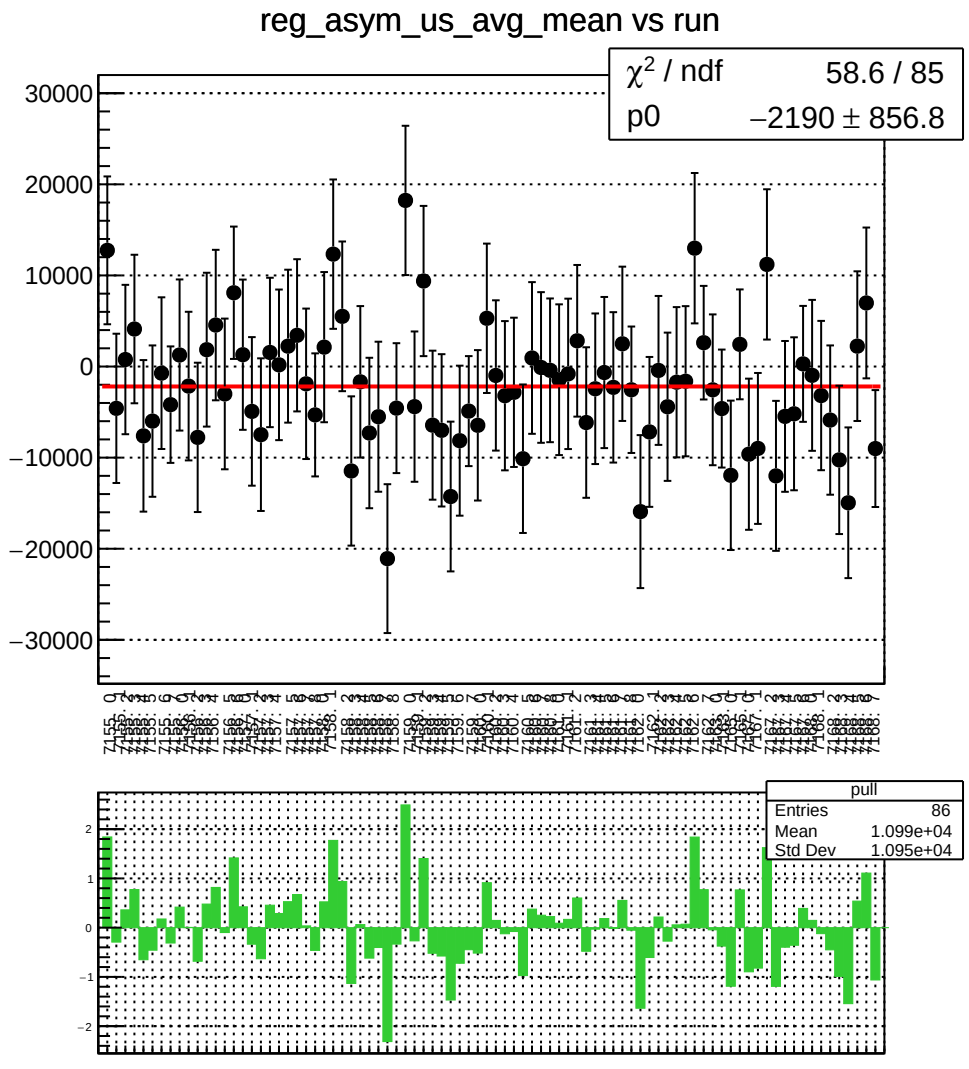
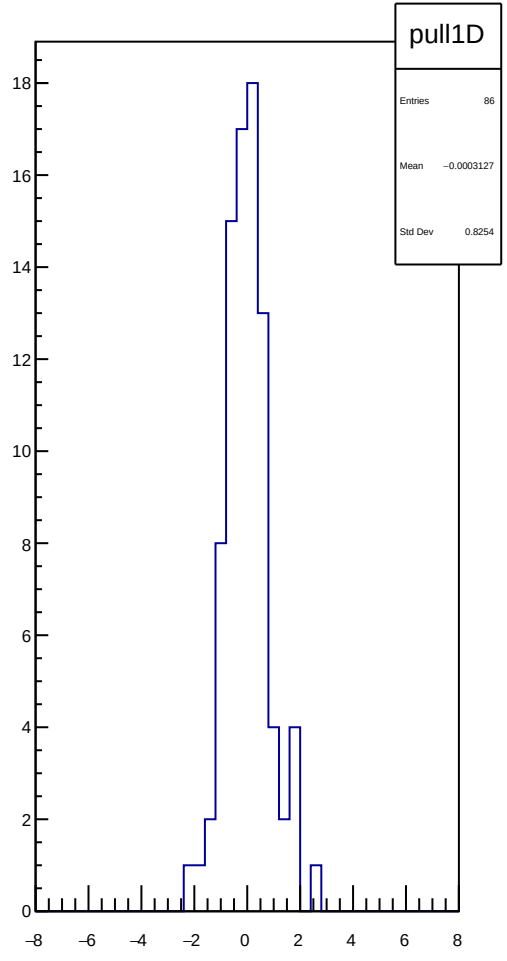
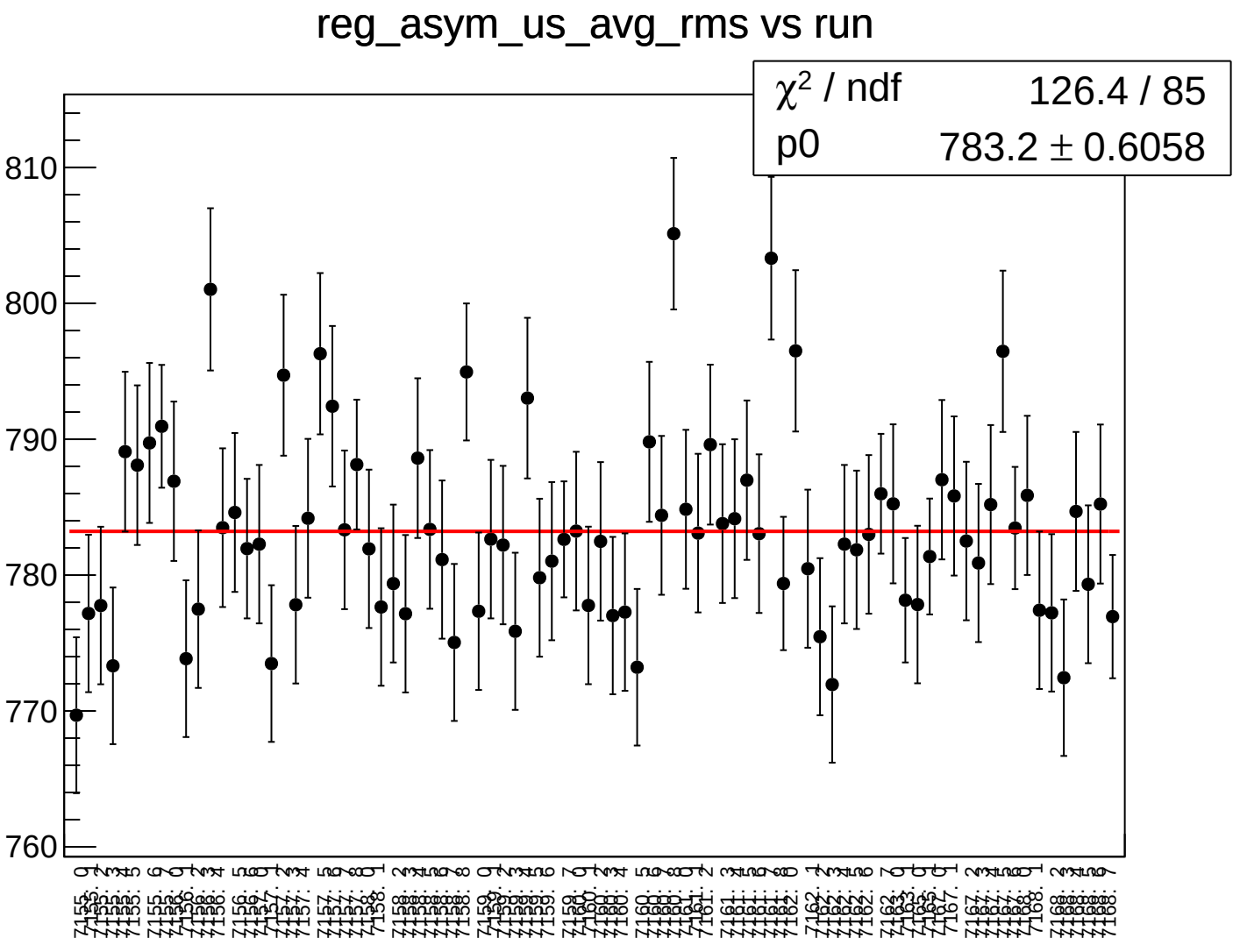
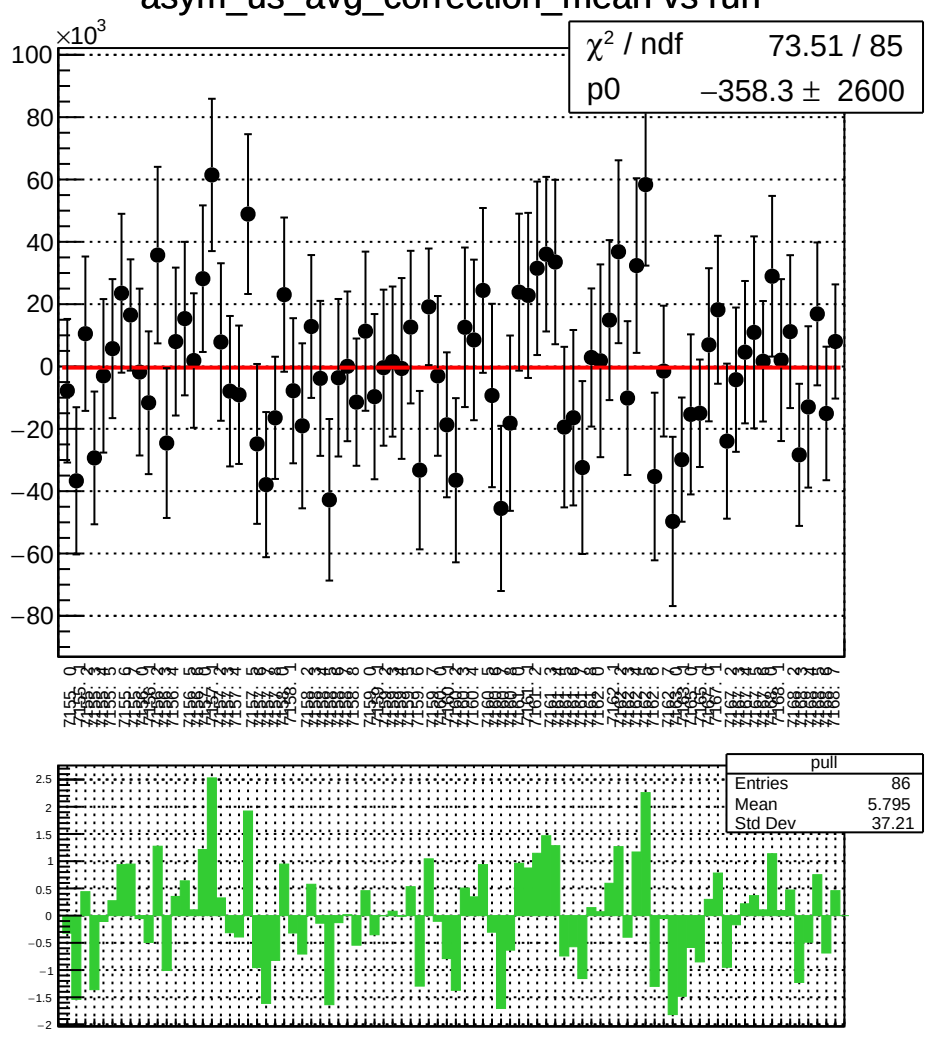
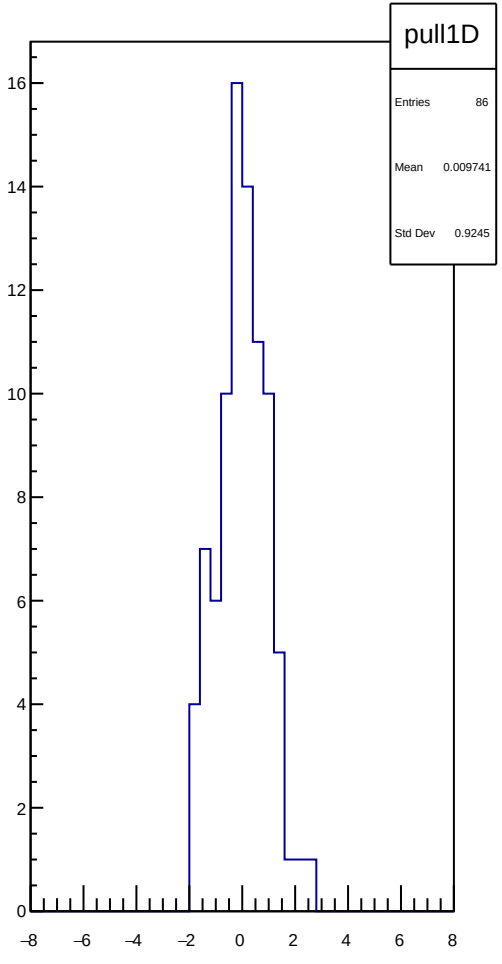
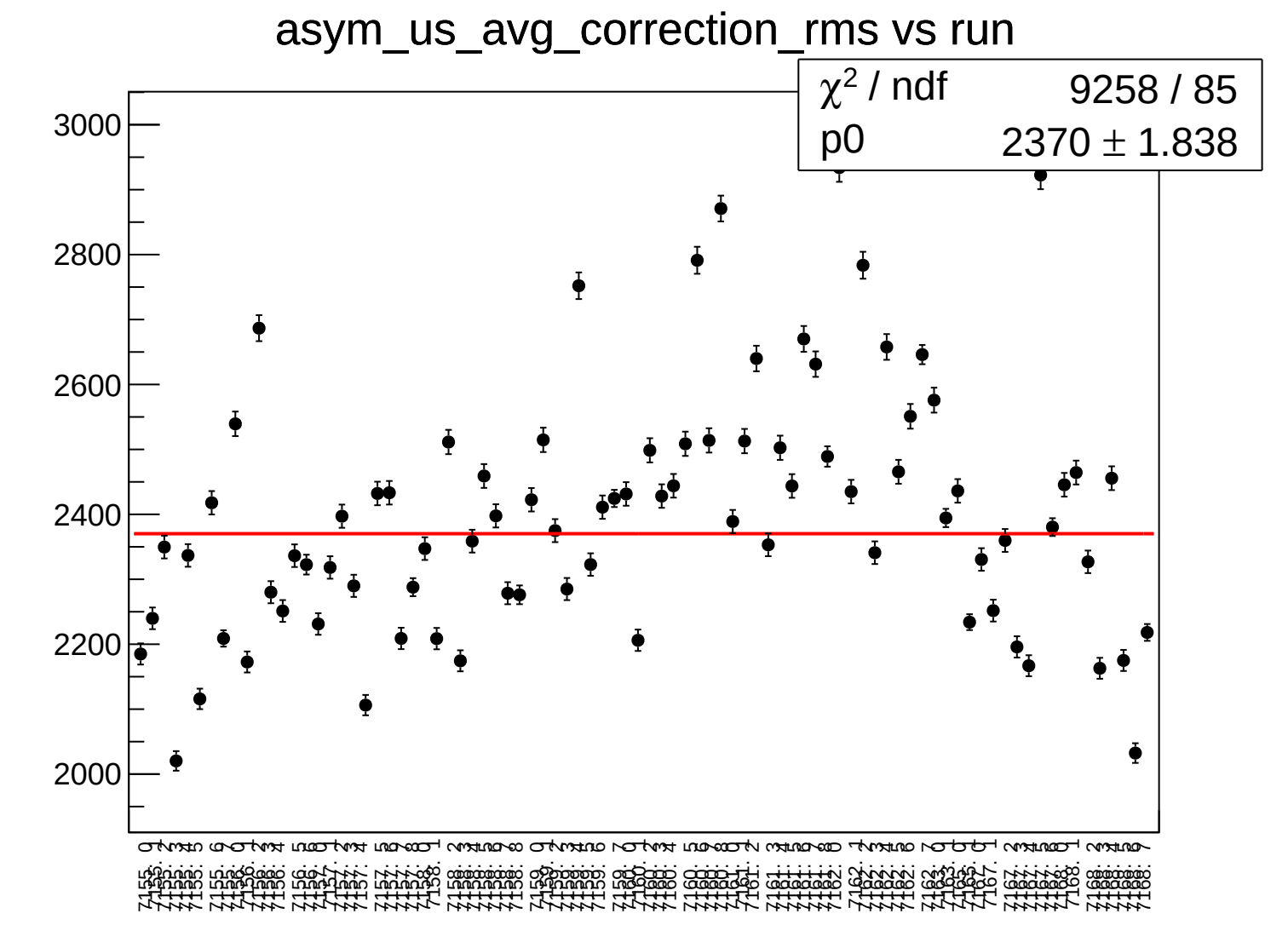

reg_asym_us_avg_mean vs run
χ² / ndf 58.6 / 85
p0 −2190 ± 856.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 1.099e+04
Std Dev 1.095e+04
2
1
0
−1
−2

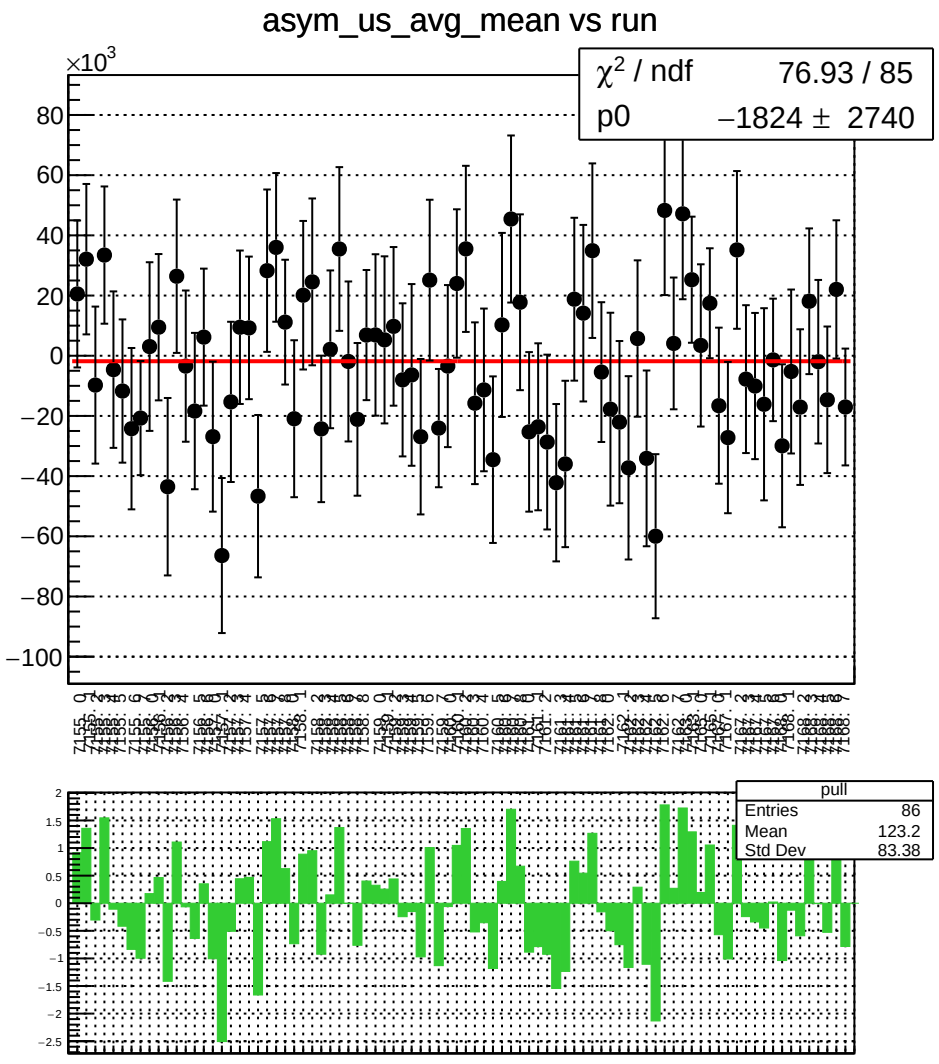

pull1D
Entries 86
Mean −0.0003127
Std Dev 0.8254
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

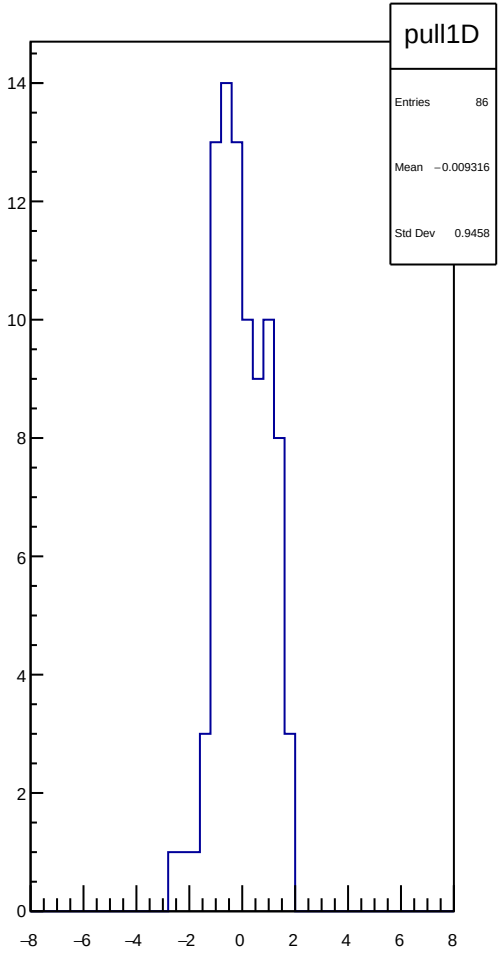

reg_asym_us_avg_rms vs run
χ^2 / ndf 126.4 / 85
p0 783.2 ± 0.6058
810
800
790
780
770
760

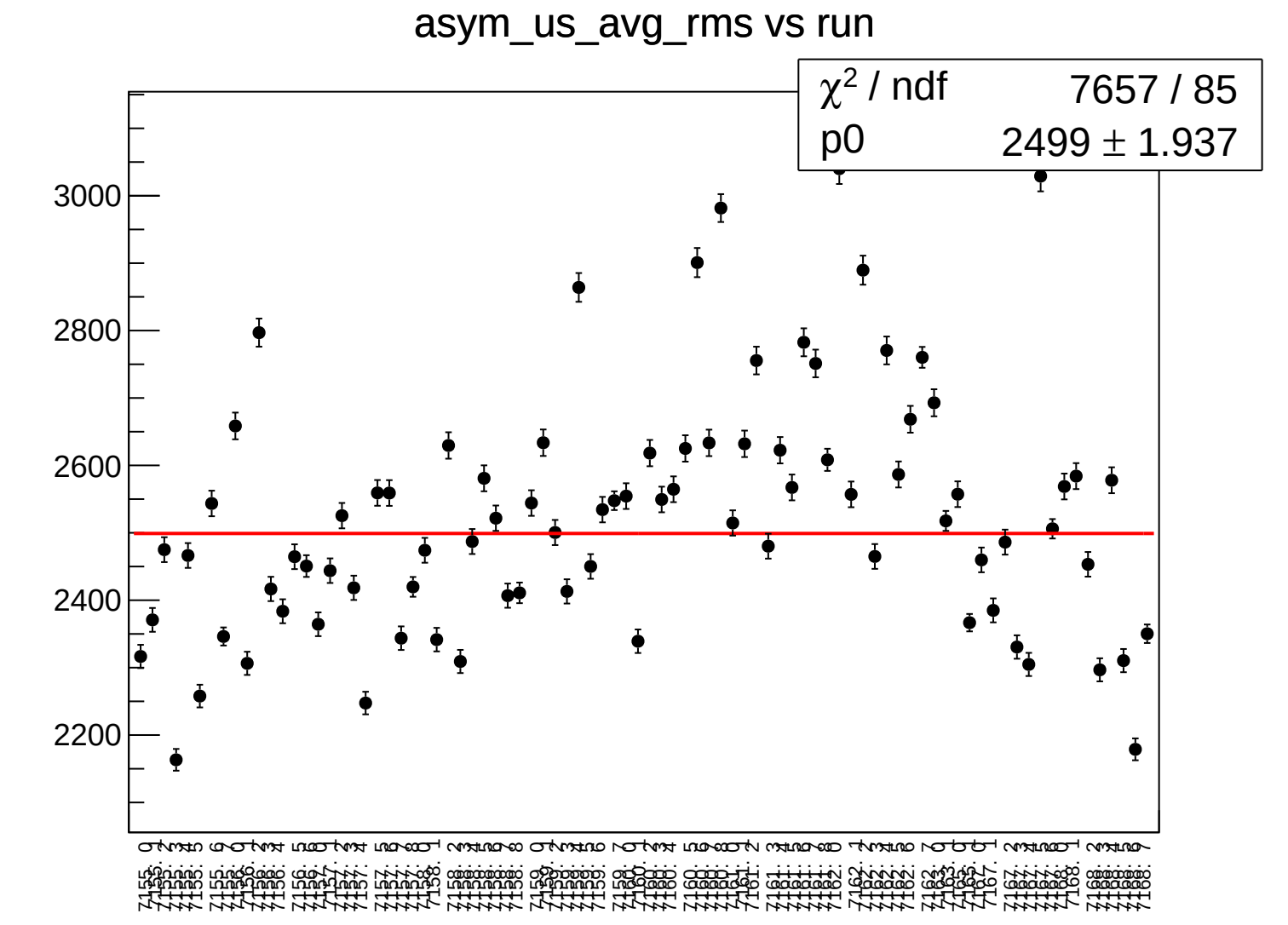

asym_us_avg_correction_mean vs run
χ^2 / ndf 73.51 / 85
p0 −358.3 ± 2600
×10^3
pull
Entries 86
Mean 5.795
Std Dev 37.21

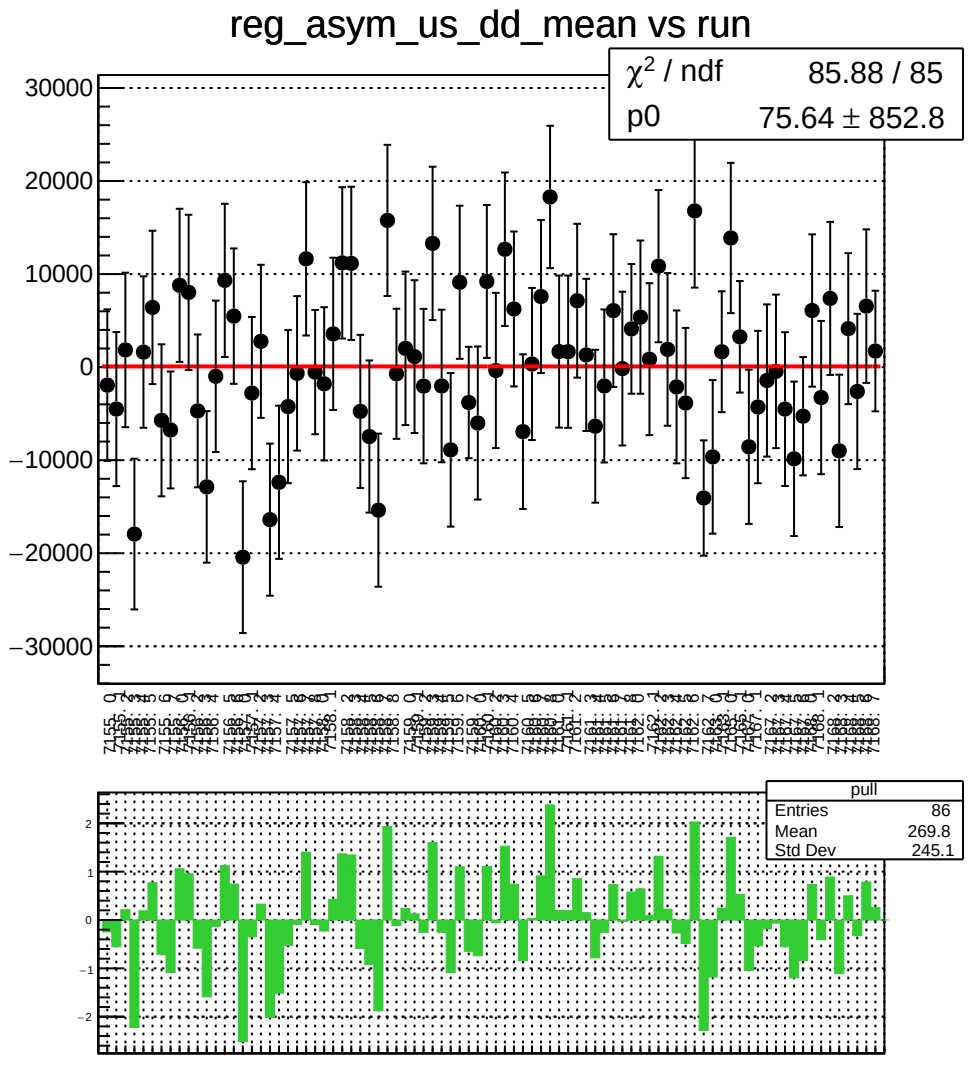

pull1D
Entries 86
Mean 0.009741
Std Dev 0.9245

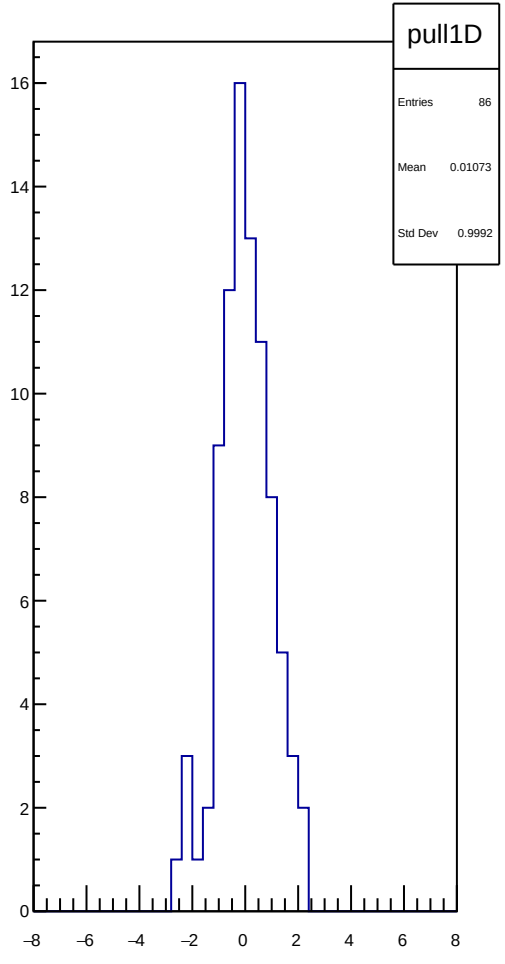

asym_us_avg_correction_rms vs run
χ² / ndf 9258 / 85
p0 2370 ± 1.838
3000
2800
2600
2400
2200
2000

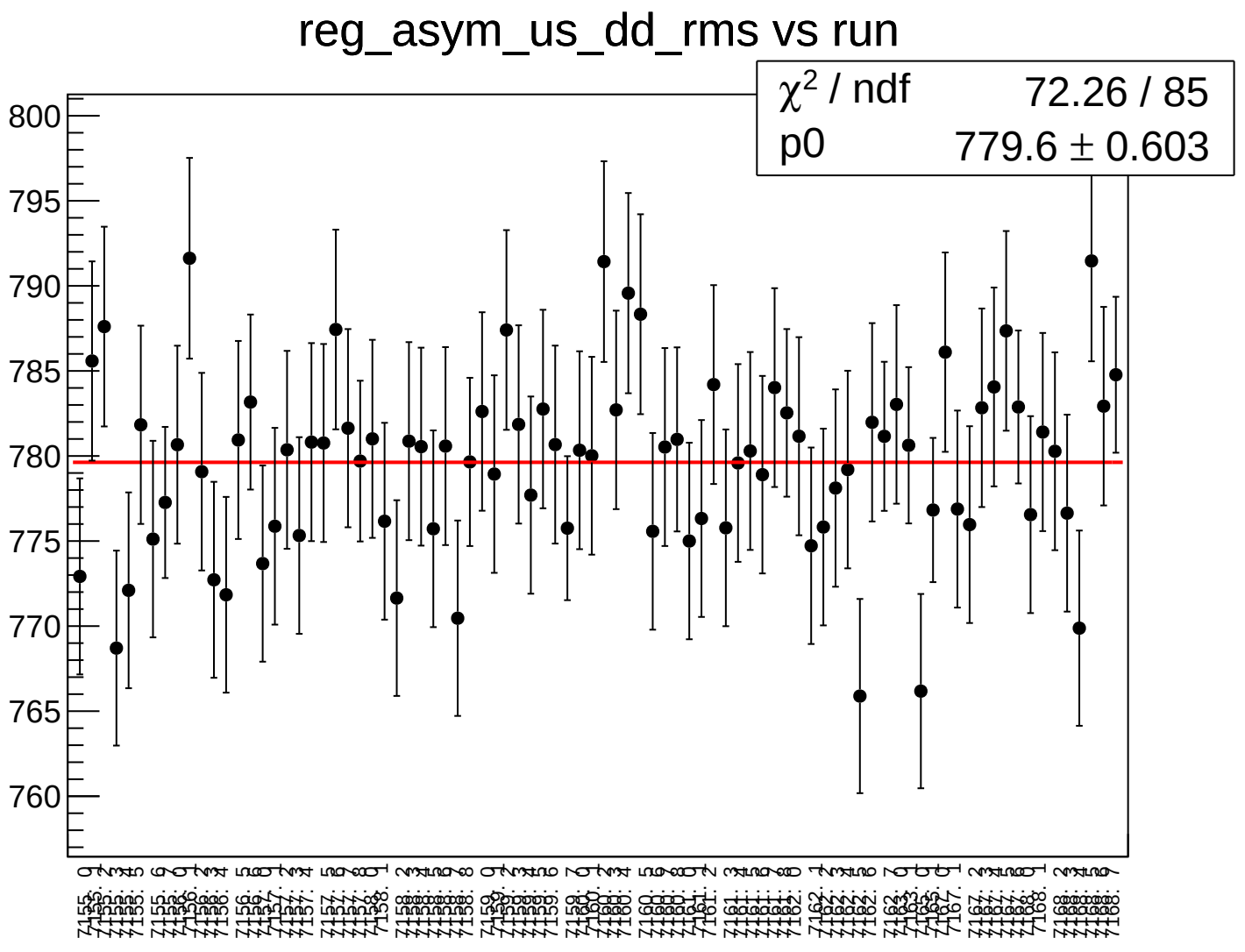

asym_us_avg_mean vs run
×10^3
χ² / ndf 76.93 / 85
p0 −1824 ± 2740
pull
Entries 86
Mean 123.2
Std Dev 83.38

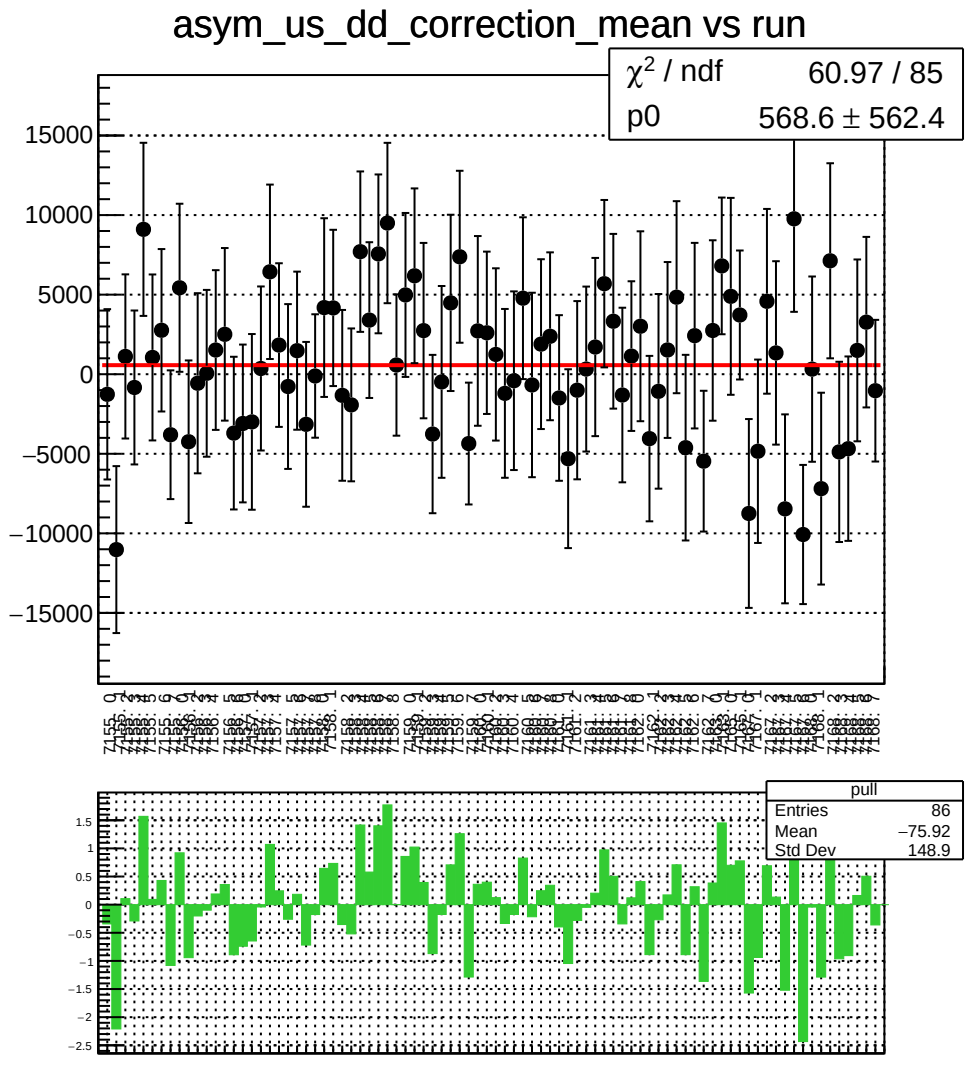

pull1D
Entries 86
Mean −0.009316
Std Dev 0.9458

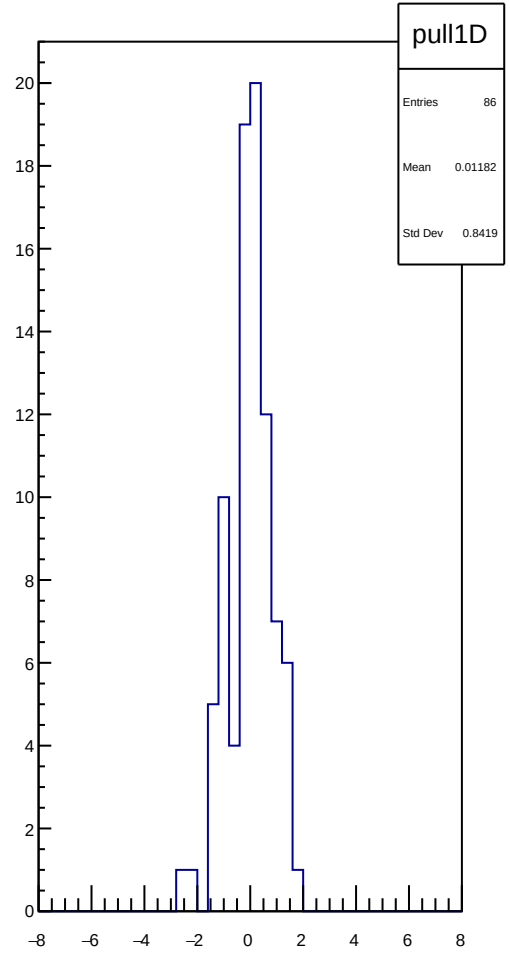

asym_us_avg_rms vs run
χ^2 / ndf 7657 / 85
p0 2499 ± 1.937
3000
2800
2600
2400
2200

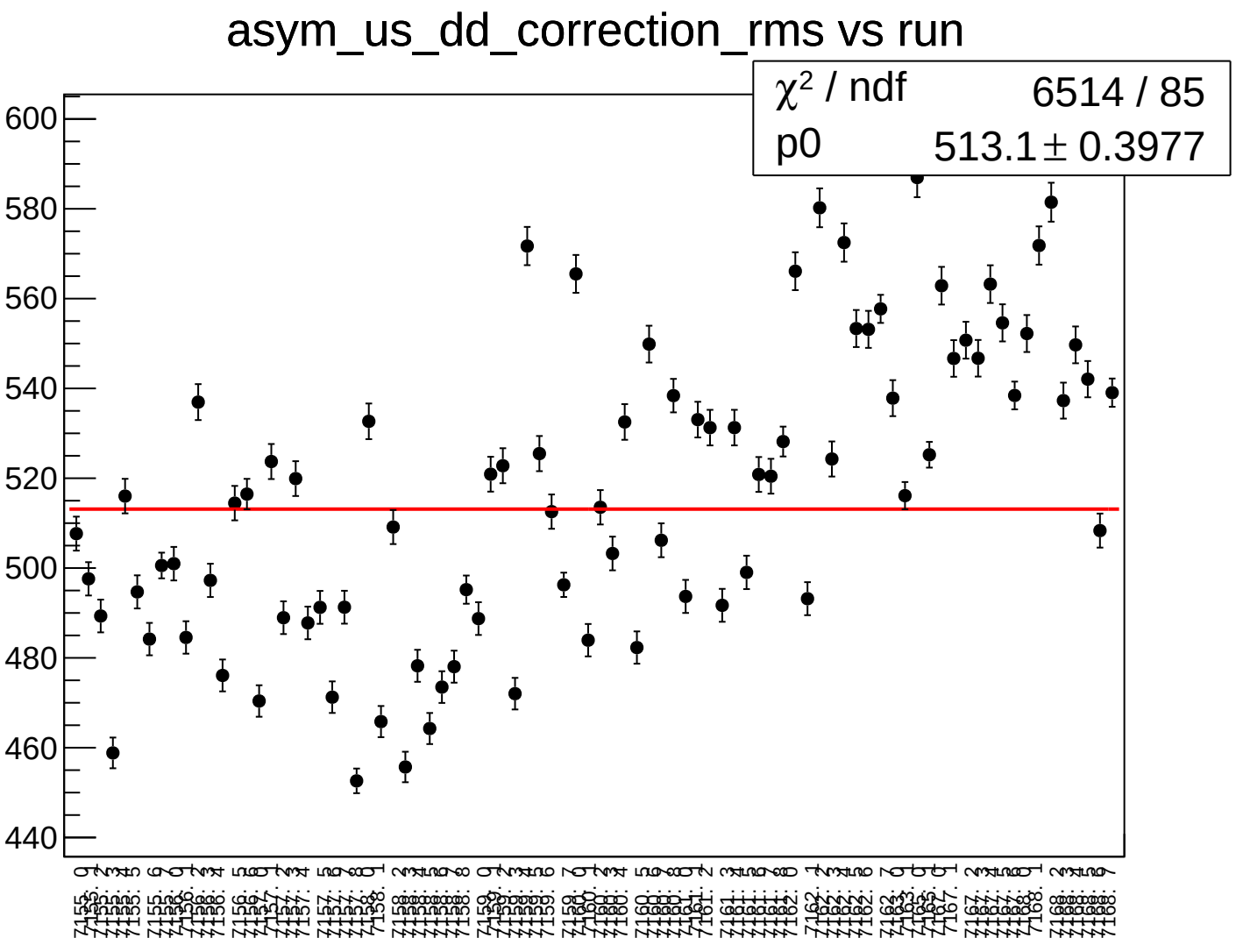

reg_asym_us_dd_mean vs run
χ^2 / ndf 85.88 / 85
p0 75.64 ± 852.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 269.8
Std Dev 245.1
2
1
0
−1
−2

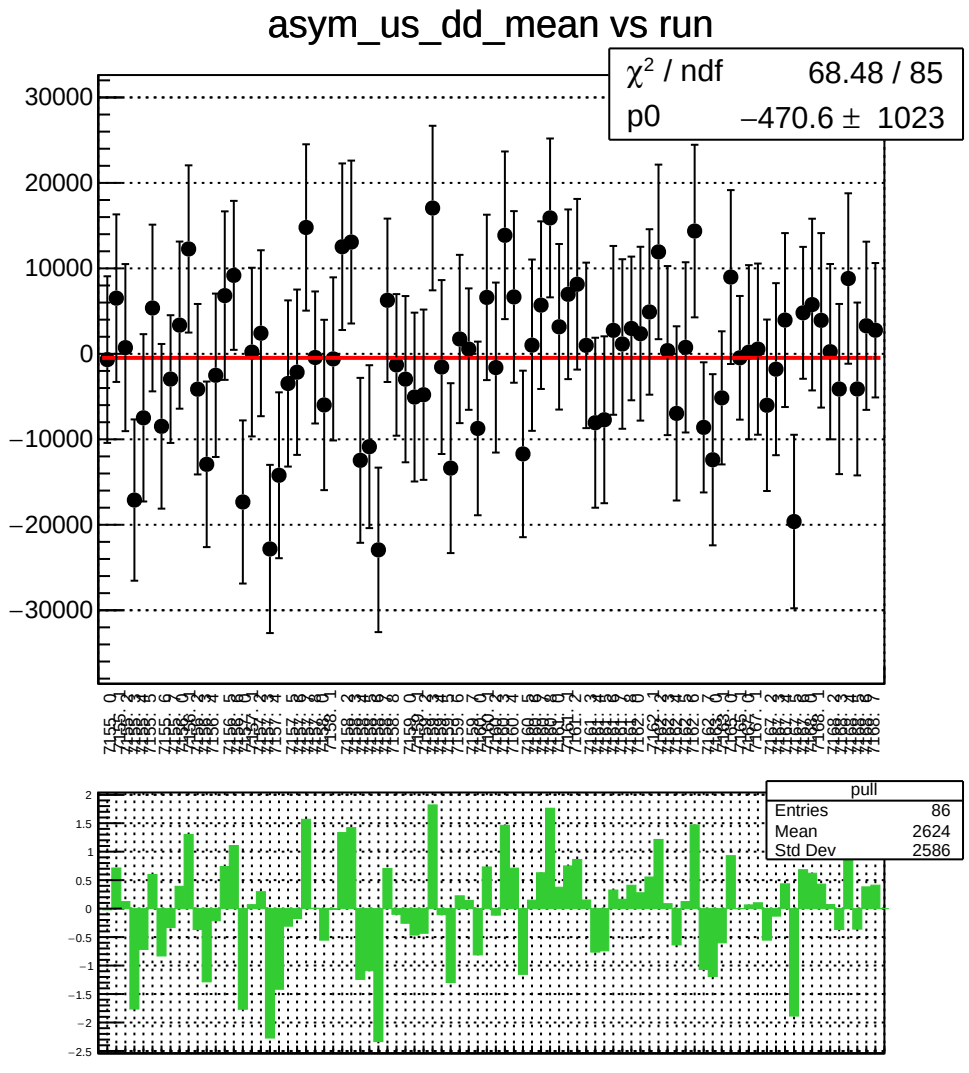

pull1D
Entries 86
Mean 0.01073
Std Dev 0.9992
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

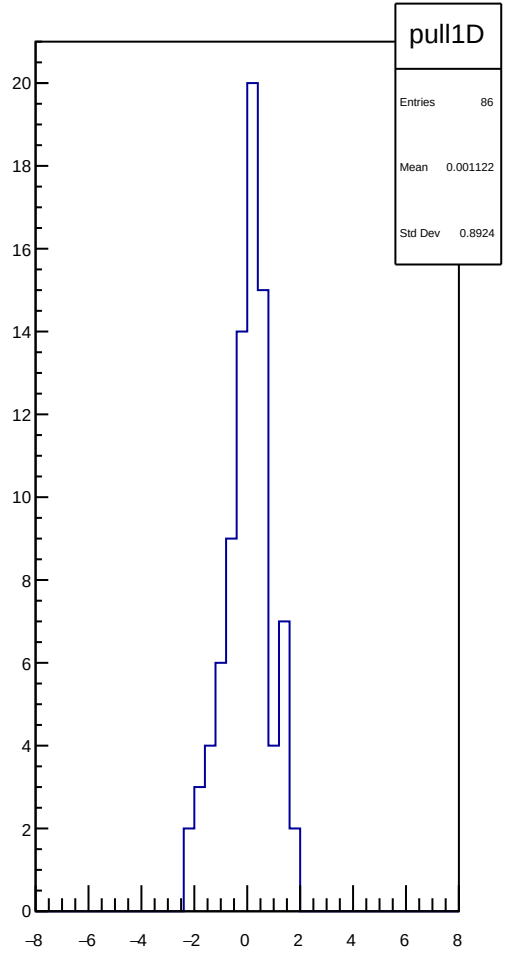

reg_asym_us_dd_rms vs run
χ^2 / ndf 72.26 / 85
p0 779.6 ± 0.603
800
795
790
785
780
775
770
765
760

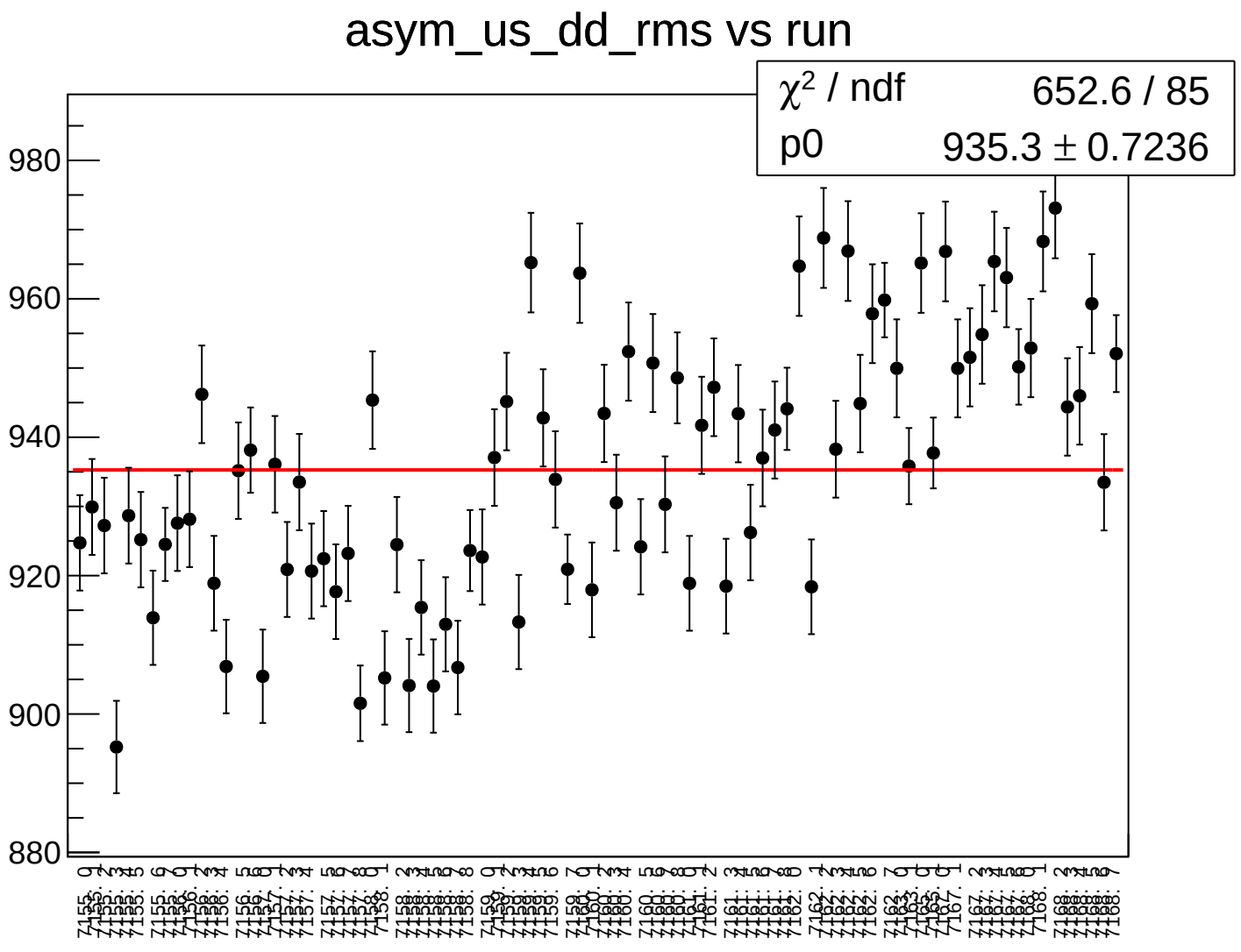

asym_us_dd_correction_mean vs run
χ² / ndf 60.97 / 85
p0 568.6 ± 562.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −75.92
Std Dev 148.9
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

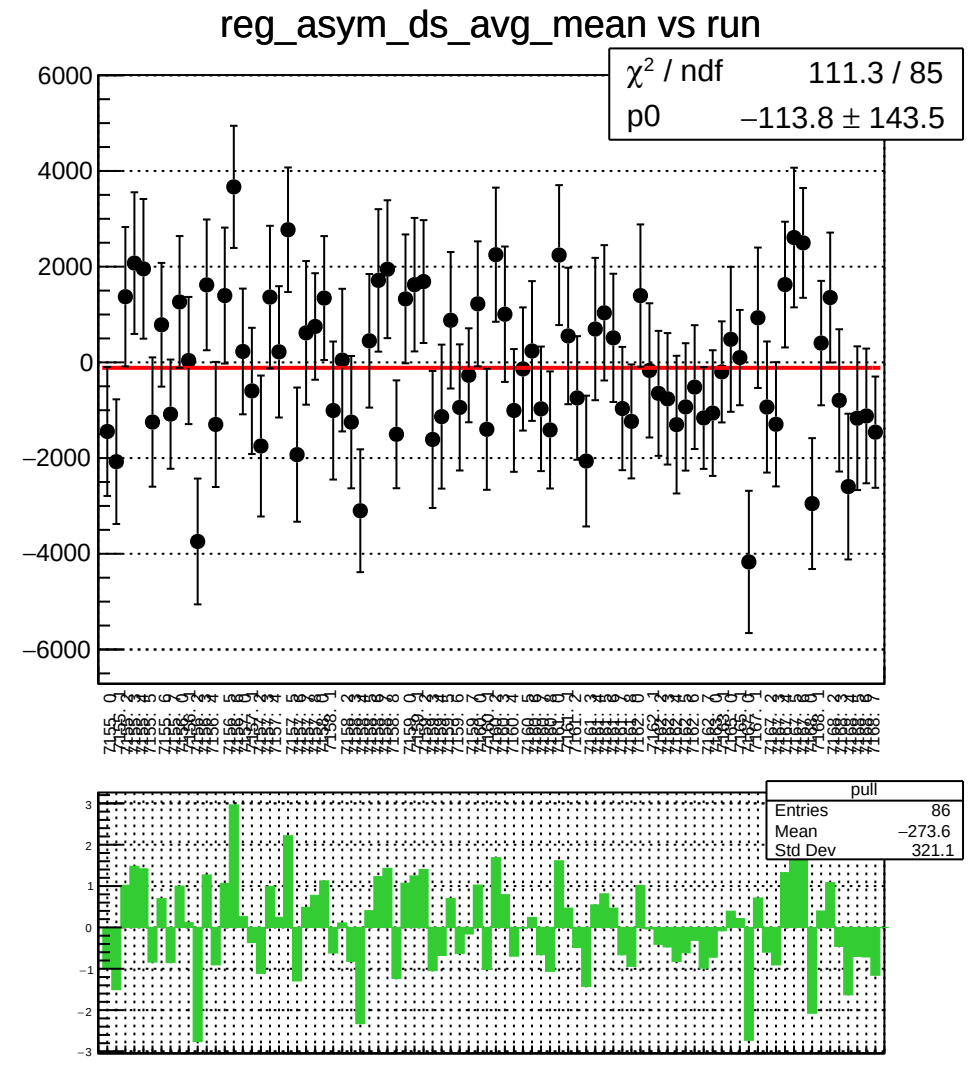

pull1D
Entries 86
Mean 0.01182
Std Dev 0.8419
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

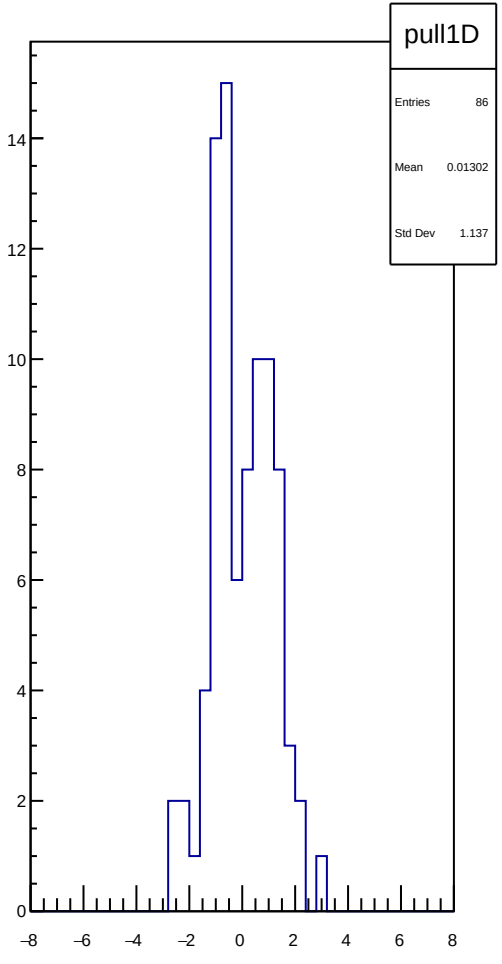

asym_us_dd_correction_rms vs run
χ² / ndf 6514 / 85
p0 513.1 ± 0.3977
600
580
560
540
520
500
480
460
440

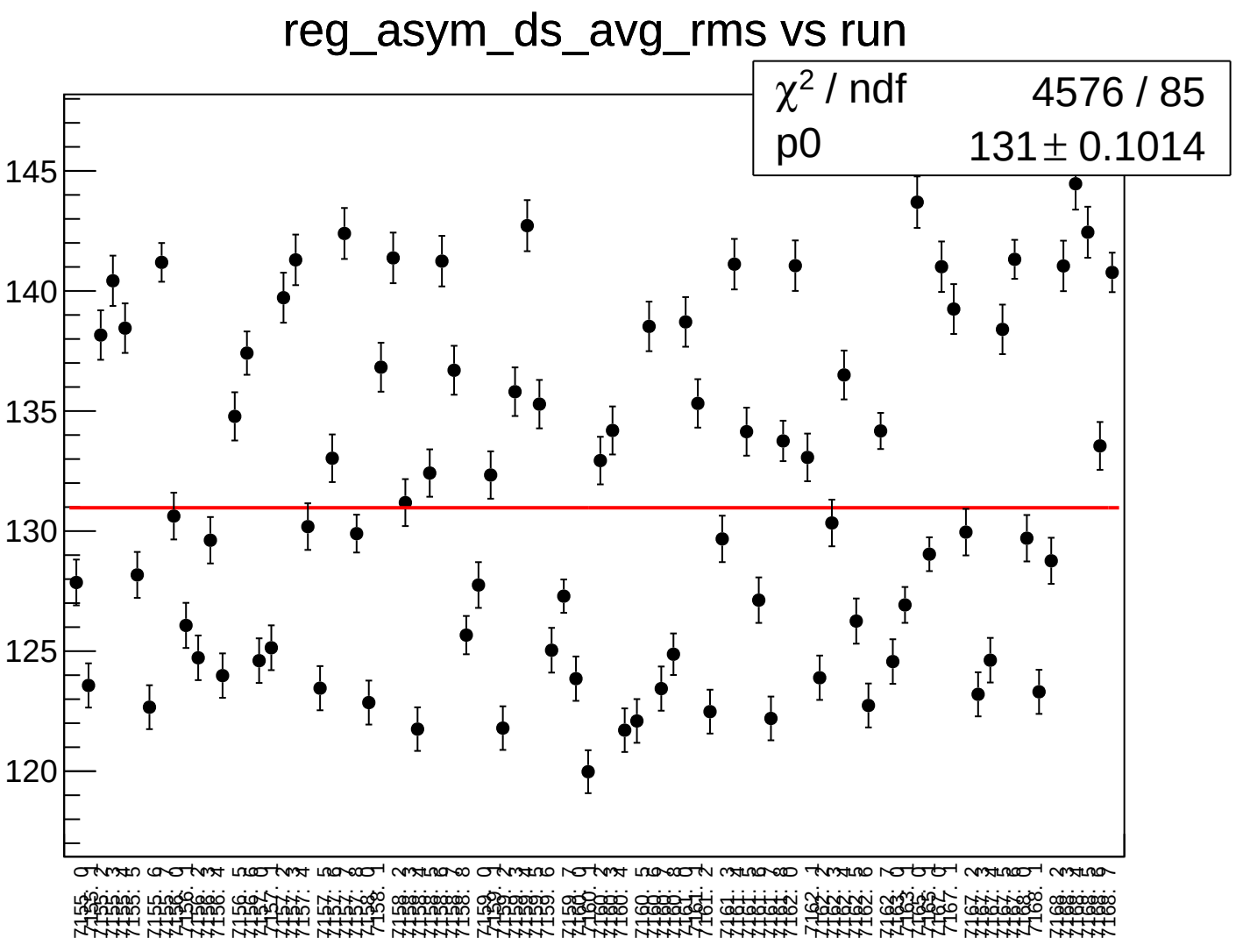

asym_us_dd_mean vs run
χ² / ndf 68.48 / 85
p0 −470.6 ± 1023
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 2624
Std Dev 2586
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

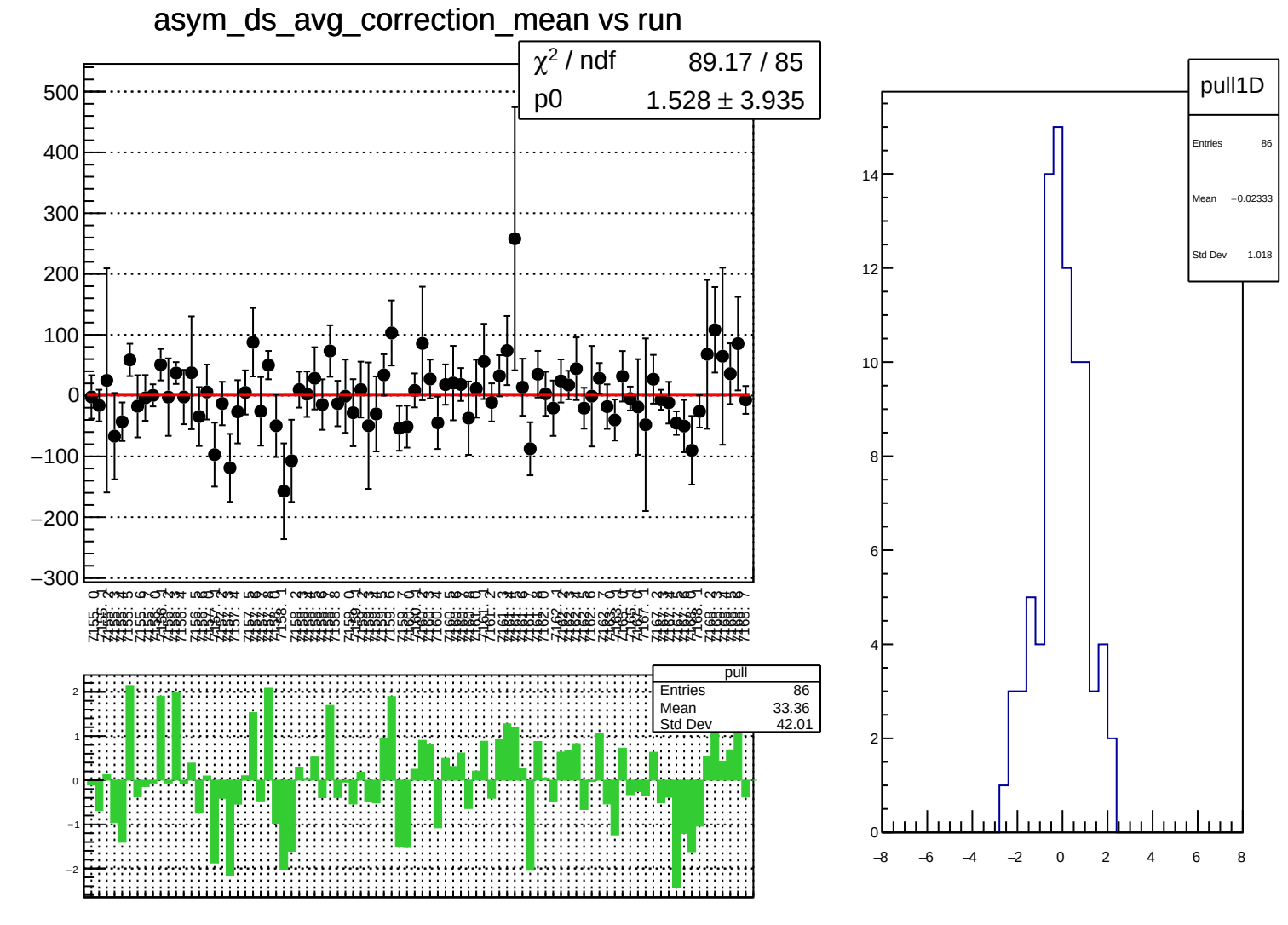

pull1D
Entries 86
Mean 0.001122
Std Dev 0.8924
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

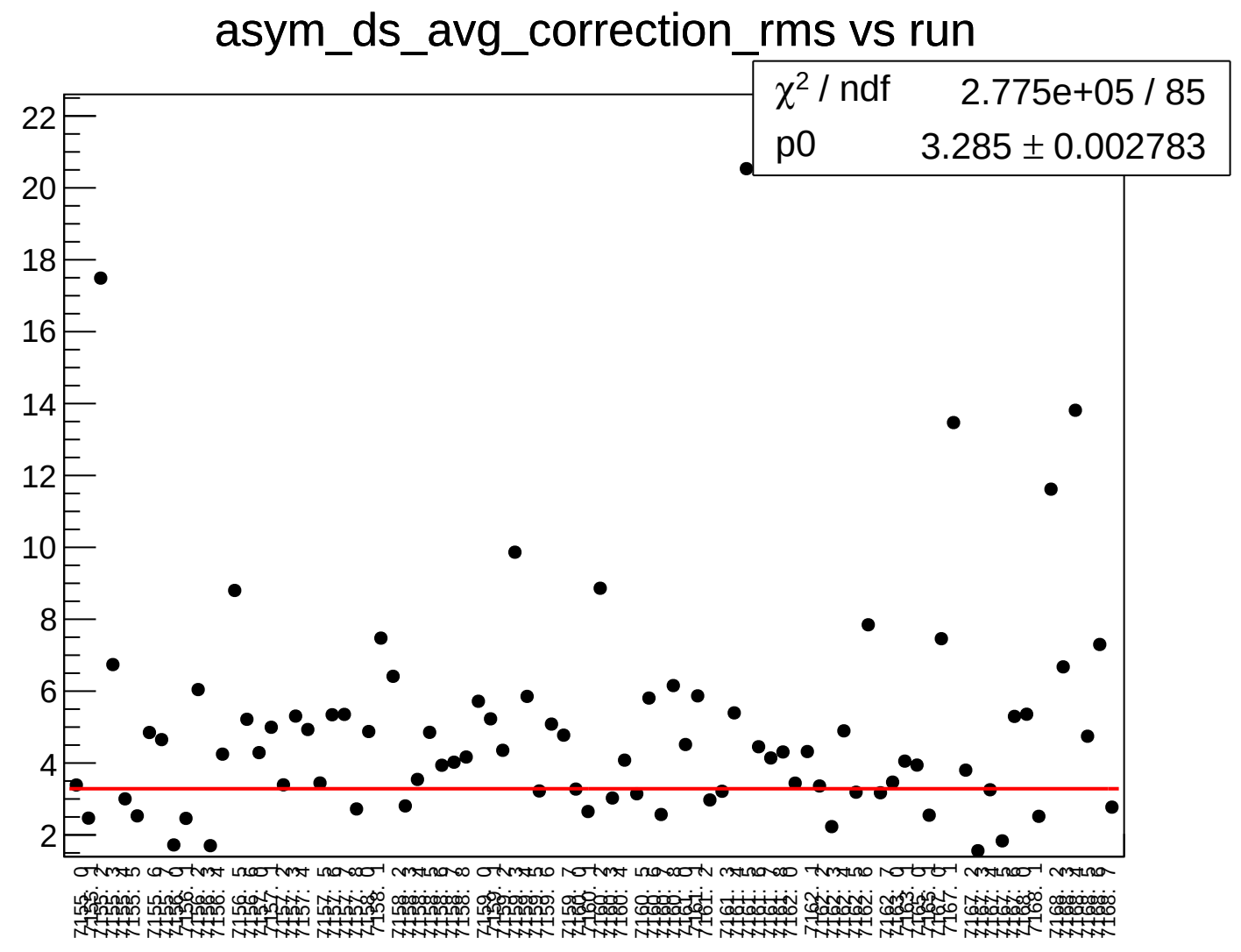

asym_us_dd_rms vs run
χ^2 / ndf 652.6 / 85
p0 935.3 ± 0.7236
980
960
940
920
900
880

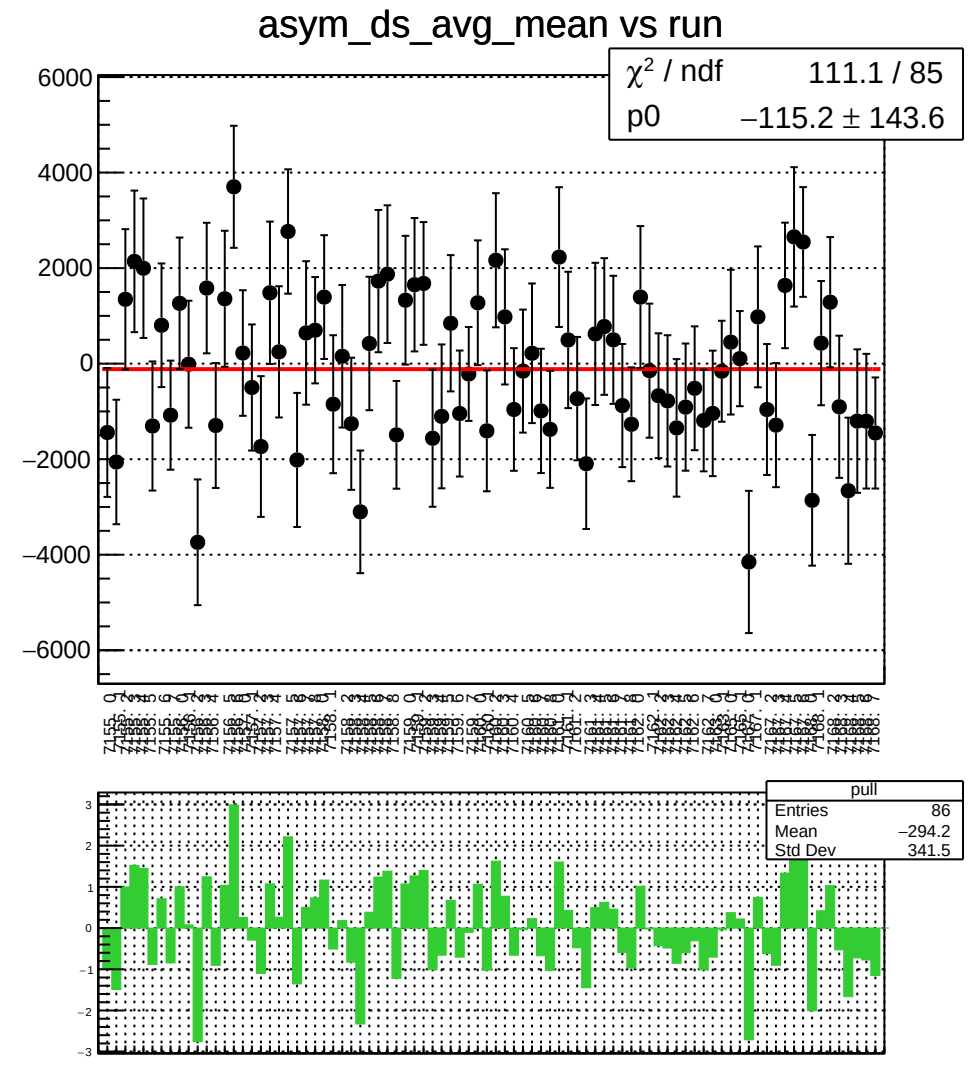

reg_asym_ds_avg_mean vs run
χ² / ndf 111.3 / 85
p0 −113.8 ± 143.5
pull
Entries 86
Mean −273.6
Std Dev 321.1

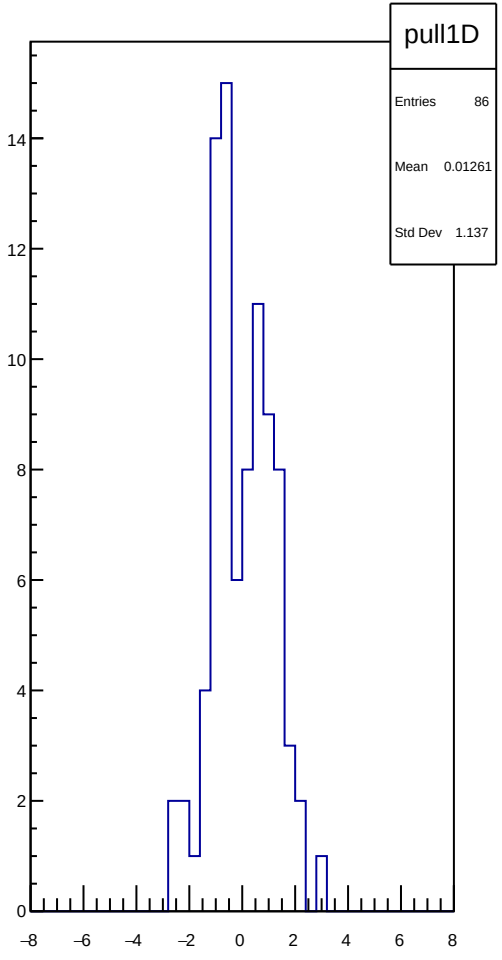

pull1D
Entries 86
Mean 0.01302
Std Dev 1.137

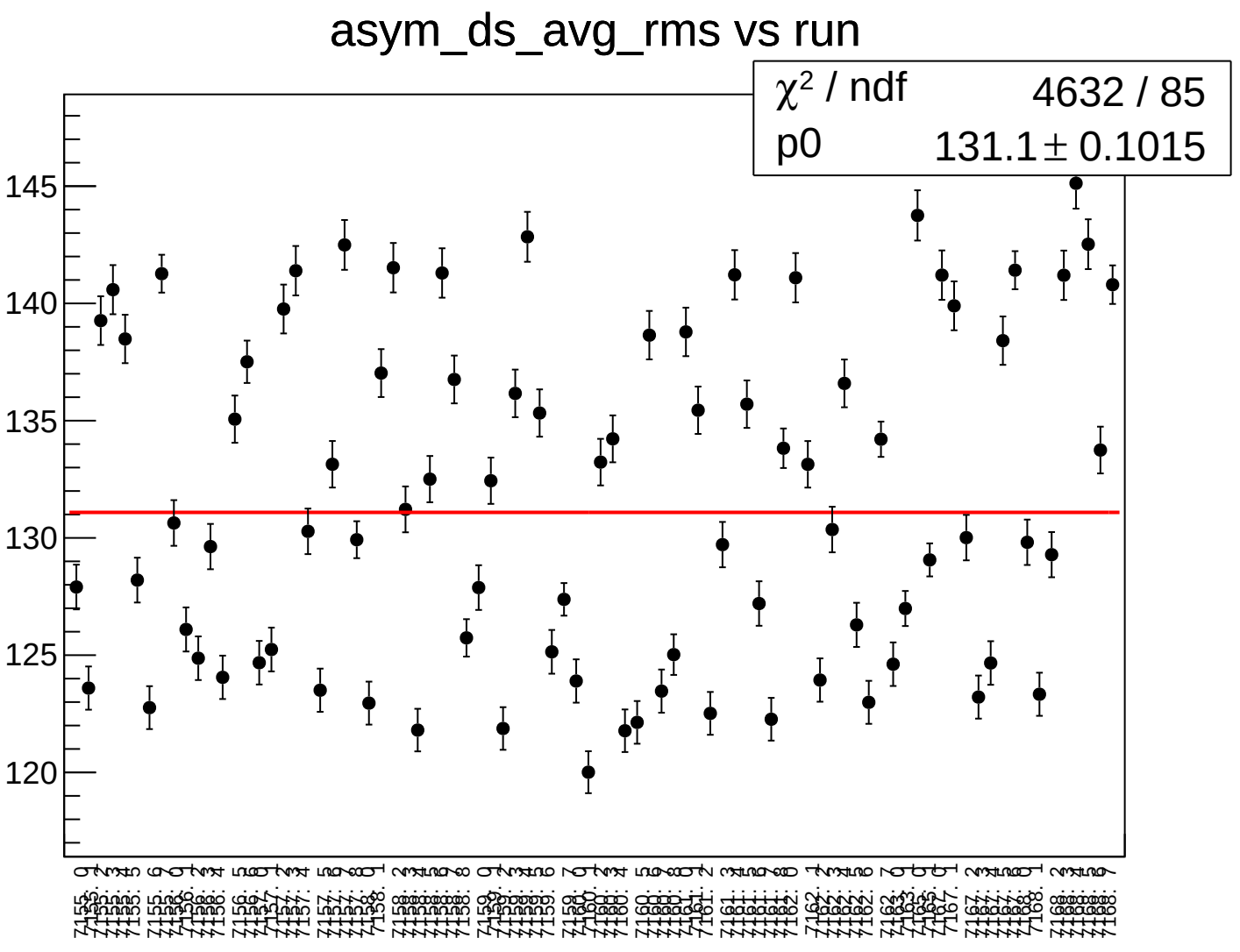

reg_asym_ds_avg_rms vs run
χ^2 / ndf 4576 / 85
p0 131 ± 0.1014
145
140
135
130
125
120

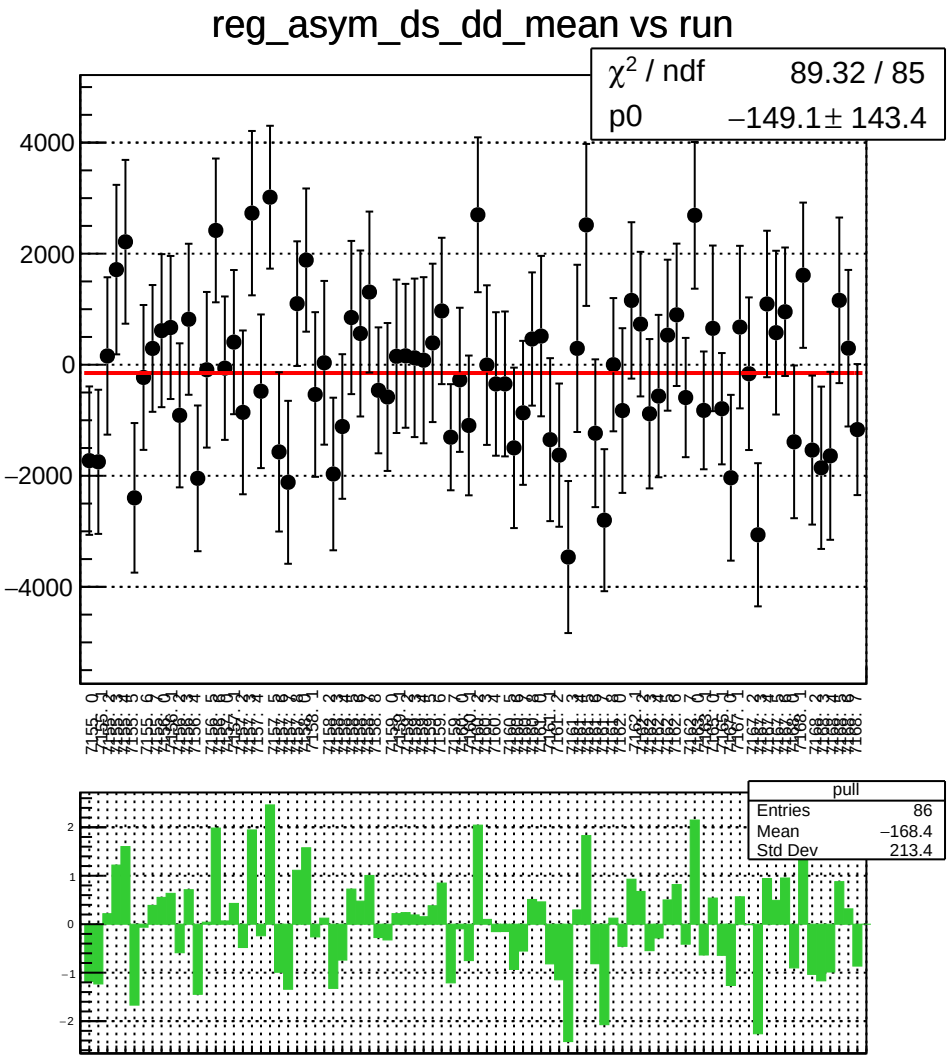

asym_ds_avg_correction_mean vs run
χ² / ndf 89.17 / 85
p0 1.528 ± 3.935
pull
Entries 86
Mean 33.36
Std Dev 42.01
pull1D
Entries 86
Mean −0.02333
Std Dev 1.018

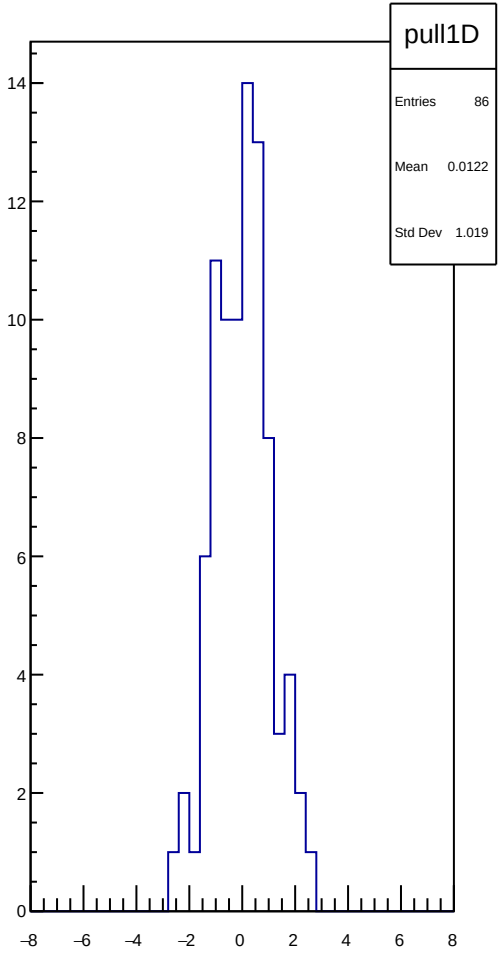

asym_ds_avg_correction_rms vs run
χ² / ndf 2.775e+05 / 85
p0 3.285 ± 0.002783
22
20
18
16
14
12
10
8
6
4
2

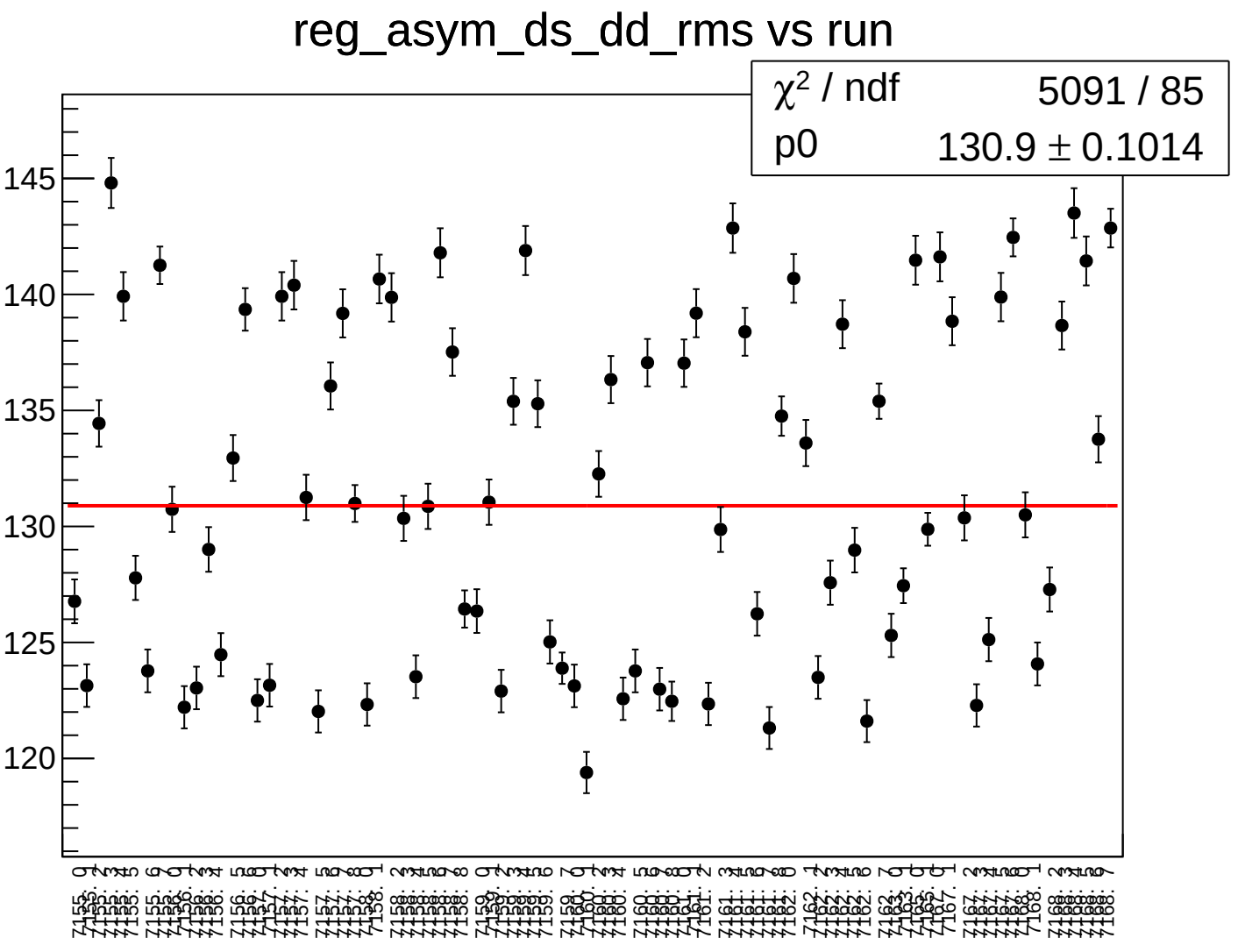

asym_ds_avg_mean vs run
χ² / ndf 111.1 / 85
p0 −115.2 ± 143.6
pull
Entries 86
Mean −294.2
Std Dev 341.5

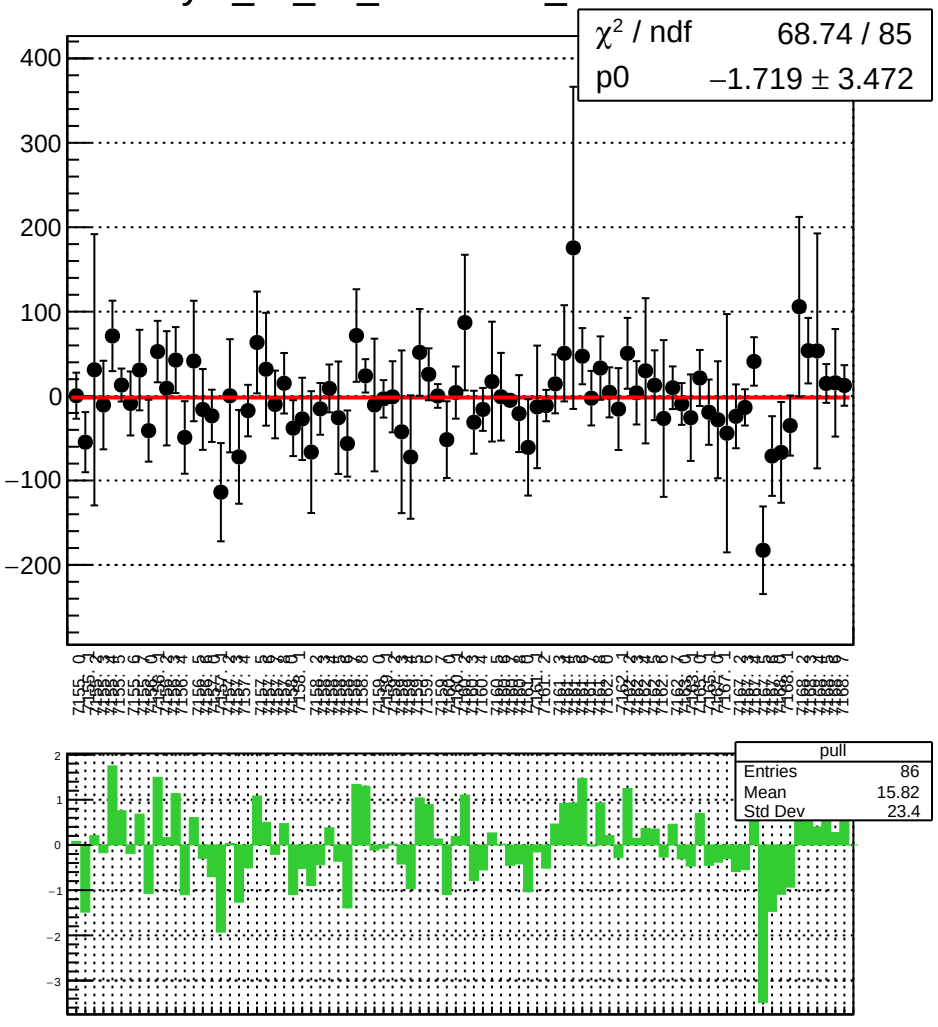

pull1D
Entries 86
Mean 0.01261
Std Dev 1.137

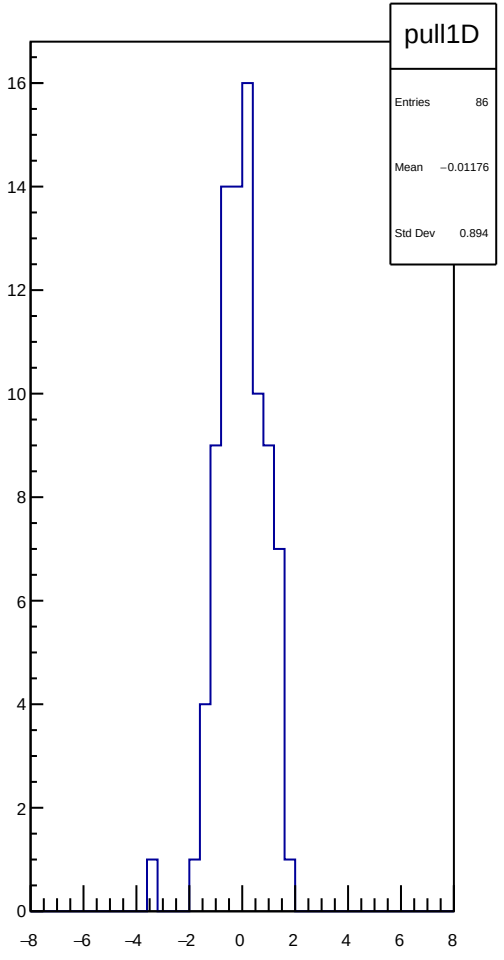

asym_ds_avg_rms vs run
χ² / ndf 4632 / 85
p0 131.1 ± 0.1015
145
140
135
130
125
120

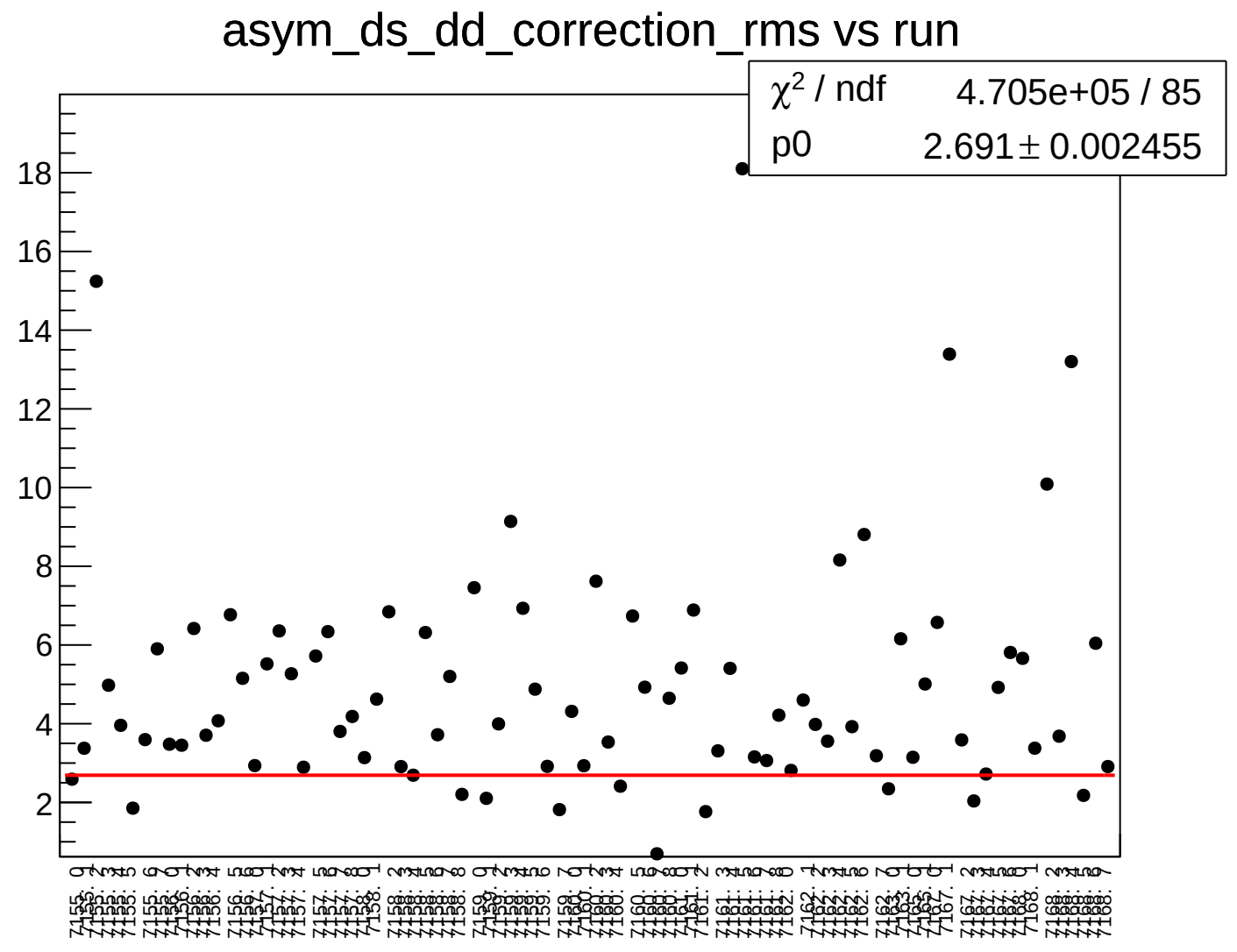

reg_asym_ds_dd_mean vs run
χ² / ndf 89.32 / 85
p0 −149.1± 143.4
4000
2000
0
−2000
−4000
pull
Entries 86
Mean −168.4
Std Dev 213.4
2
1
0
−1
−2

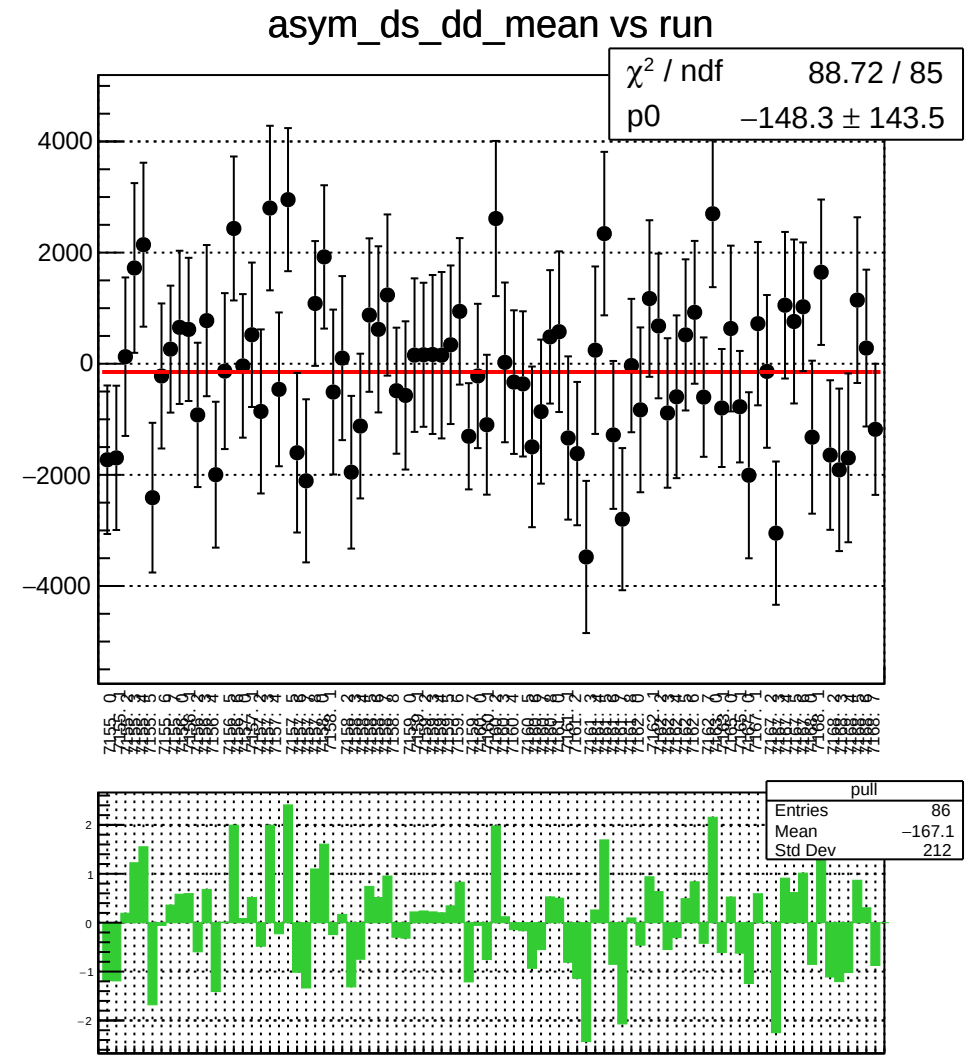

pull1D
Entries 86
Mean 0.0122
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

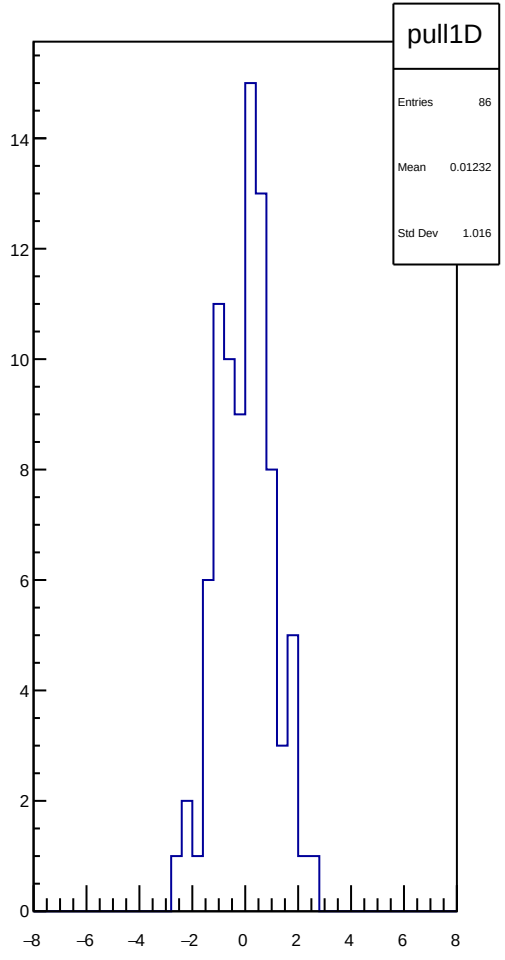

reg_asym_ds_dd_rms vs run
χ^2 / ndf 5091 / 85
p0 130.9 ± 0.1014
145
140
135
130
125
120

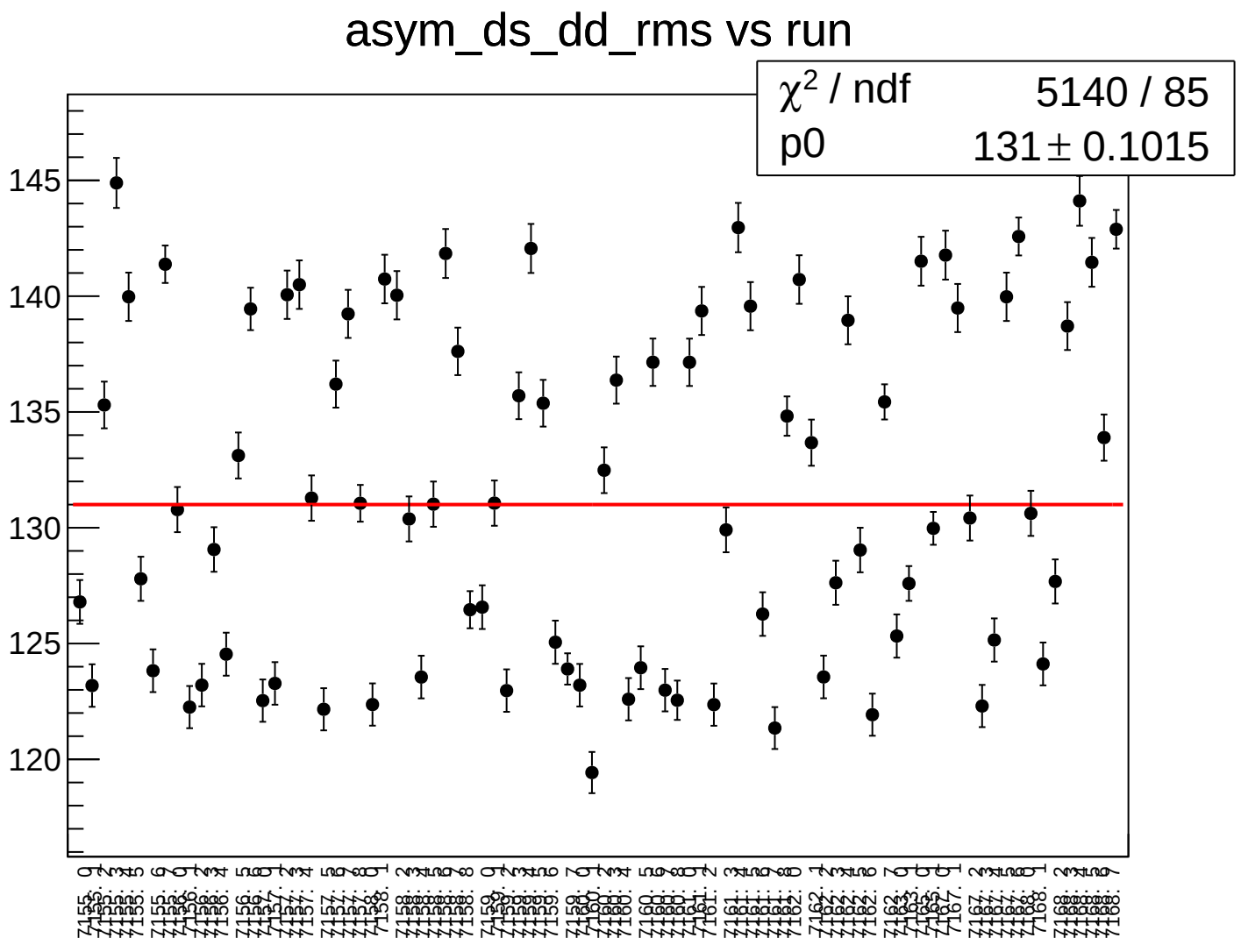

asym_ds_dd_correction_mean vs run
χ² / ndf 68.74 / 85
p0 −1.719 ± 3.472
pull
Entries 86
Mean 15.82
Std Dev 23.4

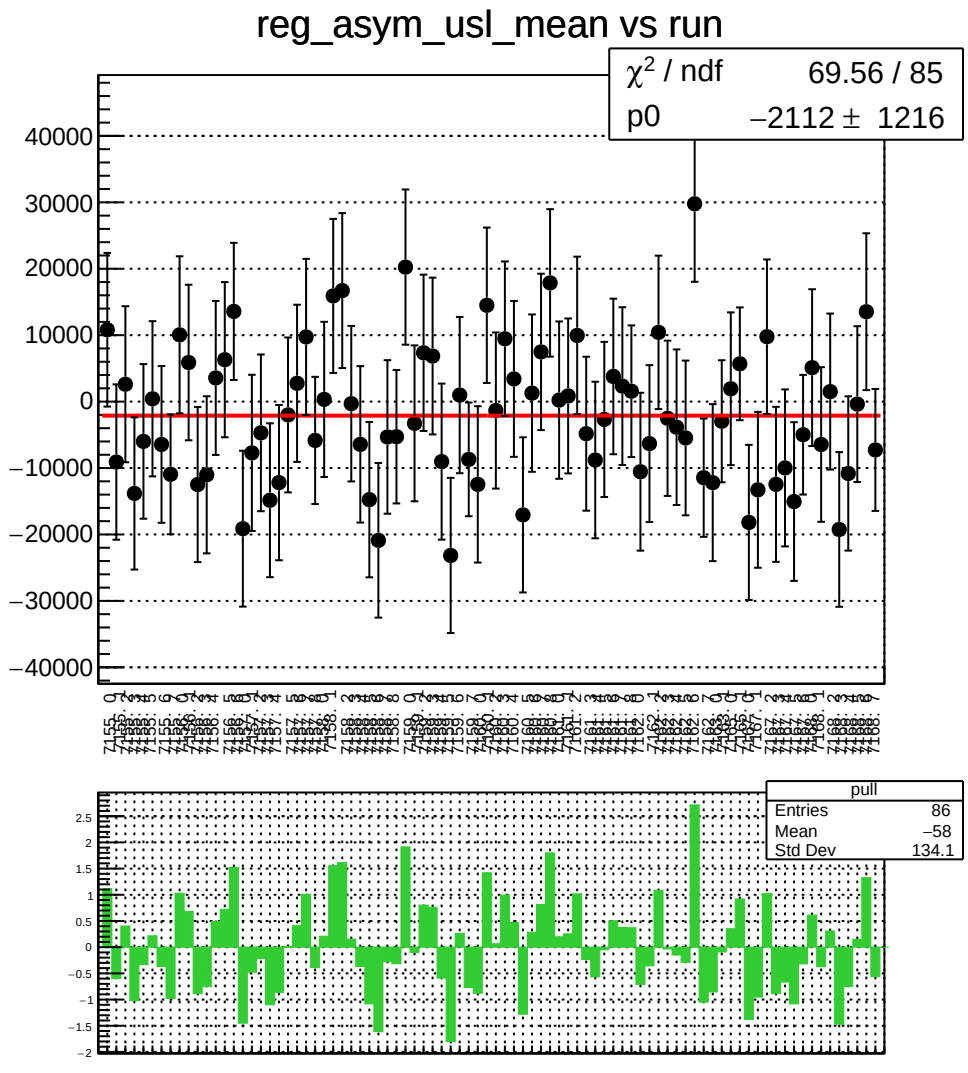

pull1D
Entries 86
Mean −0.01176
Std Dev 0.894

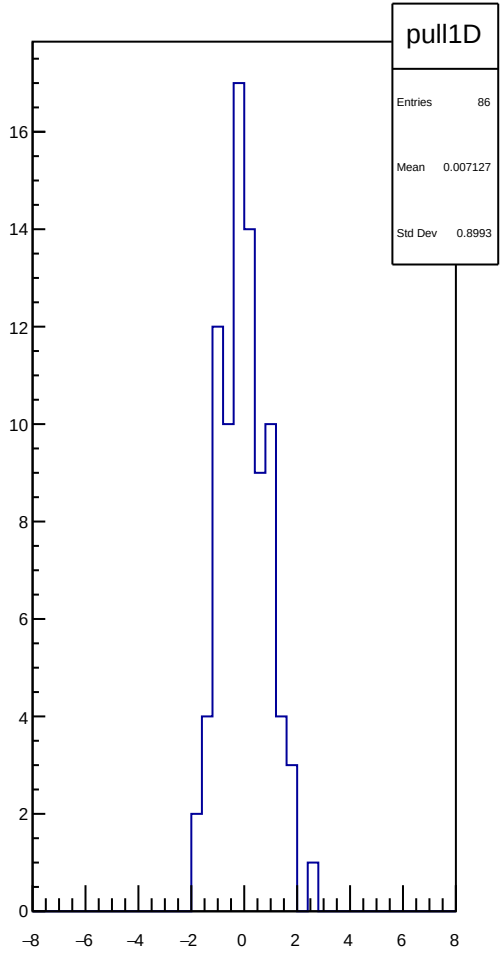

asym_ds_dd_correction_rms vs run
χ^2 / ndf 4.705e+05 / 85
p0 2.691 ± 0.002455
18
16
14
12
10
8
6
4
2

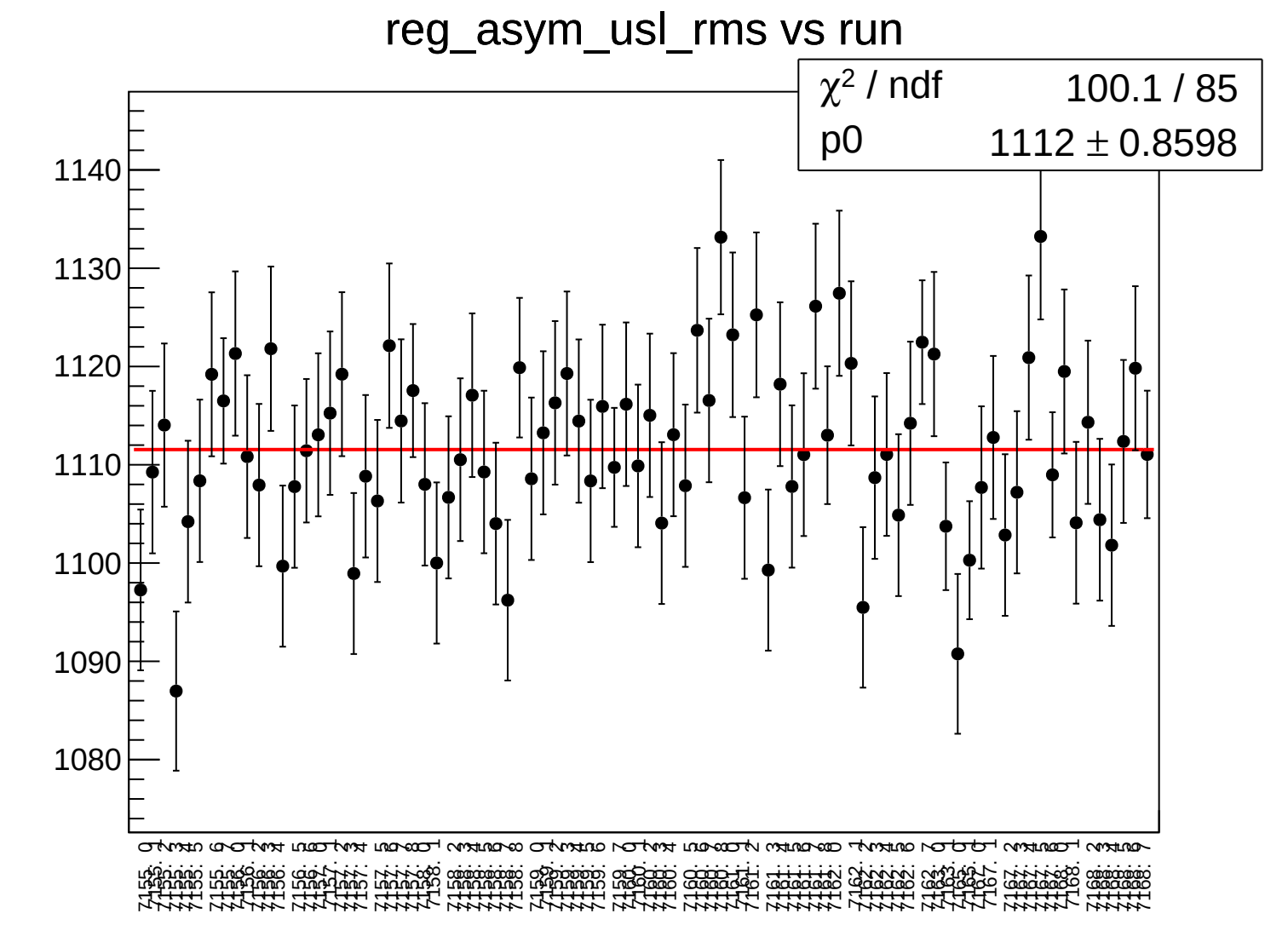

asym_ds_dd_mean vs run
χ² / ndf 88.72 / 85
p0 −148.3 ± 143.5
4000
2000
0
−2000
−4000
pull
Entries 86
Mean −167.1
Std Dev 212
2
1
0
−1
−2

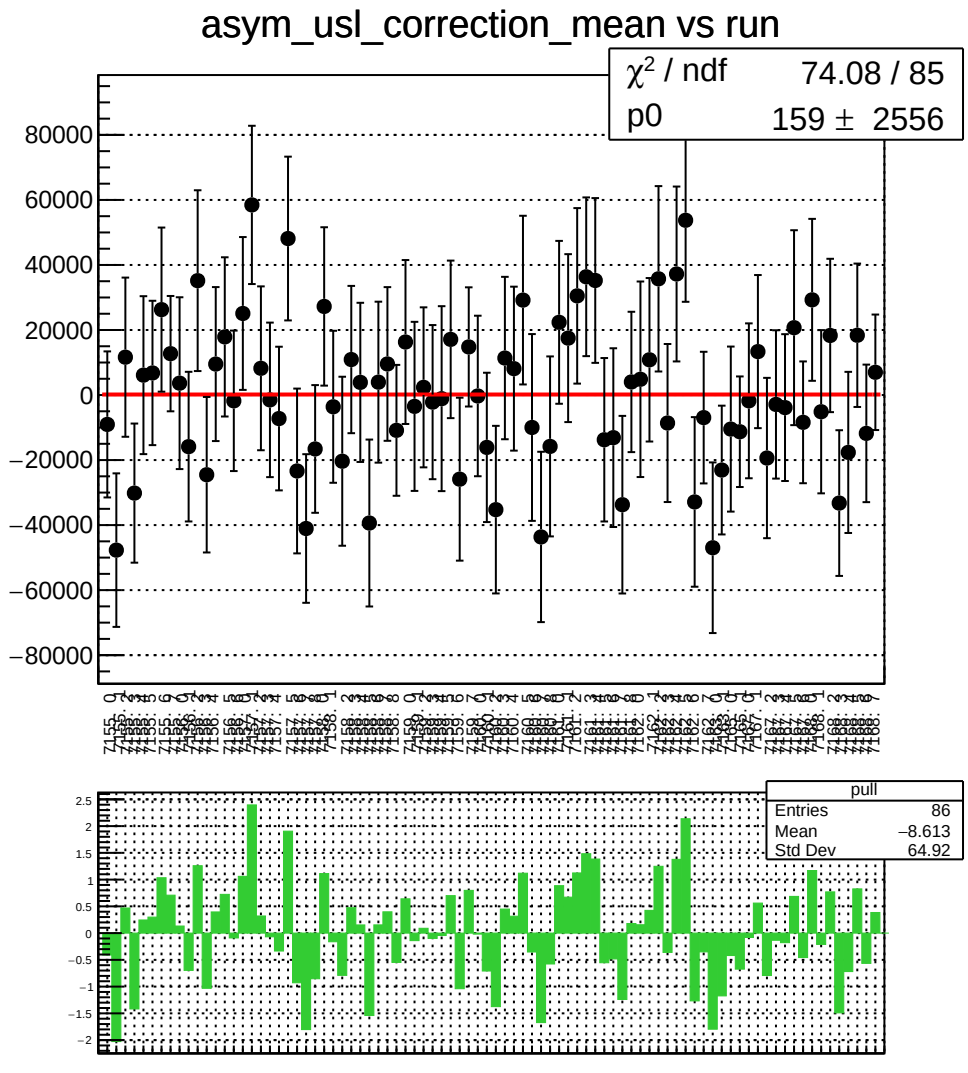

pull1D
Entries 86
Mean 0.01232
Std Dev 1.016
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

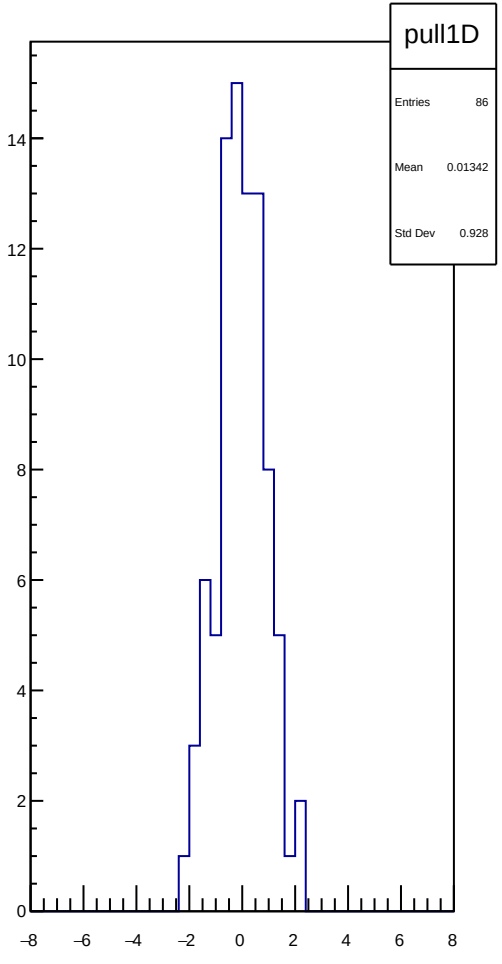

asym_ds_dd_rms vs run
χ^2 / ndf 5140 / 85
p0 131 ± 0.1015
145
140
135
130
125
120

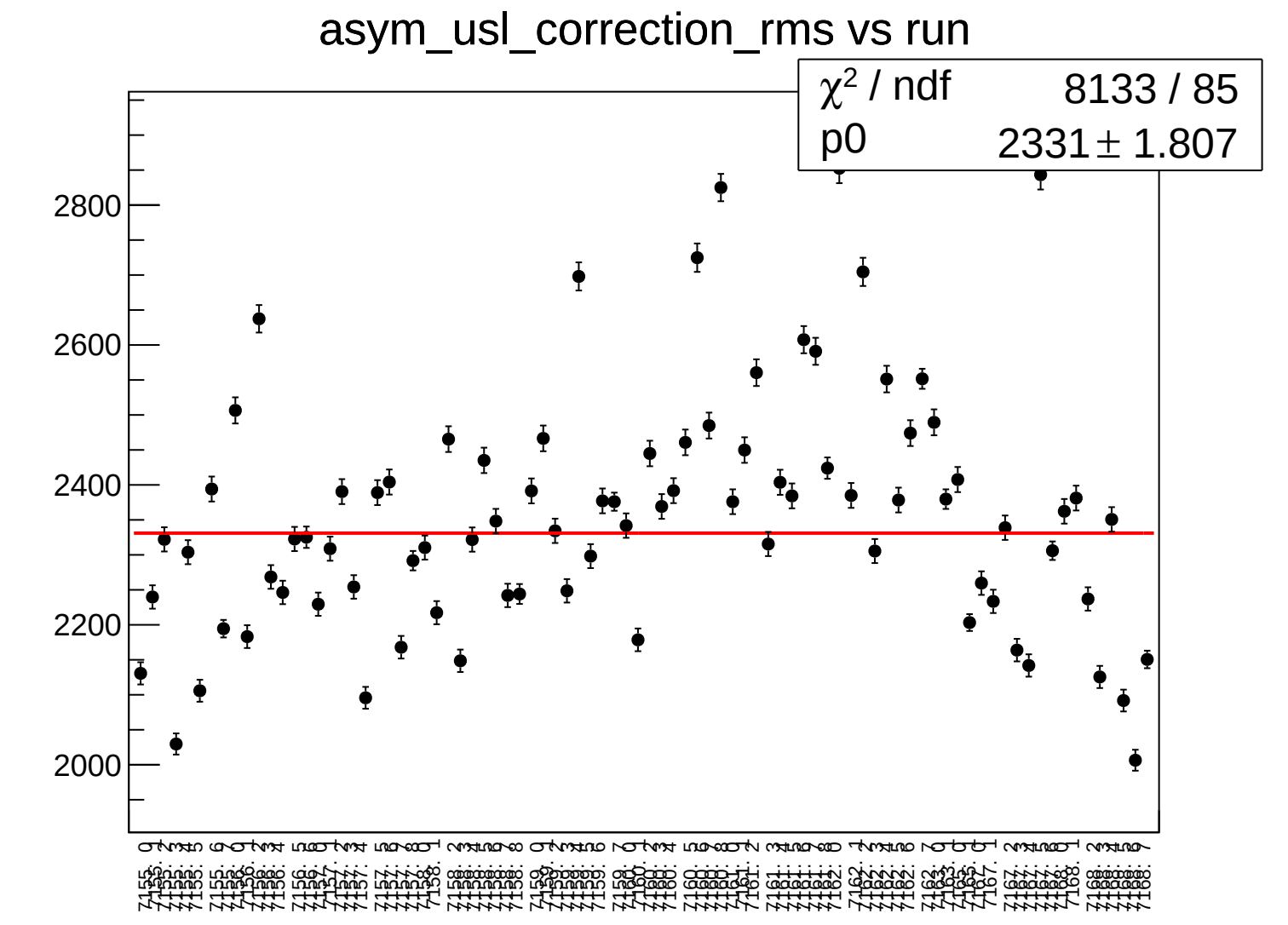

reg_asym_usl_mean vs run
χ² / ndf 69.56 / 85
p0 −2112 ± 1216
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 86
Mean −58
Std Dev 134.1
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

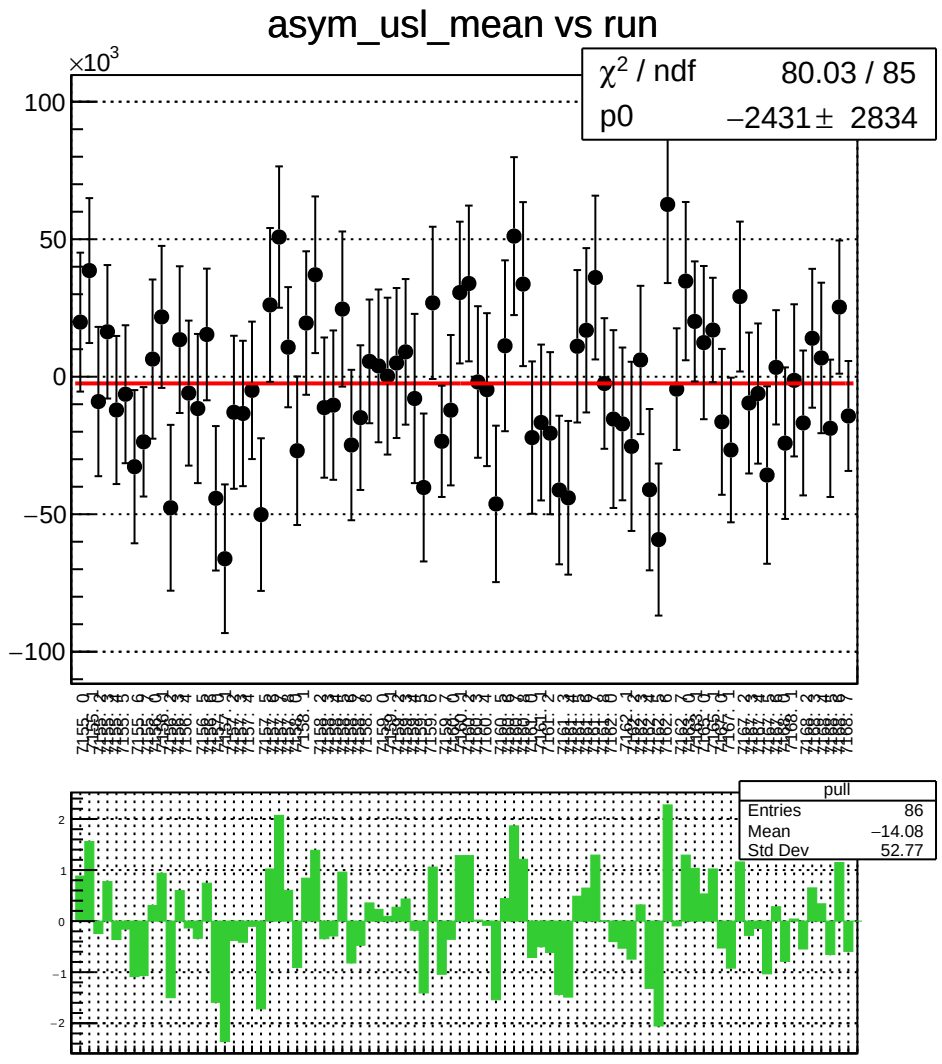

pull1D
Entries 86
Mean 0.007127
Std Dev 0.8993
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

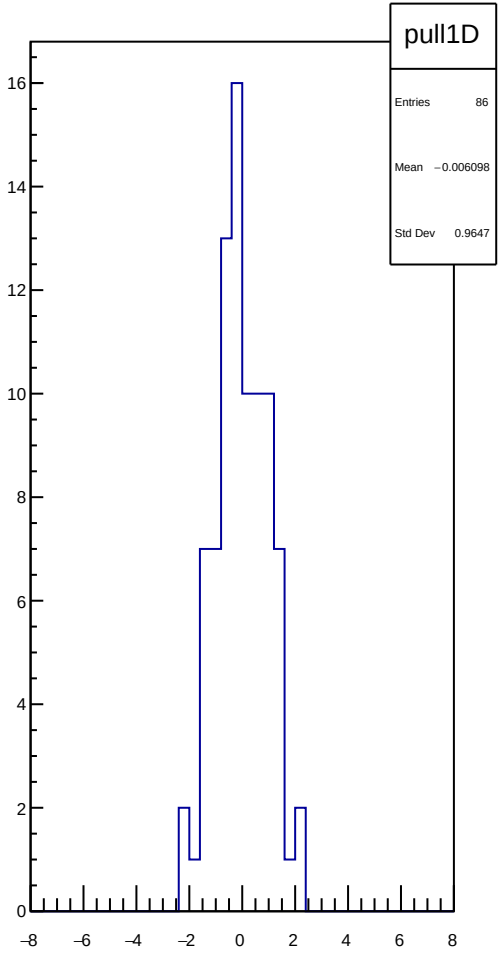

reg_asym_usl_rms vs run
χ² / ndf 100.1 / 85
p0 1112 ± 0.8598
1140
1130
1120
1110
1100
1090
1080

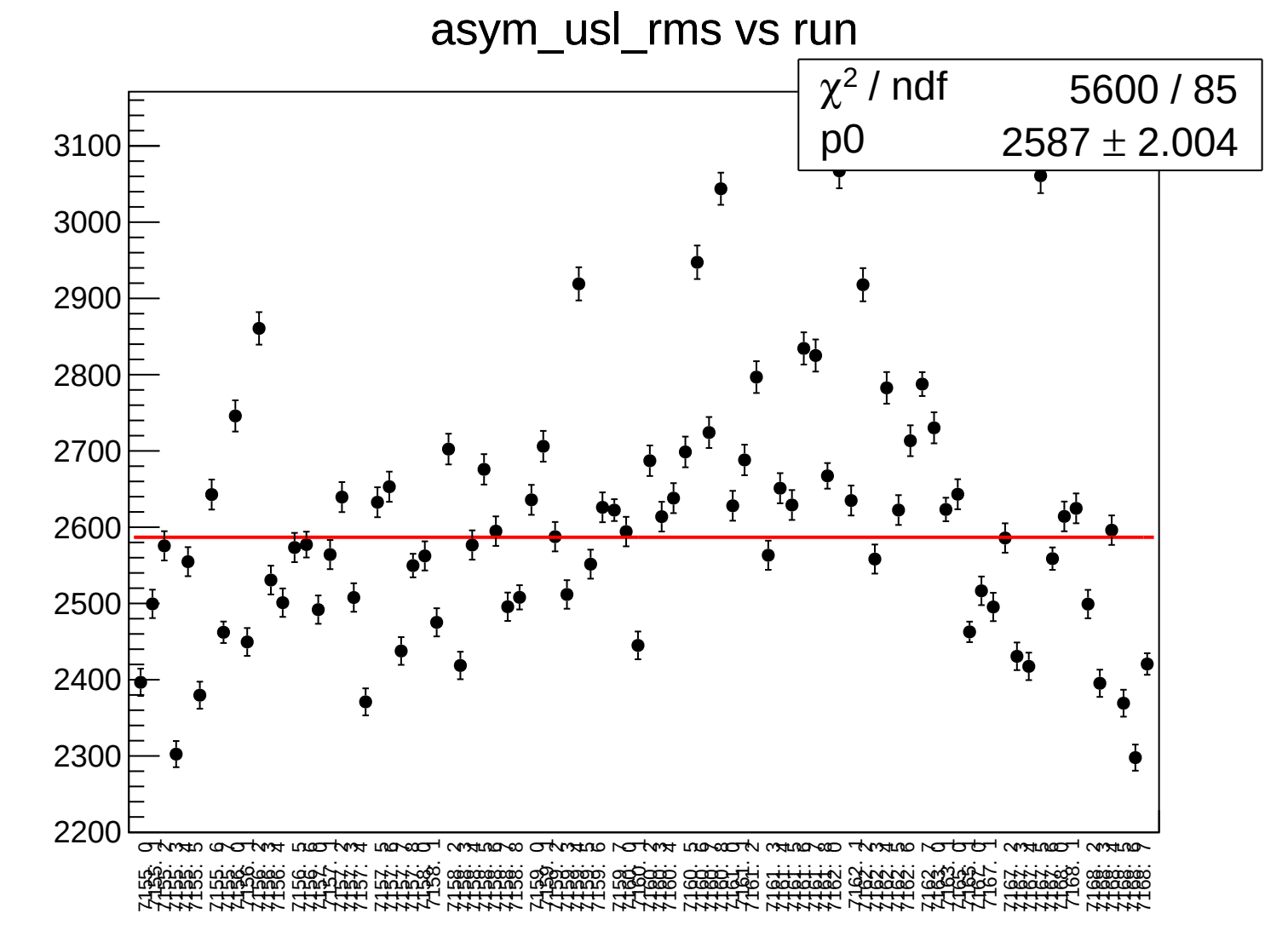

asym_usl_correction_mean vs run
χ² / ndf 74.08 / 85
p0 159 ± 2556
pull
Entries 86
Mean −8.613
Std Dev 64.92

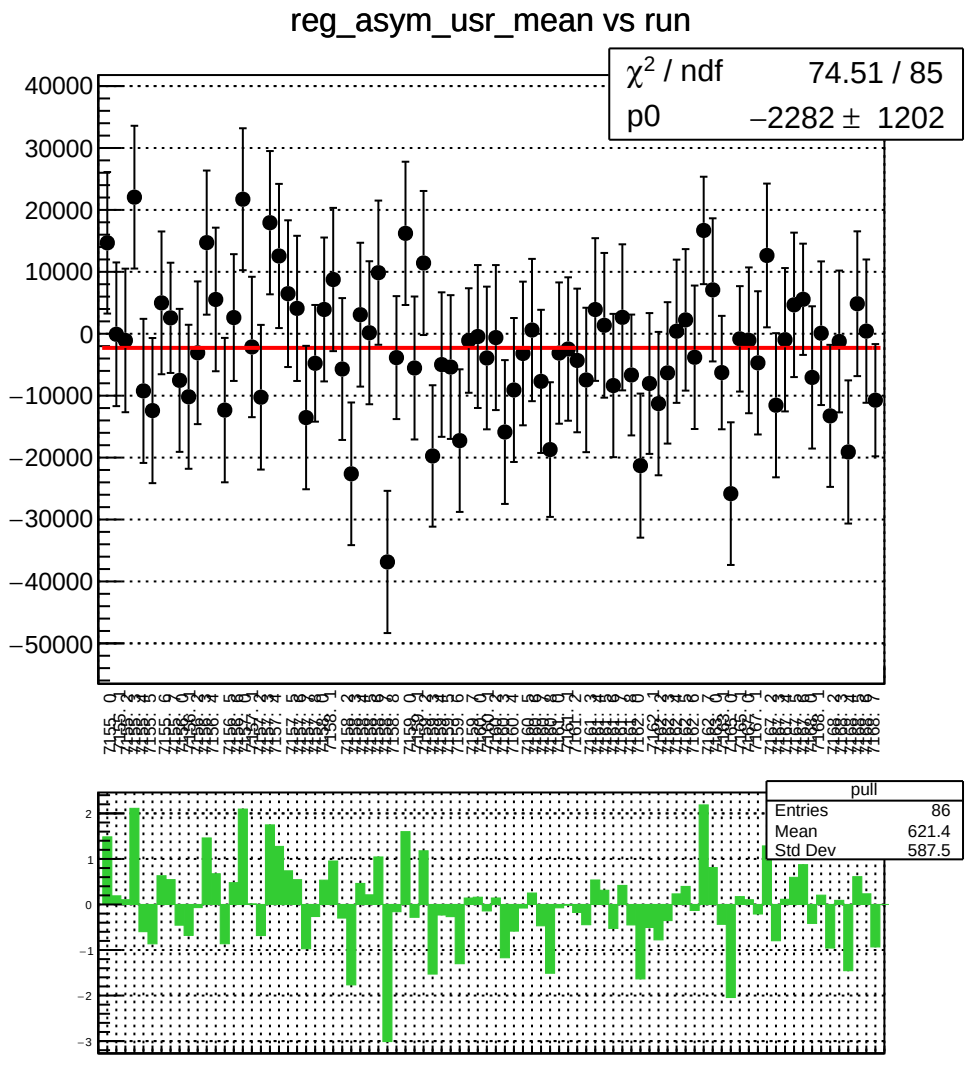

pull1D
Entries 86
Mean 0.01342
Std Dev 0.928

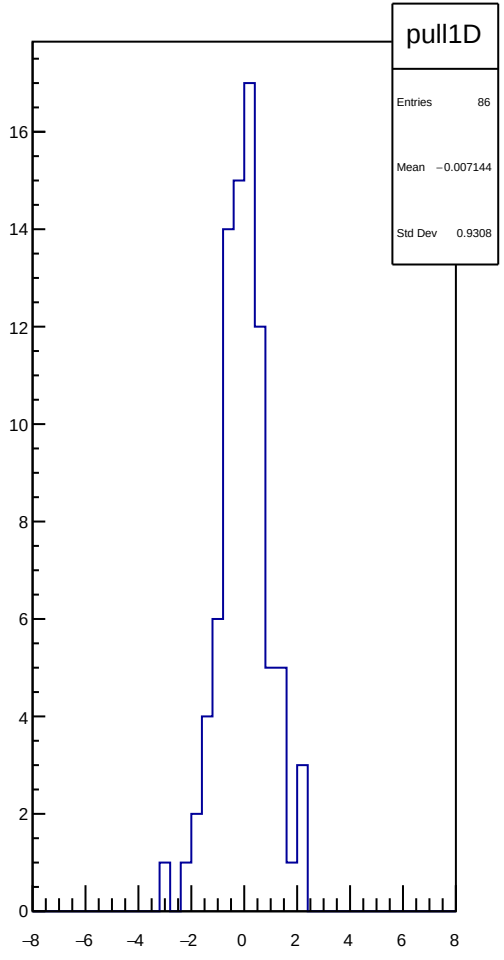

asym_usl_correction_rms vs run
χ² / ndf 8133 / 85
p0 2331 ± 1.807
2800
2600
2400
2200
2000

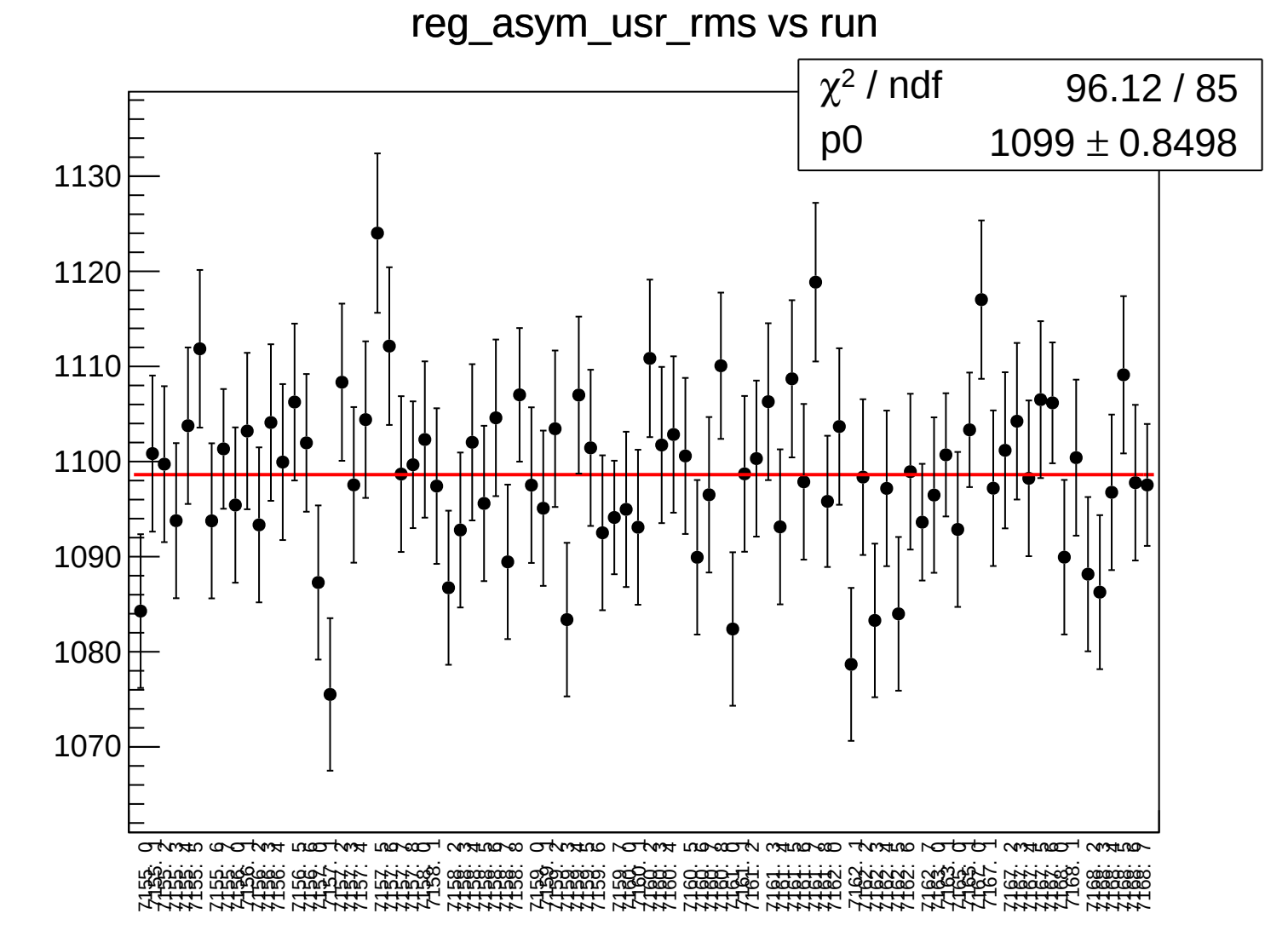

asym_usl_mean vs run
×10^3
χ² / ndf 80.03 / 85
p0 −2431 ± 2834
100
50
0
−50
−100
pull
Entries 86
Mean −14.08
Std Dev 52.77
2
1
0
−1
−2

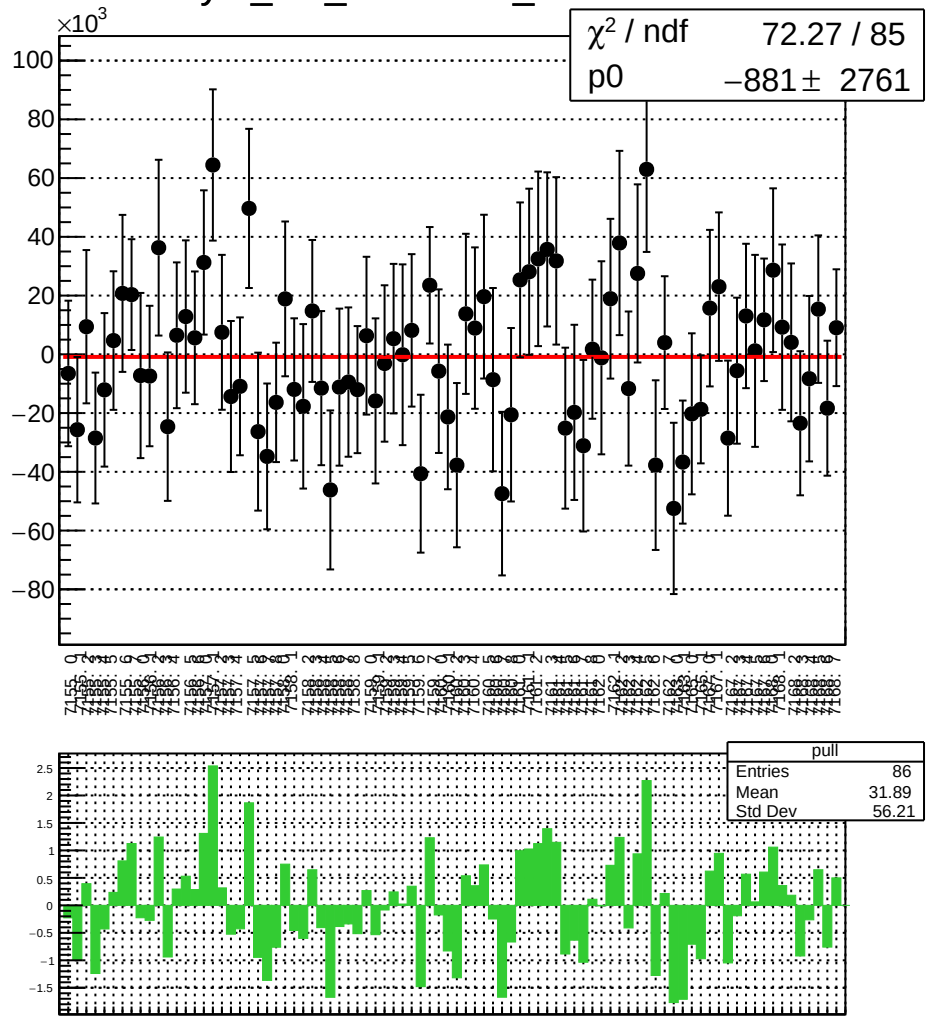

pull1D
Entries 86
Mean −0.006098
Std Dev 0.9647
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

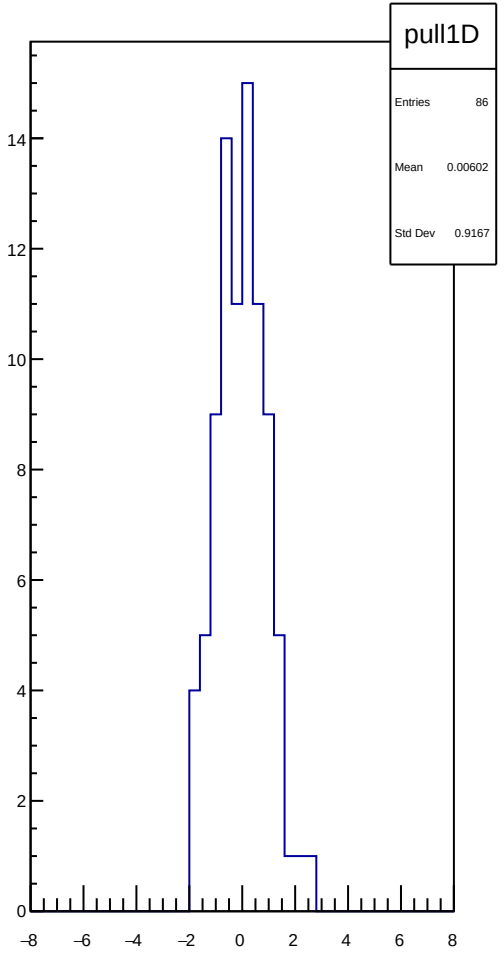

asym_usl_rms vs run
χ^2 / ndf 5600 / 85
p0 2587 ± 2.004
3100
3000
2900
2800
2700
2600
2500
2400
2300
2200

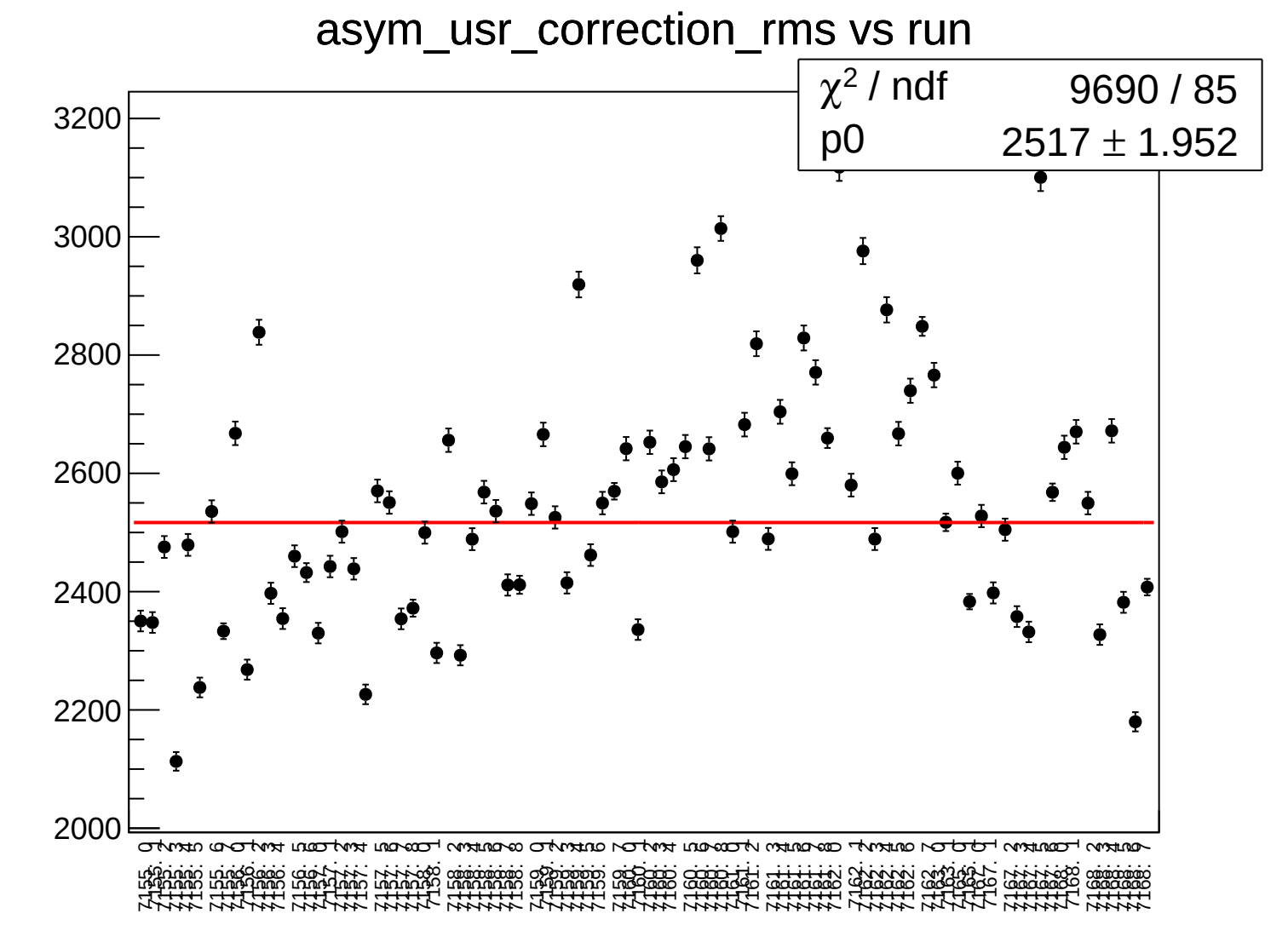

reg_asym_usr_mean vs run
χ² / ndf 74.51 / 85
p0 −2282 ± 1202
pull
Entries 86
Mean 621.4
Std Dev 587.5

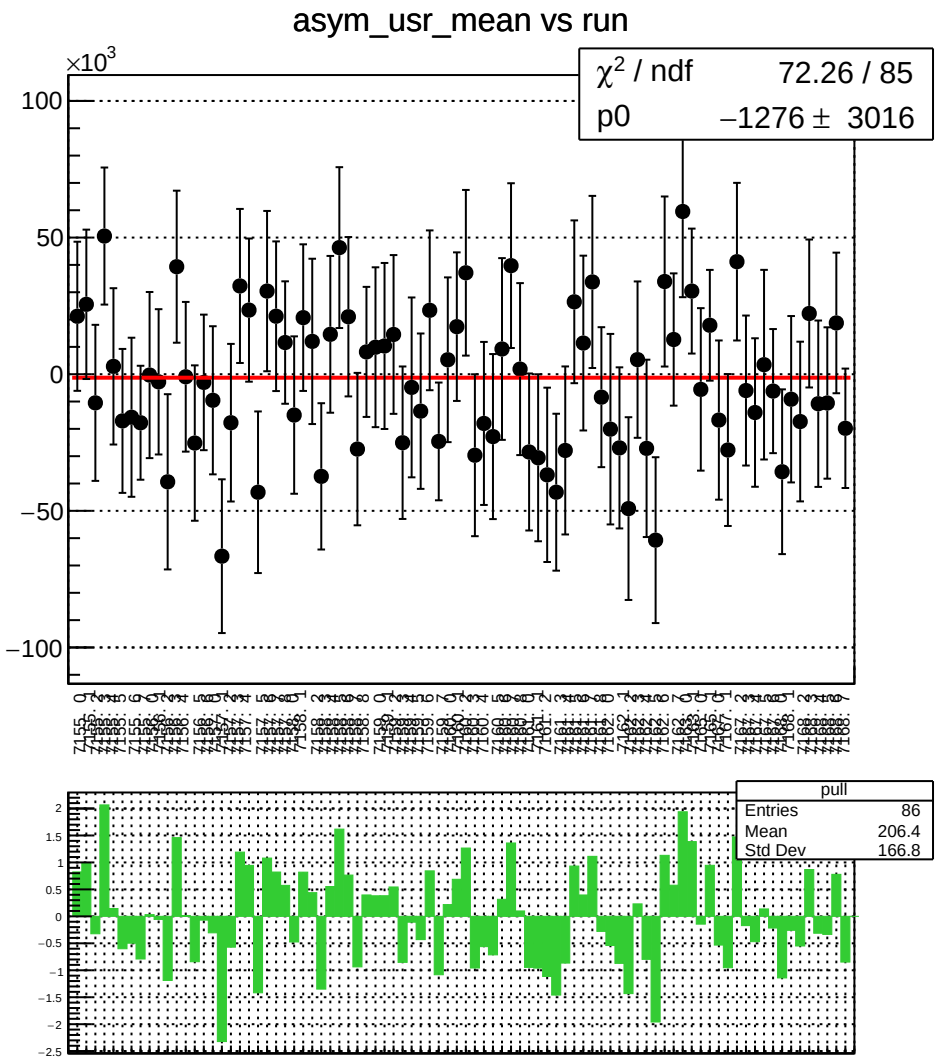

pull1D
Entries 86
Mean −0.007144
Std Dev 0.9308

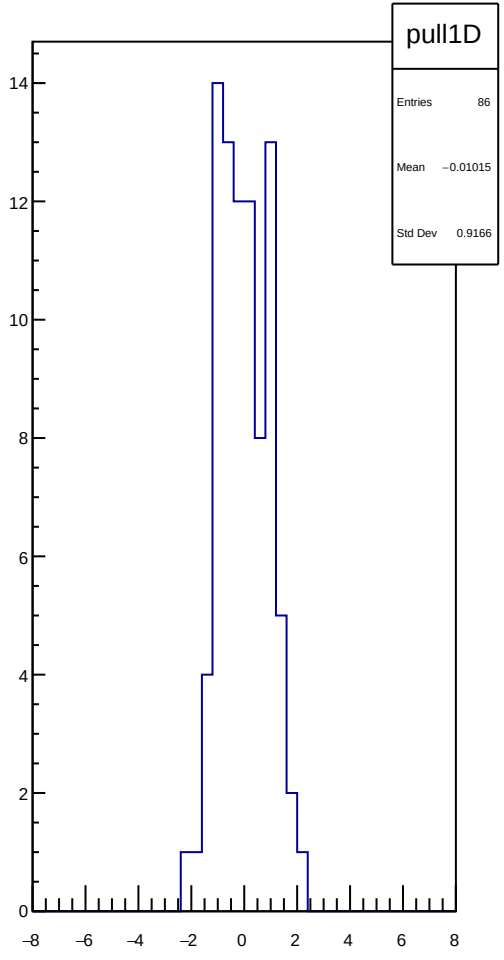

reg_asym_usr_rms vs run
χ² / ndf 96.12 / 85
p0 1099 ± 0.8498
1130
1120
1110
1100
1090
1080
1070

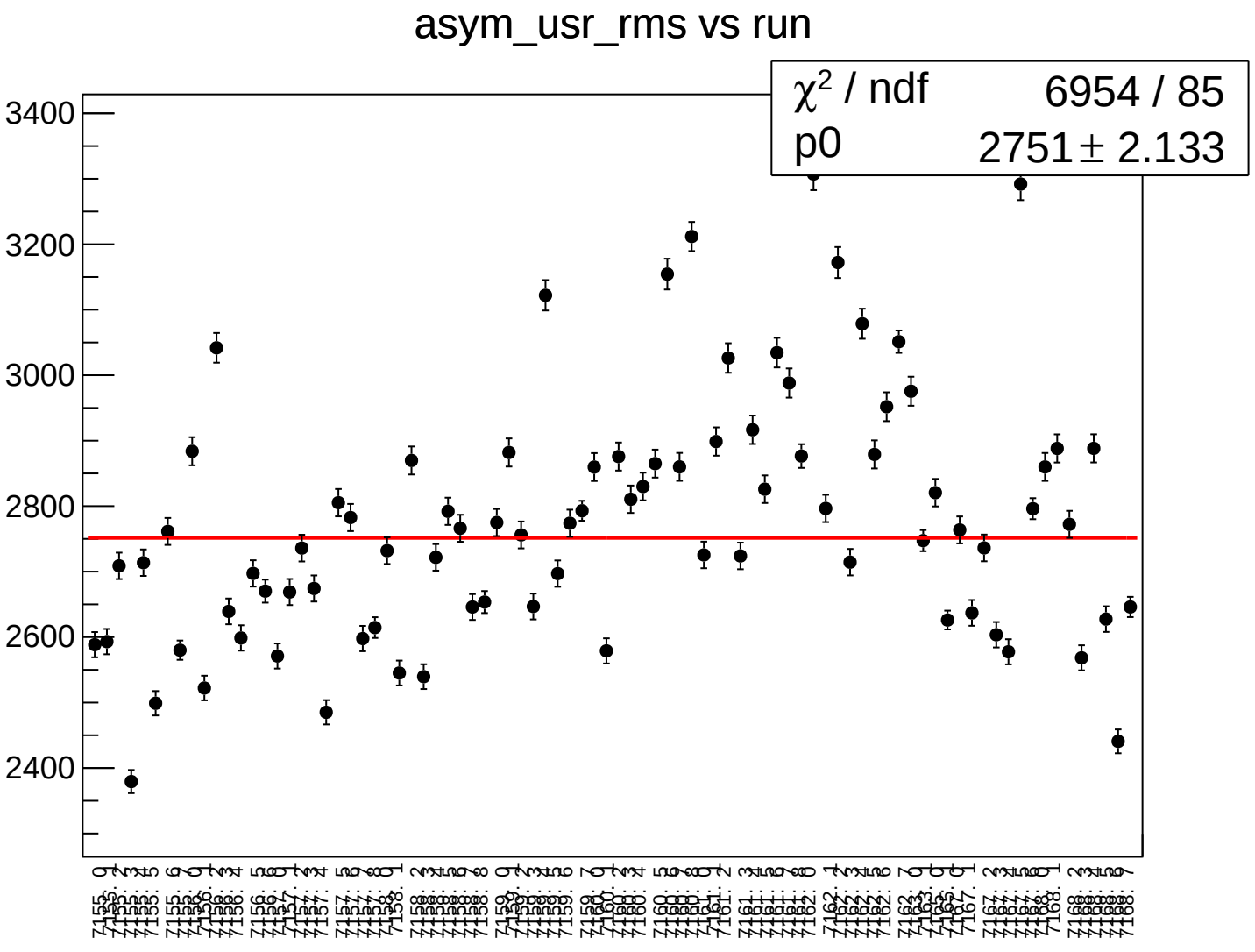

asym_usr_correction_mean vs run
×10^3
χ² / ndf 72.27 / 85
p0 −881 ± 2761
pull
Entries 86
Mean 31.89
Std Dev 56.21

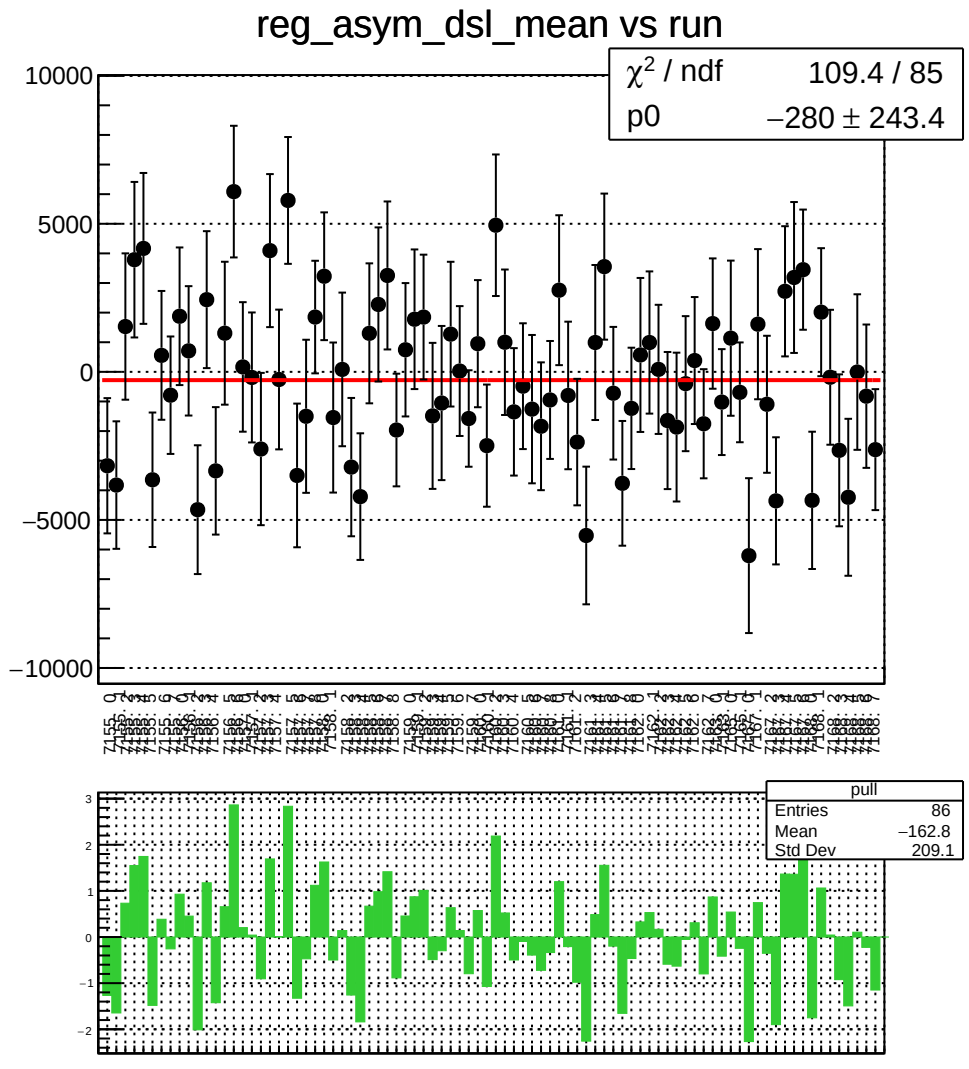

pull1D
Entries 86
Mean 0.00602
Std Dev 0.9167

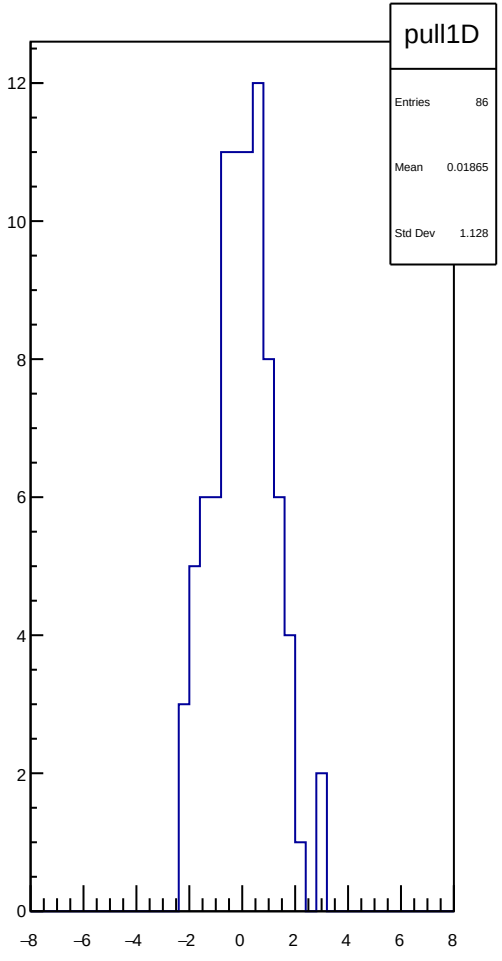

asym_usr_correction_rms vs run
χ² / ndf 9690 / 85
p0 2517 ± 1.952
3200
3000
2800
2600
2400
2200
2000

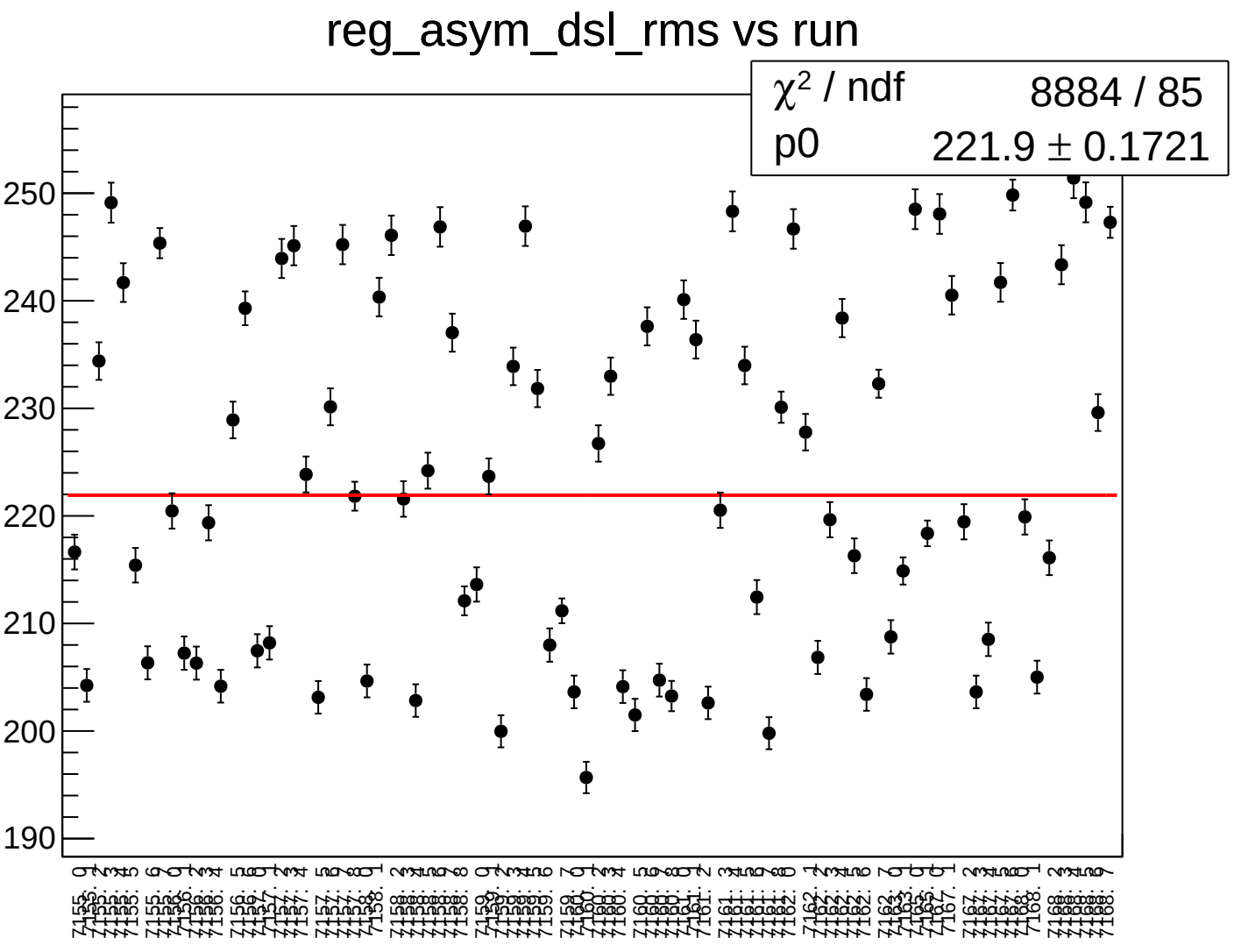

asym_usr_mean vs run
×10^3
χ² / ndf 72.26 / 85
p0 −1276 ± 3016
100
50
0
−50
−100
pull
Entries 86
Mean 206.4
Std Dev 166.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

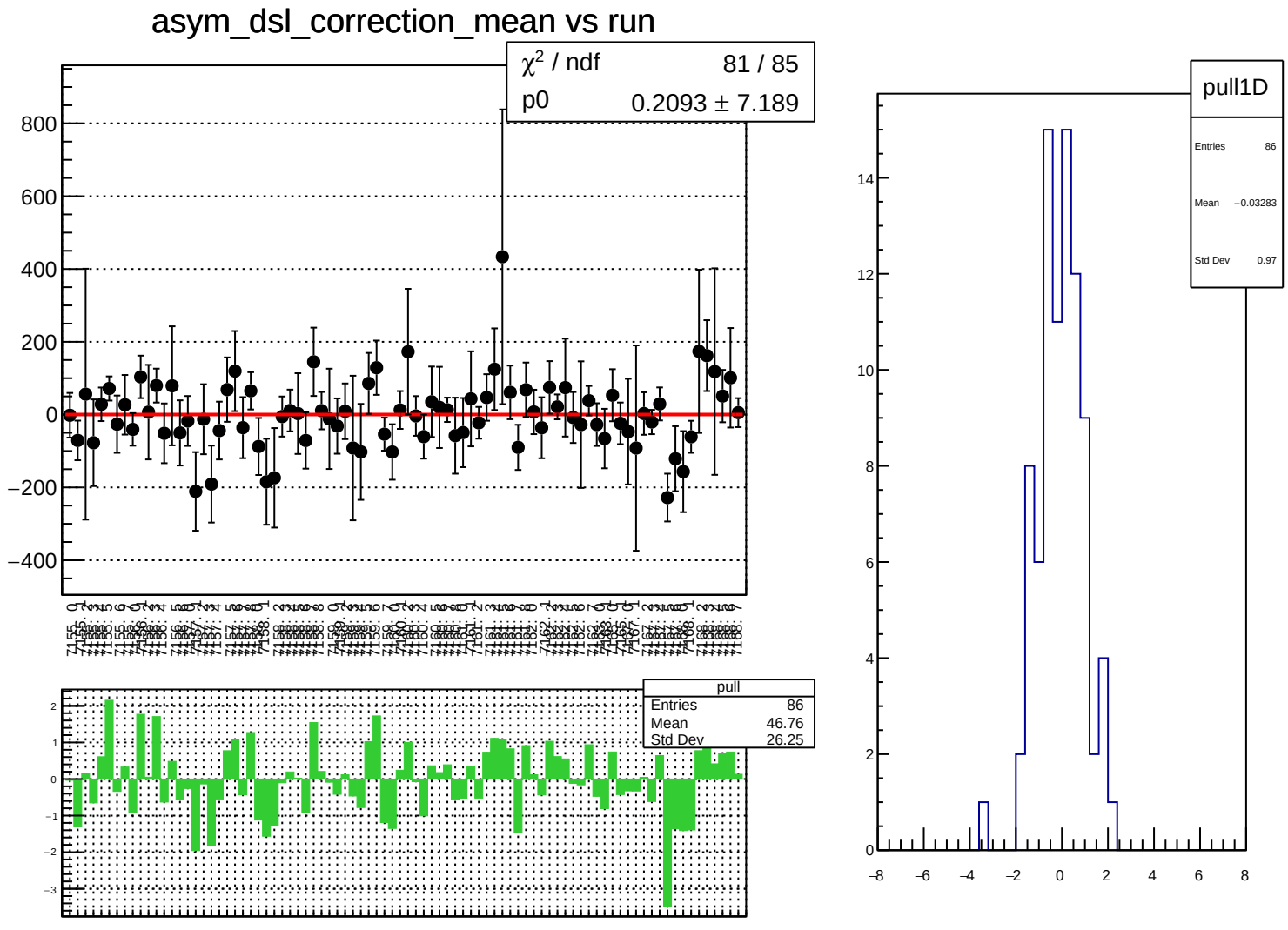

pull1D
Entries 86
Mean −0.01015
Std Dev 0.9166
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

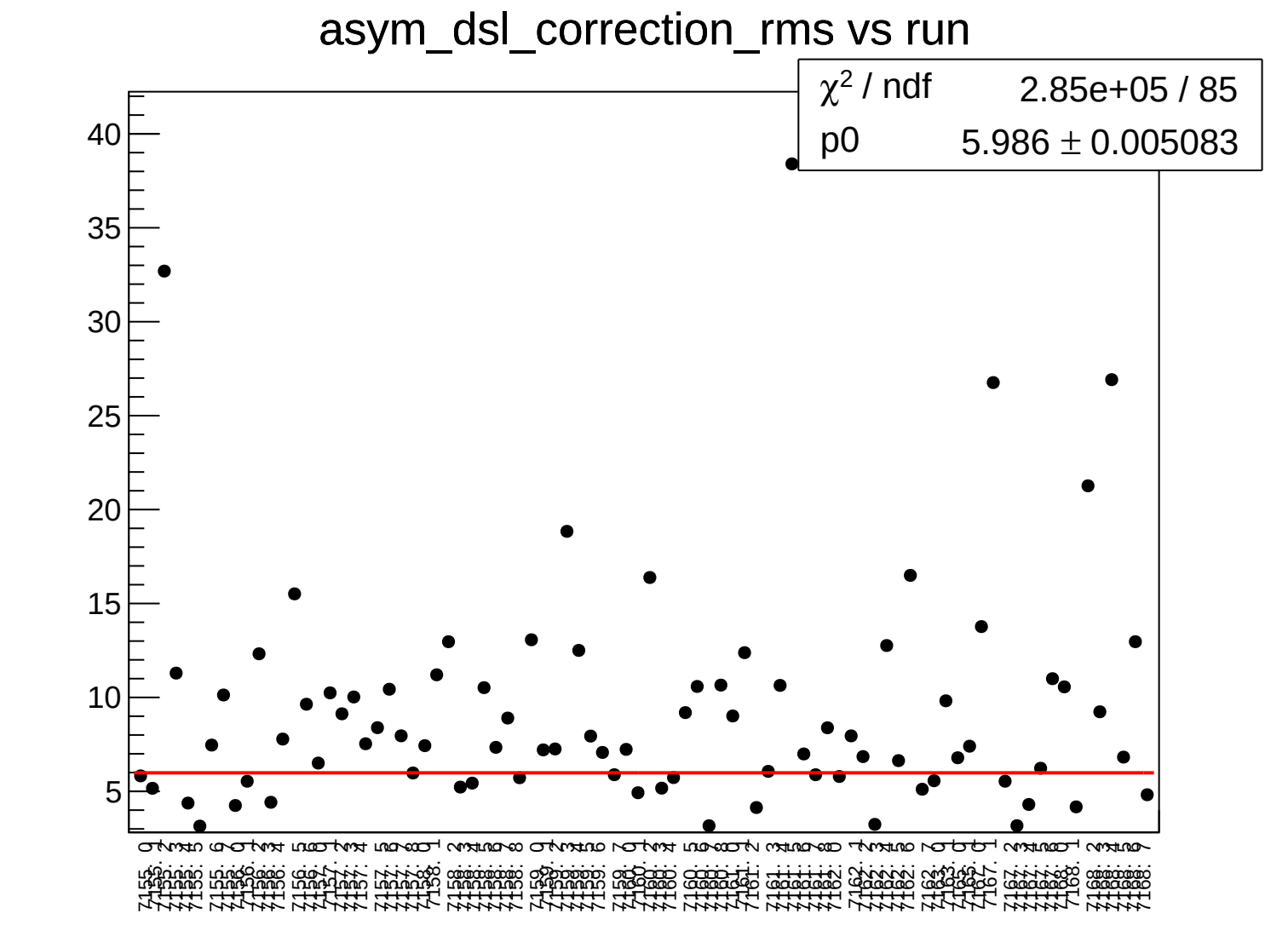

asym_usr_rms vs run
χ² / ndf 6954 / 85
p0 2751 ± 2.133
3400
3200
3000
2800
2600
2400

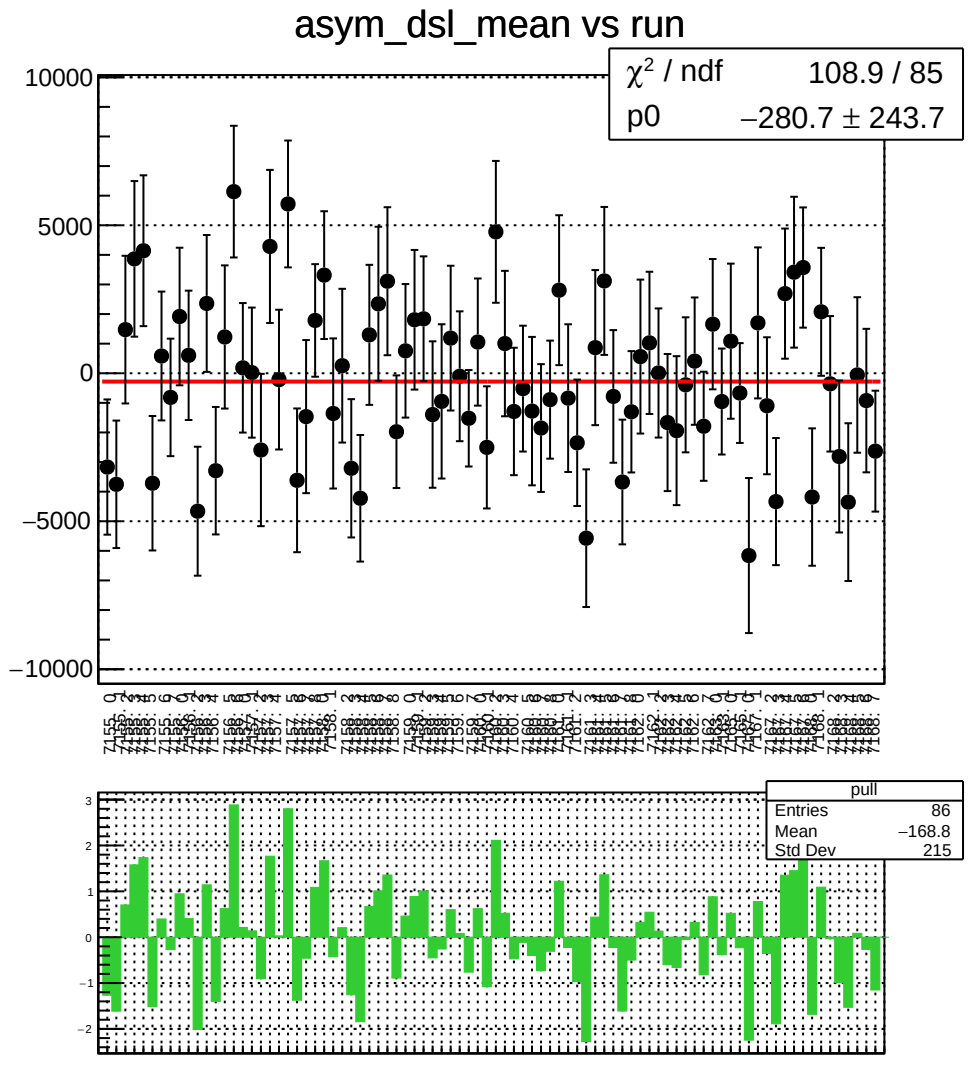

reg_asym_dsl_mean vs run
χ² / ndf 109.4 / 85
p0 −280 ± 243.4
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −162.8
Std Dev 209.1
3
2
1
0
−1
−2

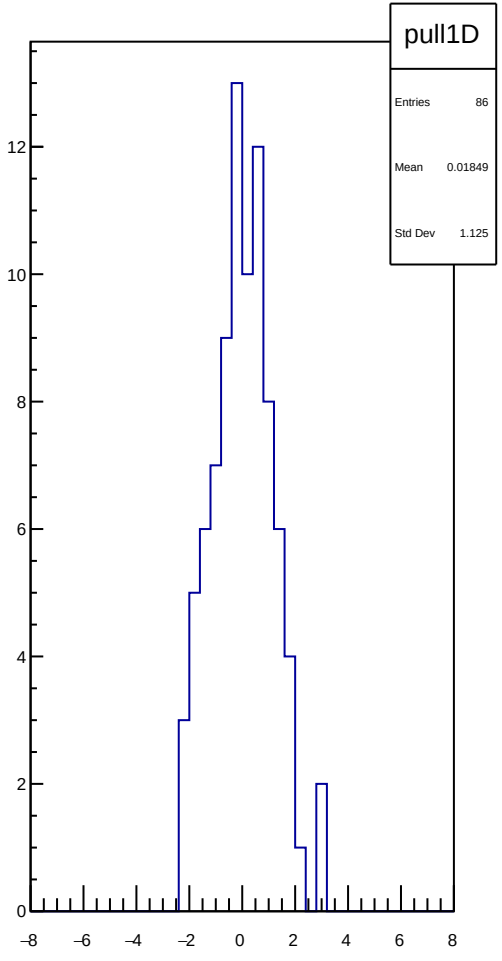

pull1D
Entries 86
Mean 0.01865
Std Dev 1.128
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

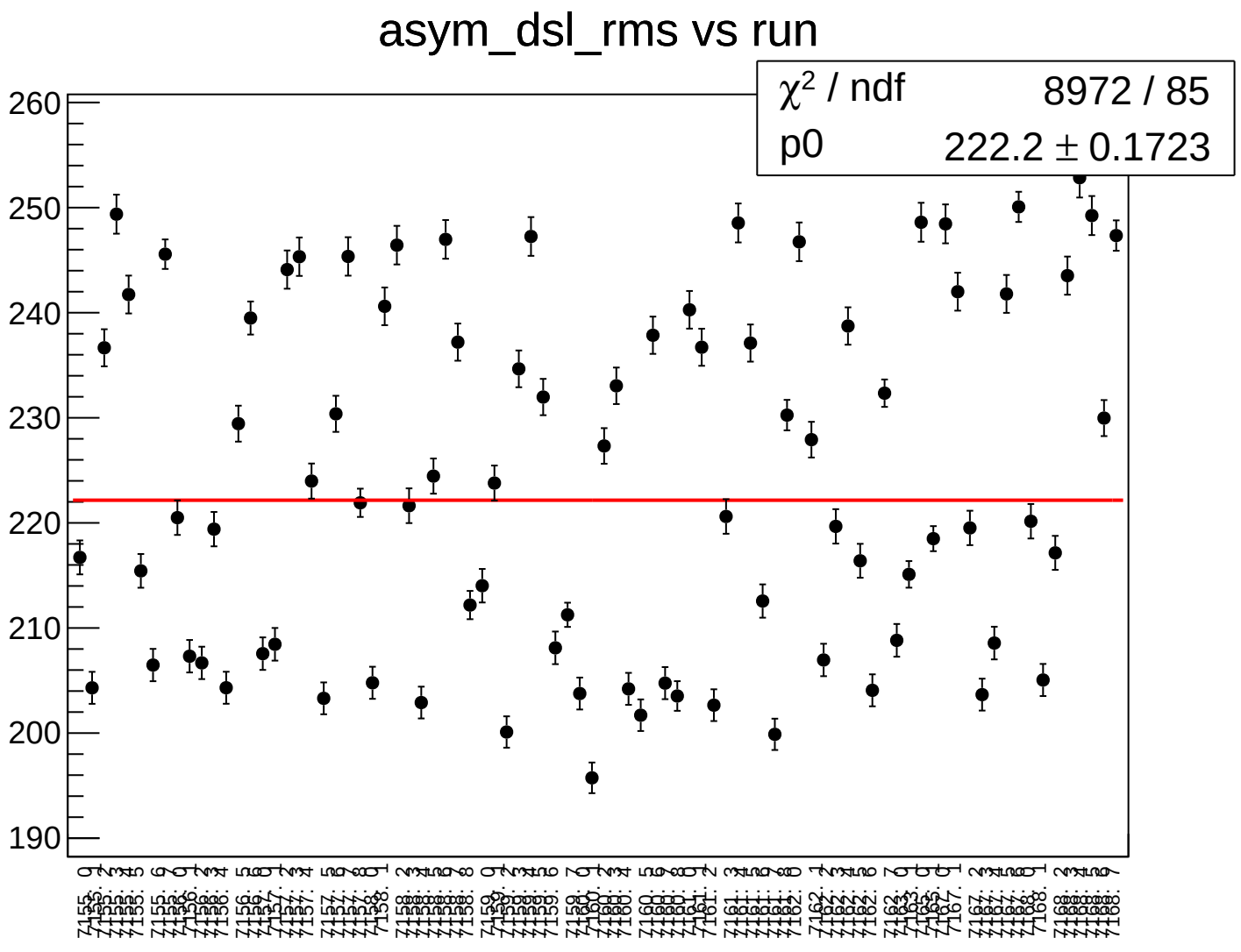

reg_asym_dsl_rms vs run
χ² / ndf 8884 / 85
p0 221.9 ± 0.1721
250
240
230
220
210
200
190

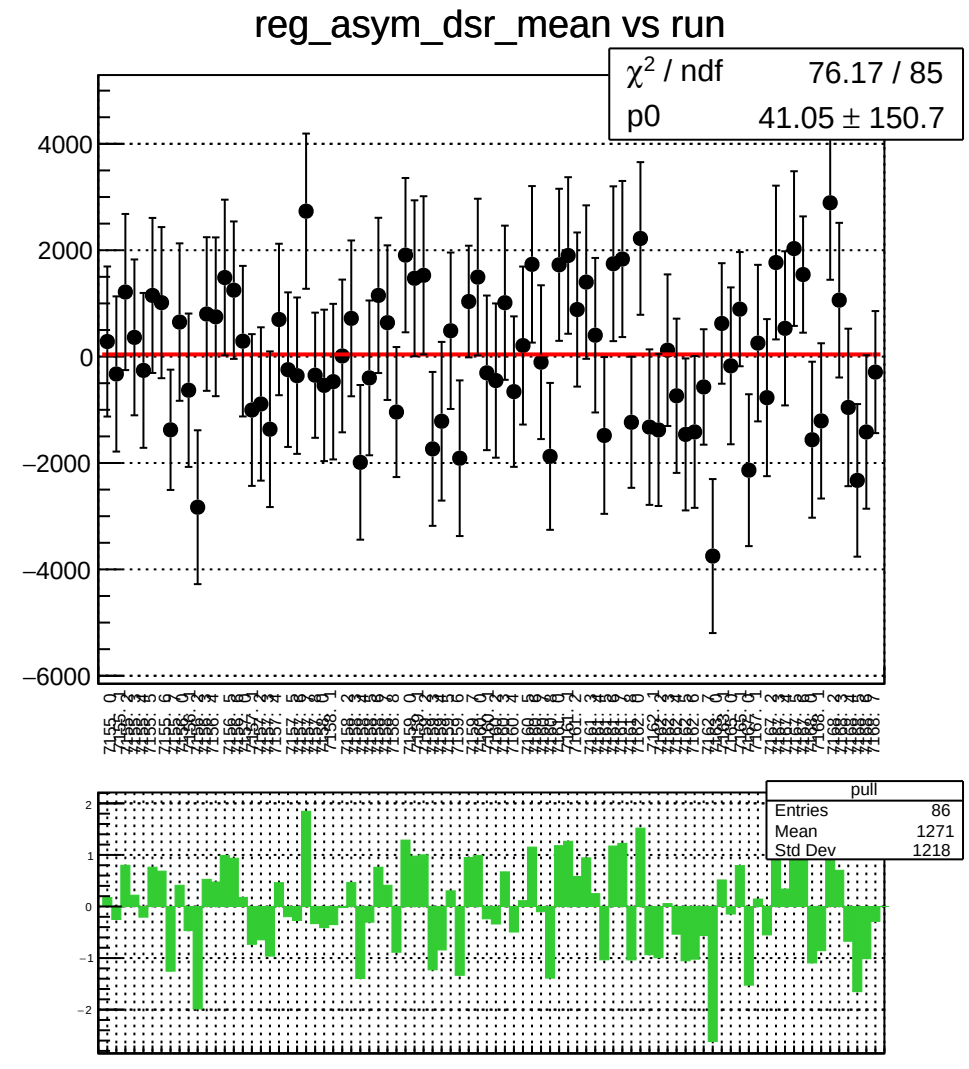

asym_dsl_correction_mean vs run
χ² / ndf 81 / 85
p0 0.2093 ± 7.189
pull
Entries 86
Mean 46.76
Std Dev 26.25
pull1D
Entries 86
Mean −0.03283
Std Dev 0.97

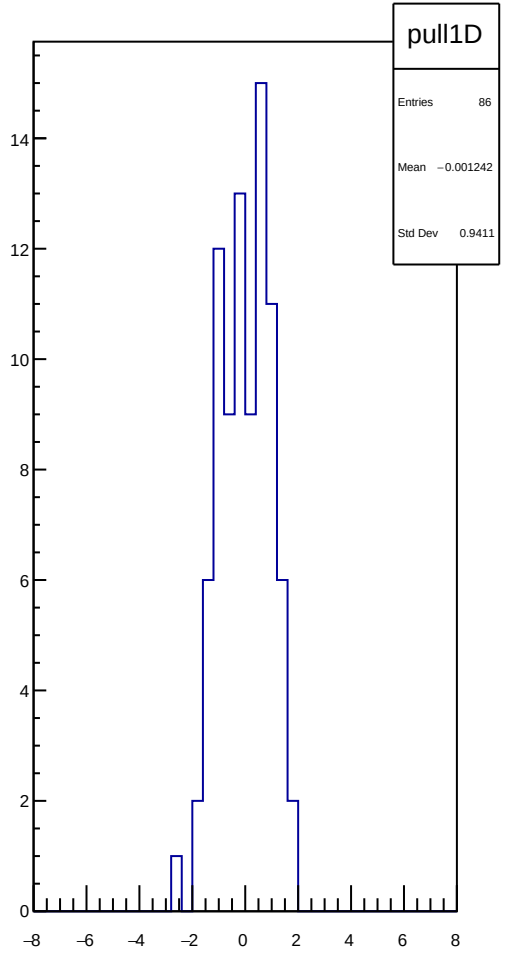

asym_dsl_correction_rms vs run
χ^2 / ndf 2.85e+05 / 85
p0 5.986 ± 0.005083
40
35
30
25
20
15
10
5

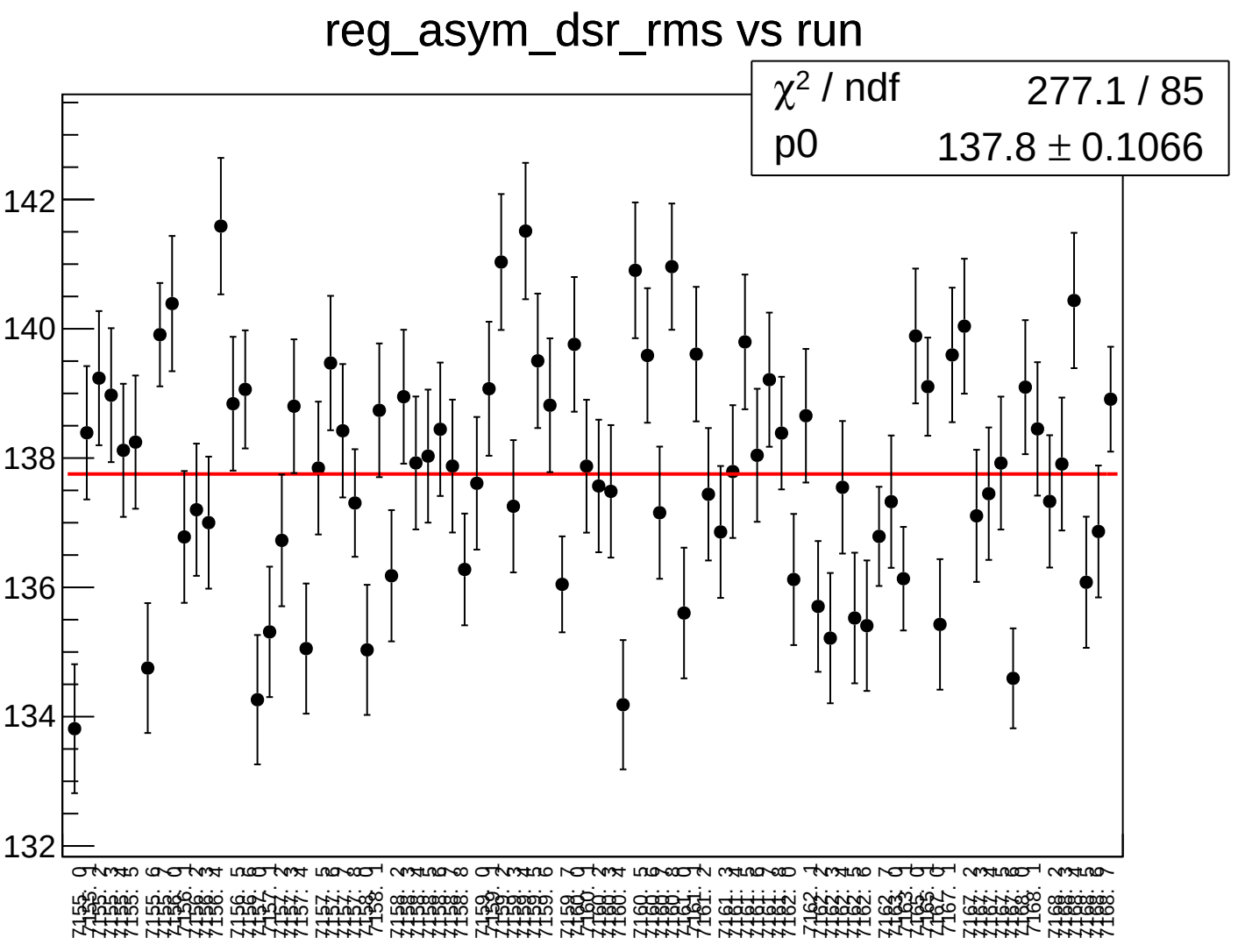

asym_dsl_mean vs run
χ² / ndf 108.9 / 85
p0 −280.7 ± 243.7
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −168.8
Std Dev 215
3
2
1
0
−1
−2

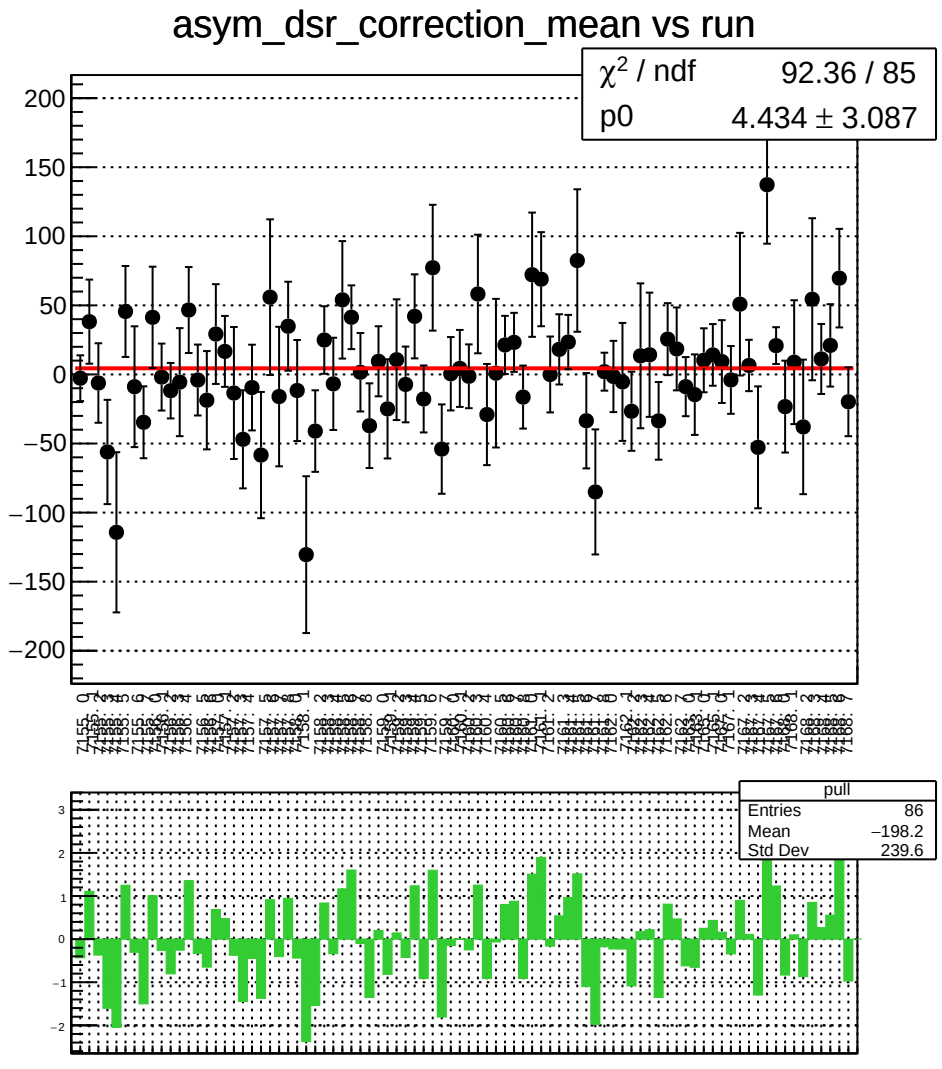

pull1D
Entries 86
Mean 0.01849
Std Dev 1.125
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

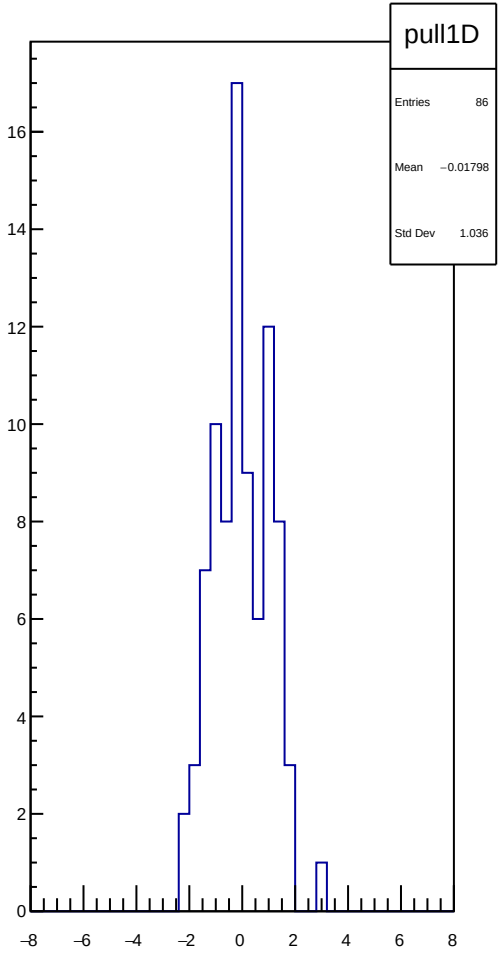

asym_dsl_rms vs run
χ² / ndf 8972 / 85
p0 222.2 ± 0.1723
260
250
240
230
220
210
200
190

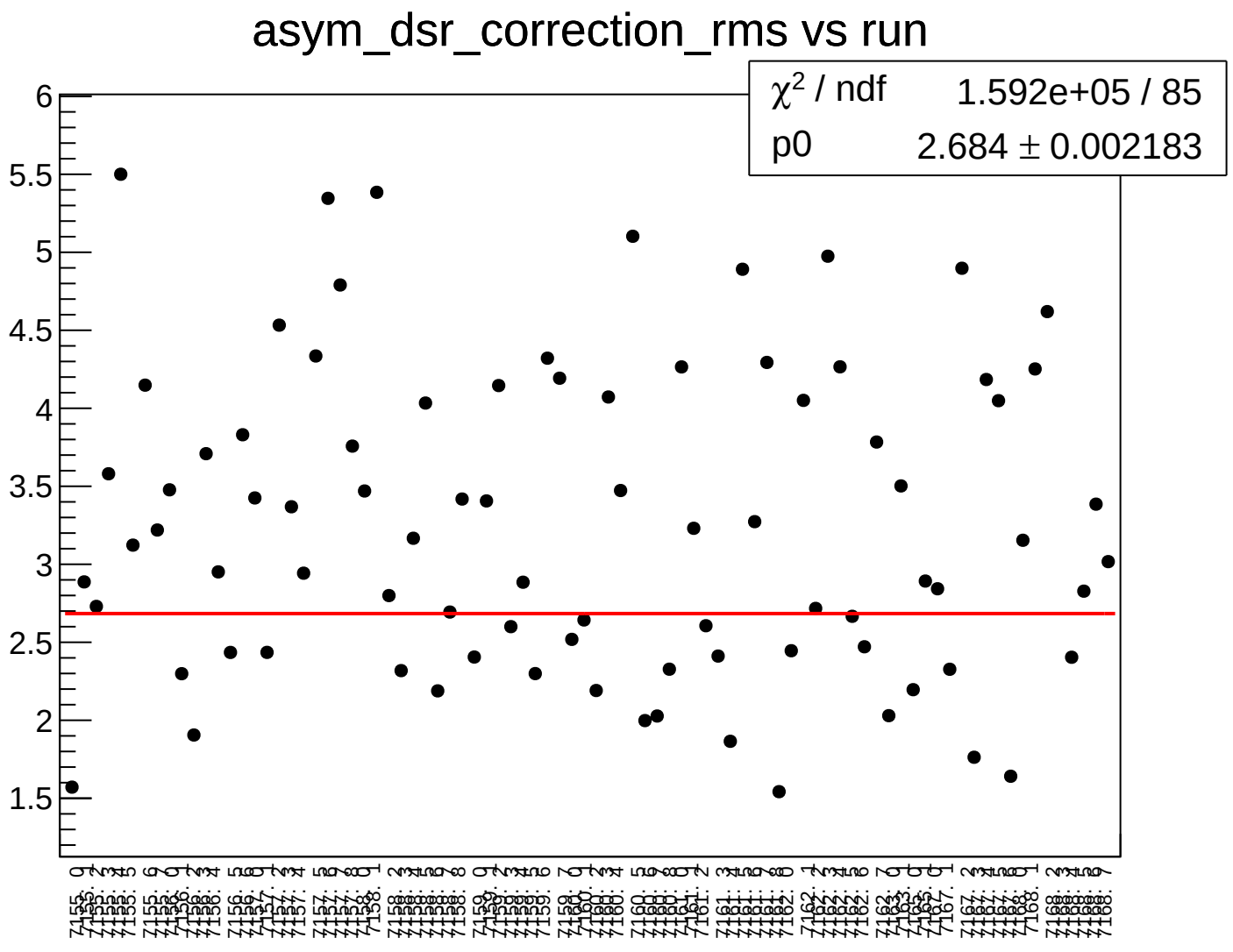

reg_asym_dsr_mean vs run
χ^2 / ndf 76.17 / 85
p0 41.05 ± 150.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 1271
Std Dev 1218
2
1
0
−1
−2

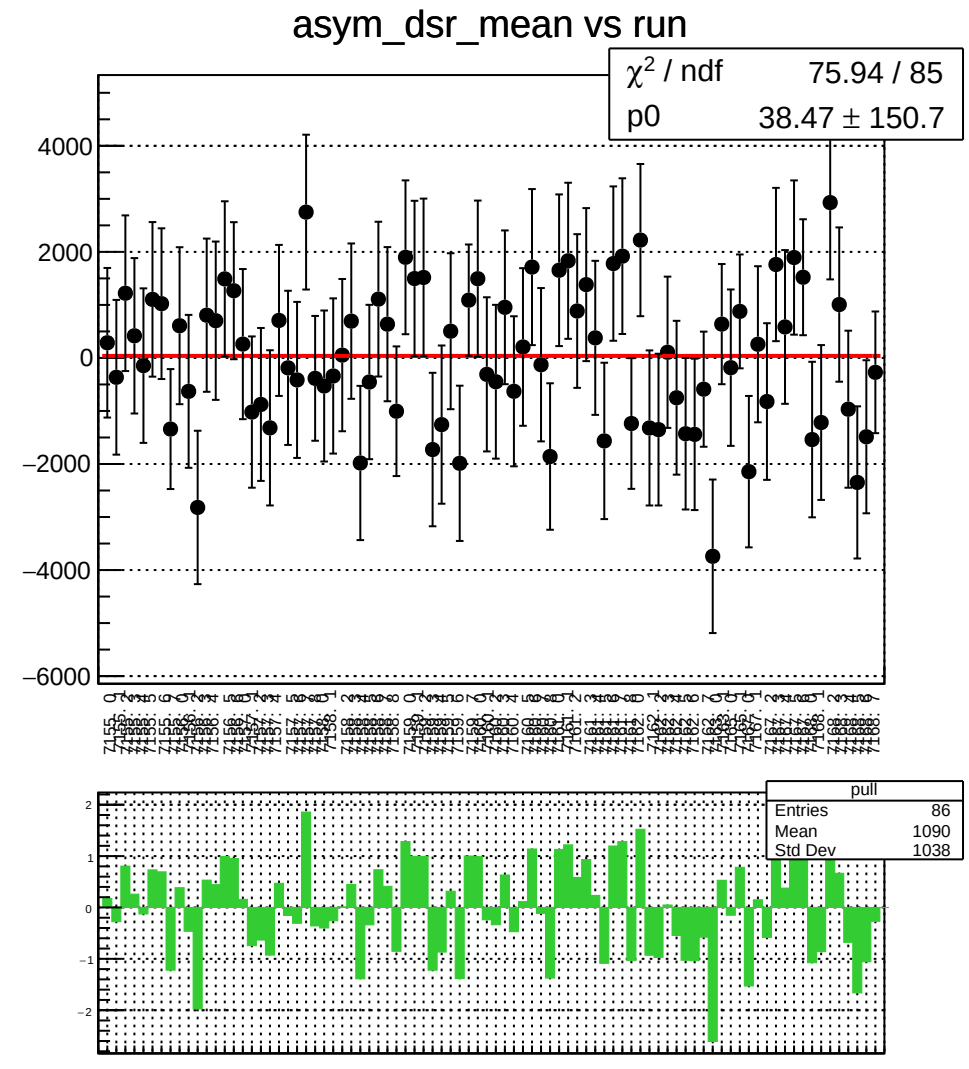

pull1D
Entries 86
Mean −0.001242
Std Dev 0.9411
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

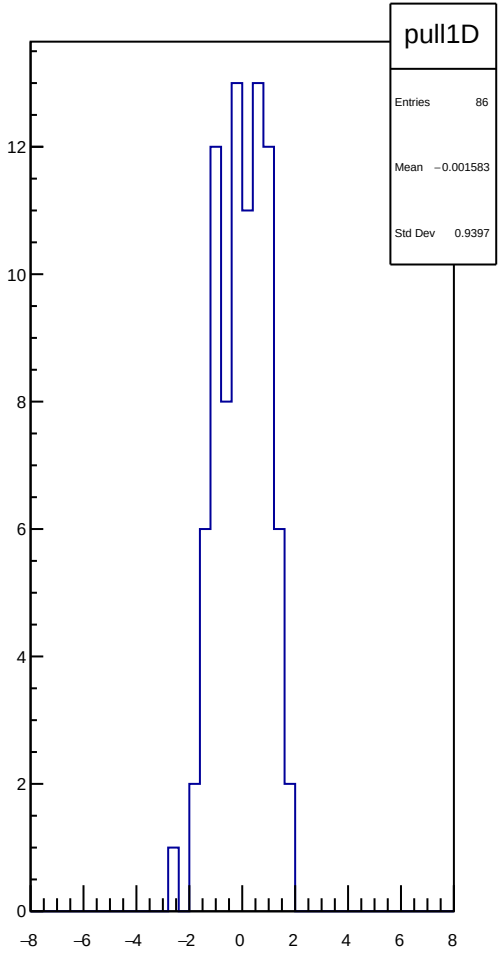

reg_asym_dsr_rms vs run
χ² / ndf 277.1 / 85
p0 137.8 ± 0.1066
142
140
138
136
134
132

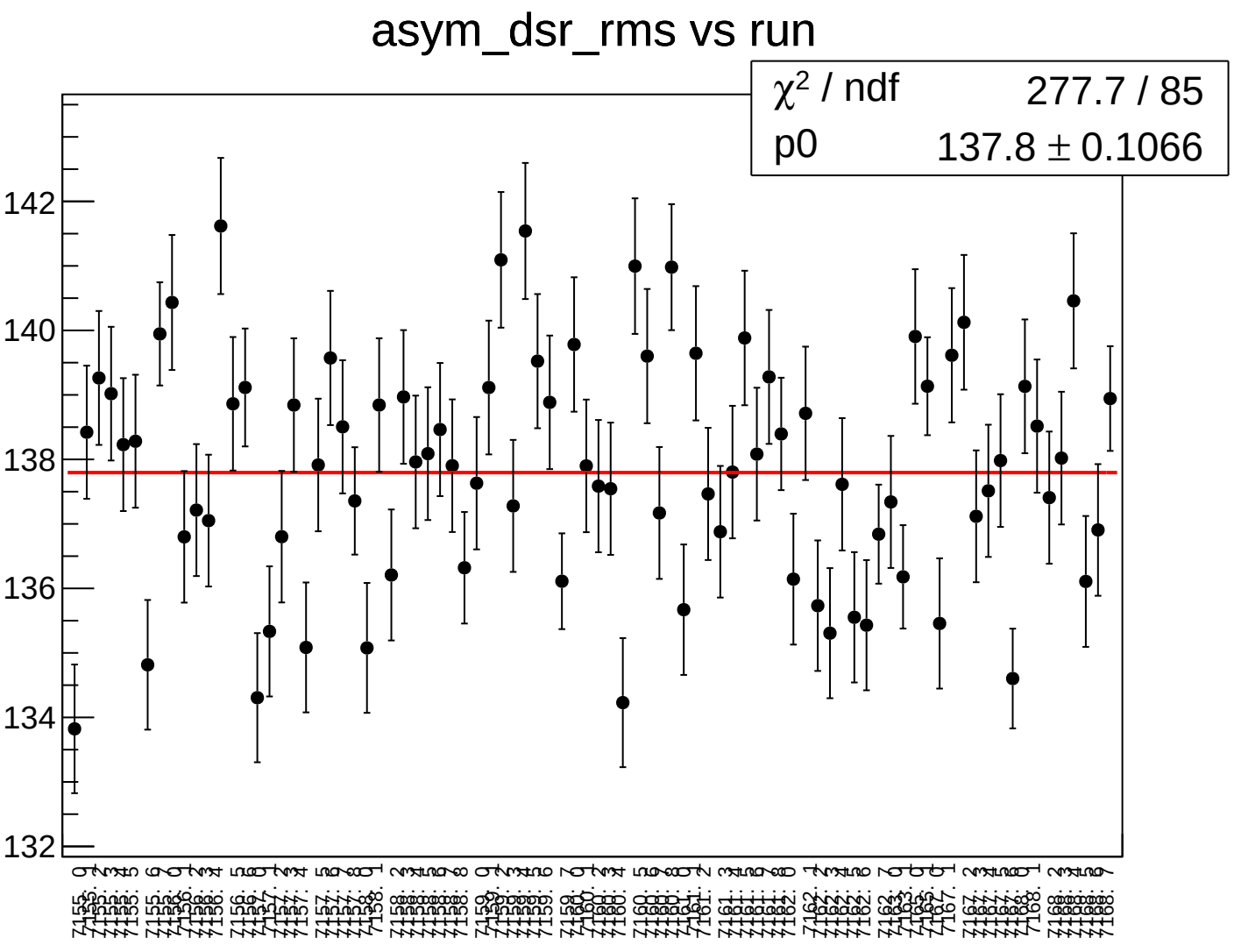

asym_dsr_correction_mean vs run
χ² / ndf 92.36 / 85
p0 4.434 ± 3.087
pull
Entries 86
Mean −198.2
Std Dev 239.6

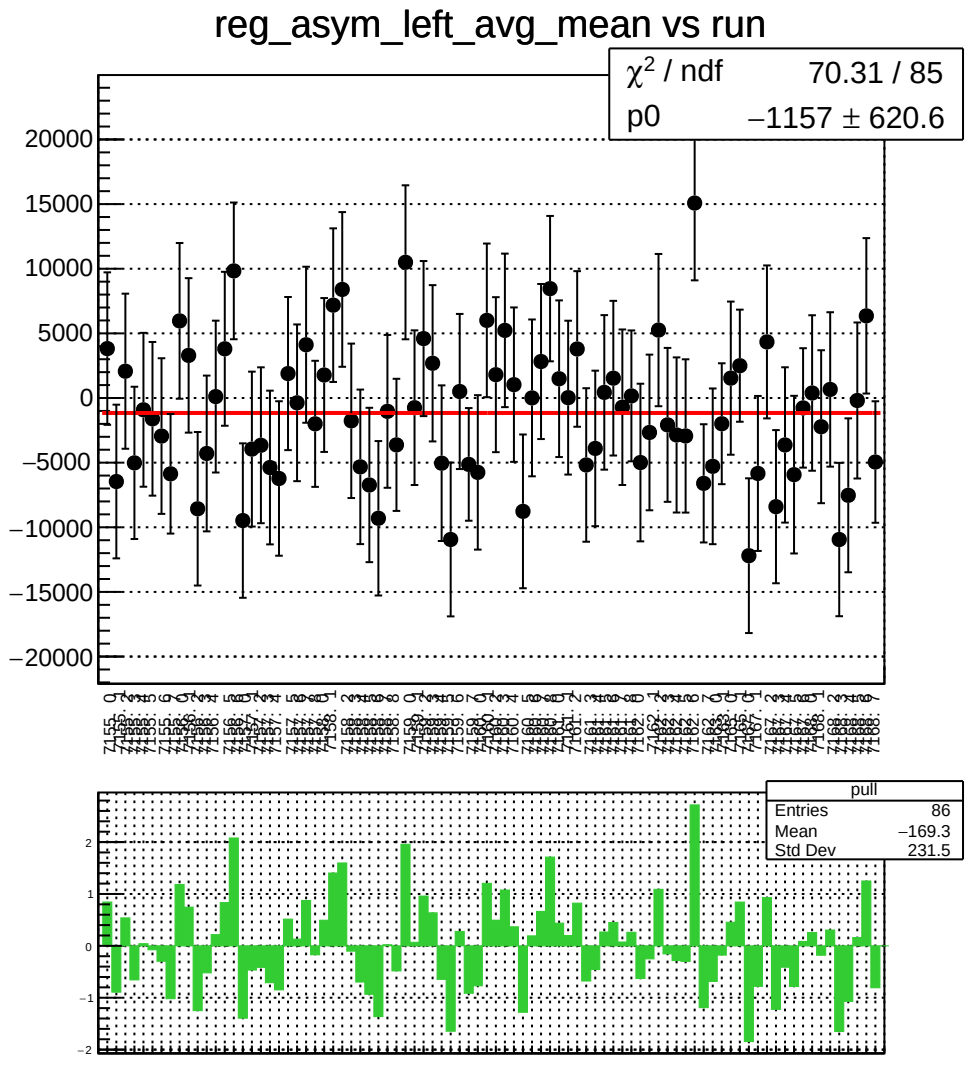

pull1D
Entries 86
Mean −0.01798
Std Dev 1.036

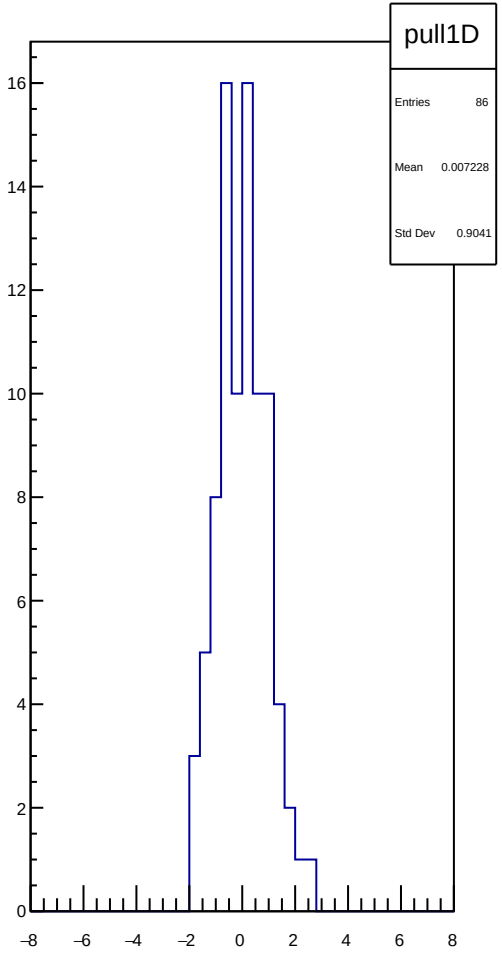

asym_dsr_correction_rms vs run
χ² / ndf 1.592e+05 / 85
p0 2.684 ± 0.002183
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5

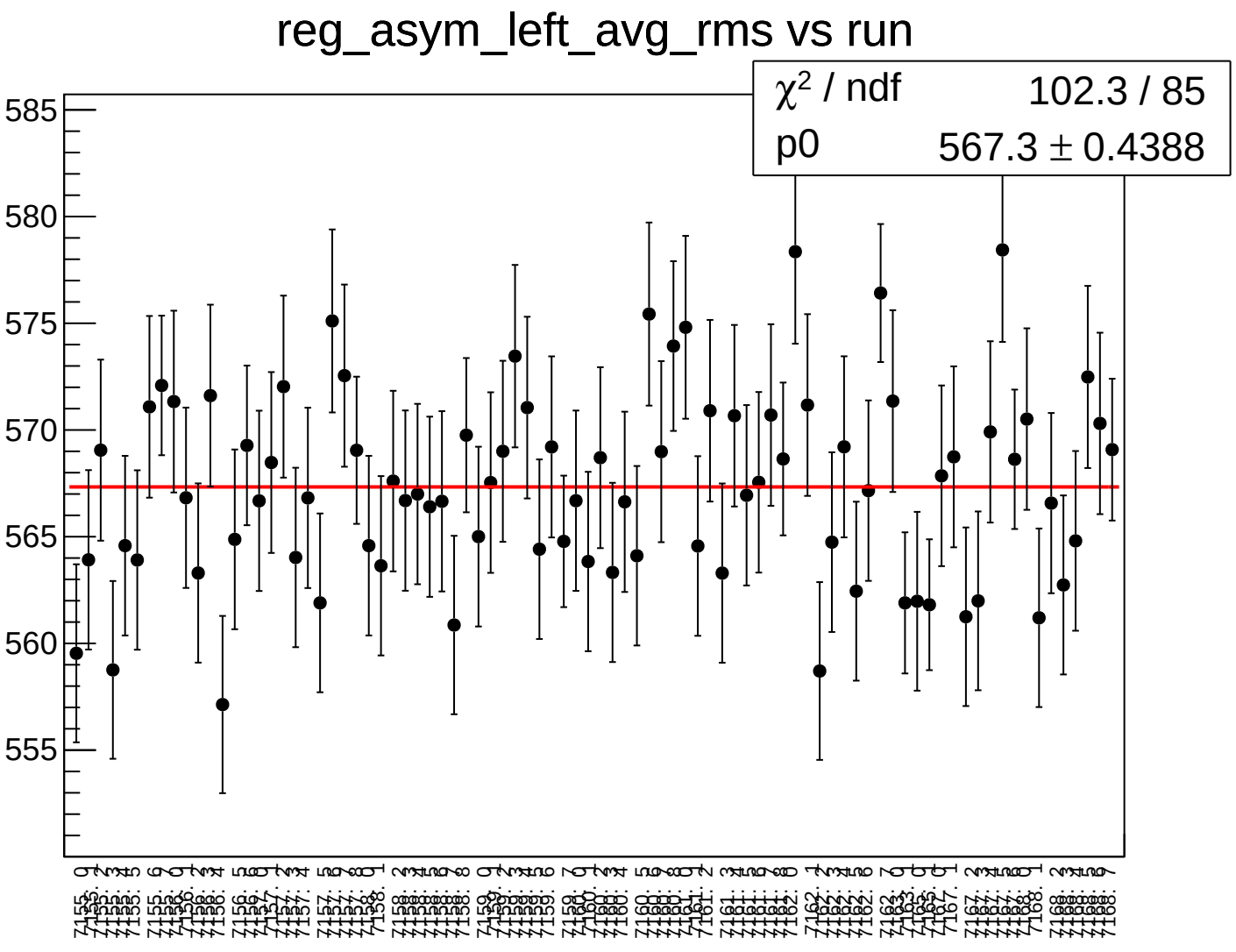

asym_dsr_mean vs run
χ² / ndf 75.94 / 85
p0 38.47 ± 150.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 1090
Std Dev 1038
2
1
0
−1
−2

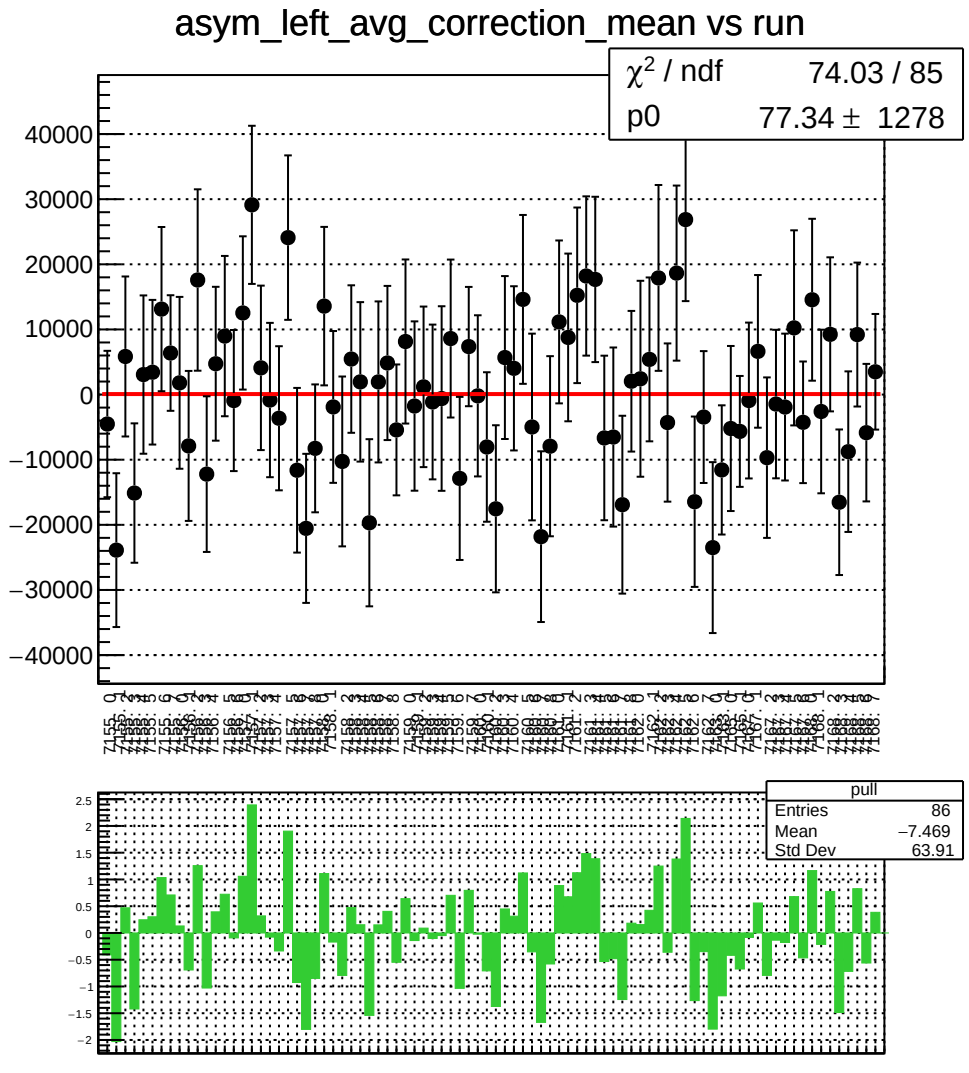

pull1D
Entries 86
Mean −0.001583
Std Dev 0.9397
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

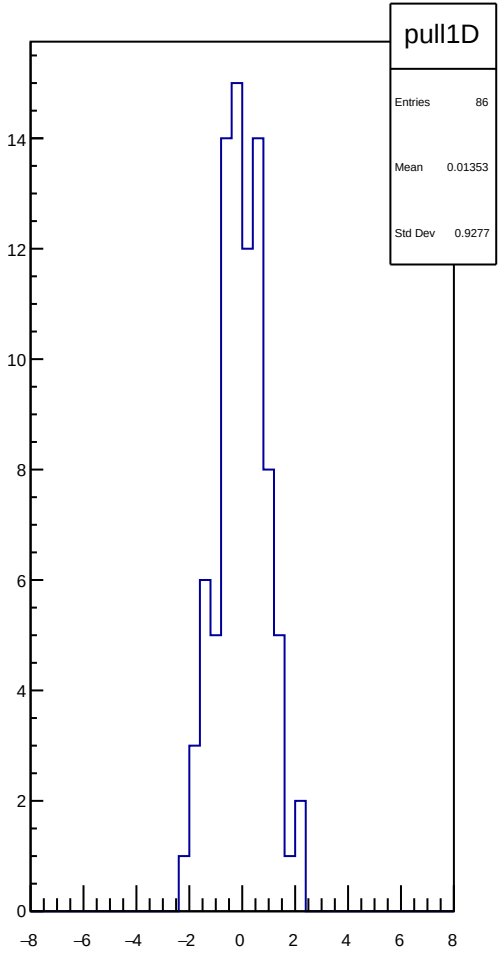

asym_dsr_rms vs run
χ² / ndf 277.7 / 85
p0 137.8 ± 0.1066
142
140
138
136
134
132

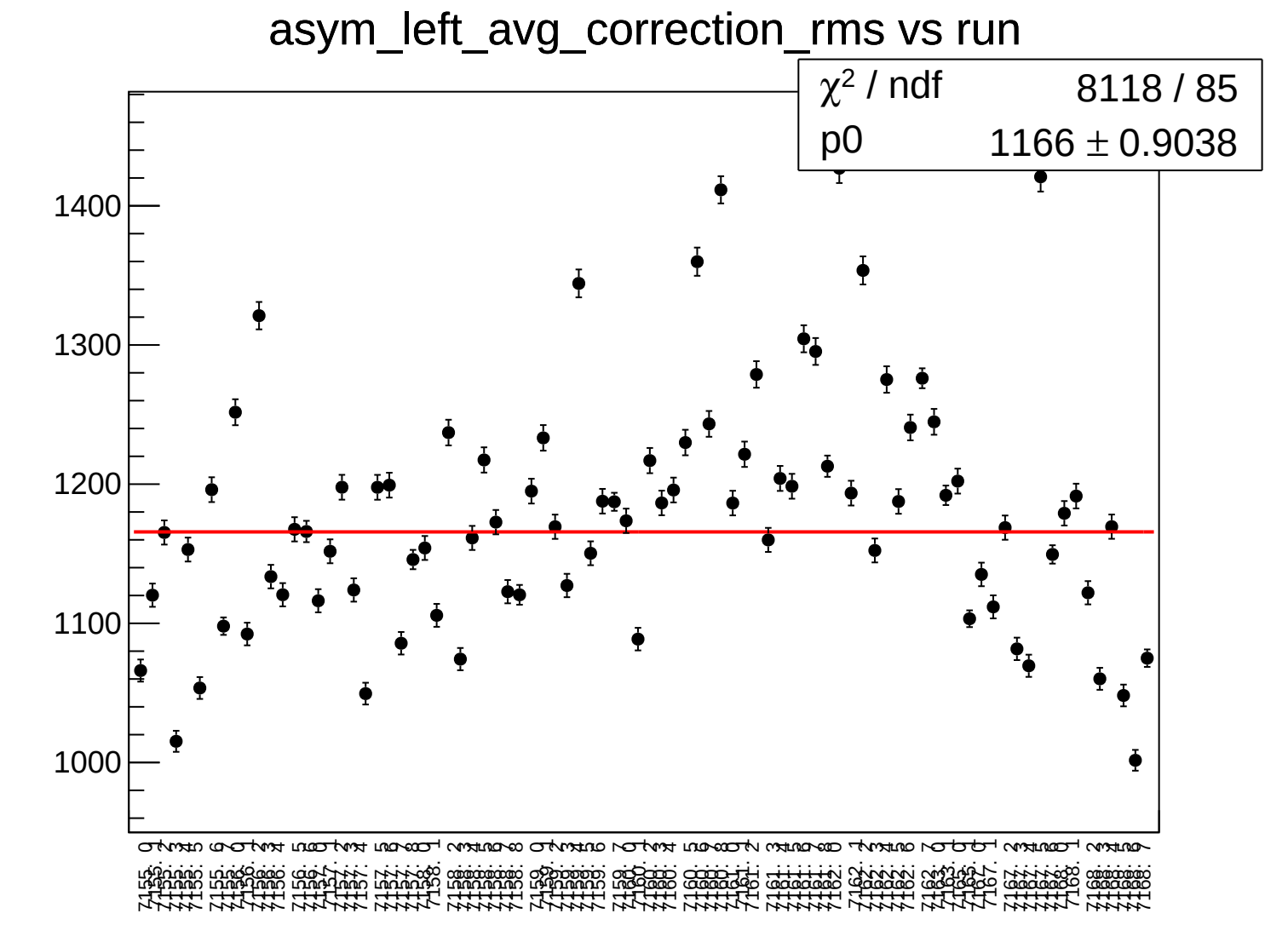

reg_asym_left_avg_mean vs run
χ² / ndf 70.31 / 85
p0 −1157 ± 620.6
pull
Entries 86
Mean −169.3
Std Dev 231.5

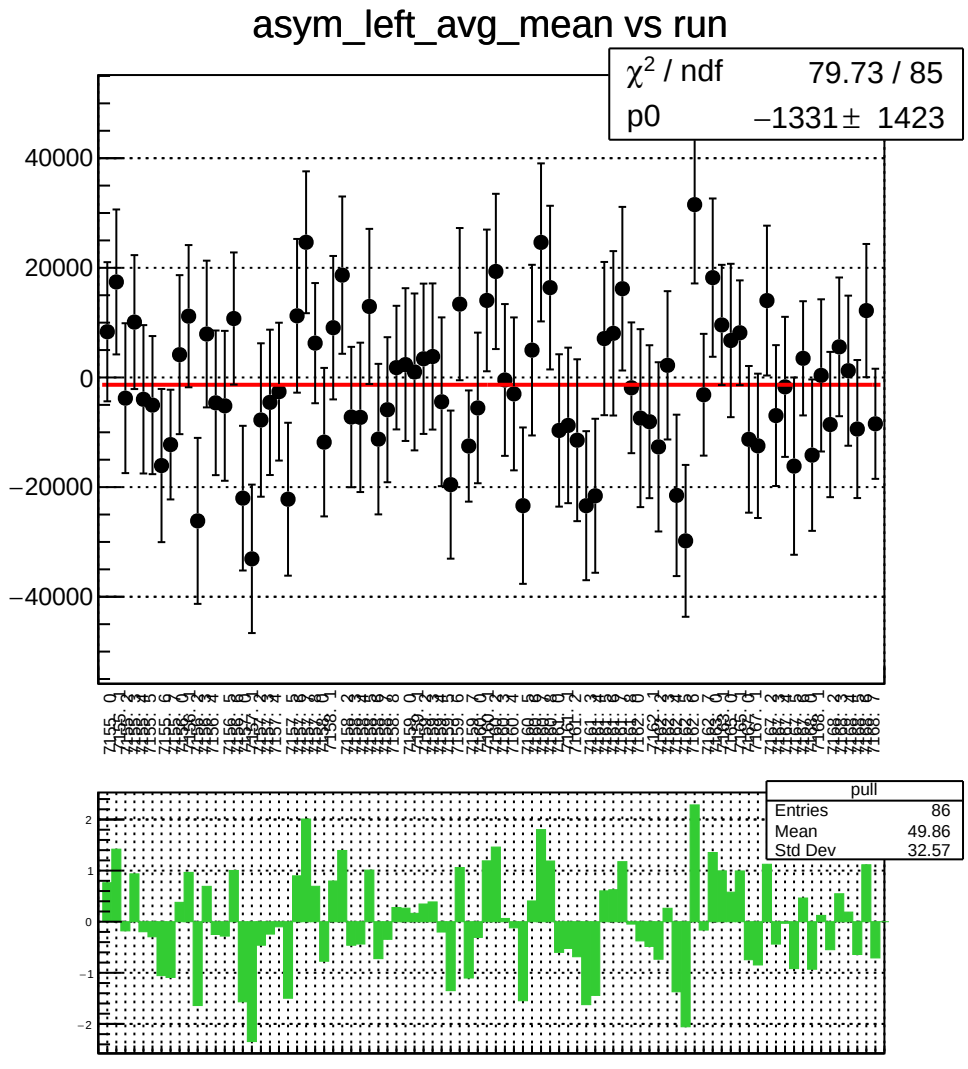

pull1D
Entries 86
Mean 0.007228
Std Dev 0.9041

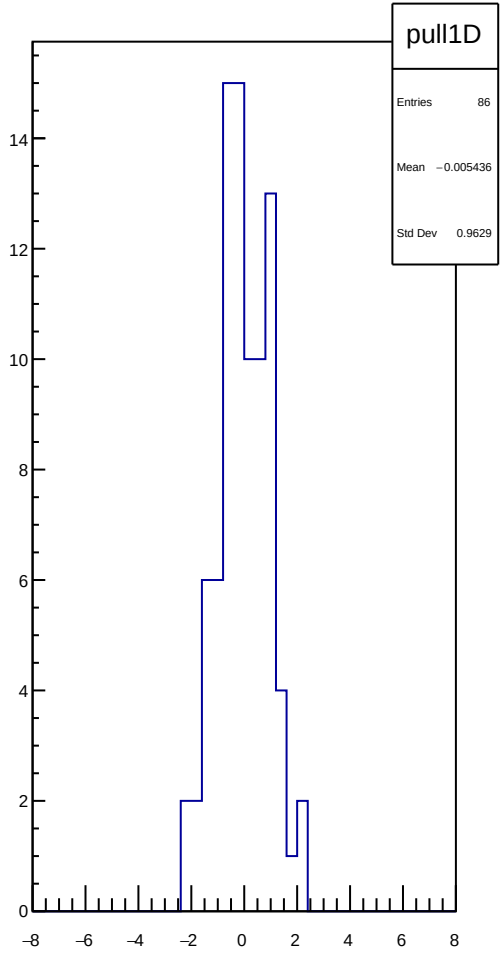

reg_asym_left_avg_rms vs run
χ² / ndf 102.3 / 85
p0 567.3 ± 0.4388
585
580
575
570
565
560
555

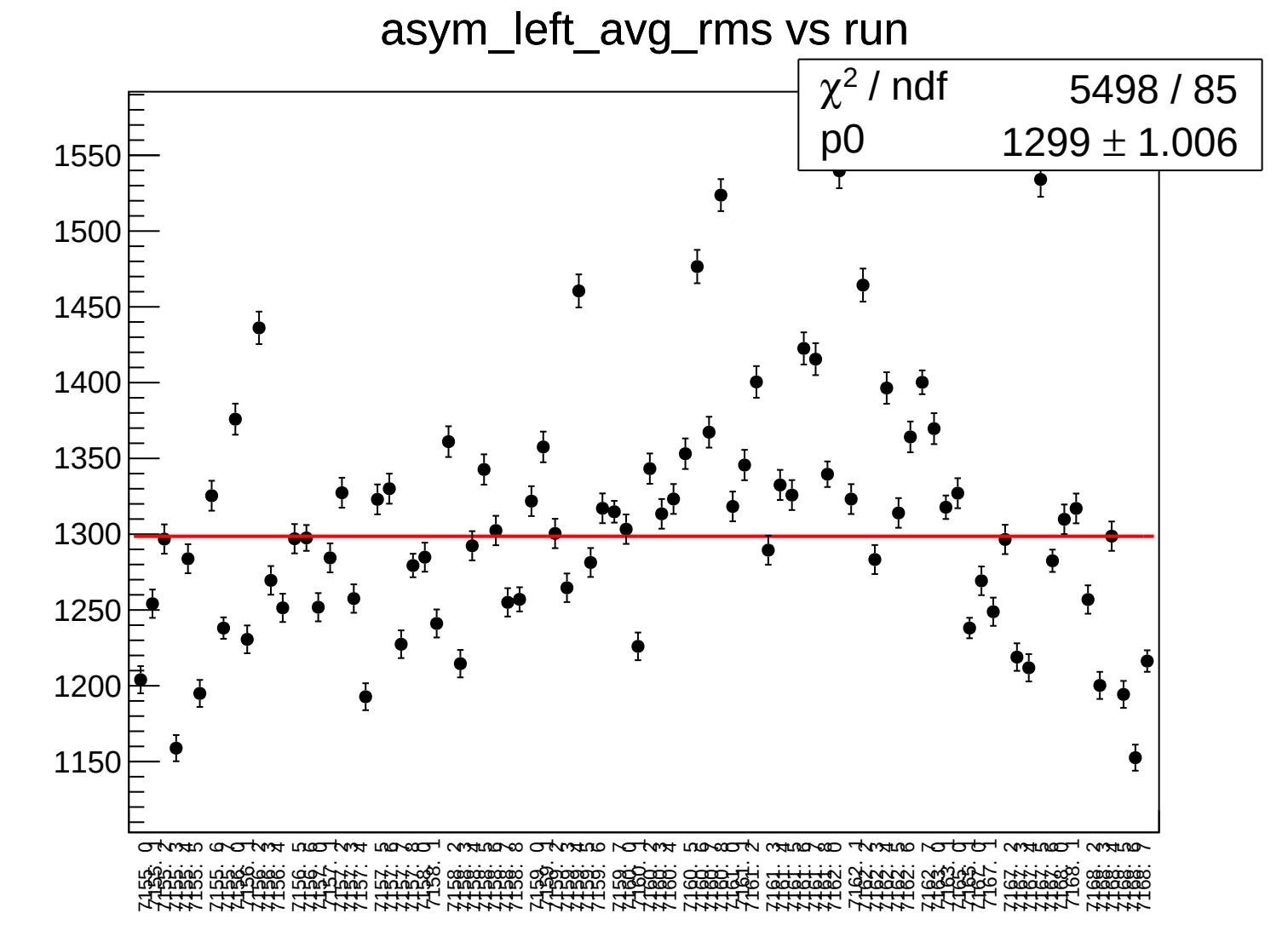

asym_left_avg_correction_mean vs run
χ² / ndf 74.03 / 85
p0 77.34 ± 1278
pull
Entries 86
Mean −7.469
Std Dev 63.91

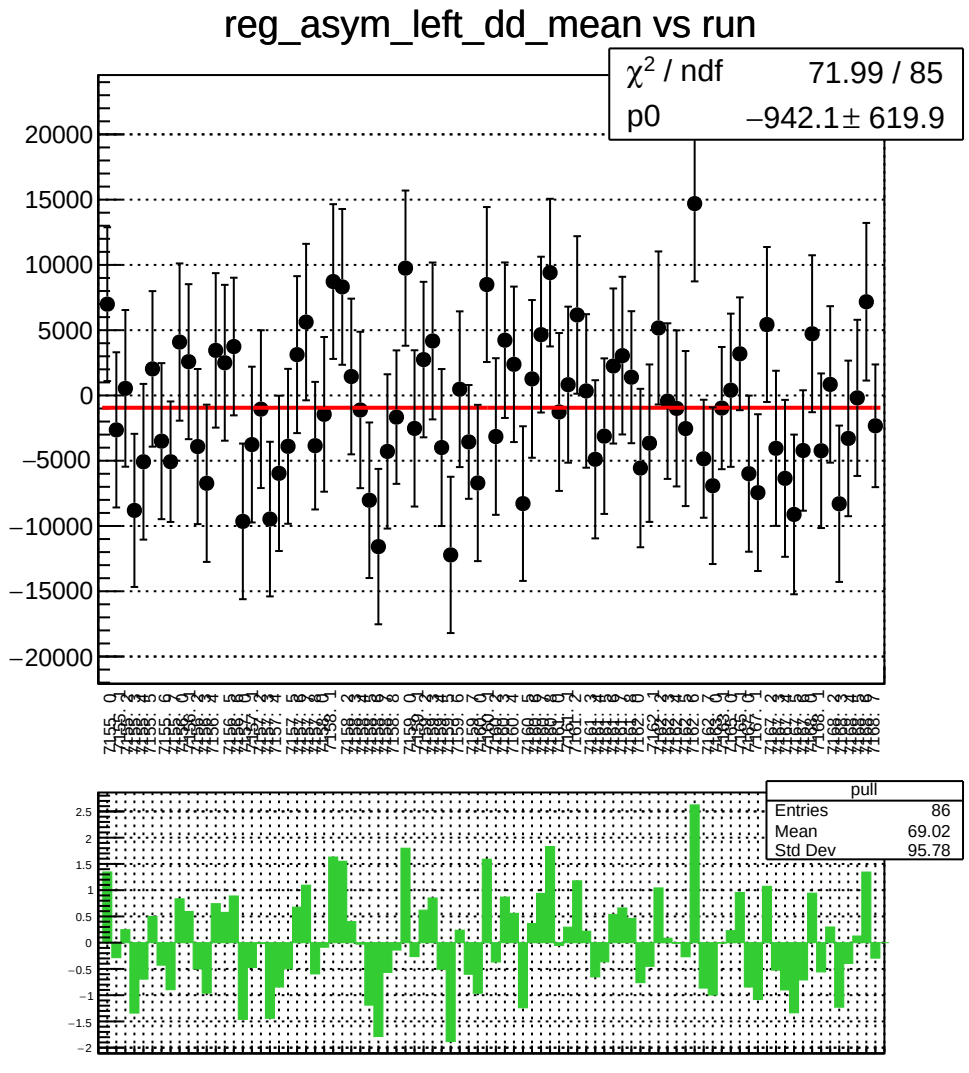

pull1D
Entries 86
Mean 0.01353
Std Dev 0.9277

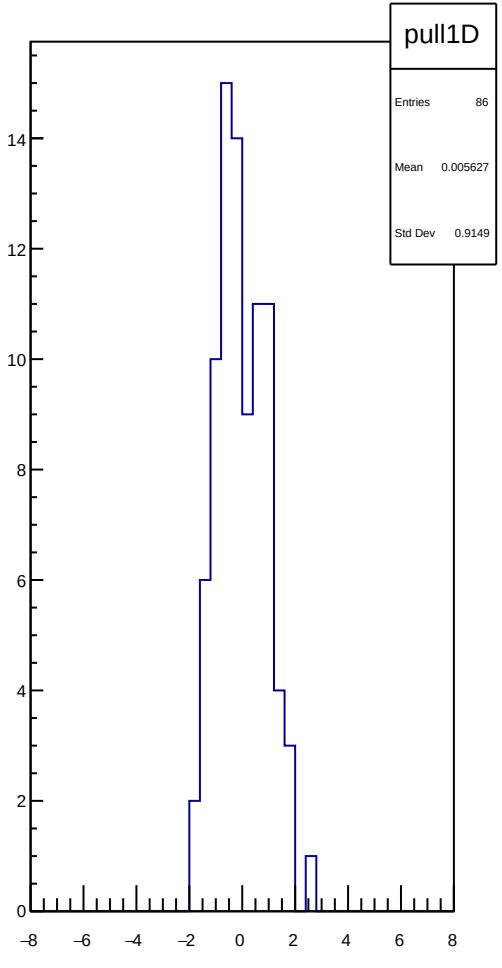

asym_left_avg_correction_rms vs run
χ² / ndf 8118 / 85
p0 1166 ± 0.9038
1400
1300
1200
1100
1000

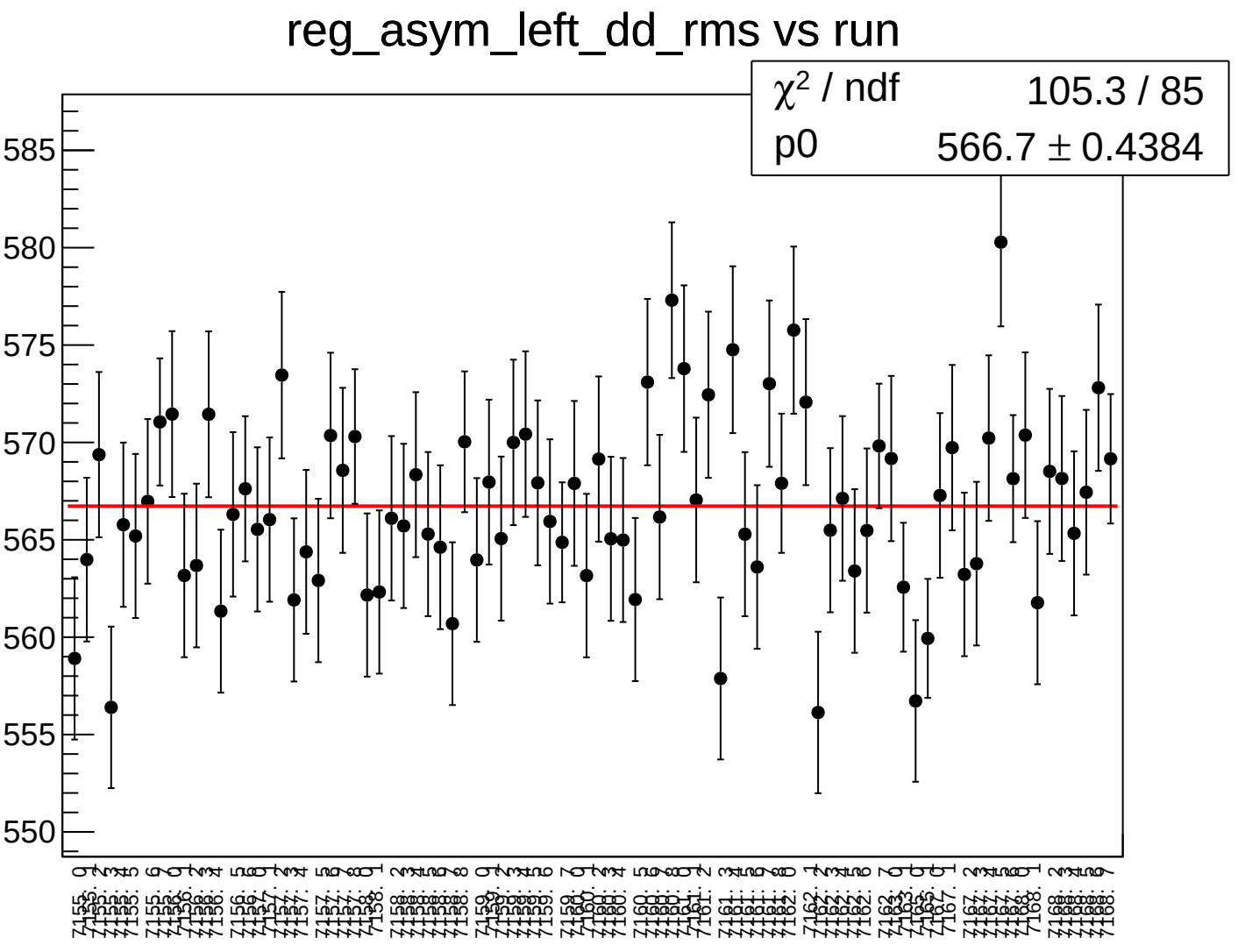

asym_left_avg_mean vs run
χ² / ndf 79.73 / 85
p0 −1331 ± 1423
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 49.86
Std Dev 32.57
2
1
0
−1
−2

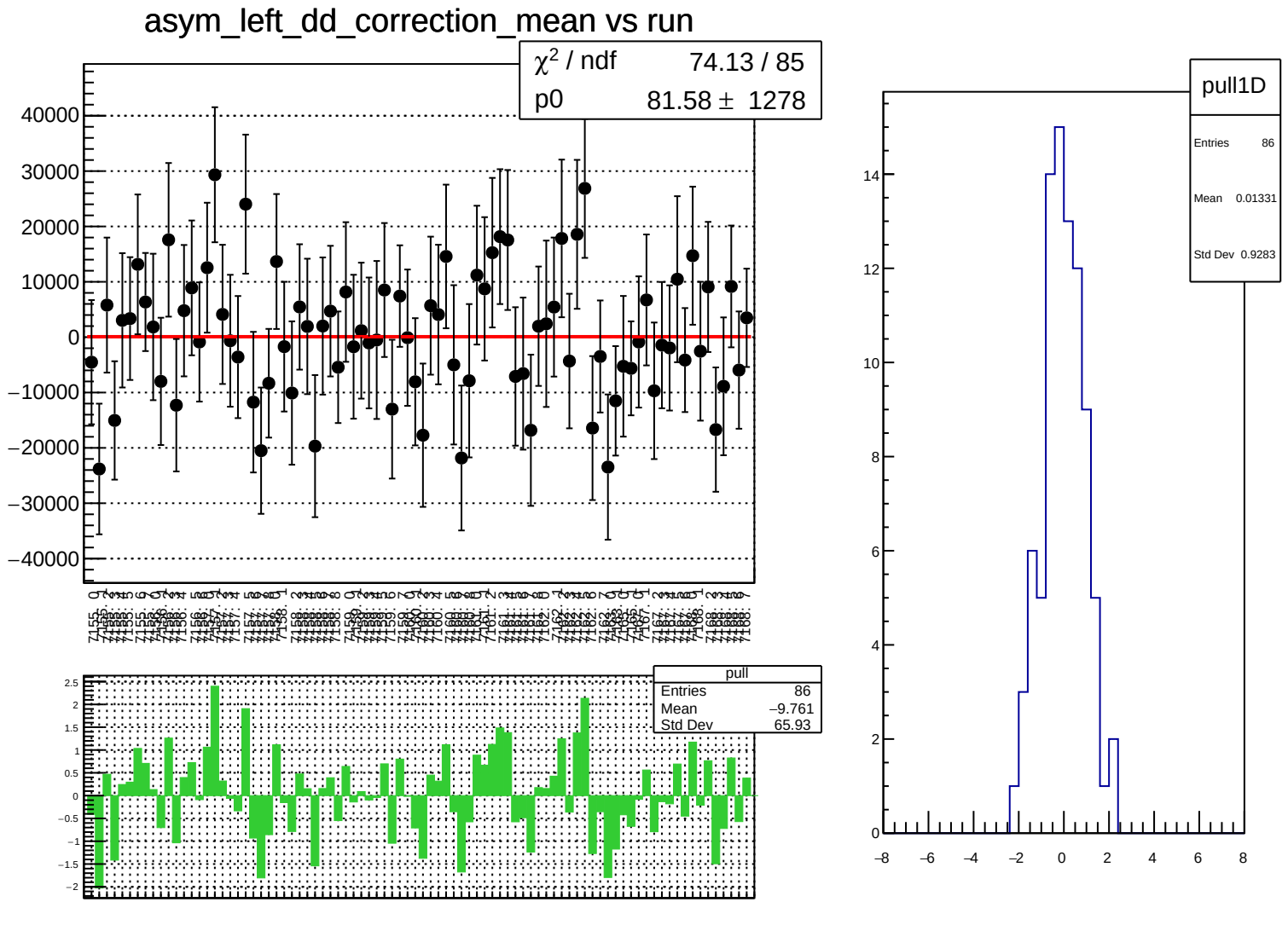

pull1D
Entries 86
Mean −0.005436
Std Dev 0.9629
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

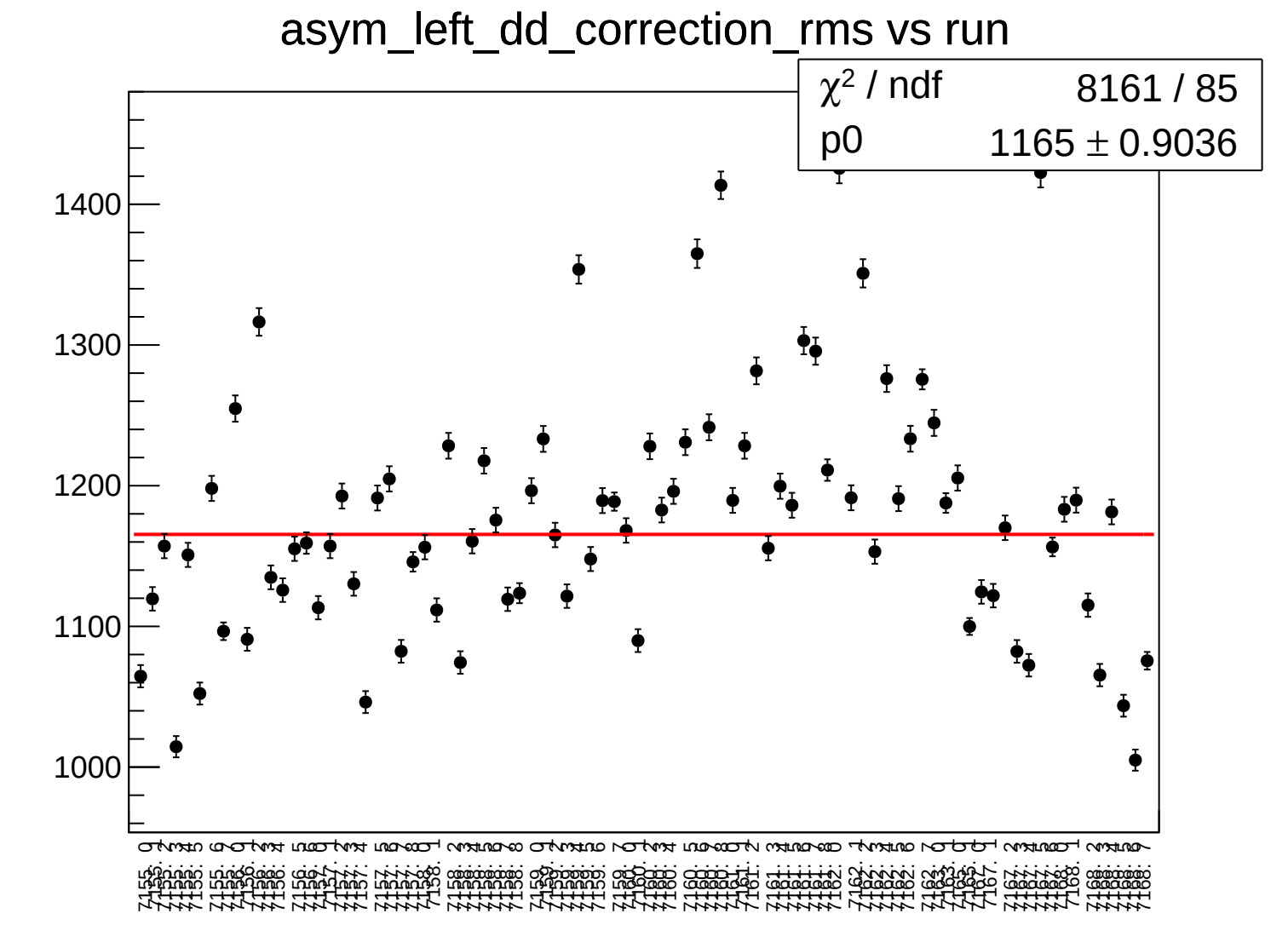

asym_left_avg_rms vs run
χ^2 / ndf 5498 / 85
p0 1299 ± 1.006
1550
1500
1450
1400
1350
1300
1250
1200
1150

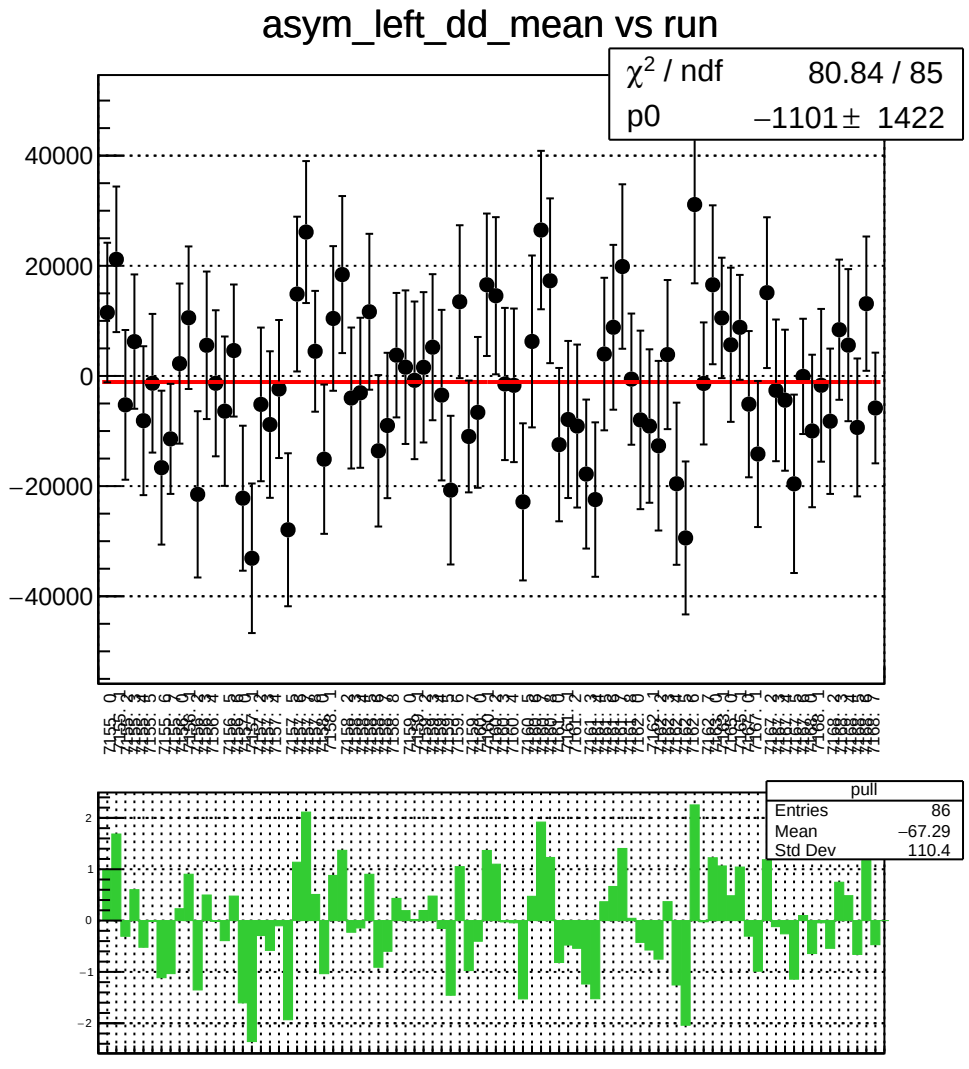

reg_asym_left_dd_mean vs run
χ² / ndf 71.99 / 85
p0 −942.1 ± 619.9
pull
Entries 86
Mean 69.02
Std Dev 95.78

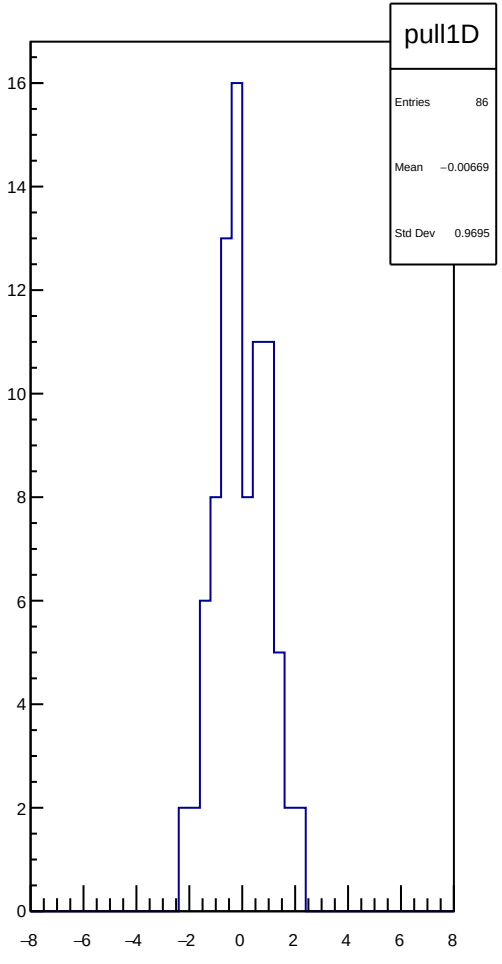

pull1D
Entries 86
Mean 0.005627
Std Dev 0.9149

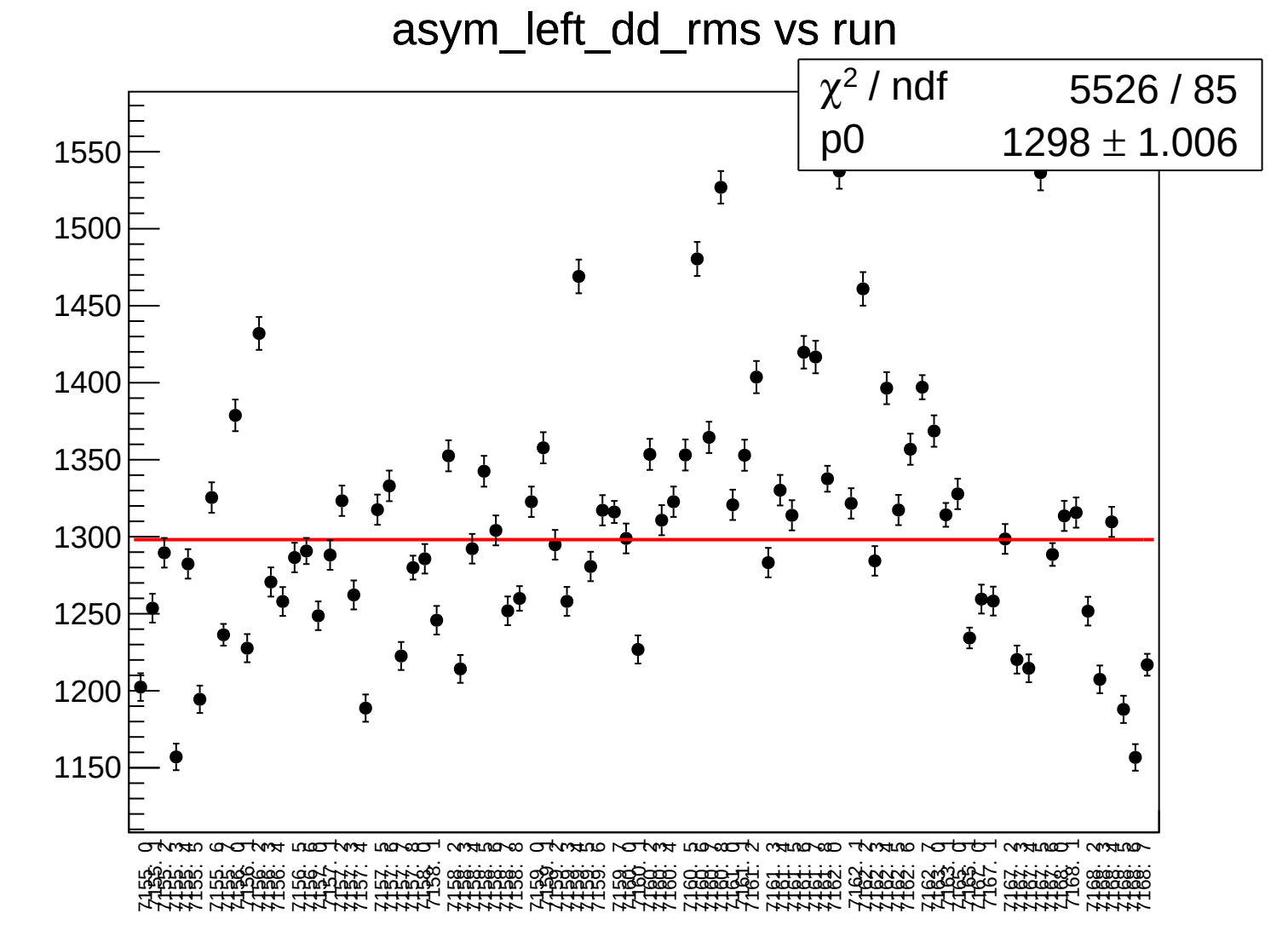

reg_asym_left_dd_rms vs run
χ² / ndf 105.3 / 85
p0 566.7 ± 0.4384
585
580
575
570
565
560
555
550

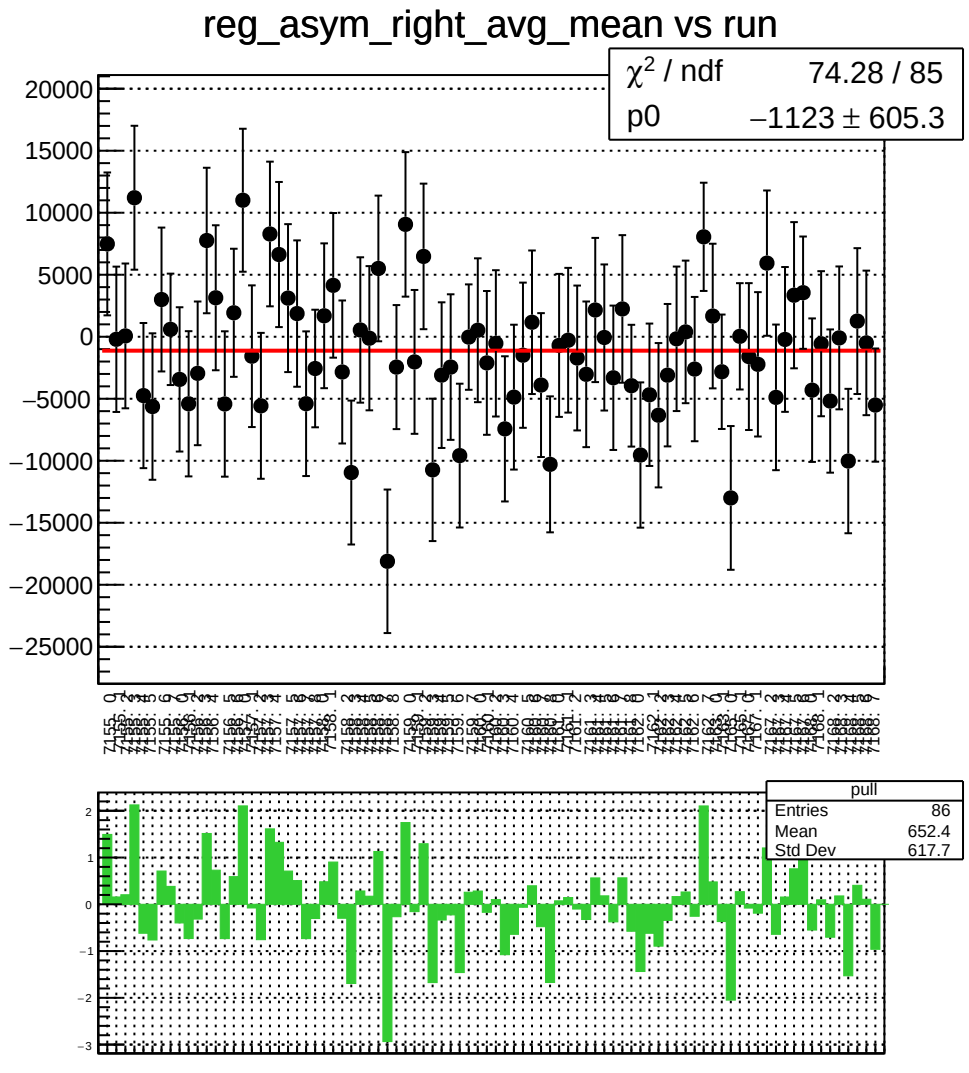

asym_left_dd_correction_mean vs run
χ² / ndf 74.13 / 85
p0 81.58 ± 1278
pull
Entries 86
Mean −9.761
Std Dev 65.93
pull1D
Entries 86
Mean 0.01331
Std Dev 0.9283

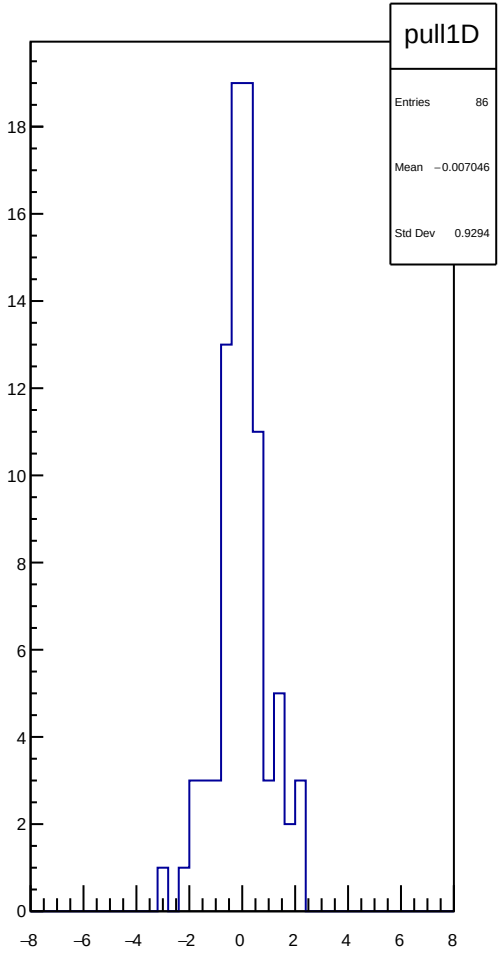

asym_left_dd_correction_rms vs run
χ² / ndf 8161 / 85
p0 1165 ± 0.9036
1400
1300
1200
1100
1000

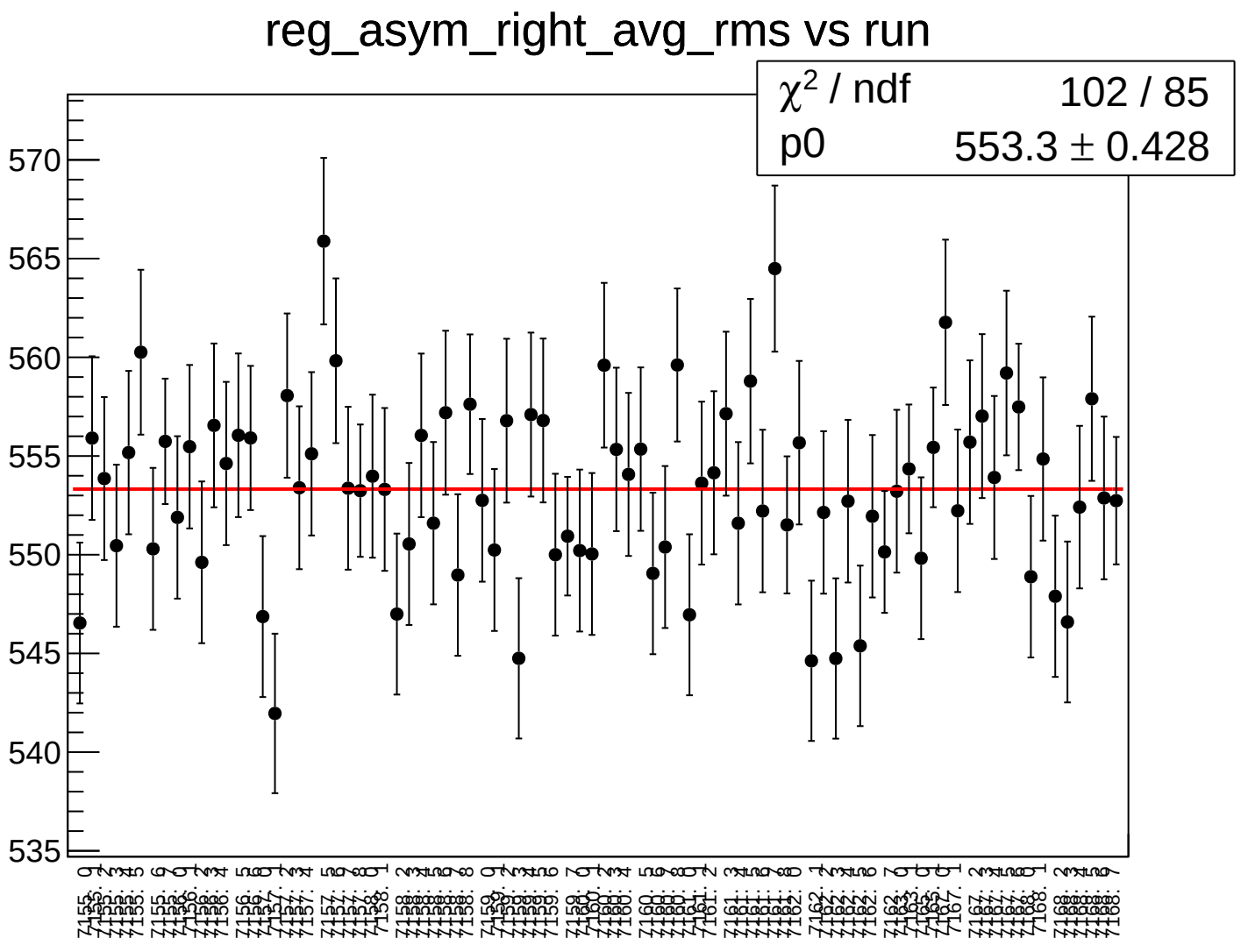

asym_left_dd_mean vs run
χ² / ndf 80.84 / 85
p0 −1101 ± 1422
40000
20000
0
−20000
−40000
pull
Entries 86
Mean −67.29
Std Dev 110.4
2
1
0
−1
−2

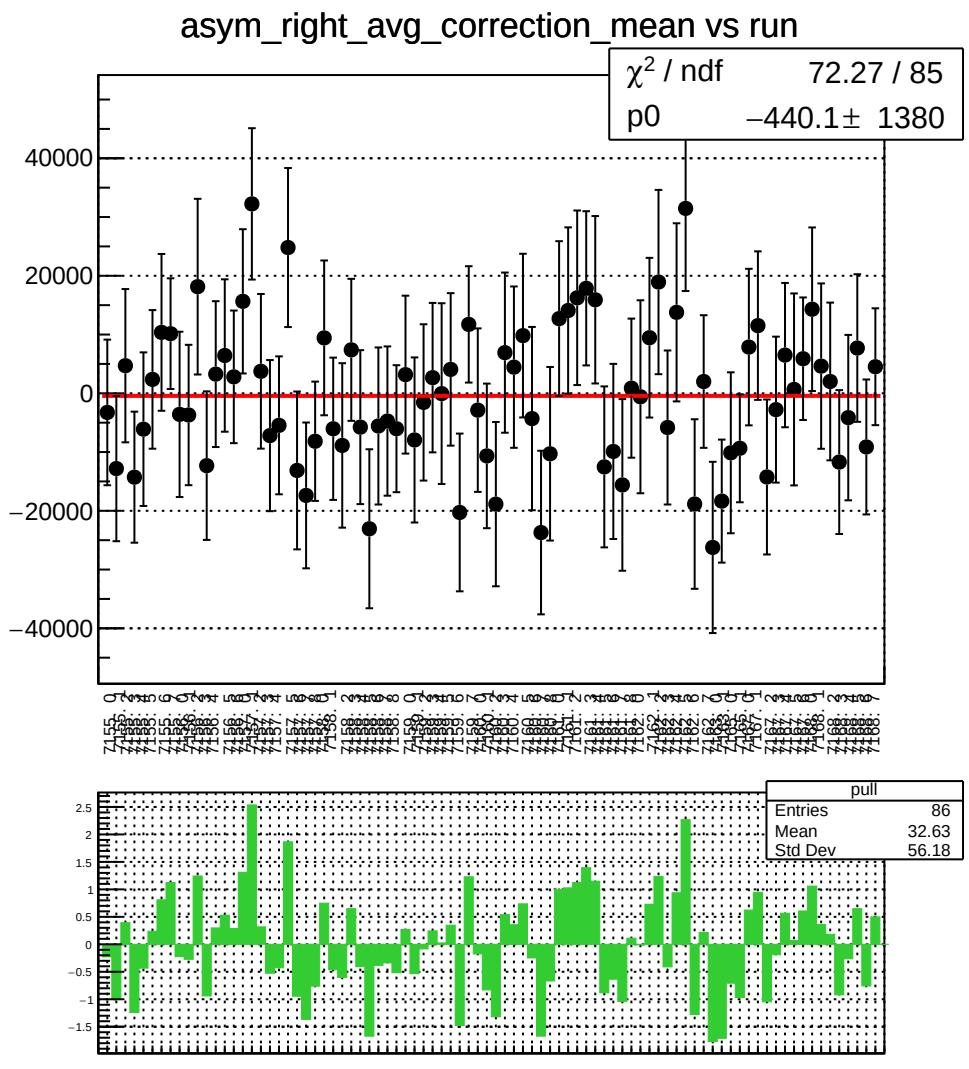

pull1D
Entries 86
Mean −0.00669
Std Dev 0.9695
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

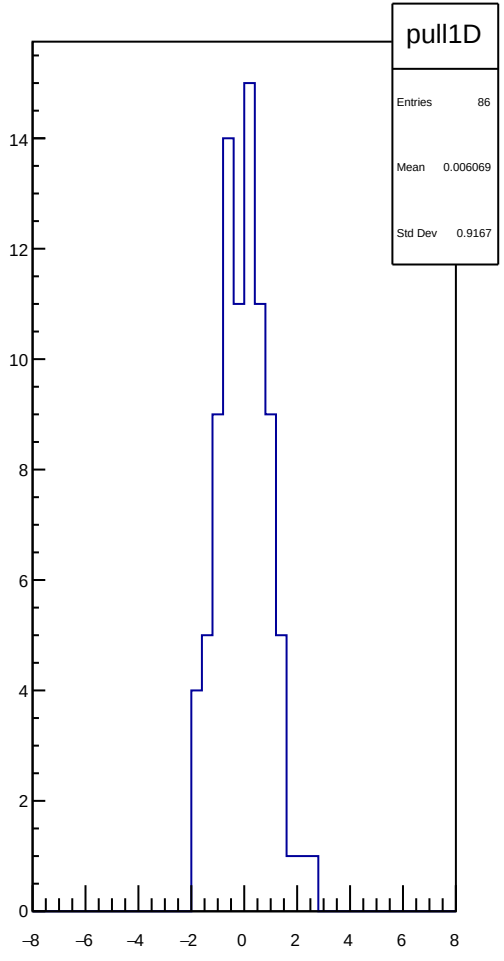

asym_left_dd_rms vs run
χ² / ndf 5526 / 85
p0 1298 ± 1.006
1550
1500
1450
1400
1350
1300
1250
1200
1150

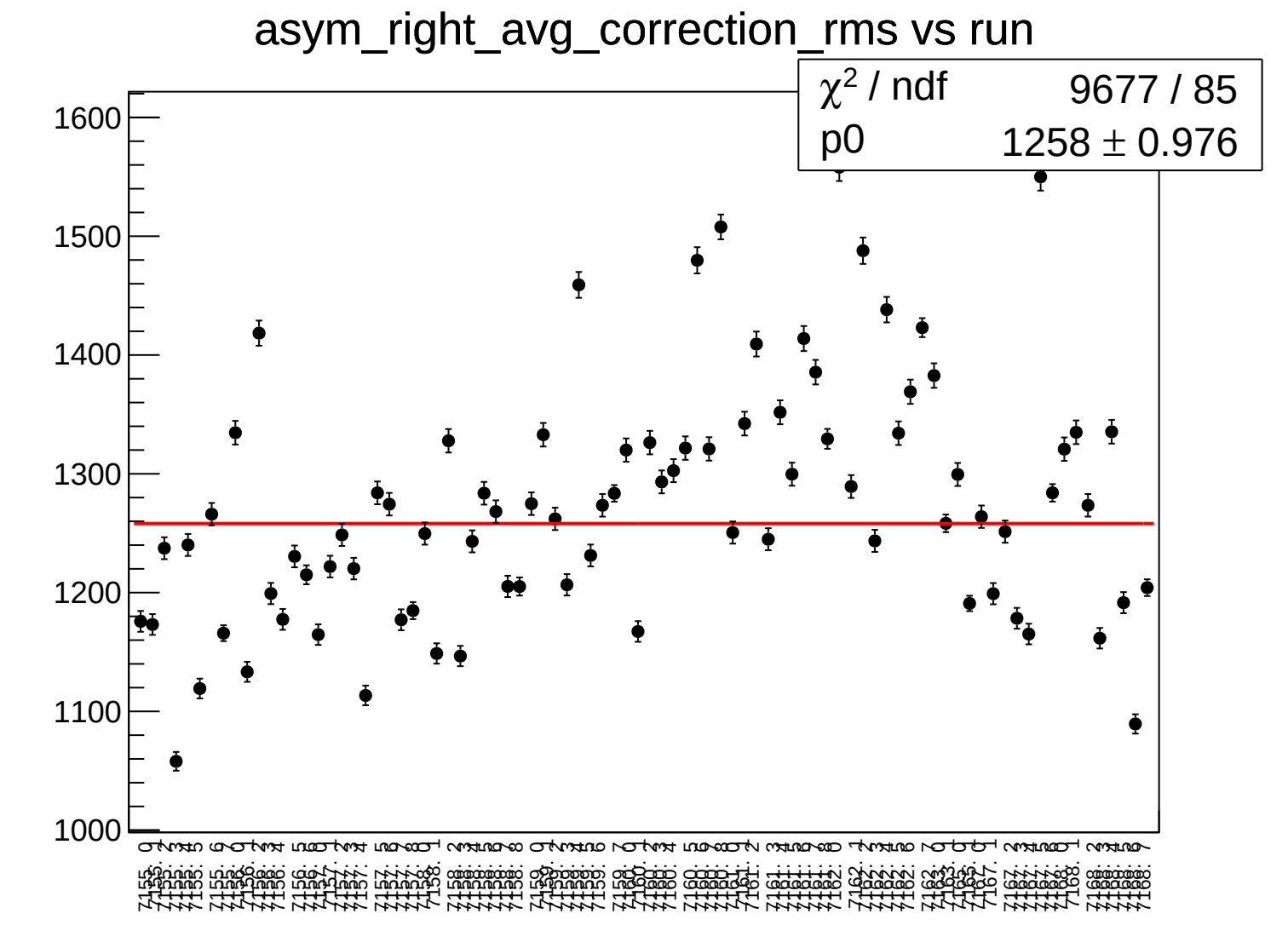

reg_asym_right_avg_mean vs run
χ² / ndf 74.28 / 85
p0 −1123 ± 605.3
pull
Entries 86
Mean 652.4
Std Dev 617.7

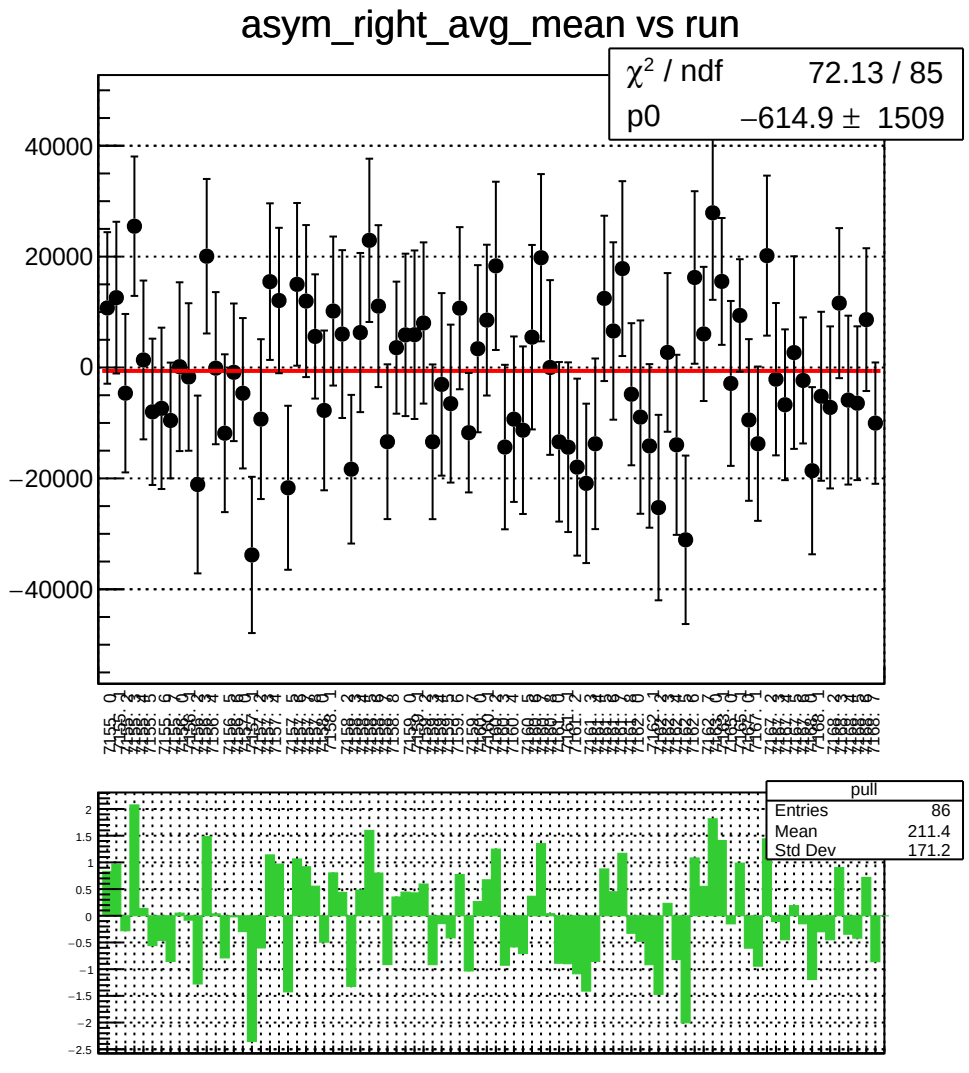

pull1D
Entries 86
Mean −0.007046
Std Dev 0.9294

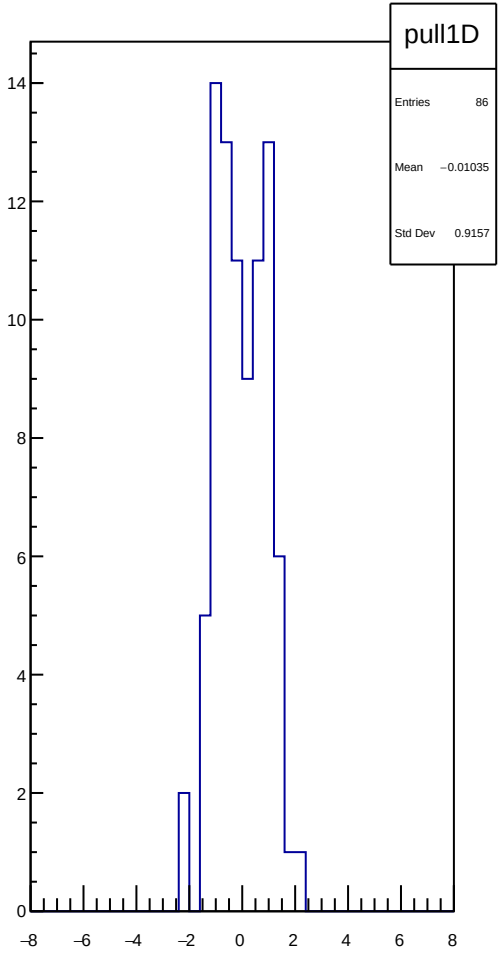

reg_asym_right_avg_rms vs run
χ^2 / ndf 102 / 85
p0 553.3 ± 0.428
570
565
560
555
550
545
540
535

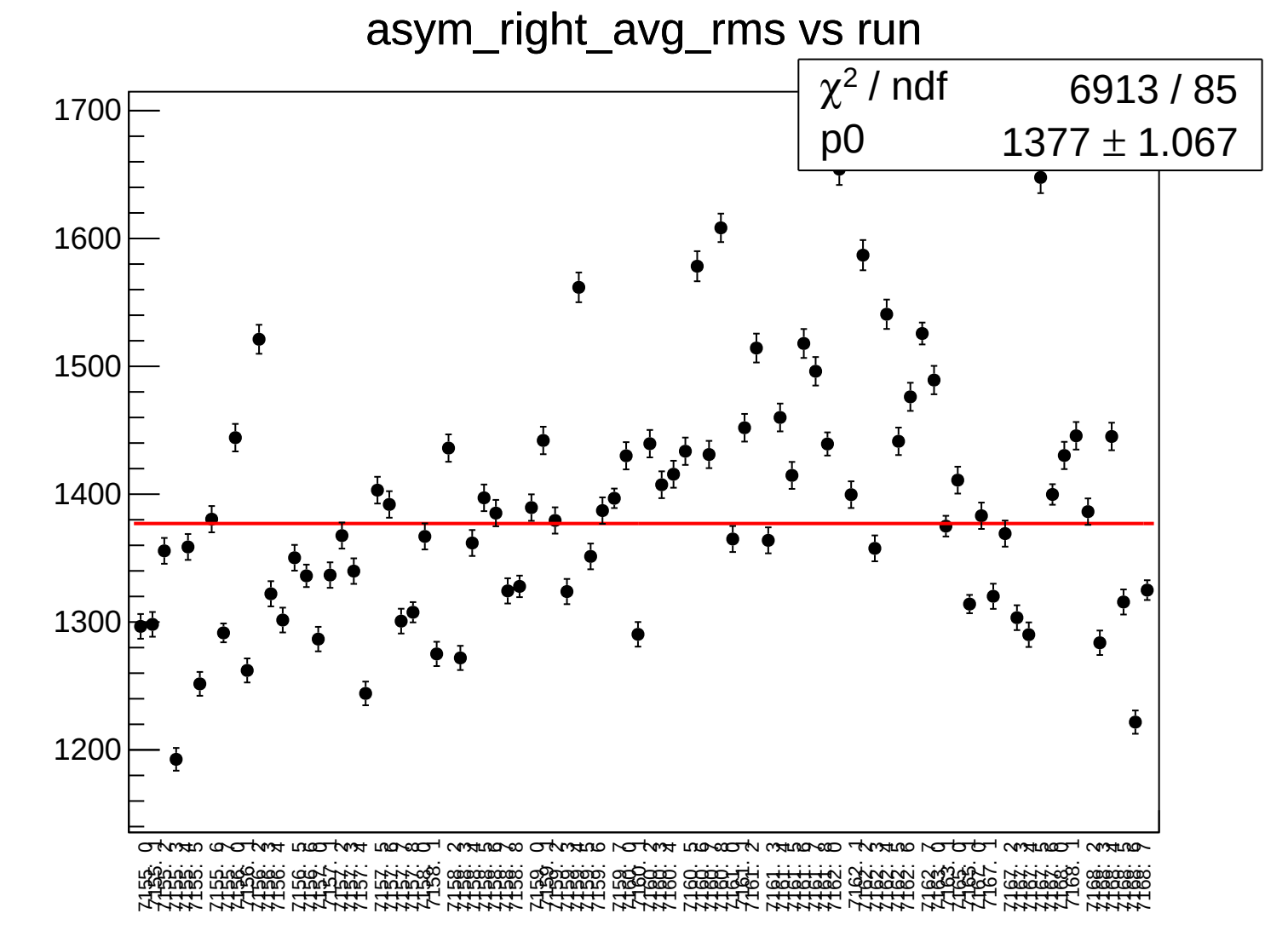

asym_right_avg_correction_mean vs run
χ² / ndf 72.27 / 85
p0 −440.1± 1380
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 32.63
Std Dev 56.18
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

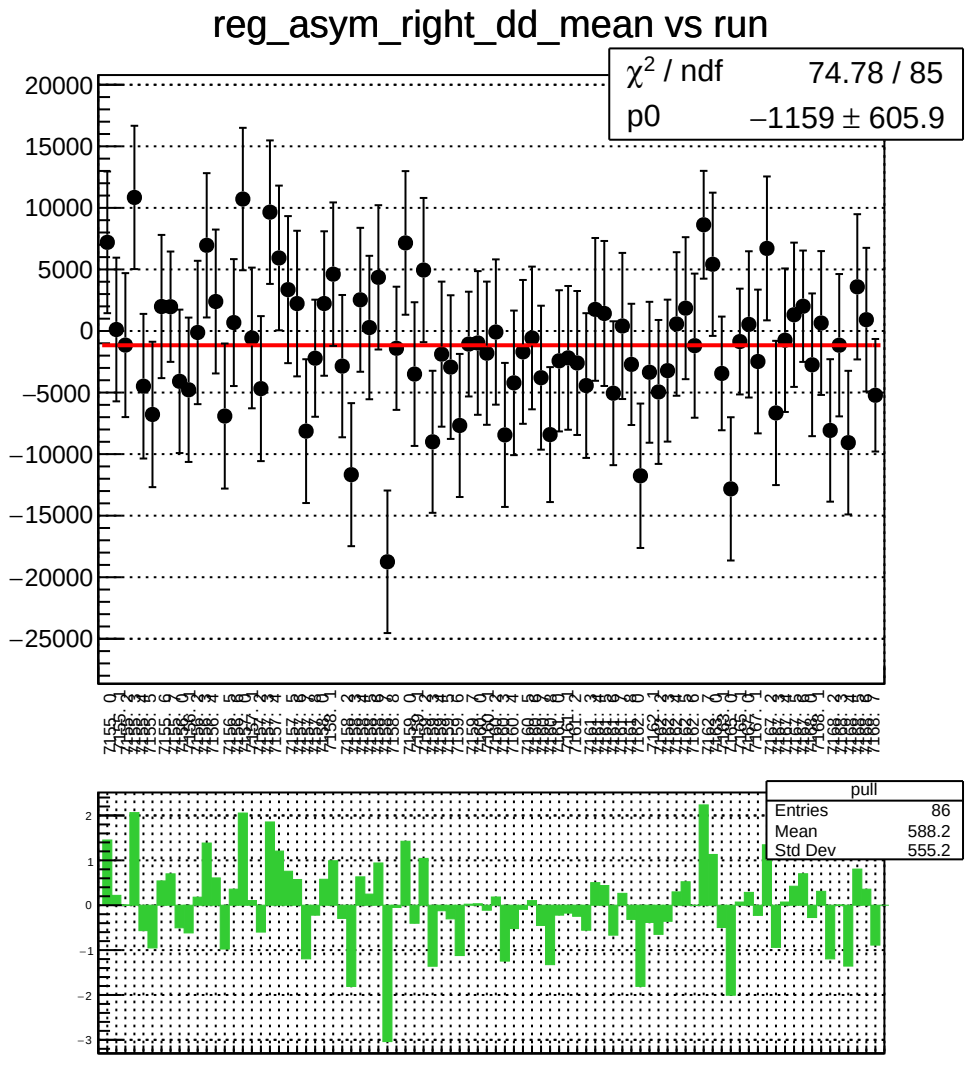

pull1D
Entries 86
Mean 0.006069
Std Dev 0.9167
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

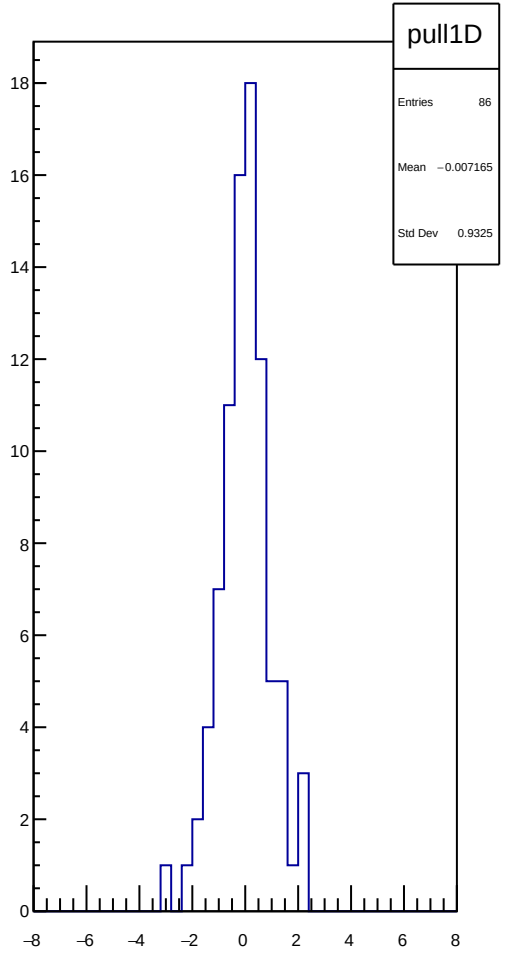

asym_right_avg_correction_rms vs run
χ^2 / ndf 9677 / 85
p0 1258 ± 0.976
1600
1500
1400
1300
1200
1100
1000

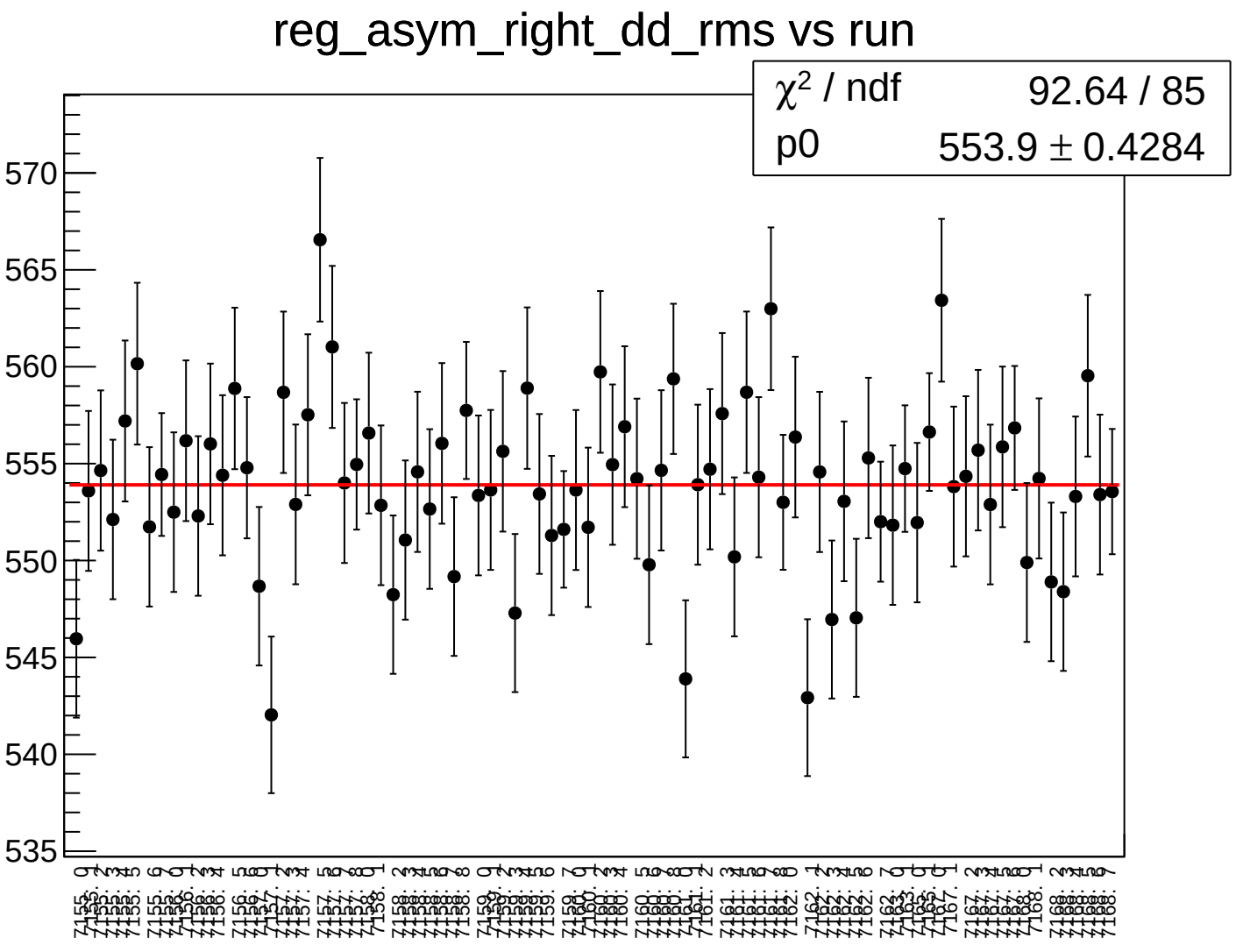

asym_right_avg_mean vs run
χ² / ndf 72.13 / 85
p0 −614.9 ± 1509
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 211.4
Std Dev 171.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

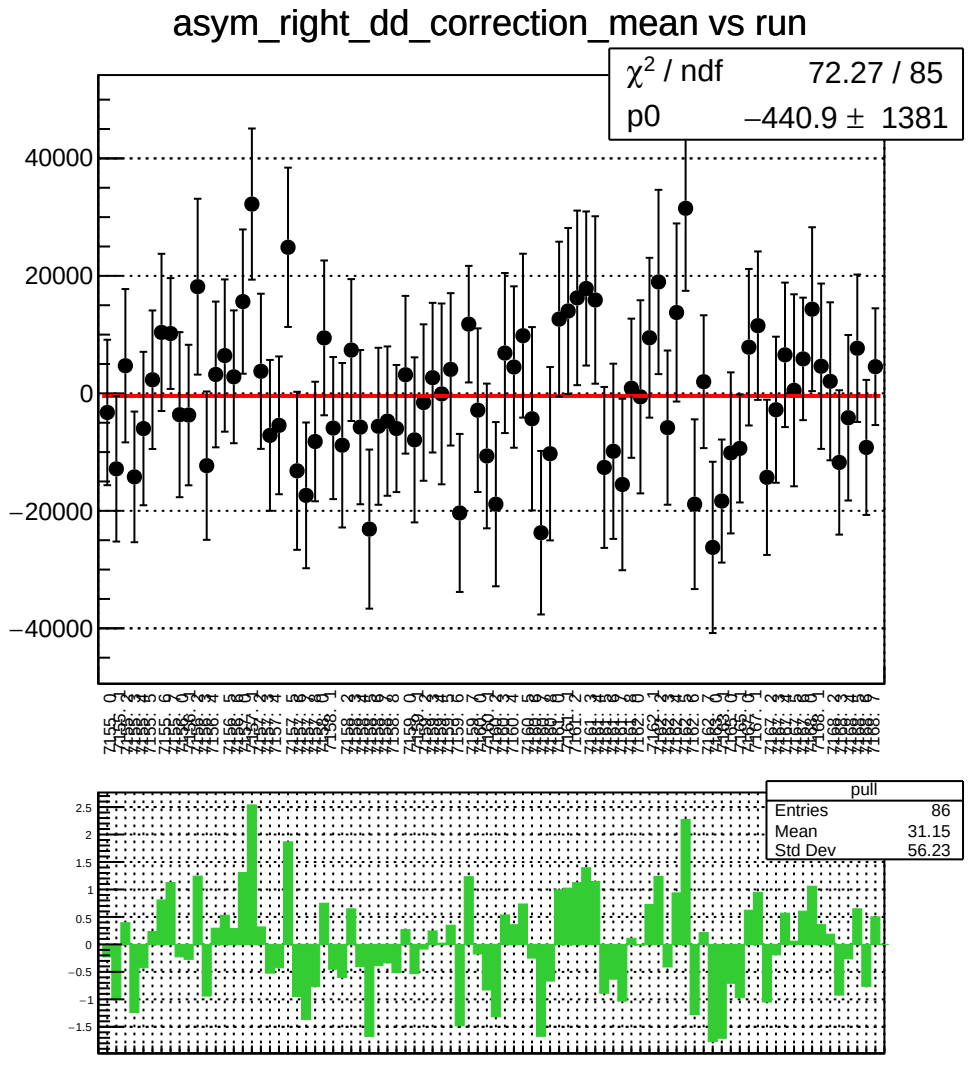

pull1D
Entries 86
Mean −0.01035
Std Dev 0.9157
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

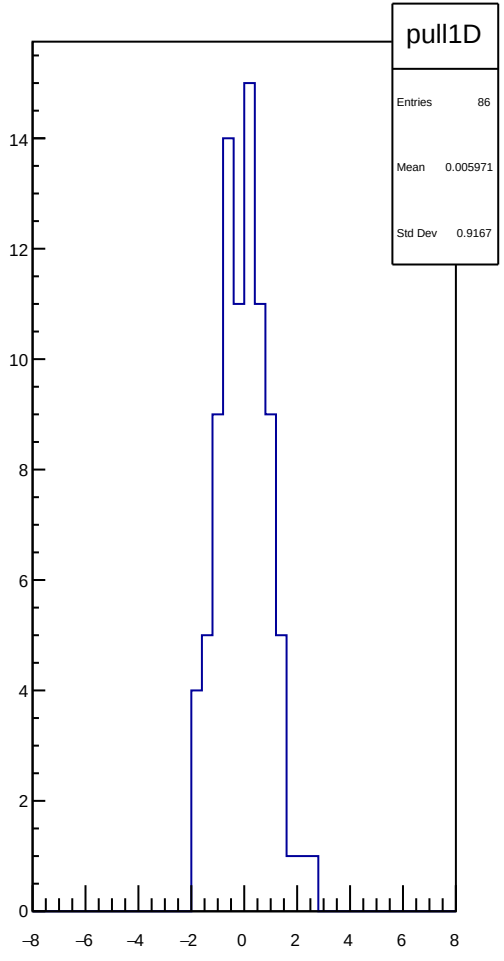

asym_right_avg_rms vs run
χ² / ndf 6913 / 85
p0 1377 ± 1.067
1700
1600
1500
1400
1300
1200

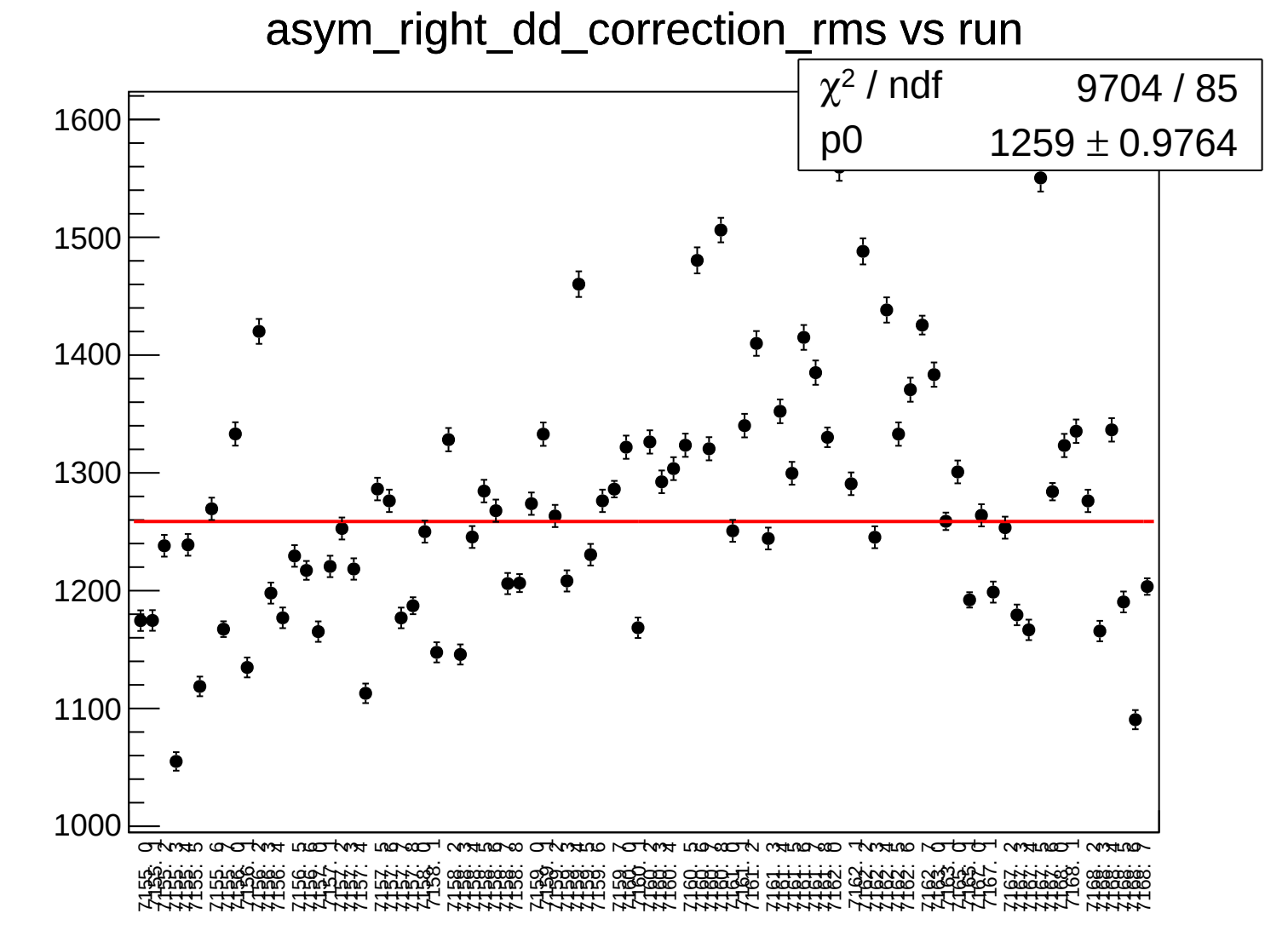

reg_asym_right_dd_mean vs run
χ² / ndf 74.78 / 85
p0 −1159 ± 605.9
pull
Entries 86
Mean 588.2
Std Dev 555.2

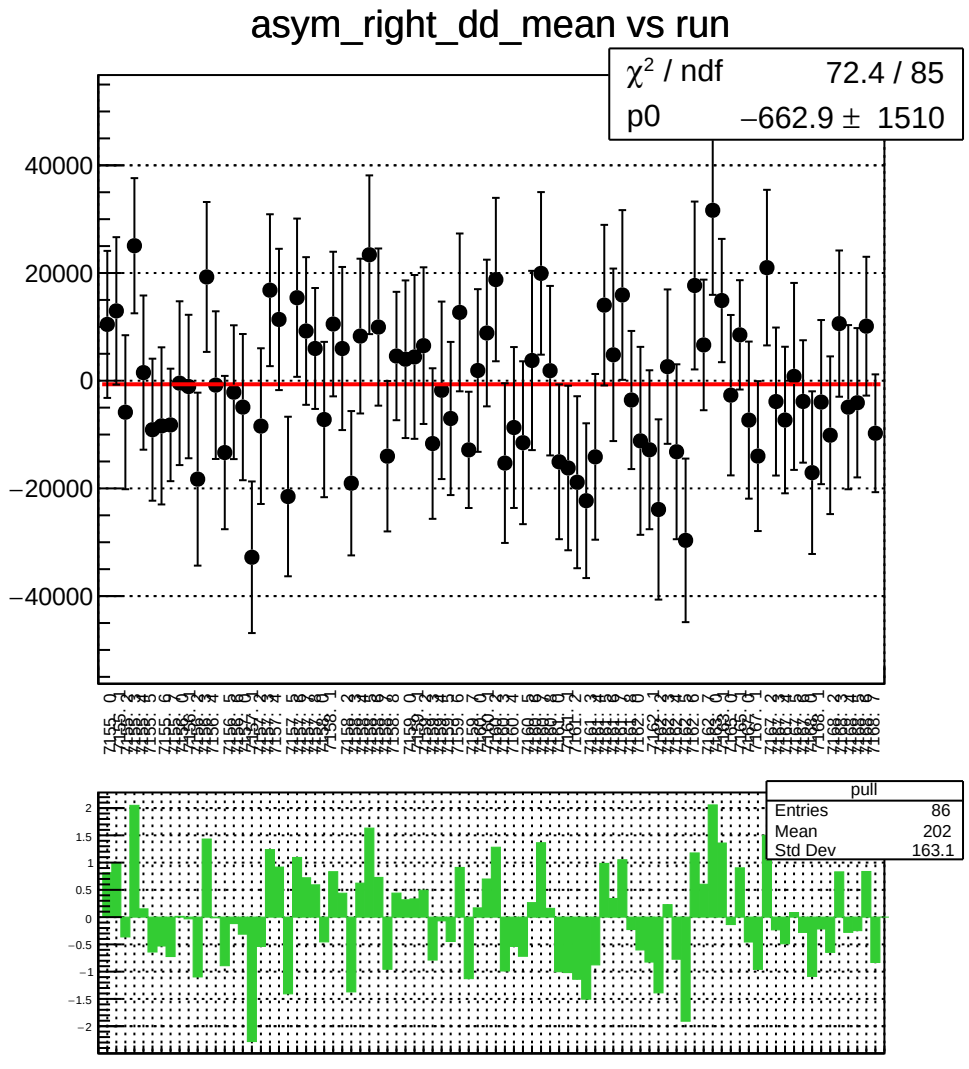

pull1D
Entries 86
Mean −0.007165
Std Dev 0.9325

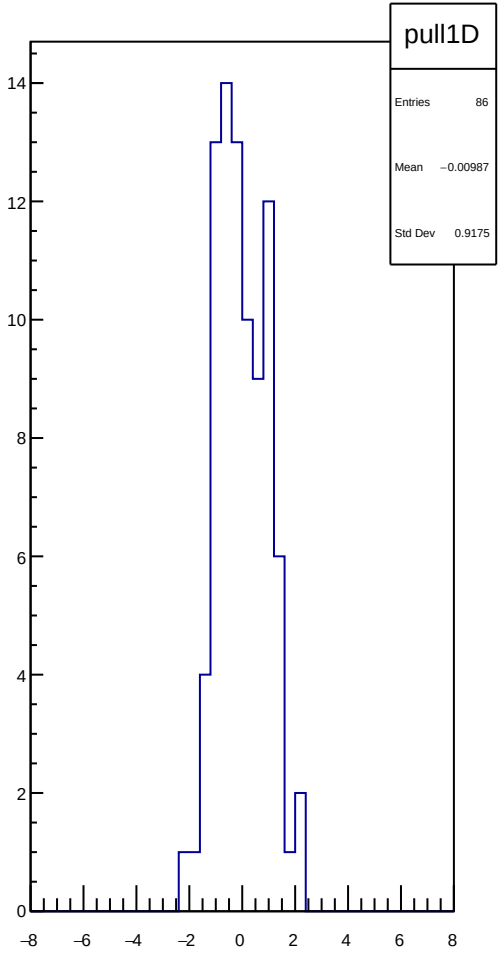

reg_asym_right_dd_rms vs run
χ² / ndf 92.64 / 85
p0 553.9 ± 0.4284
570
565
560
555
550
545
540
535

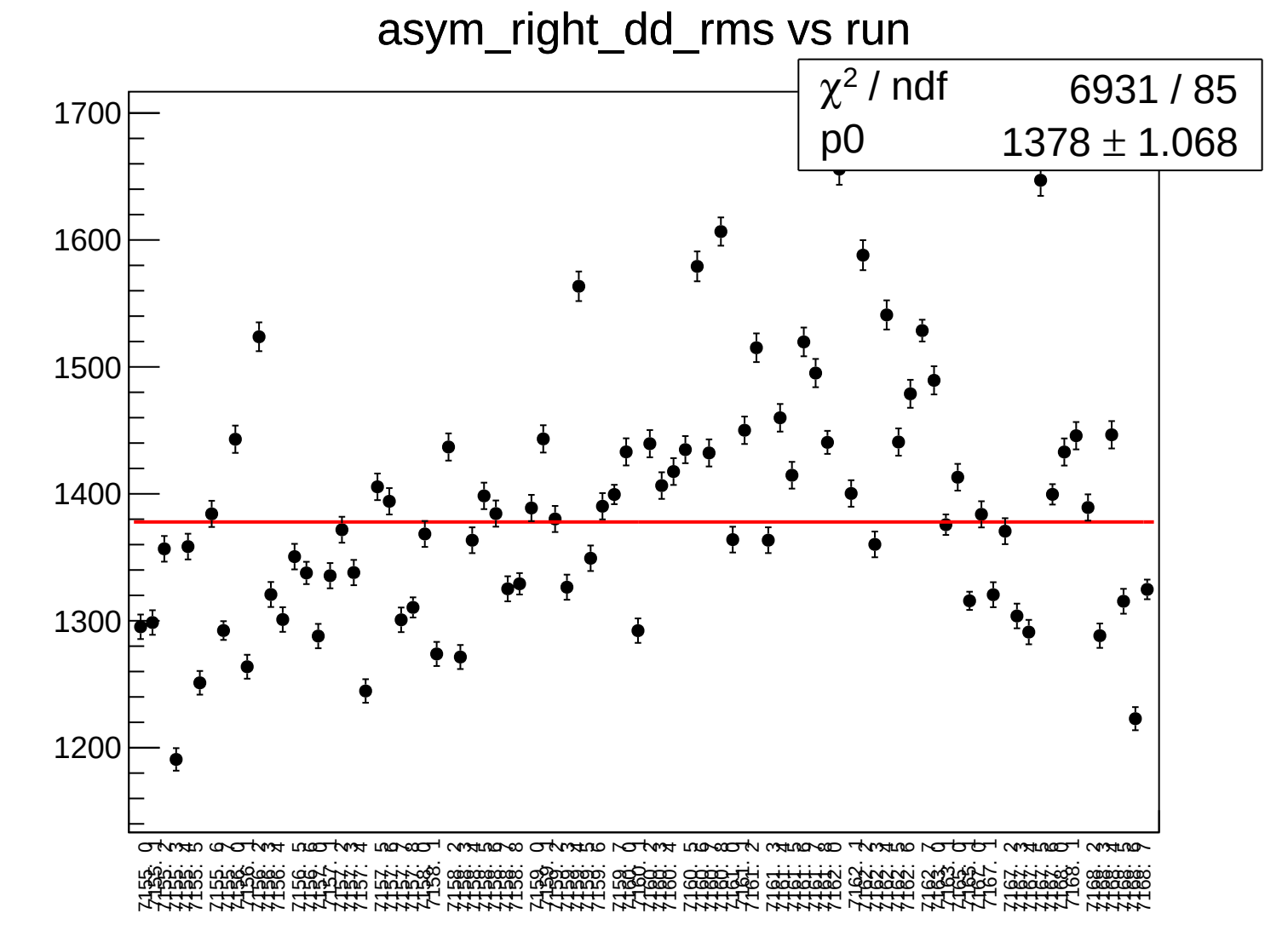

asym_right_dd_correction_mean vs run
χ² / ndf 72.27 / 85
p0 −440.9 ± 1381
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 31.15
Std Dev 56.23
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

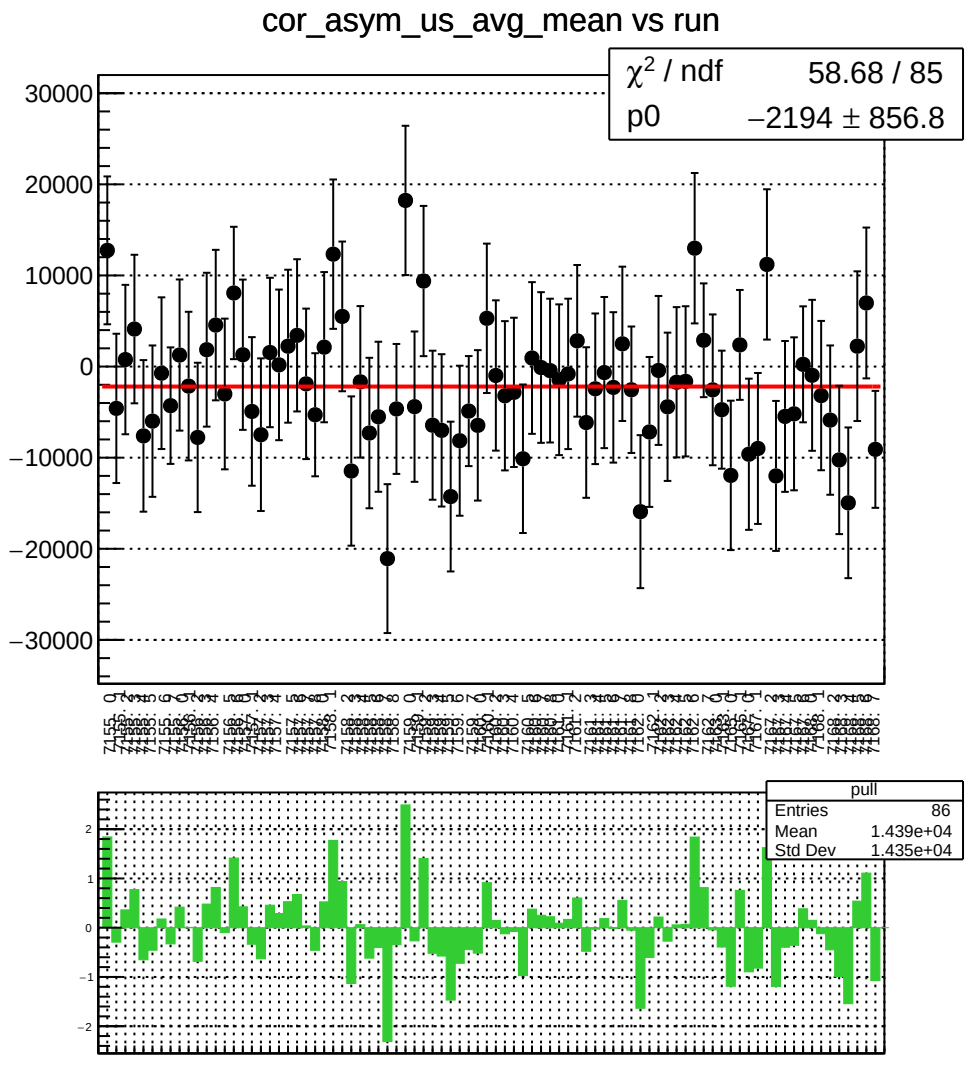

pull1D
Entries 86
Mean 0.005971
Std Dev 0.9167
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

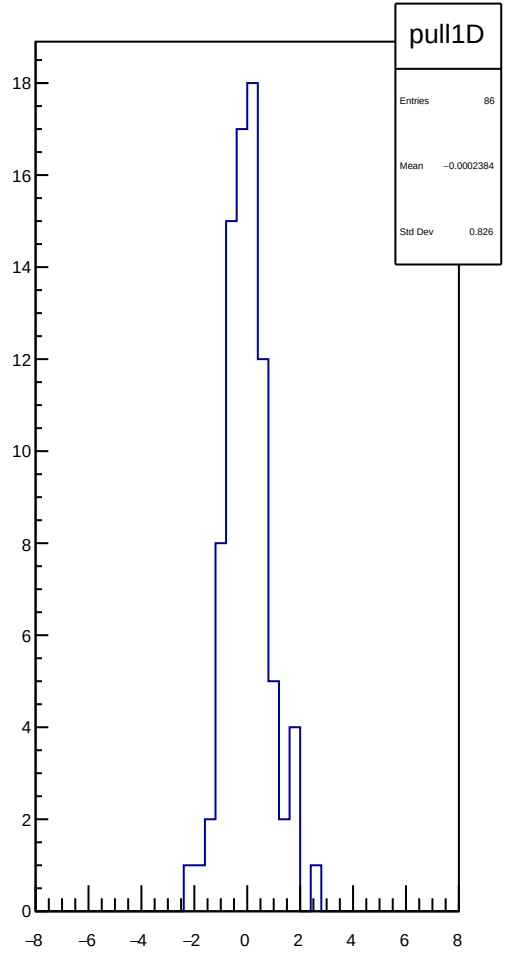

asym_right_dd_correction_rms vs run
χ² / ndf 9704 / 85
p0 1259 ± 0.9764
1600
1500
1400
1300
1200
1100
1000

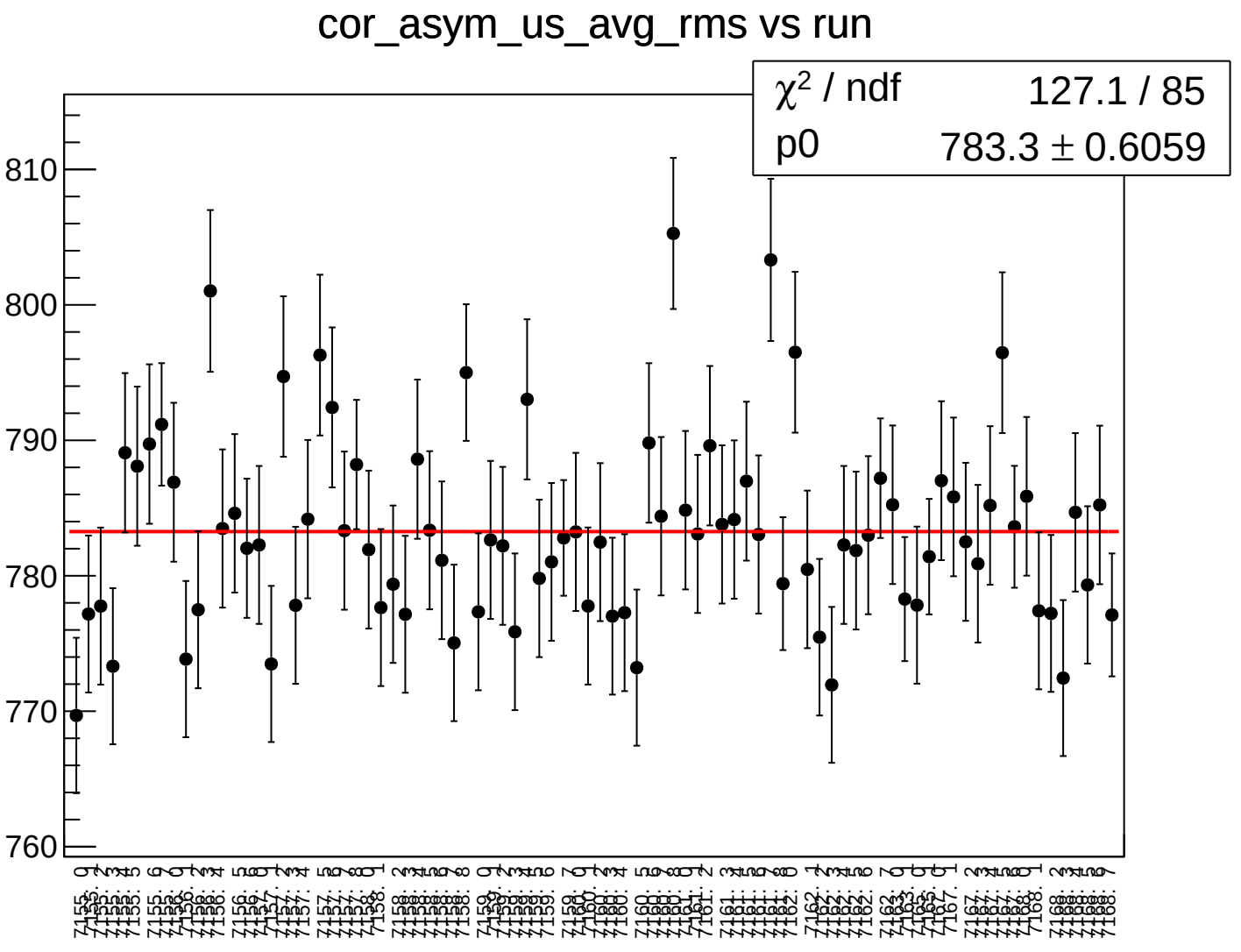

asym_right_dd_mean vs run
χ² / ndf 72.4 / 85
p0 −662.9 ± 1510
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 202
Std Dev 163.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

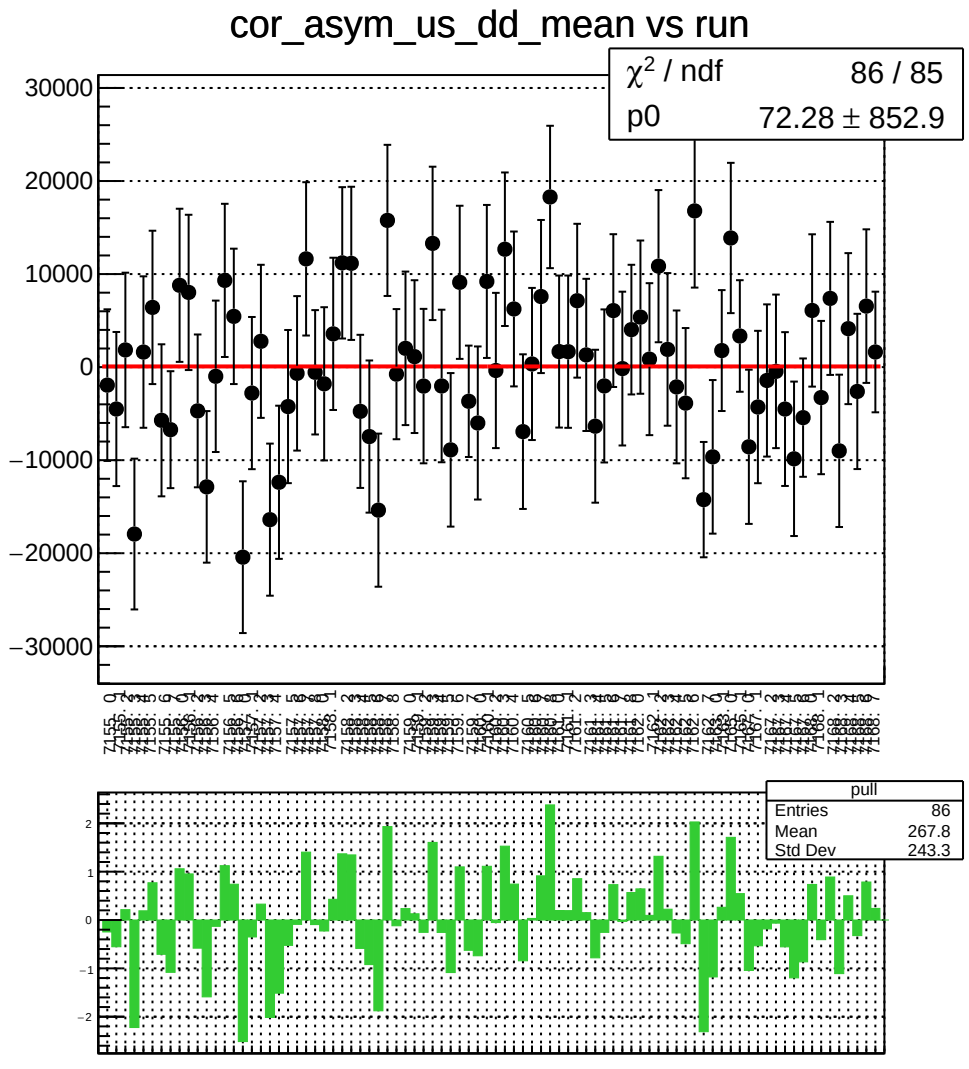

pull1D
Entries 86
Mean −0.00987
Std Dev 0.9175
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

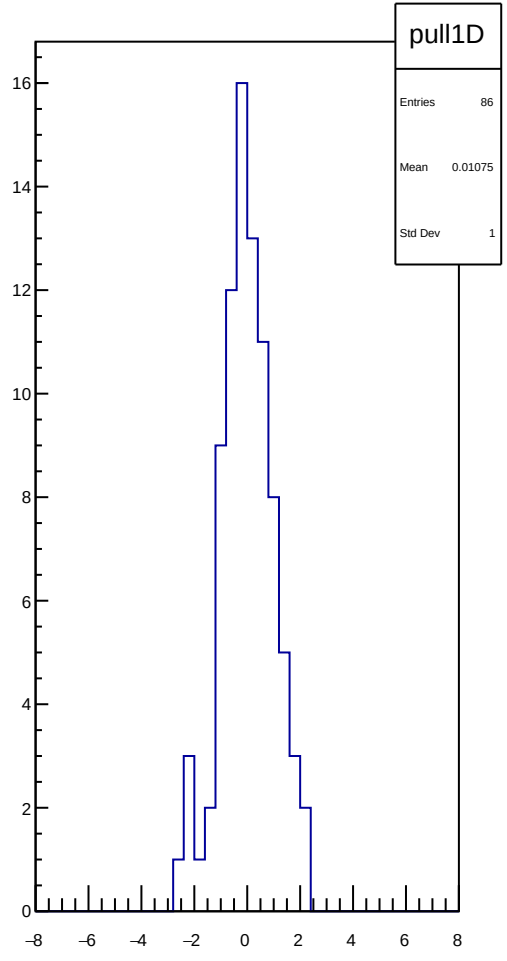

asym_right_dd_rms vs run
χ^2 / ndf 6931 / 85
p0 1378 ± 1.068
1700
1600
1500
1400
1300
1200

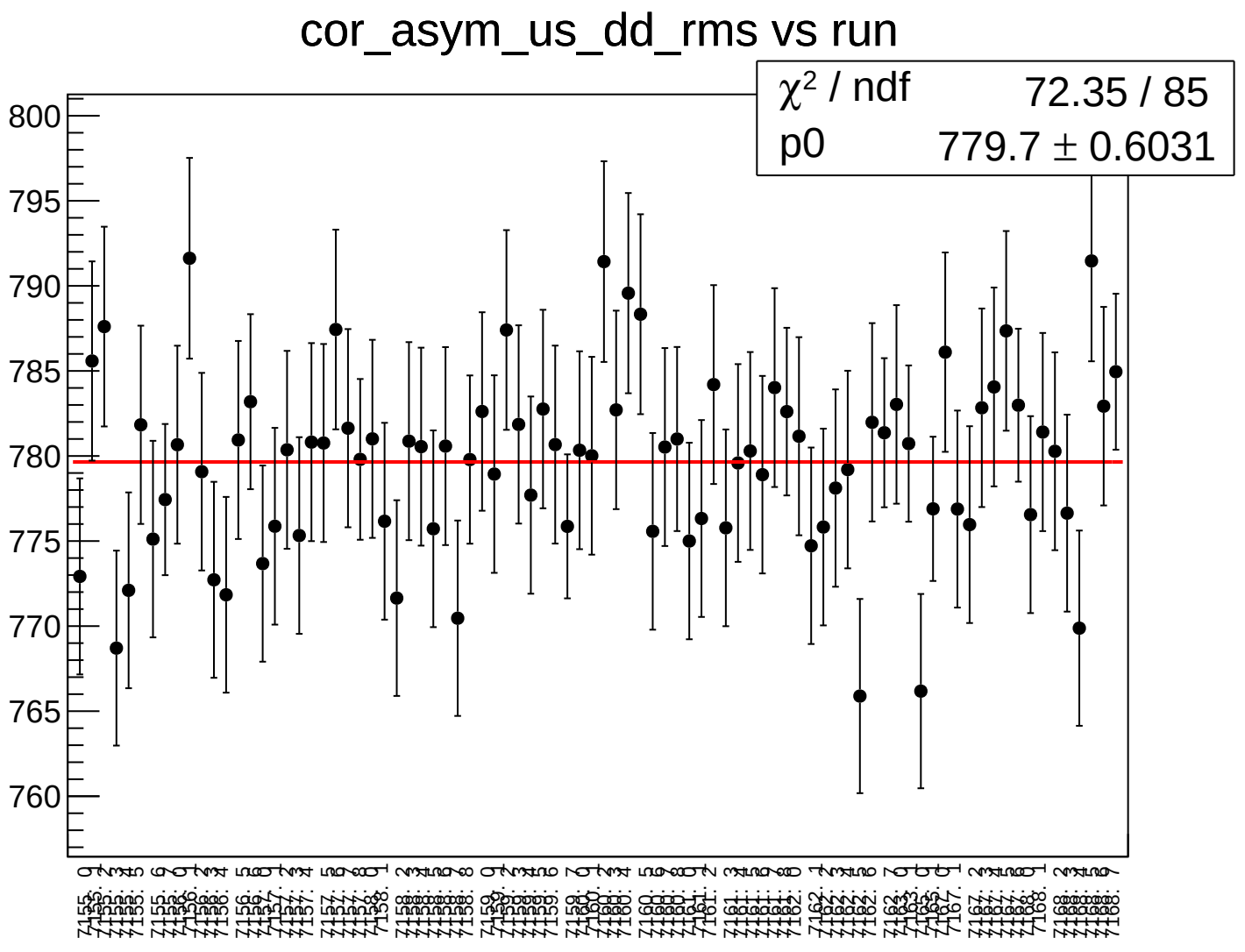

cor_asym_us_avg_mean vs run
χ² / ndf 58.68 / 85
p0 −2194 ± 856.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 1.439e+04
Std Dev 1.435e+04
2
1
0
−1
−2

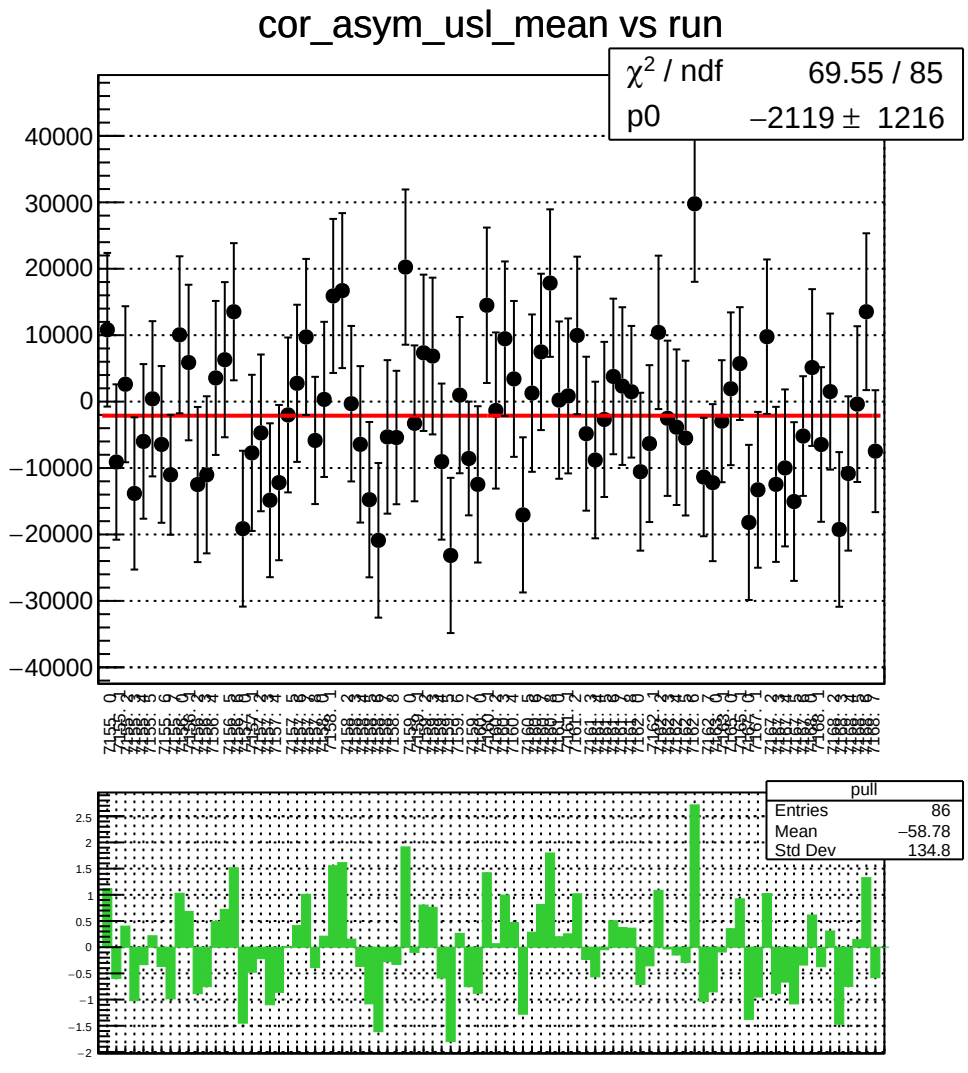

pull1D
Entries 86
Mean −0.0002384
Std Dev 0.826
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

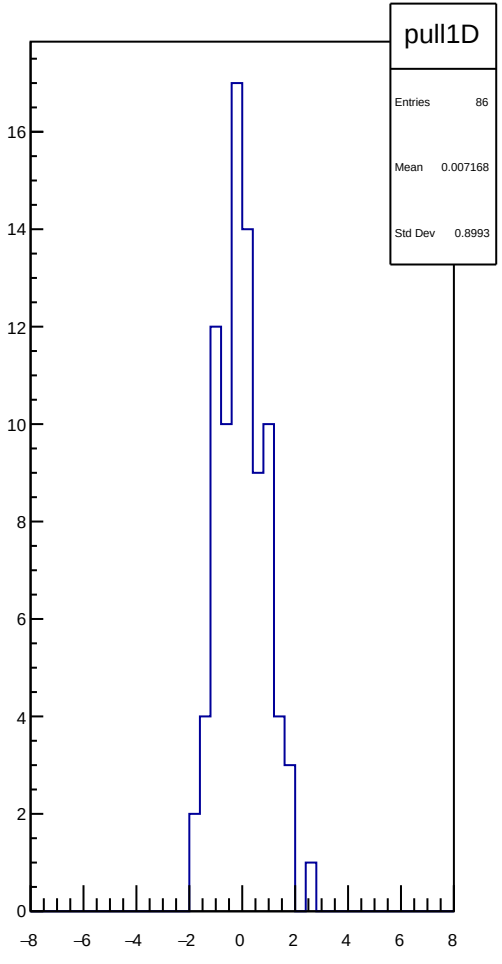

cor_asym_us_avg_rms vs run
χ² / ndf 127.1 / 85
p0 783.3 ± 0.6059
810
800
790
780
770
760

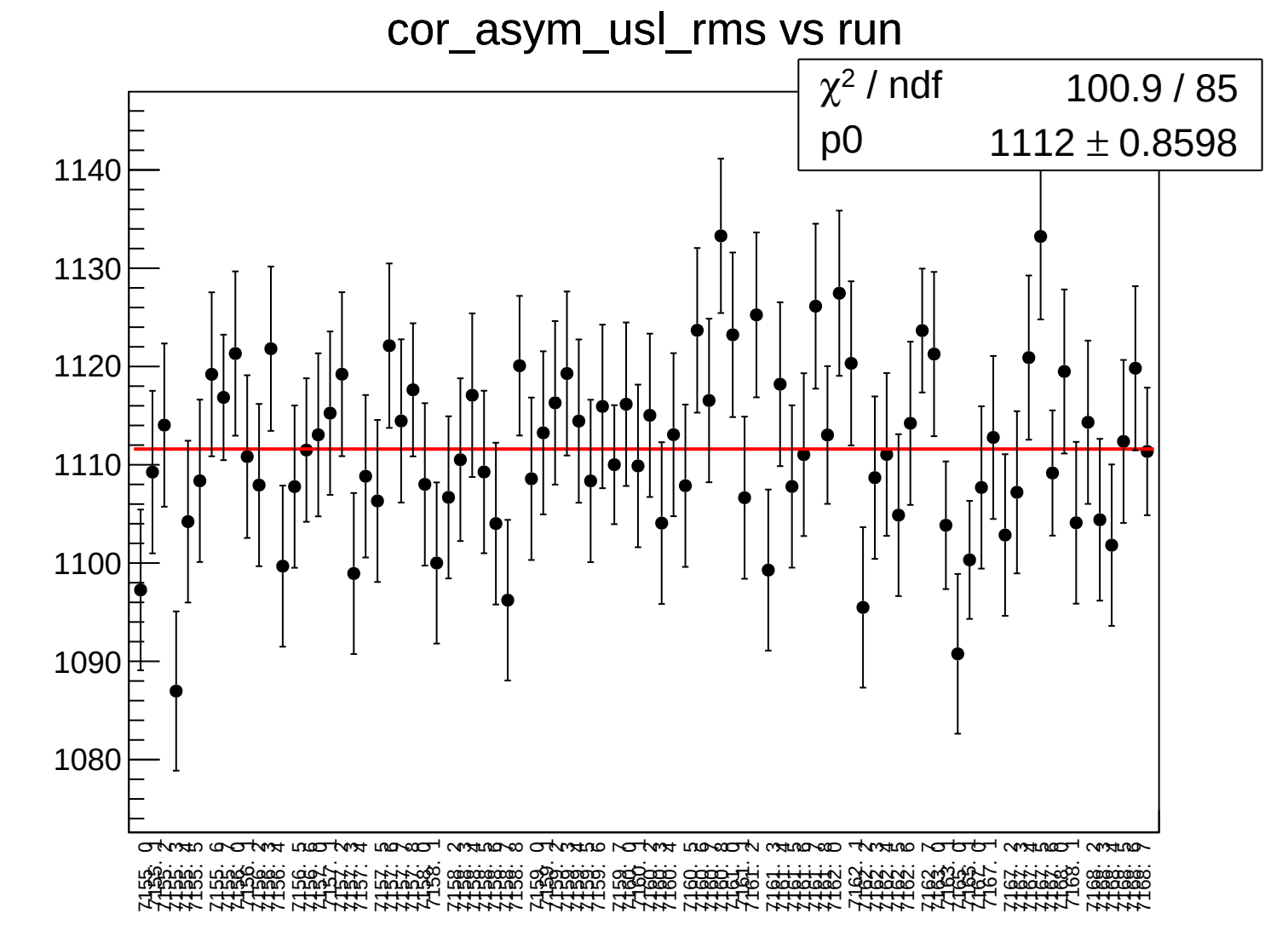

cor_asym_us_dd_mean vs run
χ² / ndf 86 / 85
p0 72.28 ± 852.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 267.8
Std Dev 243.3
2
1
0
−1
−2

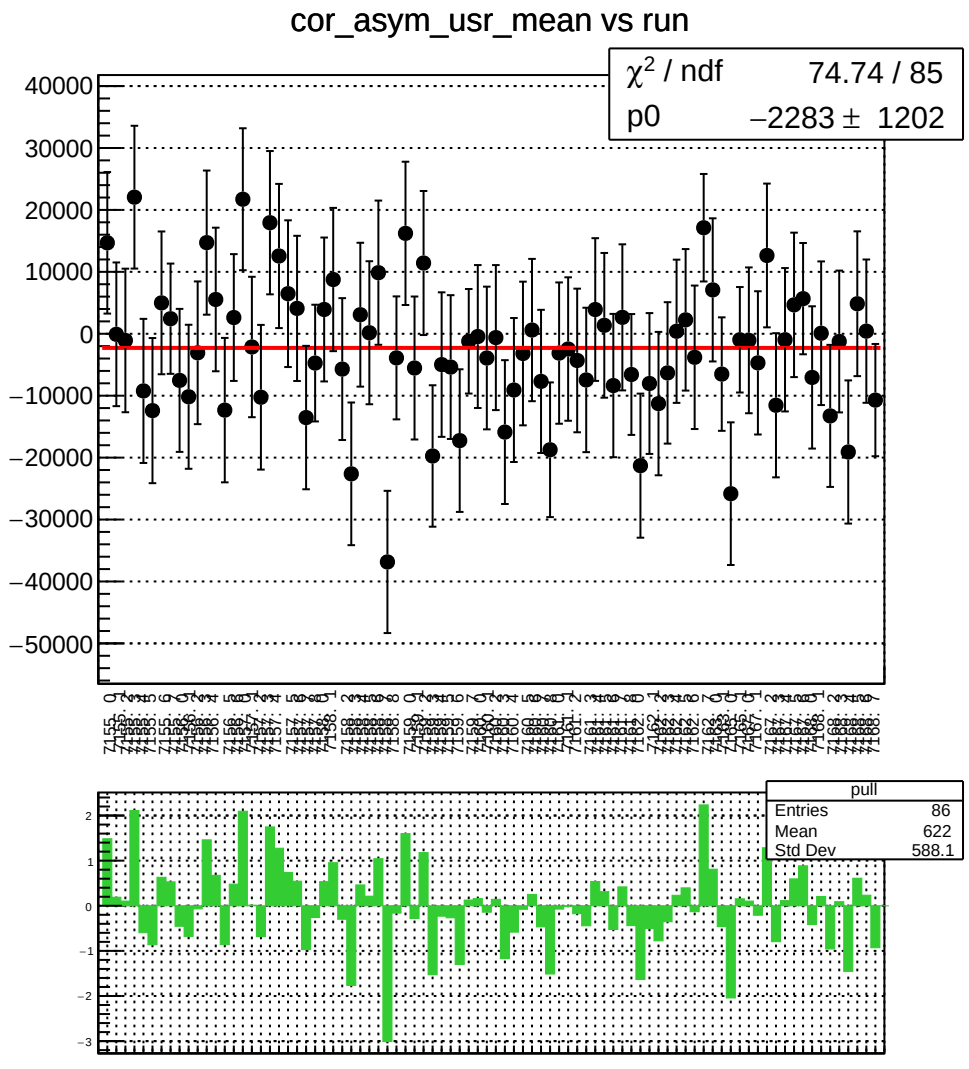

pull1D
Entries 86
Mean 0.01075
Std Dev 1
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

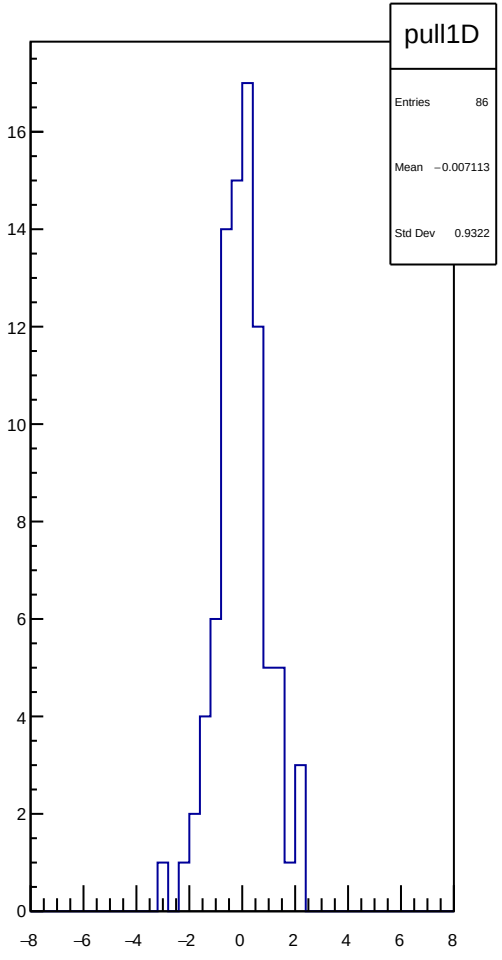

cor_asym_us_dd_rms vs run
χ² / ndf 72.35 / 85
p0 779.7 ± 0.6031
800
795
790
785
780
775
770
765
760

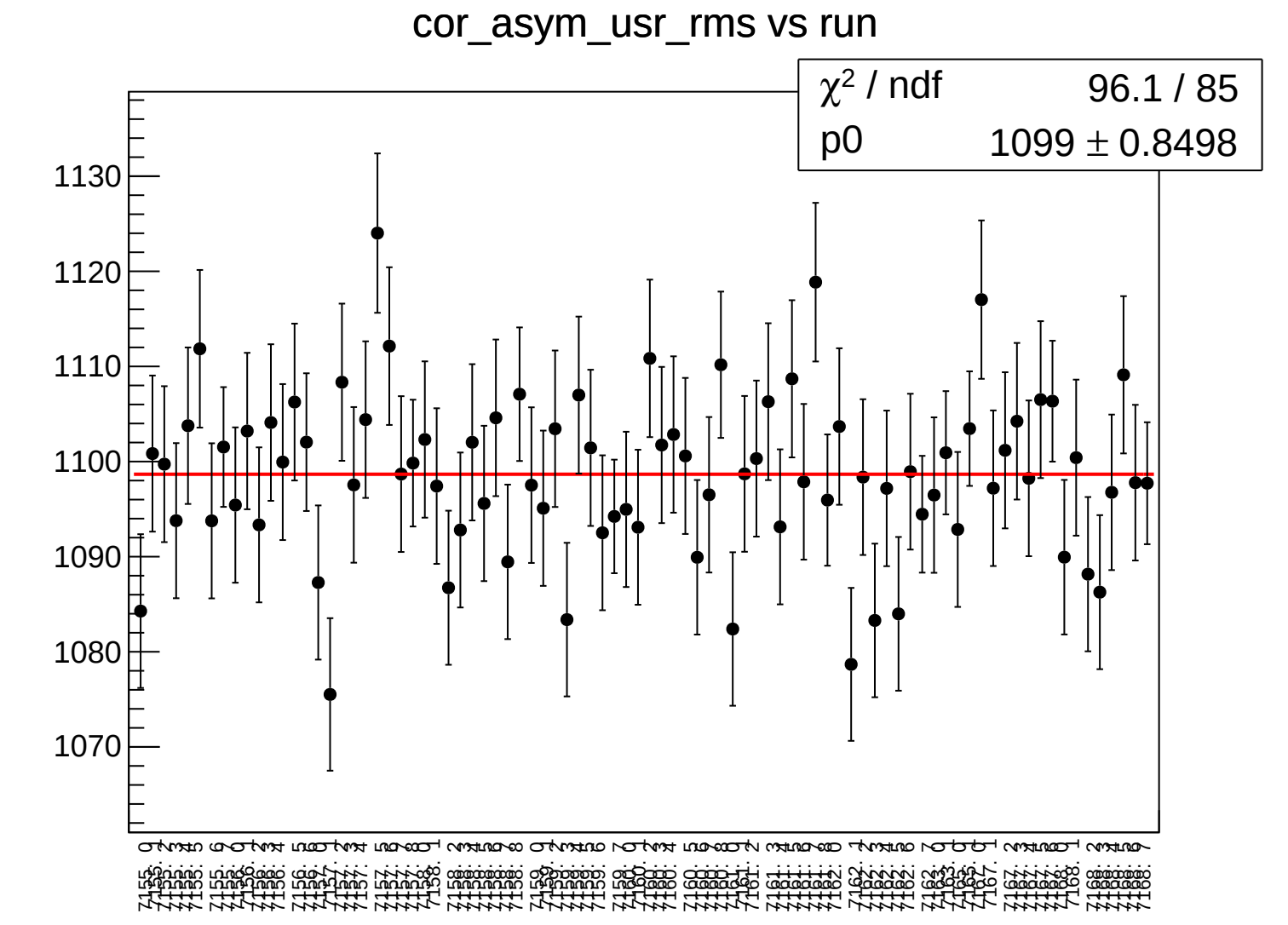

cor_asym_usl_mean vs run
χ² / ndf 69.55 / 85
p0 −2119 ± 1216
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 86
Mean −58.78
Std Dev 134.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

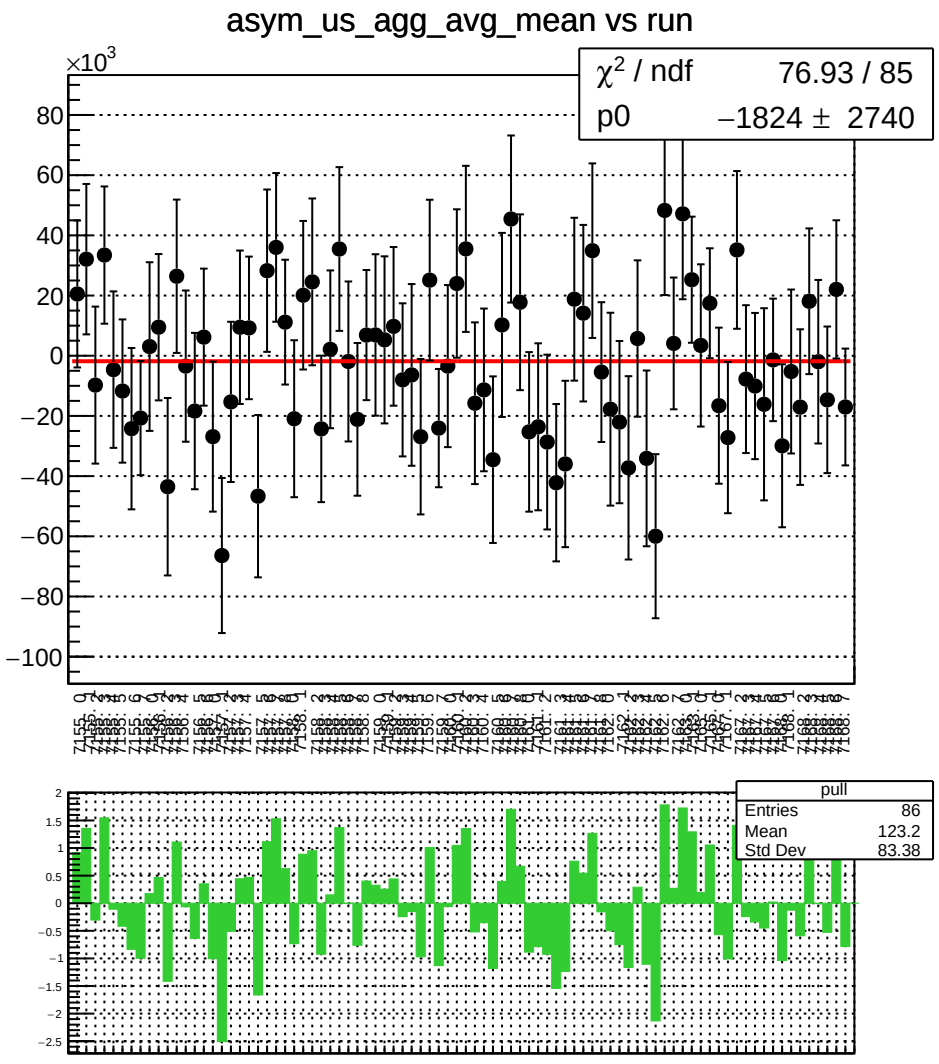

pull1D
Entries 86
Mean 0.007168
Std Dev 0.8993
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

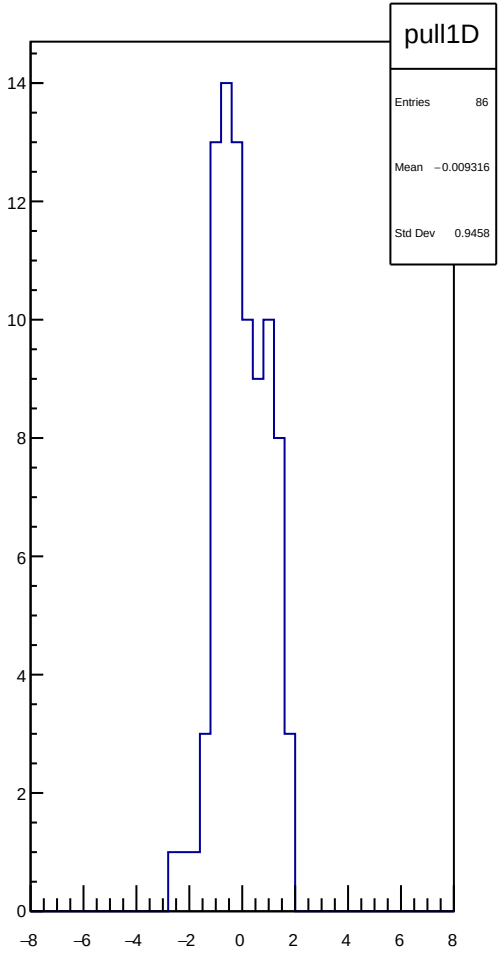

cor_asym_usl_rms vs run
χ^2 / ndf 100.9 / 85
p0 1112 ± 0.8598
1140
1130
1120
1110
1100
1090
1080

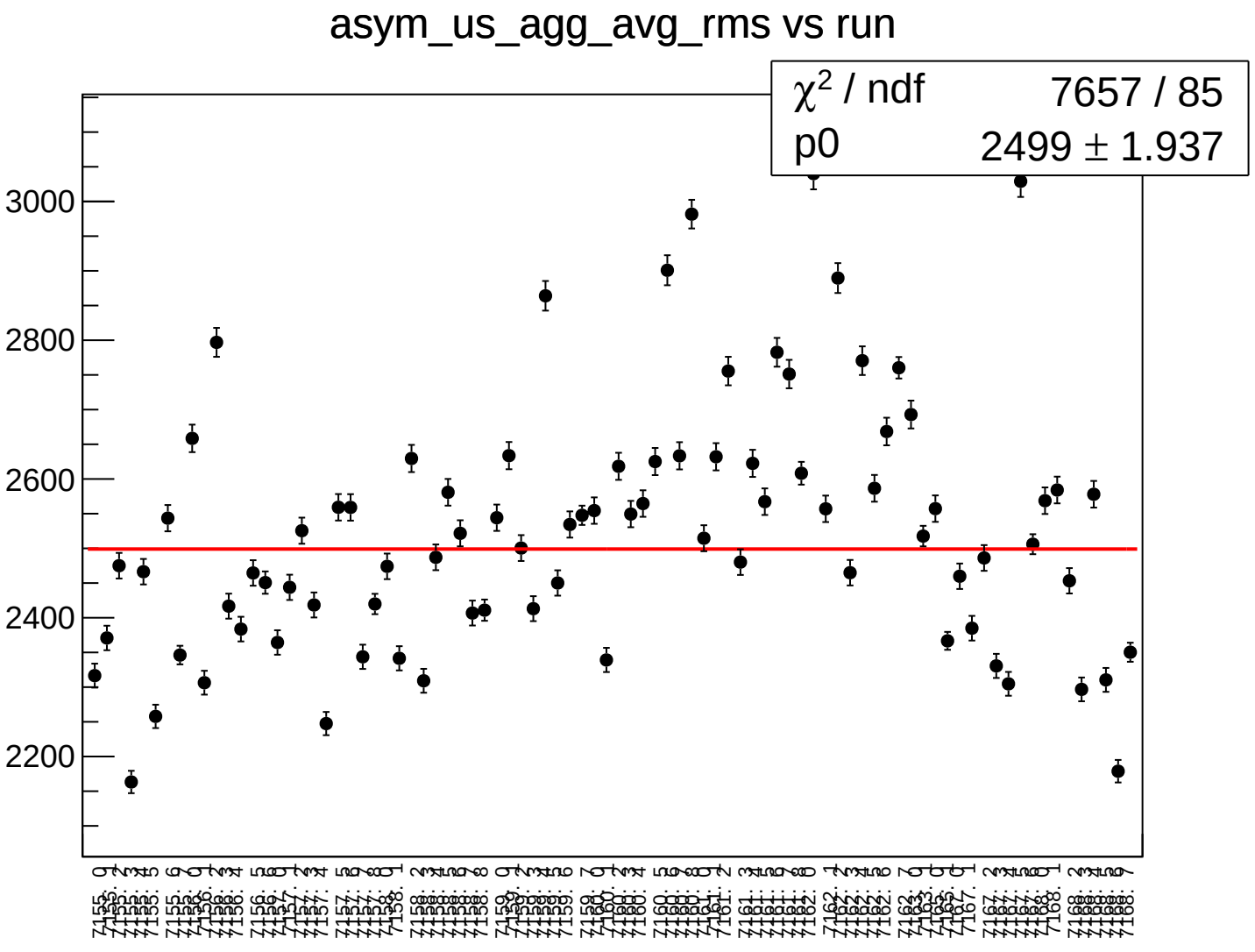

cor_asym_usr_mean vs run
χ² / ndf 74.74 / 85
p0 −2283 ± 1202
pull
Entries 86
Mean 622
Std Dev 588.1

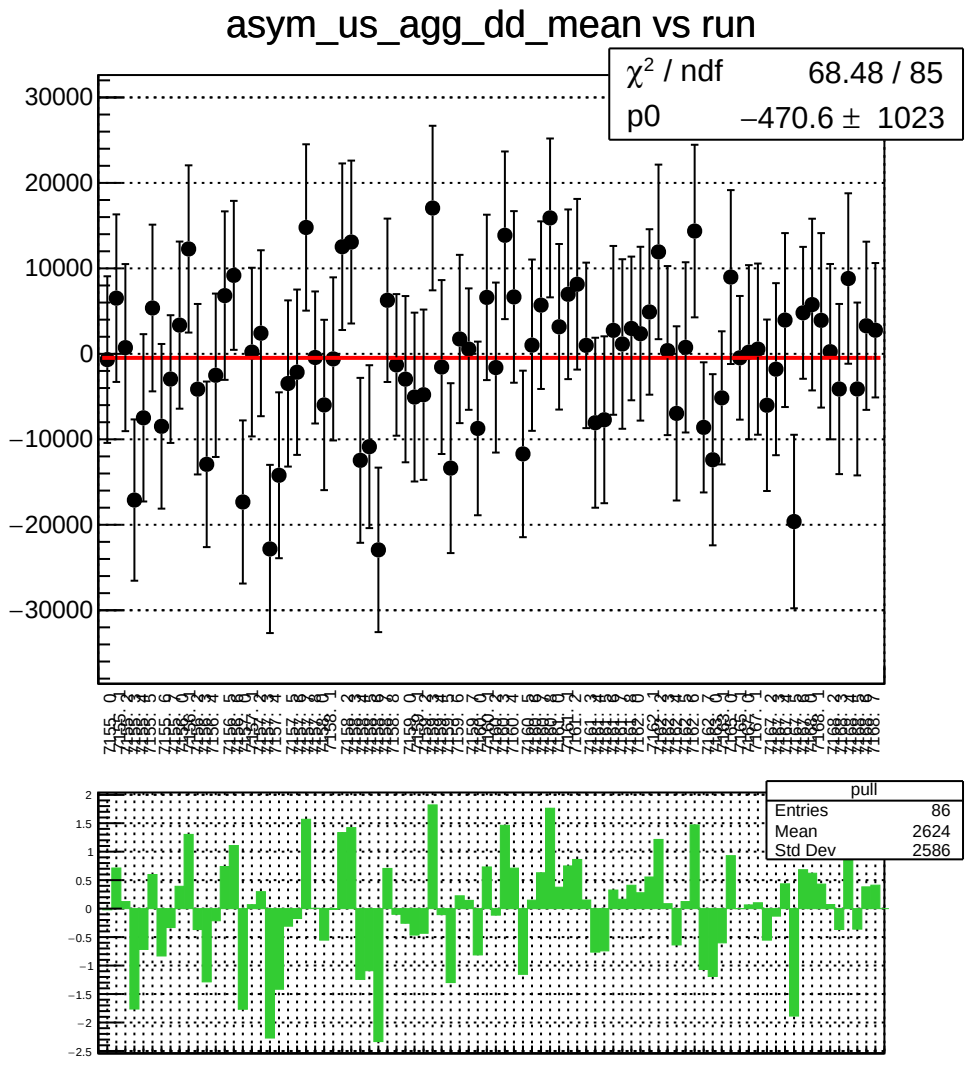

pull1D
Entries 86
Mean −0.007113
Std Dev 0.9322

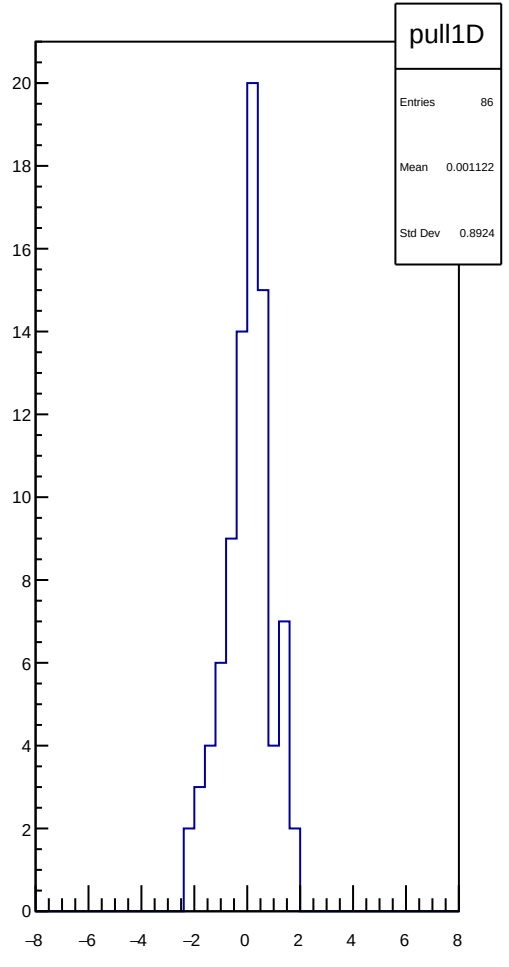

cor_asym_usr_rms vs run
χ^2 / ndf 96.1 / 85
p0 1099 ± 0.8498
1130
1120
1110
1100
1090
1080
1070

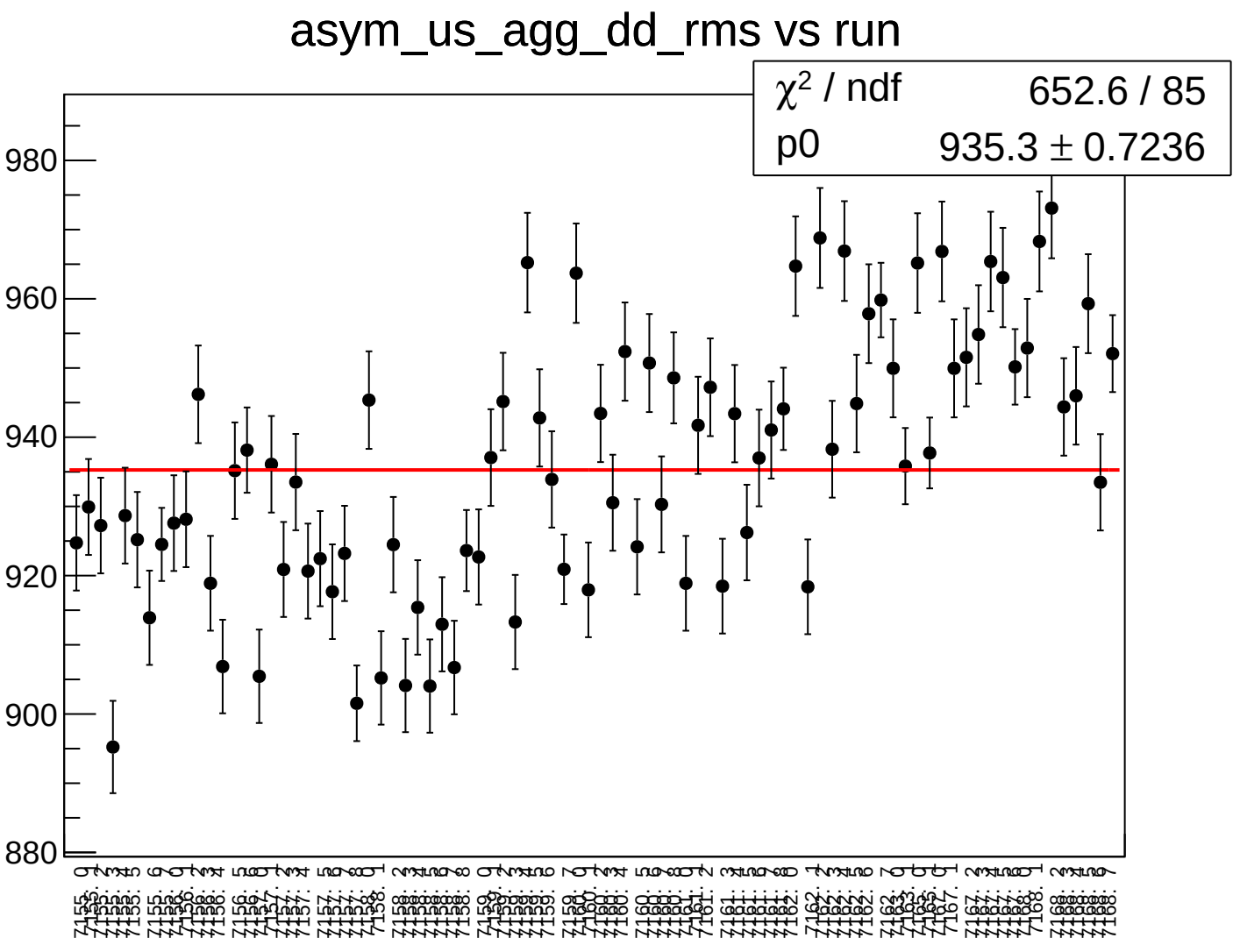

asym_us_agg_avg_mean vs run
×10^3
χ² / ndf 76.93 / 85
p0 −1824 ± 2740
pull
Entries 86
Mean 123.2
Std Dev 83.38

