries 85
Mean −0.00294
Std Dev 0.2804

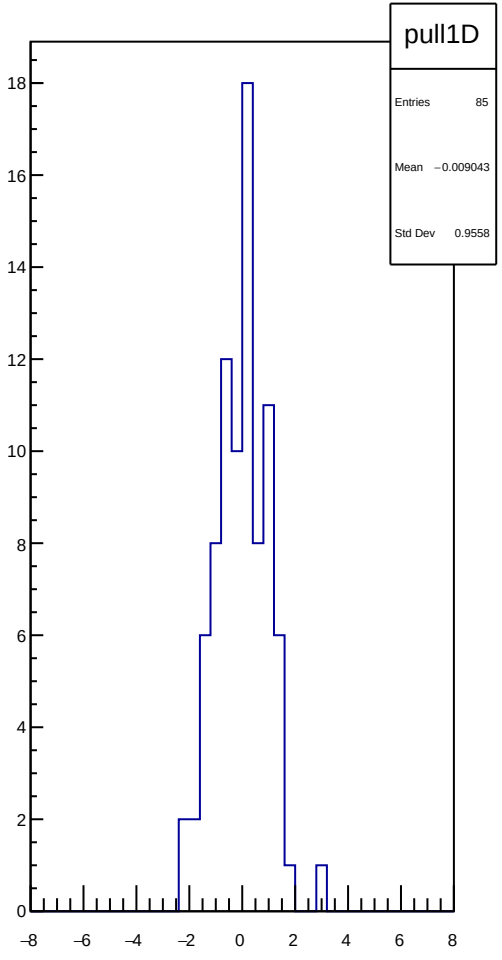

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 74.73 / 84
p0 −29.92 ± 3.029
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 154
Std Dev 67.34
2
1
0
−1
−2

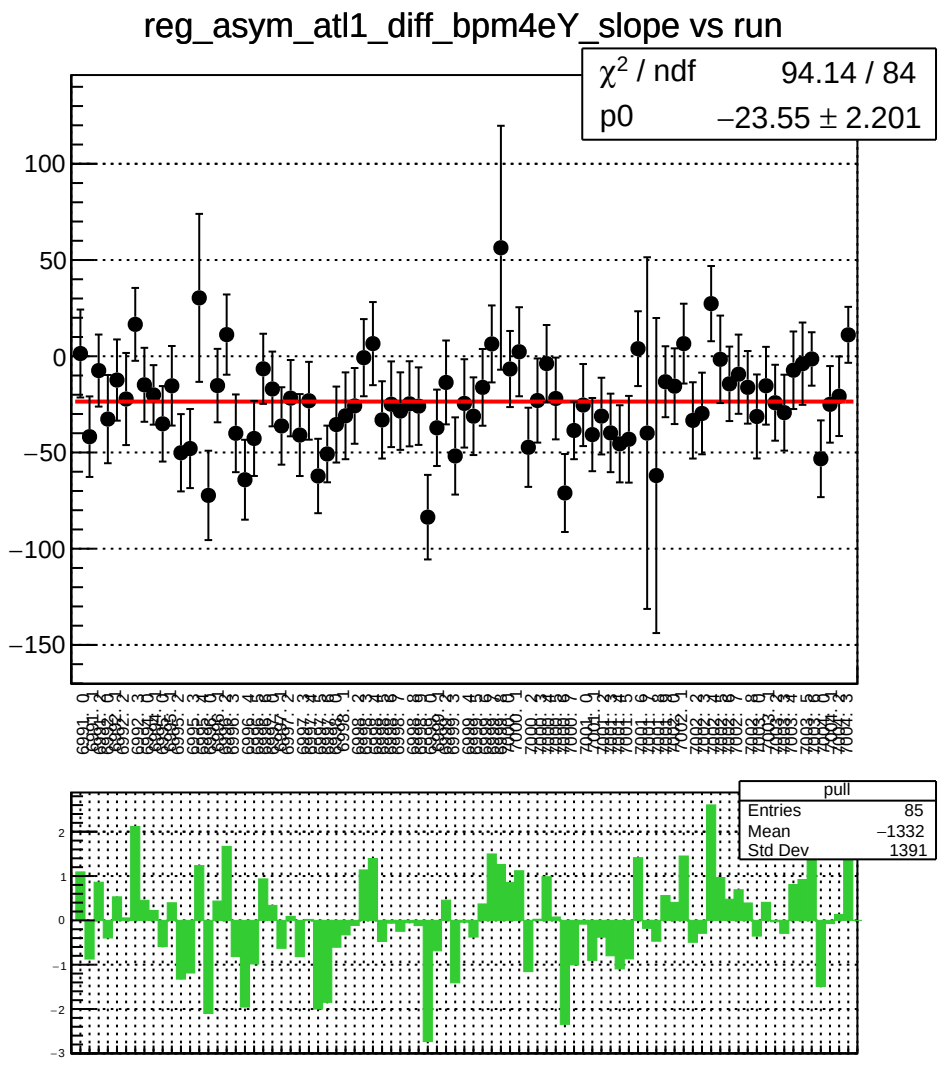

pull1D
Entries 85
Mean 0.01032
Std Dev 0.9376
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

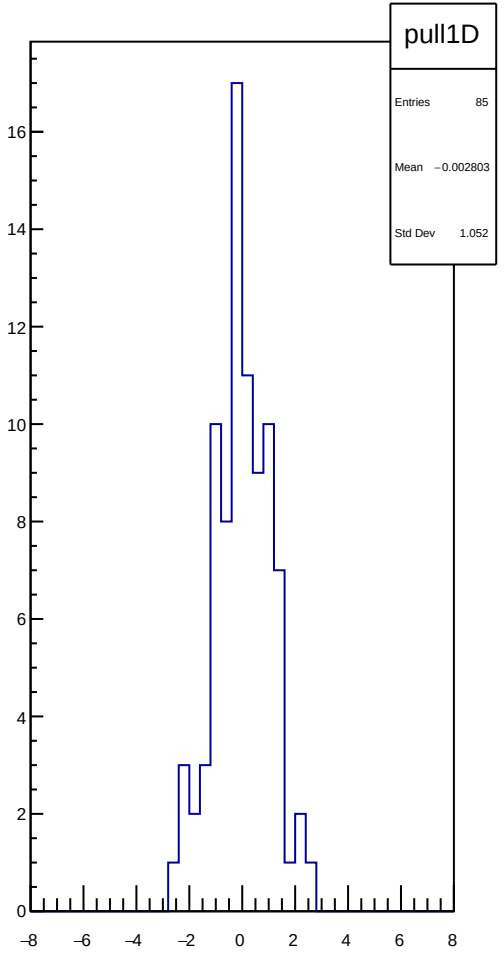

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 87.58 / 84
p0 12.92 ± 2.089
150
100
50
0
−50
−100
pull
Entries 85
Mean −1063
Std Dev 1121
2
1
0
−1
−2

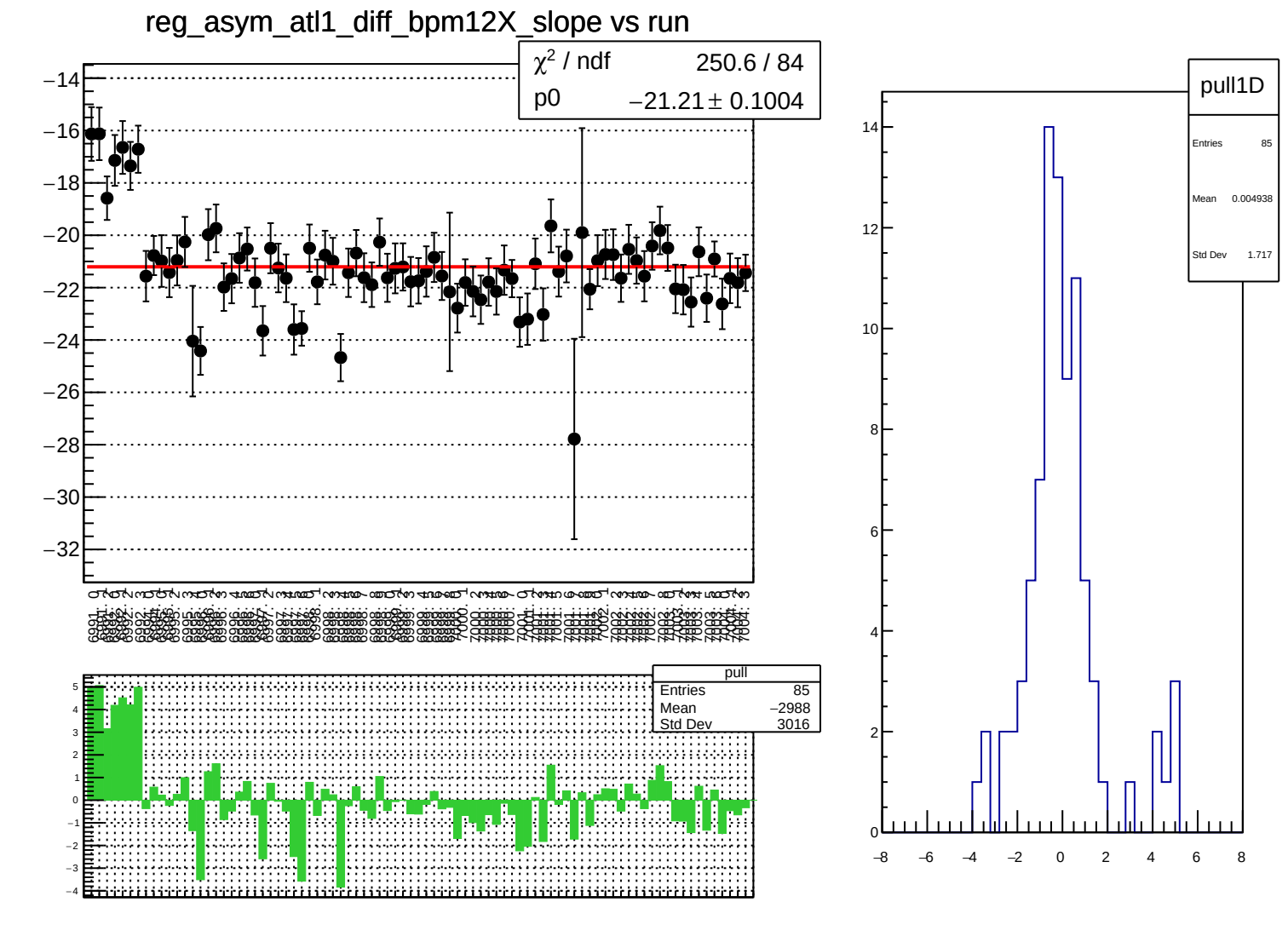

pull1D
Entries 85
Mean 0.002678
Std Dev 1.015
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

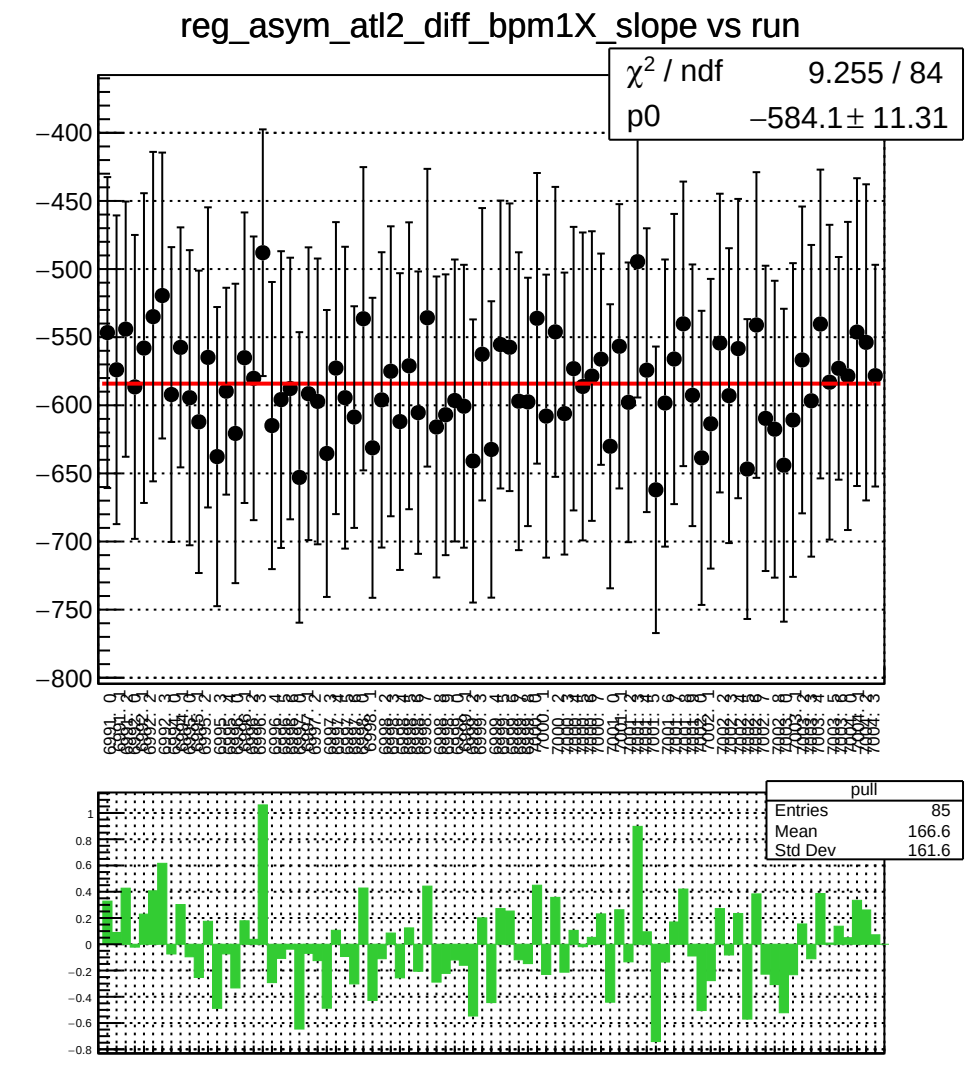

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 77.65 / 84
p0 66.03 ± 2.796
150
100
50
0
−50
−100
pull
Entries 85
Mean 126.8
Std Dev 54.56
3
2
1
0
−1
−2

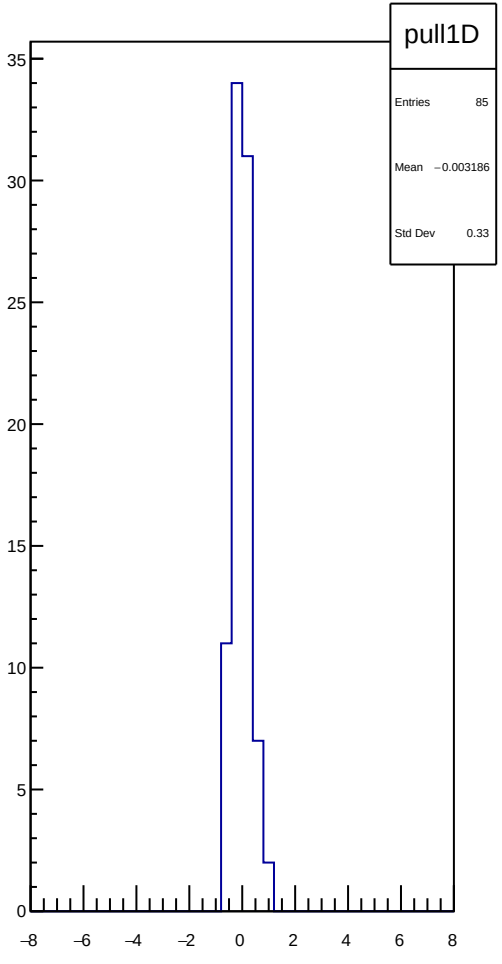

pull1D
Entries 85
Mean −0.009043
Std Dev 0.9558
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

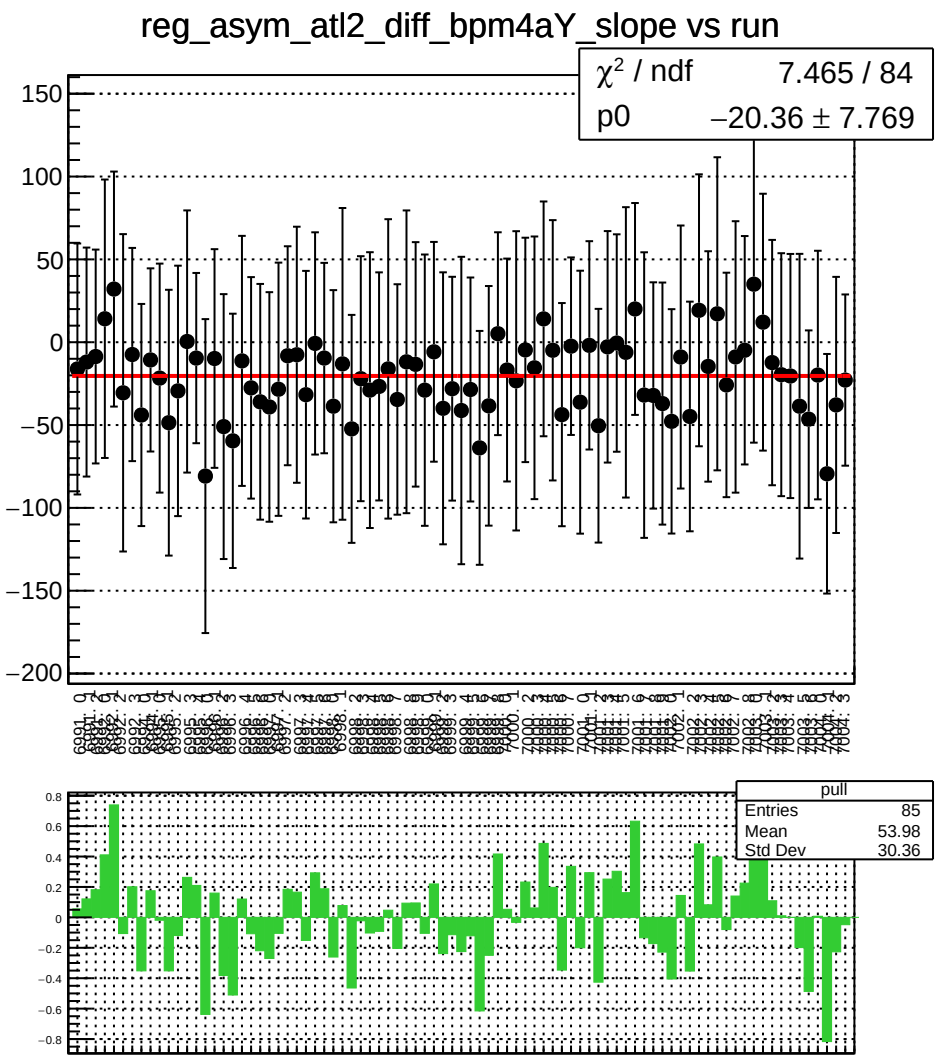

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 94.14 / 84
p0 −23.55 ± 2.201
pull
Entries 85
Mean −1332
Std Dev 1391

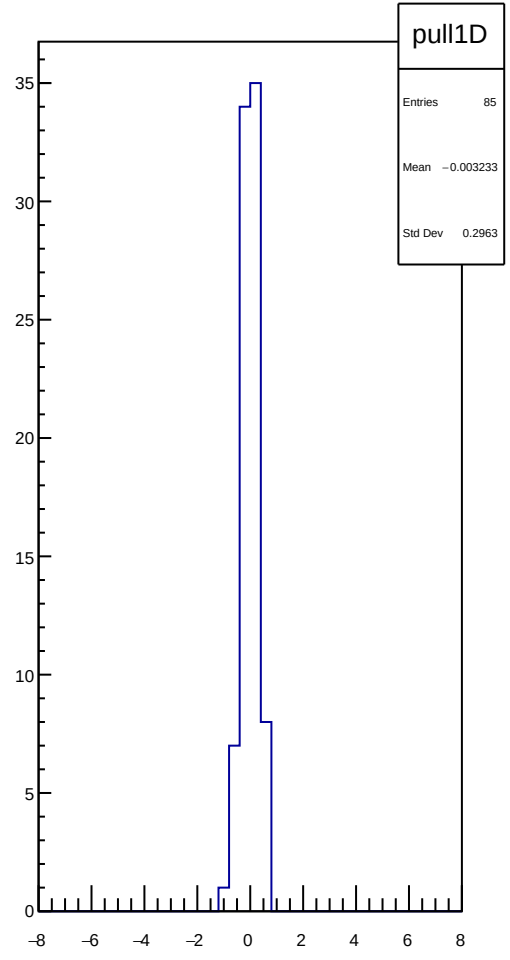

pull1D
Entries 85
Mean −0.002803
Std Dev 1.052

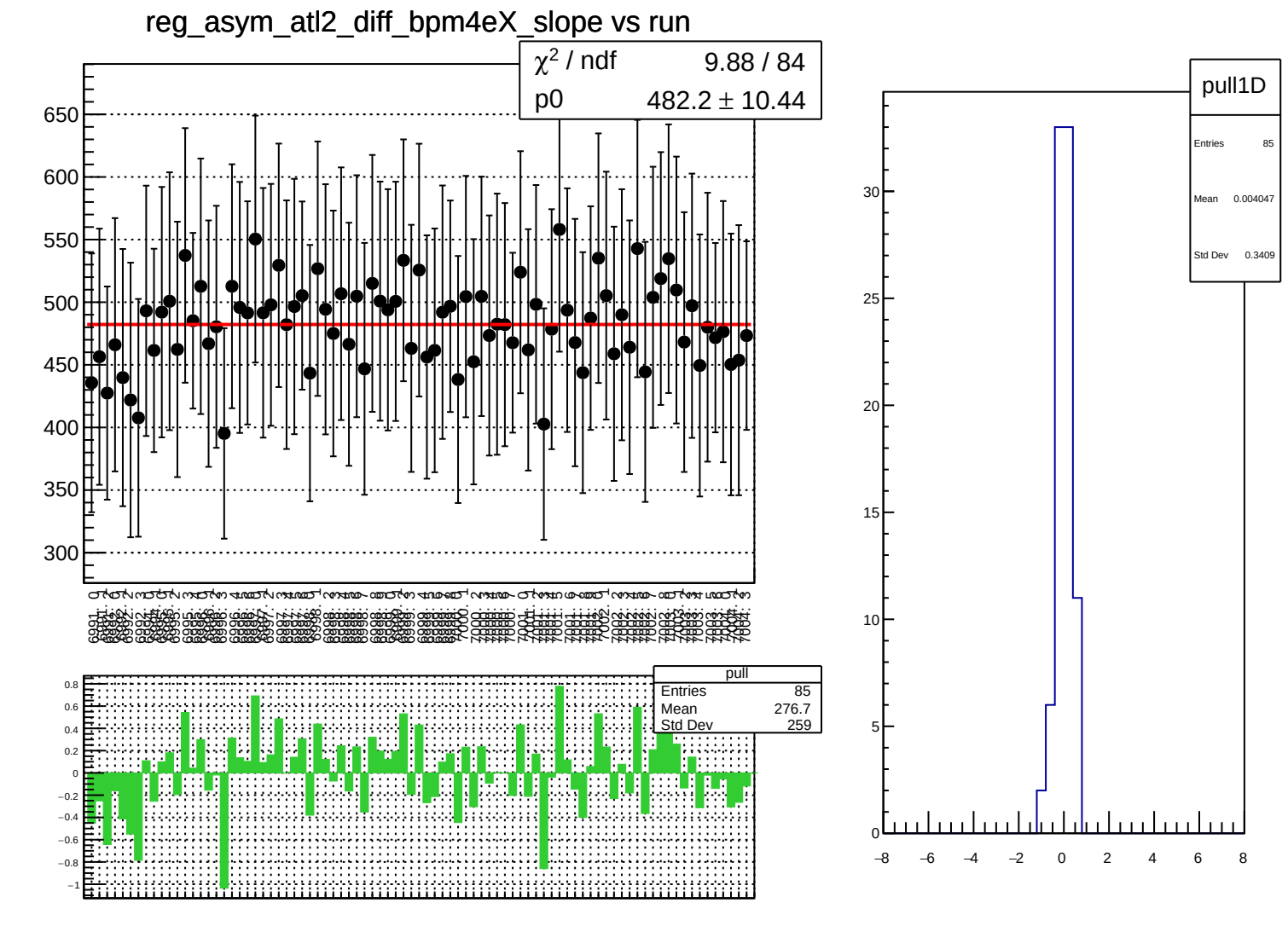

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 250.6 / 84
p0 −21.21 ± 0.1004
pull
Entries 85
Mean −2988
Std Dev 3016
pull1D
Entries 85
Mean 0.004938
Std Dev 1.717

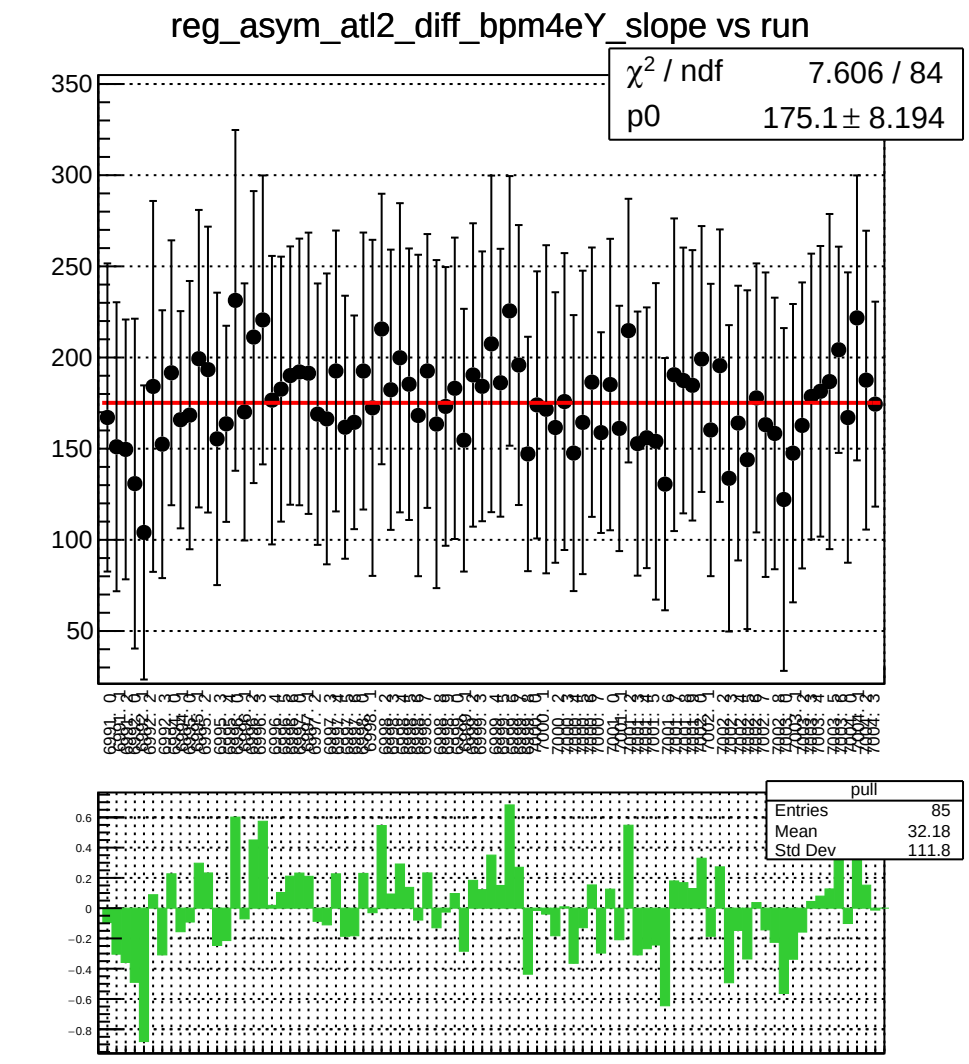

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 9.255 / 84
p0 −584.1 ± 11.31
pull
Entries 85
Mean 166.6
Std Dev 161.6

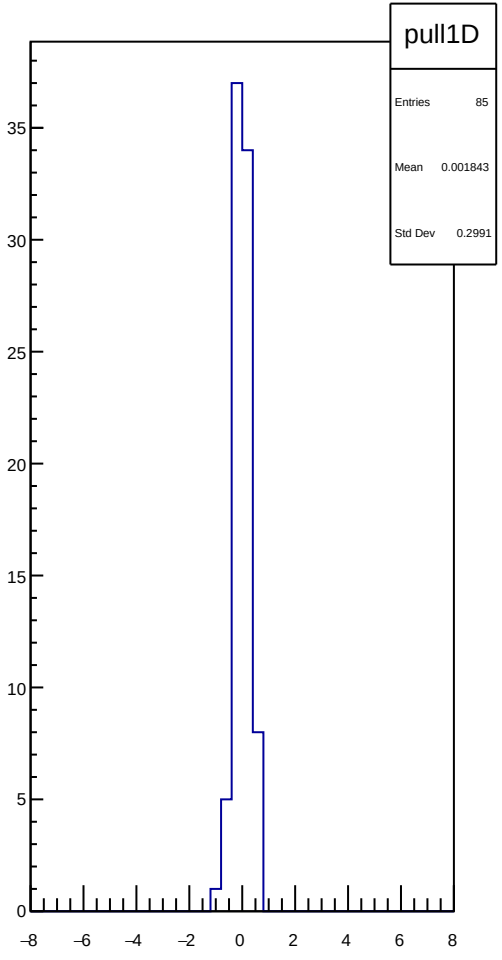

pull1D
Entries 85
Mean −0.003186
Std Dev 0.33

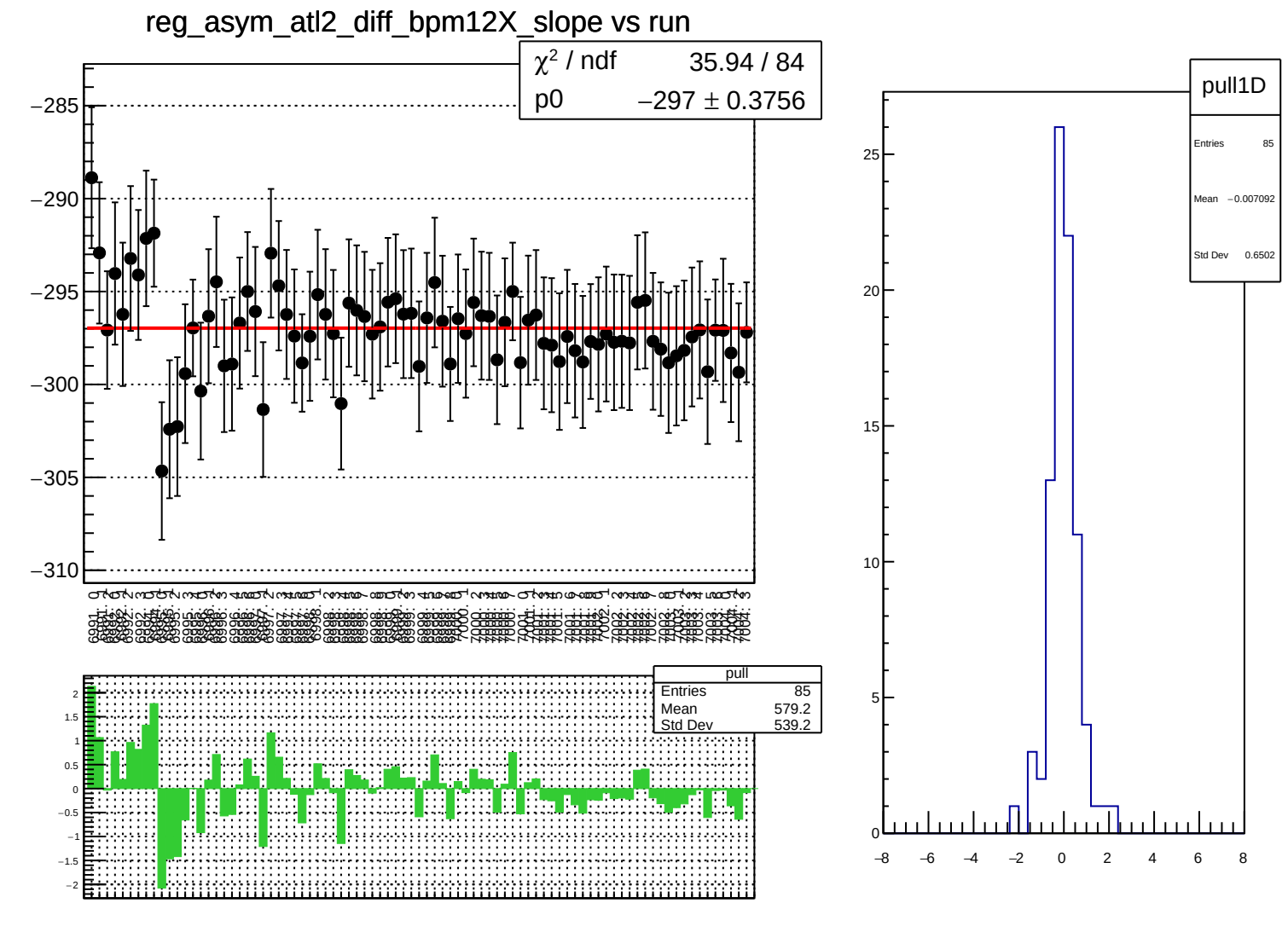

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 7.465 / 84
p0 −20.36 ± 7.769
pull
Entries 85
Mean 53.98
Std Dev 30.36

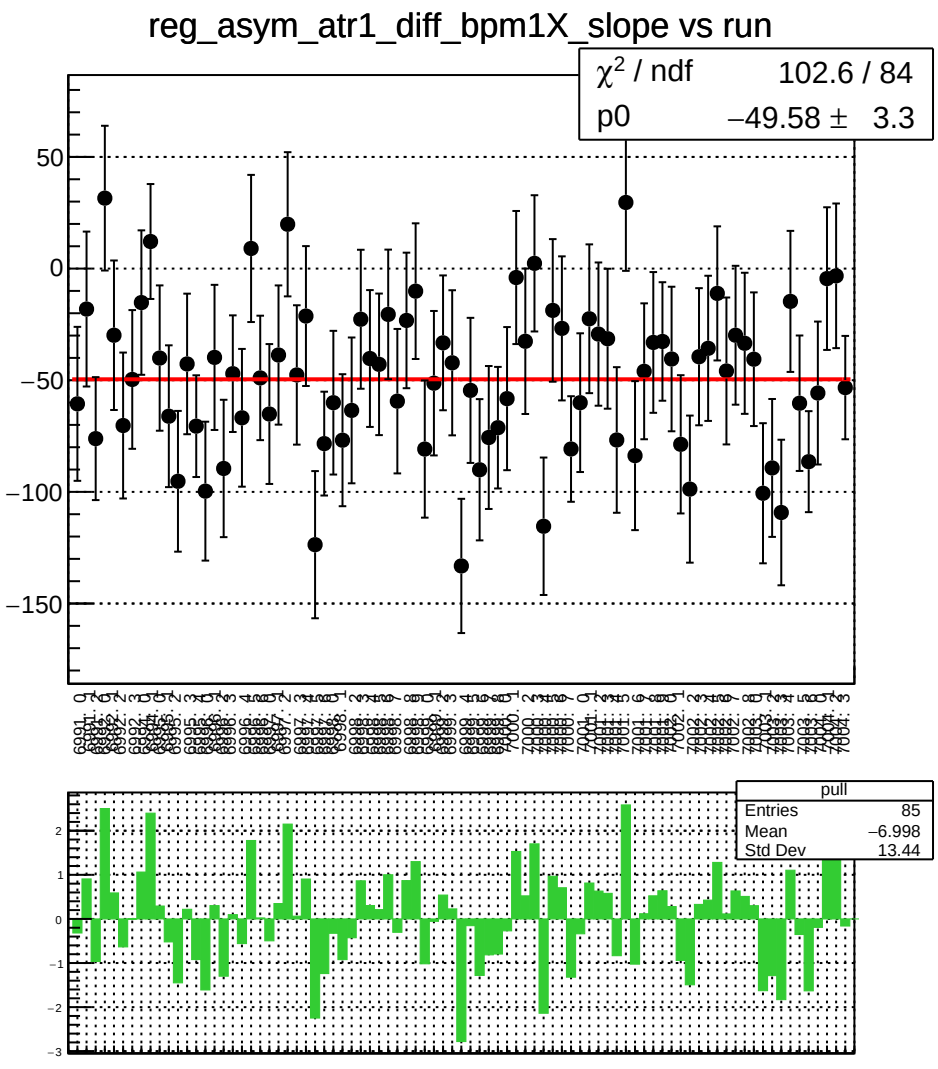

pull1D
Entries 85
Mean −0.003233
Std Dev 0.2963

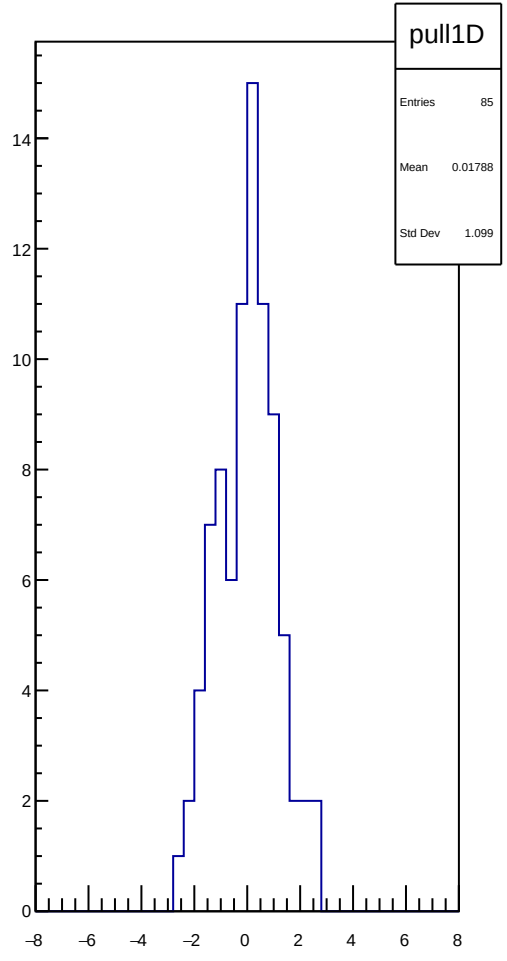

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 9.88 / 84
p0 482.2 ± 10.44
650
600
550
500
450
400
350
300
pull
Entries 85
Mean 276.7
Std Dev 259
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean 0.004047
Std Dev 0.3409
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

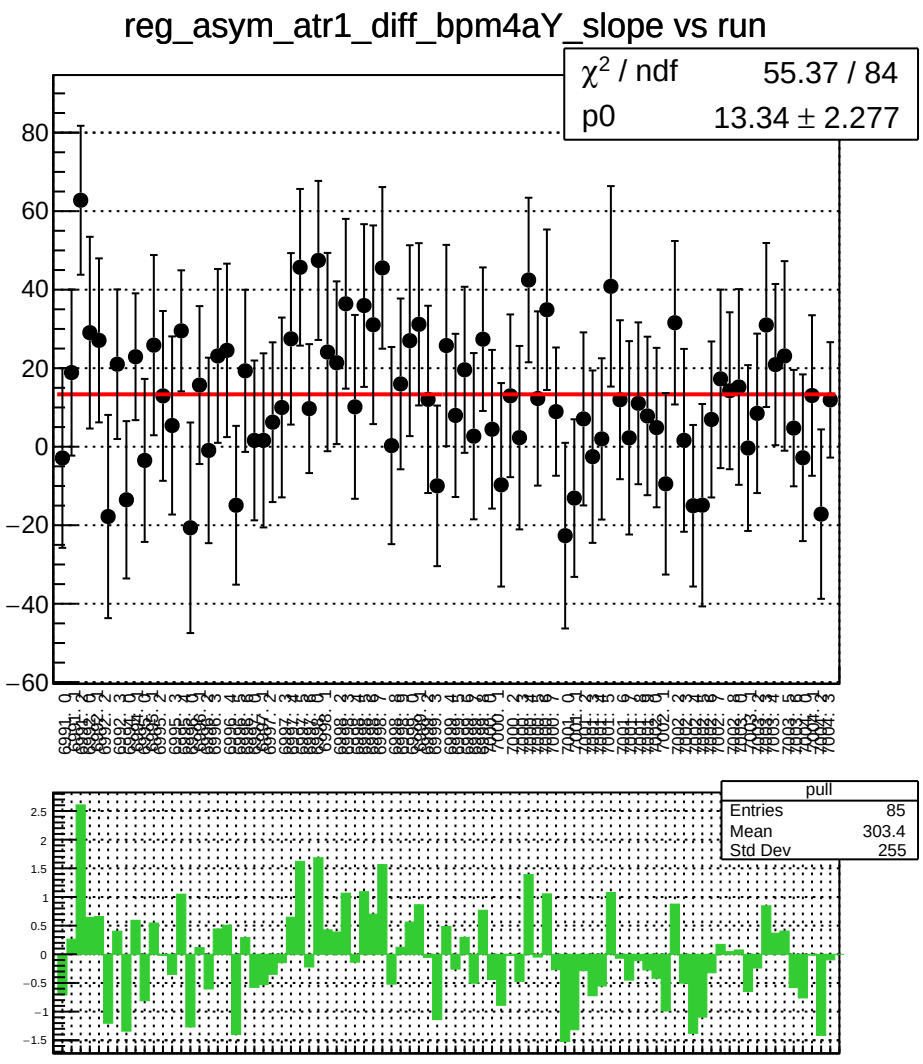

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 7.606 / 84
p0 175.1 ± 8.194
pull
Entries 85
Mean 32.18
Std Dev 111.8

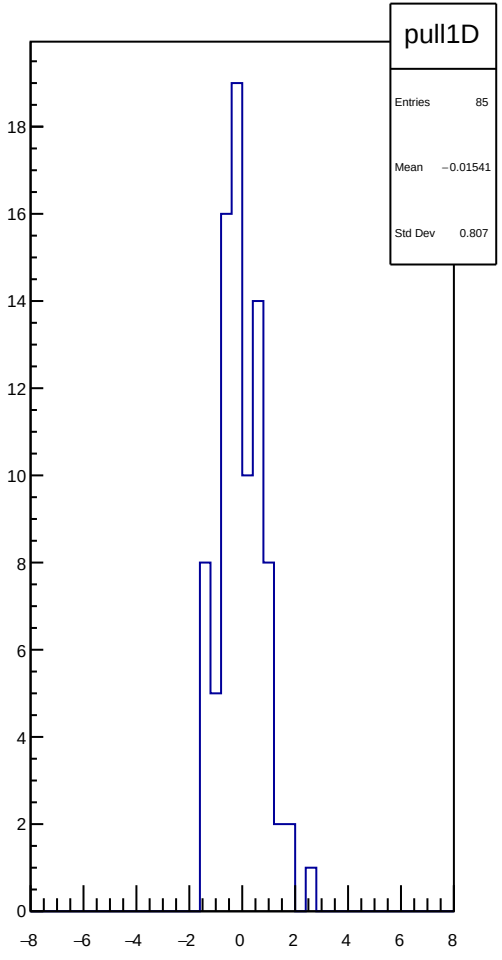

pull1D
Entries 85
Mean 0.001843
Std Dev 0.2991

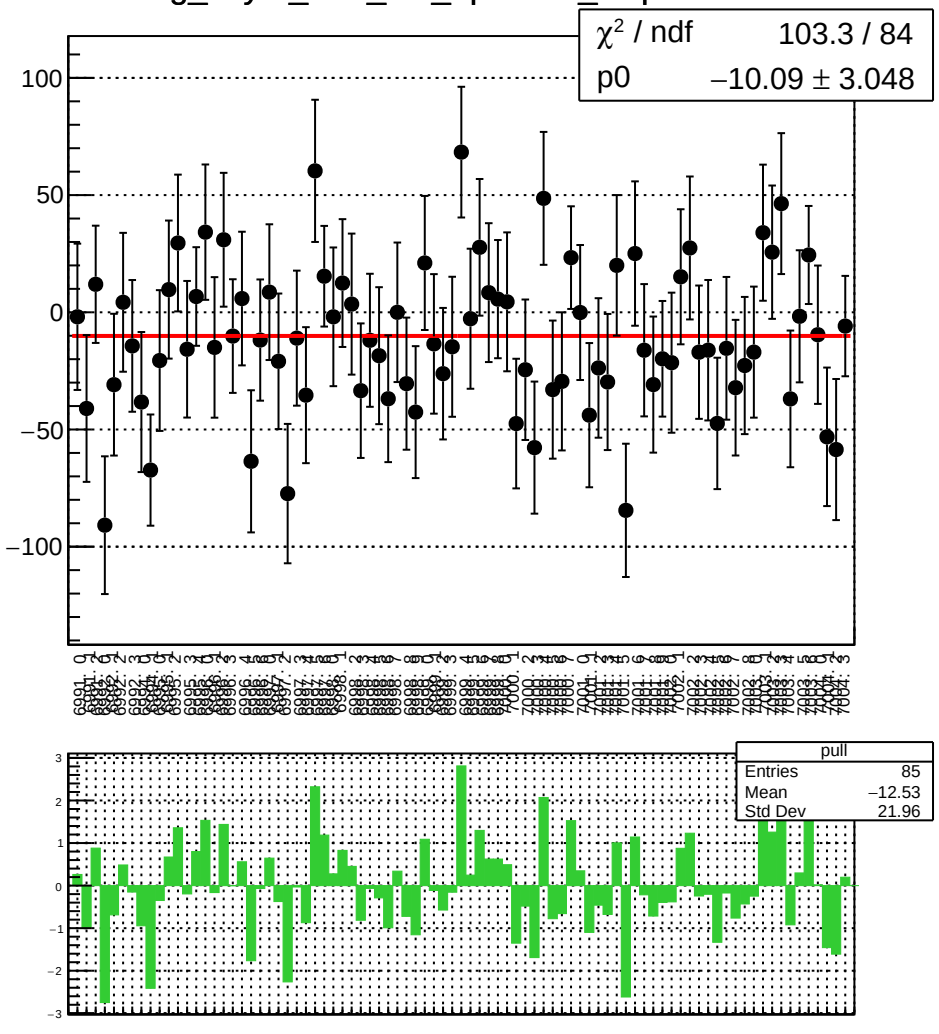

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 35.94 / 84
p0 −297 ± 0.3756
−285
−290
−295
−300
−305
−310
pull
Entries 85
Mean 579.2
Std Dev 539.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean −0.007092
Std Dev 0.6502
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

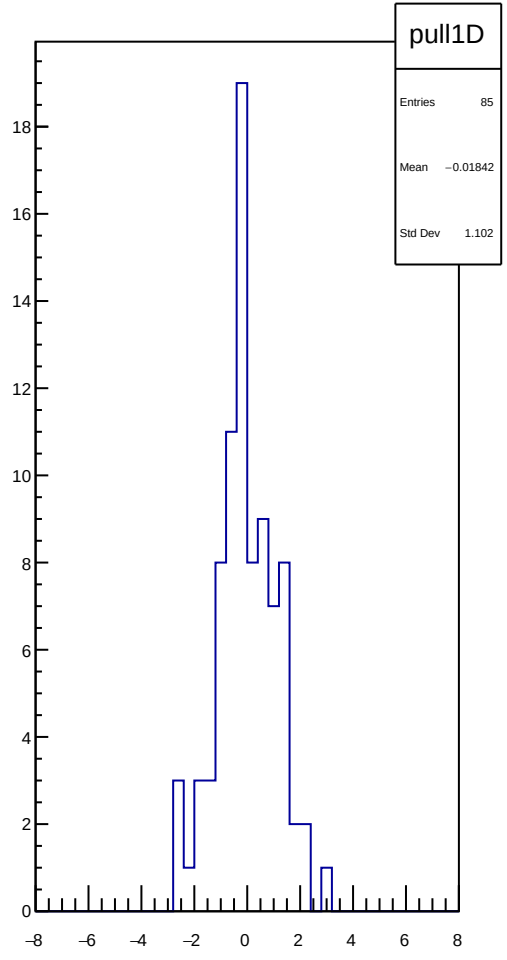

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 102.6 / 84
p0 −49.58 ± 3.3
50
0
−50
−100
−150
pull
Entries 85
Mean −6.998
Std Dev 13.44
2
1
0
−1
−2
−3

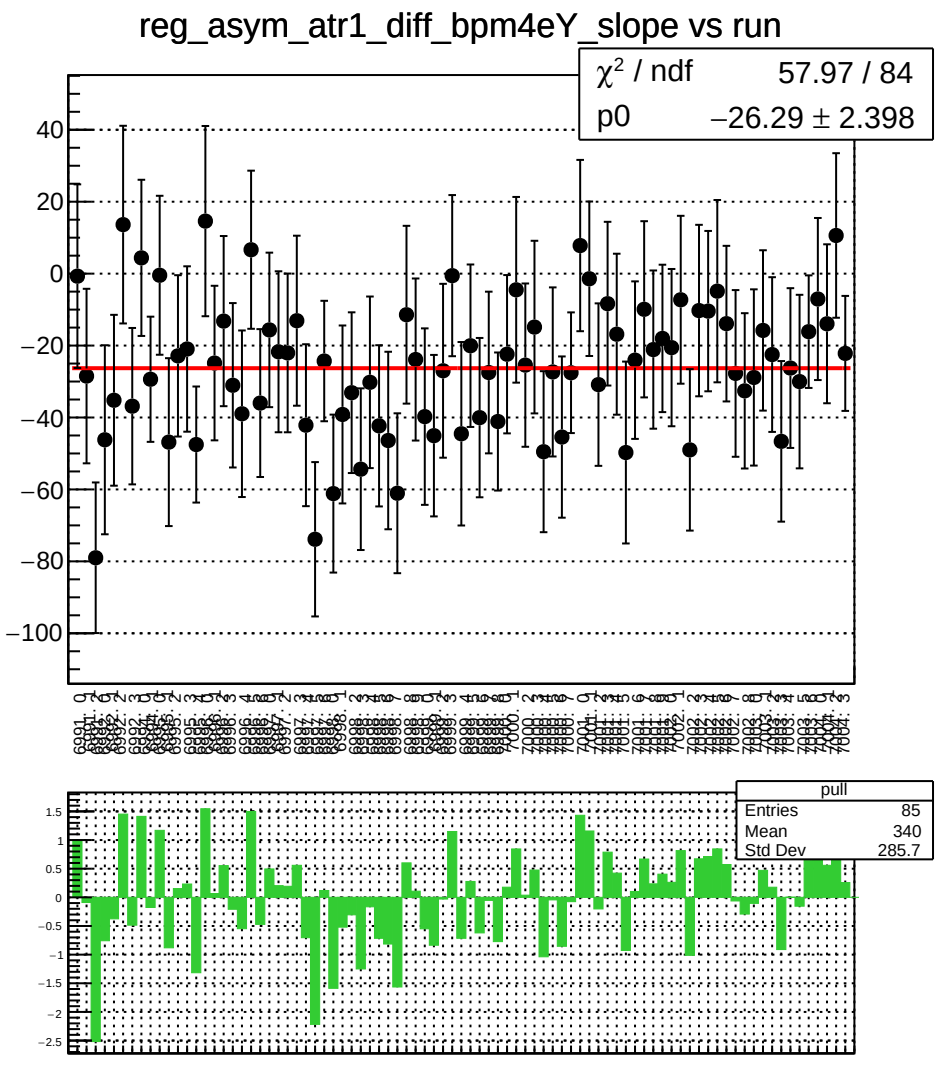

pull1D
Entries 85
Mean 0.01788
Std Dev 1.099
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

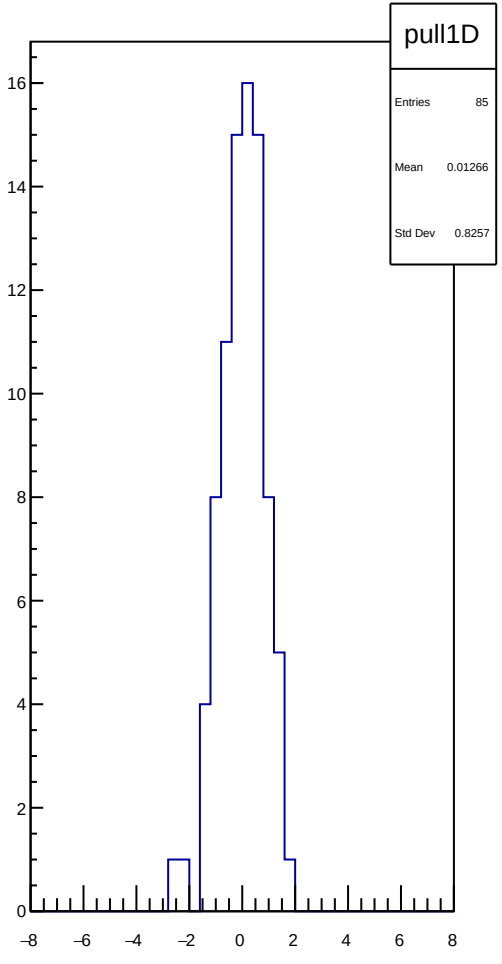

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 55.37 / 84
p0 13.34 ± 2.277
pull
Entries 85
Mean 303.4
Std Dev 255

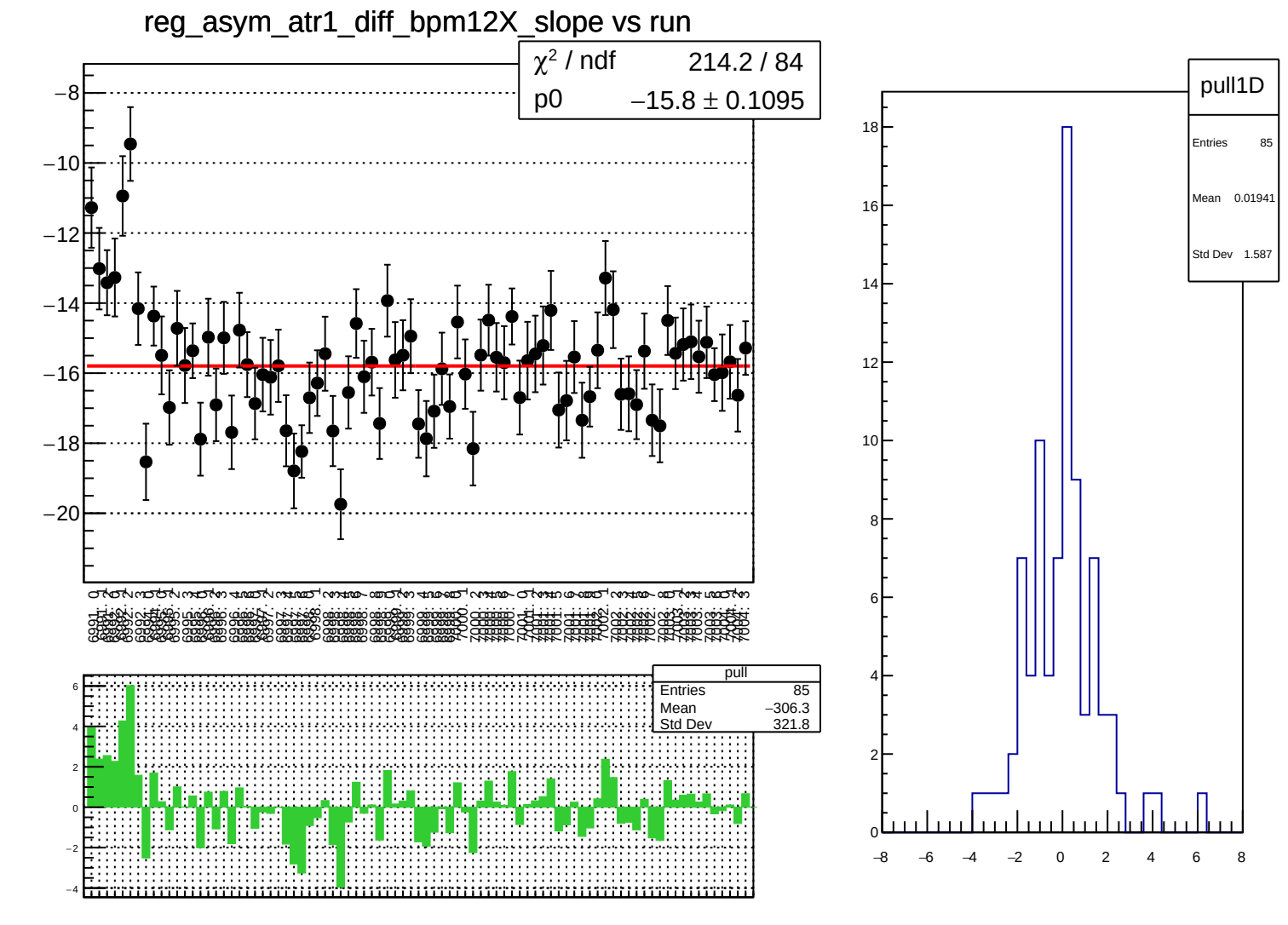

pull1D
Entries 85
Mean −0.01541
Std Dev 0.807

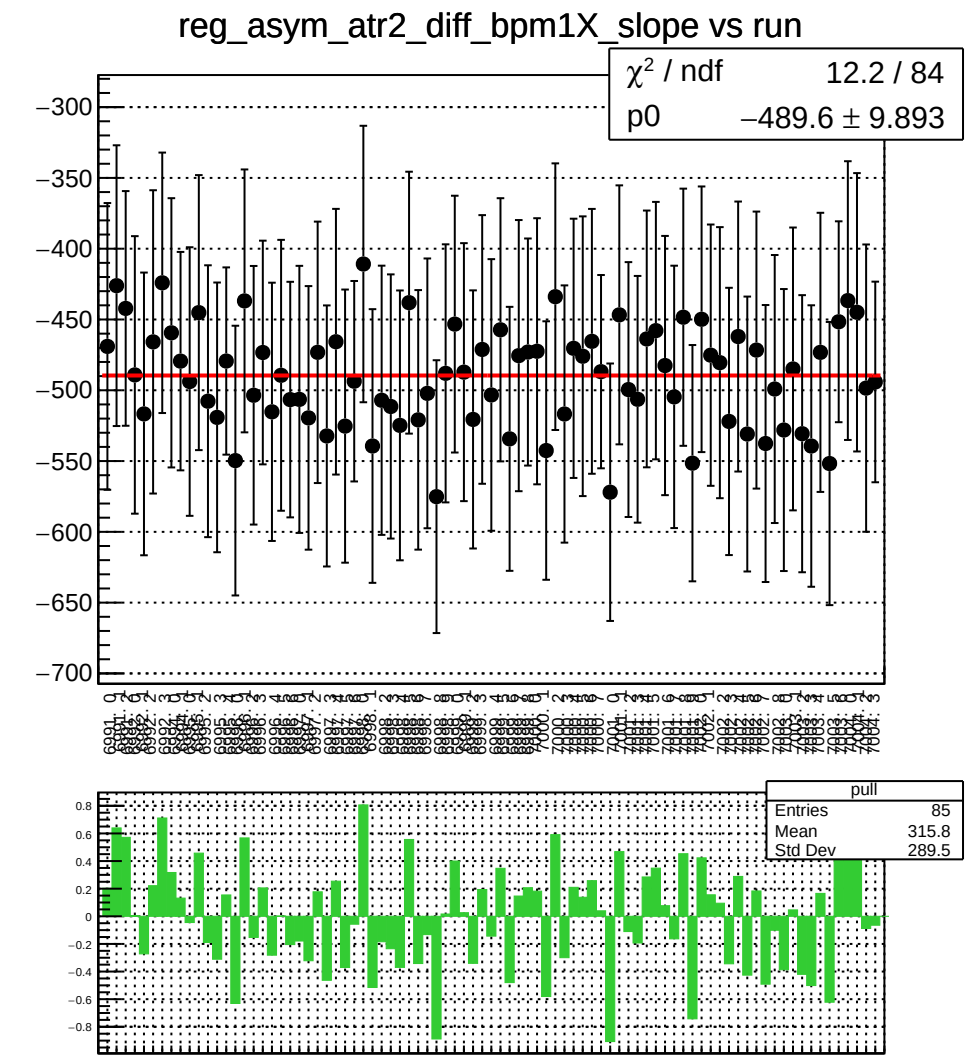

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 103.3 / 84
p0 −10.09 ± 3.048
pull
Entries 85
Mean −12.53
Std Dev 21.96

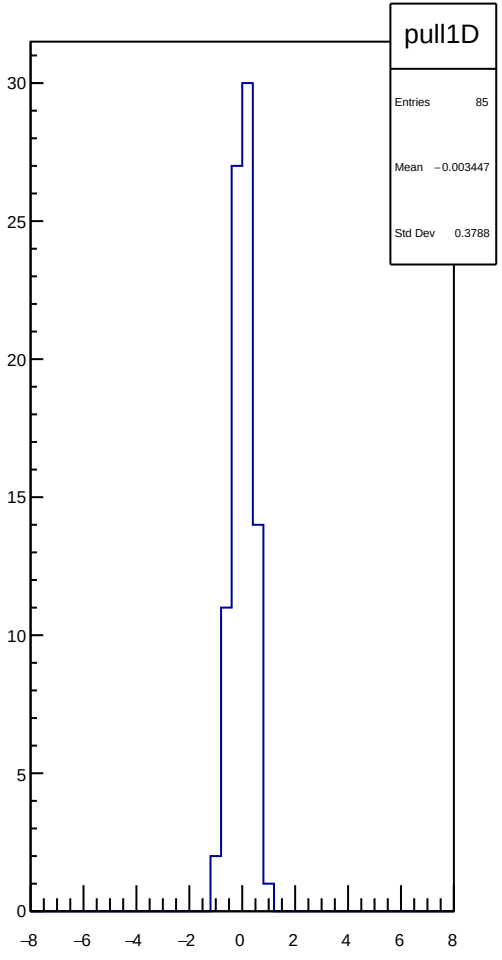

pull1D
Entries 85
Mean −0.01842
Std Dev 1.102

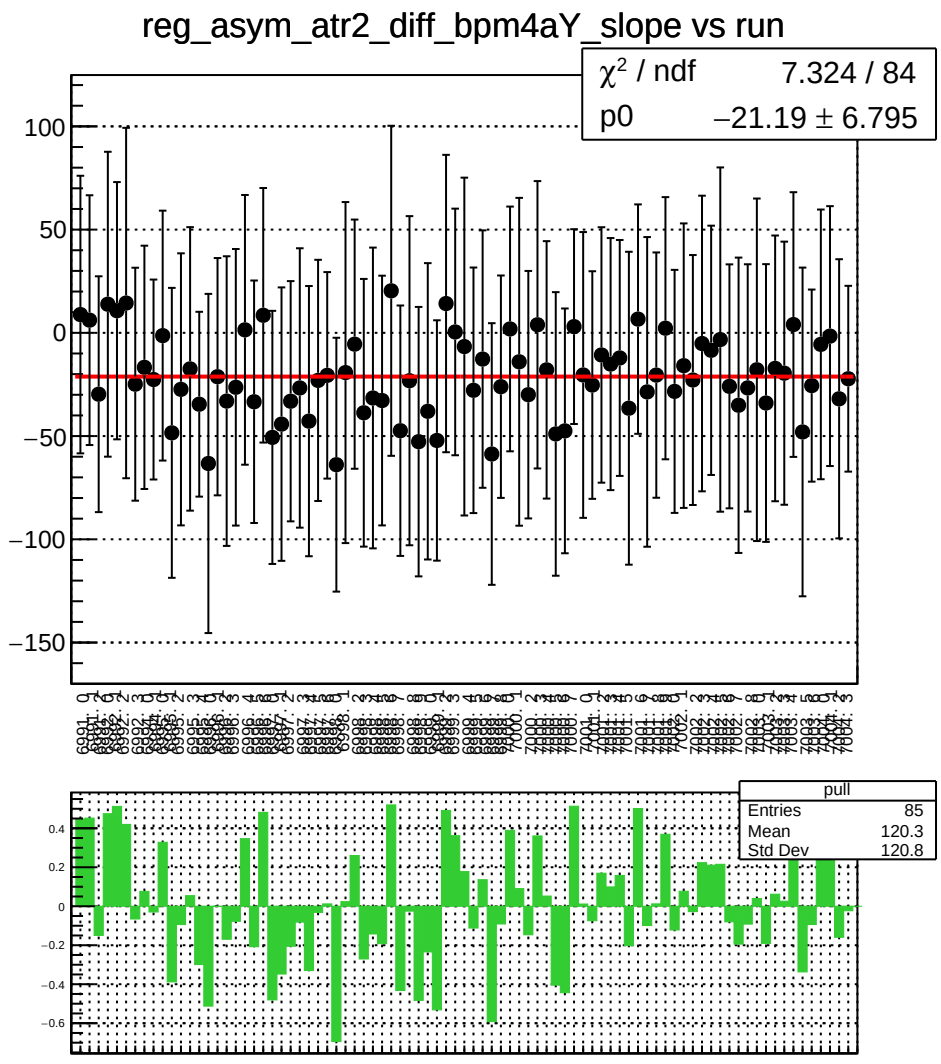

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 57.97 / 84
p0 −26.29 ± 2.398
pull
Entries 85
Mean 340
Std Dev 285.7

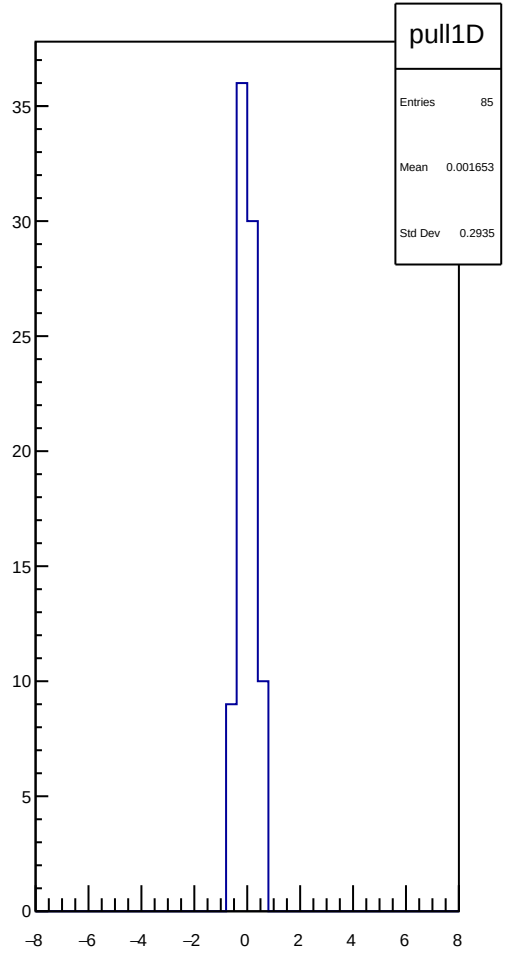

pull1D
Entries 85
Mean 0.01266
Std Dev 0.8257

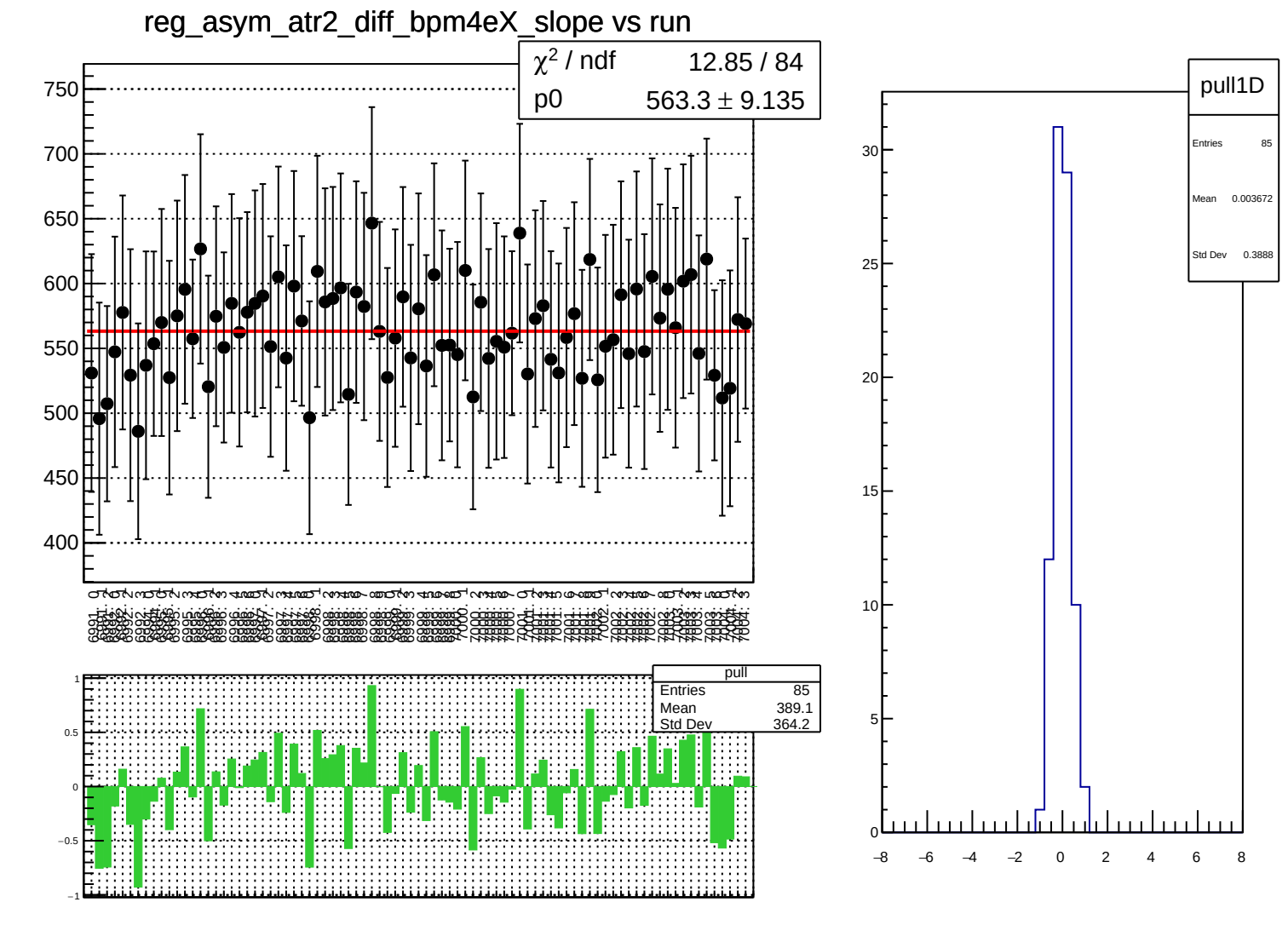

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 214.2 / 84
p0 −15.8 ± 0.1095
pull
Entries 85
Mean −306.3
Std Dev 321.8
pull1D
Entries 85
Mean 0.01941
Std Dev 1.587

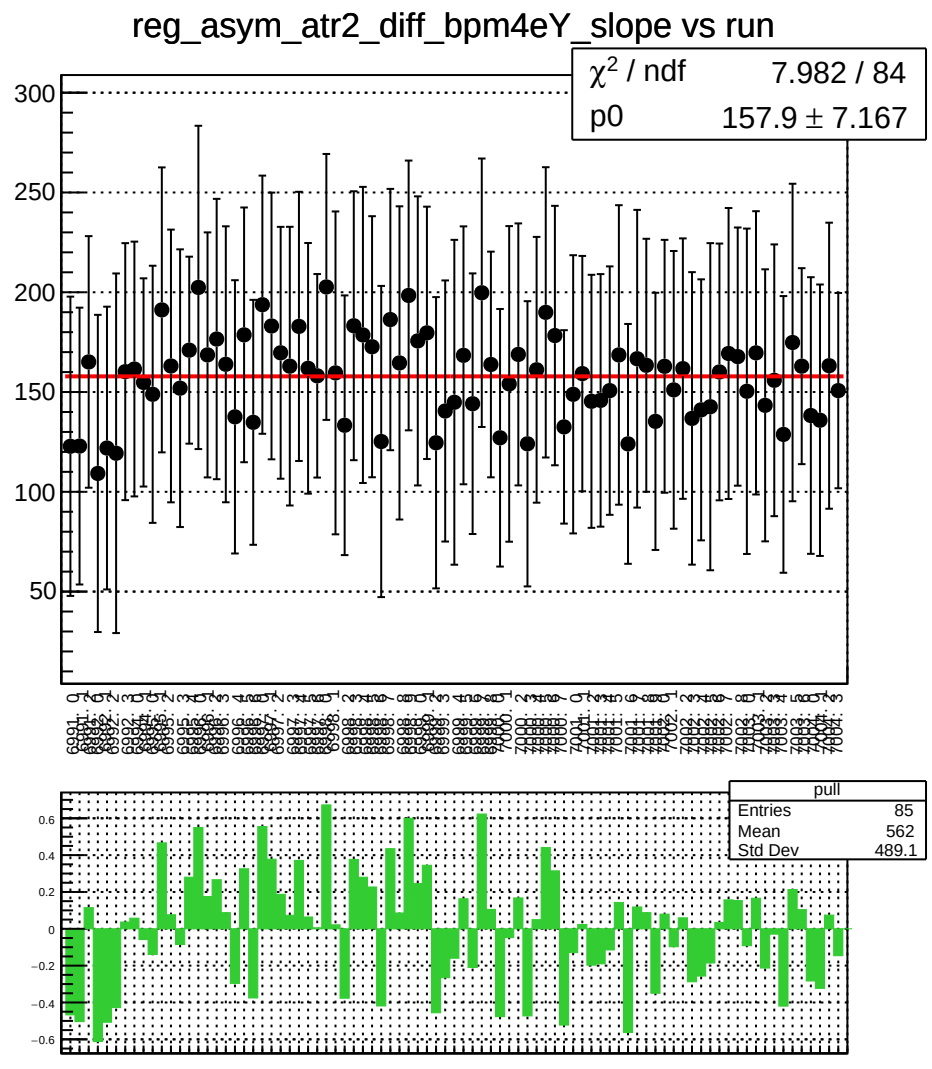

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 12.2 / 84
p0 −489.6 ± 9.893
pull
Entries 85
Mean 315.8
Std Dev 289.5

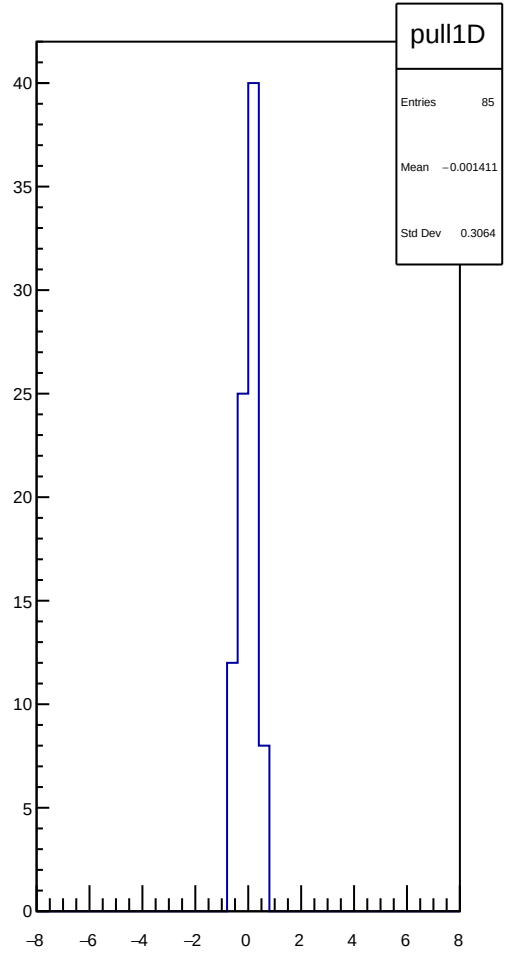

pull1D
Entries 85
Mean −0.003447
Std Dev 0.3788

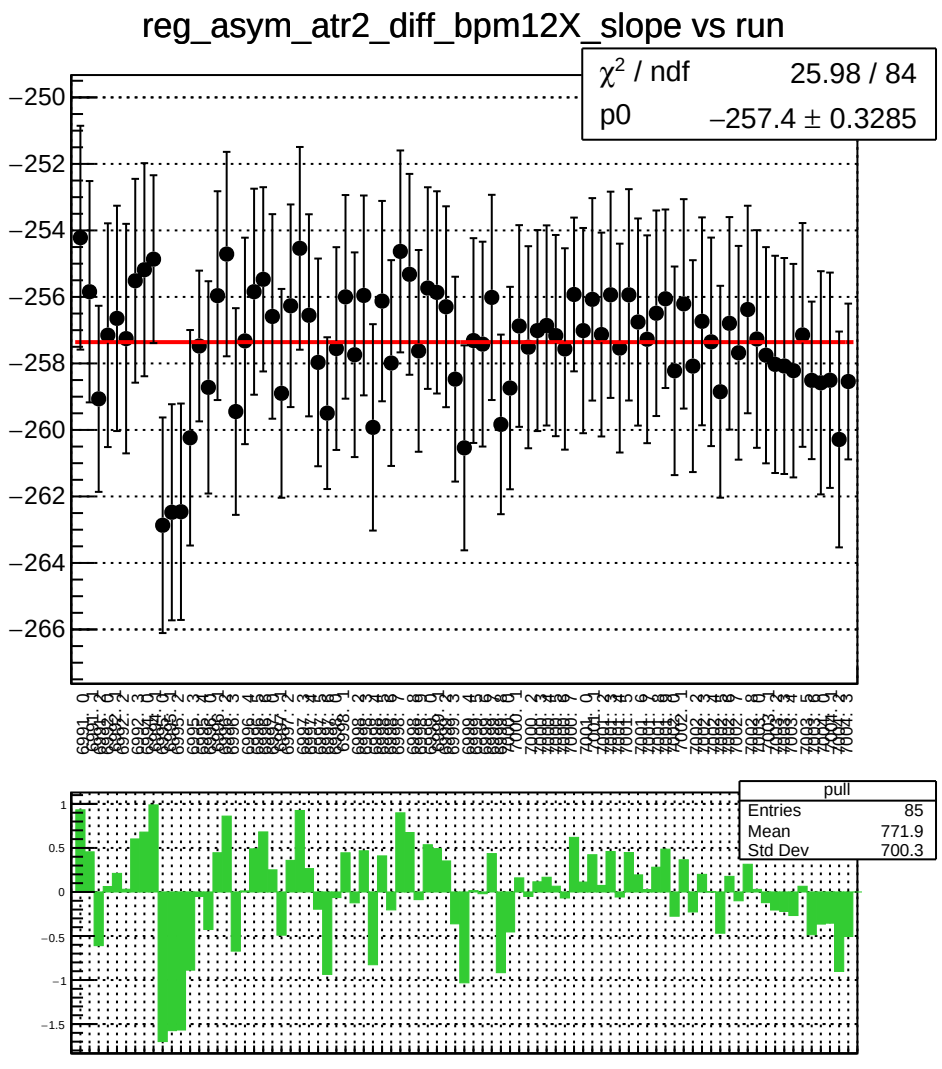

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 7.324 / 84
p0 −21.19 ± 6.795
pull
Entries 85
Mean 120.3
Std Dev 120.8

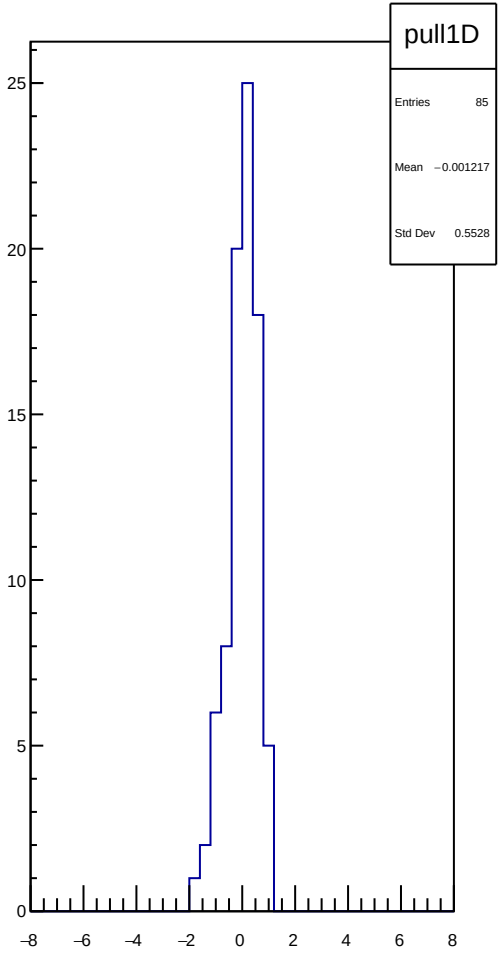

pull1D
Entries 85
Mean 0.001653
Std Dev 0.2935

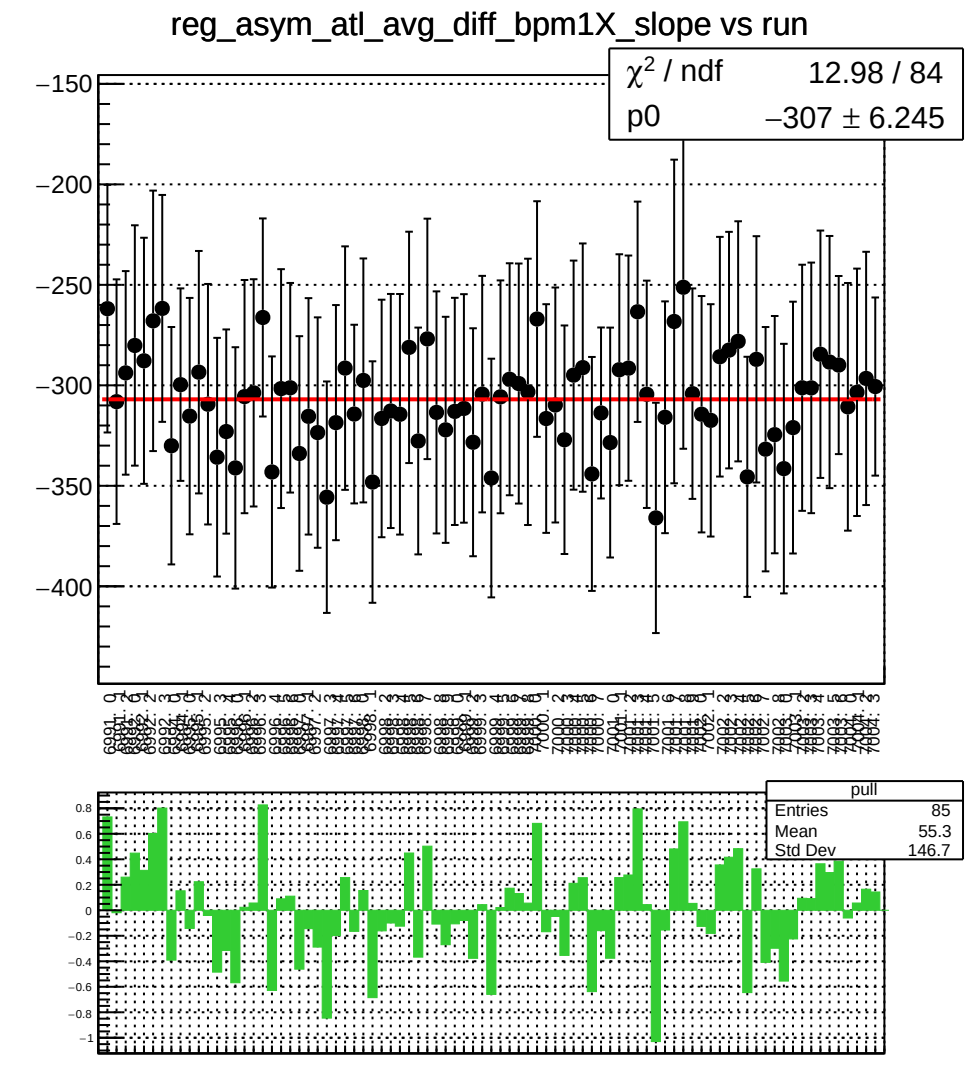

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 12.85 / 84
p0 563.3 ± 9.135
750
700
650
600
550
500
450
400
pull
Entries 85
Mean 389.1
Std Dev 364.2
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean 0.003672
Std Dev 0.3888
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

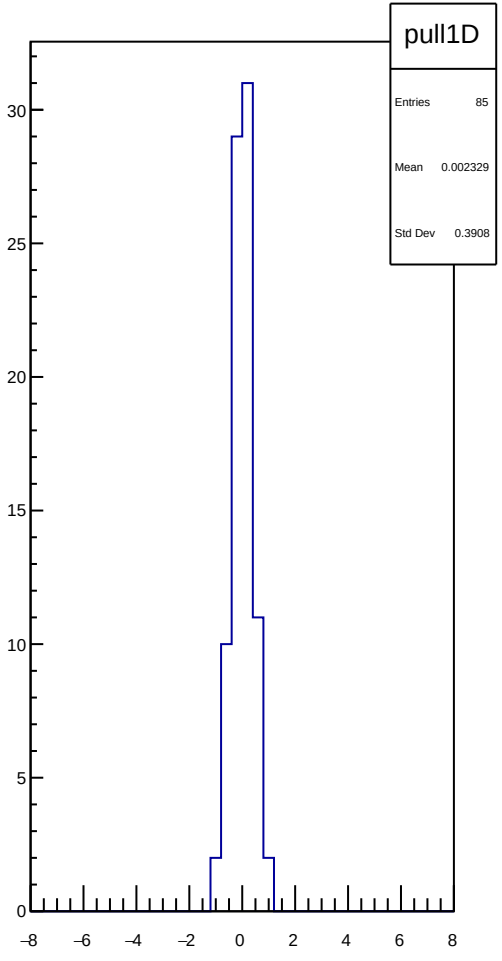

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 7.982 / 84
p0 157.9 ± 7.167
300
250
200
150
100
50
pull
Entries 85
Mean 562
Std Dev 489.1
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

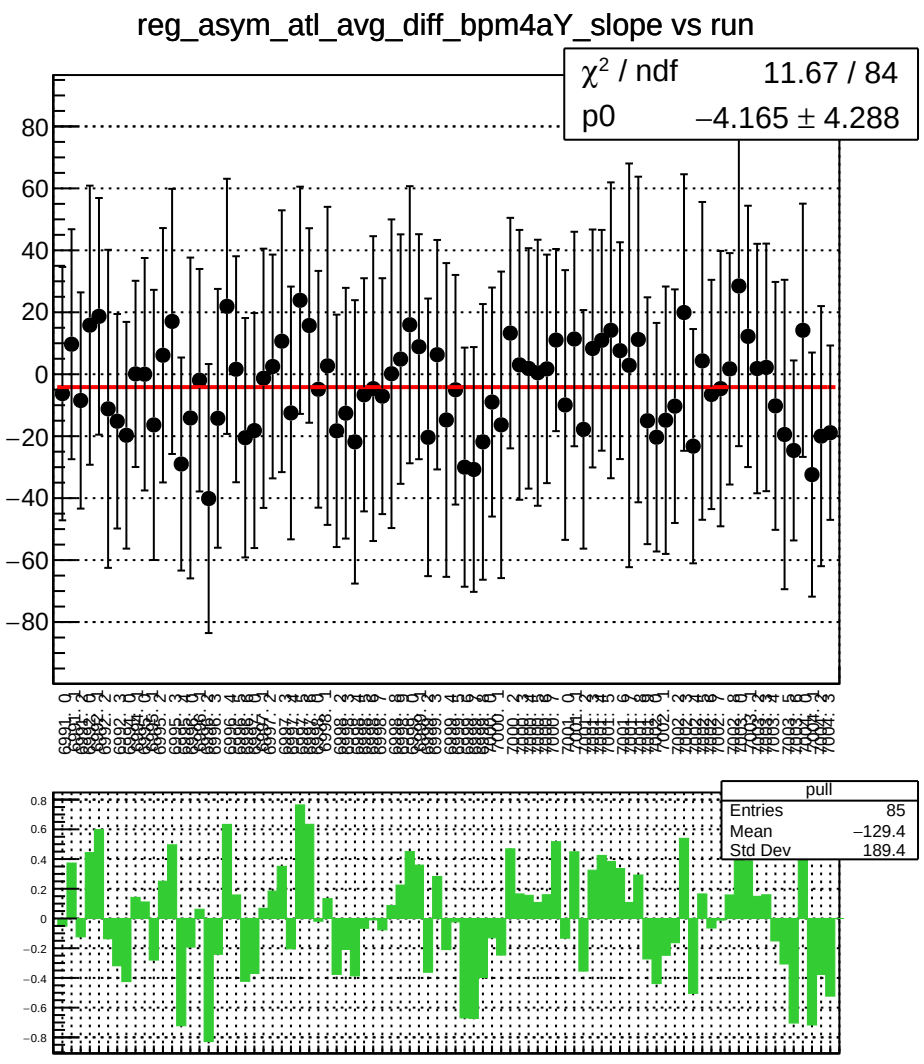

pull1D
Entries 85
Mean −0.001411
Std Dev 0.3064
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

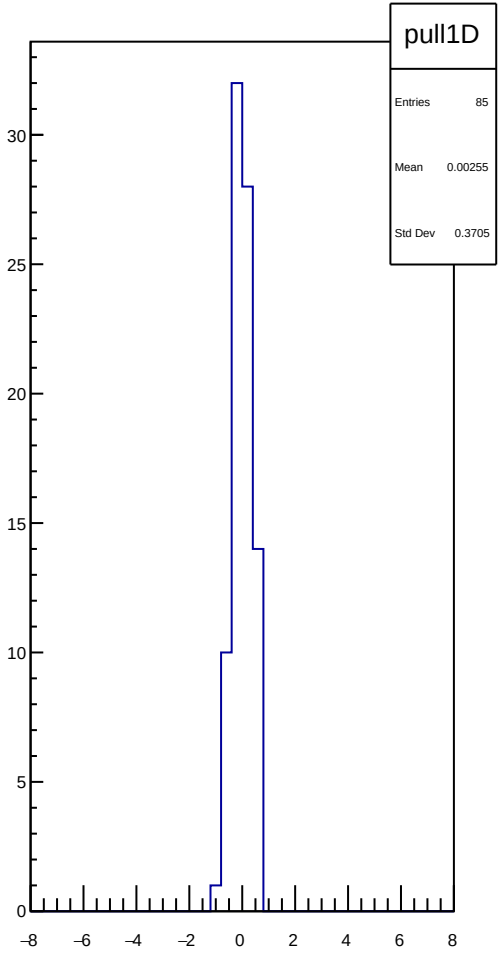

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 25.98 / 84
p0 −257.4 ± 0.3285
pull
Entries 85
Mean 771.9
Std Dev 700.3

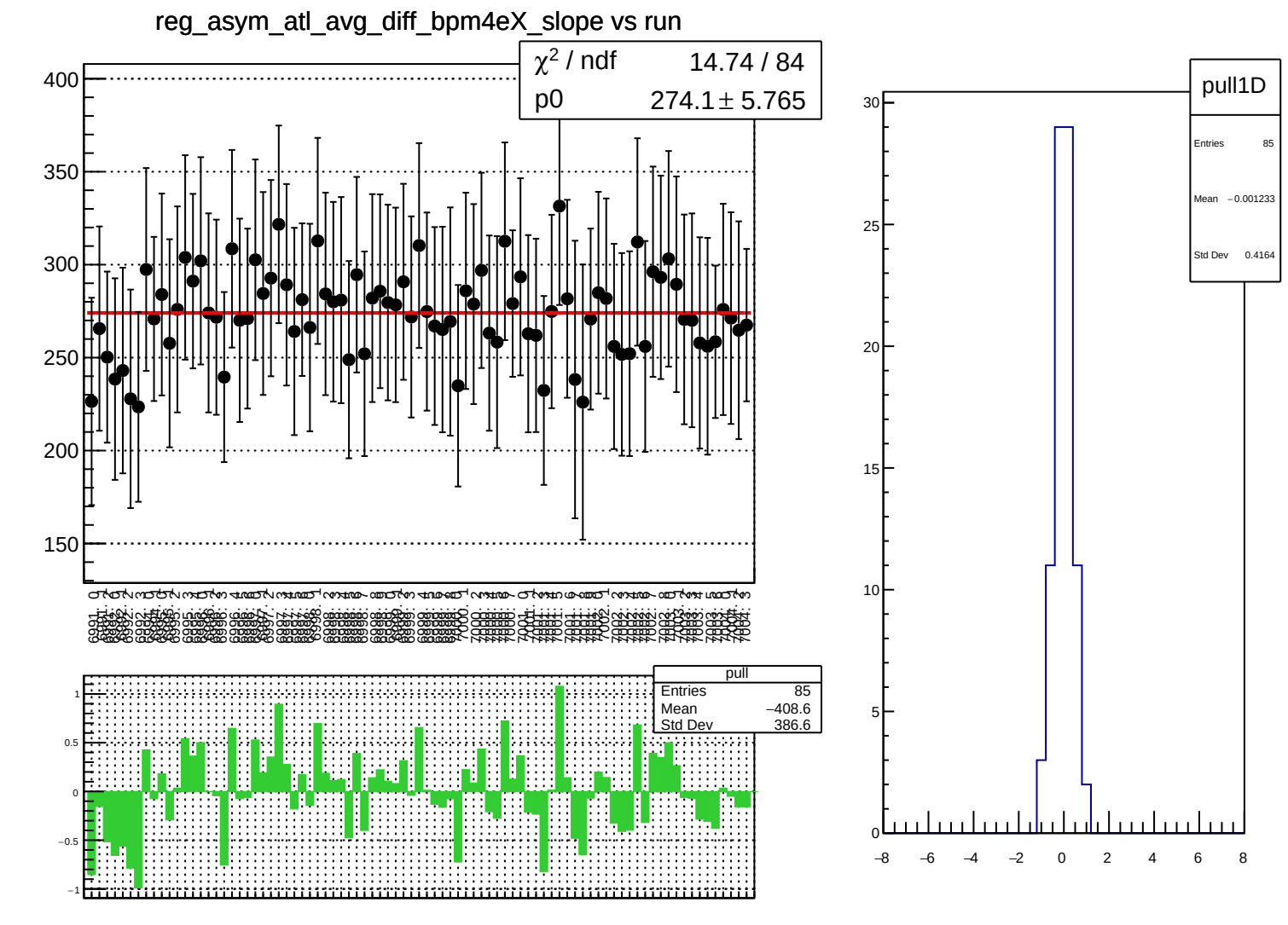

pull1D
Entries 85
Mean −0.001217
Std Dev 0.5528

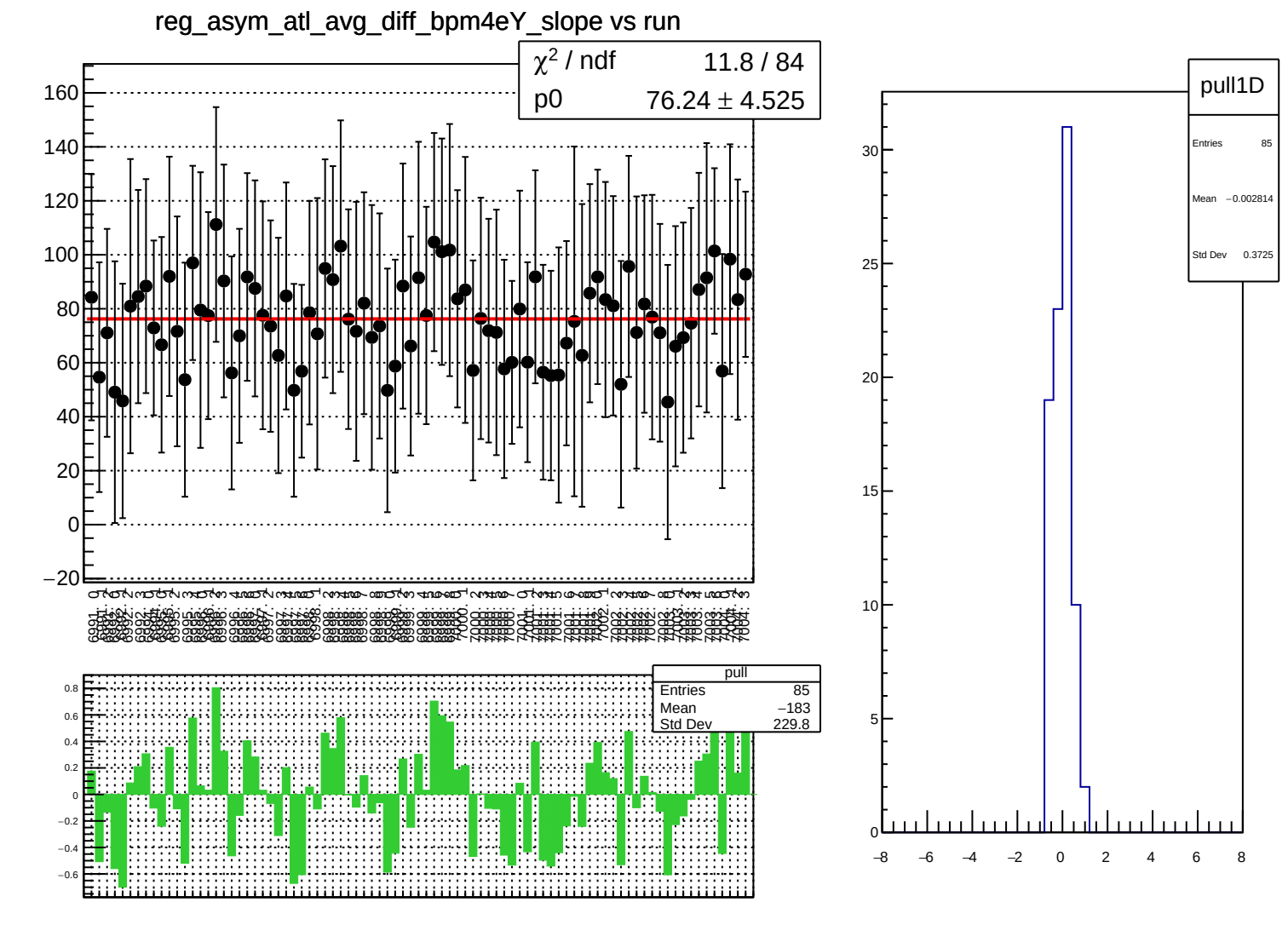

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 12.98 / 84
p0 −307 ± 6.245
pull
Entries 85
Mean 55.3
Std Dev 146.7

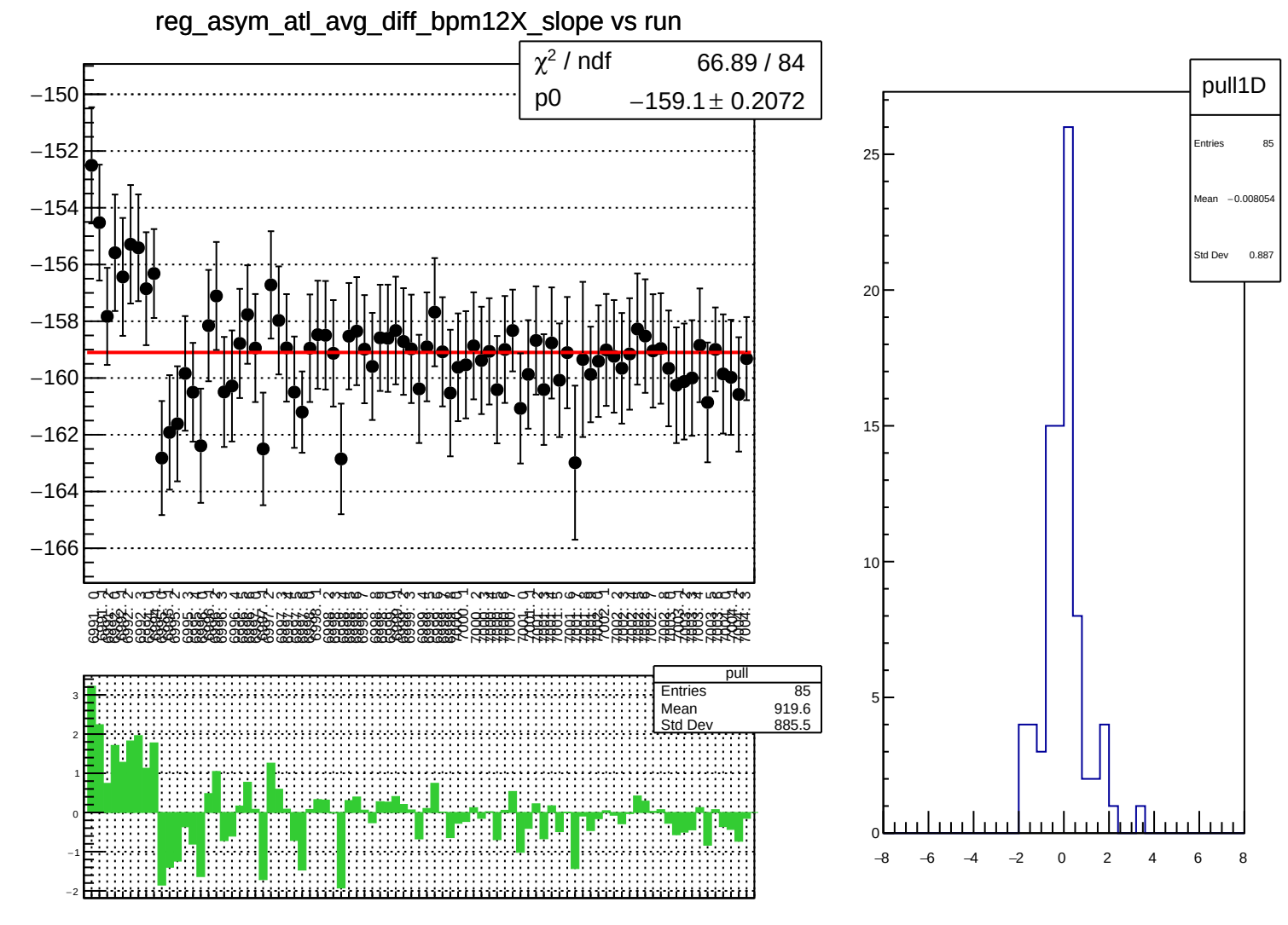

pull1D
Entries 85
Mean 0.002329
Std Dev 0.3908

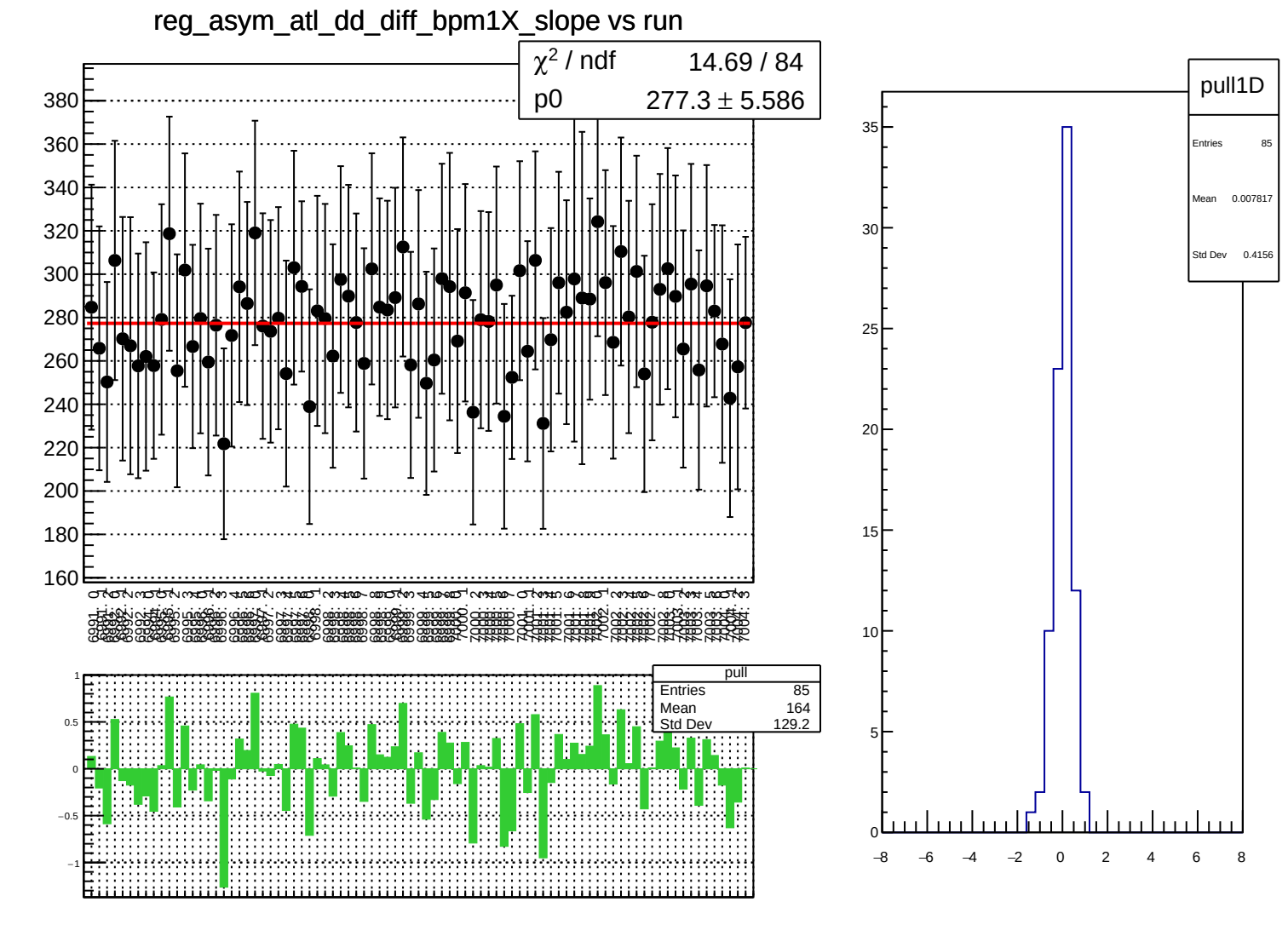

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 11.67 / 84
p0 −4.165 ± 4.288
pull
Entries 85
Mean −129.4
Std Dev 189.4

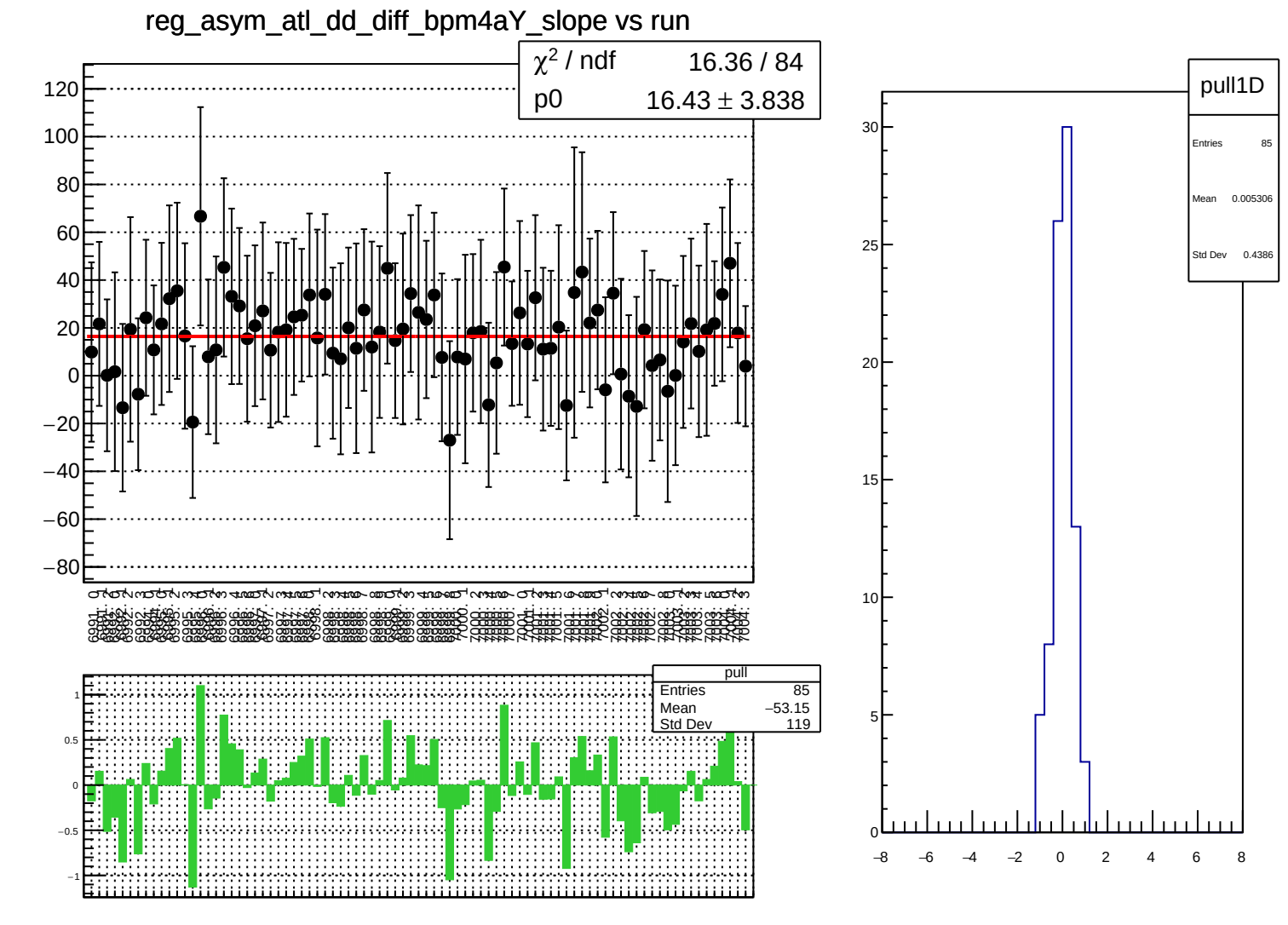

pull1D
Entries 85
Mean 0.00255
Std Dev 0.3705

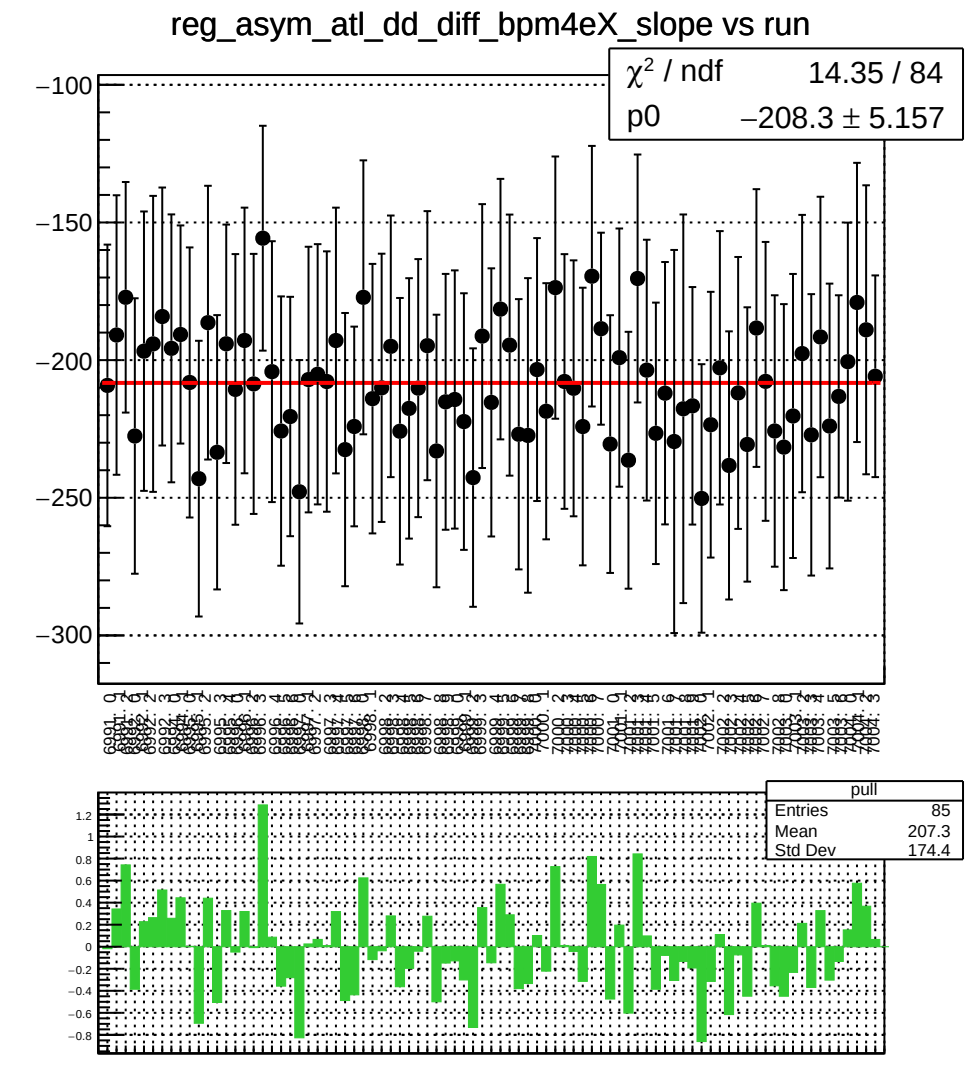

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.74 / 84
p0 274.1 ± 5.765
pull
Entries 85
Mean −408.6
Std Dev 386.6
pull1D
Entries 85
Mean −0.001233
Std Dev 0.4164

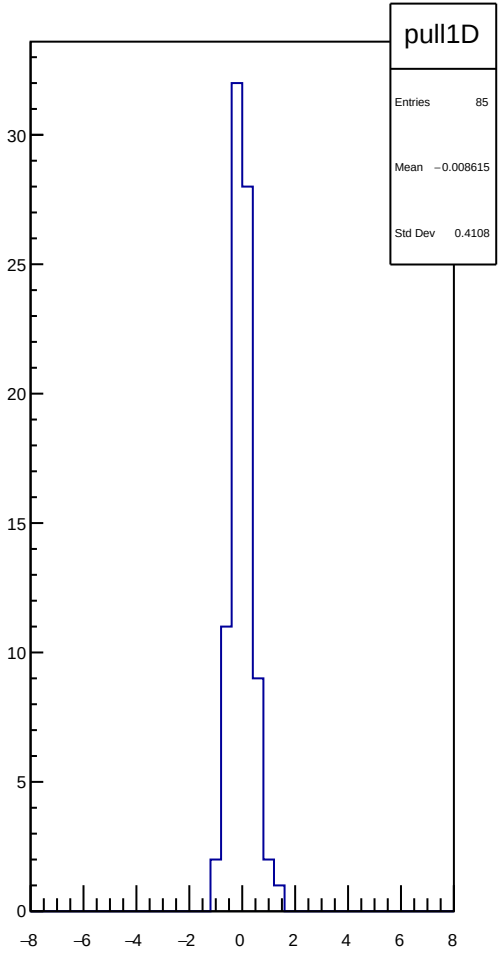

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 11.8 / 84
p0 76.24 ± 4.525
pull
Entries 85
Mean −183
Std Dev 229.8
pull1D
Entries 85
Mean −0.002814
Std Dev 0.3725

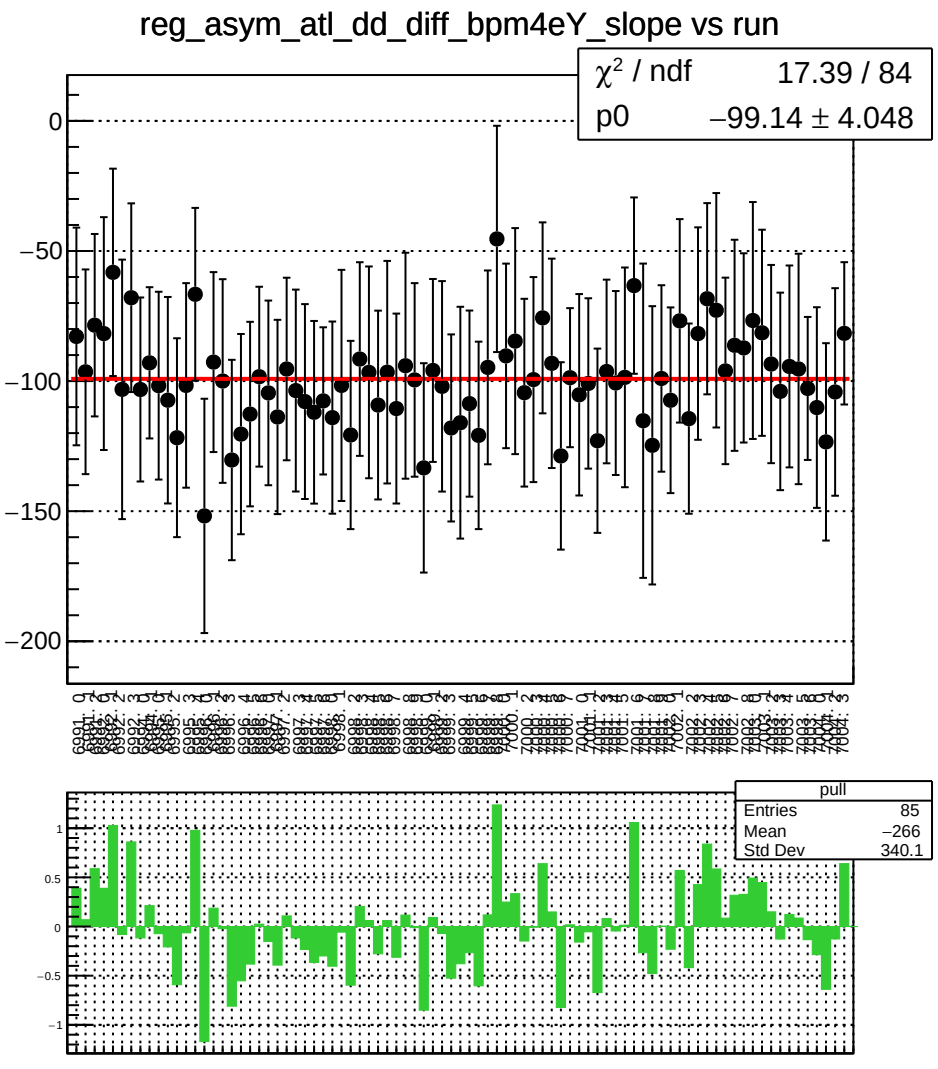

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 66.89 / 84
p0 −159.1 ± 0.2072
pull
Entries 85
Mean 919.6
Std Dev 885.5
pull1D
Entries 85
Mean −0.008054
Std Dev 0.887

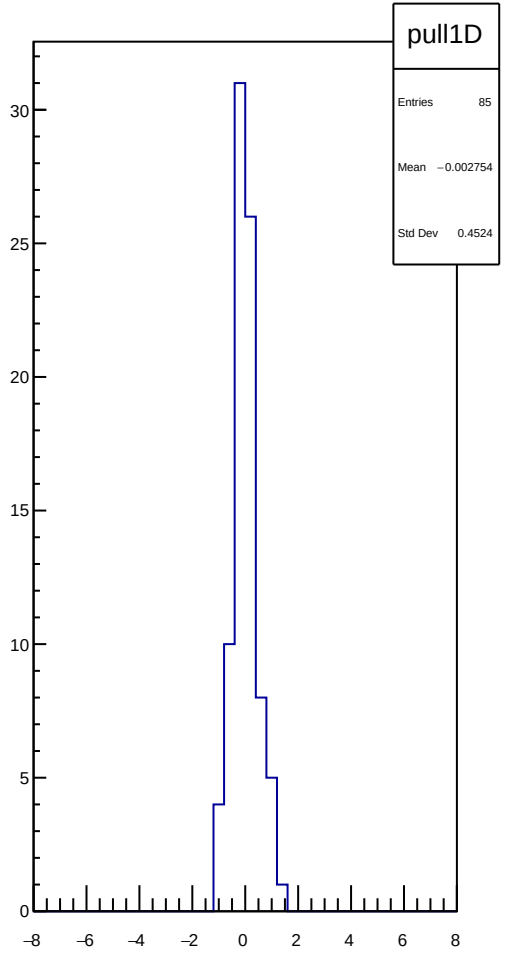

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 14.69 / 84
p0 277.3 ± 5.586
pull
Entries 85
Mean 164
Std Dev 129.2
pull1D
Entries 85
Mean 0.007817
Std Dev 0.4156

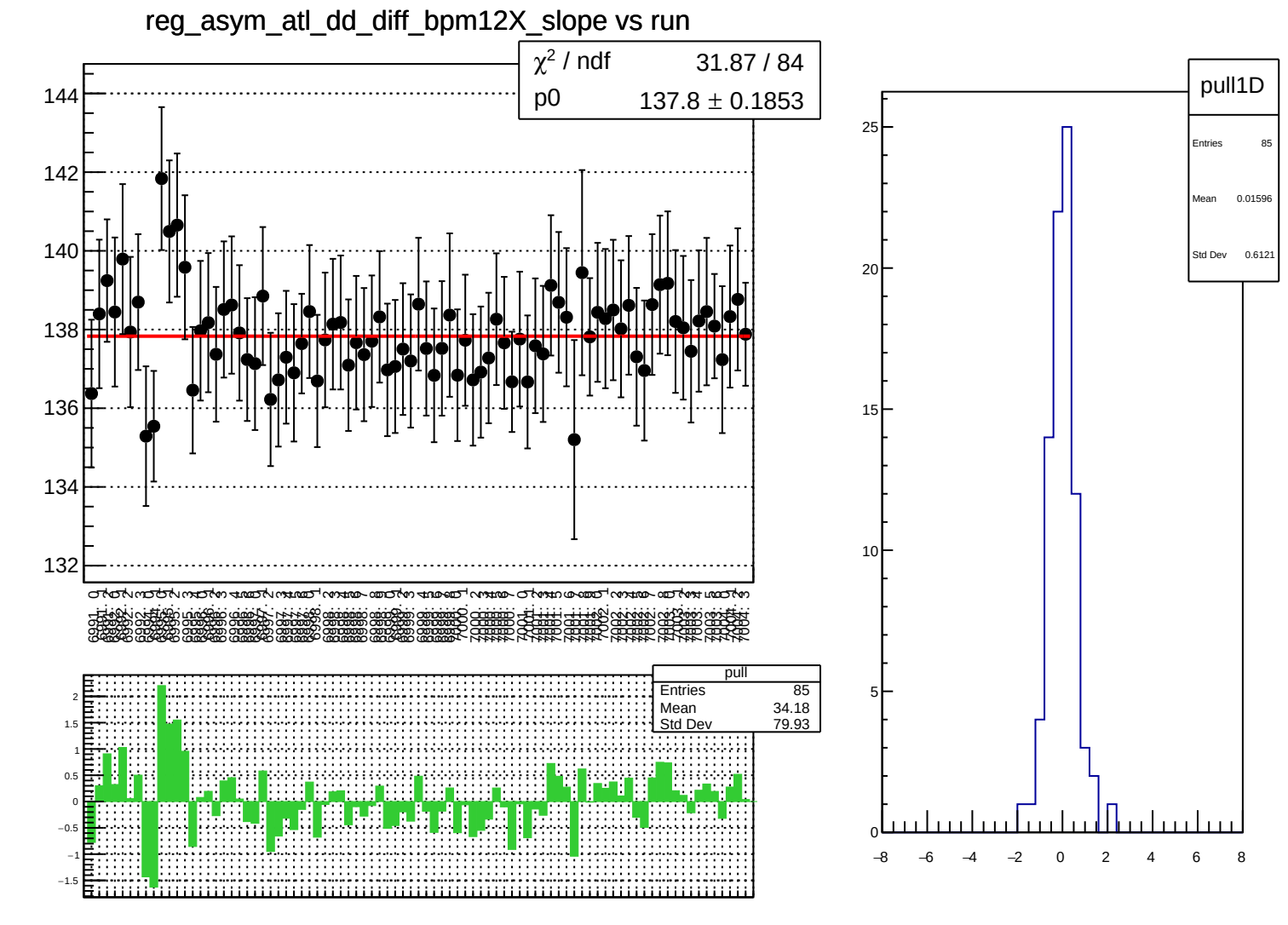

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 16.36 / 84
p0 16.43 ± 3.838
pull
Entries 85
Mean −53.15
Std Dev 119
pull1D
Entries 85
Mean 0.005306
Std Dev 0.4386

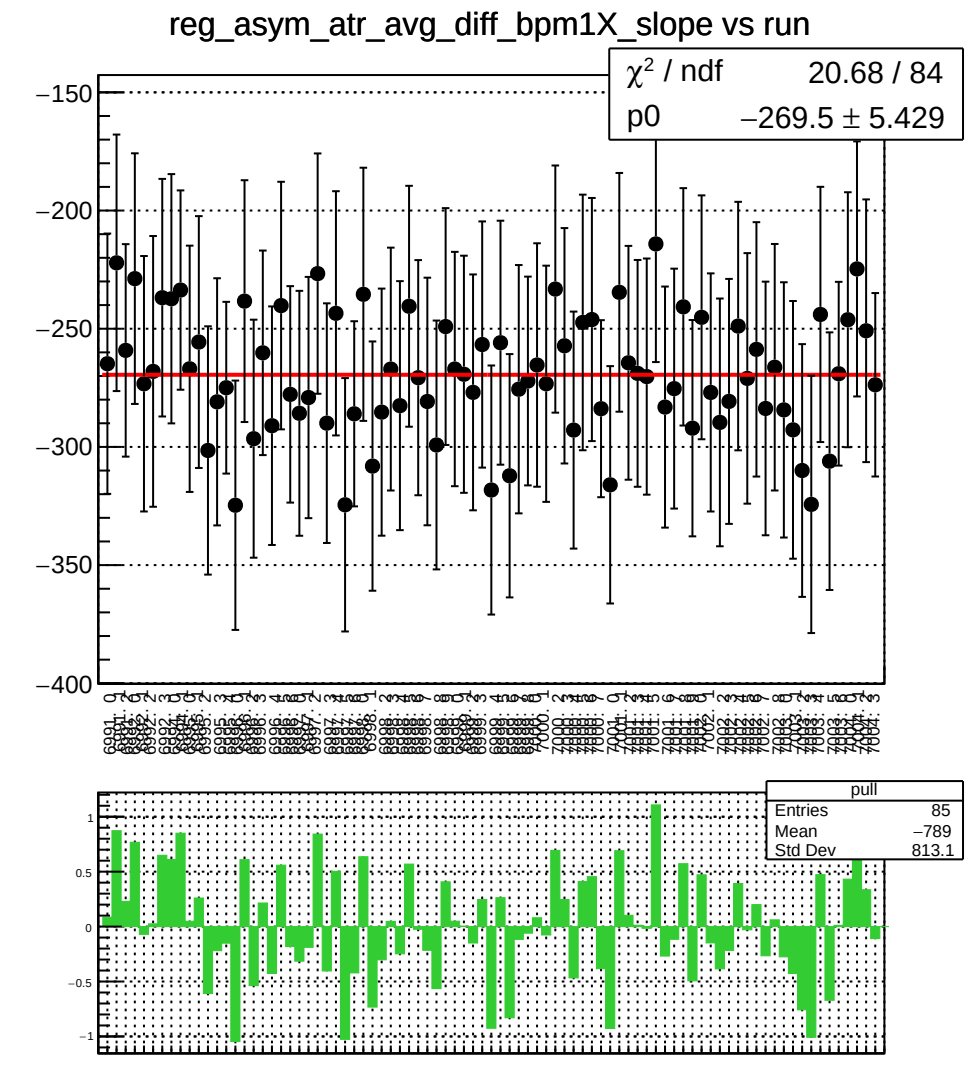

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 14.35 / 84
p0 −208.3 ± 5.157
−100
−150
−200
−250
−300
pull
Entries 85
Mean 207.3
Std Dev 174.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

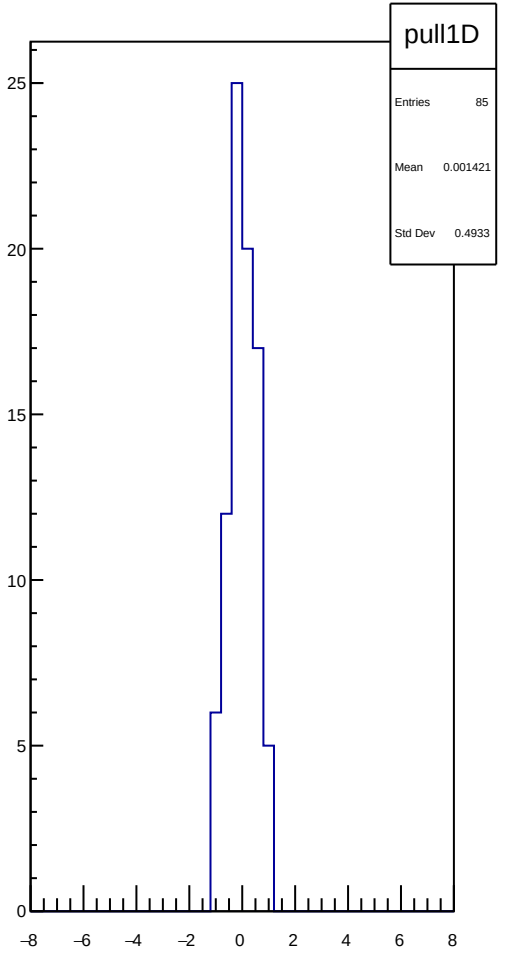

pull1D
Entries 85
Mean −0.008615
Std Dev 0.4108
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

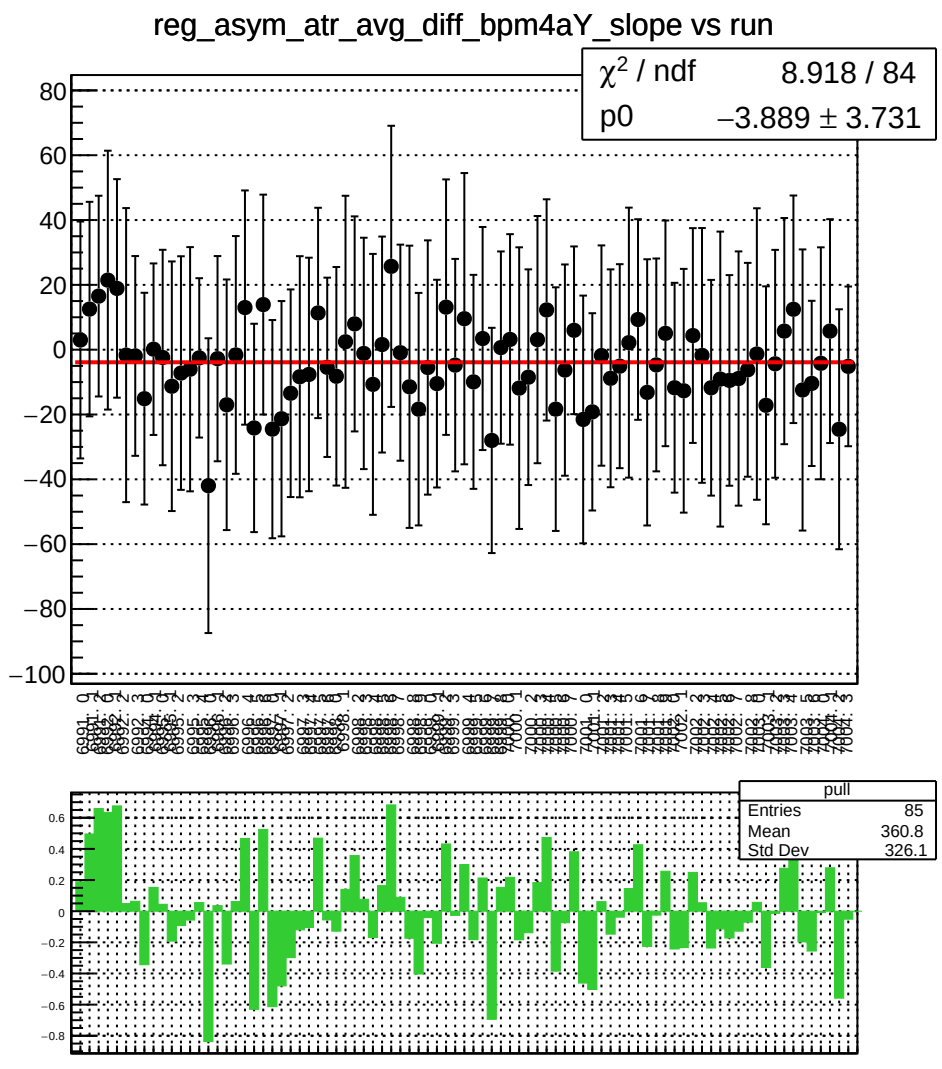

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 17.39 / 84
p0 −99.14 ± 4.048
0
−50
−100
−150
−200
pull
Entries 85
Mean −266
Std Dev 340.1
1
0.5
0
−0.5
−1

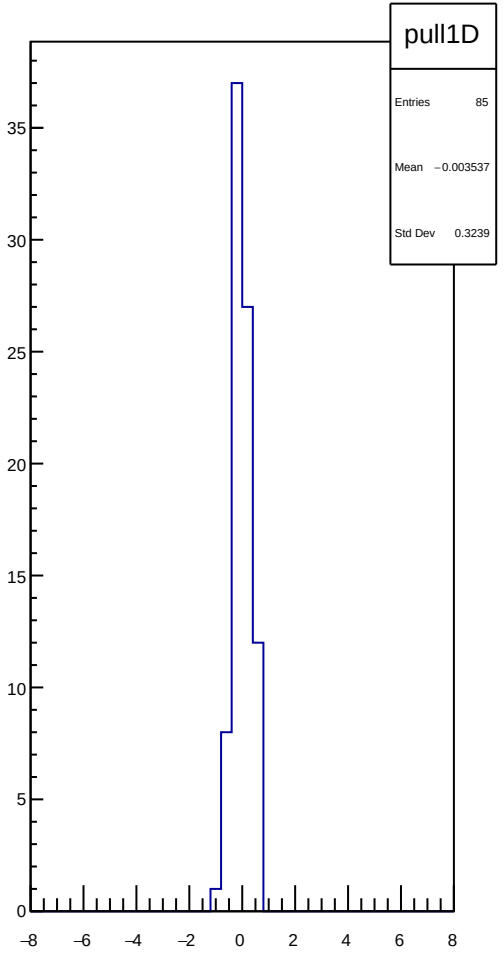

pull1D
Entries 85
Mean −0.002754
Std Dev 0.4524
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

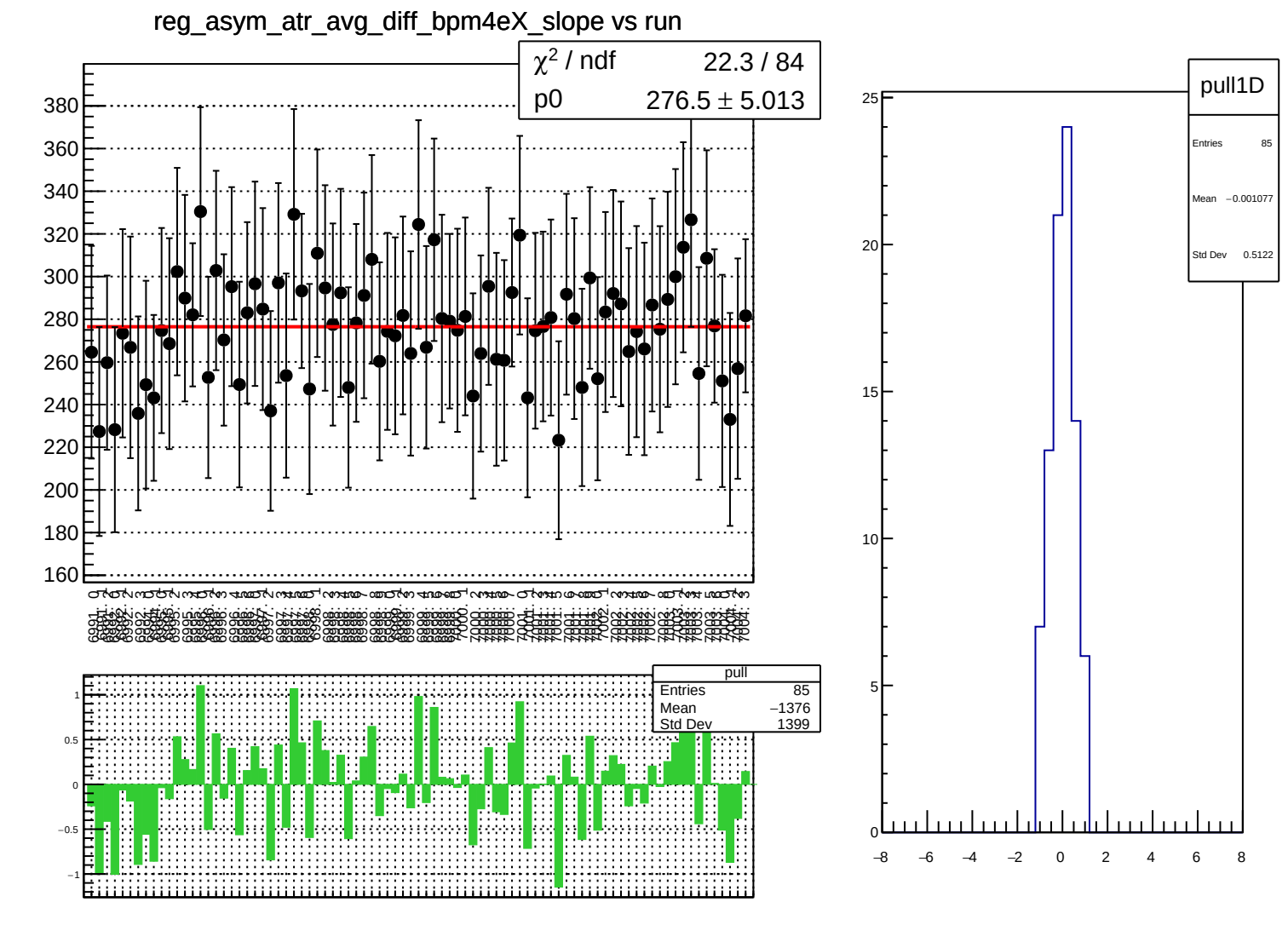

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 31.87 / 84
p0 137.8 ± 0.1853
144
142
140
138
136
134
132
pull
Entries 85
Mean 34.18
Std Dev 79.93
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean 0.01596
Std Dev 0.6121
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

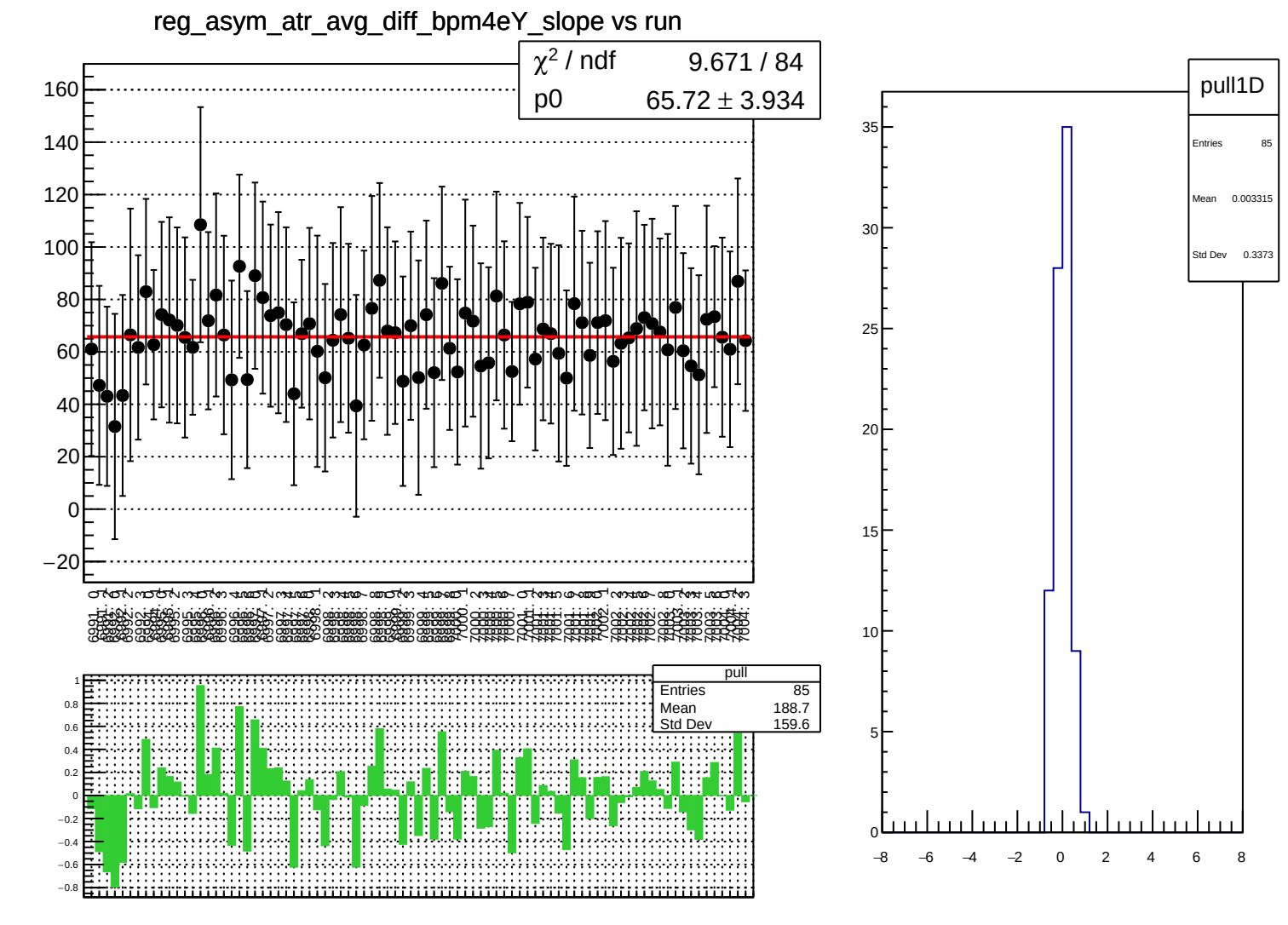

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 20.68 / 84
p0 −269.5 ± 5.429
−150
−200
−250
−300
−350
−400
pull
Entries 85
Mean −789
Std Dev 813.1
1
0.5
0
−0.5
−1

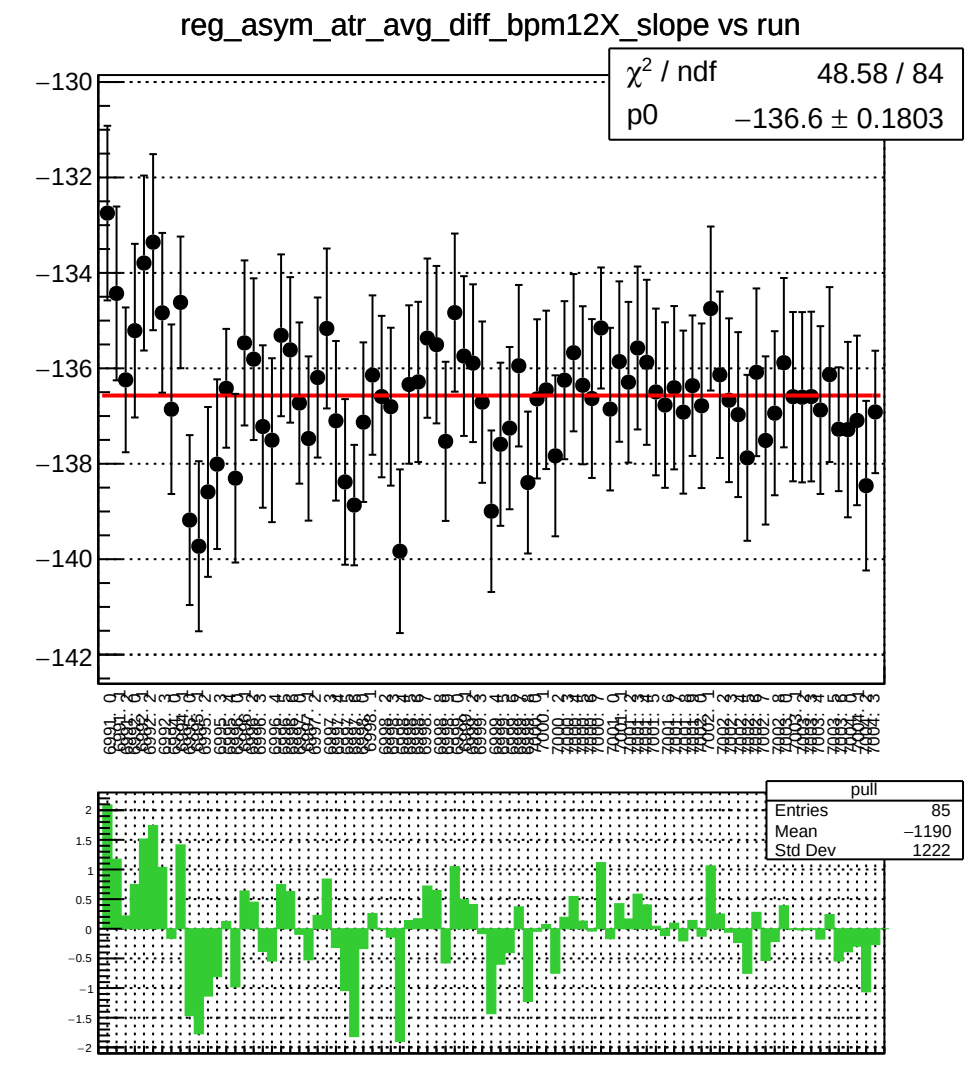

pull1D
Entries 85
Mean 0.001421
Std Dev 0.4933
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

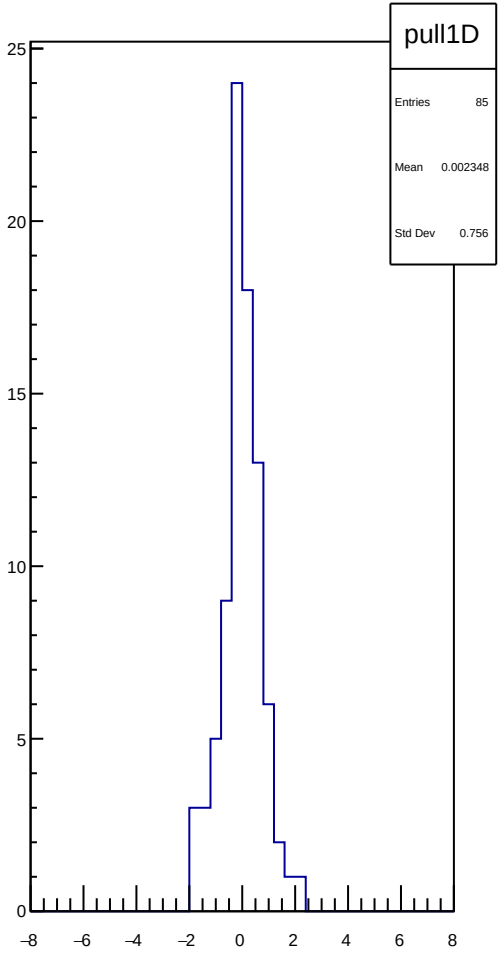

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.918 / 84
p0 −3.889 ± 3.731
pull
Entries 85
Mean 360.8
Std Dev 326.1

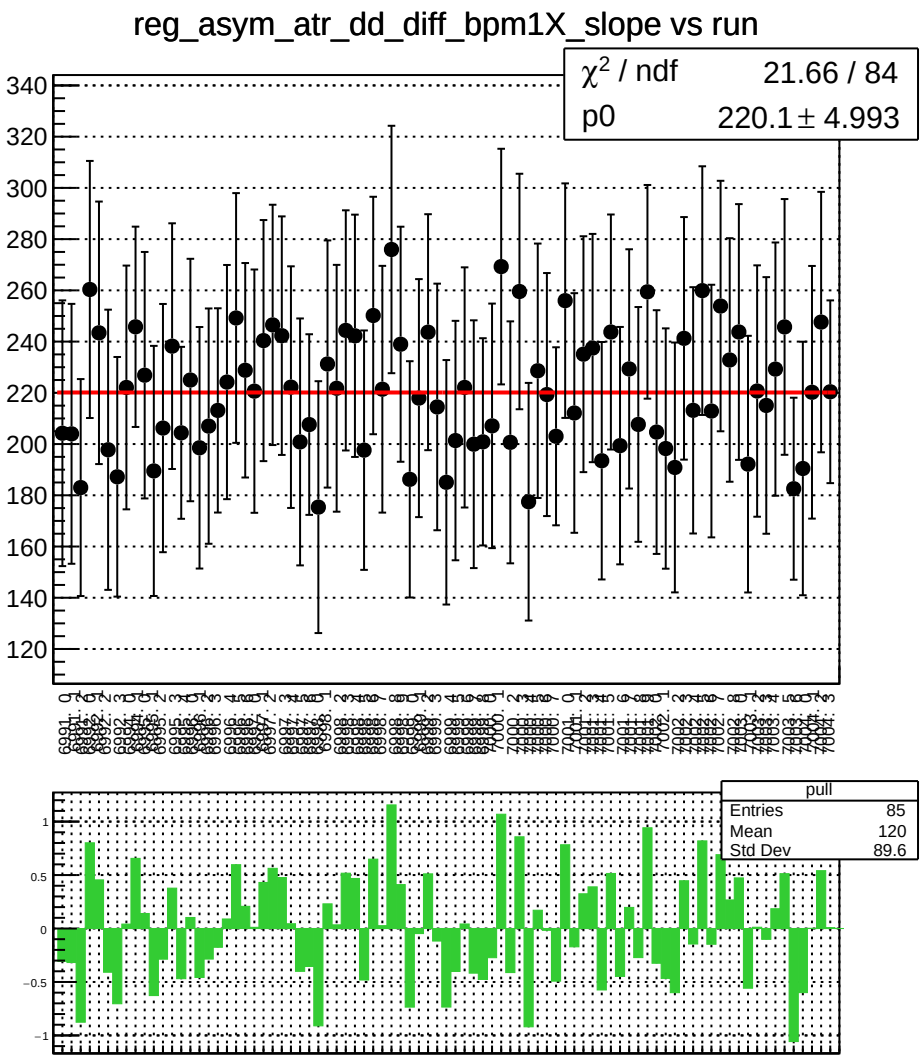

pull1D
Entries 85
Mean −0.003537
Std Dev 0.3239

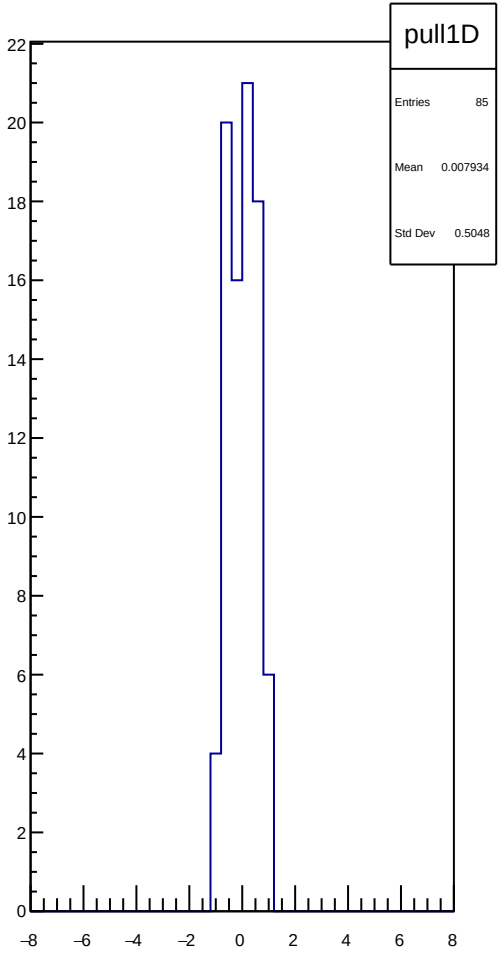

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 22.3 / 84
p0 276.5 ± 5.013
pull
Entries 85
Mean −1376
Std Dev 1399
pull1D
Entries 85
Mean −0.001077
Std Dev 0.5122

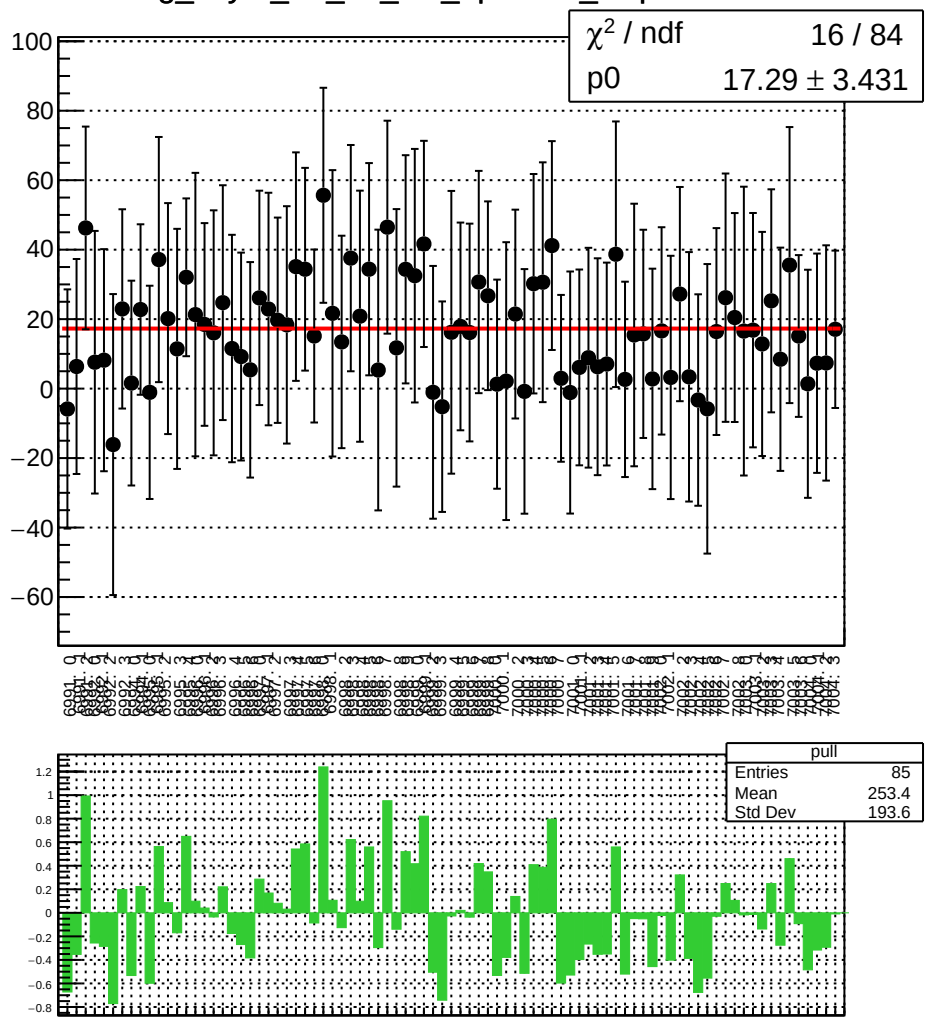

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.671 / 84
p0 65.72 ± 3.934
pull
Entries 85
Mean 188.7
Std Dev 159.6
pull1D
Entries 85
Mean 0.003315
Std Dev 0.3373

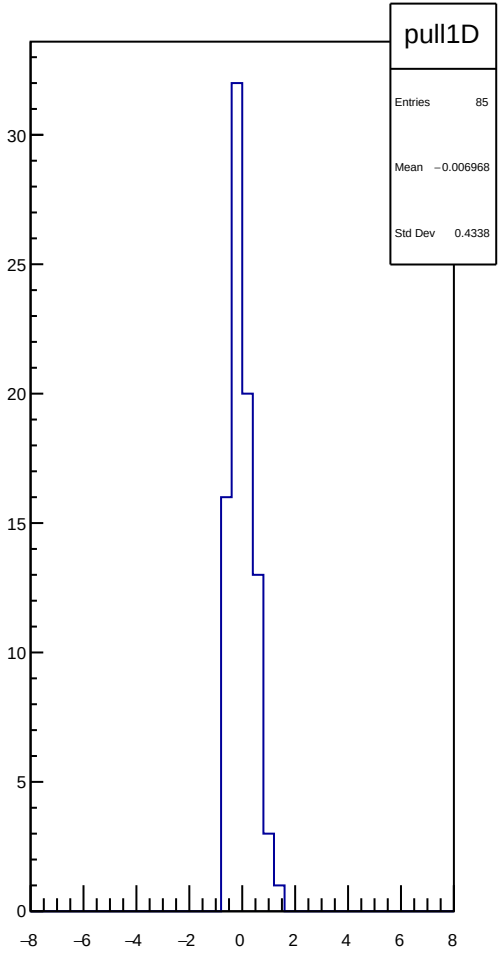

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 48.58 / 84
p0 −136.6 ± 0.1803
pull
Entries 85
Mean −1190
Std Dev 1222

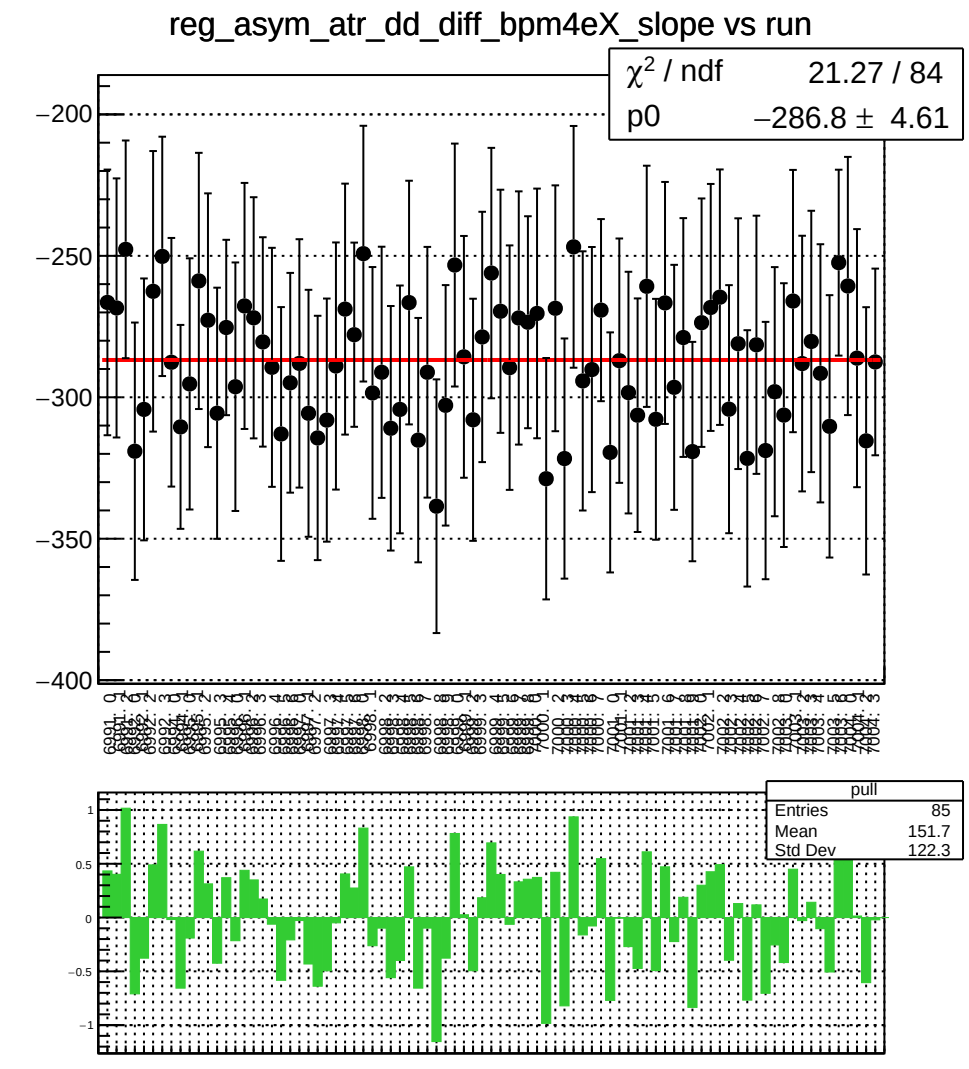

pull1D
Entries 85
Mean 0.002348
Std Dev 0.756

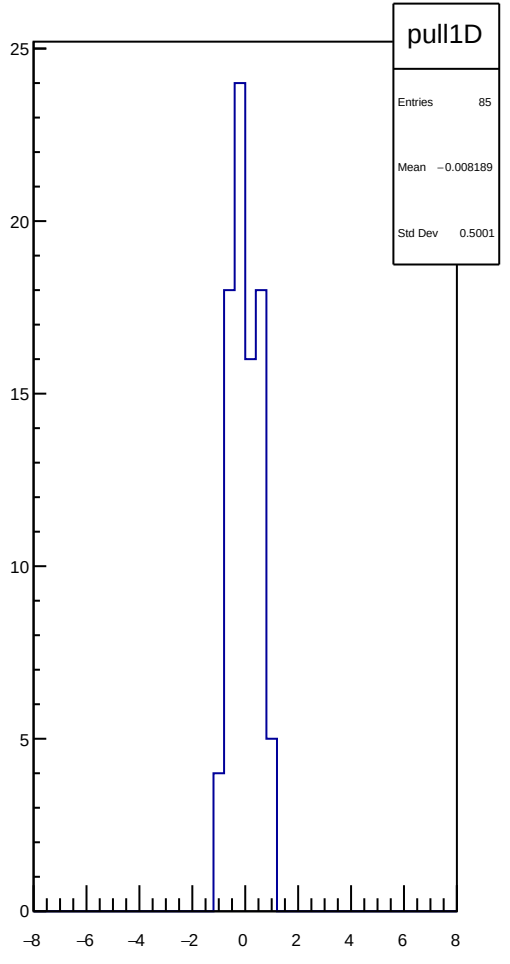

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 21.66 / 84
p0 220.1 ± 4.993
pull
Entries 85
Mean 120
Std Dev 89.6