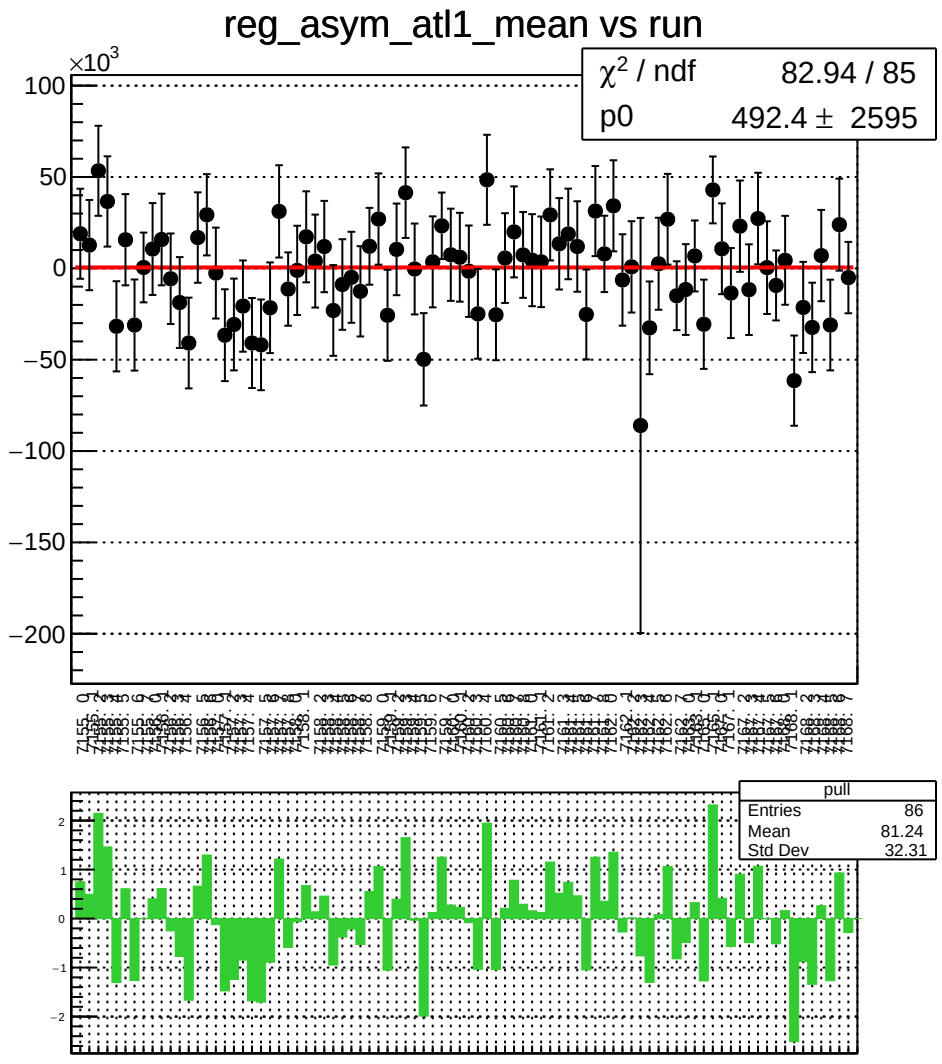

pull1D
Entries 86
Mean −0.009316
Std Dev 0.9458

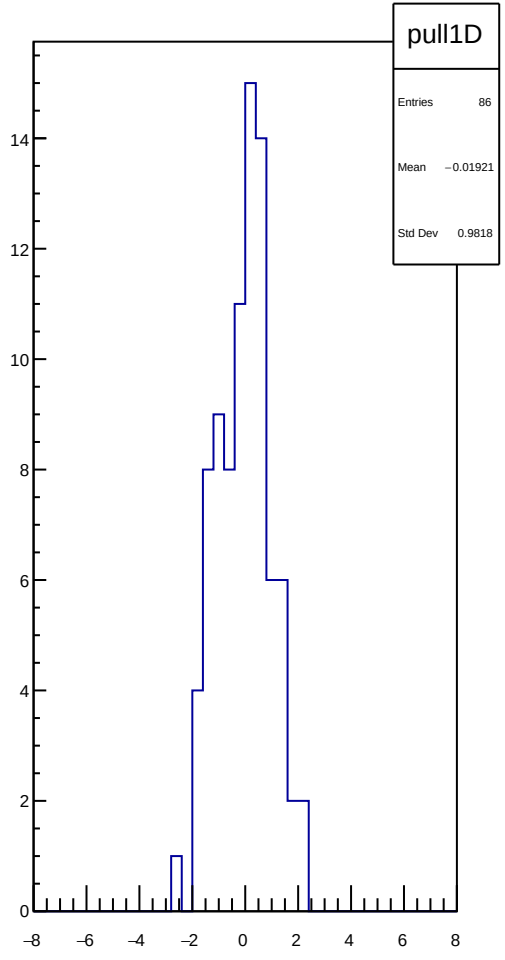

asym_us_agg_avg_rms vs run
χ² / ndf 7657 / 85
p0 2499 ± 1.937
3000
2800
2600
2400
2200

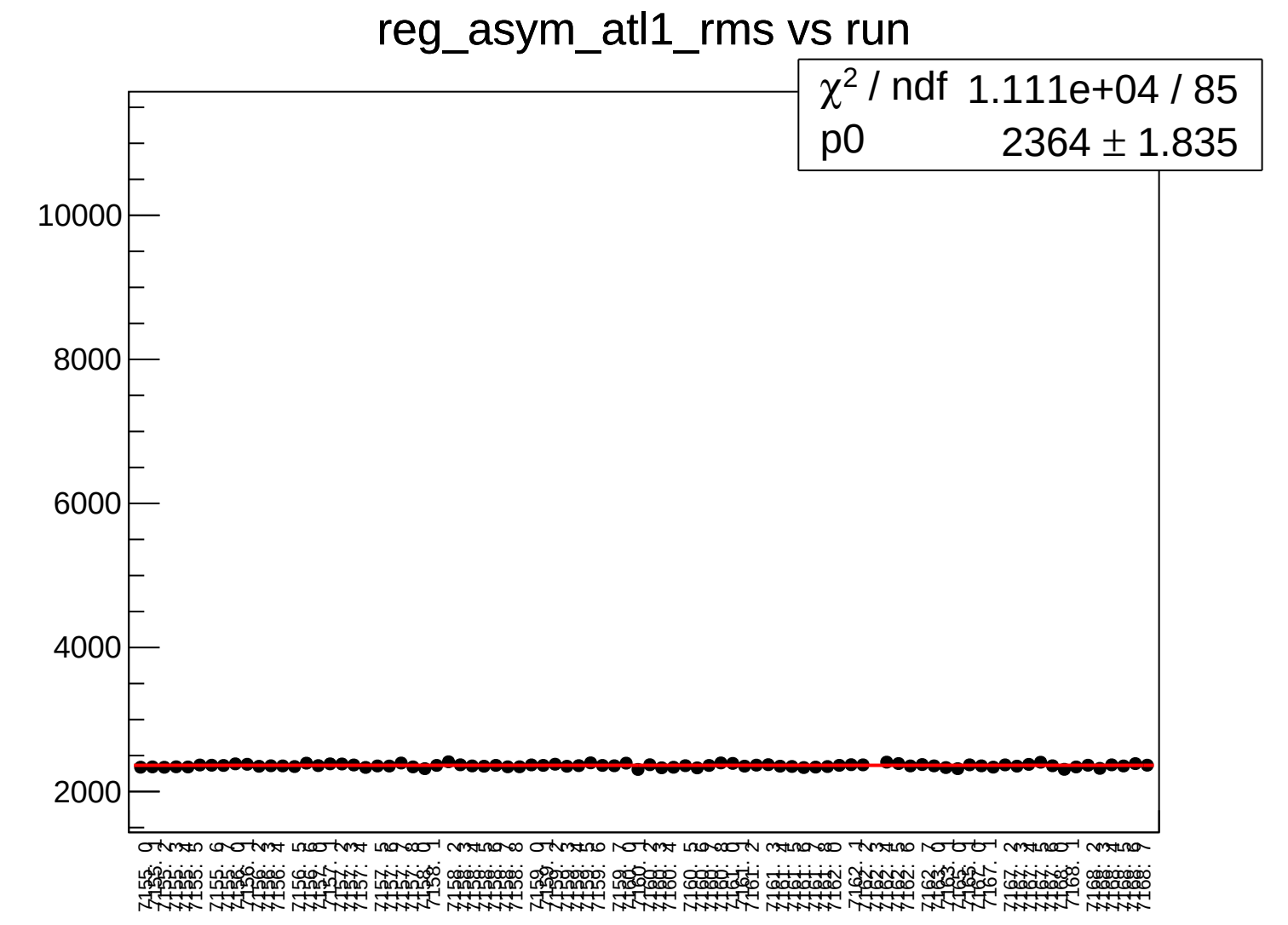

asym_us_agg_dd_mean vs run
χ² / ndf 68.48 / 85
p0 −470.6 ± 1023
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean 2624
Std Dev 2586
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

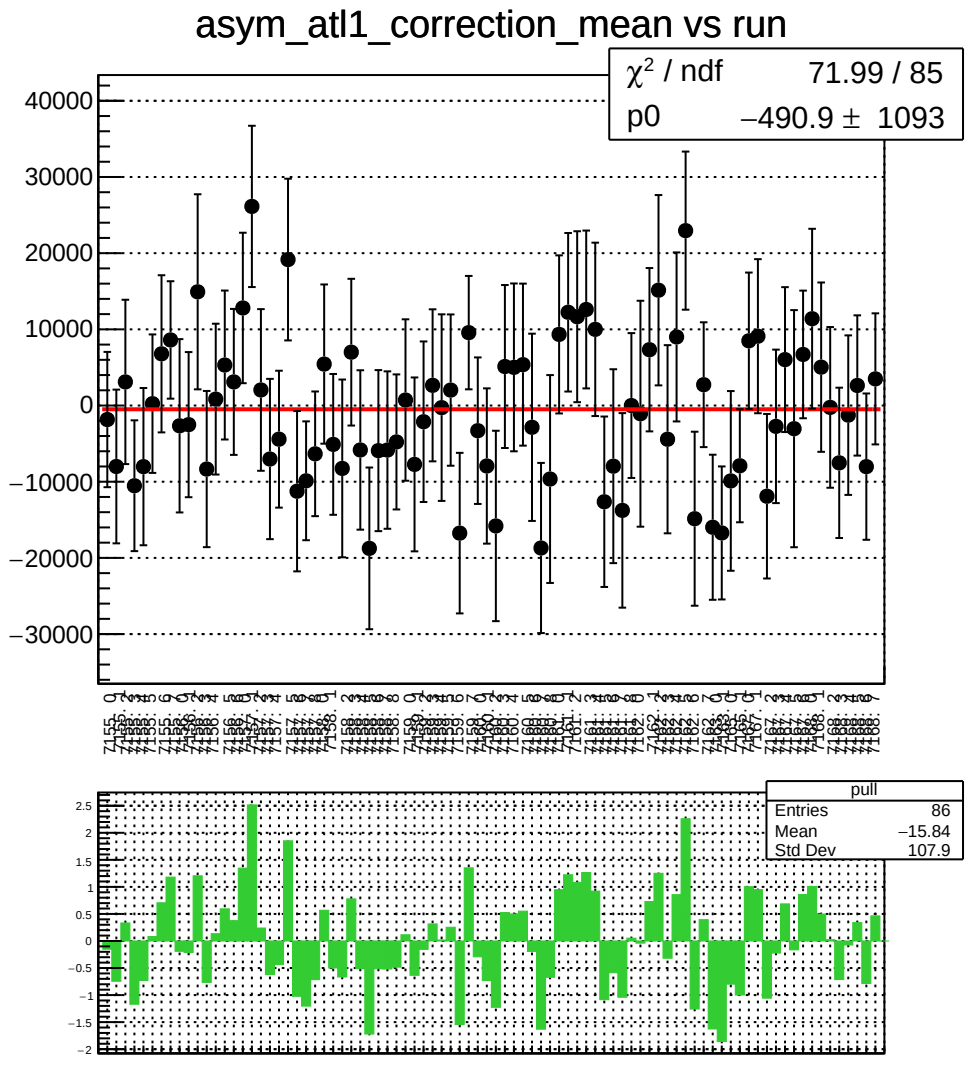

pull1D
Entries 86
Mean 0.001122
Std Dev 0.8924
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

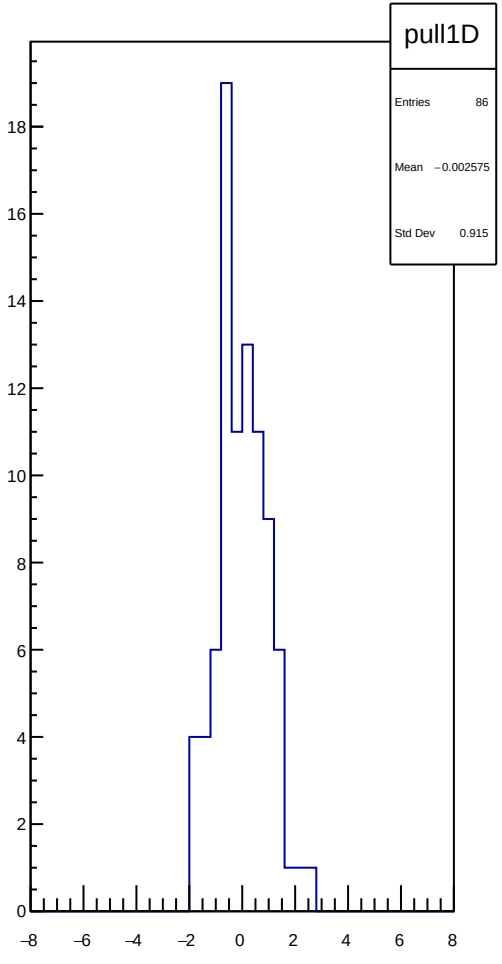

asym_us_agg_dd_rms vs run
χ² / ndf 652.6 / 85
p0 935.3 ± 0.7236
980
960
940
920
900
880

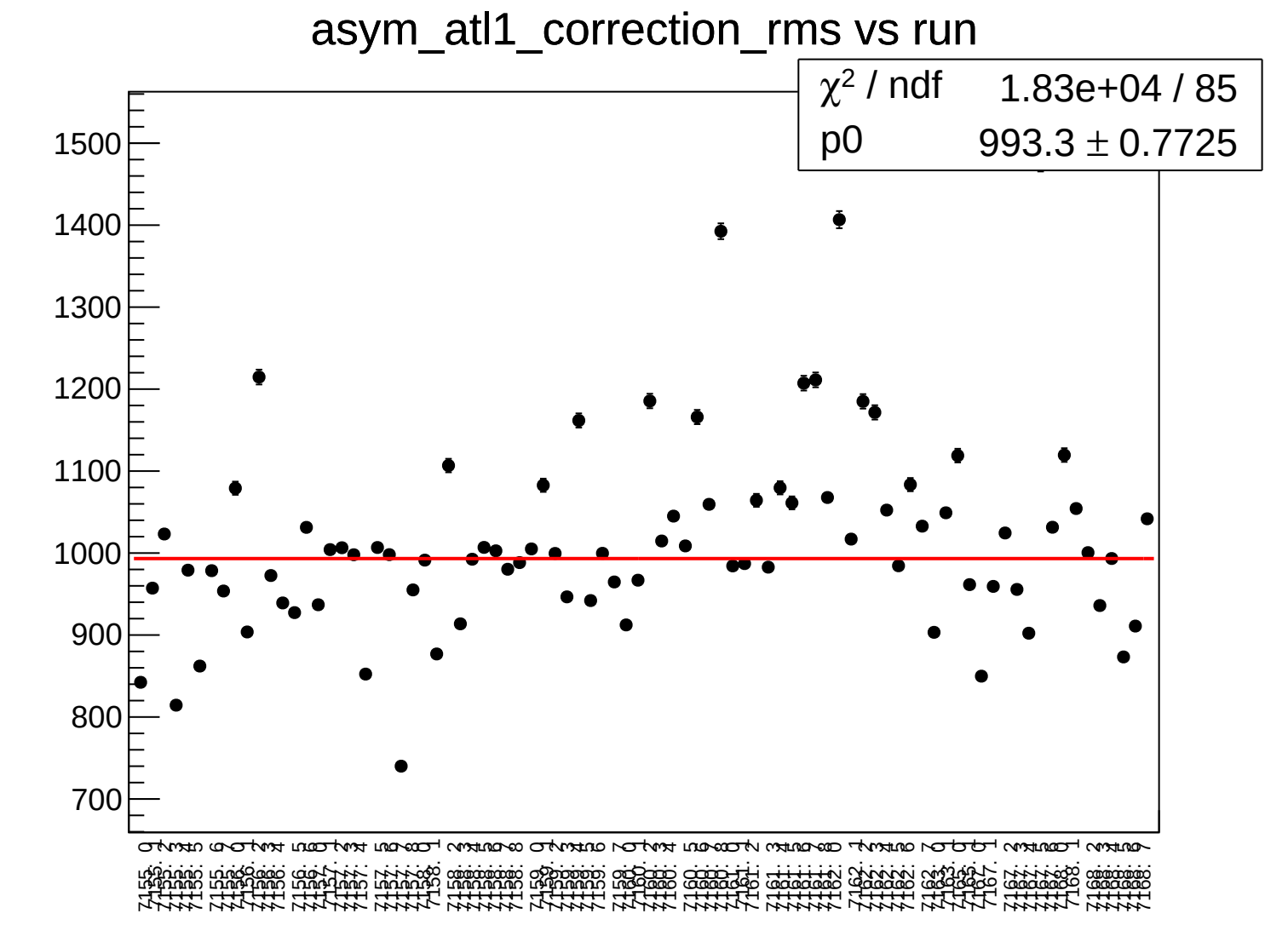

reg_asym_atl1_mean vs run
×10^3
100
50
0
−50
−100
−150
−200
χ² / ndf 82.94 / 85
p0 492.4 ± 2595
pull
Entries 86
Mean 81.24
Std Dev 32.31
2
1
0
−1
−2

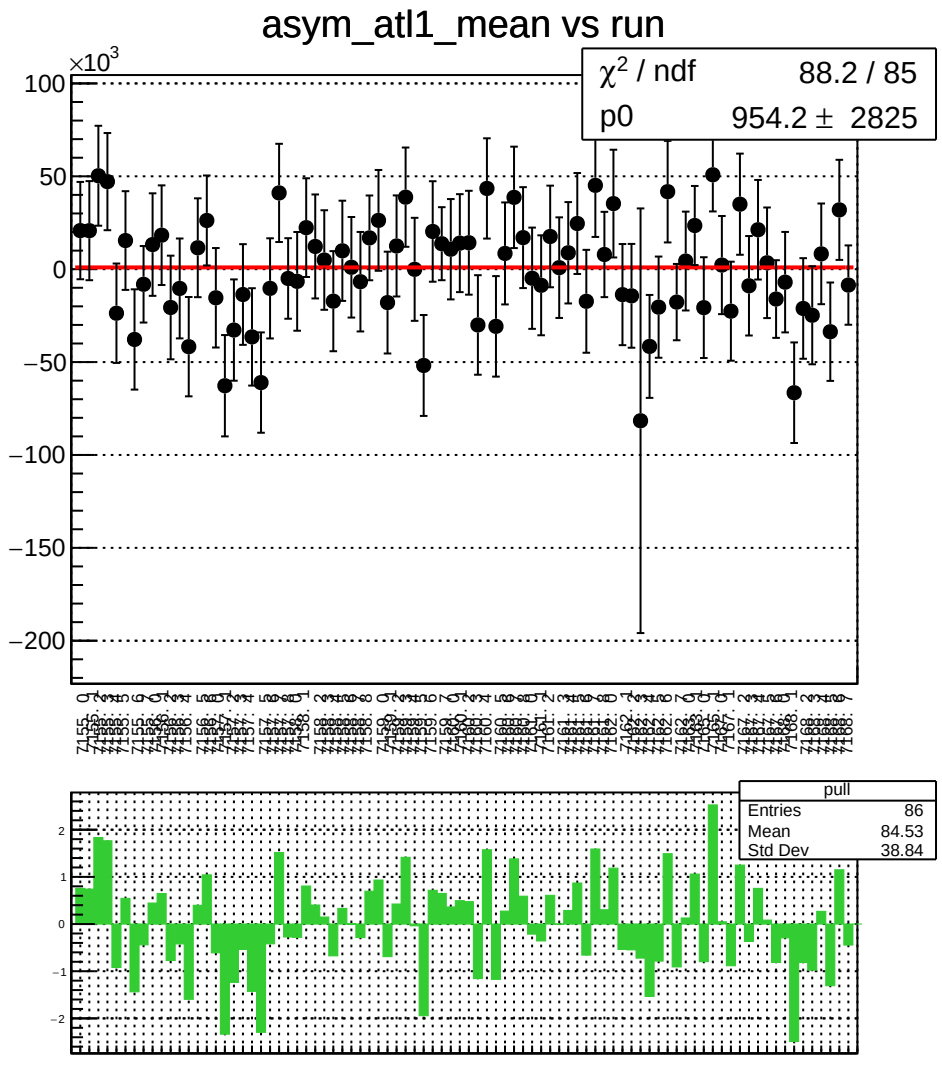

pull1D
Entries 86
Mean −0.01921
Std Dev 0.9818
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

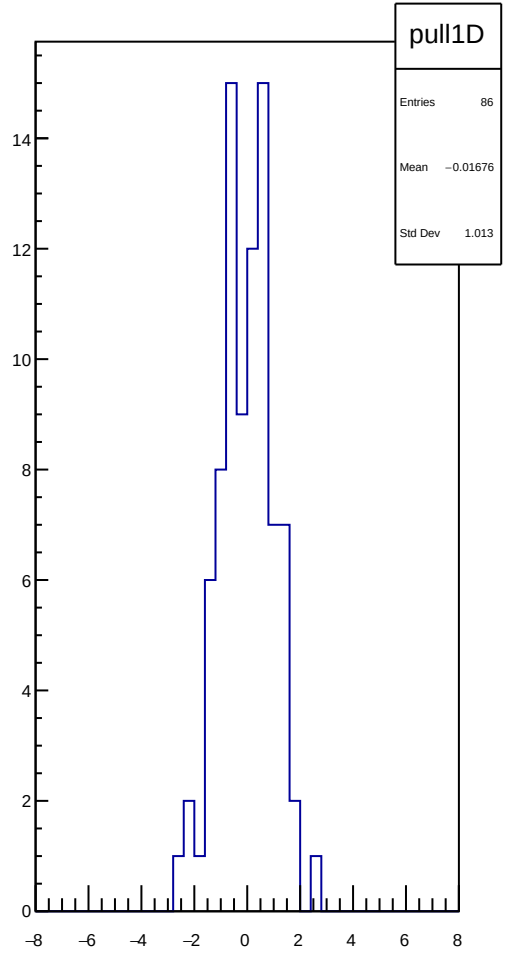

reg_asym_atl1_rms vs run
χ² / ndf 1.111e+04 / 85
p0 2364 ± 1.835
10000
8000
6000
4000
2000

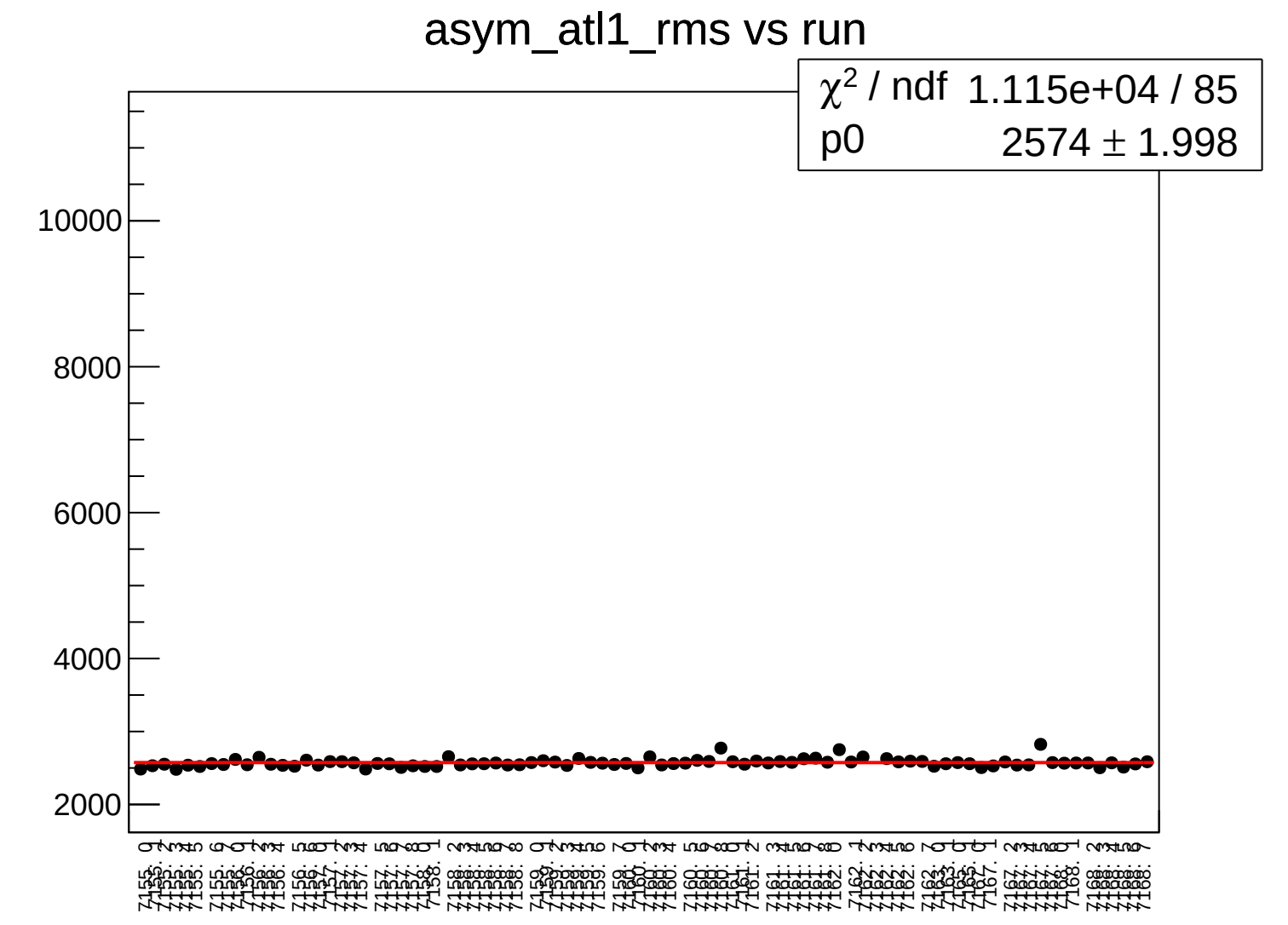

asym_atl1_correction_mean vs run
χ² / ndf 71.99 / 85
p0 −490.9 ± 1093
pull
Entries 86
Mean −15.84
Std Dev 107.9

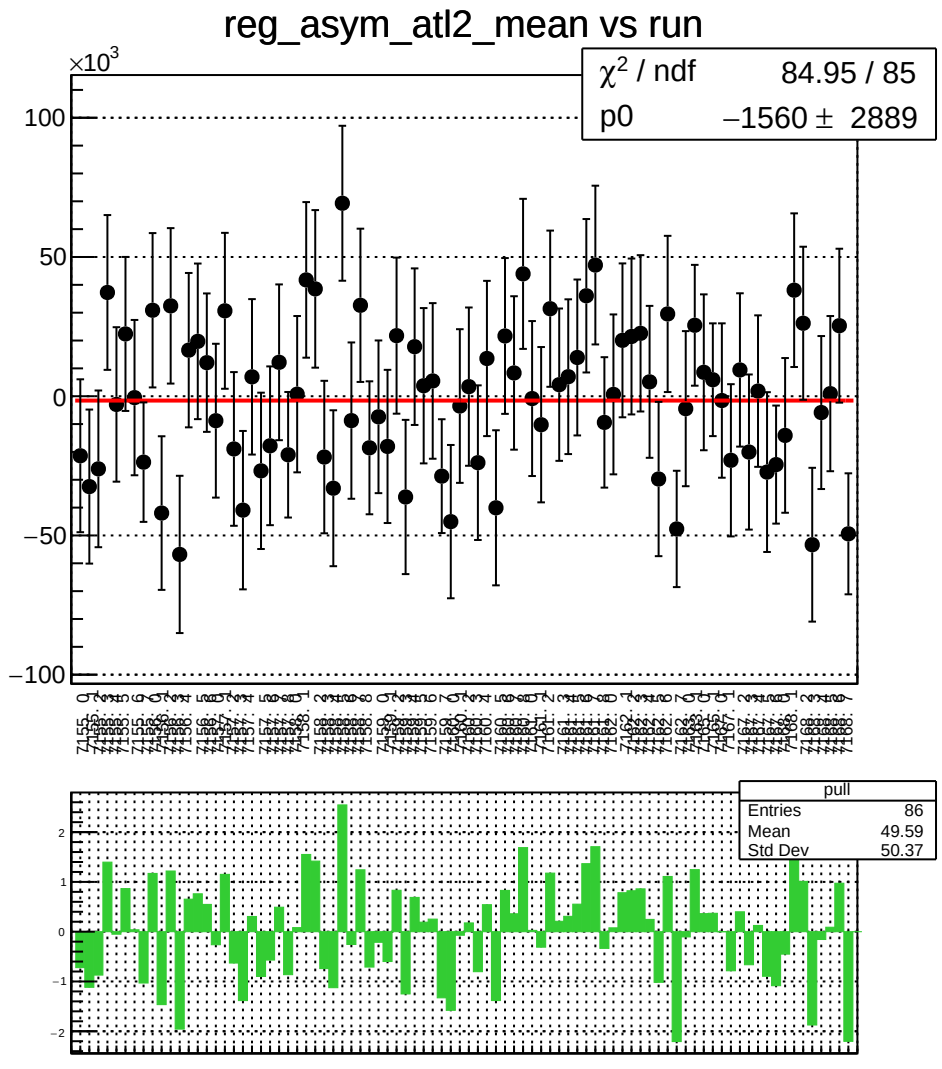

pull1D
Entries 86
Mean −0.002575
Std Dev 0.915

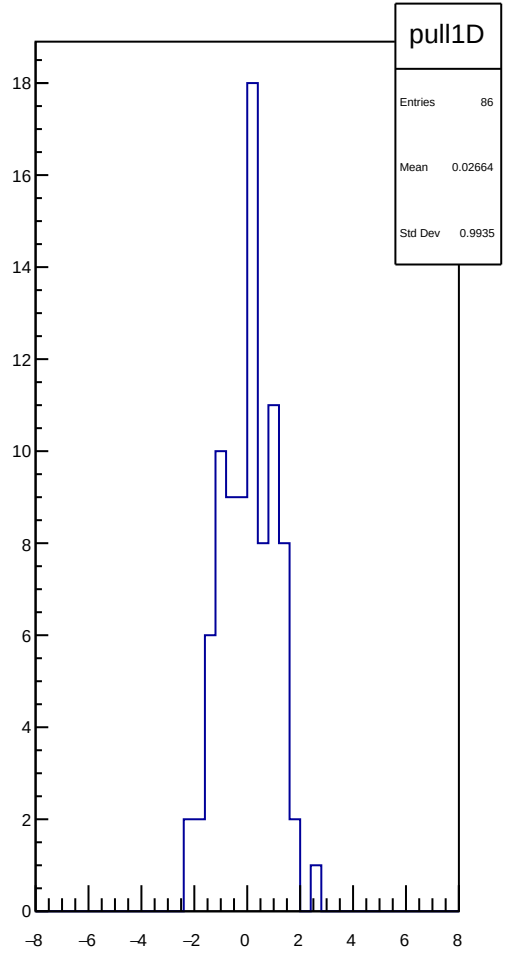

asym_atl1_correction_rms vs run
χ² / ndf 1.83e+04 / 85
p0 993.3 ± 0.7725
1500
1400
1300
1200
1100
1000
900
800
700

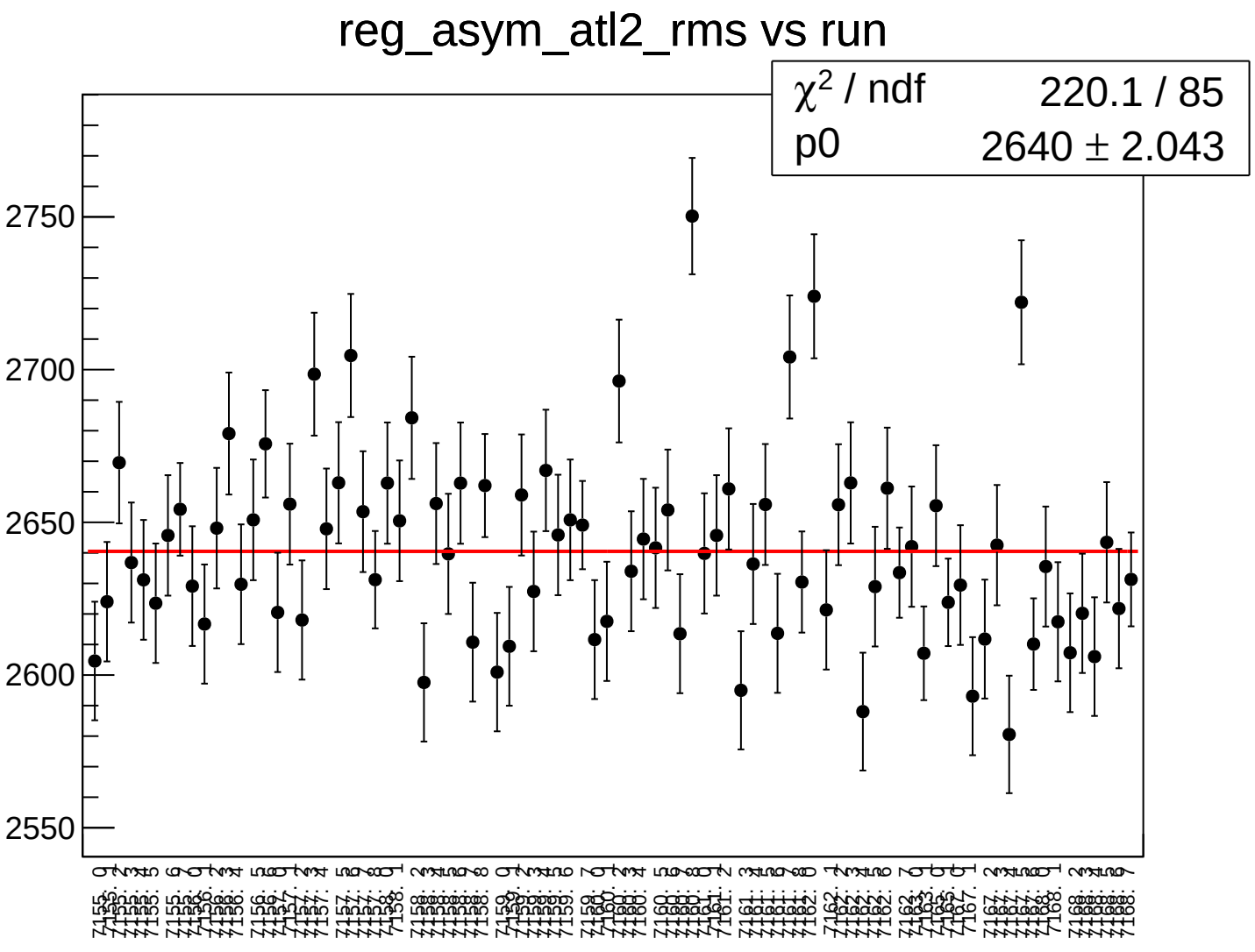

asym_atl1_mean vs run
×10^3
χ^2 / ndf 88.2 / 85
p0 954.2 ± 2825
pull
Entries 86
Mean 84.53
Std Dev 38.84

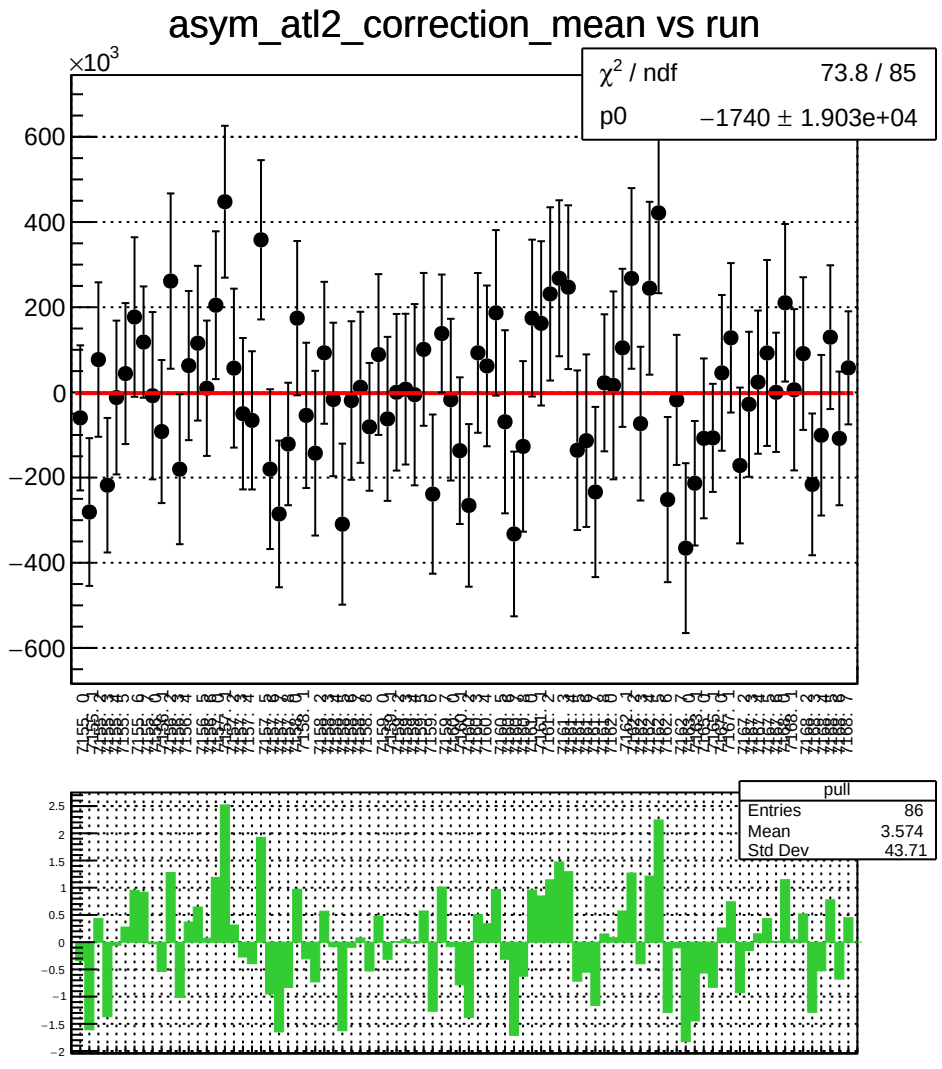

pull1D
Entries 86
Mean −0.01676
Std Dev 1.013

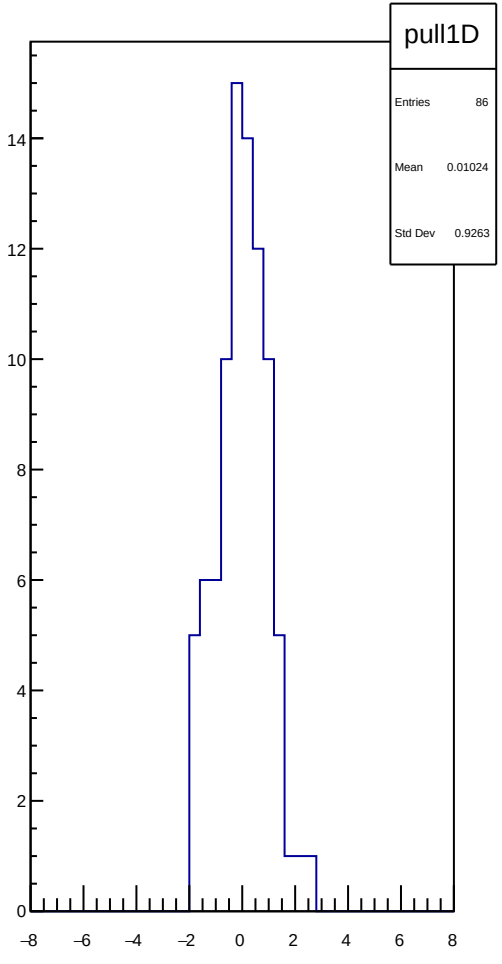

asym_atl1_rms vs run
χ² / ndf 1.115e+04 / 85
p0 2574 ± 1.998
10000
8000
6000
4000
2000

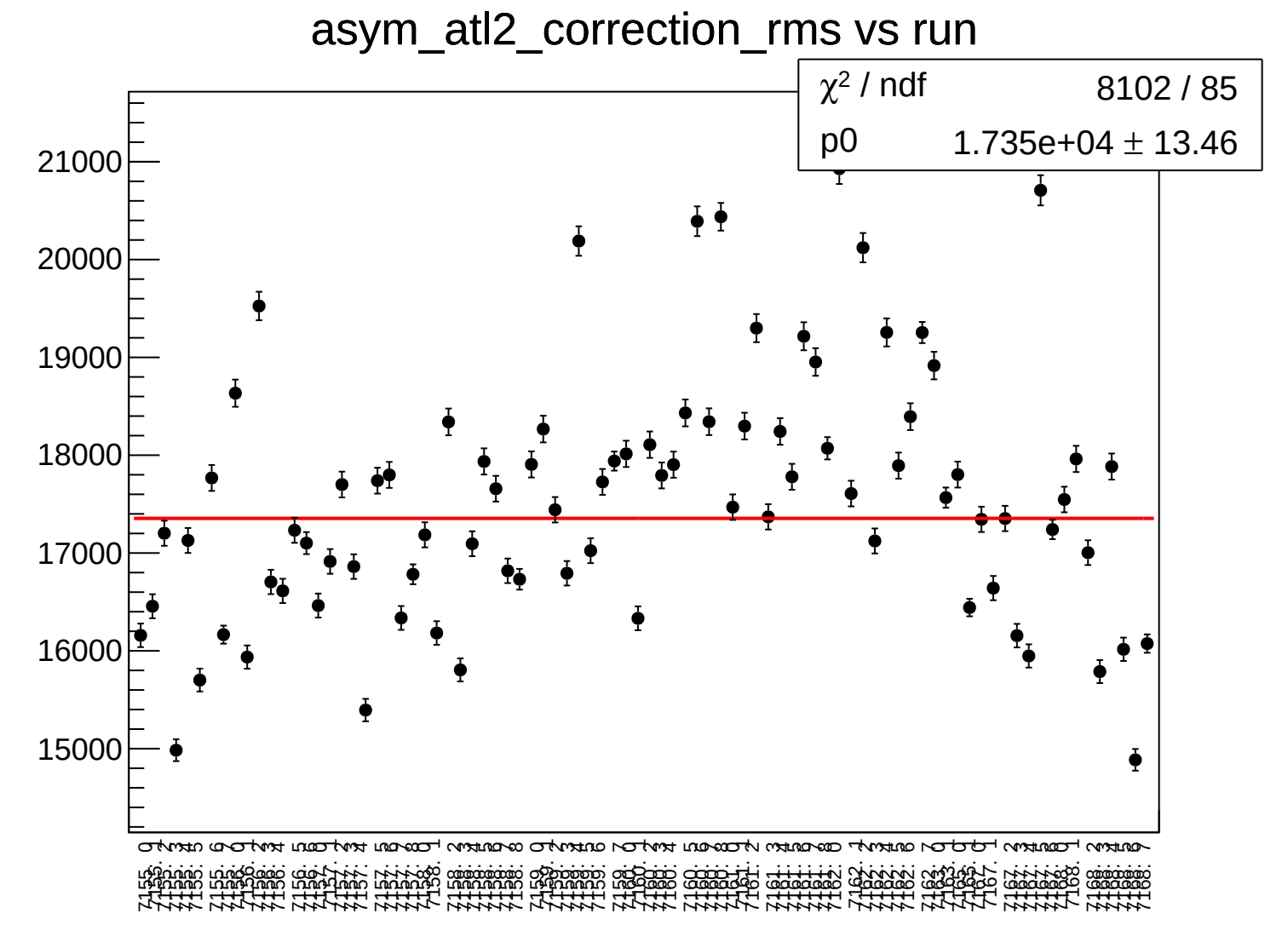

reg_asym_atl2_mean vs run
×10^3
χ² / ndf 84.95 / 85
p0 −1560 ± 2889
100
50
0
−50
−100
pull
Entries 86
Mean 49.59
Std Dev 50.37
2
1
0
−1
−2

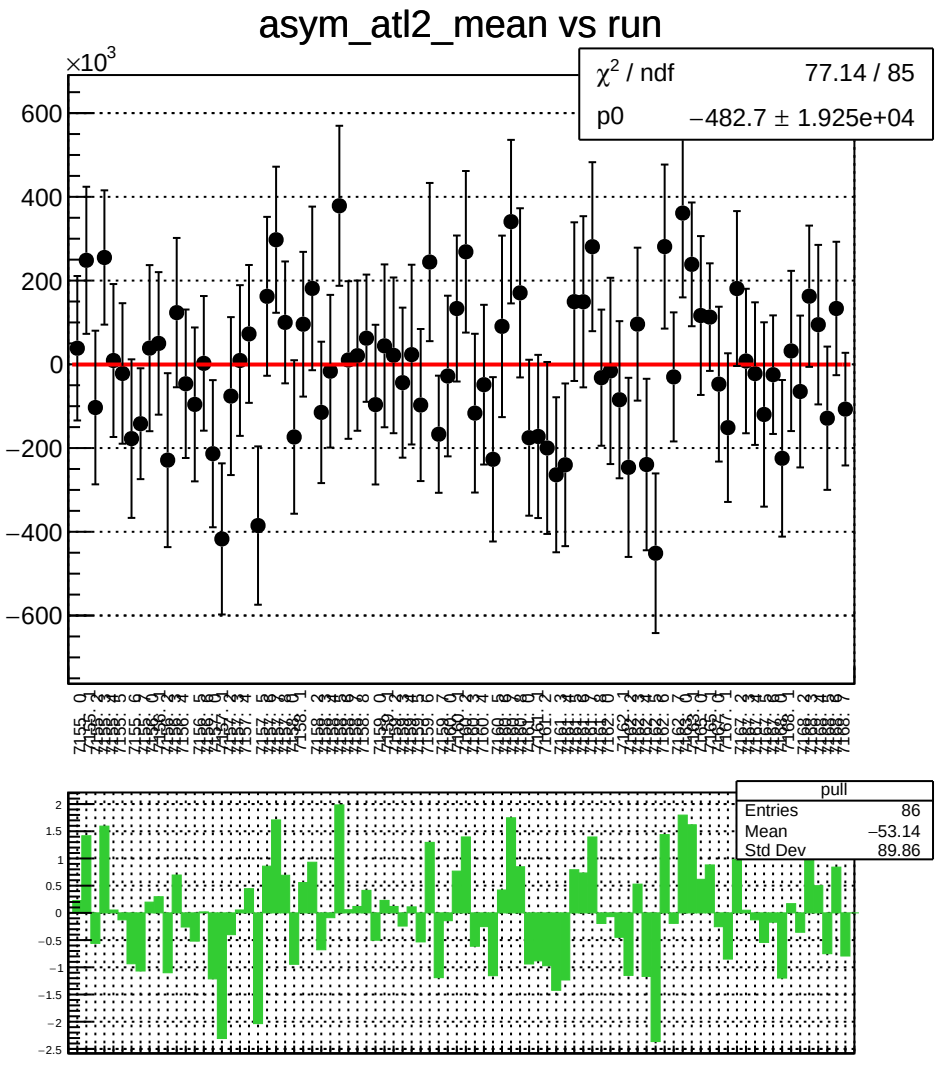

pull1D
Entries 86
Mean 0.02664
Std Dev 0.9935
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

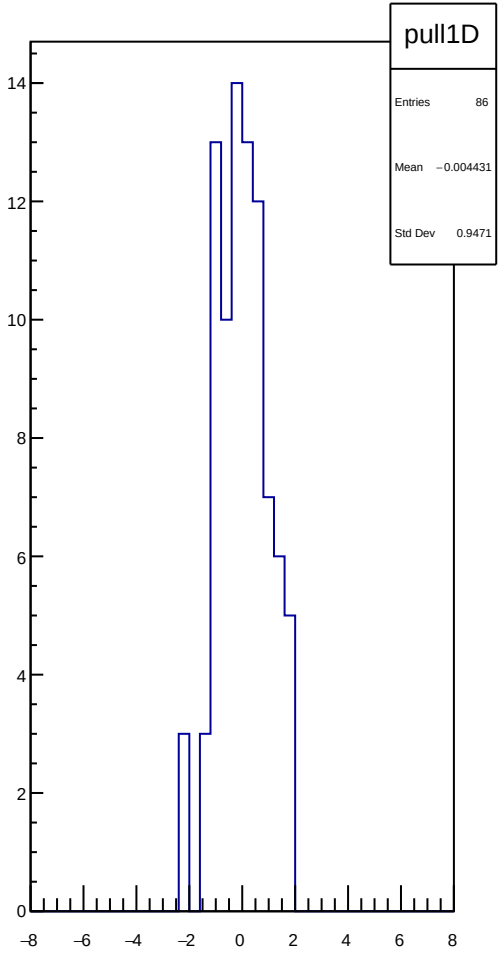

reg_asym_atl2_rms vs run
χ^2 / ndf 220.1 / 85
p0 2640 ± 2.043
2750
2700
2650
2600
2550

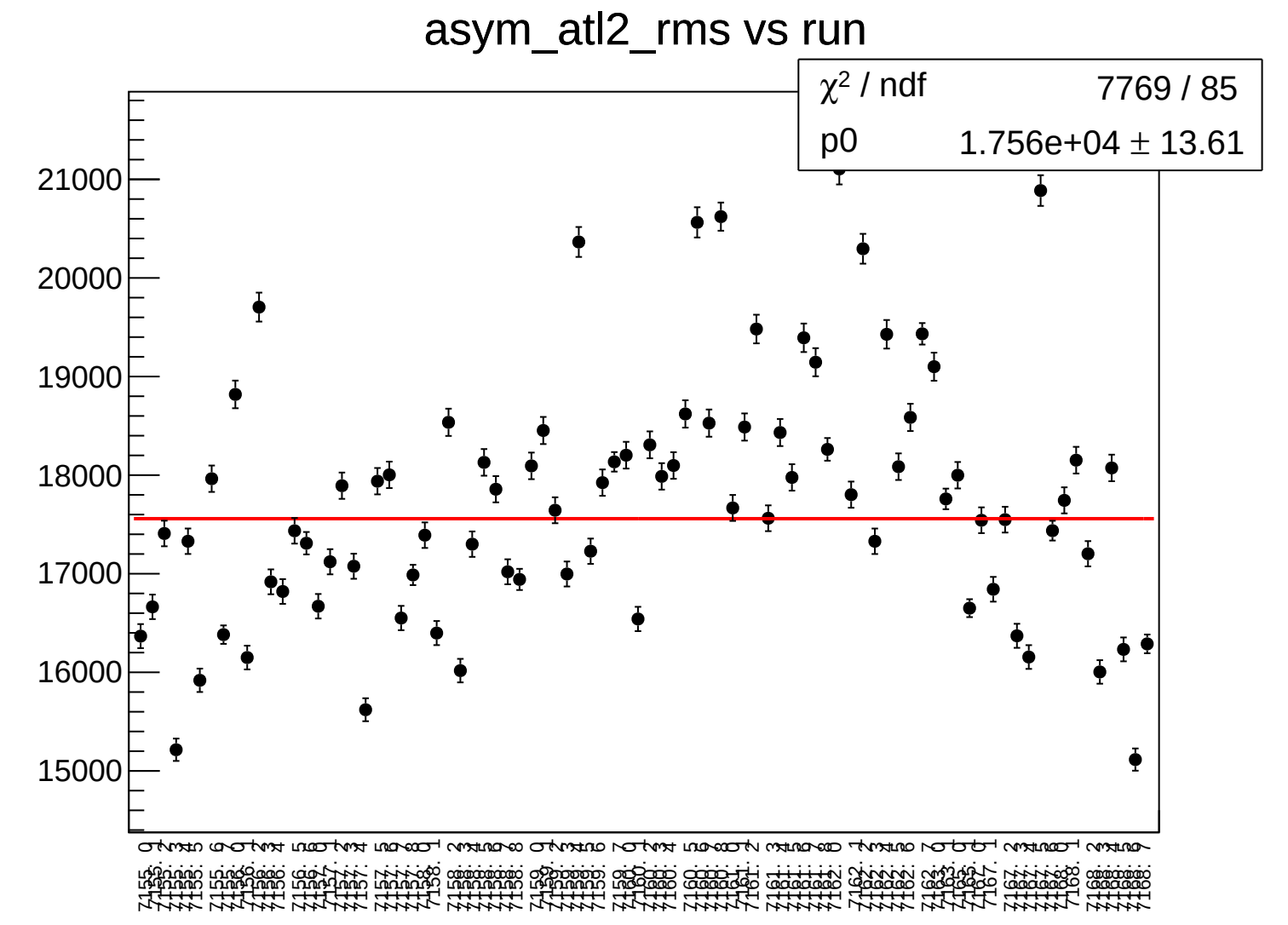

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 73.8 / 85
p0 −1740 ± 1.903e+04
600
400
200
0
−200
−400
−600
pull
Entries 86
Mean 3.574
Std Dev 43.71
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

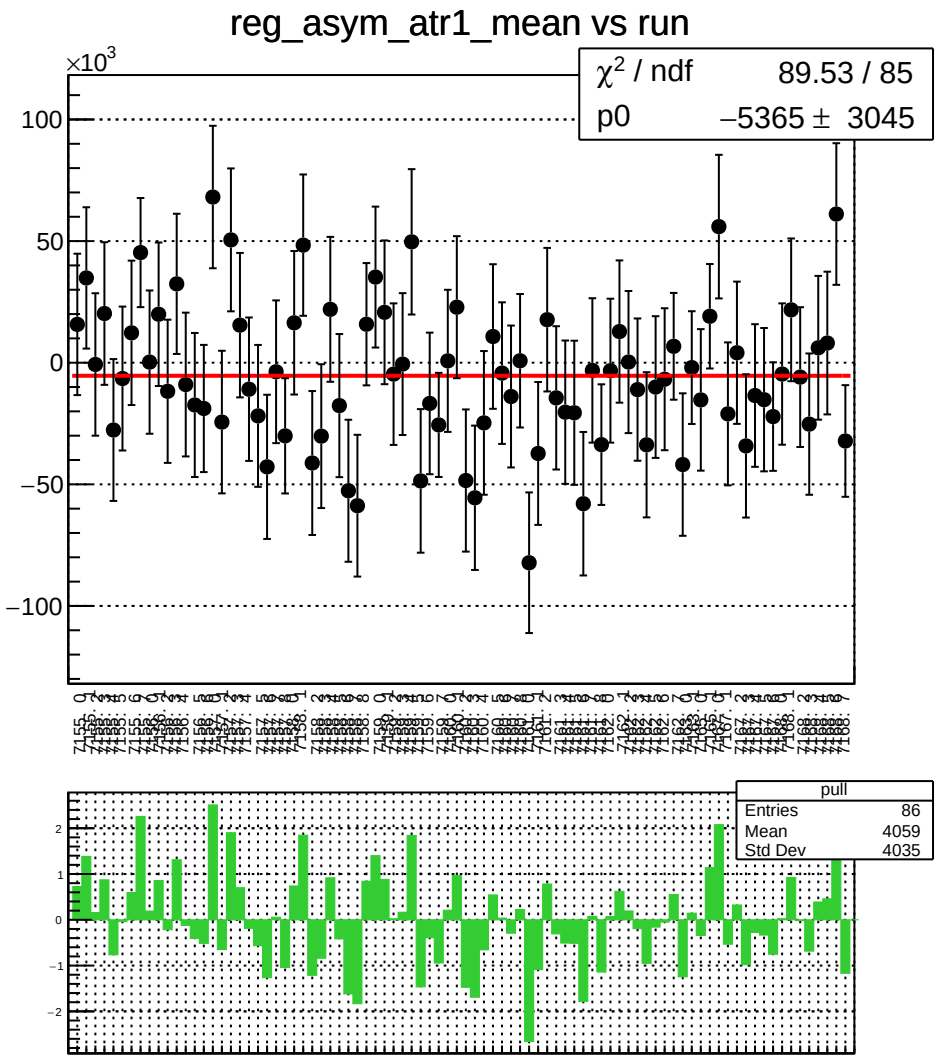

pull1D
Entries 86
Mean 0.01024
Std Dev 0.9263
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

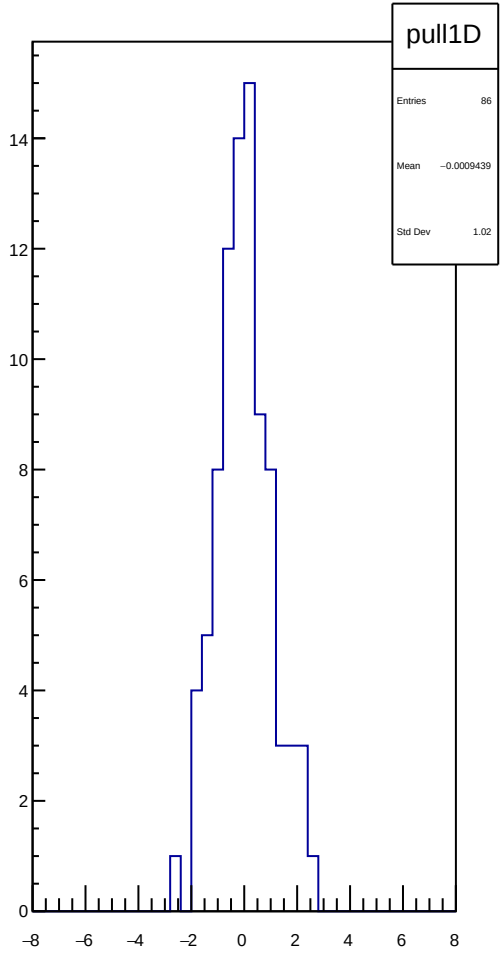

asym_atl2_correction_rms vs run
χ² / ndf 8102 / 85
p0 1.735e+04 ± 13.46
21000
20000
19000
18000
17000
16000
15000

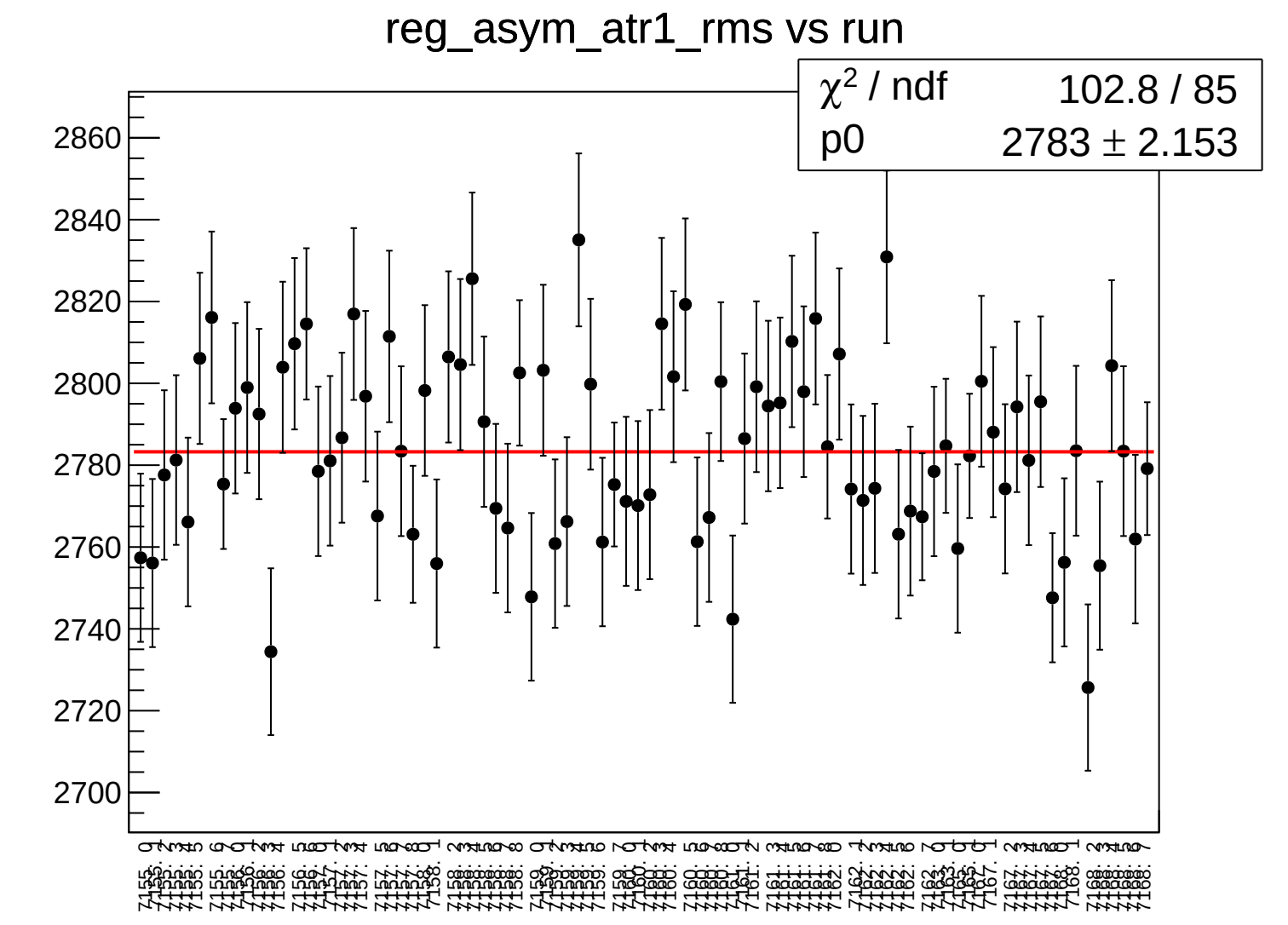

asym_atl2_mean vs run
×10^3
χ² / ndf 77.14 / 85
p0 −482.7 ± 1.925e+04
600
400
200
0
−200
−400
−600
pull
Entries 86
Mean −53.14
Std Dev 89.86
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

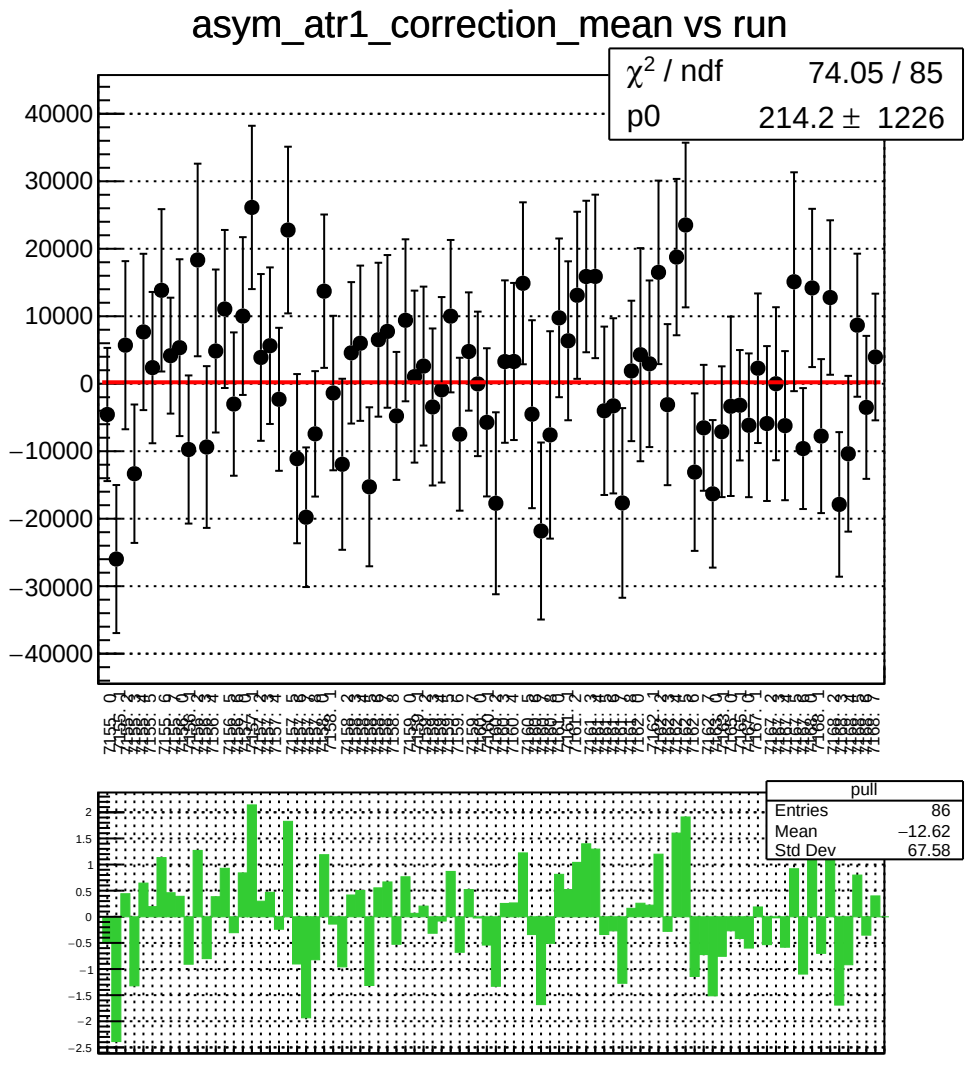

pull1D
Entries 86
Mean −0.004431
Std Dev 0.9471
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

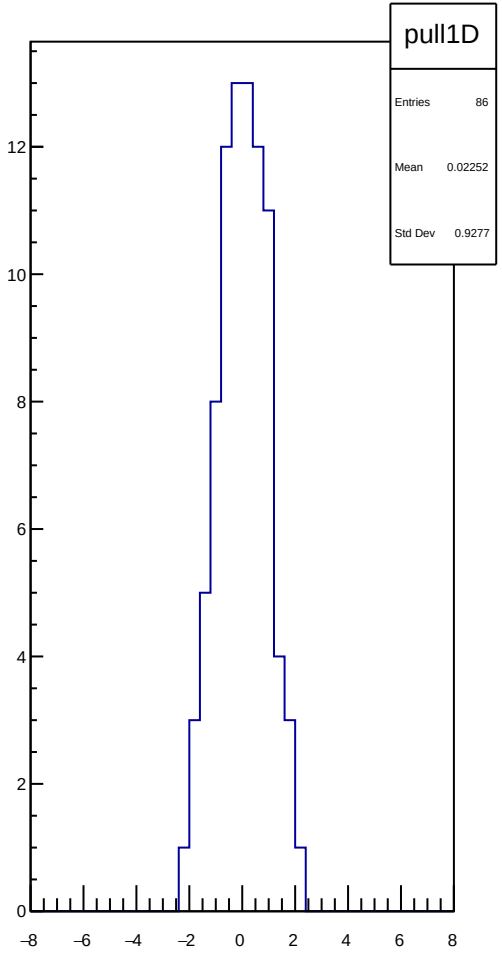

asym_atl2_rms vs run
χ² / ndf 7769 / 85
p0 1.756e+04 ± 13.61
21000
20000
19000
18000
17000
16000
15000

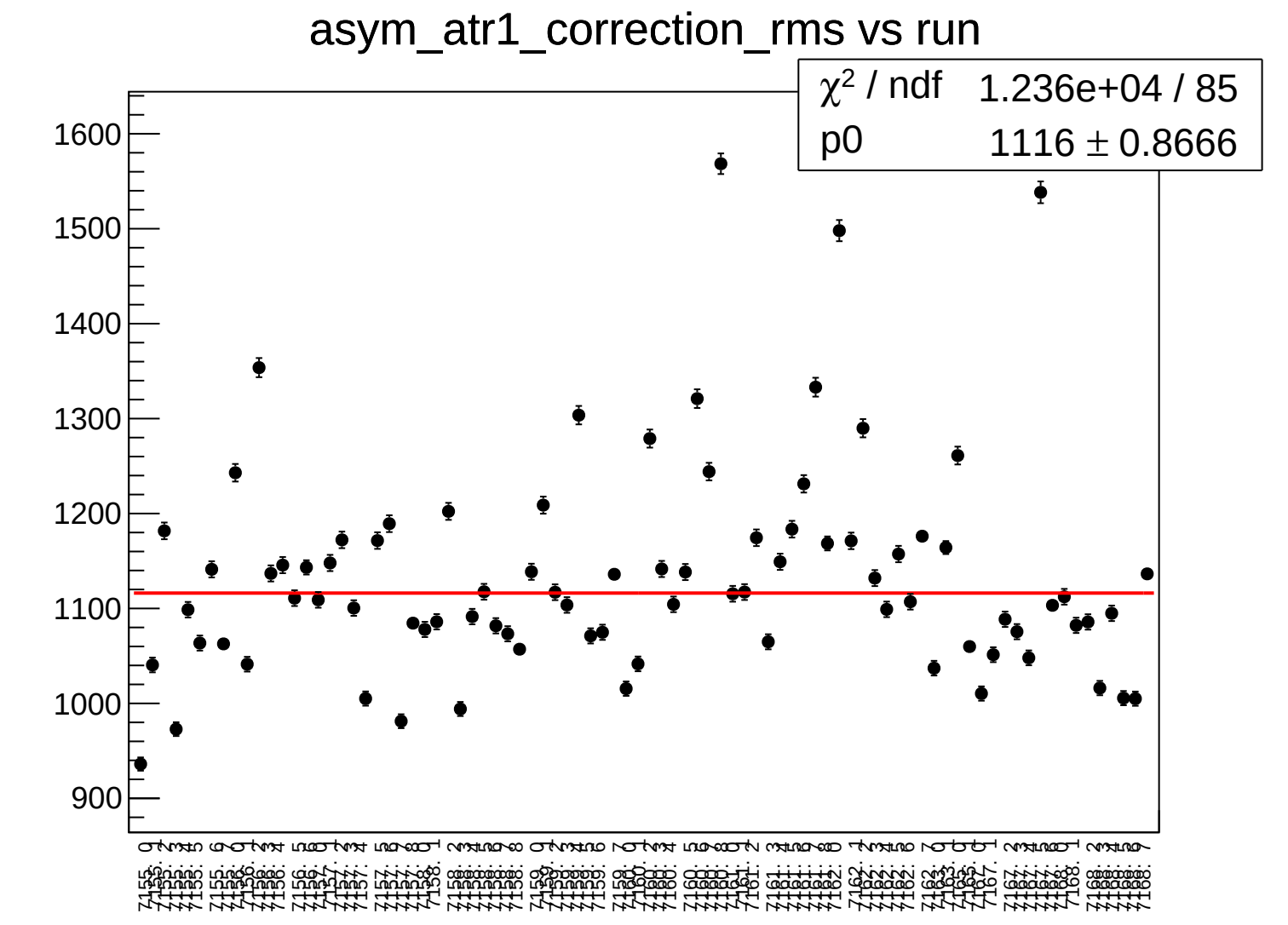

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 89.53 / 85
p0 −5365 ± 3045
100
50
0
−50
−100
pull
Entries 86
Mean 4059
Std Dev 4035
2
1
0
−1
−2

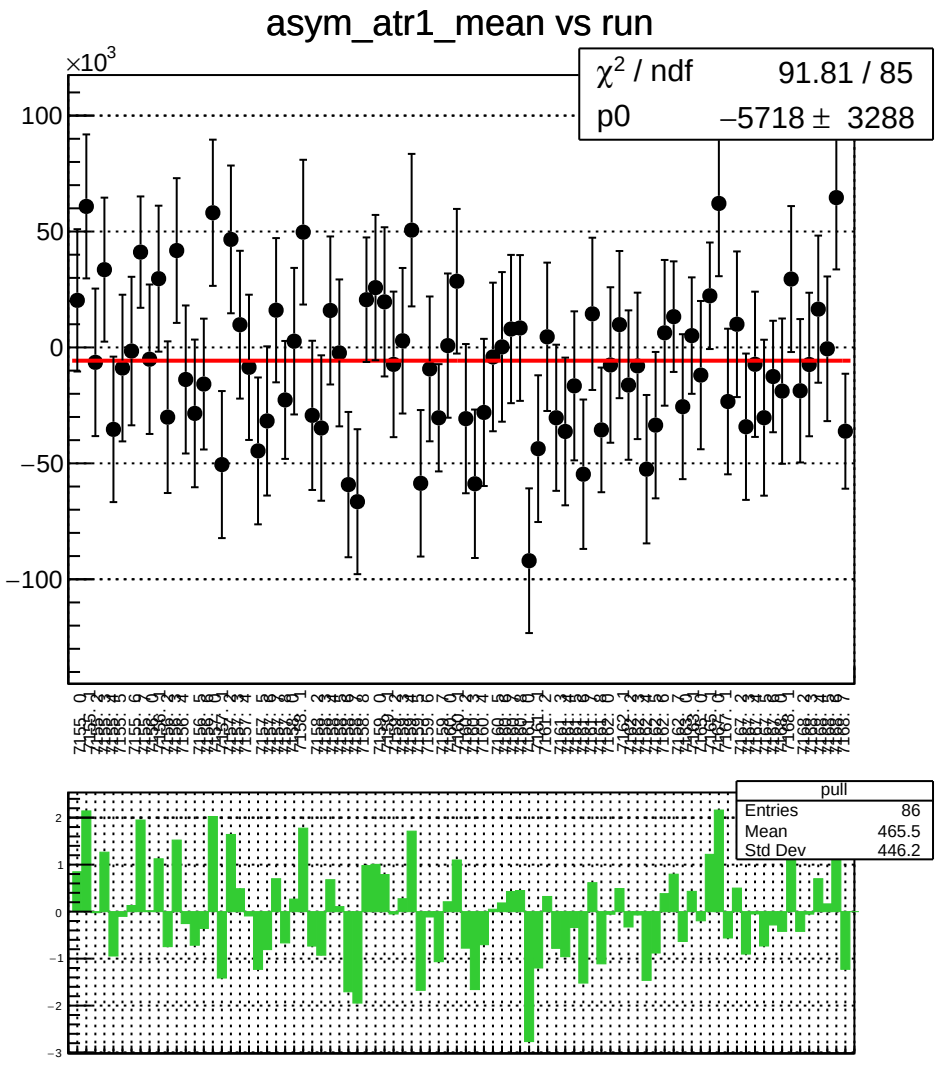

pull1D
Entries 86
Mean −0.0009439
Std Dev 1.02
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

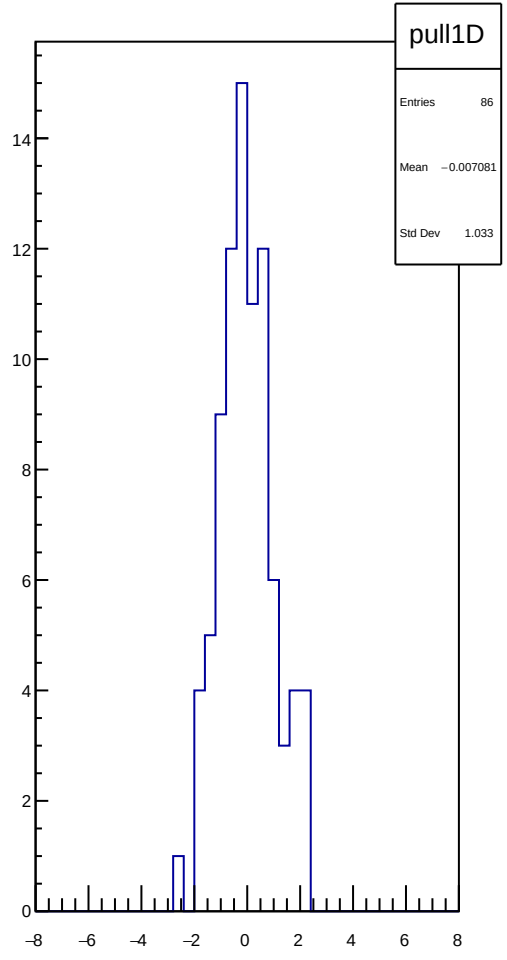

reg_asym_atr1_rms vs run
χ^2 / ndf 102.8 / 85
p0 2783 ± 2.153
2860
2840
2820
2800
2780
2760
2740
2720
2700

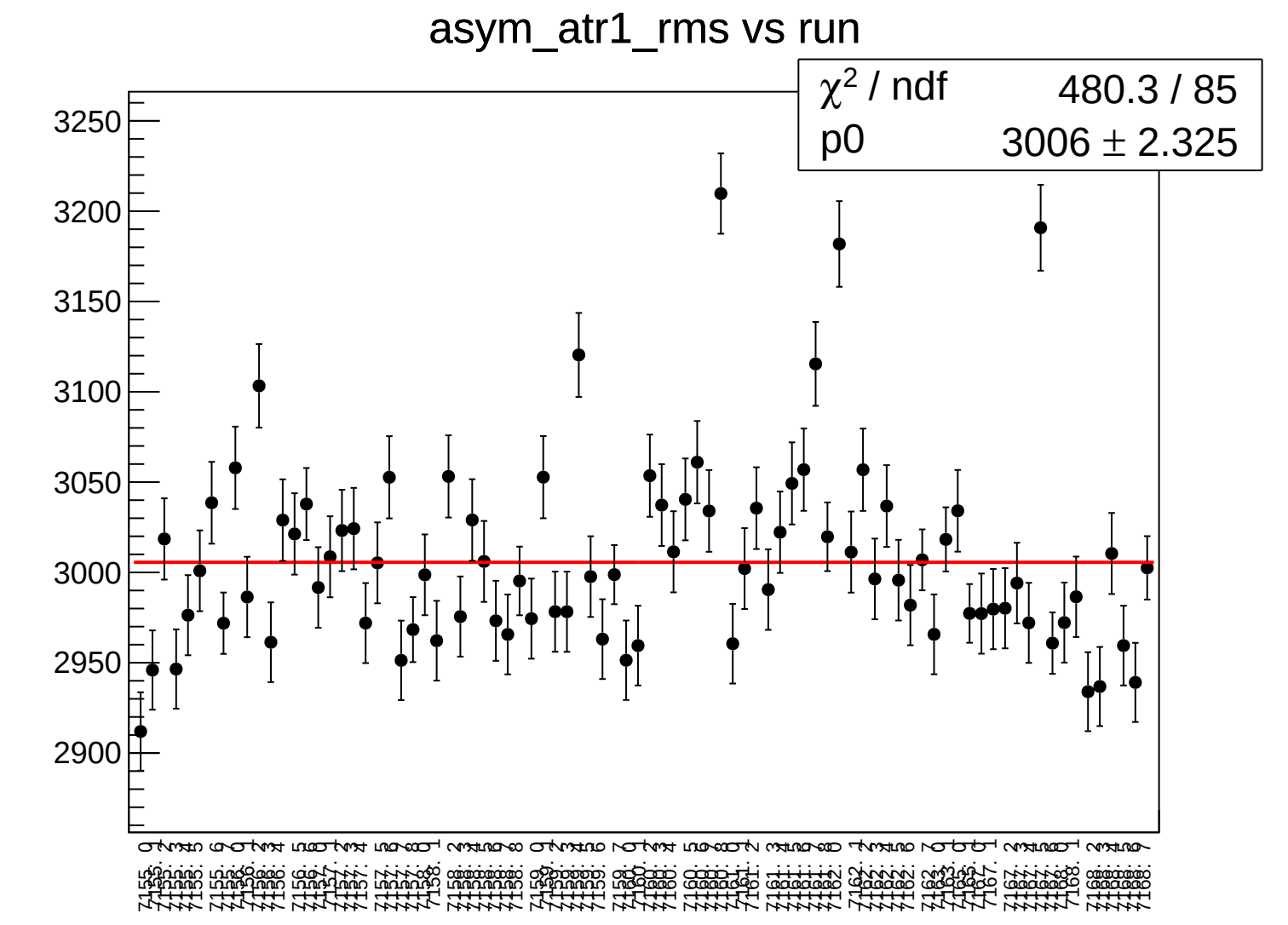

asym_atr1_correction_mean vs run
χ² / ndf 74.05 / 85
p0 214.2 ± 1226
pull
Entries 86
Mean −12.62
Std Dev 67.58

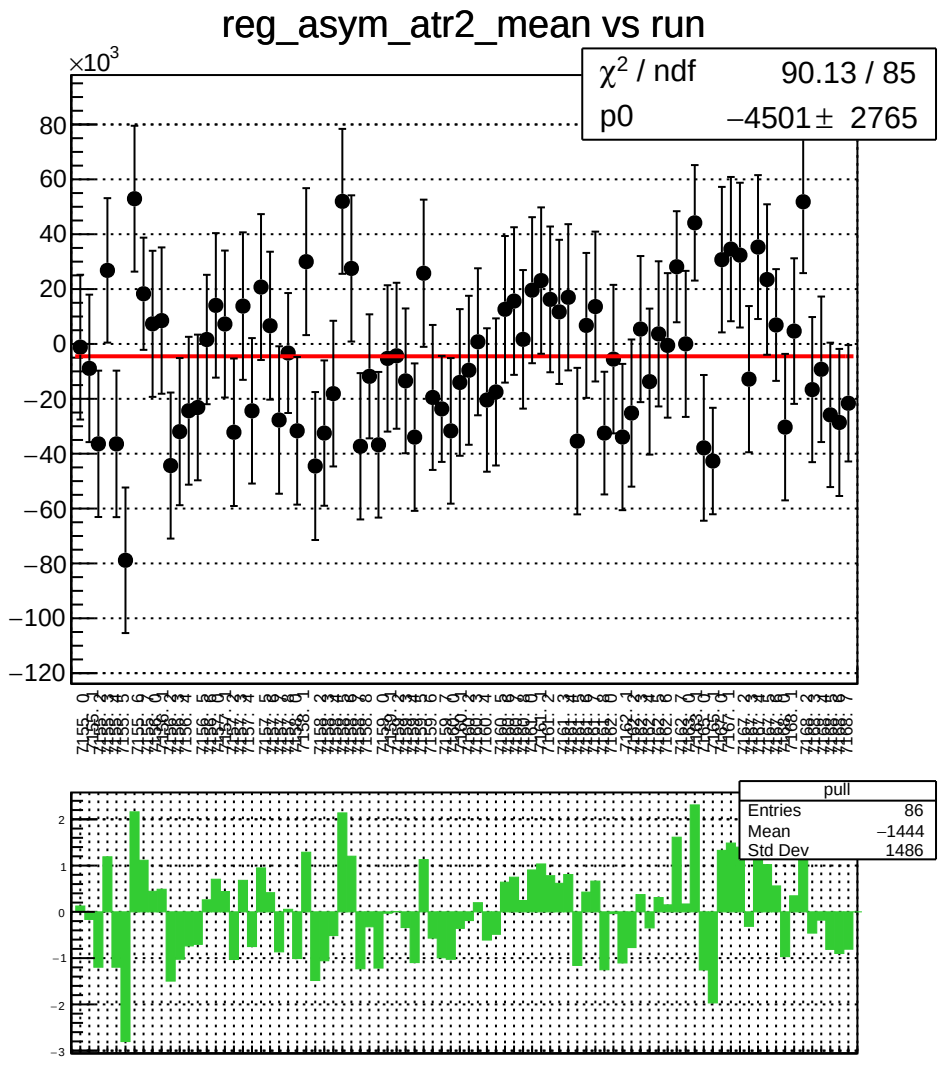

pull1D
Entries 86
Mean 0.02252
Std Dev 0.9277

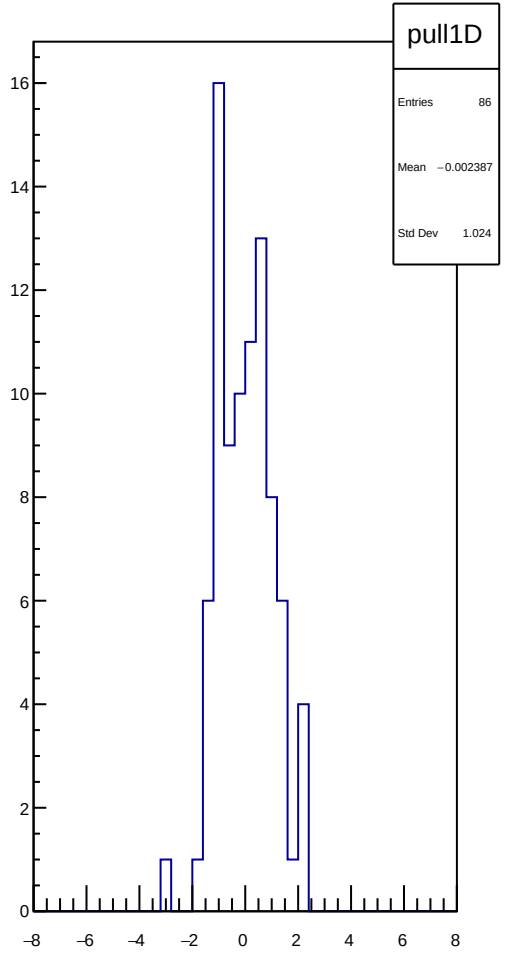

asym_atr1_correction_rms vs run
χ² / ndf 1.236e+04 / 85
p0 1116 ± 0.8666
1600
1500
1400
1300
1200
1100
1000
900

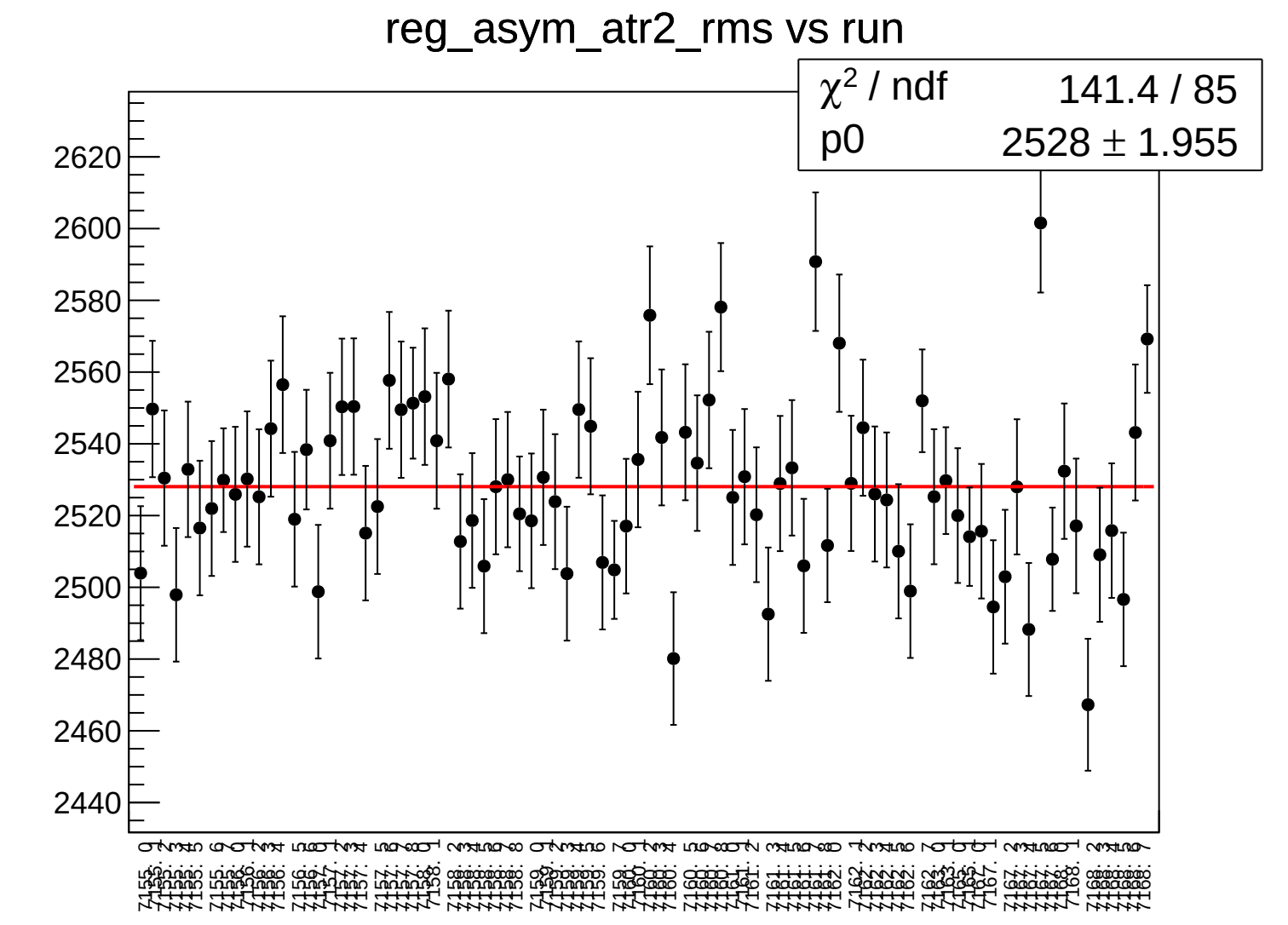

asym_atr1_mean vs run
×10^3
χ² / ndf 91.81 / 85
p0 −5718 ± 3288
100
50
0
−50
−100
pull
Entries 86
Mean 465.5
Std Dev 446.2
2
1
0
−1
−2
−3

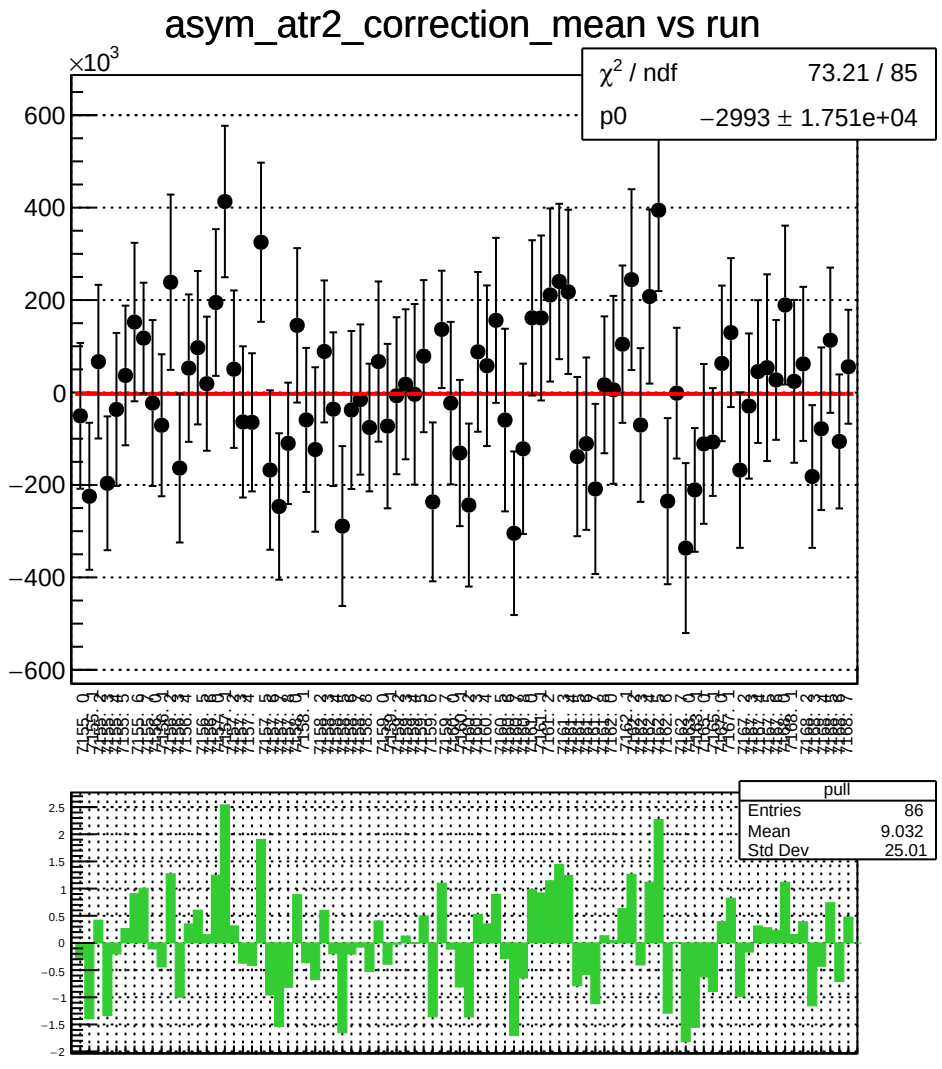

pull1D
Entries 86
Mean −0.007081
Std Dev 1.033
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

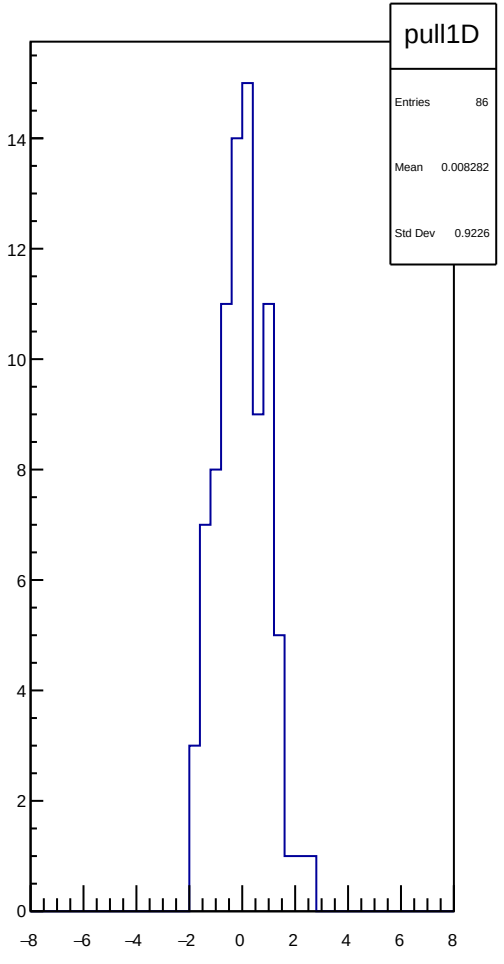

asym_atr1_rms vs run
χ^2 / ndf 480.3 / 85
p0 3006 ± 2.325
3250
3200
3150
3100
3050
3000
2950
2900

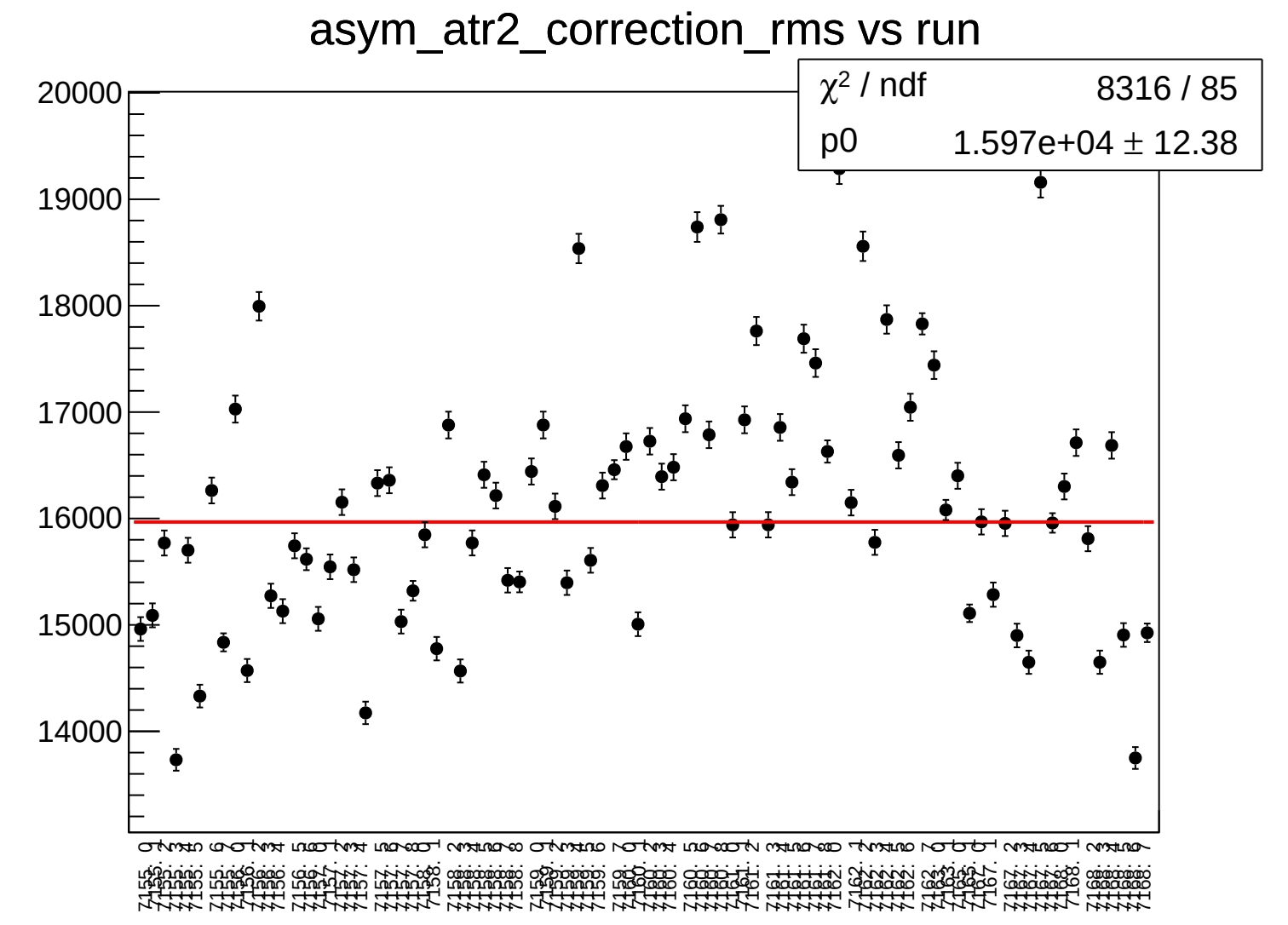

reg_asym_atr2_mean vs run
×10^3
χ² / ndf 90.13 / 85
p0 −4501 ± 2765
80
60
40
20
0
−20
−40
−60
−80
−100
−120
pull
Entries 86
Mean −1444
Std Dev 1486
2
1
0
−1
−2
−3

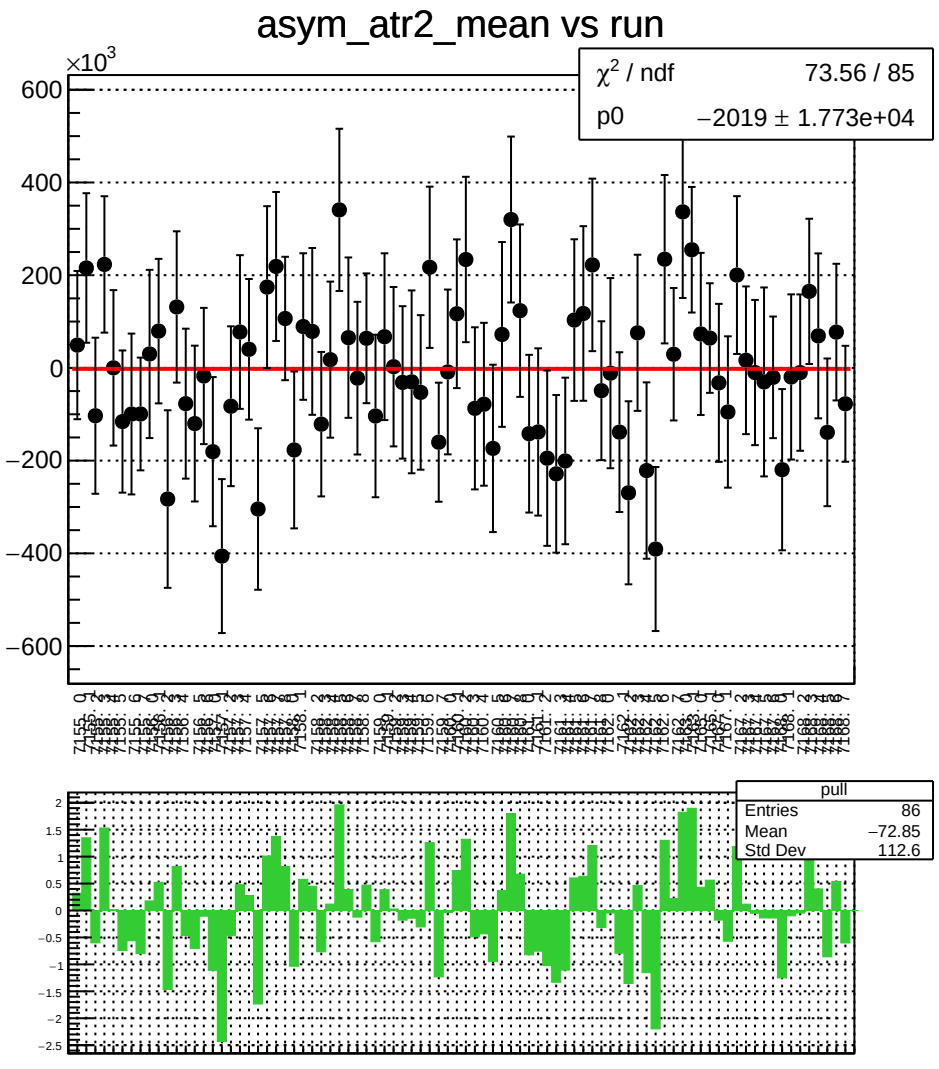

pull1D
Entries 86
Mean −0.002387
Std Dev 1.024
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

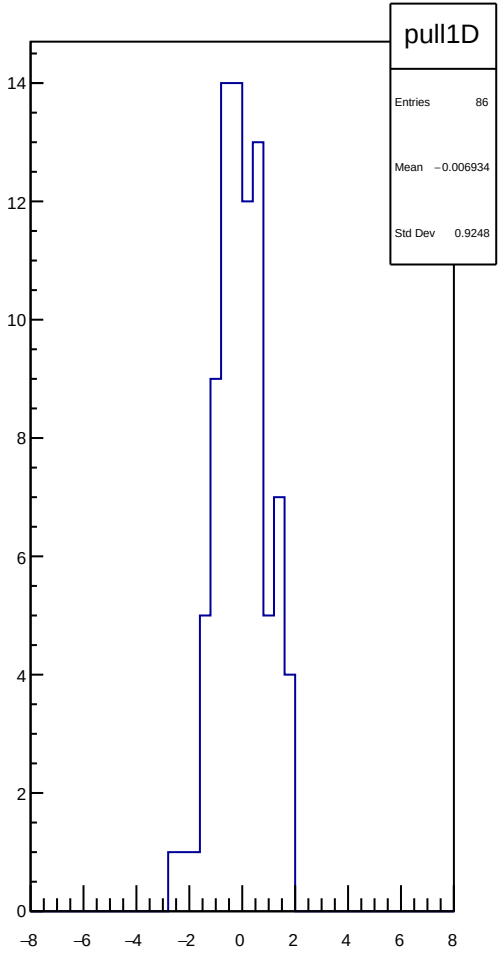

reg_asym_atr2_rms vs run
χ^2 / ndf 141.4 / 85
p0 2528 ± 1.955
2620
2600
2580
2560
2540
2520
2500
2480
2460
2440

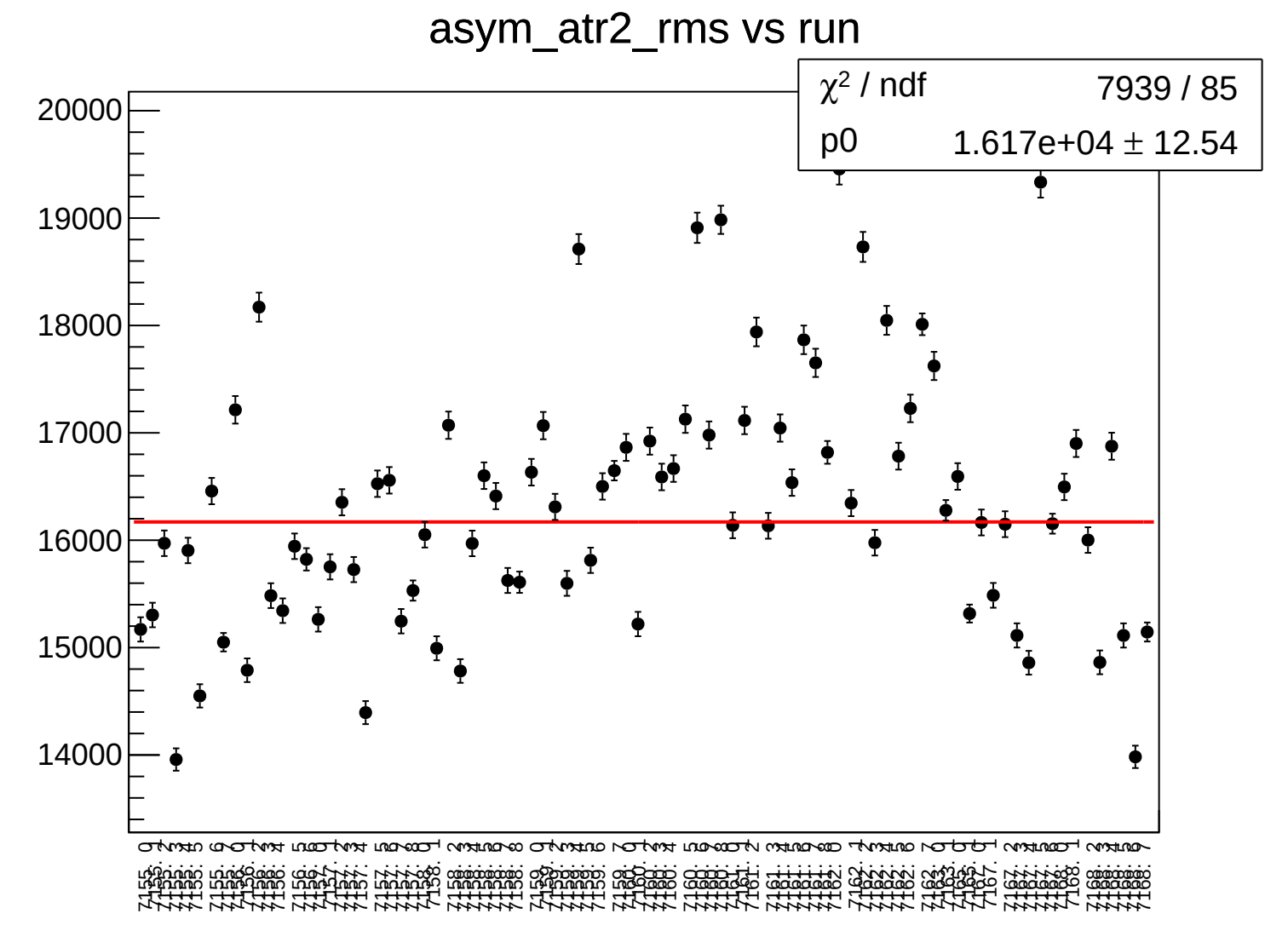

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 73.21 / 85
p0 −2993 ± 1.751e+04
pull
Entries 86
Mean 9.032
Std Dev 25.01

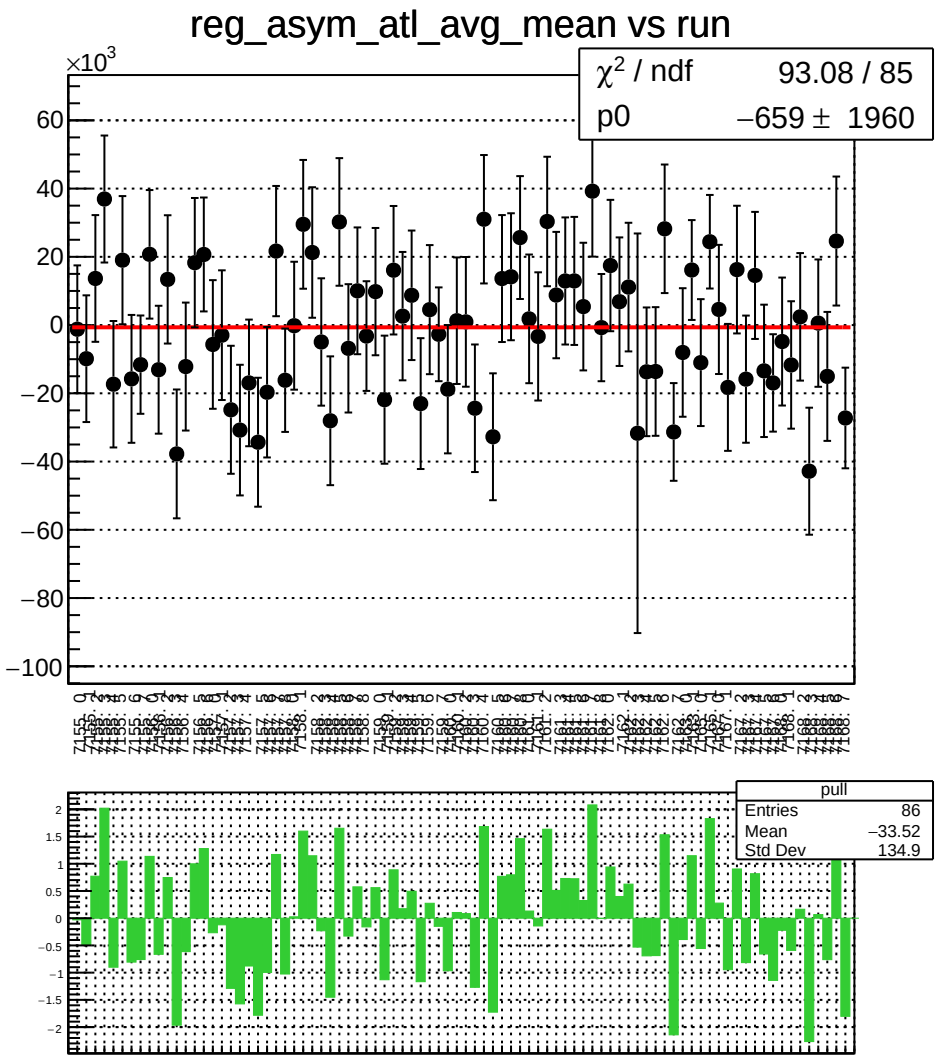

pull1D
Entries 86
Mean 0.008282
Std Dev 0.9226

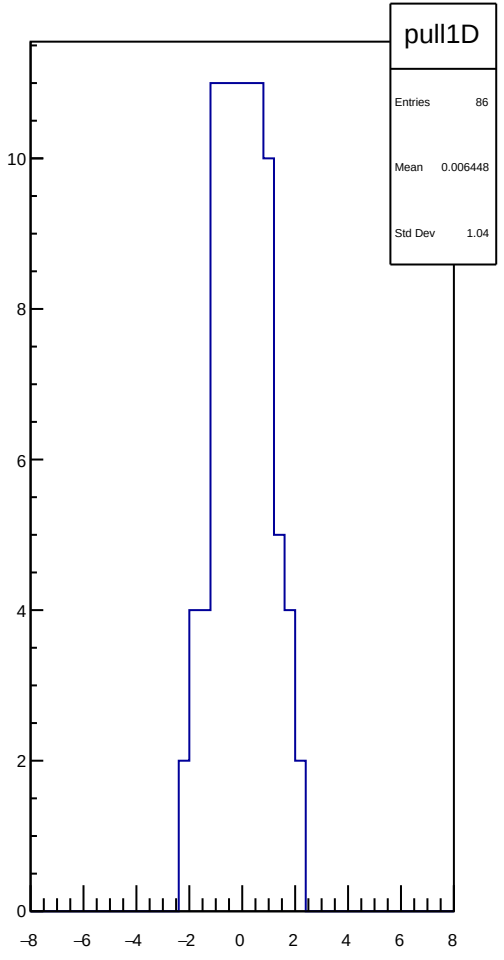

asym_atr2_correction_rms vs run
χ² / ndf 8316 / 85
p0 1.597e+04 ± 12.38
20000
19000
18000
17000
16000
15000
14000

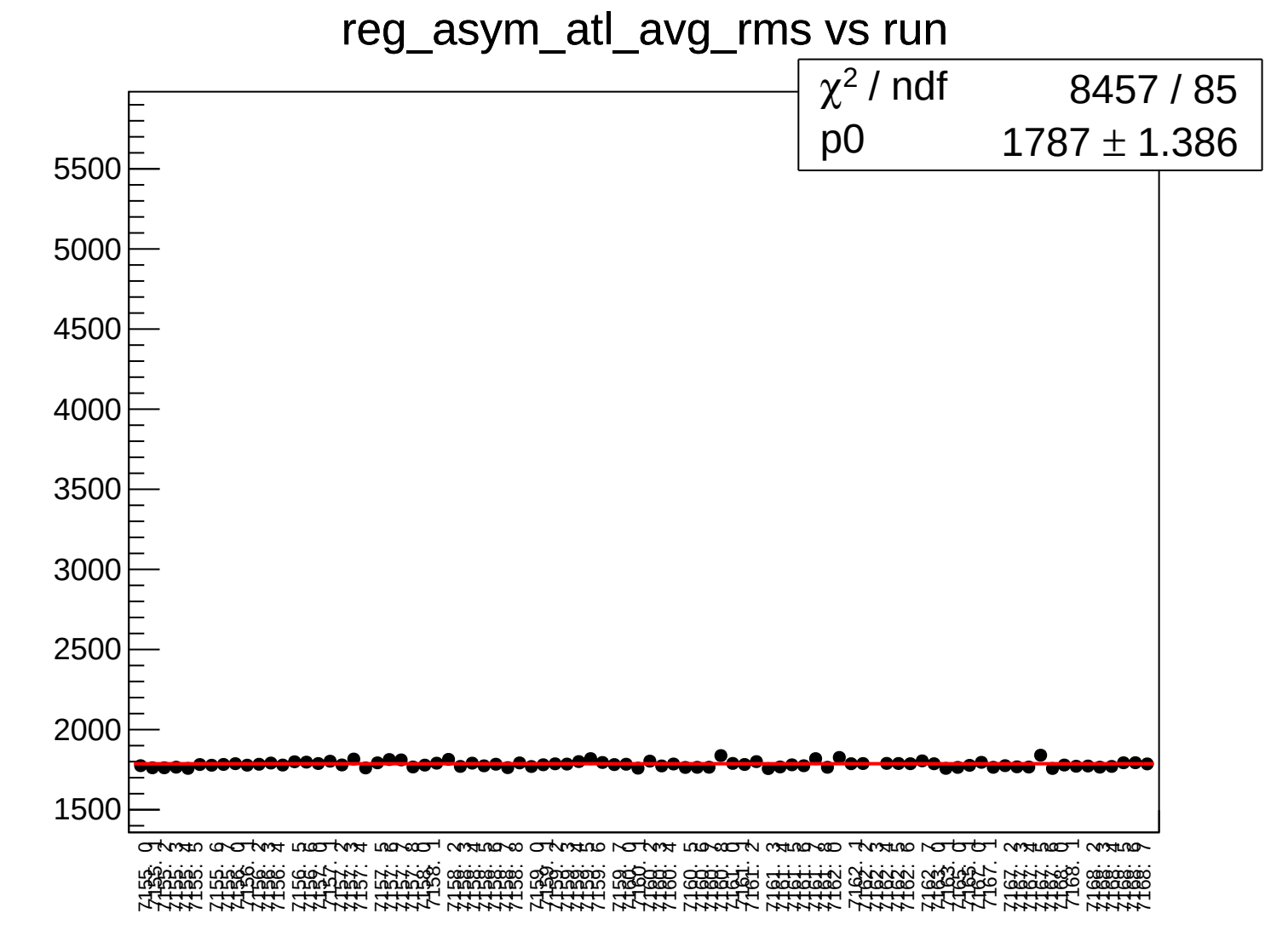

asym_atr2_mean vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 73.56 / 85
p0 −2019 ± 1.773e+04
pull
Entries 86
Mean −72.85
Std Dev 112.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

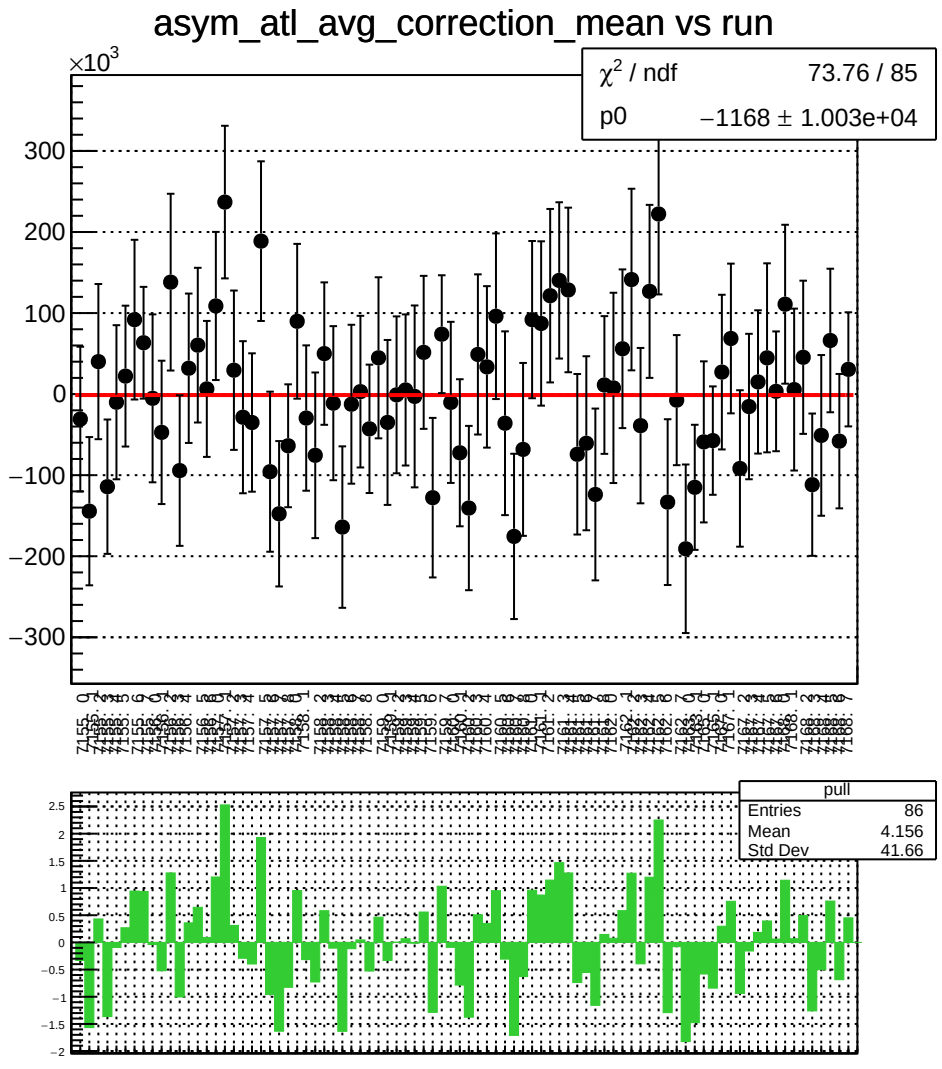

pull1D
Entries 86
Mean −0.006934
Std Dev 0.9248
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

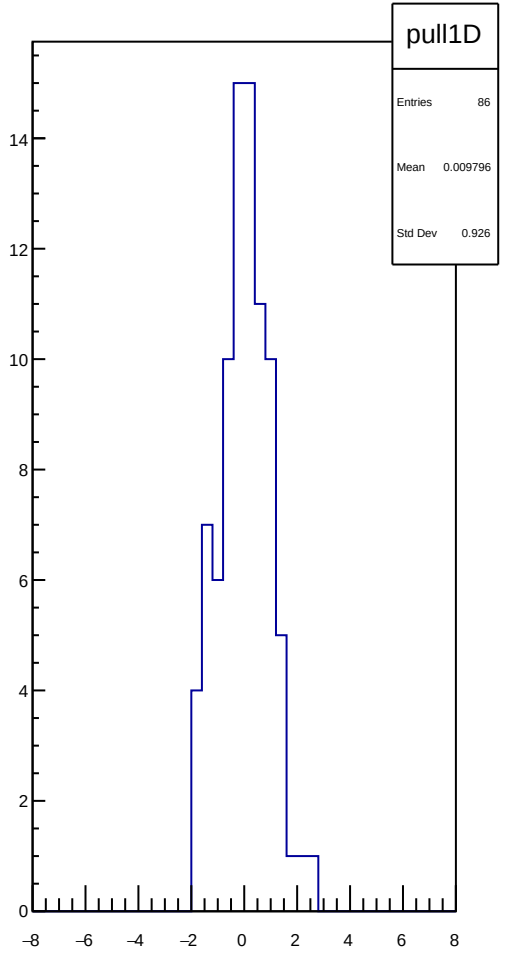

asym_atr2_rms vs run
χ² / ndf 7939 / 85
p0 1.617e+04 ± 12.54
20000
19000
18000
17000
16000
15000
14000

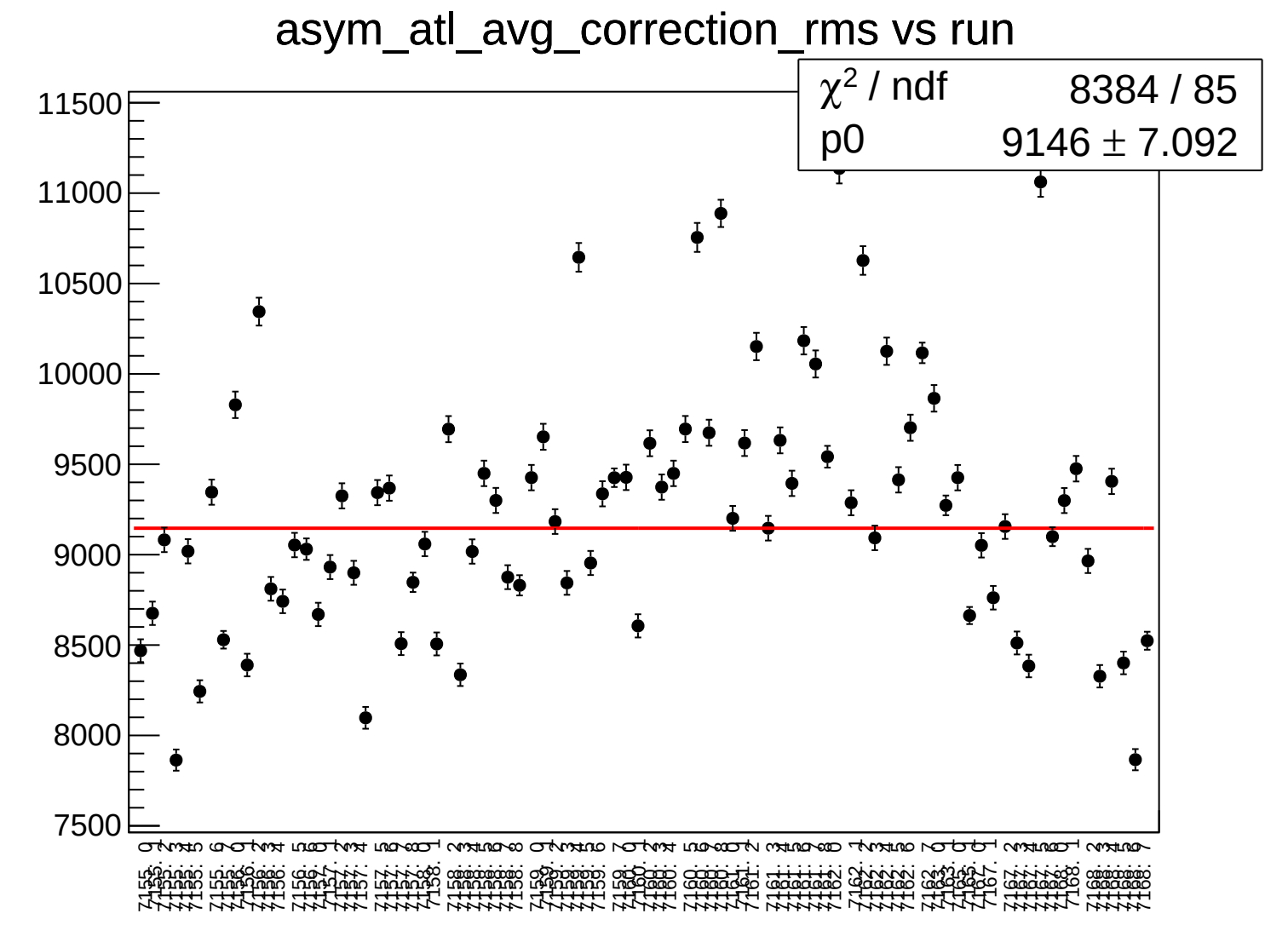

reg_asym_atl_avg_mean vs run
×10^3
χ² / ndf 93.08 / 85
p0 −659 ± 1960
pull
Entries 86
Mean −33.52
Std Dev 134.9

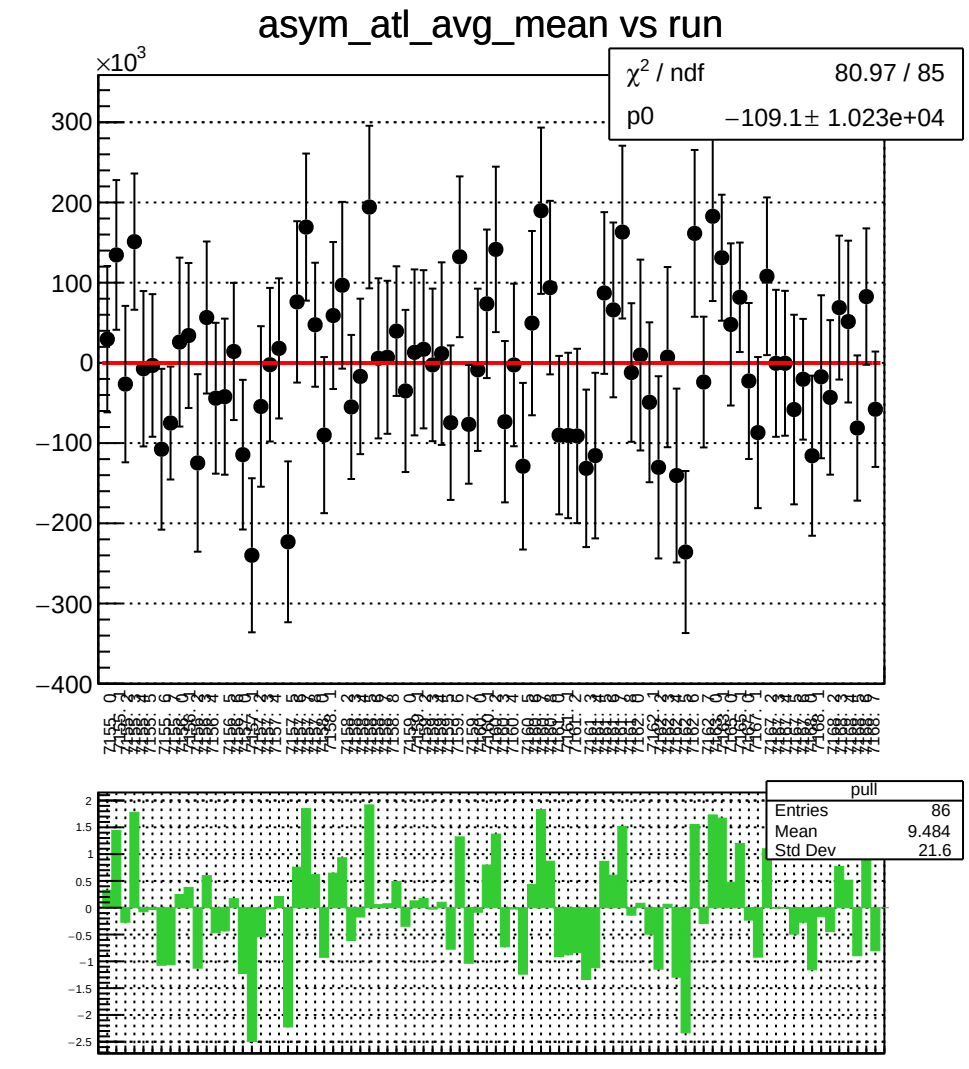

pull1D
Entries 86
Mean 0.006448
Std Dev 1.04

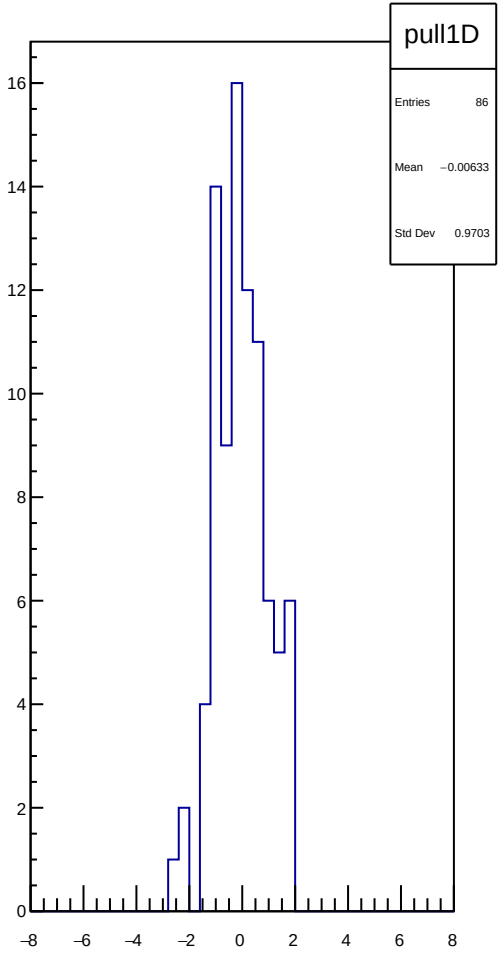

reg_asym_atl_avg_rms vs run
χ^2 / ndf 8457 / 85
p0 1787 ± 1.386
5500
5000
4500
4000
3500
3000
2500
2000
1500

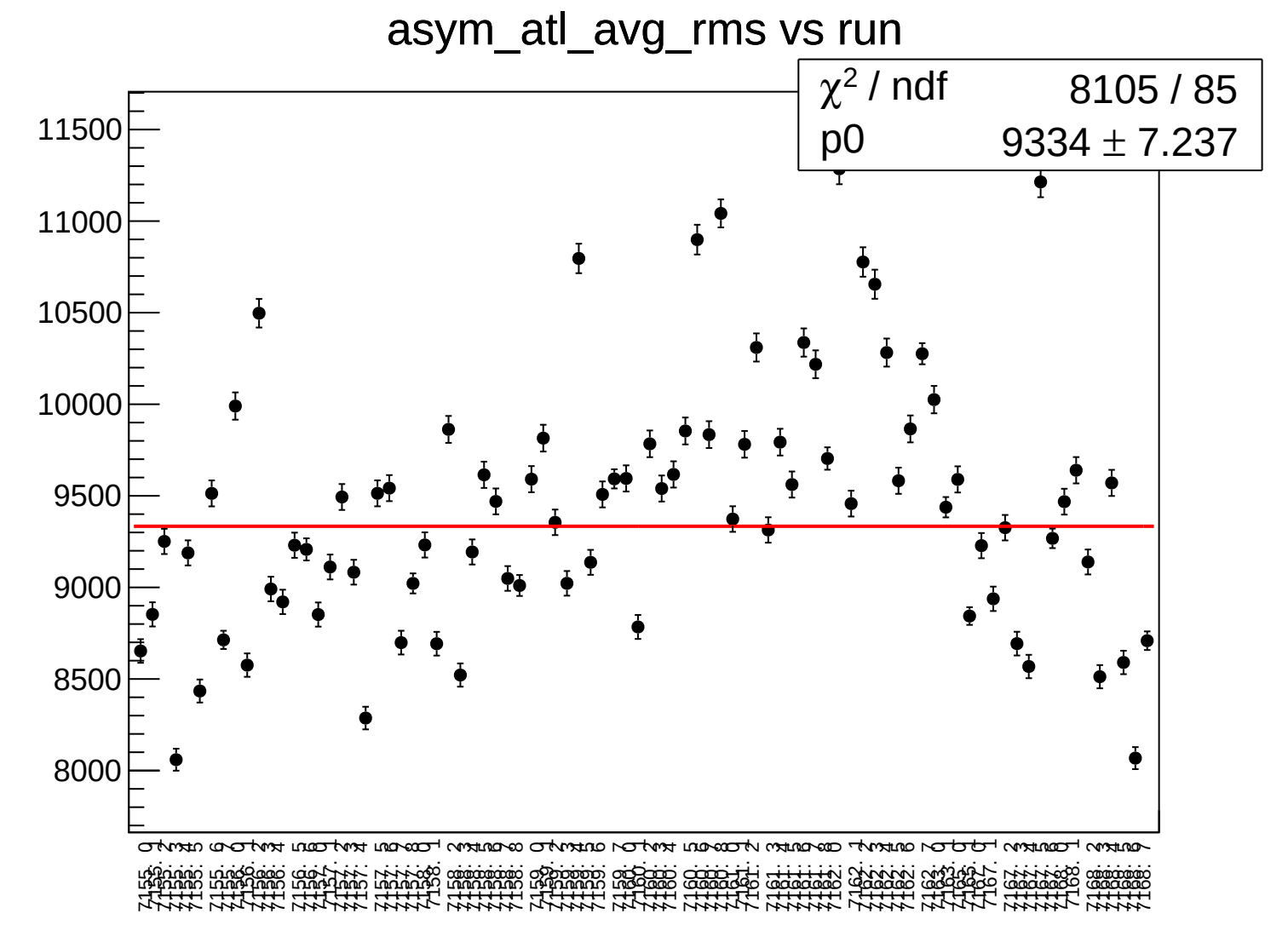

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 73.76 / 85
p0 −1168 ± 1.003e+04
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean 4.156
Std Dev 41.66
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

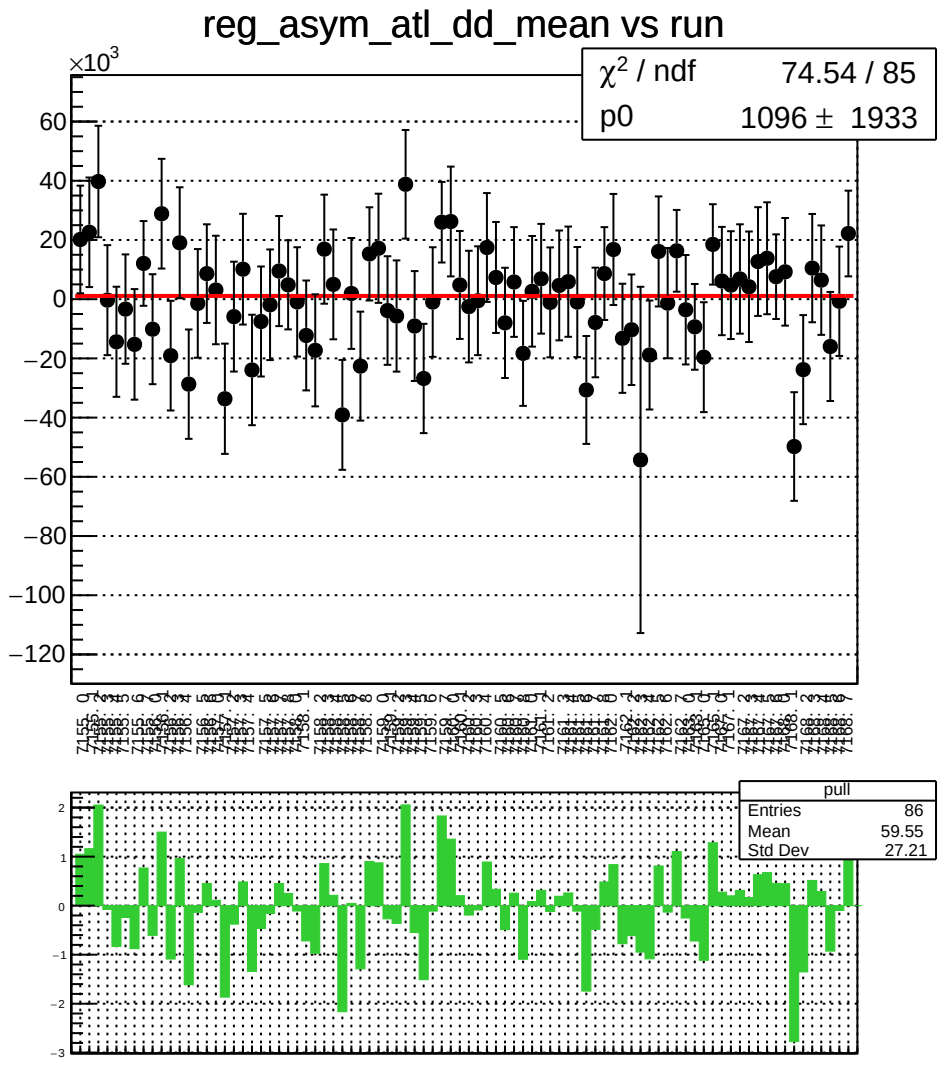

pull1D
Entries 86
Mean 0.009796
Std Dev 0.926
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

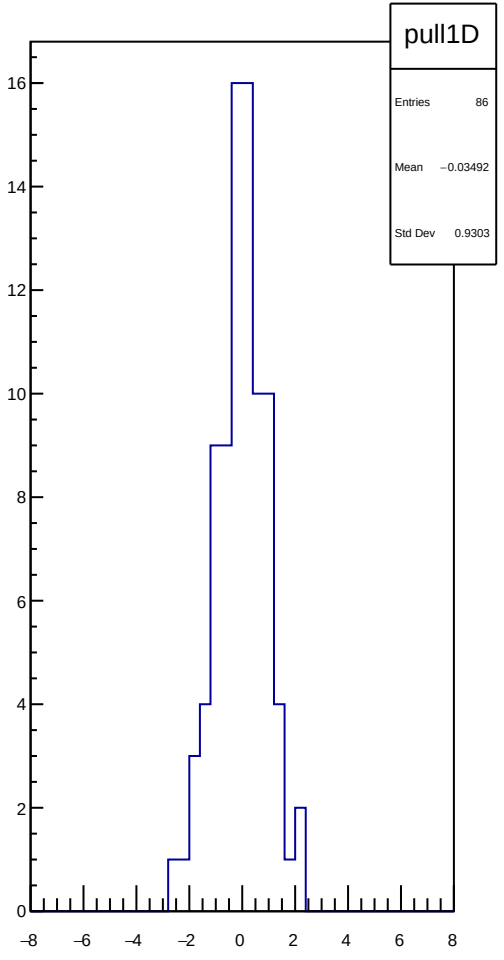

asym_atl_avg_correction_rms vs run
χ² / ndf 8384 / 85
p0 9146 ± 7.092
11500
11000
10500
10000
9500
9000
8500
8000
7500

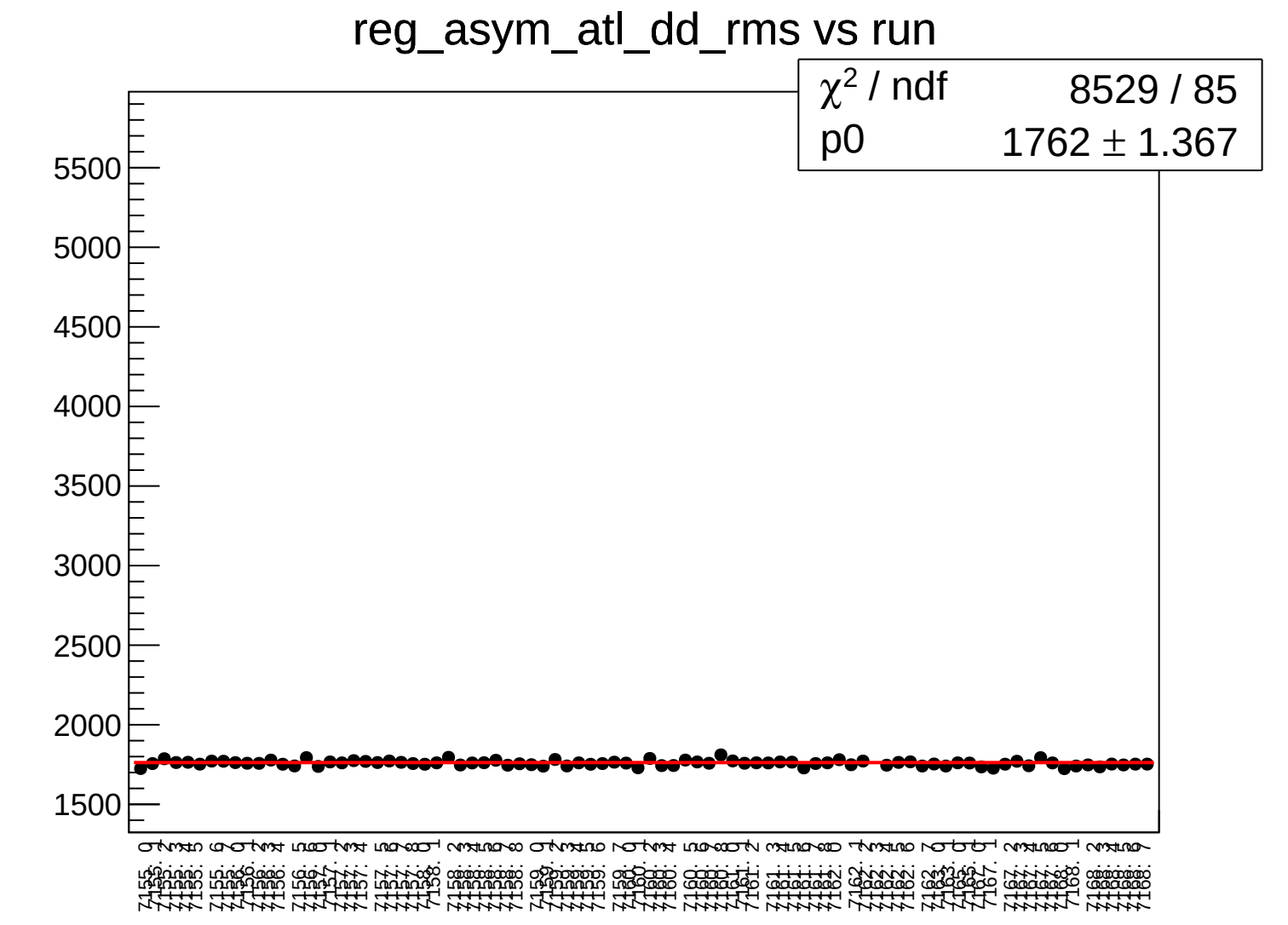

asym_atl_avg_mean vs run
×10^3
χ² / ndf 80.97 / 85
p0 −109.1± 1.023e+04
pull
Entries 86
Mean 9.484
Std Dev 21.6

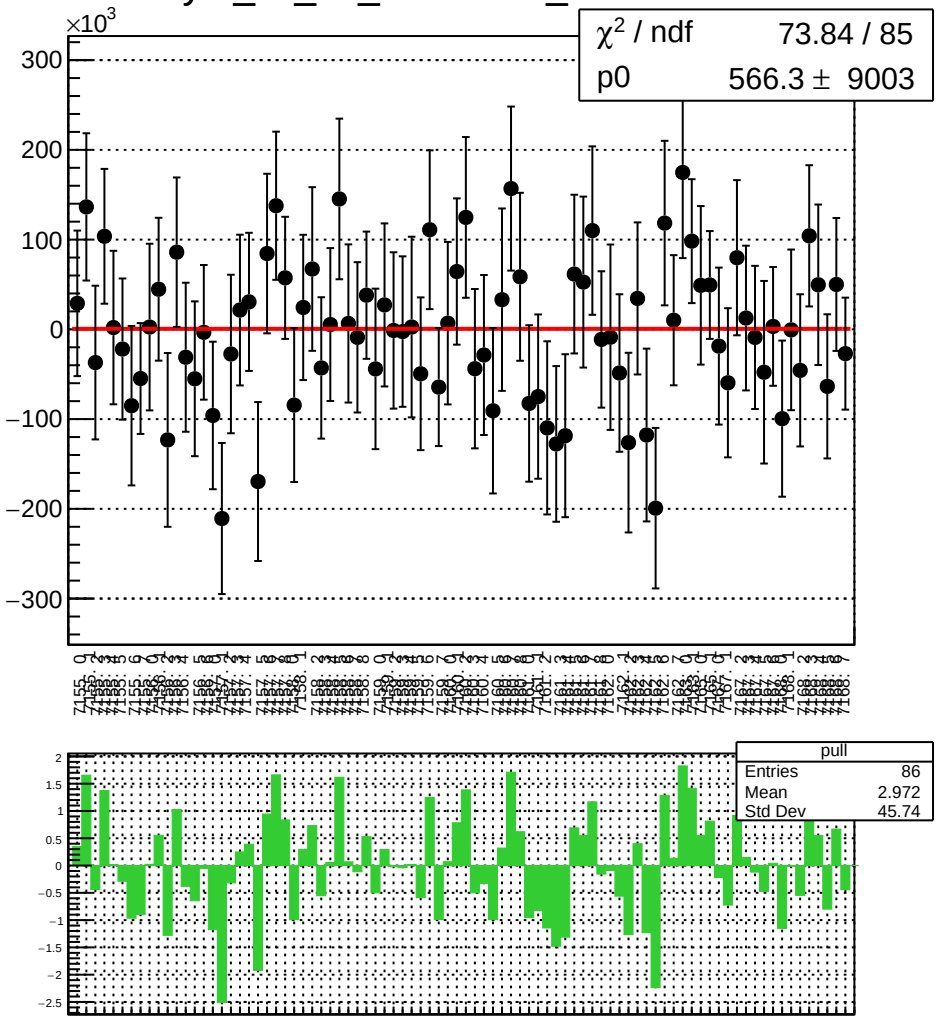

pull1D
Entries 86
Mean −0.00633
Std Dev 0.9703

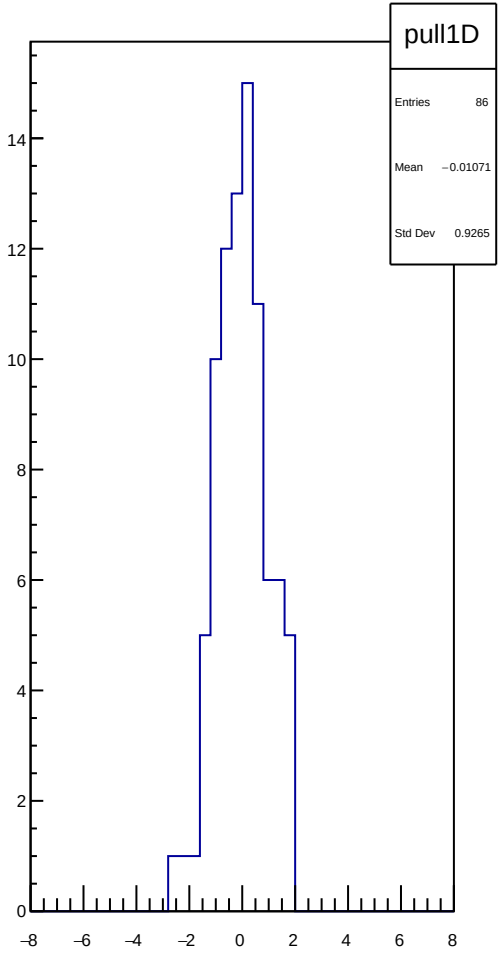

asym_atl_avg_rms vs run
χ² / ndf 8105 / 85
p0 9334 ± 7.237
11500
11000
10500
10000
9500
9000
8500
8000

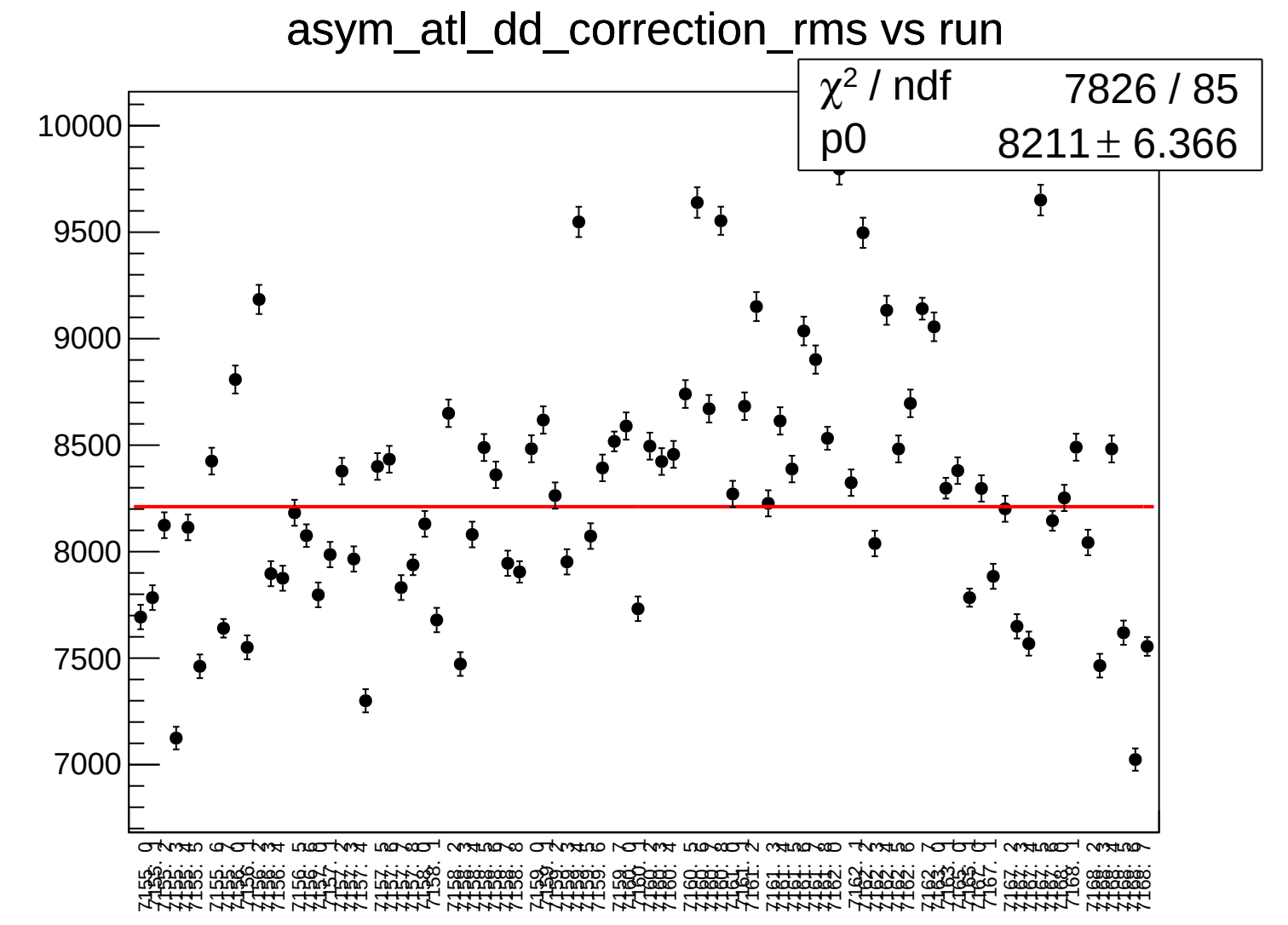

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 74.54 / 85
p0 1096 ± 1933
pull
Entries 86
Mean 59.55
Std Dev 27.21

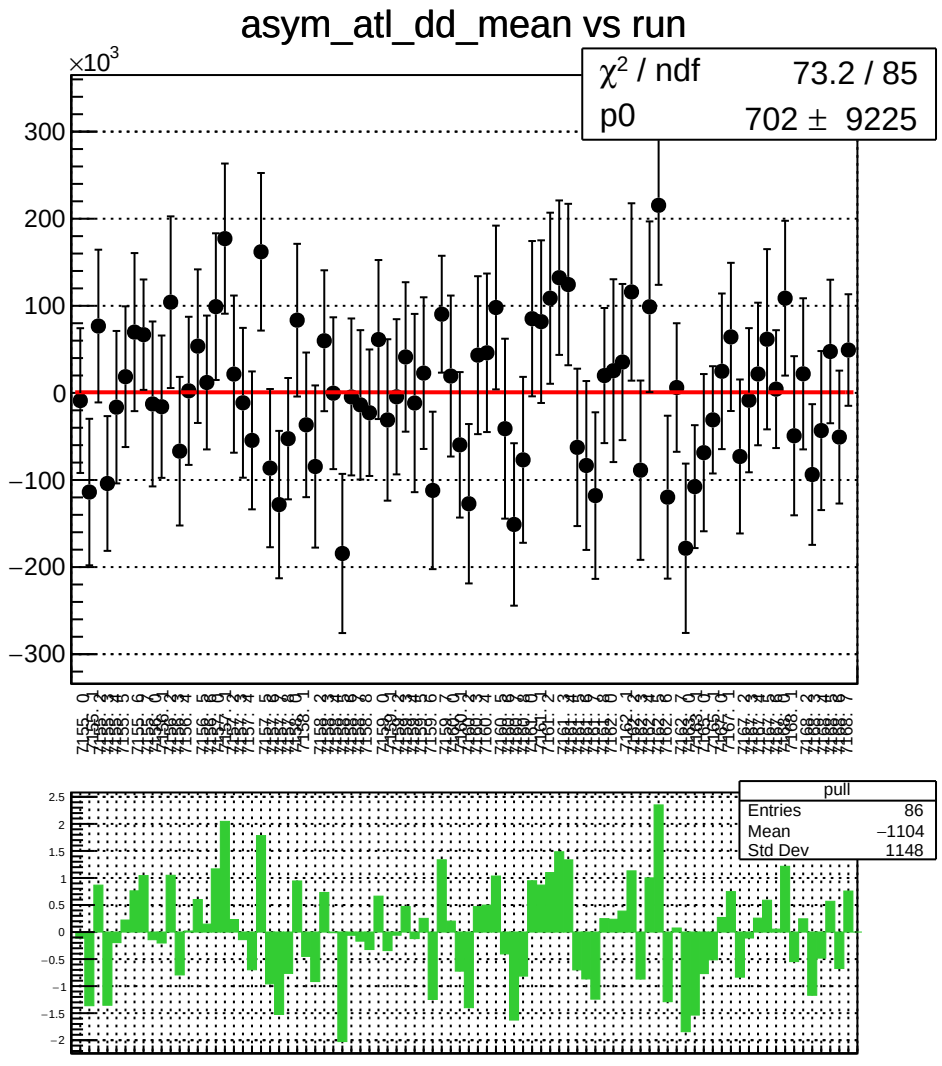

pull1D
Entries 86
Mean −0.03492
Std Dev 0.9303

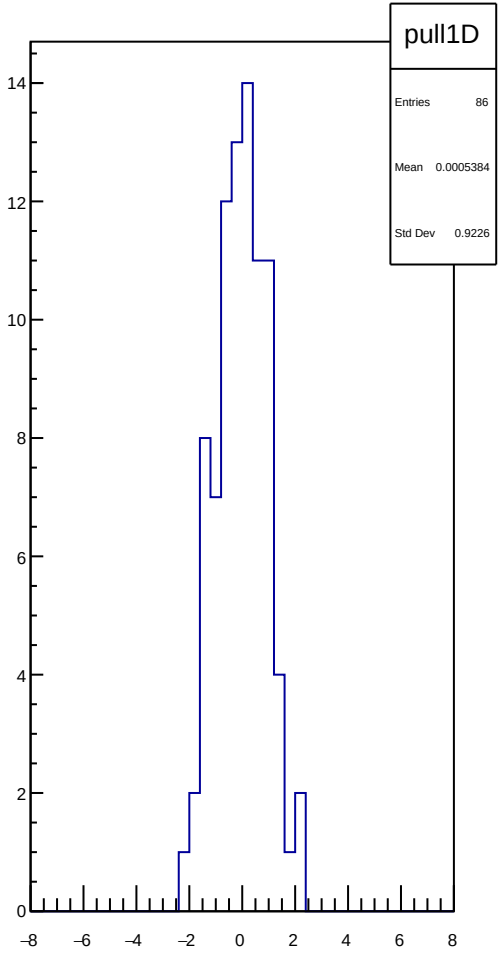

reg_asym_atl_dd_rms vs run
χ^2 / ndf 8529 / 85
p0 1762 ± 1.367
5500
5000
4500
4000
3500
3000
2500
2000
1500

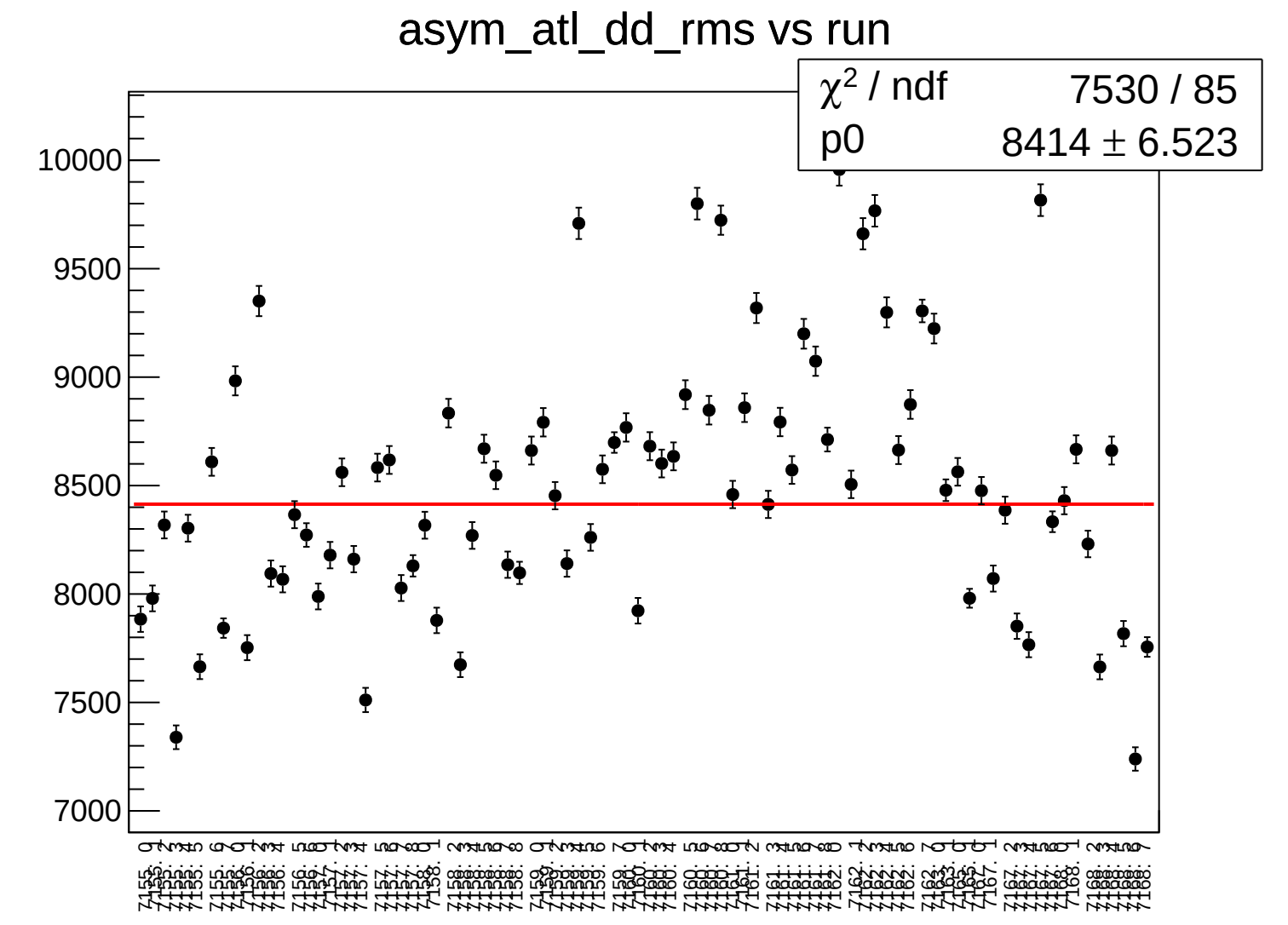

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 73.84 / 85
p0 566.3 ± 9003
pull
Entries 86
Mean 2.972
Std Dev 45.74

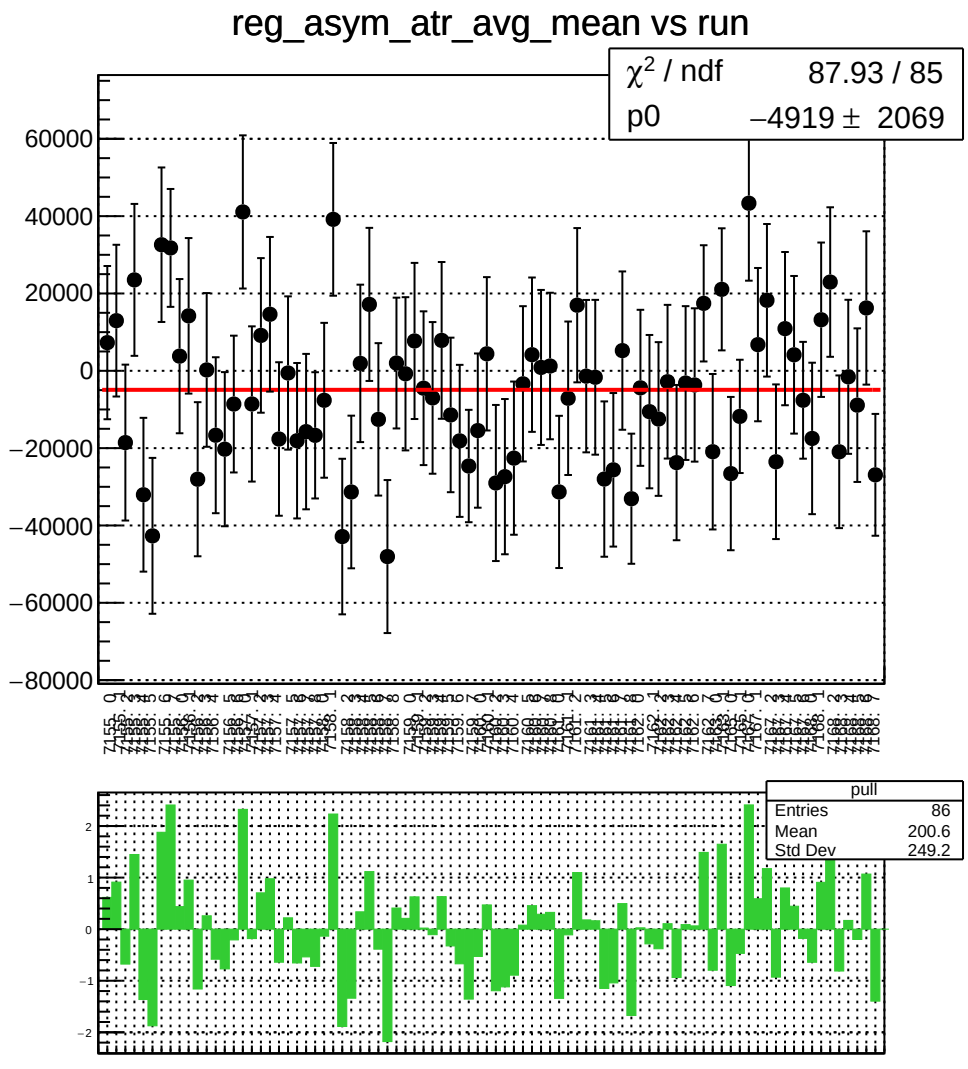

pull1D
Entries 86
Mean −0.01071
Std Dev 0.9265

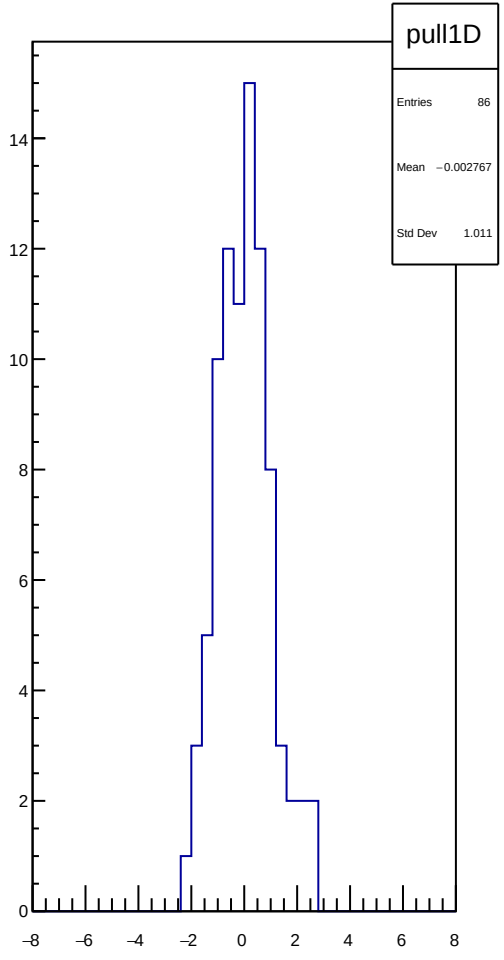

asym_atl_dd_correction_rms vs run
χ² / ndf 7826 / 85
p0 8211 ± 6.366
10000
9500
9000
8500
8000
7500
7000

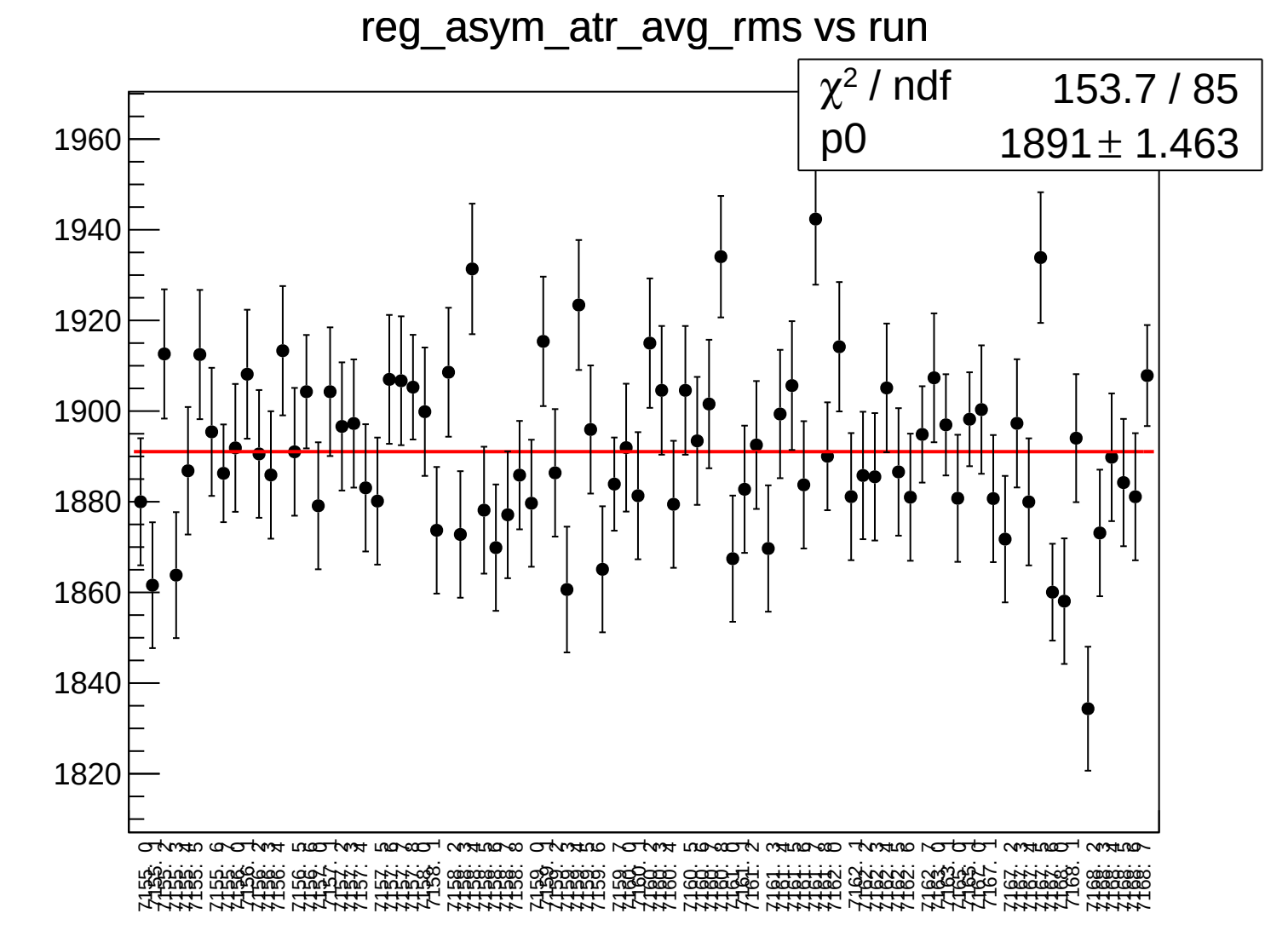

asym_atl_dd_mean vs run
×10^3
χ² / ndf 73.2 / 85
p0 702 ± 9225
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −1104
Std Dev 1148
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

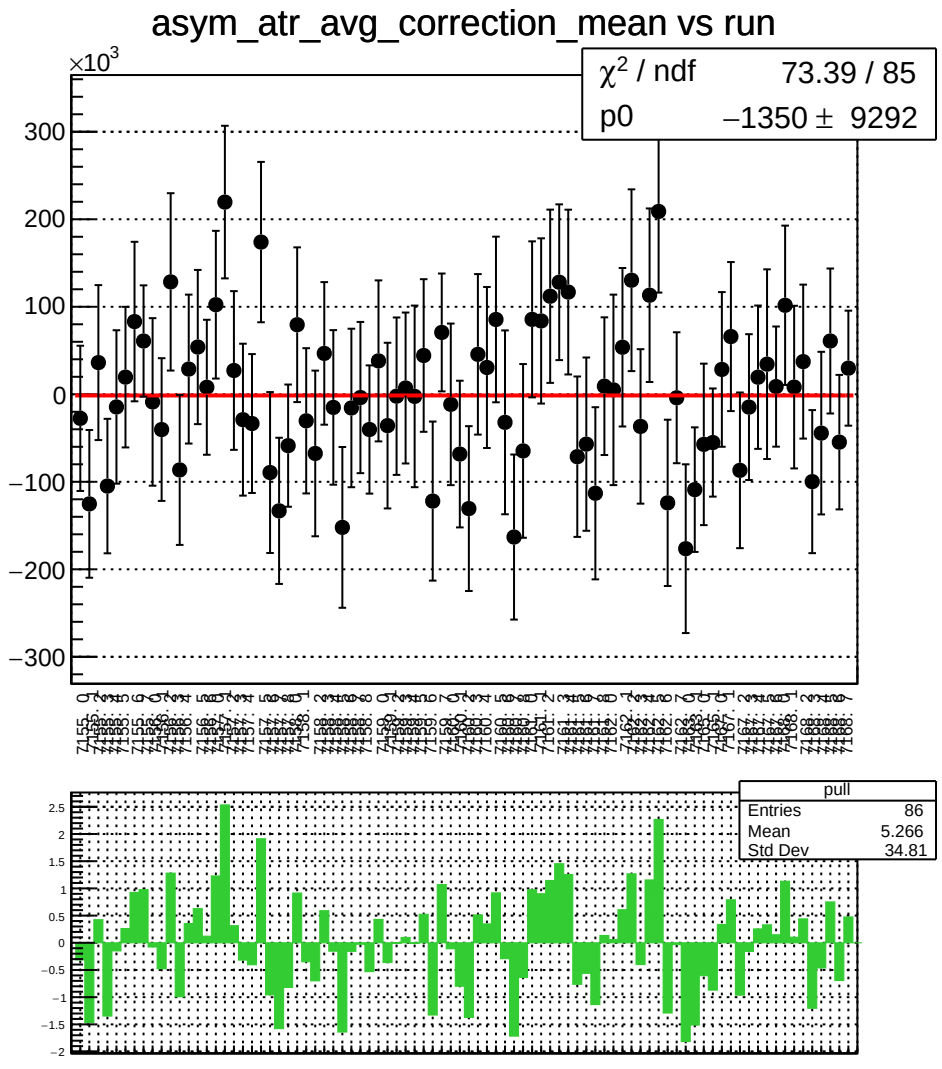

pull1D
Entries 86
Mean 0.0005384
Std Dev 0.9226
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

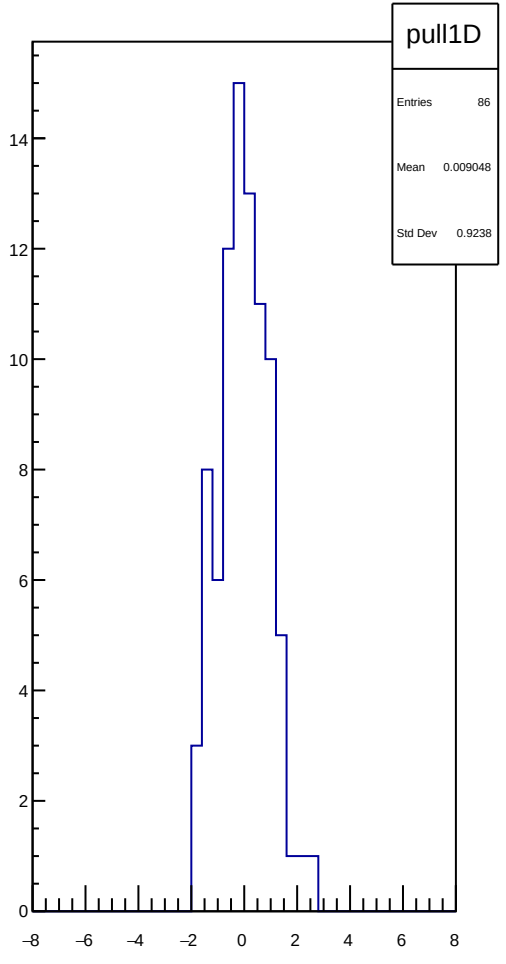

asym_atl_dd_rms vs run
χ^2 / ndf 7530 / 85
p0 8414 ± 6.523
10000
9500
9000
8500
8000
7500
7000

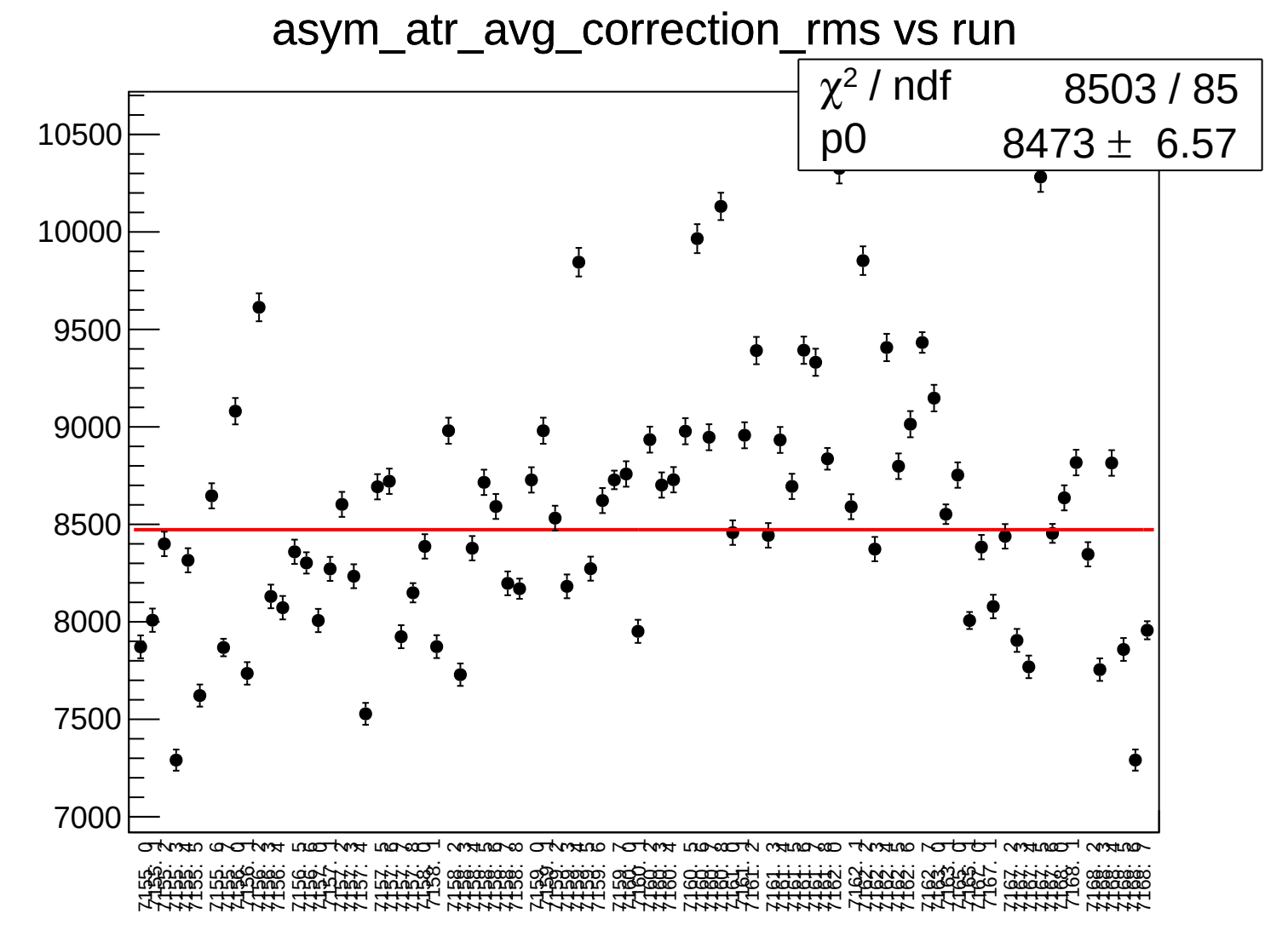

reg_asym_atr_avg_mean vs run
χ² / ndf 87.93 / 85
p0 −4919 ± 2069
pull
Entries 86
Mean 200.6
Std Dev 249.2

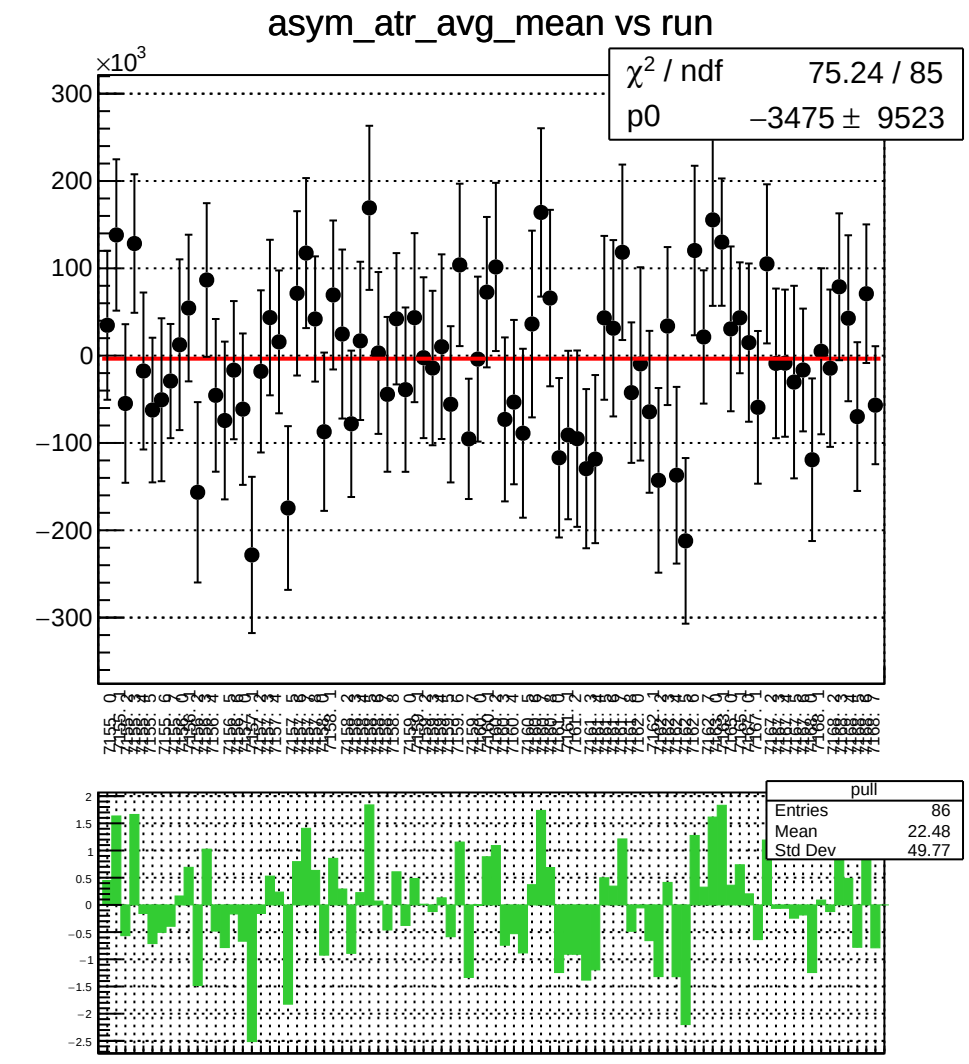

pull1D
Entries 86
Mean −0.002767
Std Dev 1.011

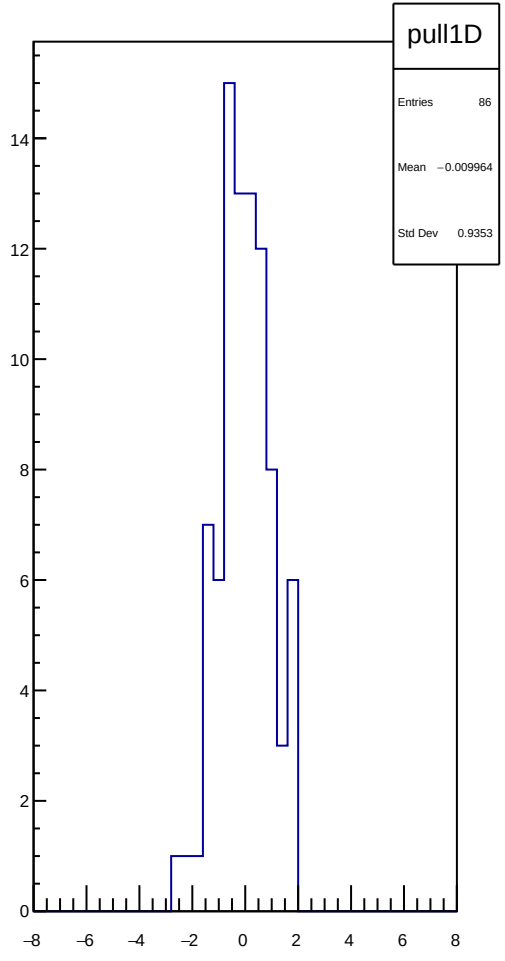

reg_asym_atr_avg_rms vs run
χ² / ndf 153.7 / 85
p0 1891 ± 1.463
1960
1940
1920
1900
1880
1860
1840
1820

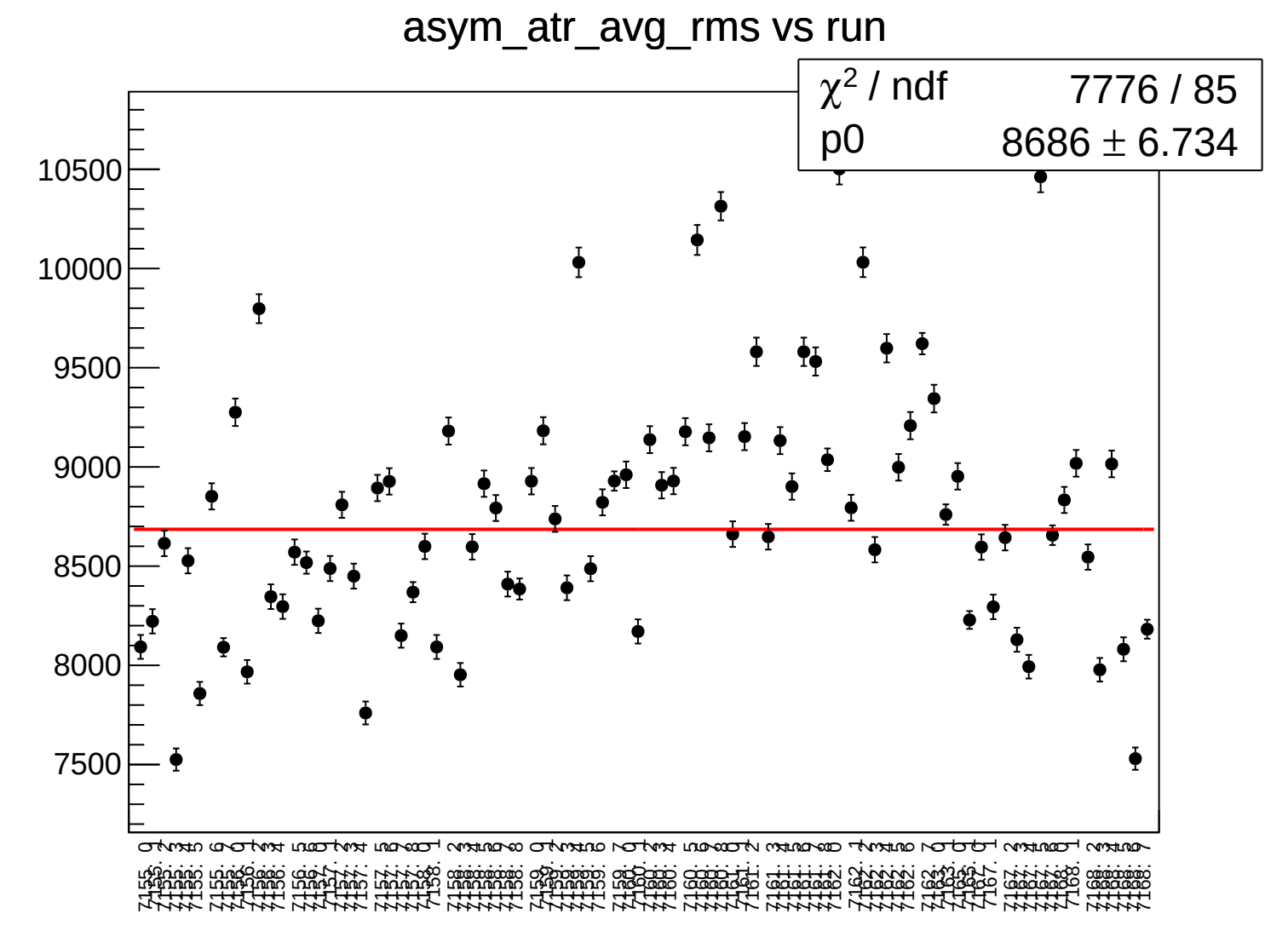

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 73.39 / 85
p0 −1350 ± 9292
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean 5.266
Std Dev 34.81
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

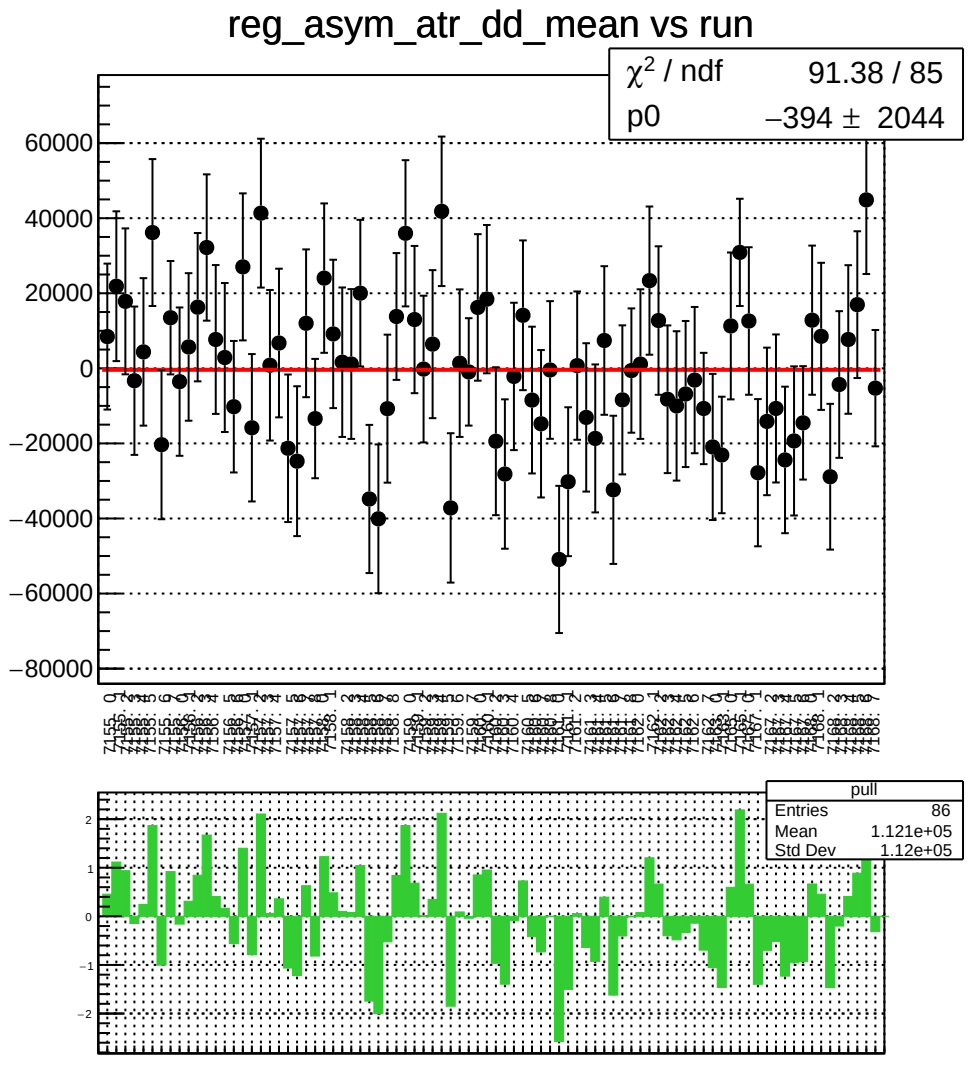

pull1D
Entries 86
Mean 0.009048
Std Dev 0.9238
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

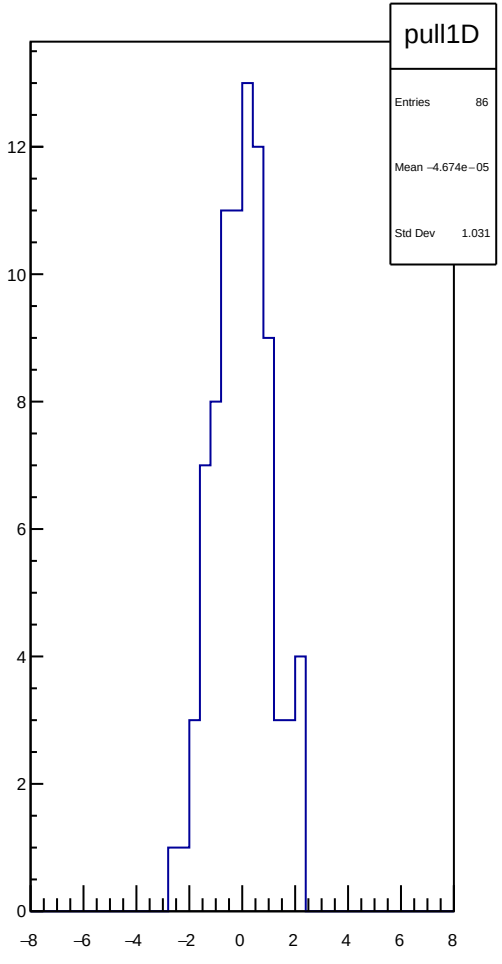

asym_atr_avg_correction_rms vs run
χ² / ndf 8503 / 85
p0 8473 ± 6.57
10500
10000
9500
9000
8500
8000
7500
7000

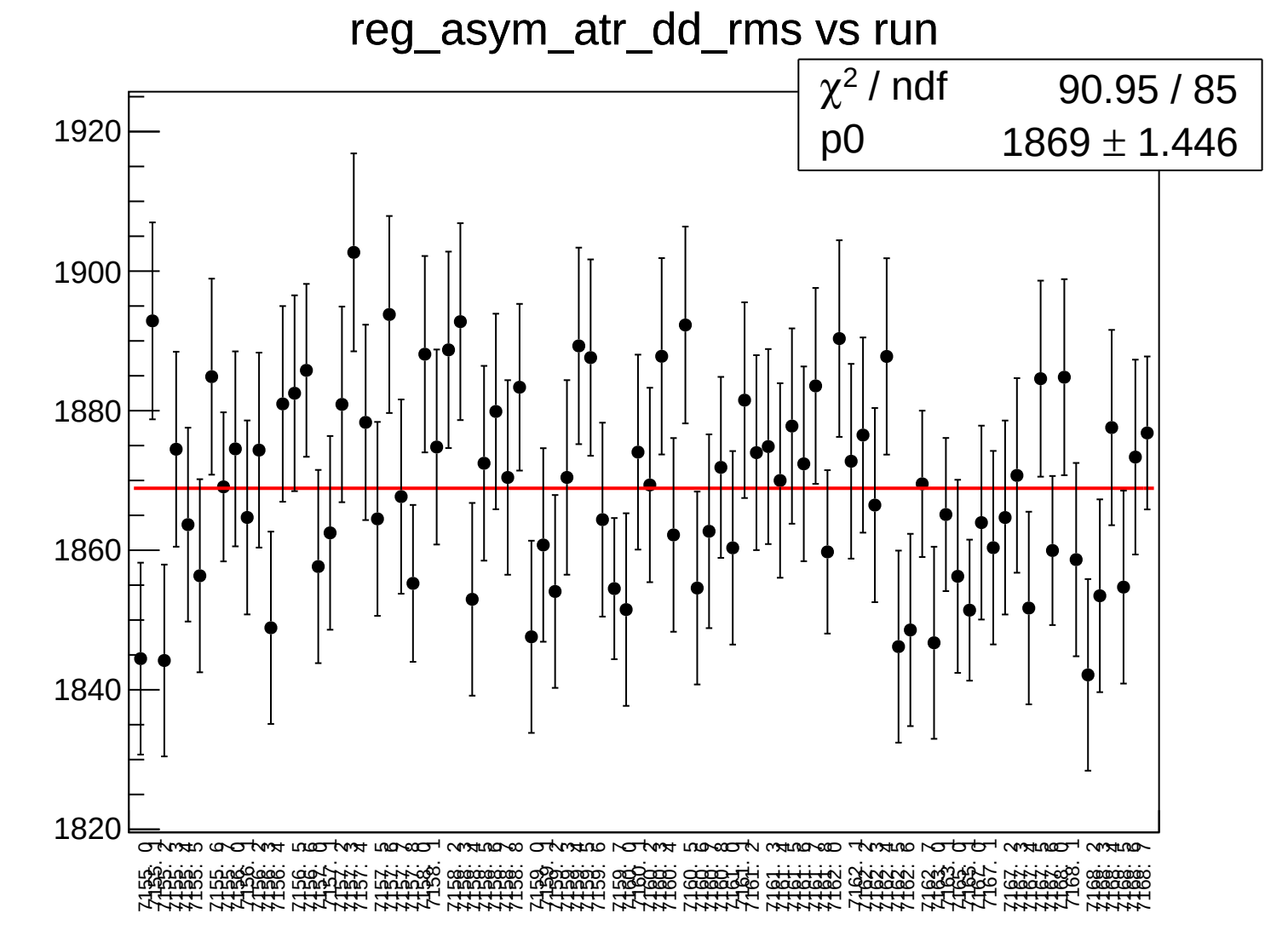

asym_atr_avg_mean vs run
×10^3
χ² / ndf 75.24 / 85
p0 −3475 ± 9523
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean 22.48
Std Dev 49.77
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

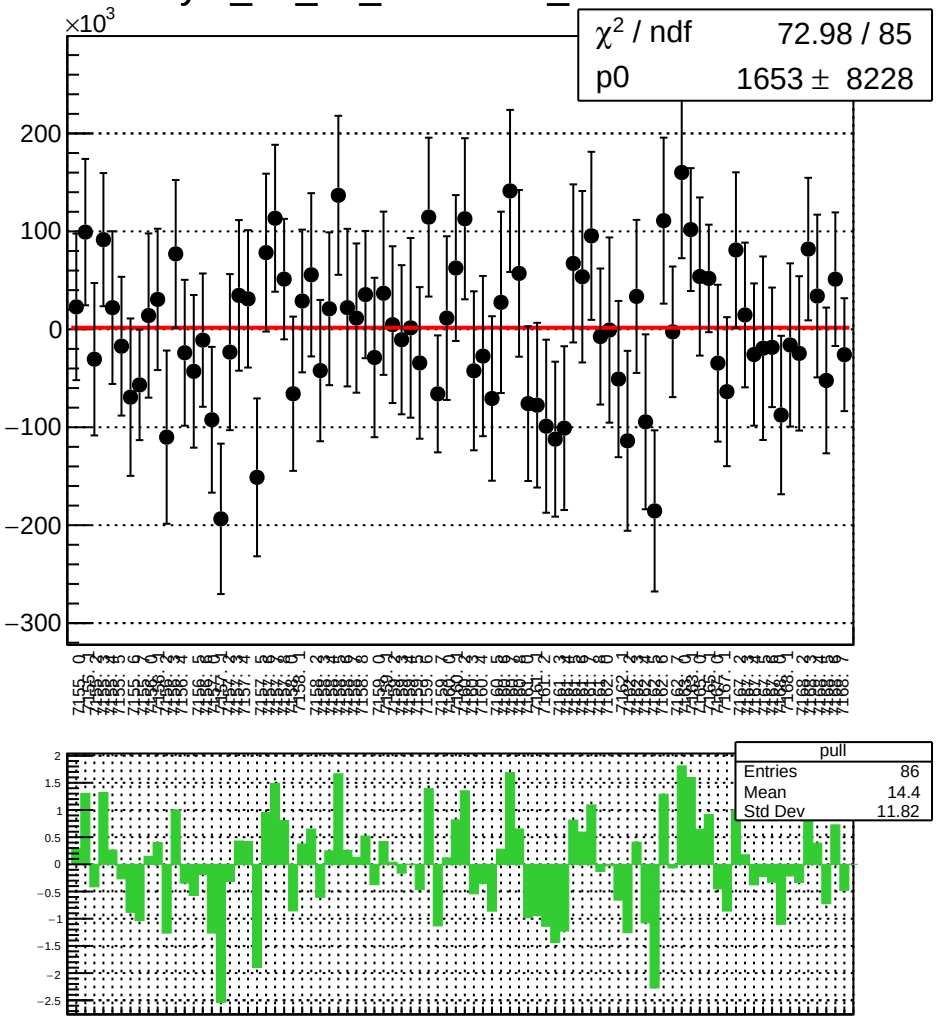

pull1D
Entries 86
Mean −0.009964
Std Dev 0.9353
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

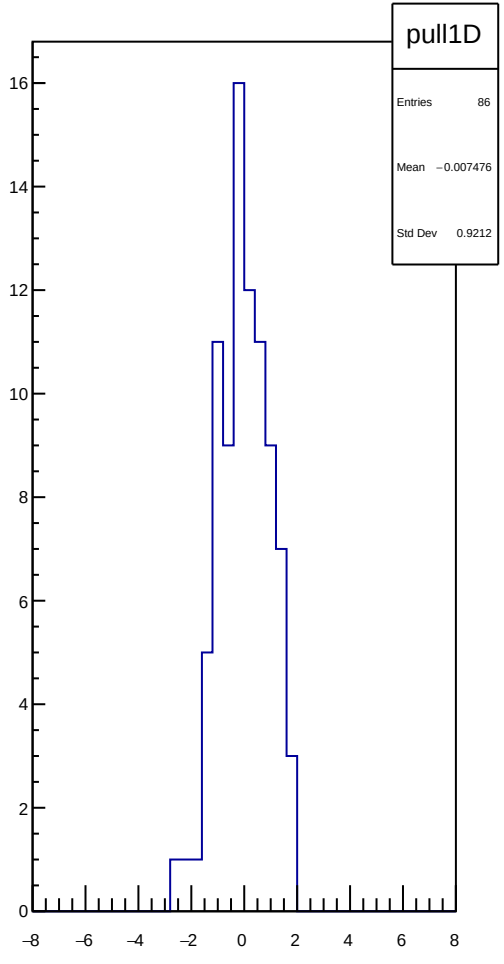

asym_atr_avg_rms vs run
χ² / ndf 7776 / 85
p0 8686 ± 6.734
10500
10000
9500
9000
8500
8000
7500

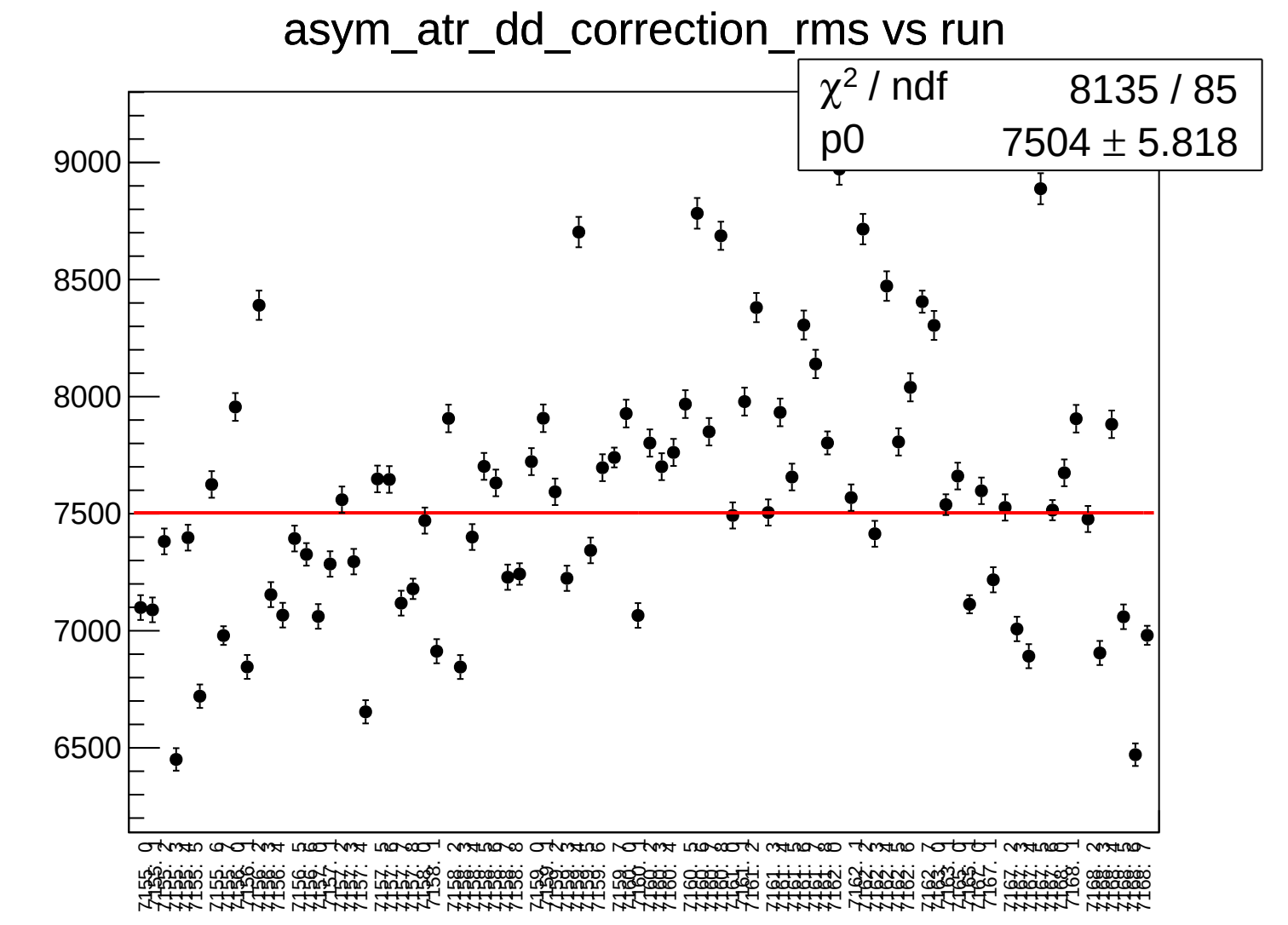

reg_asym_atr_dd_mean vs run
χ² / ndf 91.38 / 85
p0 −394 ± 2044
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 86
Mean 1.121e+05
Std Dev 1.12e+05
2
1
0
−1
−2

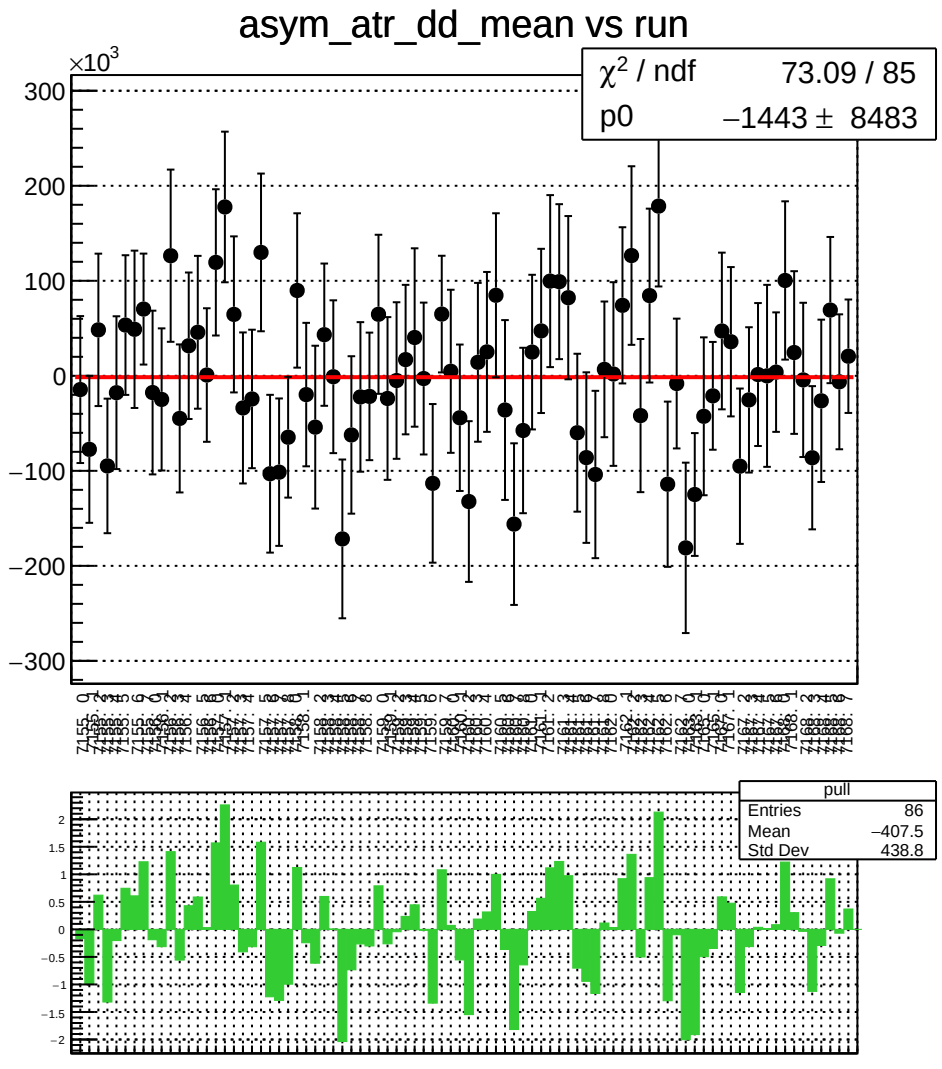

pull1D
Entries 86
Mean −4.674e−05
Std Dev 1.031
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

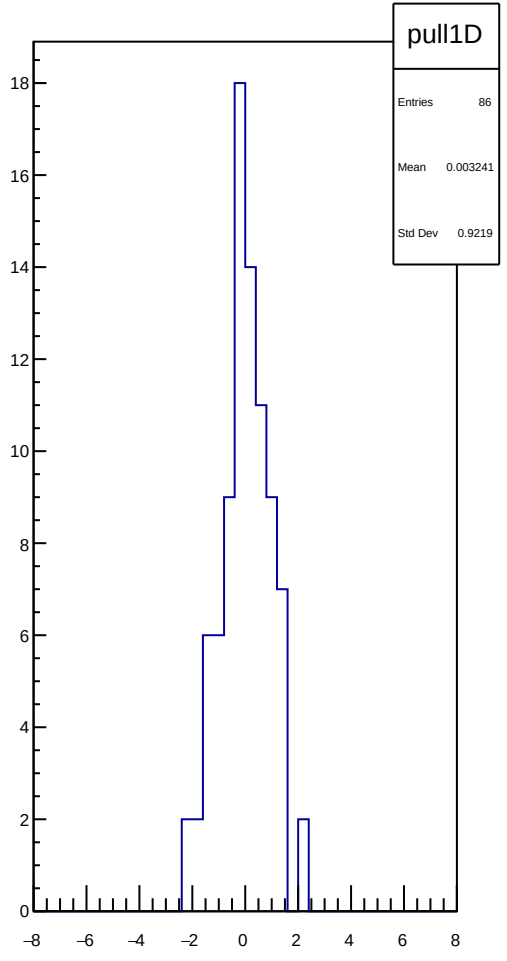

reg_asym_atr_dd_rms vs run
χ^2 / ndf 90.95 / 85
p0 1869 ± 1.446
1920
1900
1880
1860
1840
1820

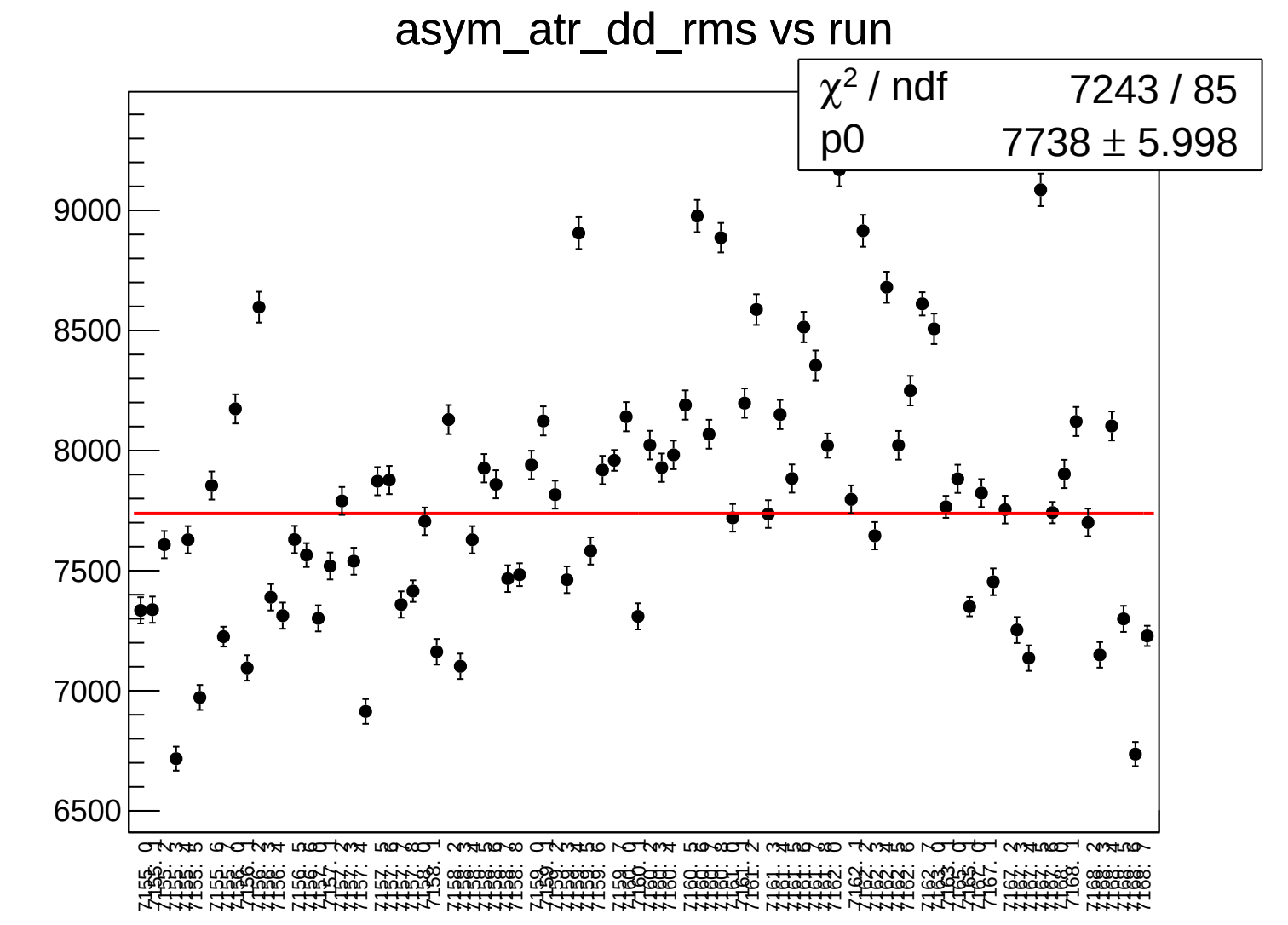

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 72.98 / 85
p0 1653 ± 8228
200
100
0
−100
−200
−300
pull
Entries 86
Mean 14.4
Std Dev 11.82
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

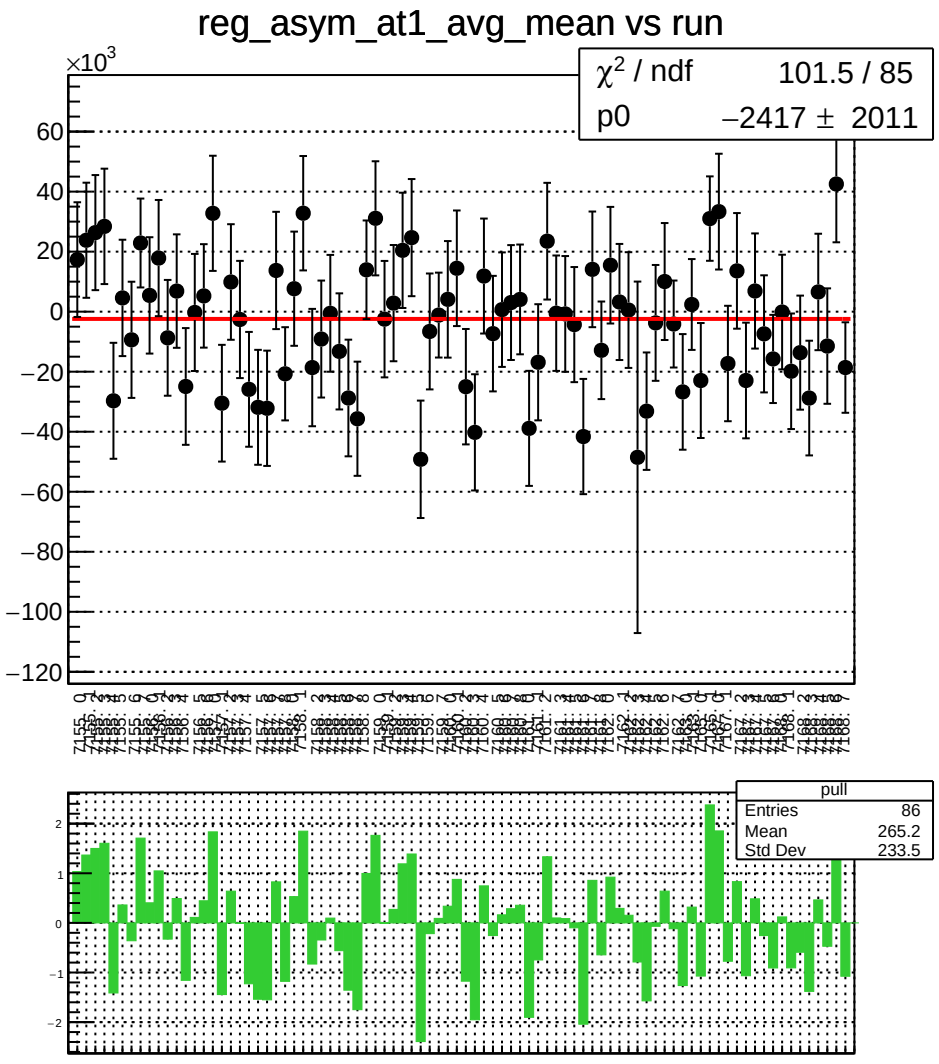

pull1D
Entries 86
Mean −0.007476
Std Dev 0.9212
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

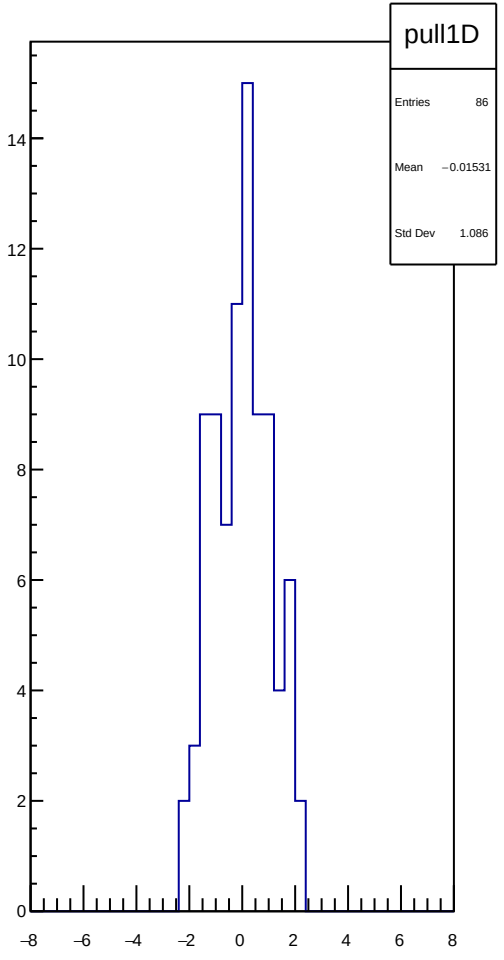

asym_atr_dd_correction_rms vs run
χ² / ndf 8135 / 85
p0 7504 ± 5.818
9000
8500
8000
7500
7000
6500

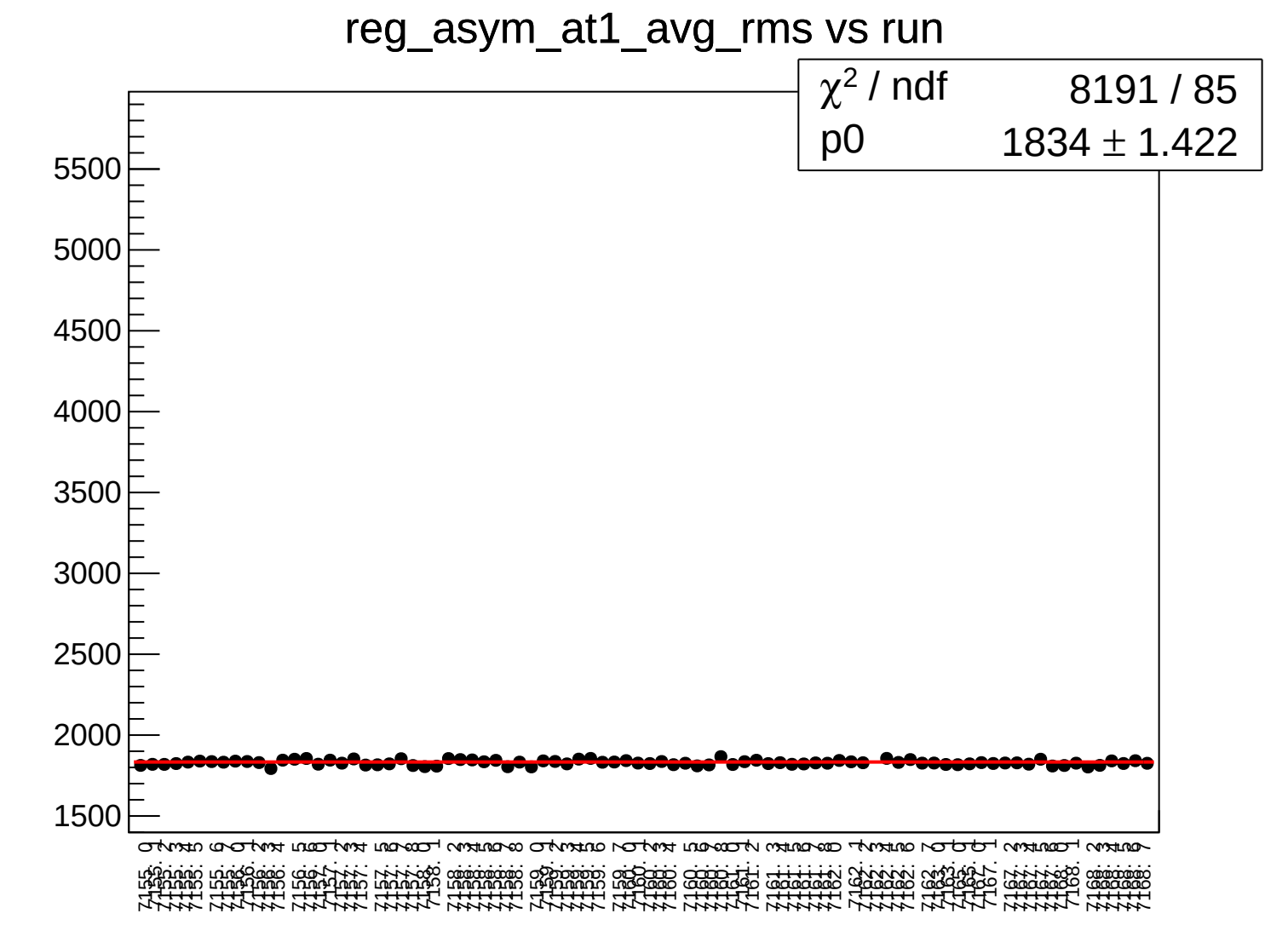

asym_atr_dd_mean vs run
×10^3
χ² / ndf 73.09 / 85
p0 −1443 ± 8483
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −407.5
Std Dev 438.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

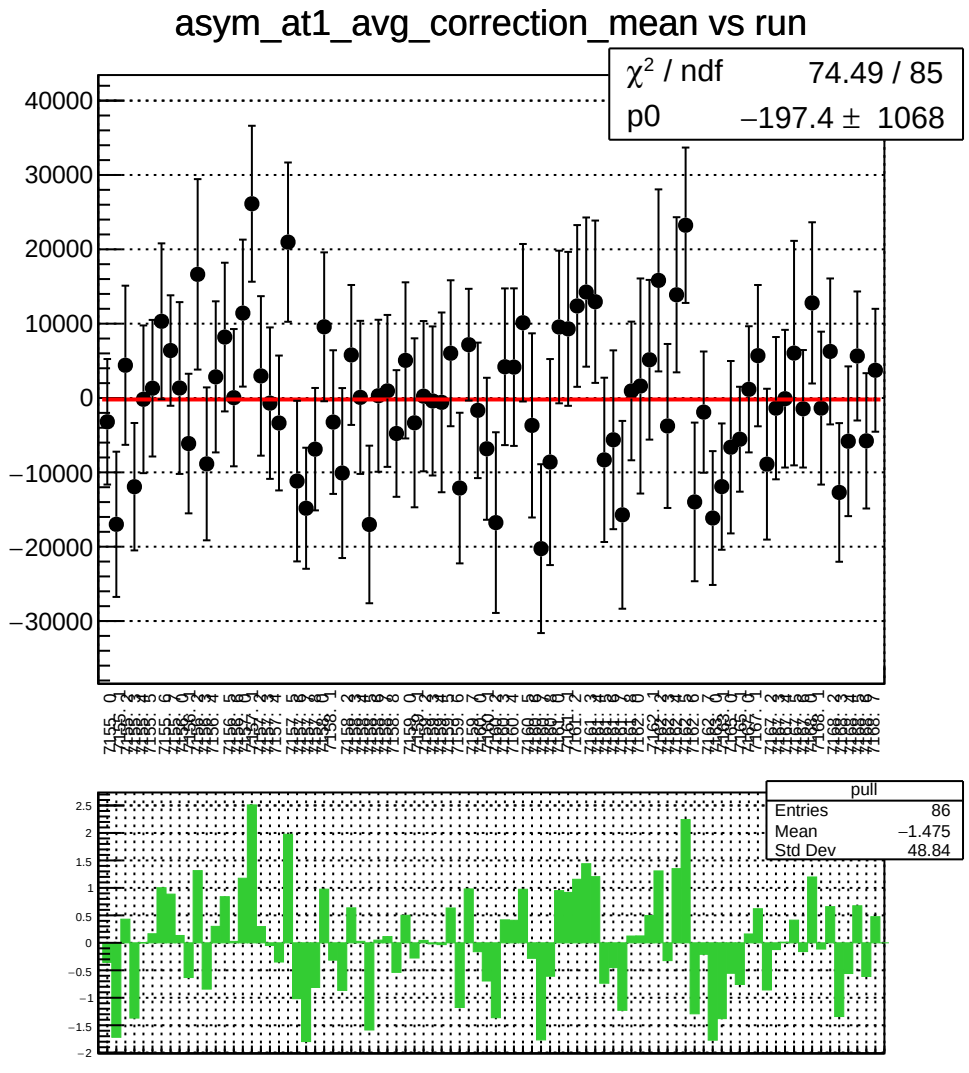

pull1D
Entries 86
Mean 0.003241
Std Dev 0.9219
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

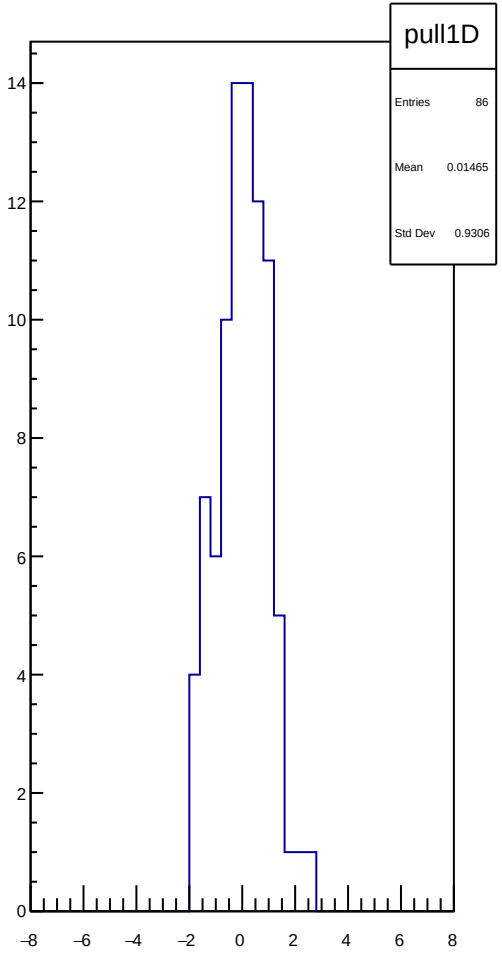

asym_atr_dd_rms vs run
χ^2 / ndf 7243 / 85
p0 7738 ± 5.998
9000
8500
8000
7500
7000
6500

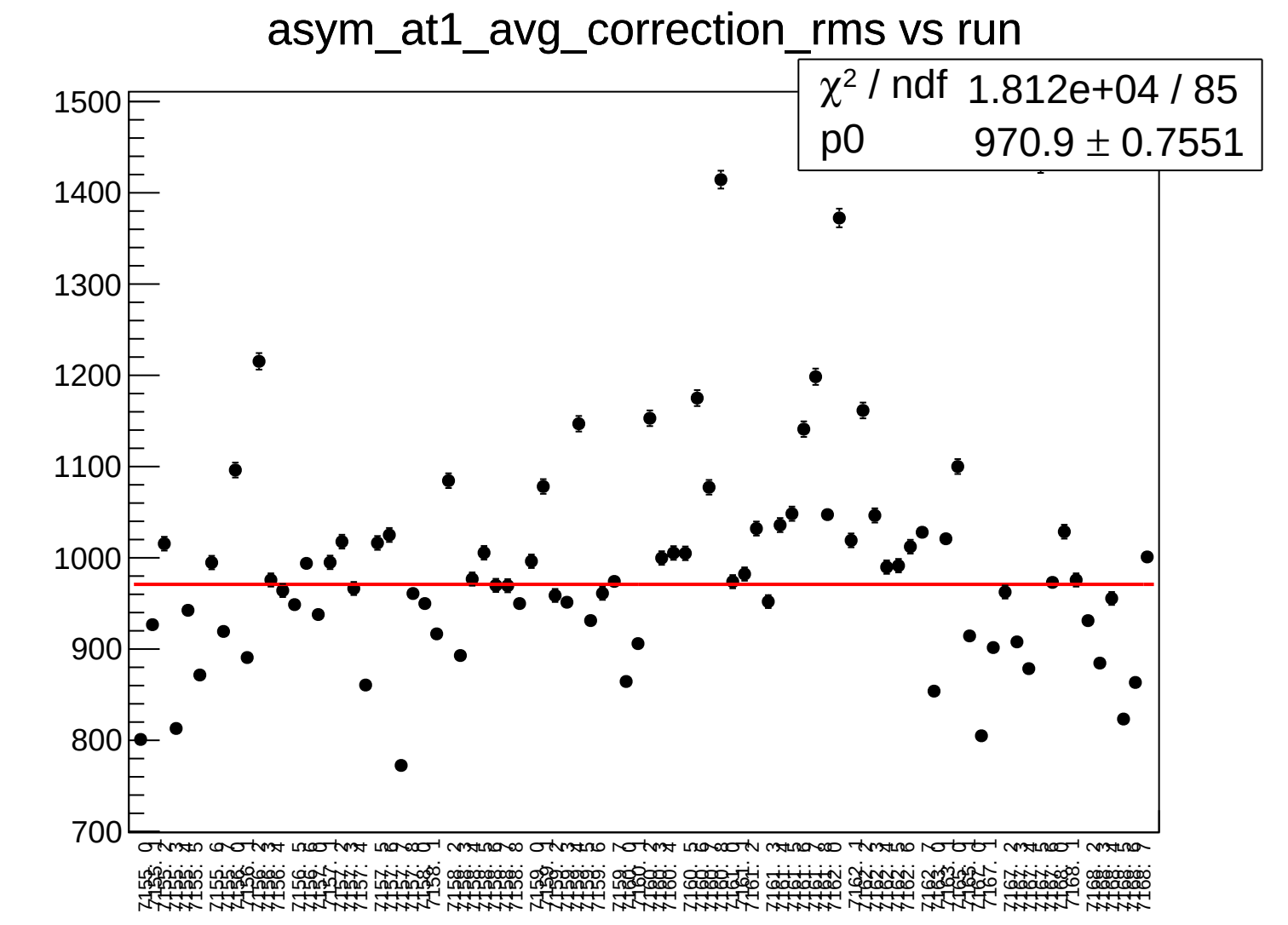

reg_asym_at1_avg_mean vs run
×10^3
χ² / ndf 101.5 / 85
p0 −2417 ± 2011
pull
Entries 86
Mean 265.2
Std Dev 233.5

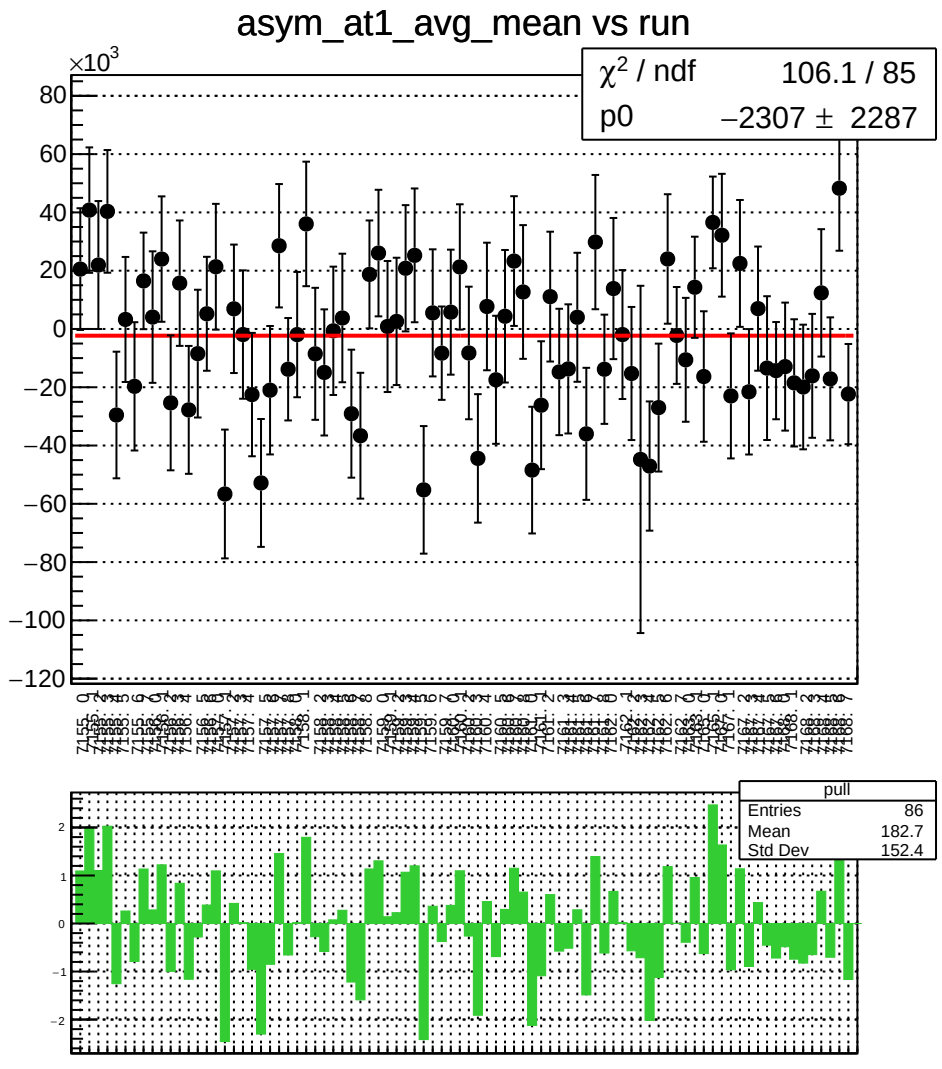

pull1D
Entries 86
Mean −0.01531
Std Dev 1.086

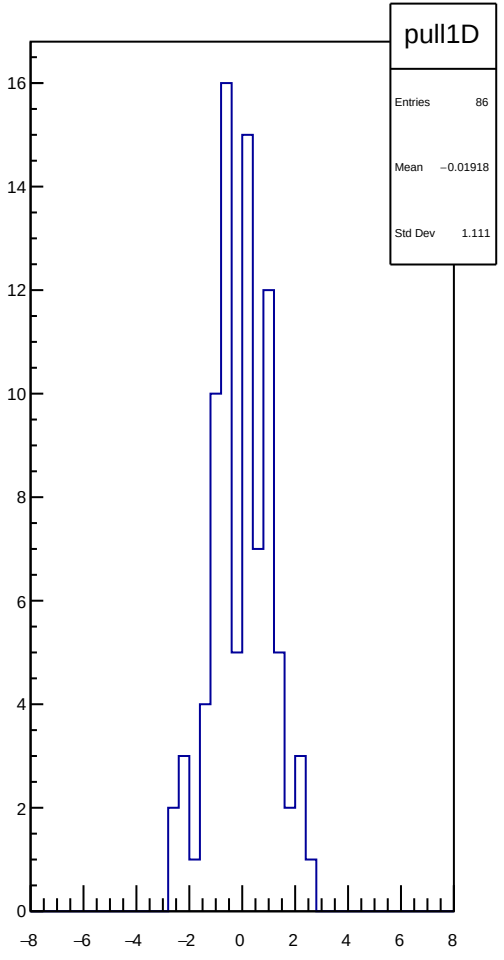

reg_asym_at1_avg_rms vs run
χ^2 / ndf 8191 / 85
p0 1834 ± 1.422
5500
5000
4500
4000
3500
3000
2500
2000
1500

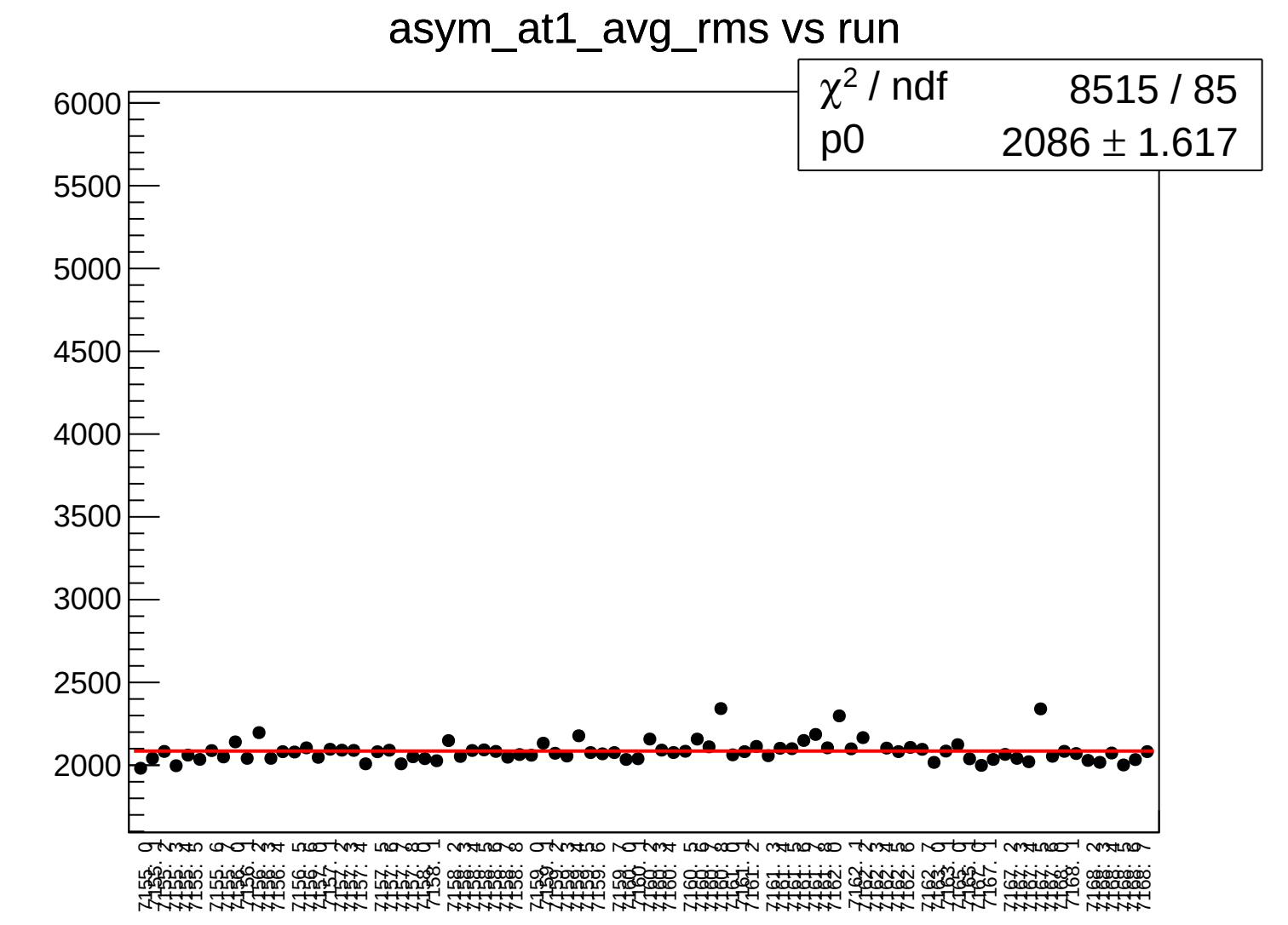

asym_at1_avg_correction_mean vs run
χ² / ndf 74.49 / 85
p0 −197.4 ± 1068
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −1.475
Std Dev 48.84
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

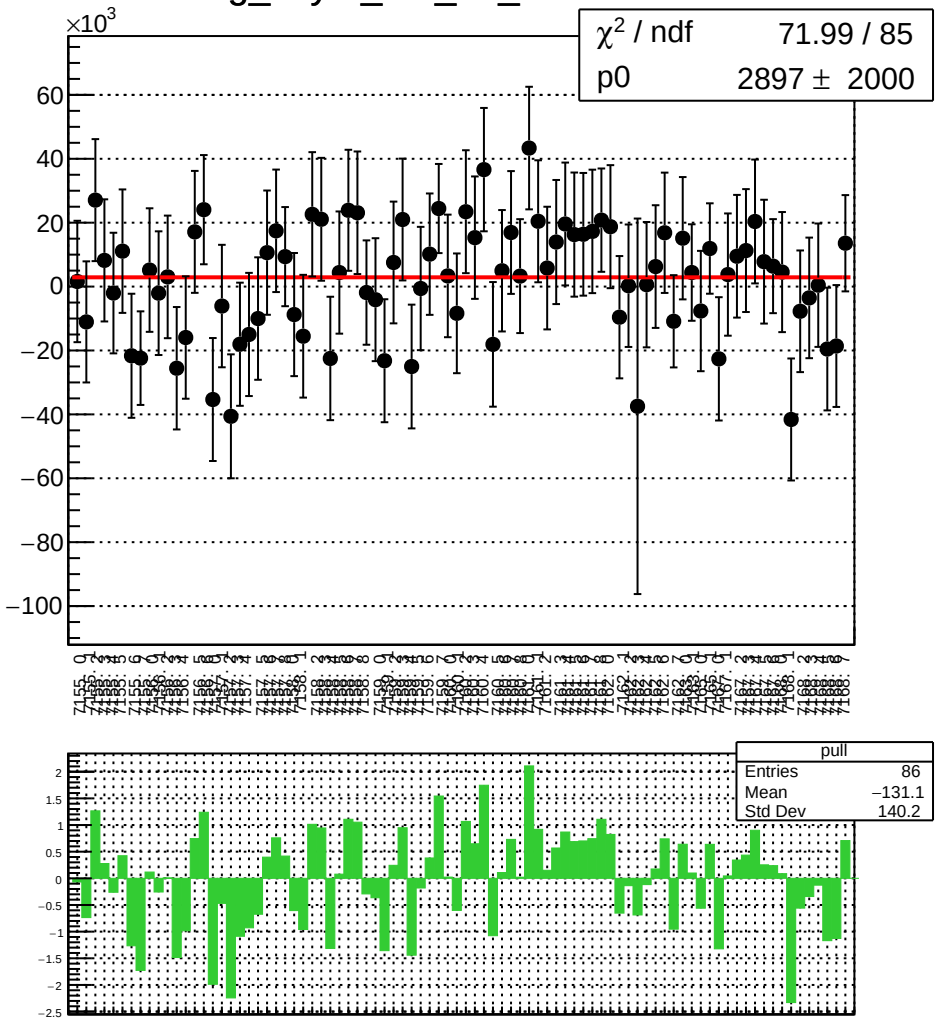

pull1D
Entries 86
Mean 0.01465
Std Dev 0.9306
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

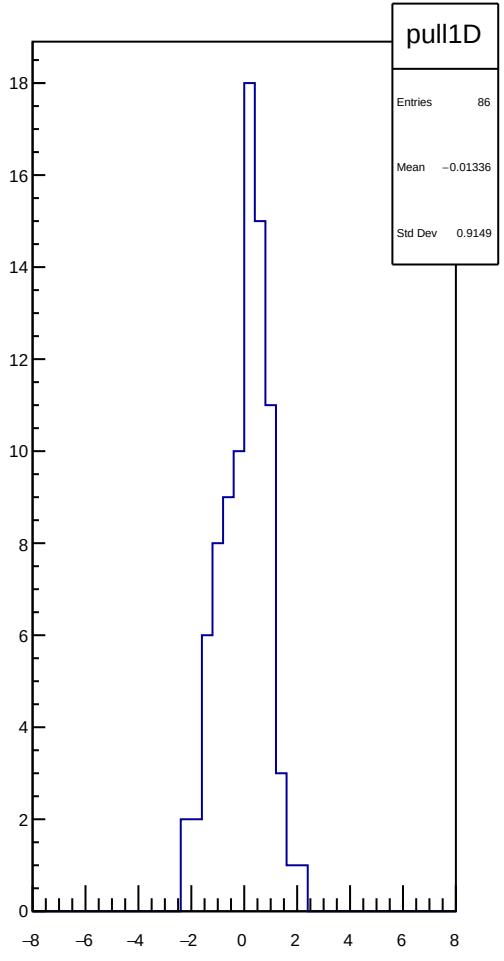

asym_at1_avg_correction_rms vs run
χ² / ndf 1.812e+04 / 85
p0 970.9 ± 0.7551
1500
1400
1300
1200
1100
1000
900
800
700

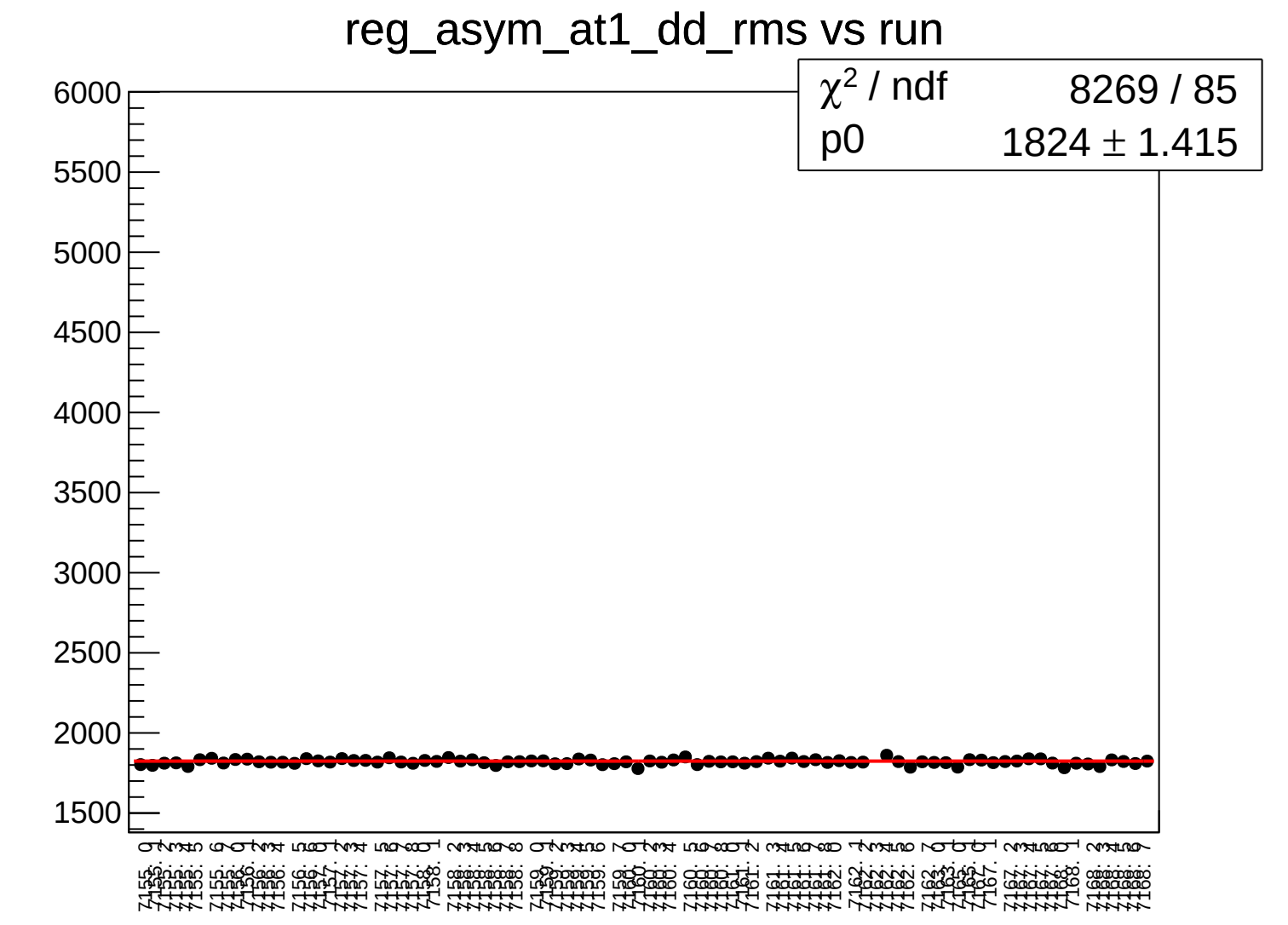

asym_at1_avg_mean vs run
×10^3
χ² / ndf 106.1 / 85
p0 −2307 ± 2287
pull
Entries 86
Mean 182.7
Std Dev 152.4

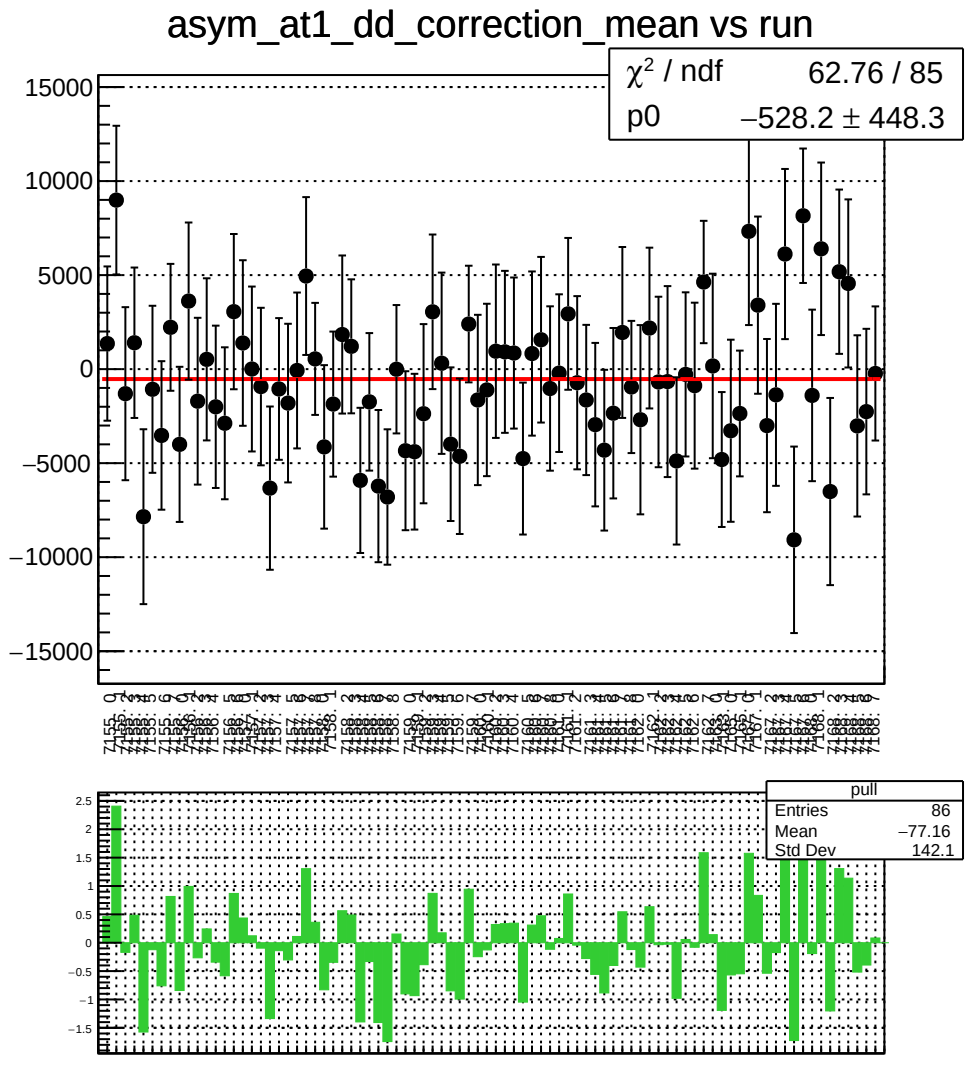

pull1D
Entries 86
Mean −0.01918
Std Dev 1.111

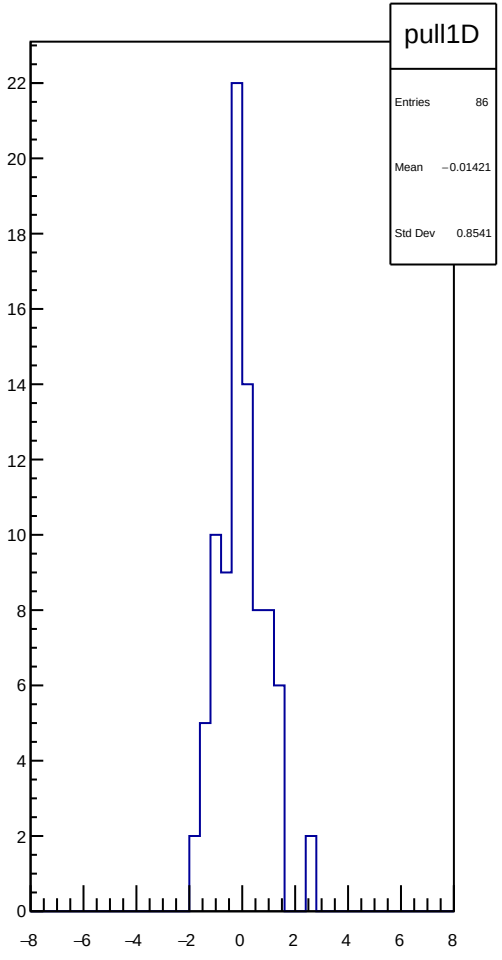

asym_at1_avg_rms vs run
χ^2 / ndf 8515 / 85
p0 2086 ± 1.617
6000
5500
5000
4500
4000
3500
3000
2500
2000

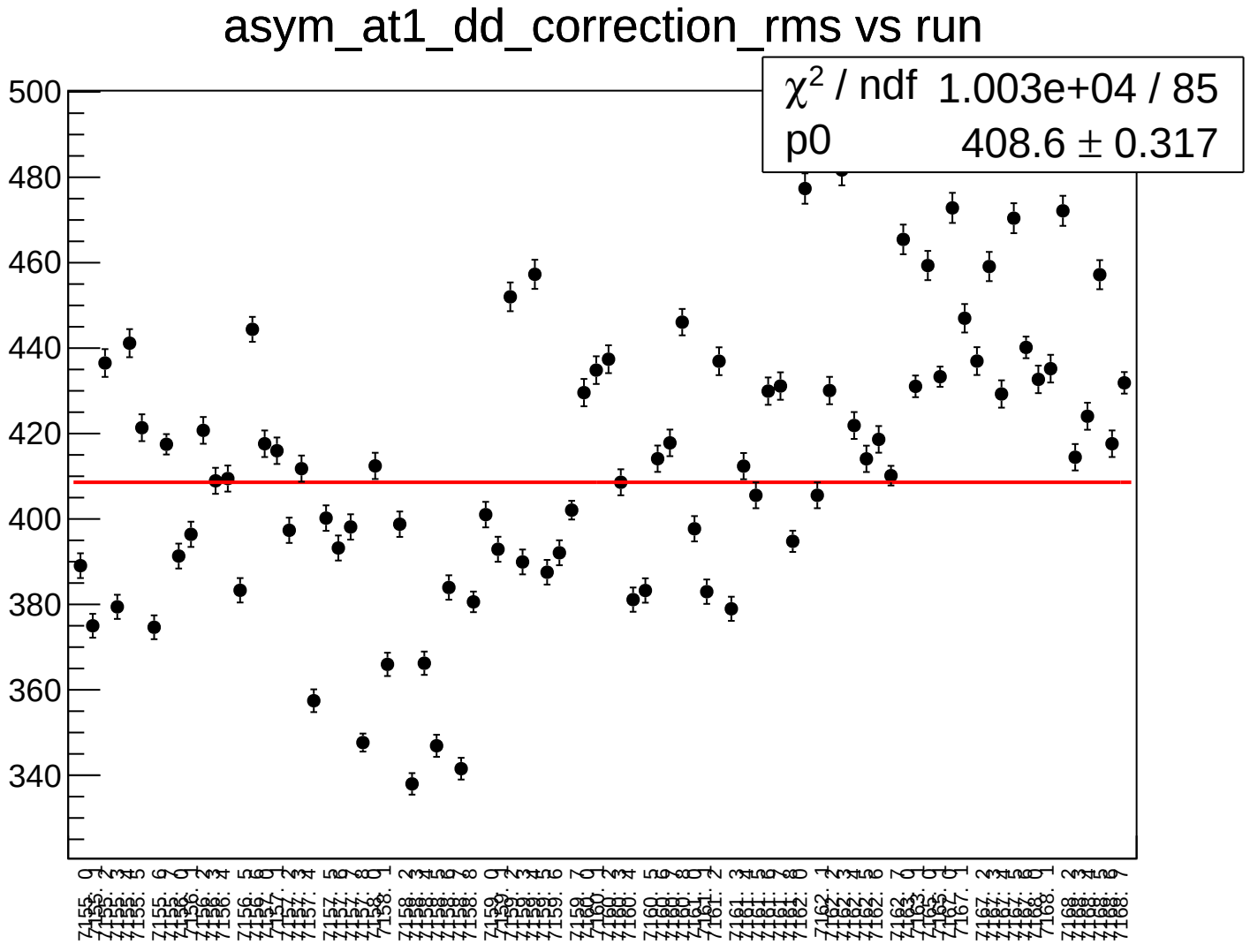

reg_asym_at1_dd_mean vs run
×10^3
χ² / ndf 71.99 / 85
p0 2897 ± 2000
pull
Entries 86
Mean −131.1
Std Dev 140.2

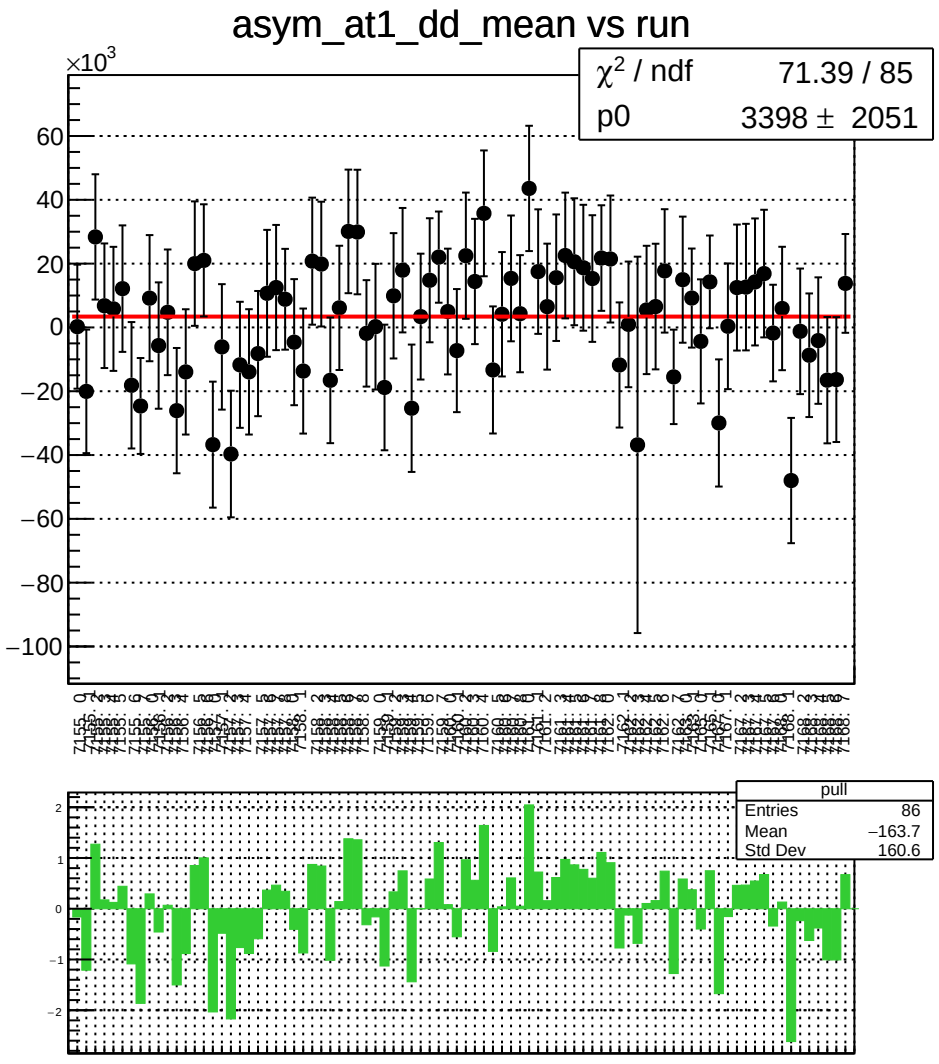

pull1D
Entries 86
Mean −0.01336
Std Dev 0.9149

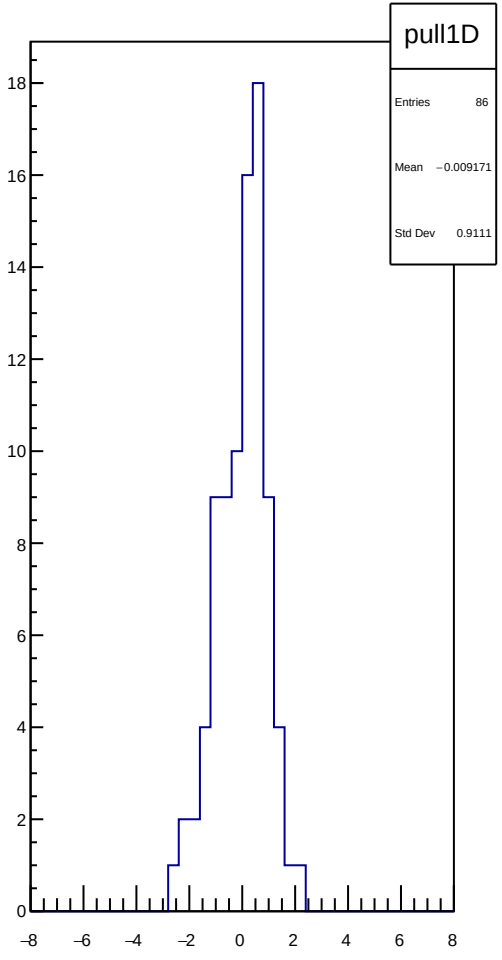

reg_asym_at1_dd_rms vs run
χ² / ndf 8269 / 85
p0 1824 ± 1.415
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

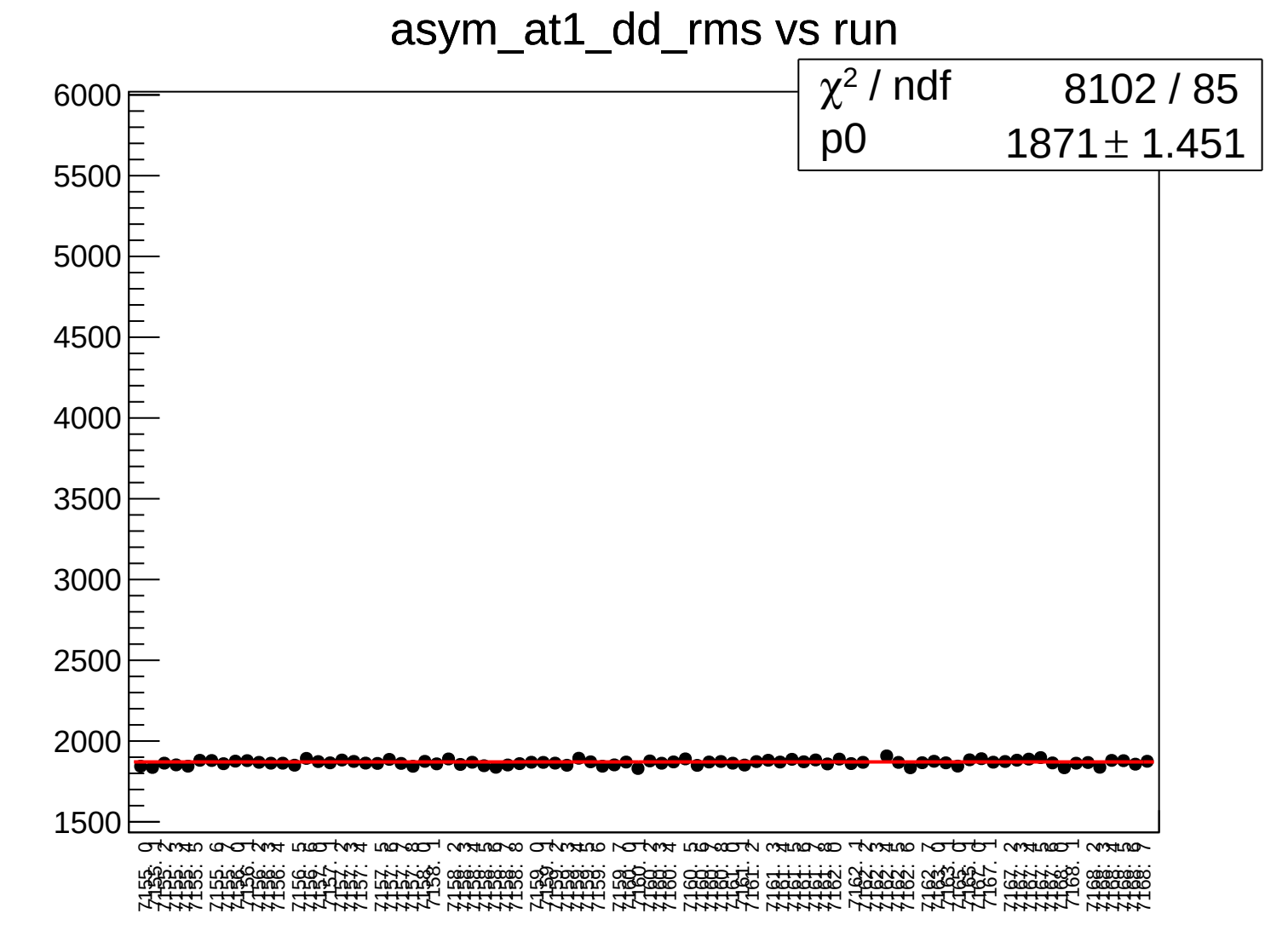

asym_at1_dd_correction_mean vs run
χ² / ndf 62.76 / 85
p0 −528.2 ± 448.3
pull
Entries 86
Mean −77.16
Std Dev 142.1

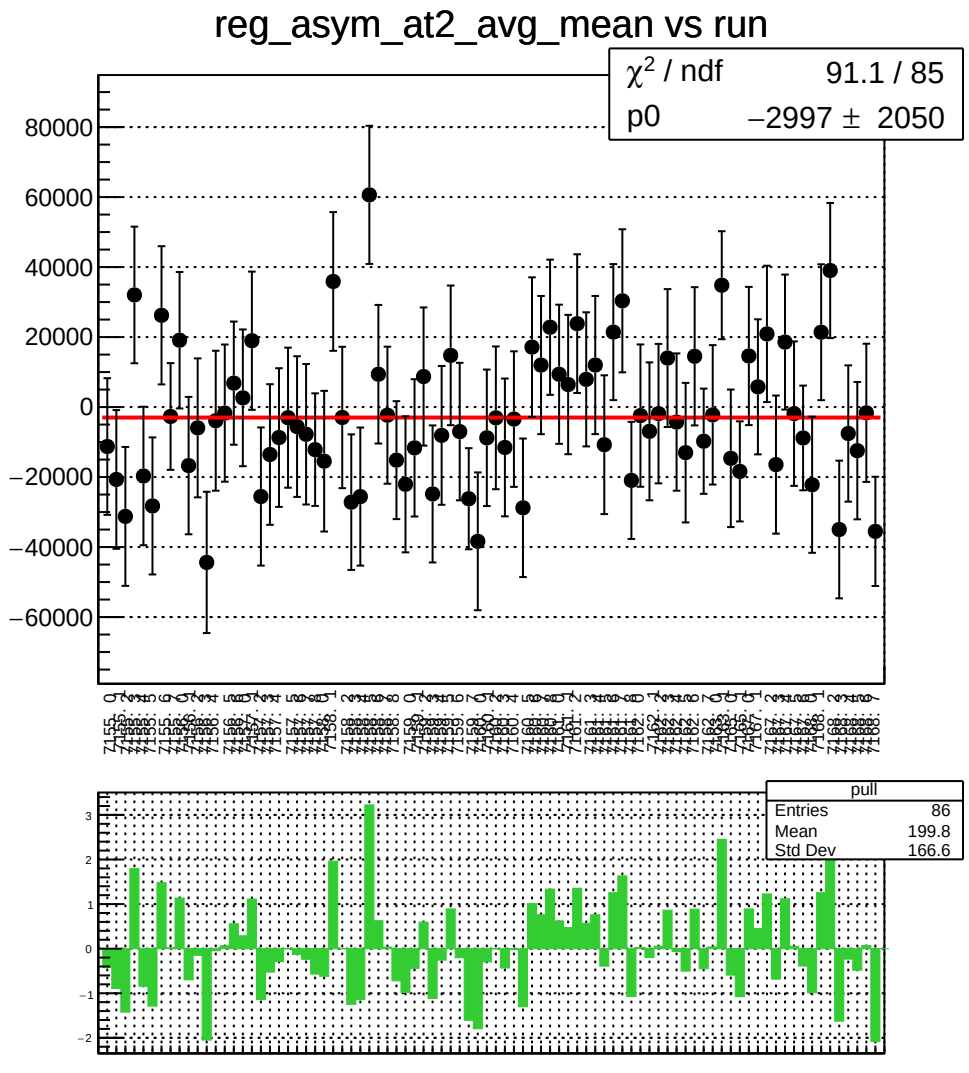

pull1D
Entries 86
Mean −0.01421
Std Dev 0.8541

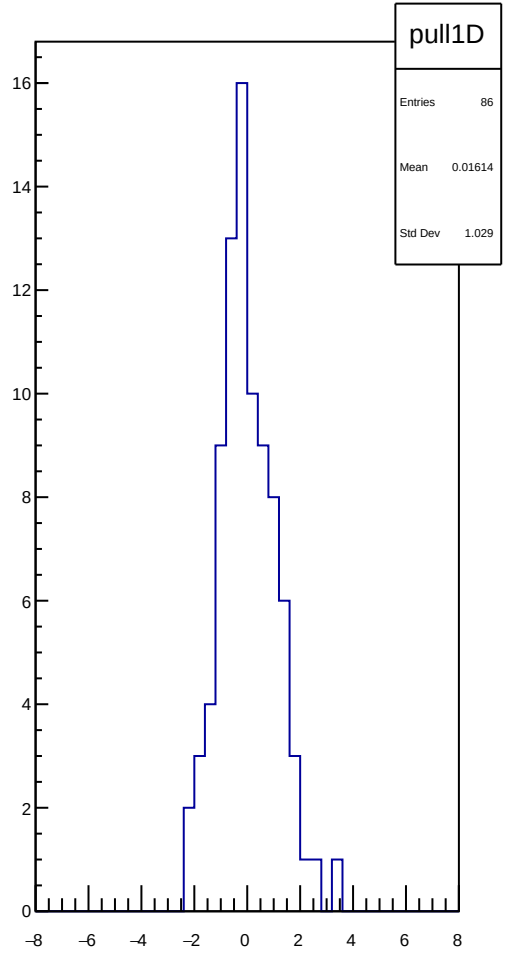

asym_at1_dd_correction_rms vs run
χ² / ndf 1.003e+04 / 85
p0 408.6 ± 0.317
500
480
460
440
420
400
380
360
340

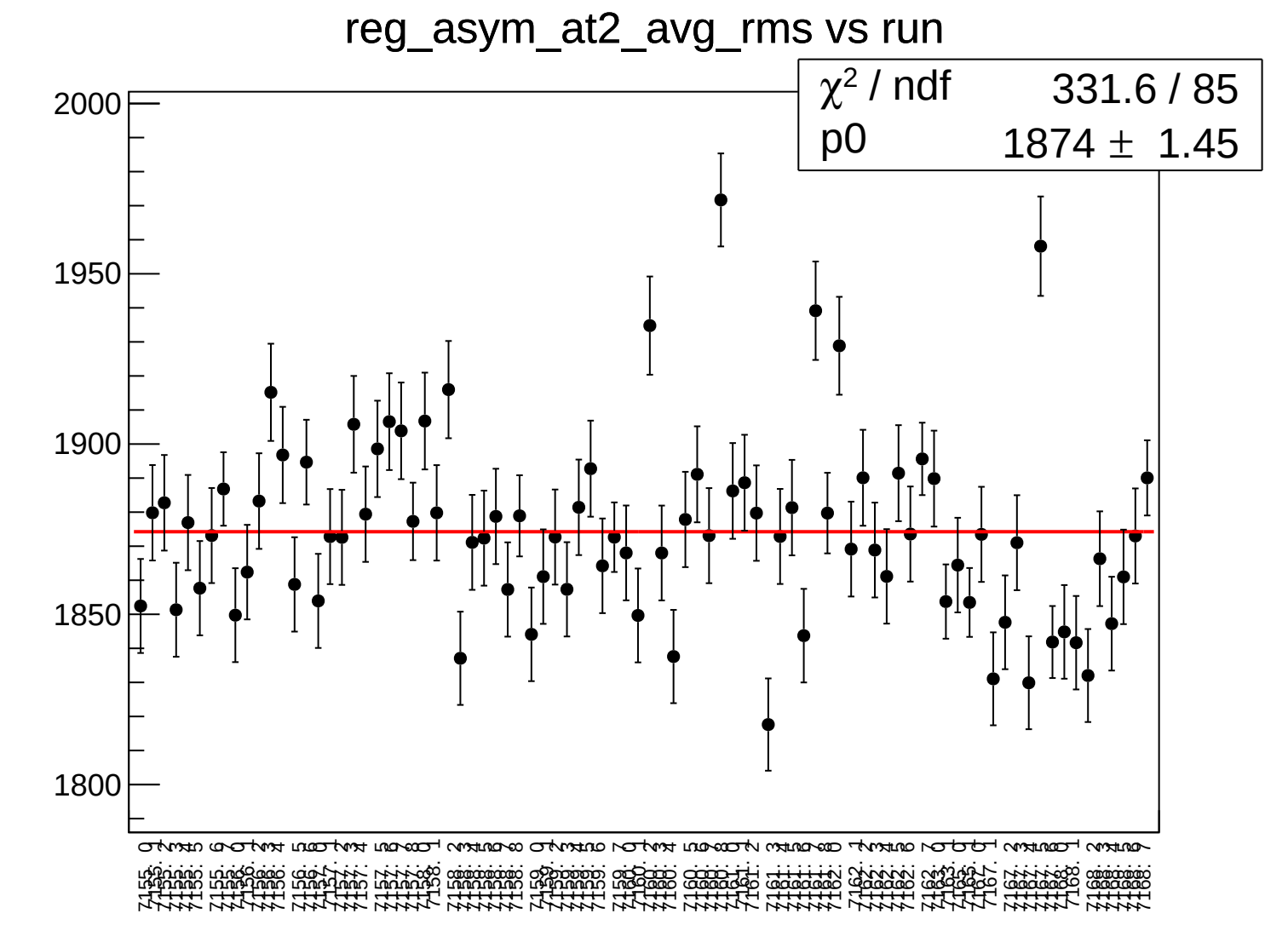

asym_at1_dd_mean vs run
×10^3
χ² / ndf 71.39 / 85
p0 3398 ± 2051
60
40
20
0
−20
−40
−60
−80
−100
pull
Entries 86
Mean −163.7
Std Dev 160.6
2
1
0
−1
−2

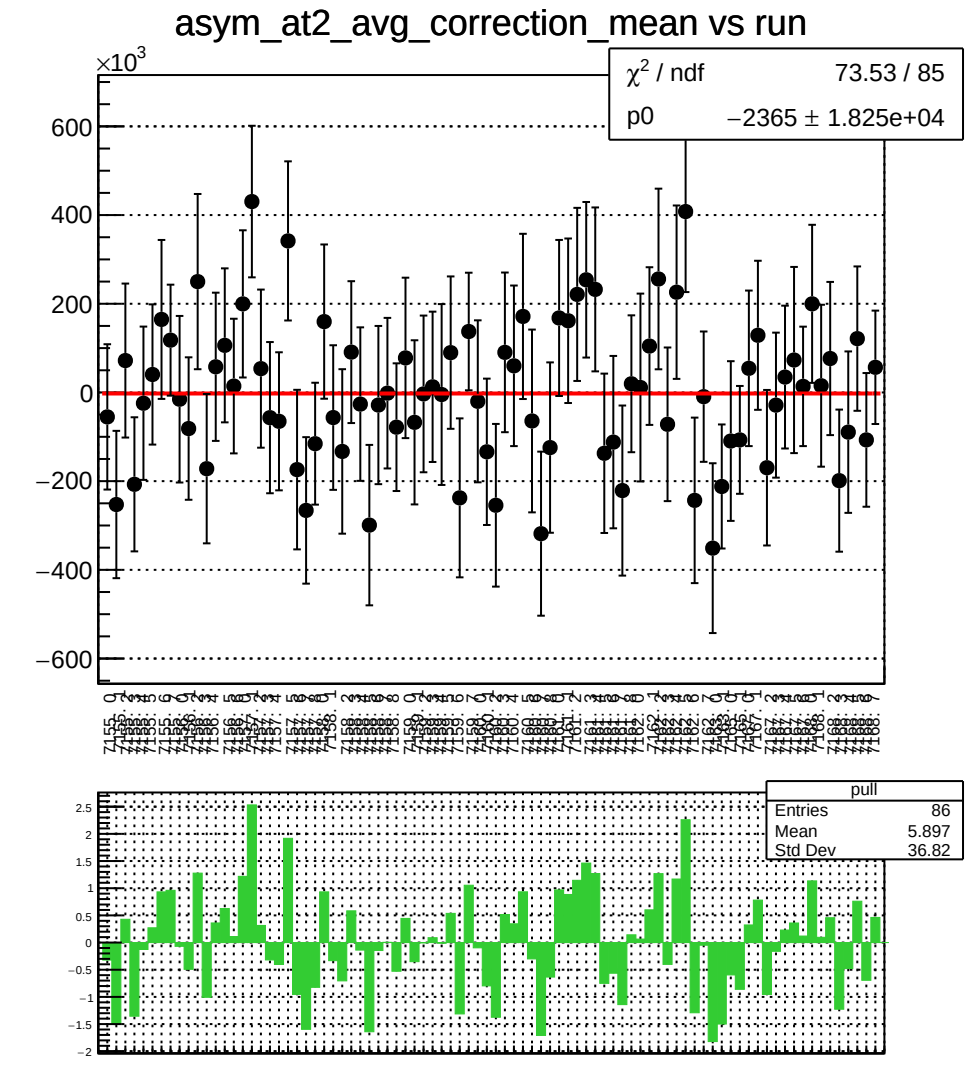

pull1D
Entries 86
Mean −0.009171
Std Dev 0.9111
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

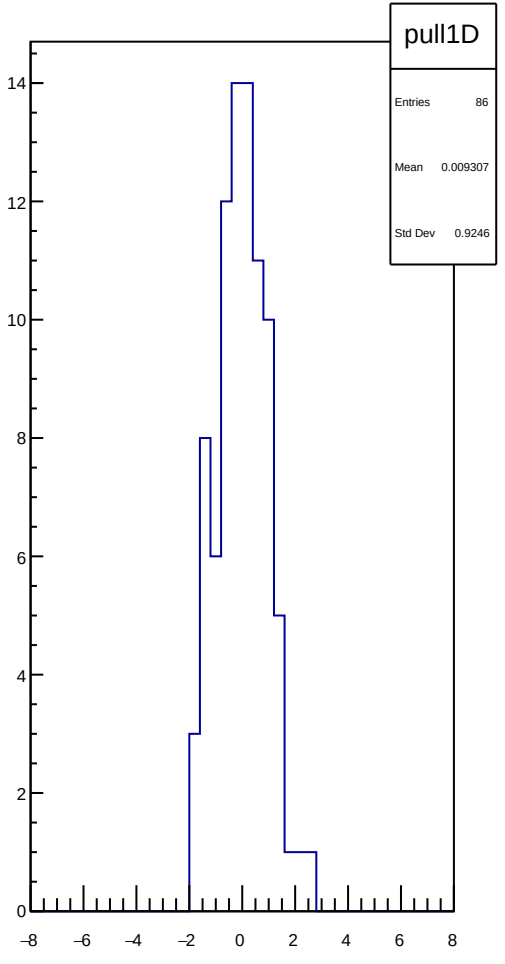

asym_at1_dd_rms vs run
χ^2 / ndf 8102 / 85
p0 1871 ± 1.451
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

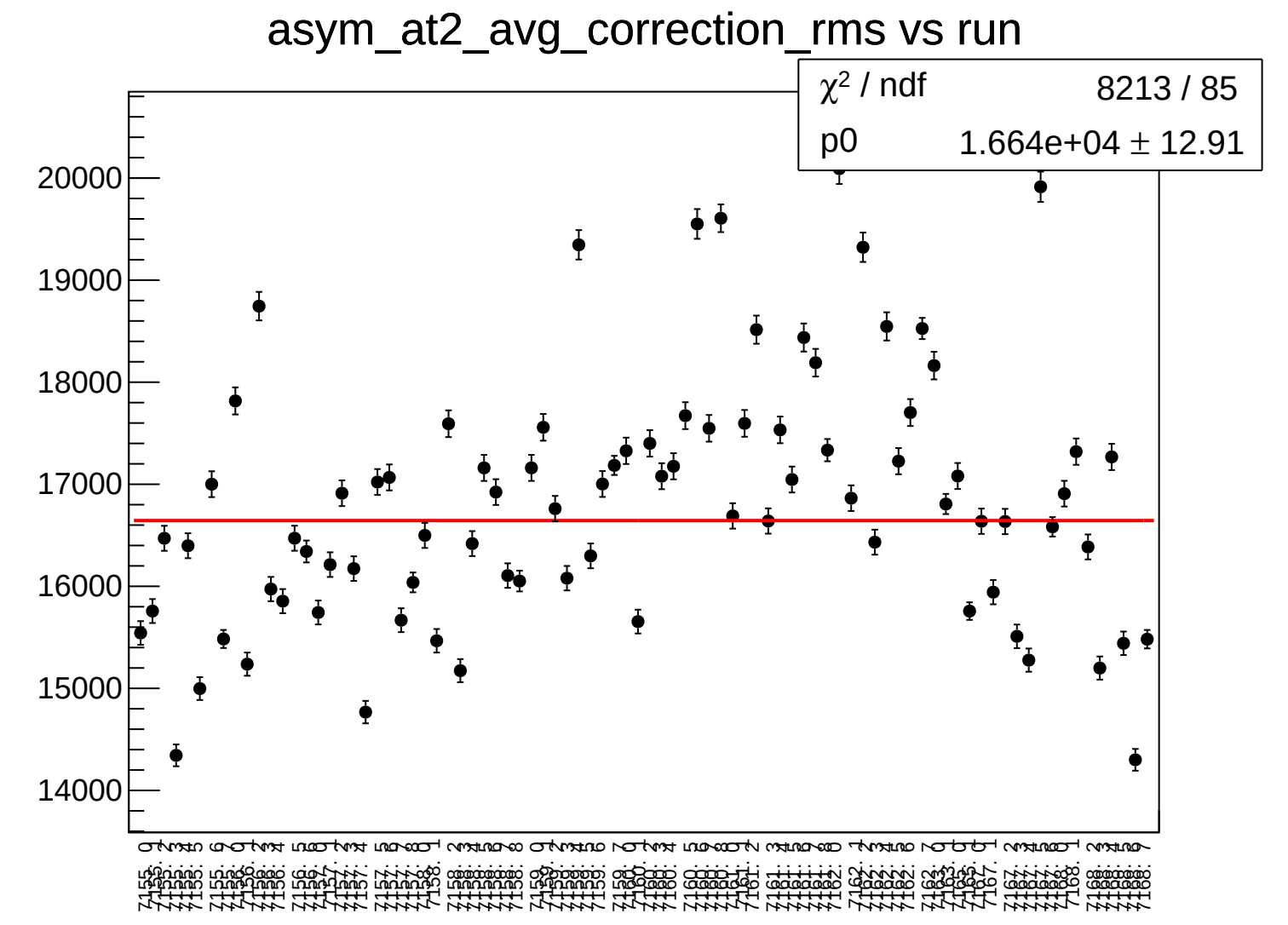

reg_asym_at2_avg_mean vs run
χ² / ndf 91.1 / 85
p0 −2997 ± 2050
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean 199.8
Std Dev 166.6
3
2
1
0
−1
−2

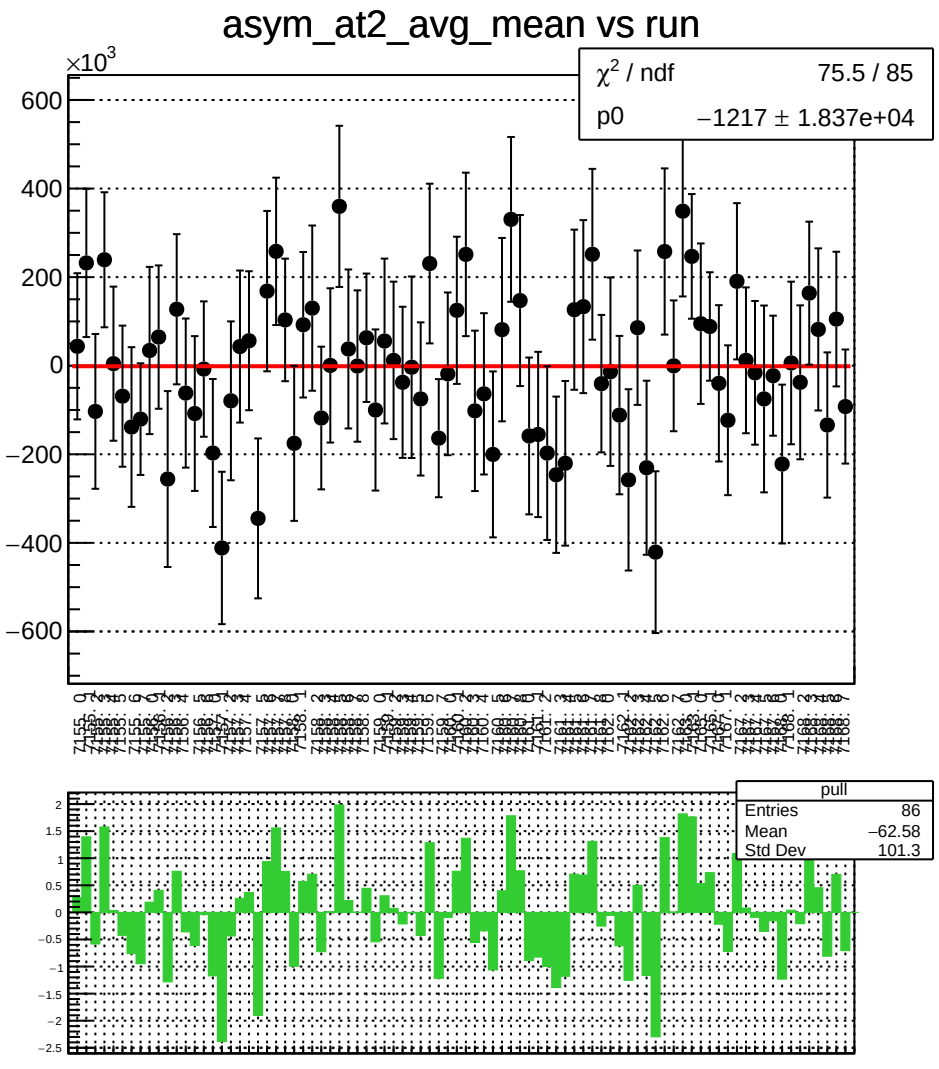

pull1D
Entries 86
Mean 0.01614
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

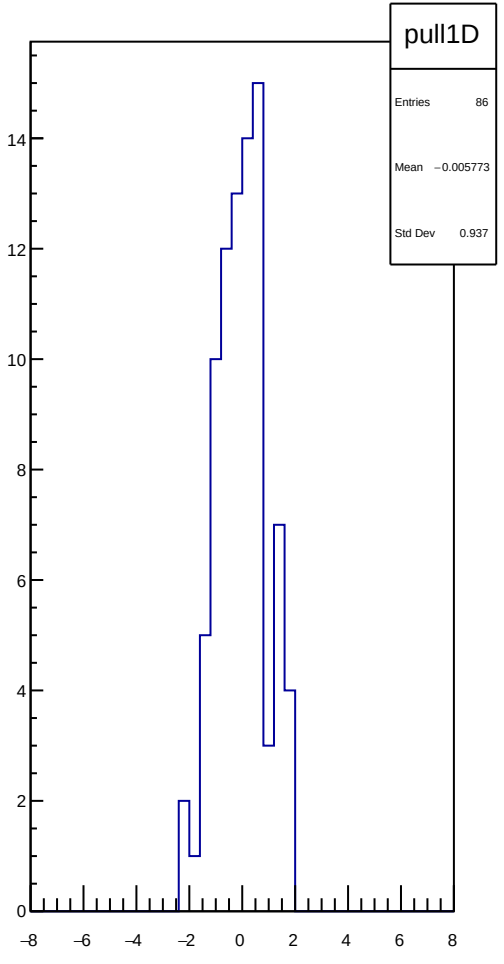

reg_asym_at2_avg_rms vs run
χ² / ndf 331.6 / 85
p0 1874 ± 1.45
2000
1950
1900
1850
1800

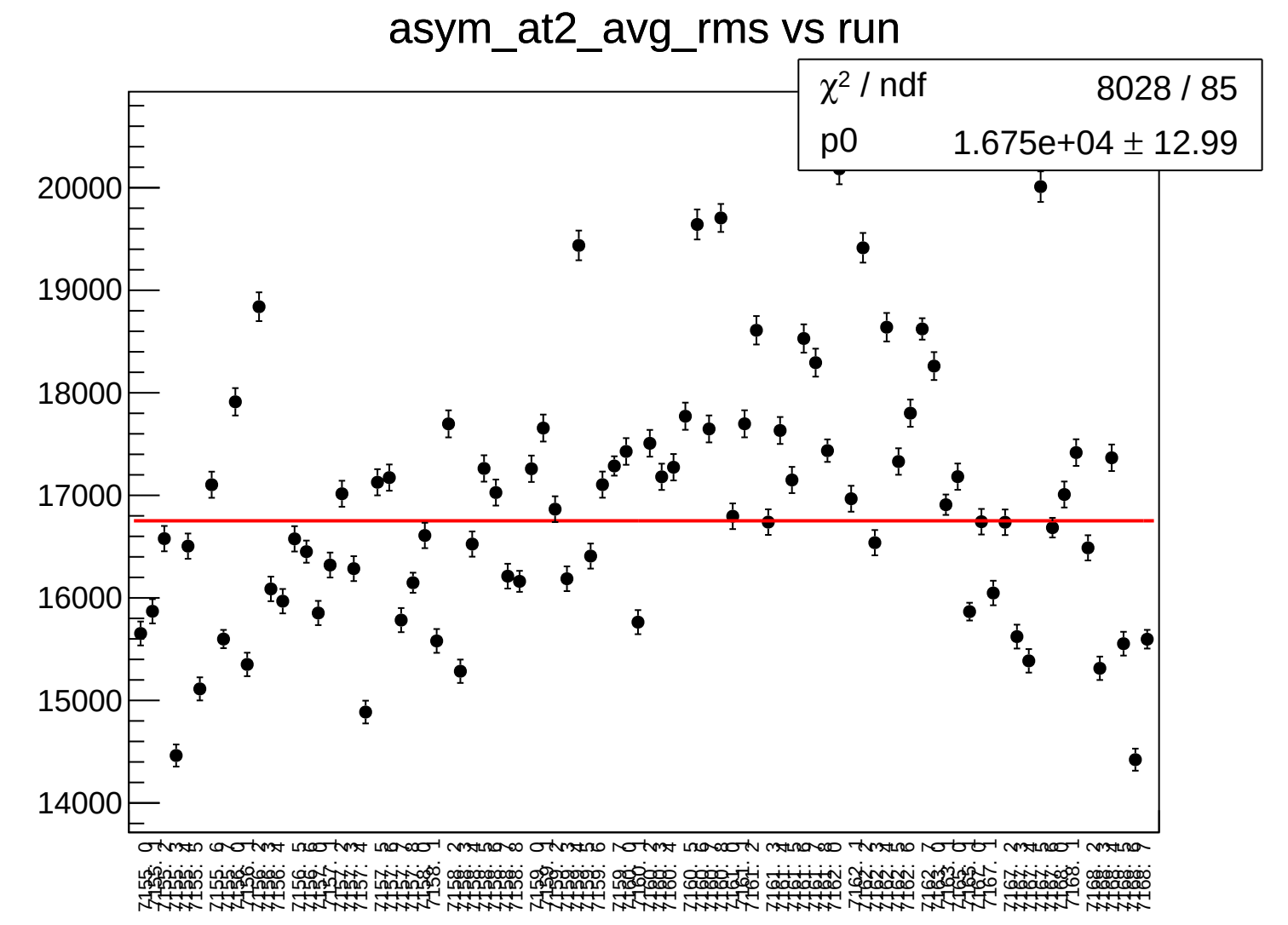

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 73.53 / 85
p0 −2365 ± 1.825e+04
pull
Entries 86
Mean 5.897
Std Dev 36.82

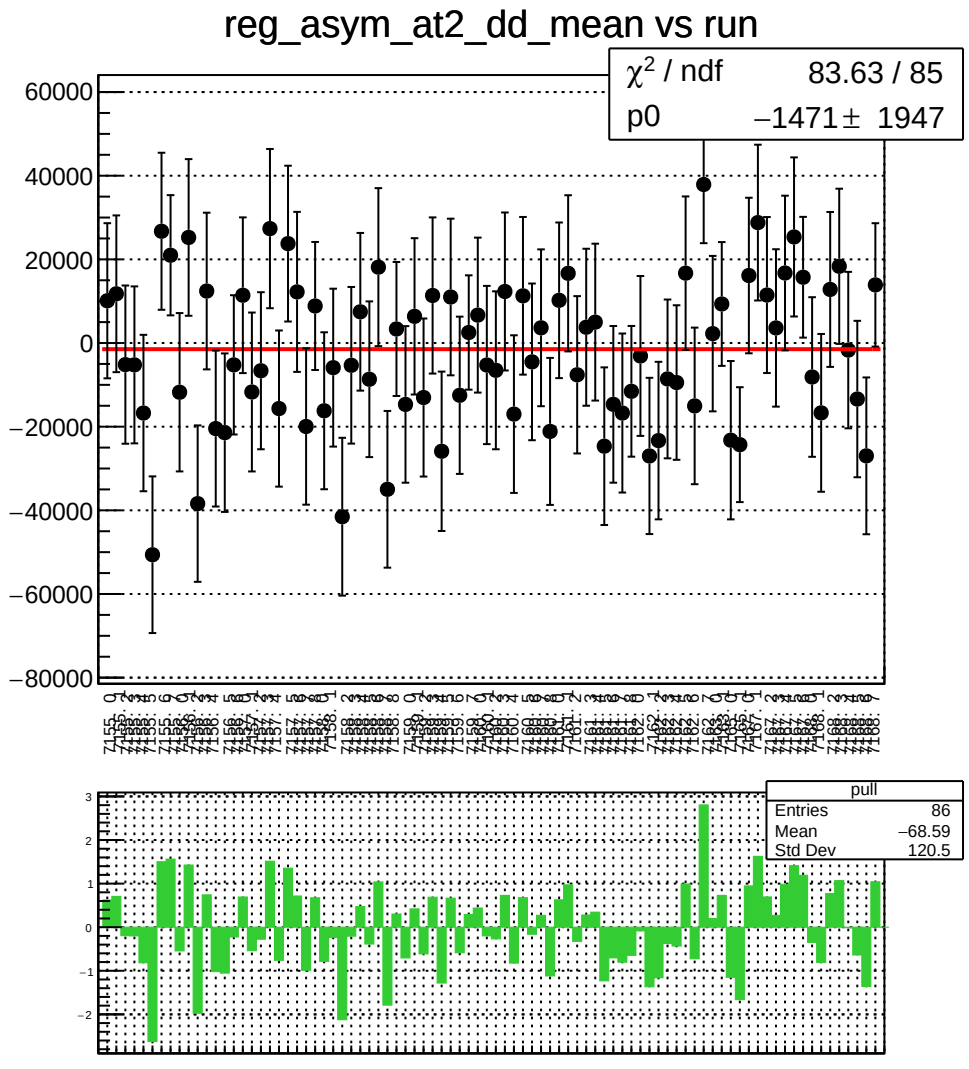

pull1D
Entries 86
Mean 0.009307
Std Dev 0.9246

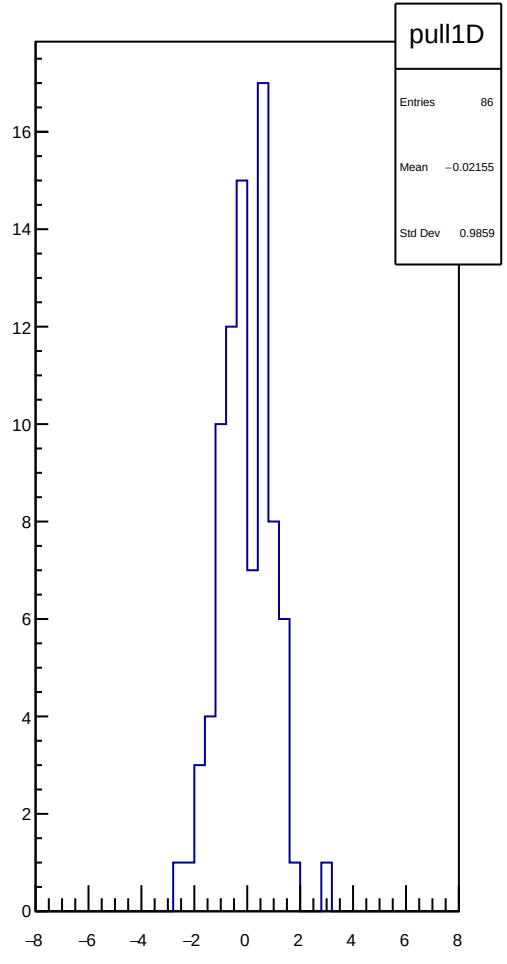

asym_at2_avg_correction_rms vs run
χ² / ndf 8213 / 85
p0 1.664e+04 ± 12.91
20000
19000
18000
17000
16000
15000
14000

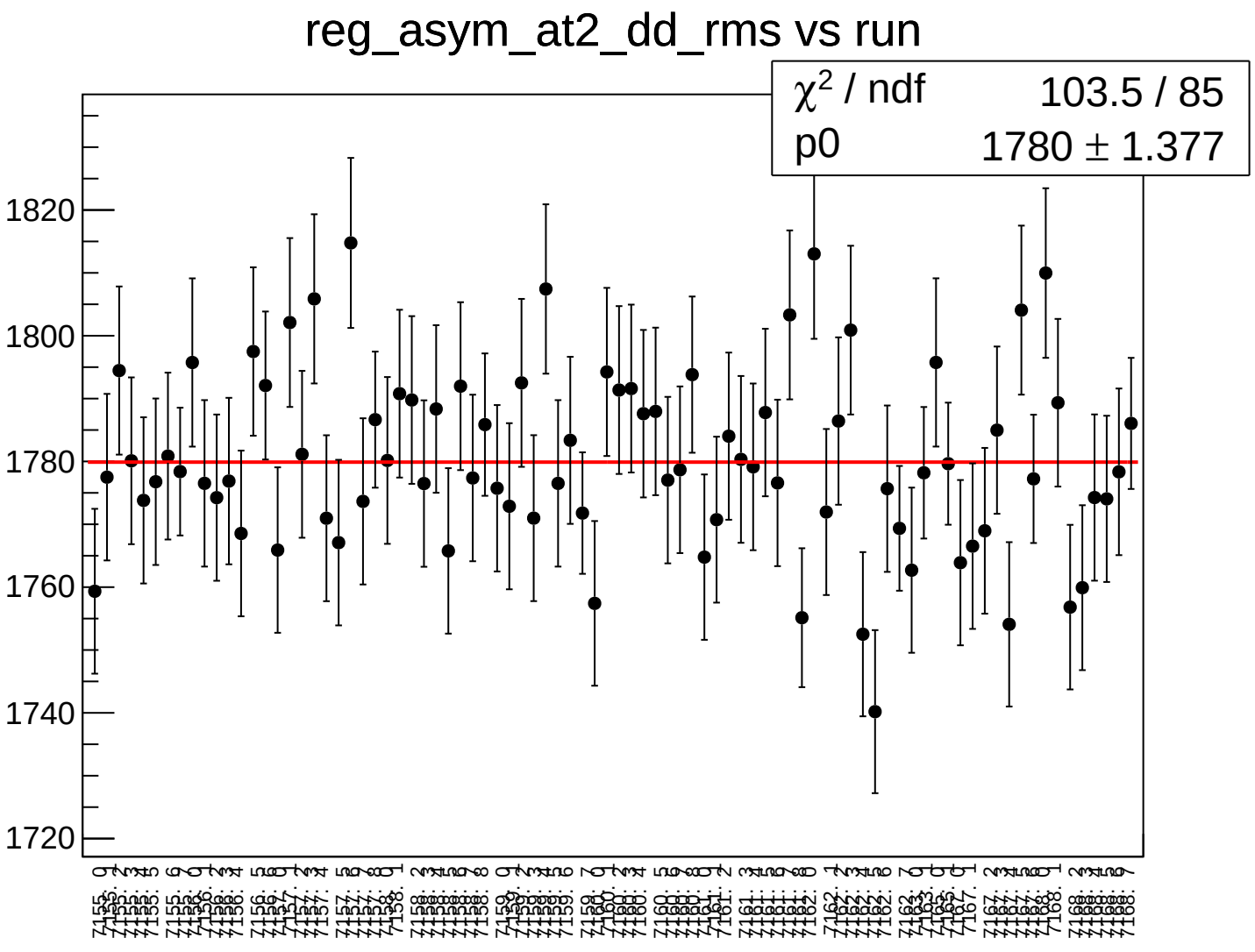

asym_at2_avg_mean vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 75.5 / 85
p0 −1217 ± 1.837e+04
pull
Entries 86
Mean −62.58
Std Dev 101.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

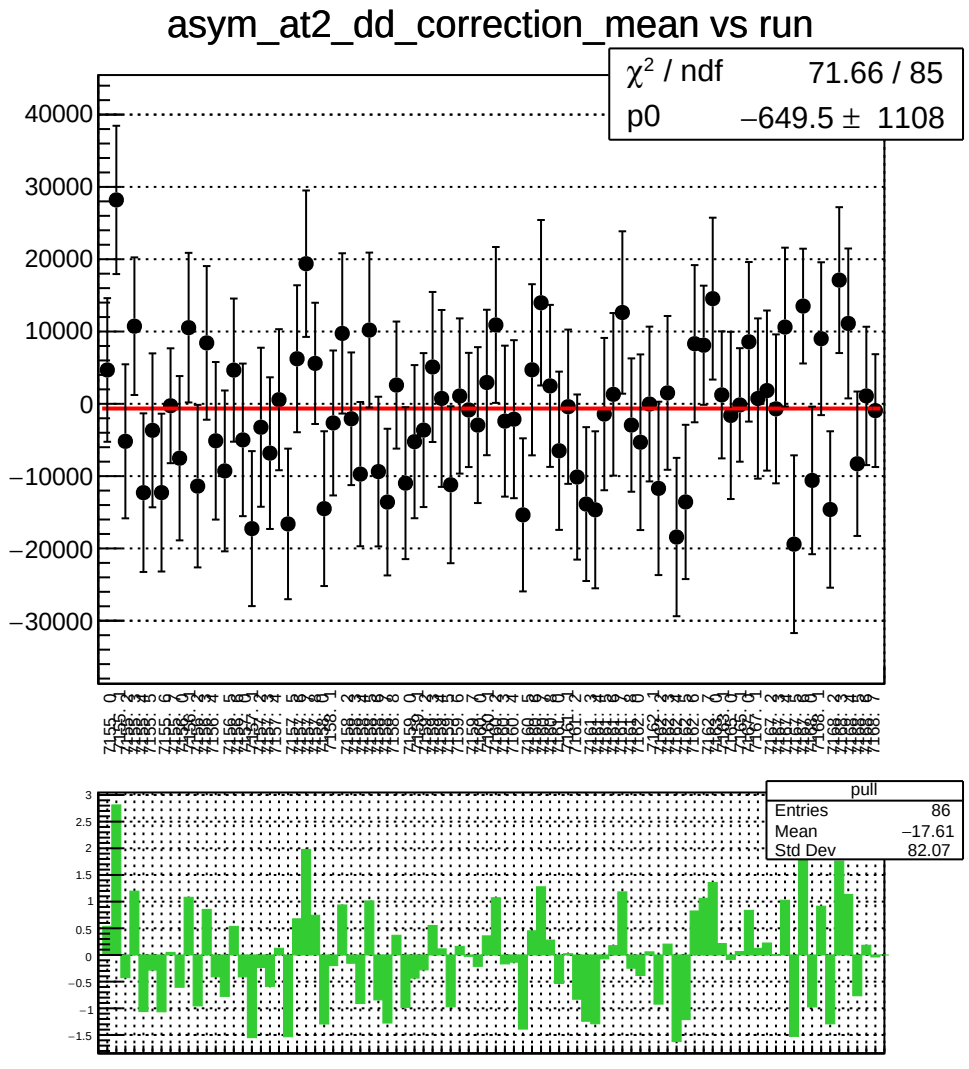

pull1D
Entries 86
Mean −0.005773
Std Dev 0.937
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

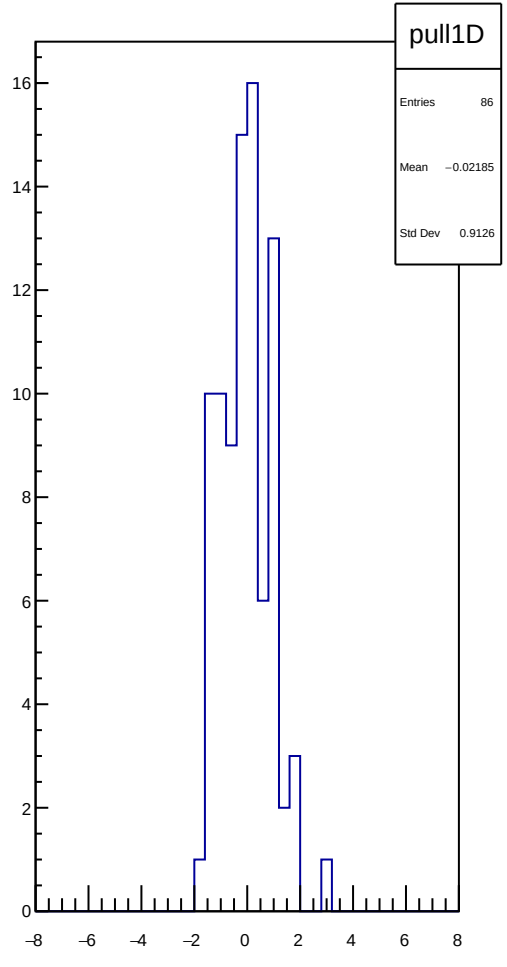

asym_at2_avg_rms vs run
χ² / ndf 8028 / 85
p0 1.675e+04 ± 12.99
20000
19000
18000
17000
16000
15000
14000

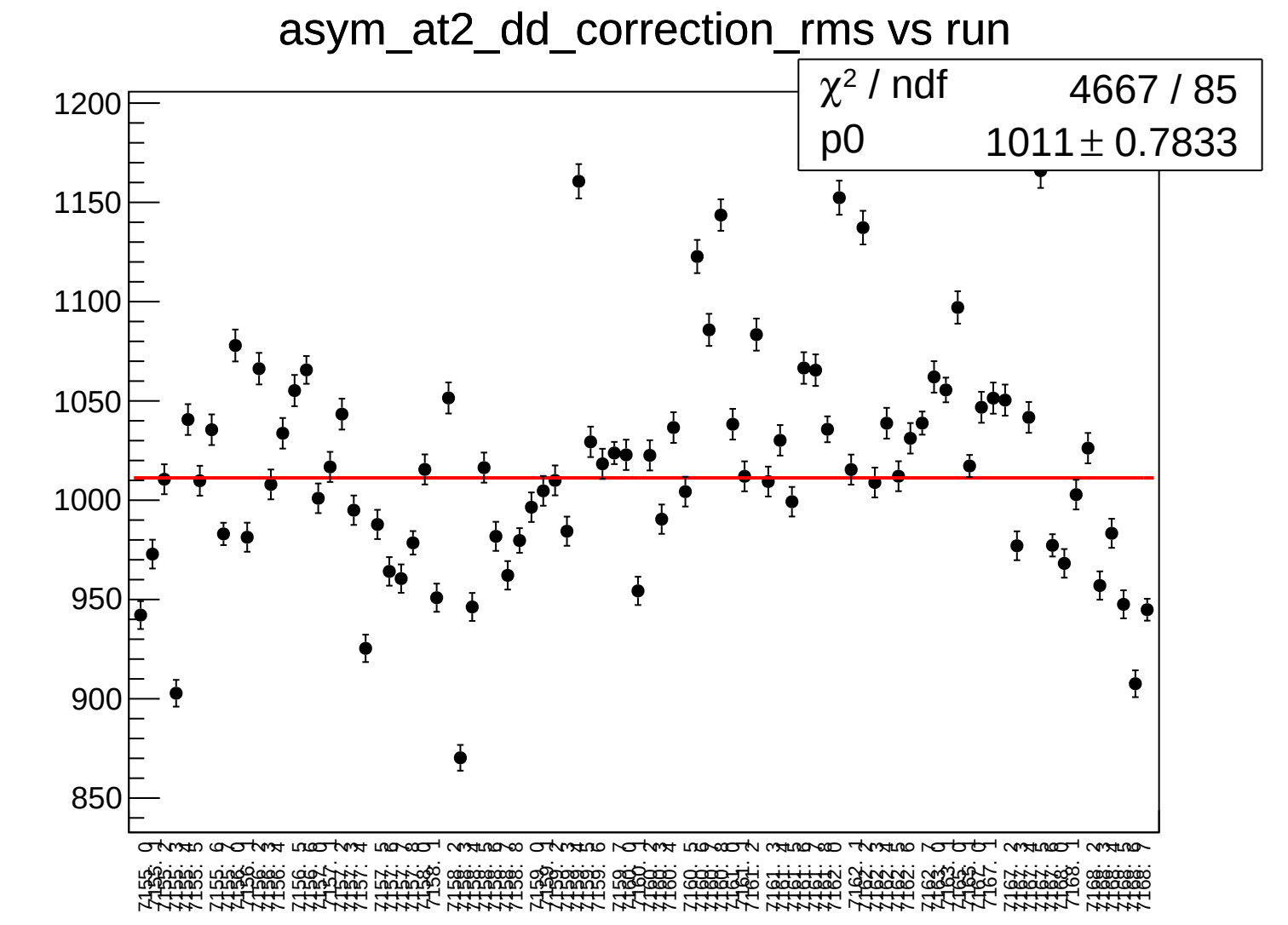

reg_asym_at2_dd_mean vs run
χ² / ndf 83.63 / 85
p0 −1471 ± 1947
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 86
Mean −68.59
Std Dev 120.5
3
2
1
0
−1
−2

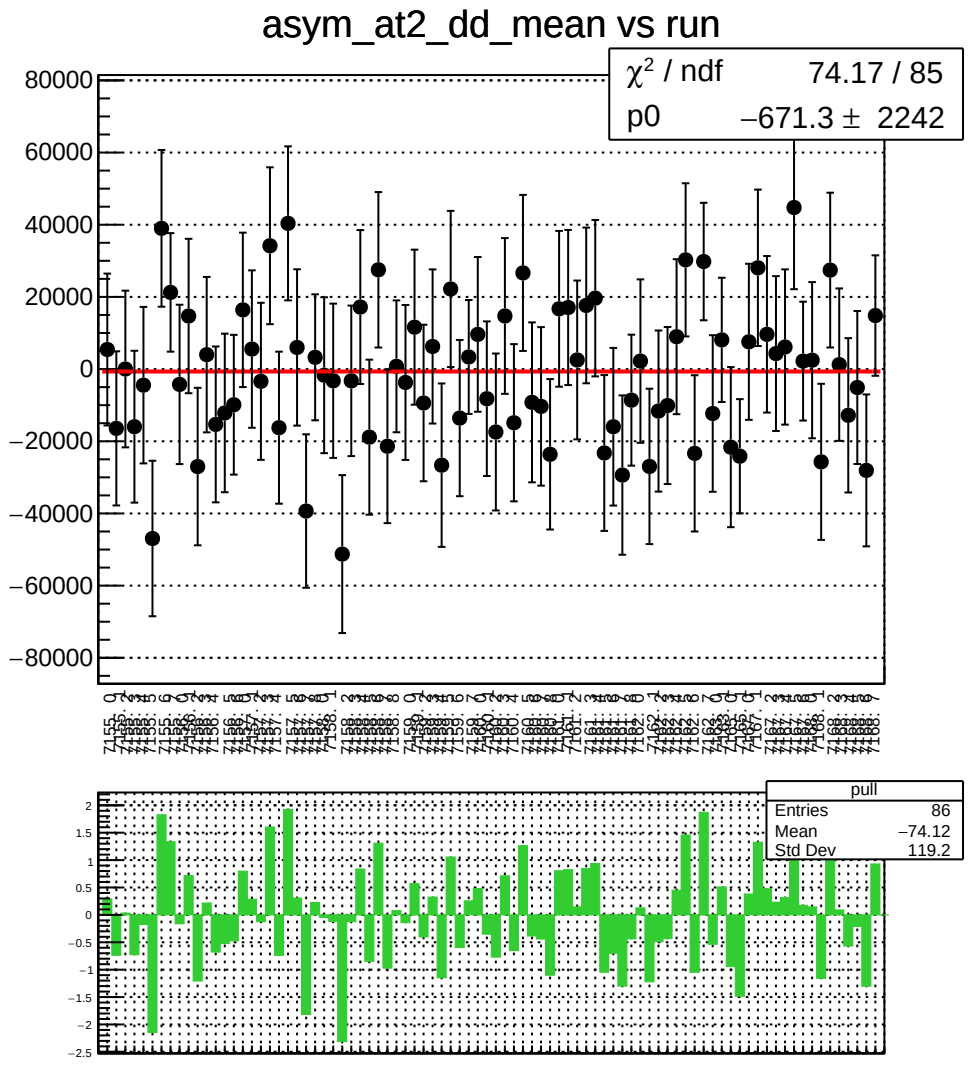

pull1D
Entries 86
Mean −0.02155
Std Dev 0.9859
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

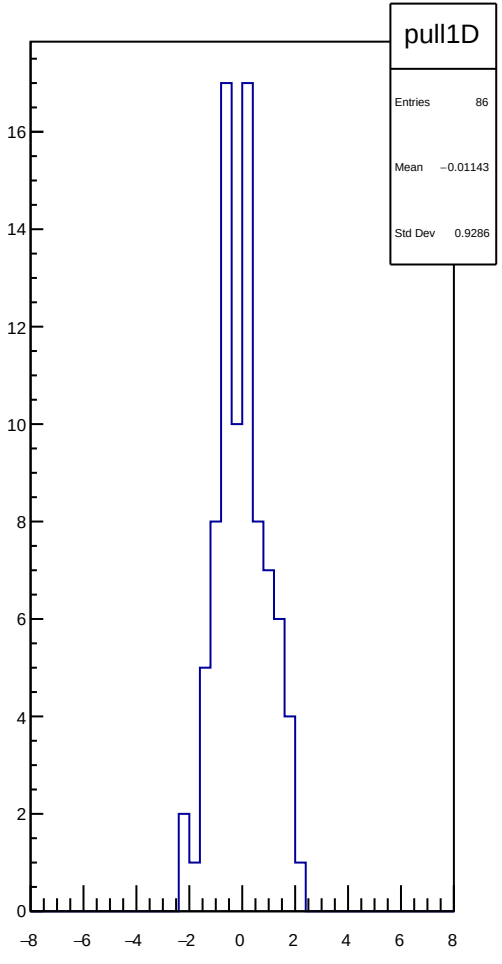

reg_asym_at2_dd_rms vs run
χ^2 / ndf 103.5 / 85
p0 1780 ± 1.377
1820
1800
1780
1760
1740
1720

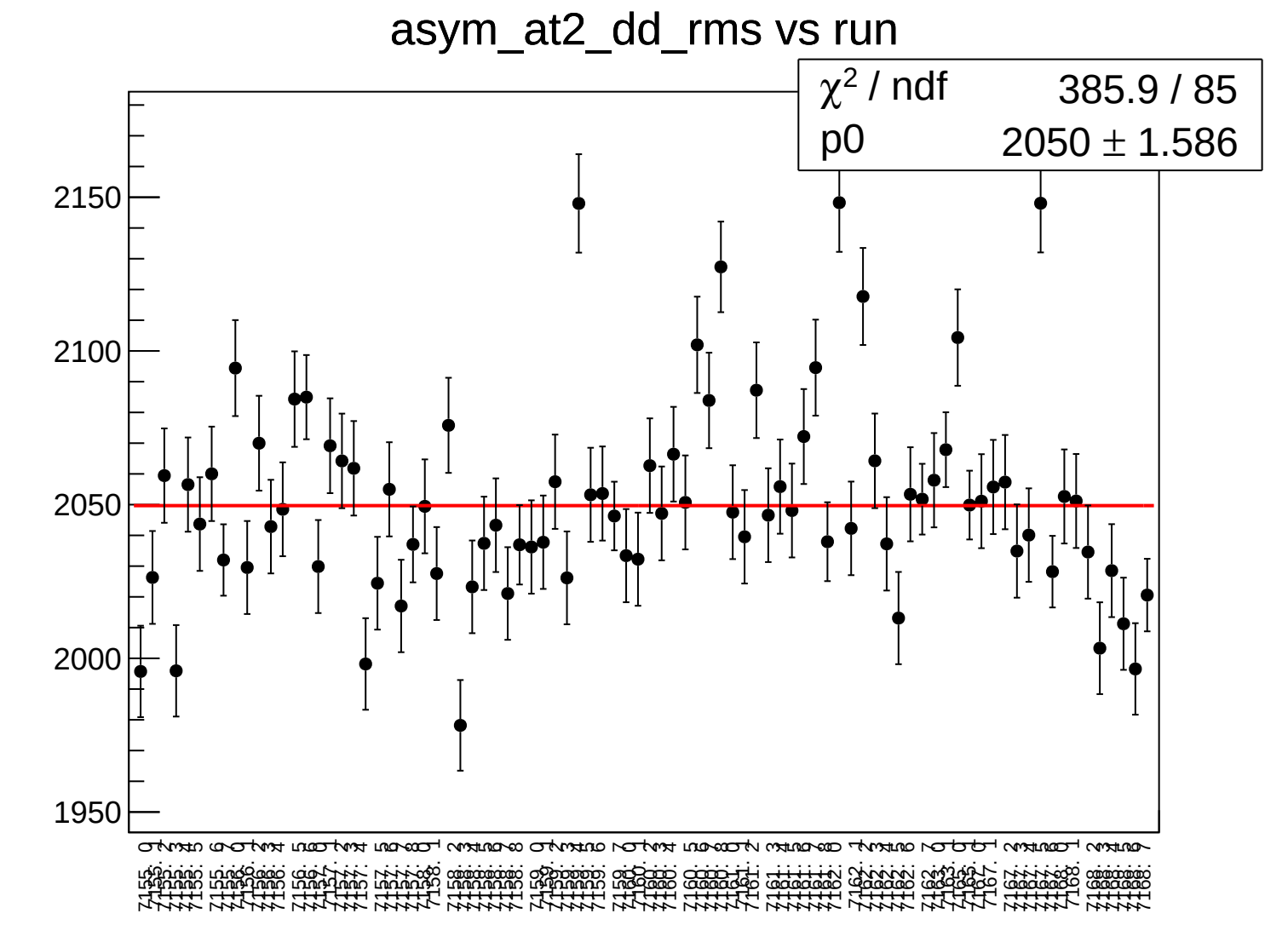

asym_at2_dd_correction_mean vs run
χ² / ndf 71.66 / 85
p0 −649.5 ± 1108
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −17.61
Std Dev 82.07
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

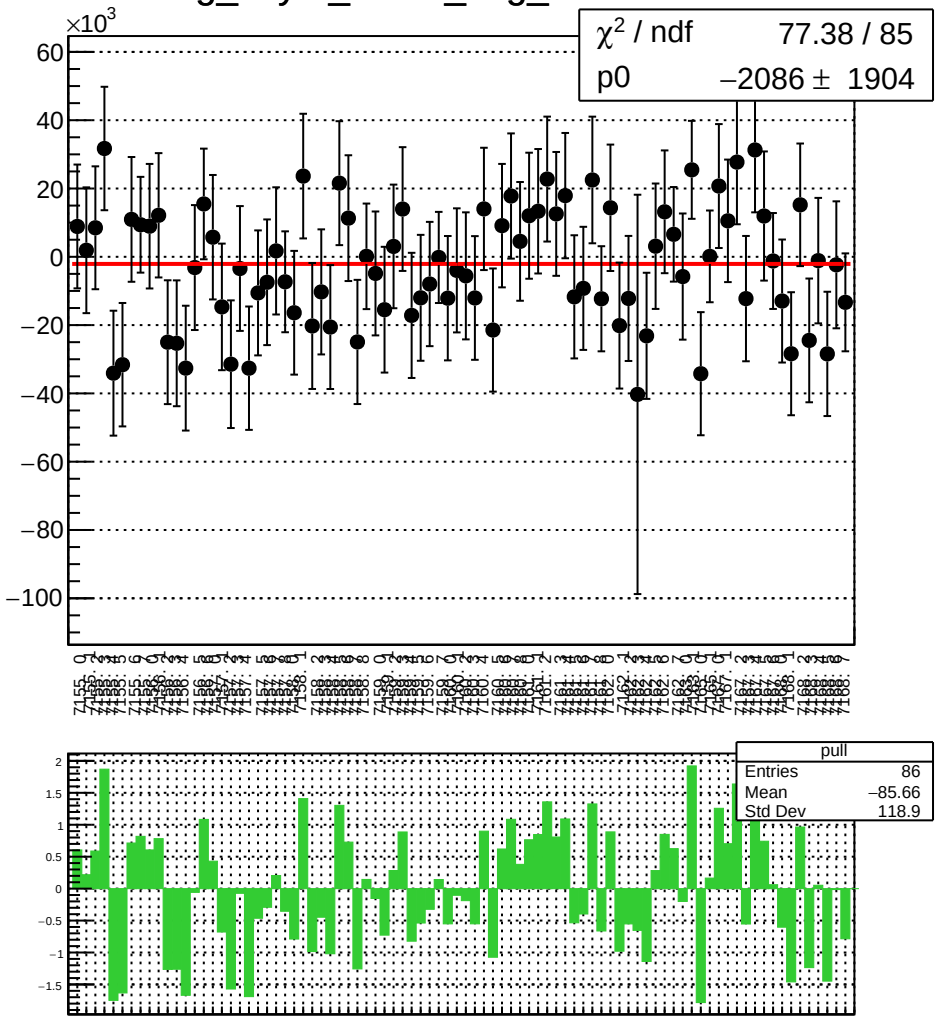

pull1D
Entries 86
Mean −0.02185
Std Dev 0.9126
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

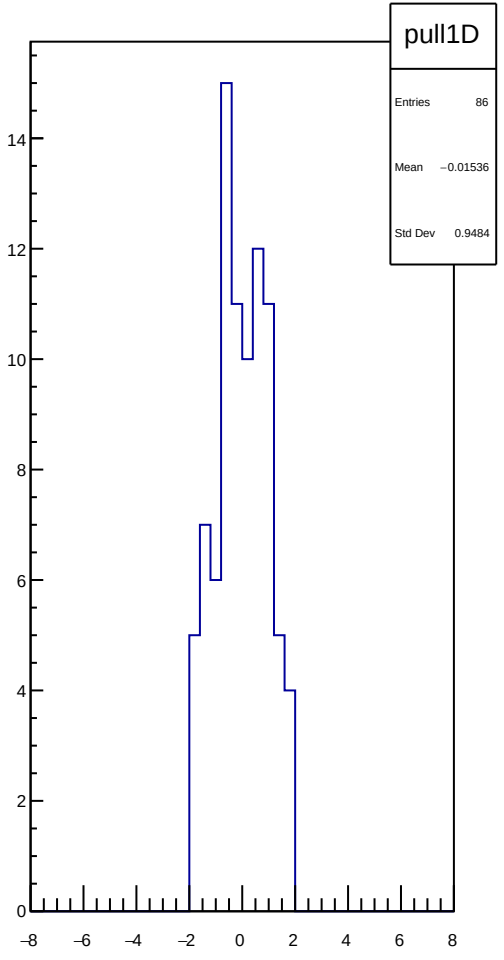

asym_at2_dd_correction_rms vs run
χ² / ndf 4667 / 85
p0 1011 ± 0.7833
1200
1150
1100
1050
1000
950
900
850

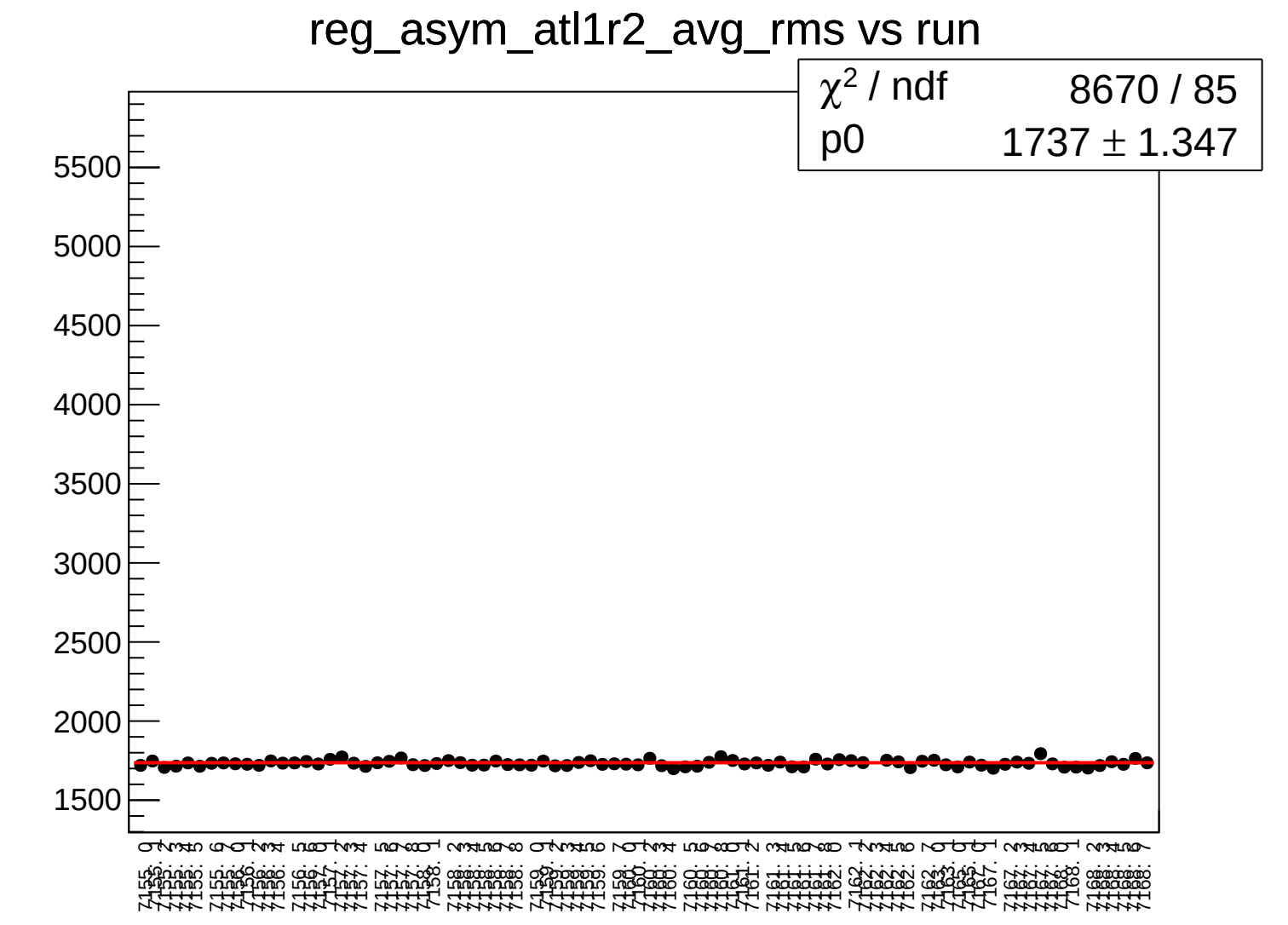

asym_at2_dd_mean vs run
χ² / ndf 74.17 / 85
p0 −671.3 ± 2242
pull
Entries 86
Mean −74.12
Std Dev 119.2

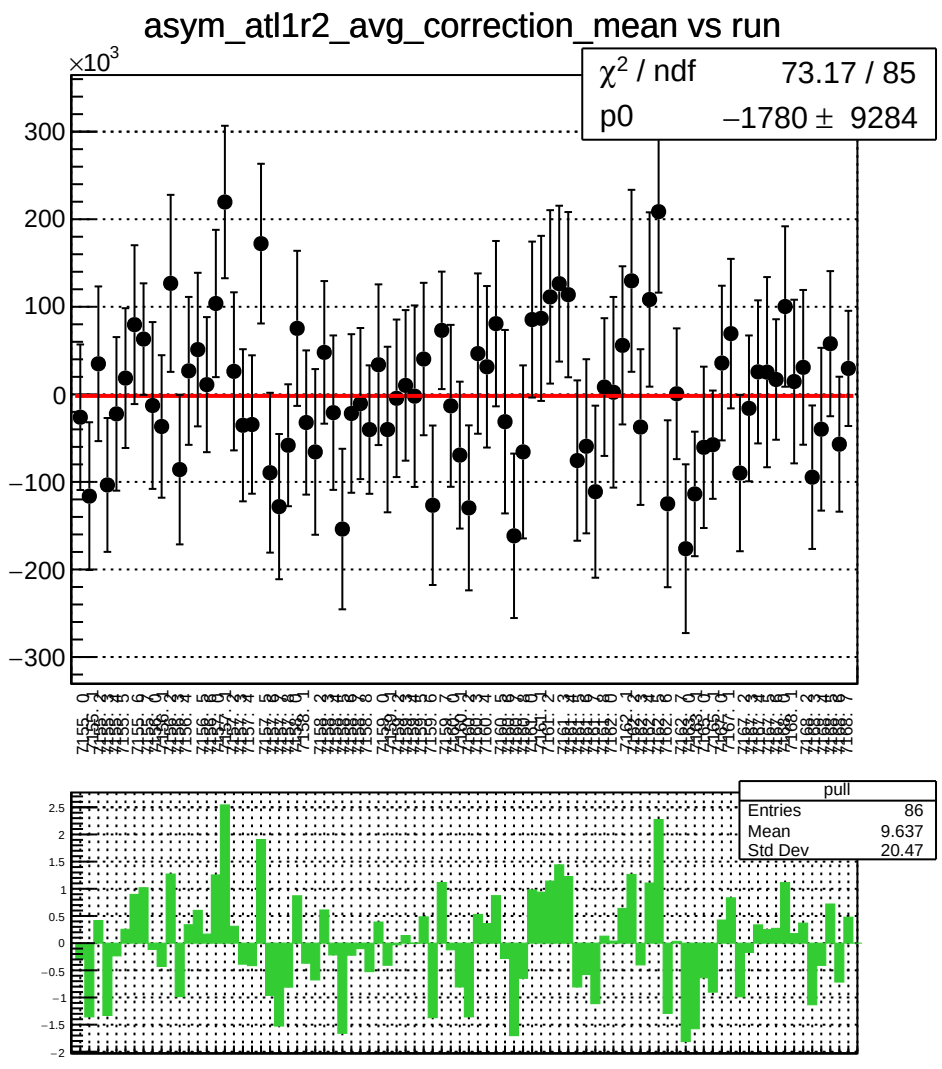

pull1D
Entries 86
Mean −0.01143
Std Dev 0.9286

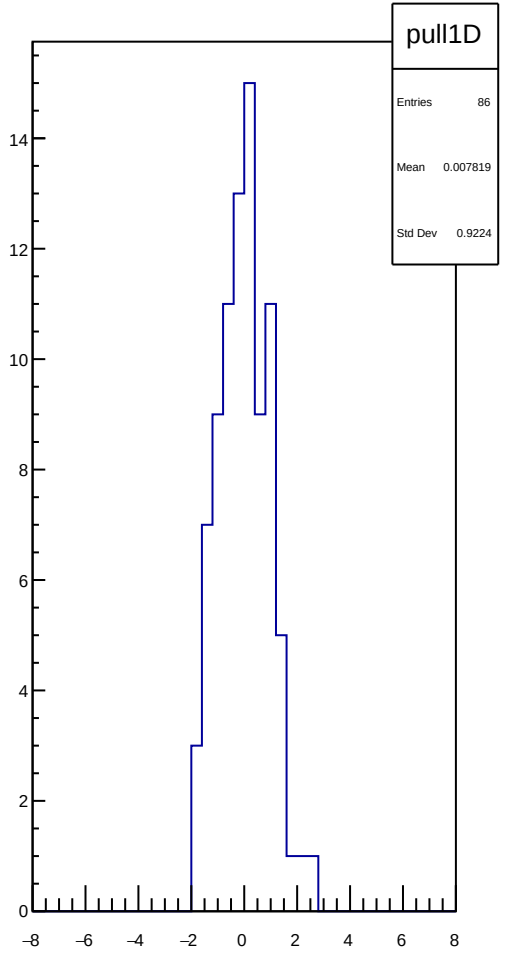

asym_at2_dd_rms vs run
χ^2 / ndf 385.9 / 85
p0 2050 ± 1.586
2150
2100
2050
2000
1950

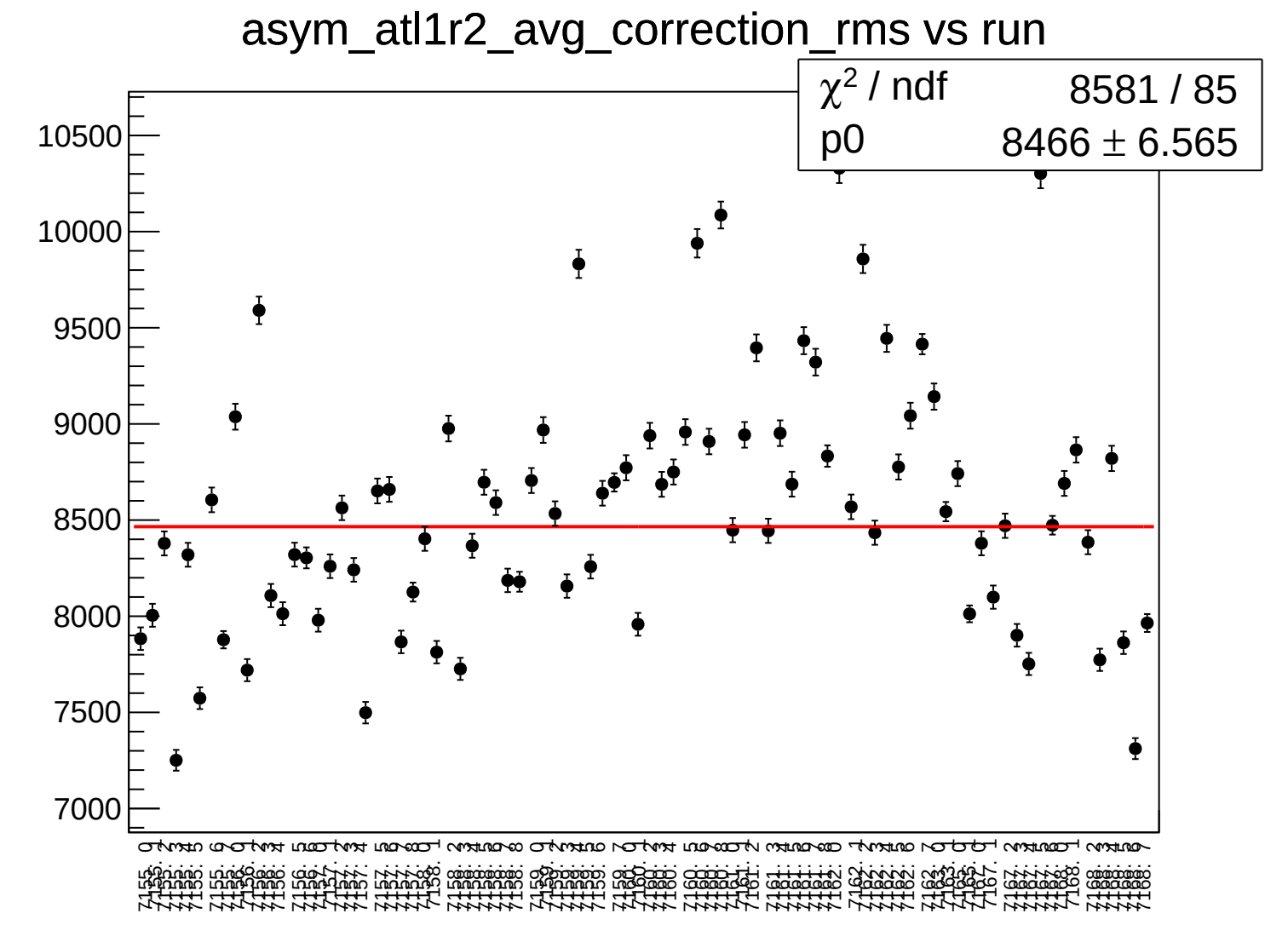

reg_asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 77.38 / 85
p0 −2086 ± 1904
pull
Entries 86
Mean −85.66
Std Dev 118.9

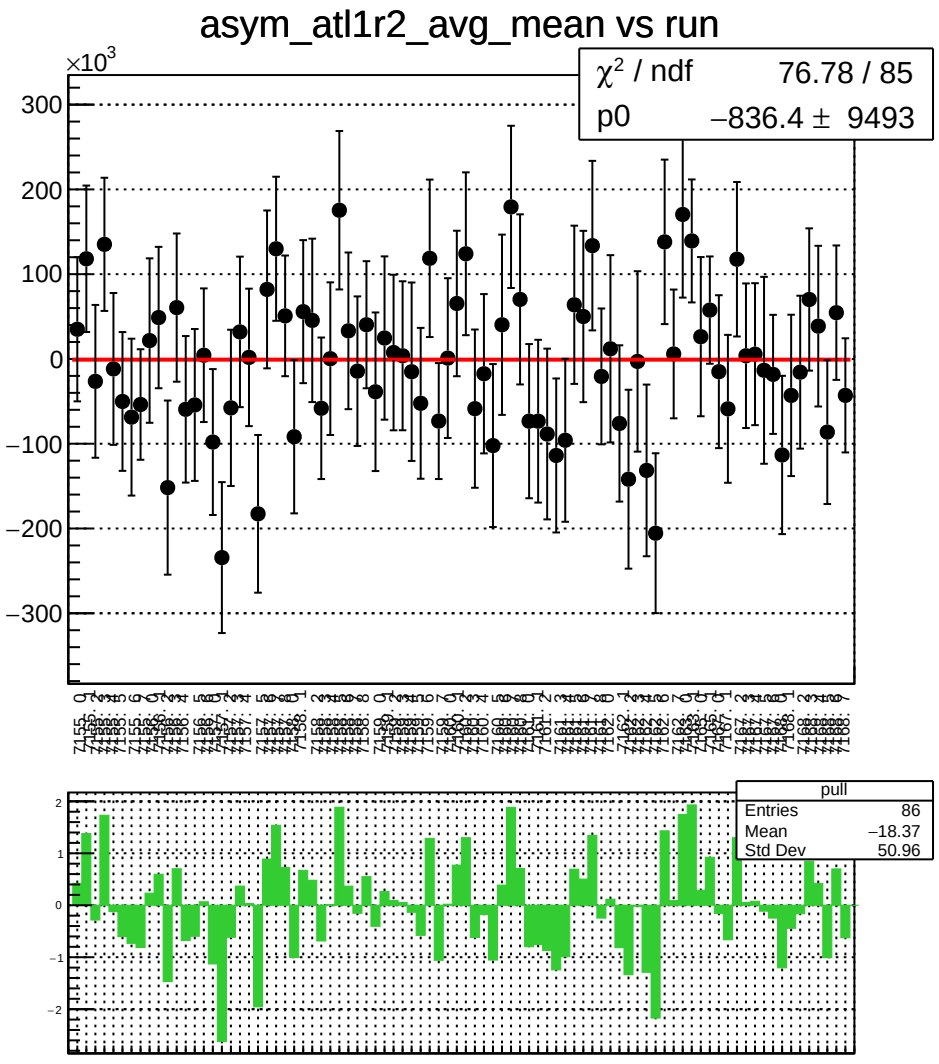

pull1D
Entries 86
Mean −0.01536
Std Dev 0.9484

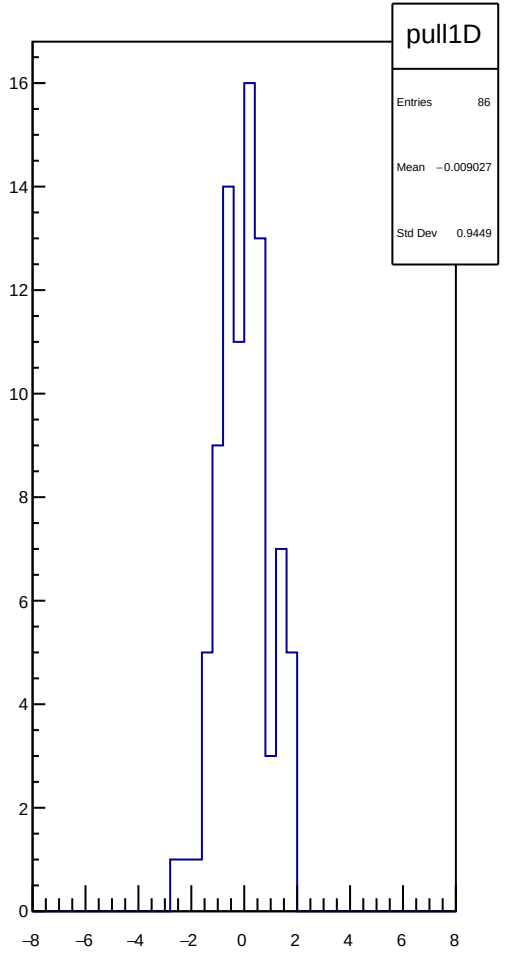

reg_asym_atl1r2_avg_rms vs run
χ^2 / ndf 8670 / 85
p0 1737 ± 1.347
5500
5000
4500
4000
3500
3000
2500
2000
1500

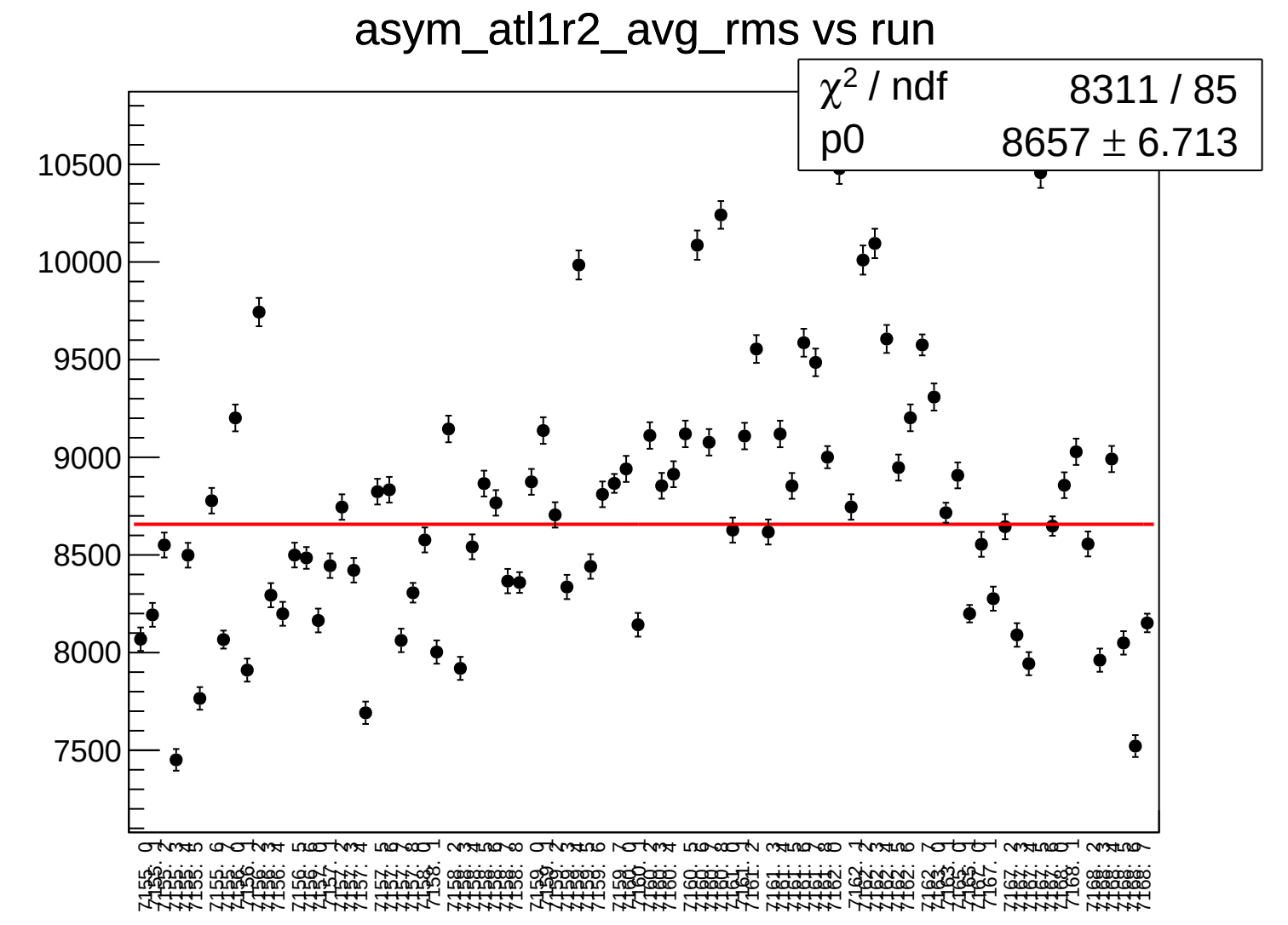

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 73.17 / 85
p0 −1780 ± 9284
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean 9.637
Std Dev 20.47
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

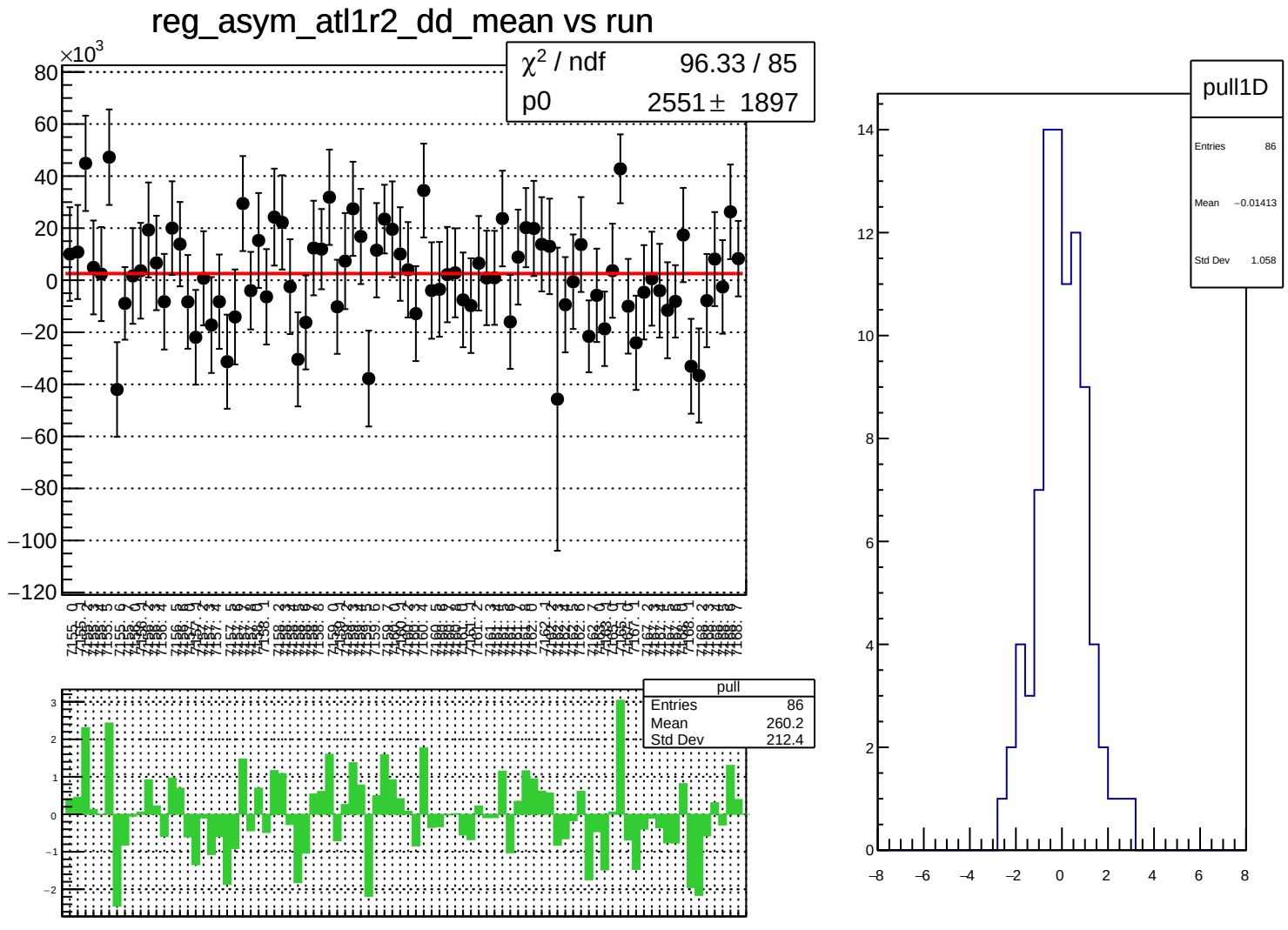

pull1D
Entries 86
Mean 0.007819
Std Dev 0.9224
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

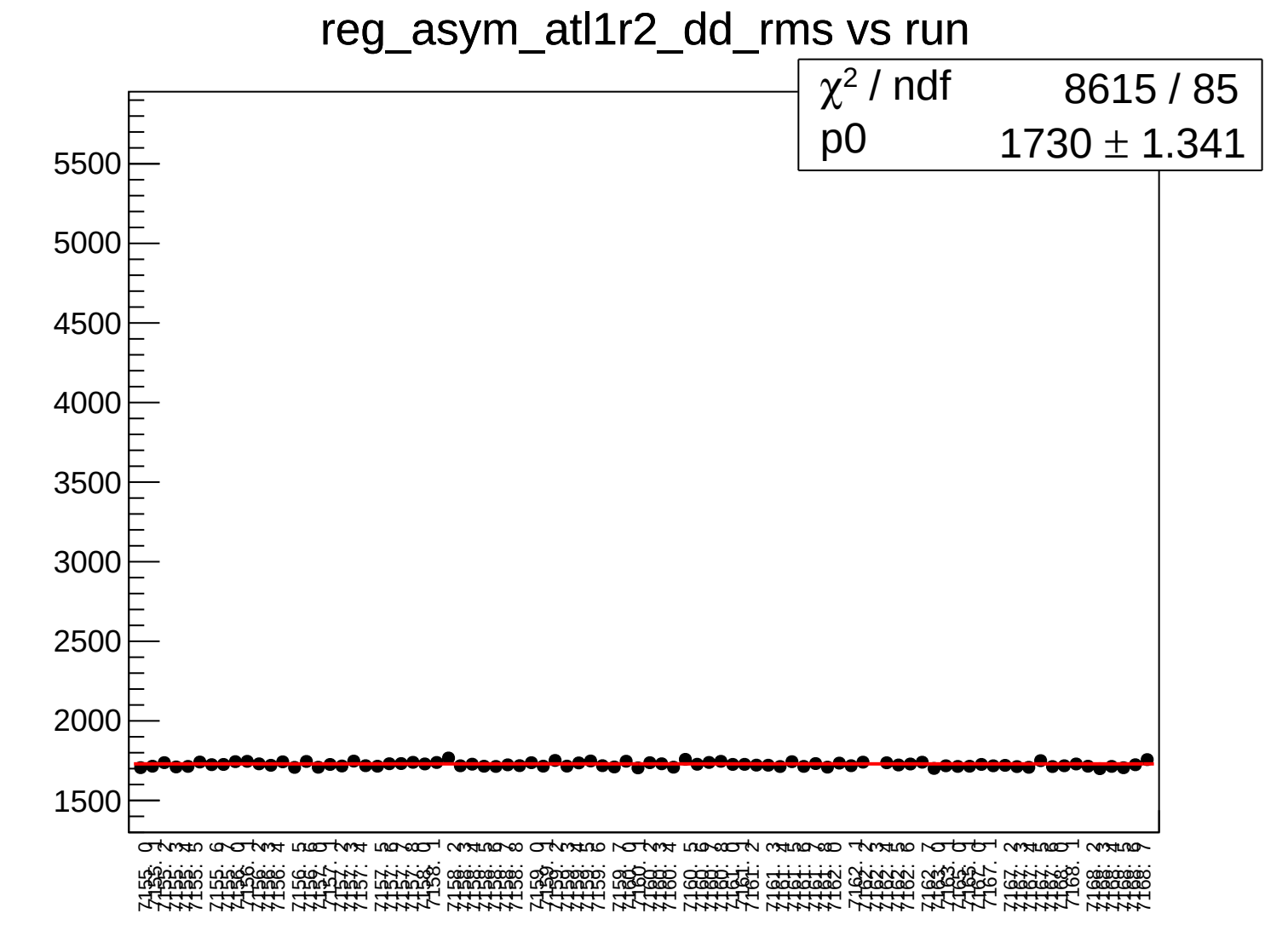

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 8581 / 85
p0 8466 ± 6.565
10500
10000
9500
9000
8500
8000
7500
7000

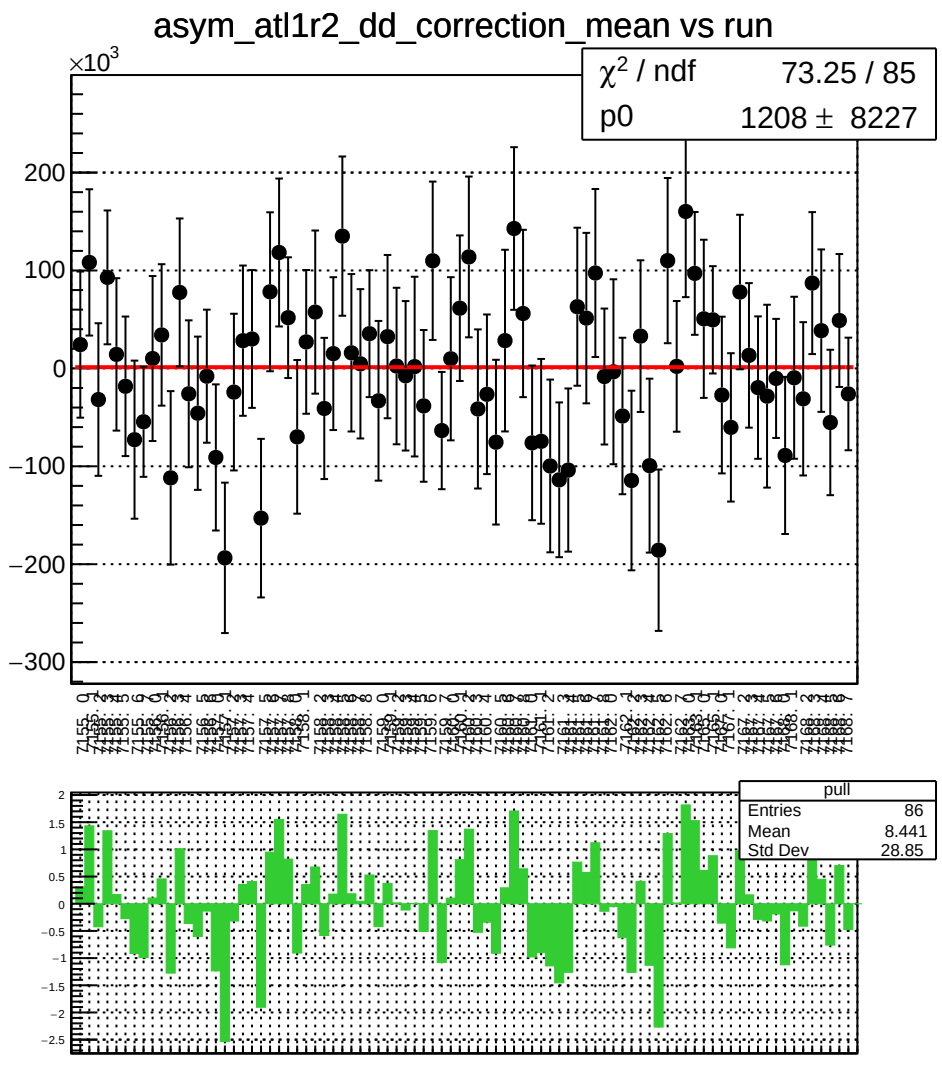

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 76.78 / 85
p0 −836.4 ± 9493
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −18.37
Std Dev 50.96
2
1
0
−1
−2

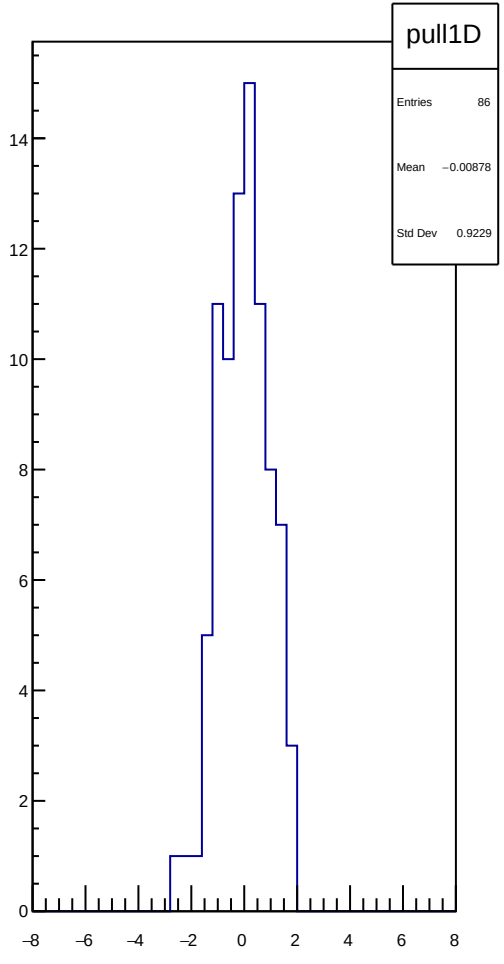

pull1D
Entries 86
Mean −0.009027
Std Dev 0.9449
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

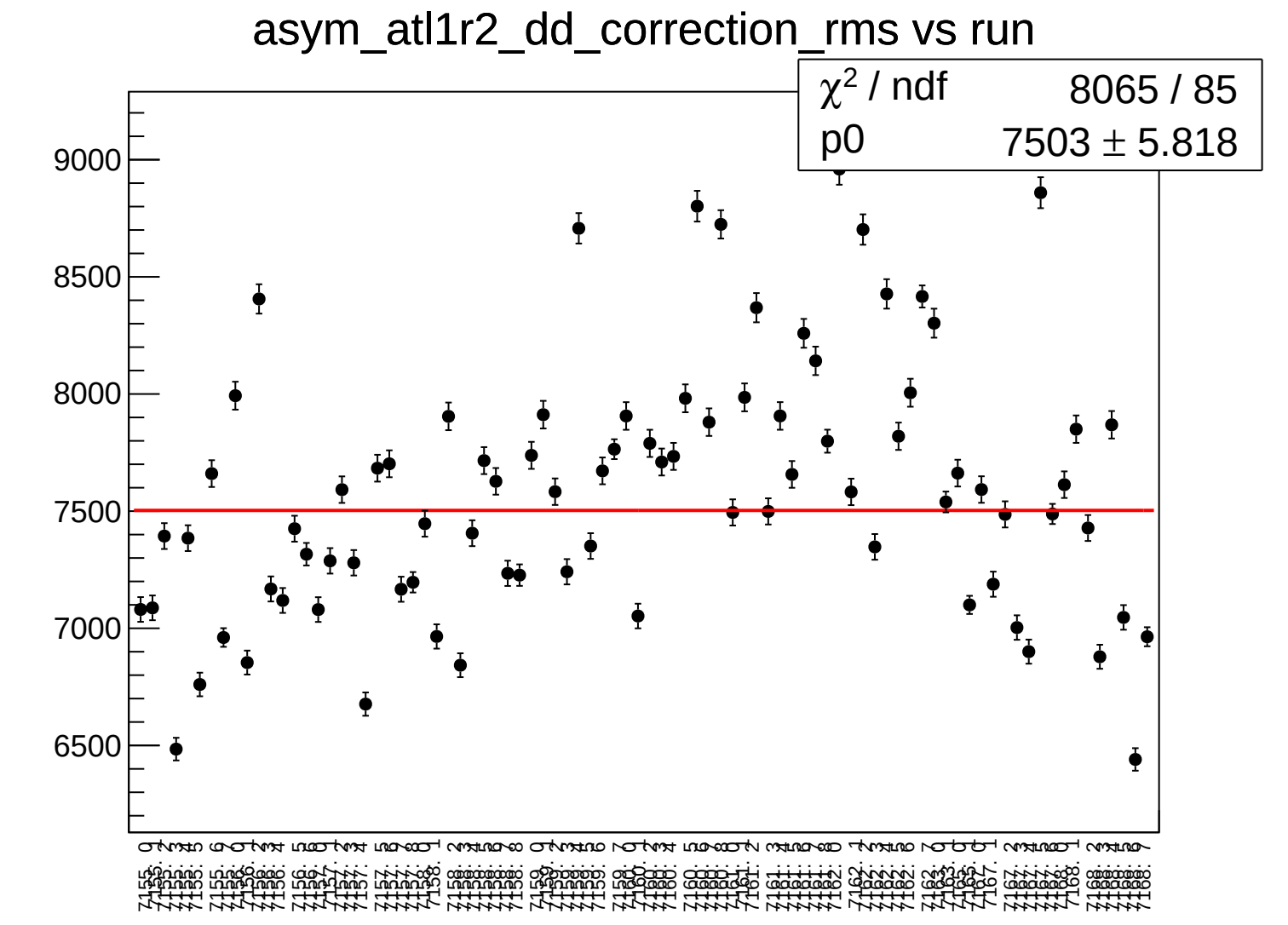

asym_atl1r2_avg_rms vs run
χ^2 / ndf 8311 / 85
p0 8657 ± 6.713
10500
10000
9500
9000
8500
8000
7500

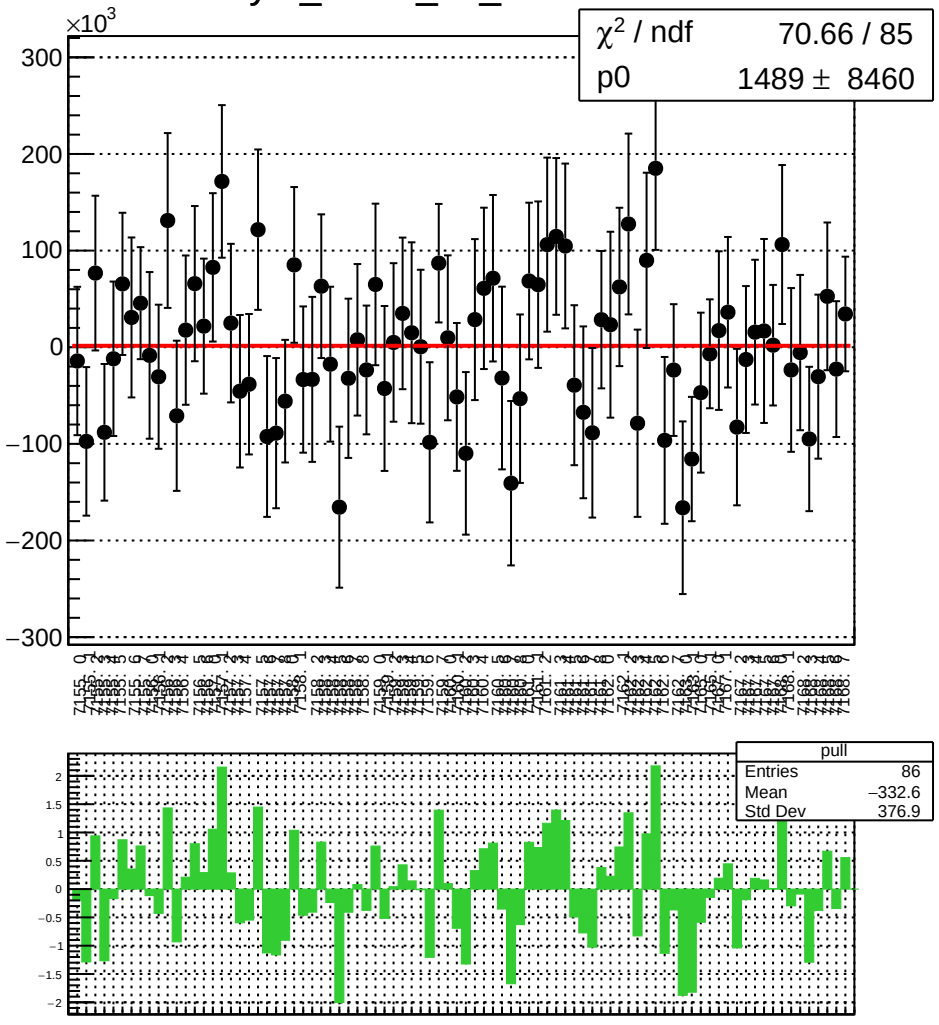

reg_asym_atl1r2_dd_mean vs run
χ² / ndf 96.33 / 85
p0 2551 ± 1897
×10³
pull
Entries 86
Mean 260.2
Std Dev 212.4
pull1D
Entries 86
Mean −0.01413
Std Dev 1.058

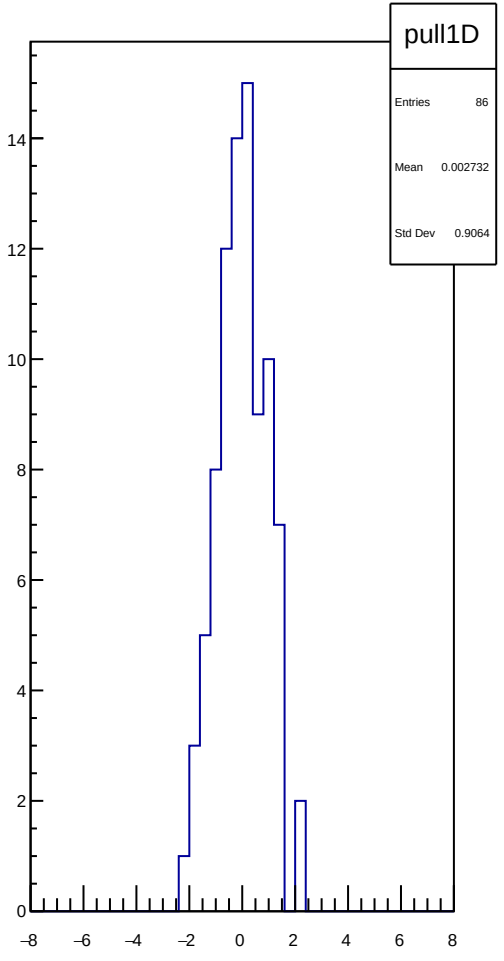

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 8615 / 85
p0 1730 ± 1.341
5500
5000
4500
4000
3500
3000
2500
2000
1500

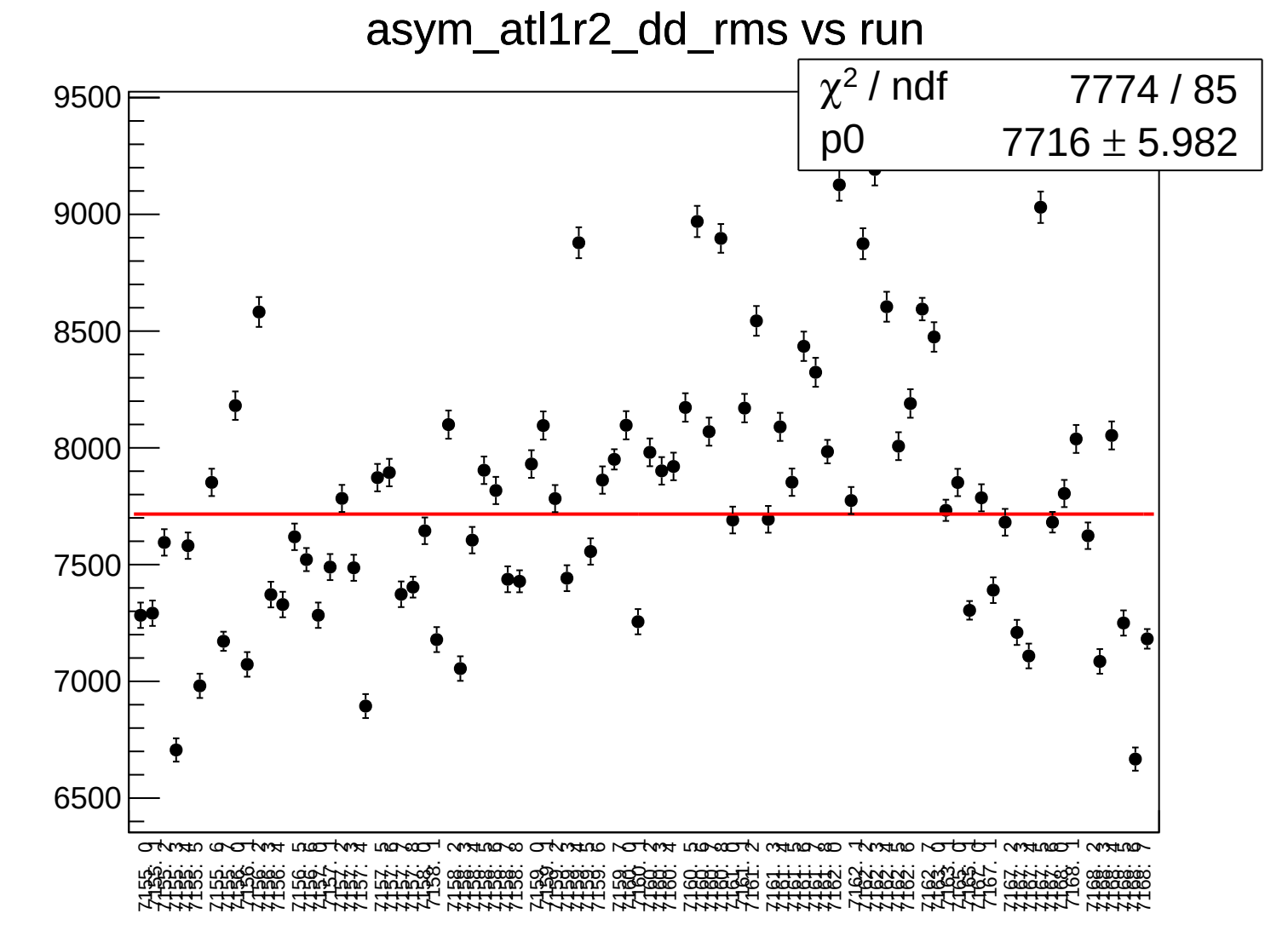

asym_atl1r2_dd_correction_mean vs run
×10^3
χ^2 / ndf 73.25 / 85
p0 1208 ± 8227
200
100
0
−100
−200
−300
pull
Entries 86
Mean 8.441
Std Dev 28.85
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

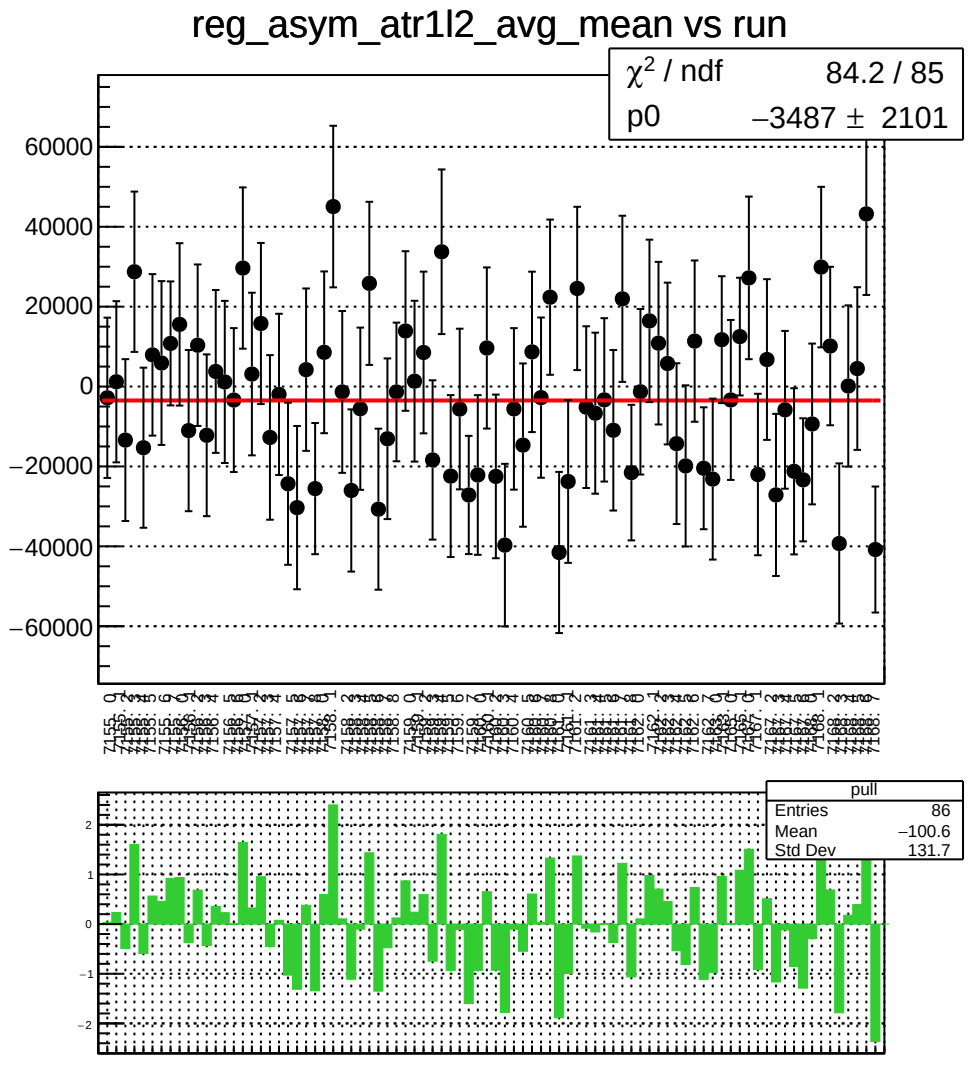

pull1D
Entries 86
Mean −0.00878
Std Dev 0.9229
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

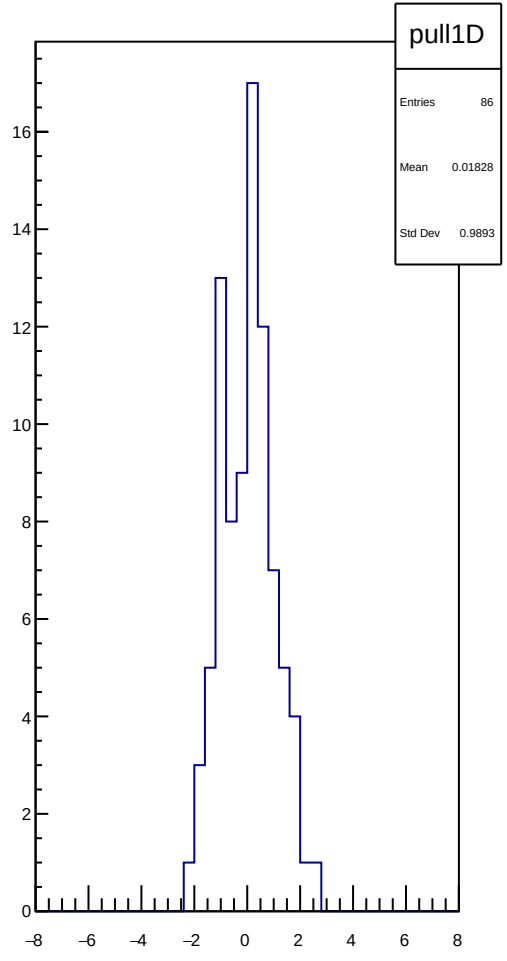

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 8065 / 85
p0 7503 ± 5.818
9000
8500
8000
7500
7000
6500

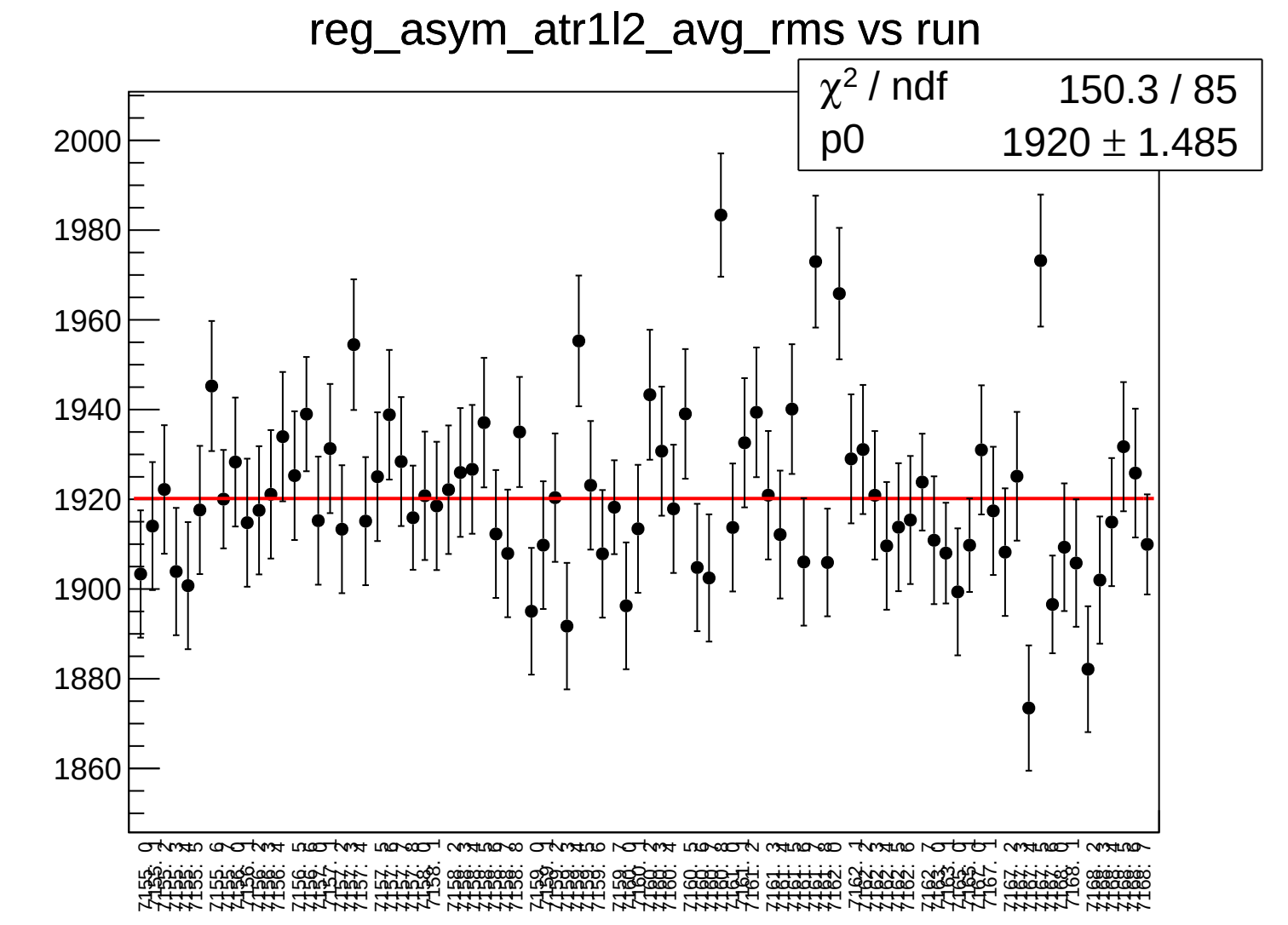

asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 70.66 / 85
p0 1489 ± 8460
pull
Entries 86
Mean −332.6
Std Dev 376.9

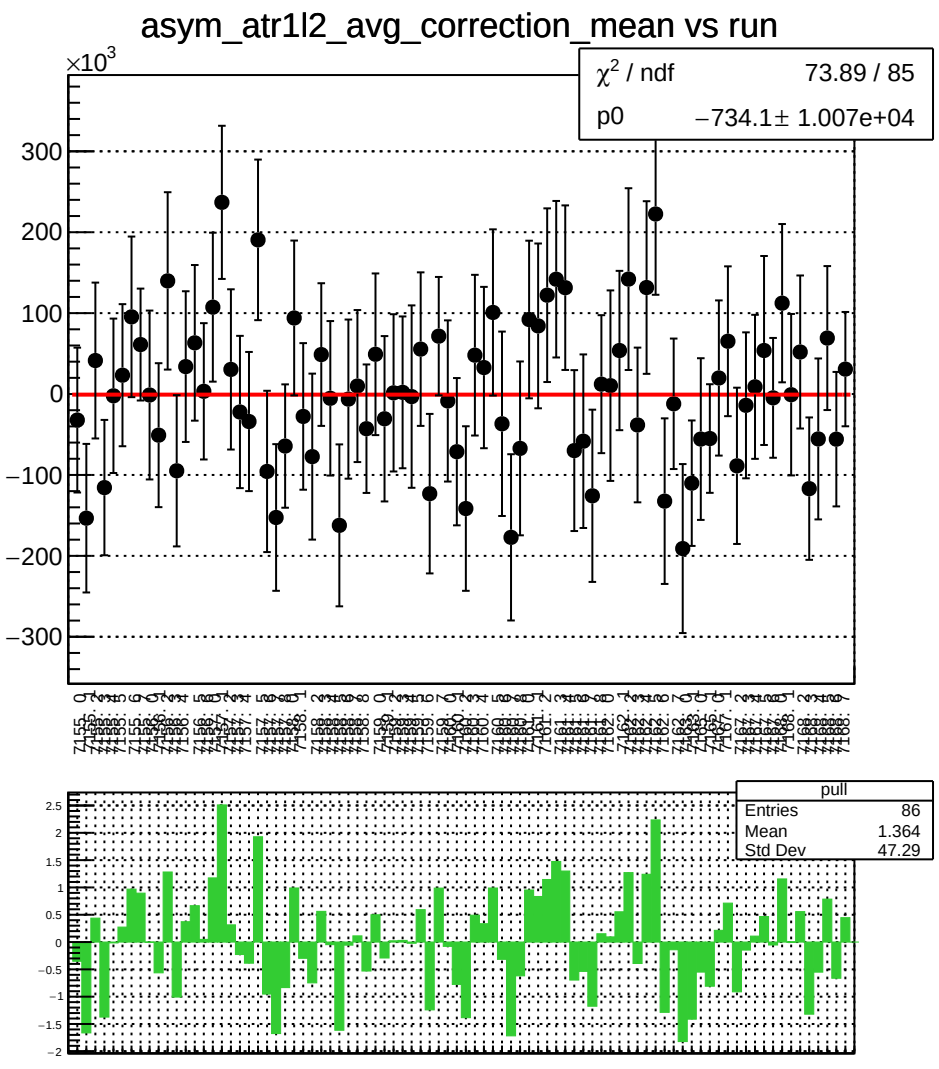

pull1D
Entries 86
Mean 0.002732
Std Dev 0.9064

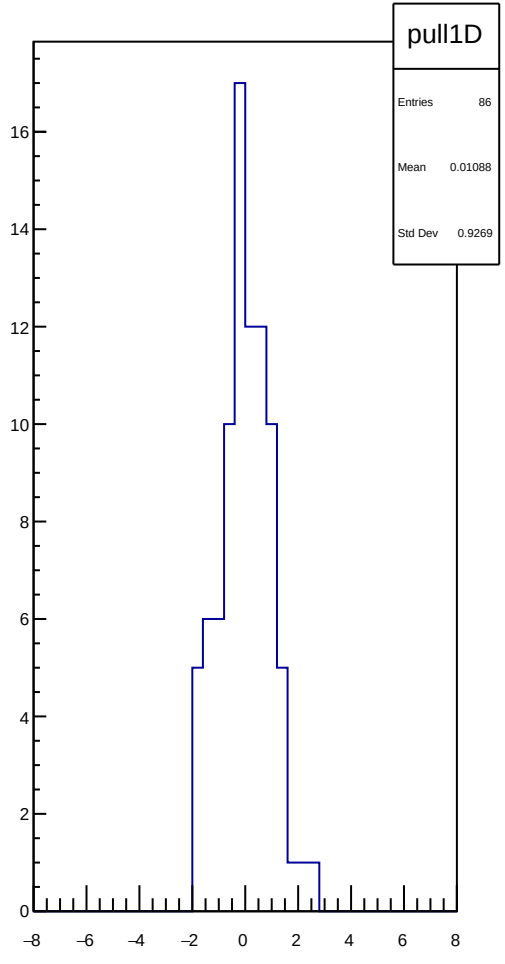

asym_atl1r2_dd_rms vs run
χ² / ndf 7774 / 85
p0 7716 ± 5.982
9500
9000
8500
8000
7500
7000
6500

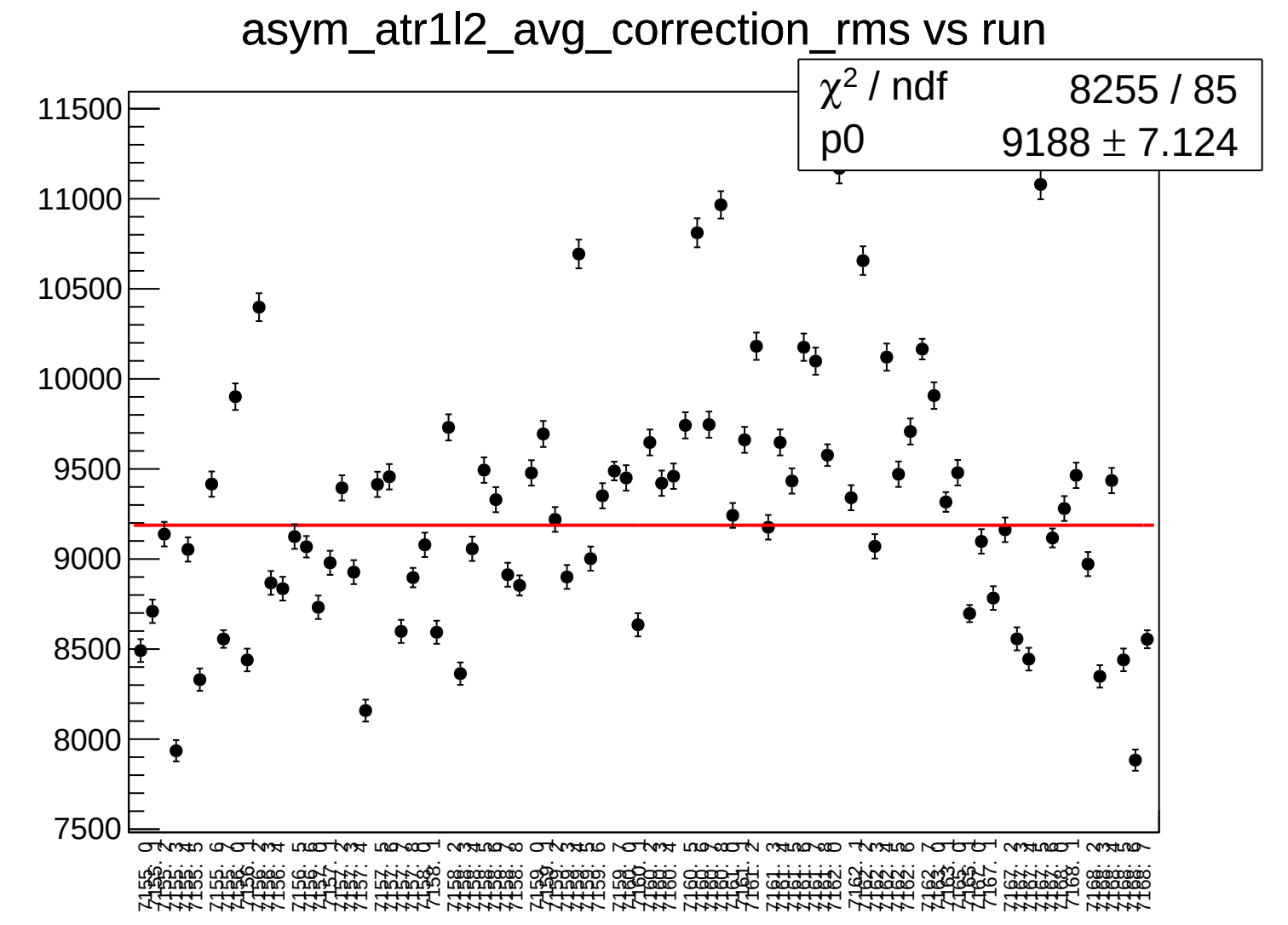

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 84.2 / 85
p0 −3487 ± 2101
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −100.6
Std Dev 131.7
2
1
0
−1
−2

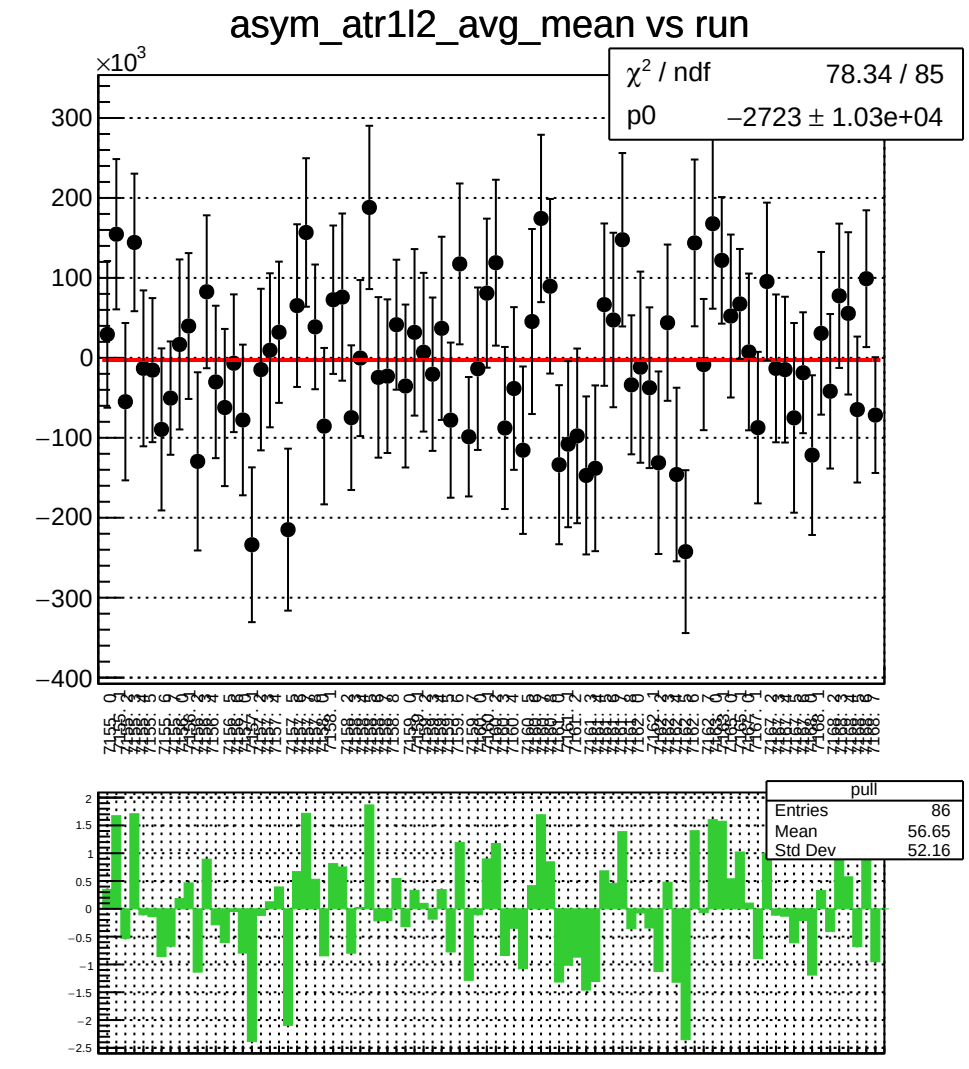

pull1D
Entries 86
Mean 0.01828
Std Dev 0.9893
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

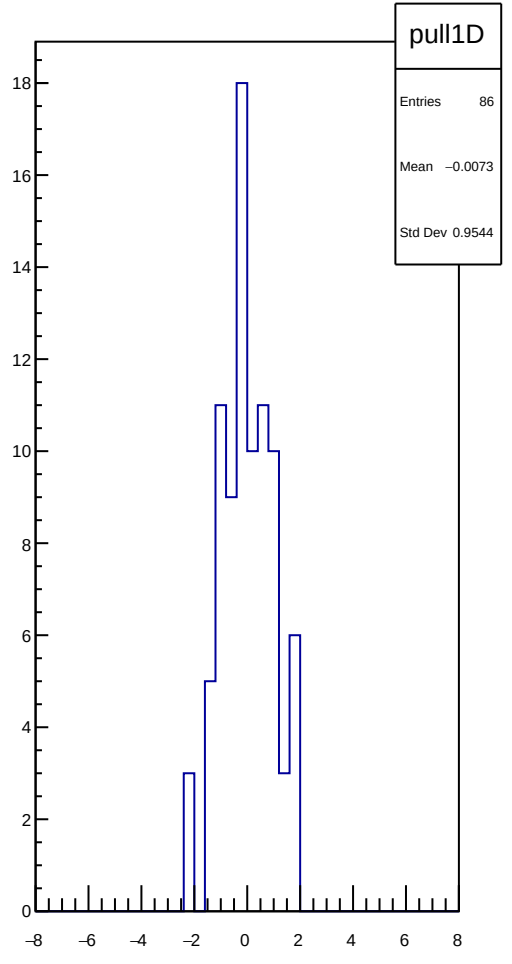

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 150.3 / 85
p0 1920 ± 1.485
2000
1980
1960
1940
1920
1900
1880
1860

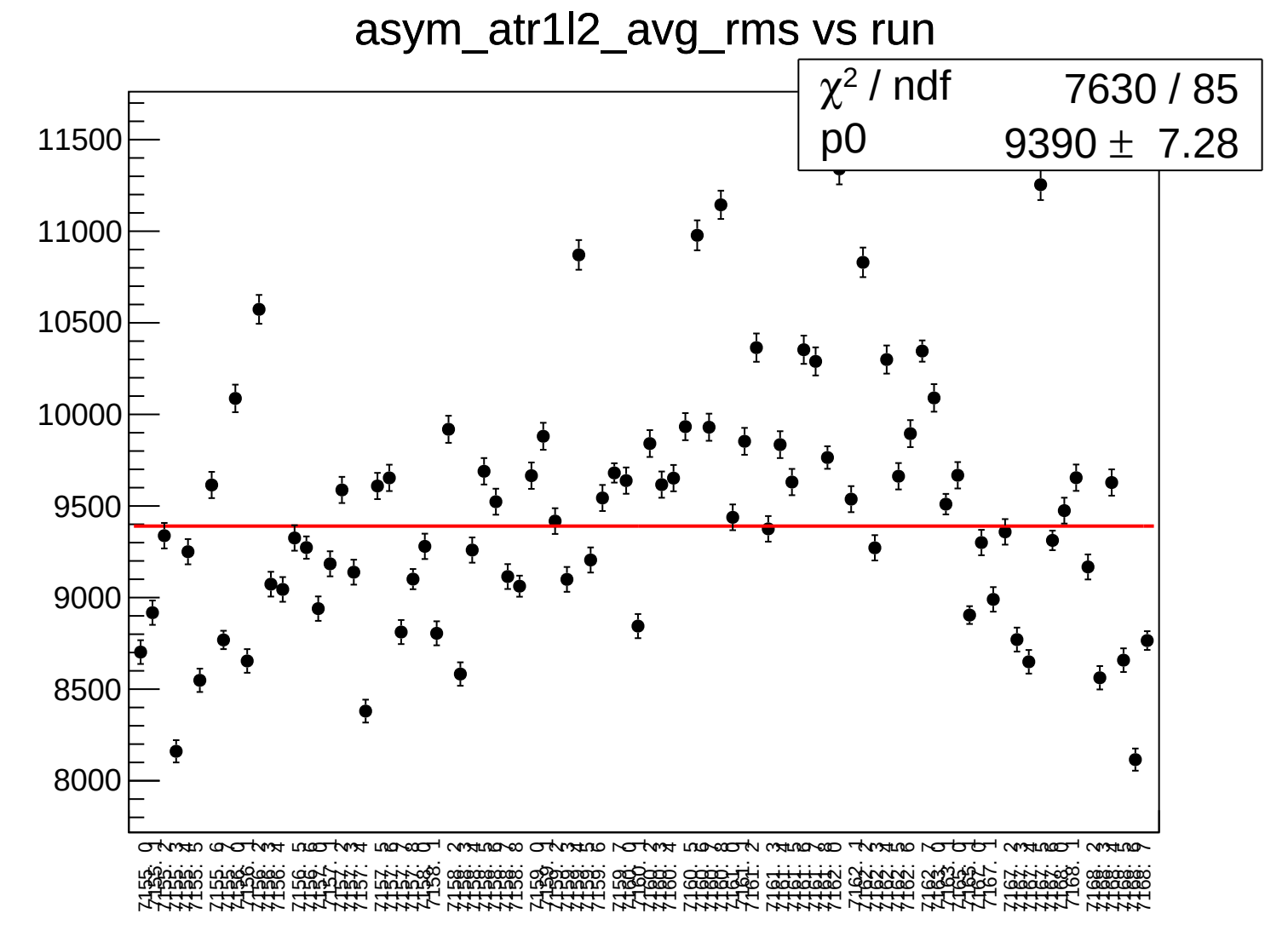

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 73.89 / 85
p0 −734.1± 1.007e+04
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean 1.364
Std Dev 47.29
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

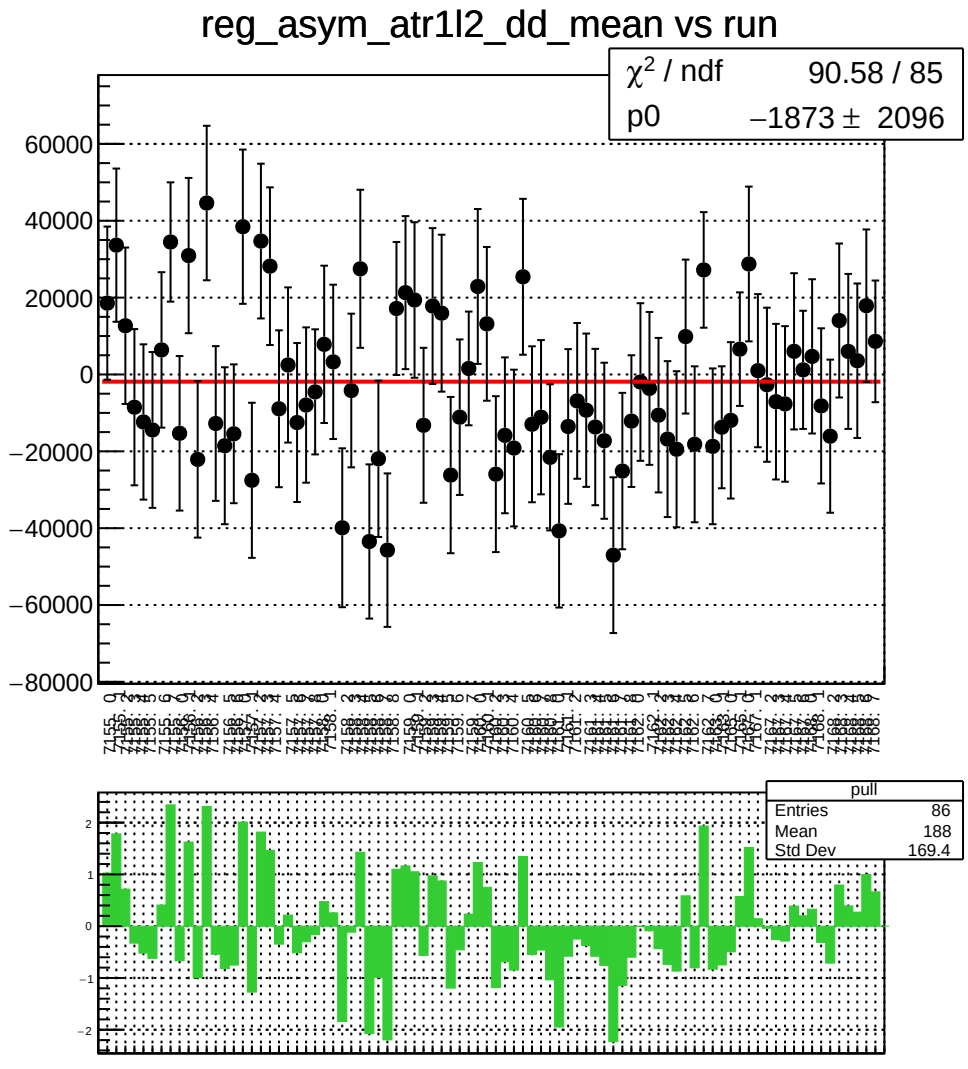

pull1D
Entries 86
Mean 0.01088
Std Dev 0.9269
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

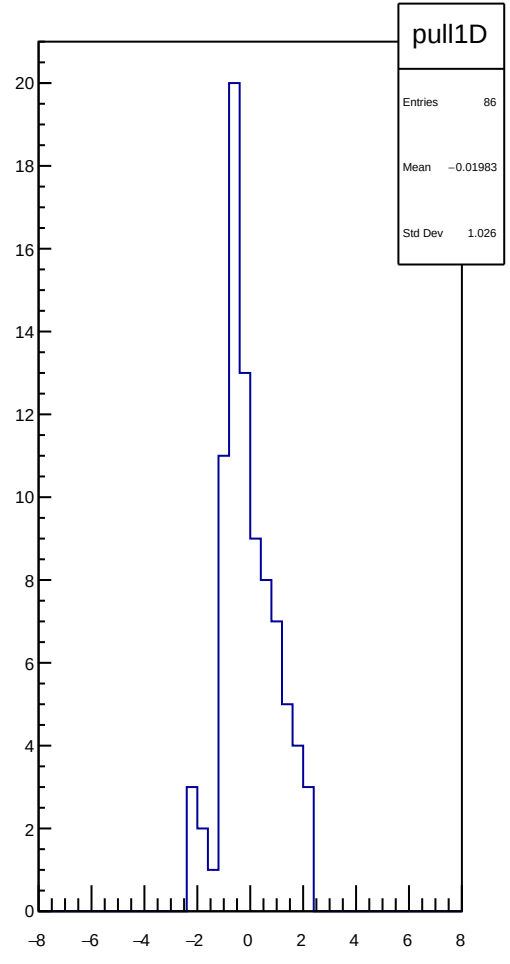

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 8255 / 85
p0 9188 ± 7.124
11500
11000
10500
10000
9500
9000
8500
8000
7500

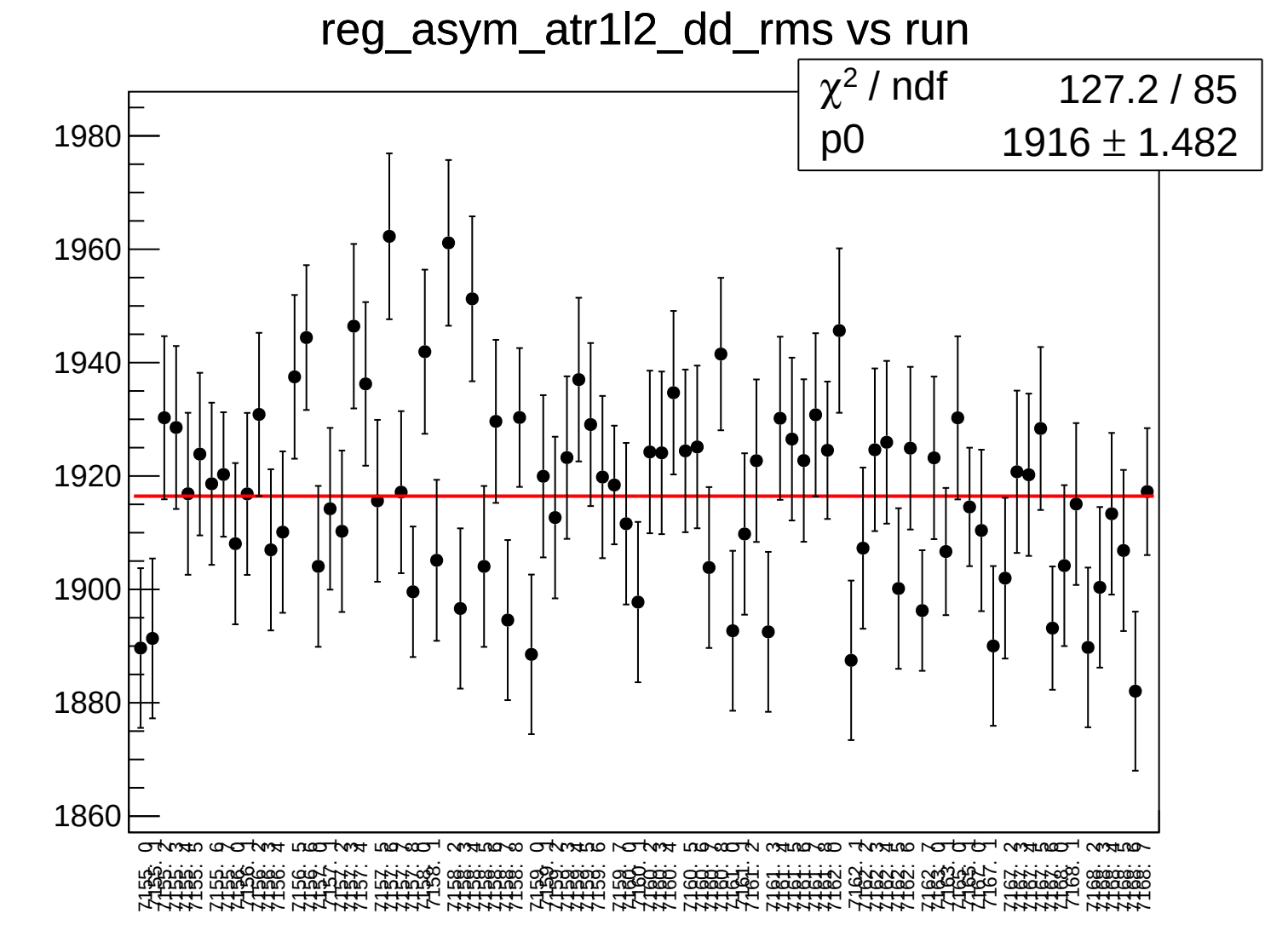

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 78.34 / 85
p0 −2723 ± 1.03e+04
300
200
100
0
−100
−200
−300
−400
pull
Entries 86
Mean 56.65
Std Dev 52.16
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

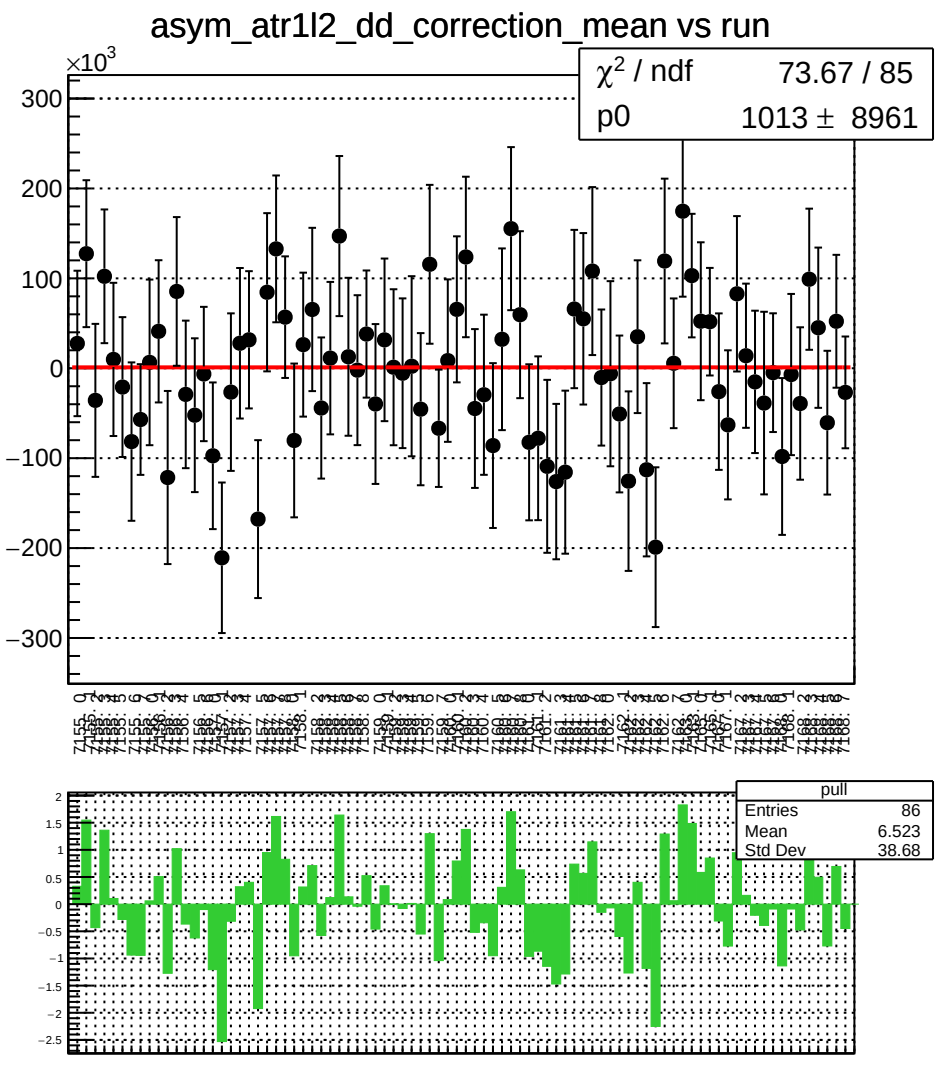

pull1D
Entries 86
Mean −0.0073
Std Dev 0.9544
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

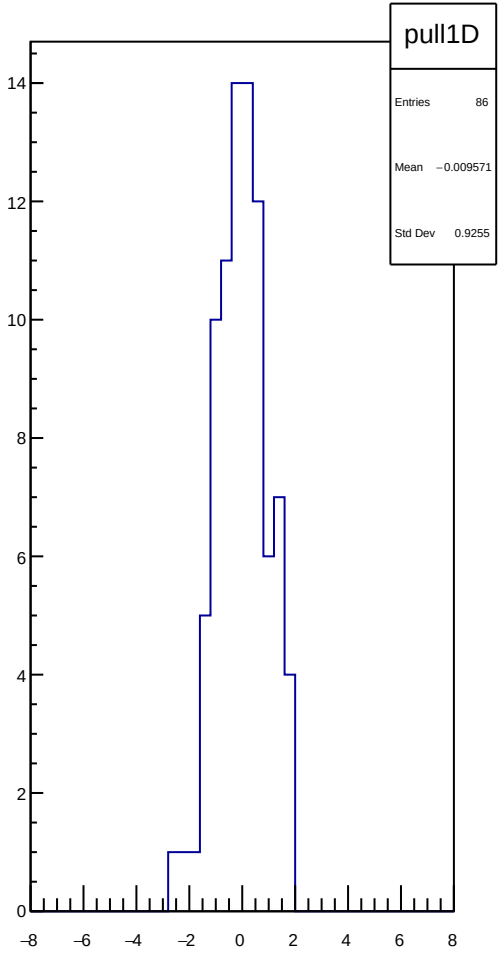

asym_atr1l2_avg_rms vs run
χ² / ndf 7630 / 85
p0 9390 ± 7.28
11500
11000
10500
10000
9500
9000
8500
8000

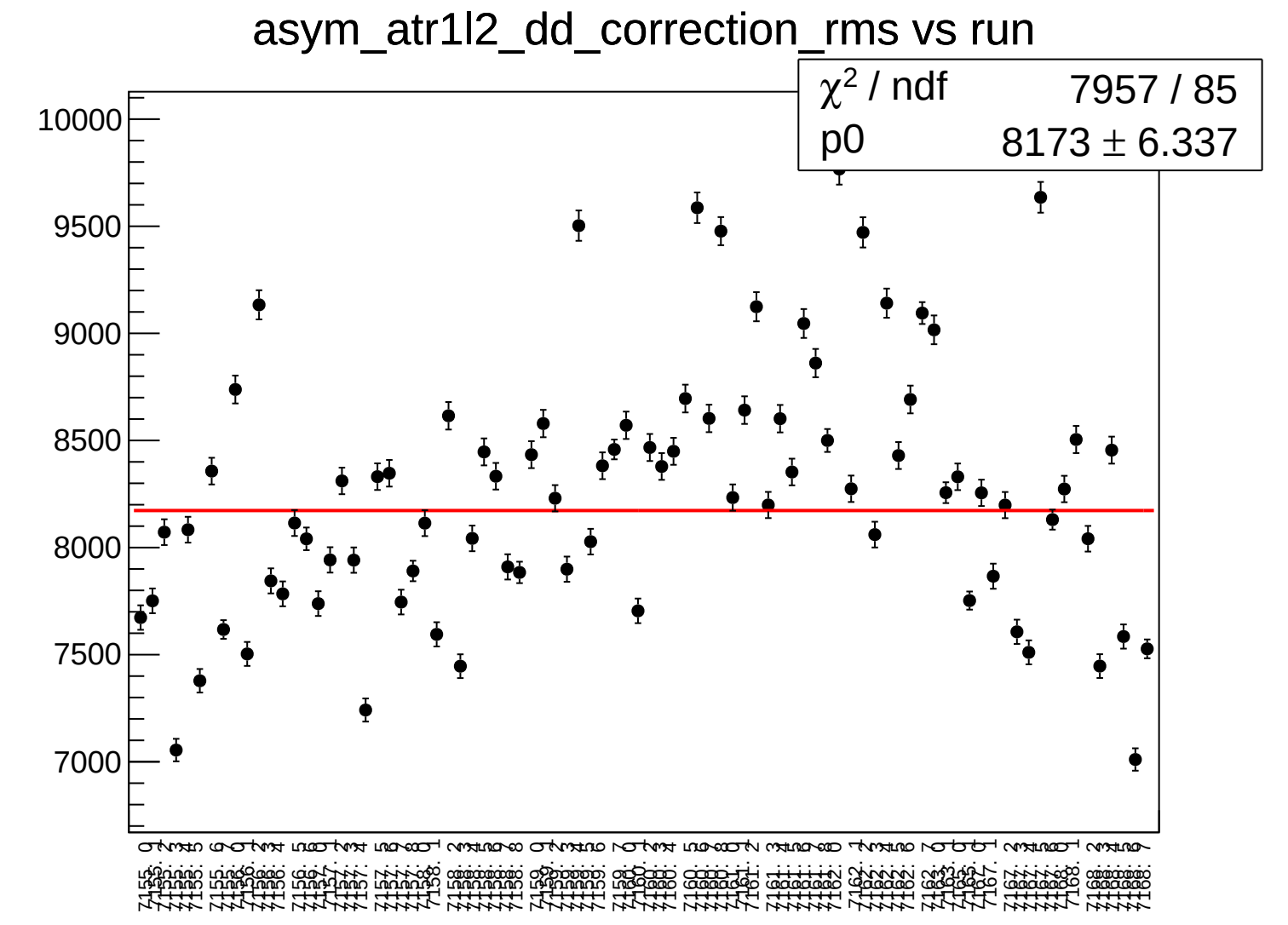

reg_asym_atr1l2_dd_mean vs run
χ² / ndf 90.58 / 85
p0 −1873 ± 2096
pull
Entries 86
Mean 188
Std Dev 169.4

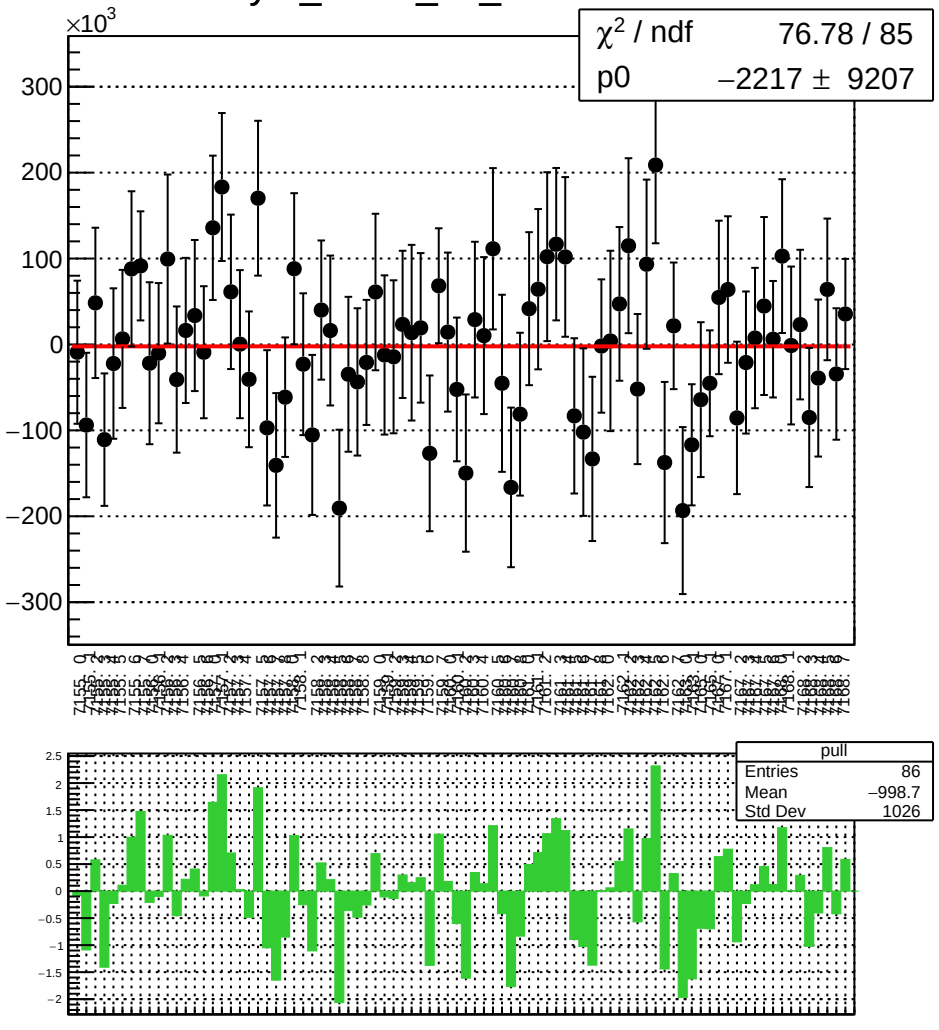

pull1D
Entries 86
Mean −0.01983
Std Dev 1.026

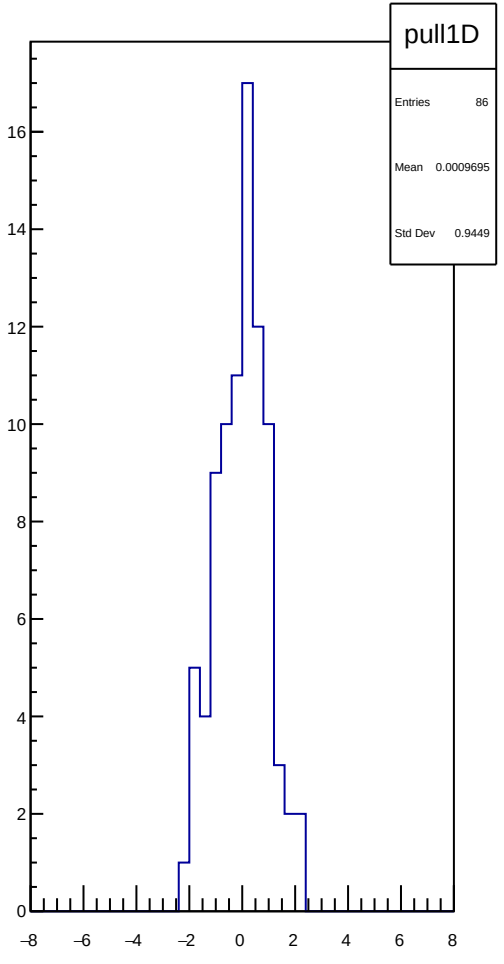

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 127.2 / 85
p0 1916 ± 1.482
1980
1960
1940
1920
1900
1880
1860

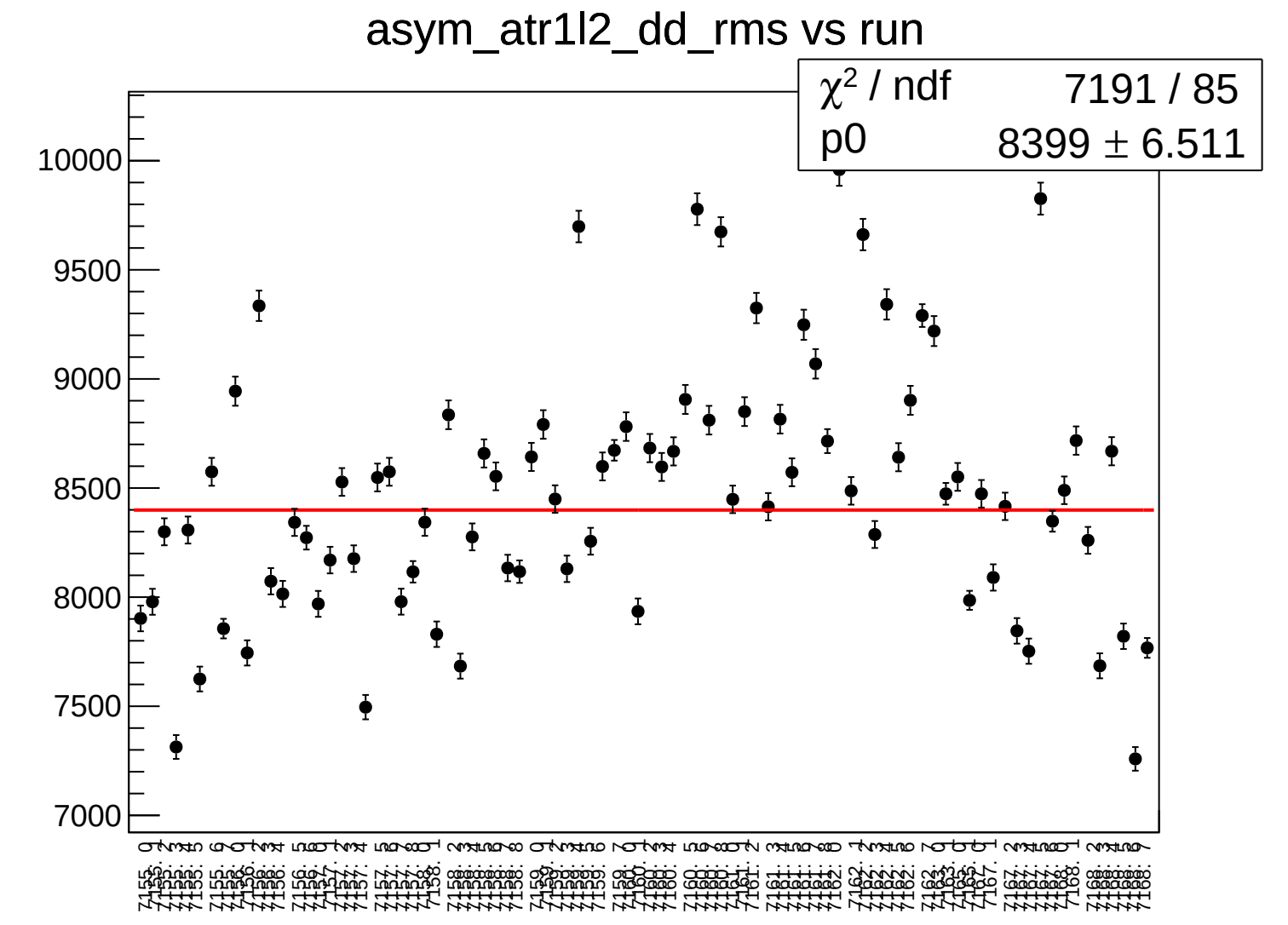

asym_atr1l2_dd_correction_mean vs run
×10^3
χ² / ndf 73.67 / 85
p0 1013 ± 8961
pull
Entries 86
Mean 6.523
Std Dev 38.68

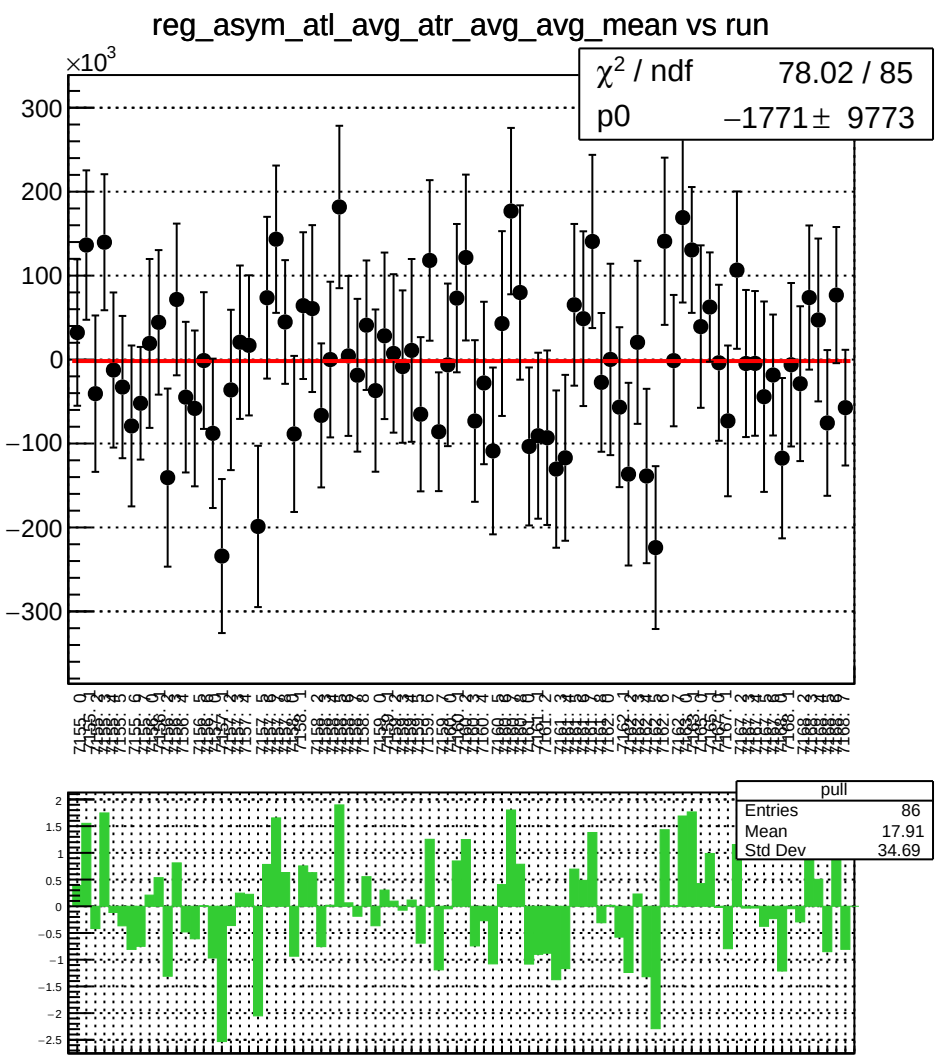

pull1D
Entries 86
Mean −0.009571
Std Dev 0.9255

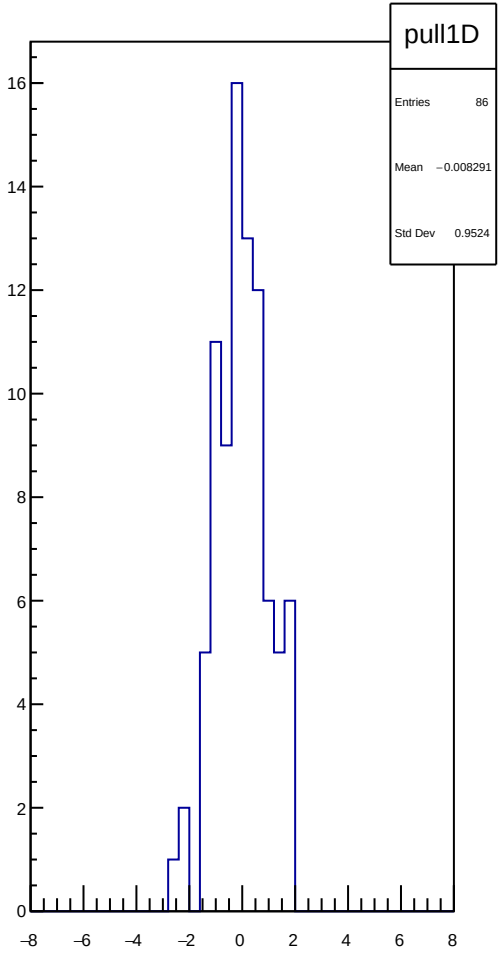

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 7957 / 85
p0 8173 ± 6.337
10000
9500
9000
8500
8000
7500
7000

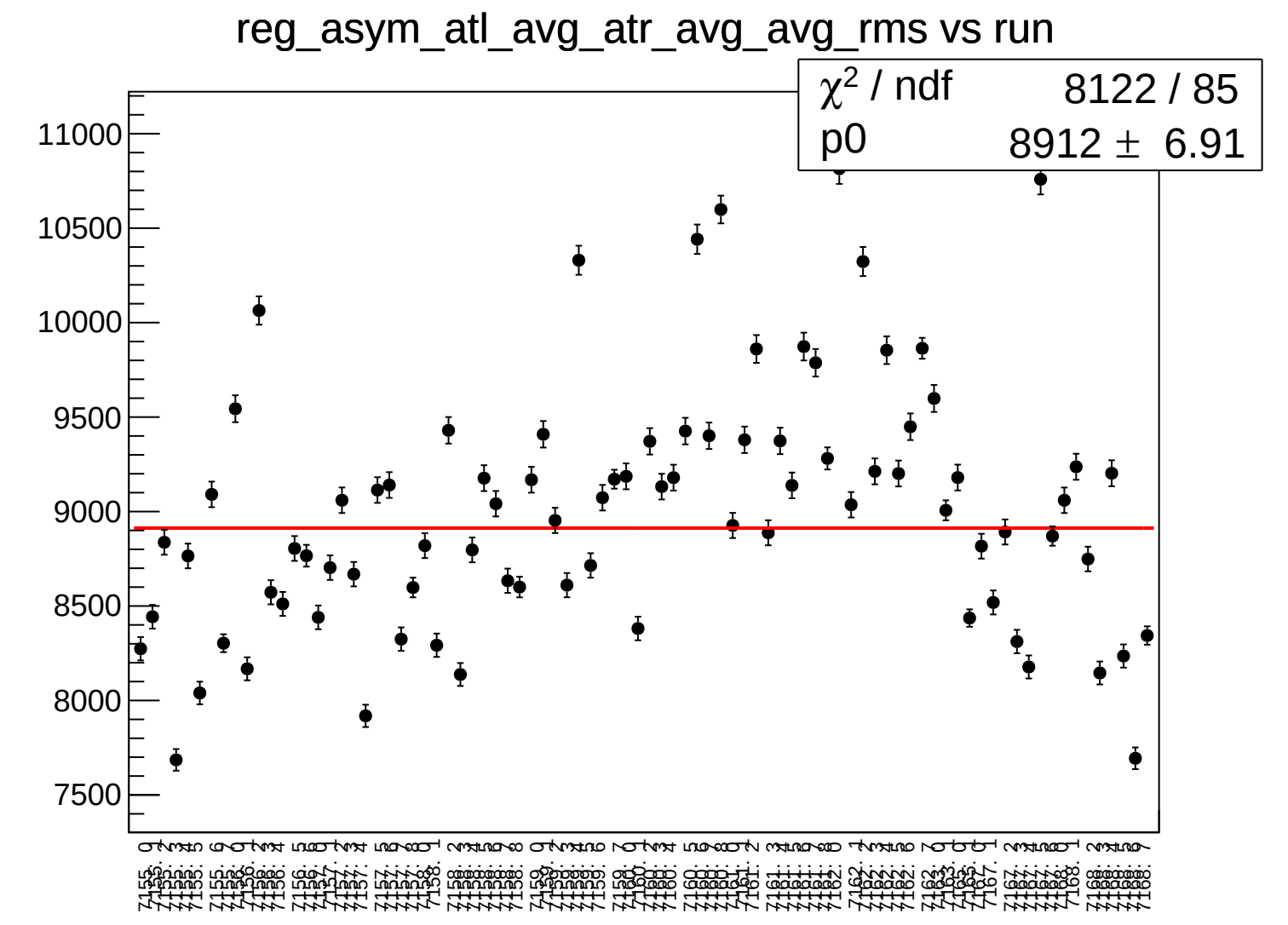

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 76.78 / 85
p0 −2217 ± 9207
pull
Entries 86
Mean −998.7
Std Dev 1026

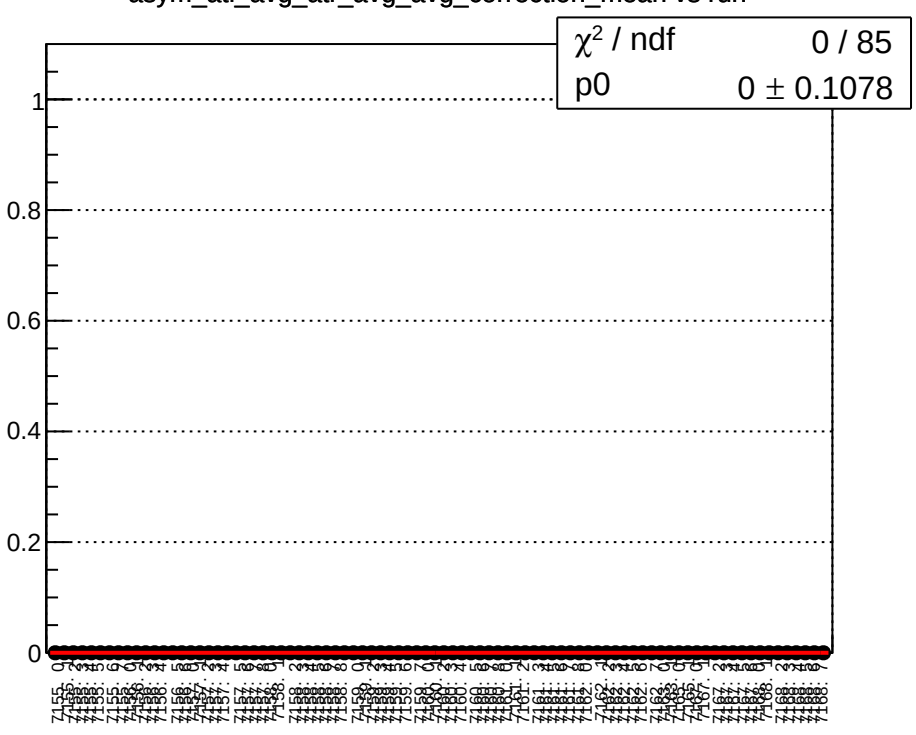

pull1D
Entries 86
Mean 0.0009695
Std Dev 0.9449

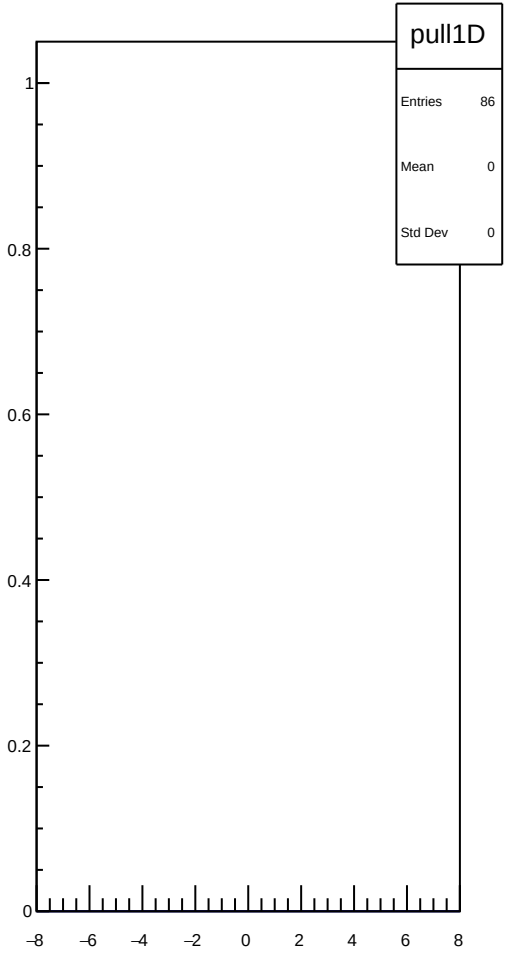

asym_atr1l2_dd_rms vs run
χ^2 / ndf 7191 / 85
p0 8399 ± 6.511
10000
9500
9000
8500
8000
7500
7000

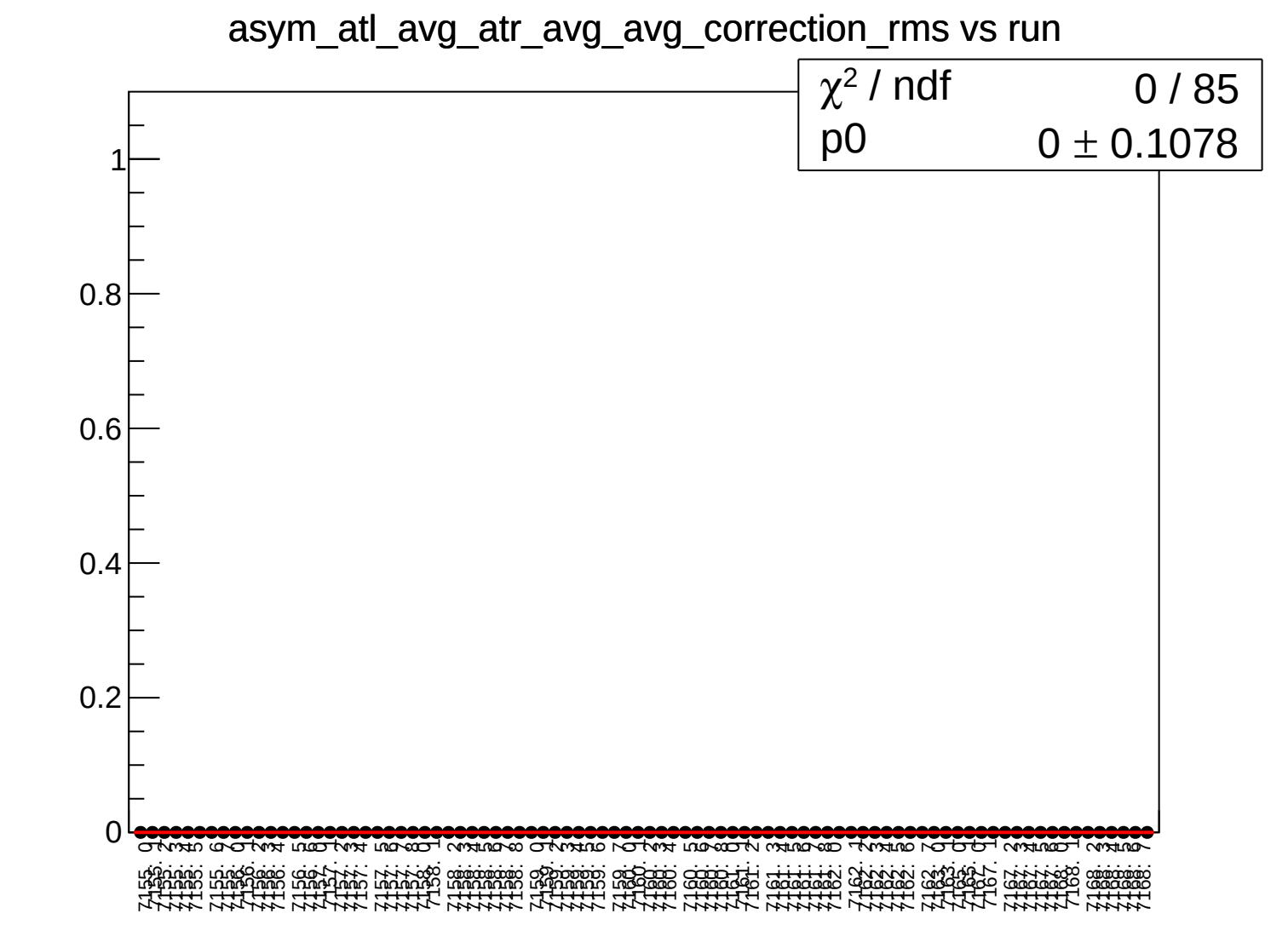

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 78.02 / 85
p0 −1771 ± 9773
pull
Entries 86
Mean 17.91
Std Dev 34.69

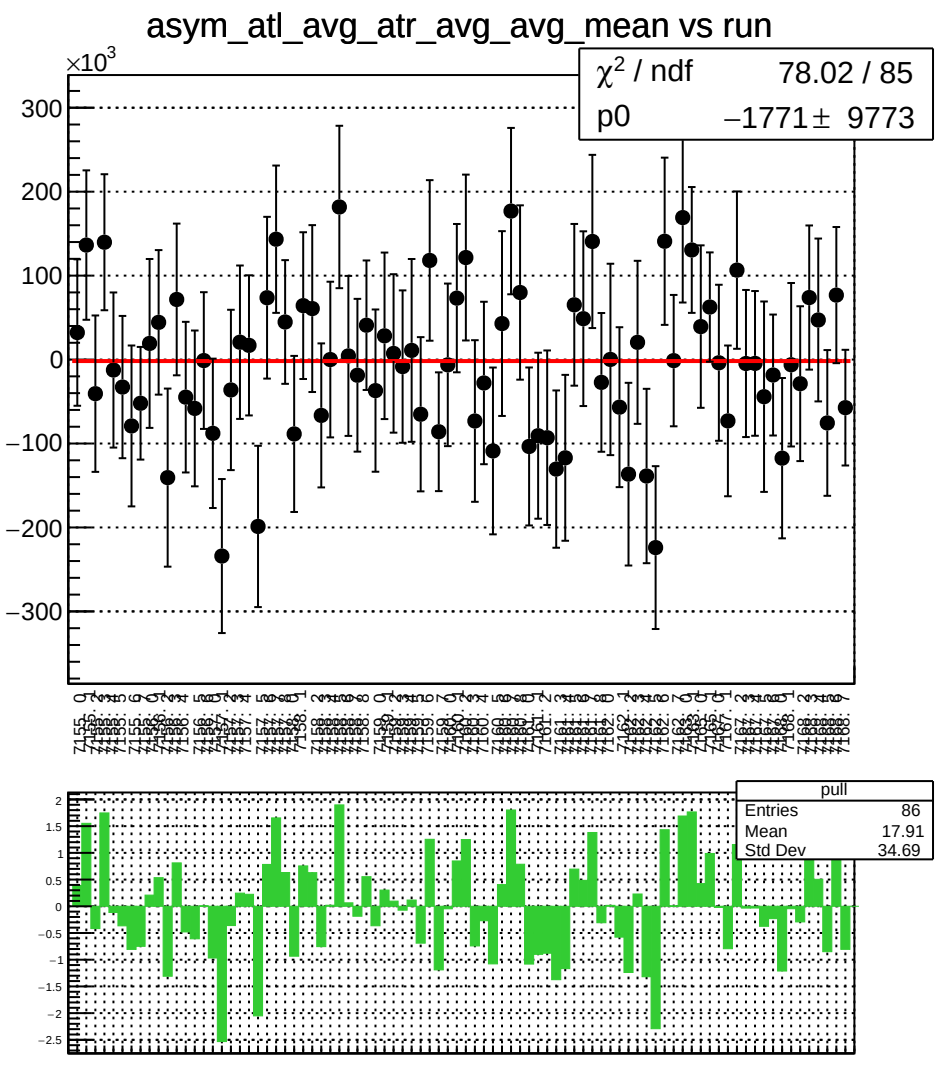

pull1D
Entries 86
Mean −0.008291
Std Dev 0.9524

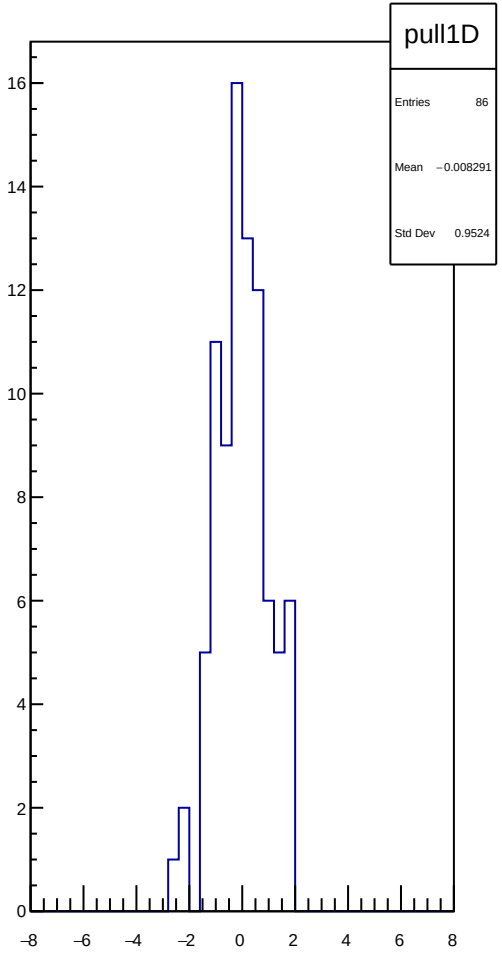

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 8122 / 85
p0 8912 ± 6.91
11000
10500
10000
9500
9000
8500
8000
7500

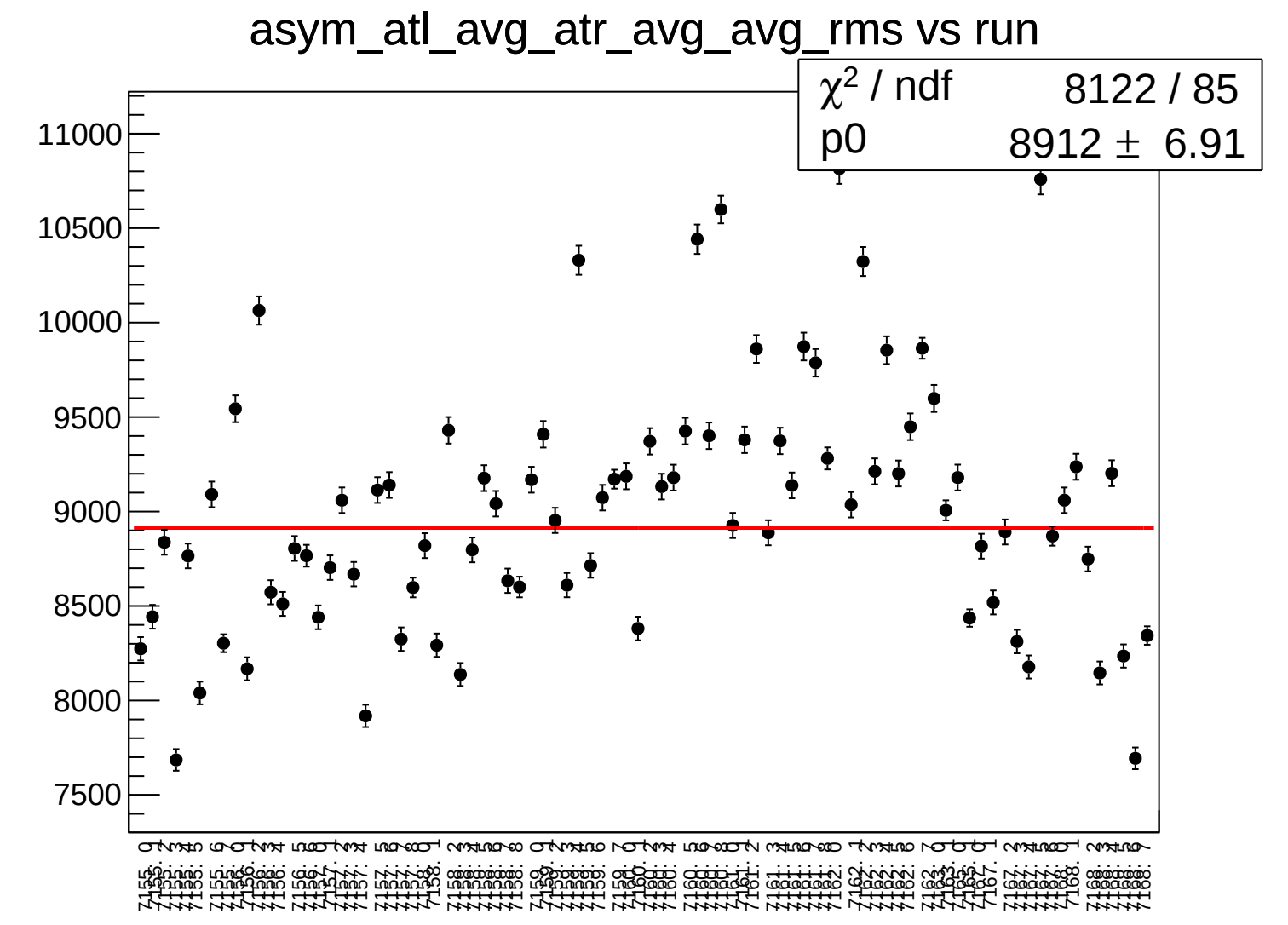

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

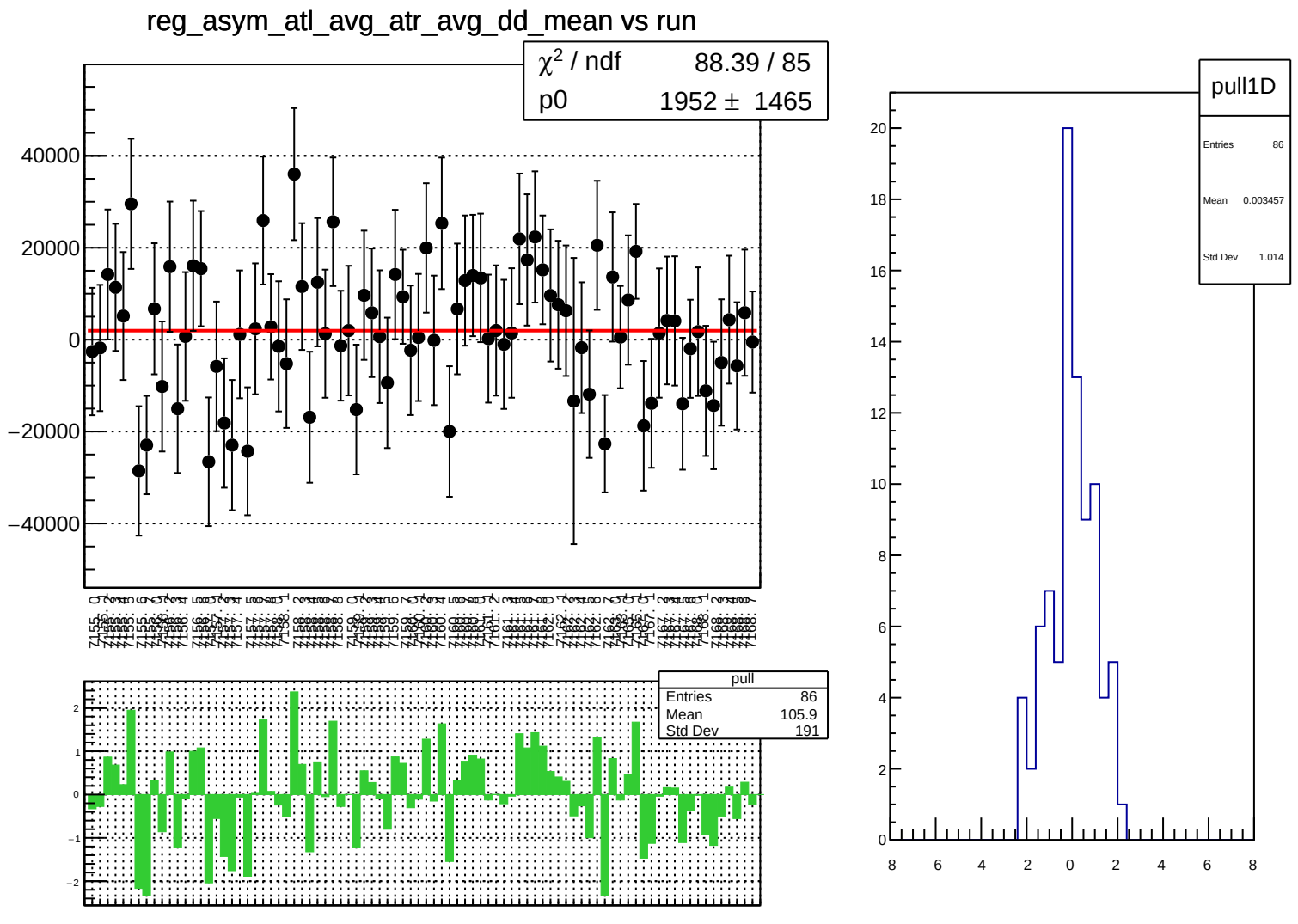

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

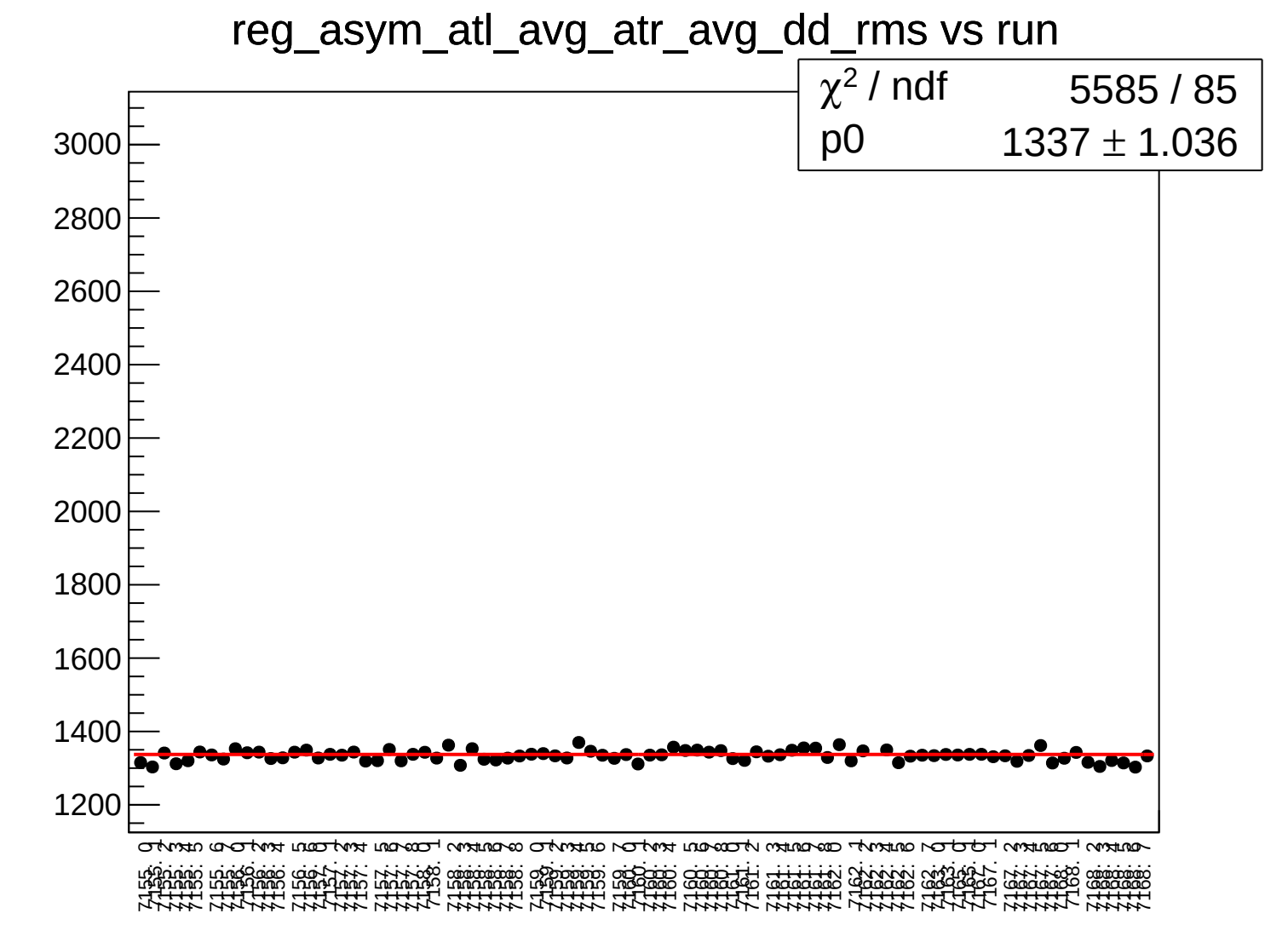

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

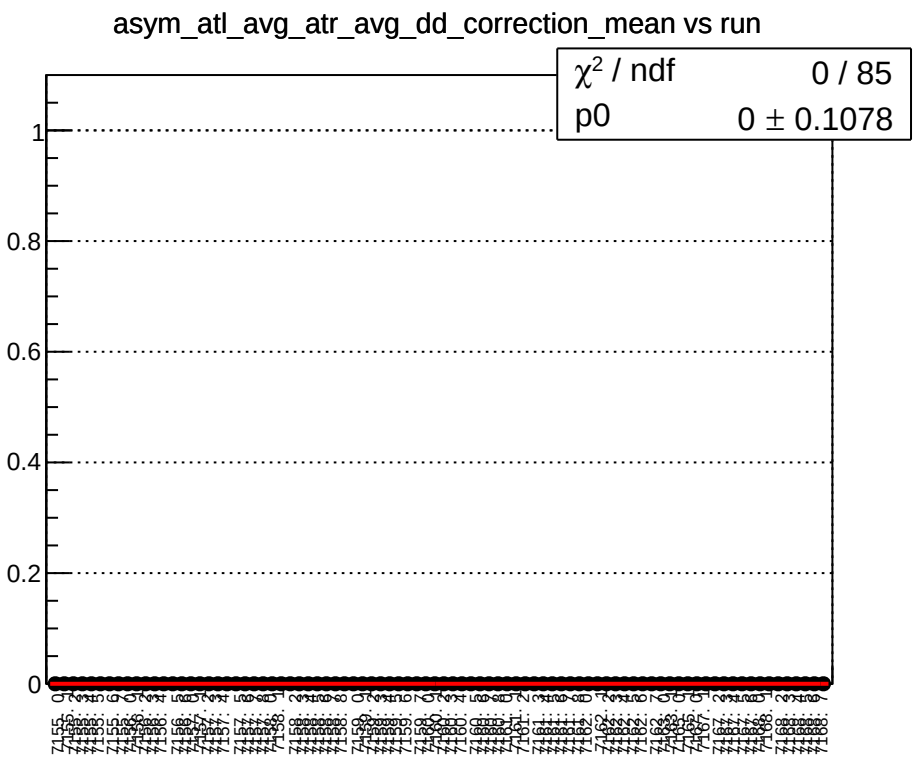

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 78.02 / 85
p0 −1771 ± 9773
pull
Entries 86
Mean 17.91
Std Dev 34.69

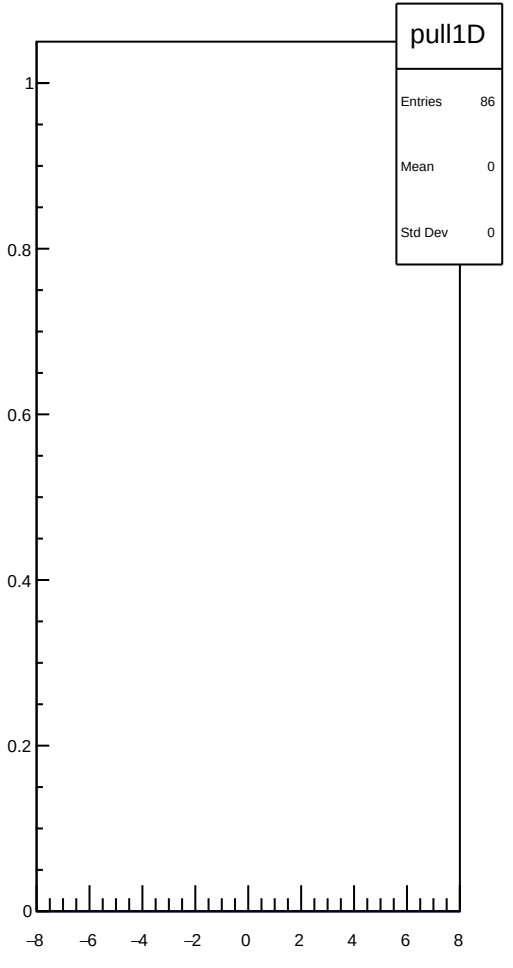

pull1D
Entries 86
Mean −0.008291
Std Dev 0.9524

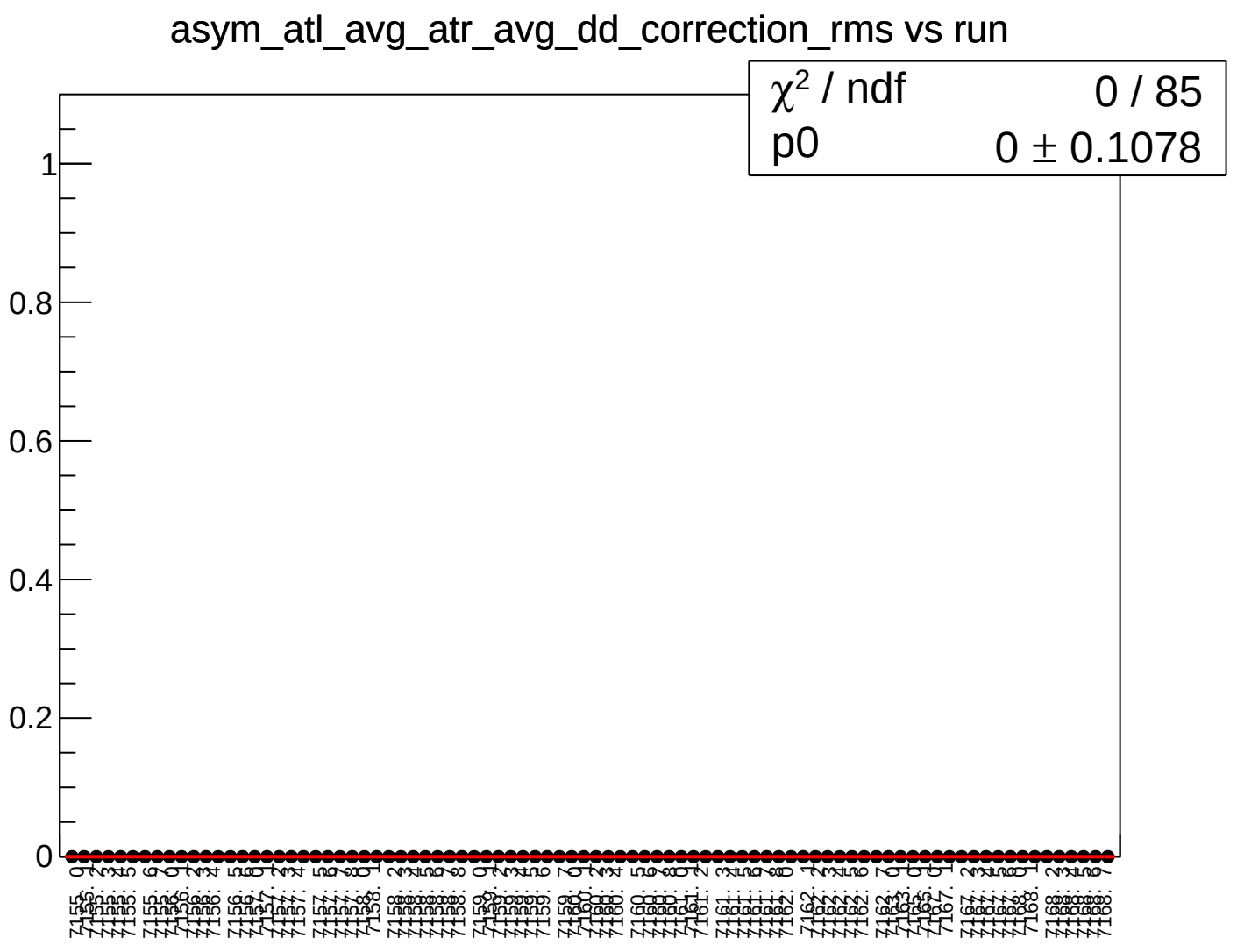

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 8122 / 85
p0 8912 ± 6.91
11000
10500
10000
9500
9000
8500
8000
7500

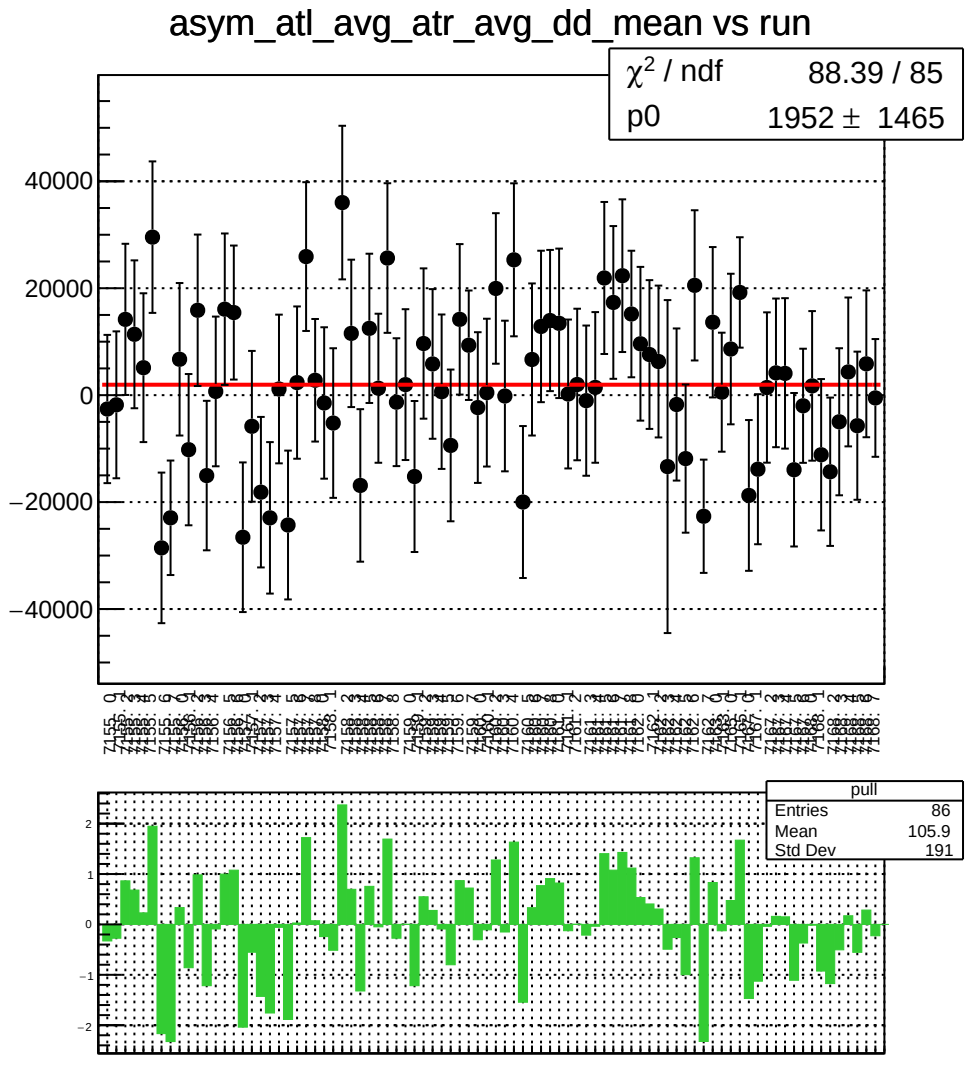

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 88.39 / 85
p0 1952 ± 1465
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 105.9
Std Dev 191
2
1
0
−1
−2
pull1D
Entries 86
Mean 0.003457
Std Dev 1.014
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

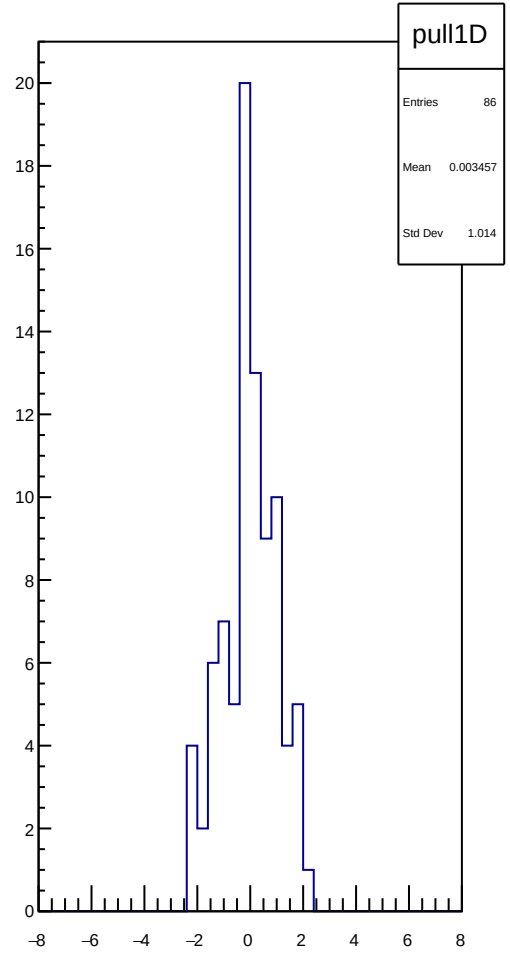

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 5585 / 85
p0 1337 ± 1.036
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

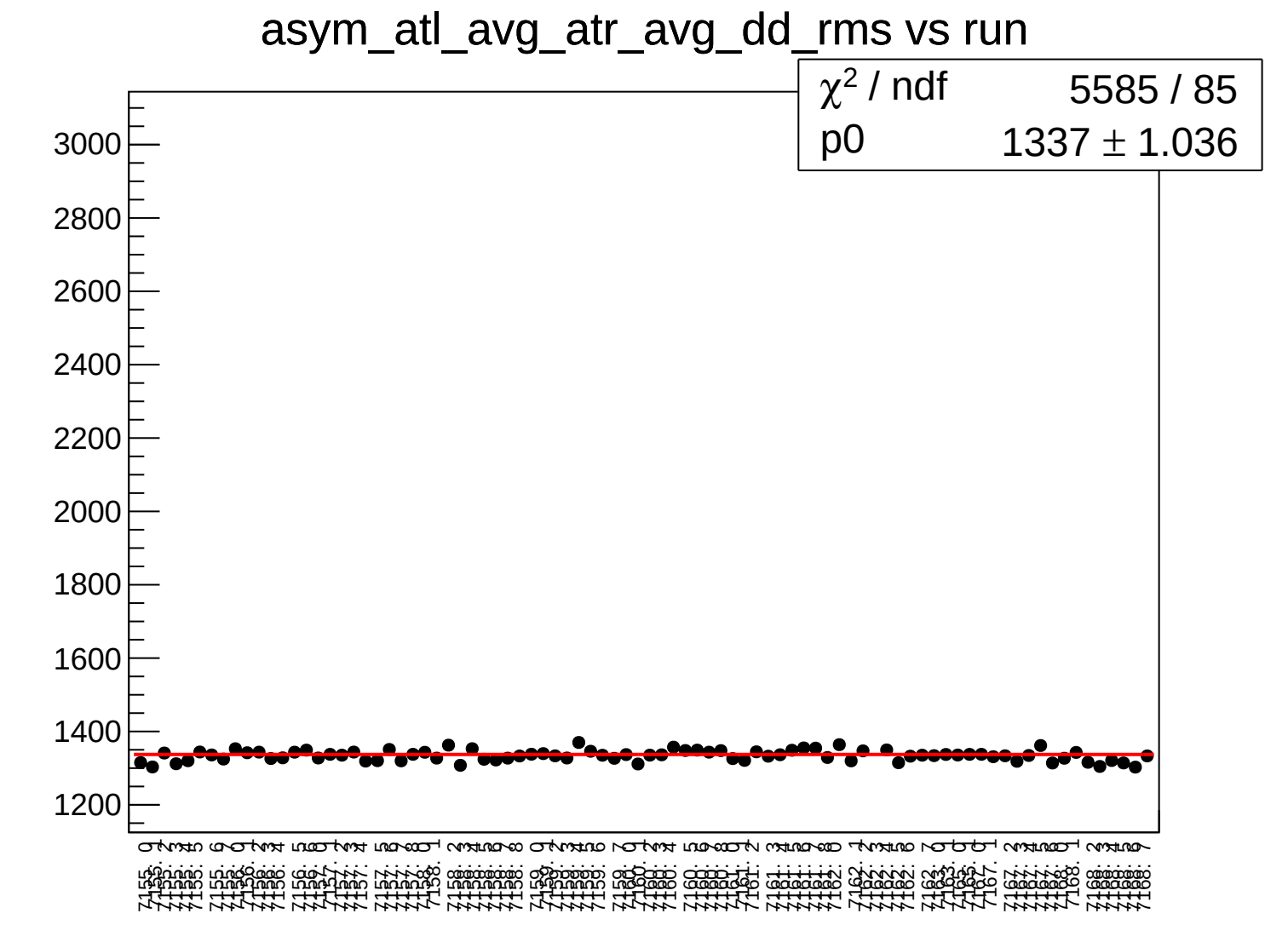

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

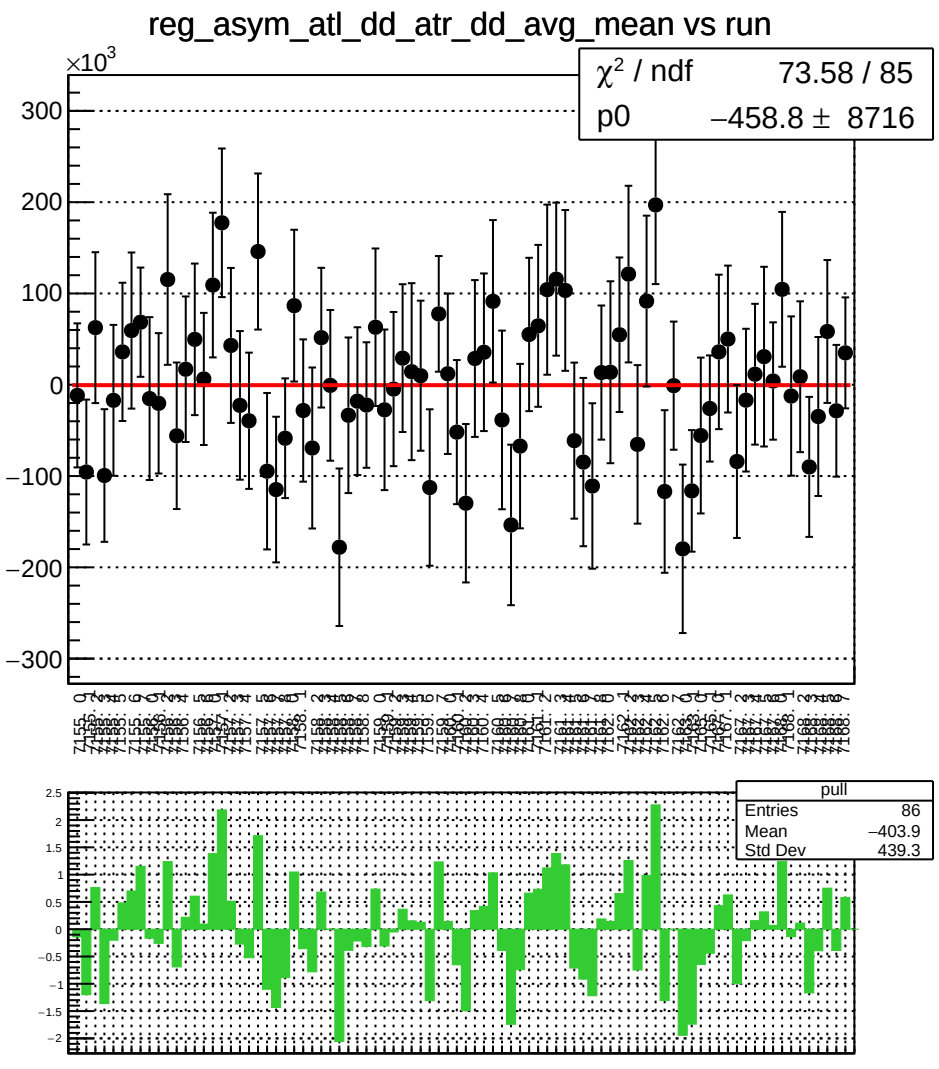

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

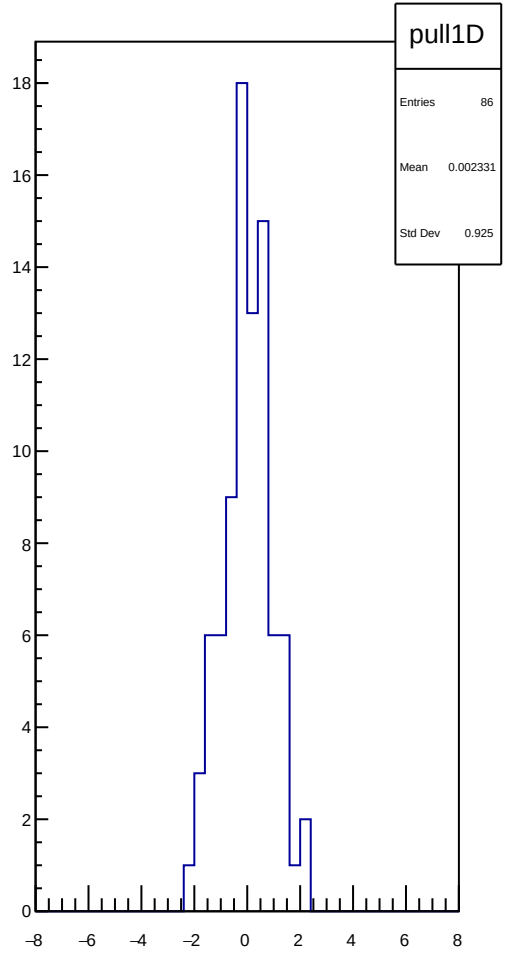

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

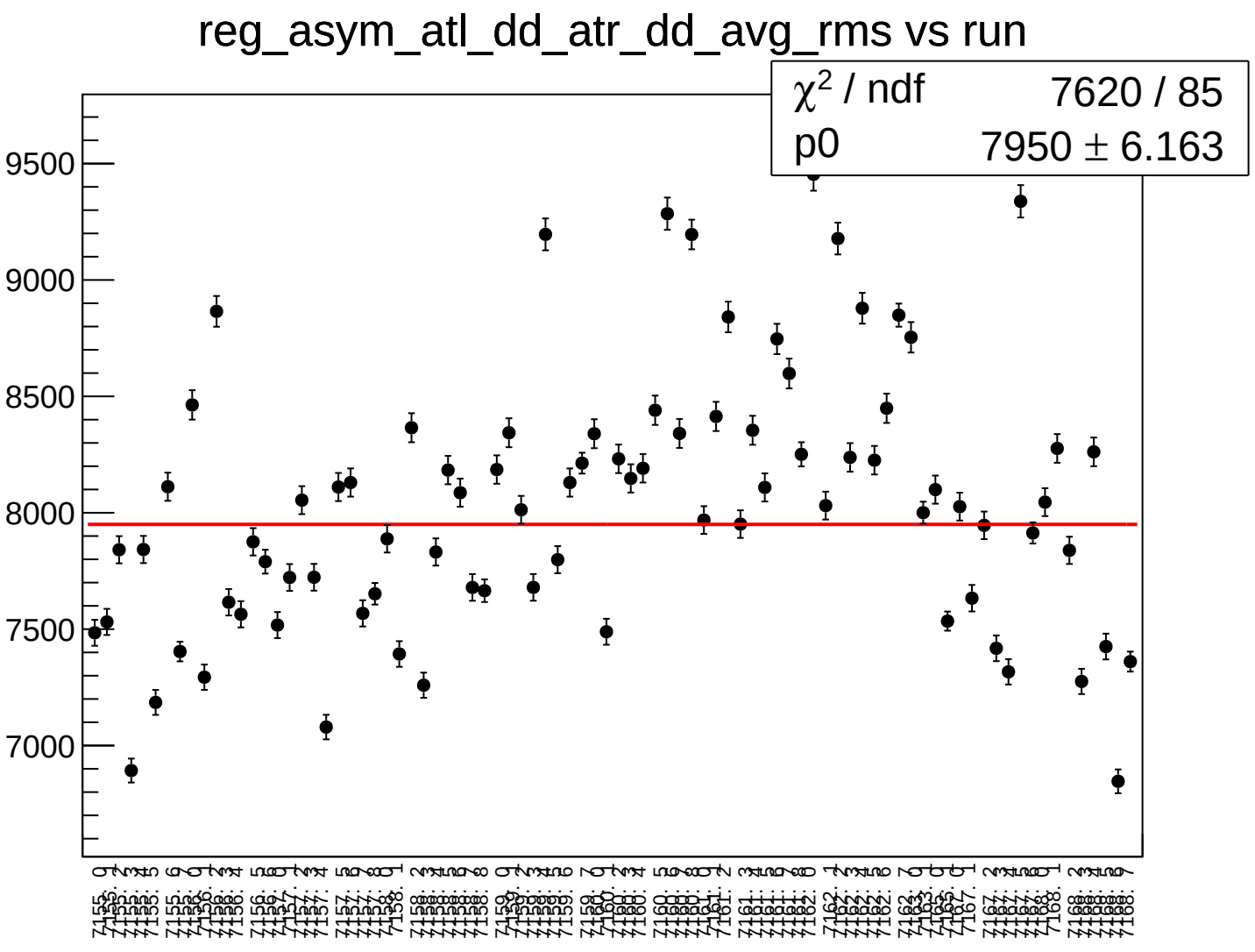

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 88.39 / 85
p0 1952 ± 1465
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 105.9
Std Dev 191
2
1
0
−1
−2

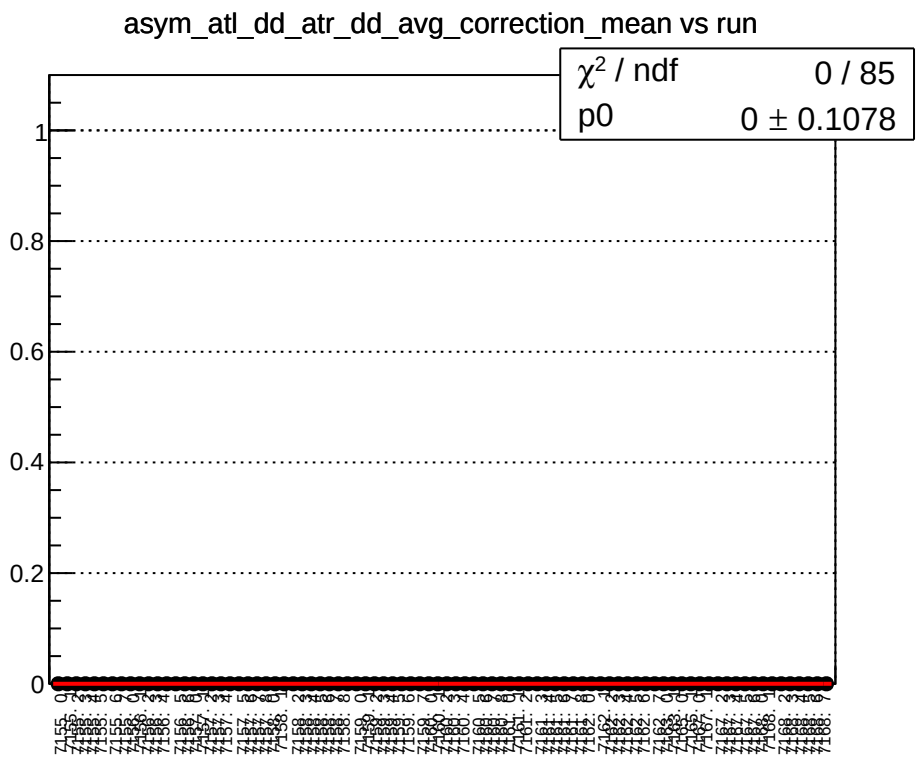

pull1D
Entries 86
Mean 0.003457
Std Dev 1.014
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

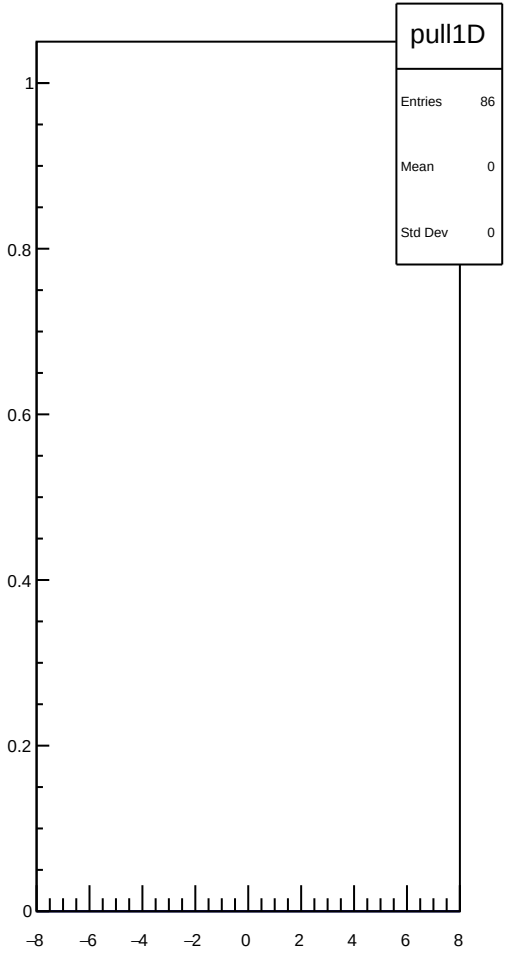

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 5585 / 85
p0 1337 ± 1.036
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

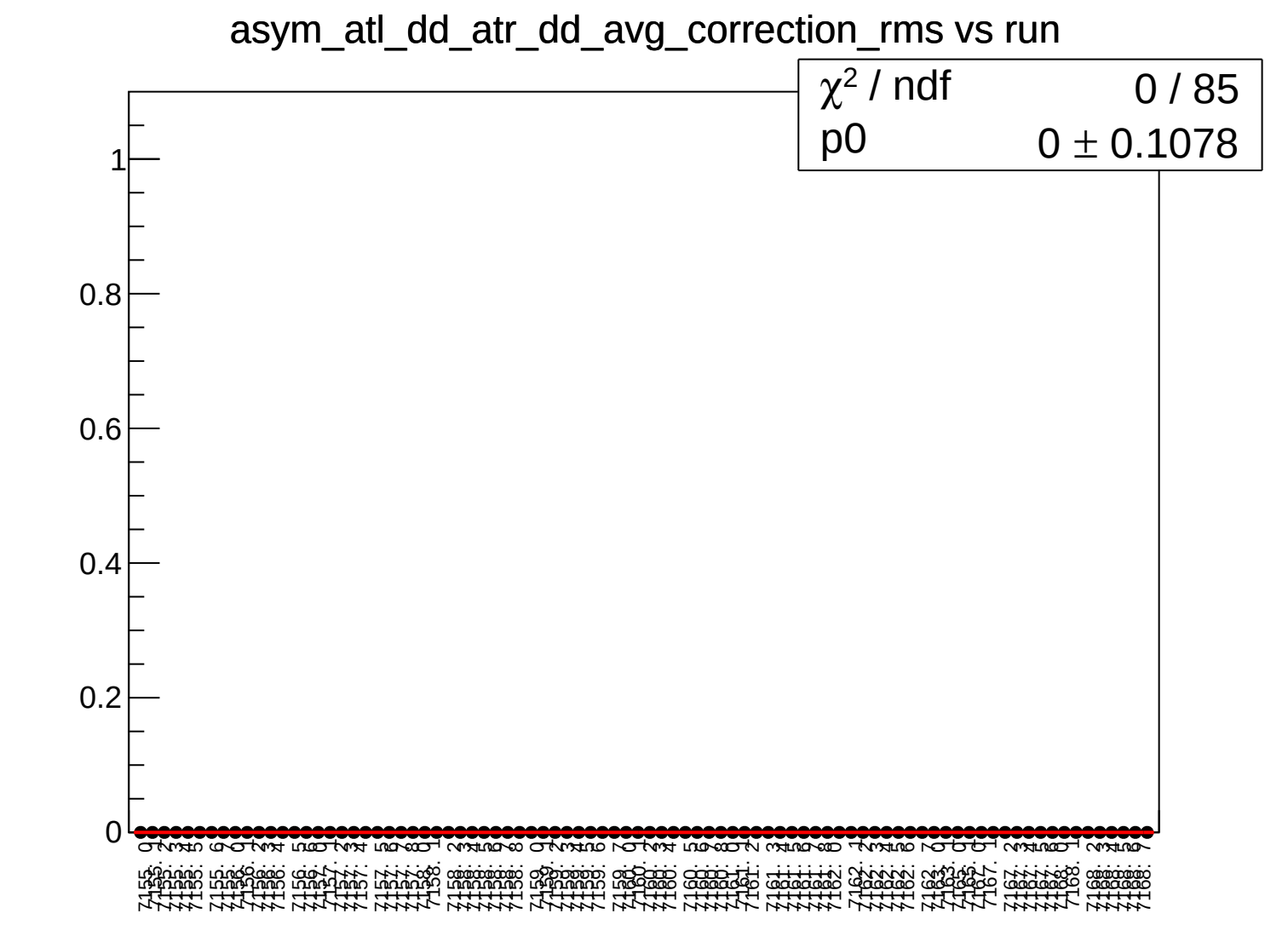

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 73.58 / 85
p0 −458.8 ± 8716
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −403.9
Std Dev 439.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

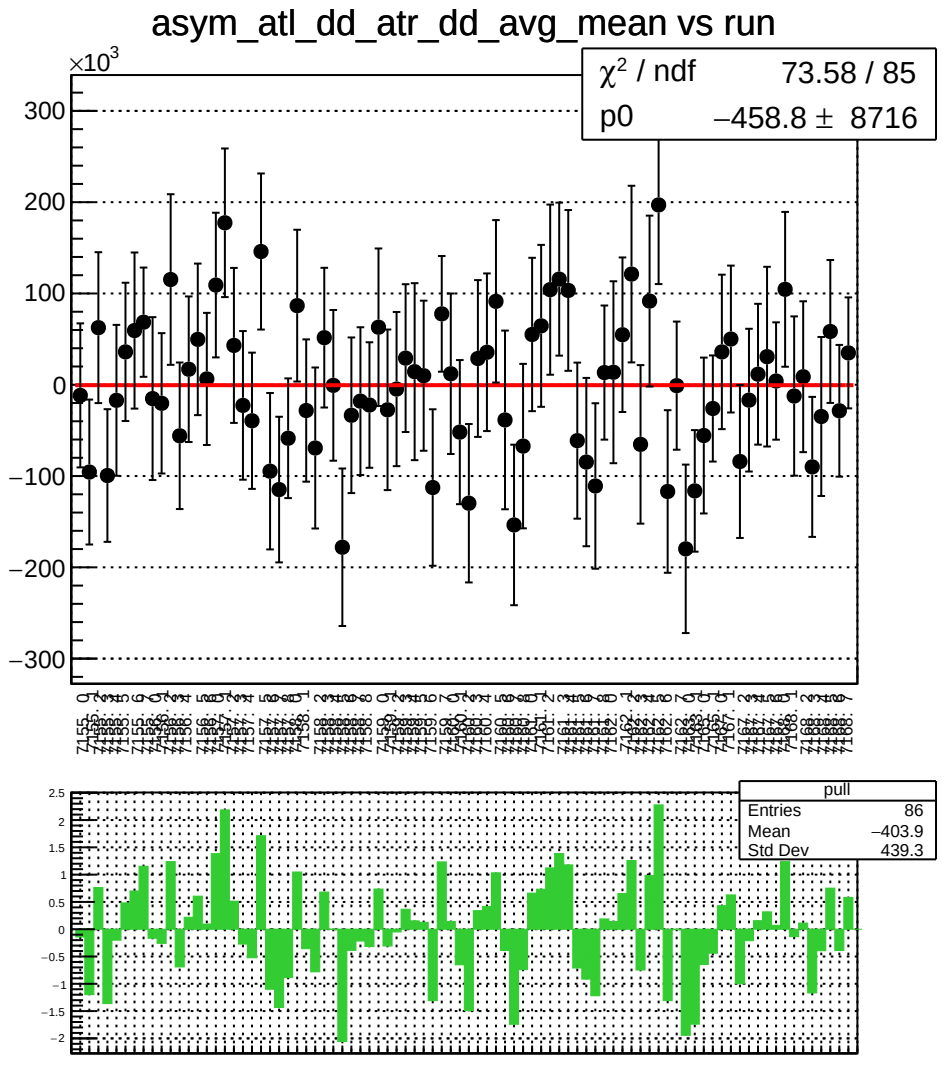

pull1D
Entries 86
Mean 0.002331
Std Dev 0.925
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

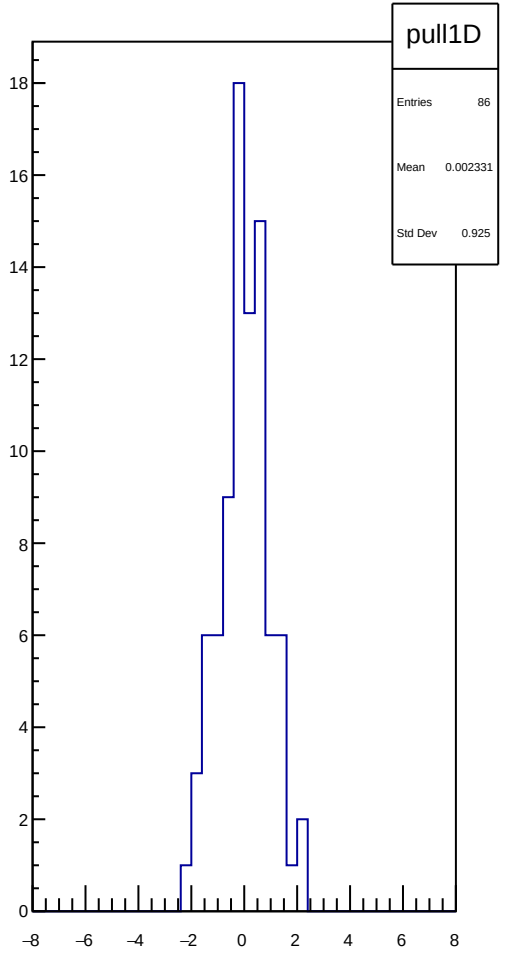

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 7620 / 85
p0 7950 ± 6.163
9500
9000
8500
8000
7500
7000

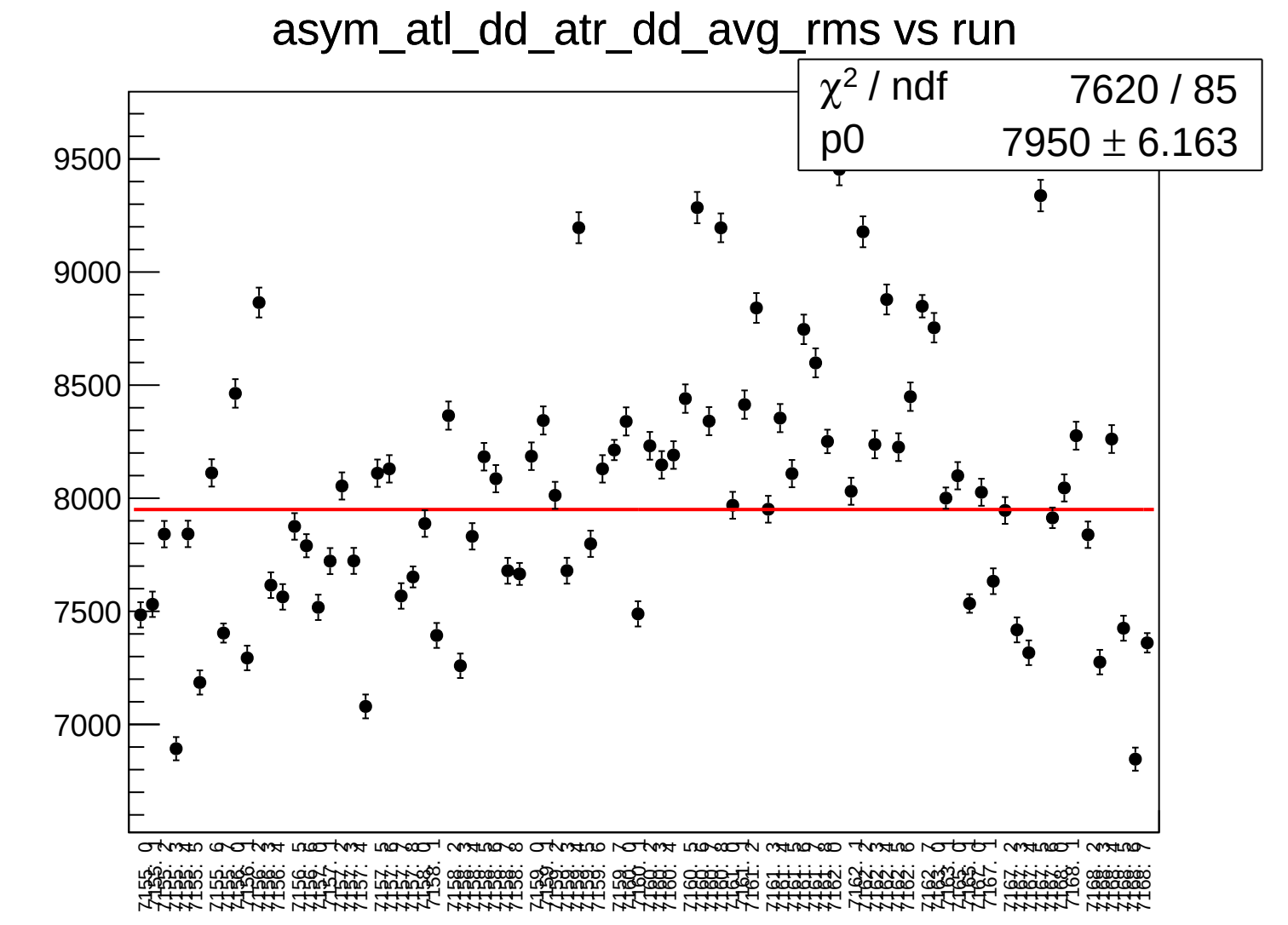

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

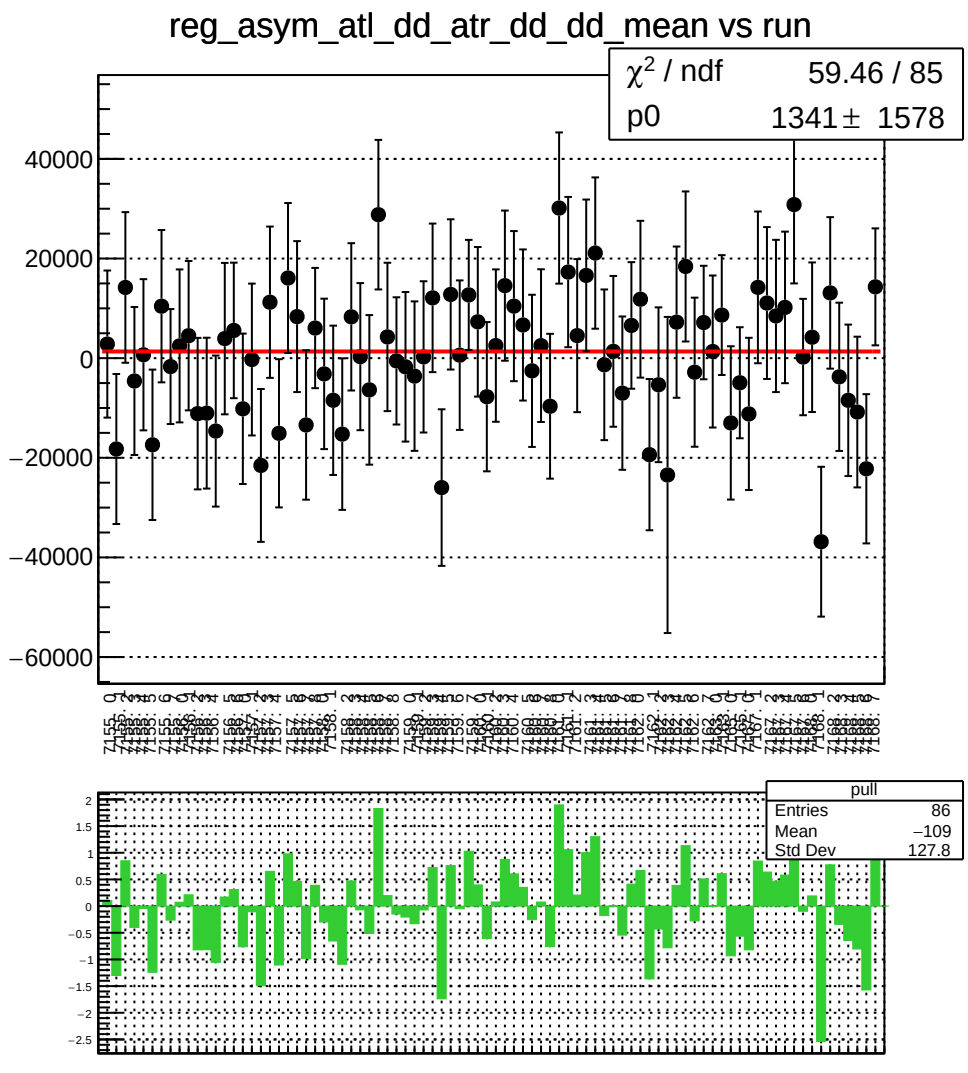

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

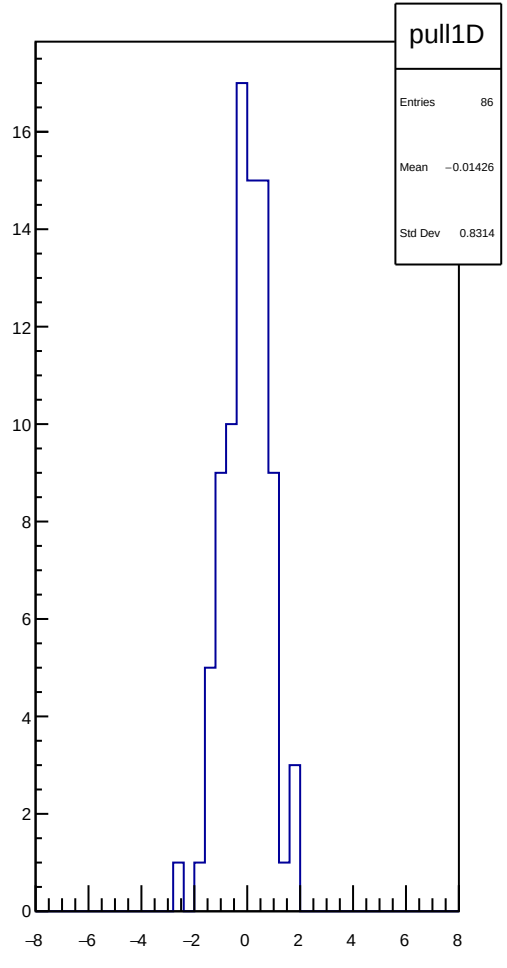

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

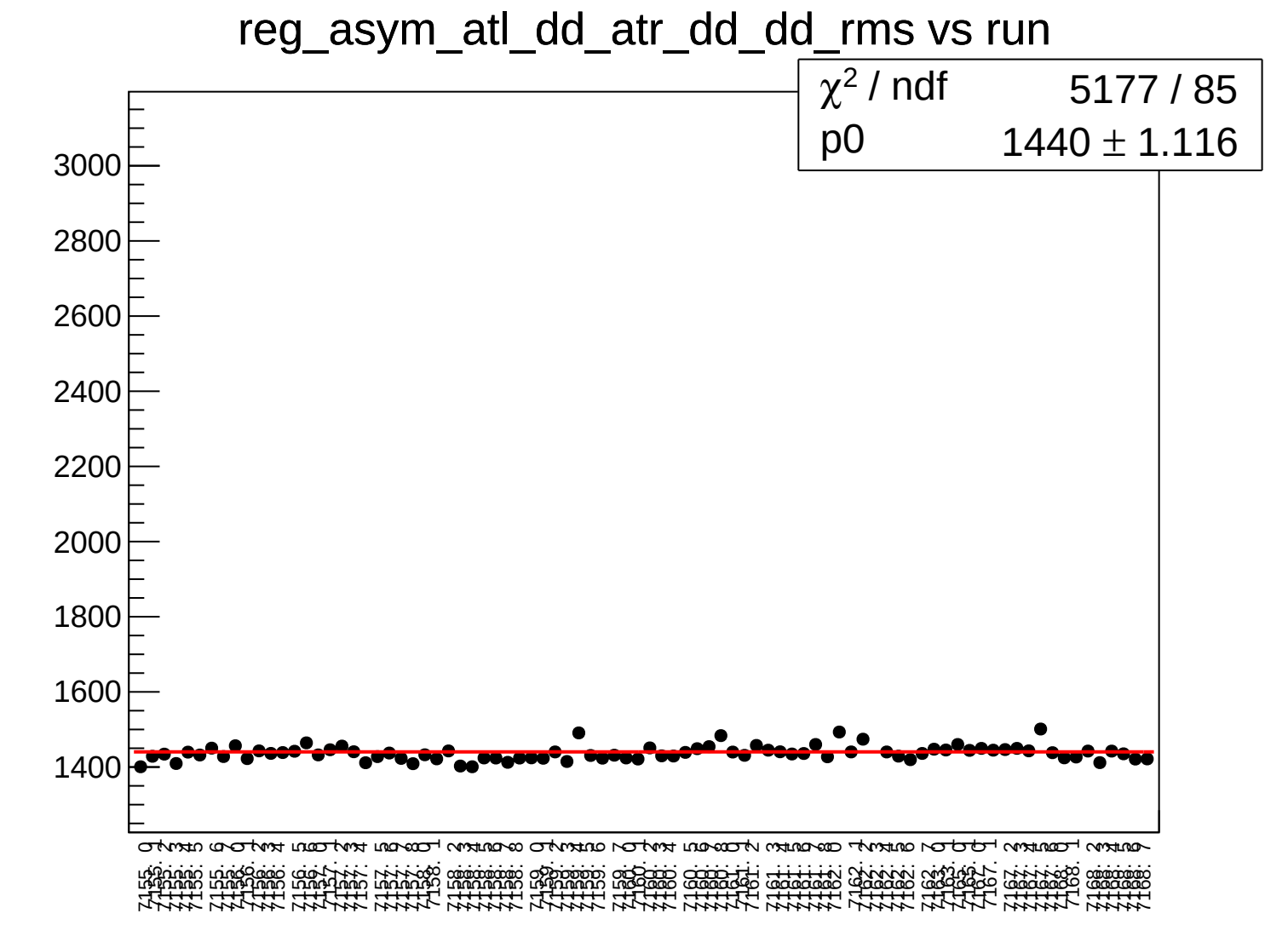

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 73.58 / 85
p0 −458.8 ± 8716
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −403.9
Std Dev 439.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

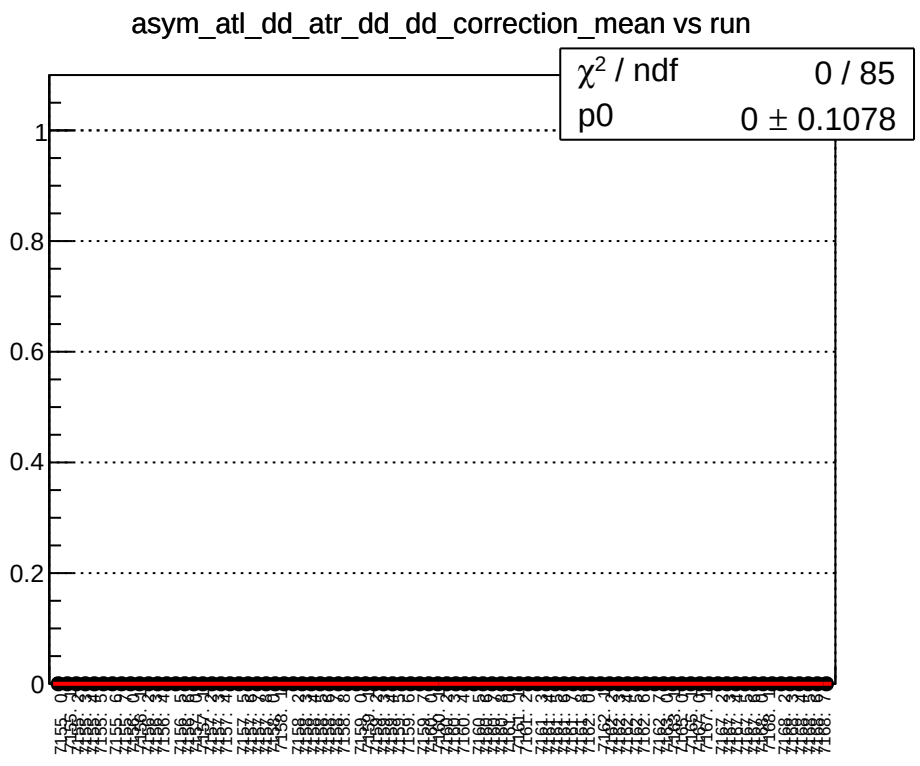

pull1D
Entries 86
Mean 0.002331
Std Dev 0.925
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

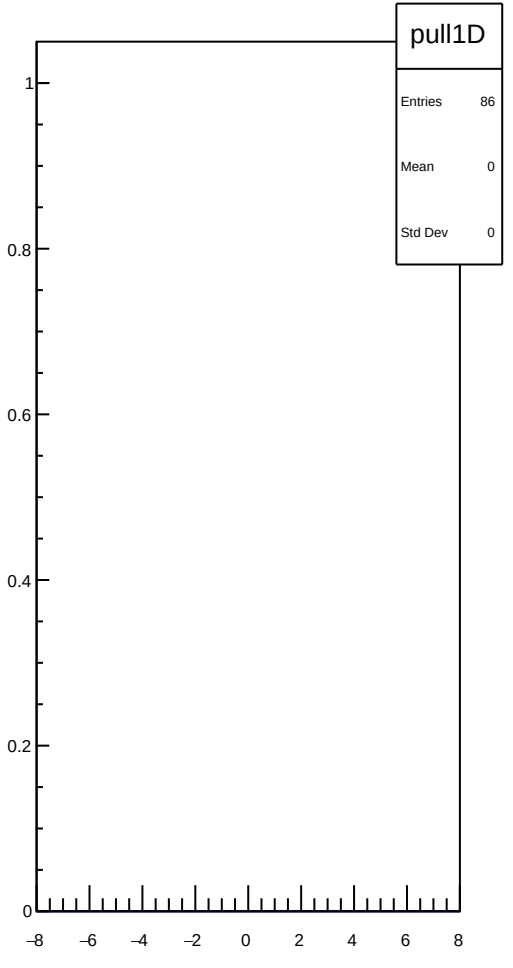

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 7620 / 85
p0 7950 ± 6.163
9500
9000
8500
8000
7500
7000

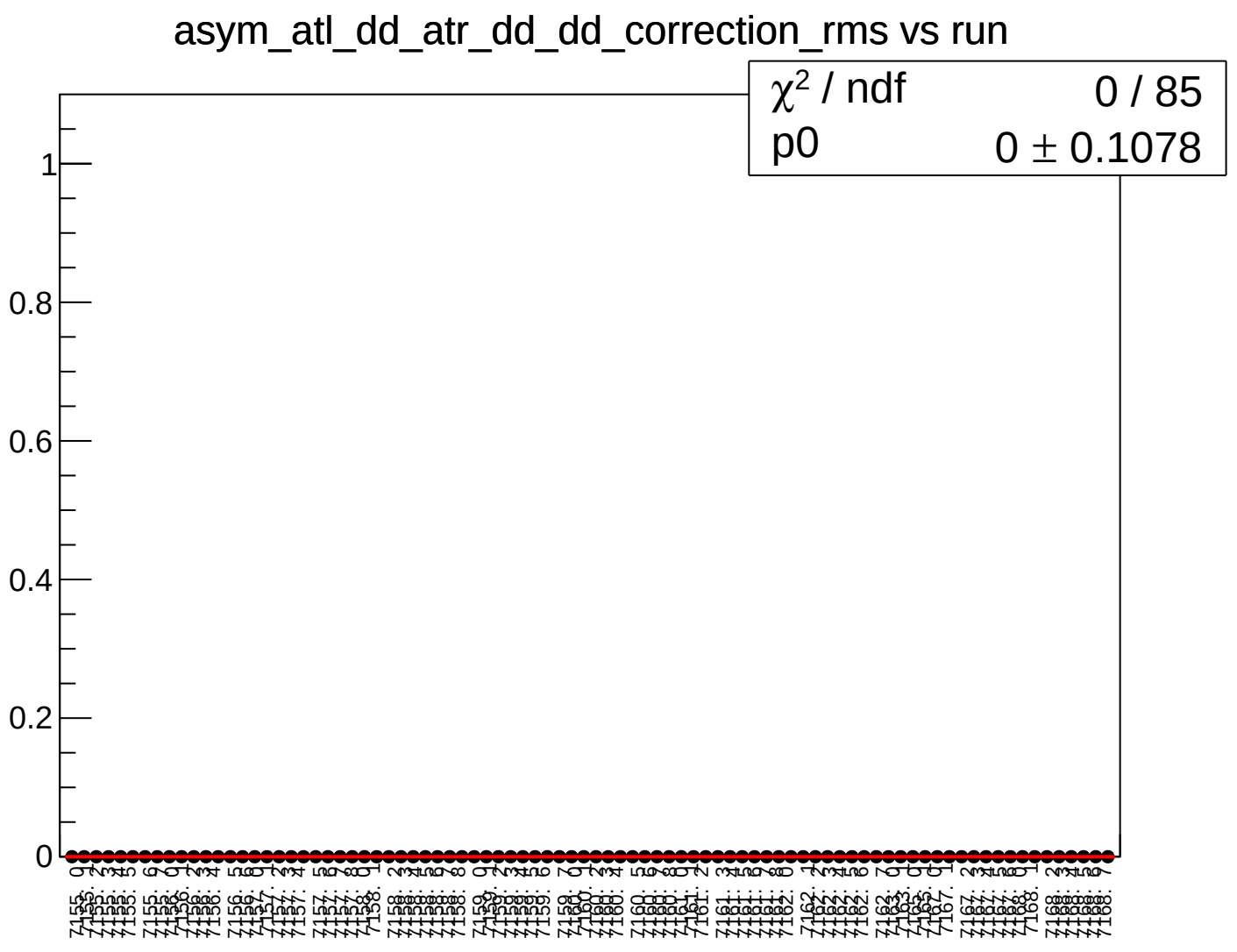

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 59.46 / 85
p0 1341 ± 1578
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −109
Std Dev 127.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

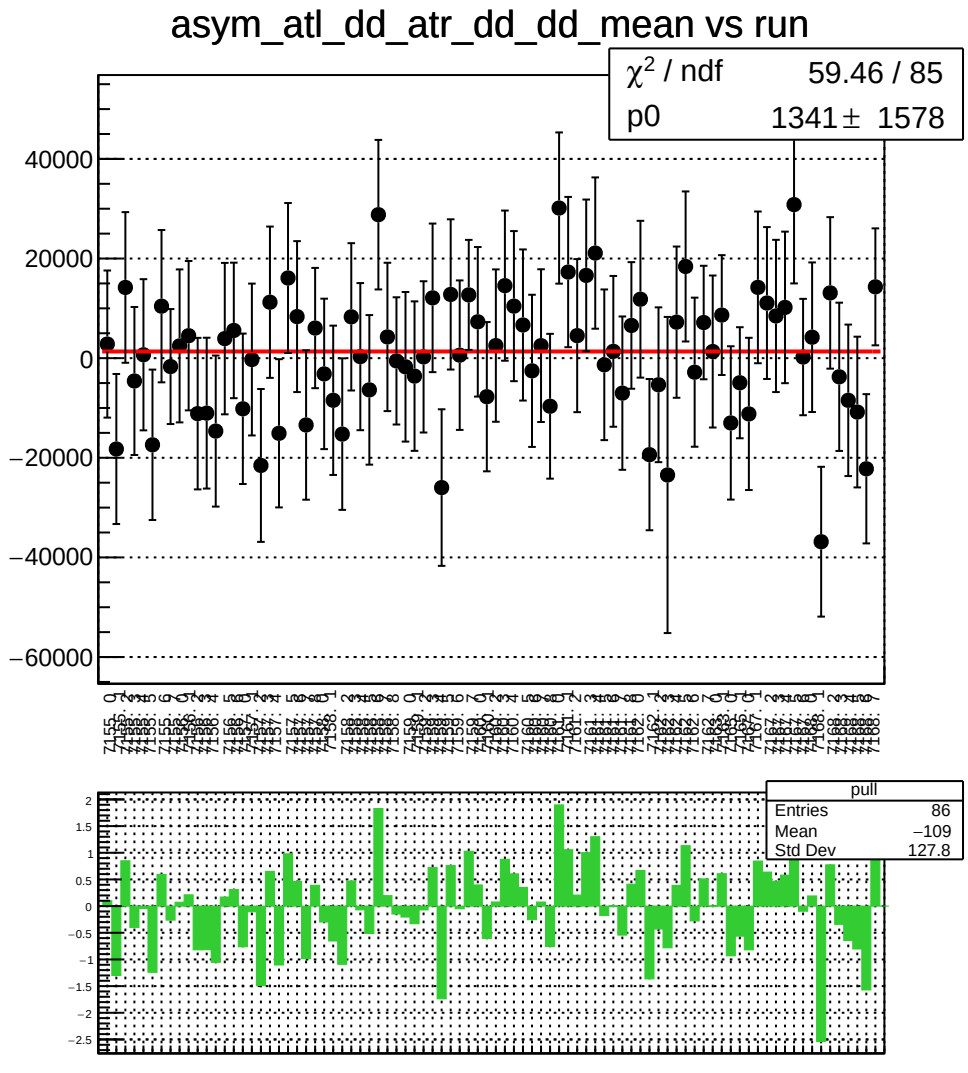

pull1D
Entries 86
Mean −0.01426
Std Dev 0.8314
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

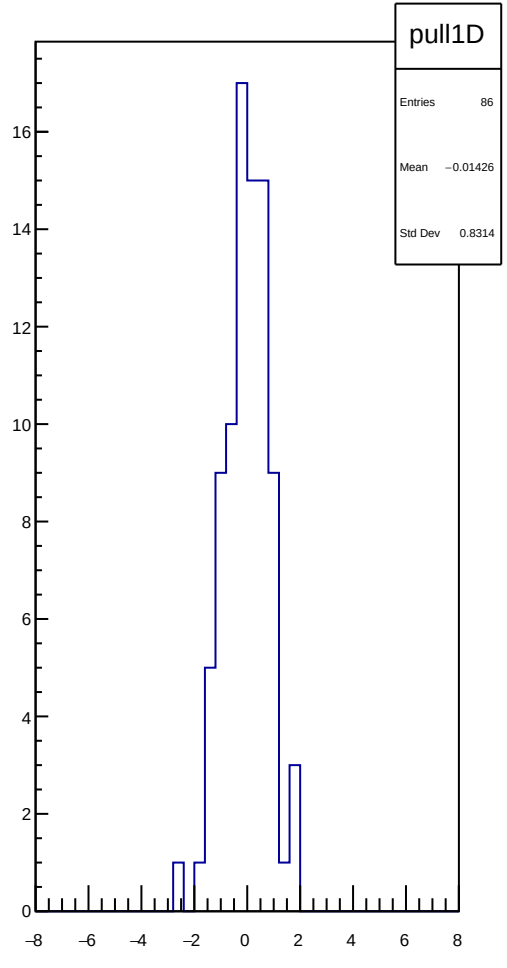

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 5177 / 85
p0 1440 ± 1.116
3000
2800
2600
2400
2200
2000
1800
1600
1400

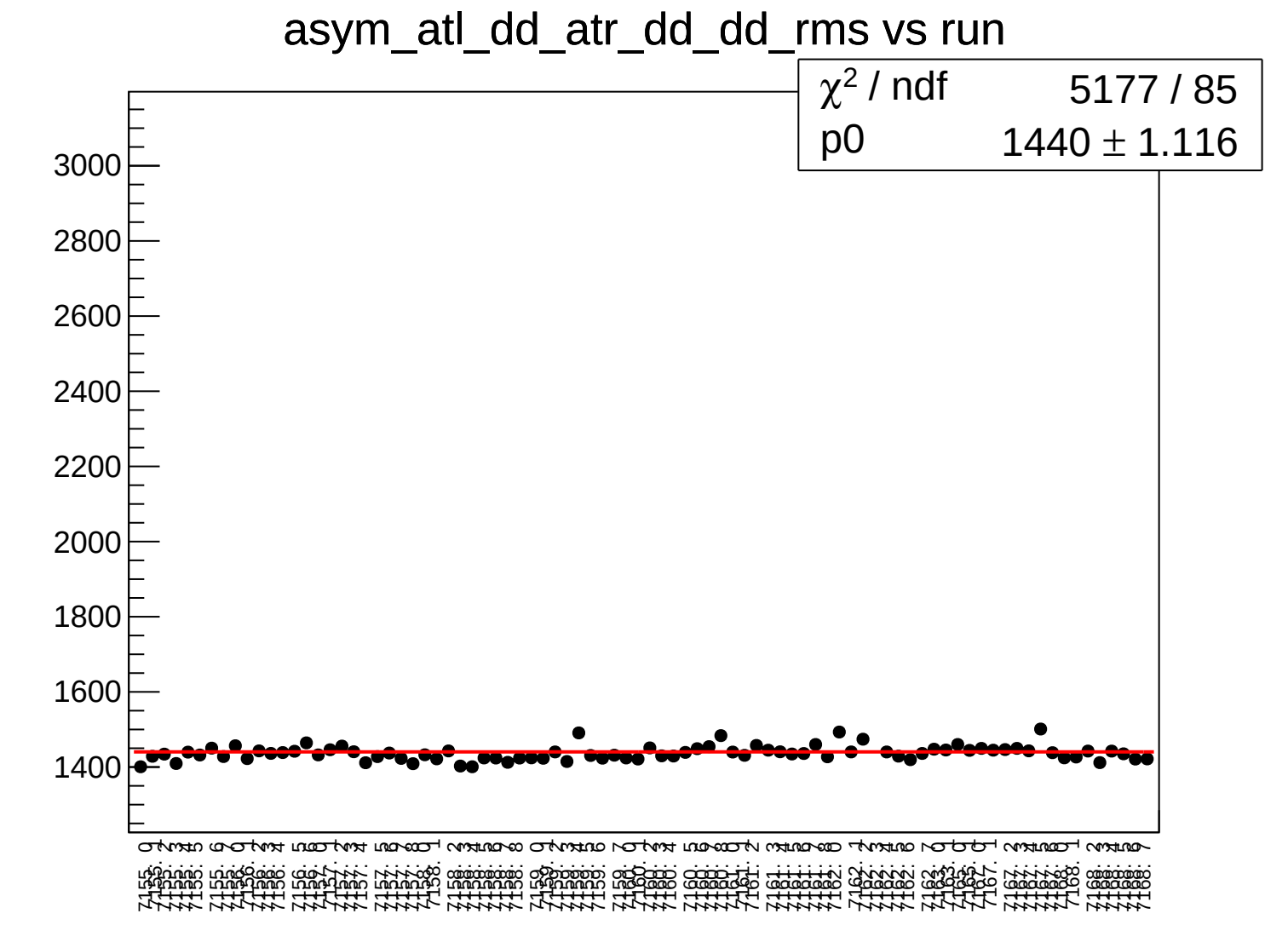

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

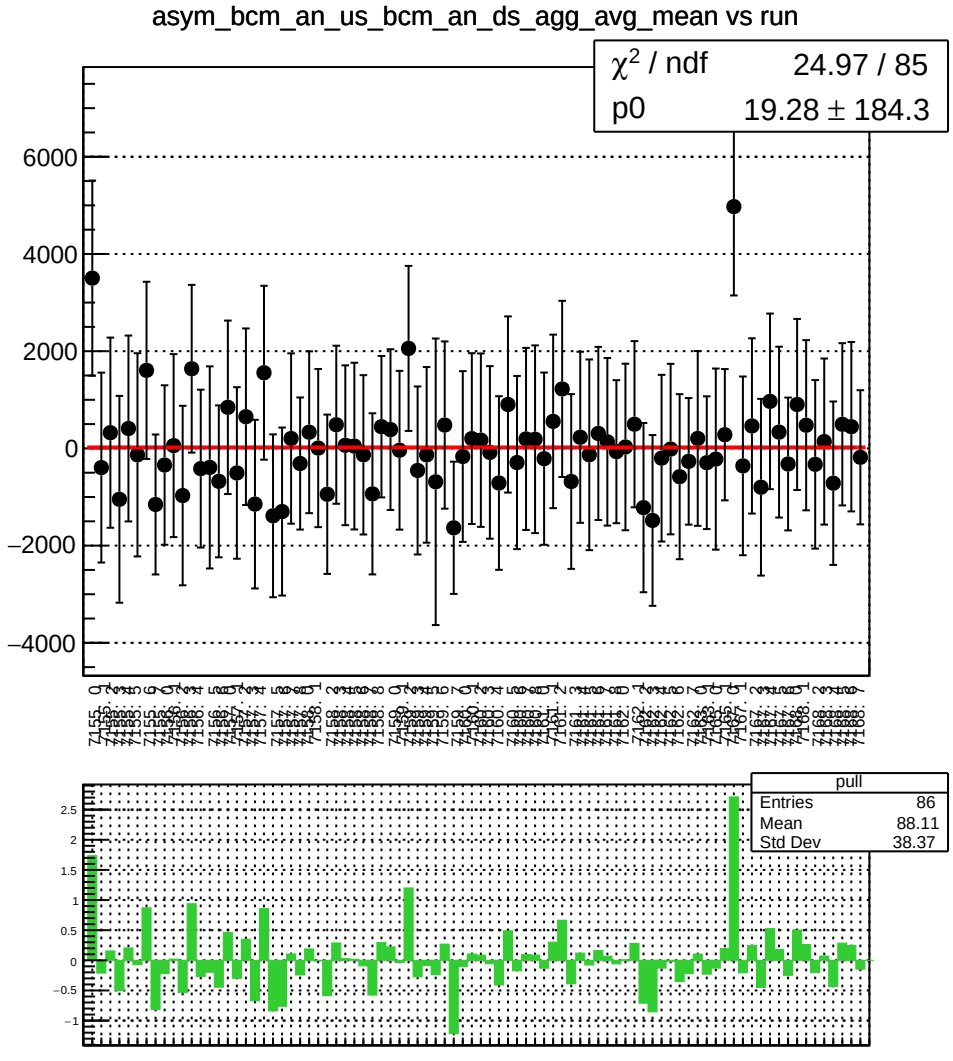

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

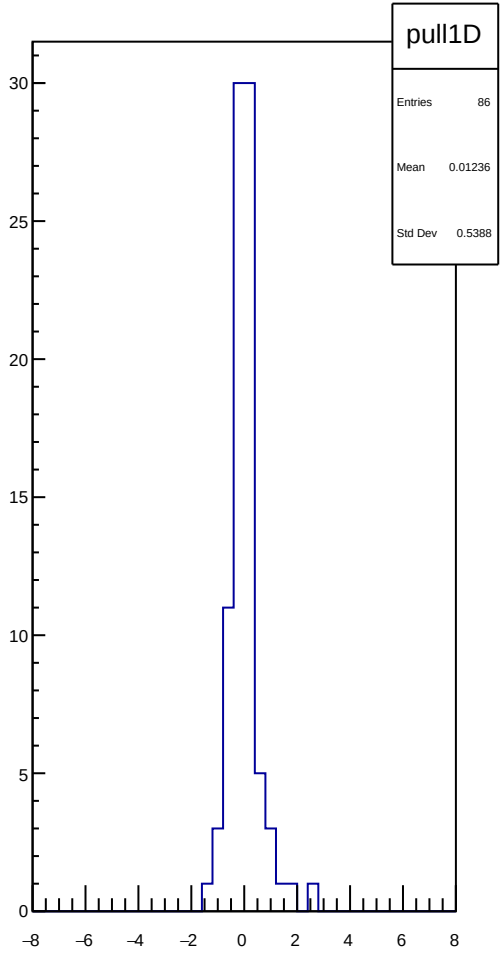

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 85
p0 0 ± 0.1078
1
0.8
0.6
0.4
0.2
0

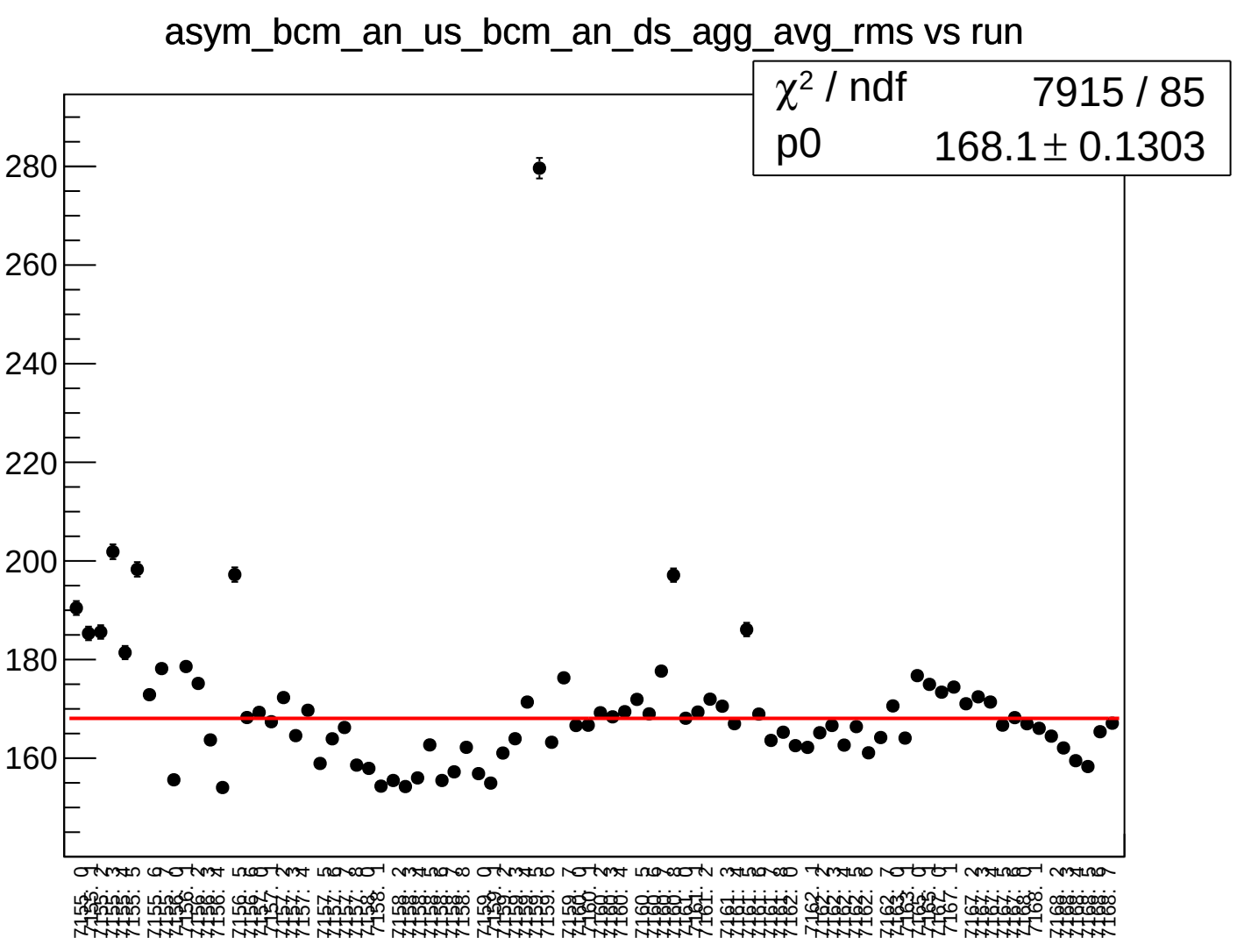

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 59.46 / 85
p0 1341 ± 1578
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −109
Std Dev 127.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

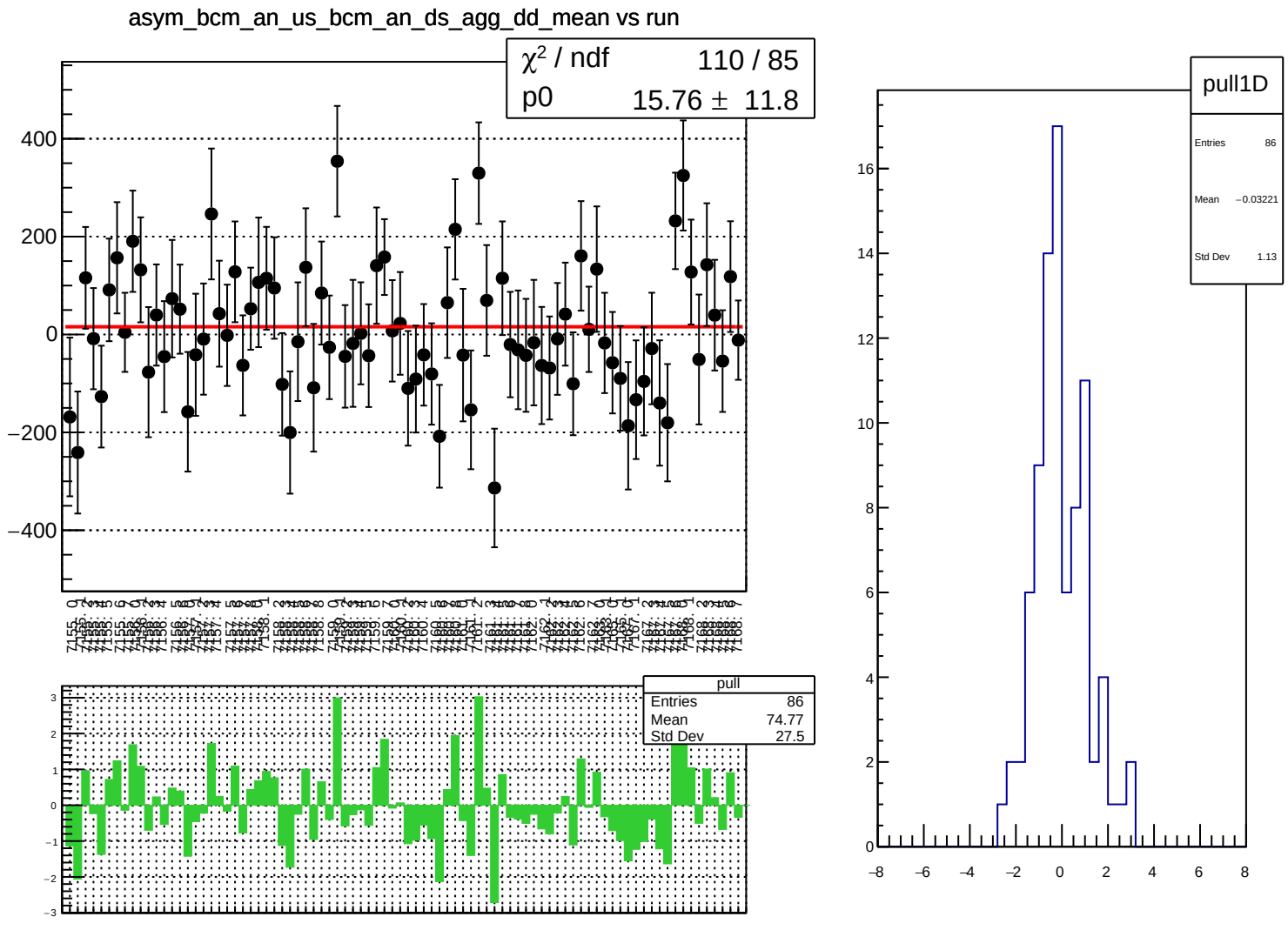

pull1D
Entries 86
Mean −0.01426
Std Dev 0.8314
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

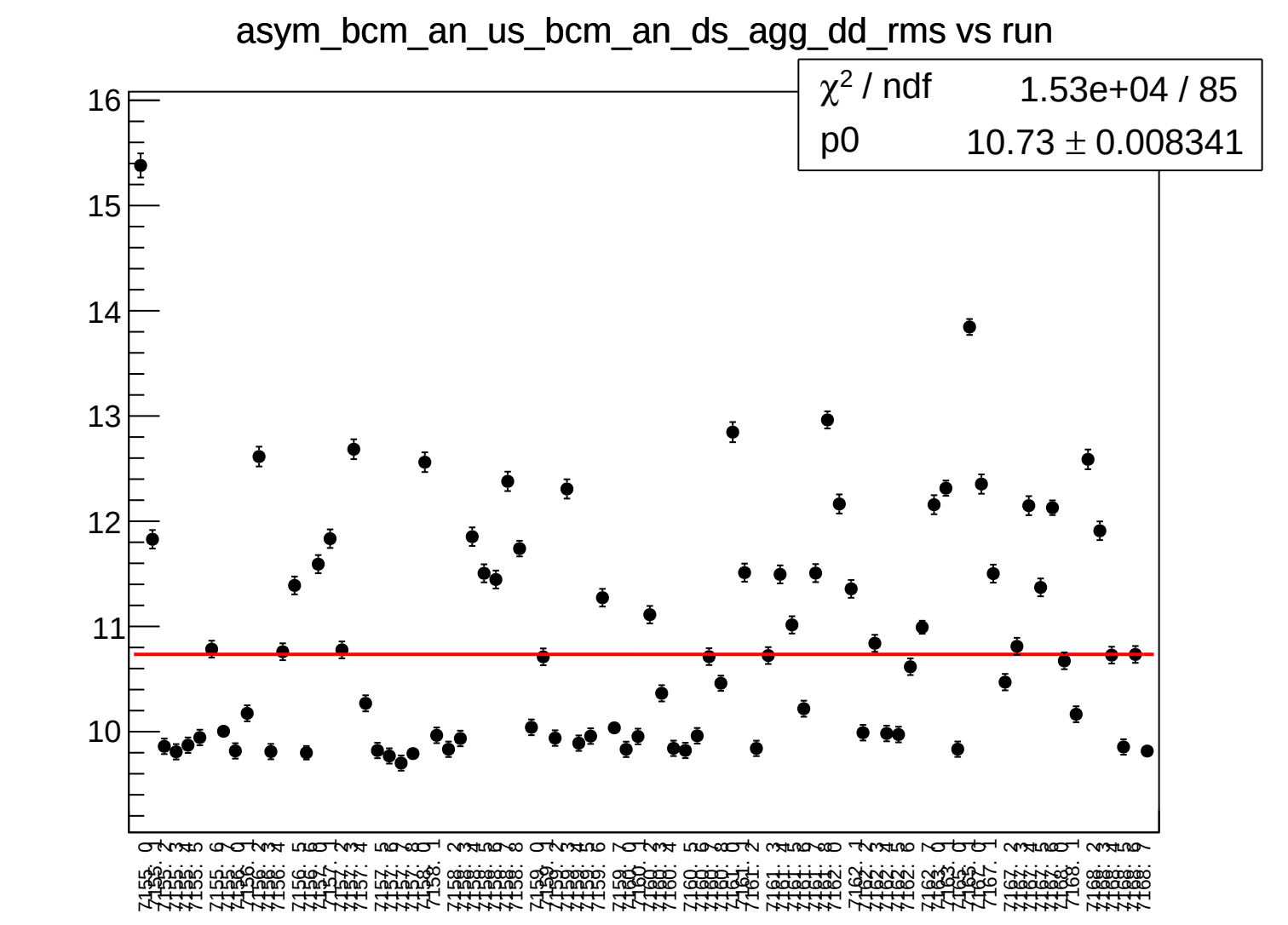

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 5177 / 85
p0 1440 ± 1.116
3000
2800
2600
2400
2200
2000
1800
1600
1400

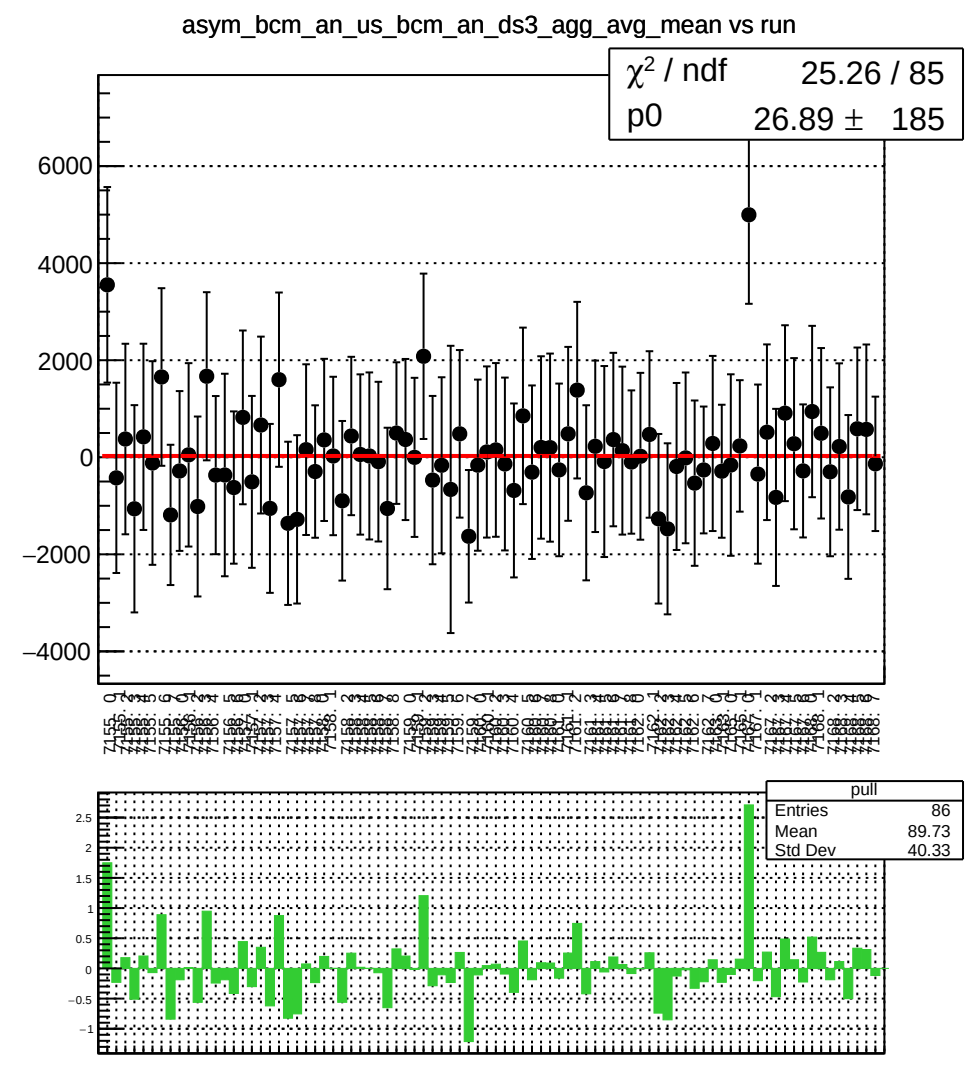

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.97 / 85
p0 19.28 ± 184.3
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 88.11
Std Dev 38.37
2.5
2
1.5
1
0.5
0
−0.5
−1

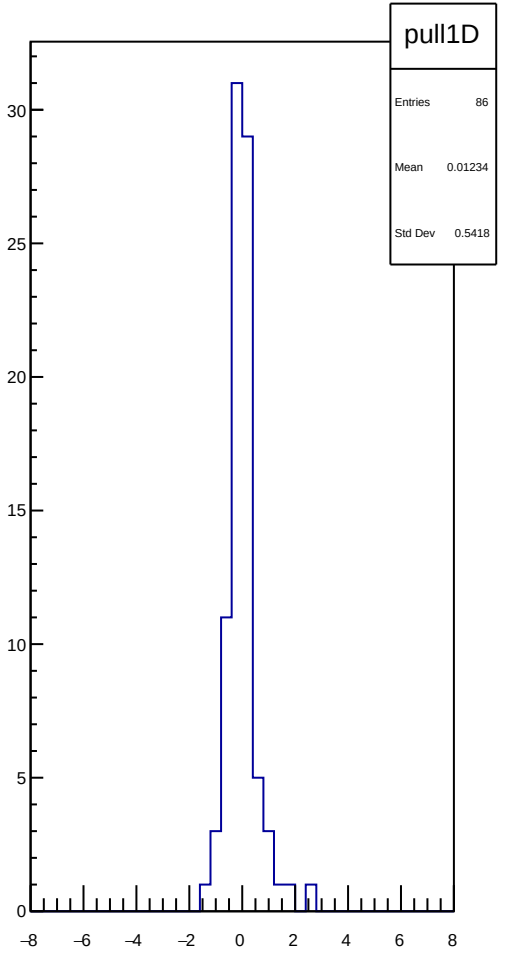

pull1D
Entries 86
Mean 0.01236
Std Dev 0.5388
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

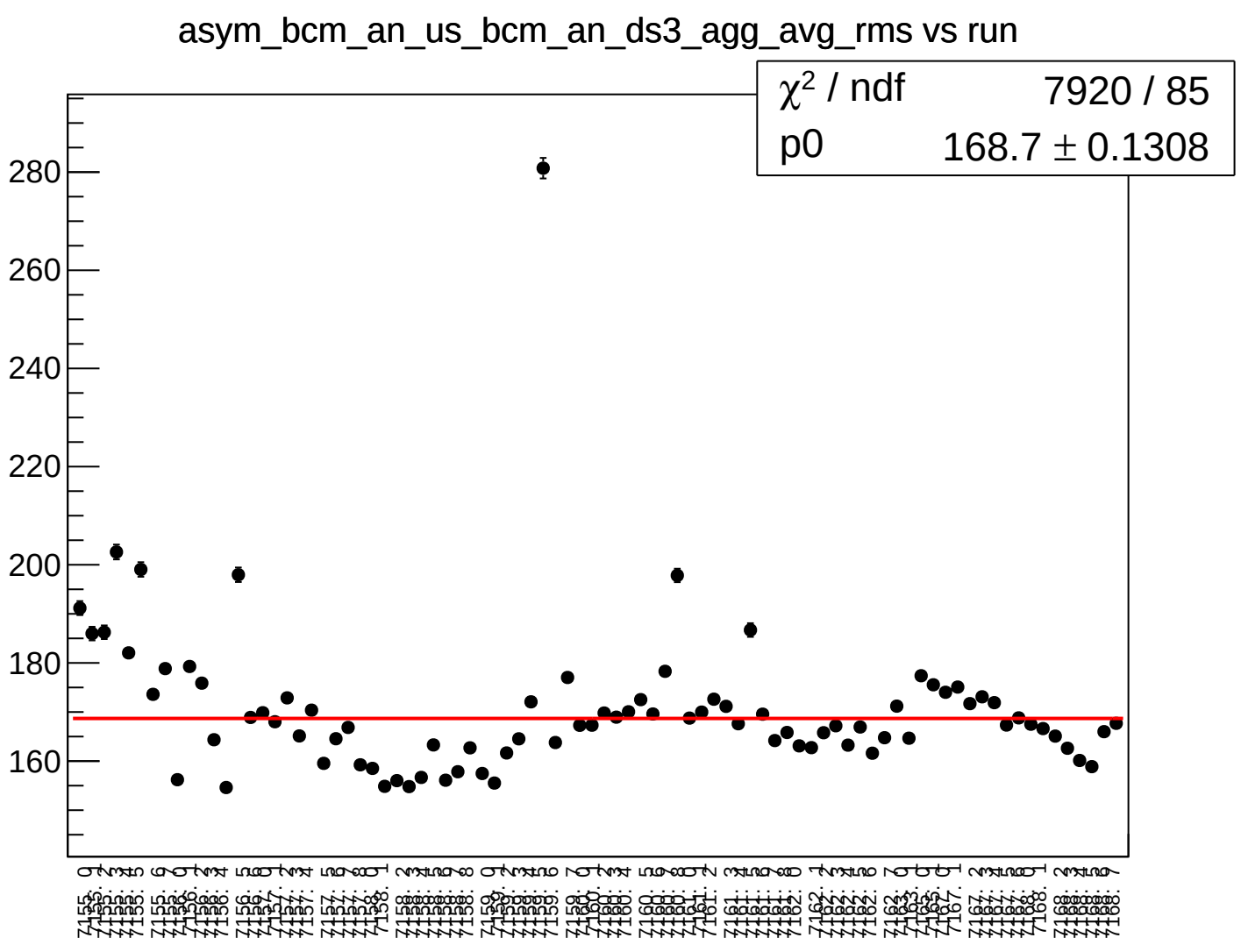

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7915 / 85
p0 168.1 ± 0.1303
280
260
240
220
200
180
160

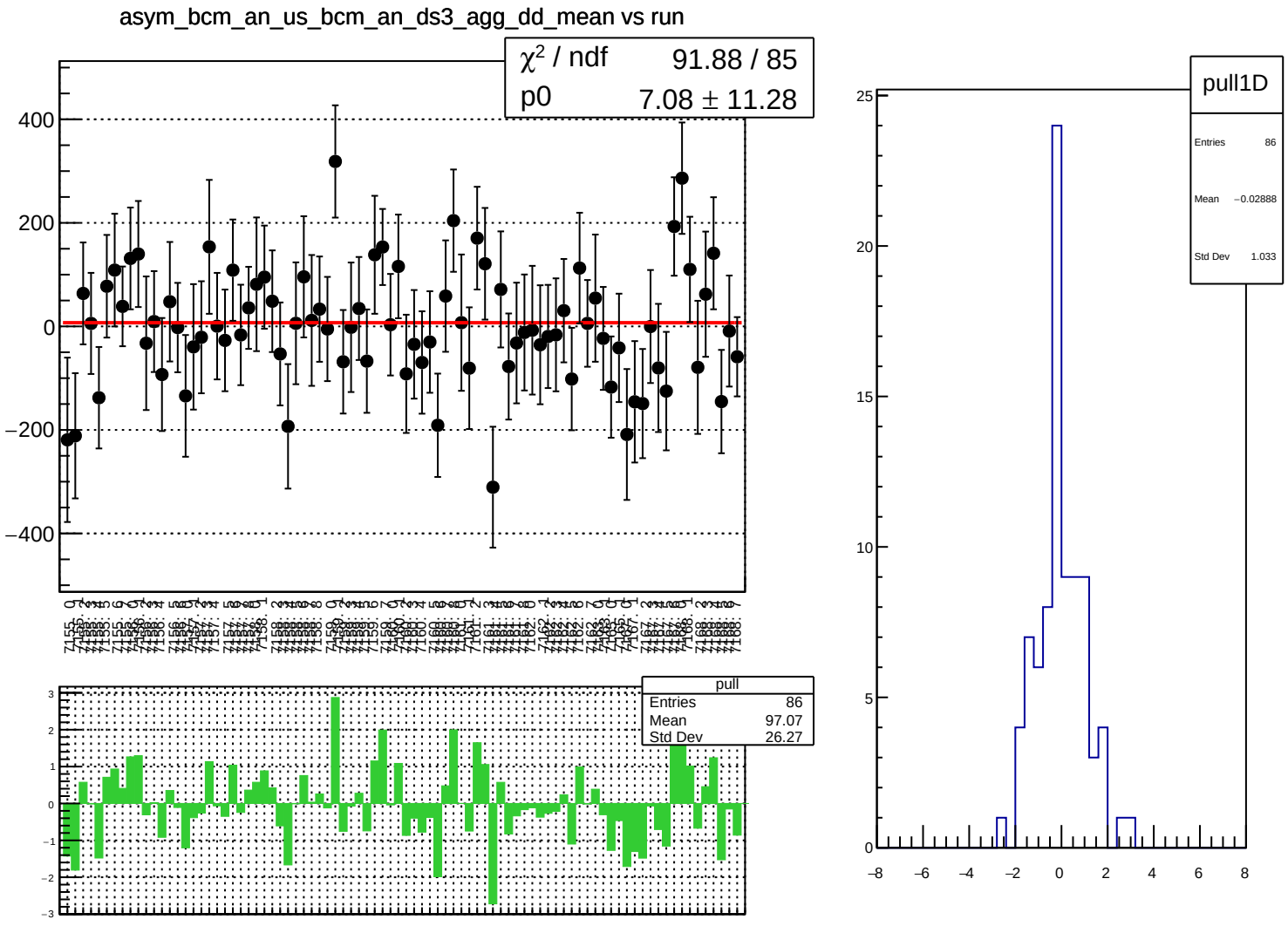

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 110 / 85
p0 15.76 ± 11.8
400
200
0
−200
−400
pull
Entries 86
Mean 74.77
Std Dev 27.5
3
2
1
0
−1
−2
−3
pull1D
Entries 86
Mean −0.03221
Std Dev 1.13
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

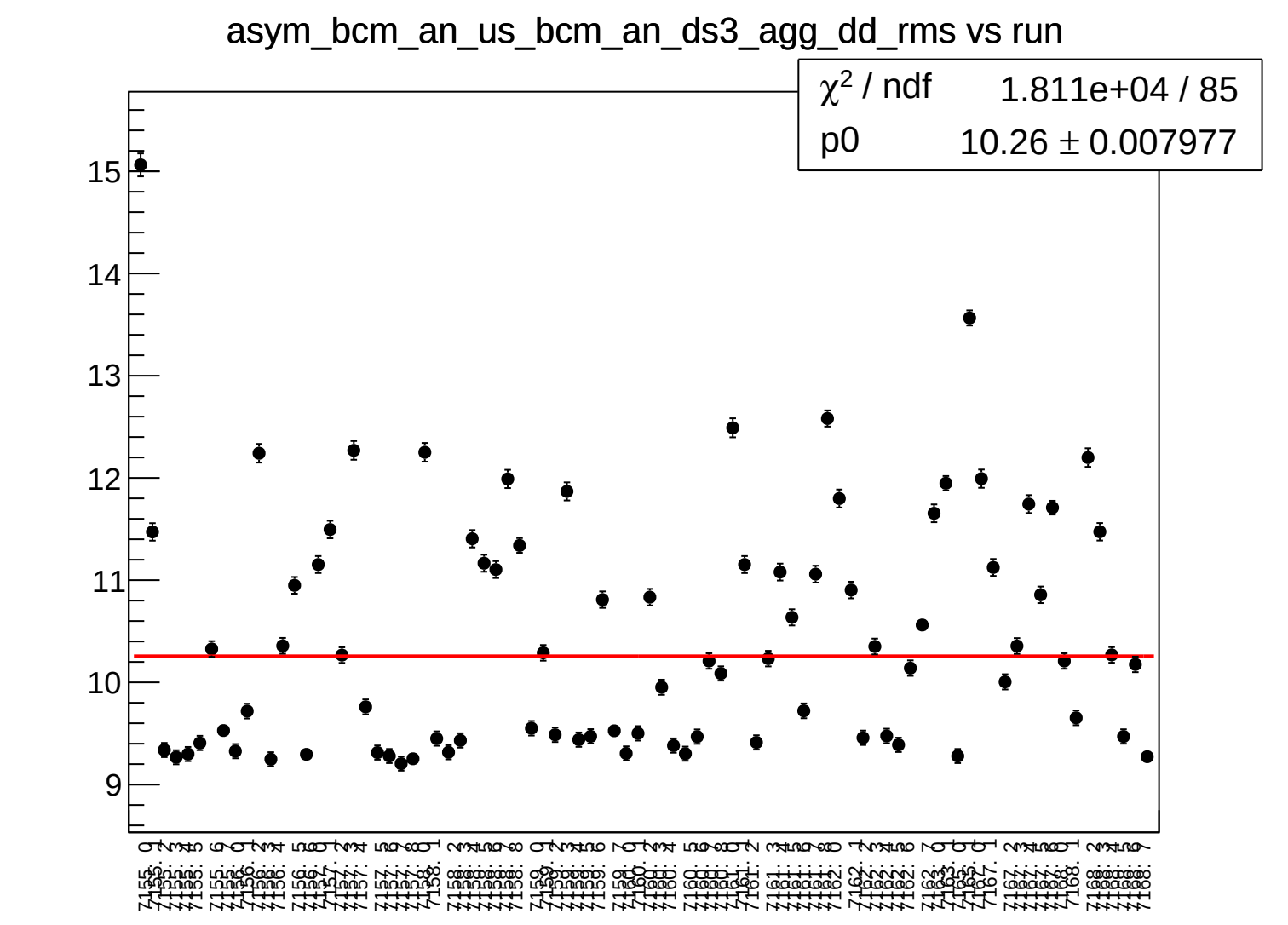

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.53e+04 / 85
p0 10.73 ± 0.008341
16
15
14
13
12
11
10

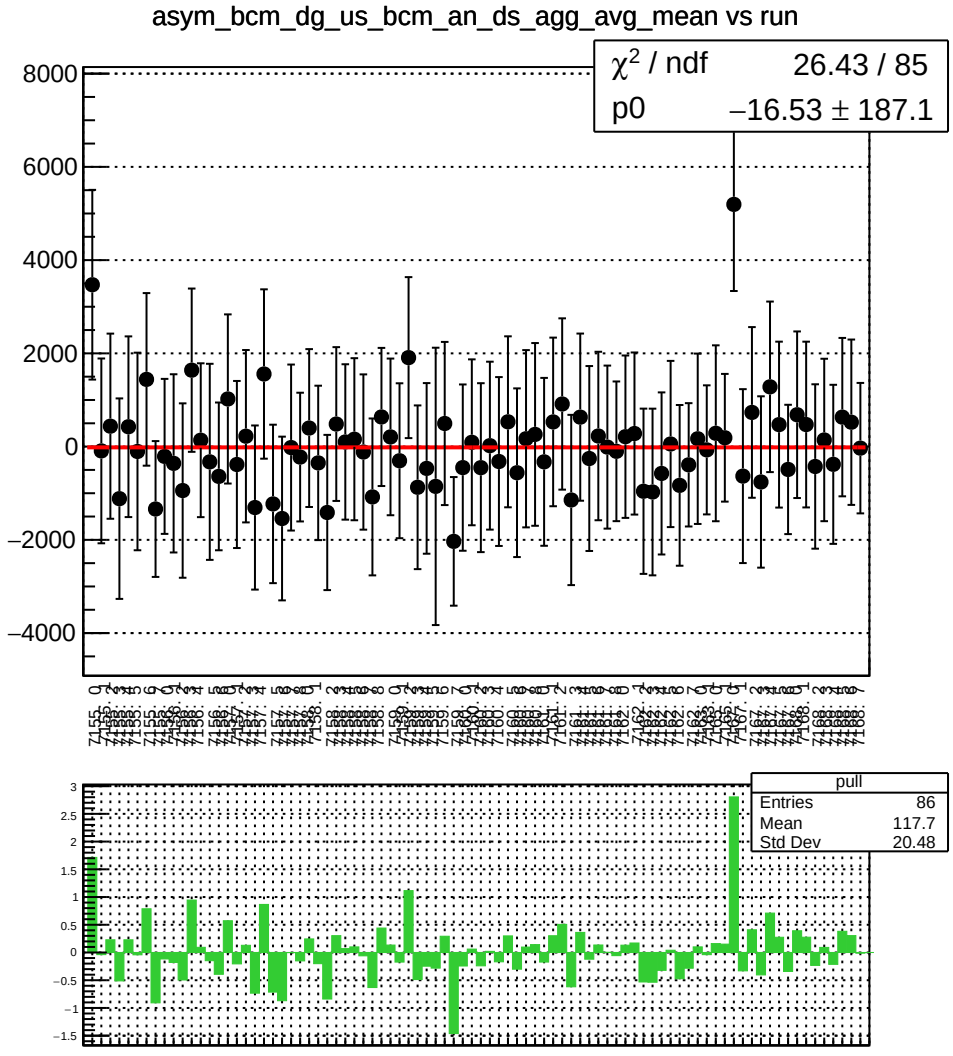

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 25.26 / 85
p0 26.89 ± 185
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 89.73
Std Dev 40.33
2.5
2
1.5
1
0.5
0
−0.5
−1

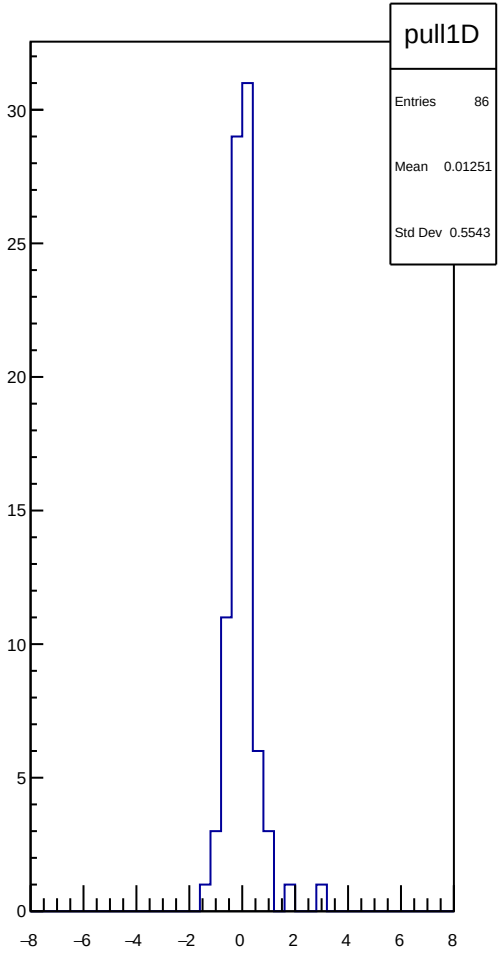

pull1D
Entries 86
Mean 0.01234
Std Dev 0.5418
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

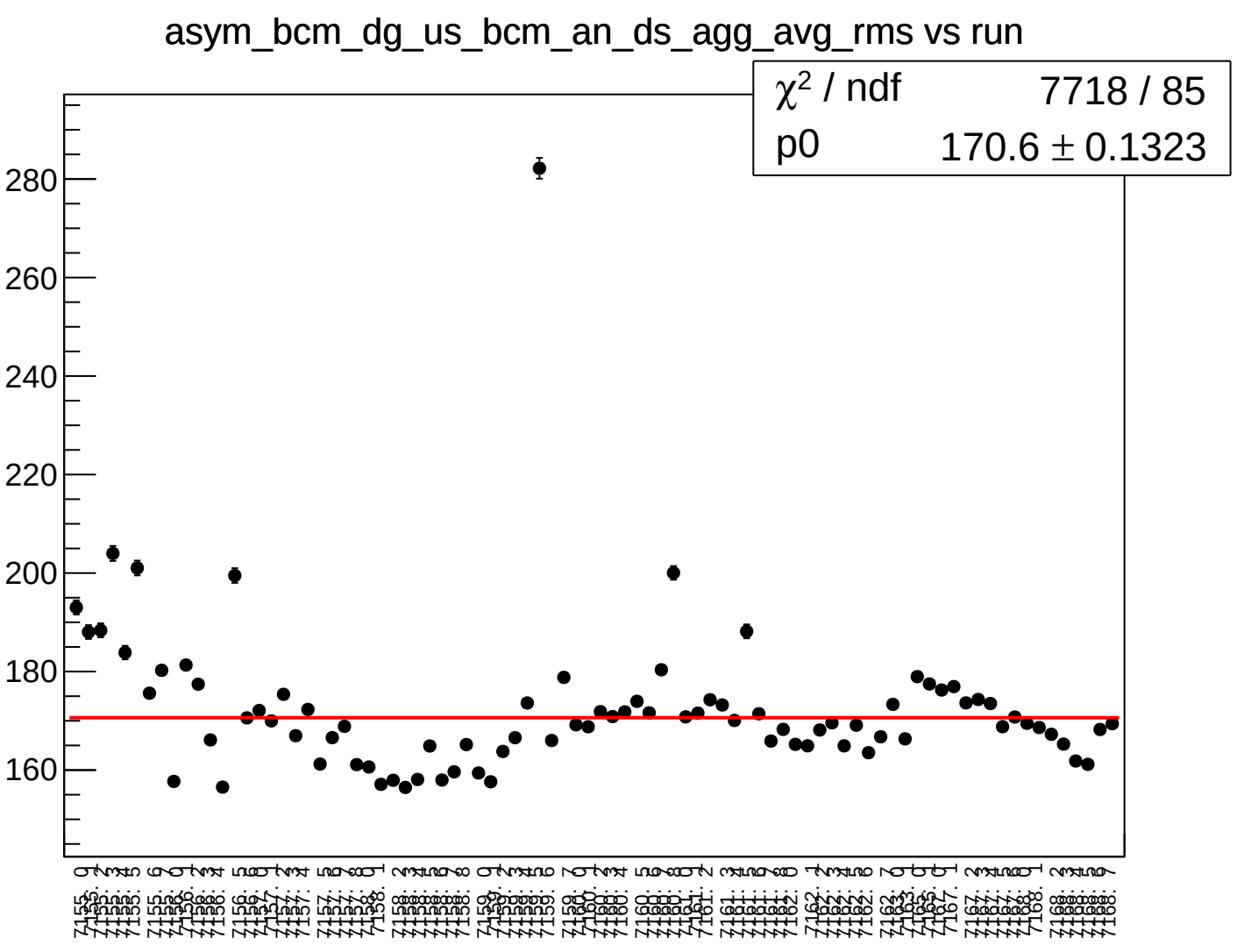

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 7920 / 85
p0 168.7 ± 0.1308
280
260
240
220
200
180
160

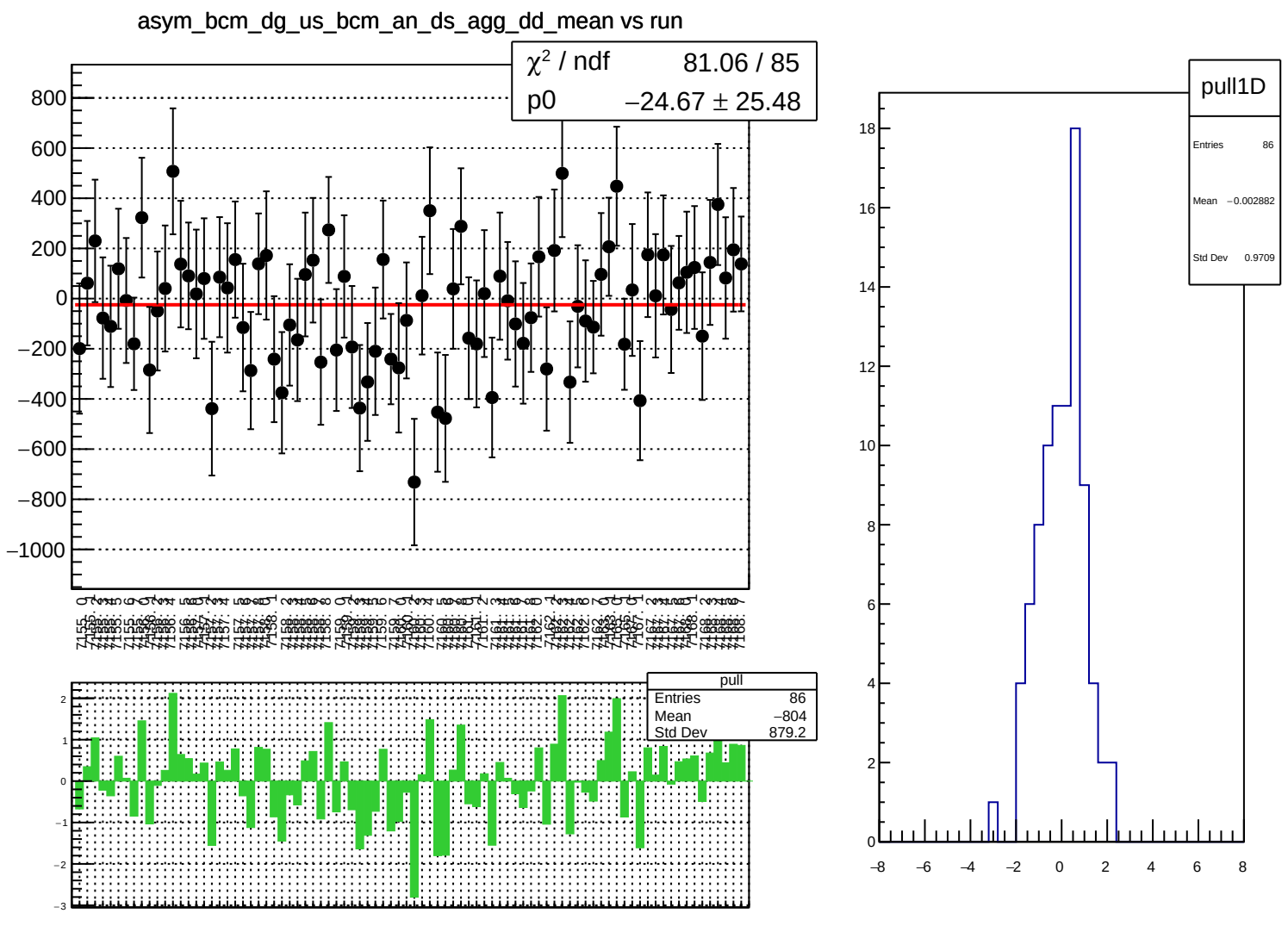

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 91.88 / 85
p0 7.08 ± 11.28
400
200
0
−200
−400
pull
Entries 86
Mean 97.07
Std Dev 26.27
3
2
1
0
−1
−2
−3
pull1D
Entries 86
Mean −0.02888
Std Dev 1.033
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

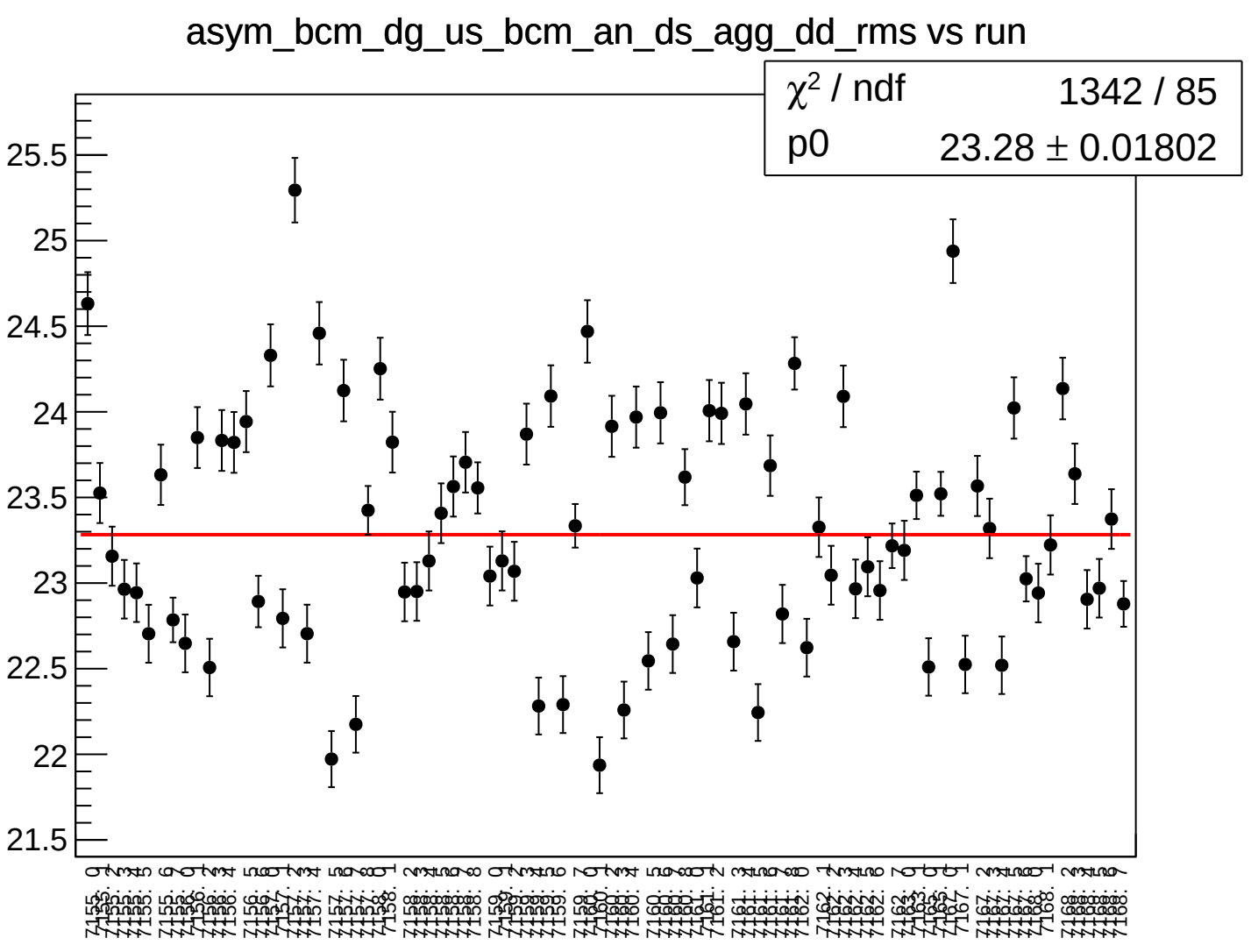

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.811e+04 / 85
p0 10.26 ± 0.007977
15
14
13
12
11
10
9

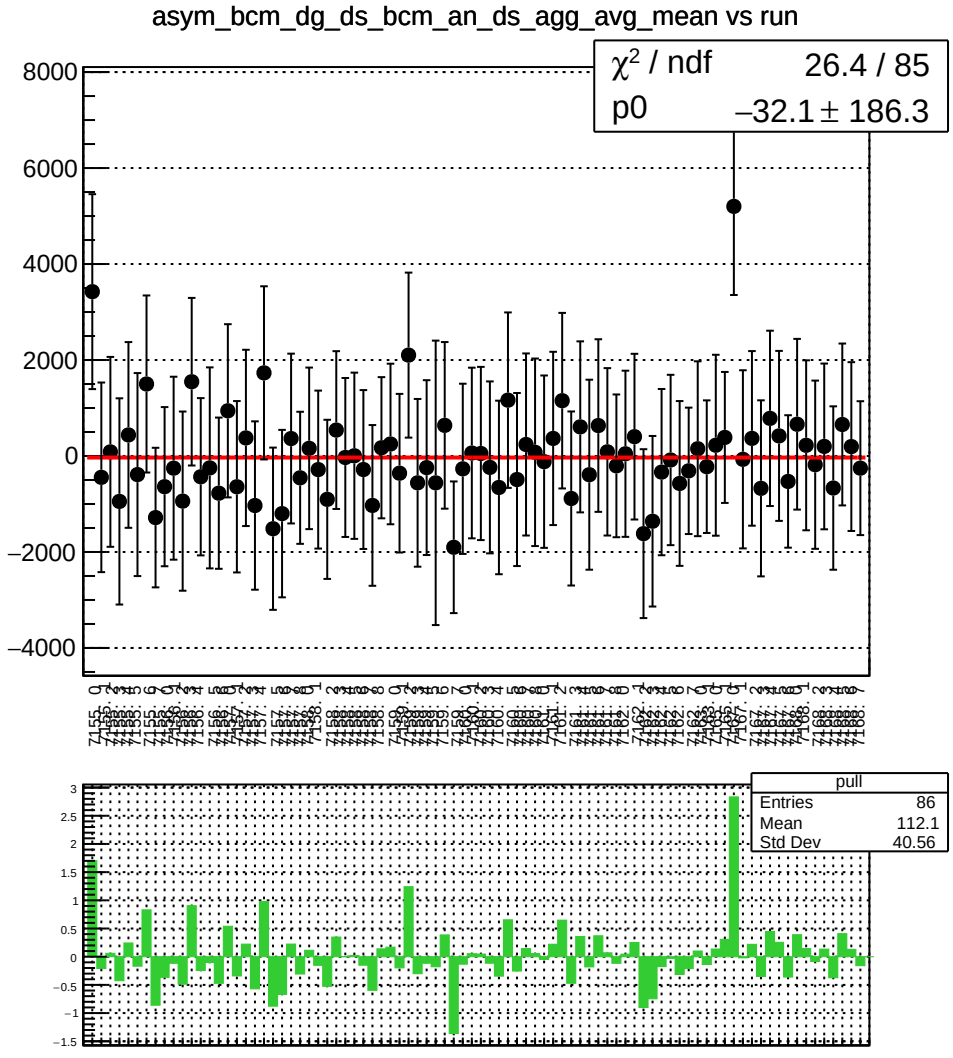

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 26.43 / 85
p0 −16.53 ± 187.1
pull
Entries 86
Mean 117.7
Std Dev 20.48

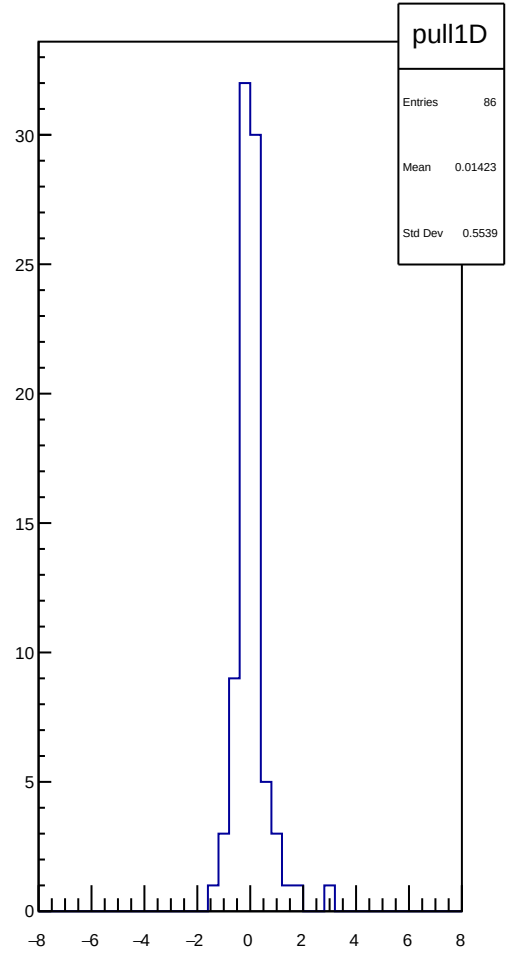

pull1D
Entries 86
Mean 0.01251
Std Dev 0.5543

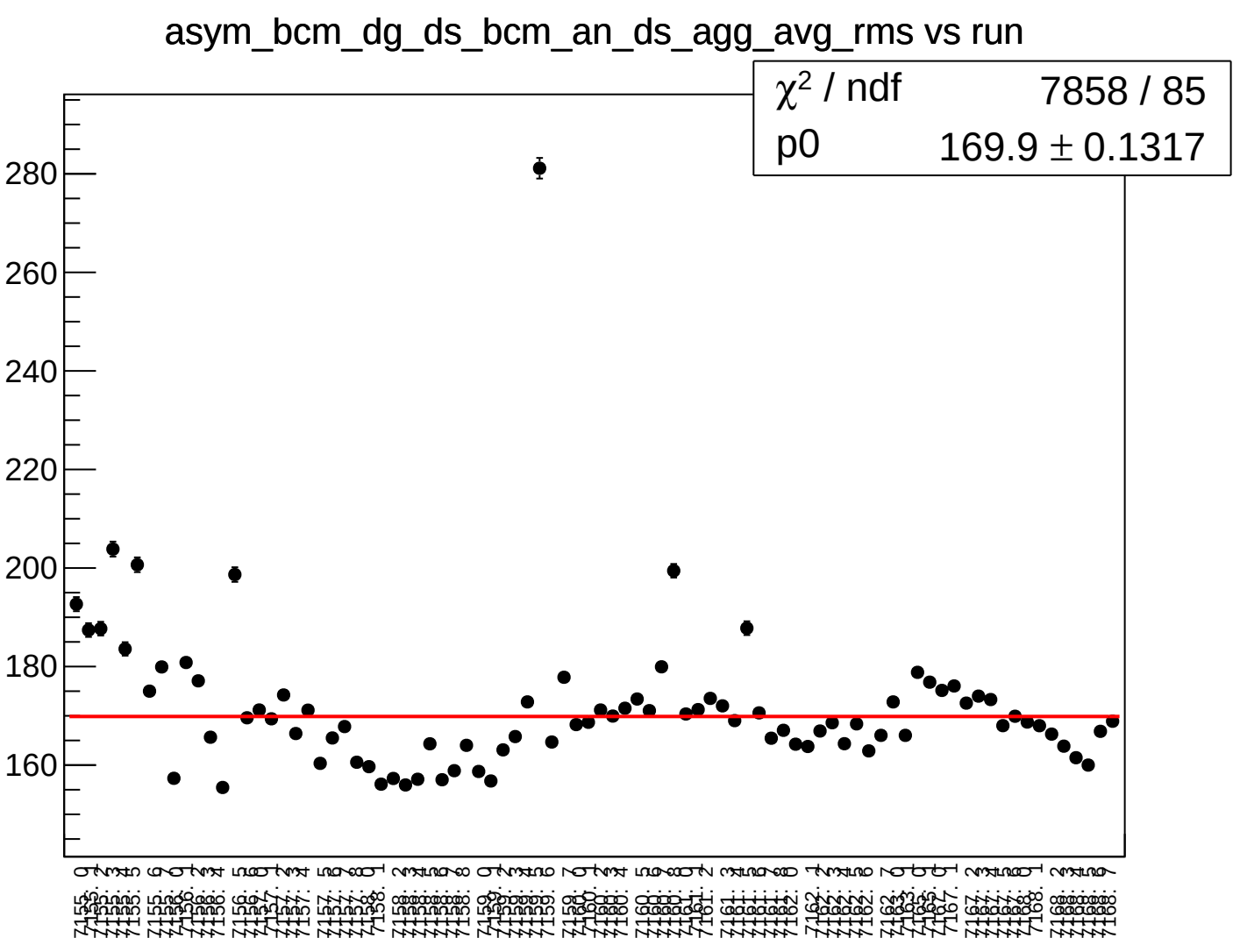

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7718 / 85
p0 170.6 ± 0.1323
280
260
240
220
200
180
160

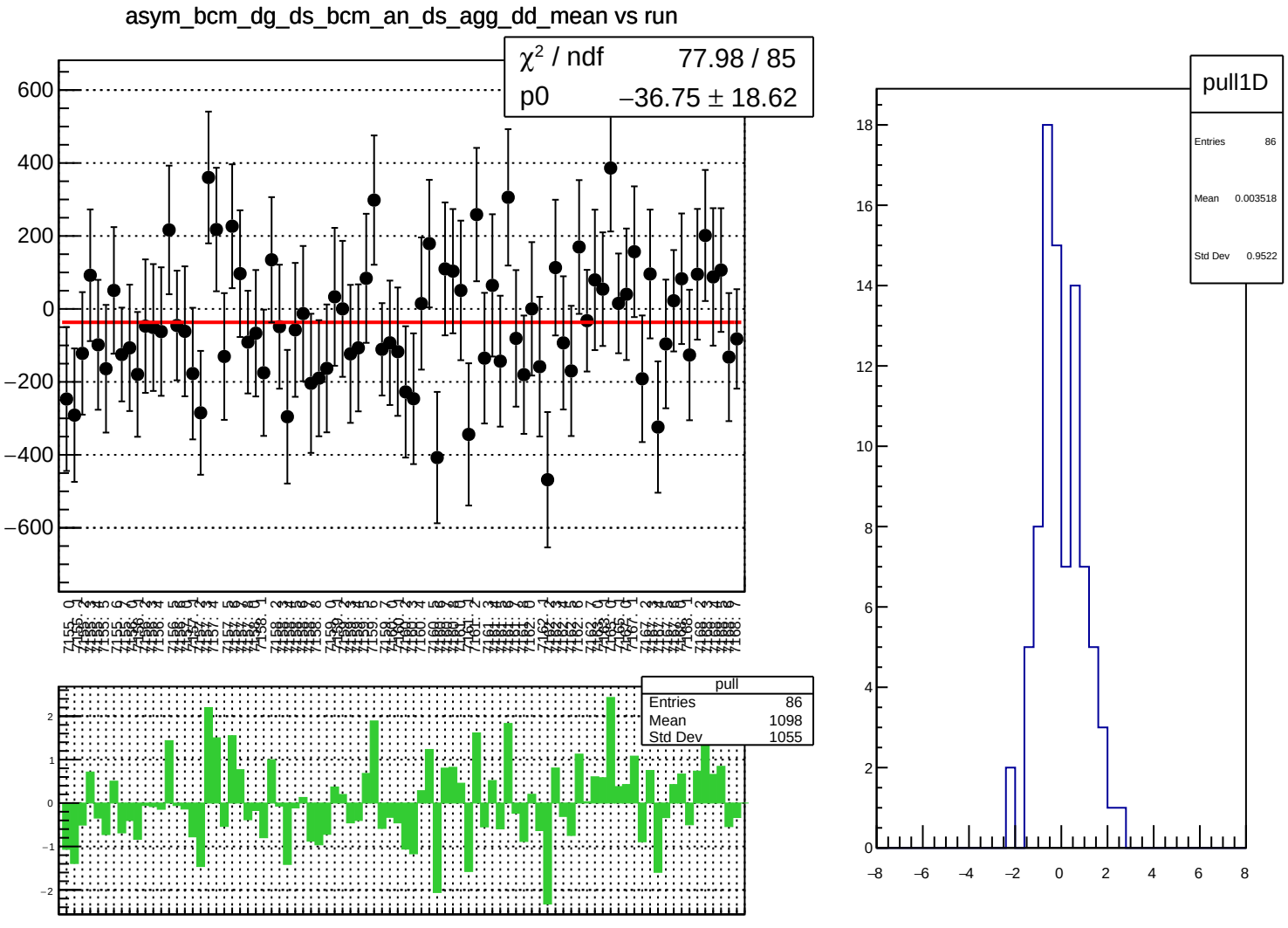

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.06 / 85
p0 −24.67 ± 25.48
pull
Entries 86
Mean −804
Std Dev 879.2
pull1D
Entries 86
Mean −0.002882
Std Dev 0.9709

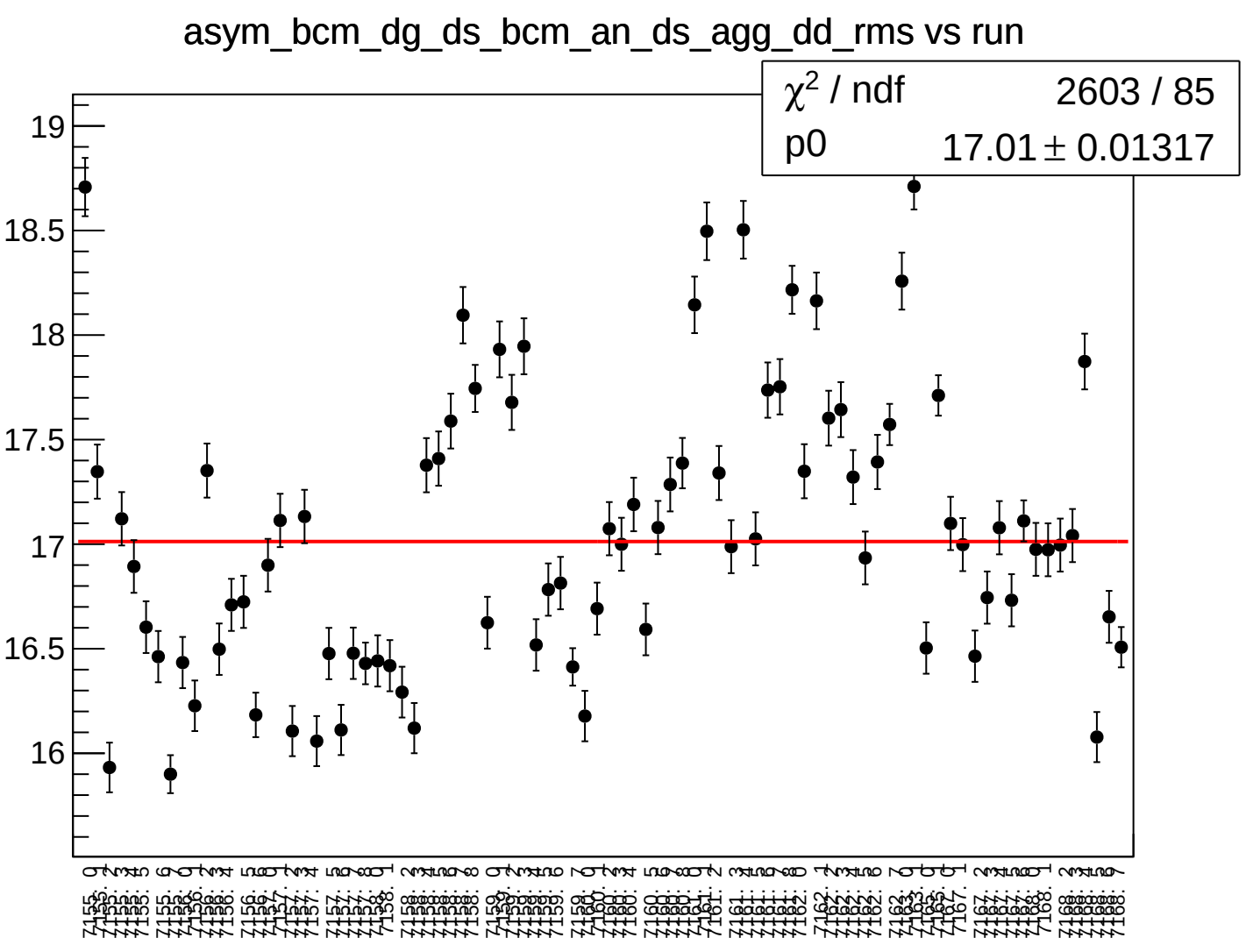

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1342 / 85
p0 23.28 ± 0.01802
25.5
25
24.5
24
23.5
23
22.5
22
21.5

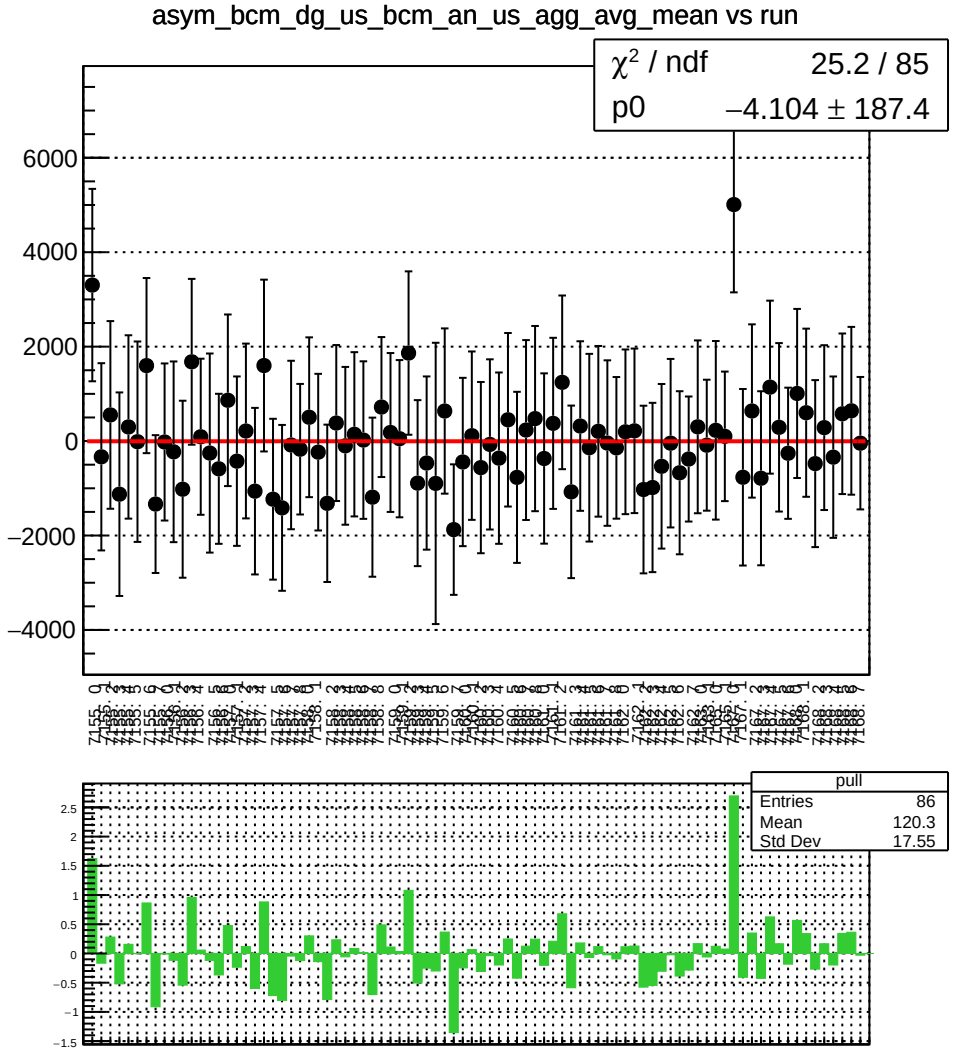

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 26.4 / 85
p0 −32.1 ± 186.3
pull
Entries 86
Mean 112.1
Std Dev 40.56

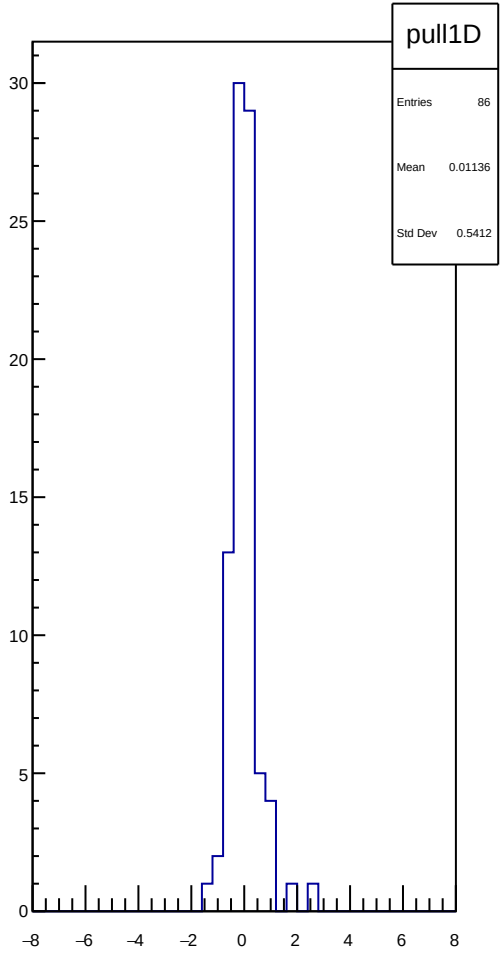

pull1D
Entries 86
Mean 0.01423
Std Dev 0.5539

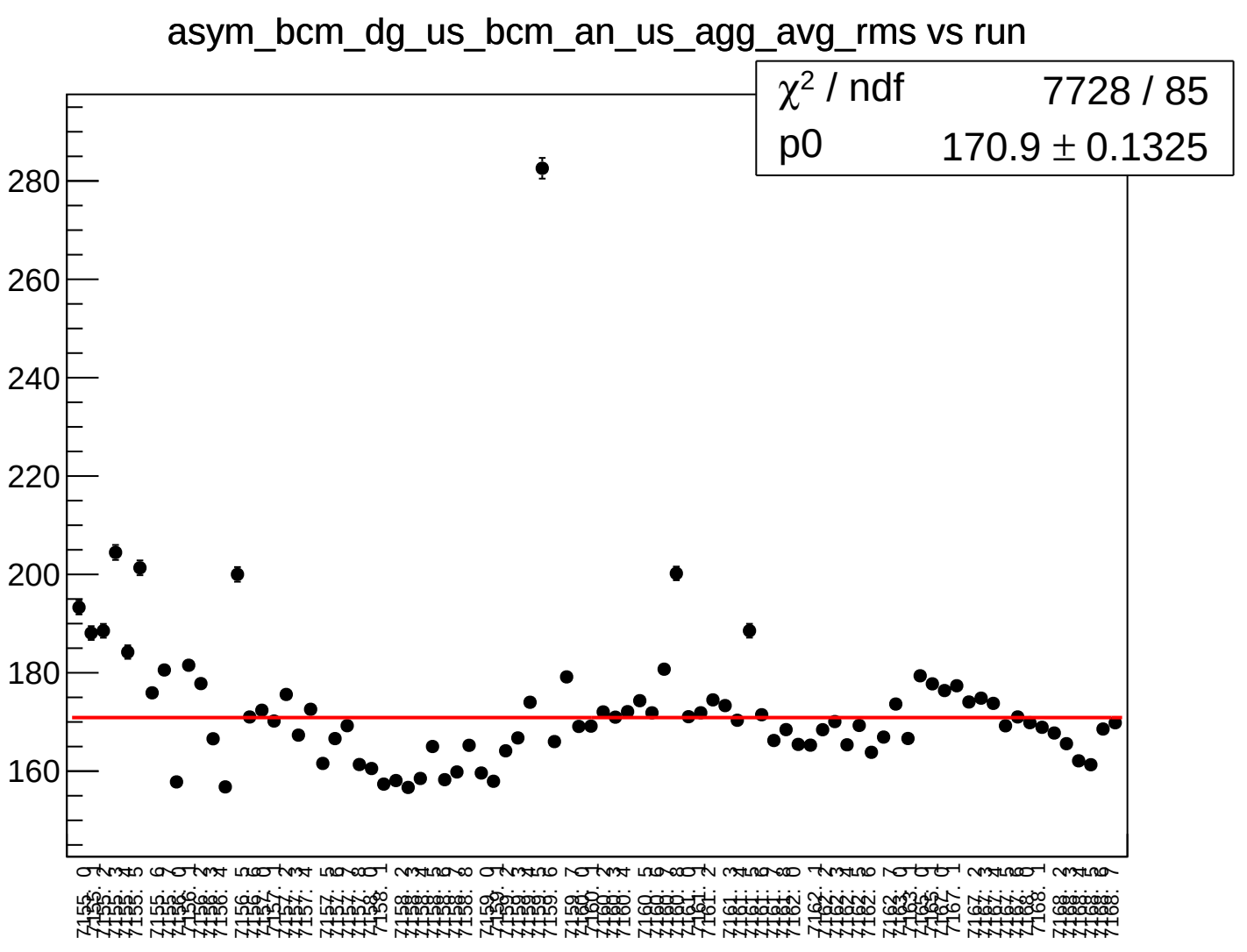

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7858 / 85
p0 169.9 ± 0.1317
280
260
240
220
200
180
160

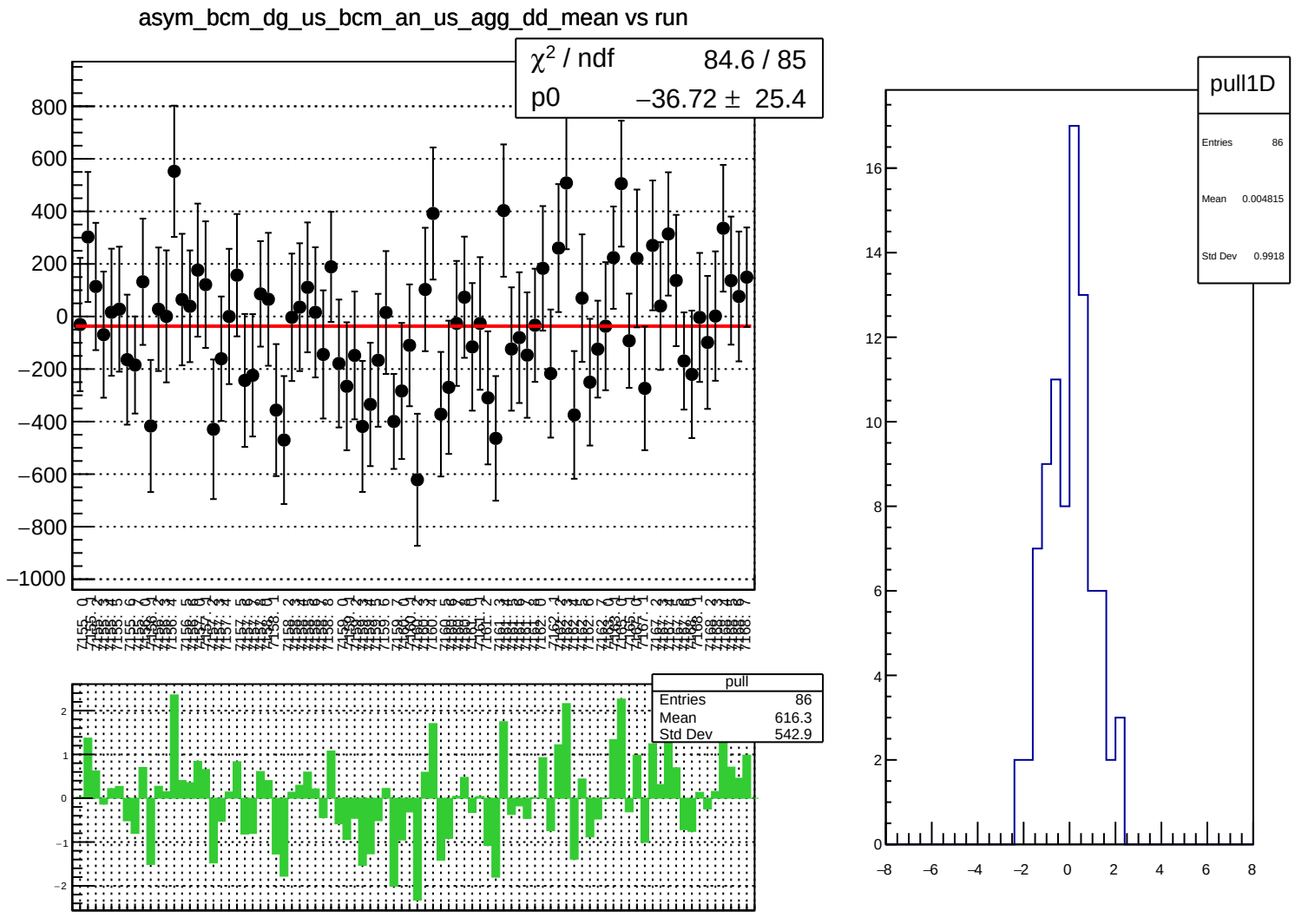

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 77.98 / 85
p0 −36.75 ± 18.62
pull
Entries 86
Mean 1098
Std Dev 1055
pull1D
Entries 86
Mean 0.003518
Std Dev 0.9522

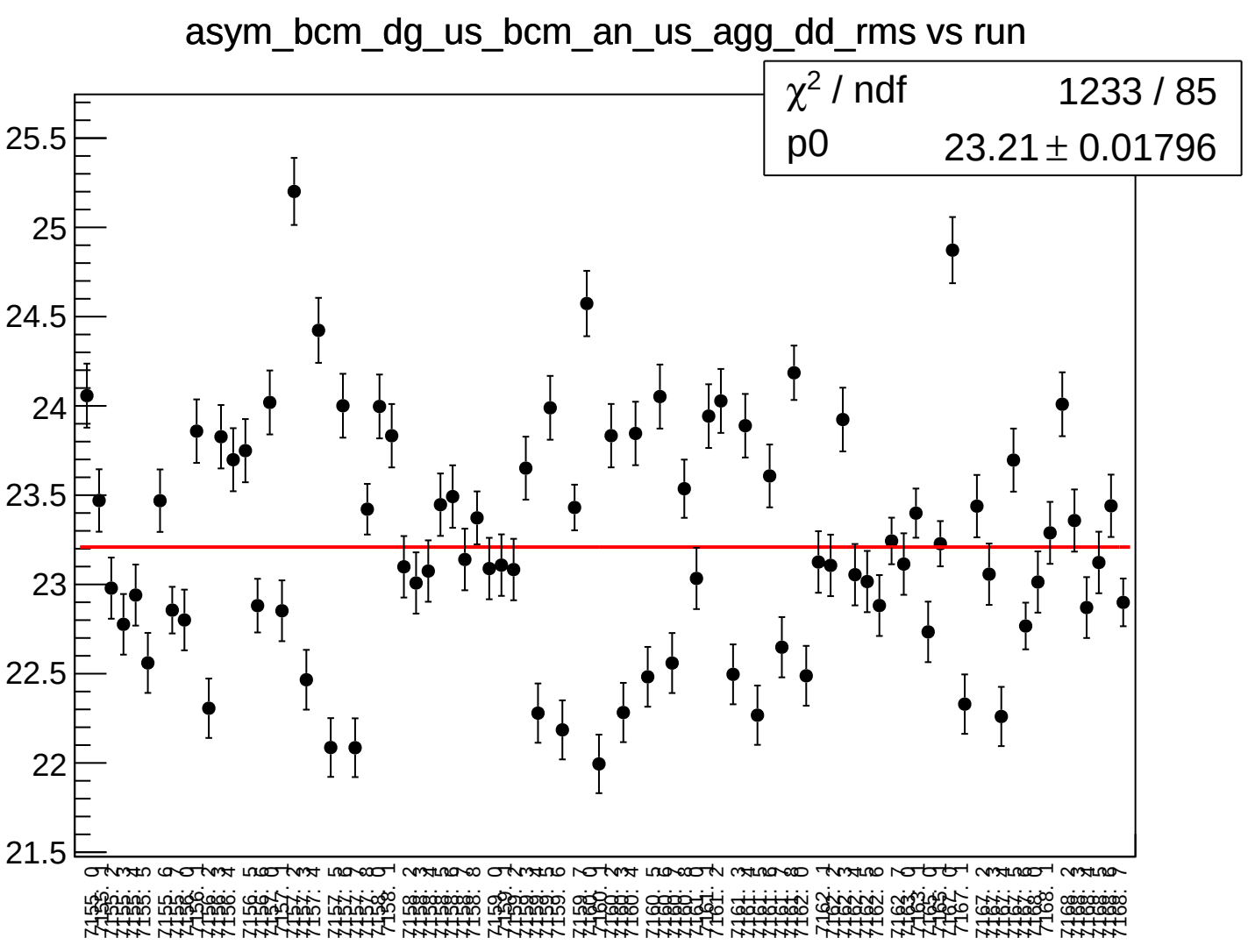

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ^2 / ndf 2603 / 85
p0 17.01 ± 0.01317
19
18.5
18
17.5
17
16.5
16

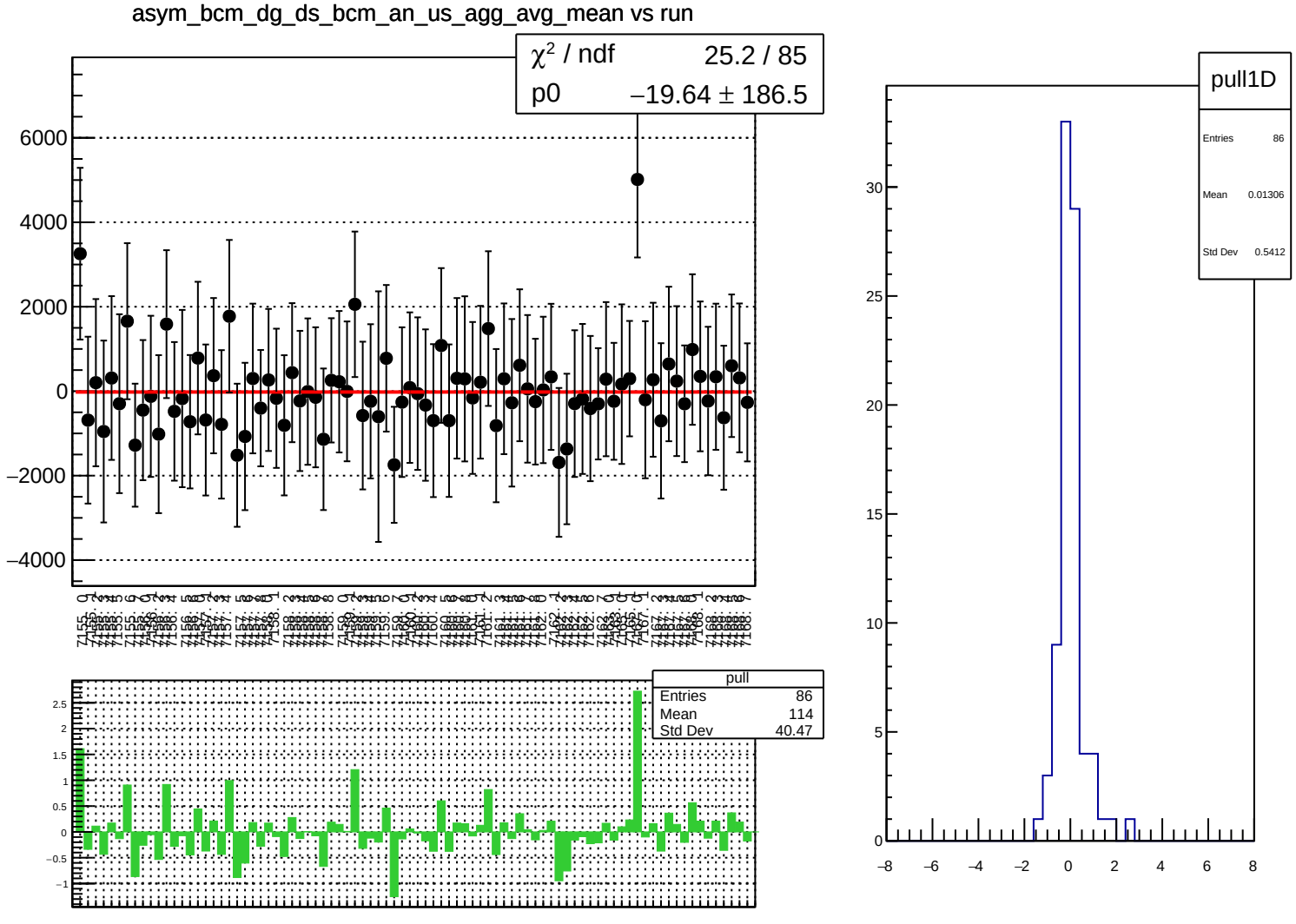

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 25.2 / 85
p0 −4.104 ± 187.4
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 120.3
Std Dev 17.55
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

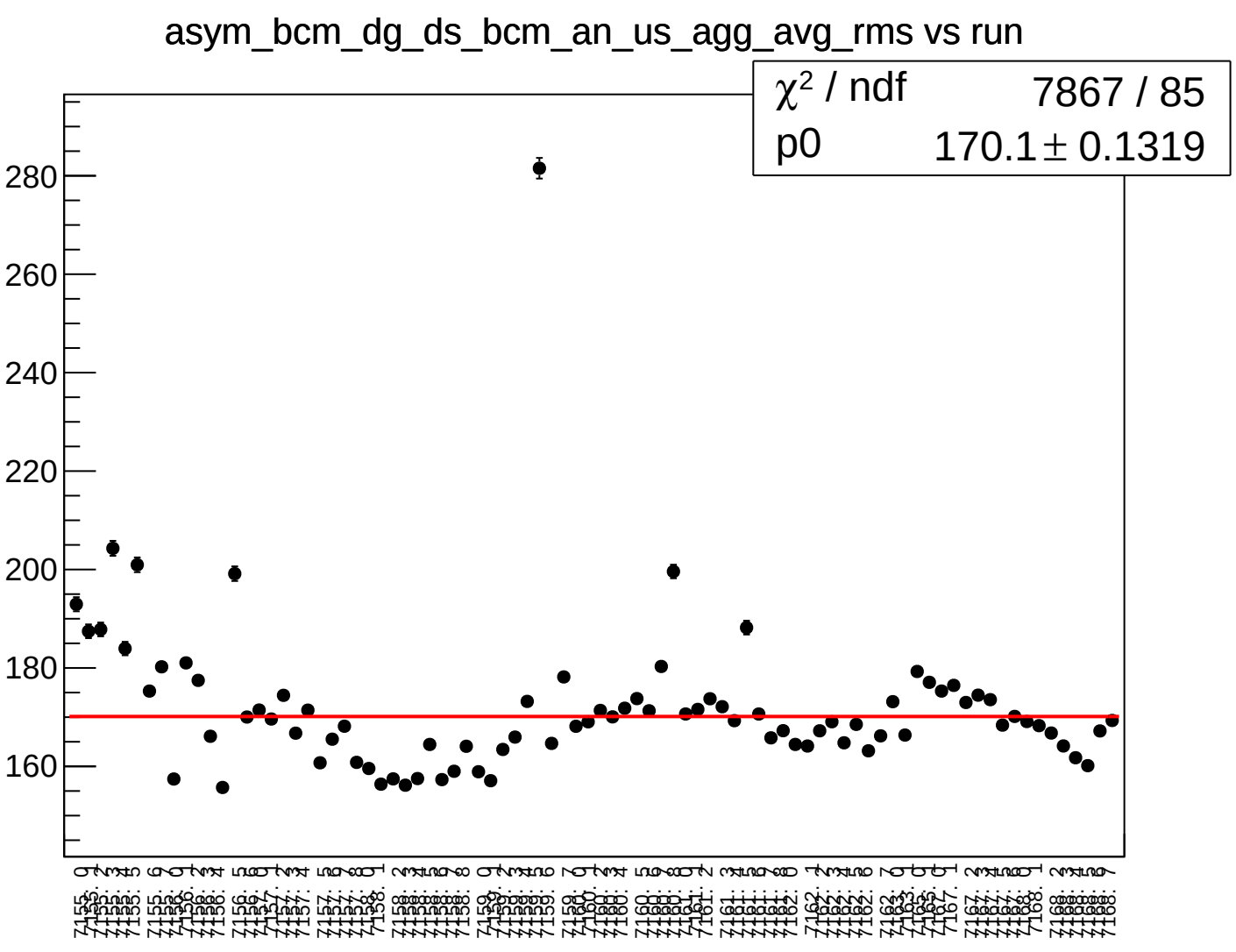

pull1D
Entries 86
Mean 0.01136
Std Dev 0.5412
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

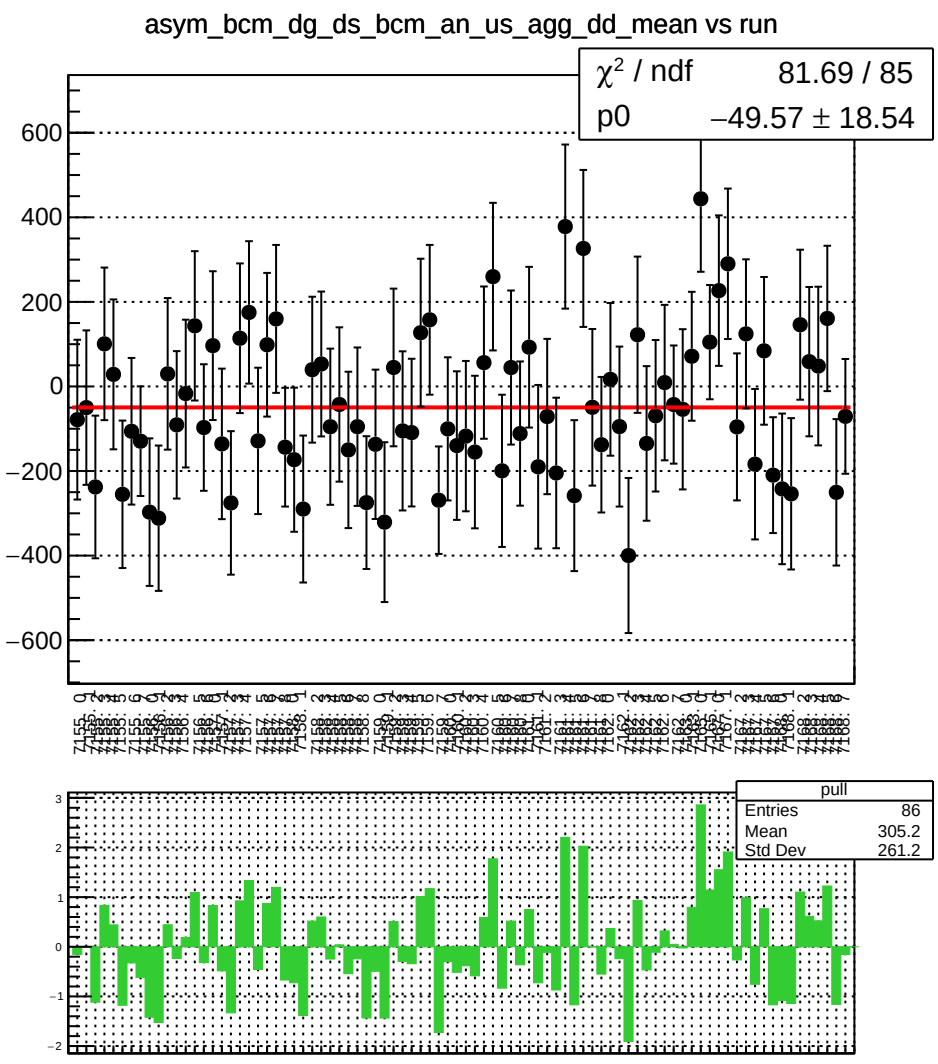

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 7728 / 85
p0 170.9 ± 0.1325
280
260
240
220
200
180
160

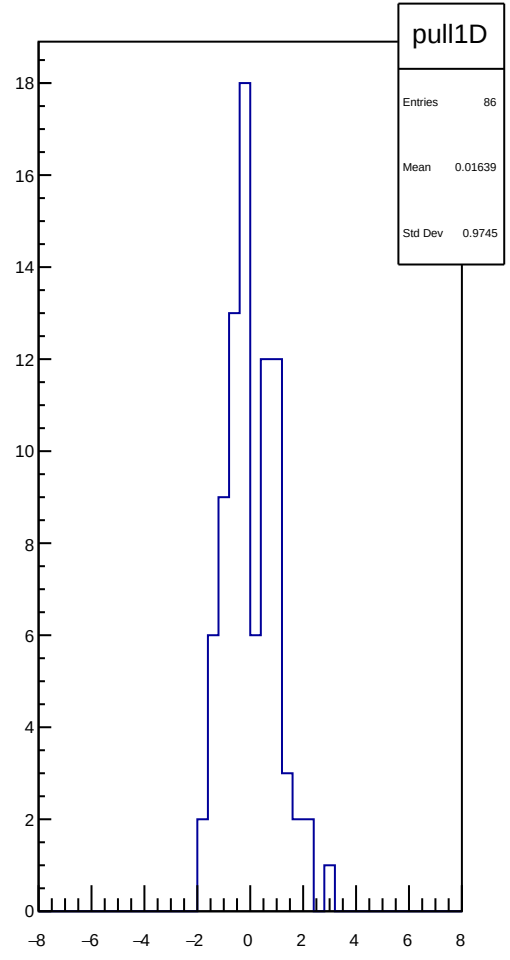

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 84.6 / 85
p0 −36.72 ± 25.4
pull
Entries 86
Mean 616.3
Std Dev 542.9
pull1D
Entries 86
Mean 0.004815
Std Dev 0.9918

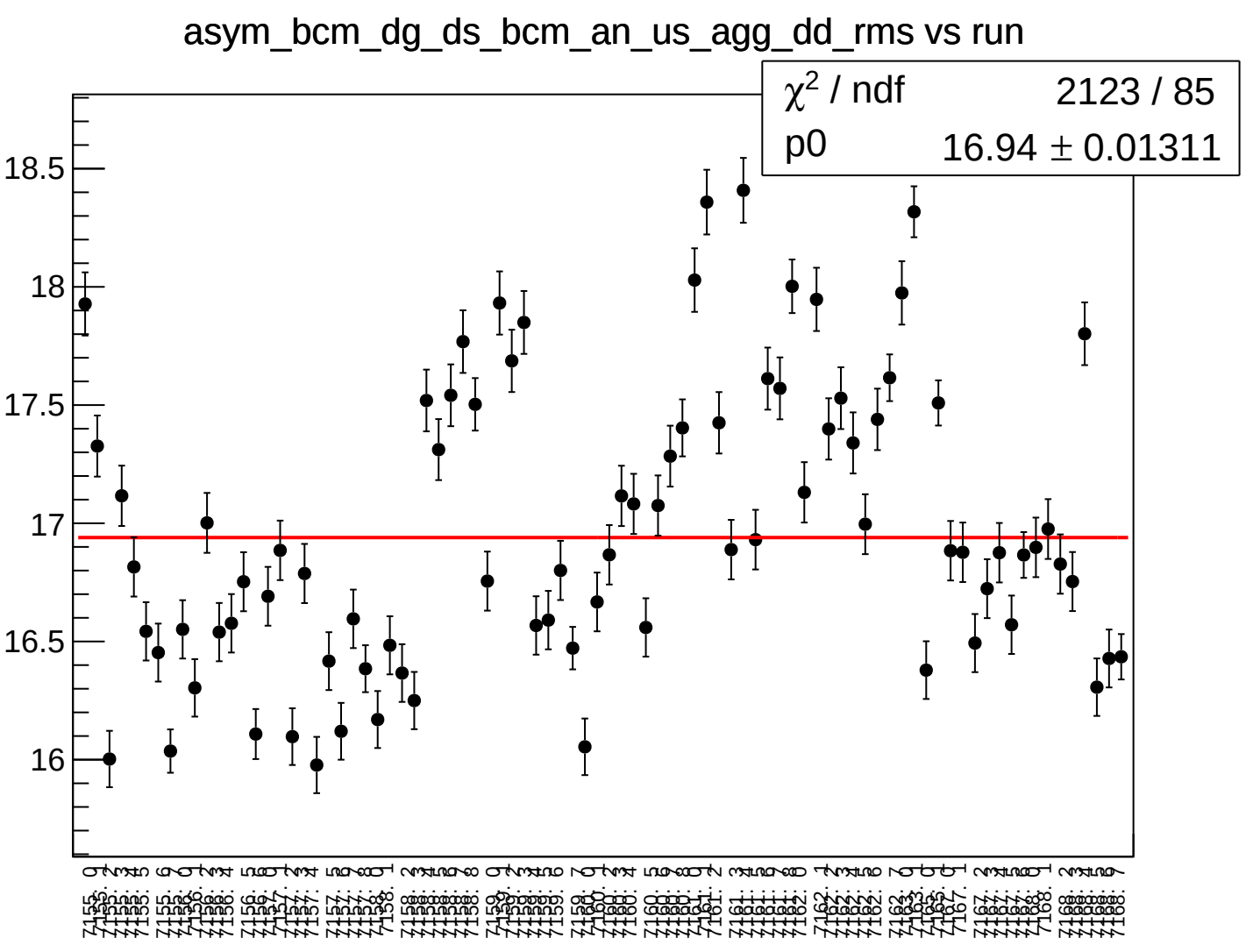

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ^2 / ndf 1233 / 85
p0 23.21 ± 0.01796
25.5
25
24.5
24
23.5
23
22.5
22
21.5

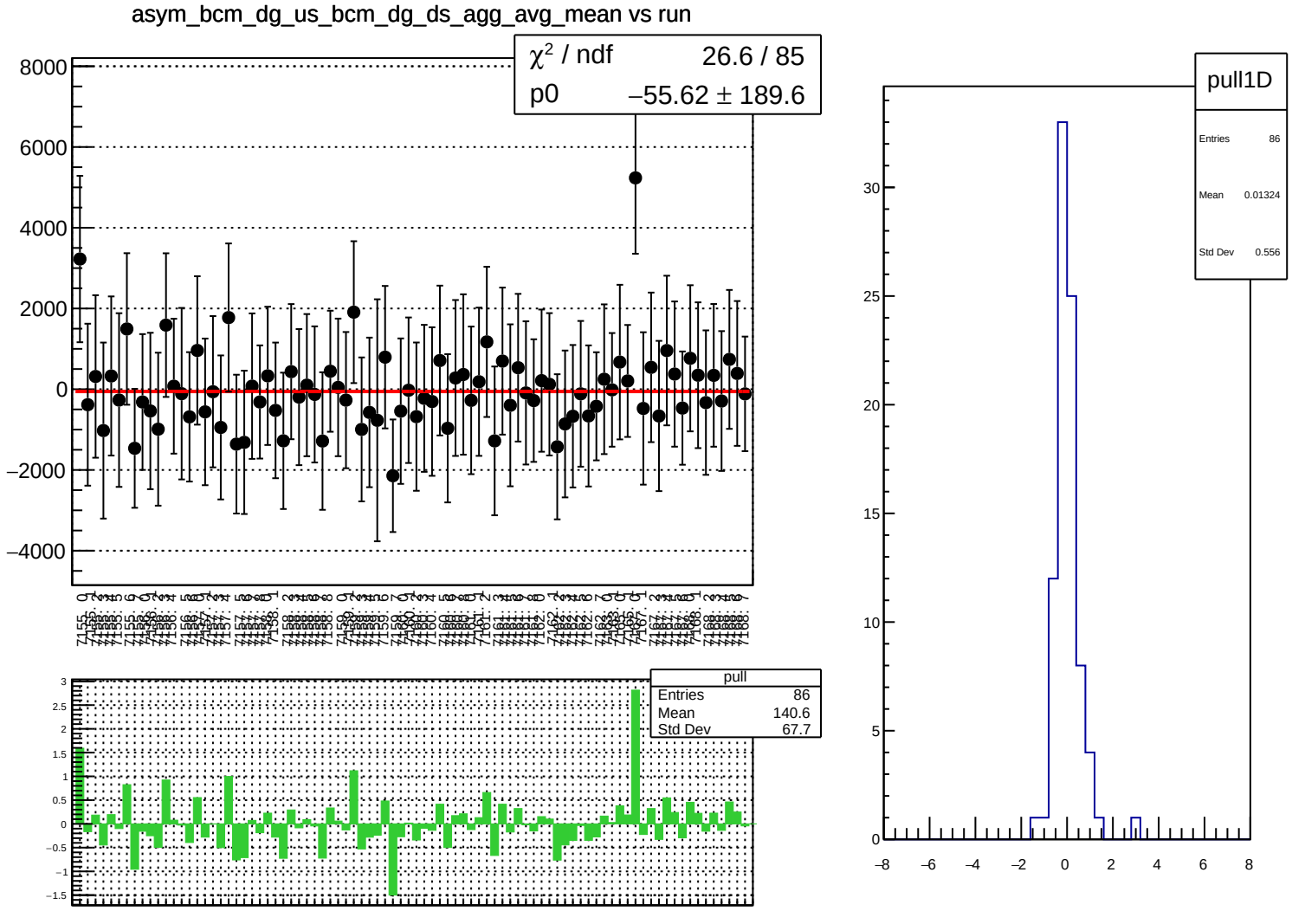

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 25.2 / 85
p0 −19.64 ± 186.5
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 114
Std Dev 40.47
2.5
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean 0.01306
Std Dev 0.5412
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

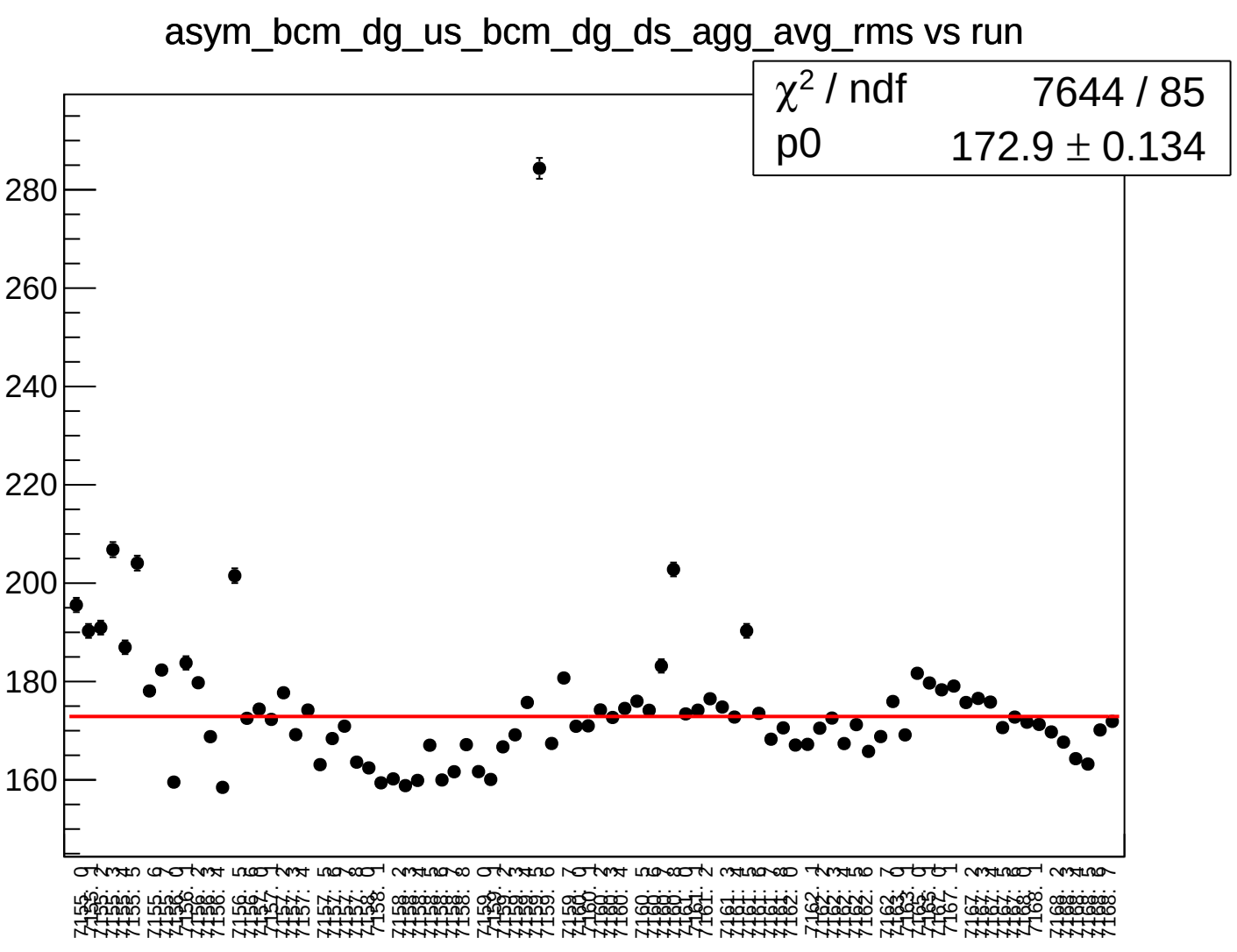

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 7867 / 85
p0 170.1 ± 0.1319
280
260
240
220
200
180
160

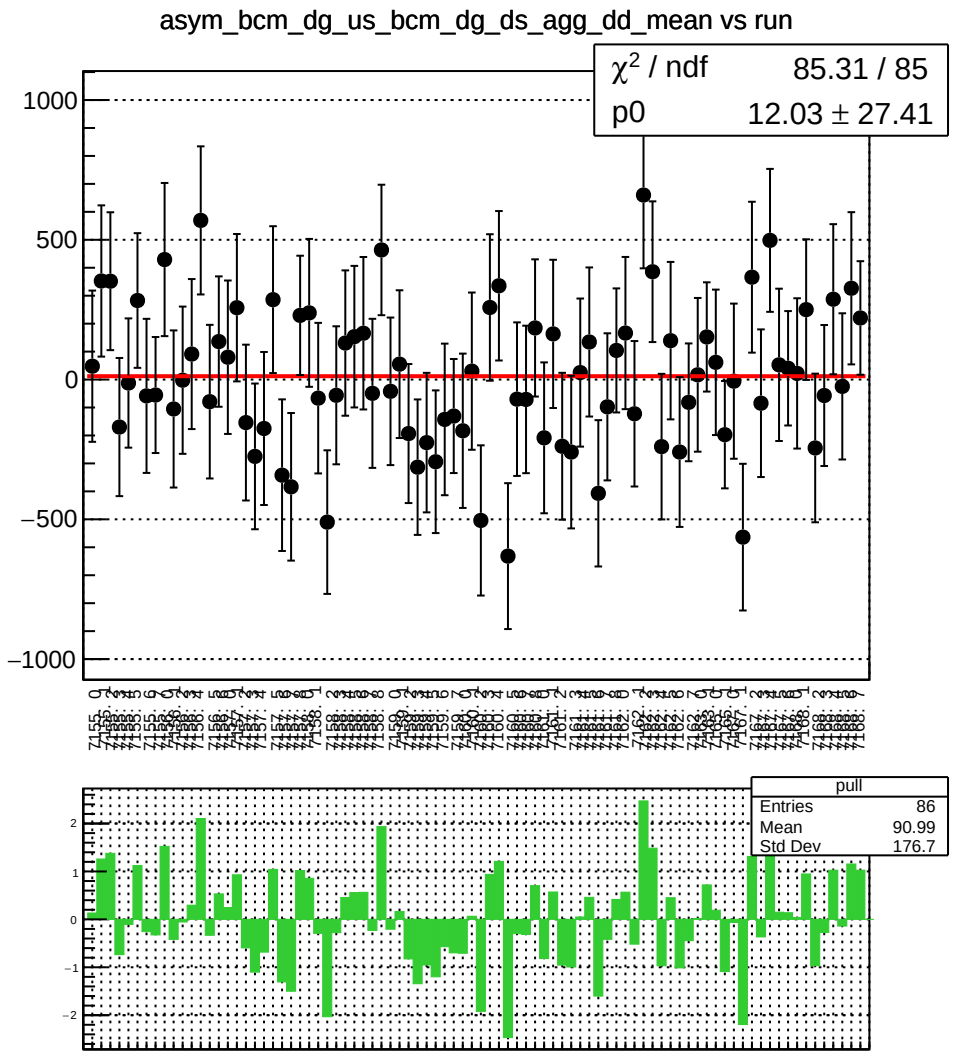

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 81.69 / 85
p0 −49.57 ± 18.54
pull
Entries 86
Mean 305.2
Std Dev 261.2

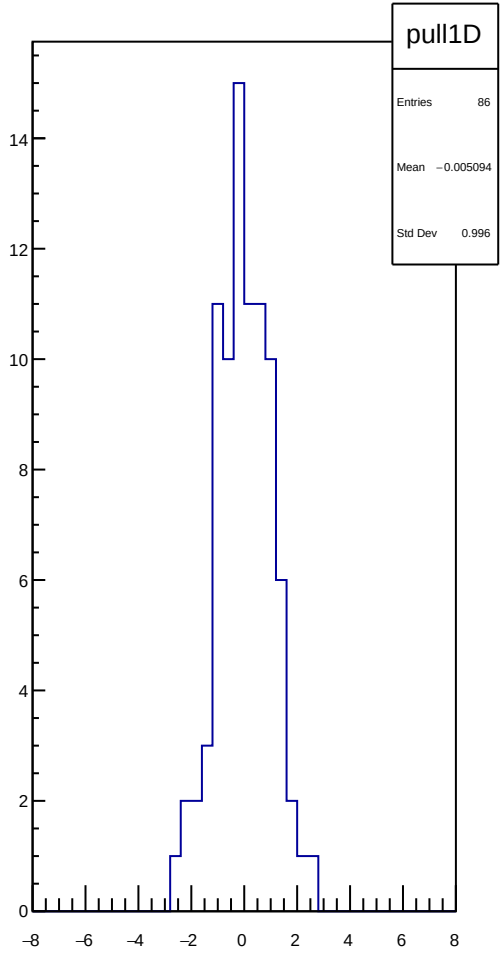

pull1D
Entries 86
Mean 0.01639
Std Dev 0.9745

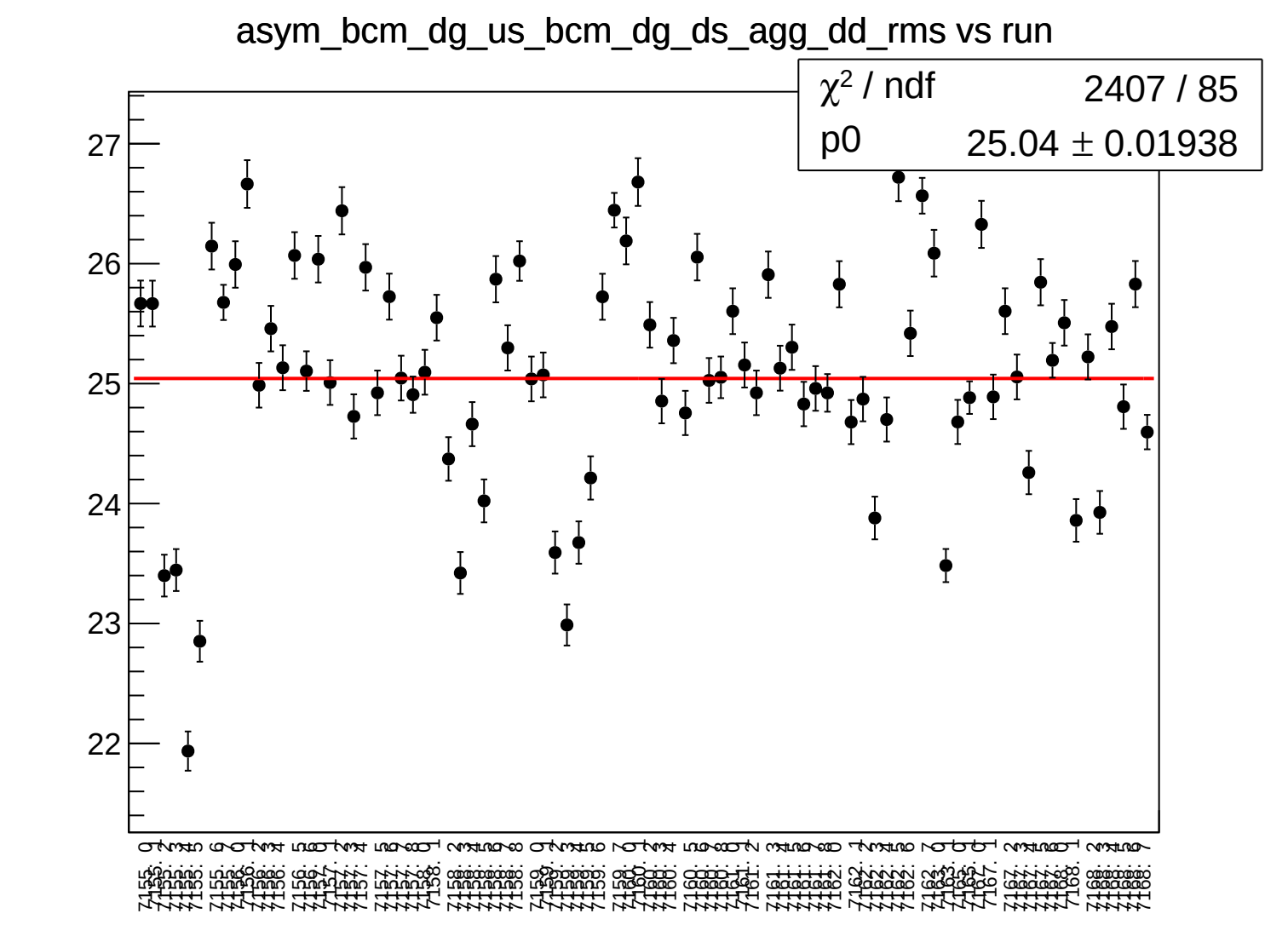

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ^2 / ndf 2123 / 85
p0 16.94 ± 0.01311
18.5
18
17.5
17
16.5
16

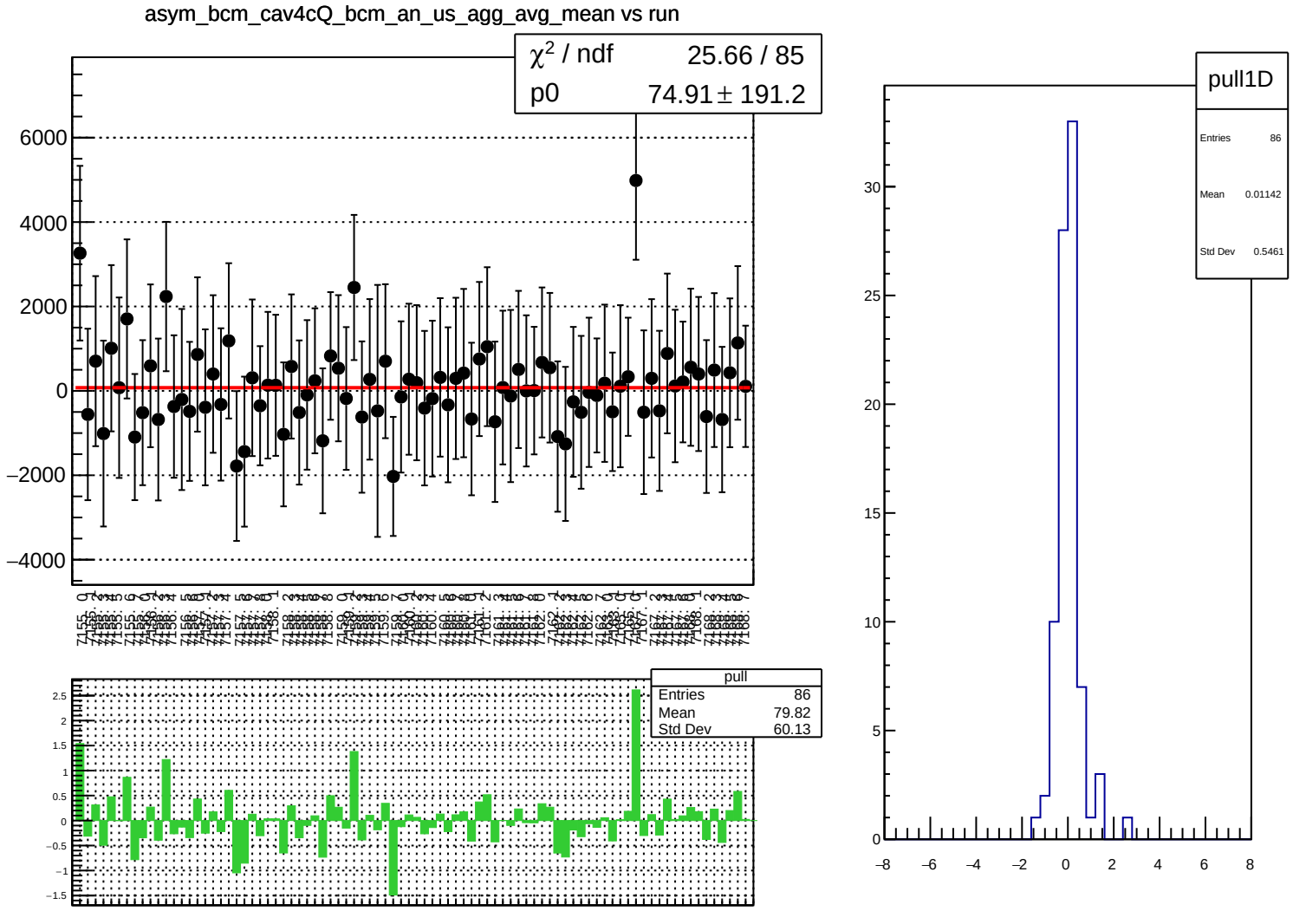

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 26.6 / 85
p0 −55.62 ± 189.6
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 140.6
Std Dev 67.7
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean 0.01324
Std Dev 0.556
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

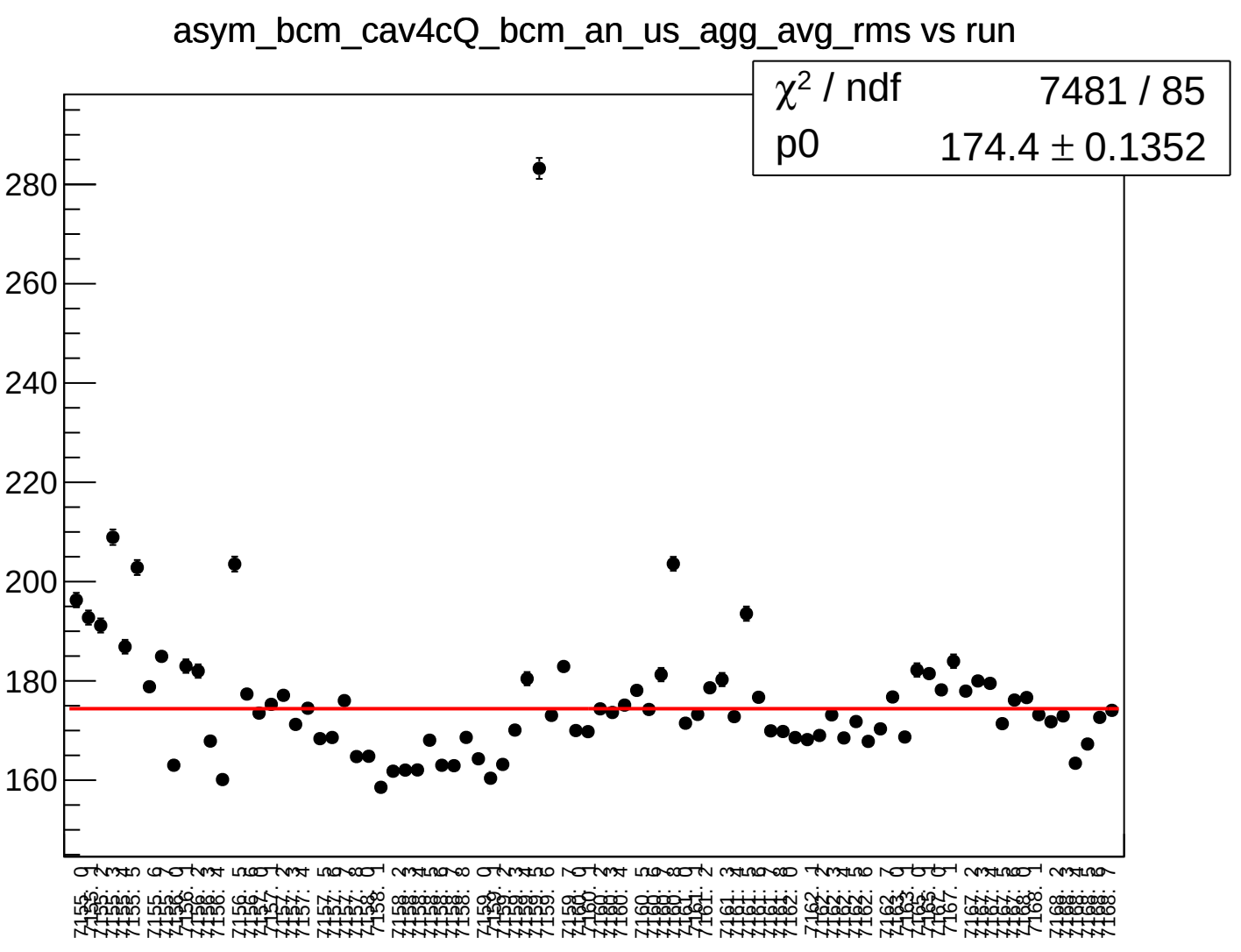

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 7644 / 85
p0 172.9 ± 0.134
280
260
240
220
200
180
160

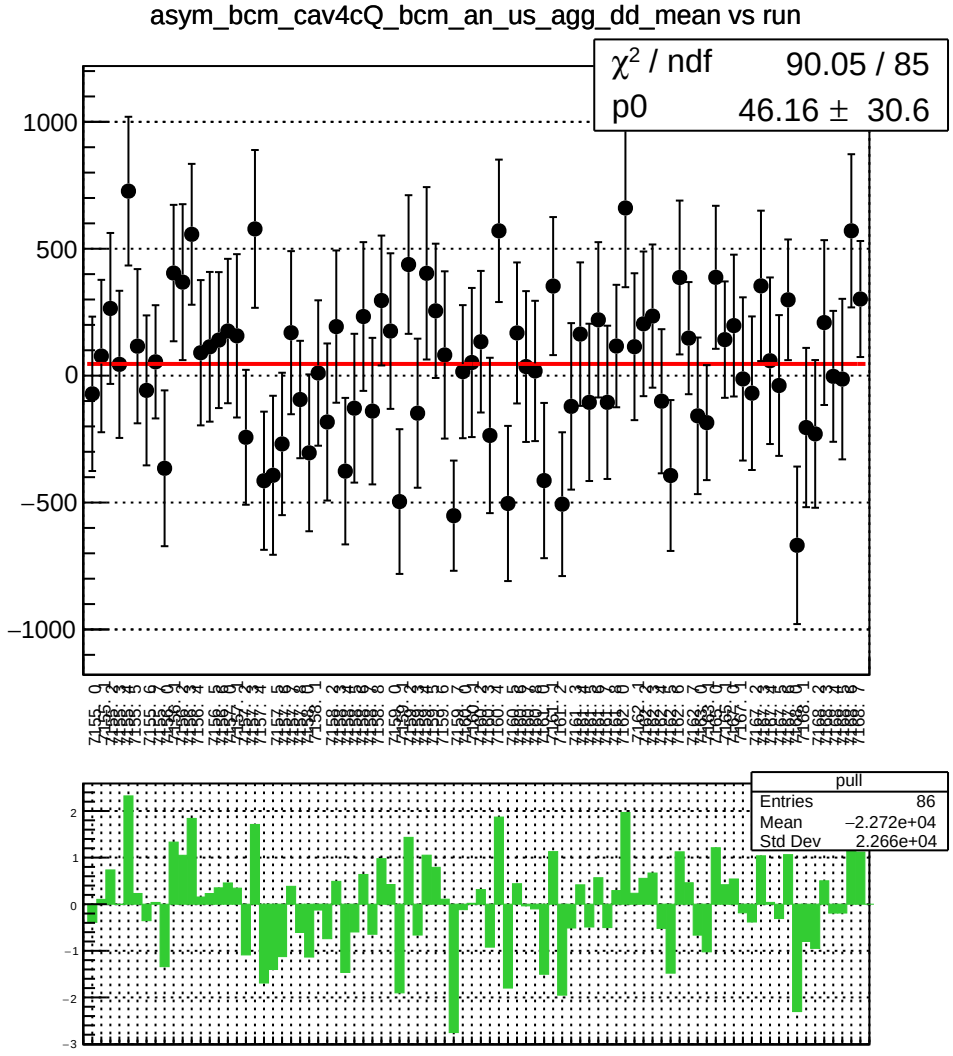

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 85.31 / 85
p0 12.03 ± 27.41
1000
500
0
−500
−1000
pull
Entries 86
Mean 90.99
Std Dev 176.7
2
1
0
−1
−2

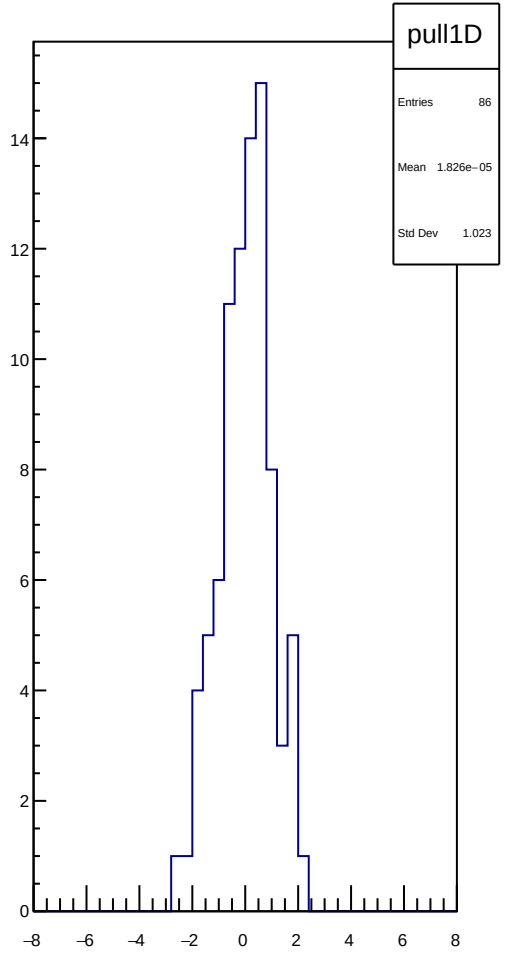

pull1D
Entries 86
Mean −0.005094
Std Dev 0.996
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

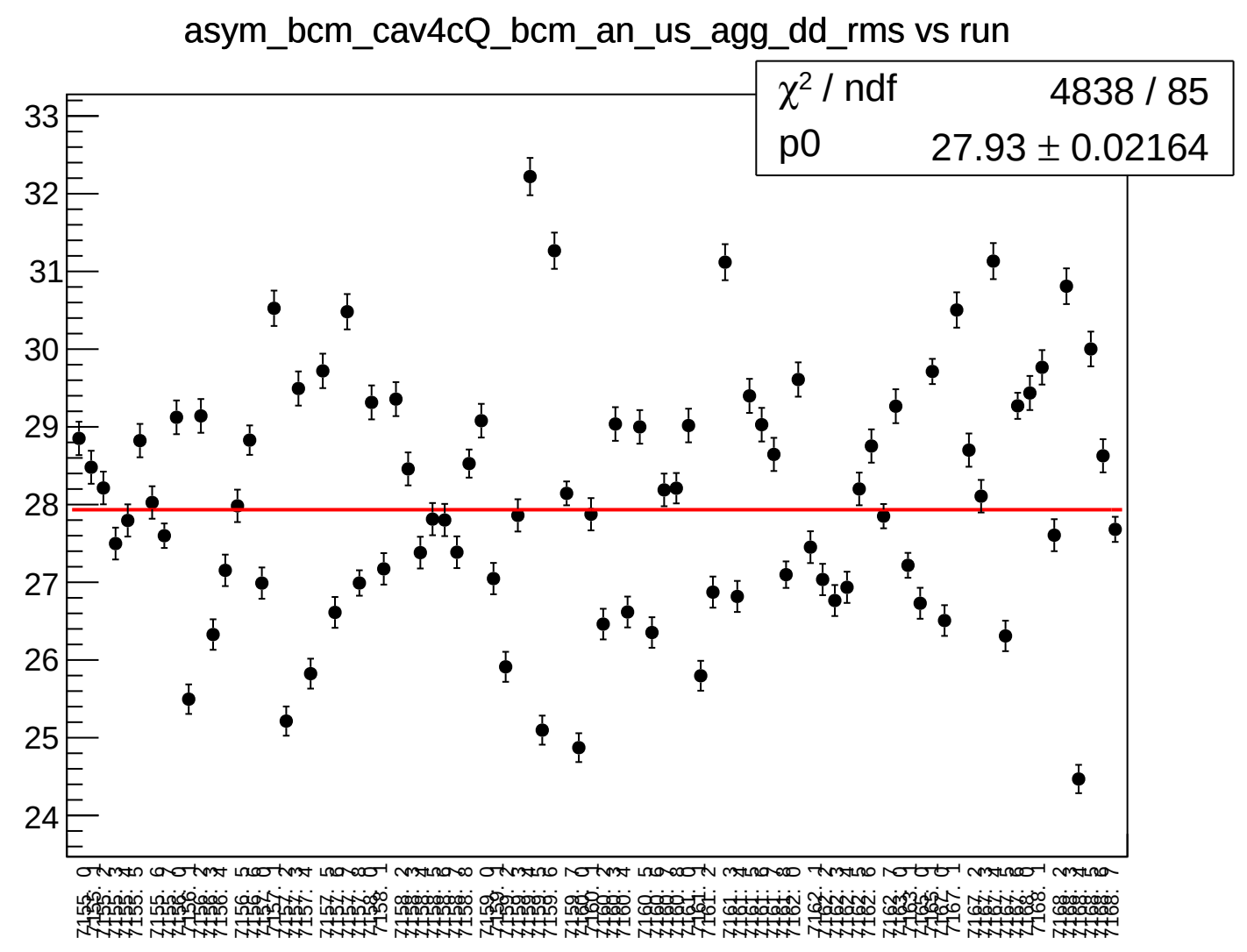

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2407 / 85
p0 25.04 ± 0.01938
27
26
25
24
23
22

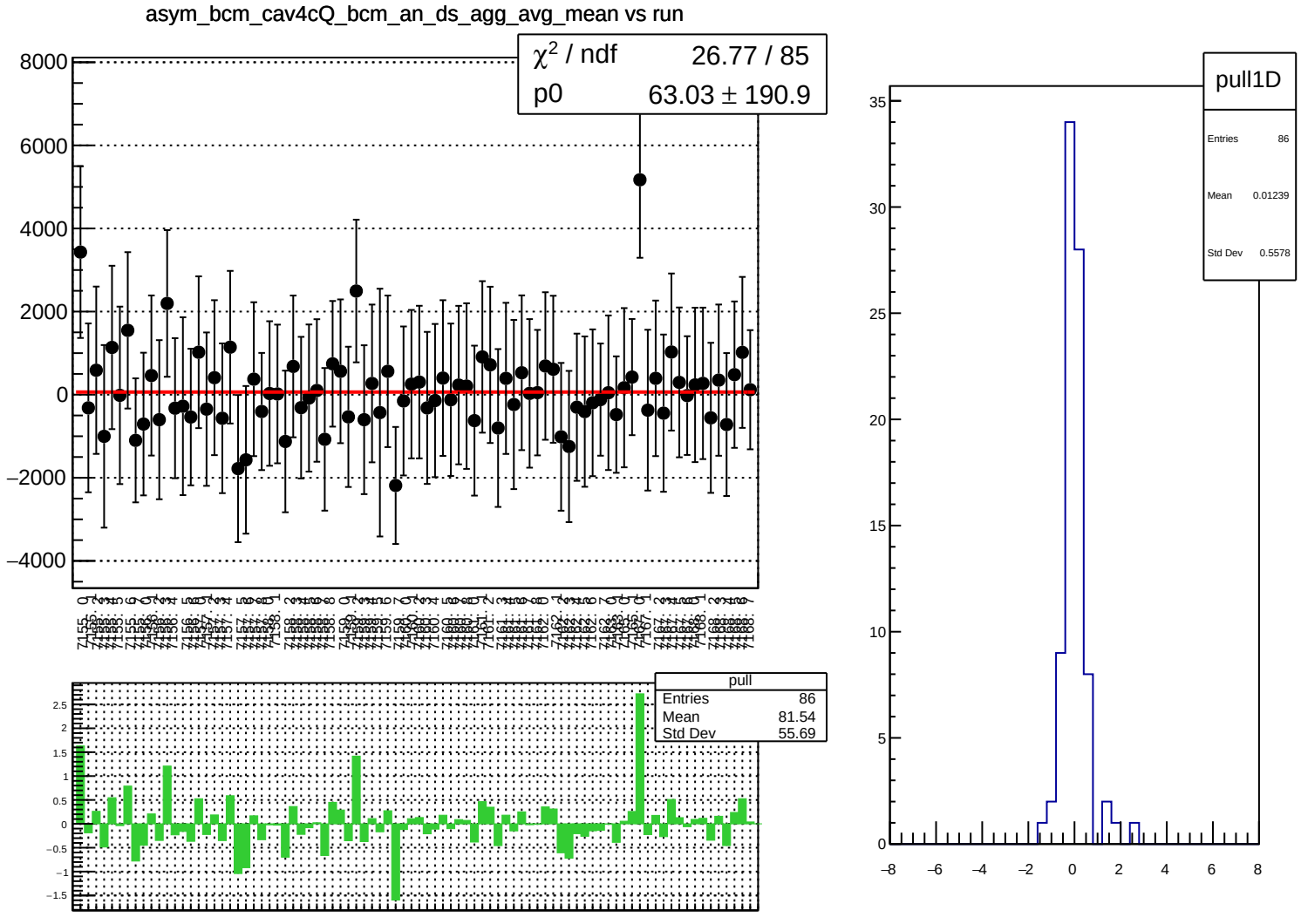

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 25.66 / 85
p0 74.91 ± 191.2
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 79.82
Std Dev 60.13
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean 0.01142
Std Dev 0.5461
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

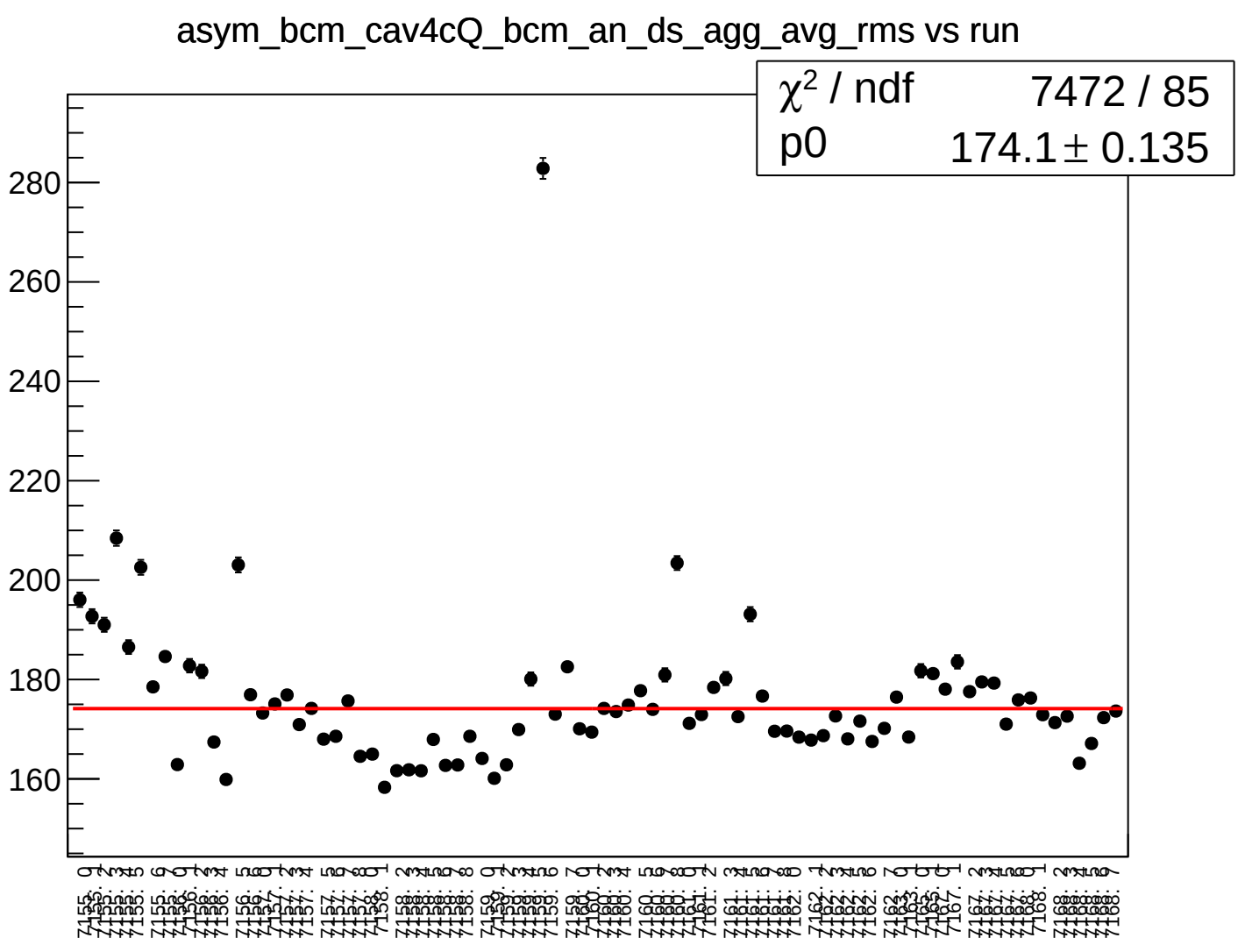

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 7481 / 85
p0 174.4 ± 0.1352
280
260
240
220
200
180
160

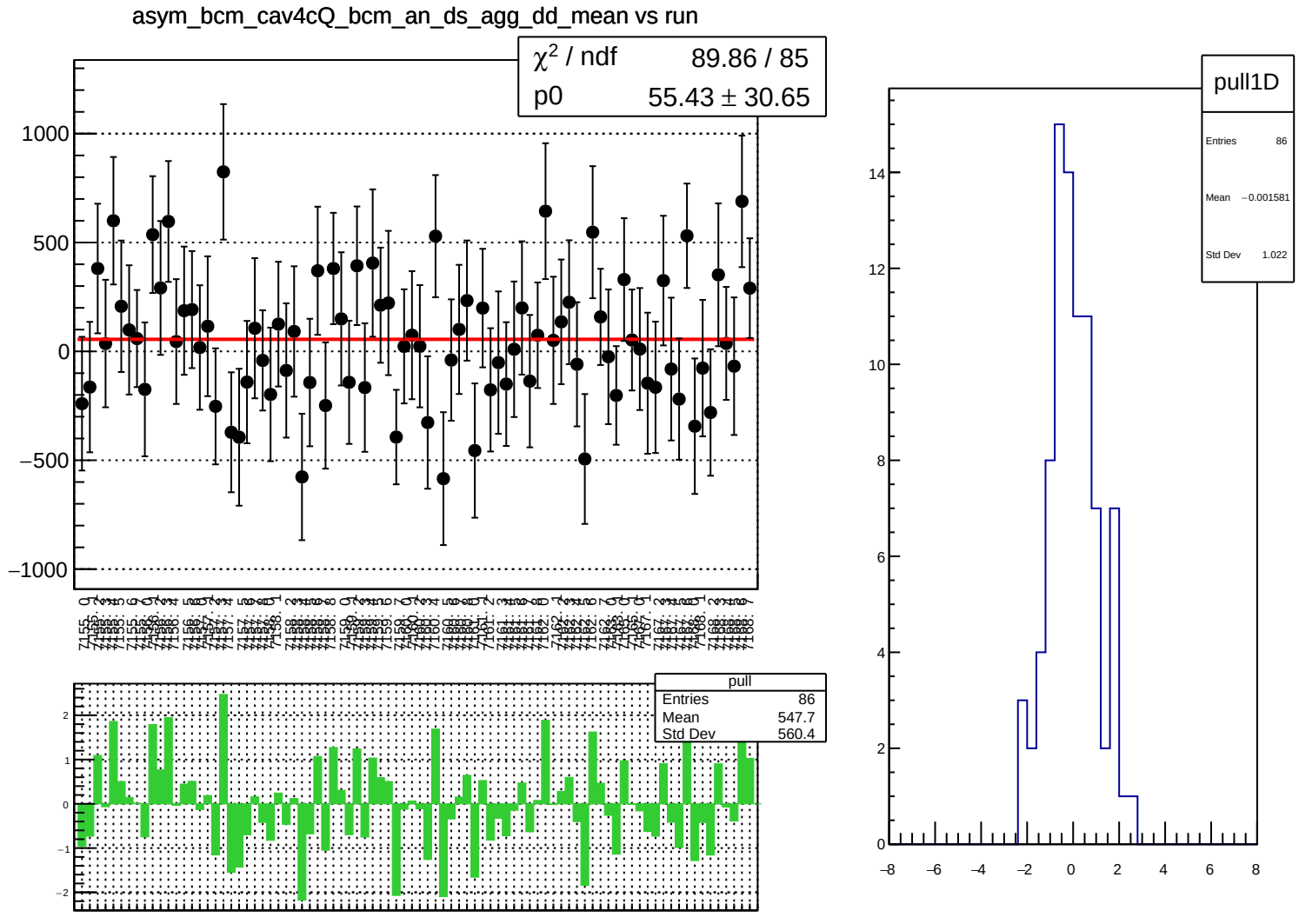

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 90.05 / 85
p0 46.16 ± 30.6
1000
500
0
−500
−1000
pull
Entries 86
Mean −2.272e+04
Std Dev 2.266e+04
2
1
0
−1
−2
−3

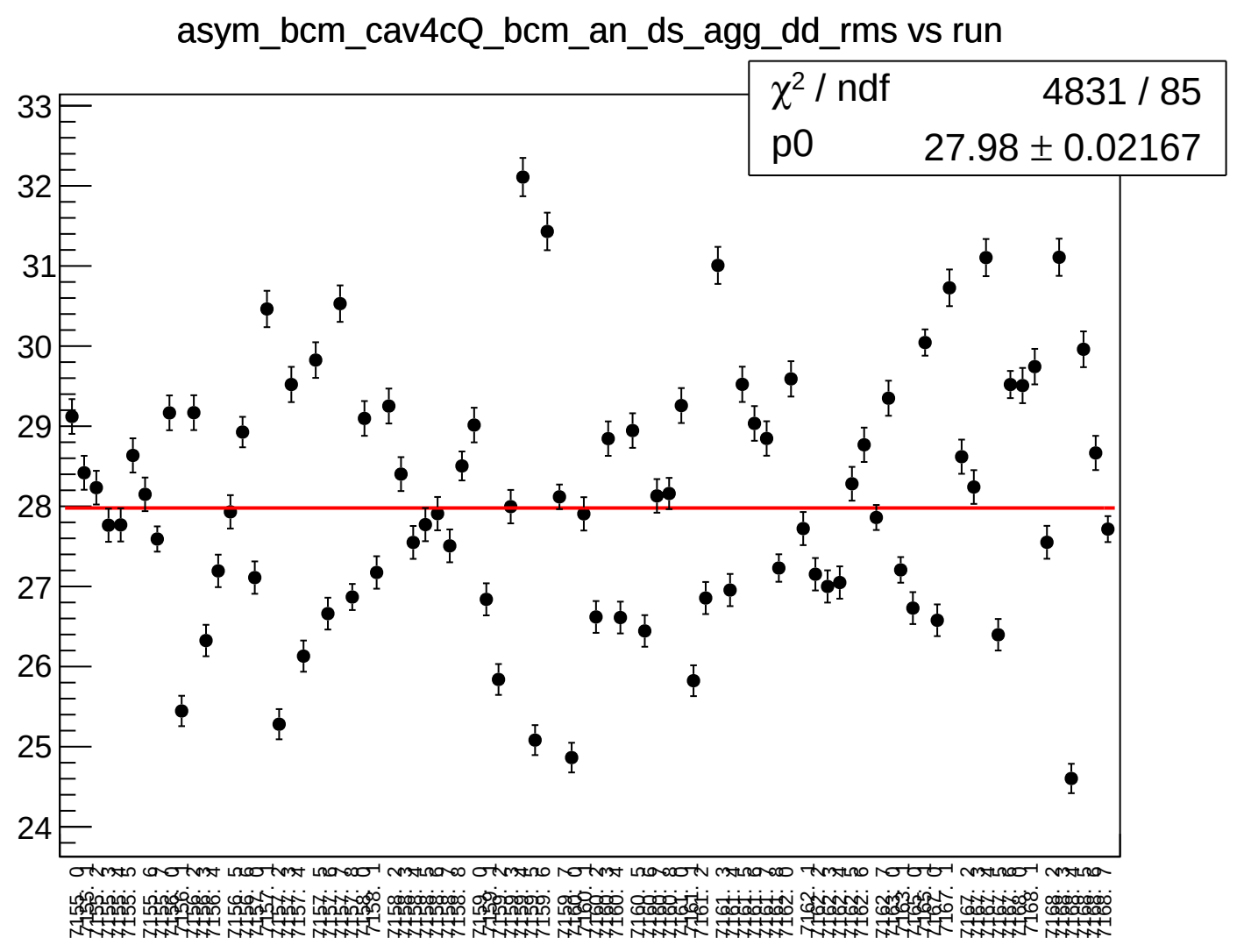

pull1D
Entries 86
Mean 1.826e−05
Std Dev 1.023
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

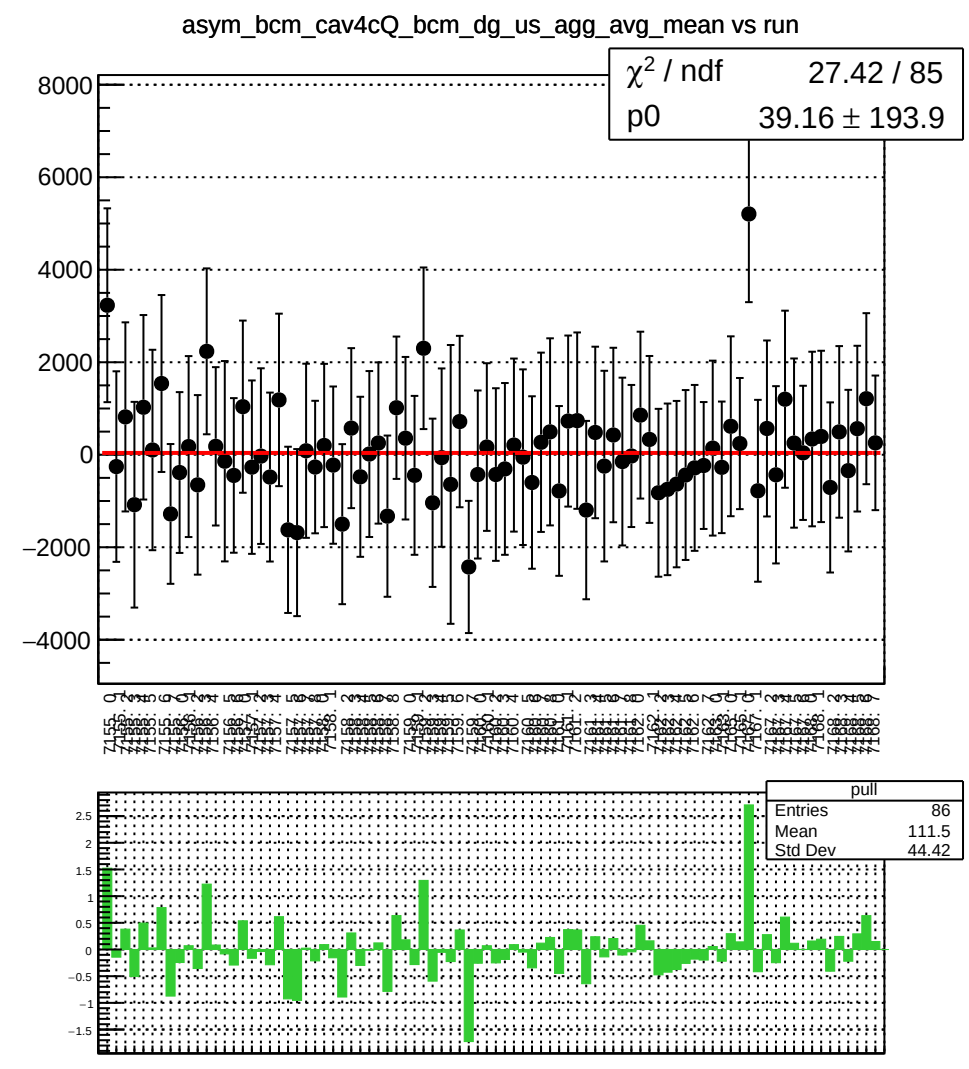

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4838 / 85
p0 27.93 ± 0.02164
33
32
31
30
29
28
27
26
25
24

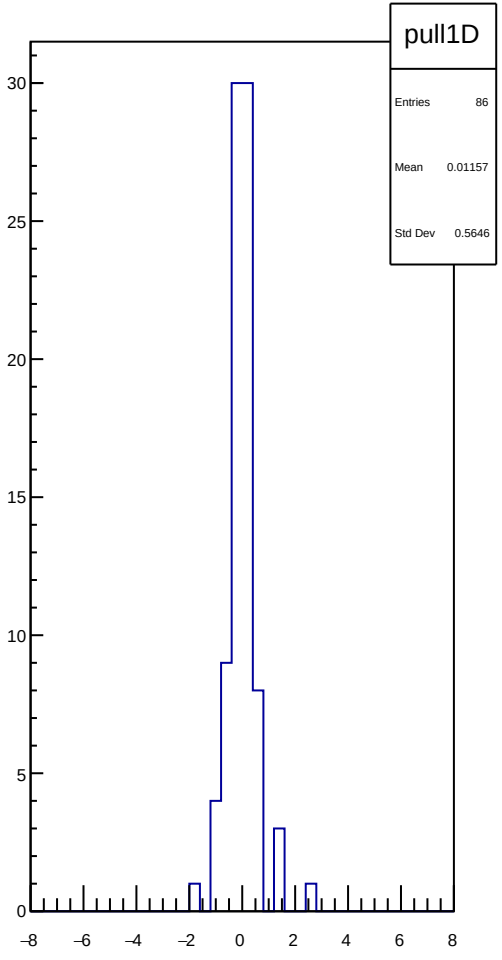

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 26.77 / 85
p0 63.03 ± 190.9
pull
Entries 86
Mean 81.54
Std Dev 55.69
pull1D
Entries 86
Mean 0.01239
Std Dev 0.5578

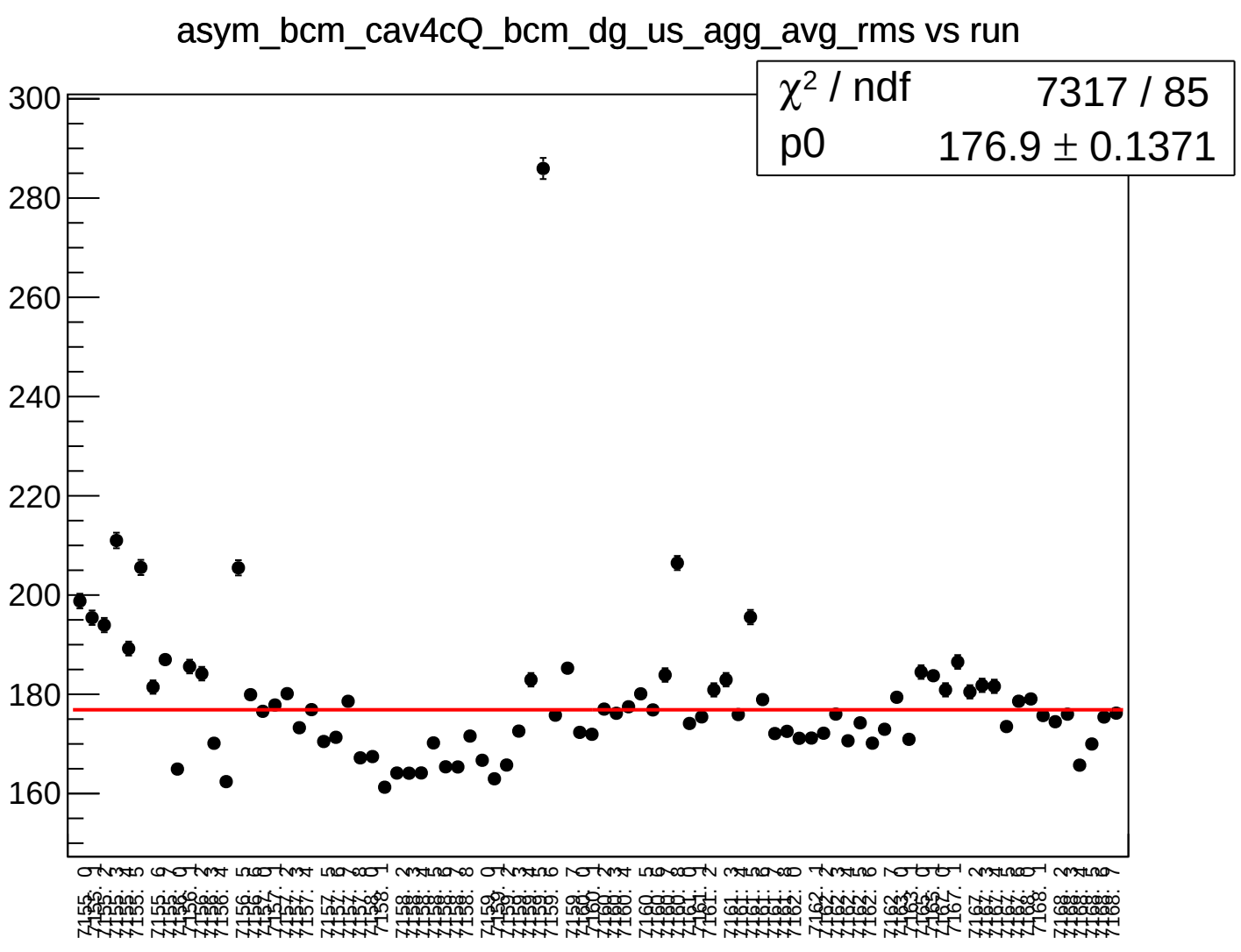

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7472 / 85
p0 174.1 ± 0.135
280
260
240
220
200
180
160

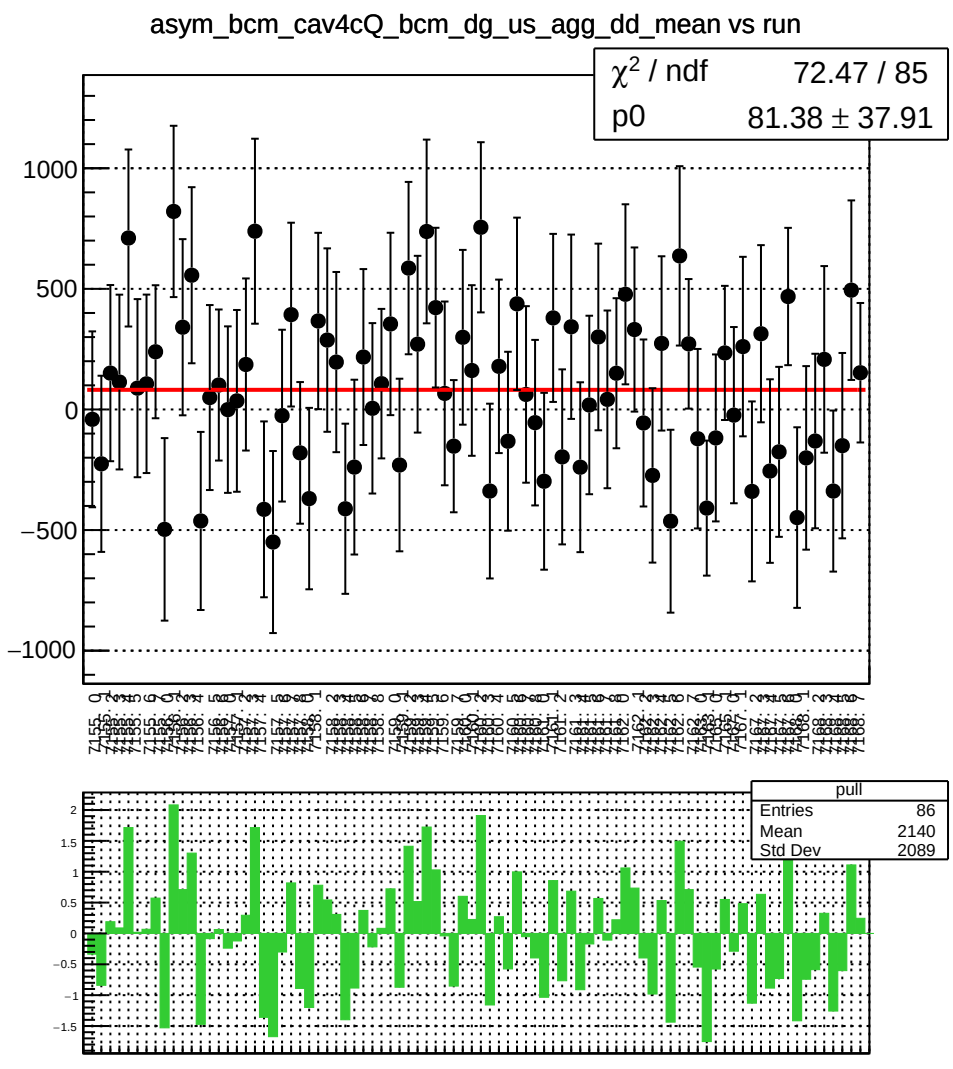

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 89.86 / 85
p0 55.43 ± 30.65
1000
500
0
−500
−1000
pull
Entries 86
Mean 547.7
Std Dev 560.4
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.001581
Std Dev 1.022
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

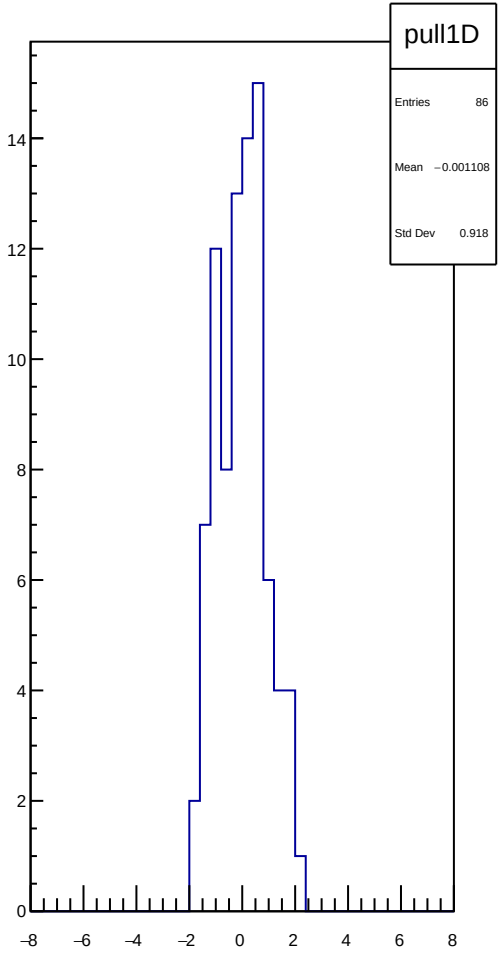

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4831 / 85
p0 27.98 ± 0.02167
33
32
31
30
29
28
27
26
25
24

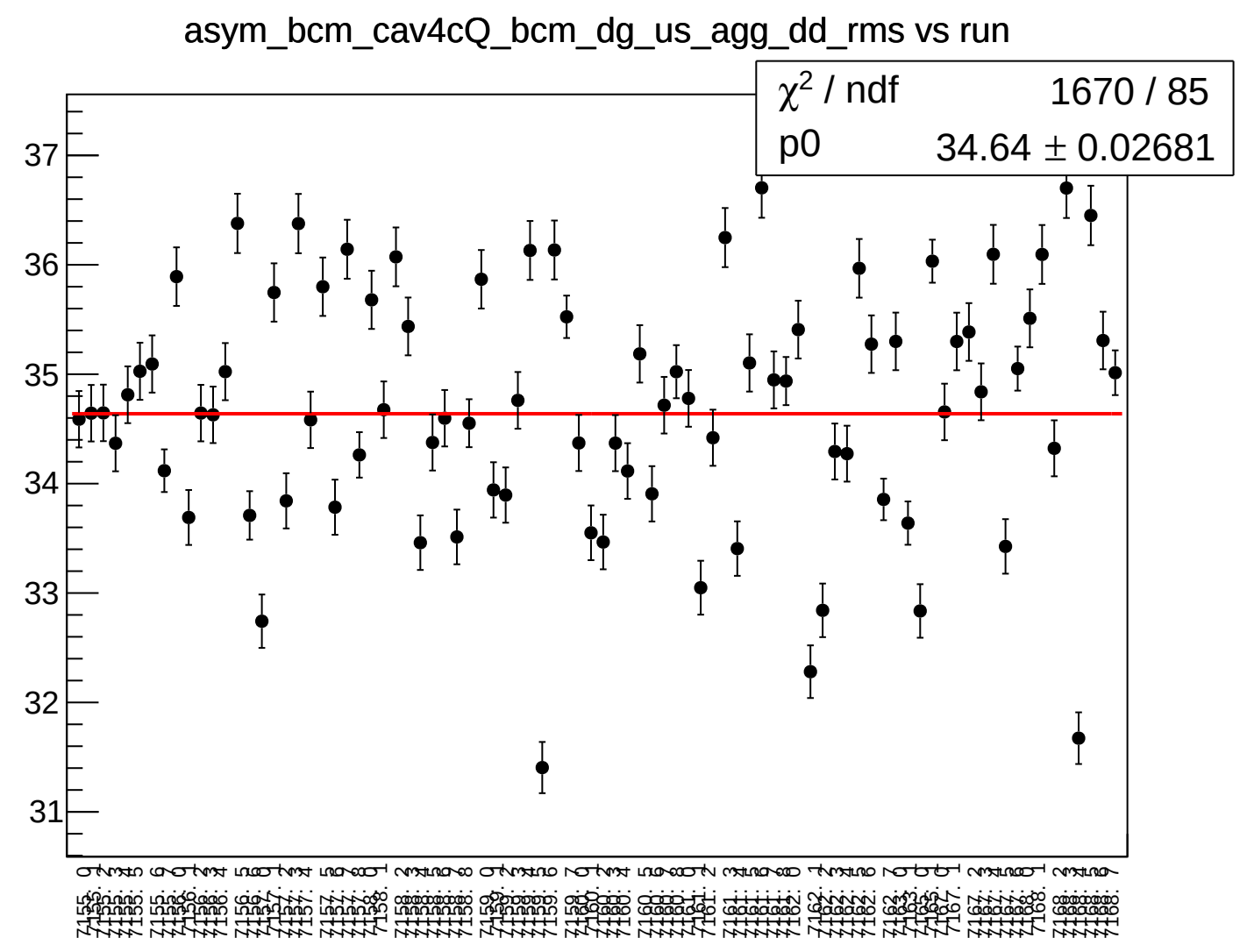

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 27.42 / 85
p0 39.16 ± 193.9
pull
Entries 86
Mean 111.5
Std Dev 44.42

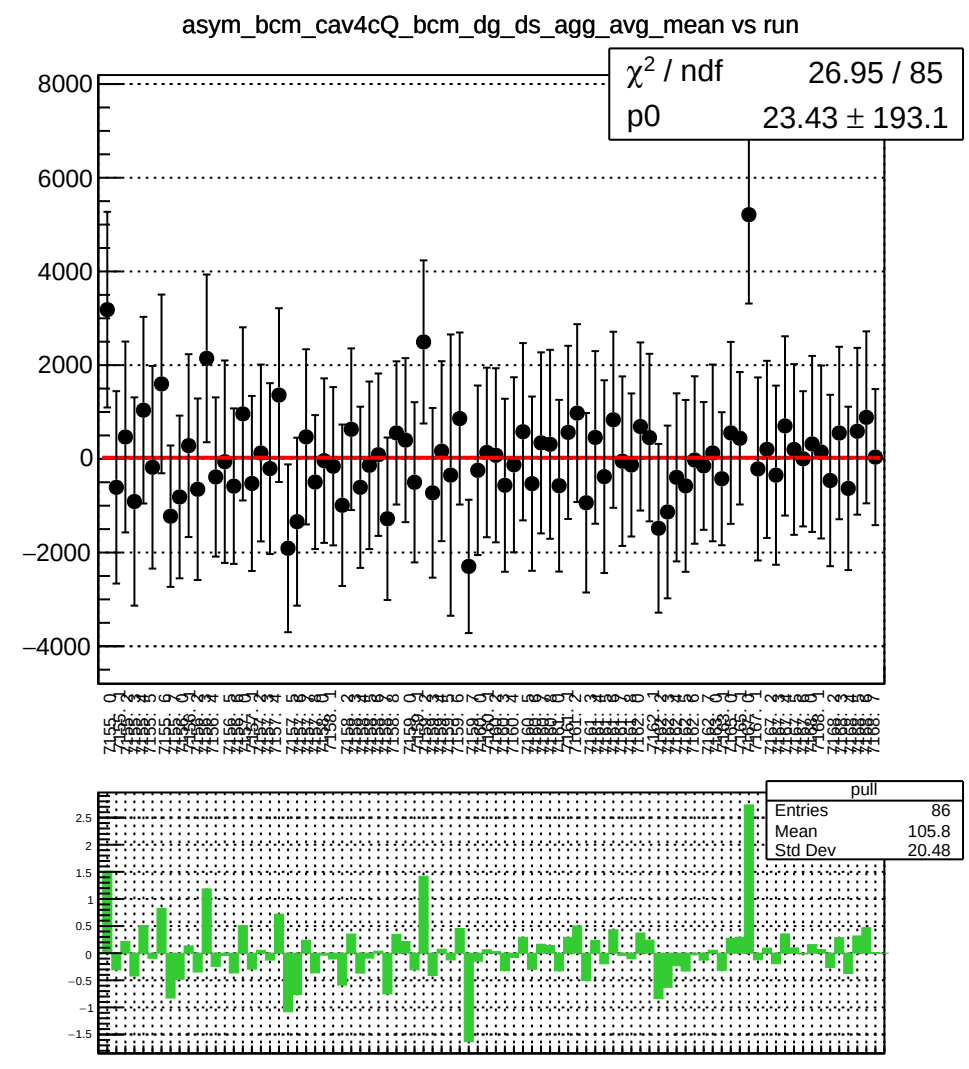

pull1D
Entries 86
Mean 0.01157
Std Dev 0.5646

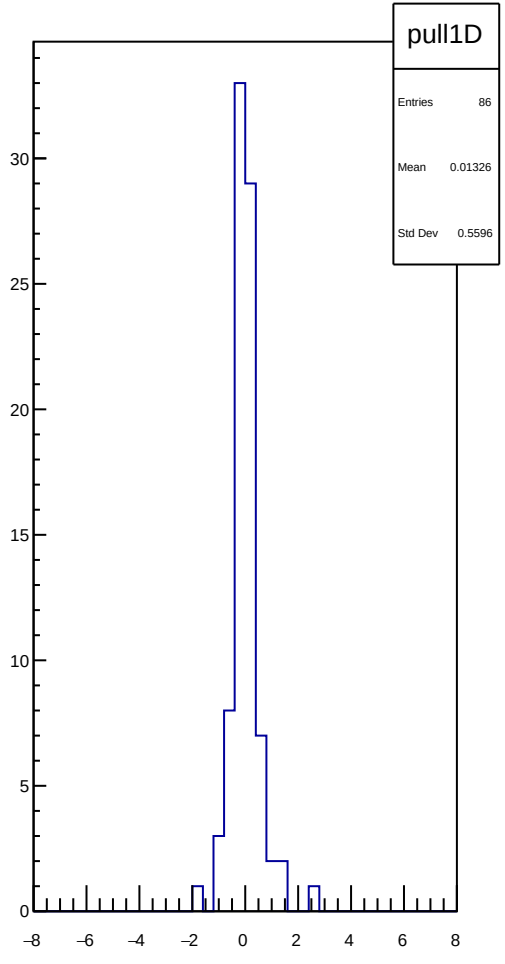

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 7317 / 85
p0 176.9 ± 0.1371
300
280
260
240
220
200
180
160

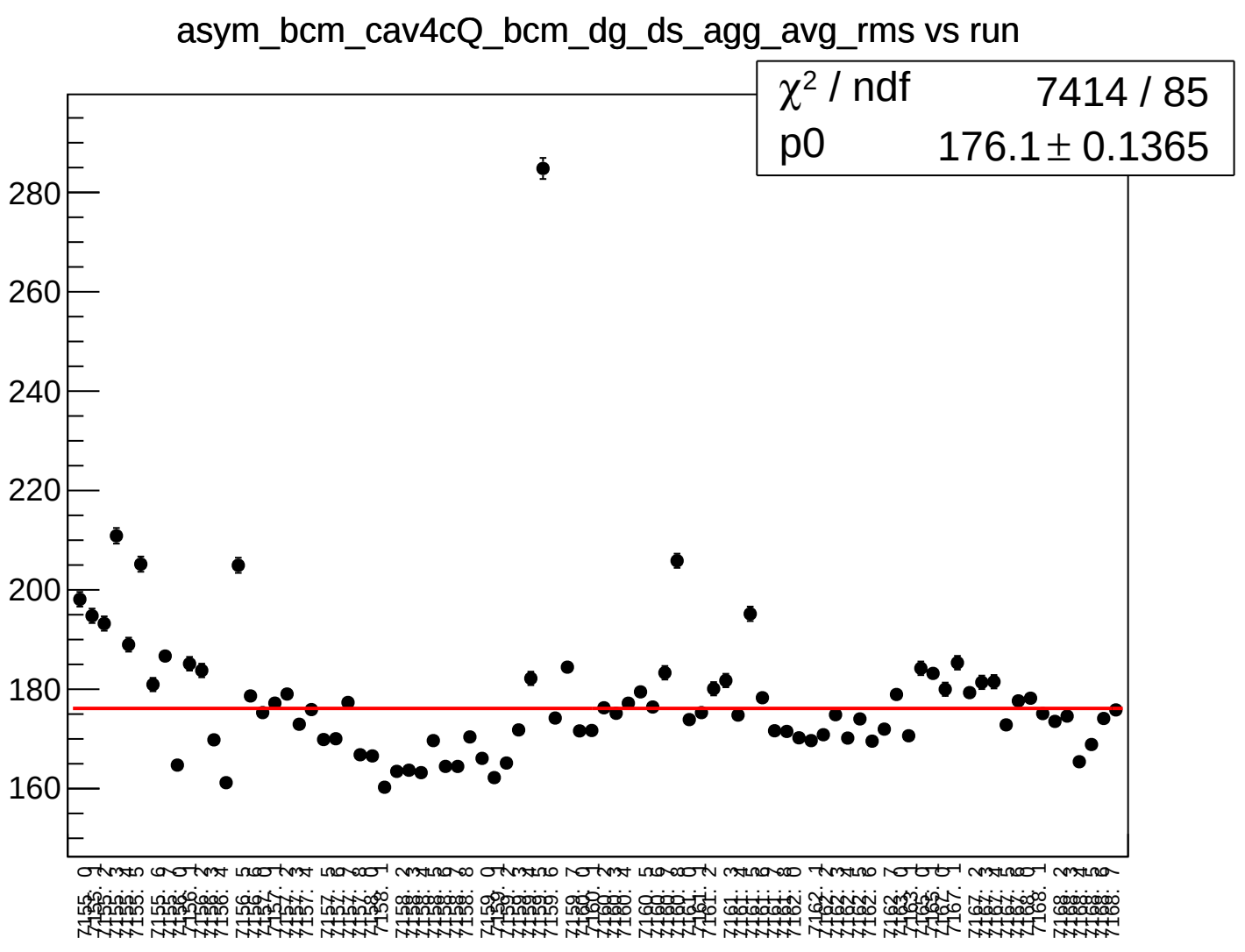

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 72.47 / 85
p0 81.38 ± 37.91
1000
500
0
−500
−1000
pull
Entries 86
Mean 2140
Std Dev 2089
2
1.5
1
0.5
0
−0.5
−1
−1.5

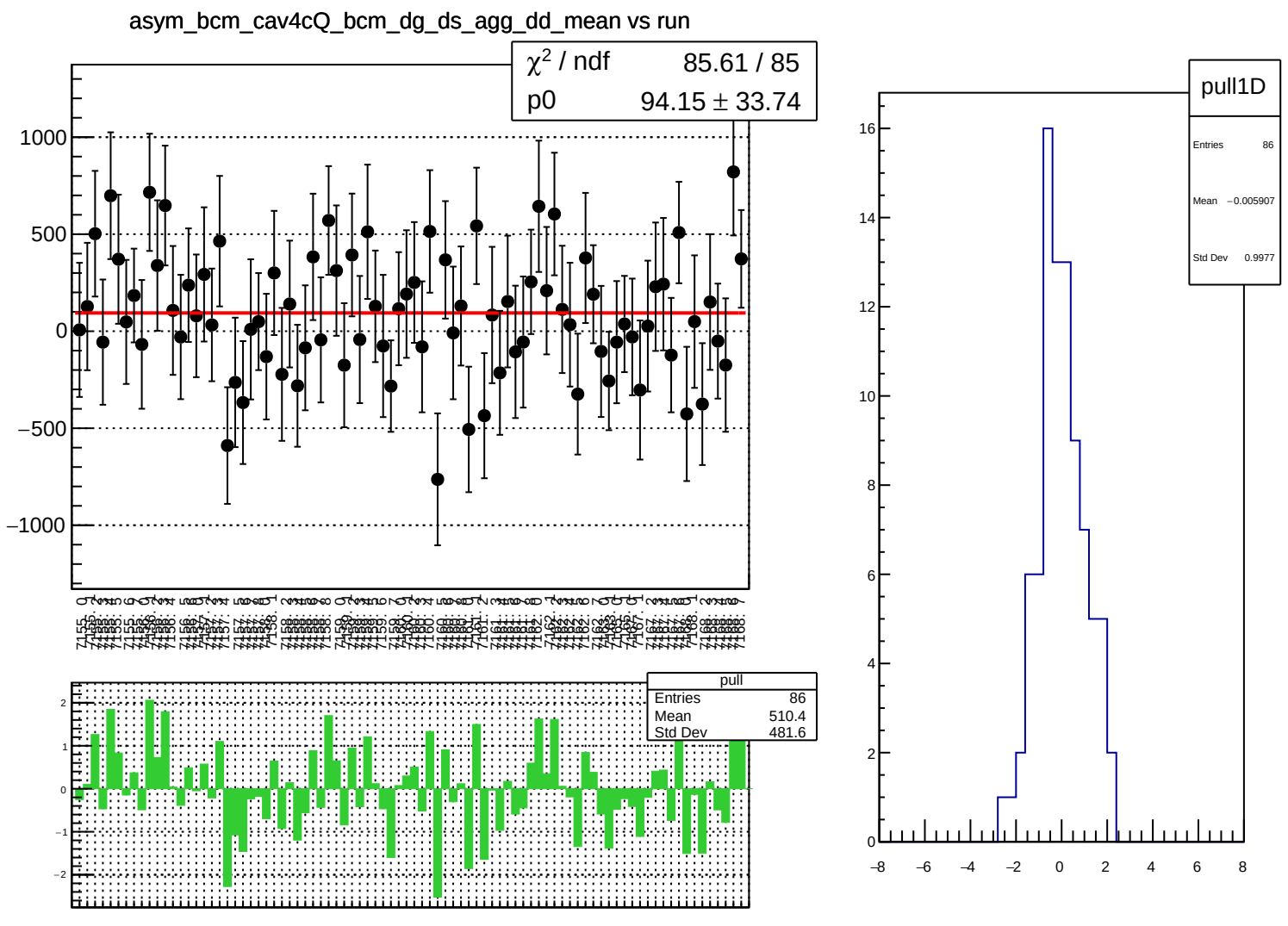

pull1D
Entries 86
Mean −0.001108
Std Dev 0.918
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

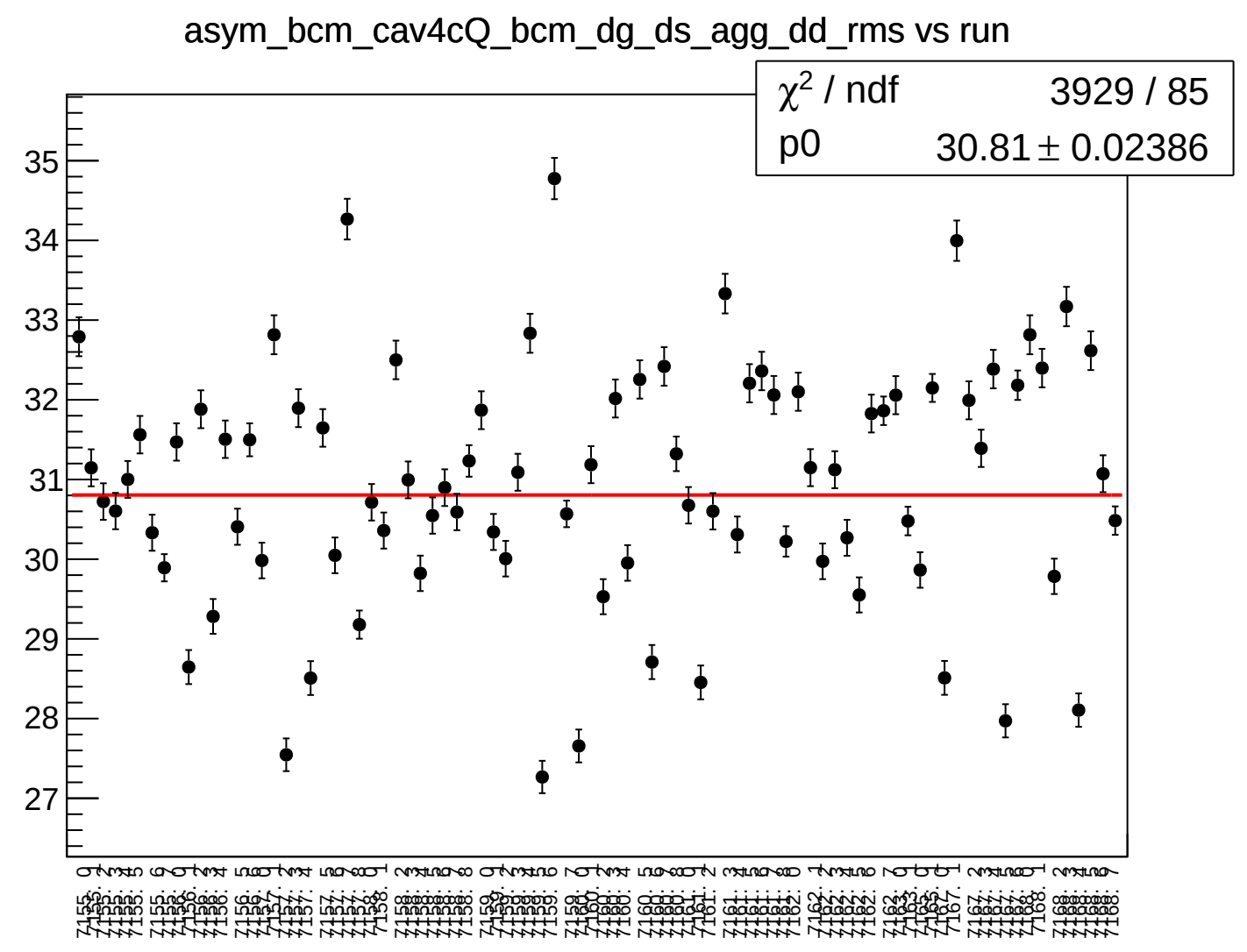

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1670 / 85
p0 34.64 ± 0.02681
37
36
35
34
33
32
31

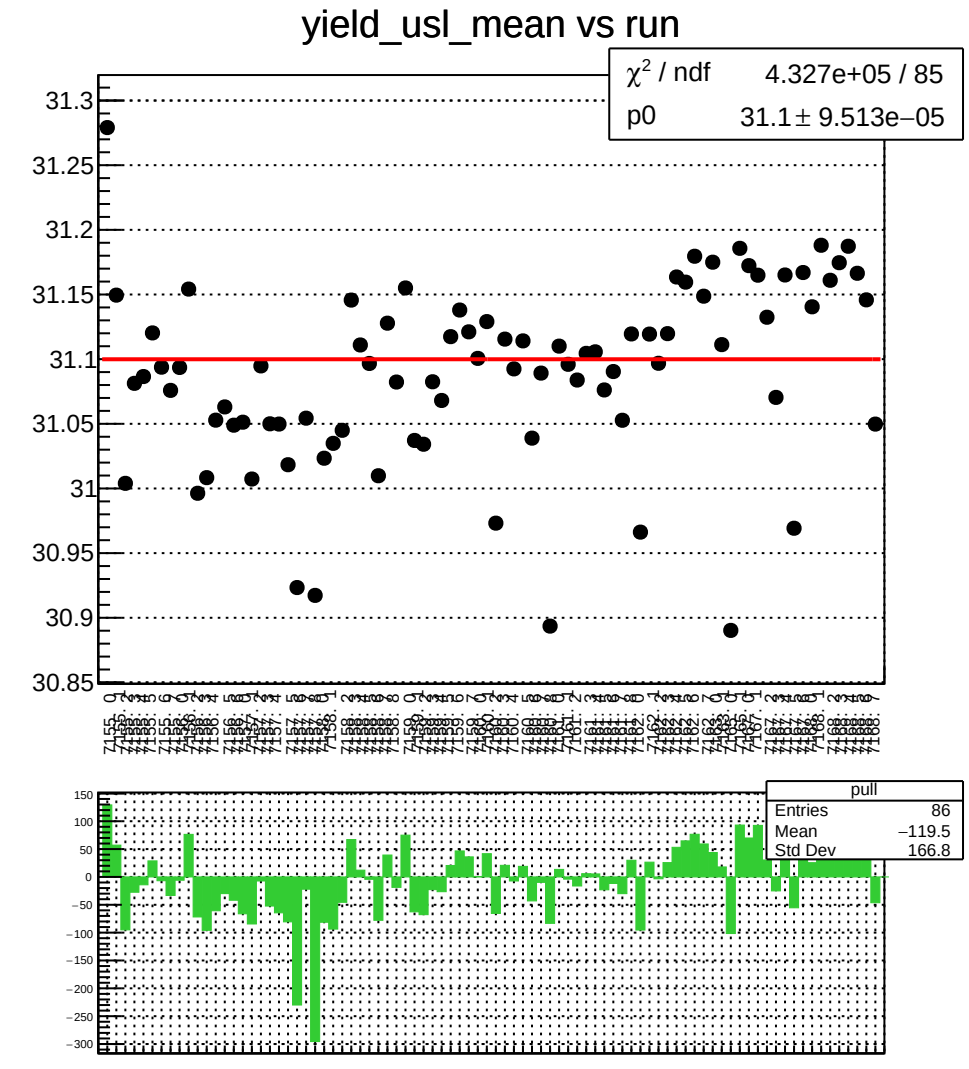

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 26.95 / 85
p0 23.43 ± 193.1
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 105.8
Std Dev 20.48
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

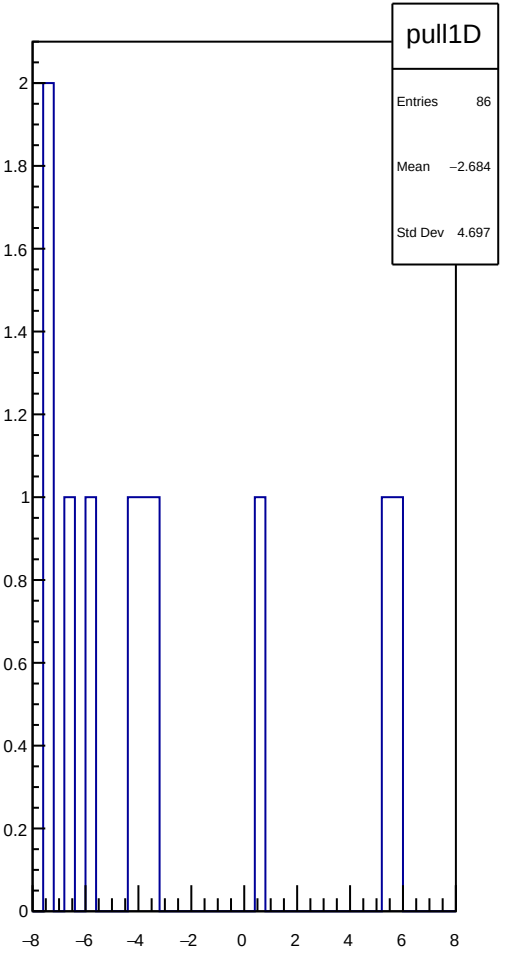

pull1D
Entries 86
Mean 0.01326
Std Dev 0.5596
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

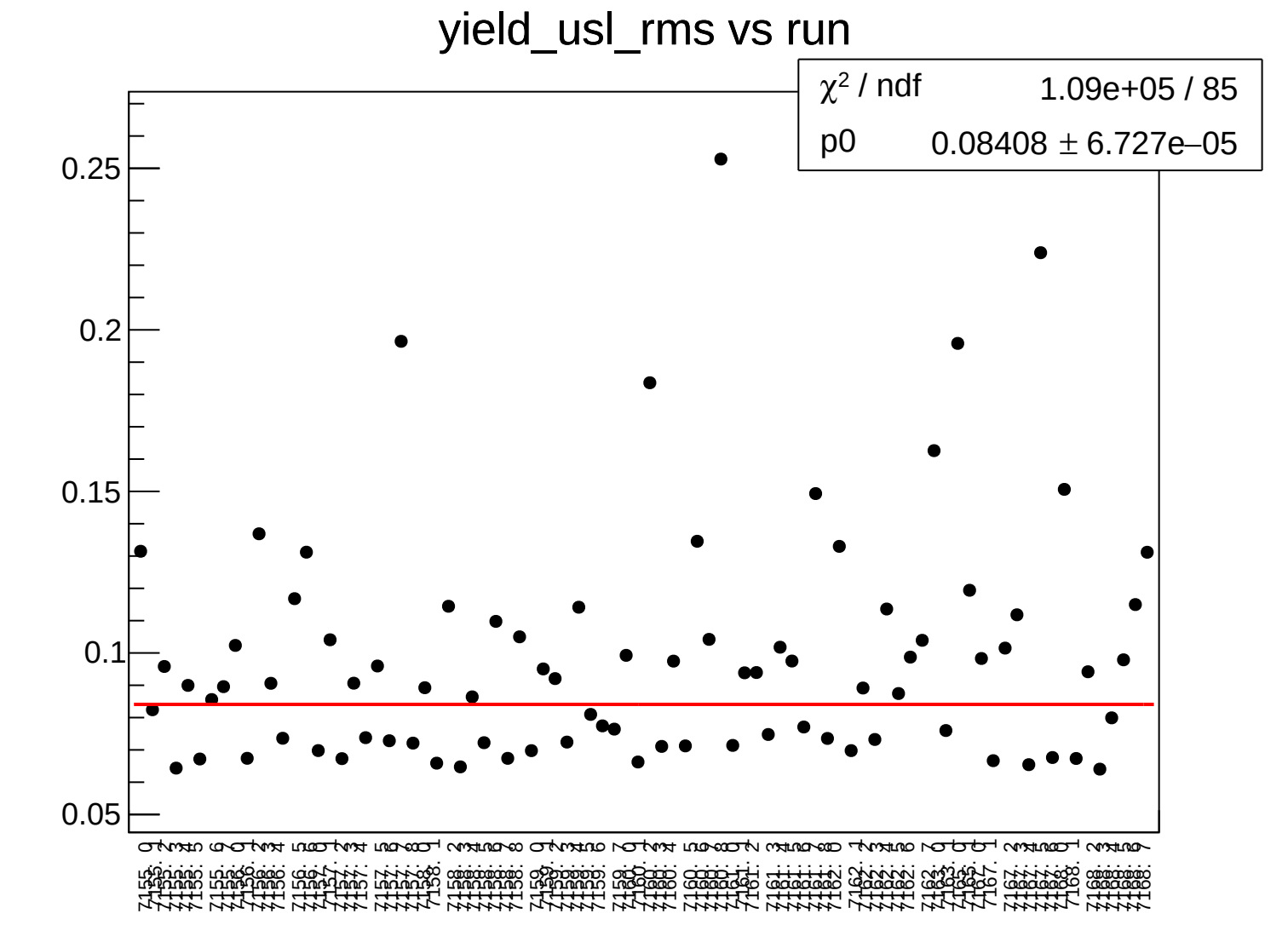

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 7414 / 85
p0 176.1 ± 0.1365
280
260
240
220
200
180
160

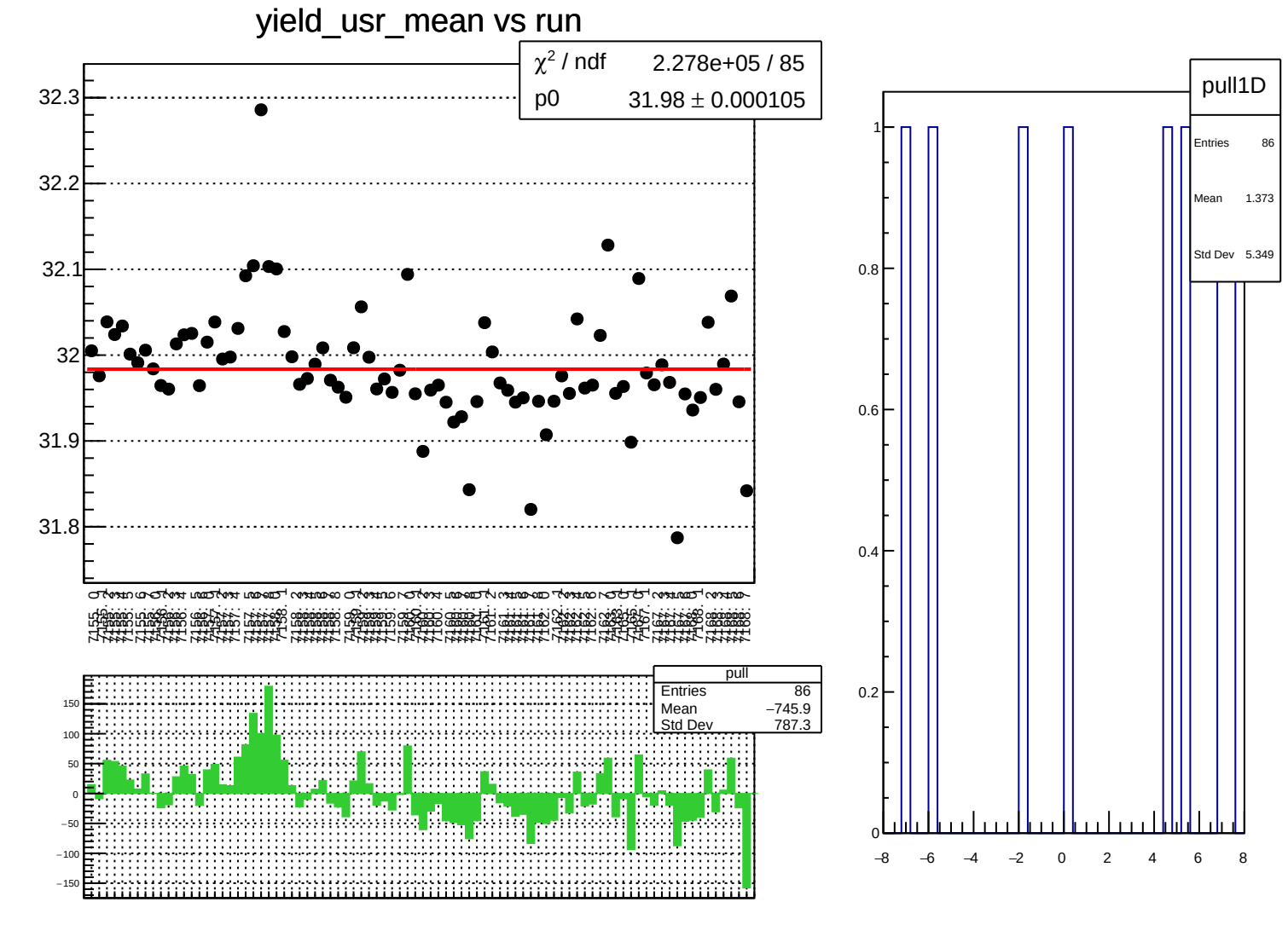

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 85.61 / 85
p0 94.15 ± 33.74
1000
500
0
−500
−1000
pull
Entries 86
Mean 510.4
Std Dev 481.6
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.005907
Std Dev 0.9977
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

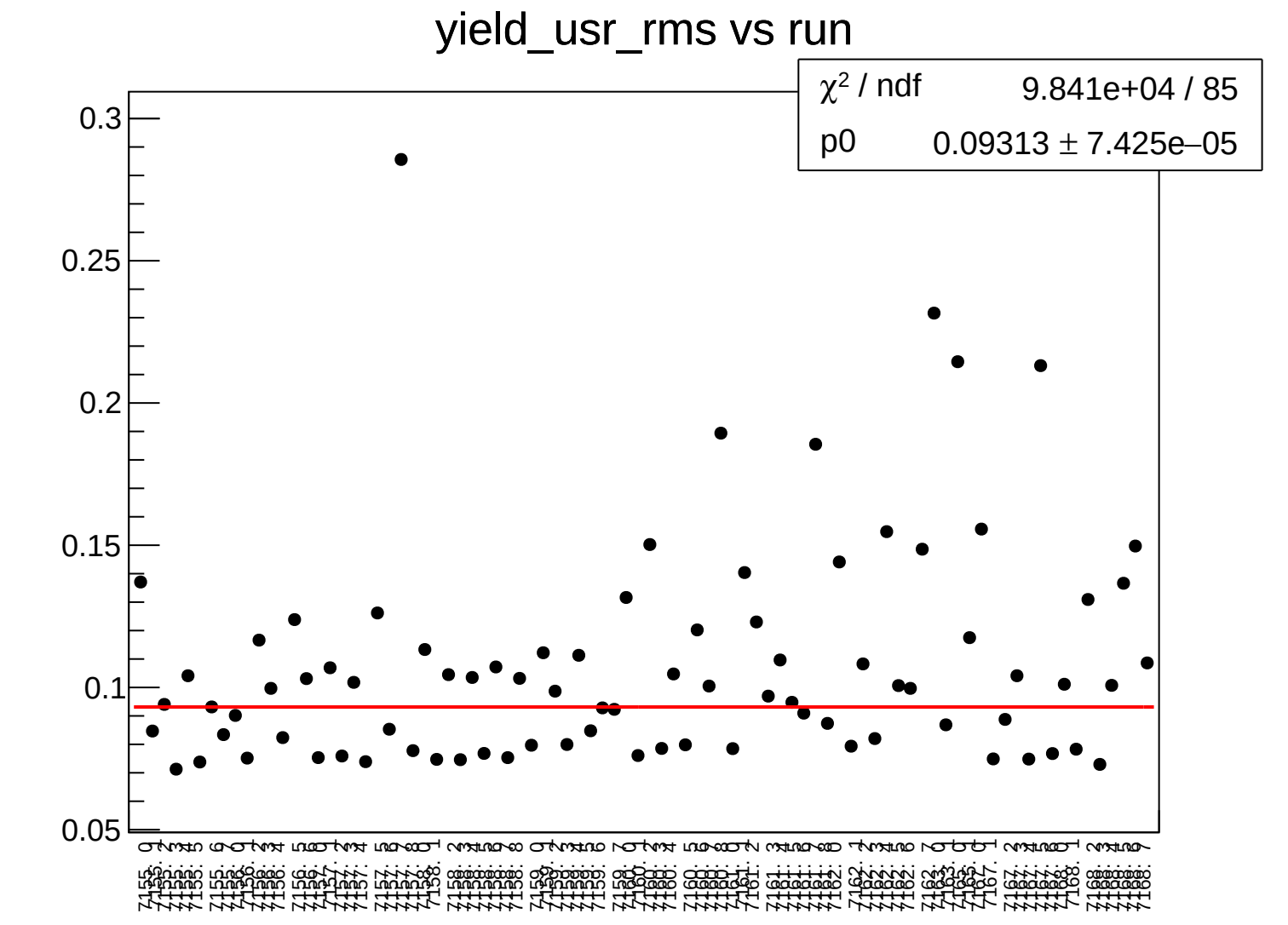

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3929 / 85
p0 30.81 ± 0.02386
35
34
33
32
31
30
29
28
27

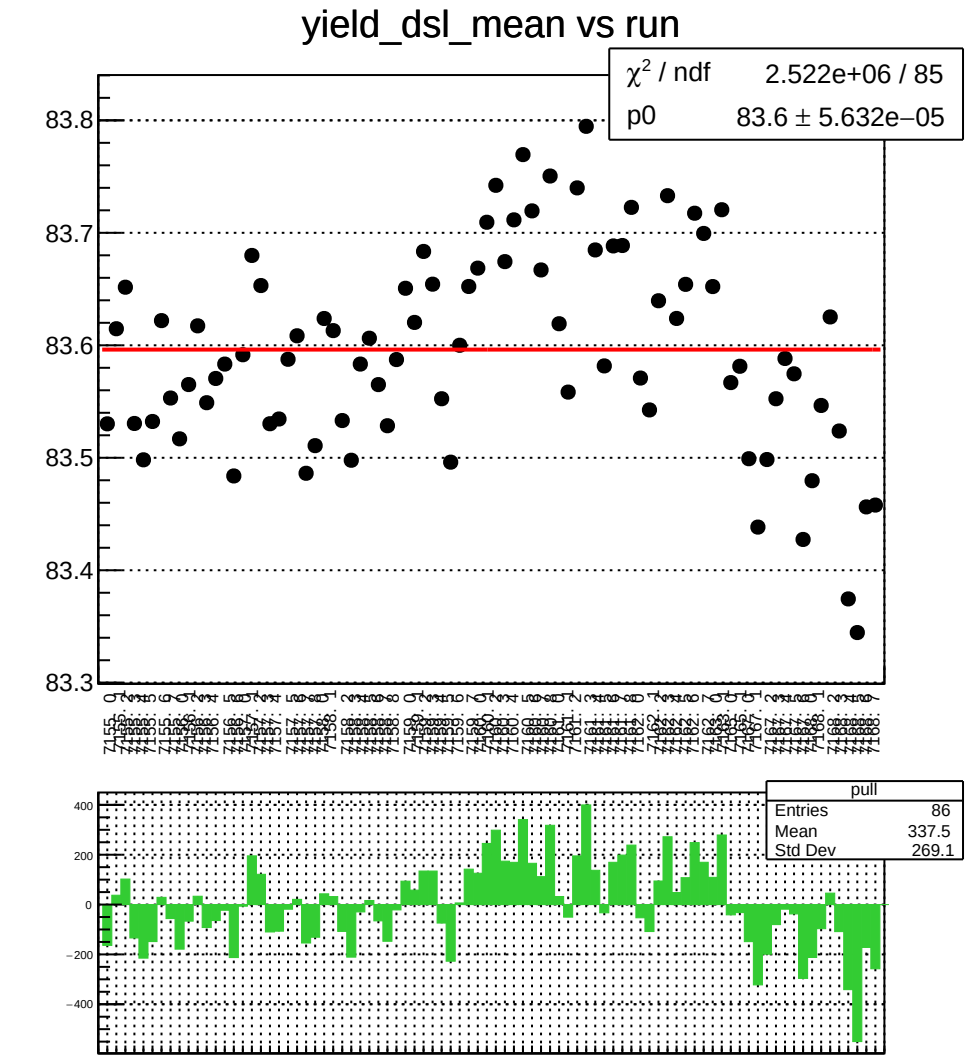

yield_usl_mean vs run
χ² / ndf 4.327e+05 / 85
p0 31.1 ± 9.513e−05
31.3
31.25
31.2
31.15
31.1
31.05
31
30.95
30.9
30.85
pull
Entries 86
Mean −119.5
Std Dev 166.8
150
100
50
0
−50
−100
−150
−200
−250
−300

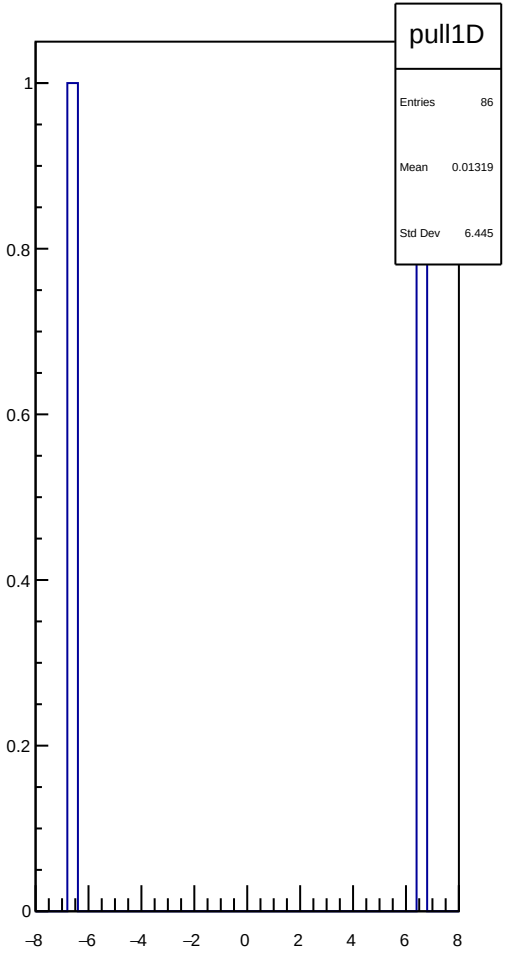

pull1D
Entries 86
Mean −2.684
Std Dev 4.697
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

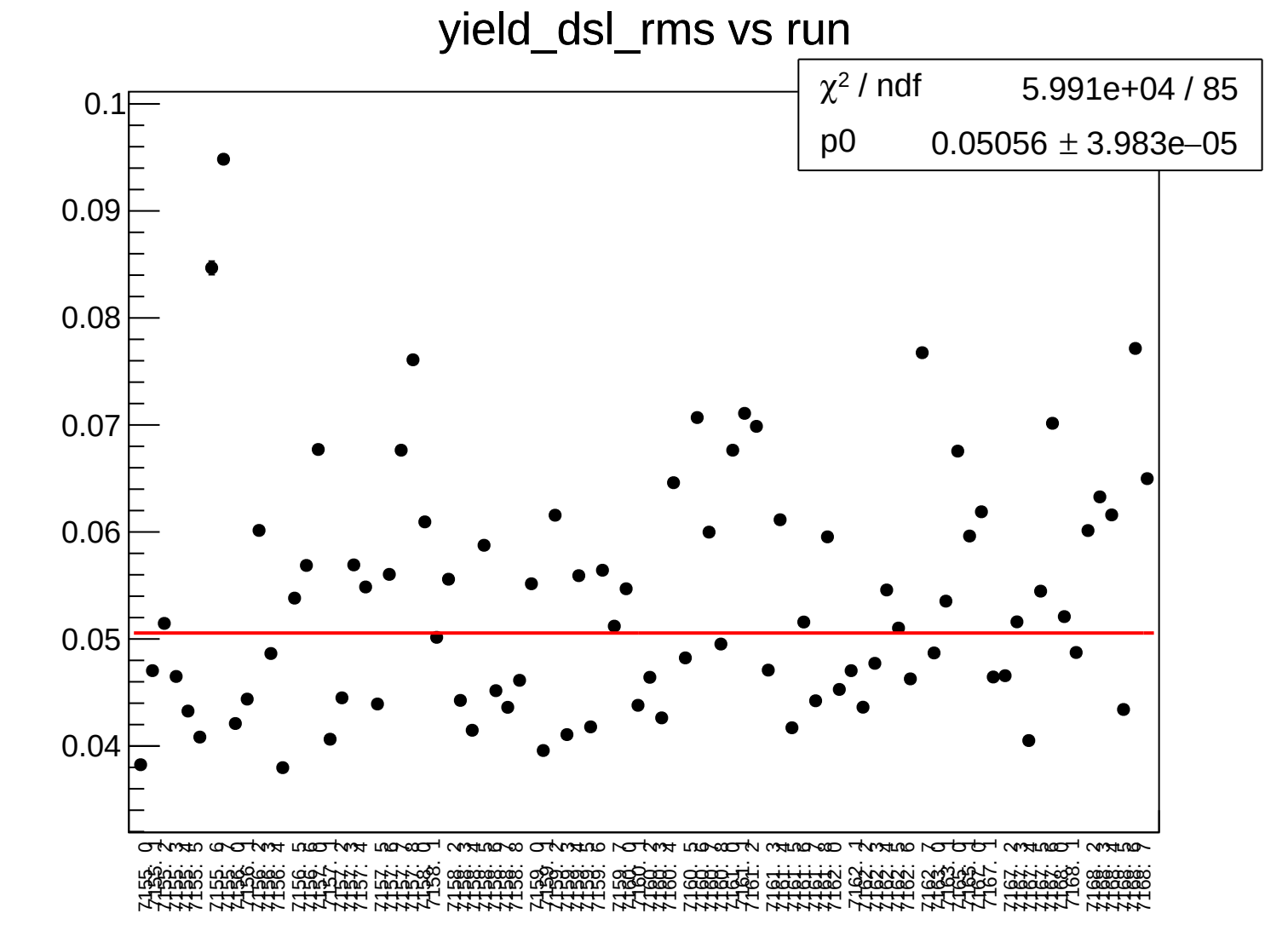

yield_usl_rms vs run
χ² / ndf 1.09e+05 / 85
p0 0.08408 ± 6.727e–05
0.25
0.2
0.15
0.1
0.05

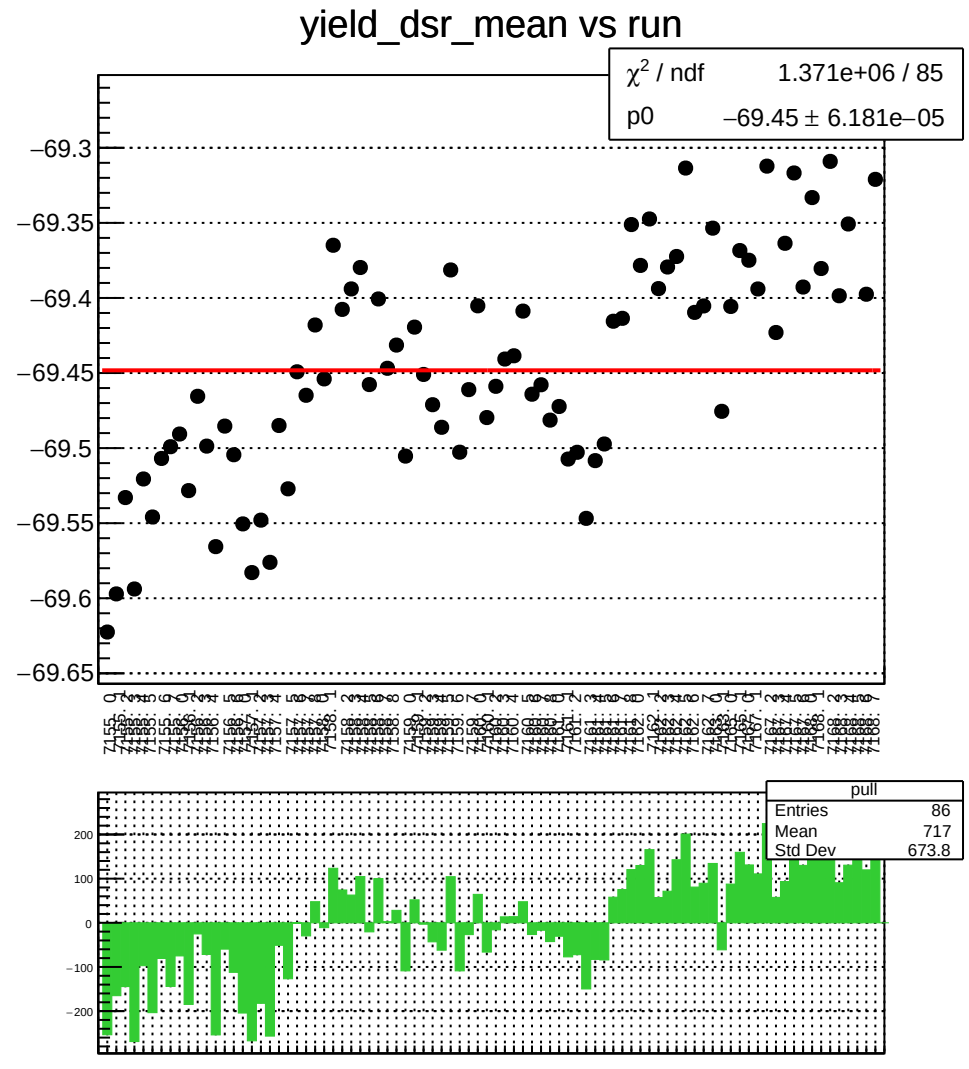

yield_usr_mean vs run
χ² / ndf 2.278e+05 / 85
p0 31.98 ± 0.000105
32.3
32.2
32.1
32
31.9
31.8
pull
Entries 86
Mean −745.9
Std Dev 787.3
150
100
50
0
−50
−100
−150
pull1D
Entries 86
Mean 1.373
Std Dev 5.349
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