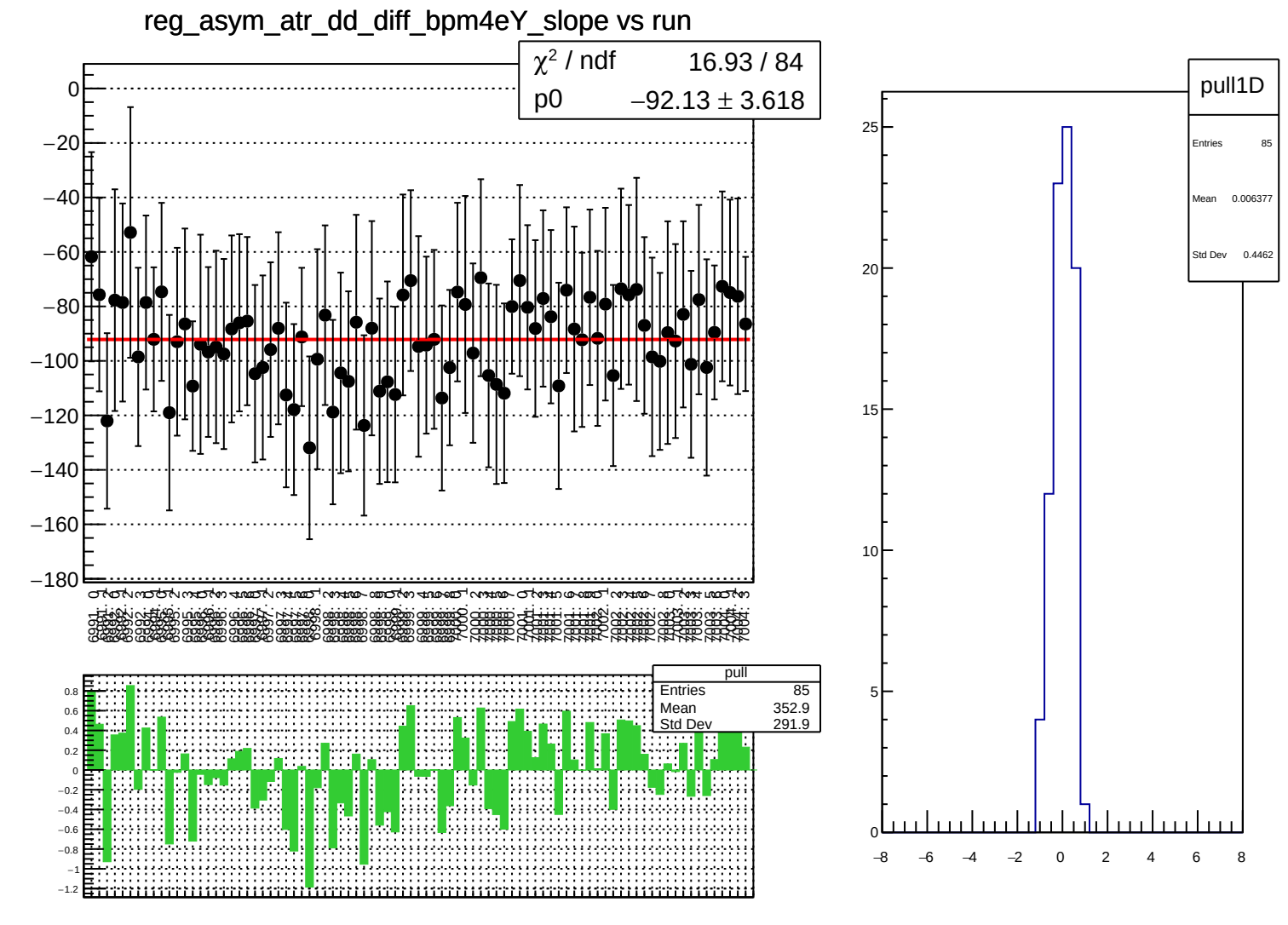

pull1D
Entries 85
Mean 0.007934
Std Dev 0.5048

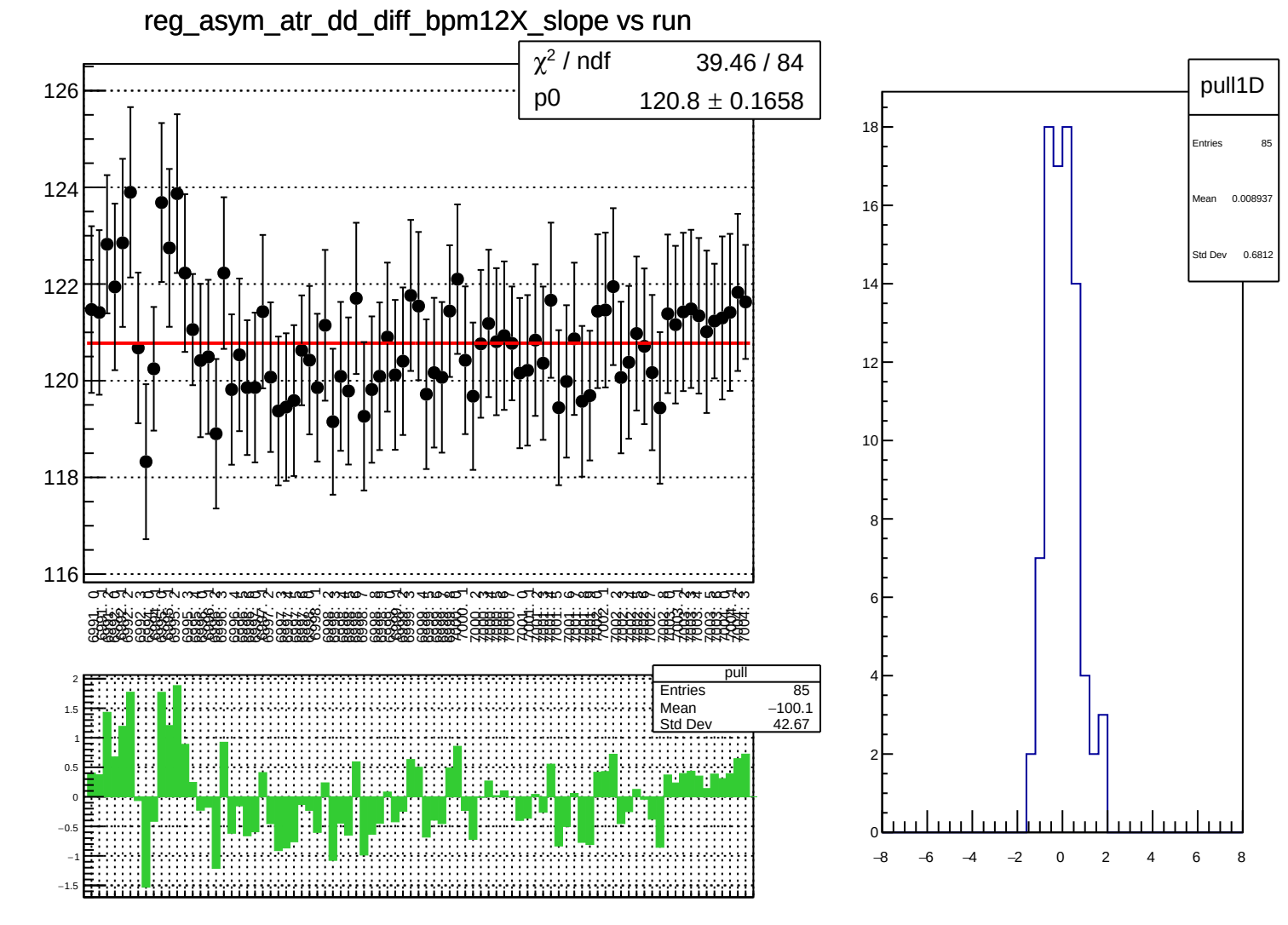

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 16 / 84
p0 17.29 ± 3.431
pull
Entries 85
Mean 253.4
Std Dev 193.6

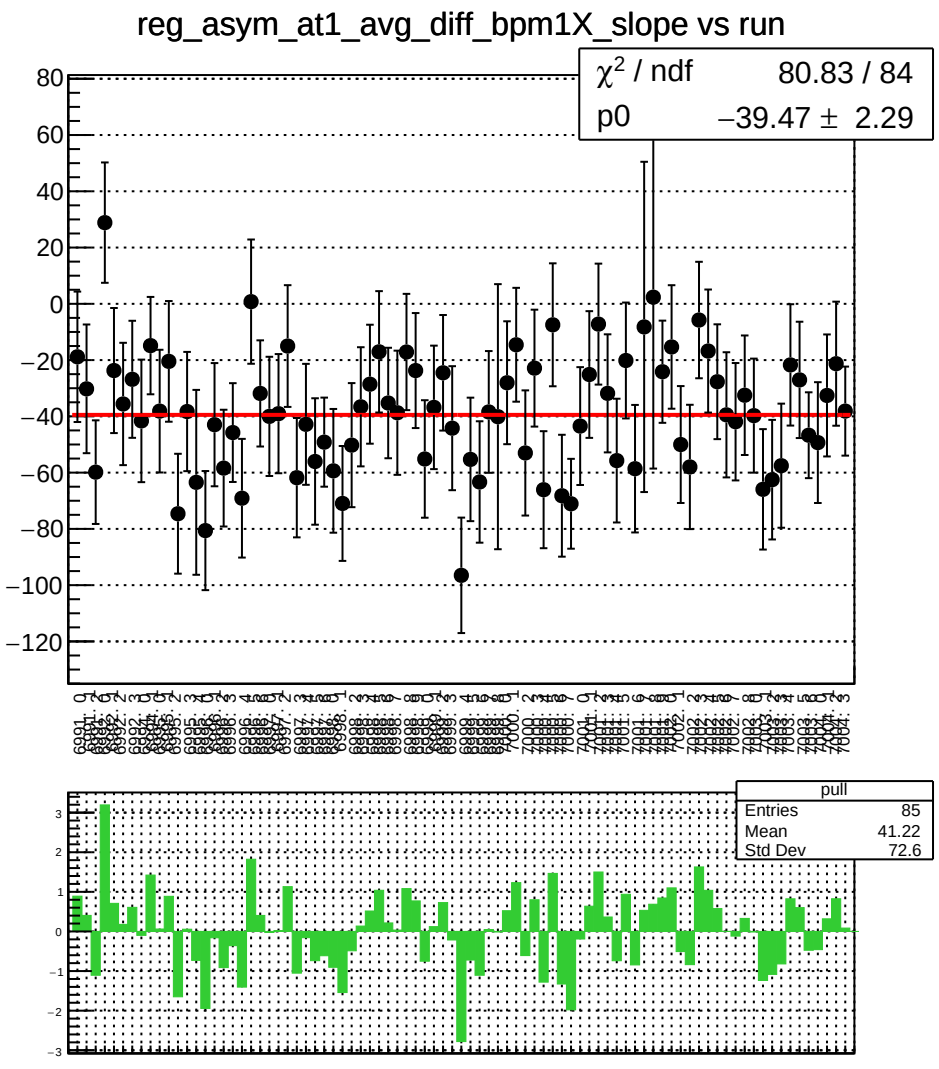

pull1D
Entries 85
Mean −0.006968
Std Dev 0.4338

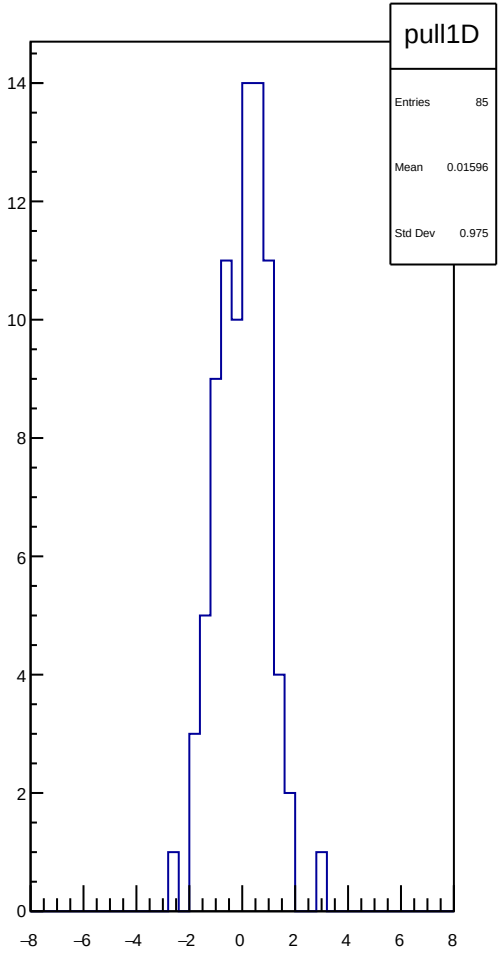

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 21.27 / 84
p0 −286.8 ± 4.61
−200
−250
−300
−350
−400
pull
Entries 85
Mean 151.7
Std Dev 122.3
1
0.5
0
−0.5
−1

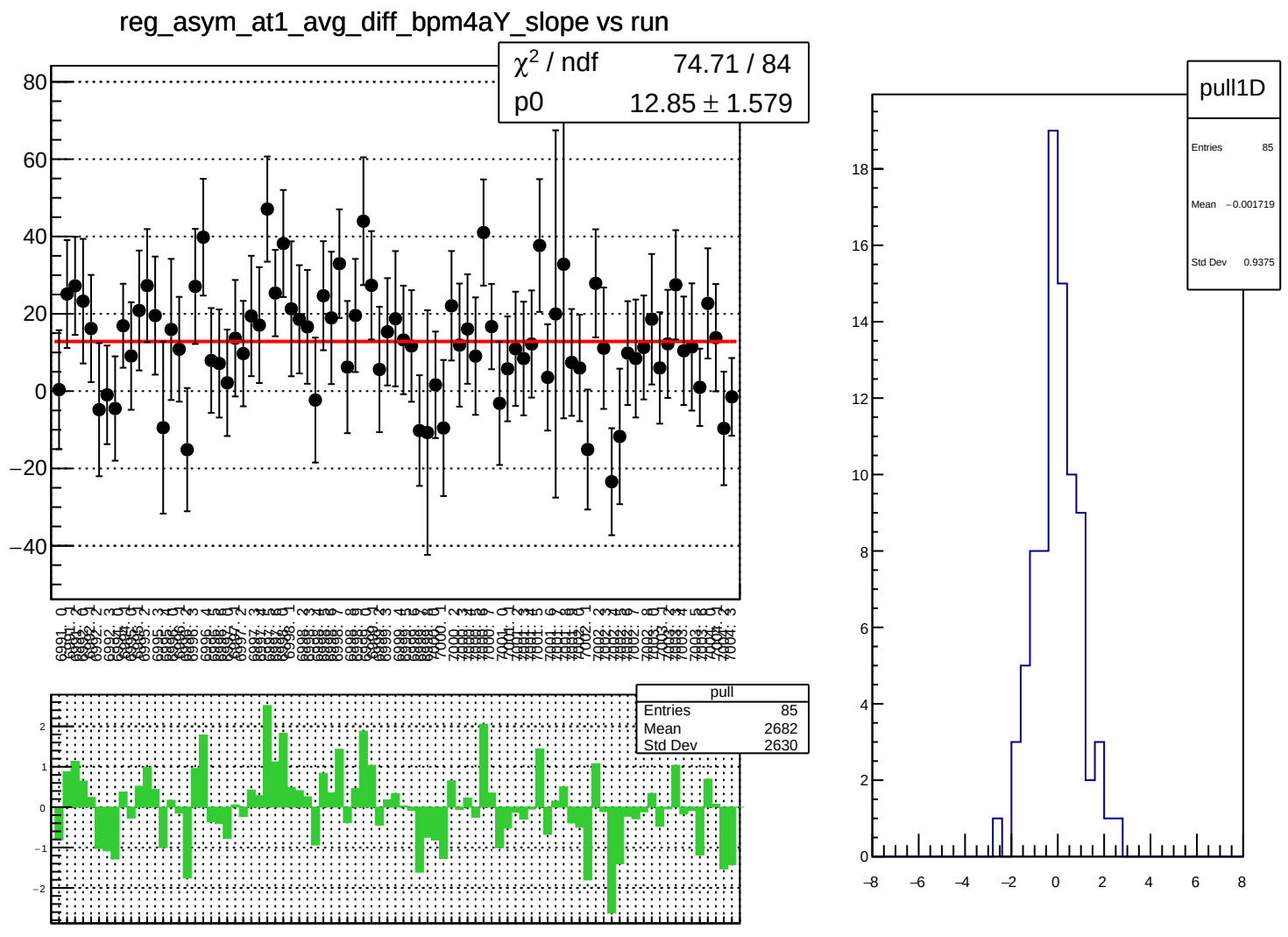

pull1D
Entries 85
Mean −0.008189
Std Dev 0.5001
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

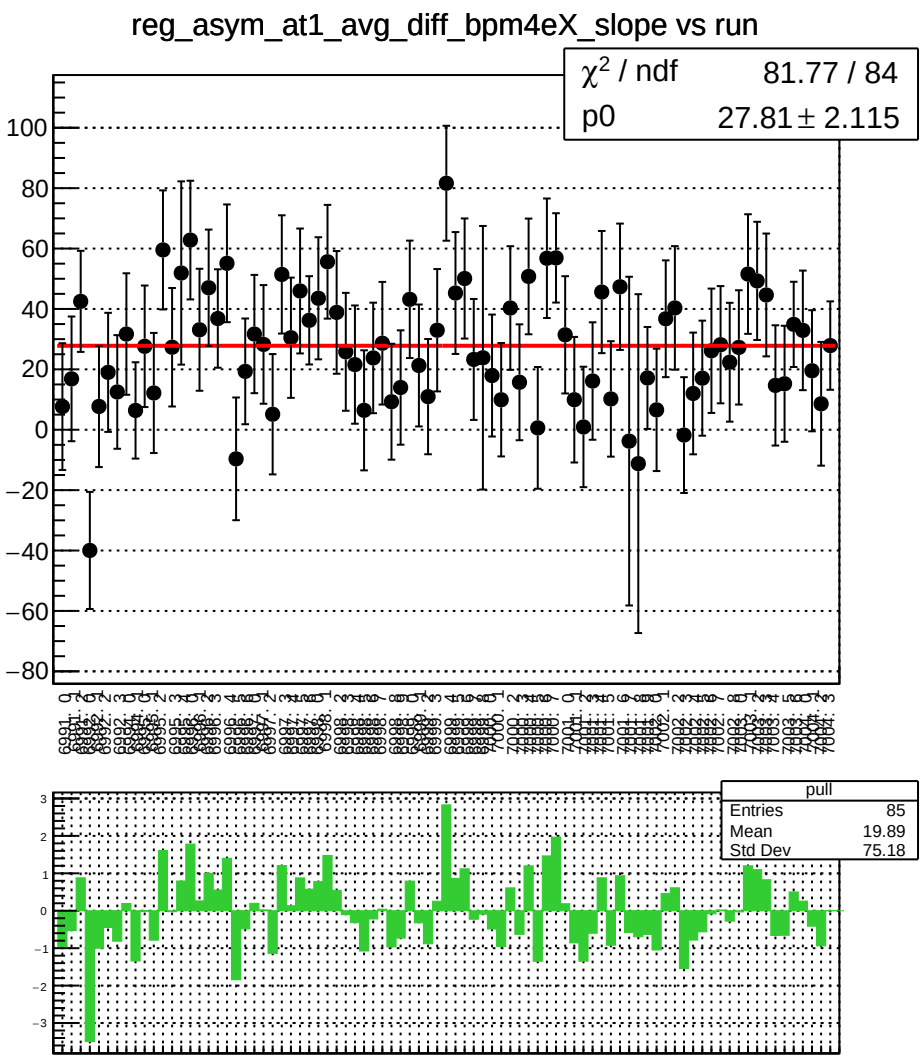

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 16.93 / 84
p0 −92.13 ± 3.618
pull
Entries 85
Mean 352.9
Std Dev 291.9
pull1D
Entries 85
Mean 0.006377
Std Dev 0.4462

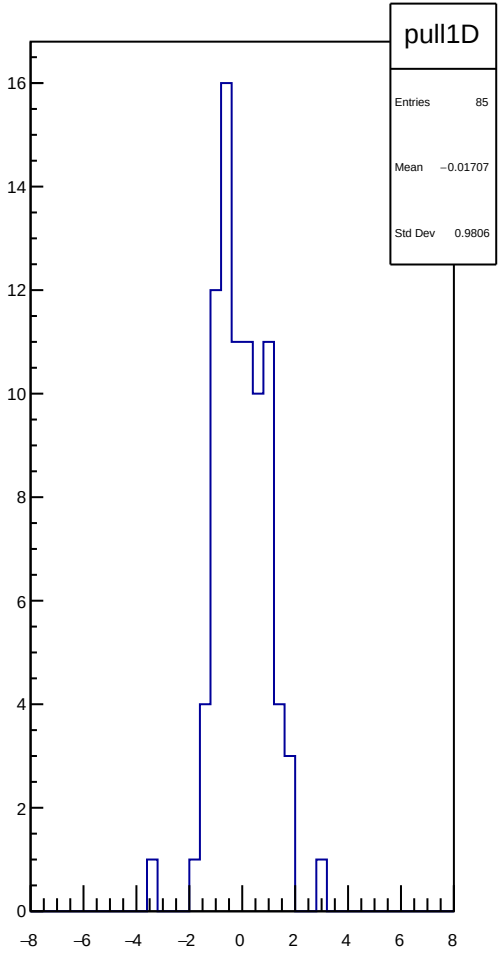

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 39.46 / 84
p0 120.8 ± 0.1658
126
124
122
120
118
116
pull
Entries 85
Mean −100.1
Std Dev 42.67
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean 0.008937
Std Dev 0.6812
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

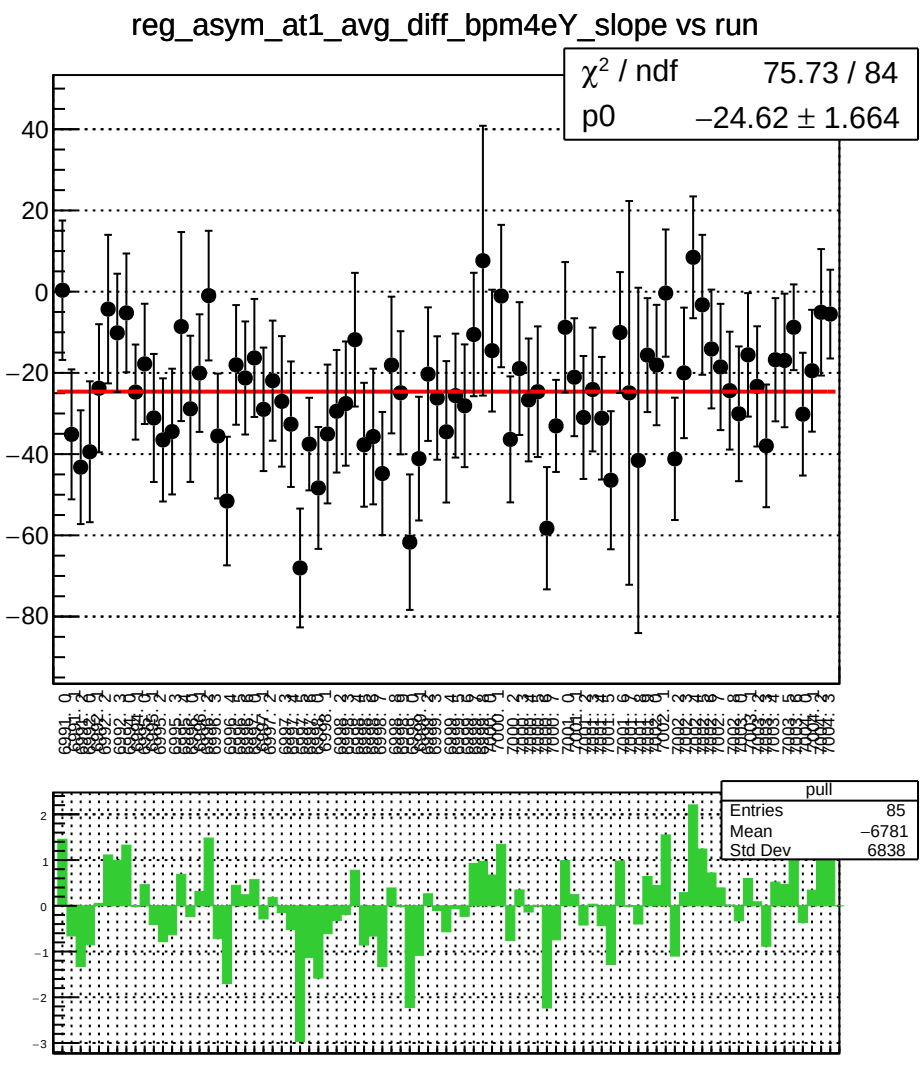

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 80.83 / 84
p0 −39.47 ± 2.29
pull
Entries 85
Mean 41.22
Std Dev 72.6

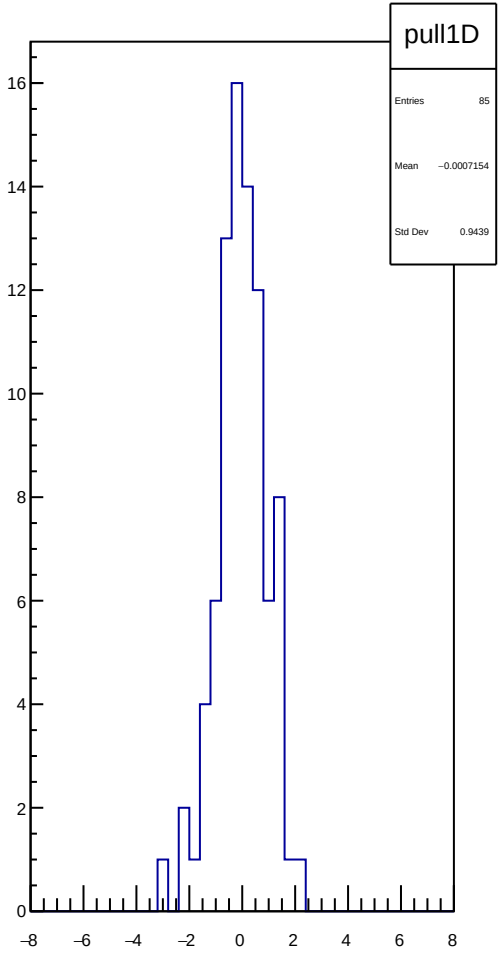

pull1D
Entries 85
Mean 0.01596
Std Dev 0.975

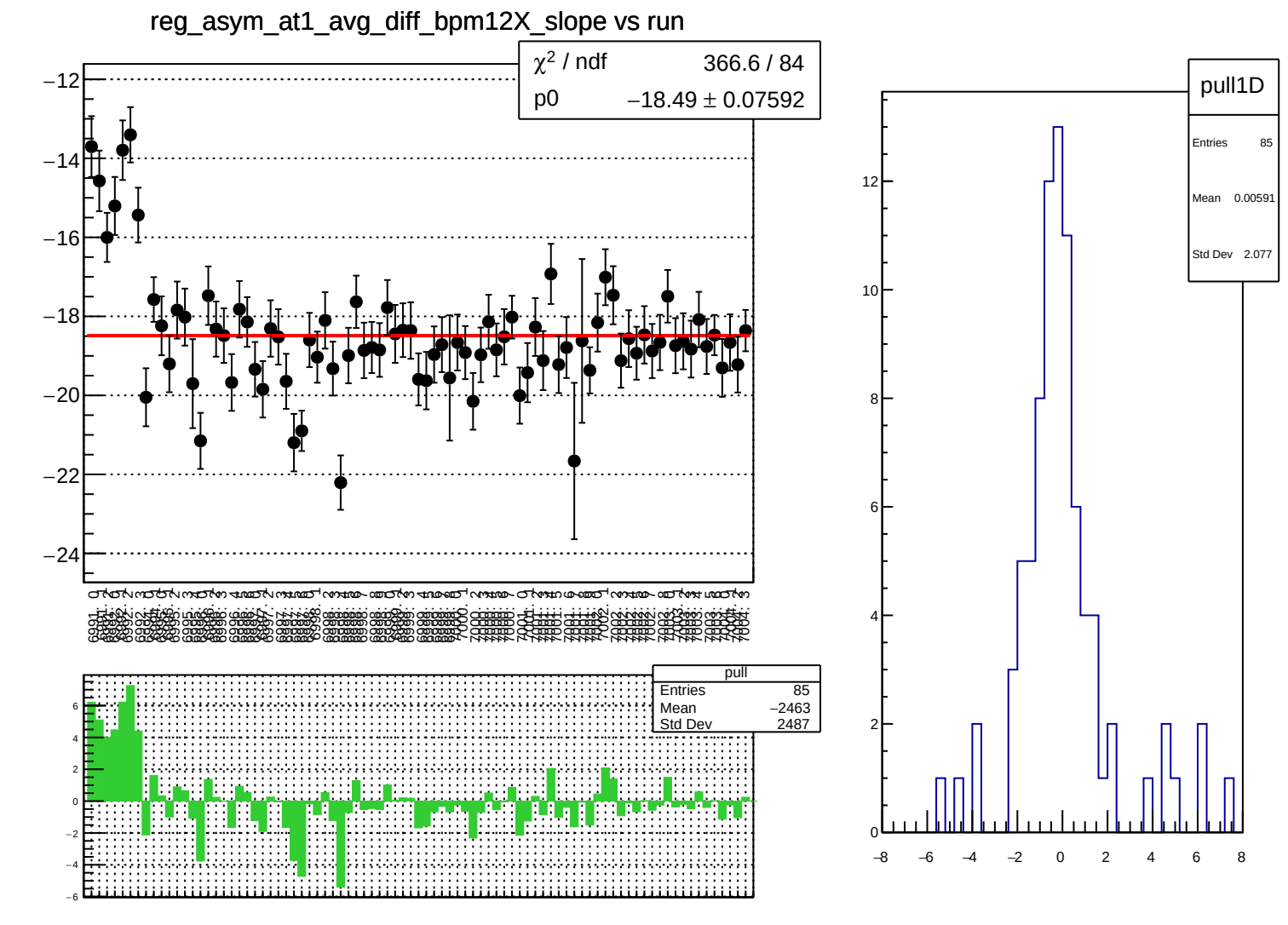

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 74.71 / 84
p0 12.85 ± 1.579
pull
Entries 85
Mean 2682
Std Dev 2630
pull1D
Entries 85
Mean −0.001719
Std Dev 0.9375

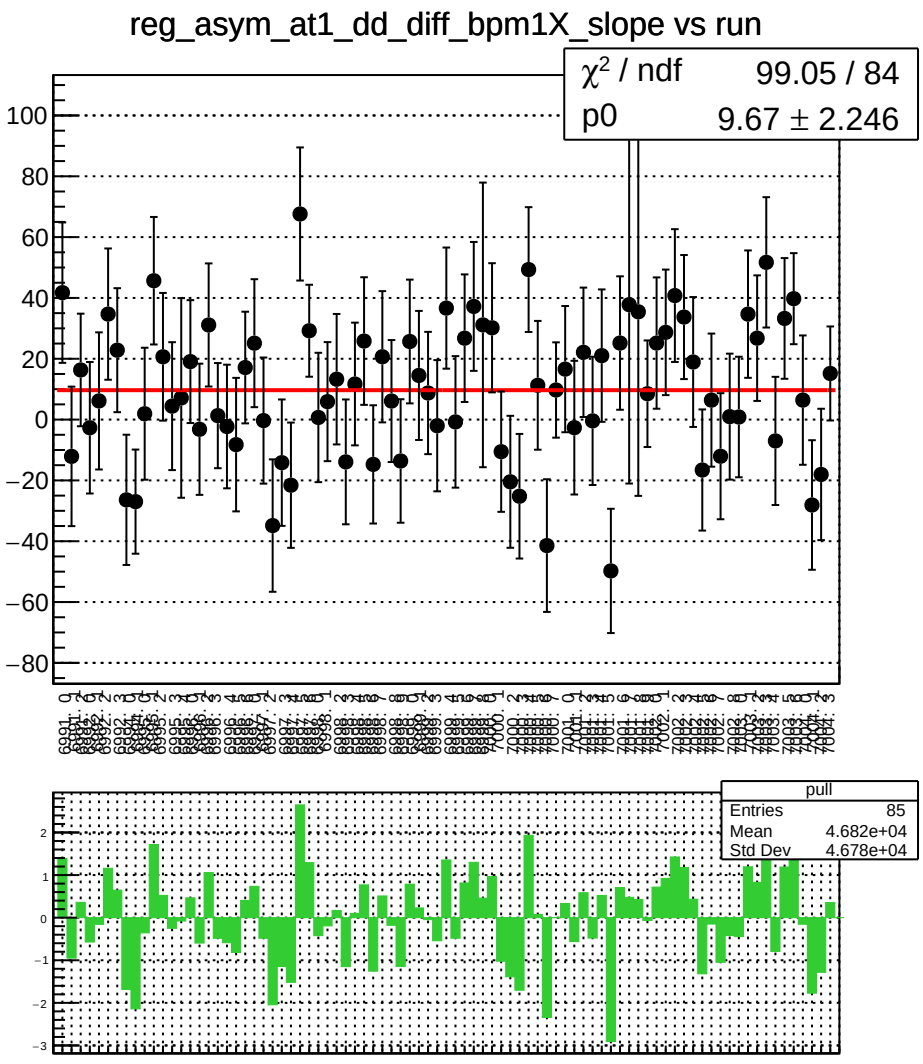

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 81.77 / 84
p0 27.81 ± 2.115
pull
Entries 85
Mean 19.89
Std Dev 75.18

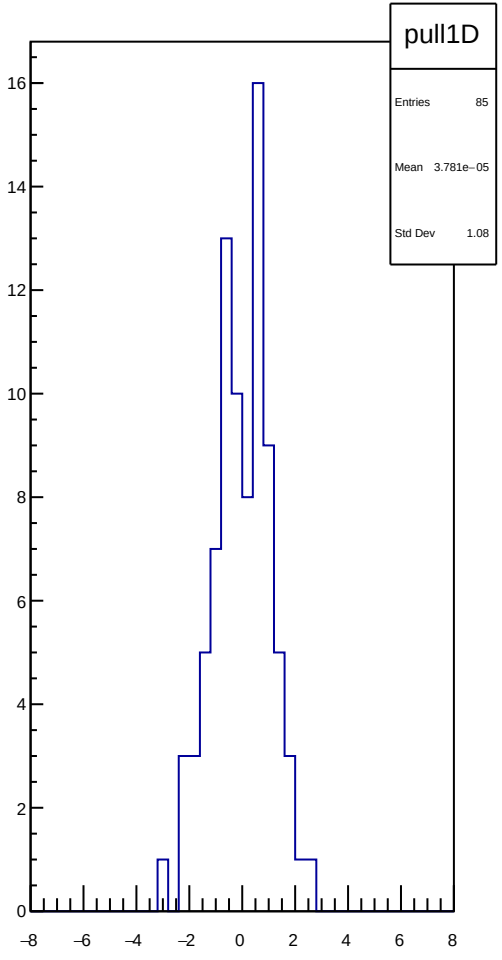

pull1D
Entries 85
Mean −0.01707
Std Dev 0.9806

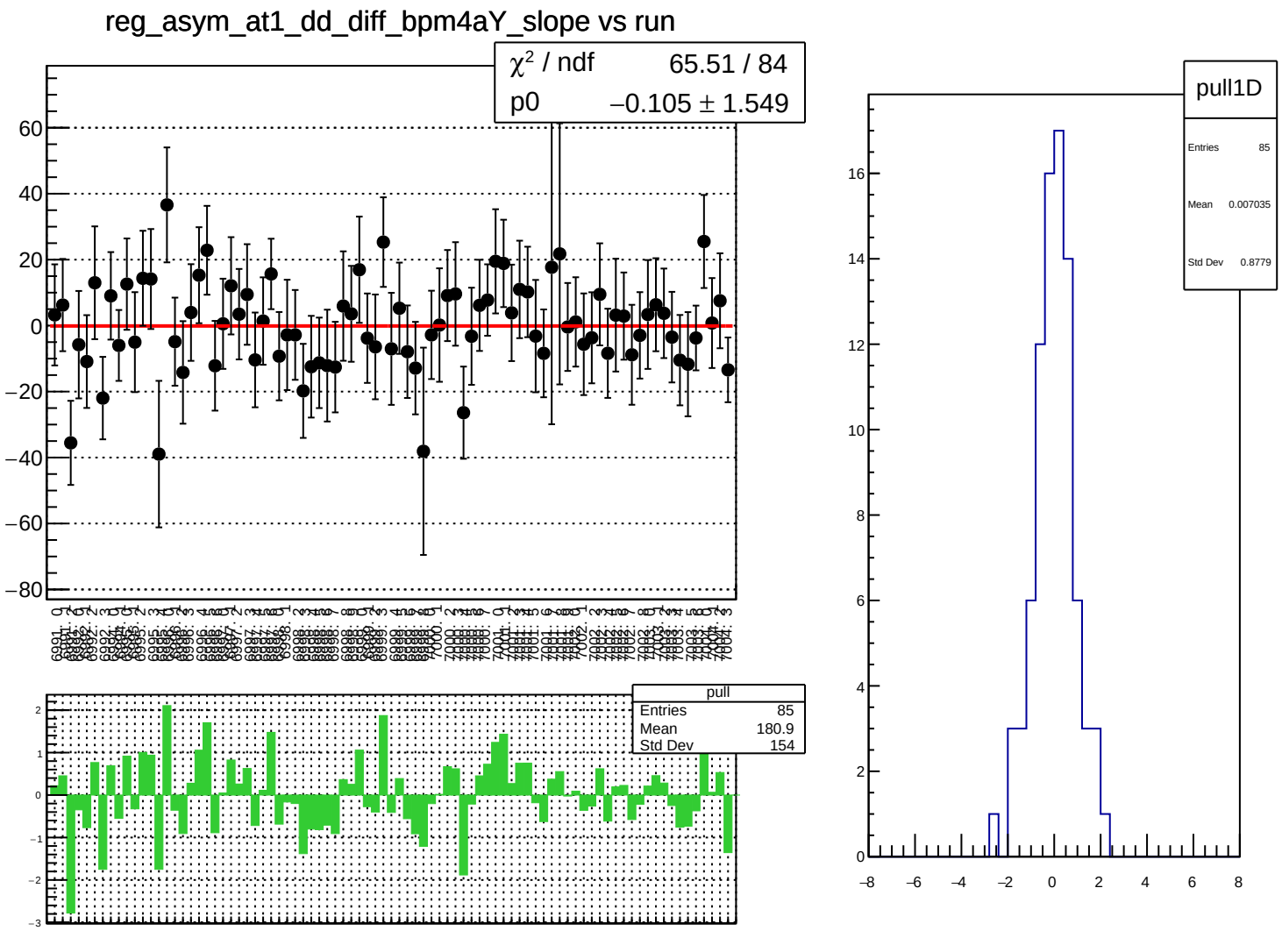

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 75.73 / 84
p0 −24.62 ± 1.664
pull
Entries 85
Mean −6781
Std Dev 6838

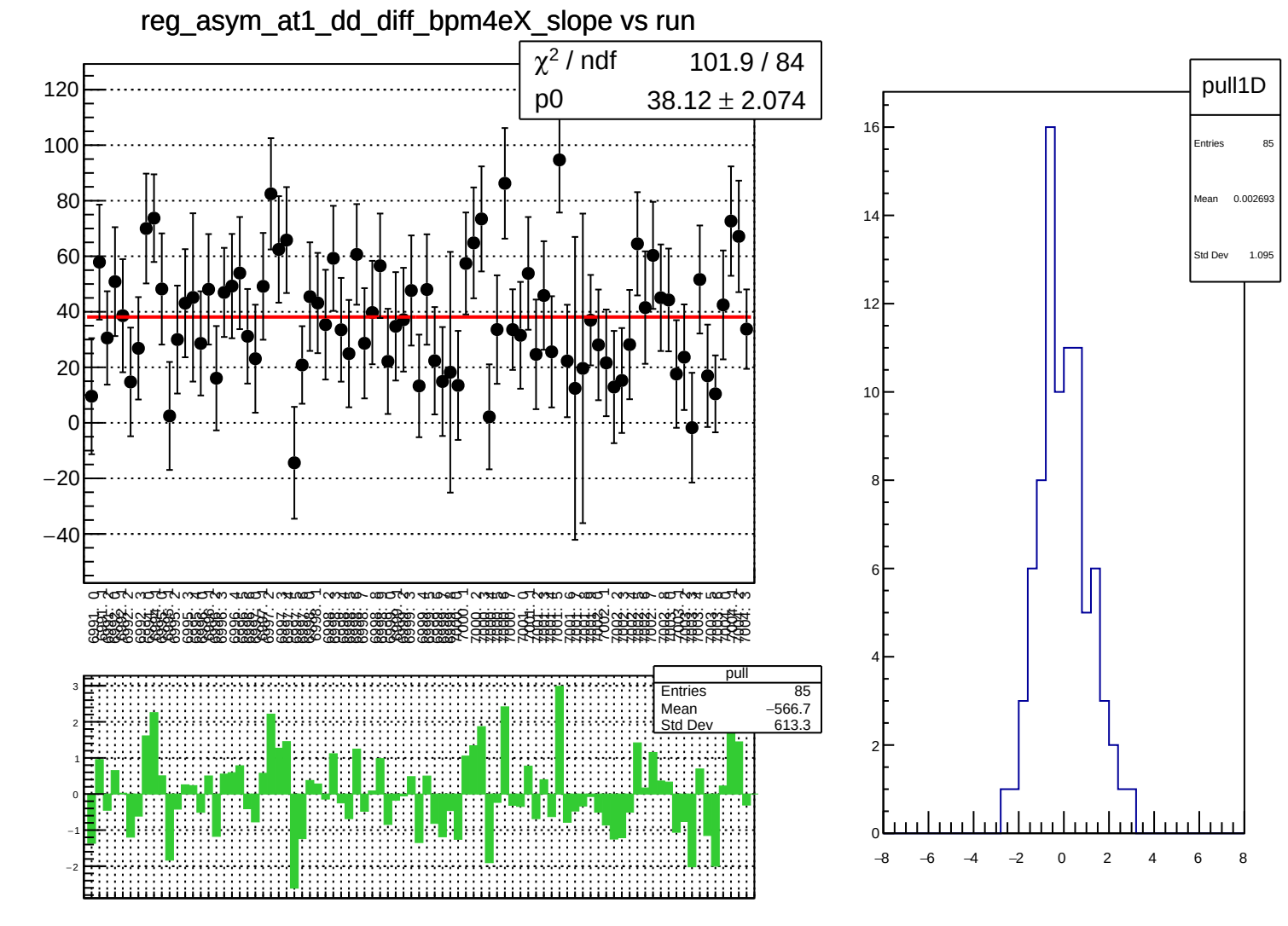

pull1D
Entries 85
Mean −0.0007154
Std Dev 0.9439

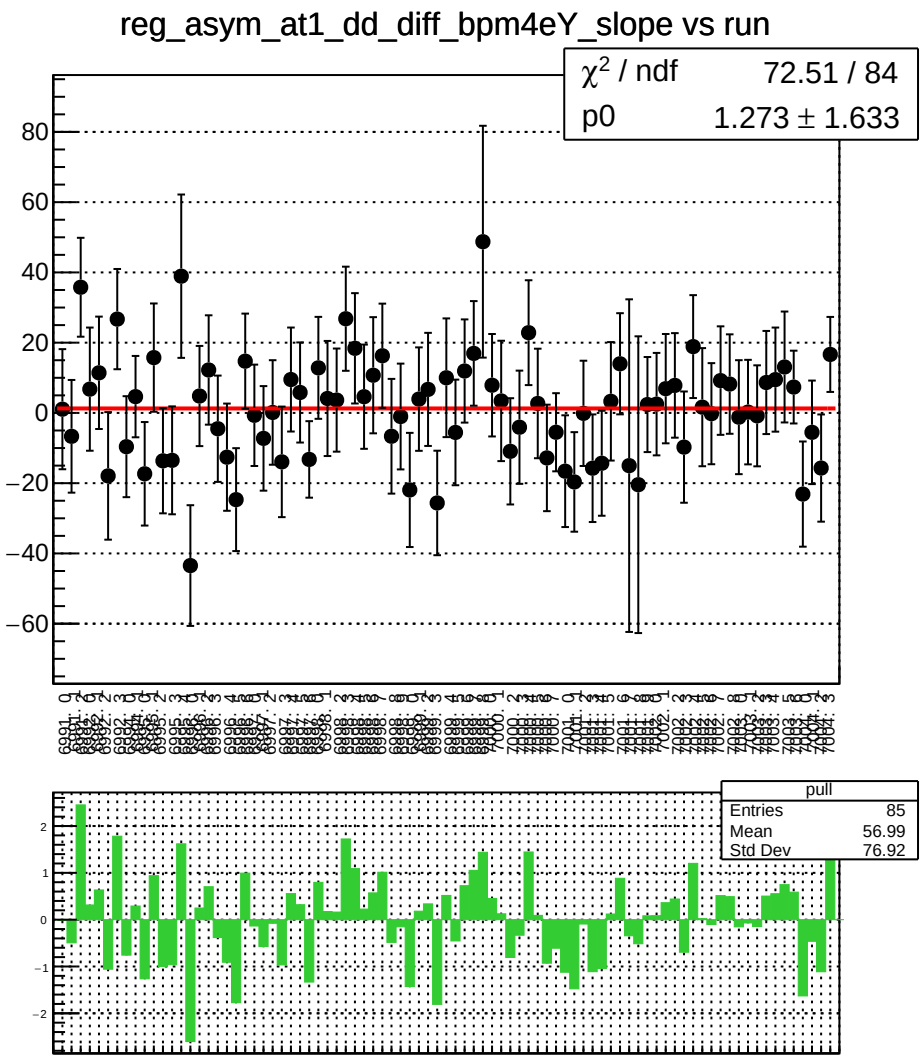

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 366.6 / 84
p0 −18.49 ± 0.07592
pull
Entries 85
Mean −2463
Std Dev 2487
pull1D
Entries 85
Mean 0.00591
Std Dev 2.077

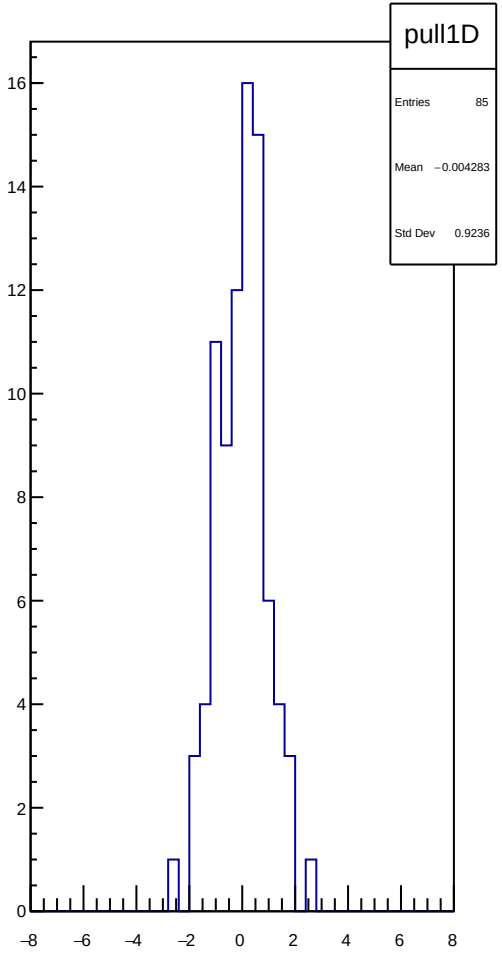

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 99.05 / 84
p0 9.67 ± 2.246
pull
Entries 85
Mean 4.682e+04
Std Dev 4.678e+04

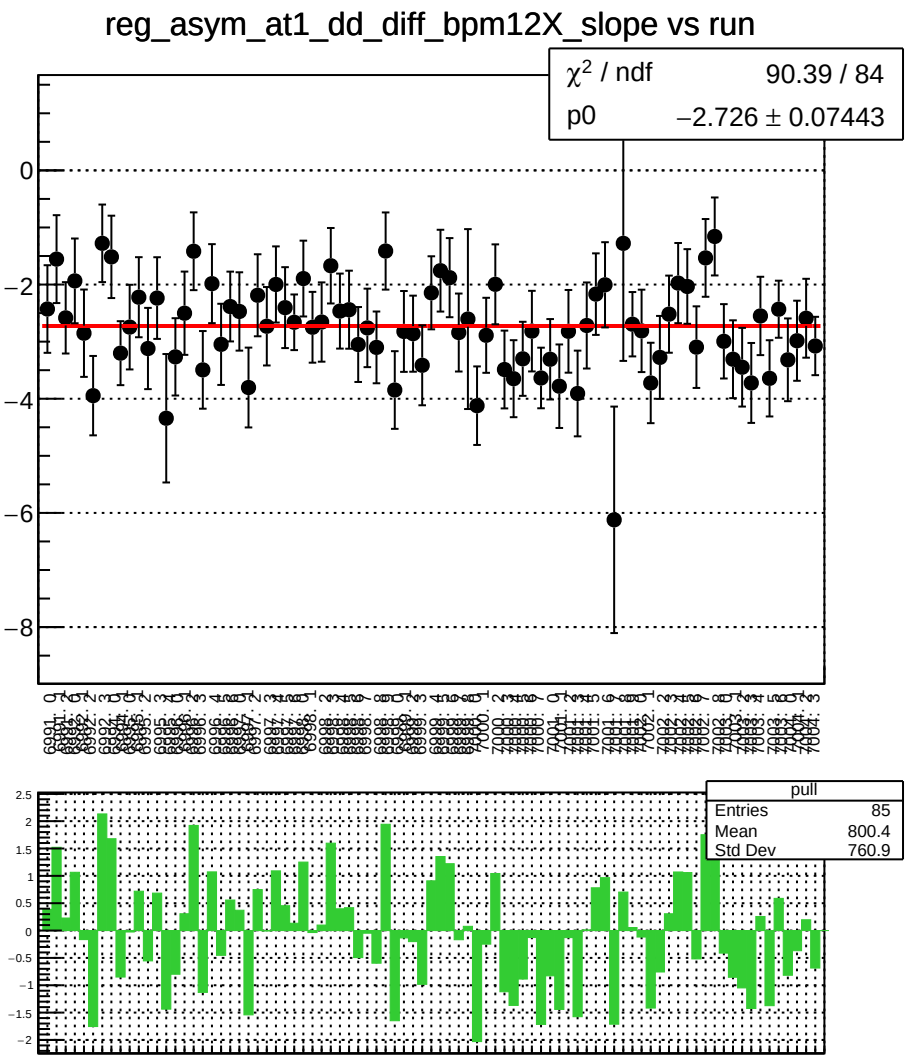

pull1D
Entries 85
Mean 3.781e−05
Std Dev 1.08

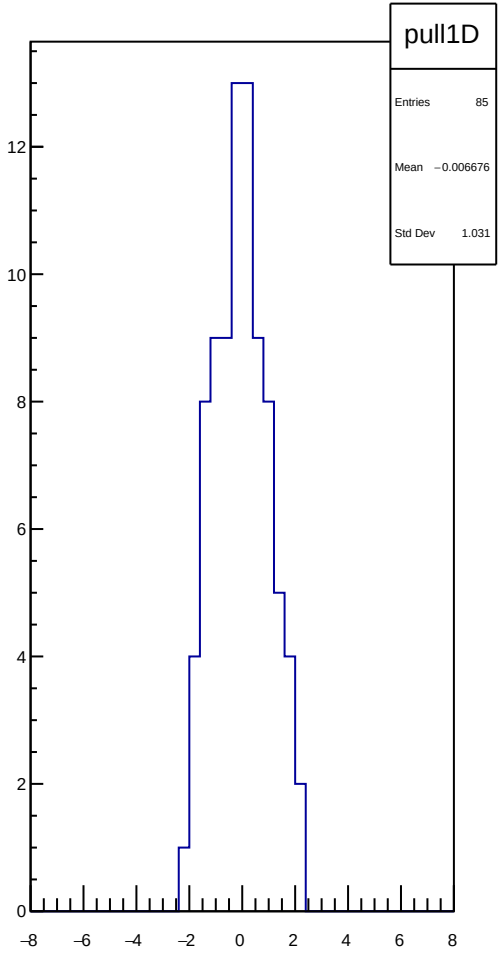

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 65.51 / 84
p0 −0.105 ± 1.549
pull
Entries 85
Mean 180.9
Std Dev 154
pull1D
Entries 85
Mean 0.007035
Std Dev 0.8779

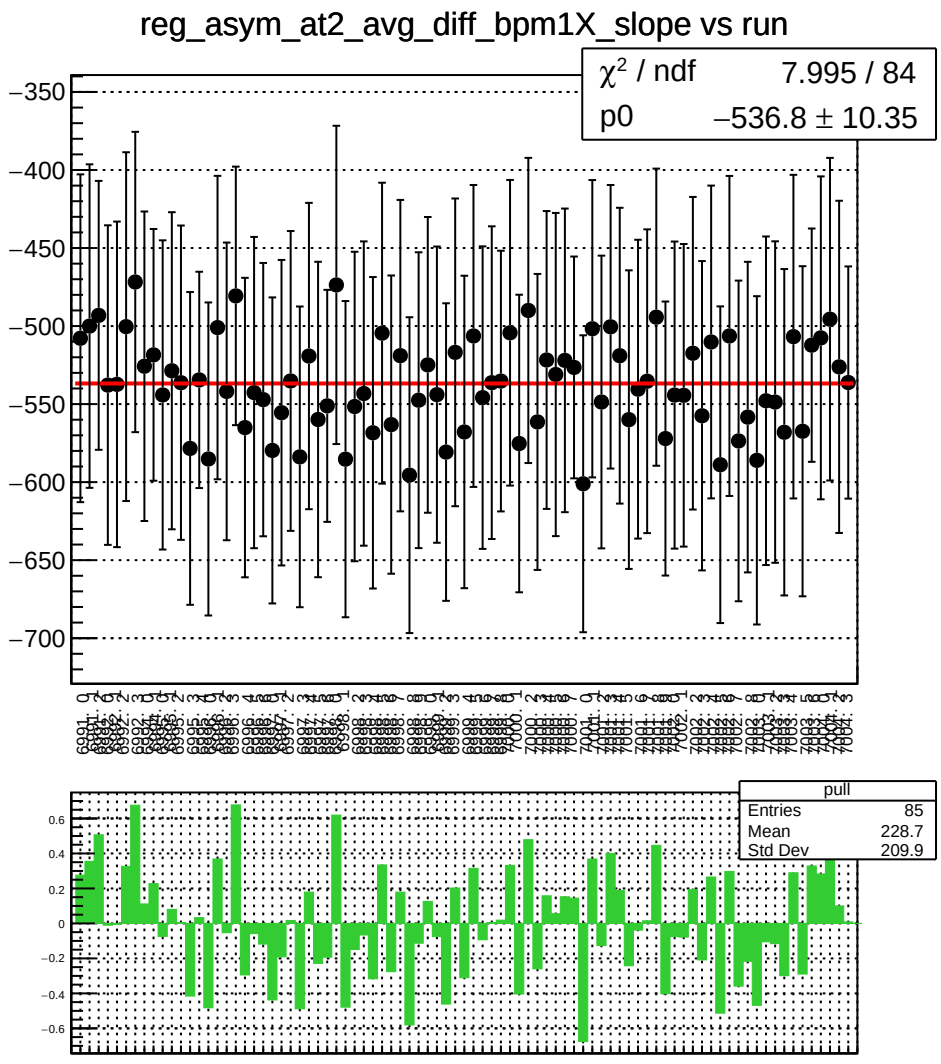

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 101.9 / 84
p0 38.12 ± 2.074
pull
Entries 85
Mean −566.7
Std Dev 613.3
pull1D
Entries 85
Mean 0.002693
Std Dev 1.095

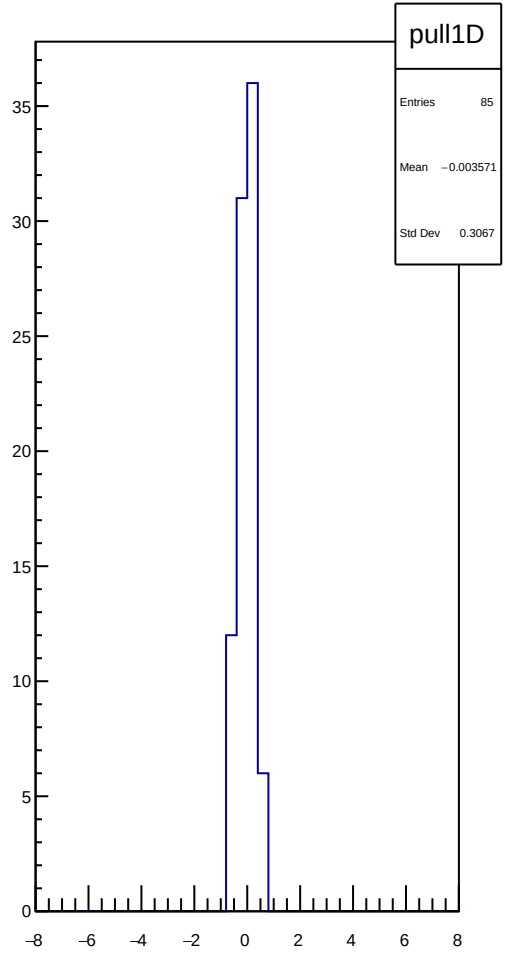

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 72.51 / 84
p0 1.273 ± 1.633
pull
Entries 85
Mean 56.99
Std Dev 76.92

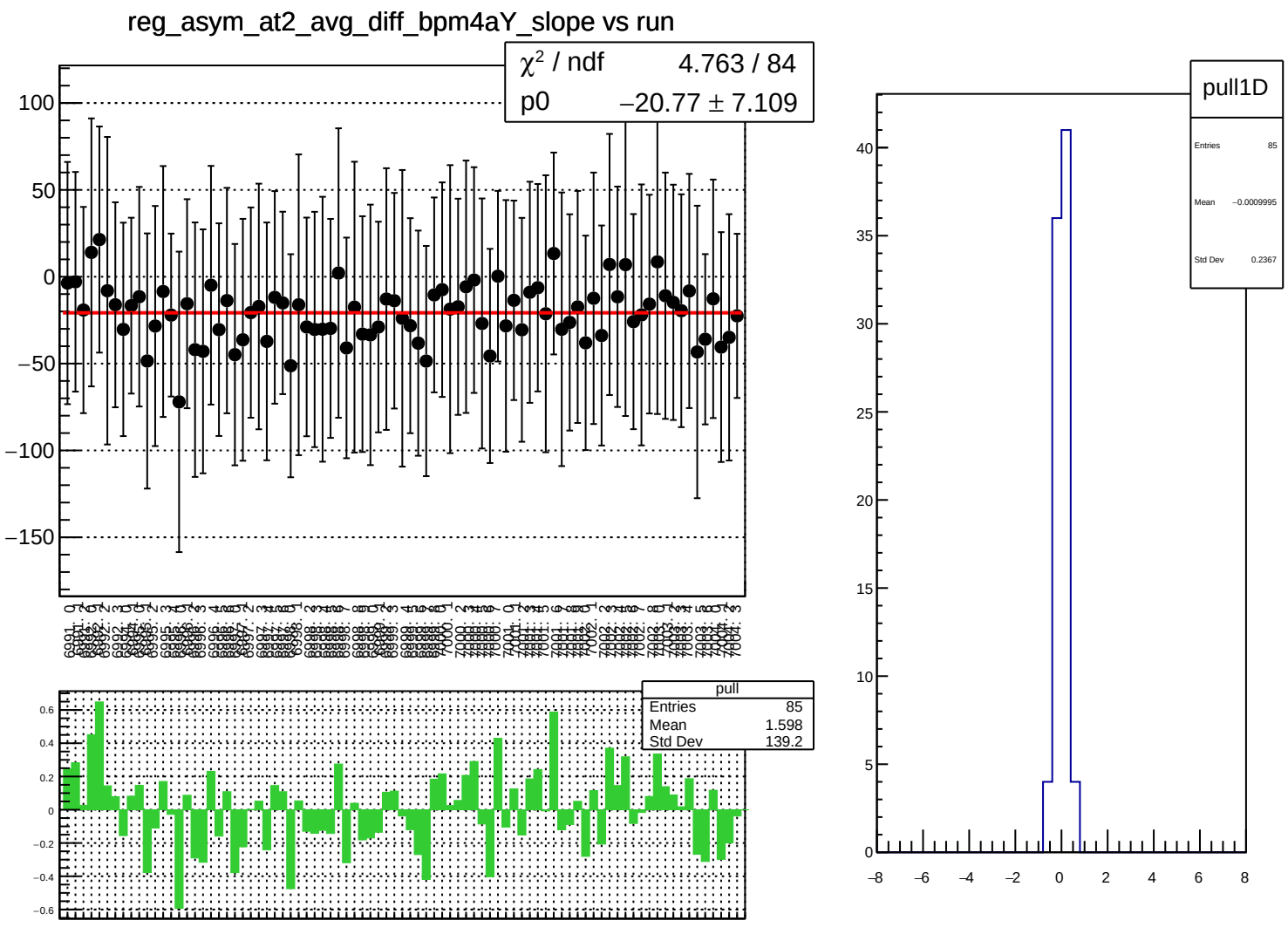

pull1D
Entries 85
Mean −0.004283
Std Dev 0.9236

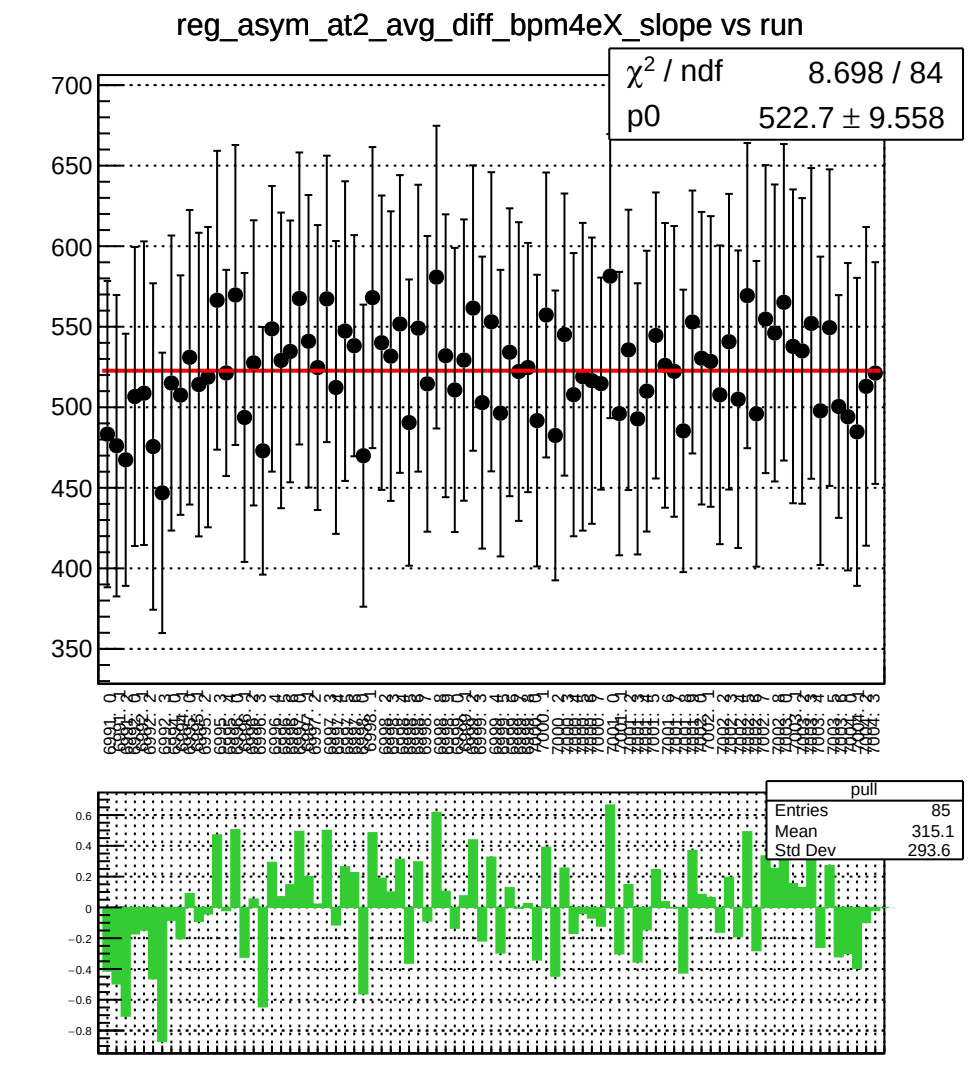

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 90.39 / 84
p0 −2.726 ± 0.07443
pull
Entries 85
Mean 800.4
Std Dev 760.9

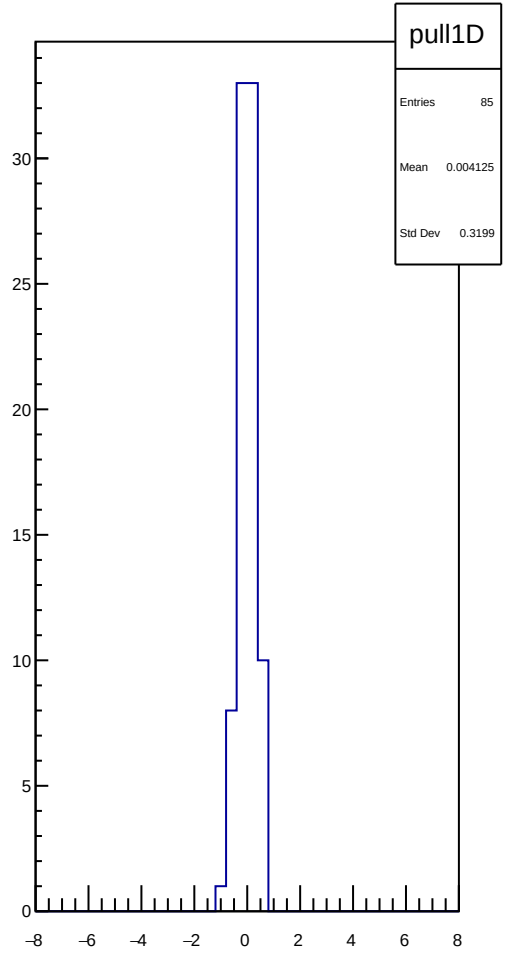

pull1D
Entries 85
Mean −0.006676
Std Dev 1.031

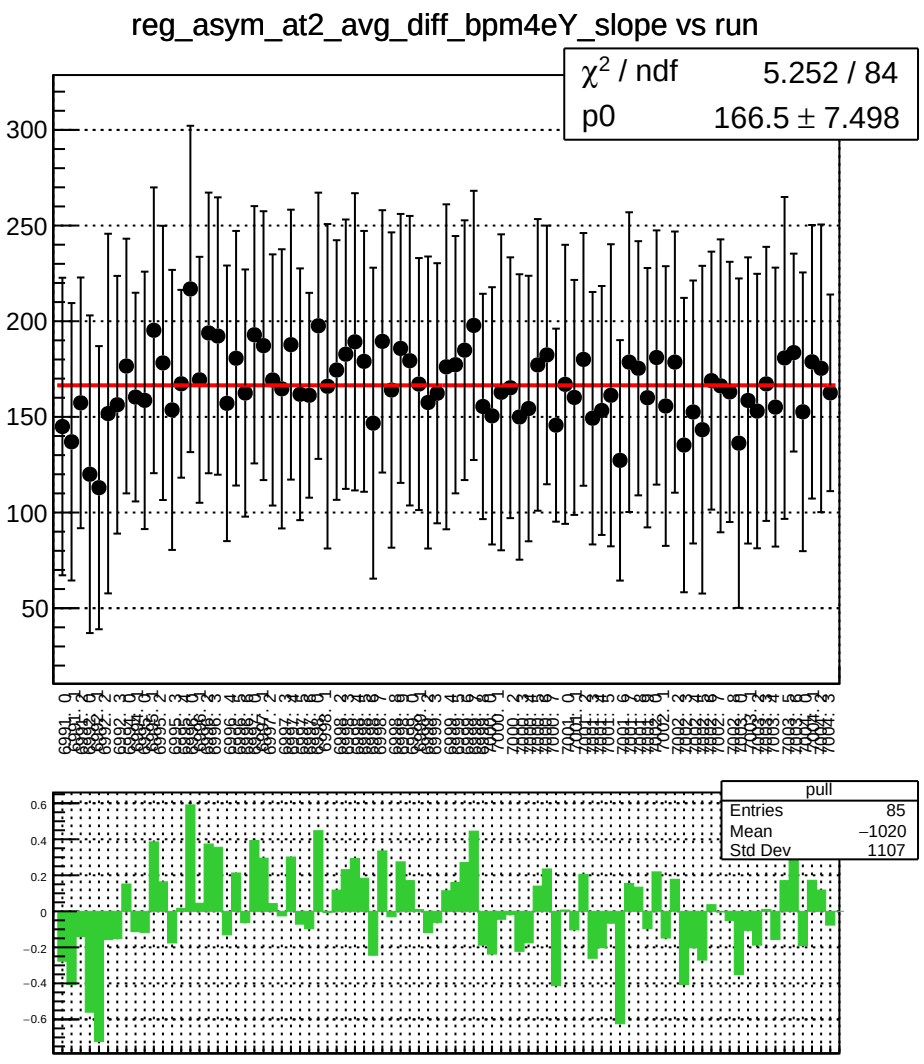

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 7.995 / 84
p0 −536.8 ± 10.35
pull
Entries 85
Mean 228.7
Std Dev 209.9

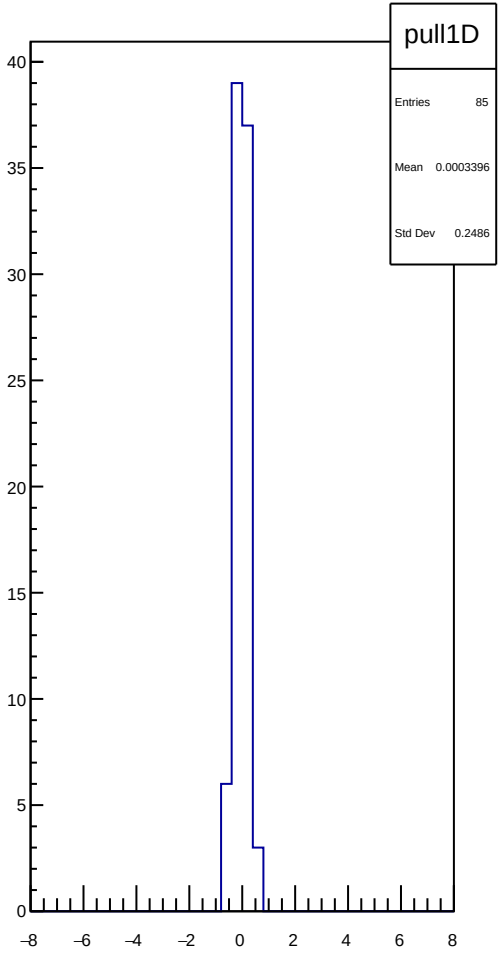

pull1D
Entries 85
Mean −0.003571
Std Dev 0.3067

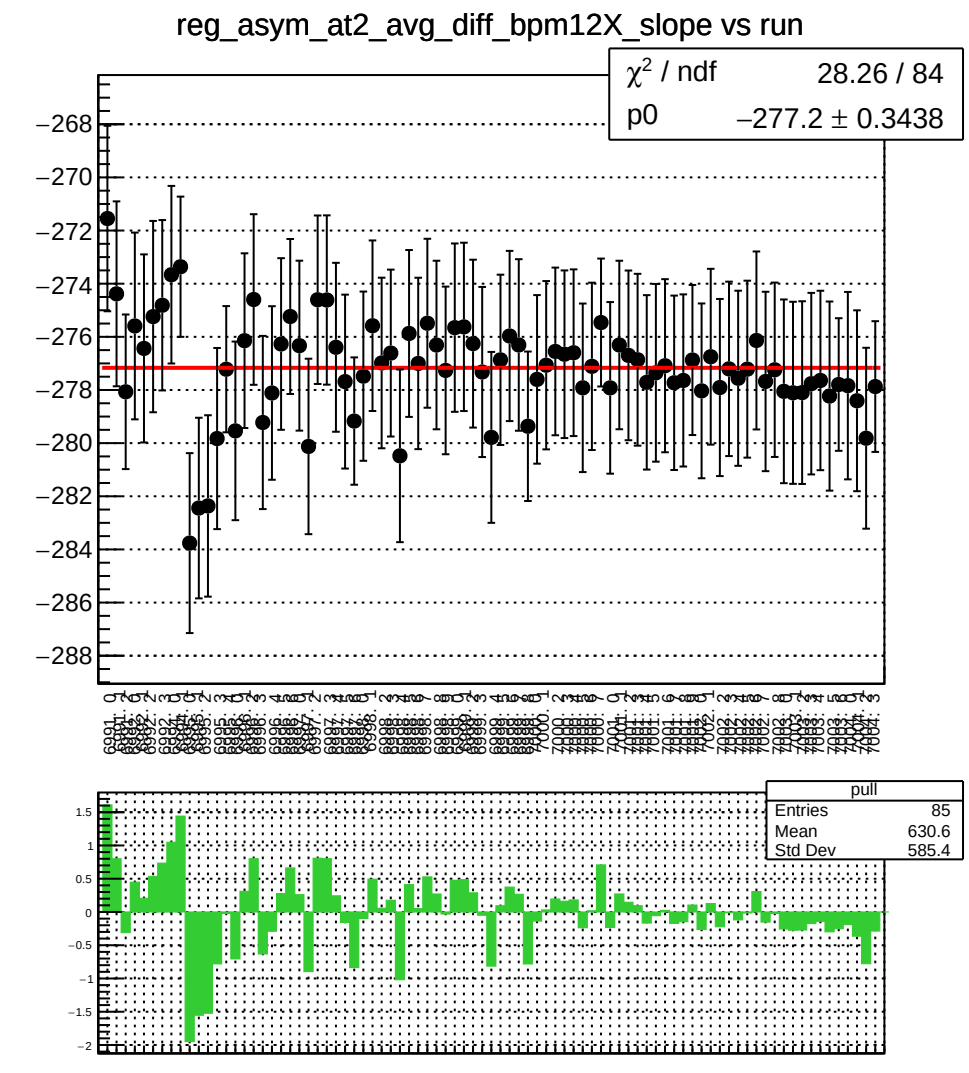

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.763 / 84
p0 −20.77 ± 7.109
100
50
0
−50
−100
−150
pull
Entries 85
Mean 1.598
Std Dev 139.2
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 85
Mean −0.0009995
Std Dev 0.2367
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

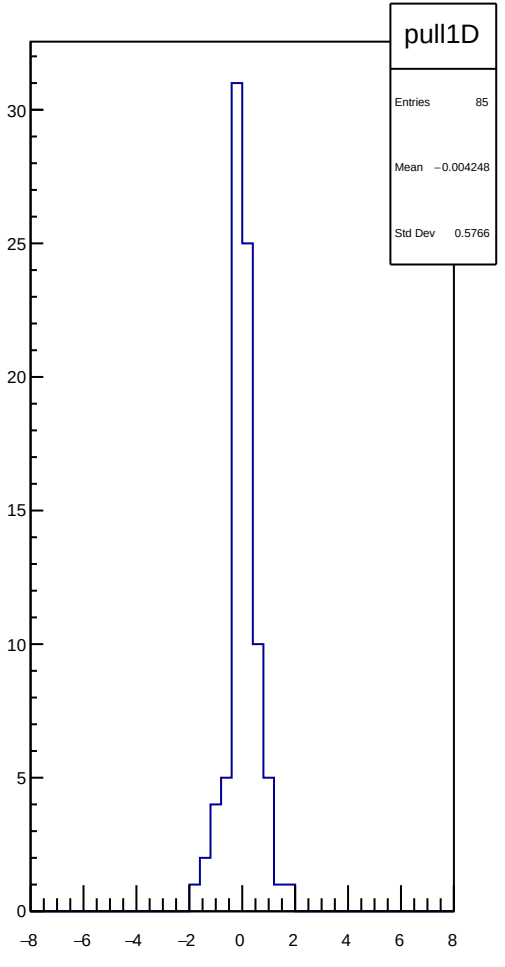

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.698 / 84
p0 522.7 ± 9.558
700
650
600
550
500
450
400
350
pull
Entries 85
Mean 315.1
Std Dev 293.6
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

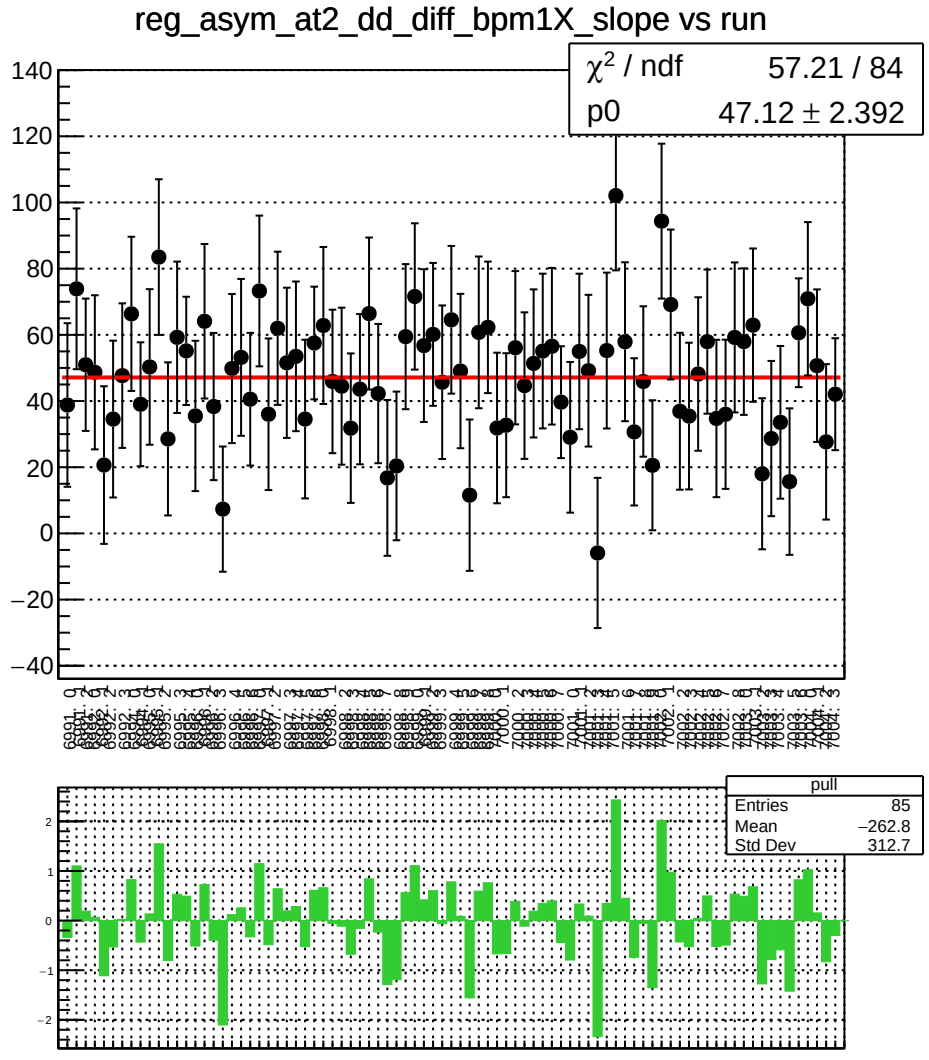

pull1D
Entries 85
Mean 0.004125
Std Dev 0.3199
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

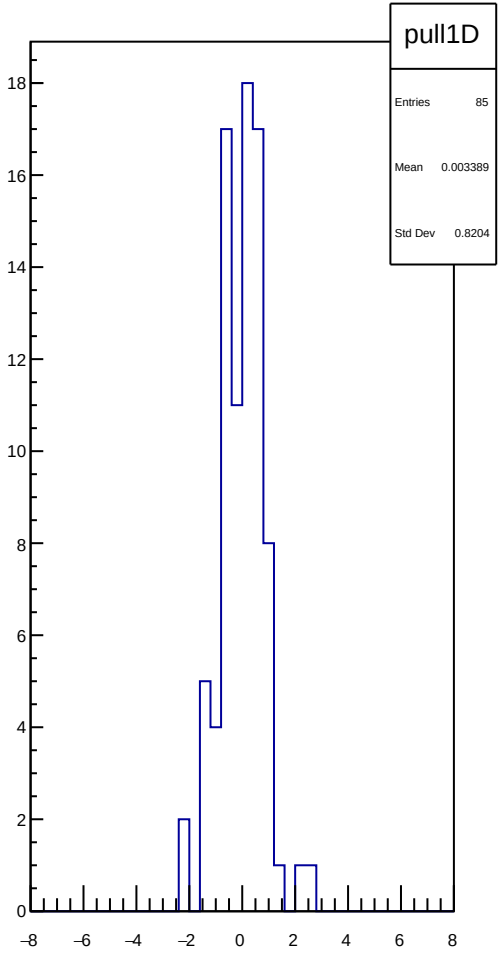

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.252 / 84
p0 166.5 ± 7.498
pull
Entries 85
Mean −1020
Std Dev 1107

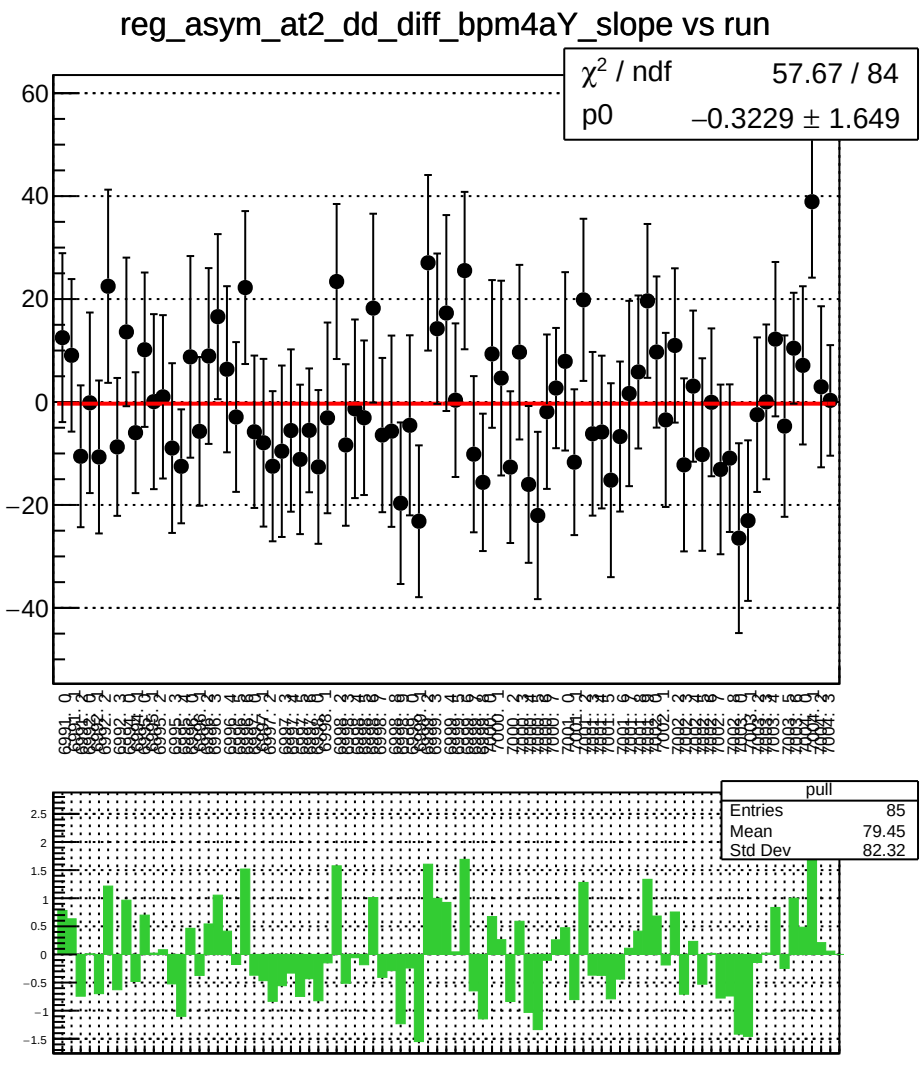

pull1D
Entries 85
Mean 0.0003396
Std Dev 0.2486

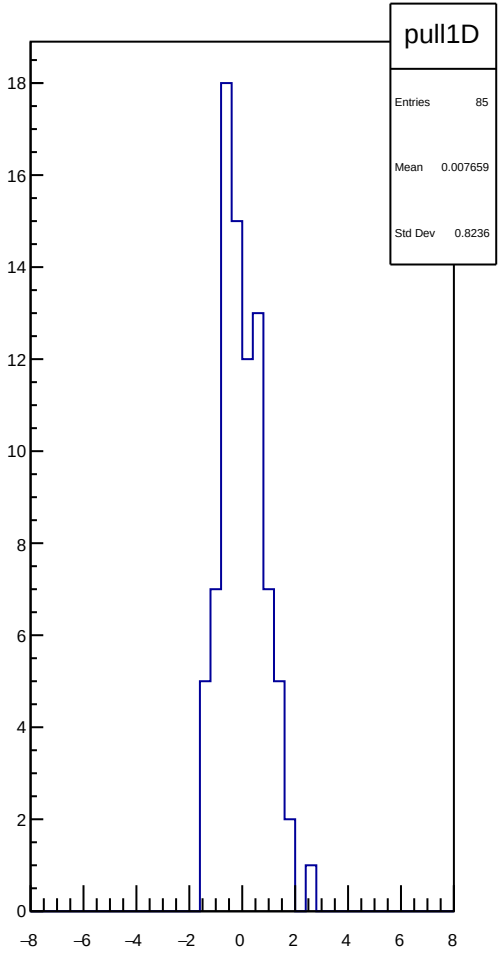

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 28.26 / 84
p0 −277.2 ± 0.3438
pull
Entries 85
Mean 630.6
Std Dev 585.4

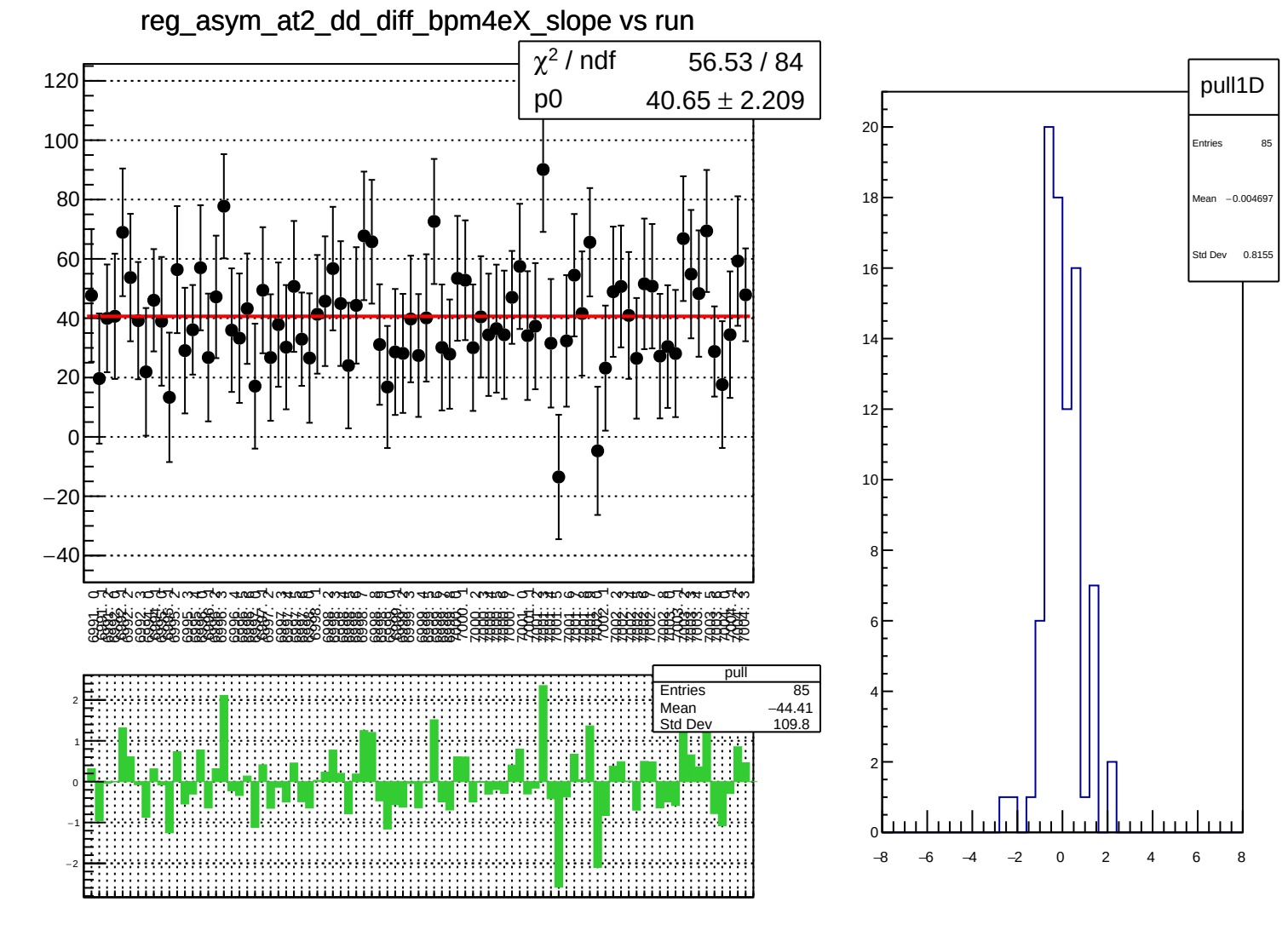

pull1D
Entries 85
Mean −0.004248
Std Dev 0.5766

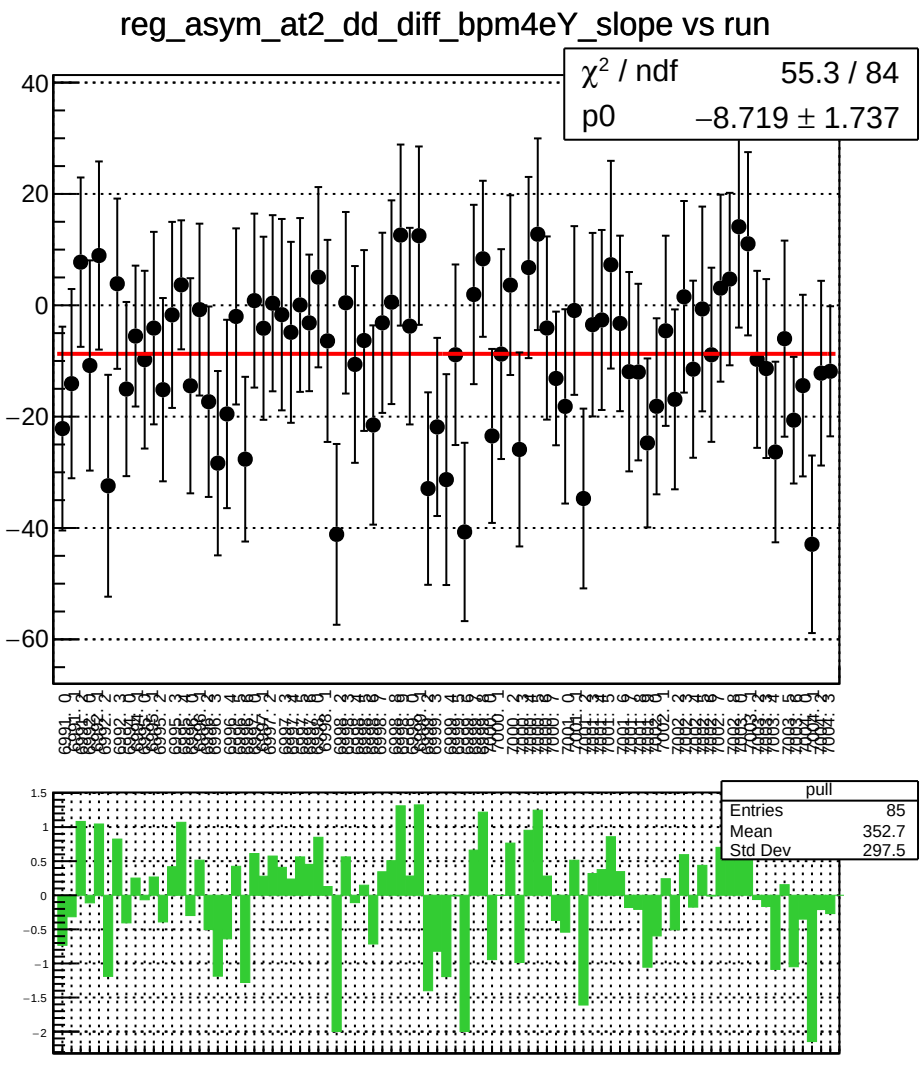

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 57.21 / 84
p0 47.12 ± 2.392
pull
Entries 85
Mean −262.8
Std Dev 312.7

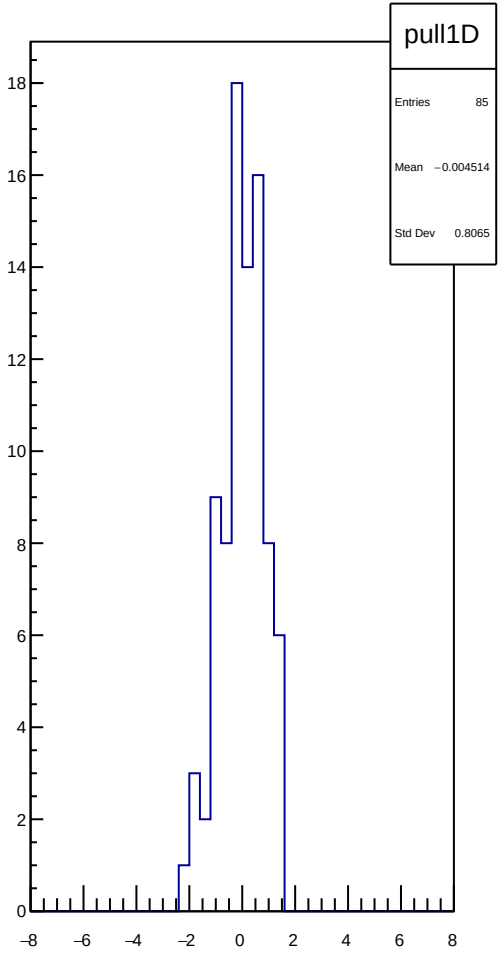

pull1D
Entries 85
Mean 0.003389
Std Dev 0.8204

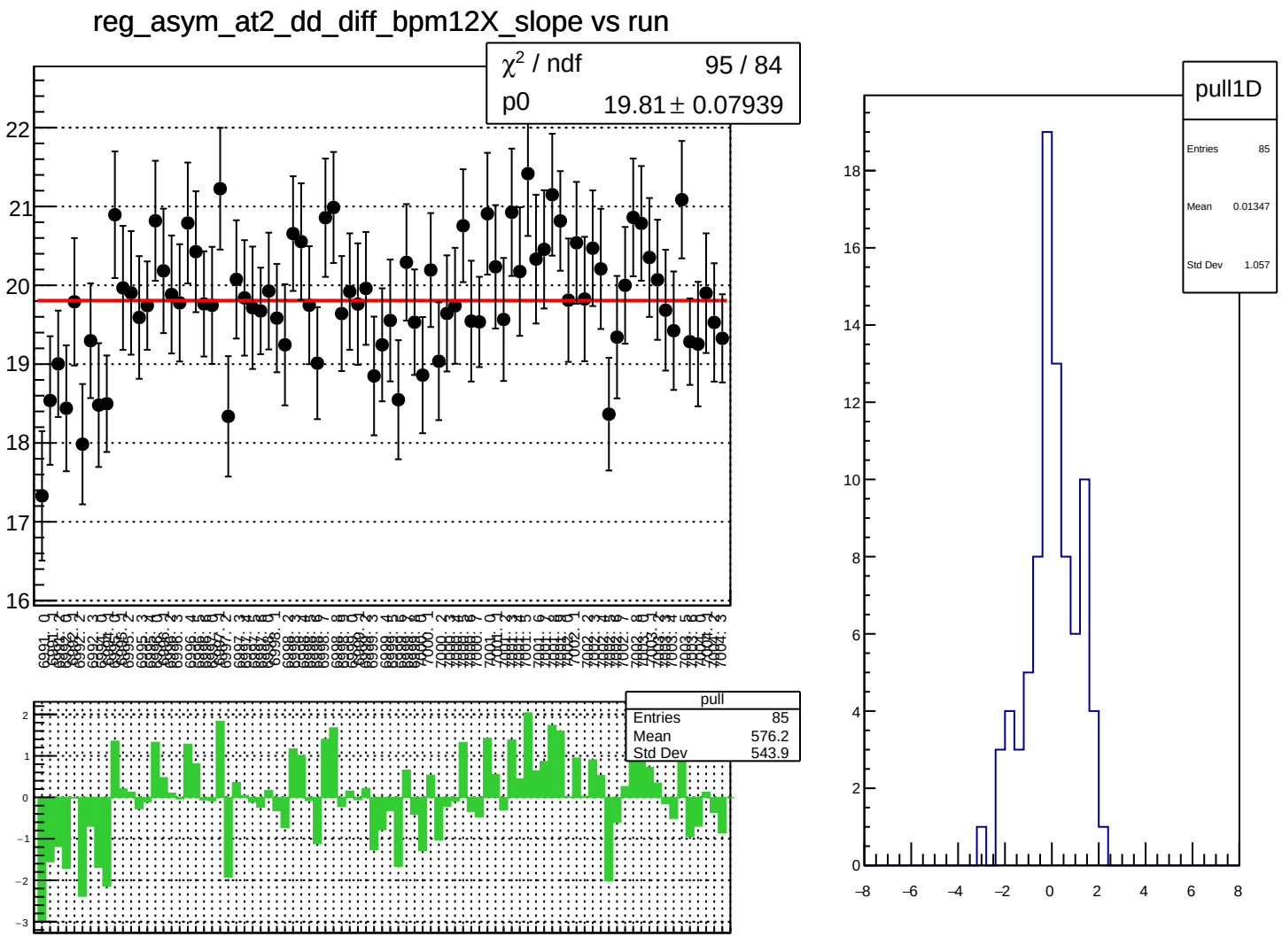

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 57.67 / 84
p0 −0.3229 ± 1.649
pull
Entries 85
Mean 79.45
Std Dev 82.32

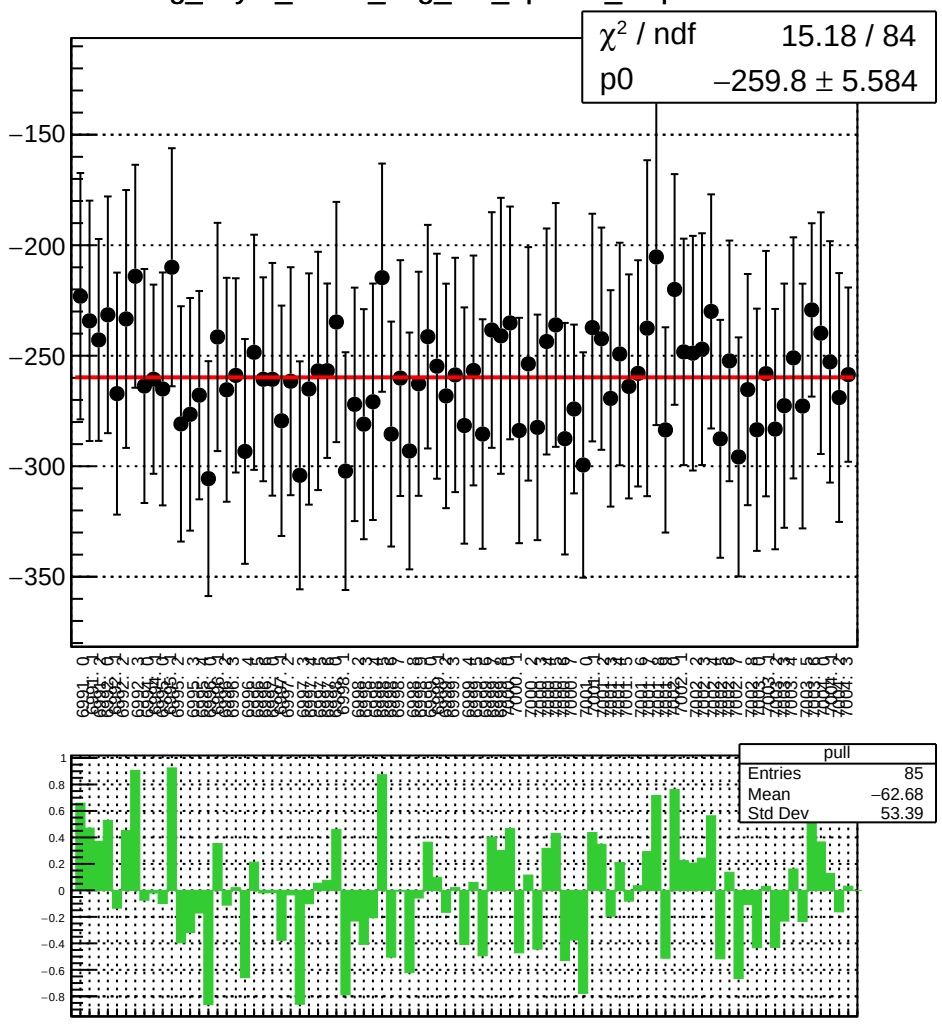

pull1D
Entries 85
Mean 0.007659
Std Dev 0.8236

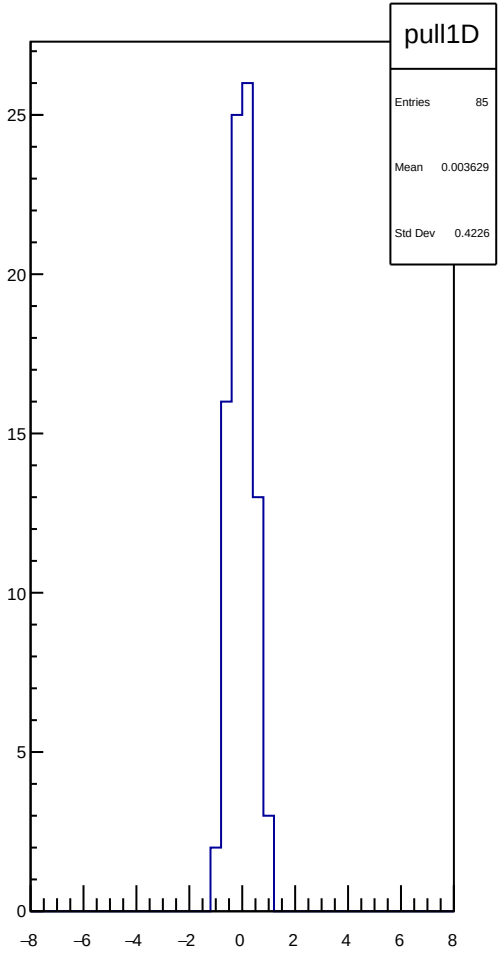

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 56.53 / 84
p0 40.65 ± 2.209
pull
Entries 85
Mean −44.41
Std Dev 109.8
pull1D
Entries 85
Mean −0.004697
Std Dev 0.8155

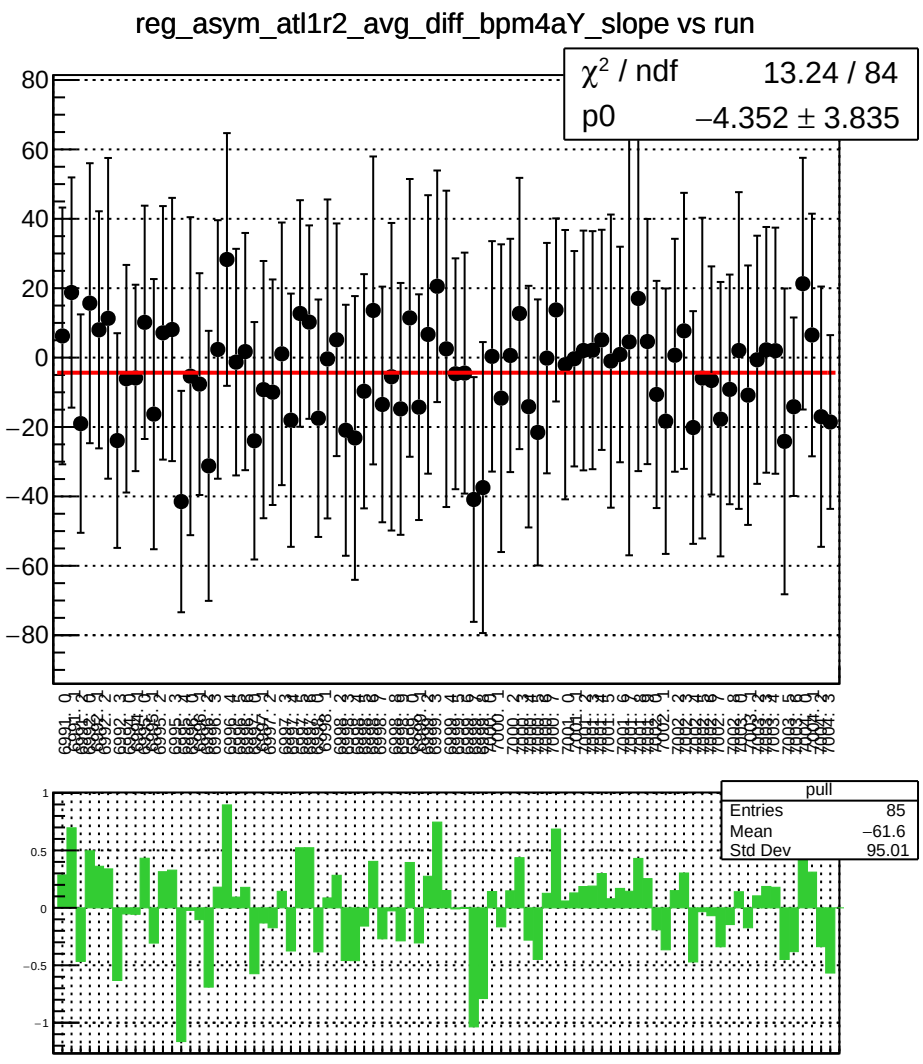

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 55.3 / 84
p0 −8.719 ± 1.737
pull
Entries 85
Mean 352.7
Std Dev 297.5

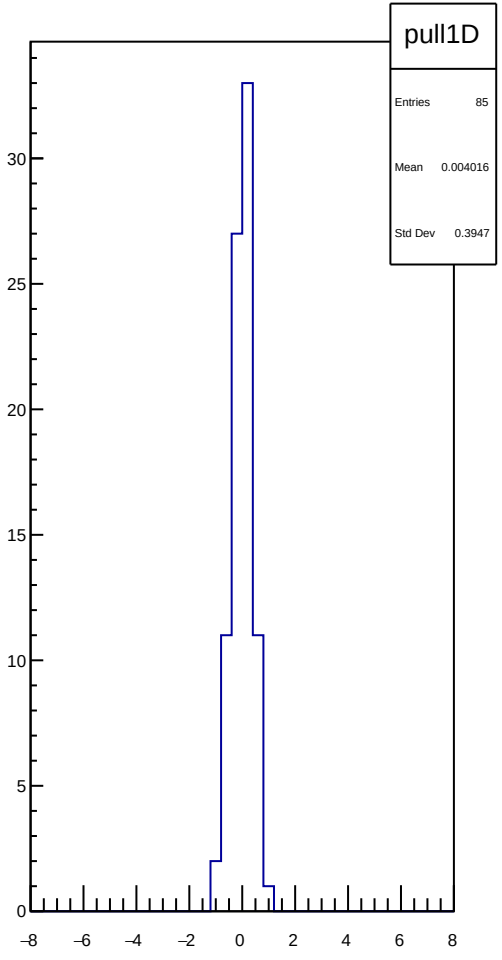

pull1D
Entries 85
Mean −0.004514
Std Dev 0.8065

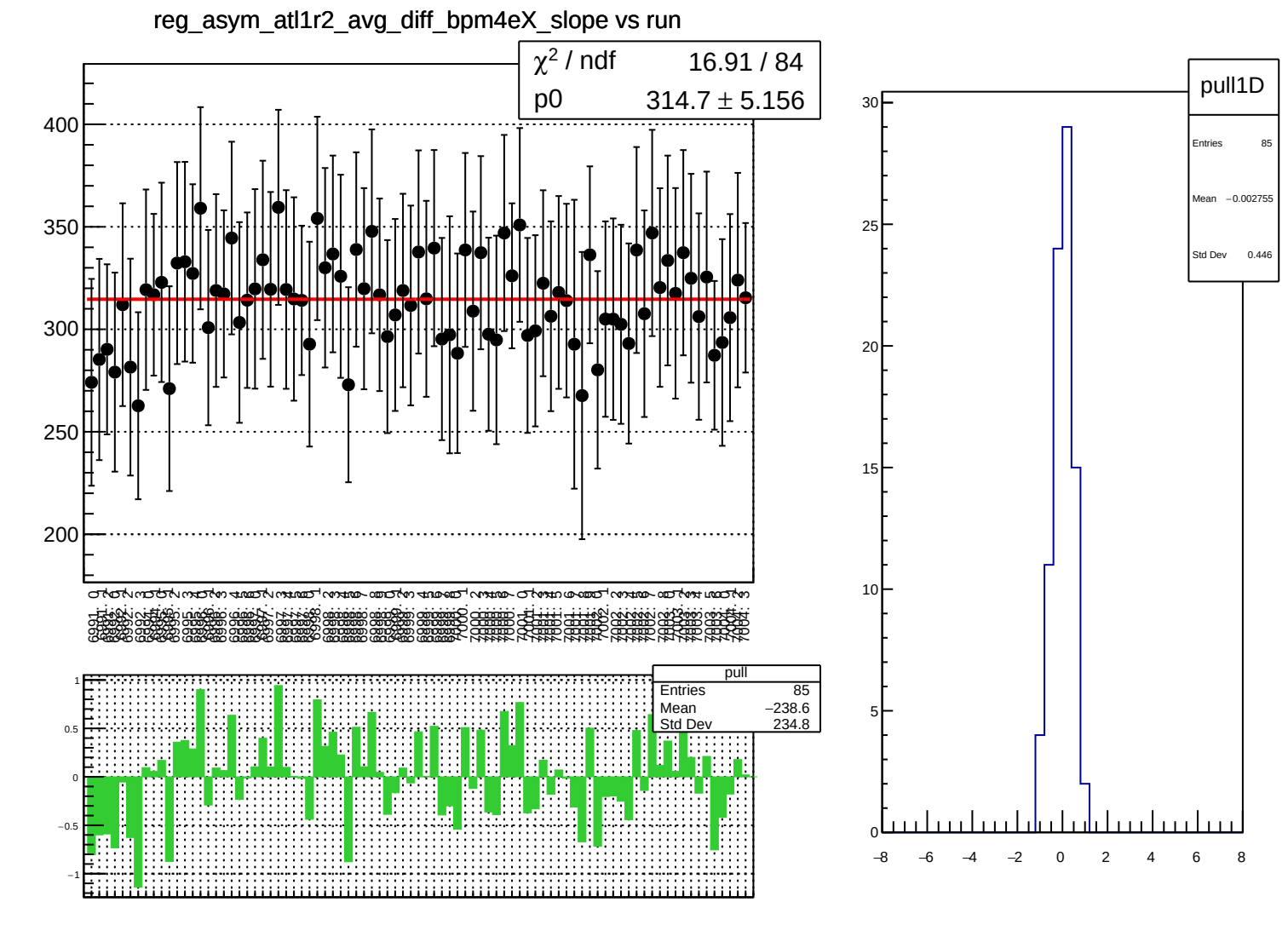

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 95 / 84
p0 19.81 ± 0.07939
pull
Entries 85
Mean 576.2
Std Dev 543.9
pull1D
Entries 85
Mean 0.01347
Std Dev 1.057

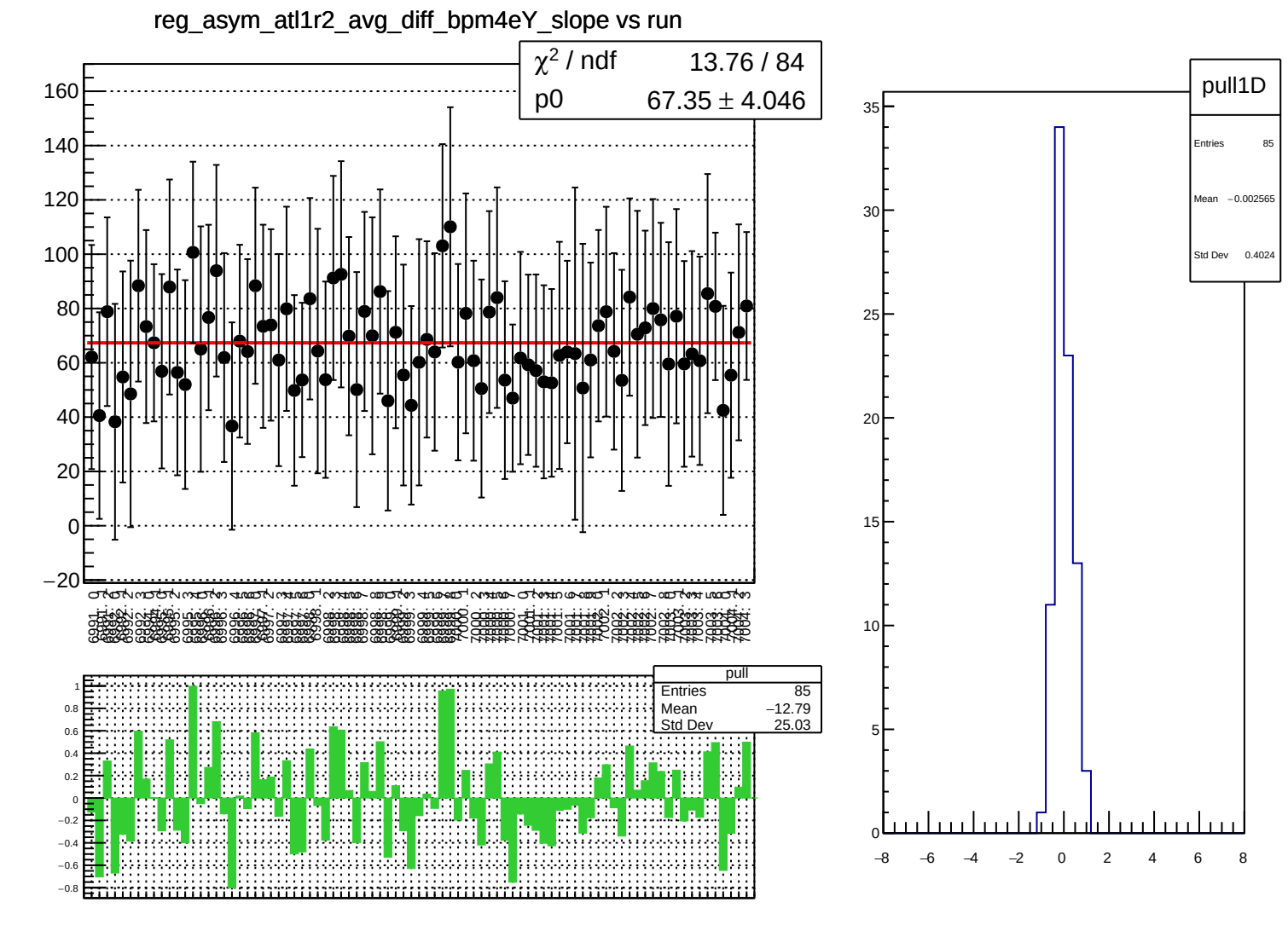

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 15.18 / 84
p0 −259.8 ± 5.584
pull
Entries 85
Mean −62.68
Std Dev 53.39

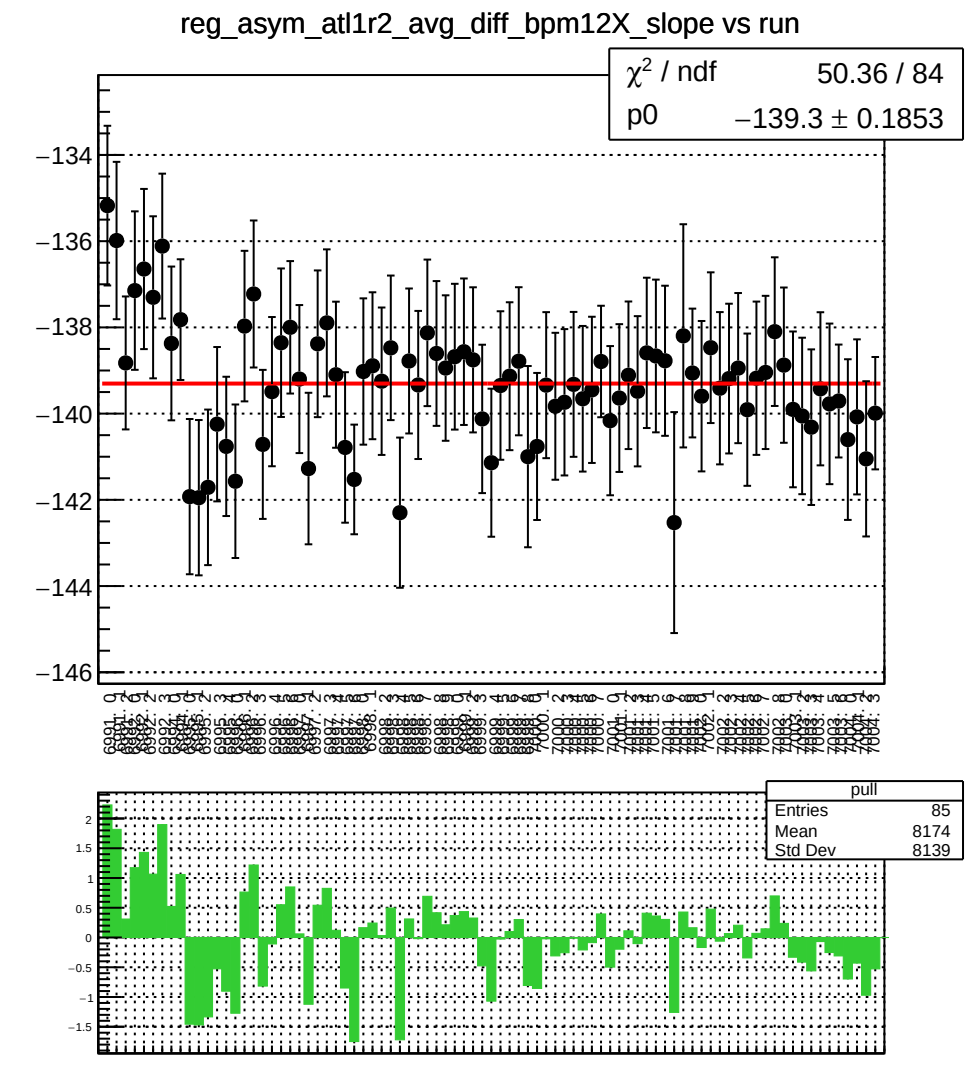

pull1D
Entries 85
Mean 0.003629
Std Dev 0.4226

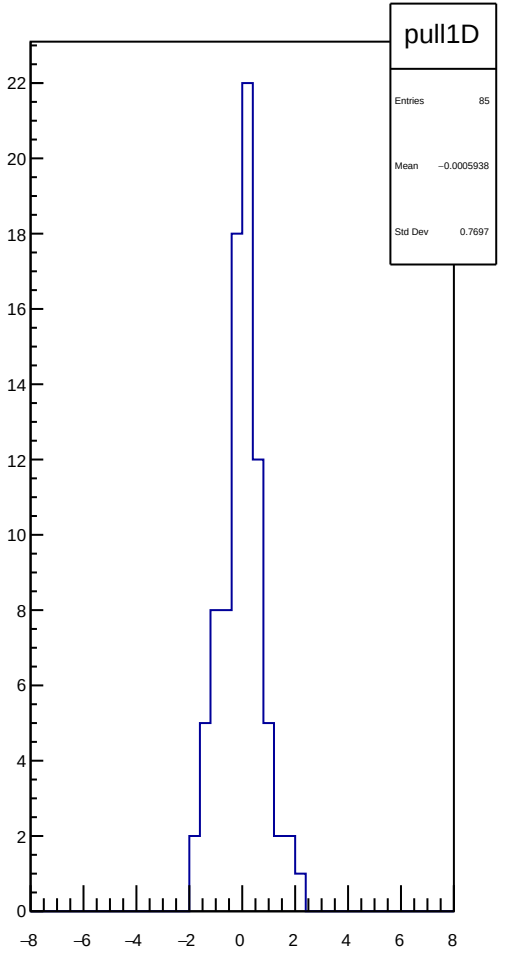

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.24 / 84
p0 −4.352 ± 3.835
pull
Entries 85
Mean −61.6
Std Dev 95.01

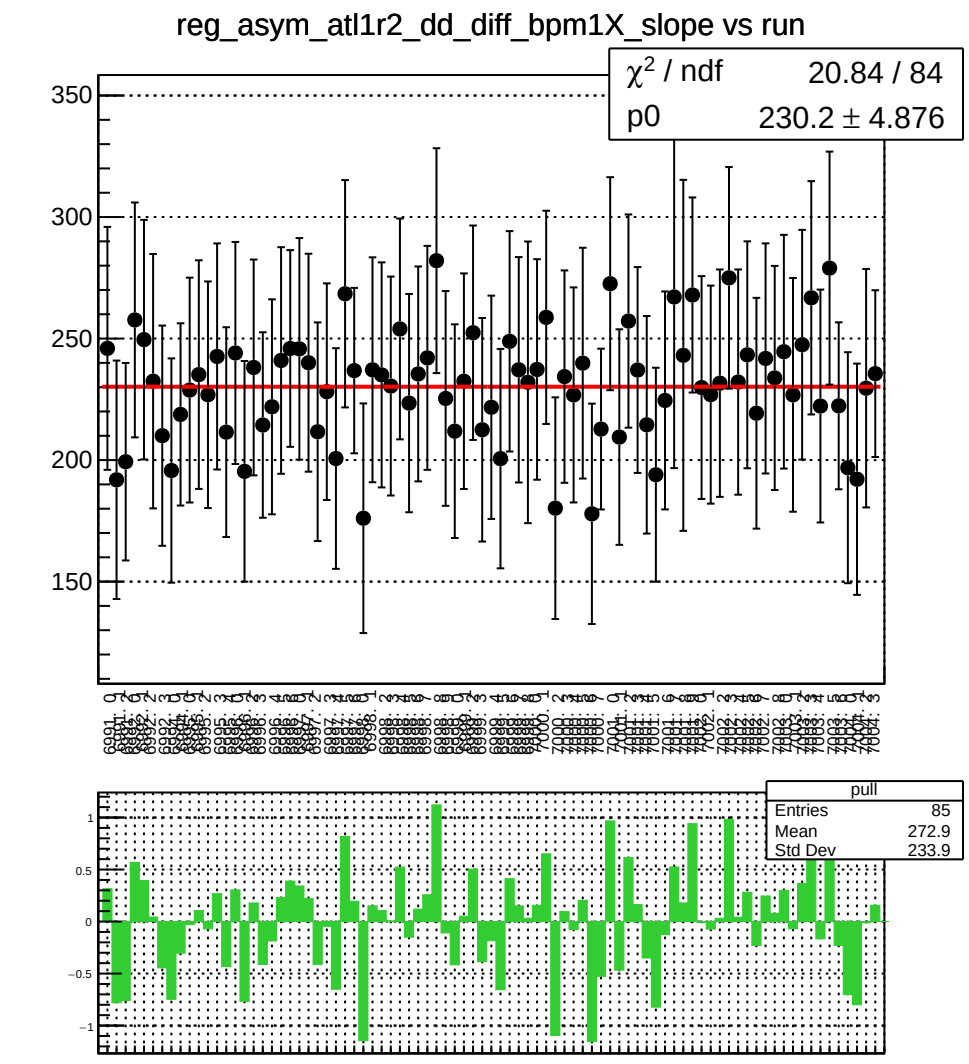

pull1D
Entries 85
Mean 0.004016
Std Dev 0.3947

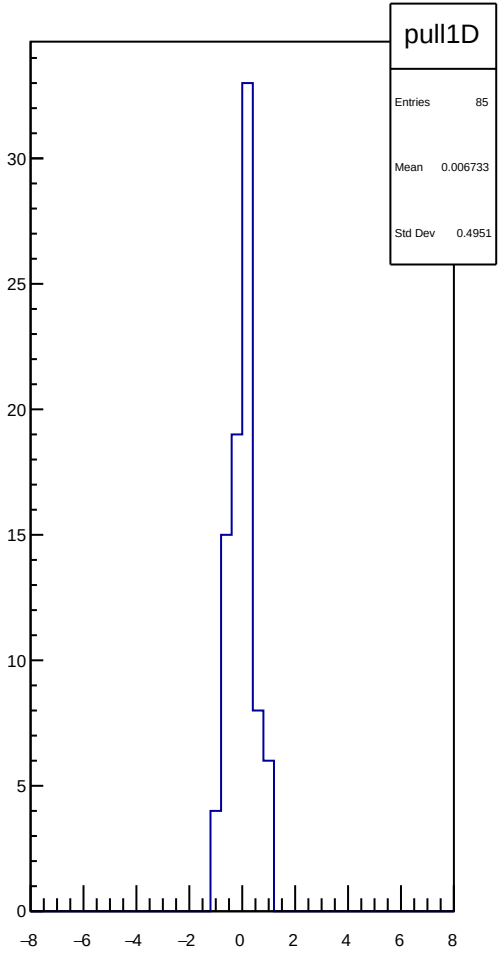

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 16.91 / 84
p0 314.7 ± 5.156
400
350
300
250
200
pull
Entries 85
Mean −238.6
Std Dev 234.8
1
0.5
0
−0.5
−1
pull1D
Entries 85
Mean −0.002755
Std Dev 0.446
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

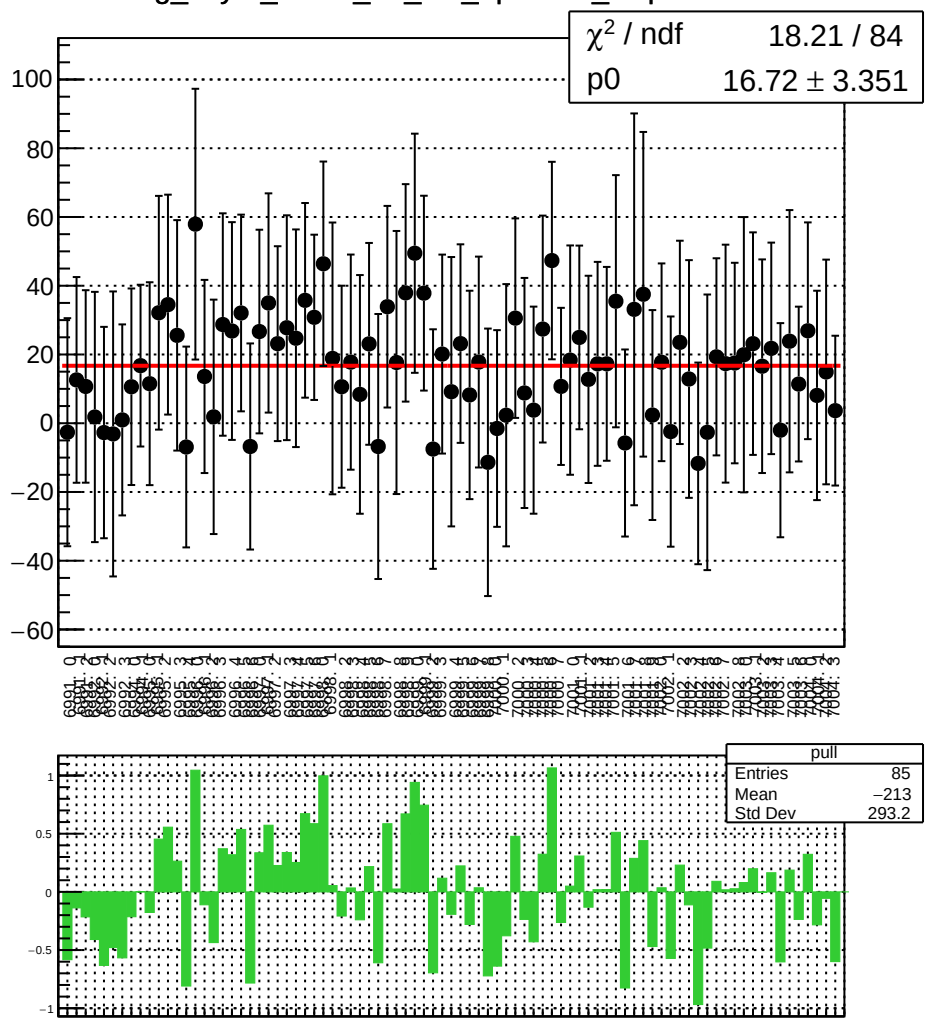

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 13.76 / 84
p0 67.35 ± 4.046
pull
Entries 85
Mean −12.79
Std Dev 25.03
pull1D
Entries 85
Mean −0.002565
Std Dev 0.4024

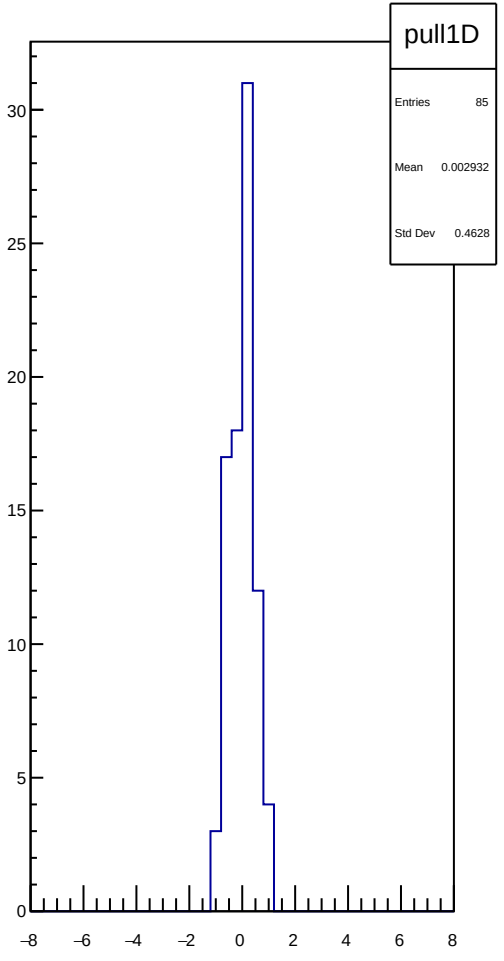

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 50.36 / 84
p0 −139.3 ± 0.1853
pull
Entries 85
Mean 8174
Std Dev 8139

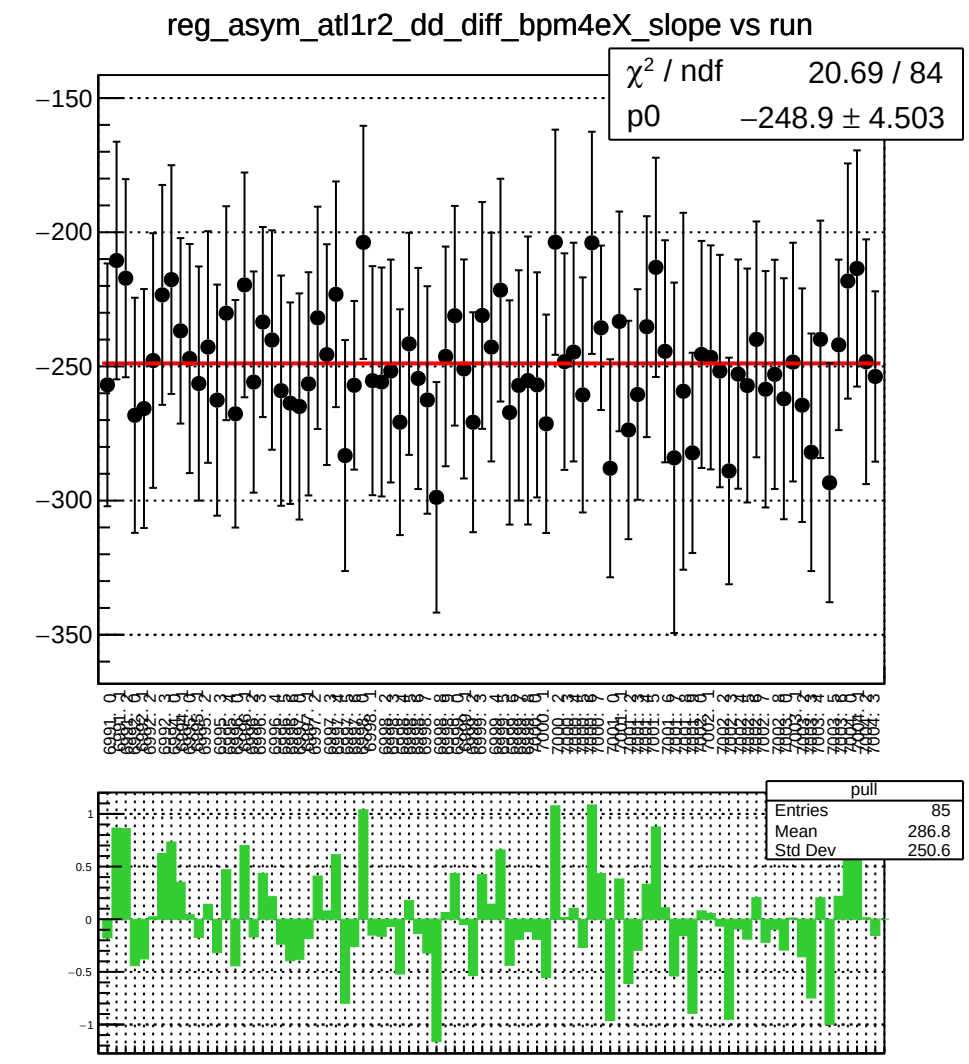

pull1D
Entries 85
Mean −0.0005938
Std Dev 0.7697

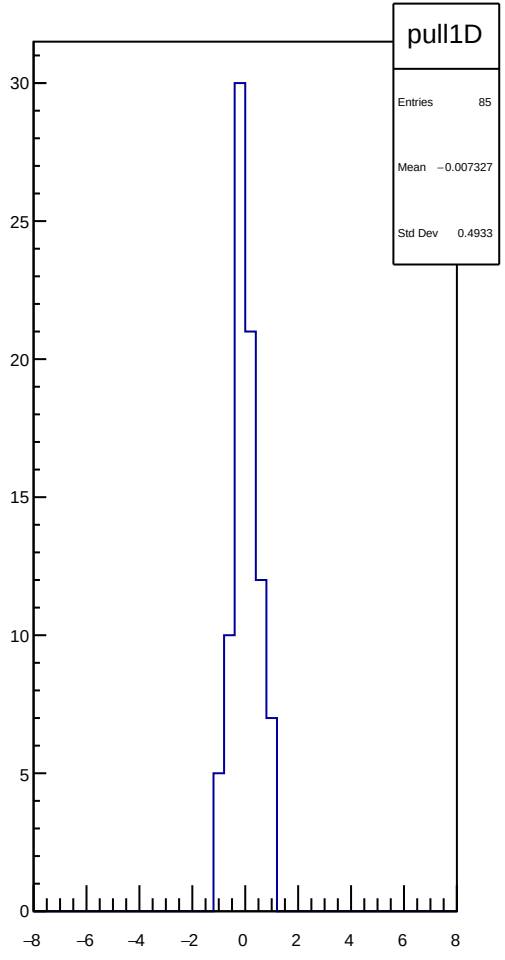

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 20.84 / 84
p0 230.2 ± 4.876
350
300
250
200
150
pull
Entries 85
Mean 272.9
Std Dev 233.9
1
0.5
0
−0.5
−1

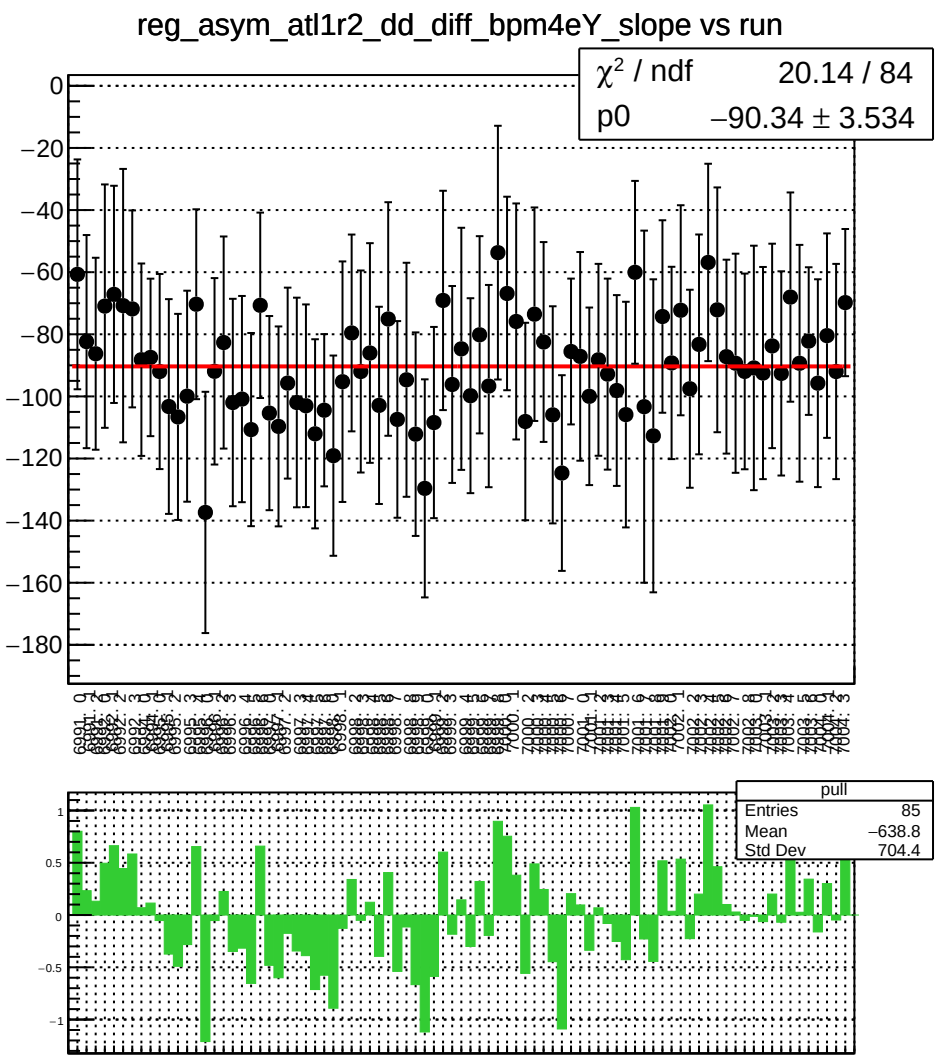

pull1D
Entries 85
Mean 0.006733
Std Dev 0.4951
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

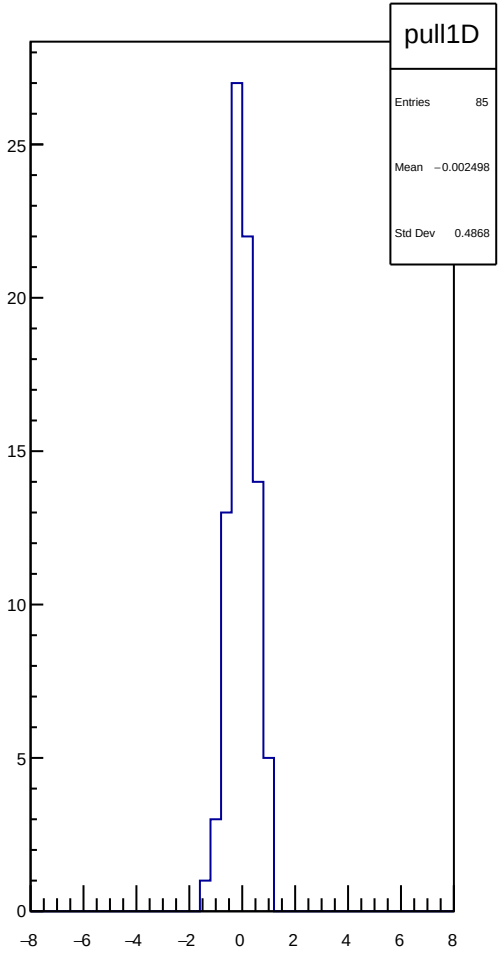

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.21 / 84
p0 16.72 ± 3.351
pull
Entries 85
Mean −213
Std Dev 293.2

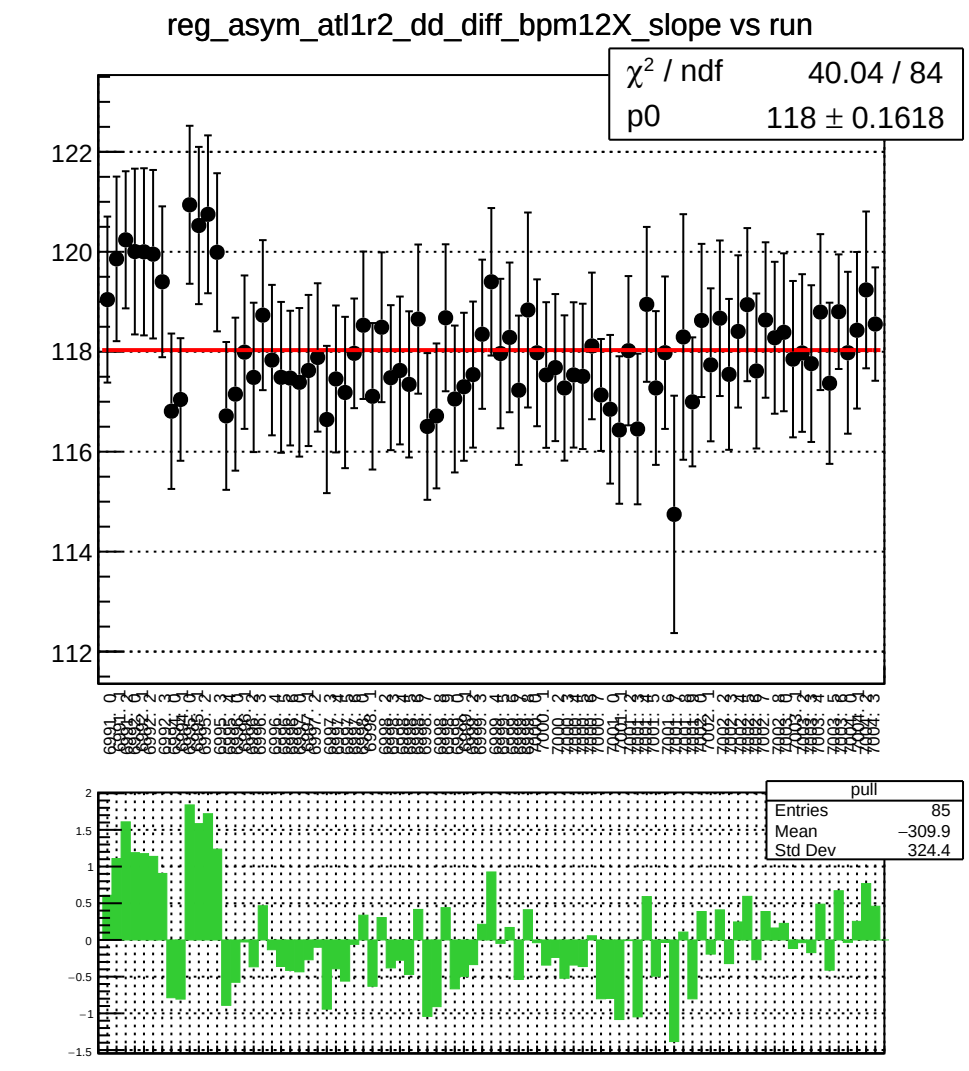

pull1D
Entries 85
Mean 0.002932
Std Dev 0.4628

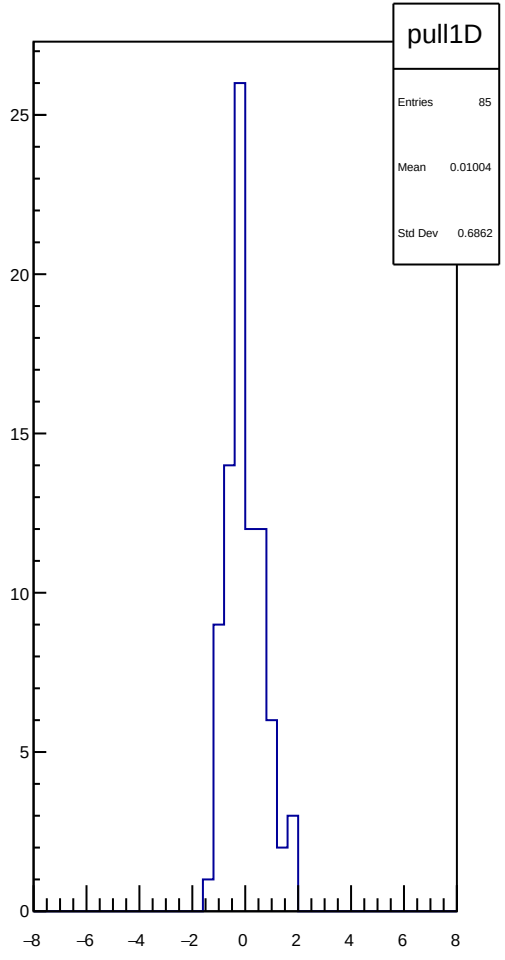

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 20.69 / 84
p0 −248.9 ± 4.503
−150
−200
−250
−300
−350
pull
Entries 85
Mean 286.8
Std Dev 250.6
1
0.5
0
−0.5
−1

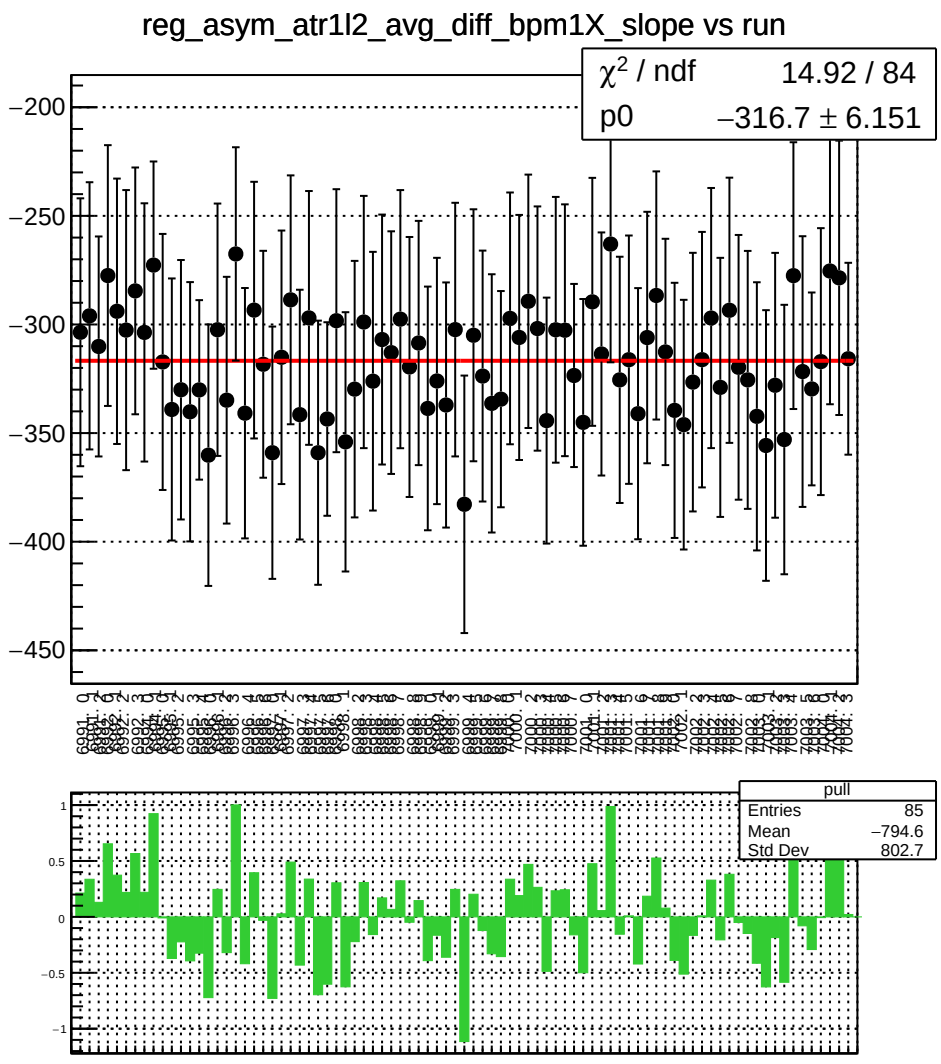

pull1D
Entries 85
Mean −0.007327
Std Dev 0.4933
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

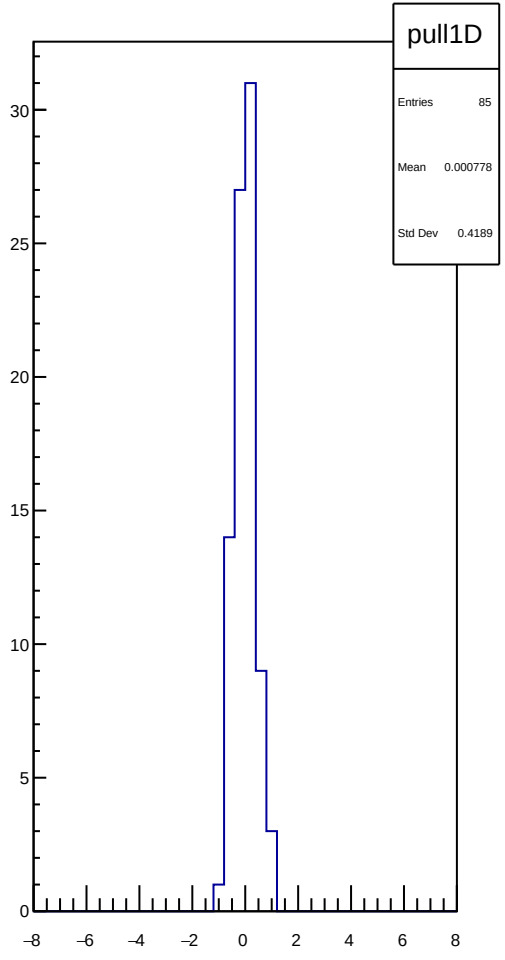

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 20.14 / 84
p0 −90.34 ± 3.534
pull
Entries 85
Mean −638.8
Std Dev 704.4

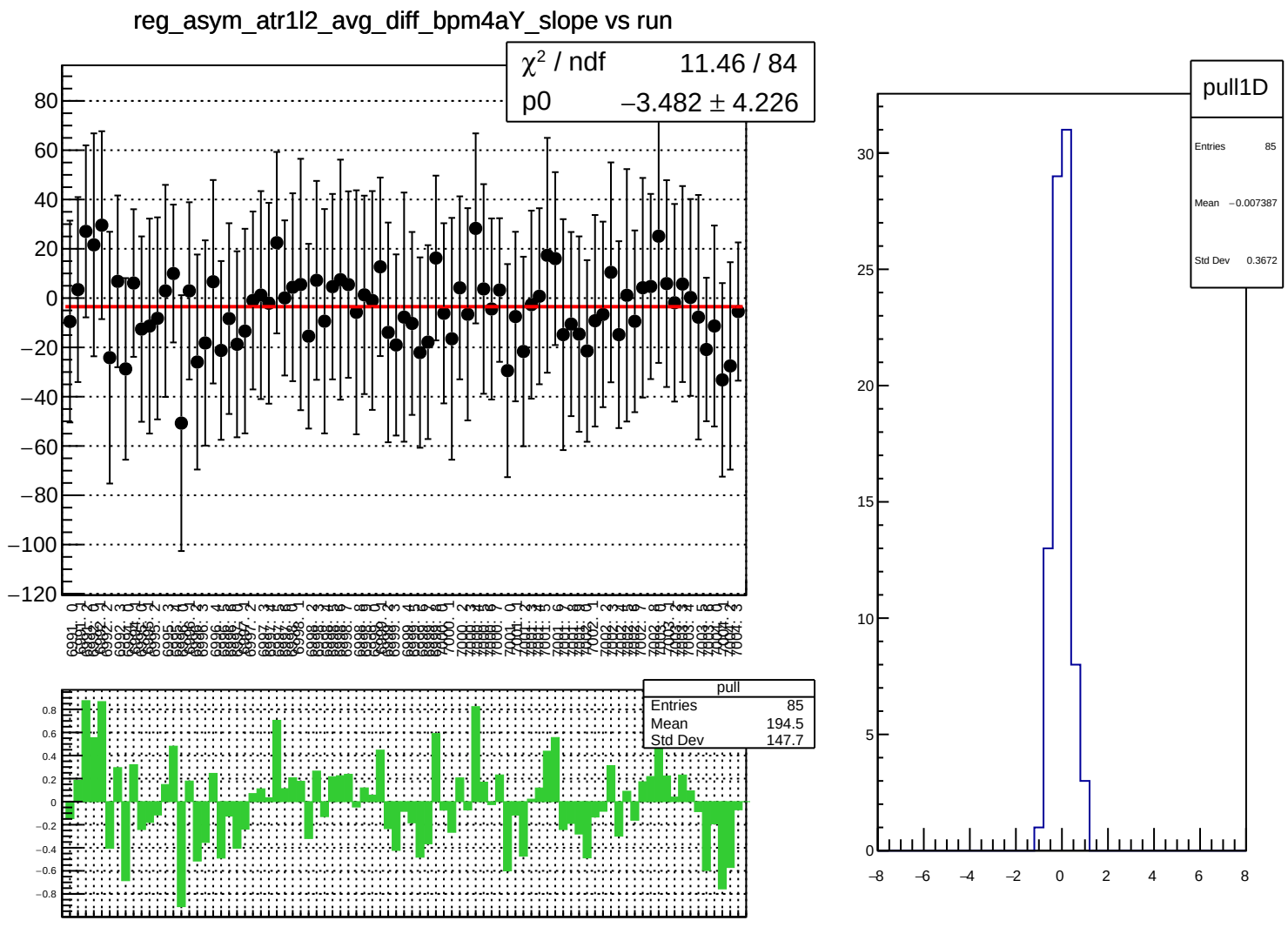

pull1D
Entries 85
Mean −0.002498
Std Dev 0.4868

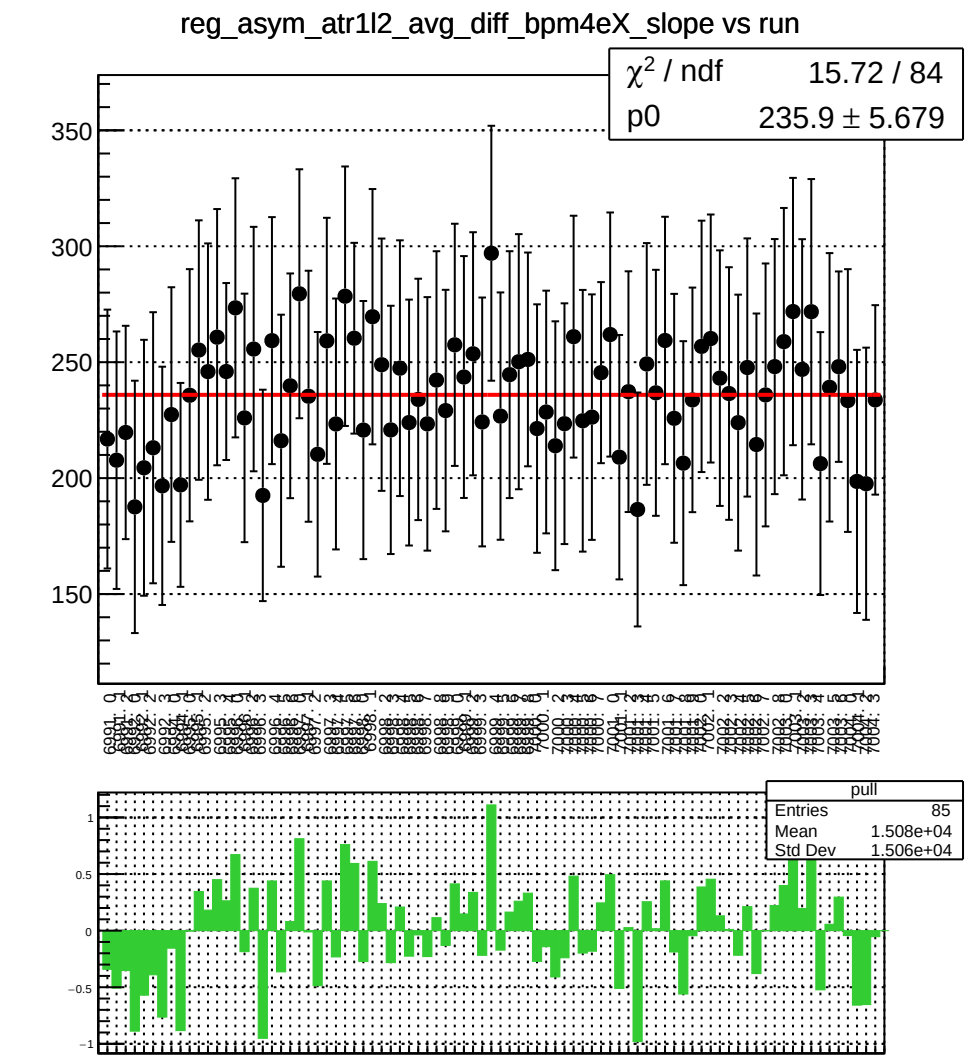

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 40.04 / 84
p0 118 ± 0.1618
122
120
118
116
114
112
pull
Entries 85
Mean −309.9
Std Dev 324.4
2
1.5
1
0.5
0
−0.5
−1
−1.5

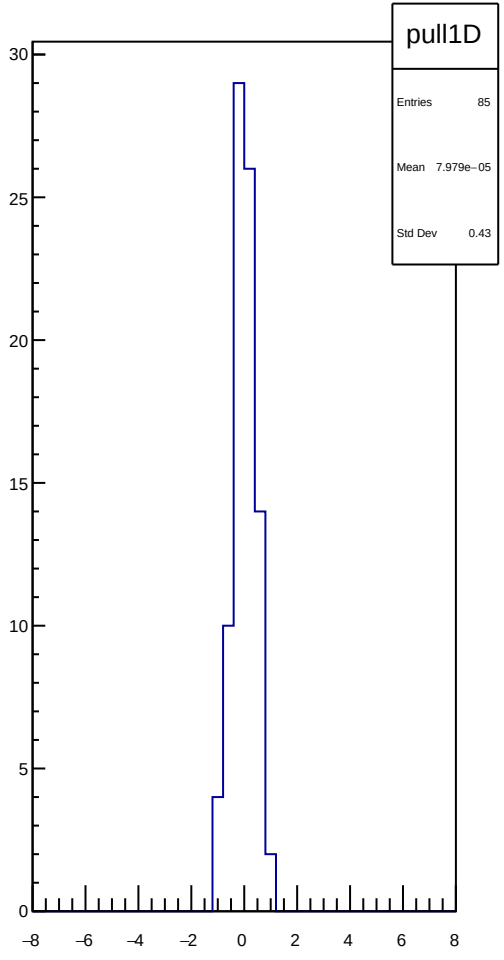

pull1D
Entries 85
Mean 0.01004
Std Dev 0.6862
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