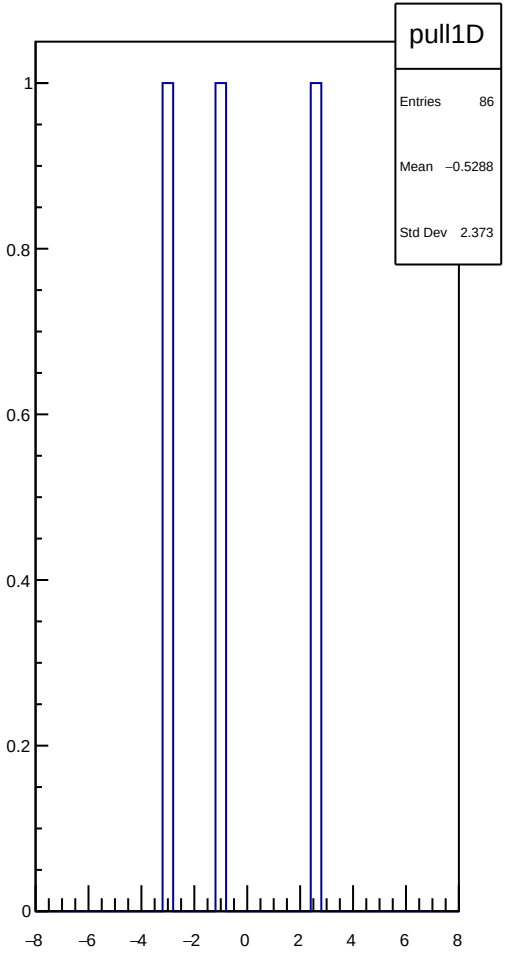

yield_usr_rms vs run
χ² / ndf 9.841e+04 / 85
p0 0.09313 ± 7.425e−05
0.3
0.25
0.2
0.15
0.1
0.05

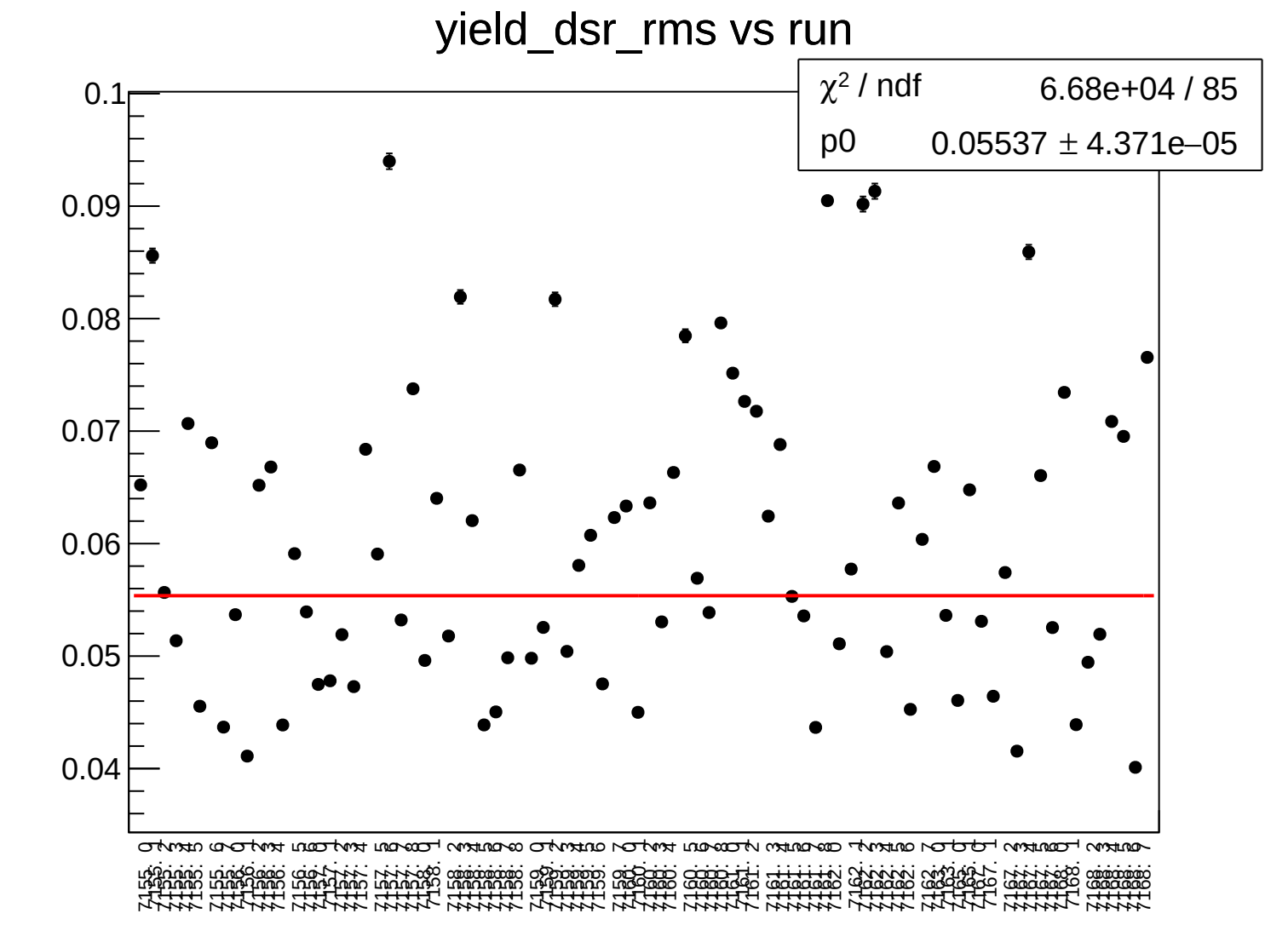

yield_dsl_mean vs run
χ² / ndf 2.522e+06 / 85
p0 83.6 ± 5.632e−05
83.8
83.7
83.6
83.5
83.4
83.3
pull
Entries 86
Mean 337.5
Std Dev 269.1
400
200
0
−200
−400

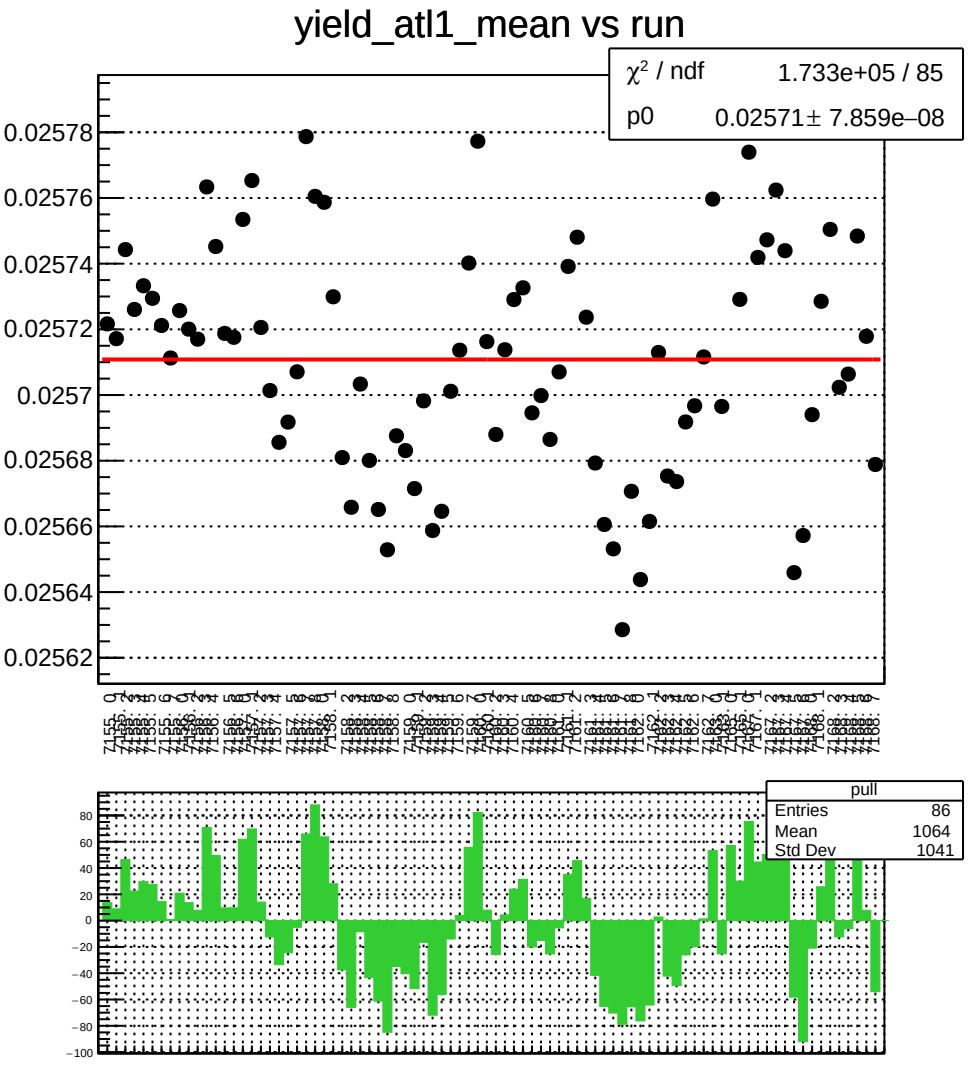

pull1D
Entries 86
Mean 0.01319
Std Dev 6.445
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

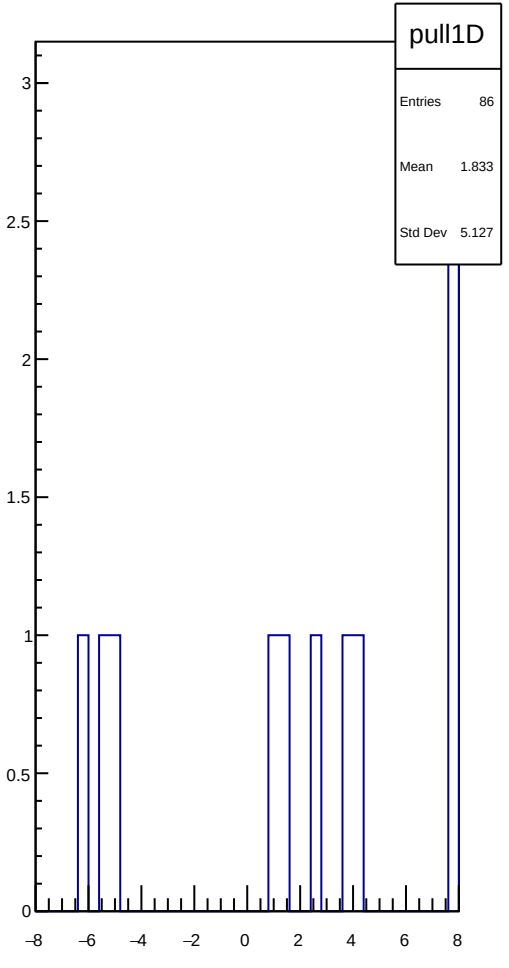

yield_dsl_rms vs run
χ² / ndf 5.991e+04 / 85
p0 0.05056 ± 3.983e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

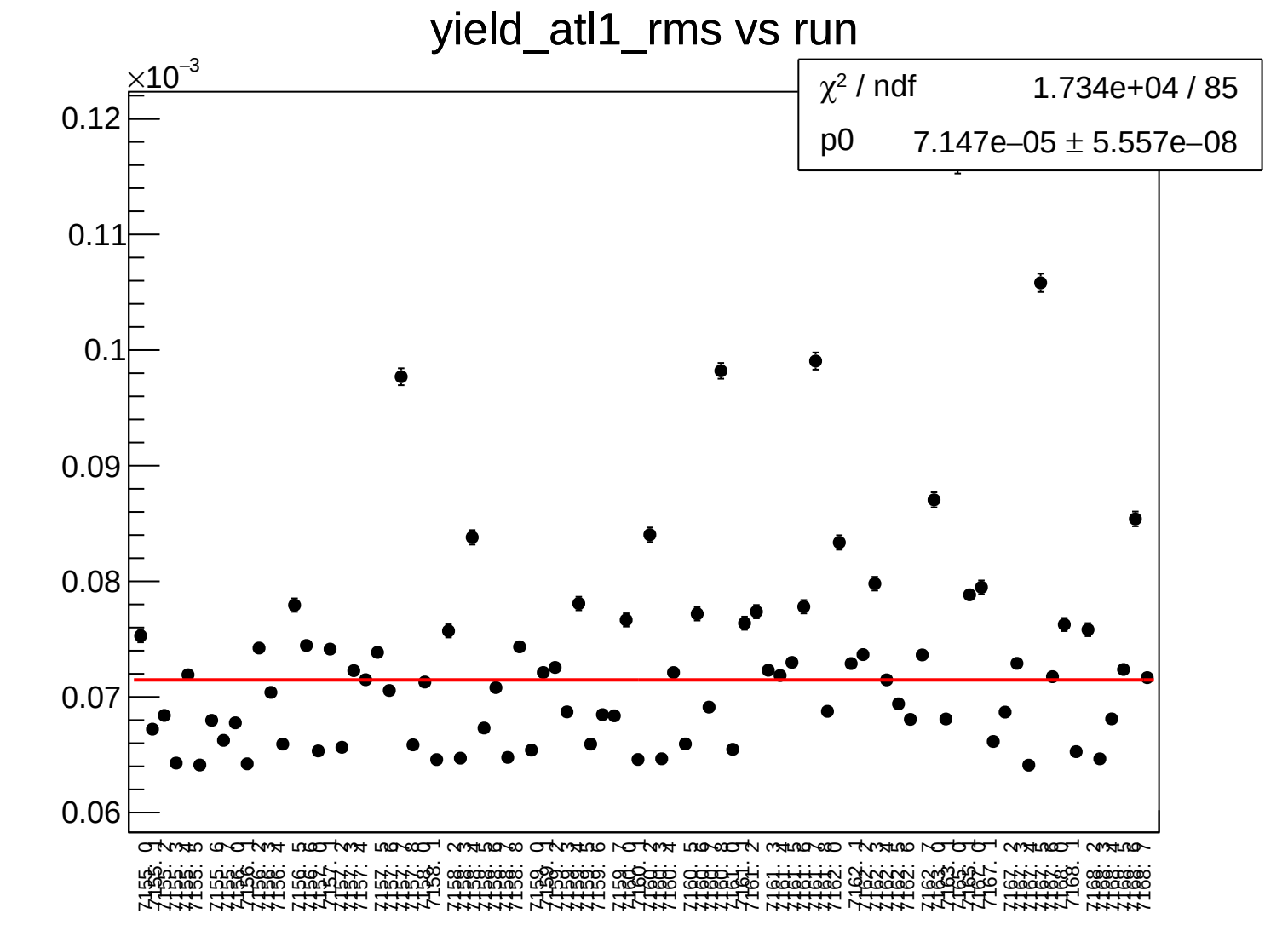

yield_dsr_mean vs run
χ² / ndf 1.371e+06 / 85
p0 −69.45 ± 6.181e−05
−69.3
−69.35
−69.4
−69.45
−69.5
−69.55
−69.6
−69.65
pull
Entries 86
Mean 717
Std Dev 673.8
200
100
0
−100
−200

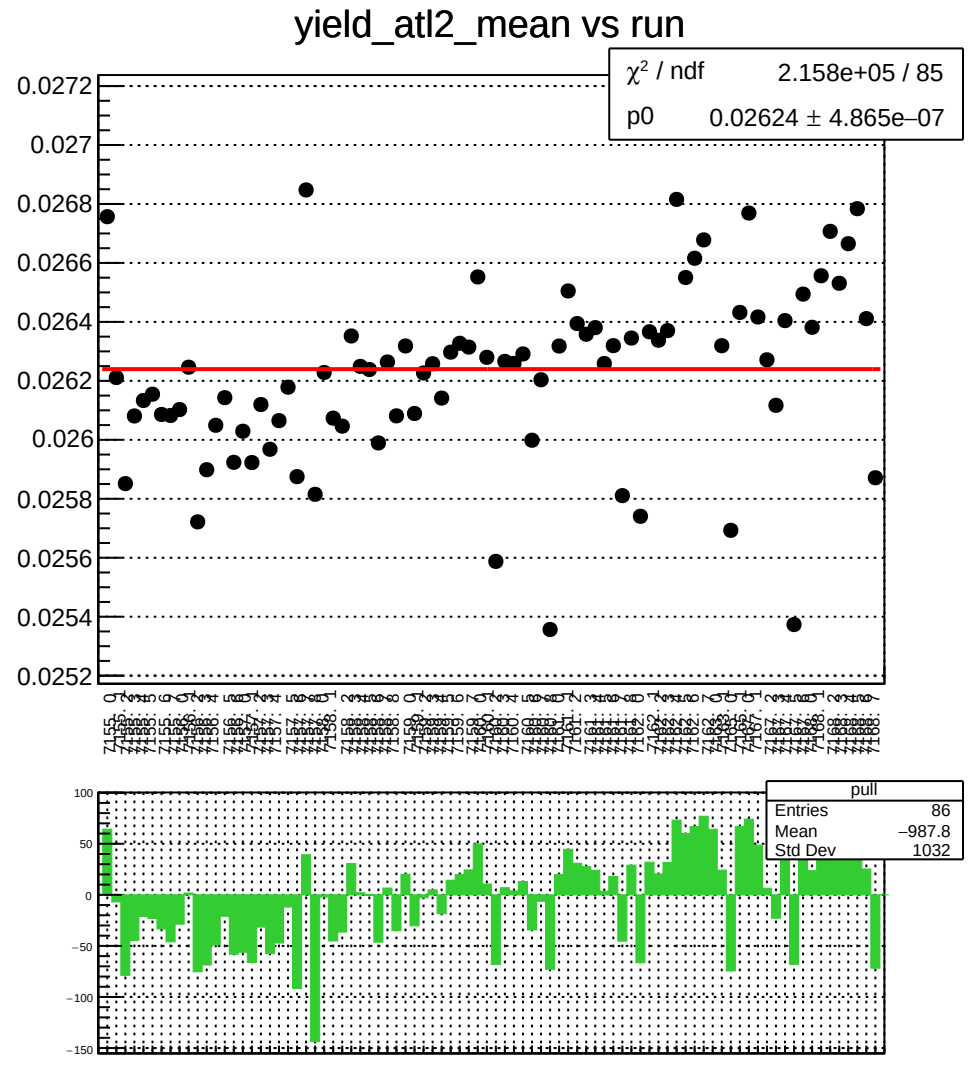

pull1D
Entries 86
Mean −0.5288
Std Dev 2.373
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

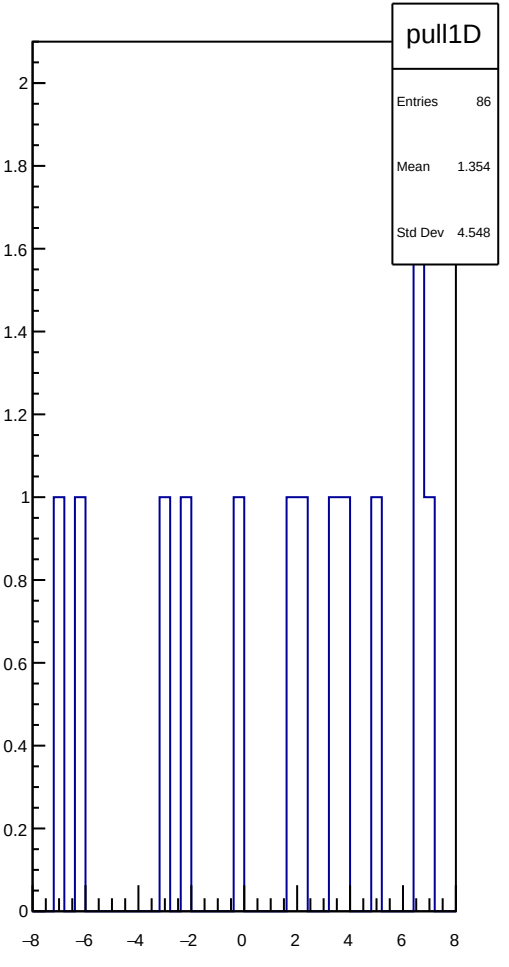

yield_dsr_rms vs run
χ² / ndf 6.68e+04 / 85
p0 0.05537 ± 4.371e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

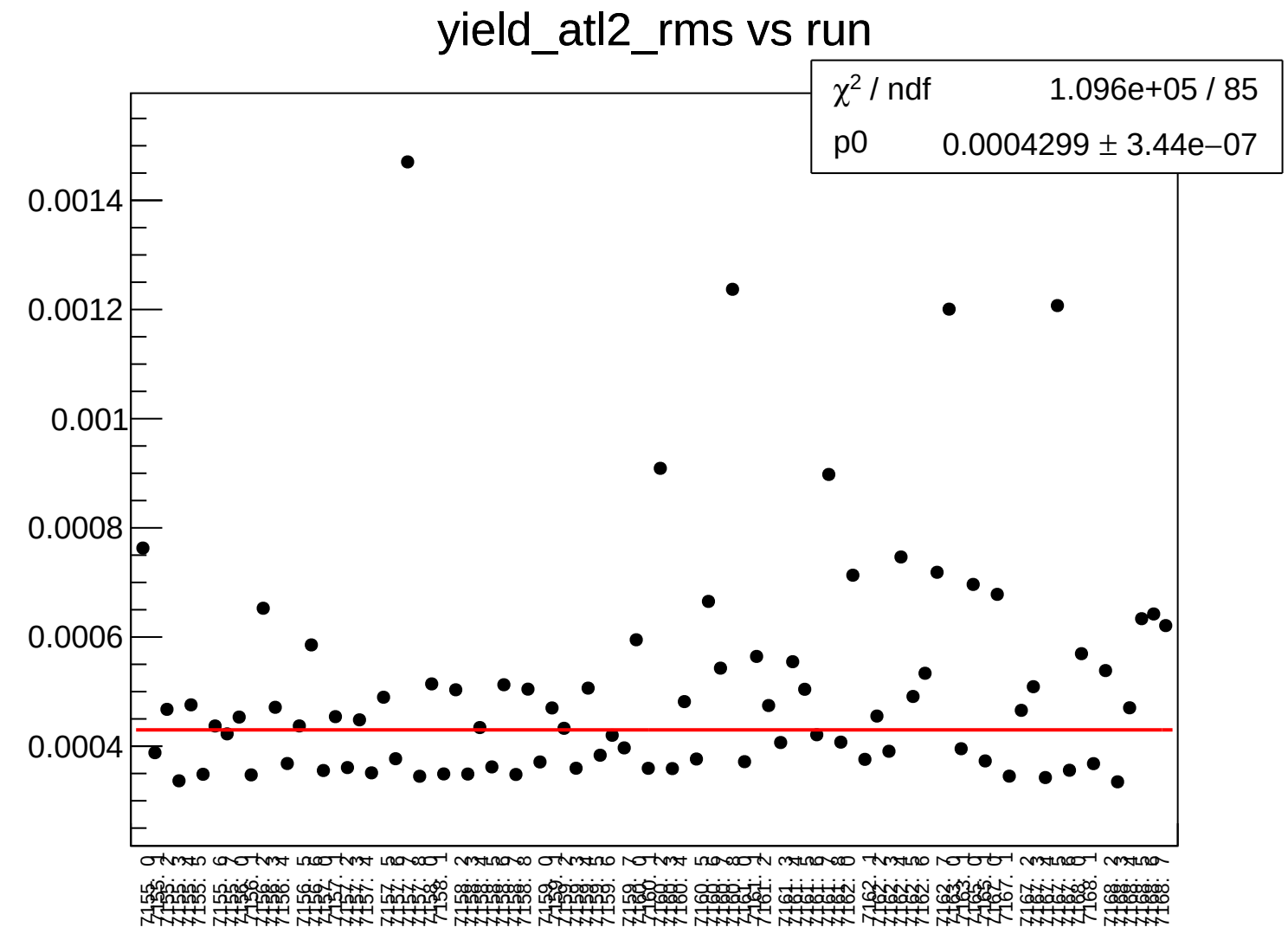

yield_atl1_mean vs run
χ² / ndf 1.733e+05 / 85
p0 0.02571± 7.859e−08
0.02578
0.02576
0.02574
0.02572
0.0257
0.02568
0.02566
0.02564
0.02562
pull
Entries 86
Mean 1064
Std Dev 1041
80
60
40
20
0
−20
−40
−60
−80
−100

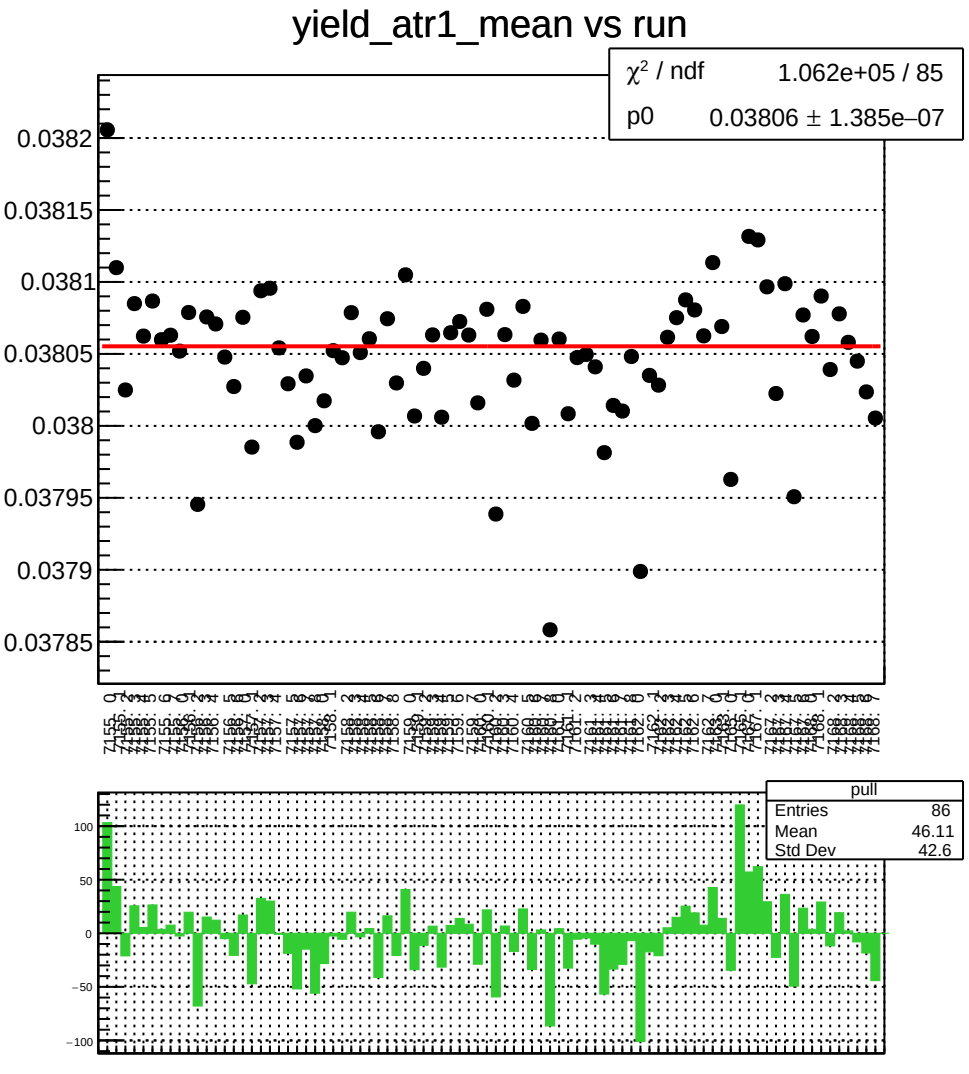

pull1D
Entries 86
Mean 1.833
Std Dev 5.127
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

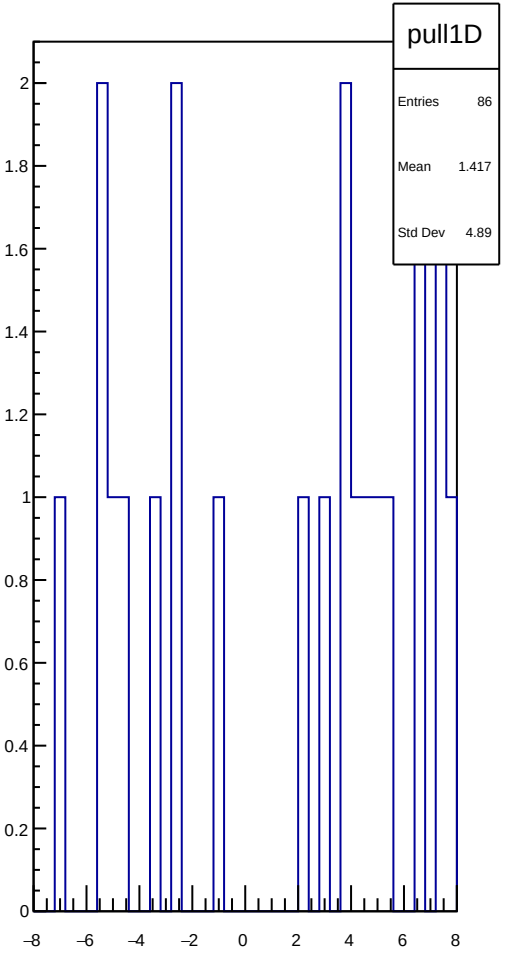

yield_atl1_rms vs run
×10⁻³
χ² / ndf 1.734e+04 / 85
p0 7.147e−05 ± 5.557e−08
0.12
0.11
0.1
0.09
0.08
0.07
0.06

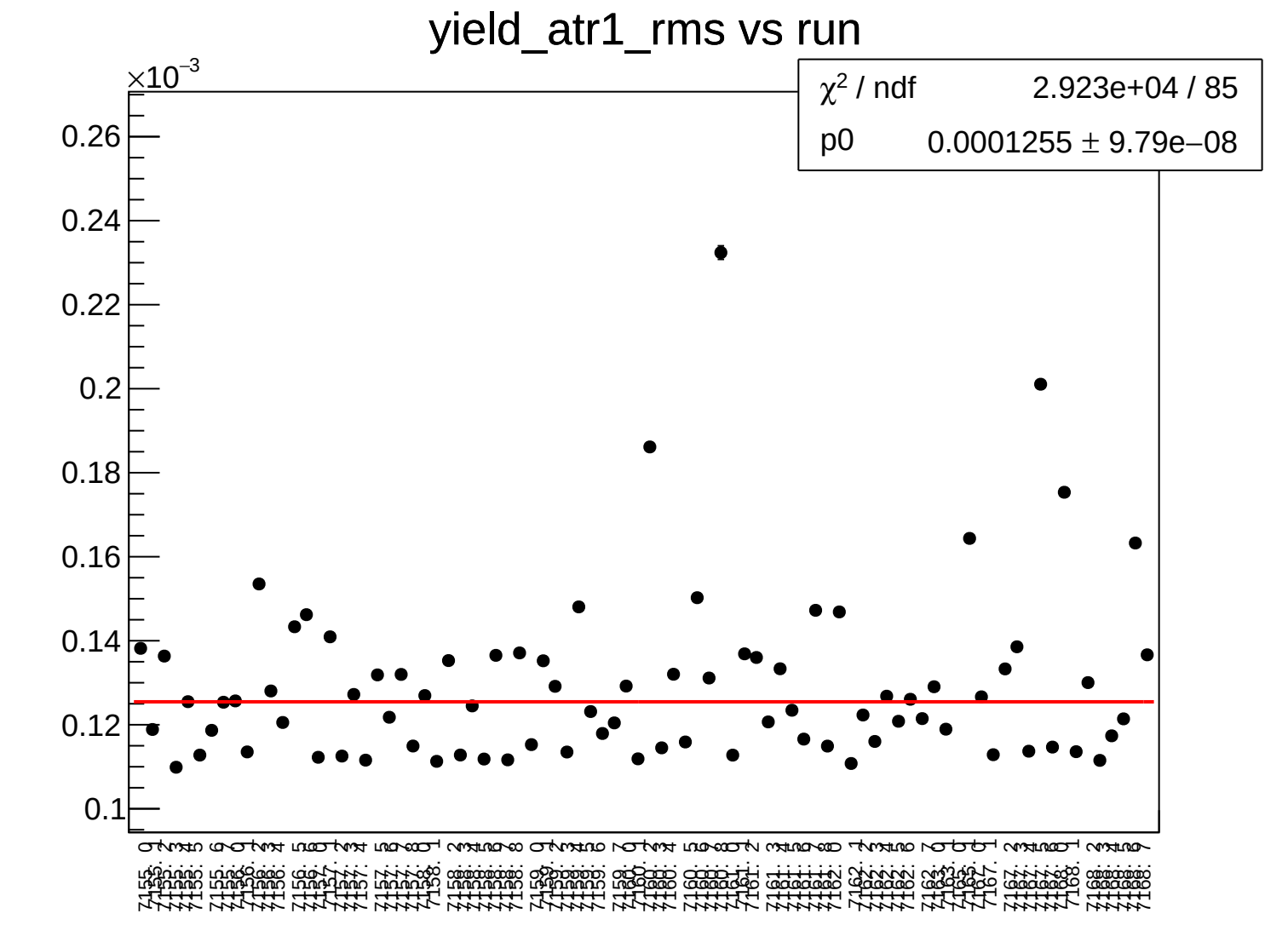

yield_atl2_mean vs run
χ² / ndf 2.158e+05 / 85
p0 0.02624 ± 4.865e−07
0.0272
0.027
0.0268
0.0266
0.0264
0.0262
0.026
0.0258
0.0256
0.0254
0.0252
pull
Entries 86
Mean −987.8
Std Dev 1032
100
50
0
−50
−100
−150

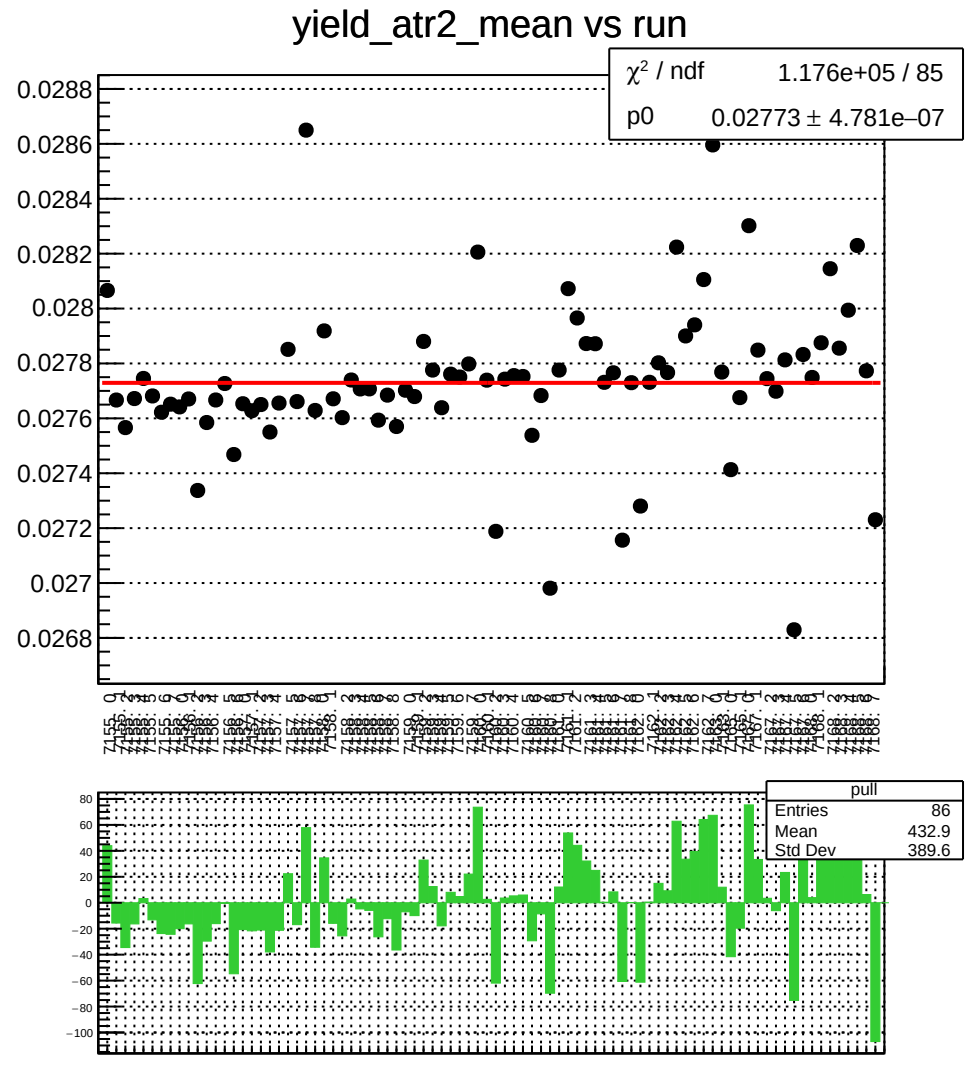

pull1D
Entries 86
Mean 1.354
Std Dev 4.548
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

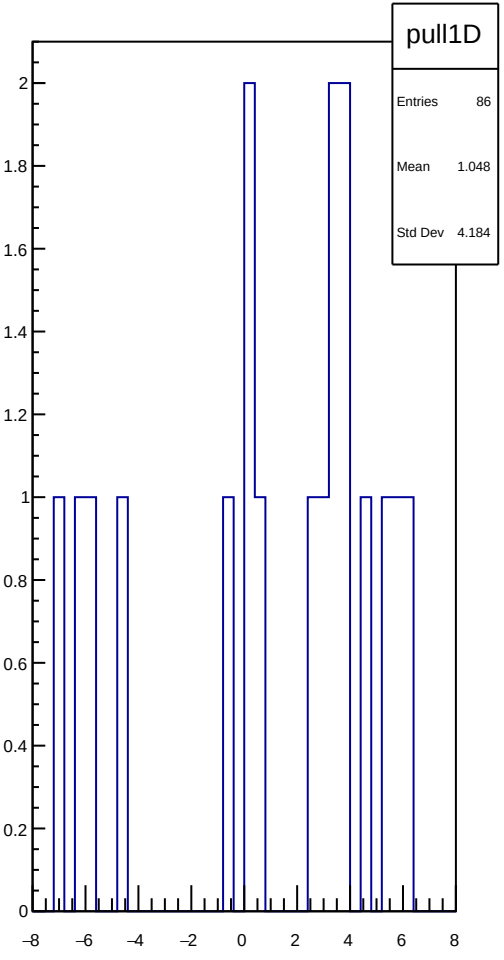

yield_atl2_rms vs run
χ² / ndf 1.096e+05 / 85
p0 0.0004299 ± 3.44e−07
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

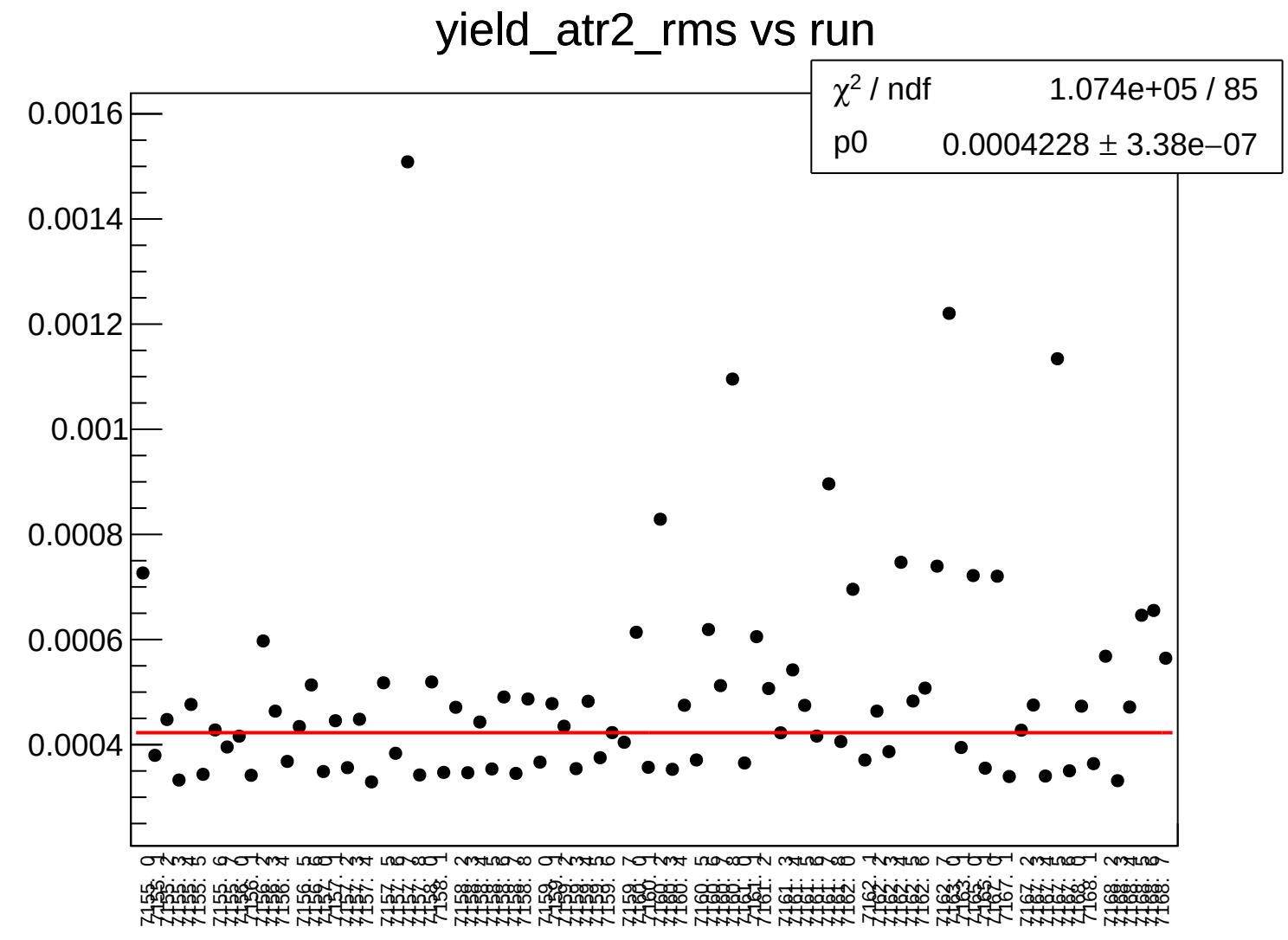

yield_atr1_mean vs run
χ² / ndf 1.062e+05 / 85
p0 0.03806 ± 1.385e−07
0.0382
0.03815
0.0381
0.03805
0.038
0.03795
0.0379
0.03785
pull
Entries 86
Mean 46.11
Std Dev 42.6
100
50
0
−50
−100

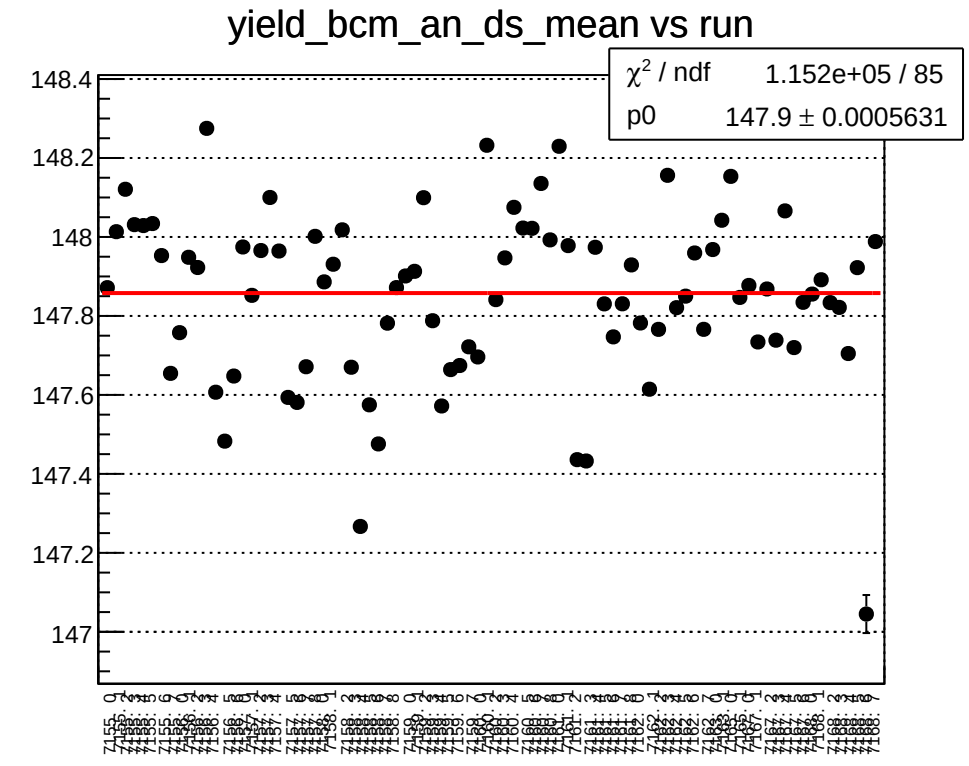

pull1D
Entries 86
Mean 1.417
Std Dev 4.89
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

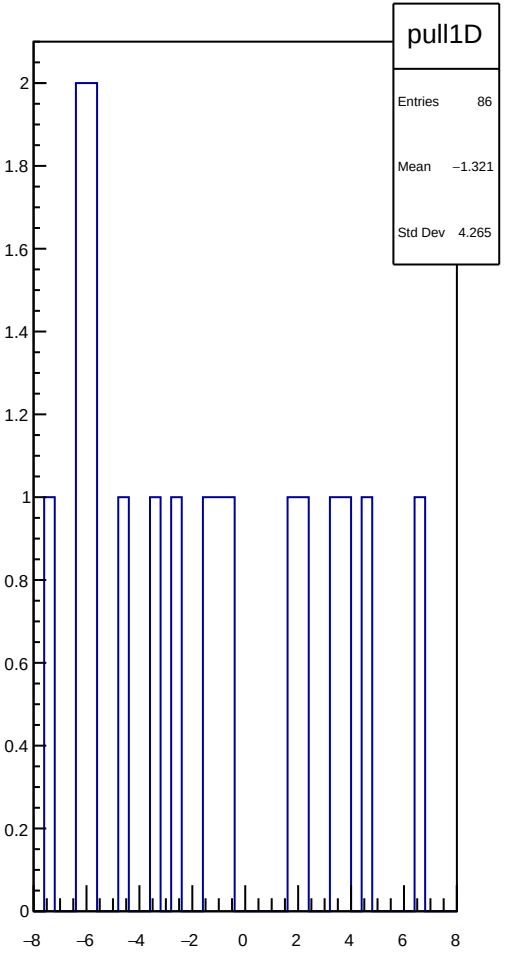

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.923e+04 / 85
p0 0.0001255 ± 9.79e−08
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1

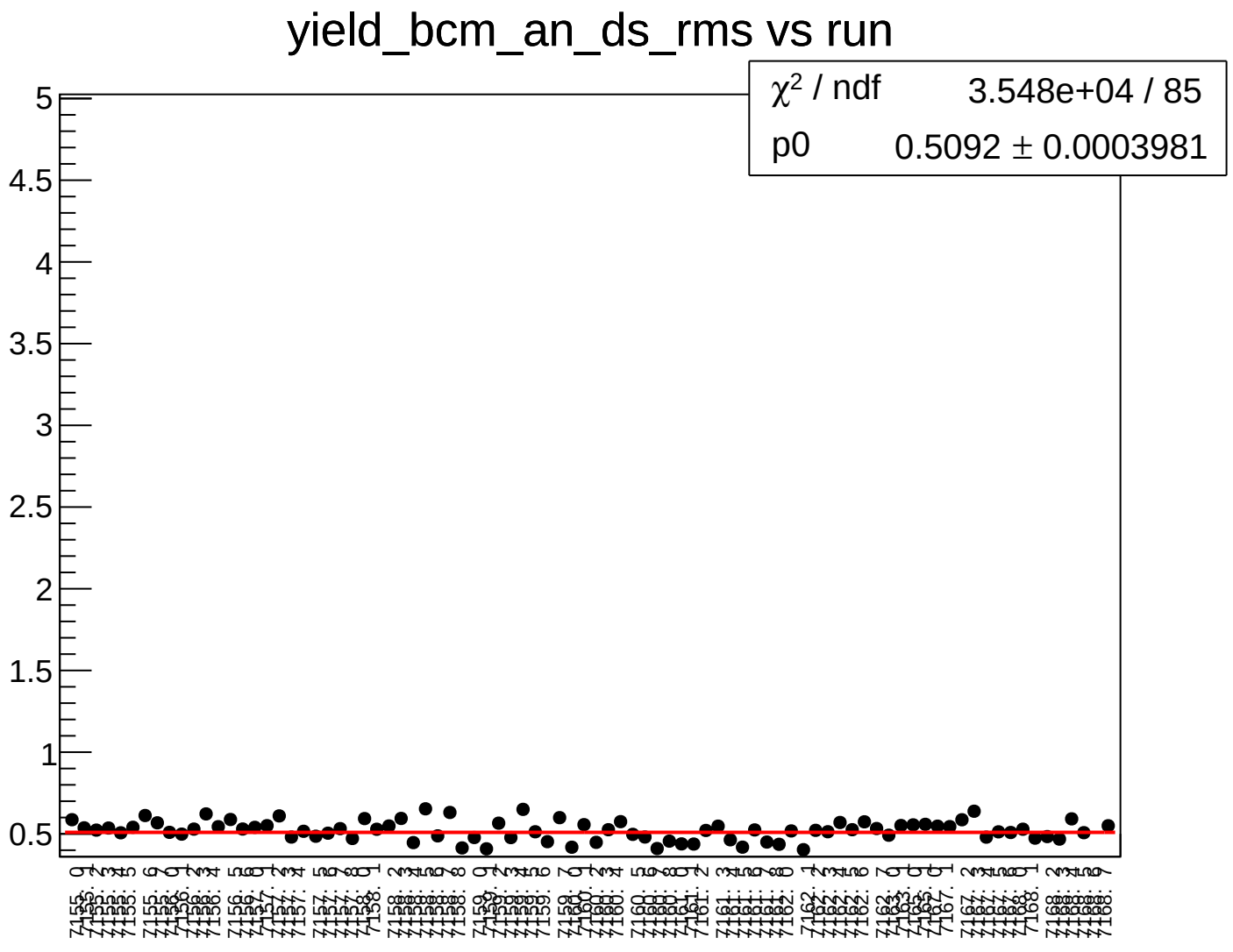

yield_atr2_mean vs run
χ² / ndf 1.176e+05 / 85
p0 0.02773 ± 4.781e−07
0.0288
0.0286
0.0284
0.0282
0.028
0.0278
0.0276
0.0274
0.0272
0.027
0.0268
pull
Entries 86
Mean 432.9
Std Dev 389.6
80
60
40
20
0
−20
−40
−60
−80
−100

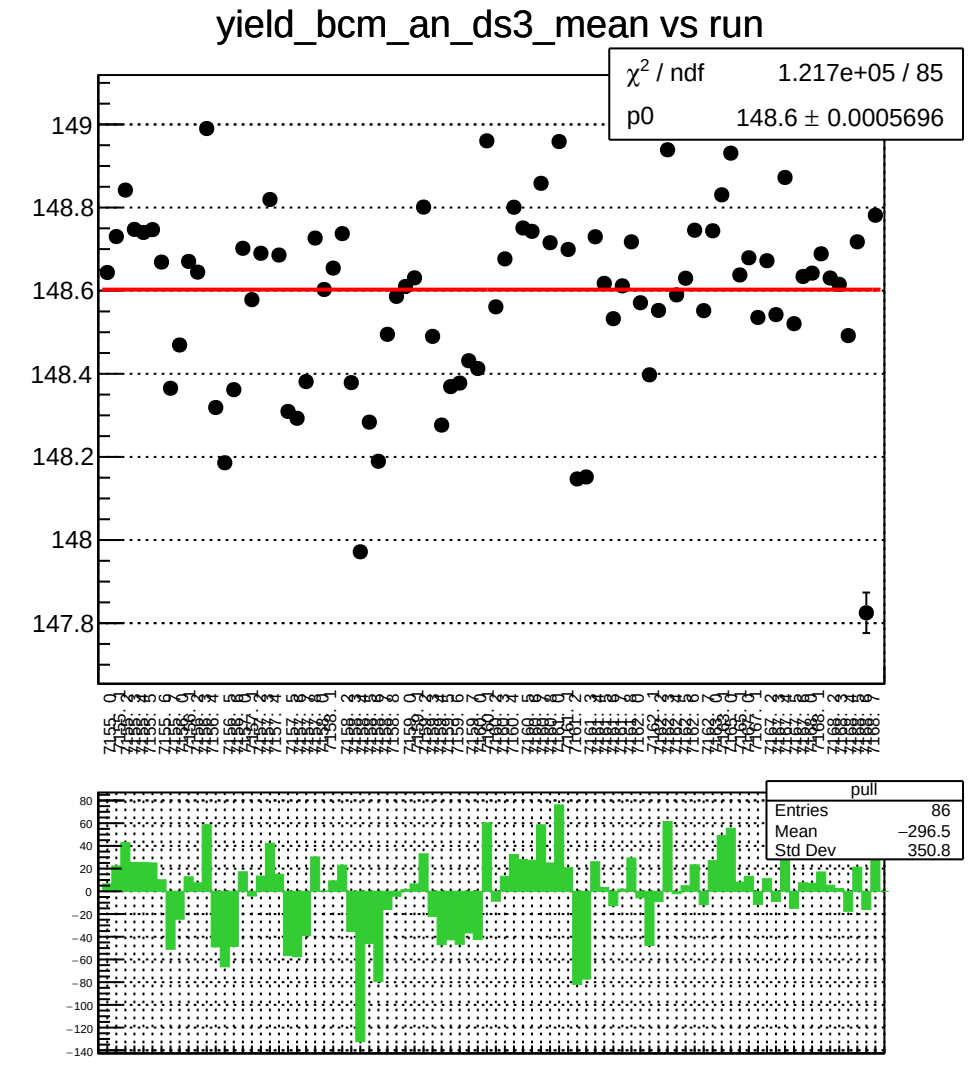

pull1D
Entries 86
Mean 1.048
Std Dev 4.184
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

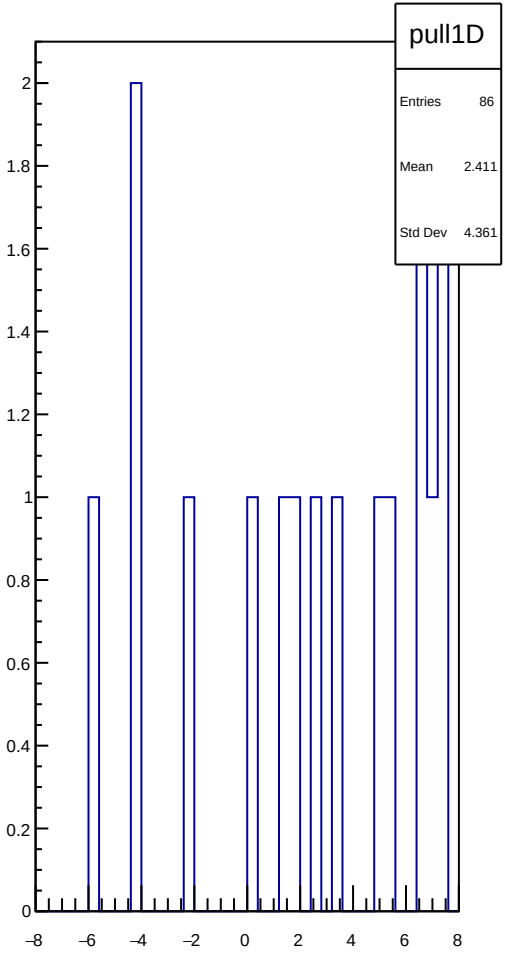

yield_atr2_rms vs run
χ^2 / ndf 1.074e+05 / 85
p0 0.0004228 ± 3.38e−07
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

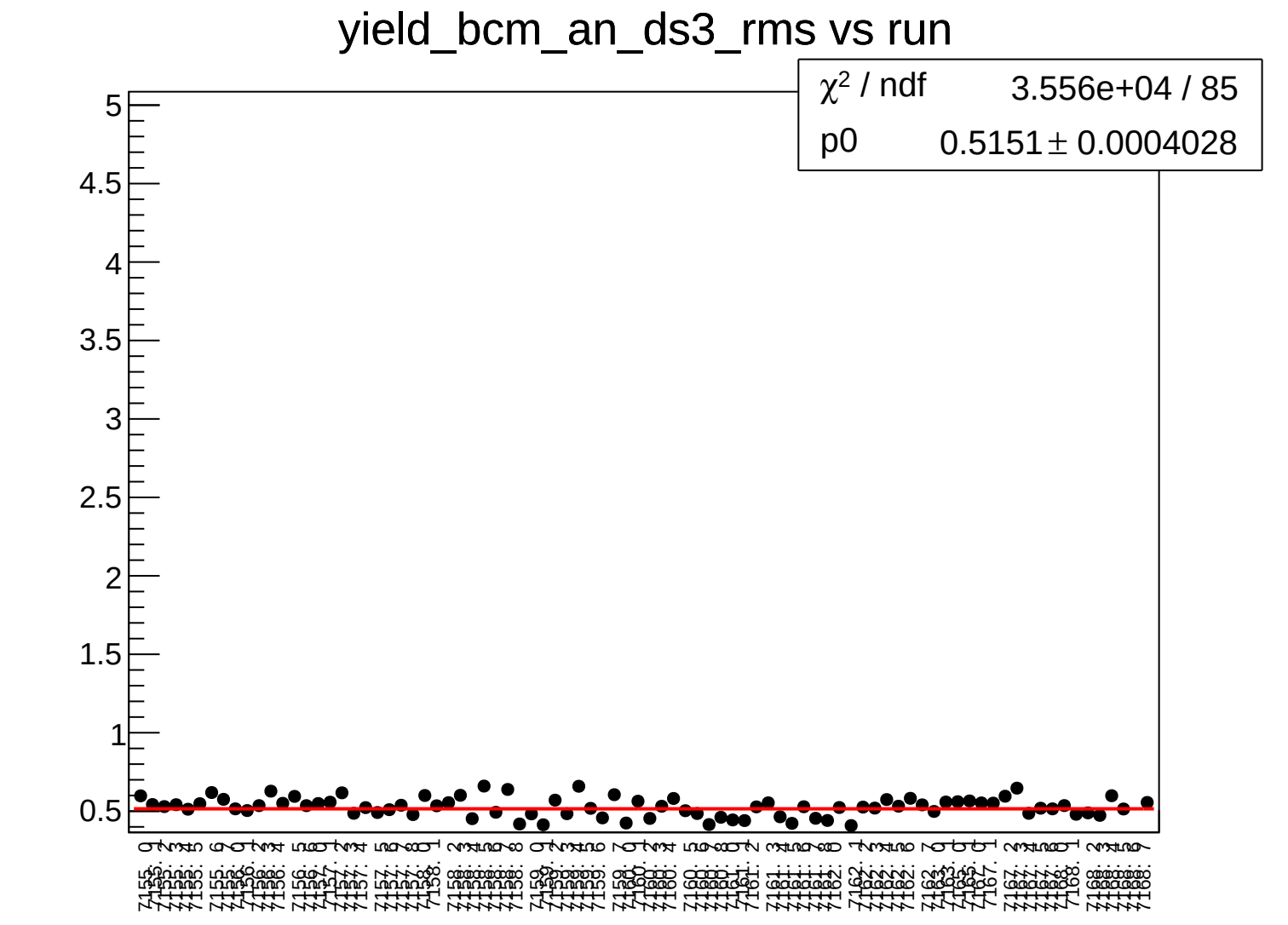

yield_bcm_an_ds_mean vs run
χ² / ndf 1.152e+05 / 85
p0 147.9 ± 0.0005631
148.4
148.2
148
147.8
147.6
147.4
147.2
147
pull
Entries 86
Mean 15.76
Std Dev 85.66
80
60
40
20
0
−20
−40
−60
−80
−100
−120

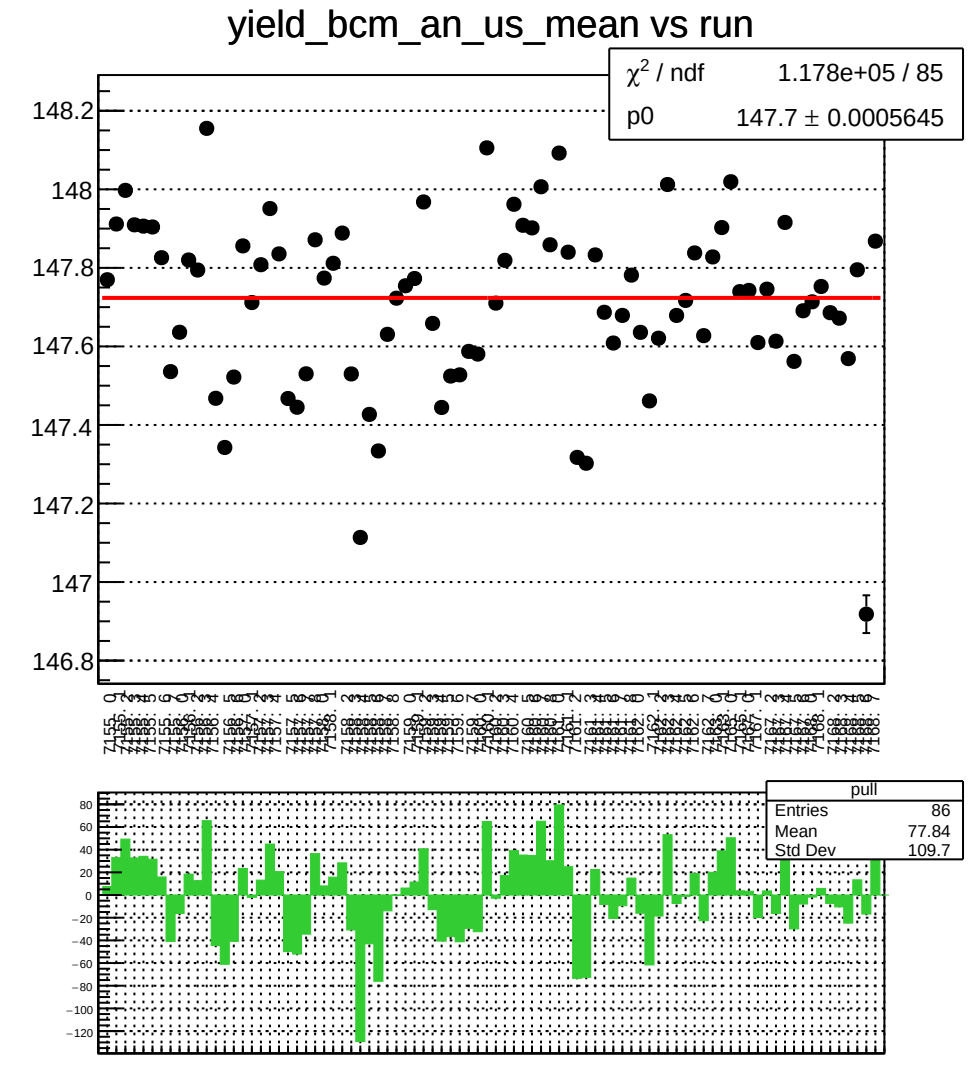

pull1D
Entries 86
Mean −1.321
Std Dev 4.265
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

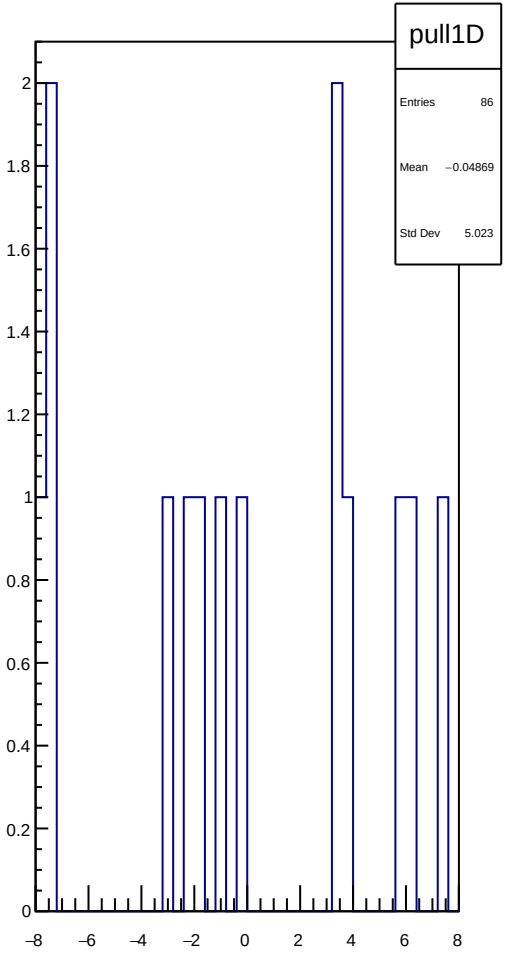

yield_bcm_an_ds_rms vs run
χ^2 / ndf 3.548e+04 / 85
p0 0.5092 ± 0.0003981
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

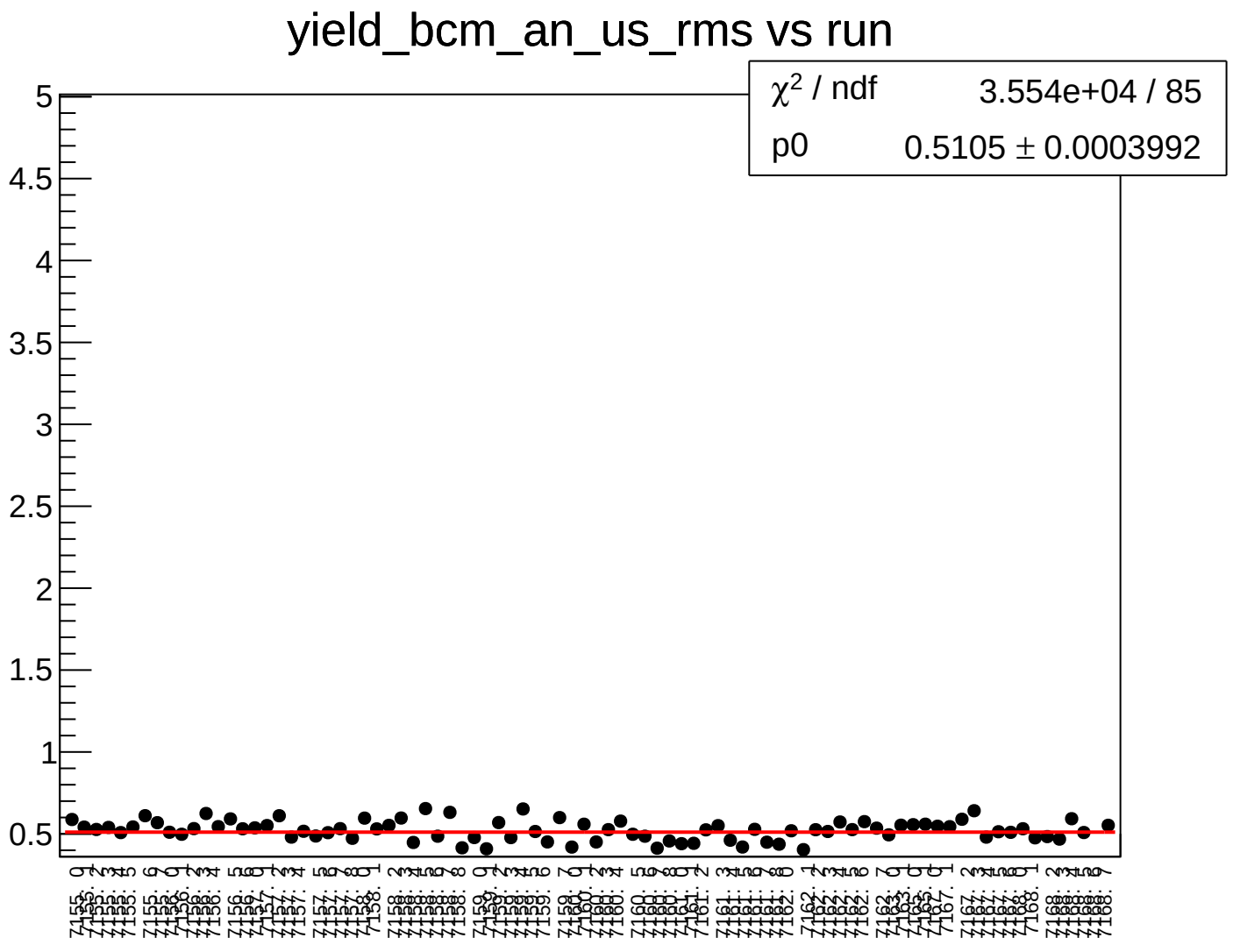

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.217e+05 / 85
p0 148.6 ± 0.0005696
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 86
Mean −296.5
Std Dev 350.8
80
60
40
20
0
−20
−40
−60
−80
−100
−120
−140

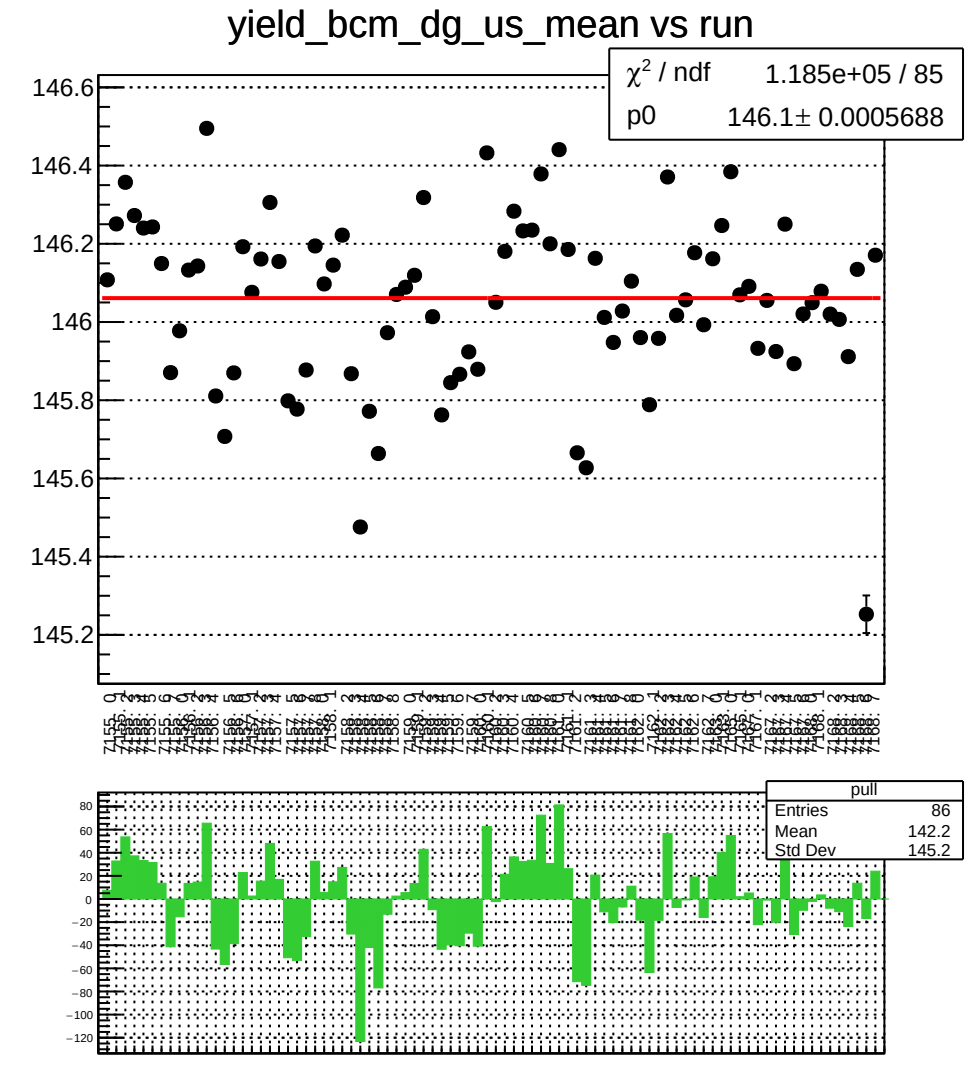

pull1D
Entries 86
Mean 2.411
Std Dev 4.361
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

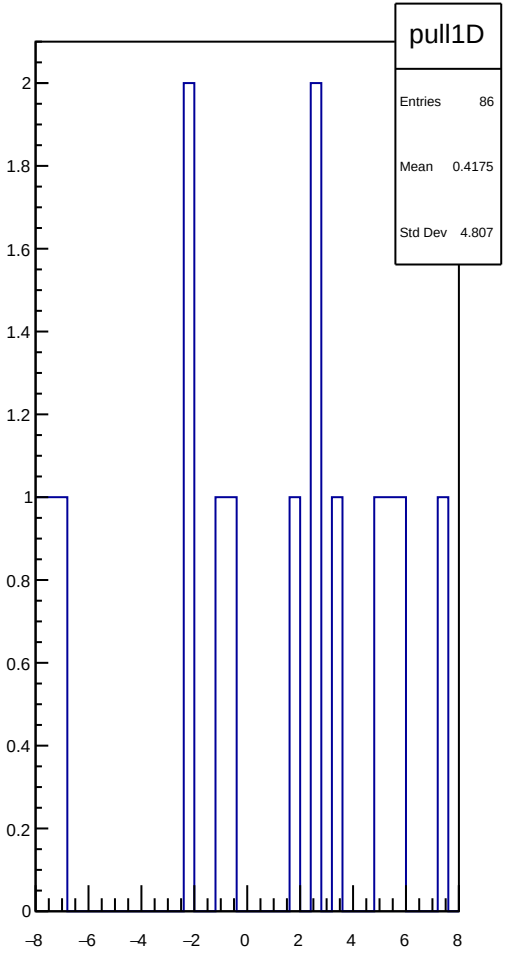

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 3.556e+04 / 85
p0 0.5151 ± 0.0004028
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

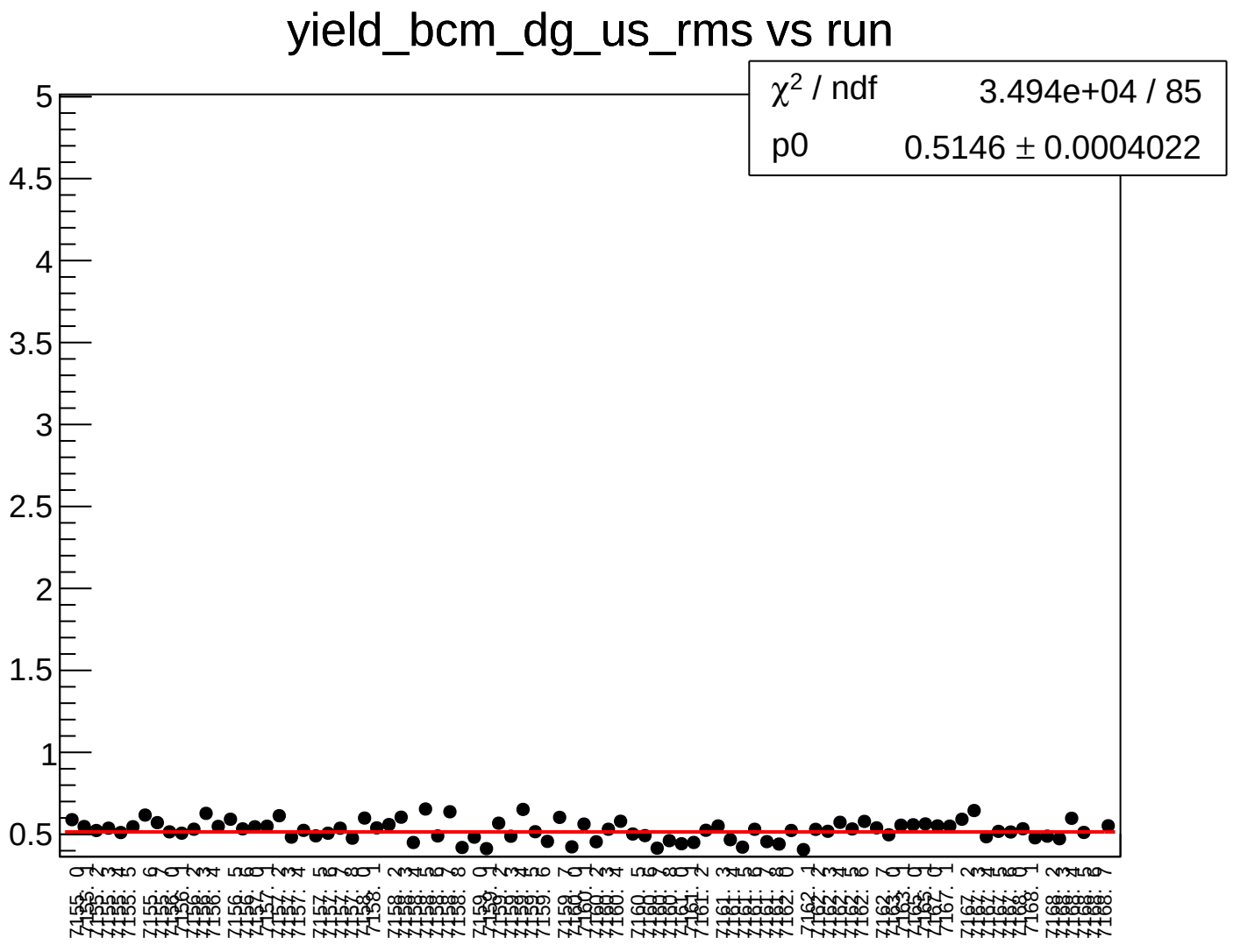

yield_bcm_an_us_mean vs run
χ² / ndf 1.178e+05 / 85
p0 147.7 ± 0.0005645
148.2
148
147.8
147.6
147.4
147.2
147
146.8
pull
Entries 86
Mean 77.84
Std Dev 109.7
80
60
40
20
0
−20
−40
−60
−80
−100
−120

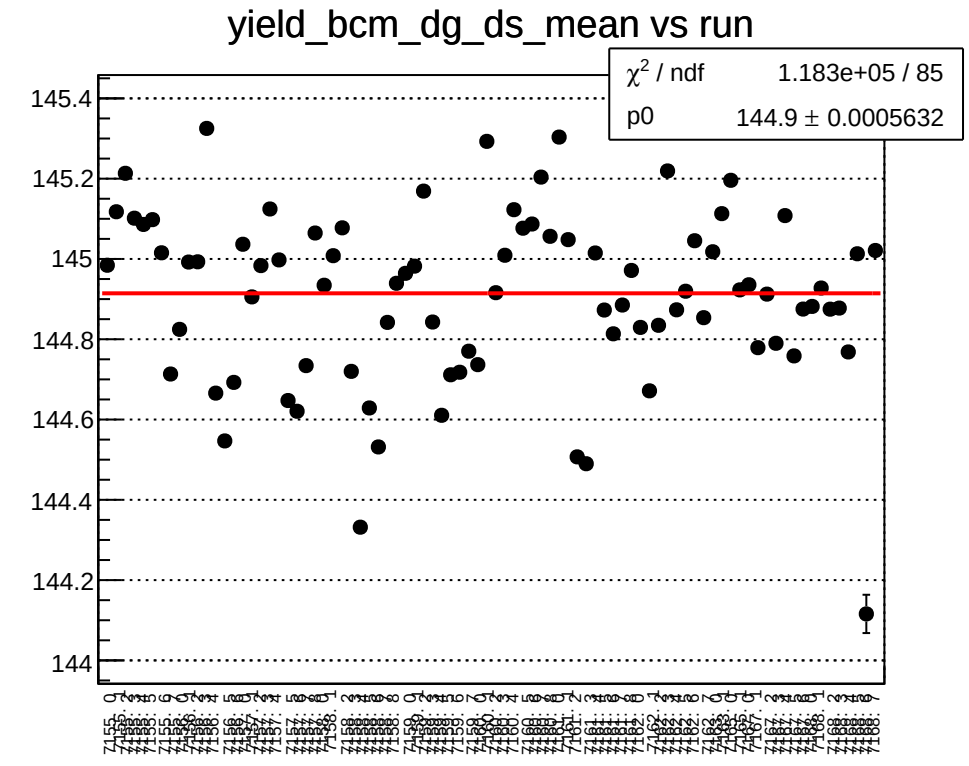

pull1D
Entries 86
Mean −0.04869
Std Dev 5.023
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

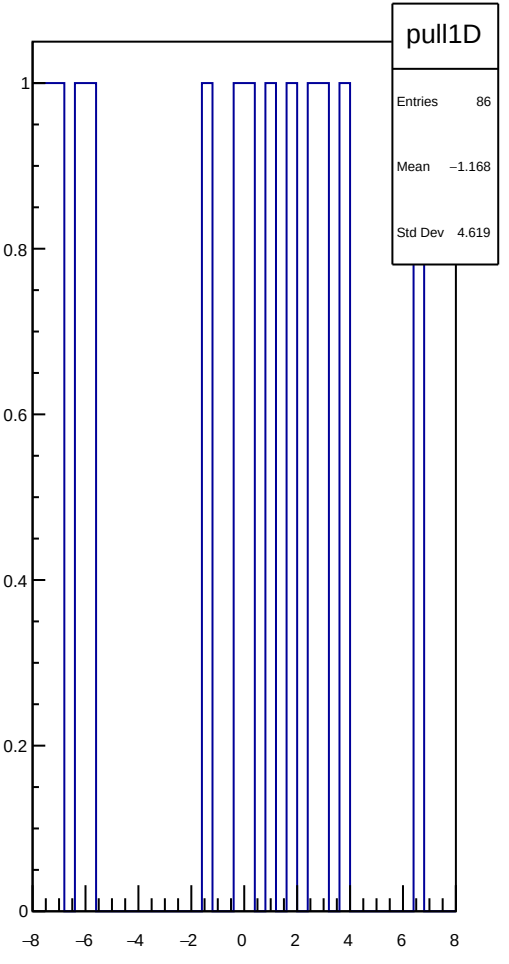

yield_bcm_an_us_rms vs run
χ² / ndf 3.554e+04 / 85
p0 0.5105 ± 0.0003992
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

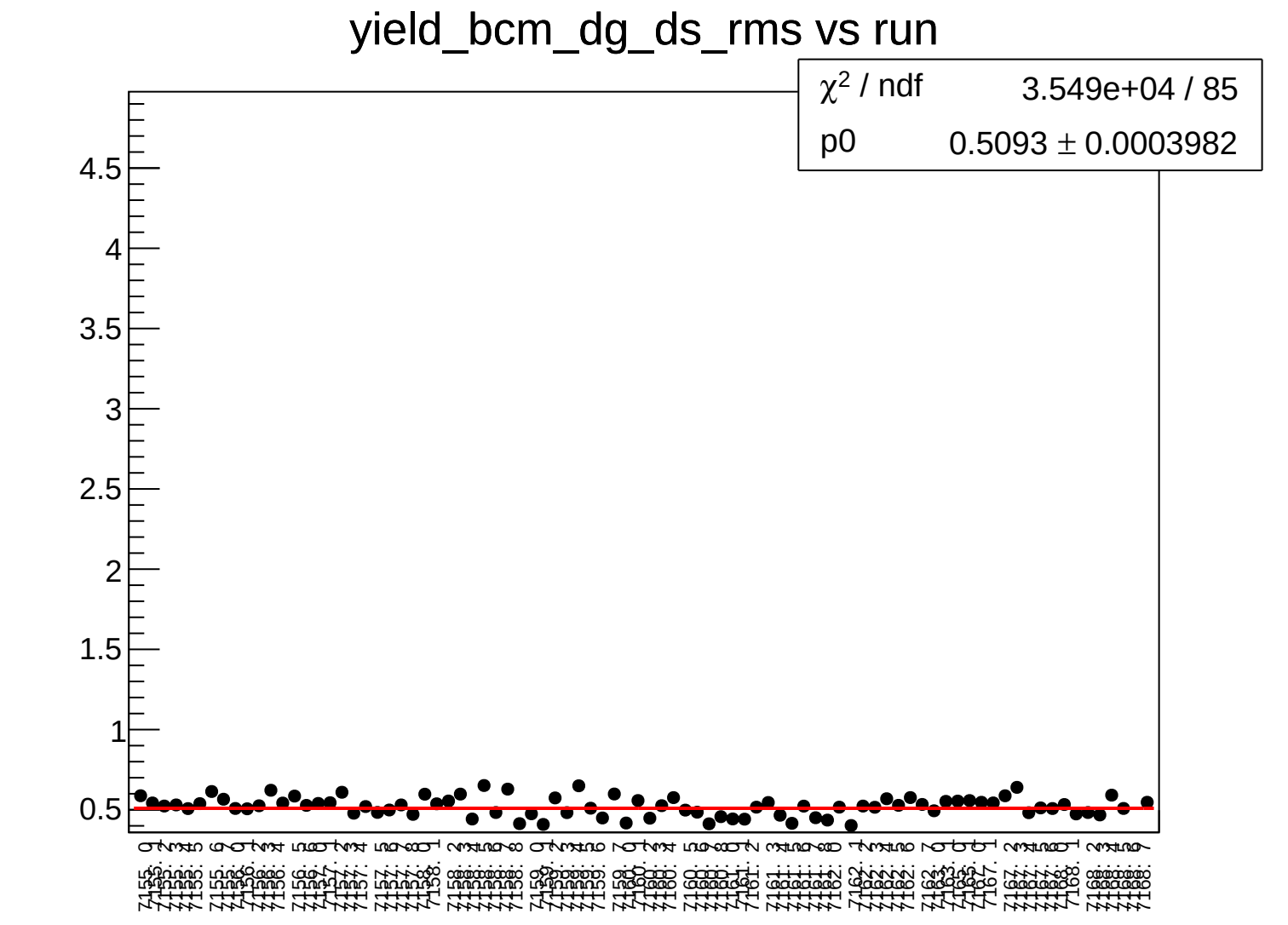

yield_bcm_dg_us_mean vs run
χ² / ndf 1.185e+05 / 85
p0 146.1± 0.0005688
146.6
146.4
146.2
146
145.8
145.6
145.4
145.2
pull
Entries 86
Mean 142.2
Std Dev 145.2
80
60
40
20
0
−20
−40
−60
−80
−100
−120

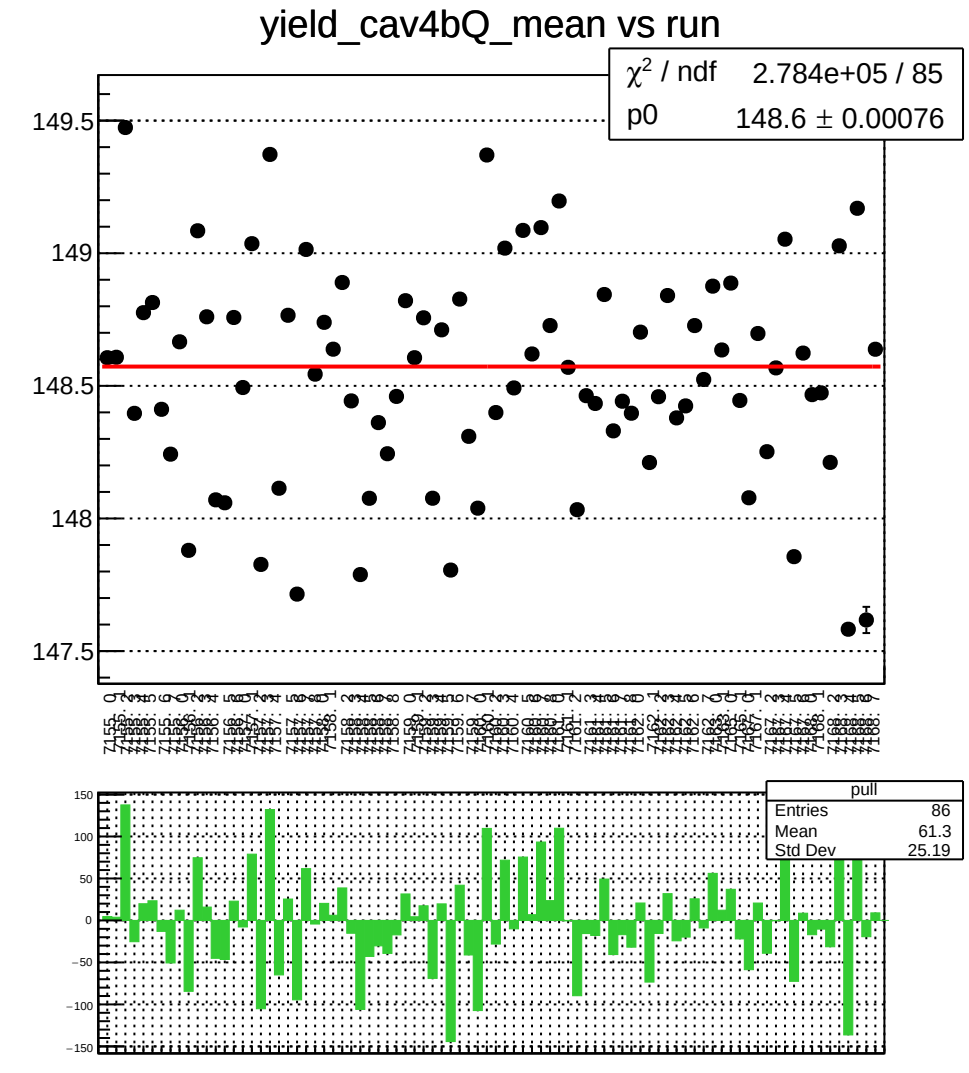

pull1D
Entries 86
Mean 0.4175
Std Dev 4.807
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

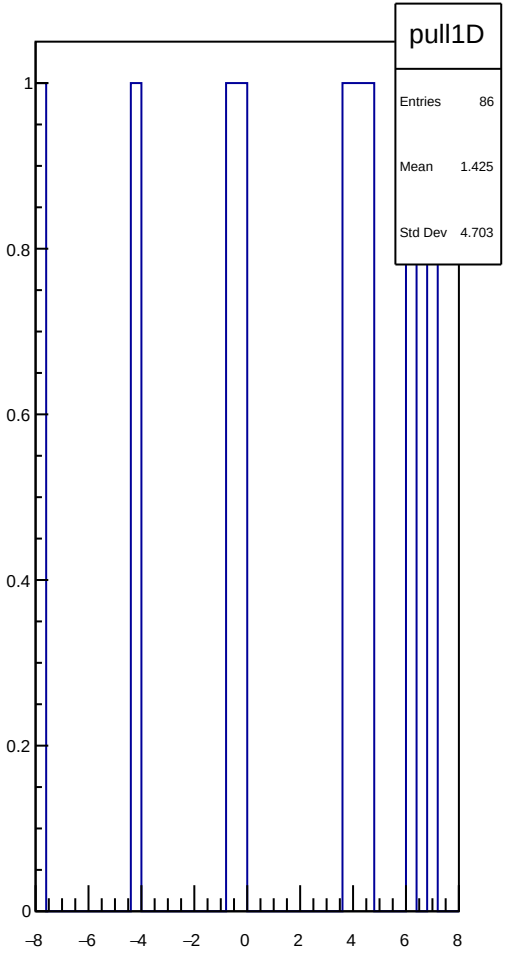

yield_bcm_dg_us_rms vs run
χ² / ndf 3.494e+04 / 85
p0 0.5146 ± 0.0004022
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

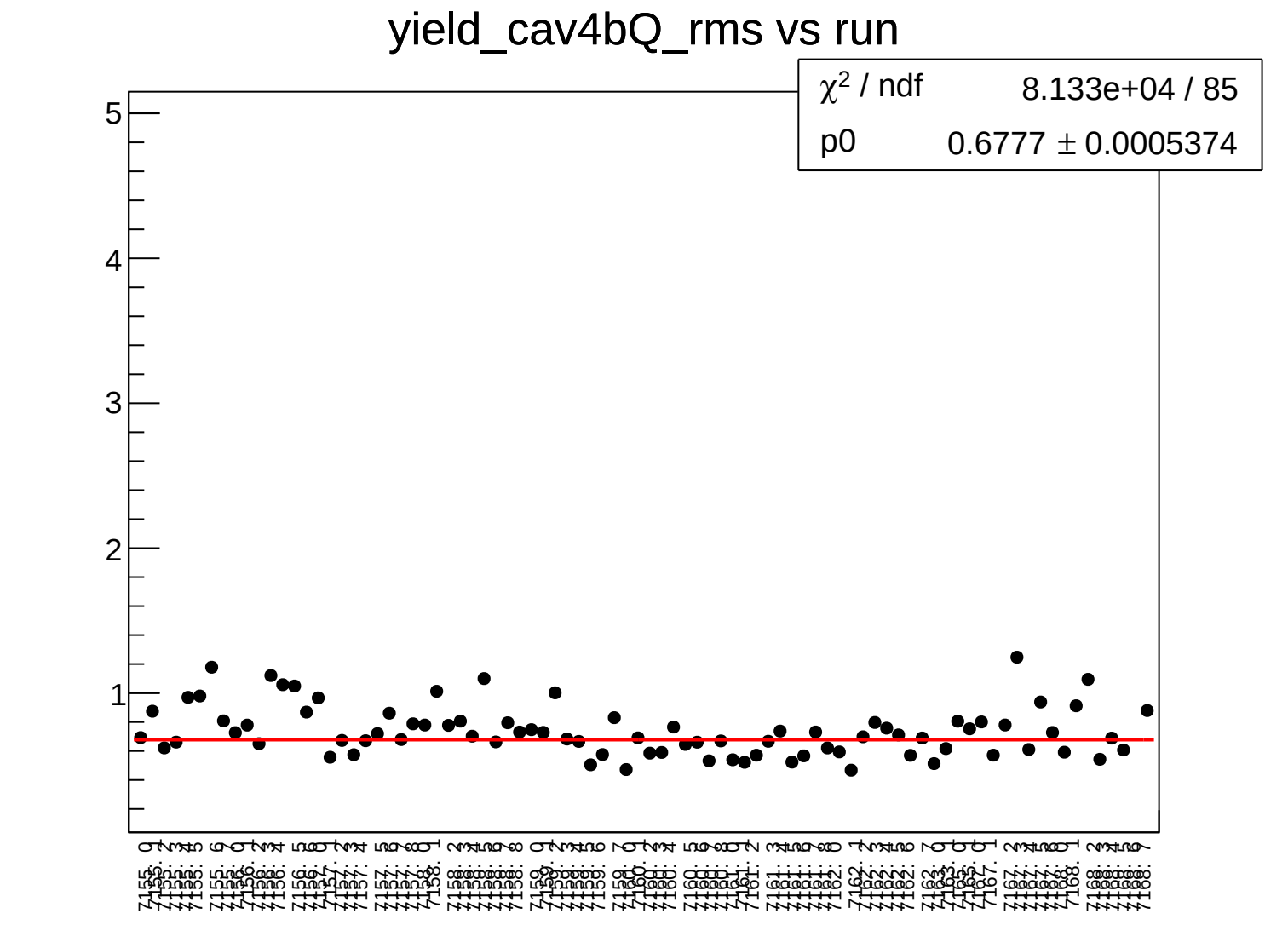

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.183e+05 / 85
p0 144.9 ± 0.0005632
145.4
145.2
145
144.8
144.6
144.4
144.2
144
pull
Entries 86
Mean 69.78
Std Dev 108.2
80
60
40
20
0
−20
−40
−60
−80
−100
−120

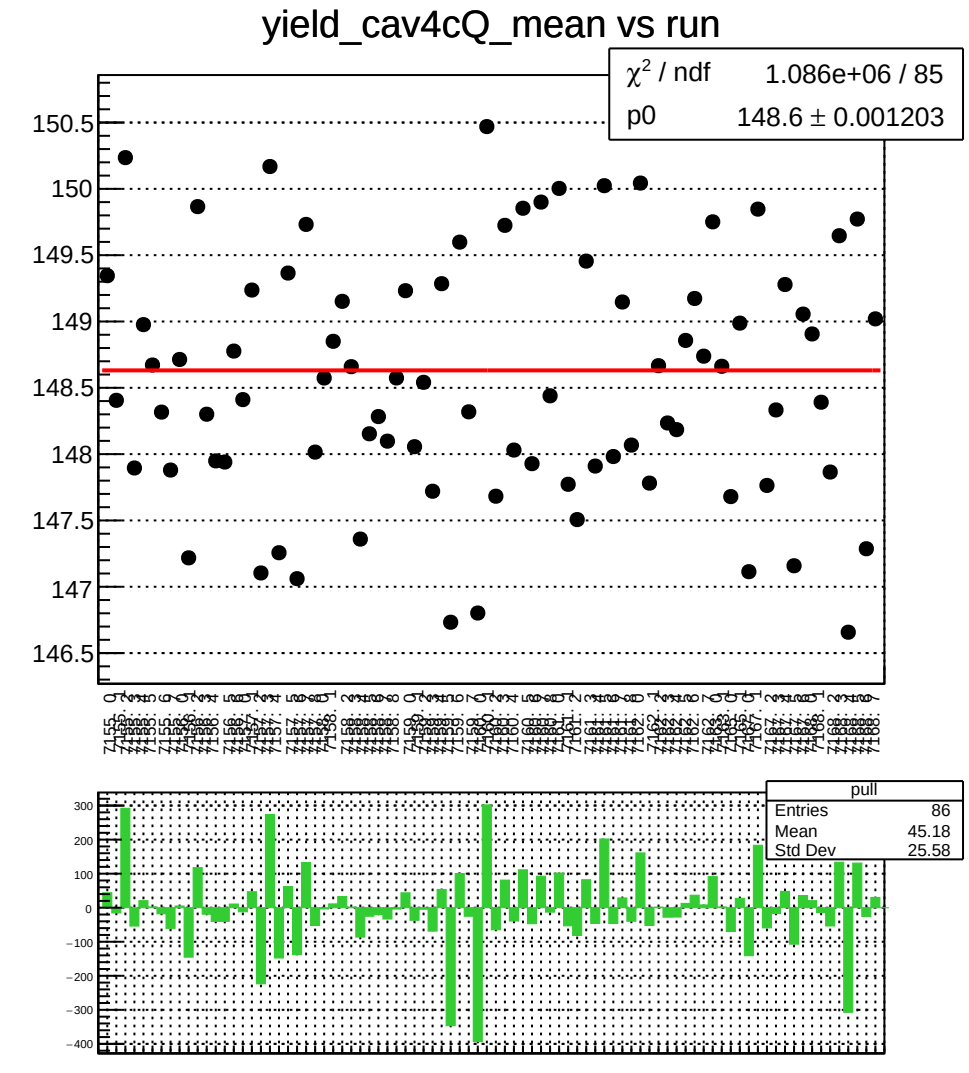

pull1D
Entries 86
Mean −1.168
Std Dev 4.619
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

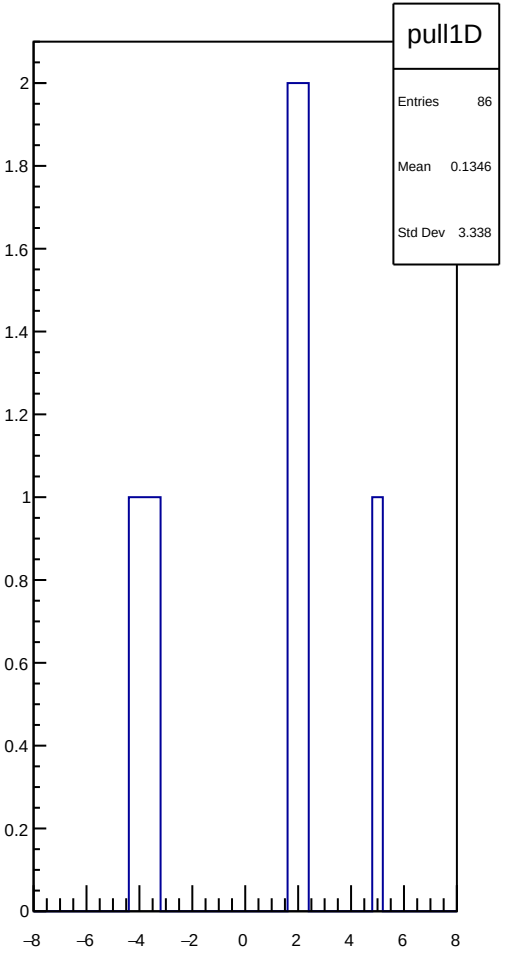

yield_bcm_dg_ds_rms vs run
χ² / ndf 3.549e+04 / 85
p0 0.5093 ± 0.0003982
4.5
4
3.5
3
2.5
2
1.5
1
0.5

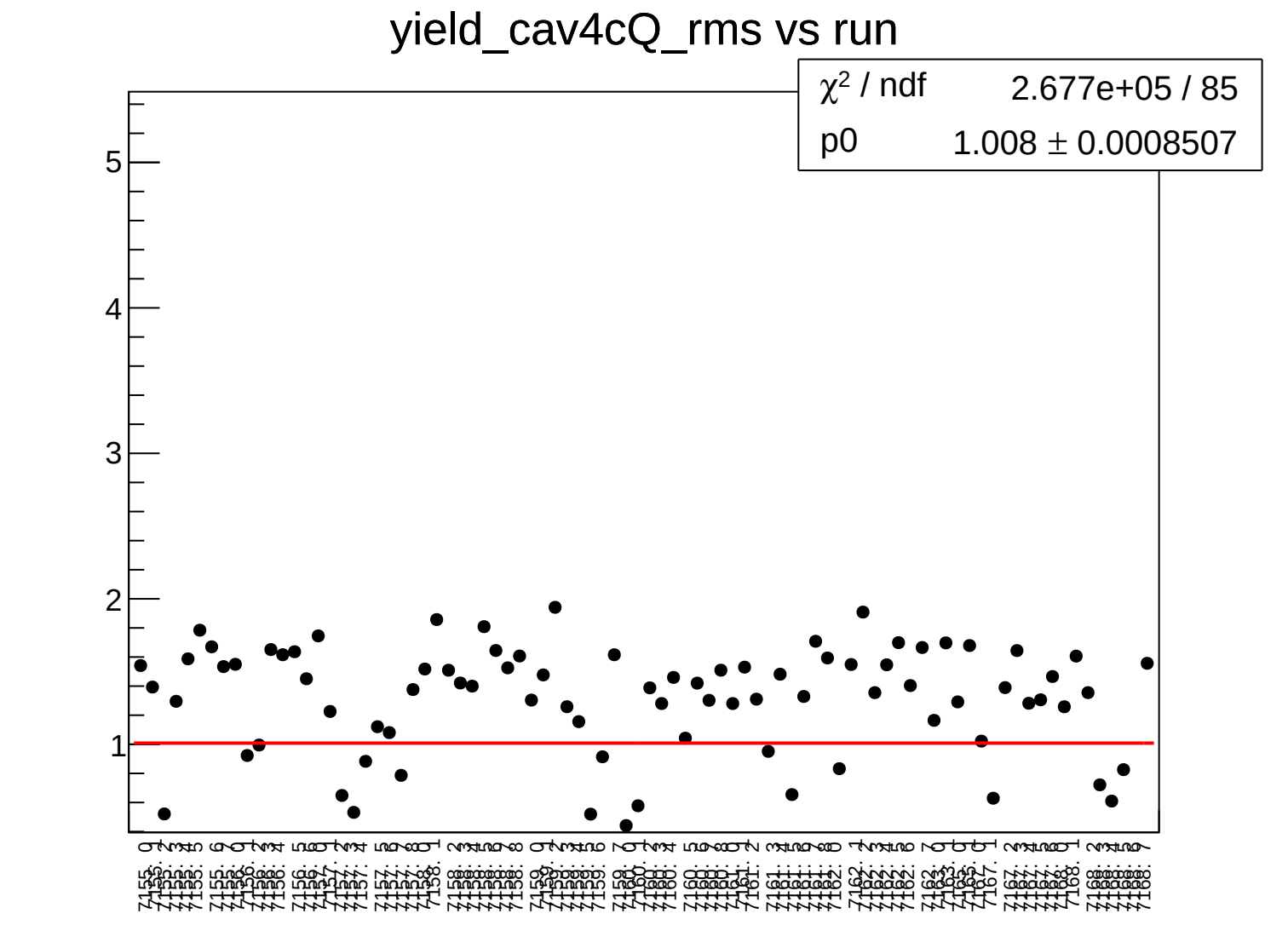

yield_cav4bQ_mean vs run
χ^2 / ndf 2.784e+05 / 85
p0 148.6 ± 0.00076
149.5
149
148.5
148
147.5
pull
Entries 86
Mean 61.3
Std Dev 25.19
150
100
50
0
−50
−100
−150

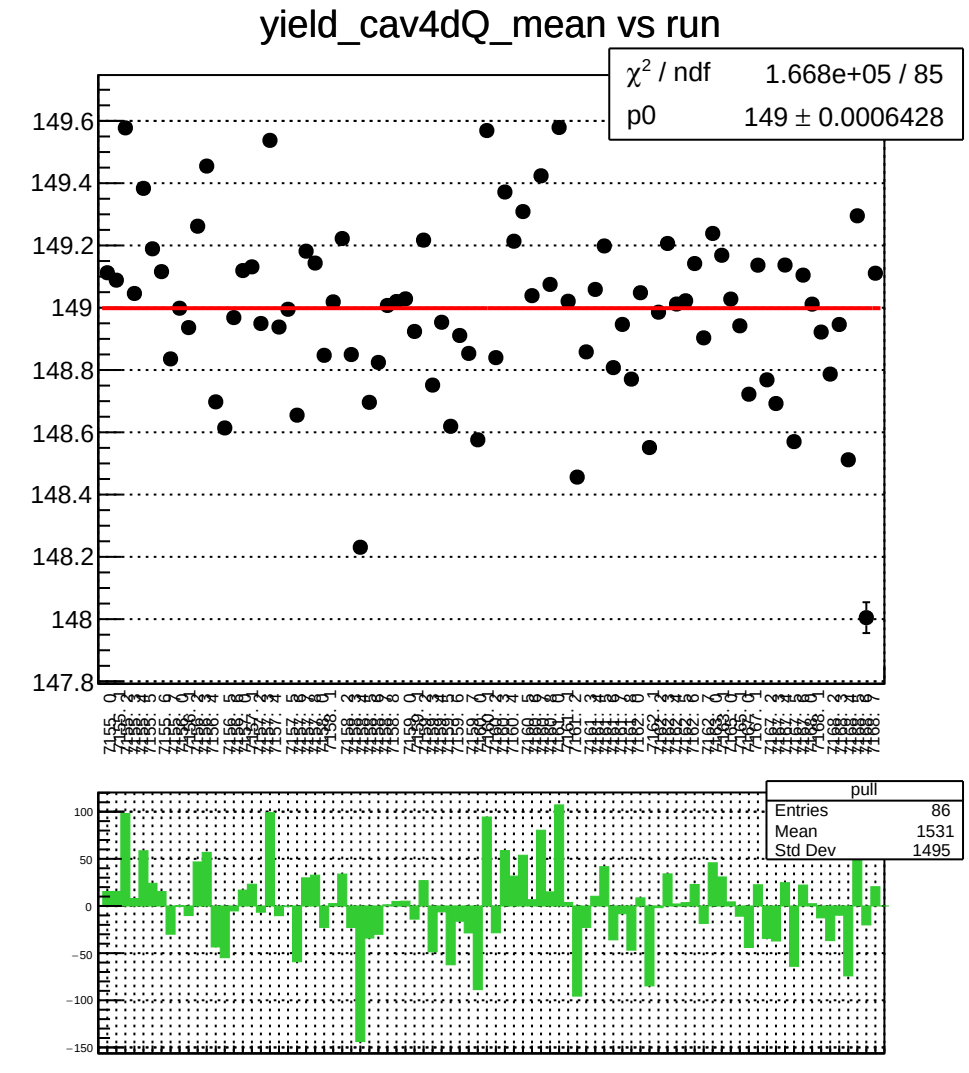

pull1D
Entries 86
Mean 1.425
Std Dev 4.703
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

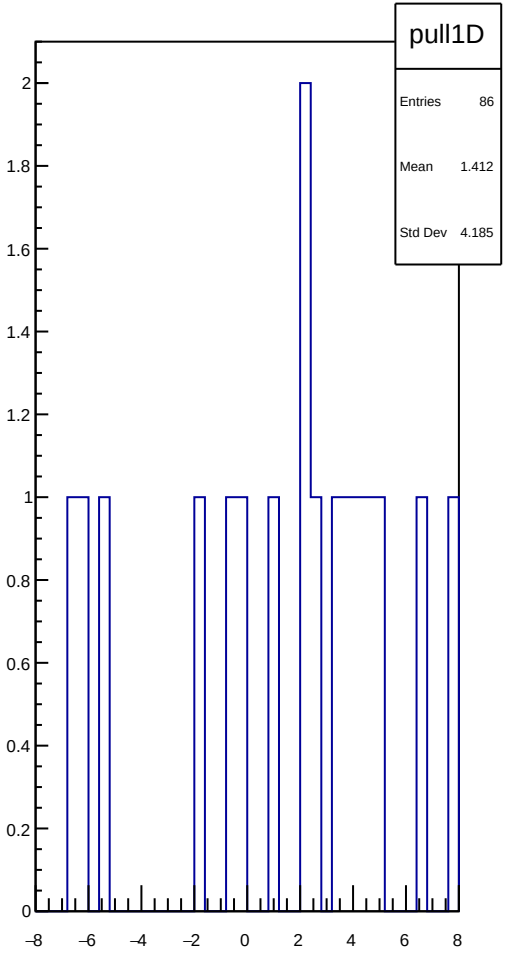

yield_cav4bQ_rms vs run
χ² / ndf 8.133e+04 / 85
p0 0.6777 ± 0.0005374
5
4
3
2
1

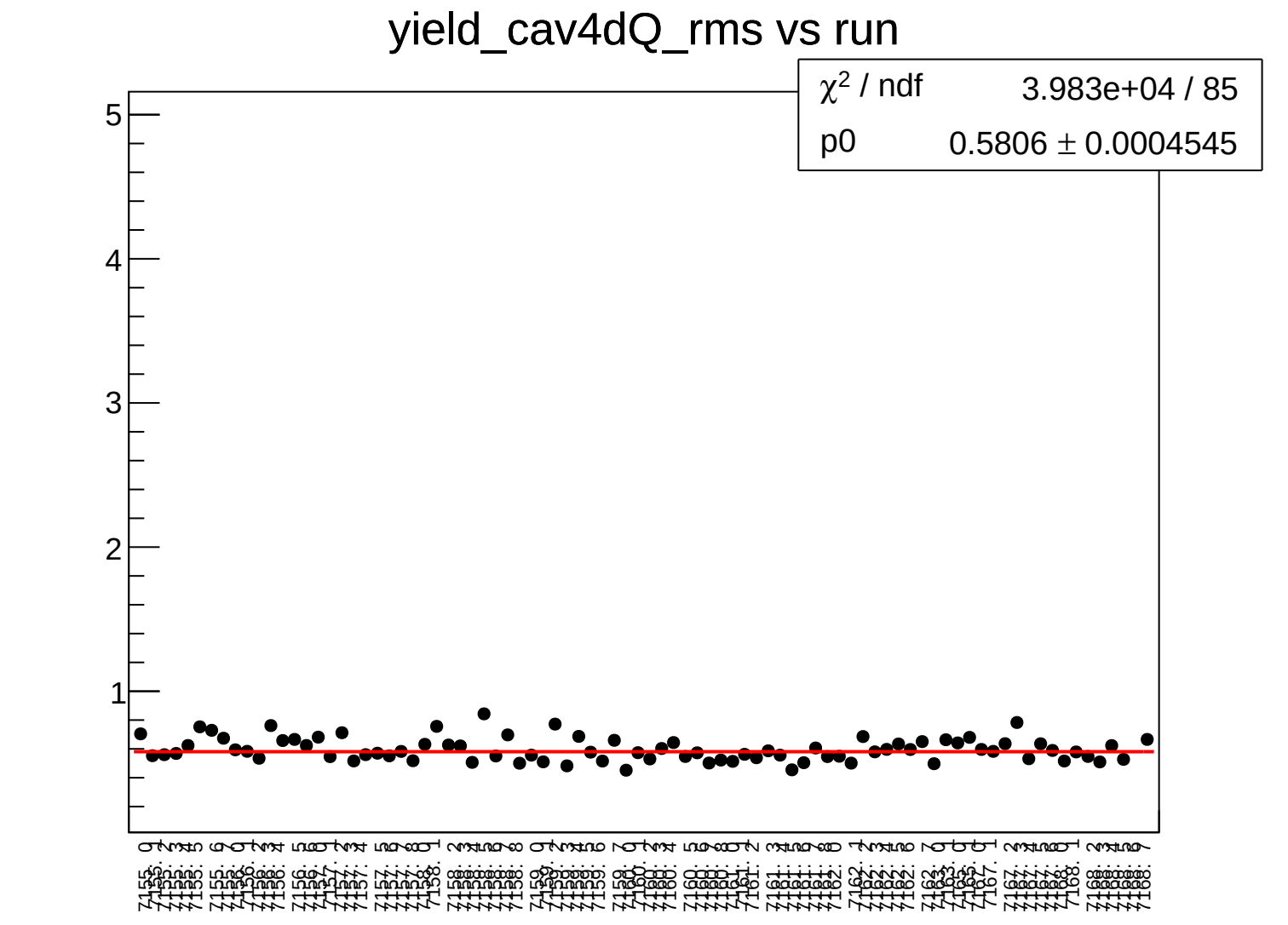

yield_cav4cQ_mean vs run
χ^2 / ndf 1.086e+06 / 85
p0 148.6 ± 0.001203
150.5
150
149.5
149
148.5
148
147.5
147
146.5
pull
Entries 86
Mean 45.18
Std Dev 25.58
300
200
100
0
−100
−200
−300
−400

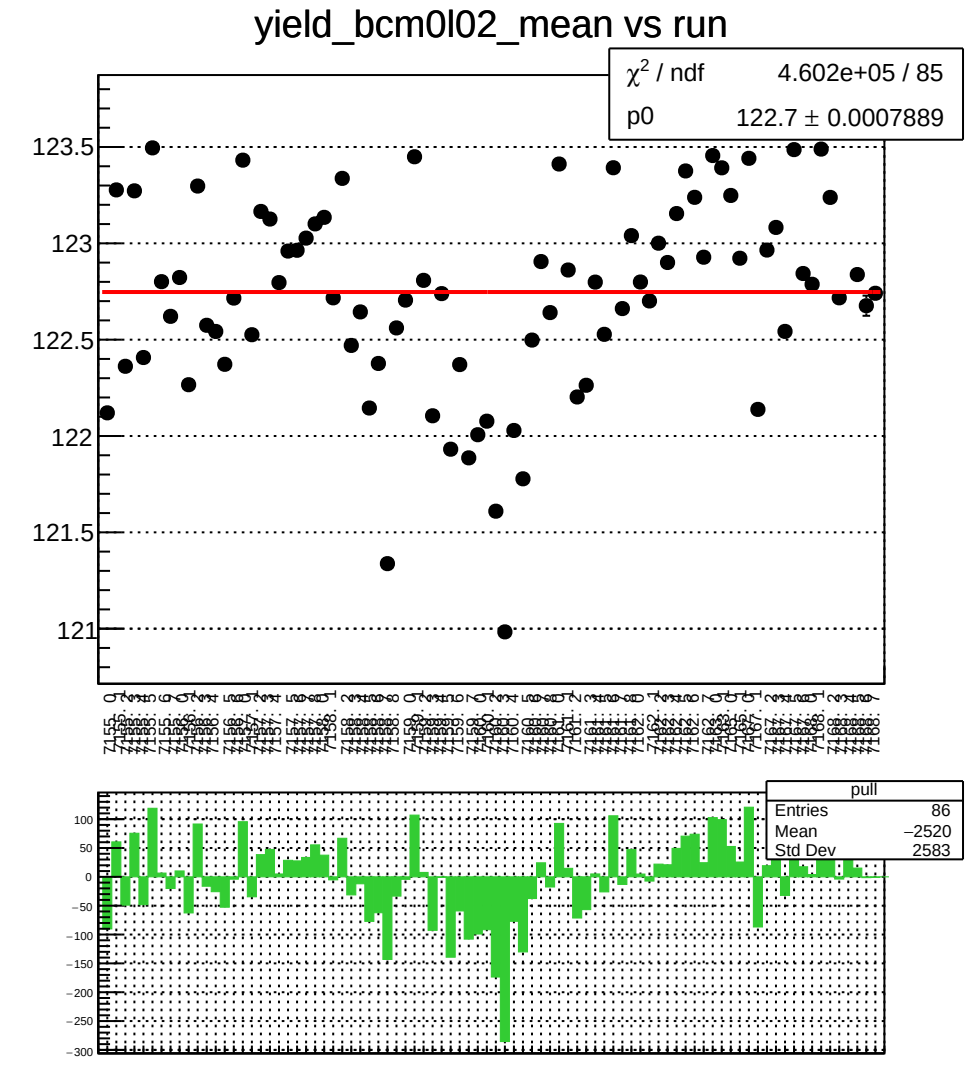

pull1D
Entries 86
Mean 0.1346
Std Dev 3.338
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

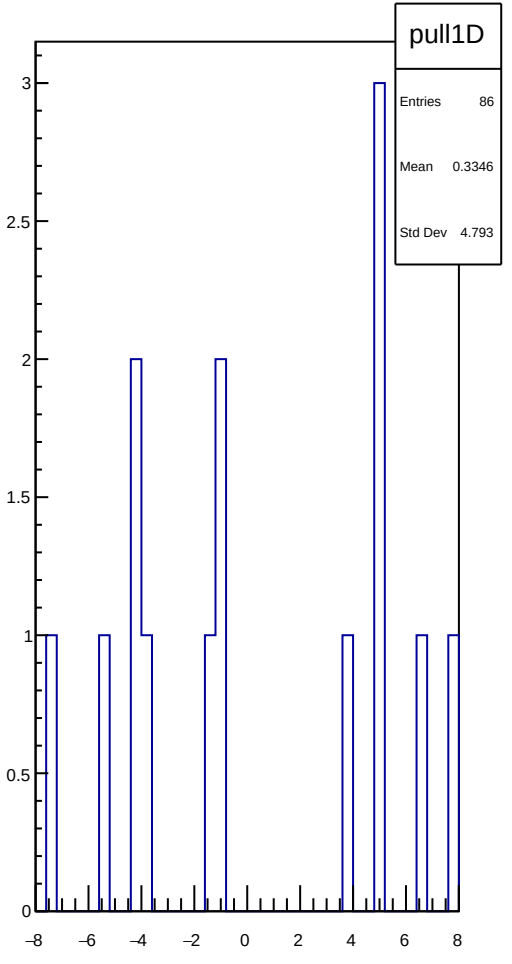

yield_cav4cQ_rms vs run
χ² / ndf 2.677e+05 / 85
p0 1.008 ± 0.0008507
5
4
3
2
1

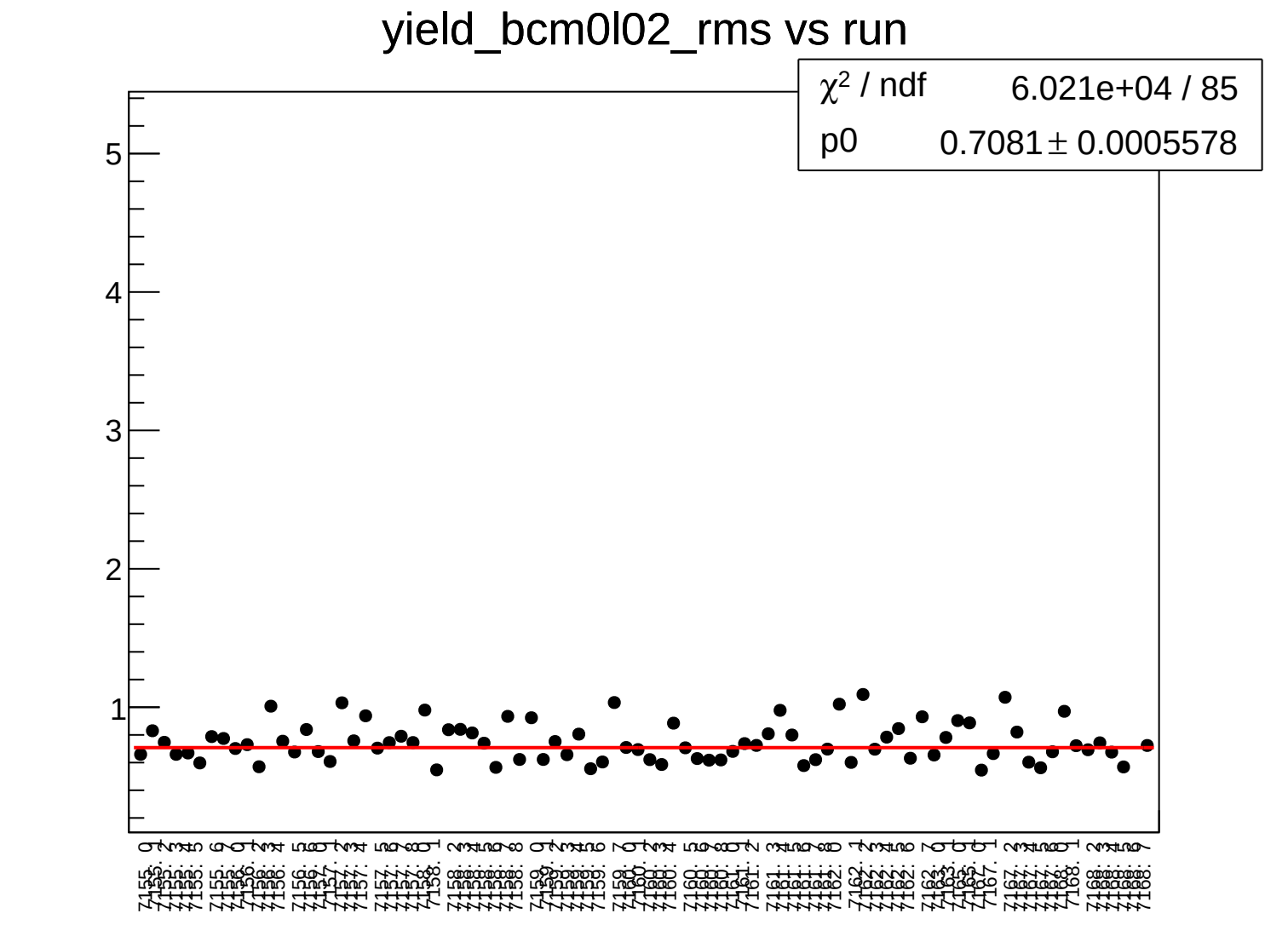

yield_cav4dQ_mean vs run
χ² / ndf 1.668e+05 / 85
p0 149 ± 0.0006428
149.6
149.4
149.2
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 86
Mean 1531
Std Dev 1495
100
50
0
−50
−100
−150

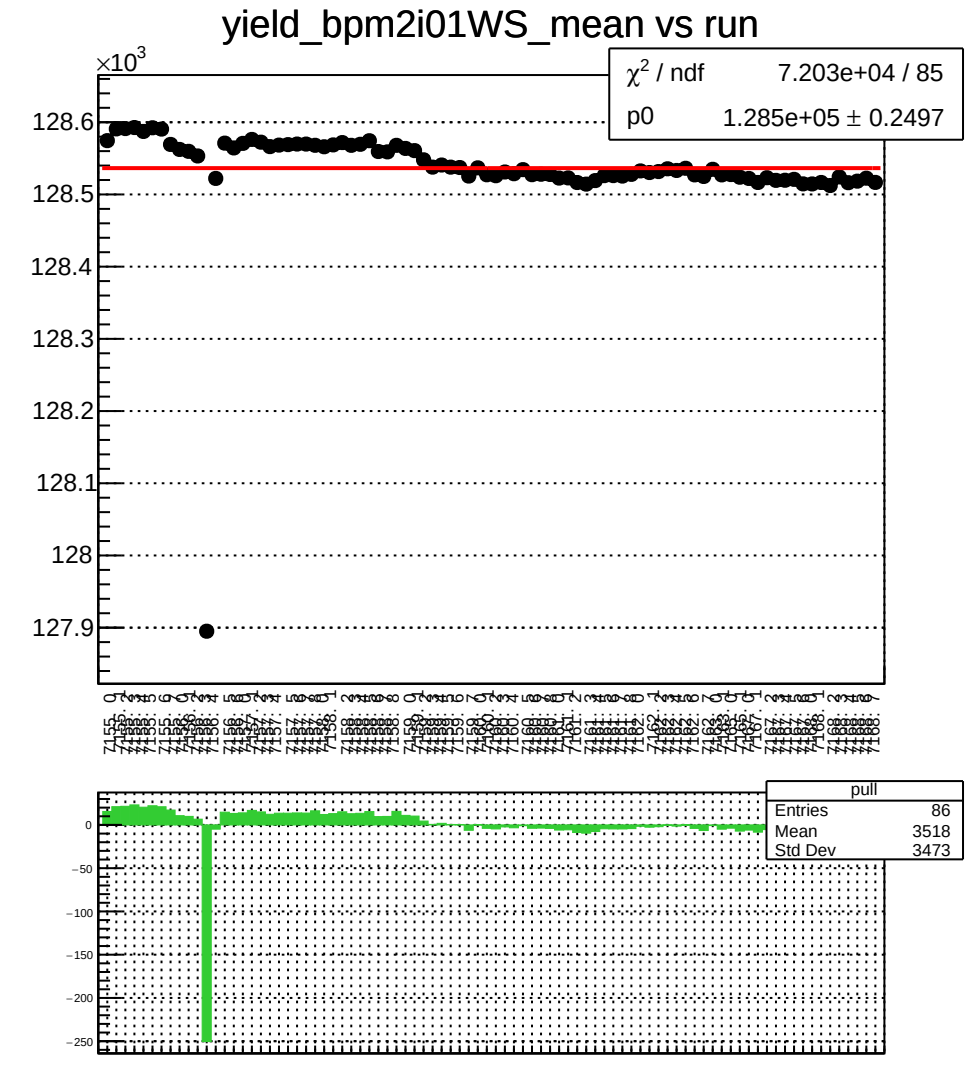

pull1D
Entries 86
Mean 1.412
Std Dev 4.185
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

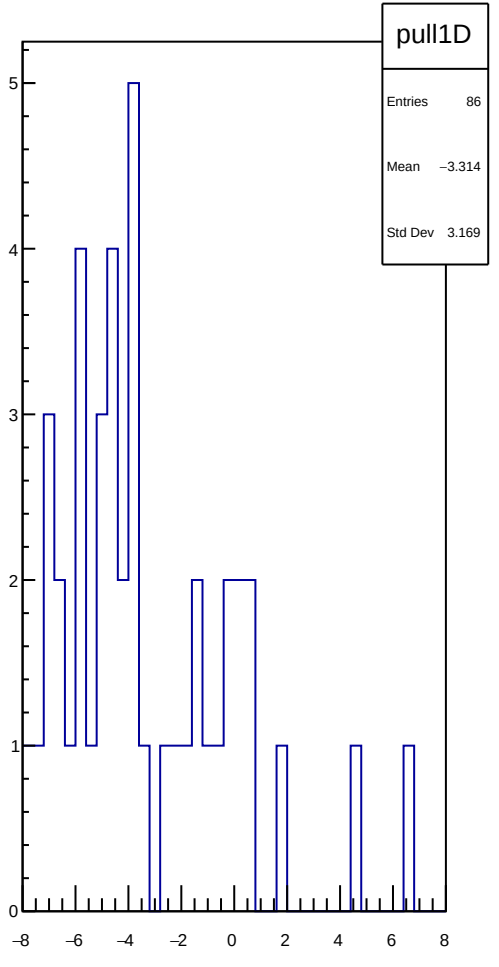

yield_cav4dQ_rms vs run
χ² / ndf 3.983e+04 / 85
p0 0.5806 ± 0.0004545
5
4
3
2
1

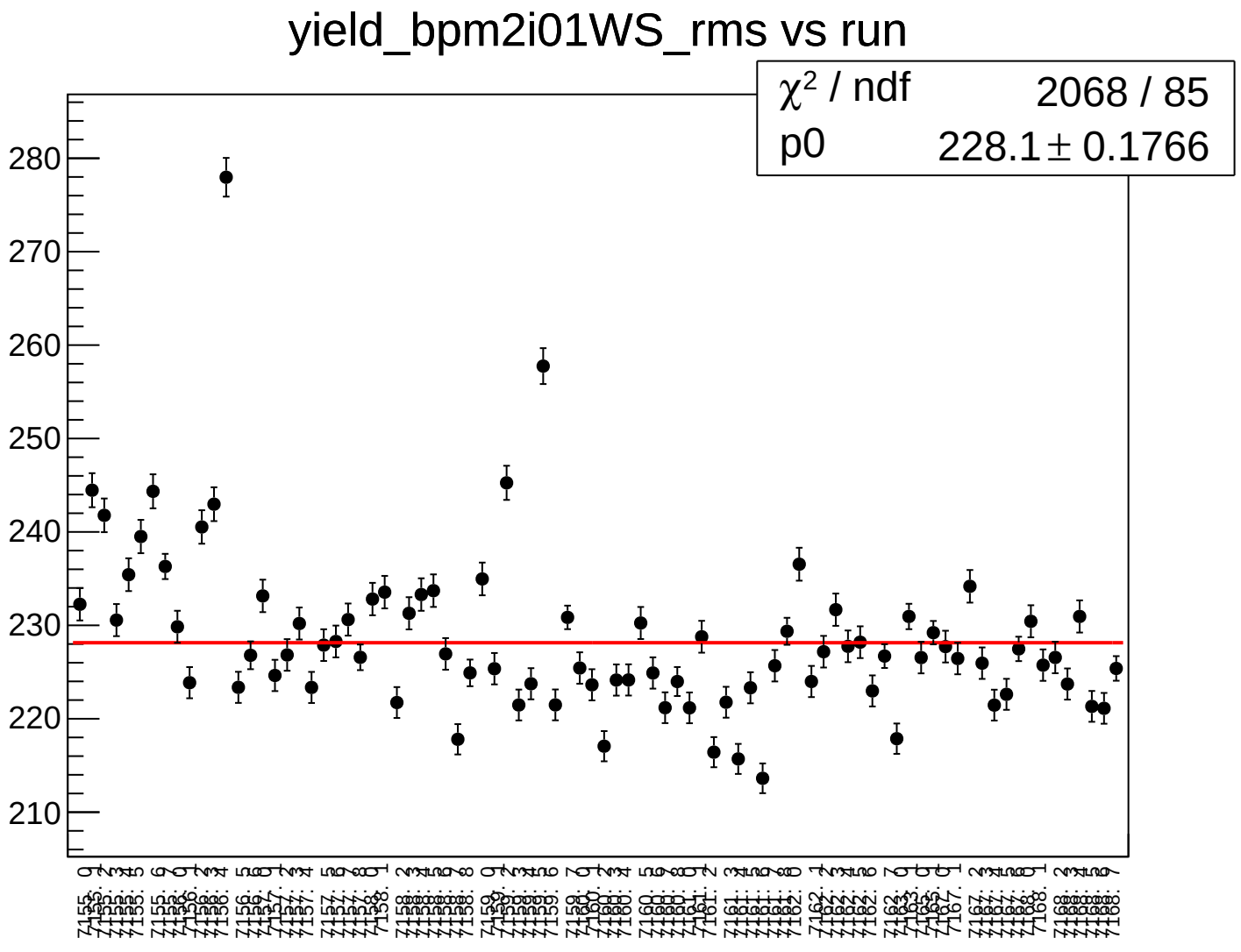

yield_bcm0l02_mean vs run
χ² / ndf 4.602e+05 / 85
p0 122.7 ± 0.0007889
123.5
123
122.5
122
121.5
121
pull
Entries 86
Mean −2520
Std Dev 2583
100
50
0
−50
−100
−150
−200
−250
−300

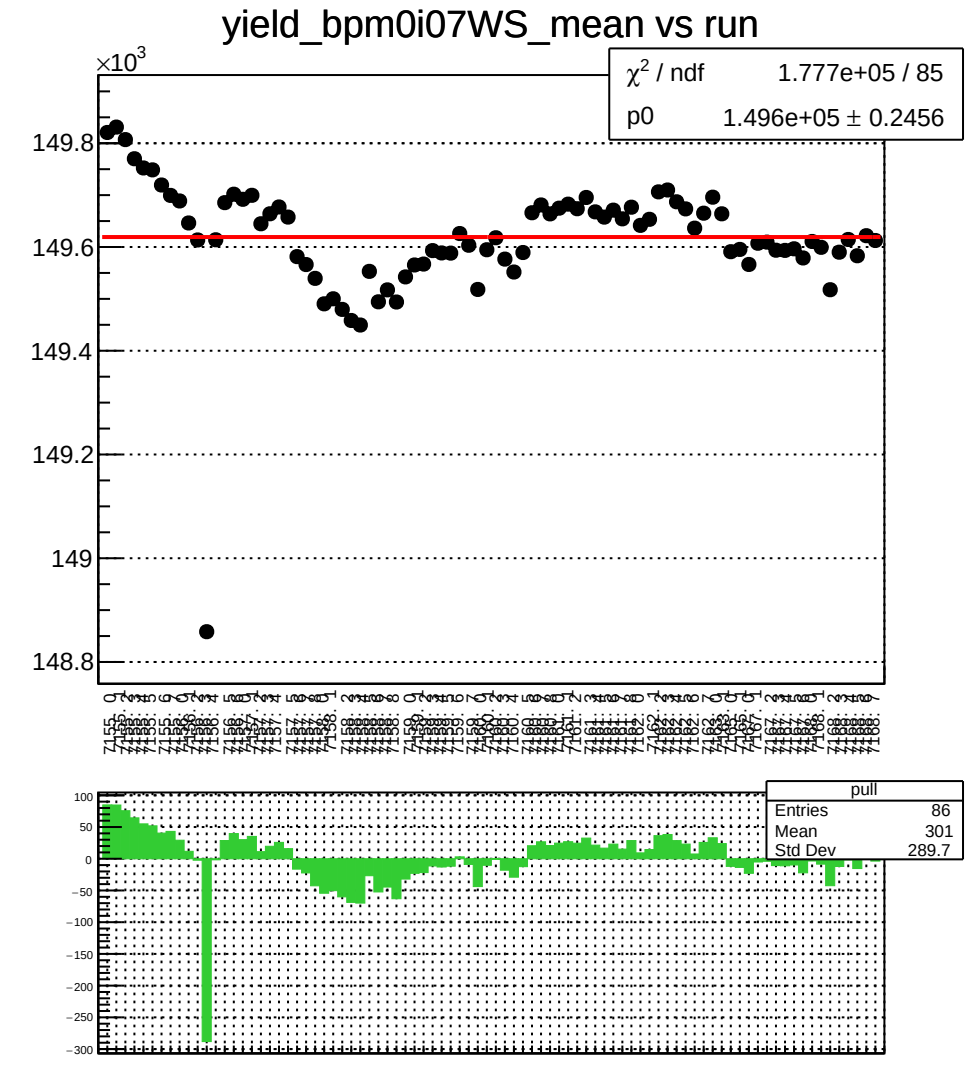

pull1D
Entries 86
Mean 0.3346
Std Dev 4.793
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

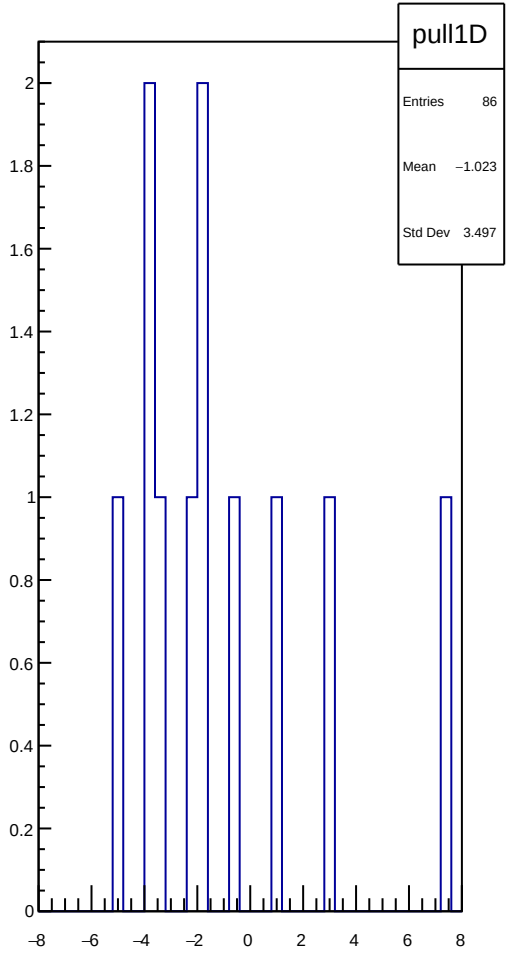

yield_bcm0l02_rms vs run
χ² / ndf 6.021e+04 / 85
p0 0.7081 ± 0.0005578
5
4
3
2
1

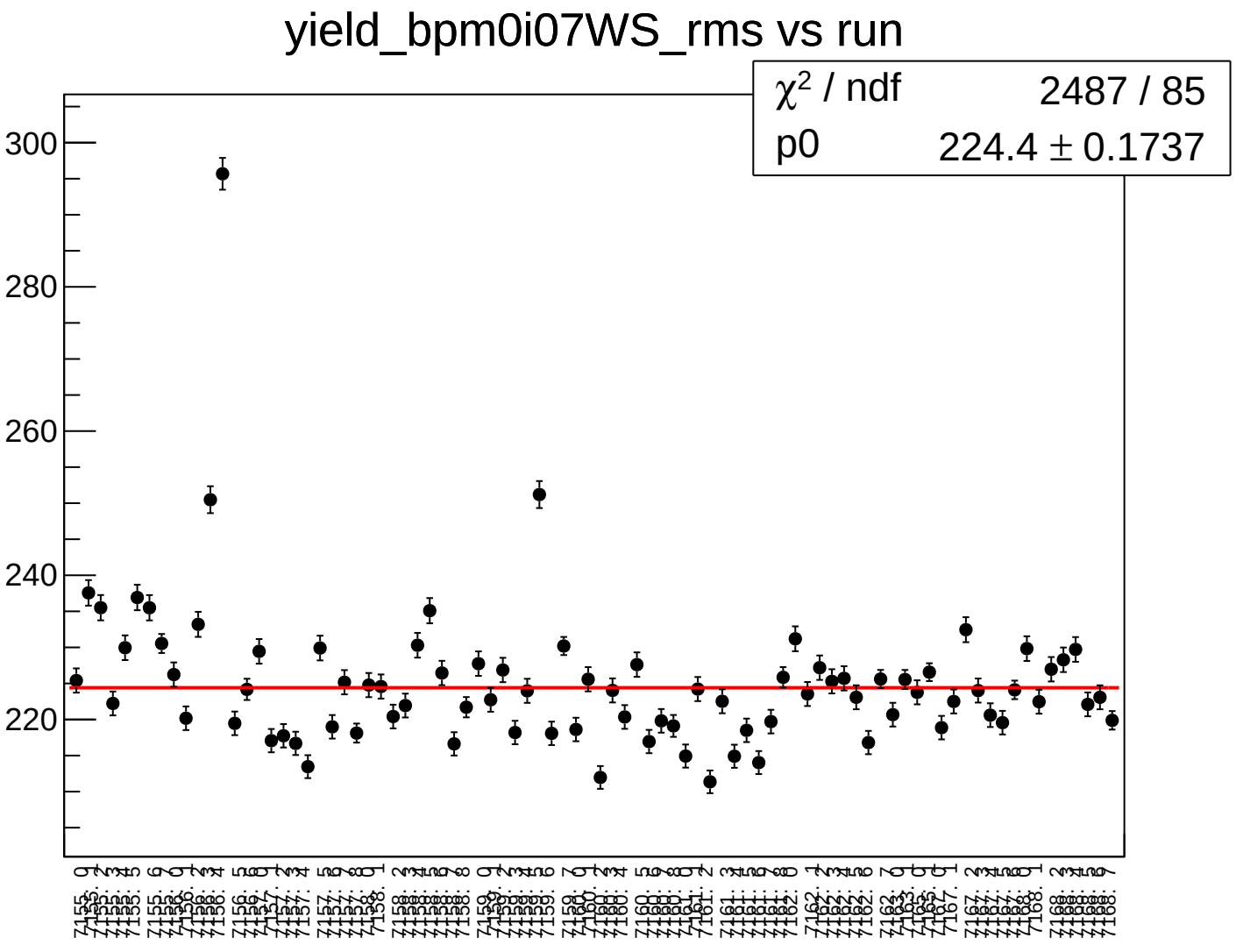

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 7.203e+04 / 85
p0 1.285e+05 ± 0.2497
128.6
128.5
128.4
128.3
128.2
128.1
128
127.9
pull
Entries 86
Mean 3518
Std Dev 3473
0
−50
−100
−150
−200
−250

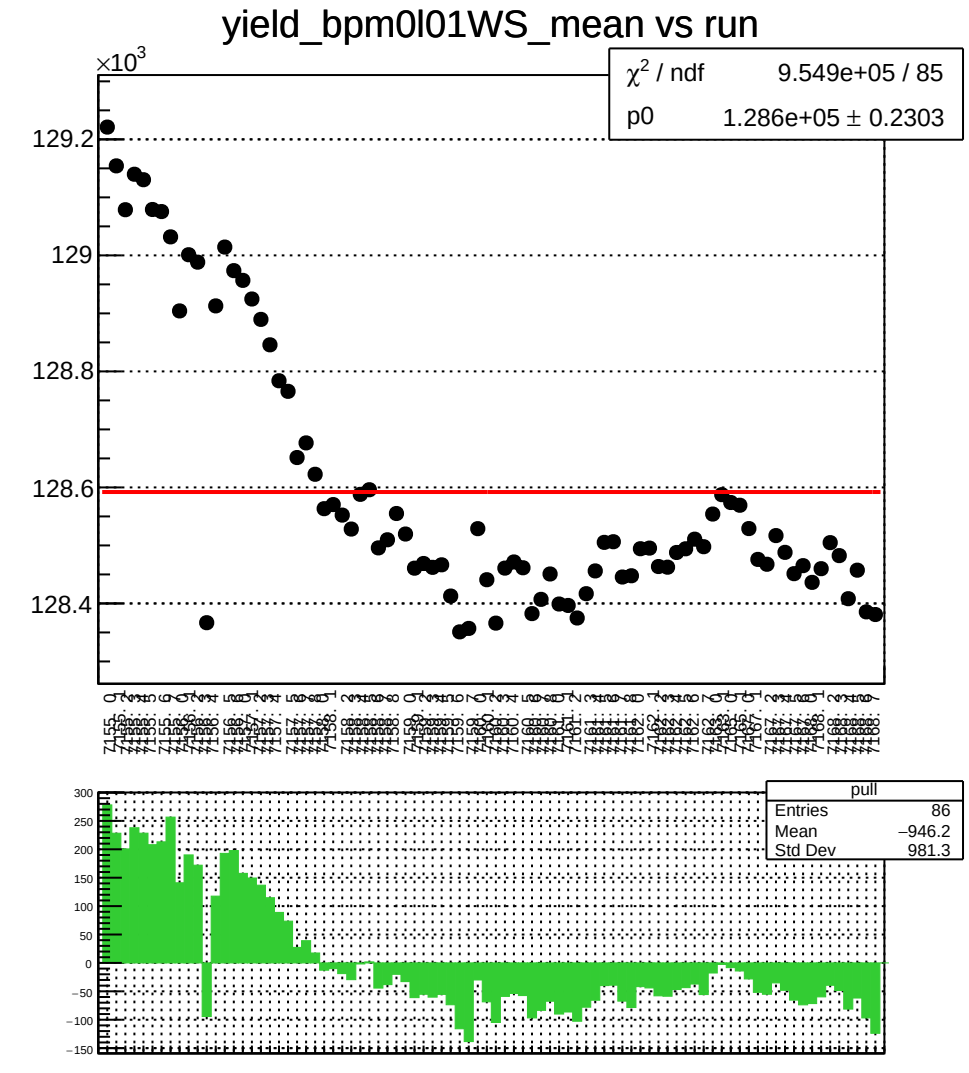

pull1D
Entries 86
Mean −3.314
Std Dev 3.169
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

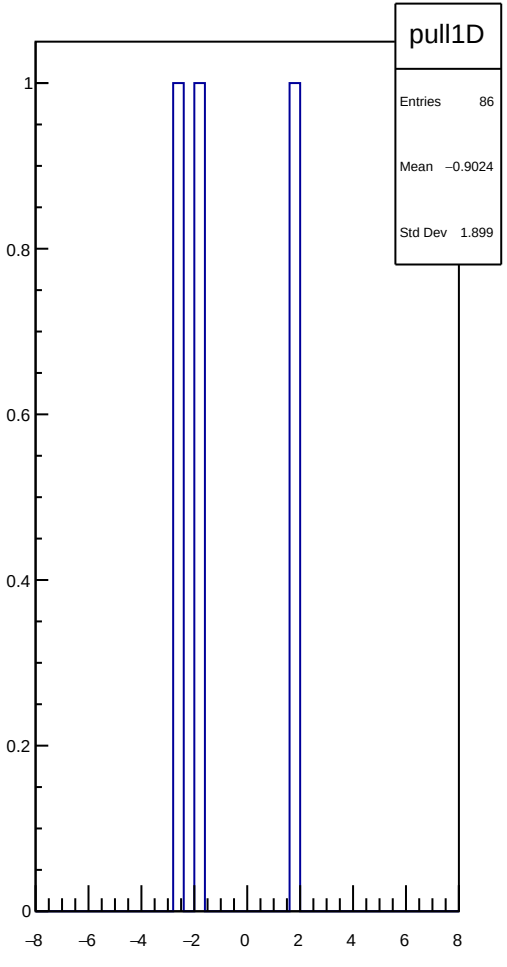

yield_bpm2i01WS_rms vs run
χ² / ndf 2068 / 85
p0 228.1 ± 0.1766
280
270
260
250
240
230
220
210

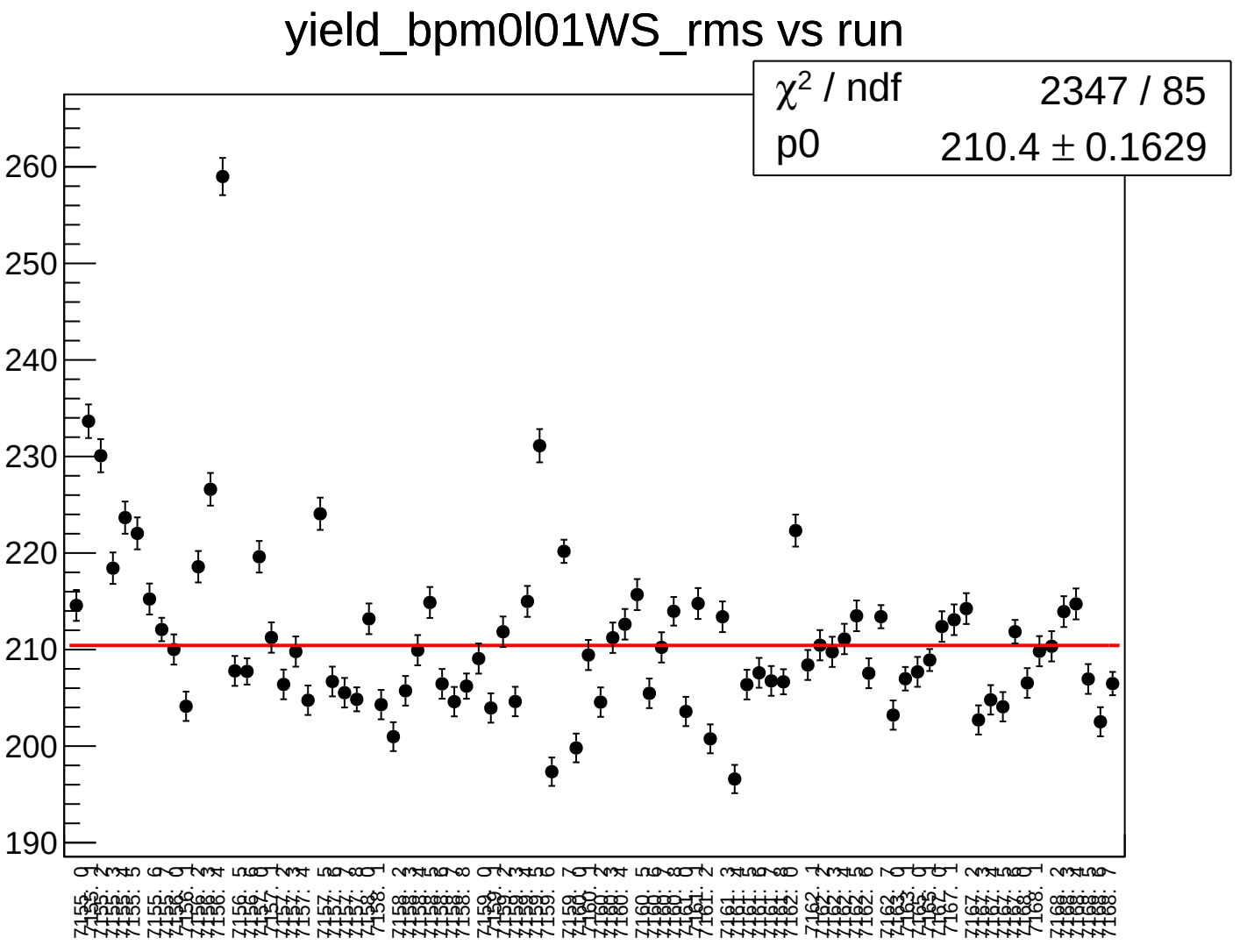

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 1.777e+05 / 85
p0 1.496e+05 ± 0.2456
149.8
149.6
149.4
149.2
149
148.8
pull
Entries 86
Mean 301
Std Dev 289.7
100
50
0
−50
−100
−150
−200
−250
−300

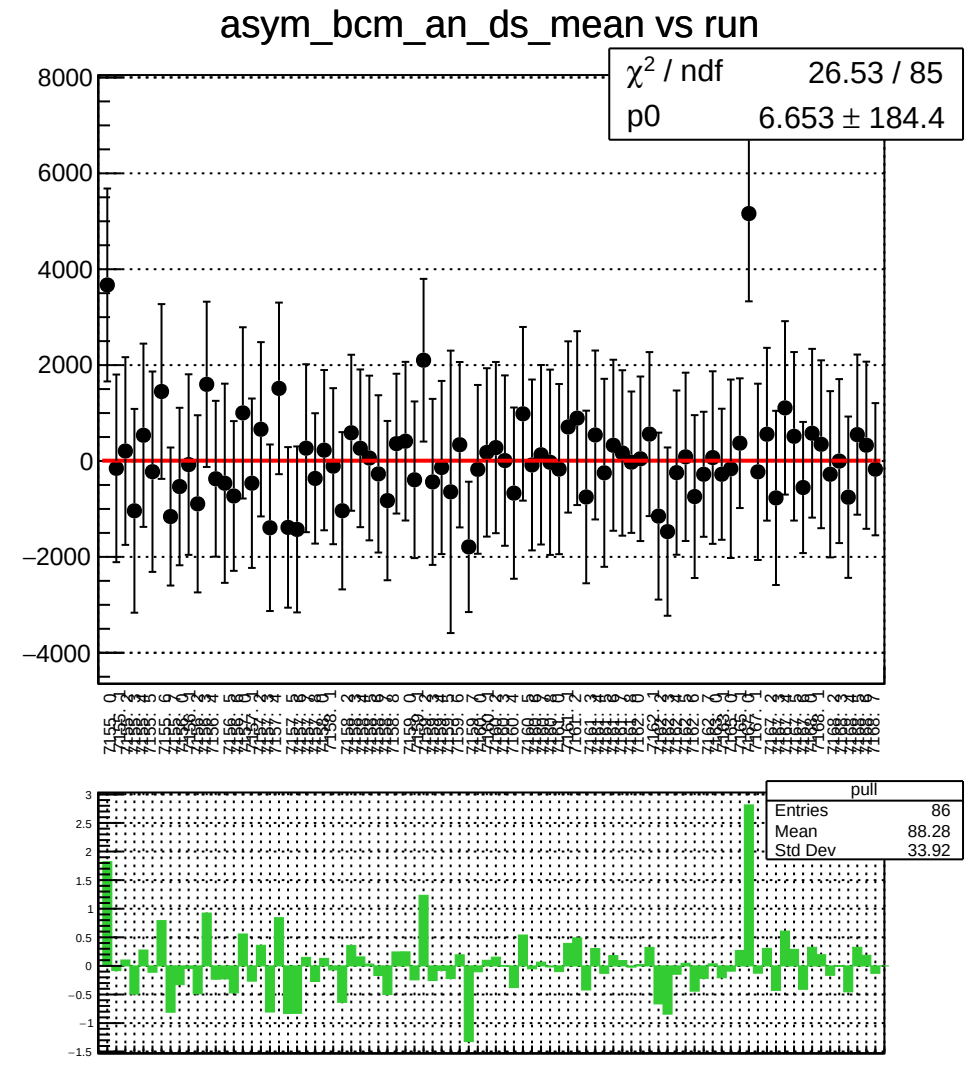

pull1D
Entries 86
Mean −1.023
Std Dev 3.497
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

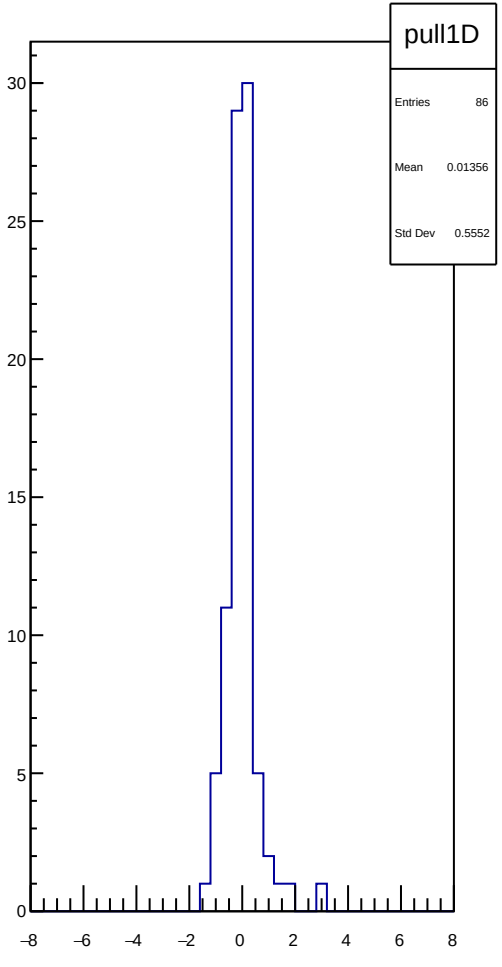

yield_bpm0i07WS_rms vs run
χ² / ndf 2487 / 85
p0 224.4 ± 0.1737
300
280
260
240
220

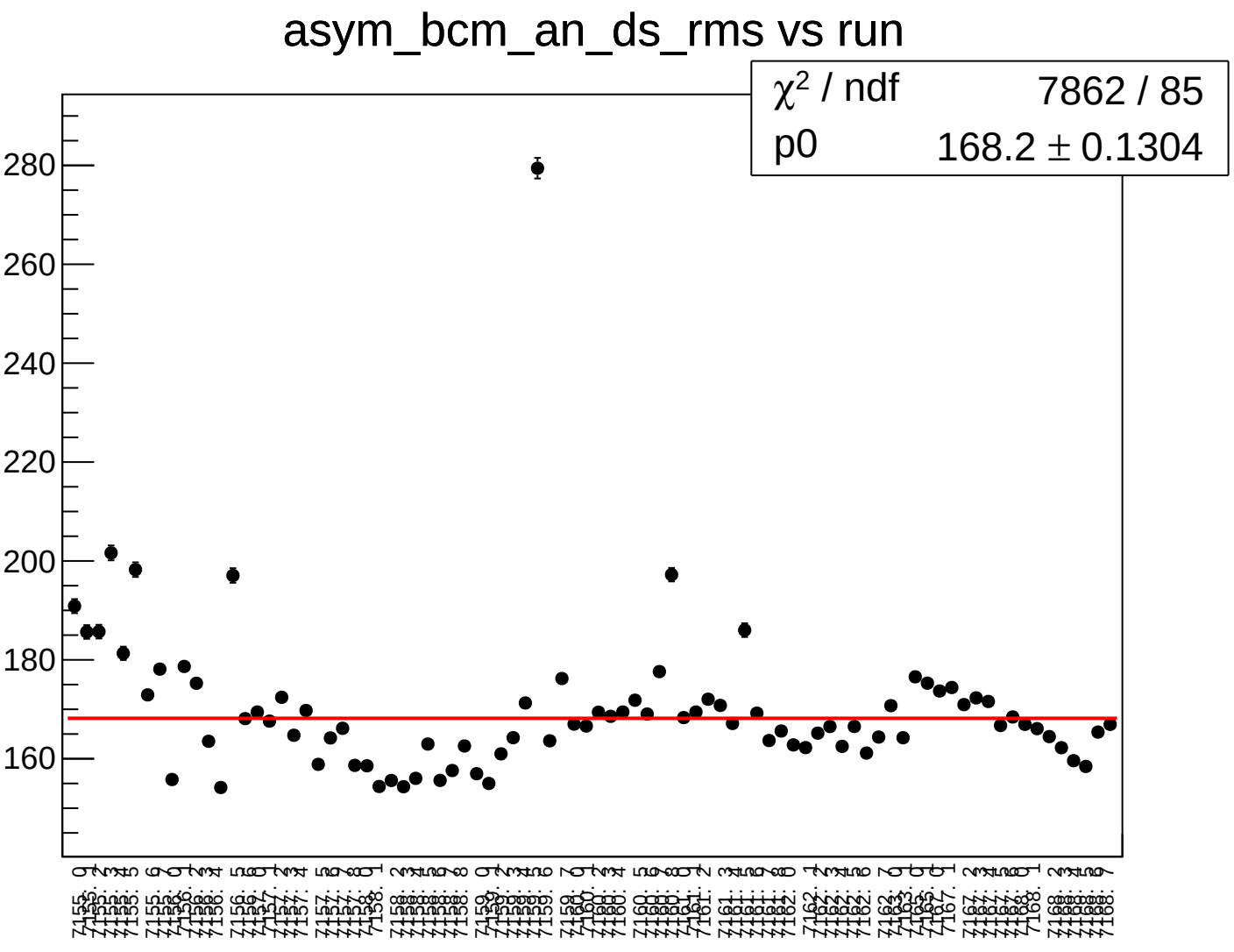

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 9.549e+05 / 85
p0 1.286e+05 ± 0.2303
129.2
129
128.8
128.6
128.4
pull
Entries 86
Mean −946.2
Std Dev 981.3
300
250
200
150
100
50
0
−50
−100
−150

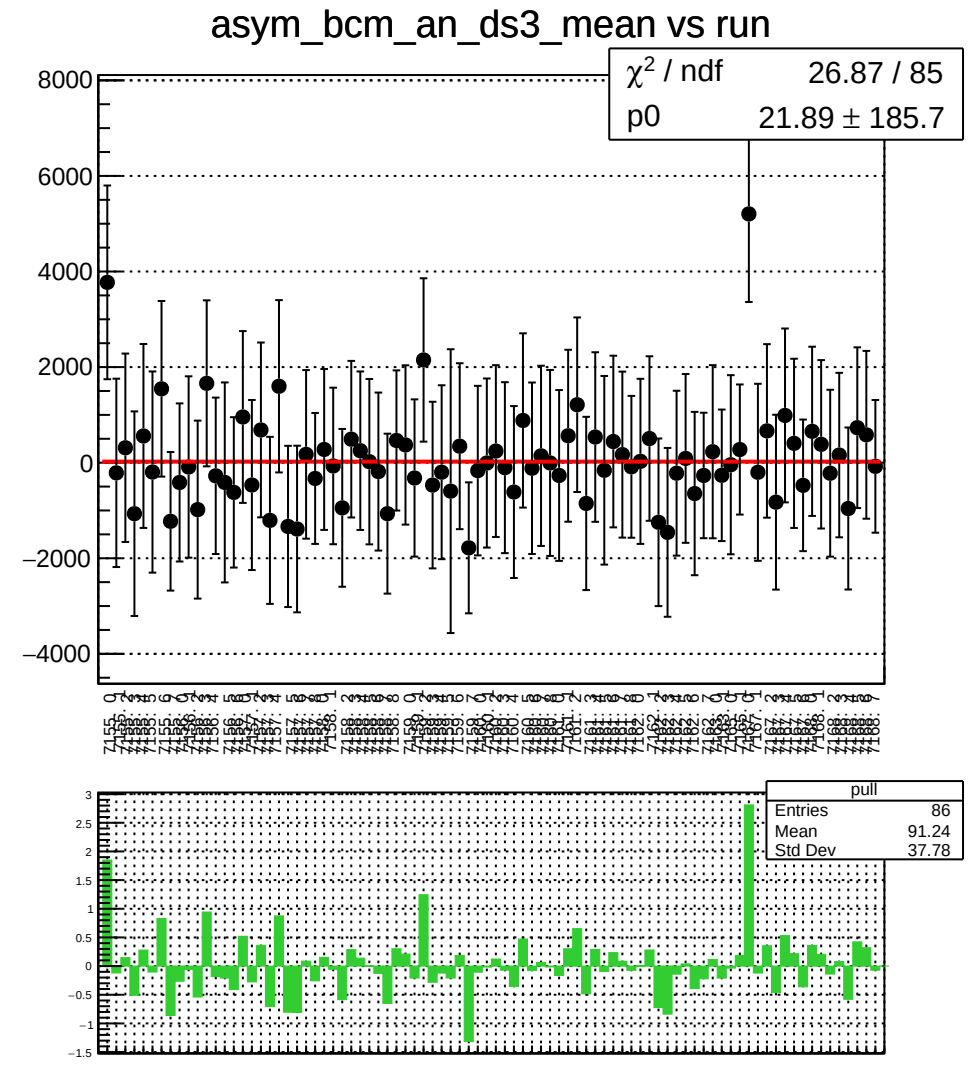

pull1D
Entries 86
Mean −0.9024
Std Dev 1.899
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

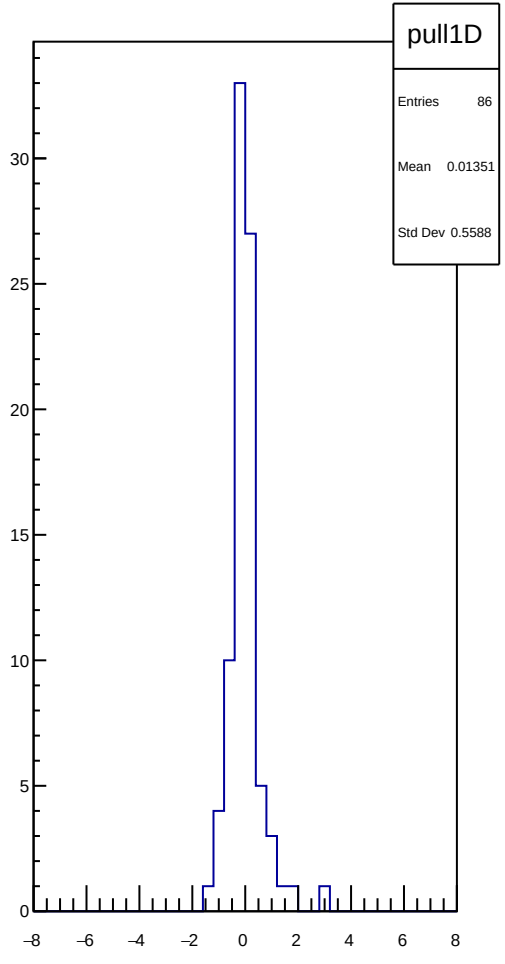

yield_bpm0l01WS_rms vs run
χ² / ndf 2347 / 85
p0 210.4 ± 0.1629
260
250
240
230
220
210
200
190

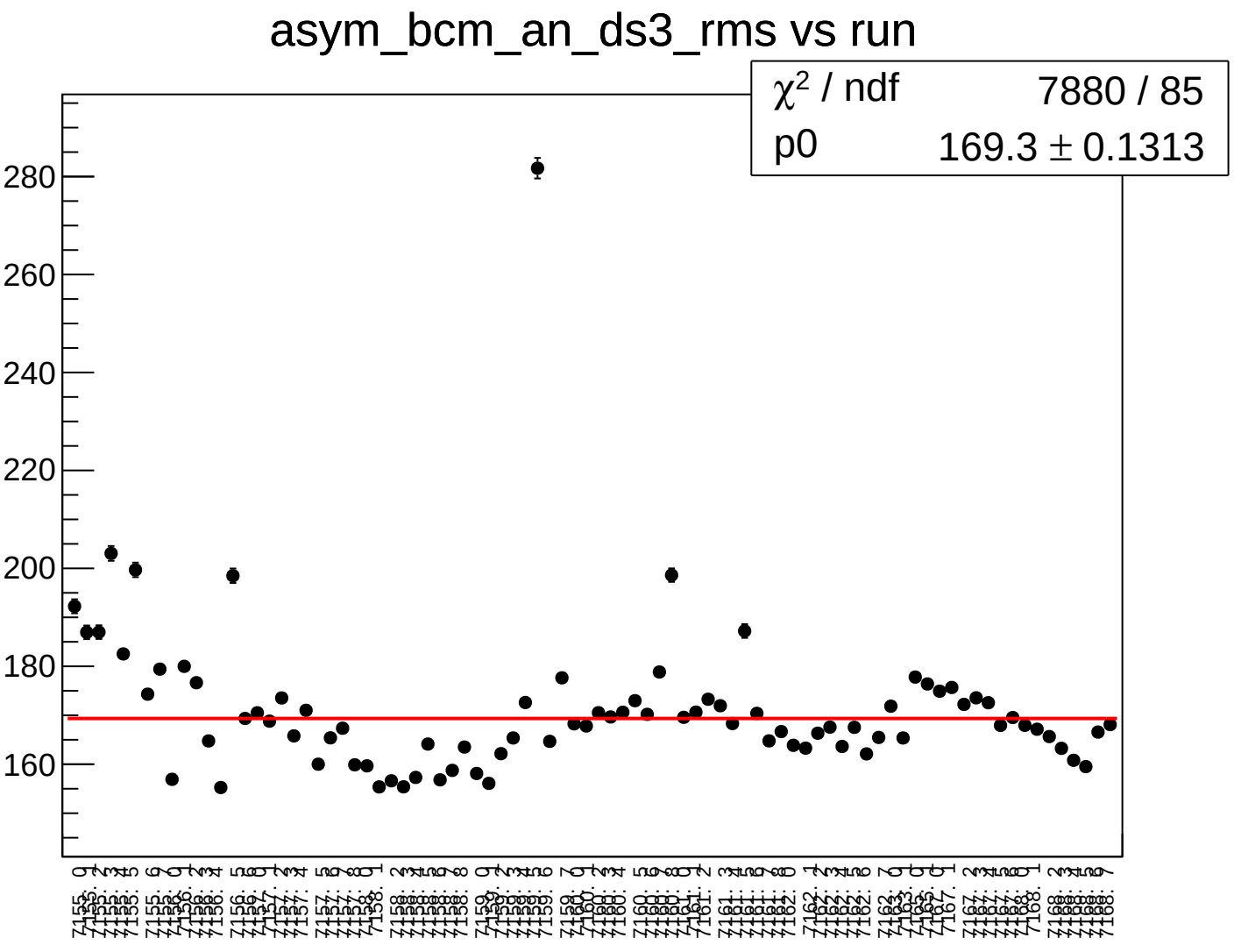

asym_bcm_an_ds_mean vs run
χ² / ndf 26.53 / 85
p0 6.653 ± 184.4
pull
Entries 86
Mean 88.28
Std Dev 33.92

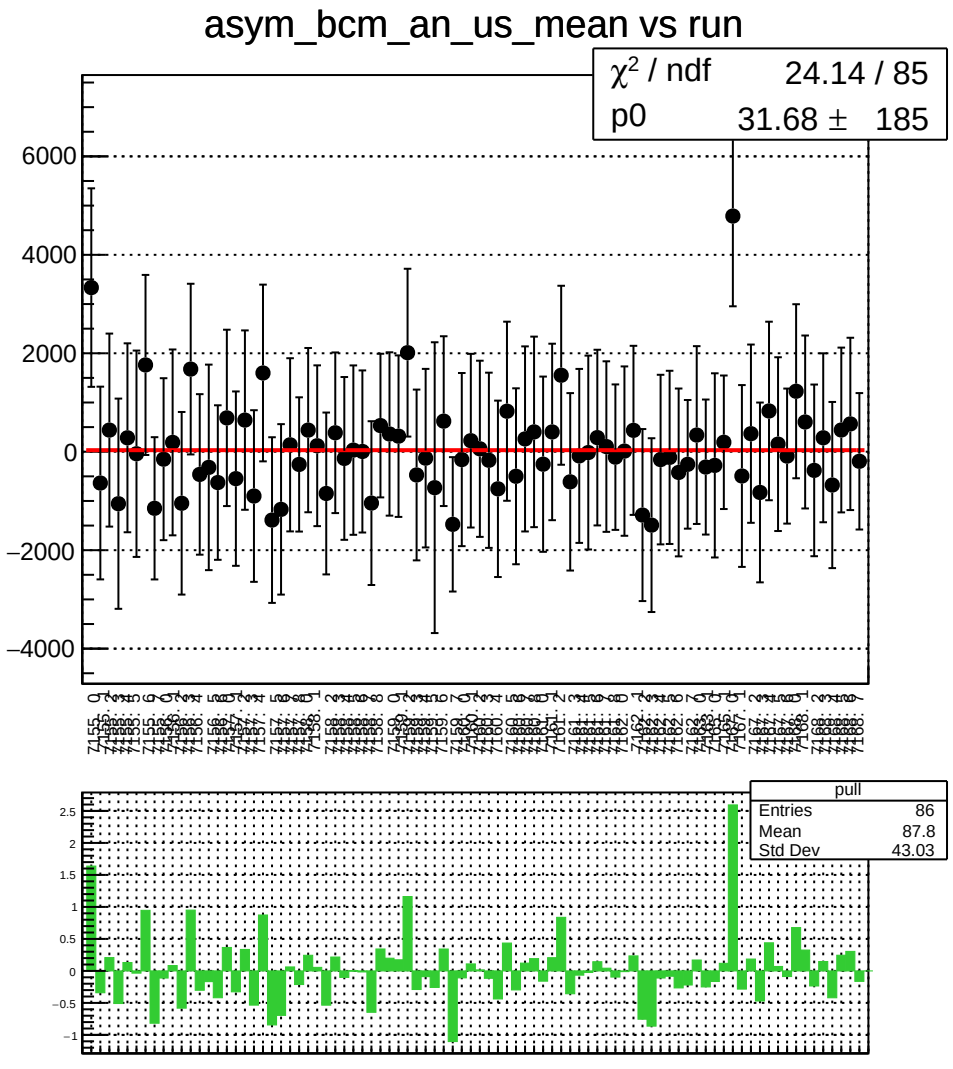

pull1D
Entries 86
Mean 0.01356
Std Dev 0.5552

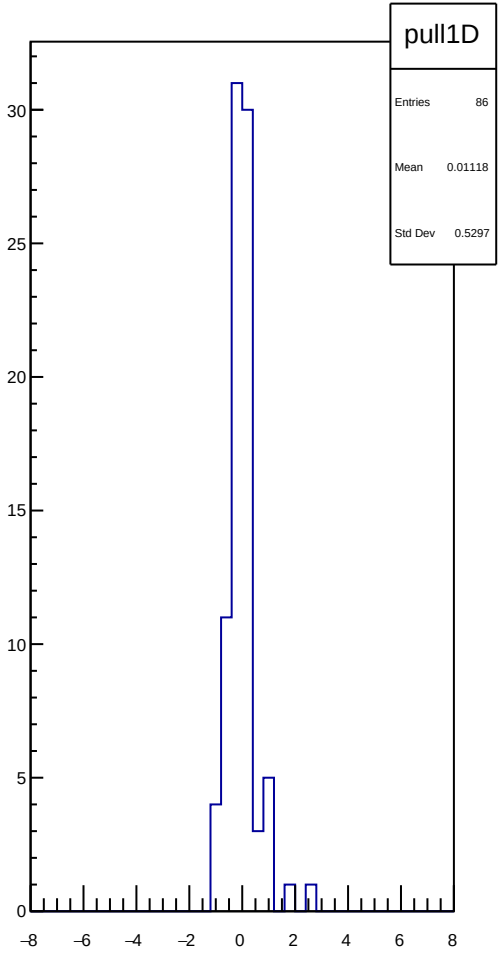

asym_bcm_an_ds_rms vs run
χ^2 / ndf 7862 / 85
p0 168.2 ± 0.1304
280
260
240
220
200
180
160

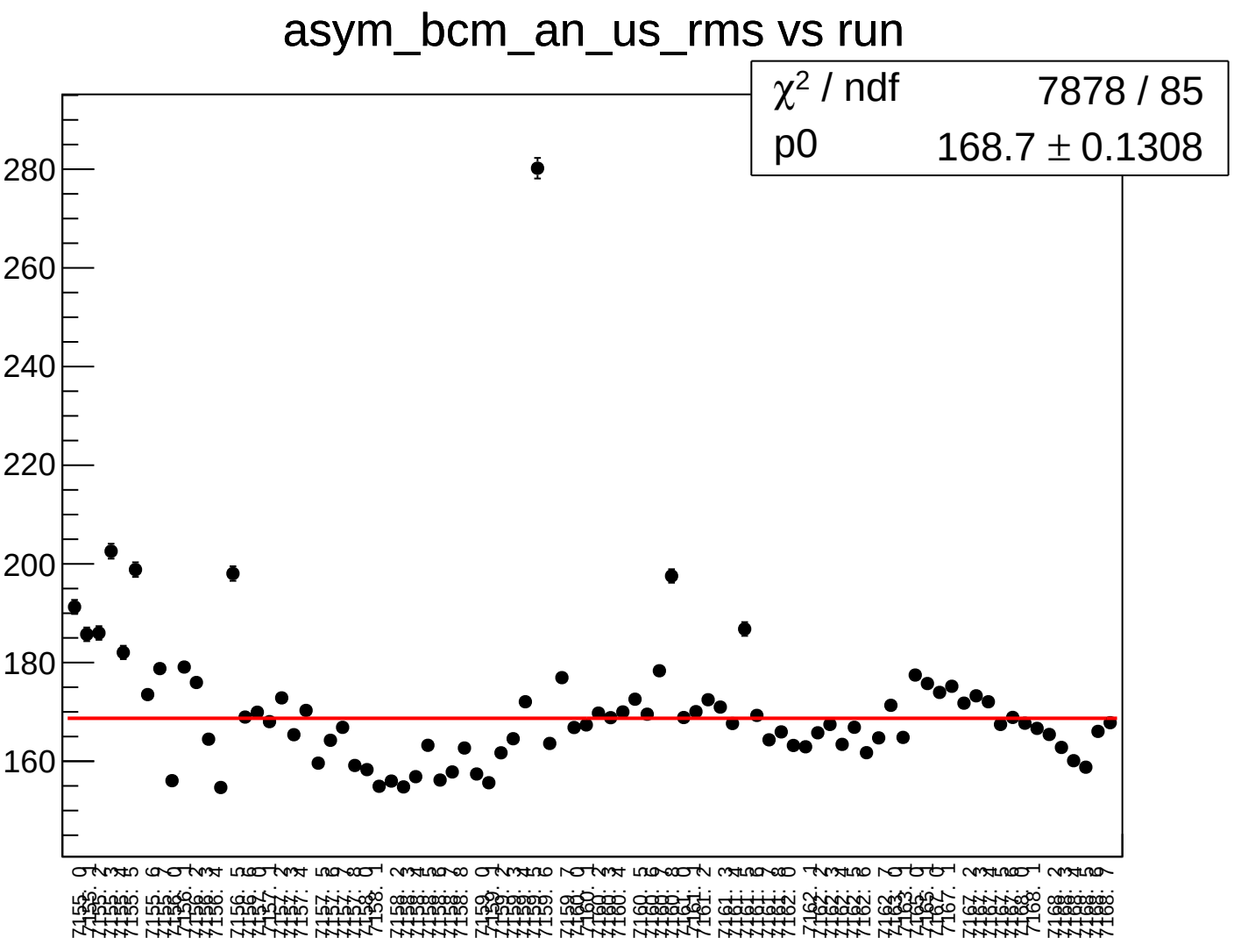

asym_bcm_an_ds3_mean vs run
χ² / ndf 26.87 / 85
p0 21.89 ± 185.7
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 91.24
Std Dev 37.78
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

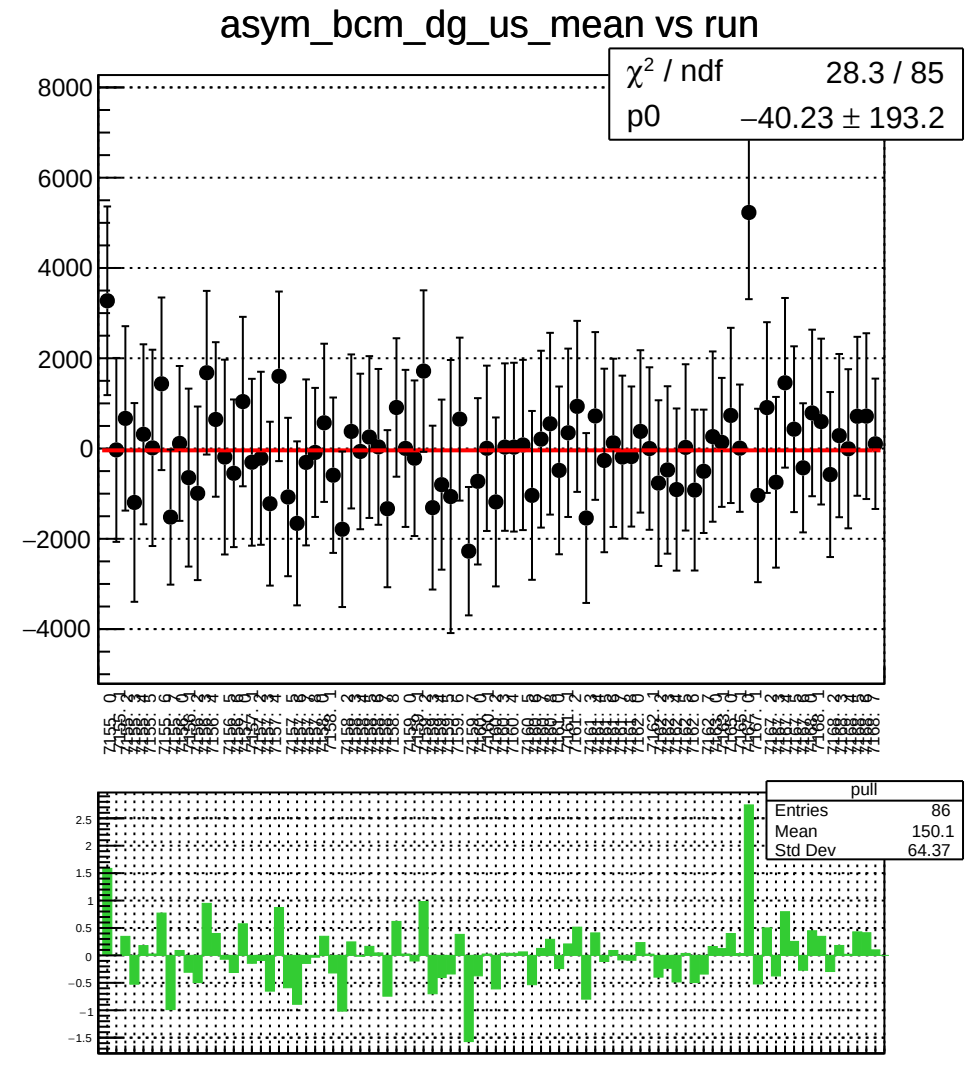

pull1D
Entries 86
Mean 0.01351
Std Dev 0.5588
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

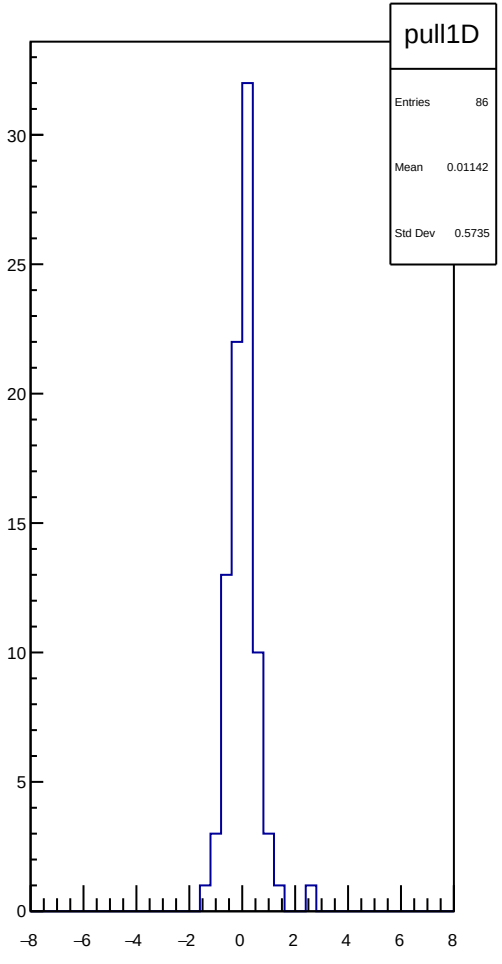

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 7880 / 85
p0 169.3 ± 0.1313
280
260
240
220
200
180
160

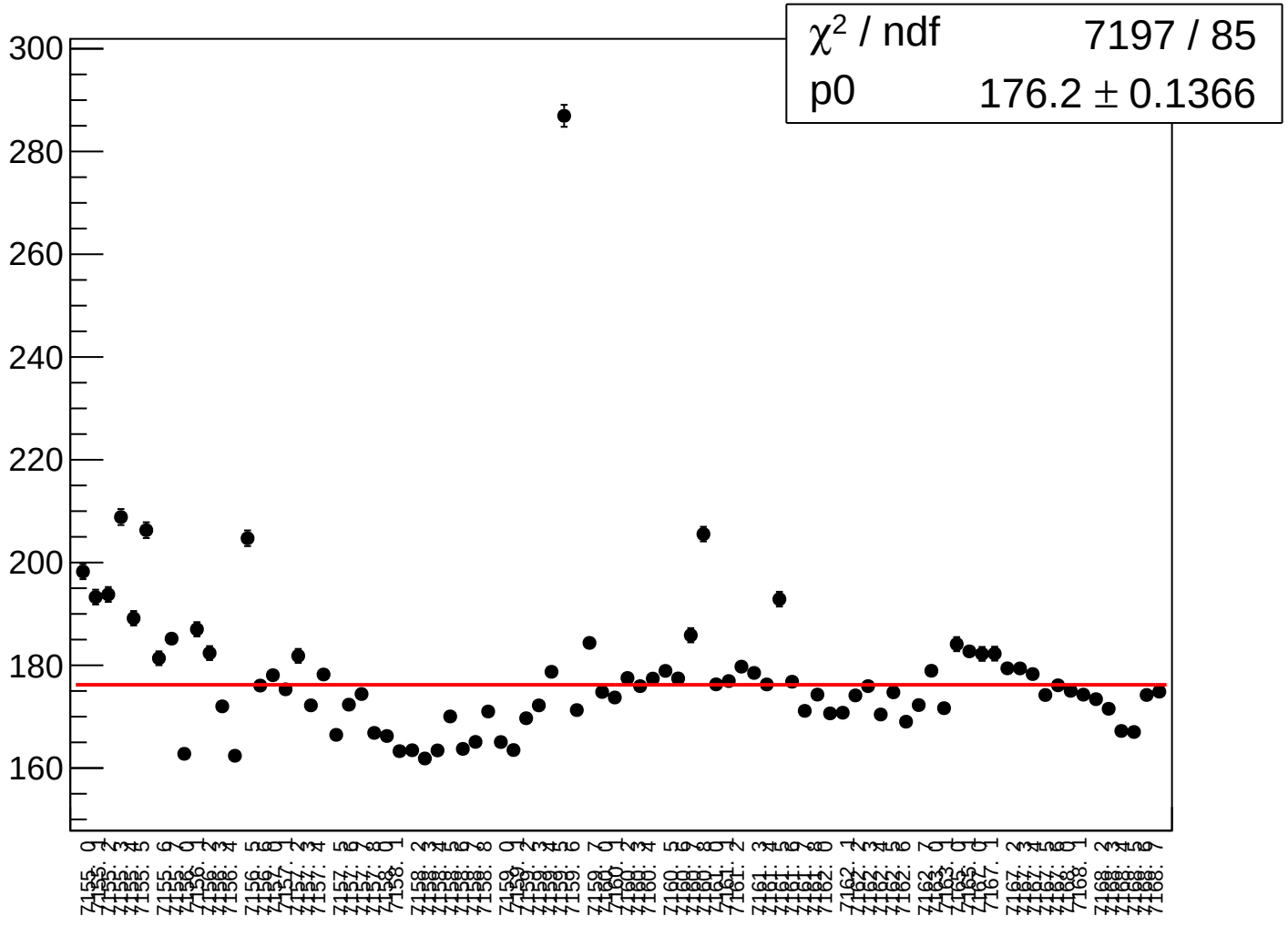

asym_bcm_an_us_mean vs run
χ² / ndf 24.14 / 85
p0 31.68 ± 185
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 87.8
Std Dev 43.03
2.5
2
1.5
1
0.5
0
−0.5
−1

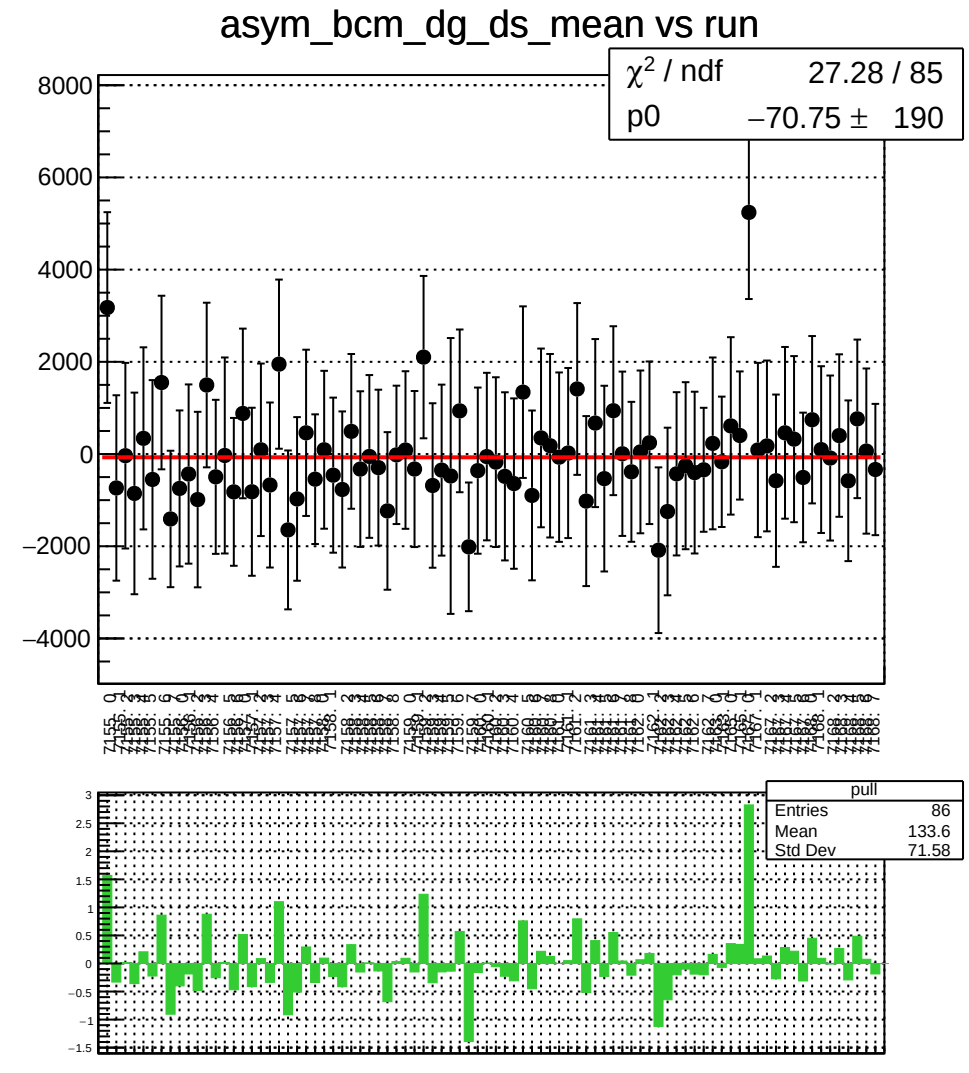

pull1D
Entries 86
Mean 0.01118
Std Dev 0.5297
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

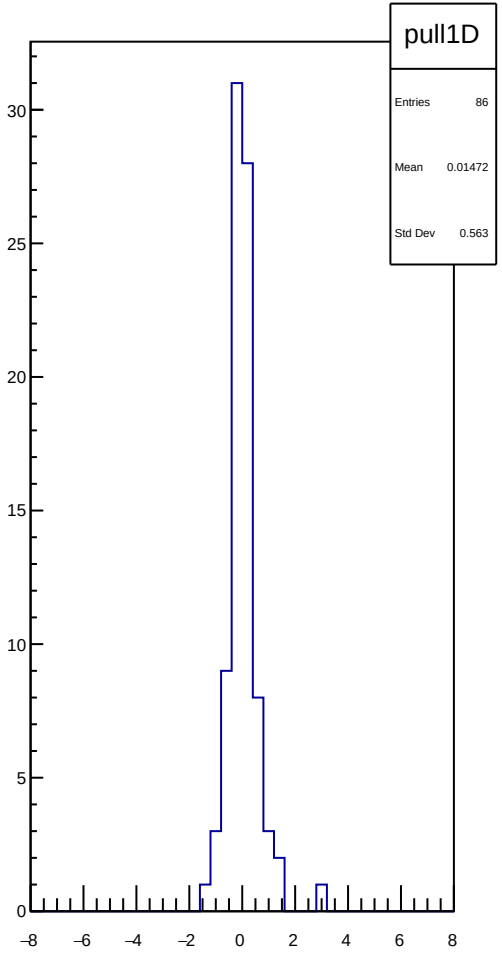

asym_bcm_an_us_rms vs run
χ² / ndf 7878 / 85
p0 168.7 ± 0.1308
280
260
240
220
200
180
160

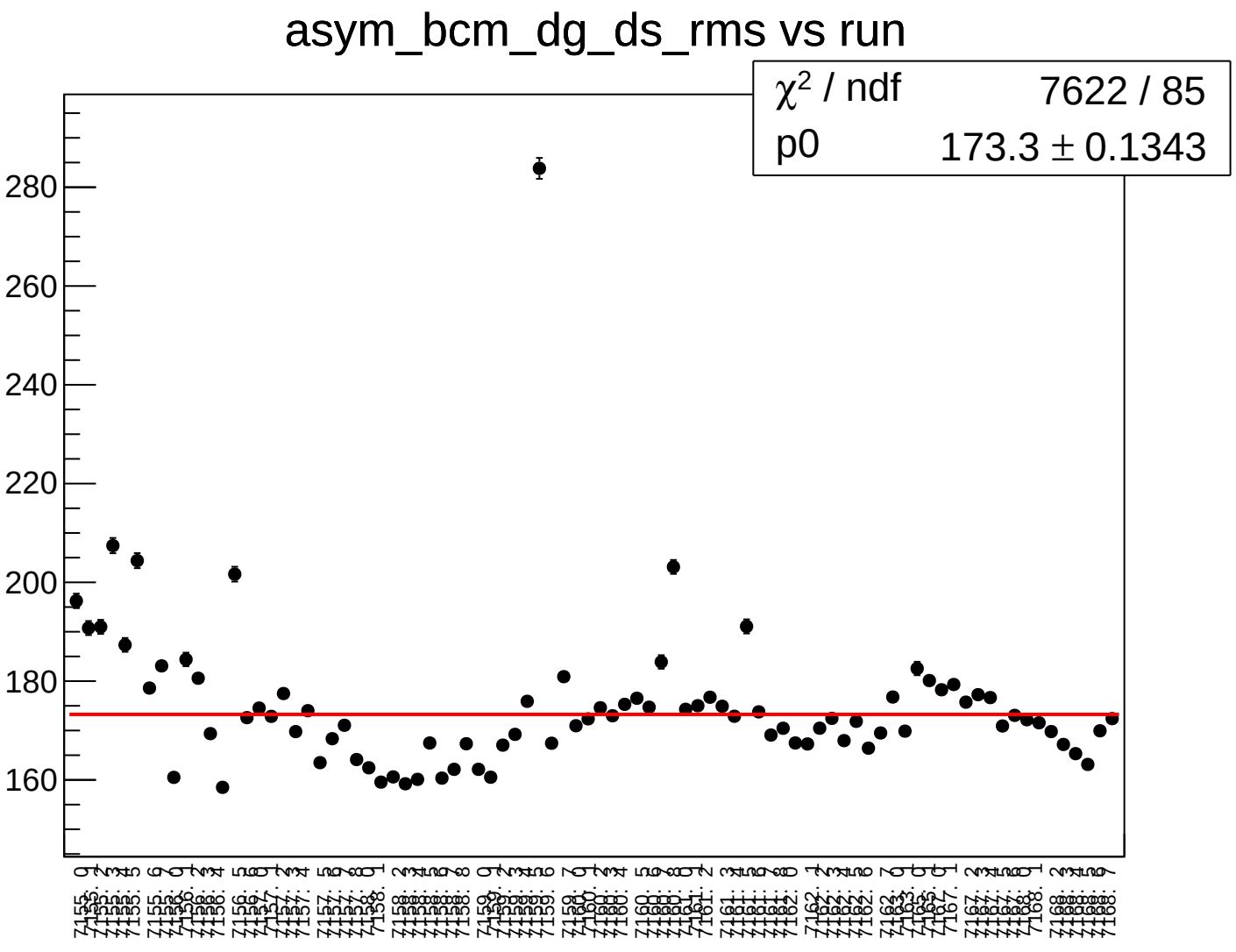

asym_bcm_dg_us_mean vs run
χ² / ndf 28.3 / 85
p0 −40.23 ± 193.2
pull
Entries 86
Mean 150.1
Std Dev 64.37

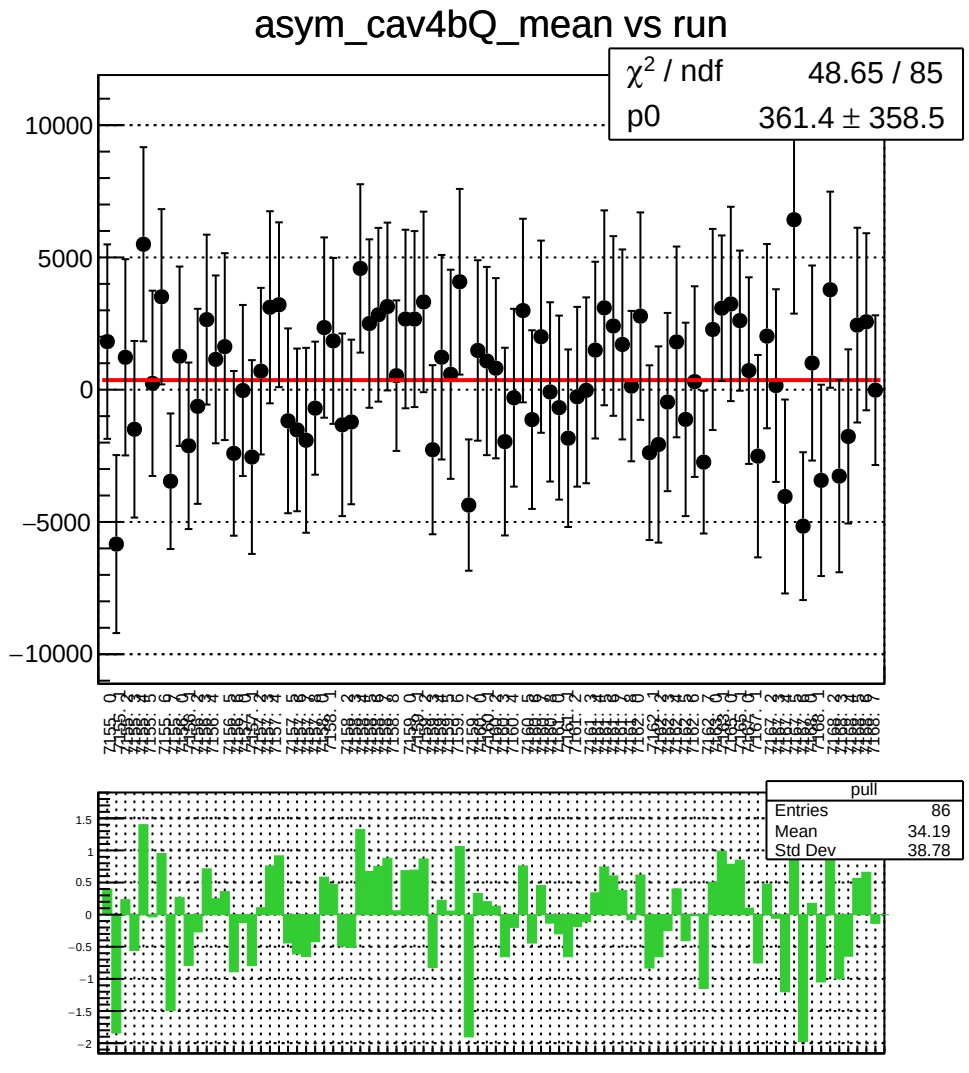

pull1D
Entries 86
Mean 0.01142
Std Dev 0.5735

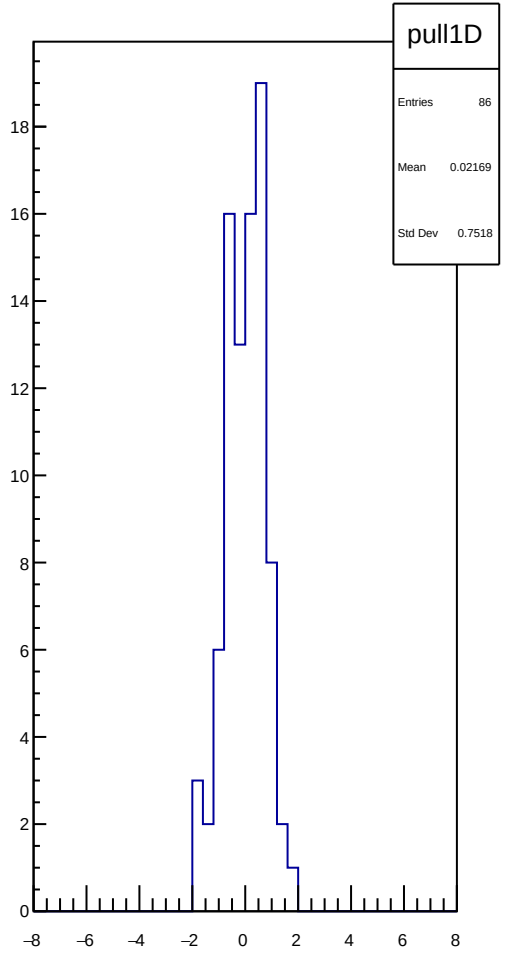

asym_bcm_dg_us_rms vs run
χ² / ndf 7197 / 85
p0 176.2 ± 0.1366
300
280
260
240
220
200
180
160

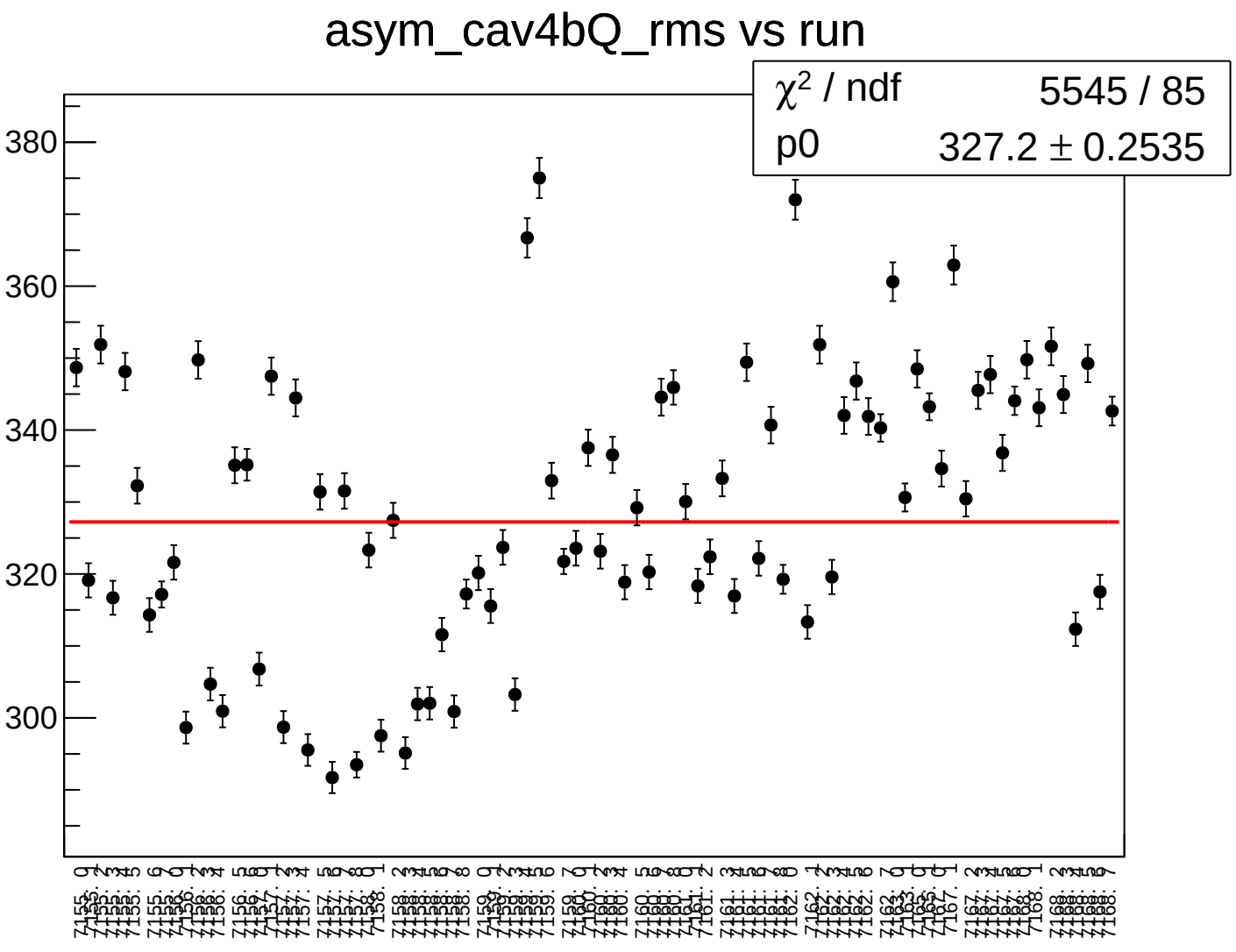

asym_bcm_dg_ds_mean vs run
χ² / ndf 27.28 / 85
p0 −70.75 ± 190
pull
Entries 86
Mean 133.6
Std Dev 71.58

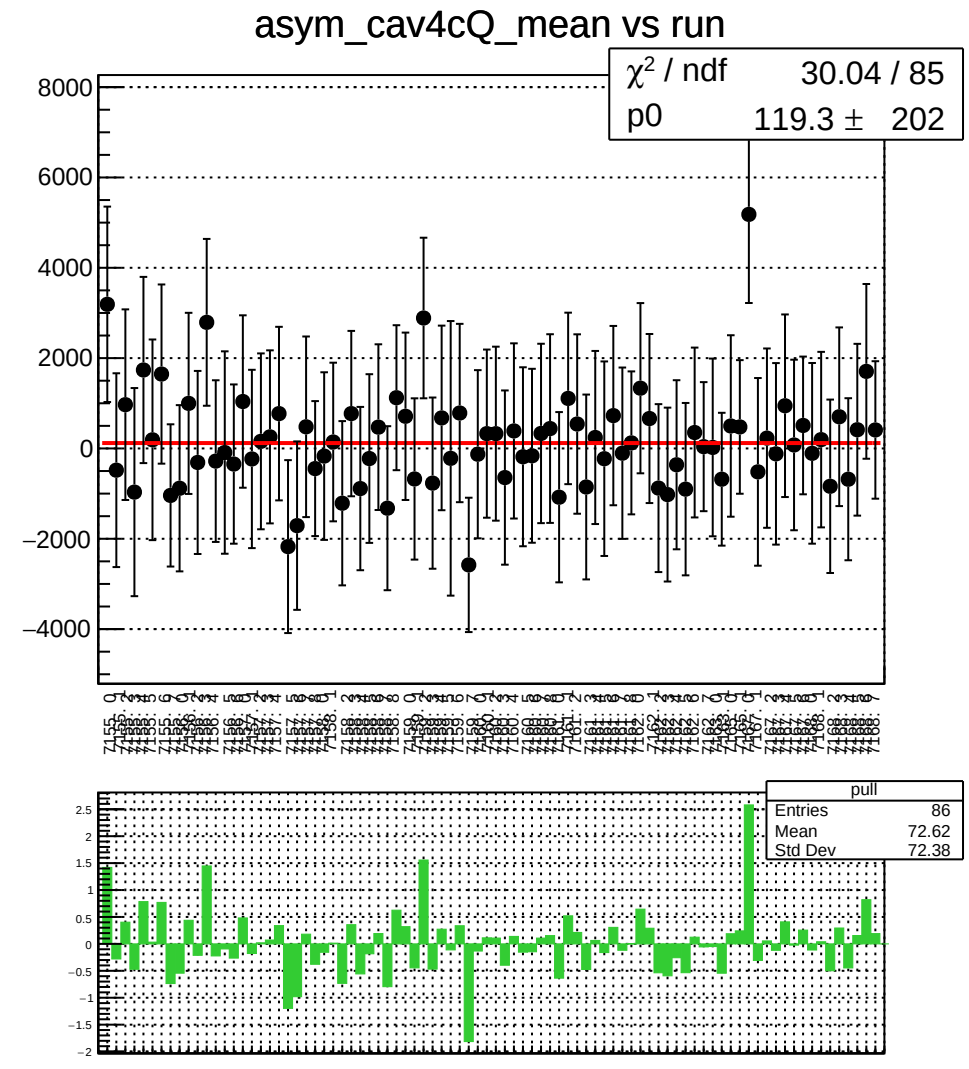

pull1D
Entries 86
Mean 0.01472
Std Dev 0.563

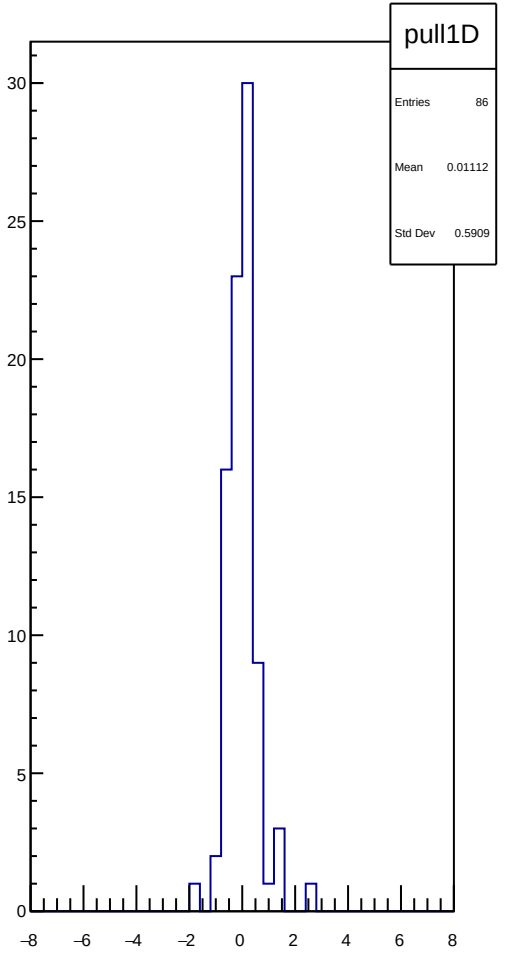

asym_bcm_dg_ds_rms vs run
χ² / ndf 7622 / 85
p0 173.3 ± 0.1343
280
260
240
220
200
180
160

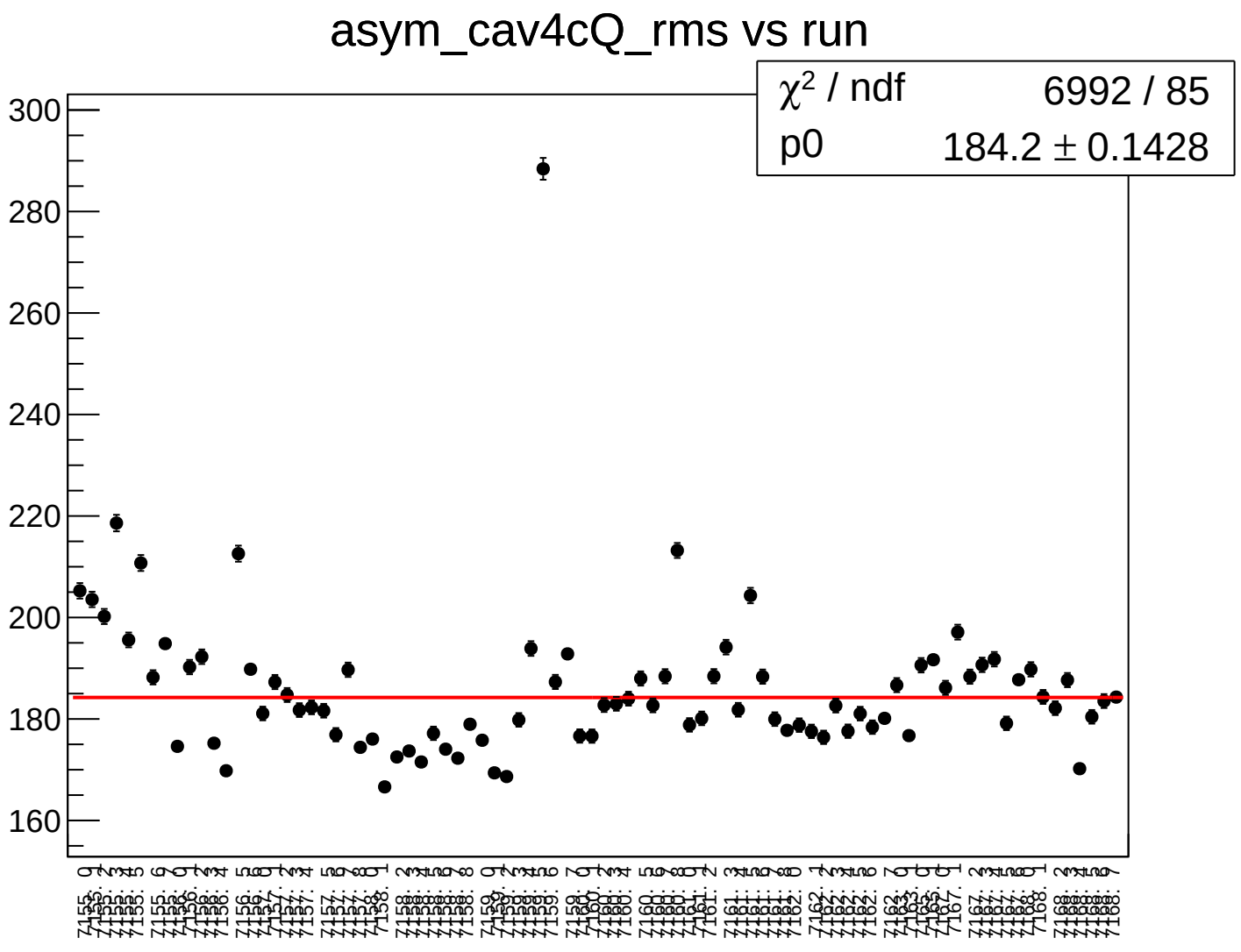

asym_cav4bQ_mean vs run
χ² / ndf 48.65 / 85
p0 361.4 ± 358.5
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 34.19
Std Dev 38.78
1.5
1
0.5
0
−0.5
−1
−1.5
−2

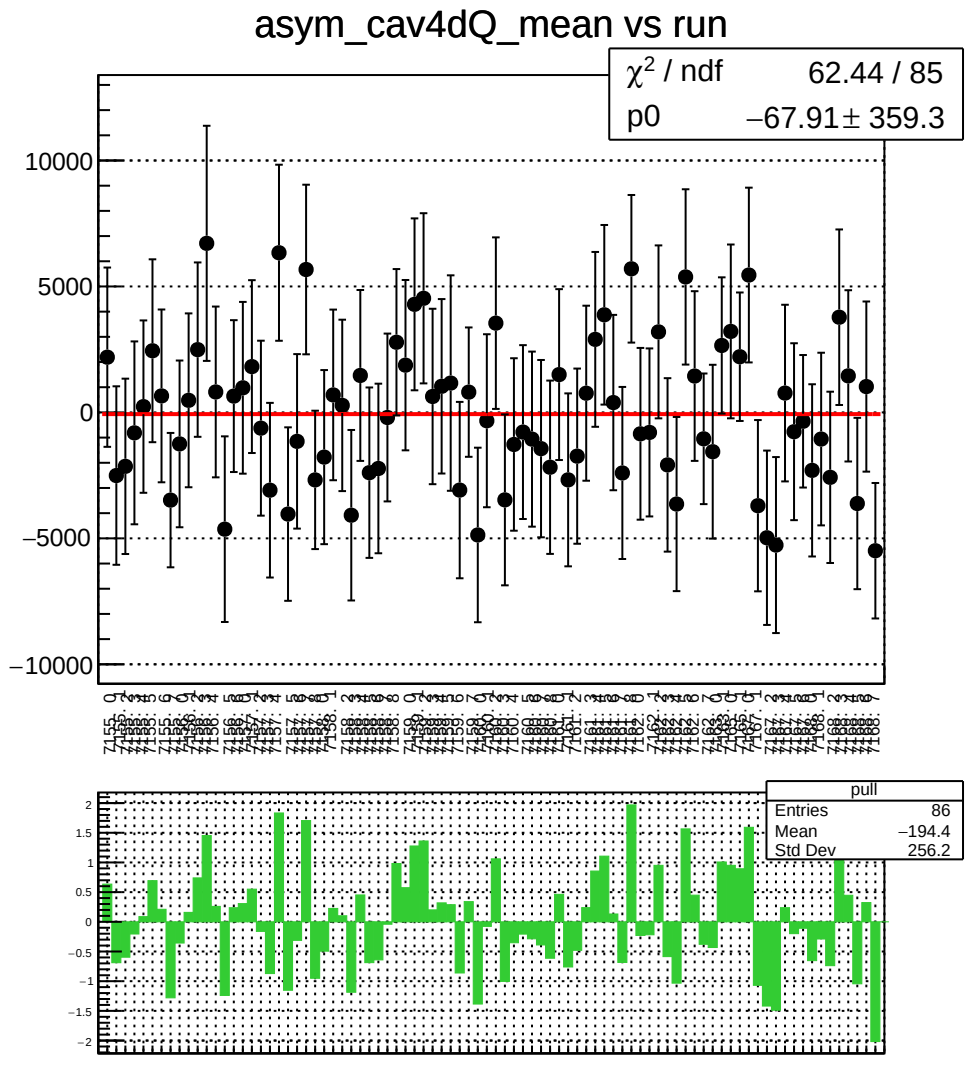

pull1D
Entries 86
Mean 0.02169
Std Dev 0.7518
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

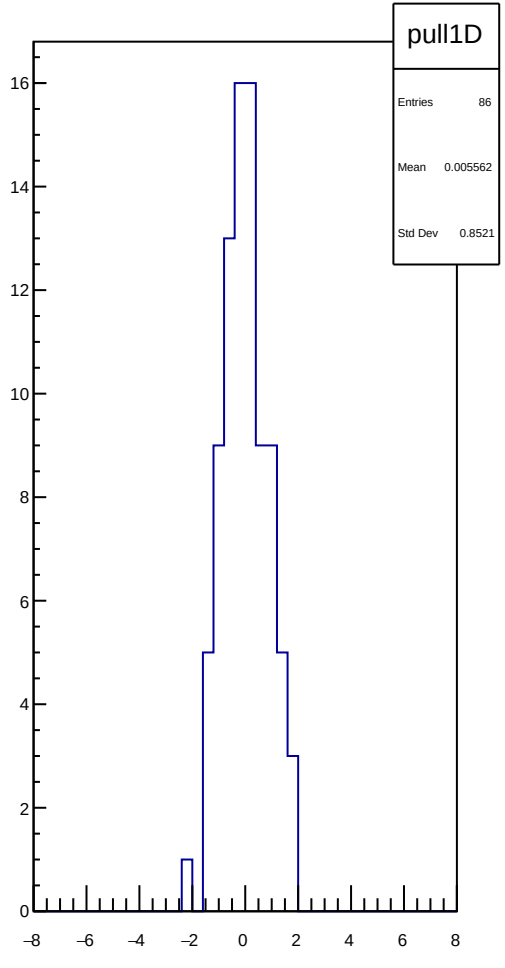

asym_cav4bQ_rms vs run
χ² / ndf 5545 / 85
p0 327.2 ± 0.2535
380
360
340
320
300

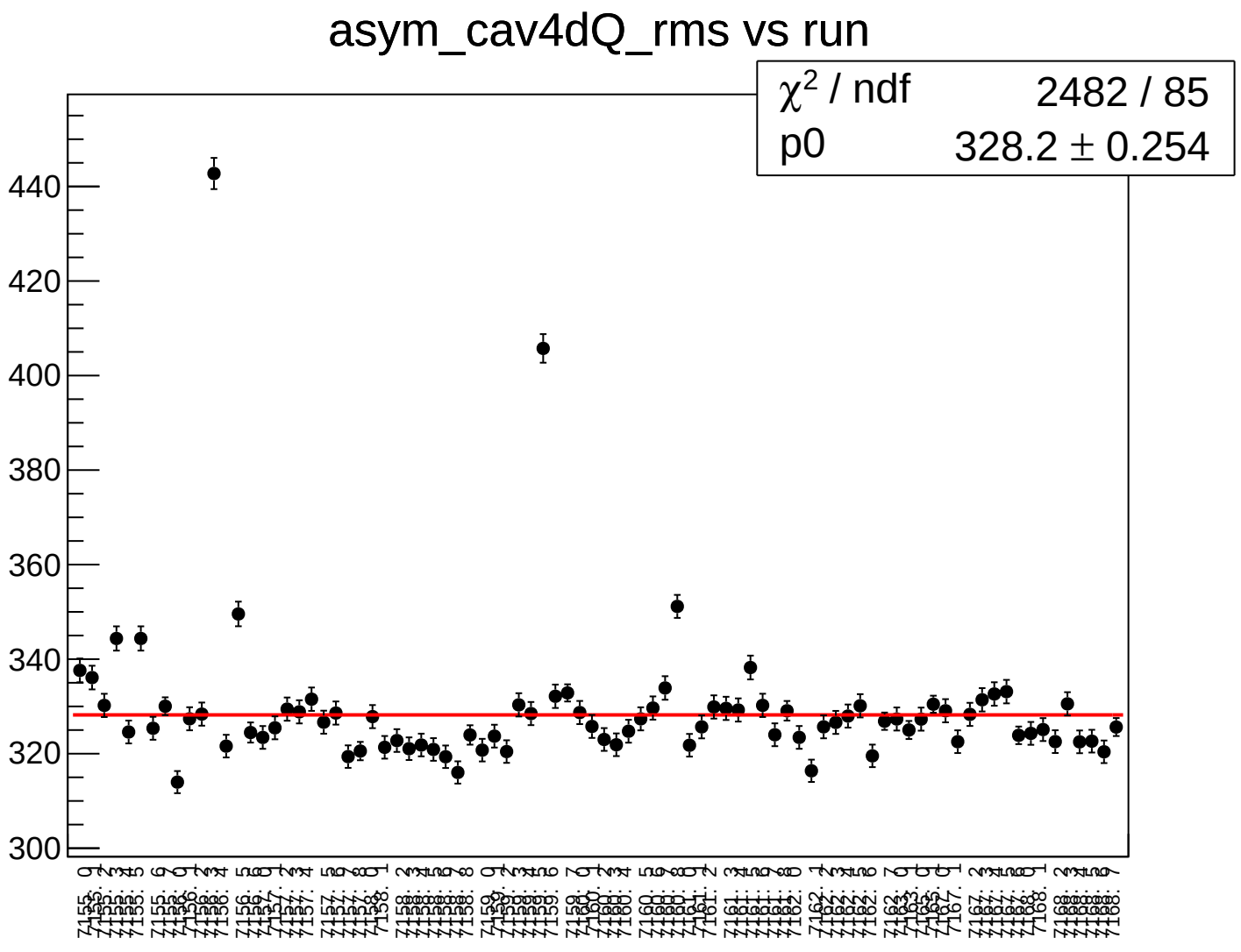

asym_cav4cQ_mean vs run
χ² / ndf 30.04 / 85
p0 119.3 ± 202
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 86
Mean 72.62
Std Dev 72.38
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

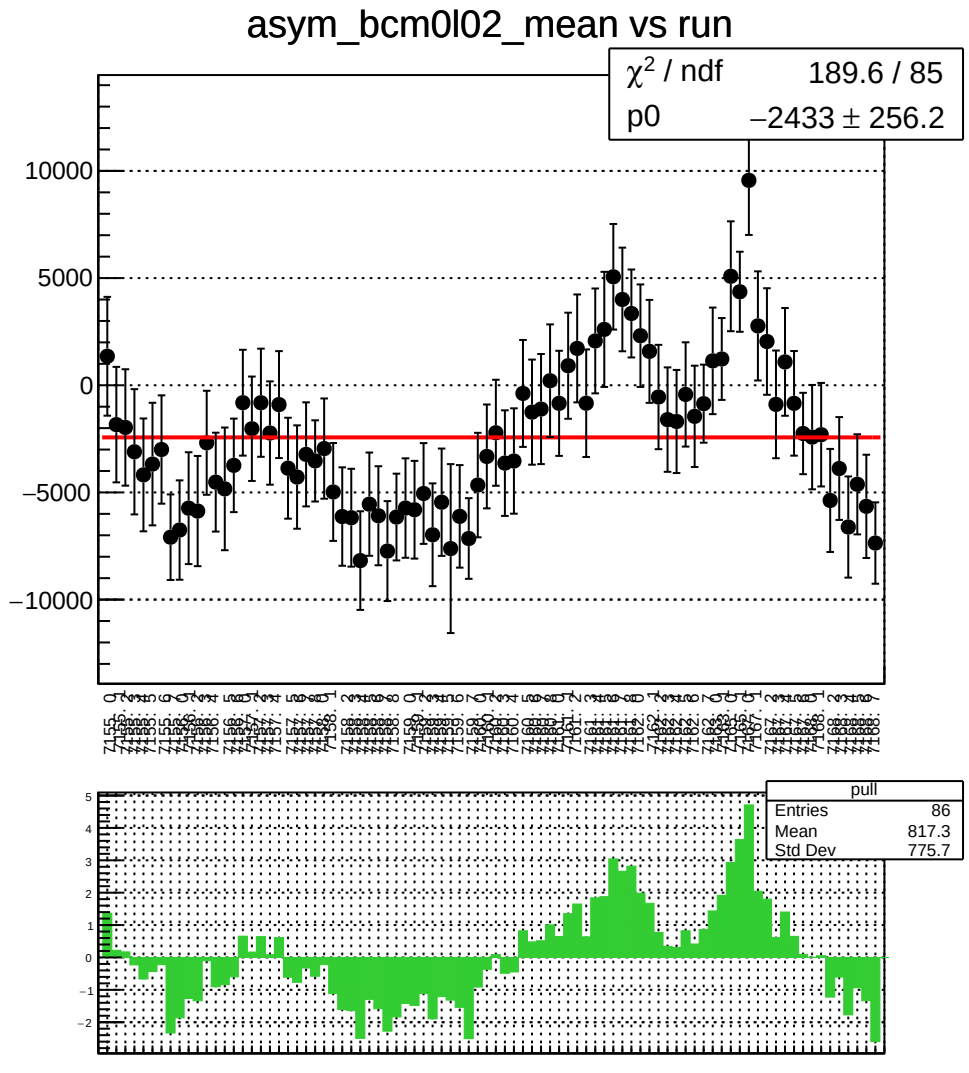

pull1D
Entries 86
Mean 0.01112
Std Dev 0.5909
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

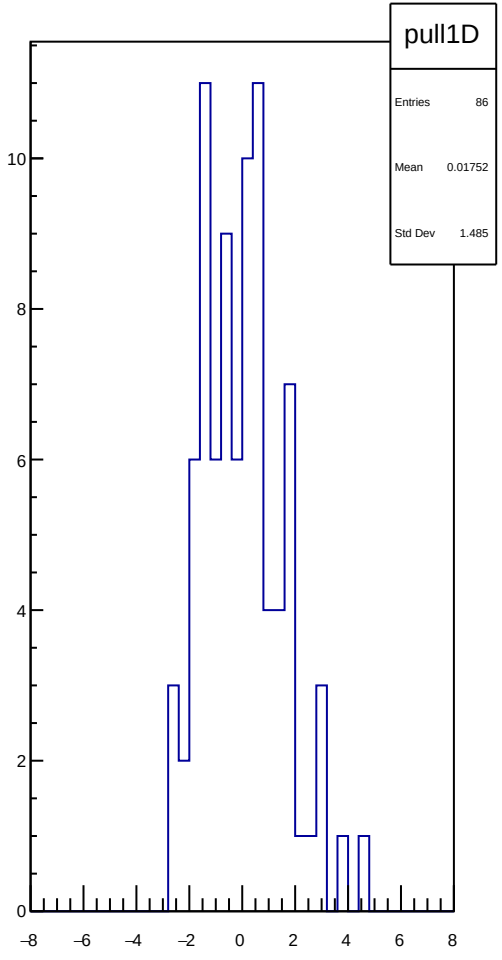

asym_cav4cQ_rms vs run
χ² / ndf 6992 / 85
p0 184.2 ± 0.1428
300
280
260
240
220
200
180
160

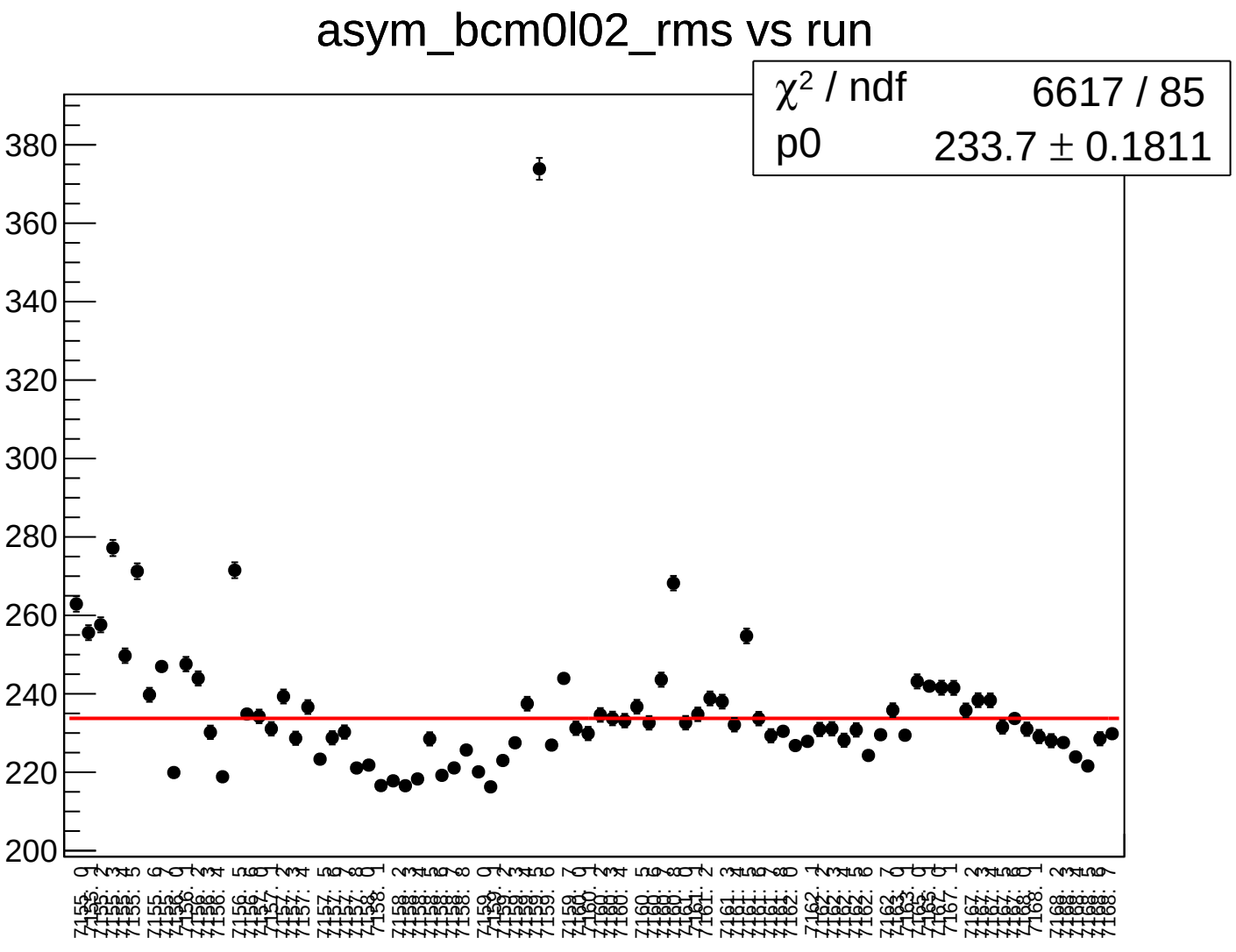

asym_cav4dQ_mean vs run
χ² / ndf 62.44 / 85
p0 −67.91 ± 359.3
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −194.4
Std Dev 256.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

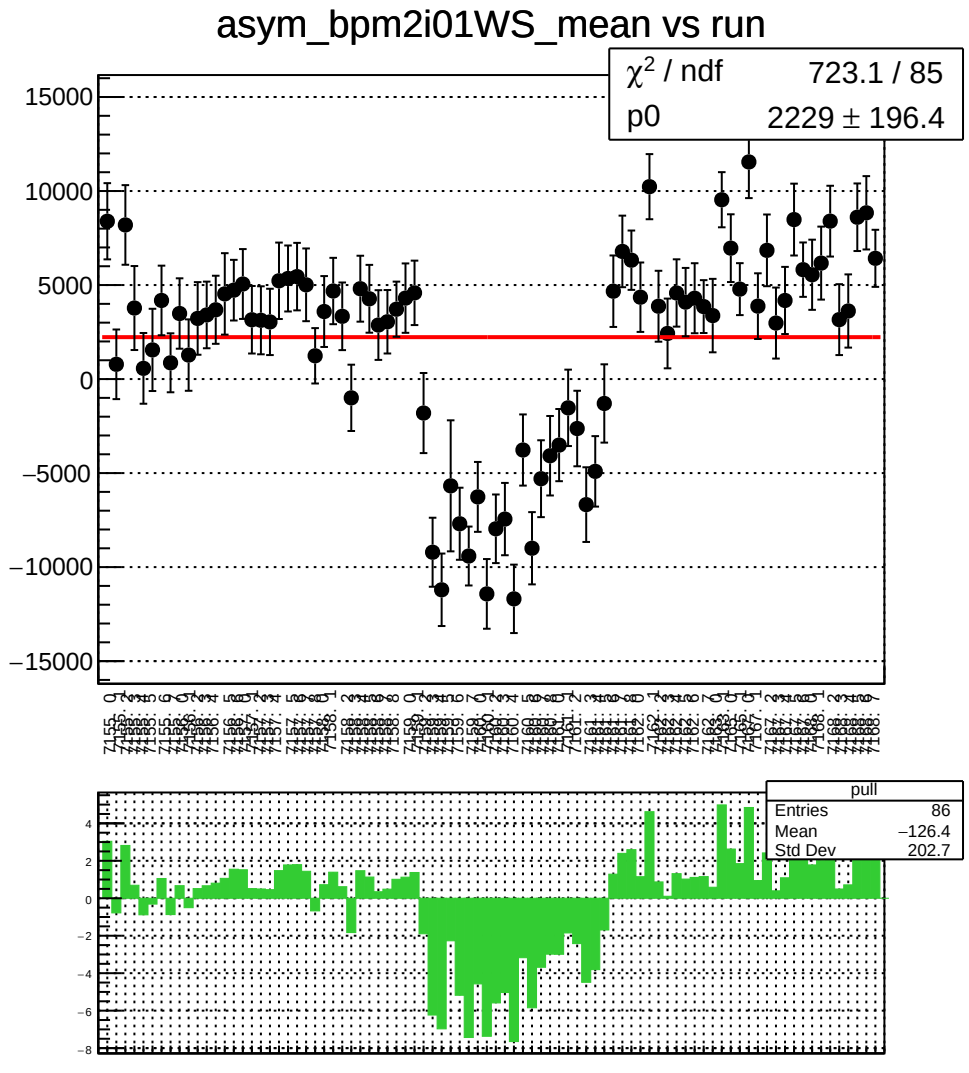

pull1D
Entries 86
Mean 0.005562
Std Dev 0.8521
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

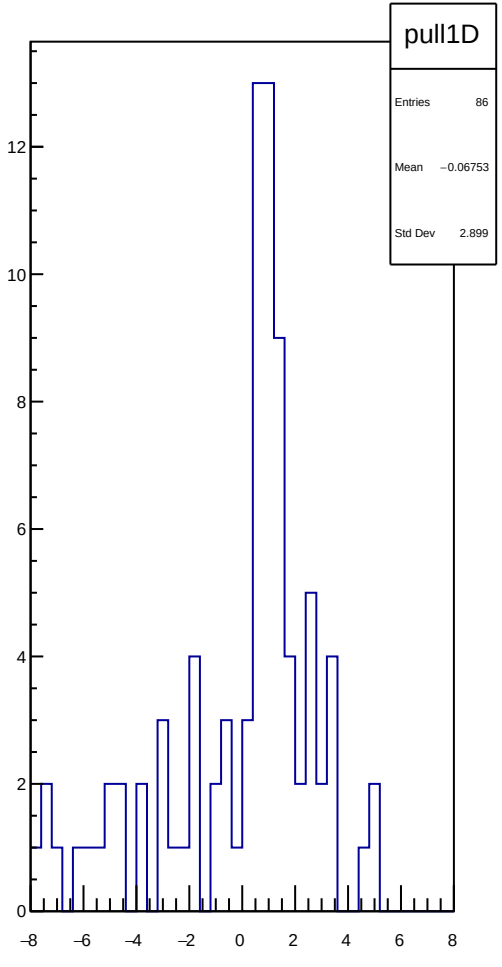

asym_cav4dQ_rms vs run
χ^2 / ndf 2482 / 85
p0 328.2 ± 0.254
440
420
400
380
360
340
320
300

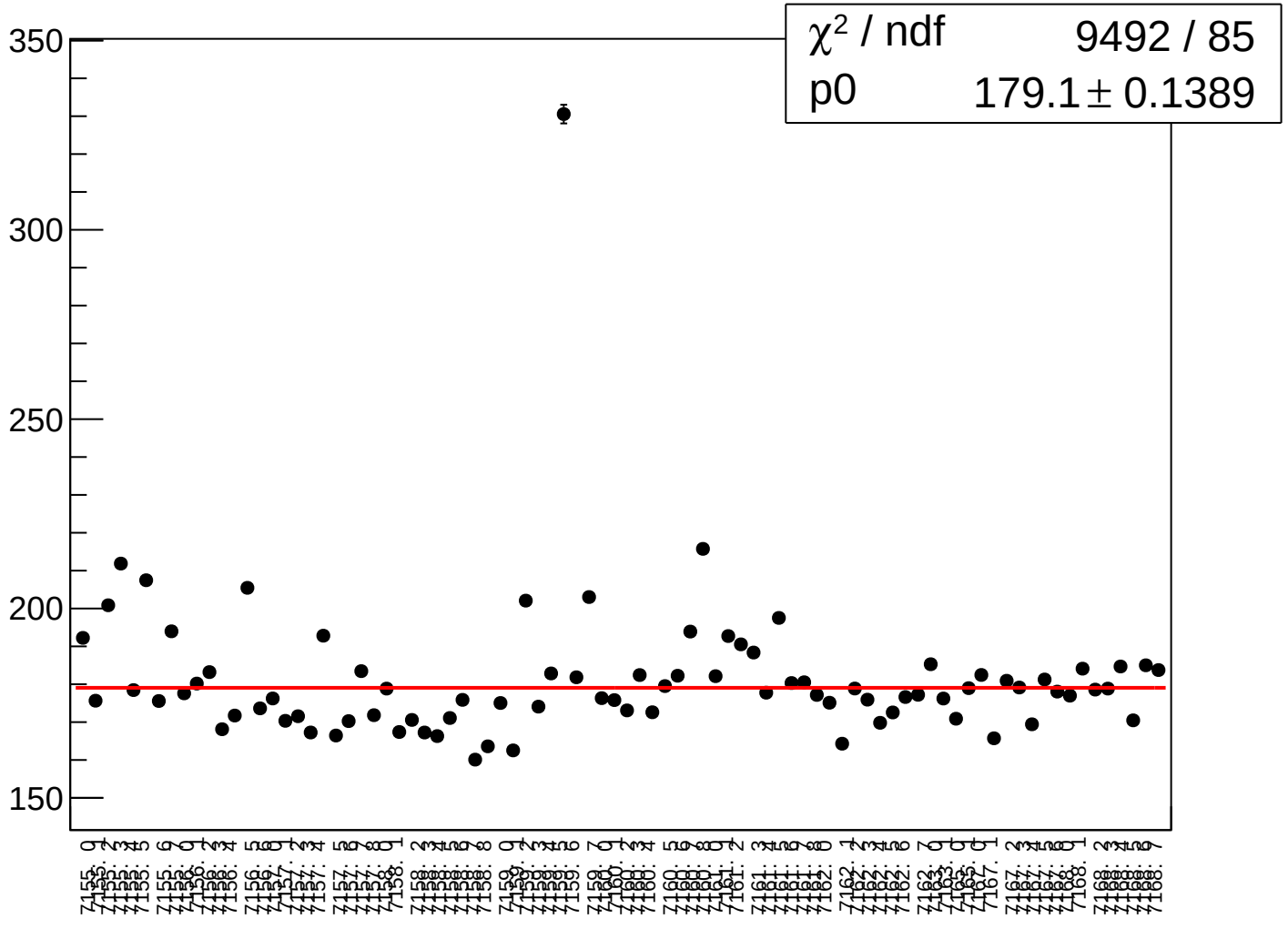

asym_bcm0l02_mean vs run
χ^2 / ndf 189.6 / 85
p0 −2433 ± 256.2
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 817.3
Std Dev 775.7
5
4
3
2
1
0
−1
−2

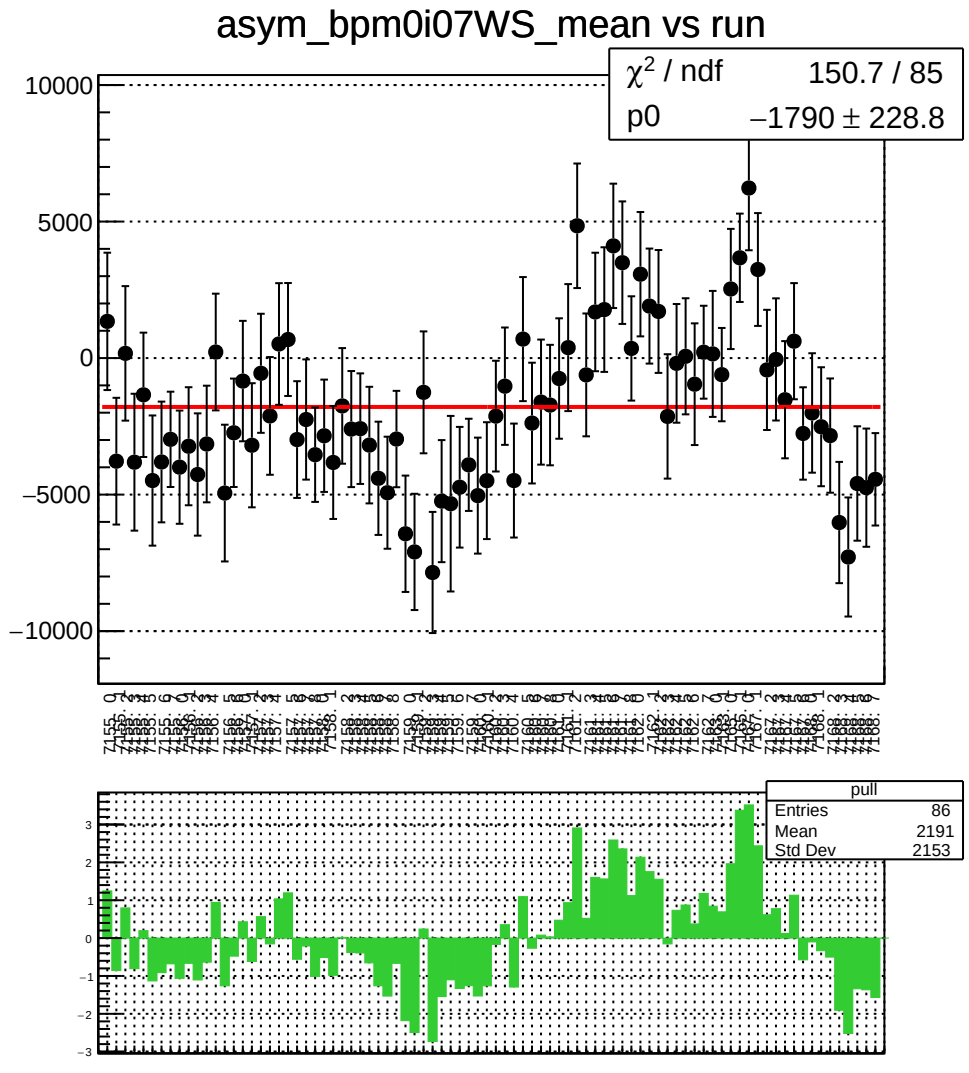

pull1D
Entries 86
Mean 0.01752
Std Dev 1.485
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

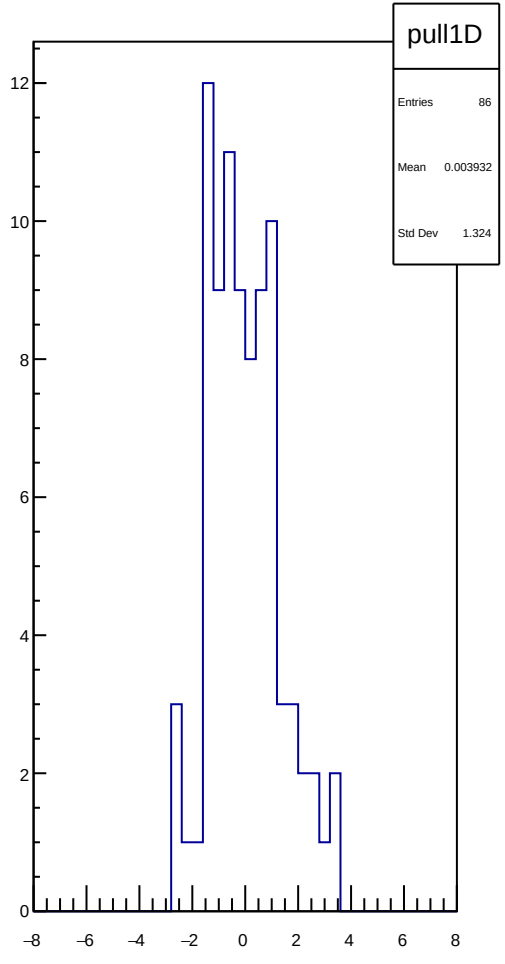

asym_bcm0l02_rms vs run
χ² / ndf 6617 / 85
p0 233.7 ± 0.1811
380
360
340
320
300
280
260
240
220
200

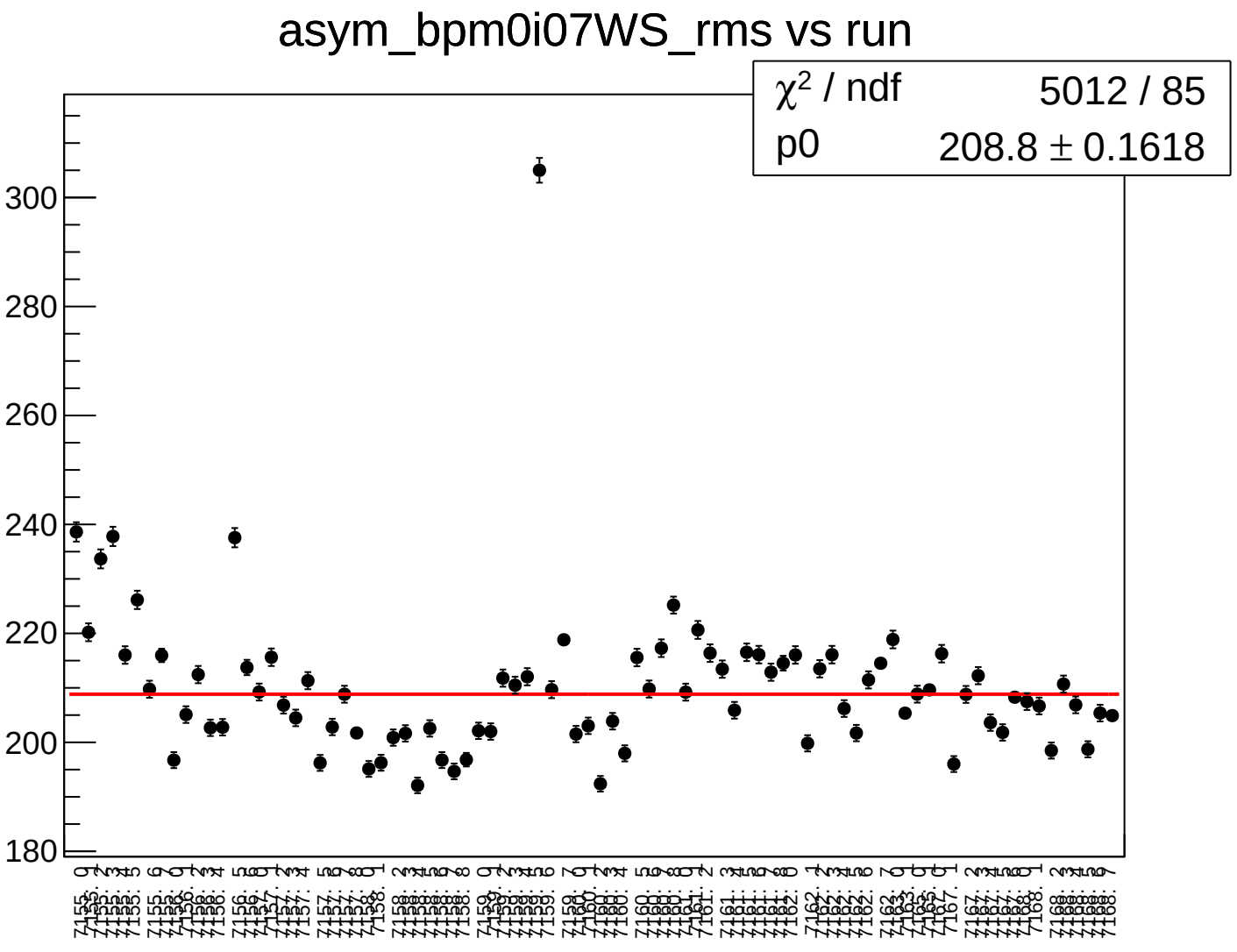

asym_bpm2i01WS_mean vs run
χ² / ndf 723.1 / 85
p0 2229 ± 196.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −126.4
Std Dev 202.7
4
2
0
−2
−4
−6
−8

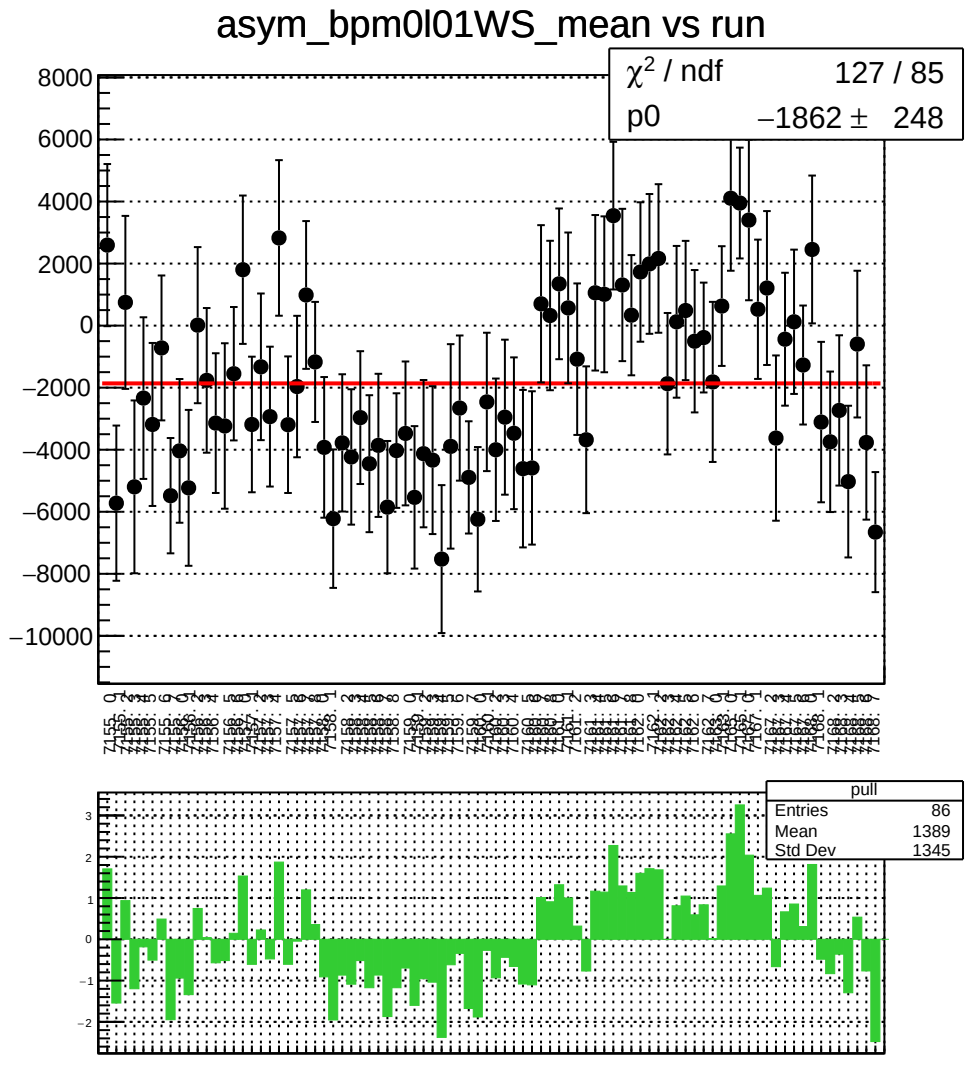

pull1D
Entries 86
Mean −0.06753
Std Dev 2.899
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

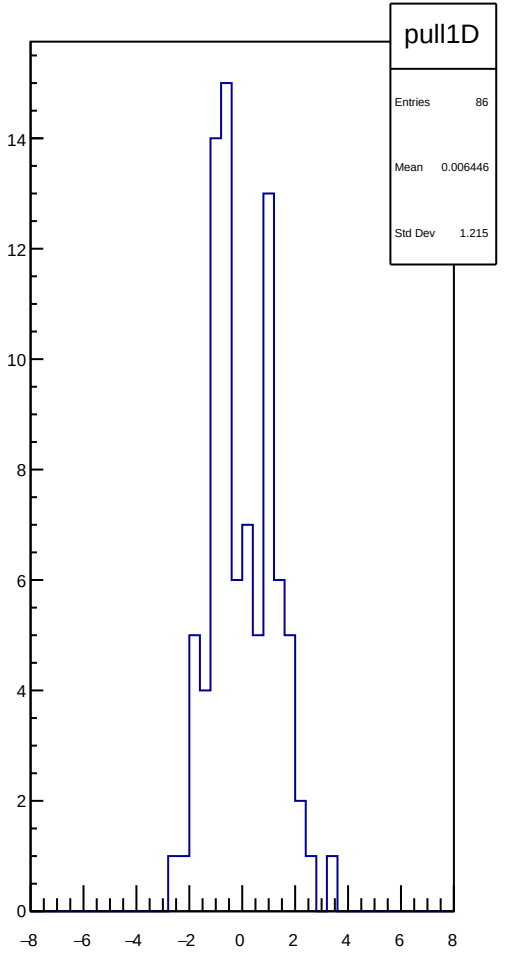

asym_bpm2i01WS_rms vs run
χ² / ndf 9492 / 85
p0 179.1 ± 0.1389
350
300
250
200
150

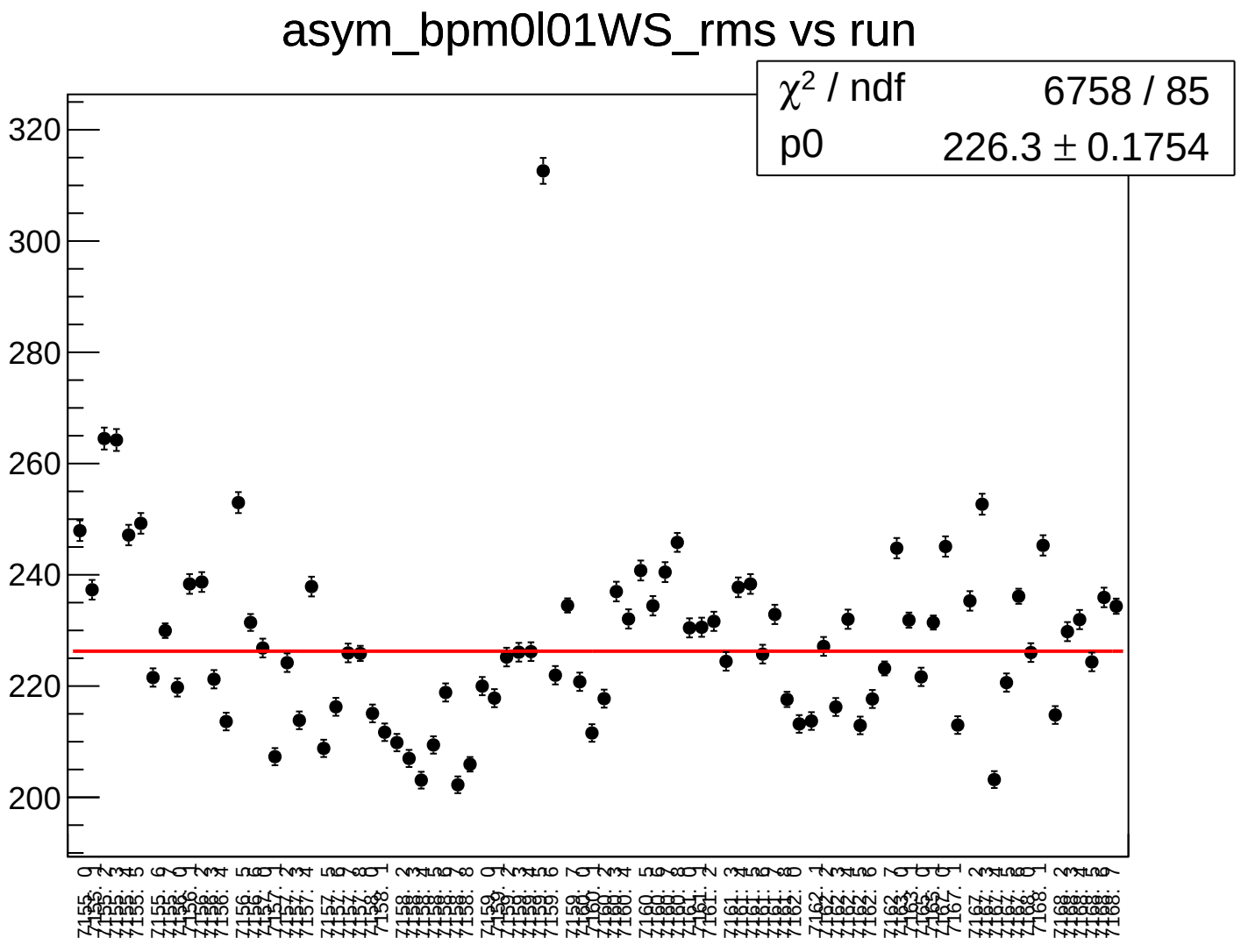

asym_bpm0i07WS_mean vs run
χ² / ndf 150.7 / 85
p0 −1790 ± 228.8
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 2191
Std Dev 2153
3
2
1
0
−1
−2
−3

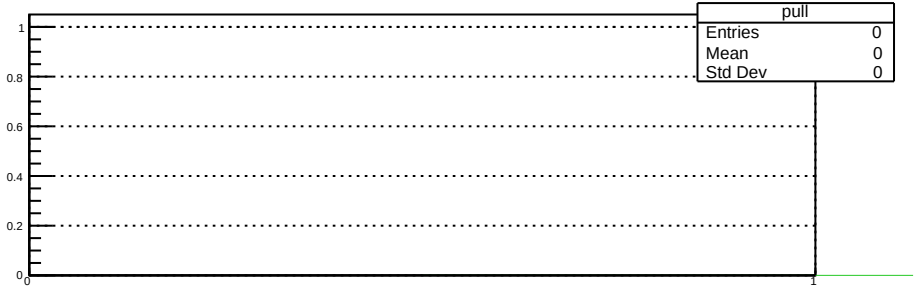

pull1D
Entries 86
Mean 0.003932
Std Dev 1.324
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

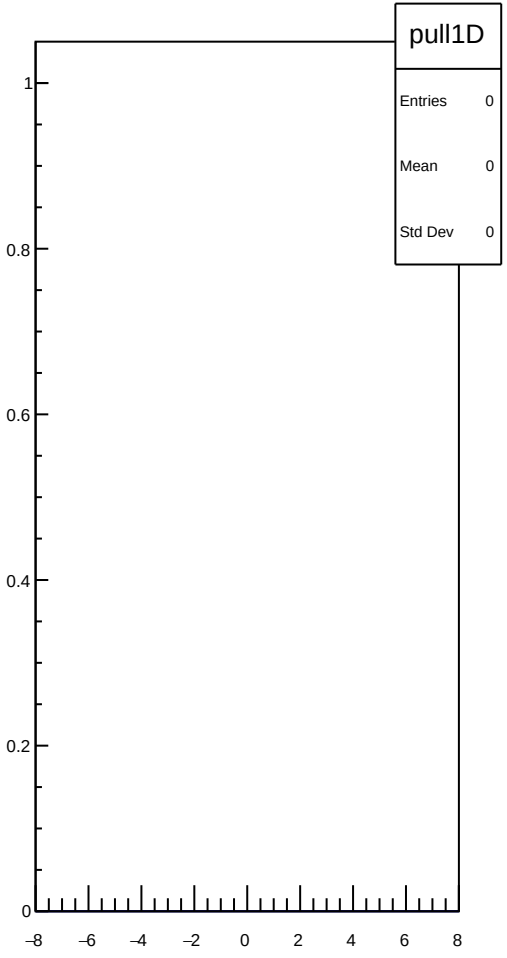

asym_bpm0i07WS_rms vs run
χ² / ndf 5012 / 85
p0 208.8 ± 0.1618
300
280
260
240
220
200
180

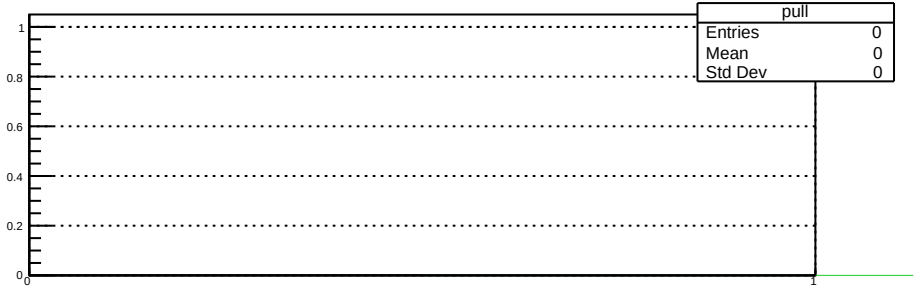

asym_bpm0l01WS_mean vs run
χ² / ndf 127 / 85
p0 −1862 ± 248
pull
Entries 86
Mean 1389
Std Dev 1345

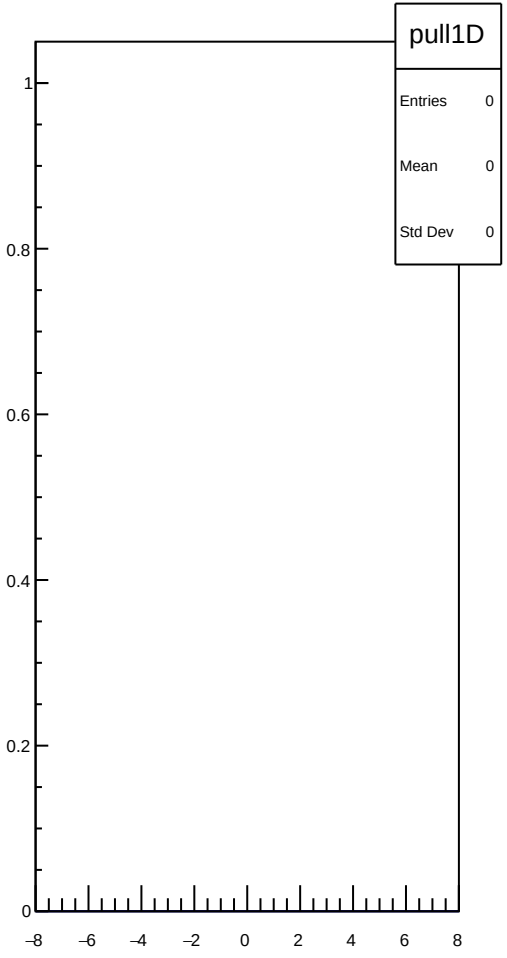

pull1D
Entries 86
Mean 0.006446
Std Dev 1.215

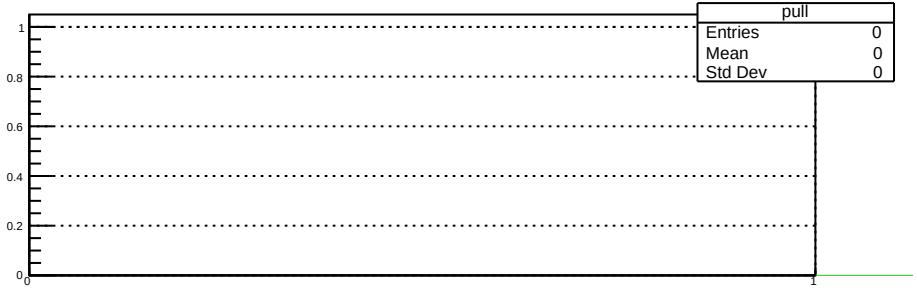

asym_bpm0l01WS_rms vs run
χ² / ndf 6758 / 85
p0 226.3 ± 0.1754
320
300
280
260
240
220
200

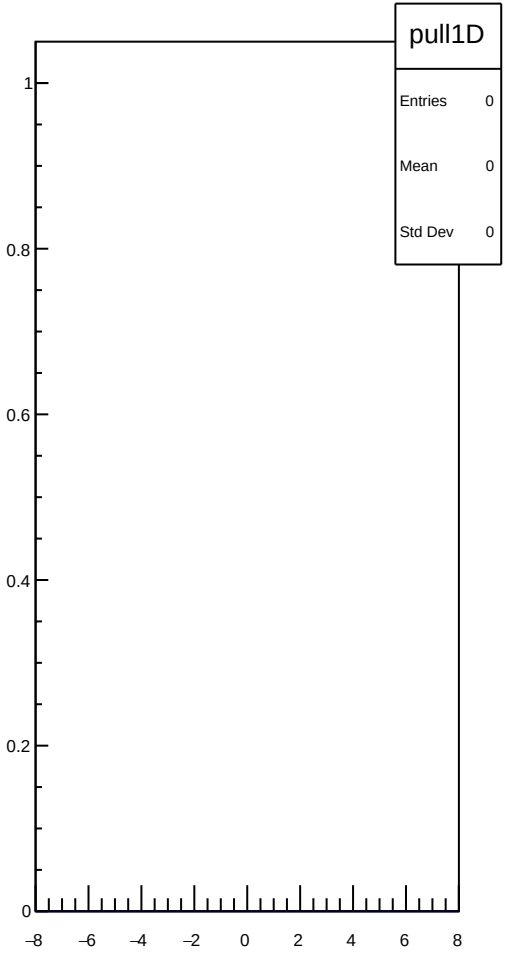

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

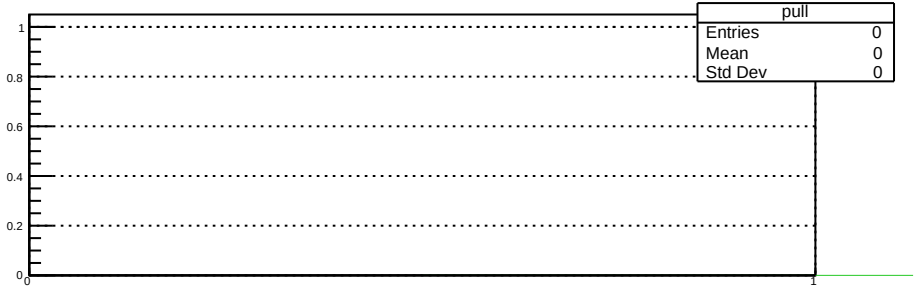

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

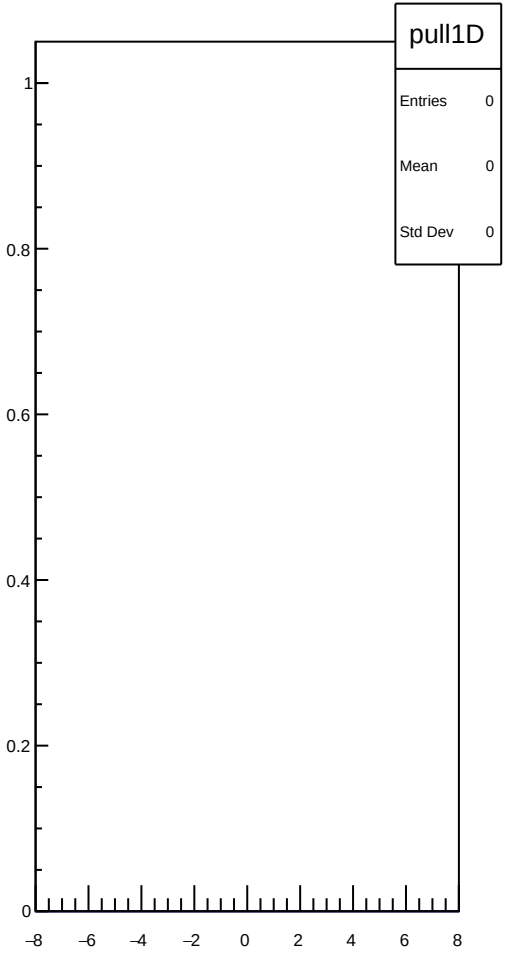

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

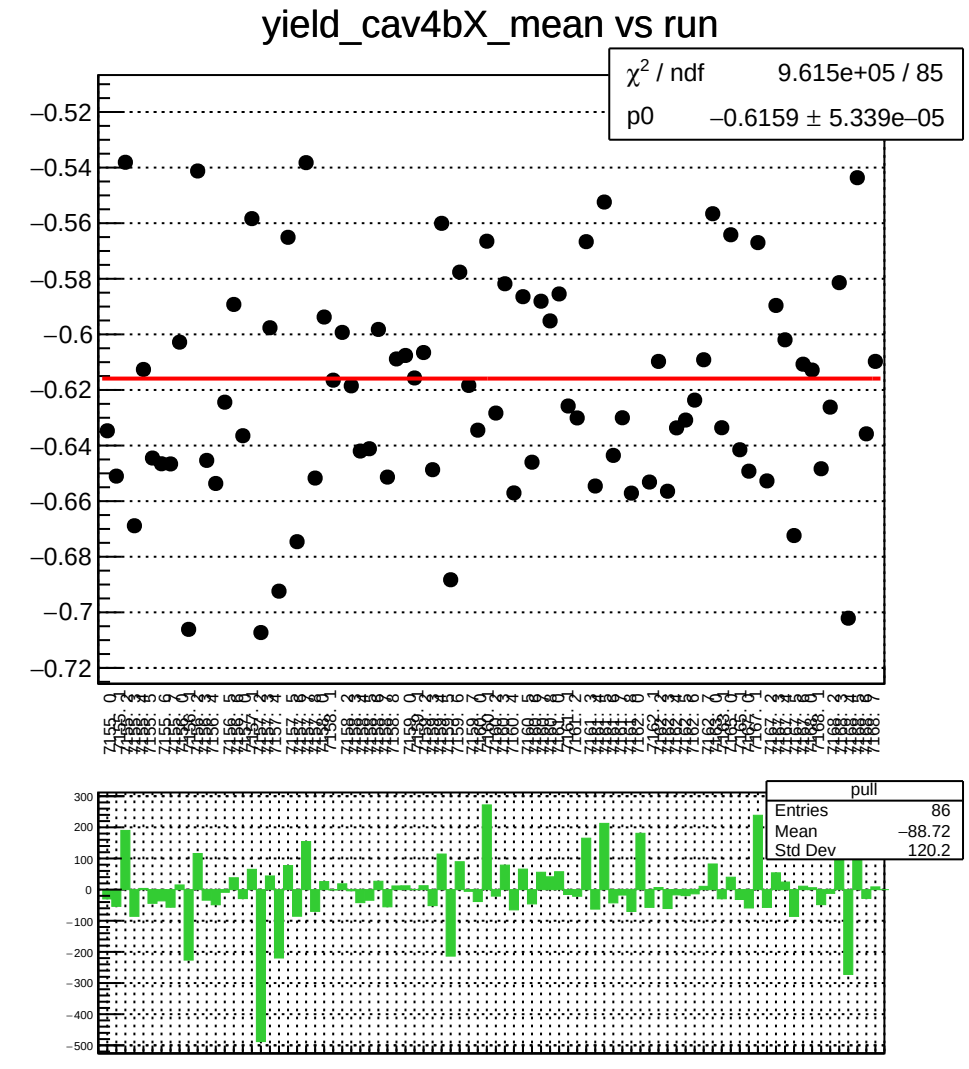

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

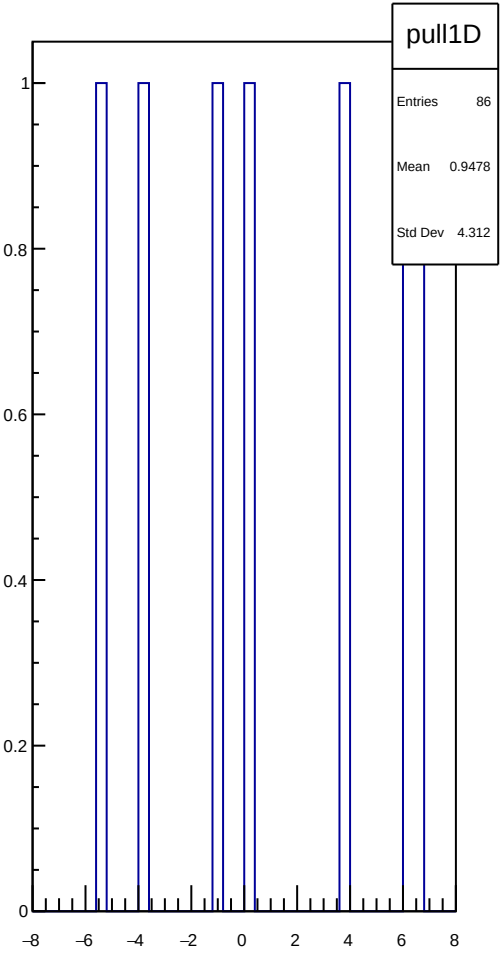

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

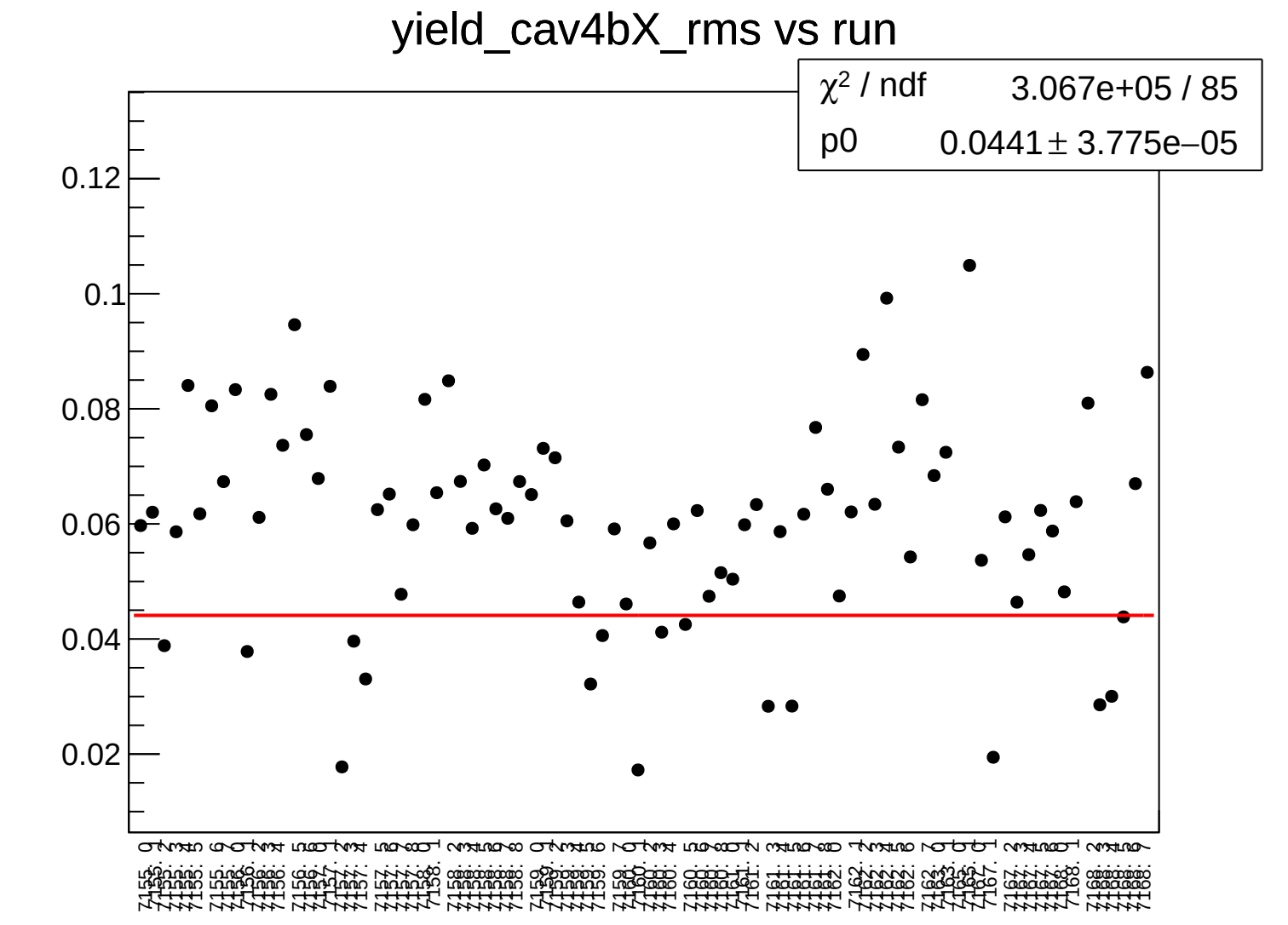

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

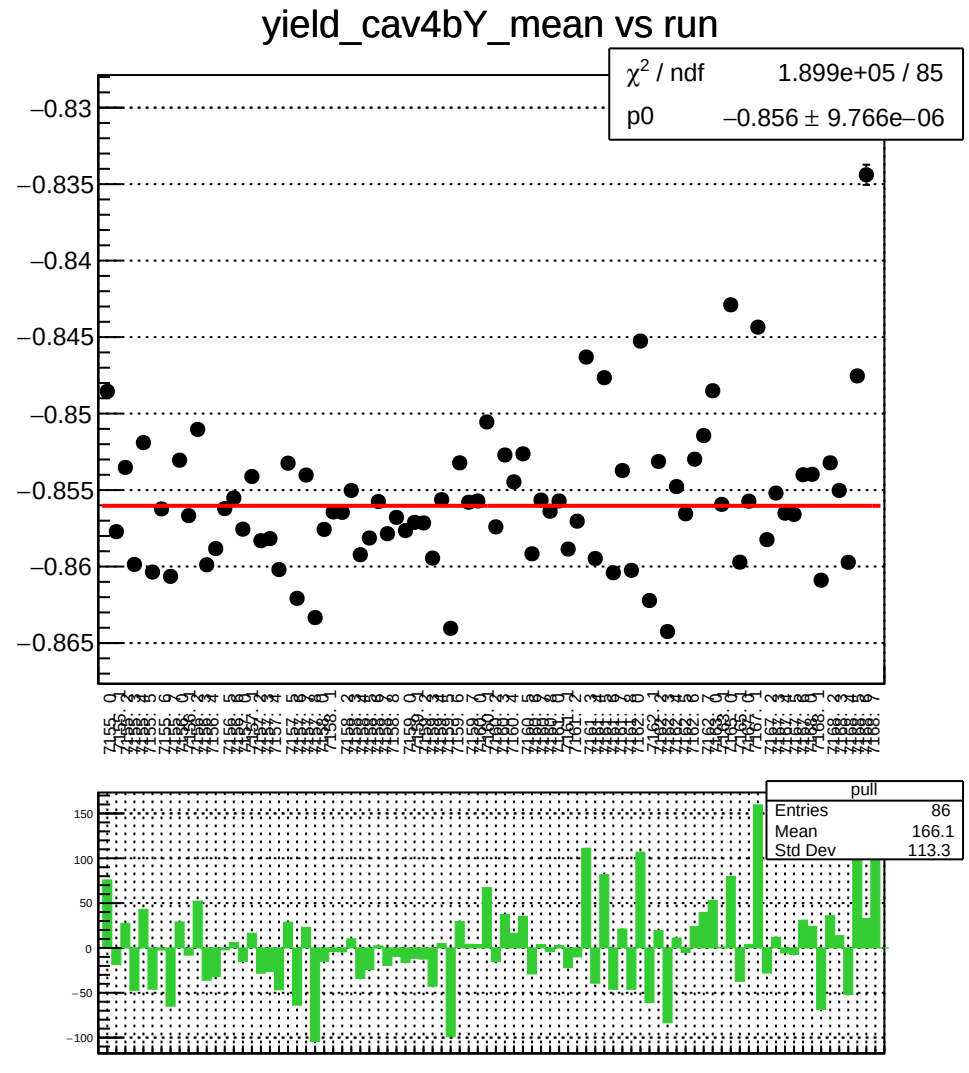

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

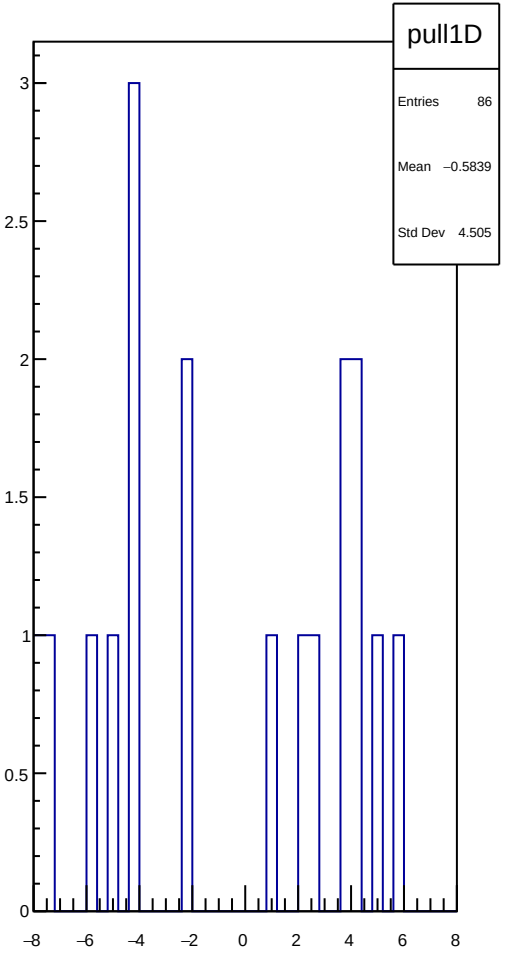

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

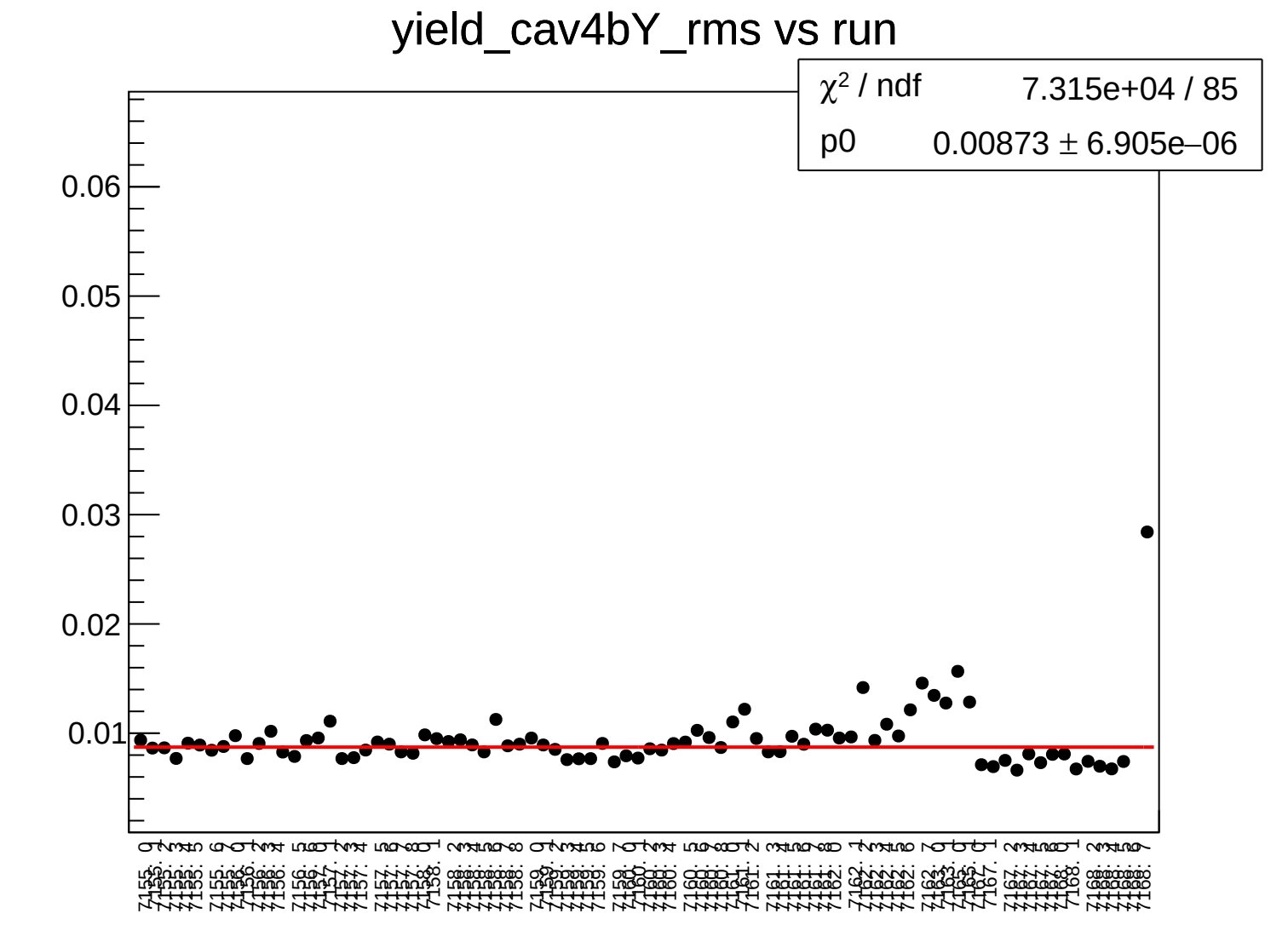

yield_cav4bX_mean vs run
χ² / ndf 9.615e+05 / 85
p0 −0.6159 ± 5.339e−05
−0.52
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
pull
Entries 86
Mean −88.72
Std Dev 120.2
300
200
100
0
−100
−200
−300
−400
−500

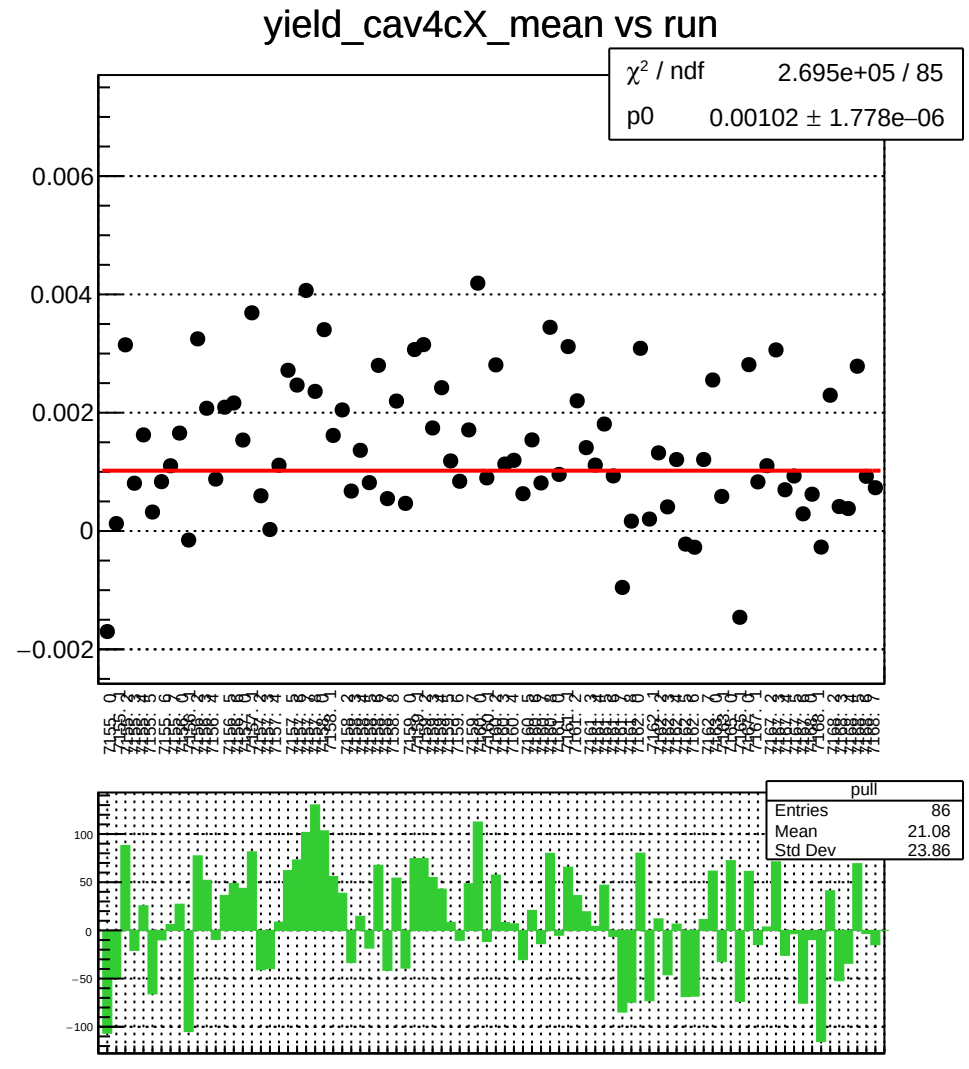

pull1D
Entries 86
Mean 0.9478
Std Dev 4.312
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

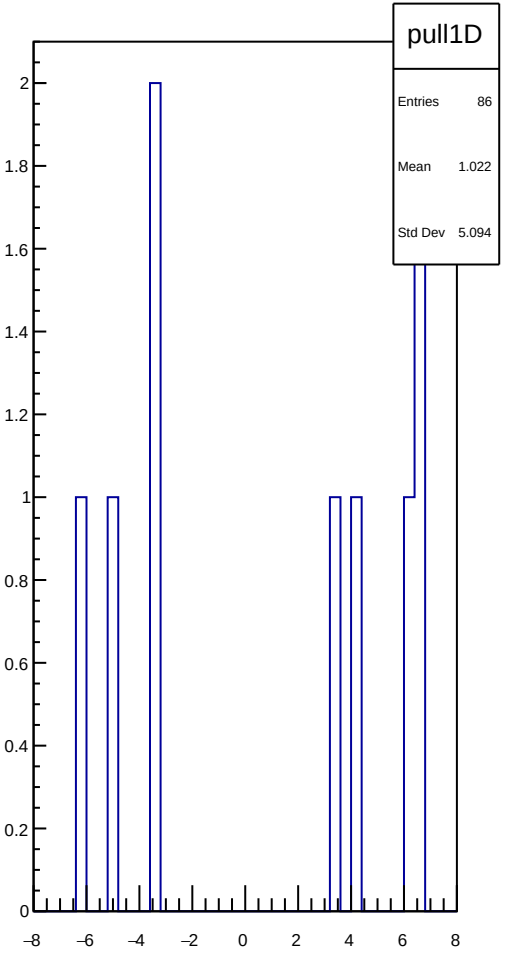

yield_cav4bX_rms vs run
χ² / ndf 3.067e+05 / 85
p0 0.0441 ± 3.775e−05
0.12
0.1
0.08
0.06
0.04
0.02

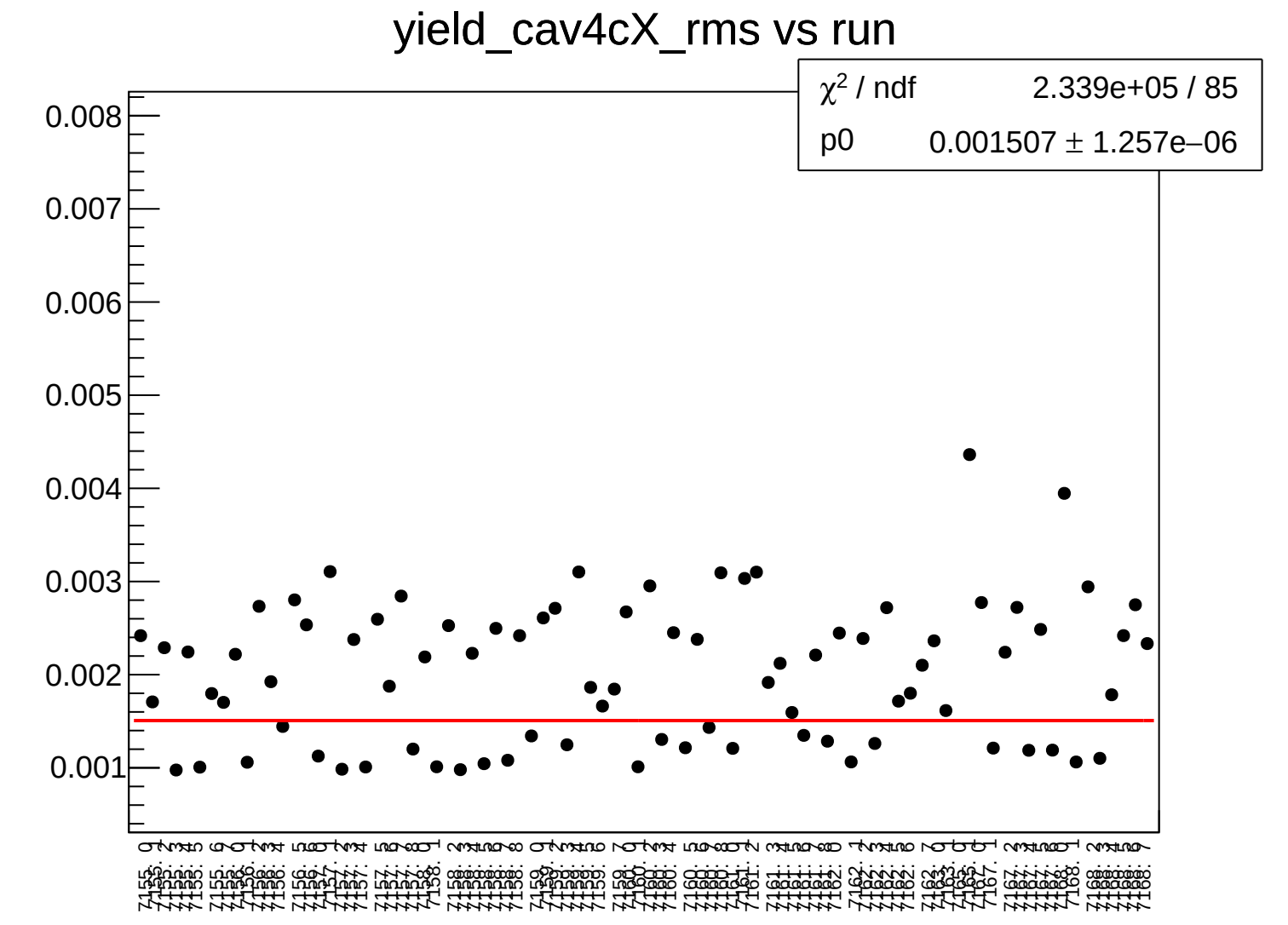

yield_cav4bY_mean vs run
χ² / ndf 1.899e+05 / 85
p0 −0.856 ± 9.766e−06
−0.83
−0.835
−0.84
−0.845
−0.85
−0.855
−0.86
−0.865
pull
Entries 86
Mean 166.1
Std Dev 113.3
150
100
50
0
−50
−100

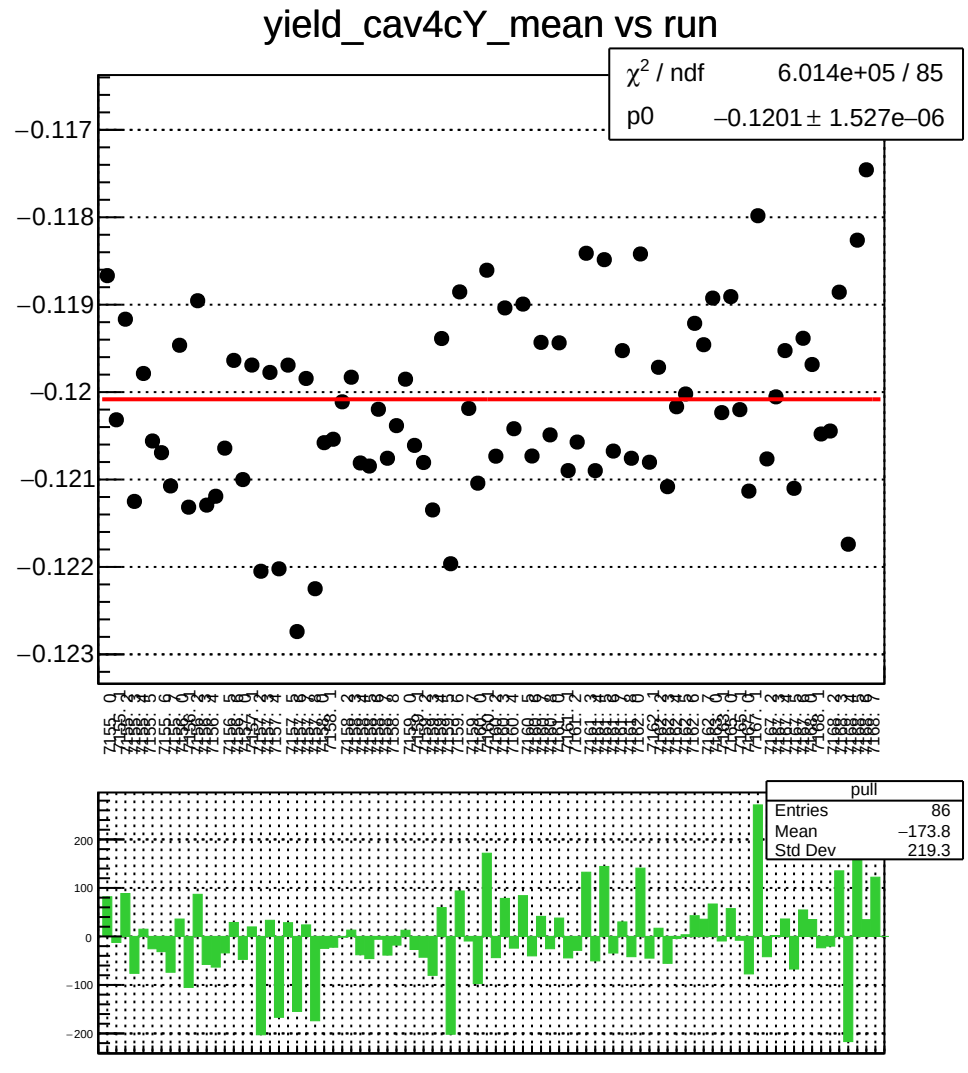

pull1D
Entries 86
Mean −0.5839
Std Dev 4.505
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

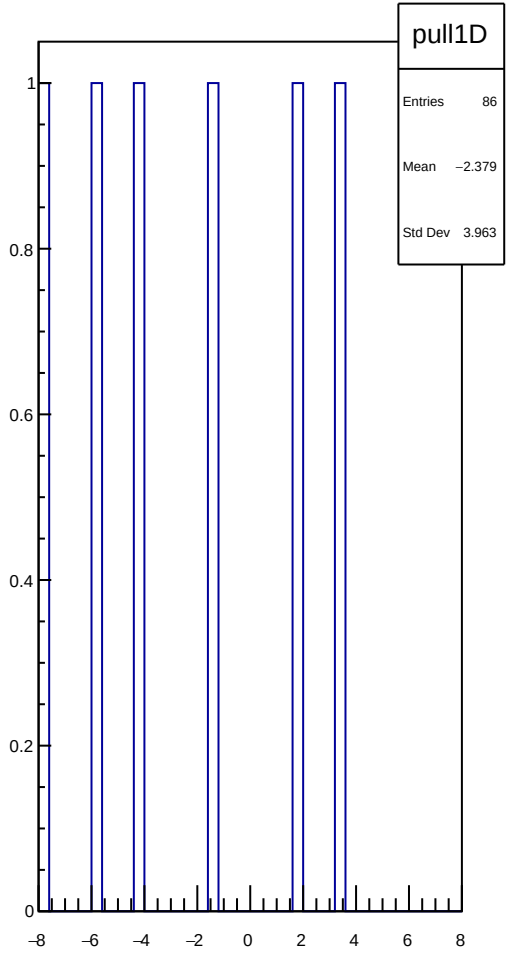

yield_cav4bY_rms vs run
χ² / ndf 7.315e+04 / 85
p0 0.00873 ± 6.905e–06
0.06
0.05
0.04
0.03
0.02
0.01

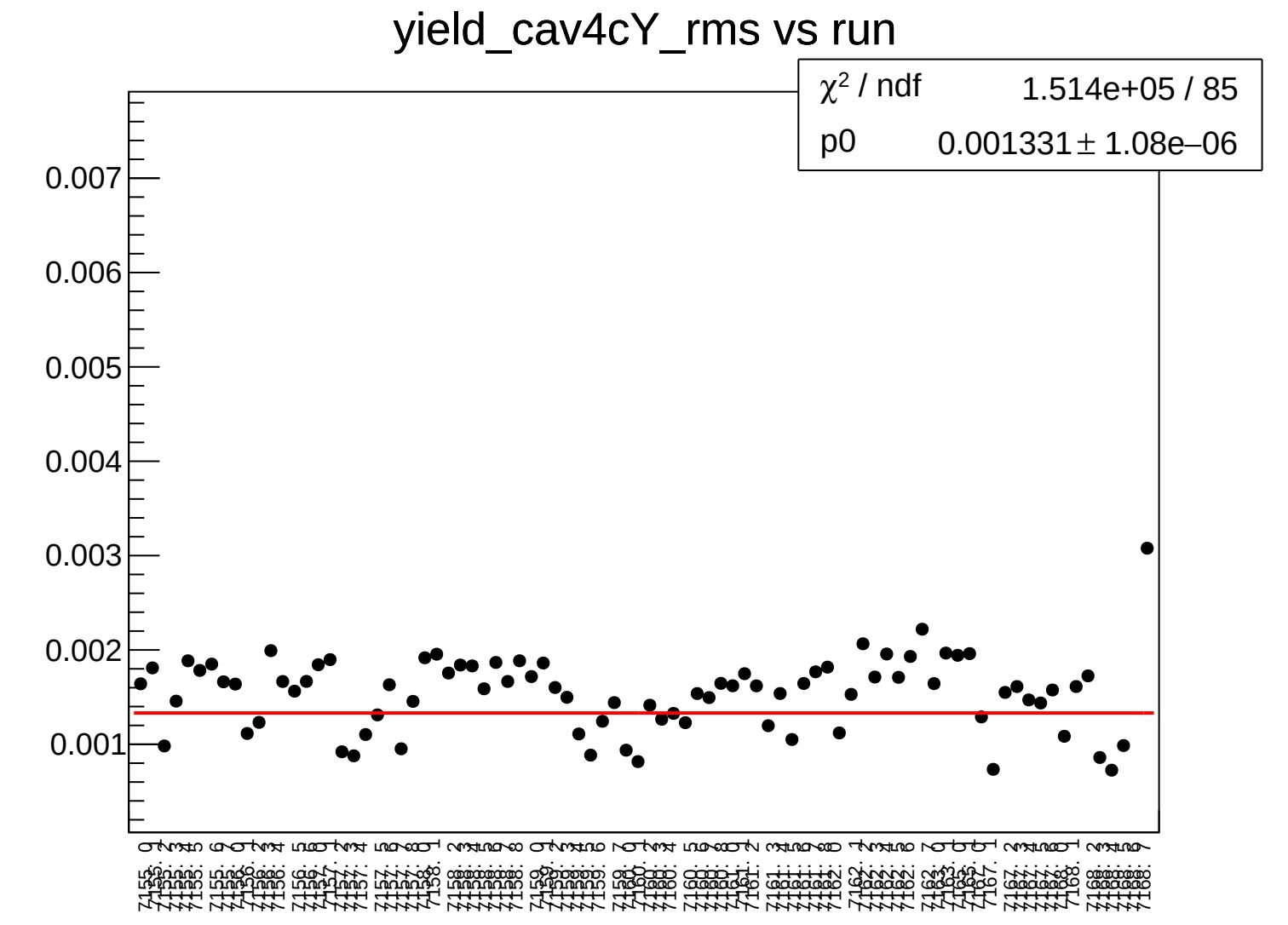

yield_cav4cX_mean vs run
χ² / ndf 2.695e+05 / 85
p0 0.00102 ± 1.778e−06
0.006
0.004
0.002
0
−0.002
pull
Entries 86
Mean 21.08
Std Dev 23.86
100
50
0
−50
−100

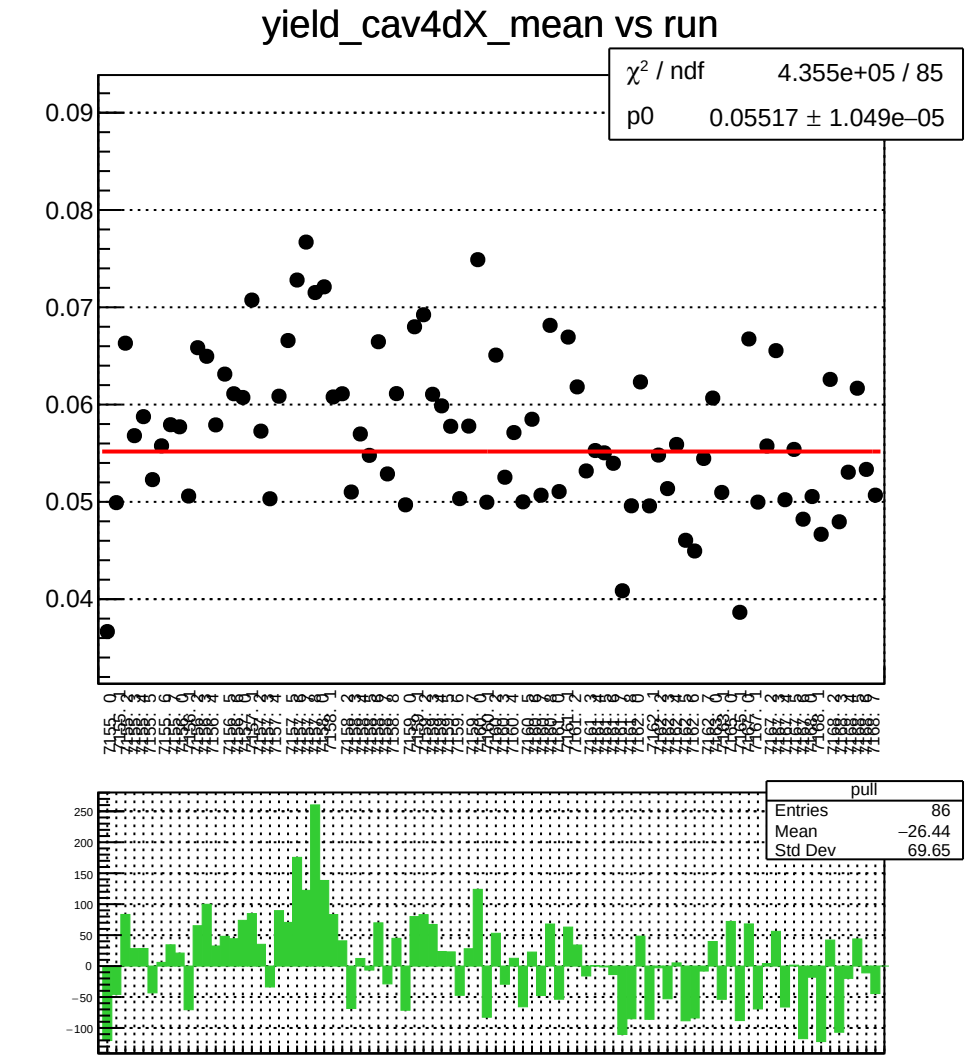

pull1D
Entries 86
Mean 1.022
Std Dev 5.094
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

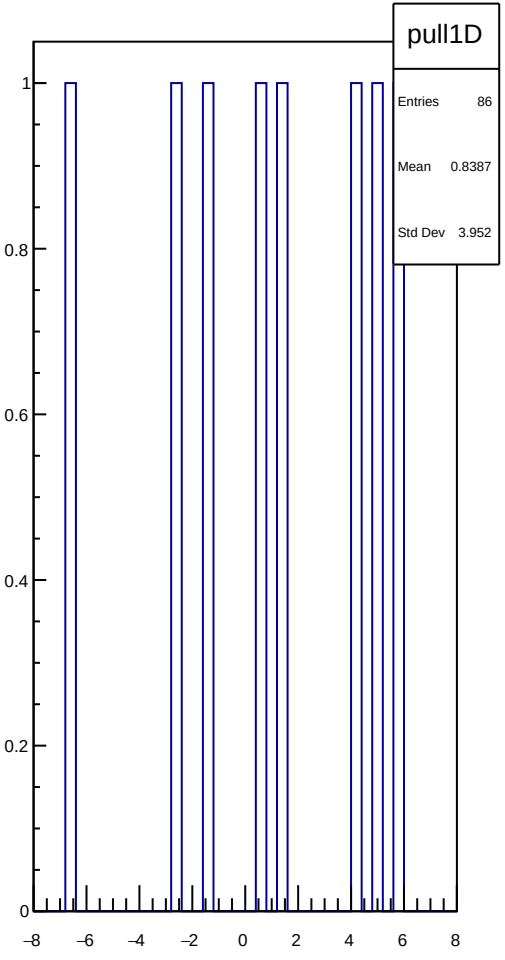

yield_cav4cX_rms vs run
χ² / ndf 2.339e+05 / 85
p0 0.001507 ± 1.257e−06
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

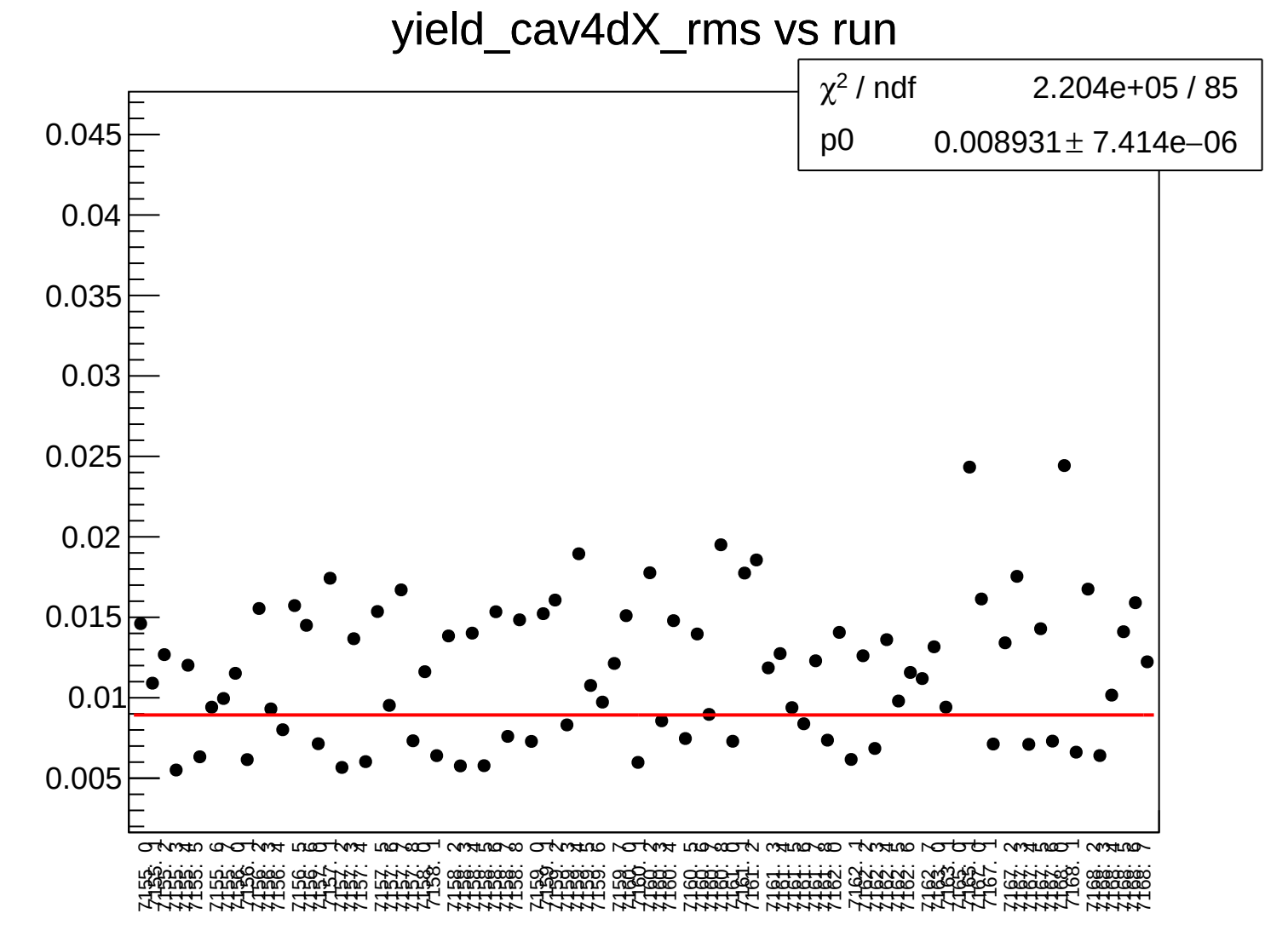

yield_cav4cY_mean vs run
χ² / ndf 6.014e+05 / 85
p0 −0.1201 ± 1.527e−06
−0.117
−0.118
−0.119
−0.12
−0.121
−0.122
−0.123
pull
Entries 86
Mean −173.8
Std Dev 219.3
200
100
0
−100
−200

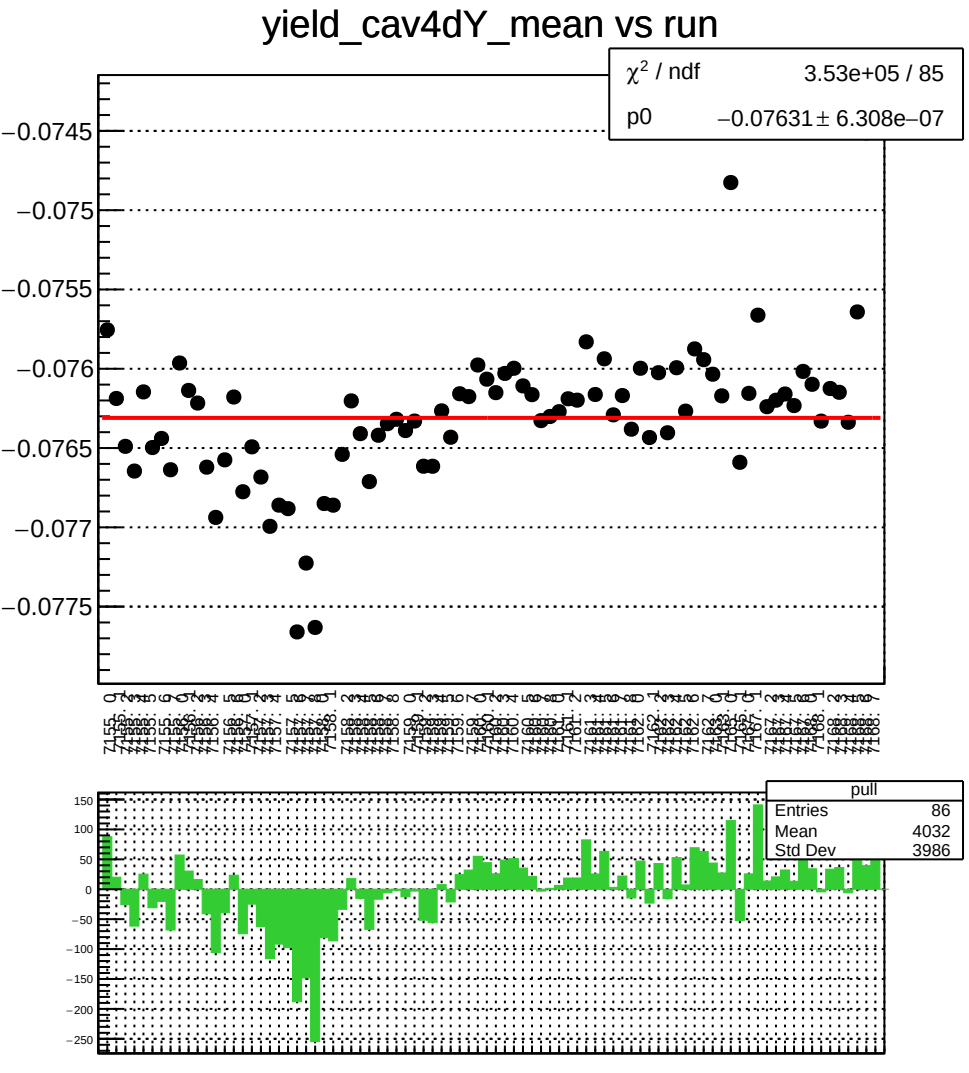

pull1D
Entries 86
Mean −2.379
Std Dev 3.963
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

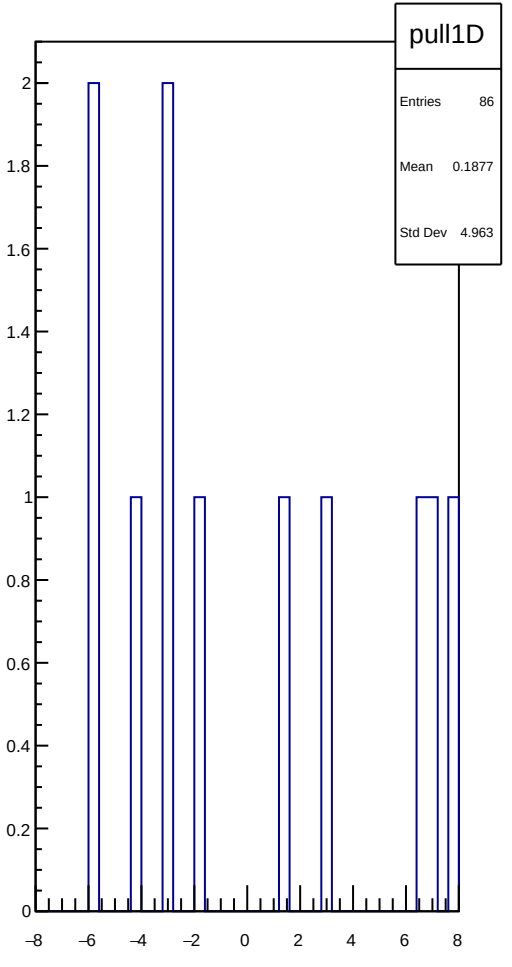

yield_cav4cY_rms vs run
χ² / ndf 1.514e+05 / 85
p0 0.001331 ± 1.08e–06
0.007
0.006
0.005
0.004
0.003
0.002
0.001

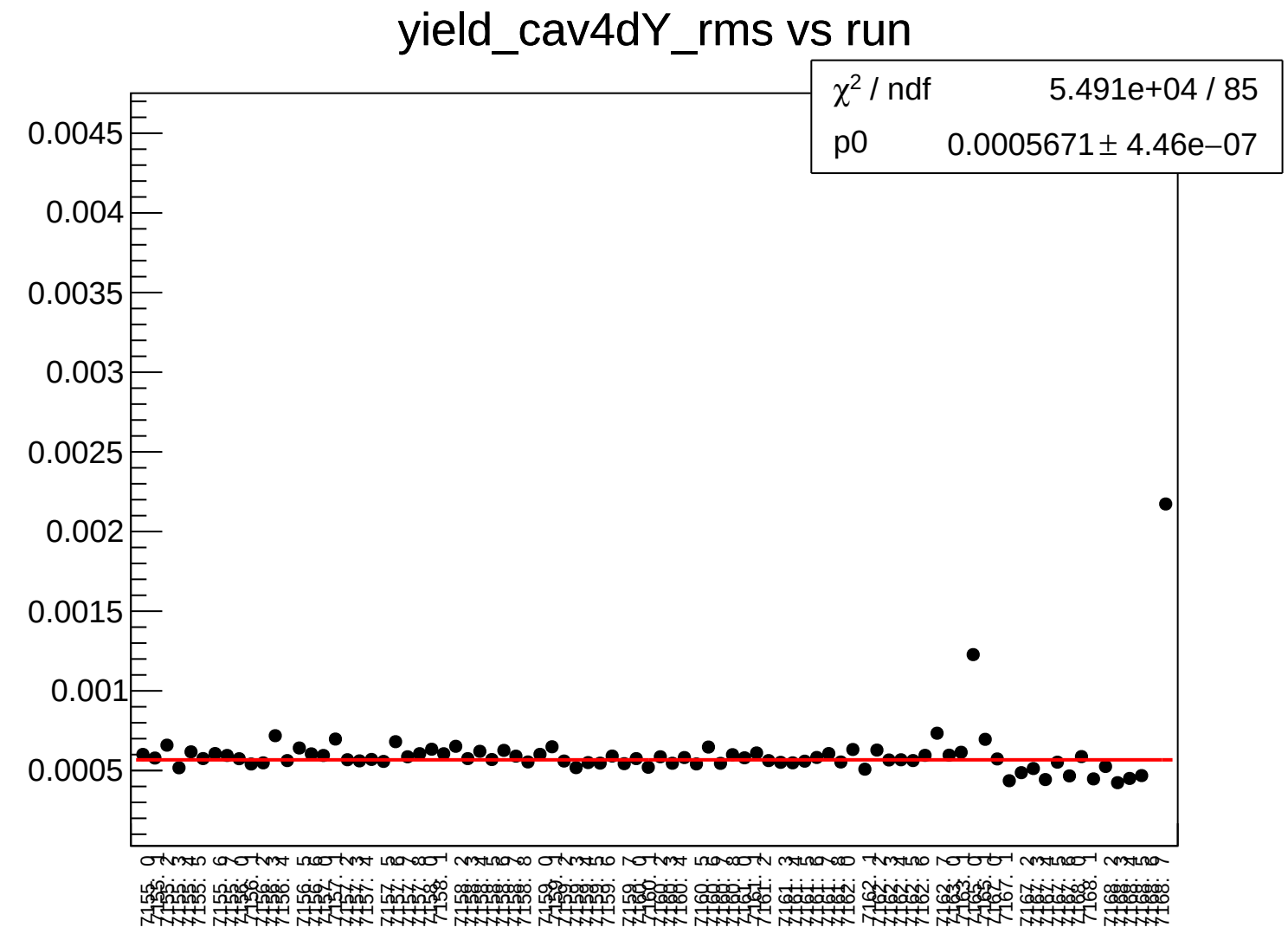

yield_cav4dX_mean vs run
χ² / ndf 4.355e+05 / 85
p0 0.05517 ± 1.049e−05
0.09
0.08
0.07
0.06
0.05
0.04
pull
Entries 86
Mean −26.44
Std Dev 69.65
250
200
150
100
50
0
−50
−100

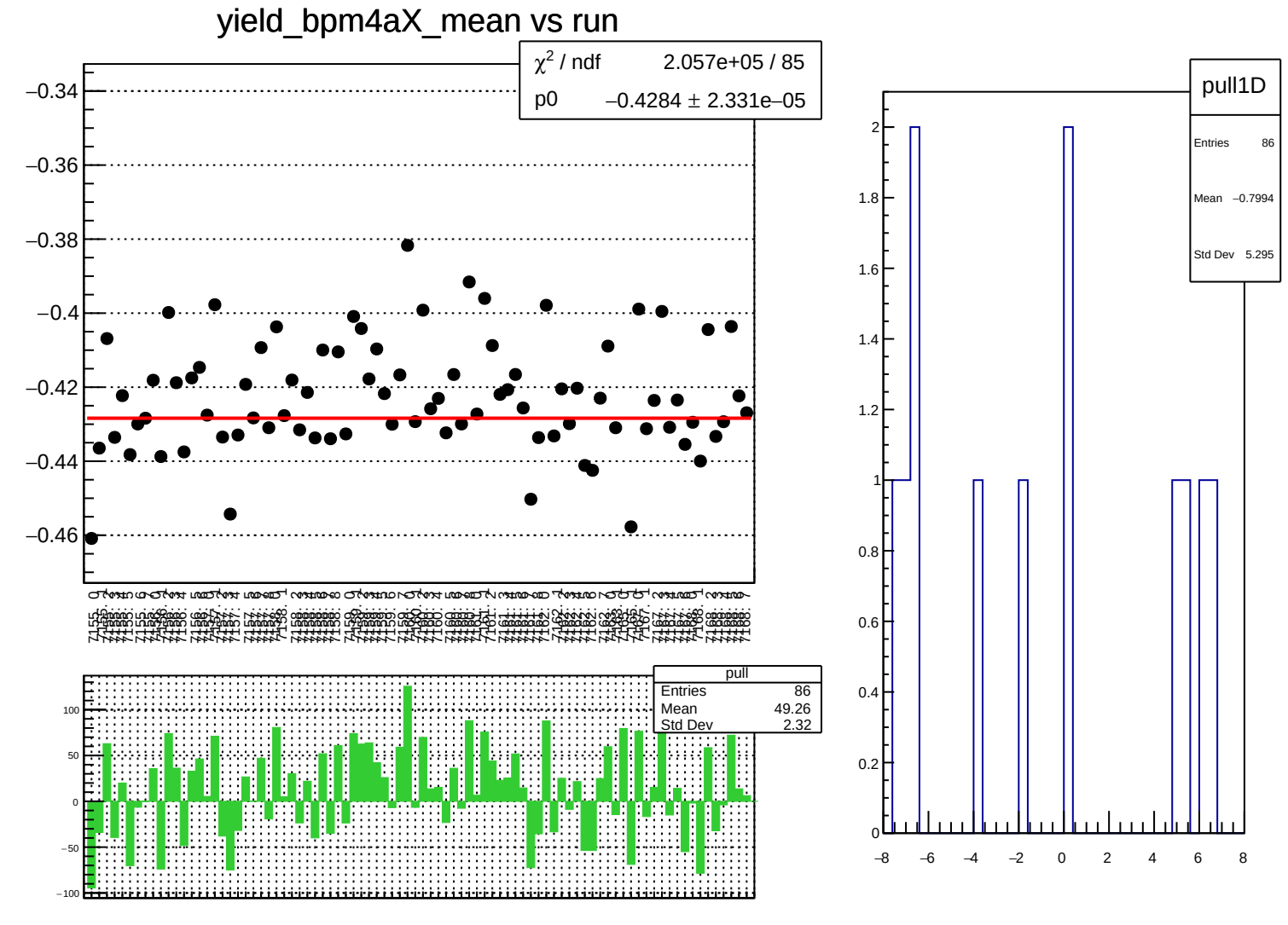

pull1D
Entries 86
Mean 0.8387
Std Dev 3.952
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

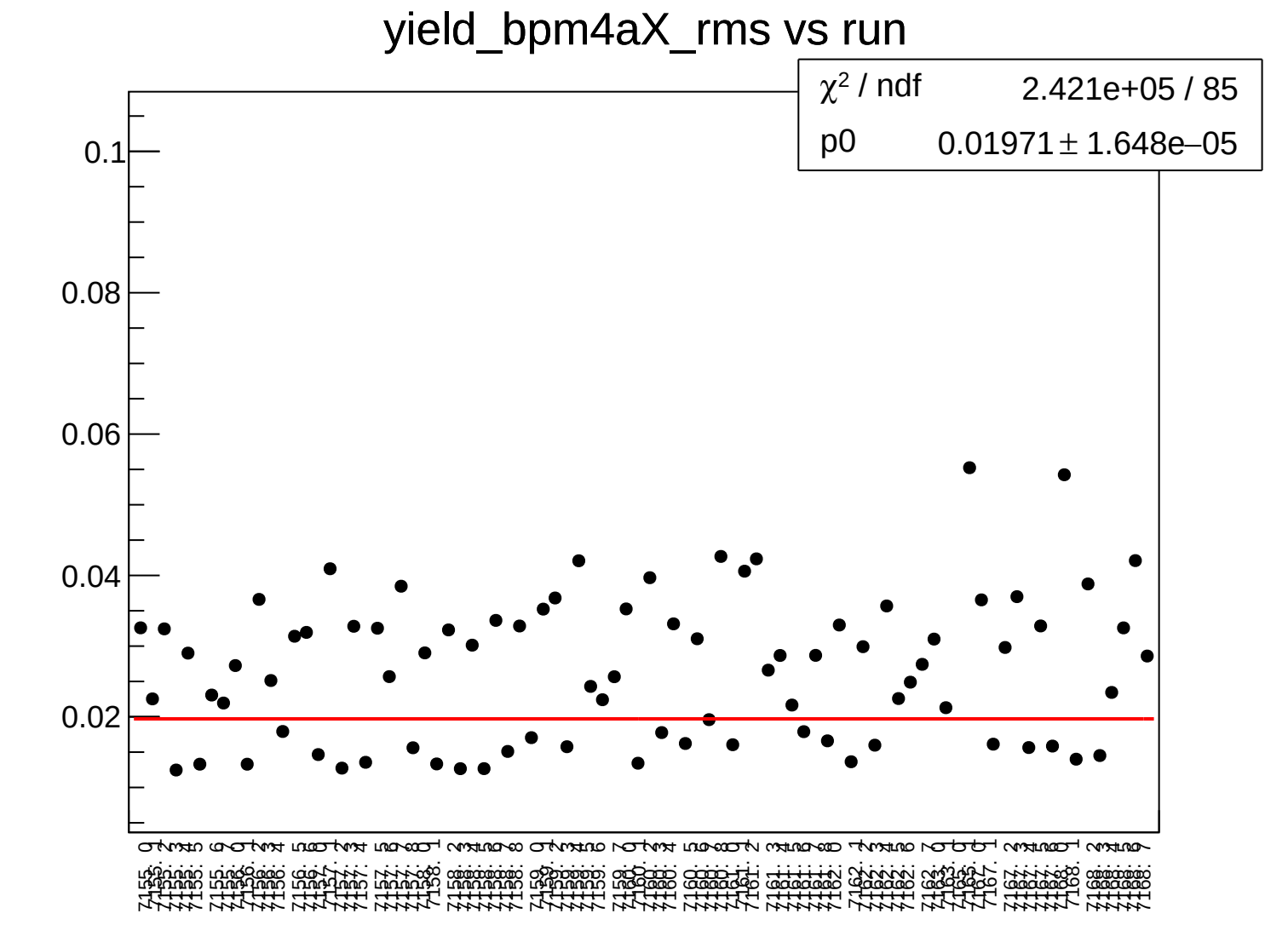

yield_cav4dX_rms vs run
χ² / ndf 2.204e+05 / 85
p0 0.008931 ± 7.414e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

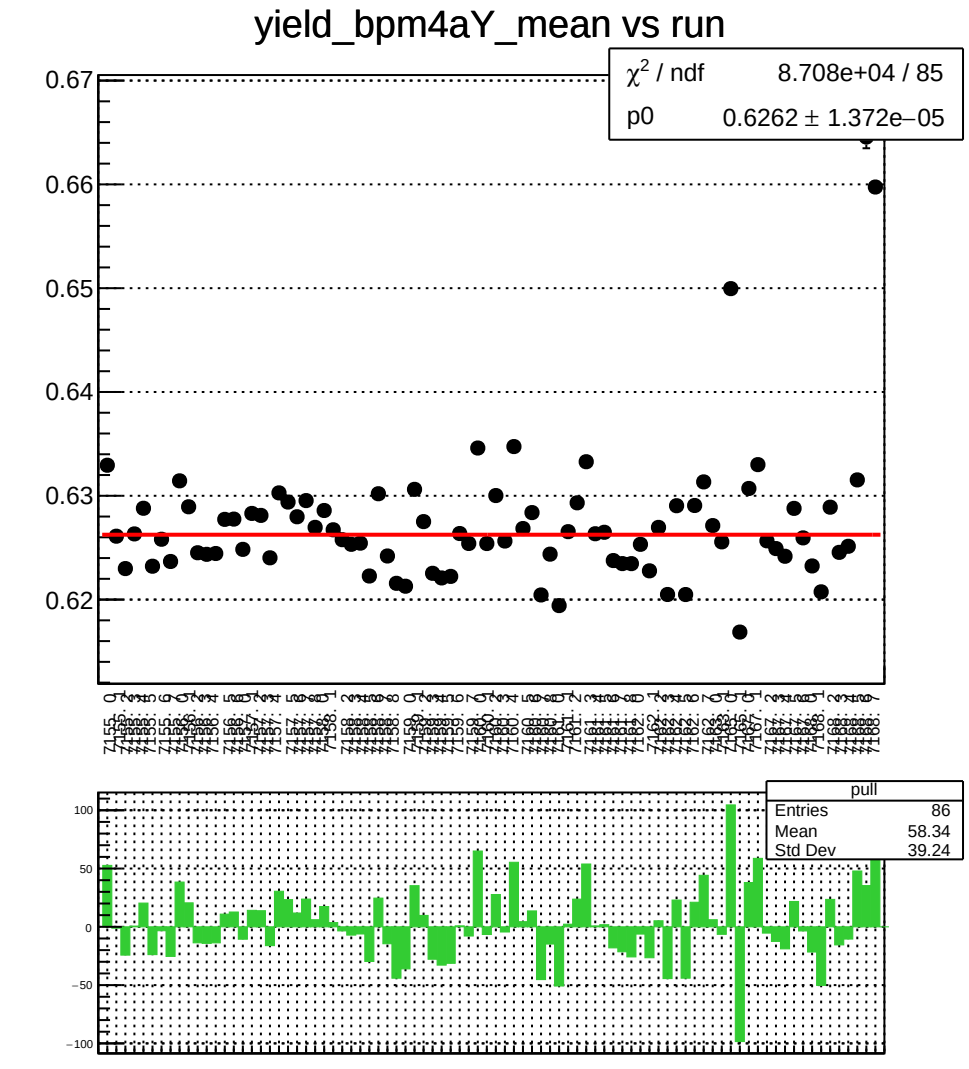

yield_cav4dY_mean vs run
χ² / ndf 3.53e+05 / 85
p0 −0.07631 ± 6.308e−07
−0.0745
−0.075
−0.0755
−0.076
−0.0765
−0.077
−0.0775
pull
Entries 86
Mean 4032
Std Dev 3986
150
100
50
0
−50
−100
−150
−200
−250

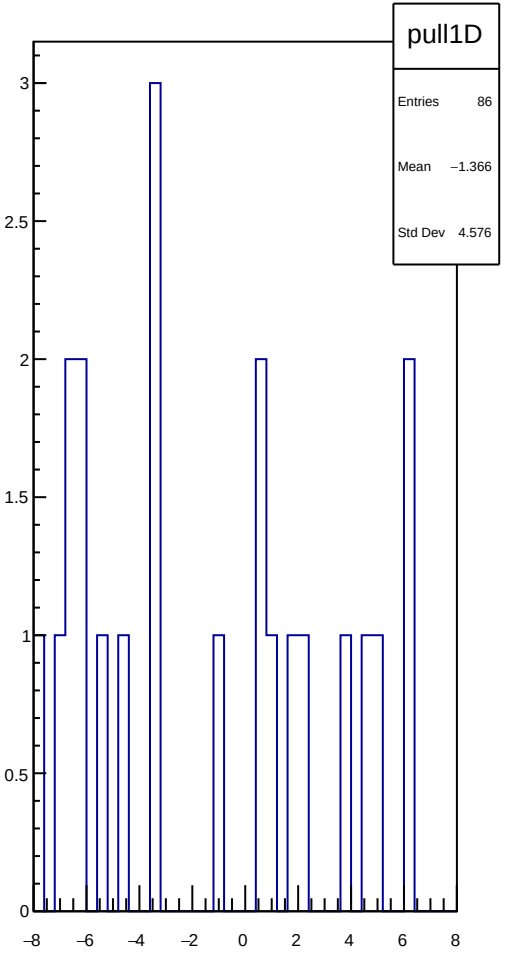

pull1D
Entries 86
Mean 0.1877
Std Dev 4.963
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

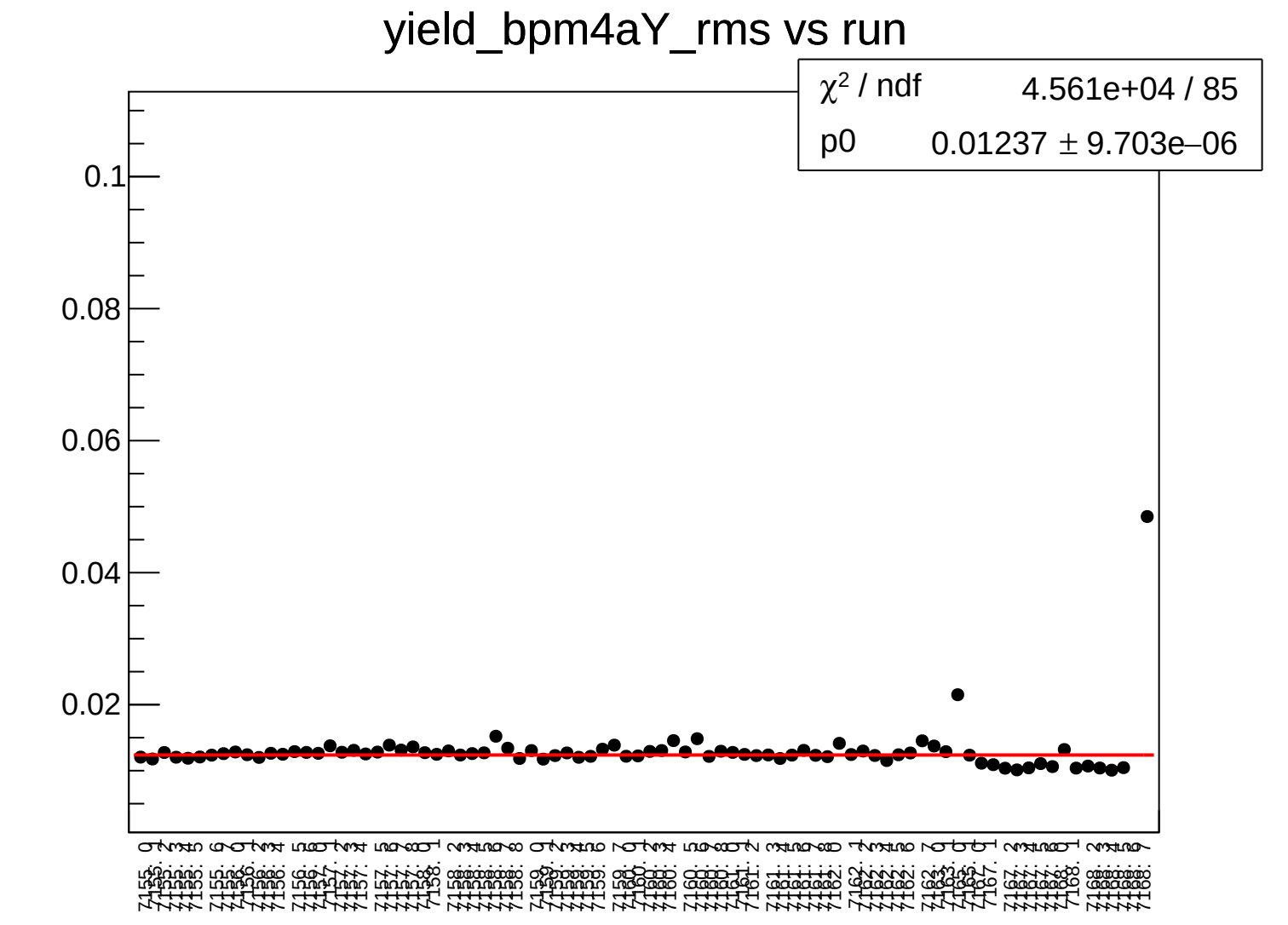

yield_cav4dY_rms vs run
χ² / ndf 5.491e+04 / 85
p0 0.0005671 ± 4.46e−07
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005

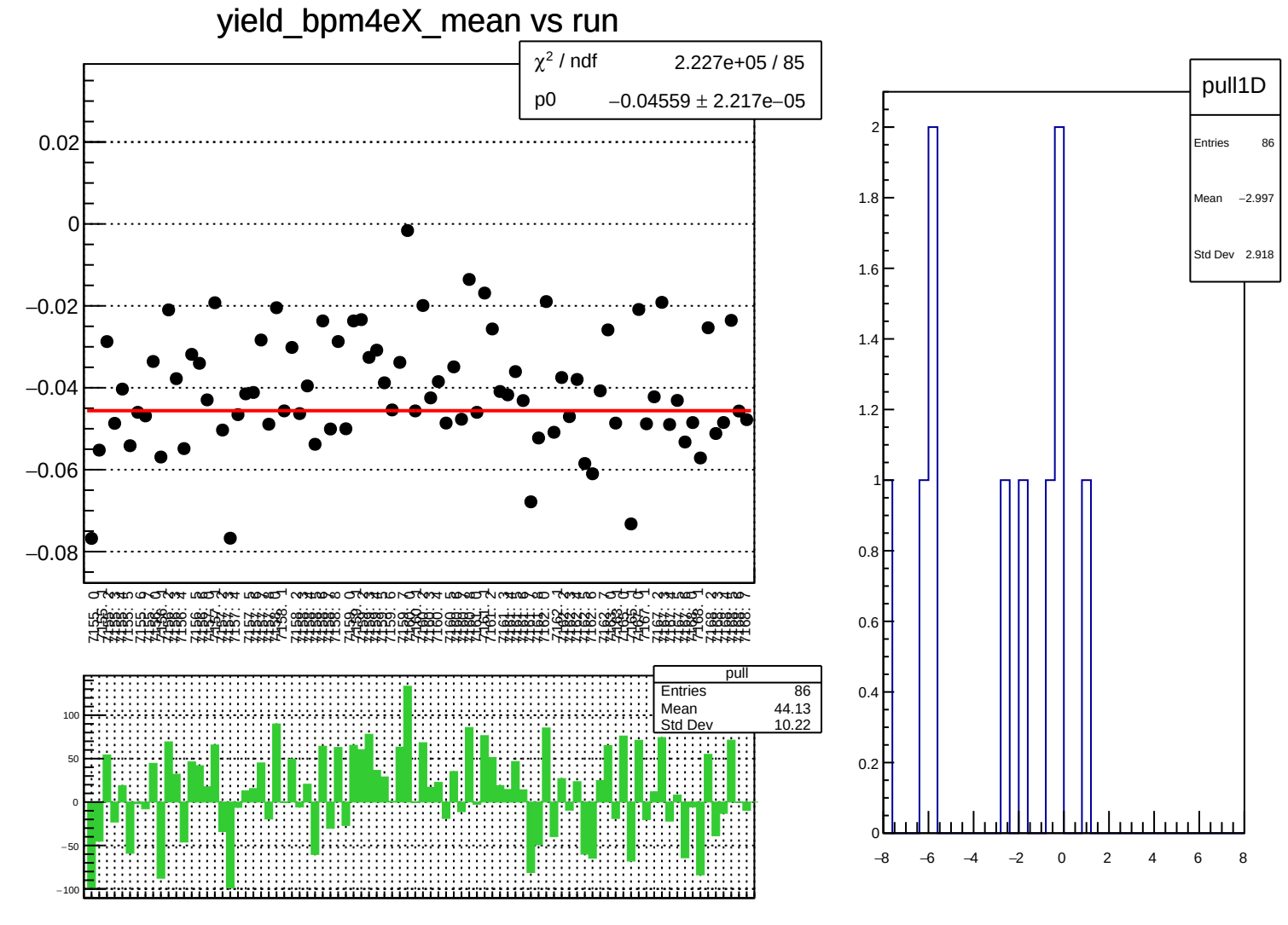

yield_bpm4aX_mean vs run
χ² / ndf 2.057e+05 / 85
p0 −0.4284 ± 2.331e−05
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
−0.46
pull
Entries 86
Mean 49.26
Std Dev 2.32
100
50
0
−50
−100
pull1D
Entries 86
Mean −0.7994
Std Dev 5.295
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

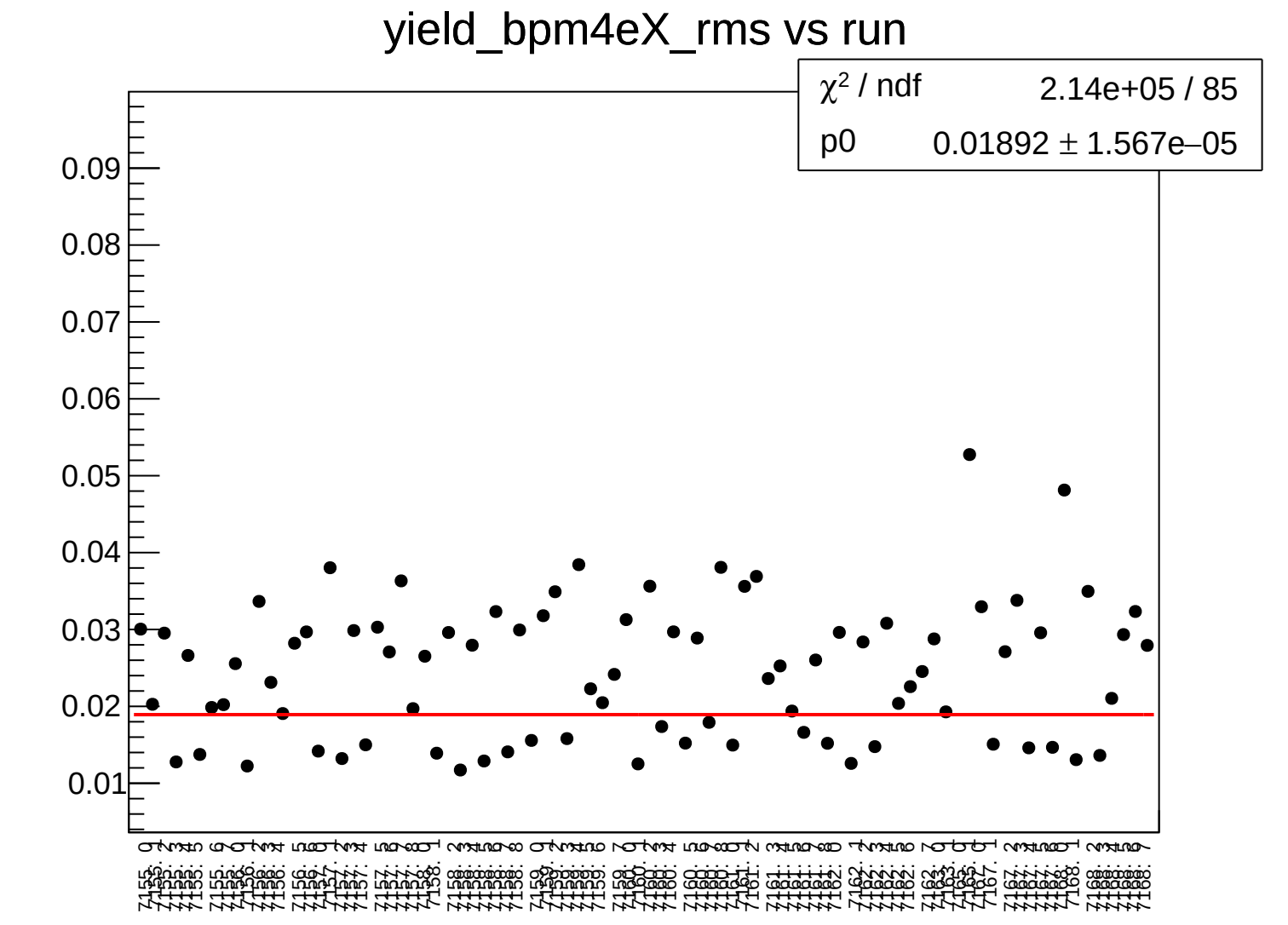

yield_bpm4aX_rms vs run
χ² / ndf 2.421e+05 / 85
p0 0.01971 ± 1.648e–05
0.1
0.08
0.06
0.04
0.02

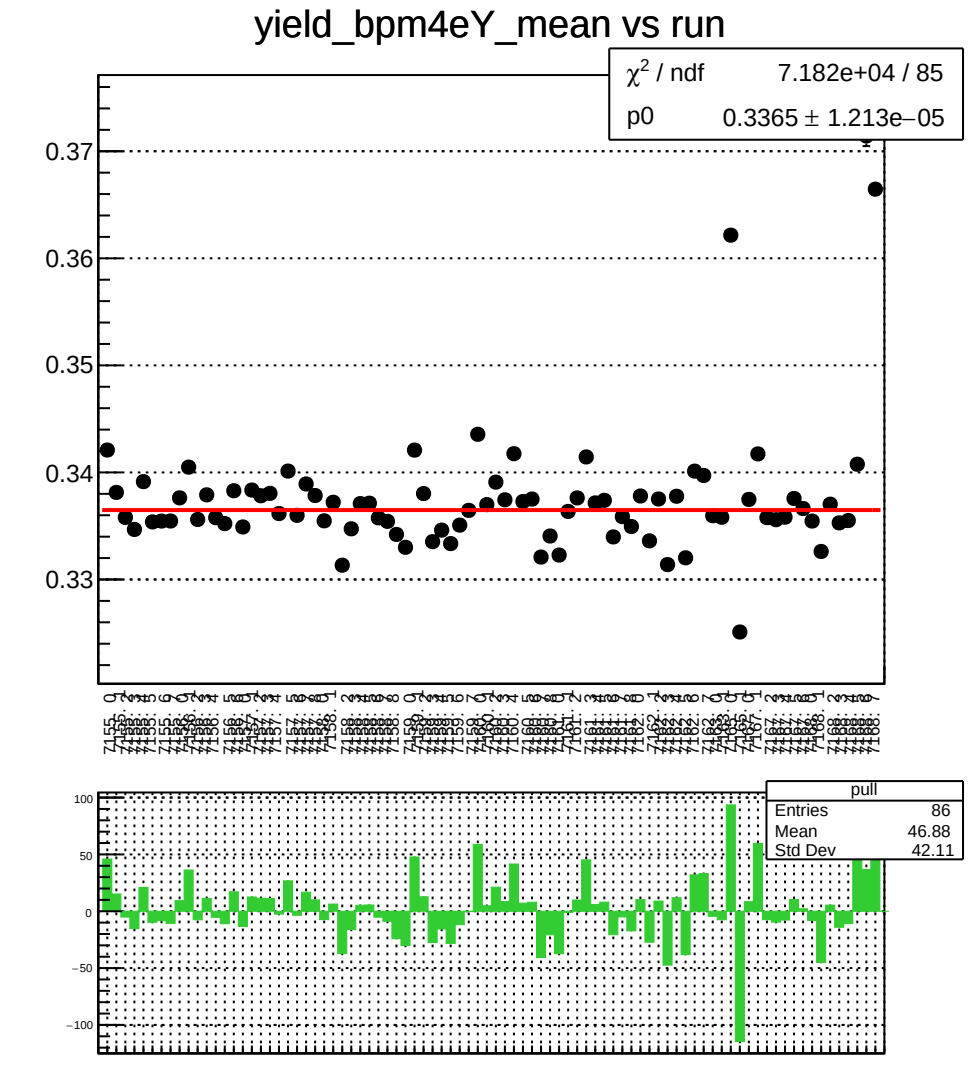

yield_bpm4aY_mean vs run
χ² / ndf 8.708e+04 / 85
p0 0.6262 ± 1.372e−05
0.67
0.66
0.65
0.64
0.63
0.62
pull
Entries 86
Mean 58.34
Std Dev 39.24
100
50
0
−50
−100

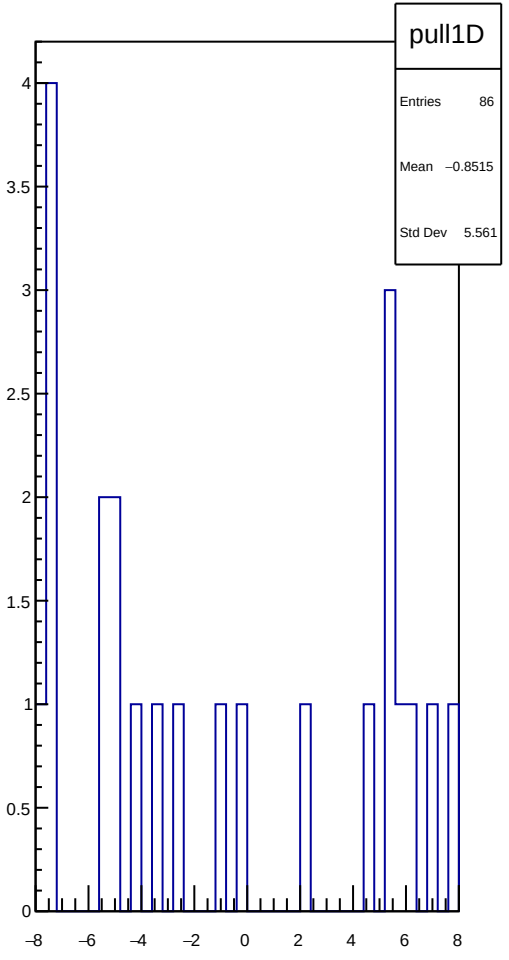

pull1D
Entries 86
Mean −1.366
Std Dev 4.576
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

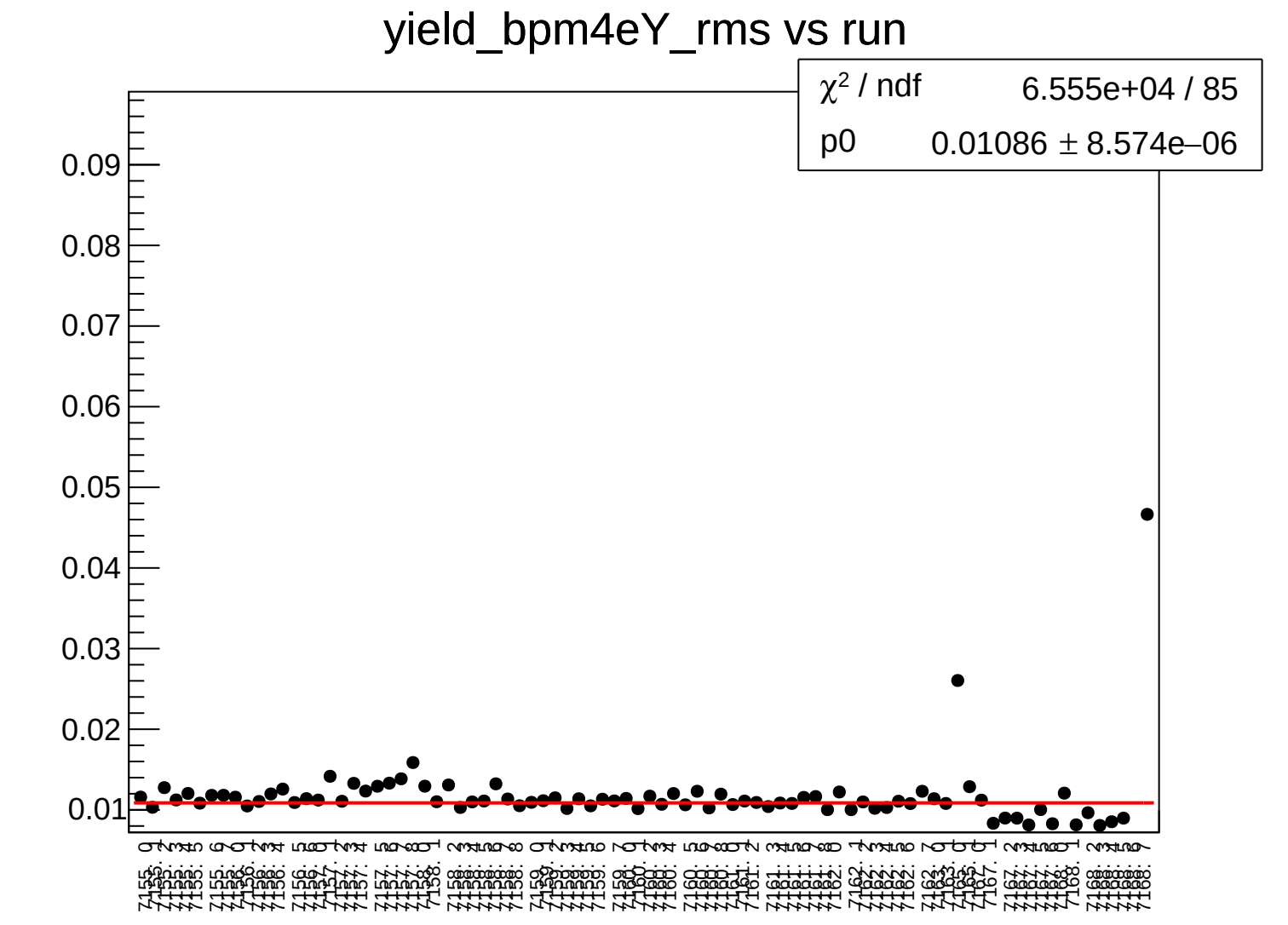

yield_bpm4aY_rms vs run
χ² / ndf 4.561e+04 / 85
p0 0.01237 ± 9.703e–06
0.1
0.08
0.06
0.04
0.02

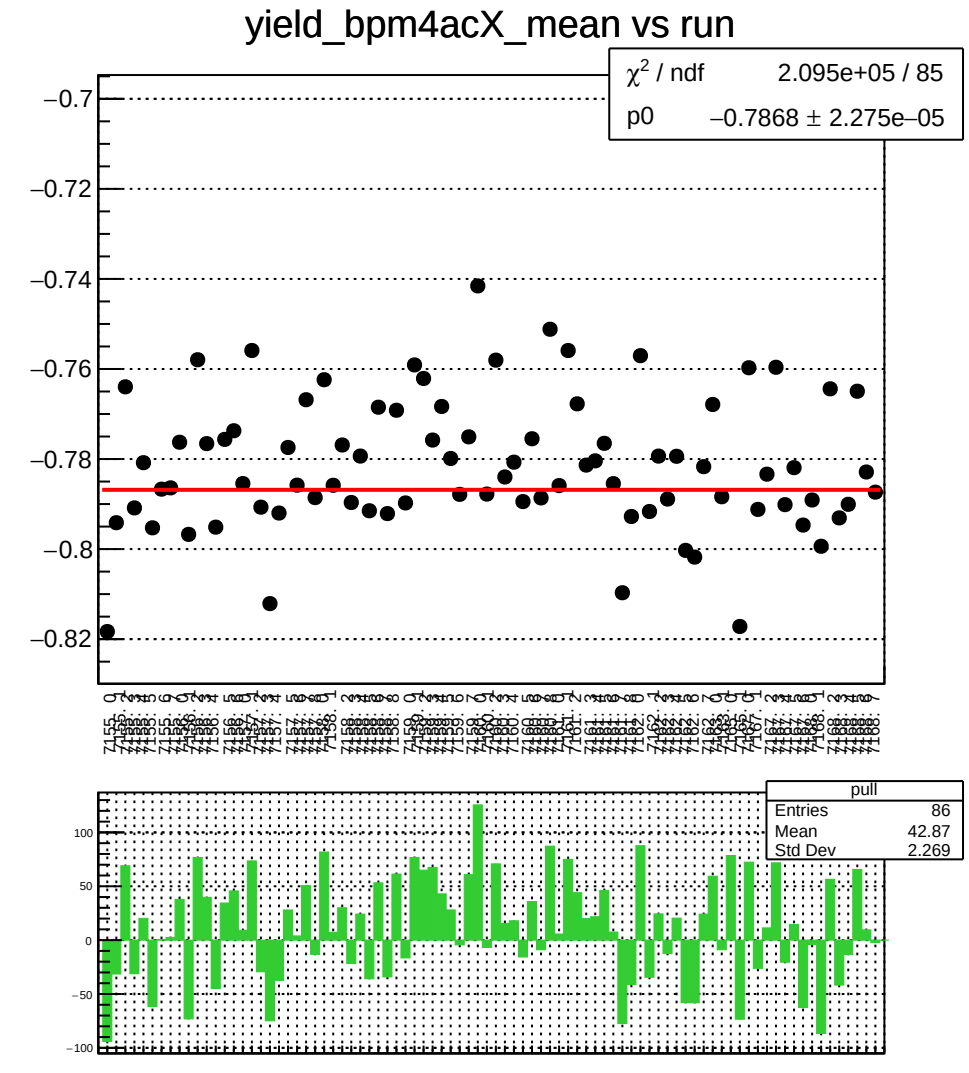

yield_bpm4eX_mean vs run
χ² / ndf 2.227e+05 / 85
p0 −0.04559 ± 2.217e−05
0.02
0
−0.02
−0.04
−0.06
−0.08
pull
Entries 86
Mean 44.13
Std Dev 10.22
100
50
0
−50
−100
pull1D
Entries 86
Mean −2.997
Std Dev 2.918
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

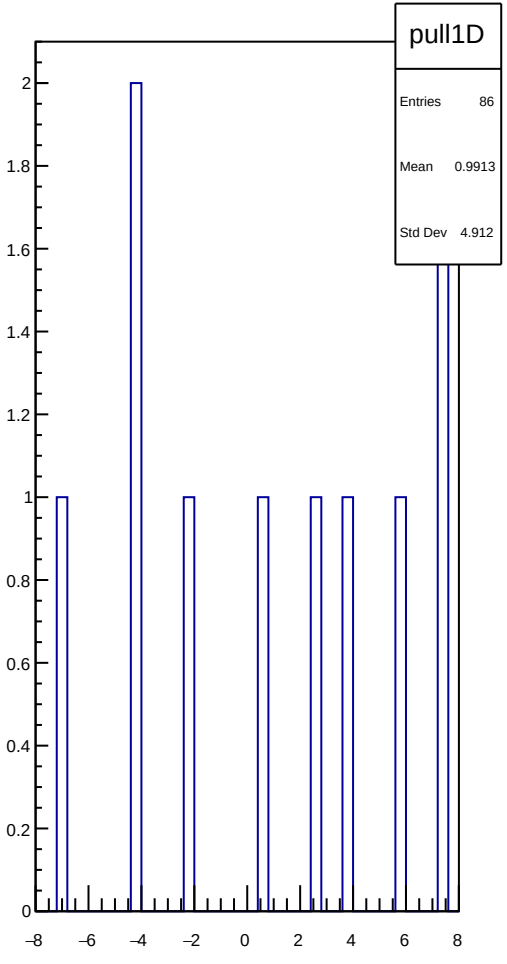

yield_bpm4eX_rms vs run
χ² / ndf 2.14e+05 / 85
p0 0.01892 ± 1.567e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

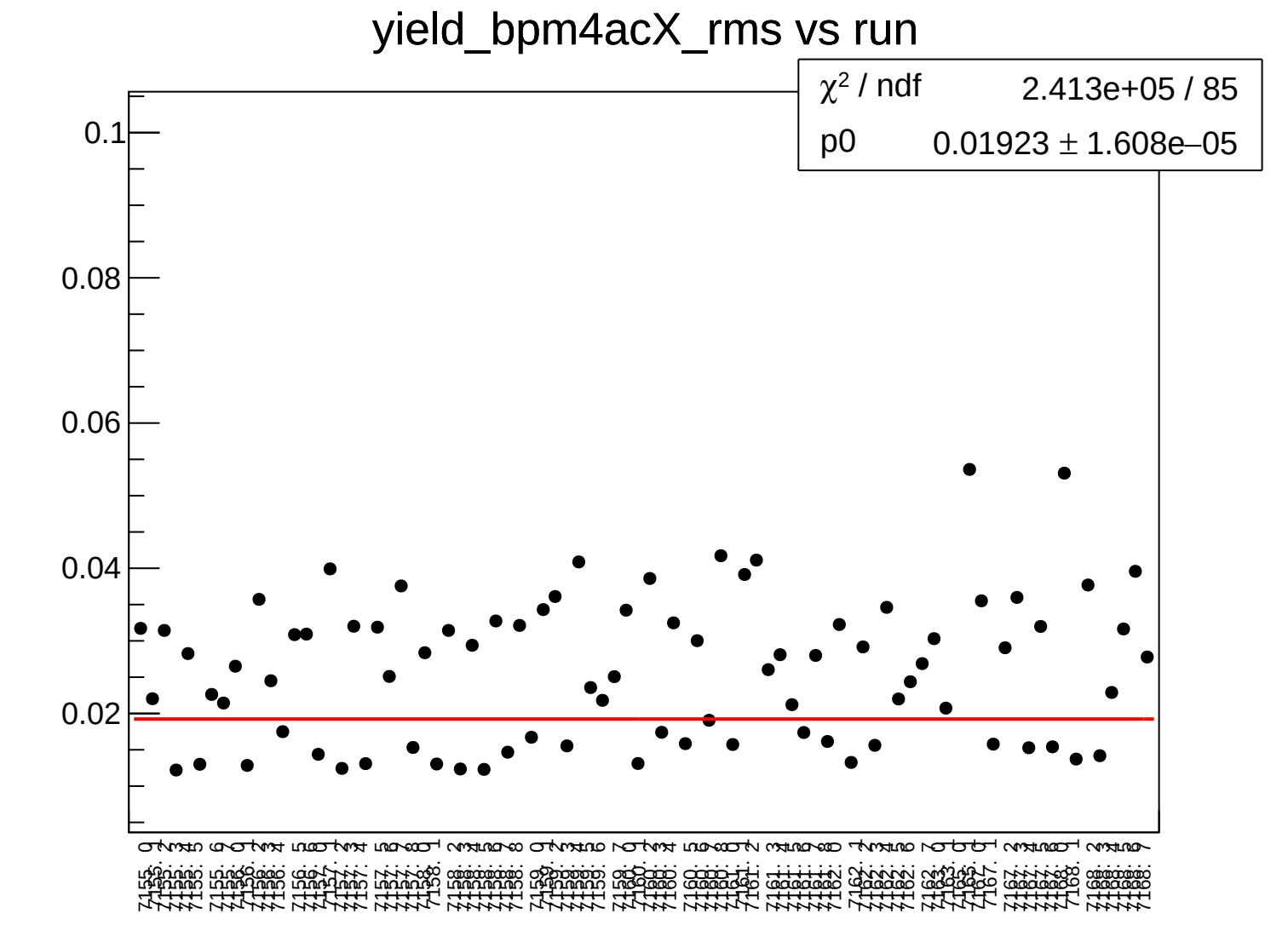

yield_bpm4eY_mean vs run
χ² / ndf 7.182e+04 / 85
p0 0.3365 ± 1.213e−05
0.37
0.36
0.35
0.34
0.33
pull
Entries 86
Mean 46.88
Std Dev 42.11
100
50
0
−50
−100

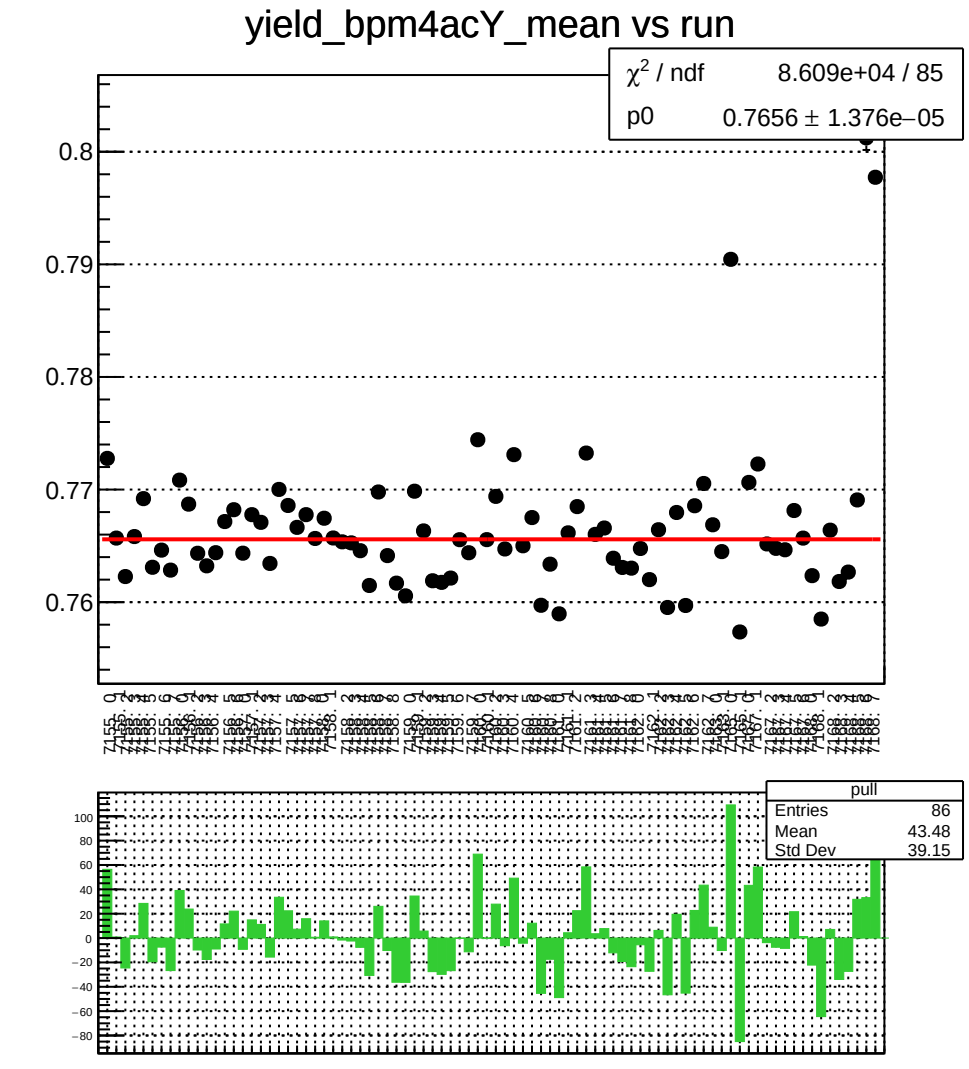

pull1D
Entries 86
Mean −0.8515
Std Dev 5.561
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