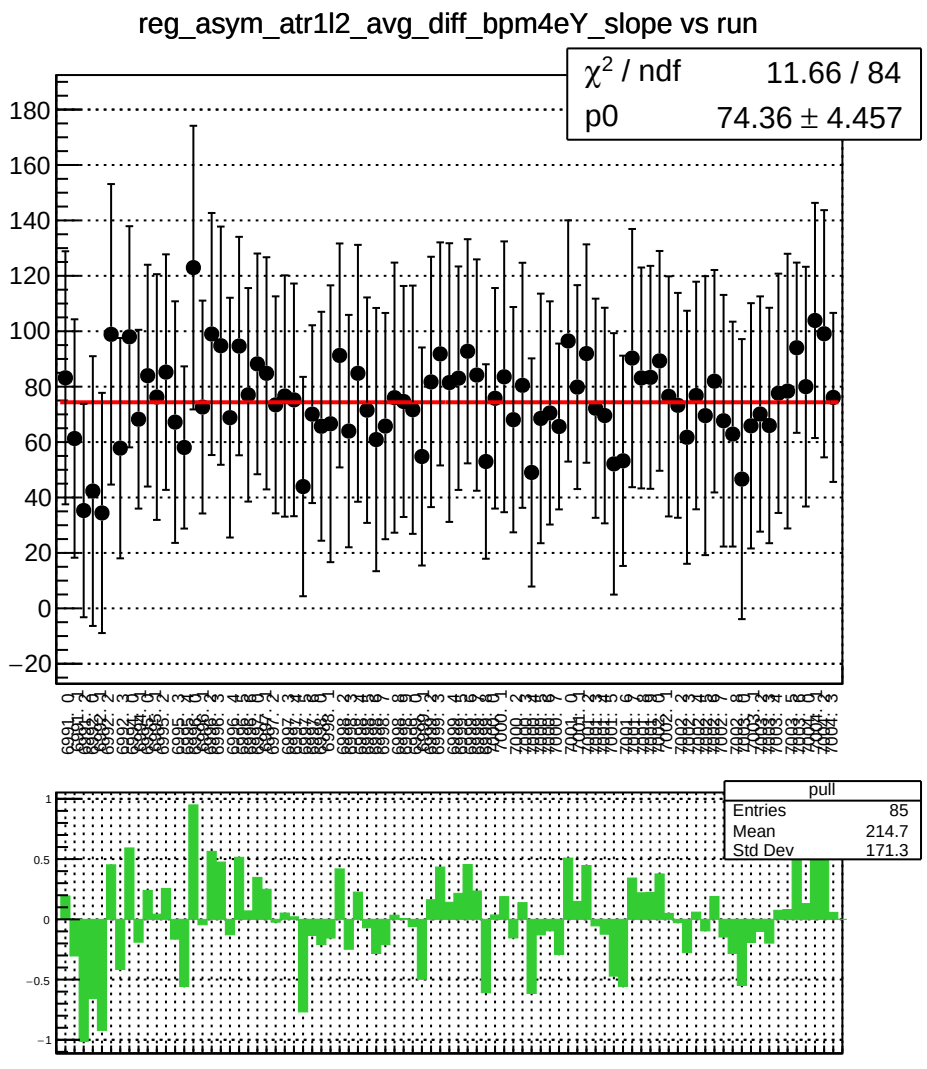

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 14.92 / 84
p0 −316.7 ± 6.151
−200
−250
−300
−350
−400
−450
pull
Entries 85
Mean −794.6
Std Dev 802.7
1
0.5
0
−0.5
−1

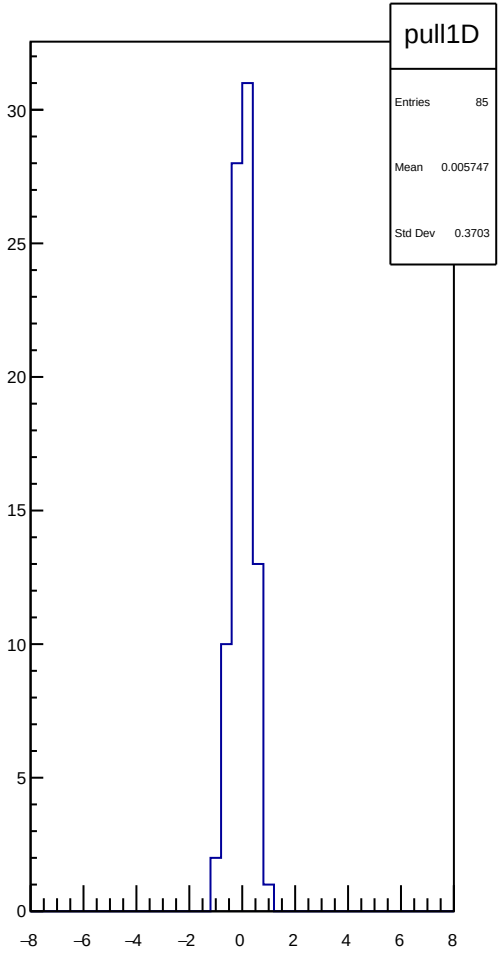

pull1D
Entries 85
Mean 0.000778
Std Dev 0.4189
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

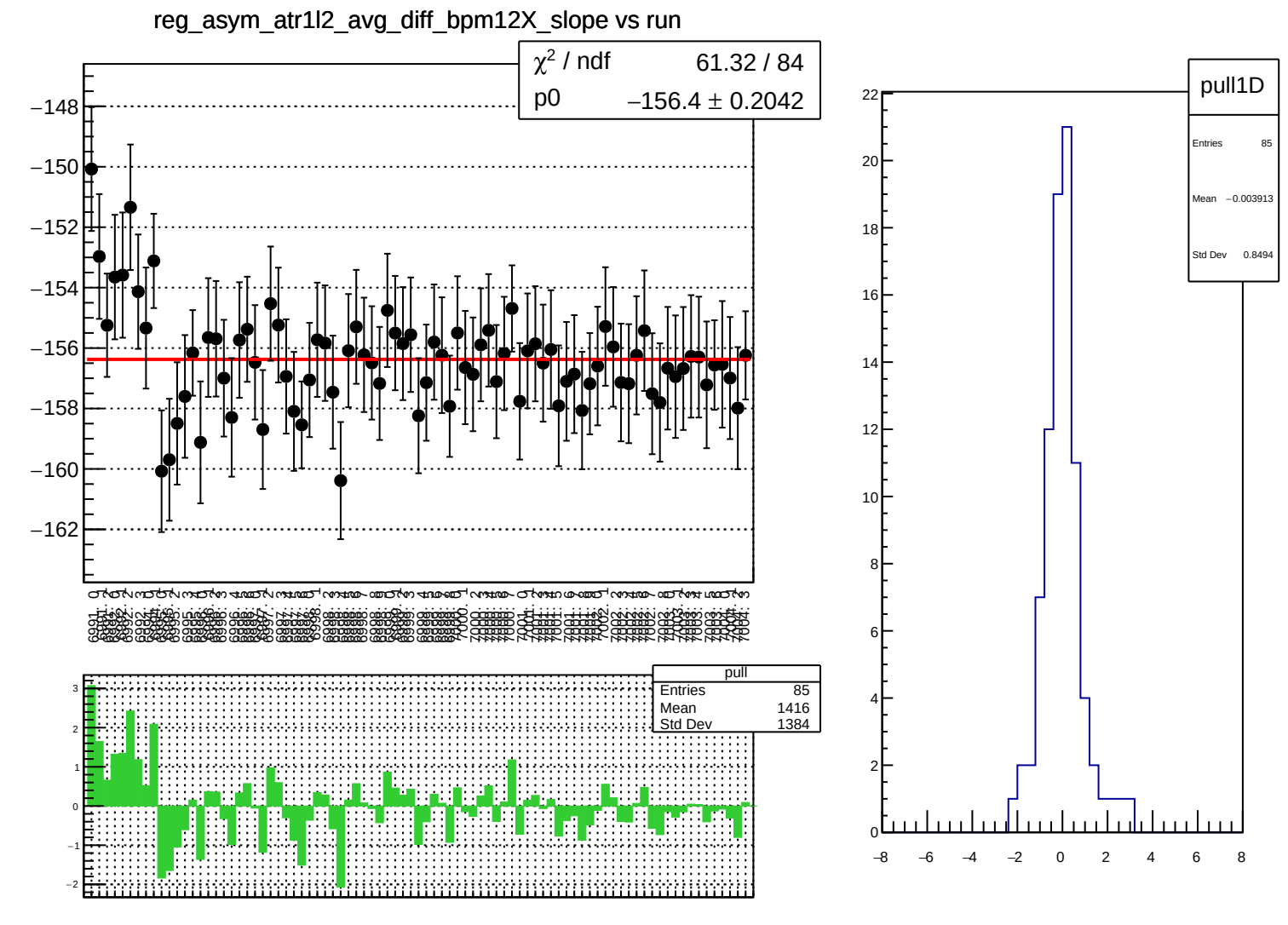

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 11.46 / 84
p0 −3.482 ± 4.226
pull
Entries 85
Mean 194.5
Std Dev 147.7
pull1D
Entries 85
Mean −0.007387
Std Dev 0.3672

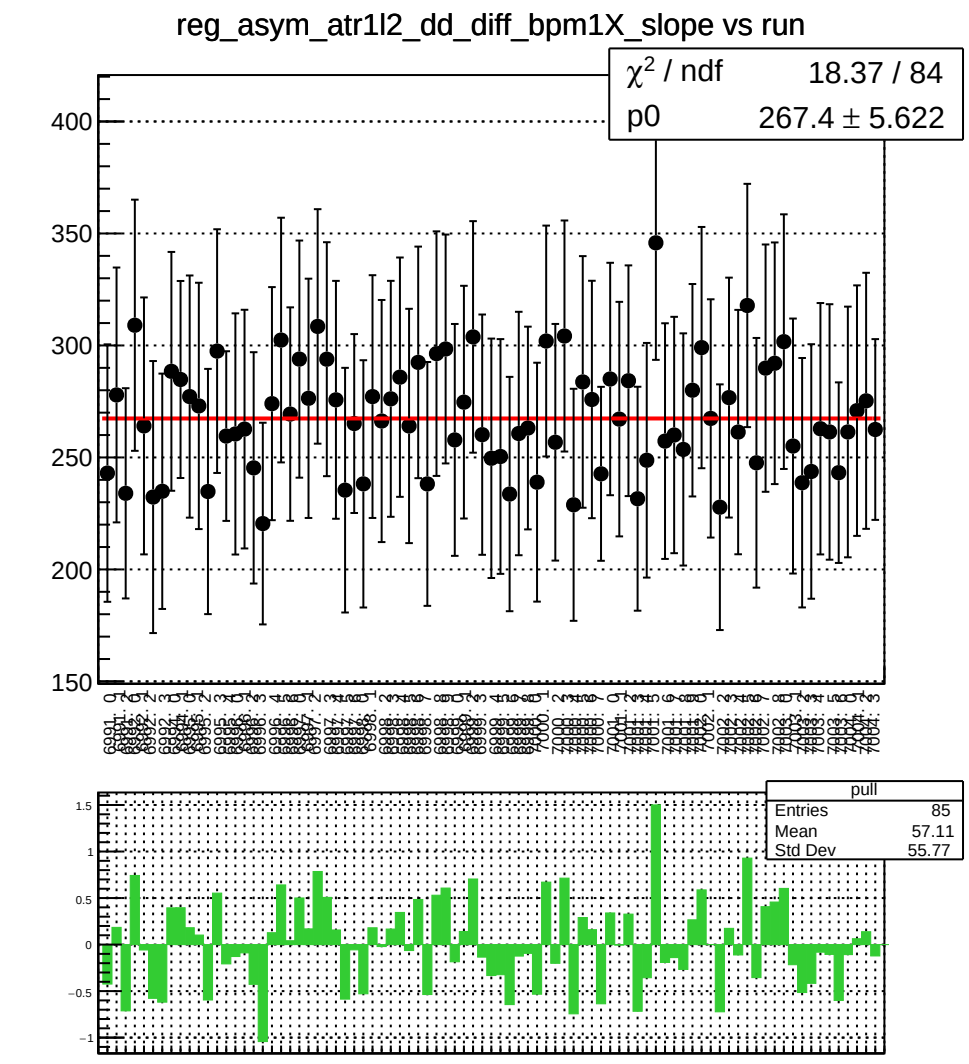

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 15.72 / 84
p0 235.9 ± 5.679
350
300
250
200
150
pull
Entries 85
Mean 1.508e+04
Std Dev 1.506e+04
1
0.5
0
−0.5
−1

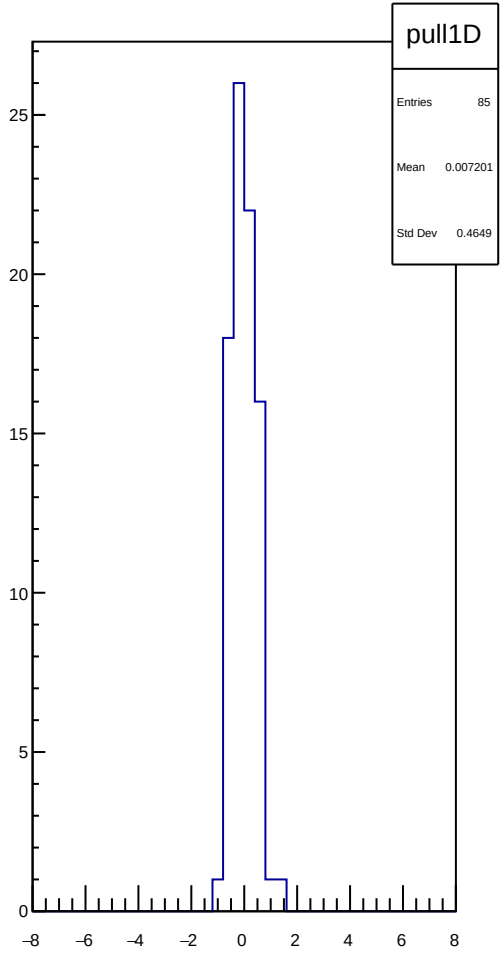

pull1D
Entries 85
Mean 7.979e−05
Std Dev 0.43
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

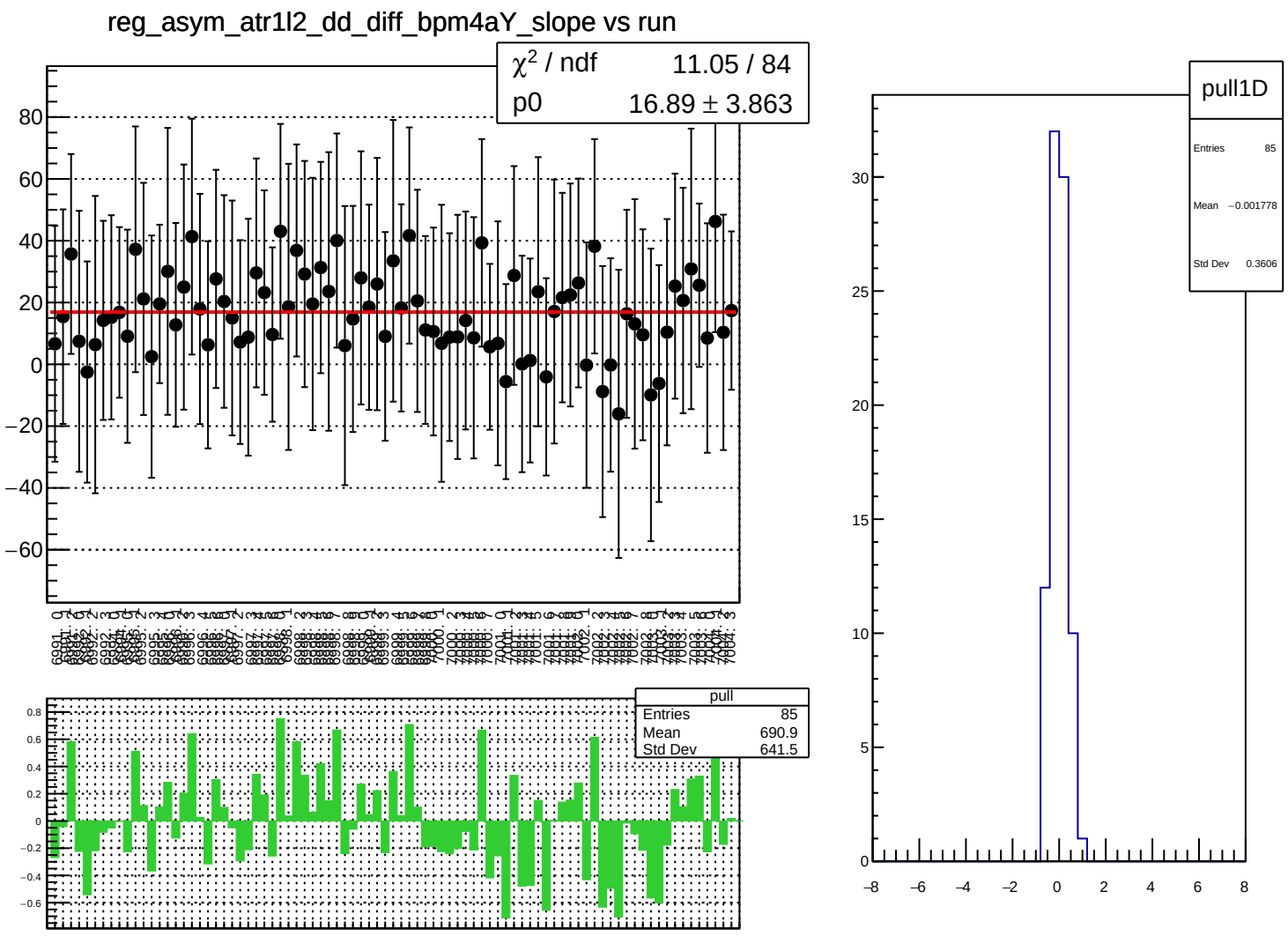

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 11.66 / 84
p0 74.36 ± 4.457
pull
Entries 85
Mean 214.7
Std Dev 171.3

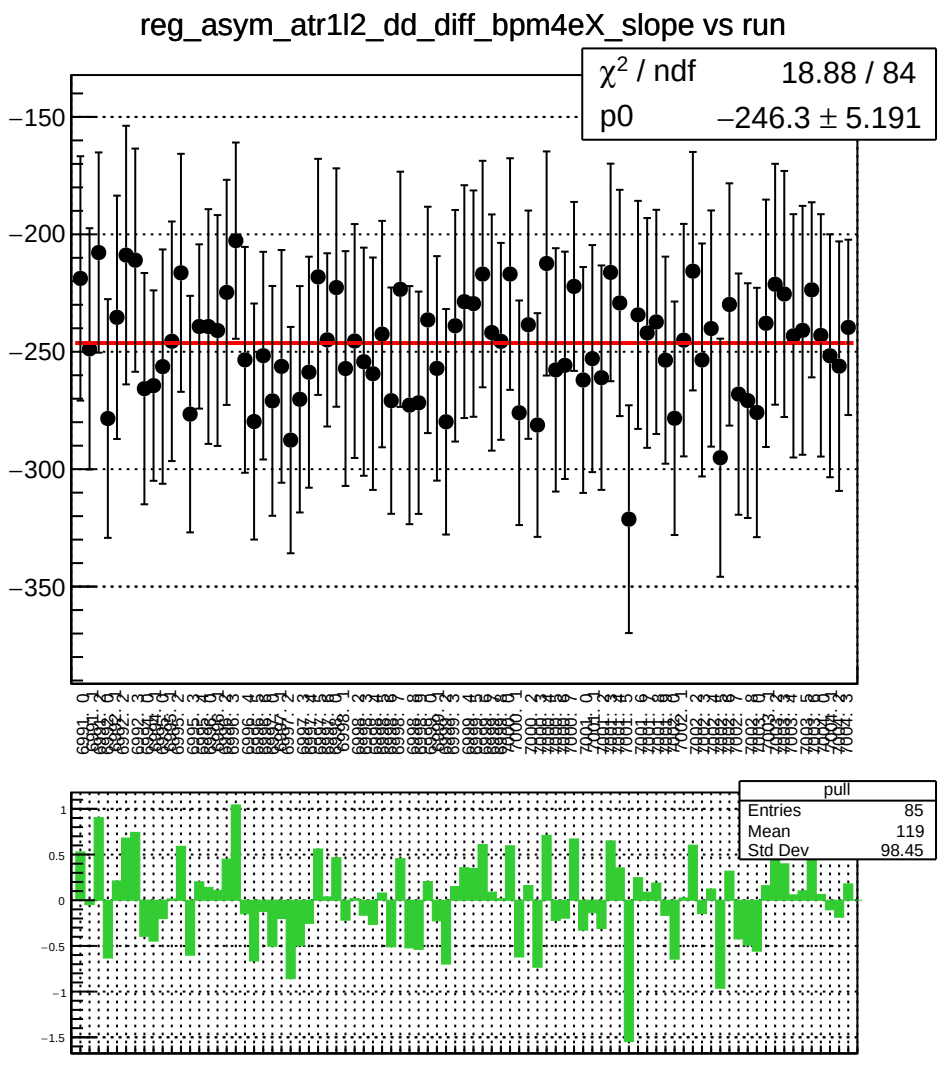

pull1D
Entries 85
Mean 0.005747
Std Dev 0.3703

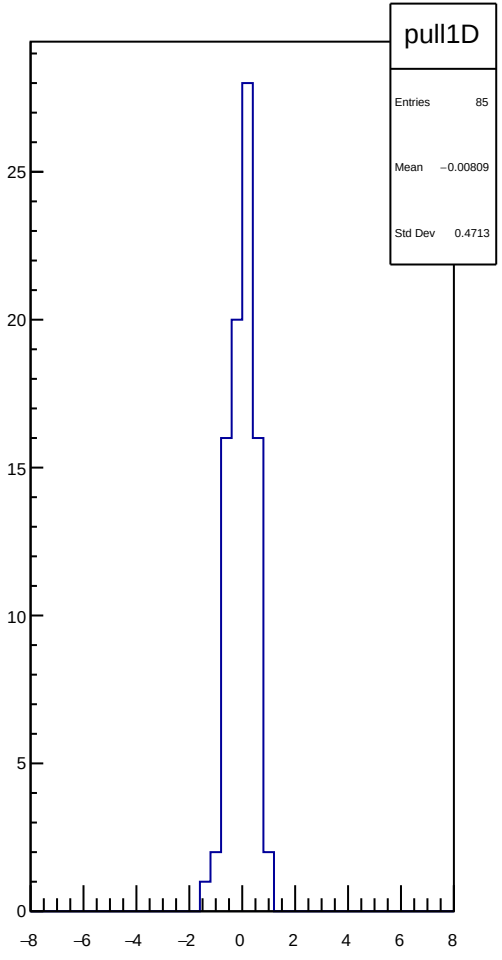

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 61.32 / 84
p0 −156.4 ± 0.2042
pull
Entries 85
Mean 1416
Std Dev 1384
pull1D
Entries 85
Mean −0.003913
Std Dev 0.8494

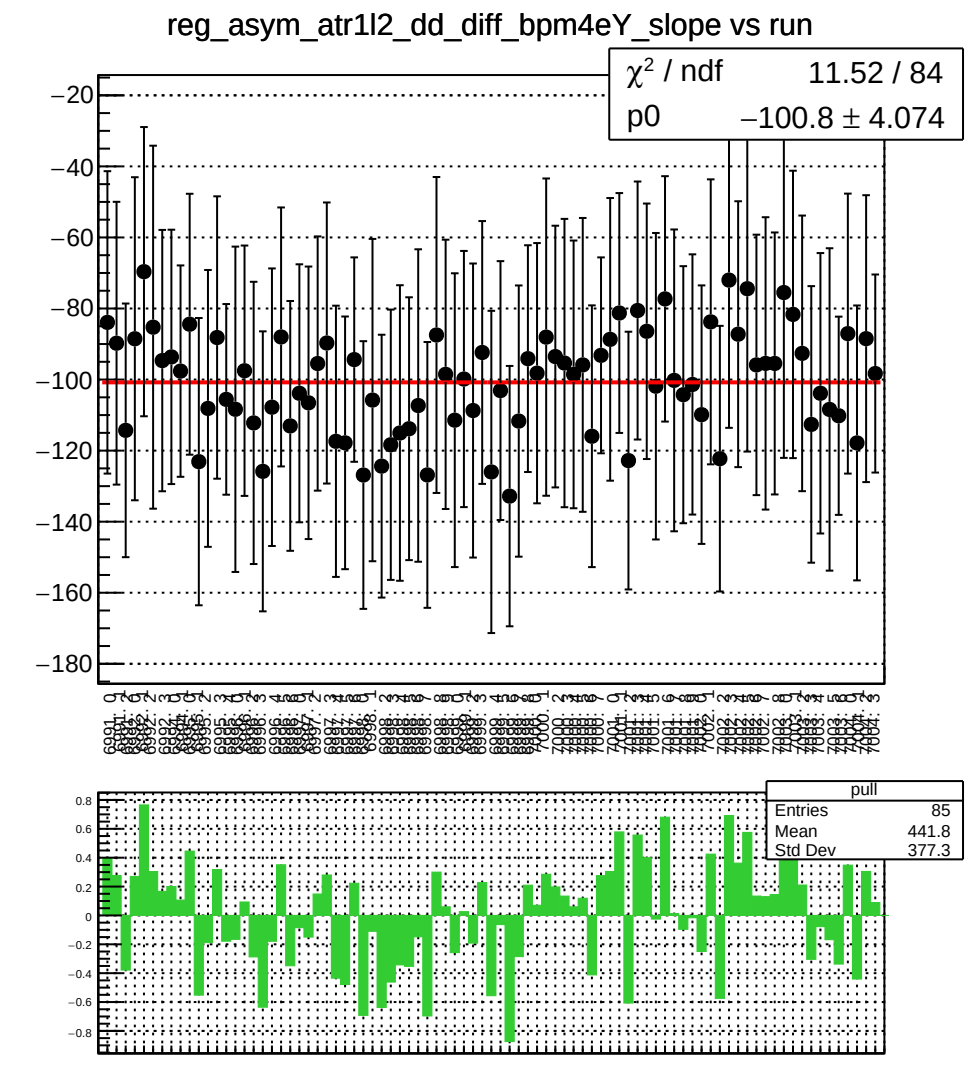

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 18.37 / 84
p0 267.4 ± 5.622
pull
Entries 85
Mean 57.11
Std Dev 55.77

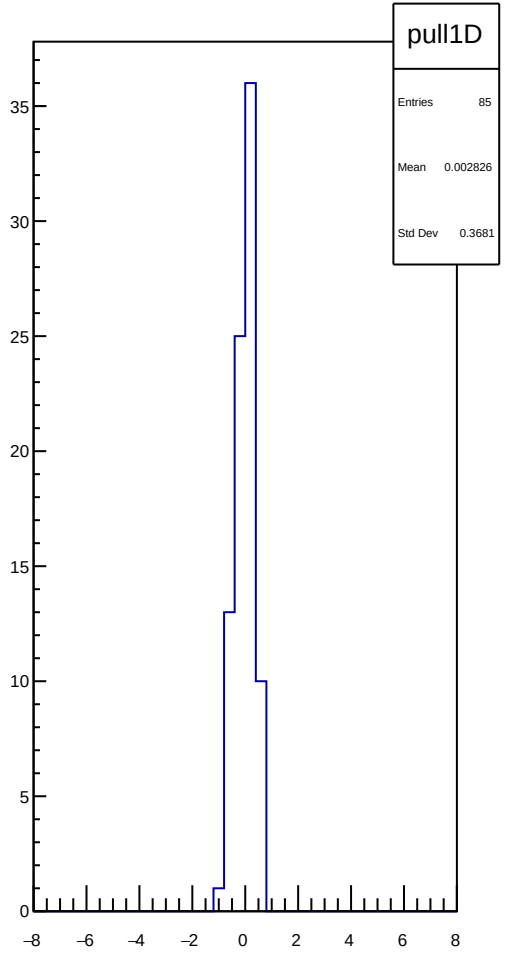

pull1D
Entries 85
Mean 0.007201
Std Dev 0.4649

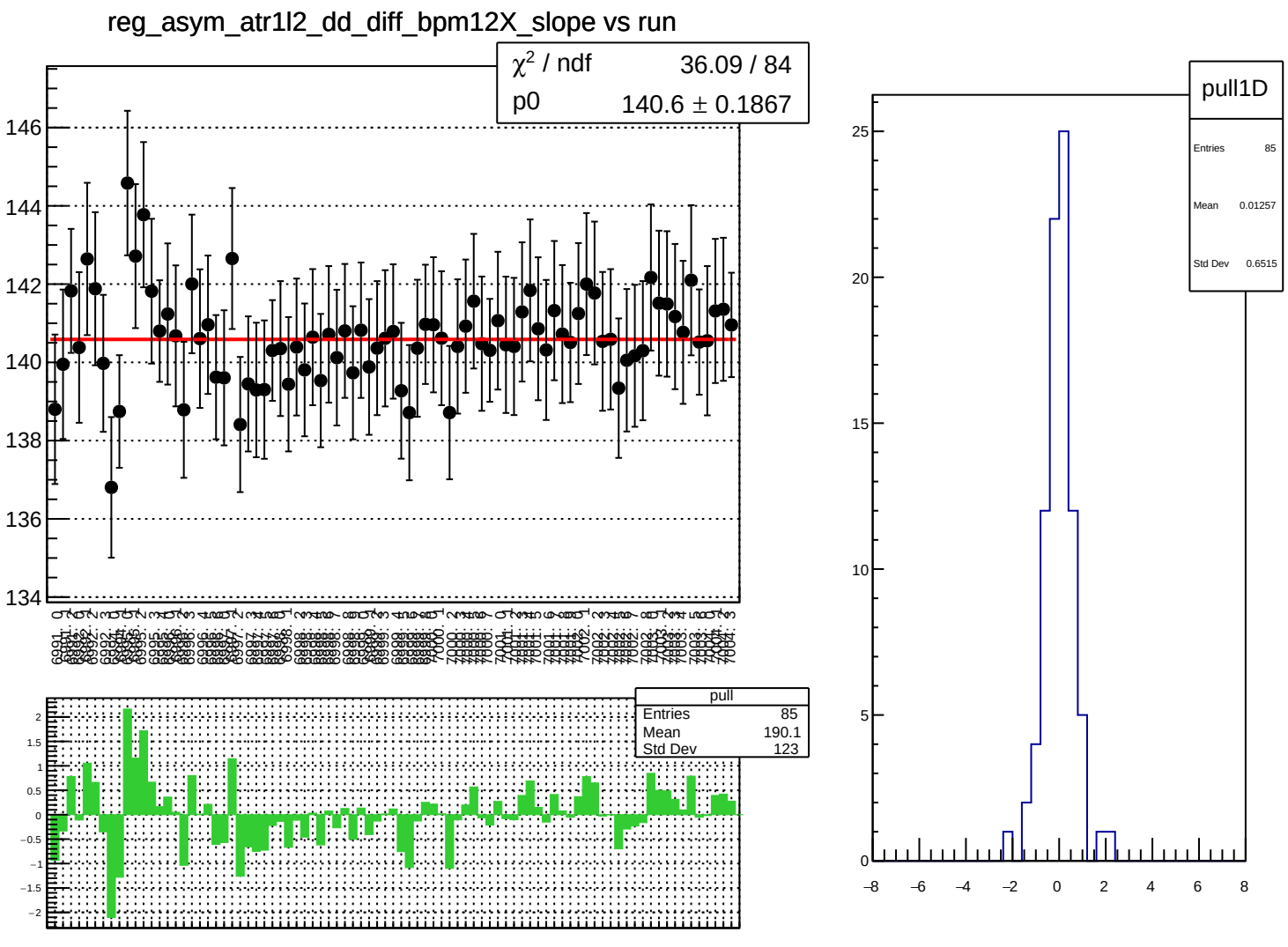

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.05 / 84
p0 16.89 ± 3.863
pull
Entries 85
Mean 690.9
Std Dev 641.5
pull1D
Entries 85
Mean −0.001778
Std Dev 0.3606

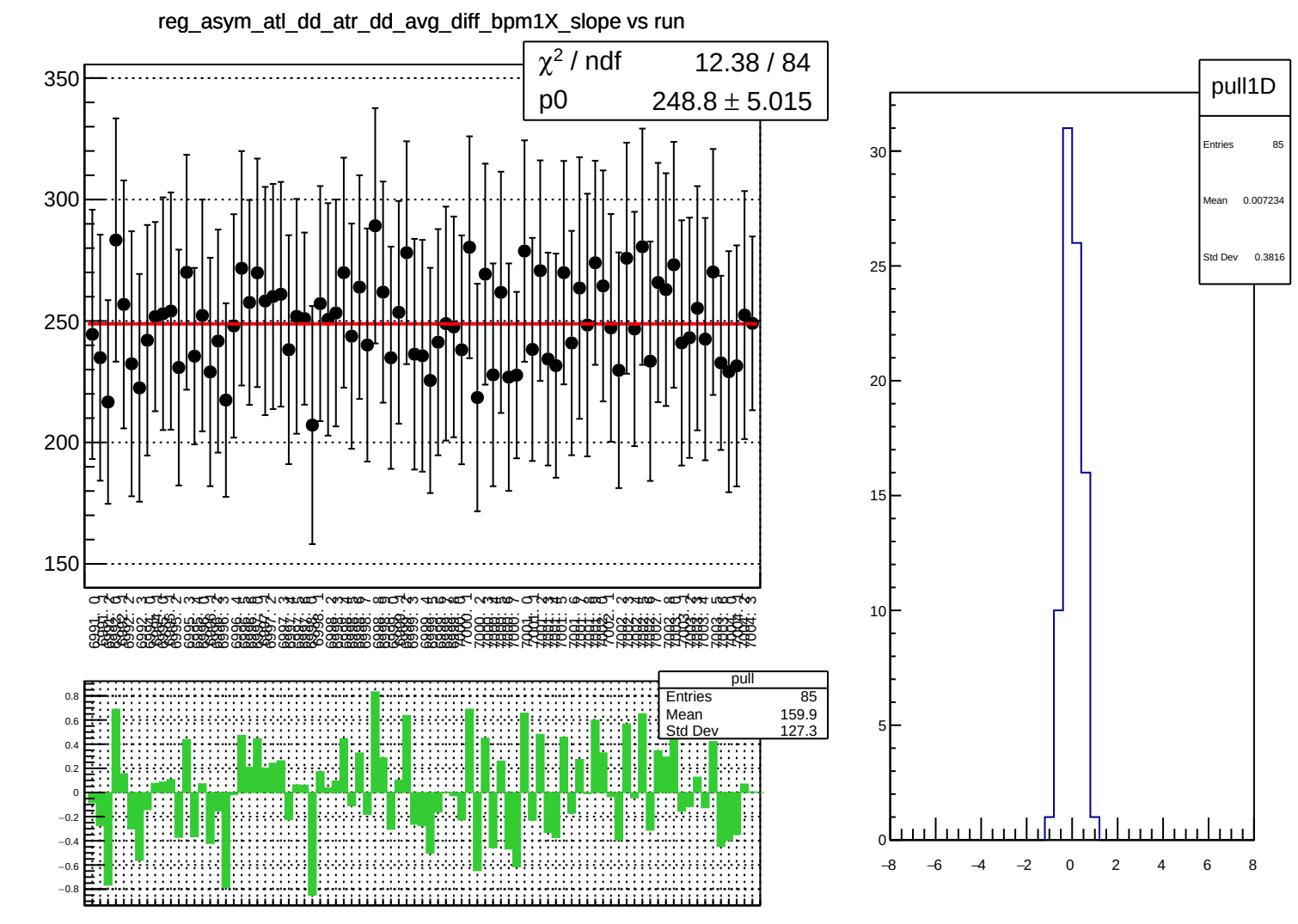

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.88 / 84
p0 −246.3 ± 5.191
−150
−200
−250
−300
−350
pull
Entries 85
Mean 119
Std Dev 98.45
1
0.5
0
−0.5
−1
−1.5

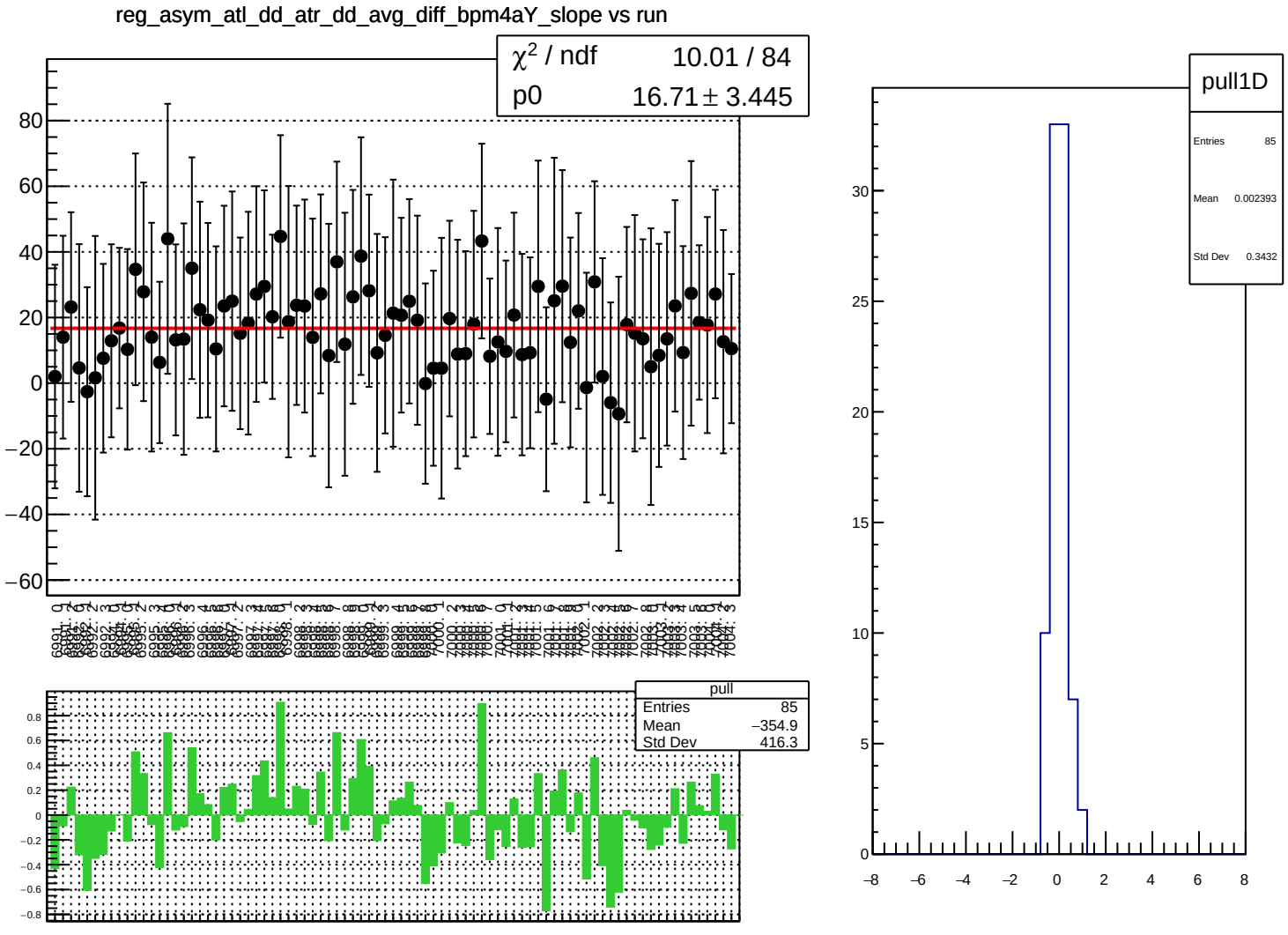

pull1D
Entries 85
Mean −0.00809
Std Dev 0.4713
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

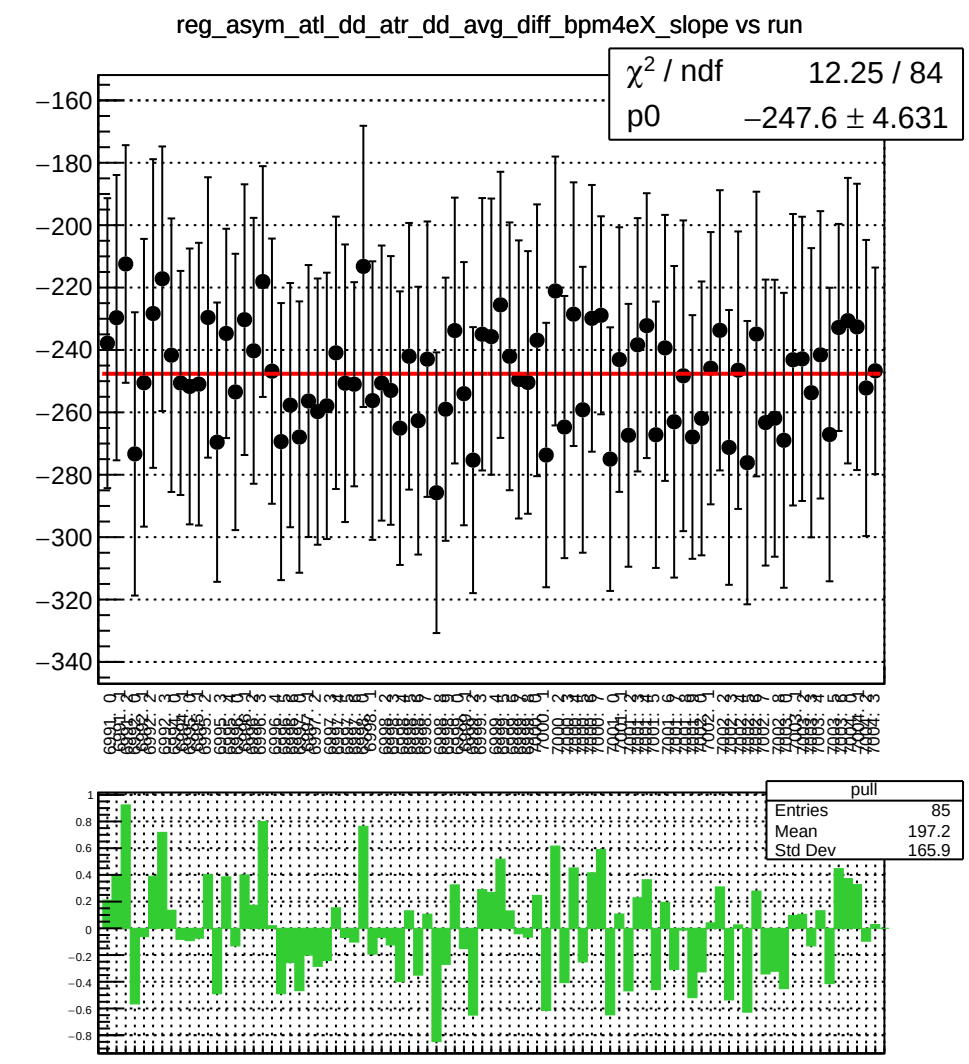

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 11.52 / 84
p0 −100.8 ± 4.074
pull
Entries 85
Mean 441.8
Std Dev 377.3

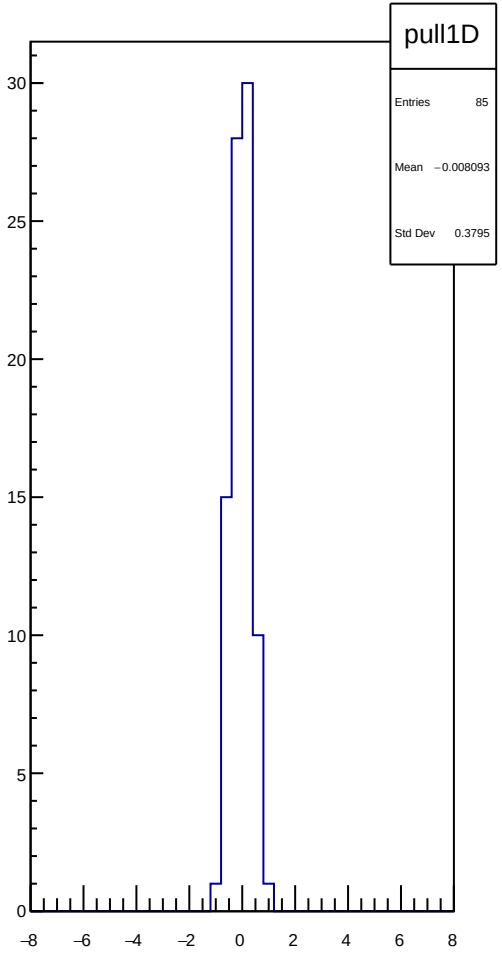

pull1D
Entries 85
Mean 0.002826
Std Dev 0.3681

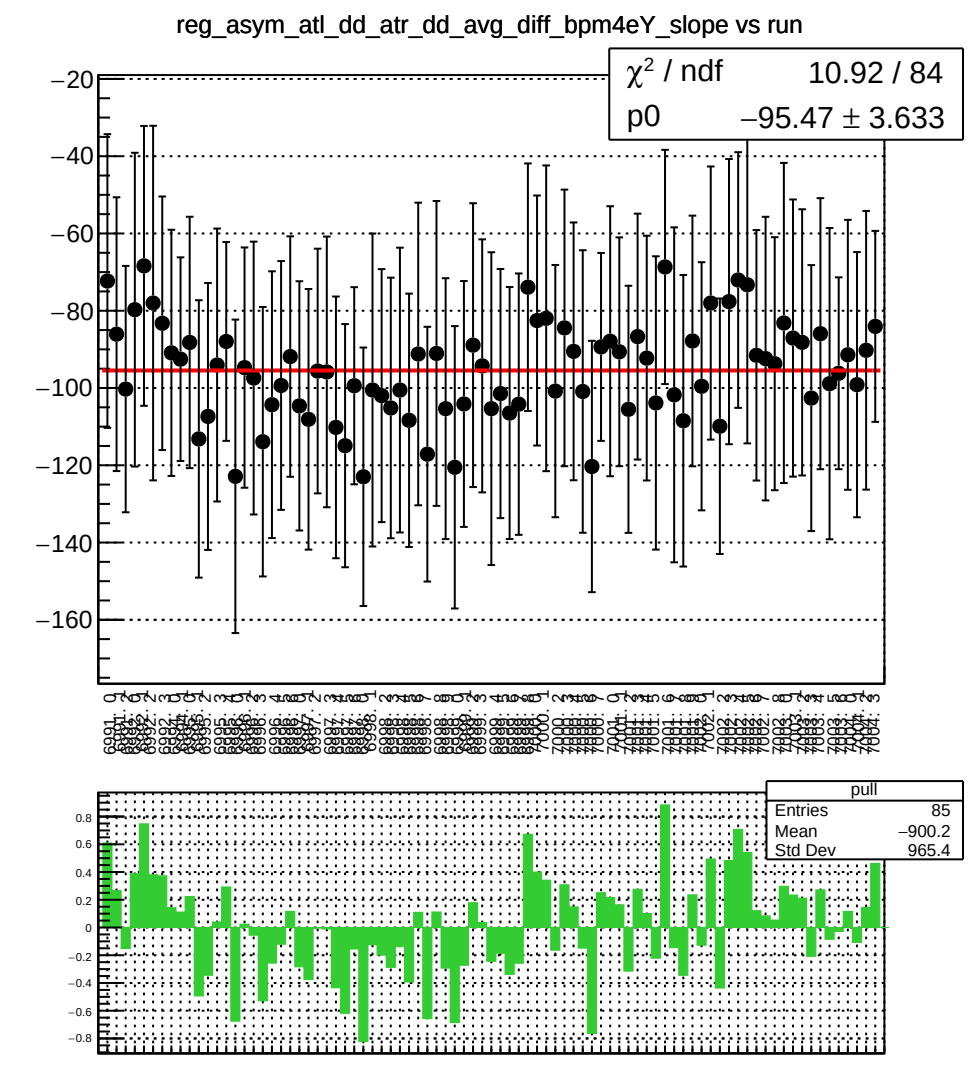

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 36.09 / 84
p0 140.6 ± 0.1867
146
144
142
140
138
136
134
pull
Entries 85
Mean 190.1
Std Dev 123
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.01257
Std Dev 0.6515
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

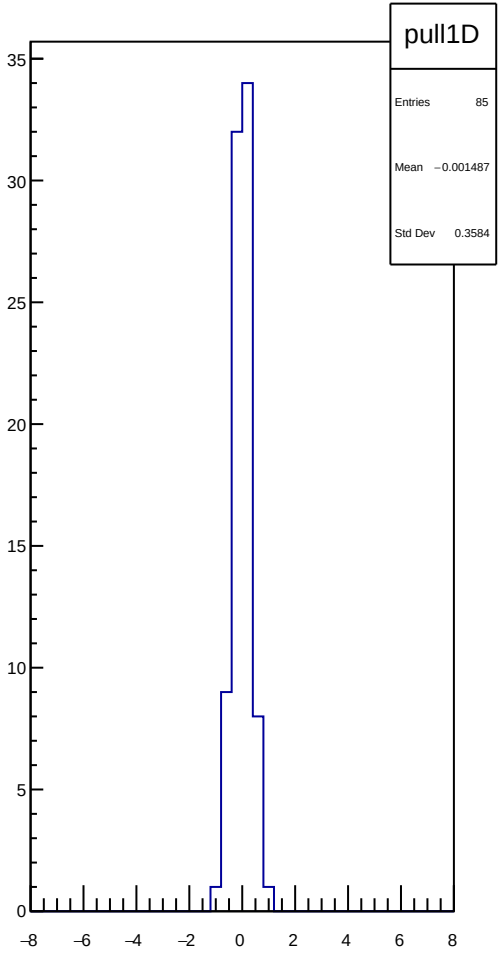

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 12.38 / 84
p0 248.8 ± 5.015
350
300
250
200
150
pull
Entries 85
Mean 159.9
Std Dev 127.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean 0.007234
Std Dev 0.3816
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

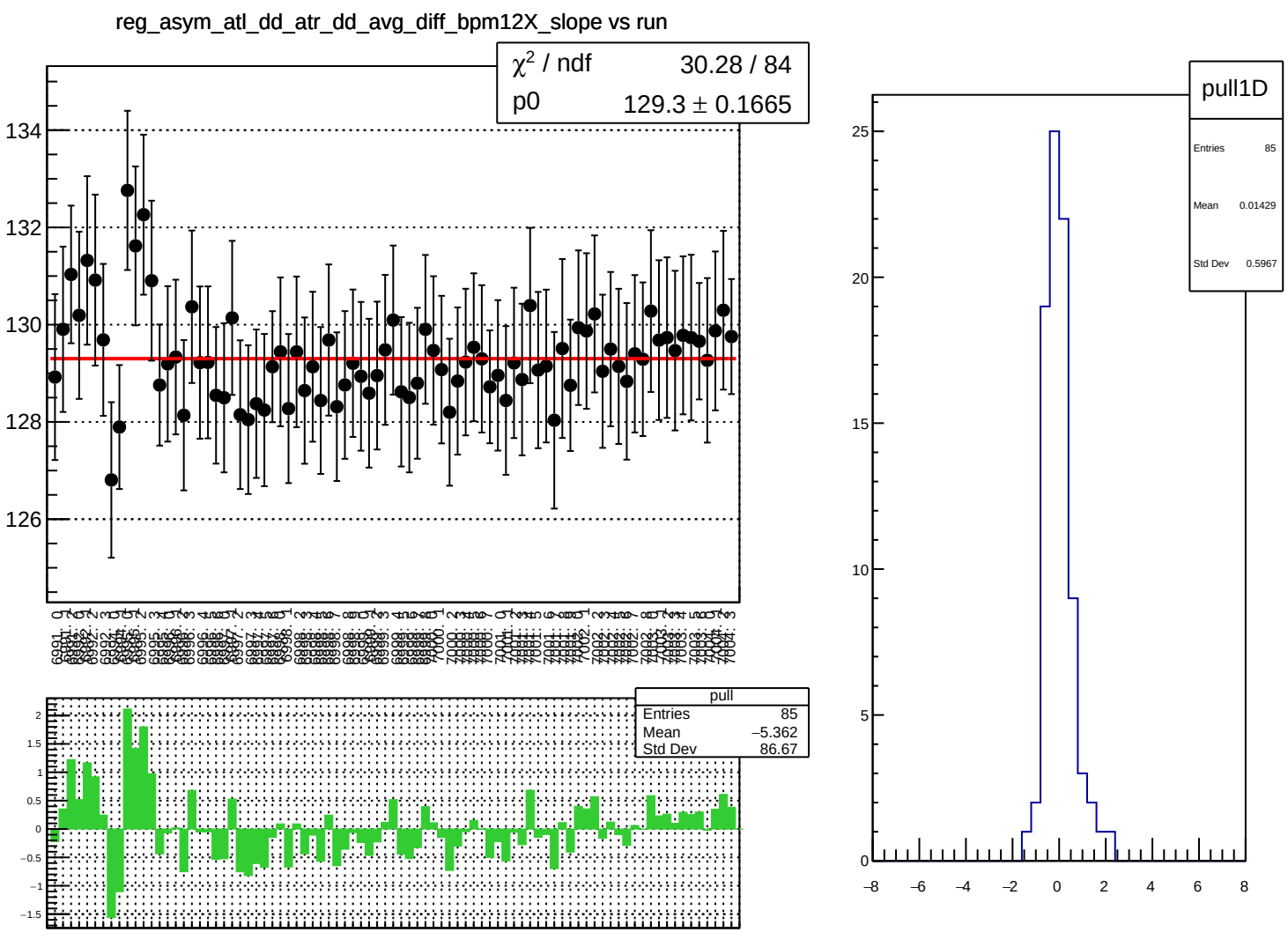

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.01 / 84
p0 16.71 ± 3.445
pull
Entries 85
Mean −354.9
Std Dev 416.3
pull1D
Entries 85
Mean 0.002393
Std Dev 0.3432

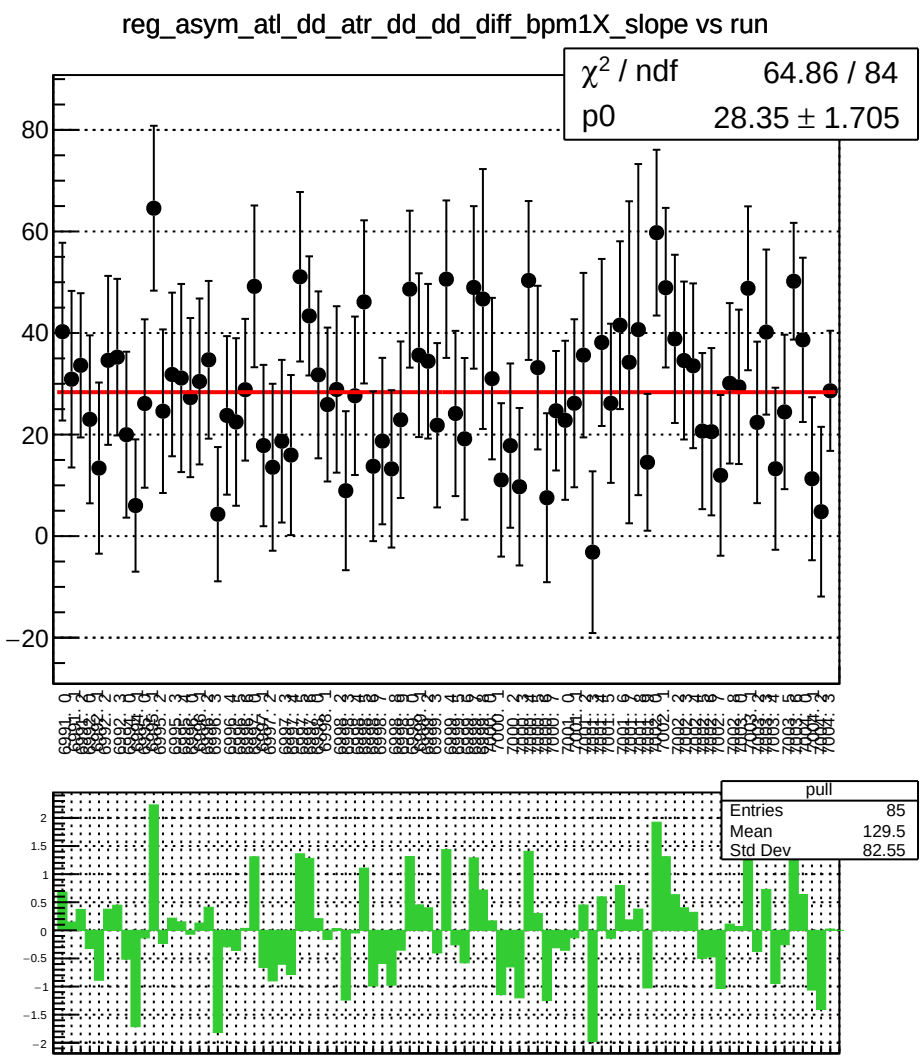

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.25 / 84
p0 −247.6 ± 4.631
pull
Entries 85
Mean 197.2
Std Dev 165.9

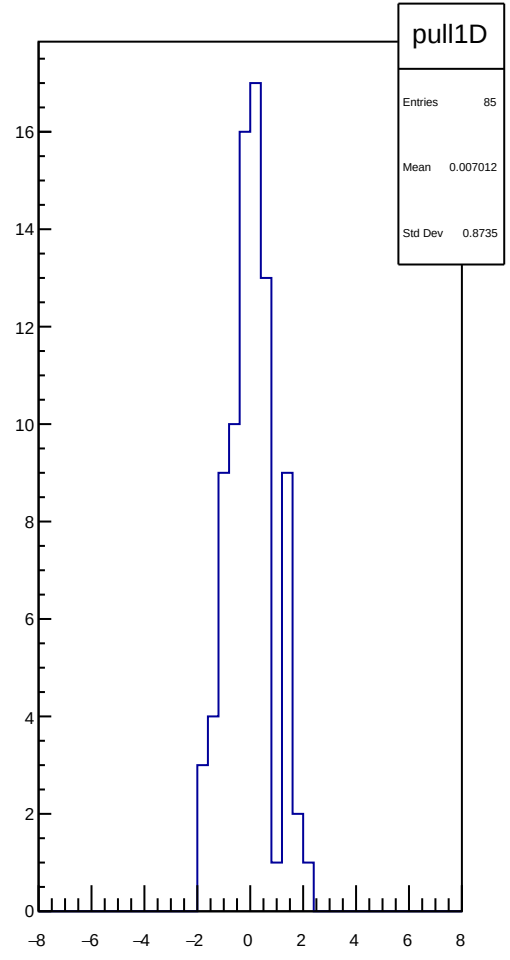

pull1D
Entries 85
Mean −0.008093
Std Dev 0.3795

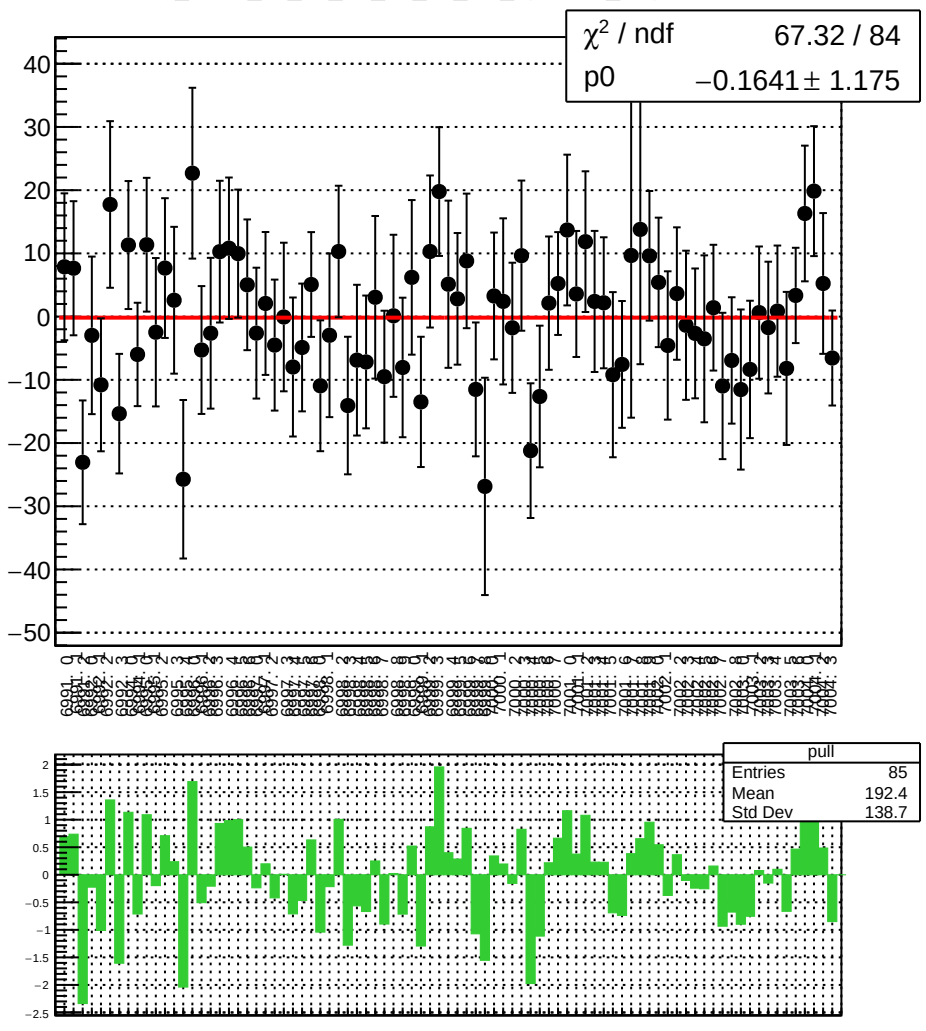

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.92 / 84
p0 −95.47 ± 3.633
pull
Entries 85
Mean −900.2
Std Dev 965.4

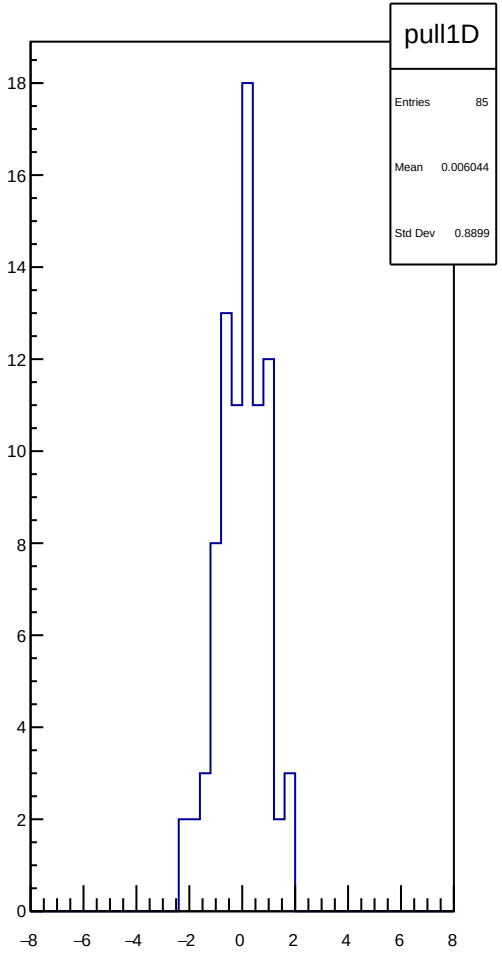

pull1D
Entries 85
Mean −0.001487
Std Dev 0.3584

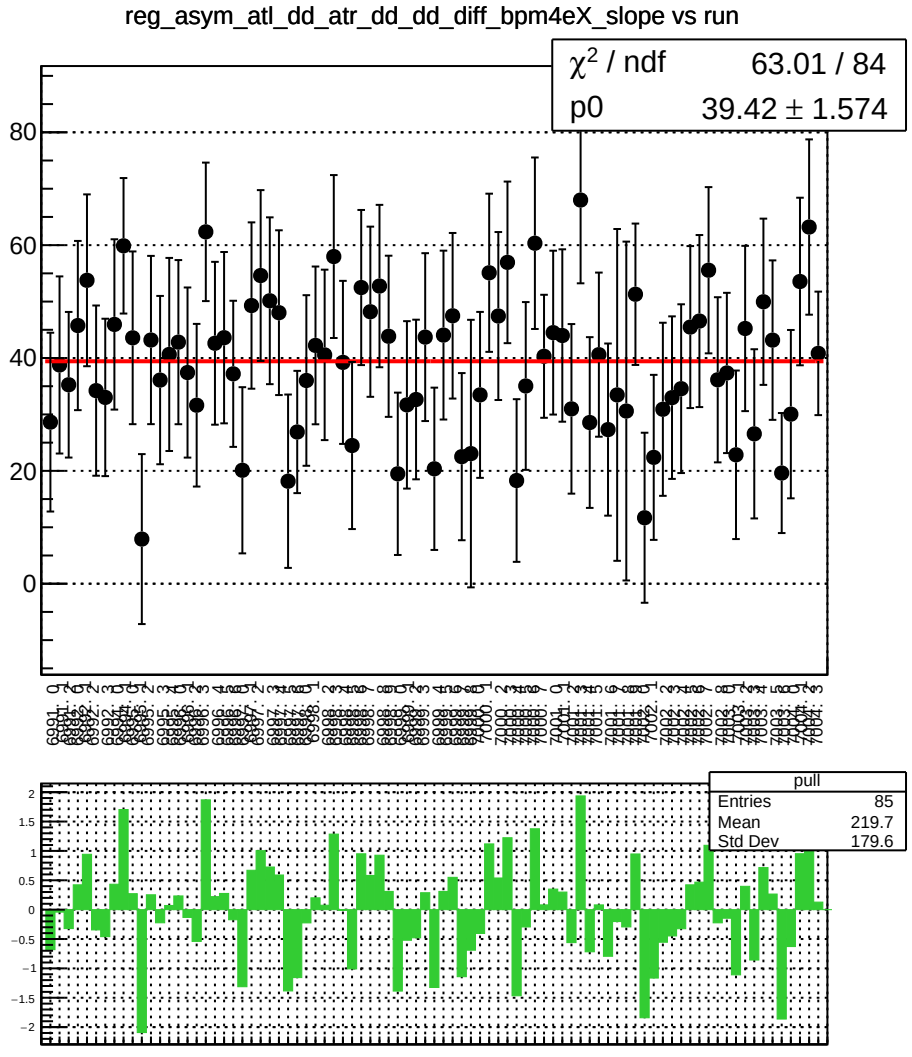

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 30.28 / 84
p0 129.3 ± 0.1665
134
132
130
128
126
pull
Entries 85
Mean −5.362
Std Dev 86.67
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean 0.01429
Std Dev 0.5967
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

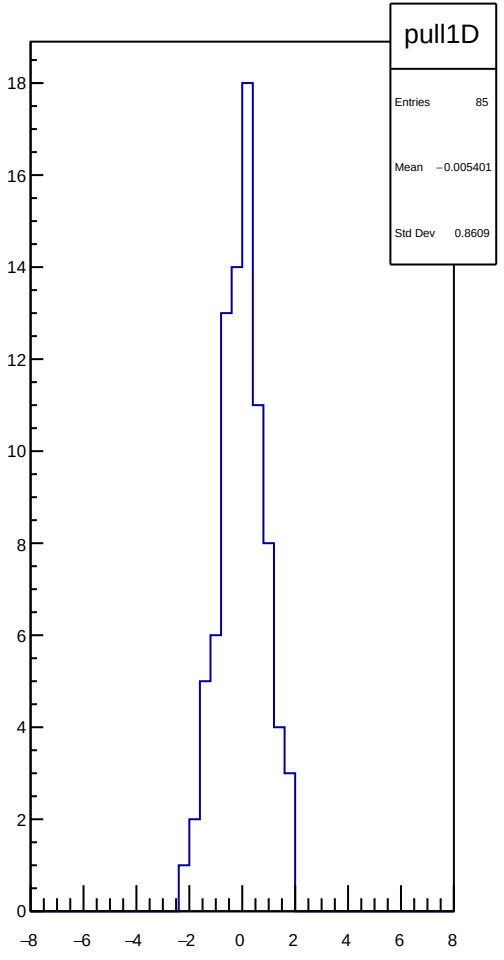

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 64.86 / 84
p0 28.35 ± 1.705
pull
Entries 85
Mean 129.5
Std Dev 82.55

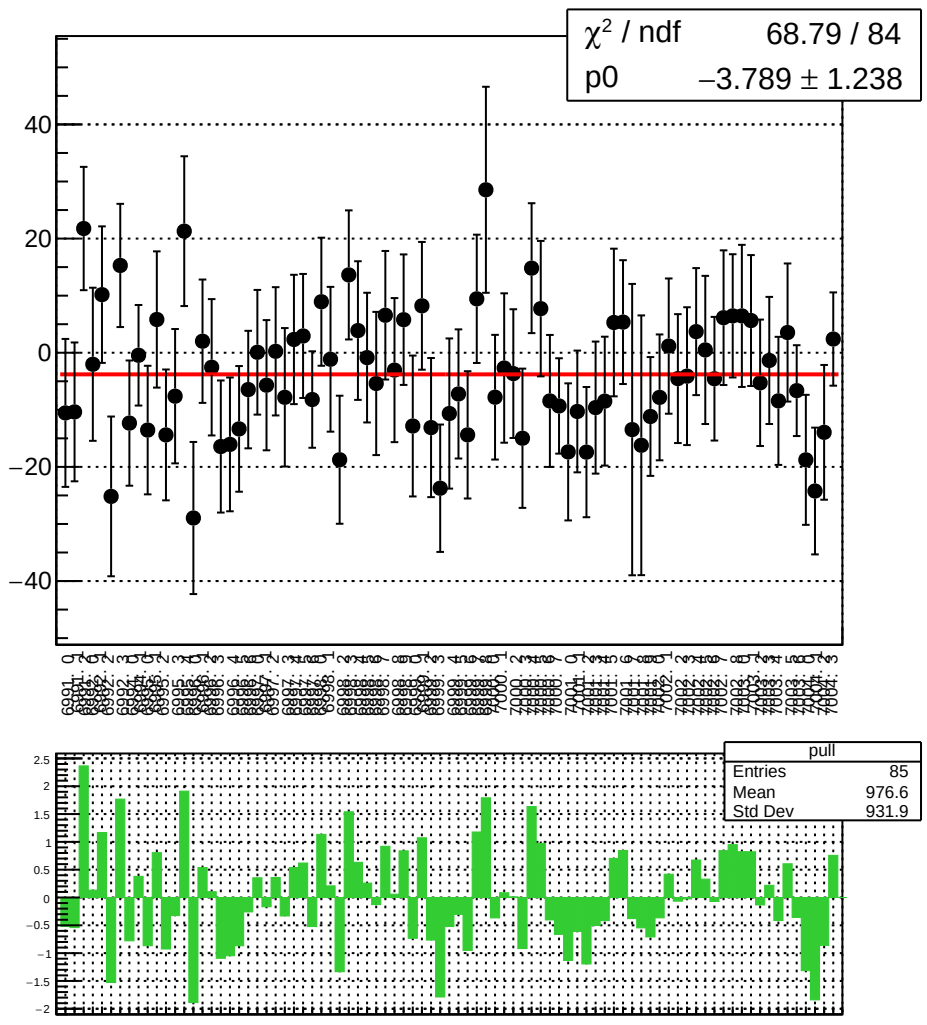

pull1D
Entries 85
Mean 0.007012
Std Dev 0.8735

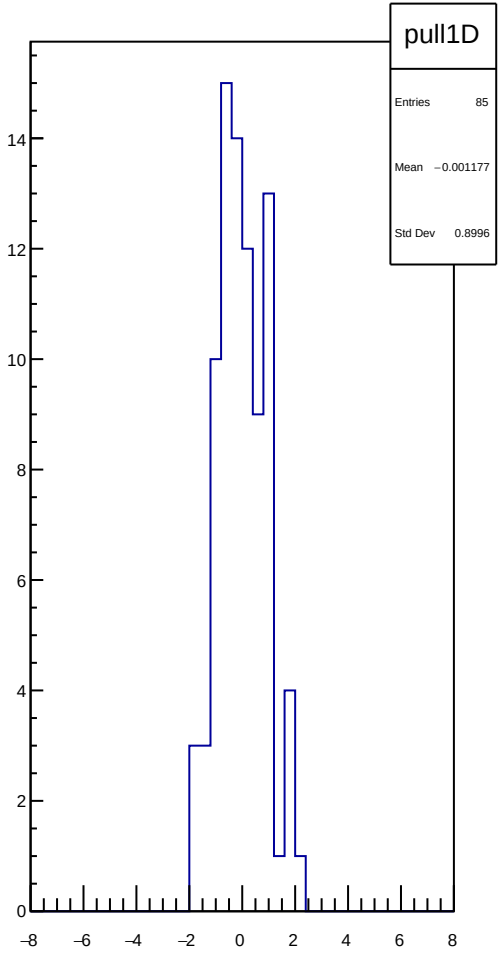

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 67.32 / 84
p0 −0.1641 ± 1.175
pull
Entries 85
Mean 192.4
Std Dev 138.7

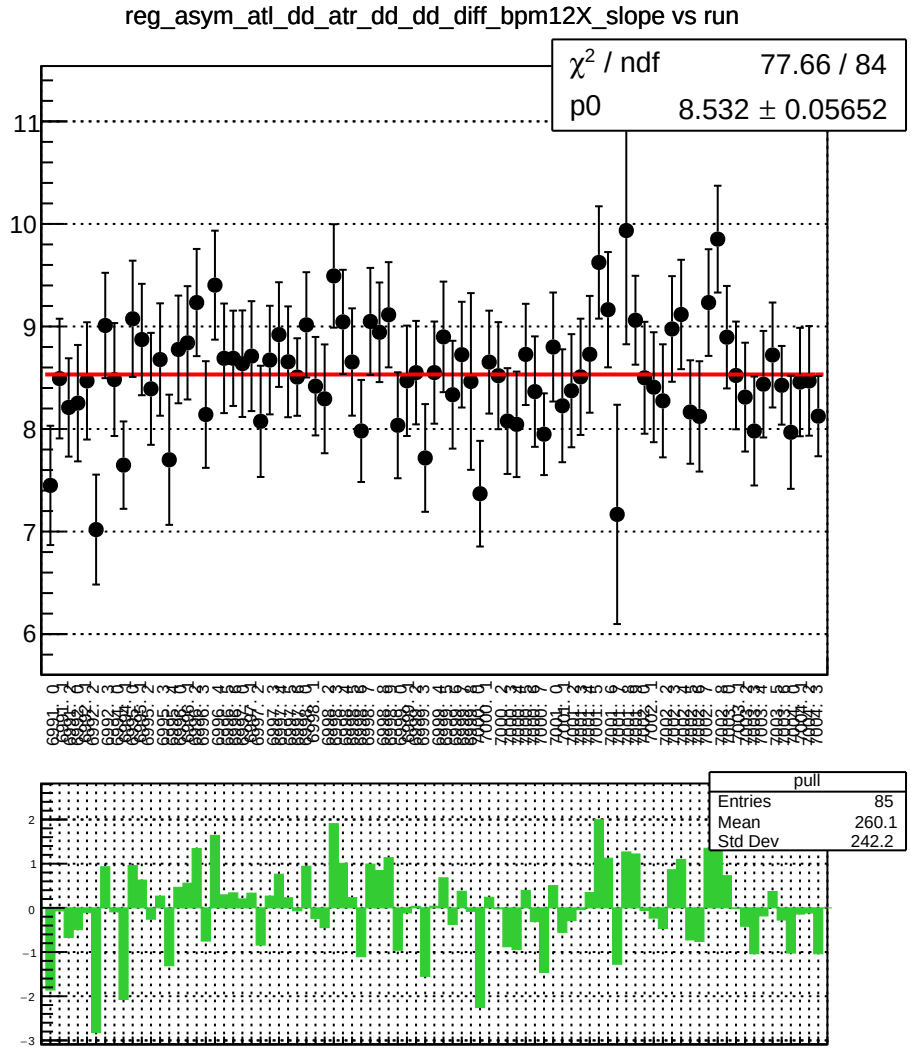

pull1D
Entries 85
Mean 0.006044
Std Dev 0.8899

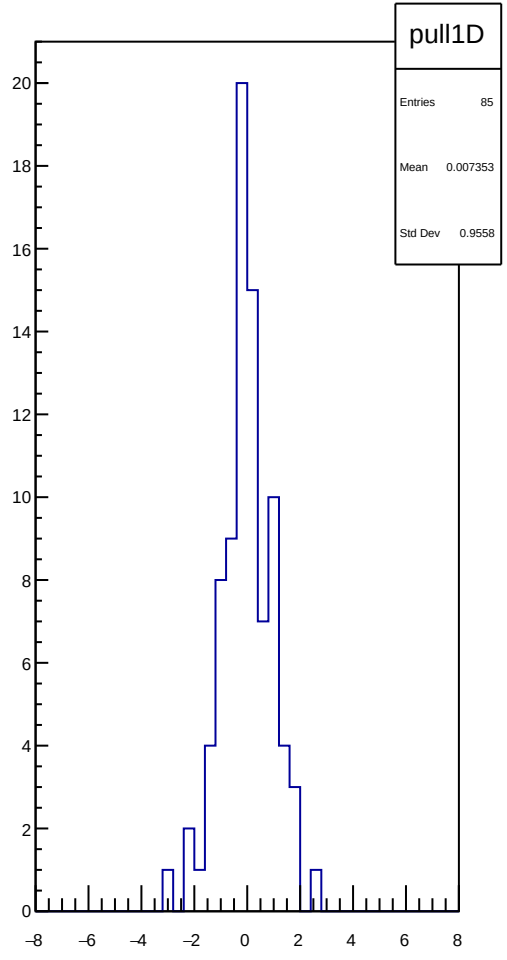

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 63.01 / 84
p0 39.42 ± 1.574
pull
Entries 85
Mean 219.7
Std Dev 179.6