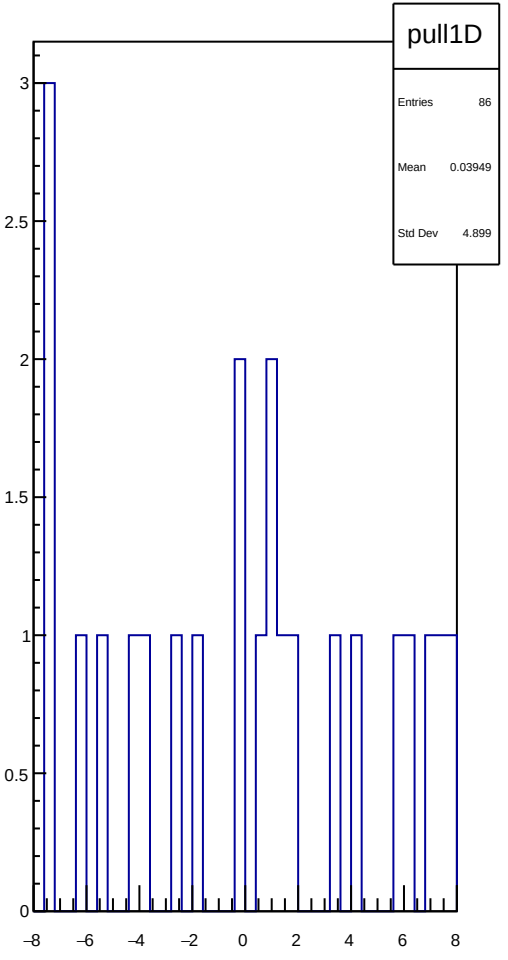

yield_bpm4eY_rms vs run
χ² / ndf 6.555e+04 / 85
p0 0.01086 ± 8.574e–06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

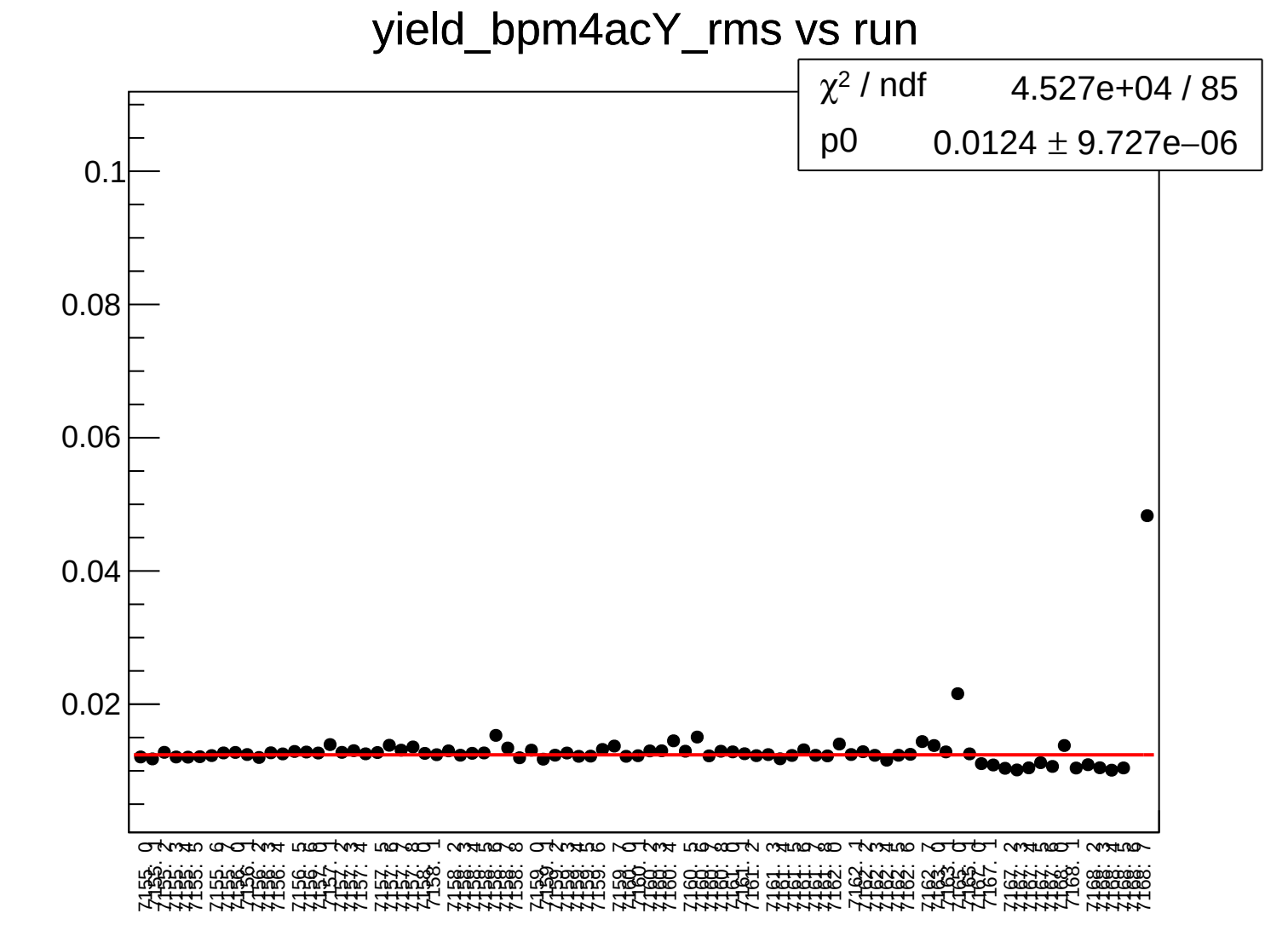

yield_bpm4acX_mean vs run
χ² / ndf 2.095e+05 / 85
p0 −0.7868 ± 2.275e−05
pull
Entries 86
Mean 42.87
Std Dev 2.269

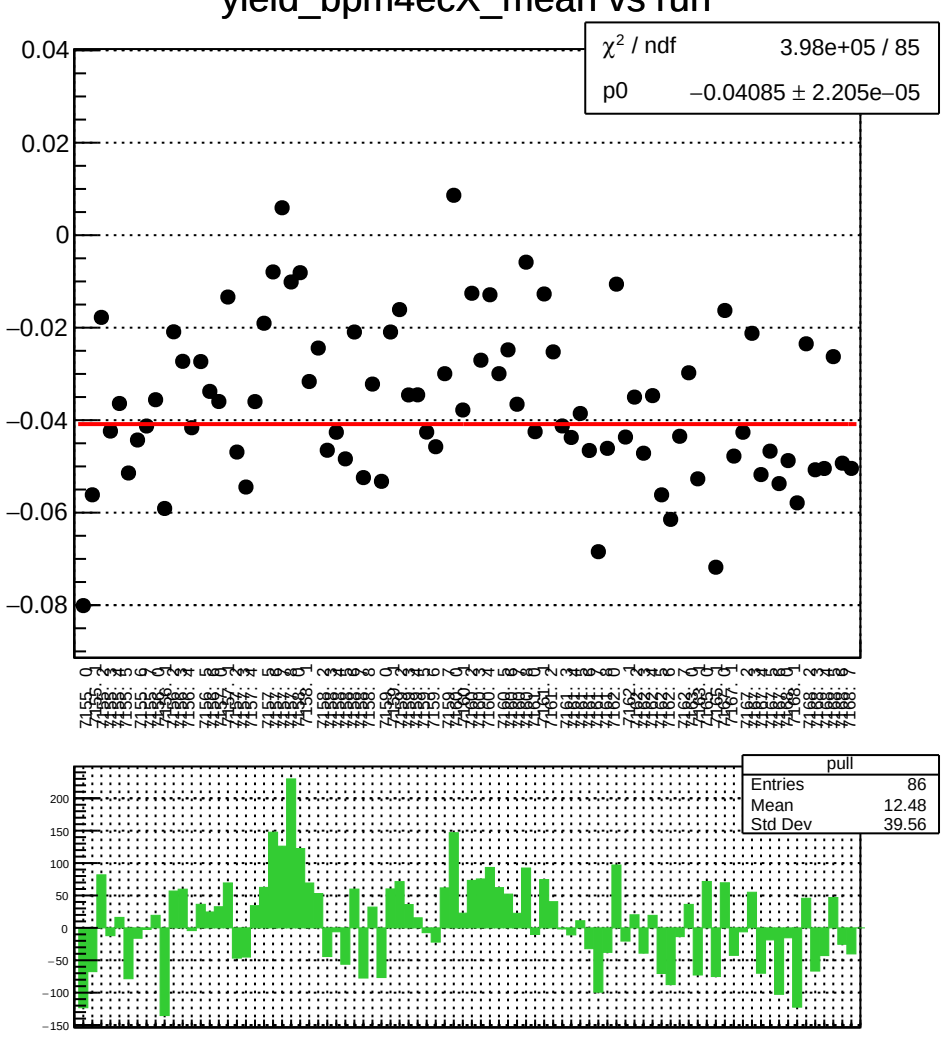

pull1D
Entries 86
Mean 0.9913
Std Dev 4.912

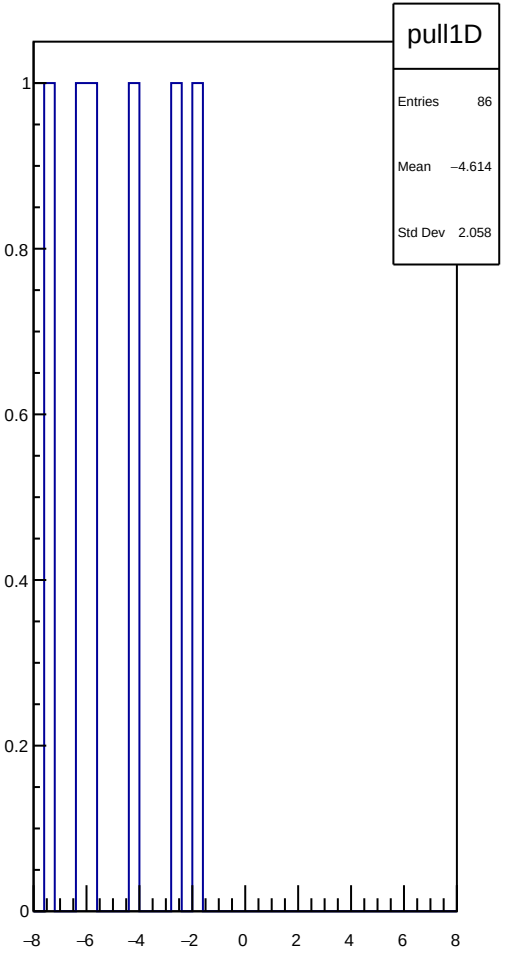

yield_bpm4acX_rms vs run
χ² / ndf 2.413e+05 / 85
p0 0.01923 ± 1.608e−05
0.1
0.08
0.06
0.04
0.02

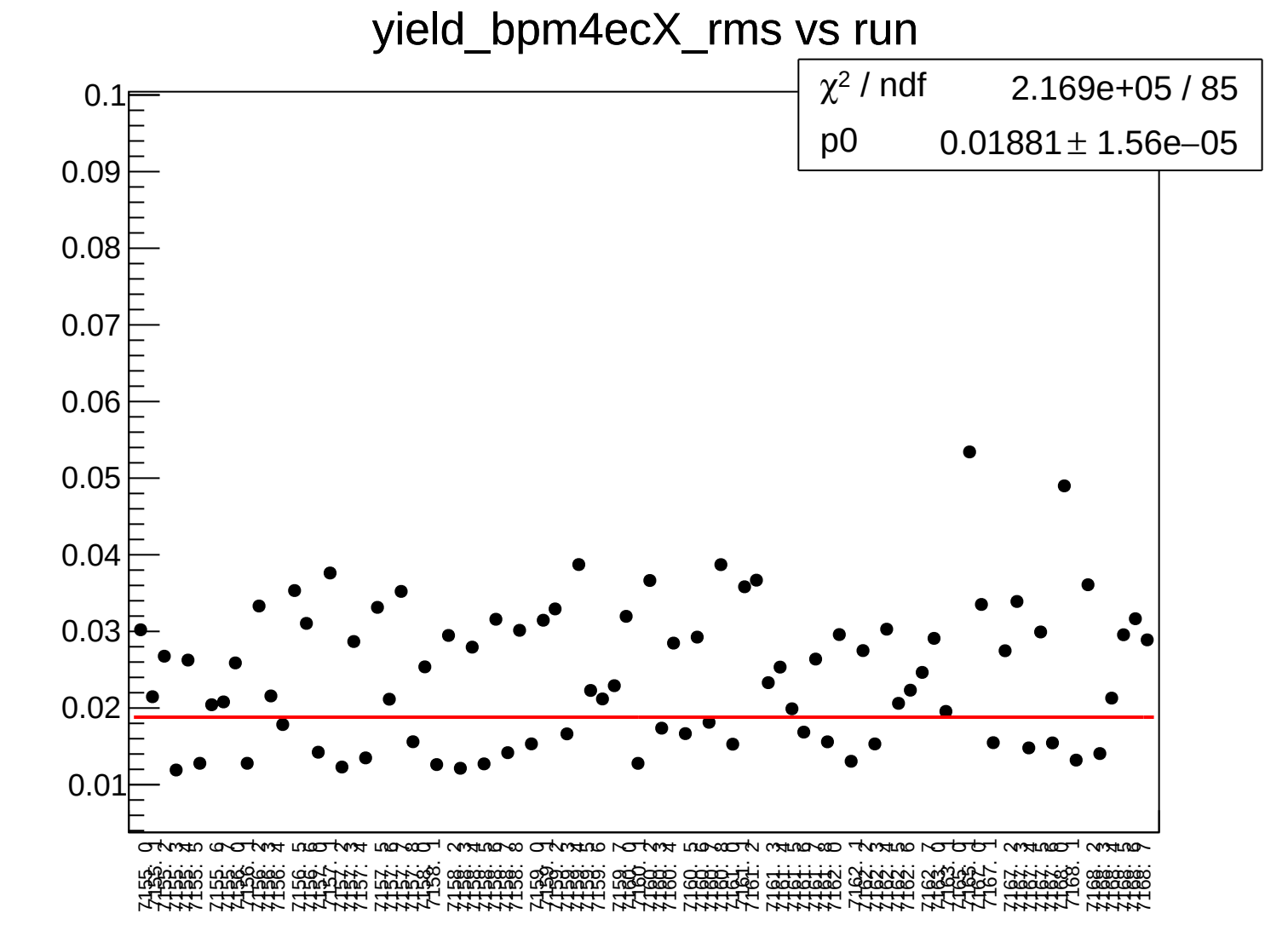

yield_bpm4acY_mean vs run
χ² / ndf 8.609e+04 / 85
p0 0.7656 ± 1.376e−05
0.8
0.79
0.78
0.77
0.76
pull
Entries 86
Mean 43.48
Std Dev 39.15
100
80
60
40
20
0
−20
−40
−60
−80

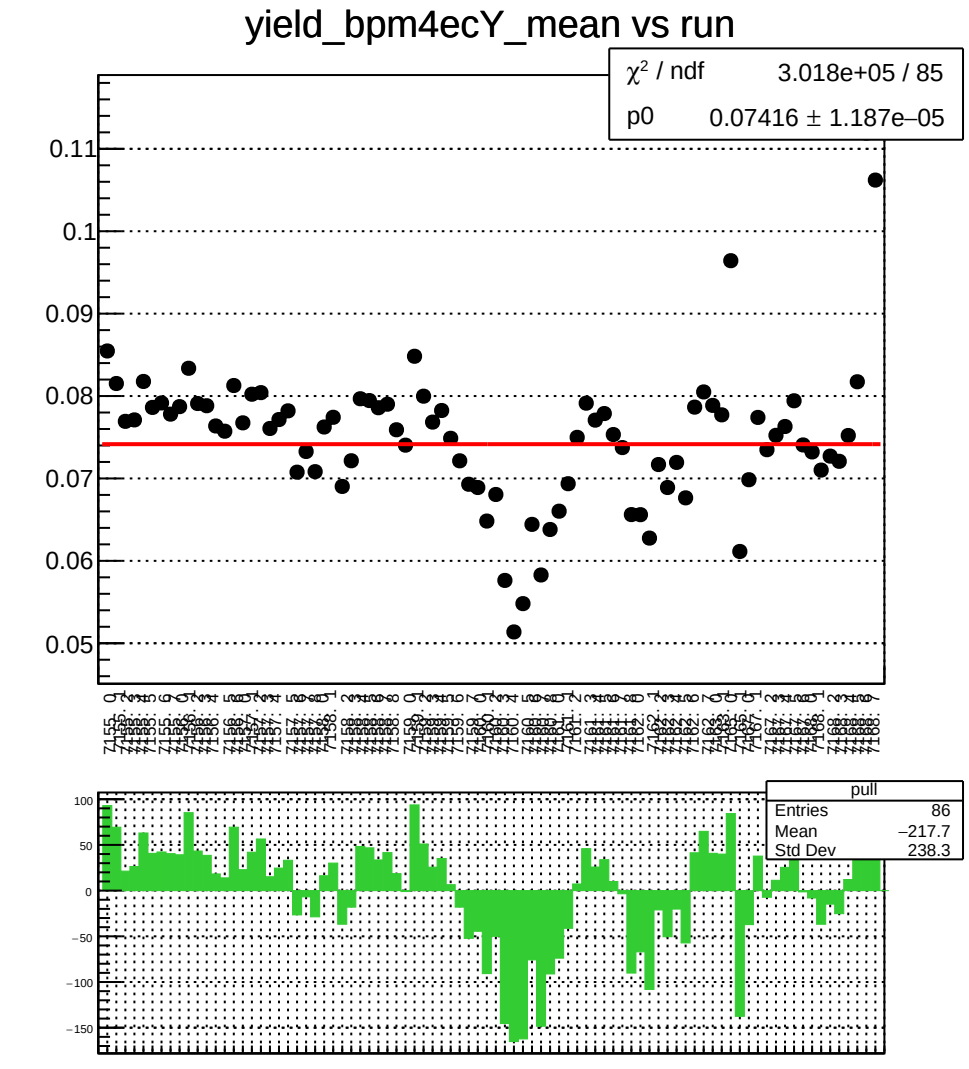

pull1D
Entries 86
Mean 0.03949
Std Dev 4.899
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

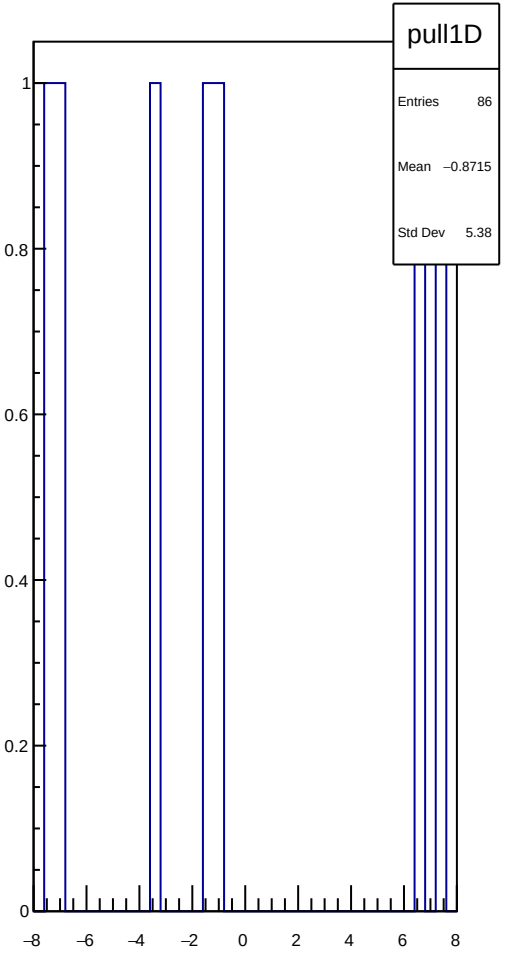

yield_bpm4acY_rms vs run
χ² / ndf 4.527e+04 / 85
p0 0.0124 ± 9.727e−06
0.1
0.08
0.06
0.04
0.02

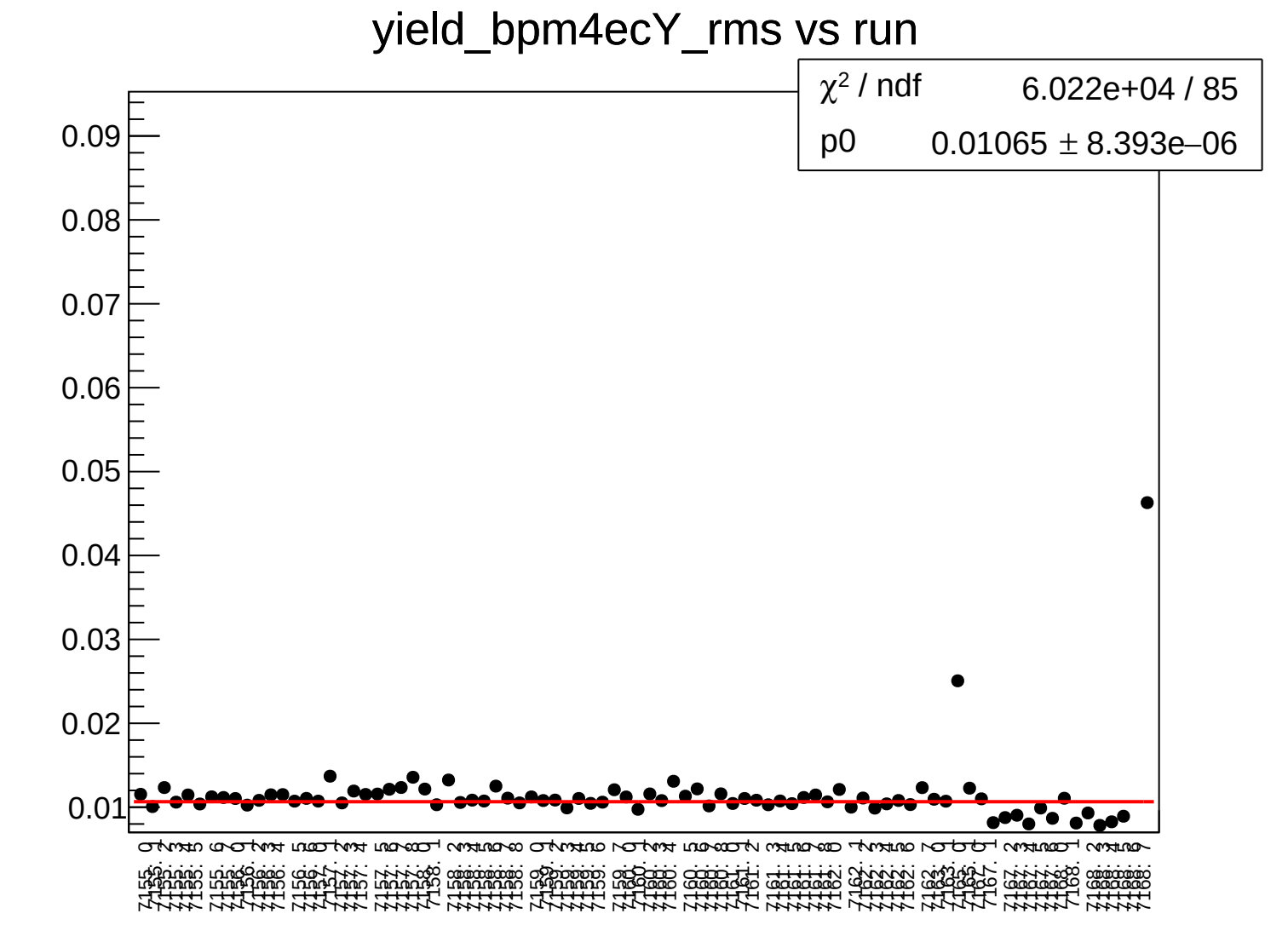

yield_bpm4ecX_mean vs run
χ² / ndf 3.98e+05 / 85
p0 −0.04085 ± 2.205e−05
pull
Entries 86
Mean 12.48
Std Dev 39.56

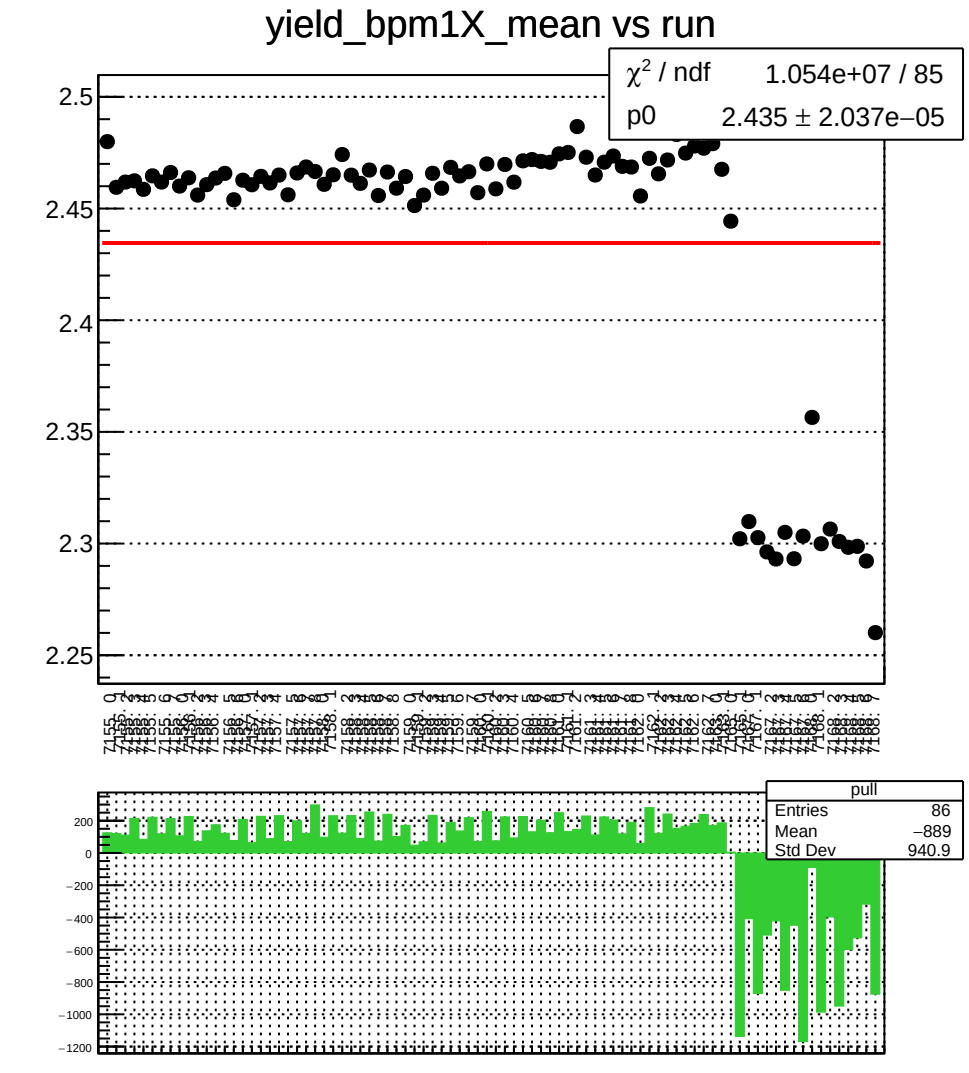

pull1D
Entries 86
Mean −4.614
Std Dev 2.058

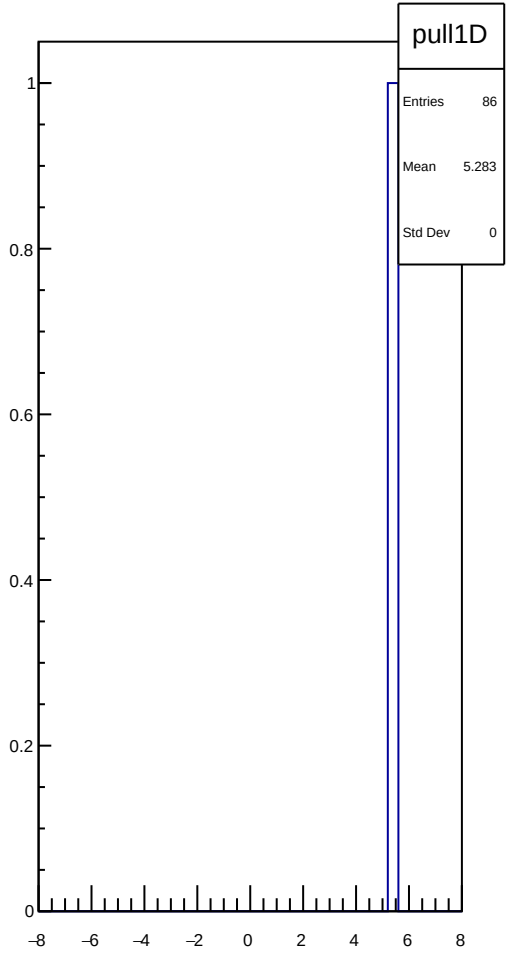

yield_bpm4ecX_rms vs run
χ² / ndf 2.169e+05 / 85
p0 0.01881 ± 1.56e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

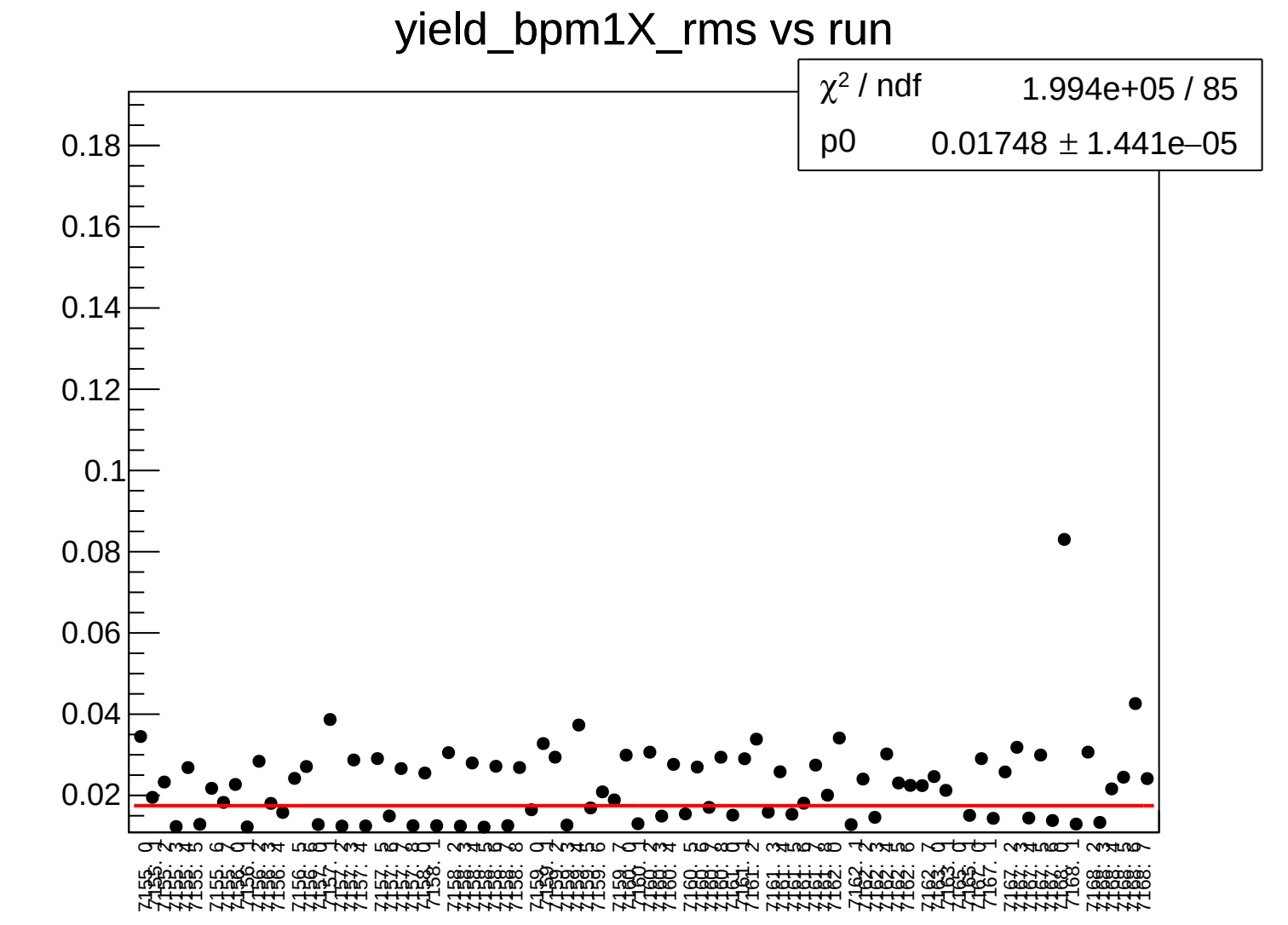

yield_bpm4ecY_mean vs run
χ² / ndf 3.018e+05 / 85
p0 0.07416 ± 1.187e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
pull
Entries 86
Mean −217.7
Std Dev 238.3
100
50
0
−50
−100
−150

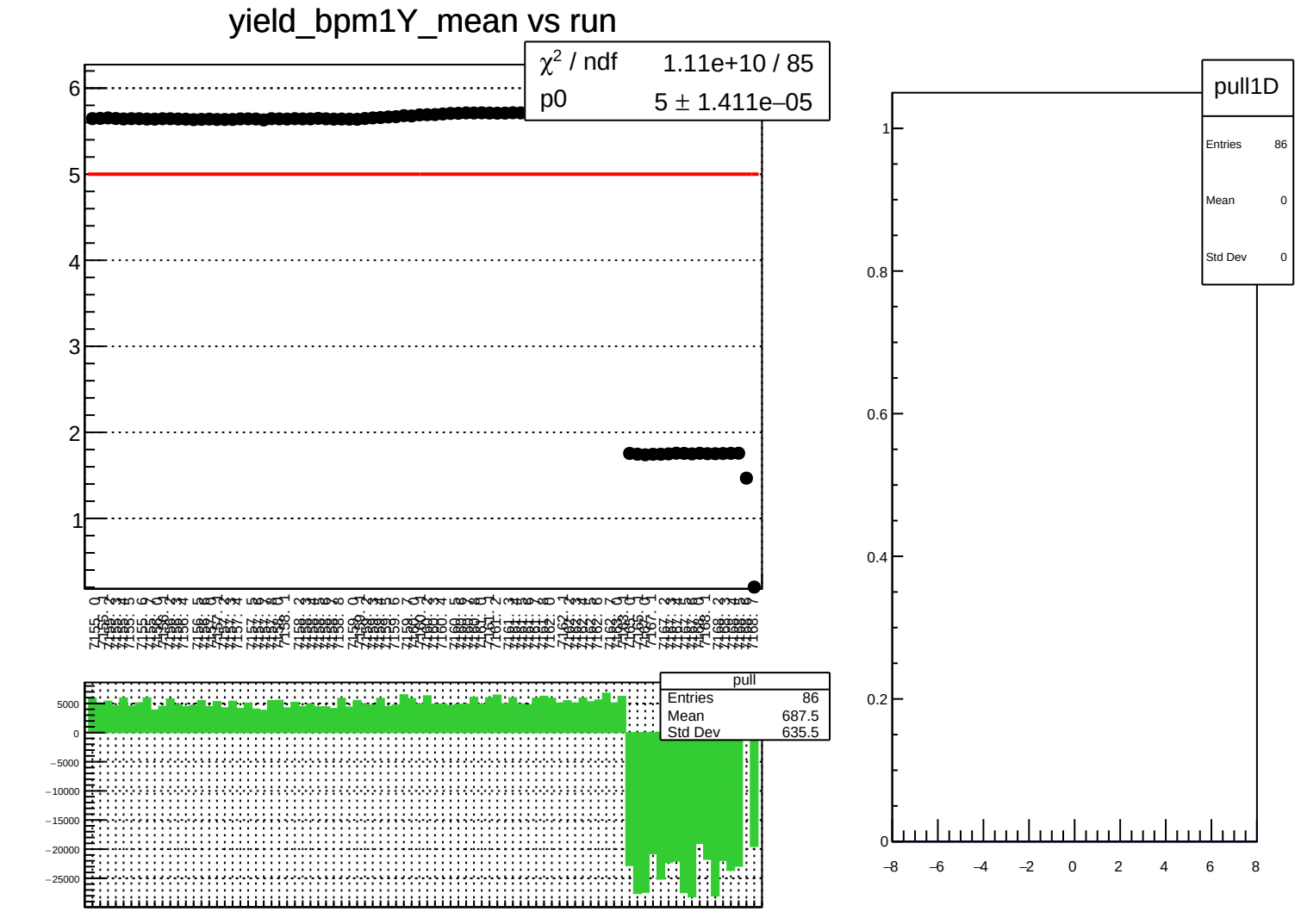

pull1D
Entries 86
Mean −0.8715
Std Dev 5.38
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

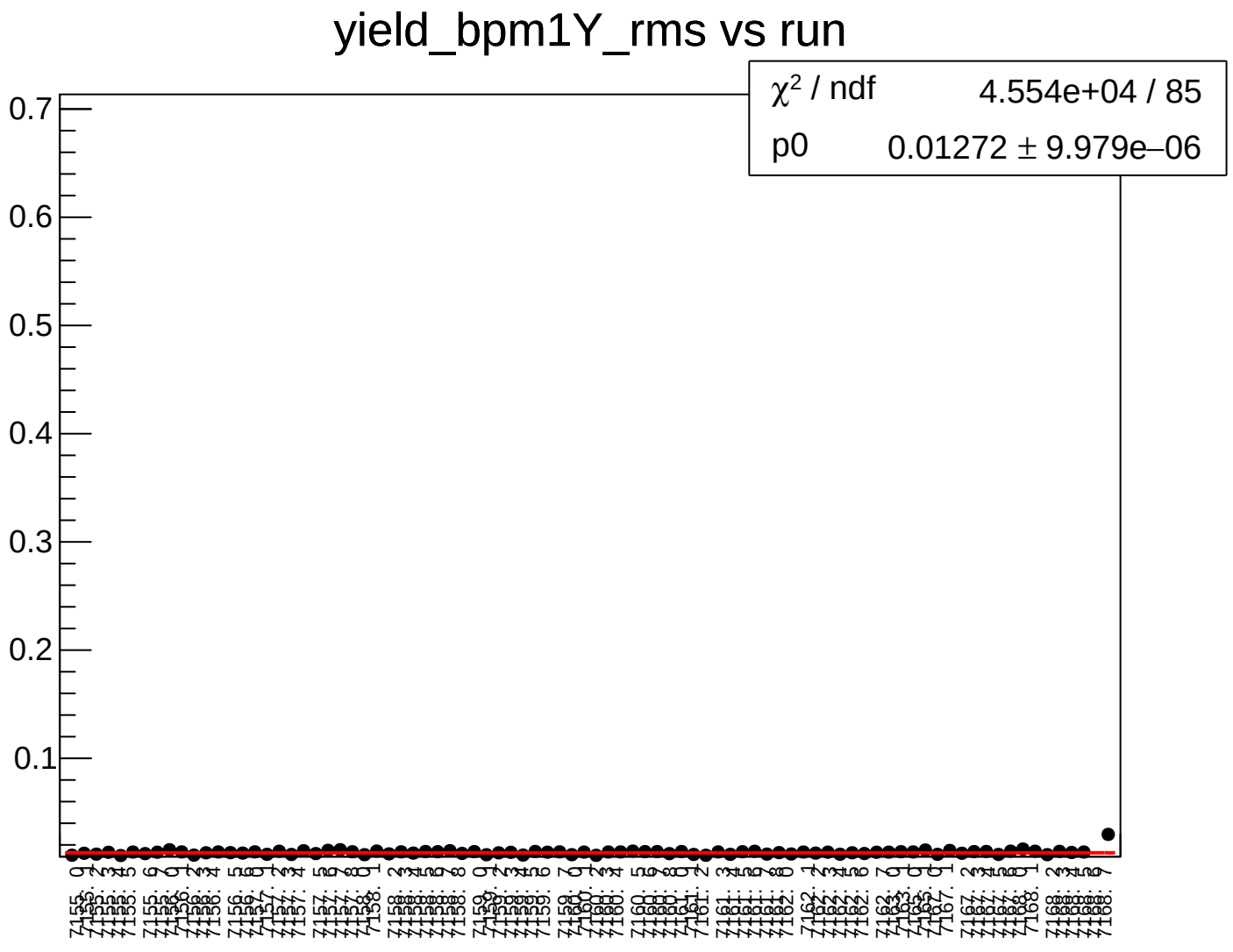

yield_bpm4ecY_rms vs run
χ² / ndf 6.022e+04 / 85
p0 0.01065 ± 8.393e–06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

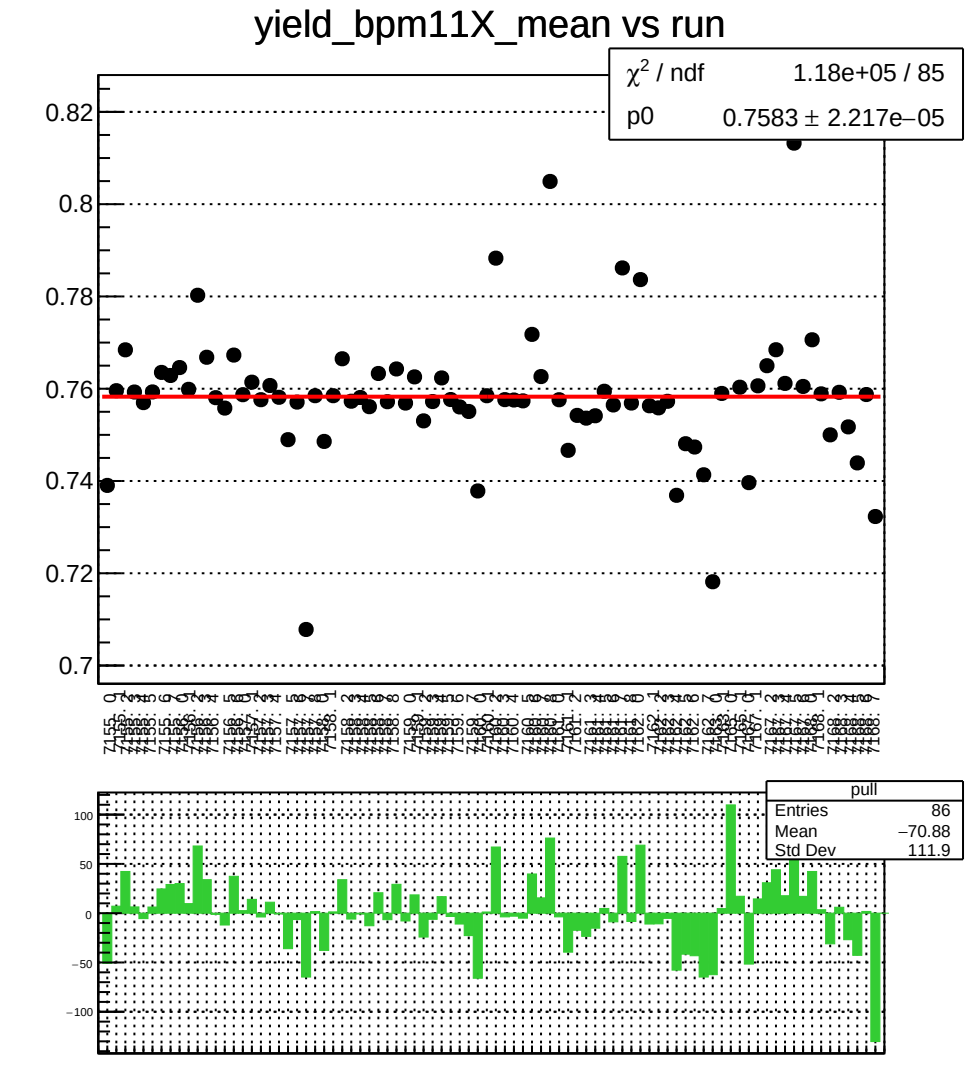

yield_bpm1X_mean vs run
χ² / ndf 1.054e+07 / 85
p0 2.435 ± 2.037e−05
2.5
2.45
2.4
2.35
2.3
2.25
pull
Entries 86
Mean −889
Std Dev 940.9
200
0
−200
−400
−600
−800
−1000
−1200

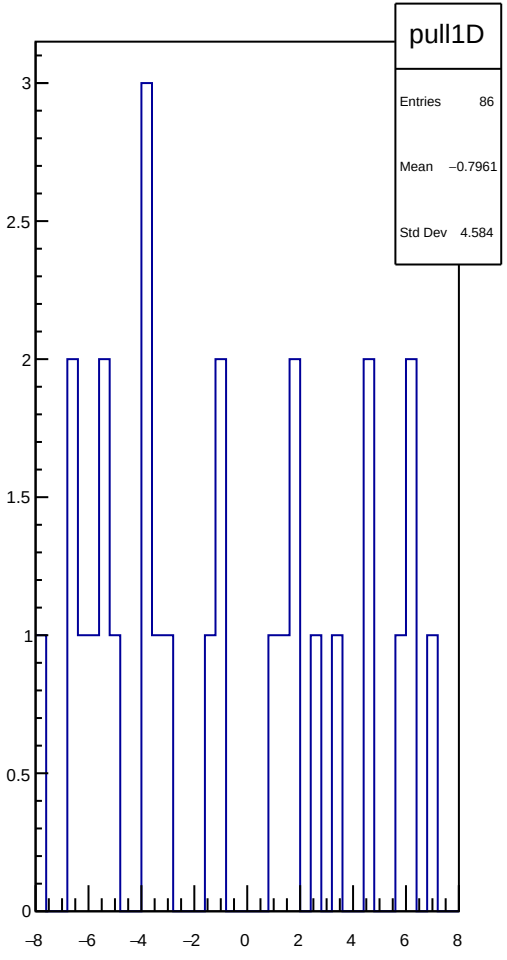

pull1D
Entries 86
Mean 5.283
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

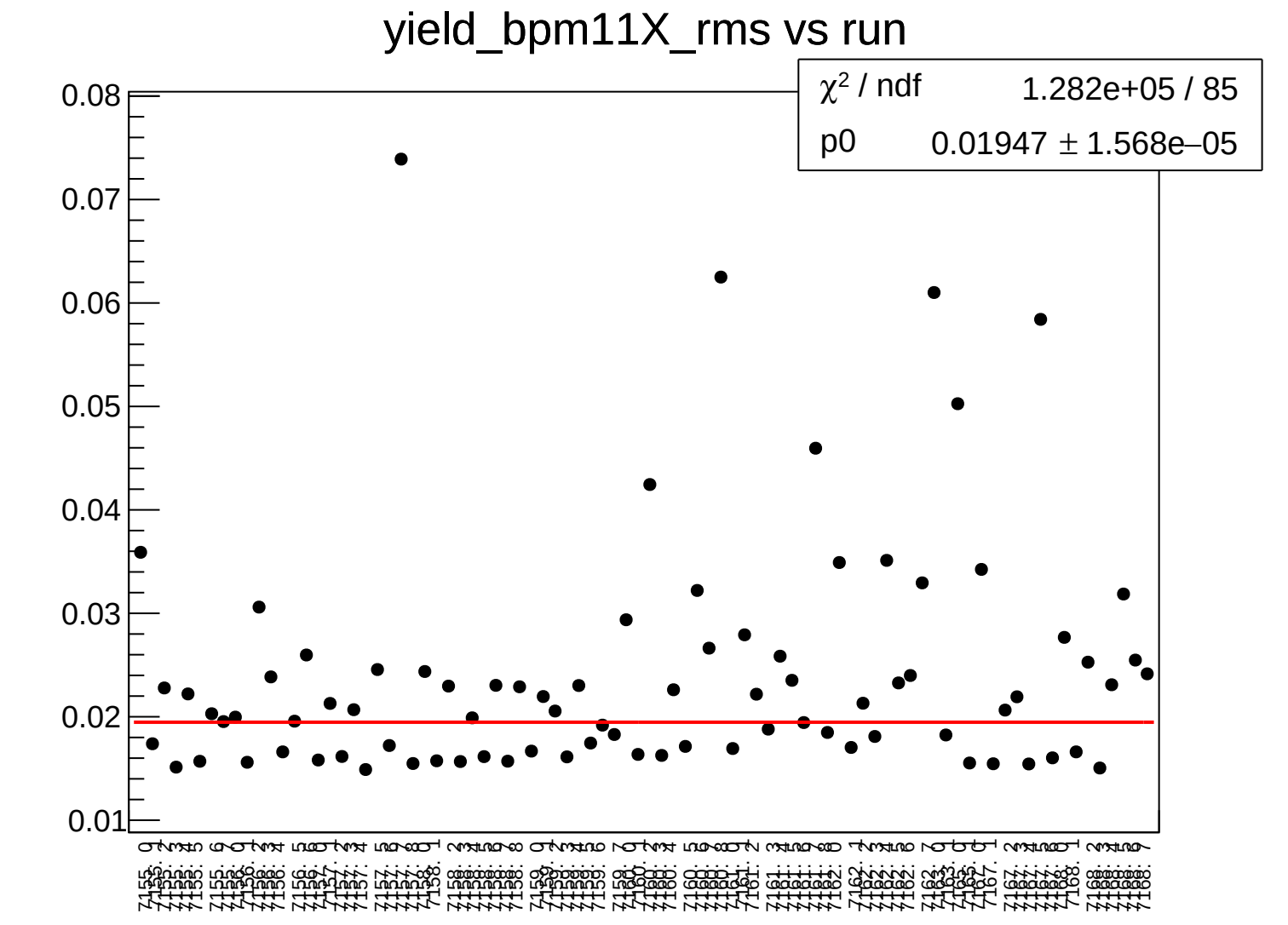

yield_bpm1X_rms vs run
χ² / ndf 1.994e+05 / 85
p0 0.01748 ± 1.441e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

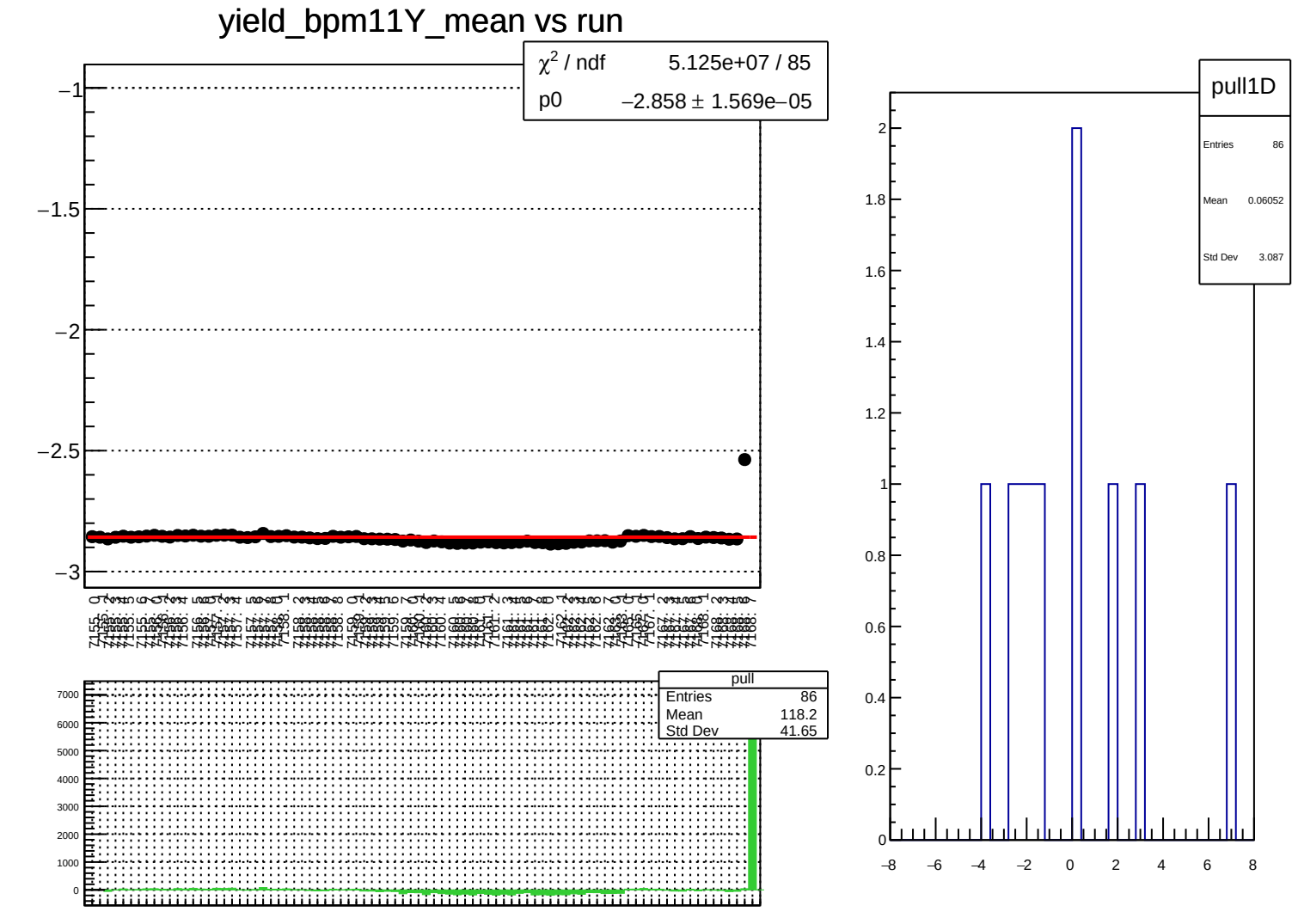

yield_bpm1Y_mean vs run
χ² / ndf 1.11e+10 / 85
p0 5 ± 1.411e–05
pull
Entries 86
Mean 687.5
Std Dev 635.5
pull1D
Entries 86
Mean 0
Std Dev 0

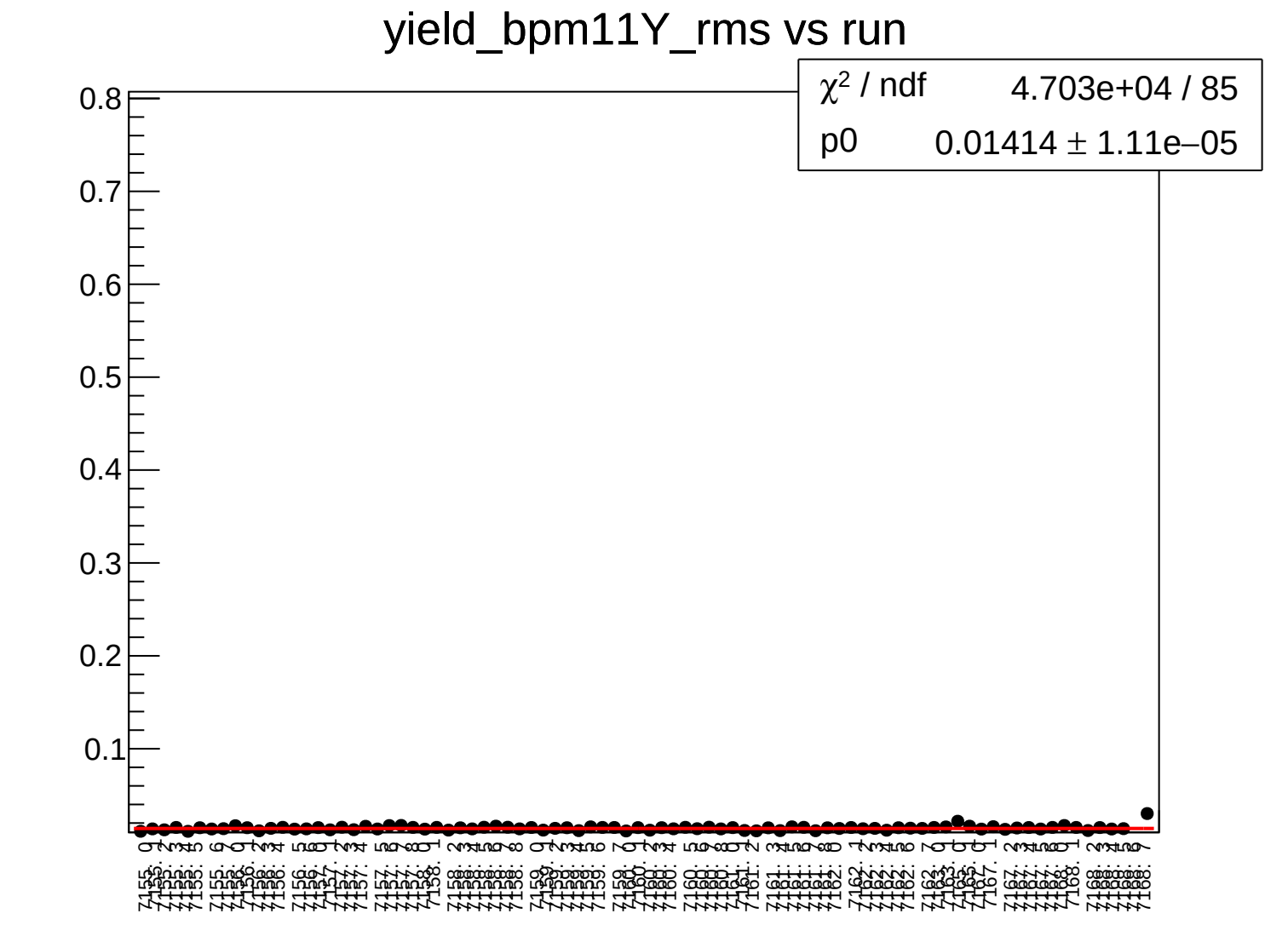

yield_bpm1Y_rms vs run
χ² / ndf 4.554e+04 / 85
p0 0.01272 ± 9.979e−06
0.7
0.6
0.5
0.4
0.3
0.2
0.1

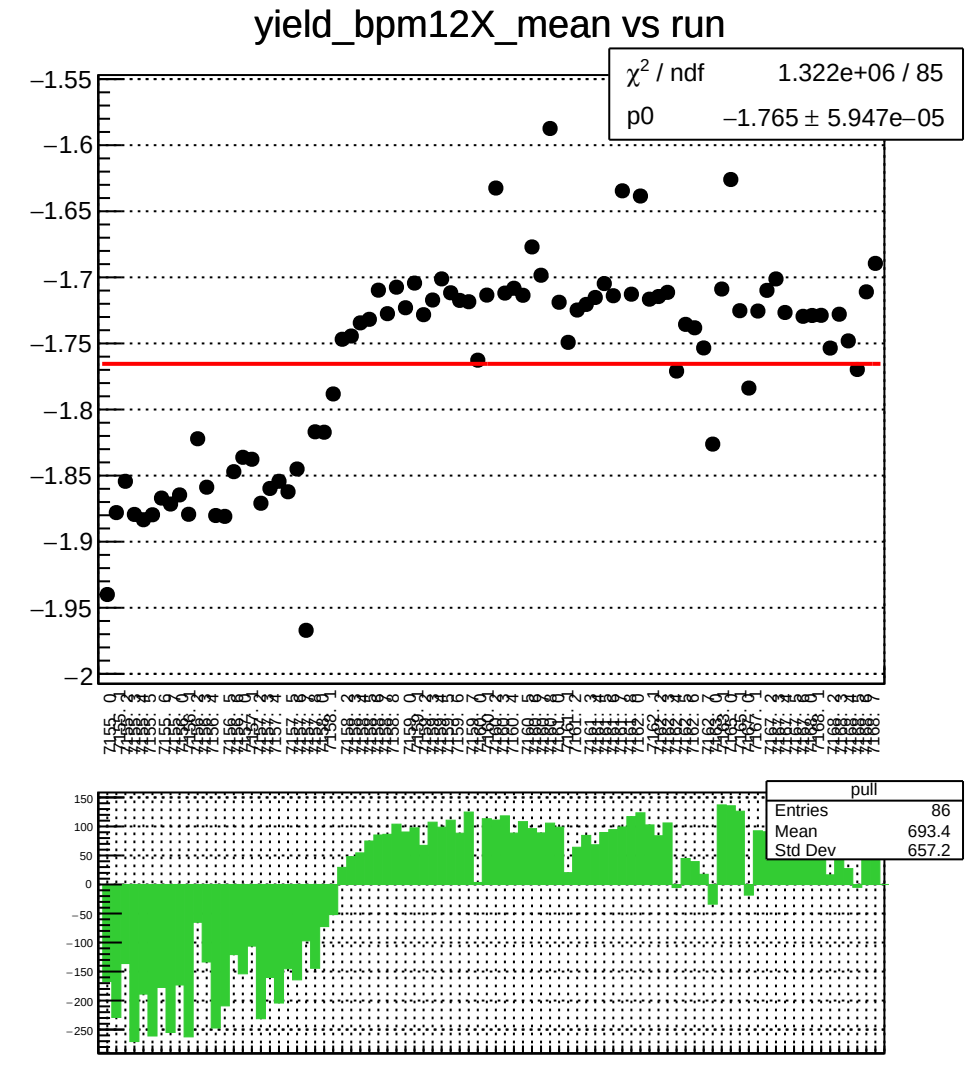

yield_bpm11X_mean vs run
χ² / ndf 1.18e+05 / 85
p0 0.7583 ± 2.217e−05
0.82
0.8
0.78
0.76
0.74
0.72
0.7
pull
Entries 86
Mean −70.88
Std Dev 111.9
100
50
0
−50
−100

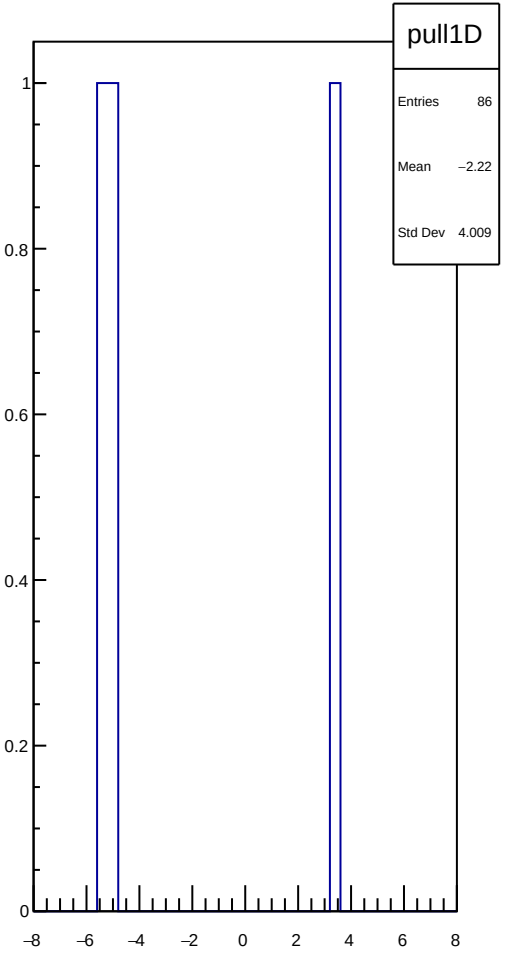

pull1D
Entries 86
Mean −0.7961
Std Dev 4.584
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

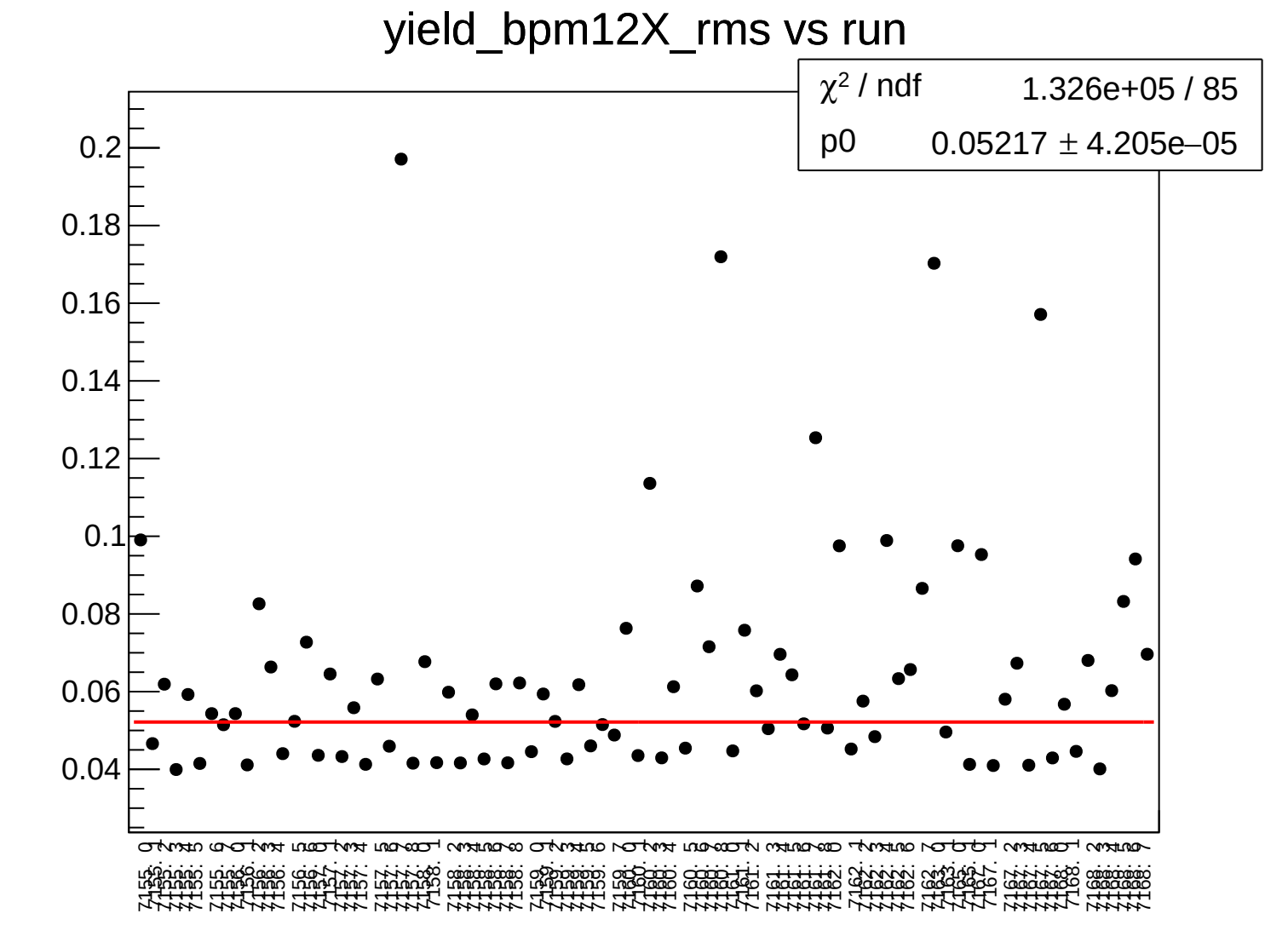

yield_bpm11X_rms vs run
χ² / ndf 1.282e+05 / 85
p0 0.01947 ± 1.568e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

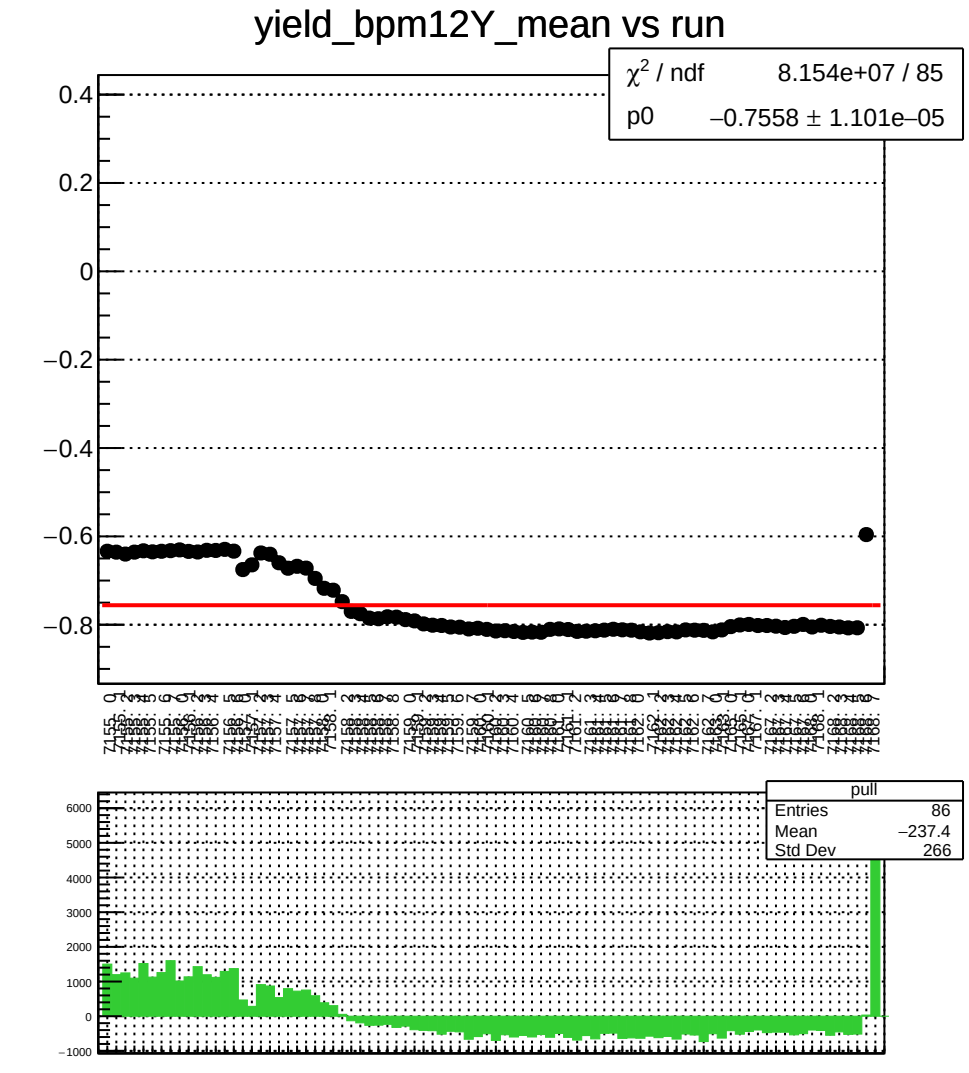

yield_bpm11Y_mean vs run
χ² / ndf 5.125e+07 / 85
p0 −2.858 ± 1.569e−05
pull
Entries 86
Mean 118.2
Std Dev 41.65
pull1D
Entries 86
Mean 0.06052
Std Dev 3.087

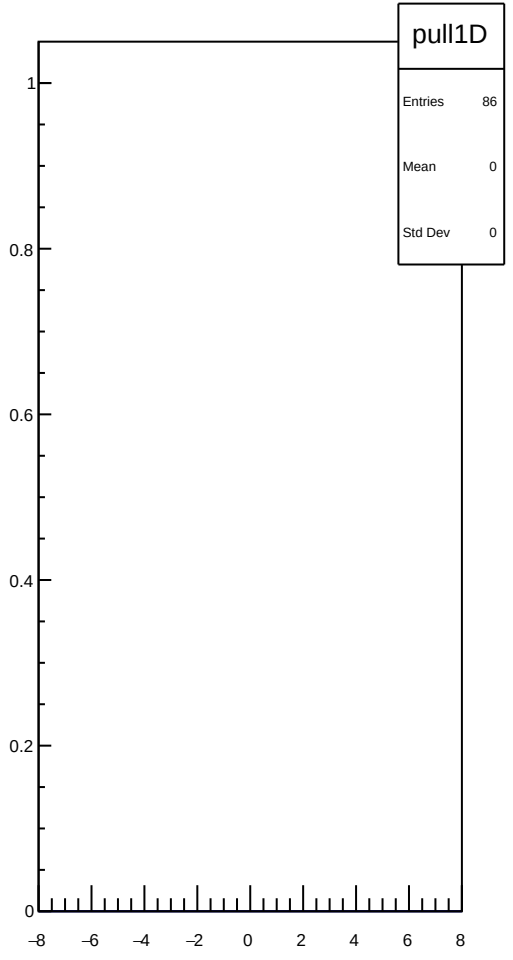

yield_bpm11Y_rms vs run
χ² / ndf 4.703e+04 / 85
p0 0.01414 ± 1.11e−05
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

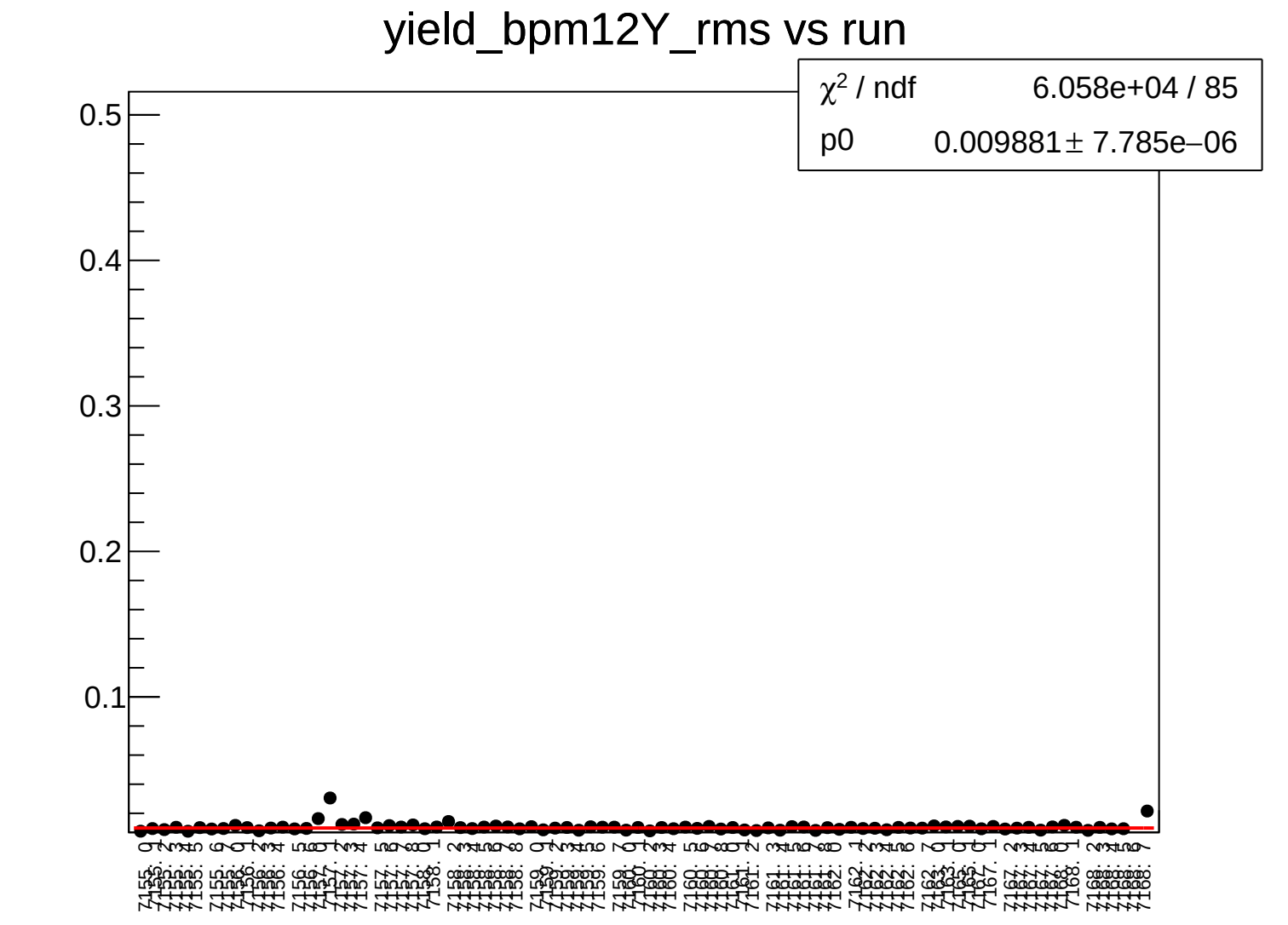

yield_bpm12X_mean vs run
χ² / ndf 1.322e+06 / 85
p0 −1.765 ± 5.947e−05
pull
Entries 86
Mean 693.4
Std Dev 657.2

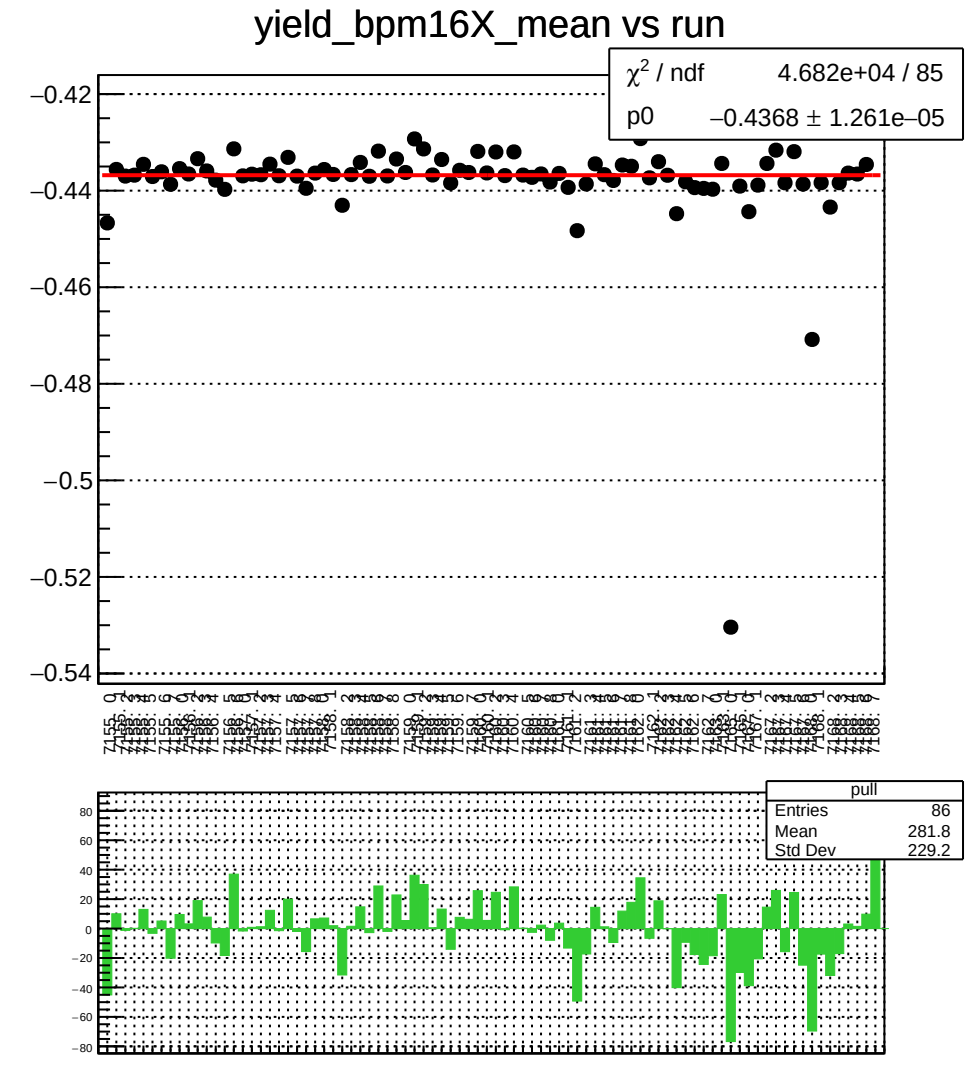

pull1D
Entries 86
Mean −2.22
Std Dev 4.009

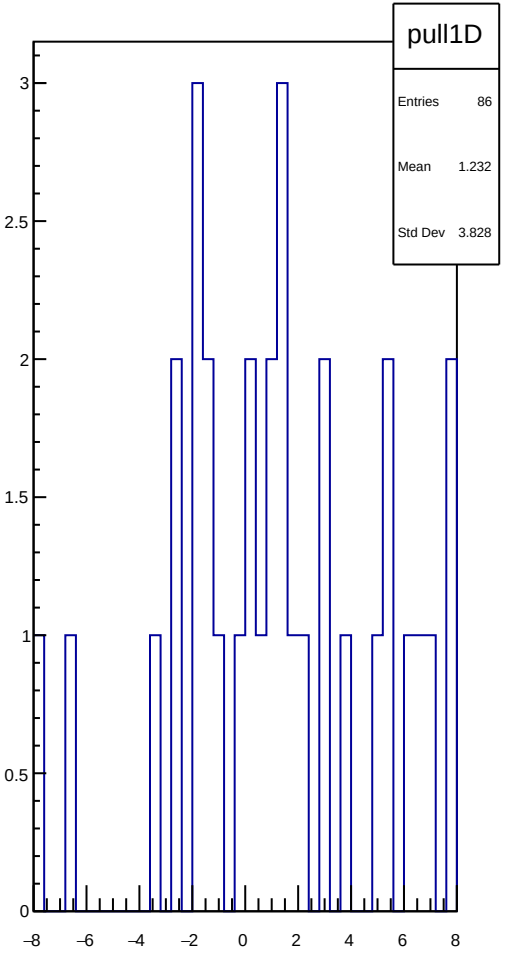

yield_bpm12X_rms vs run
χ² / ndf 1.326e+05 / 85
p0 0.05217 ± 4.205e–05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

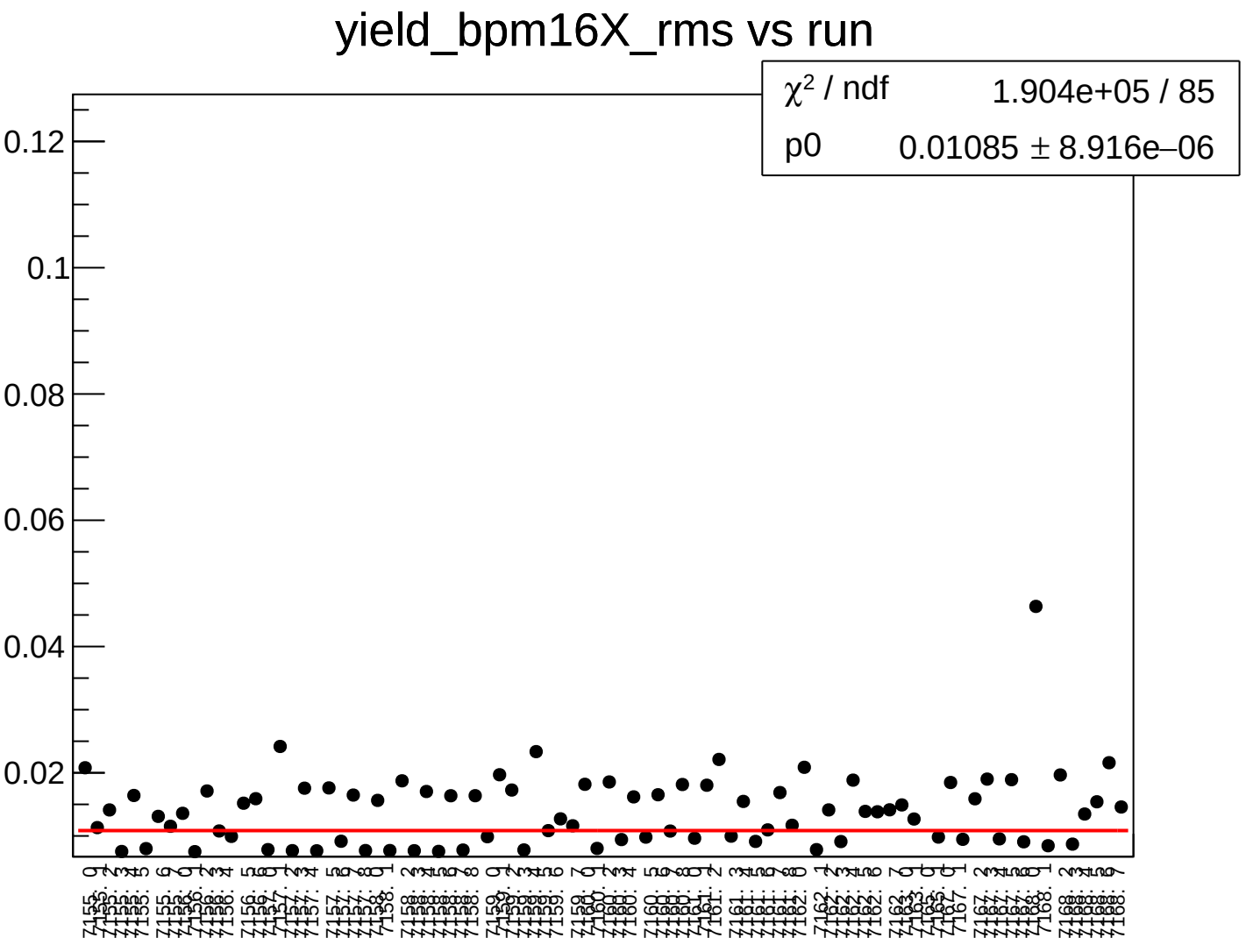

yield_bpm12Y_mean vs run
χ² / ndf 8.154e+07 / 85
p0 −0.7558 ± 1.101e−05
pull
Entries 86
Mean −237.4
Std Dev 266

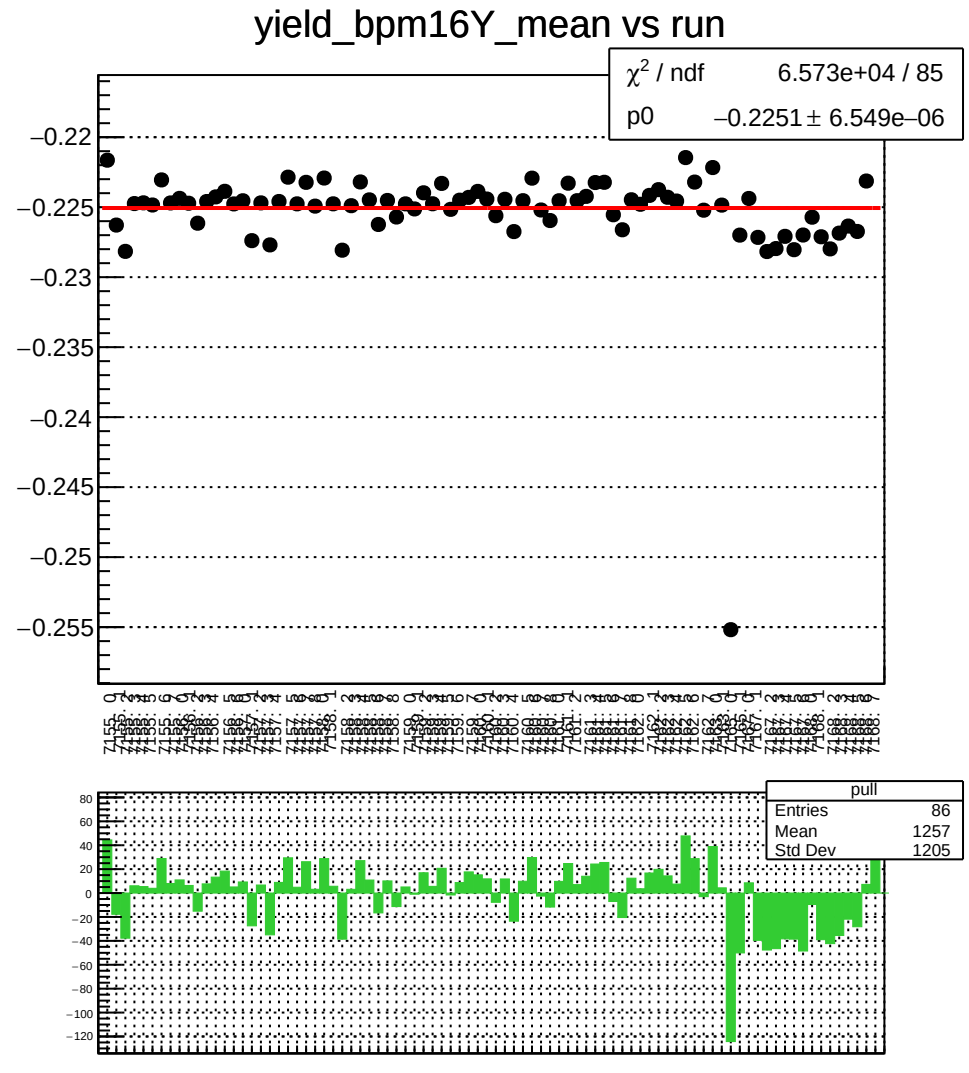

pull1D
Entries 86
Mean 0
Std Dev 0

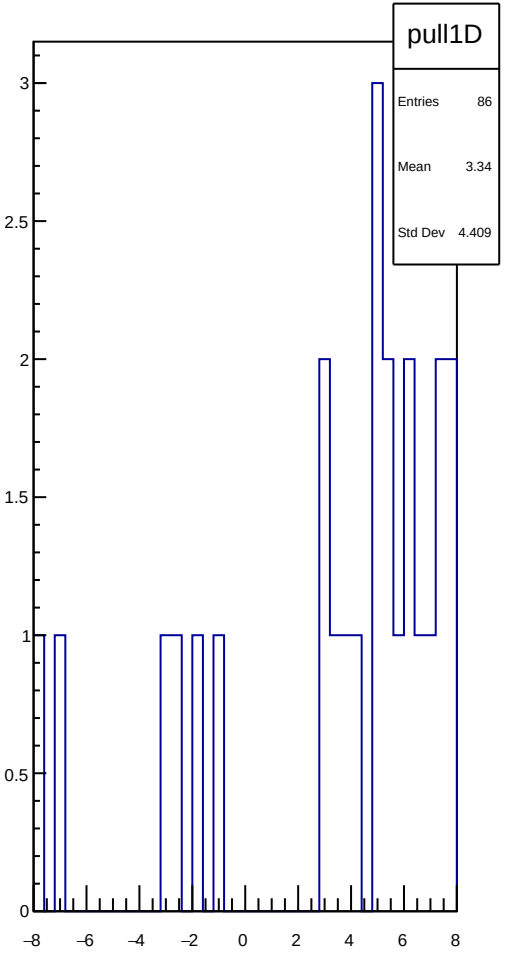

yield_bpm12Y_rms vs run
χ^2 / ndf 6.058e+04 / 85
p0 0.009881 ± 7.785e−06
0.5
0.4
0.3
0.2
0.1

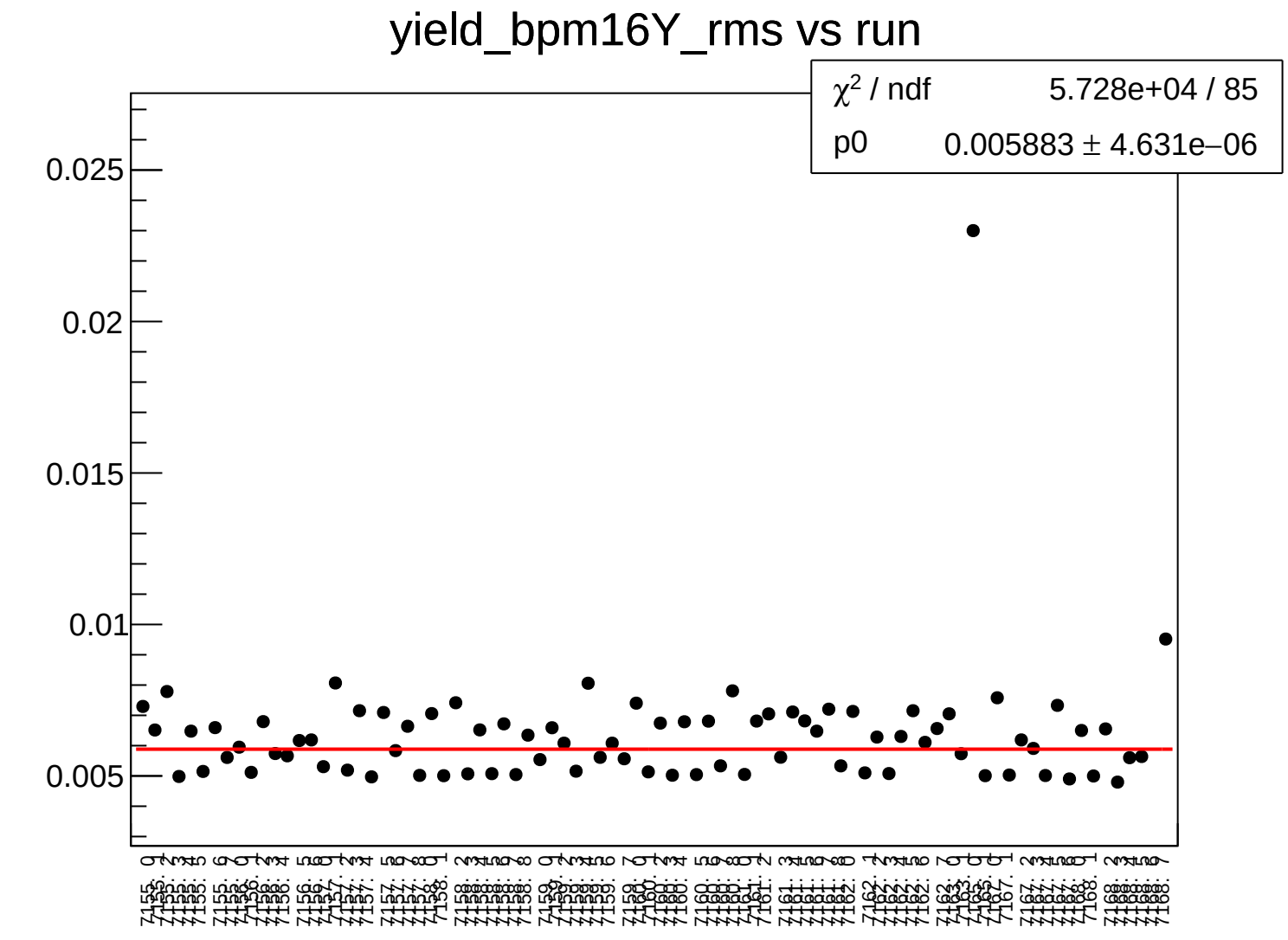

yield_bpm16X_mean vs run
χ² / ndf 4.682e+04 / 85
p0 −0.4368 ± 1.261e−05
−0.42
−0.44
−0.46
−0.48
−0.5
−0.52
−0.54
pull
Entries 86
Mean 281.8
Std Dev 229.2
80
60
40
20
0
−20
−40
−60
−80

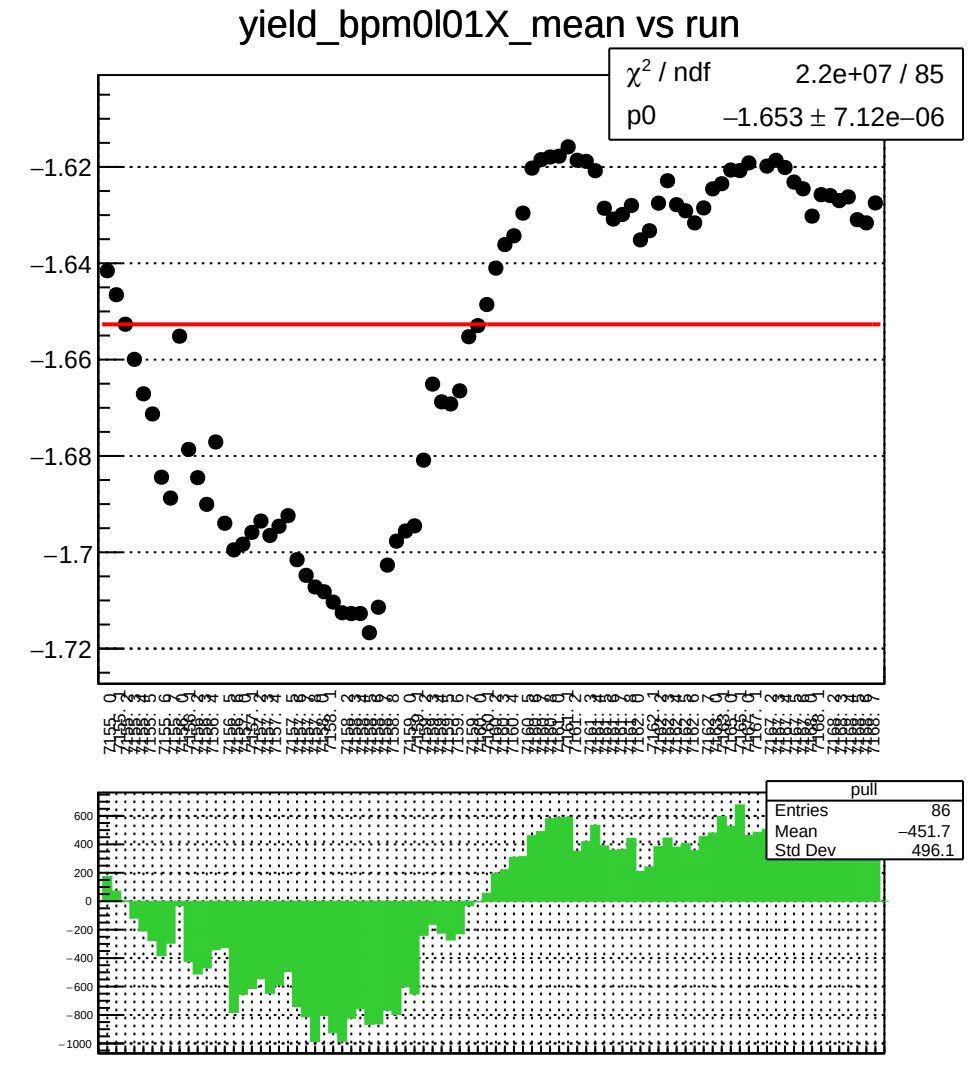

pull1D
Entries 86
Mean 1.232
Std Dev 3.828
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

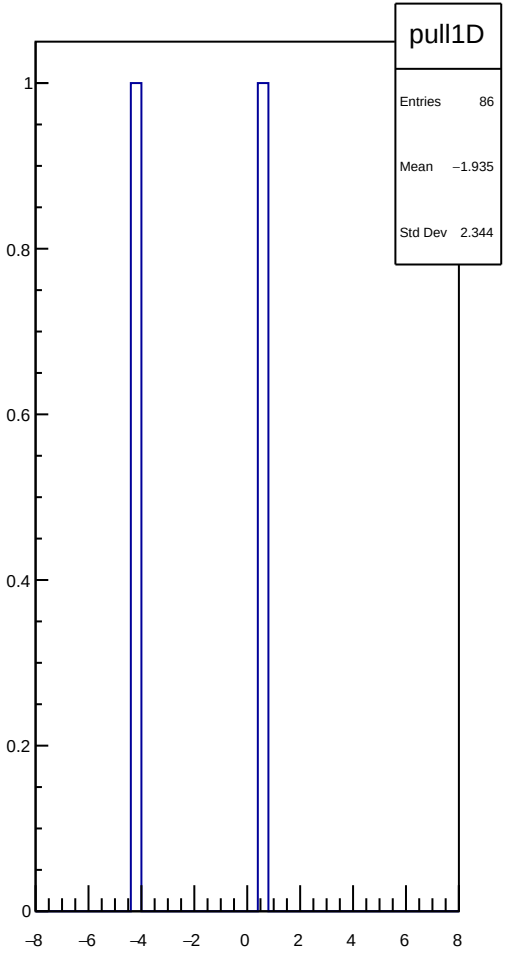

yield_bpm16X_rms vs run
χ² / ndf 1.904e+05 / 85
p0 0.01085 ± 8.916e–06
0.12
0.1
0.08
0.06
0.04
0.02

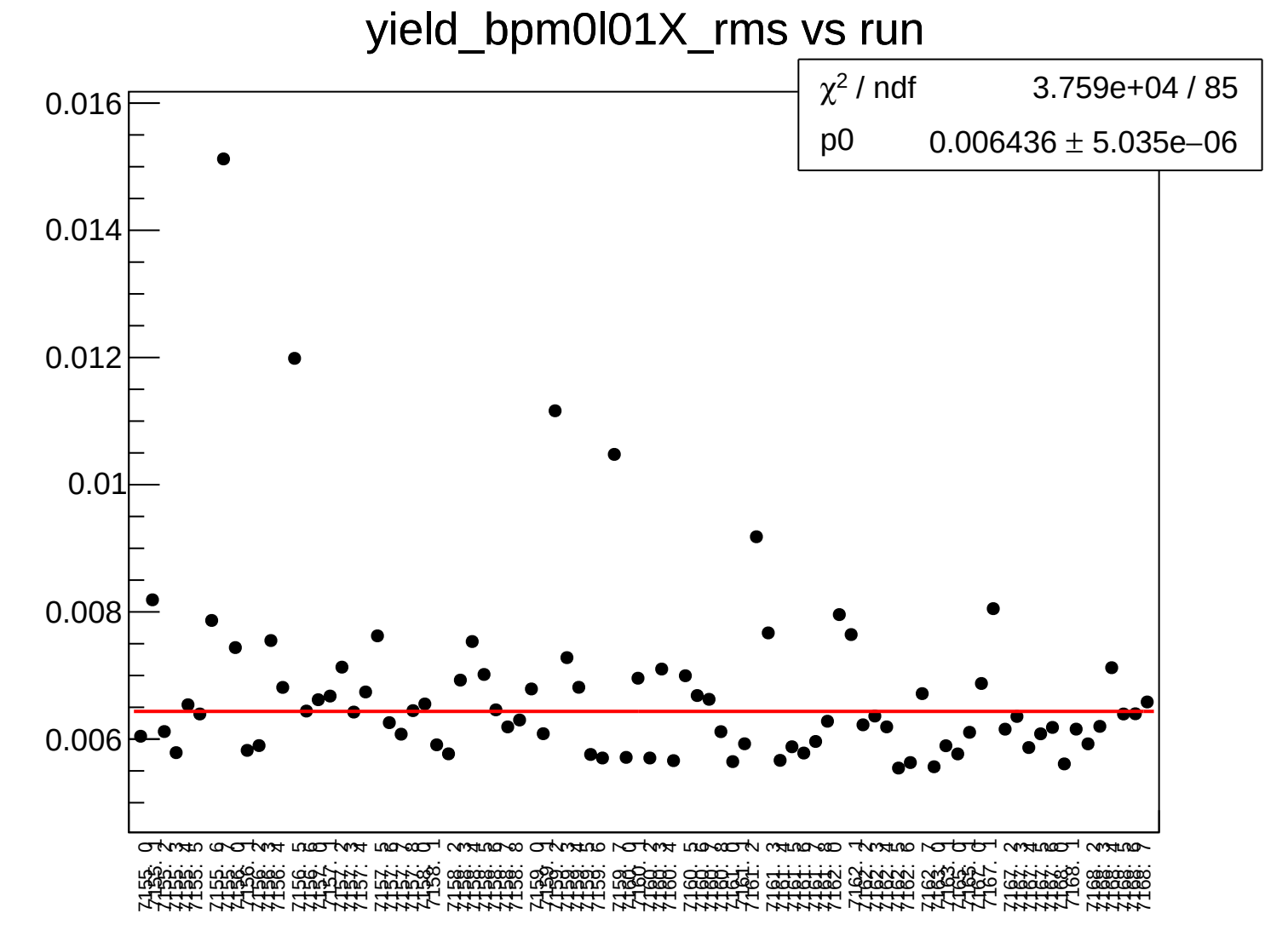

yield_bpm16Y_mean vs run
χ² / ndf 6.573e+04 / 85
p0 −0.2251 ± 6.549e−06
−0.22
−0.225
−0.23
−0.235
−0.24
−0.245
−0.25
−0.255
pull
Entries 86
Mean 1257
Std Dev 1205
80
60
40
20
0
−20
−40
−60
−80
−100
−120

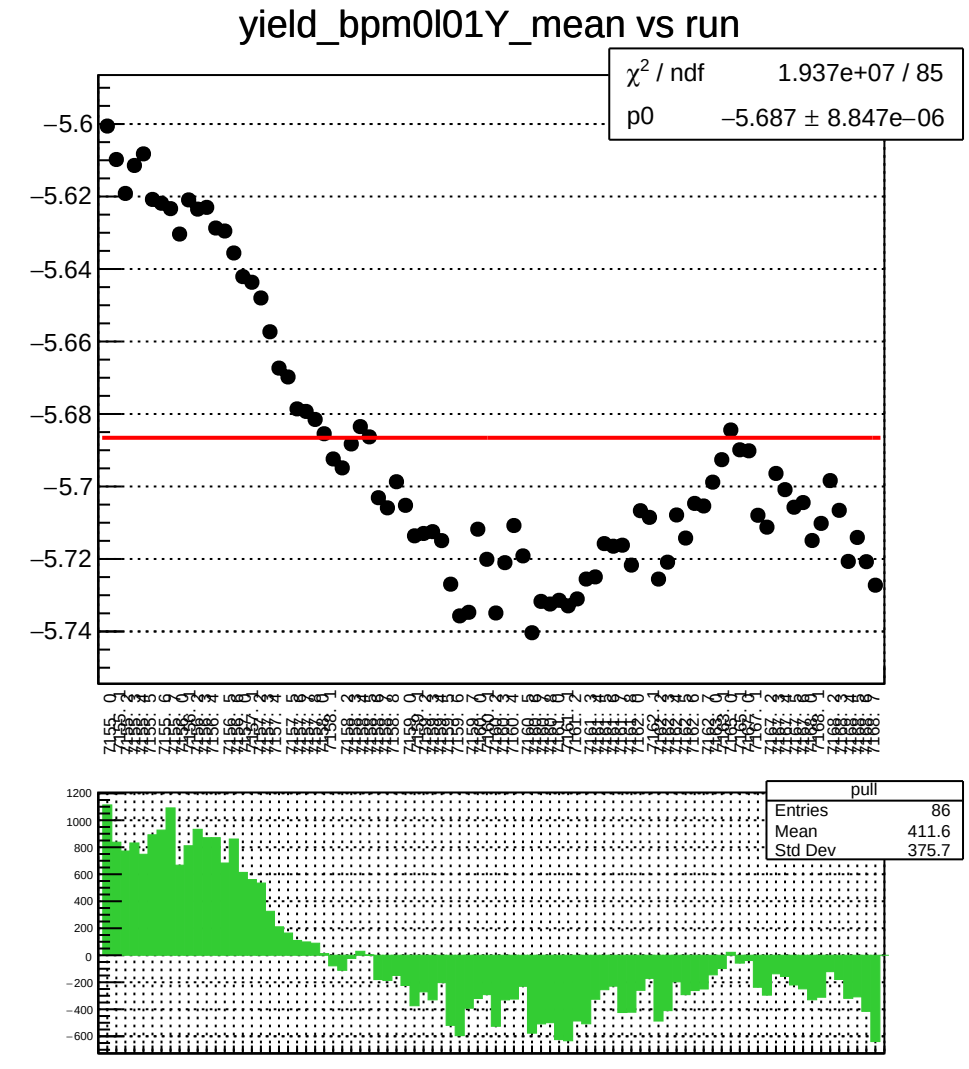

pull1D
Entries 86
Mean 3.34
Std Dev 4.409
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

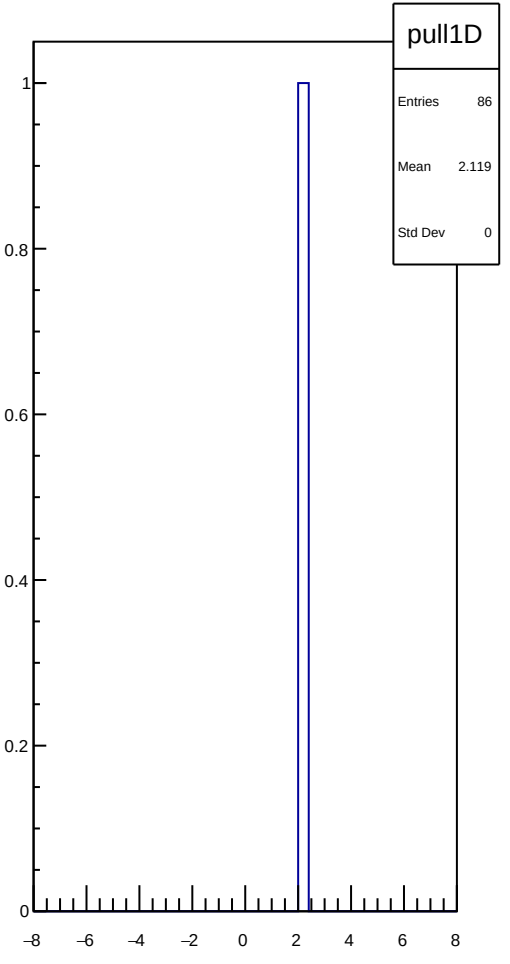

yield_bpm16Y_rms vs run
χ^2 / ndf 5.728e+04 / 85
p0 0.005883 ± 4.631e−06
0.025
0.02
0.015
0.01
0.005

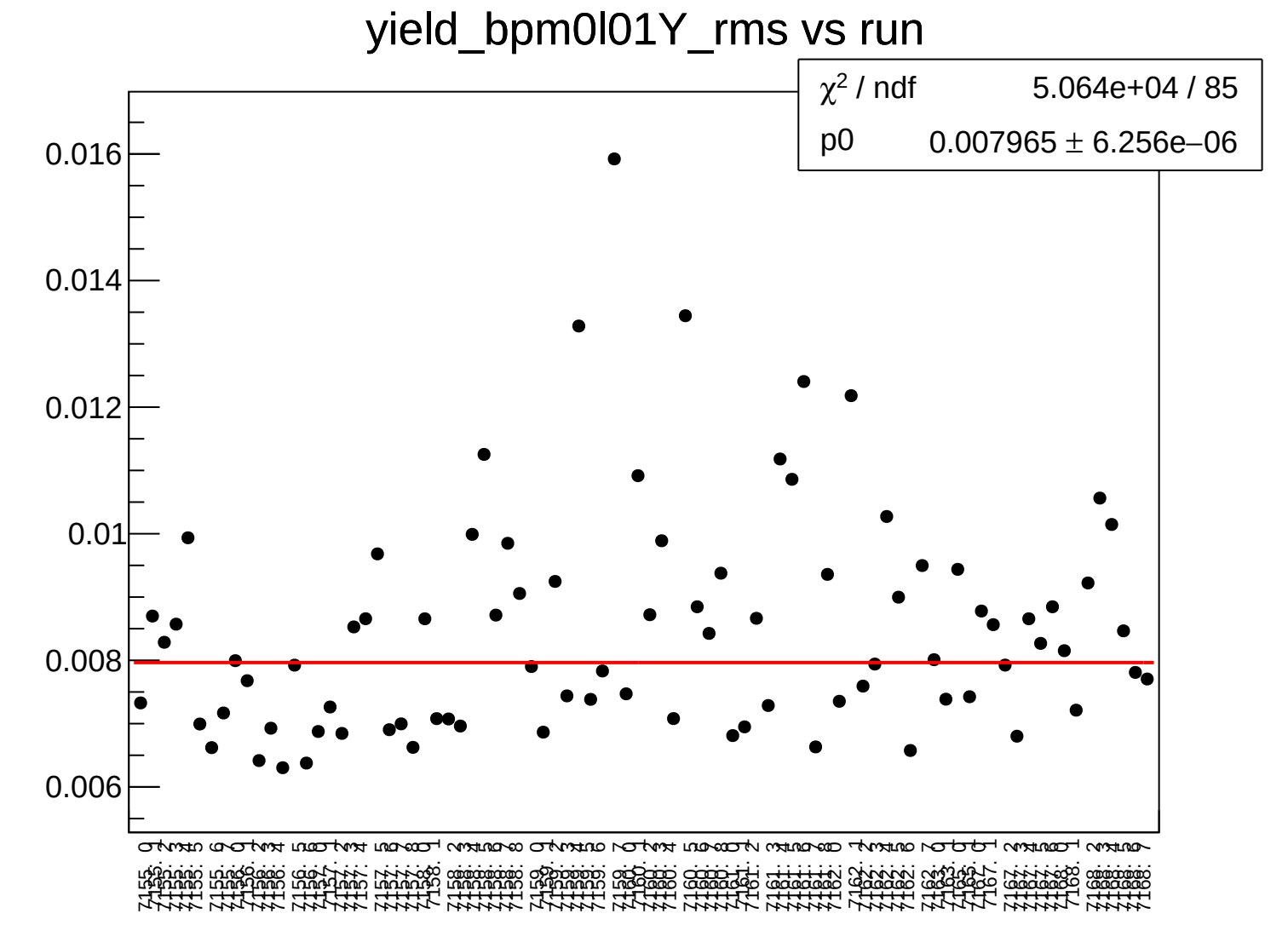

yield_bpm0l01X_mean vs run
χ² / ndf 2.2e+07 / 85
p0 −1.653 ± 7.12e−06
−1.62
−1.64
−1.66
−1.68
−1.7
−1.72
pull
Entries 86
Mean −451.7
Std Dev 496.1
600
400
200
0
−200
−400
−600
−800
−1000

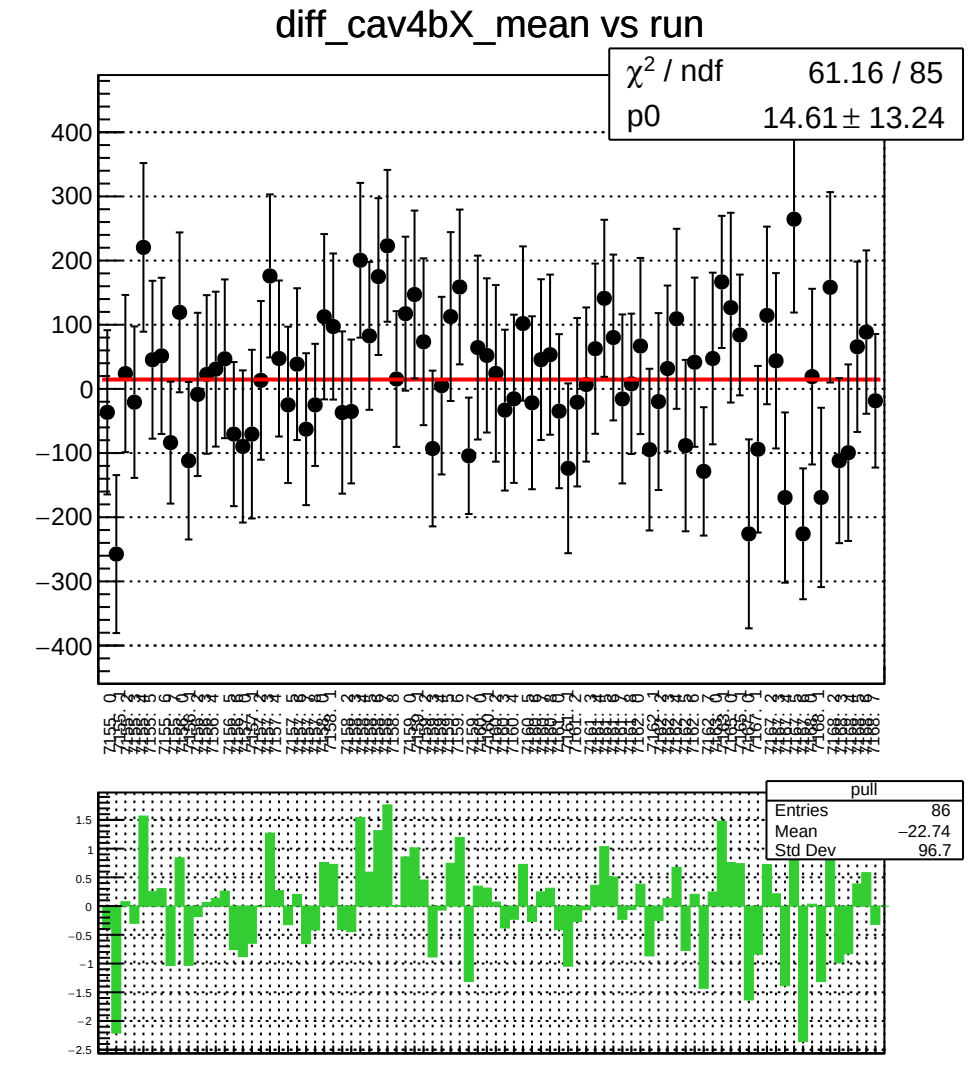

pull1D
Entries 86
Mean −1.935
Std Dev 2.344
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

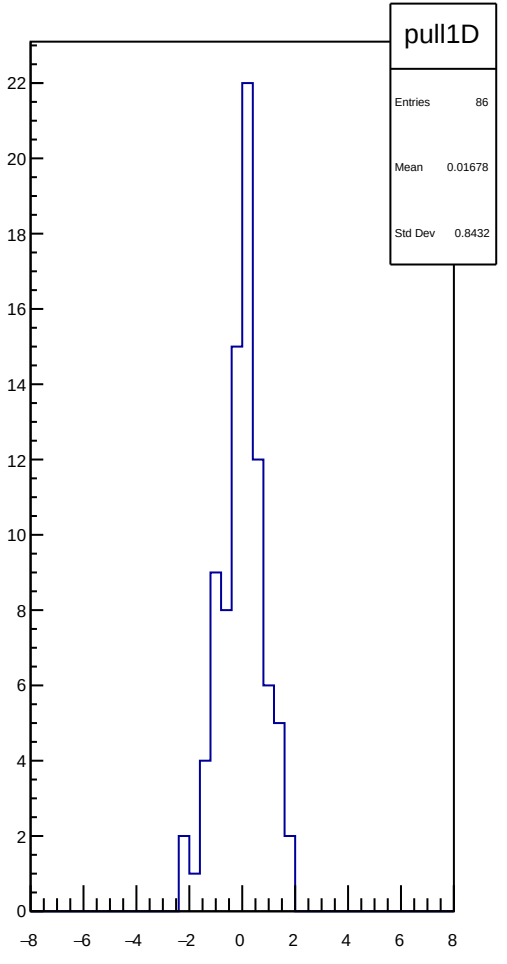

yield_bpm0l01X_rms vs run
χ² / ndf 3.759e+04 / 85
p0 0.006436 ± 5.035e−06
0.016
0.014
0.012
0.01
0.008
0.006

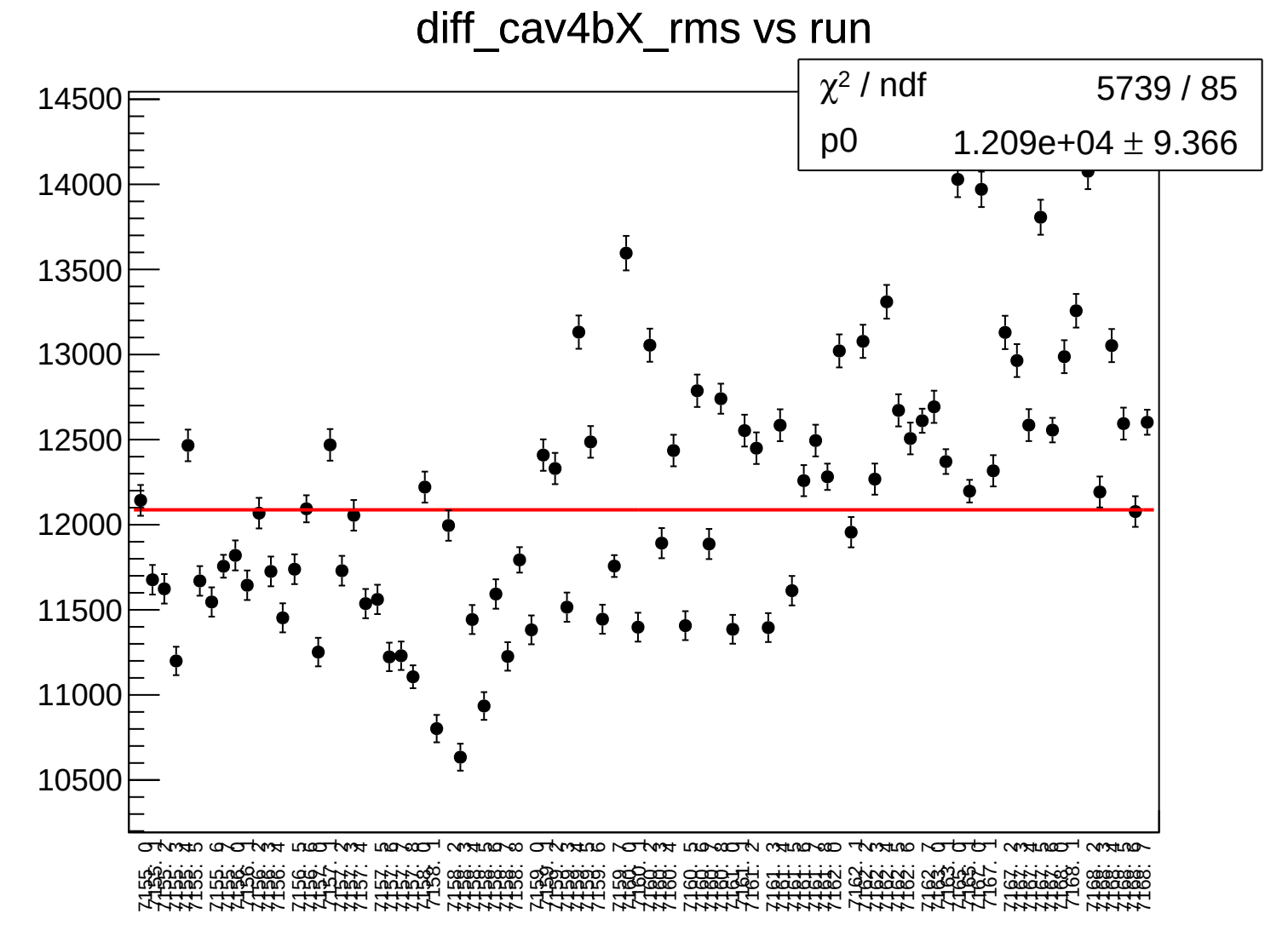

yield_bpm0l01Y_mean vs run
χ² / ndf 1.937e+07 / 85
p0 −5.687 ± 8.847e−06
−5.6
−5.62
−5.64
−5.66
−5.68
−5.7
−5.72
−5.74
pull
Entries 86
Mean 411.6
Std Dev 375.7
1200
1000
800
600
400
200
0
−200
−400
−600

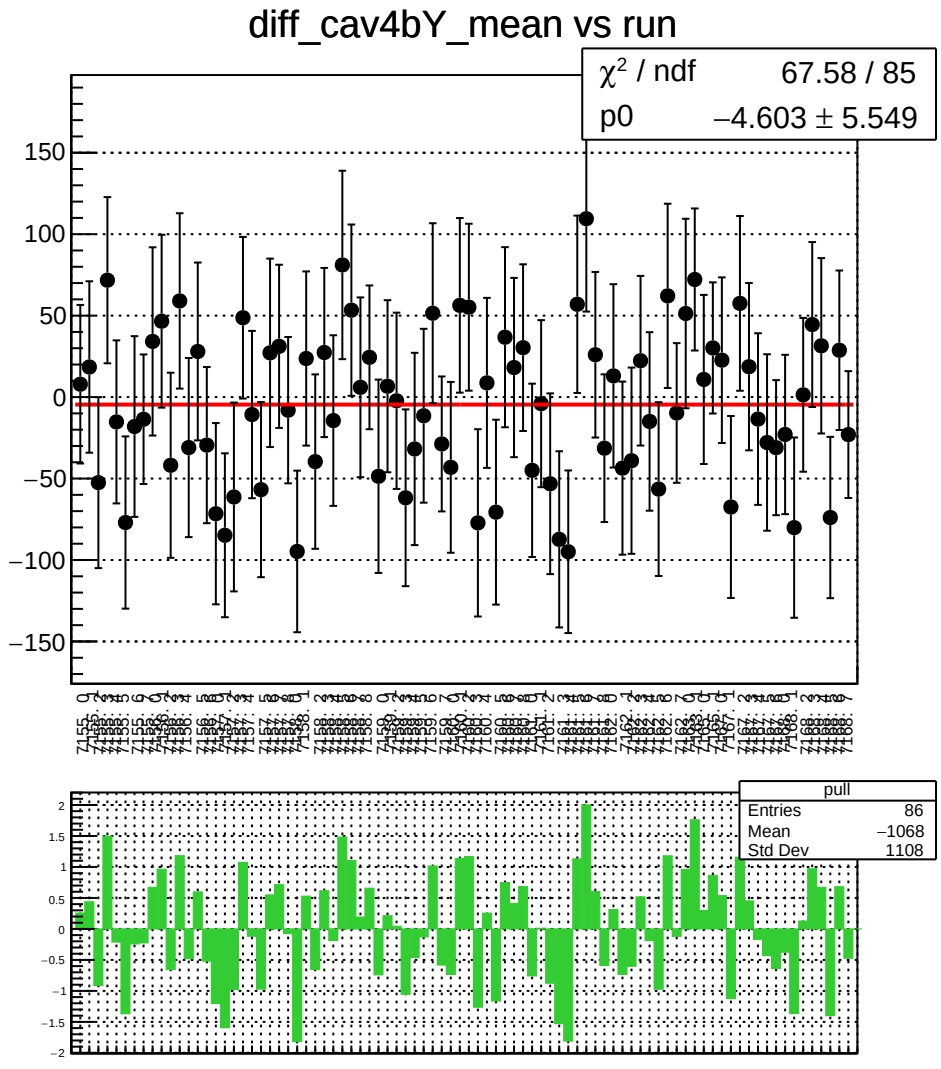

pull1D
Entries 86
Mean 2.119
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

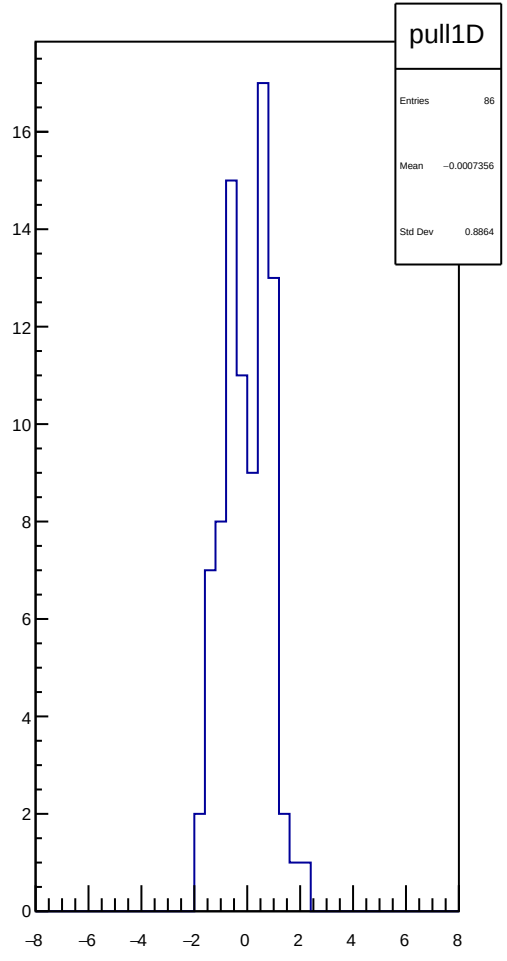

yield_bpm0l01Y_rms vs run
χ² / ndf 5.064e+04 / 85
p0 0.007965 ± 6.256e−06
0.016
0.014
0.012
0.01
0.008
0.006

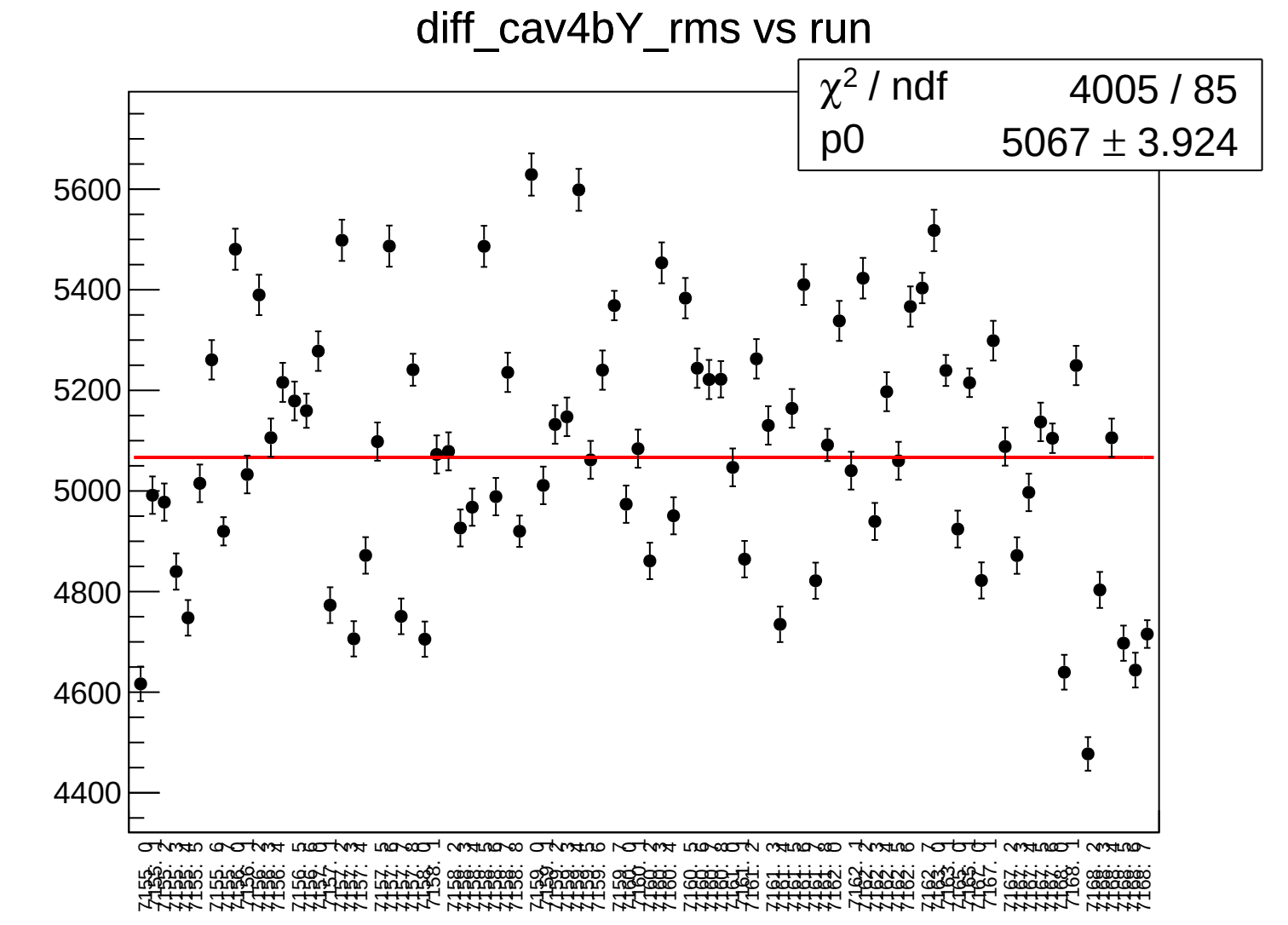

diff_cav4bX_mean vs run
χ² / ndf 61.16 / 85
p0 14.61 ± 13.24
pull
Entries 86
Mean −22.74
Std Dev 96.7

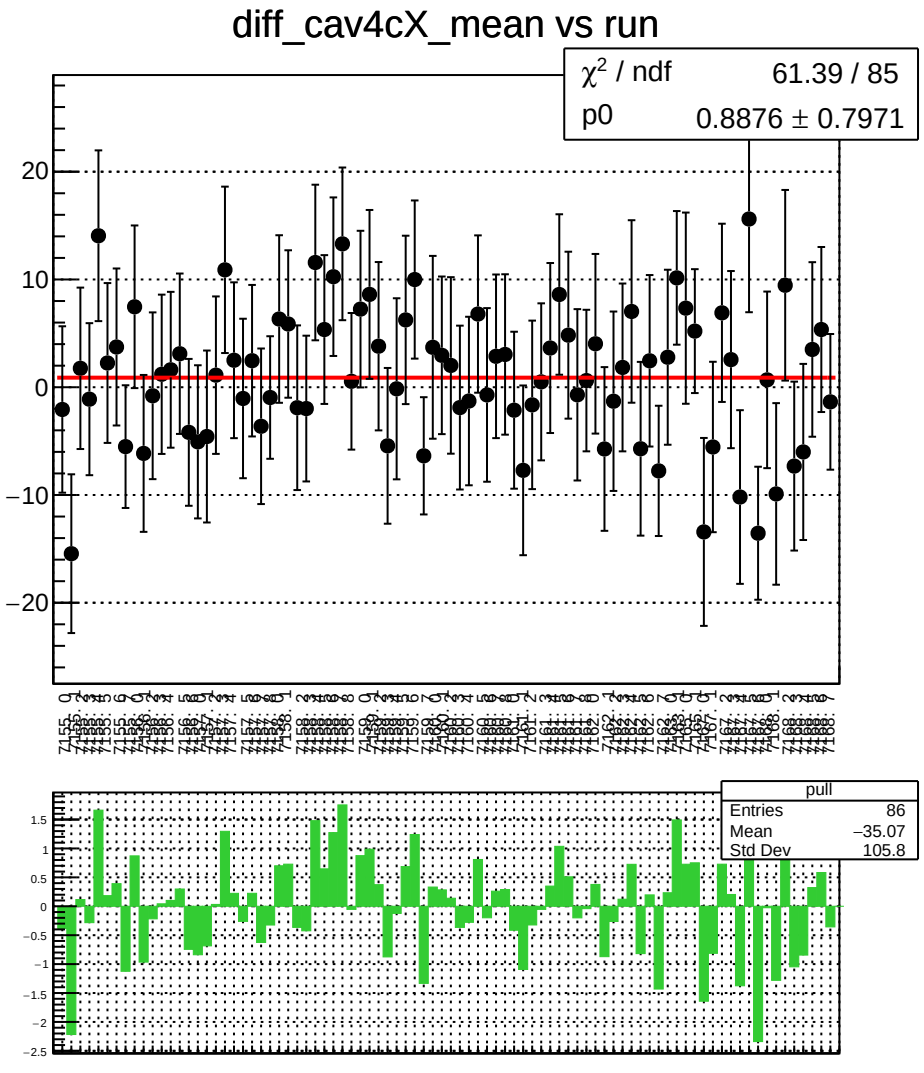

pull1D
Entries 86
Mean 0.01678
Std Dev 0.8432

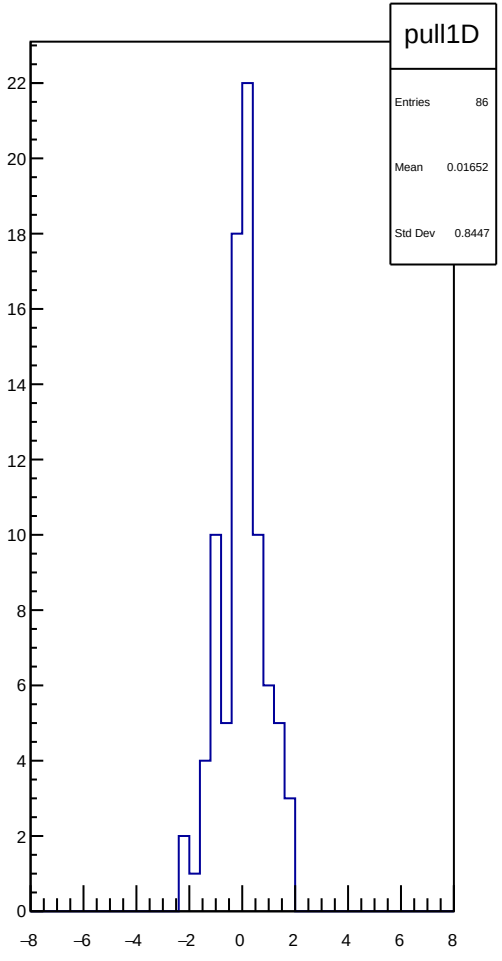

diff_cav4bX_rms vs run
χ² / ndf 5739 / 85
p0 1.209e+04 ± 9.366
14500
14000
13500
13000
12500
12000
11500
11000
10500

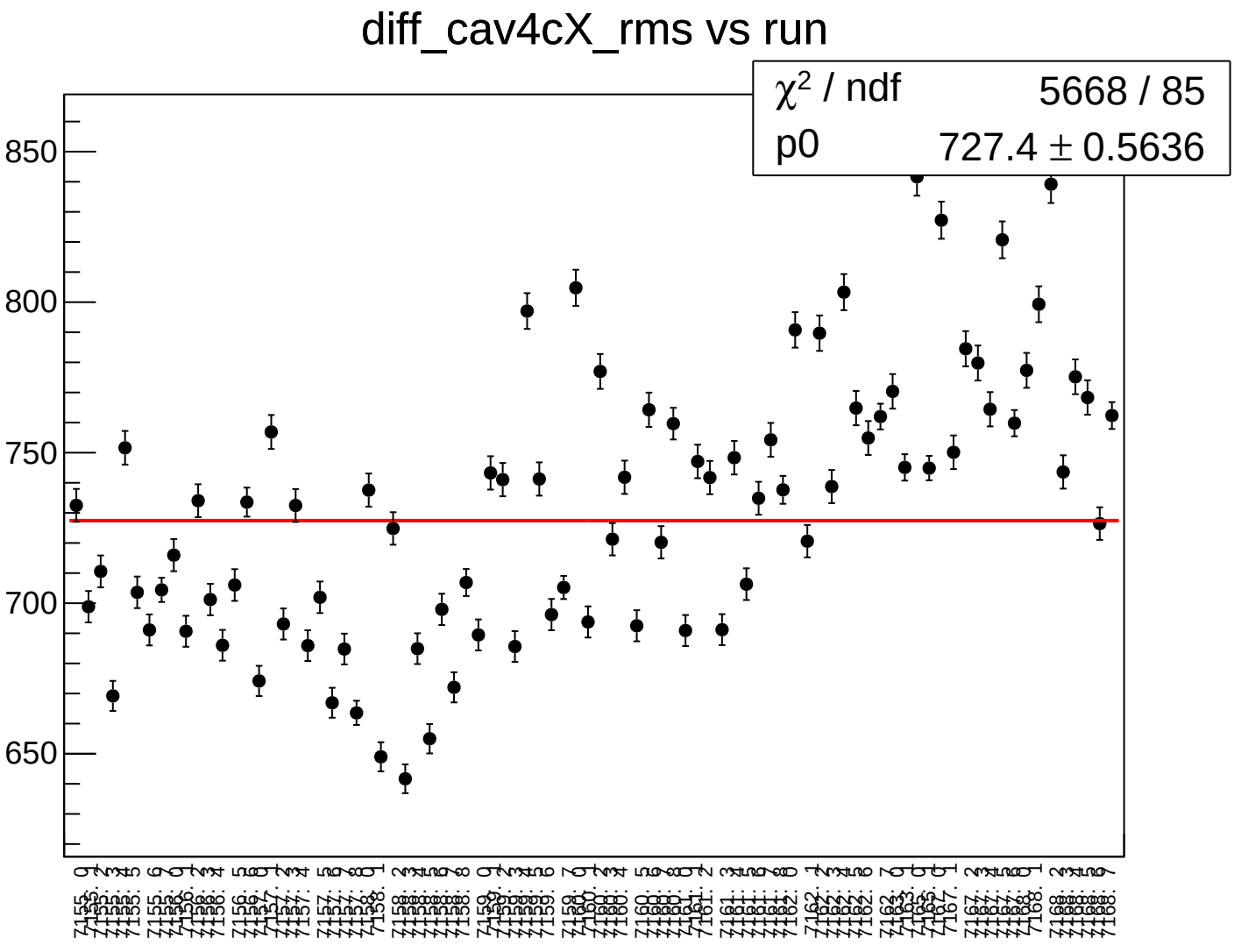

diff_cav4bY_mean vs run
χ² / ndf 67.58 / 85
p0 −4.603 ± 5.549
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean −1068
Std Dev 1108
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

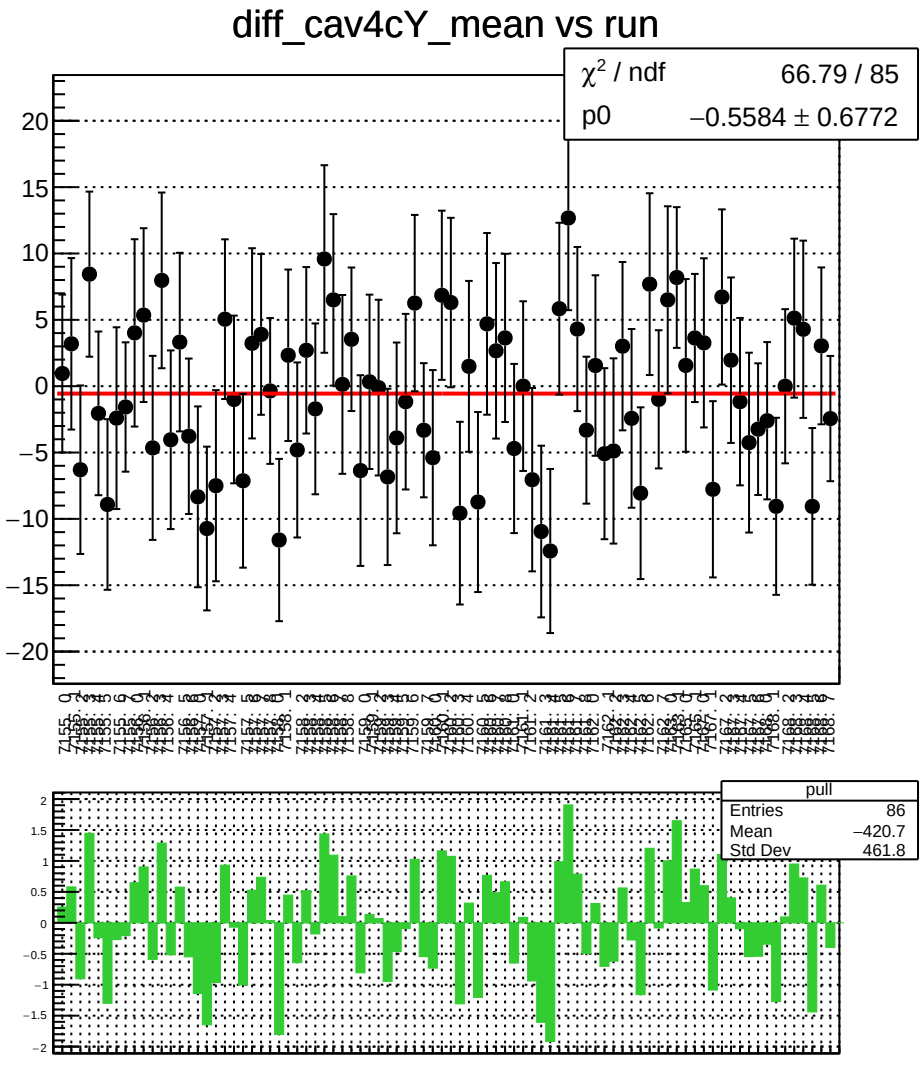

pull1D
Entries 86
Mean −0.0007356
Std Dev 0.8864
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

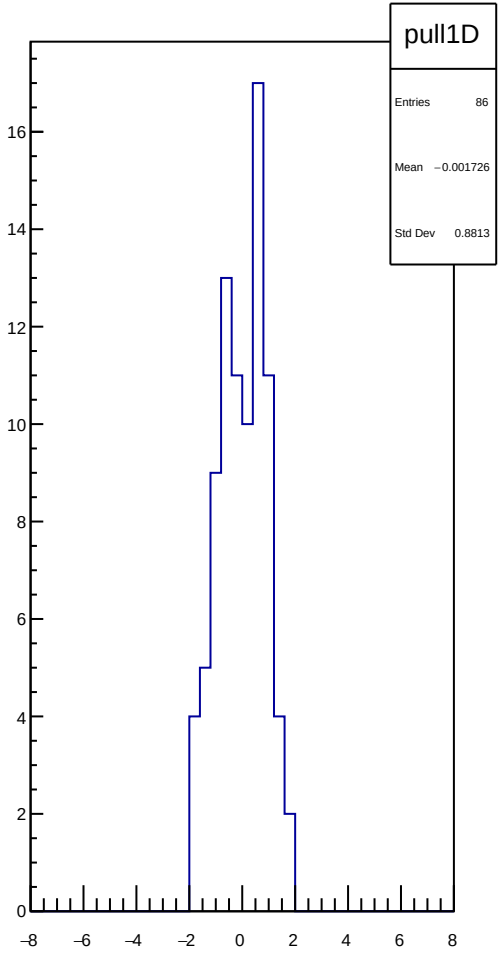

diff_cav4bY_rms vs run
χ² / ndf 4005 / 85
p0 5067 ± 3.924
5600
5400
5200
5000
4800
4600
4400

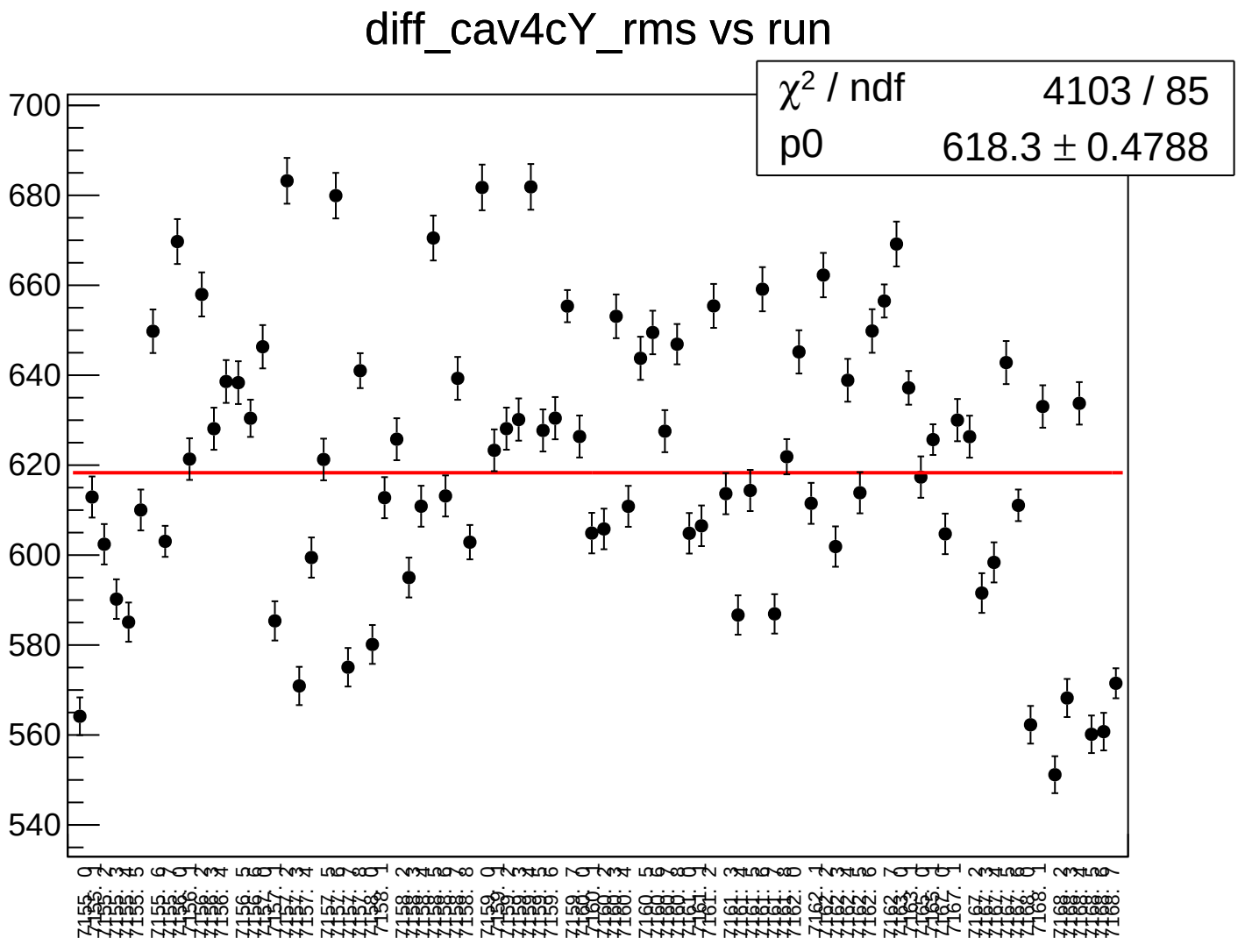

diff_cav4cX_mean vs run
χ² / ndf 61.39 / 85
p0 0.8876 ± 0.7971
pull
Entries 86
Mean −35.07
Std Dev 105.8

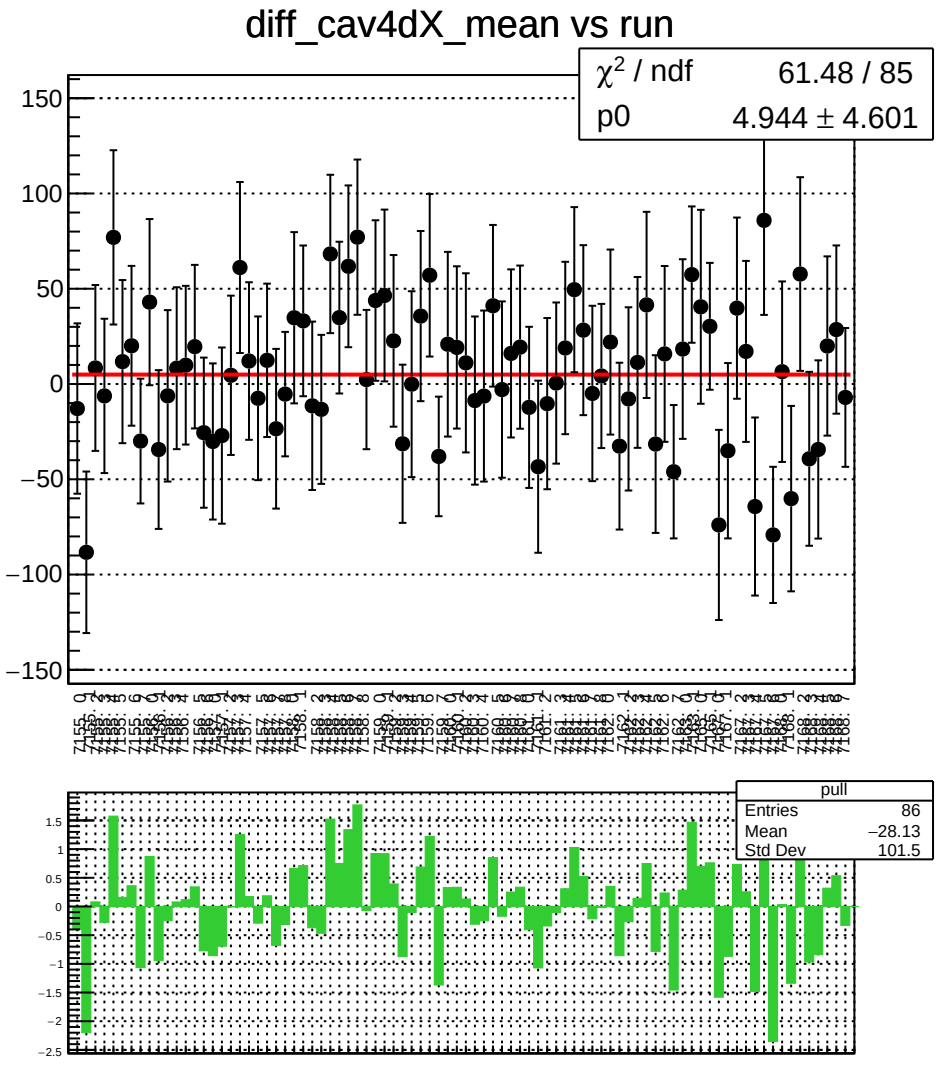

pull1D
Entries 86
Mean 0.01652
Std Dev 0.8447

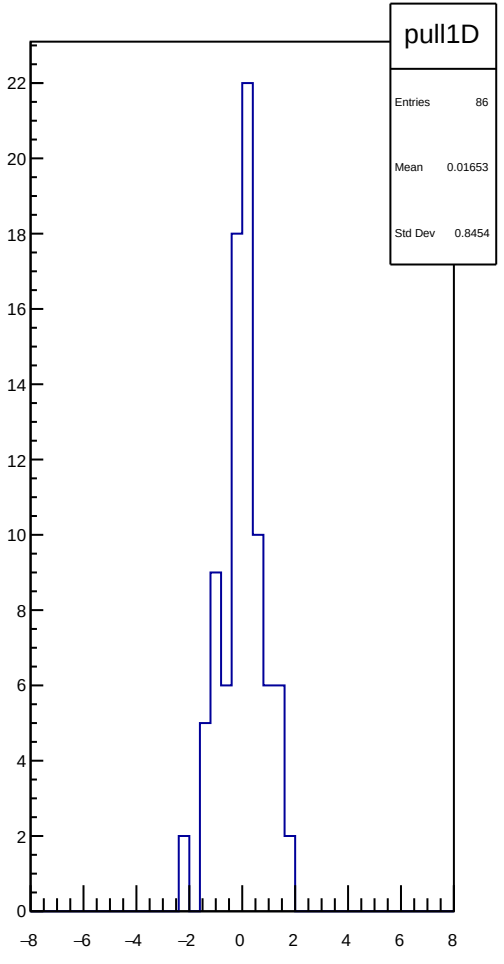

diff_cav4cX_rms vs run
χ² / ndf 5668 / 85
p0 727.4 ± 0.5636
850
800
750
700
650

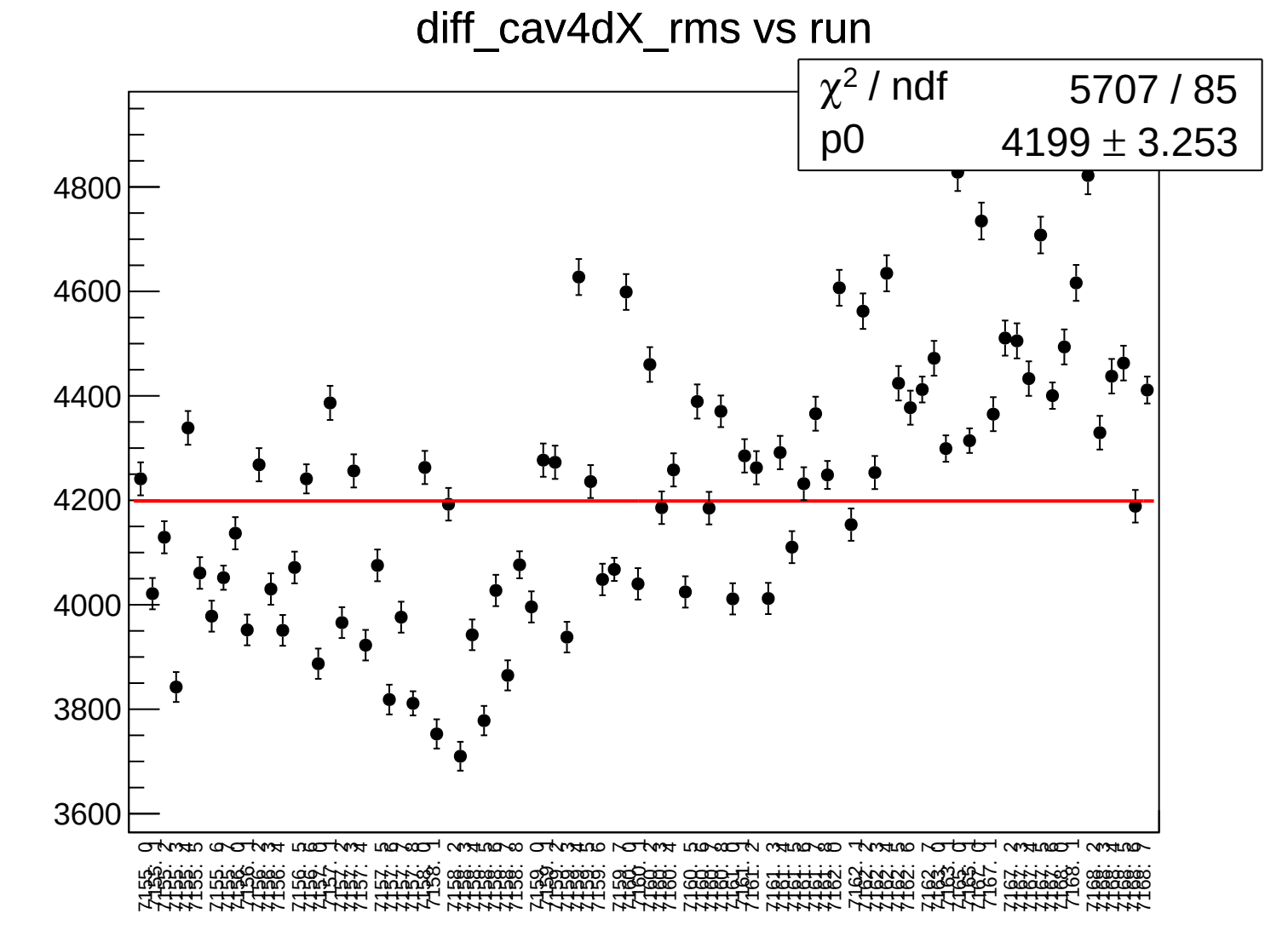

diff_cav4cY_mean vs run
χ² / ndf 66.79 / 85
p0 −0.5584 ± 0.6772
pull
Entries 86
Mean −420.7
Std Dev 461.8

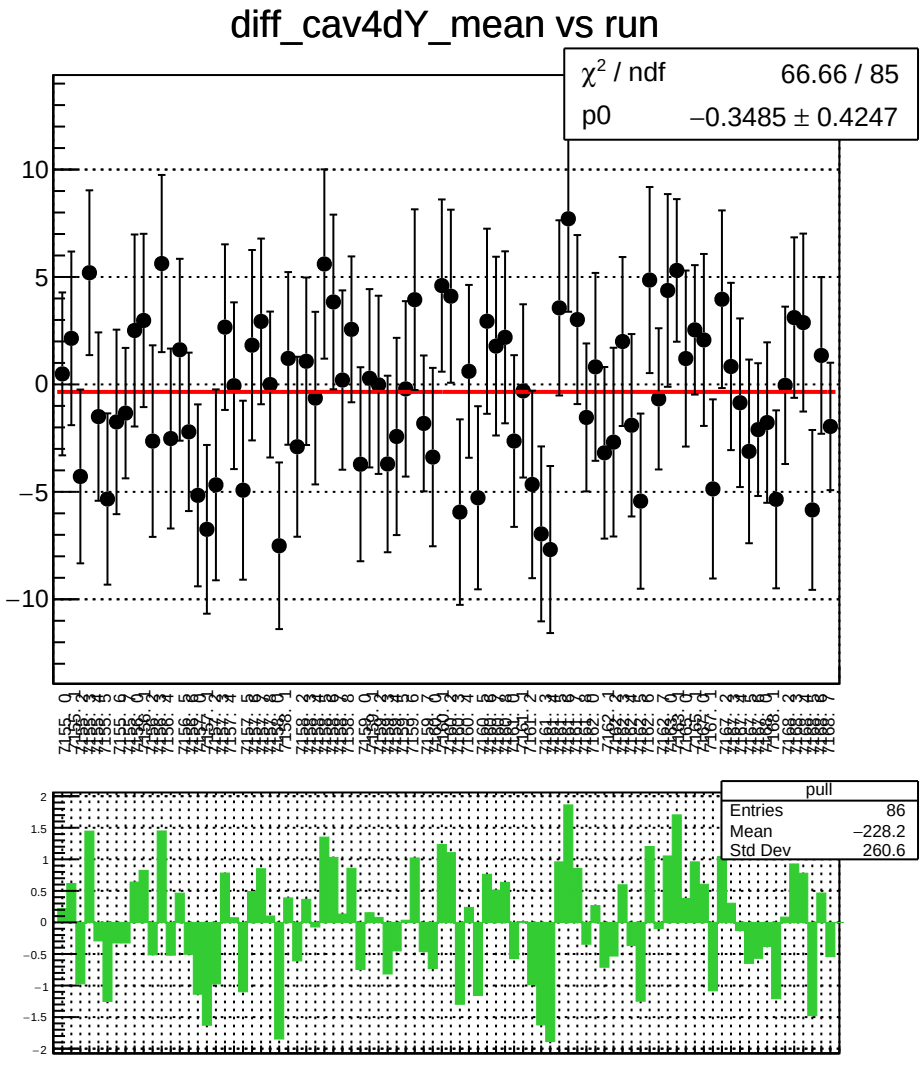

pull1D
Entries 86
Mean −0.001726
Std Dev 0.8813

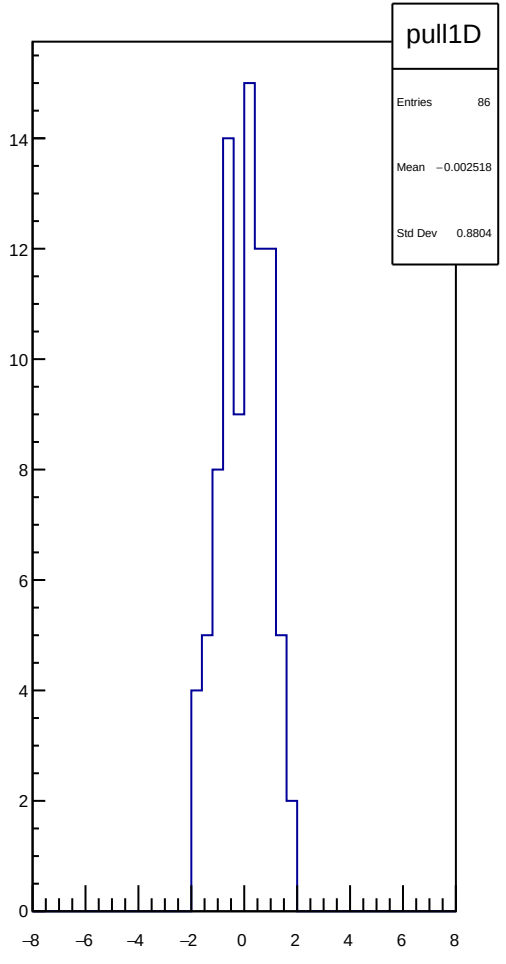

diff_cav4cY_rms vs run
χ² / ndf 4103 / 85
p0 618.3 ± 0.4788
700
680
660
640
620
600
580
560
540

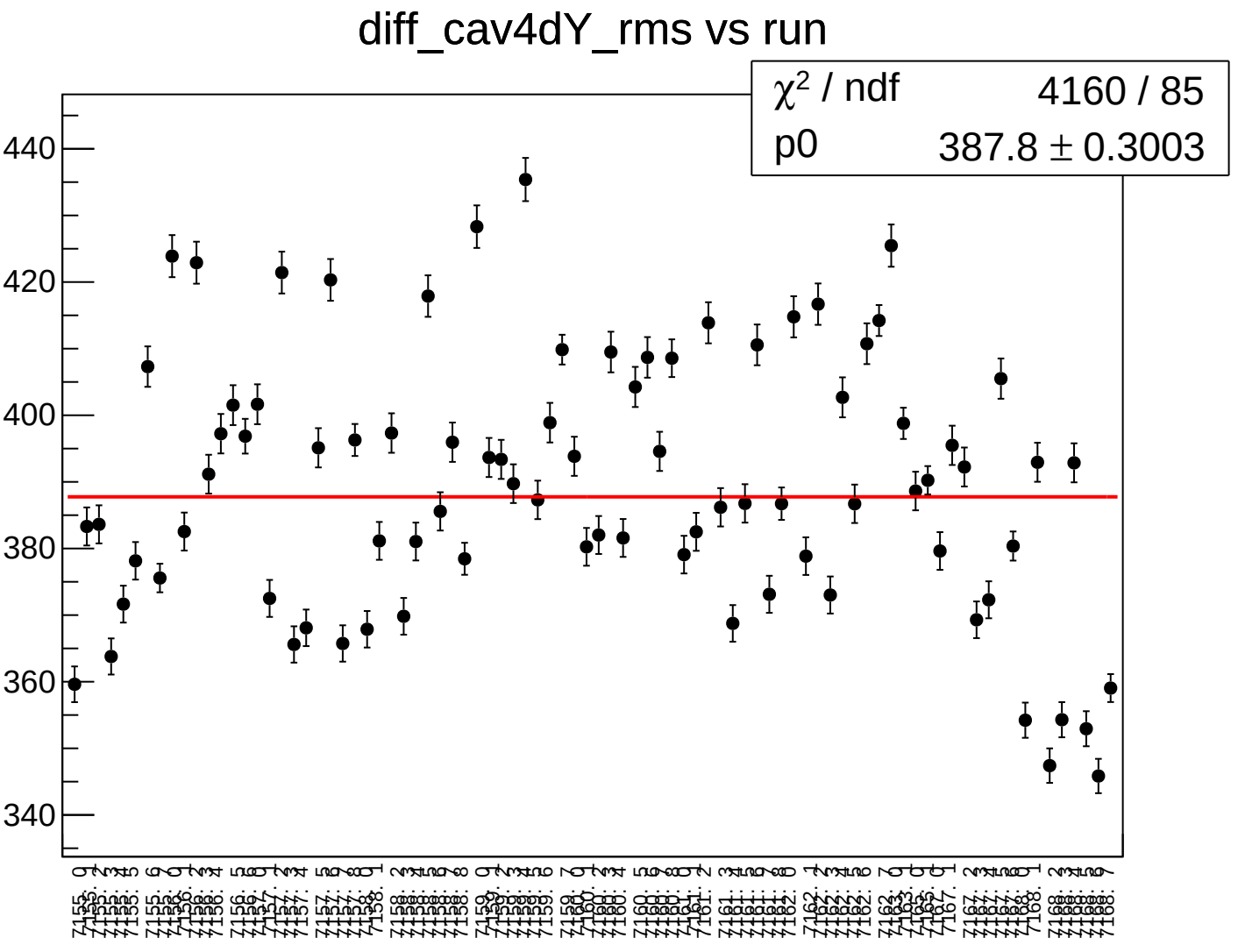

diff_cav4dX_mean vs run
χ² / ndf 61.48 / 85
p0 4.944 ± 4.601
pull
Entries 86
Mean −28.13
Std Dev 101.5

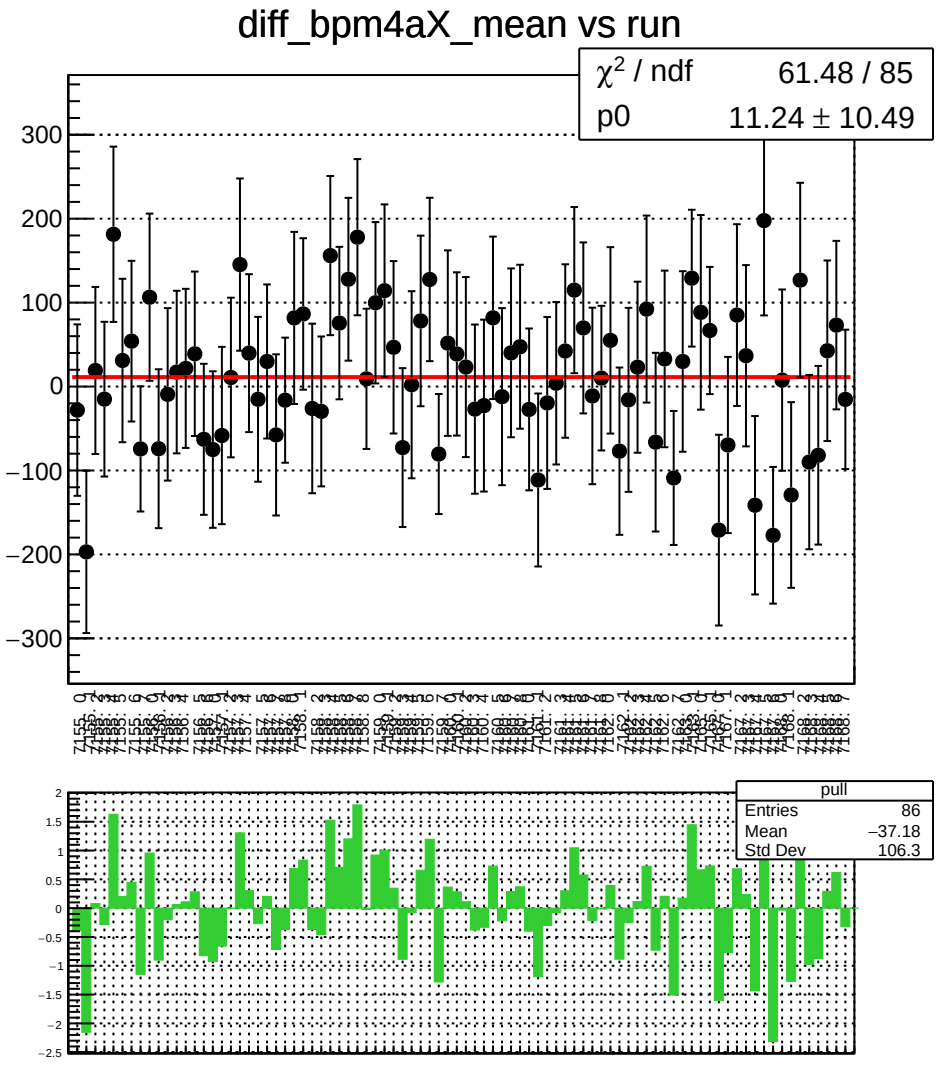

pull1D
Entries 86
Mean 0.01653
Std Dev 0.8454

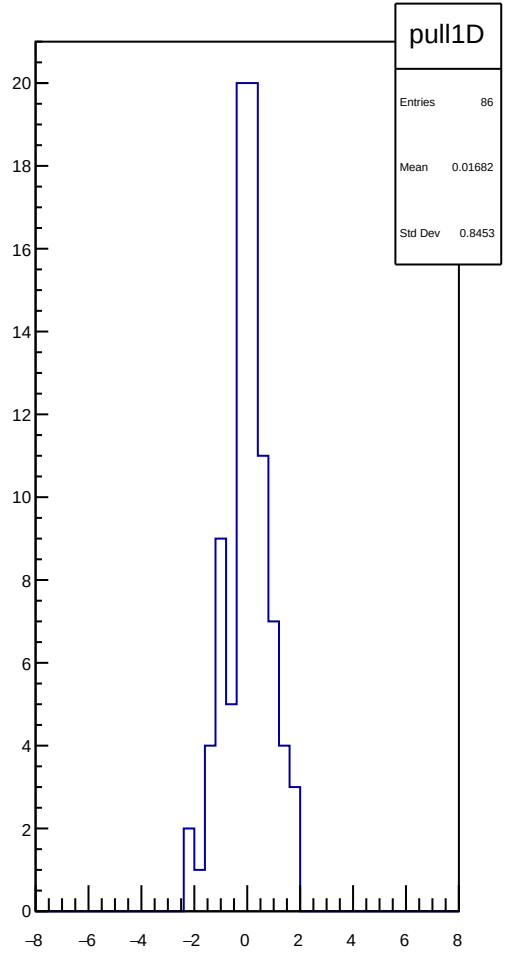

diff_cav4dX_rms vs run
χ² / ndf 5707 / 85
p0 4199 ± 3.253
4800
4600
4400
4200
4000
3800
3600

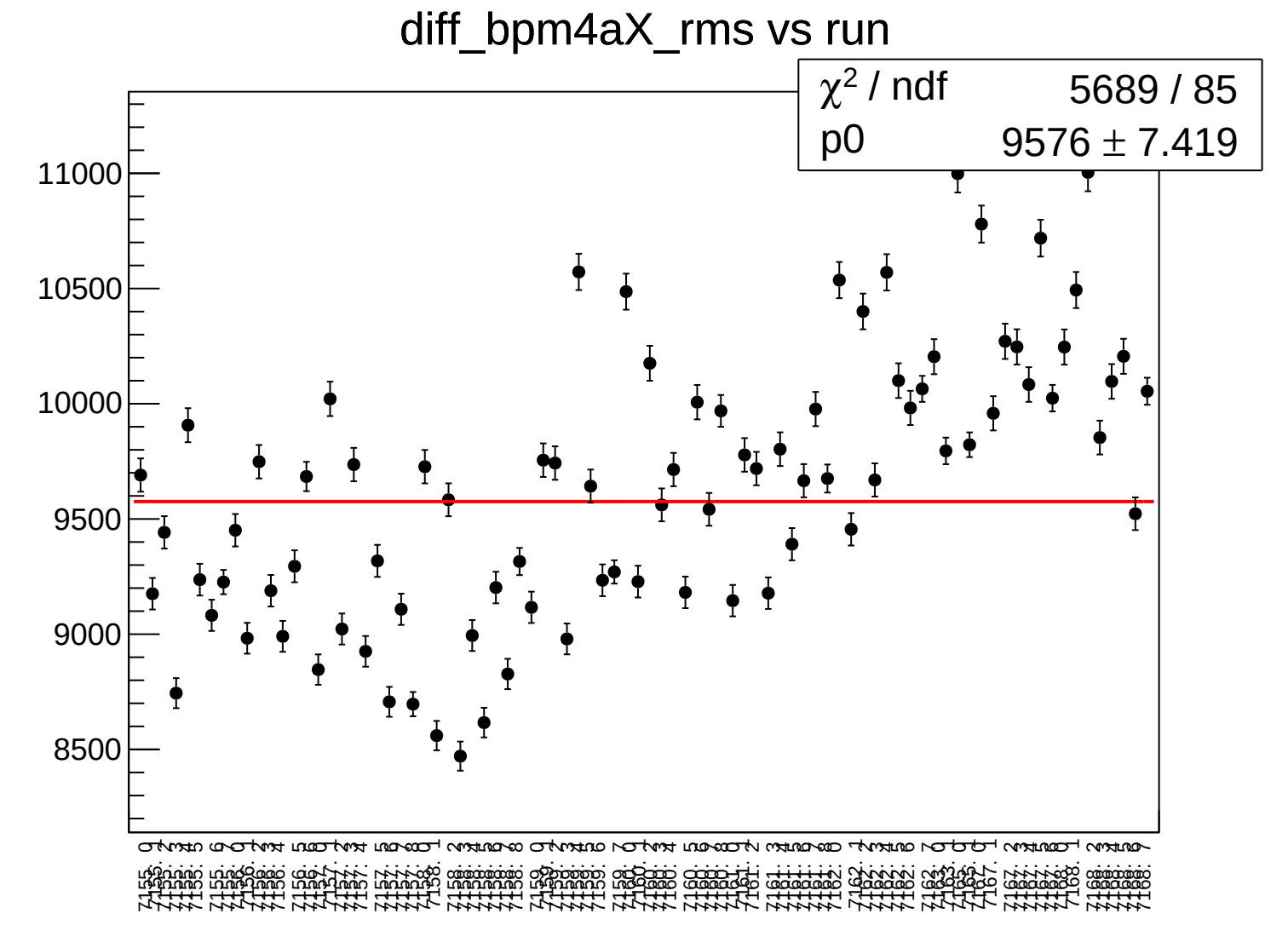

diff_cav4dY_mean vs run
χ^2 / ndf 66.66 / 85
p0 −0.3485 ± 0.4247
10
5
0
−5
−10
pull
Entries 86
Mean −228.2
Std Dev 260.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

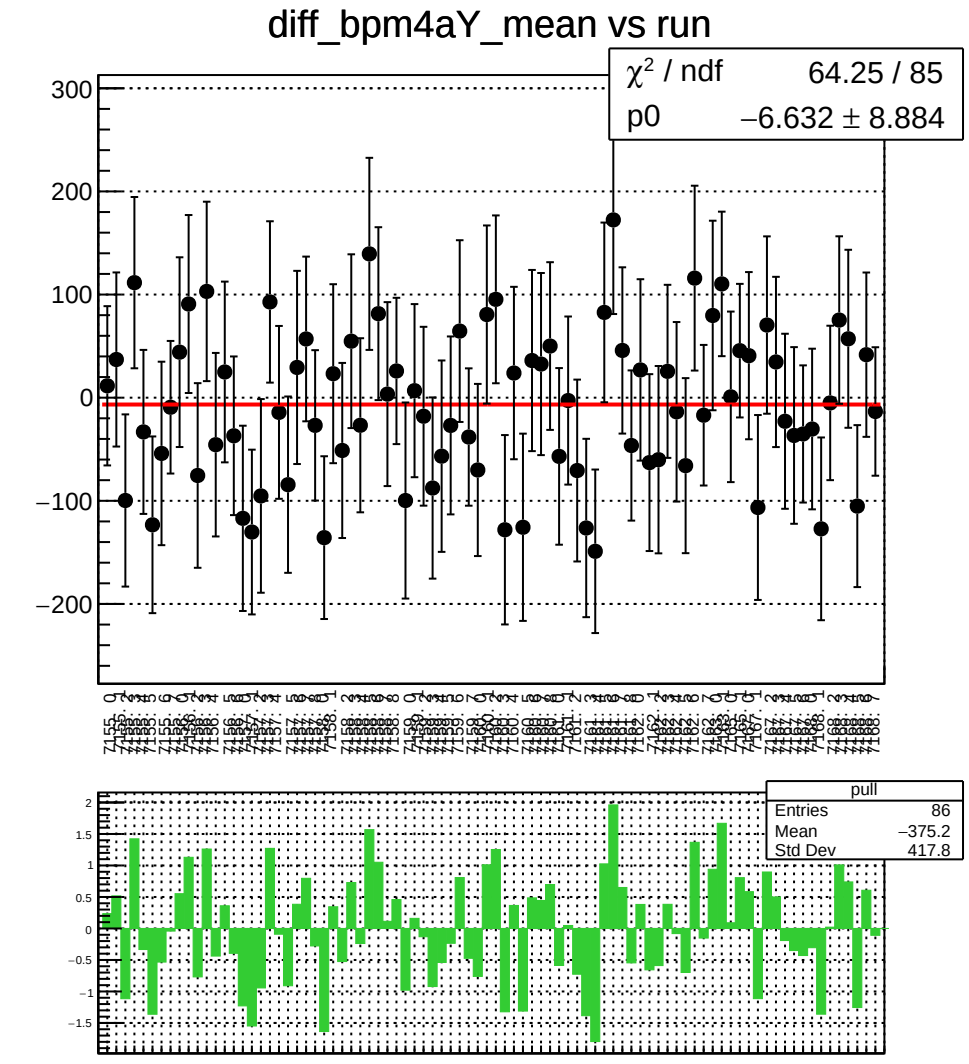

pull1D
Entries 86
Mean −0.002518
Std Dev 0.8804
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

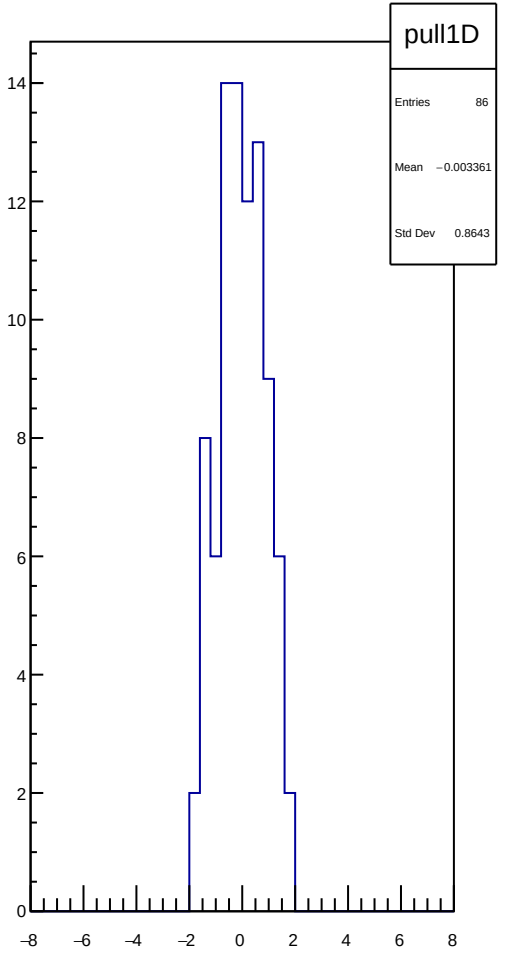

diff_cav4dY_rms vs run
χ² / ndf 4160 / 85
p0 387.8 ± 0.3003
440
420
400
380
360
340

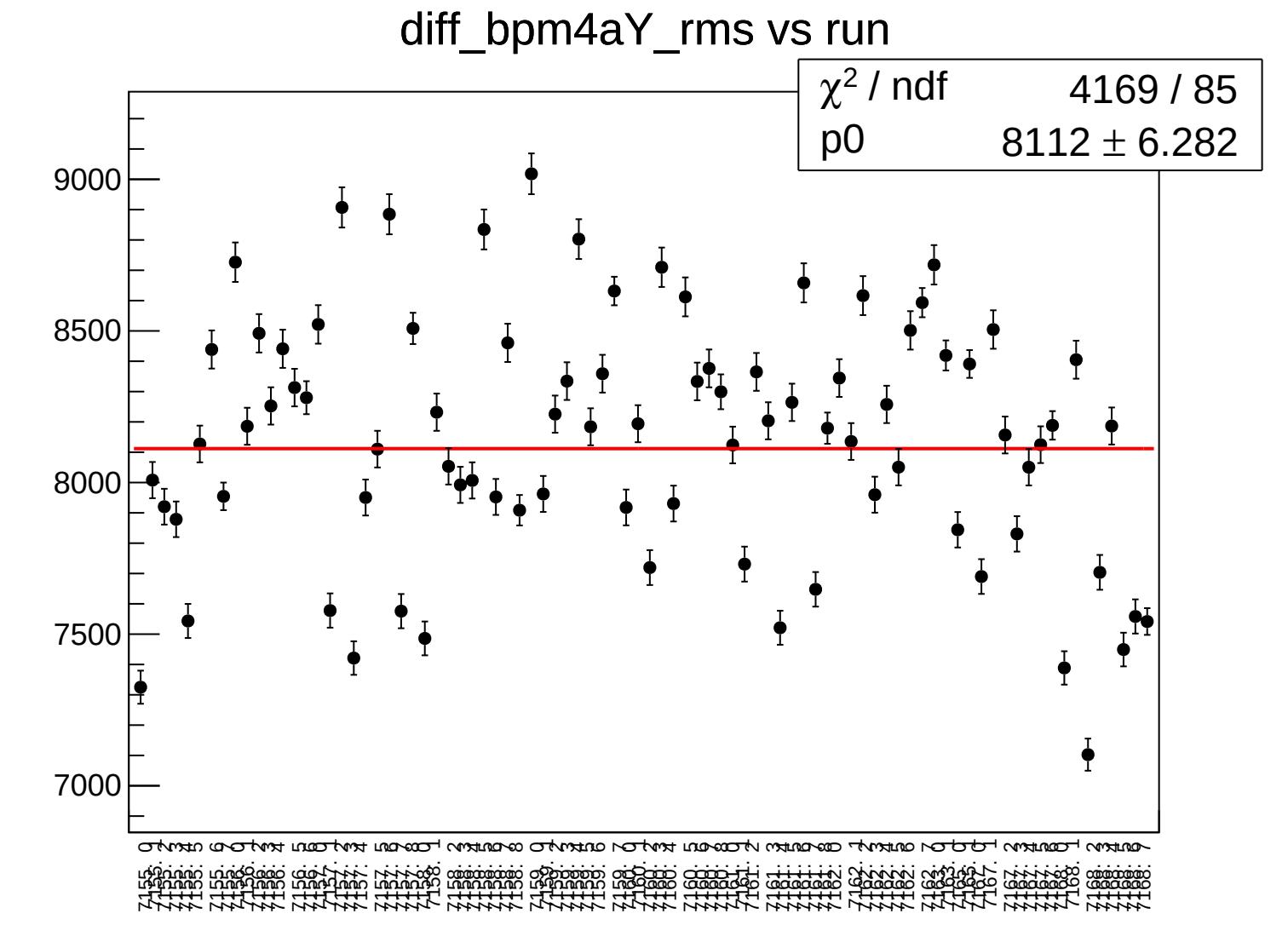

diff_bpm4aX_mean vs run
χ² / ndf 61.48 / 85
p0 11.24 ± 10.49
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −37.18
Std Dev 106.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

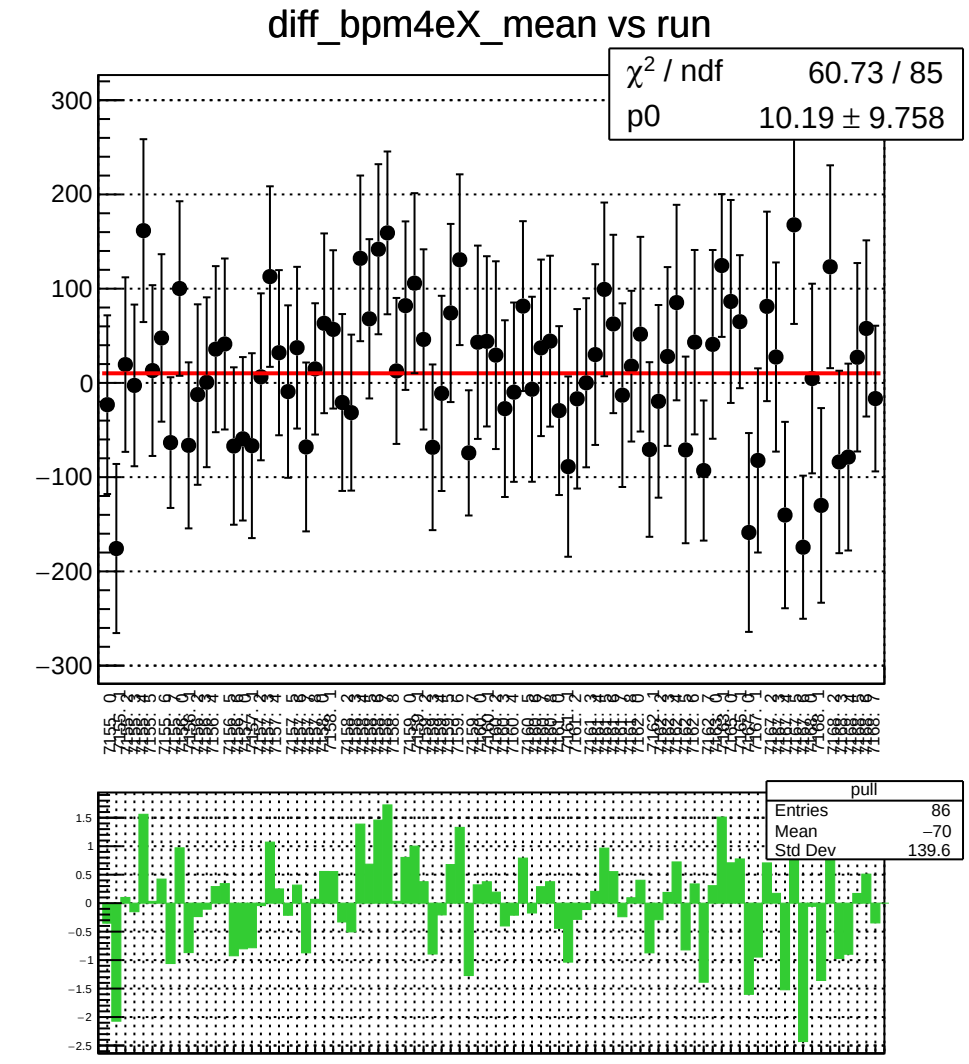

pull1D
Entries 86
Mean 0.01682
Std Dev 0.8453
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

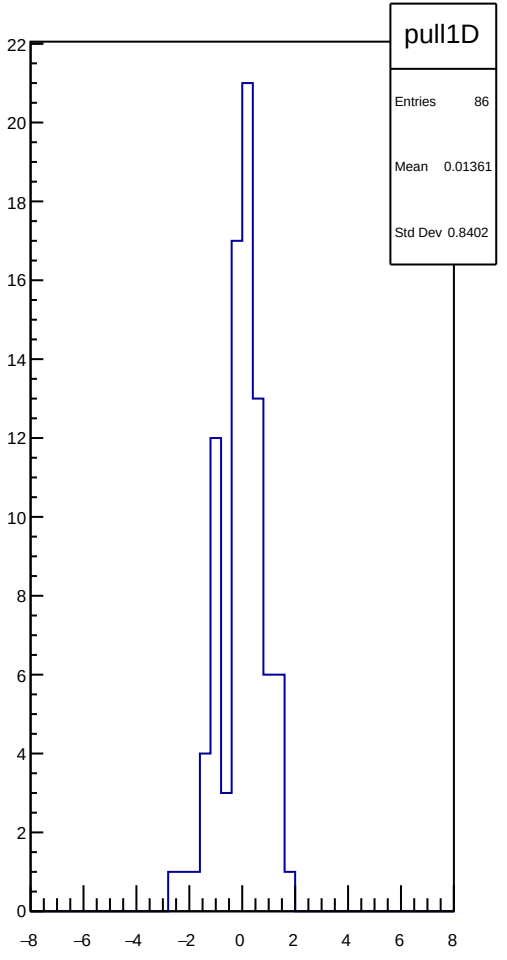

diff_bpm4aX_rms vs run
χ² / ndf 5689 / 85
p0 9576 ± 7.419
11000
10500
10000
9500
9000
8500

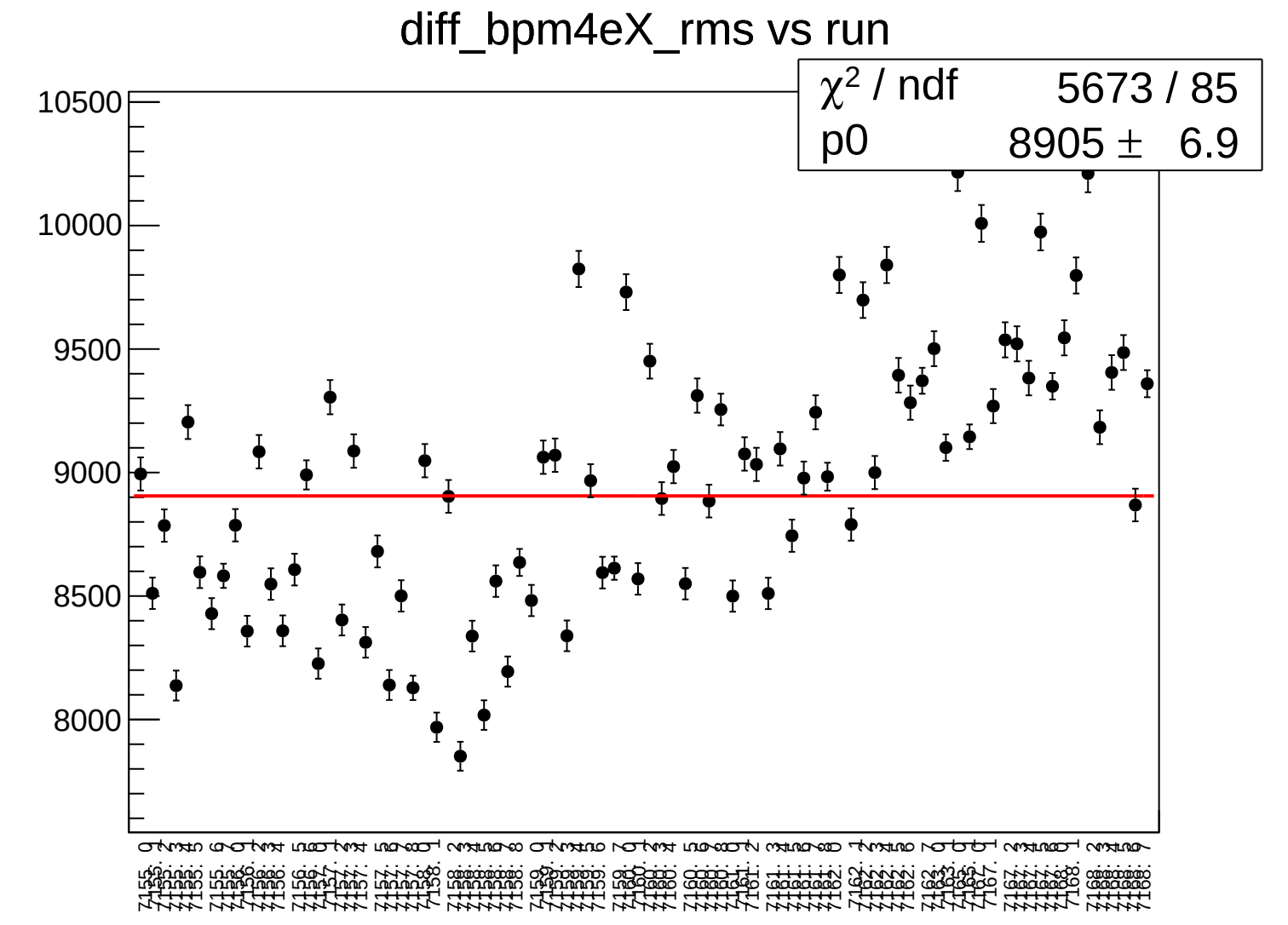

diff_bpm4aY_mean vs run
χ² / ndf 64.25 / 85
p0 −6.632 ± 8.884
300
200
100
0
−100
−200
pull
Entries 86
Mean −375.2
Std Dev 417.8
2
1.5
1
0.5
0
−0.5
−1
−1.5

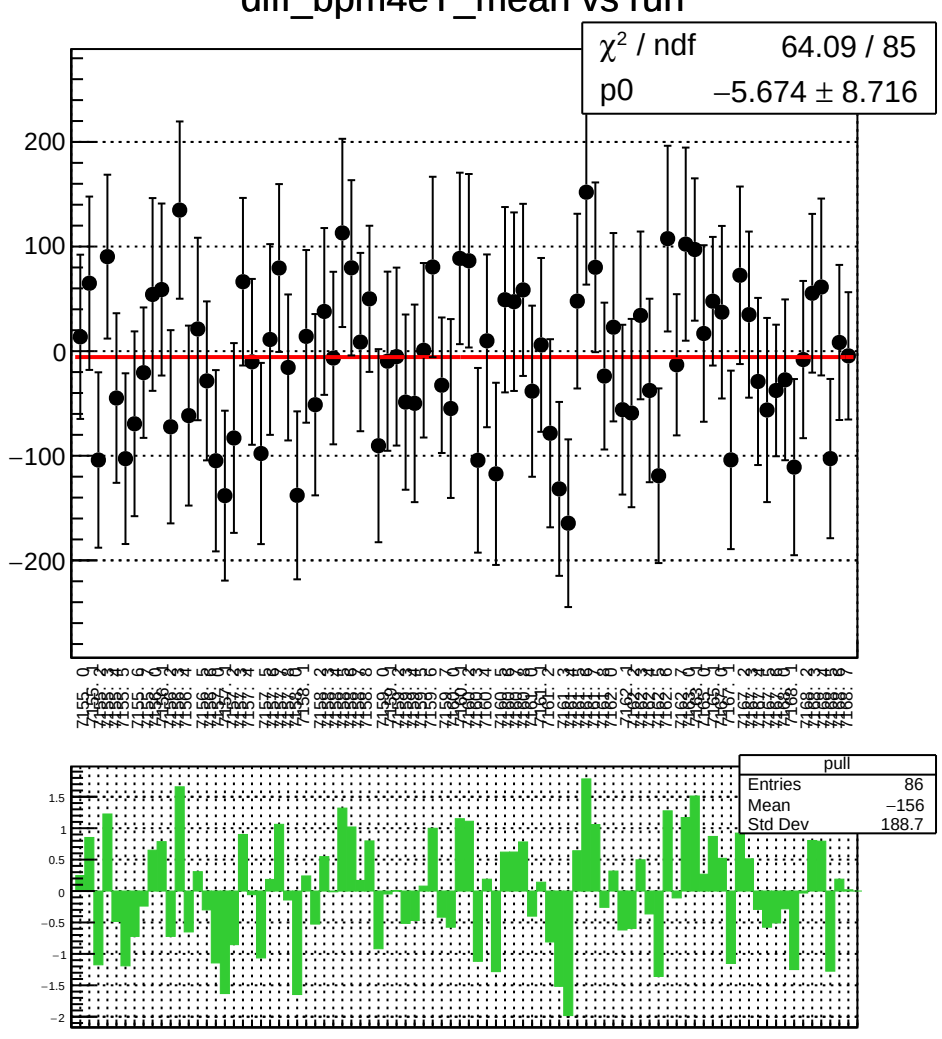

pull1D
Entries 86
Mean −0.003361
Std Dev 0.8643
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

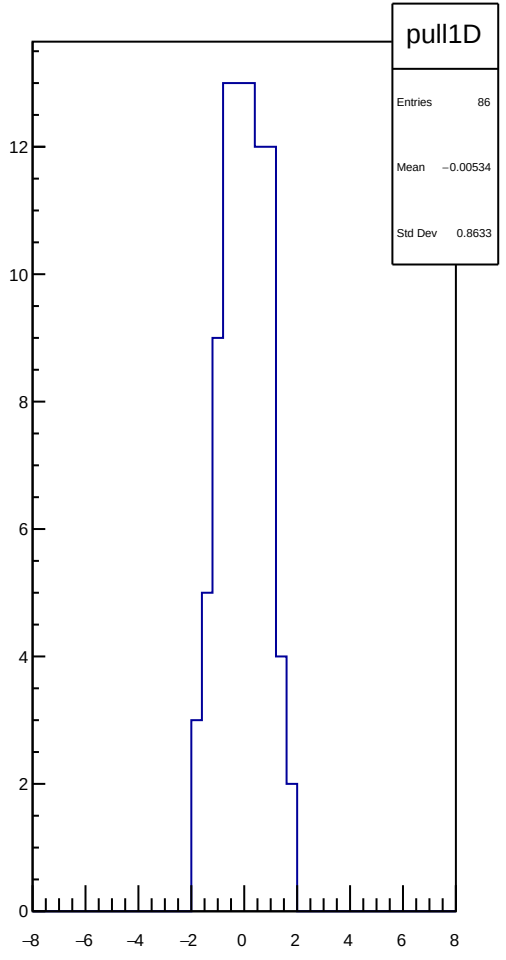

diff_bpm4aY_rms vs run
χ^2 / ndf 4169 / 85
p0 8112 ± 6.282
9000
8500
8000
7500
7000

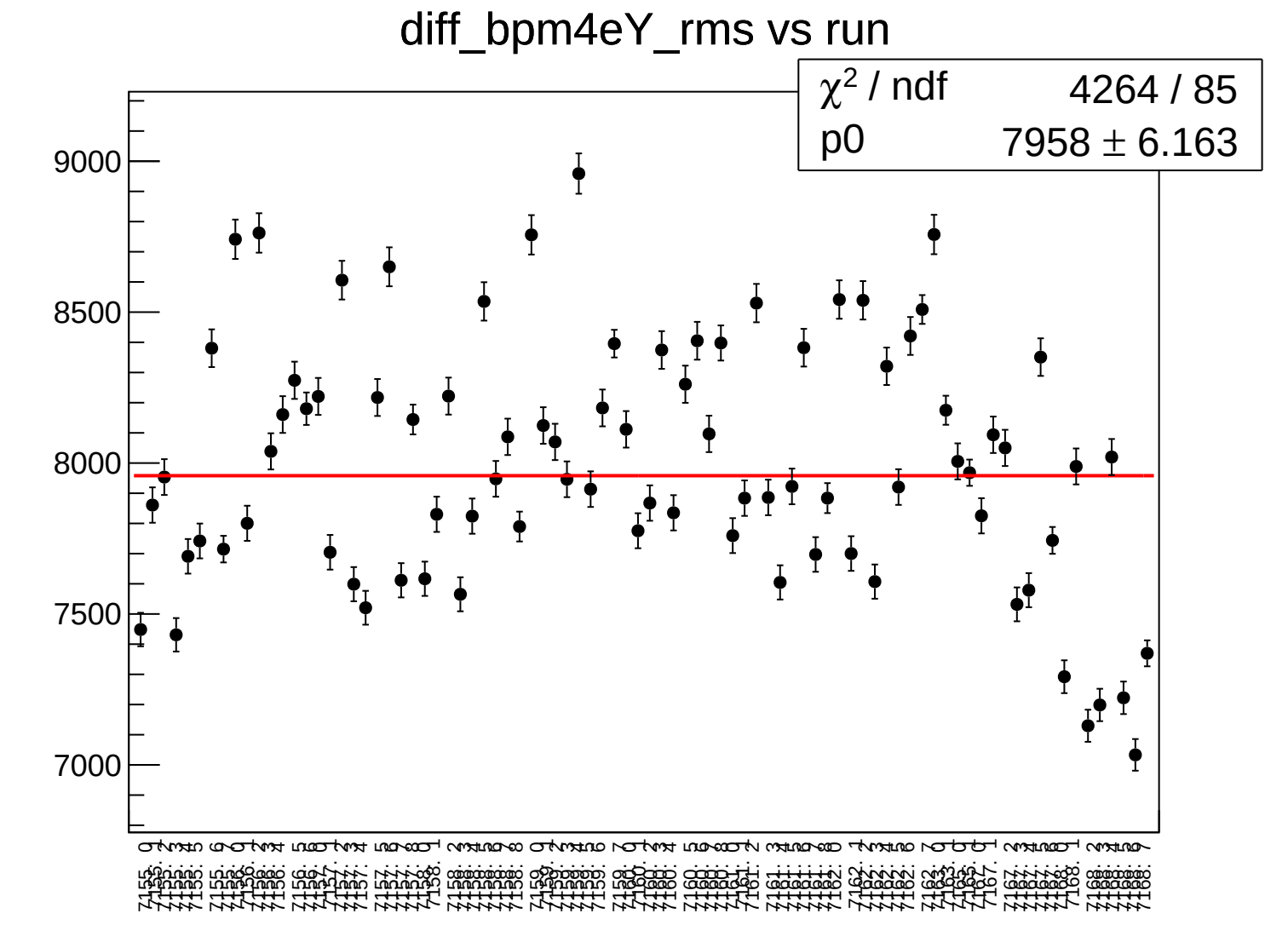

diff_bpm4eX_mean vs run
χ² / ndf 60.73 / 85
p0 10.19 ± 9.758
pull
Entries 86
Mean −70
Std Dev 139.6

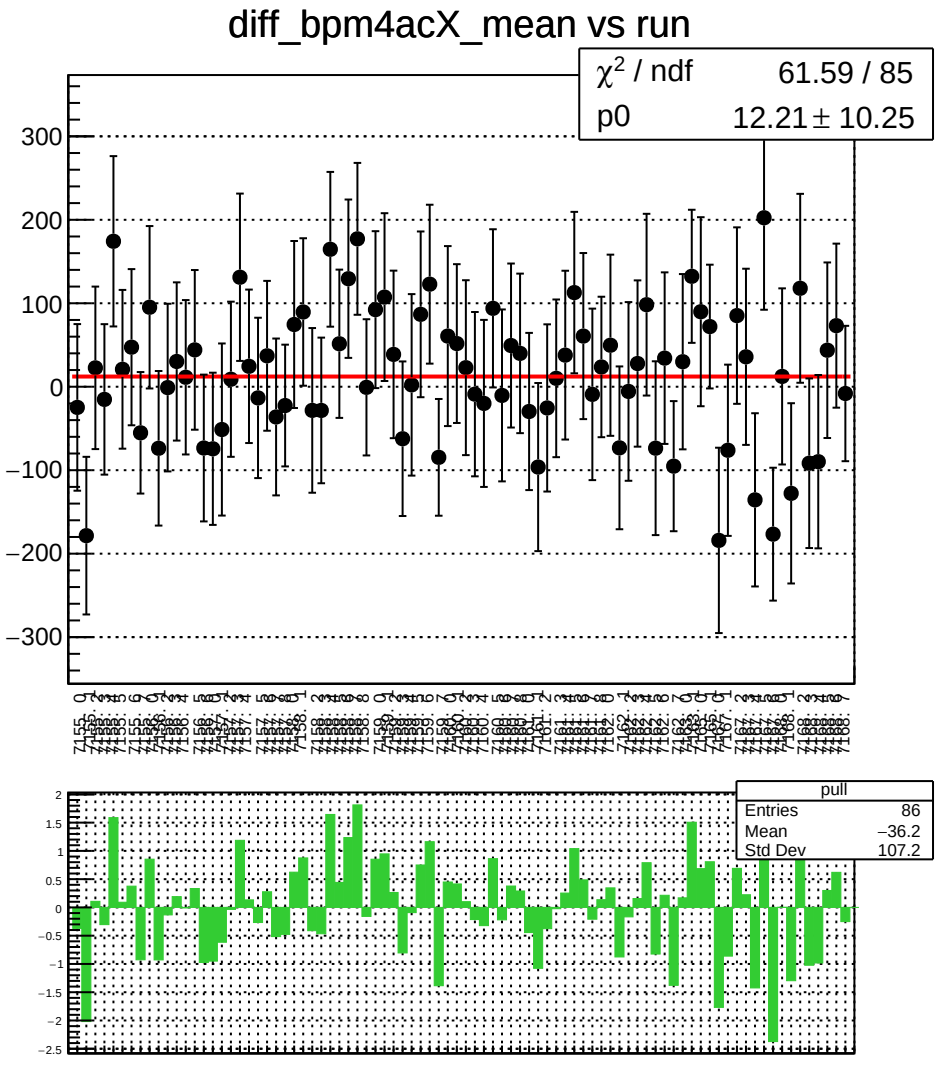

pull1D
Entries 86
Mean 0.01361
Std Dev 0.8402

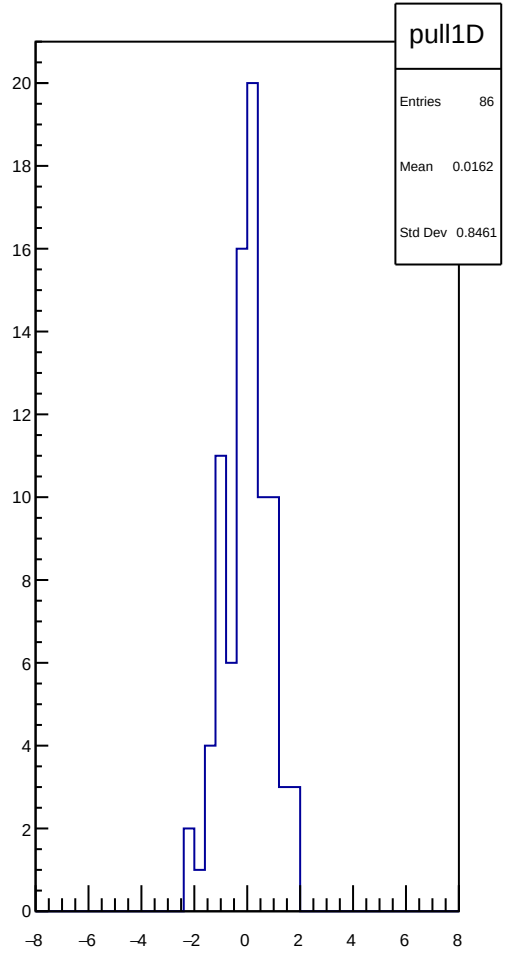

diff_bpm4eX_rms vs run
χ² / ndf 5673 / 85
p0 8905 ± 6.9
10500
10000
9500
9000
8500
8000

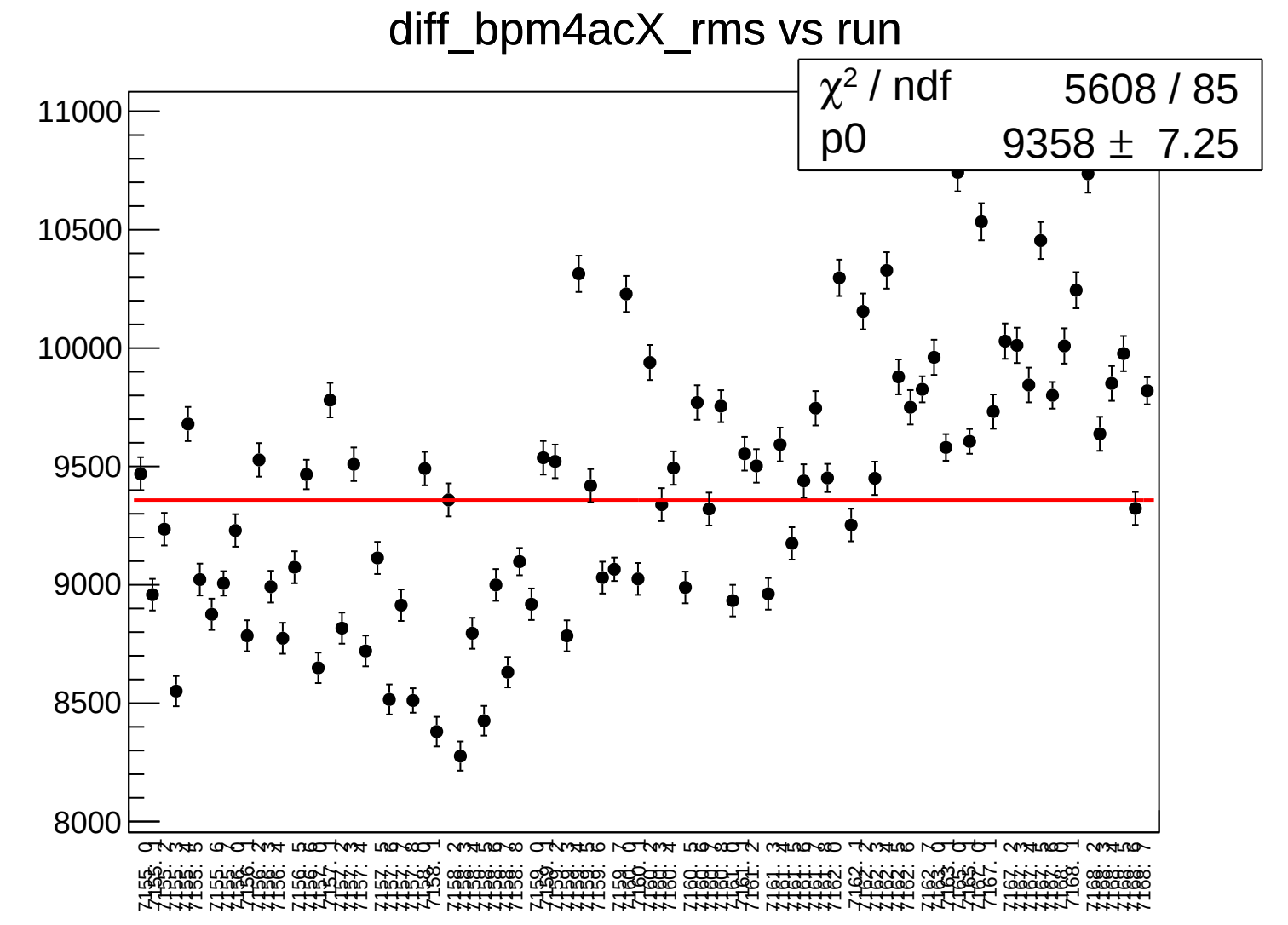

diff_bpm4eY_mean vs run
χ² / ndf 64.09 / 85
p0 −5.674 ± 8.716
200
100
0
−100
−200
pull
Entries 86
Mean −156
Std Dev 188.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2

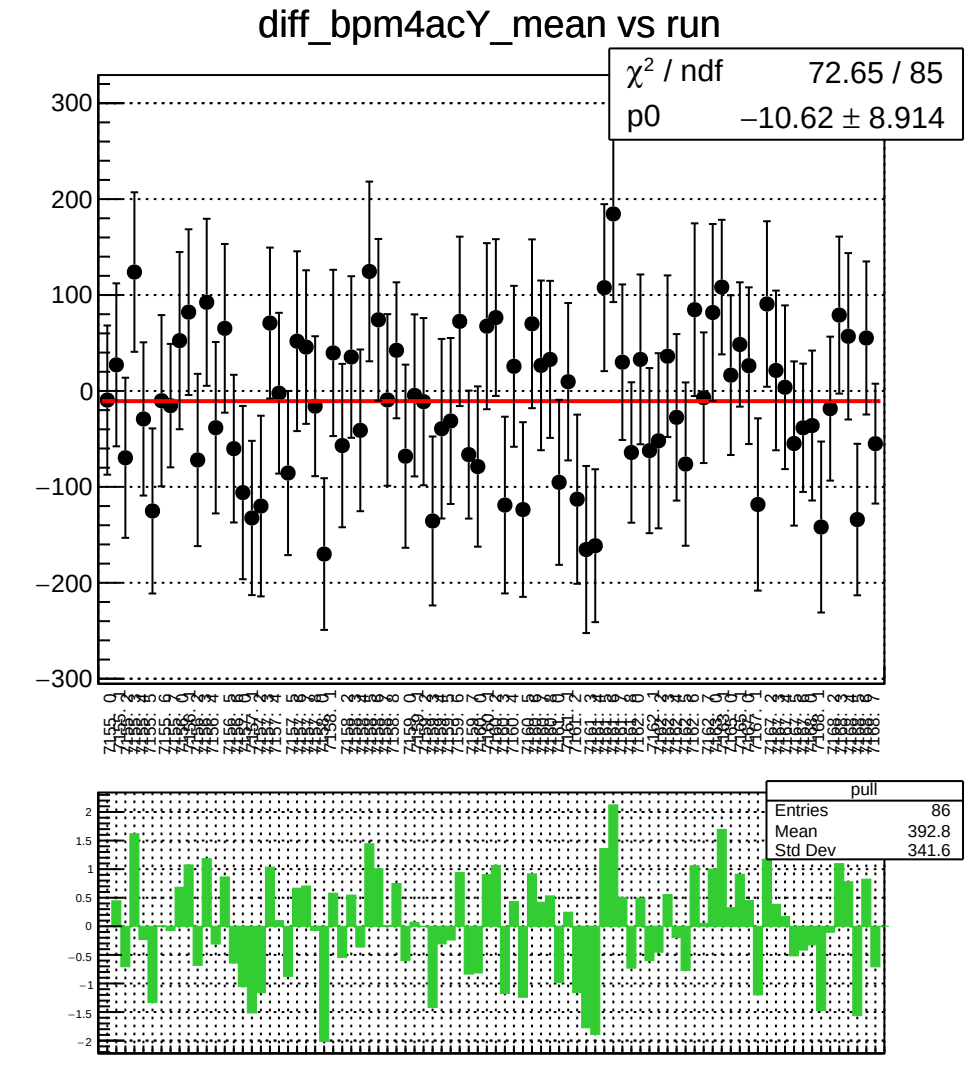

pull1D
Entries 86
Mean −0.00534
Std Dev 0.8633
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

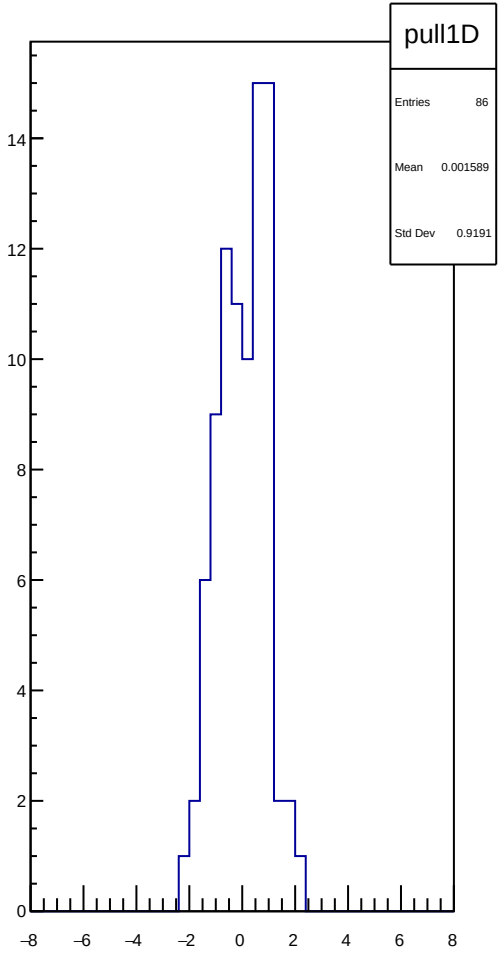

diff_bpm4eY_rms vs run
χ² / ndf 4264 / 85
p0 7958 ± 6.163
9000
8500
8000
7500
7000

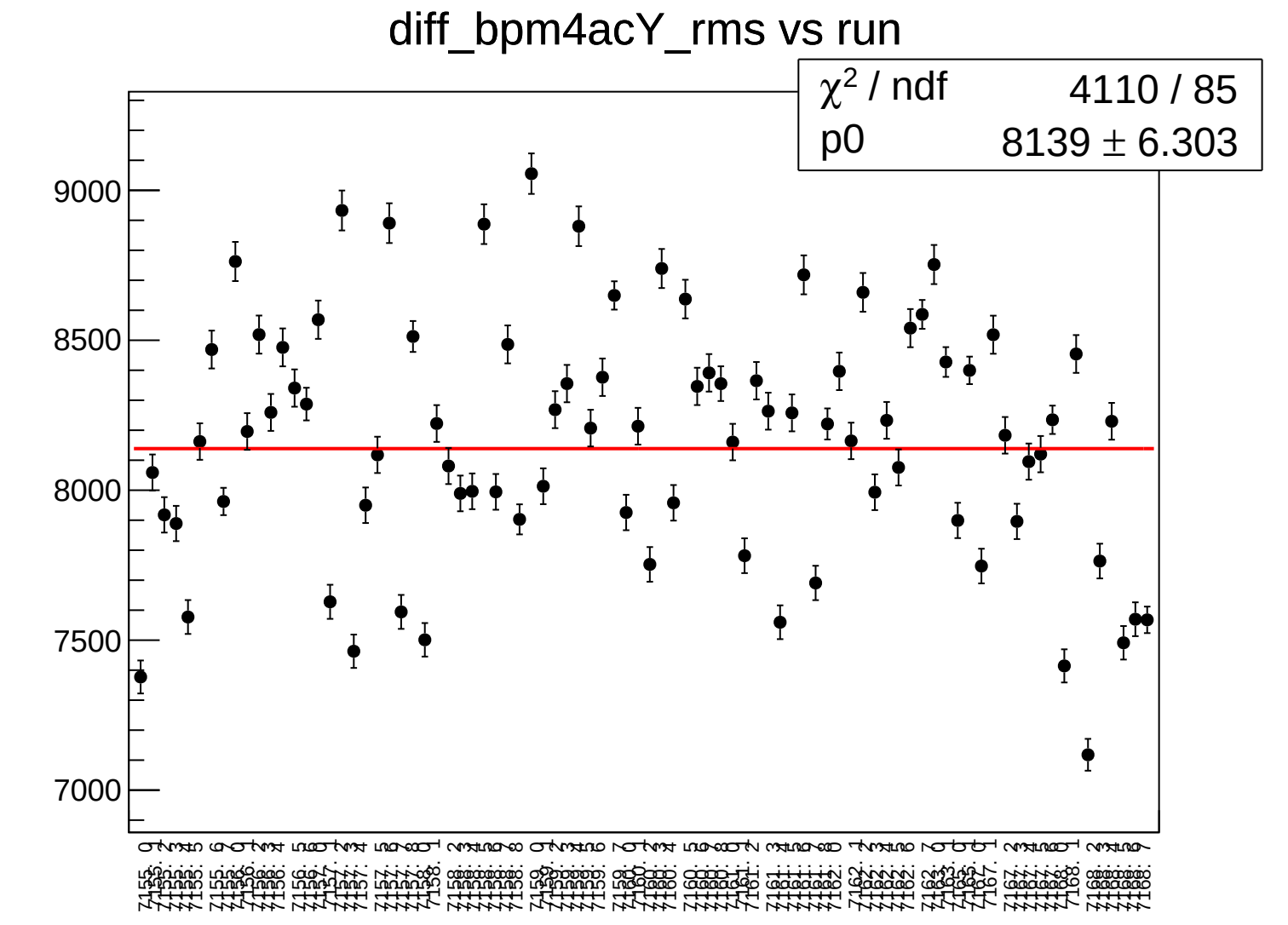

diff_bpm4acX_mean vs run
χ^2 / ndf 61.59 / 85
p0 12.21 ± 10.25
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean −36.2
Std Dev 107.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

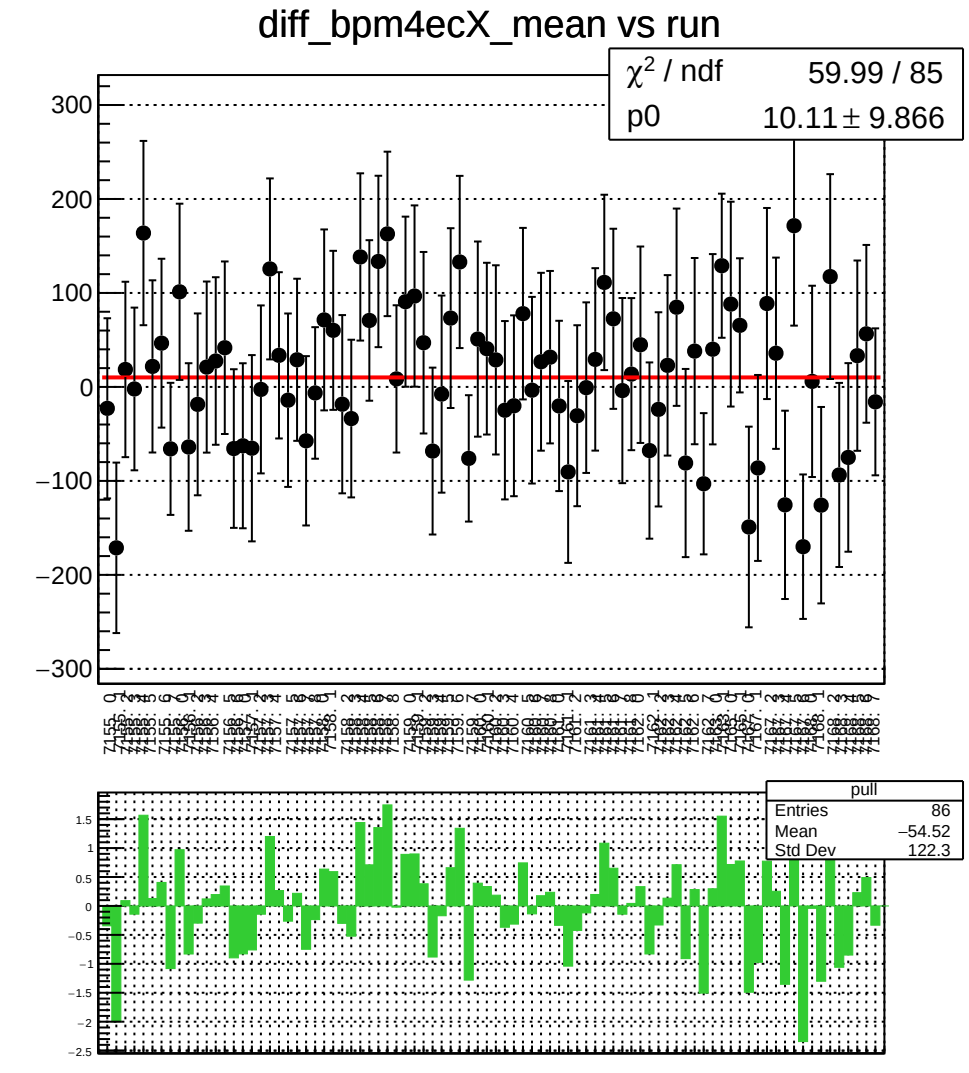

pull1D
Entries 86
Mean 0.0162
Std Dev 0.8461
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

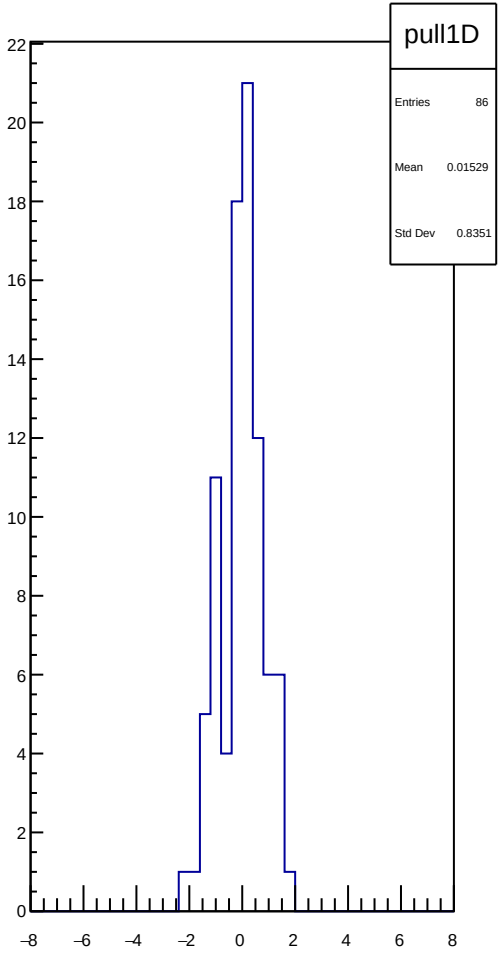

diff_bpm4acX_rms vs run
χ² / ndf 5608 / 85
p0 9358 ± 7.25
11000
10500
10000
9500
9000
8500
8000

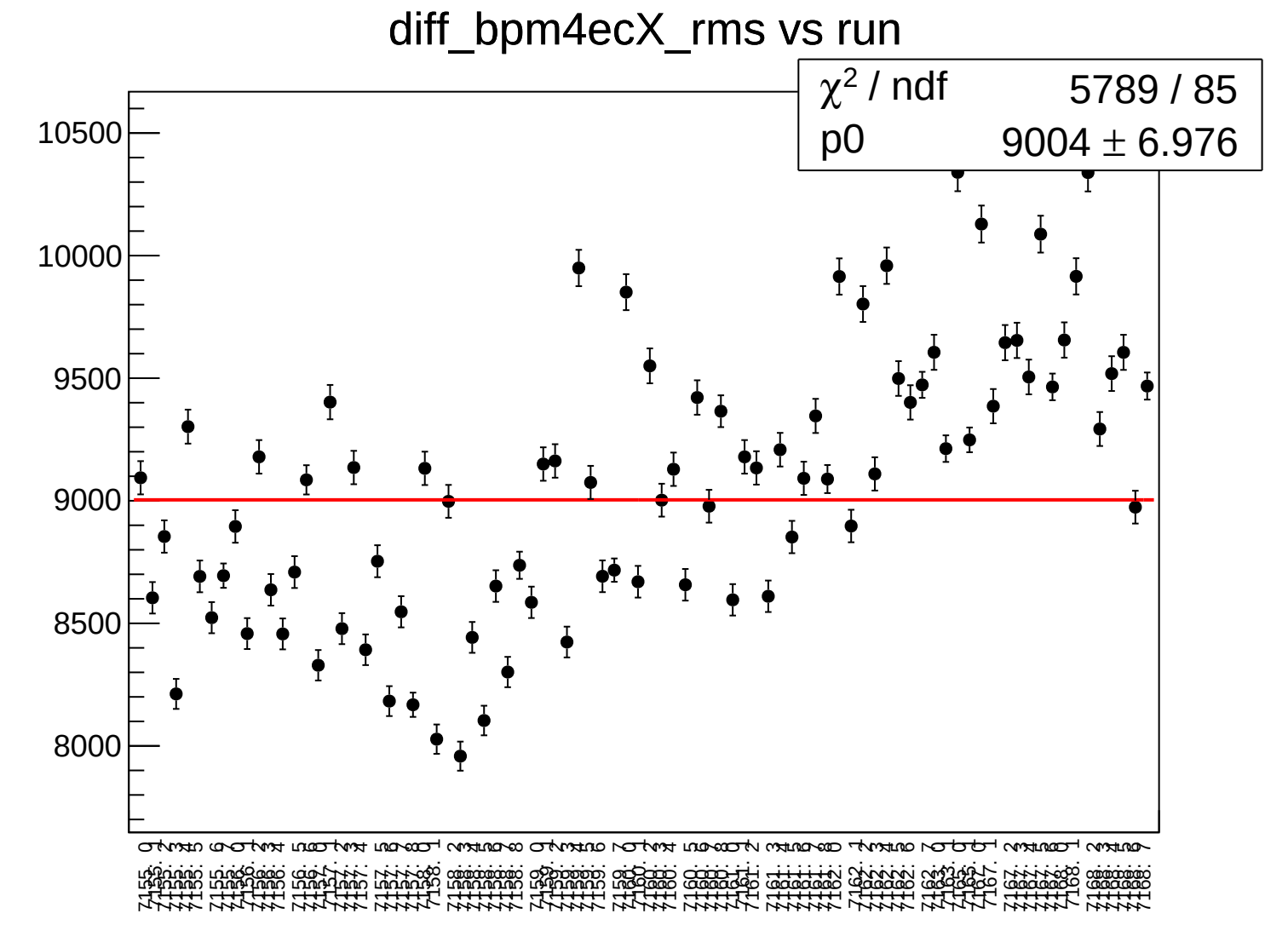

diff_bpm4acY_mean vs run
χ² / ndf 72.65 / 85
p0 −10.62 ± 8.914
pull
Entries 86
Mean 392.8
Std Dev 341.6

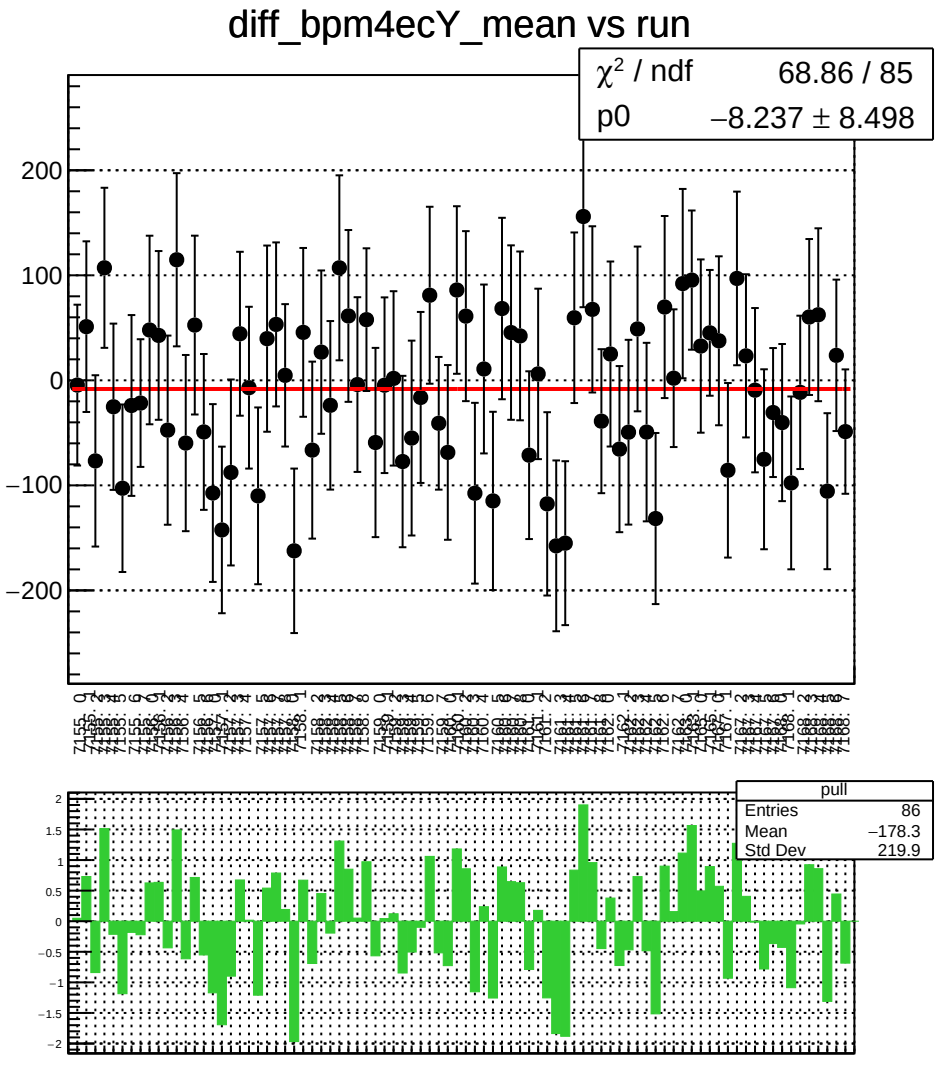

pull1D
Entries 86
Mean 0.001589
Std Dev 0.9191

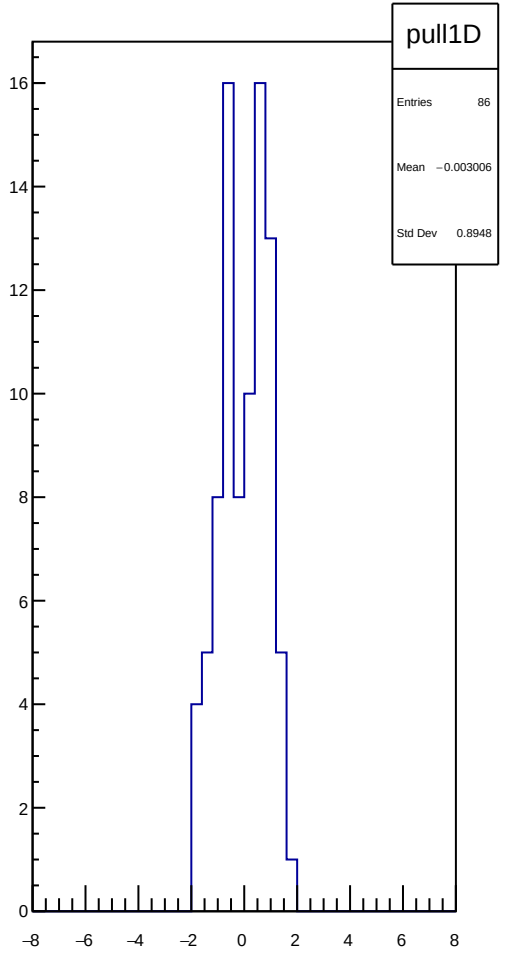

diff_bpm4acY_rms vs run
χ² / ndf 4110 / 85
p0 8139 ± 6.303
9000
8500
8000
7500
7000


diff_bpm4ecX_mean vs run
χ² / ndf 59.99 / 85
p0 10.11 ± 9.866
pull
Entries 86
Mean −54.52
Std Dev 122.3


pull1D
Entries 86
Mean 0.01529
Std Dev 0.8351


diff_bpm4ecX_rms vs run
χ² / ndf 5789 / 85
p0 9004 ± 6.976
10500
10000
9500
9000
8500
8000


diff_bpm4ecY_mean vs run
χ² / ndf 68.86 / 85
p0 −8.237 ± 8.498
200
100
0
−100
−200
pull
Entries 86
Mean −178.3
Std Dev 219.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2


pull1D
Entries 86
Mean −0.003006
Std Dev 0.8948
16
14
12
10
8
6
4
2
0
−8
−6
−4
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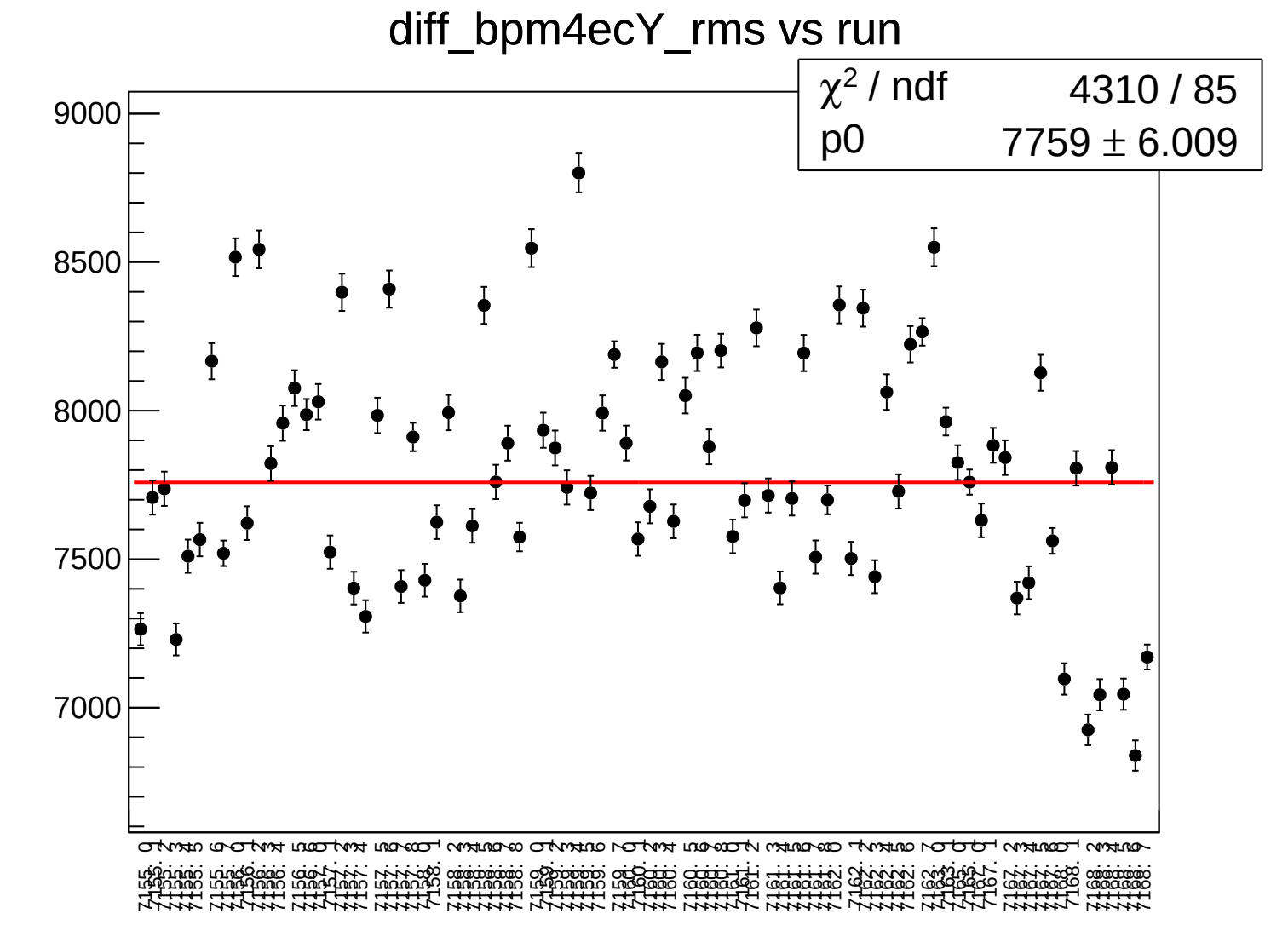
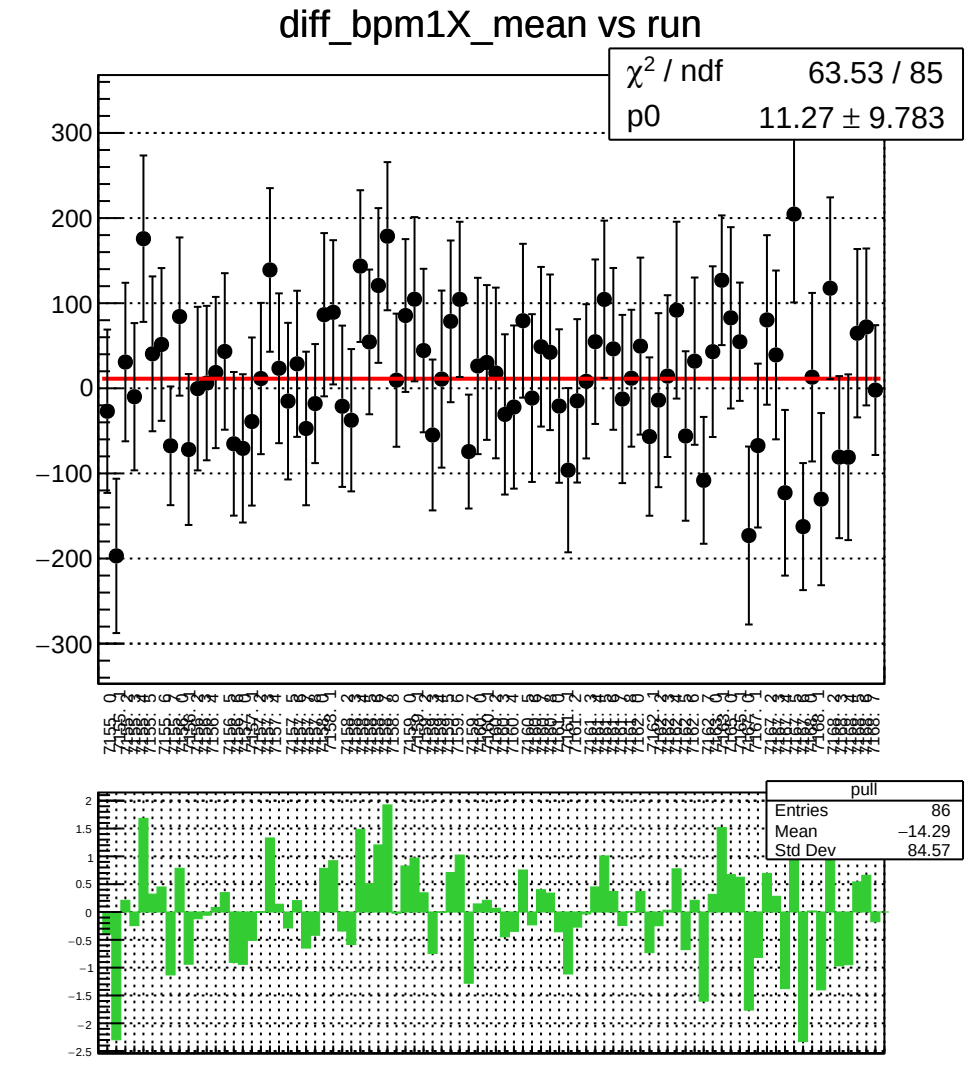
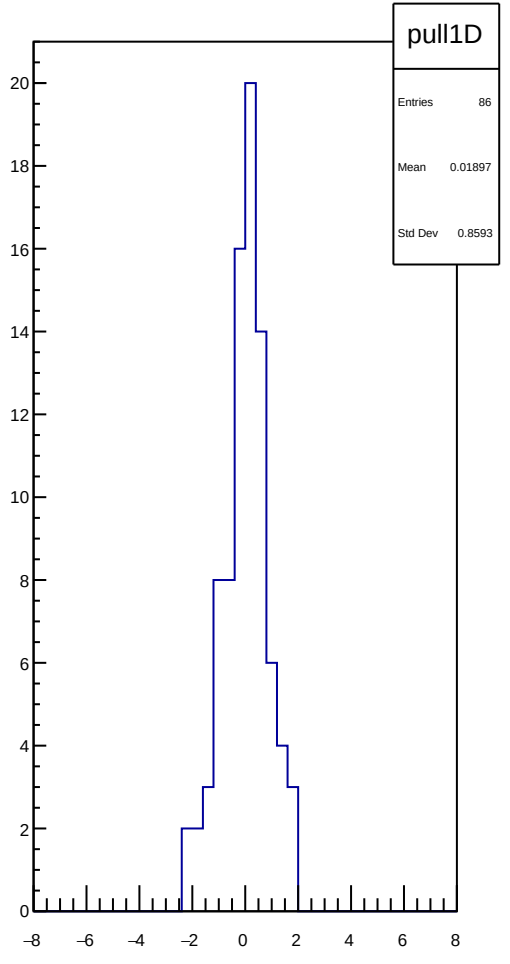
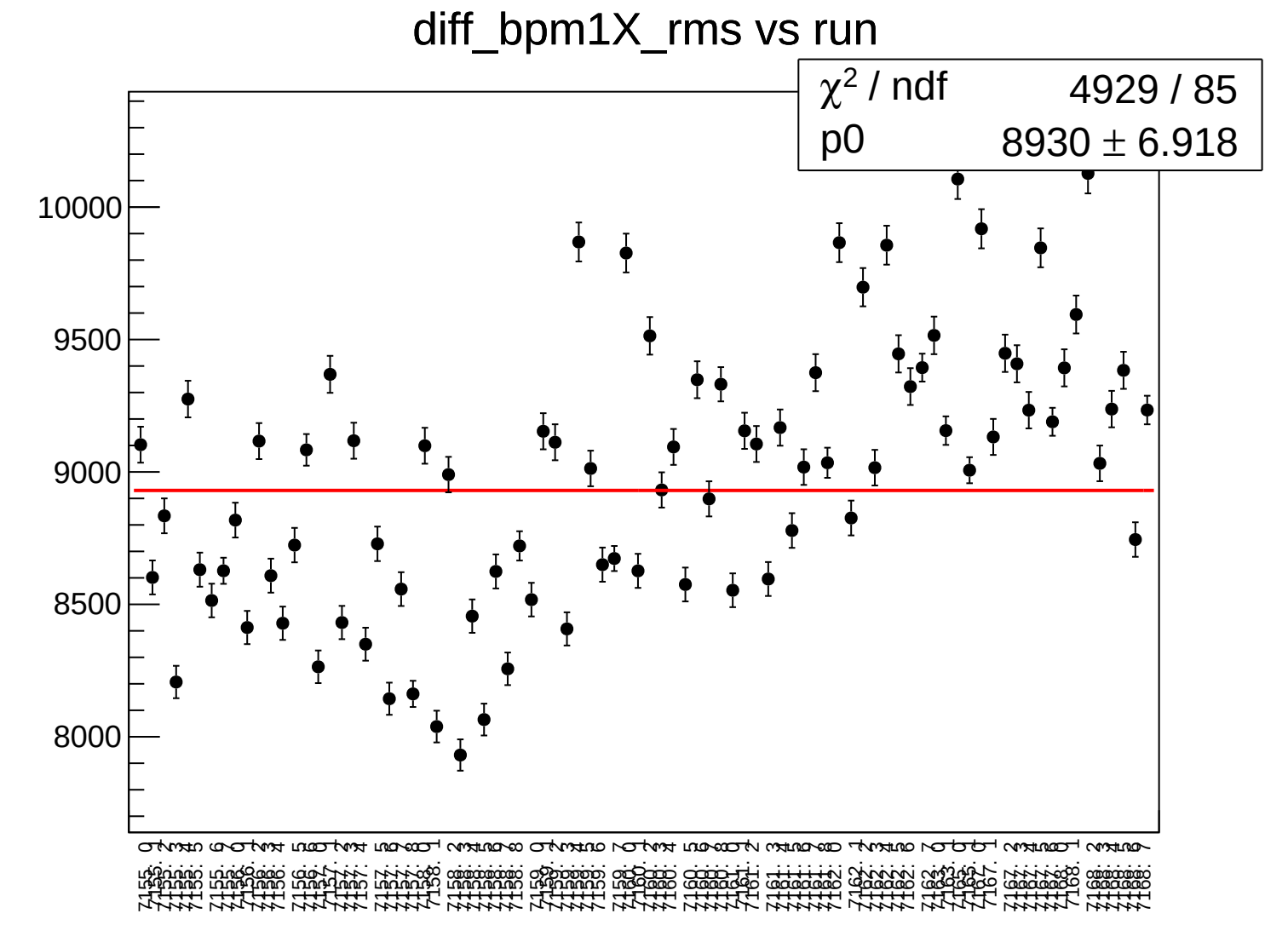
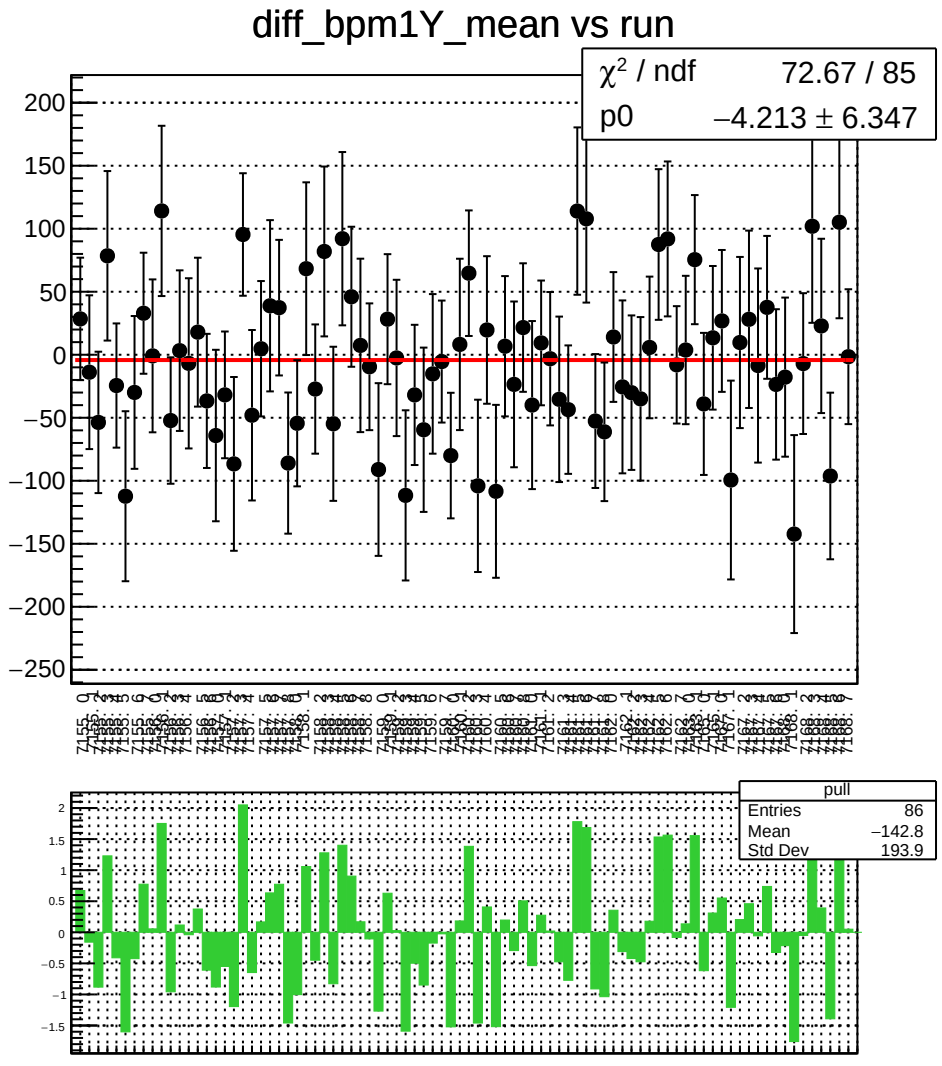
0
2
4
6
8

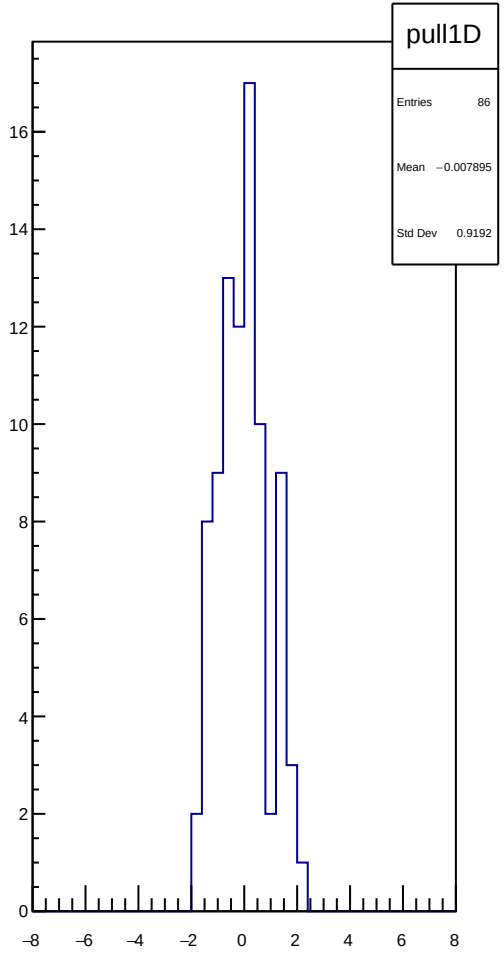

diff_bpm4ecY_rms vs run
χ² / ndf 4310 / 85
p0 7759 ± 6.009
9000
8500
8000
7500
7000

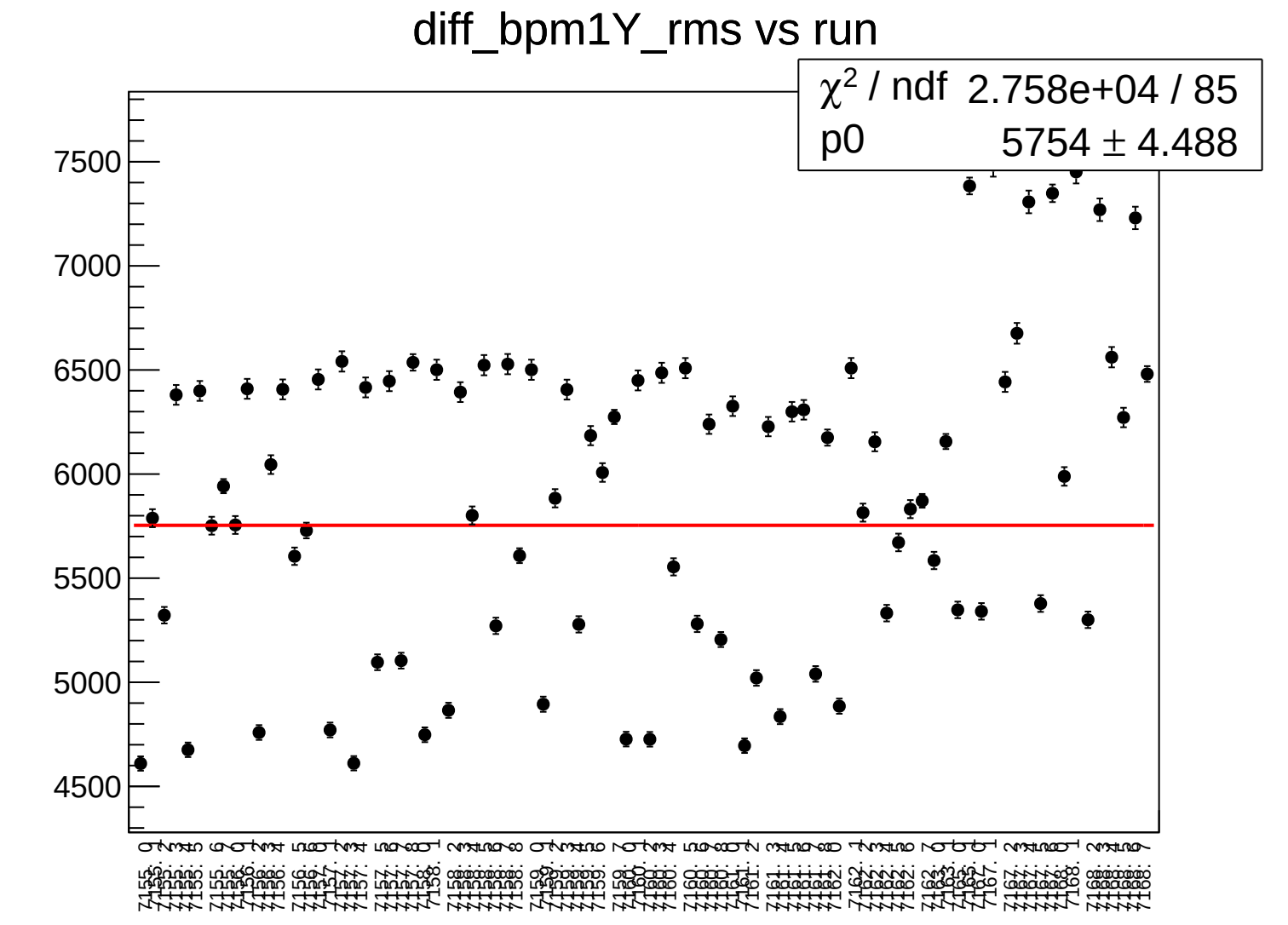

diff_bpm1X_mean vs run
χ² / ndf 63.53 / 85
p0 11.27 ± 9.783
pull
Entries 86
Mean −14.29
Std Dev 84.57

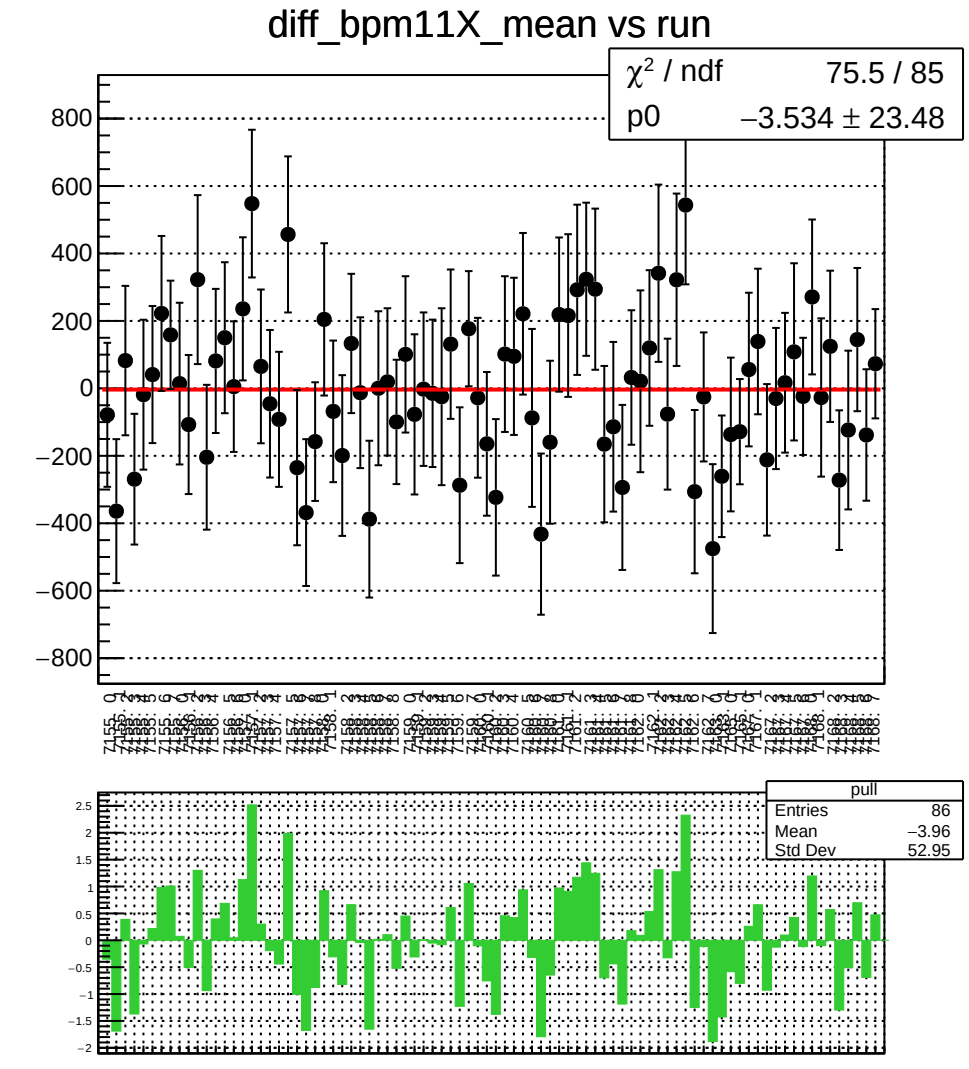

pull1D
Entries 86
Mean 0.01897
Std Dev 0.8593

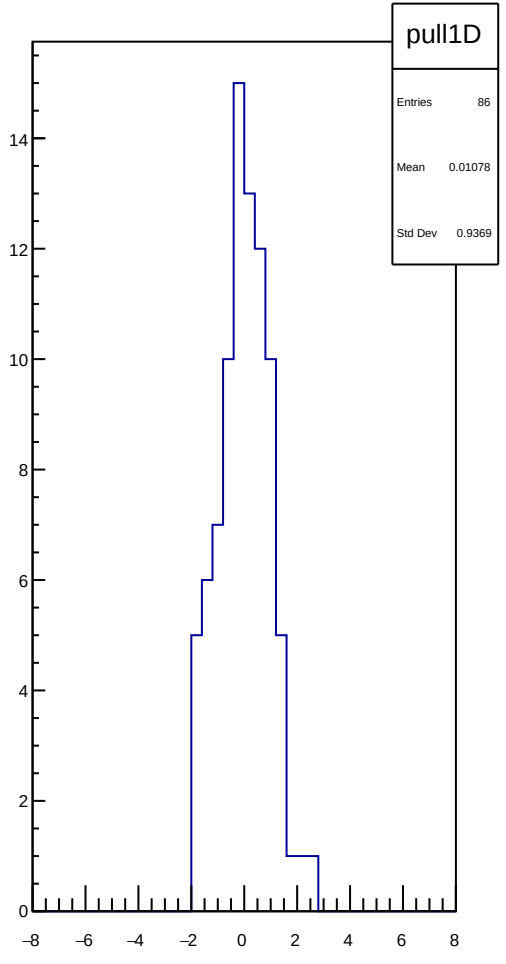

diff_bpm1X_rms vs run
χ² / ndf 4929 / 85
p0 8930 ± 6.918
10000
9500
9000
8500
8000

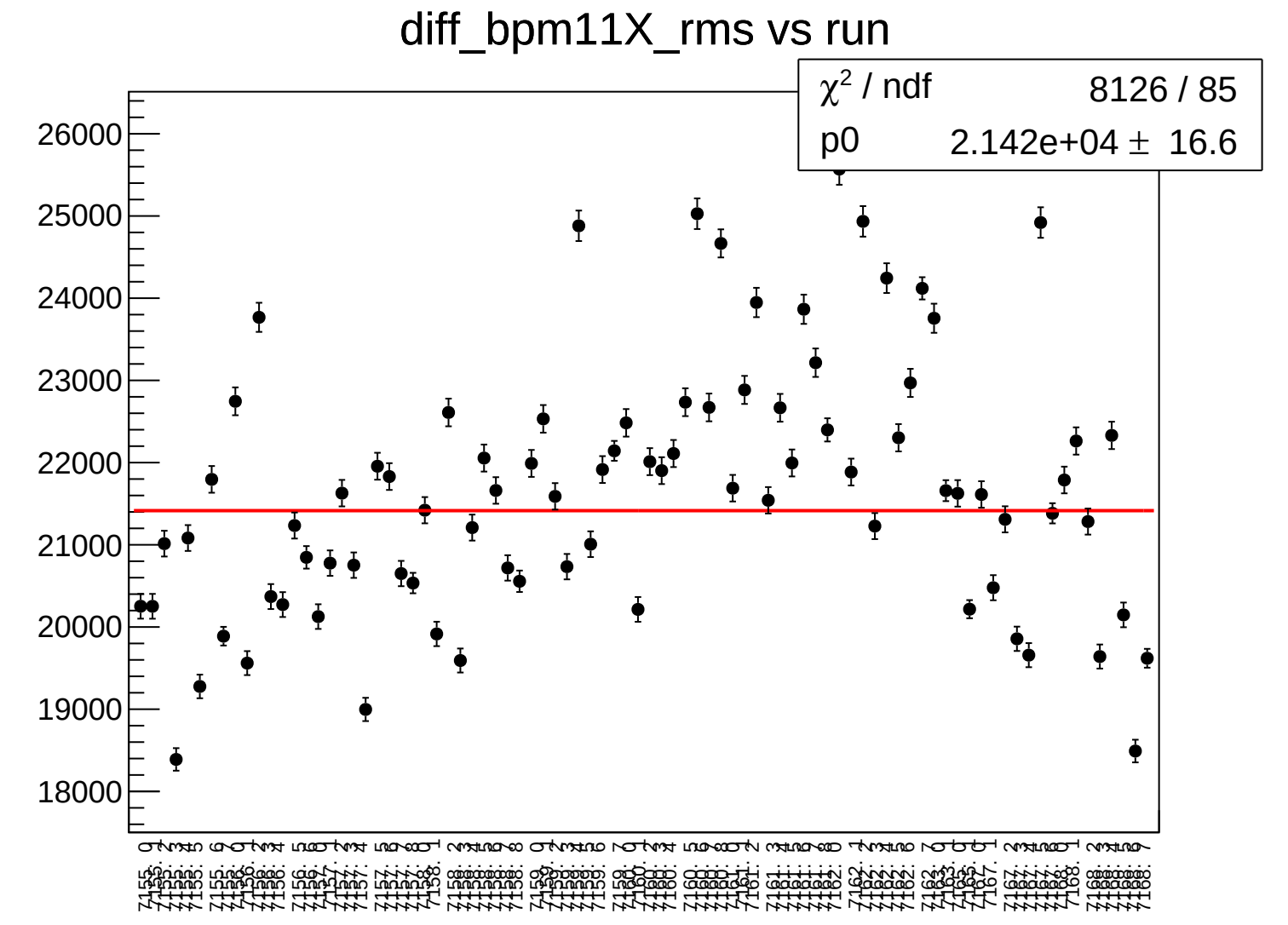

diff_bpm1Y_mean vs run
χ² / ndf 72.67 / 85
p0 −4.213 ± 6.347
pull
Entries 86
Mean −142.8
Std Dev 193.9

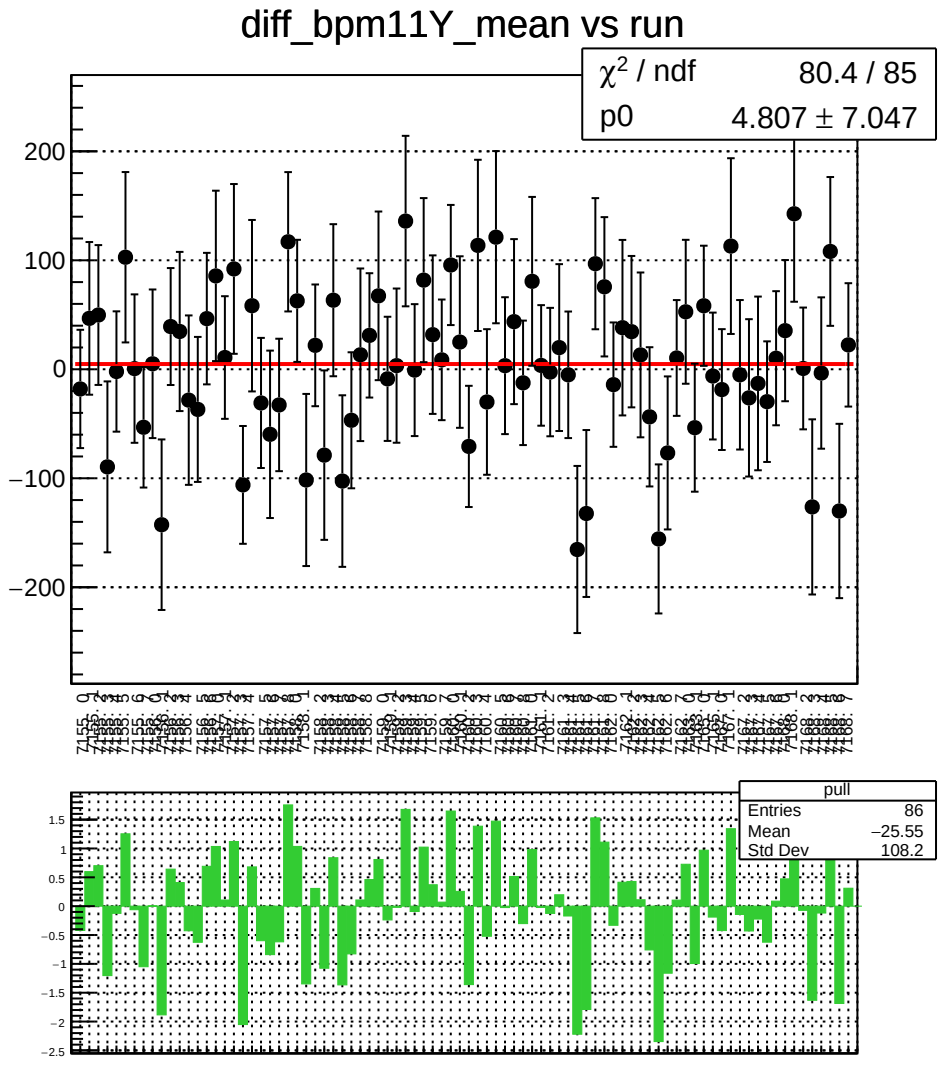

pull1D
Entries 86
Mean −0.007895
Std Dev 0.9192

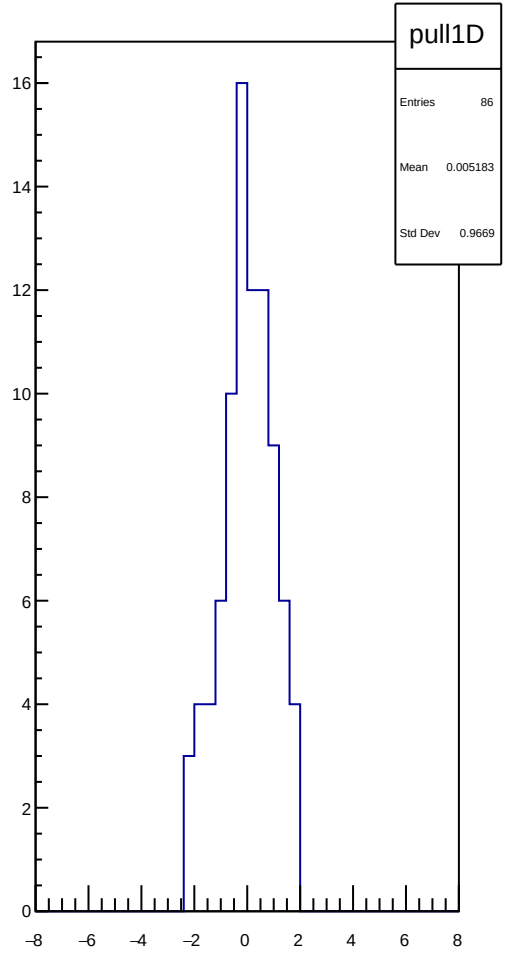

diff_bpm1Y_rms vs run
χ^2 / ndf 2.758e+04 / 85
p0 5754 ± 4.488
7500
7000
6500
6000
5500
5000
4500

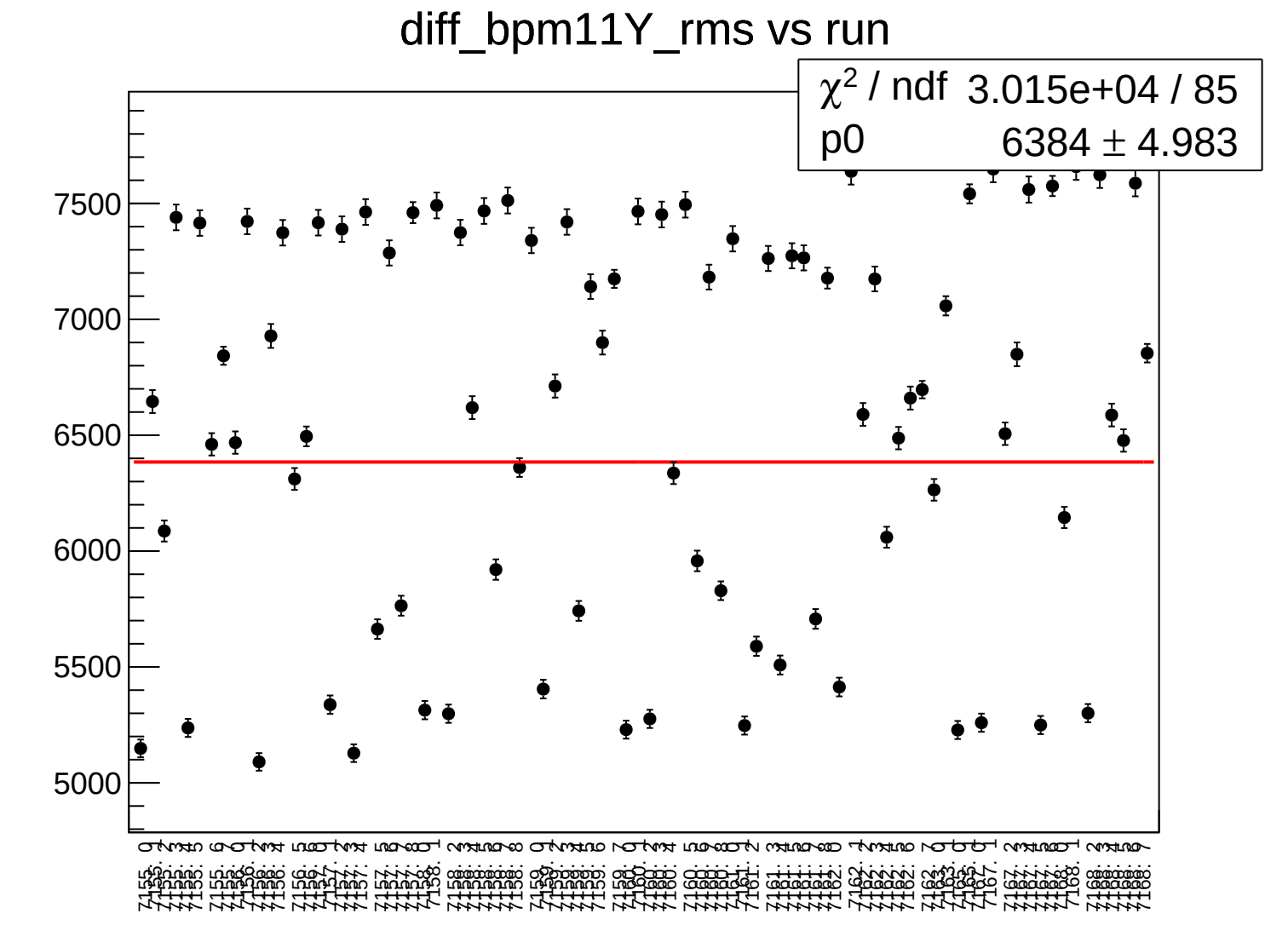

diff_bpm11X_mean vs run
χ² / ndf 75.5 / 85
p0 −3.534 ± 23.48
800
600
400
200
0
−200
−400
−600
−800
pull
Entries 86
Mean −3.96
Std Dev 52.95
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

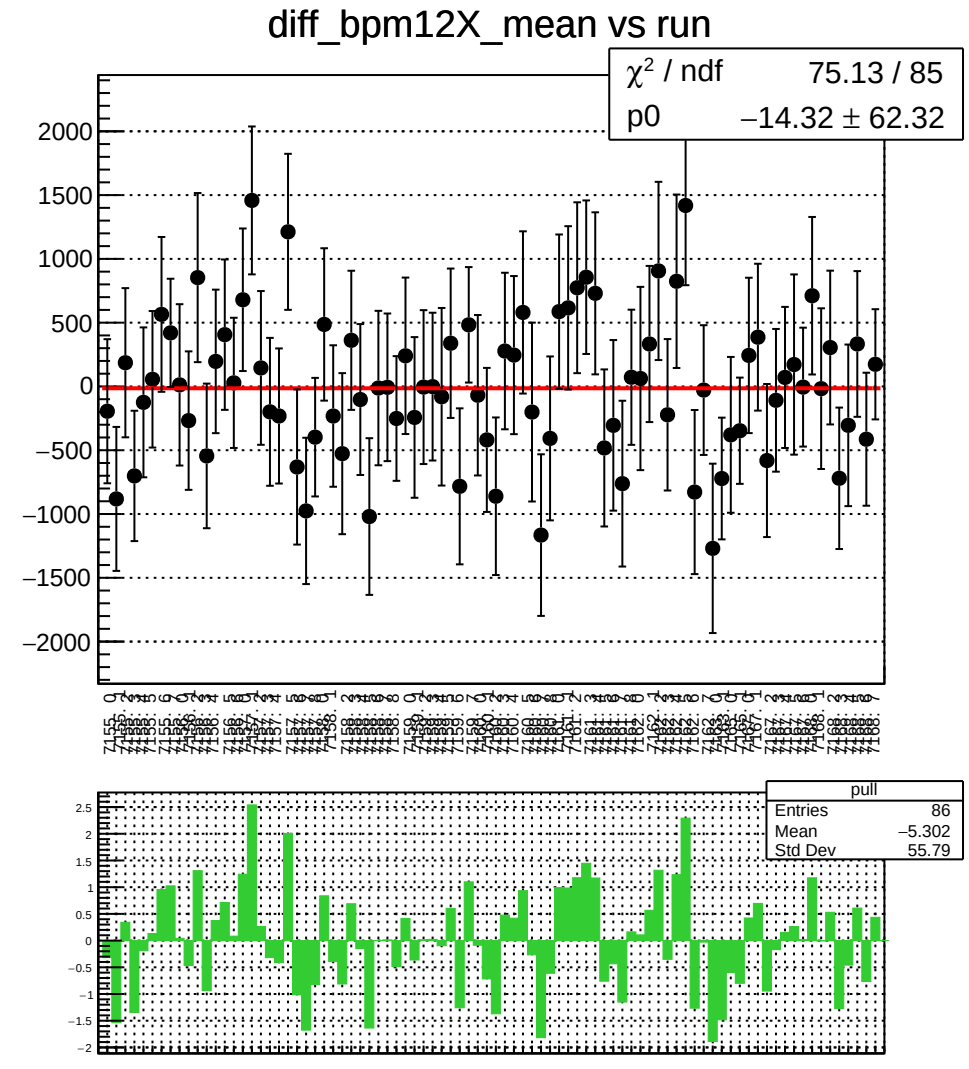

pull1D
Entries 86
Mean 0.01078
Std Dev 0.9369
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

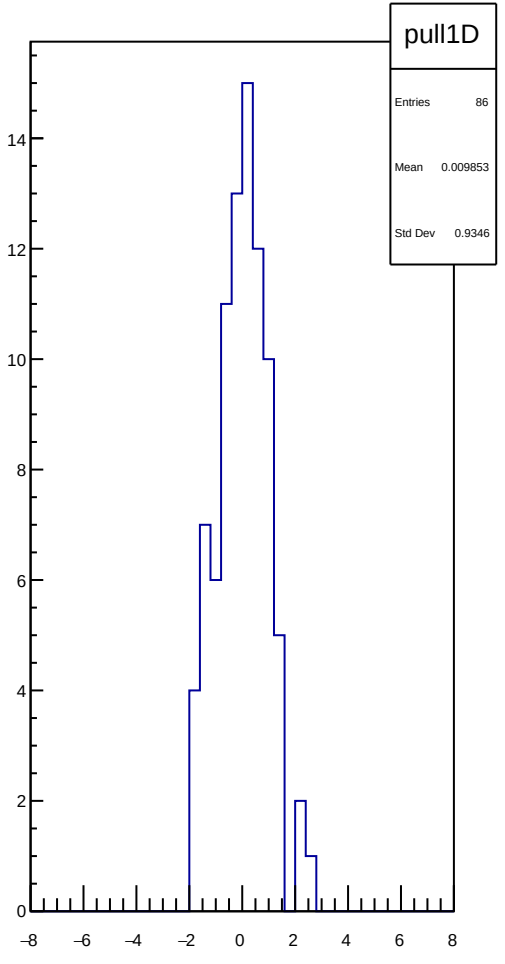

diff_bpm11X_rms vs run
χ² / ndf 8126 / 85
p0 2.142e+04 ± 16.6
26000
25000
24000
23000
22000
21000
20000
19000
18000

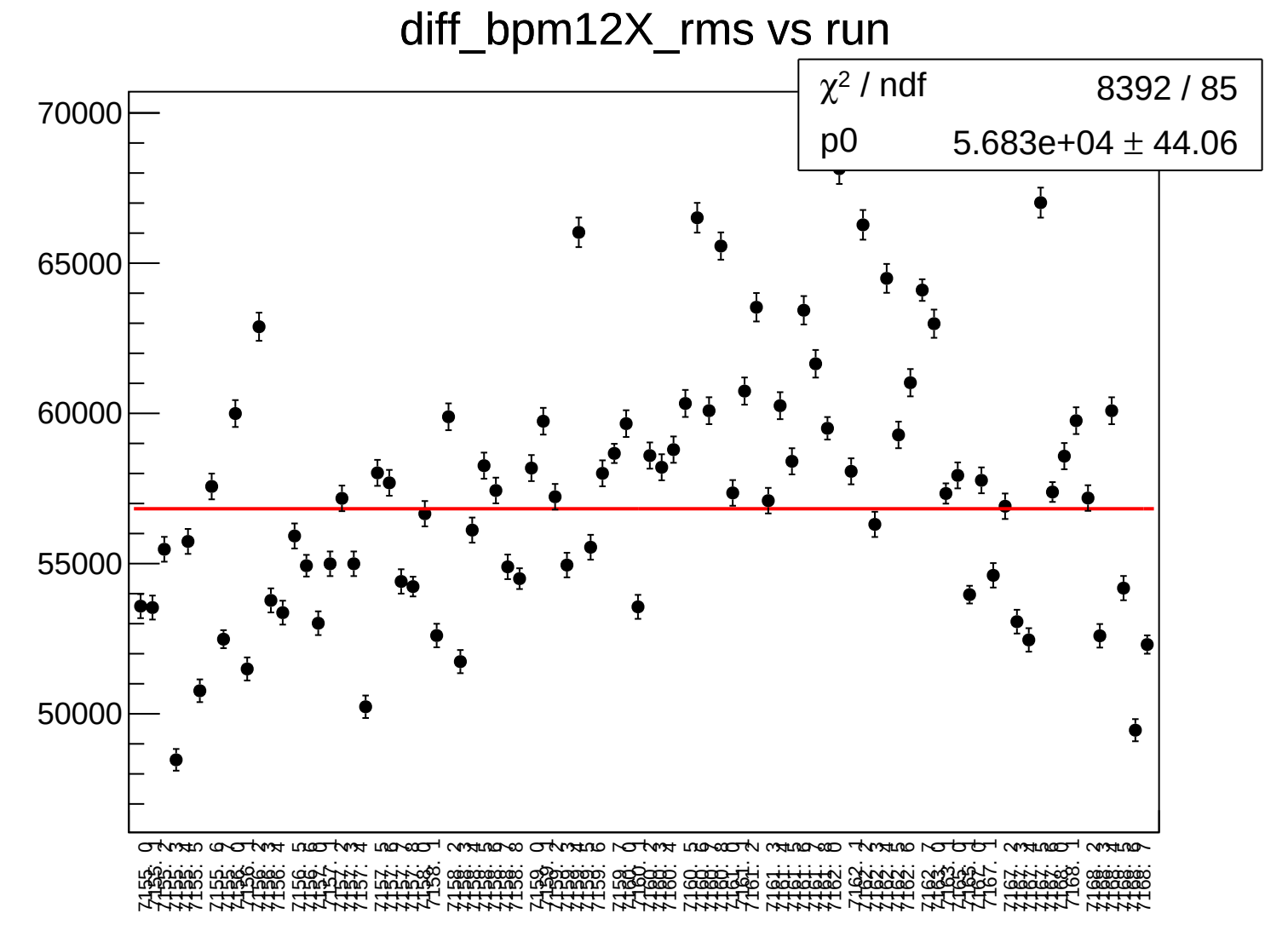

diff_bpm11Y_mean vs run
χ² / ndf 80.4 / 85
p0 4.807 ± 7.047
200
100
0
−100
−200
pull
Entries 86
Mean −25.55
Std Dev 108.2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

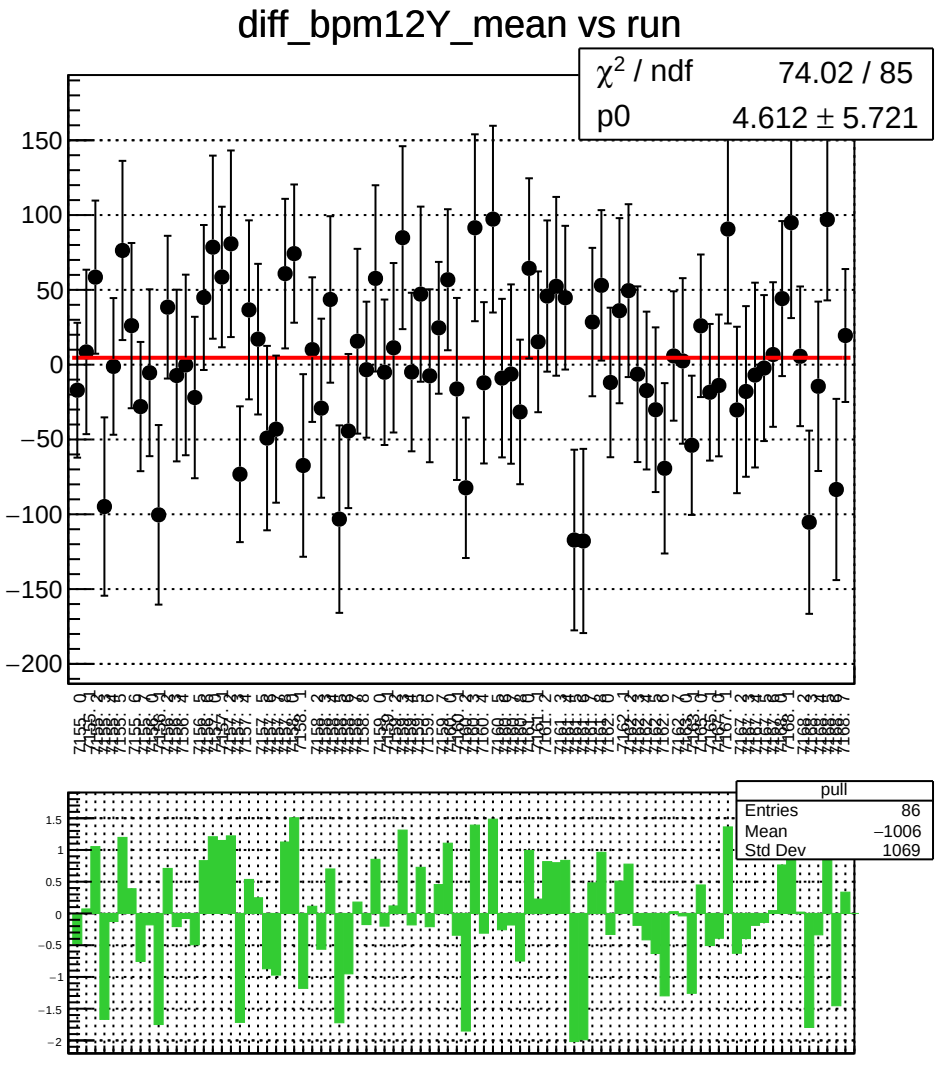

pull1D
Entries 86
Mean 0.005183
Std Dev 0.9669
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

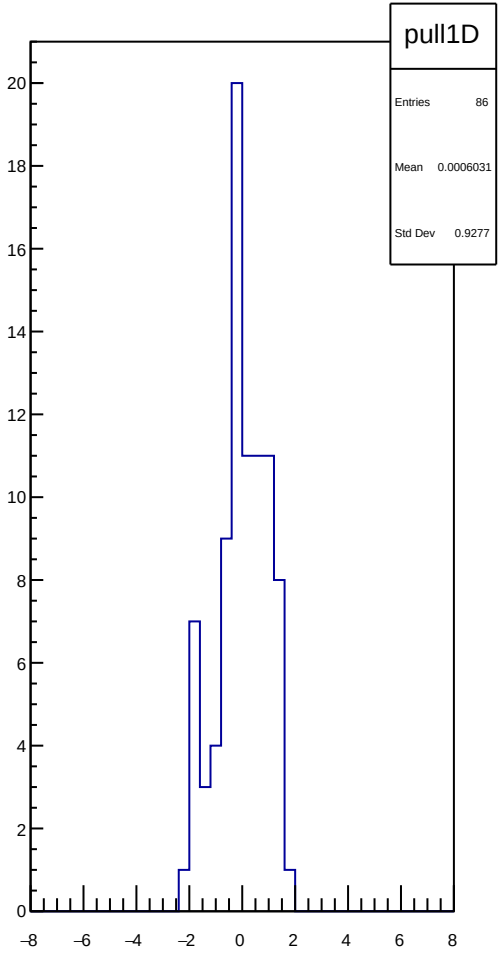

diff_bpm11Y_rms vs run
χ² / ndf 3.015e+04 / 85
p0 6384 ± 4.983
7500
7000
6500
6000
5500
5000

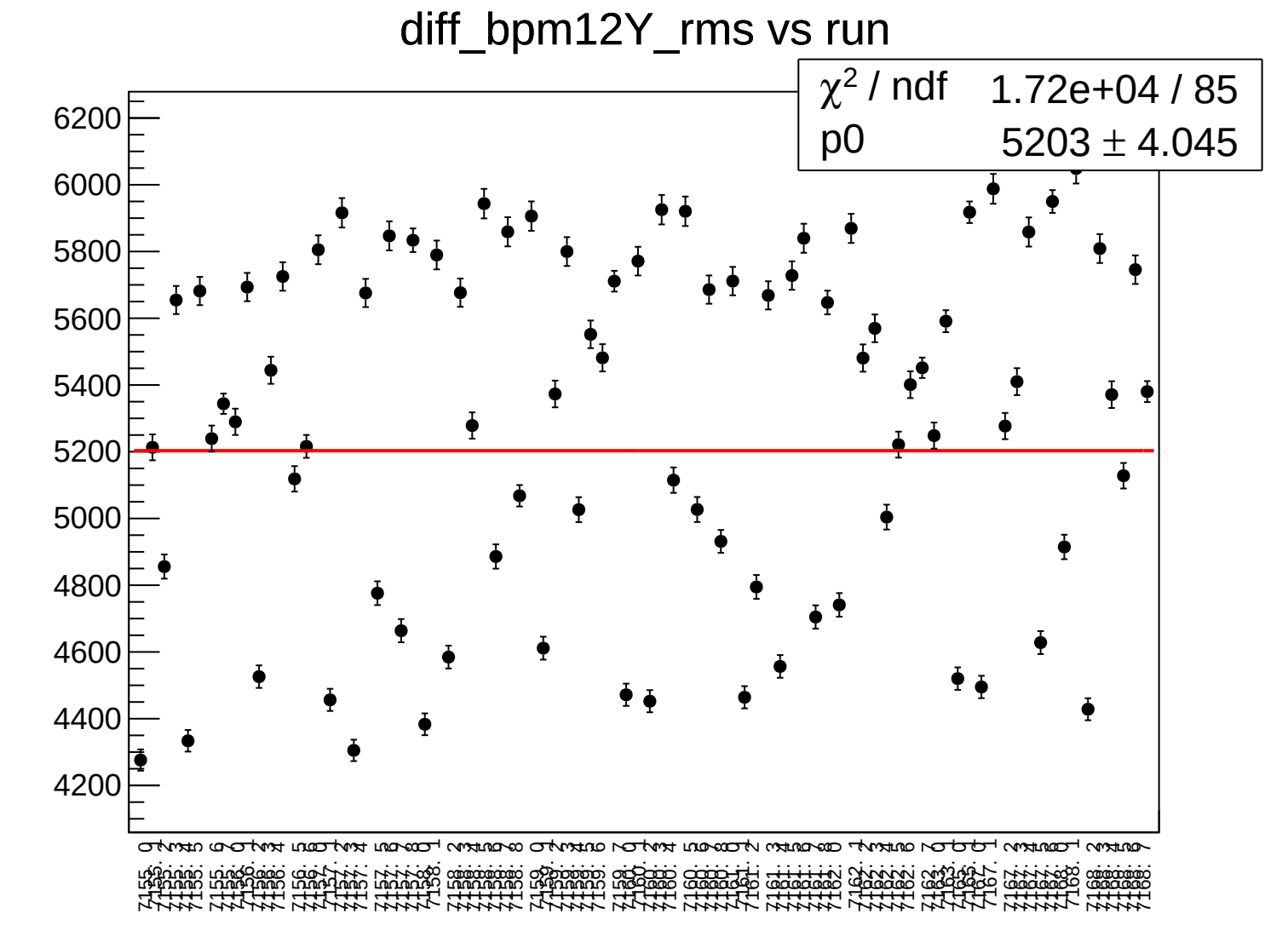

diff_bpm12X_mean vs run
χ² / ndf 75.13 / 85
p0 −14.32 ± 62.32
pull
Entries 86
Mean −5.302
Std Dev 55.79

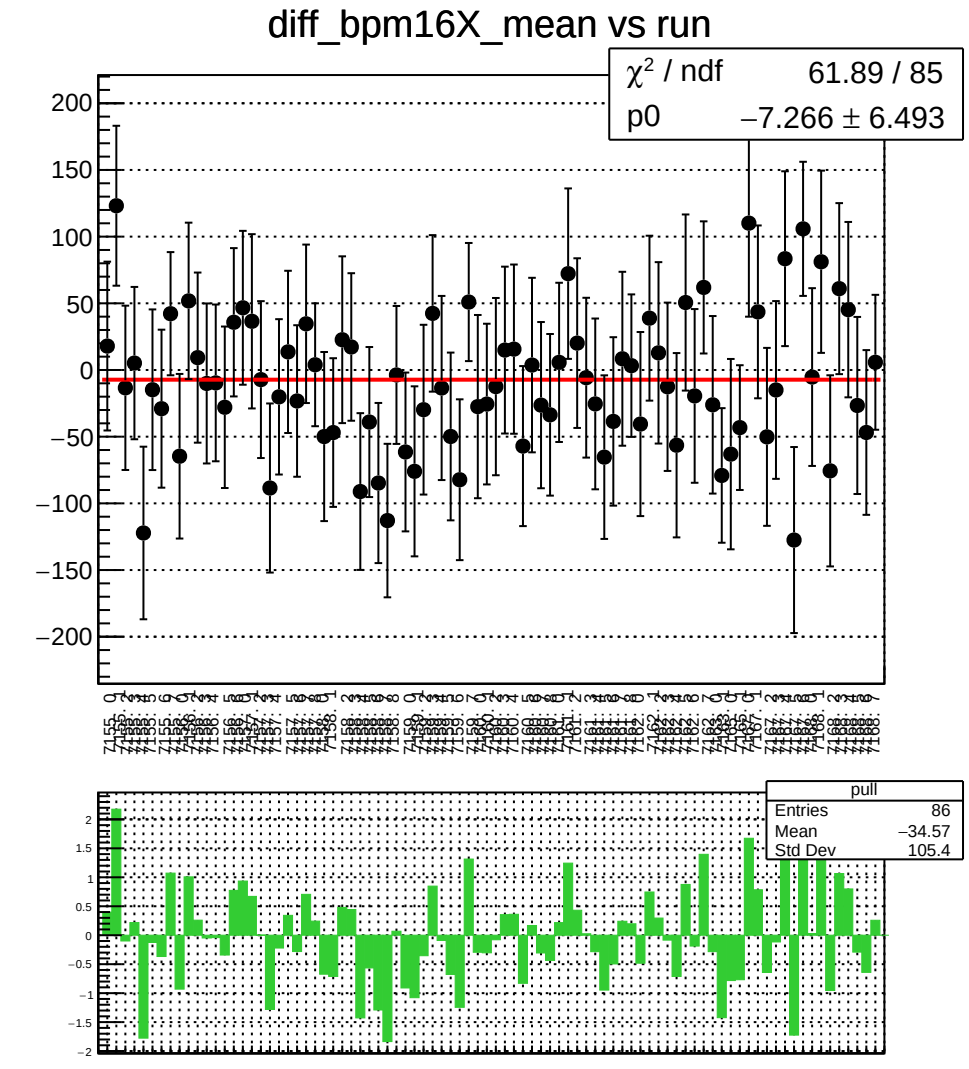

pull1D
Entries 86
Mean 0.009853
Std Dev 0.9346

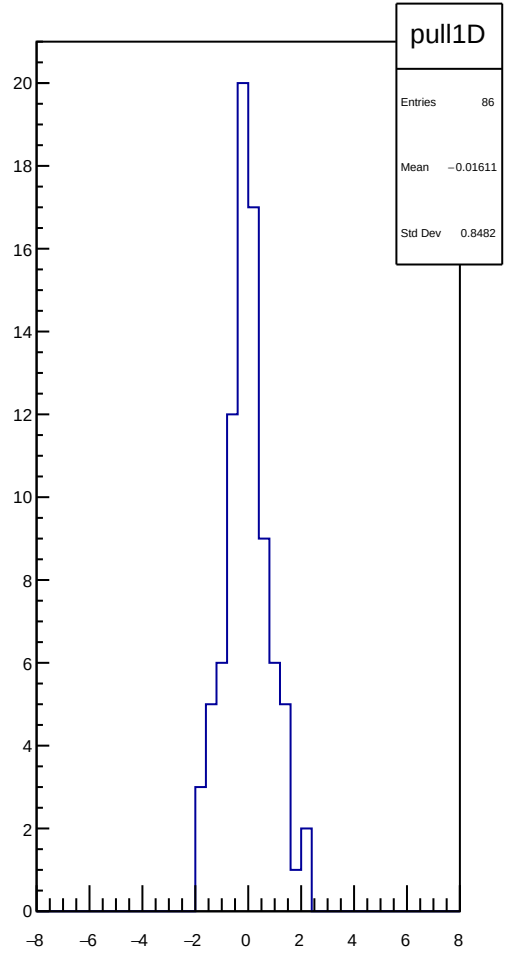

diff_bpm12X_rms vs run
χ² / ndf 8392 / 85
p0 5.683e+04 ± 44.06
70000
65000
60000
55000
50000

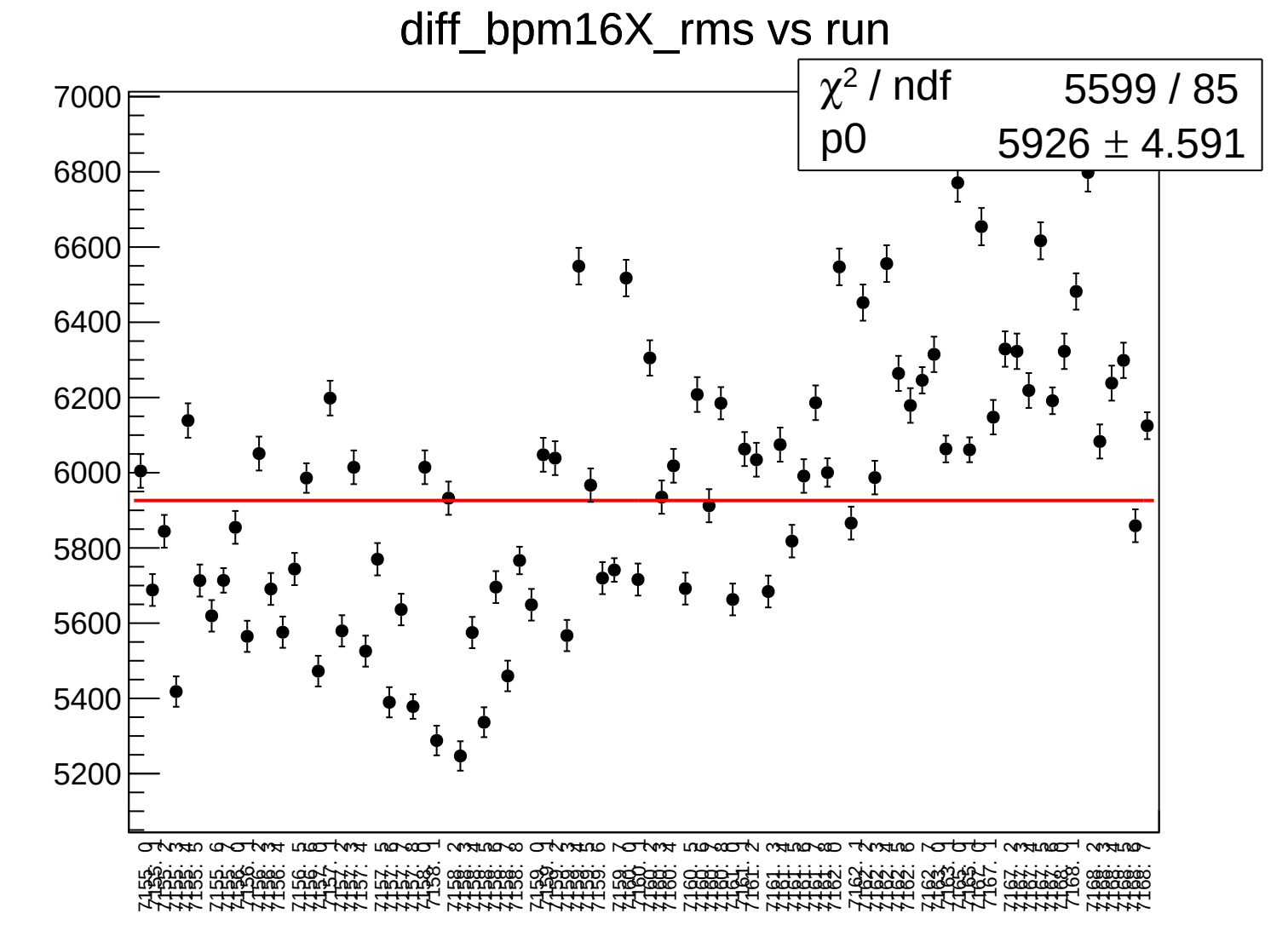

diff_bpm12Y_mean vs run
χ² / ndf 74.02 / 85
p0 4.612 ± 5.721
pull
Entries 86
Mean −1006
Std Dev 1069

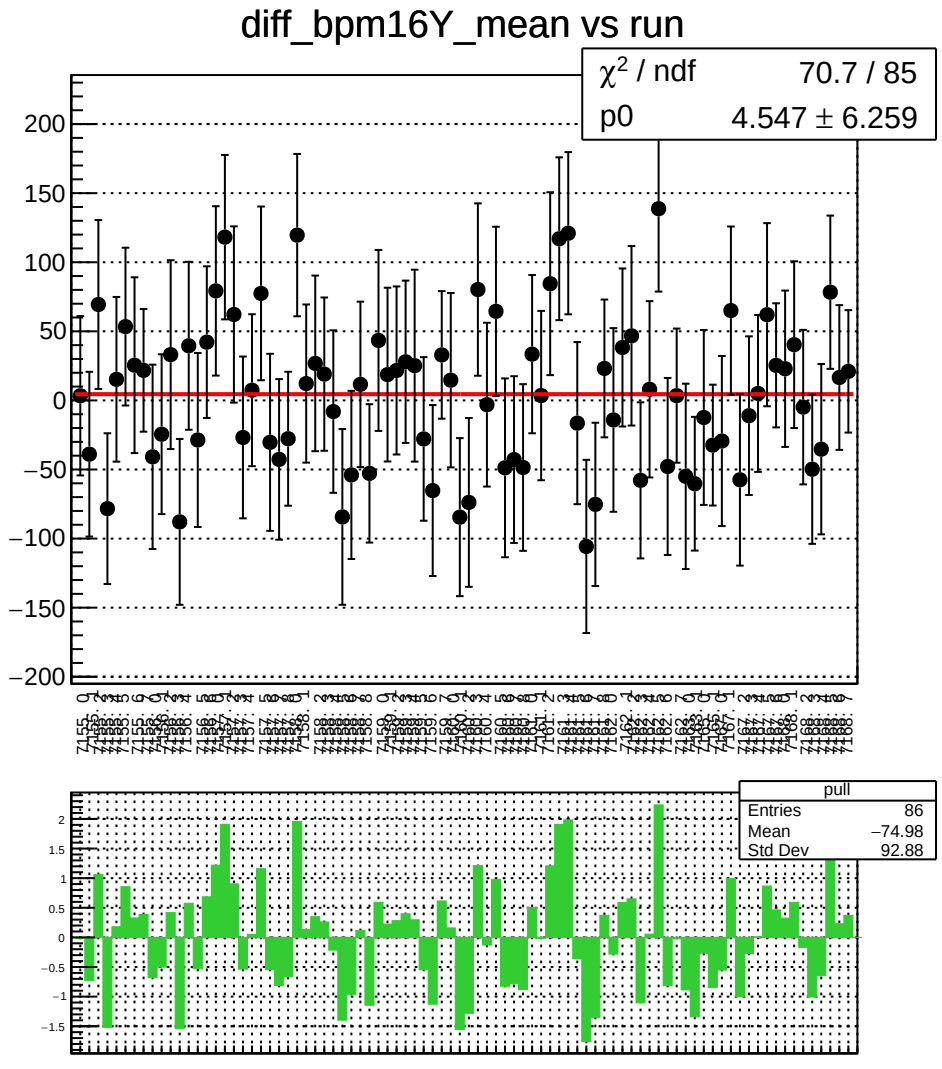

pull1D
Entries 86
Mean 0.0006031
Std Dev 0.9277

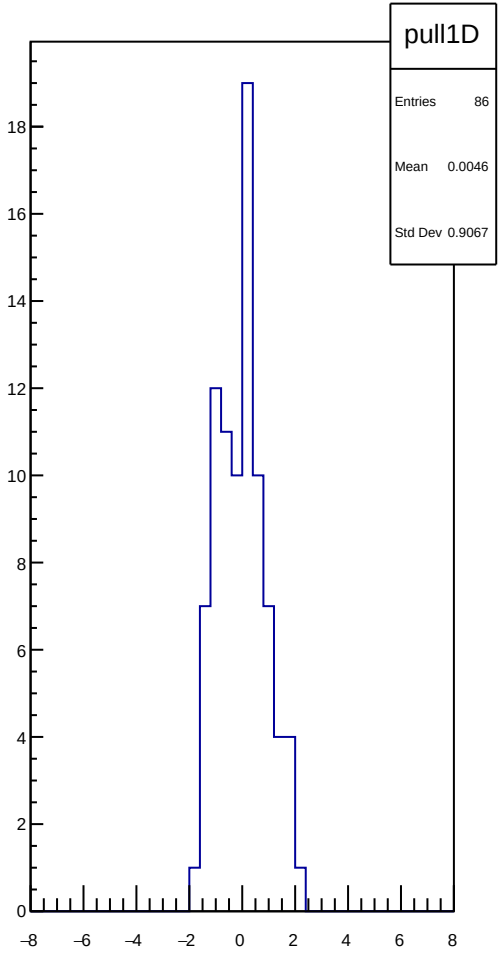

diff_bpm12Y_rms vs run
χ² / ndf 1.72e+04 / 85
p0 5203 ± 4.045
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400
4200

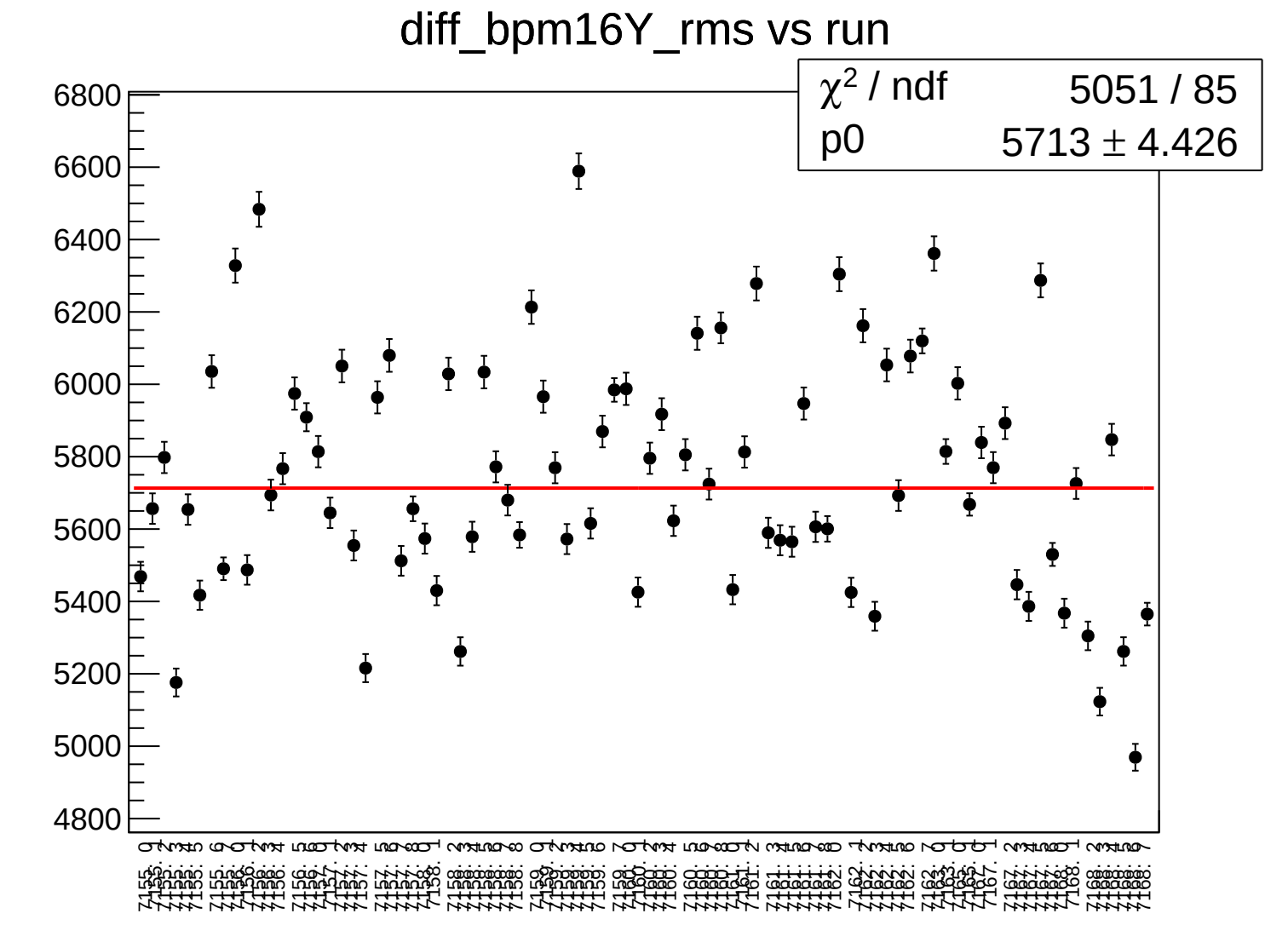

diff_bpm16X_mean vs run
χ² / ndf 61.89 / 85
p0 −7.266 ± 6.493
pull
Entries 86
Mean −34.57
Std Dev 105.4

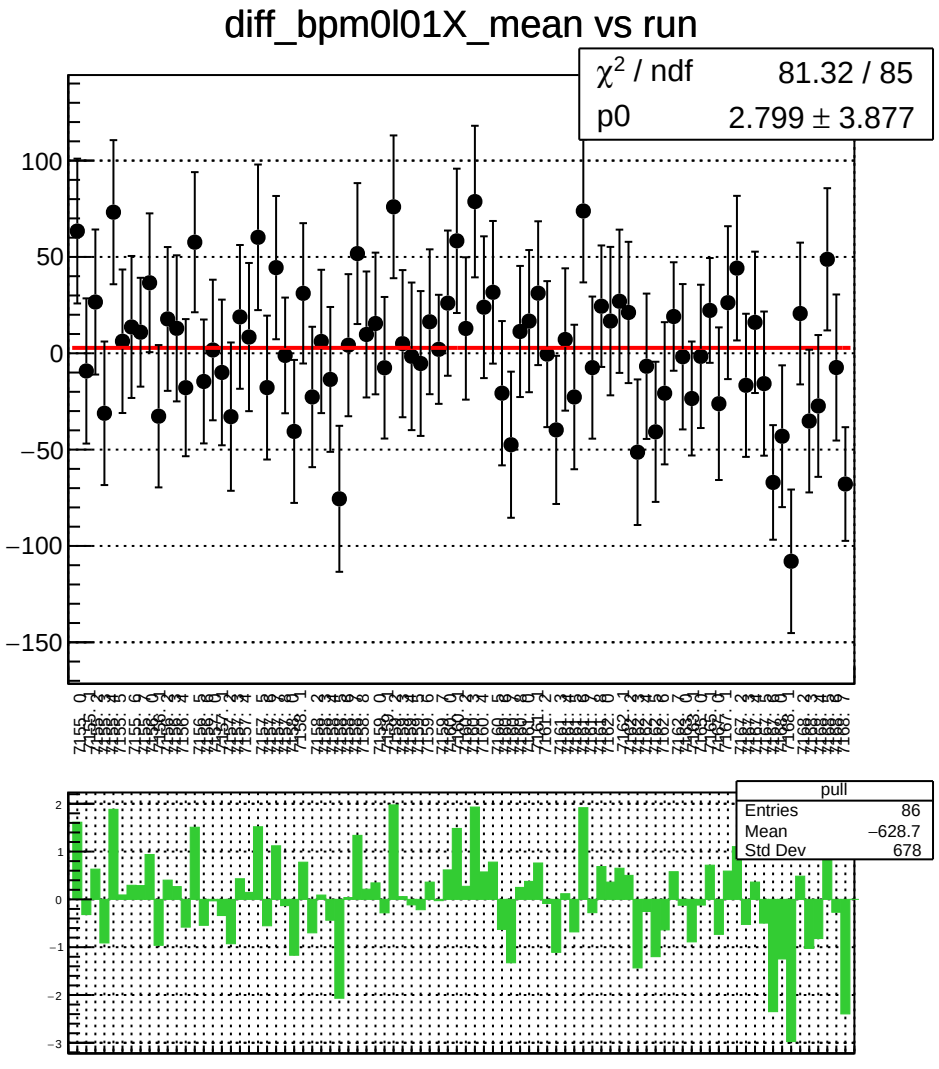

pull1D
Entries 86
Mean −0.01611
Std Dev 0.8482

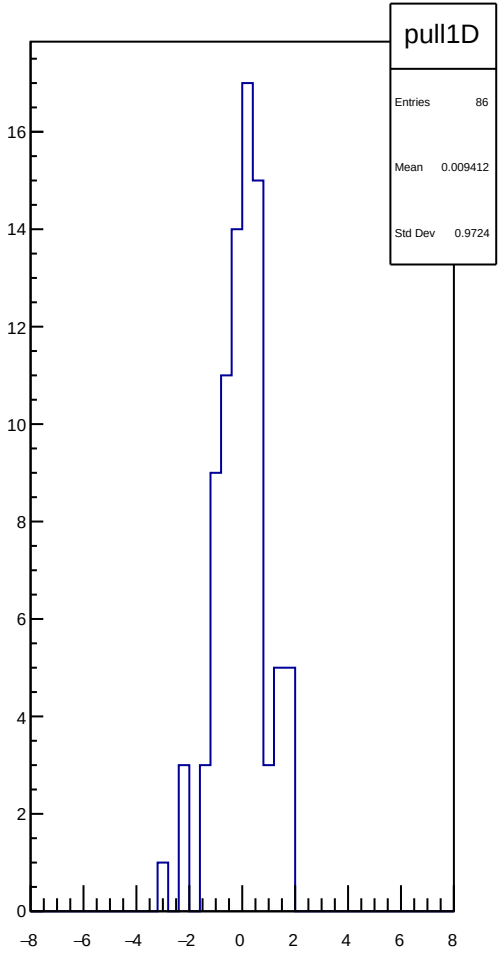

diff_bpm16X_rms vs run
χ² / ndf 5599 / 85
p0 5926 ± 4.591
7000
6800
6600
6400
6200
6000
5800
5600
5400
5200

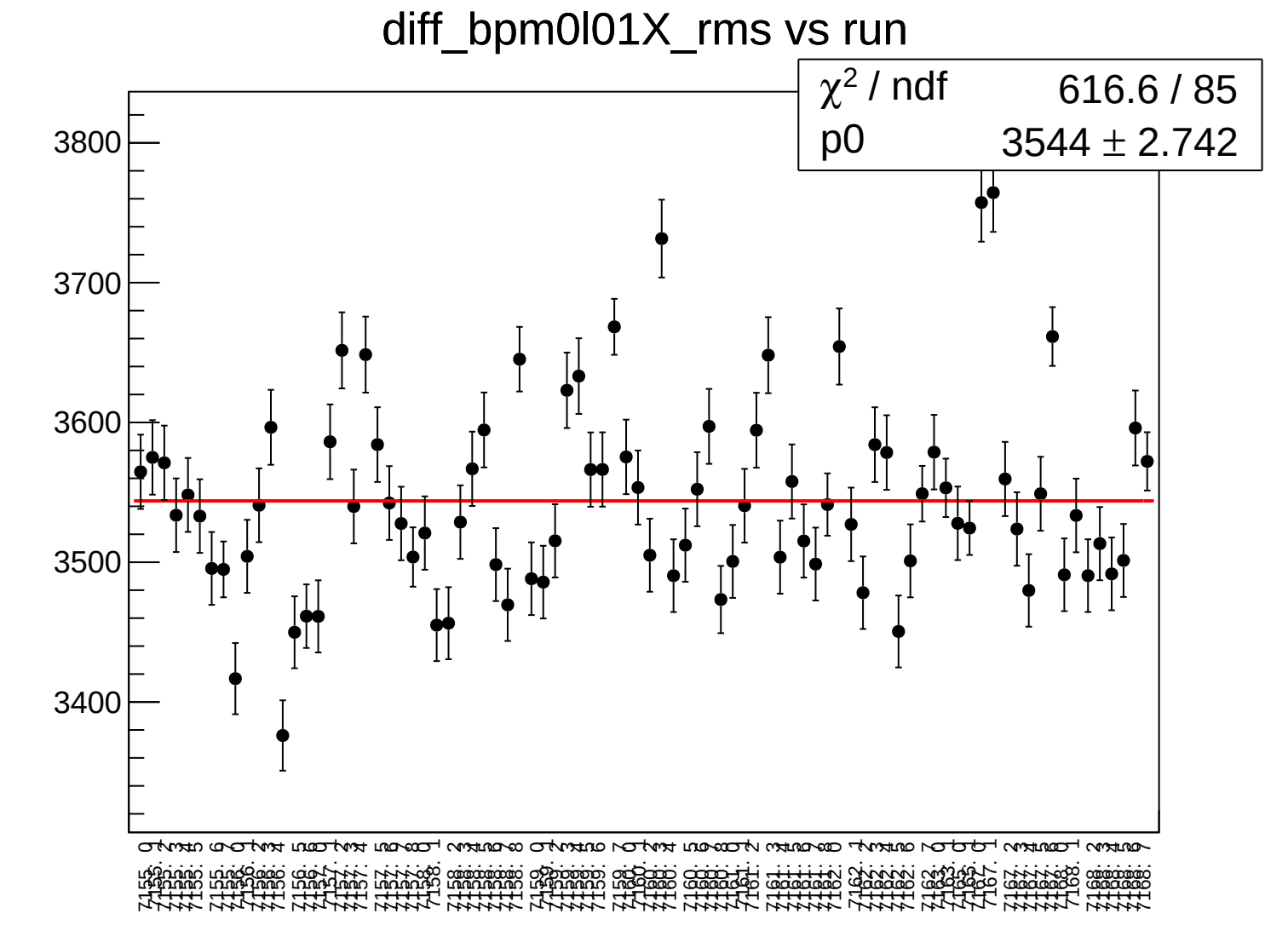

diff_bpm16Y_mean vs run
χ^2 / ndf 70.7 / 85
p0 4.547 ± 6.259
pull
Entries 86
Mean −74.98
Std Dev 92.88

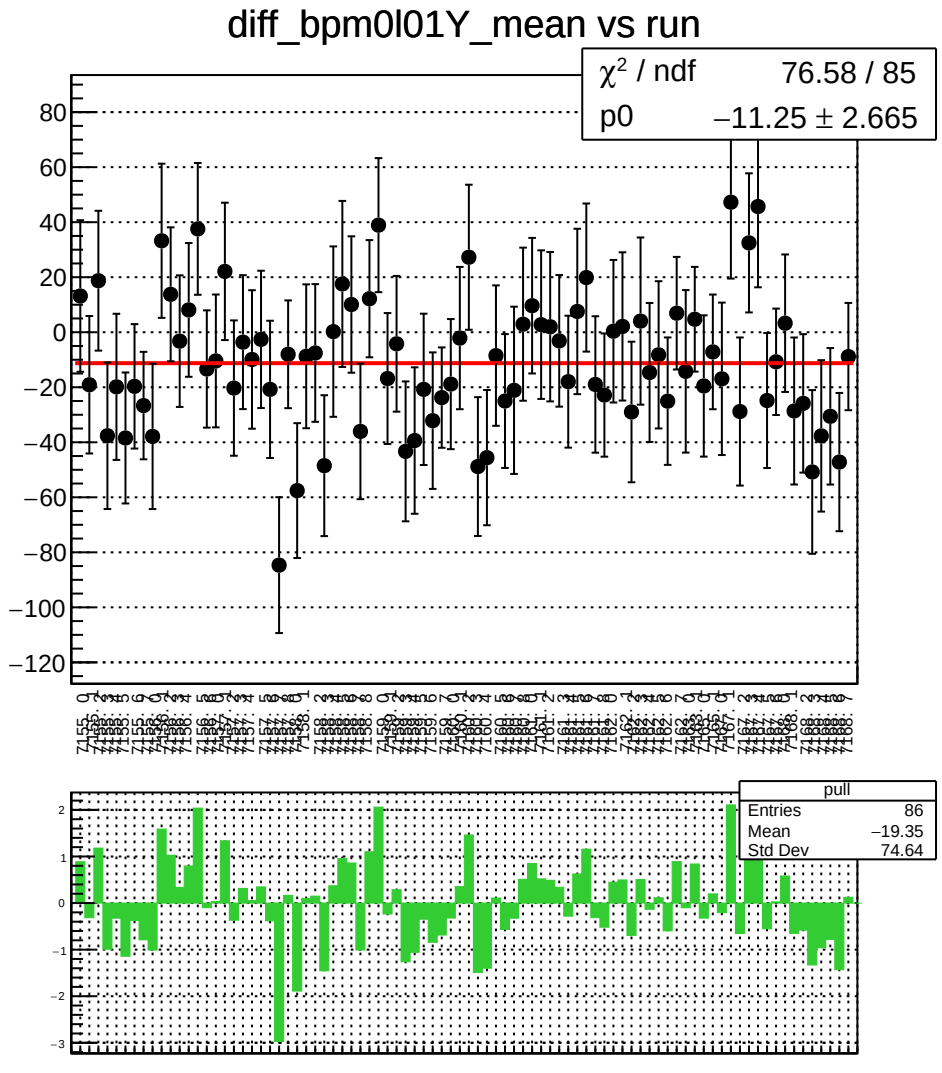

pull1D
Entries 86
Mean 0.0046
Std Dev 0.9067

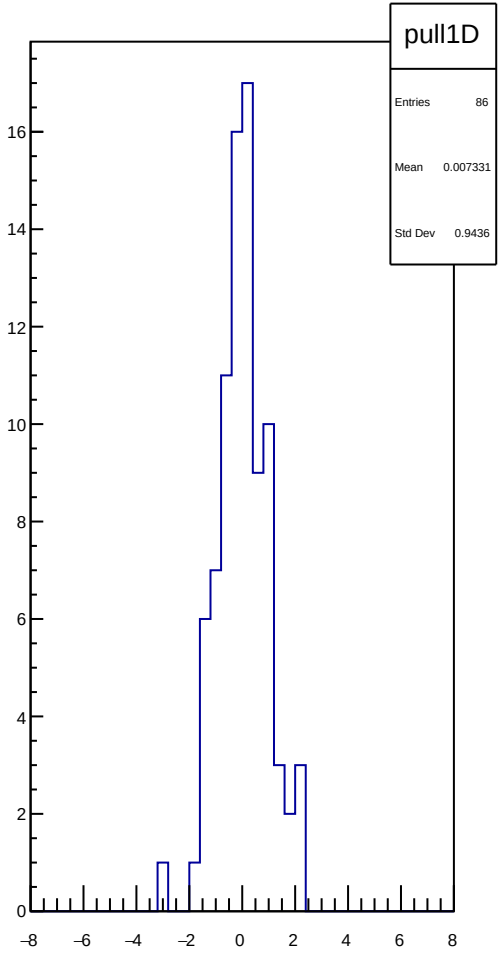

diff_bpm16Y_rms vs run
χ² / ndf 5051 / 85
p0 5713 ± 4.426
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

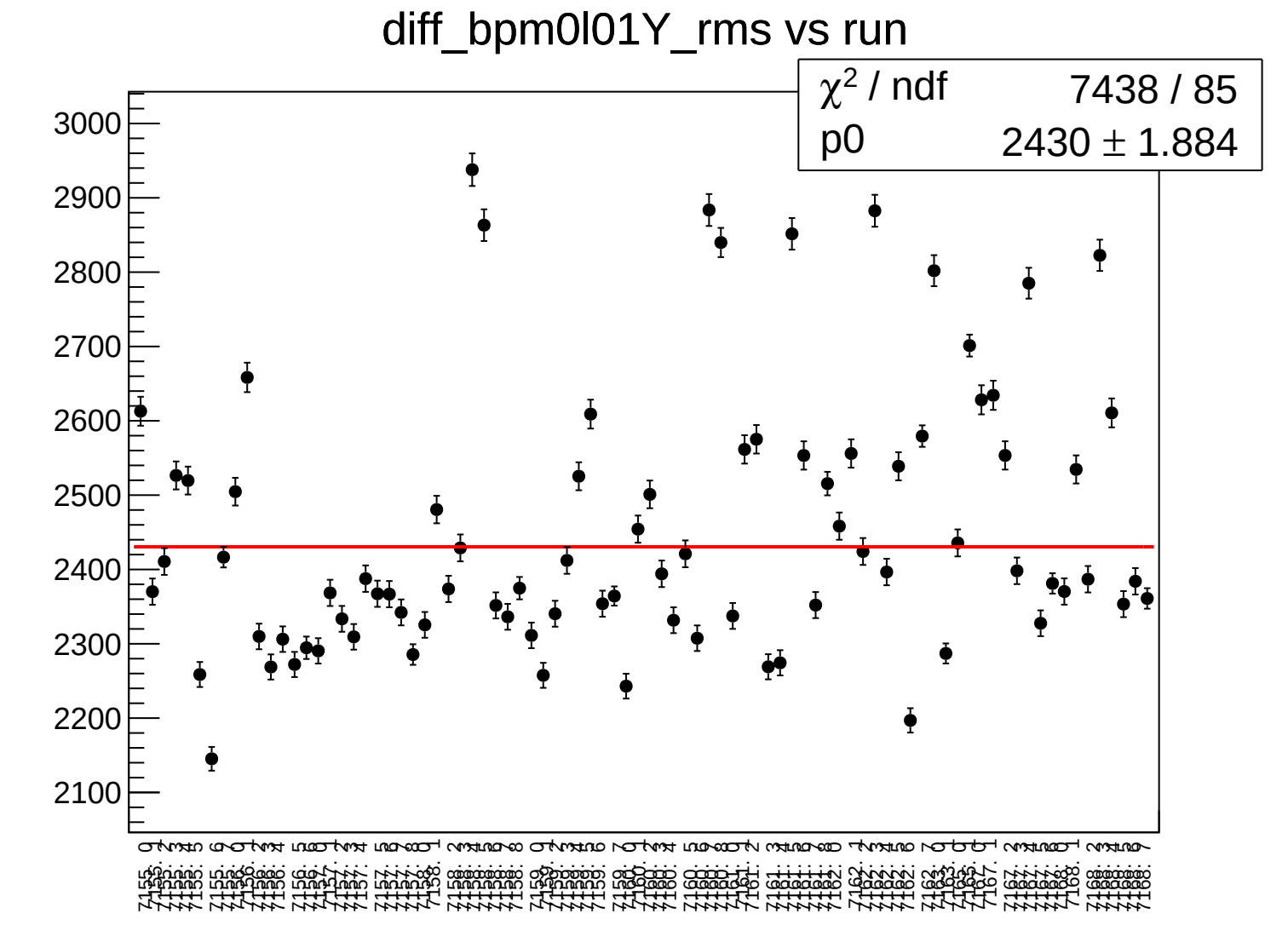

diff_bpm0l01X_mean vs run
χ² / ndf 81.32 / 85
p0 2.799 ± 3.877
pull
Entries 86
Mean −628.7
Std Dev 678

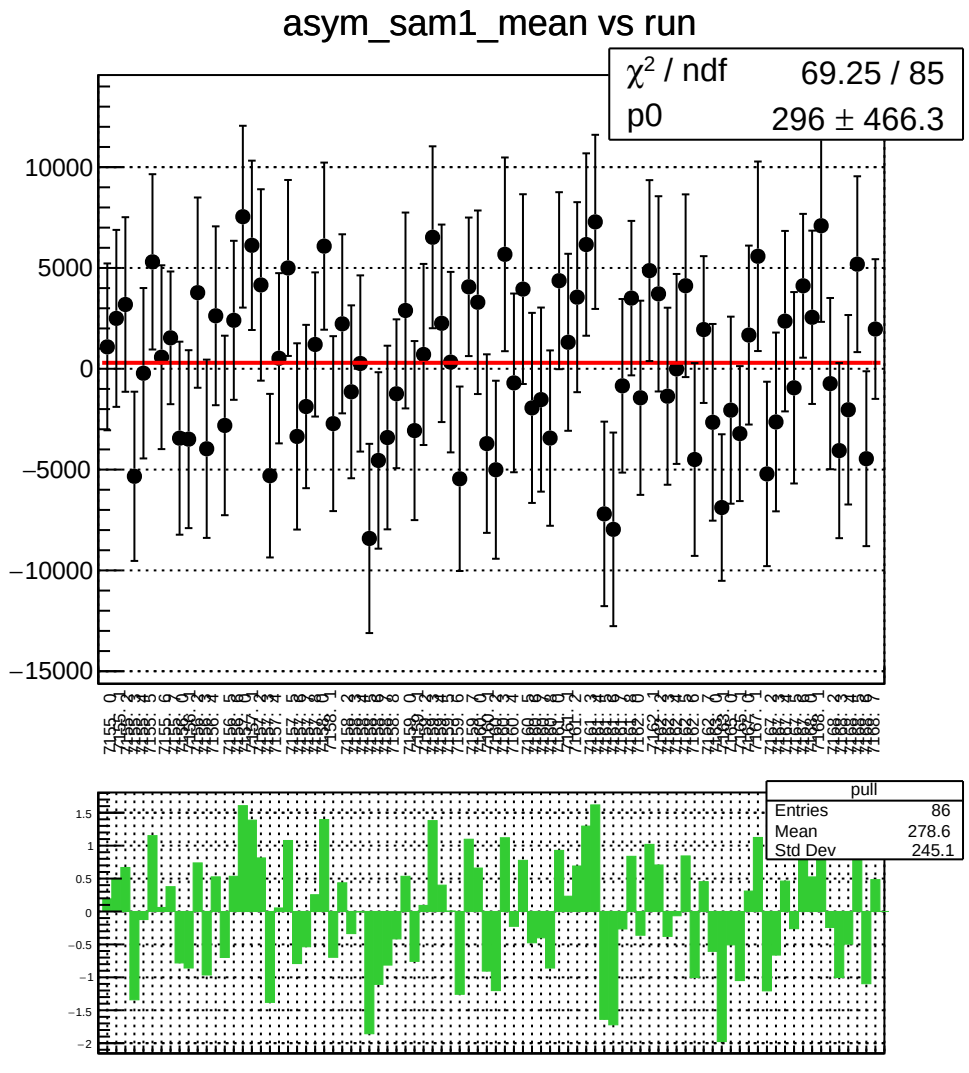

pull1D
Entries 86
Mean 0.009412
Std Dev 0.9724

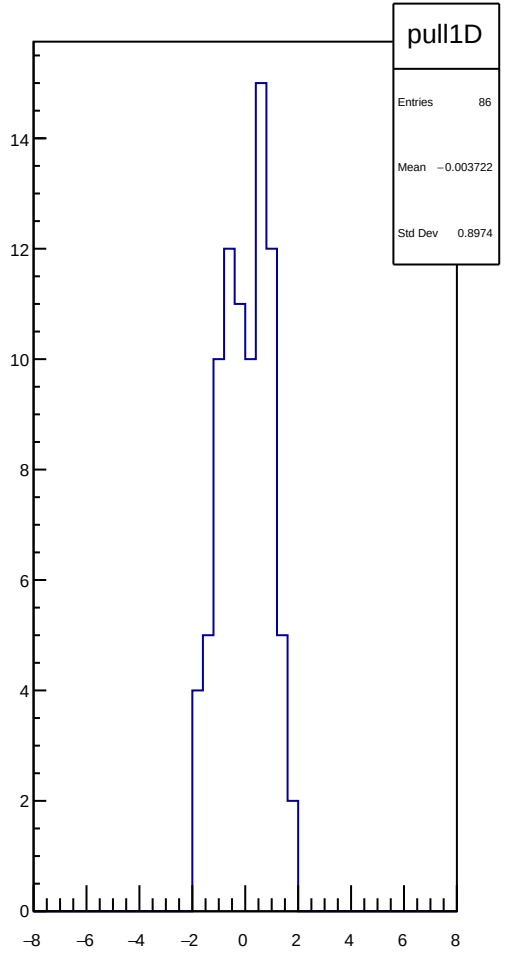

diff_bpm0l01X_rms vs run
χ² / ndf 616.6 / 85
p0 3544 ± 2.742
3800
3700
3600
3500
3400

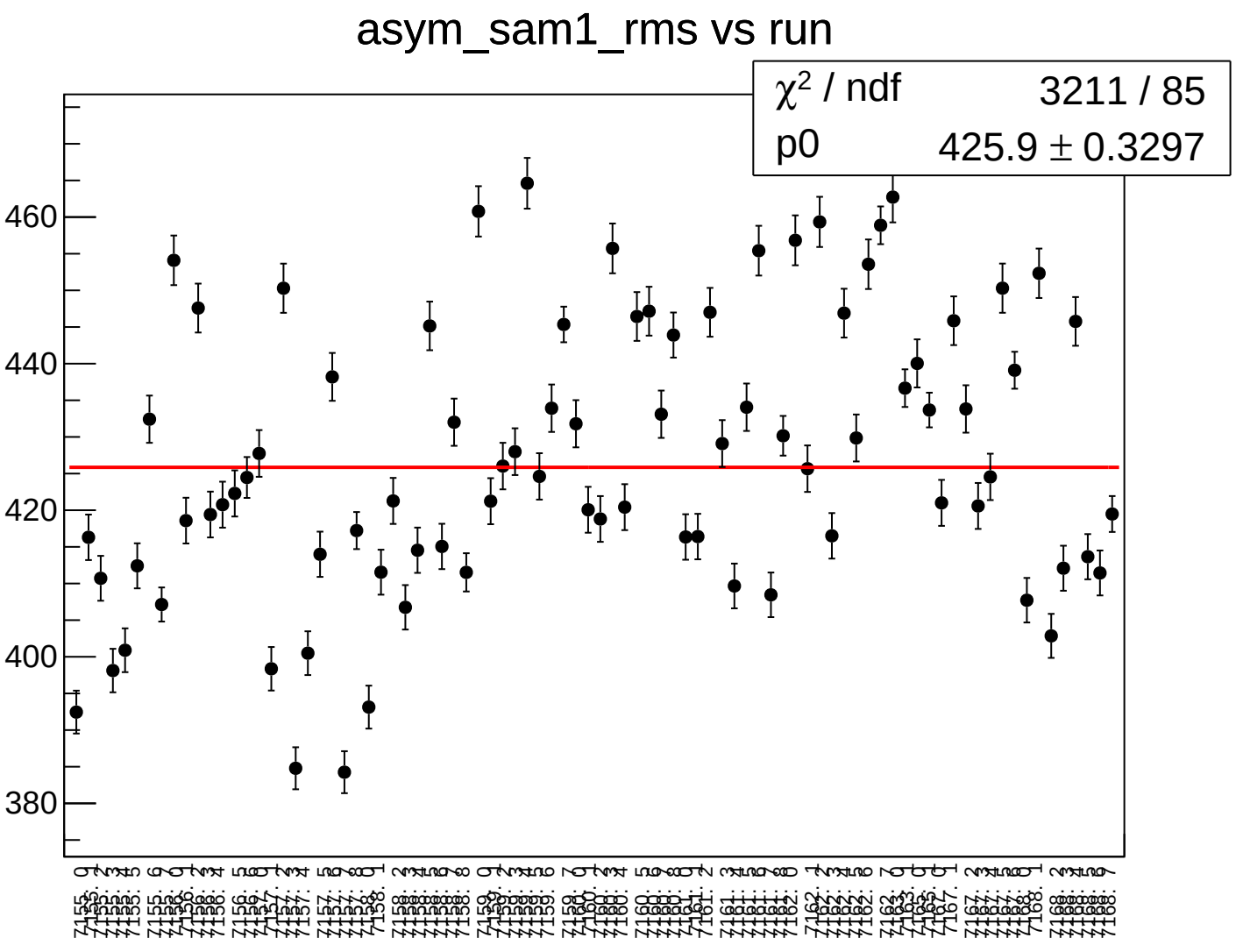

diff_bpm0l01Y_mean vs run
χ^2 / ndf 76.58 / 85
p0 −11.25 ± 2.665
pull
Entries 86
Mean −19.35
Std Dev 74.64

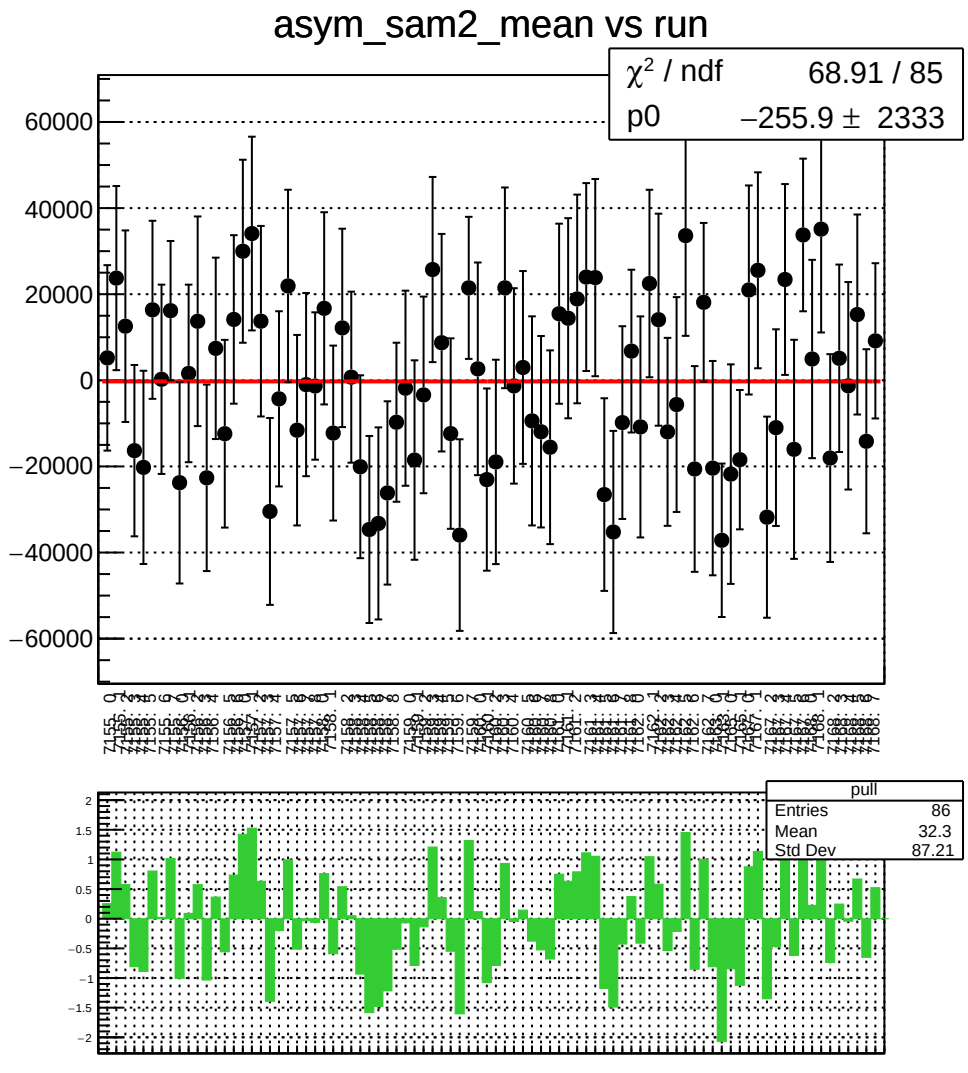

pull1D
Entries 86
Mean 0.007331
Std Dev 0.9436

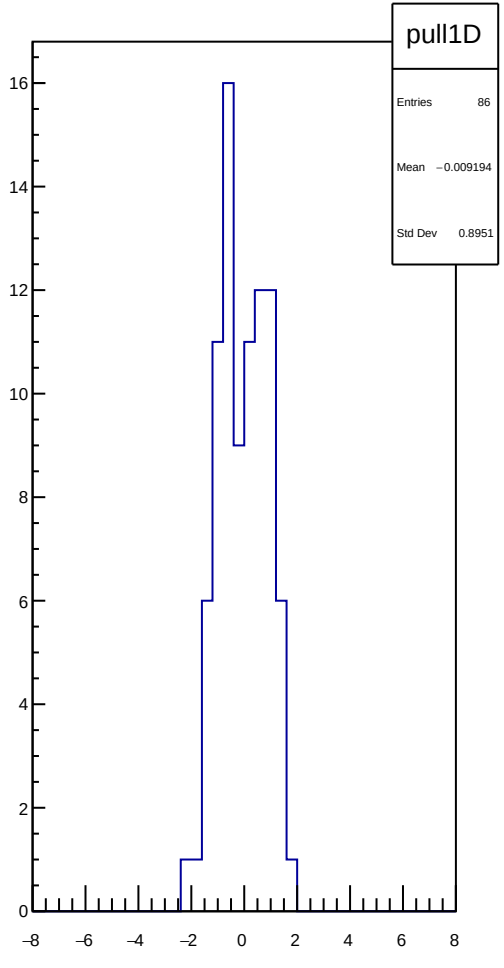

diff_bpm0l01Y_rms vs run
χ² / ndf 7438 / 85
p0 2430 ± 1.884
3000
2900
2800
2700
2600
2500
2400
2300
2200
2100

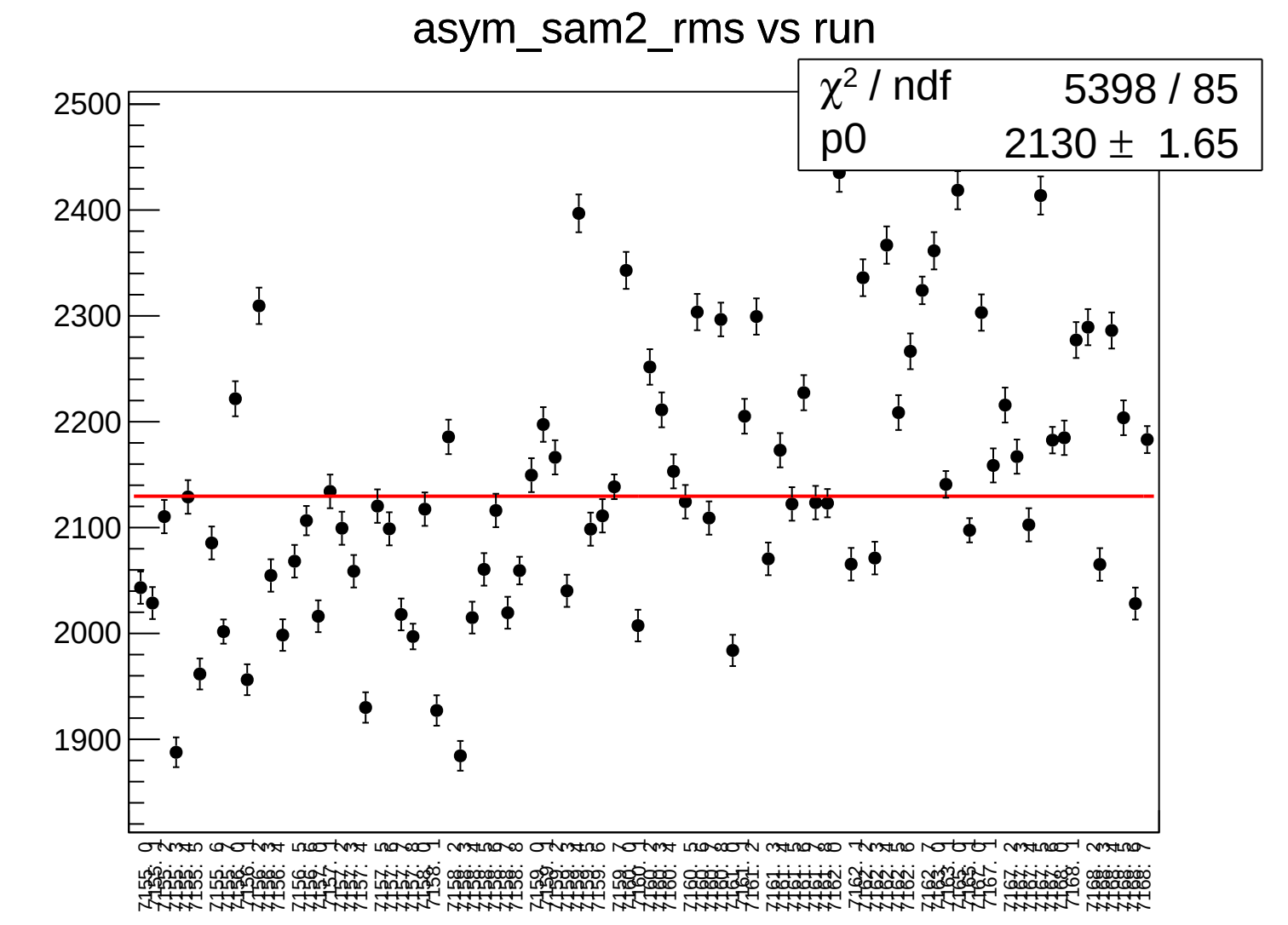

asym_sam1_mean vs run
χ² / ndf 69.25 / 85
p0 296 ± 466.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 278.6
Std Dev 245.1
1.5
1
0.5
0
−0.5
−1
−1.5
−2

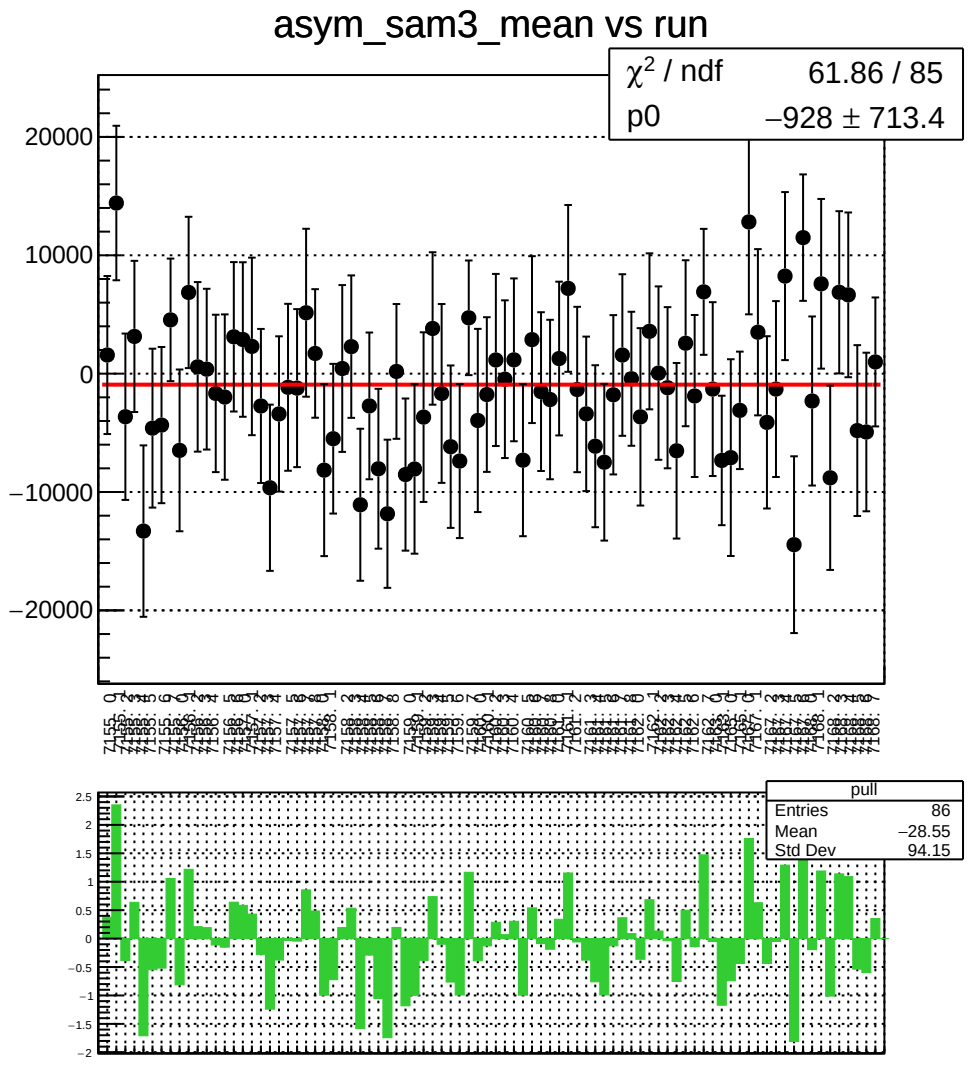

pull1D
Entries 86
Mean −0.003722
Std Dev 0.8974
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

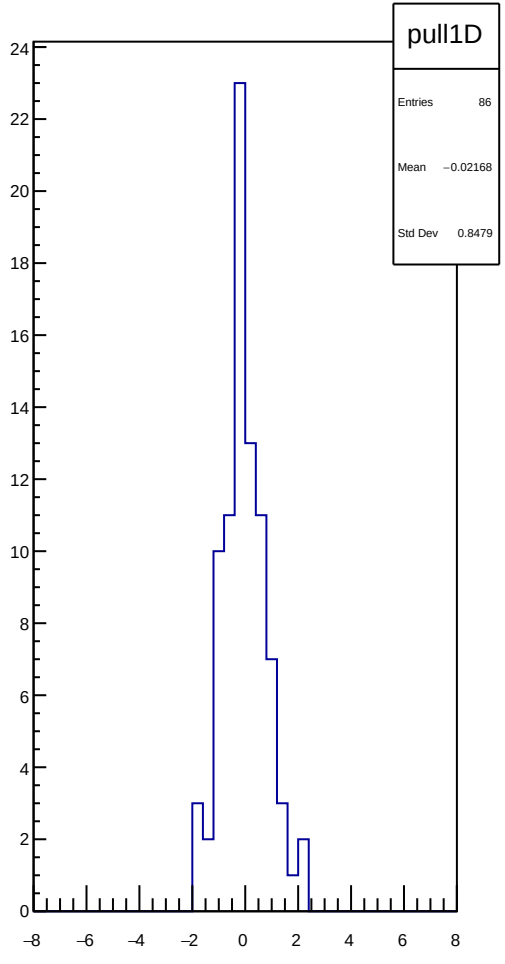

asym_sam1_rms vs run
χ² / ndf 3211 / 85
p0 425.9 ± 0.3297
460
440
420
400
380

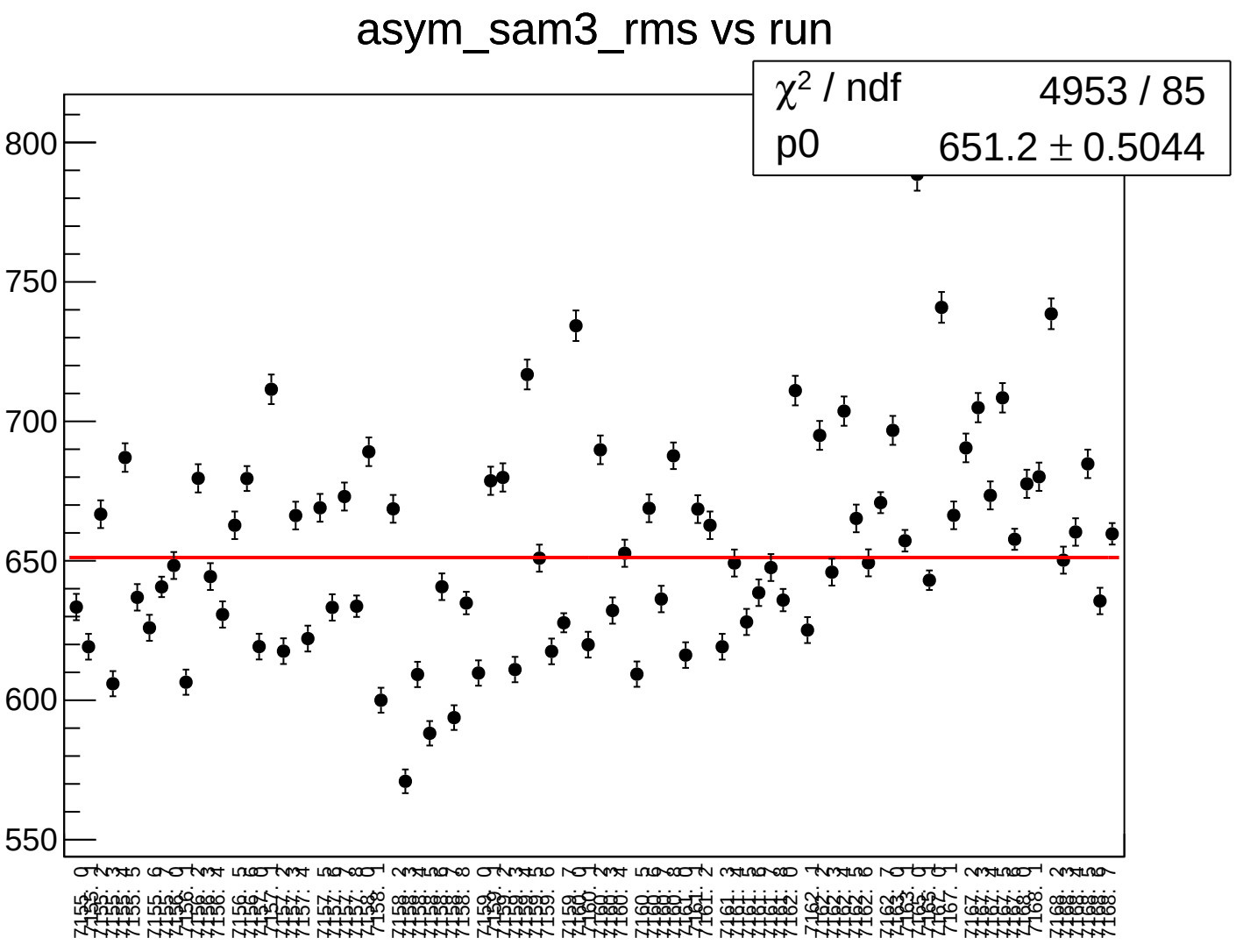

asym_sam2_mean vs run
χ² / ndf 68.91 / 85
p0 −255.9 ± 2333
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean 32.3
Std Dev 87.21
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

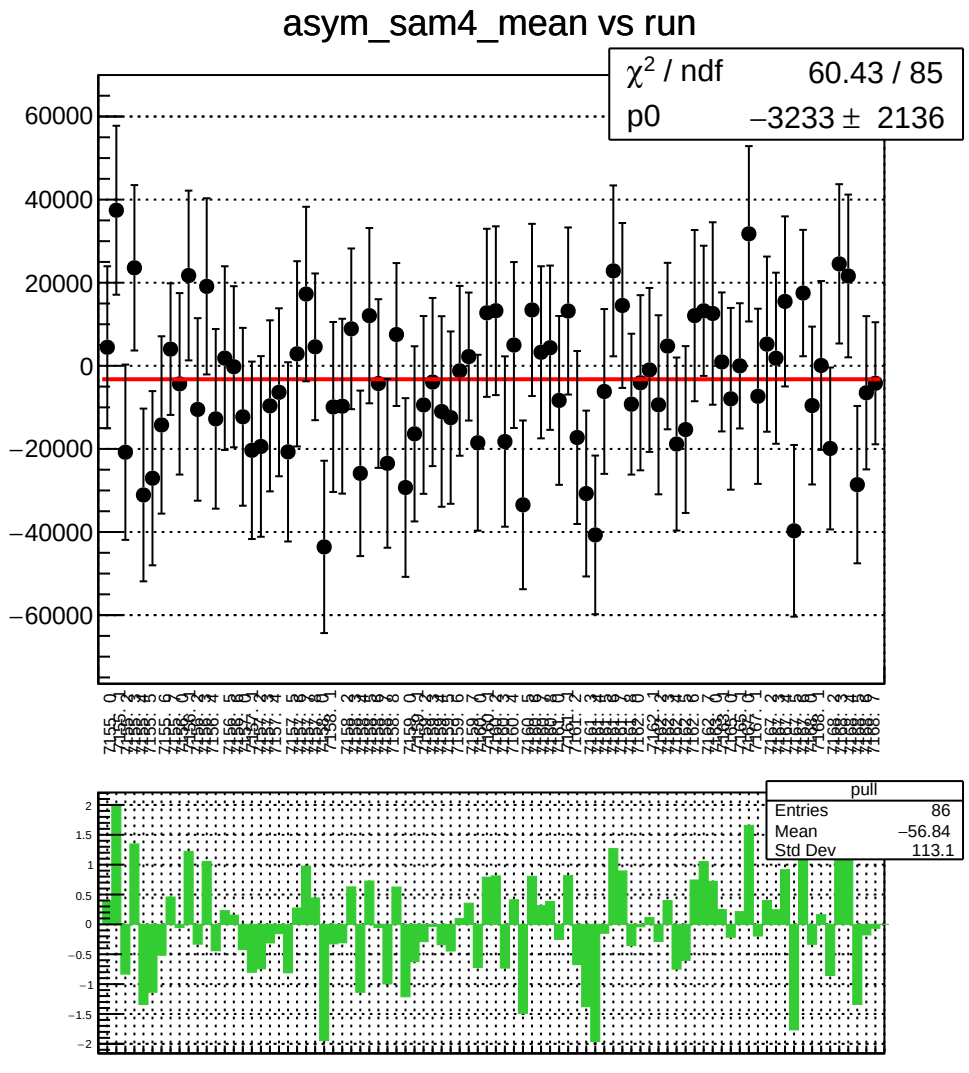

pull1D
Entries 86
Mean −0.009194
Std Dev 0.8951
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

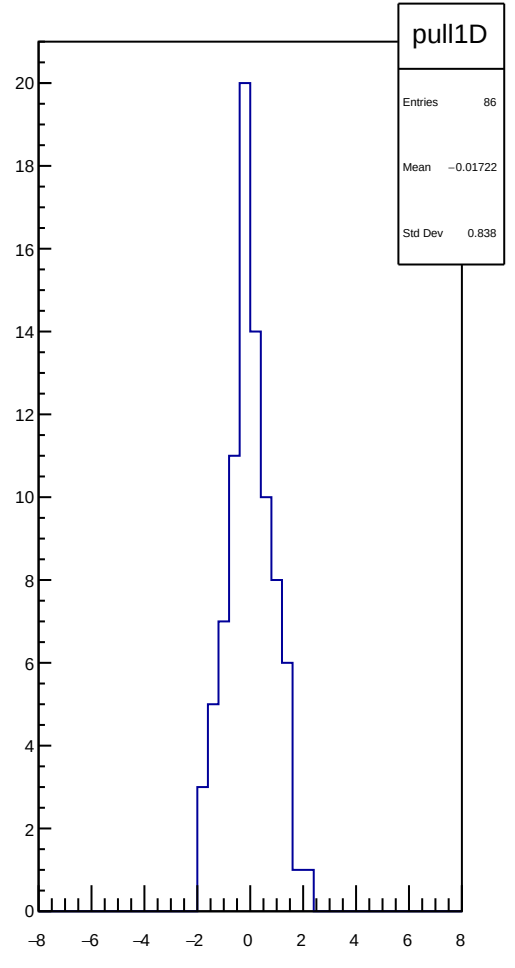

asym_sam2_rms vs run
χ² / ndf 5398 / 85
p0 2130 ± 1.65
2500
2400
2300
2200
2100
2000
1900

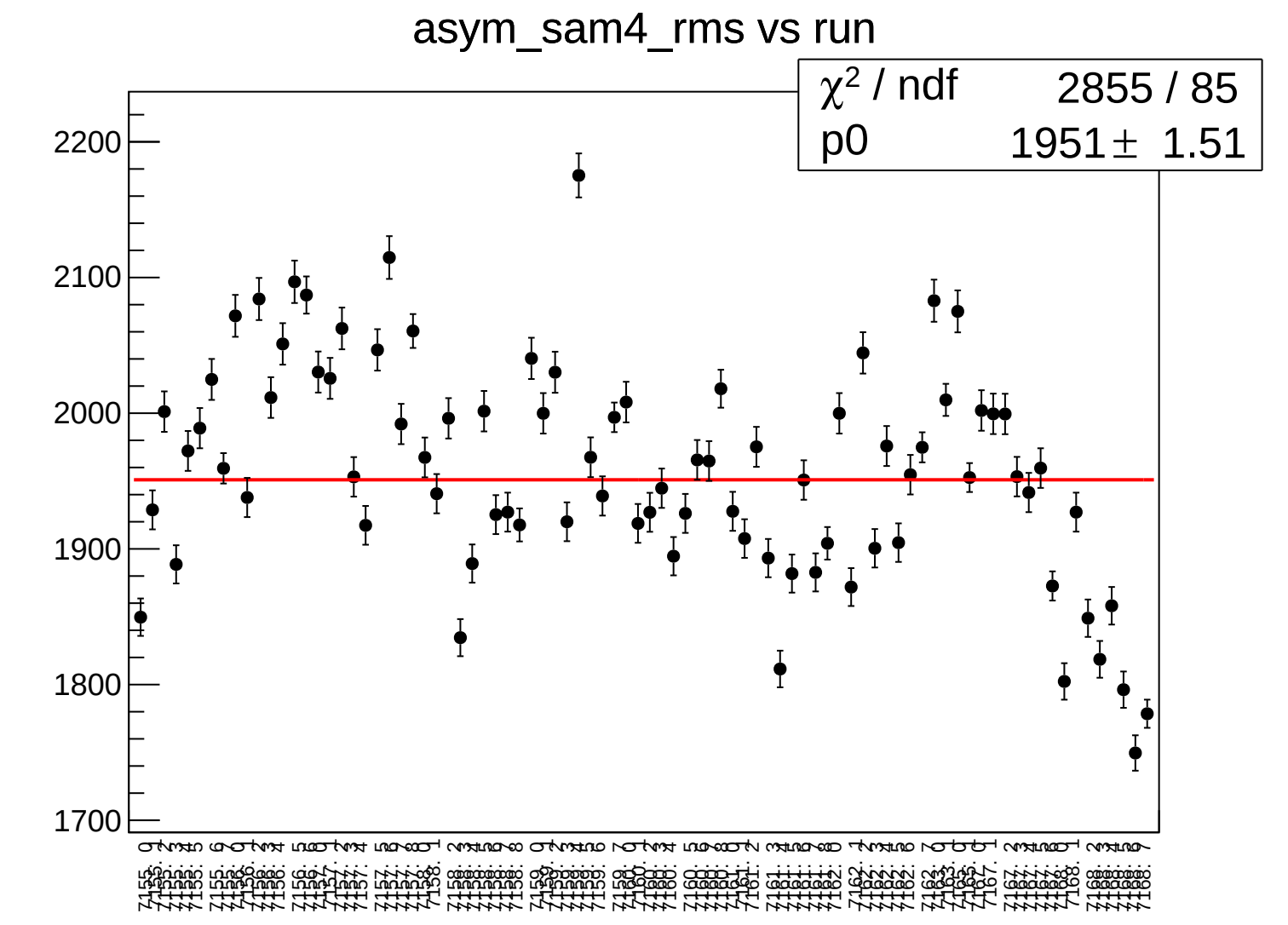

asym_sam3_mean vs run
χ² / ndf 61.86 / 85
p0 −928 ± 713.4
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −28.55
Std Dev 94.15
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

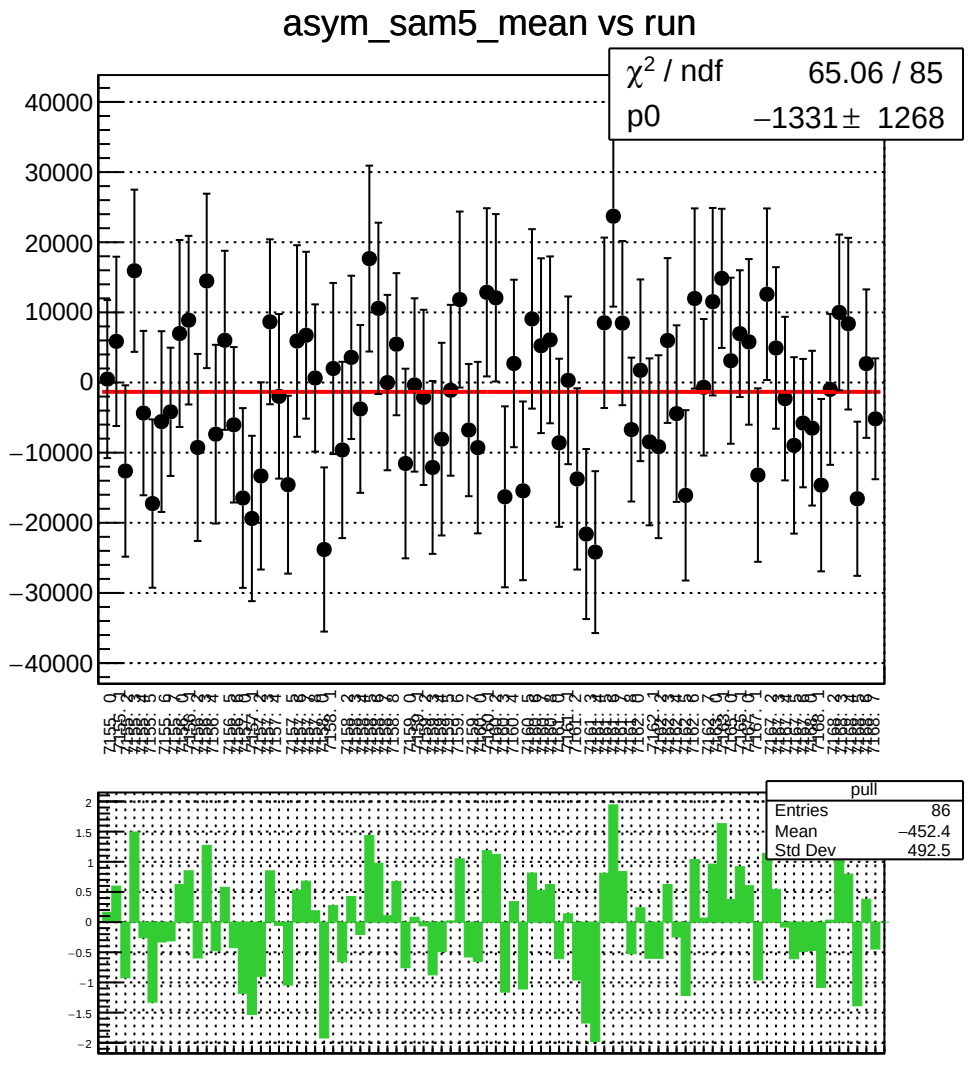

pull1D
Entries 86
Mean −0.02168
Std Dev 0.8479
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

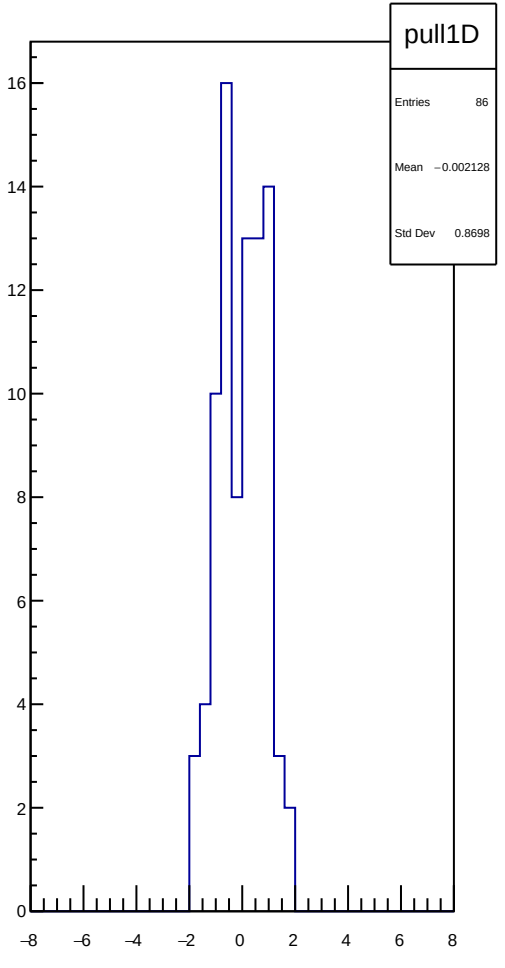

asym_sam3_rms vs run
χ² / ndf 4953 / 85
p0 651.2 ± 0.5044
800
750
700
650
600
550

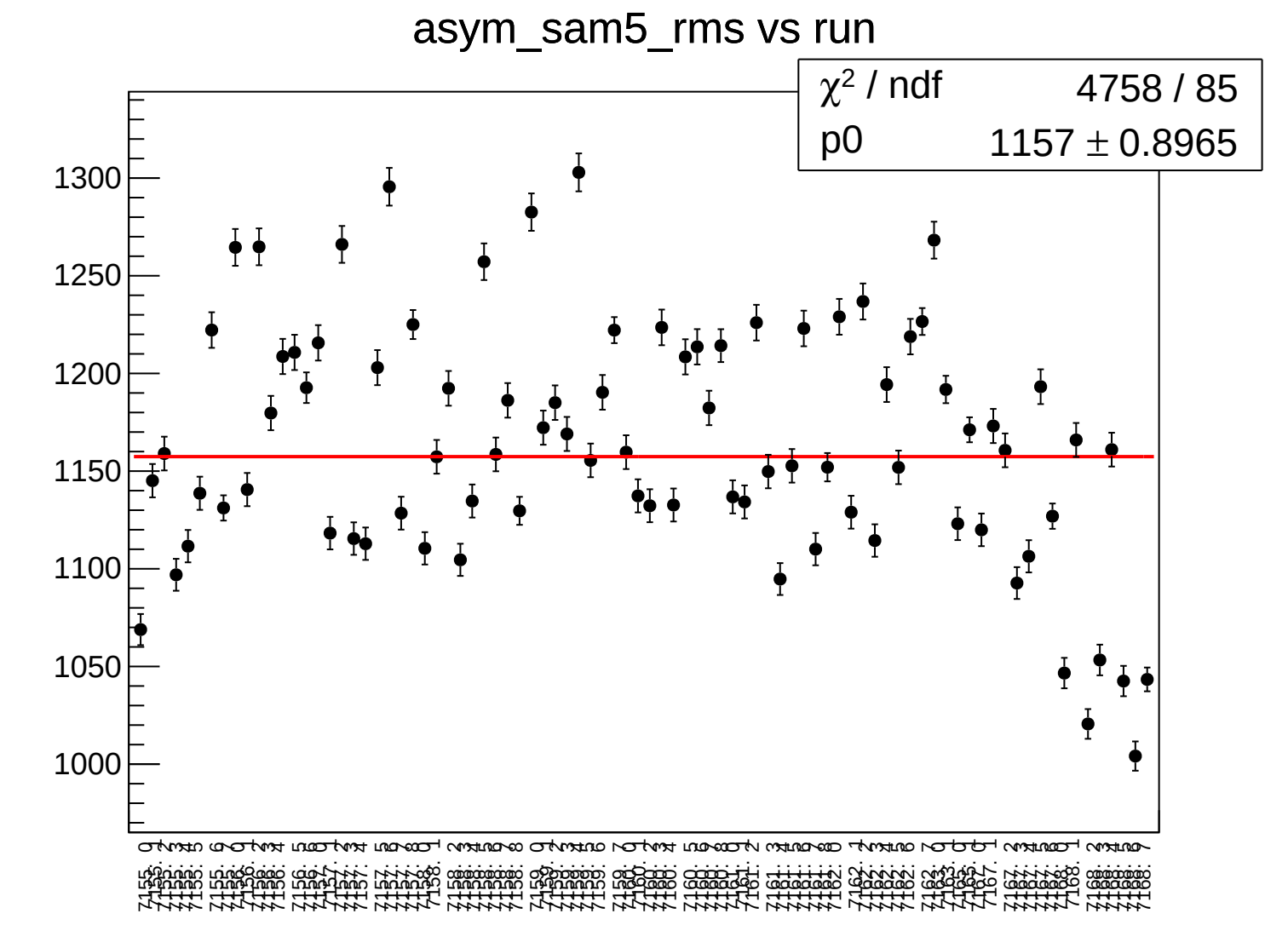

asym_sam4_mean vs run
χ² / ndf 60.43 / 85
p0 −3233 ± 2136
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −56.84
Std Dev 113.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

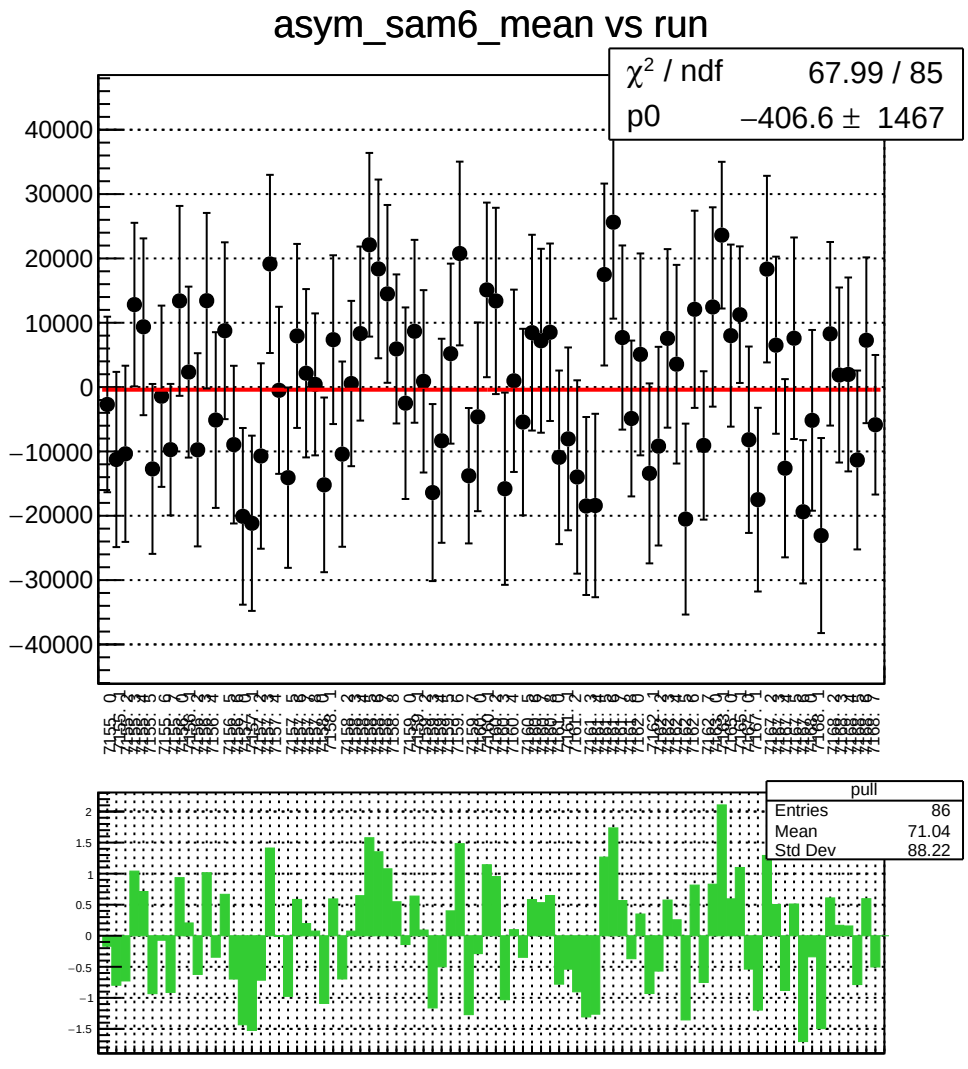

pull1D
Entries 86
Mean −0.01722
Std Dev 0.838
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

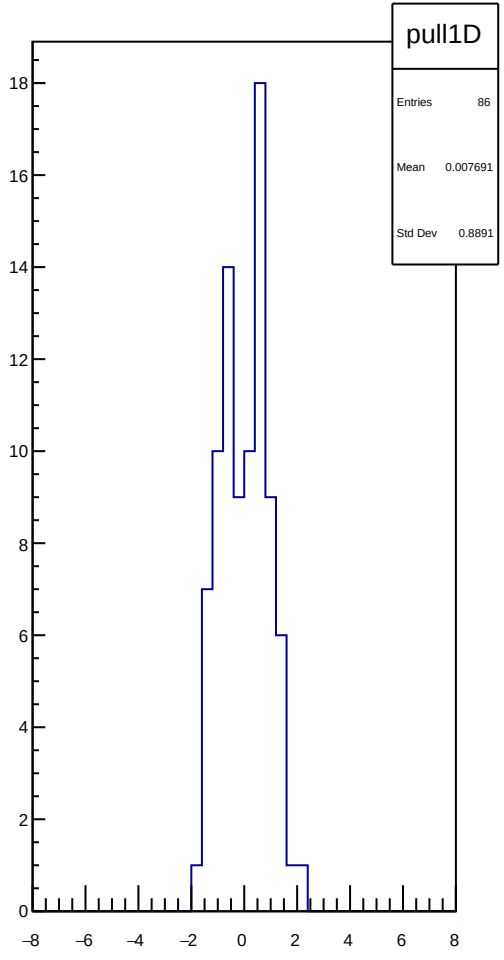

asym_sam4_rms vs run
χ² / ndf 2855 / 85
p0 1951 ± 1.51
2200
2100
2000
1900
1800
1700

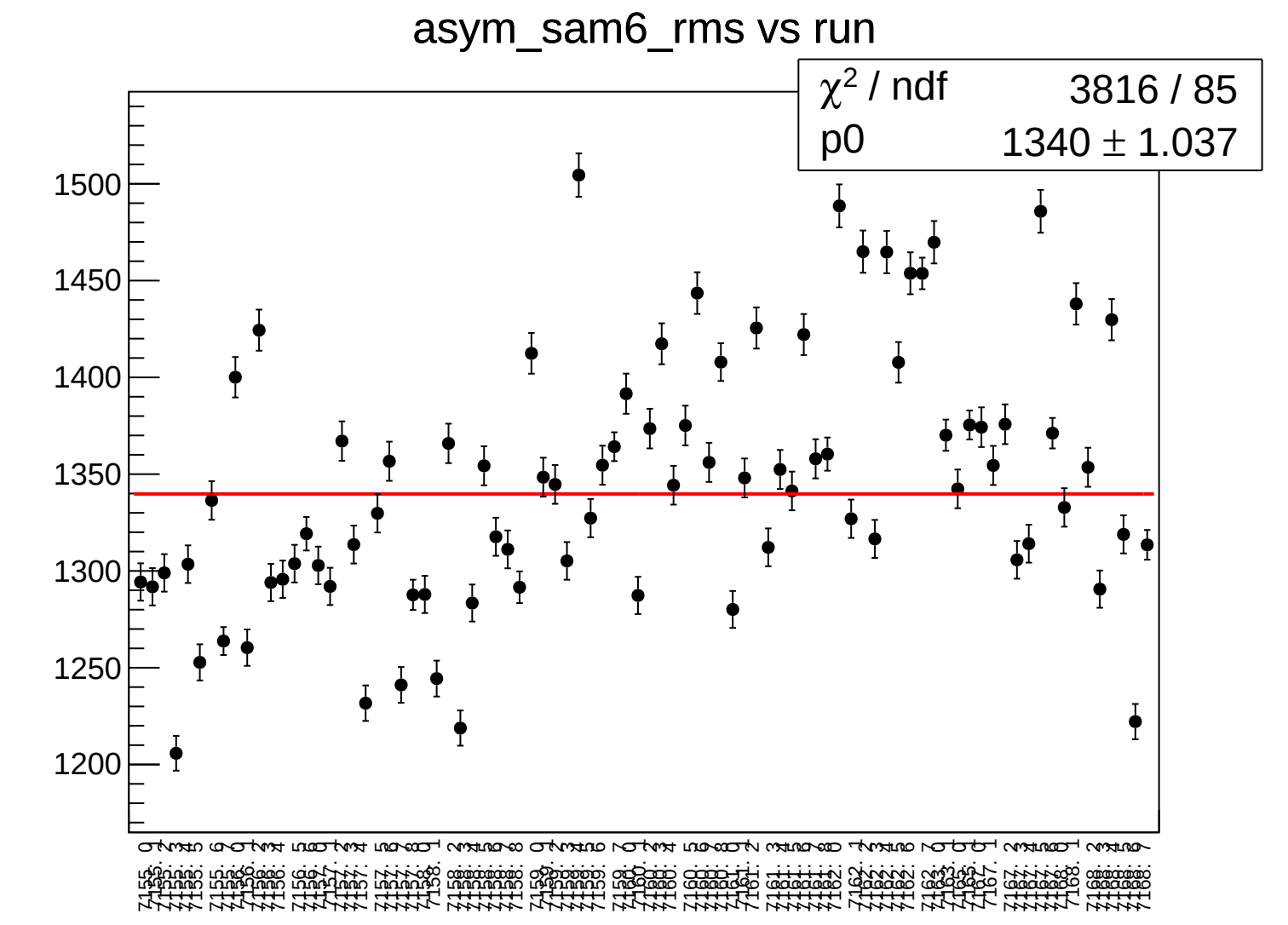

asym_sam5_mean vs run
χ² / ndf 65.06 / 85
p0 −1331 ± 1268
pull
Entries 86
Mean −452.4
Std Dev 492.5

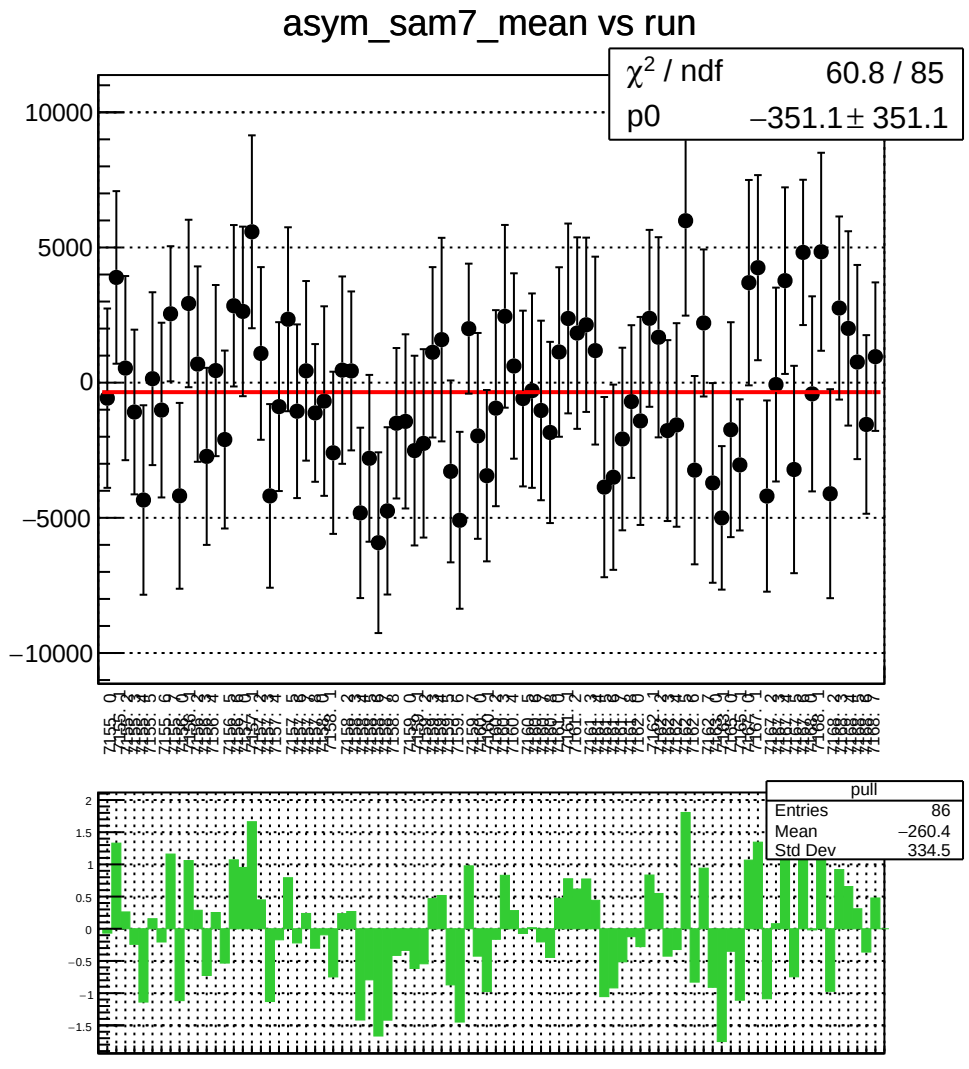

pull1D
Entries 86
Mean −0.002128
Std Dev 0.8698

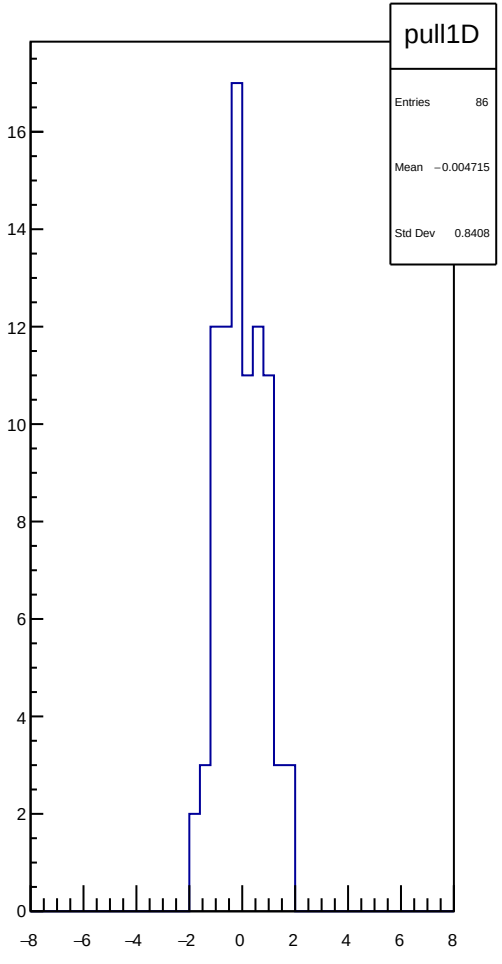

asym_sam5_rms vs run
χ² / ndf 4758 / 85
p0 1157 ± 0.8965
1300
1250
1200
1150
1100
1050
1000

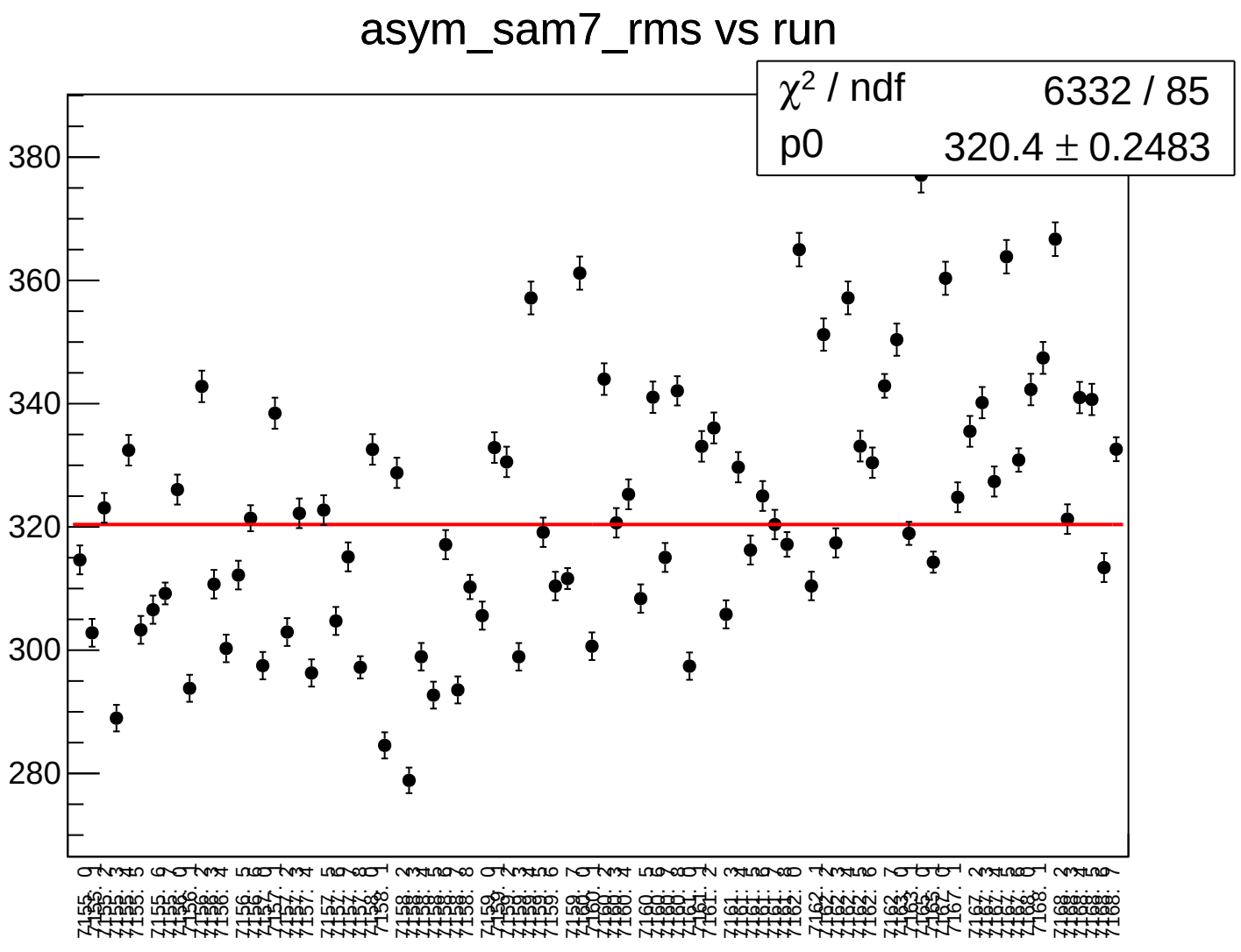

asym_sam6_mean vs run
χ² / ndf 67.99 / 85
p0 −406.6 ± 1467
pull
Entries 86
Mean 71.04
Std Dev 88.22

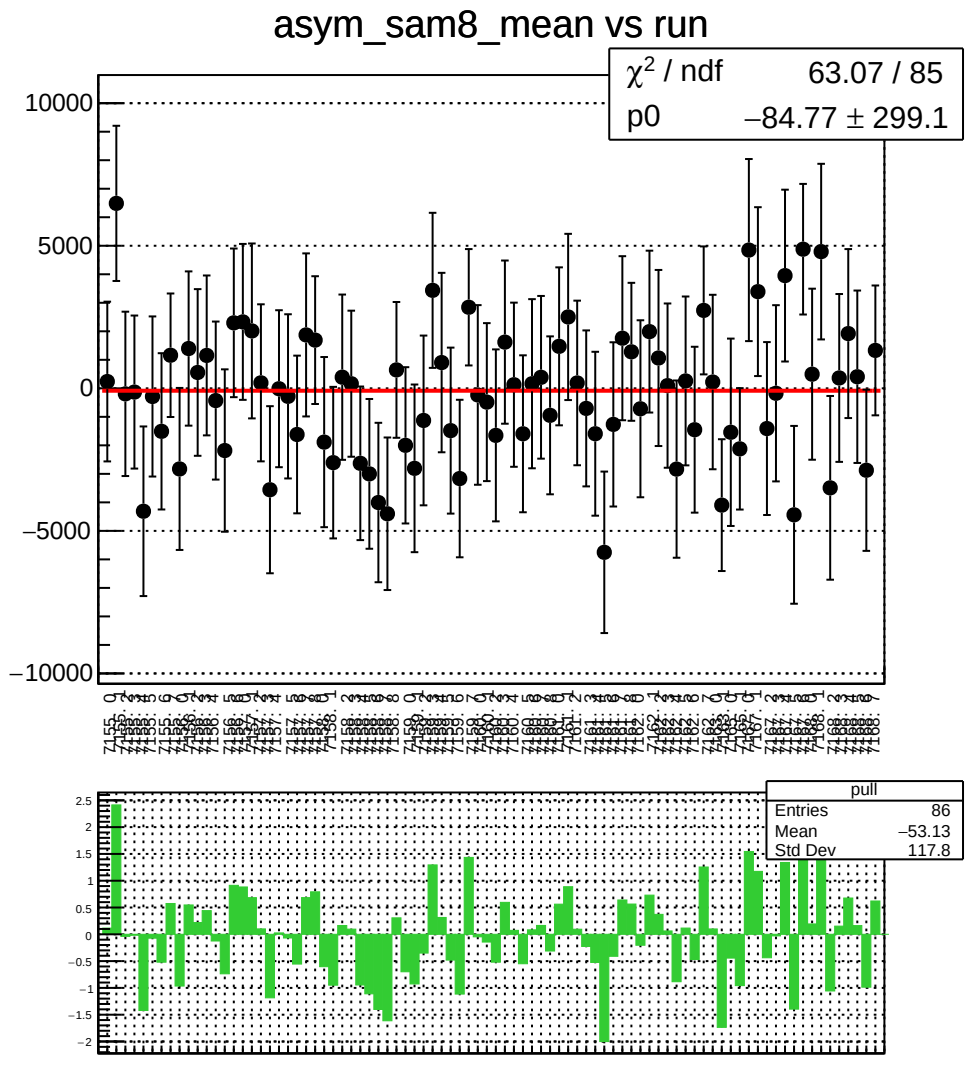

pull1D
Entries 86
Mean 0.007691
Std Dev 0.8891

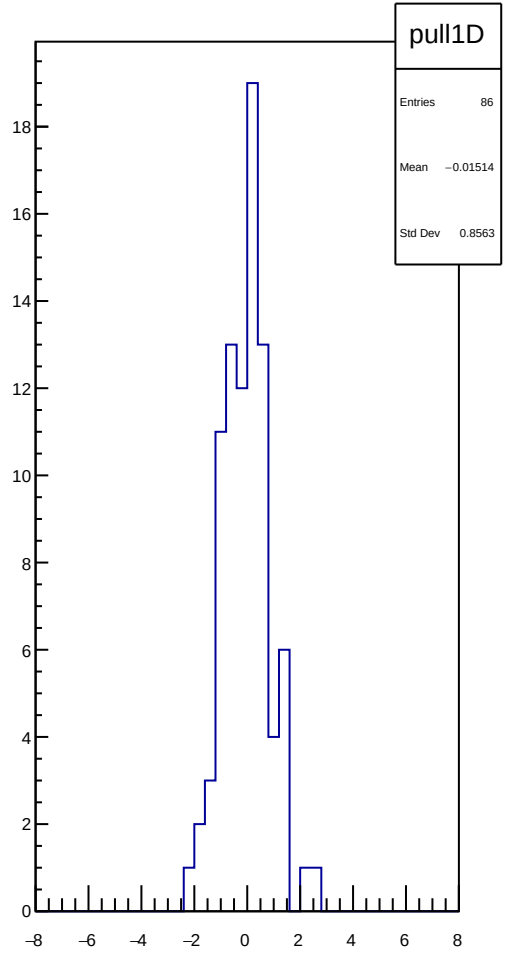

asym_sam6_rms vs run
χ² / ndf 3816 / 85
p0 1340 ± 1.037
1500
1450
1400
1350
1300
1250
1200

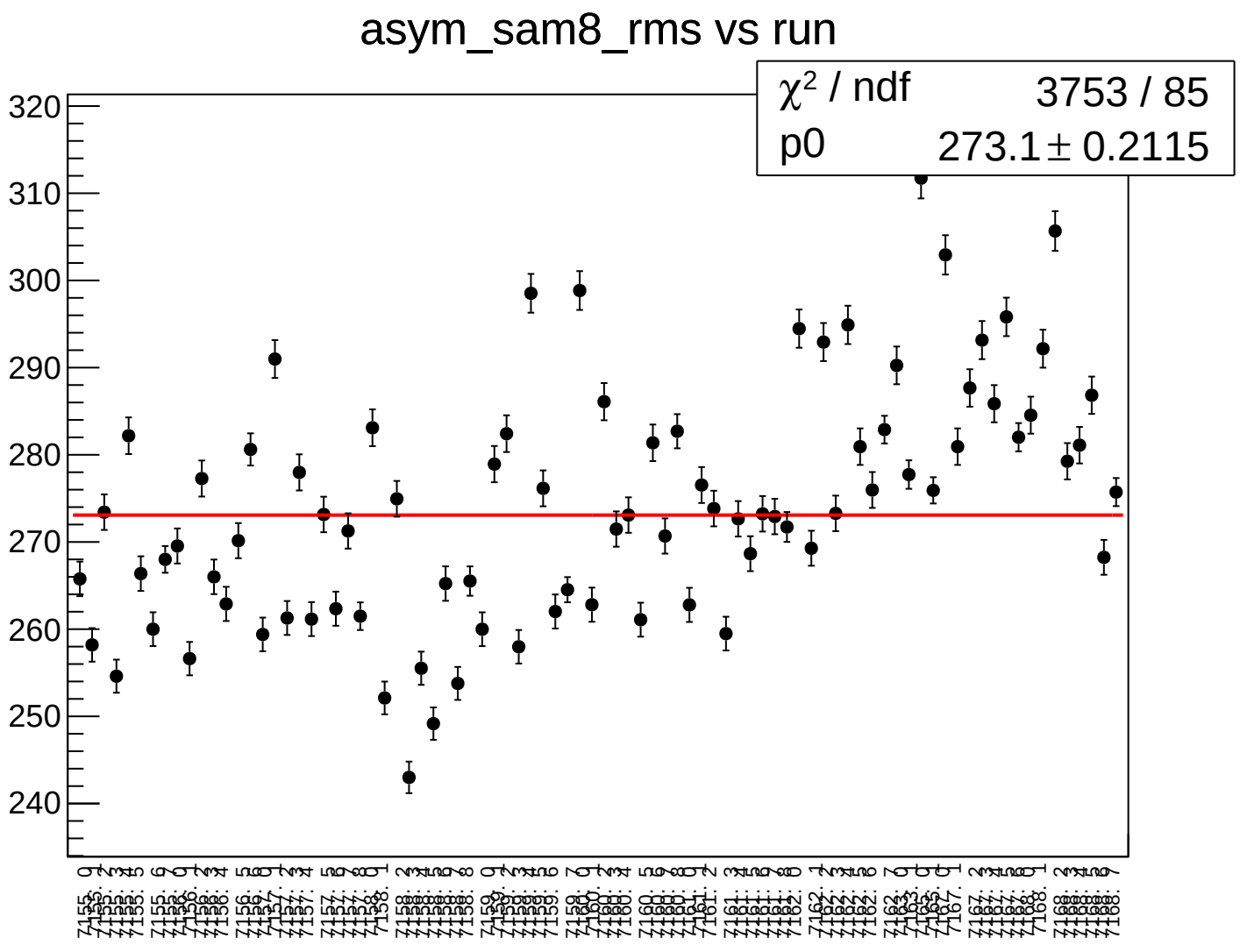

asym_sam7_mean vs run
χ² / ndf 60.8 / 85
p0 −351.1 ± 351.1
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −260.4
Std Dev 334.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

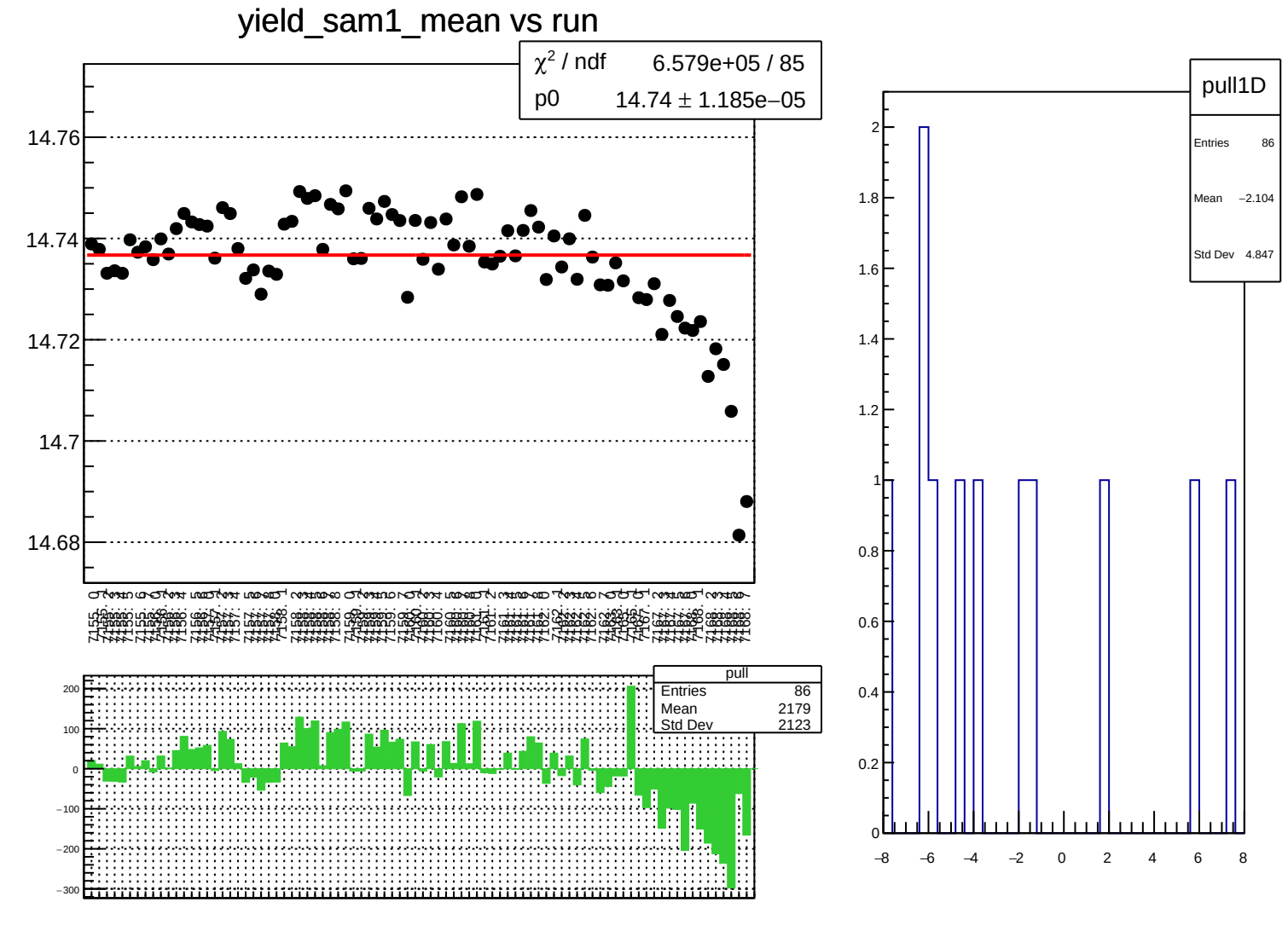

pull1D
Entries 86
Mean −0.004715
Std Dev 0.8408
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

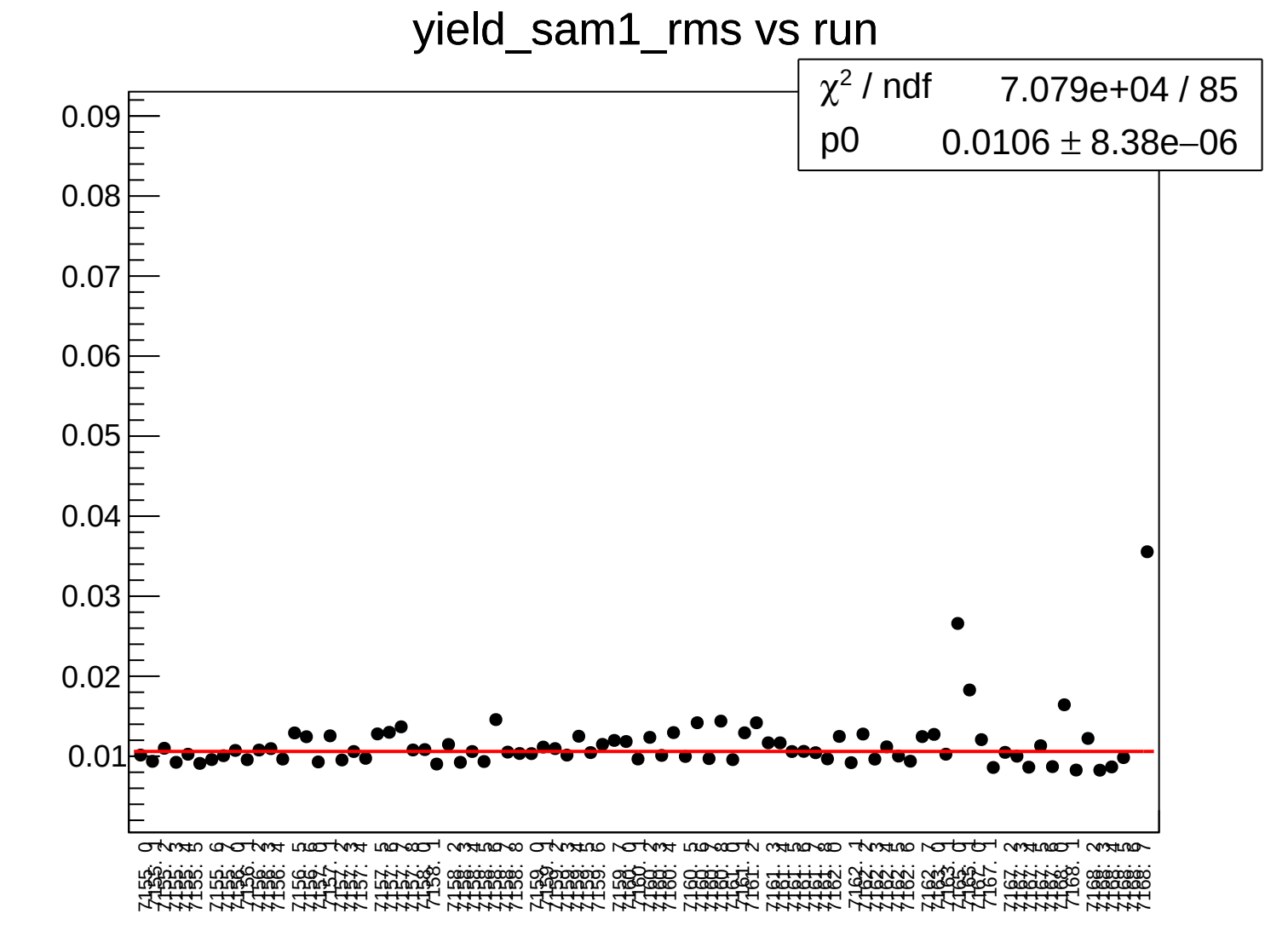

asym_sam7_rms vs run
χ² / ndf 6332 / 85
p0 320.4 ± 0.2483
380
360
340
320
300
280

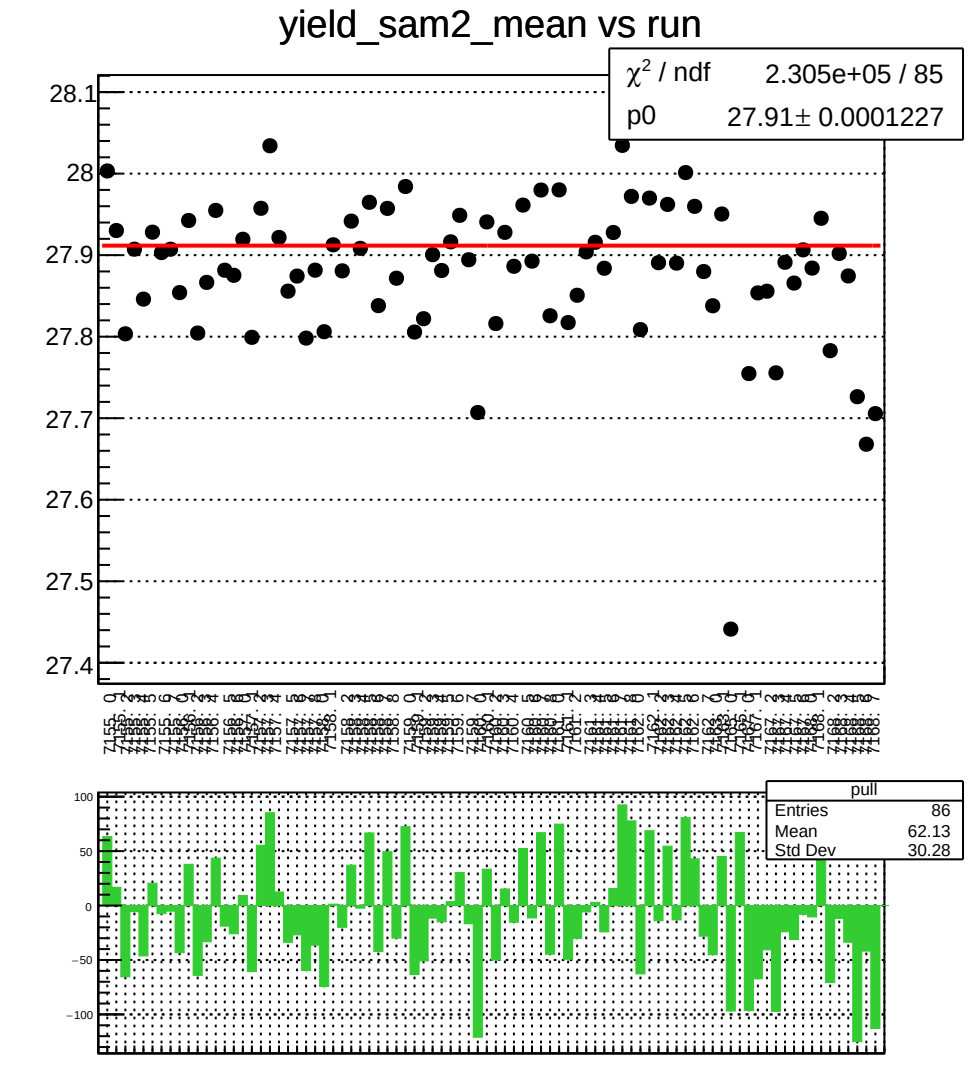

asym_sam8_mean vs run
χ² / ndf 63.07 / 85
p0 −84.77 ± 299.1
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −53.13
Std Dev 117.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

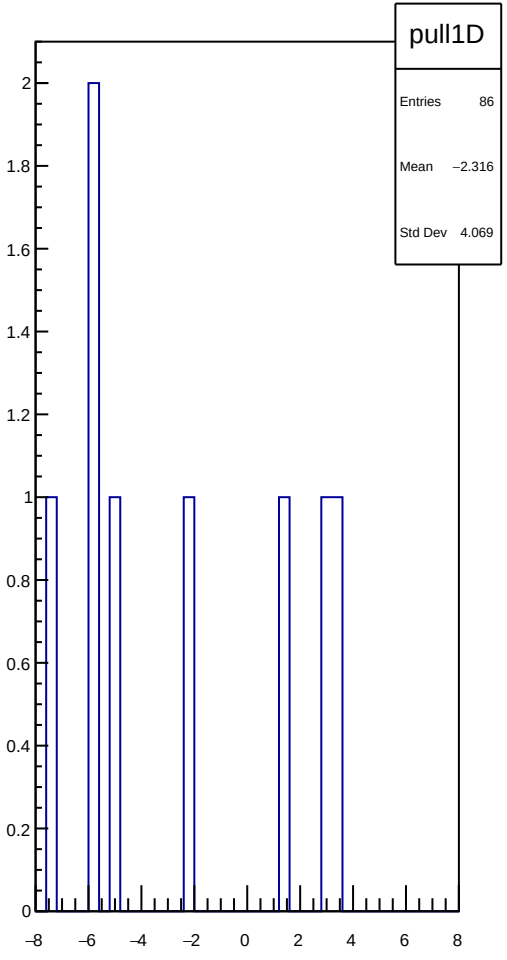

pull1D
Entries 86
Mean −0.01514
Std Dev 0.8563
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

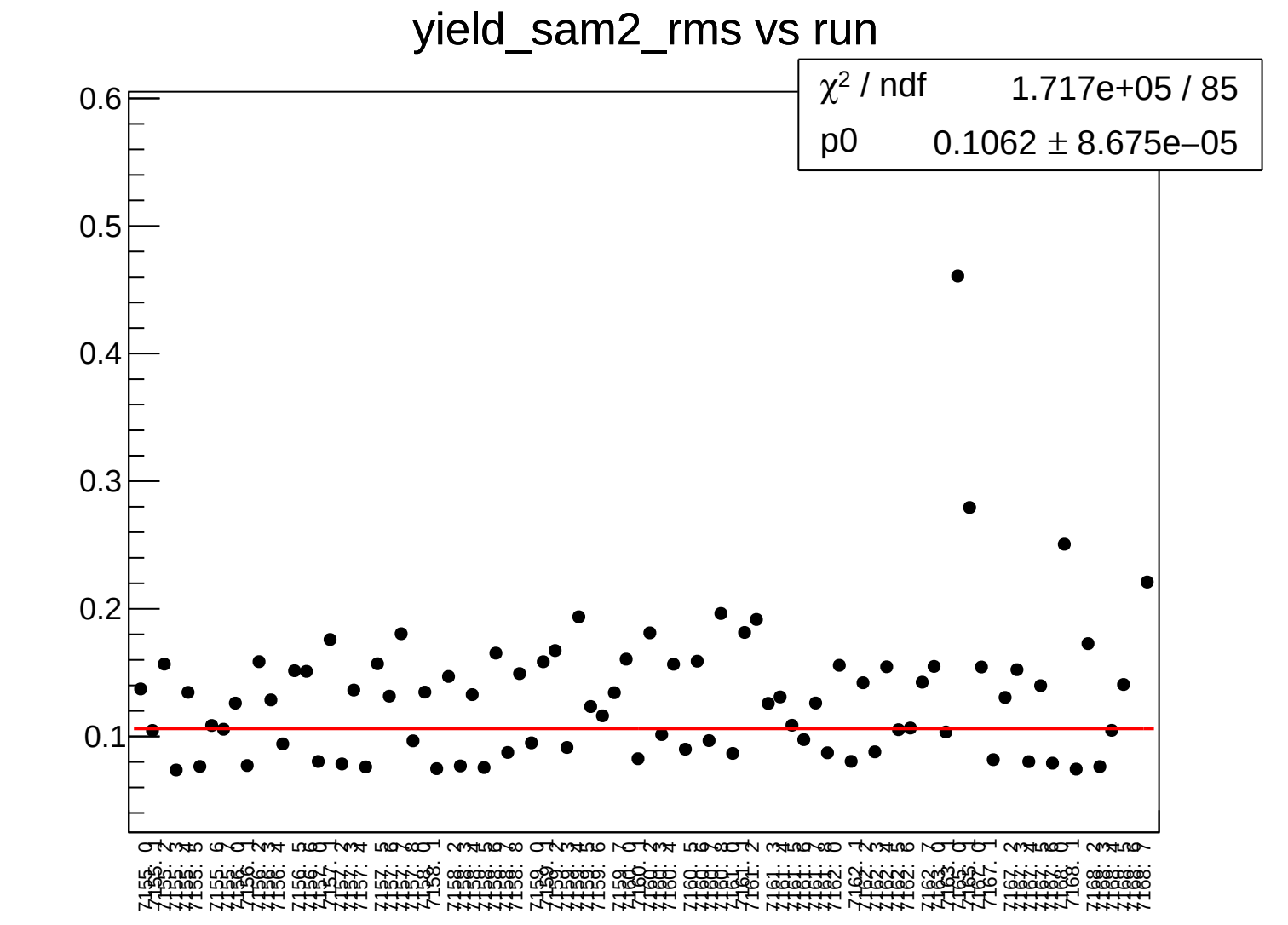

asym_sam8_rms vs run
χ² / ndf 3753 / 85
p0 273.1 ± 0.2115
320
310
300
290
280
270
260
250
240

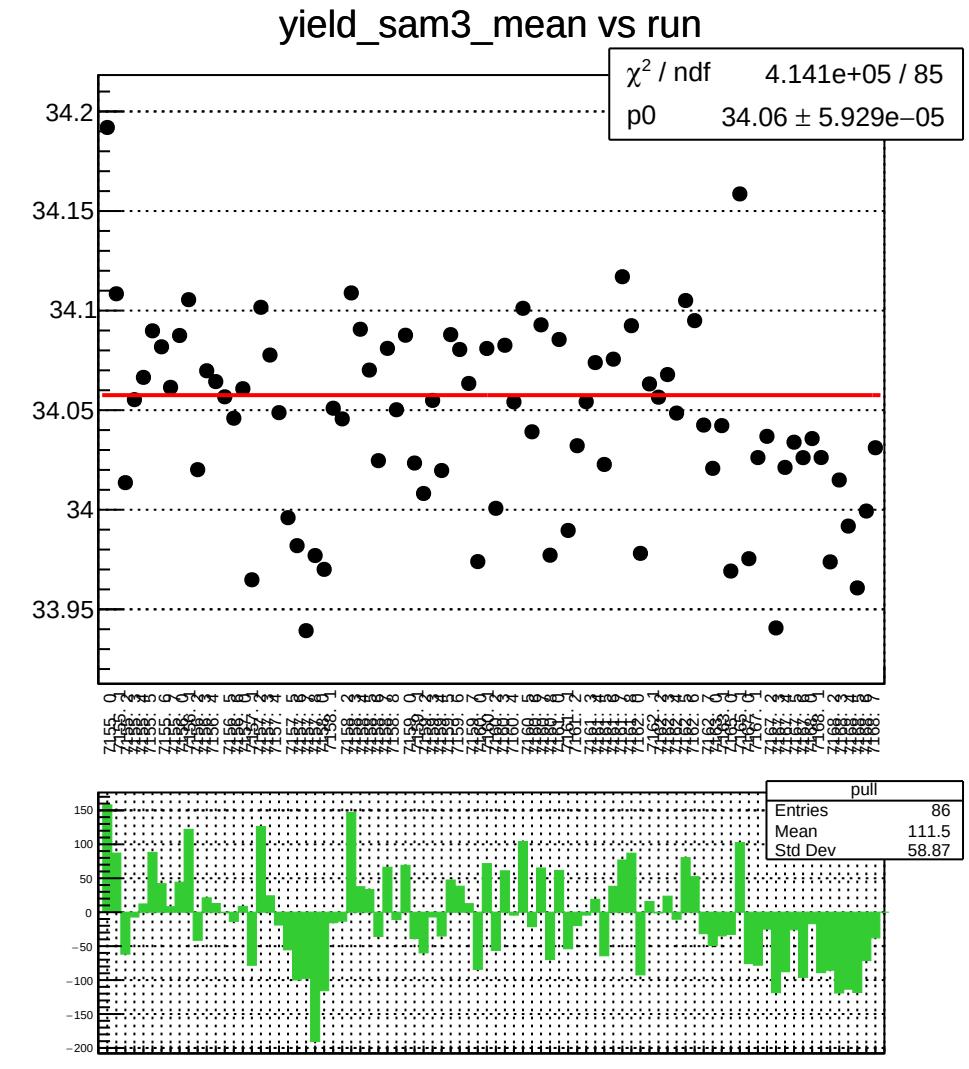

yield_sam1_mean vs run
χ² / ndf 6.579e+05 / 85
p0 14.74 ± 1.185e−05
14.76
14.74
14.72
14.7
14.68
pull
Entries 86
Mean 2179
Std Dev 2123
200
100
0
−100
−200
−300
pull1D
Entries 86
Mean −2.104
Std Dev 4.847
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

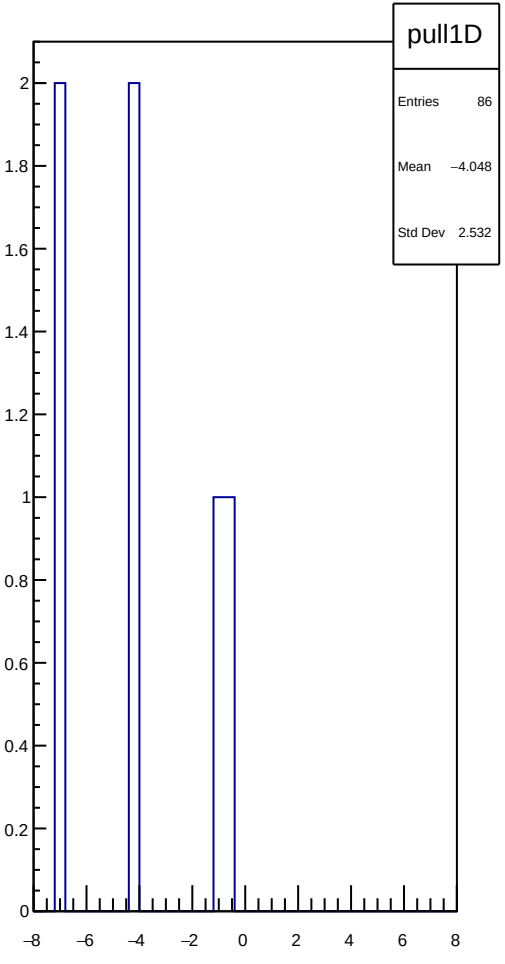

yield_sam1_rms vs run
χ² / ndf 7.079e+04 / 85
p0 0.0106 ± 8.38e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

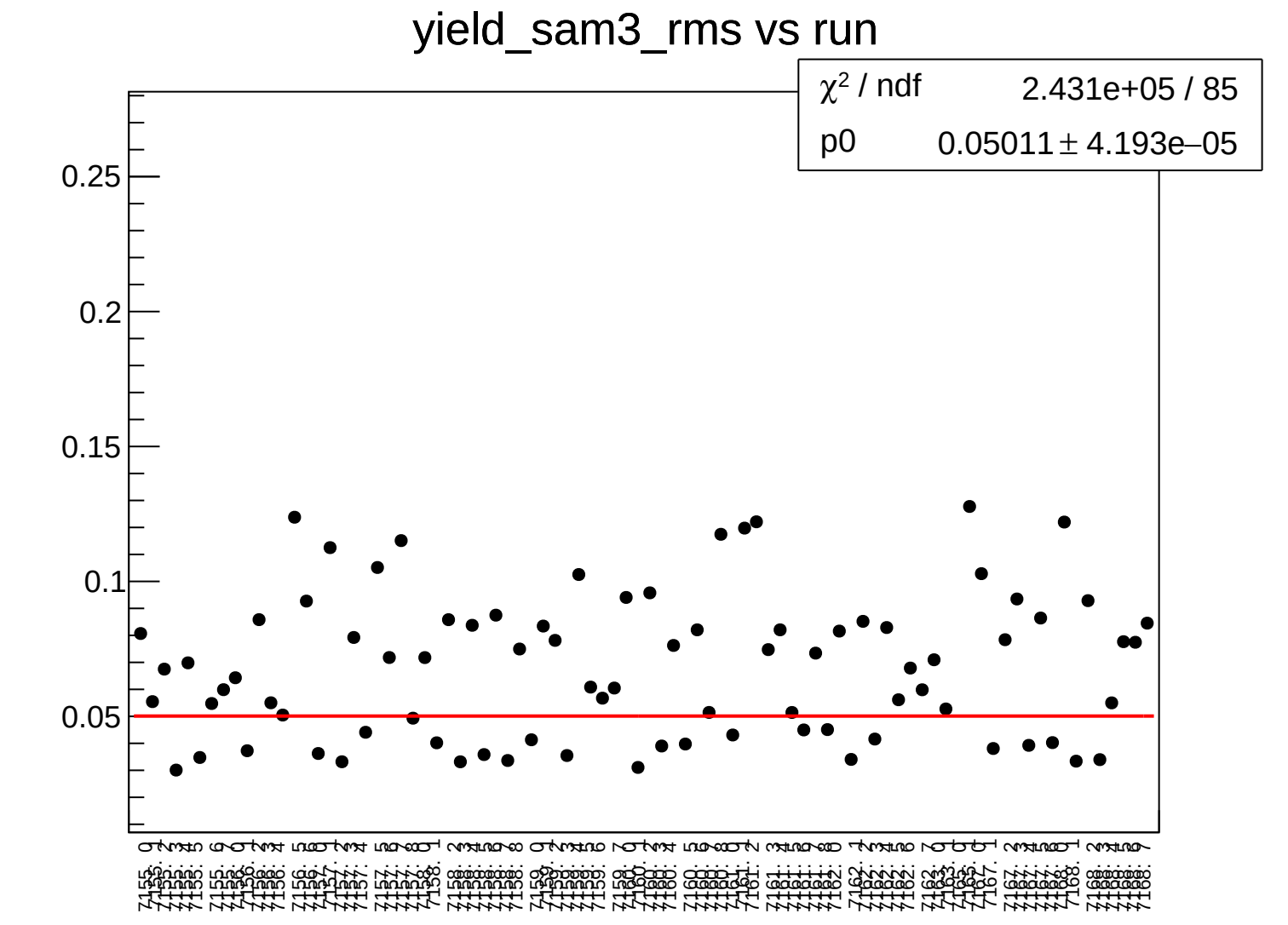

yield_sam2_mean vs run
χ² / ndf 2.305e+05 / 85
p0 27.91± 0.0001227
28.1
28
27.9
27.8
27.7
27.6
27.5
27.4
pull
Entries 86
Mean 62.13
Std Dev 30.28
100
50
0
−50
−100

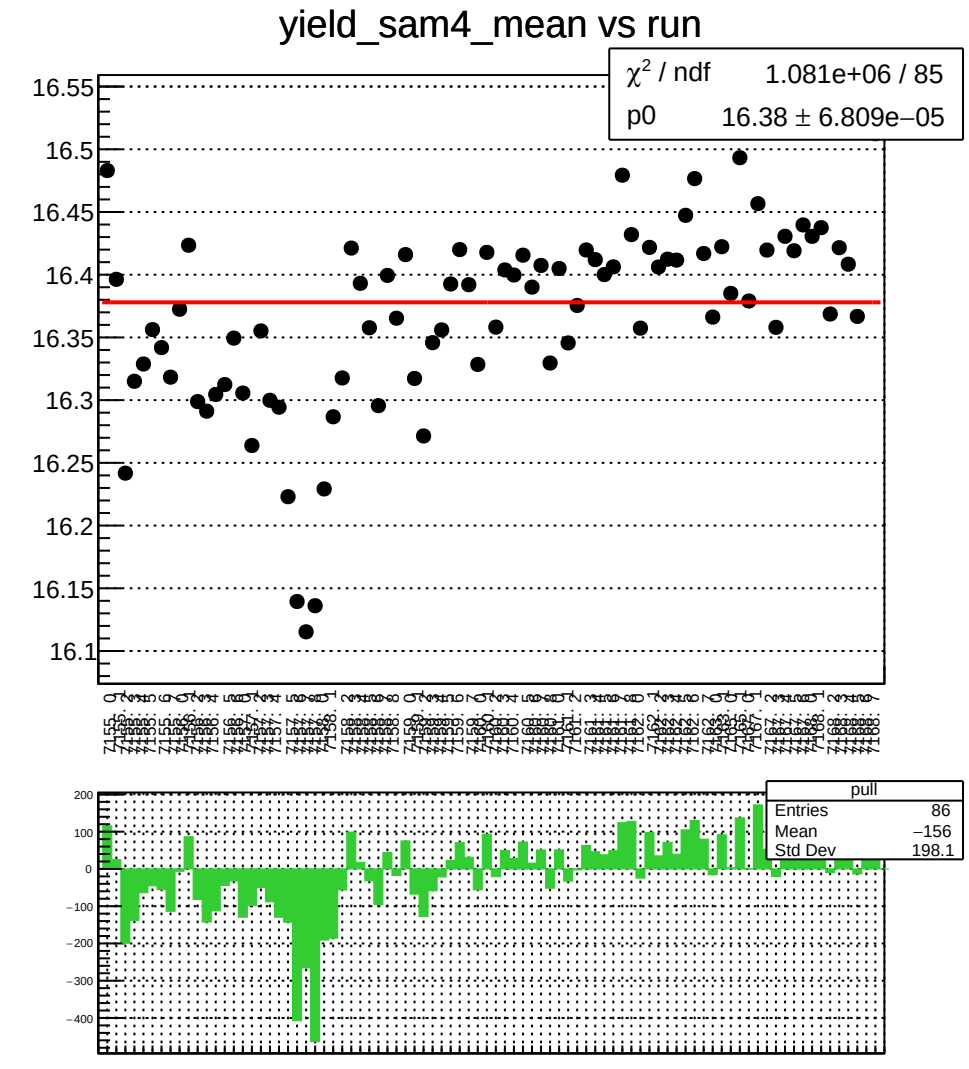

pull1D
Entries 86
Mean −2.316
Std Dev 4.069
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

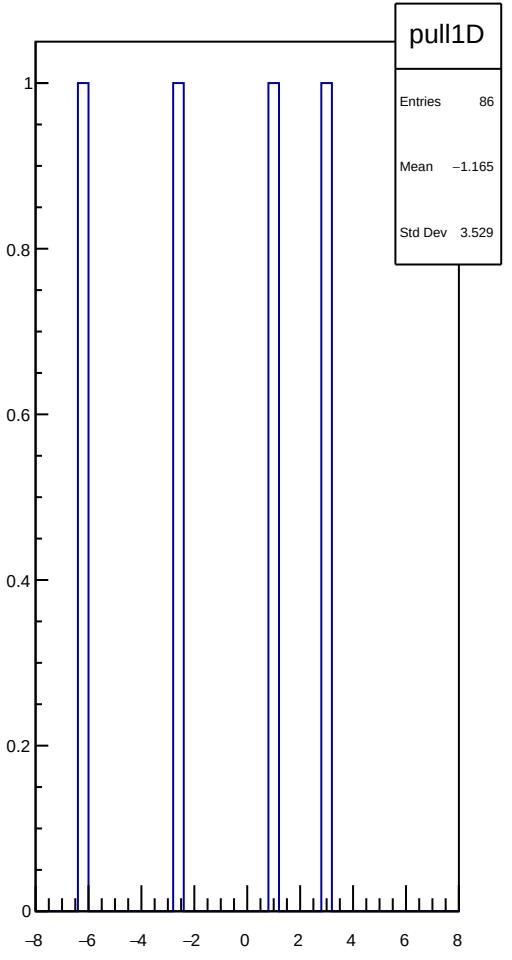

yield_sam2_rms vs run
χ² / ndf 1.717e+05 / 85
p0 0.1062 ± 8.675e−05
0.6
0.5
0.4
0.3
0.2
0.1

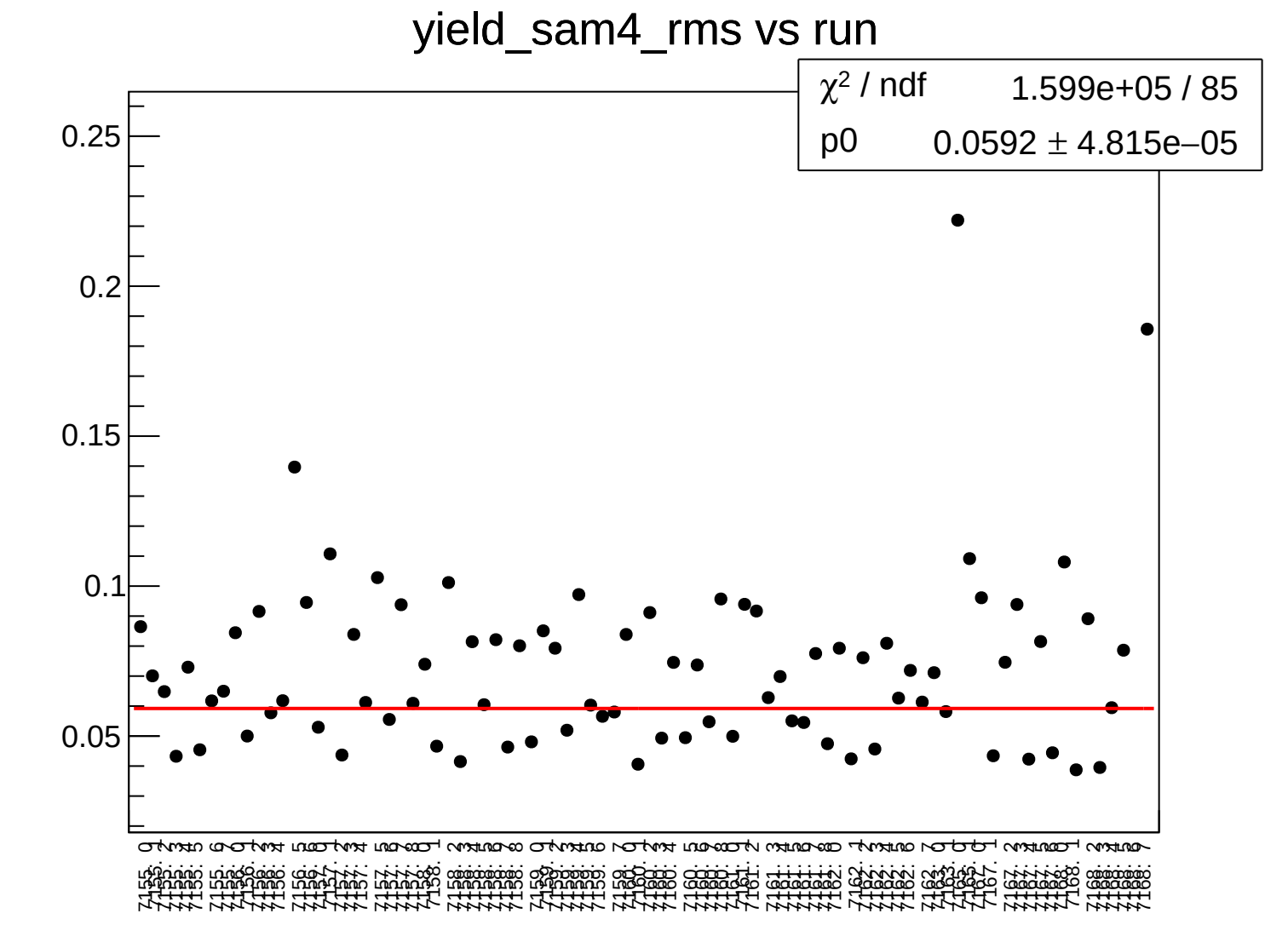

yield_sam3_mean vs run
χ² / ndf 4.141e+05 / 85
p0 34.06 ± 5.929e−05
34.2
34.15
34.1
34.05
34
33.95
pull
Entries 86
Mean 111.5
Std Dev 58.87
150
100
50
0
−50
−100
−150
−200

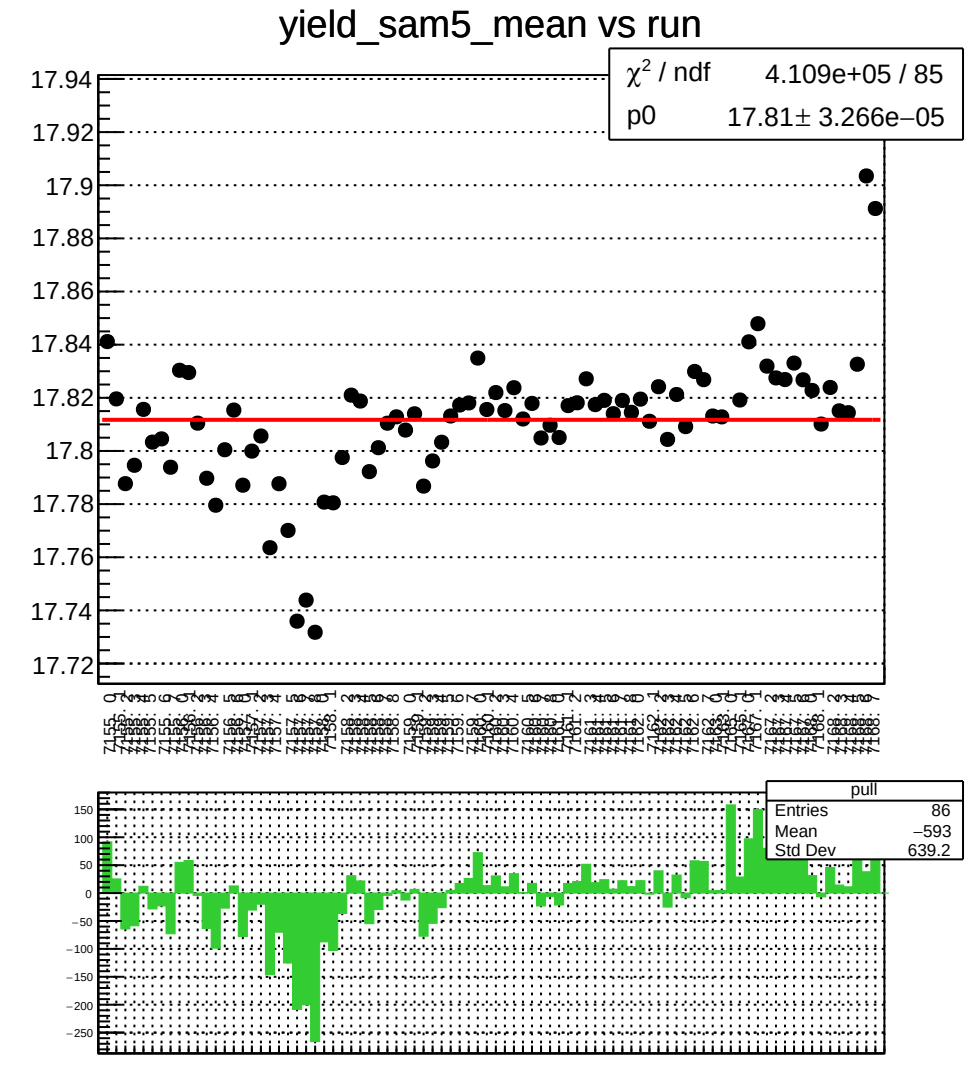

pull1D
Entries 86
Mean −4.048
Std Dev 2.532
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

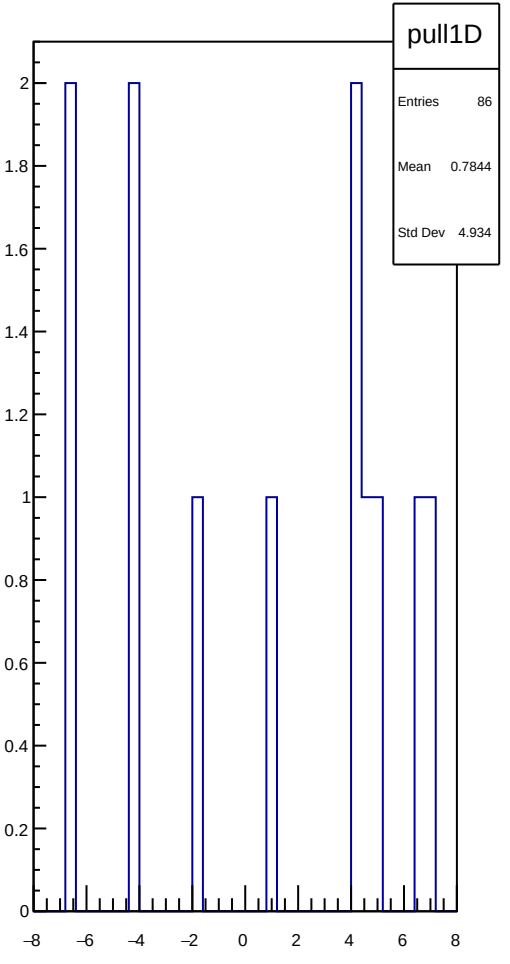

yield_sam3_rms vs run
χ² / ndf 2.431e+05 / 85
p0 0.05011 ± 4.193e–05
0.25
0.2
0.15
0.1
0.05

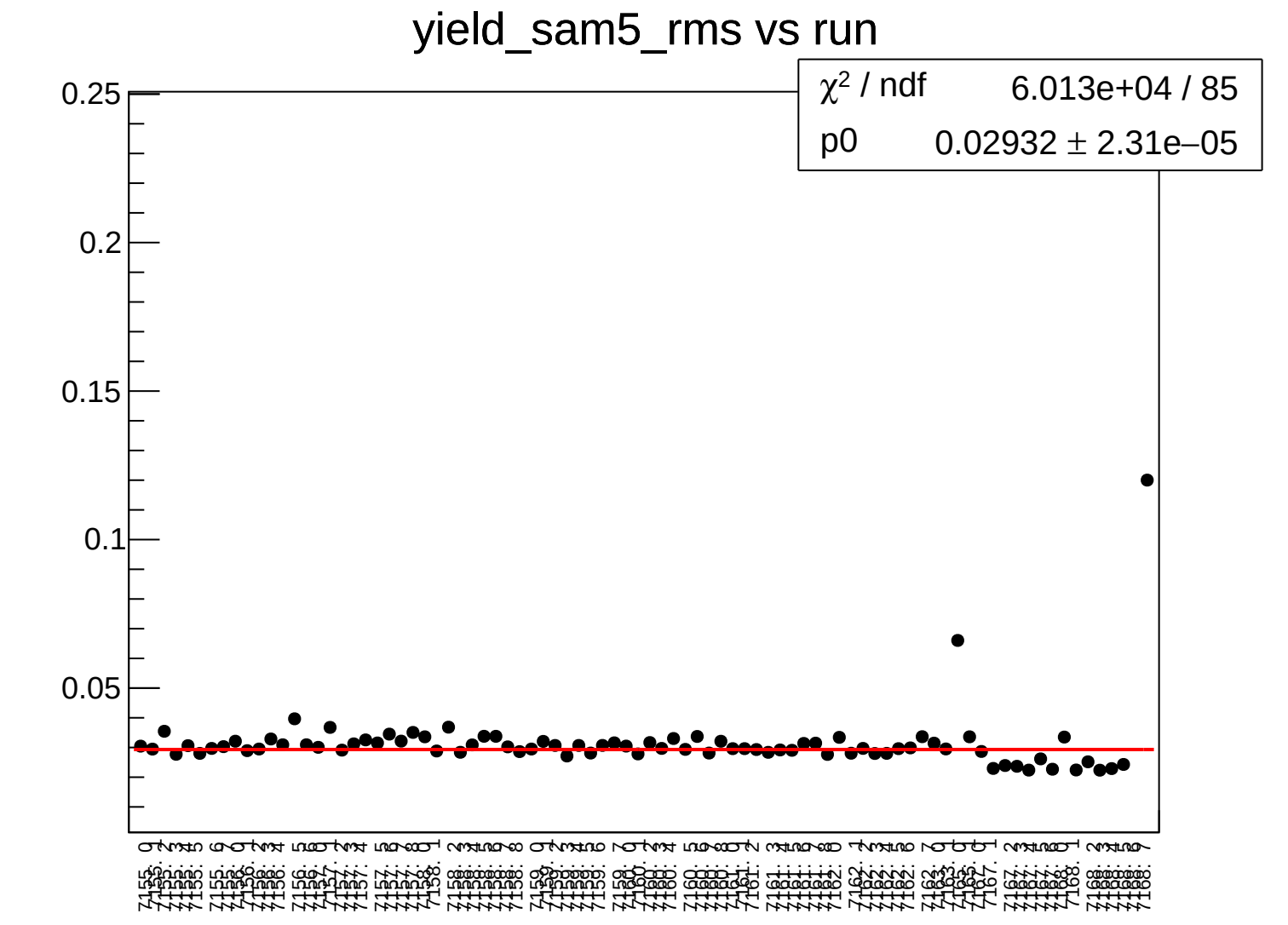

yield_sam4_mean vs run
χ² / ndf 1.081e+06 / 85
p0 16.38 ± 6.809e−05
16.55
16.5
16.45
16.4
16.35
16.3
16.25
16.2
16.15
16.1
pull
Entries 86
Mean −156
Std Dev 198.1
200
100
0
−100
−200
−300
−400

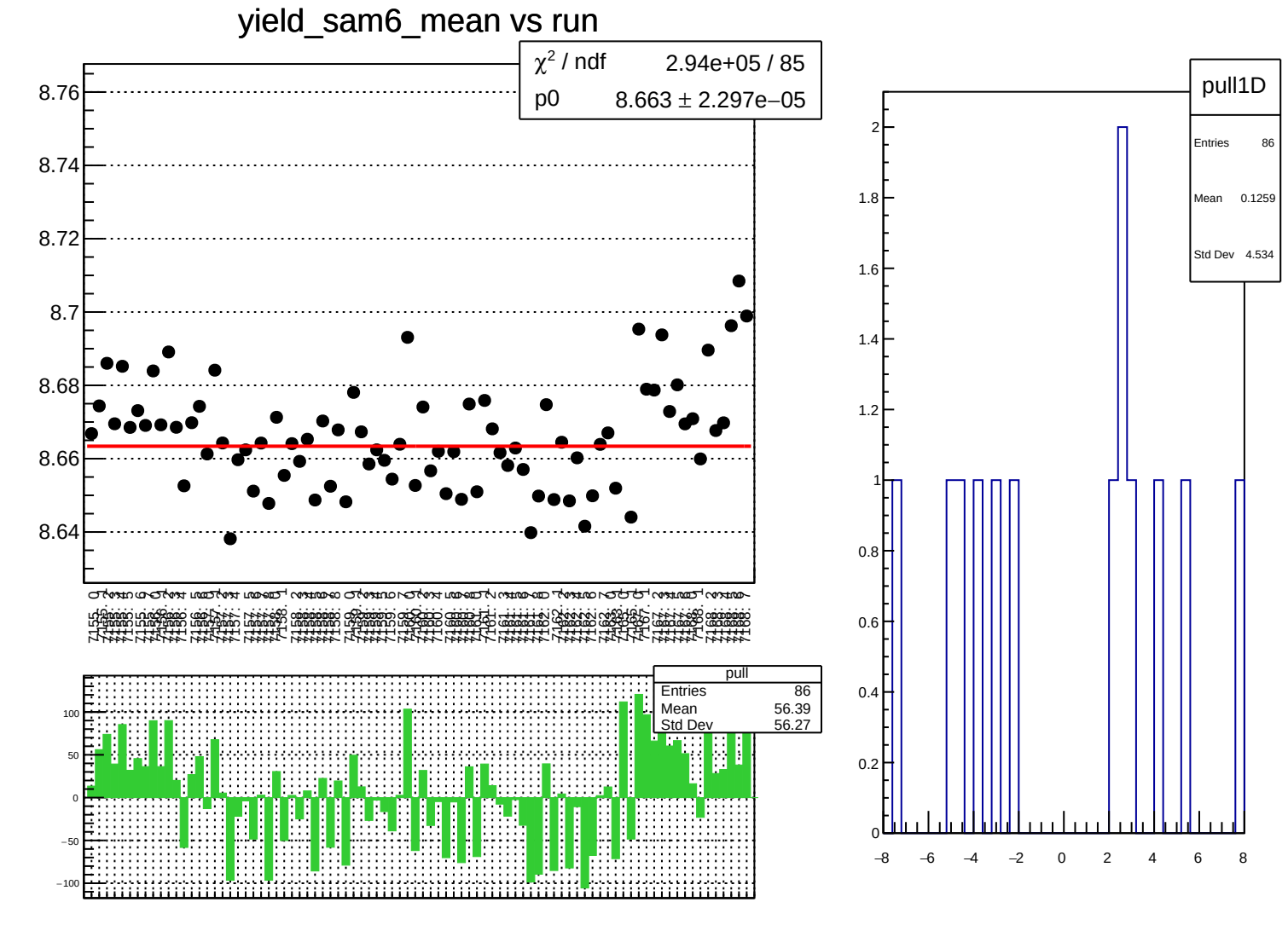

pull1D
Entries 86
Mean −1.165
Std Dev 3.529
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

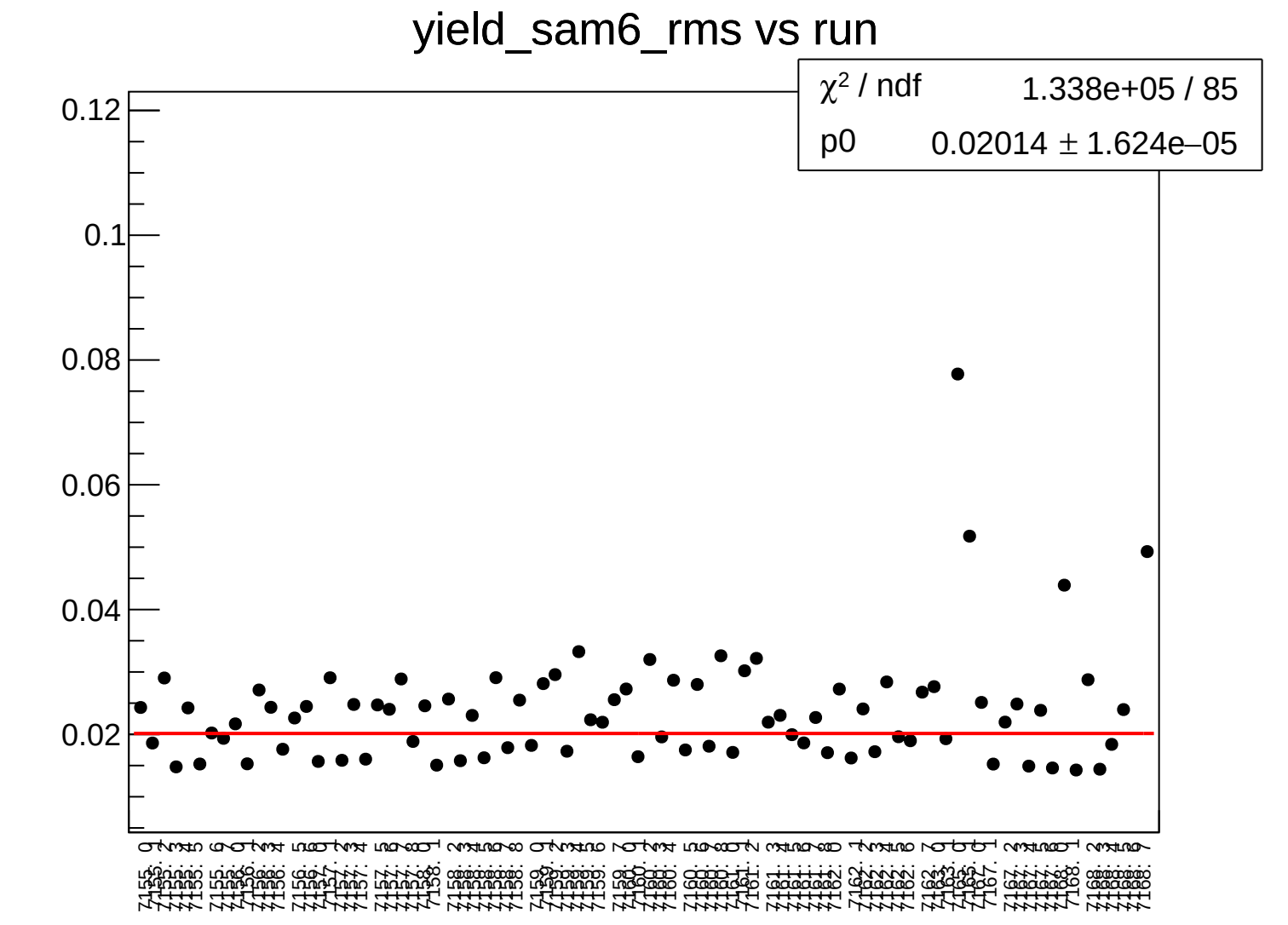

yield_sam4_rms vs run
χ² / ndf 1.599e+05 / 85
p0 0.0592 ± 4.815e−05
0.25
0.2
0.15
0.1
0.05

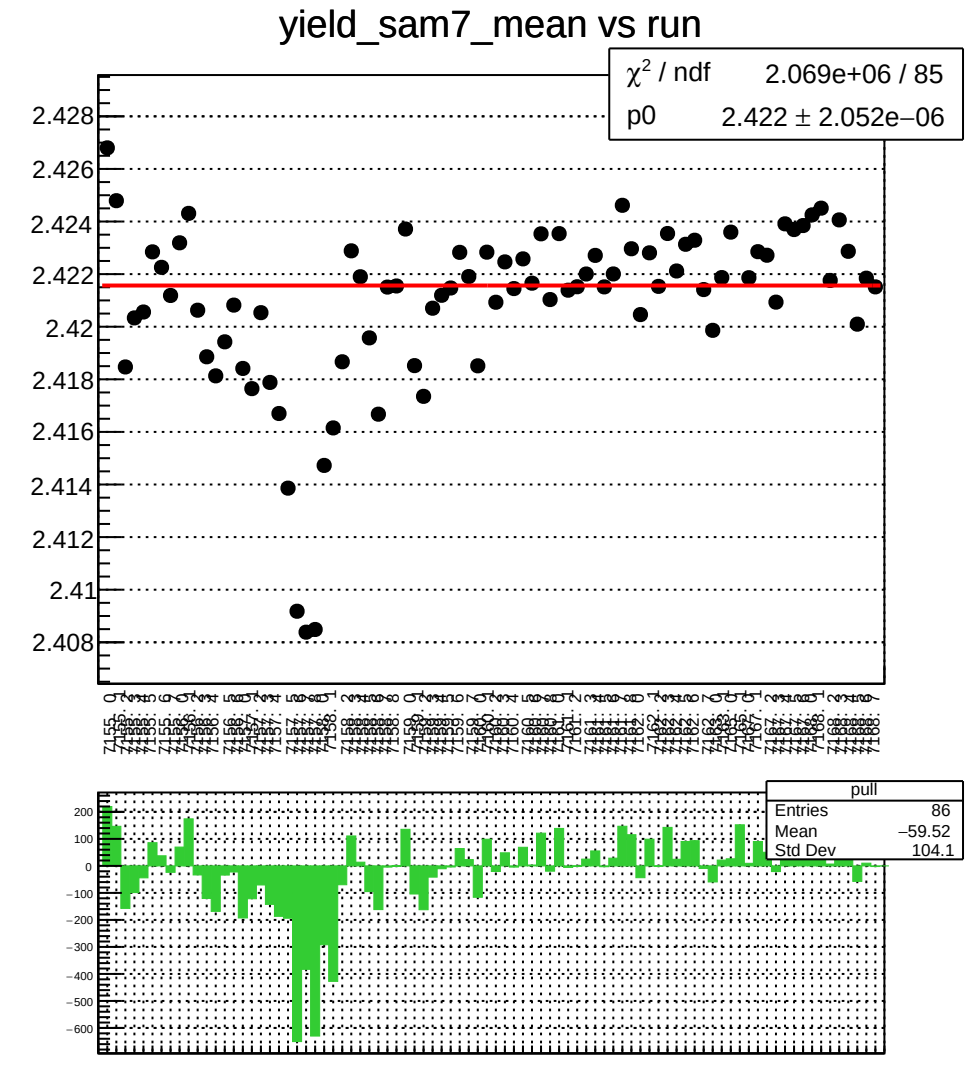

yield_sam5_mean vs run
χ² / ndf 4.109e+05 / 85
p0 17.81± 3.266e−05
17.94
17.92
17.9
17.88
17.86
17.84
17.82
17.8
17.78
17.76
17.74
17.72
pull
Entries 86
Mean −593
Std Dev 639.2
150
100
50
0
−50
−100
−150
−200
−250

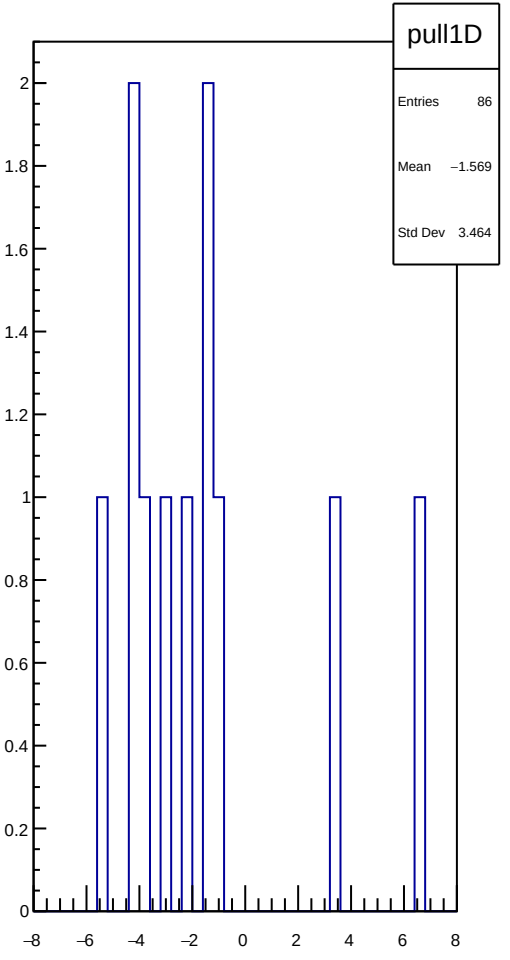

pull1D
Entries 86
Mean 0.7844
Std Dev 4.934
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

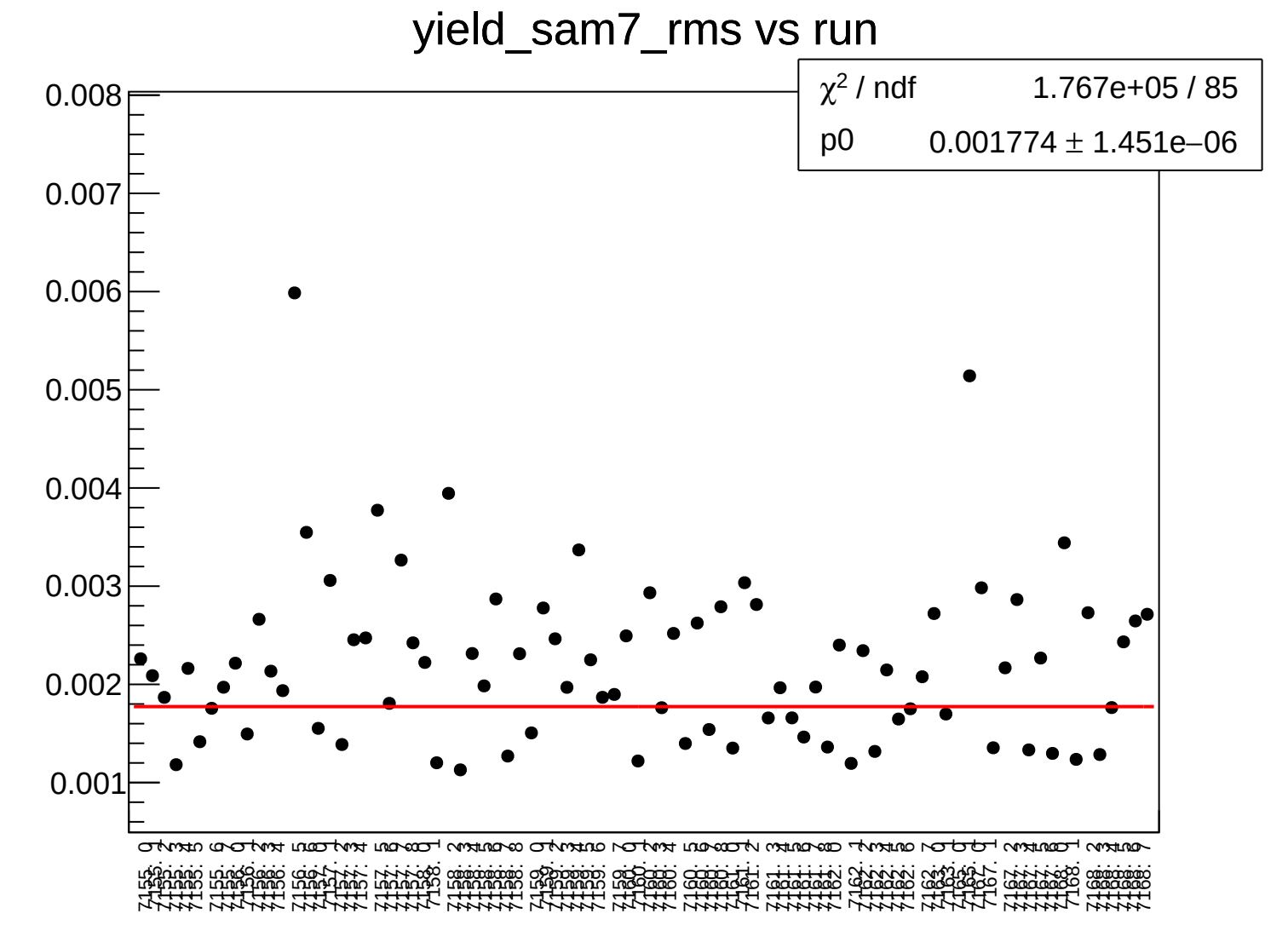

yield_sam5_rms vs run
χ² / ndf 6.013e+04 / 85
p0 0.02932 ± 2.31e−05
0.25
0.2
0.15
0.1
0.05

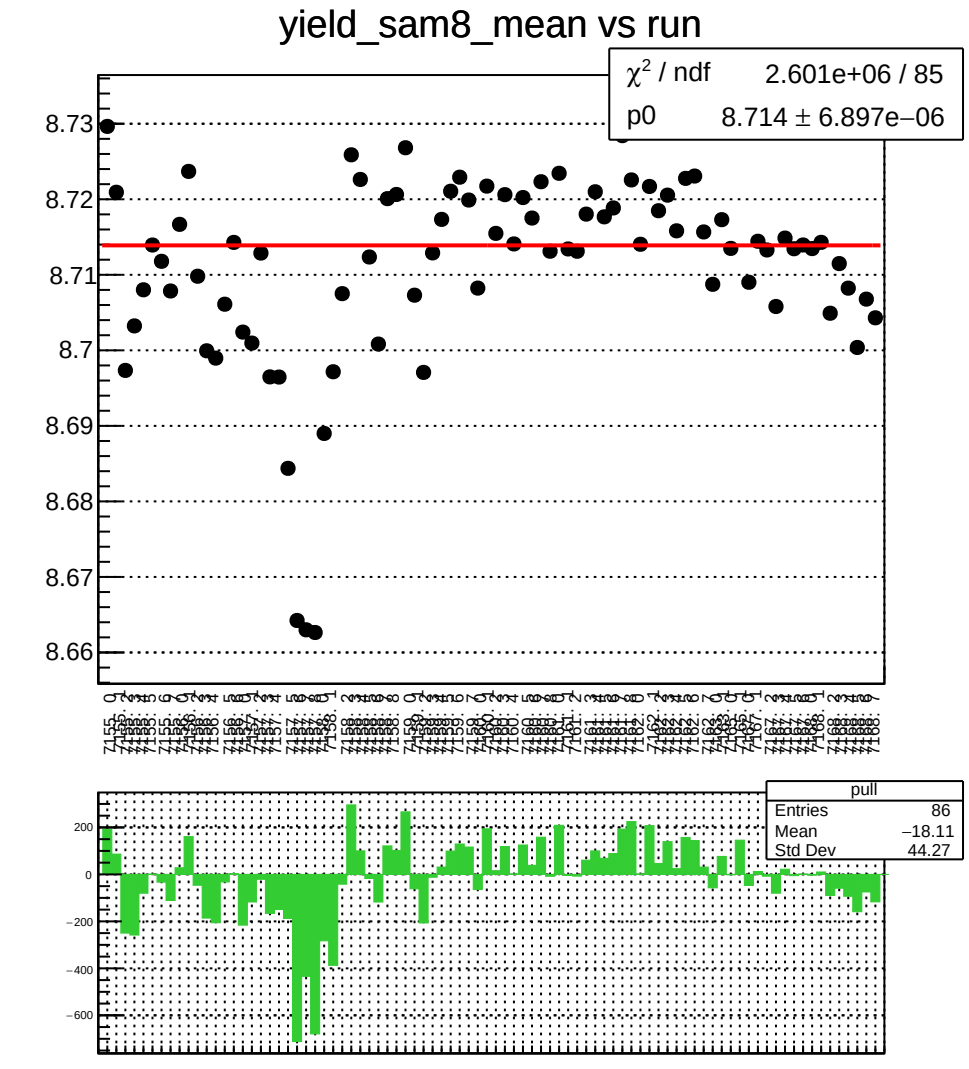

yield_sam6_mean vs run
χ² / ndf 2.94e+05 / 85
p0 8.663 ± 2.297e−05
8.76
8.74
8.72
8.7
8.68
8.66
8.64
pull
Entries 86
Mean 56.39
Std Dev 56.27
100
50
0
−50
−100
pull1D
Entries 86
Mean 0.1259
Std Dev 4.534
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

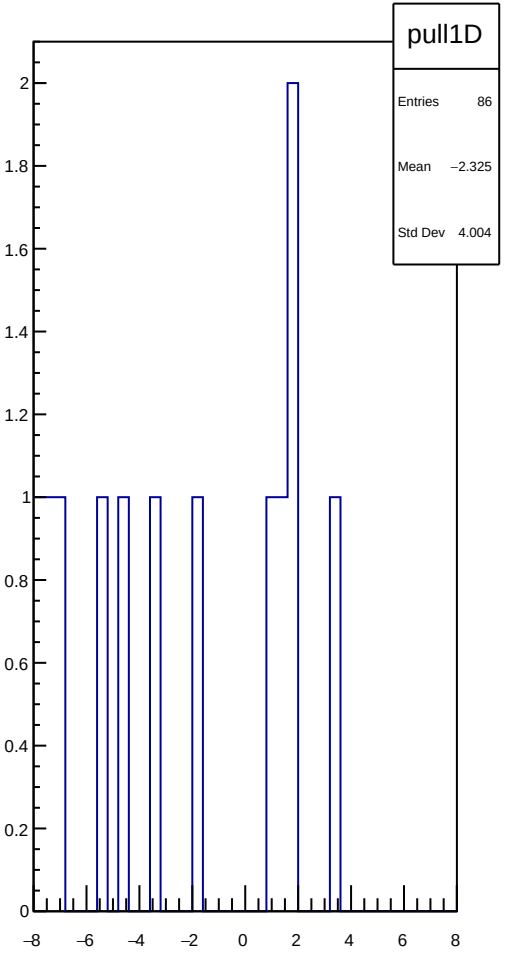

yield_sam6_rms vs run
χ² / ndf 1.338e+05 / 85
p0 0.02014 ± 1.624e−05
0.12
0.1
0.08
0.06
0.04
0.02

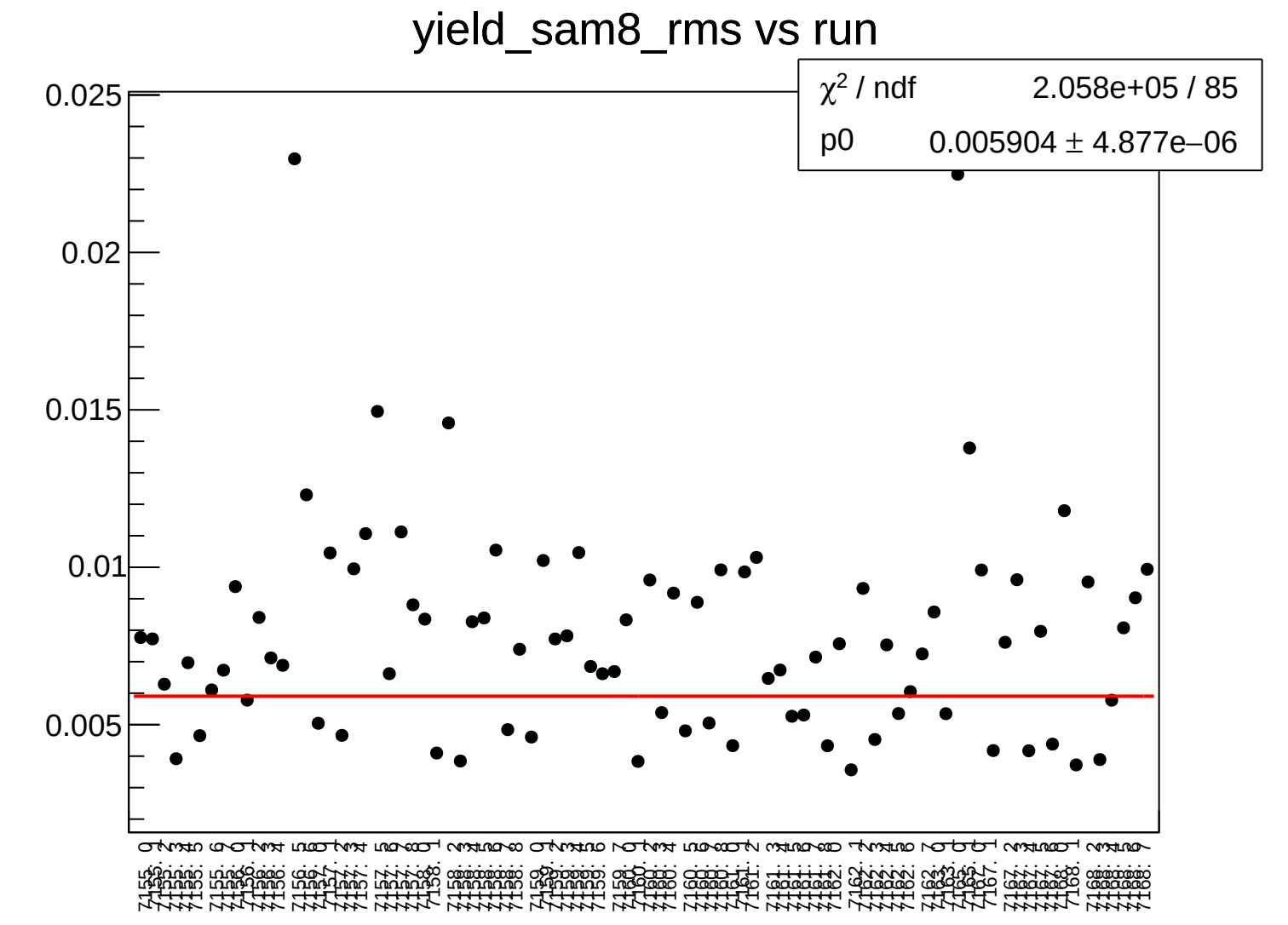

yield_sam7_mean vs run
χ² / ndf 2.069e+06 / 85
p0 2.422 ± 2.052e−06
2.428
2.426
2.424
2.422
2.42
2.418
2.416
2.414
2.412
2.41
2.408
pull
Entries 86
Mean −59.52
Std Dev 104.1
200
100
0
−100
−200
−300
−400
−500
−600

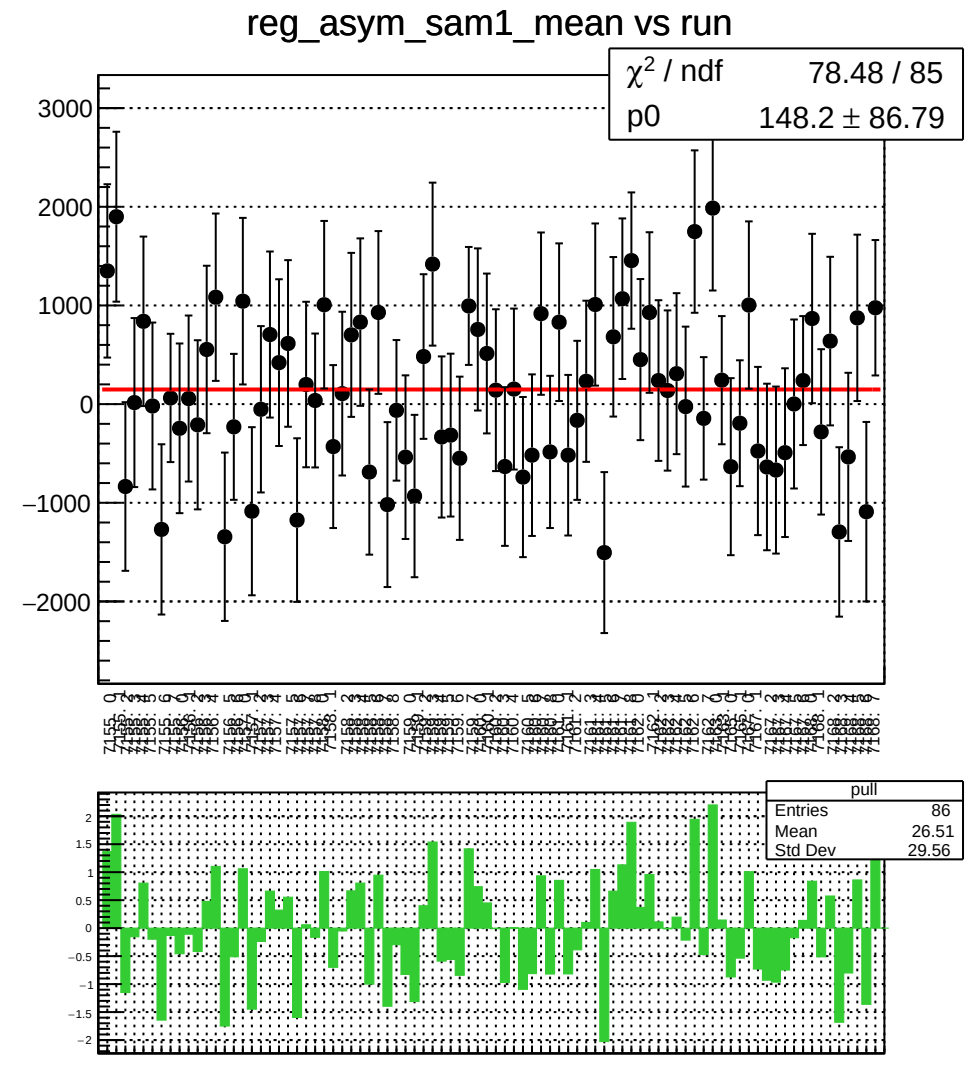

pull1D
Entries 86
Mean −1.569
Std Dev 3.464
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

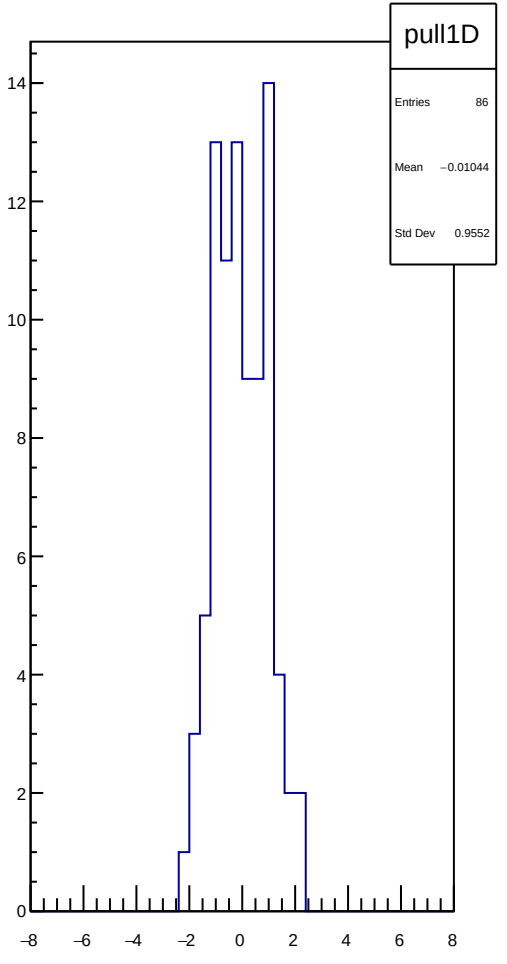

yield_sam7_rms vs run
χ² / ndf 1.767e+05 / 85
p0 0.001774 ± 1.451e−06
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

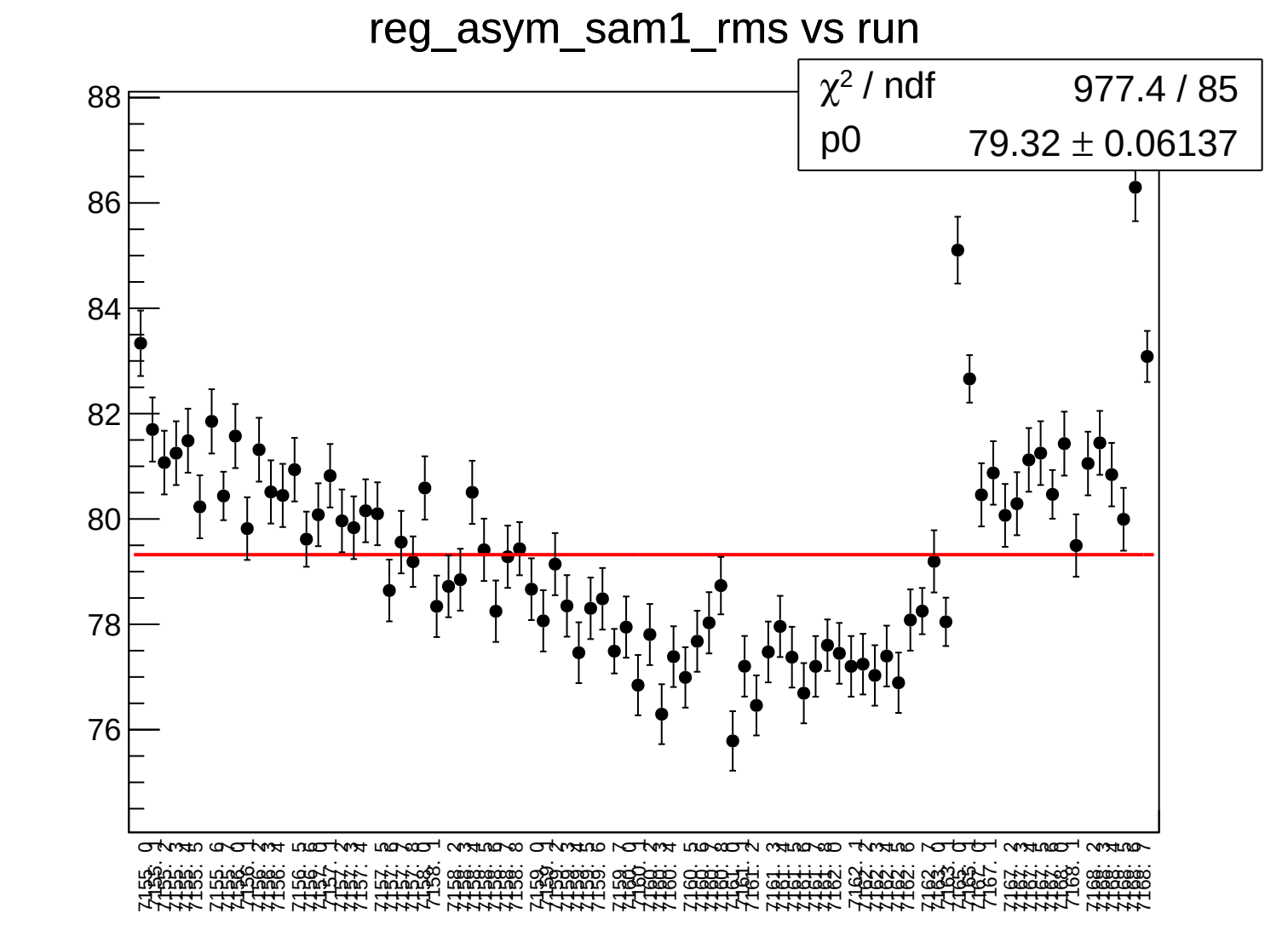

yield_sam8_mean vs run
χ² / ndf 2.601e+06 / 85
p0 8.714 ± 6.897e−06
8.73
8.72
8.71
8.7
8.69
8.68
8.67
8.66
pull
Entries 86
Mean −18.11
Std Dev 44.27
200
0
−200
−400
−600

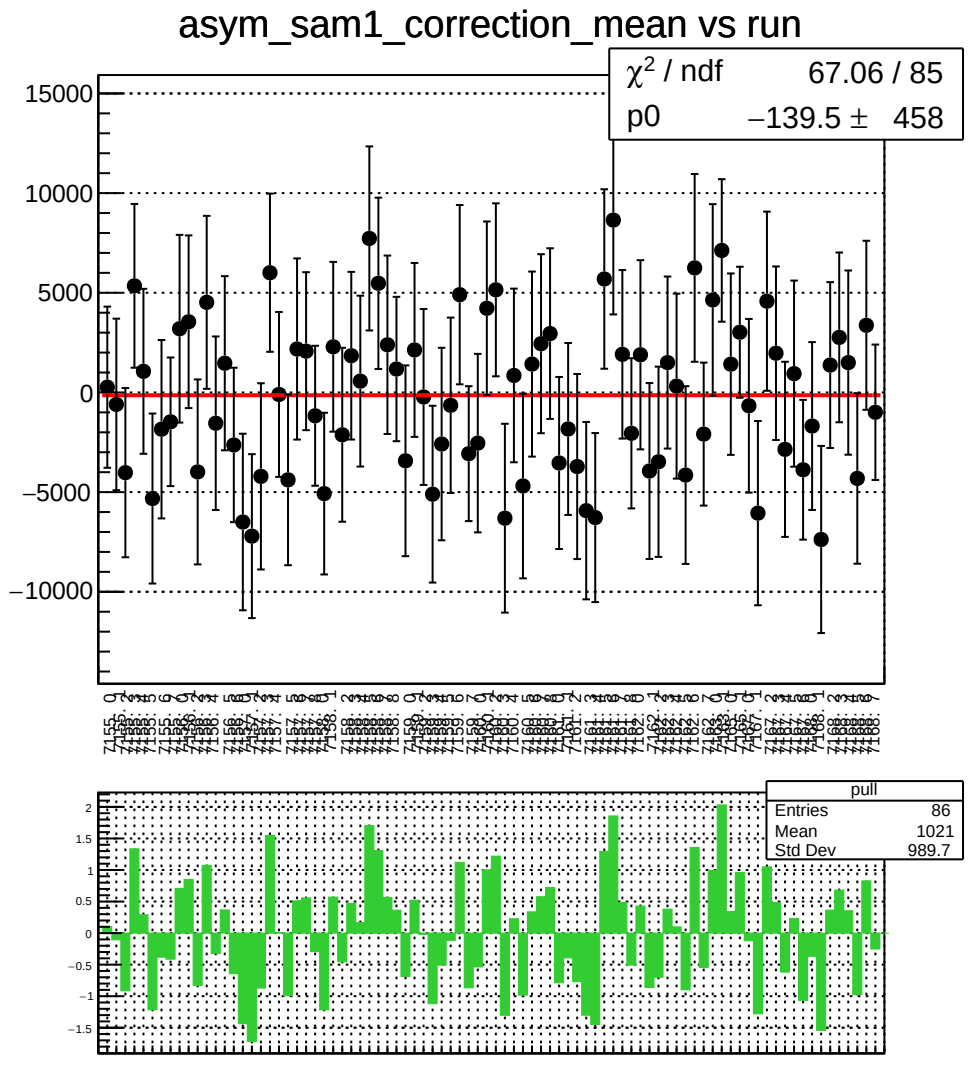

pull1D
Entries 86
Mean −2.325
Std Dev 4.004
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

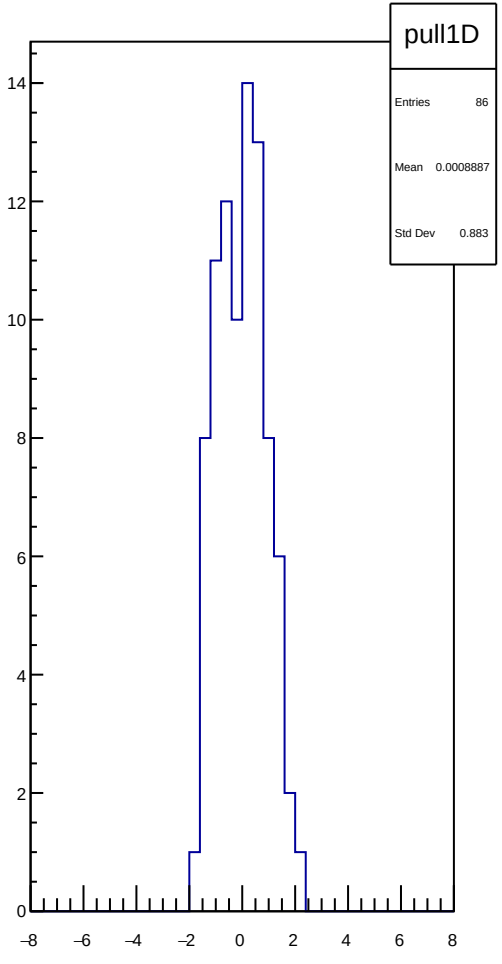

yield_sam8_rms vs run
χ² / ndf 2.058e+05 / 85
p0 0.005904 ± 4.877e−06
0.025
0.02
0.015
0.01
0.005


reg_asym_sam1_mean vs run
χ² / ndf 78.48 / 85
p0 148.2 ± 86.79
3000
2000
1000
0
−1000
−2000
pull
Entries 86
Mean 26.51
Std Dev 29.56
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

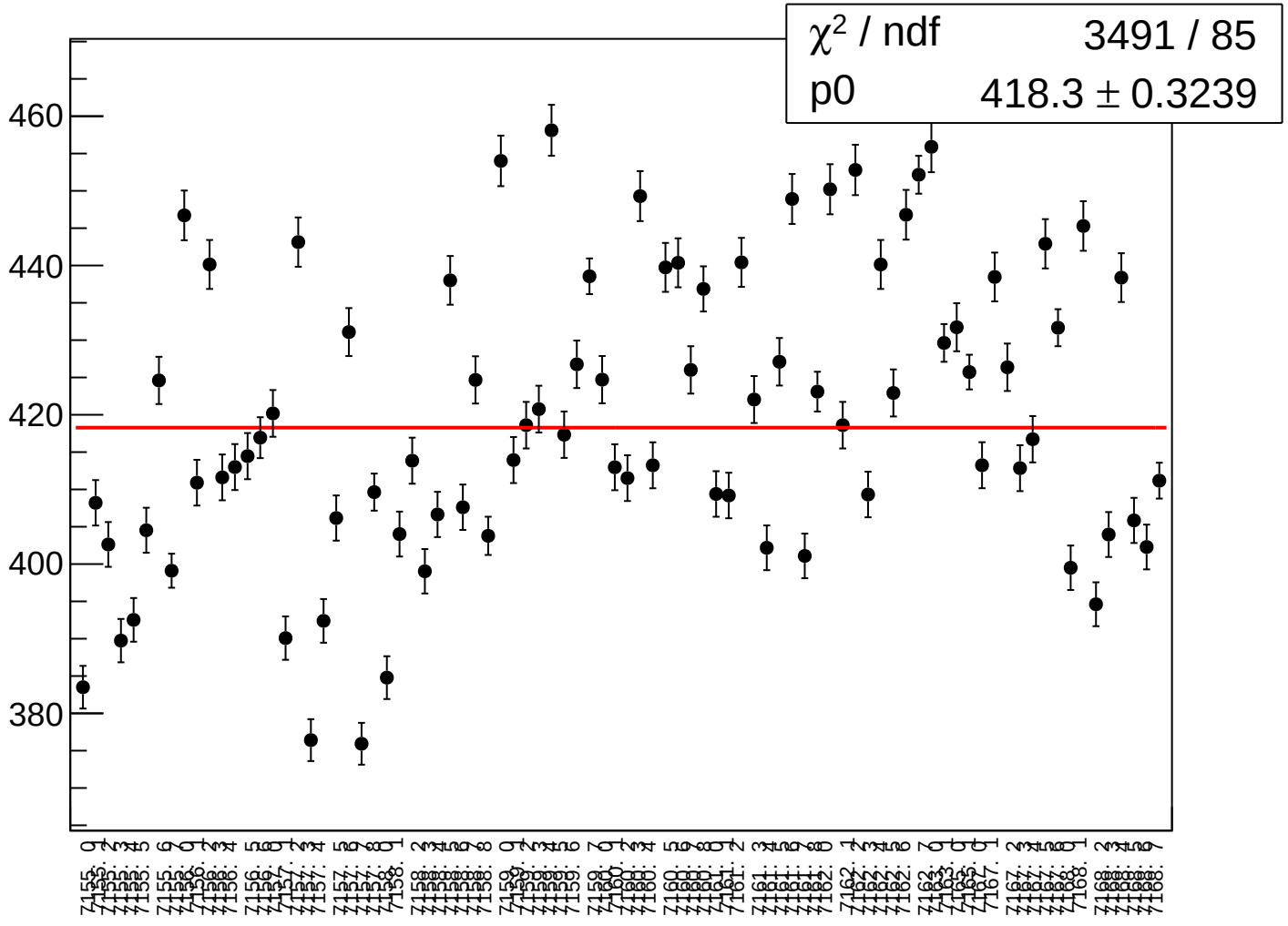

pull1D
Entries 86
Mean −0.01044
Std Dev 0.9552
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

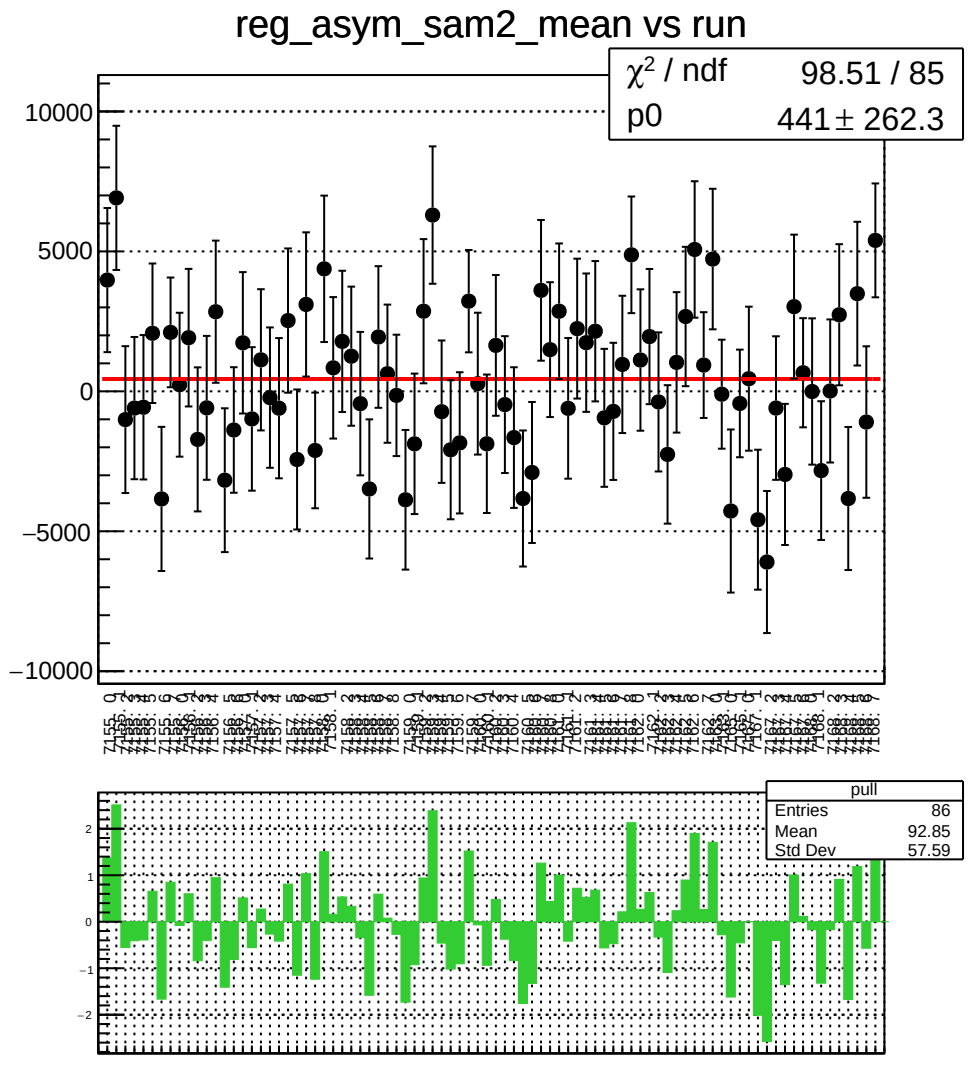

reg_asym_sam1_rms vs run
χ² / ndf 977.4 / 85
p0 79.32 ± 0.06137
88
86
84
82
80
78
76

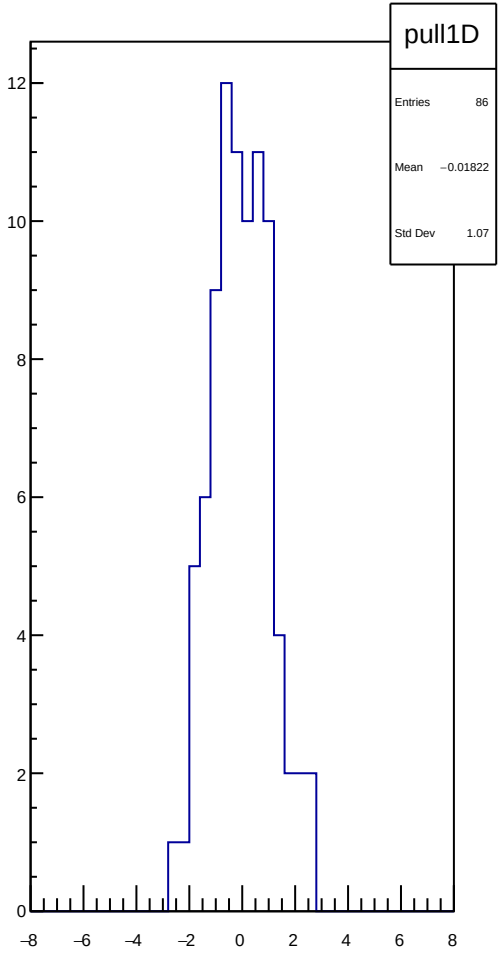

asym_sam1_correction_mean vs run
χ² / ndf 67.06 / 85
p0 −139.5 ± 458
15000
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 1021
Std Dev 989.7
2
1.5
1
0.5
0
−0.5
−1
−1.5

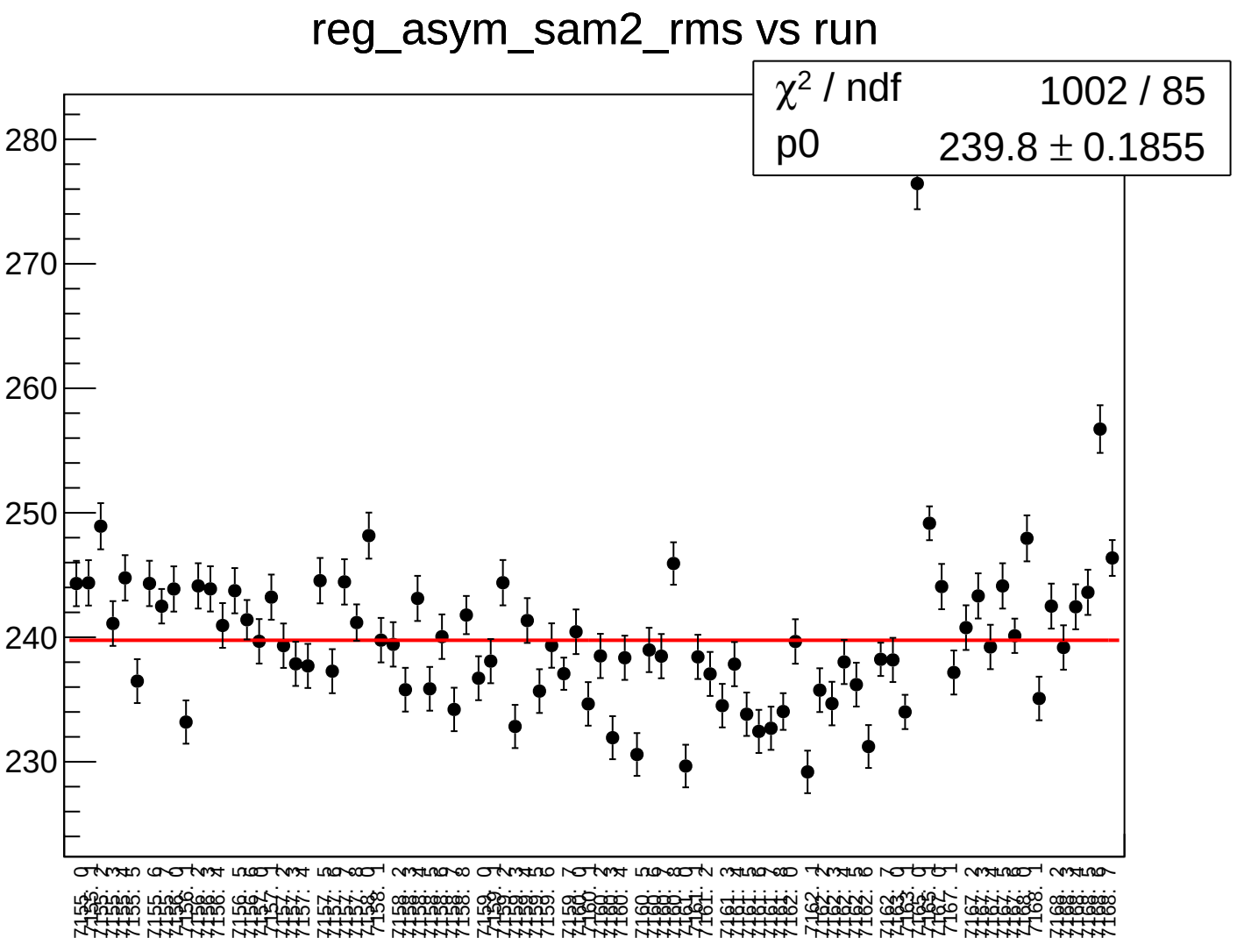

pull1D
Entries 86
Mean 0.0008887
Std Dev 0.883
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

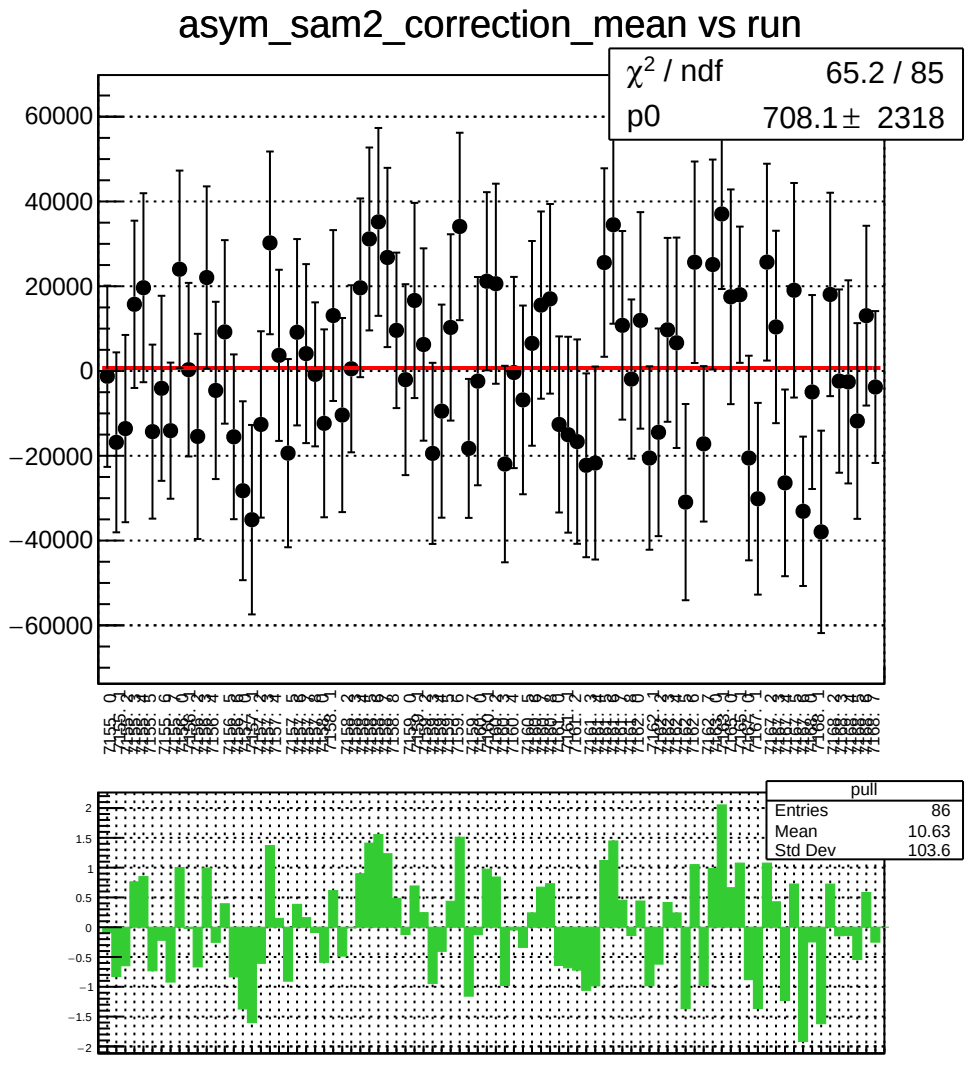
asym_sam1_correction_rms vs run

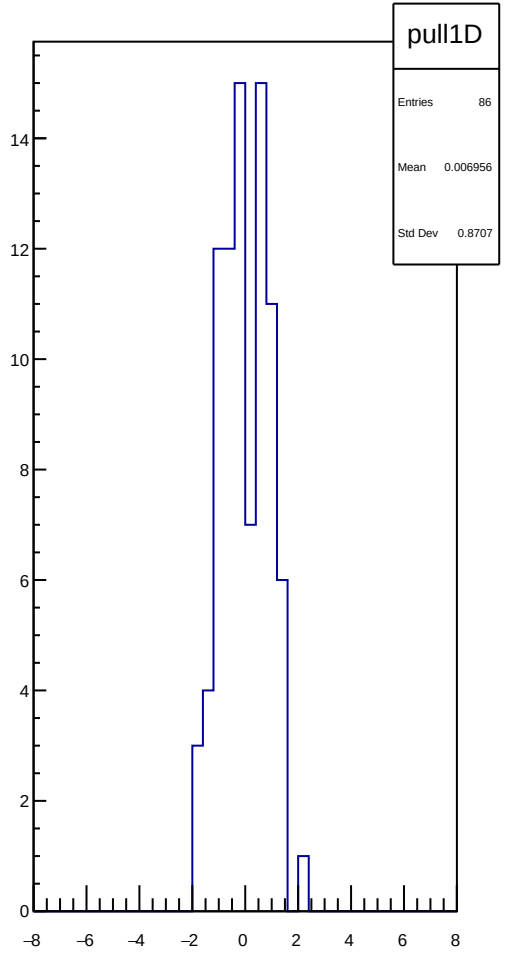


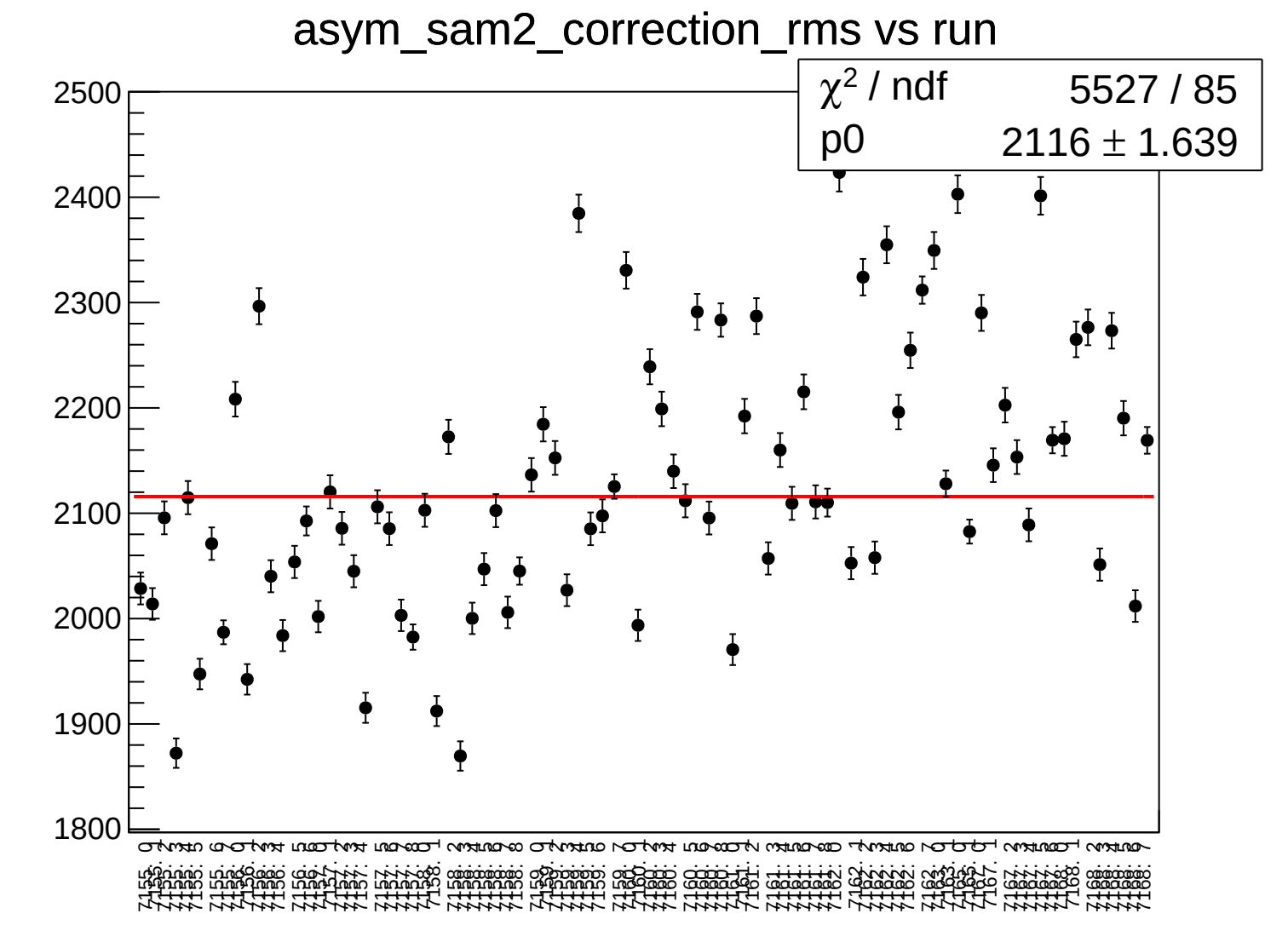

reg_asym_sam2_mean vs run
χ² / ndf 98.51 / 85
p0 441 ± 262.3
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 92.85
Std Dev 57.59
2
1
0
−1
−2

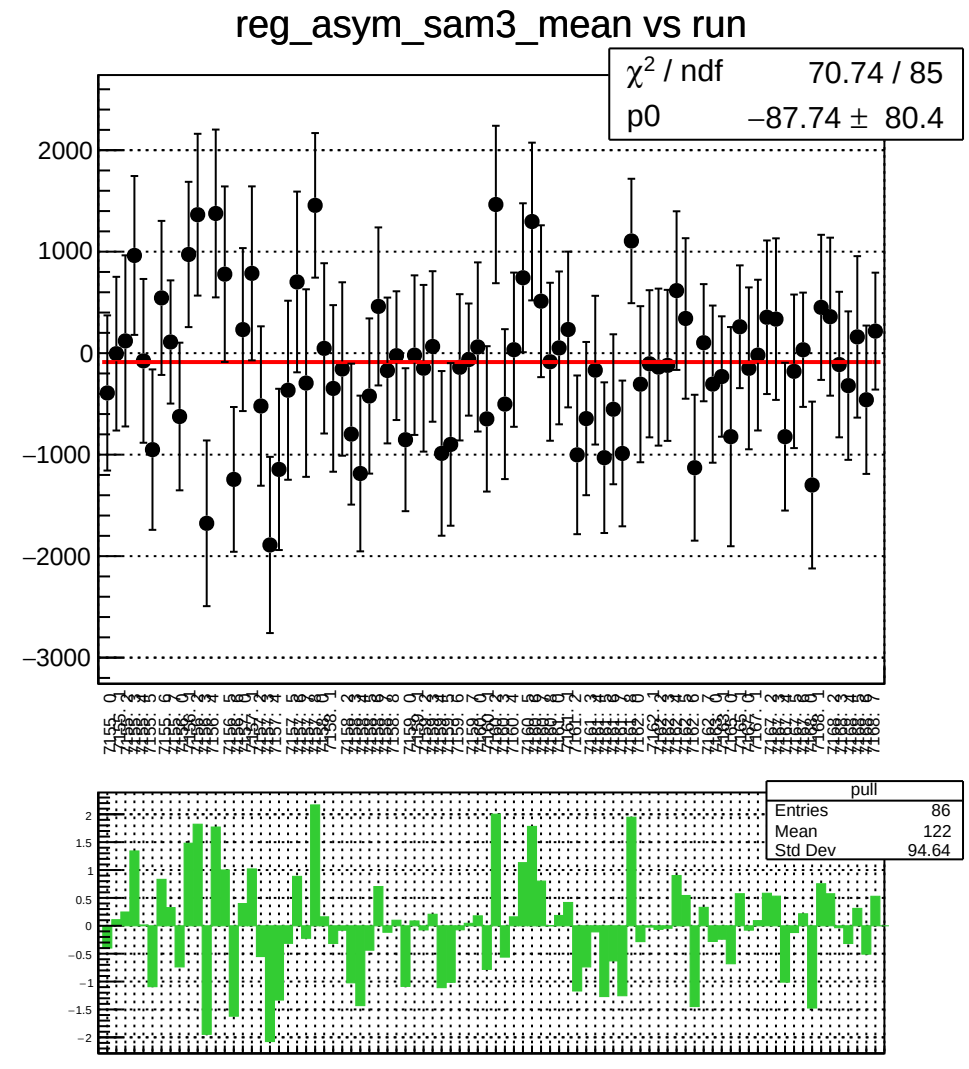

pull1D
Entries 86
Mean −0.01822
Std Dev 1.07
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

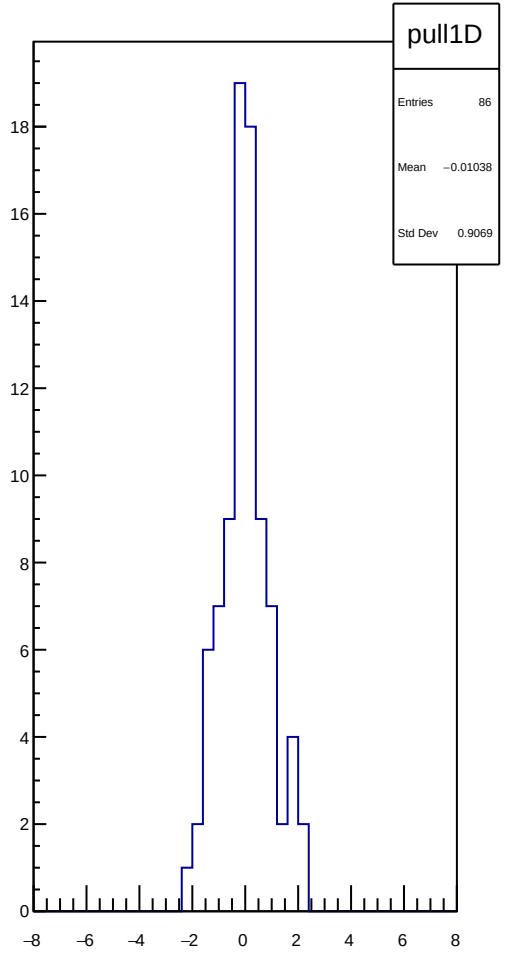

reg_asym_sam2_rms vs run
χ² / ndf 1002 / 85
p0 239.8 ± 0.1855
280
270
260
250
240
230

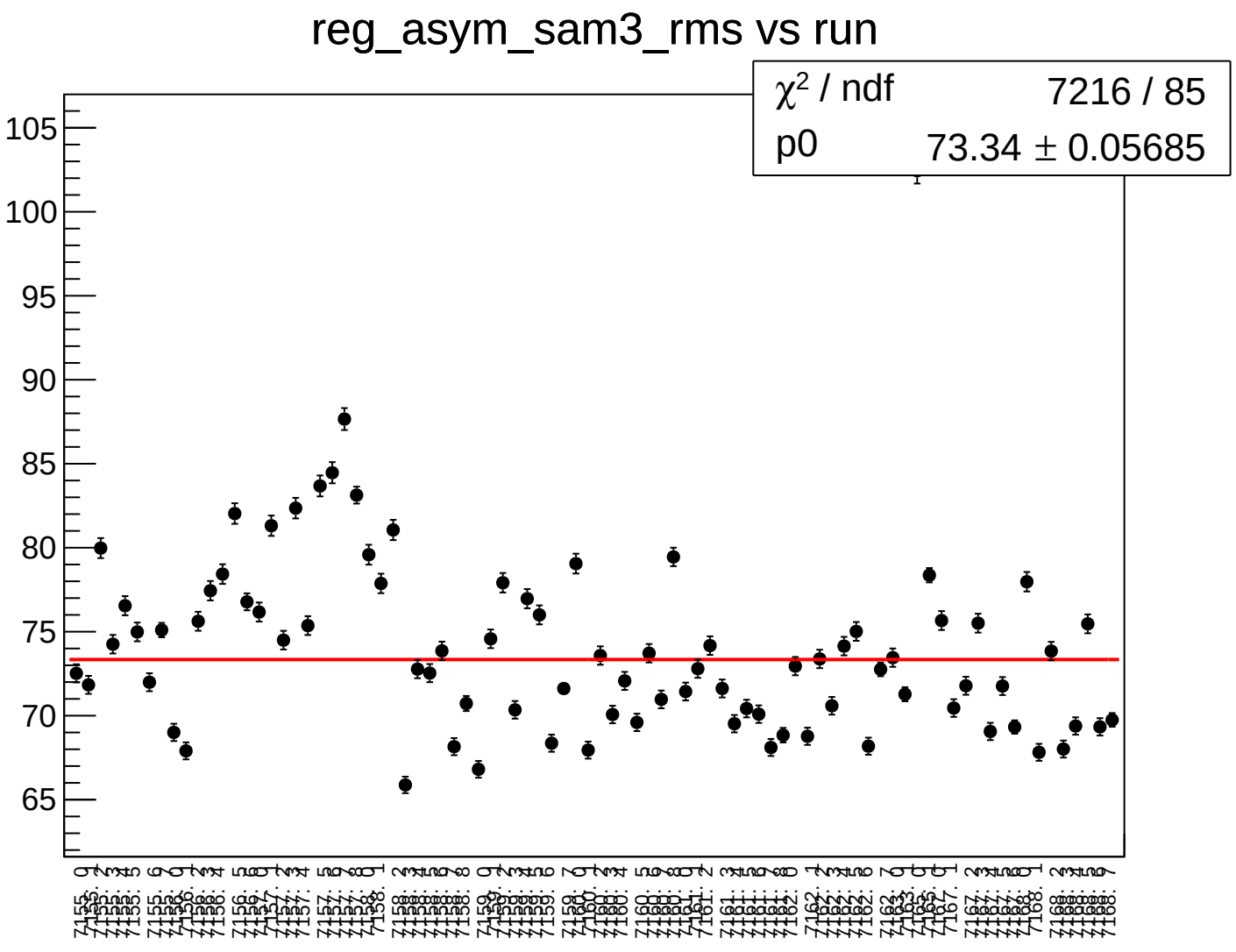

asym_sam2_correction_mean vs run
χ² / ndf 65.2 / 85
p0 708.1 ± 2318
pull
Entries 86
Mean 10.63
Std Dev 103.6

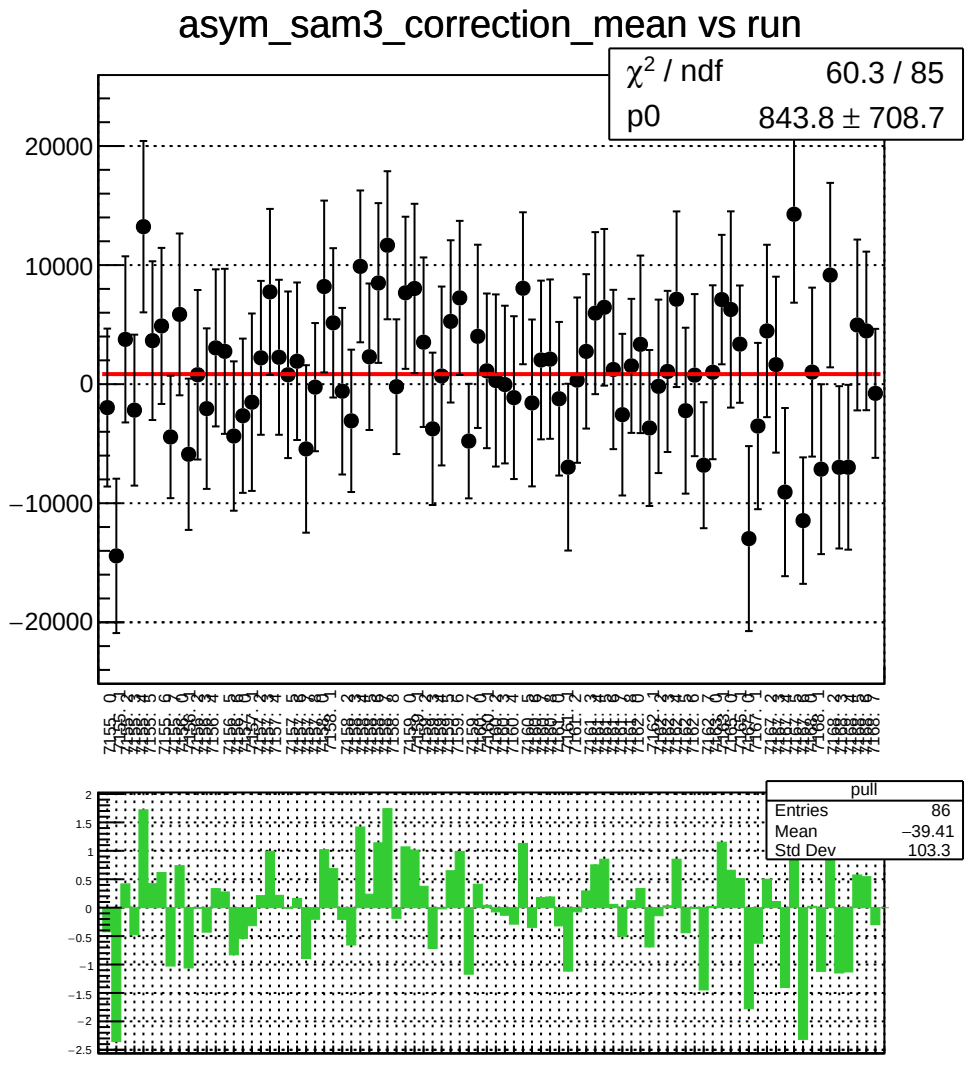

pull1D
Entries 86
Mean 0.006956
Std Dev 0.8707

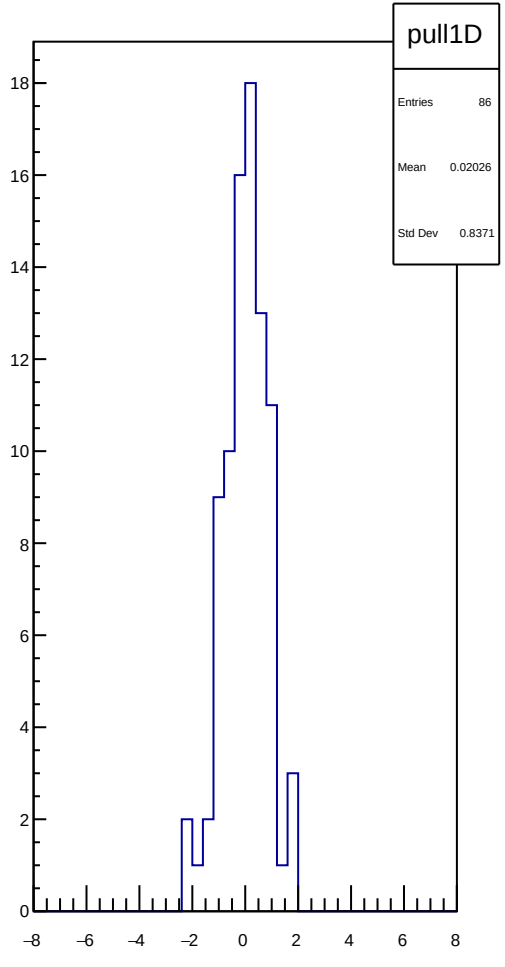

asym_sam2_correction_rms vs run
χ² / ndf 5527 / 85
p0 2116 ± 1.639
2500
2400
2300
2200
2100
2000
1900
1800

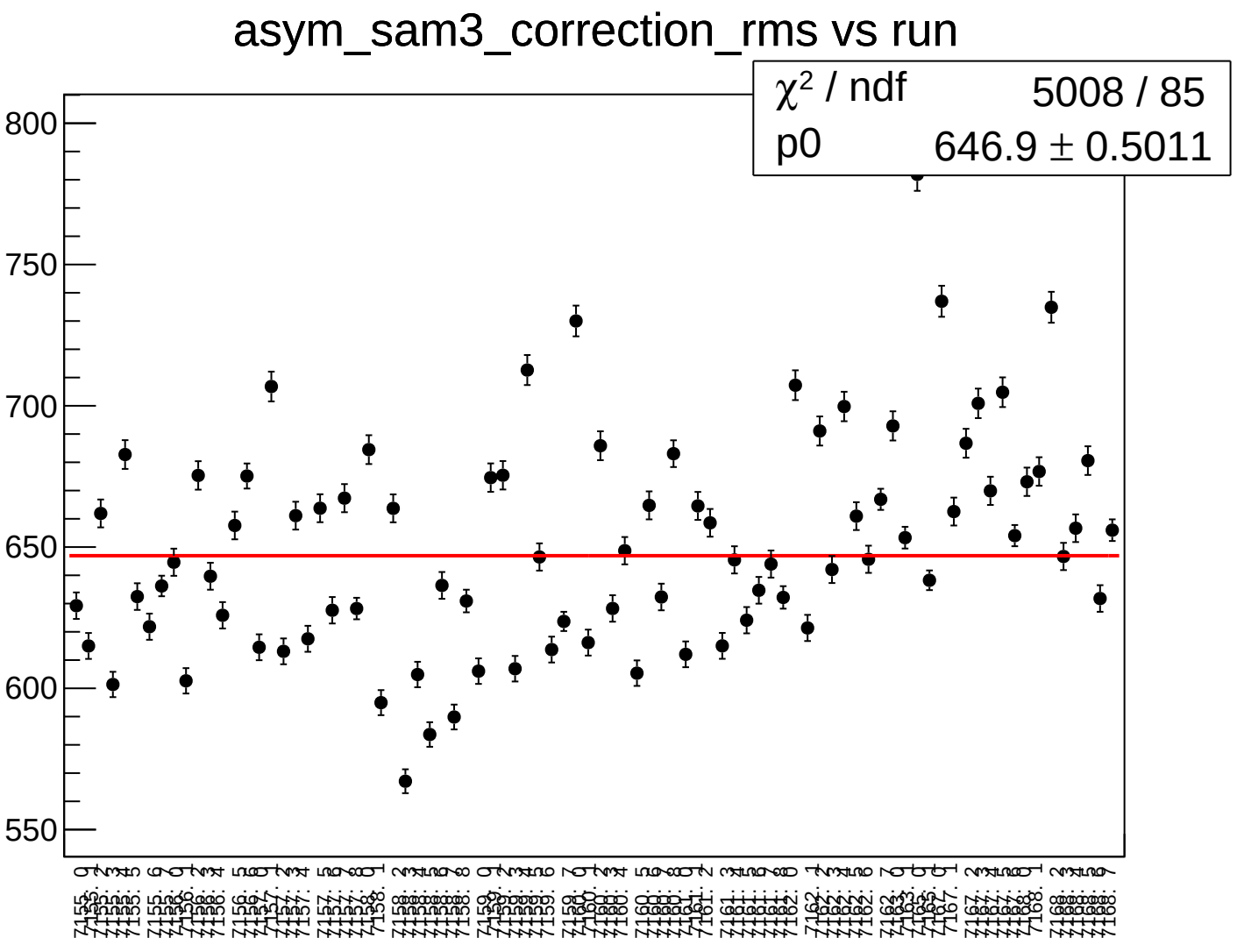

reg_asym_sam3_mean vs run
χ² / ndf 70.74 / 85
p0 −87.74 ± 80.4
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 122
Std Dev 94.64
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

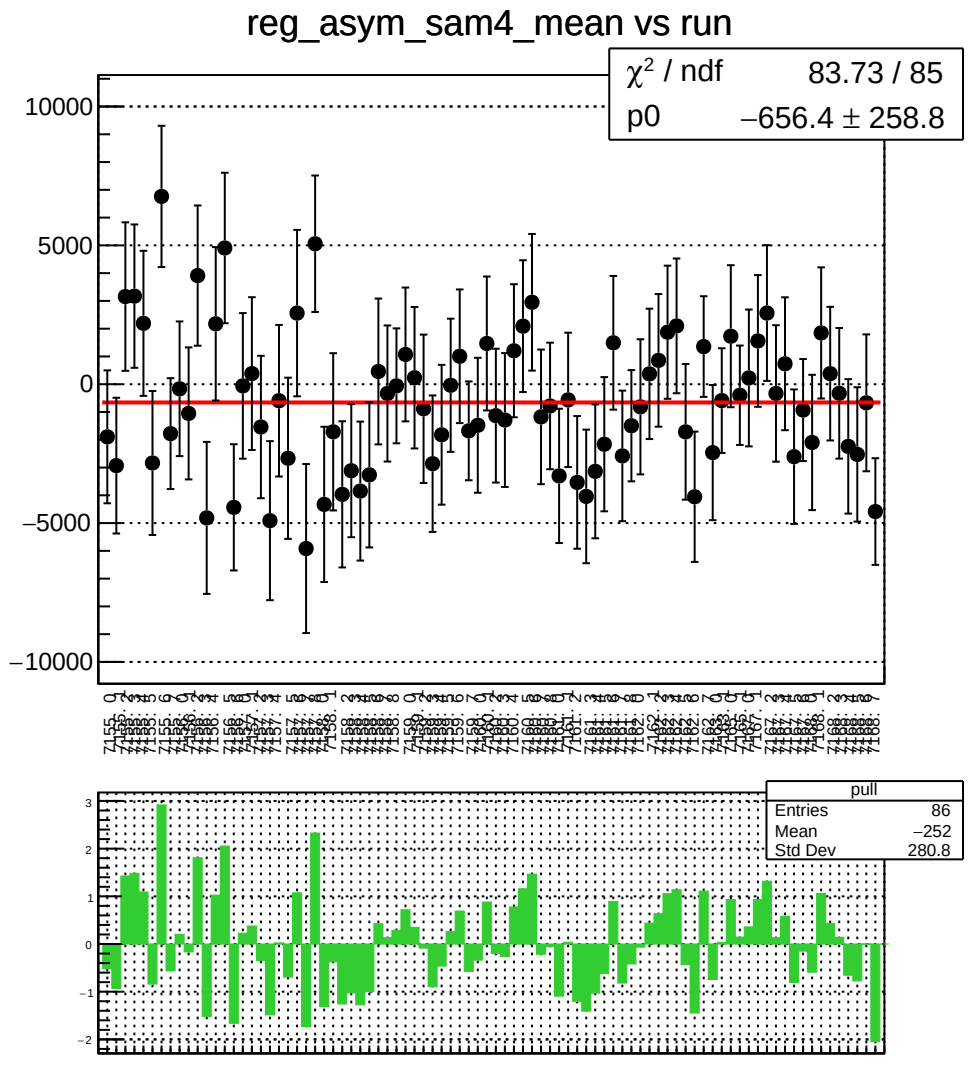

pull1D
Entries 86
Mean −0.01038
Std Dev 0.9069
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

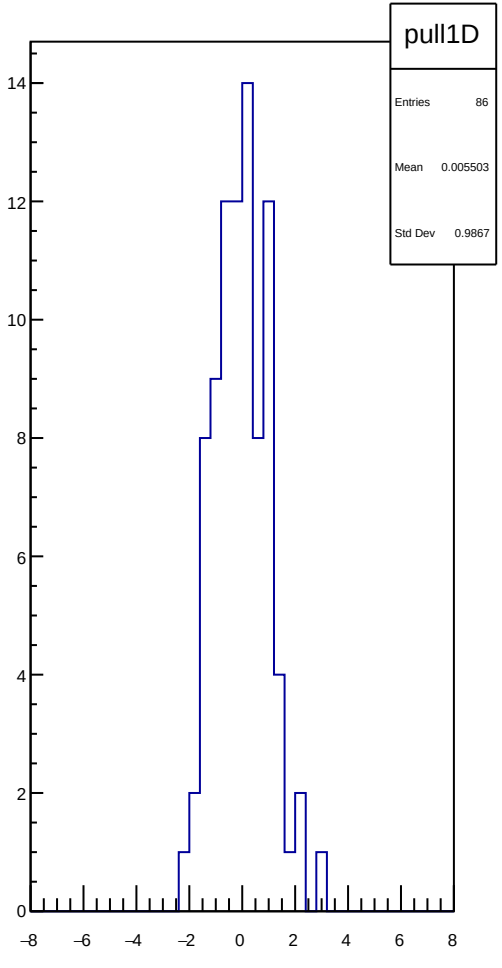

reg_asym_sam3_rms vs run
χ² / ndf 7216 / 85
p0 73.34 ± 0.05685
105
100
95
90
85
80
75
70
65

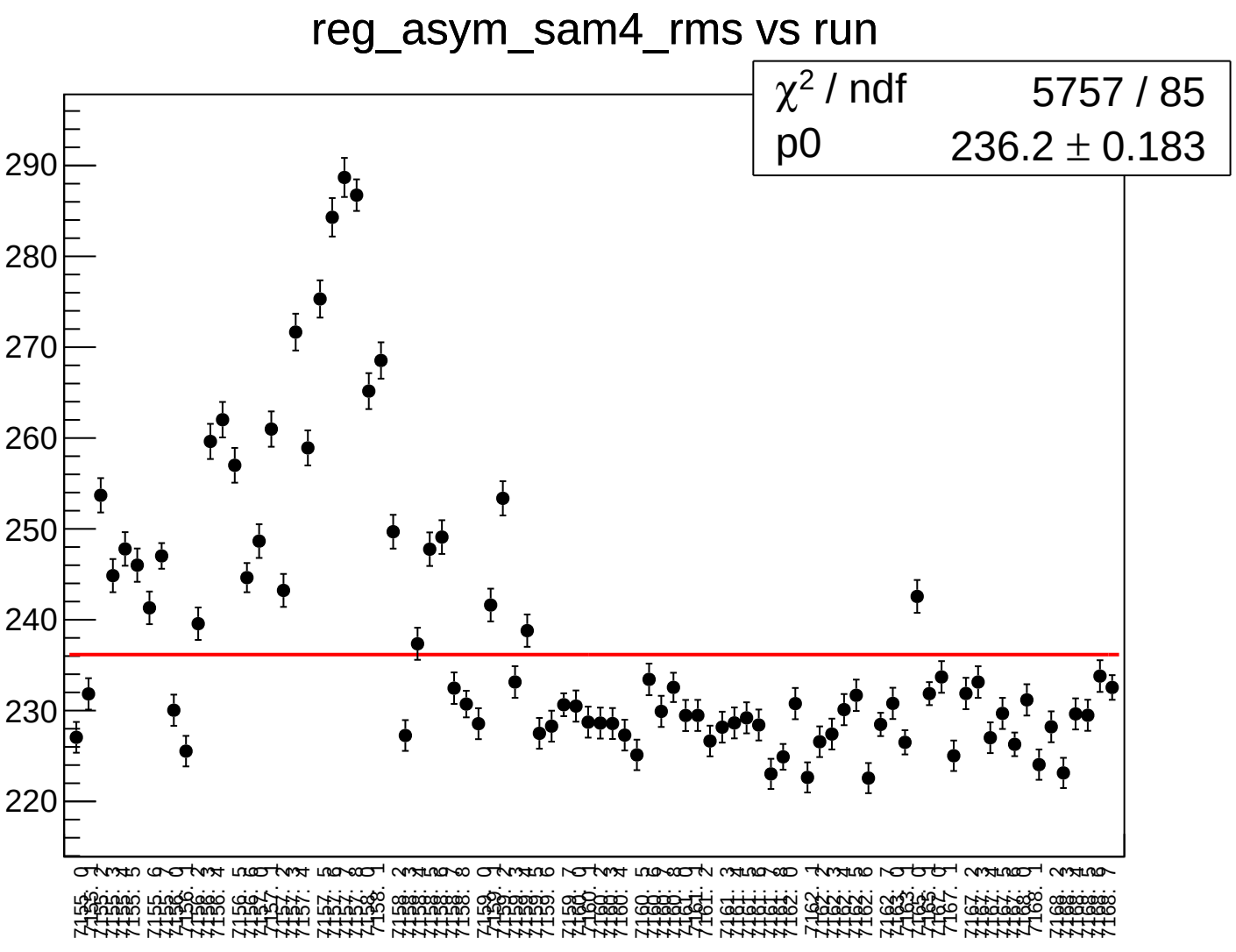

asym_sam3_correction_mean vs run
χ² / ndf 60.3 / 85
p0 843.8 ± 708.7
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −39.41
Std Dev 103.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

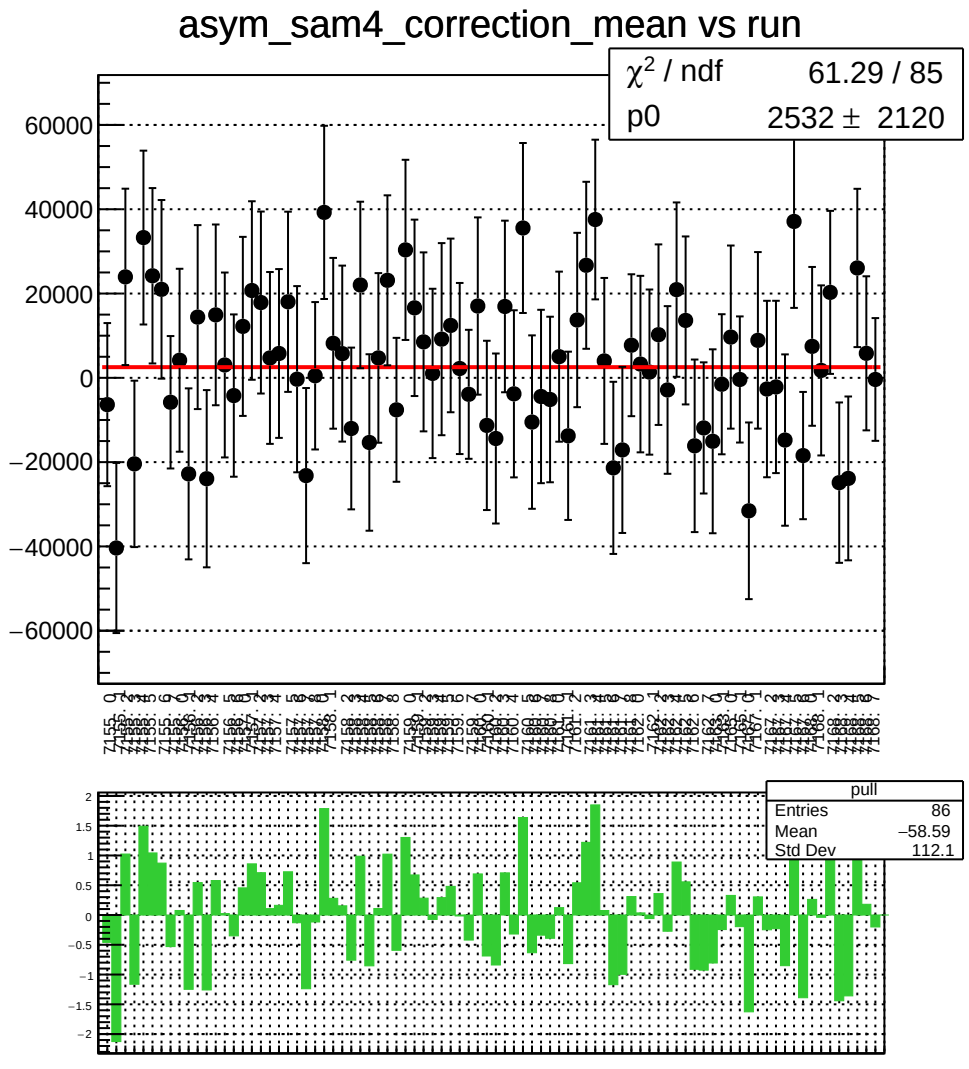

pull1D
Entries 86
Mean 0.02026
Std Dev 0.8371
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

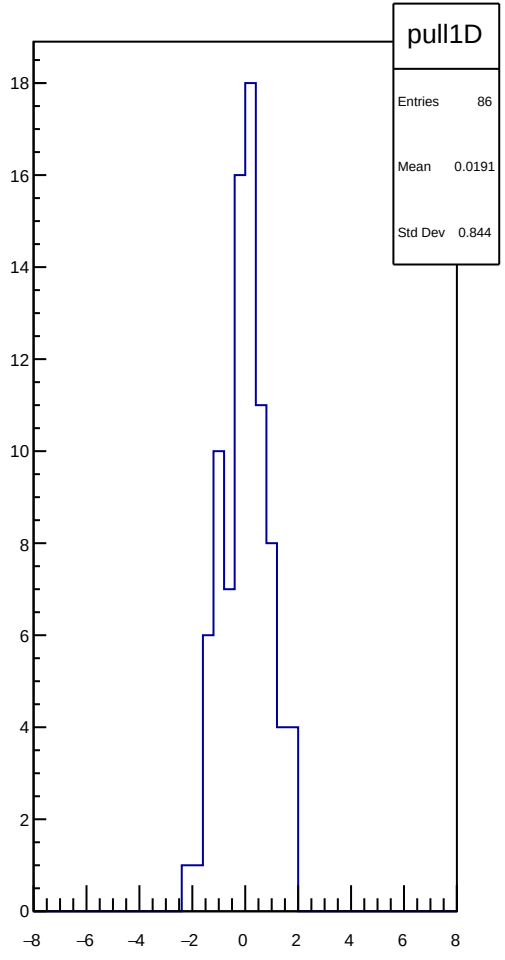

asym_sam3_correction_rms vs run
χ² / ndf 5008 / 85
p0 646.9 ± 0.5011
800
750
700
650
600
550

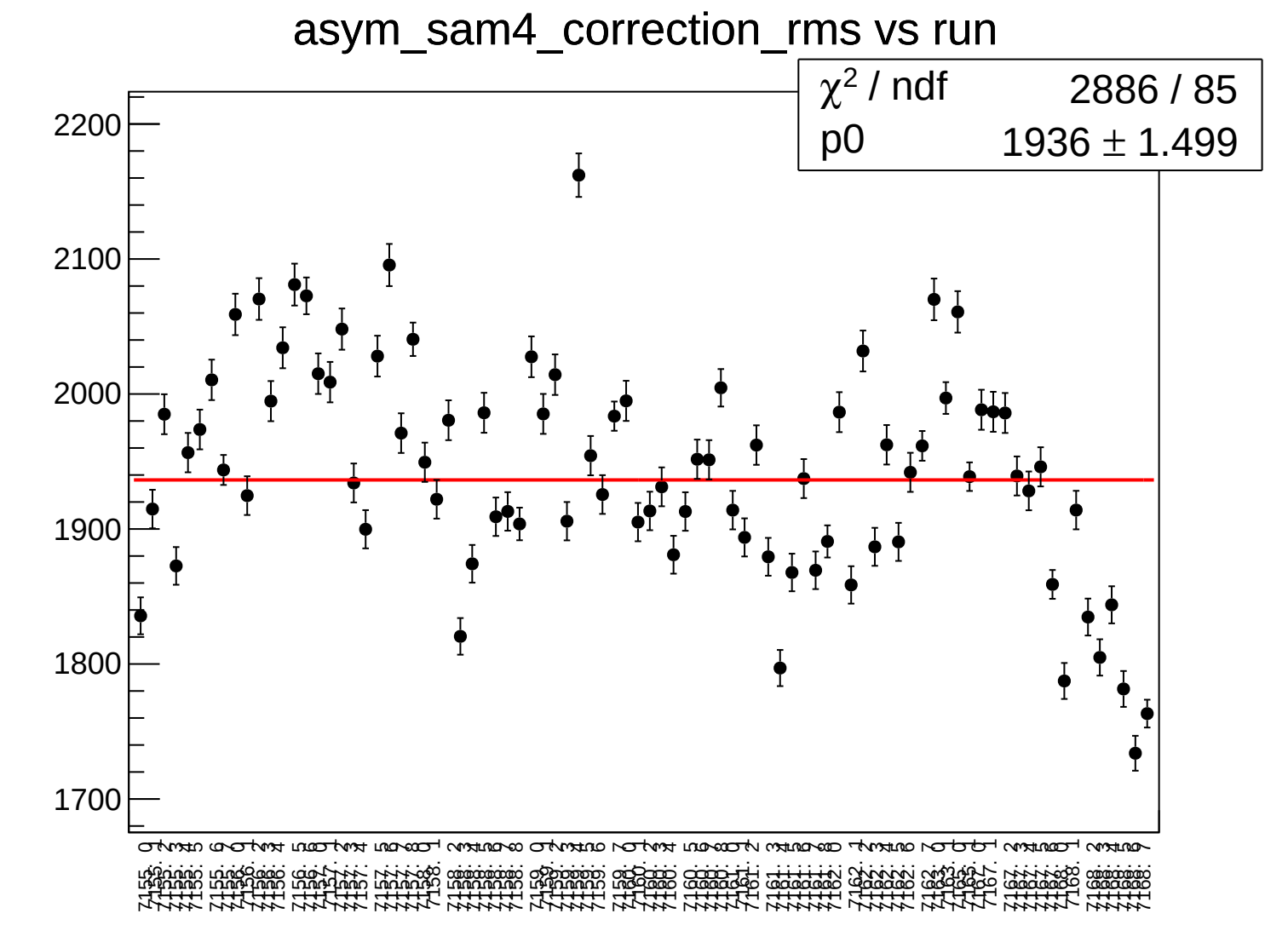

reg_asym_sam4_mean vs run
χ² / ndf 83.73 / 85
p0 −656.4 ± 258.8
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −252
Std Dev 280.8
3
2
1
0
−1
−2

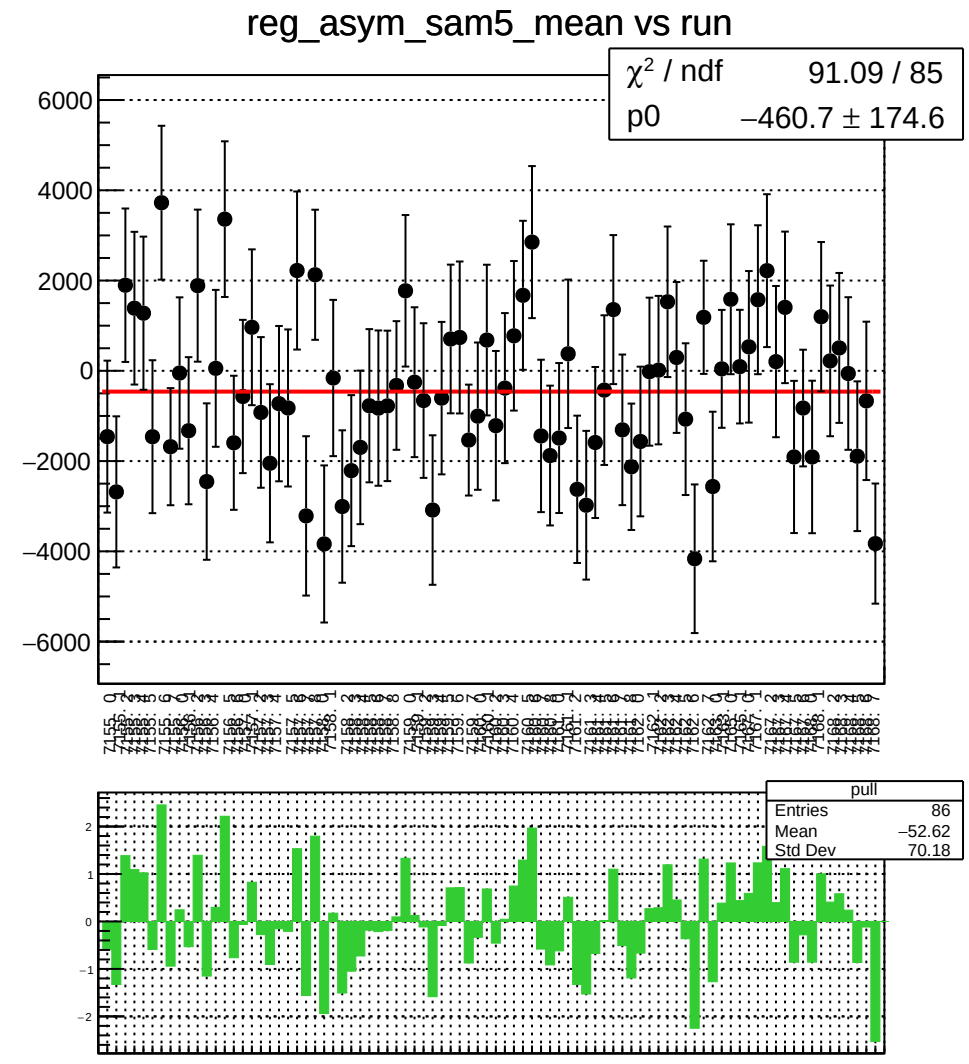

pull1D
Entries 86
Mean 0.005503
Std Dev 0.9867
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

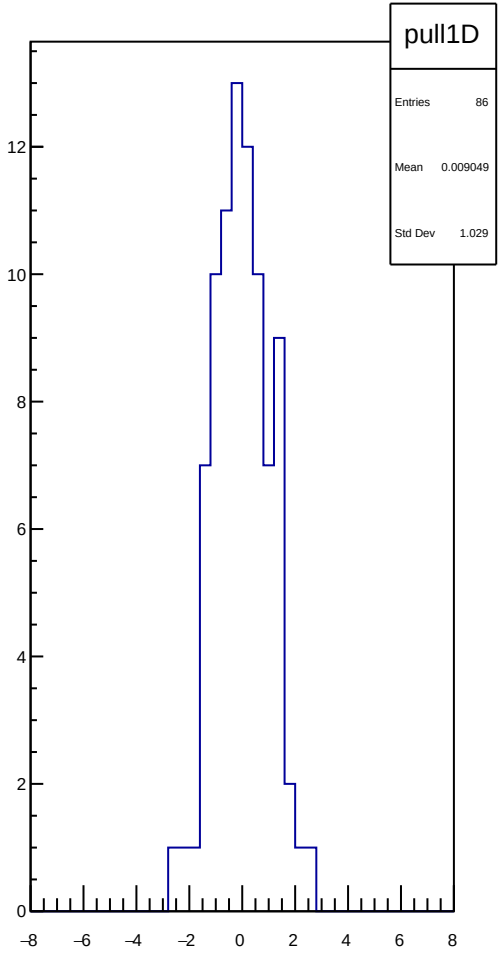

reg_asym_sam4_rms vs run
χ^2 / ndf 5757 / 85
p0 236.2 ± 0.183
290
280
270
260
250
240
230
220

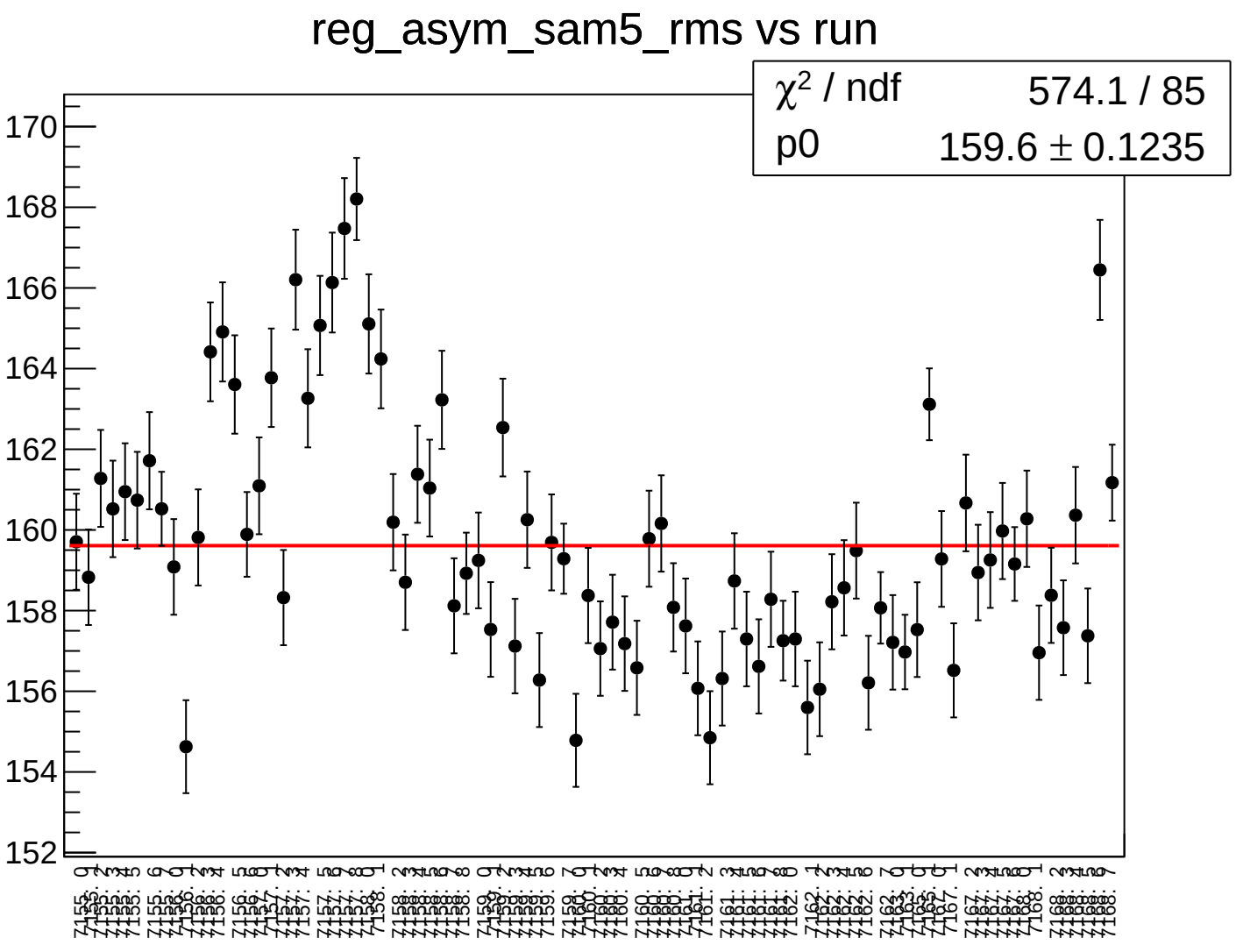

asym_sam4_correction_mean vs run
χ² / ndf 61.29 / 85
p0 2532 ± 2120
pull
Entries 86
Mean −58.59
Std Dev 112.1

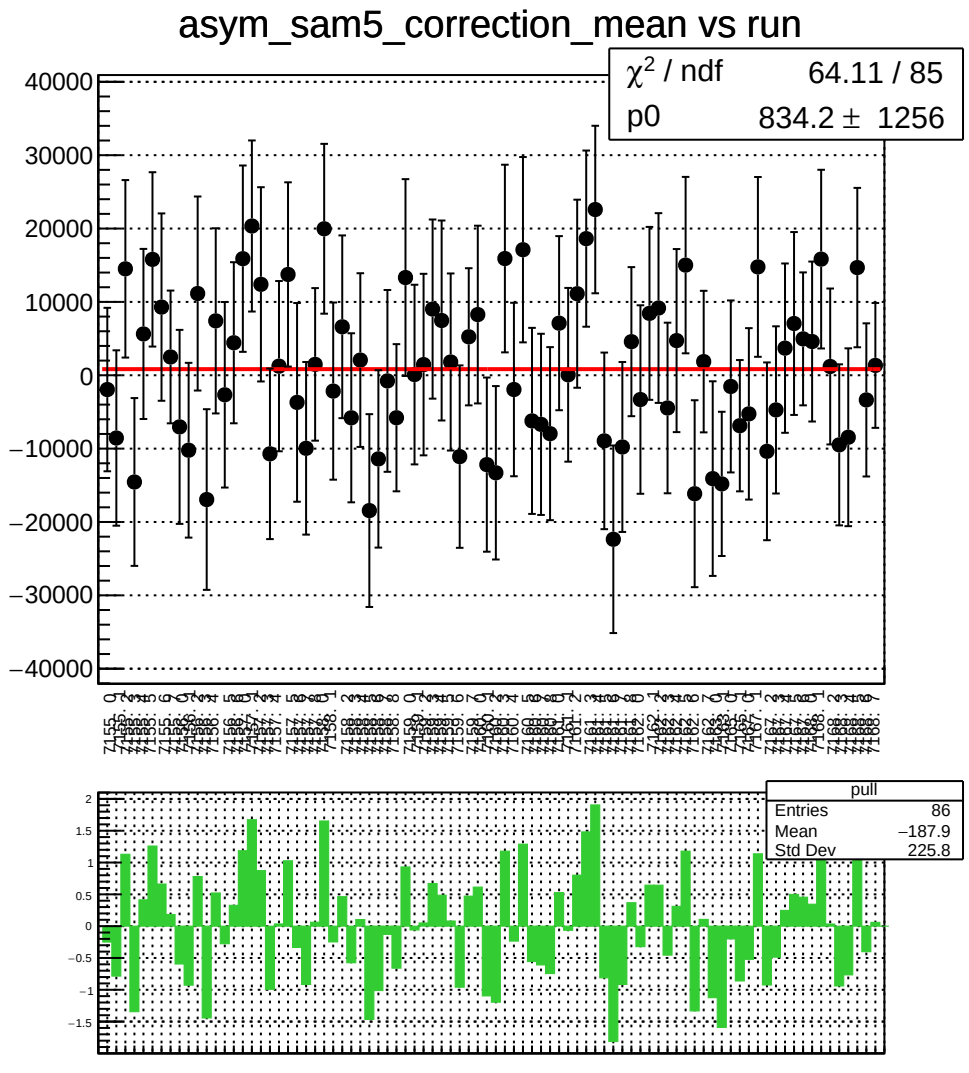

pull1D
Entries 86
Mean 0.0191
Std Dev 0.844

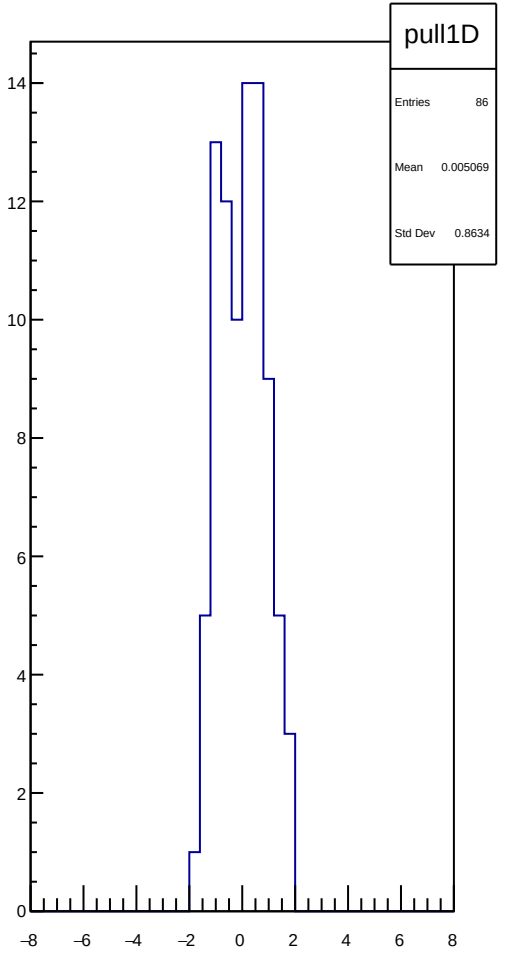

asym_sam4_correction_rms vs run
χ² / ndf 2886 / 85
p0 1936 ± 1.499
2200
2100
2000
1900
1800
1700

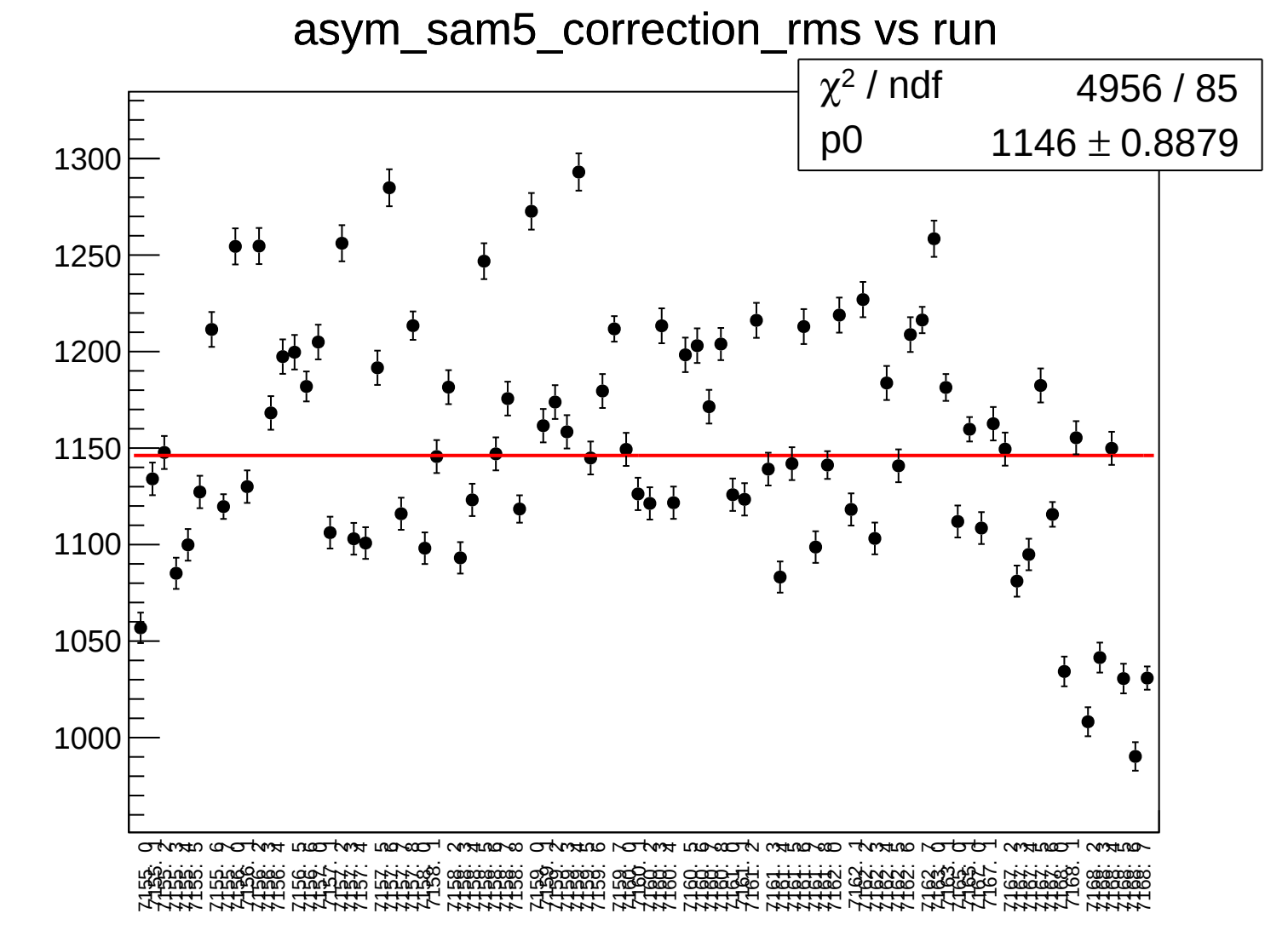

reg_asym_sam5_mean vs run
χ² / ndf 91.09 / 85
p0 −460.7 ± 174.6
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean −52.62
Std Dev 70.18
2
1
0
−1
−2

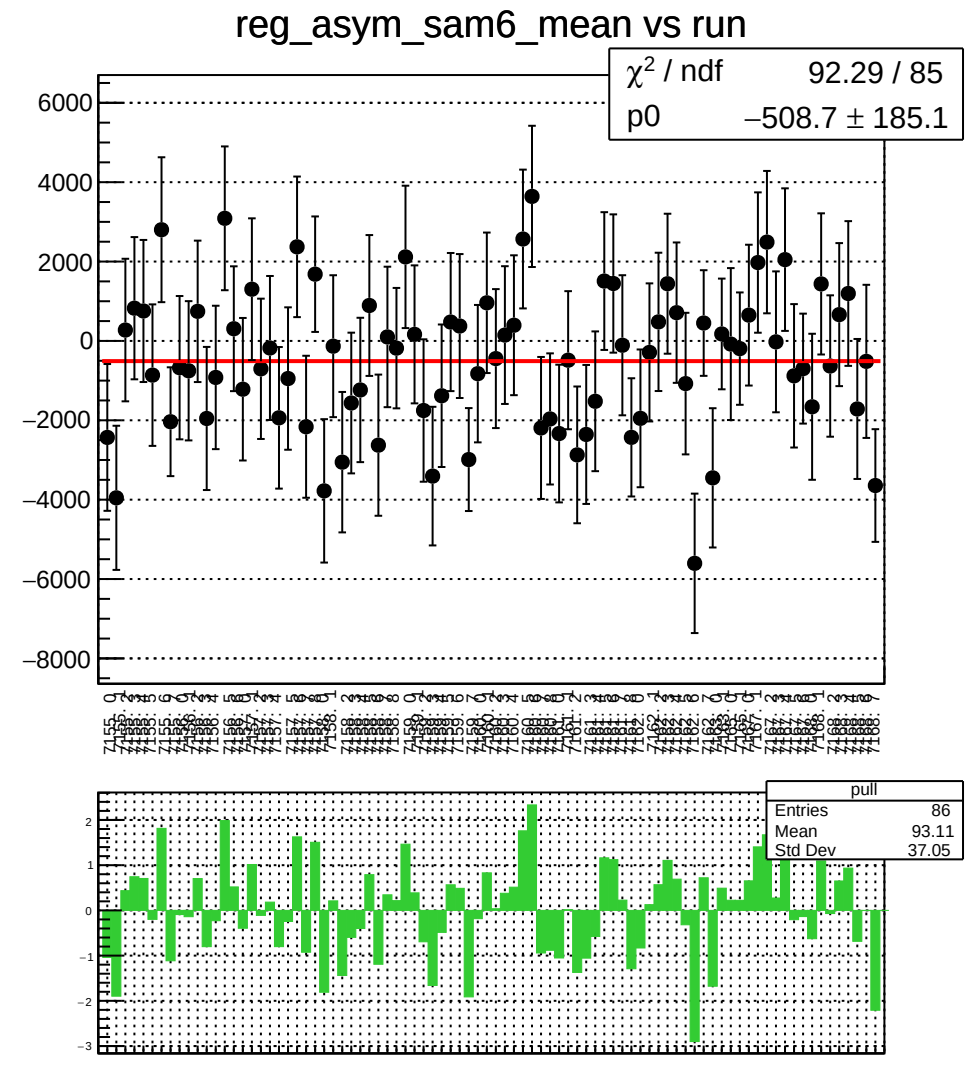

pull1D
Entries 86
Mean 0.009049
Std Dev 1.029
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

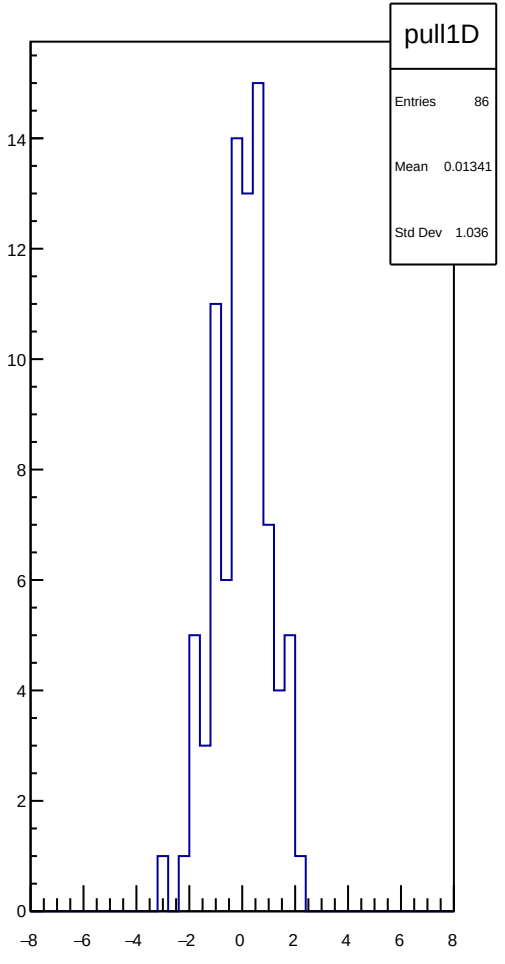

reg_asym_sam5_rms vs run
χ² / ndf 574.1 / 85
p0 159.6 ± 0.1235
170
168
166
164
162
160
158
156
154
152

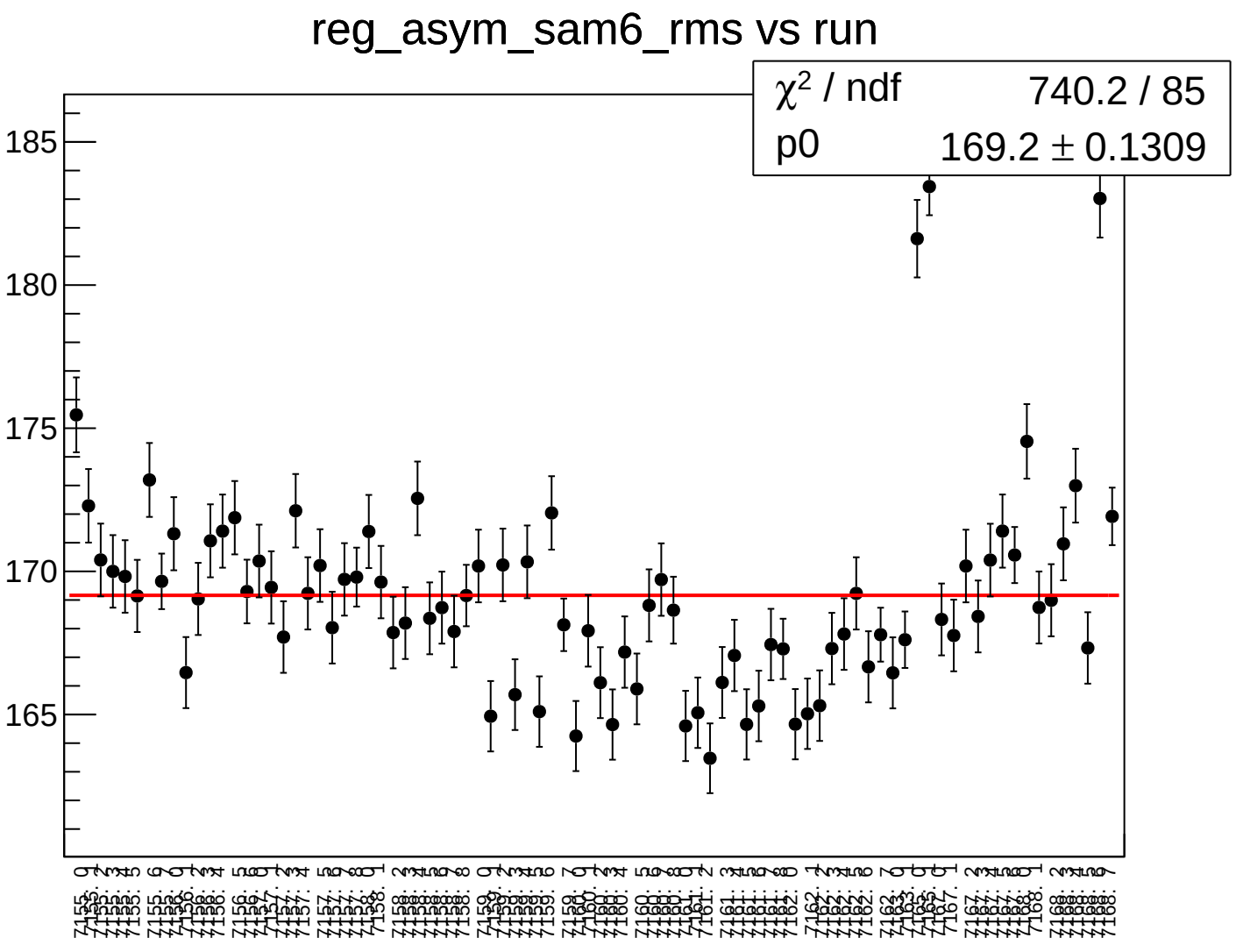

asym_sam5_correction_mean vs run
χ² / ndf 64.11 / 85
p0 834.2 ± 1256
pull
Entries 86
Mean −187.9
Std Dev 225.8

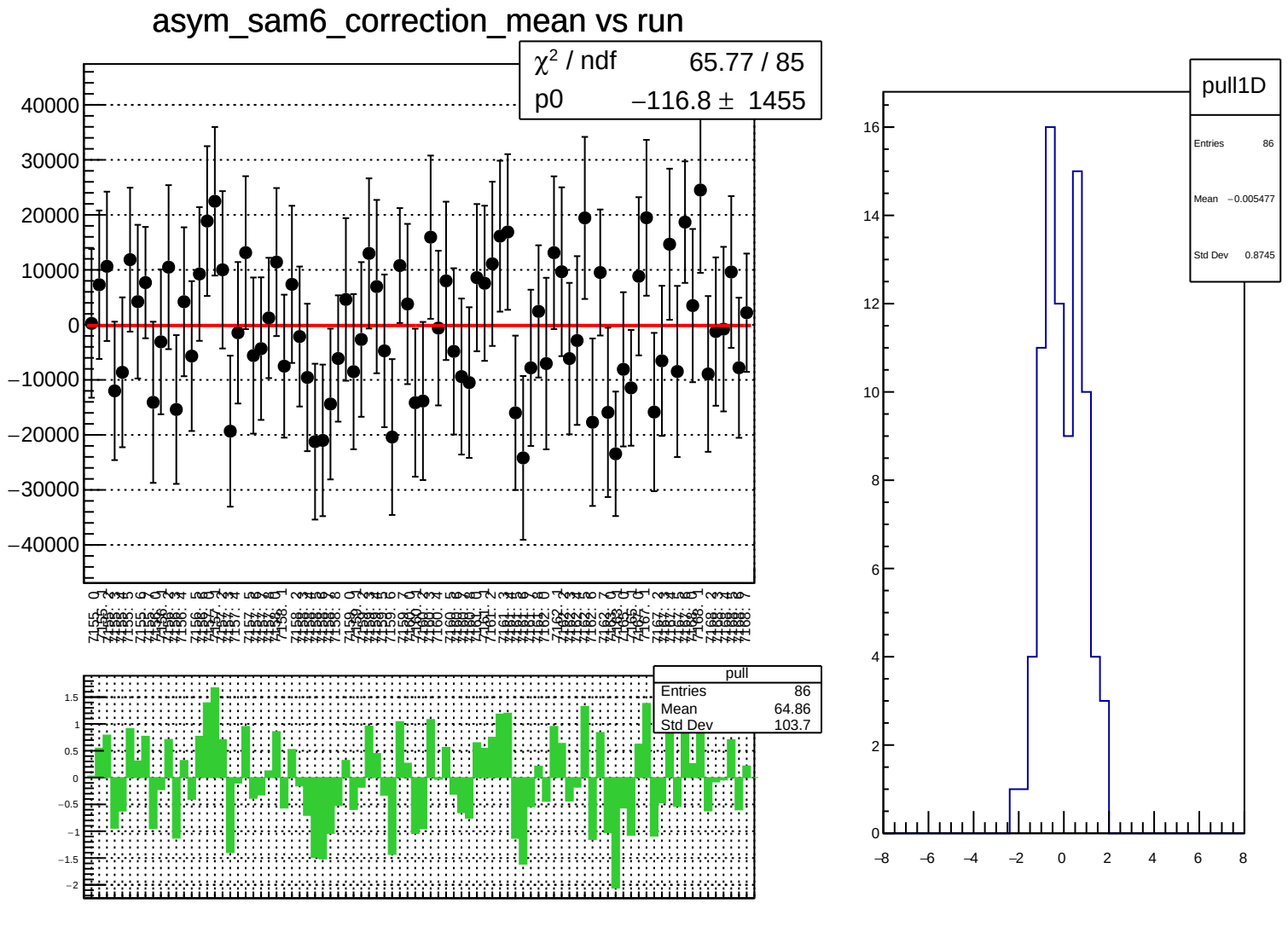

pull1D
Entries 86
Mean 0.005069
Std Dev 0.8634

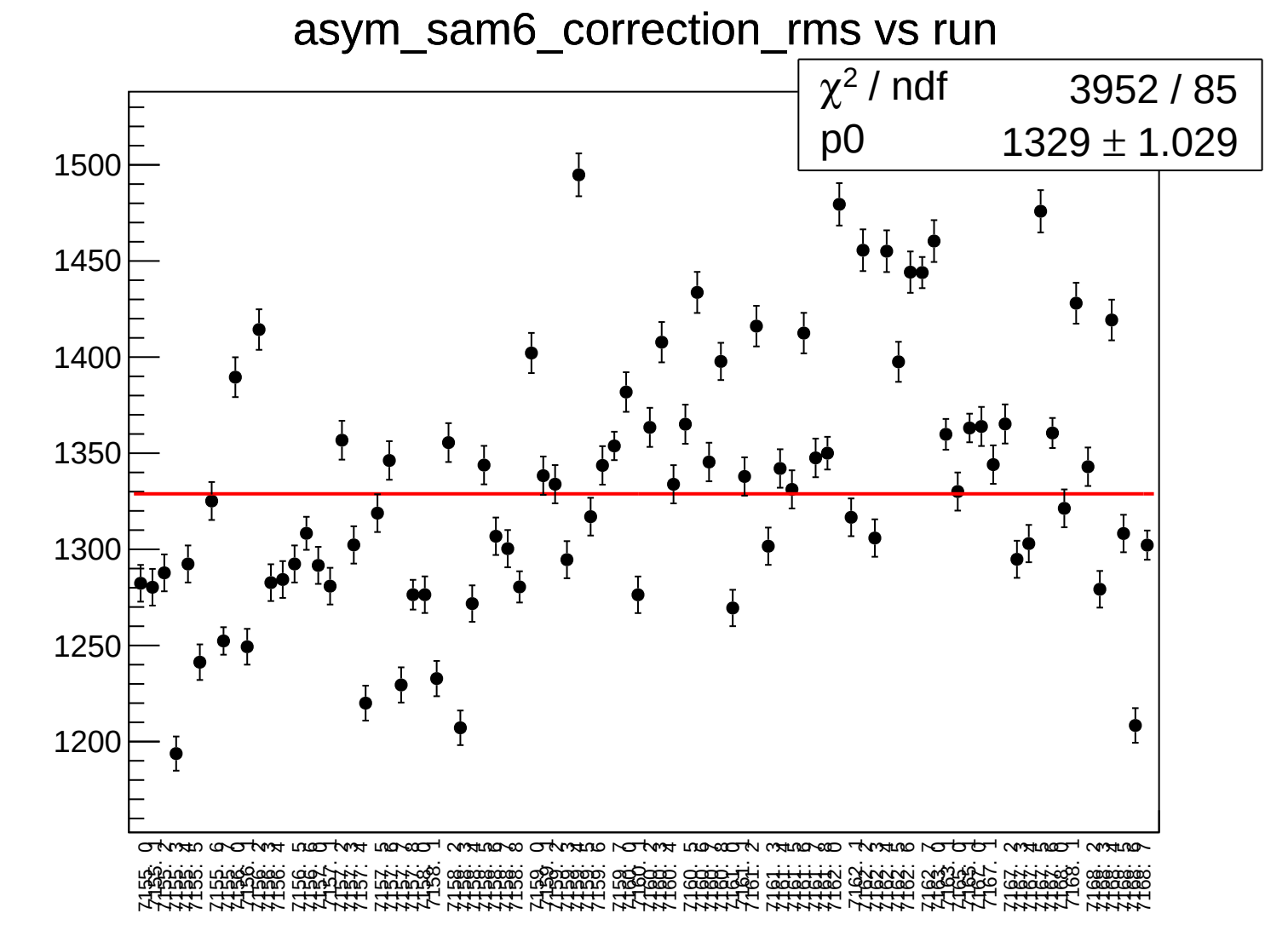

asym_sam5_correction_rms vs run
χ² / ndf 4956 / 85
p0 1146 ± 0.8879
1300
1250
1200
1150
1100
1050
1000

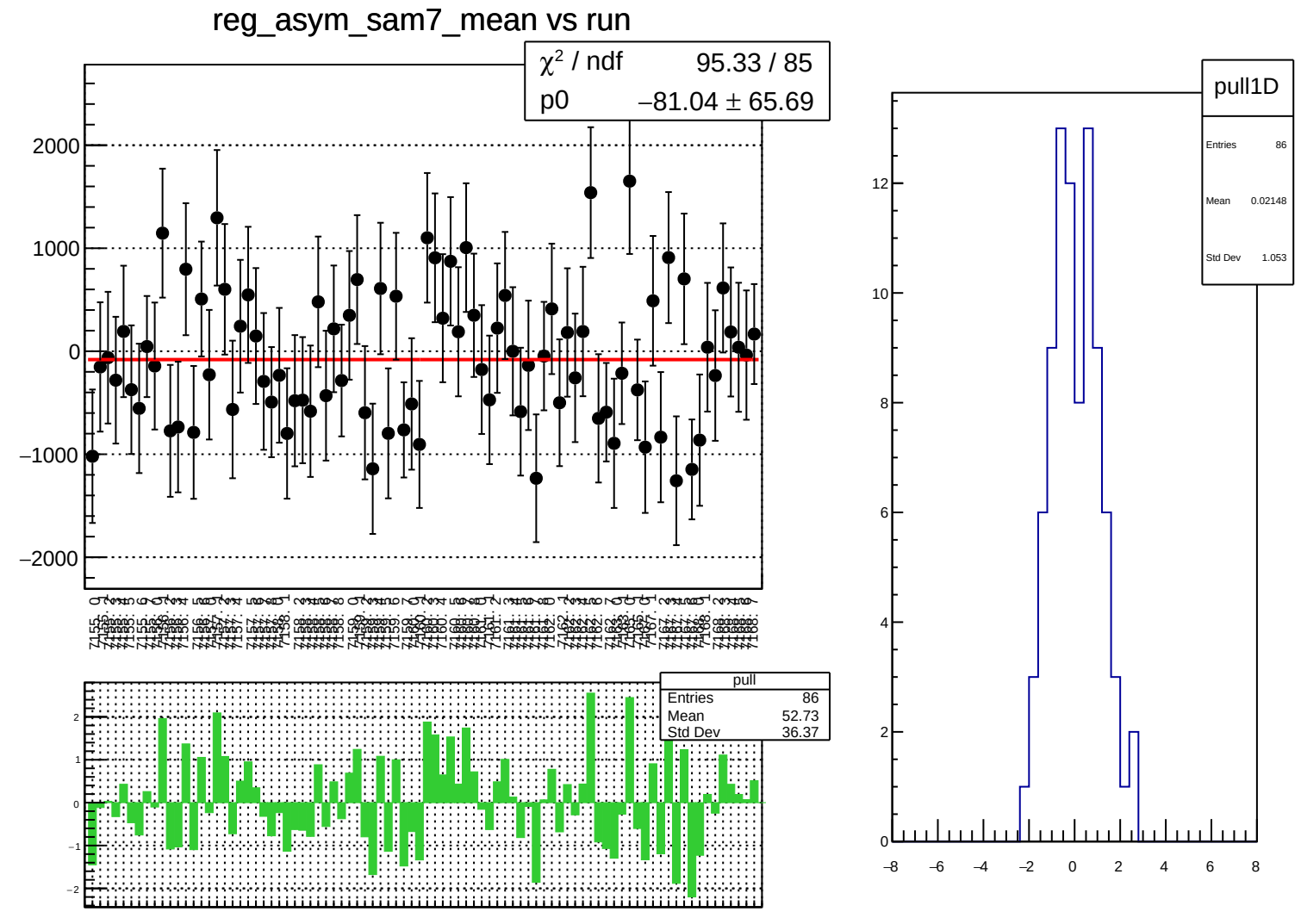

reg_asym_sam6_mean vs run
χ² / ndf 92.29 / 85
p0 −508.7 ± 185.1
pull
Entries 86
Mean 93.11
Std Dev 37.05

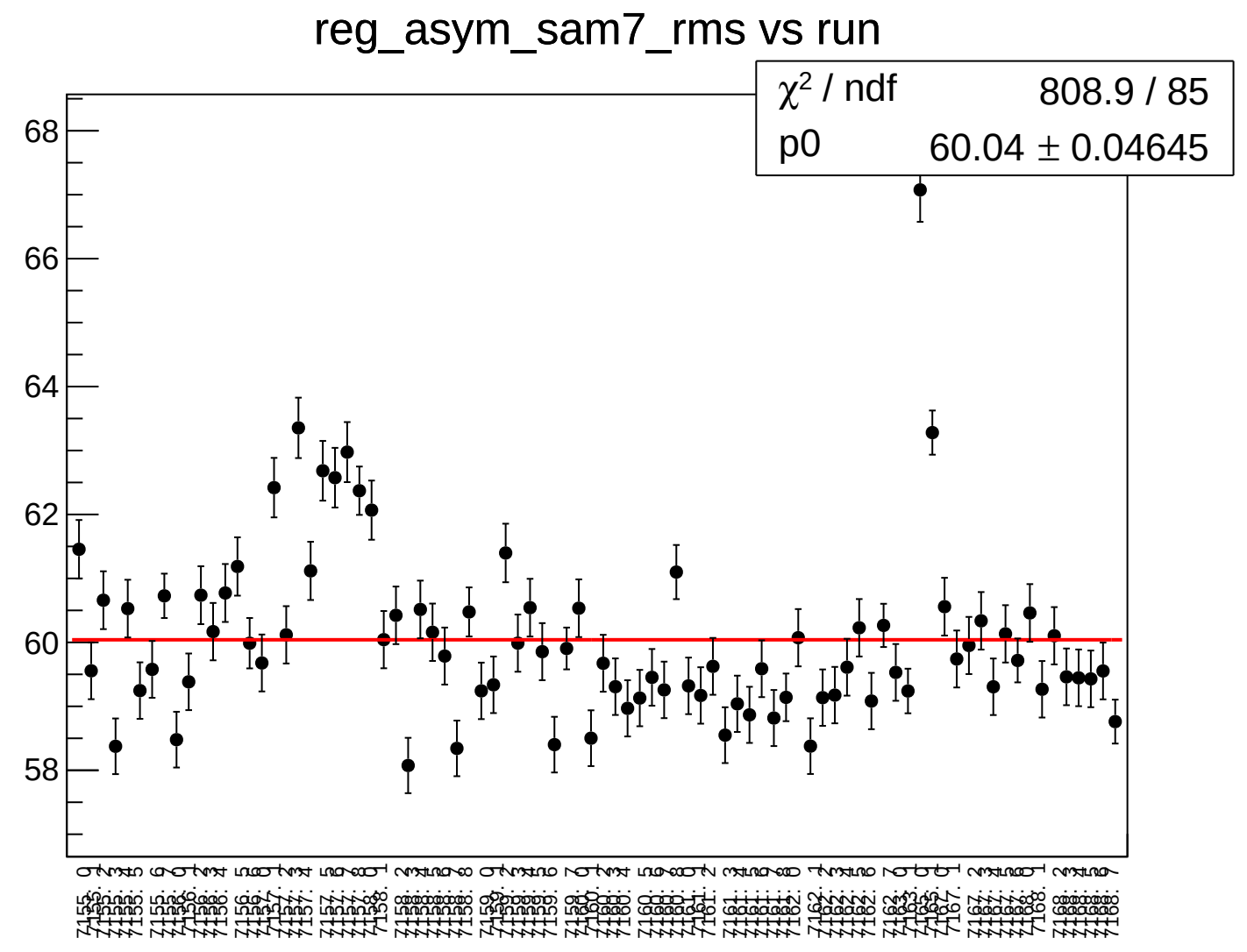

pull1D
Entries 86
Mean 0.01341
Std Dev 1.036

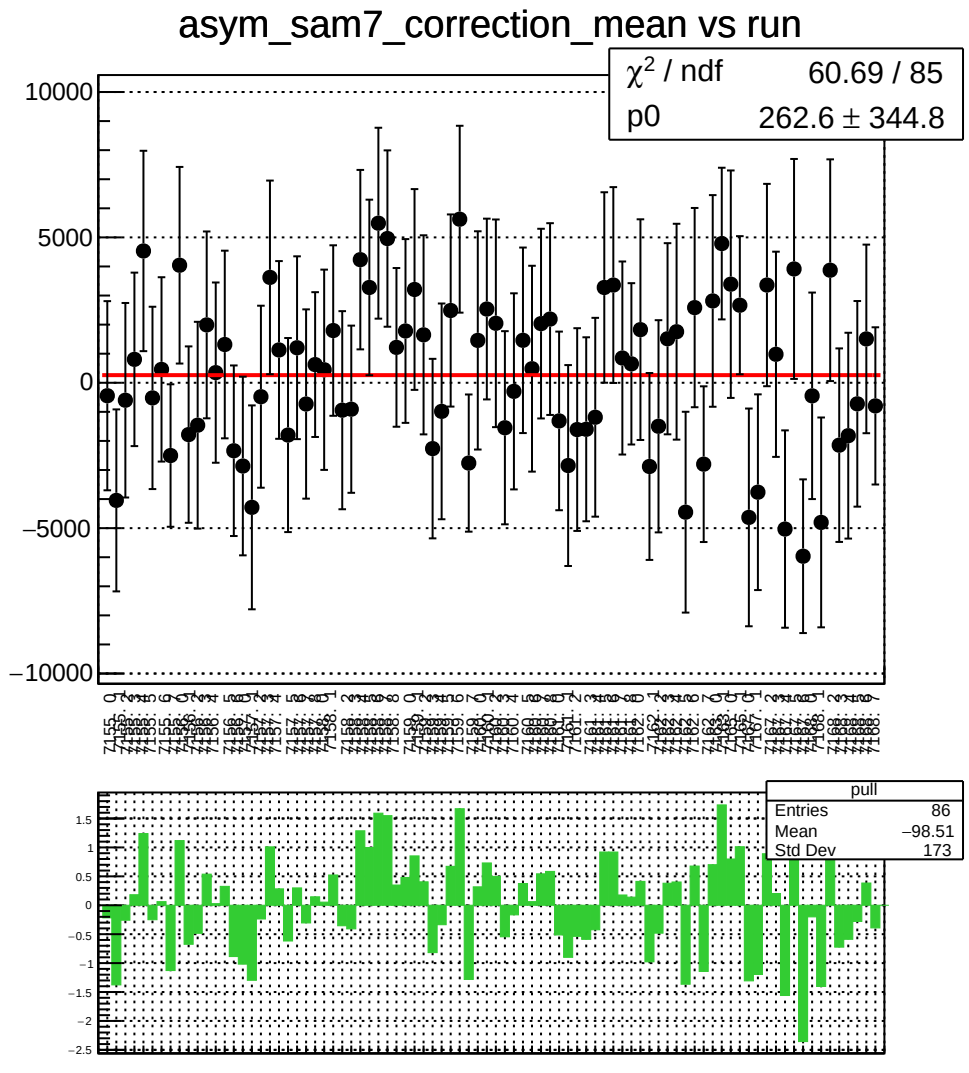

reg_asym_sam6_rms vs run
χ² / ndf 740.2 / 85
p0 169.2 ± 0.1309
185
180
175
170
165

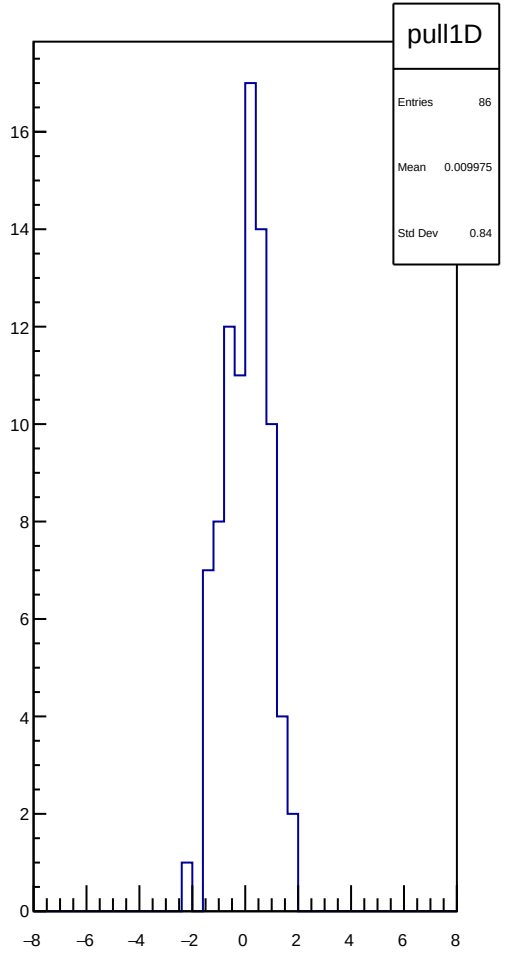

asym_sam6_correction_mean vs run
χ² / ndf 65.77 / 85
p0 −116.8 ± 1455
pull
Entries 86
Mean 64.86
Std Dev 103.7
pull1D
Entries 86
Mean −0.005477
Std Dev 0.8745

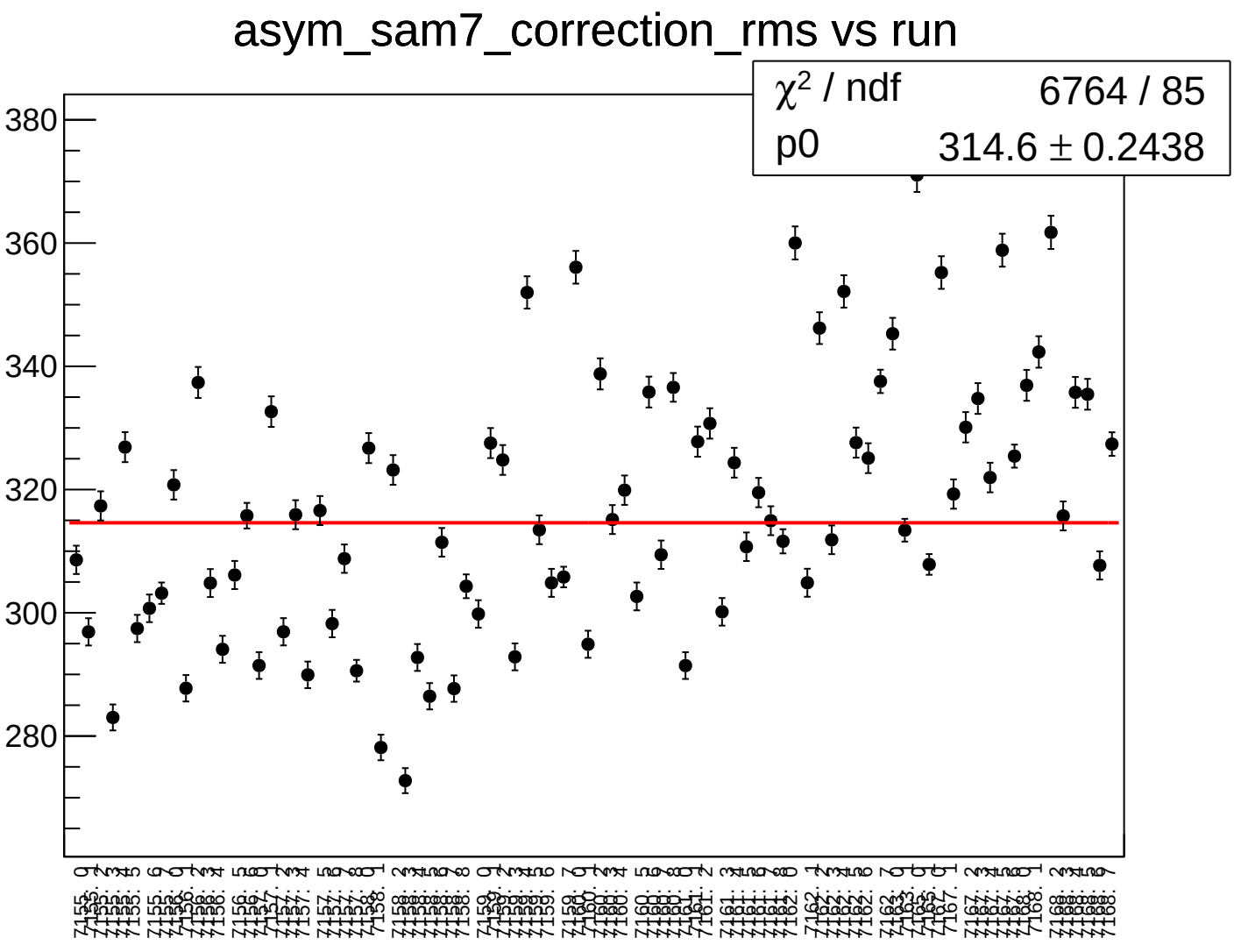

asym_sam6_correction_rms vs run
χ² / ndf 3952 / 85
p0 1329 ± 1.029
1500
1450
1400
1350
1300
1250
1200

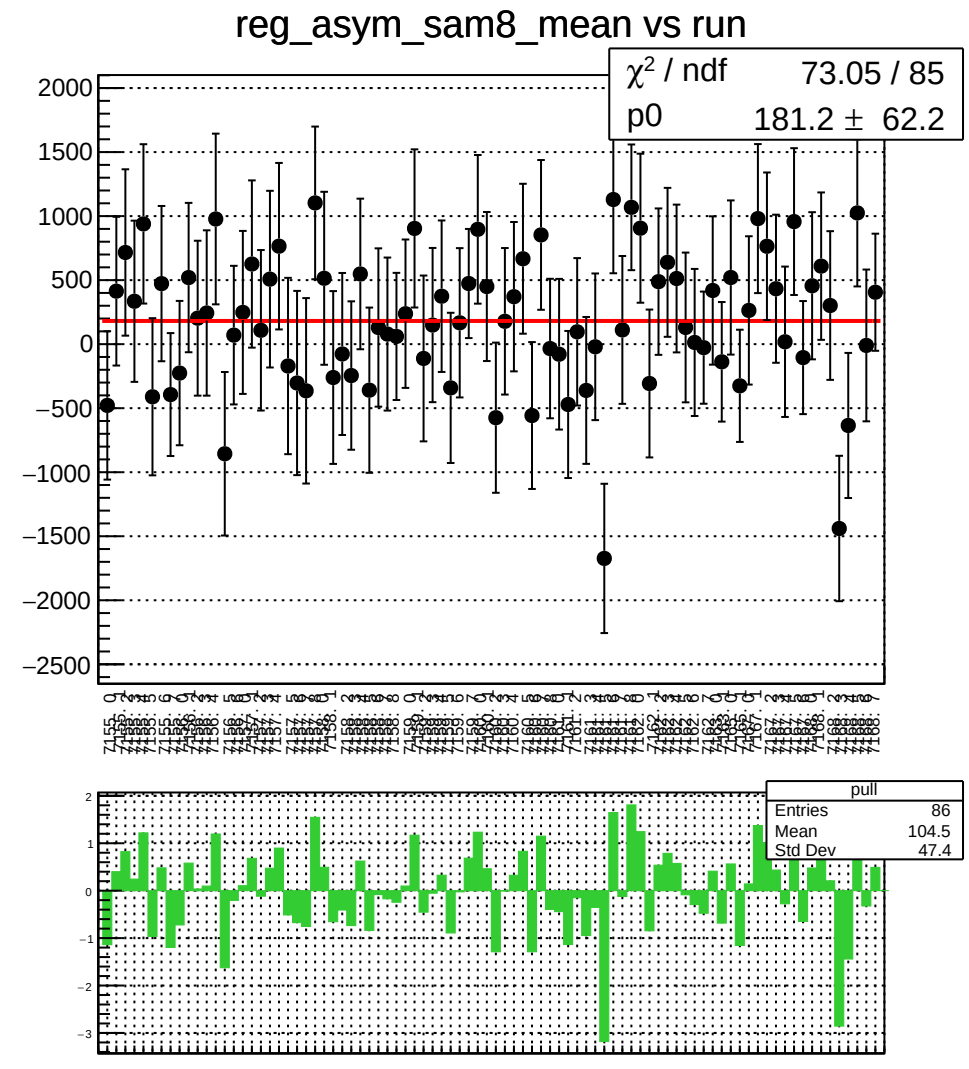

reg_asym_sam7_mean vs run
χ² / ndf 95.33 / 85
p0 −81.04 ± 65.69
2000
1000
0
−1000
−2000
pull
Entries 86
Mean 52.73
Std Dev 36.37
2
1
0
−1
−2
pull1D
Entries 86
Mean 0.02148
Std Dev 1.053
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

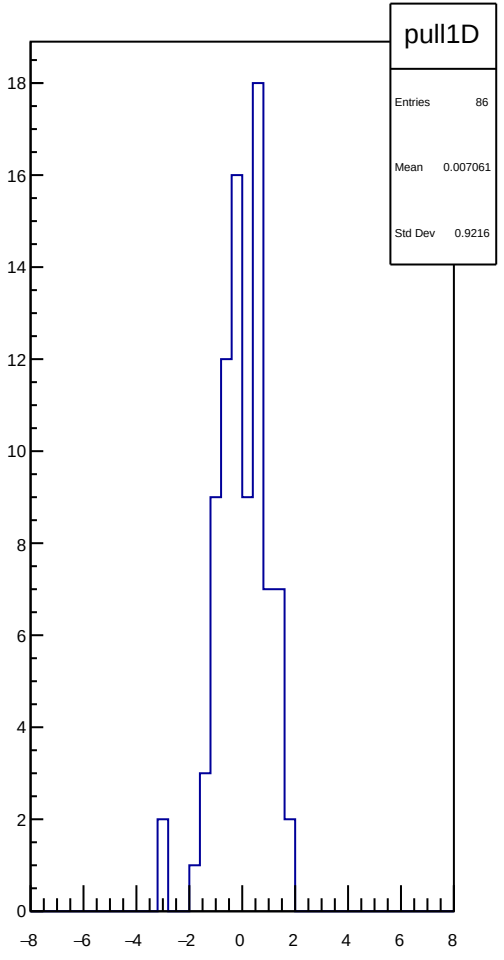

reg_asym_sam7_rms vs run
χ² / ndf 808.9 / 85
p0 60.04 ± 0.04645
68
66
64
62
60
58

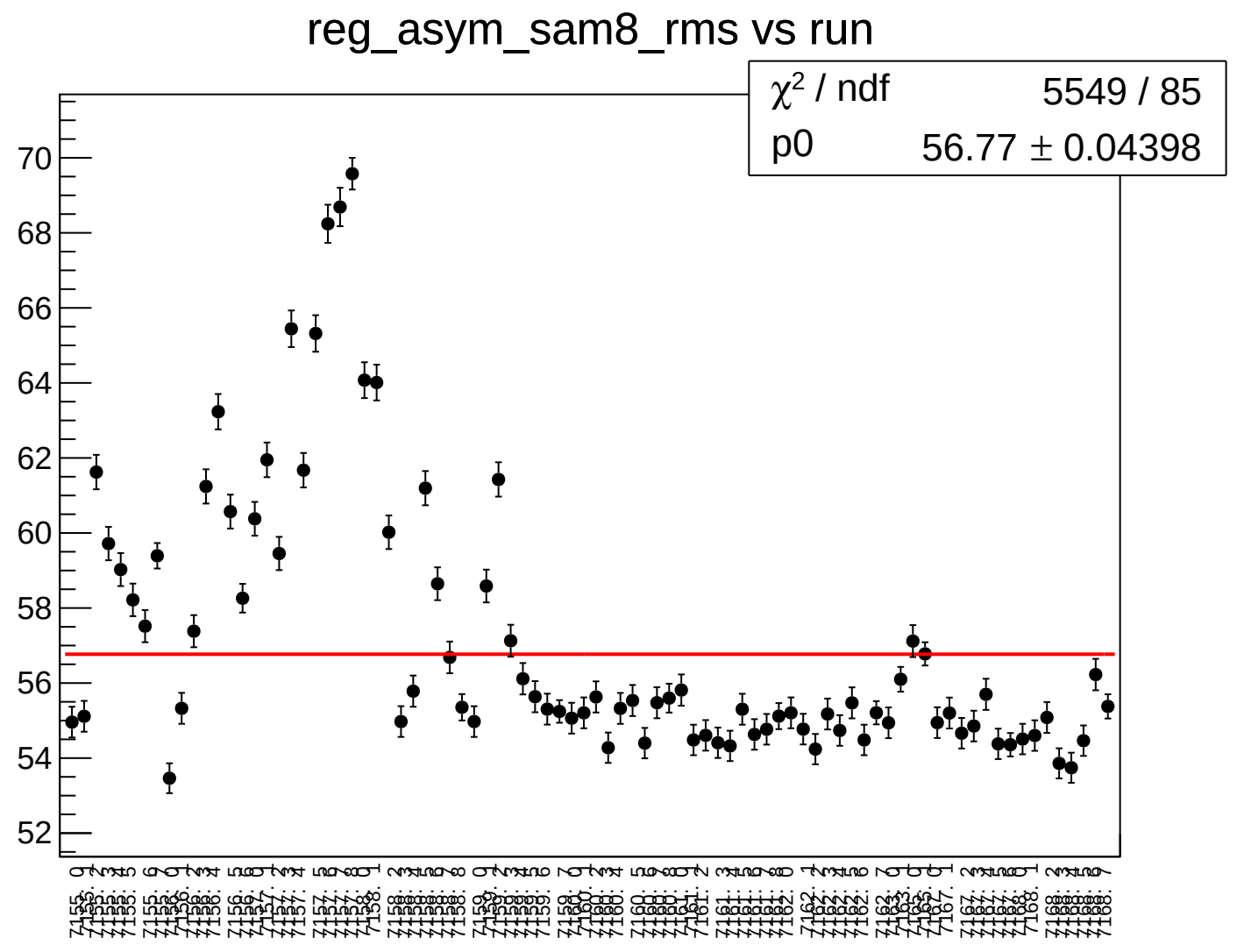

asym_sam7_correction_mean vs run
χ^2 / ndf 60.69 / 85
p0 262.6 ± 344.8
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −98.51
Std Dev 173
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

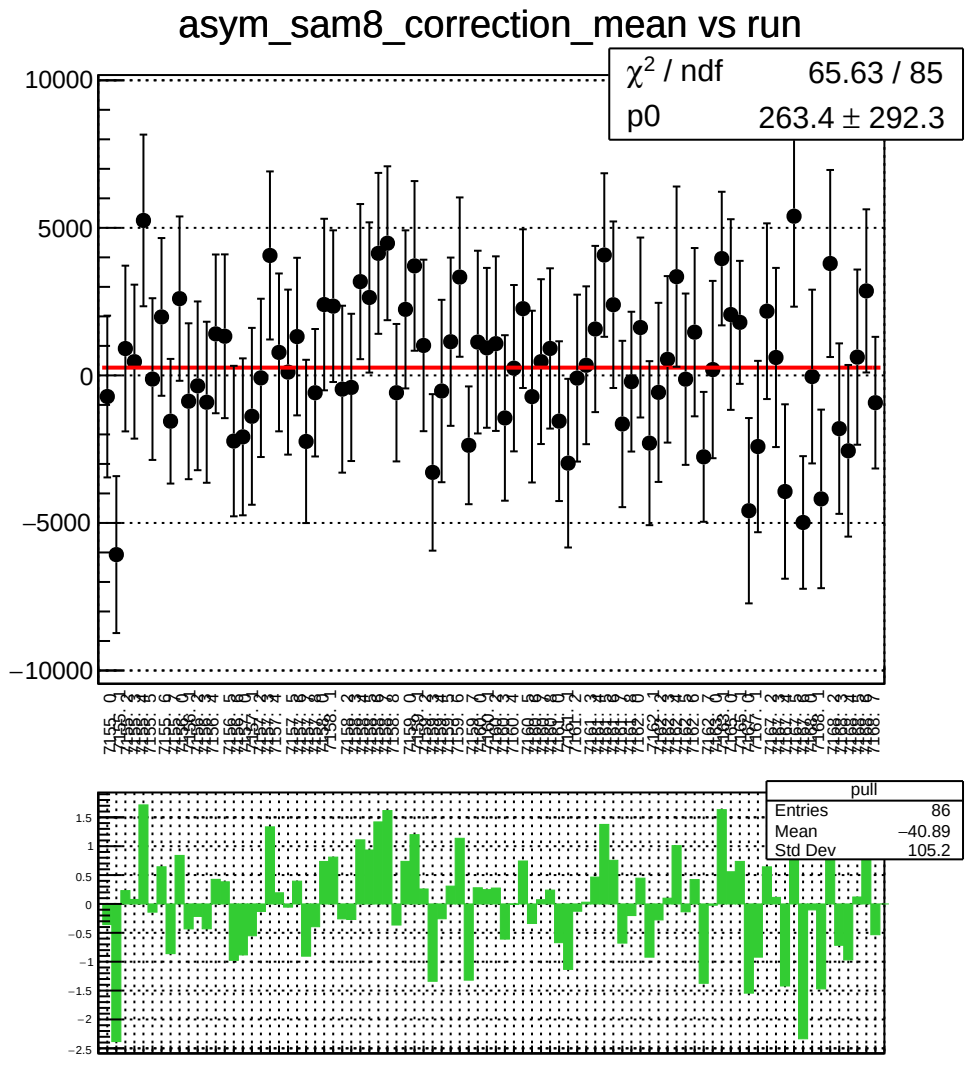

pull1D
Entries 86
Mean 0.009975
Std Dev 0.84
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

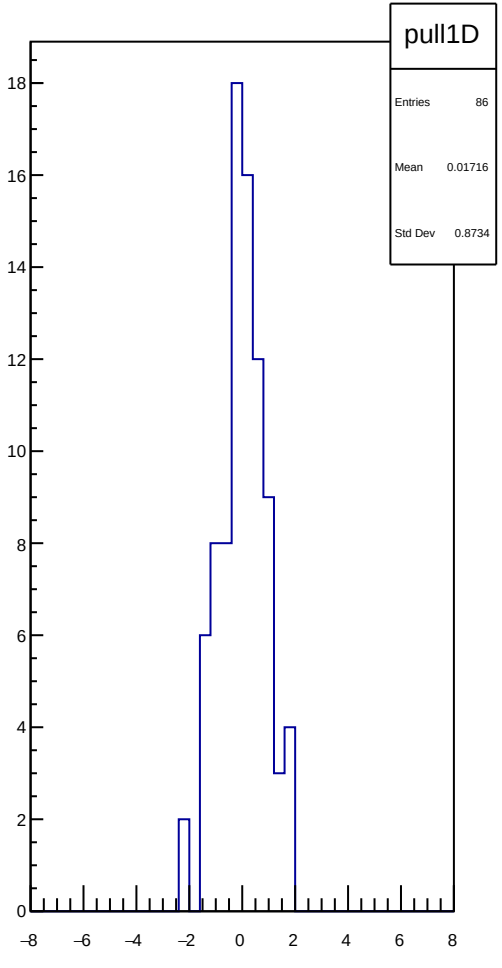

asym_sam7_correction_rms vs run
χ² / ndf 6764 / 85
p0 314.6 ± 0.2438
380
360
340
320
300
280

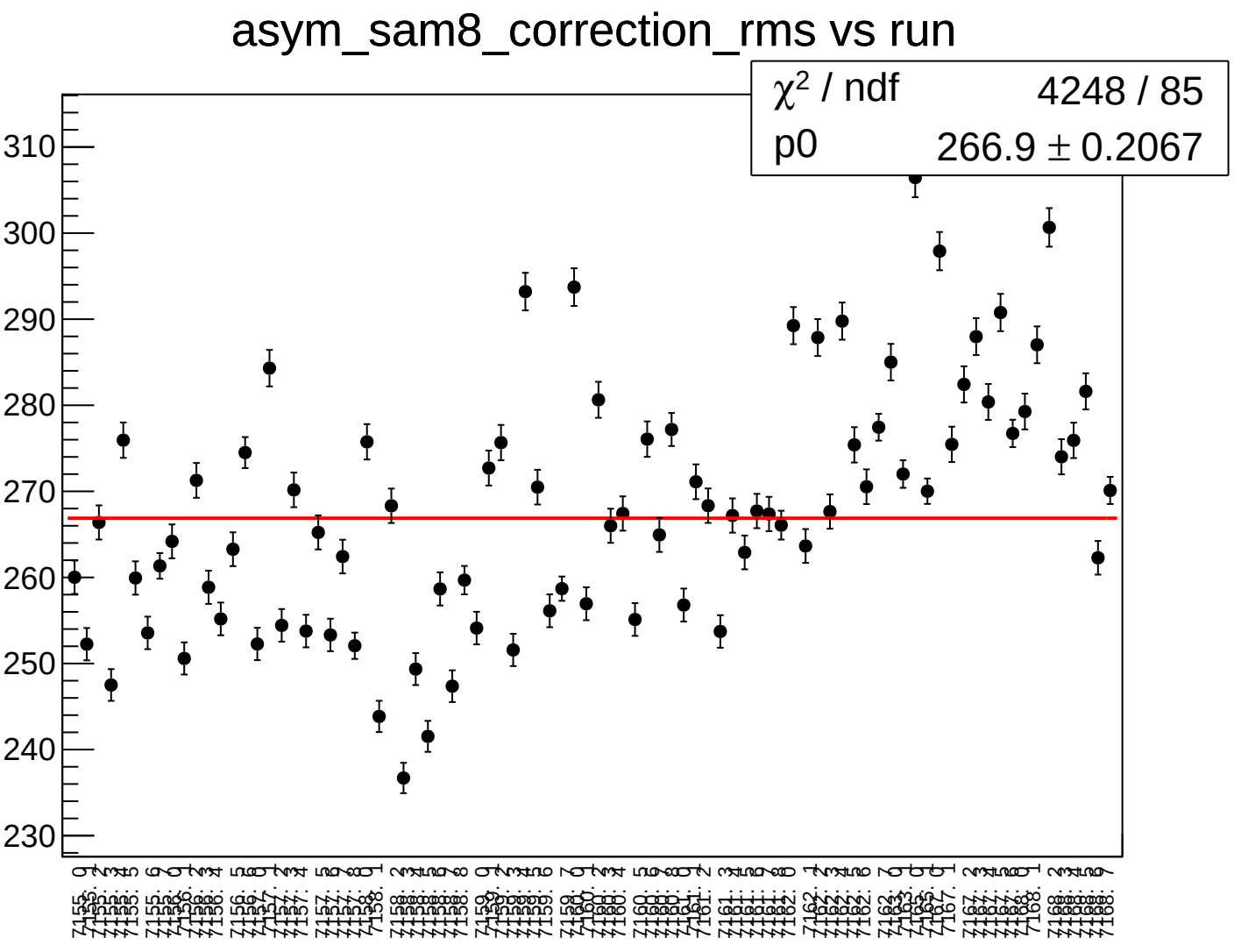

reg_asym_sam8_mean vs run
χ² / ndf 73.05 / 85
p0 181.2 ± 62.2
pull
Entries 86
Mean 104.5
Std Dev 47.4

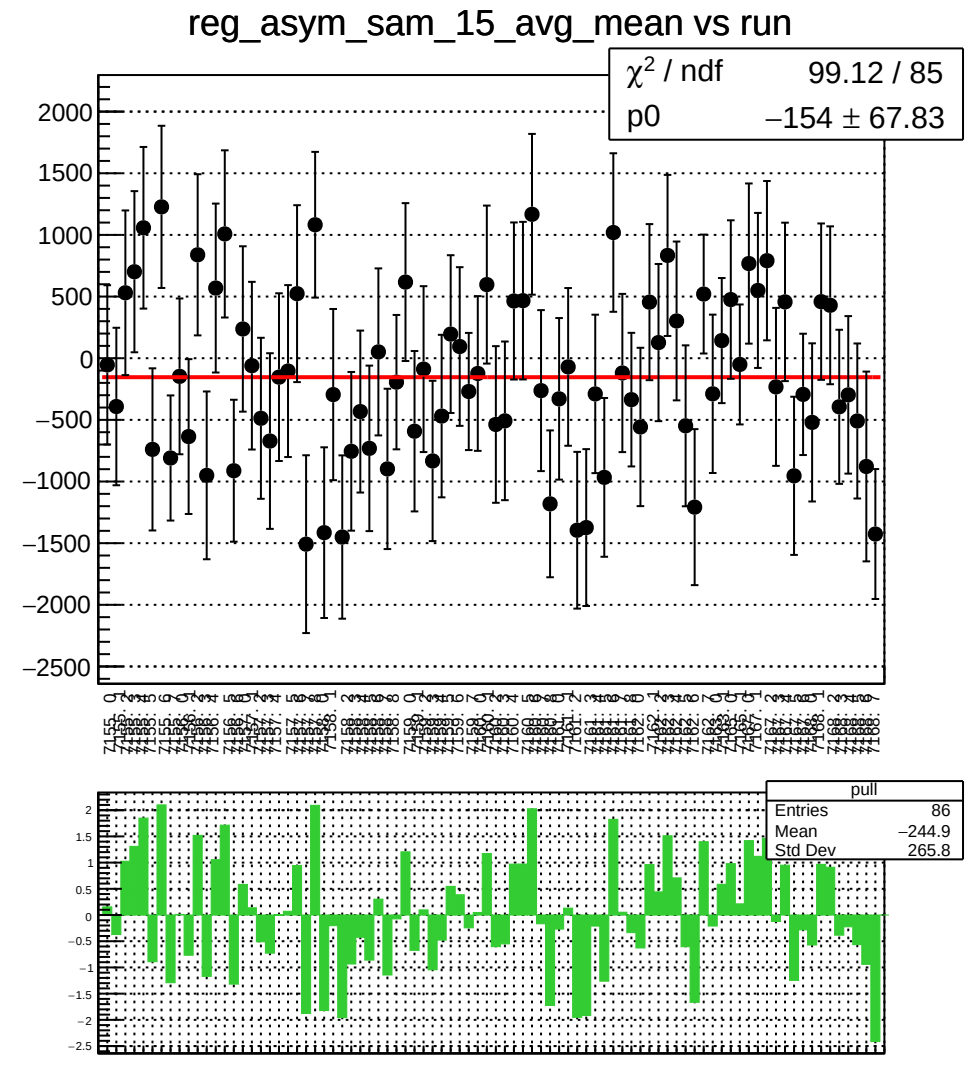

pull1D
Entries 86
Mean 0.007061
Std Dev 0.9216

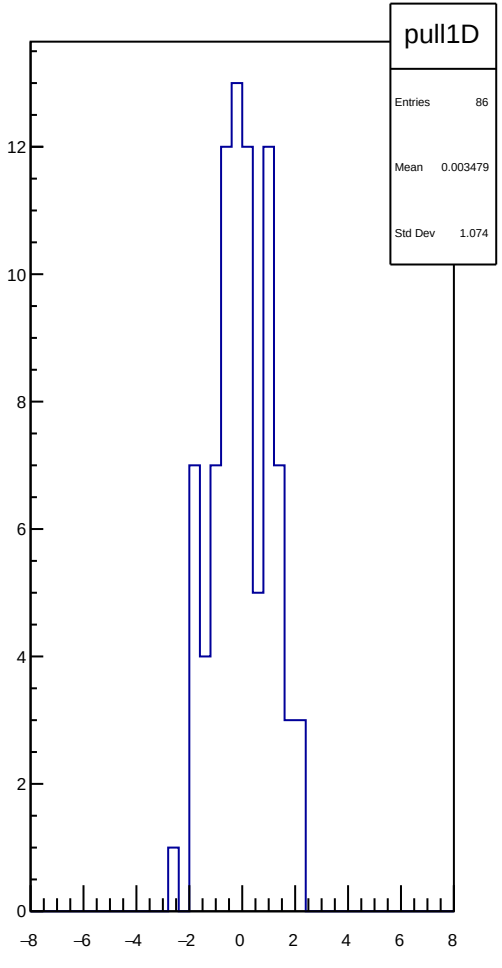

reg_asym_sam8_rms vs run
χ^2 / ndf 5549 / 85
p0 56.77 ± 0.04398
70
68
66
64
62
60
58
56
54
52

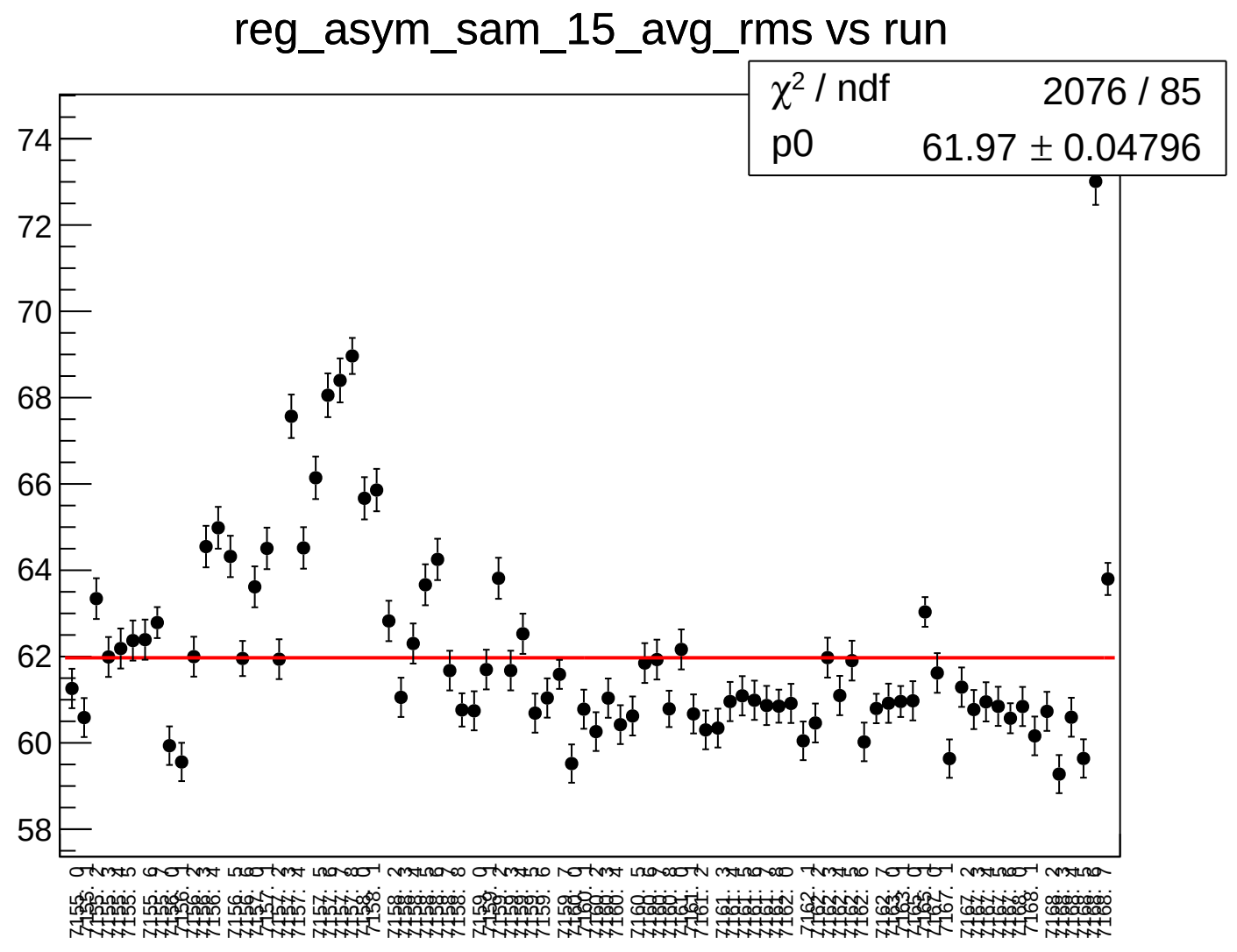

asym_sam8_correction_mean vs run
χ^2 / ndf 65.63 / 85
p0 263.4 ± 292.3
pull
Entries 86
Mean −40.89
Std Dev 105.2

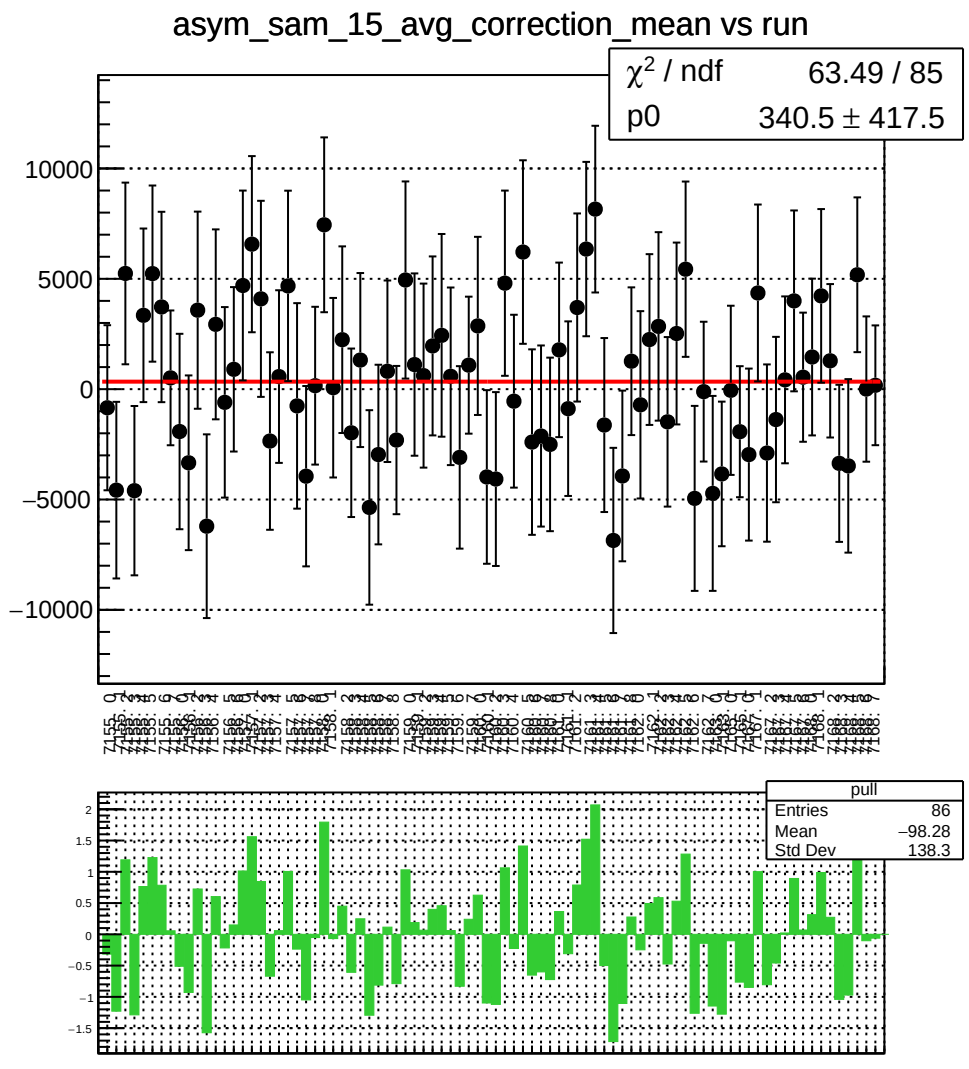

pull1D
Entries 86
Mean 0.01716
Std Dev 0.8734

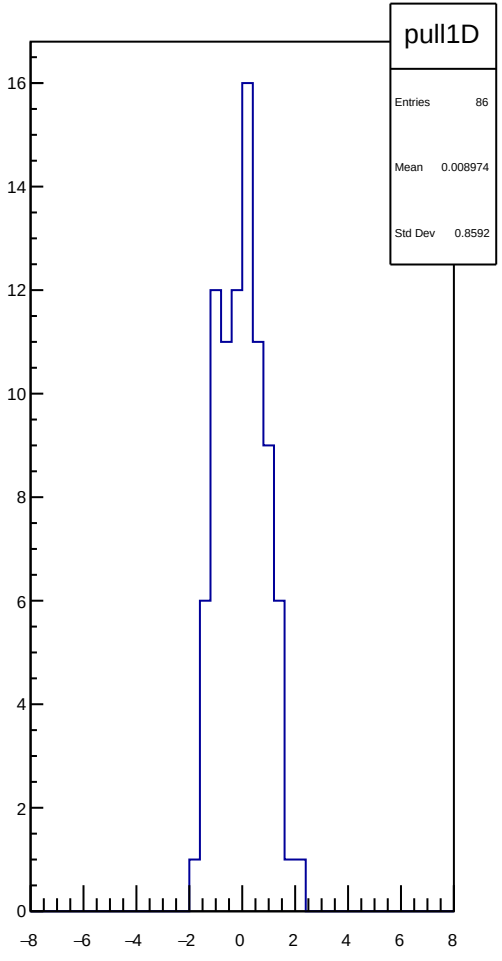

asym_sam8_correction_rms vs run
χ² / ndf 4248 / 85
p0 266.9 ± 0.2067
310
300
290
280
270
260
250
240
230

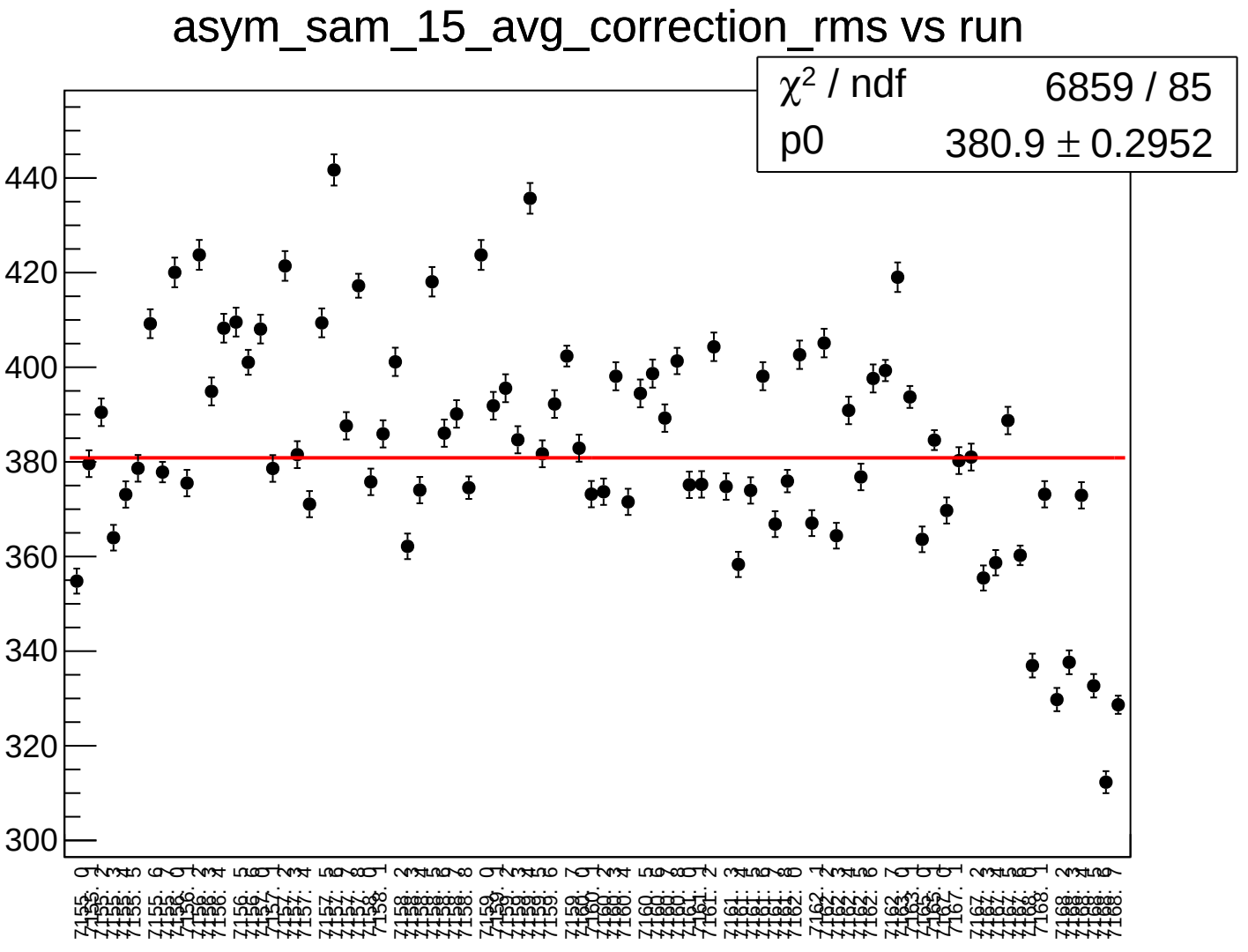

reg_asym_sam_15_avg_mean vs run
χ² / ndf 99.12 / 85
p0 −154 ± 67.83
pull
Entries 86
Mean −244.9
Std Dev 265.8

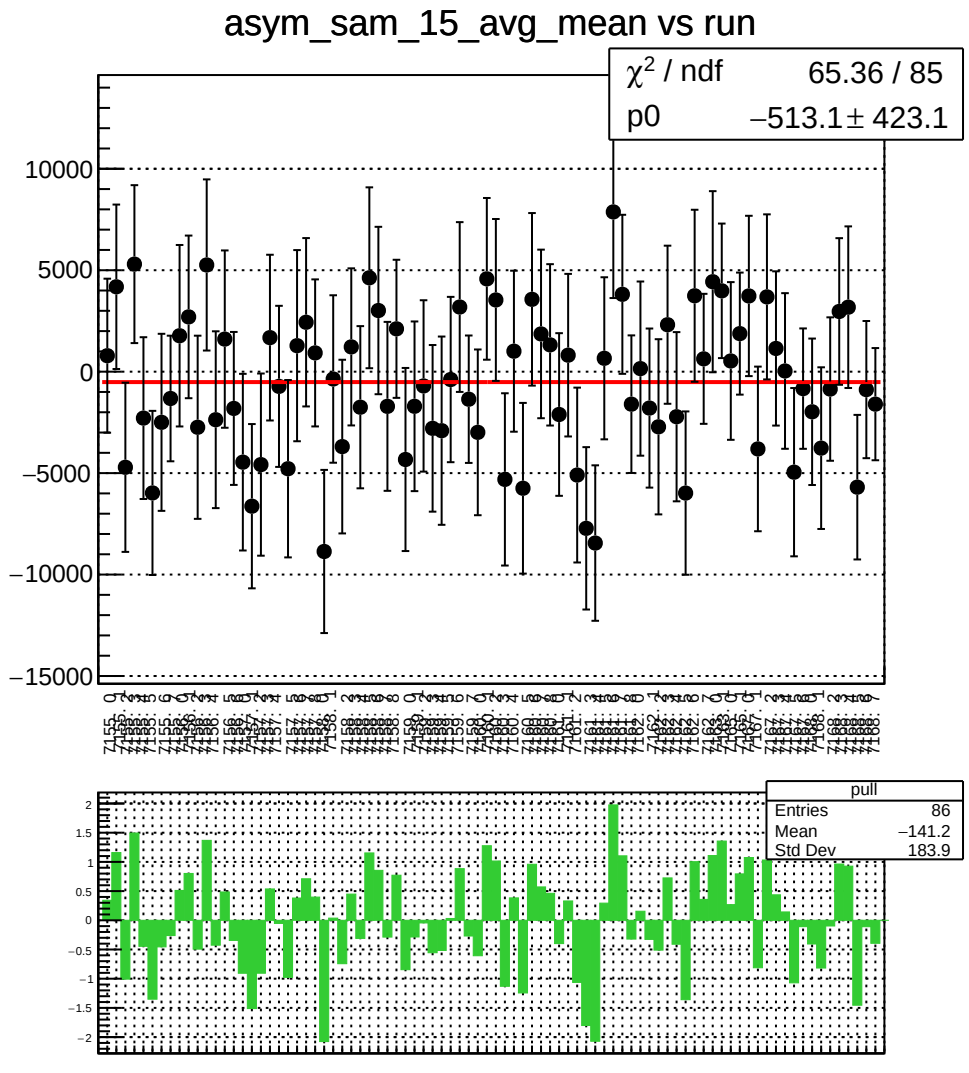

pull1D
Entries 86
Mean 0.003479
Std Dev 1.074

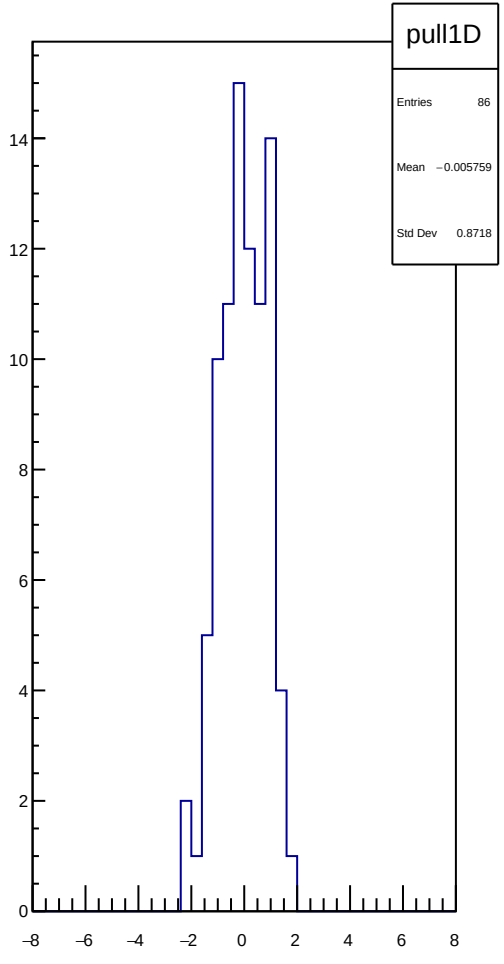

reg_asym_sam_15_avg_rms vs run
χ^2 / ndf 2076 / 85
p0 61.97 ± 0.04796
74
72
70
68
66
64
62
60
58

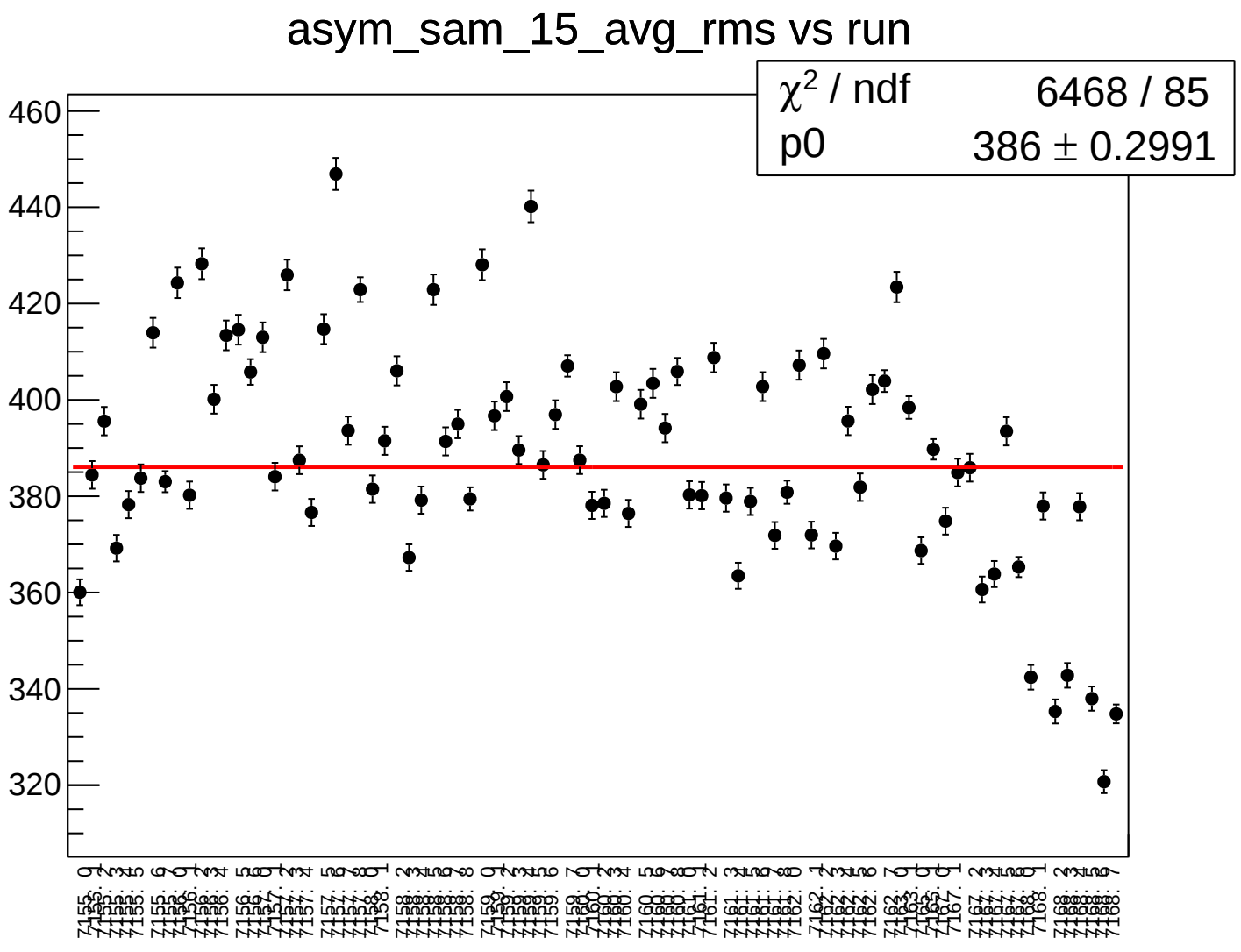

asym_sam_15_avg_correction_mean vs run
χ² / ndf 63.49 / 85
p0 340.5 ± 417.5
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −98.28
Std Dev 138.3
2
1.5
1
0.5
0
−0.5
−1
−1.5

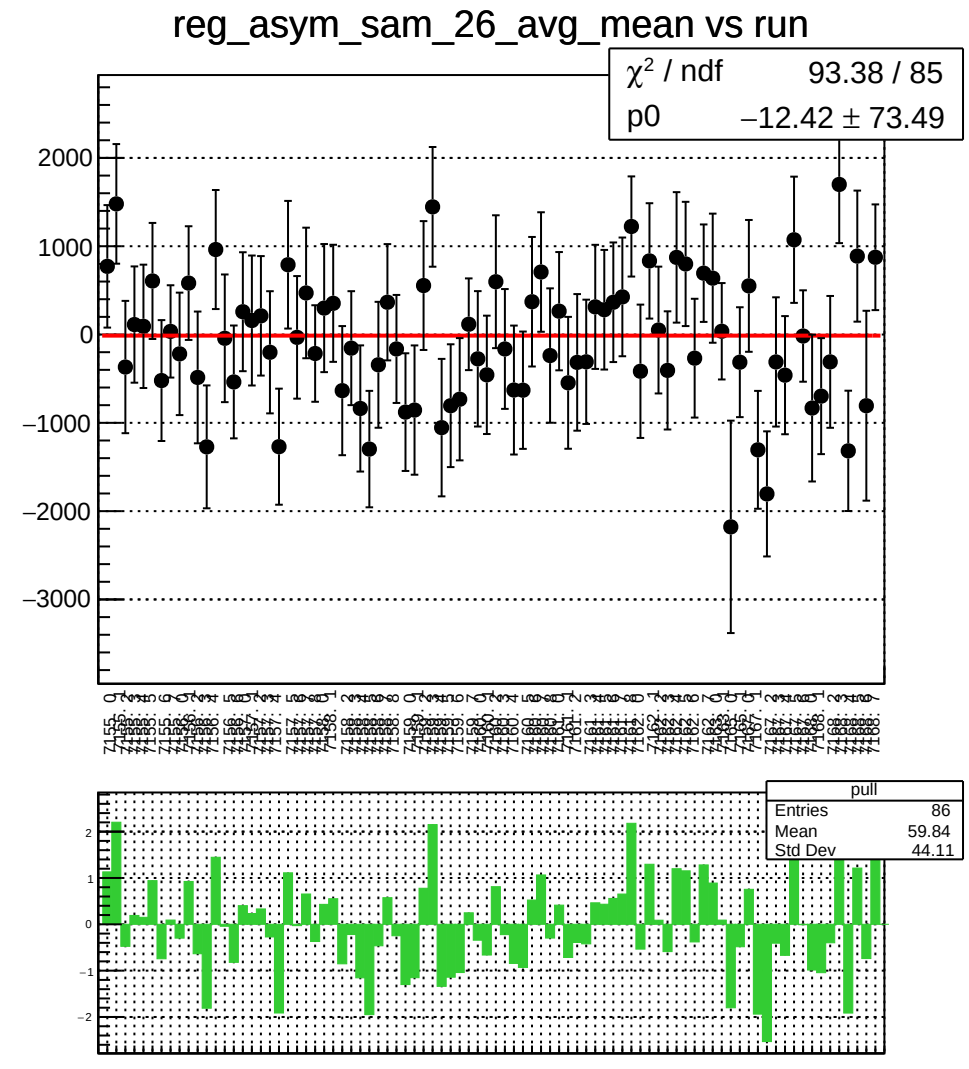

pull1D
Entries 86
Mean 0.008974
Std Dev 0.8592
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

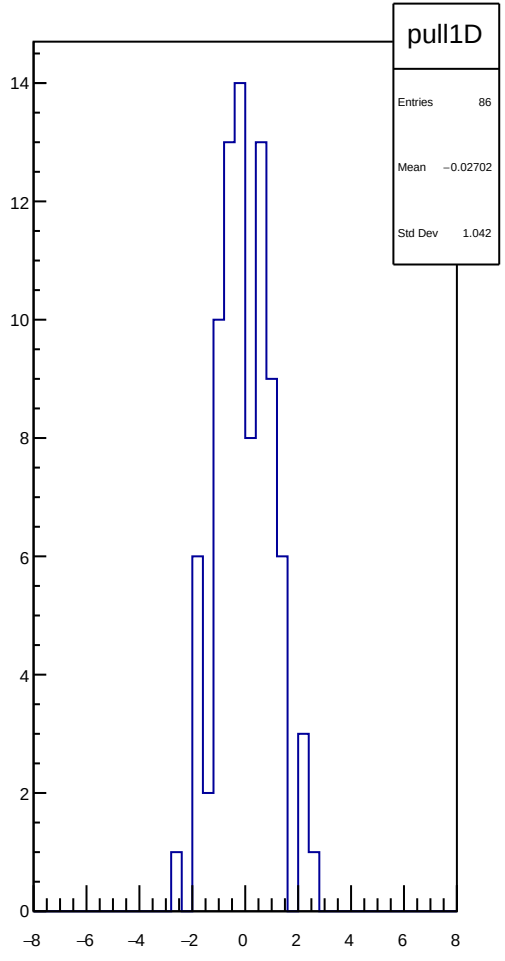

asym_sam_15_avg_correction_rms vs run
χ² / ndf 6859 / 85
p0 380.9 ± 0.2952
440
420
400
380
360
340
320
300

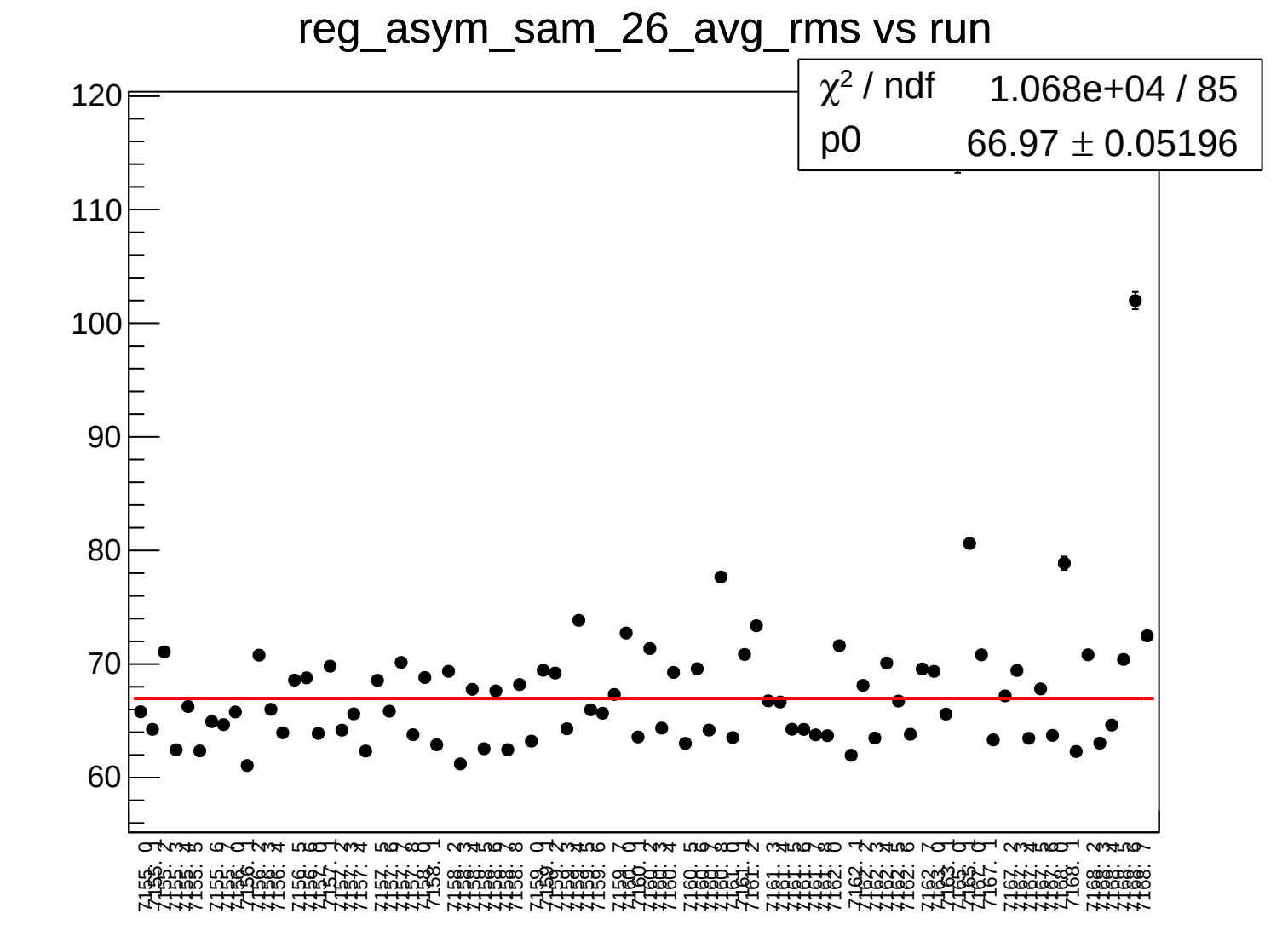

asym_sam_15_avg_mean vs run
χ² / ndf 65.36 / 85
p0 −513.1 ± 423.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −141.2
Std Dev 183.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

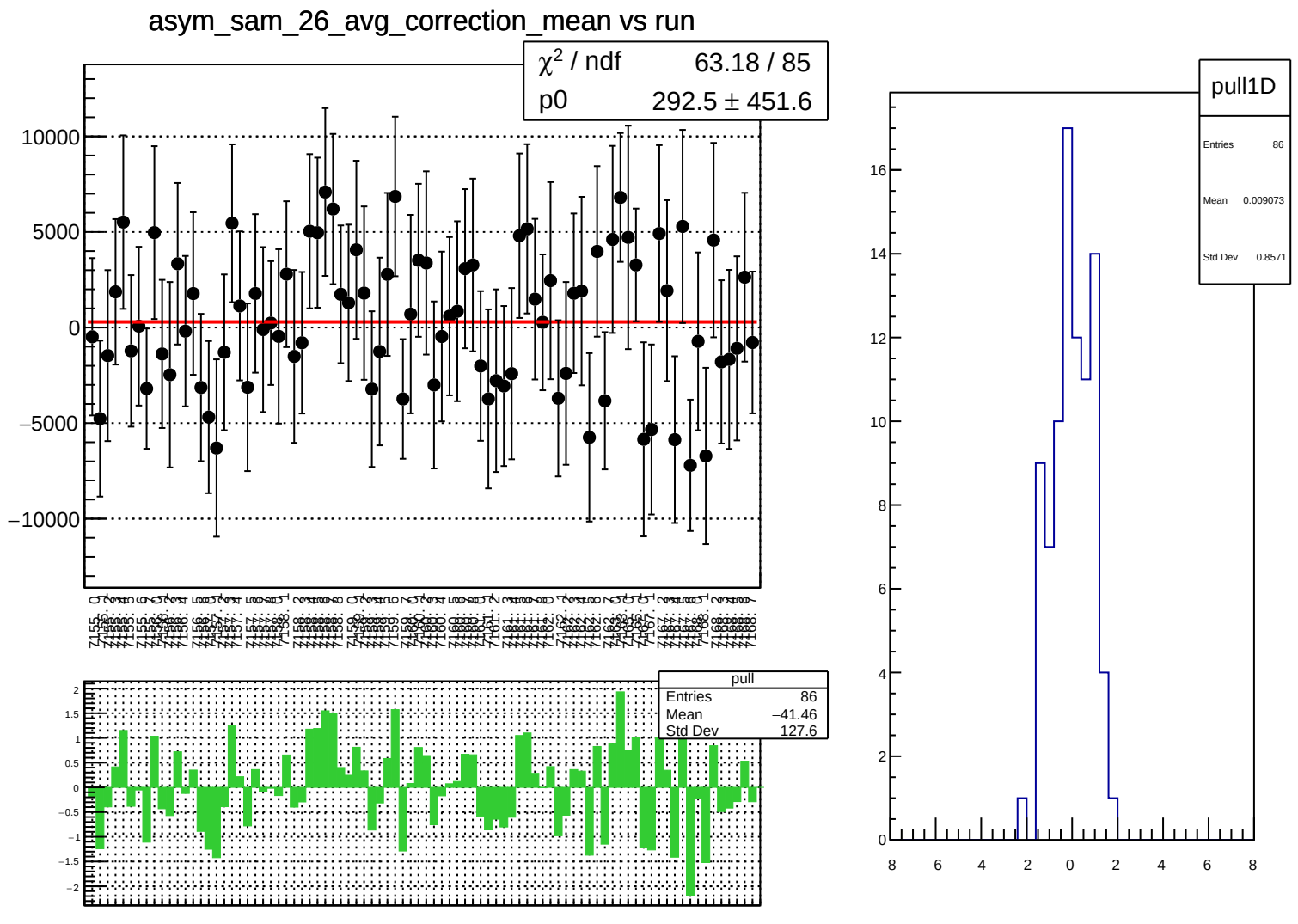

pull1D
Entries 86
Mean −0.005759
Std Dev 0.8718
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

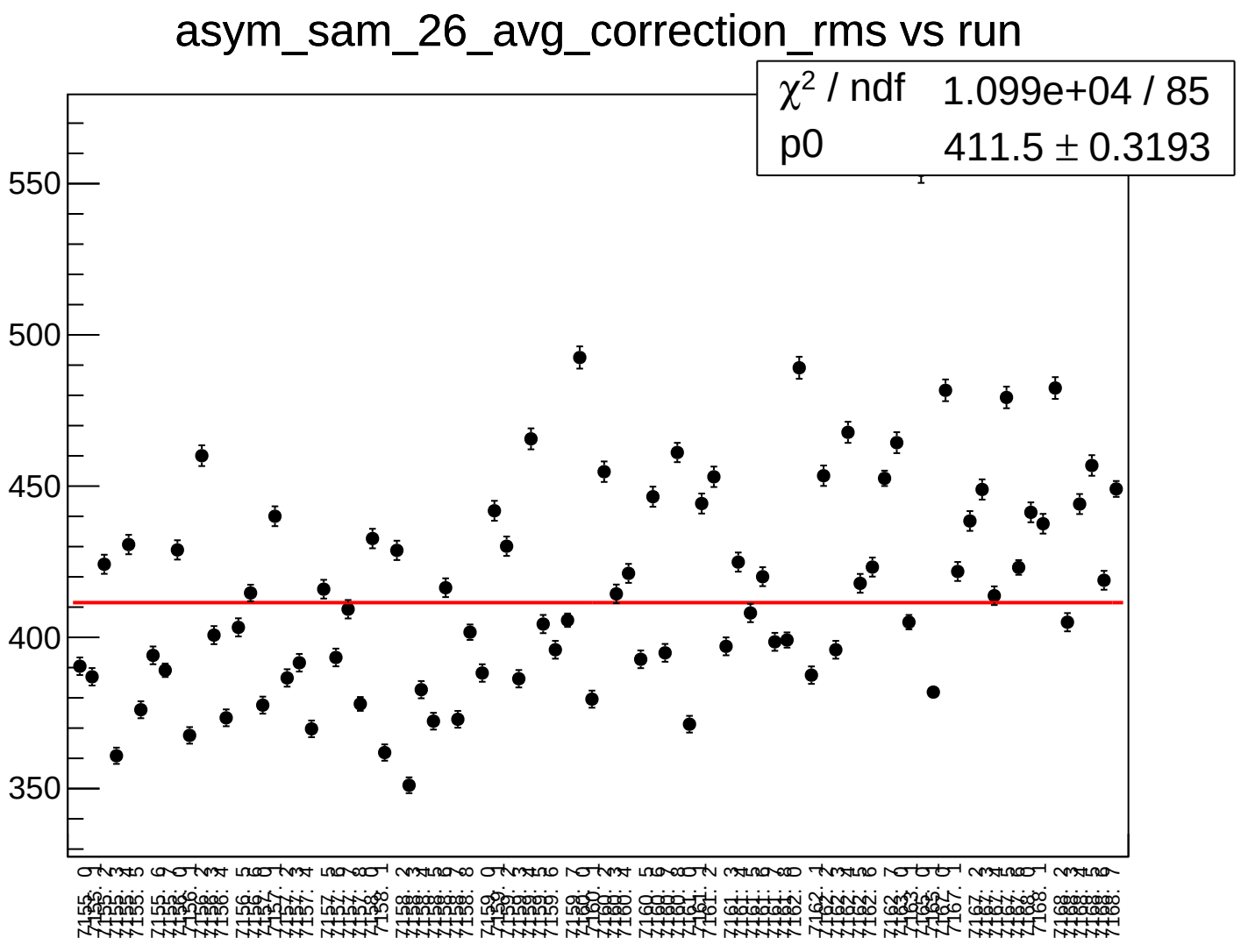

asym_sam_15_avg_rms vs run
χ² / ndf 6468 / 85
p0 386 ± 0.2991
460
440
420
400
380
360
340
320

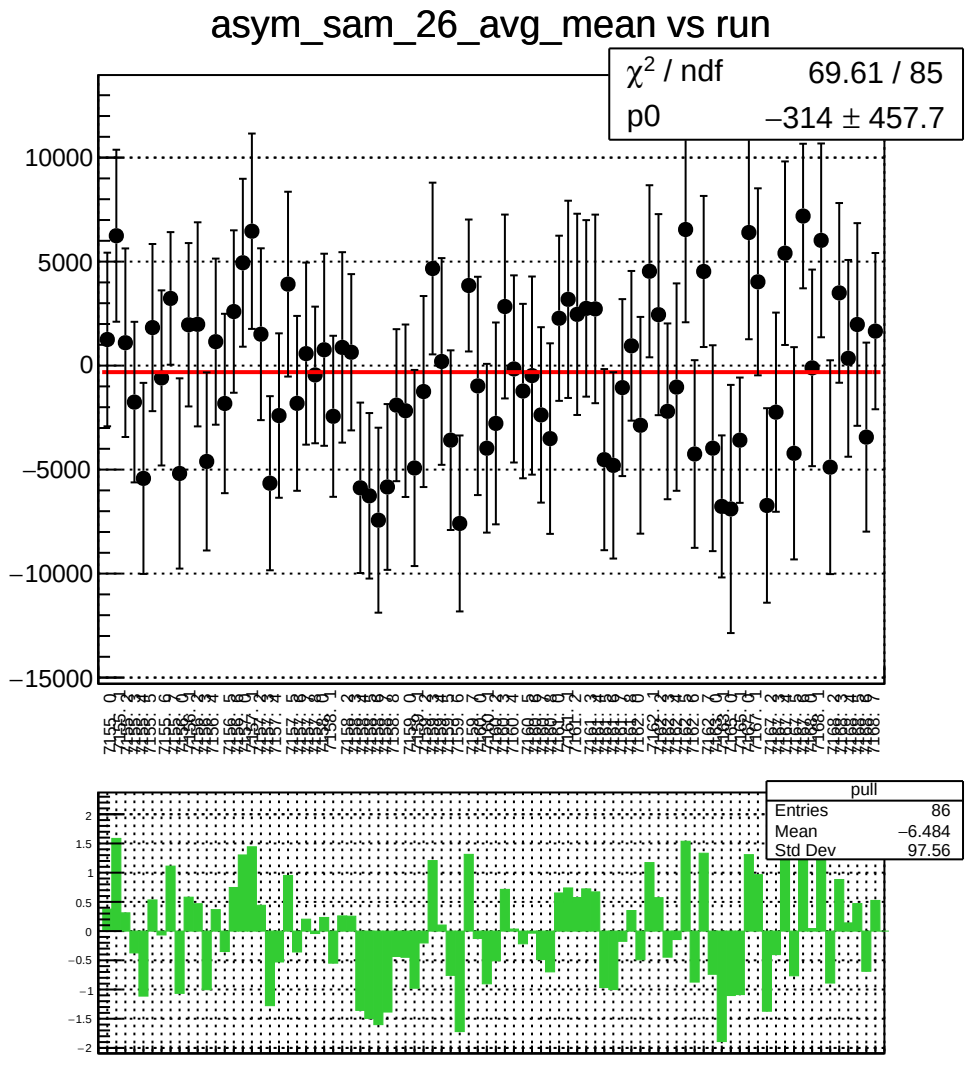

reg_asym_sam_26_avg_mean vs run
χ² / ndf 93.38 / 85
p0 −12.42 ± 73.49
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 59.84
Std Dev 44.11
2
1
0
−1
−2

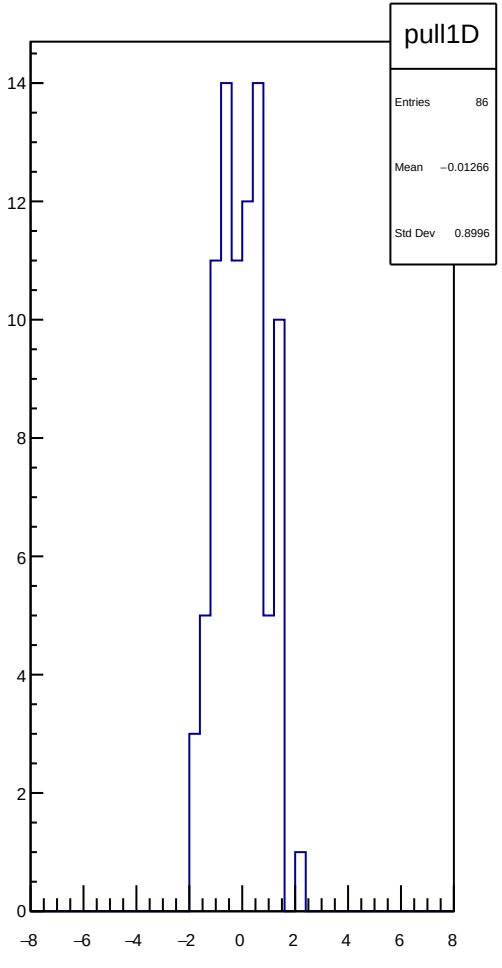

pull1D
Entries 86
Mean −0.02702
Std Dev 1.042
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

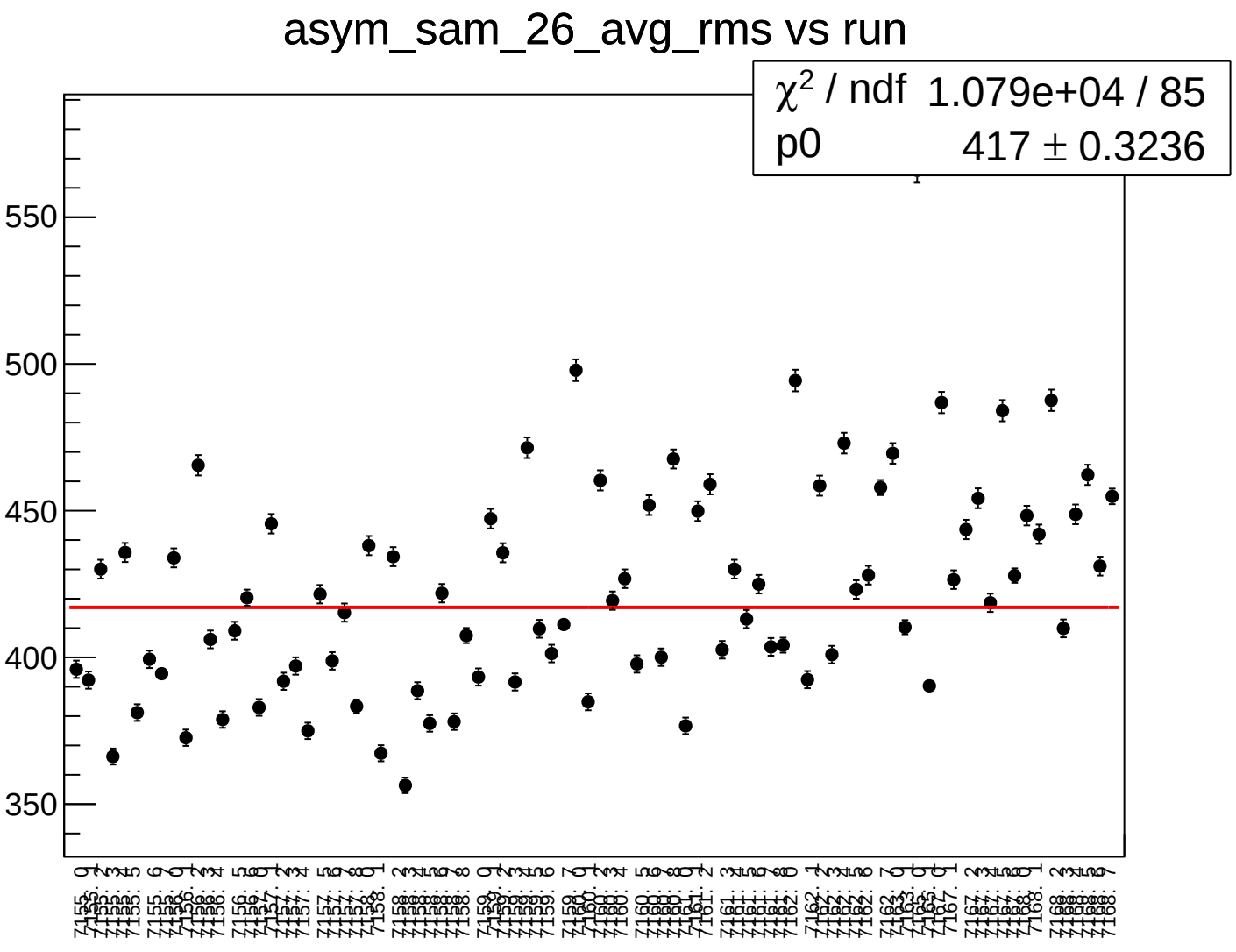

reg_asym_sam_26_avg_rms vs run
χ^2 / ndf 1.068e+04 / 85
p0 66.97 ± 0.05196
120
110
100
90
80
70
60

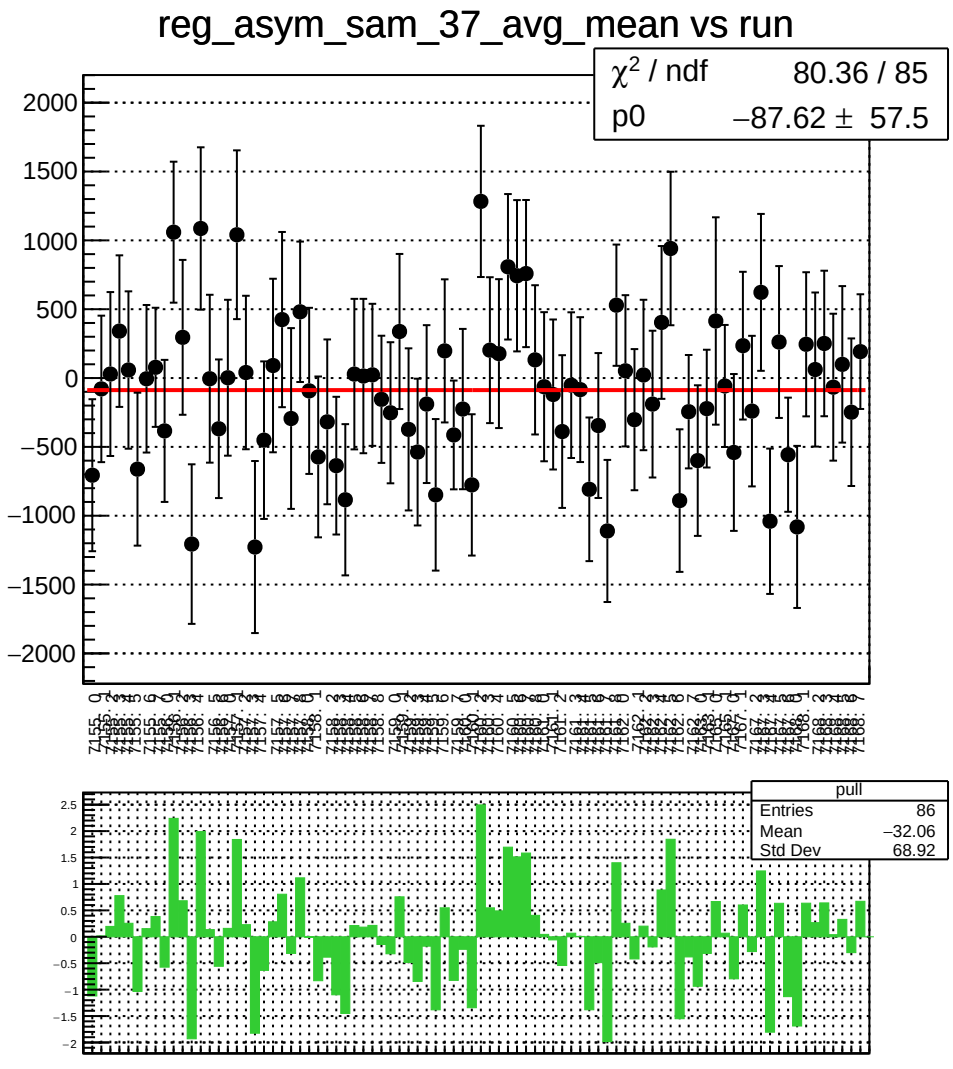

asym_sam_26_avg_correction_mean vs run
χ² / ndf 63.18 / 85
p0 292.5 ± 451.6
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −41.46
Std Dev 127.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean 0.009073
Std Dev 0.8571
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

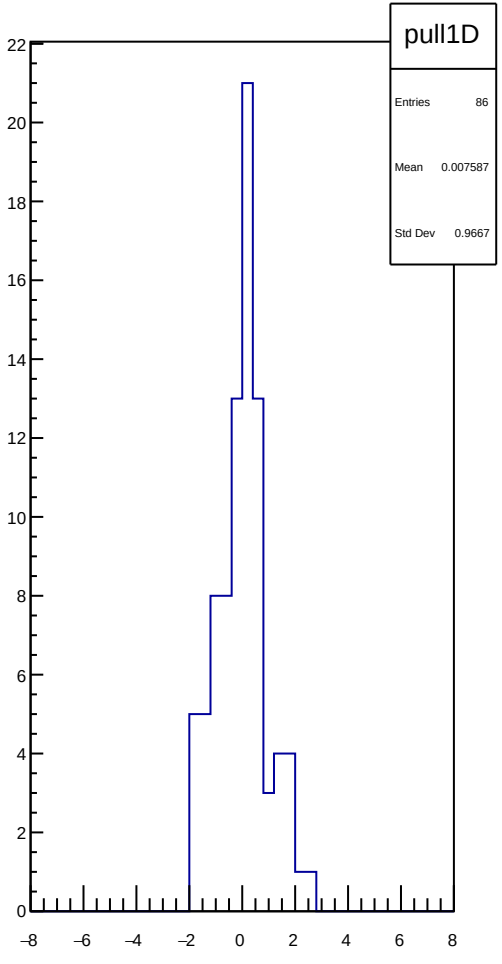

asym_sam_26_avg_correction_rms vs run
χ² / ndf 1.099e+04 / 85
p0 411.5 ± 0.3193
550
500
450
400
350

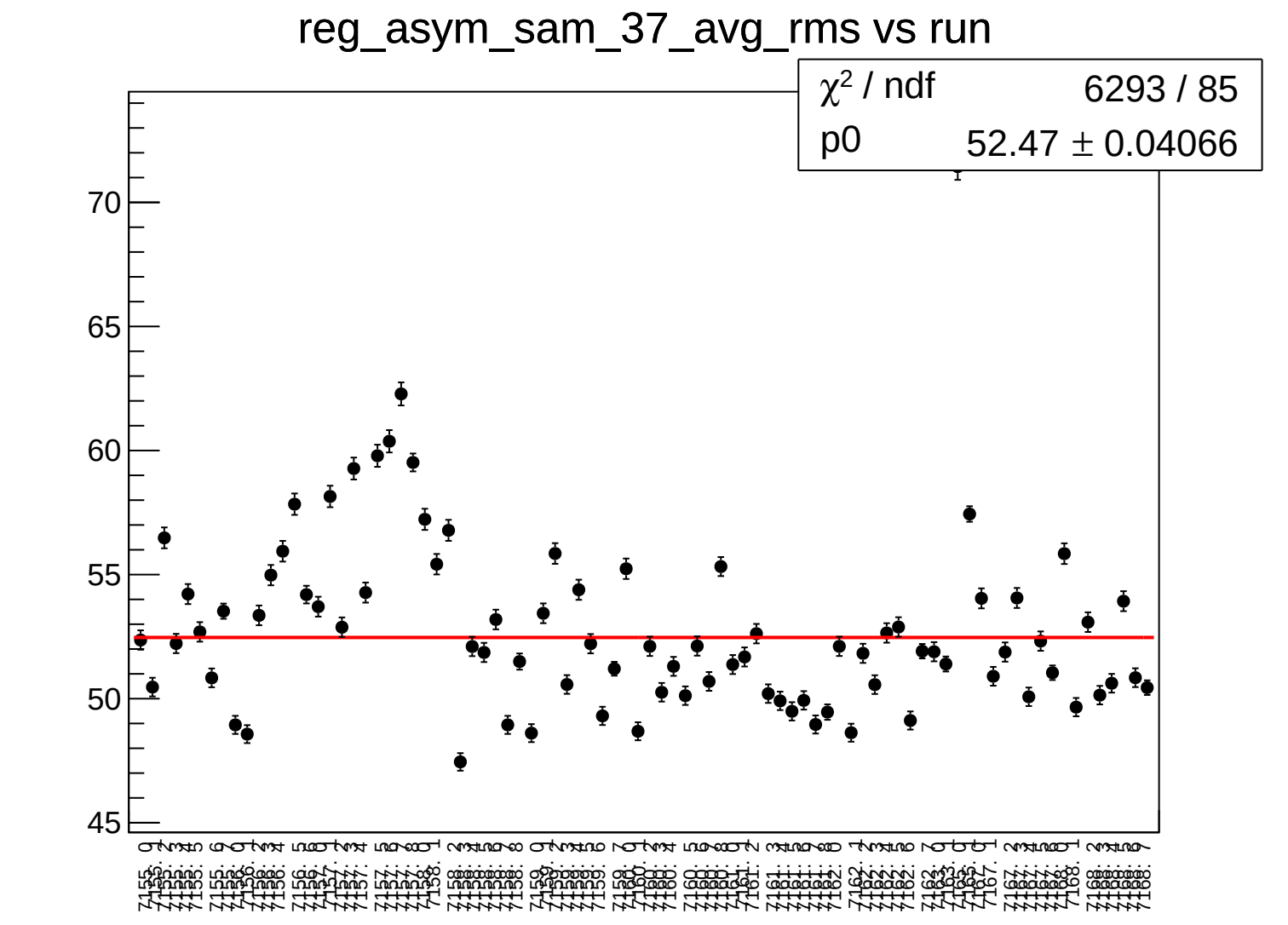

asym_sam_26_avg_mean vs run
χ² / ndf 69.61 / 85
p0 −314 ± 457.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −6.484
Std Dev 97.56
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

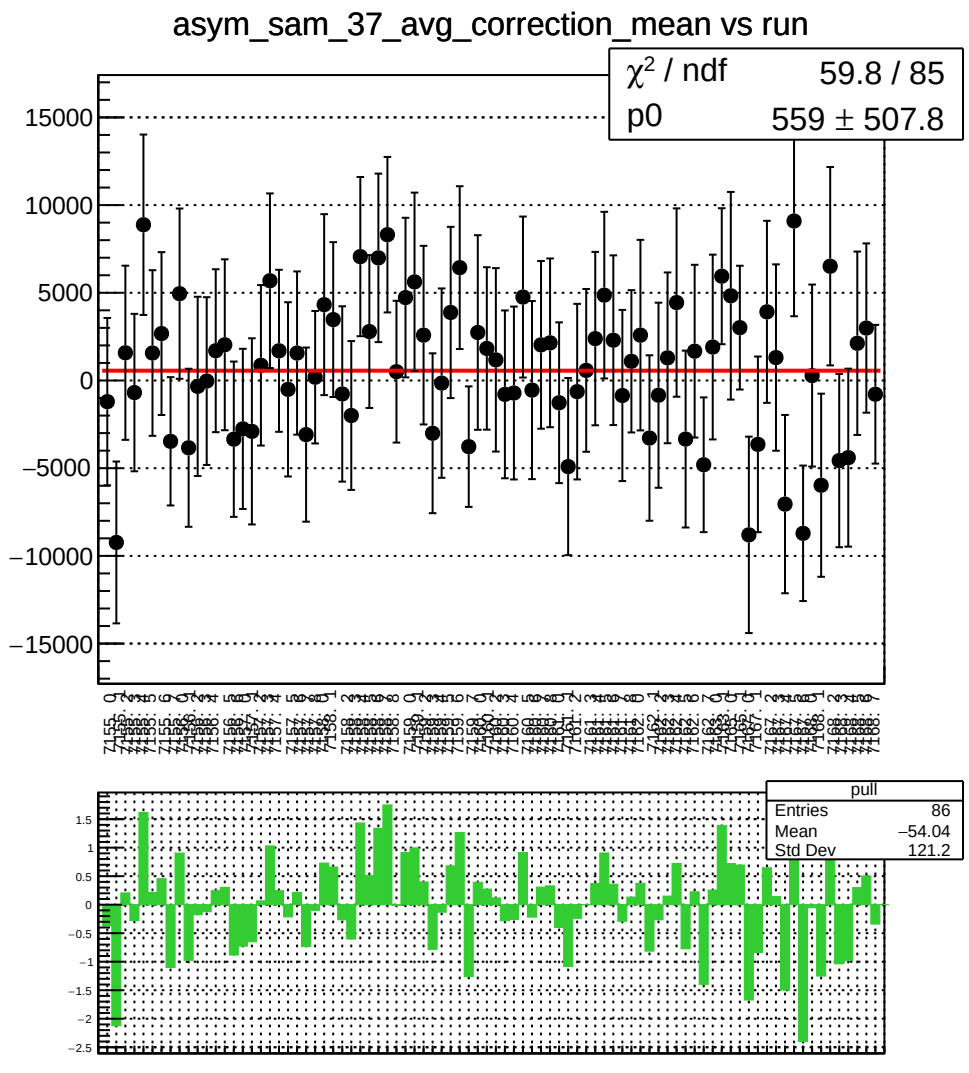

pull1D
Entries 86
Mean −0.01266
Std Dev 0.8996
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

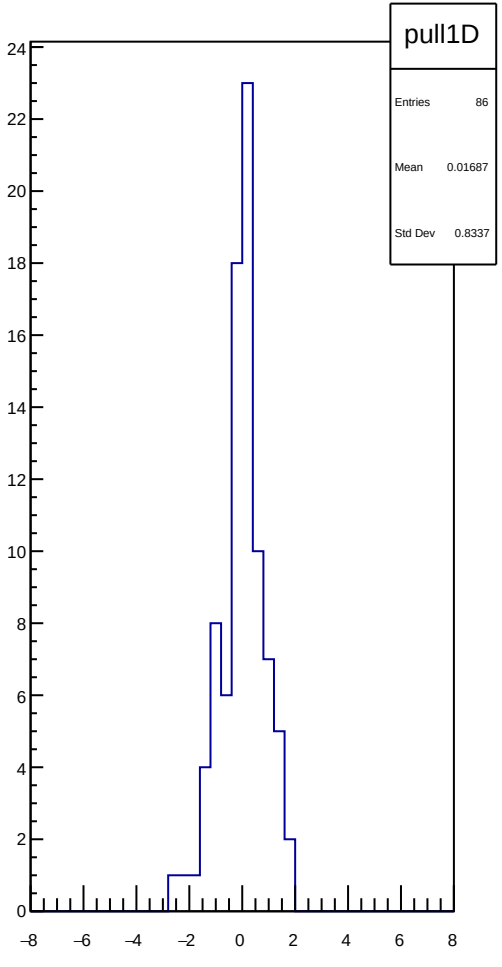

asym_sam_26_avg_rms vs run
χ^2 / ndf 1.079e+04 / 85
p0 417 ± 0.3236
550
500
450
400
350

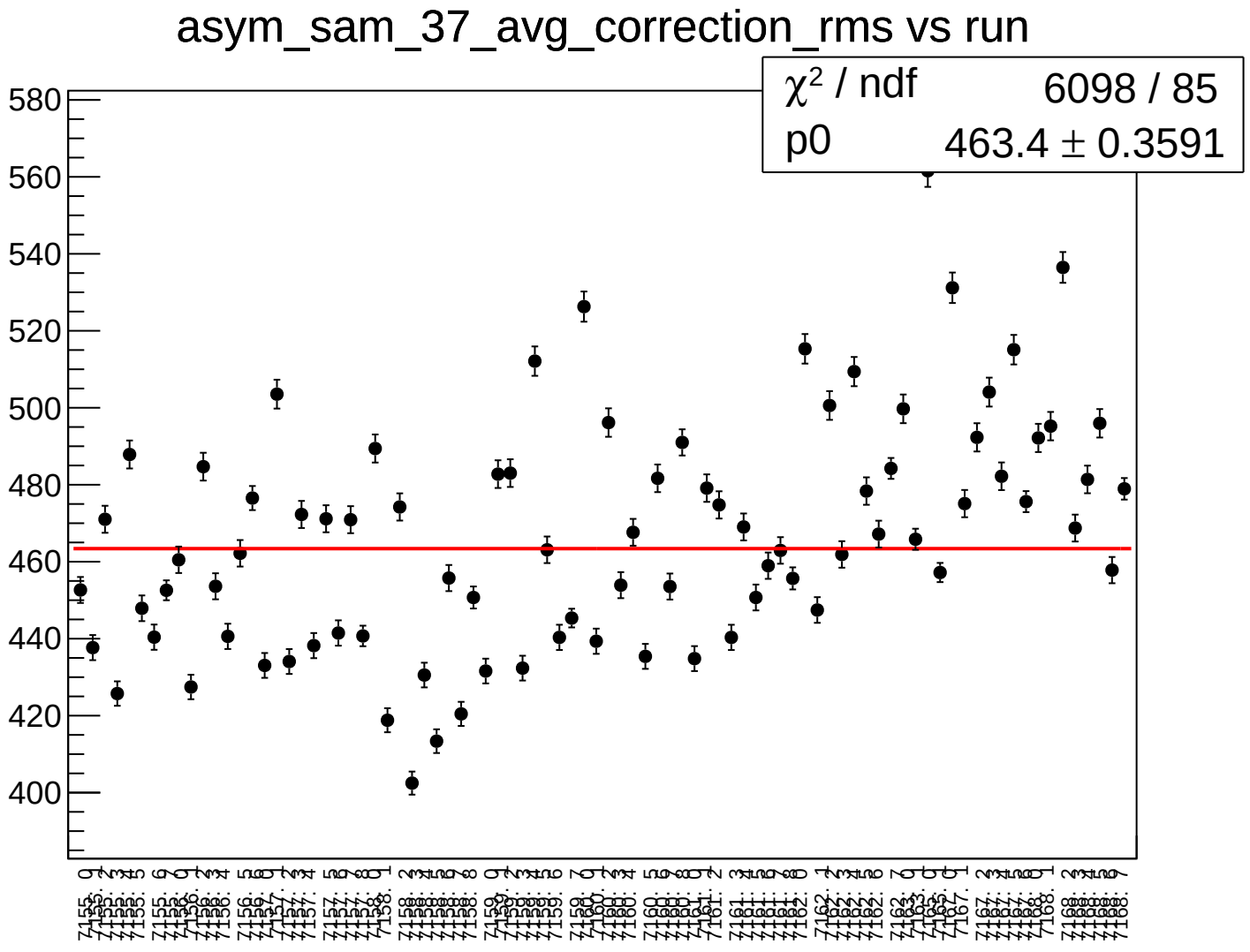

reg_asym_sam_37_avg_mean vs run
χ² / ndf 80.36 / 85
p0 −87.62 ± 57.5
pull
Entries 86
Mean −32.06
Std Dev 68.92

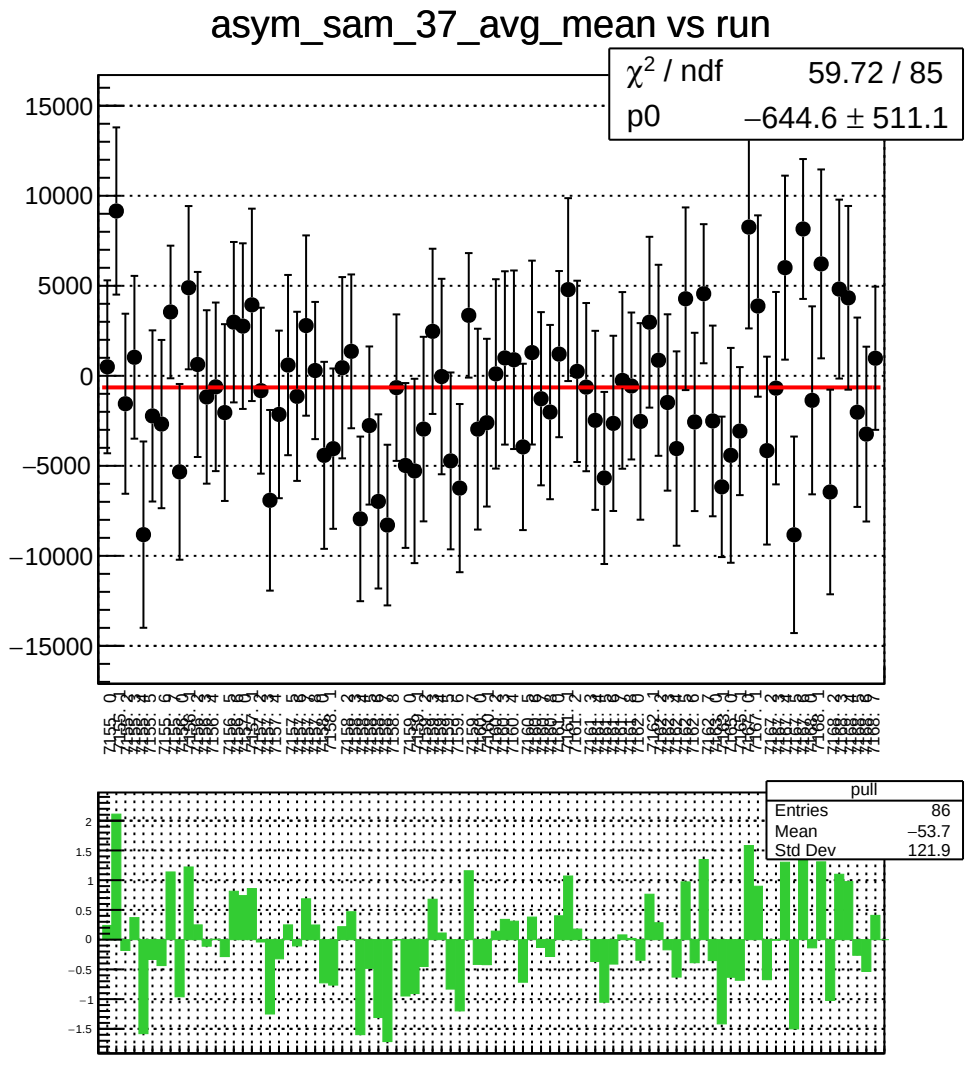

pull1D
Entries 86
Mean 0.007587
Std Dev 0.9667

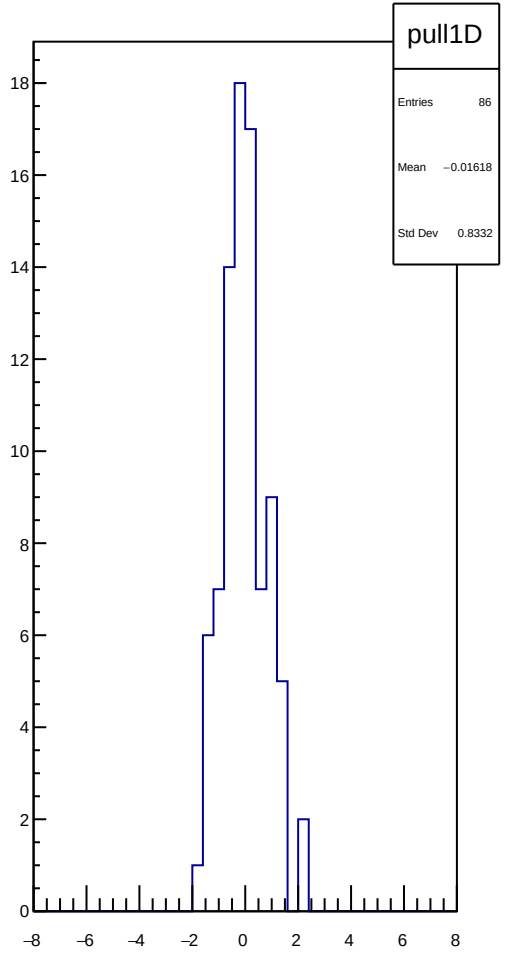

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 6293 / 85
p0 52.47 ± 0.04066
70
65
60
55
50
45

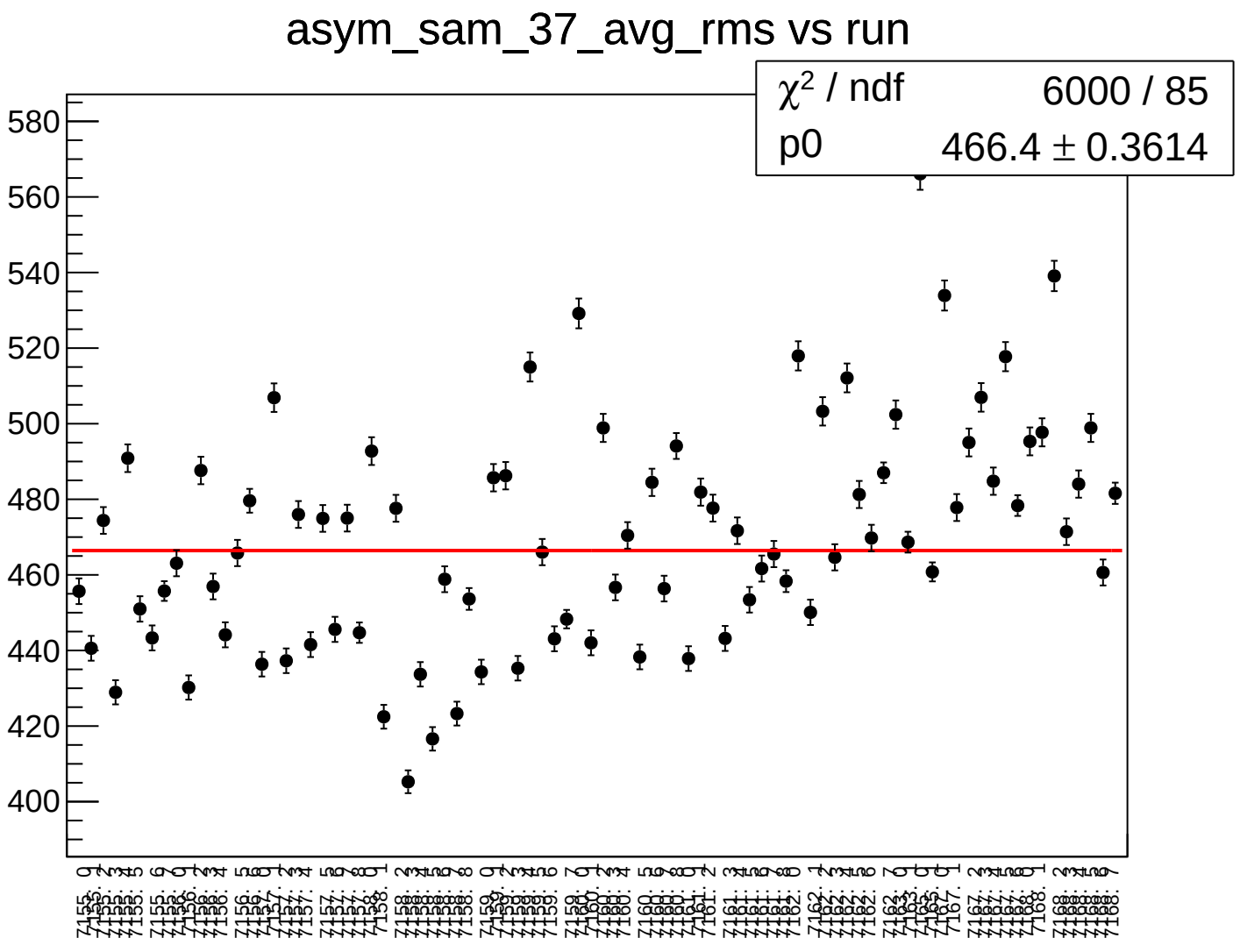

asym_sam_37_avg_correction_mean vs run
χ² / ndf 59.8 / 85
p0 559 ± 507.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −54.04
Std Dev 121.2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

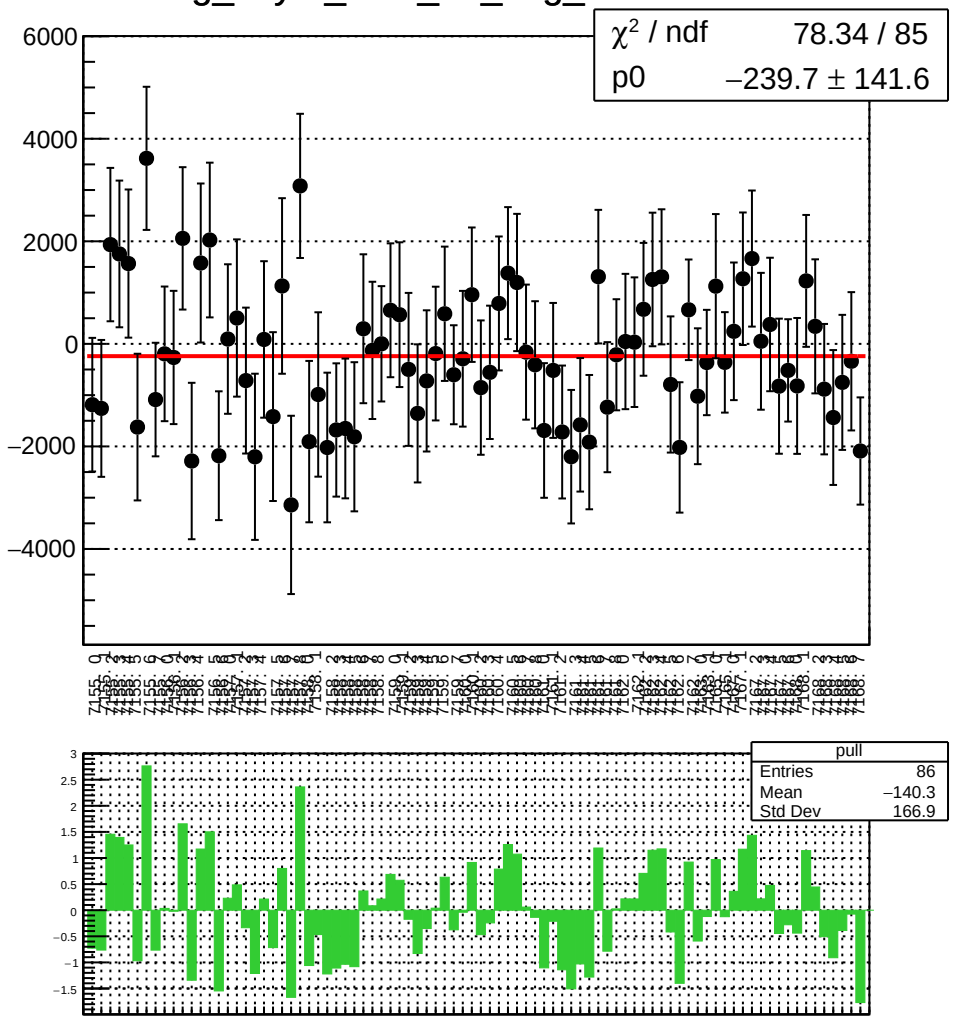

pull1D
Entries 86
Mean 0.01687
Std Dev 0.8337
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

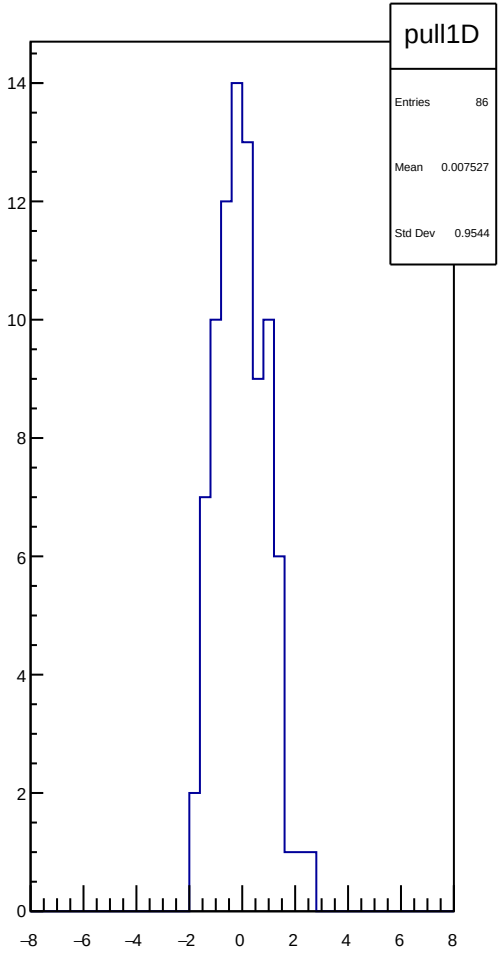

asym_sam_37_avg_correction_rms vs run
χ² / ndf 6098 / 85
p0 463.4 ± 0.3591
580
560
540
520
500
480
460
440
420
400

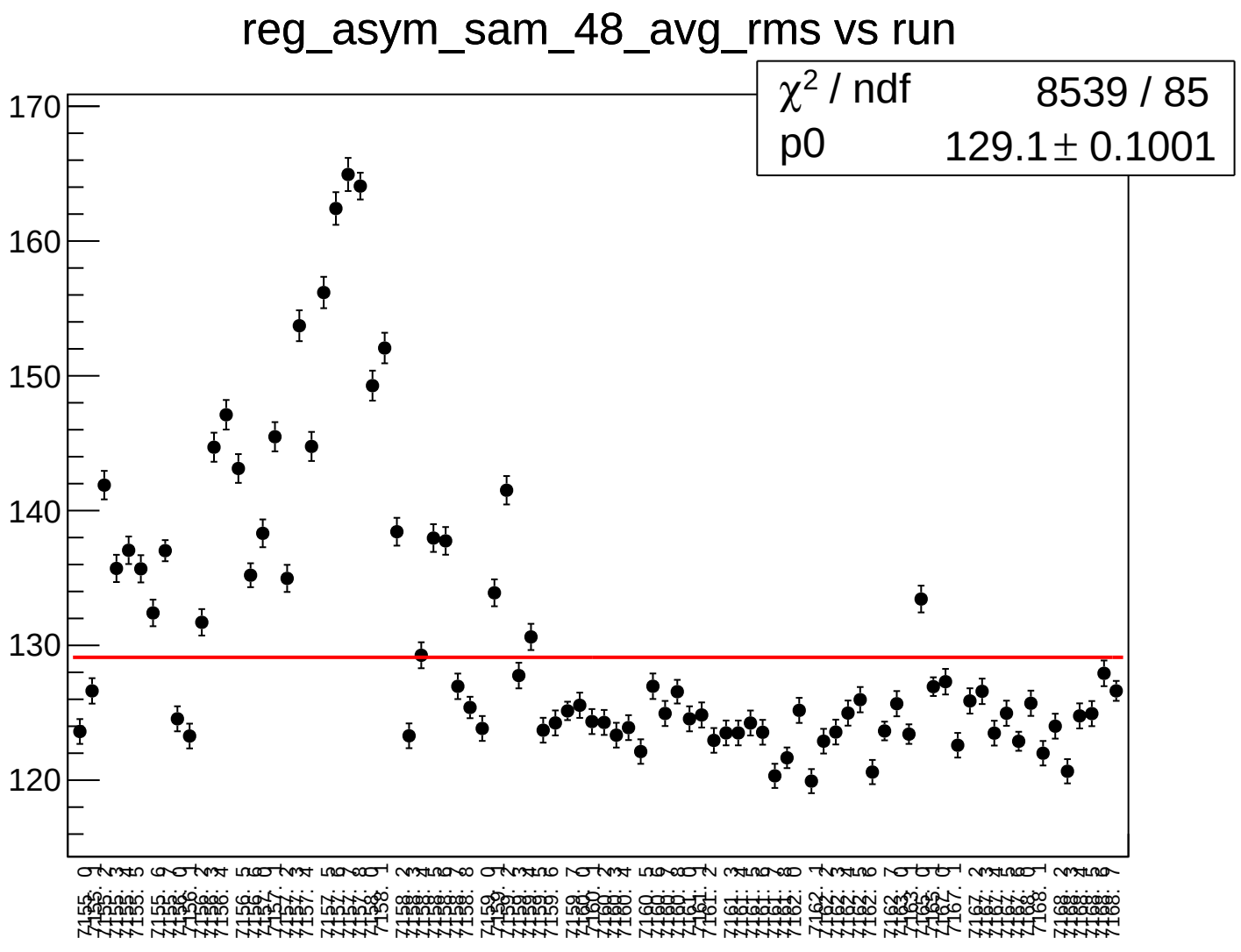

asym_sam_37_avg_mean vs run
χ² / ndf 59.72 / 85
p0 −644.6 ± 511.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −53.7
Std Dev 121.9
2
1.5
1
0.5
0
−0.5
−1
−1.5

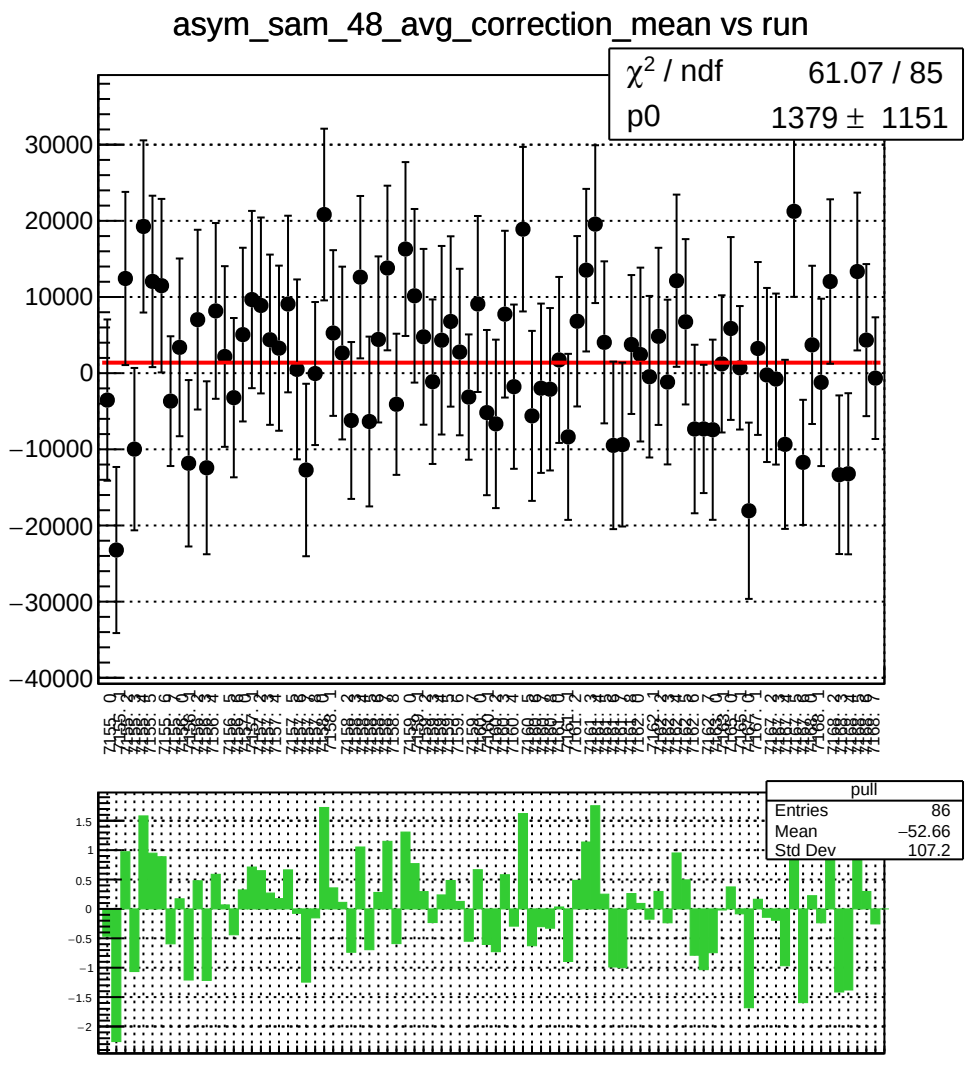

pull1D
Entries 86
Mean −0.01618
Std Dev 0.8332
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

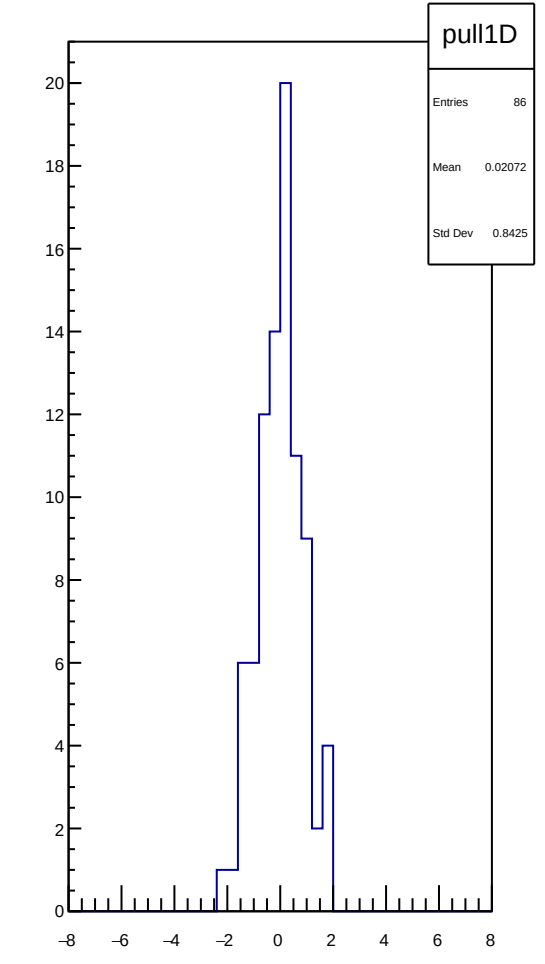

asym_sam_37_avg_rms vs run
χ² / ndf 6000 / 85
p0 466.4 ± 0.3614
580
560
540
520
500
480
460
440
420
400

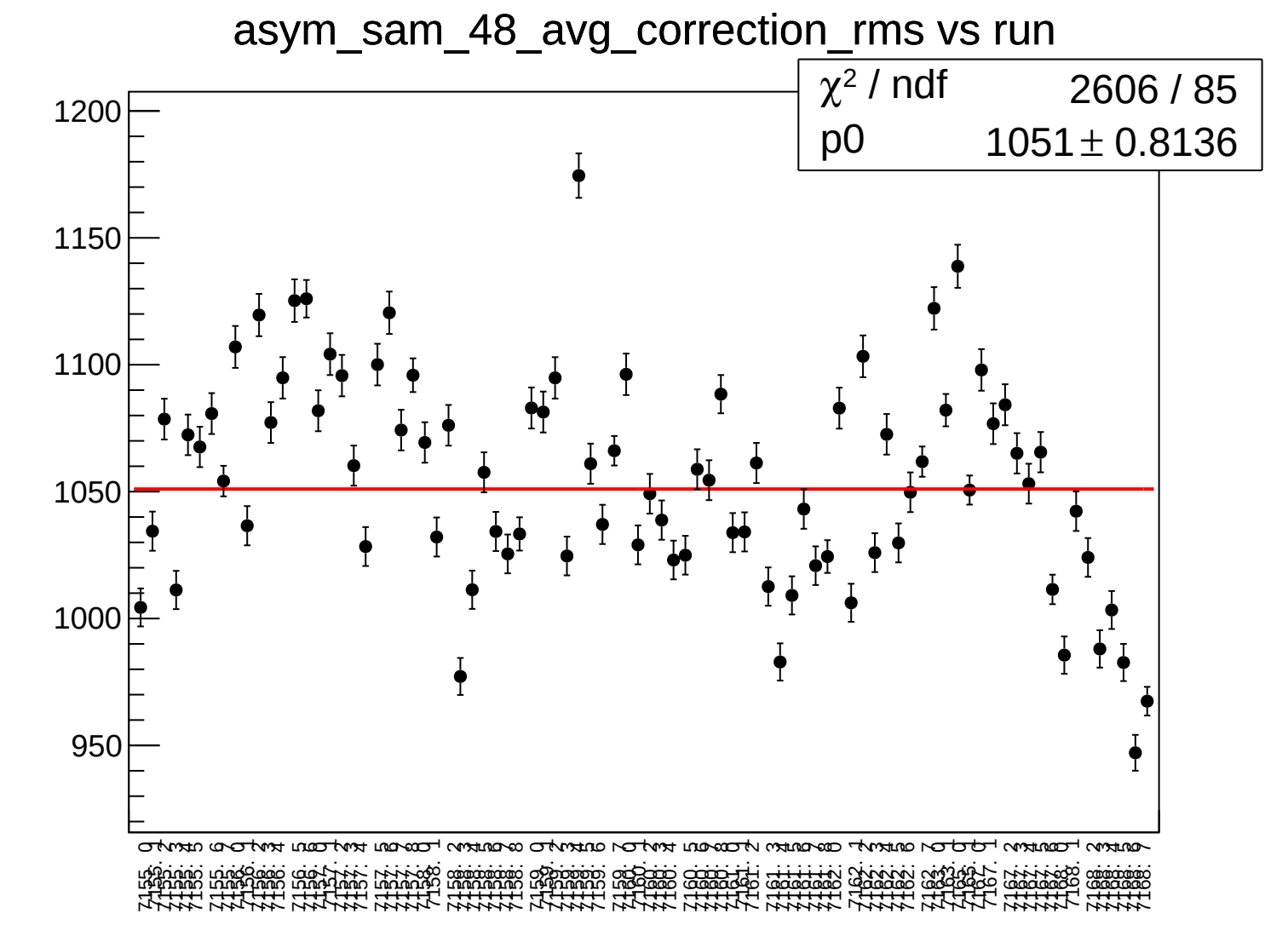

reg_asym_sam_48_avg_mean vs run
χ² / ndf 78.34 / 85
p0 −239.7 ± 141.6
pull
Entries 86
Mean −140.3
Std Dev 166.9

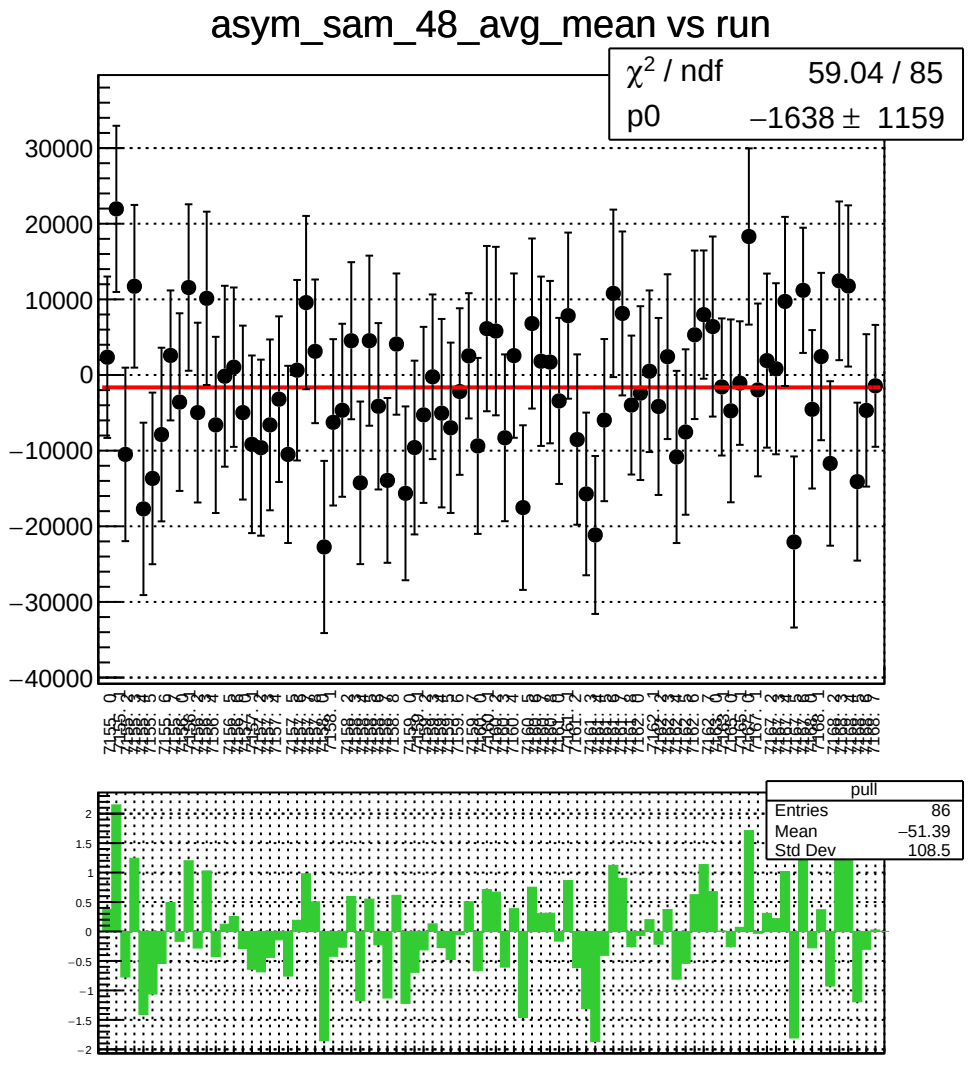

pull1D
Entries 86
Mean 0.007527
Std Dev 0.9544

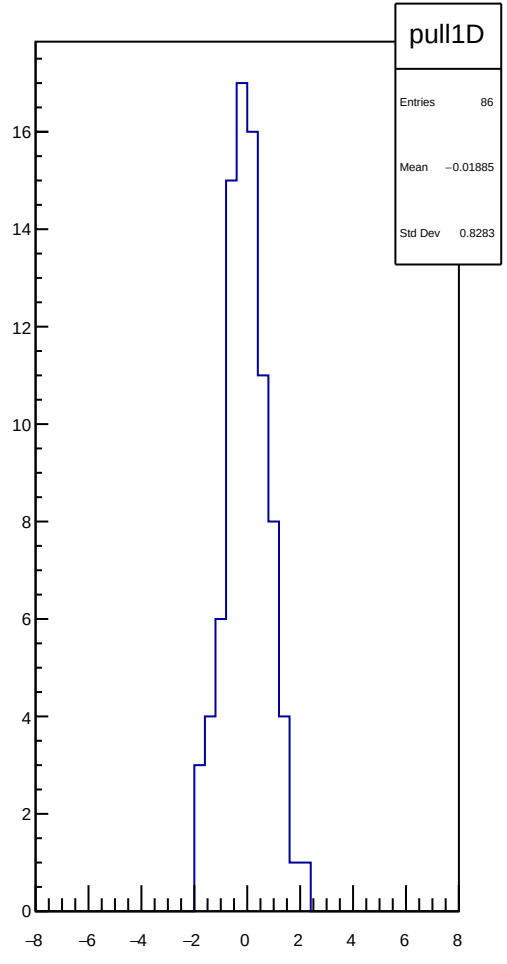

reg_asym_sam_48_avg_rms vs run
χ² / ndf 8539 / 85
p0 129.1 ± 0.1001
170
160
150
140
130
120

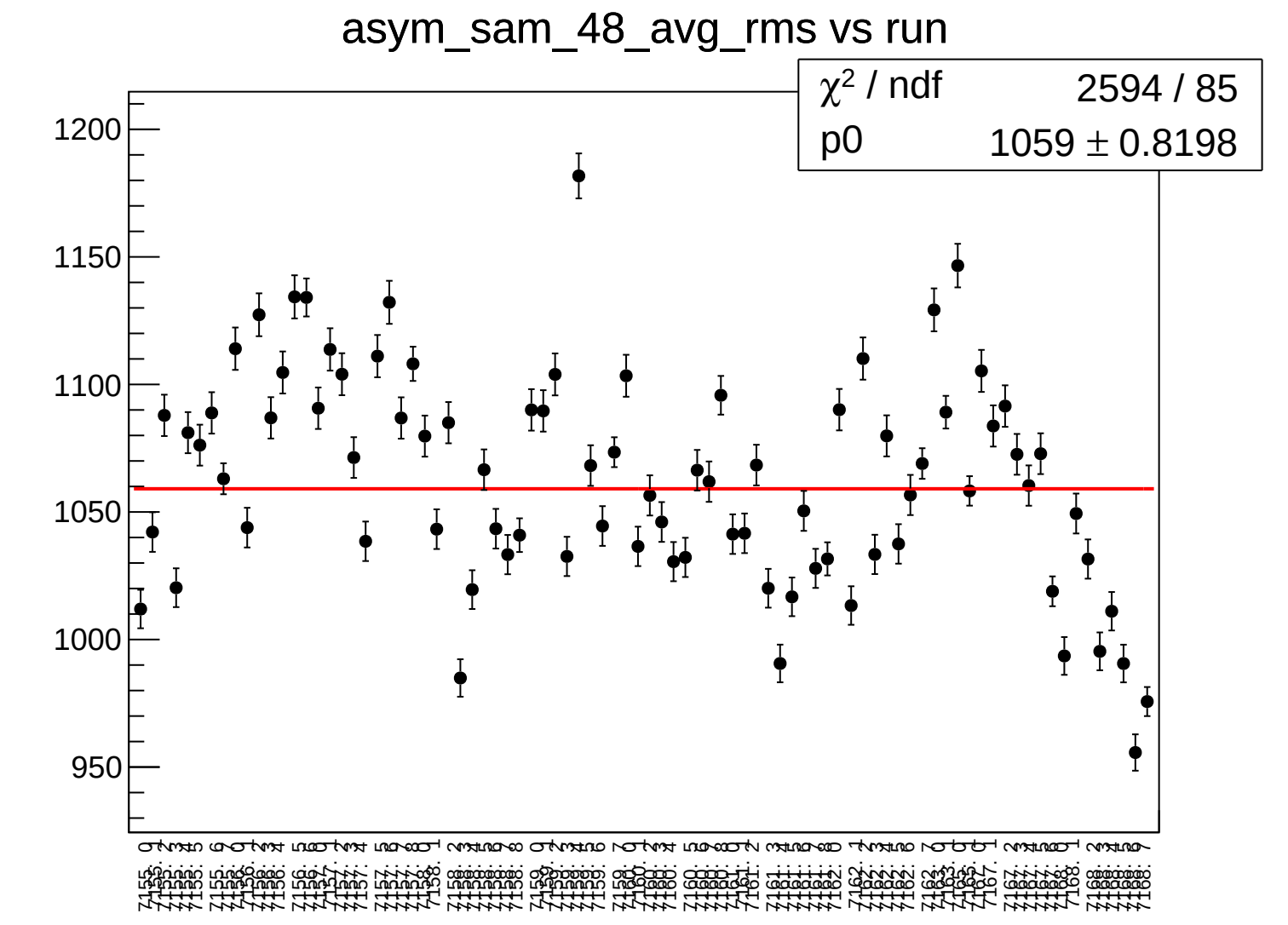

asym_sam_48_avg_correction_mean vs run
χ² / ndf 61.07 / 85
p0 1379 ± 1151
pull
Entries 86
Mean −52.66
Std Dev 107.2

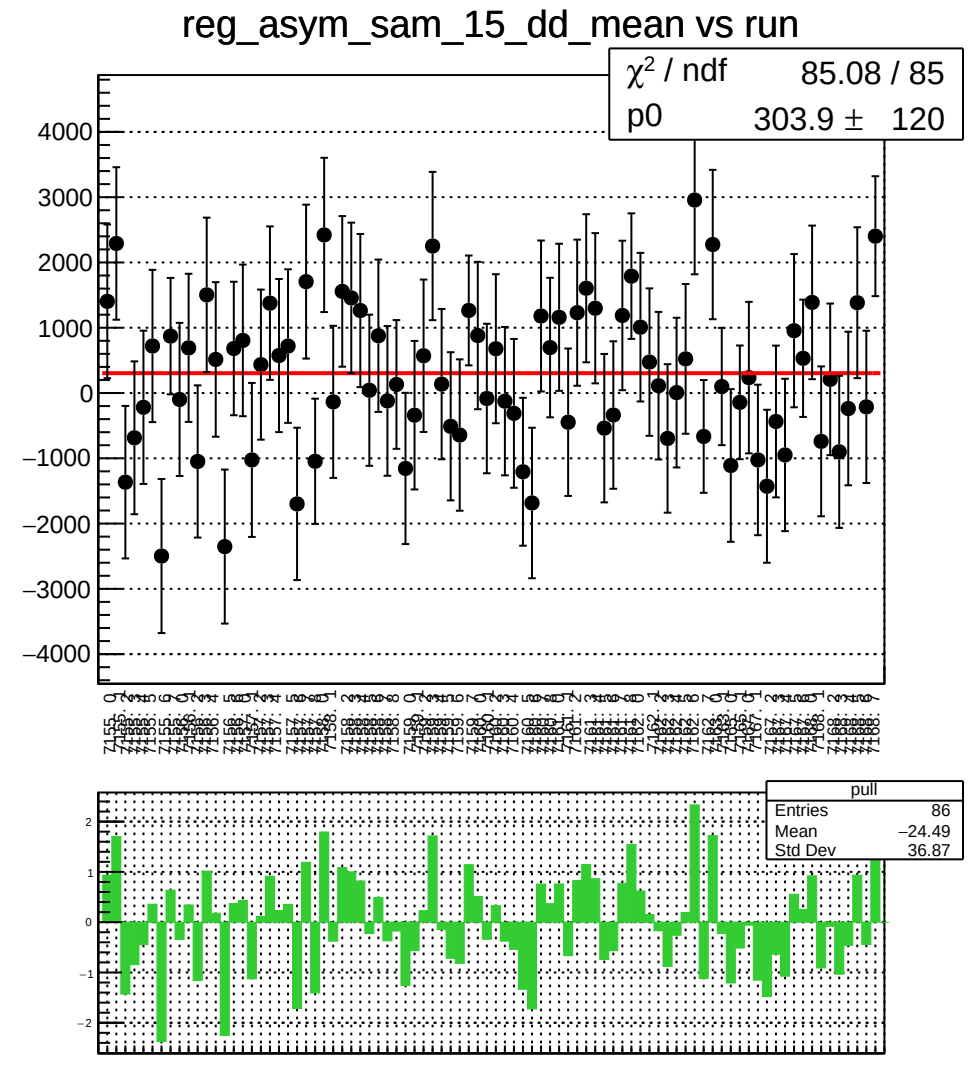

pull1D
Entries 86
Mean 0.02072
Std Dev 0.8425

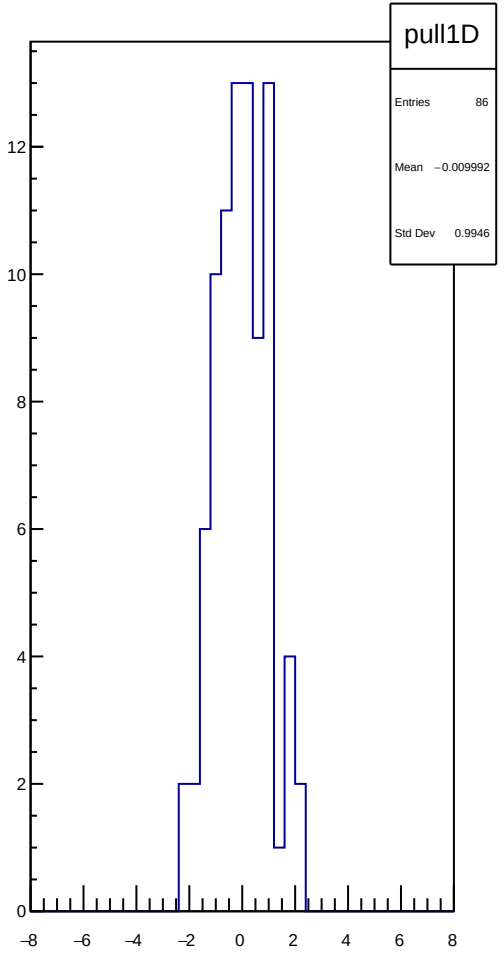

asym_sam_48_avg_correction_rms vs run
χ² / ndf 2606 / 85
p0 1051 ± 0.8136
1200
1150
1100
1050
1000
950

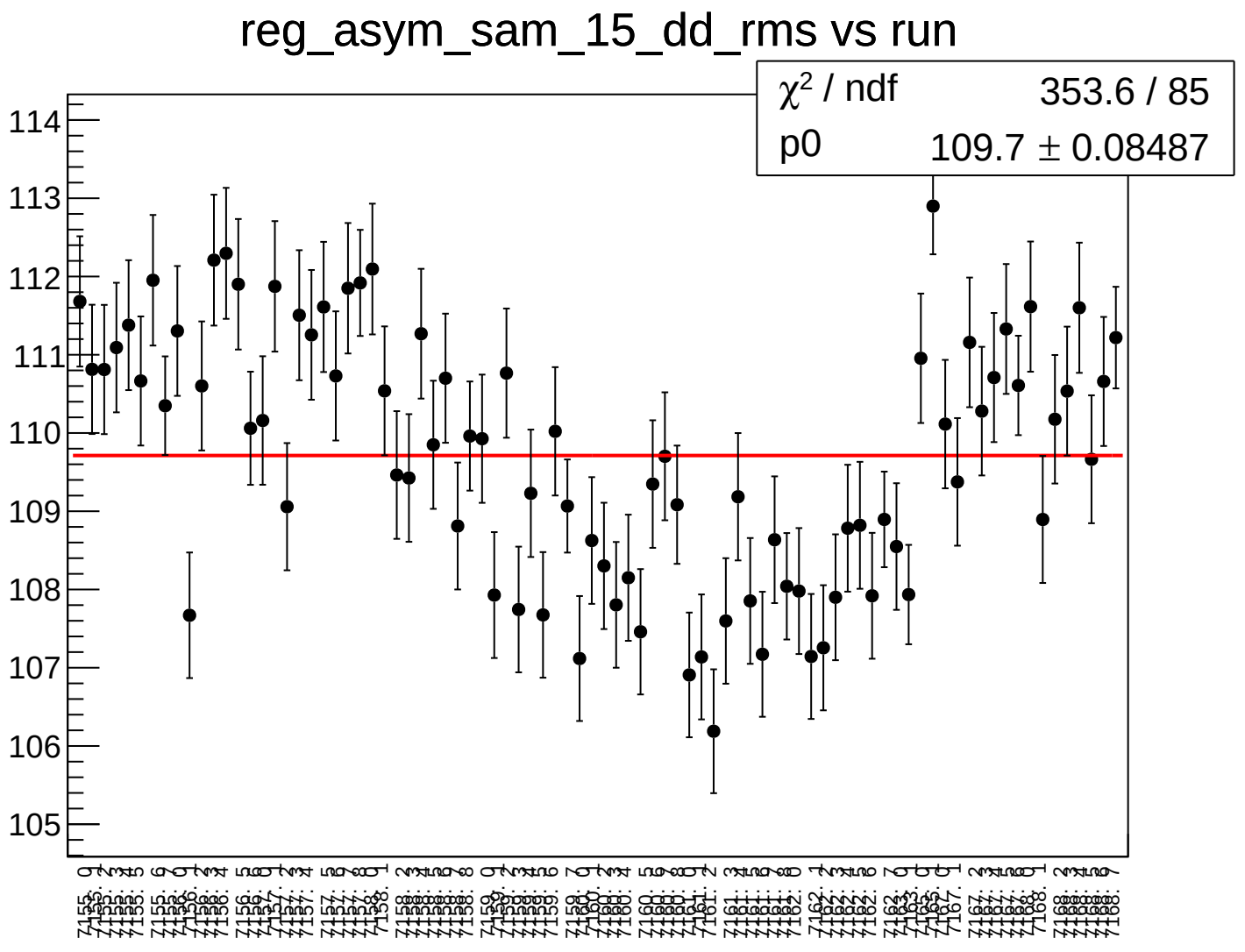

asym_sam_48_avg_mean vs run
χ² / ndf 59.04 / 85
p0 −1638 ± 1159
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 86
Mean −51.39
Std Dev 108.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

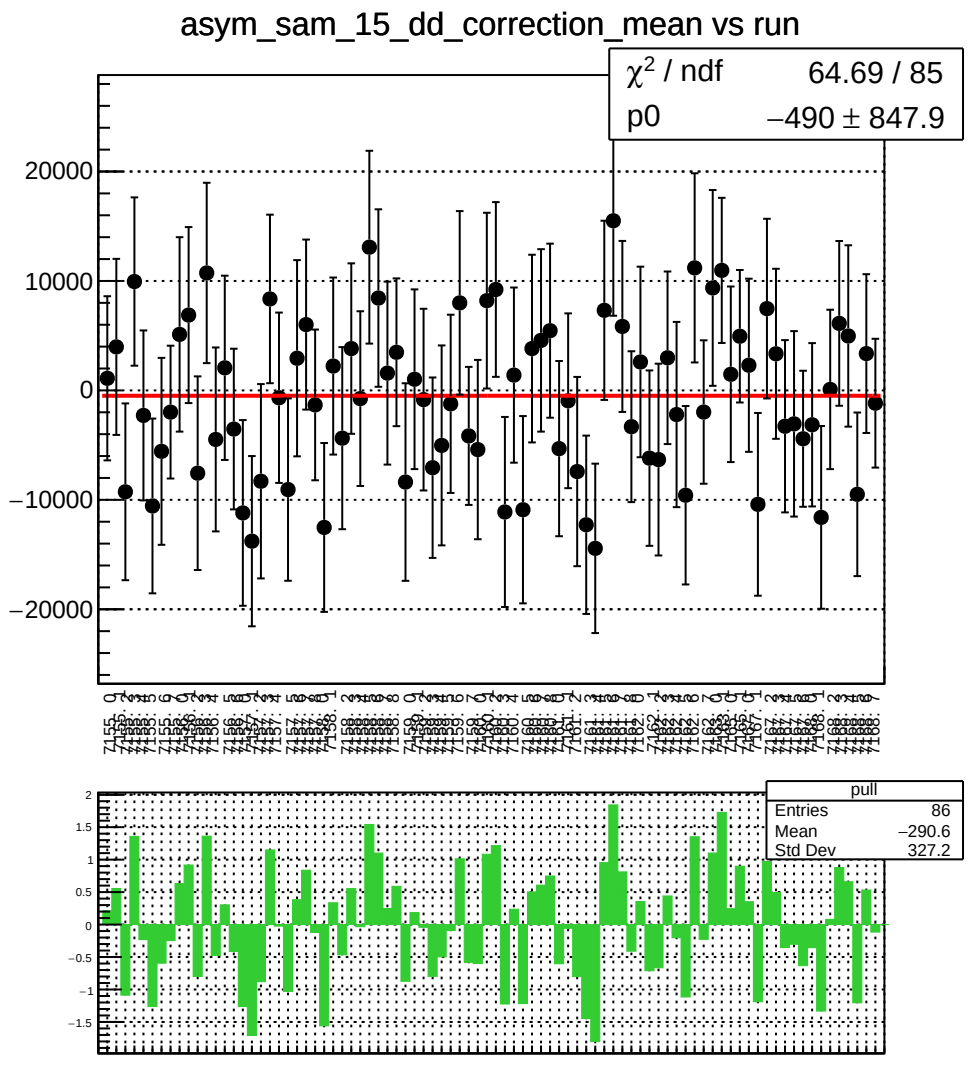

pull1D
Entries 86
Mean −0.01885
Std Dev 0.8283
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

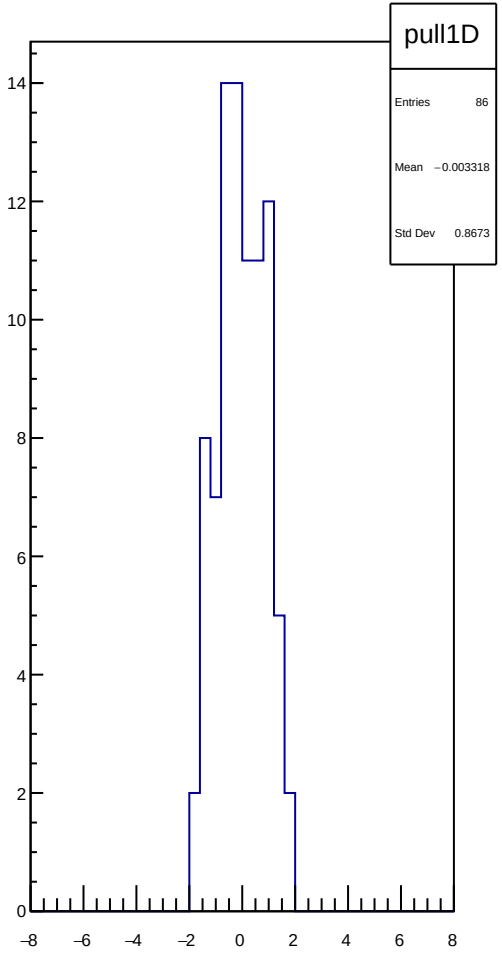

asym_sam_48_avg_rms vs run
χ² / ndf 2594 / 85
p0 1059 ± 0.8198
1200
1150
1100
1050
1000
950

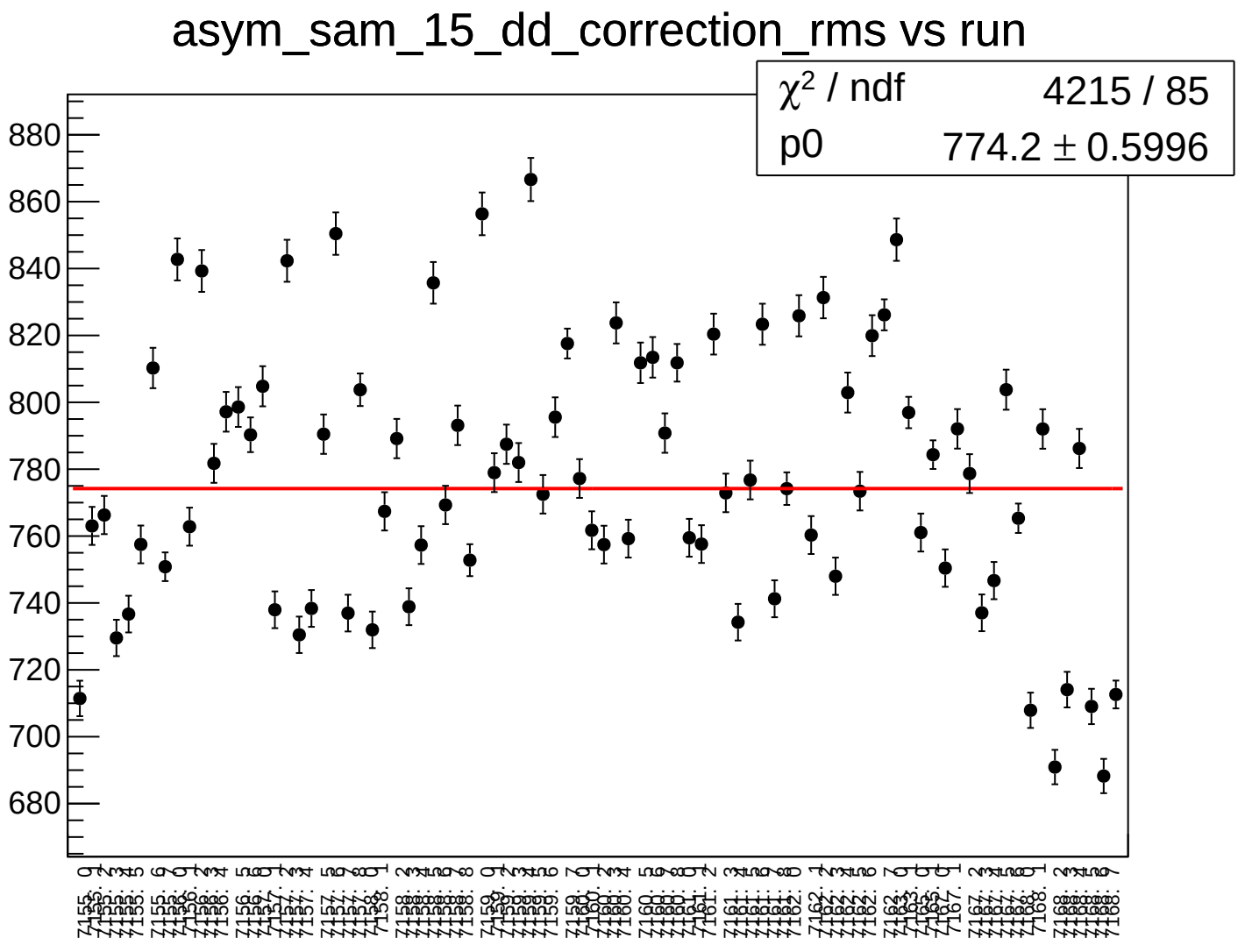

reg_asym_sam_15_dd_mean vs run
χ² / ndf 85.08 / 85
p0 303.9 ± 120
pull
Entries 86
Mean −24.49
Std Dev 36.87