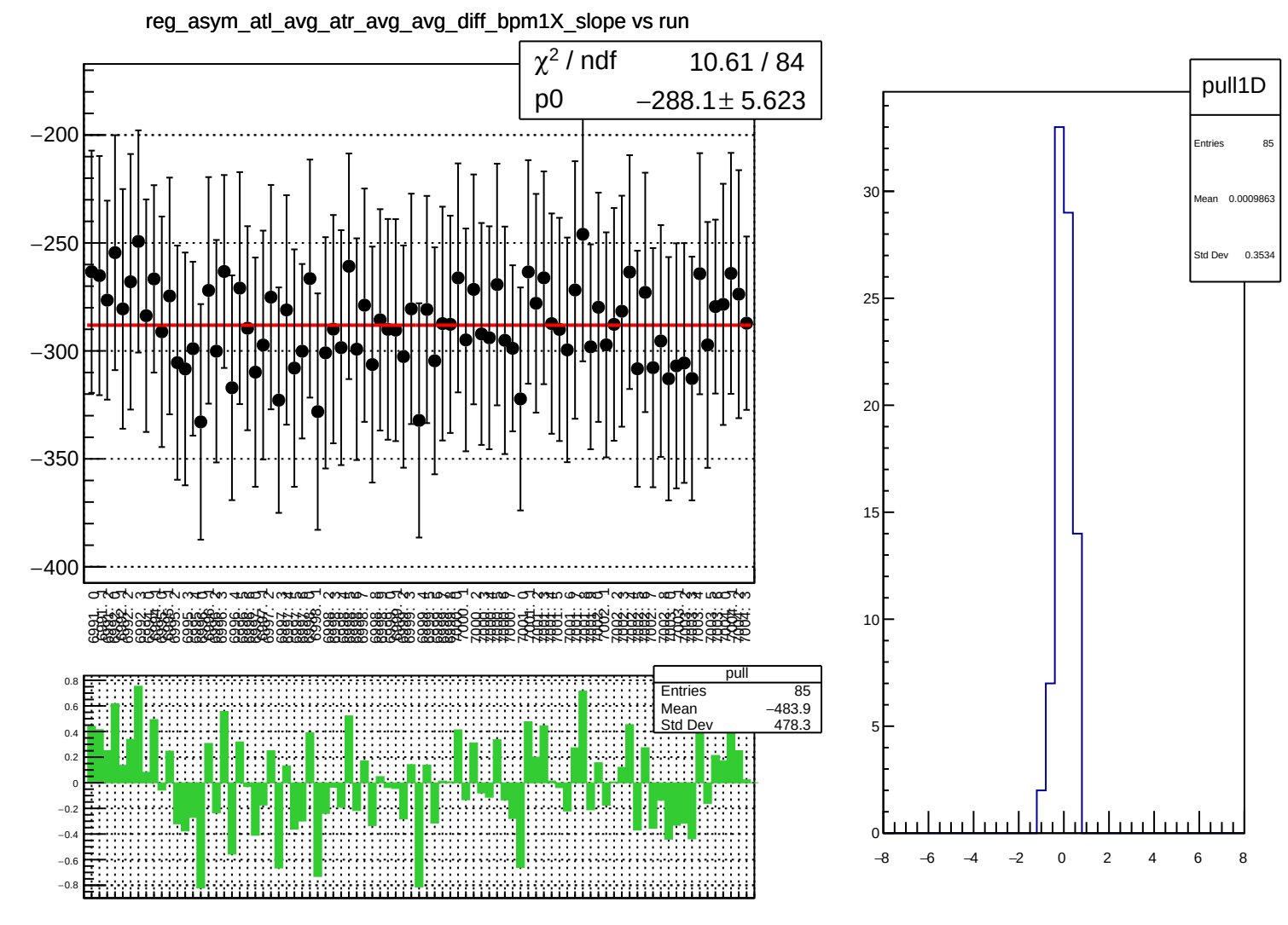

pull1D
Entries 85
Mean −0.005401
Std Dev 0.8609

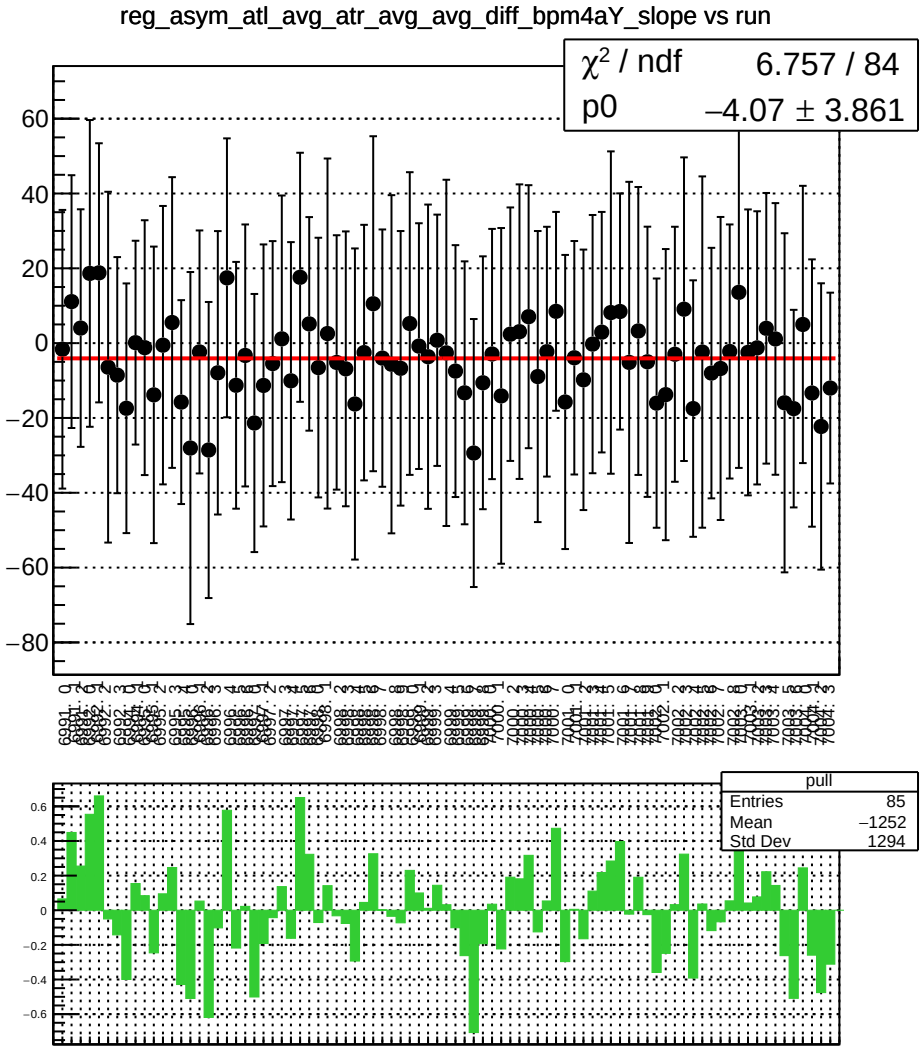

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 68.79 / 84
p0 −3.789 ± 1.238
pull
Entries 85
Mean 976.6
Std Dev 931.9

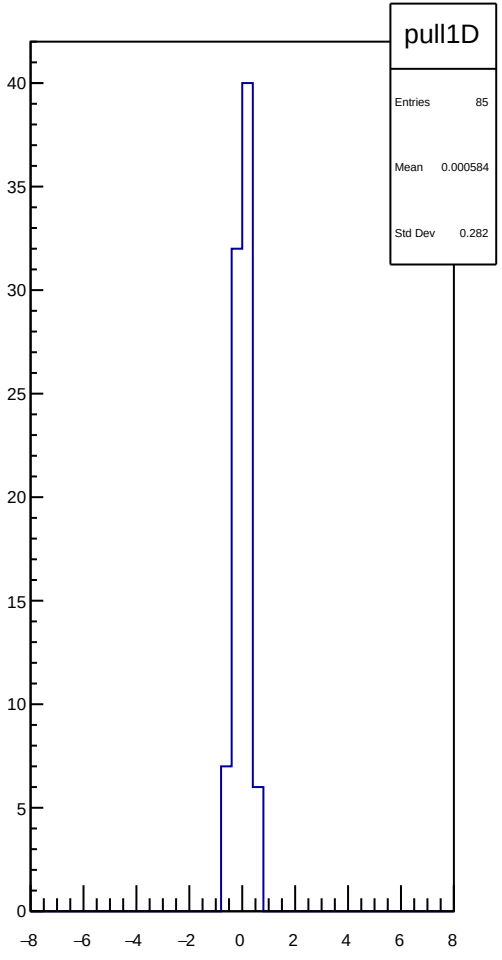

pull1D
Entries 85
Mean −0.001177
Std Dev 0.8996

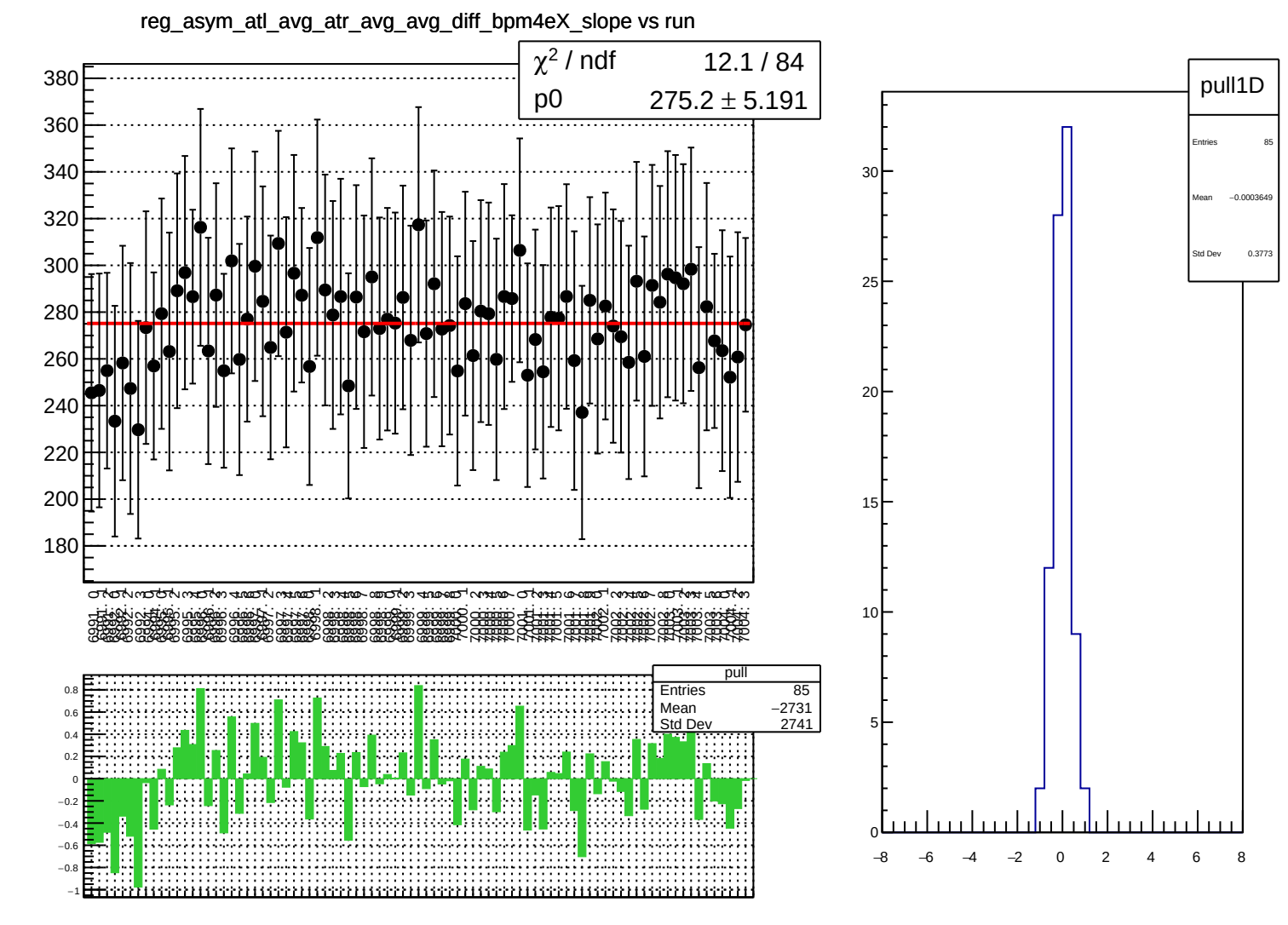

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 77.66 / 84
p0 8.532 ± 0.05652
pull
Entries 85
Mean 260.1
Std Dev 242.2

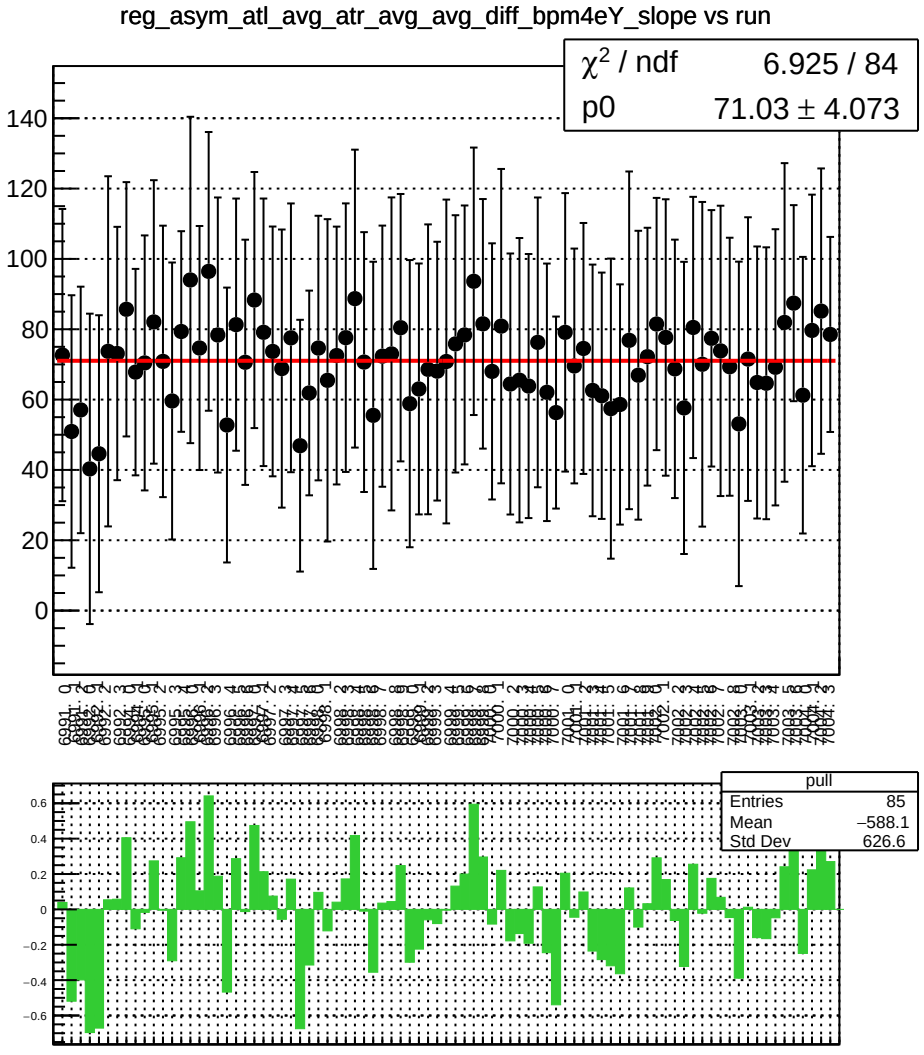

pull1D
Entries 85
Mean 0.007353
Std Dev 0.9558

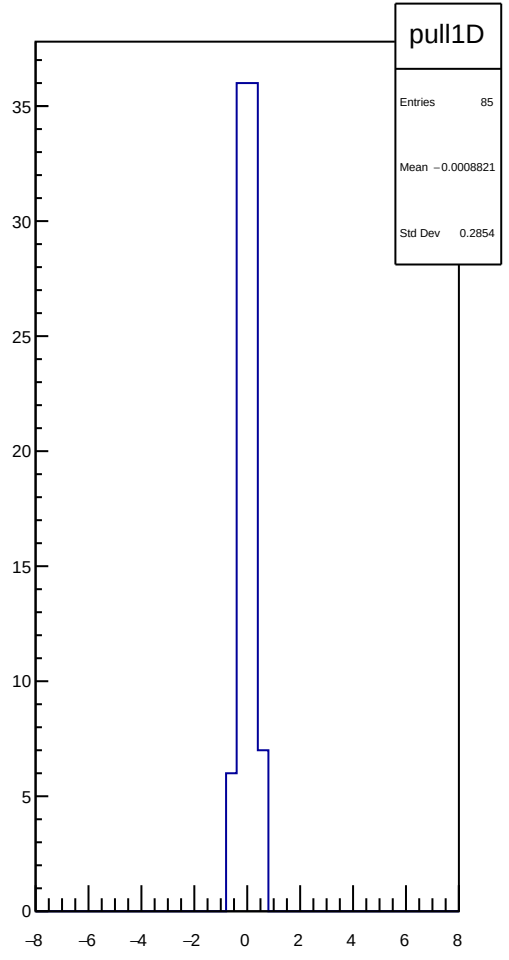

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 10.61 / 84
p0 −288.1 ± 5.623
−200
−250
−300
−350
−400
pull
Entries 85
Mean −483.9
Std Dev 478.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean 0.0009863
Std Dev 0.3534
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

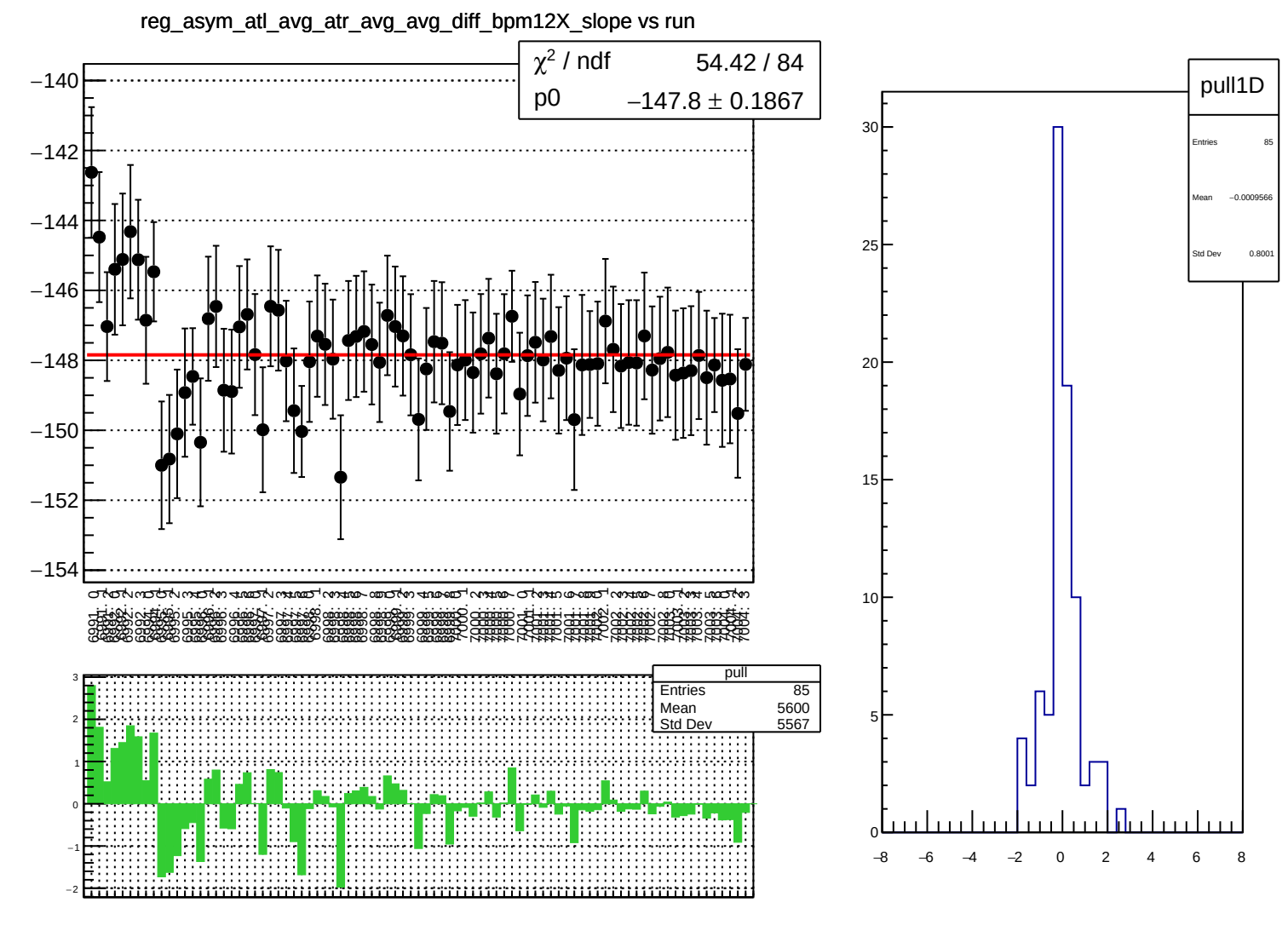

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.757 / 84
p0 −4.07 ± 3.861
pull
Entries 85
Mean −1252
Std Dev 1294

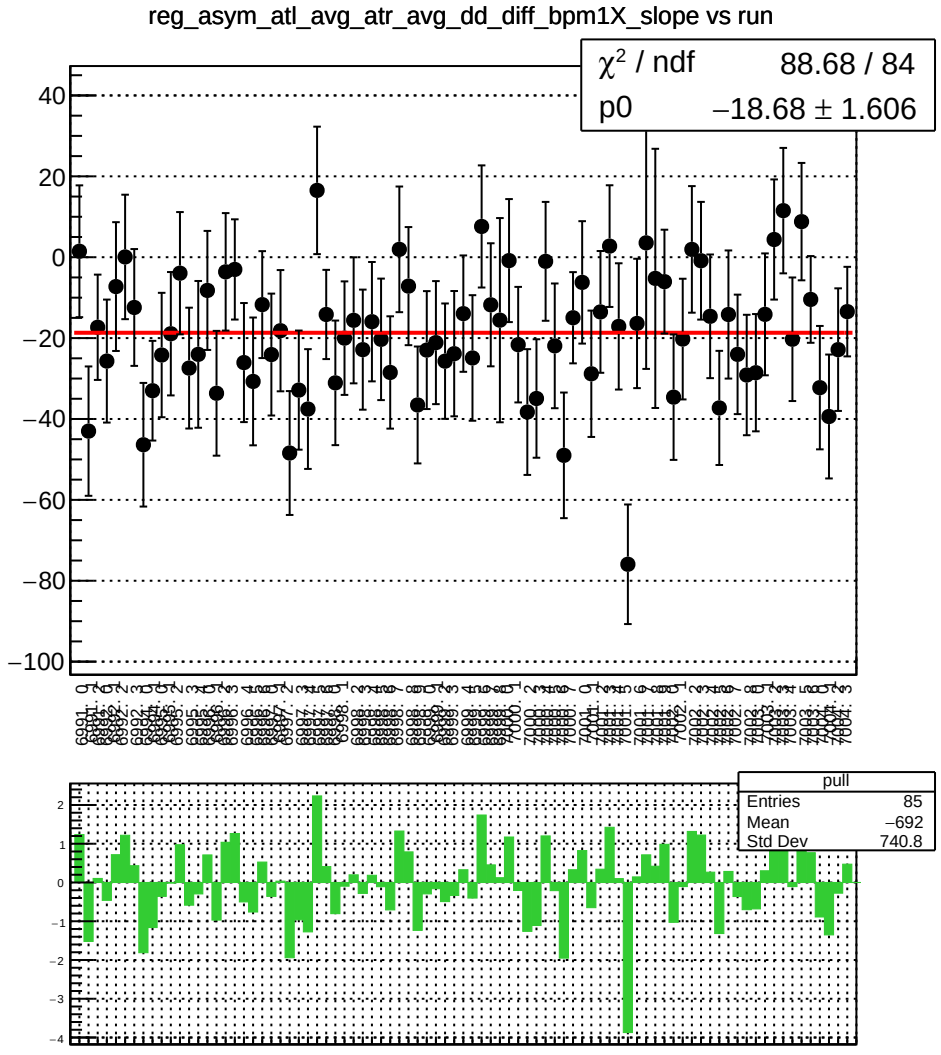

pull1D
Entries 85
Mean 0.000584
Std Dev 0.282

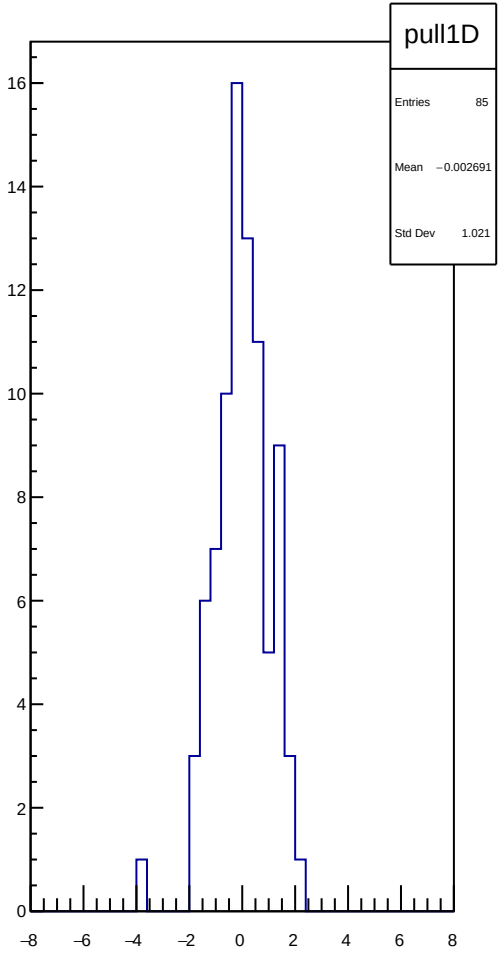

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.1 / 84
p0 275.2 ± 5.191
pull
Entries 85
Mean −2731
Std Dev 2741
pull1D
Entries 85
Mean −0.0003649
Std Dev 0.3773

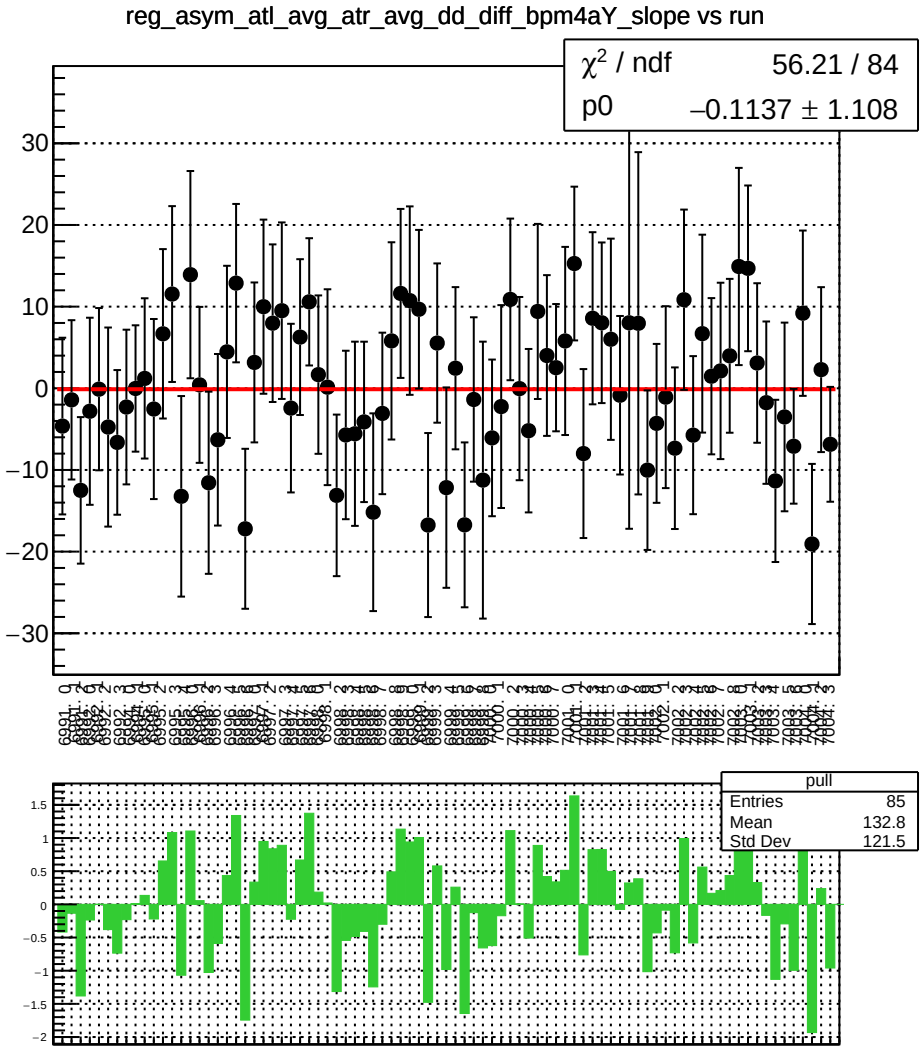

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.925 / 84
p0 71.03 ± 4.073
pull
Entries 85
Mean −588.1
Std Dev 626.6

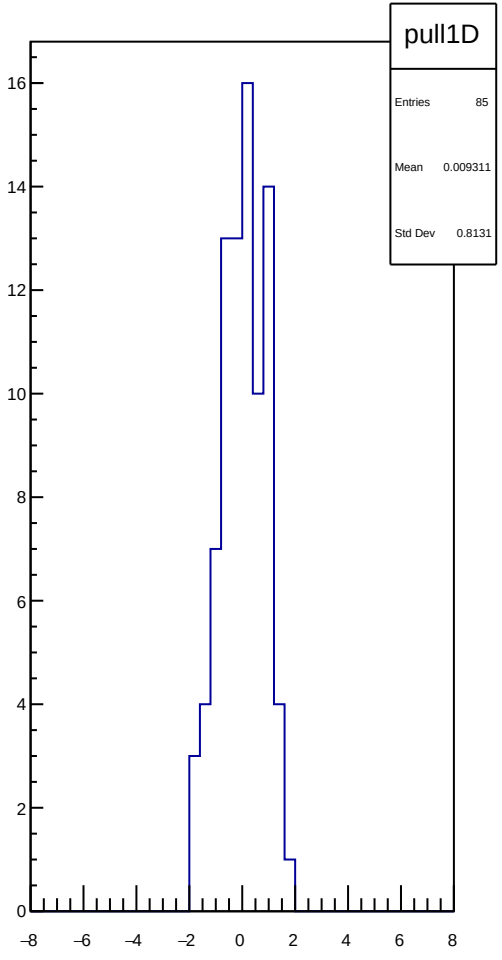

pull1D
Entries 85
Mean −0.0008821
Std Dev 0.2854

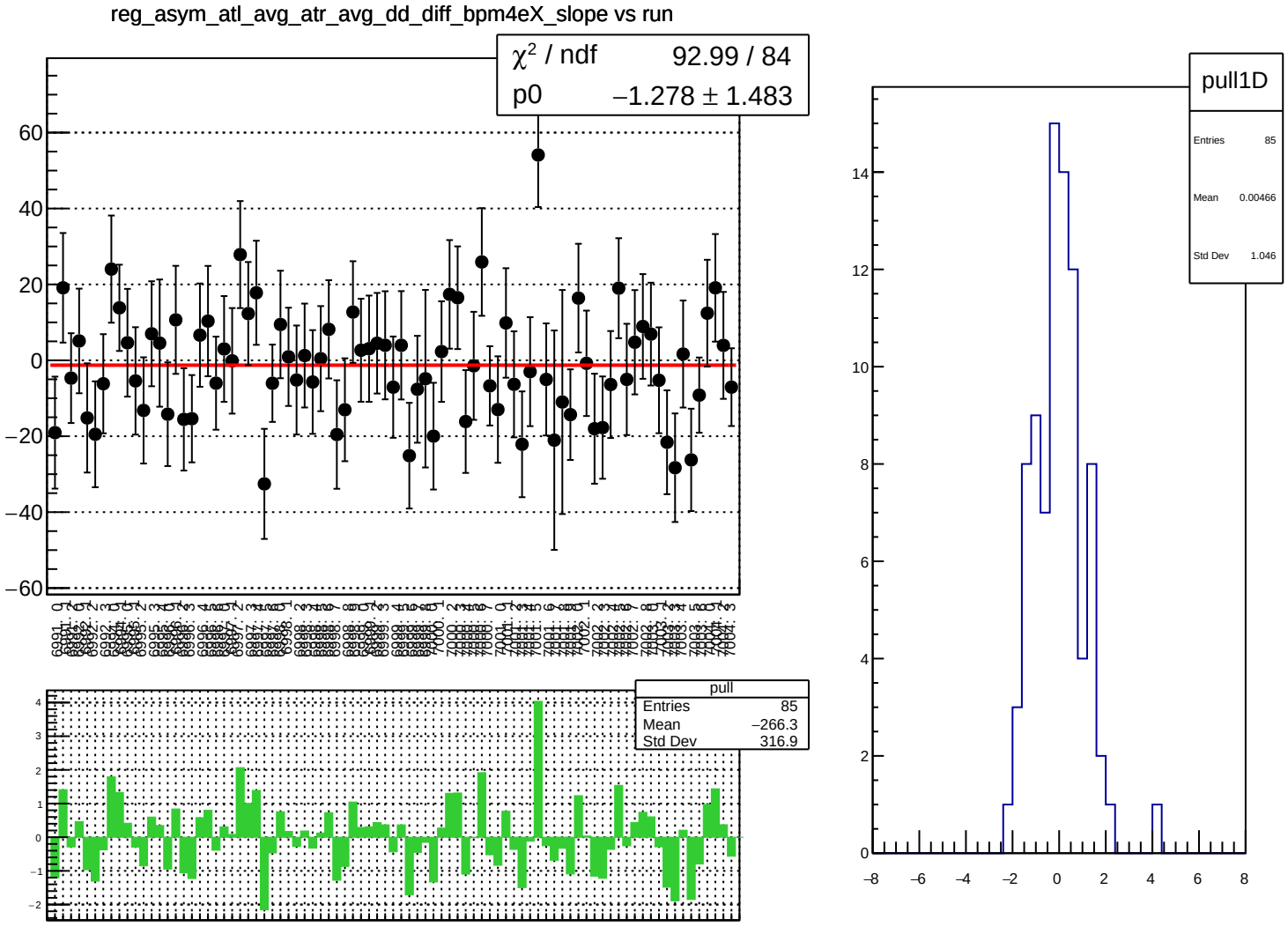

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 54.42 / 84
p0 −147.8 ± 0.1867
pull
Entries 85
Mean 5600
Std Dev 5567
pull1D
Entries 85
Mean −0.0009566
Std Dev 0.8001

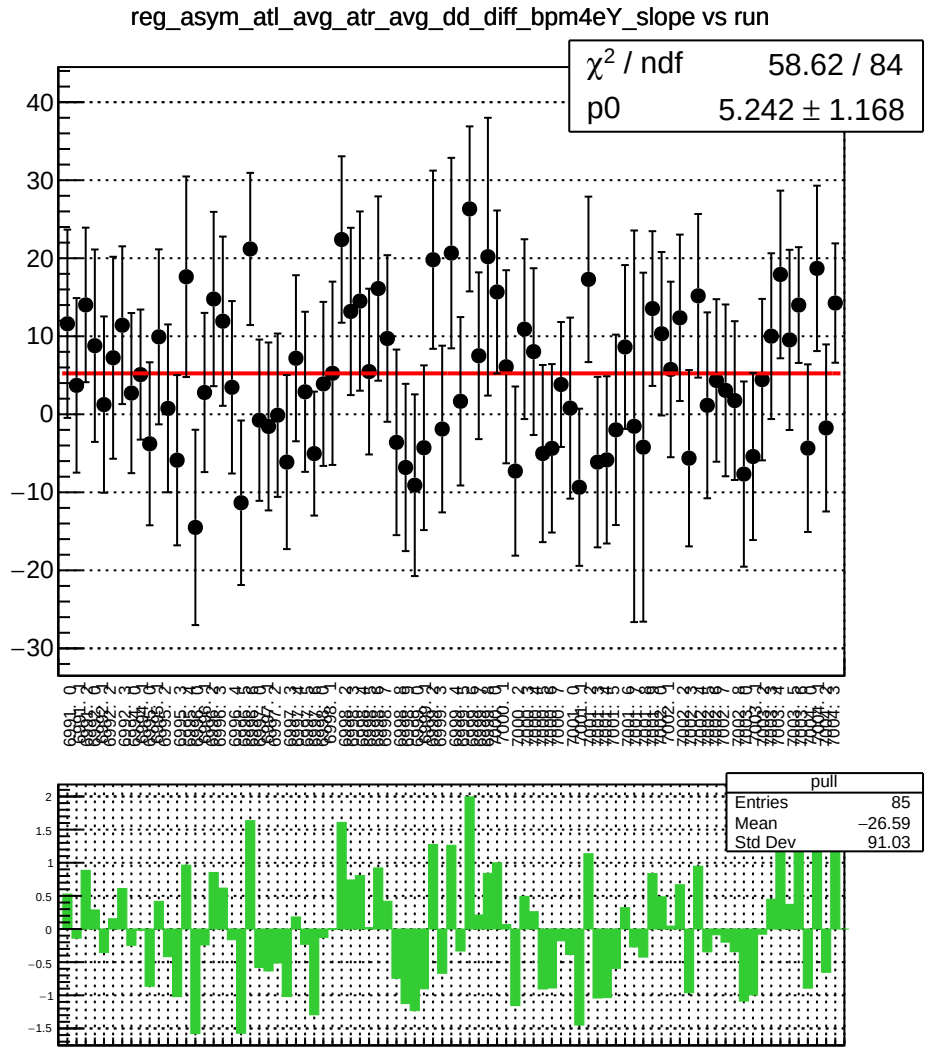

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 88.68 / 84
p0 −18.68 ± 1.606
pull
Entries 85
Mean −692
Std Dev 740.8

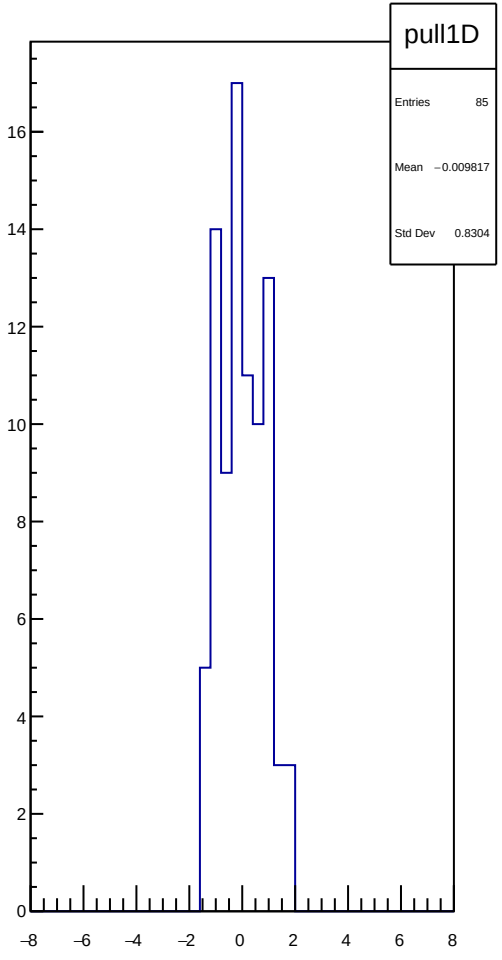

pull1D
Entries 85
Mean −0.002691
Std Dev 1.021

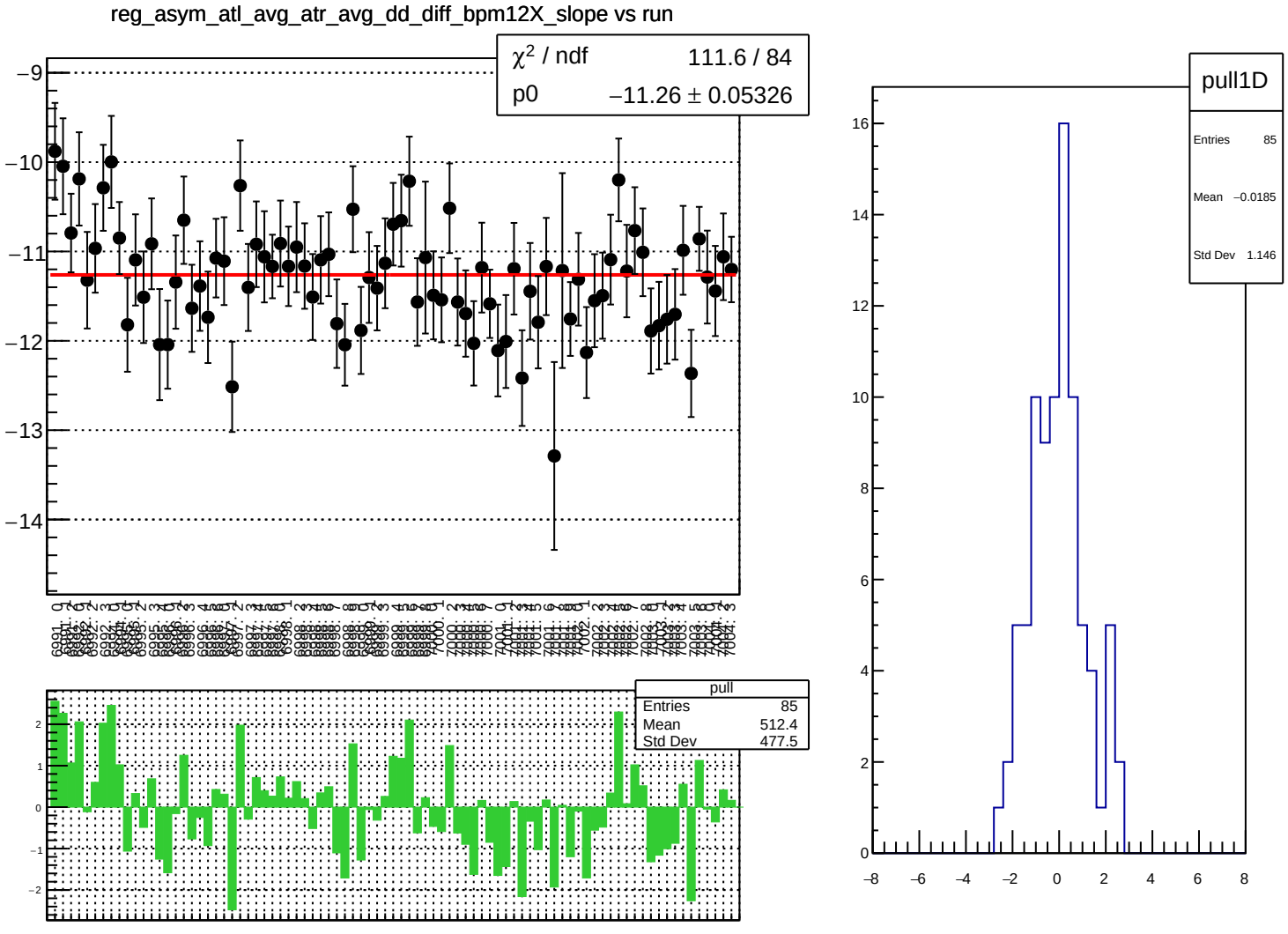

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 56.21 / 84
p0 −0.1137 ± 1.108
pull
Entries 85
Mean 132.8
Std Dev 121.5

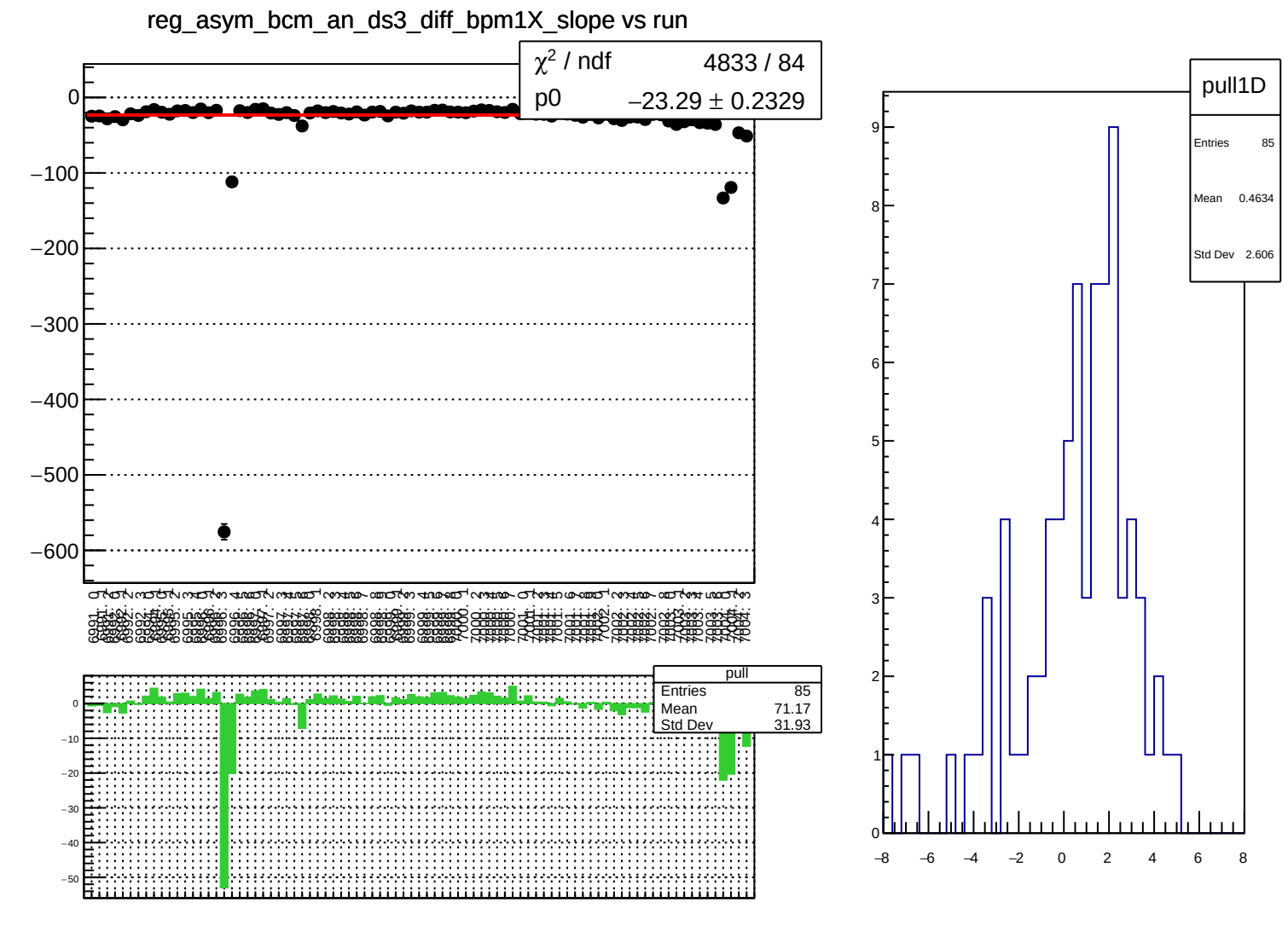

pull1D
Entries 85
Mean 0.009311
Std Dev 0.8131

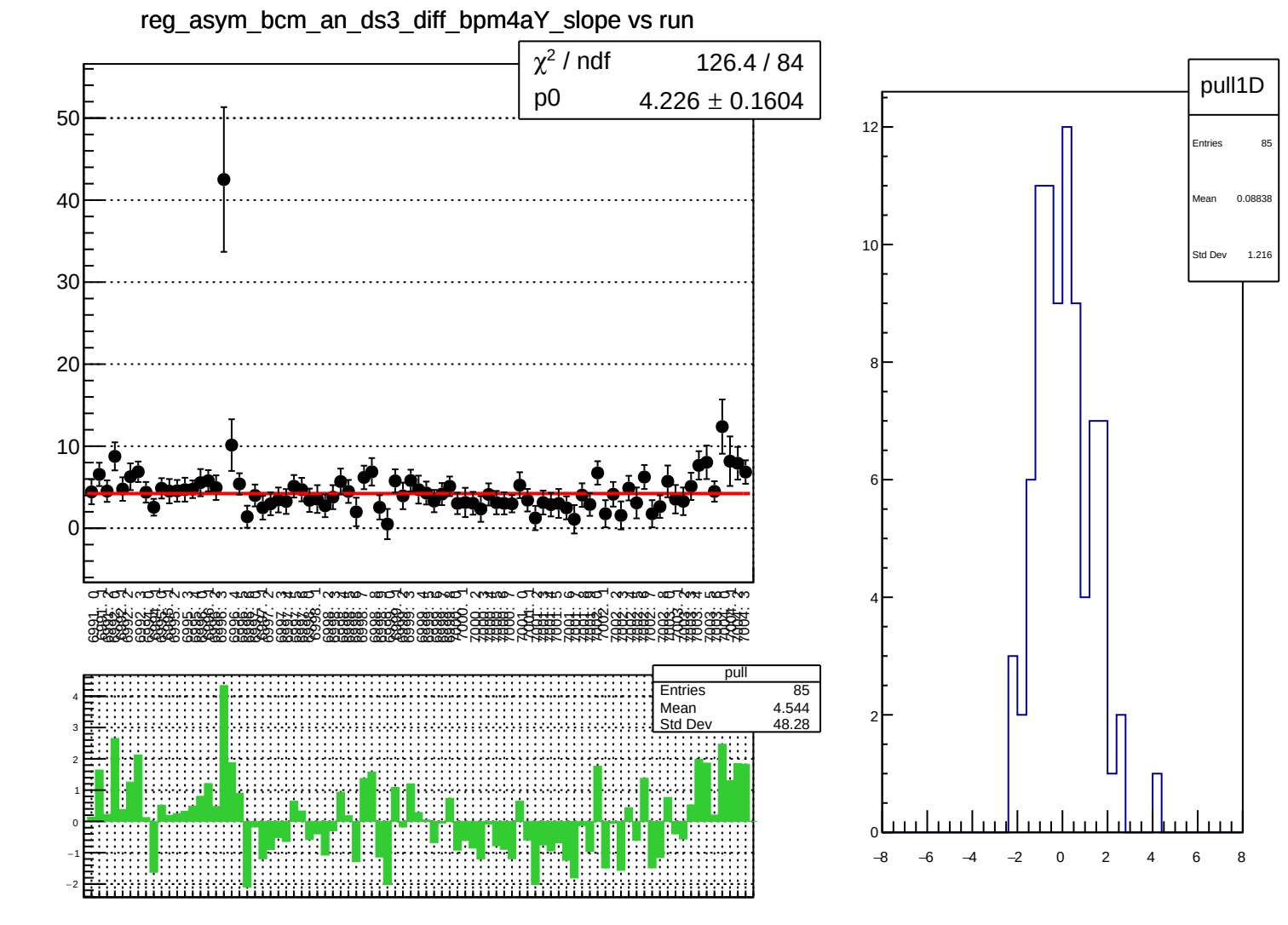

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 92.99 / 84
p0 −1.278 ± 1.483
pull
Entries 85
Mean −266.3
Std Dev 316.9
pull1D
Entries 85
Mean 0.00466
Std Dev 1.046

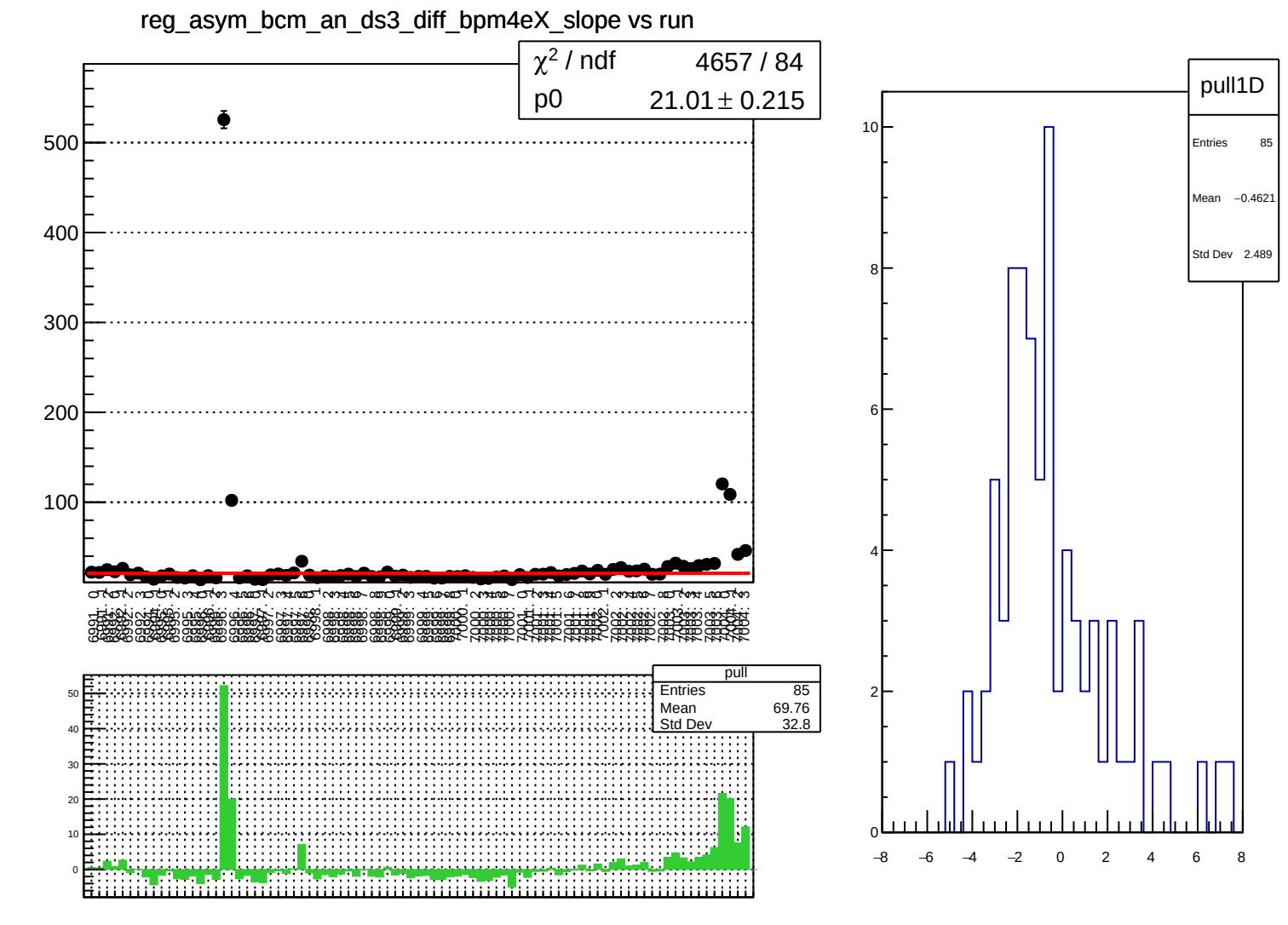

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 58.62 / 84
p0 5.242 ± 1.168
pull
Entries 85
Mean −26.59
Std Dev 91.03

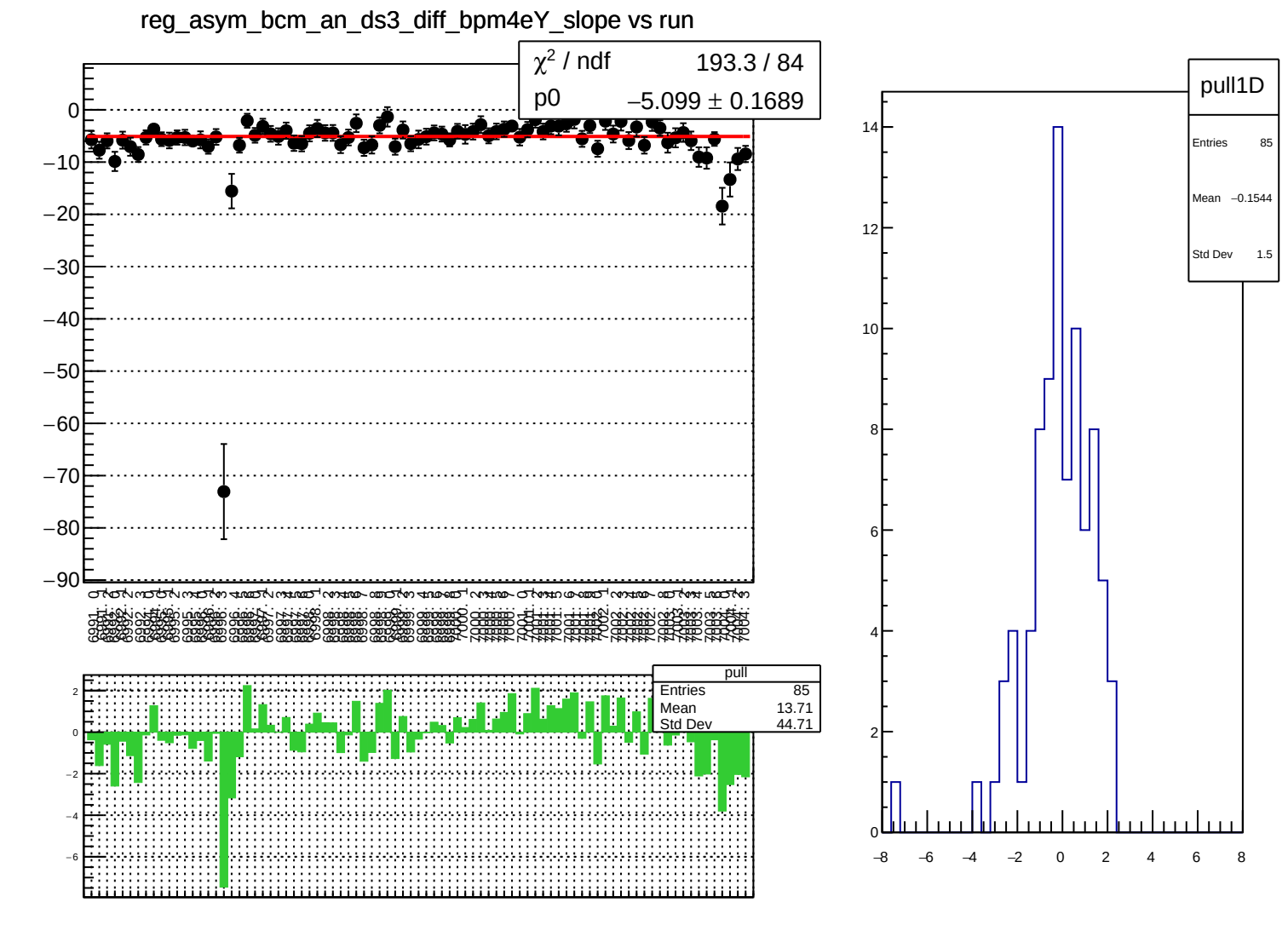

pull1D
Entries 85
Mean −0.009817
Std Dev 0.8304

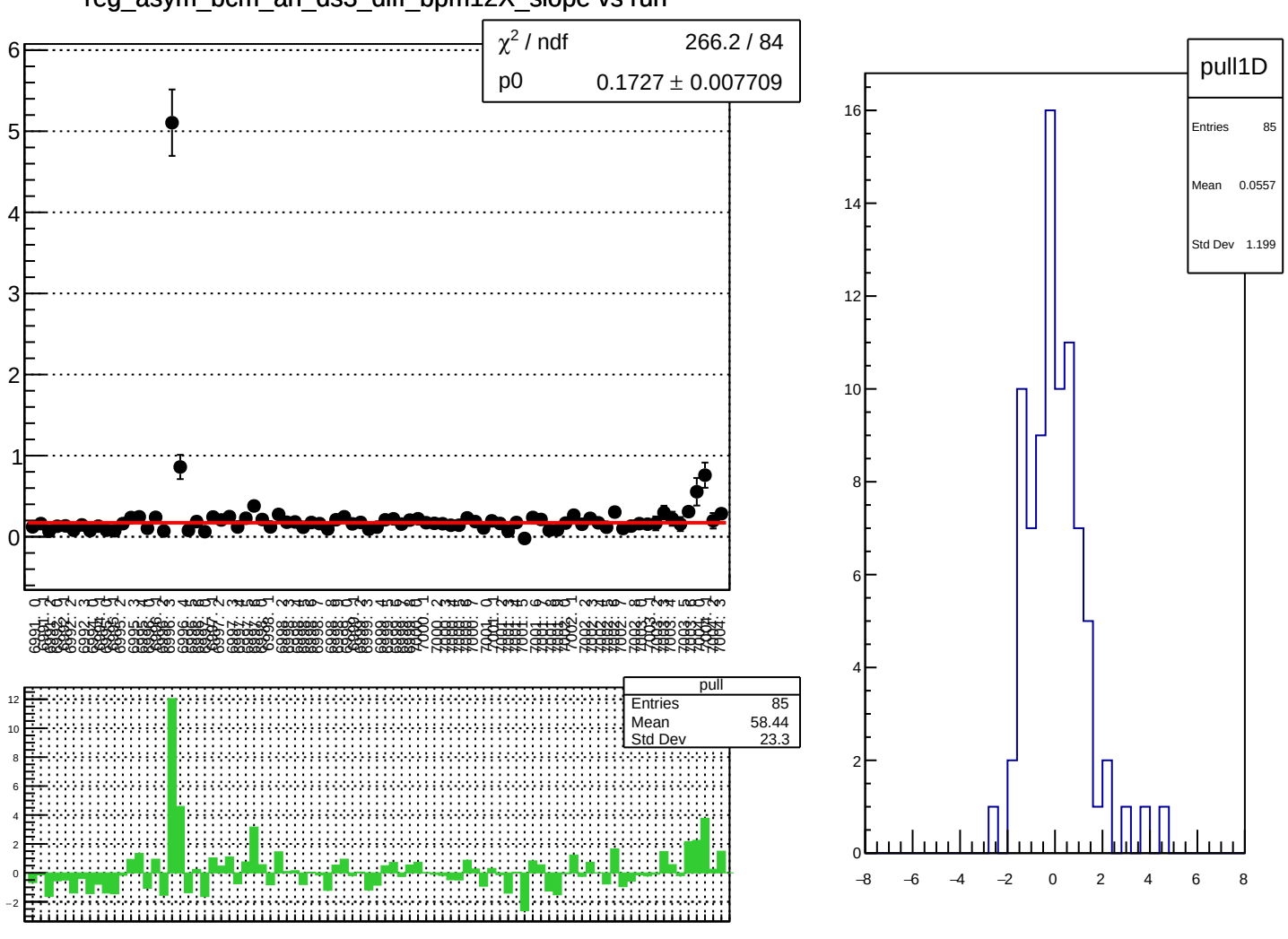

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 111.6 / 84
p0 −11.26 ± 0.05326
pull
Entries 85
Mean 512.4
Std Dev 477.5
pull1D
Entries 85
Mean −0.0185
Std Dev 1.146

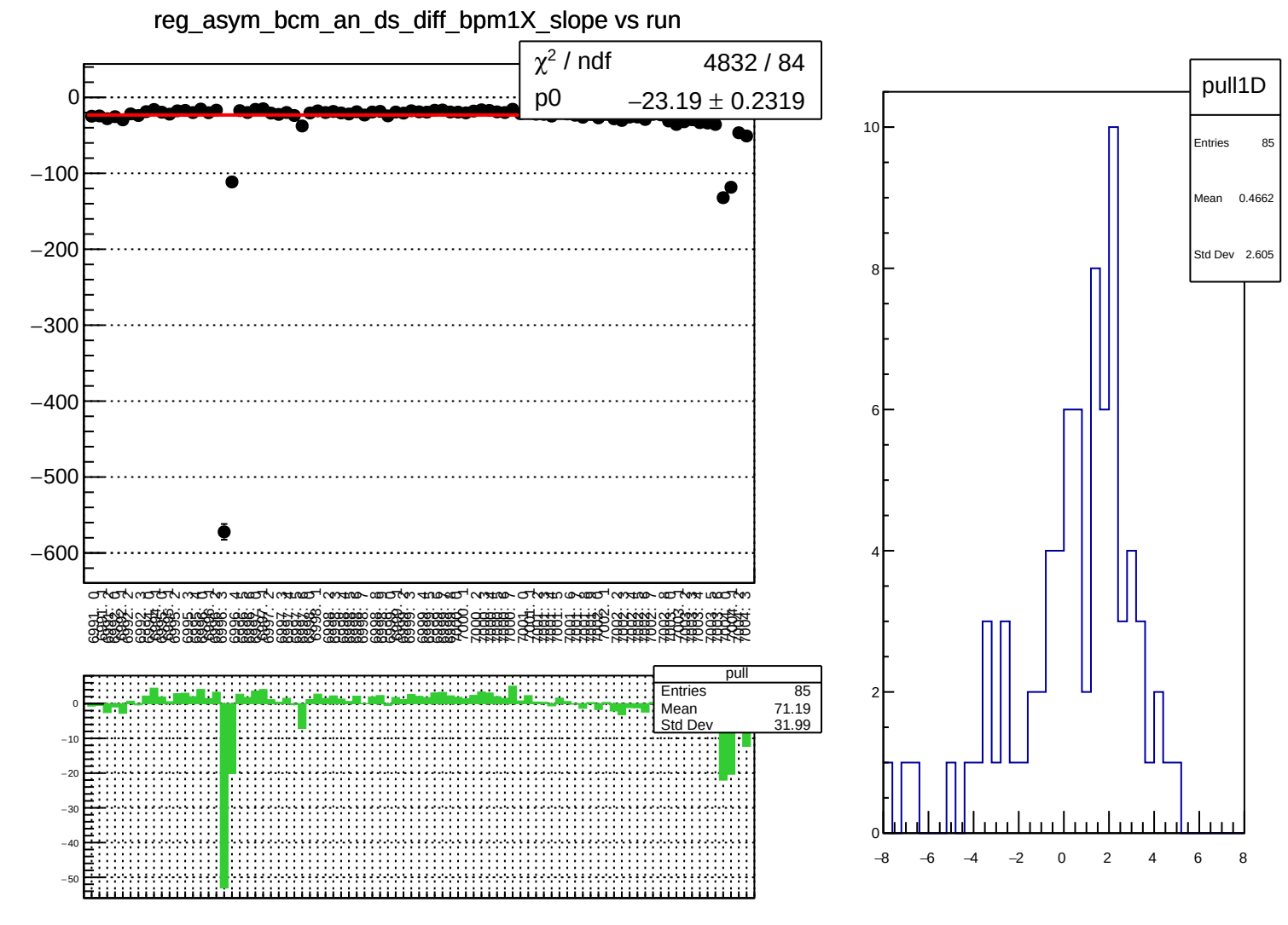

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 4833 / 84
p0 −23.29 ± 0.2329
pull
Entries 85
Mean 71.17
Std Dev 31.93
pull1D
Entries 85
Mean 0.4634
Std Dev 2.606

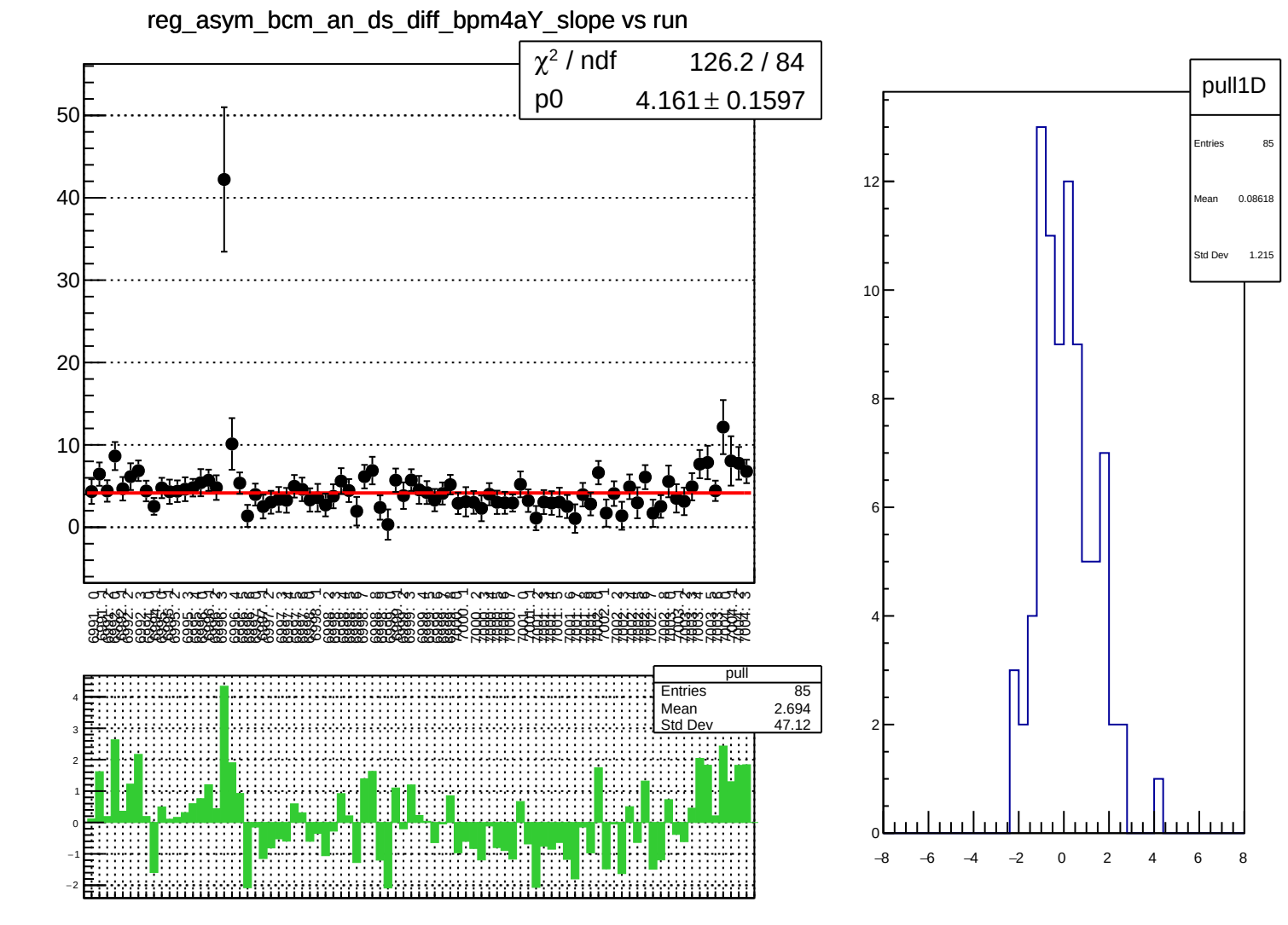

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 126.4 / 84
p0 4.226 ± 0.1604
pull
Entries 85
Mean 4.544
Std Dev 48.28
pull1D
Entries 85
Mean 0.08838
Std Dev 1.216

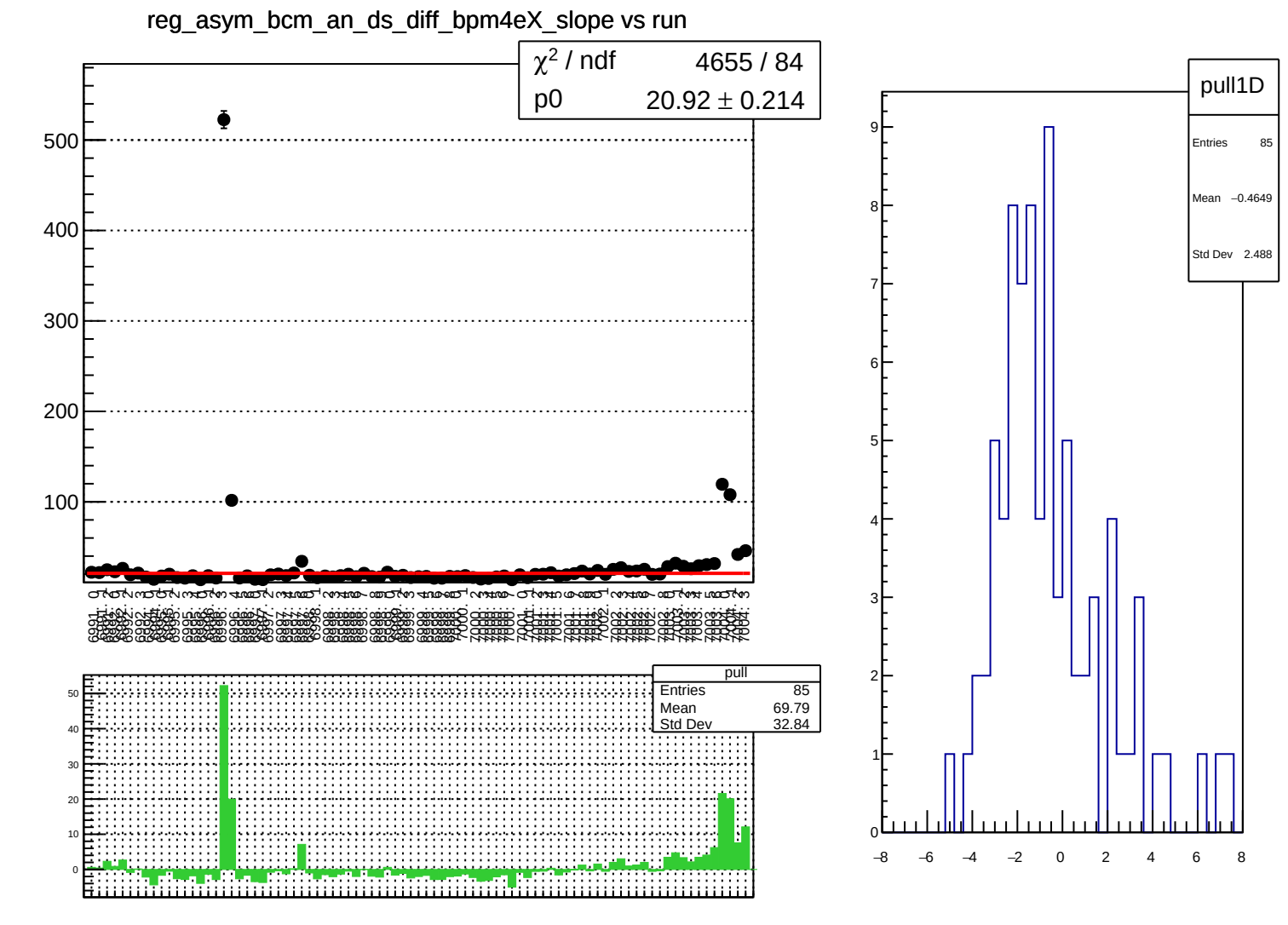

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 4657 / 84
p0 21.01 ± 0.215
500
400
300
200
100
pull
Entries 85
Mean 69.76
Std Dev 32.8
50
40
30
20
10
0
pull1D
Entries 85
Mean −0.4621
Std Dev 2.489
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

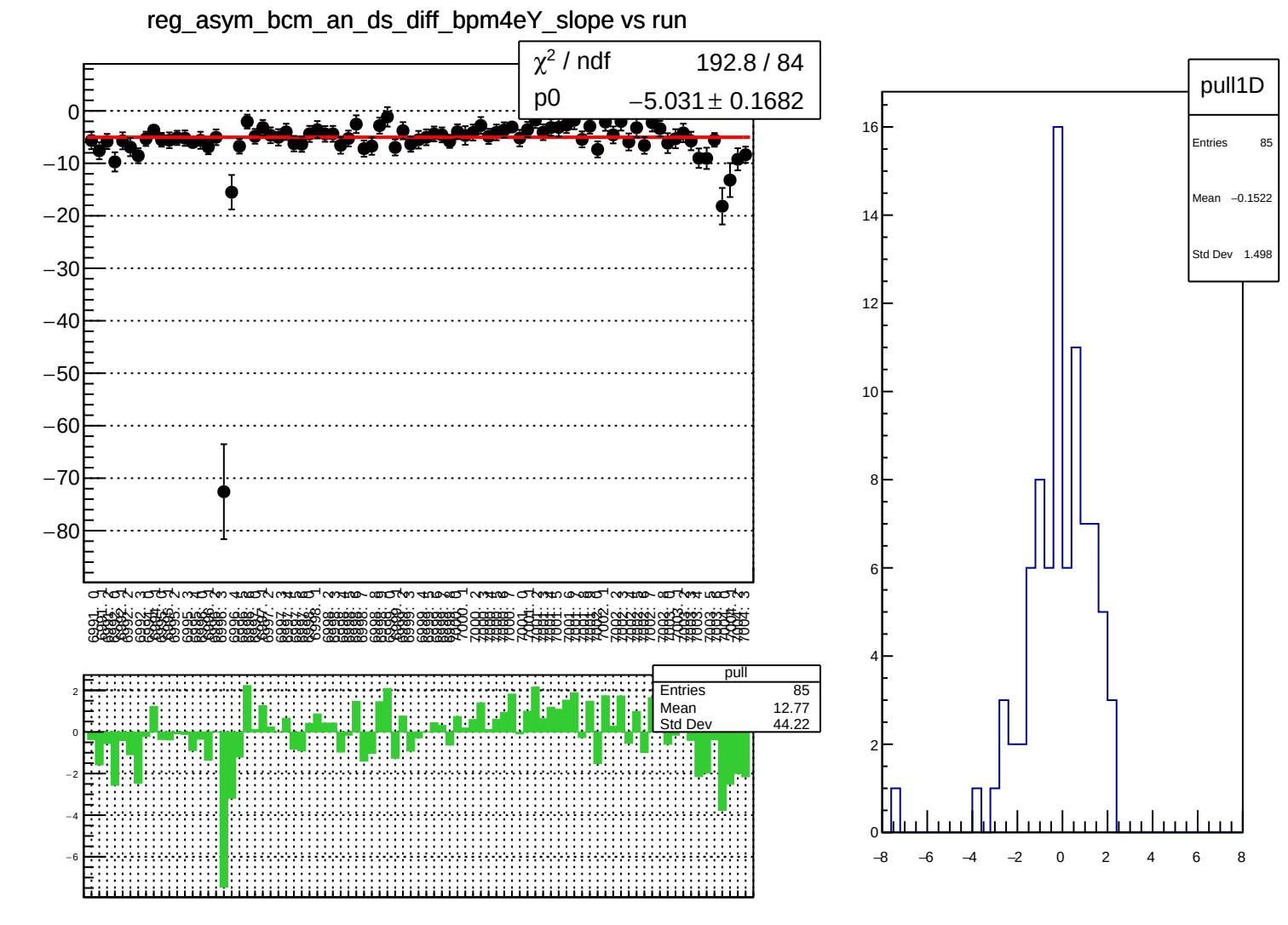

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 193.3 / 84
p0 −5.099 ± 0.1689
pull
Entries 85
Mean 13.71
Std Dev 44.71
pull1D
Entries 85
Mean −0.1544
Std Dev 1.5

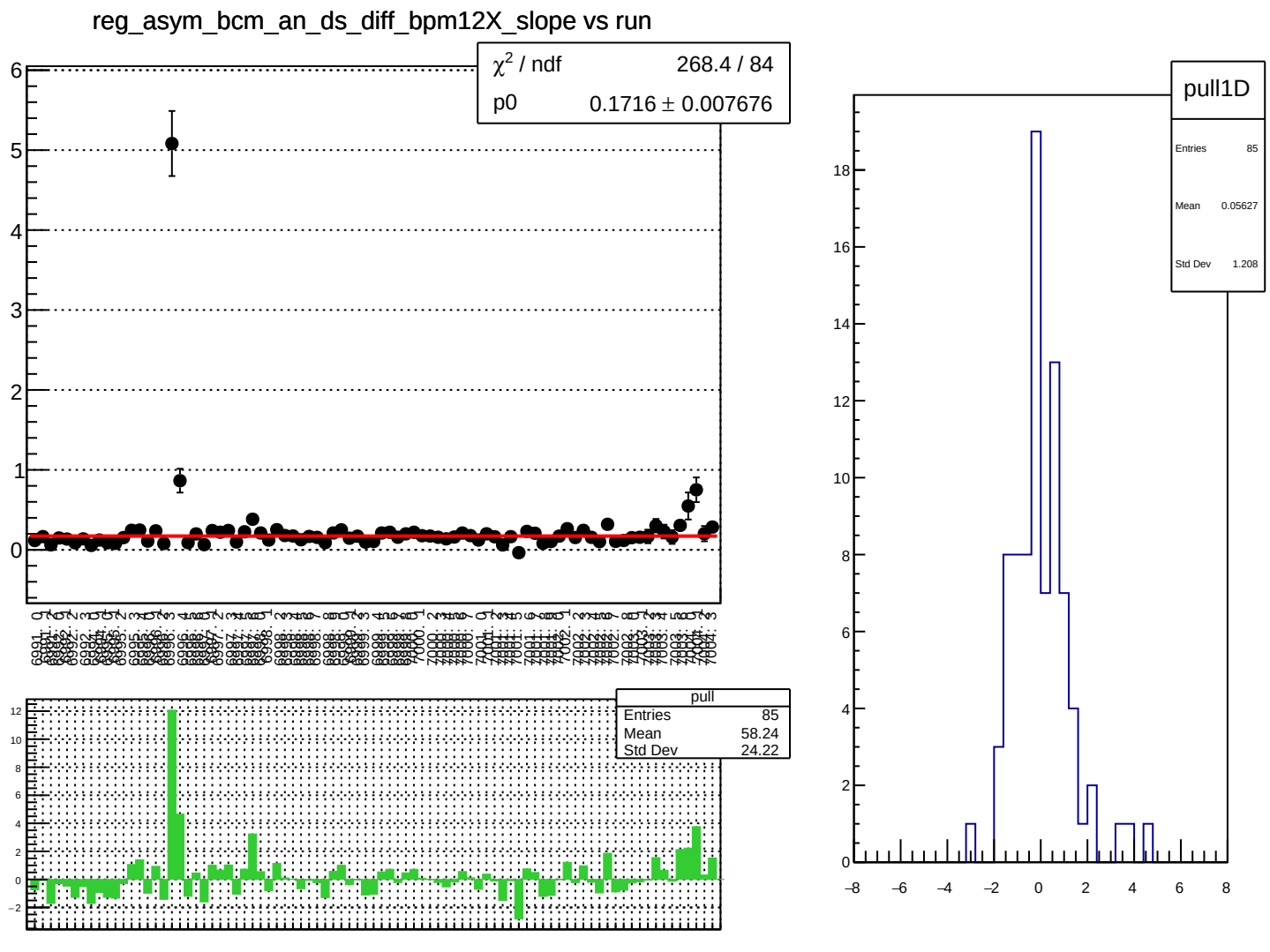

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 266.2 / 84
p0 0.1727 ± 0.007709
pull
Entries 85
Mean 58.44
Std Dev 23.3
pull1D
Entries 85
Mean 0.0557
Std Dev 1.199