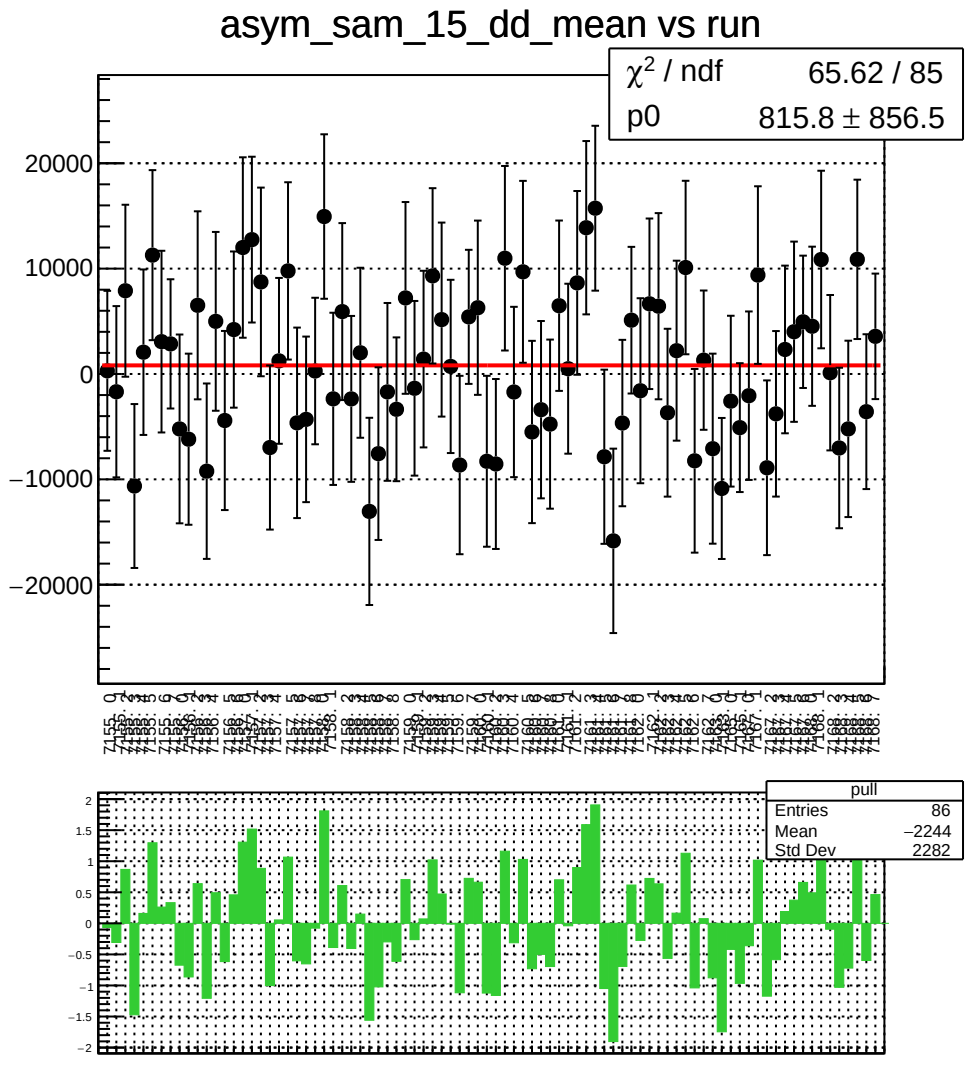

pull1D
Entries 86
Mean −0.009992
Std Dev 0.9946

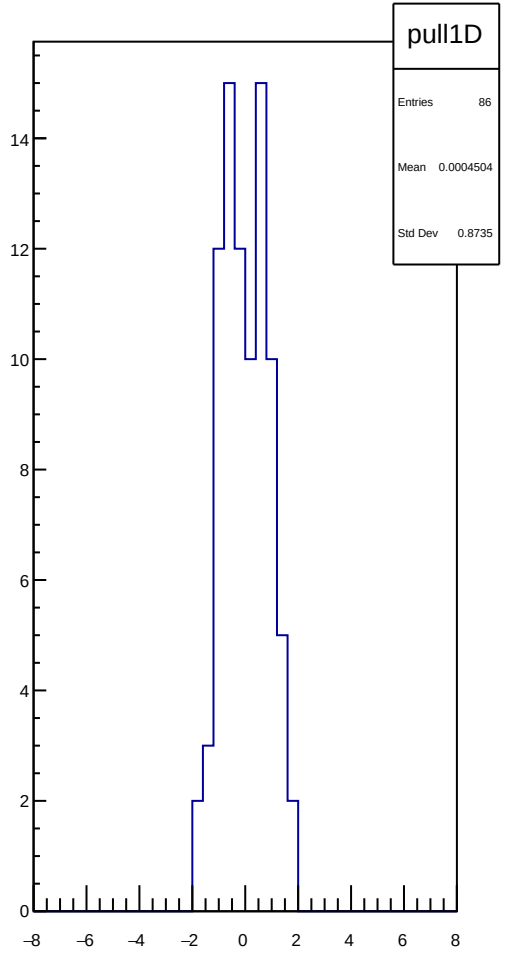

reg_asym_sam_15_dd_rms vs run
χ^2 / ndf 353.6 / 85
p0 109.7 ± 0.08487
114
113
112
111
110
109
108
107
106
105

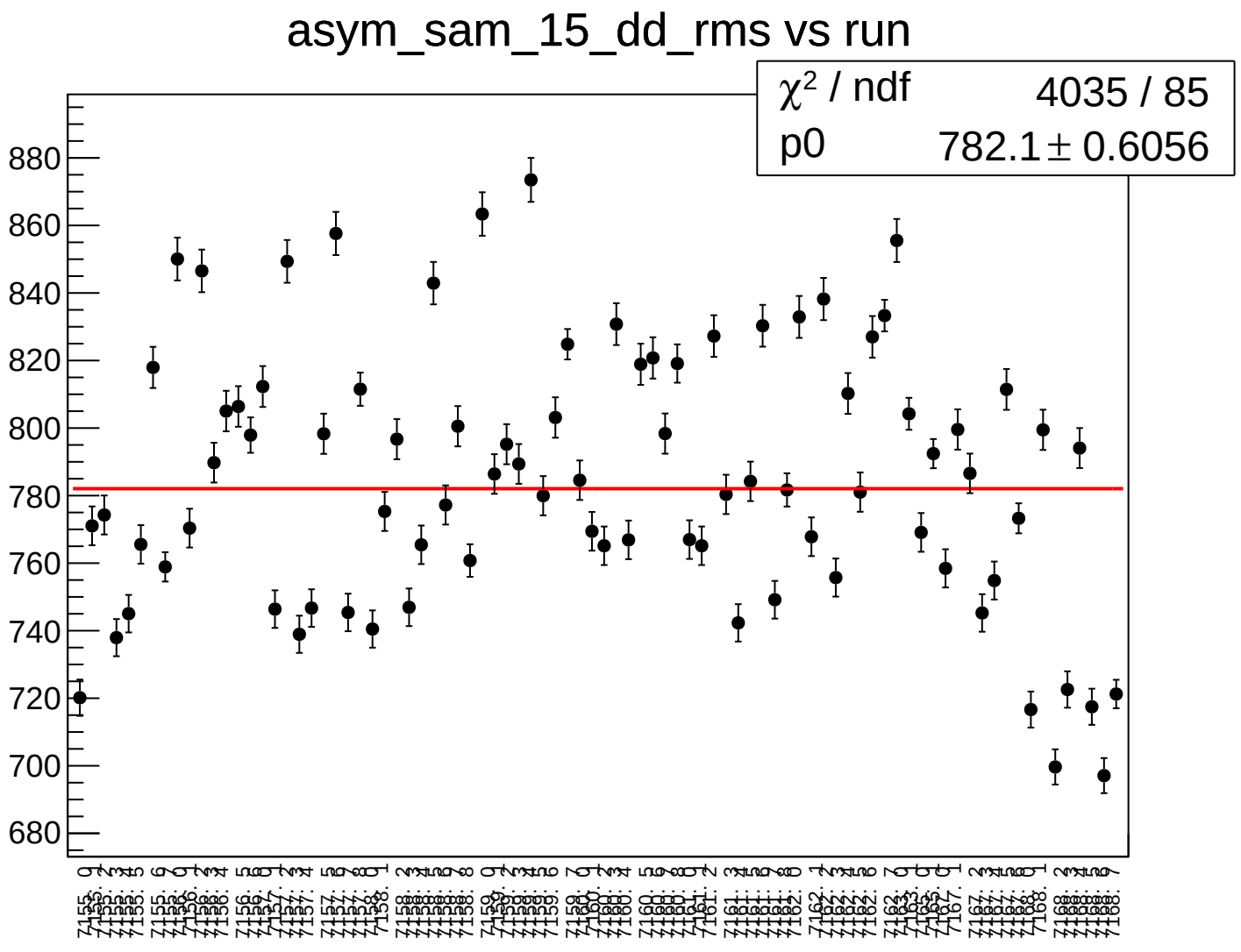

asym_sam_15_dd_correction_mean vs run
χ² / ndf 64.69 / 85
p0 −490 ± 847.9
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −290.6
Std Dev 327.2
2
1.5
1
0.5
0
−0.5
−1
−1.5

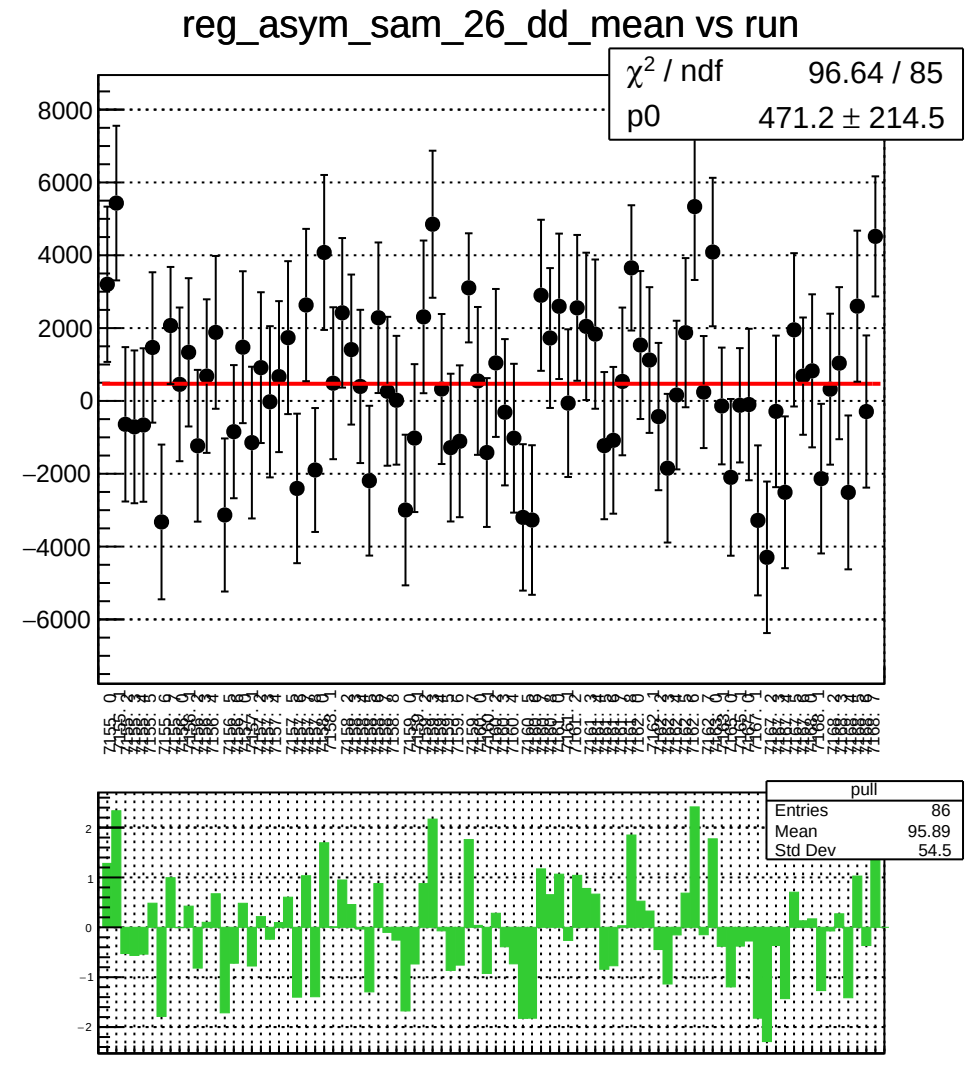

pull1D
Entries 86
Mean −0.003318
Std Dev 0.8673
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

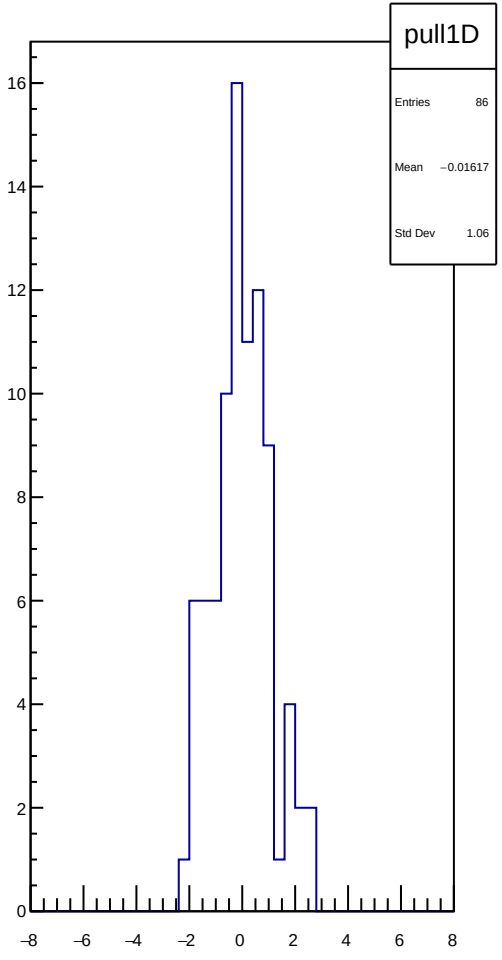

asym_sam_15_dd_correction_rms vs run
χ² / ndf 4215 / 85
p0 774.2 ± 0.5996
880
860
840
820
800
780
760
740
720
700
680

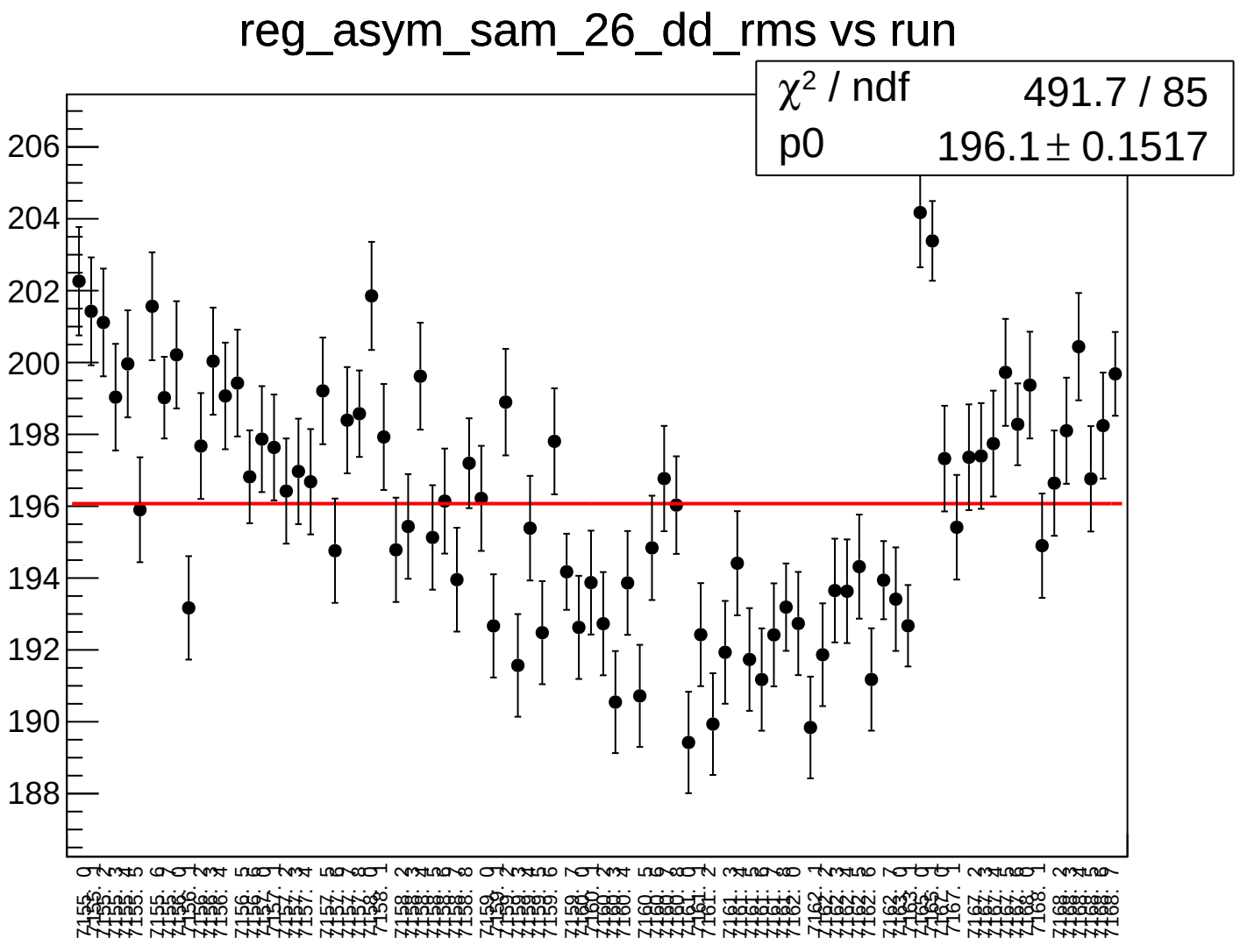

asym_sam_15_dd_mean vs run
χ² / ndf 65.62 / 85
p0 815.8 ± 856.5
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −2244
Std Dev 2282
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

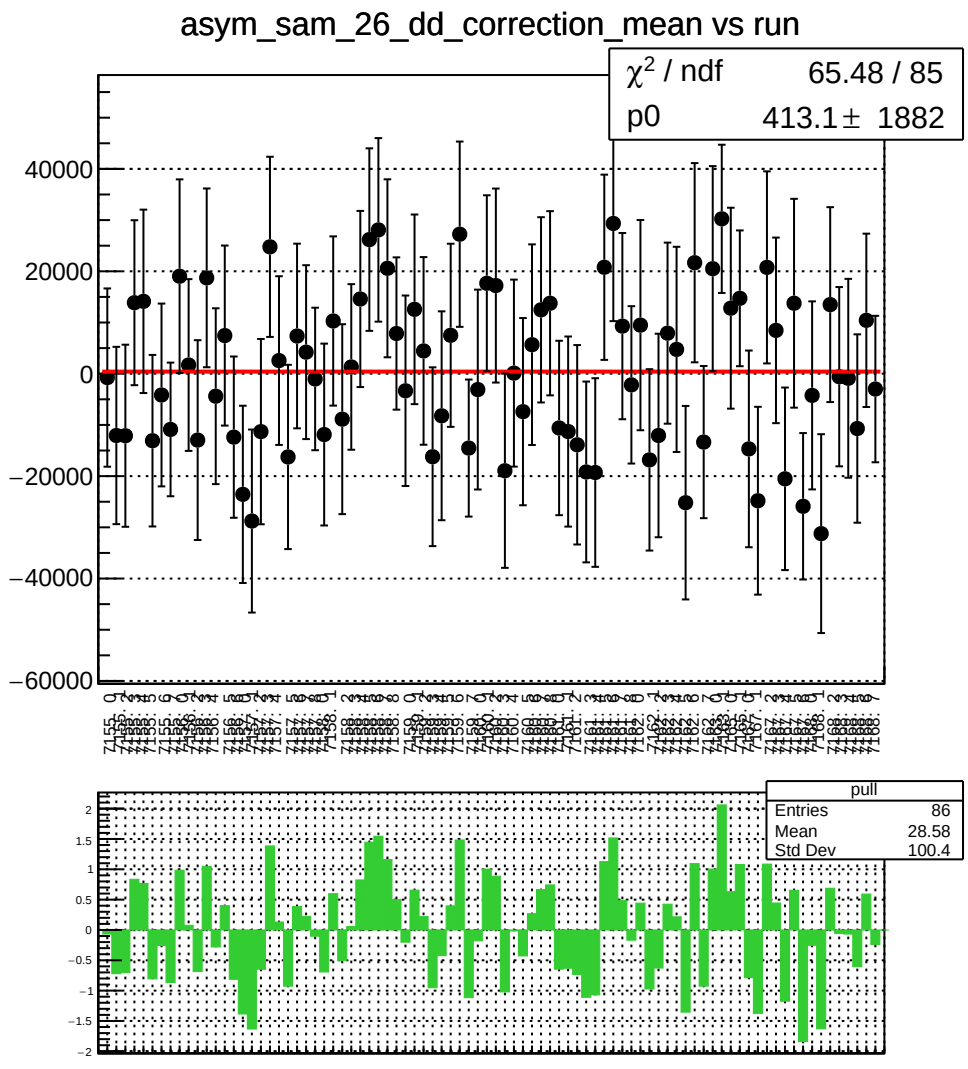

pull1D
Entries 86
Mean 0.0004504
Std Dev 0.8735
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

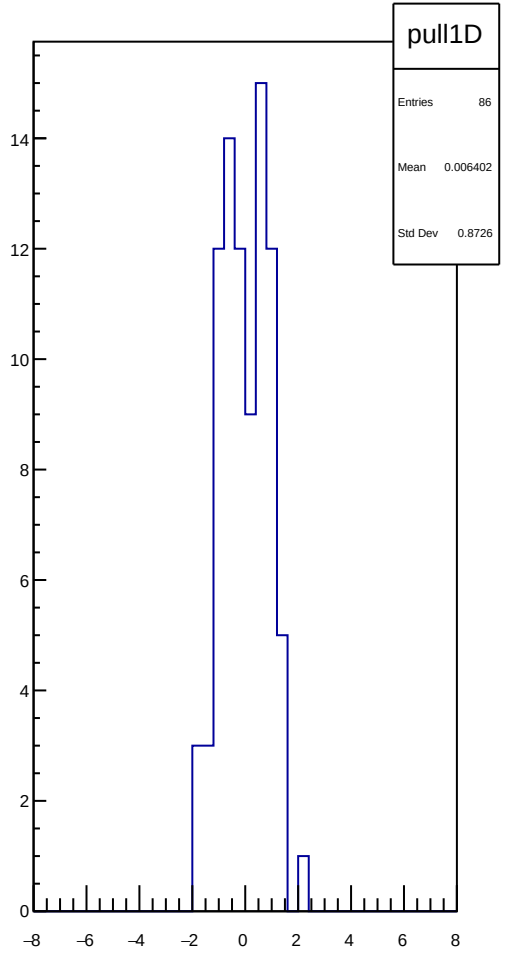

asym_sam_15_dd_rms vs run
χ² / ndf 4035 / 85
p0 782.1 ± 0.6056
880
860
840
820
800
780
760
740
720
700
680

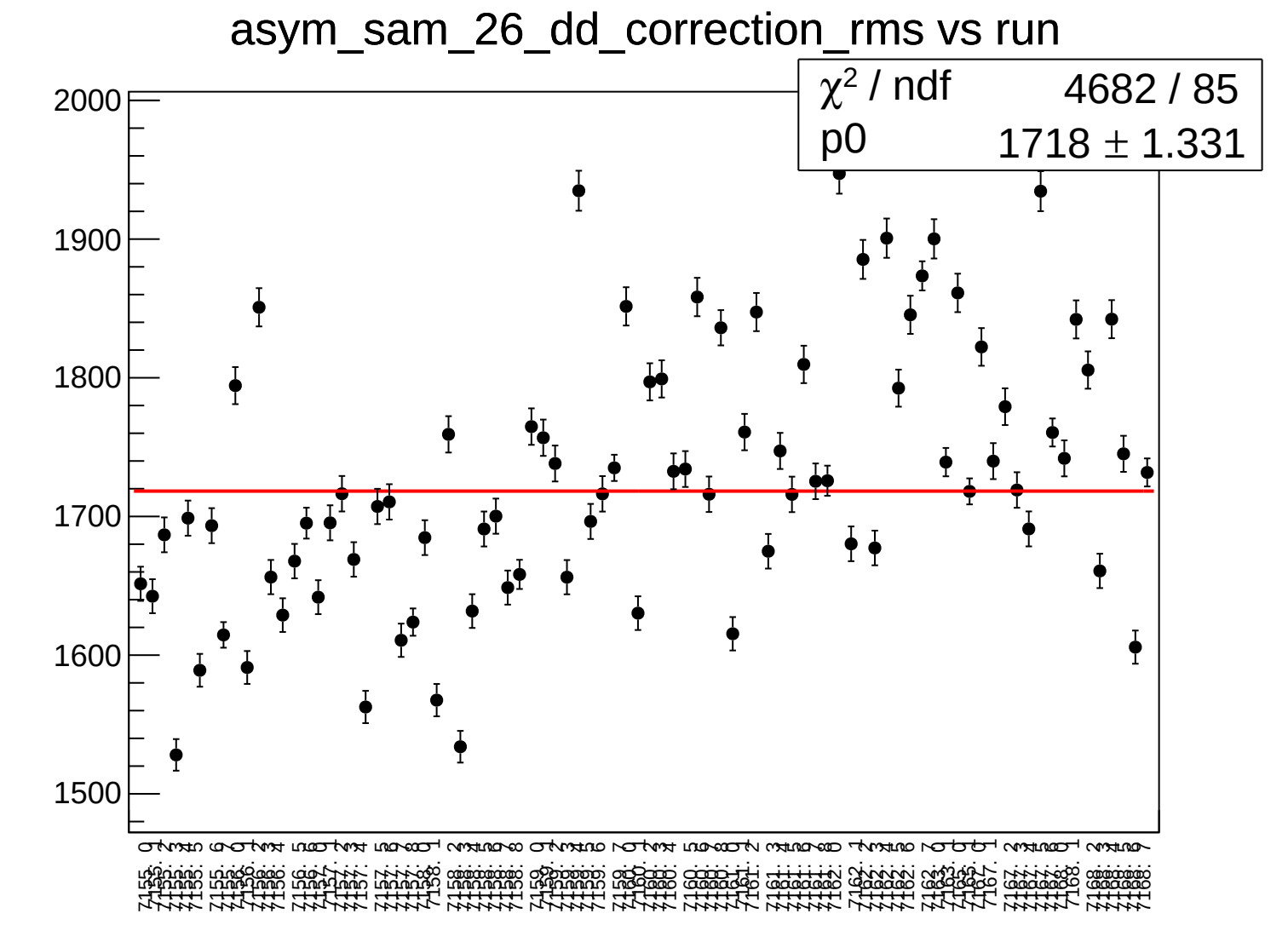

reg_asym_sam_26_dd_mean vs run
χ² / ndf 96.64 / 85
p0 471.2 ± 214.5
pull
Entries 86
Mean 95.89
Std Dev 54.5

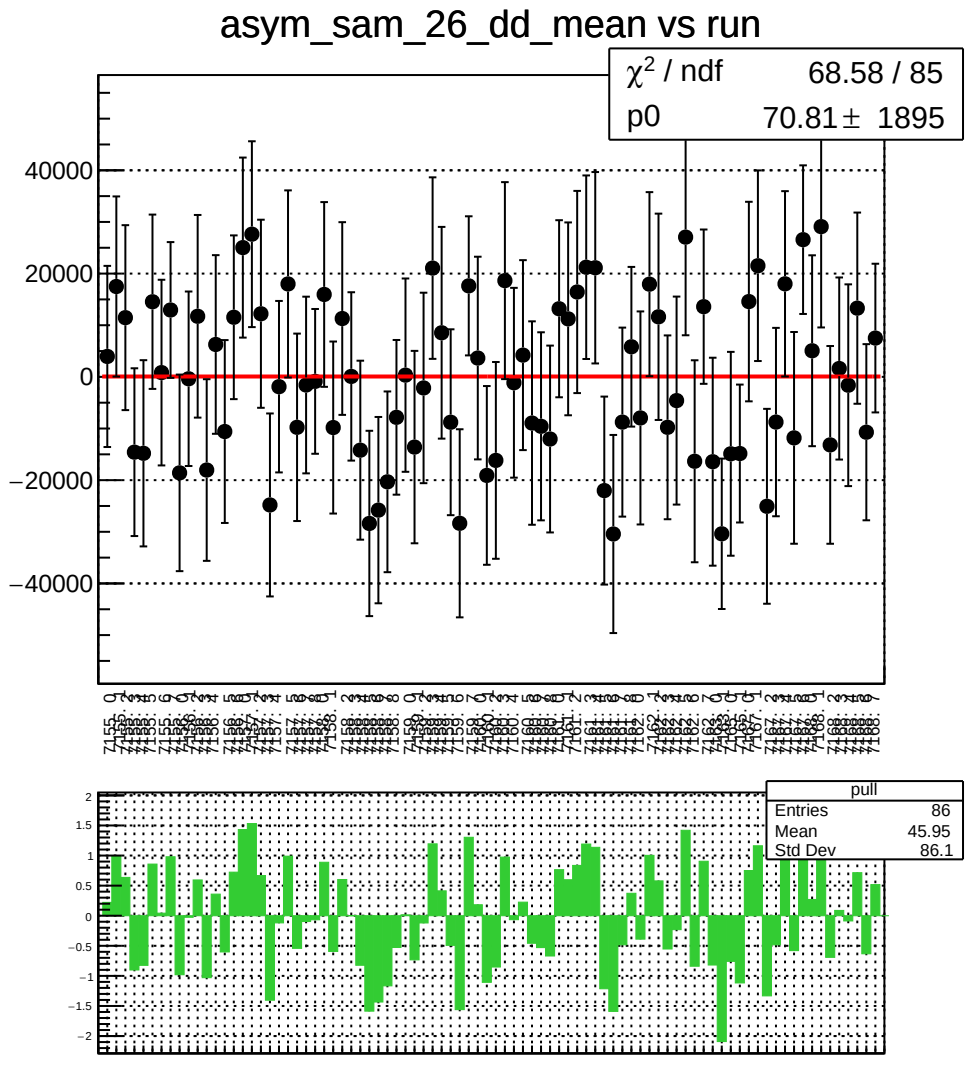

pull1D
Entries 86
Mean −0.01617
Std Dev 1.06

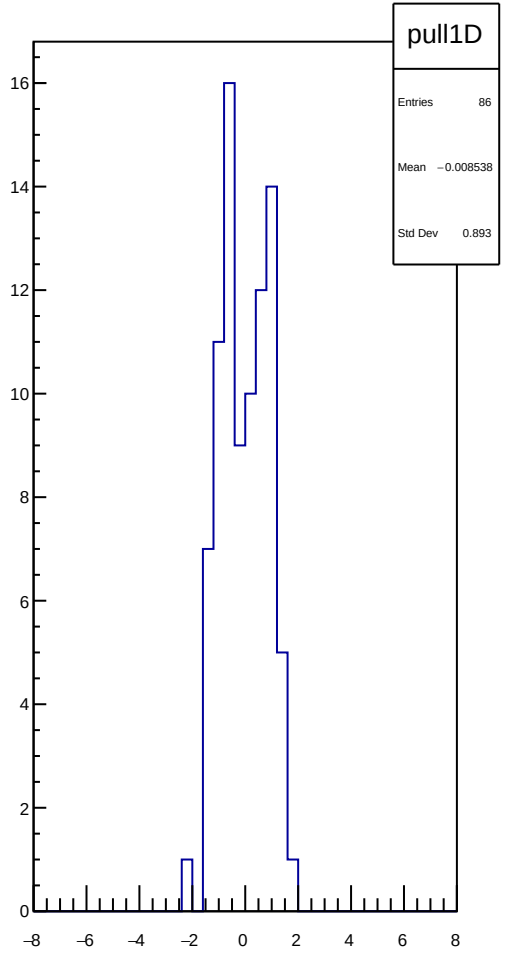

reg_asym_sam_26_dd_rms vs run
χ² / ndf 491.7 / 85
p0 196.1 ± 0.1517
206
204
202
200
198
196
194
192
190
188

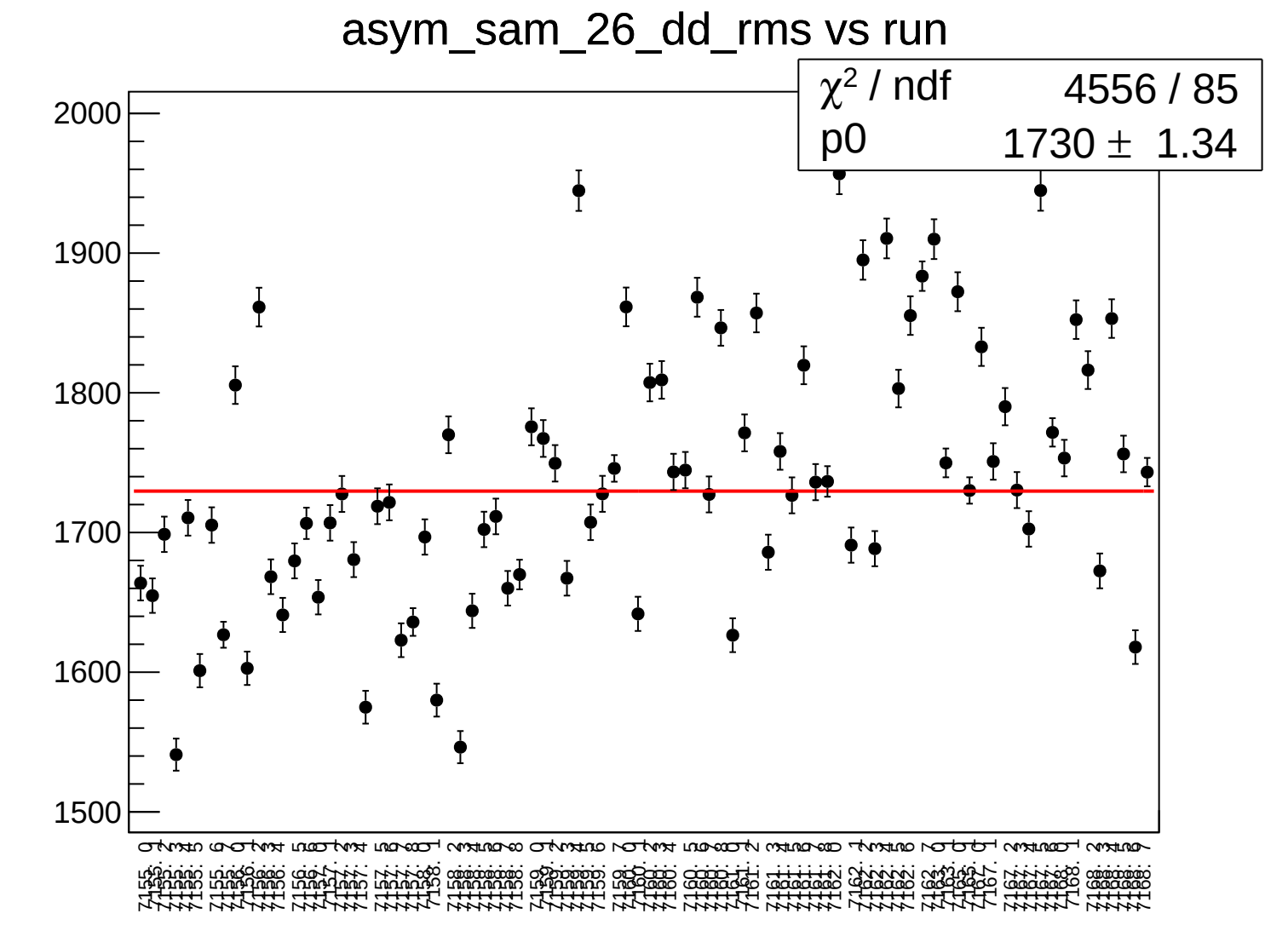

asym_sam_26_dd_correction_mean vs run
χ² / ndf 65.48 / 85
p0 413.1 ± 1882
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean 28.58
Std Dev 100.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

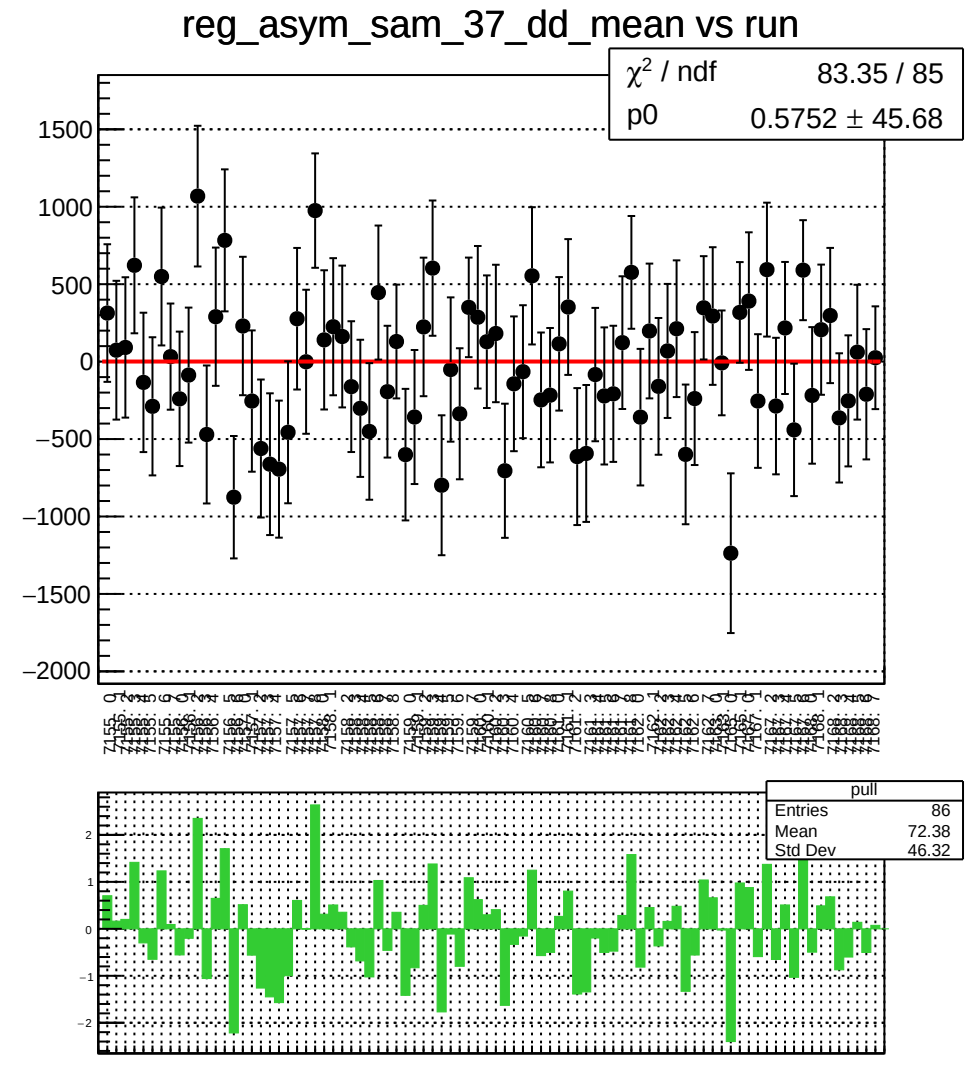

pull1D
Entries 86
Mean 0.006402
Std Dev 0.8726
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

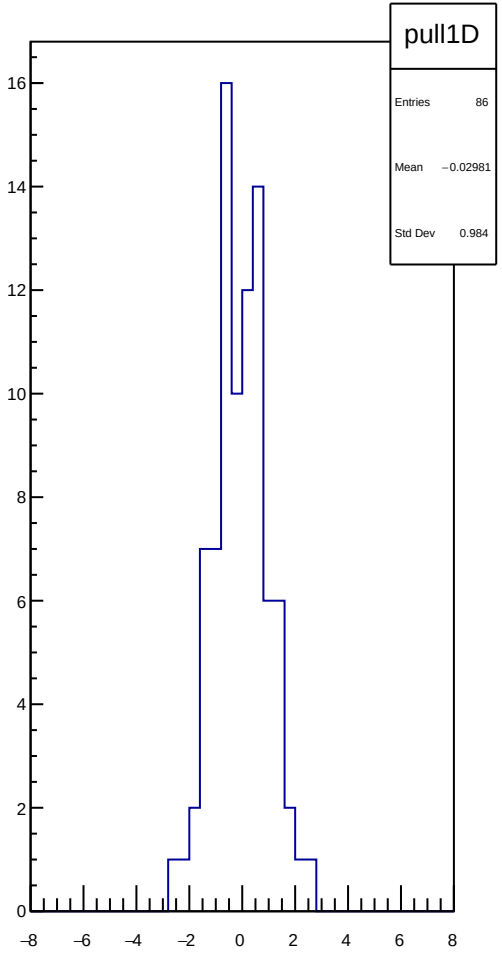

asym_sam_26_dd_correction_rms vs run
χ² / ndf 4682 / 85
p0 1718 ± 1.331
2000
1900
1800
1700
1600
1500

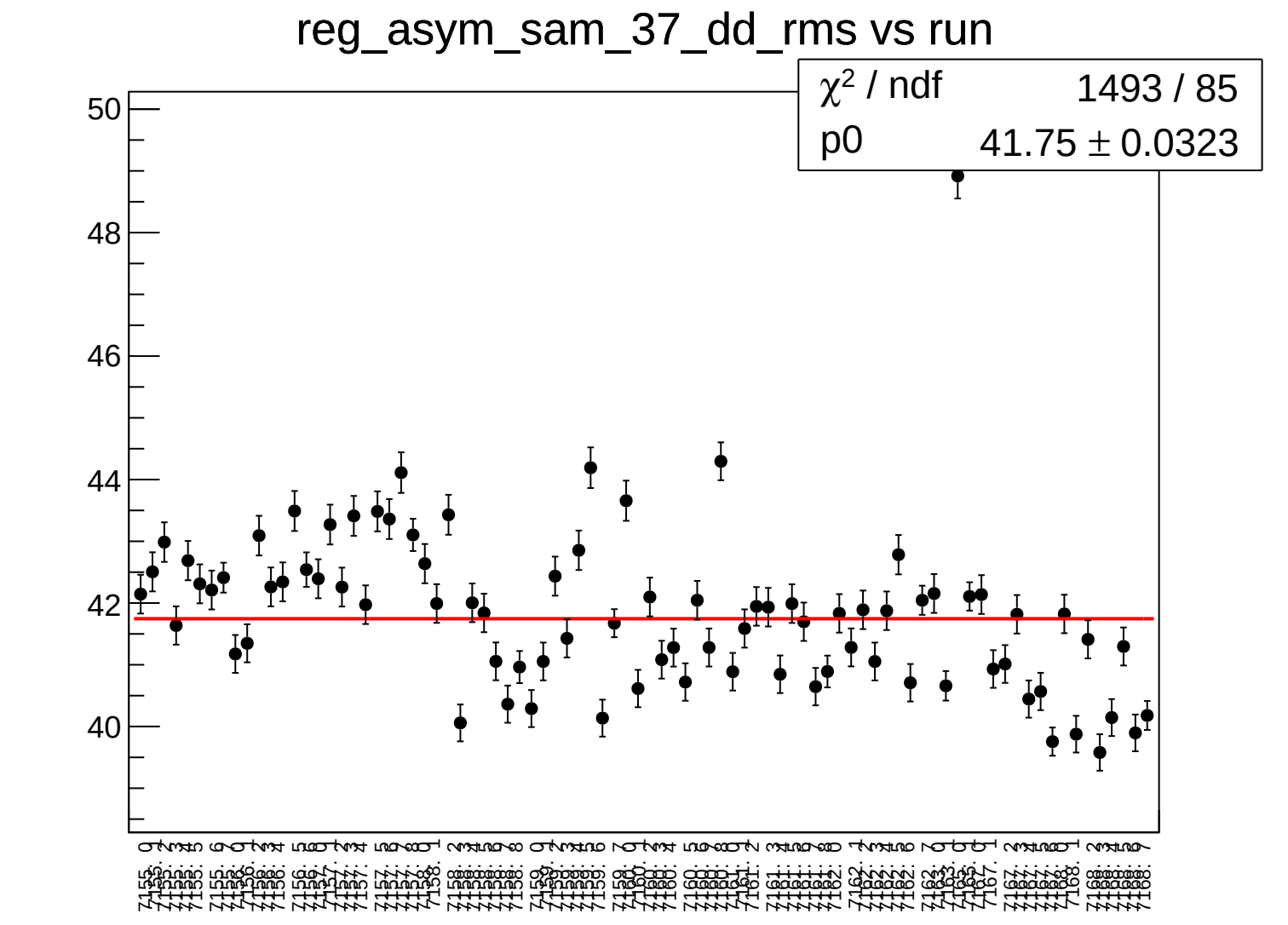

asym_sam_26_dd_mean vs run
χ² / ndf 68.58 / 85
p0 70.81 ± 1895
40000
20000
0
−20000
−40000
pull
Entries 86
Mean 45.95
Std Dev 86.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

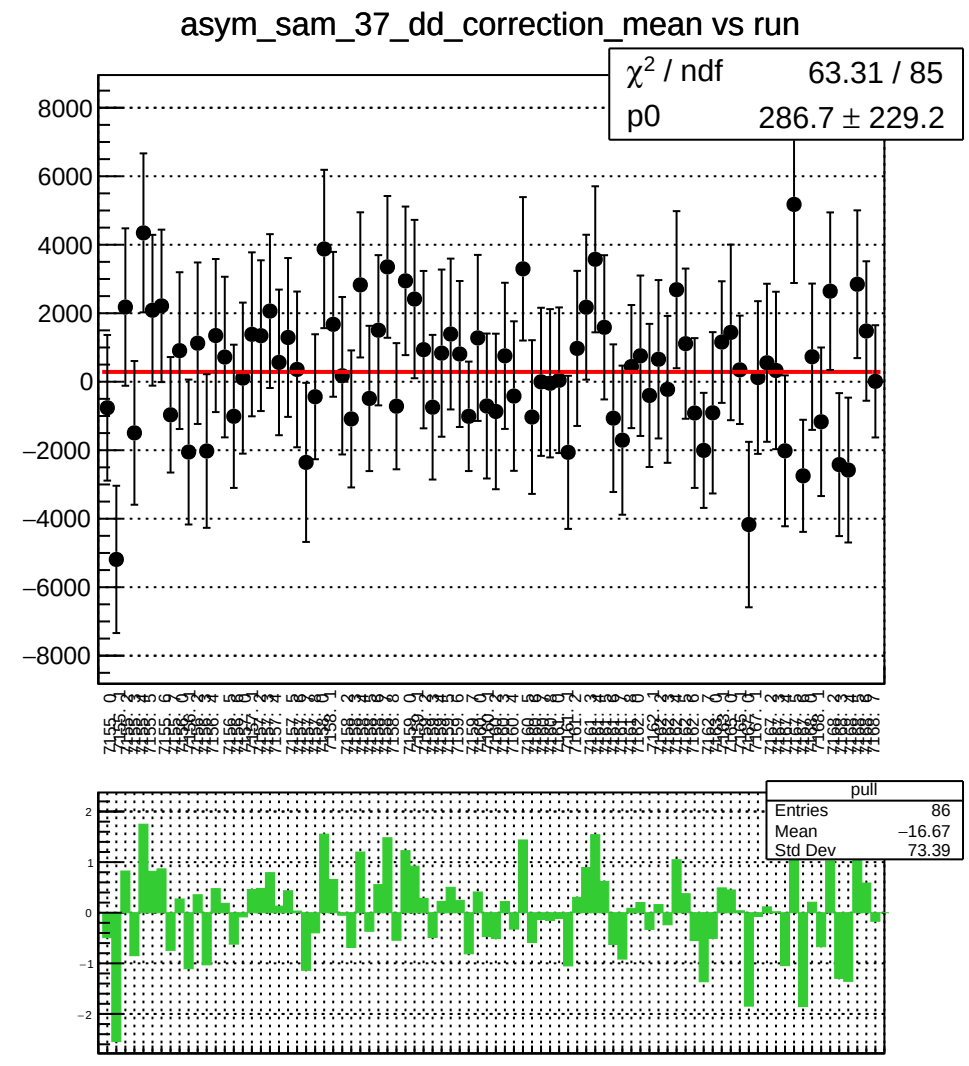

pull1D
Entries 86
Mean −0.008538
Std Dev 0.893
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

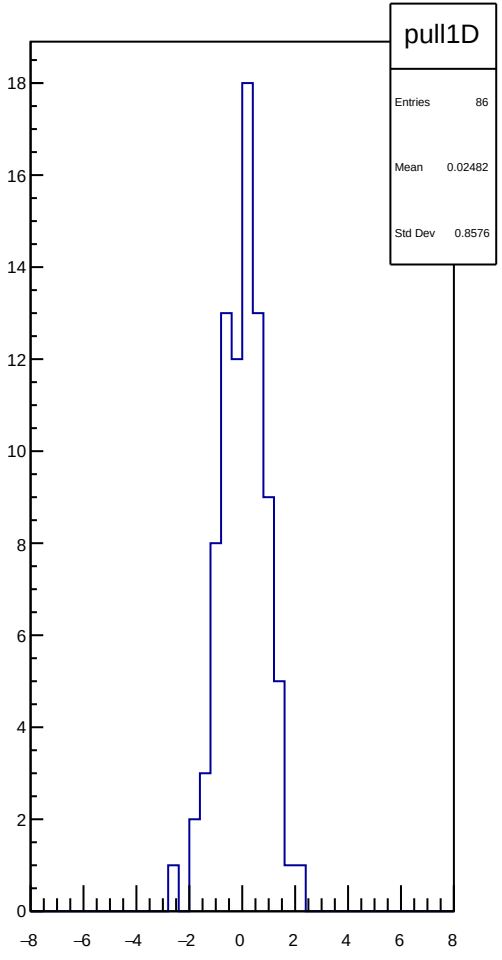

asym_sam_26_dd_rms vs run
χ² / ndf 4556 / 85
p0 1730 ± 1.34
2000
1900
1800
1700
1600
1500

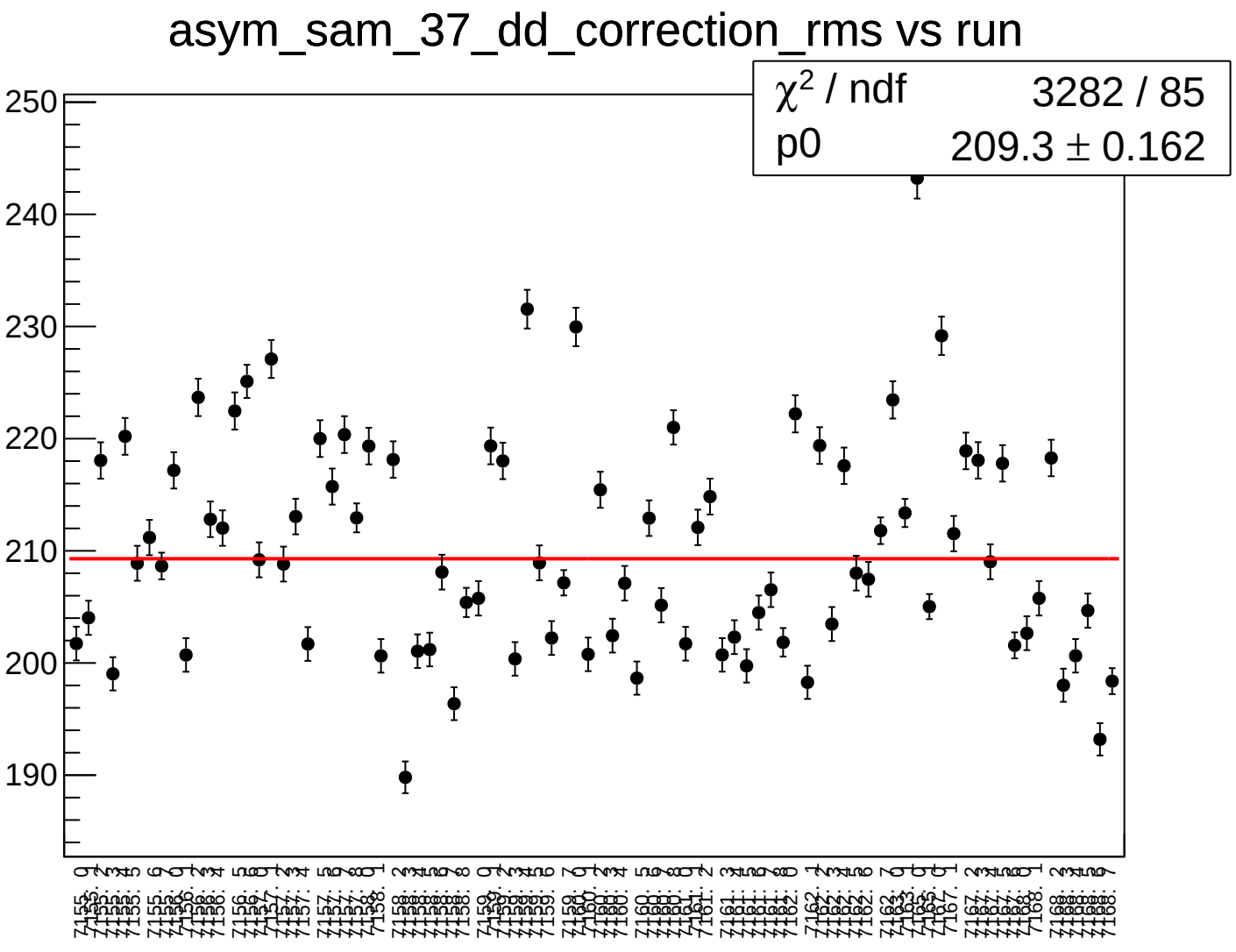

reg_asym_sam_37_dd_mean vs run
χ² / ndf 83.35 / 85
p0 0.5752 ± 45.68
pull
Entries 86
Mean 72.38
Std Dev 46.32

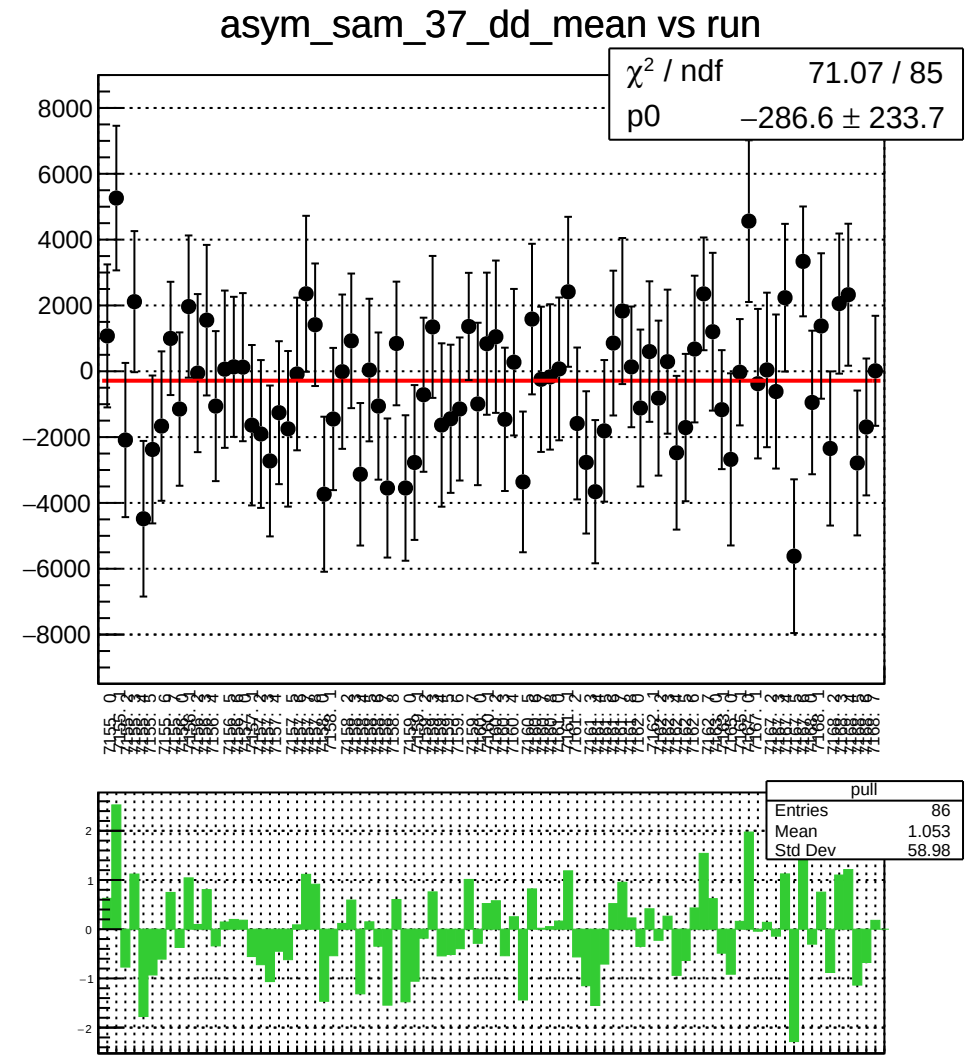

pull1D
Entries 86
Mean −0.02981
Std Dev 0.984

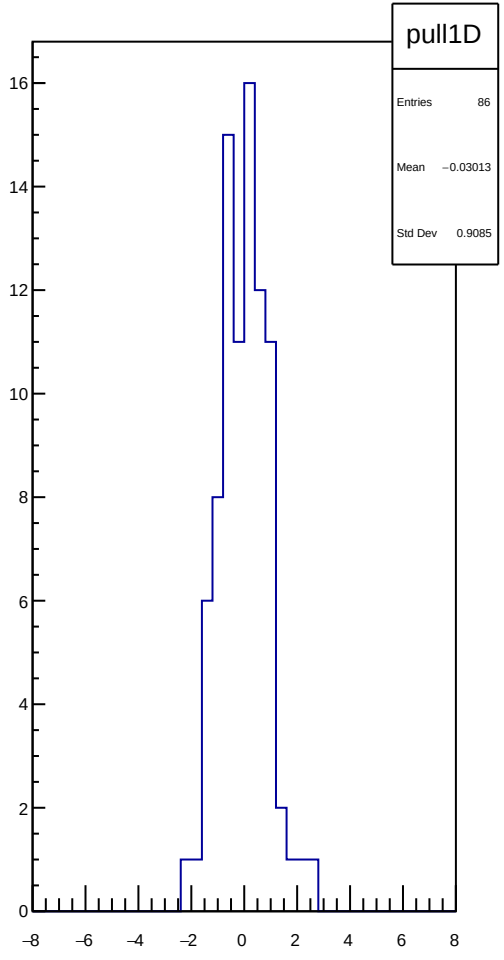

reg_asym_sam_37_dd_rms vs run
χ² / ndf 1493 / 85
p0 41.75 ± 0.0323
50
48
46
44
42
40


asym_sam_37_dd_correction_mean vs run
χ² / ndf 63.31 / 85
p0 286.7 ± 229.2
pull
Entries 86
Mean −16.67
Std Dev 73.39


pull1D
Entries 86
Mean 0.02482
Std Dev 0.8576


asym_sam_37_dd_correction_rms vs run
χ² / ndf 3282 / 85
p0 209.3 ± 0.162
250
240
230
220
210
200
190


asym_sam_37_dd_mean vs run
χ² / ndf 71.07 / 85
p0 −286.6 ± 233.7
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 86
Mean 1.053
Std Dev 58.98
2
1
0
−1
−2


pull1D
Entries 86
Mean −0.03013
Std Dev 0.9085
16
14
12
10
8
6
4
2
0
−8
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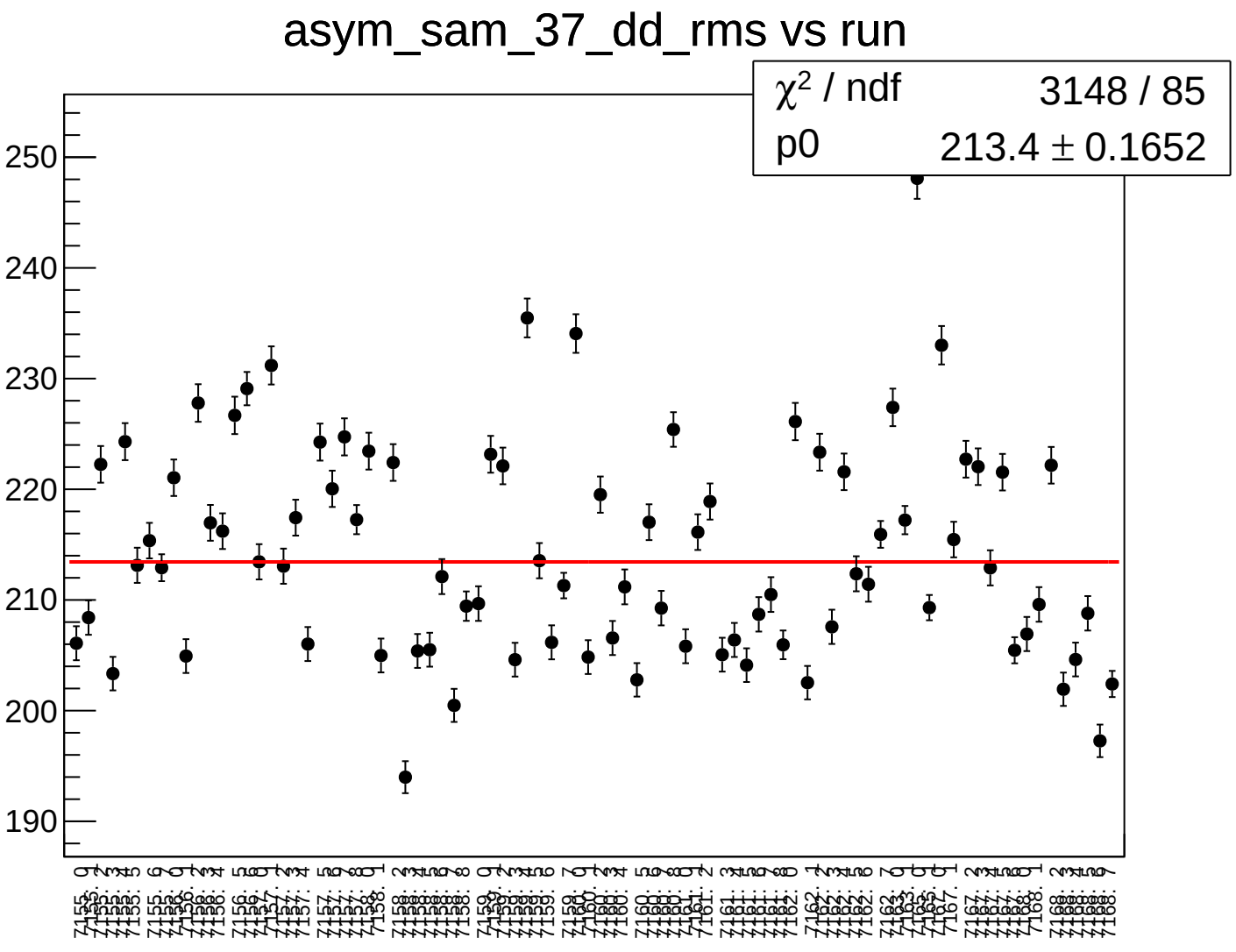
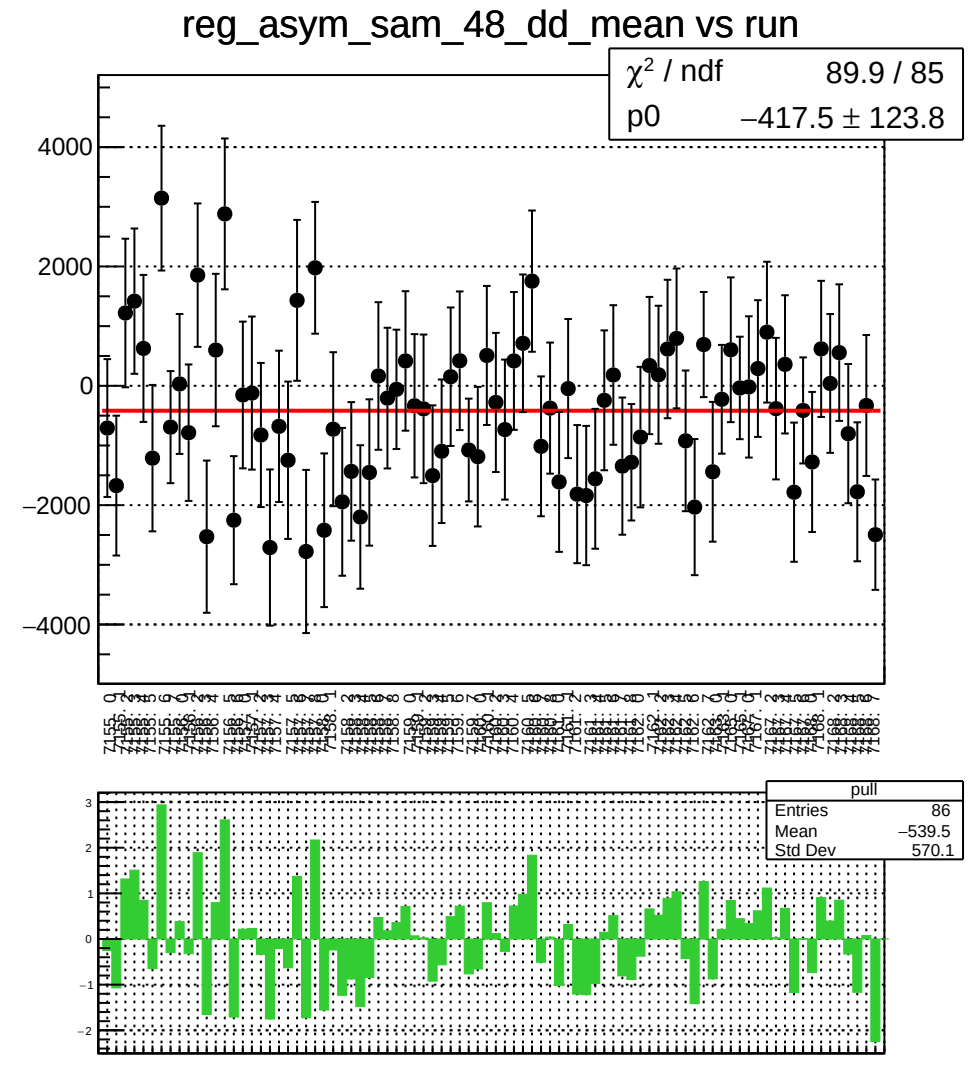
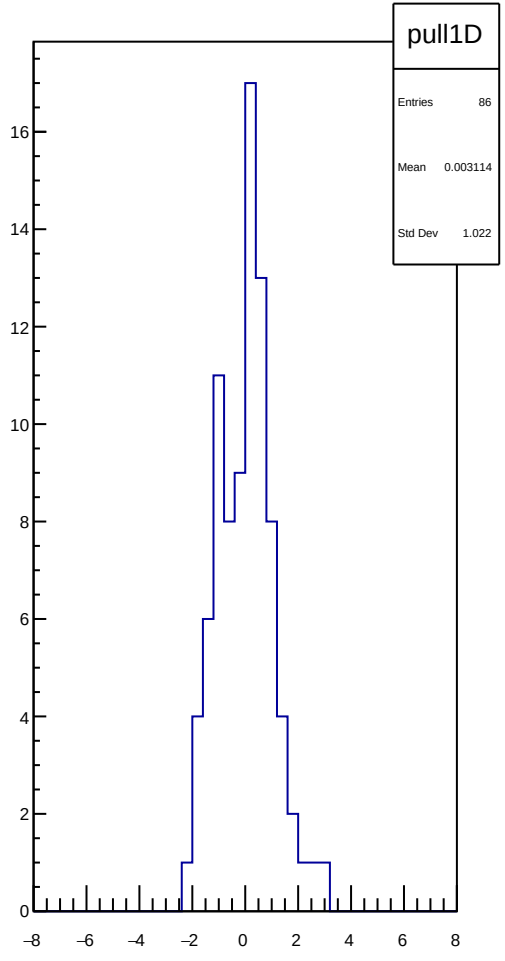
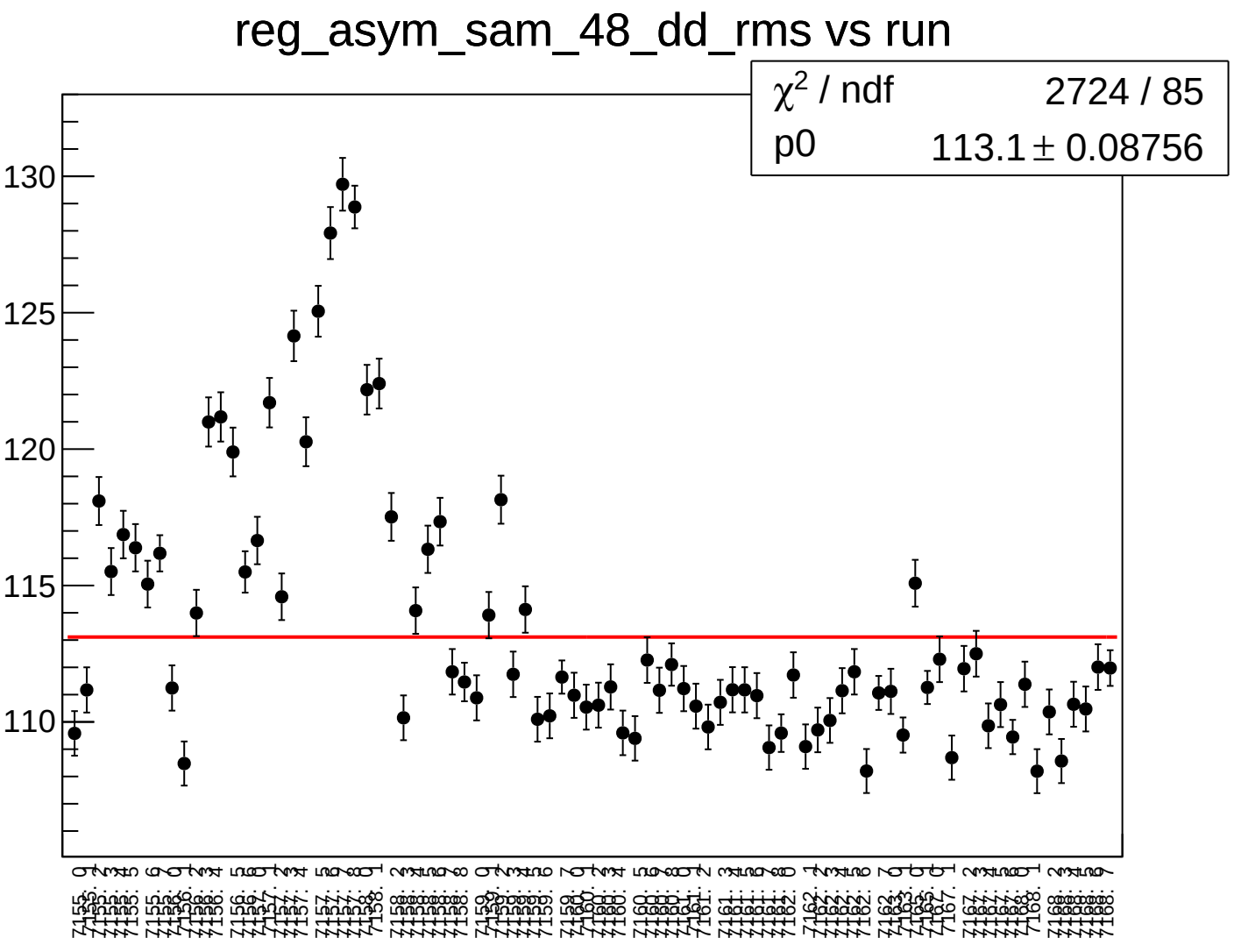
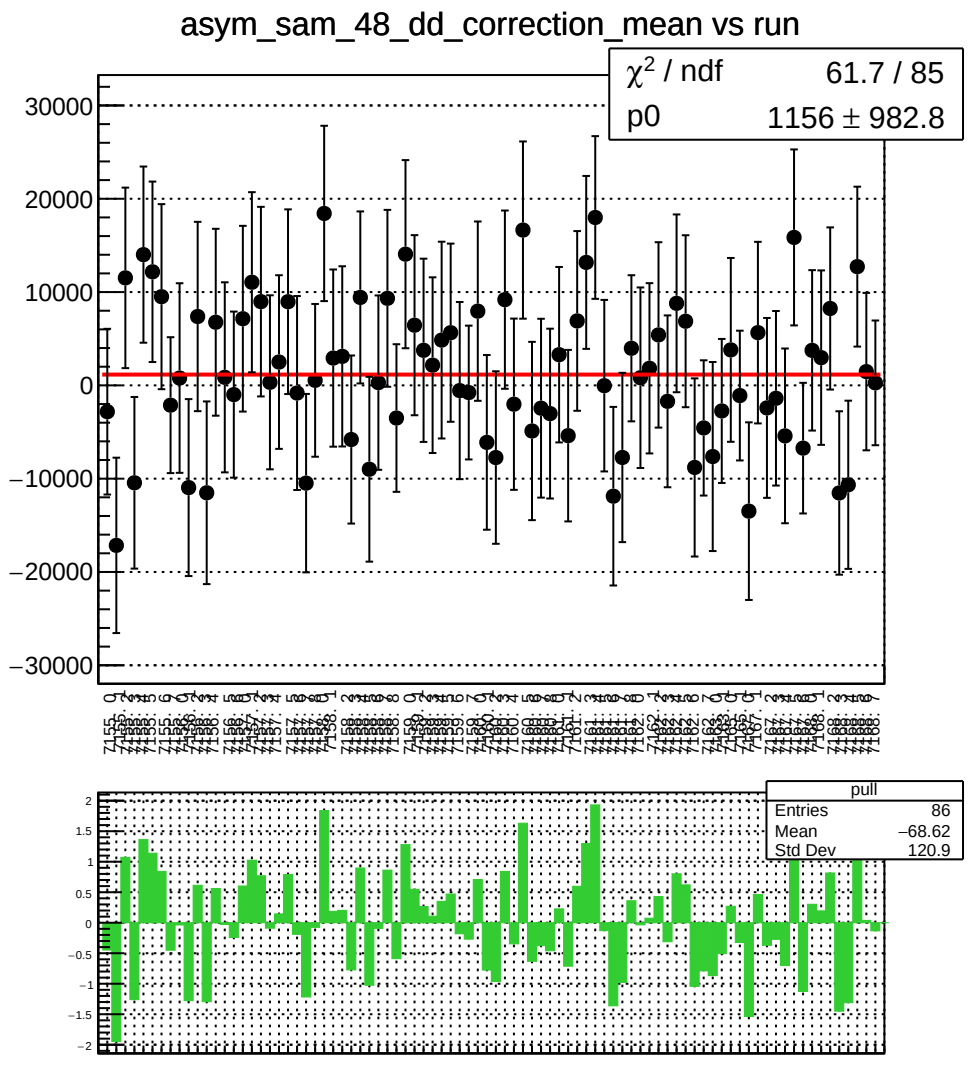
−4
−2
0
2
4
6
8

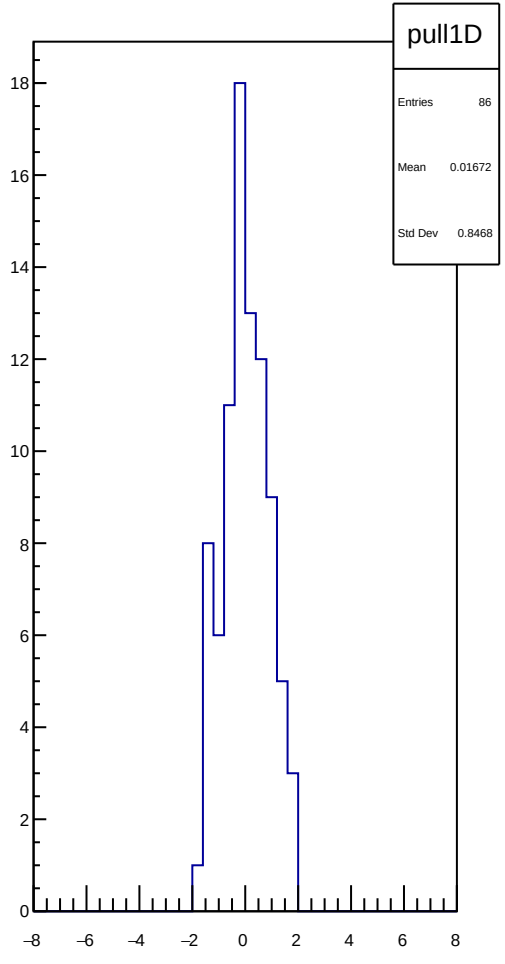

asym_sam_37_dd_rms vs run
χ² / ndf 3148 / 85
p0 213.4 ± 0.1652
250
240
230
220
210
200
190

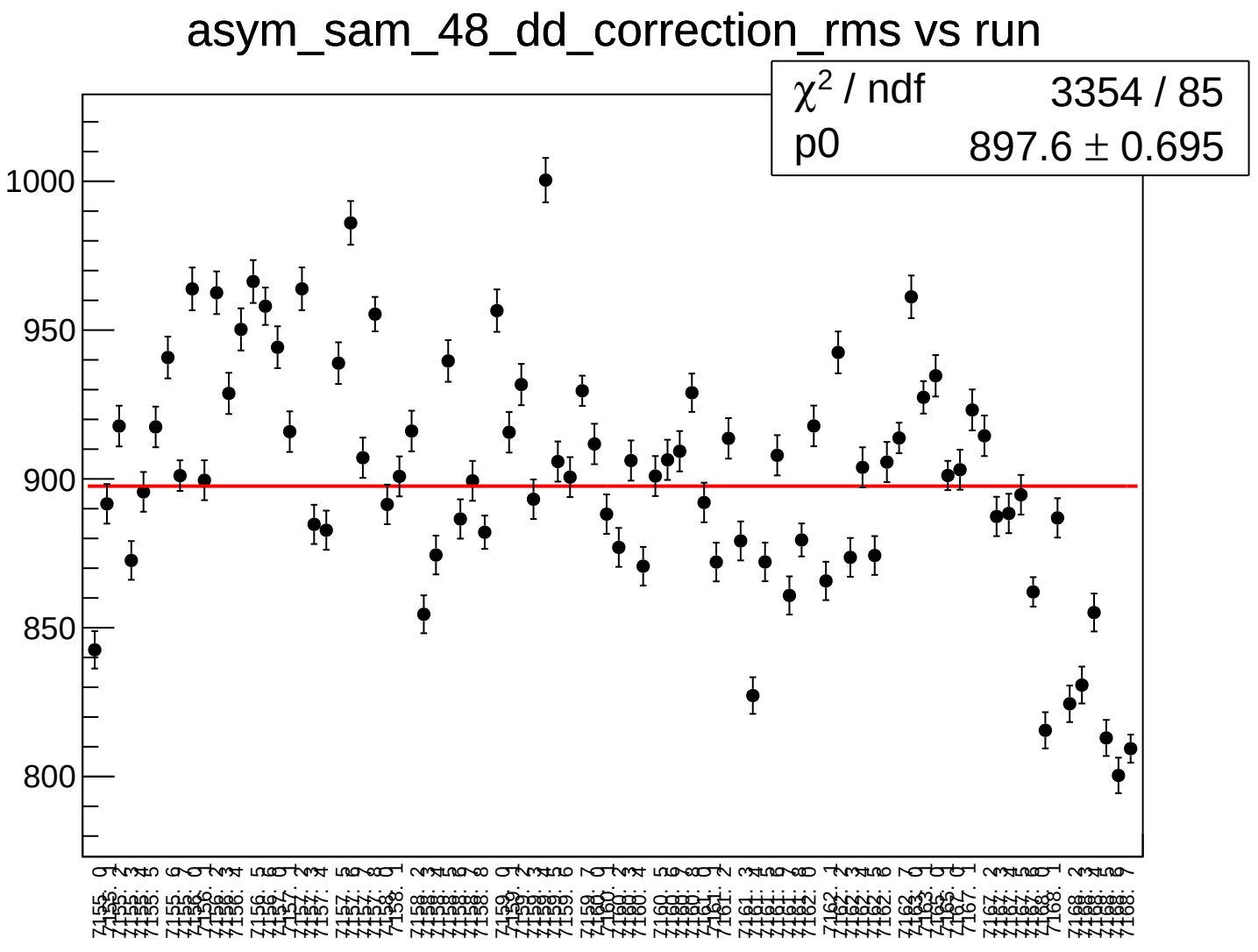

reg_asym_sam_48_dd_mean vs run
χ² / ndf 89.9 / 85
p0 −417.5 ± 123.8
4000
2000
0
−2000
−4000
pull
Entries 86
Mean −539.5
Std Dev 570.1
3
2
1
0
−1
−2

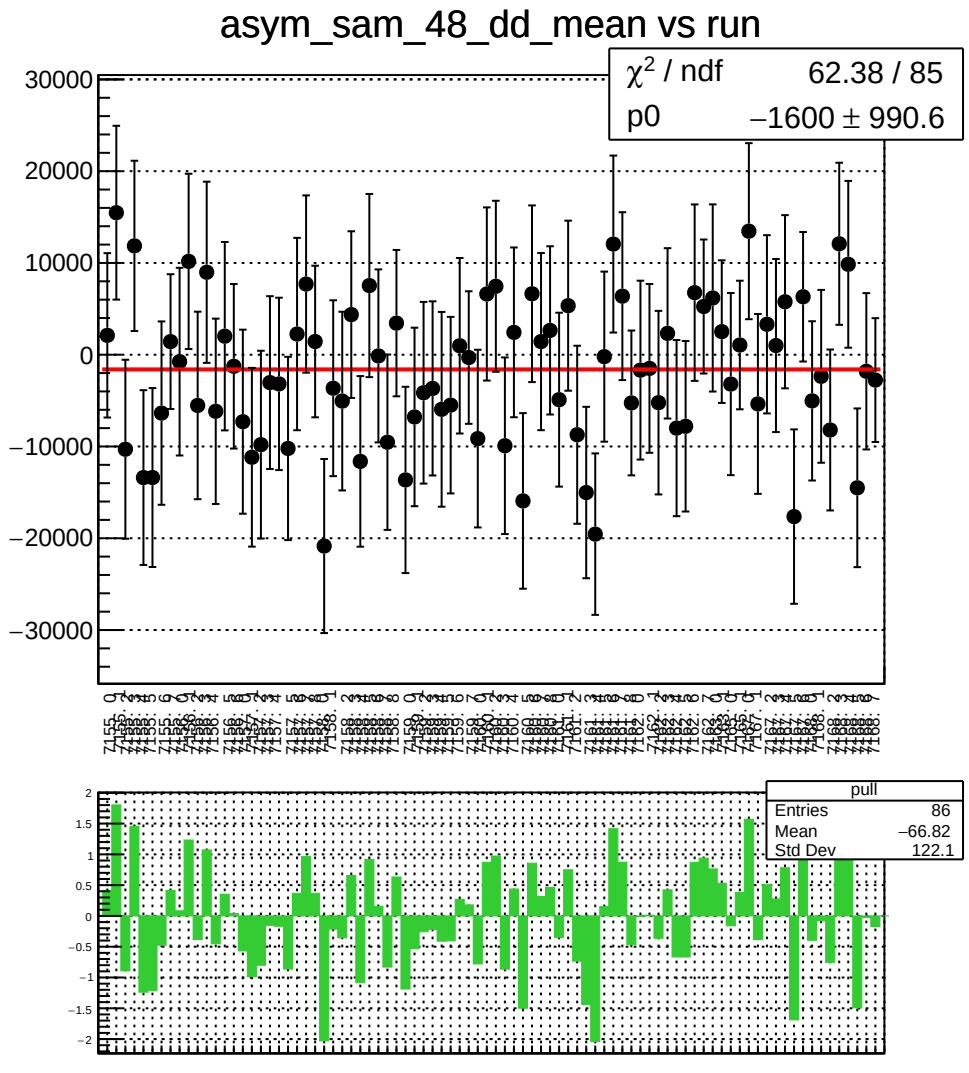

pull1D
Entries 86
Mean 0.003114
Std Dev 1.022
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

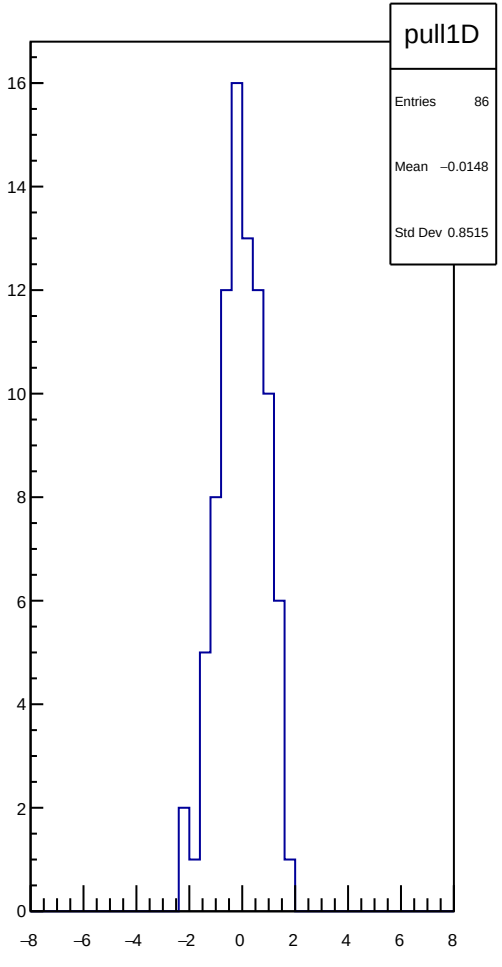

reg_asym_sam_48_dd_rms vs run
χ^2 / ndf 2724 / 85
p0 113.1 ± 0.08756
130
125
120
115
110

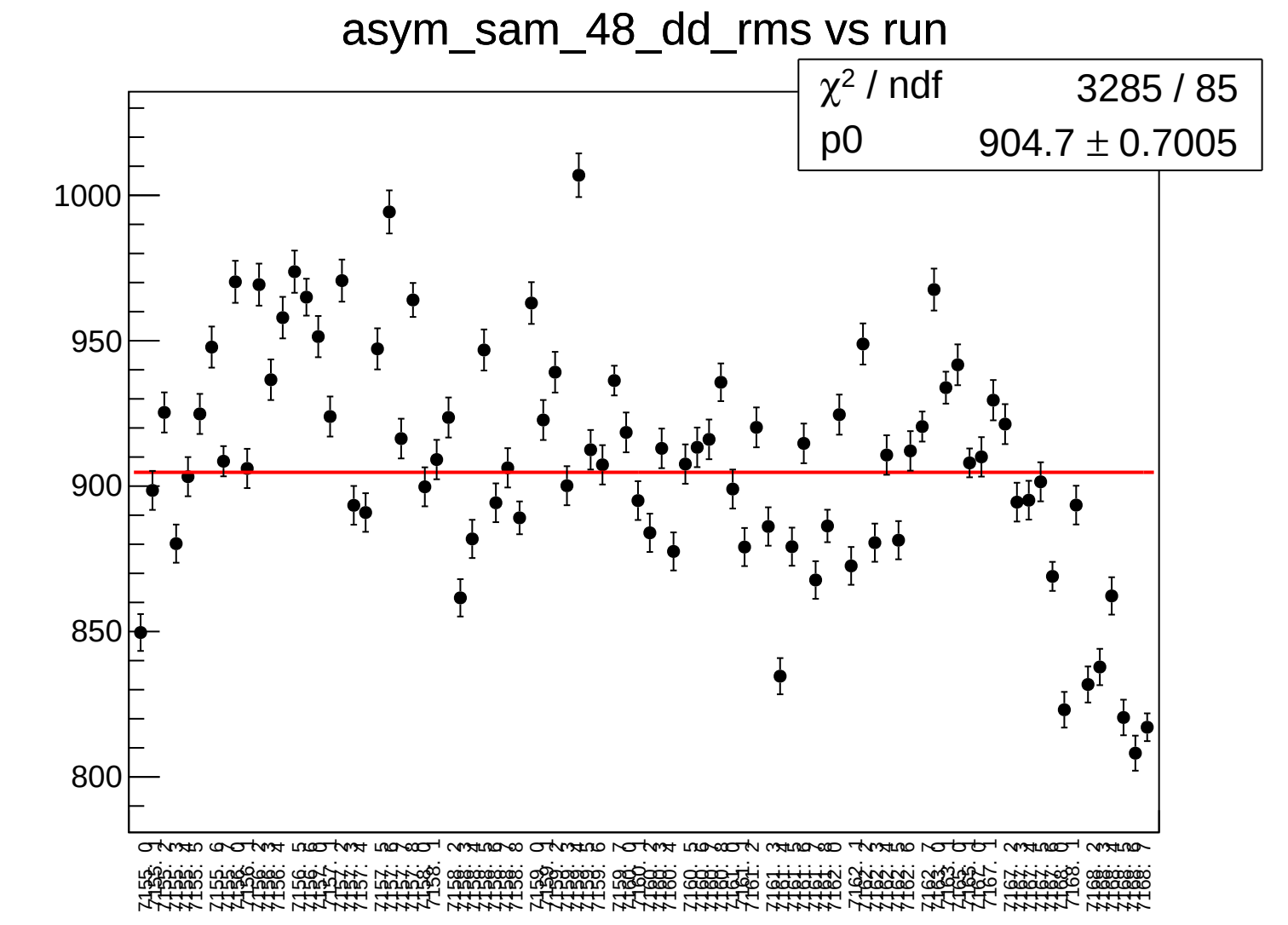

asym_sam_48_dd_correction_mean vs run
χ² / ndf 61.7 / 85
p0 1156 ± 982.8
pull
Entries 86
Mean −68.62
Std Dev 120.9

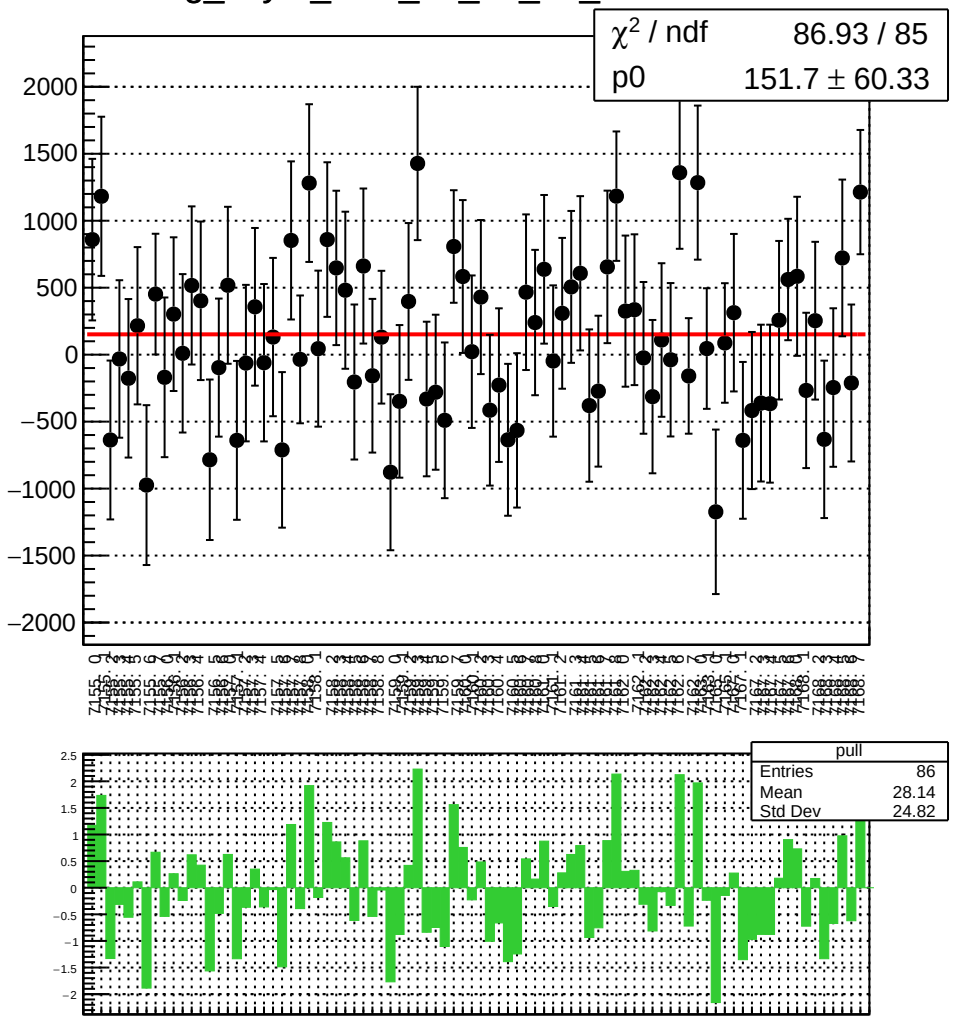

pull1D
Entries 86
Mean 0.01672
Std Dev 0.8468

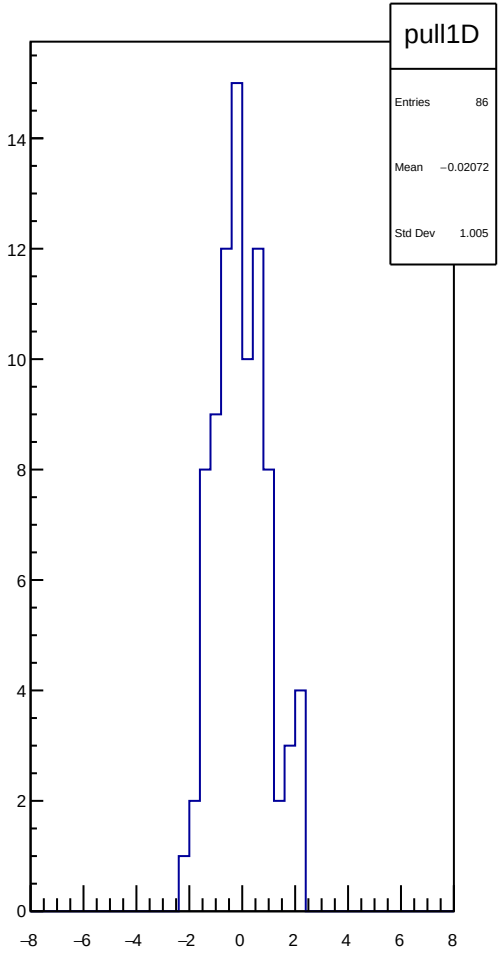

asym_sam_48_dd_correction_rms vs run
χ² / ndf 3354 / 85
p0 897.6 ± 0.695
1000
950
900
850
800

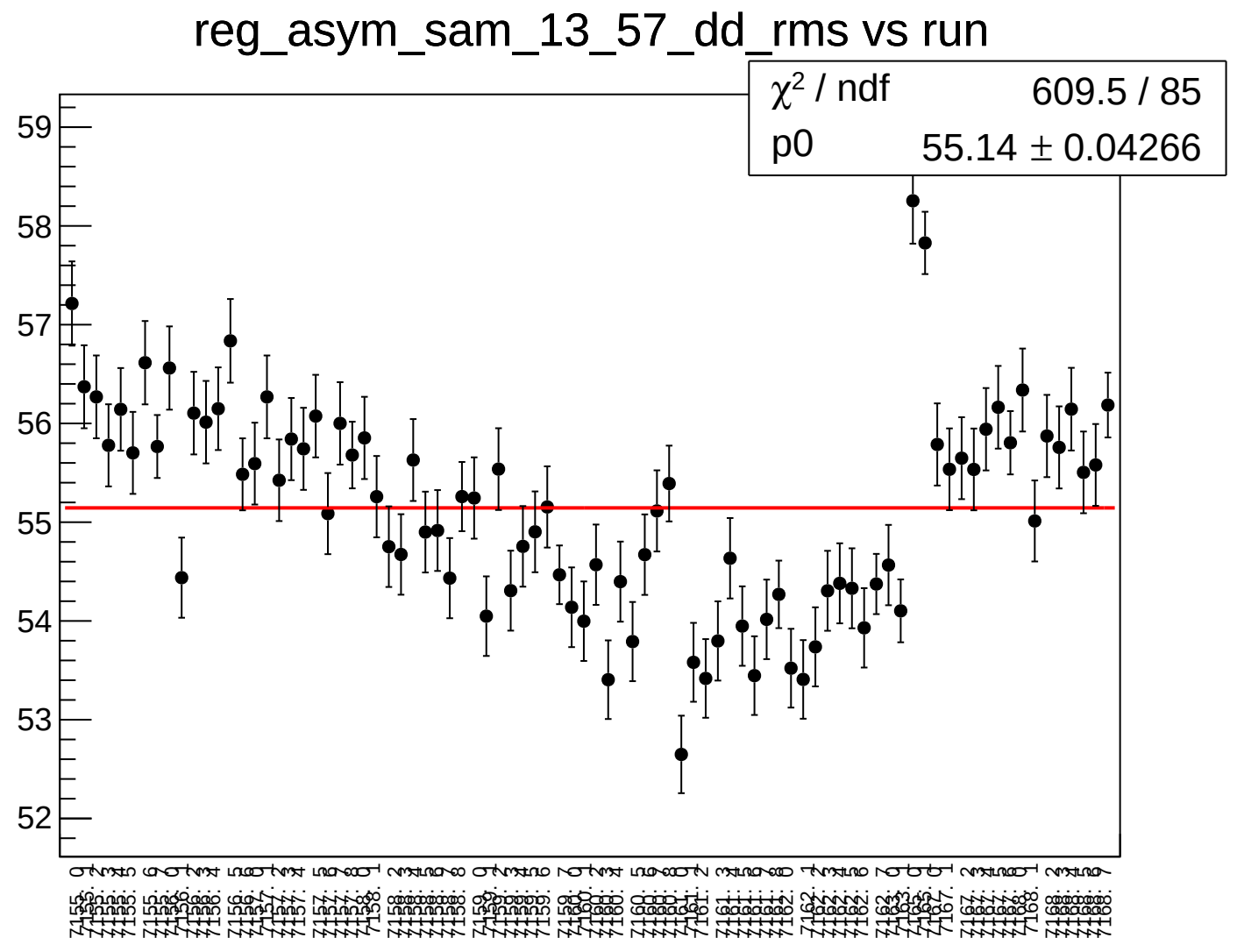

asym_sam_48_dd_mean vs run
χ² / ndf 62.38 / 85
p0 −1600 ± 990.6
pull
Entries 86
Mean −66.82
Std Dev 122.1

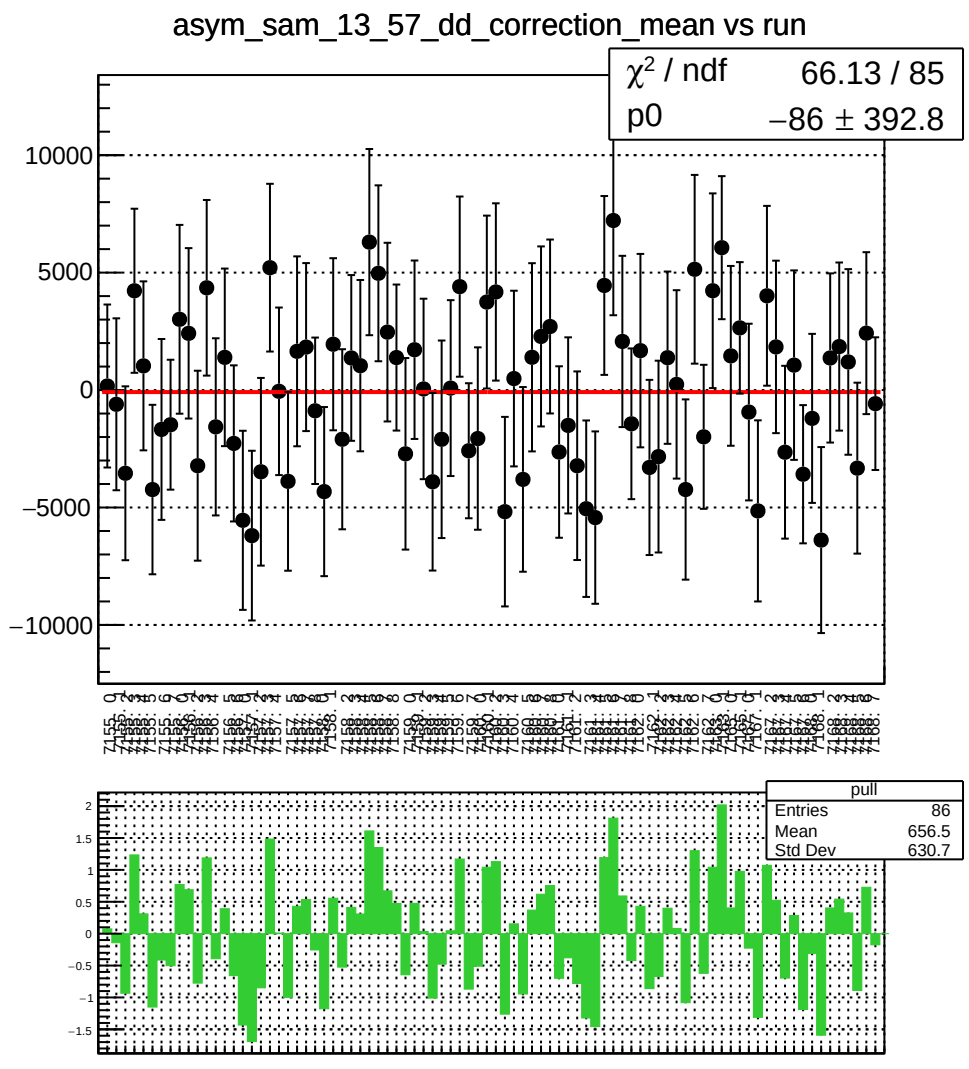

pull1D
Entries 86
Mean −0.0148
Std Dev 0.8515

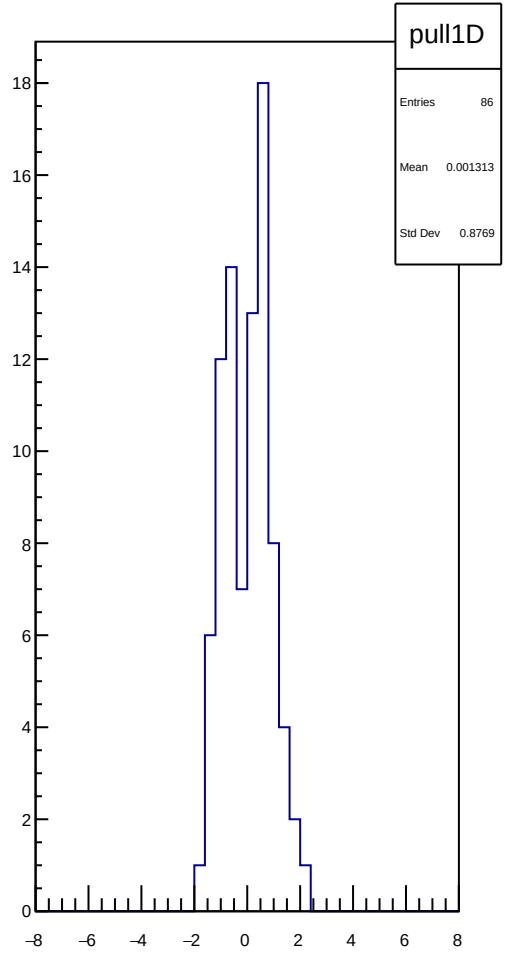

asym_sam_48_dd_rms vs run
χ² / ndf 3285 / 85
p0 904.7 ± 0.7005
1000
950
900
850
800

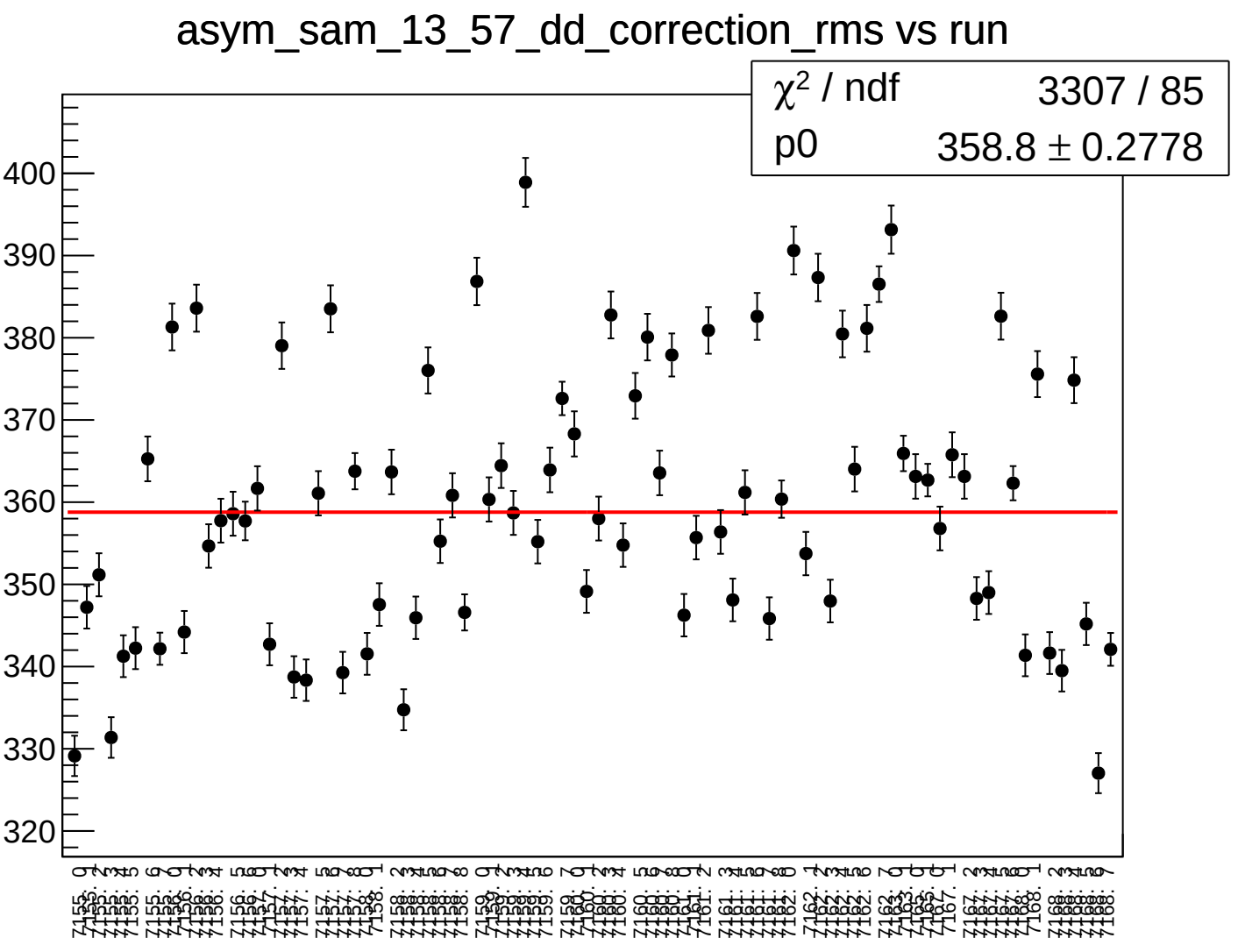

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 86.93 / 85
p0 151.7 ± 60.33
pull
Entries 86
Mean 28.14
Std Dev 24.82

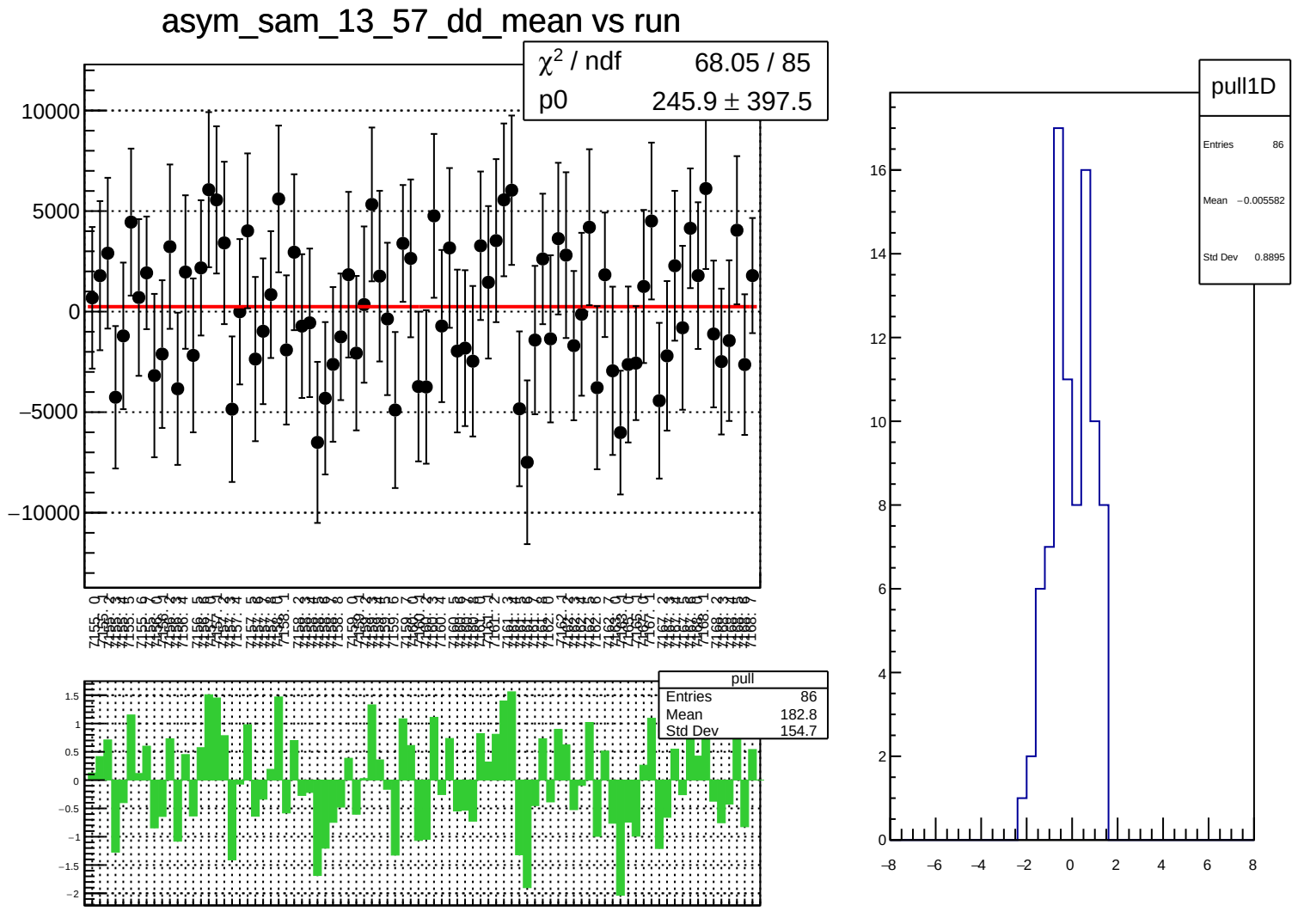

pull1D
Entries 86
Mean −0.02072
Std Dev 1.005

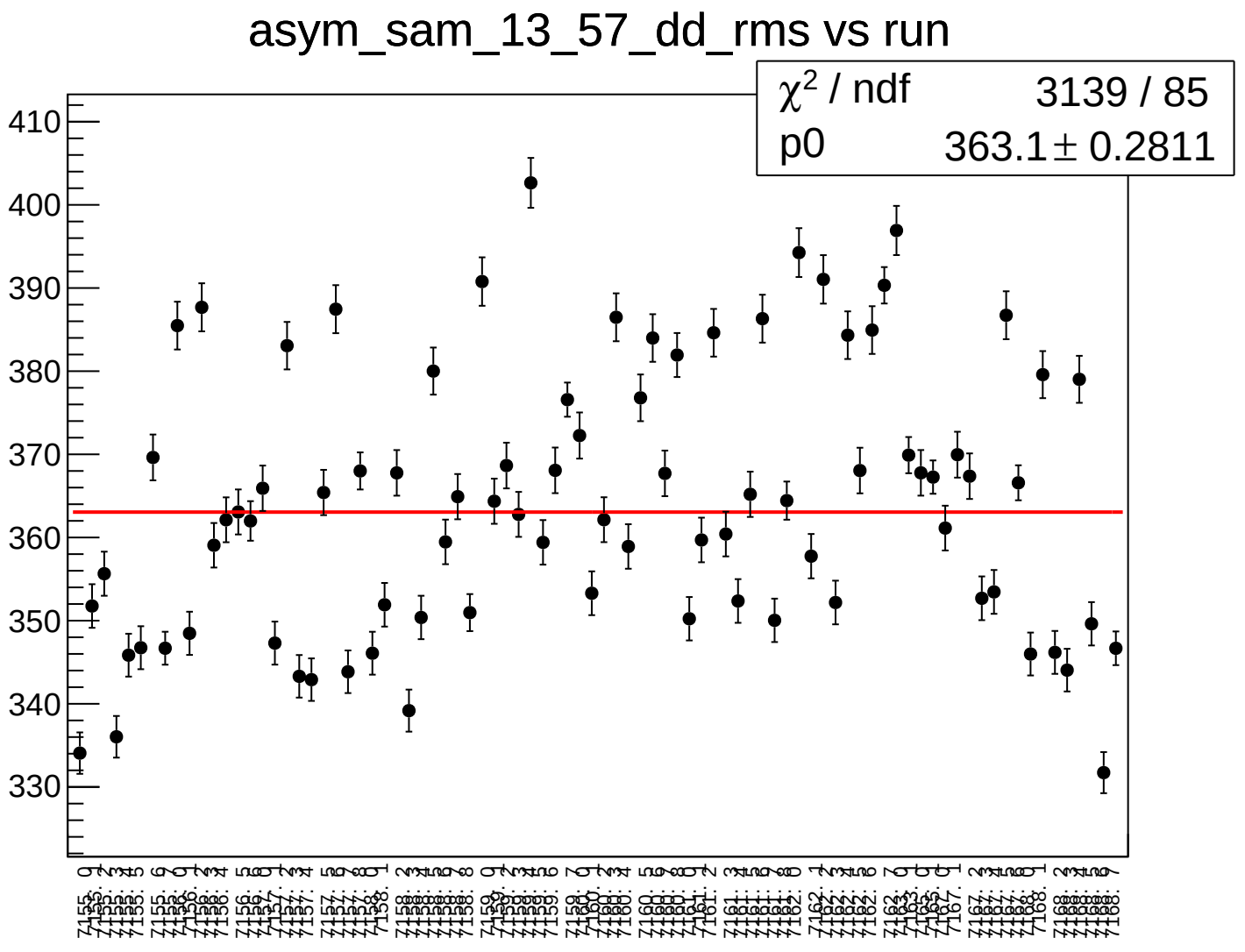

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 609.5 / 85
p0 55.14 ± 0.04266
59
58
57
56
55
54
53
52

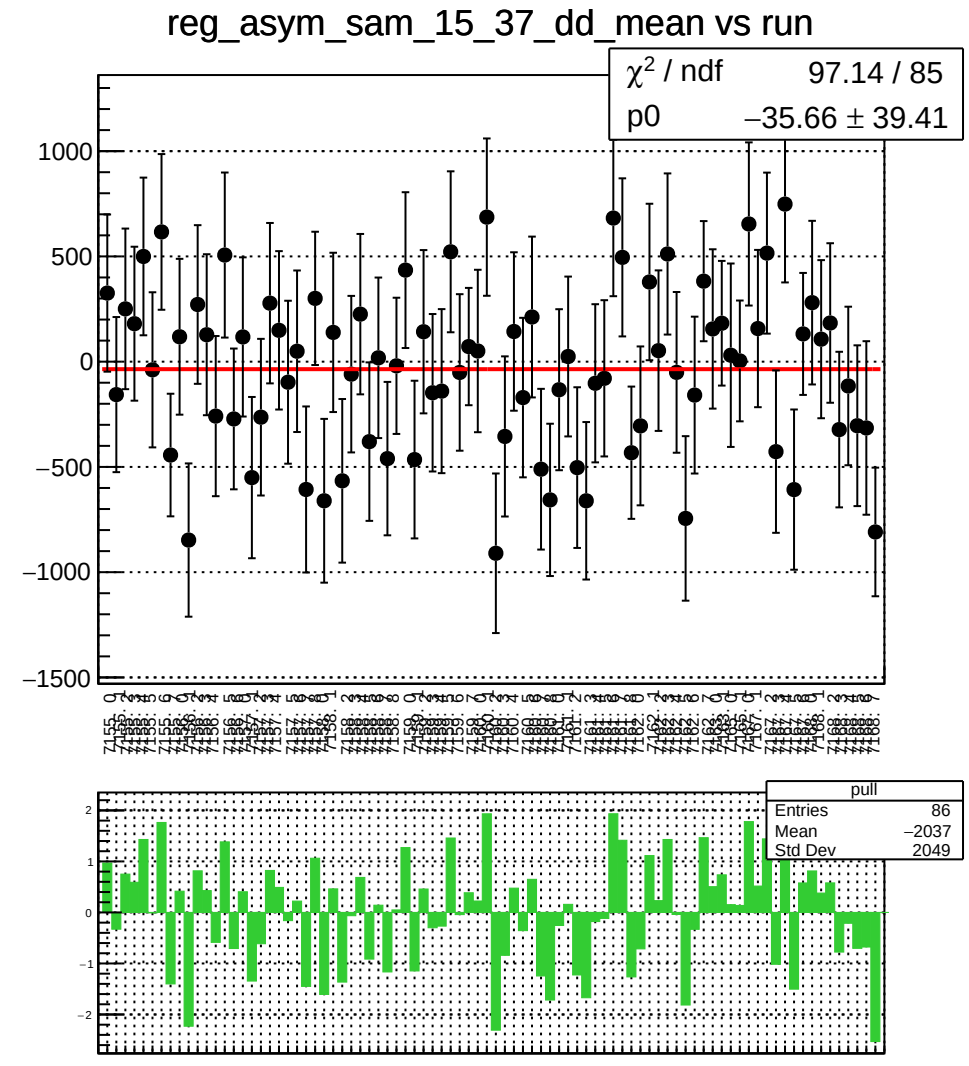

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 66.13 / 85
p0 −86 ± 392.8
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 656.5
Std Dev 630.7
2
1.5
1
0.5
0
−0.5
−1
−1.5

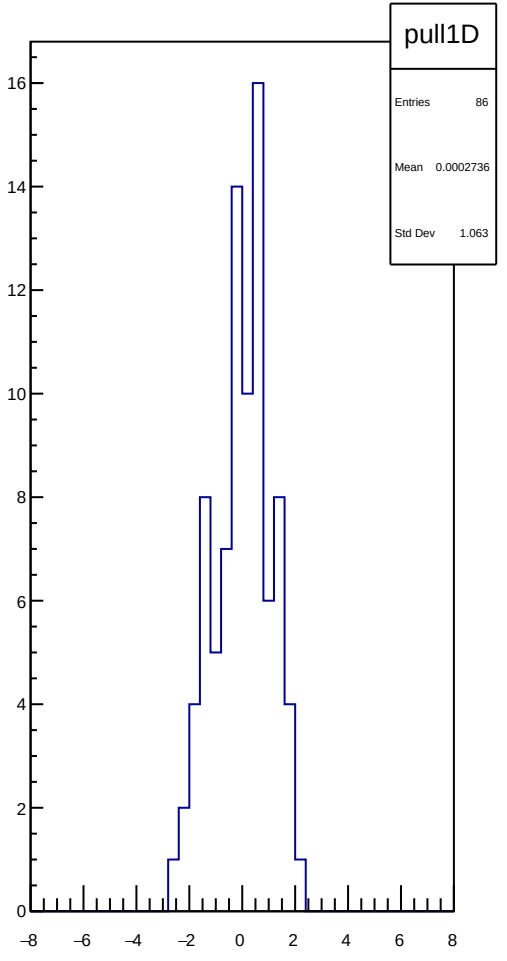

pull1D
Entries 86
Mean 0.001313
Std Dev 0.8769
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

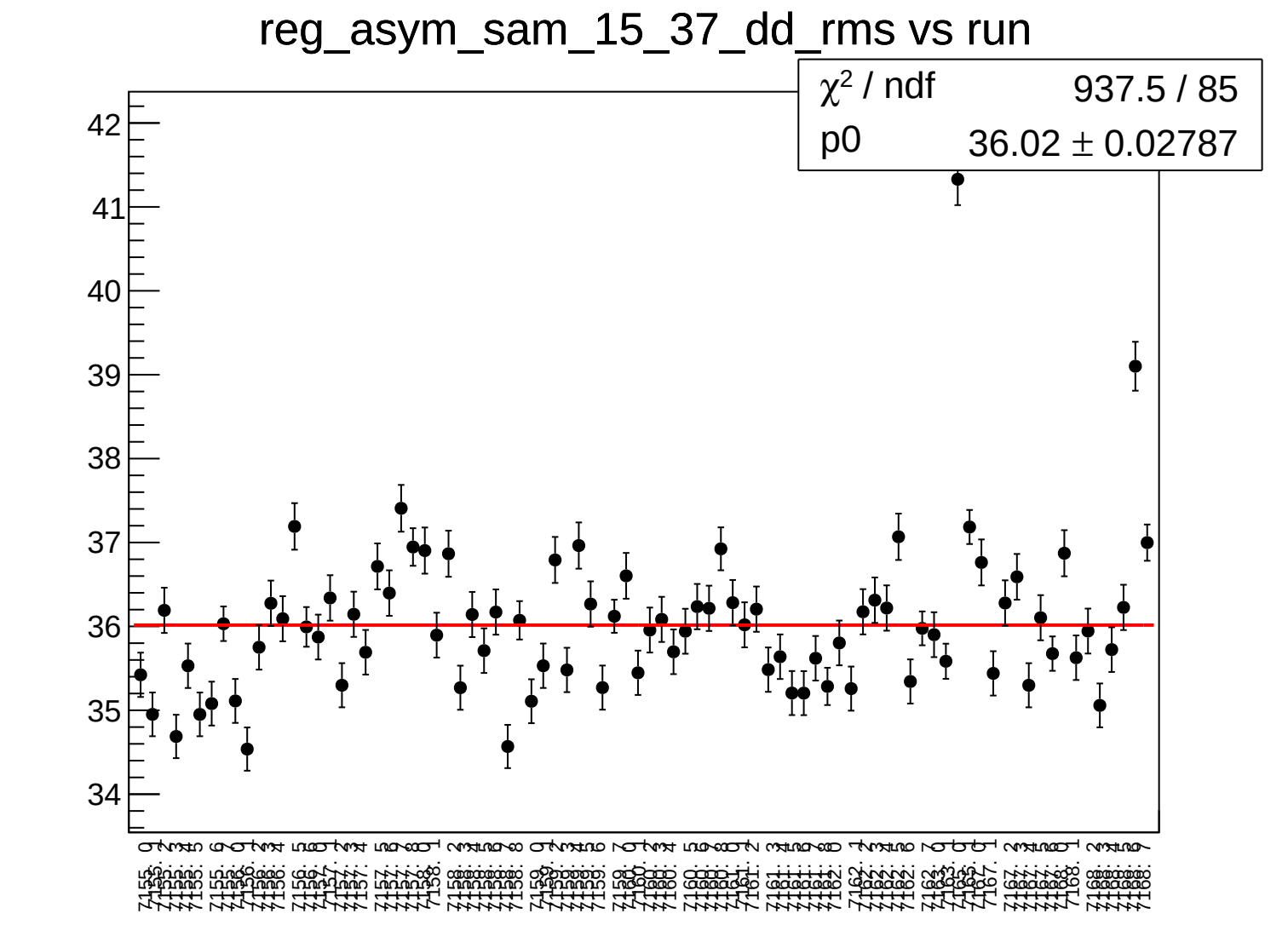

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 3307 / 85
p0 358.8 ± 0.2778
400
390
380
370
360
350
340
330
320

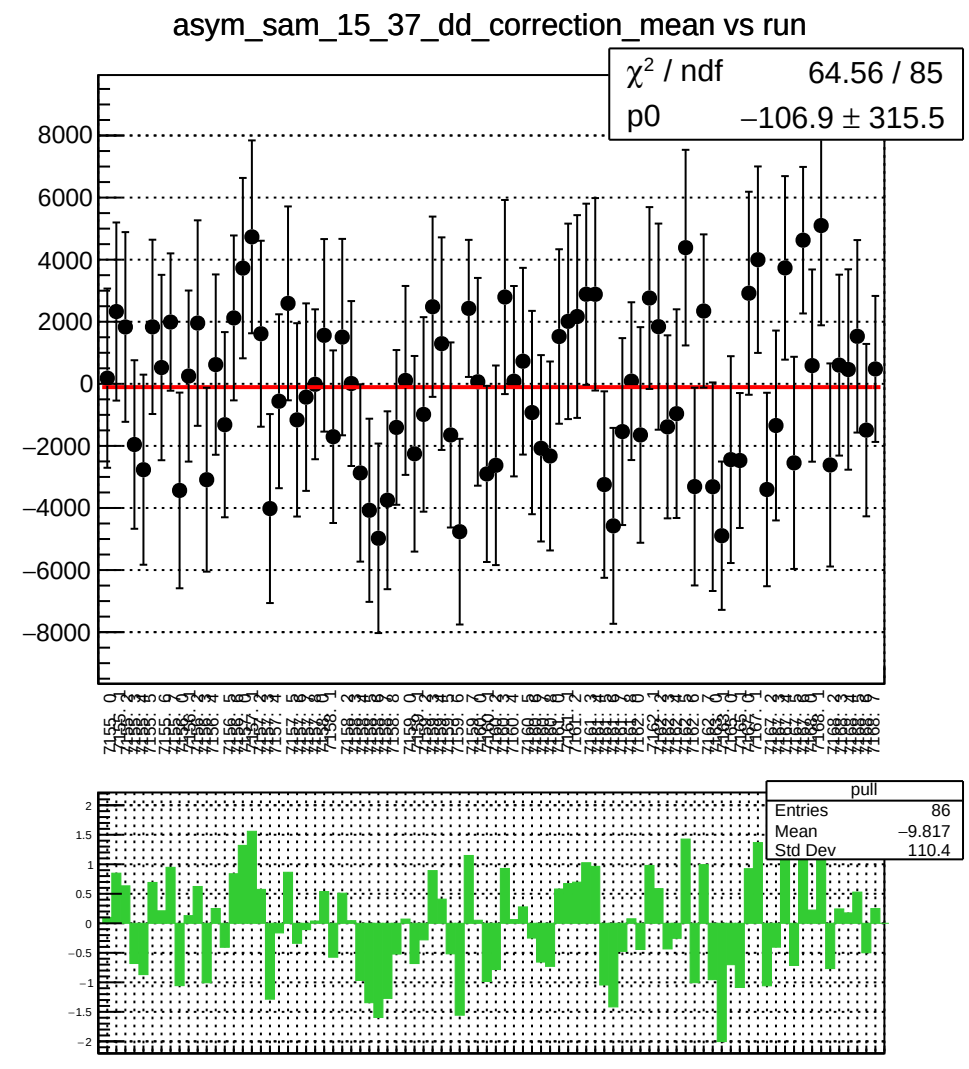

asym_sam_13_57_dd_mean vs run
χ² / ndf 68.05 / 85
p0 245.9 ± 397.5
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 182.8
Std Dev 154.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean −0.005582
Std Dev 0.8895
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

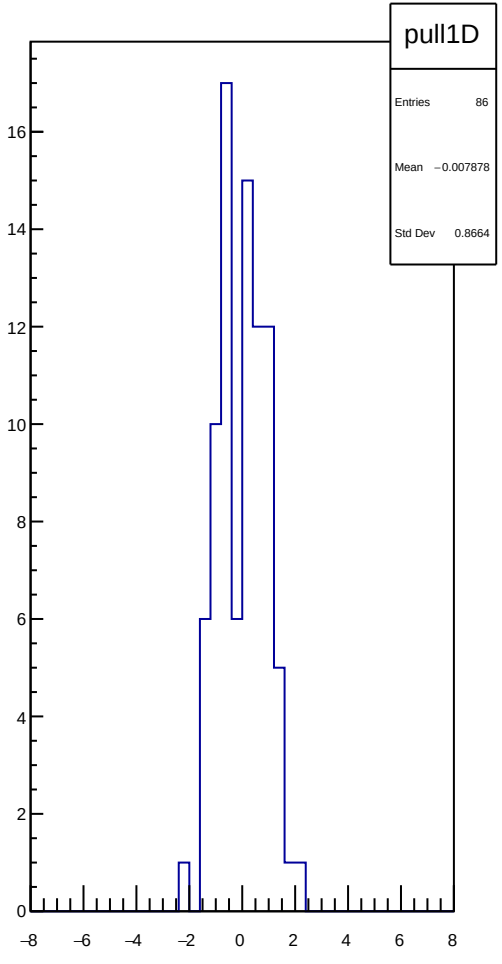

asym_sam_13_57_dd_rms vs run
χ^2 / ndf 3139 / 85
p0 363.1 ± 0.2811
410
400
390
380
370
360
350
340
330

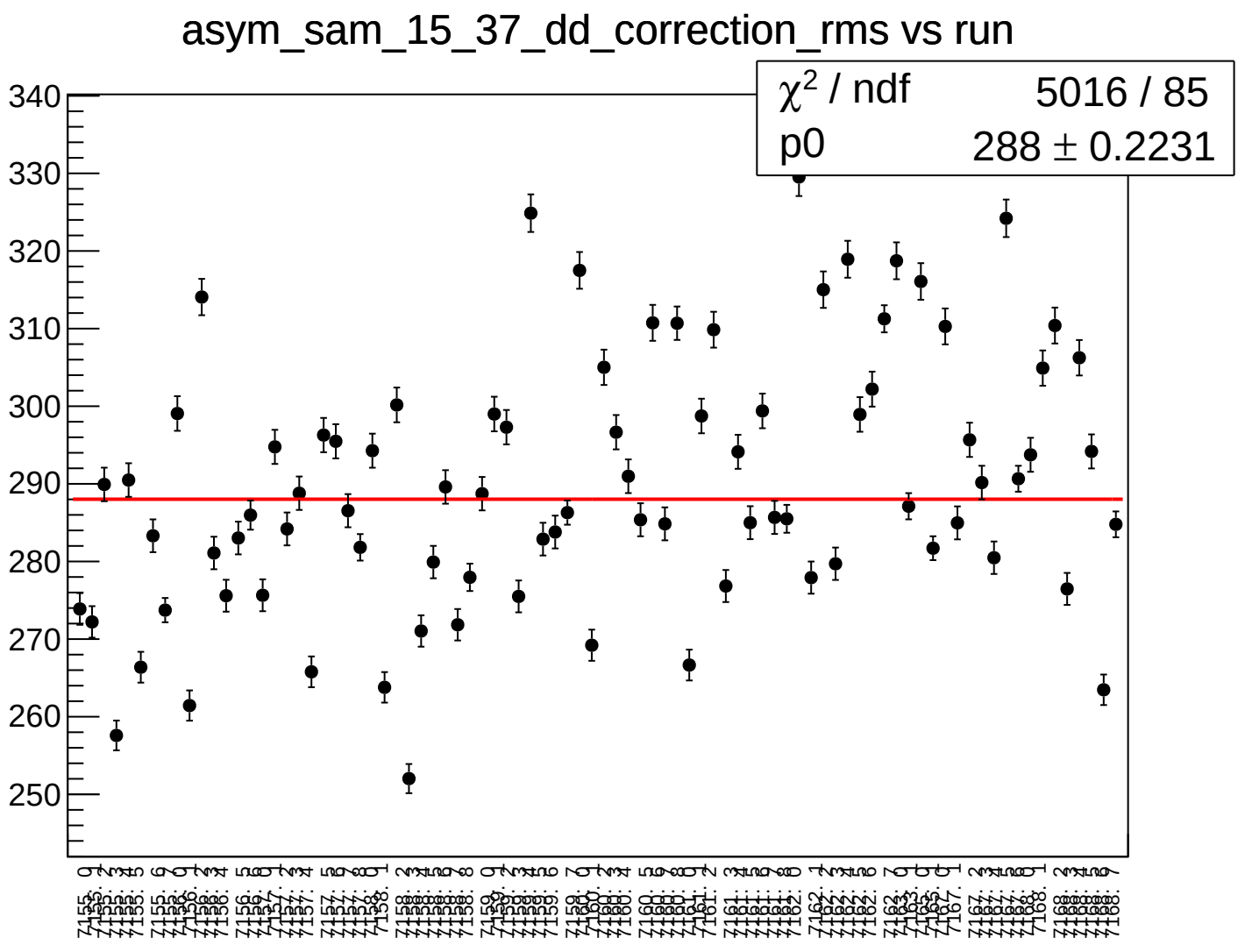

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 97.14 / 85
p0 −35.66 ± 39.41
1000
500
0
−500
−1000
−1500
pull
Entries 86
Mean −2037
Std Dev 2049
2
1
0
−1
−2

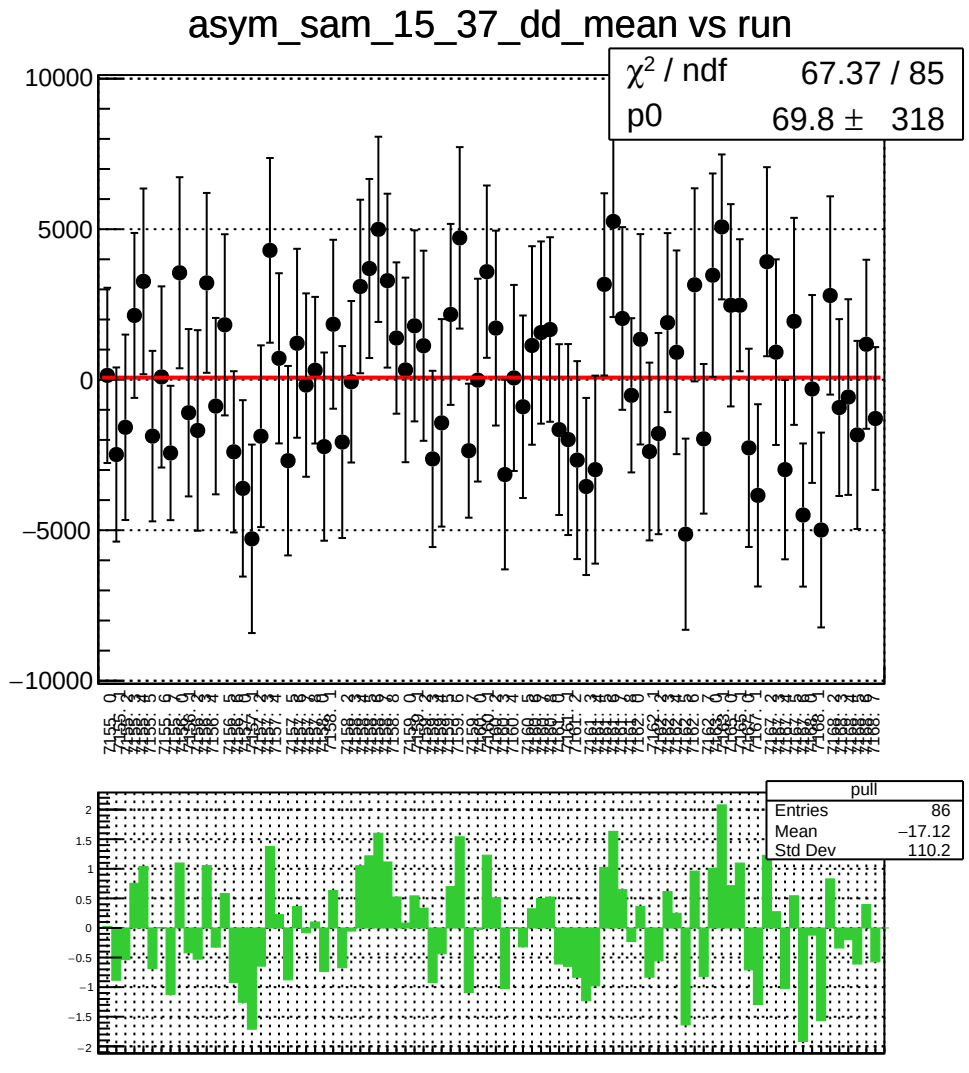

pull1D
Entries 86
Mean 0.0002736
Std Dev 1.063
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

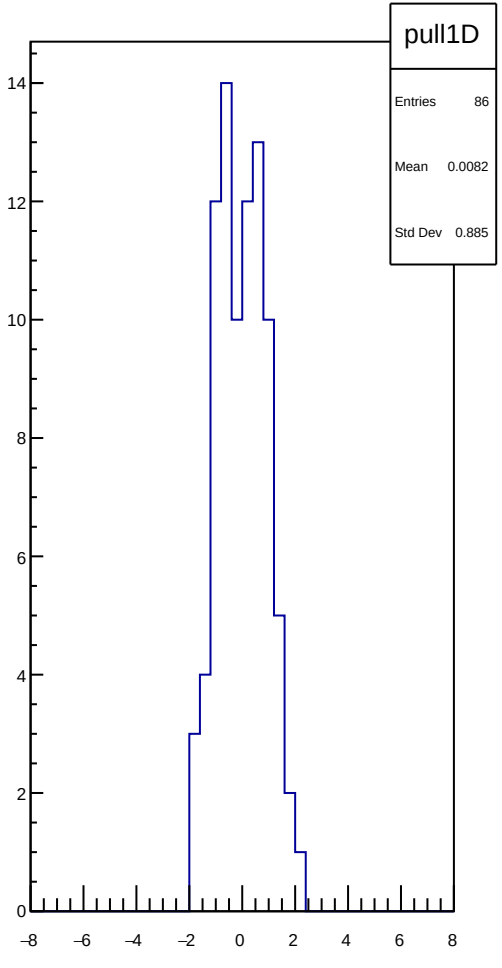

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 937.5 / 85
p0 36.02 ± 0.02787
42
41
40
39
38
37
36
35
34

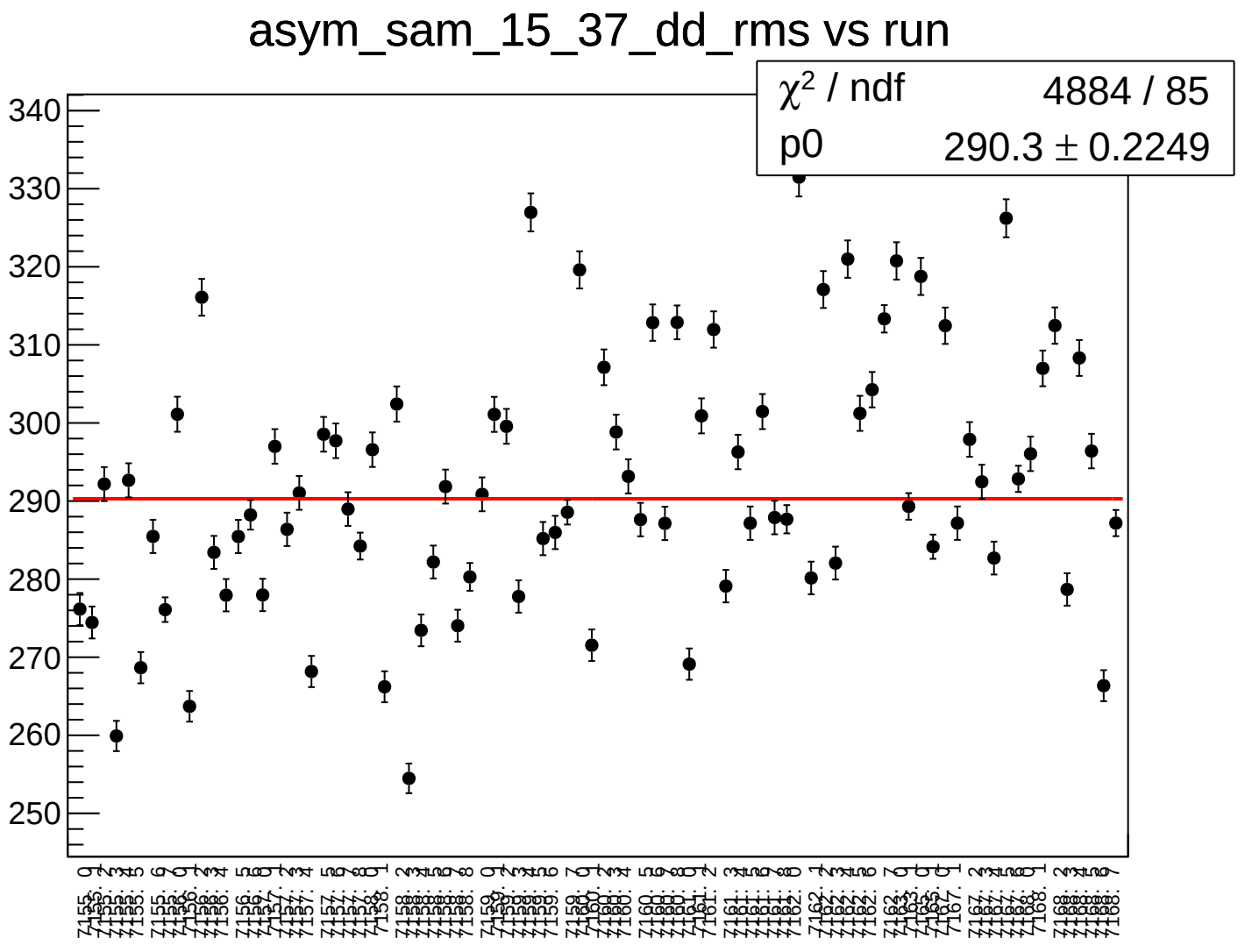

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 64.56 / 85
p0 −106.9 ± 315.5
pull
Entries 86
Mean −9.817
Std Dev 110.4

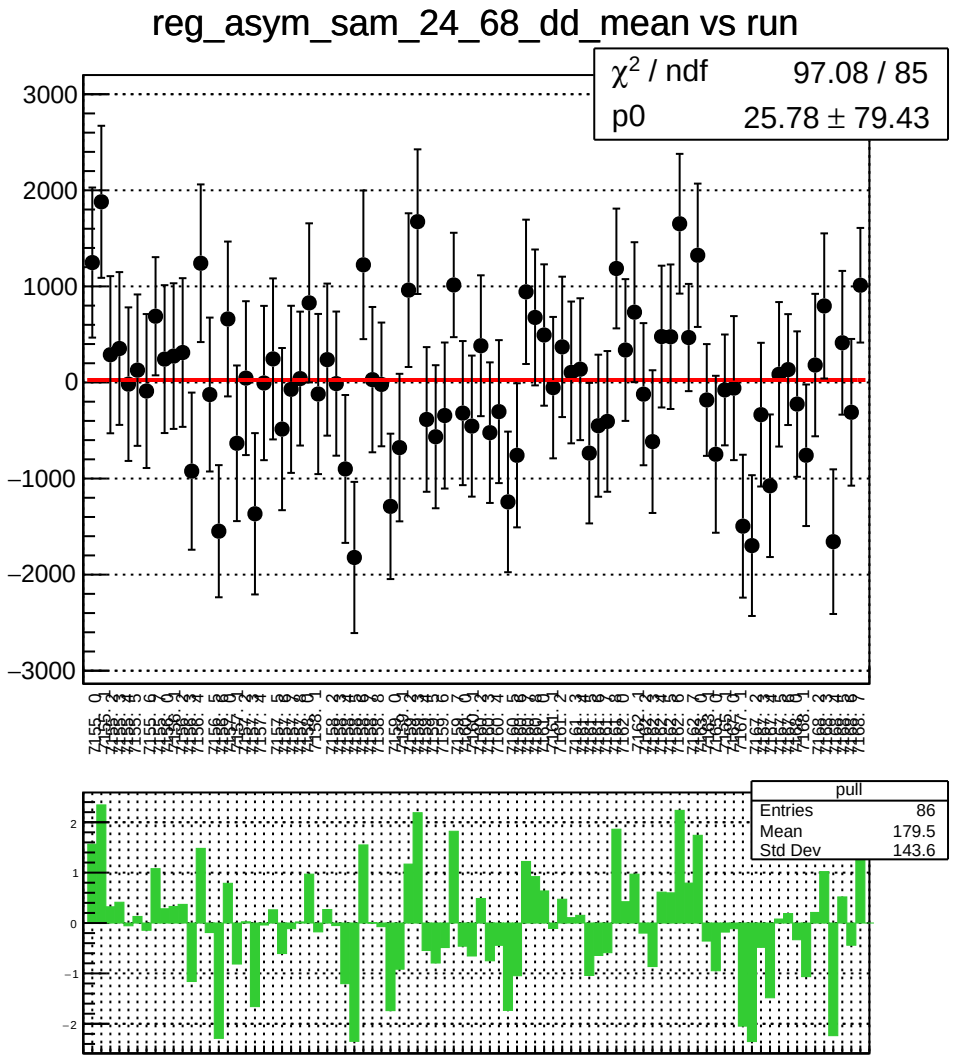

pull1D
Entries 86
Mean −0.007878
Std Dev 0.8664

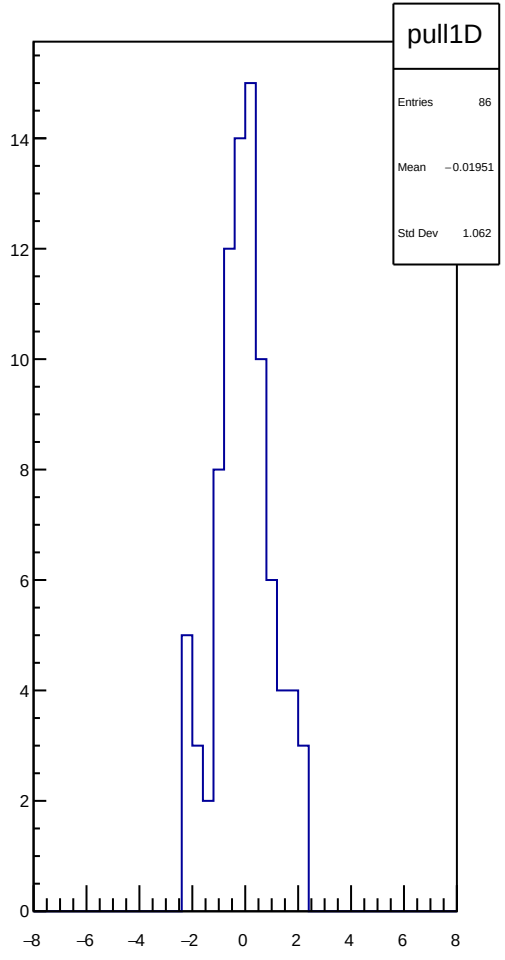

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 5016 / 85
p0 288 ± 0.2231
340
330
320
310
300
290
280
270
260
250

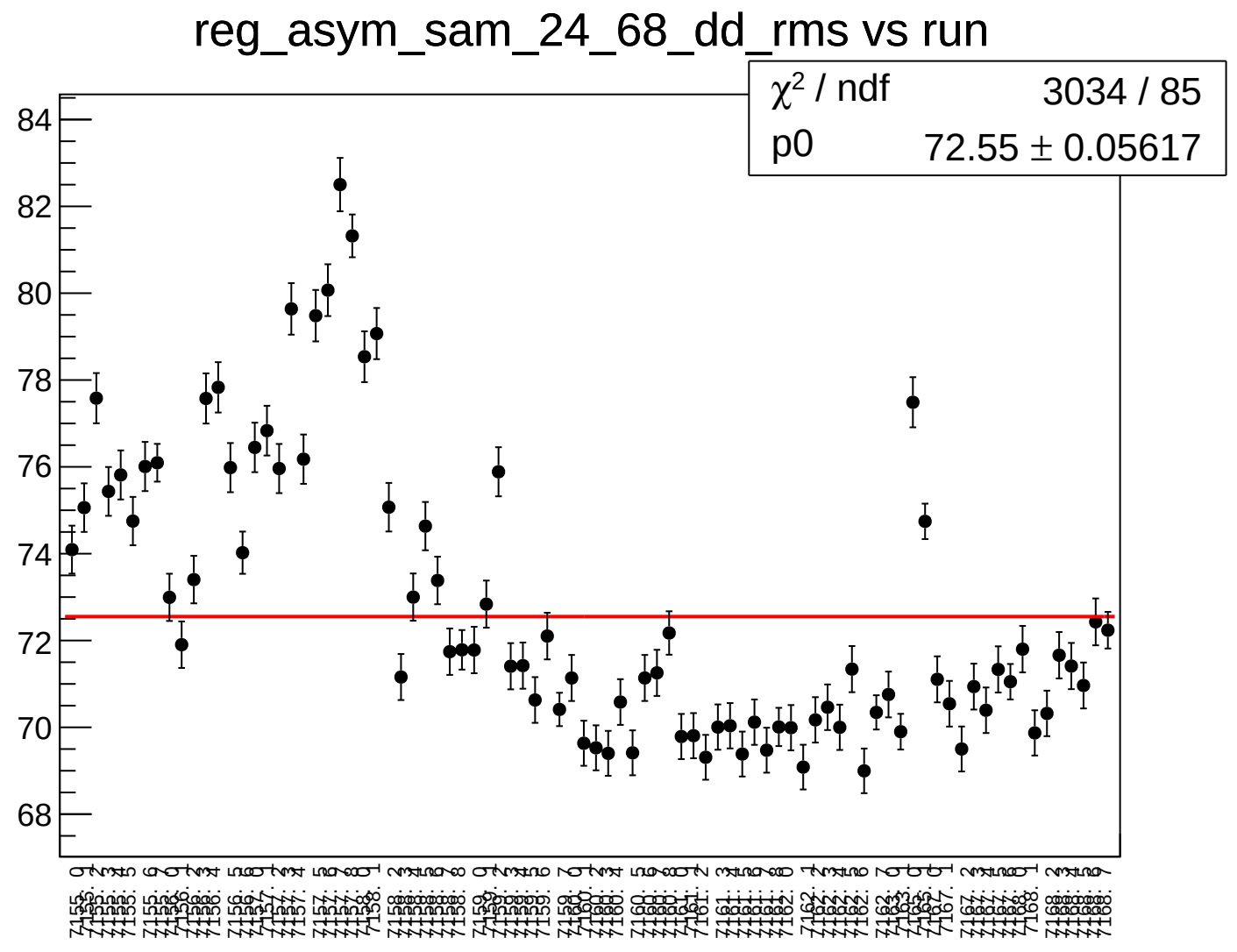

asym_sam_15_37_dd_mean vs run
χ^2 / ndf 67.37 / 85
p0 69.8 ± 318
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −17.12
Std Dev 110.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

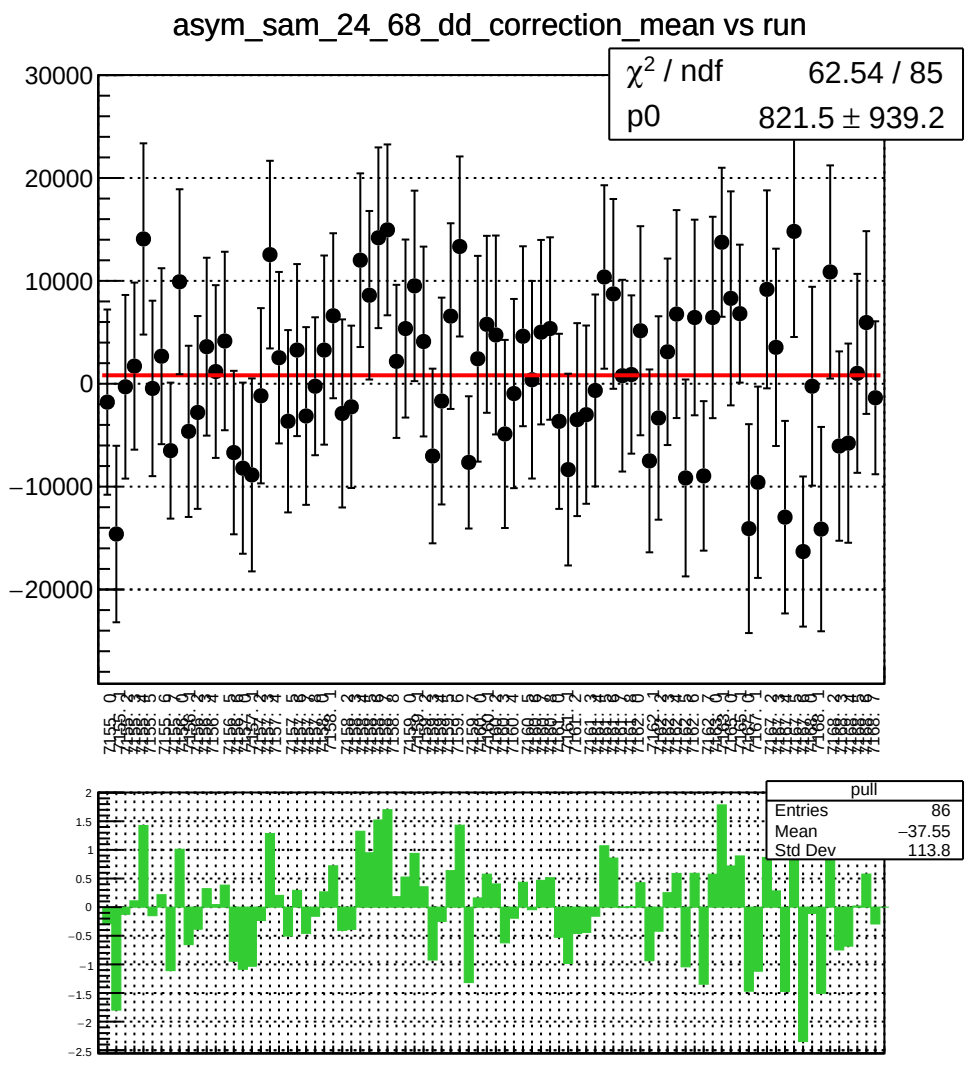

pull1D
Entries 86
Mean 0.0082
Std Dev 0.885
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

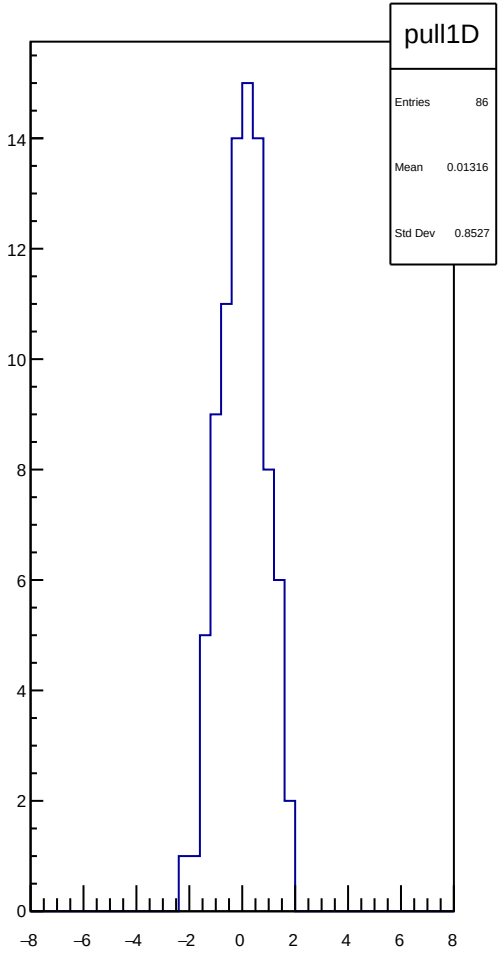

asym_sam_15_37_dd_rms vs run
χ² / ndf 4884 / 85
p0 290.3 ± 0.2249
340
330
320
310
300
290
280
270
260
250

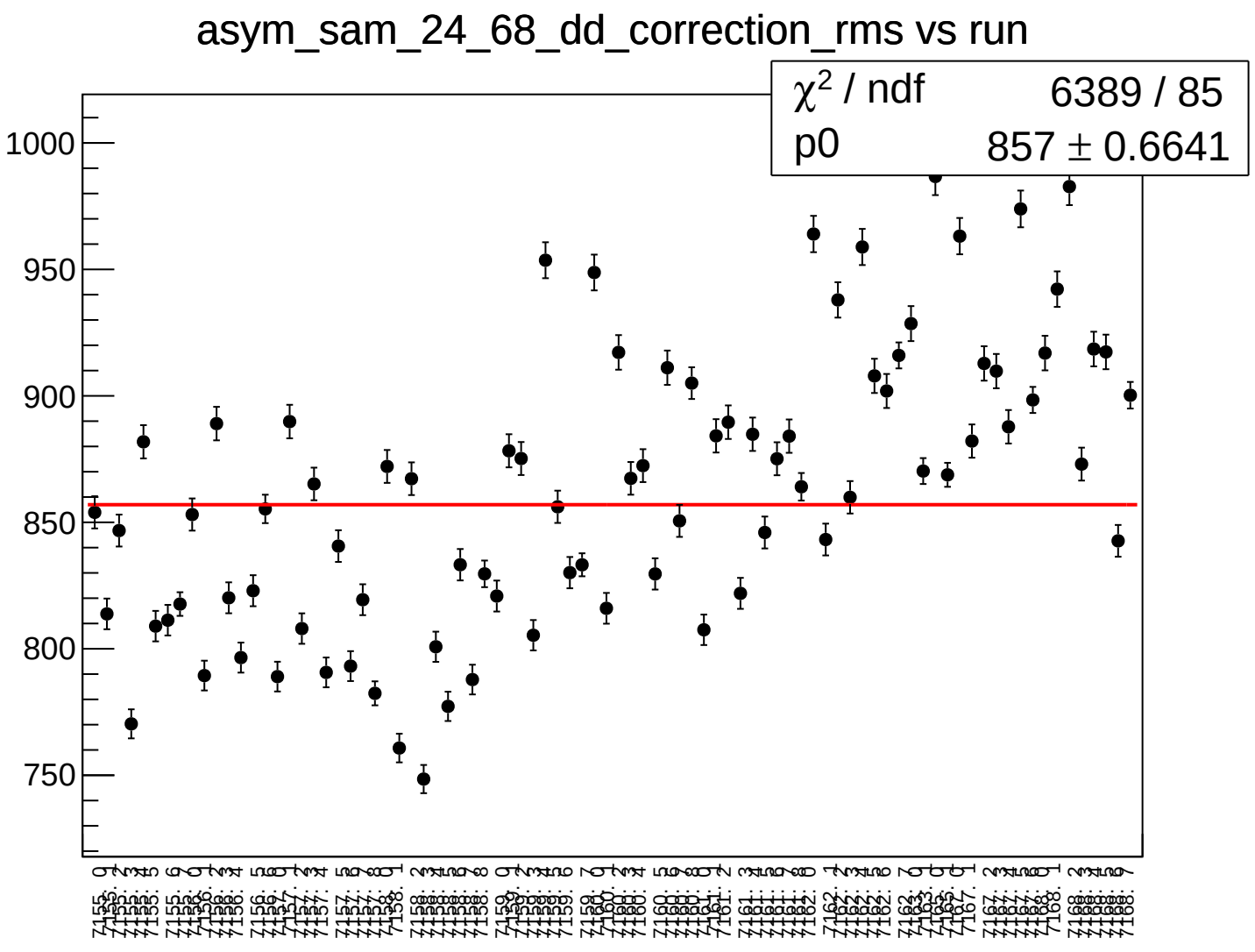

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 97.08 / 85
p0 25.78 ± 79.43
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 179.5
Std Dev 143.6
2
1
0
−1
−2

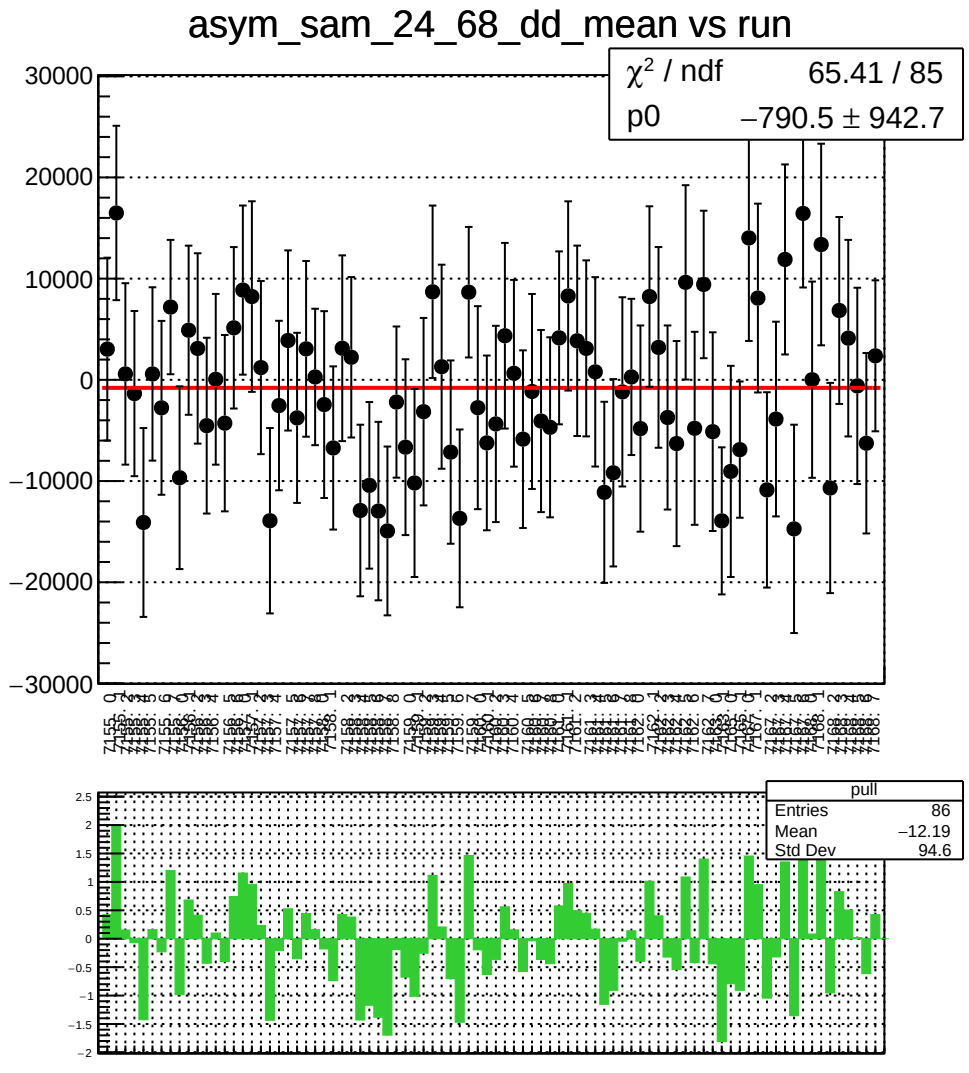

pull1D
Entries 86
Mean −0.01951
Std Dev 1.062
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

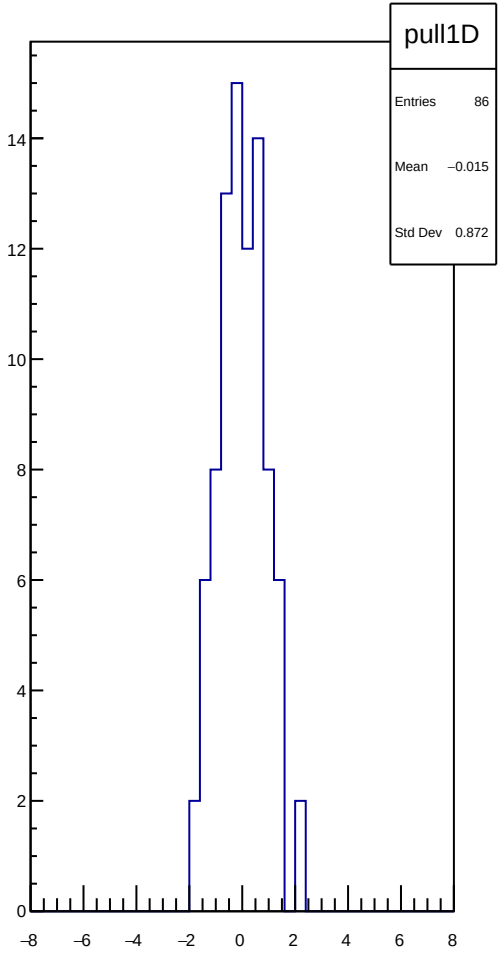

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 3034 / 85
p0 72.55 ± 0.05617
84
82
80
78
76
74
72
70
68

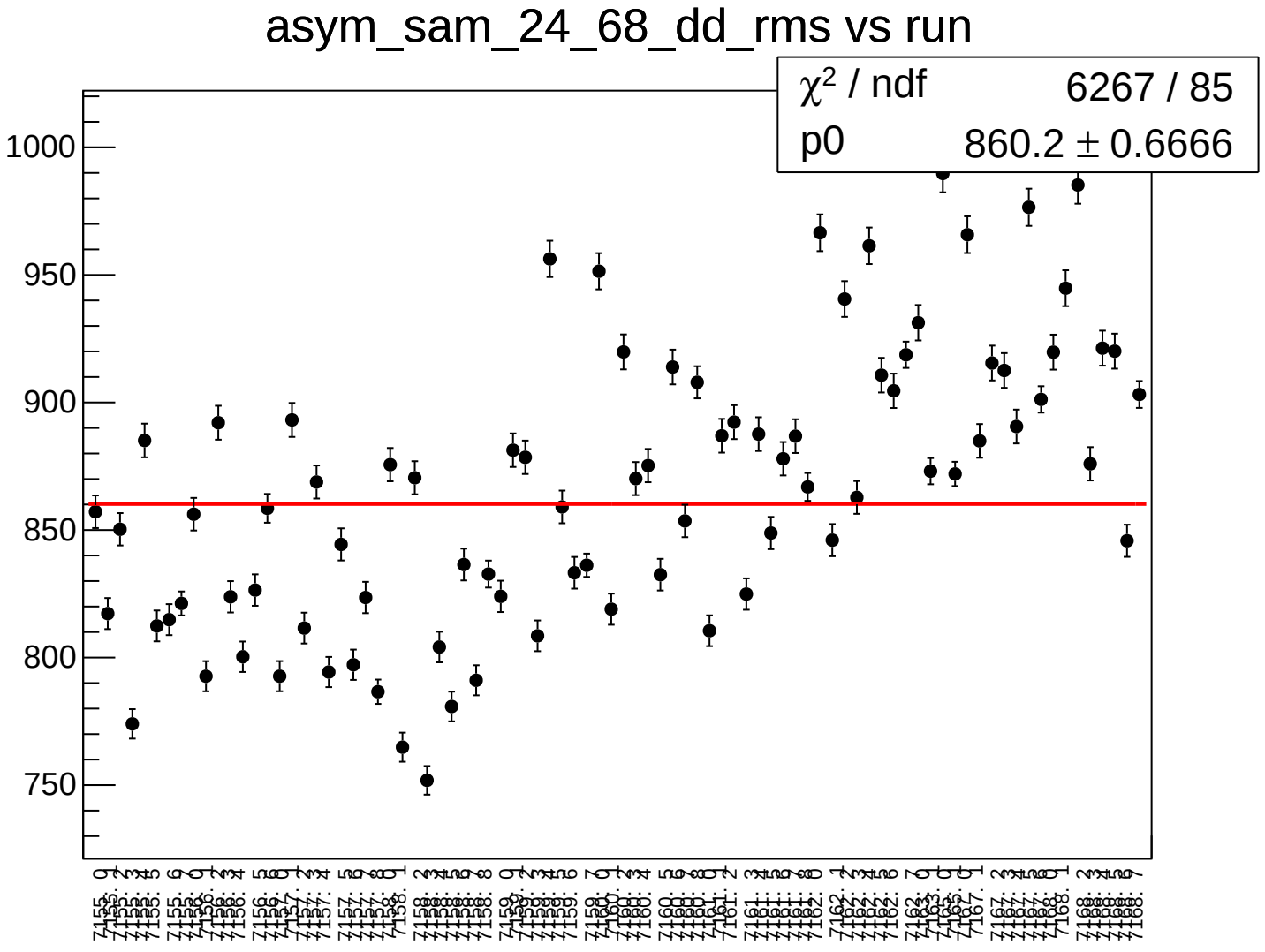

asym_sam_24_68_dd_correction_mean vs run
χ^2 / ndf 62.54 / 85
p0 821.5 ± 939.2
30000
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −37.55
Std Dev 113.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

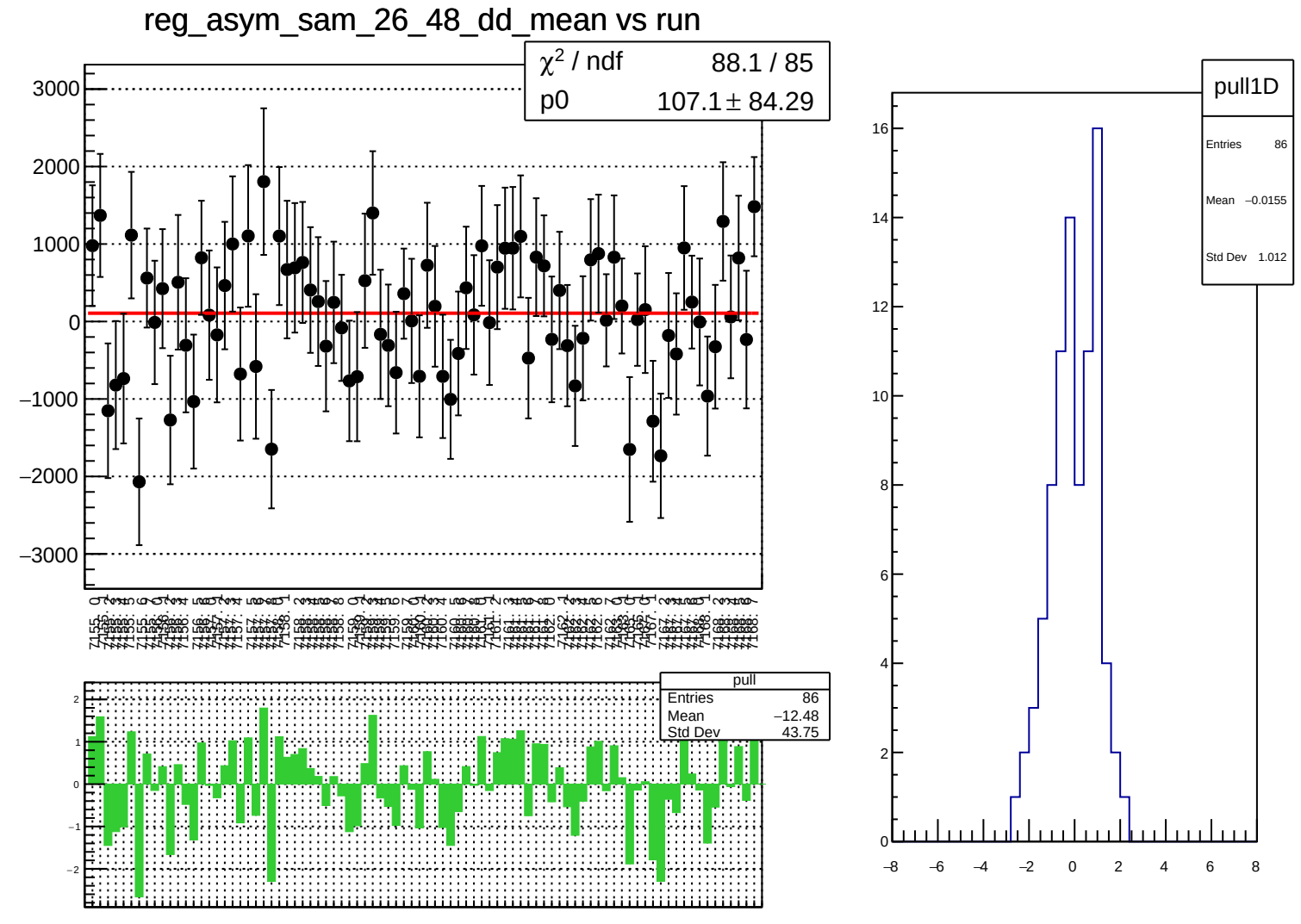

pull1D
Entries 86
Mean 0.01316
Std Dev 0.8527
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

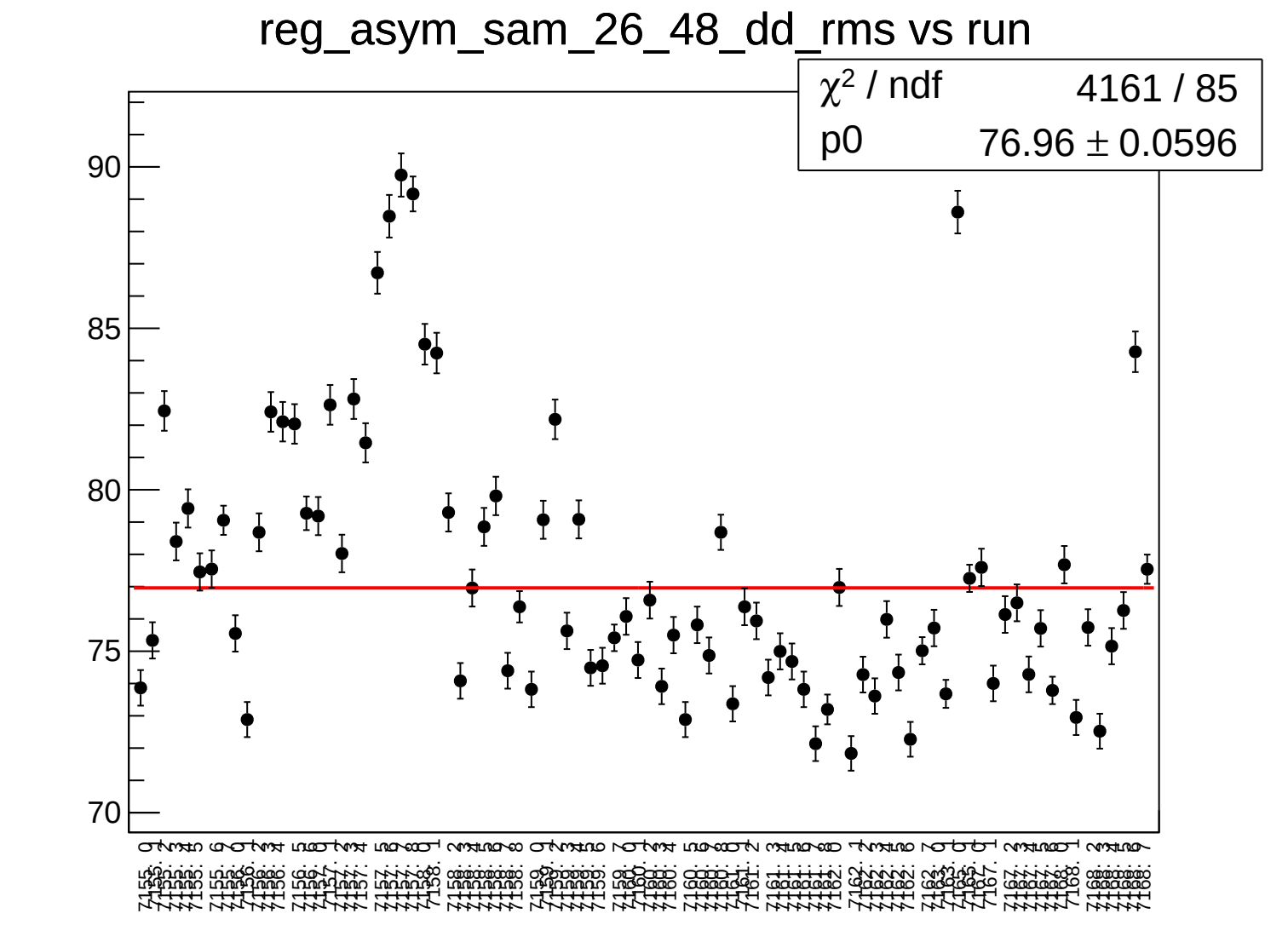

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 6389 / 85
p0 857 ± 0.6641
1000
950
900
850
800
750

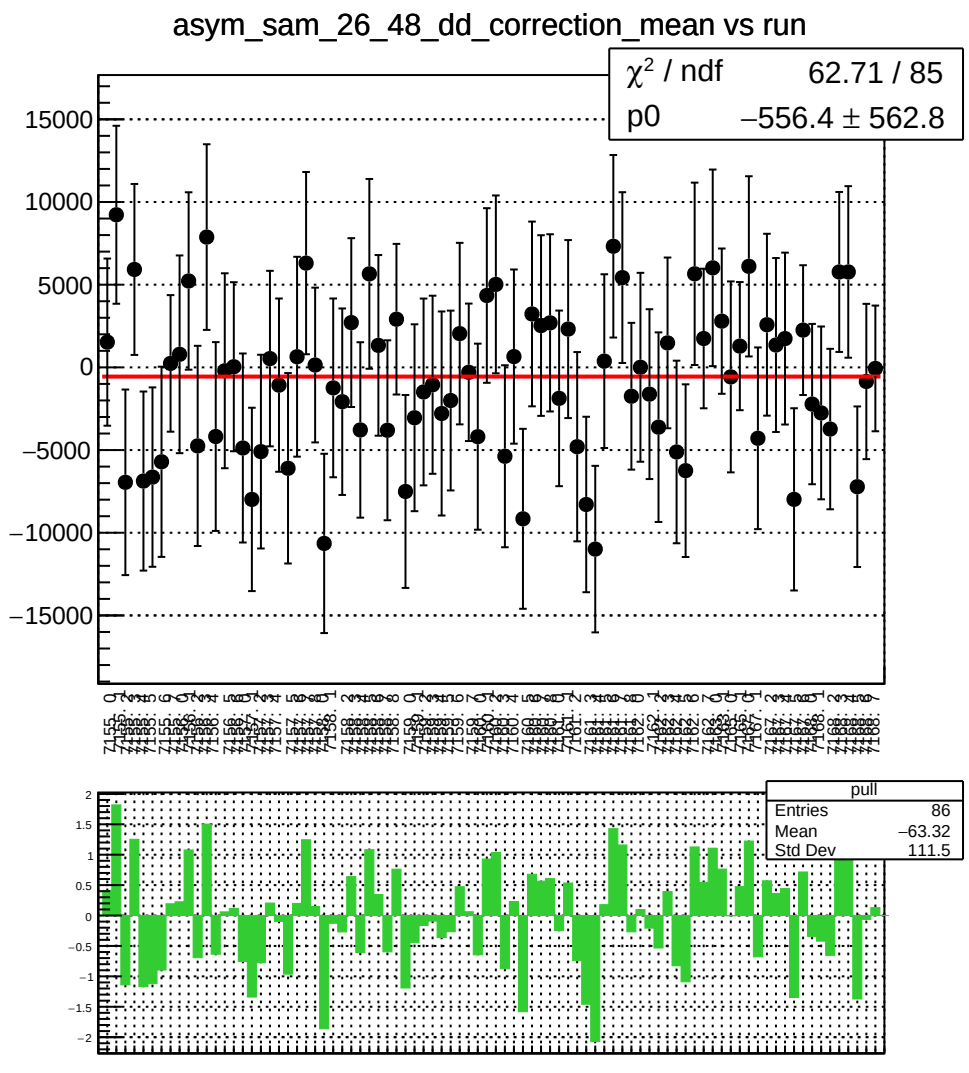

asym_sam_24_68_dd_mean vs run
χ² / ndf 65.41 / 85
p0 −790.5 ± 942.7
pull
Entries 86
Mean −12.19
Std Dev 94.6

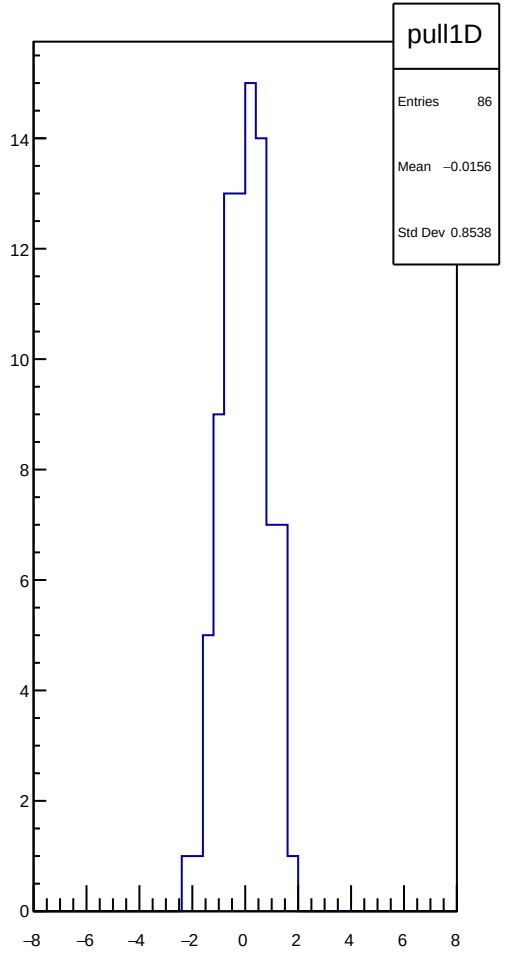

pull1D
Entries 86
Mean −0.015
Std Dev 0.872

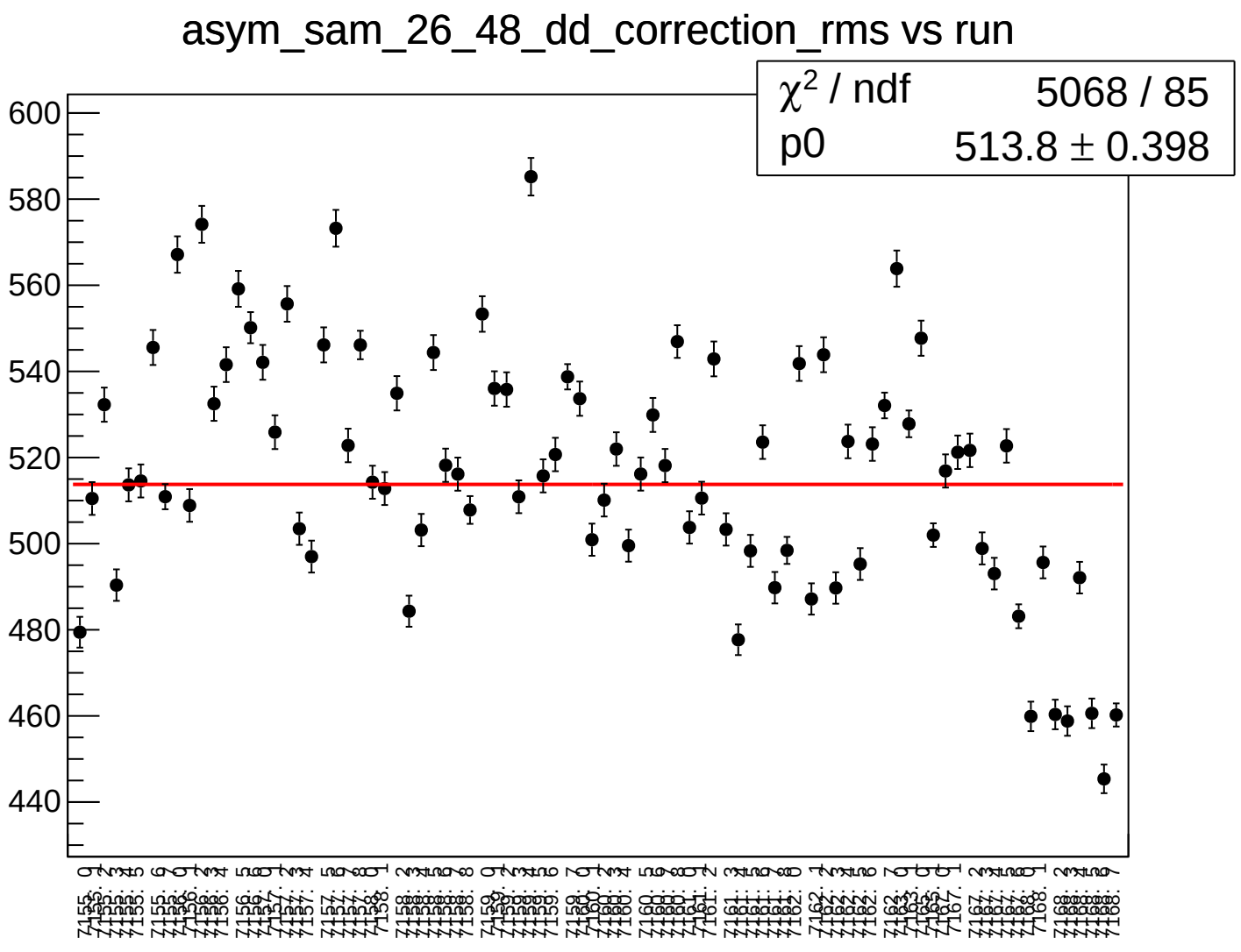

asym_sam_24_68_dd_rms vs run
χ² / ndf 6267 / 85
p0 860.2 ± 0.6666
1000
950
900
850
800
750

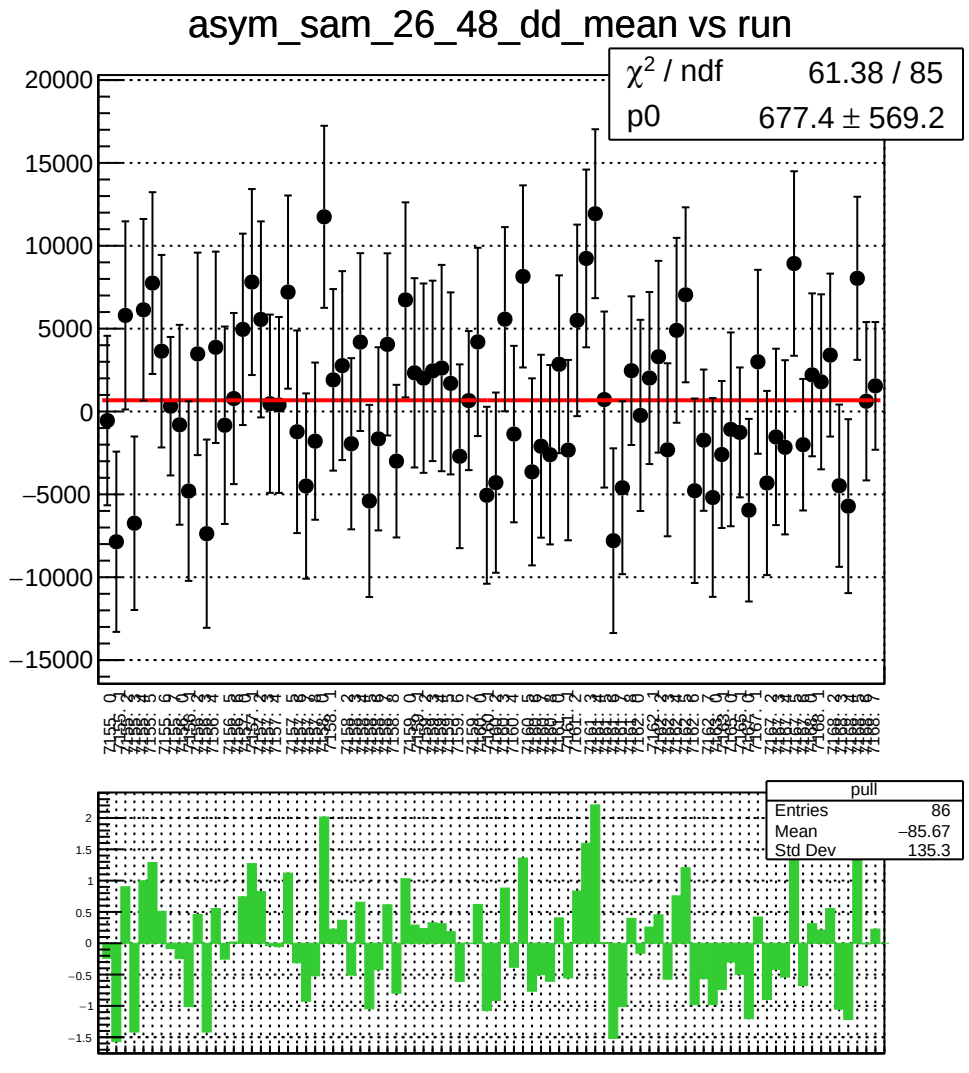

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 88.1 / 85
p0 107.1 ± 84.29
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −12.48
Std Dev 43.75
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.0155
Std Dev 1.012
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

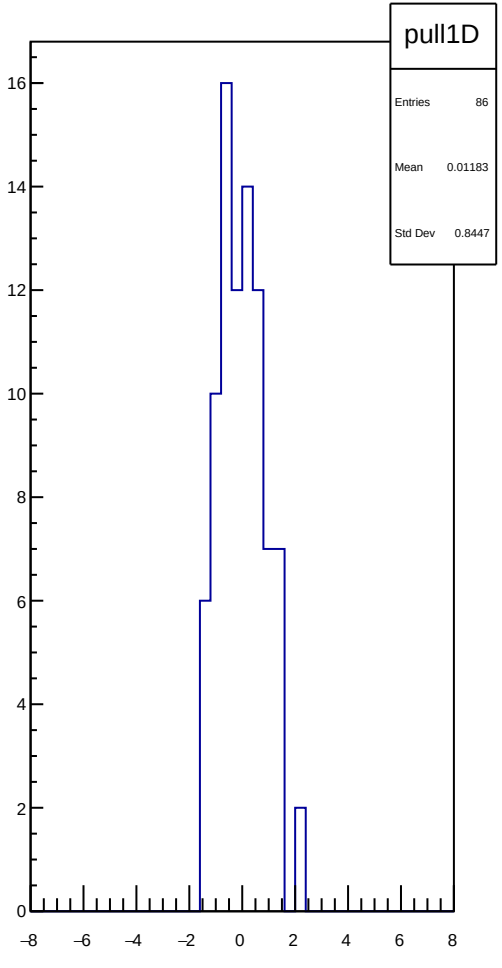

reg_asym_sam_26_48_dd_rms vs run
χ^2 / ndf 4161 / 85
p0 76.96 ± 0.0596
90
85
80
75
70

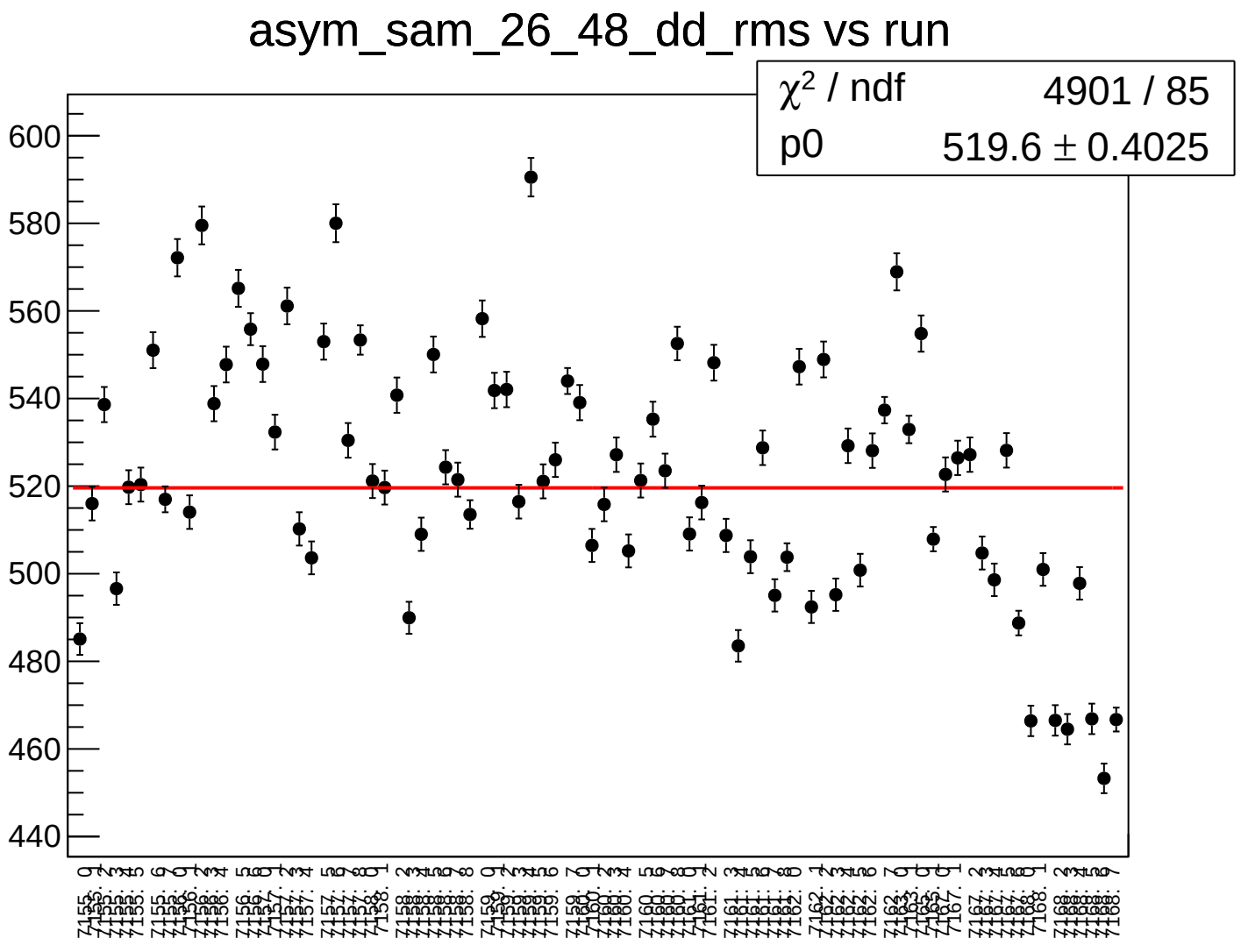

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 62.71 / 85
p0 −556.4 ± 562.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −63.32
Std Dev 111.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

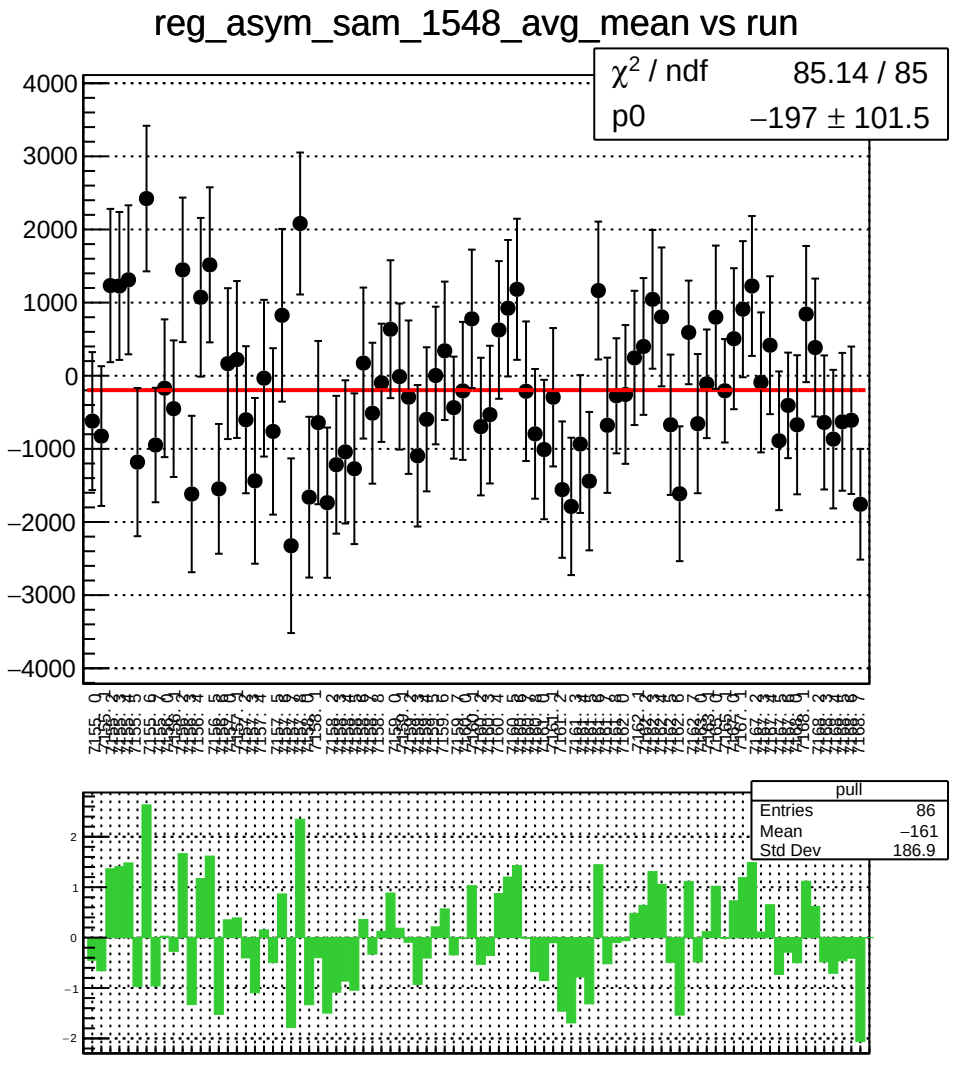

pull1D
Entries 86
Mean −0.0156
Std Dev 0.8538
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

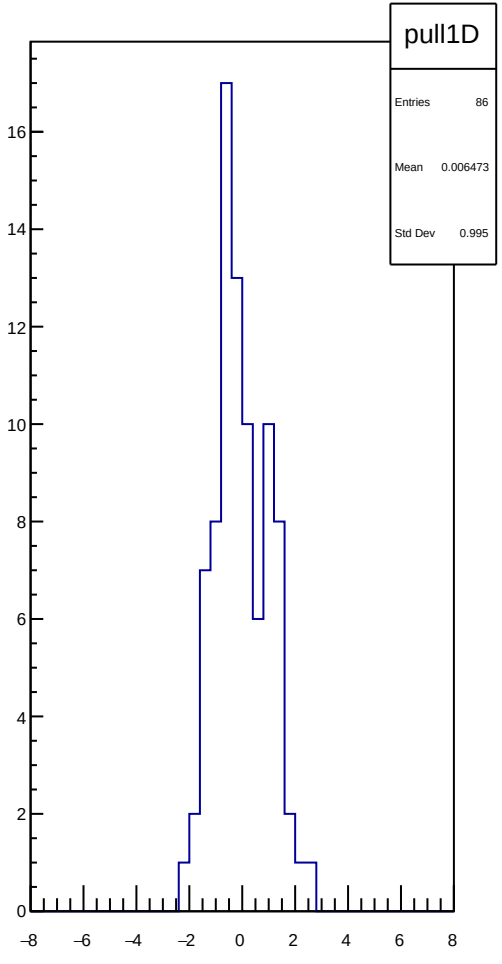

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 5068 / 85
p0 513.8 ± 0.398
600
580
560
540
520
500
480
460
440

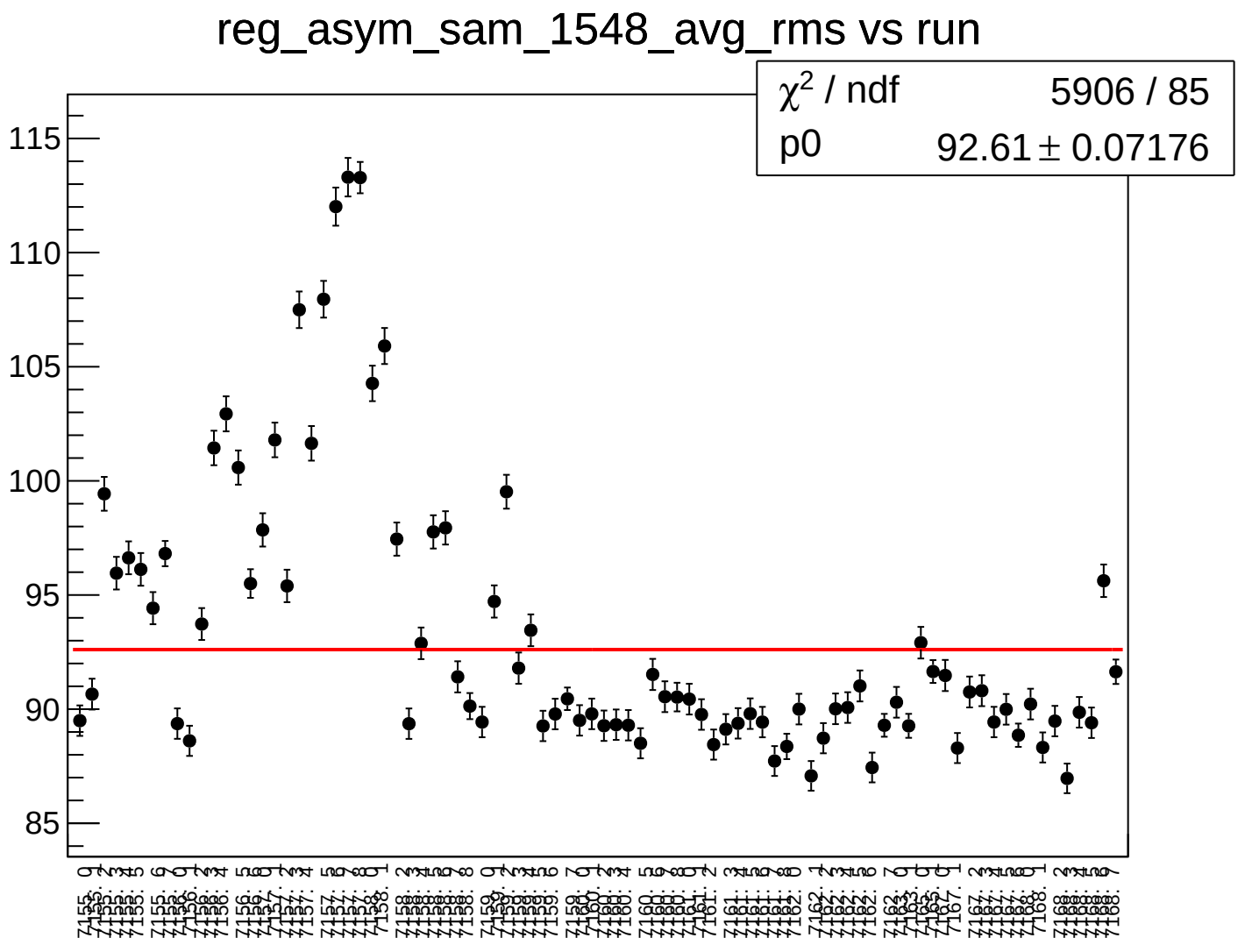

asym_sam_26_48_dd_mean vs run
χ² / ndf 61.38 / 85
p0 677.4 ± 569.2
pull
Entries 86
Mean −85.67
Std Dev 135.3

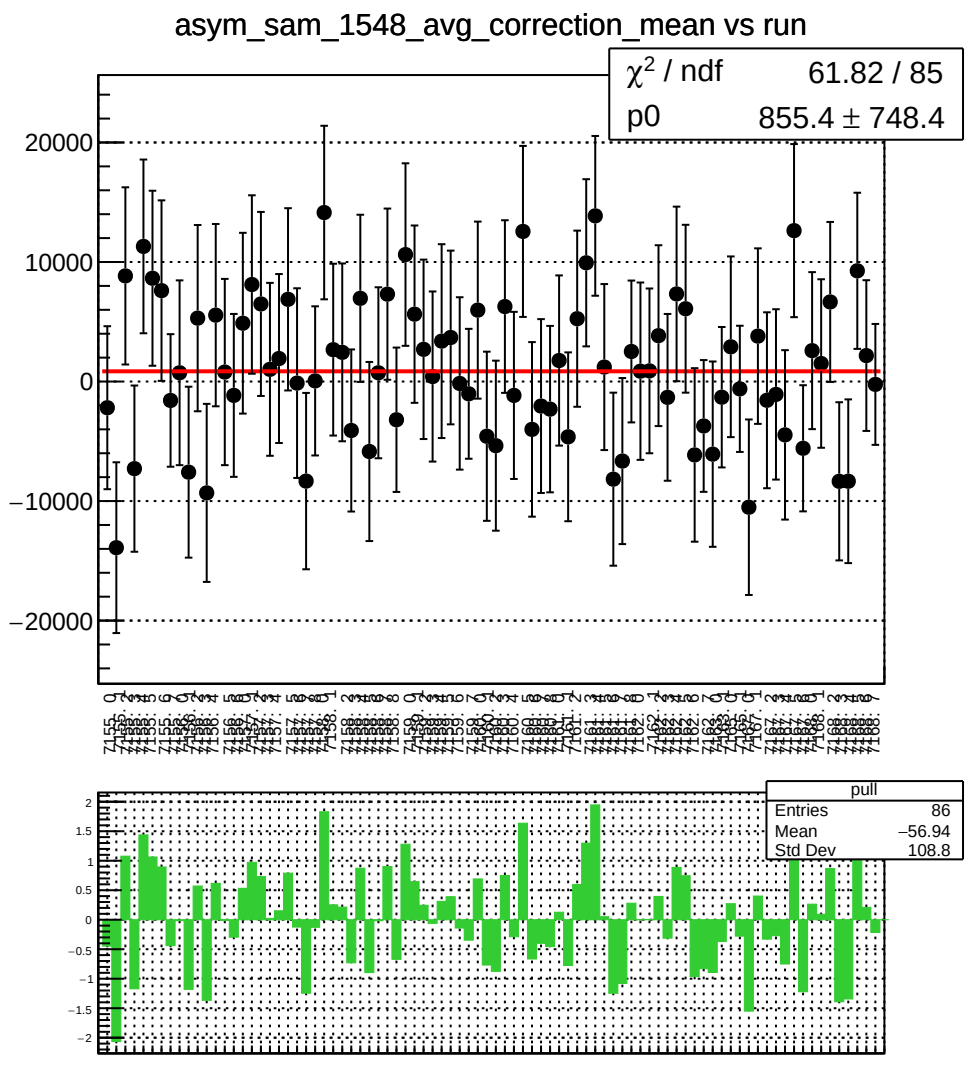

pull1D
Entries 86
Mean 0.01183
Std Dev 0.8447

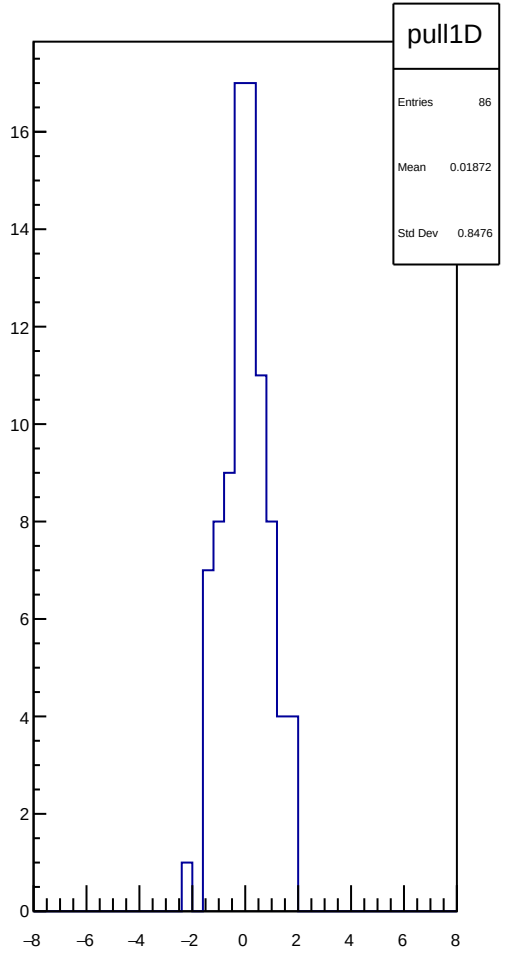

asym_sam_26_48_dd_rms vs run
χ² / ndf 4901 / 85
p0 519.6 ± 0.4025
600
580
560
540
520
500
480
460
440

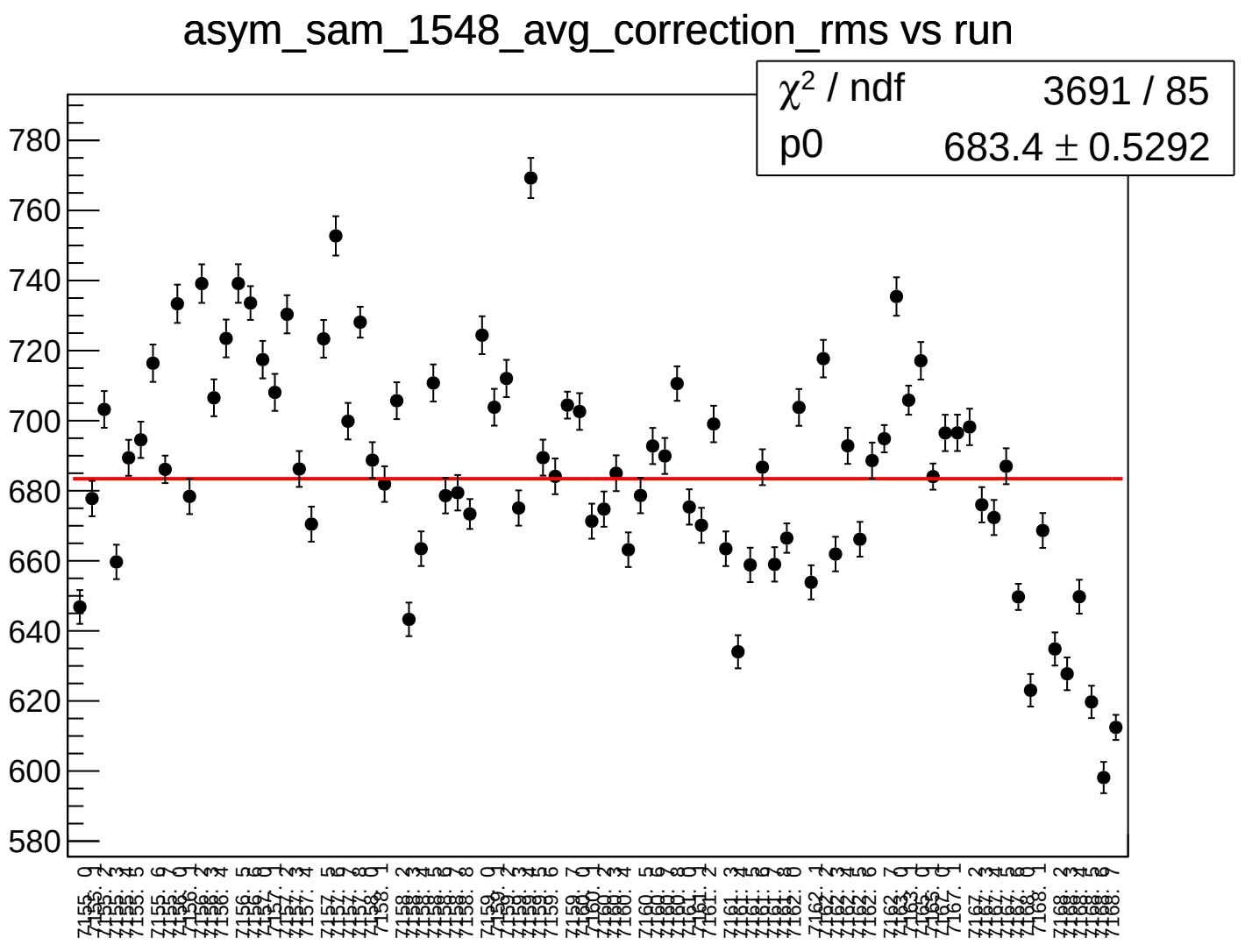

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 85.14 / 85
p0 −197 ± 101.5
pull
Entries 86
Mean −161
Std Dev 186.9

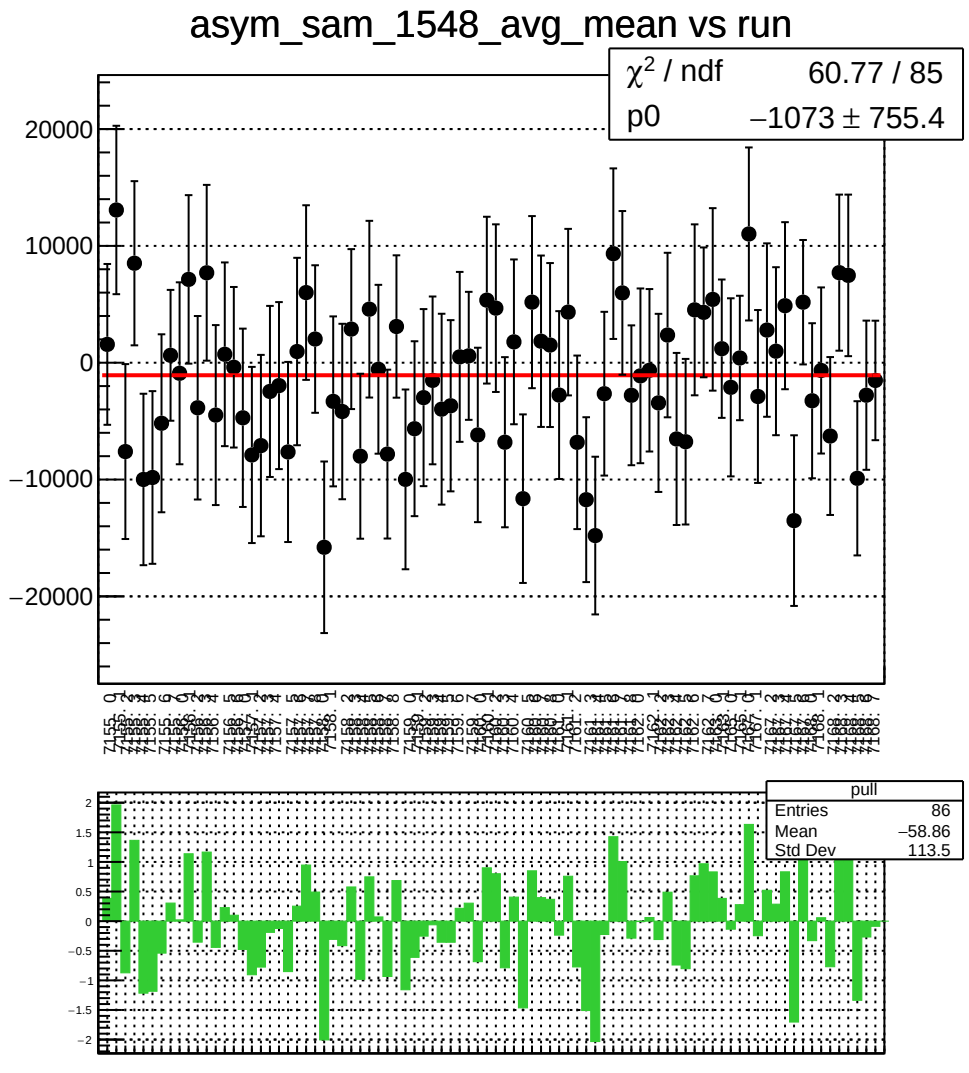

pull1D
Entries 86
Mean 0.006473
Std Dev 0.995

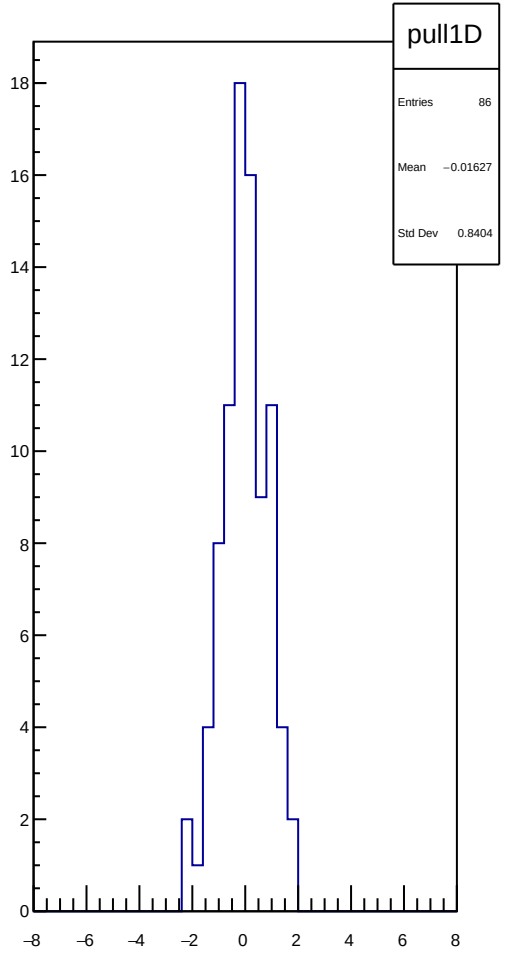

reg_asym_sam_1548_avg_rms vs run
χ^2 / ndf 5906 / 85
p0 92.61 ± 0.07176
115
110
105
100
95
90
85

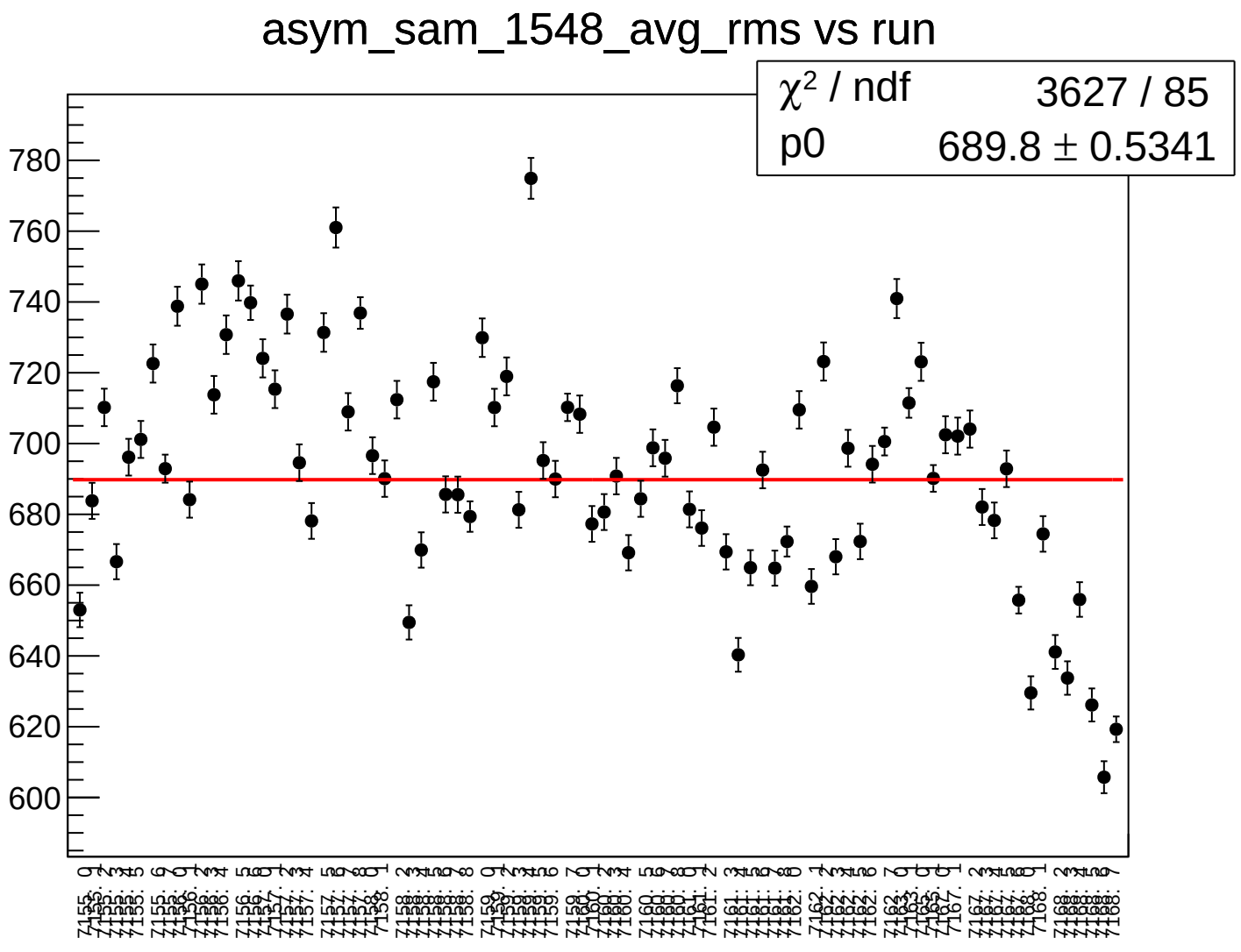

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 61.82 / 85
p0 855.4 ± 748.4
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −56.94
Std Dev 108.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

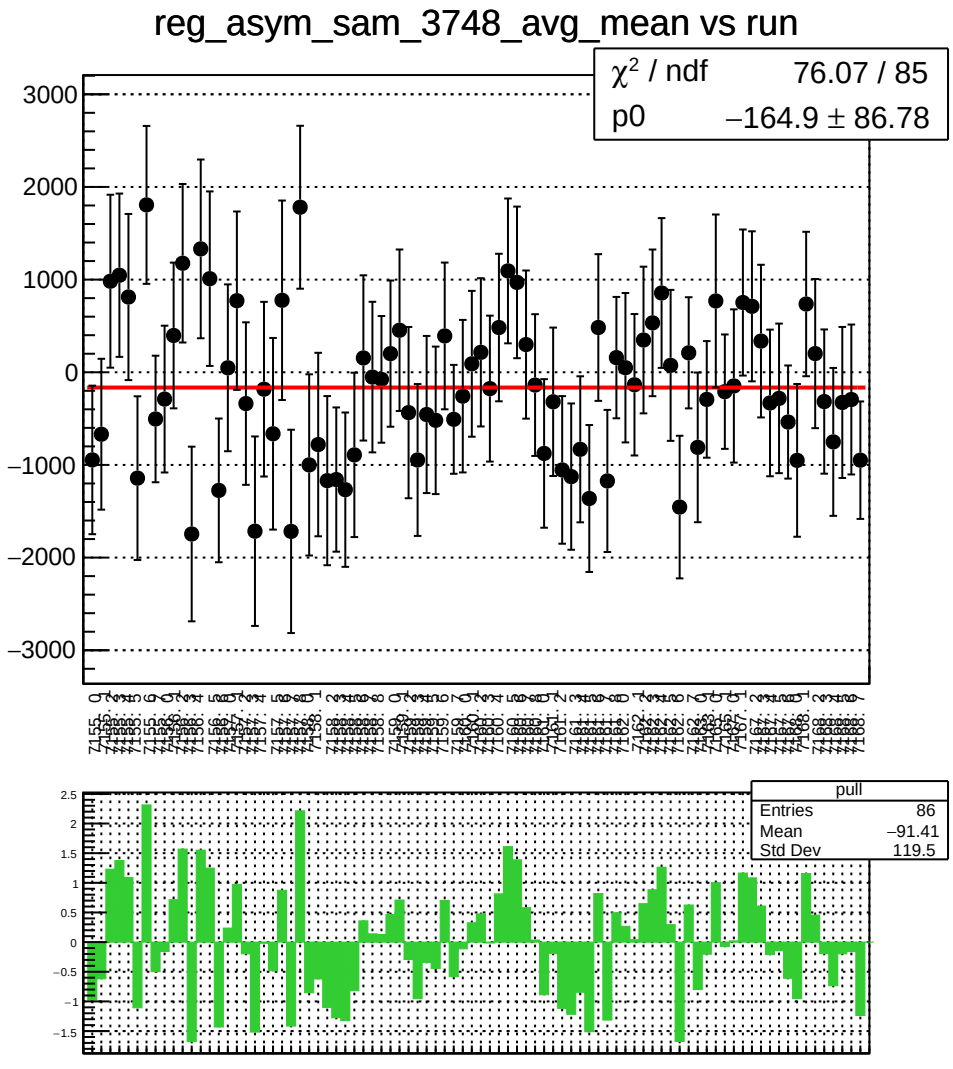

pull1D
Entries 86
Mean 0.01872
Std Dev 0.8476
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

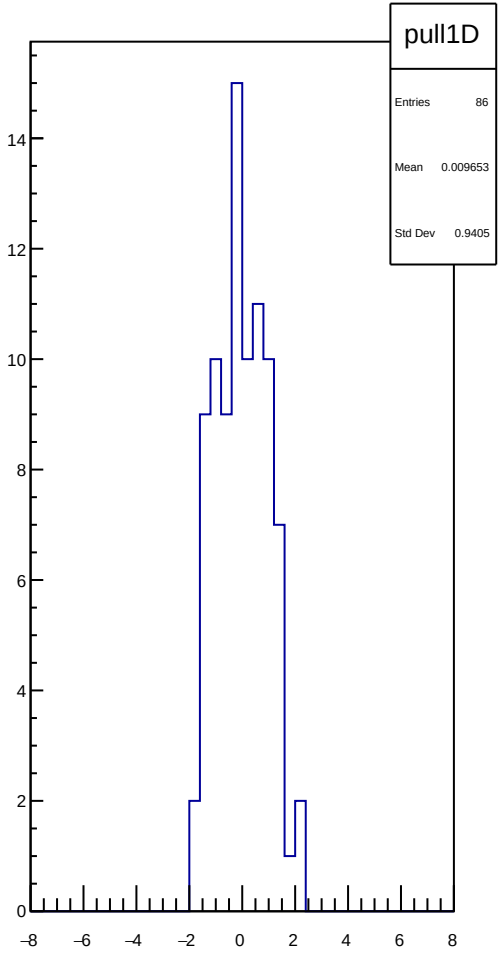

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 3691 / 85
p0 683.4 ± 0.5292
780
760
740
720
700
680
660
640
620
600
580

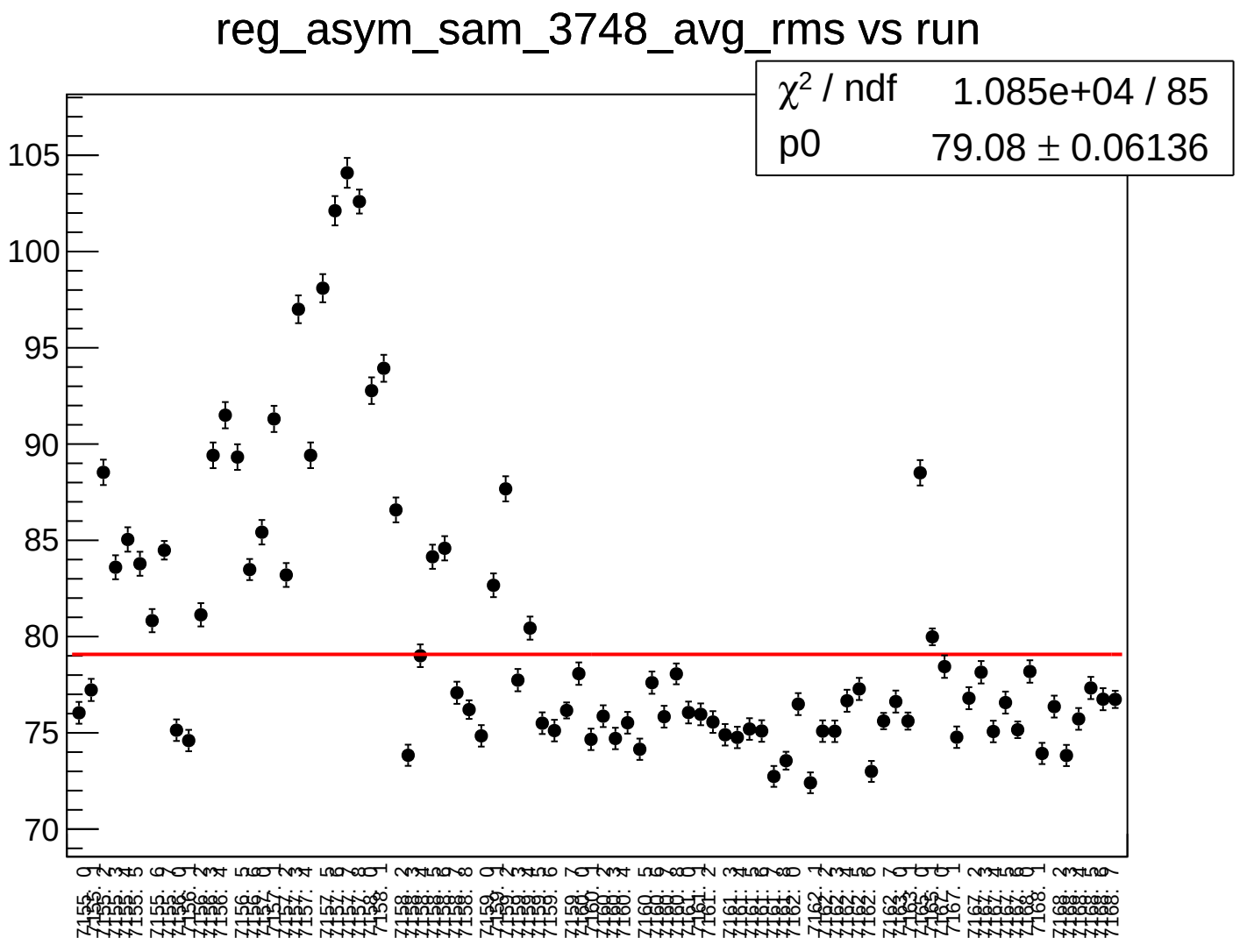

asym_sam_1548_avg_mean vs run
χ² / ndf 60.77 / 85
p0 −1073 ± 755.4
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −58.86
Std Dev 113.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

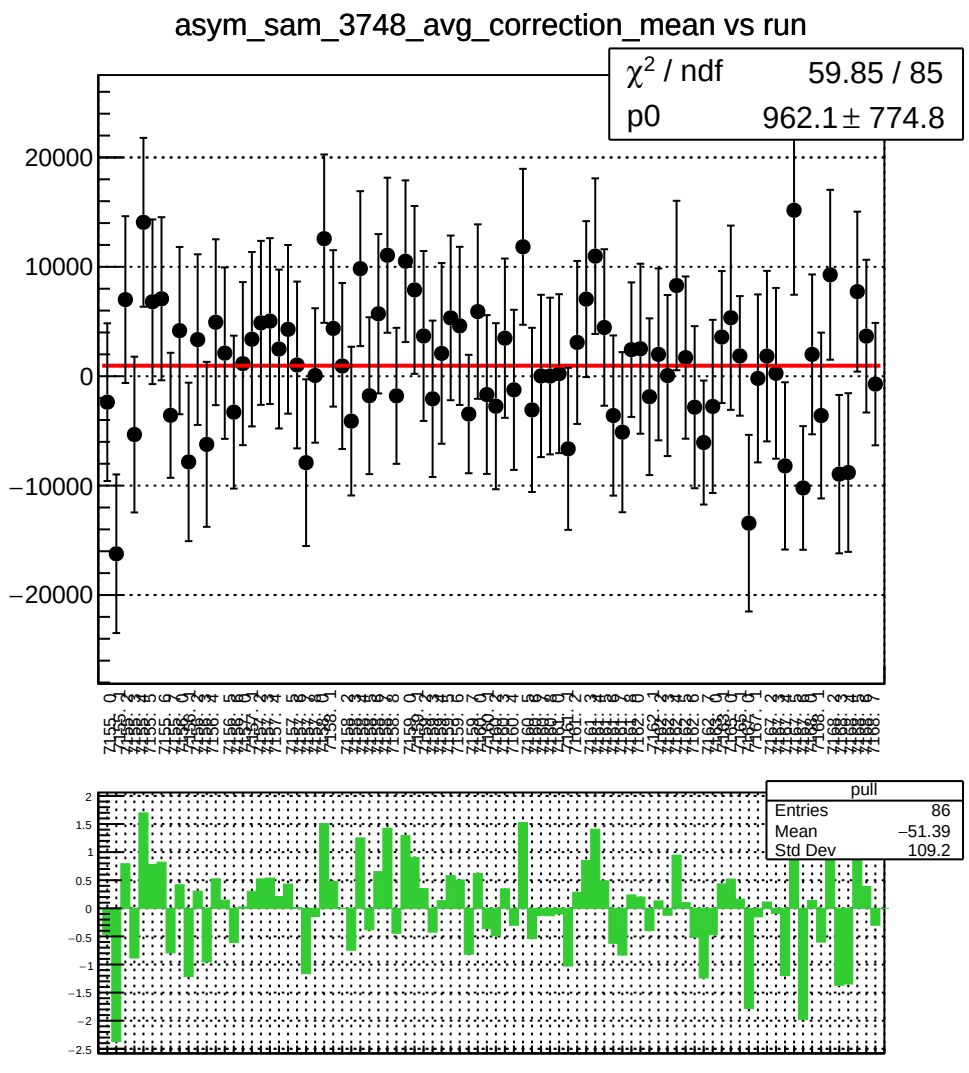

pull1D
Entries 86
Mean −0.01627
Std Dev 0.8404
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

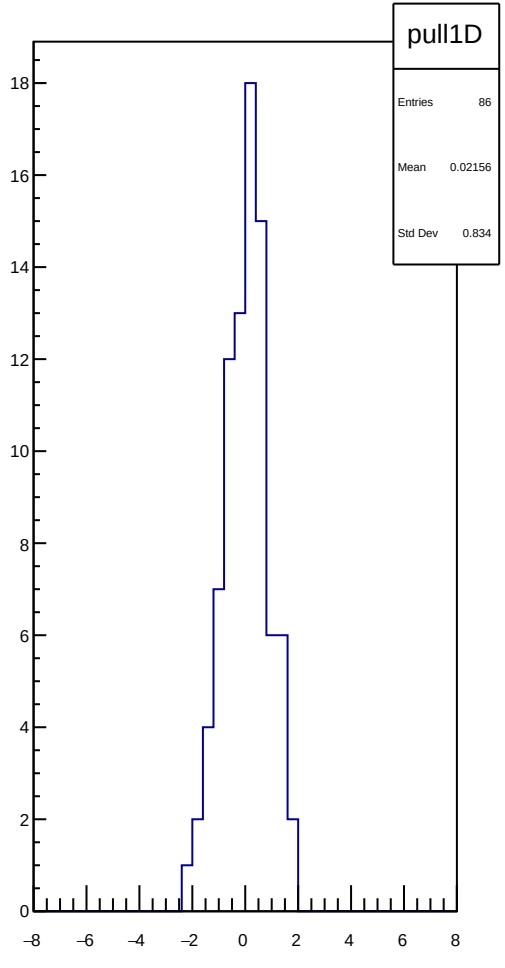

asym_sam_1548_avg_rms vs run
χ² / ndf 3627 / 85
p0 689.8 ± 0.5341
780
760
740
720
700
680
660
640
620
600

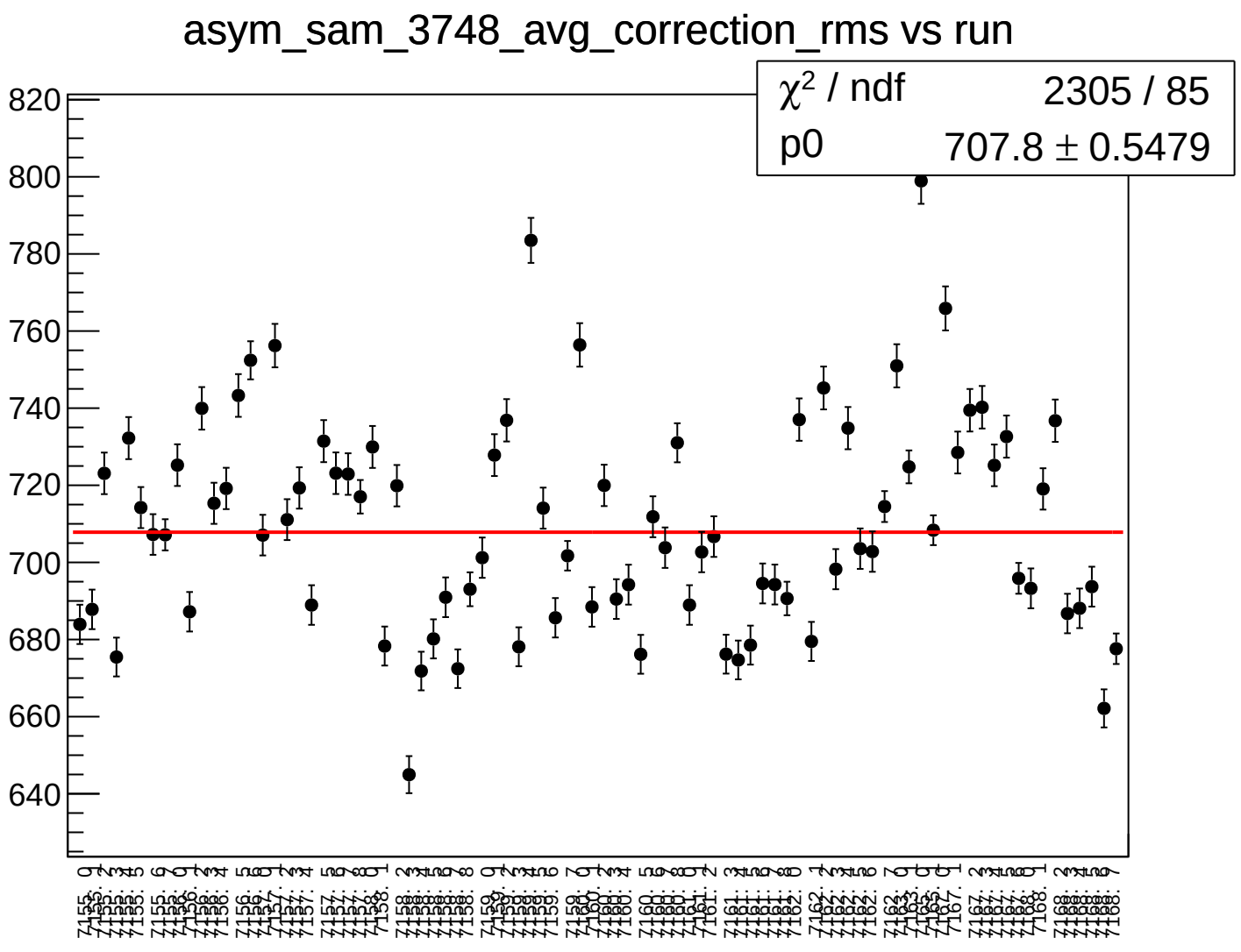

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 76.07 / 85
p0 −164.9 ± 86.78
pull
Entries 86
Mean −91.41
Std Dev 119.5

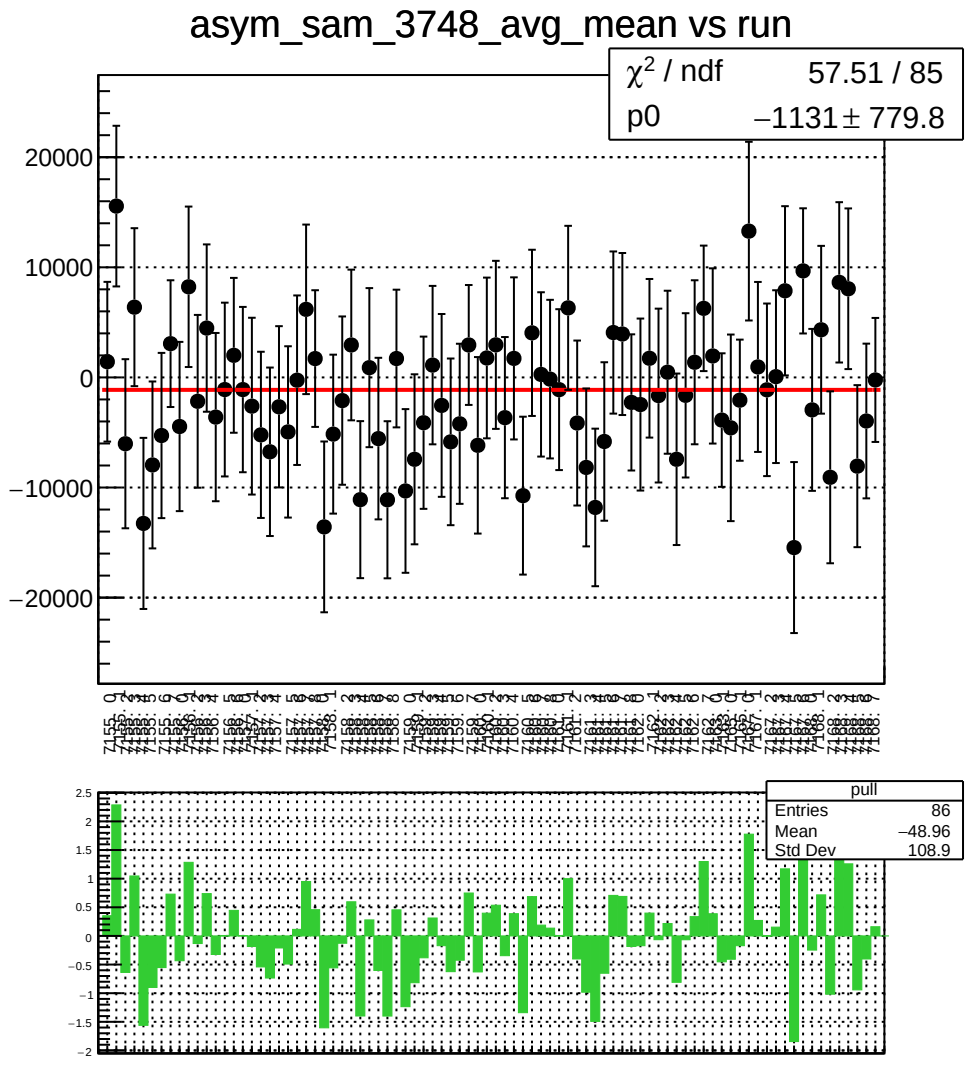

pull1D
Entries 86
Mean 0.009653
Std Dev 0.9405

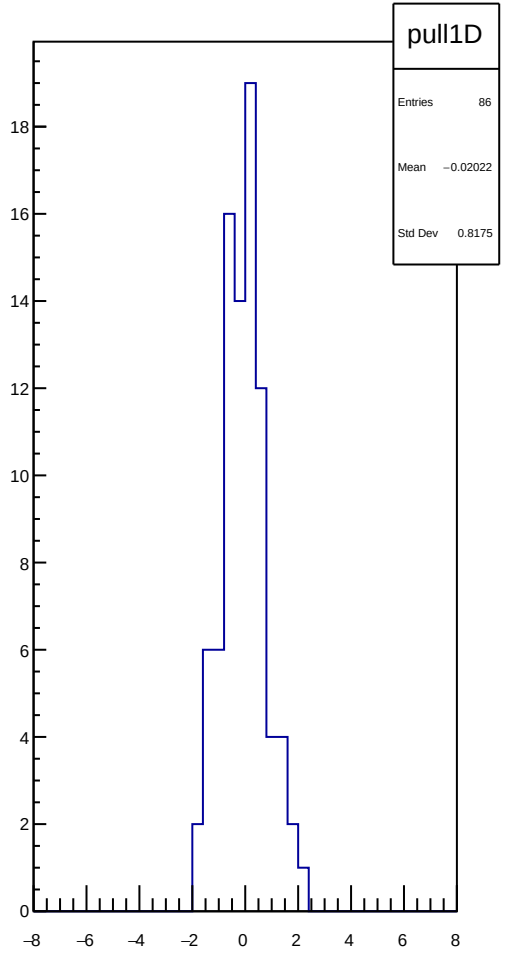

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 1.085e+04 / 85
p0 79.08 ± 0.06136
105
100
95
90
85
80
75
70

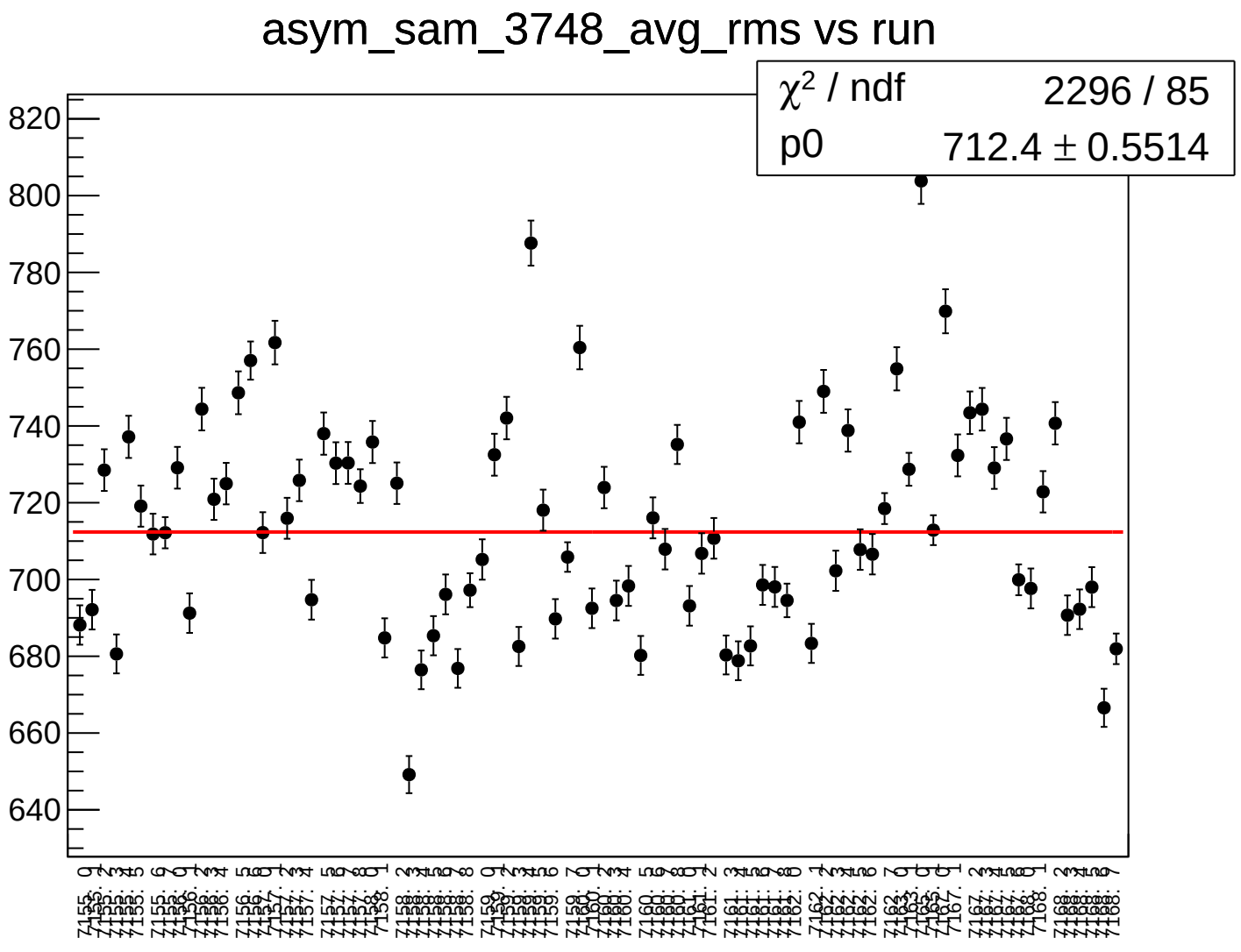

asym_sam_3748_avg_correction_mean vs run
χ^2 / ndf 59.85 / 85
p0 962.1 ± 774.8
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −51.39
Std Dev 109.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

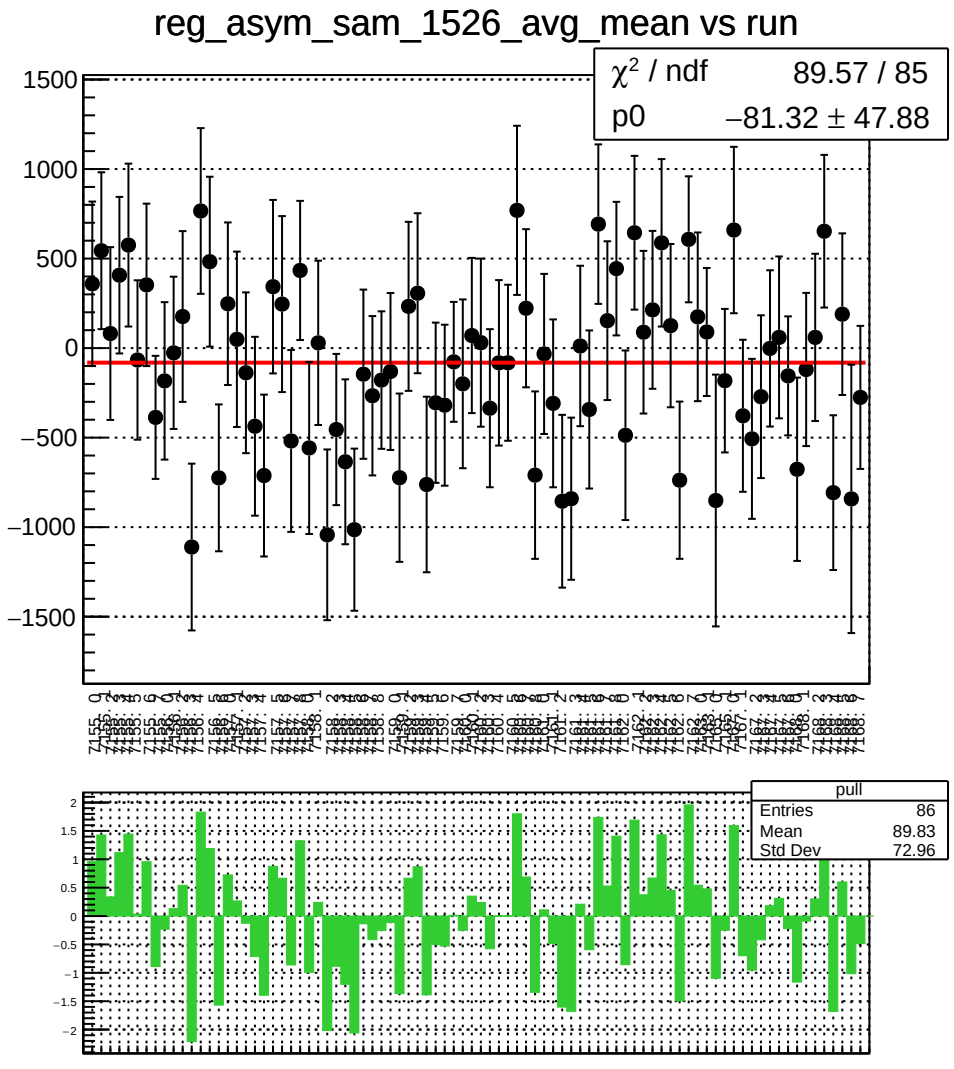

pull1D
Entries 86
Mean 0.02156
Std Dev 0.834
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

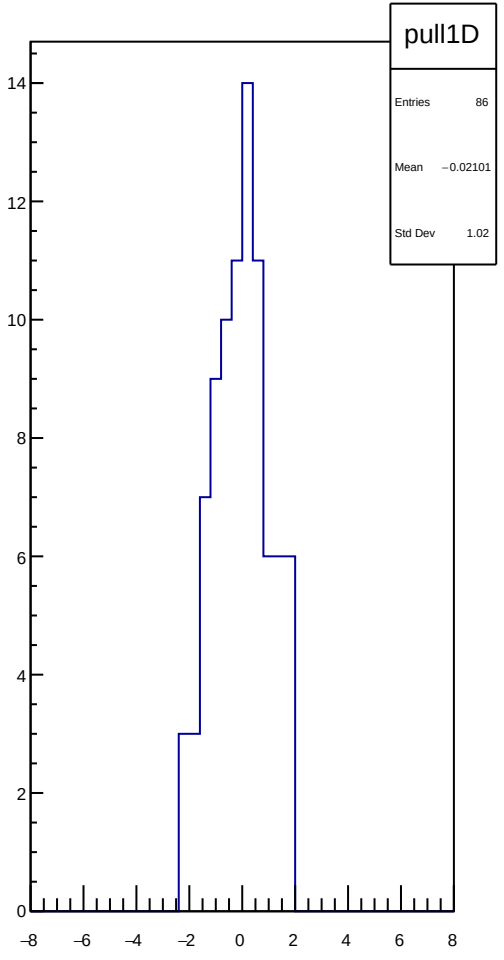

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 2305 / 85
p0 707.8 ± 0.5479
820
800
780
760
740
720
700
680
660
640

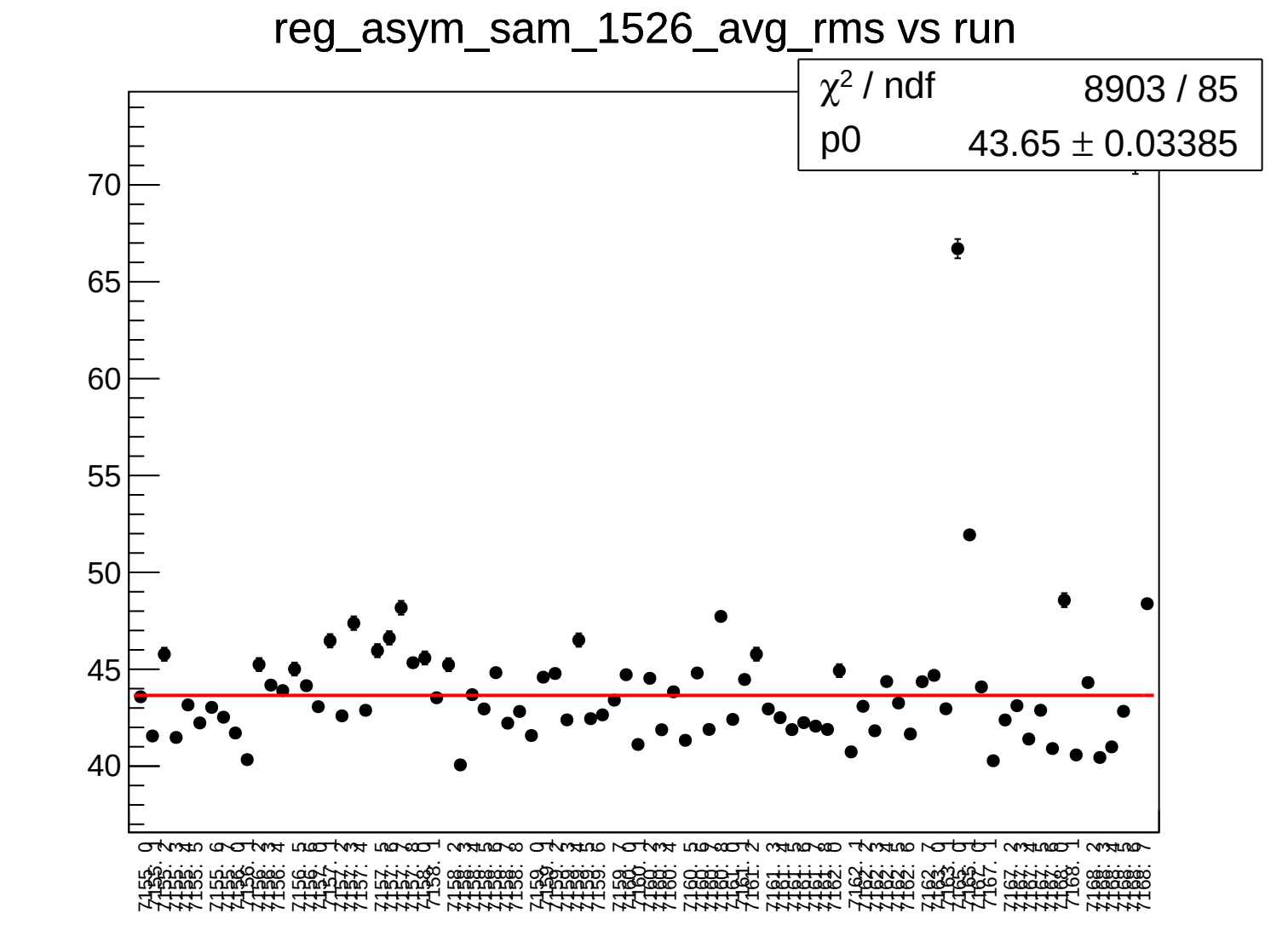

asym_sam_3748_avg_mean vs run
χ² / ndf 57.51 / 85
p0 −1131 ± 779.8
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −48.96
Std Dev 108.9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

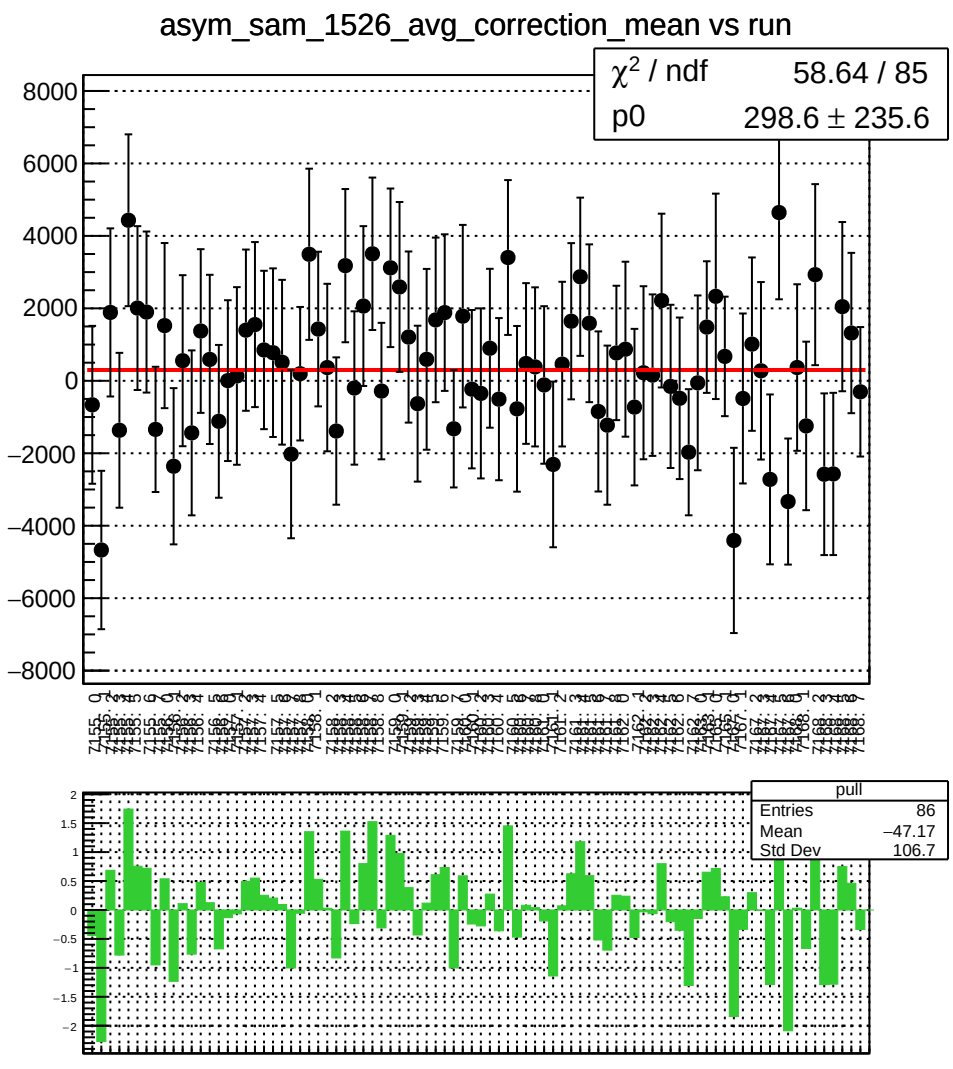

pull1D
Entries 86
Mean −0.02022
Std Dev 0.8175
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

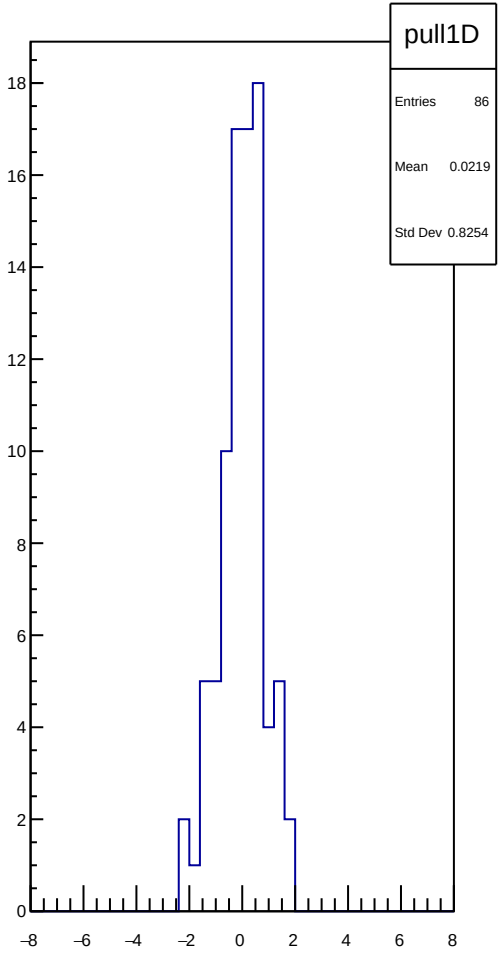

asym_sam_3748_avg_rms vs run
χ² / ndf 2296 / 85
p0 712.4 ± 0.5514
820
800
780
760
740
720
700
680
660
640

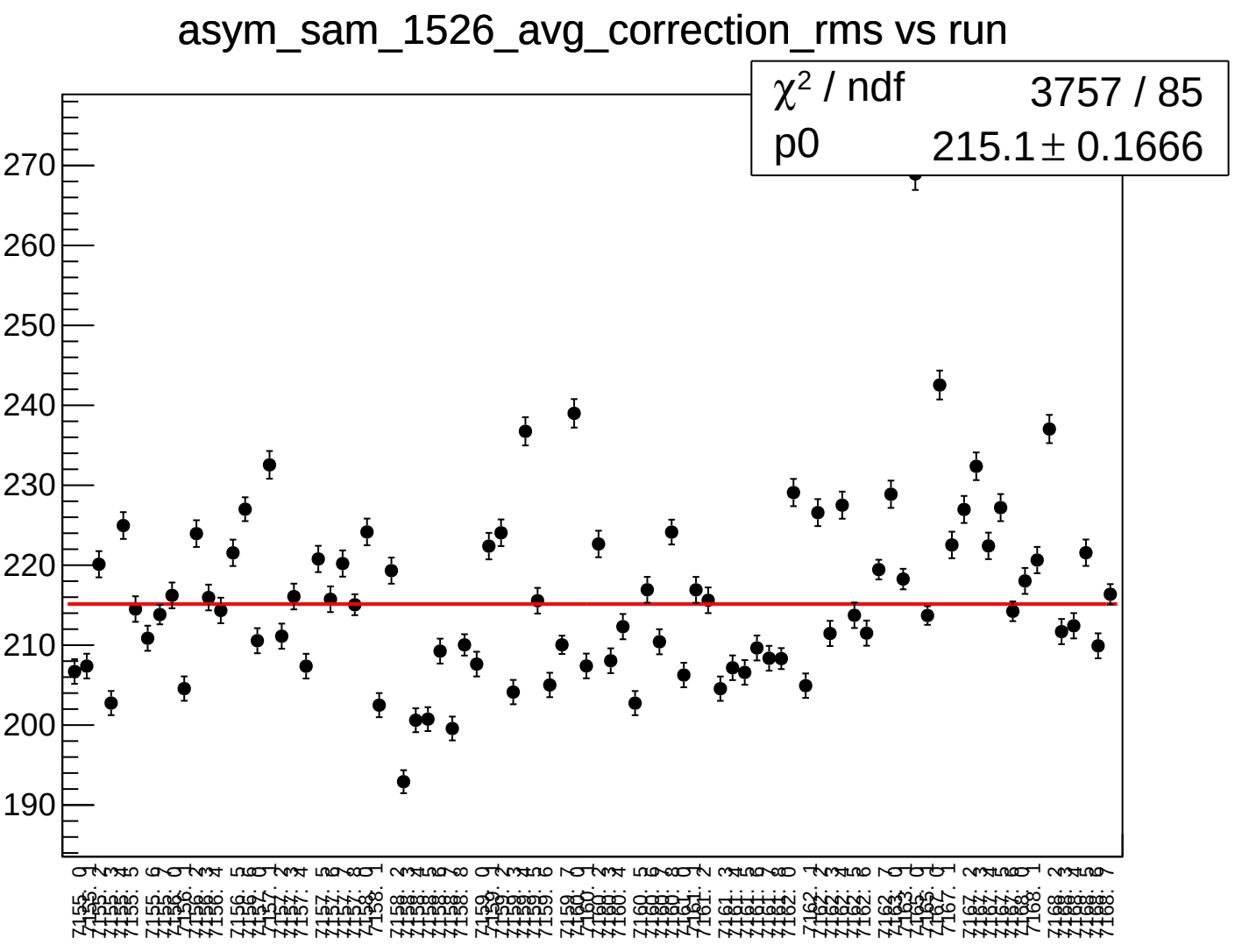

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 89.57 / 85
p0 −81.32 ± 47.88
pull
Entries 86
Mean 89.83
Std Dev 72.96

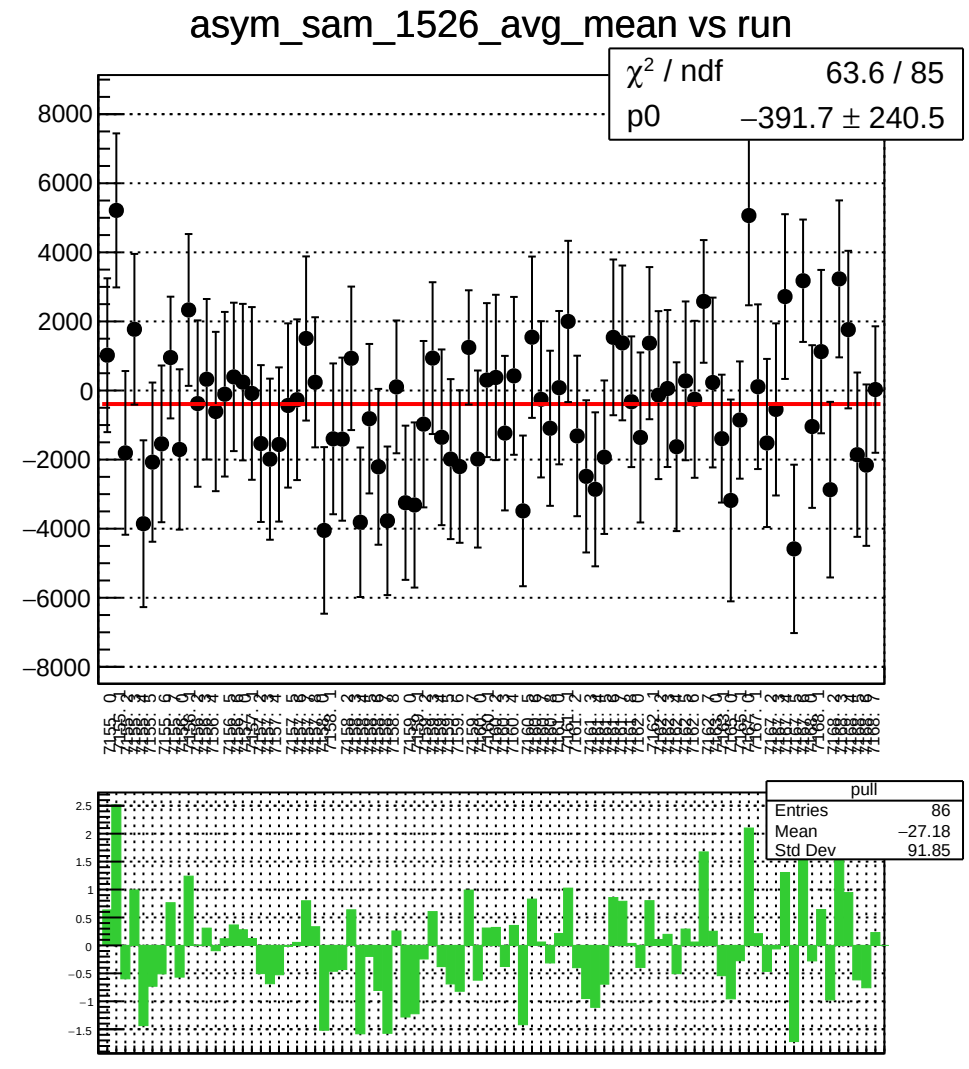

pull1D
Entries 86
Mean −0.02101
Std Dev 1.02

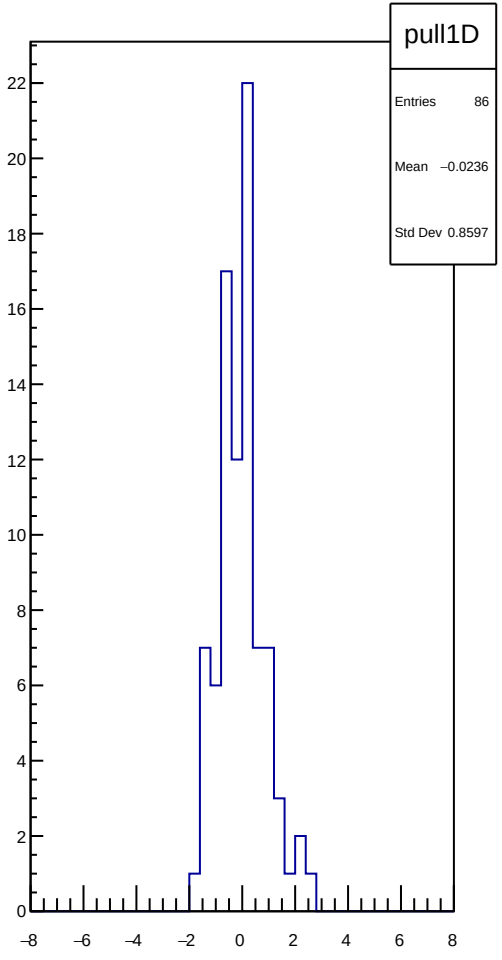

reg_asym_sam_1526_avg_rms vs run
χ² / ndf 8903 / 85
p0 43.65 ± 0.03385
70
65
60
55
50
45
40

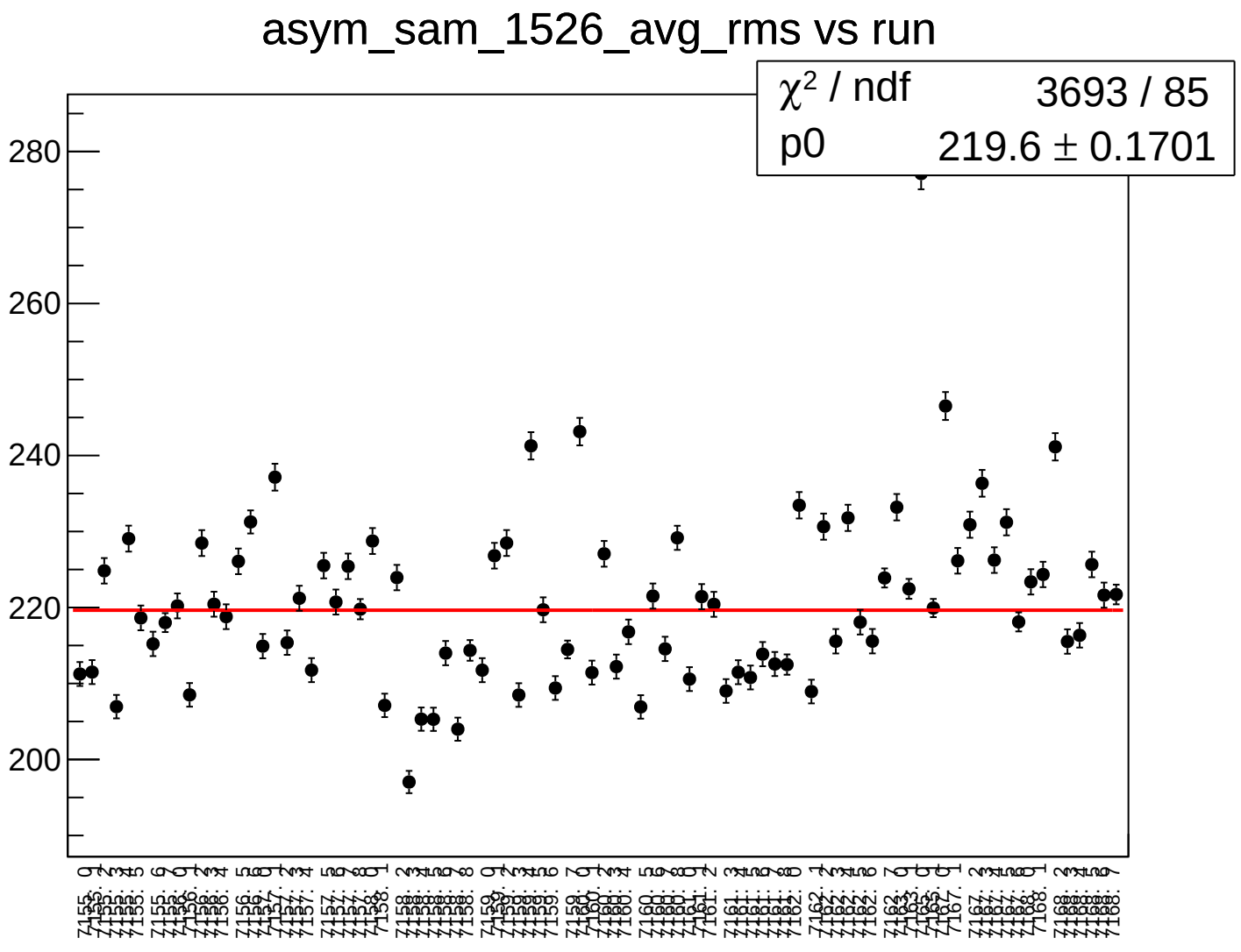

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 58.64 / 85
p0 298.6 ± 235.6
pull
Entries 86
Mean −47.17
Std Dev 106.7

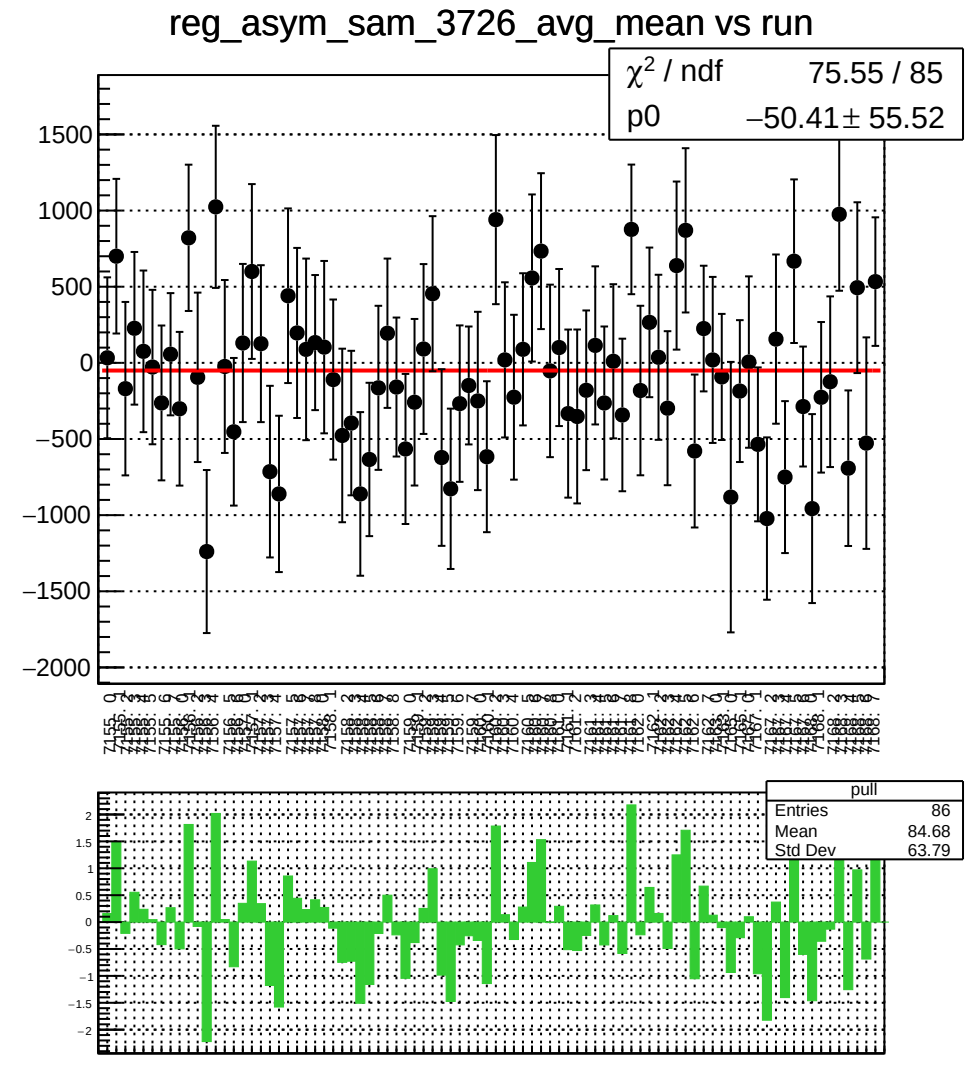

pull1D
Entries 86
Mean 0.0219
Std Dev 0.8254

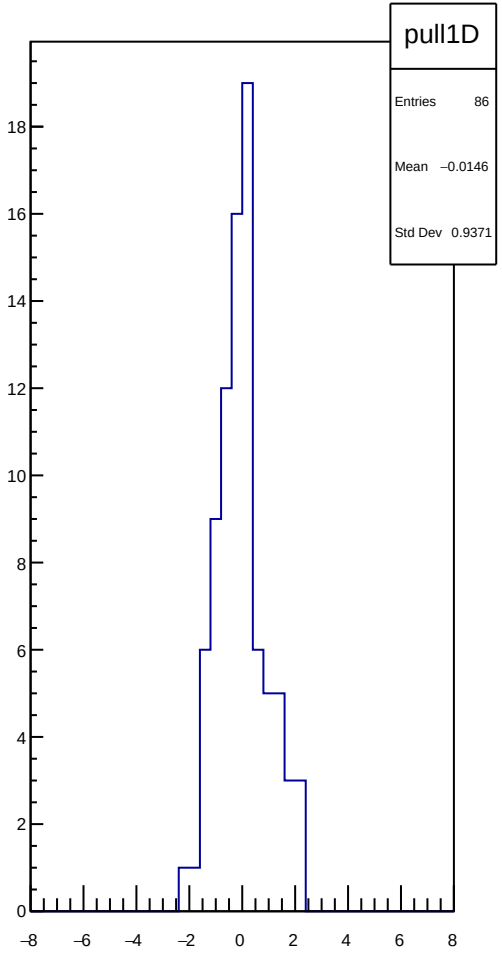

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 3757 / 85
p0 215.1 ± 0.1666
270
260
250
240
230
220
210
200
190

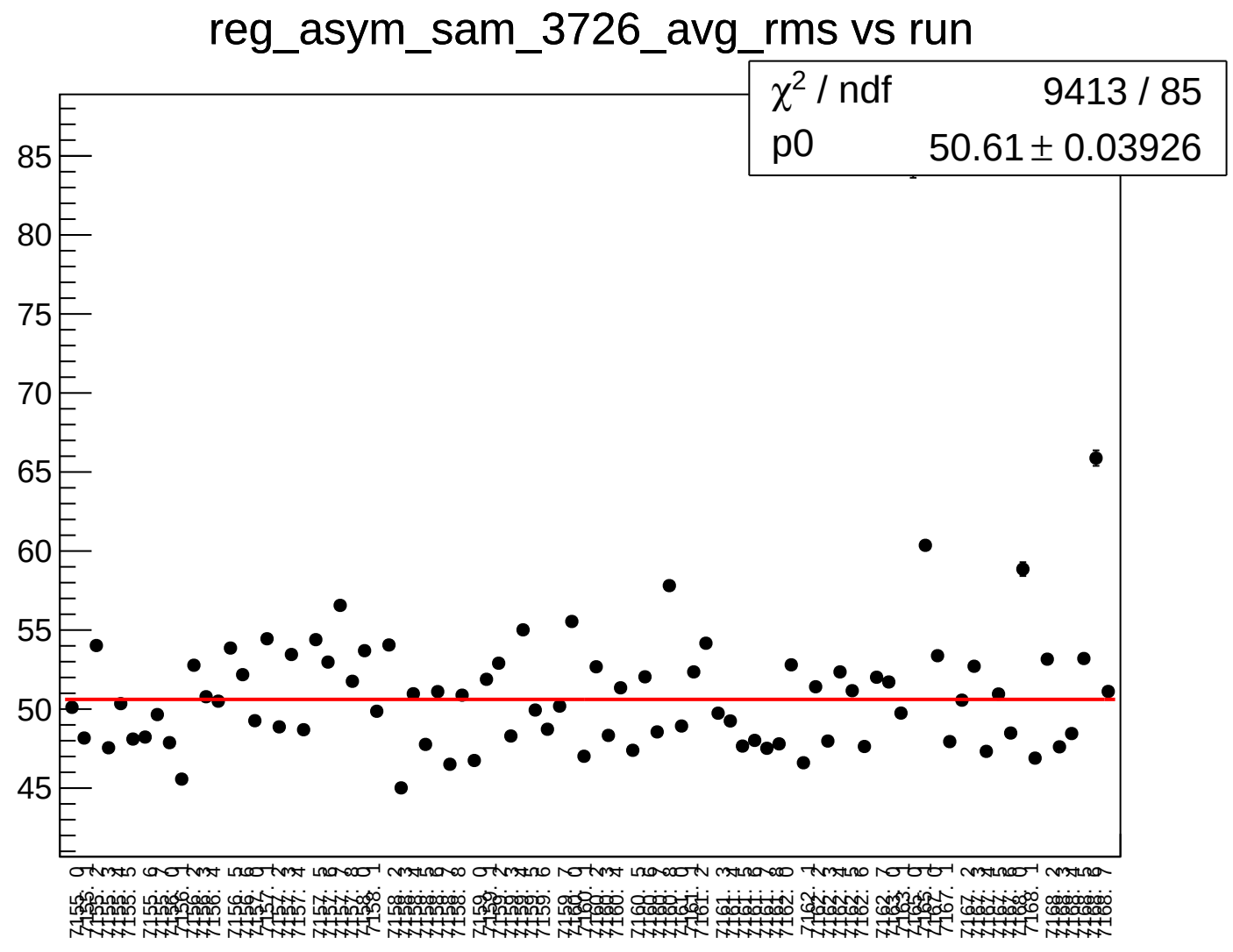

asym_sam_1526_avg_mean vs run
χ² / ndf 63.6 / 85
p0 −391.7 ± 240.5
pull
Entries 86
Mean −27.18
Std Dev 91.85

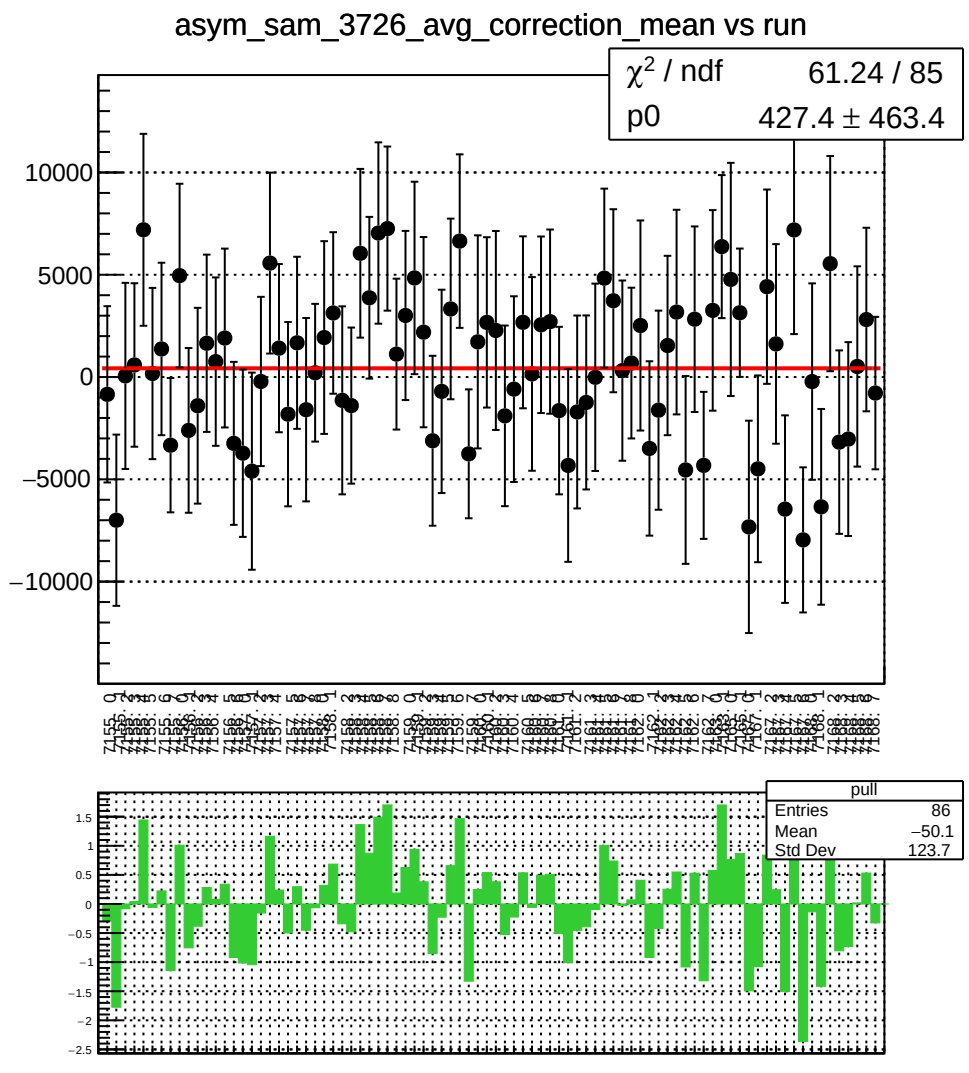

pull1D
Entries 86
Mean −0.0236
Std Dev 0.8597

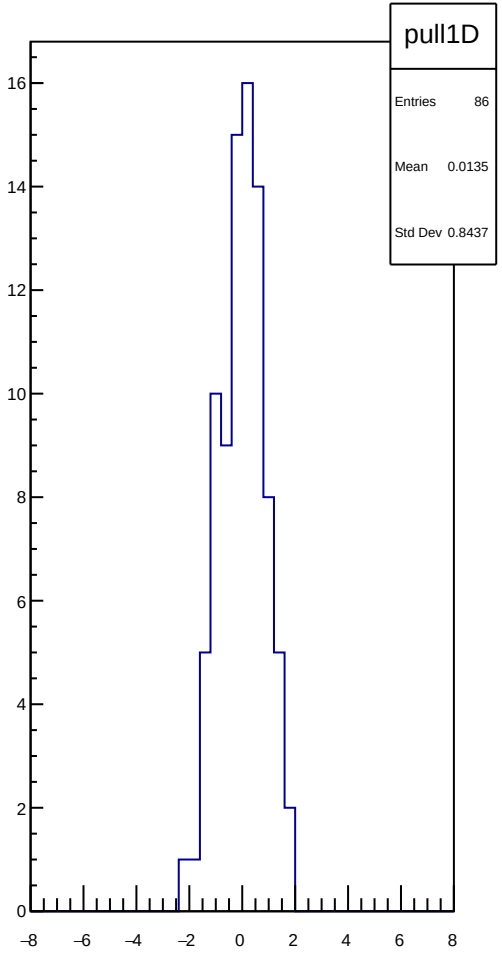

asym_sam_1526_avg_rms vs run
χ² / ndf 3693 / 85
p0 219.6 ± 0.1701
280
260
240
220
200

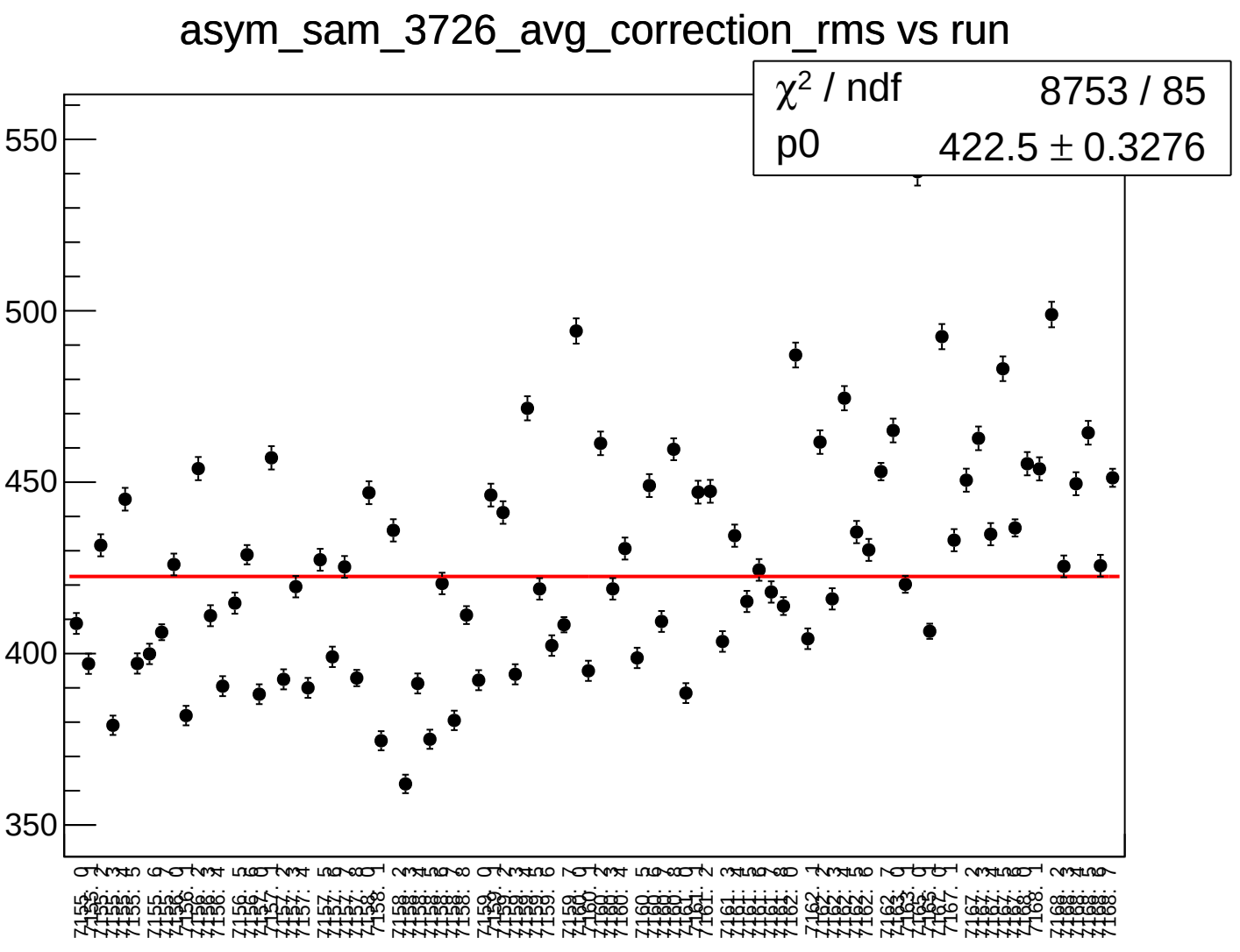

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 75.55 / 85
p0 −50.41 ± 55.52
pull
Entries 86
Mean 84.68
Std Dev 63.79

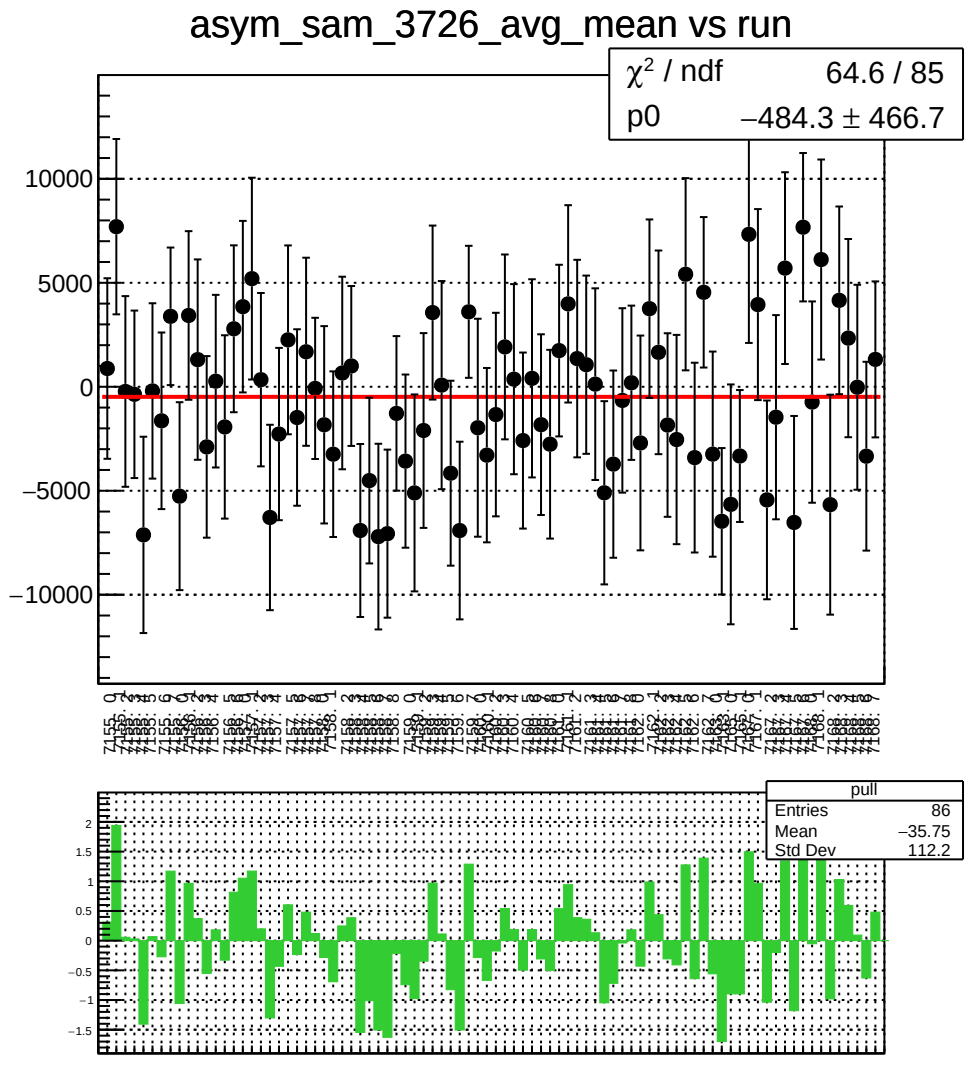

pull1D
Entries 86
Mean −0.0146
Std Dev 0.9371

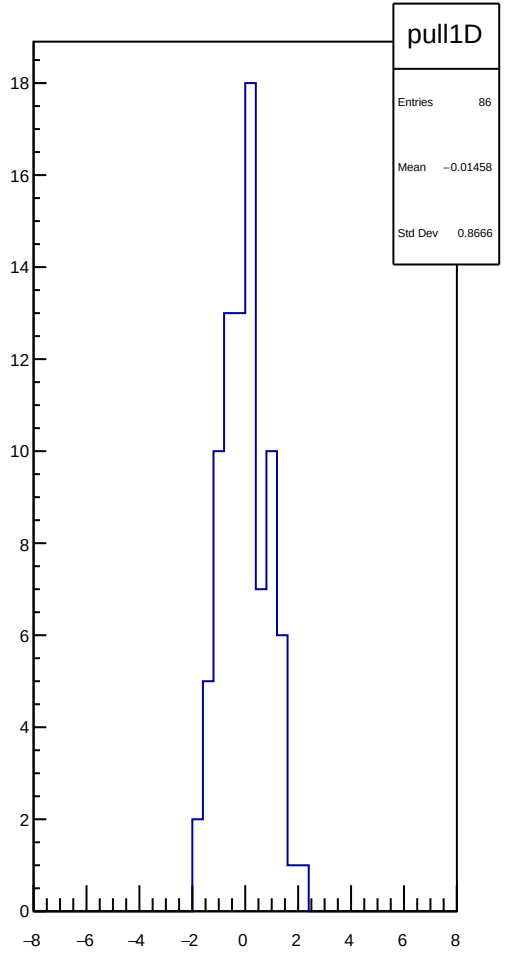

reg_asym_sam_3726_avg_rms vs run
χ^2 / ndf 9413 / 85
p0 50.61 ± 0.03926
85
80
75
70
65
60
55
50
45

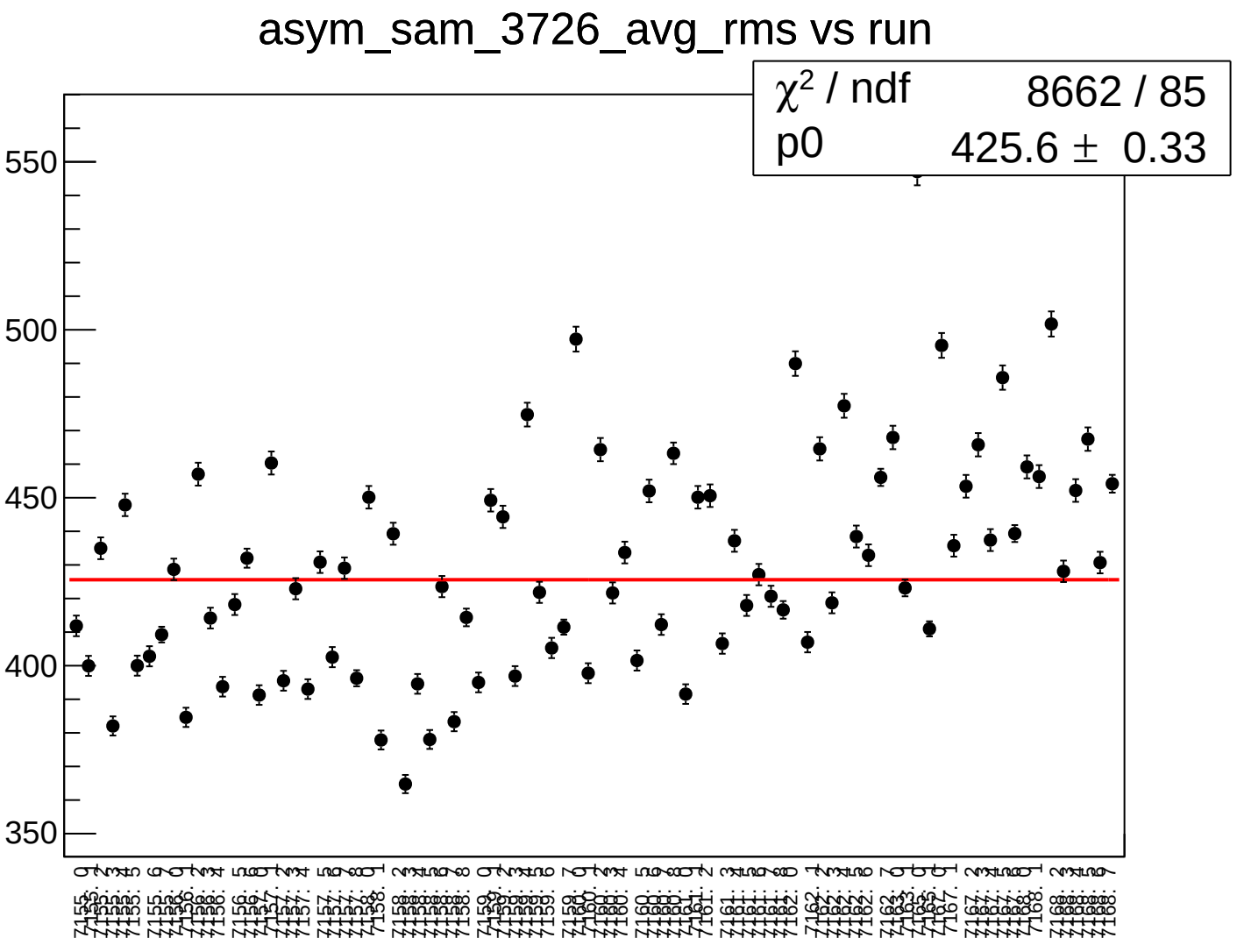

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 61.24 / 85
p0 427.4 ± 463.4
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −50.1
Std Dev 123.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

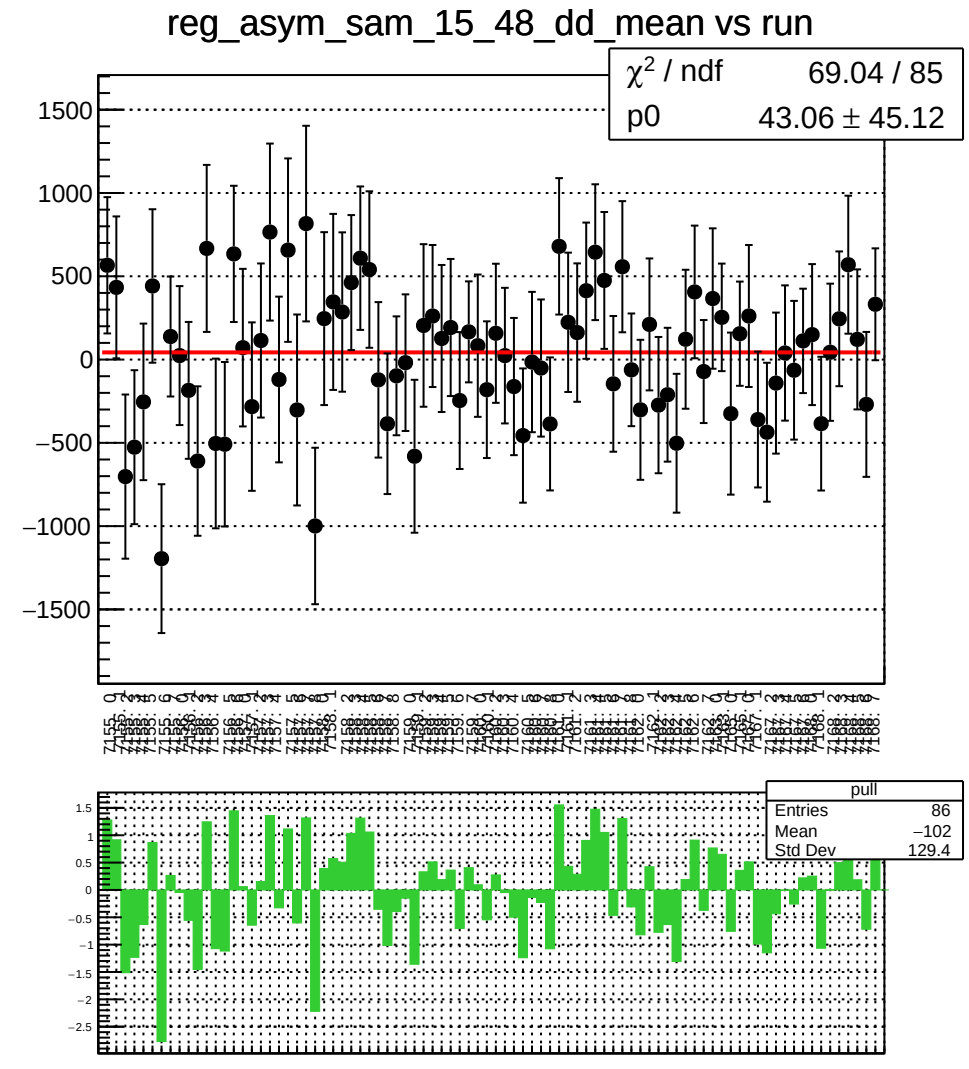

pull1D
Entries 86
Mean 0.0135
Std Dev 0.8437
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

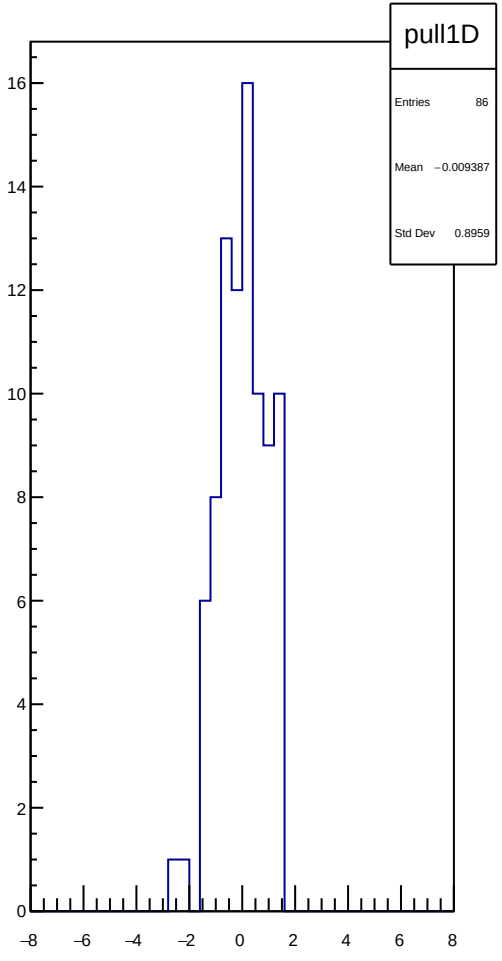

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 8753 / 85
p0 422.5 ± 0.3276
550
500
450
400
350

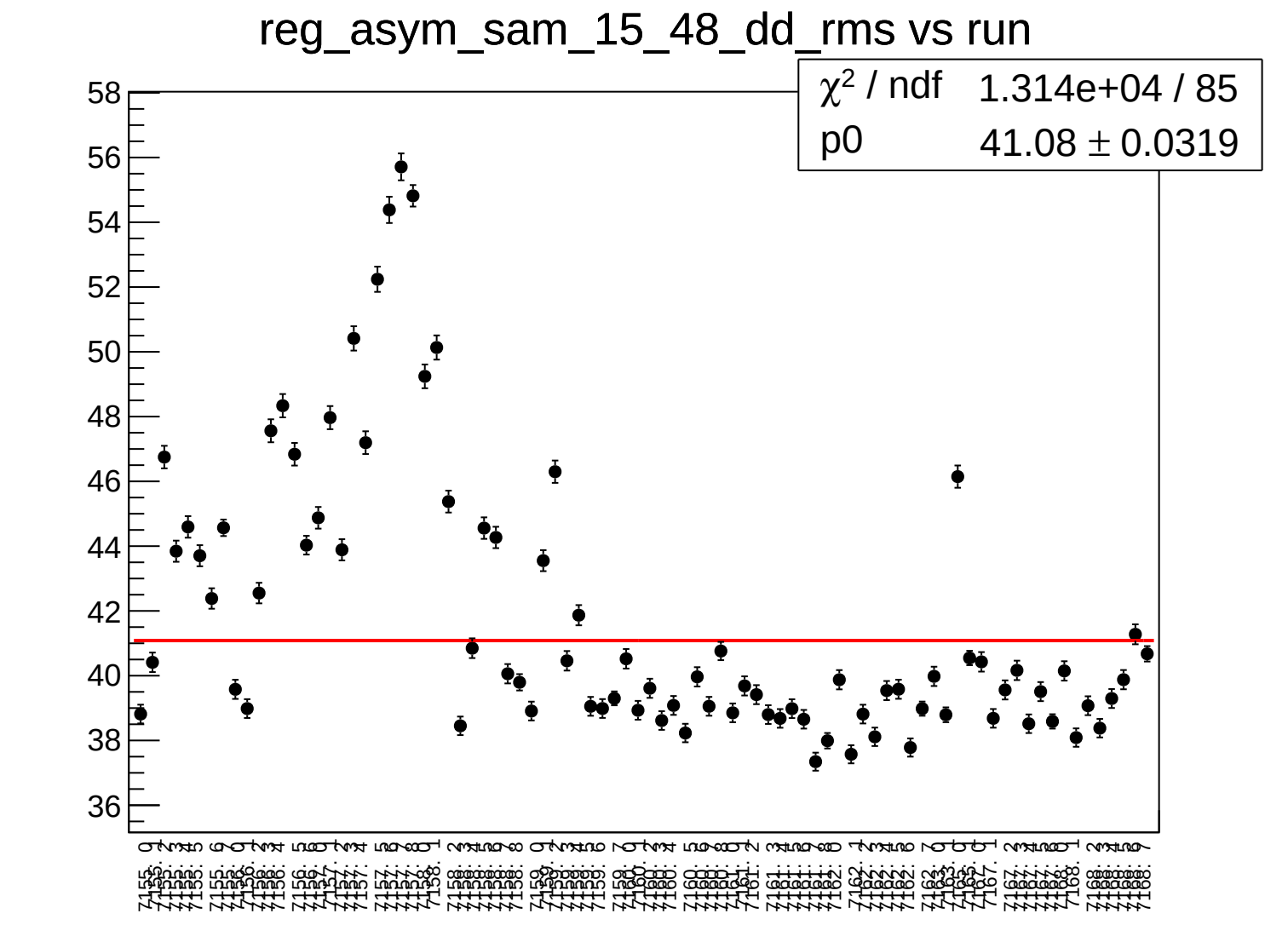

asym_sam_3726_avg_mean vs run
χ² / ndf 64.6 / 85
p0 −484.3 ± 466.7
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −35.75
Std Dev 112.2
2
1.5
1
0.5
0
−0.5
−1
−1.5

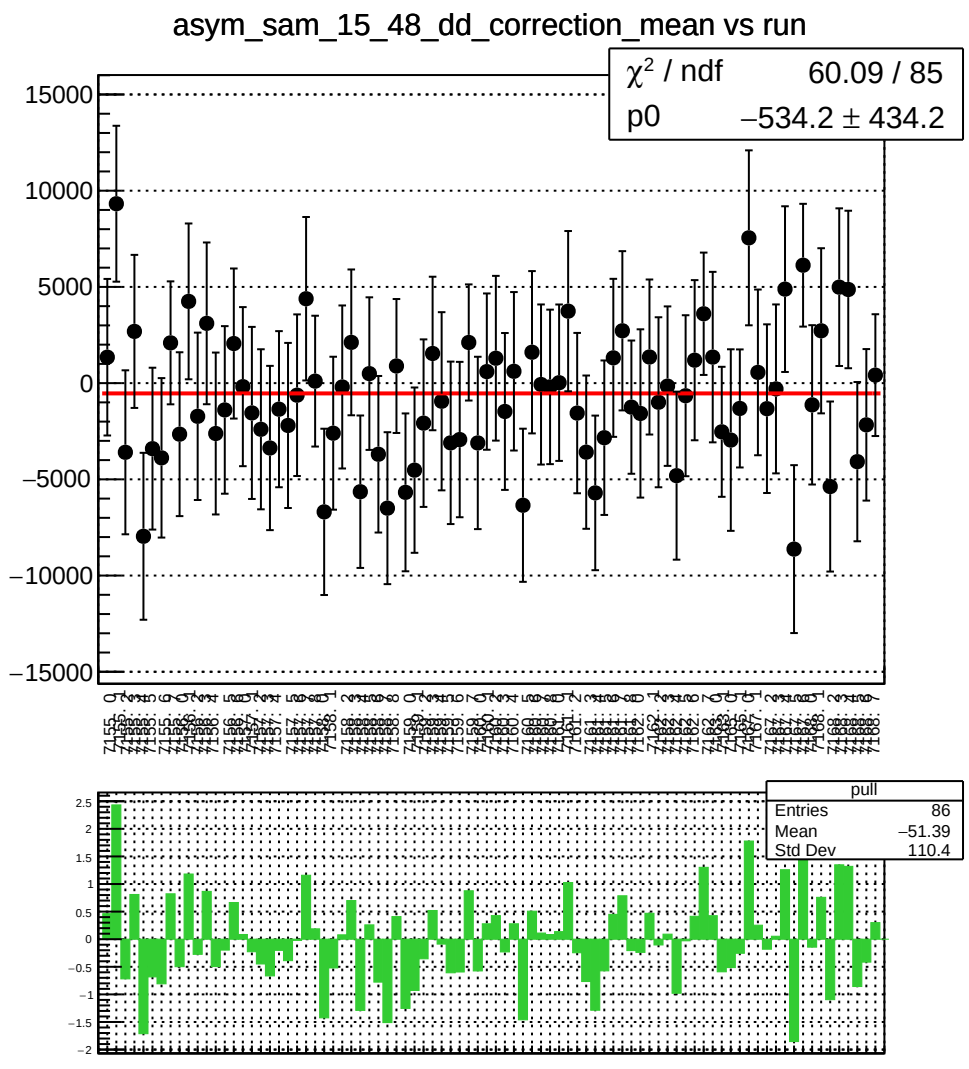

pull1D
Entries 86
Mean −0.01458
Std Dev 0.8666
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

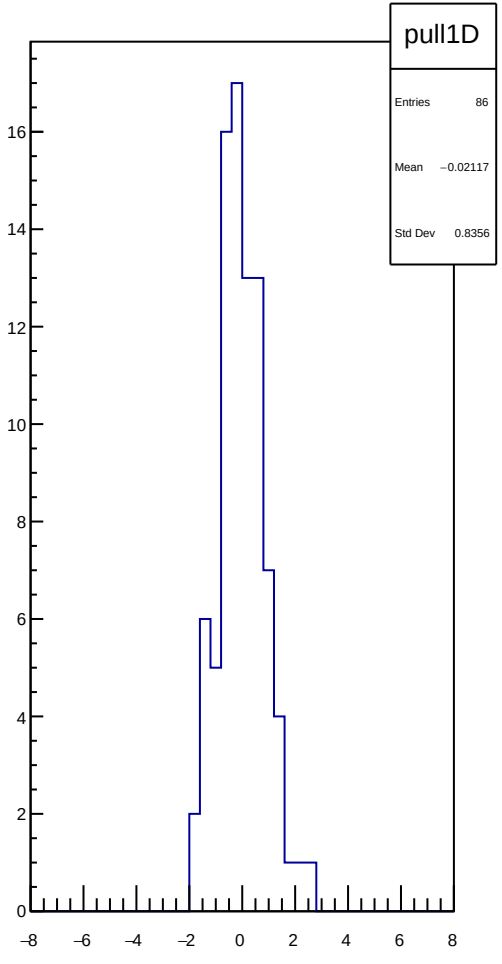

asym_sam_3726_avg_rms vs run
χ^2 / ndf 8662 / 85
p0 425.6 ± 0.33
550
500
450
400
350

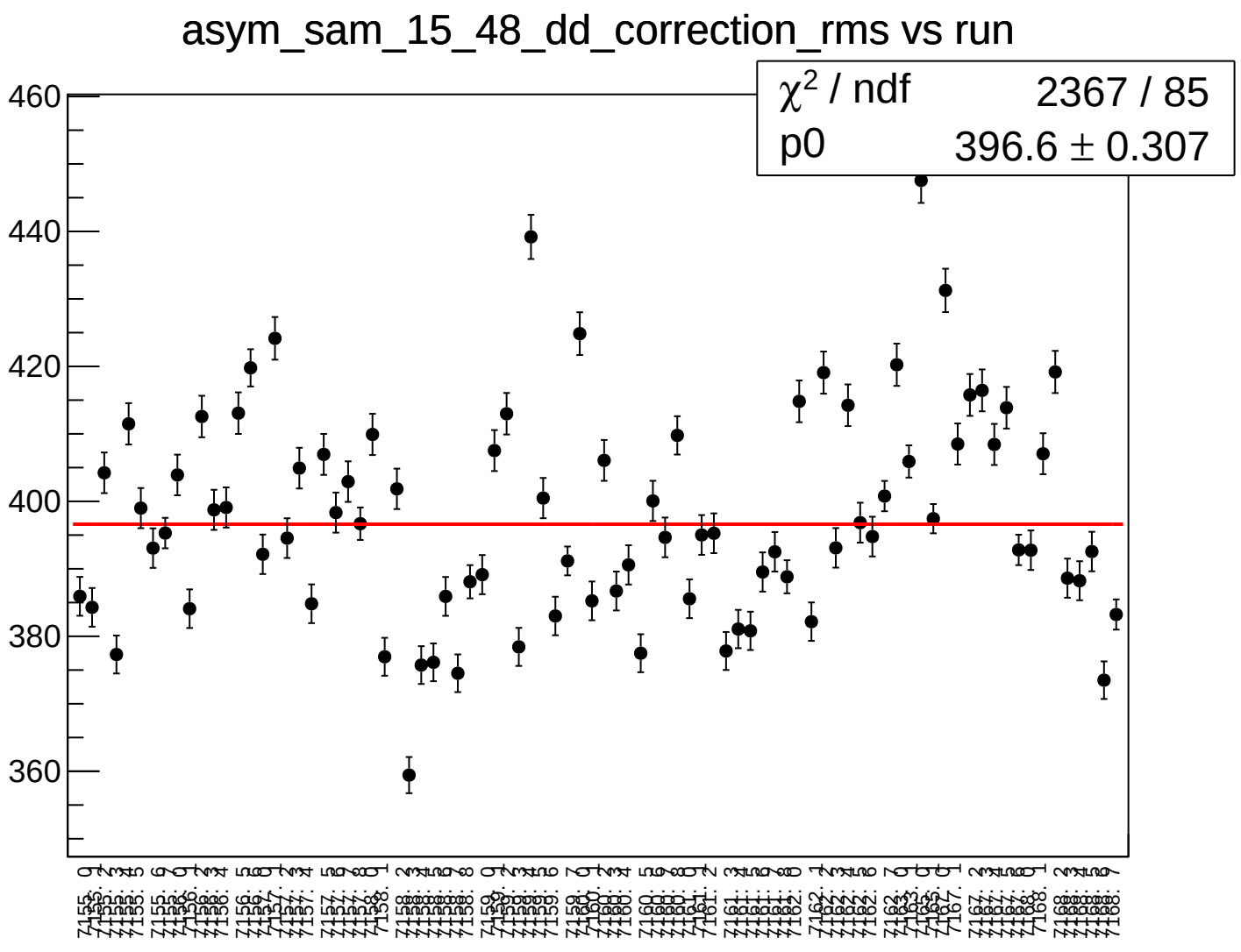

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 69.04 / 85
p0 43.06 ± 45.12
pull
Entries 86
Mean −102
Std Dev 129.4

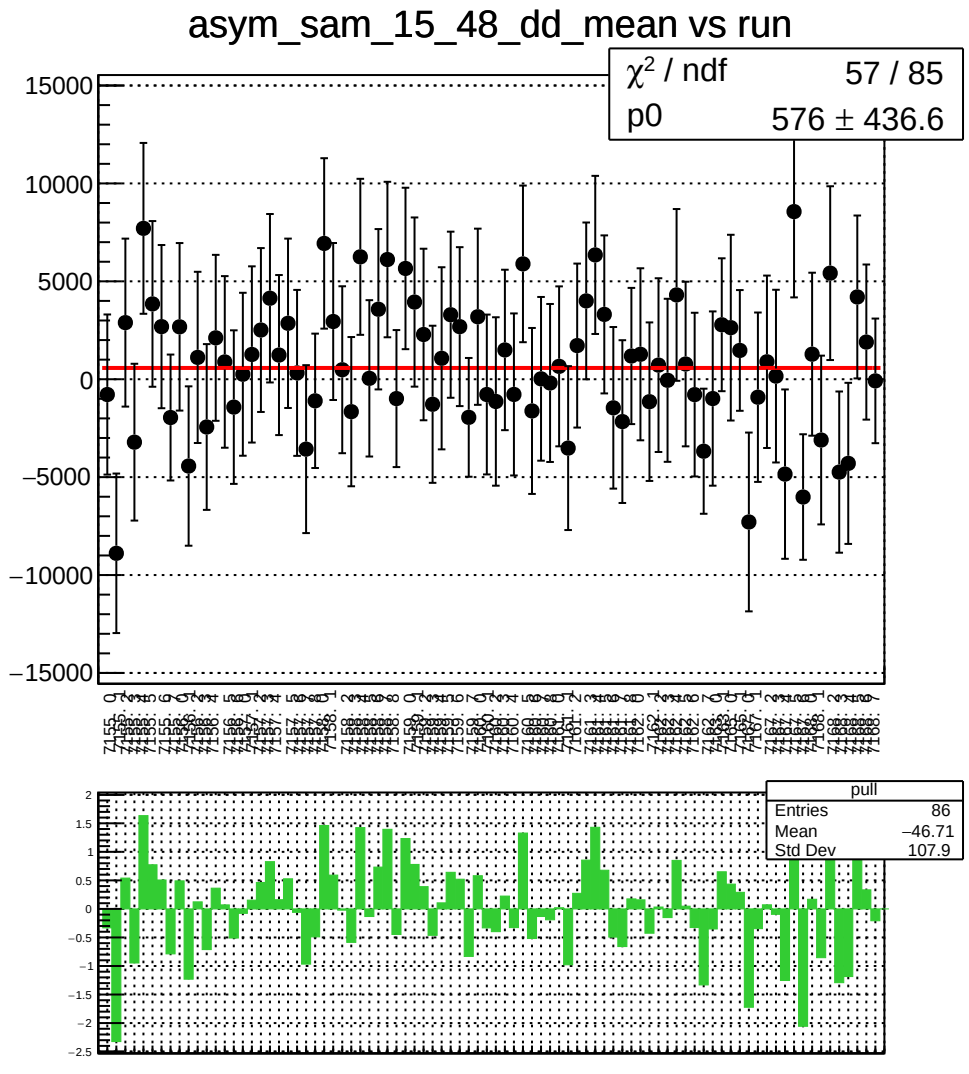

pull1D
Entries 86
Mean −0.009387
Std Dev 0.8959

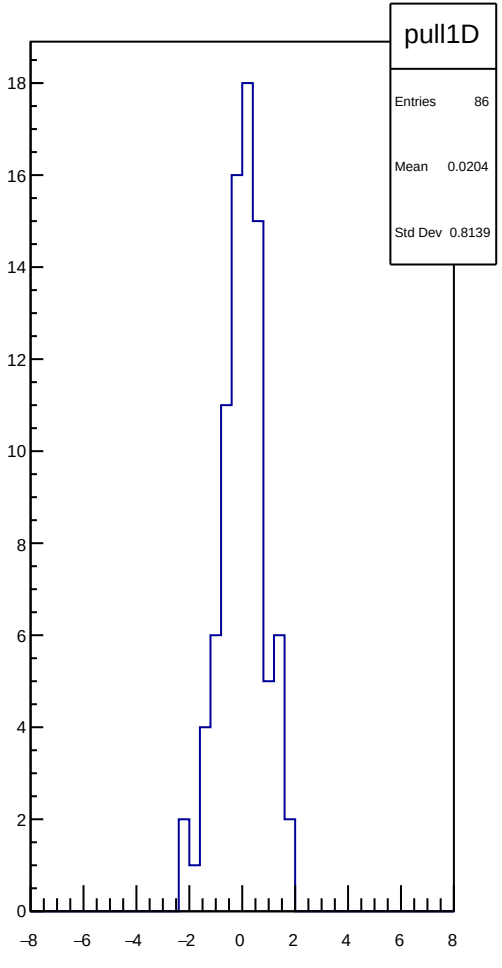

reg_asym_sam_15_48_dd_rms vs run
χ² / ndf 1.314e+04 / 85
p0 41.08 ± 0.0319
58
56
54
52
50
48
46
44
42
40
38
36

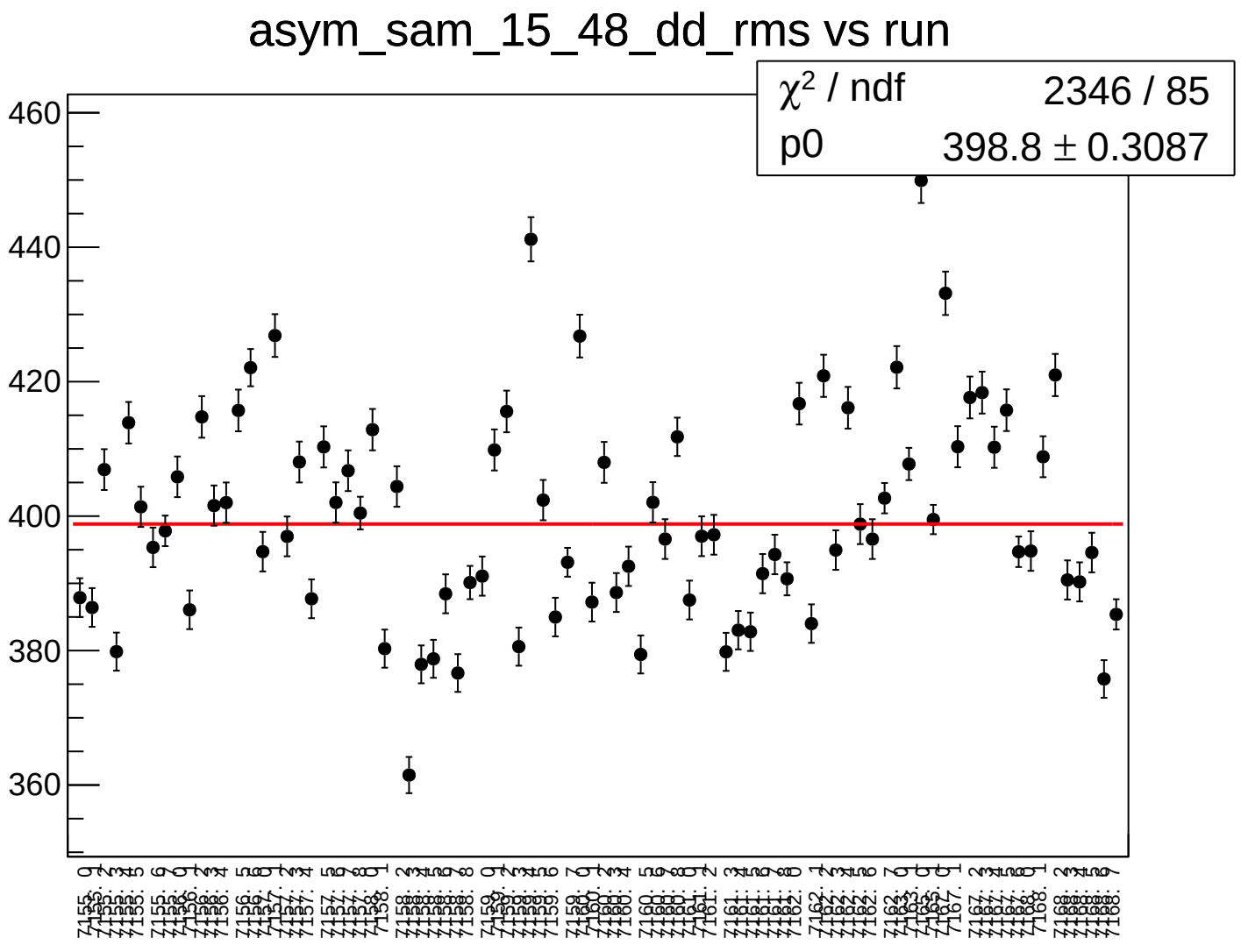

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 60.09 / 85
p0 −534.2 ± 434.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −51.39
Std Dev 110.4
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

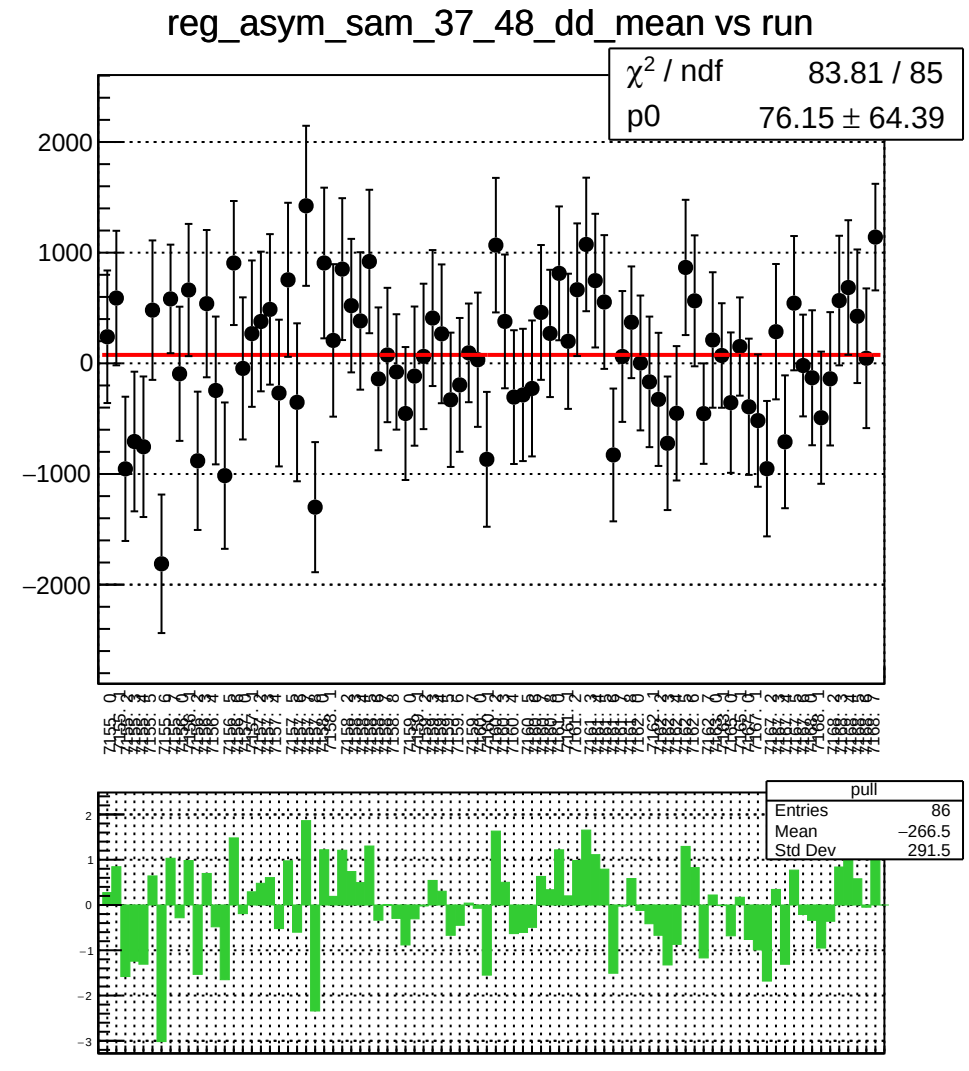

pull1D
Entries 86
Mean −0.02117
Std Dev 0.8356
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

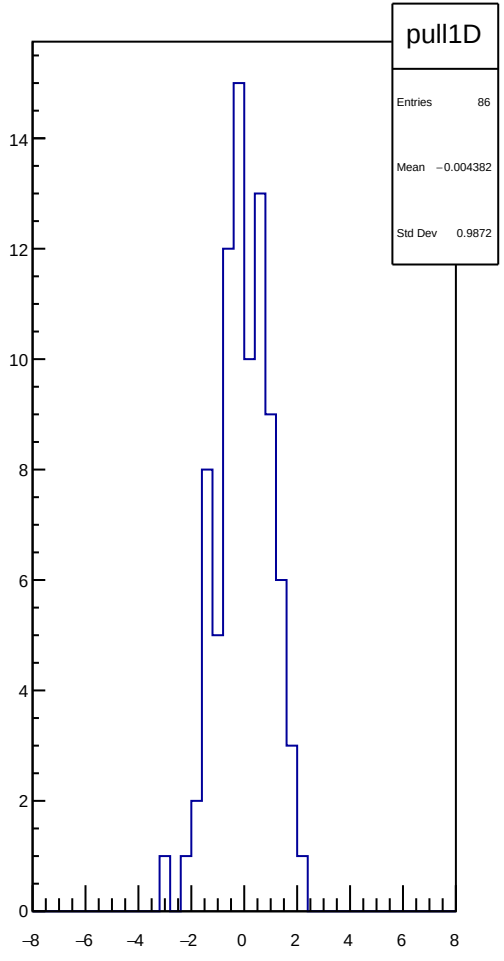

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 2367 / 85
p0 396.6 ± 0.307
460
440
420
400
380
360

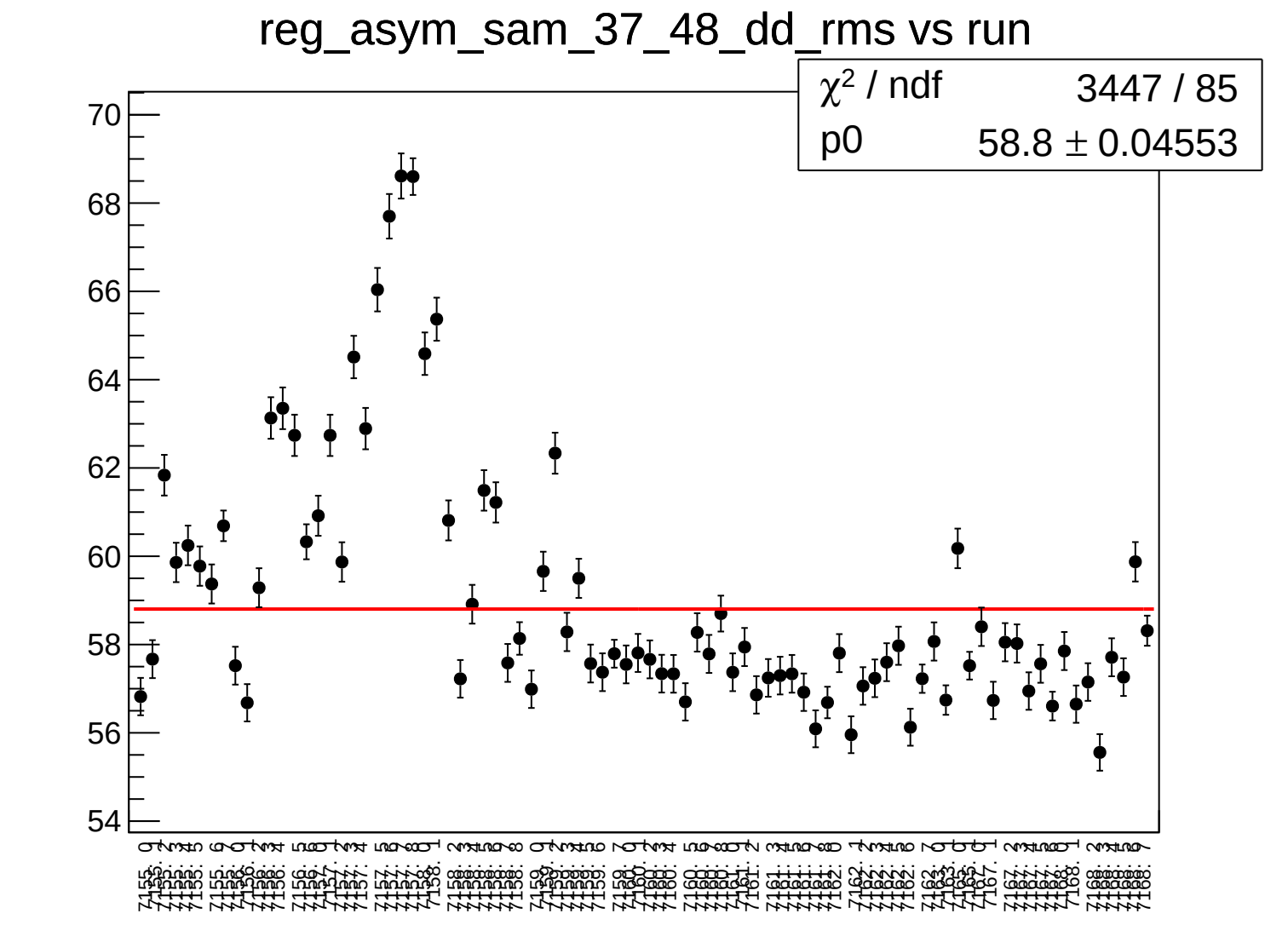

asym_sam_15_48_dd_mean vs run
χ² / ndf 57 / 85
p0 576 ± 436.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −46.71
Std Dev 107.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

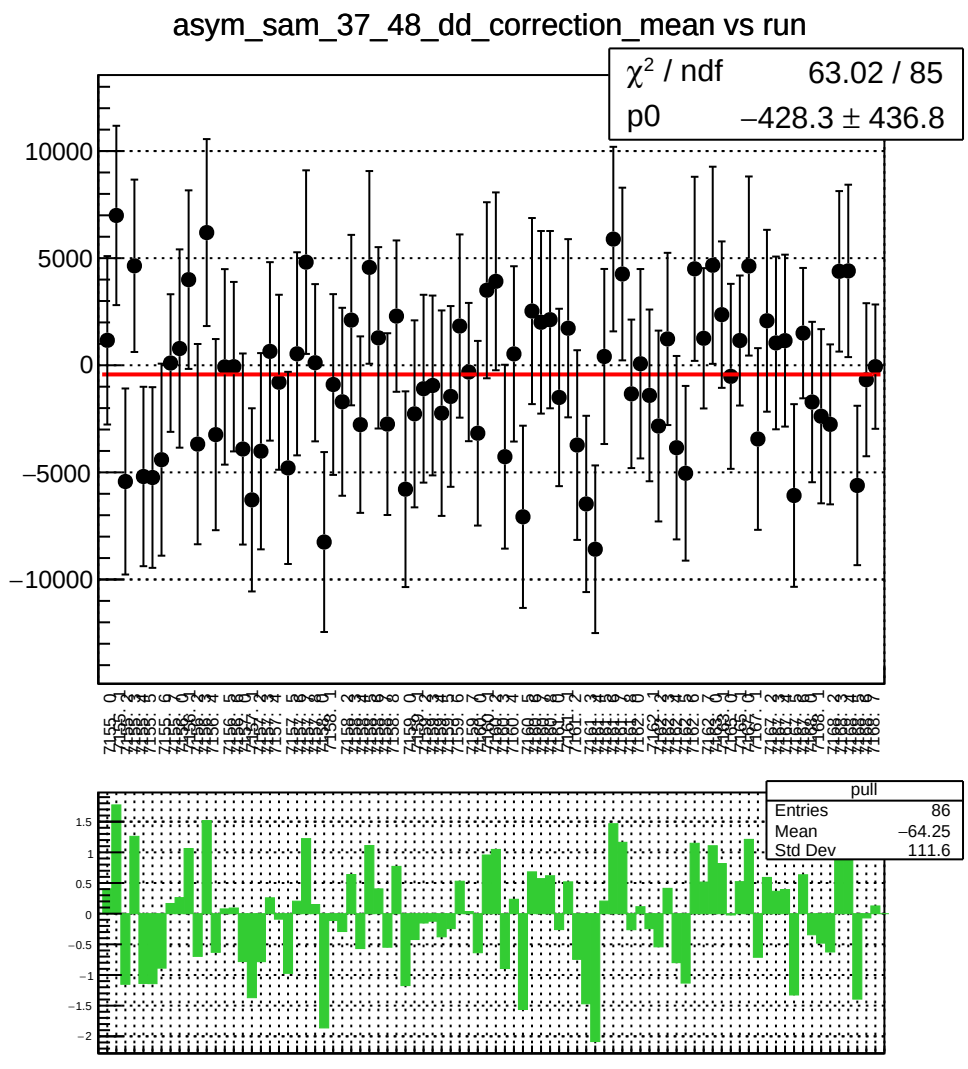

pull1D
Entries 86
Mean 0.0204
Std Dev 0.8139
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

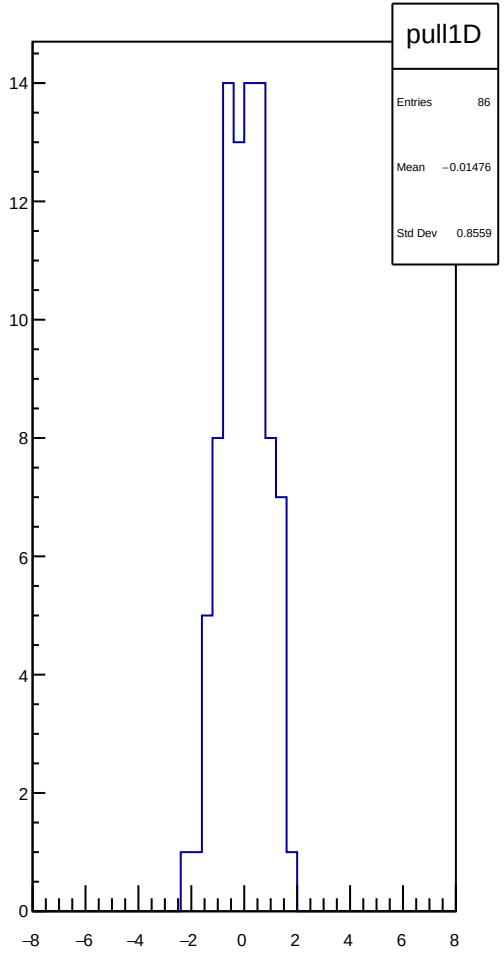

asym_sam_15_48_dd_rms vs run
χ² / ndf 2346 / 85
p0 398.8 ± 0.3087
460
440
420
400
380
360

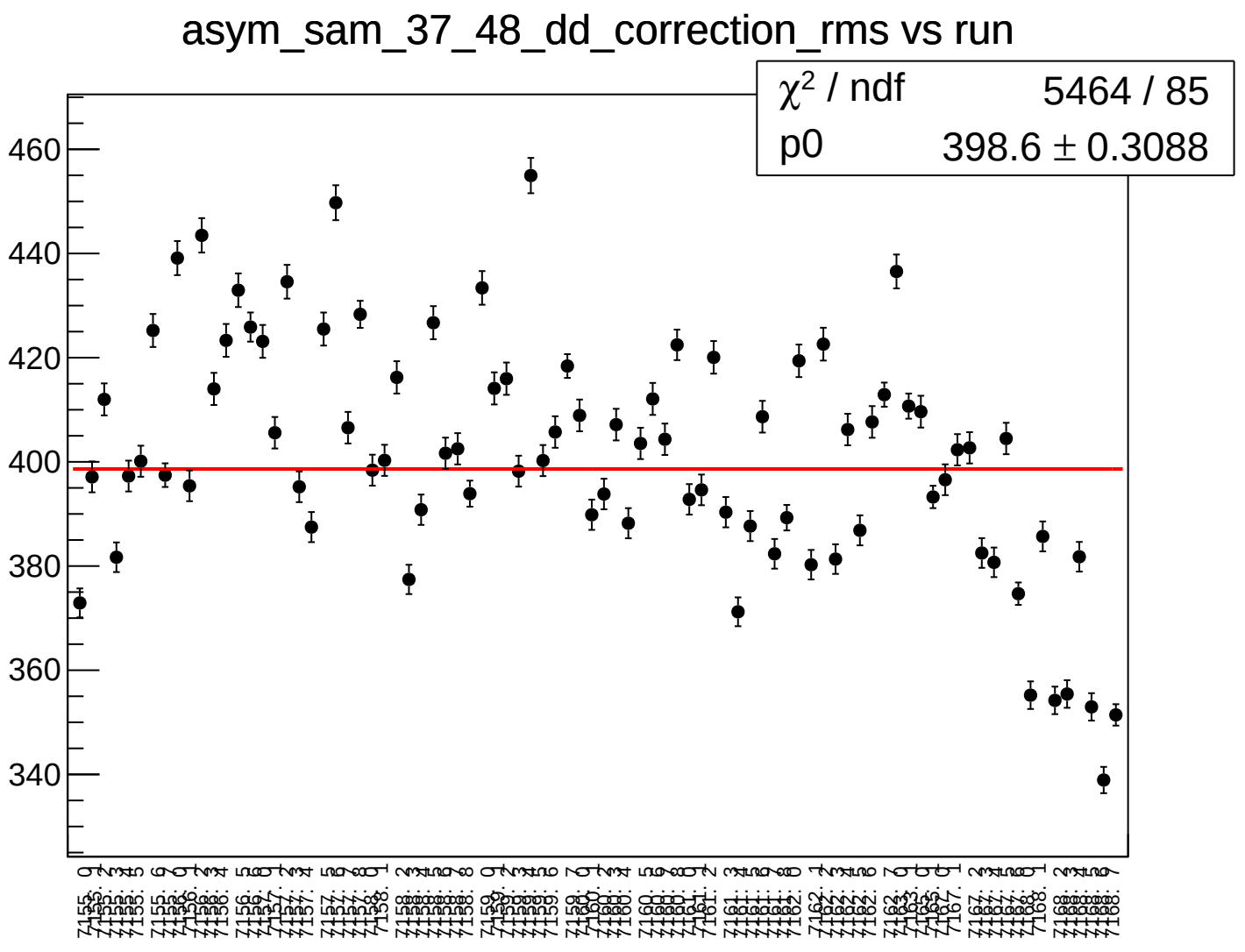

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 83.81 / 85
p0 76.15 ± 64.39
2000
1000
0
−1000
−2000
pull
Entries 86
Mean −266.5
Std Dev 291.5
2
1
0
−1
−2
−3

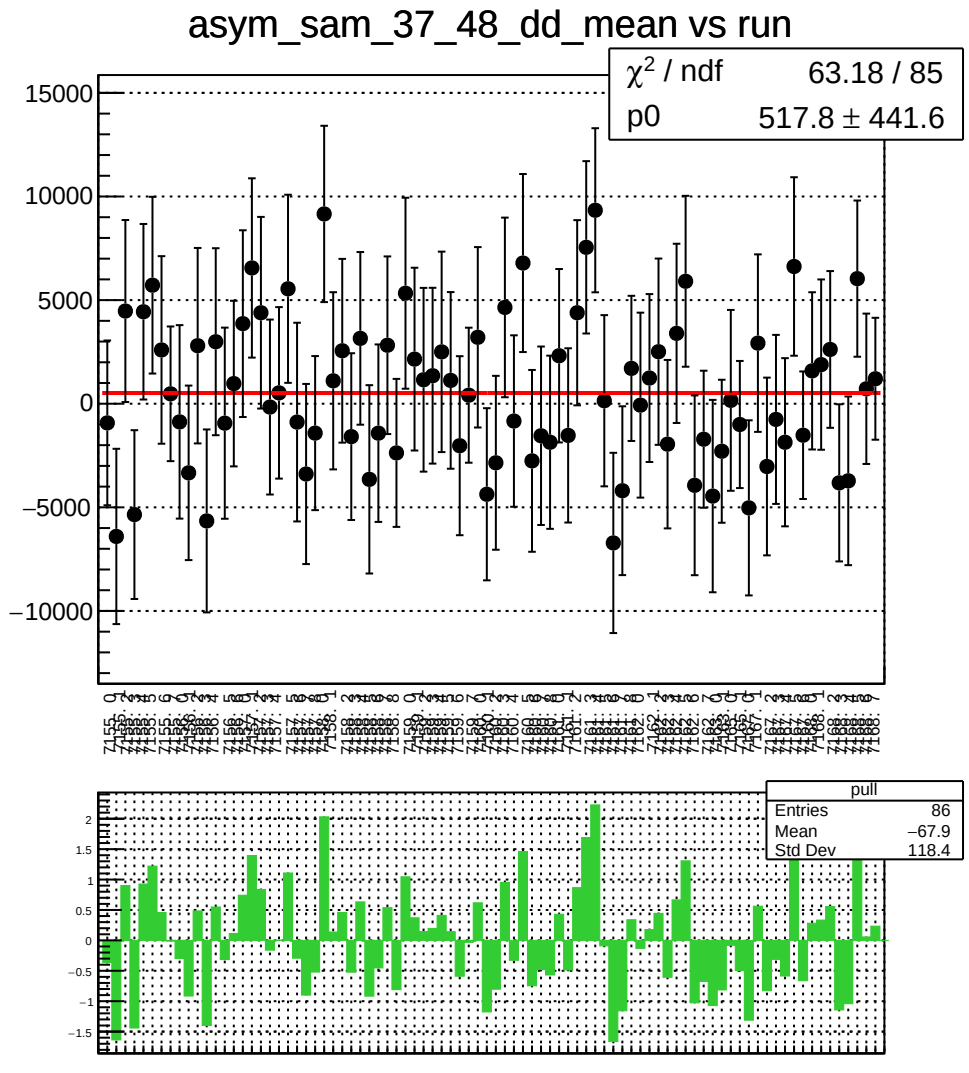

pull1D
Entries 86
Mean −0.004382
Std Dev 0.9872
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

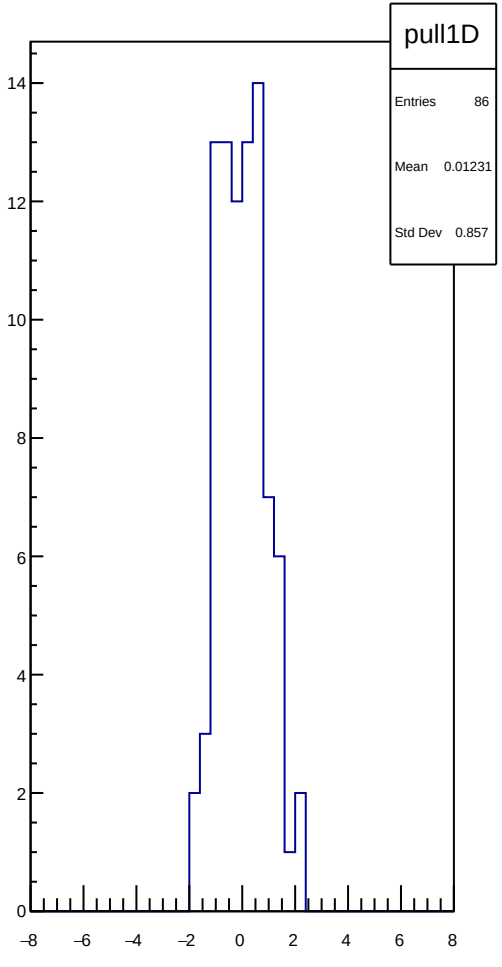

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 3447 / 85
p0 58.8 ± 0.04553
70
68
66
64
62
60
58
56
54

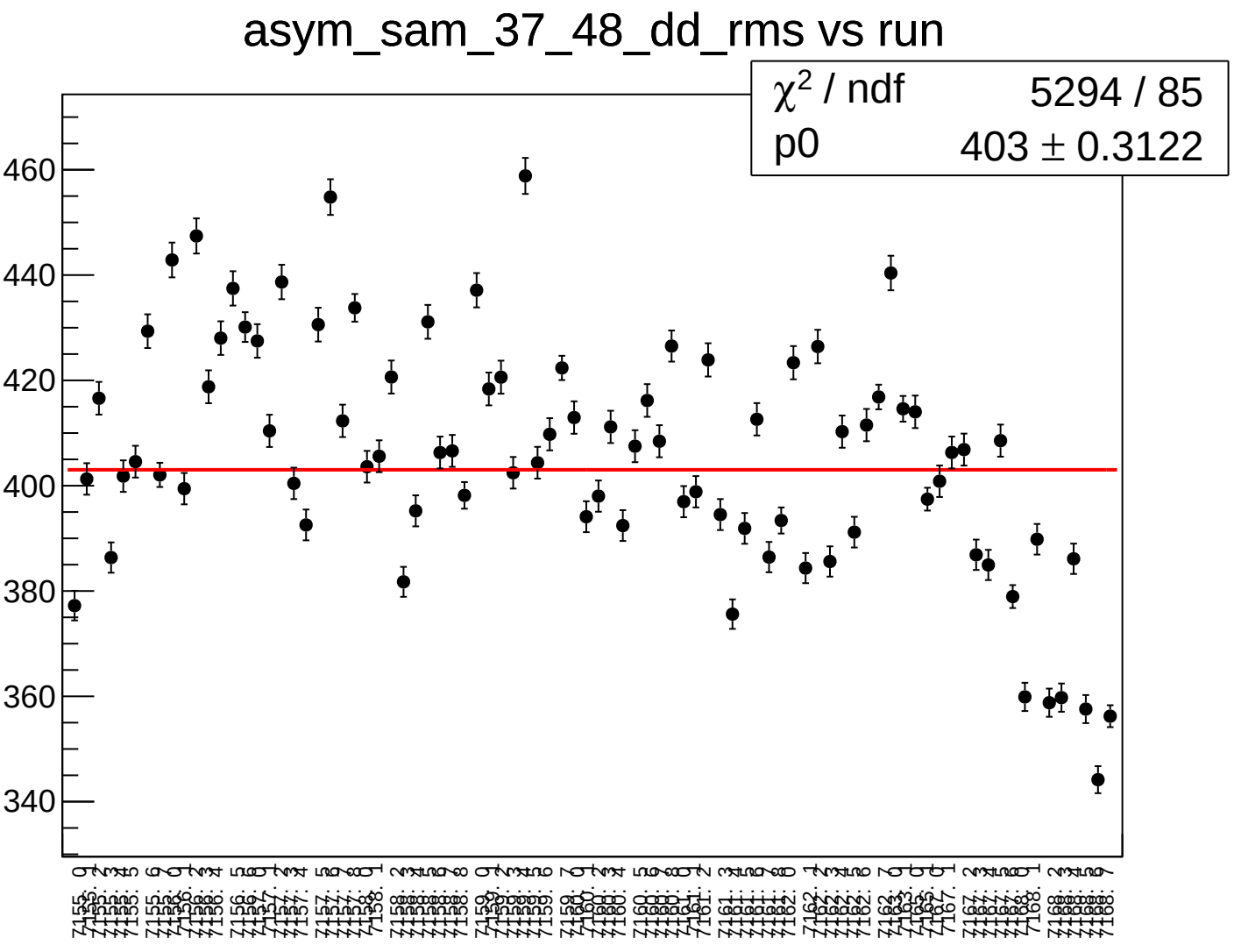

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 63.02 / 85
p0 −428.3 ± 436.8
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −64.25
Std Dev 111.6
1.5
1
0.5
0
−0.5
−1
−1.5
−2

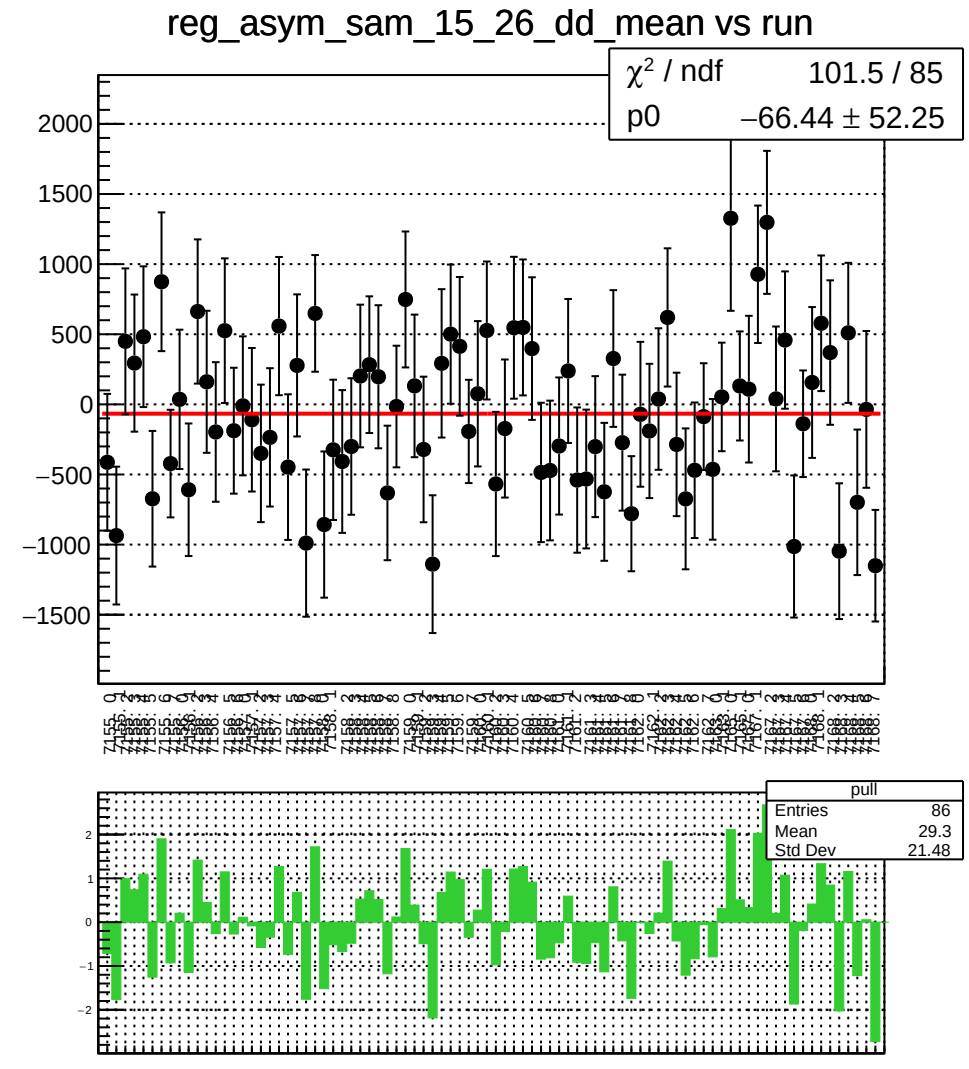

pull1D
Entries 86
Mean −0.01476
Std Dev 0.8559
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

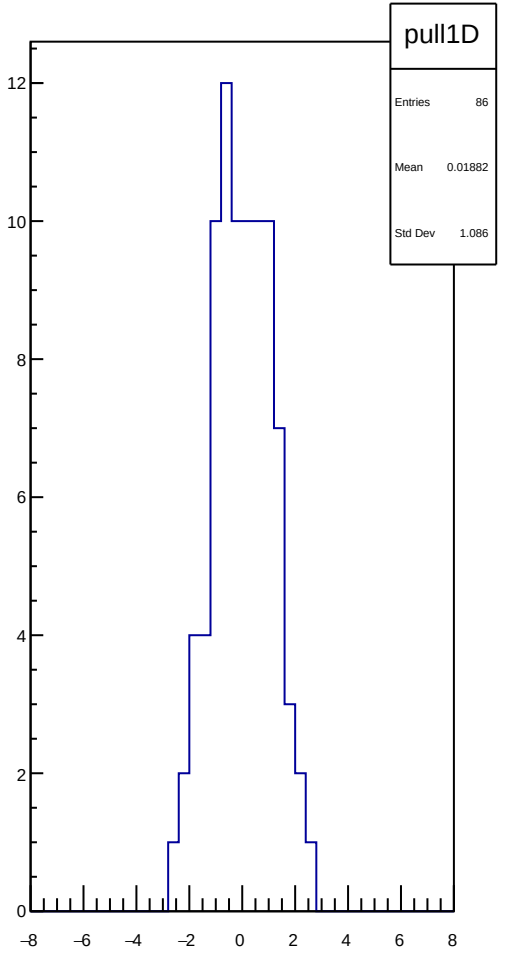

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 5464 / 85
p0 398.6 ± 0.3088
460
440
420
400
380
360
340

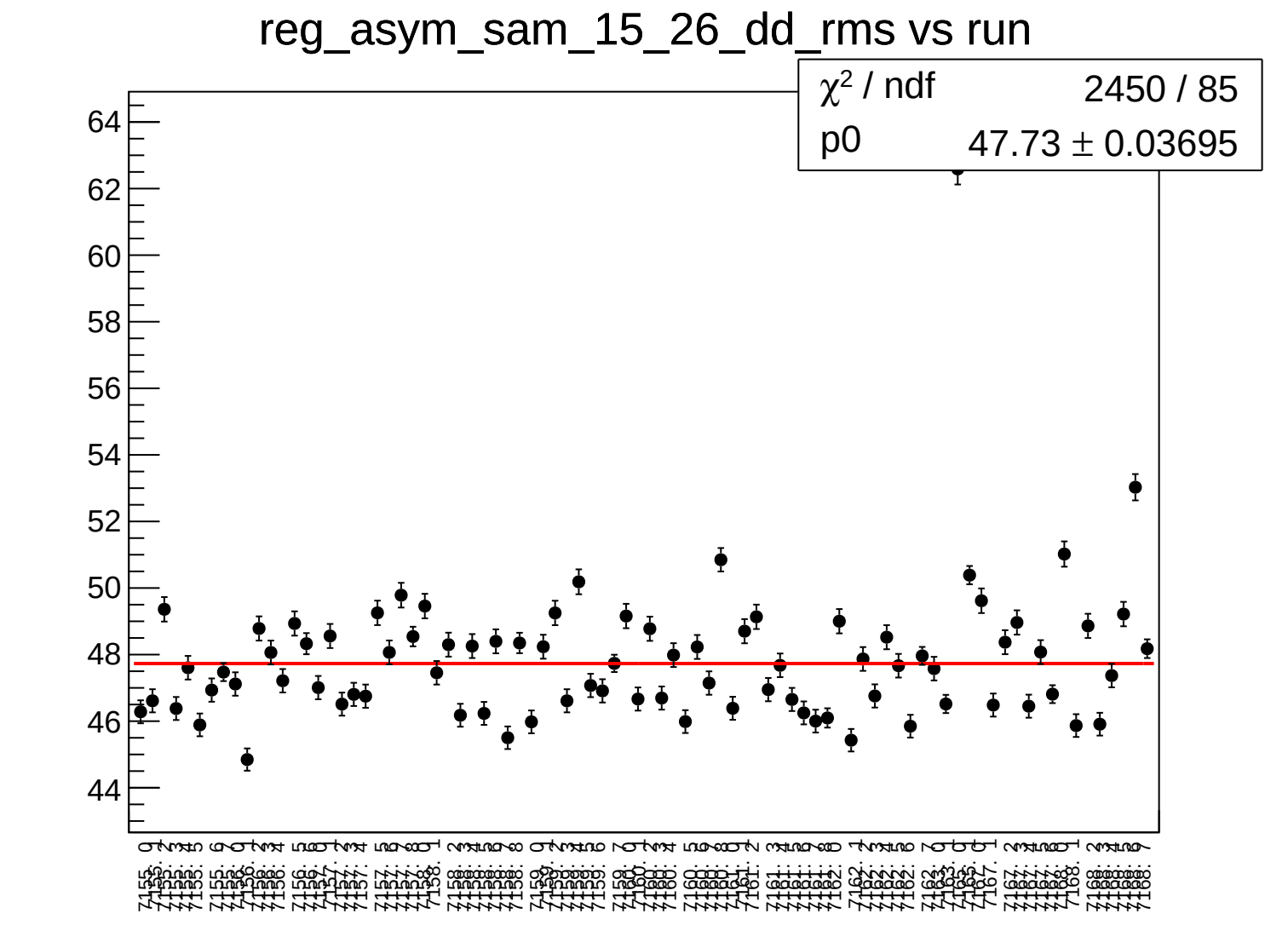

asym_sam_37_48_dd_mean vs run
χ² / ndf 63.18 / 85
p0 517.8 ± 441.6
15000
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −67.9
Std Dev 118.4
2
1.5
1
0.5
0
−0.5
−1
−1.5

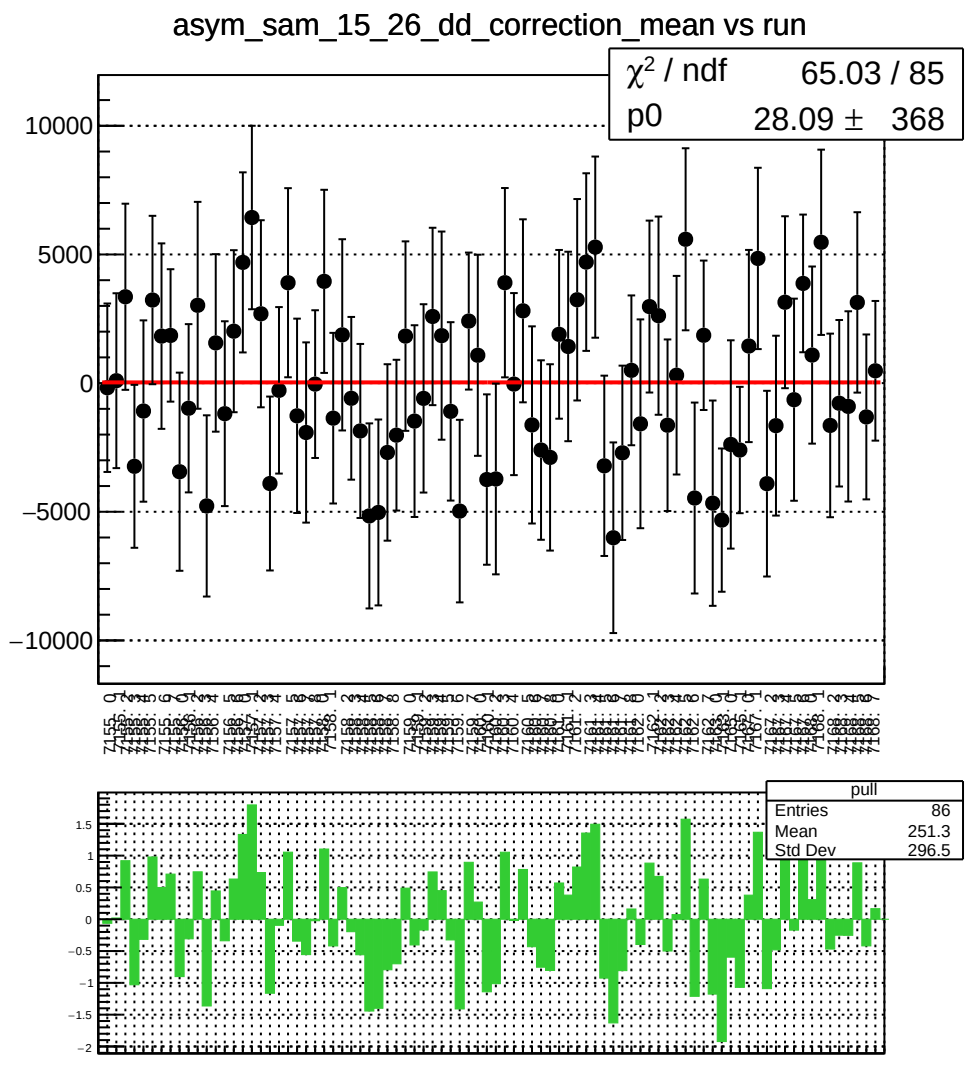

pull1D
Entries 86
Mean 0.01231
Std Dev 0.857
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

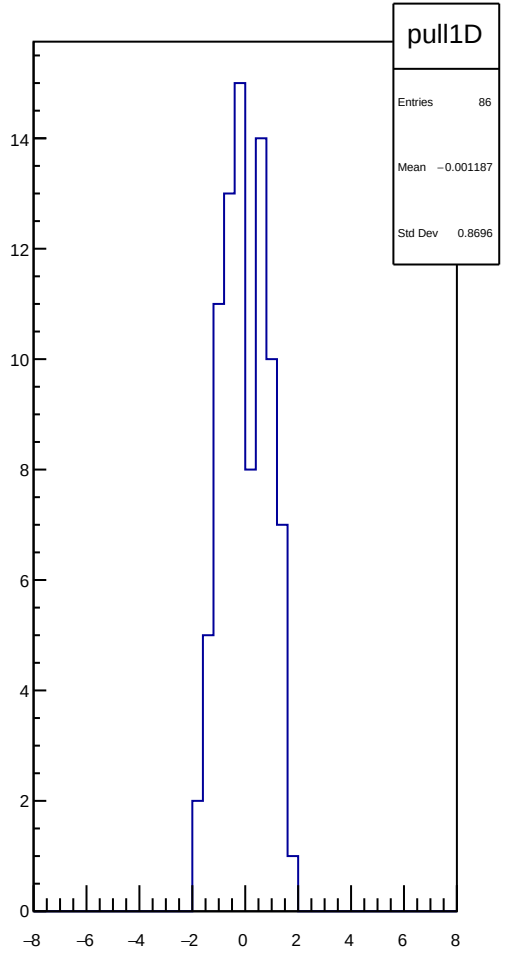

asym_sam_37_48_dd_rms vs run
χ² / ndf 5294 / 85
p0 403 ± 0.3122
460
440
420
400
380
360
340

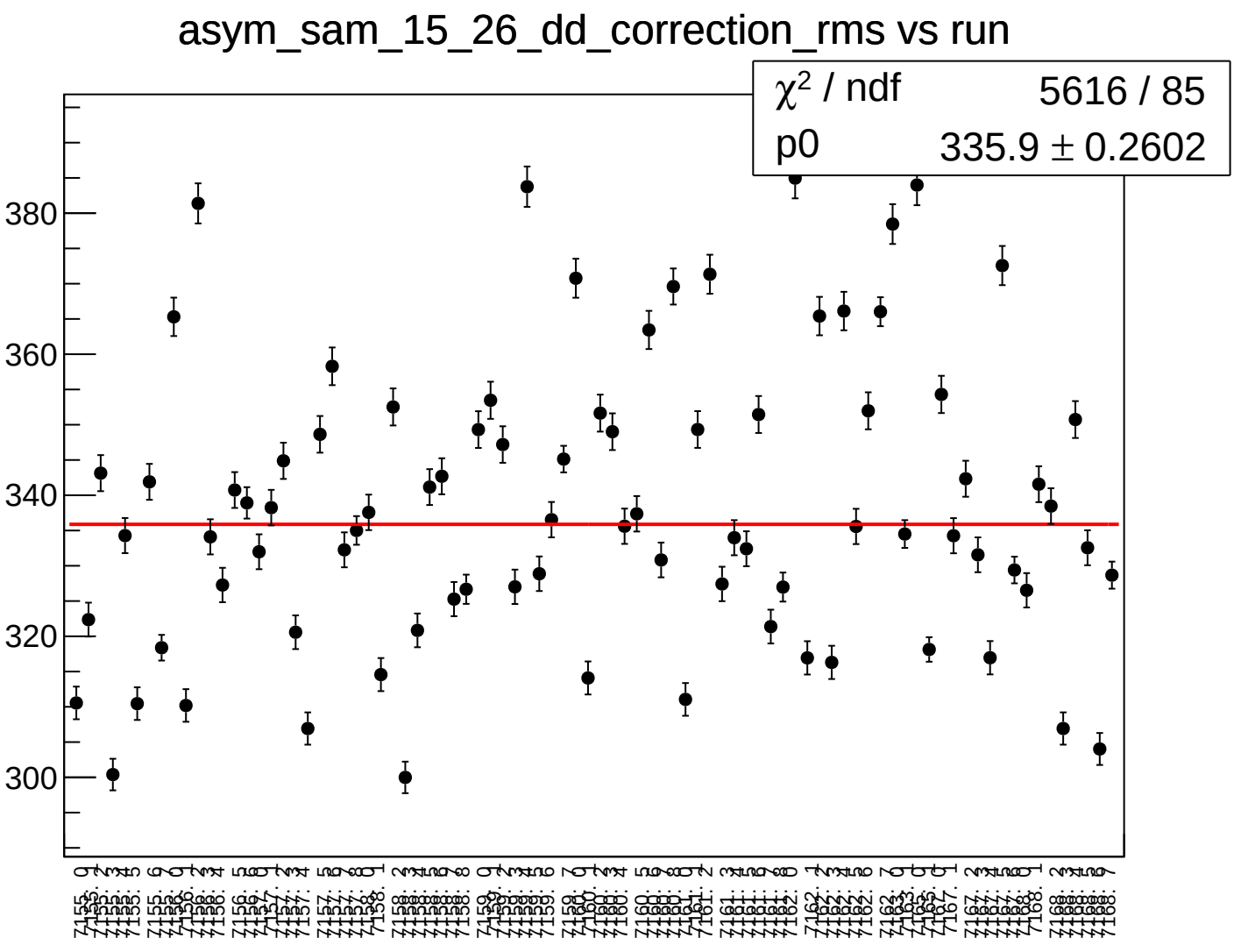

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 101.5 / 85
p0 −66.44 ± 52.25
2000
1500
1000
500
0
−500
−1000
−1500
pull
Entries 86
Mean 29.3
Std Dev 21.48
2
1
0
−1
−2