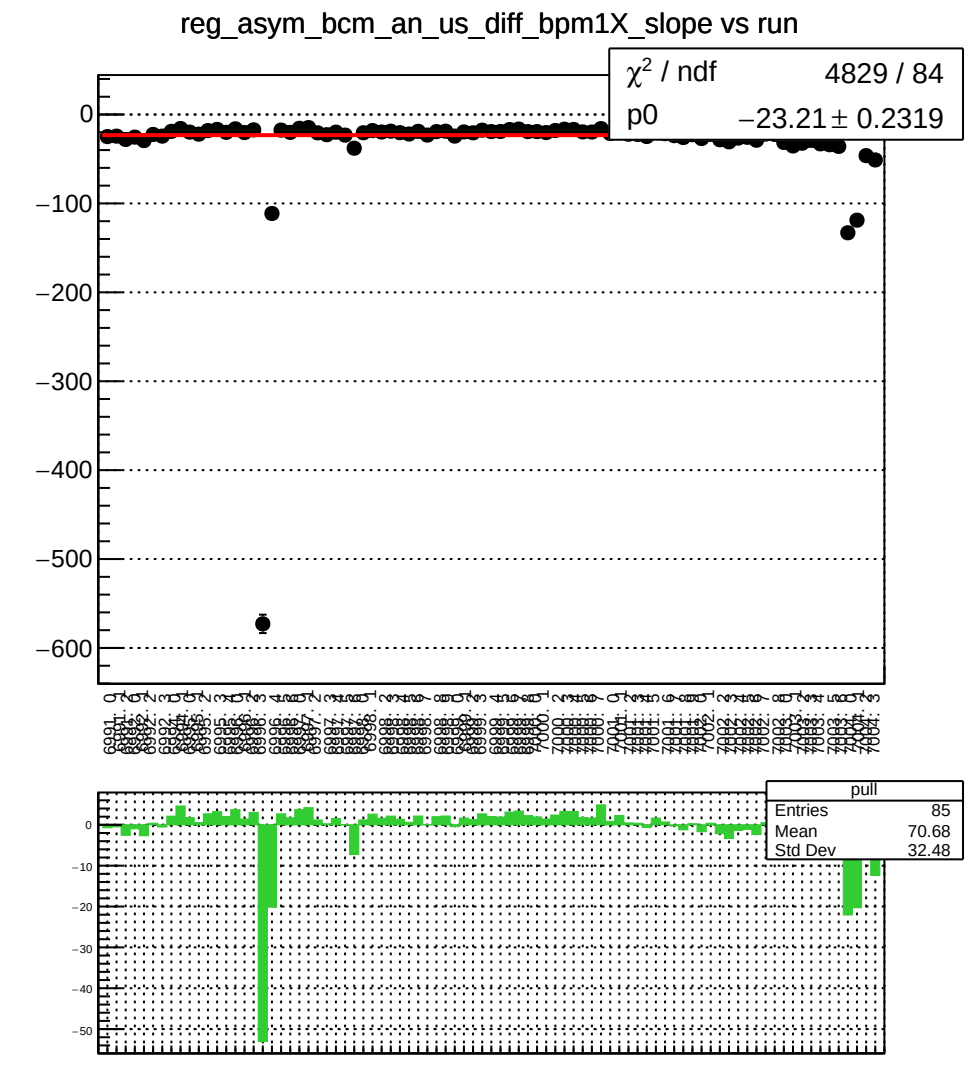

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 4832 / 84
p0 −23.19 ± 0.2319
pull
Entries 85
Mean 71.19
Std Dev 31.99
pull1D
Entries 85
Mean 0.4662
Std Dev 2.605

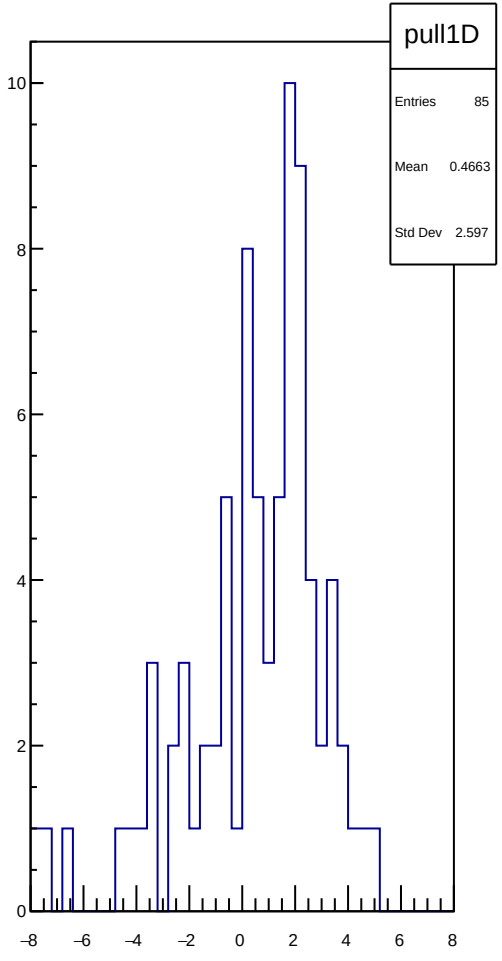

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 126.2 / 84
p0 4.161 ± 0.1597
pull
Entries 85
Mean 2.694
Std Dev 47.12
pull1D
Entries 85
Mean 0.08618
Std Dev 1.215

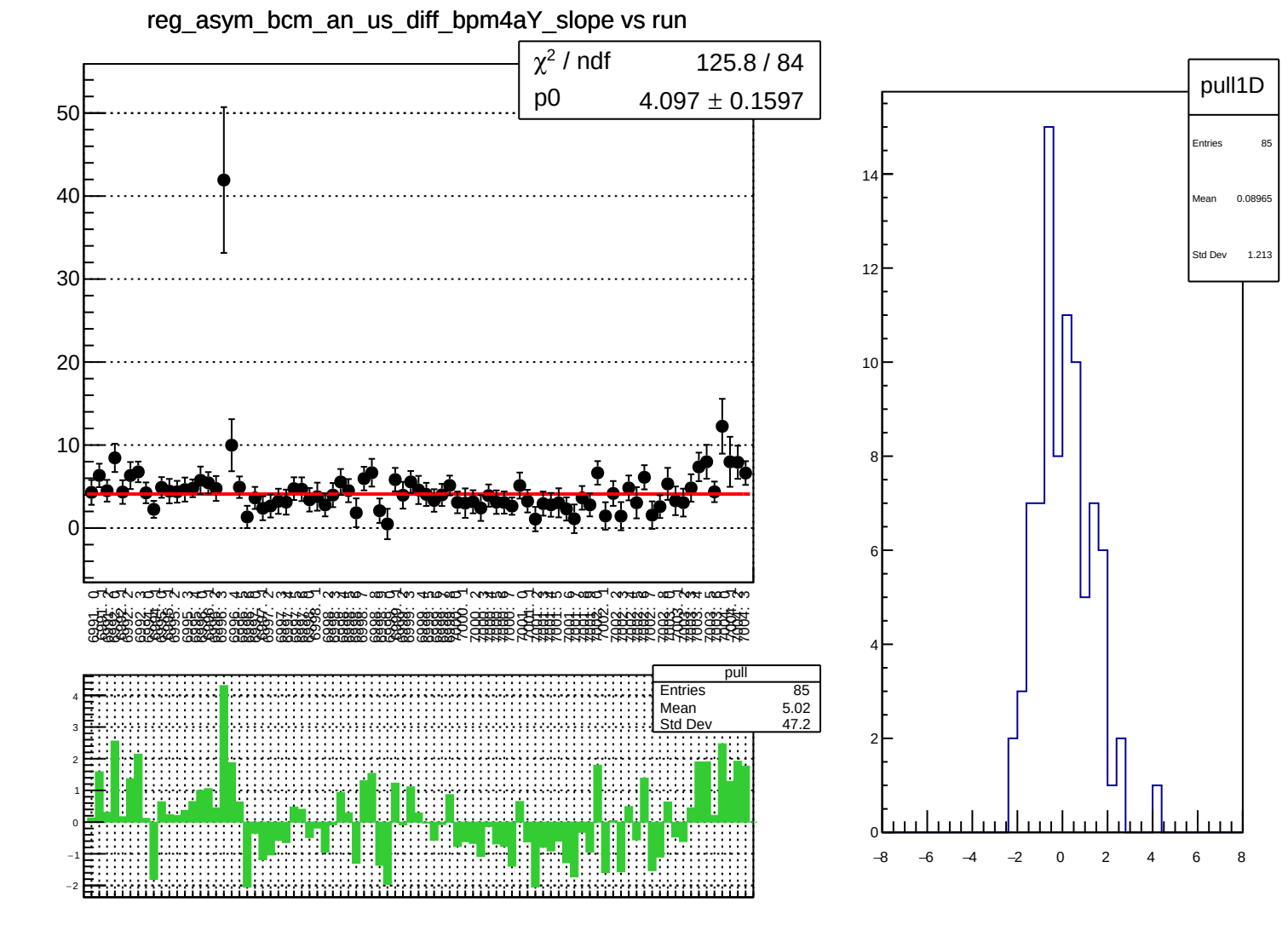

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 4655 / 84
p0 20.92 ± 0.214
500
400
300
200
100
pull
Entries 85
Mean 69.79
Std Dev 32.84
50
40
30
20
10
0
pull1D
Entries 85
Mean −0.4649
Std Dev 2.488
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

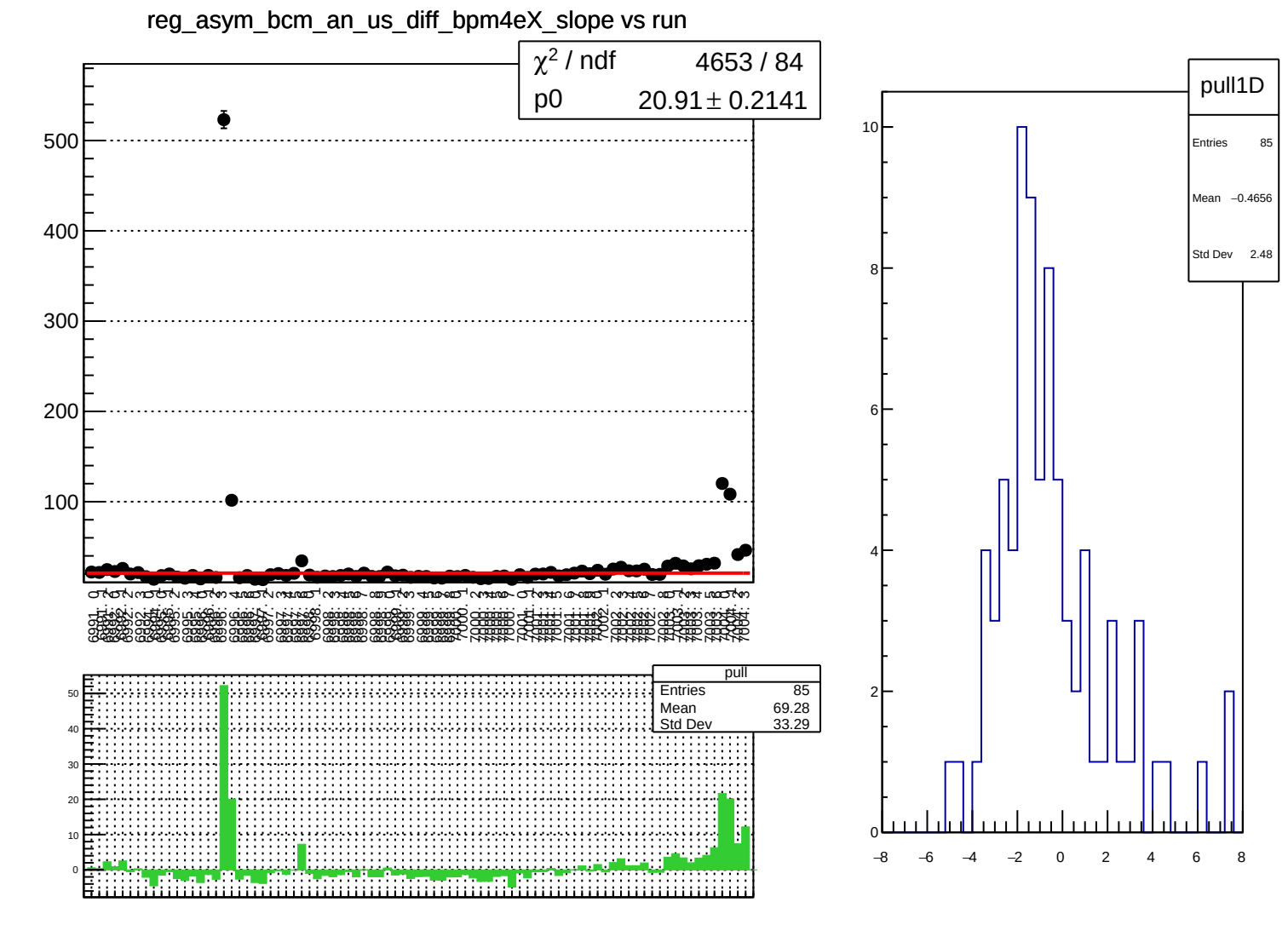

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 192.8 / 84
p0 −5.031 ± 0.1682
pull
Entries 85
Mean 12.77
Std Dev 44.22
pull1D
Entries 85
Mean −0.1522
Std Dev 1.498

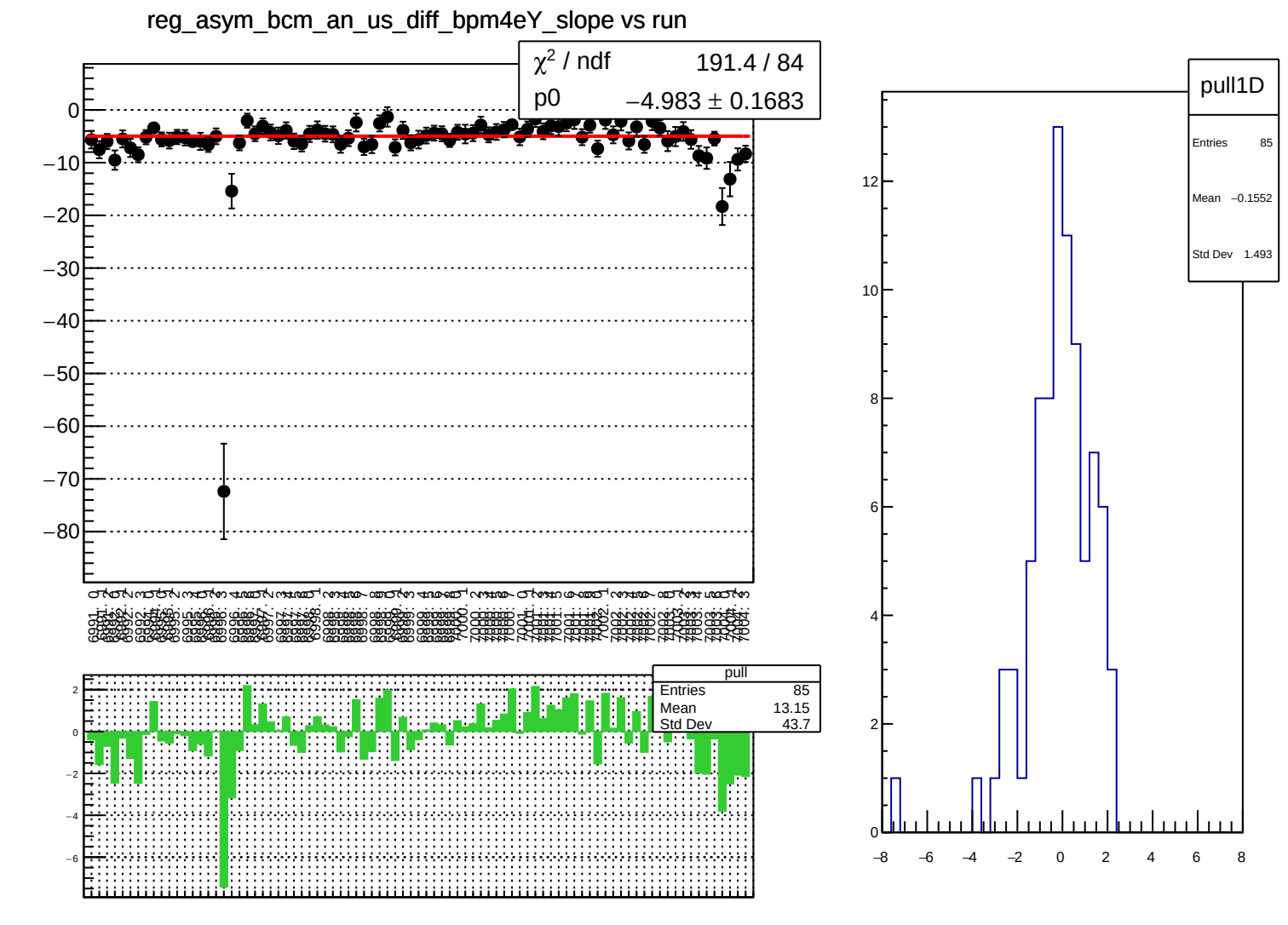

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 268.4 / 84
p0 0.1716 ± 0.007676
pull
Entries 85
Mean 58.24
Std Dev 24.22
pull1D
Entries 85
Mean 0.05627
Std Dev 1.208

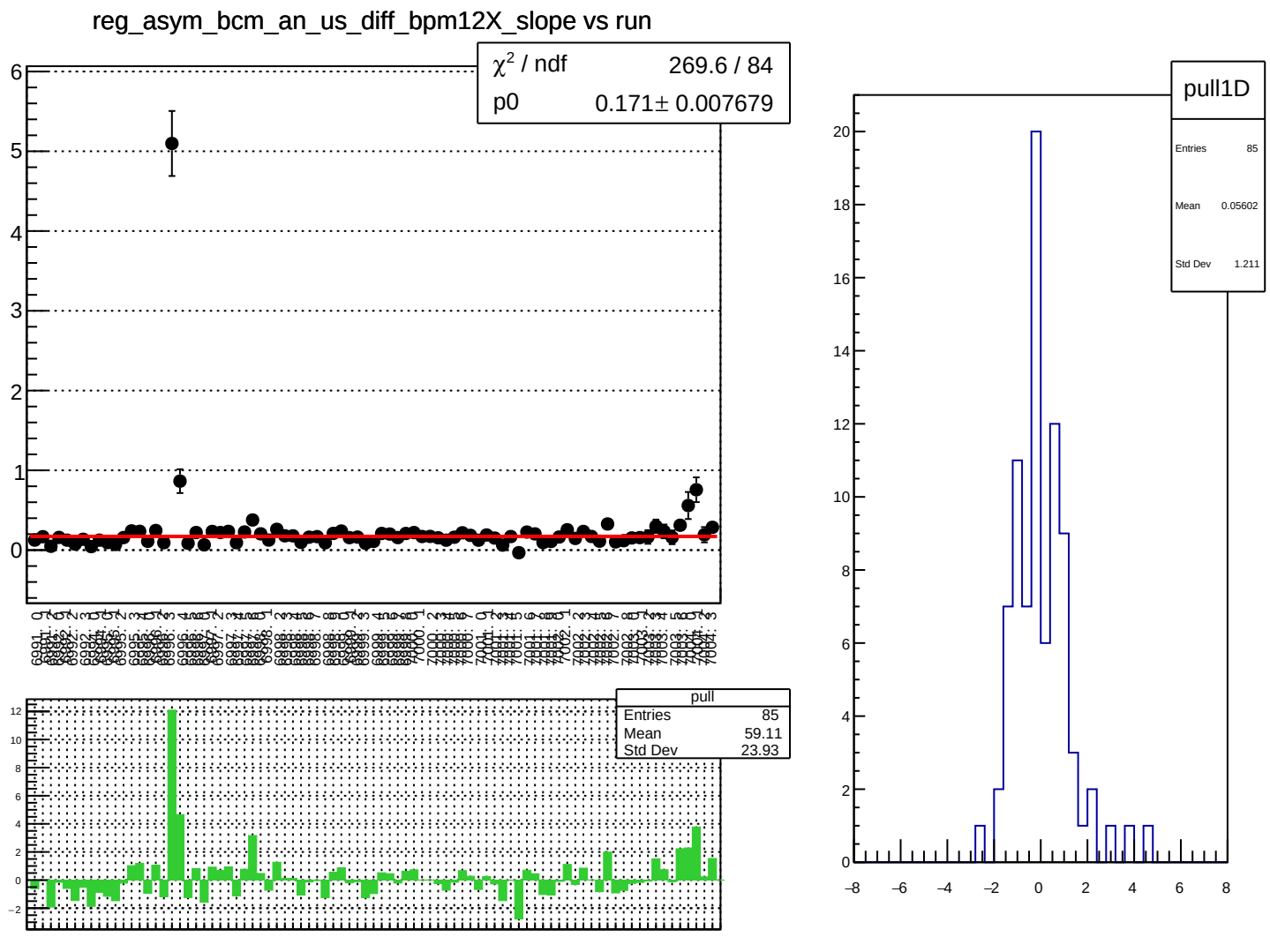

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 4829 / 84
p0 −23.21 ± 0.2319
pull
Entries 85
Mean 70.68
Std Dev 32.48

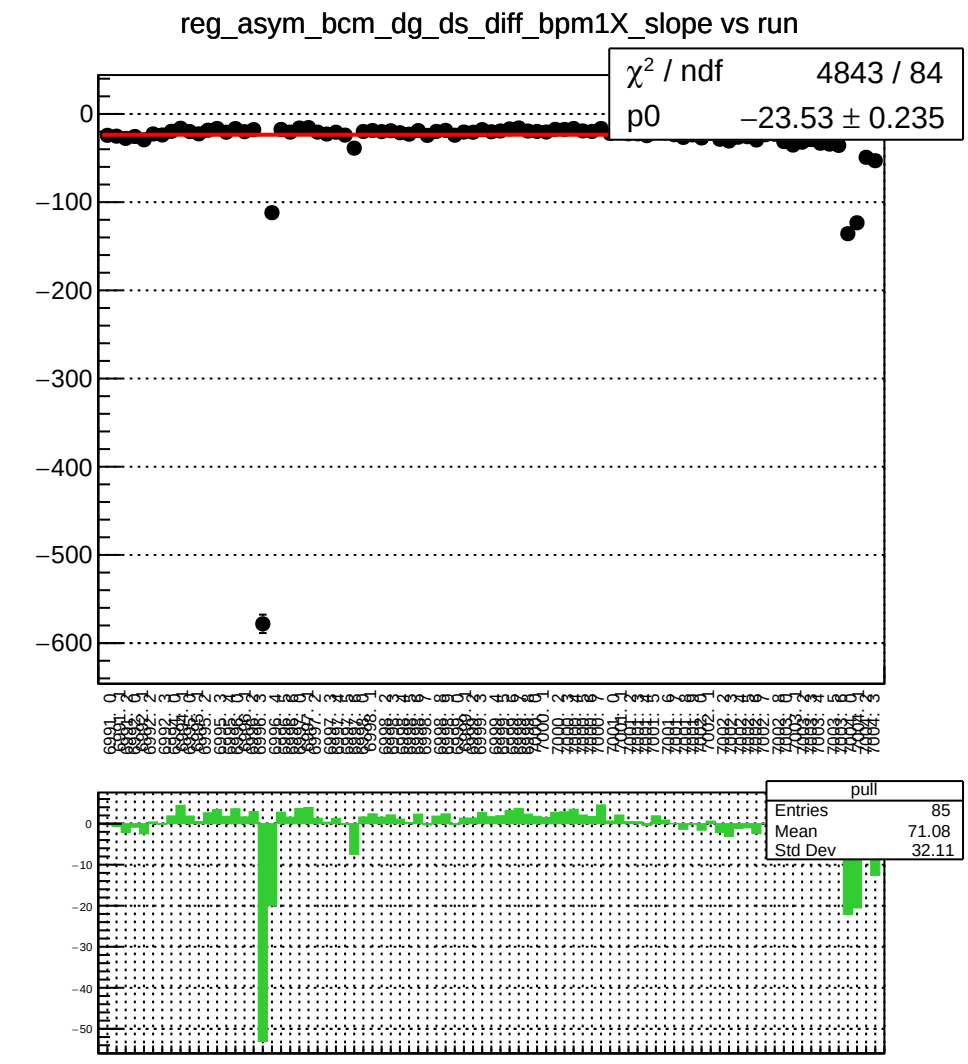

pull1D
Entries 85
Mean 0.4663
Std Dev 2.597

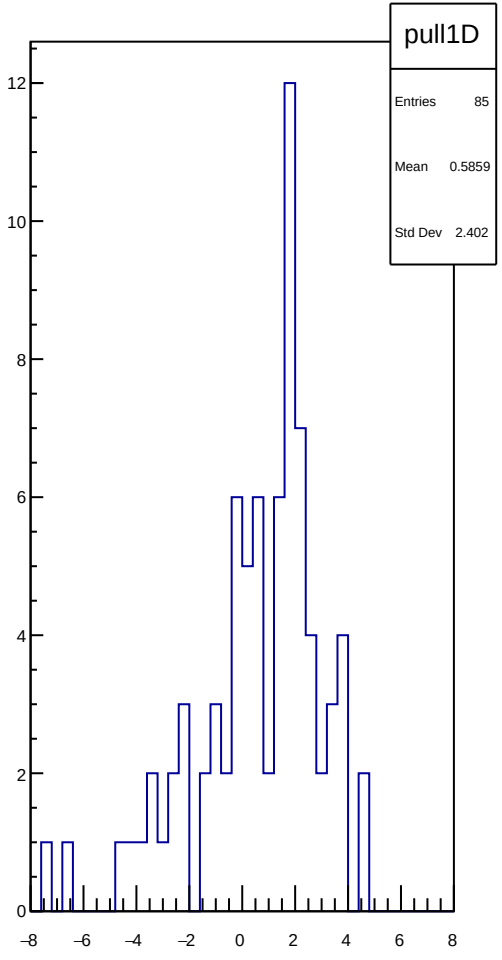

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 125.8 / 84
p0 4.097 ± 0.1597
pull
Entries 85
Mean 5.02
Std Dev 47.2
pull1D
Entries 85
Mean 0.08965
Std Dev 1.213

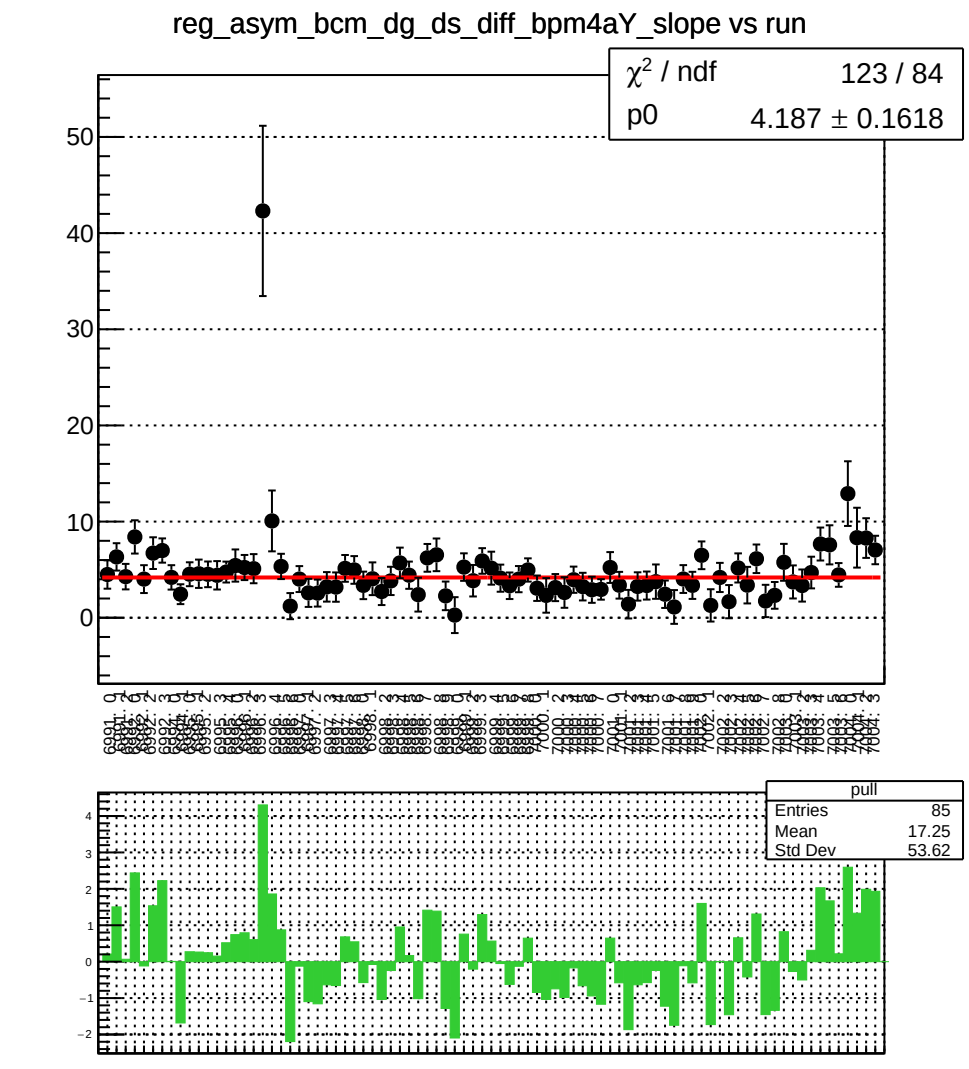

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 4653 / 84
p0 20.91 ± 0.2141
500
400
300
200
100
pull
Entries 85
Mean 69.28
Std Dev 33.29
50
40
30
20
10
0
pull1D
Entries 85
Mean −0.4656
Std Dev 2.48
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

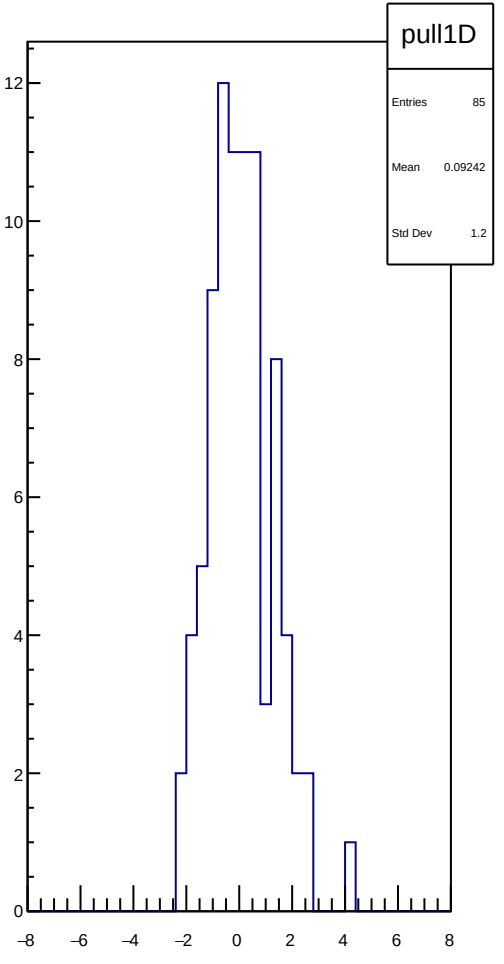

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 191.4 / 84
p0 −4.983 ± 0.1683
pull
Entries 85
Mean 13.15
Std Dev 43.7
pull1D
Entries 85
Mean −0.1552
Std Dev 1.493

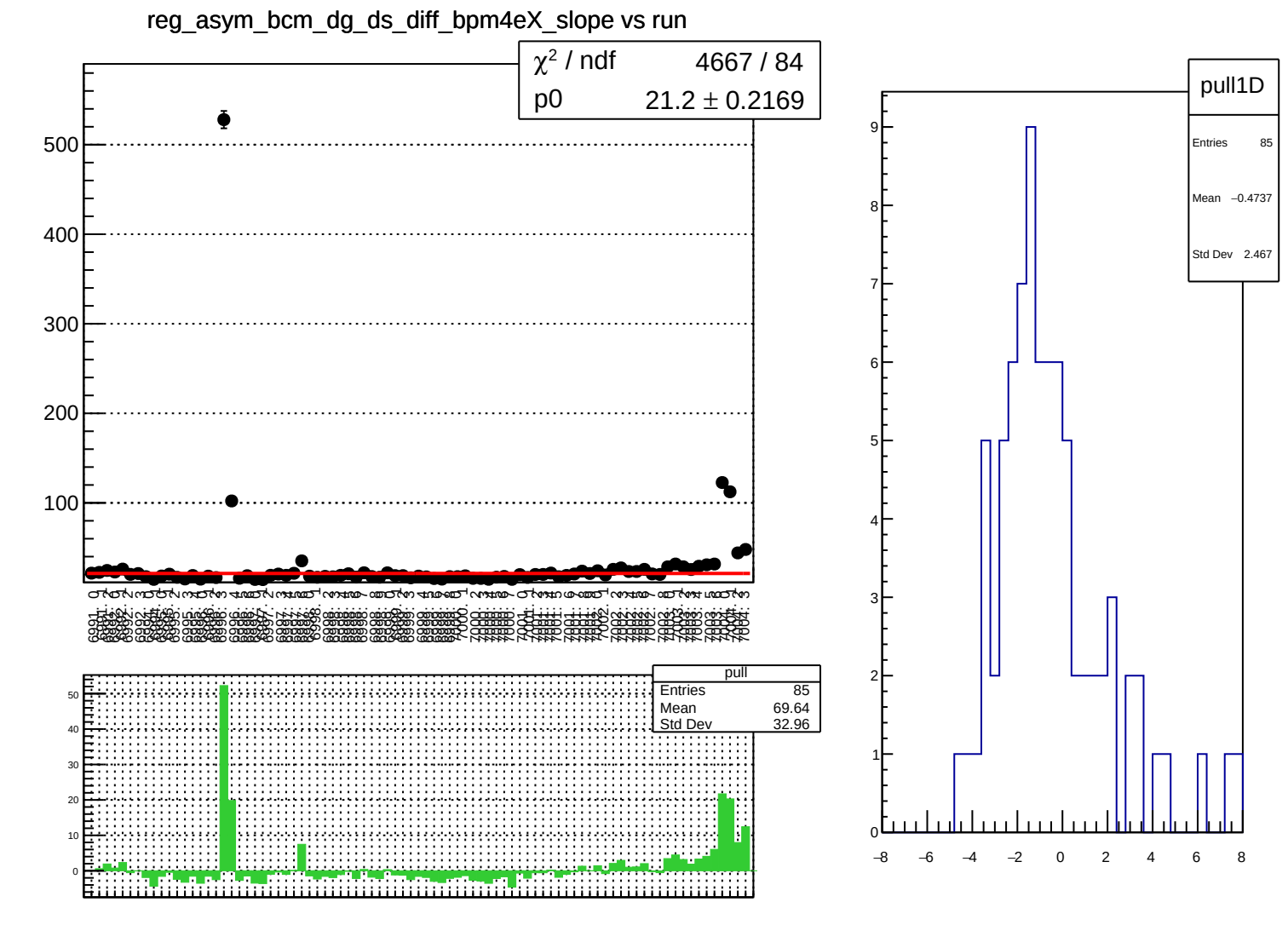

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 269.6 / 84
p0 0.171± 0.007679
pull
Entries 85
Mean 59.11
Std Dev 23.93
pull1D
Entries 85
Mean 0.05602
Std Dev 1.211

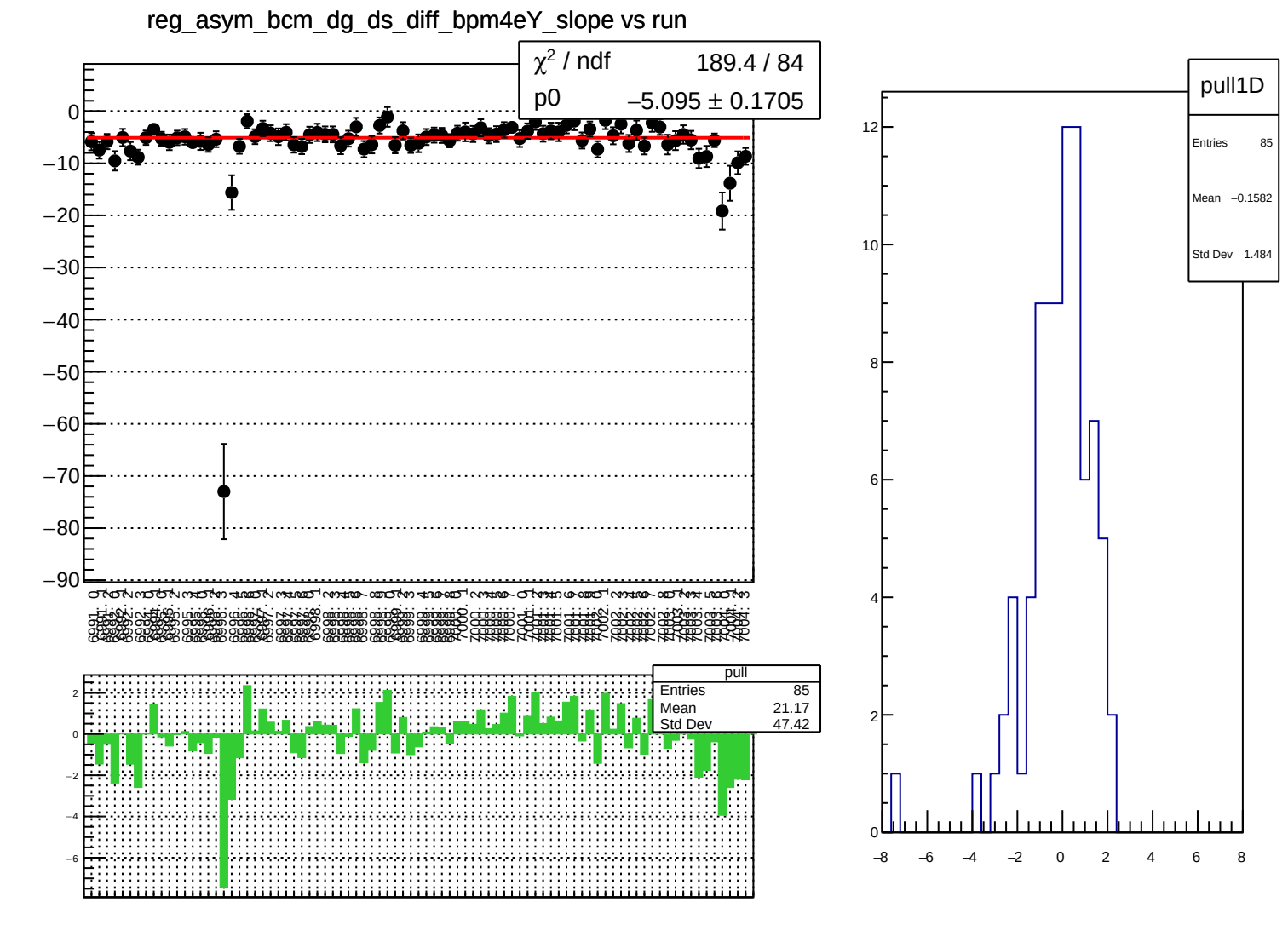

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 4843 / 84
p0 −23.53 ± 0.235
pull
Entries 85
Mean 71.08
Std Dev 32.11

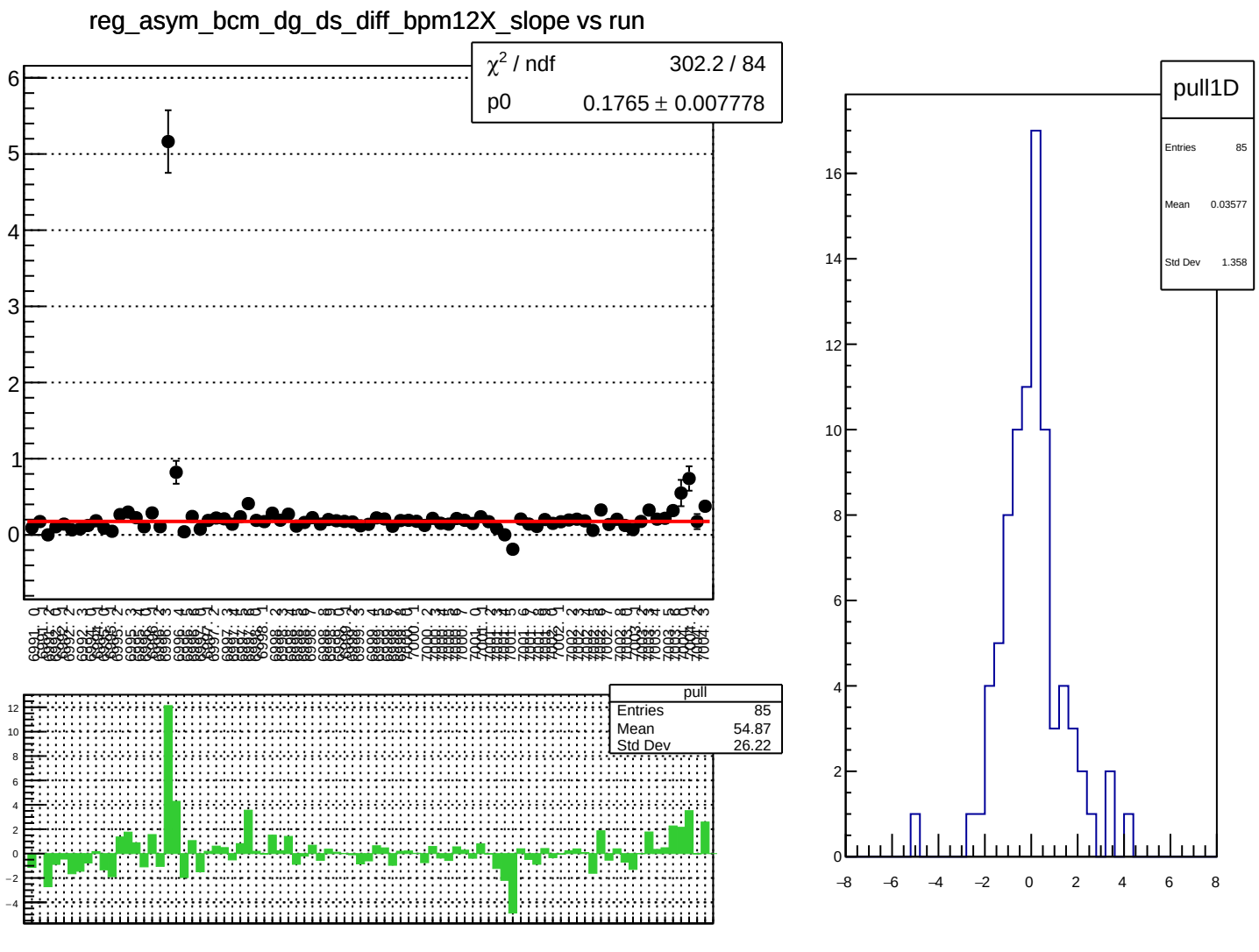

pull1D
Entries 85
Mean 0.5859
Std Dev 2.402

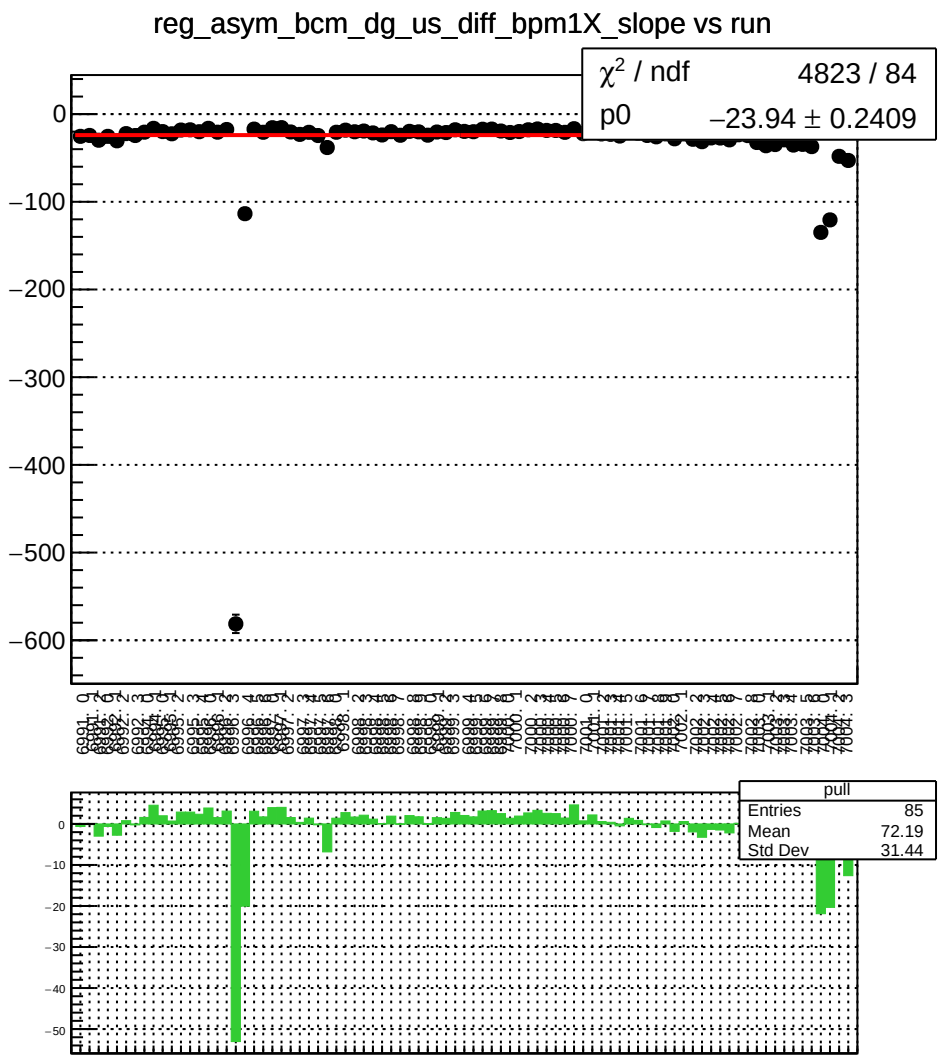

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 123 / 84
p0 4.187 ± 0.1618
pull
Entries 85
Mean 17.25
Std Dev 53.62

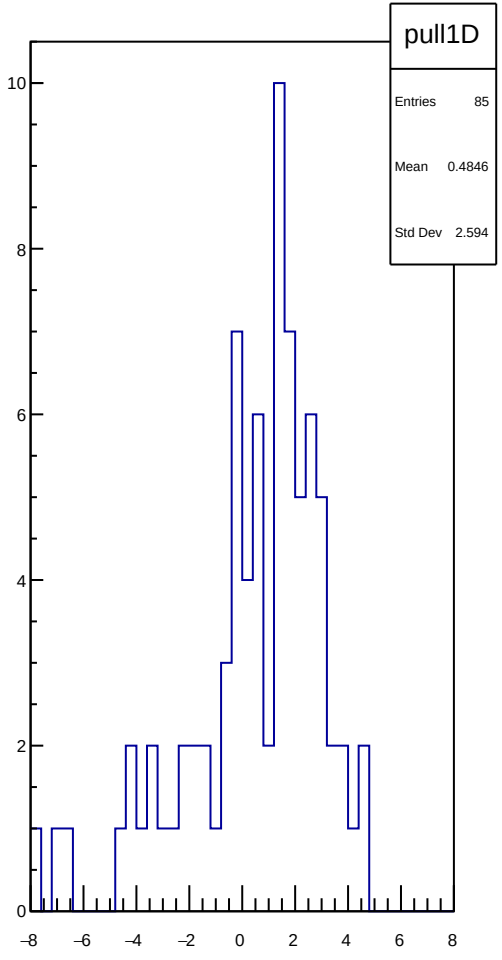

pull1D
Entries 85
Mean 0.09242
Std Dev 1.2

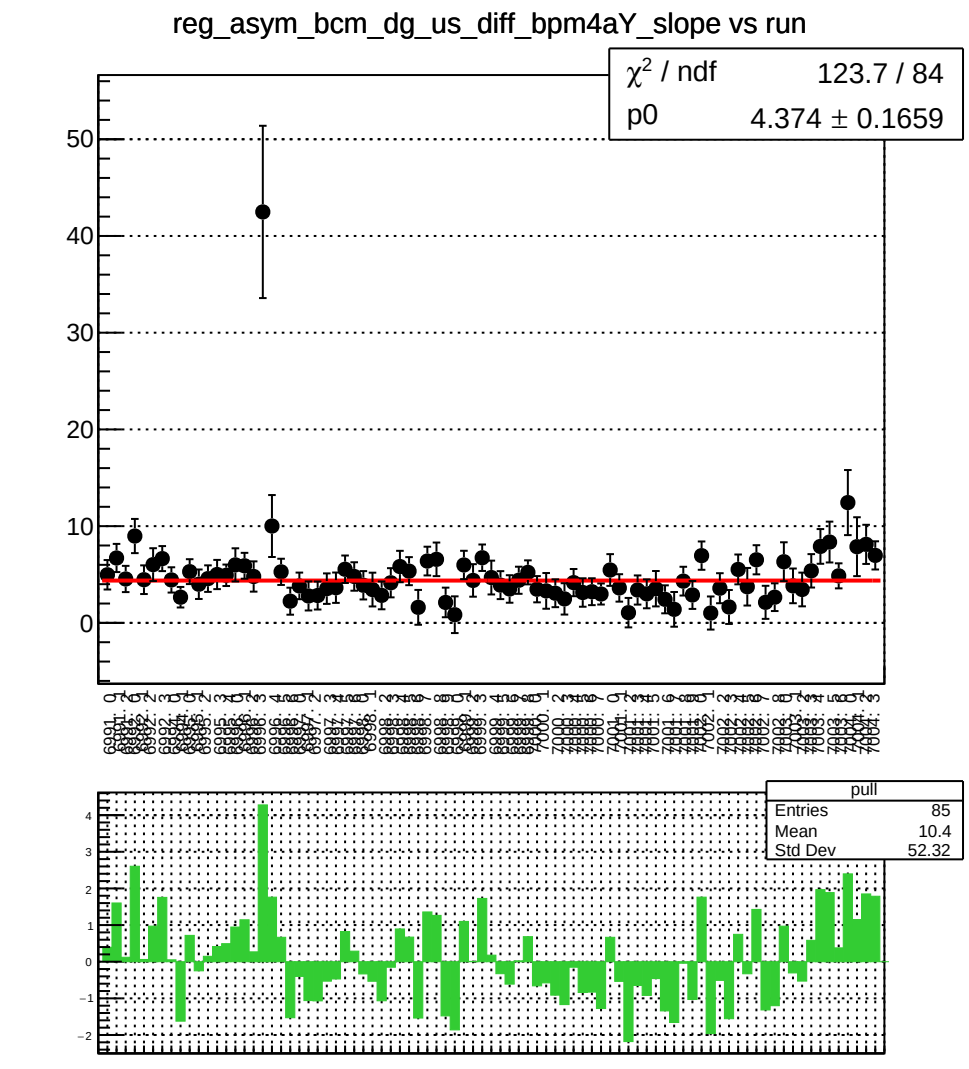

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 4667 / 84
p0 21.2 ± 0.2169
500
400
300
200
100
pull
Entries 85
Mean 69.64
Std Dev 32.96
50
40
30
20
10
0
pull1D
Entries 85
Mean −0.4737
Std Dev 2.467
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

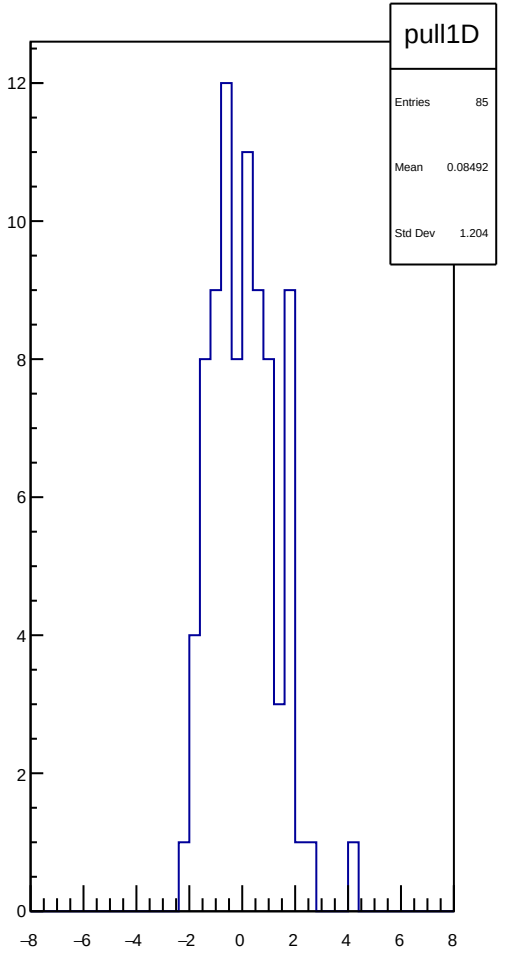

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 189.4 / 84
p0 −5.095 ± 0.1705
pull
Entries 85
Mean 21.17
Std Dev 47.42
pull1D
Entries 85
Mean −0.1582
Std Dev 1.484

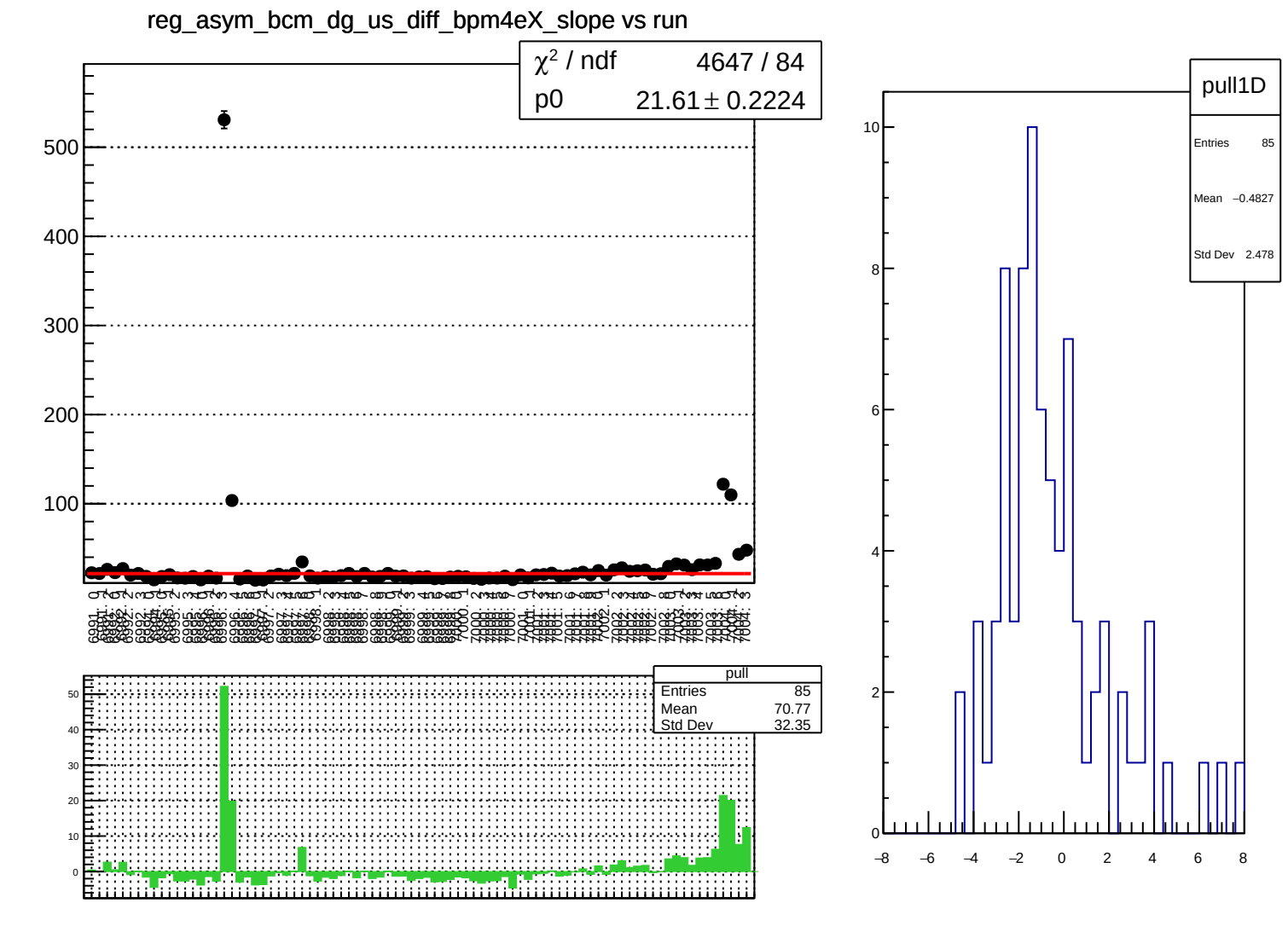

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 302.2 / 84
p0 0.1765 ± 0.007778
pull
Entries 85
Mean 54.87
Std Dev 26.22
pull1D
Entries 85
Mean 0.03577
Std Dev 1.358

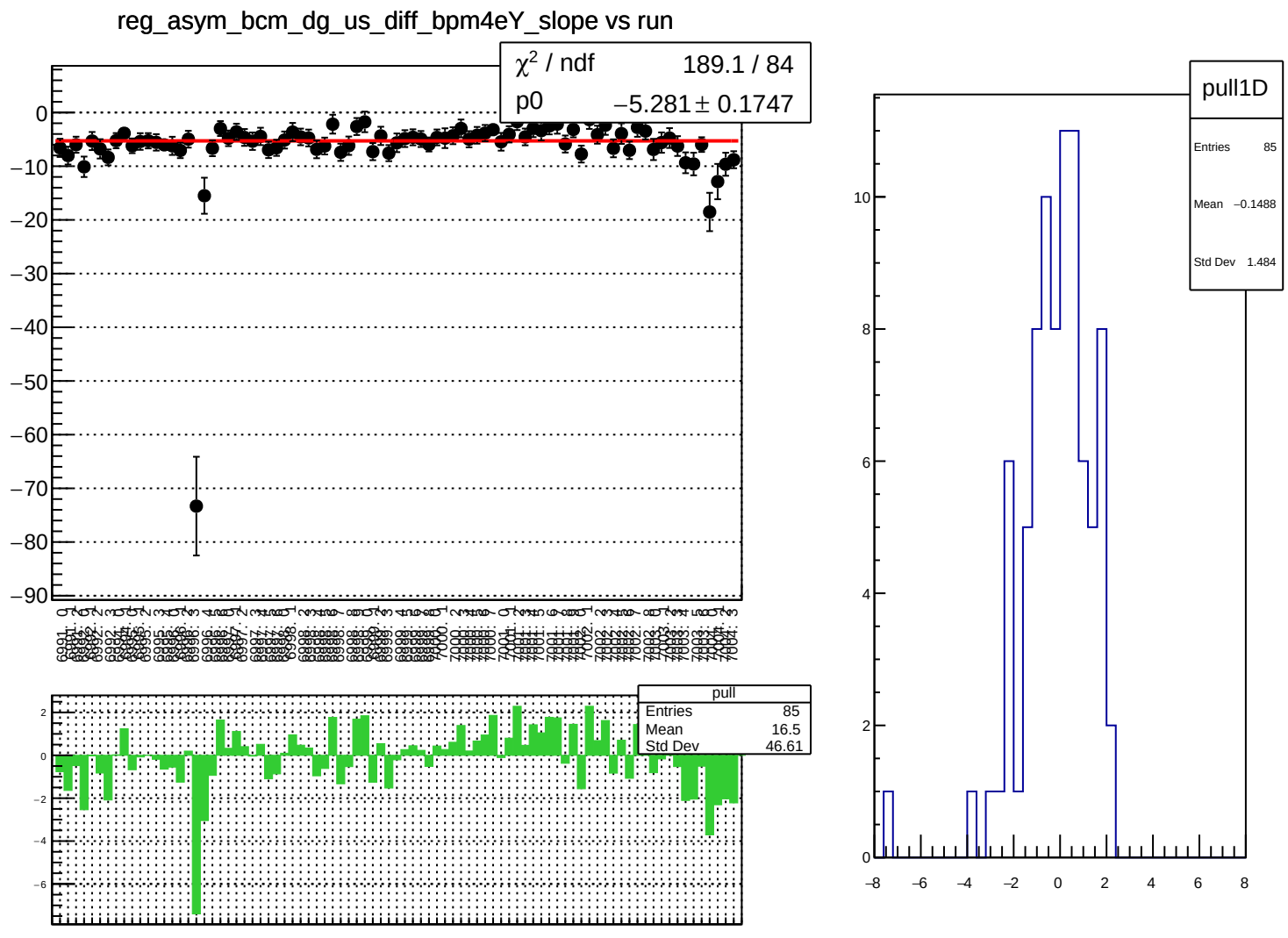

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 4823 / 84
p0 −23.94 ± 0.2409
pull
Entries 85
Mean 72.19
Std Dev 31.44

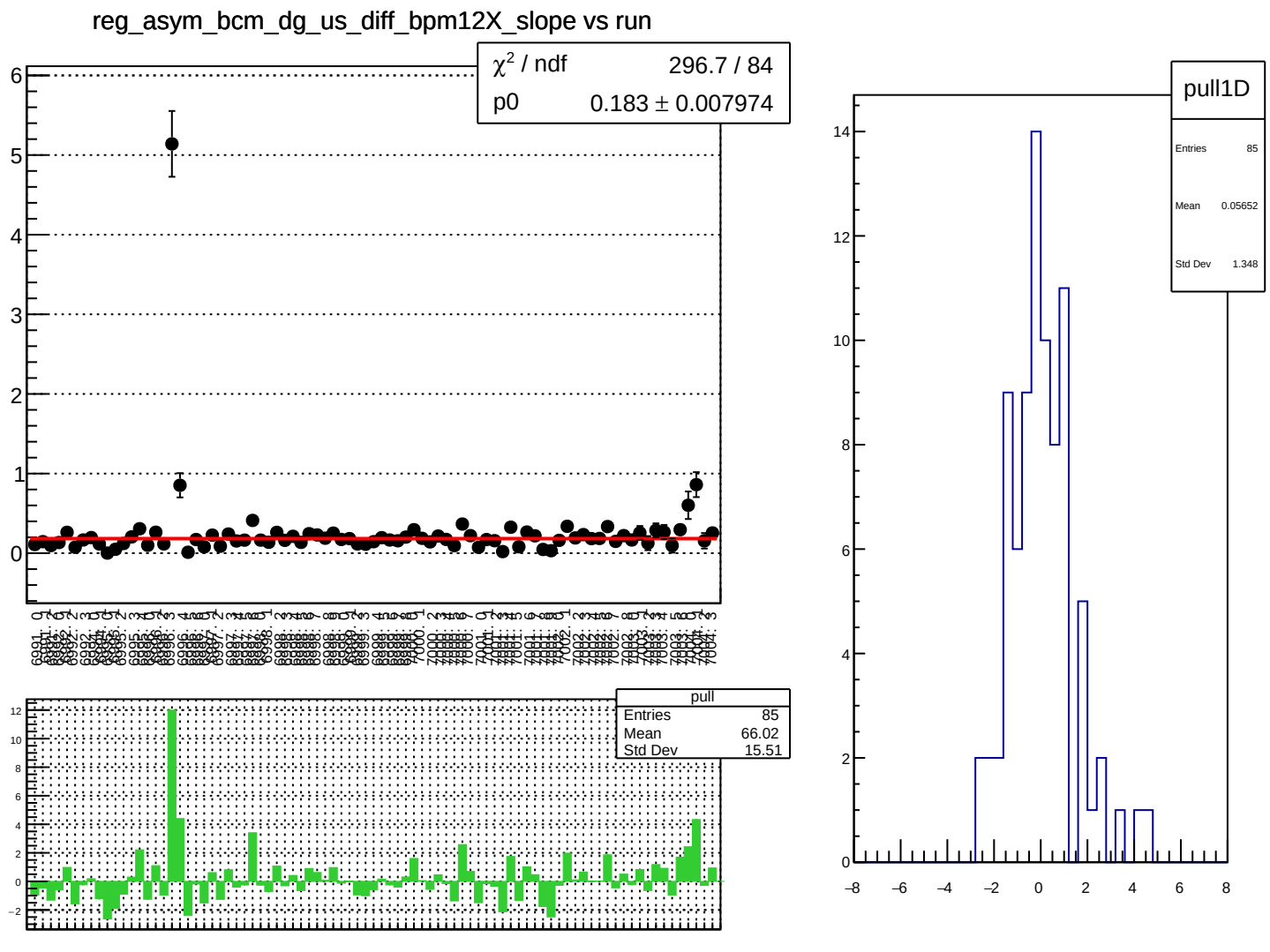

pull1D
Entries 85
Mean 0.4846
Std Dev 2.594

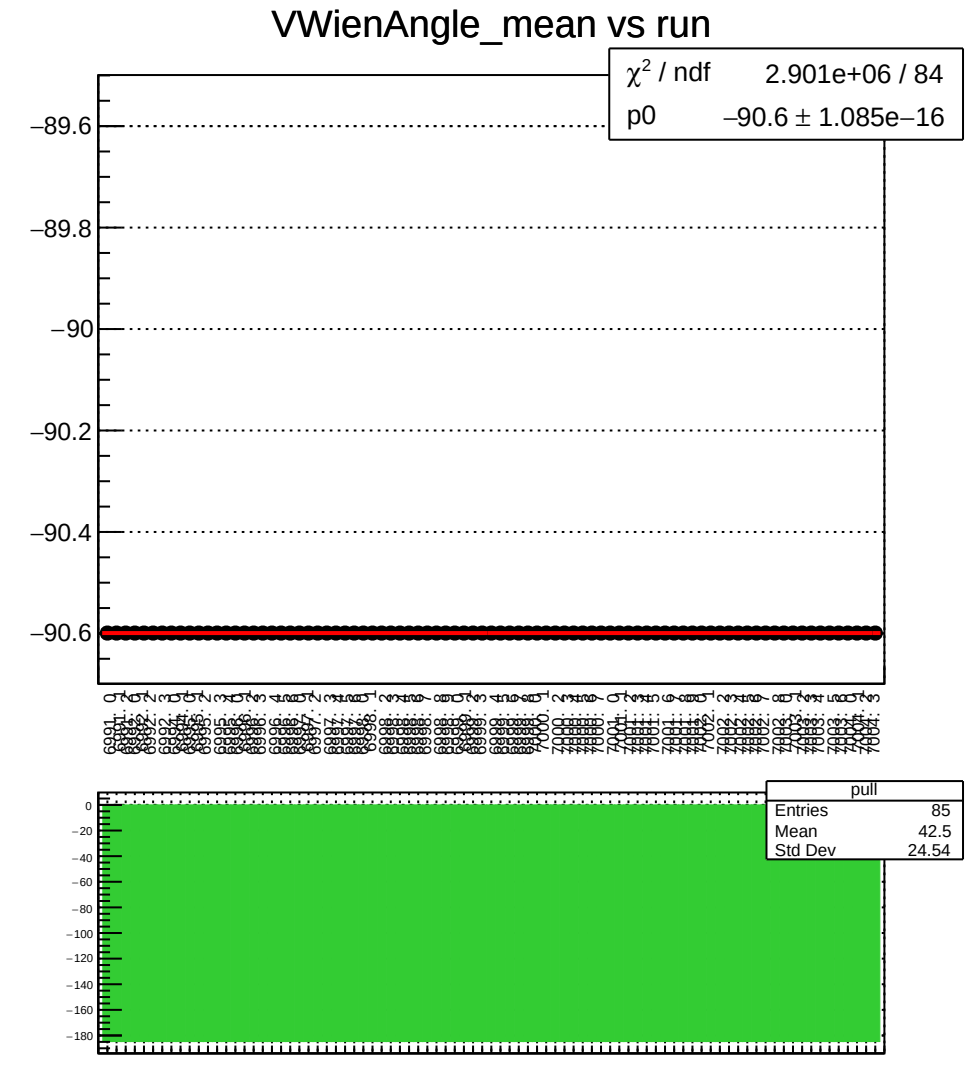

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 123.7 / 84
p0 4.374 ± 0.1659
pull
Entries 85
Mean 10.4
Std Dev 52.32

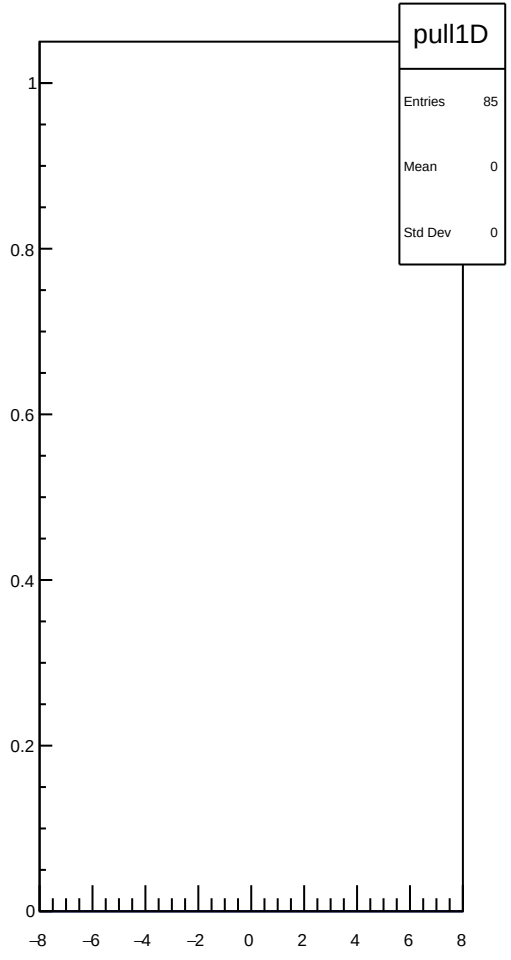

pull1D
Entries 85
Mean 0.08492
Std Dev 1.204

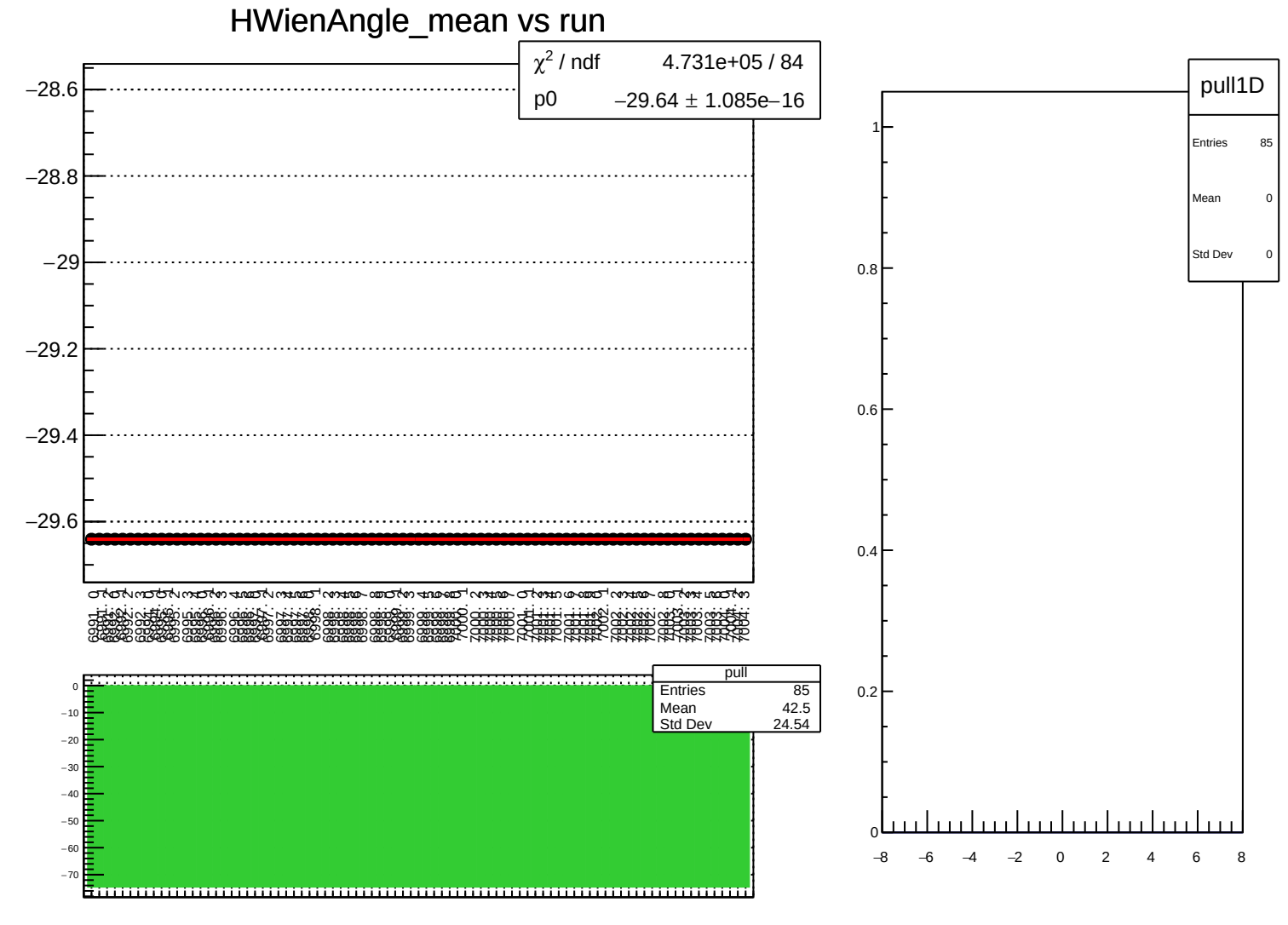

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 4647 / 84
p0 21.61 ± 0.2224
500
400
300
200
100
pull
Entries 85
Mean 70.77
Std Dev 32.35
50
40
30
20
10
0
pull1D
Entries 85
Mean −0.4827
Std Dev 2.478
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

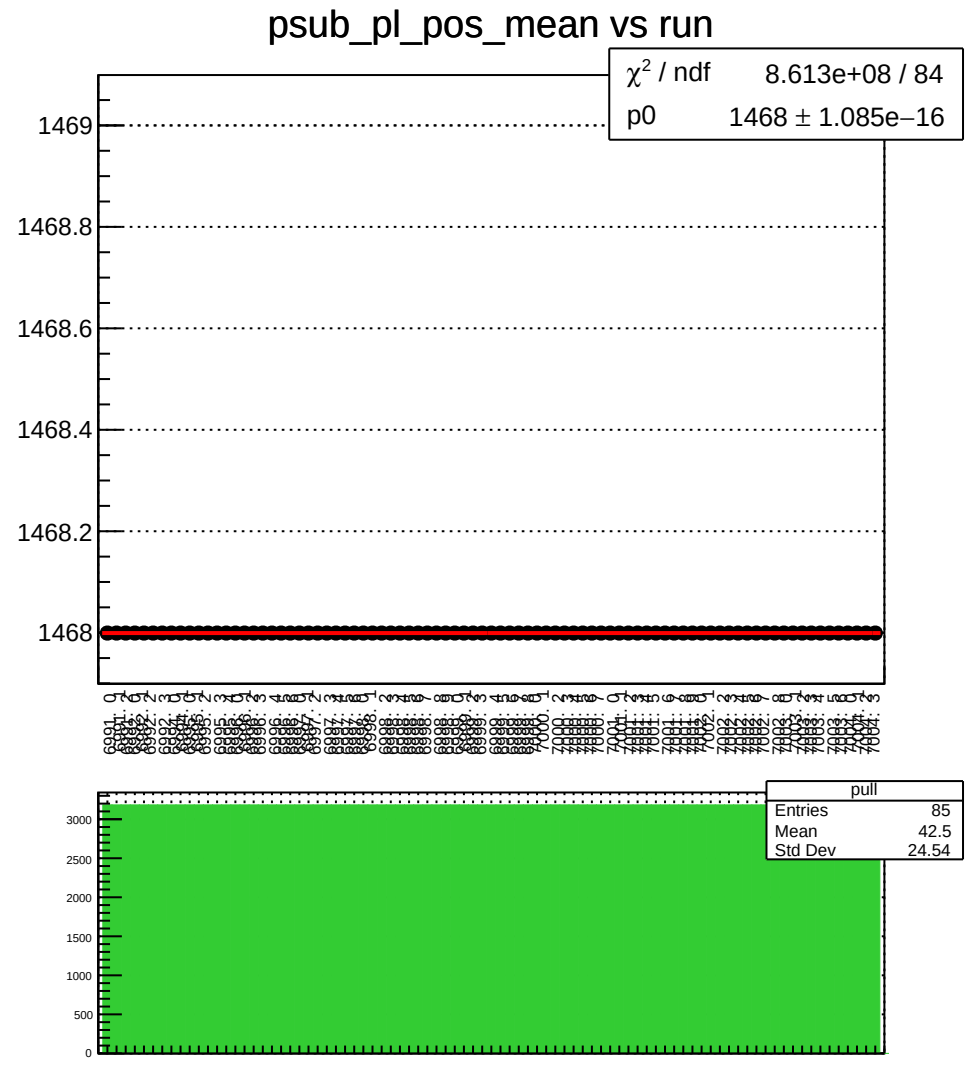

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 189.1 / 84
p0 −5.281 ± 0.1747
pull
Entries 85
Mean 16.5
Std Dev 46.61
pull1D
Entries 85
Mean −0.1488
Std Dev 1.484

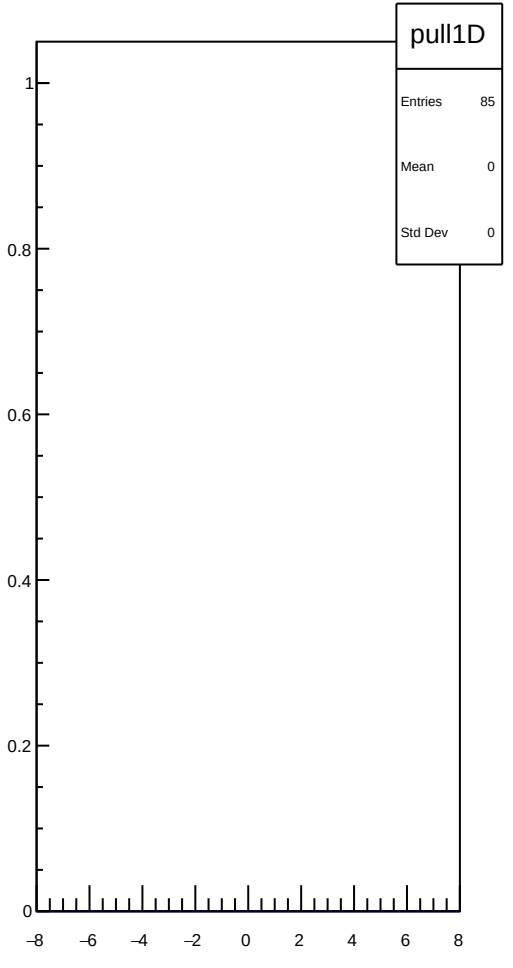

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 296.7 / 84
p0 0.183 ± 0.007974
pull
Entries 85
Mean 66.02
Std Dev 15.51
pull1D
Entries 85
Mean 0.05652
Std Dev 1.348

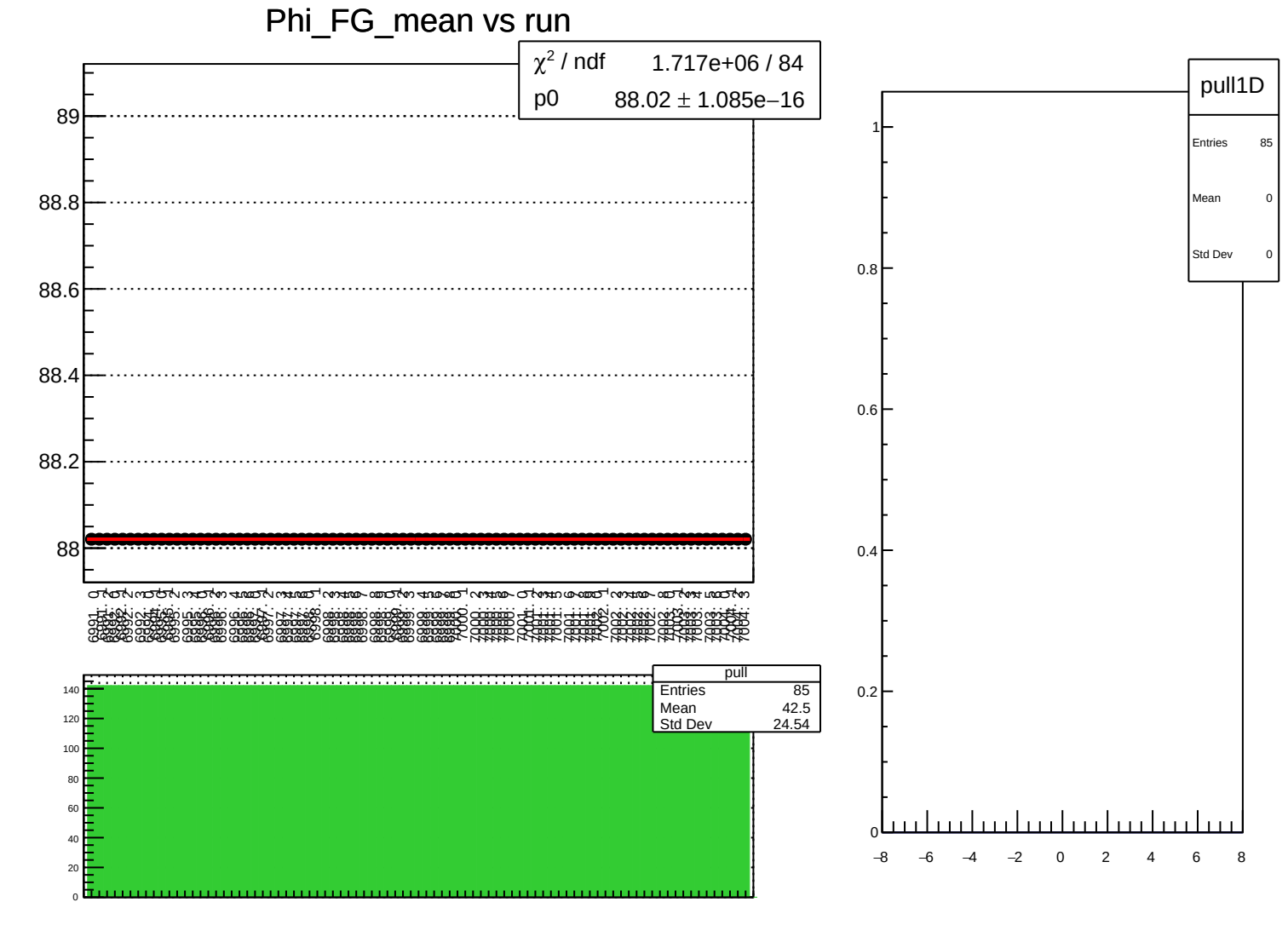

VWienAngle_mean vs run
χ² / ndf 2.901e+06 / 84
p0 −90.6 ± 1.085e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−20
−40
−60
−80
−100
−120
−140
−160
−180

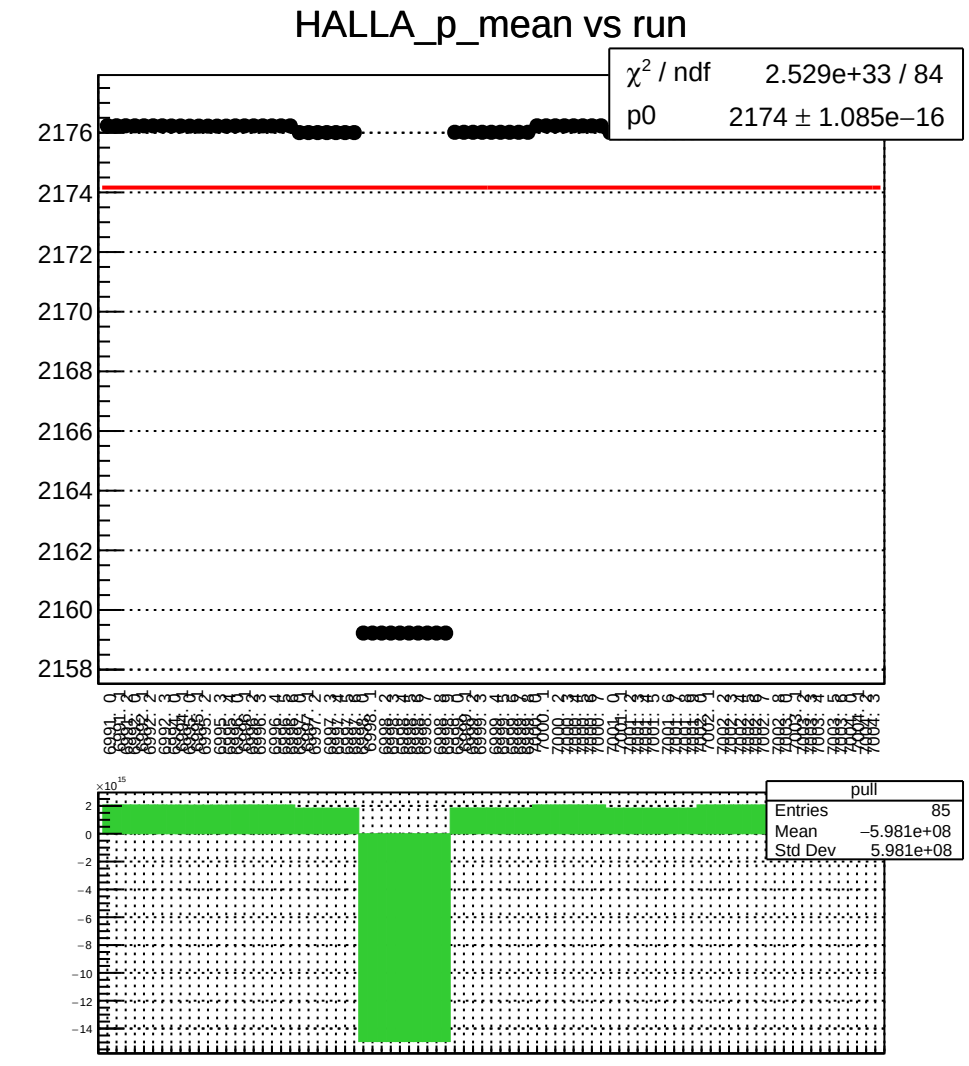

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

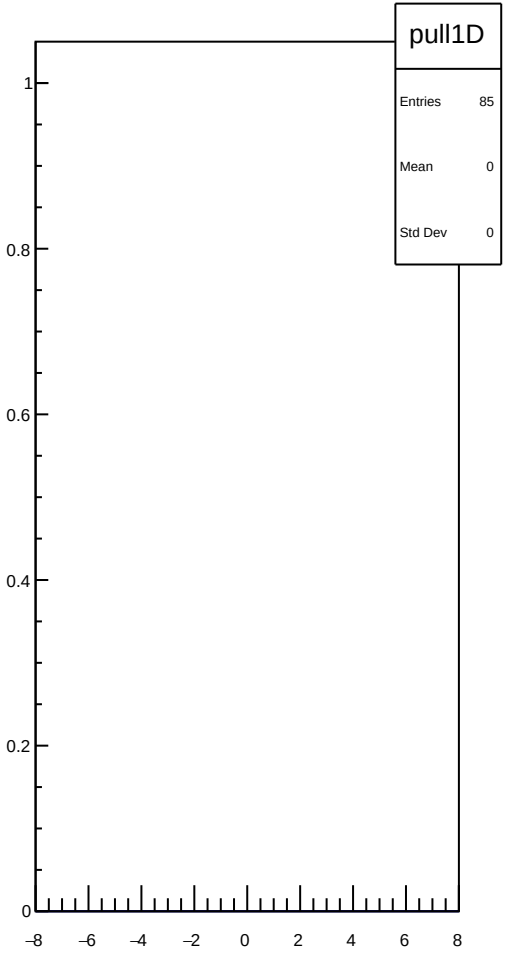

HWienAngle_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

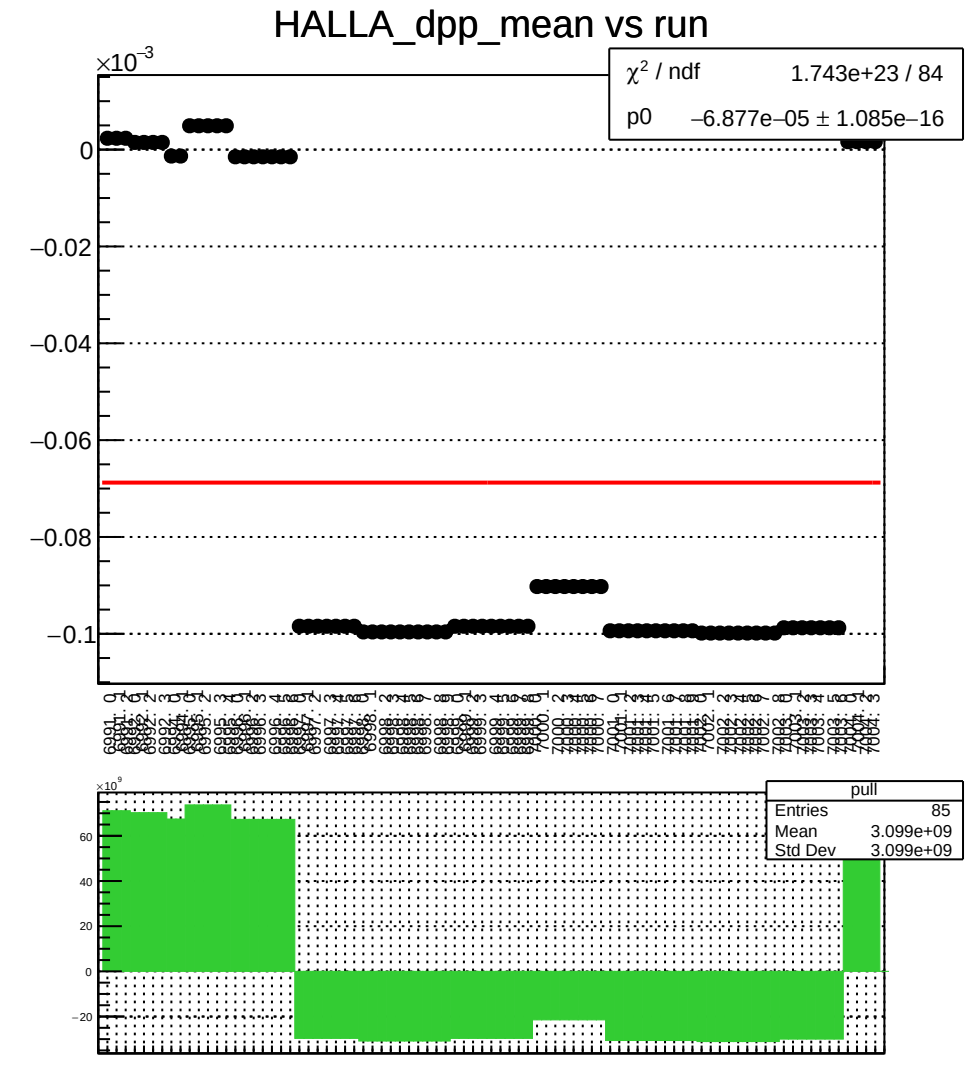

psub_pl_pos_mean vs run
χ² / ndf 8.613e+08 / 84
p0 1468 ± 1.085e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 85
Mean 42.5
Std Dev 24.54
3000
2500
2000
1500
1000
500
0

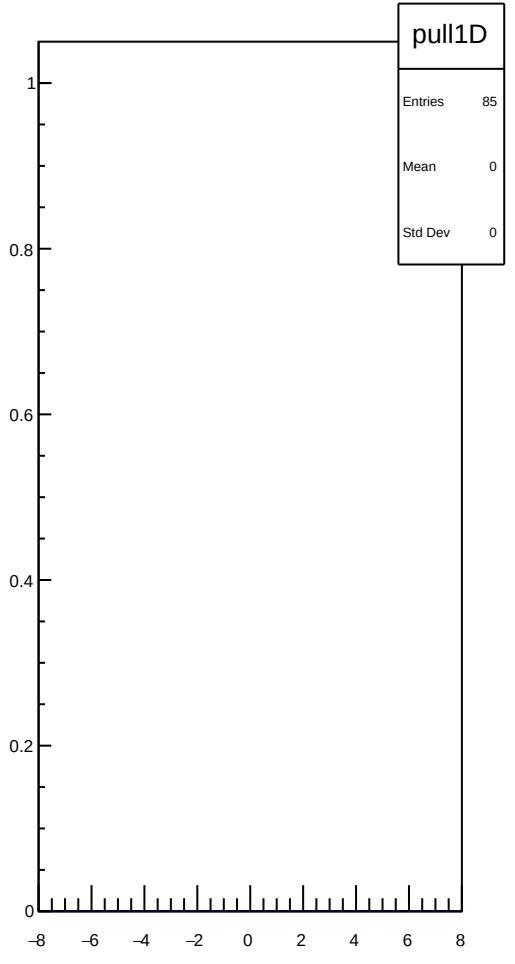

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

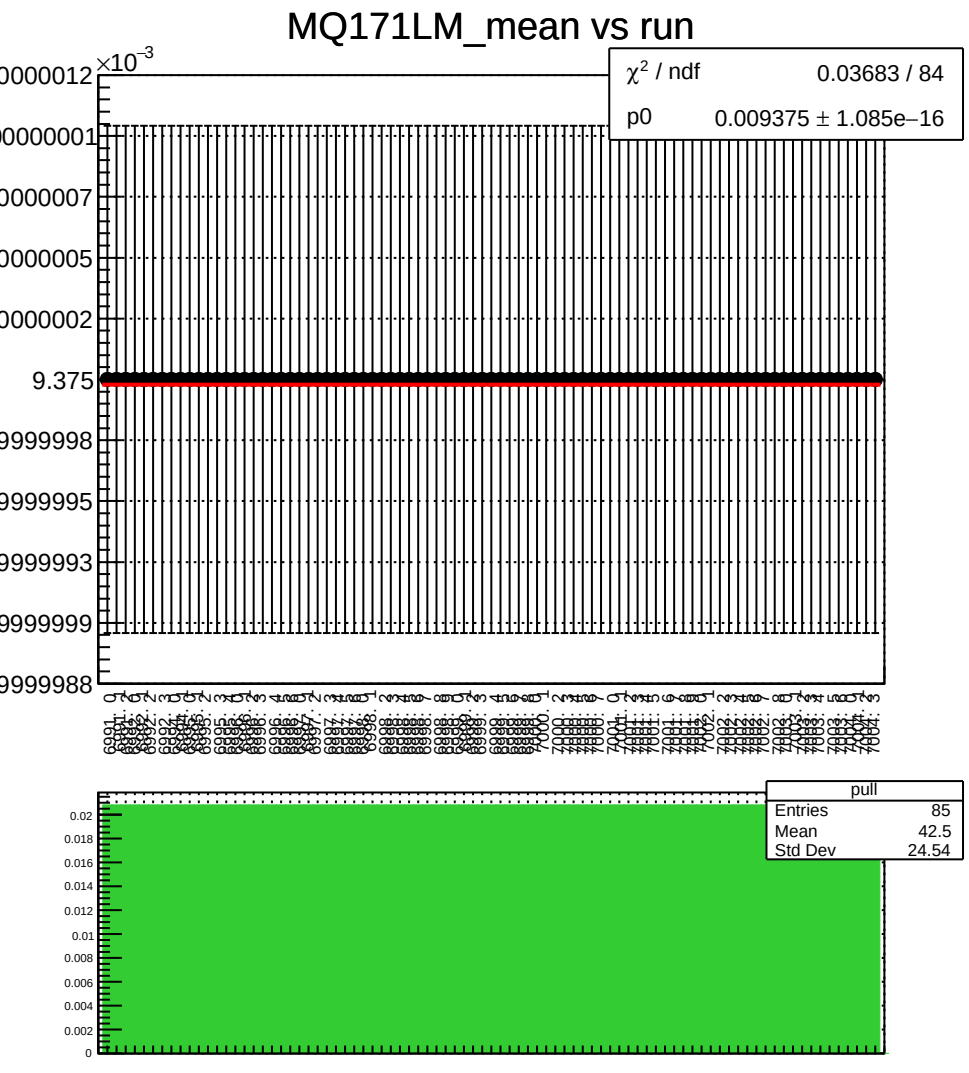

Phi_FG_mean vs run
χ² / ndf 1.717e+06 / 84
p0 88.02 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
140
120
100
80
60
40
20
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

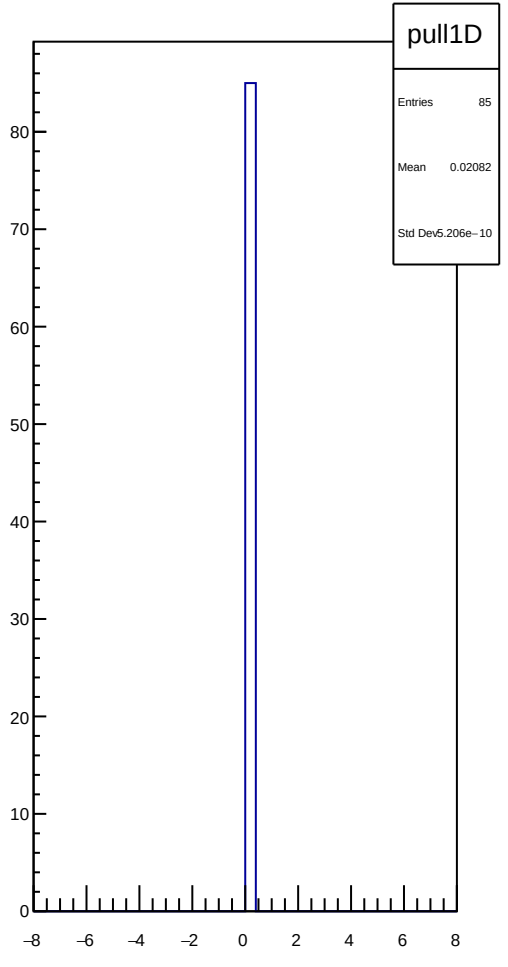

HALLA_p_mean vs run
χ² / ndf 2.529e+33 / 84
p0 2174 ± 1.085e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 85
Mean −5.981e+08
Std Dev 5.981e+08
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14

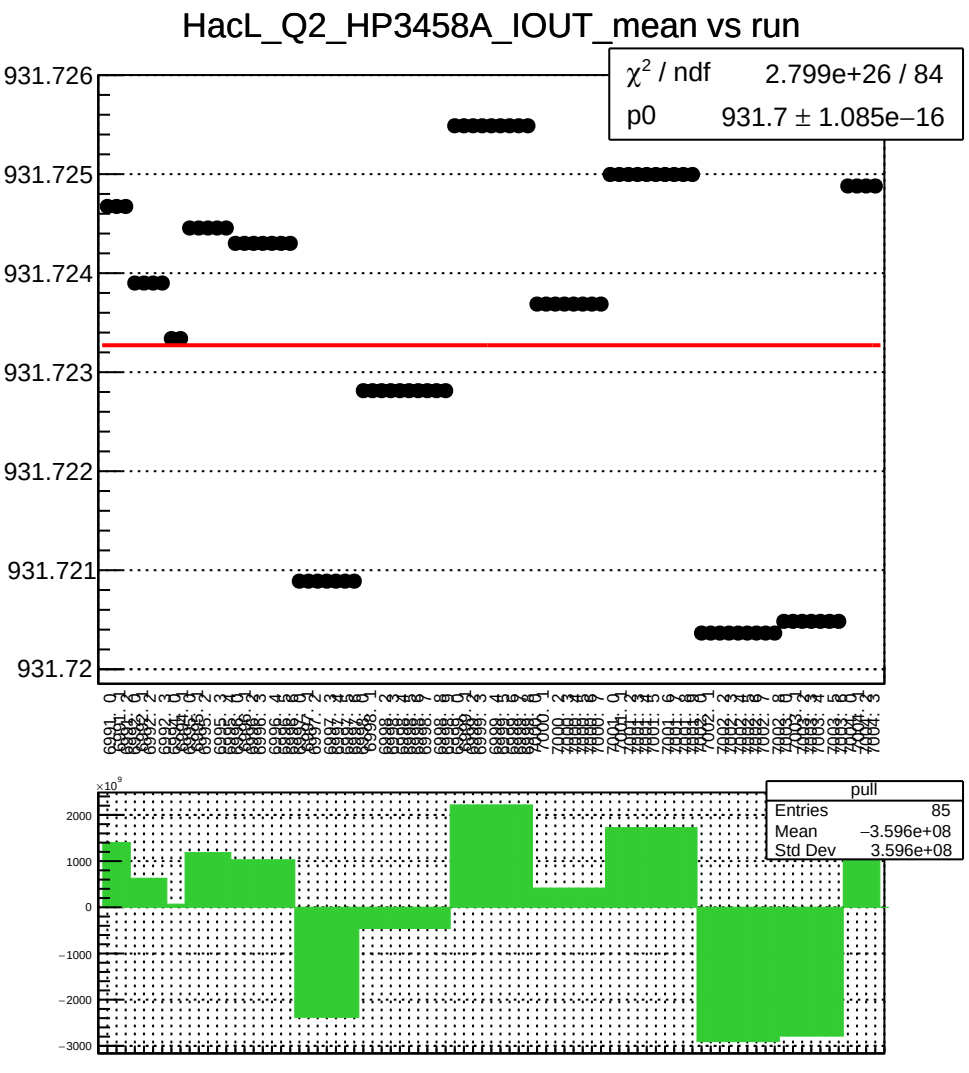

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

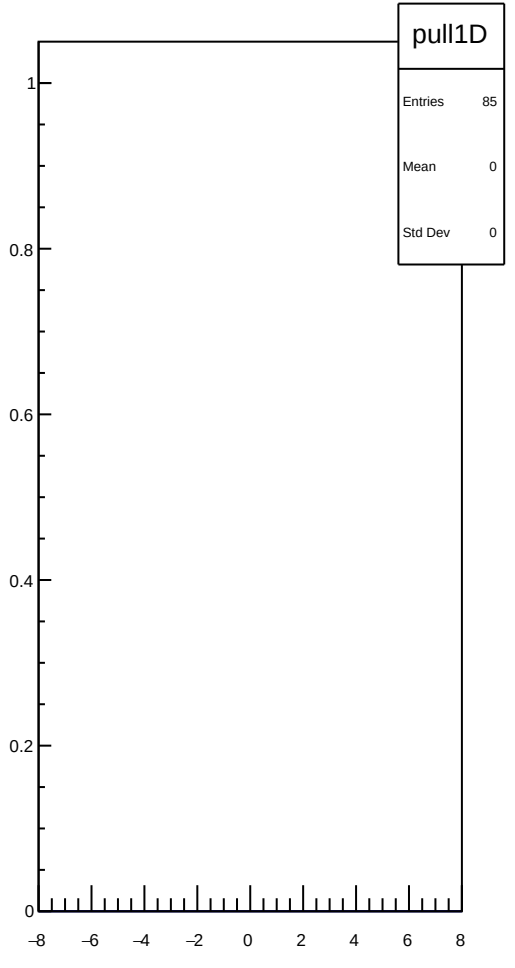

HALLA_dpp_mean vs run
χ² / ndf 1.743e+23 / 84
p0 −6.877e−05 ± 1.085e−16
×10⁻³
0
−0.02
−0.04
−0.06
−0.08
−0.1
×10⁹
60
40
20
0
−20
pull
Entries 85
Mean 3.099e+09
Std Dev 3.099e+09

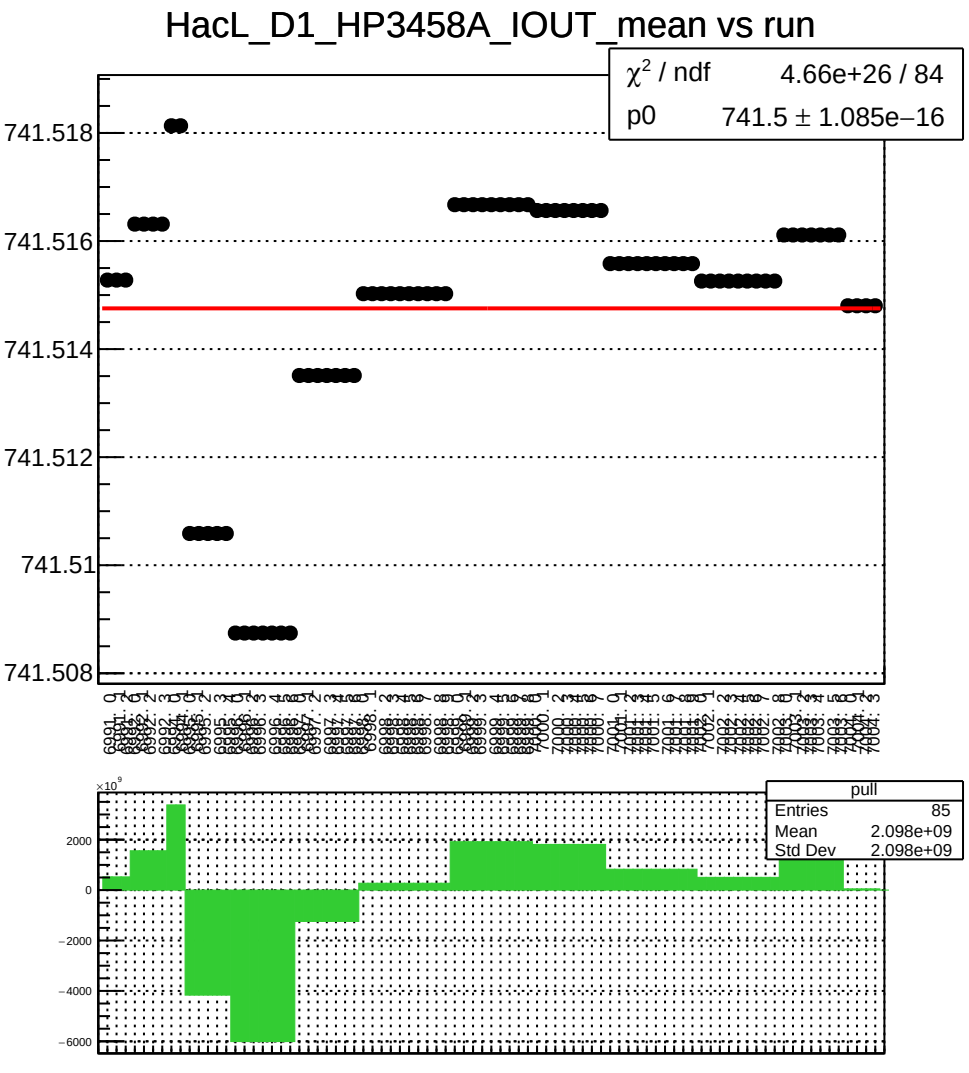

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

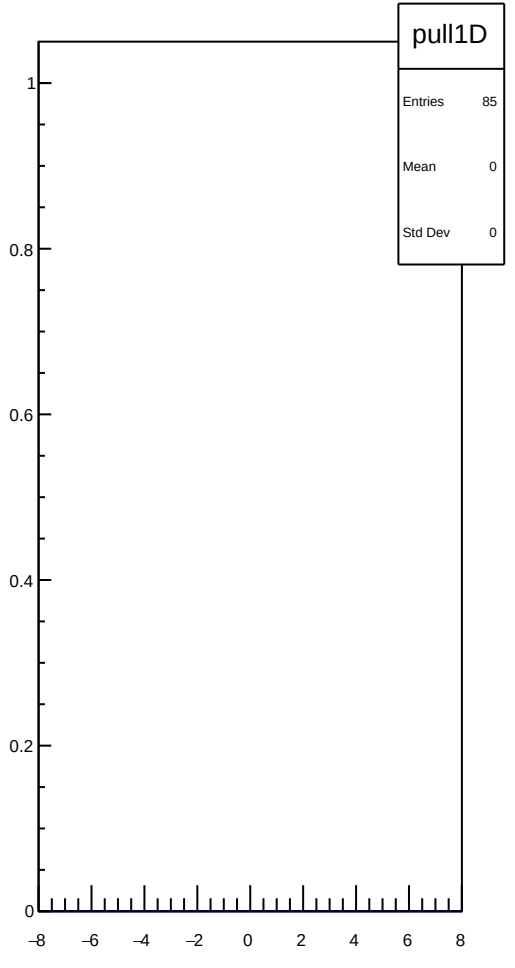

MQ171LM_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54

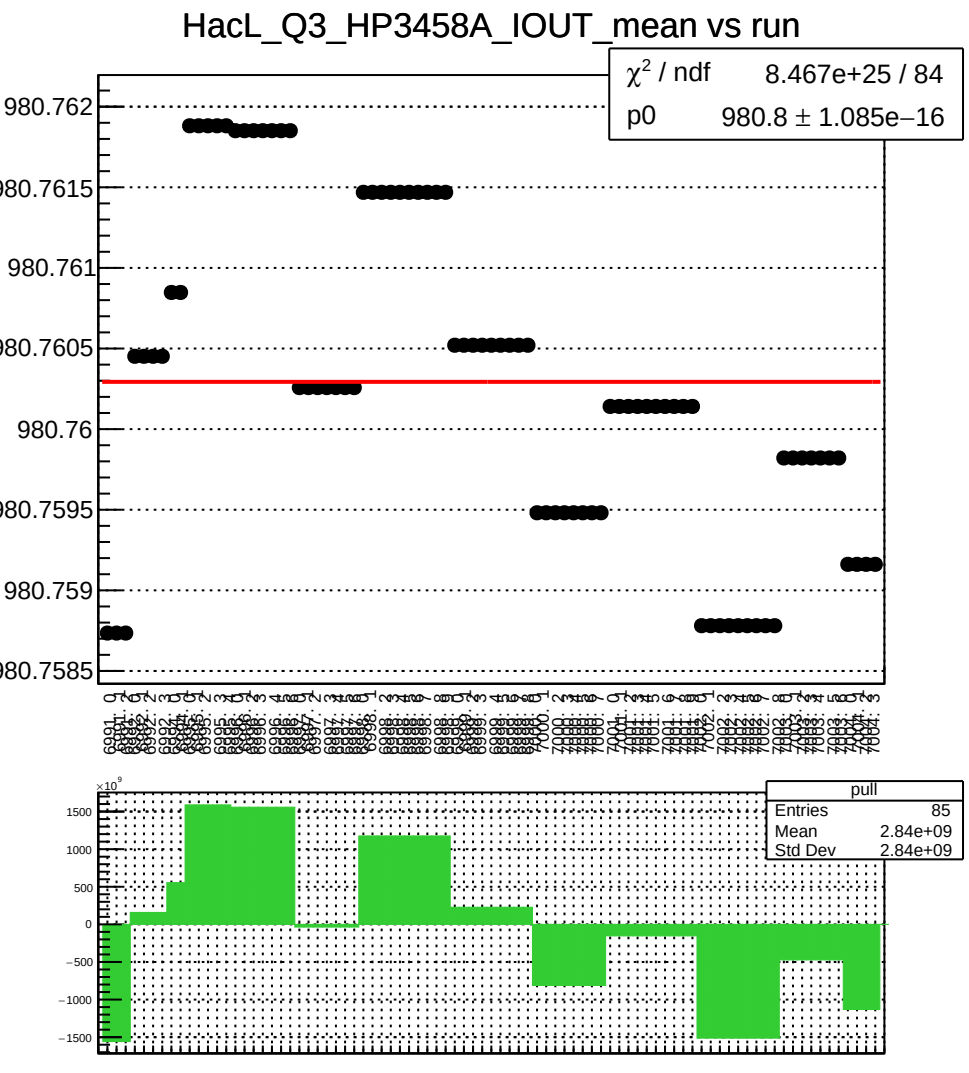

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

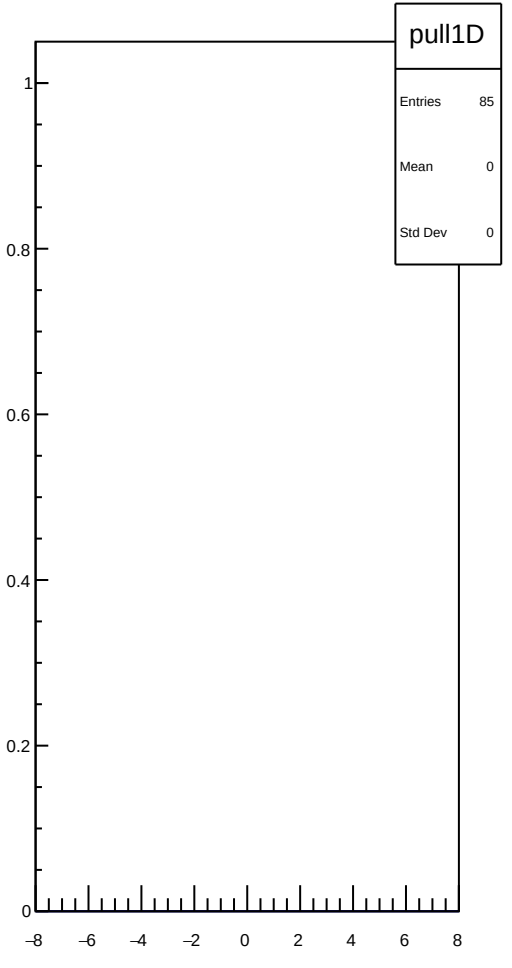

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 2.799e+26 / 84
p0 931.7 ± 1.085e−16
931.726
931.725
931.724
931.723
931.722
931.721
931.72
×10⁹
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean −3.596e+08
Std Dev 3.596e+08

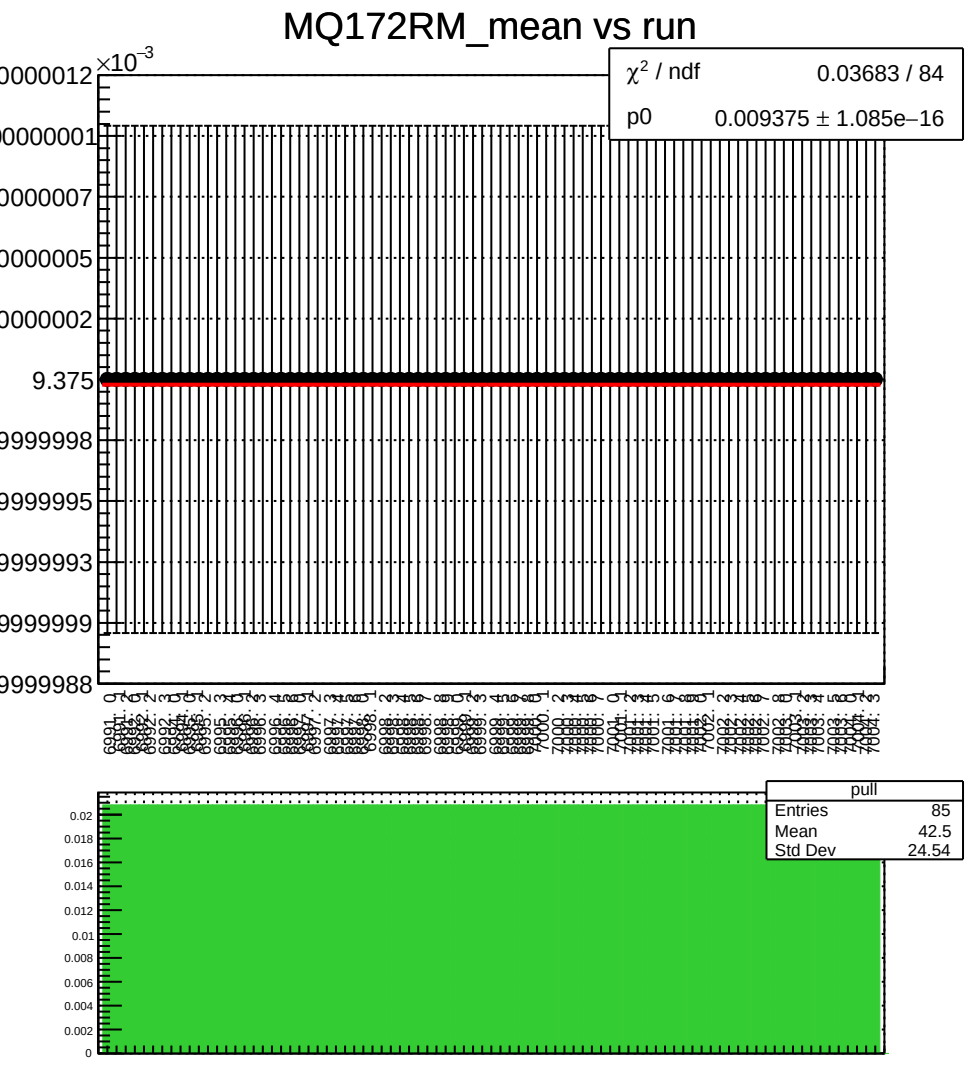

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

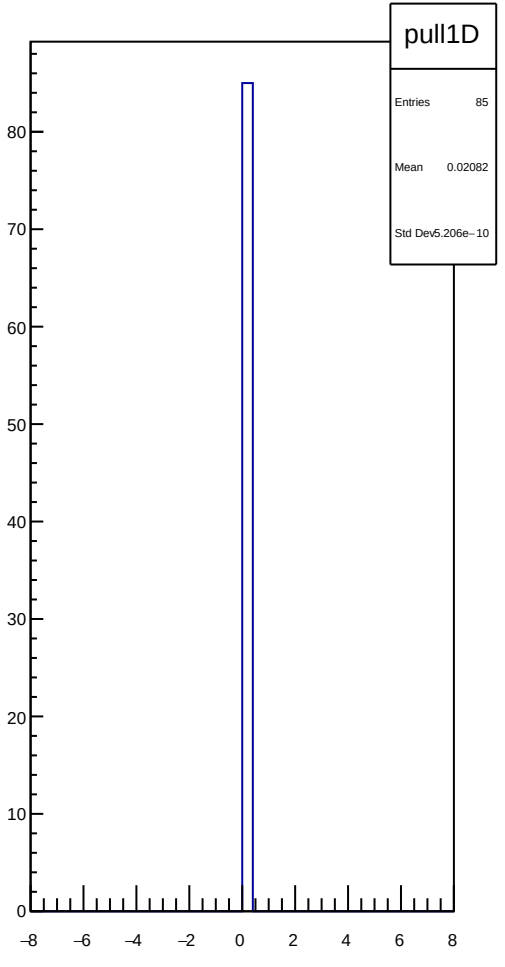

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 4.66e+26 / 84
p0 741.5 ± 1.085e−16
741.518
741.516
741.514
741.512
741.51
741.508
pull
Entries 85
Mean 2.098e+09
Std Dev 2.098e+09
×10⁹
2000
0
−2000
−4000
−6000

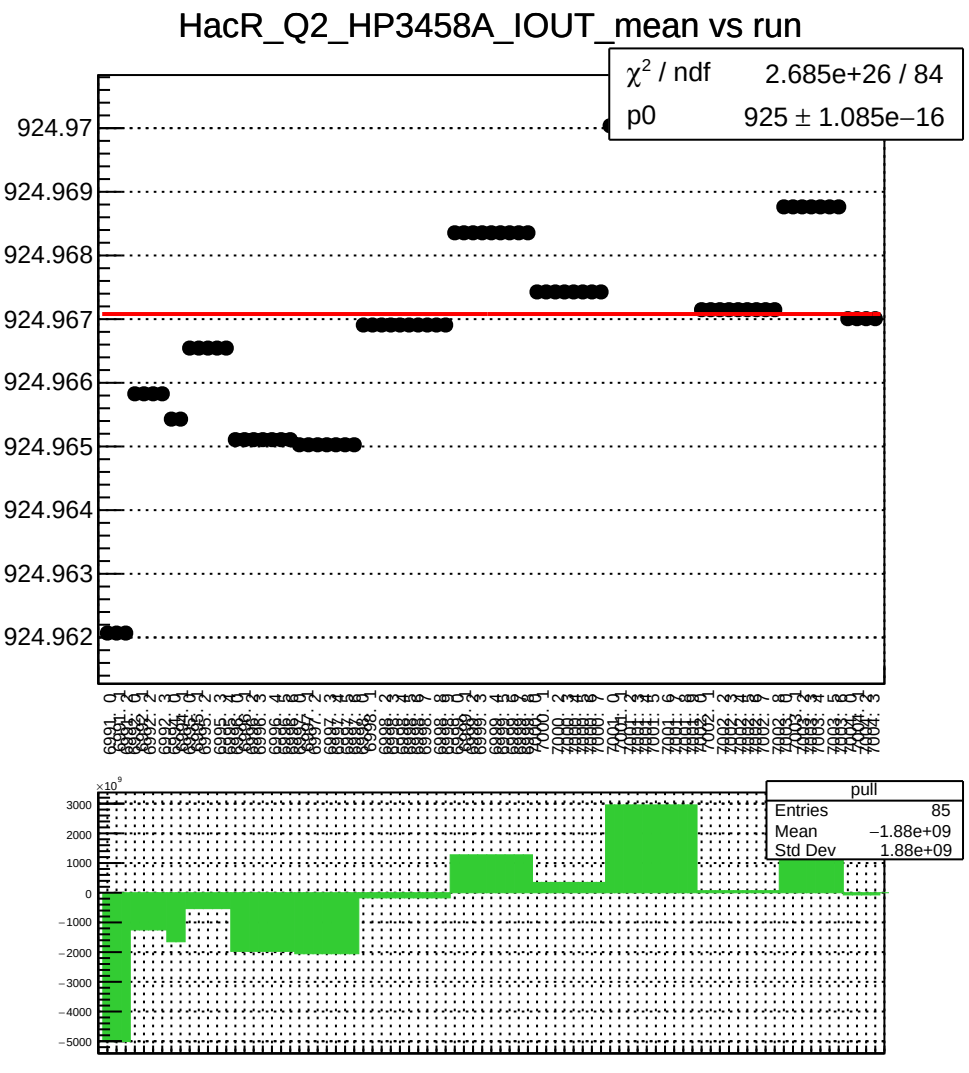

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

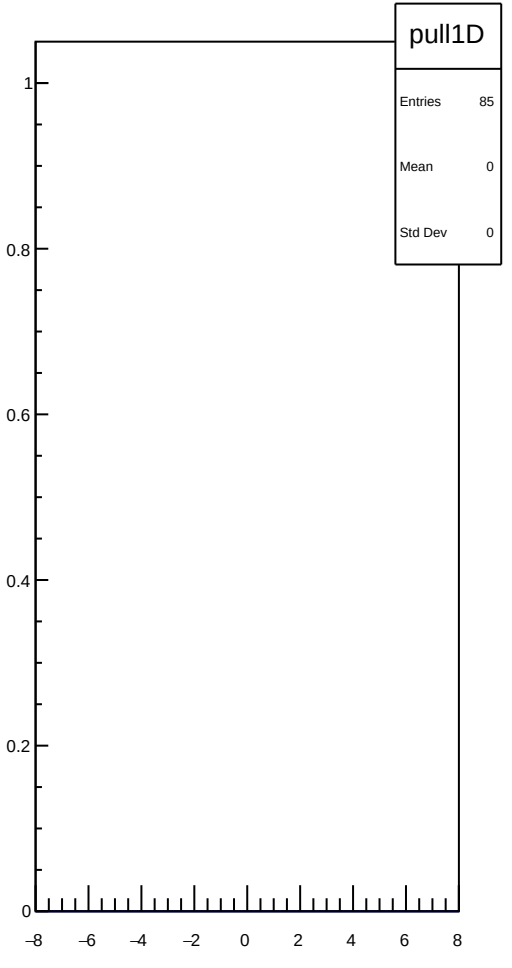

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 8.467e+25 / 84
p0 980.8 ± 1.085e−16
980.762
980.7615
980.761
980.7605
980.76
980.7595
980.759
980.7585
pull
Entries 85
Mean 2.84e+09
Std Dev 2.84e+09
×10⁹
1500
1000
500
0
−500
−1000
−1500

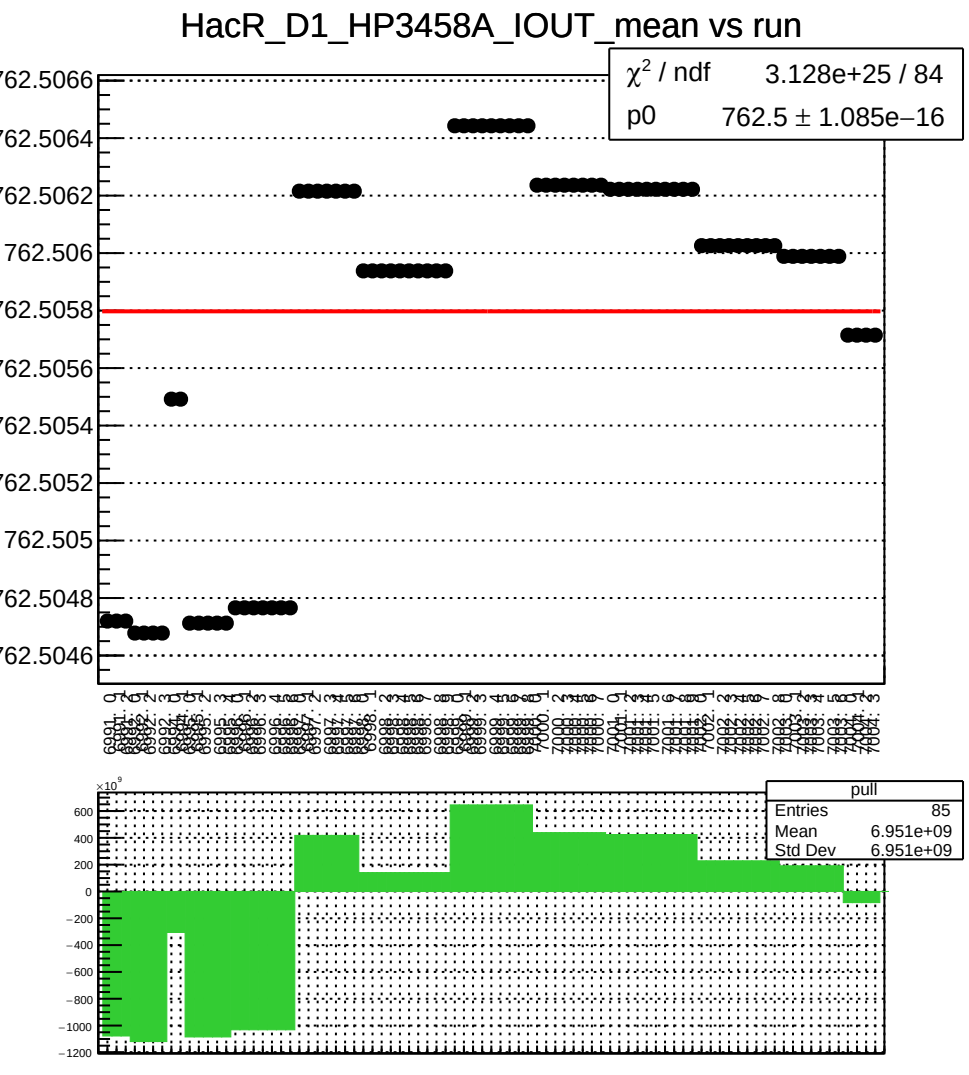

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

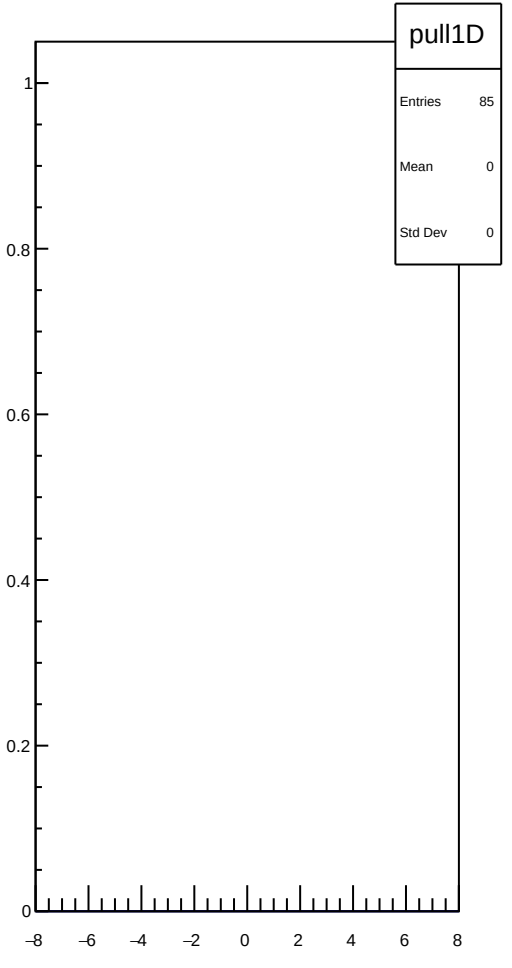

MQ172RM_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
pull
Entries 85
Mean 42.5
Std Dev 24.54

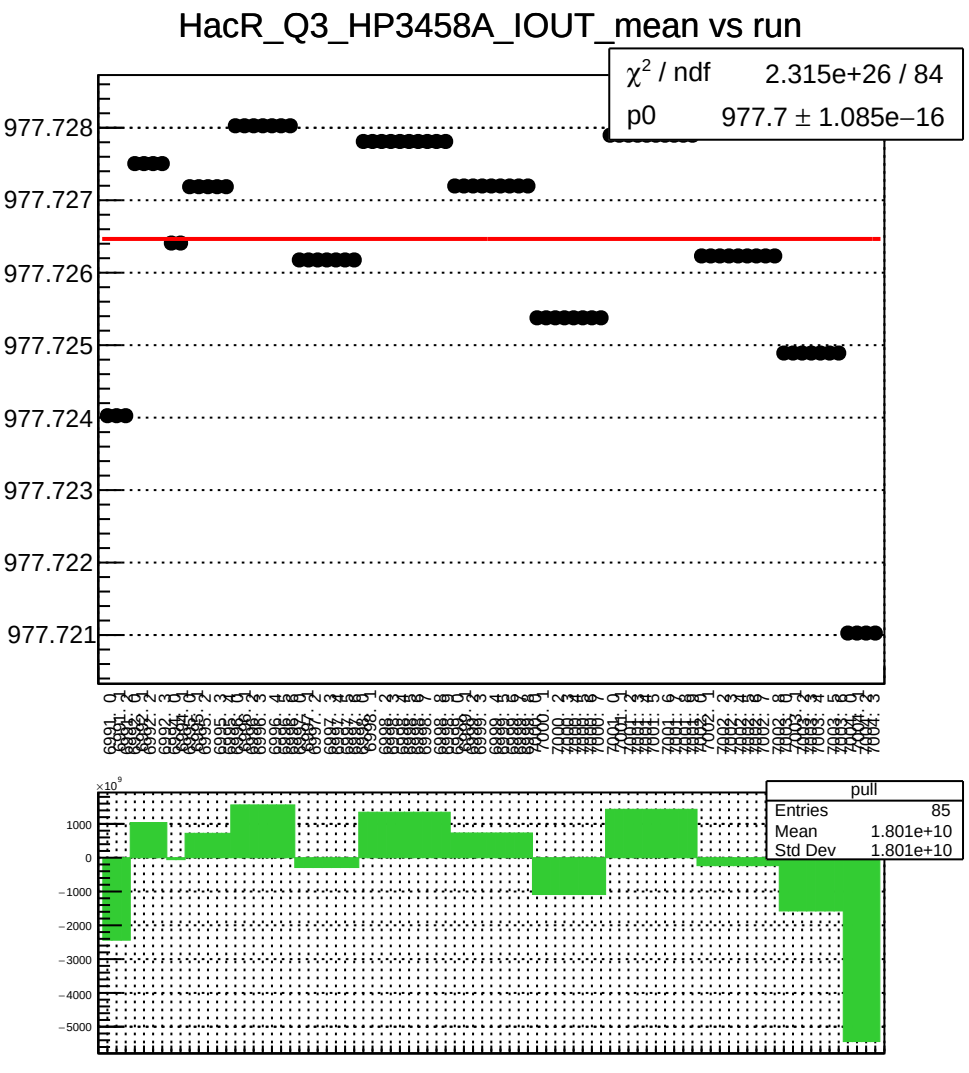

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

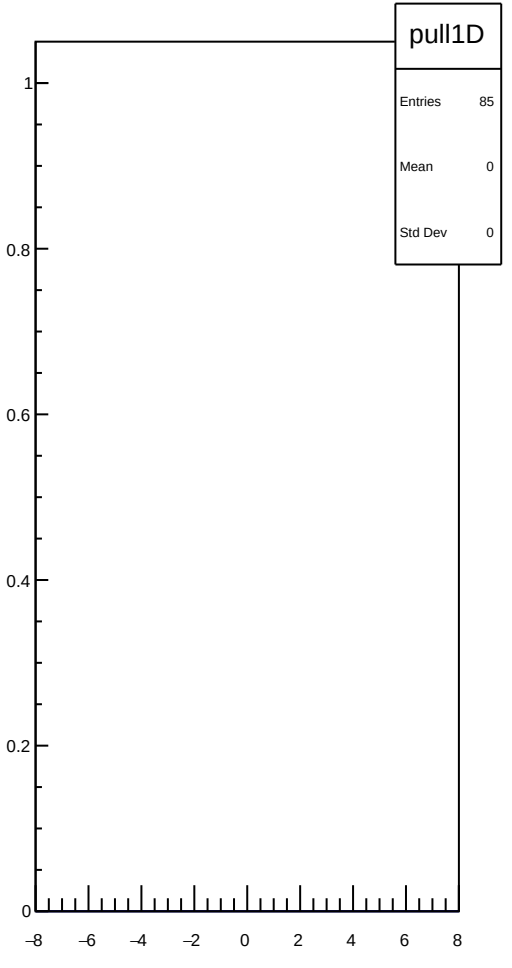

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 2.685e+26 / 84
p0 925 ± 1.085e−16
924.97
924.969
924.968
924.967
924.966
924.965
924.964
924.963
924.962
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000
pull
Entries 85
Mean −1.88e+09
Std Dev 1.88e+09

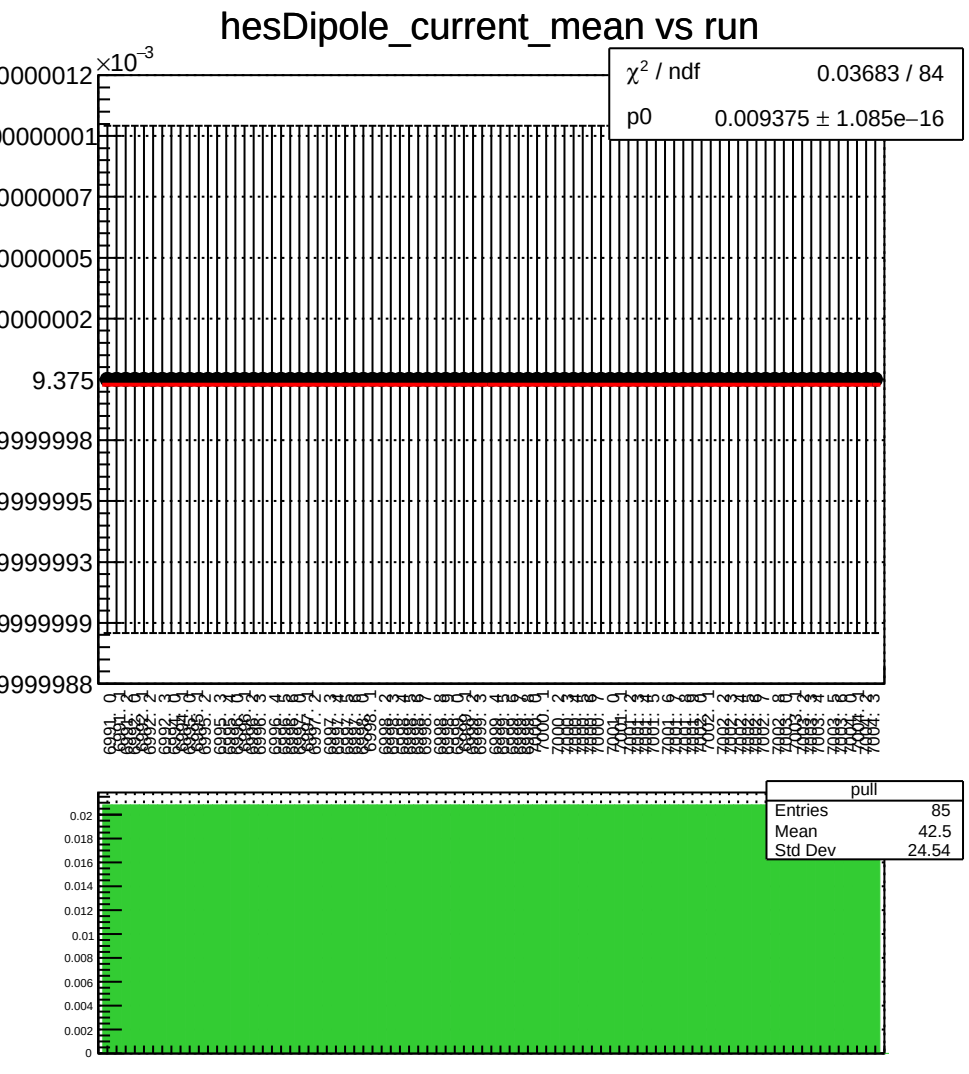

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

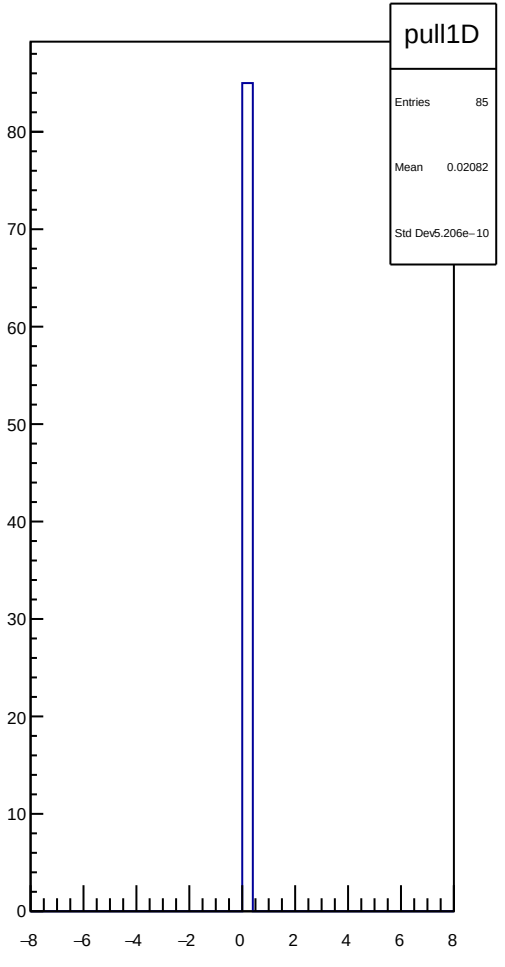

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 3.128e+25 / 84
p0 762.5 ± 1.085e−16
762.5066
762.5064
762.5062
762.506
762.5058
762.5056
762.5054
762.5052
762.505
762.5048
762.5046
pull
Entries 85
Mean 6.951e+09
Std Dev 6.951e+09
×10⁹
600
400
200
0
−200
−400
−600
−800
−1000
−1200

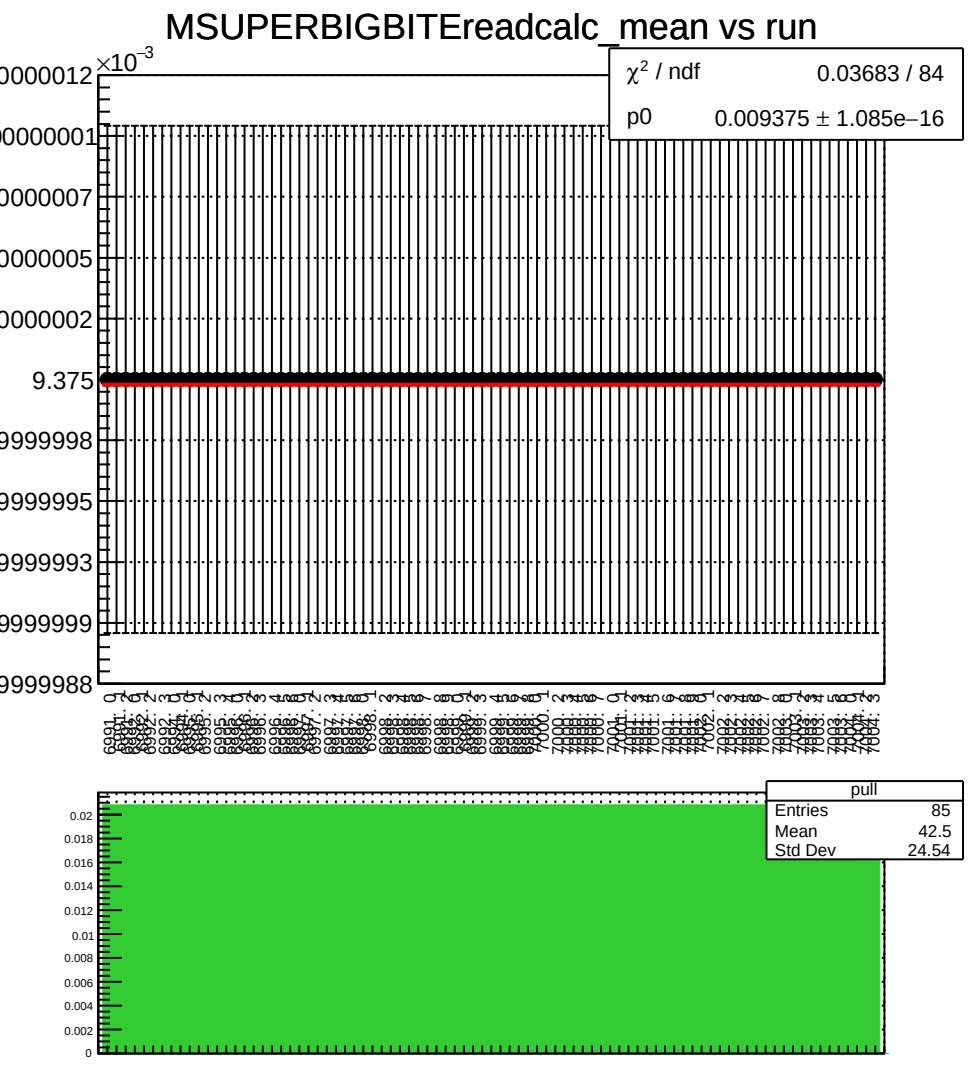

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

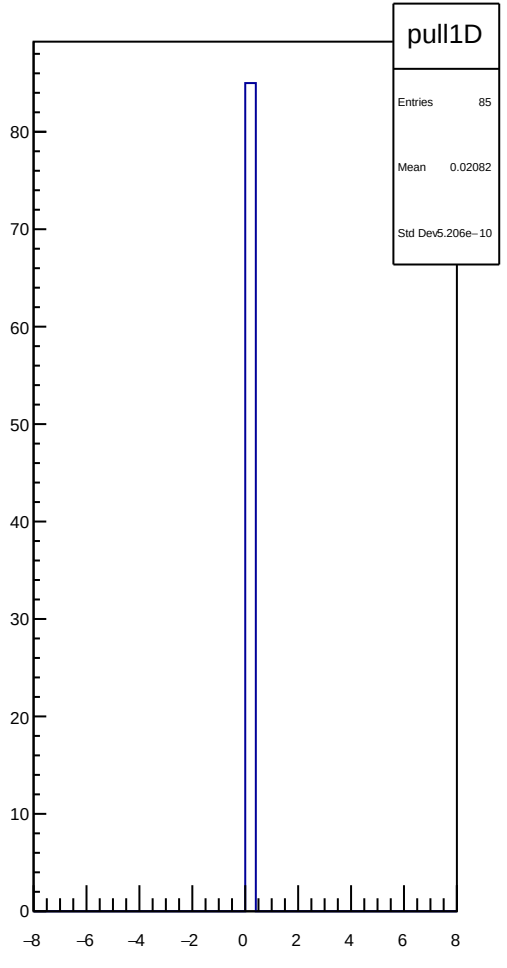

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.315e+26 / 84
p0 977.7 ± 1.085e−16
977.728
977.727
977.726
977.725
977.724
977.723
977.722
977.721
×10⁹
1000
0
−1000
−2000
−3000
−4000
−5000
pull
Entries 85
Mean 1.801e+10
Std Dev 1.801e+10

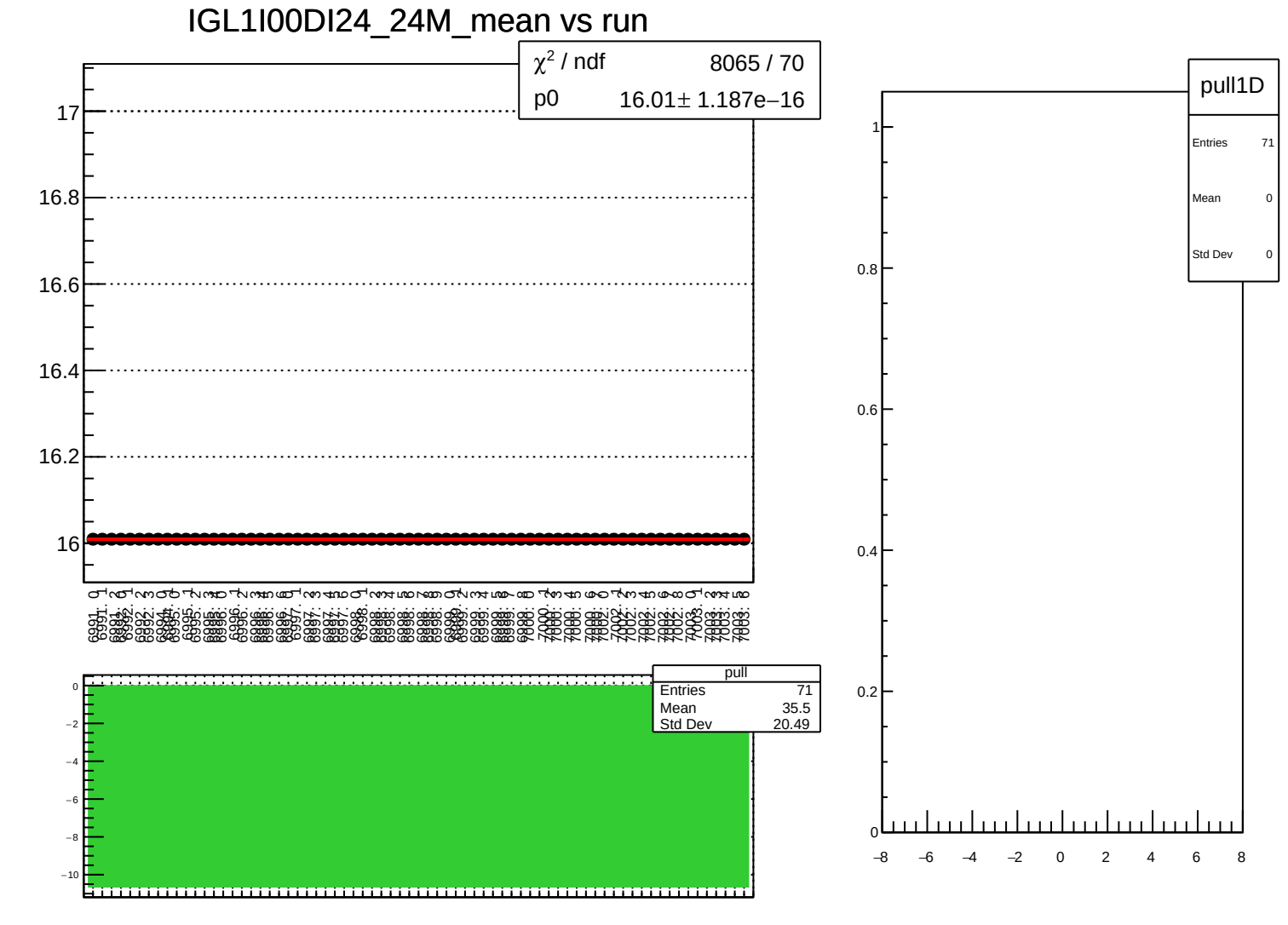

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

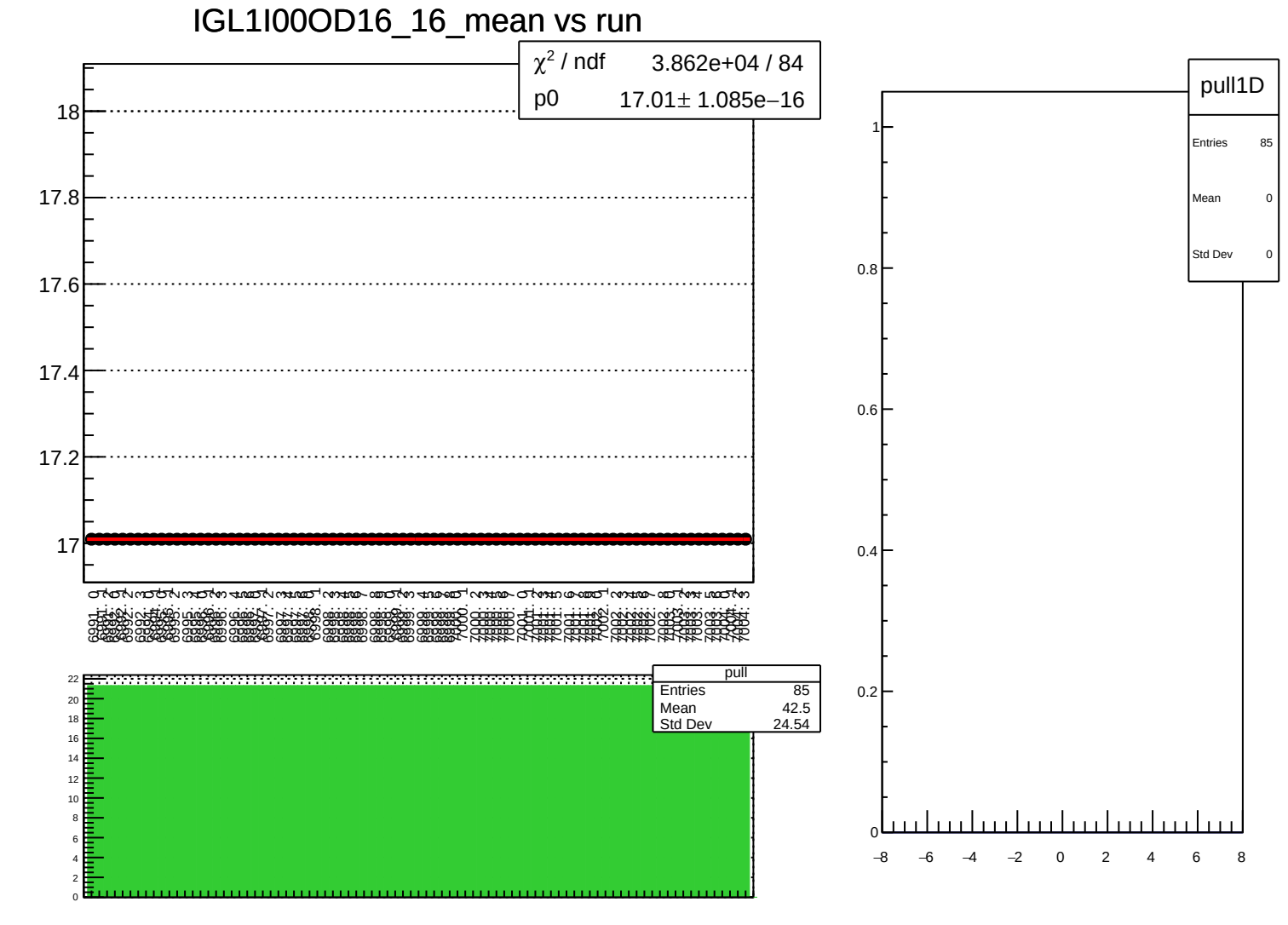

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
9.375
pull
Entries 85
Mean 42.5
Std Dev 24.54

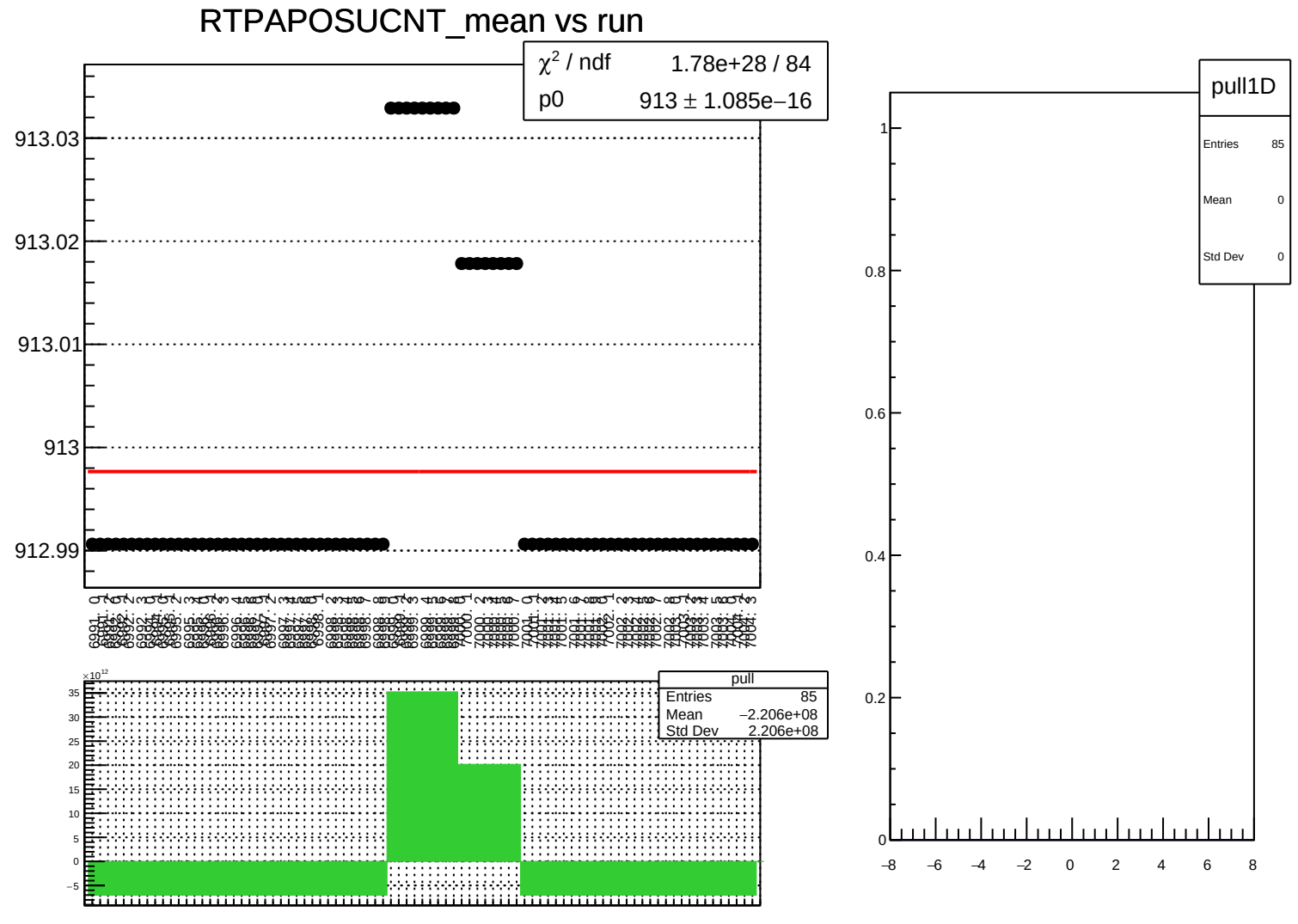

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10

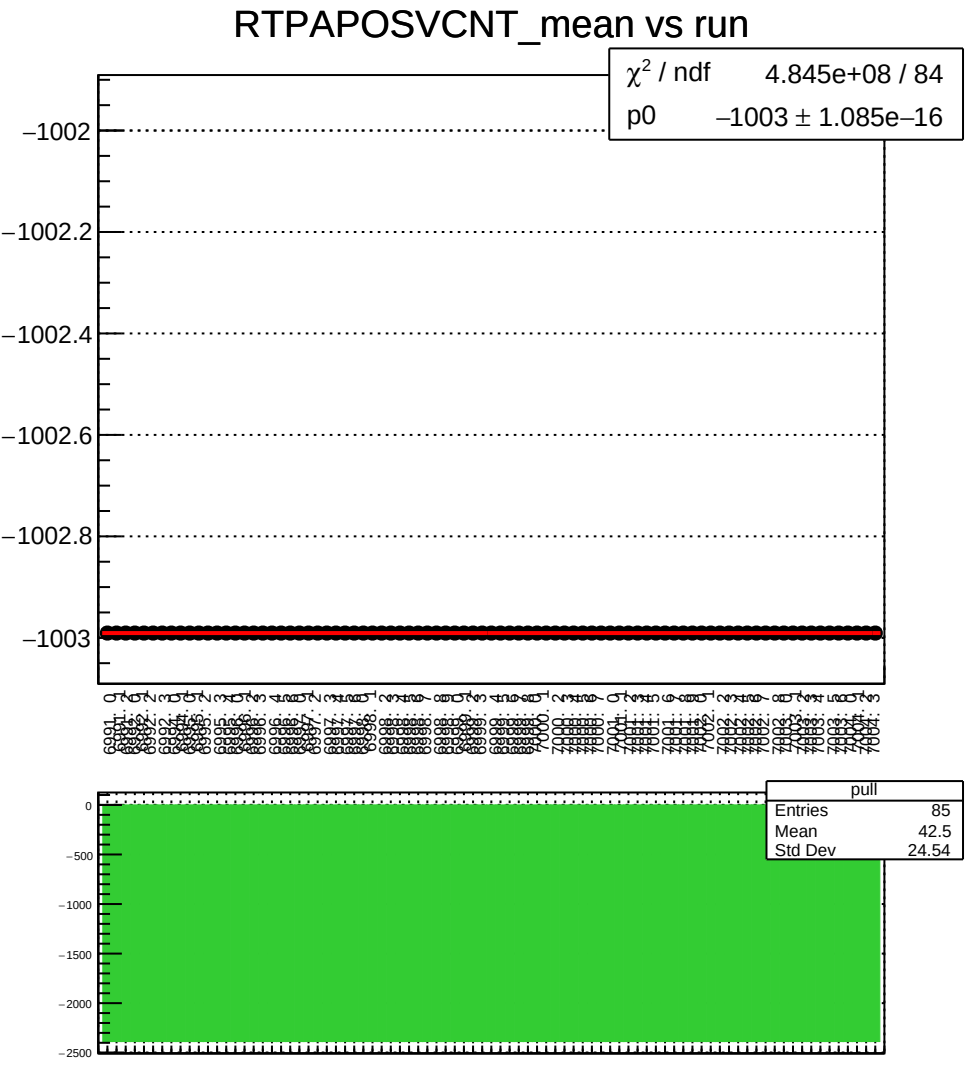

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.03683 / 84
p0 0.009375 ± 1.085e−16
×10⁻³
9.375
pull
Entries 85
Mean 42.5
Std Dev 24.54

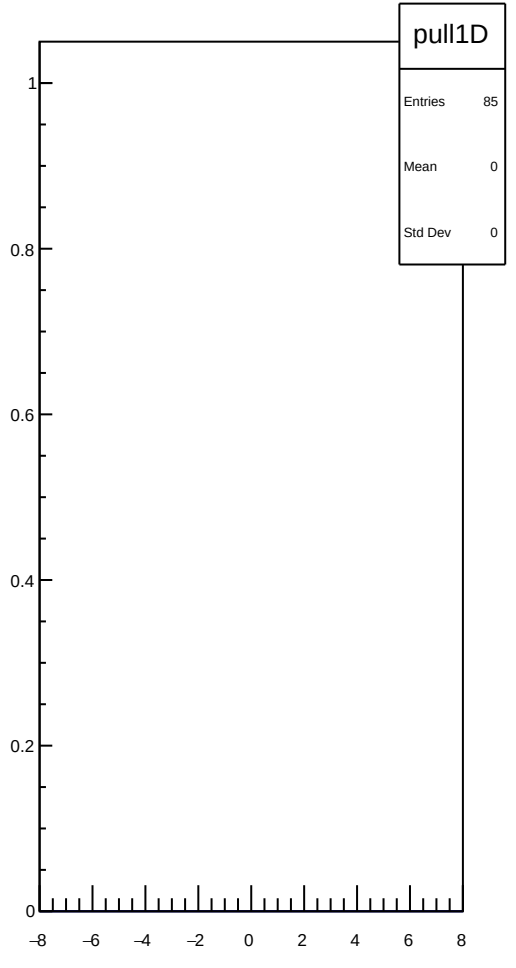

pull1D
Entries 85
Mean 0.02082
Std Dev 5.206e−10


IGL1I00DI24_24M_mean vs run
χ² / ndf 8065 / 70
p0 16.01± 1.187e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 71
Mean 35.5
Std Dev 20.49
0
−2
−4
−6
−8
−10
pull1D
Entries 71
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 3.862e+04 / 84
p0 17.01± 1.085e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 85
Mean 42.5
Std Dev 24.54
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 1.78e+28 / 84
p0 913 ± 1.085e−16
913.03
913.02
913.01
913
912.99
pull
Entries 85
Mean −2.206e+08
Std Dev 2.206e+08
×10¹²
35
30
25
20
15
10
5
0
−5
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 4.845e+08 / 84
p0 −1003 ± 1.085e−16
−1002
−1002.2
−1002.4
−1002.6
−1002.8
−1003
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−500
−1000
−1500
−2000
−2500


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