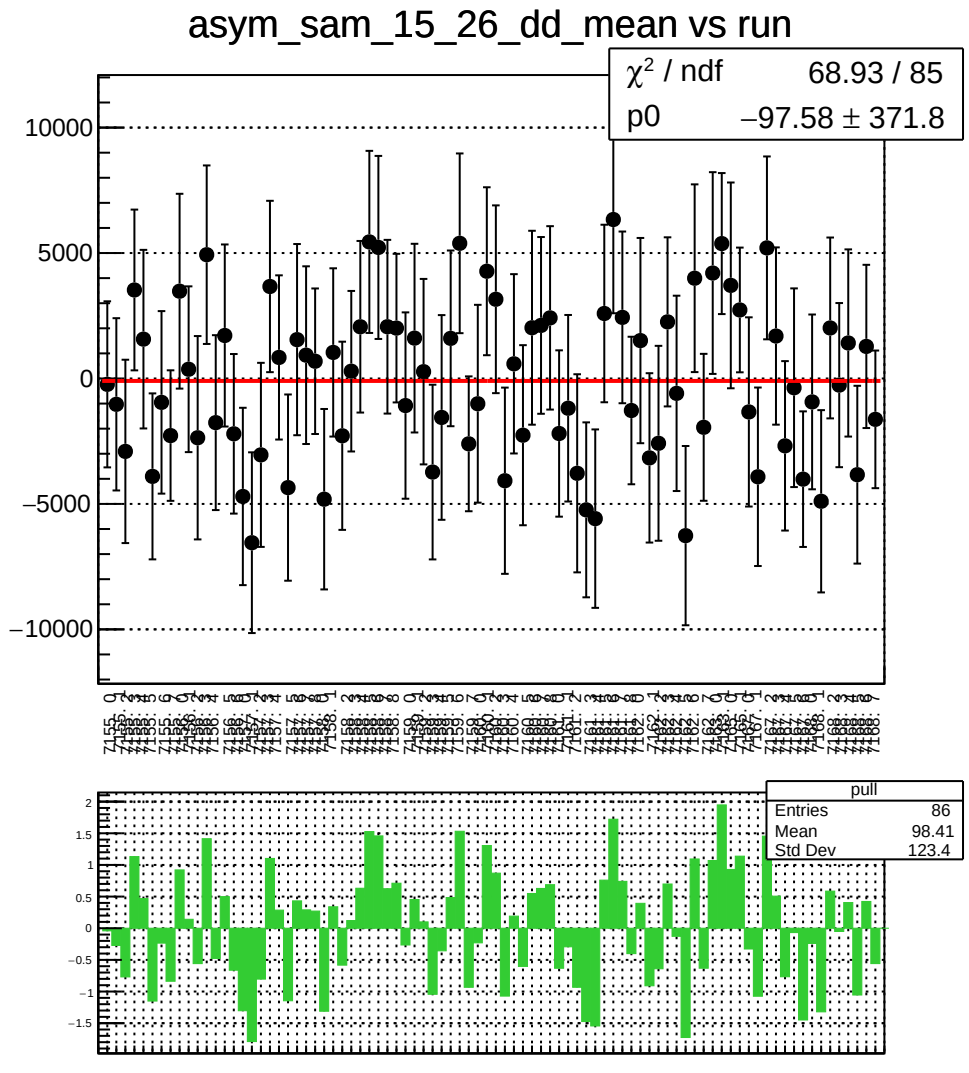

pull1D
Entries 86
Mean 0.01882
Std Dev 1.086
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

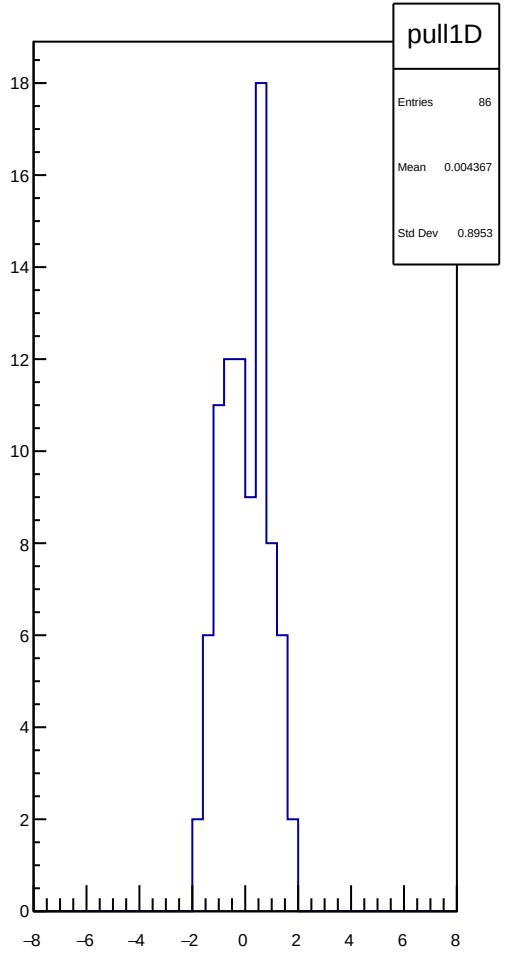

reg_asym_sam_15_26_dd_rms vs run
χ^2 / ndf 2450 / 85
p0 47.73 ± 0.03695
64
62
60
58
56
54
52
50
48
46
44

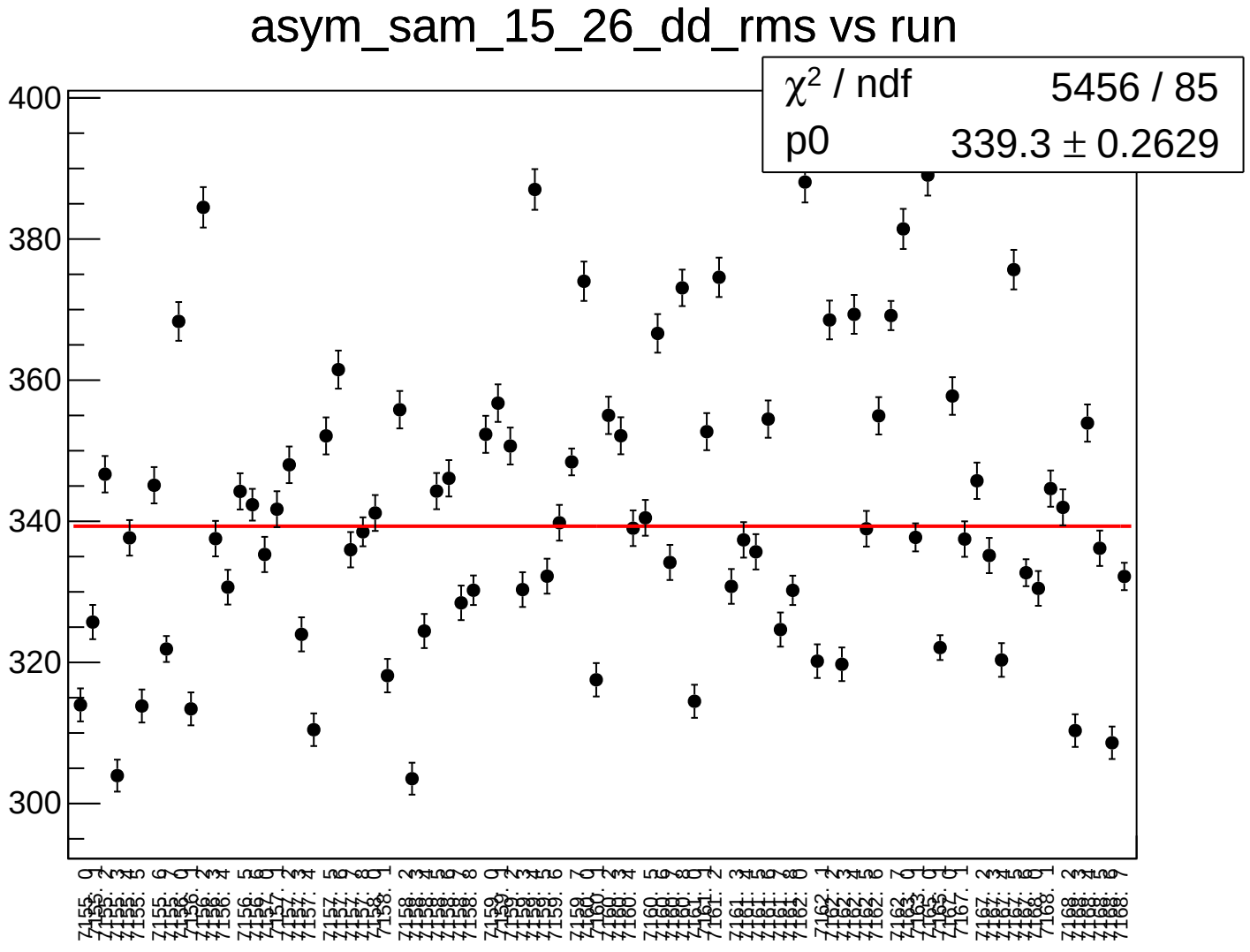

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 65.03 / 85
p0 28.09 ± 368
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 251.3
Std Dev 296.5
1.5
1
0.5
0
−0.5
−1
−1.5
−2

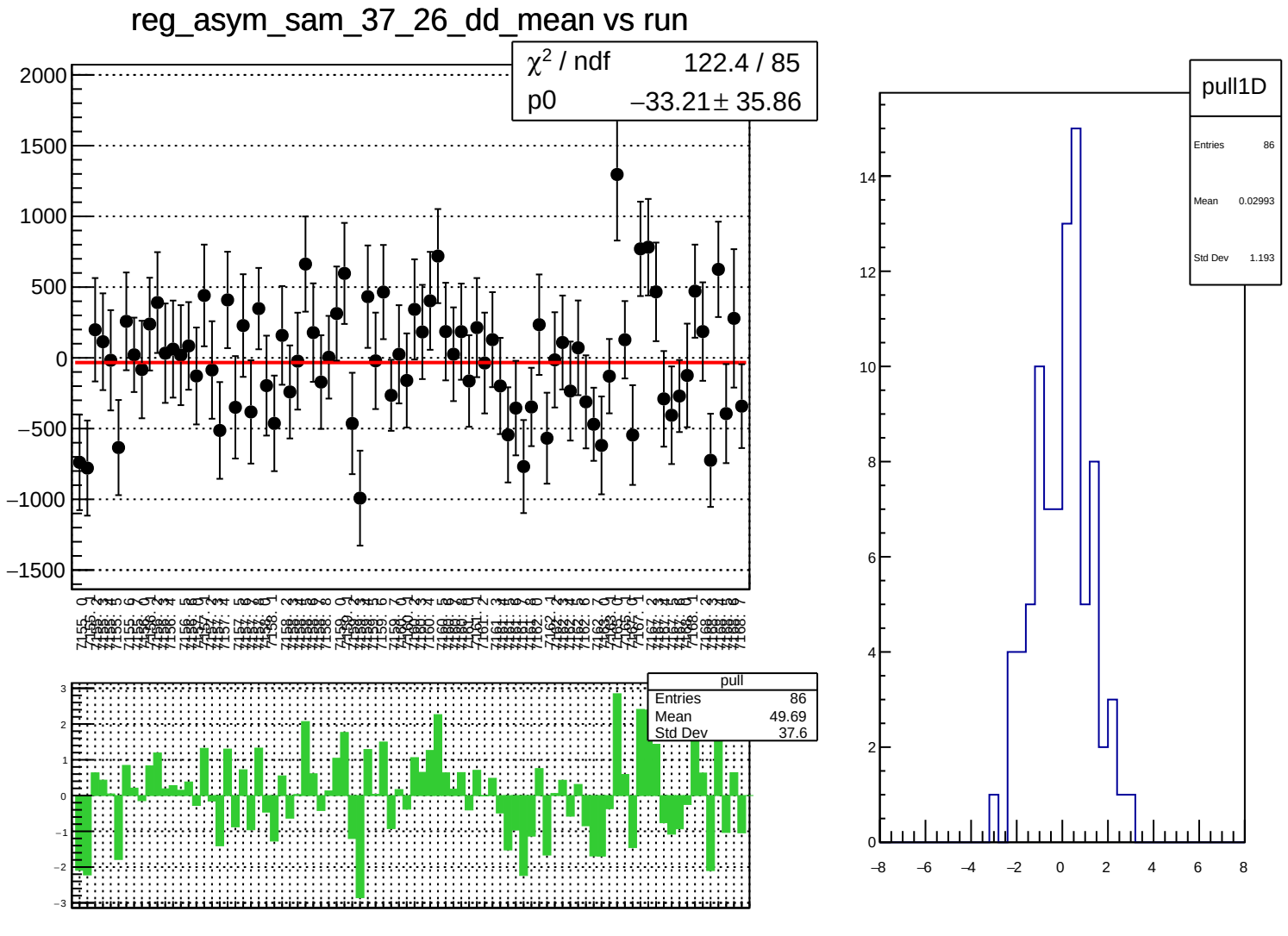

pull1D
Entries 86
Mean −0.001187
Std Dev 0.8696
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

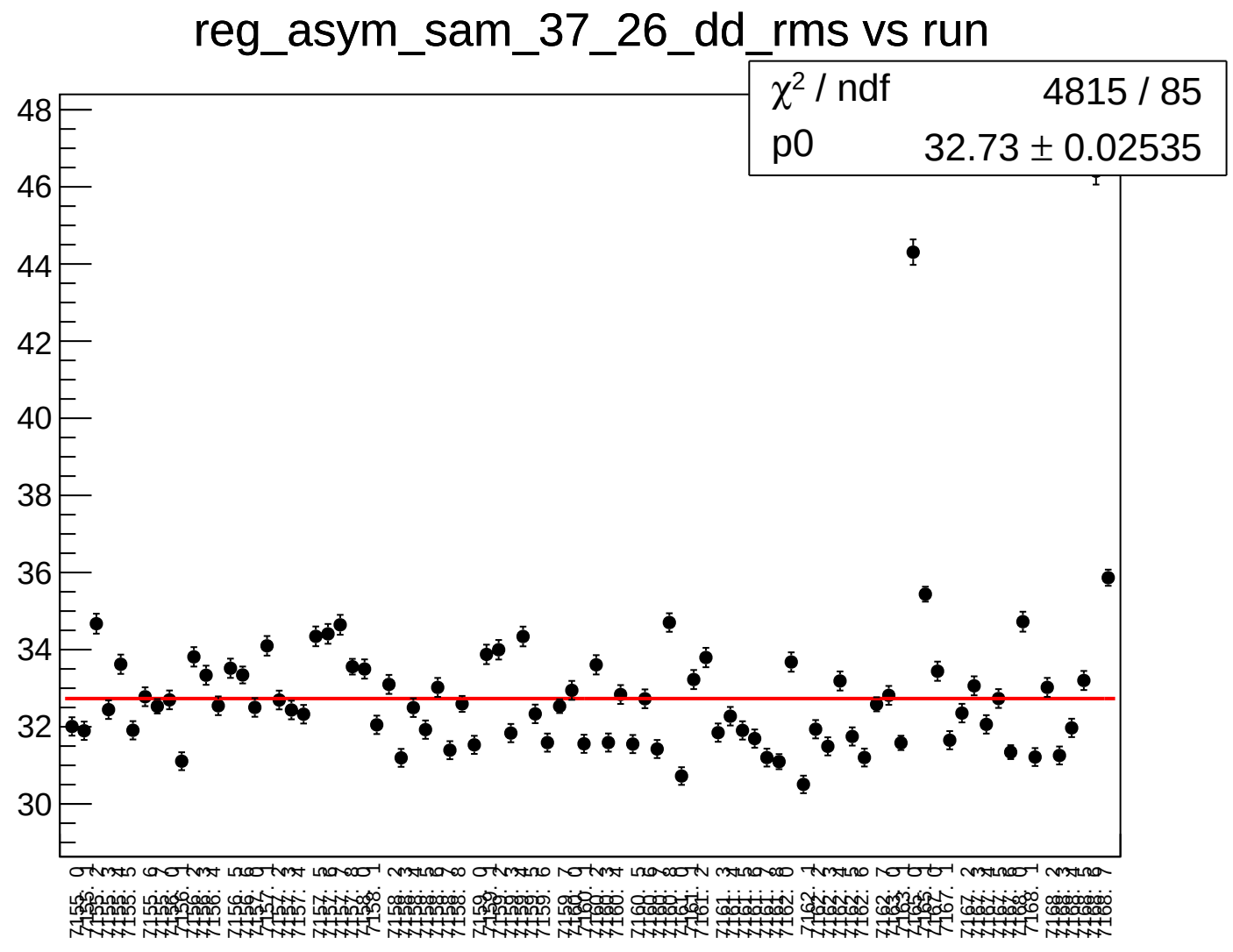

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 5616 / 85
p0 335.9 ± 0.2602
380
360
340
320
300

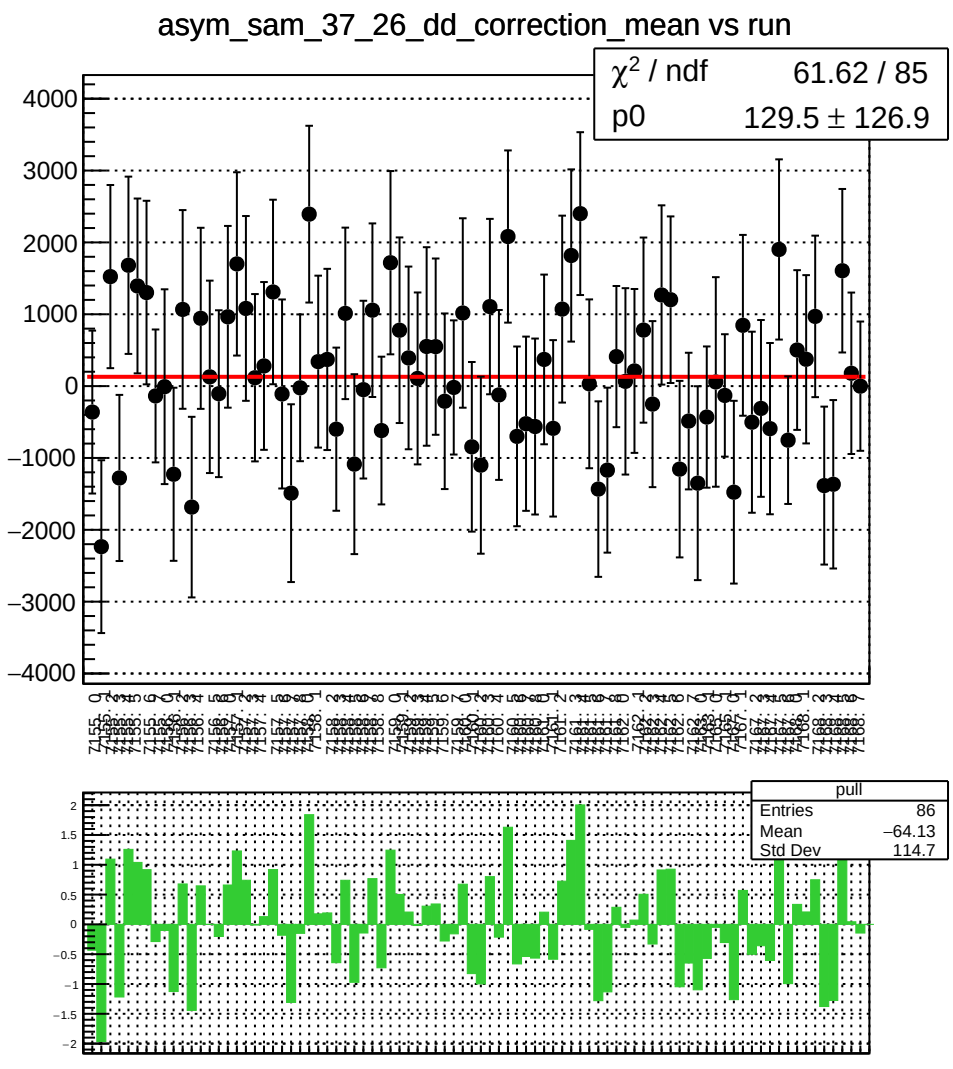

asym_sam_15_26_dd_mean vs run
χ² / ndf 68.93 / 85
p0 −97.58 ± 371.8
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 98.41
Std Dev 123.4
2
1.5
1
0.5
0
−0.5
−1
−1.5

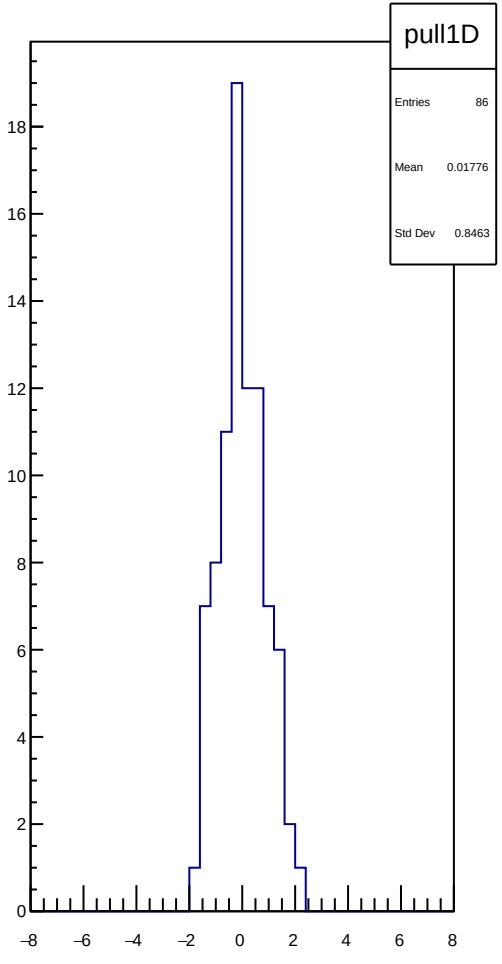

pull1D
Entries 86
Mean 0.004367
Std Dev 0.8953
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

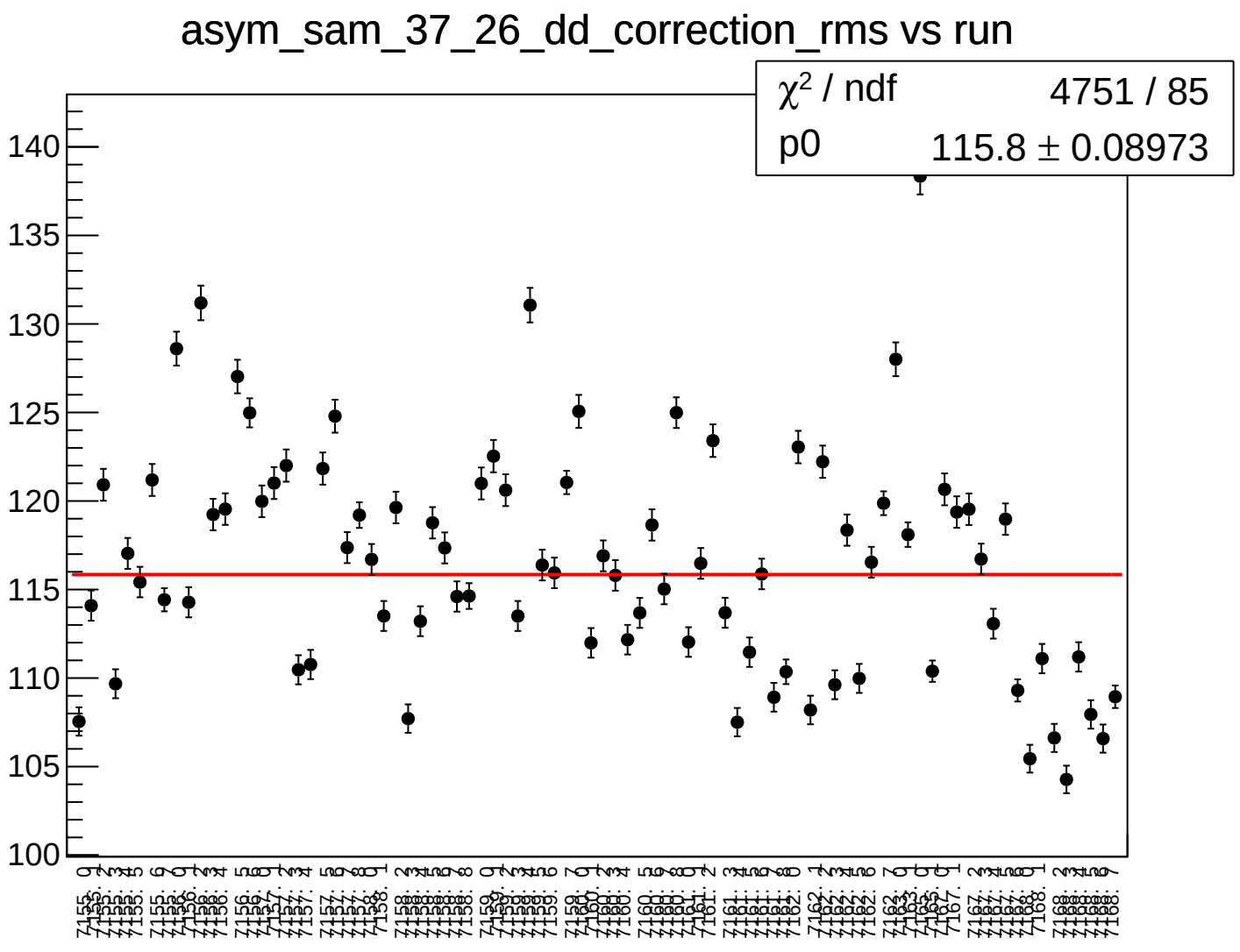

asym_sam_15_26_dd_rms vs run
χ² / ndf 5456 / 85
p0 339.3 ± 0.2629
400
380
360
340
320
300

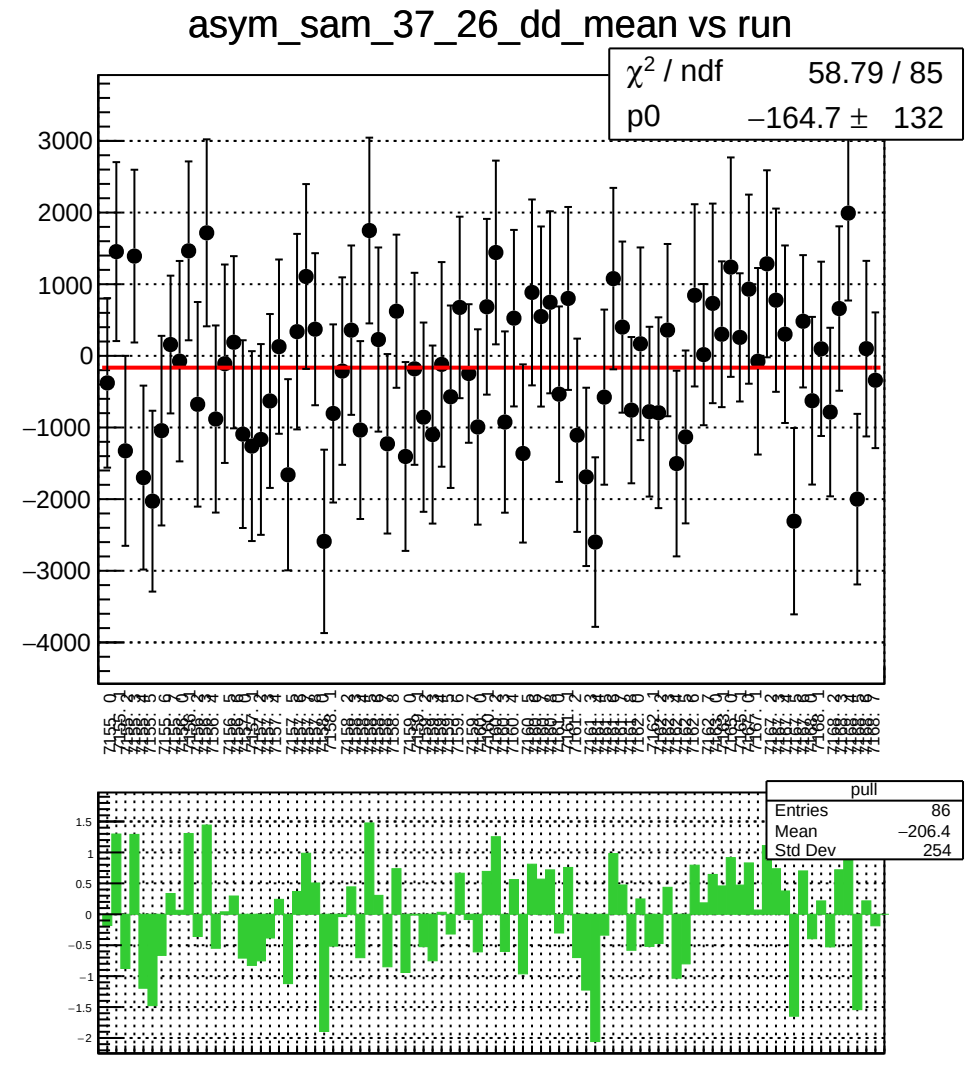

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 122.4 / 85
p0 −33.21 ± 35.86
pull
Entries 86
Mean 49.69
Std Dev 37.6
pull1D
Entries 86
Mean 0.02993
Std Dev 1.193

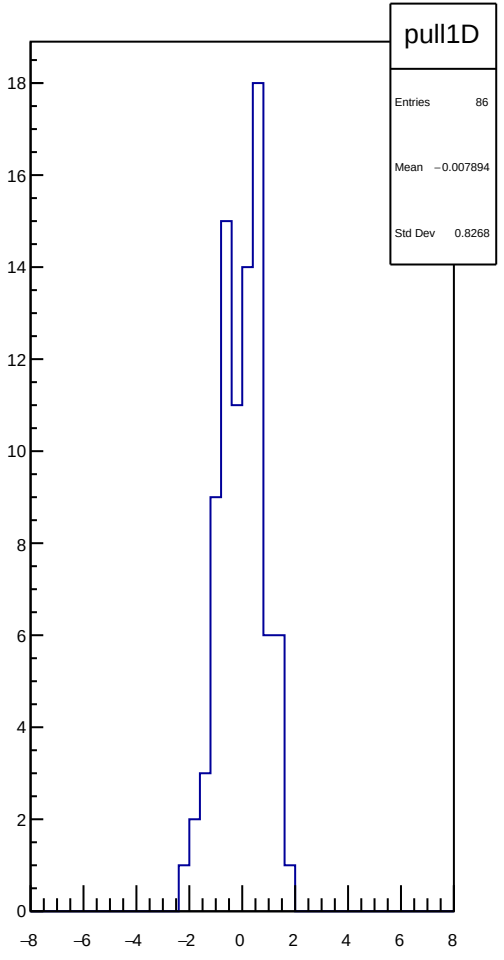

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 4815 / 85
p0 32.73 ± 0.02535
48
46
44
42
40
38
36
34
32
30

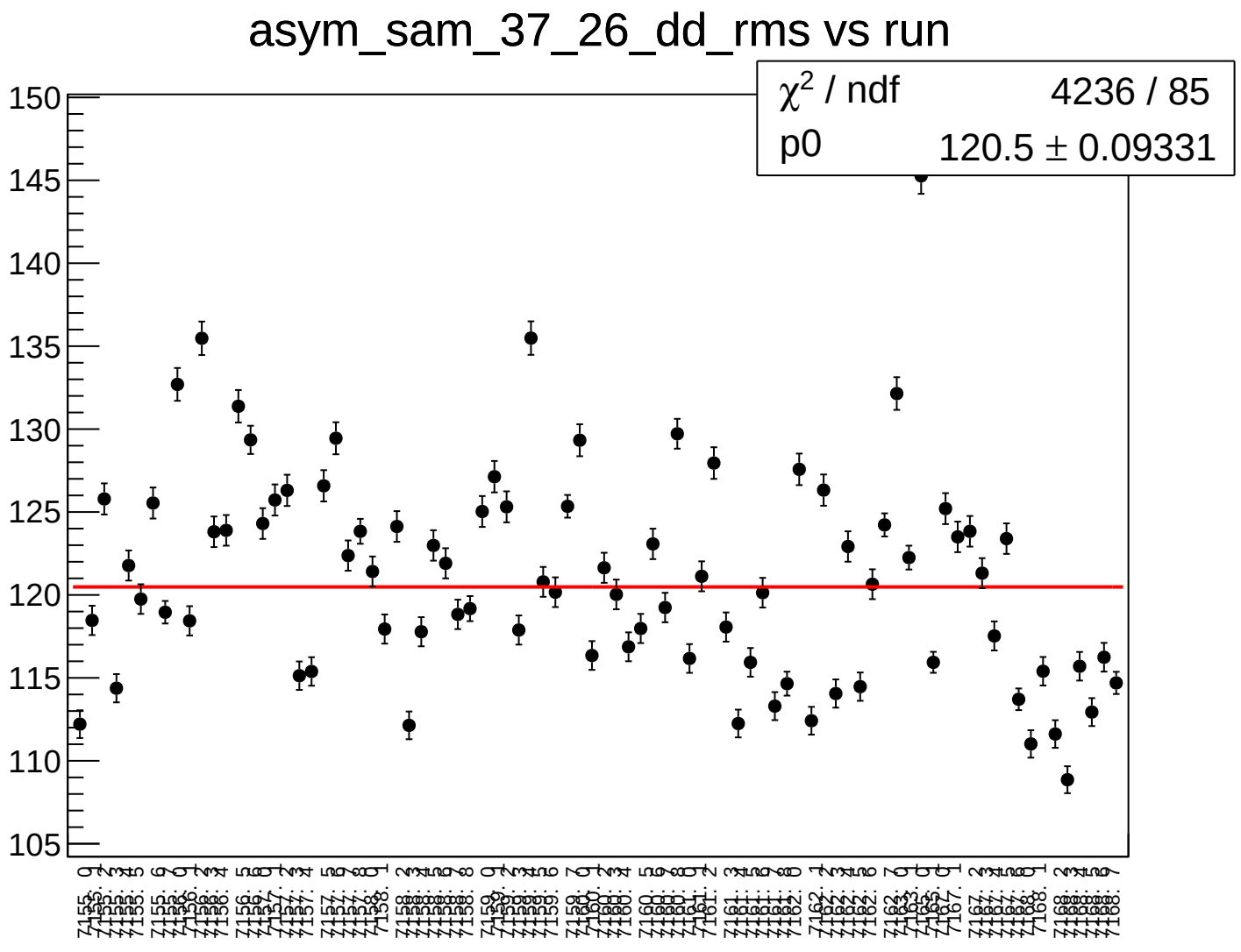

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 61.62 / 85
p0 129.5 ± 126.9
pull
Entries 86
Mean −64.13
Std Dev 114.7

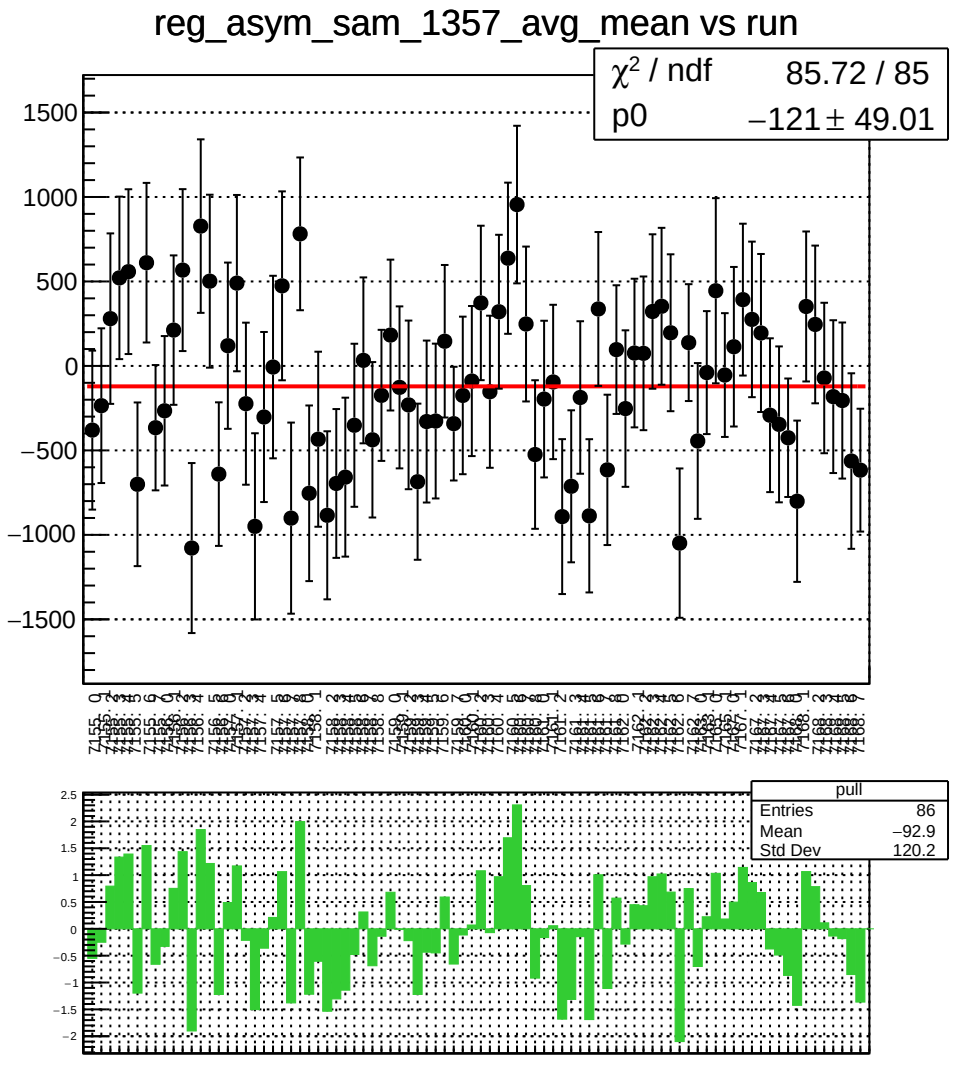

pull1D
Entries 86
Mean 0.01776
Std Dev 0.8463

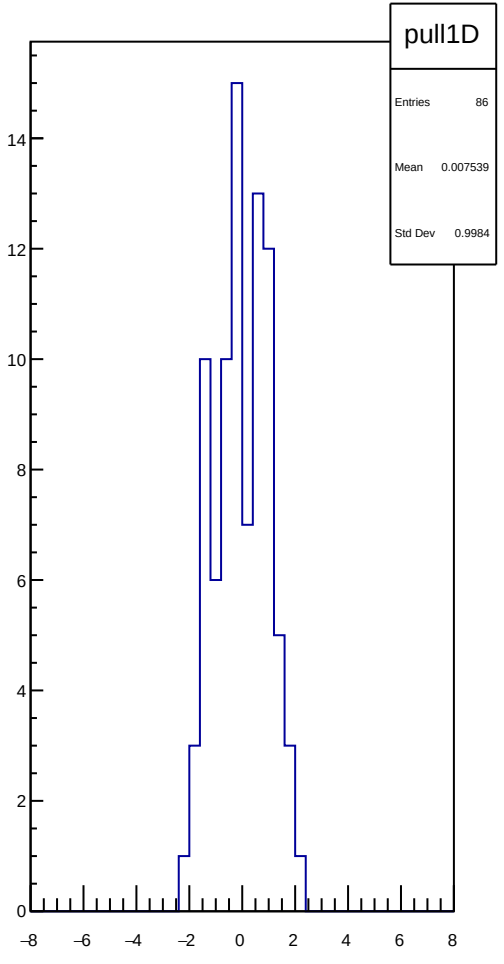

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 4751 / 85
p0 115.8 ± 0.08973
140
135
130
125
120
115
110
105
100

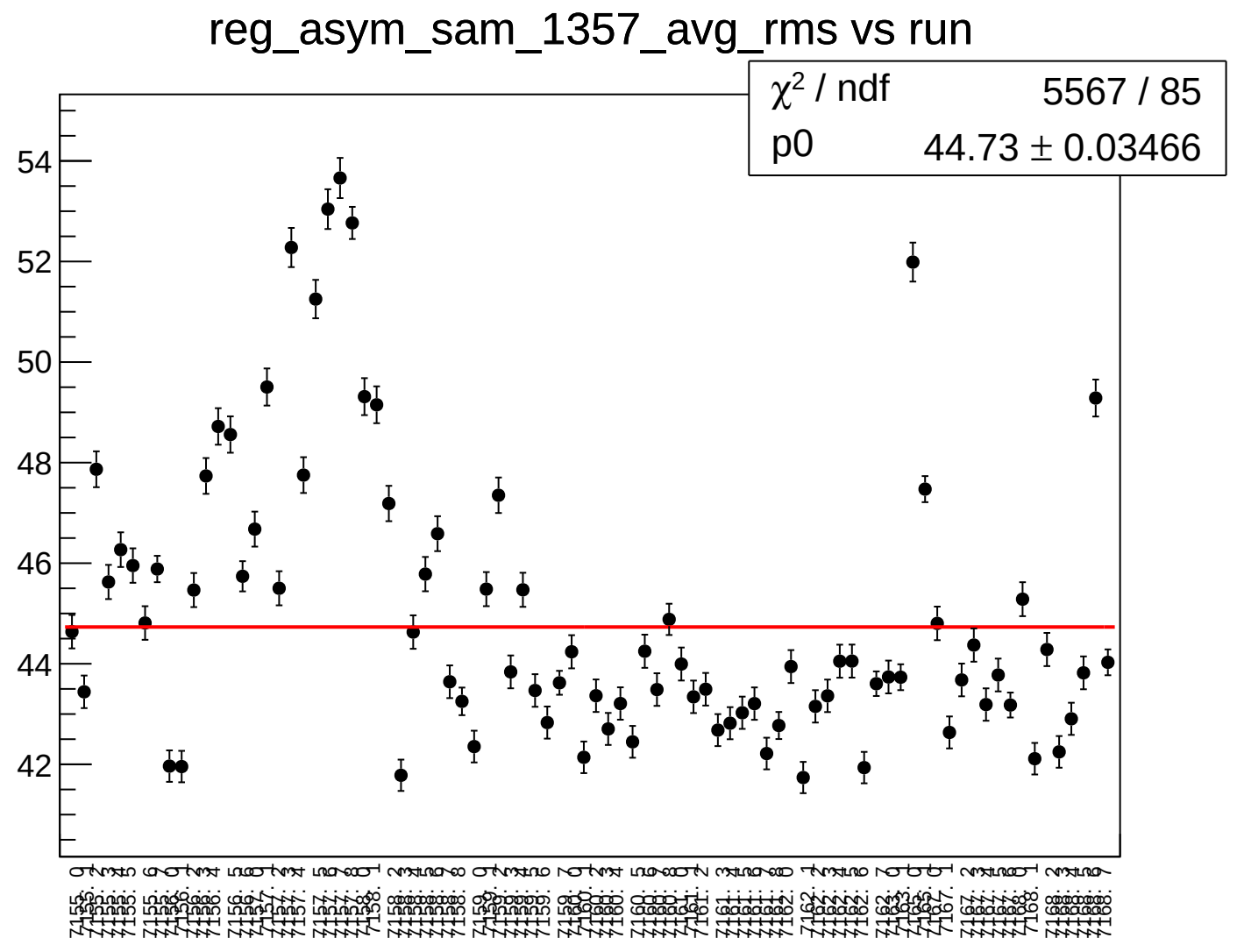

asym_sam_37_26_dd_mean vs run
χ² / ndf 58.79 / 85
p0 −164.7 ± 132
pull
Entries 86
Mean −206.4
Std Dev 254

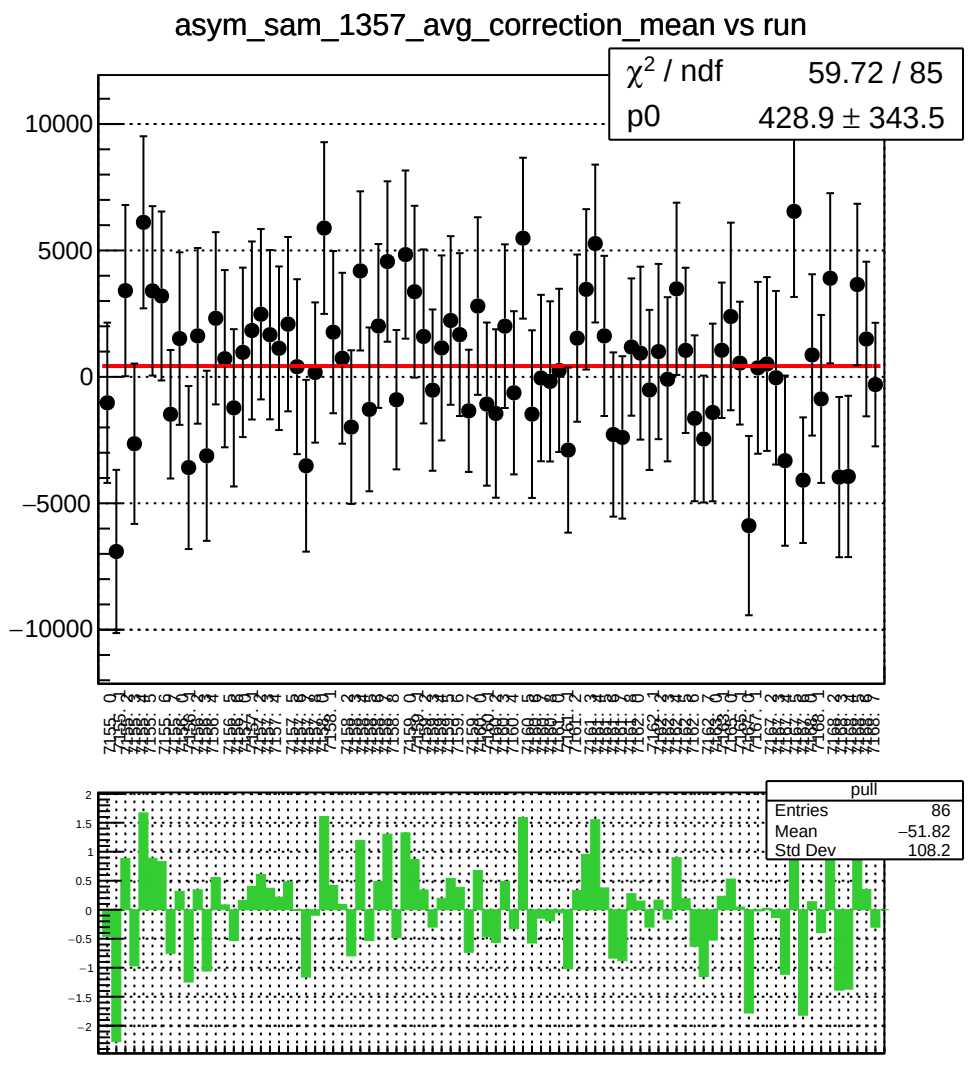

pull1D
Entries 86
Mean −0.007894
Std Dev 0.8268

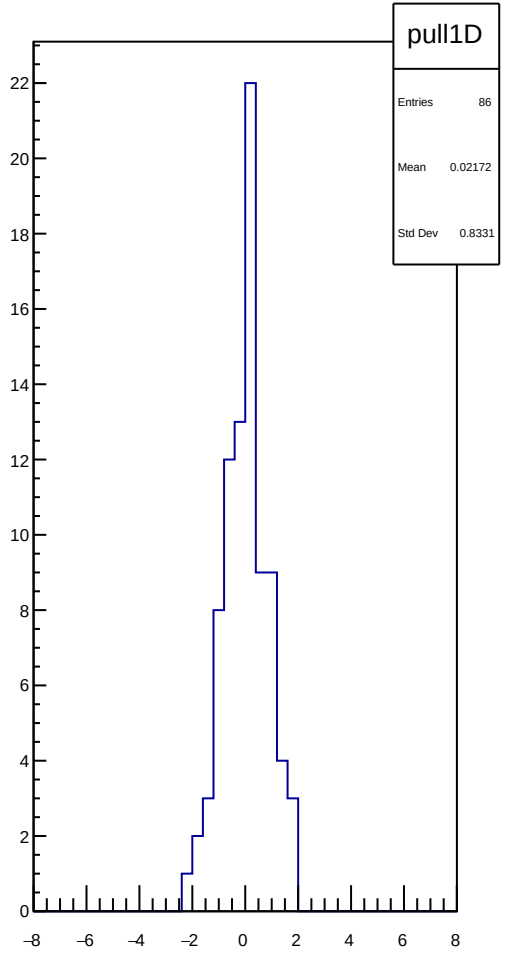

asym_sam_37_26_dd_rms vs run
χ² / ndf 4236 / 85
p0 120.5 ± 0.09331
150
145
140
135
130
125
120
115
110
105

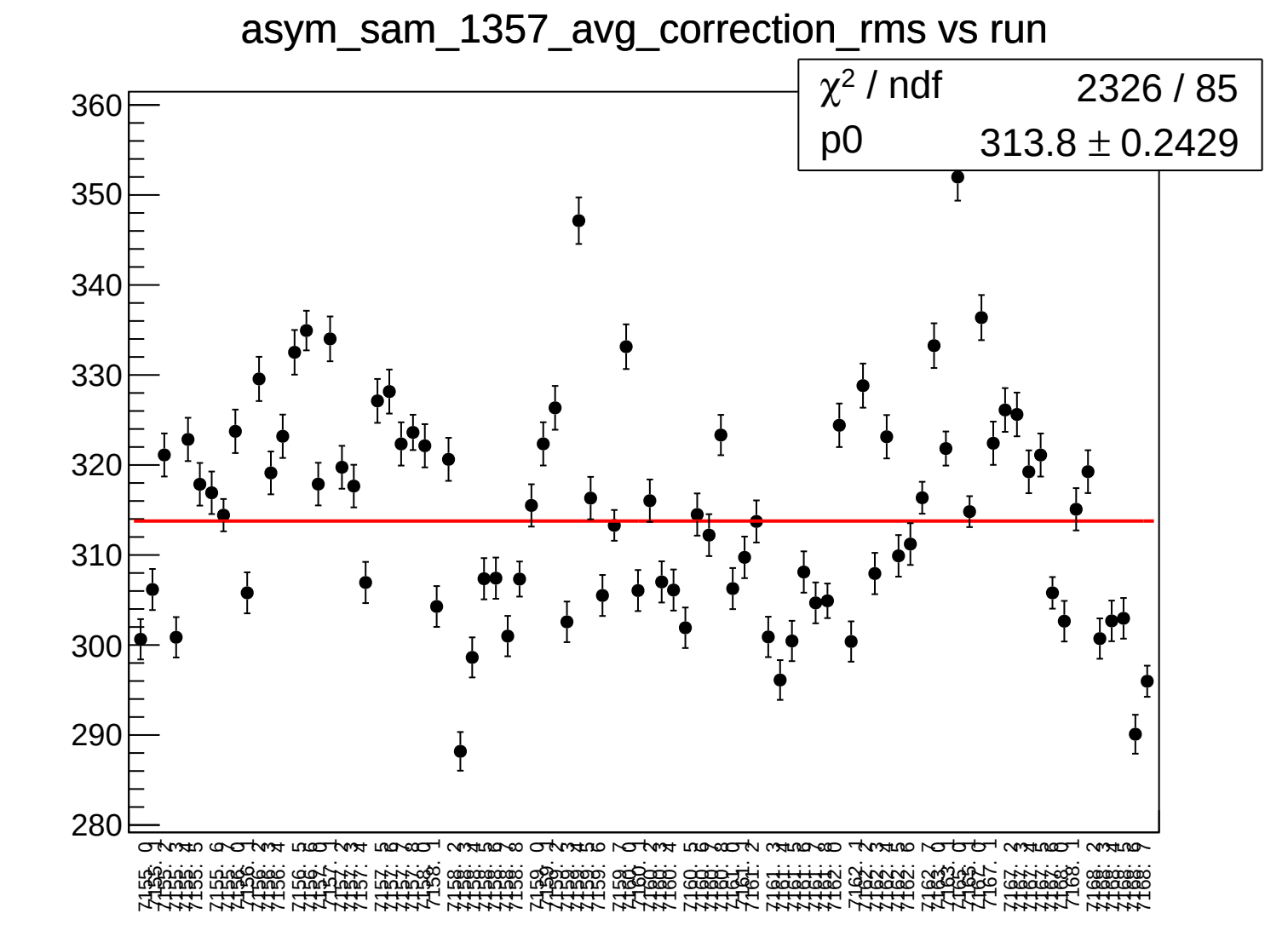

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 85.72 / 85
p0 −121 ± 49.01
1500
1000
500
0
−500
−1000
−1500
pull
Entries 86
Mean −92.9
Std Dev 120.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

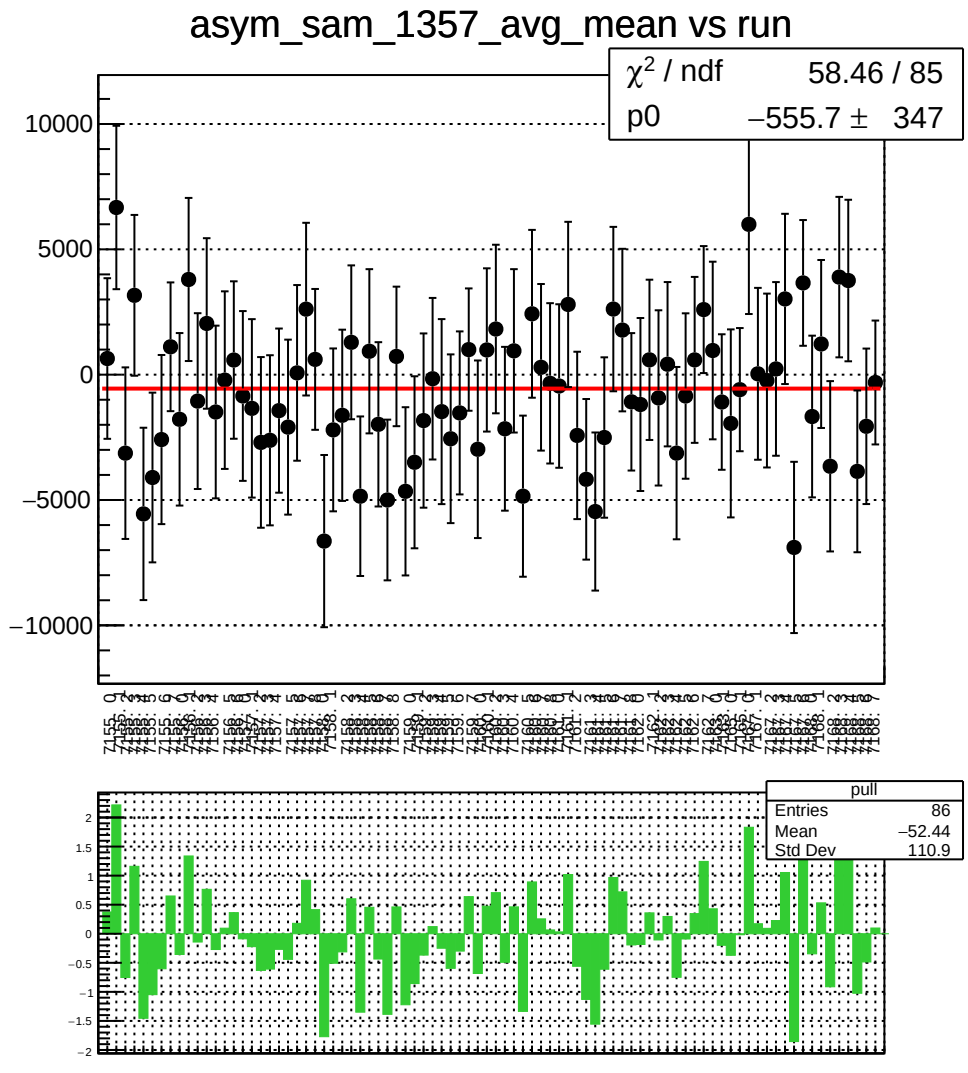

pull1D
Entries 86
Mean 0.007539
Std Dev 0.9984
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

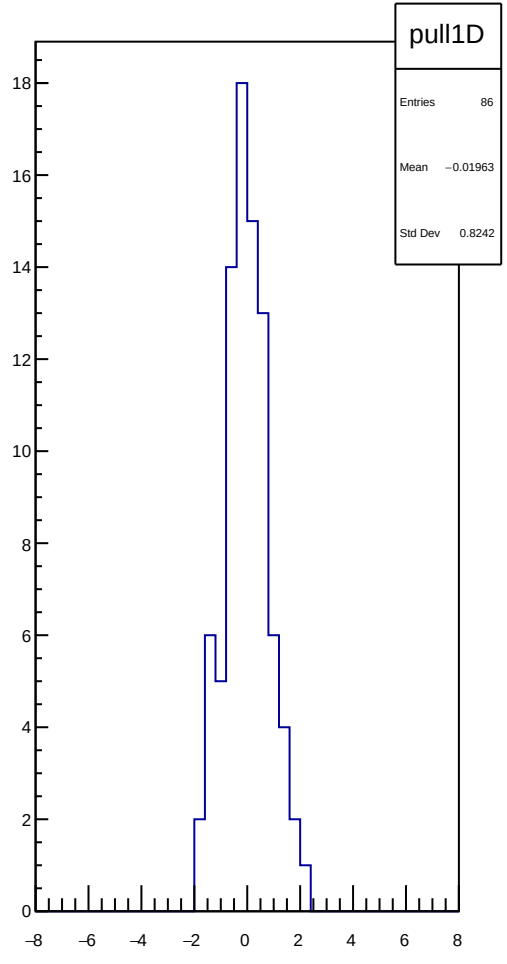

reg_asym_sam_1357_avg_rms vs run
χ^2 / ndf 5567 / 85
p0 44.73 ± 0.03466
54
52
50
48
46
44
42

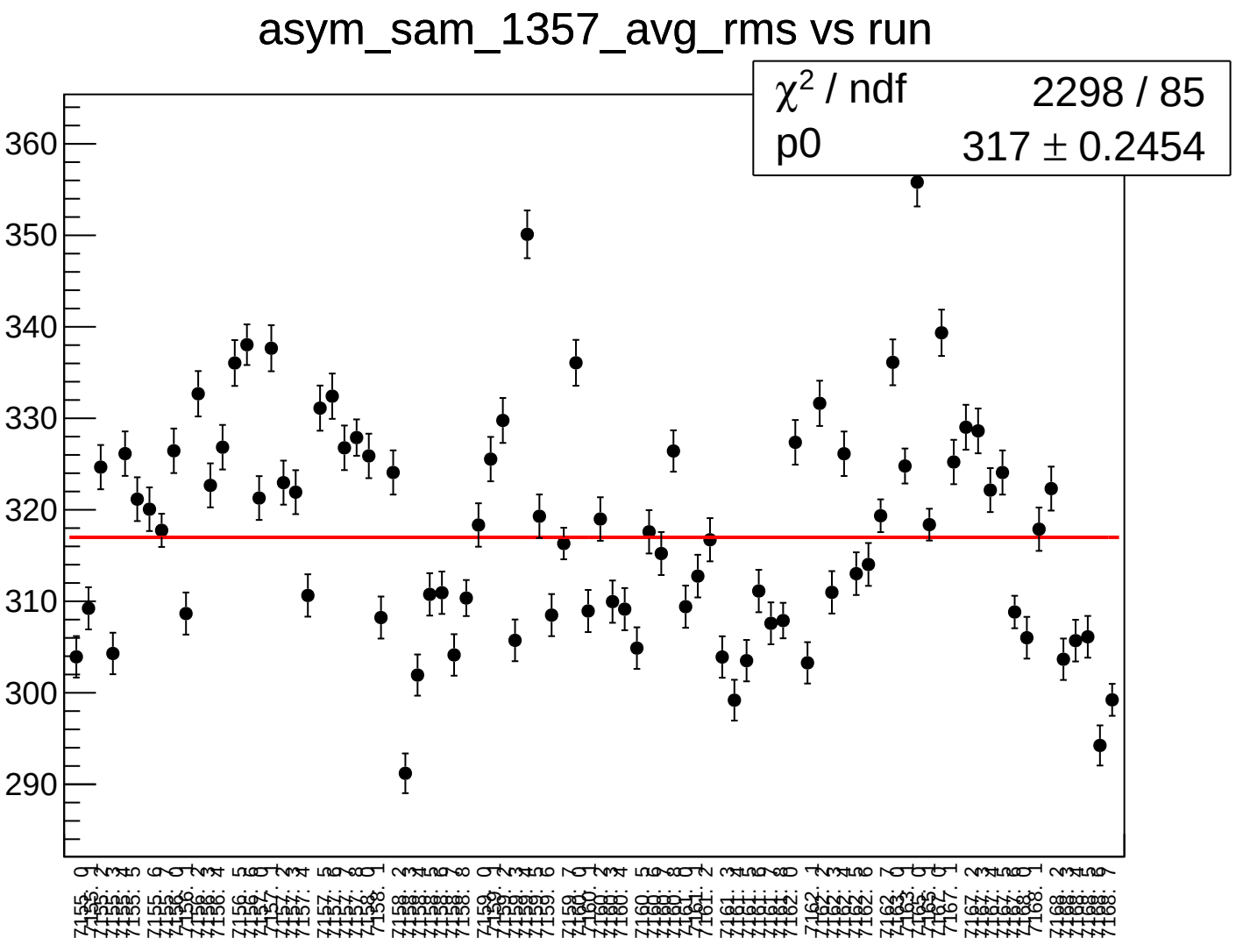

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 59.72 / 85
p0 428.9 ± 343.5
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −51.82
Std Dev 108.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

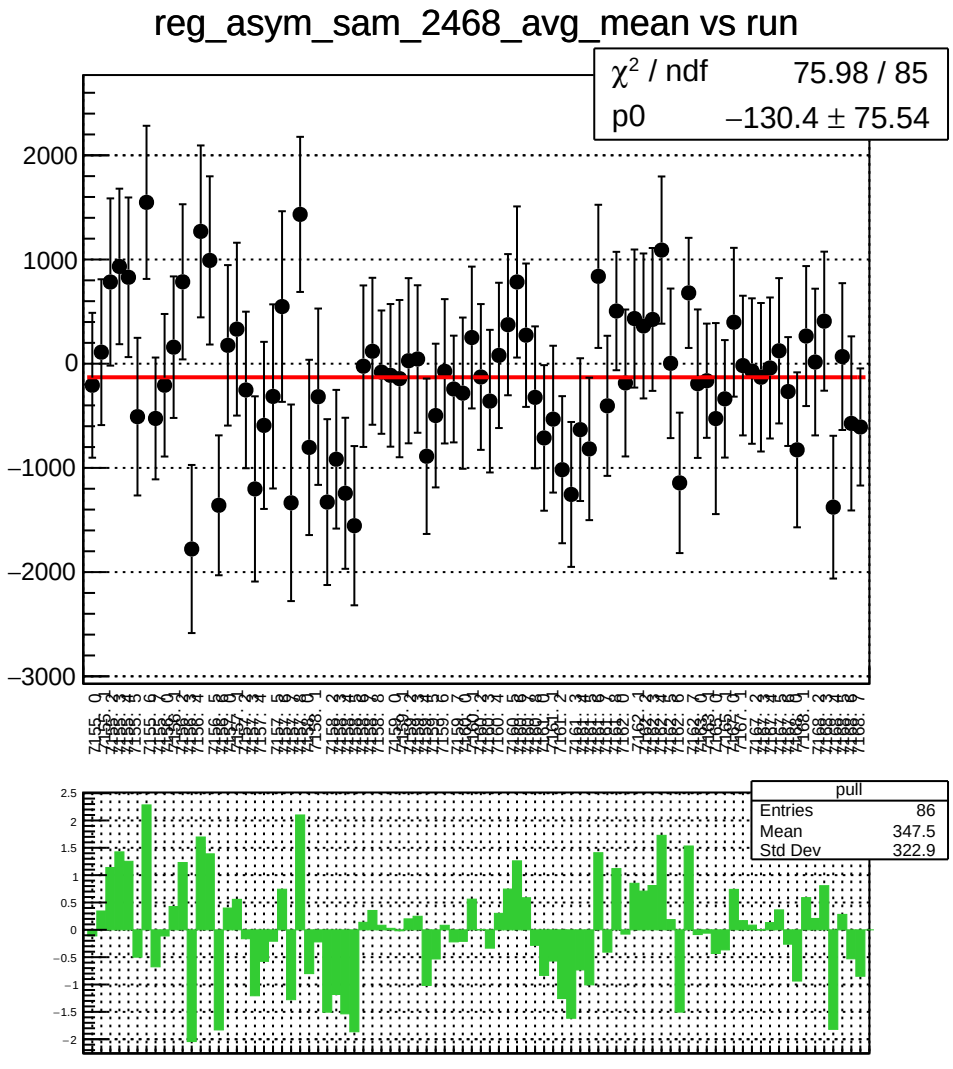

pull1D
Entries 86
Mean 0.02172
Std Dev 0.8331
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

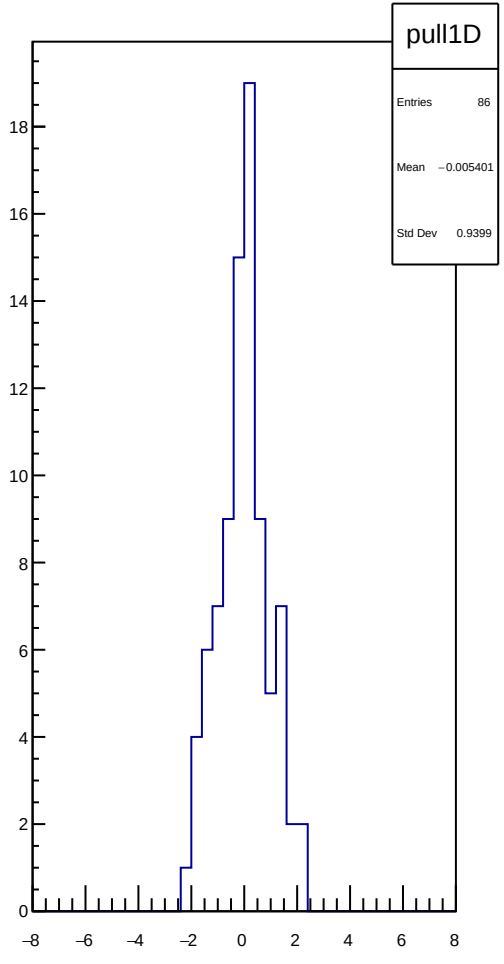

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 2326 / 85
p0 313.8 ± 0.2429
360
350
340
330
320
310
300
290
280

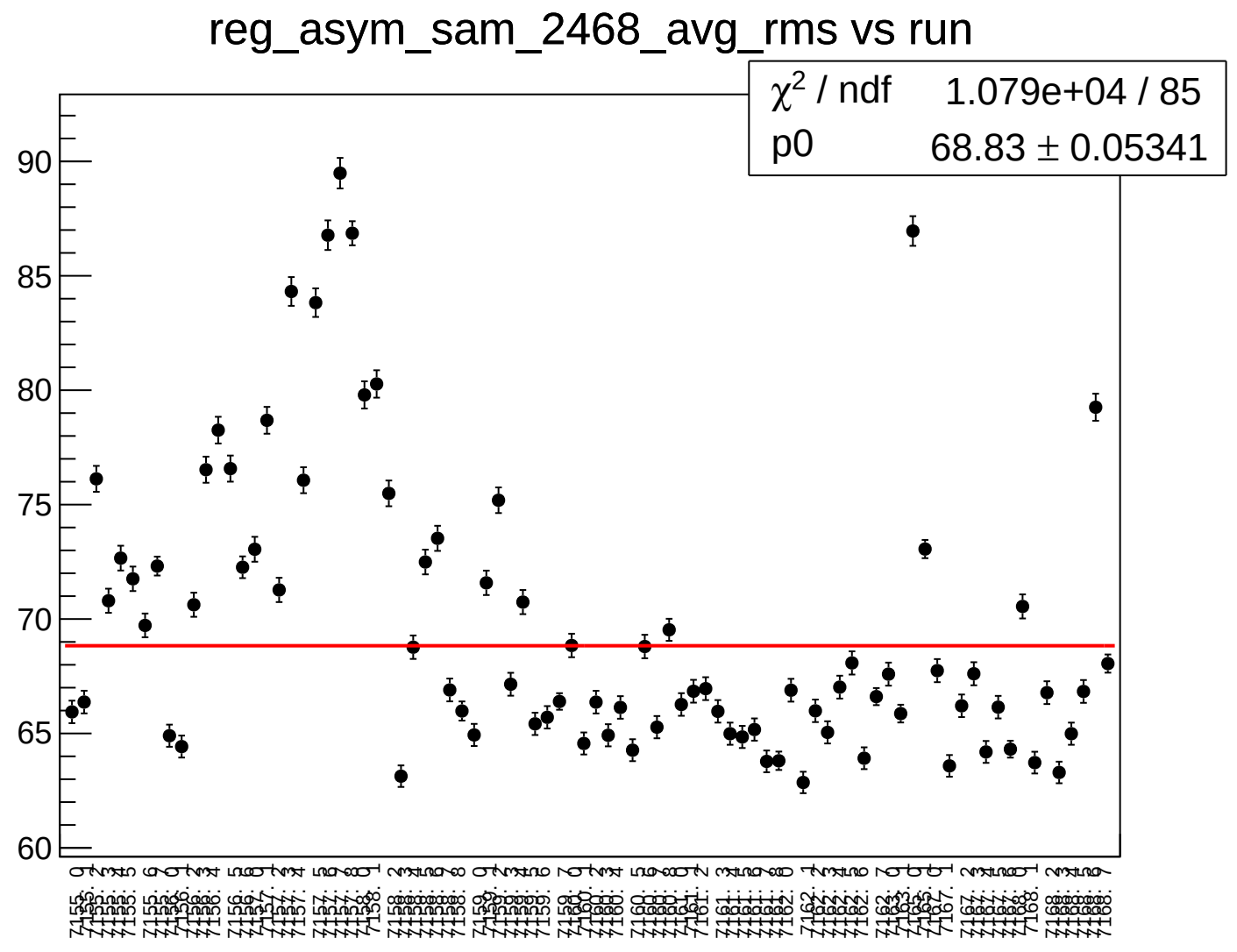

asym_sam_1357_avg_mean vs run
χ² / ndf 58.46 / 85
p0 −555.7 ± 347
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −52.44
Std Dev 110.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

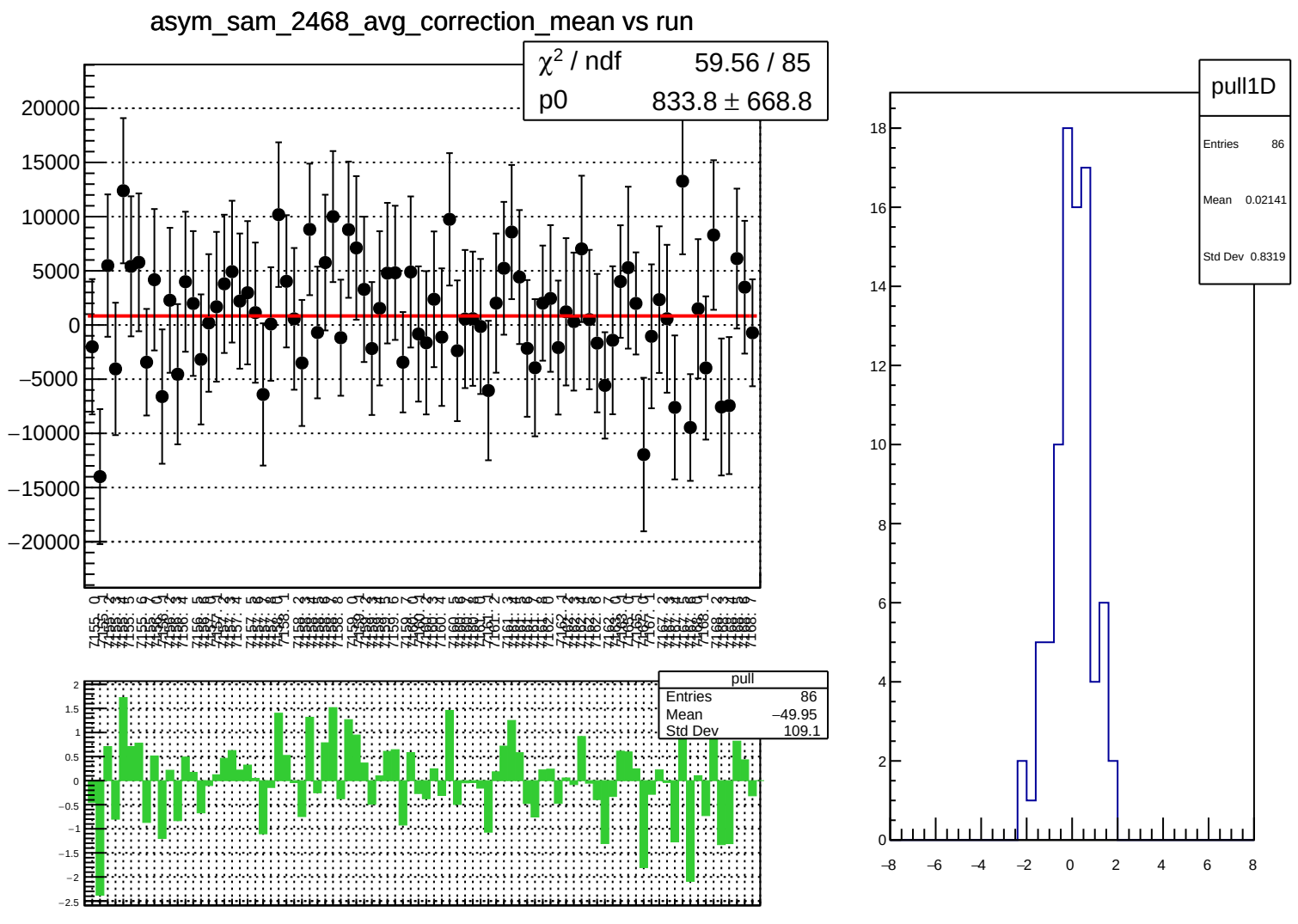

pull1D
Entries 86
Mean −0.01963
Std Dev 0.8242
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

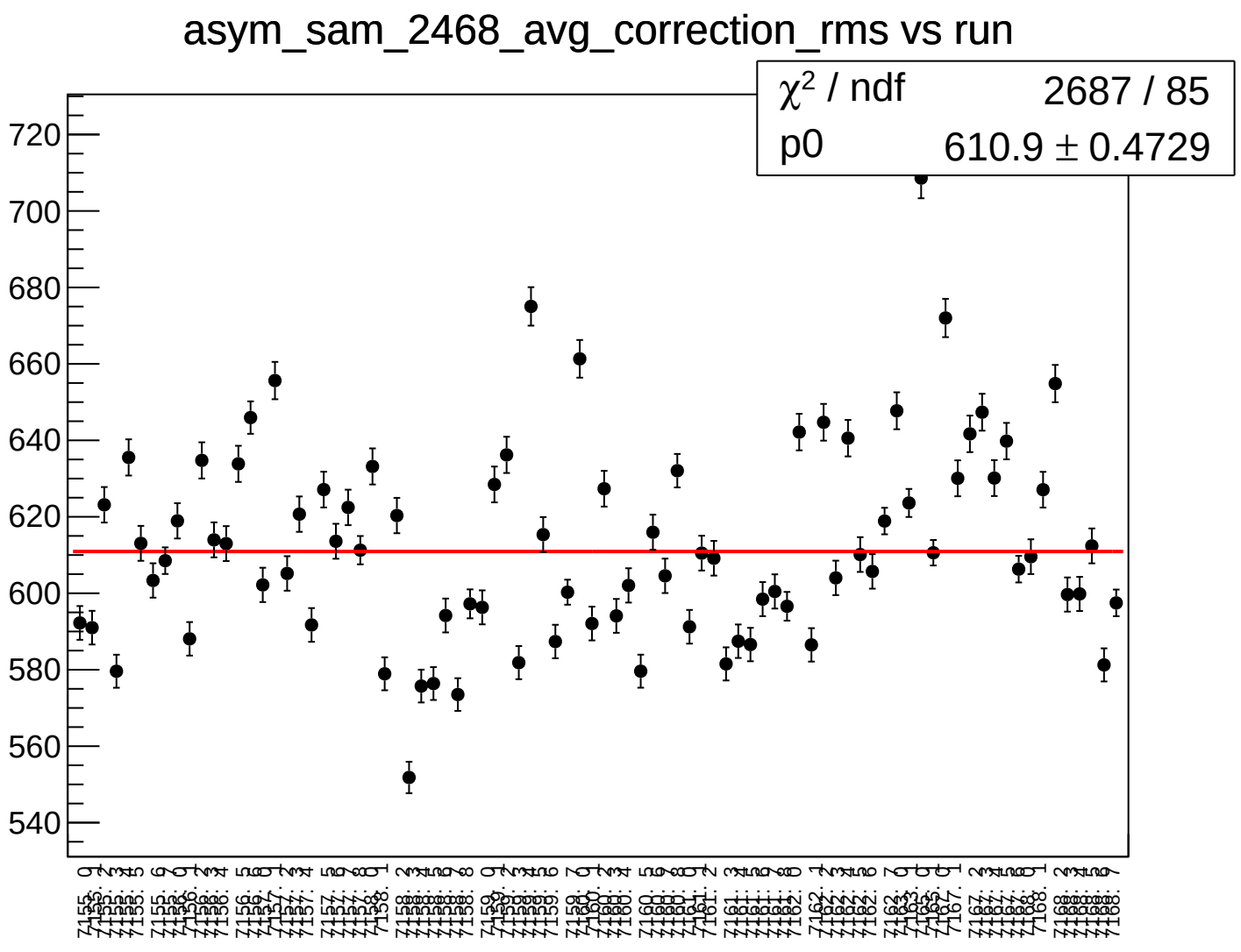

asym_sam_1357_avg_rms vs run
χ^2 / ndf 2298 / 85
p0 317 ± 0.2454
360
350
340
330
320
310
300
290

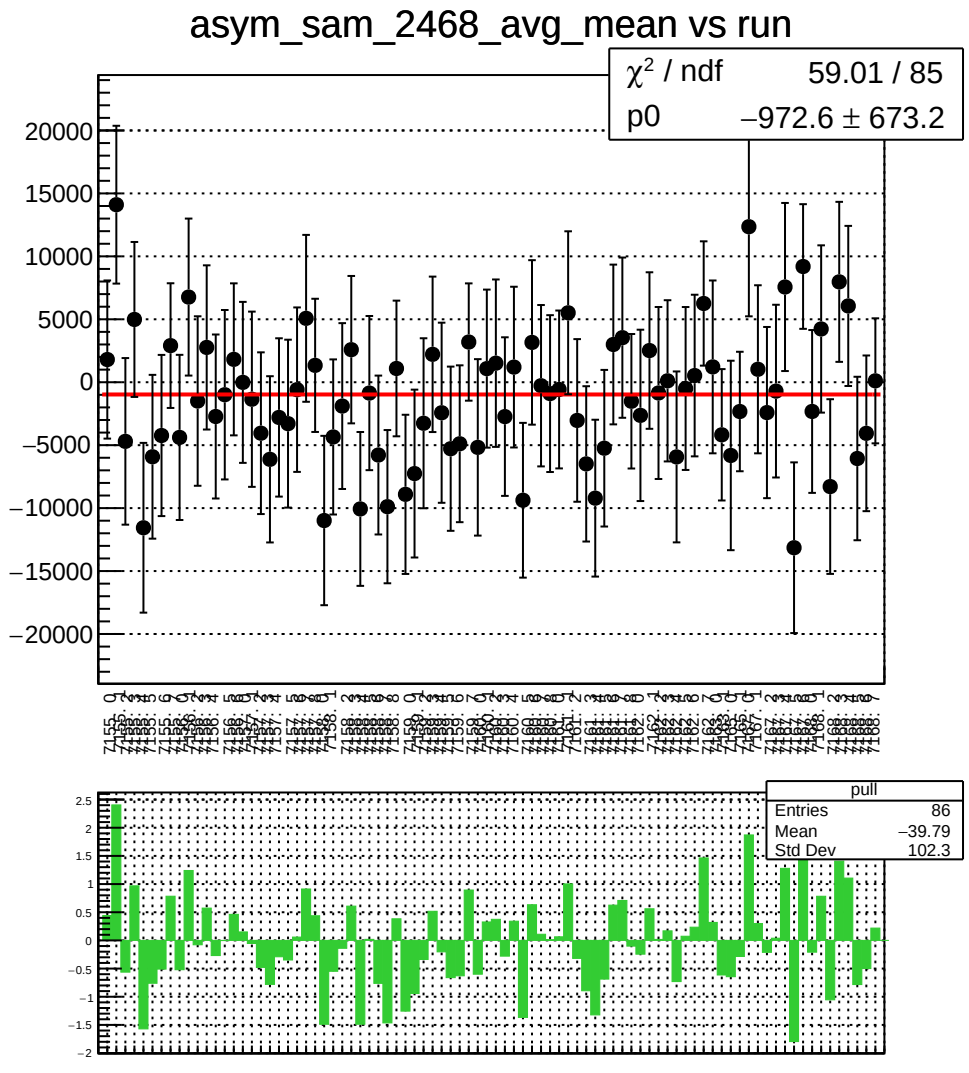

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 75.98 / 85
p0 −130.4 ± 75.54
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 347.5
Std Dev 322.9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

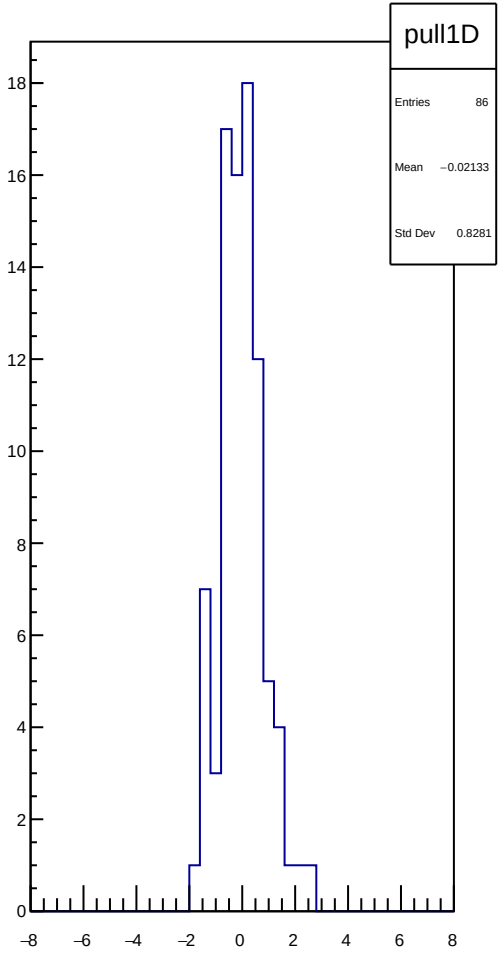

pull1D
Entries 86
Mean −0.005401
Std Dev 0.9399
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

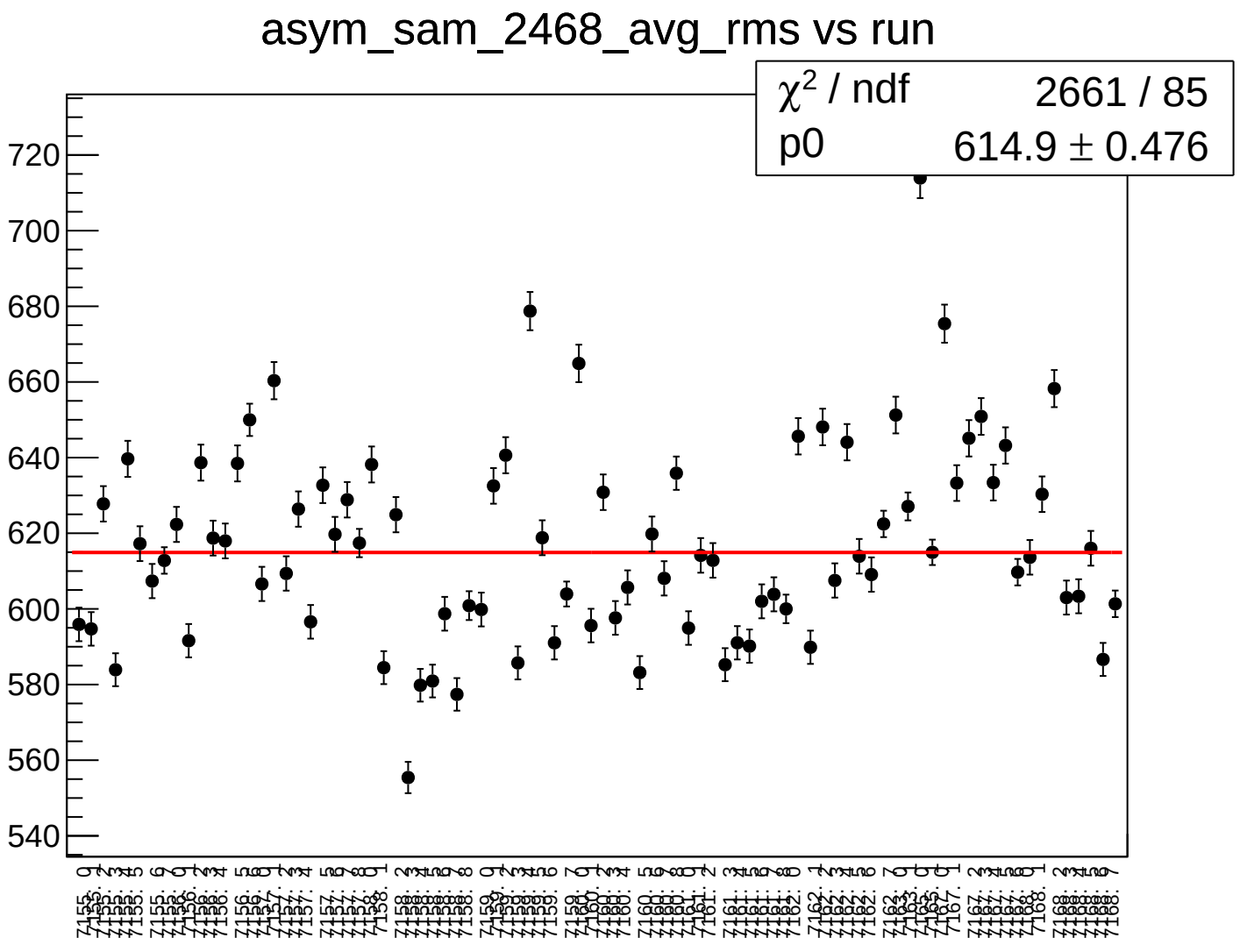

reg_asym_sam_2468_avg_rms vs run
χ^2 / ndf 1.079e+04 / 85
p0 68.83 ± 0.05341
90
85
80
75
70
65
60

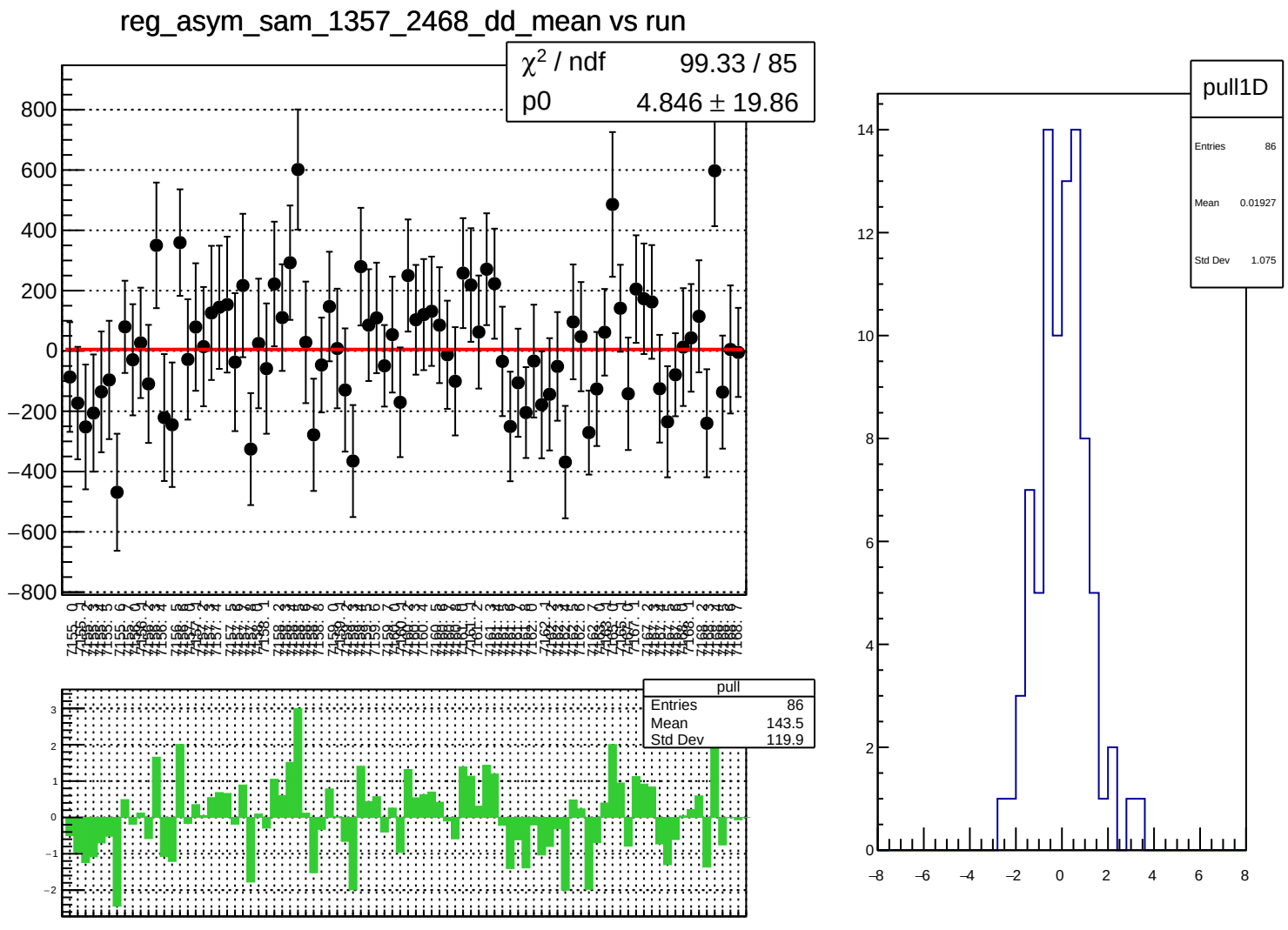

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 59.56 / 85
p0 833.8 ± 668.8
pull
Entries 86
Mean −49.95
Std Dev 109.1
pull1D
Entries 86
Mean 0.02141
Std Dev 0.8319

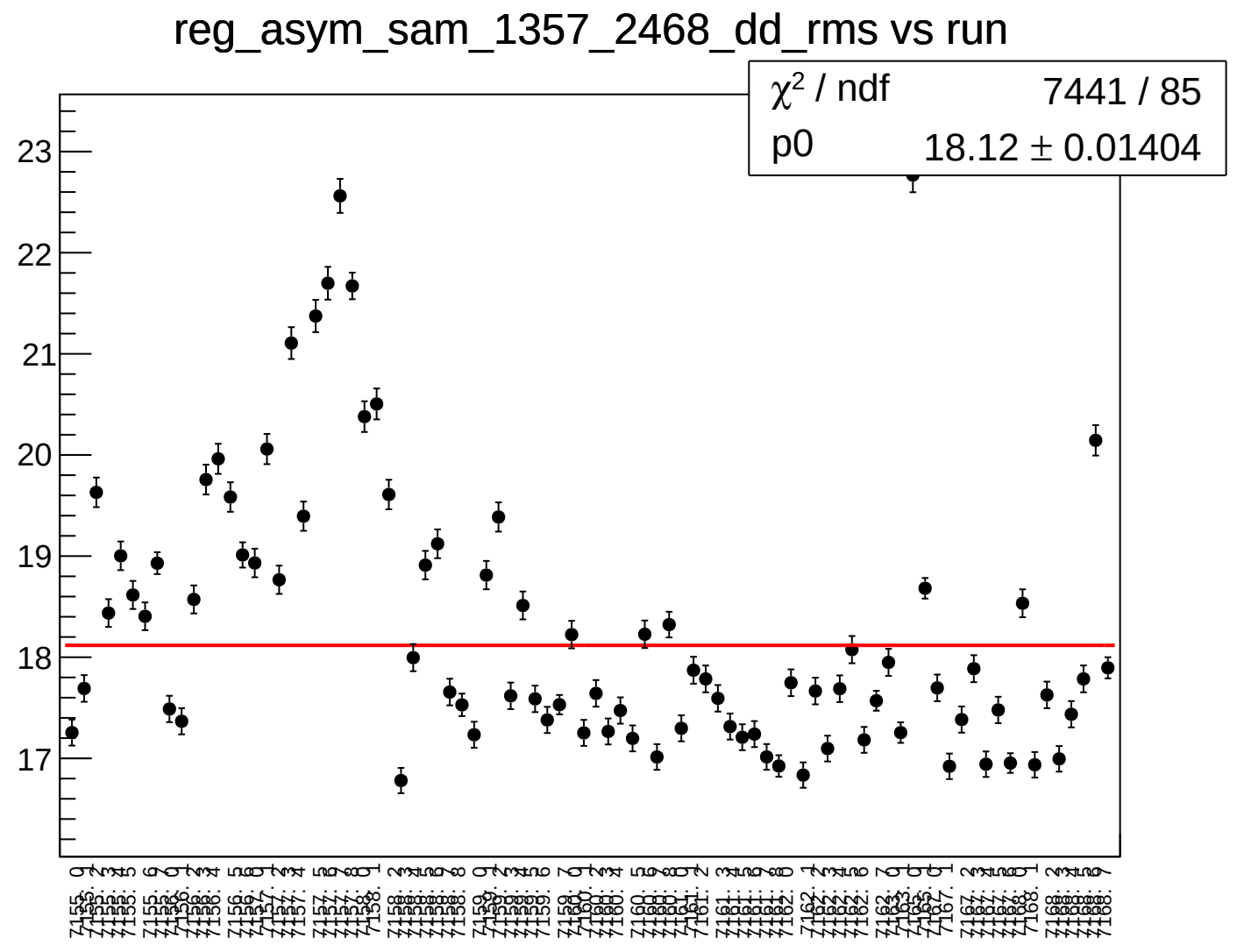

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 2687 / 85
p0 610.9 ± 0.4729
720
700
680
660
640
620
600
580
560
540

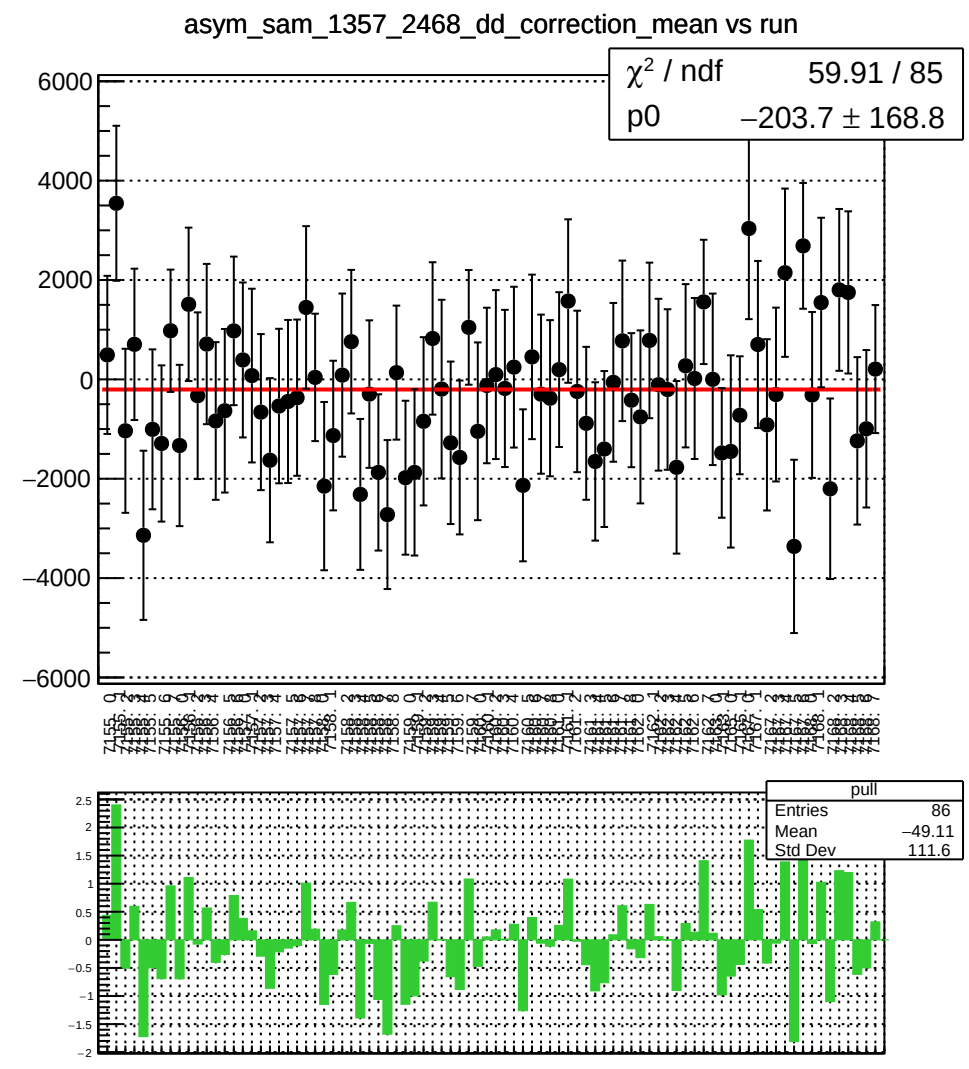

asym_sam_2468_avg_mean vs run
χ² / ndf 59.01 / 85
p0 −972.6 ± 673.2
pull
Entries 86
Mean −39.79
Std Dev 102.3

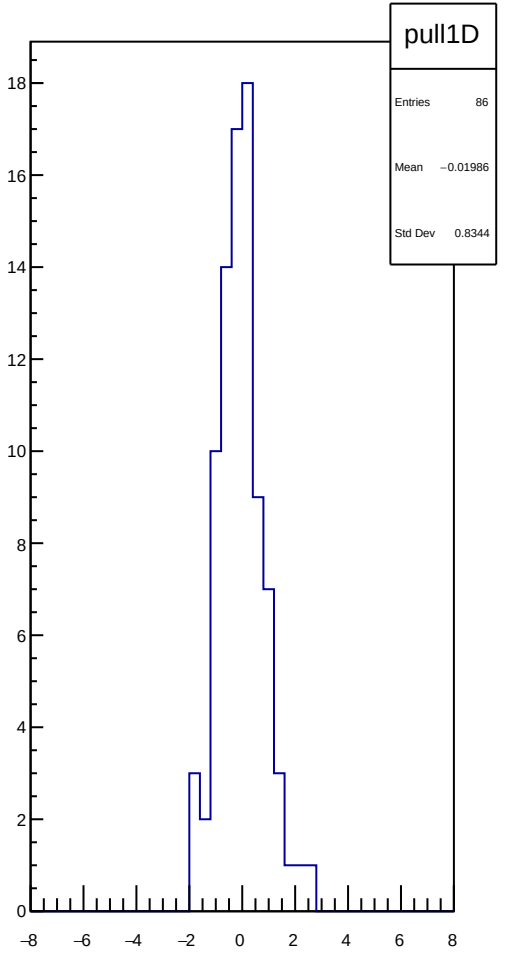

pull1D
Entries 86
Mean −0.02133
Std Dev 0.8281

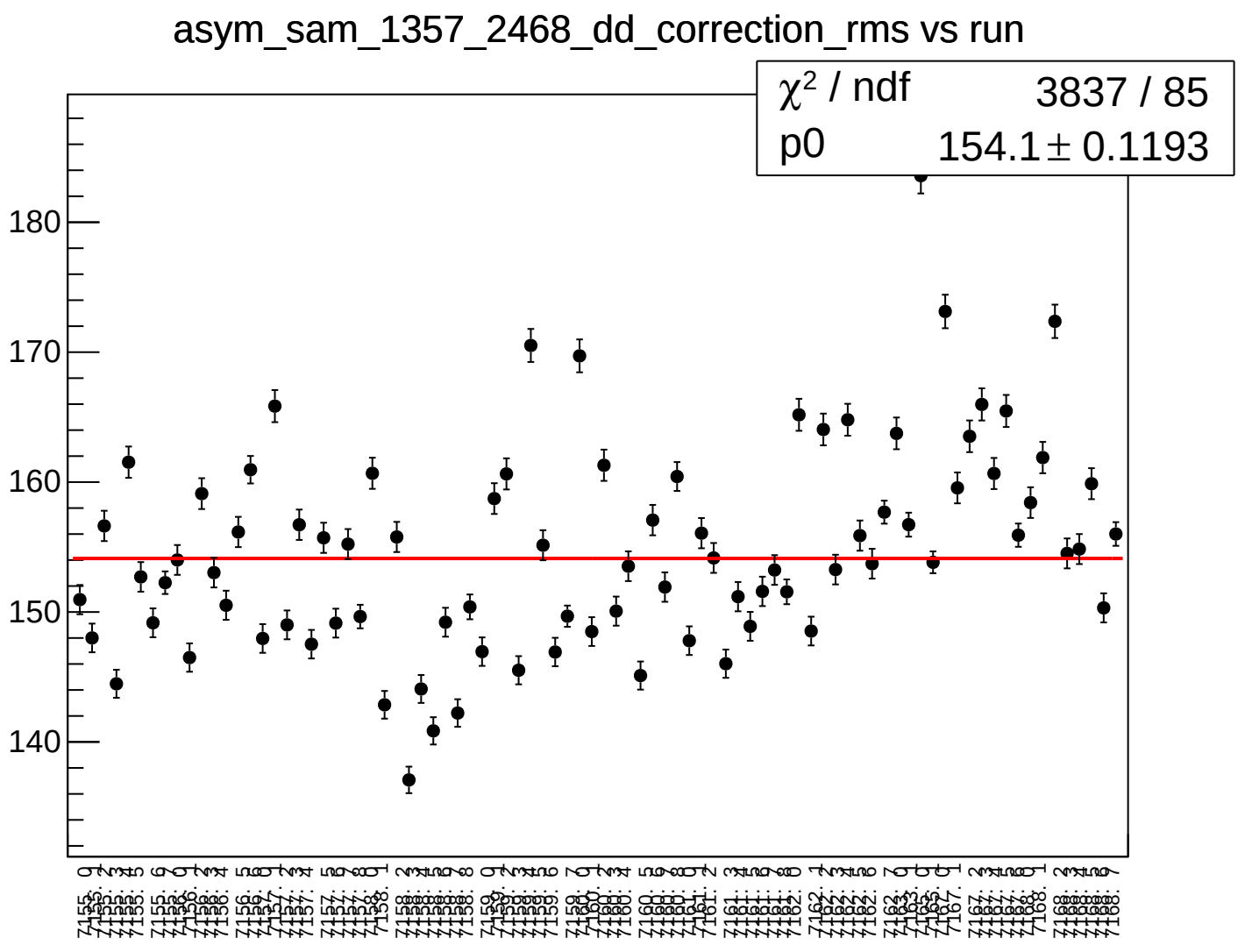

asym_sam_2468_avg_rms vs run
χ² / ndf 2661 / 85
p0 614.9 ± 0.476
720
700
680
660
640
620
600
580
560
540

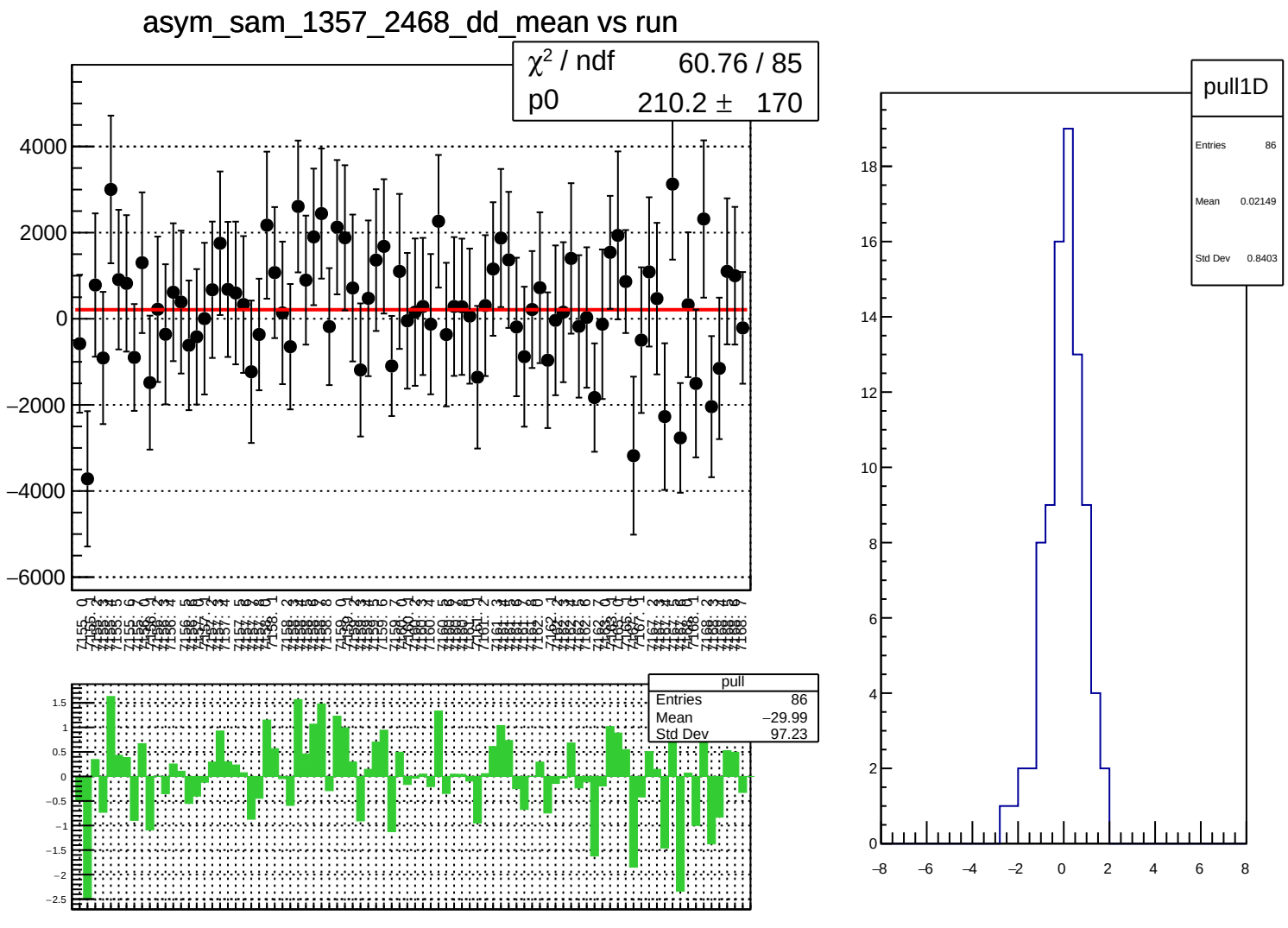

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 99.33 / 85
p0 4.846 ± 19.86
pull
Entries 86
Mean 143.5
Std Dev 119.9
pull1D
Entries 86
Mean 0.01927
Std Dev 1.075

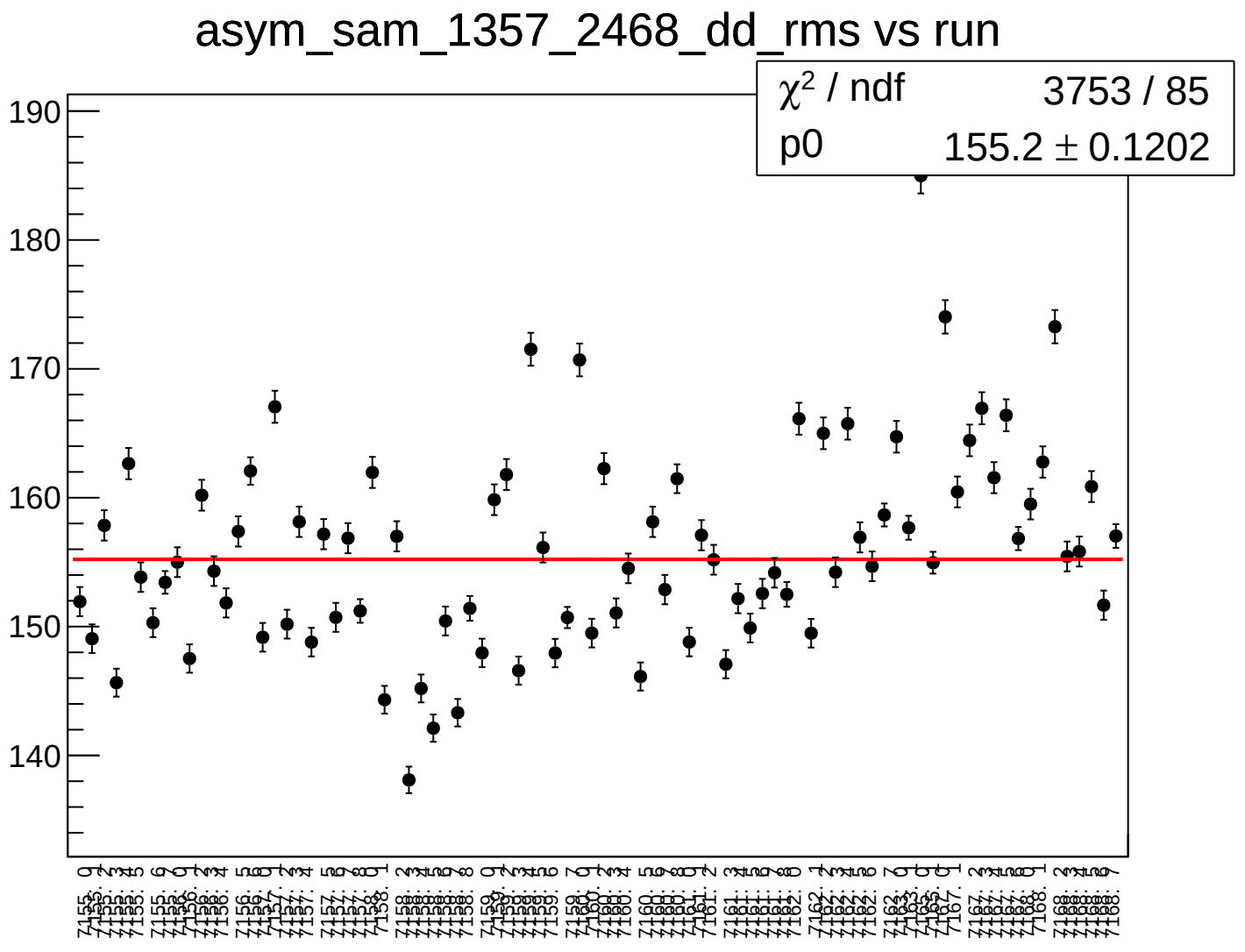

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 7441 / 85
p0 18.12 ± 0.01404
23
22
21
20
19
18
17

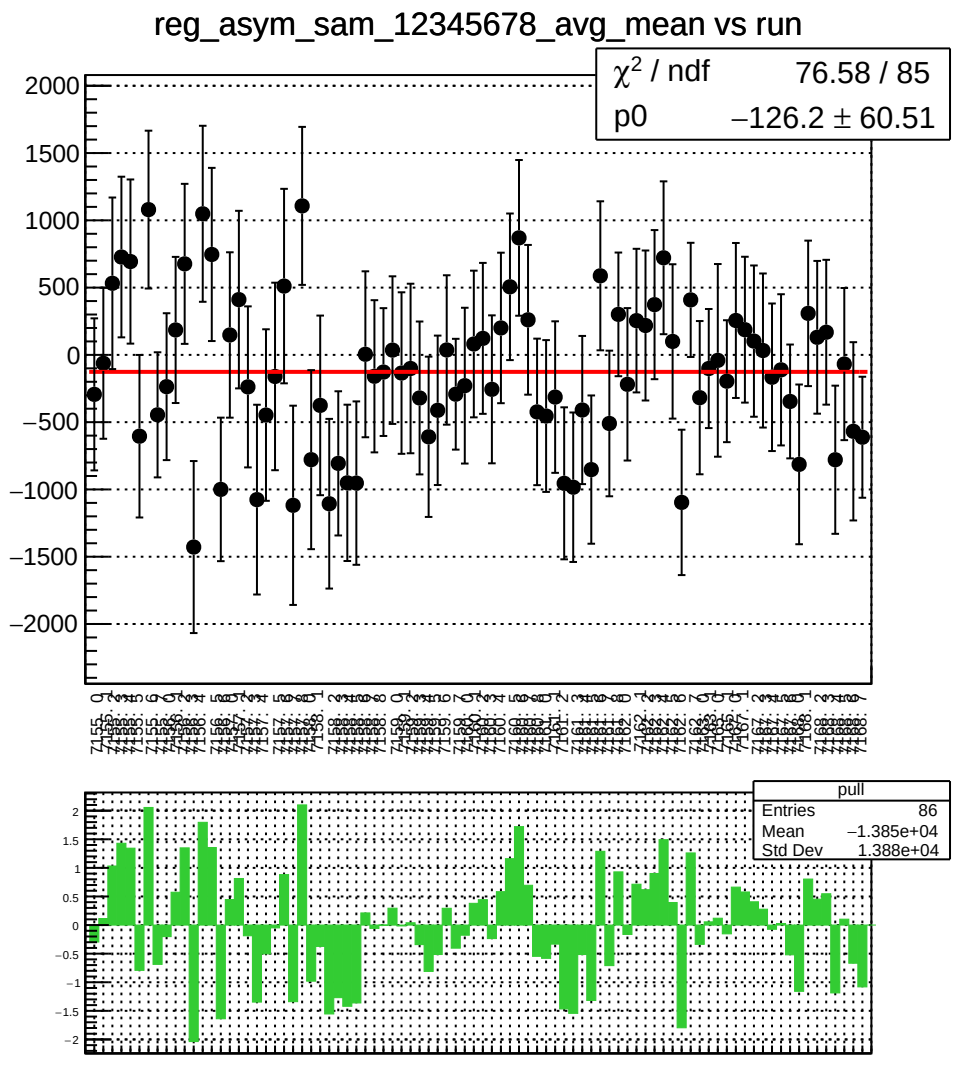

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 59.91 / 85
p0 −203.7 ± 168.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean −49.11
Std Dev 111.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

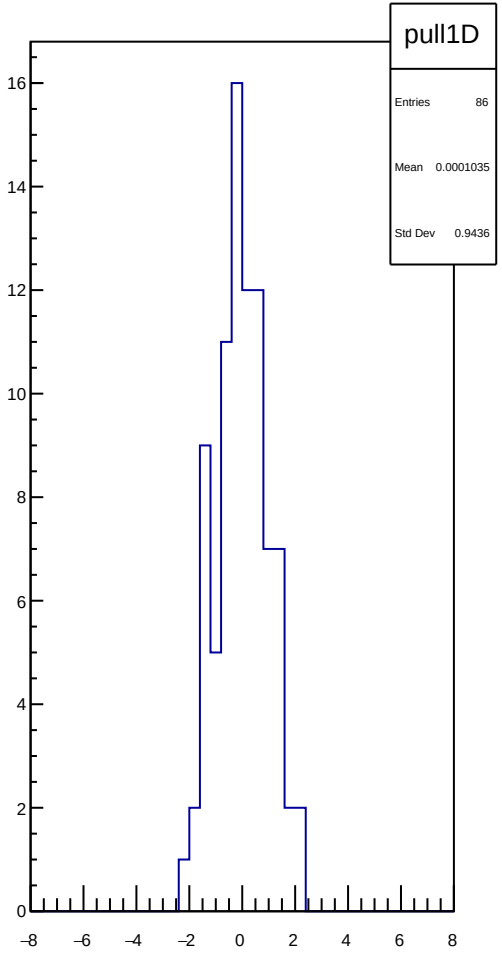

pull1D
Entries 86
Mean −0.01986
Std Dev 0.8344
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

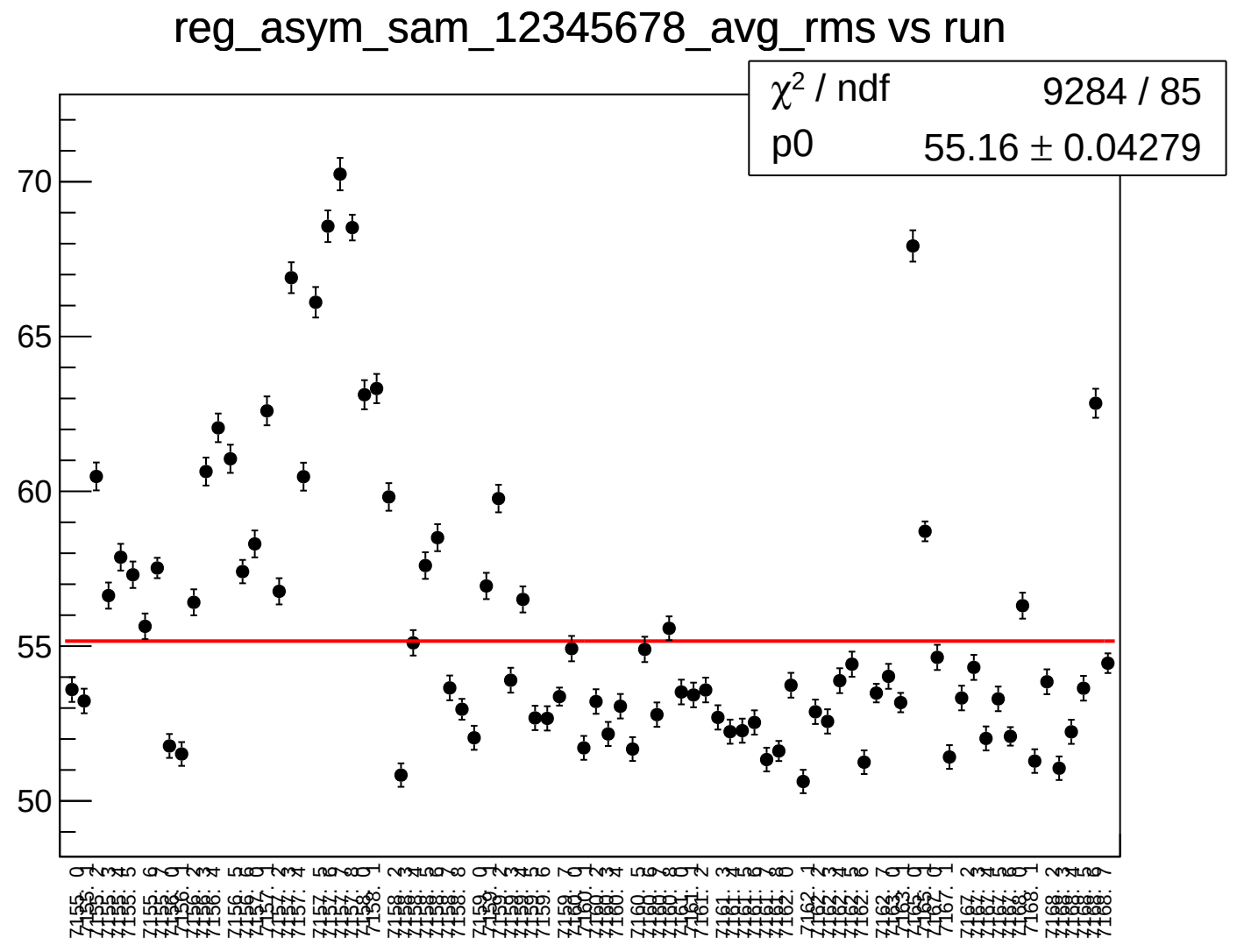

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 3837 / 85
p0 154.1 ± 0.1193
180
170
160
150
140

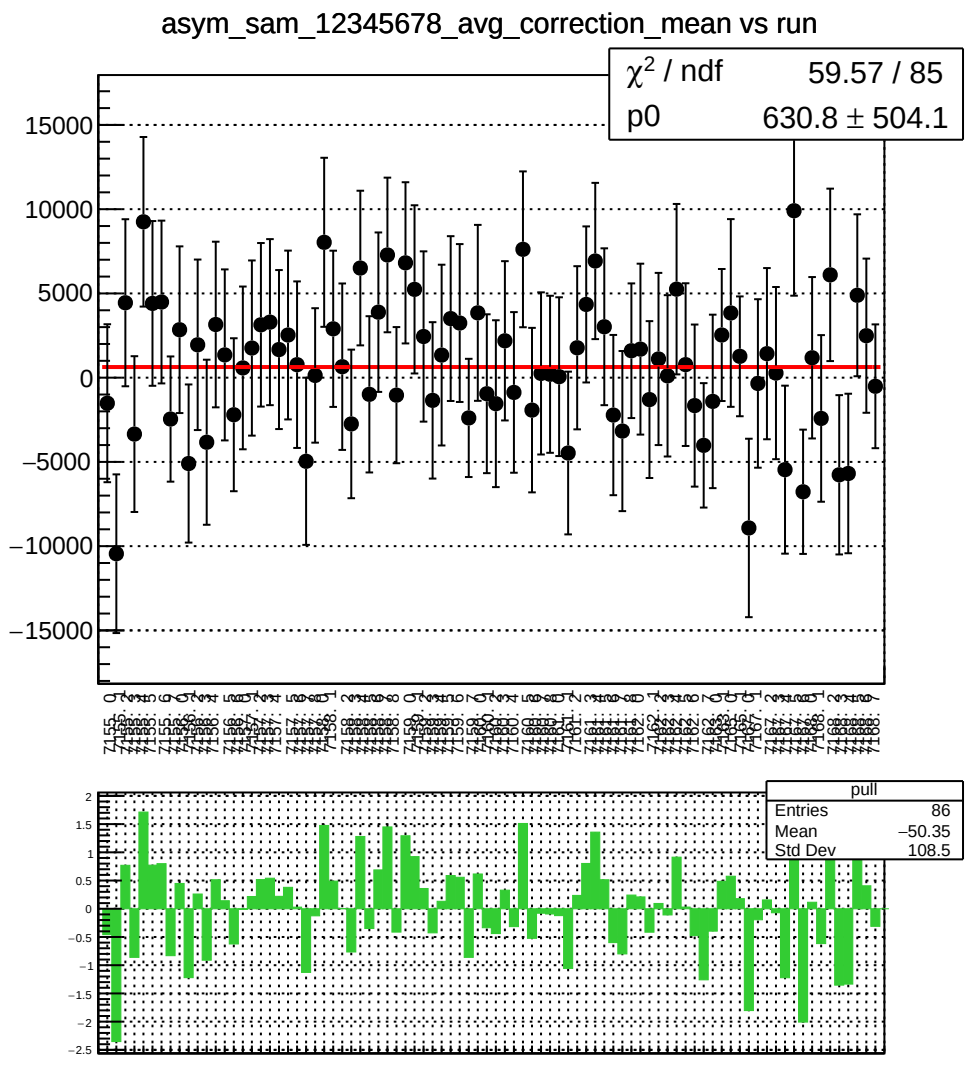

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 60.76 / 85
p0 210.2 ± 170
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean −29.99
Std Dev 97.23
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 86
Mean 0.02149
Std Dev 0.8403
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

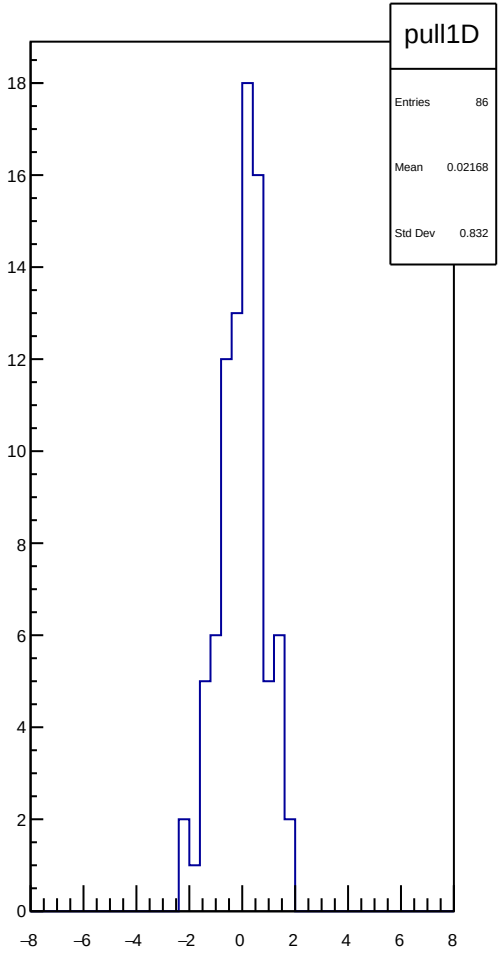

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 3753 / 85
p0 155.2 ± 0.1202
190
180
170
160
150
140

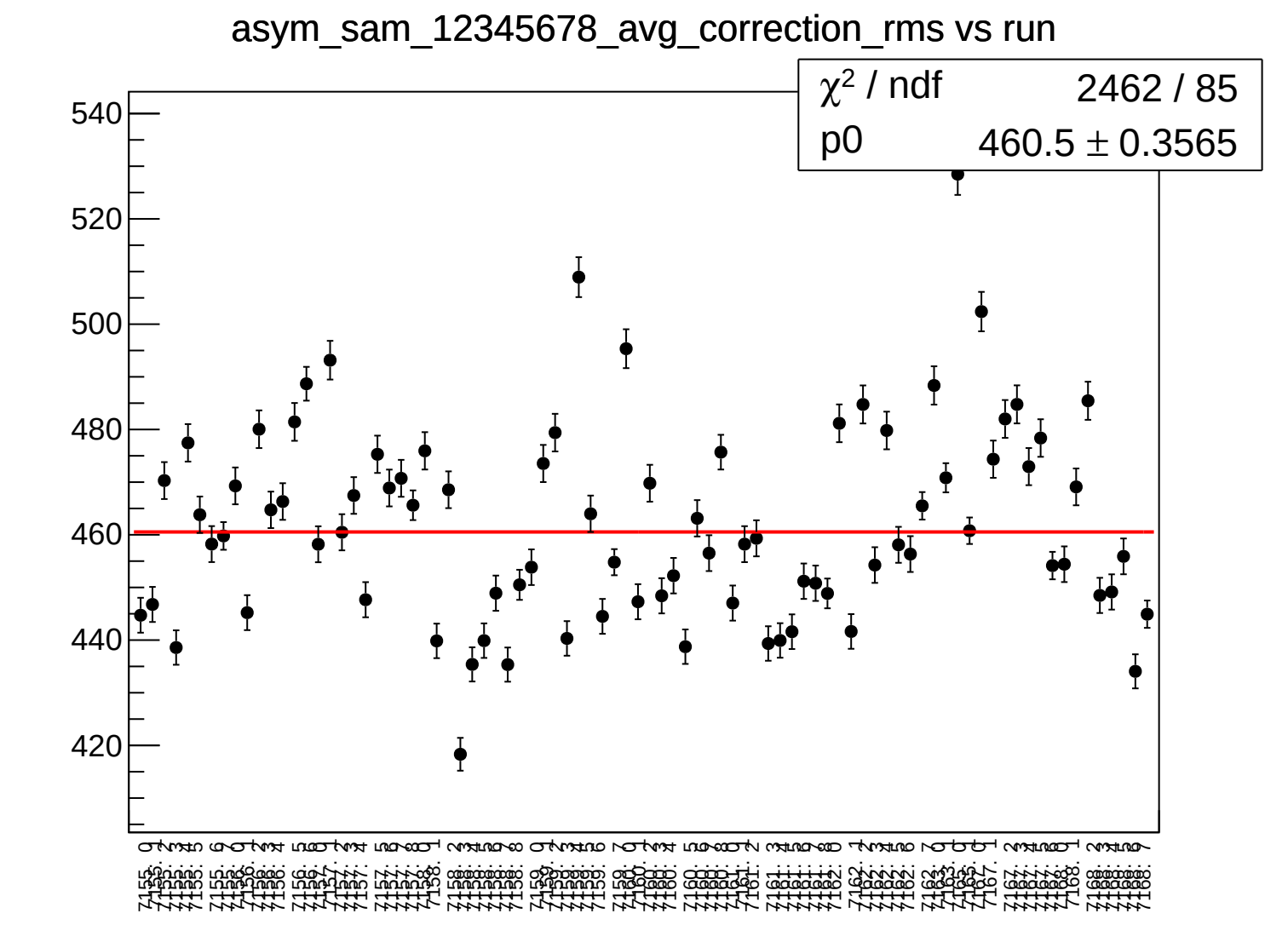

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 76.58 / 85
p0 −126.2 ± 60.51
pull
Entries 86
Mean −1.385e+04
Std Dev 1.388e+04

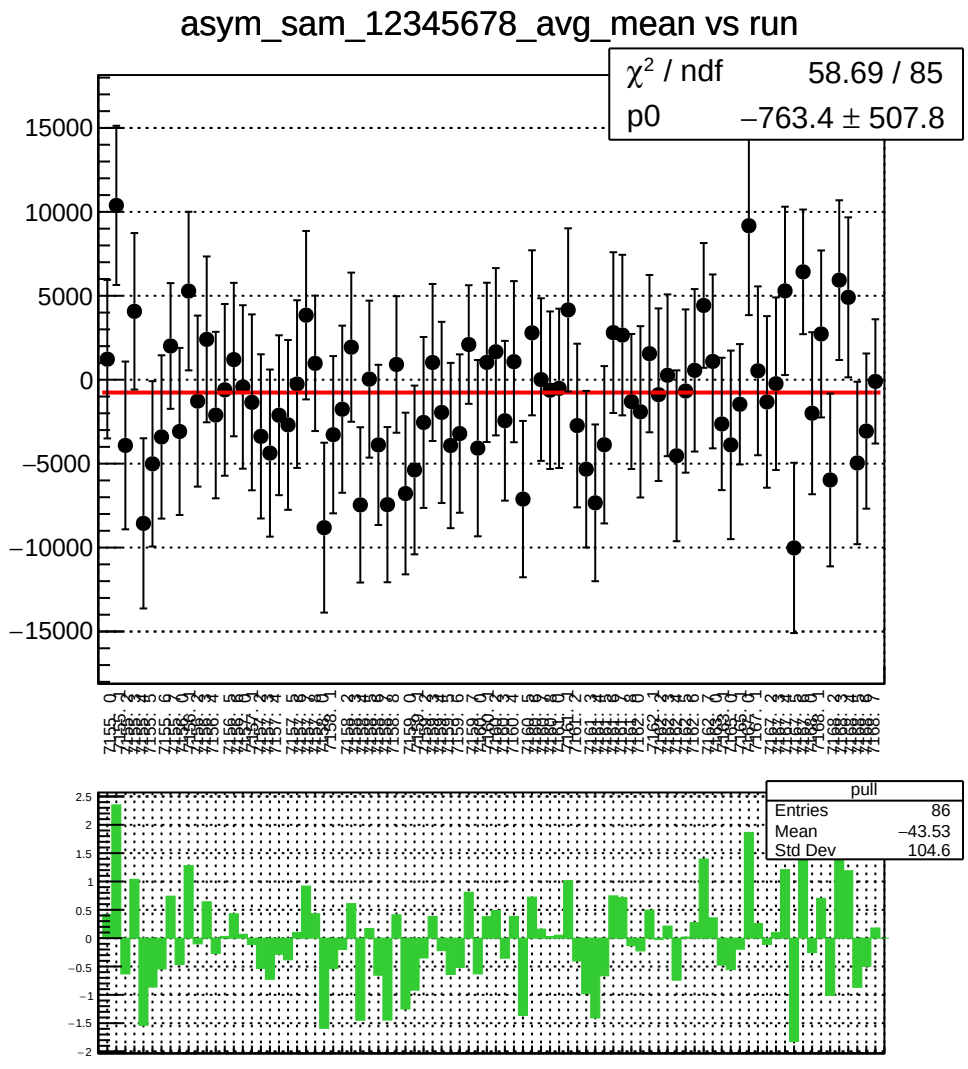

pull1D
Entries 86
Mean 0.0001035
Std Dev 0.9436

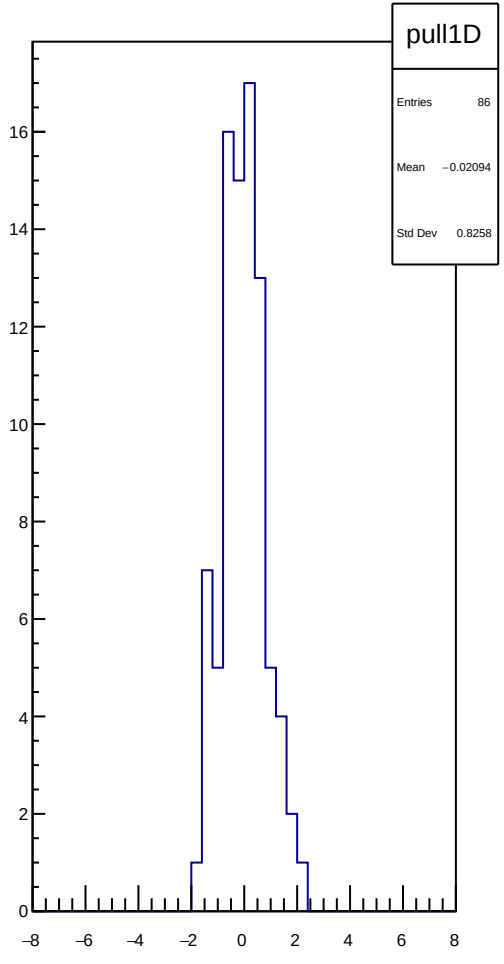

reg_asym_sam_12345678_avg_rms vs run
χ^2 / ndf 9284 / 85
p0 55.16 ± 0.04279
70
65
60
55
50

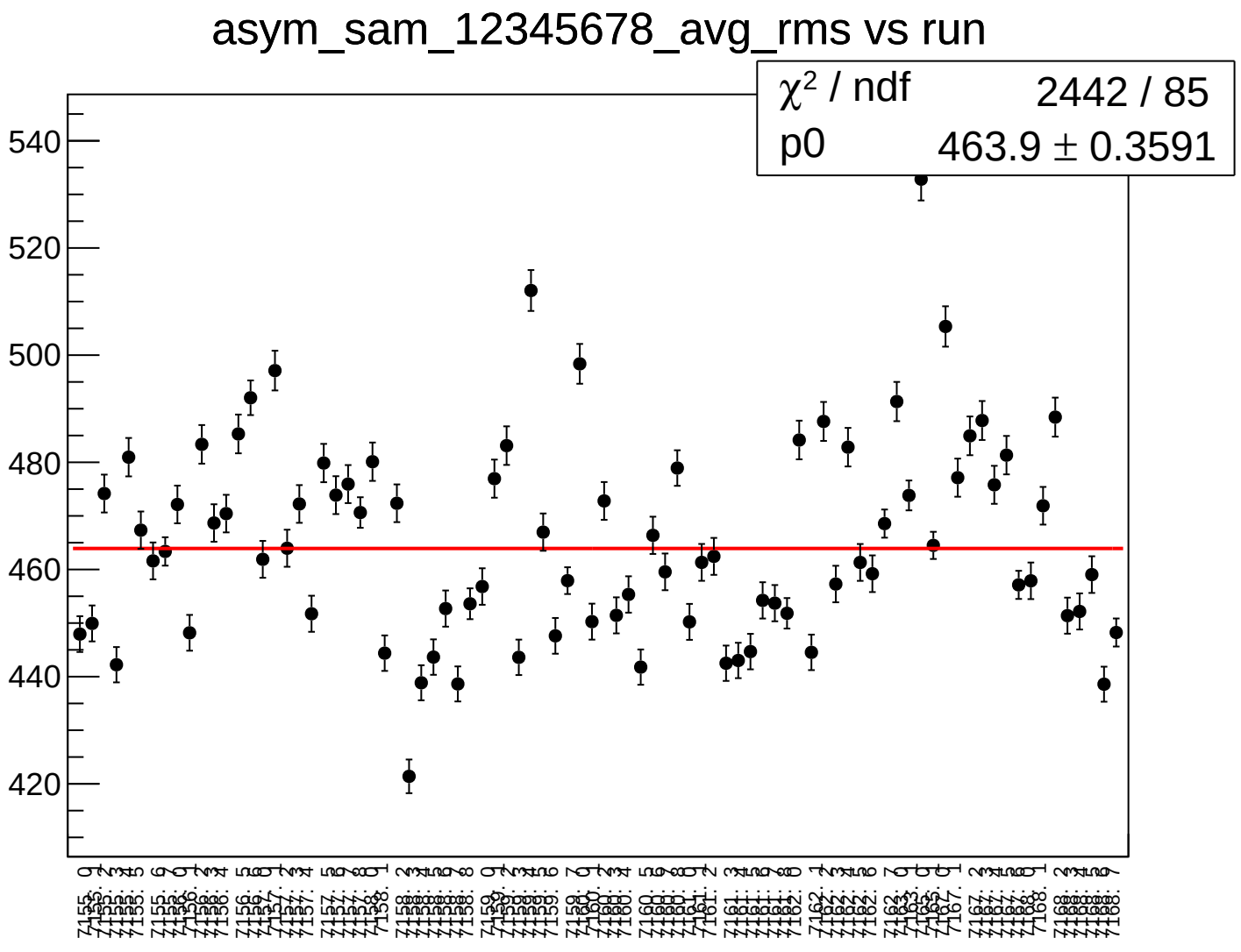

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 59.57 / 85
p0 630.8 ± 504.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −50.35
Std Dev 108.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

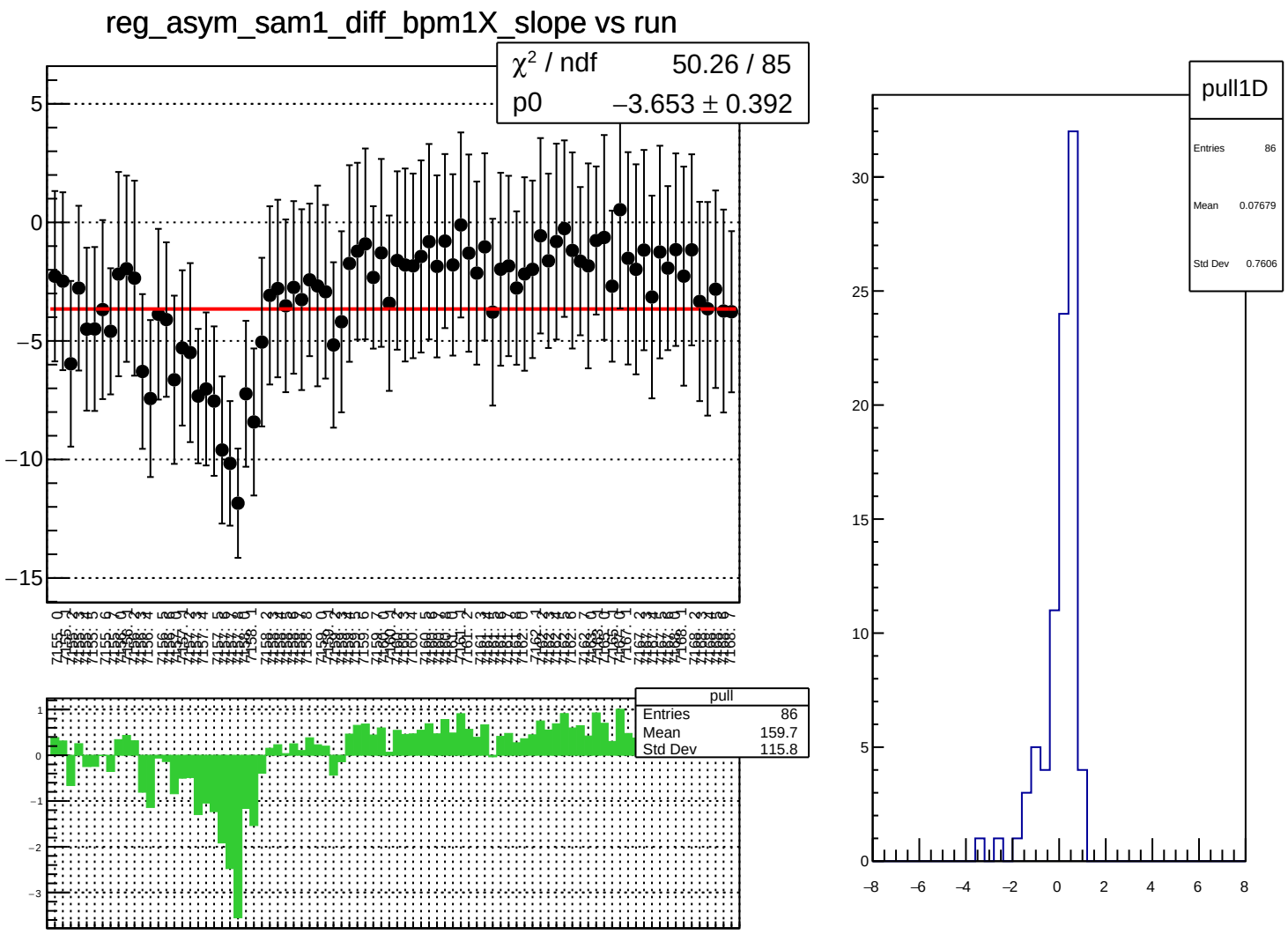

pull1D
Entries 86
Mean 0.02168
Std Dev 0.832
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

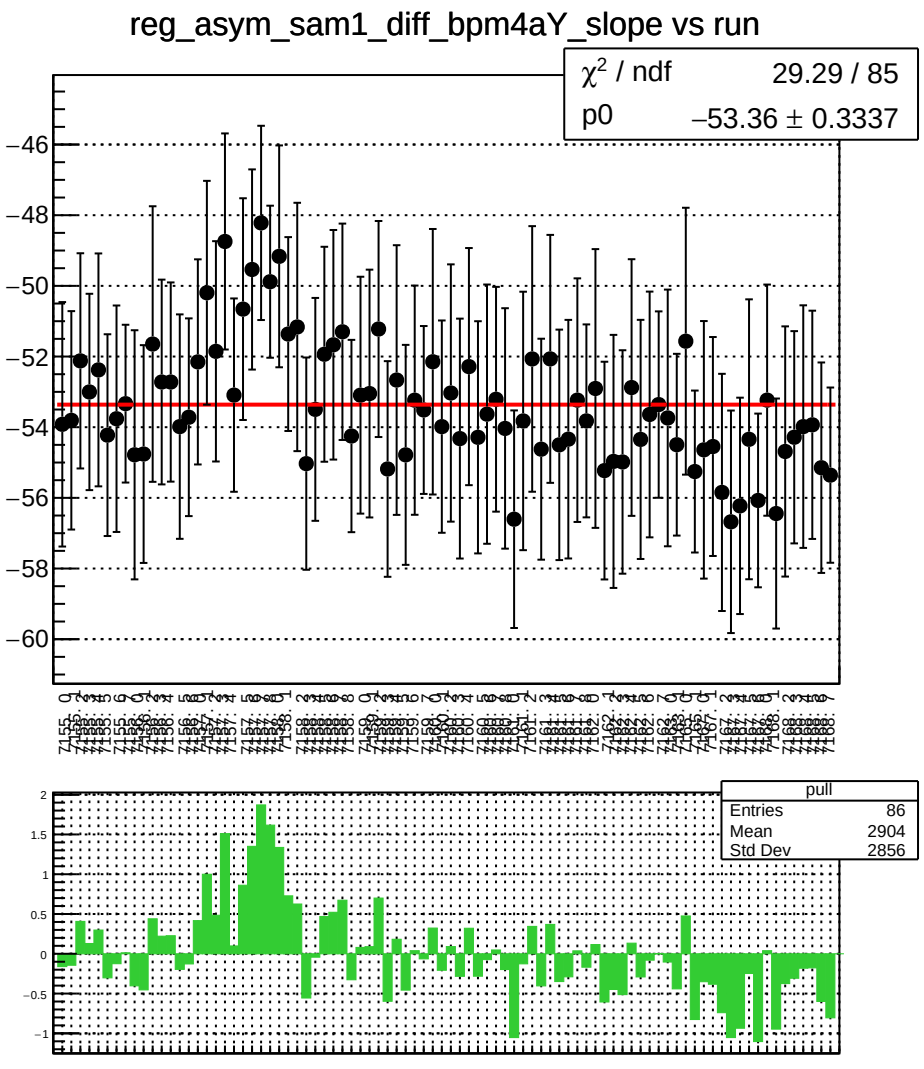

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 2462 / 85
p0 460.5 ± 0.3565
540
520
500
480
460
440
420

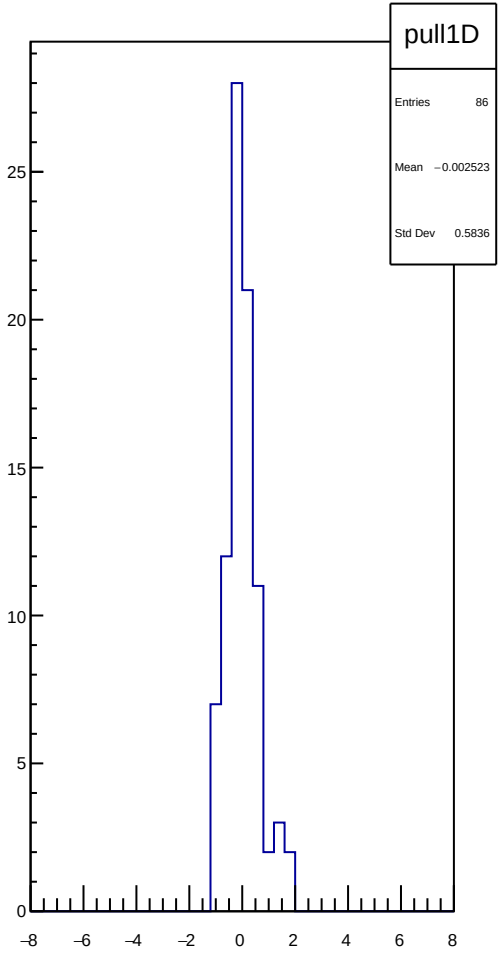

asym_sam_12345678_avg_mean vs run
χ² / ndf 58.69 / 85
p0 −763.4 ± 507.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean −43.53
Std Dev 104.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

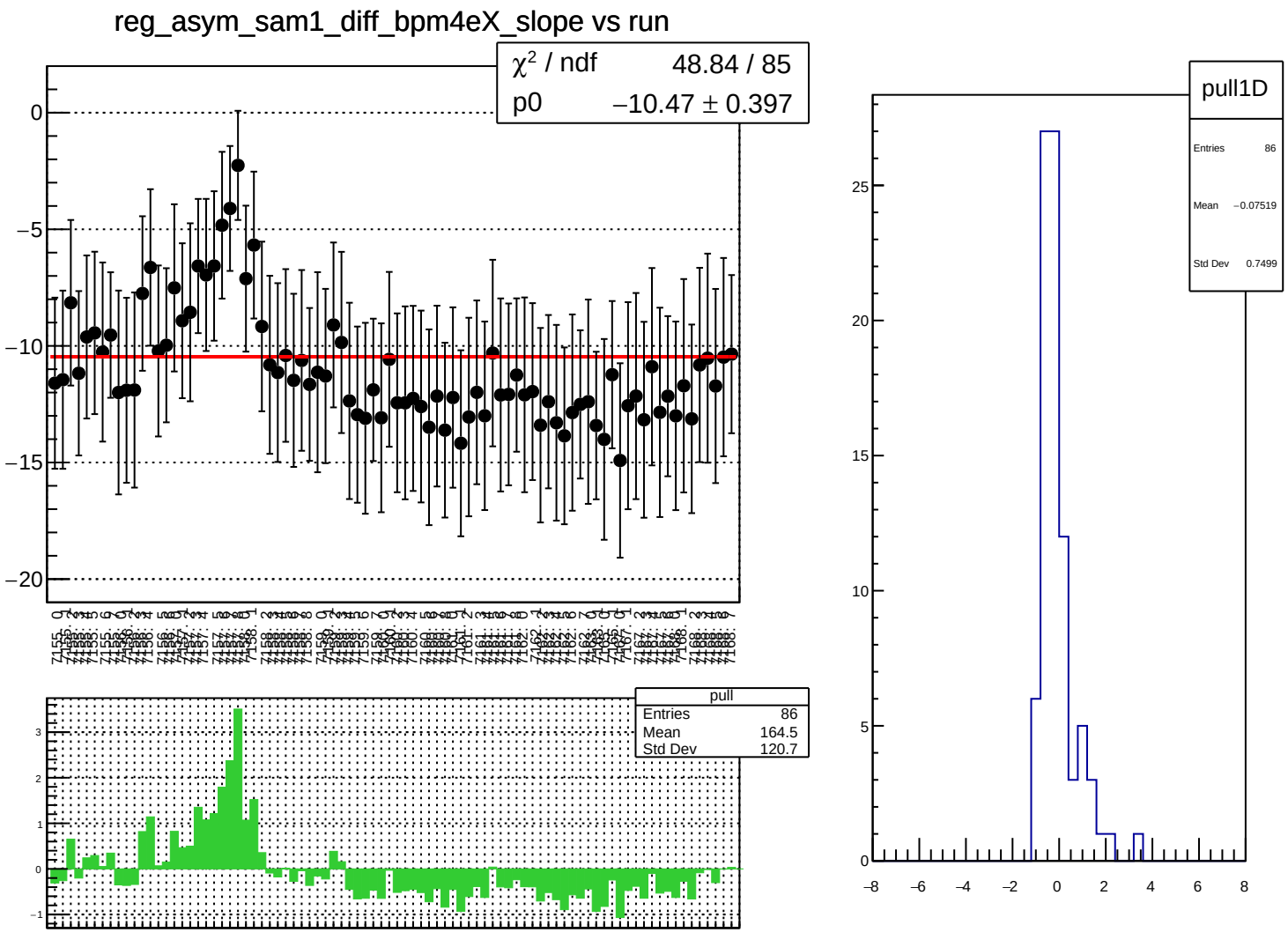

pull1D
Entries 86
Mean −0.02094
Std Dev 0.8258
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

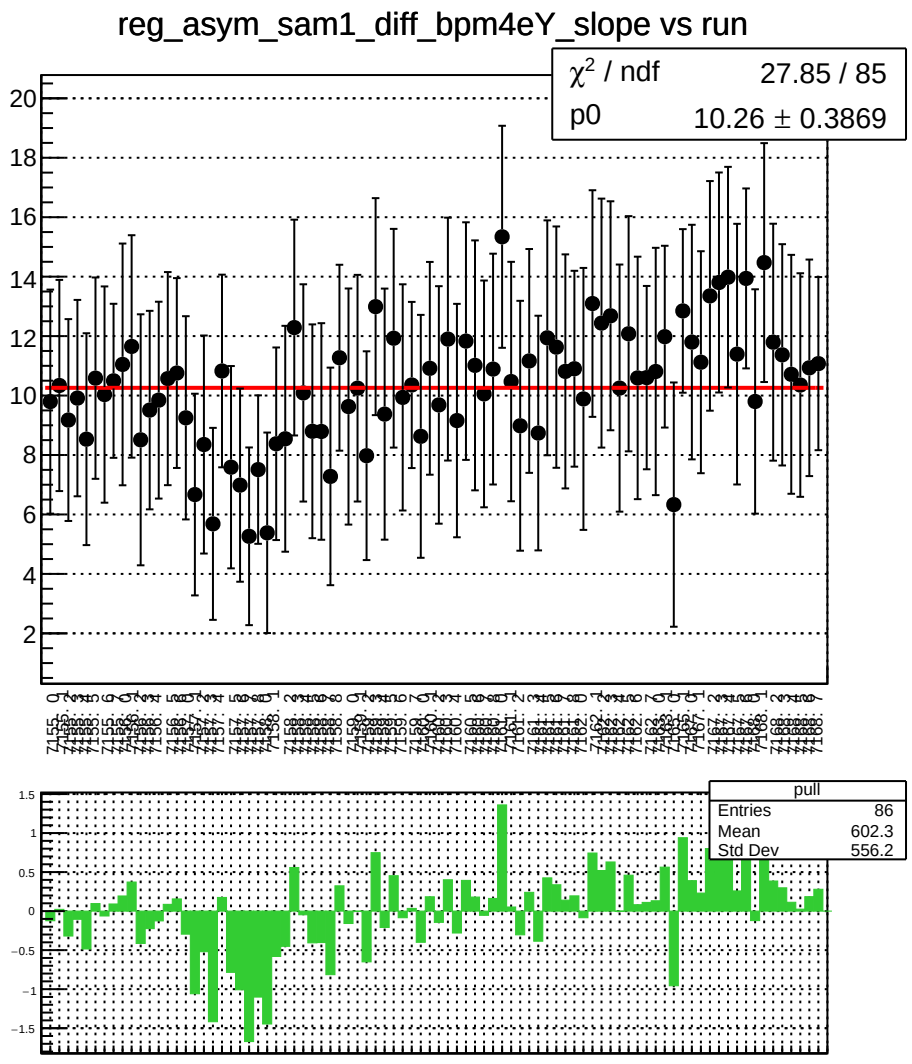

asym_sam_12345678_avg_rms vs run
χ² / ndf 2442 / 85
p0 463.9 ± 0.3591
540
520
500
480
460
440
420

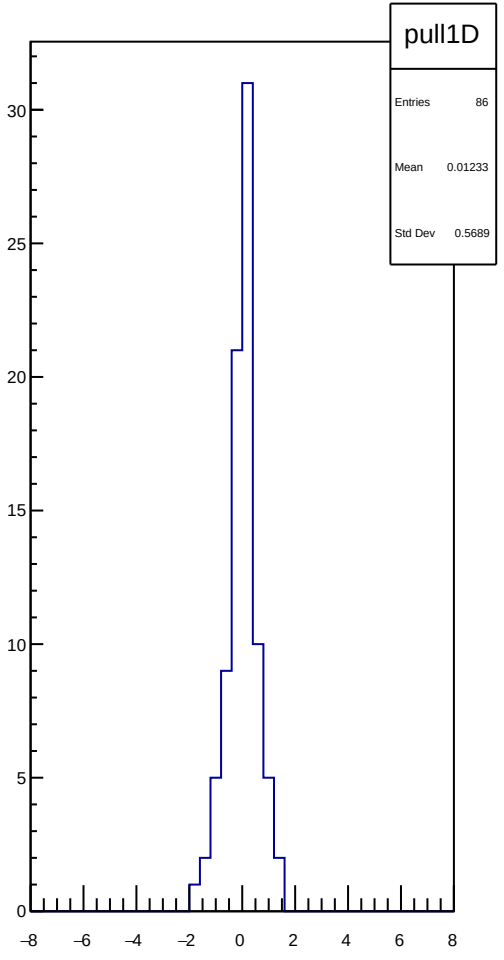

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 50.26 / 85
p0 −3.653 ± 0.392
pull
Entries 86
Mean 159.7
Std Dev 115.8
pull1D
Entries 86
Mean 0.07679
Std Dev 0.7606

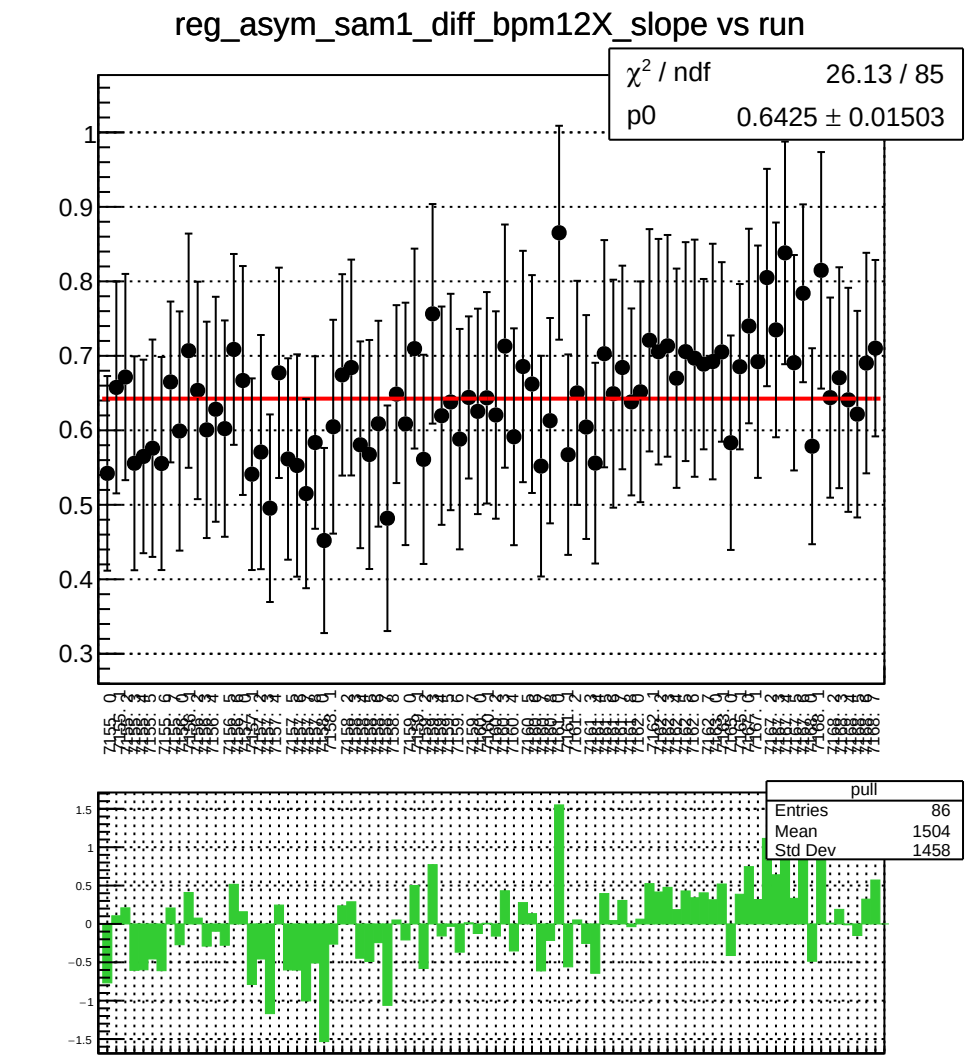

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 29.29 / 85
p0 −53.36 ± 0.3337
pull
Entries 86
Mean 2904
Std Dev 2856

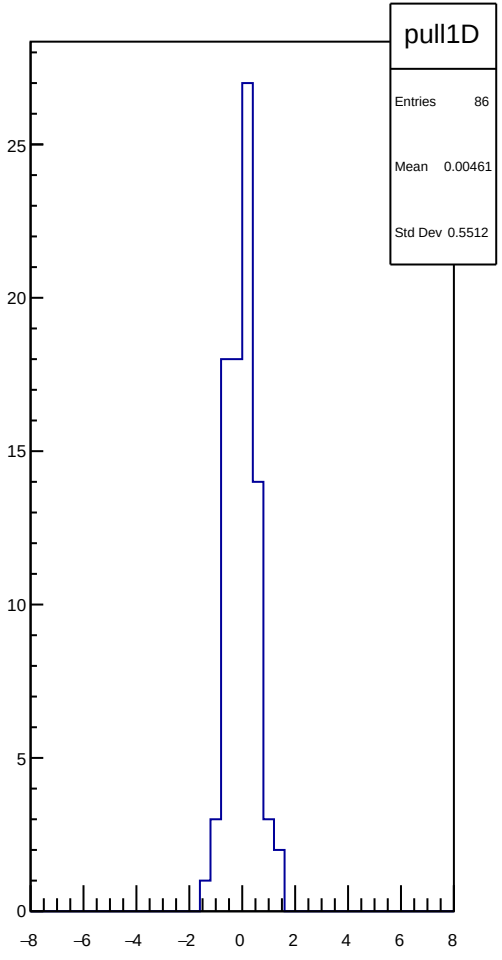

pull1D
Entries 86
Mean −0.002523
Std Dev 0.5836

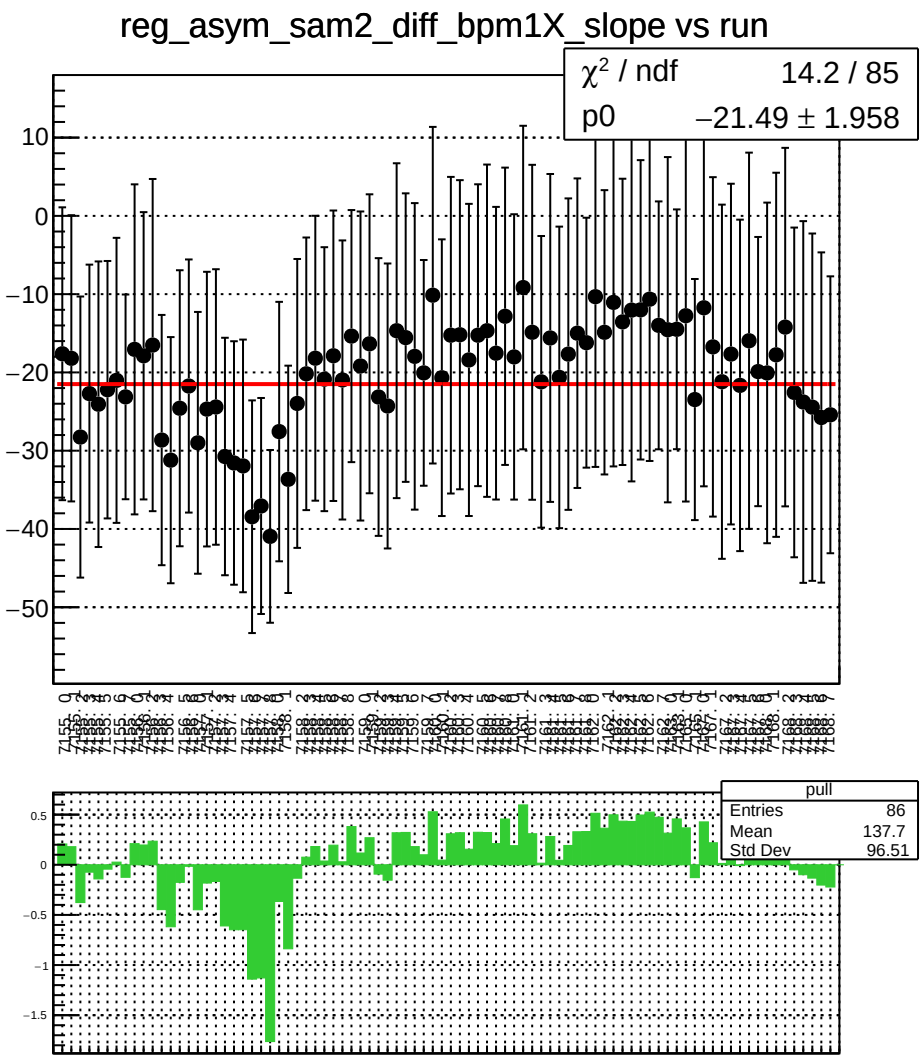

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 48.84 / 85
p0 −10.47 ± 0.397
pull
Entries 86
Mean 164.5
Std Dev 120.7
pull1D
Entries 86
Mean −0.07519
Std Dev 0.7499

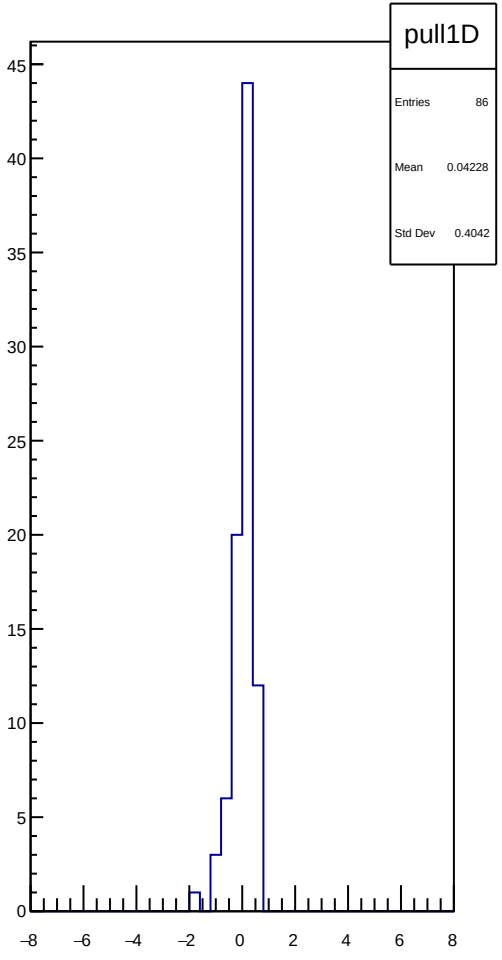

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 27.85 / 85
p0 10.26 ± 0.3869
pull
Entries 86
Mean 602.3
Std Dev 556.2

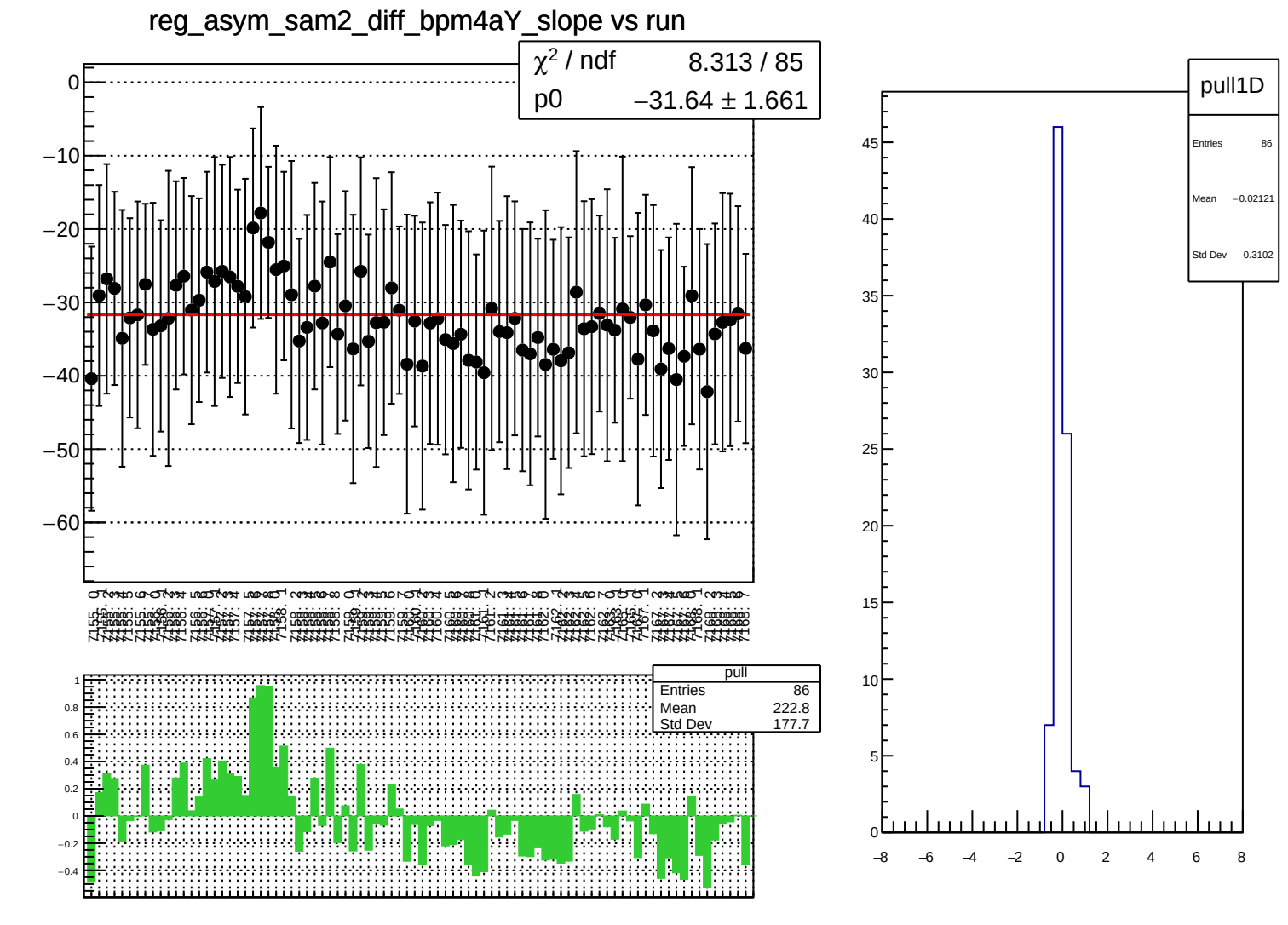

pull1D
Entries 86
Mean 0.01233
Std Dev 0.5689

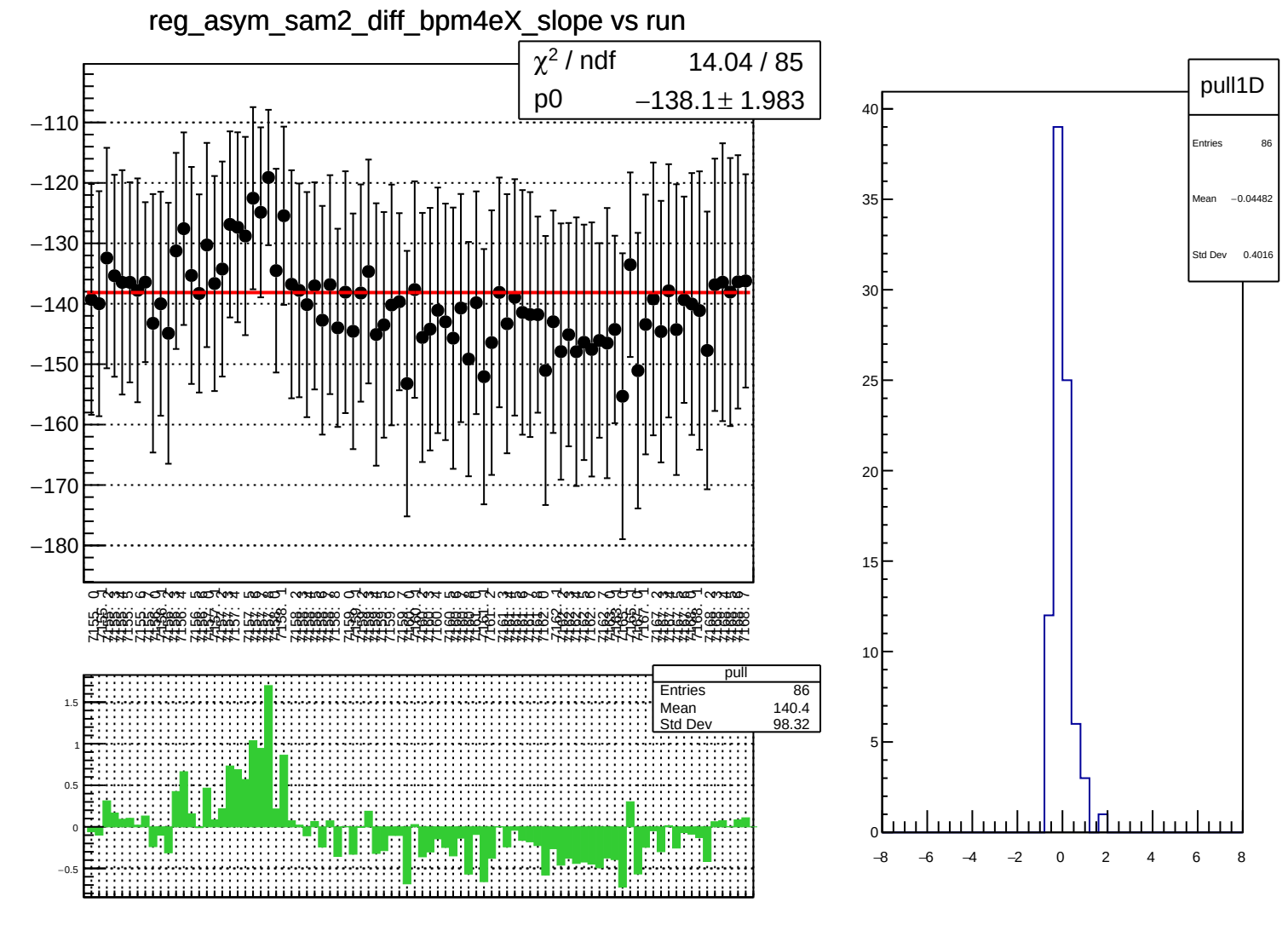

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 26.13 / 85
p0 0.6425 ± 0.01503
pull
Entries 86
Mean 1504
Std Dev 1458

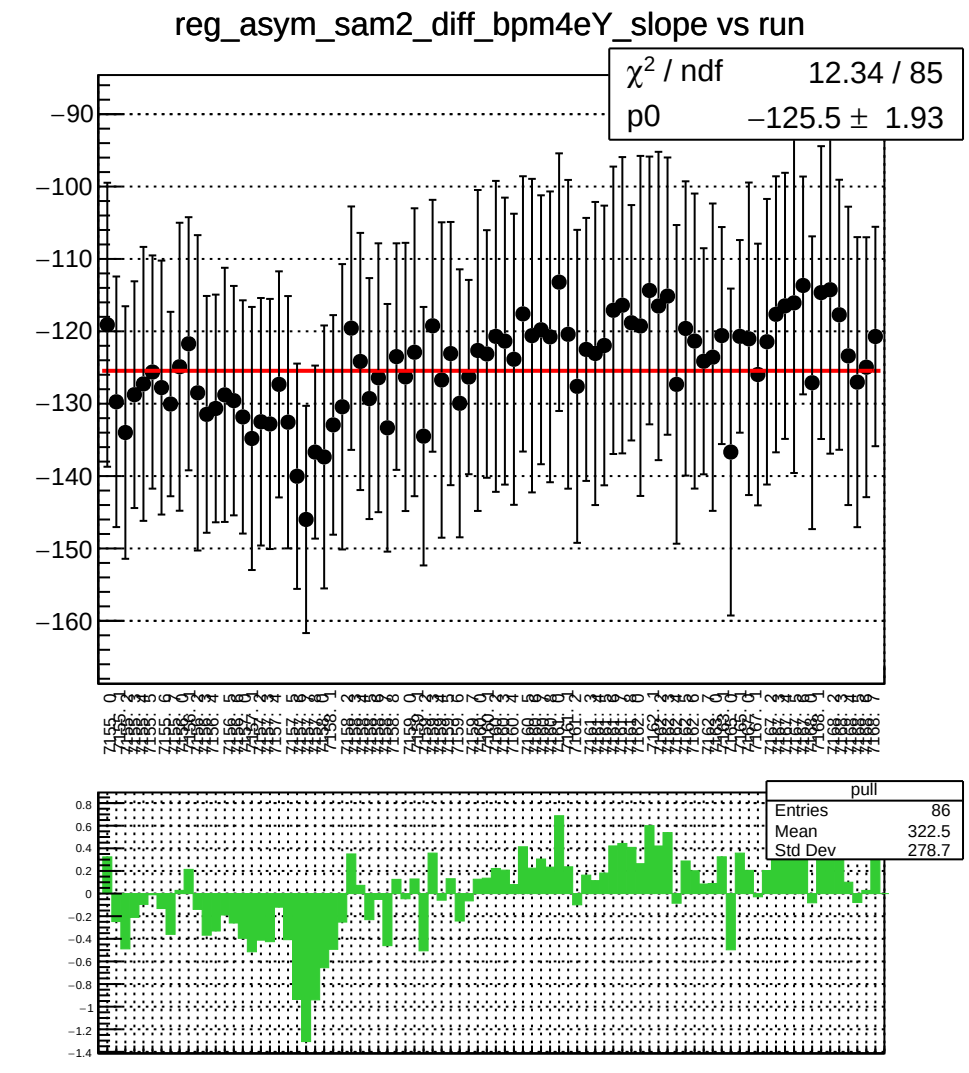

pull1D
Entries 86
Mean 0.00461
Std Dev 0.5512

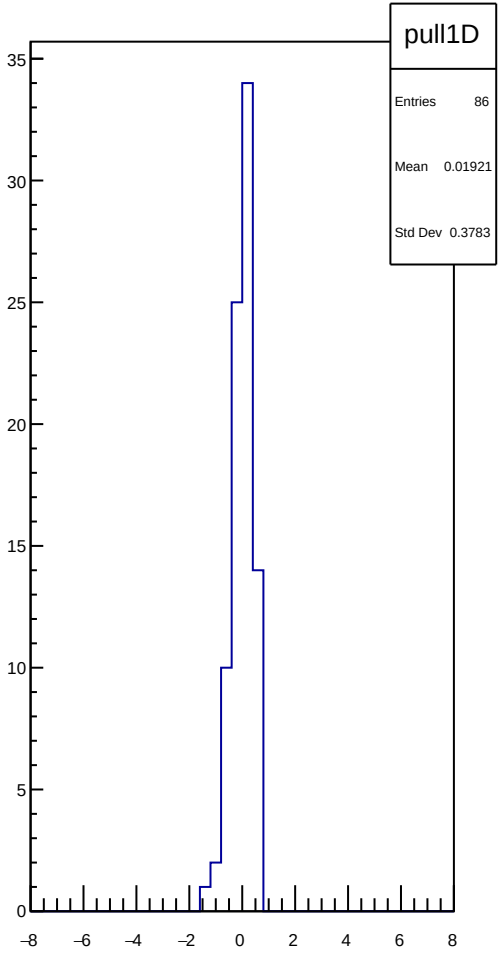

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 14.2 / 85
p0 −21.49 ± 1.958
pull
Entries 86
Mean 137.7
Std Dev 96.51

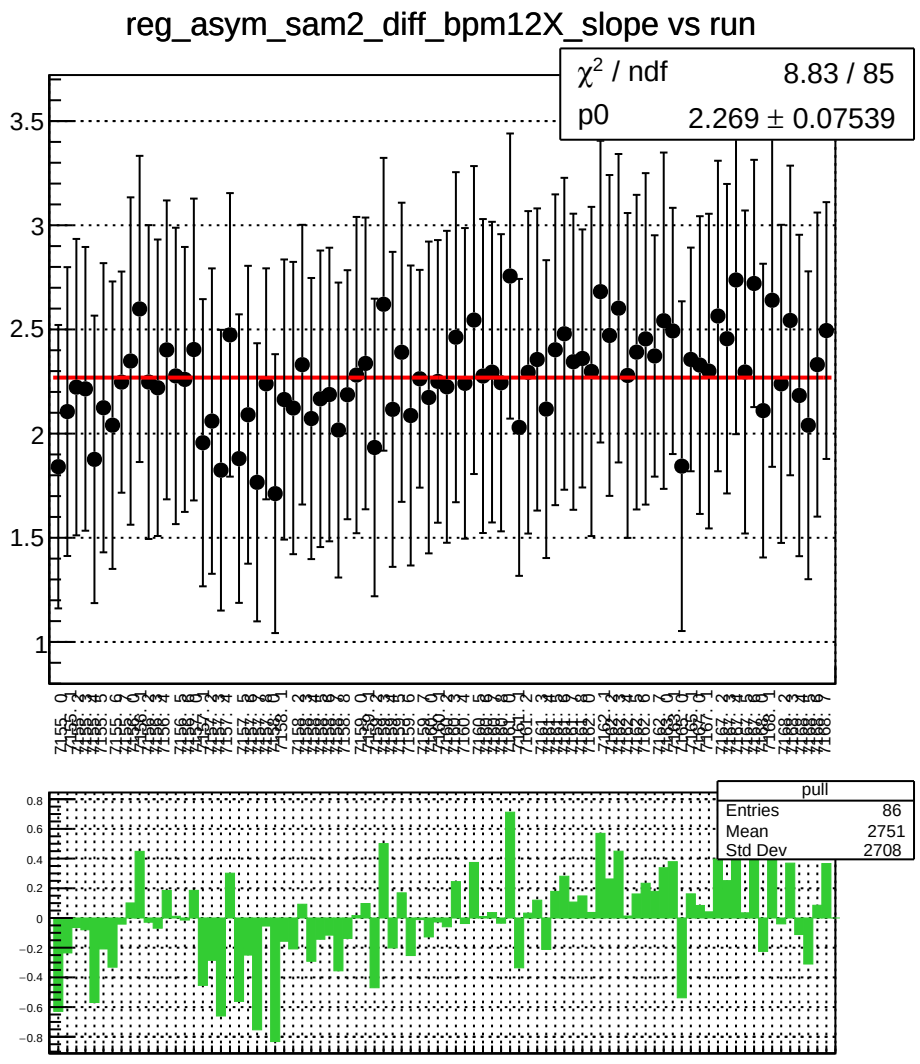

pull1D
Entries 86
Mean 0.04228
Std Dev 0.4042

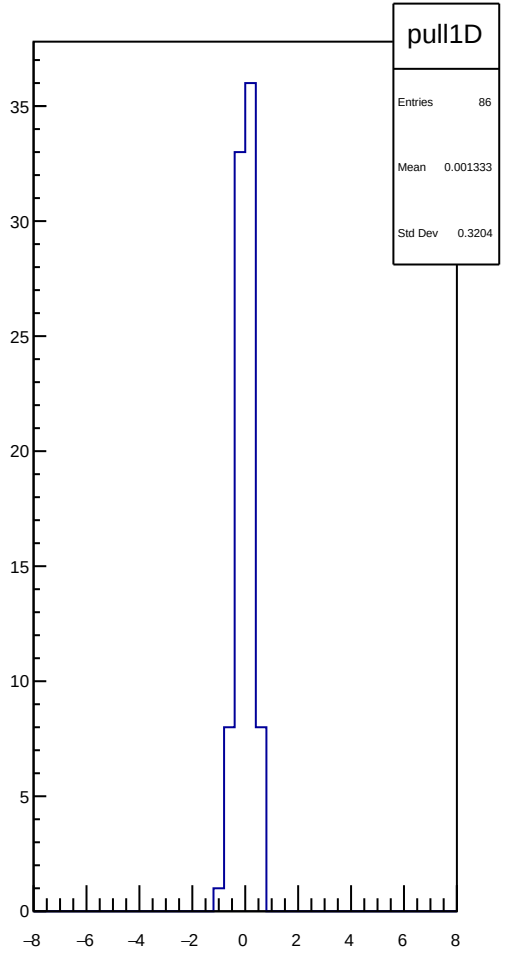

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 8.313 / 85
p0 −31.64 ± 1.661
pull
Entries 86
Mean 222.8
Std Dev 177.7
pull1D
Entries 86
Mean −0.02121
Std Dev 0.3102

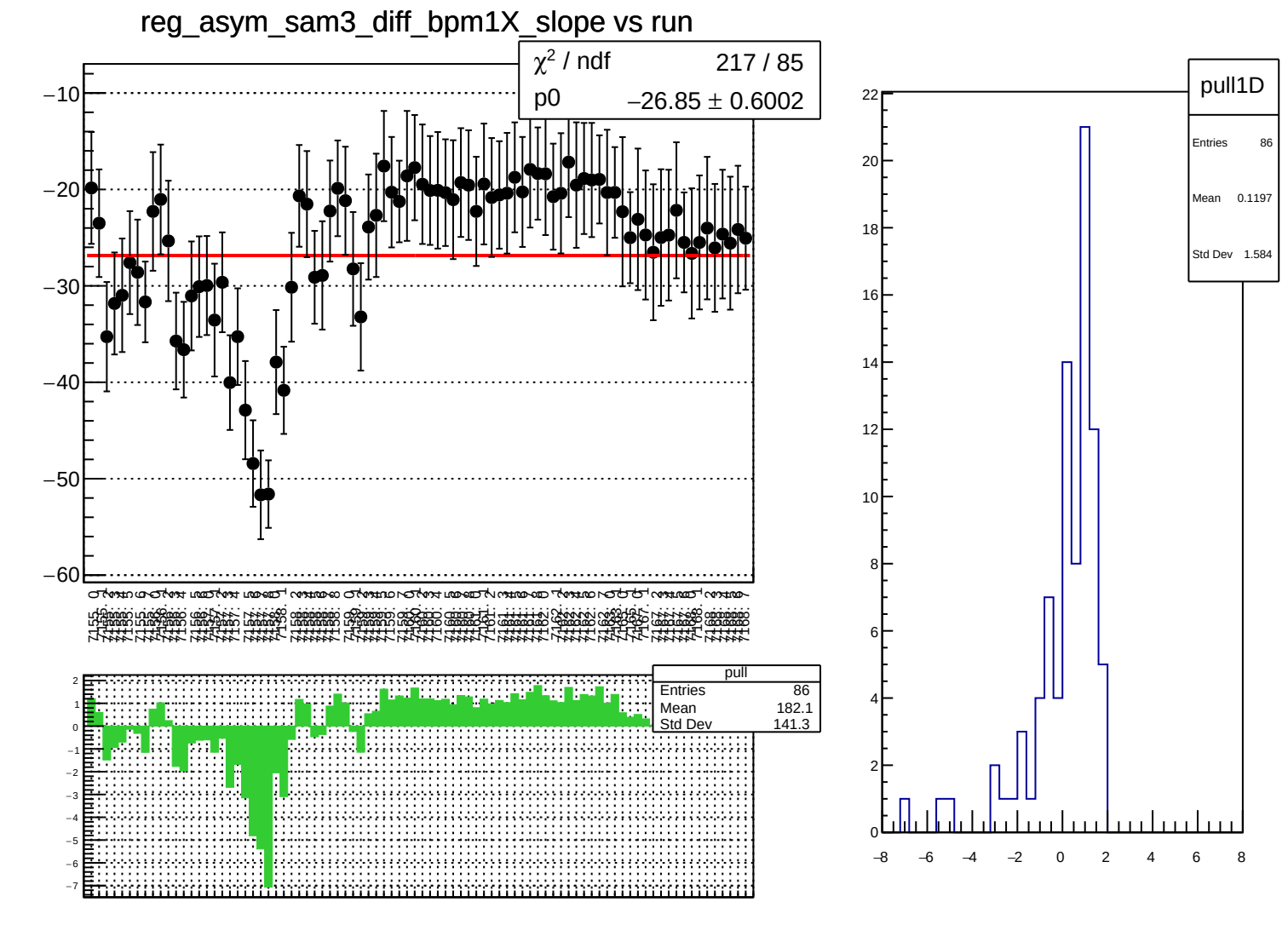

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 14.04 / 85
p0 −138.1± 1.983
pull
Entries 86
Mean 140.4
Std Dev 98.32
pull1D
Entries 86
Mean −0.04482
Std Dev 0.4016

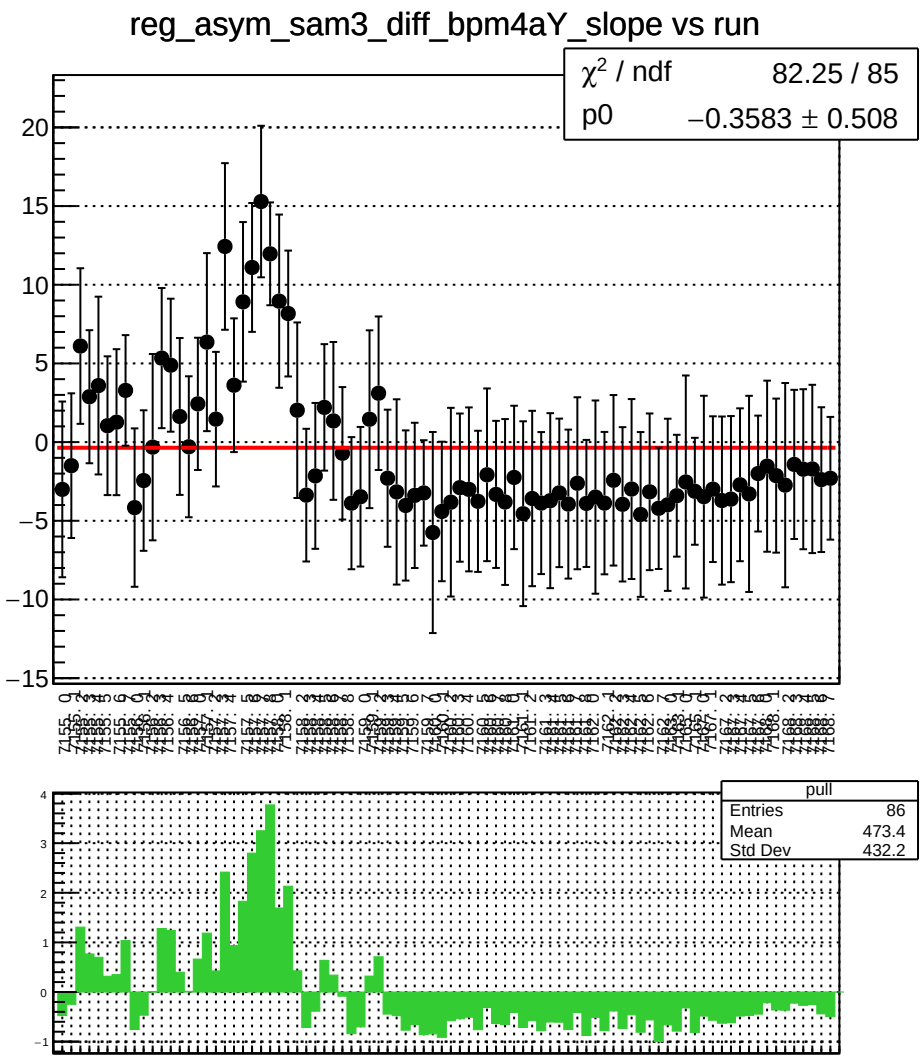

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 12.34 / 85
p0 −125.5 ± 1.93
pull
Entries 86
Mean 322.5
Std Dev 278.7

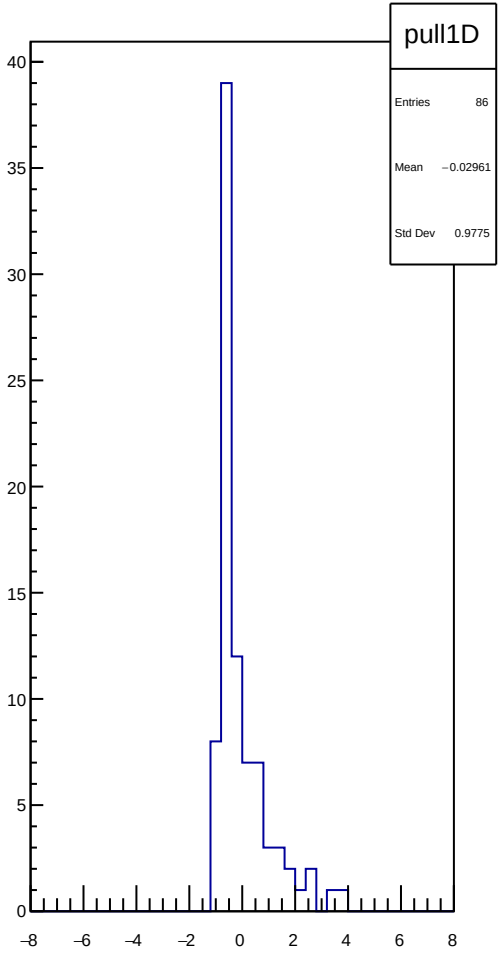

pull1D
Entries 86
Mean 0.01921
Std Dev 0.3783

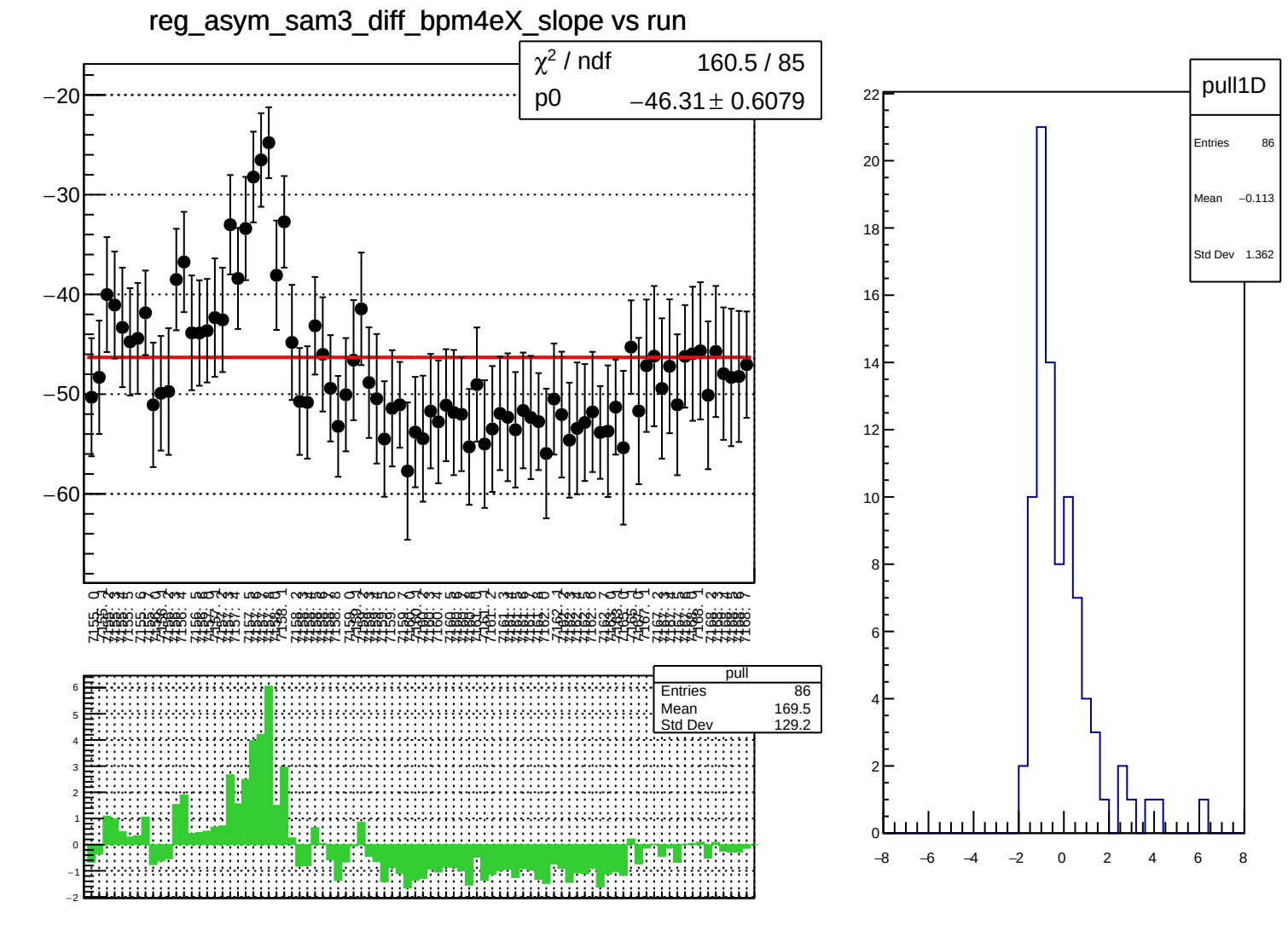

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 8.83 / 85
p0 2.269 ± 0.07539
pull
Entries 86
Mean 2751
Std Dev 2708

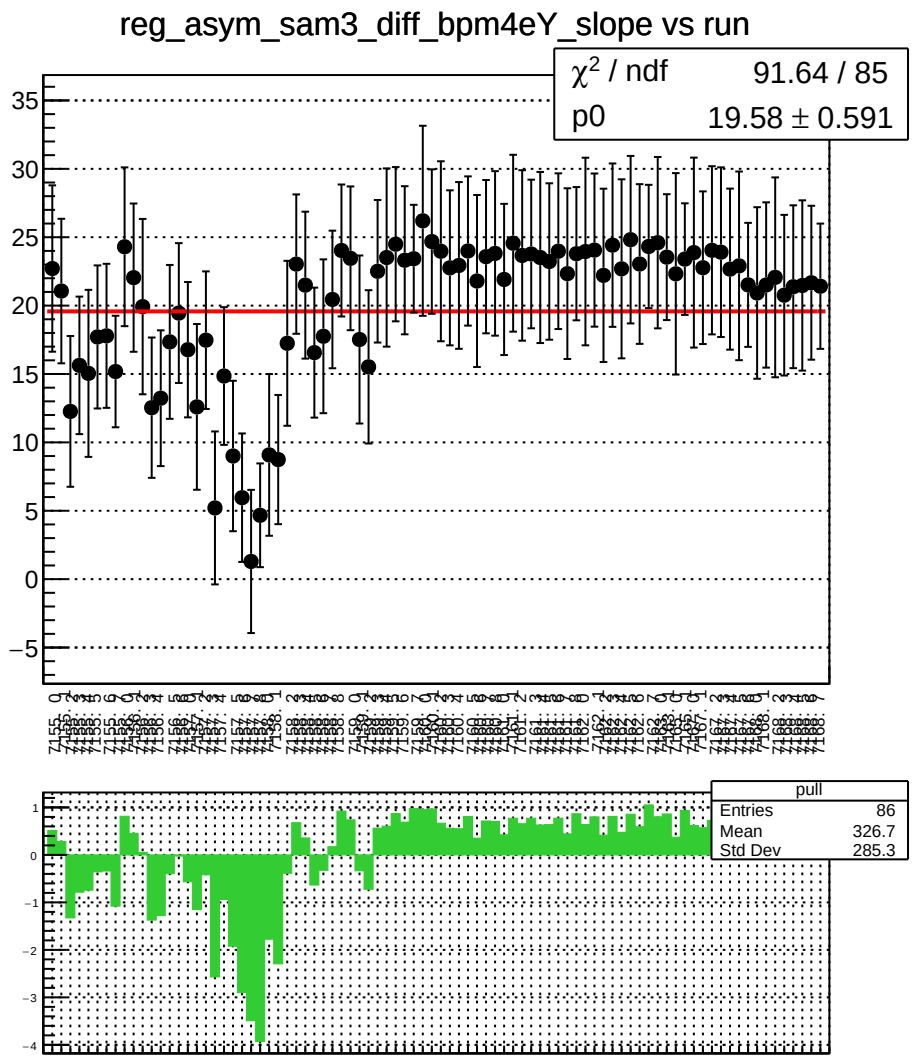

pull1D
Entries 86
Mean 0.001333
Std Dev 0.3204

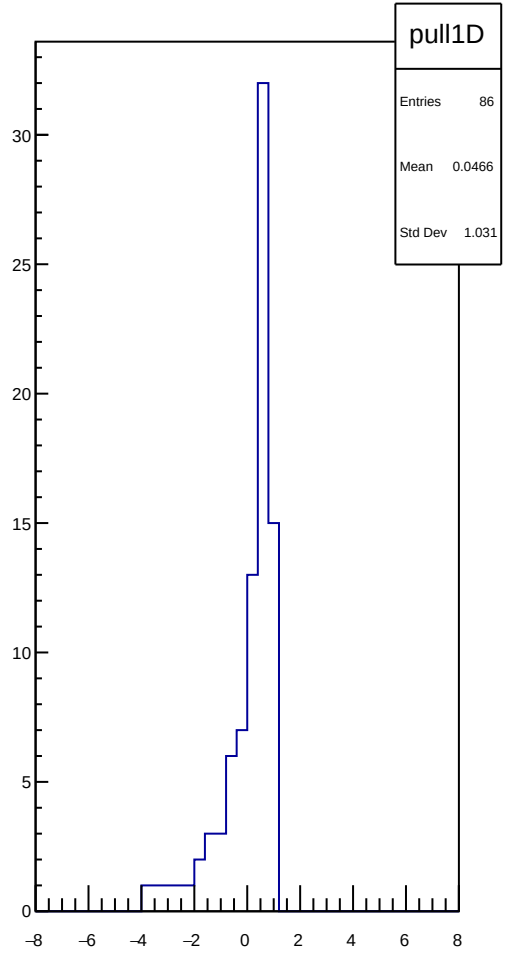

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 217 / 85
p0 −26.85 ± 0.6002
pull
Entries 86
Mean 182.1
Std Dev 141.3
pull1D
Entries 86
Mean 0.1197
Std Dev 1.584

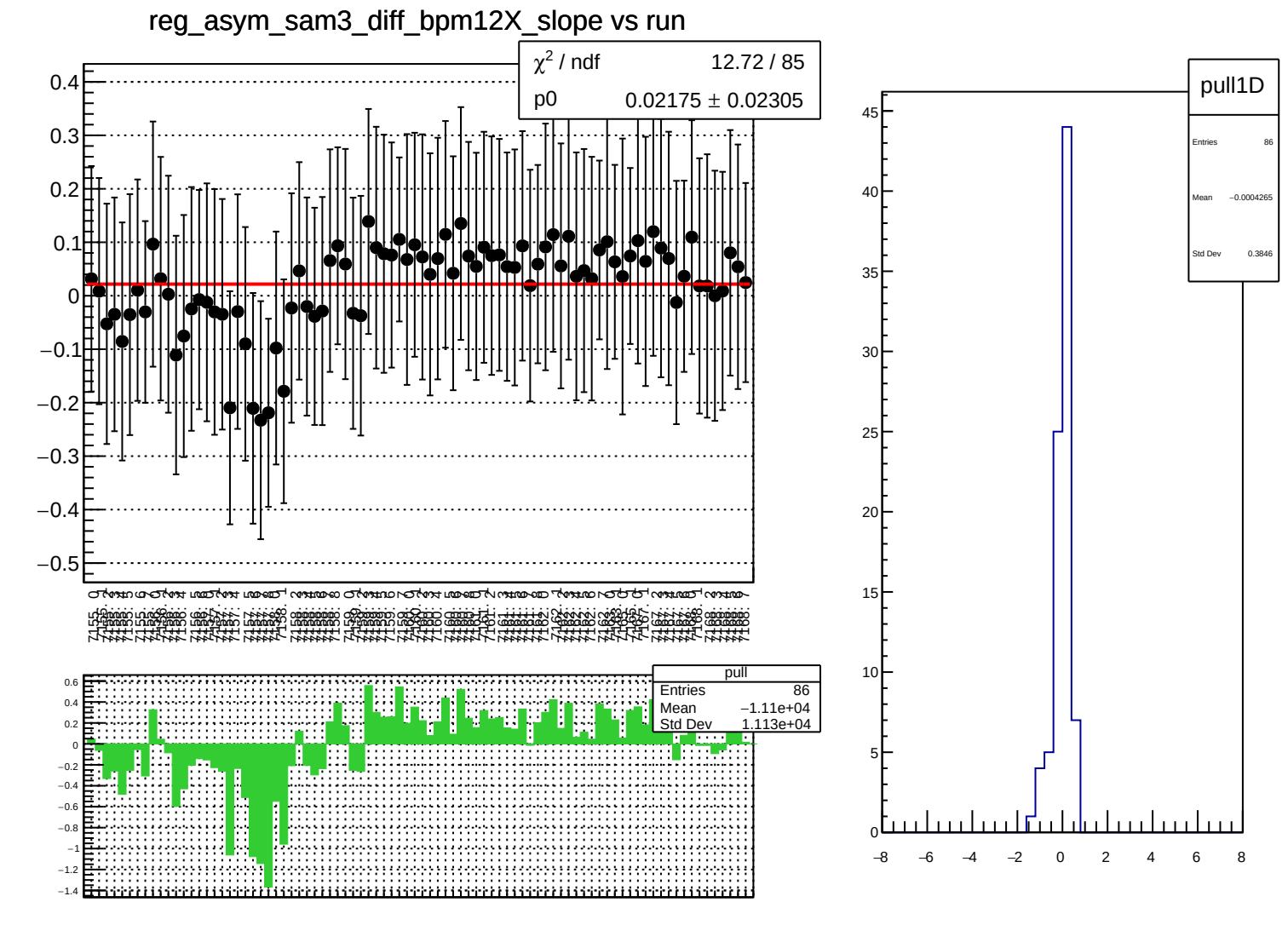

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 82.25 / 85
p0 −0.3583 ± 0.508
pull
Entries 86
Mean 473.4
Std Dev 432.2

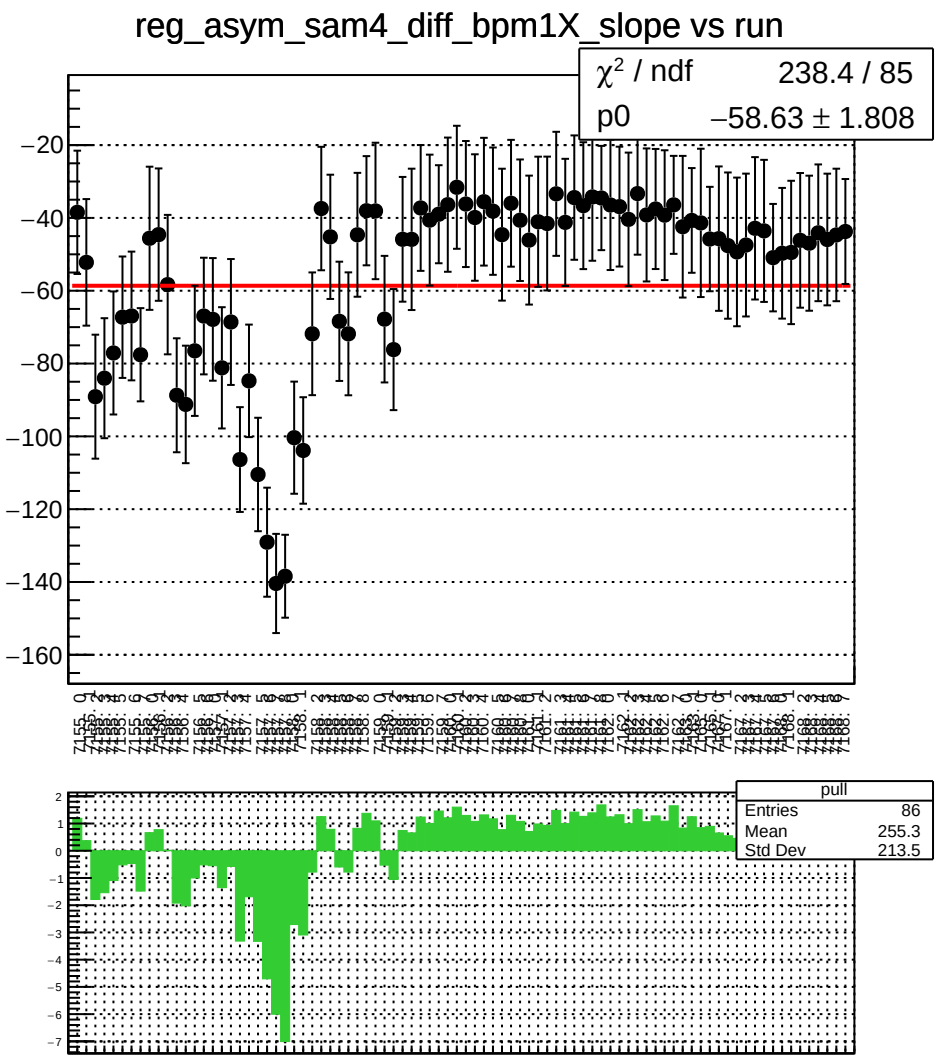

pull1D
Entries 86
Mean −0.02961
Std Dev 0.9775

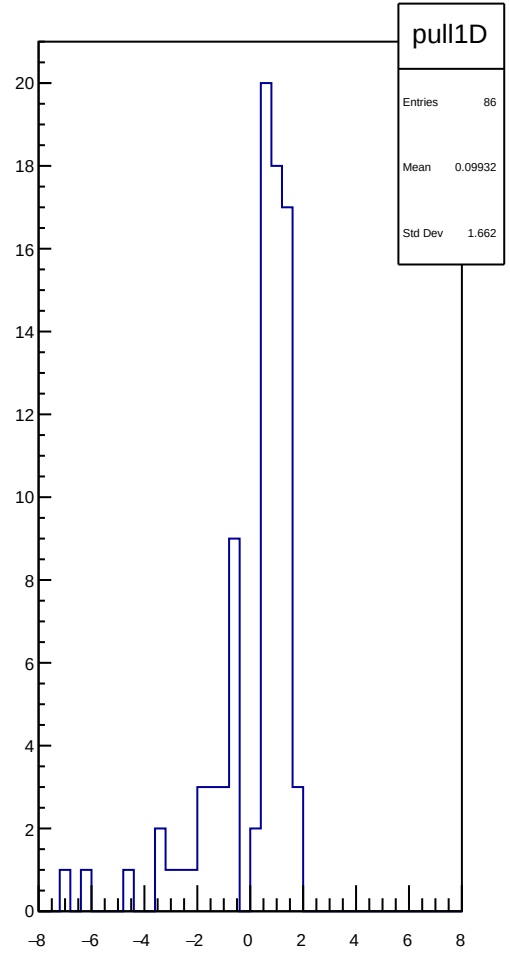

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 160.5 / 85
p0 −46.31 ± 0.6079
pull
Entries 86
Mean 169.5
Std Dev 129.2
pull1D
Entries 86
Mean −0.113
Std Dev 1.362

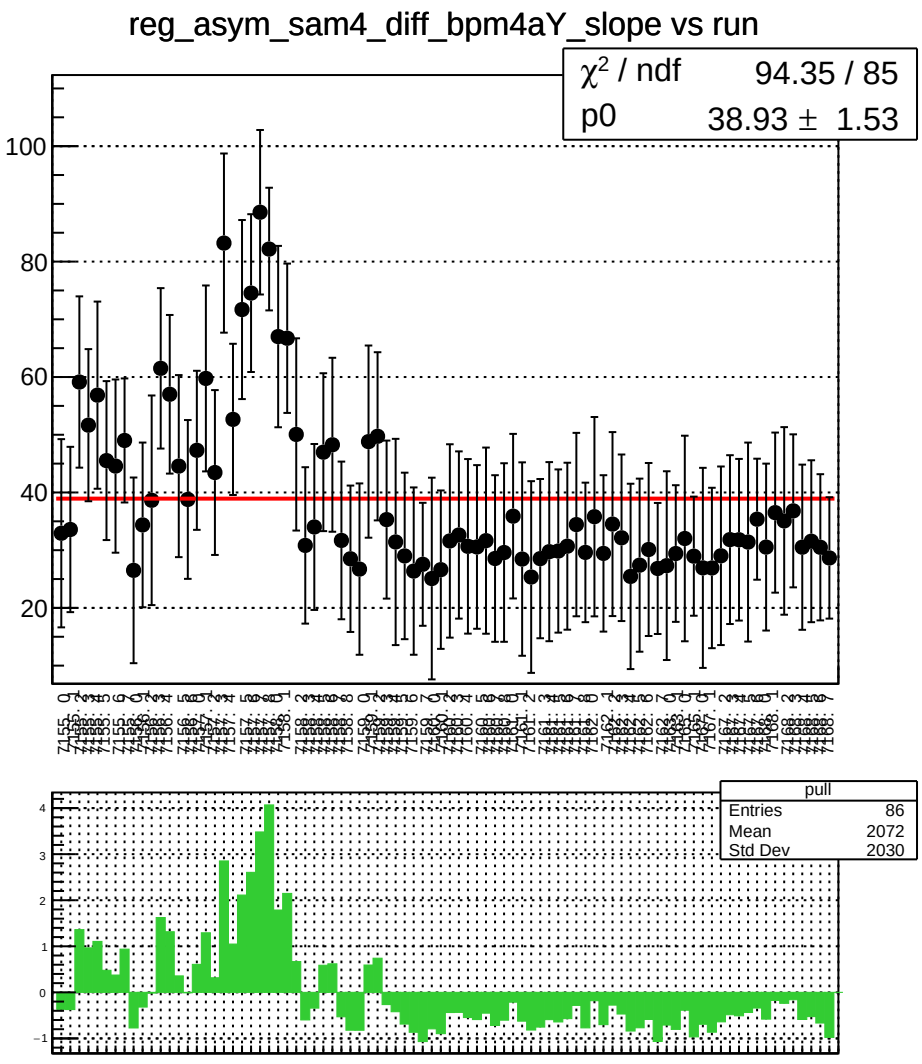

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 91.64 / 85
p0 19.58 ± 0.591
pull
Entries 86
Mean 326.7
Std Dev 285.3

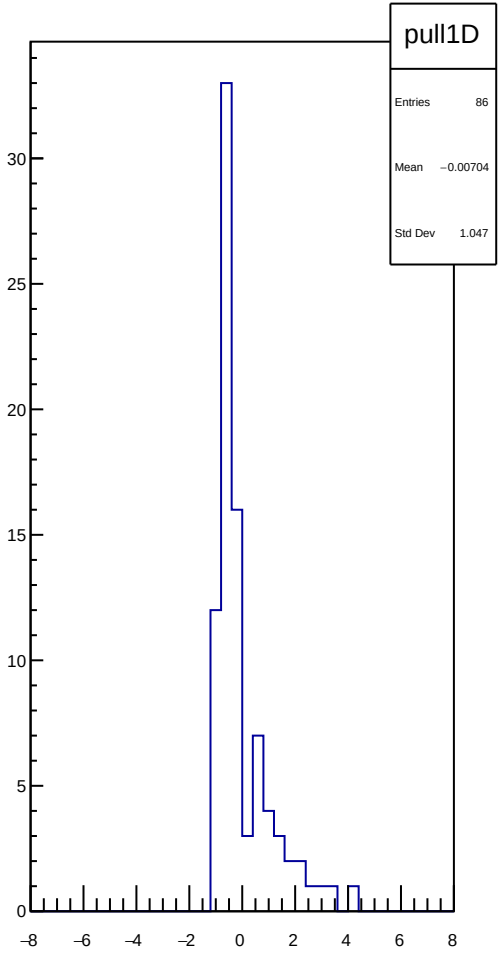

pull1D
Entries 86
Mean 0.0466
Std Dev 1.031

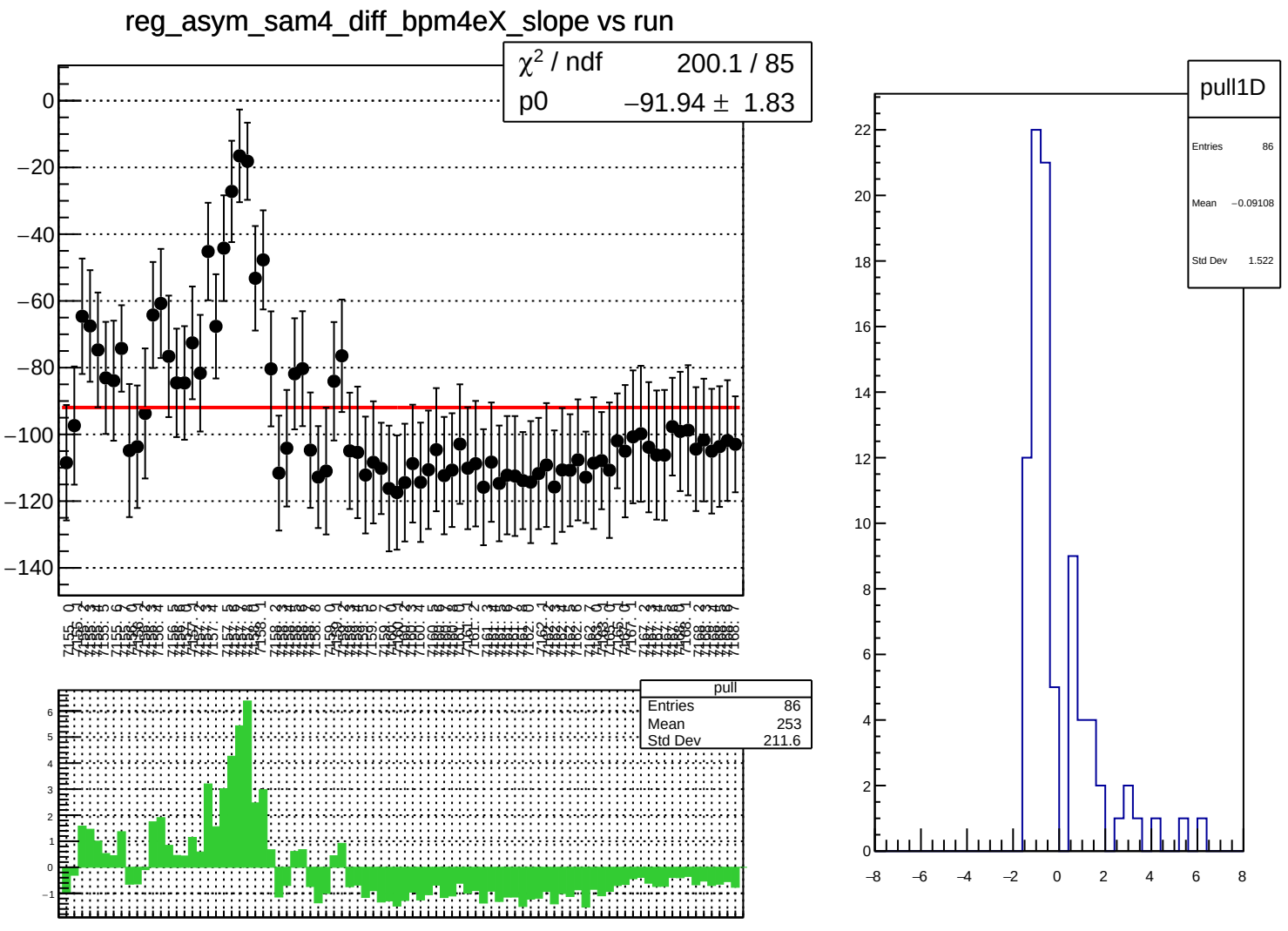

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 12.72 / 85
p0 0.02175 ± 0.02305
pull
Entries 86
Mean −1.11e+04
Std Dev 1.113e+04
pull1D
Entries 86
Mean −0.0004265
Std Dev 0.3846

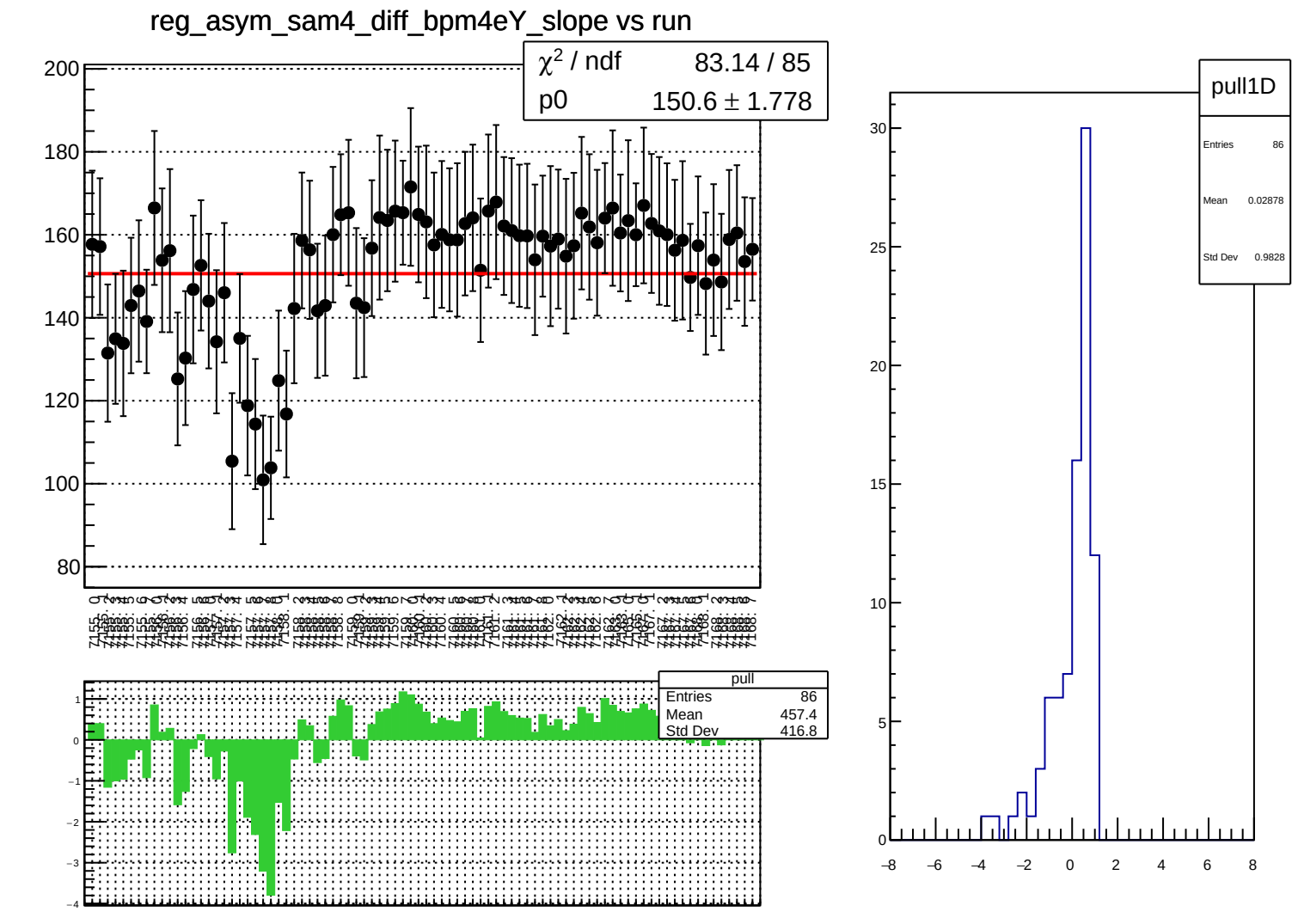

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 238.4 / 85
p0 −58.63 ± 1.808
pull
Entries 86
Mean 255.3
Std Dev 213.5

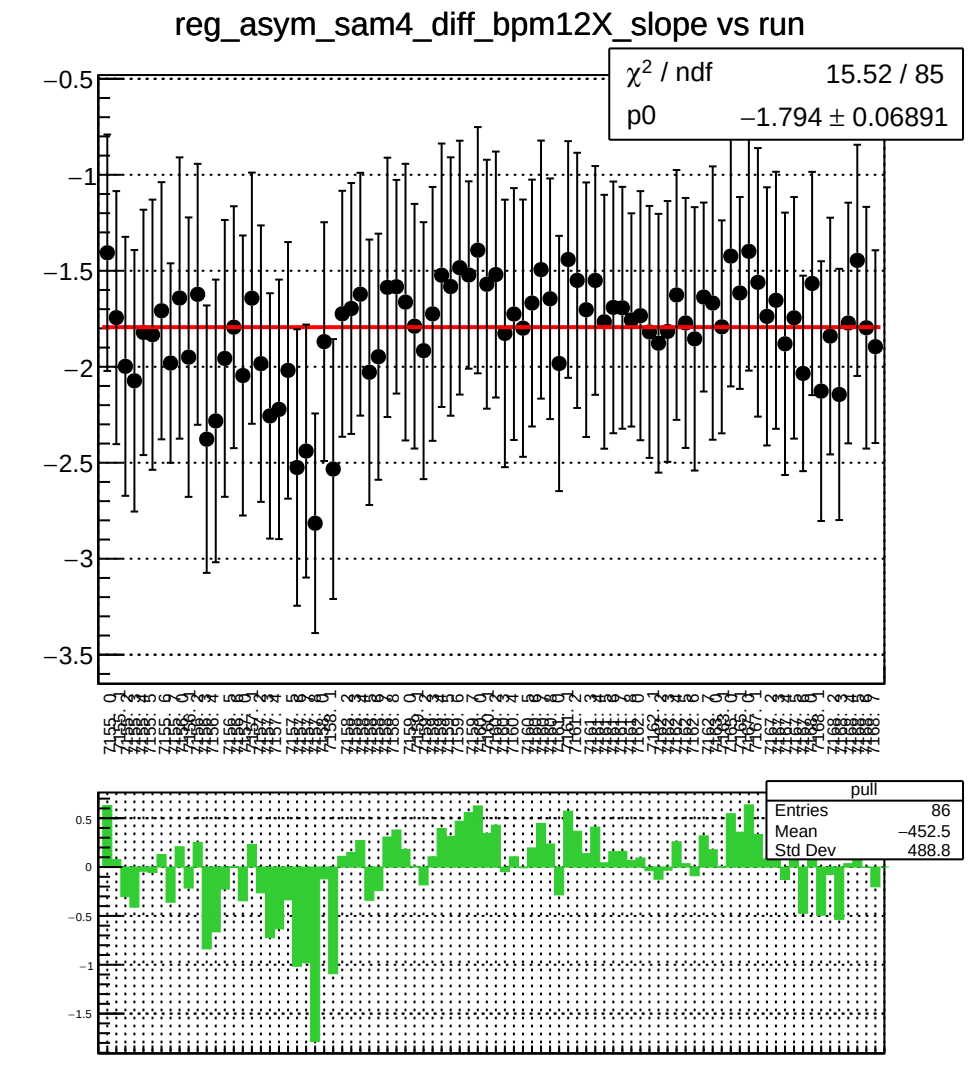

pull1D
Entries 86
Mean 0.09932
Std Dev 1.662

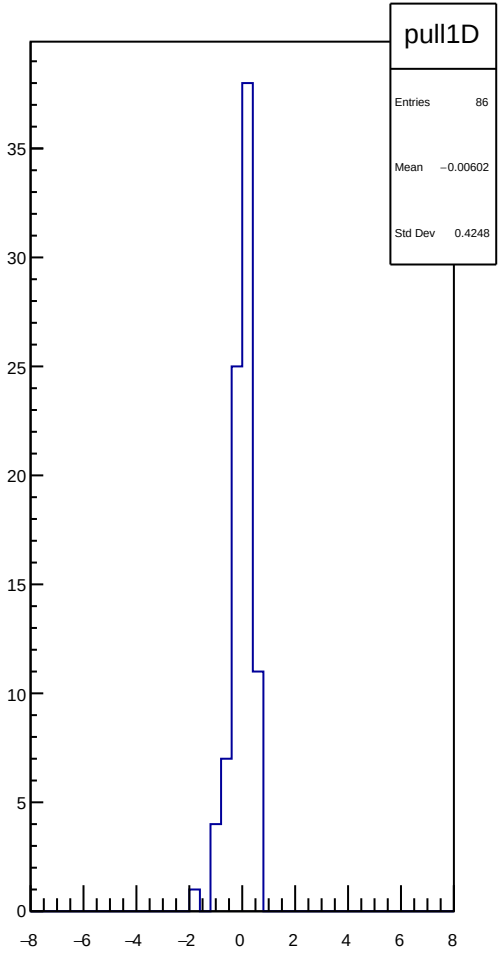

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 94.35 / 85
p0 38.93 ± 1.53
pull
Entries 86
Mean 2072
Std Dev 2030

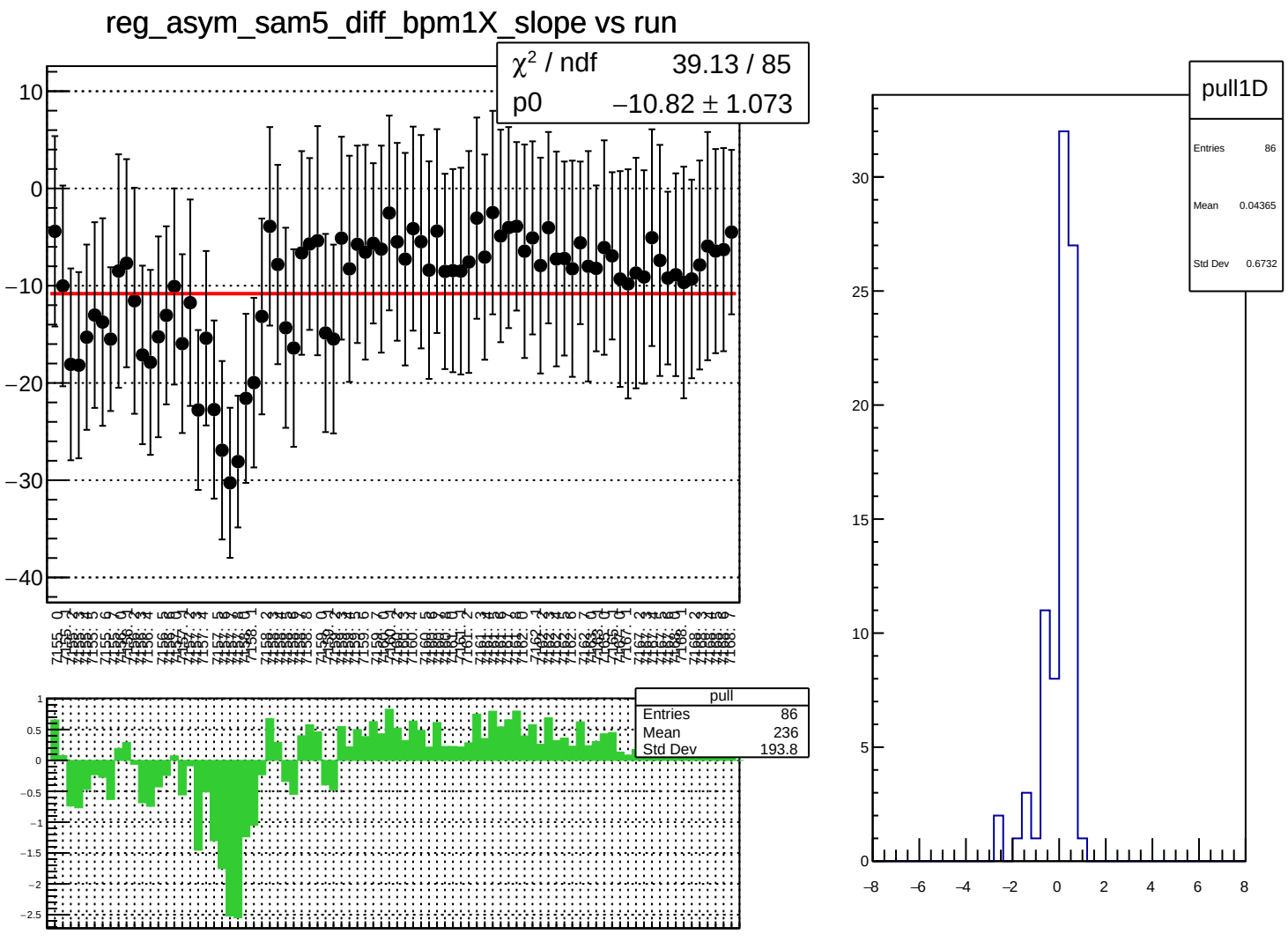

pull1D
Entries 86
Mean −0.00704
Std Dev 1.047

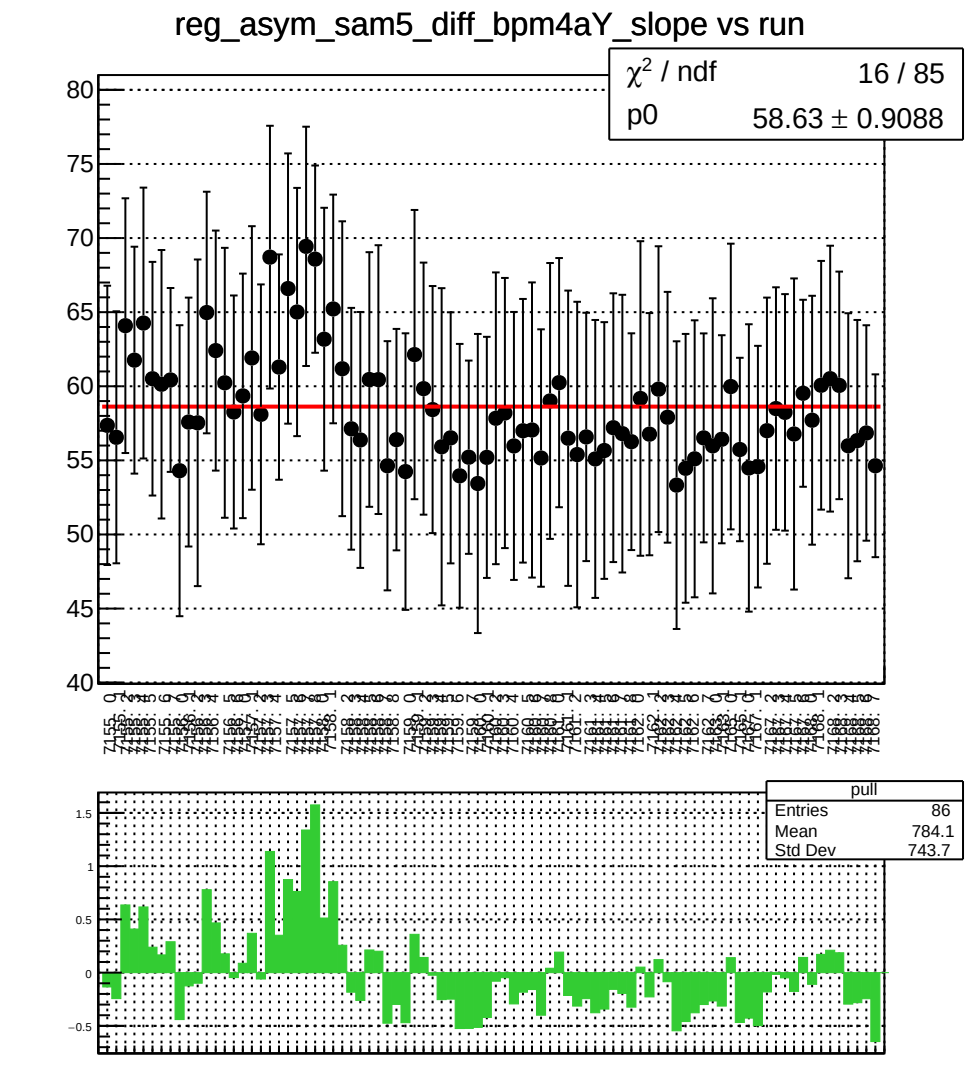

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 200.1 / 85
p0 −91.94 ± 1.83
pull
Entries 86
Mean 253
Std Dev 211.6
pull1D
Entries 86
Mean −0.09108
Std Dev 1.522

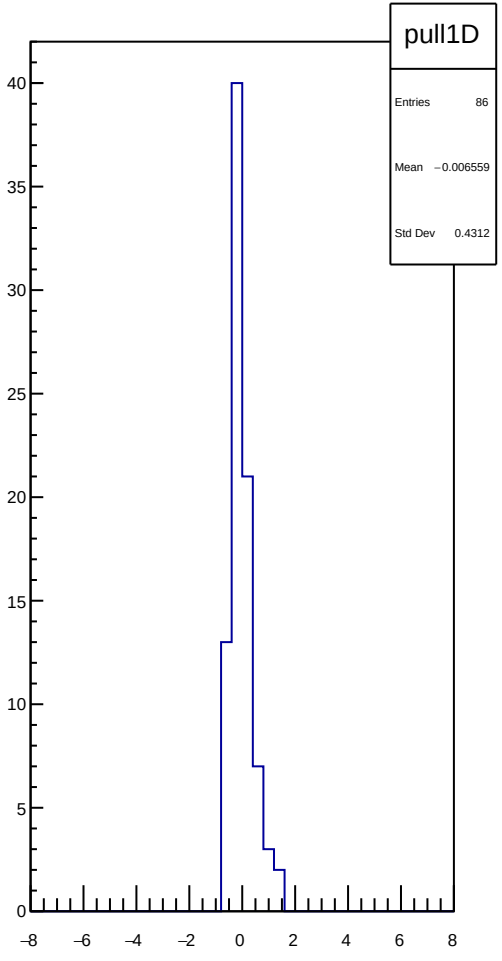

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 83.14 / 85
p0 150.6 ± 1.778
pull
Entries 86
Mean 457.4
Std Dev 416.8
pull1D
Entries 86
Mean 0.02878
Std Dev 0.9828

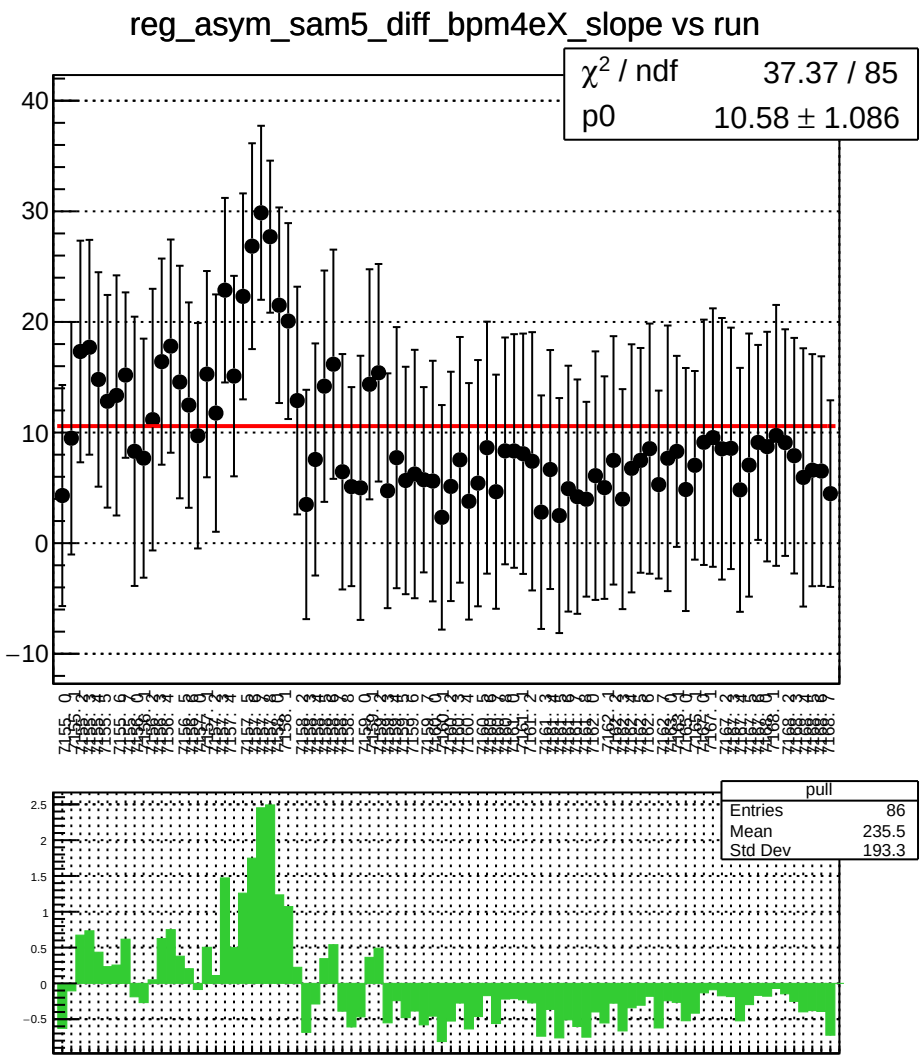

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 15.52 / 85
p0 −1.794 ± 0.06891
pull
Entries 86
Mean −452.5
Std Dev 488.8

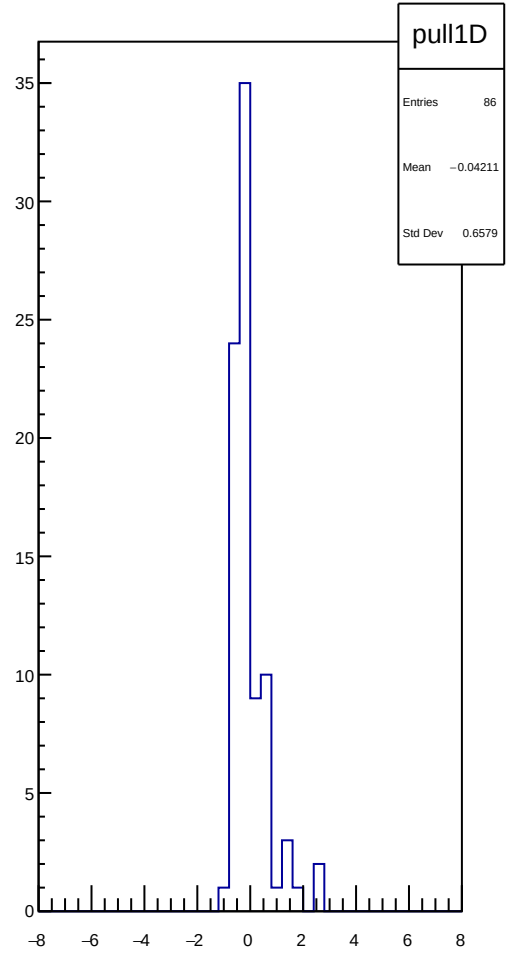

pull1D
Entries 86
Mean −0.00602
Std Dev 0.4248

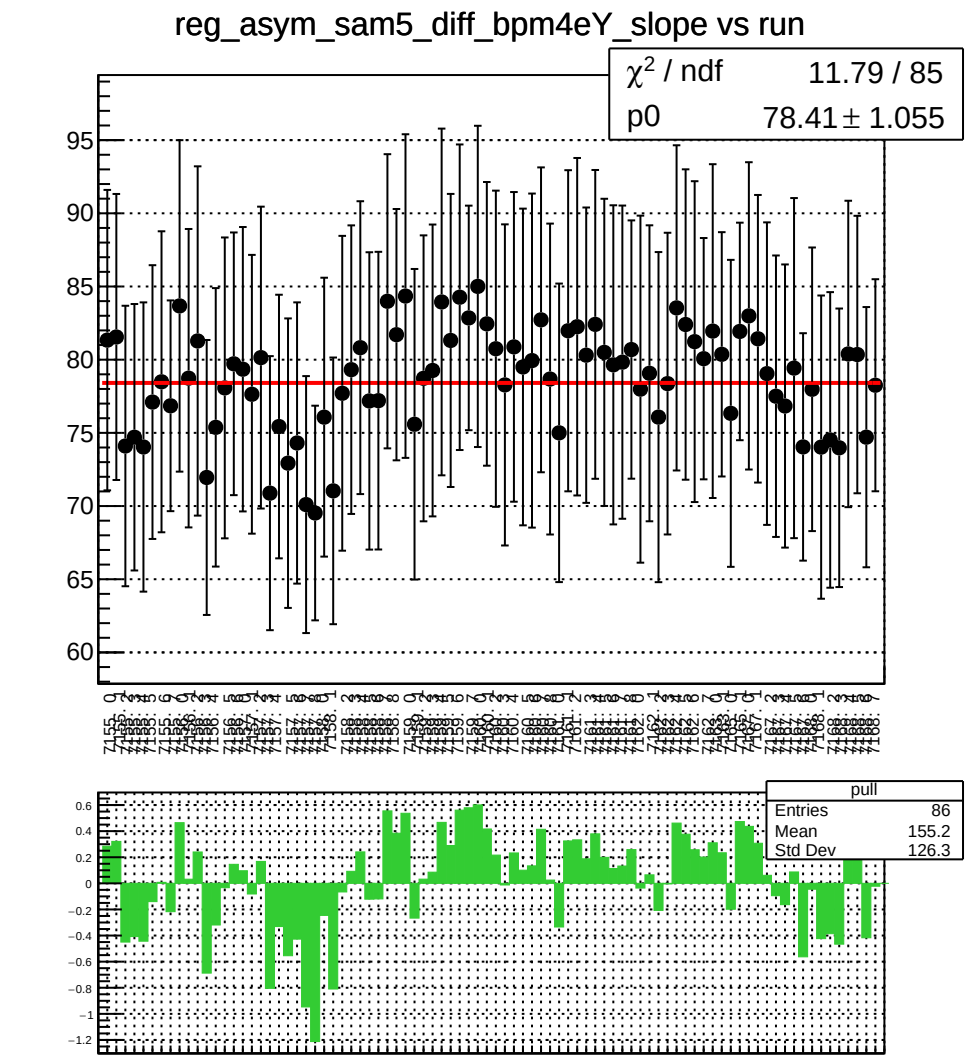

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 39.13 / 85
p0 −10.82 ± 1.073
pull
Entries 86
Mean 236
Std Dev 193.8
pull1D
Entries 86
Mean 0.04365
Std Dev 0.6732

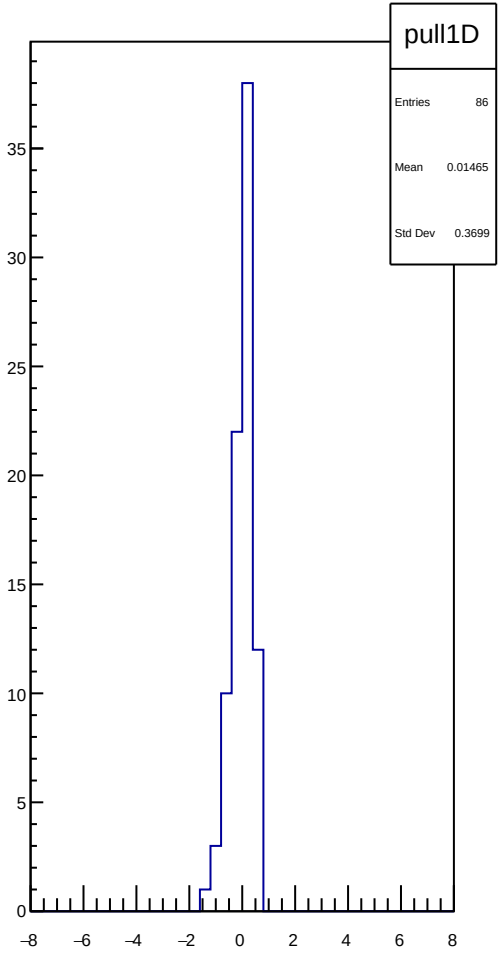

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 16 / 85
p0 58.63 ± 0.9088
pull
Entries 86
Mean 784.1
Std Dev 743.7

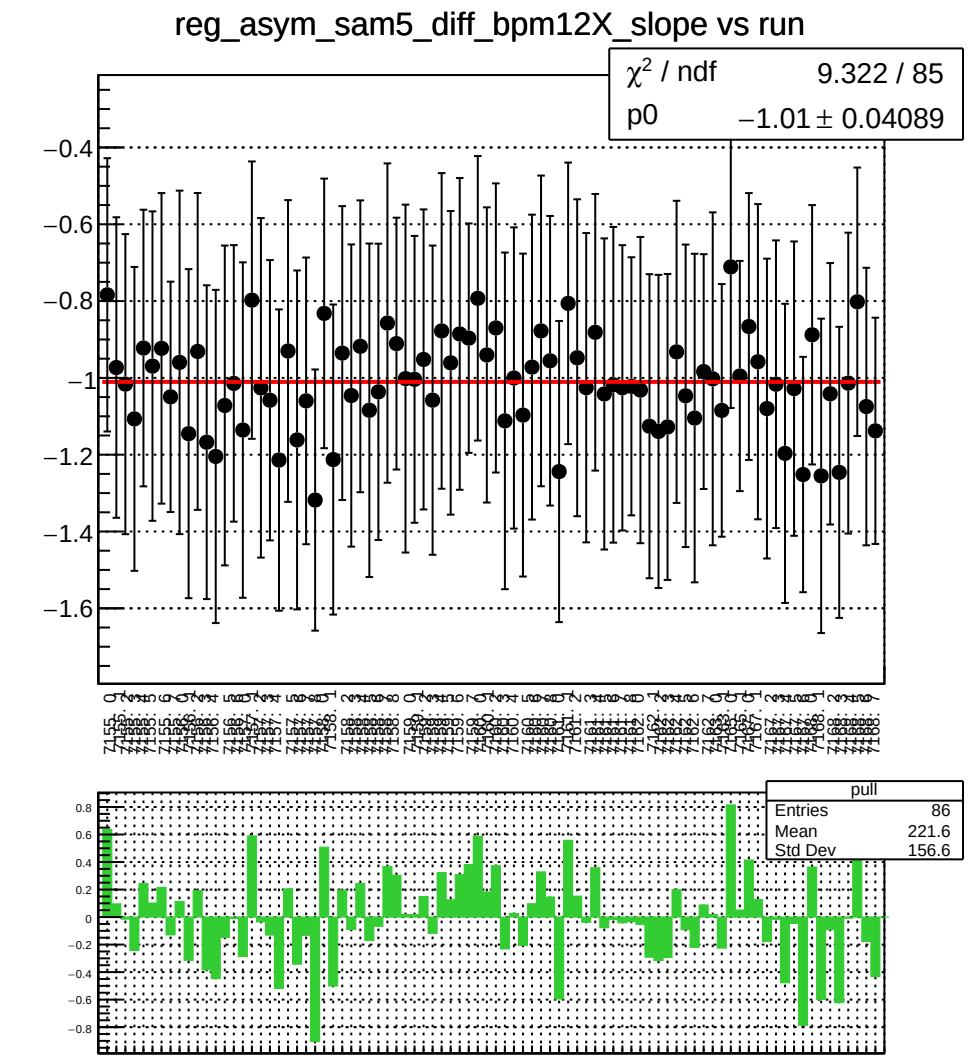

pull1D
Entries 86
Mean −0.006559
Std Dev 0.4312

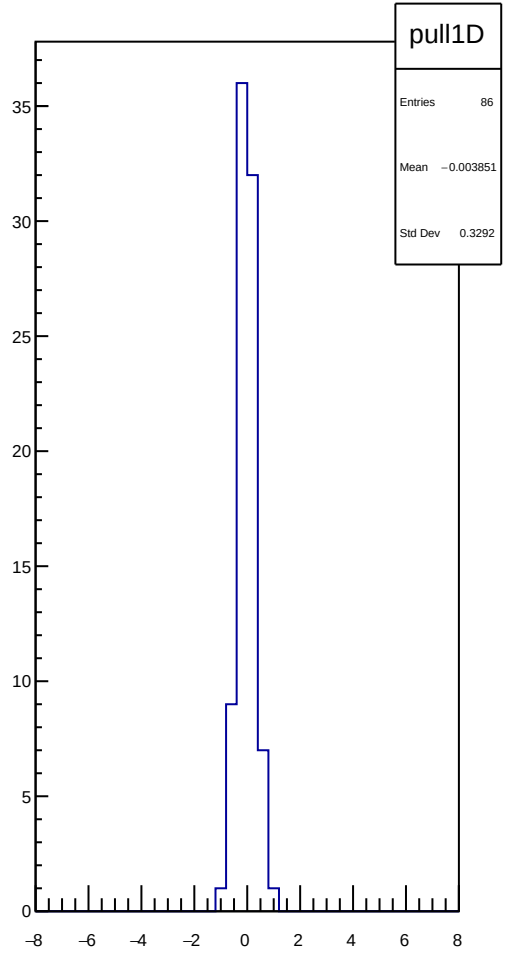

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 37.37 / 85
p0 10.58 ± 1.086
pull
Entries 86
Mean 235.5
Std Dev 193.3

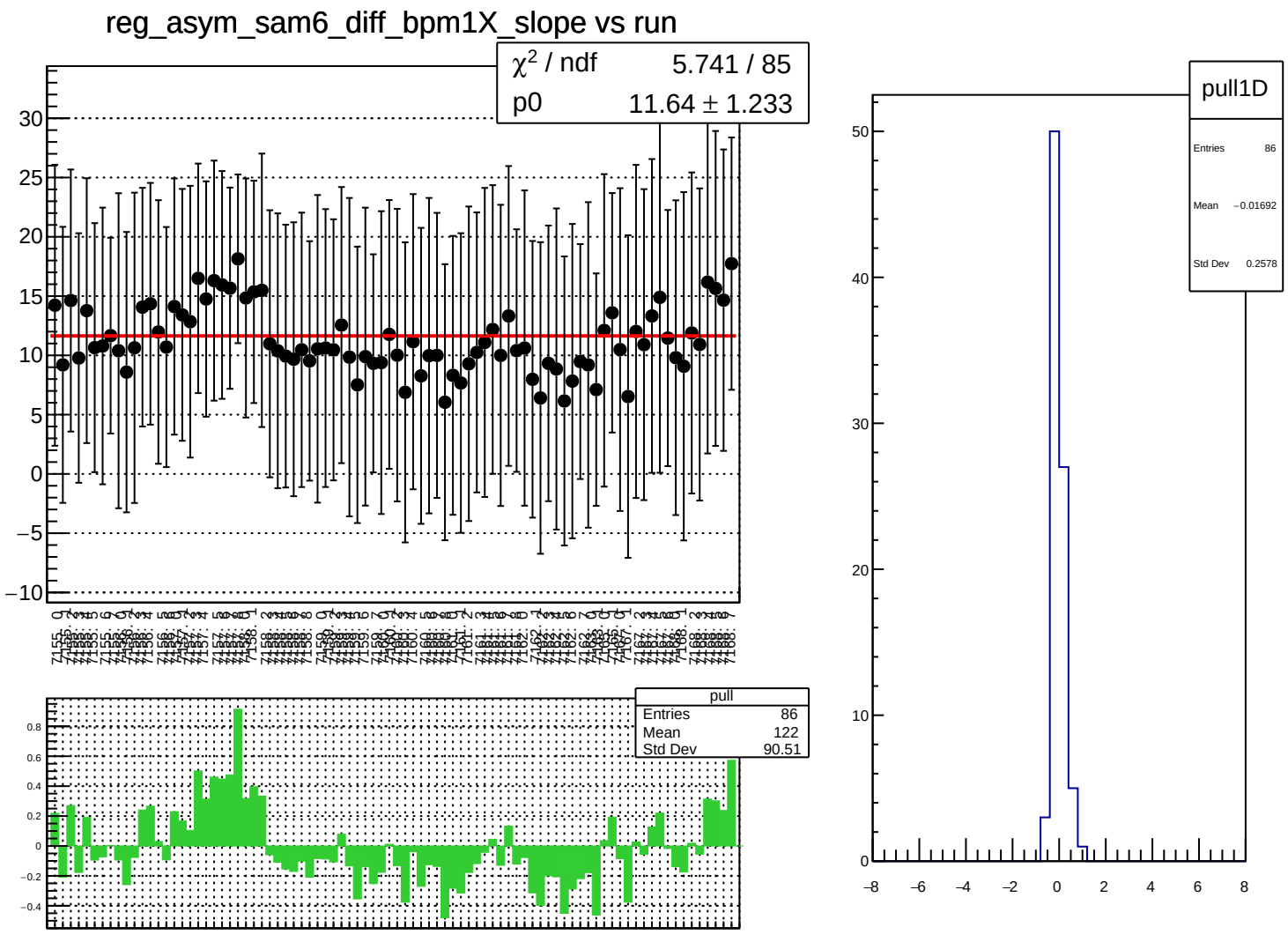

pull1D
Entries 86
Mean −0.04211
Std Dev 0.6579

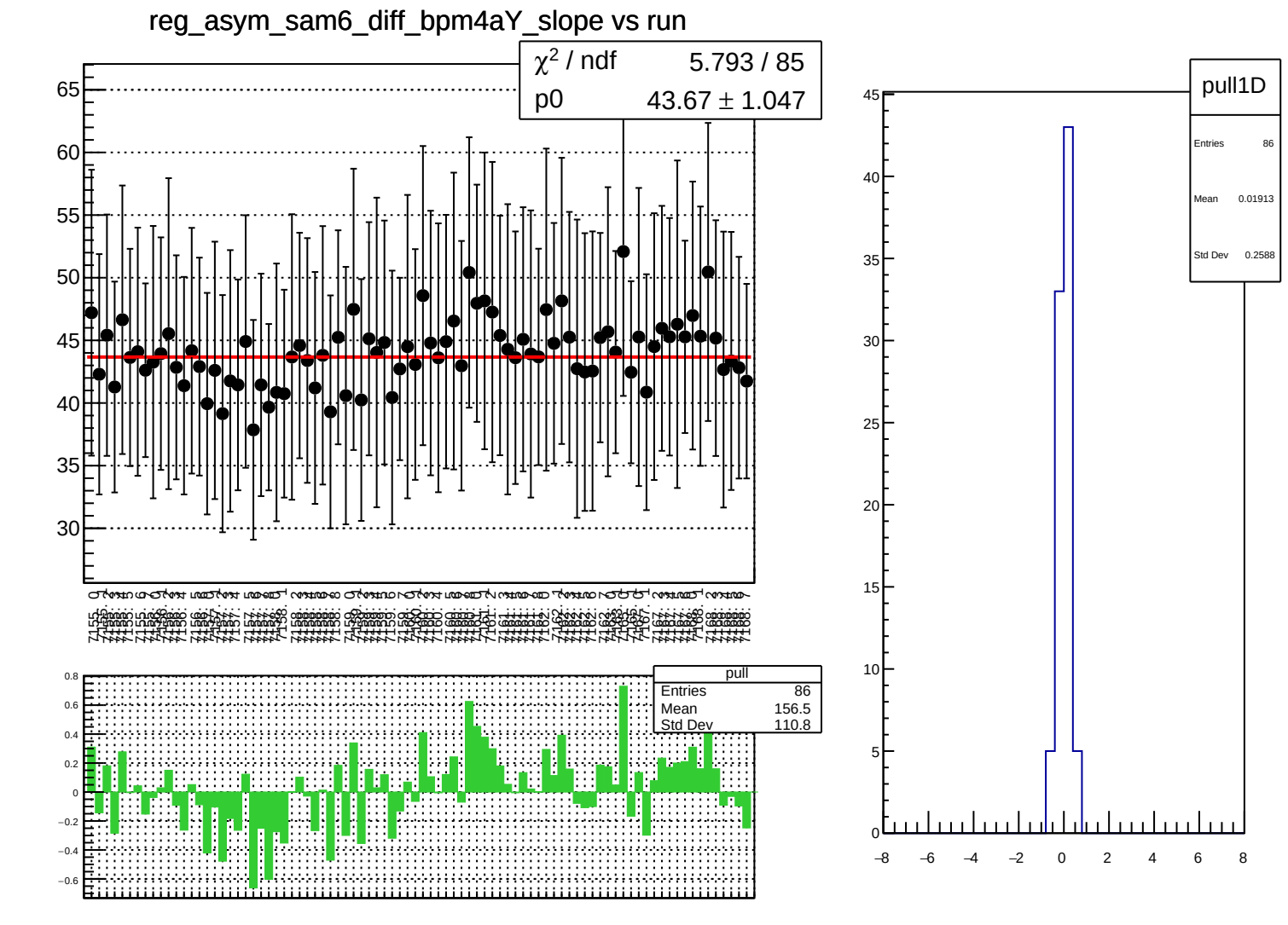

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 11.79 / 85
p0 78.41 ± 1.055
pull
Entries 86
Mean 155.2
Std Dev 126.3

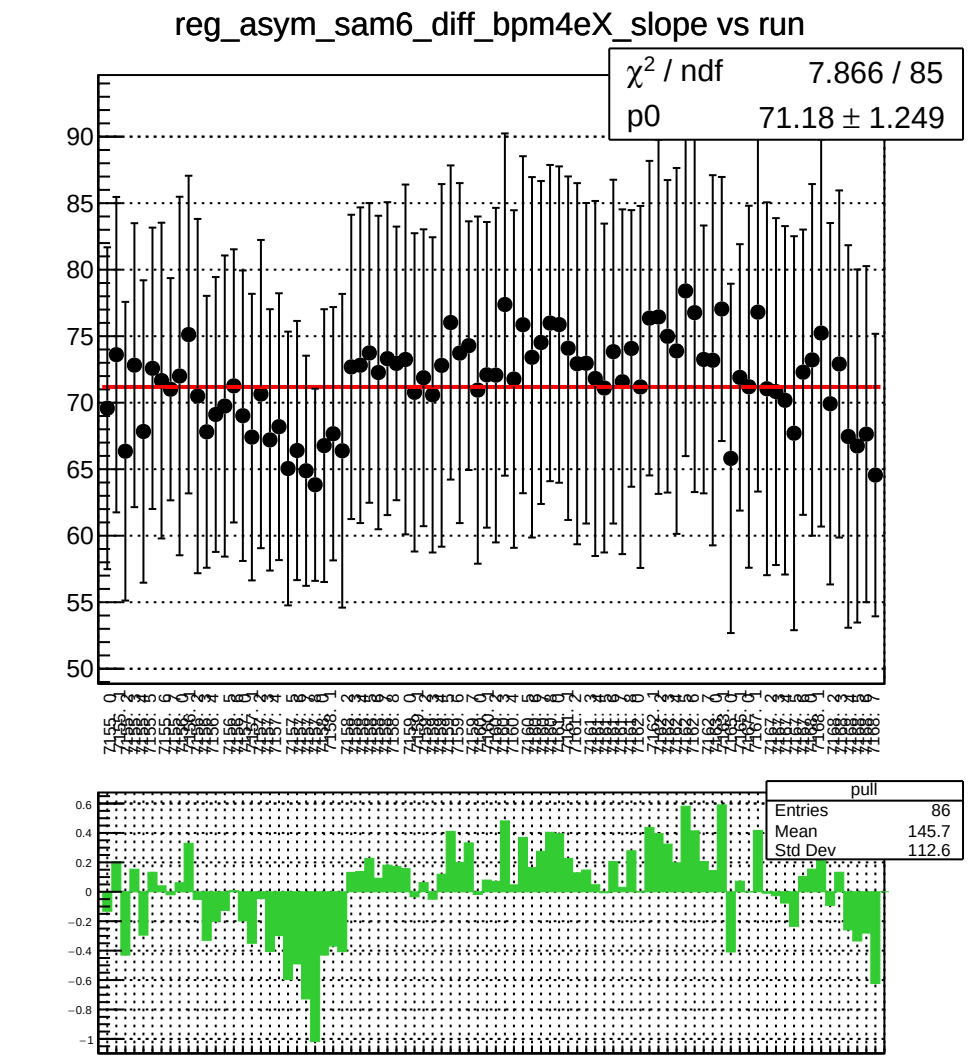

pull1D
Entries 86
Mean 0.01465
Std Dev 0.3699

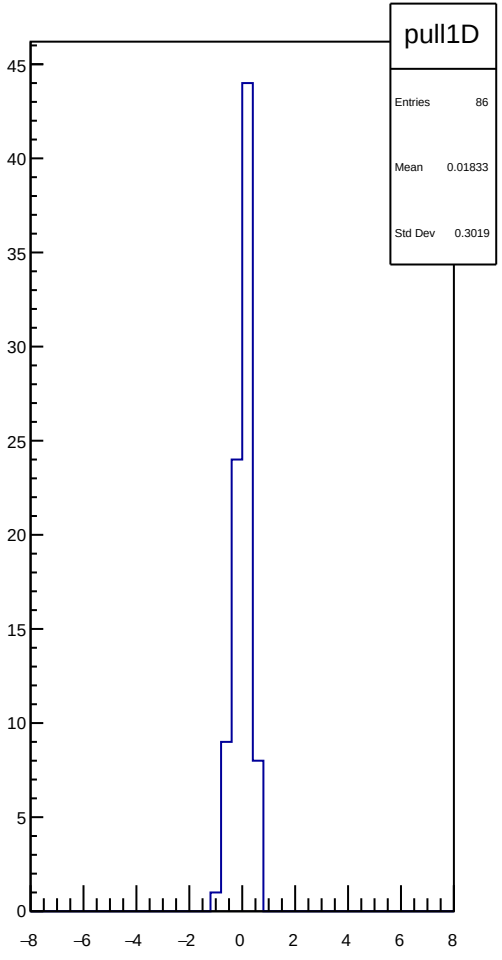

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 9.322 / 85
p0 −1.01 ± 0.04089
pull
Entries 86
Mean 221.6
Std Dev 156.6

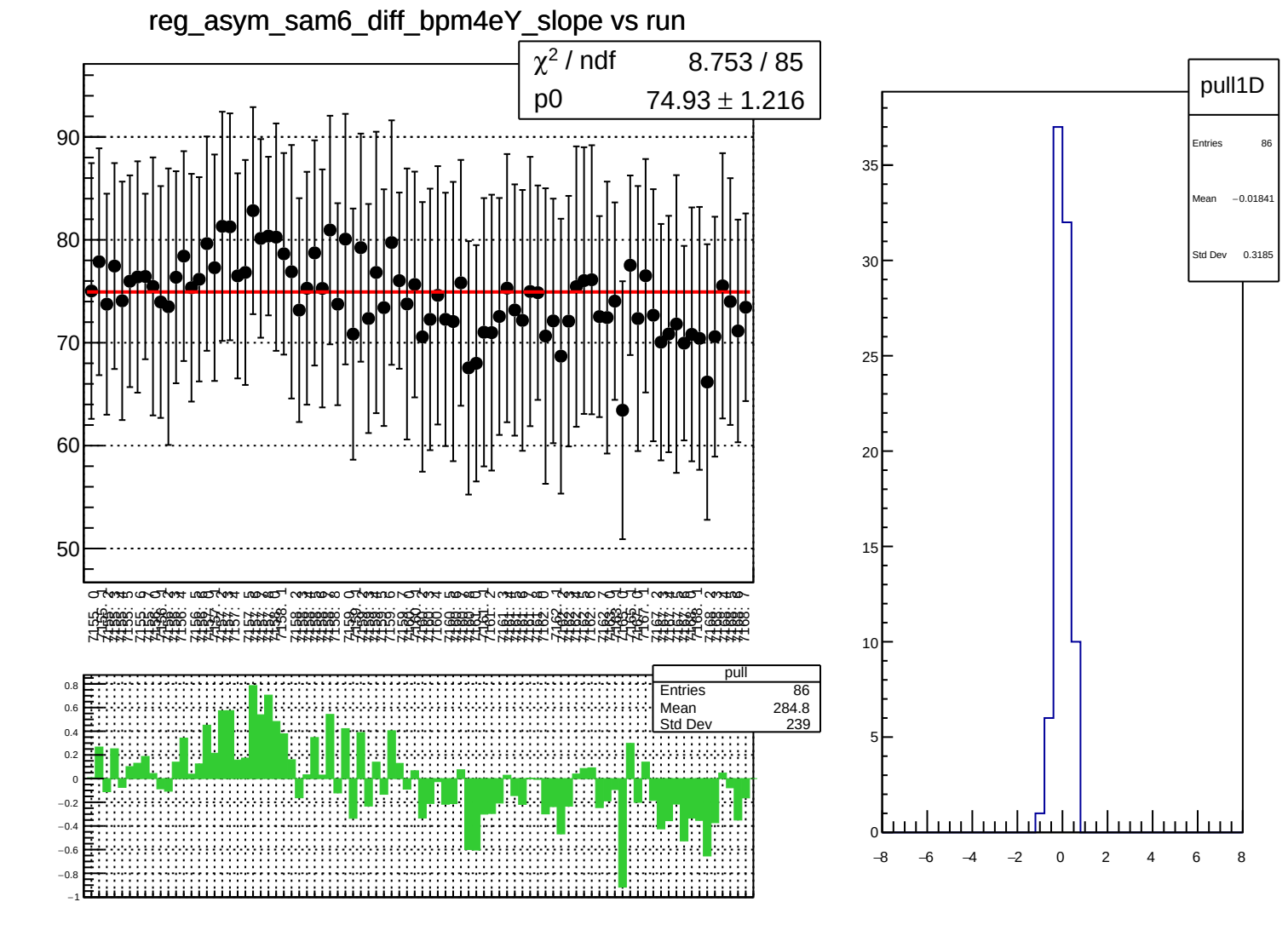

pull1D
Entries 86
Mean −0.003851
Std Dev 0.3292

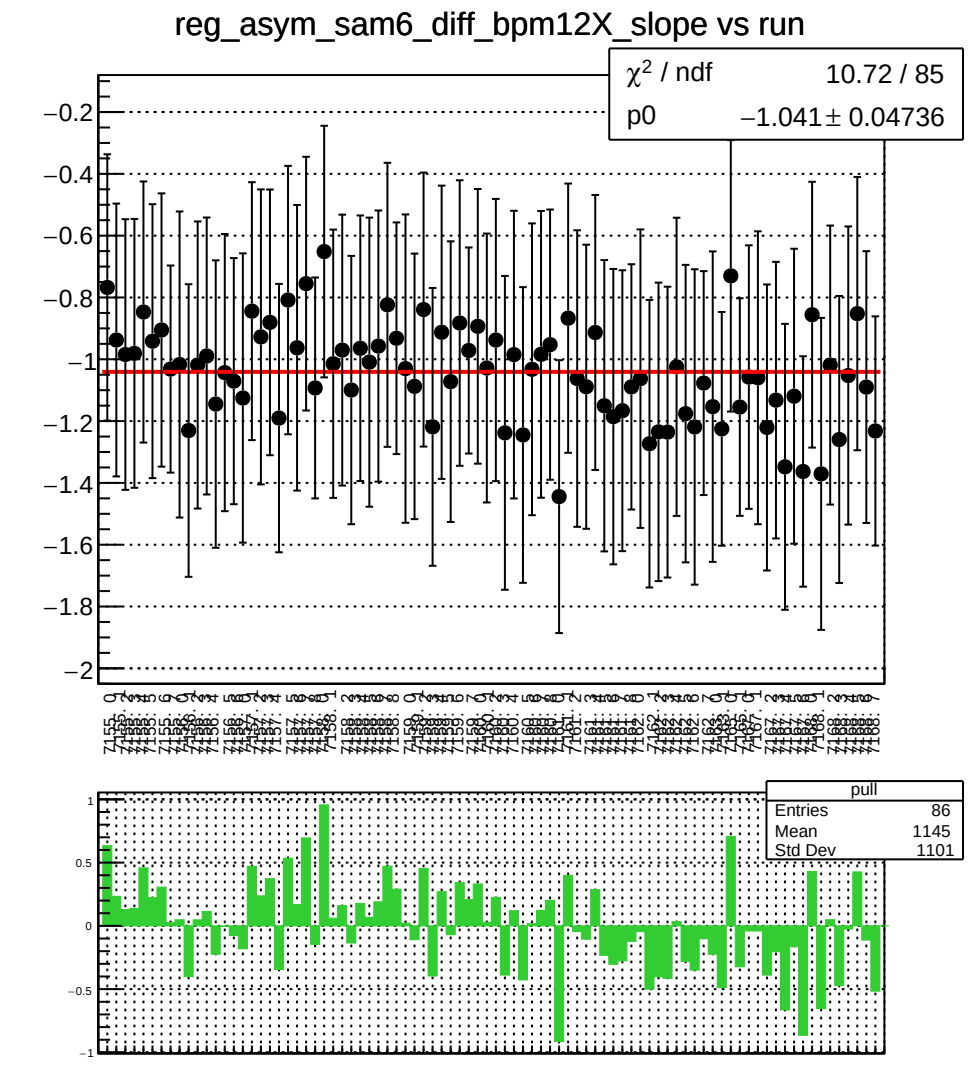

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 5.741 / 85
p0 11.64 ± 1.233
pull
Entries 86
Mean 122
Std Dev 90.51
pull1D
Entries 86
Mean −0.01692
Std Dev 0.2578

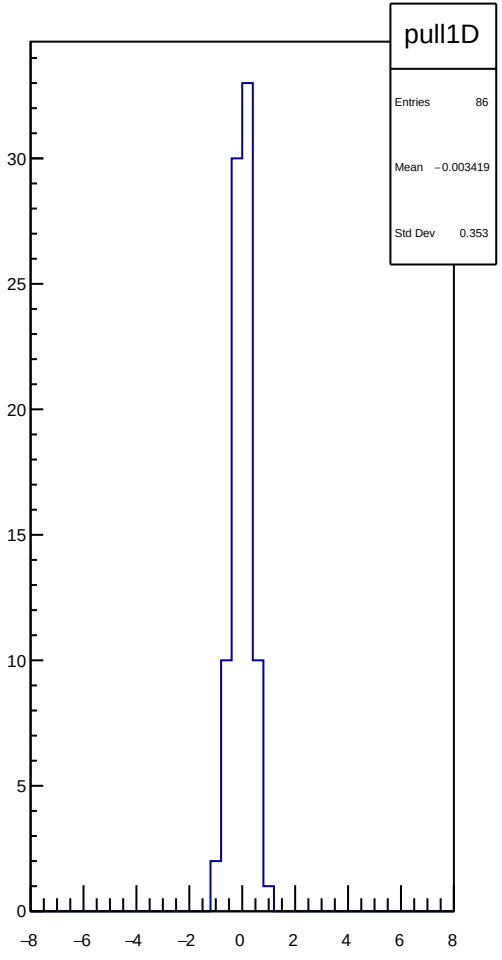

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 5.793 / 85
p0 43.67 ± 1.047
pull
Entries 86
Mean 156.5
Std Dev 110.8
pull1D
Entries 86
Mean 0.01913
Std Dev 0.2588

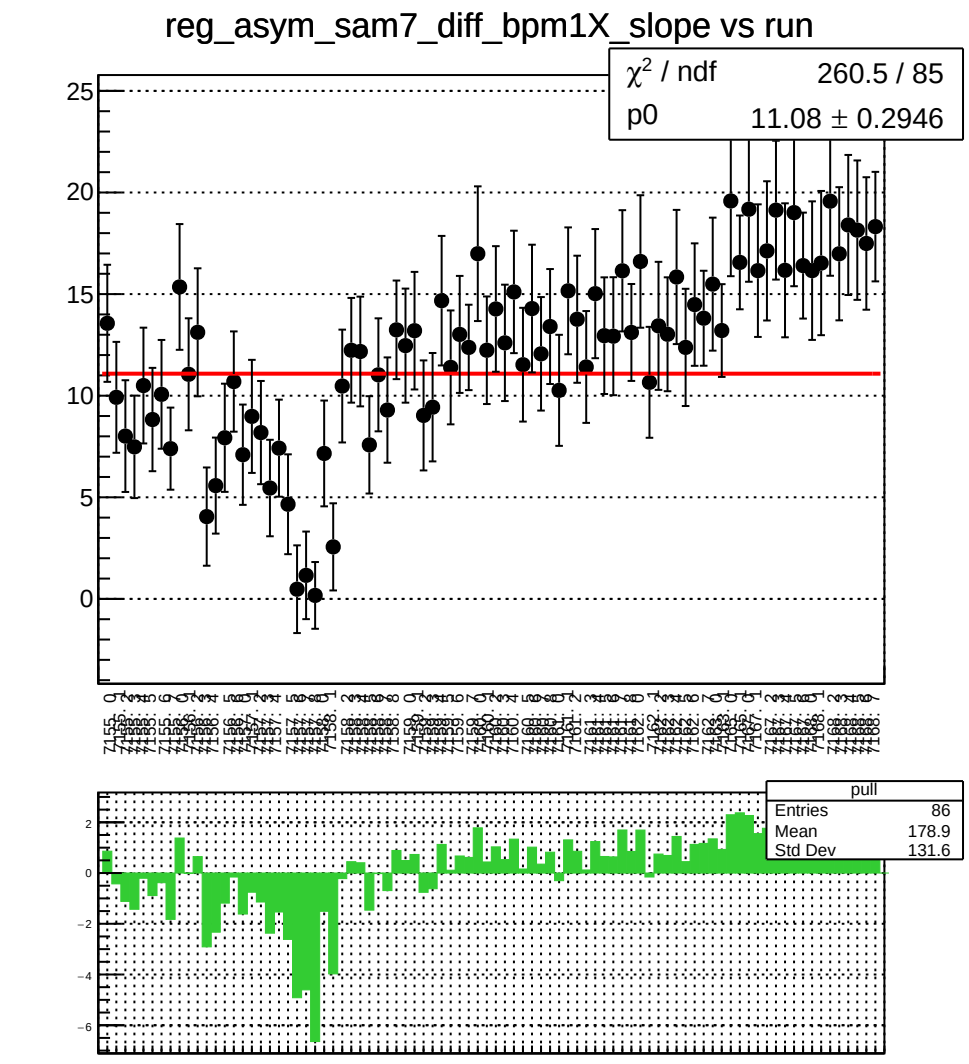

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 7.866 / 85
p0 71.18 ± 1.249
pull
Entries 86
Mean 145.7
Std Dev 112.6

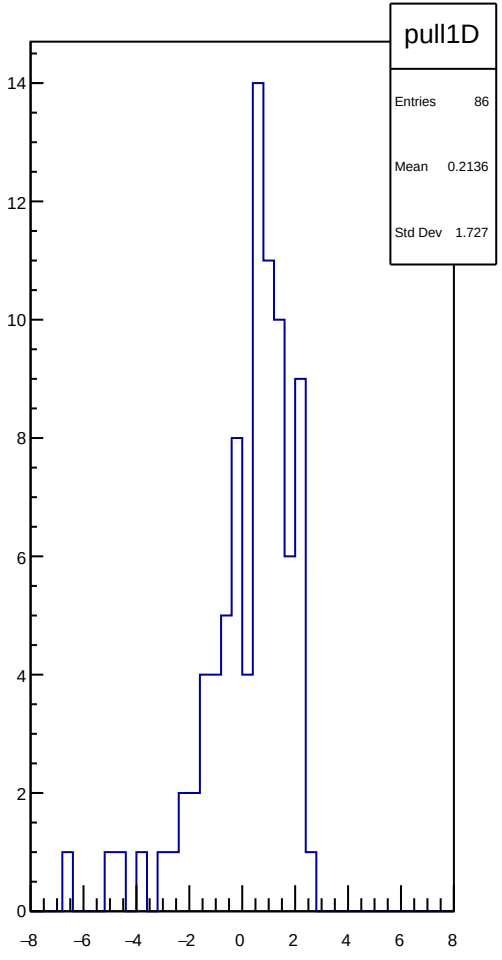

pull1D
Entries 86
Mean 0.01833
Std Dev 0.3019

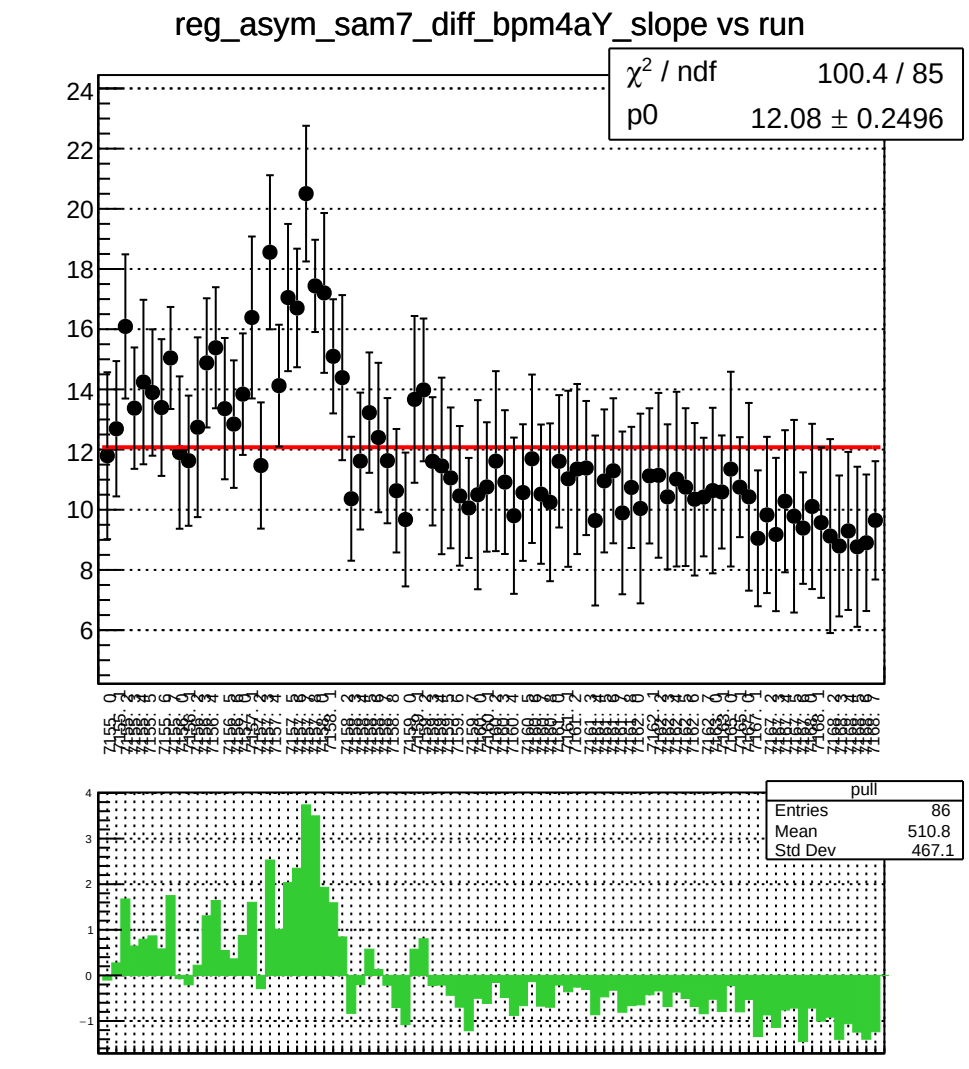

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 8.753 / 85
p0 74.93 ± 1.216
pull
Entries 86
Mean 284.8
Std Dev 239
pull1D
Entries 86
Mean −0.01841
Std Dev 0.3185

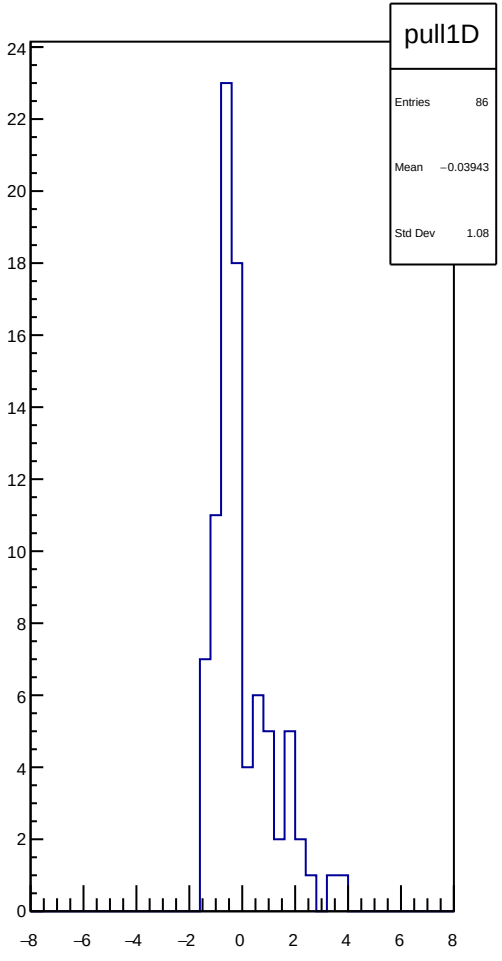

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 10.72 / 85
p0 −1.041 ± 0.04736
pull
Entries 86
Mean 1145
Std Dev 1101

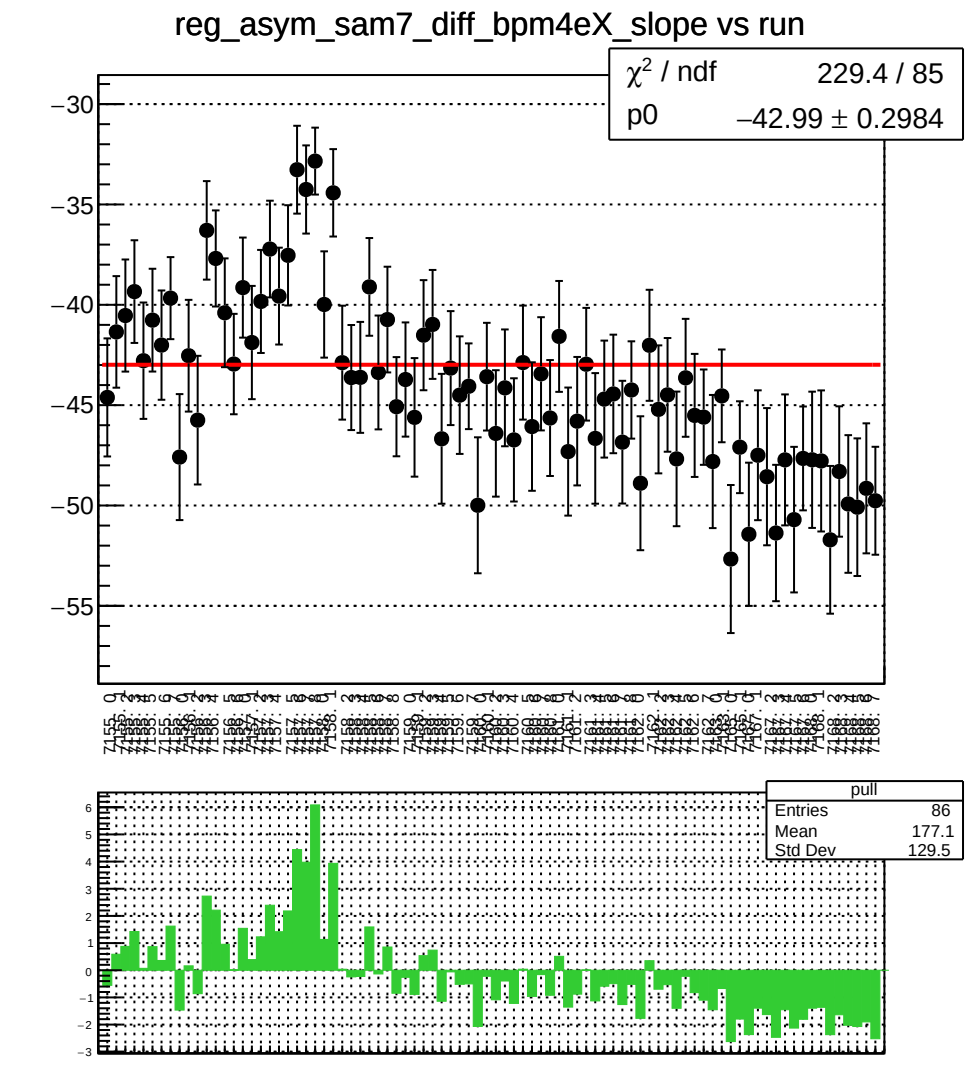

pull1D
Entries 86
Mean −0.003419
Std Dev 0.353

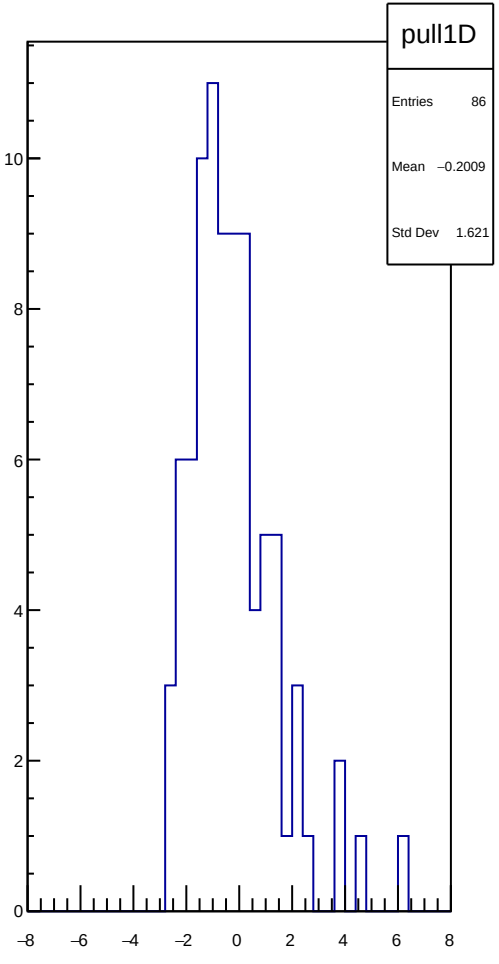

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 260.5 / 85
p0 11.08 ± 0.2946
pull
Entries 86
Mean 178.9
Std Dev 131.6

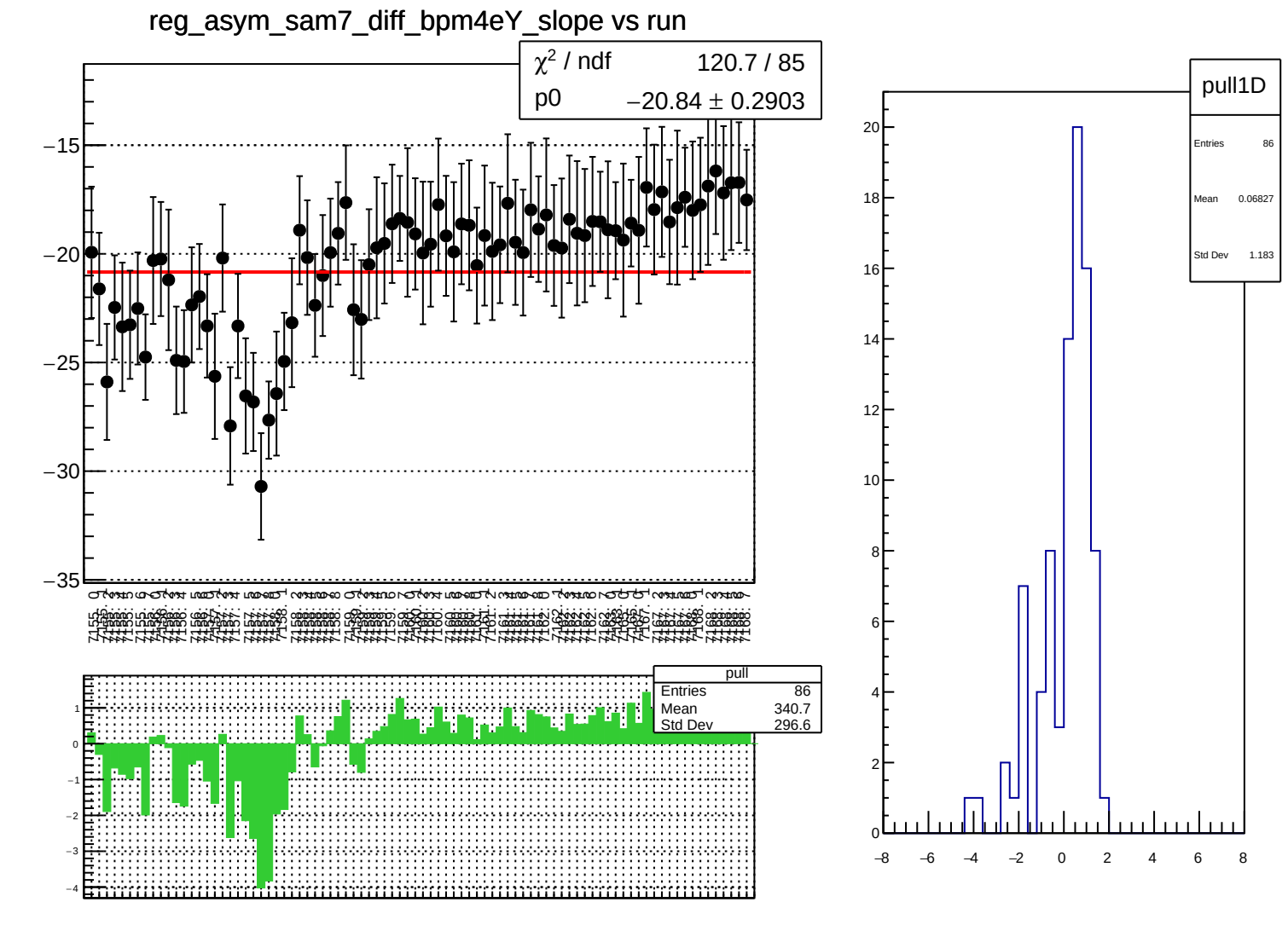

pull1D
Entries 86
Mean 0.2136
Std Dev 1.727

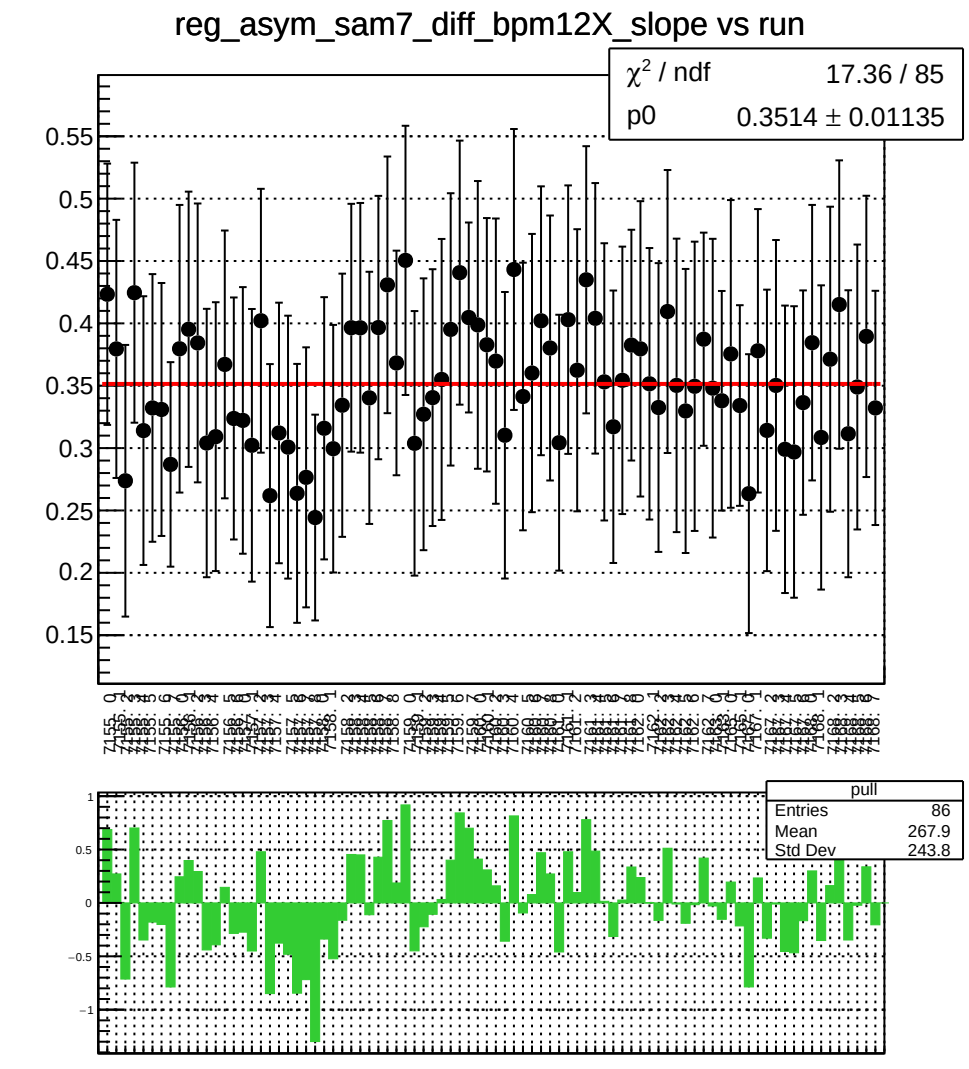

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 100.4 / 85
p0 12.08 ± 0.2496
pull
Entries 86
Mean 510.8
Std Dev 467.1

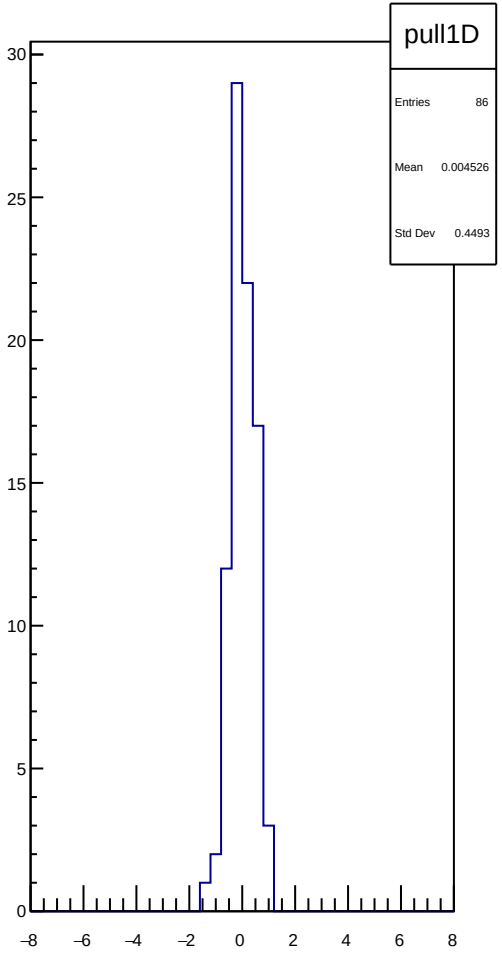

pull1D
Entries 86
Mean −0.03943
Std Dev 1.08

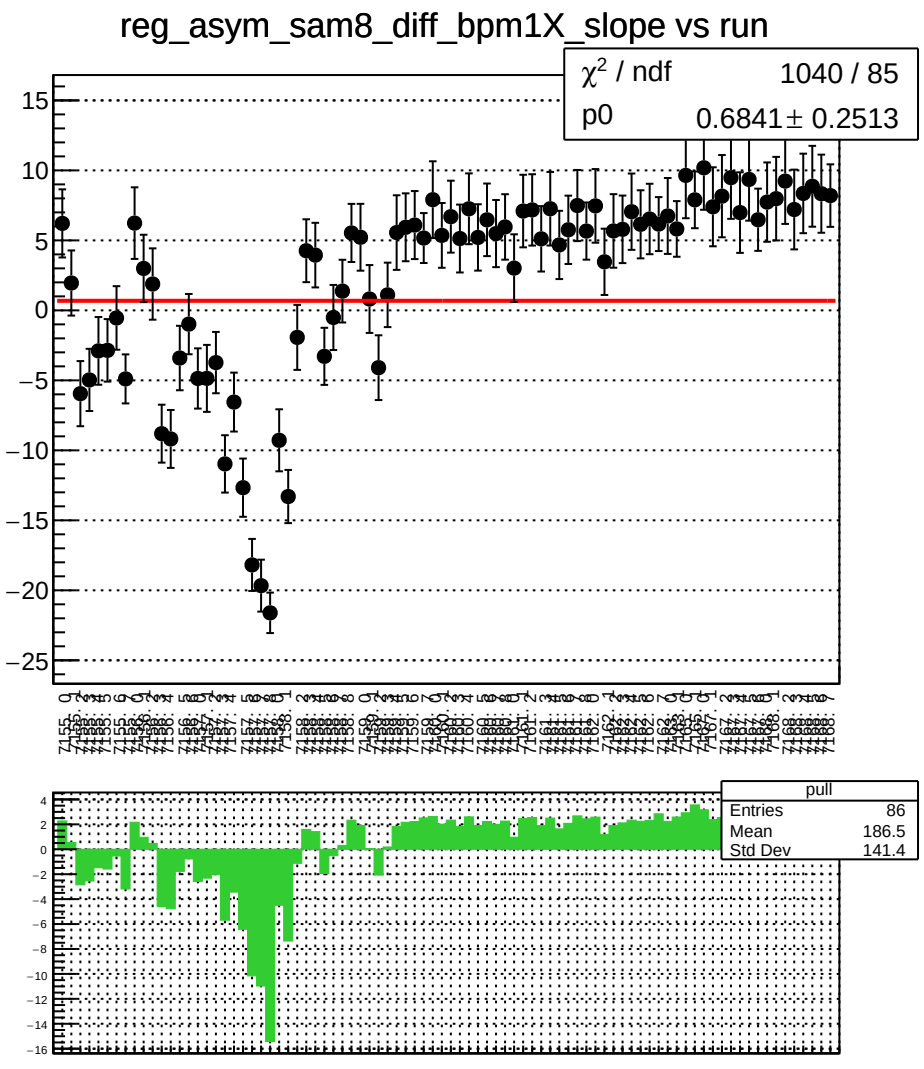

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 229.4 / 85
p0 −42.99 ± 0.2984
pull
Entries 86
Mean 177.1
Std Dev 129.5

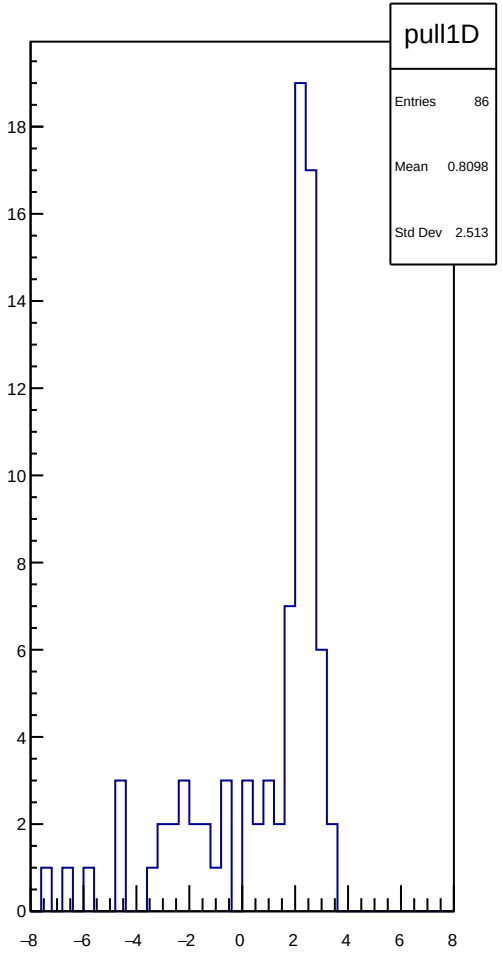

pull1D
Entries 86
Mean −0.2009
Std Dev 1.621

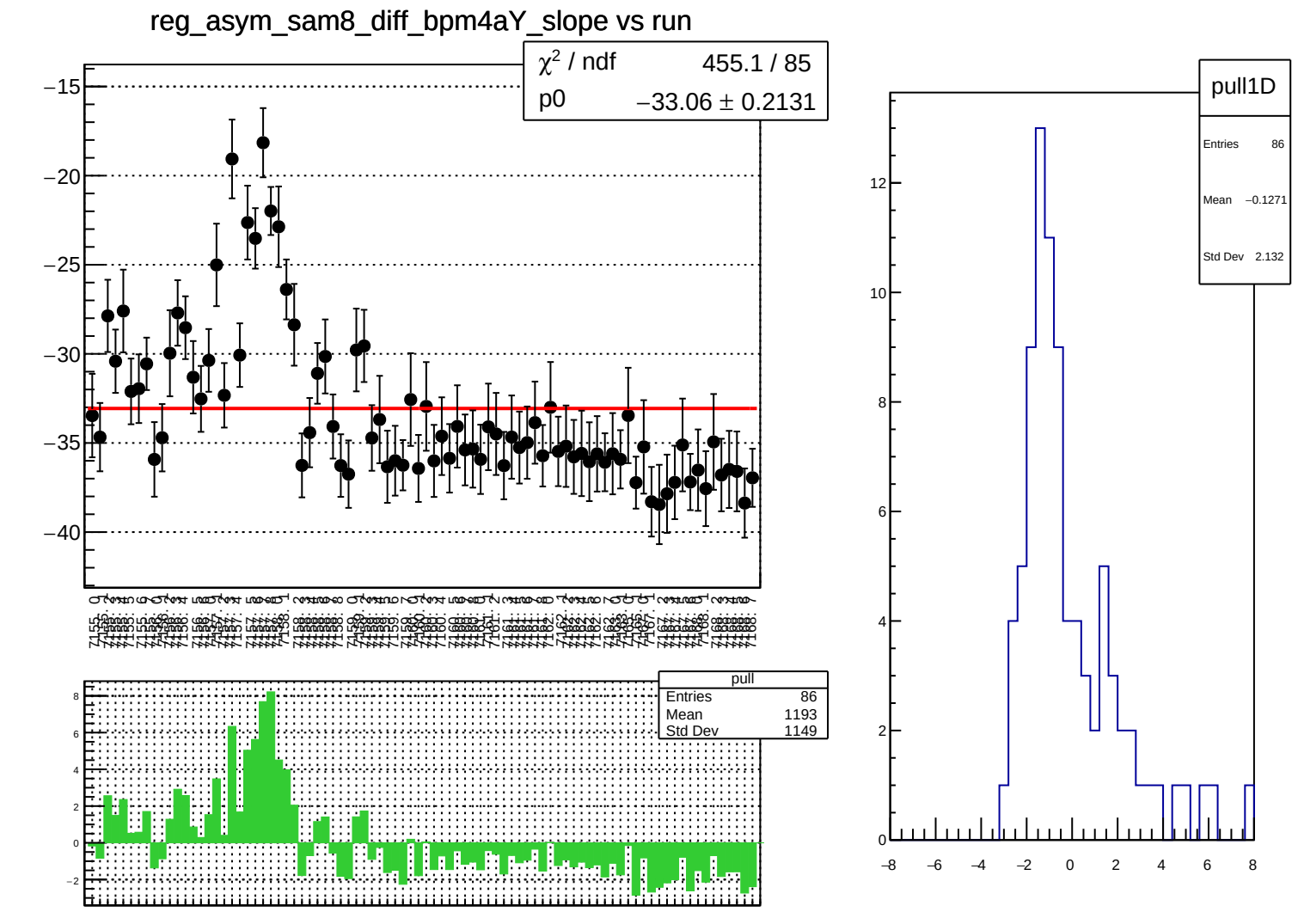

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 120.7 / 85
p0 −20.84 ± 0.2903
pull
Entries 86
Mean 340.7
Std Dev 296.6
pull1D
Entries 86
Mean 0.06827
Std Dev 1.183

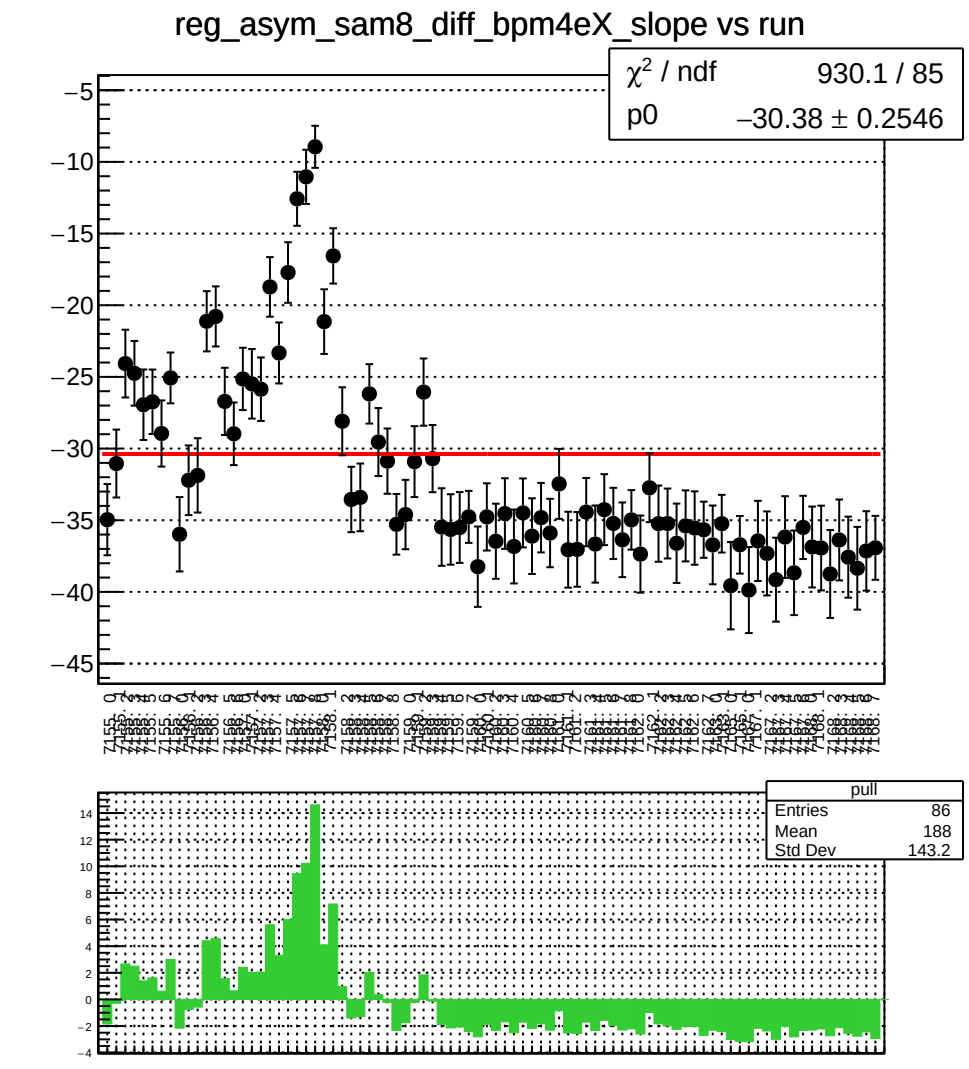

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 17.36 / 85
p0 0.3514 ± 0.01135
pull
Entries 86
Mean 267.9
Std Dev 243.8

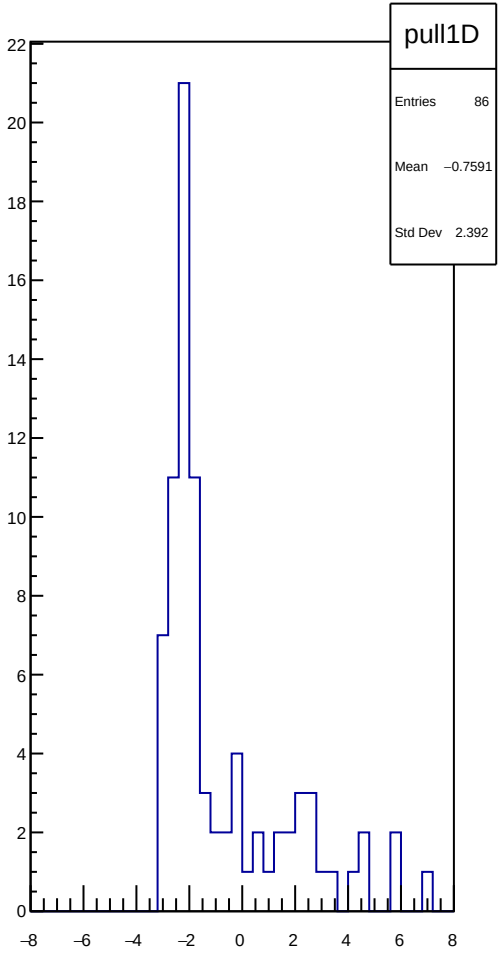

pull1D
Entries 86
Mean 0.004526
Std Dev 0.4493

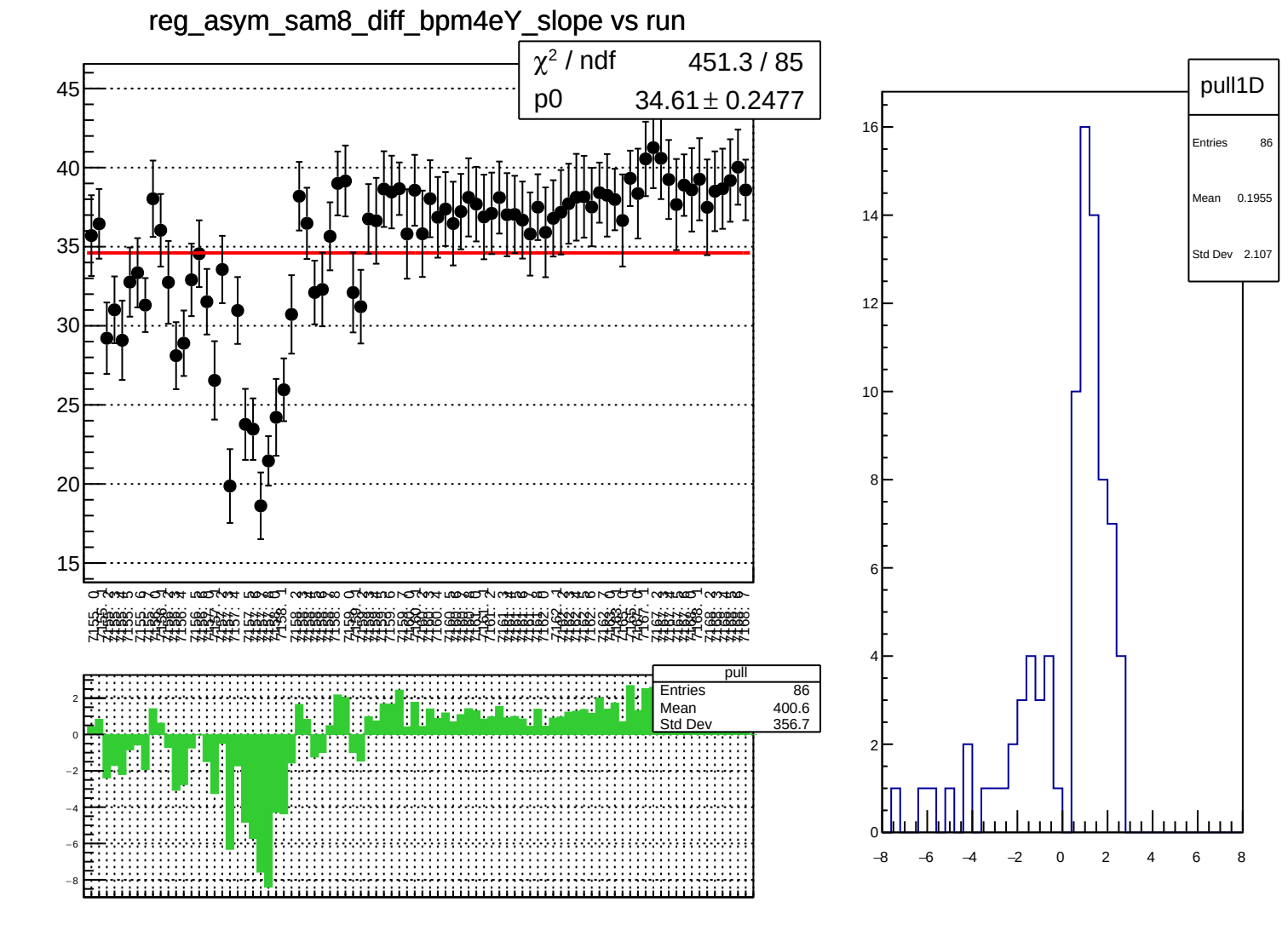

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 1040 / 85
p0 0.6841 ± 0.2513
pull
Entries 86
Mean 186.5
Std Dev 141.4

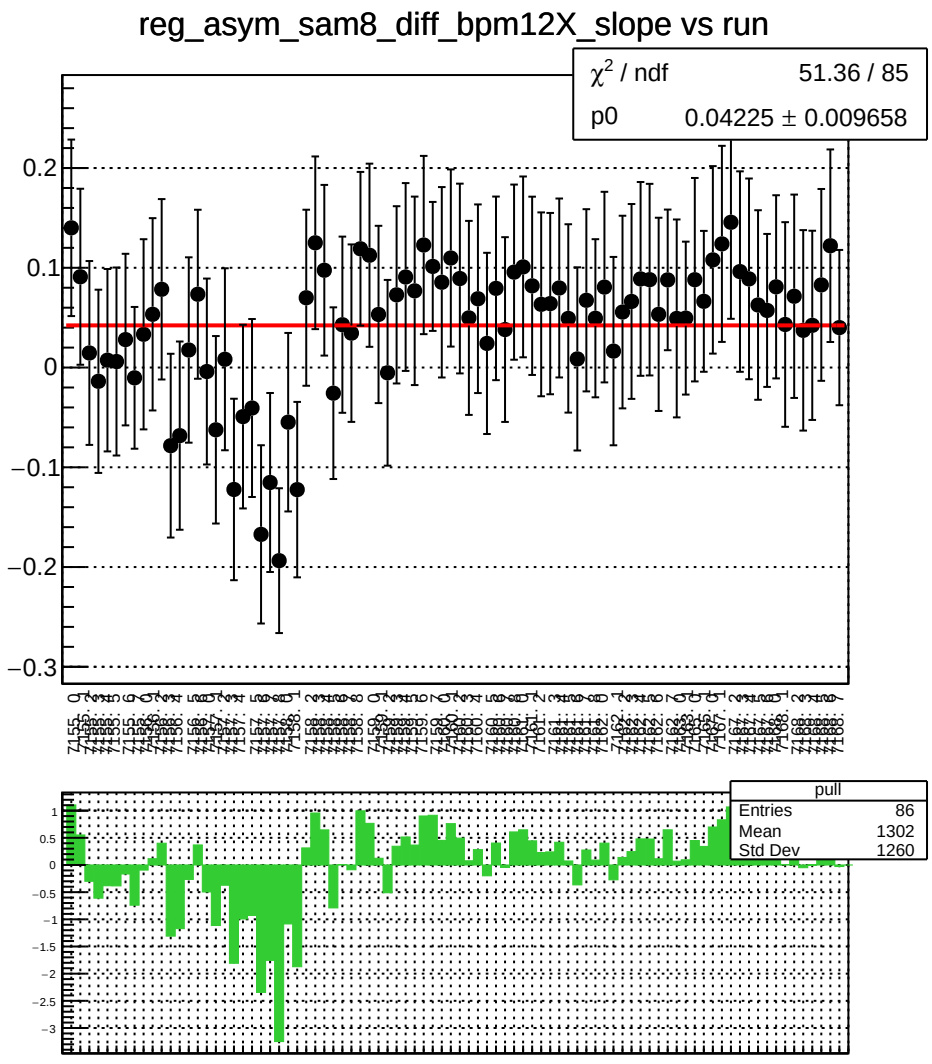

pull1D
Entries 86
Mean 0.8098
Std Dev 2.513

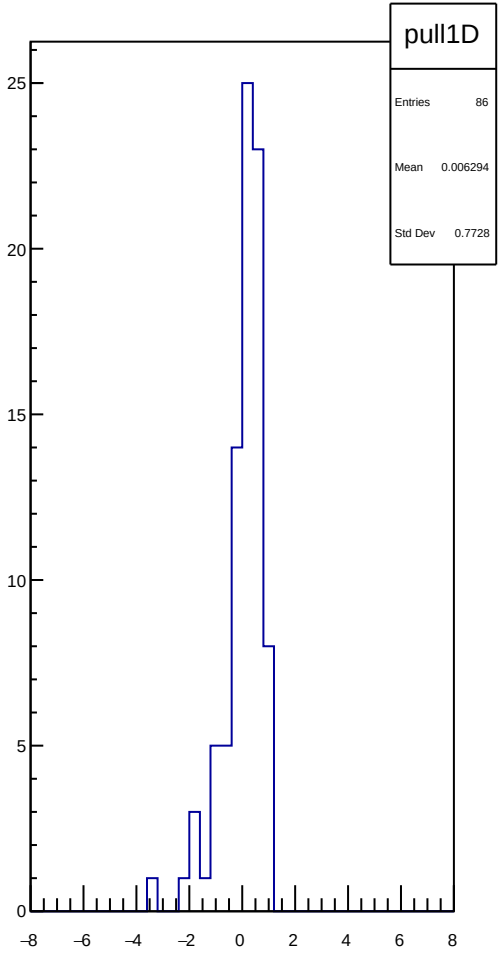

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 455.1 / 85
p0 −33.06 ± 0.2131
pull
Entries 86
Mean 1193
Std Dev 1149
pull1D
Entries 86
Mean −0.1271
Std Dev 2.132

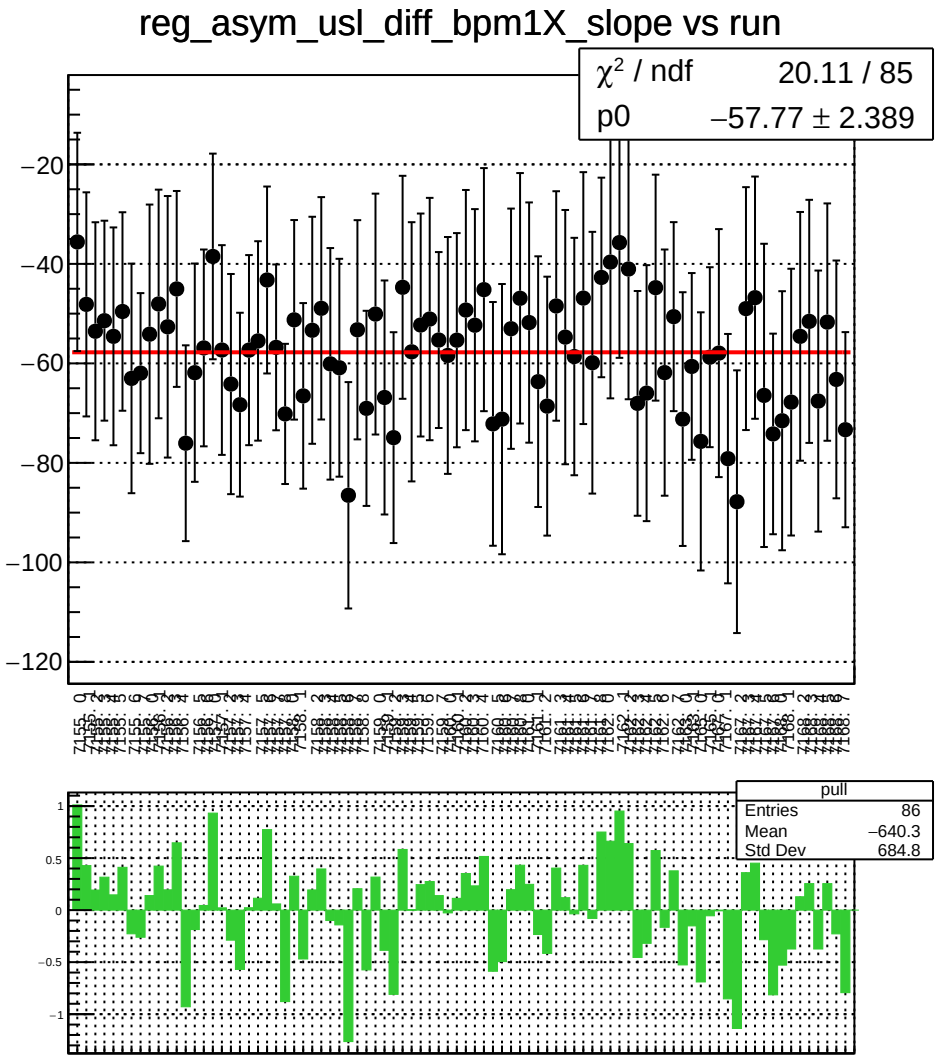

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 930.1 / 85
p0 −30.38 ± 0.2546
pull
Entries 86
Mean 188
Std Dev 143.2

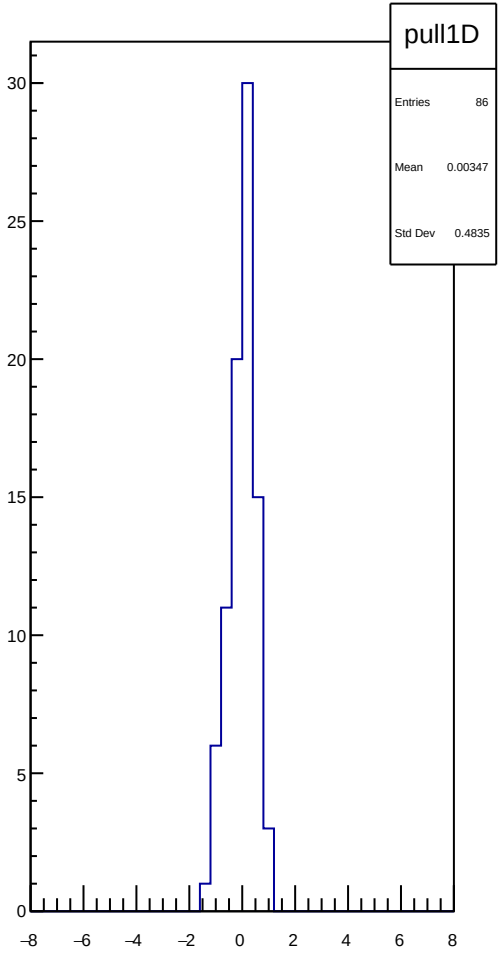

pull1D
Entries 86
Mean −0.7591
Std Dev 2.392

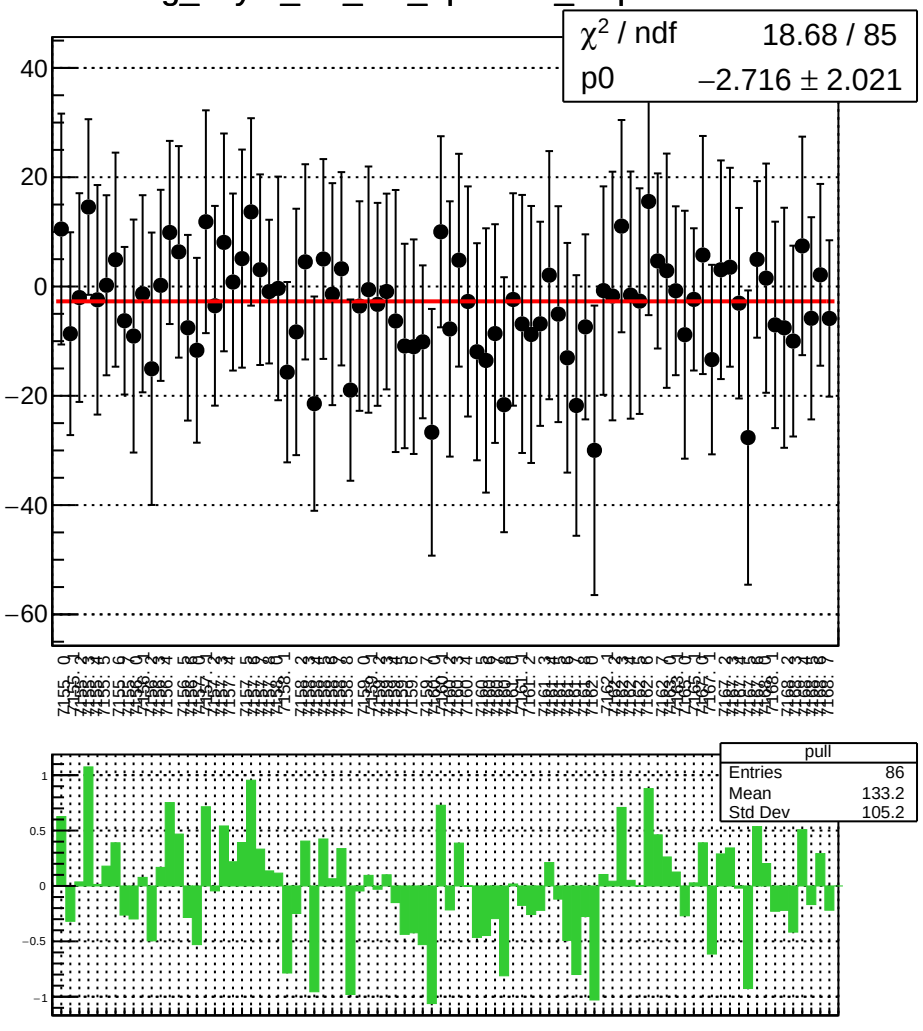

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 451.3 / 85
p0 34.61 ± 0.2477
pull
Entries 86
Mean 400.6
Std Dev 356.7
pull1D
Entries 86
Mean 0.1955
Std Dev 2.107

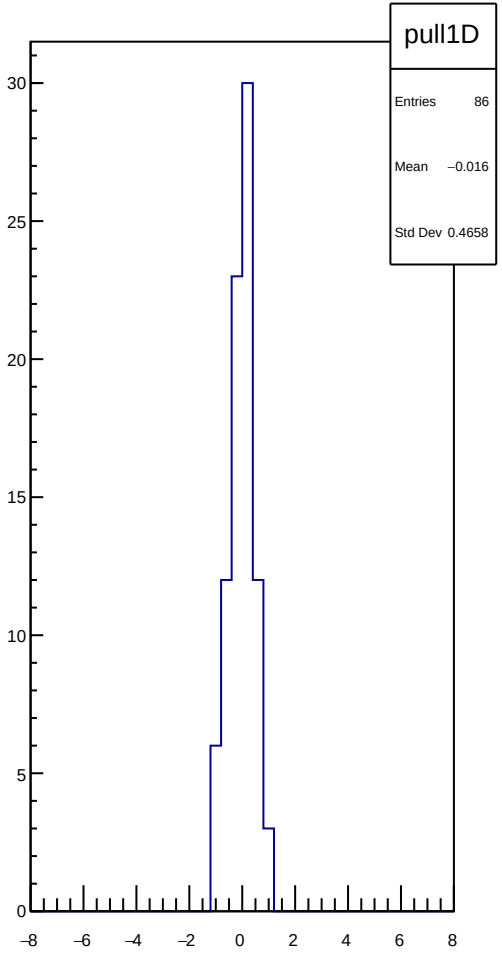

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 51.36 / 85
p0 0.04225 ± 0.009658
pull
Entries 86
Mean 1302
Std Dev 1260

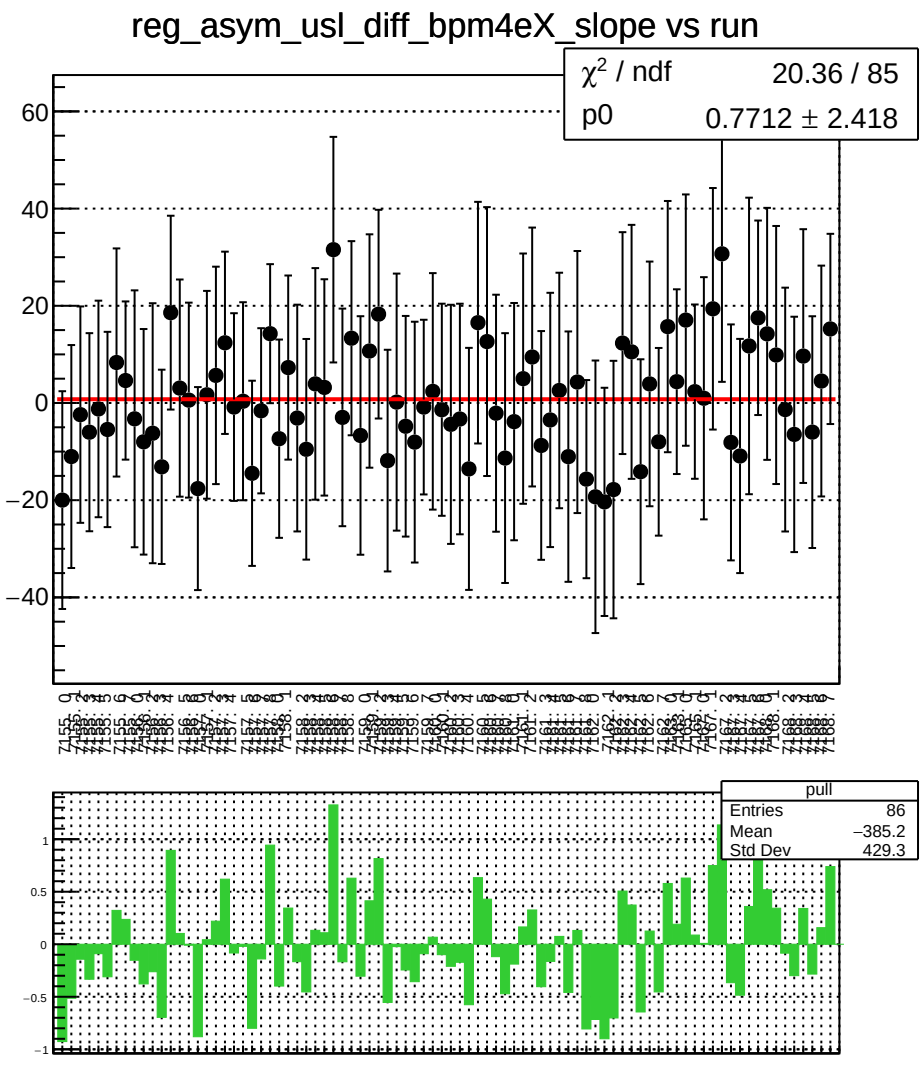

pull1D
Entries 86
Mean 0.006294
Std Dev 0.7728

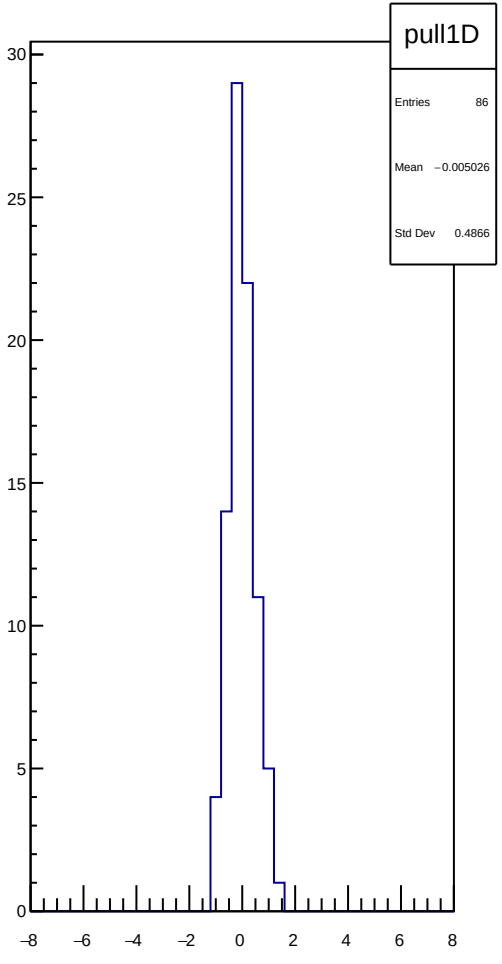

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 20.11 / 85
p0 −57.77 ± 2.389
pull
Entries 86
Mean −640.3
Std Dev 684.8

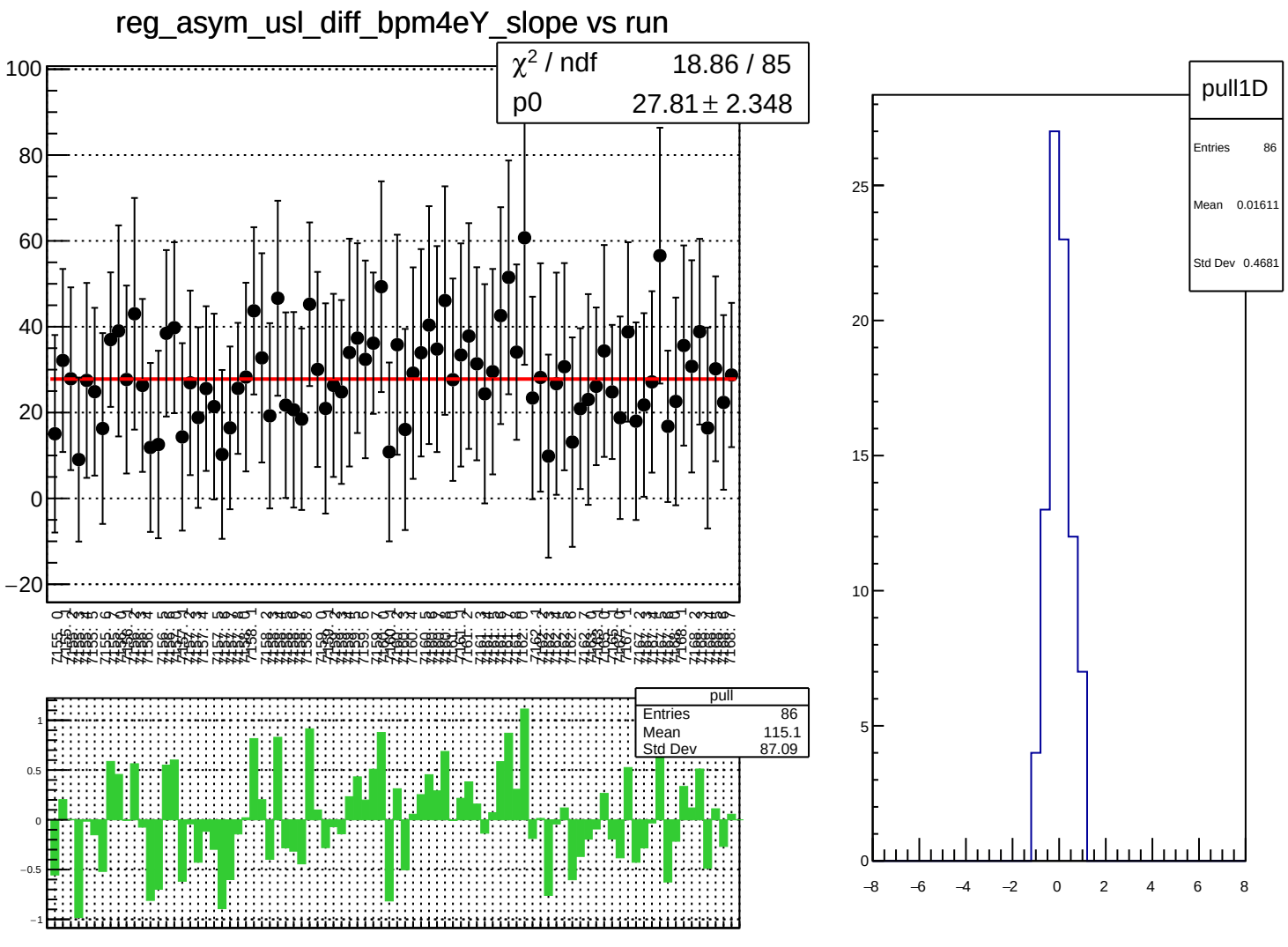

pull1D
Entries 86
Mean 0.00347
Std Dev 0.4835

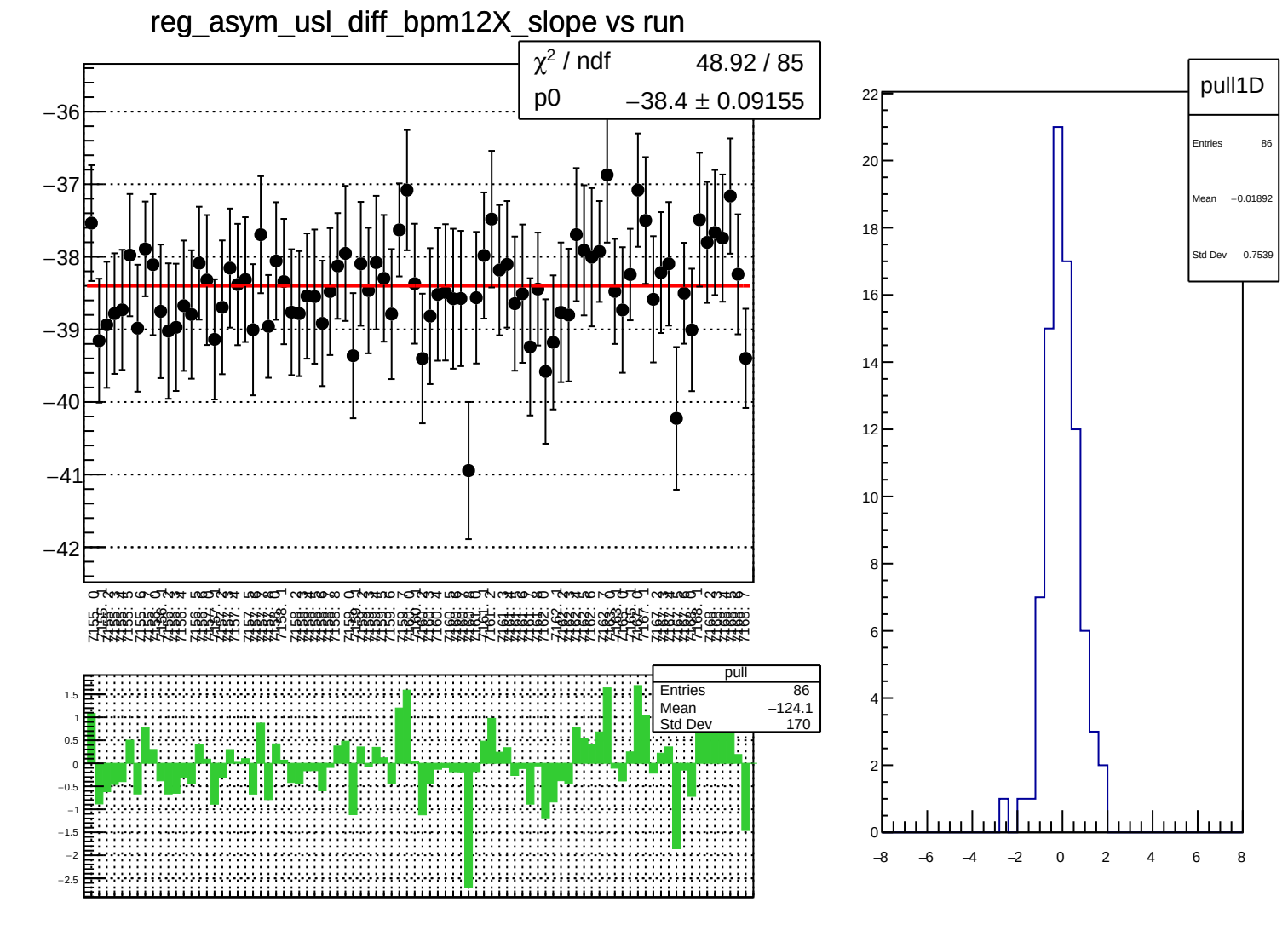

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 18.68 / 85
p0 −2.716 ± 2.021
pull
Entries 86
Mean 133.2
Std Dev 105.2

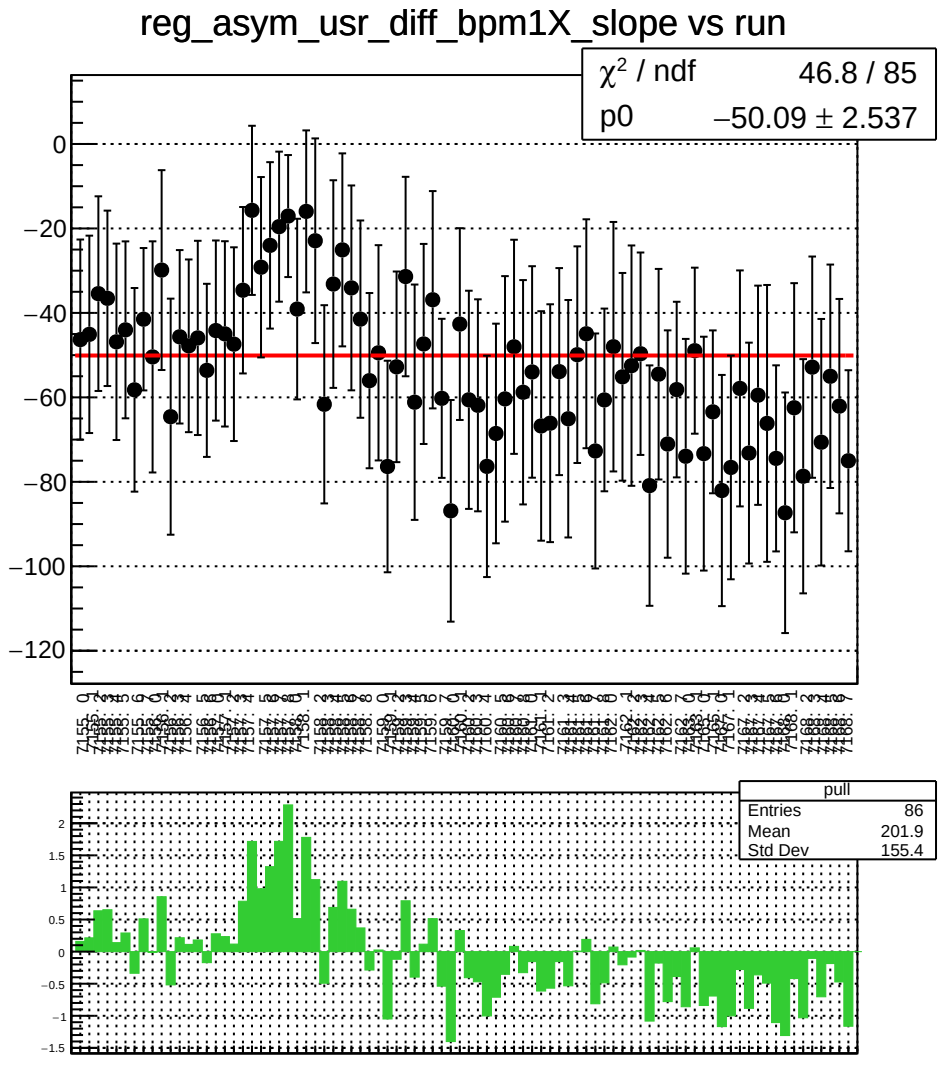

pull1D
Entries 86
Mean −0.016
Std Dev 0.4658

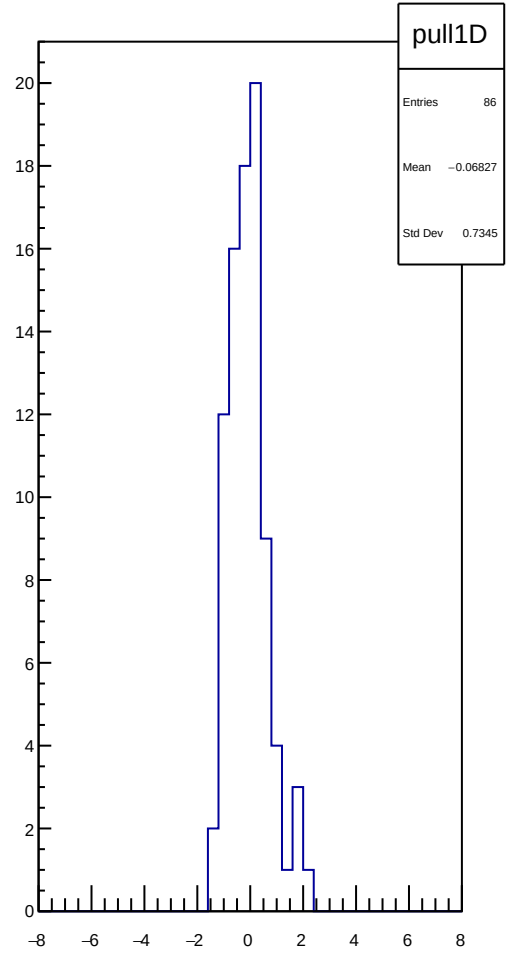

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 20.36 / 85
p0 0.7712 ± 2.418
pull
Entries 86
Mean −385.2
Std Dev 429.3

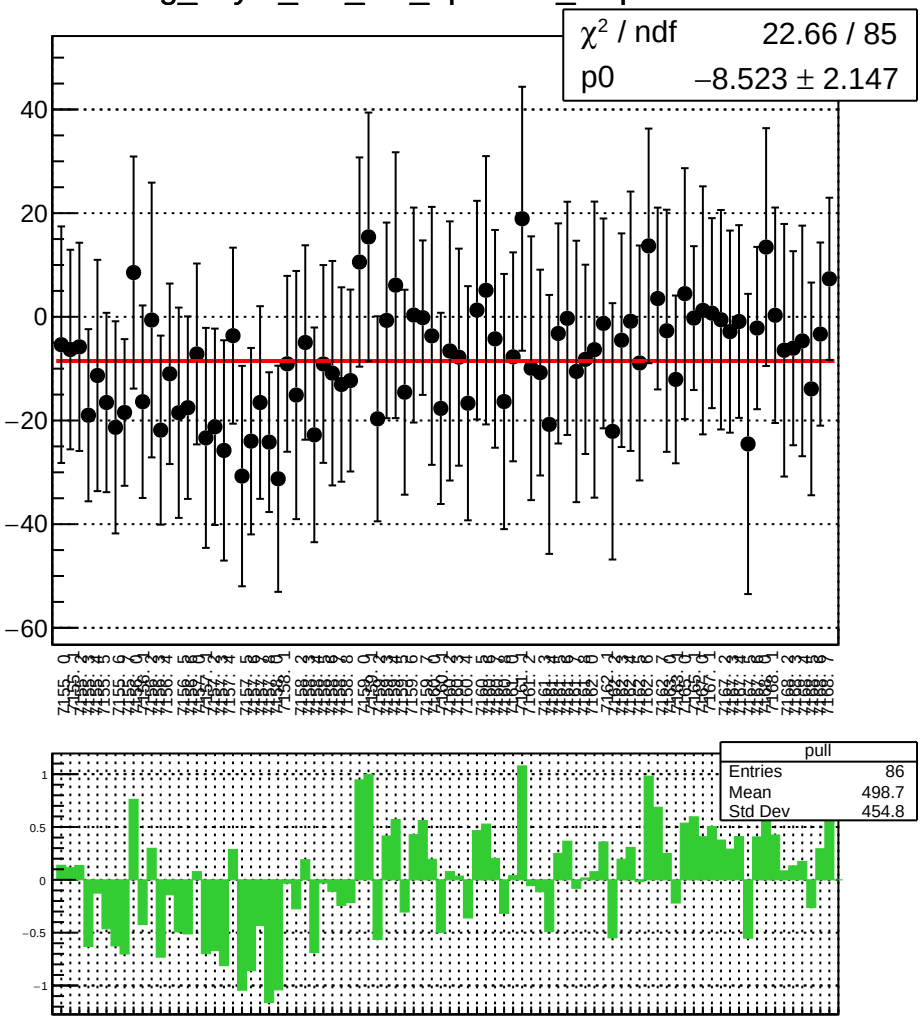

pull1D
Entries 86
Mean −0.005026
Std Dev 0.4866

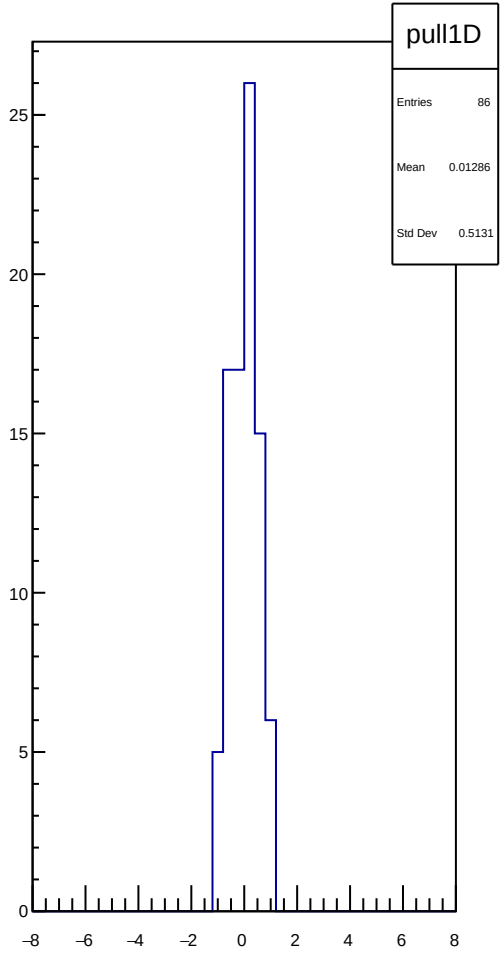

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 18.86 / 85
p0 27.81 ± 2.348
pull
Entries 86
Mean 115.1
Std Dev 87.09
pull1D
Entries 86
Mean 0.01611
Std Dev 0.4681

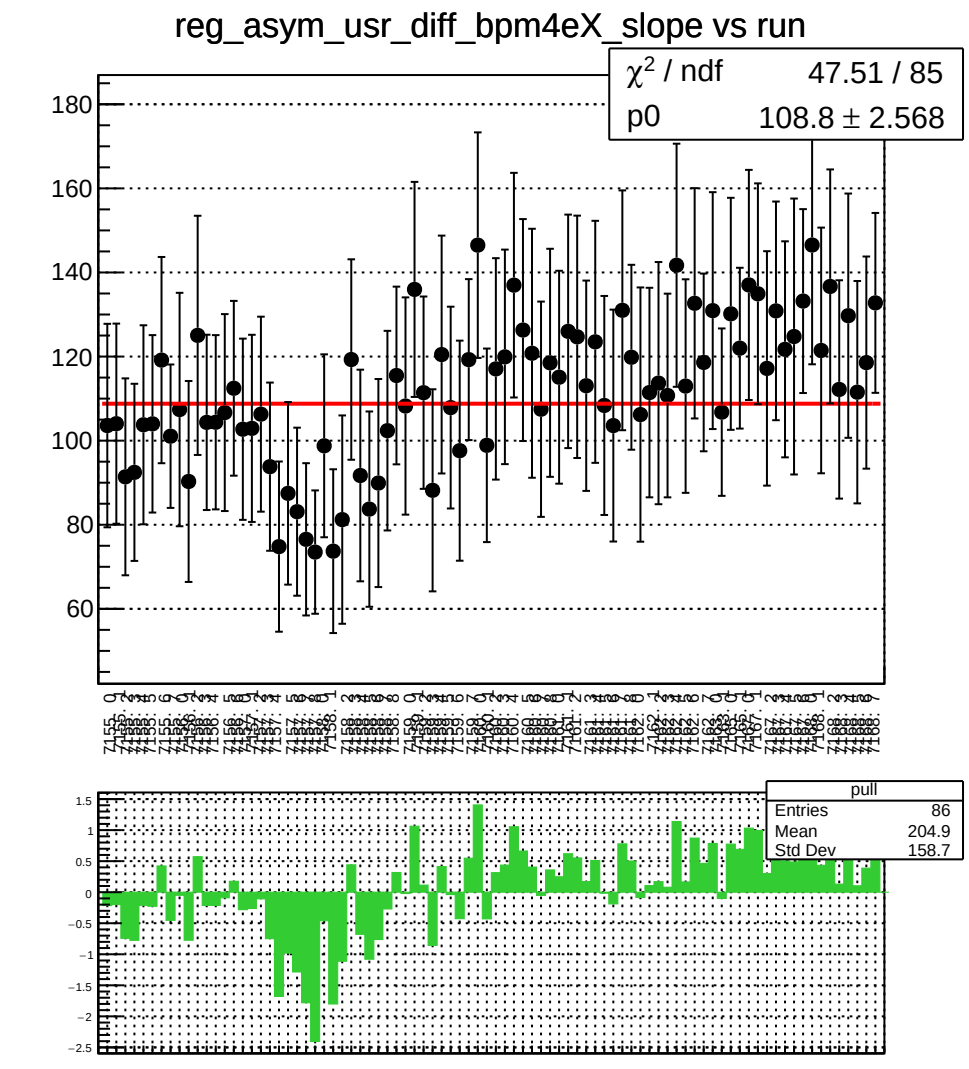

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 48.92 / 85
p0 −38.4 ± 0.09155
−36
−37
−38
−39
−40
−41
−42
pull
Entries 86
Mean −124.1
Std Dev 170
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 86
Mean −0.01892
Std Dev 0.7539
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

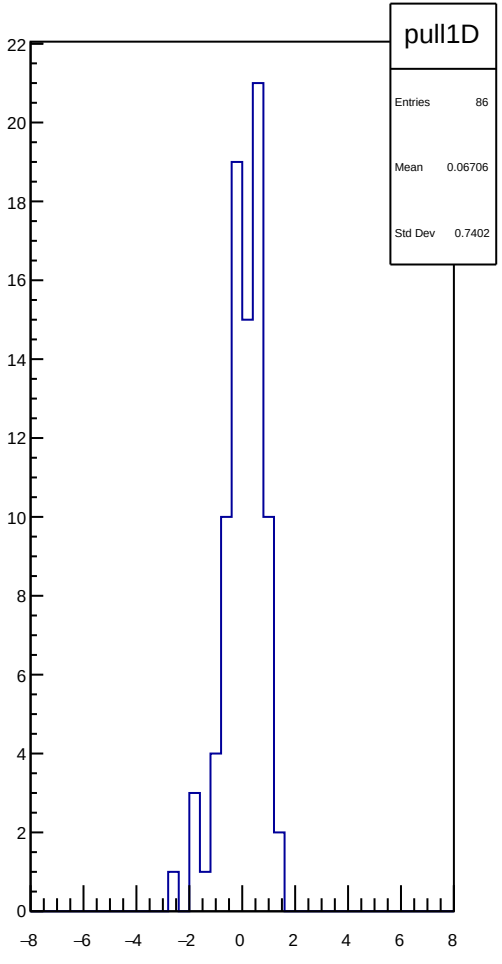

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 46.8 / 85
p0 −50.09 ± 2.537
pull
Entries 86
Mean 201.9
Std Dev 155.4

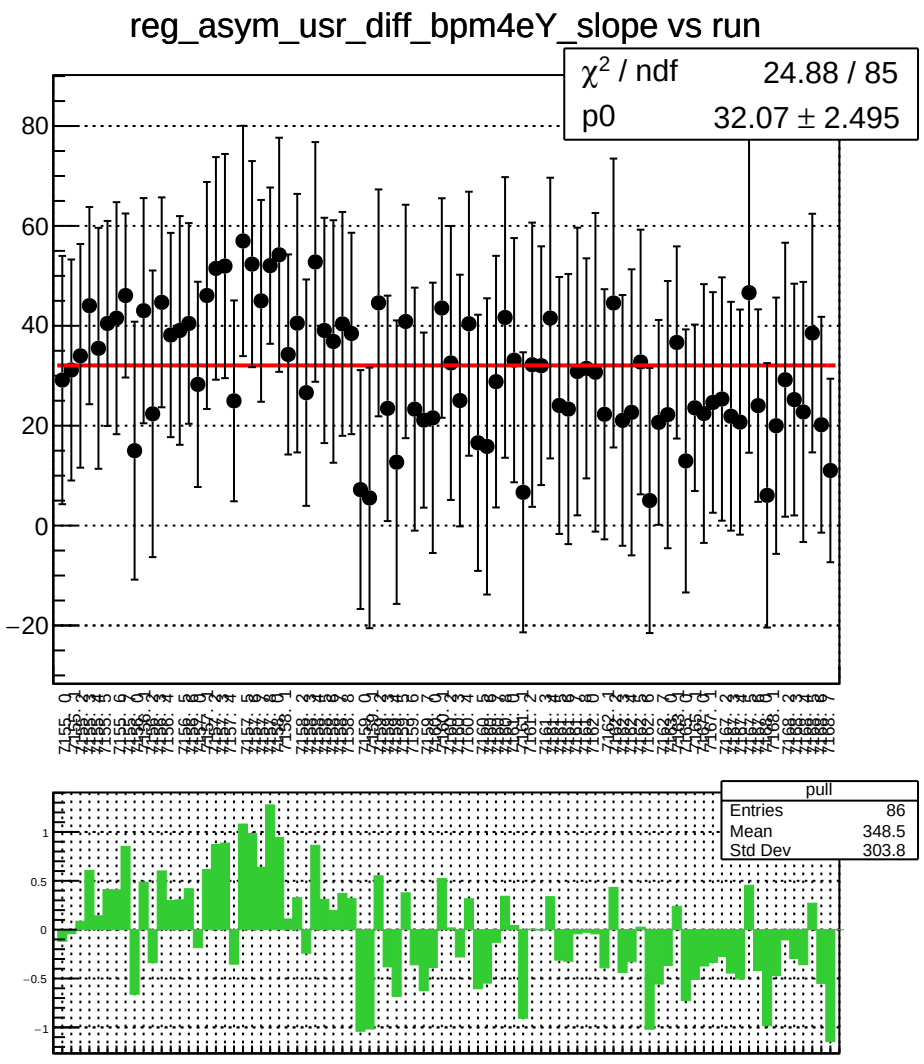

pull1D
Entries 86
Mean −0.06827
Std Dev 0.7345

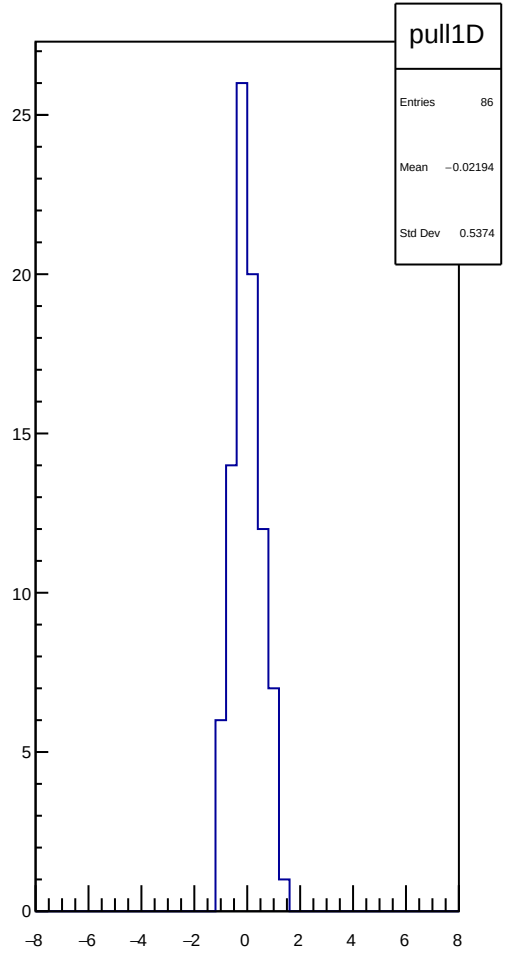

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 22.66 / 85
p0 −8.523 ± 2.147
pull
Entries 86
Mean 498.7
Std Dev 454.8

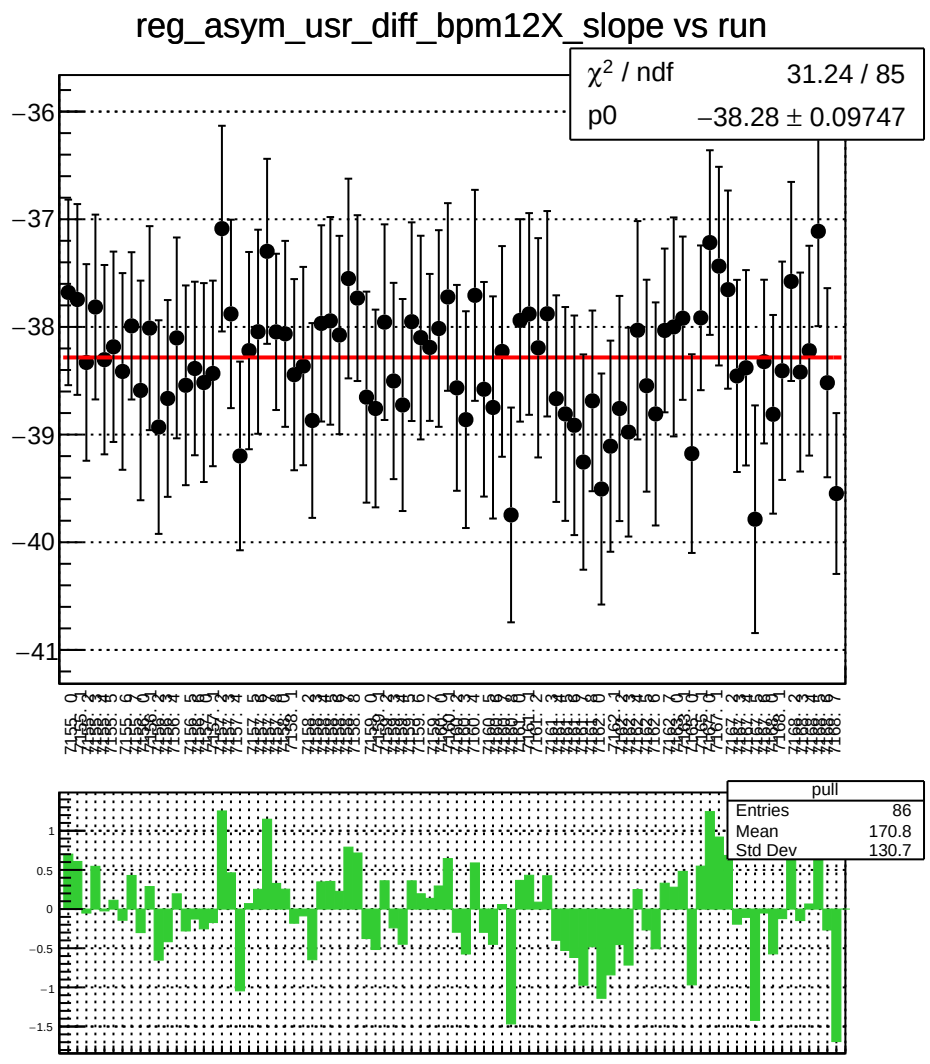

pull1D
Entries 86
Mean 0.01286
Std Dev 0.5131

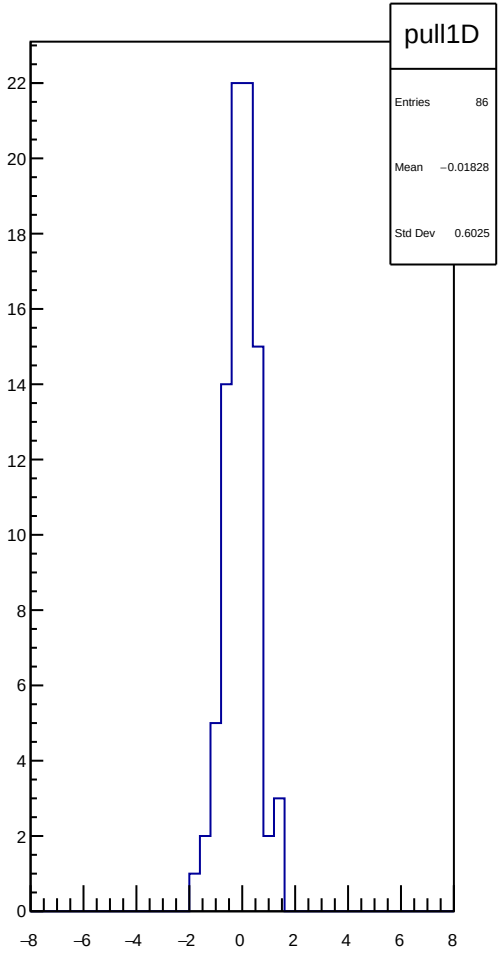

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 47.51 / 85
p0 108.8 ± 2.568
pull
Entries 86
Mean 204.9
Std Dev 158.7

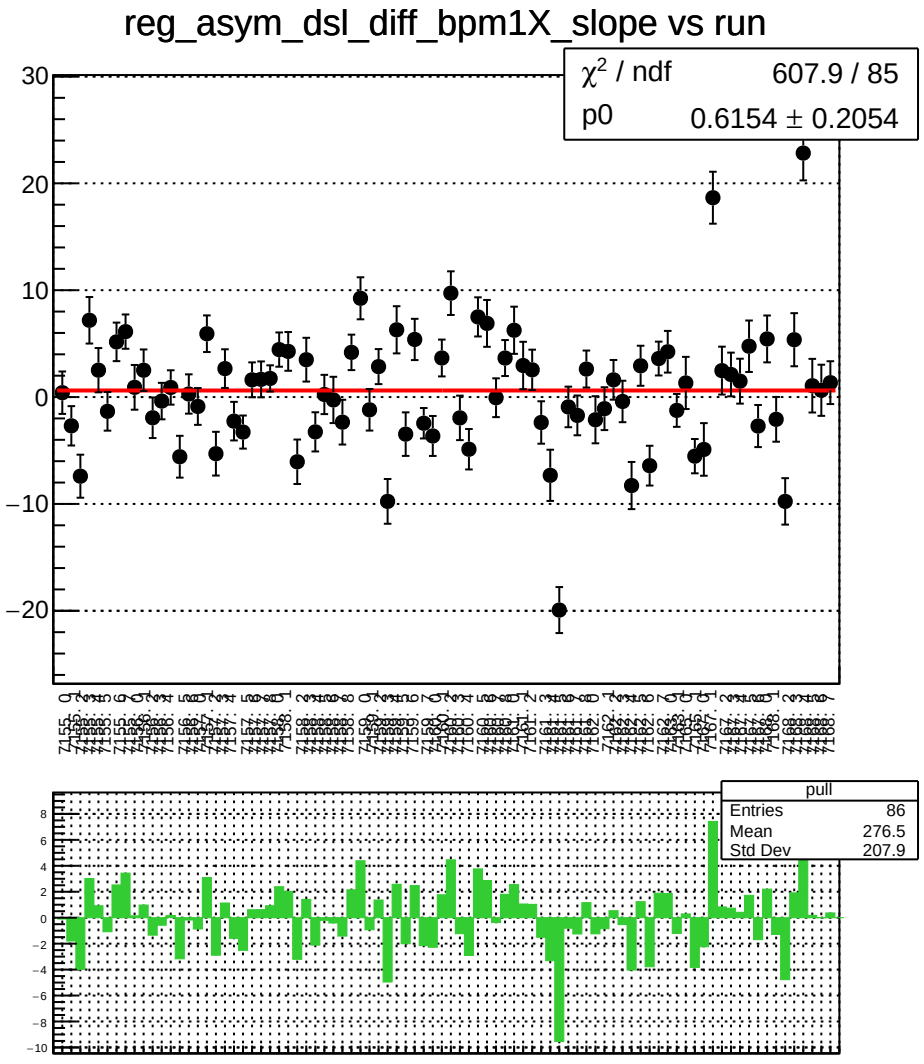

pull1D
Entries 86
Mean 0.06706
Std Dev 0.7402

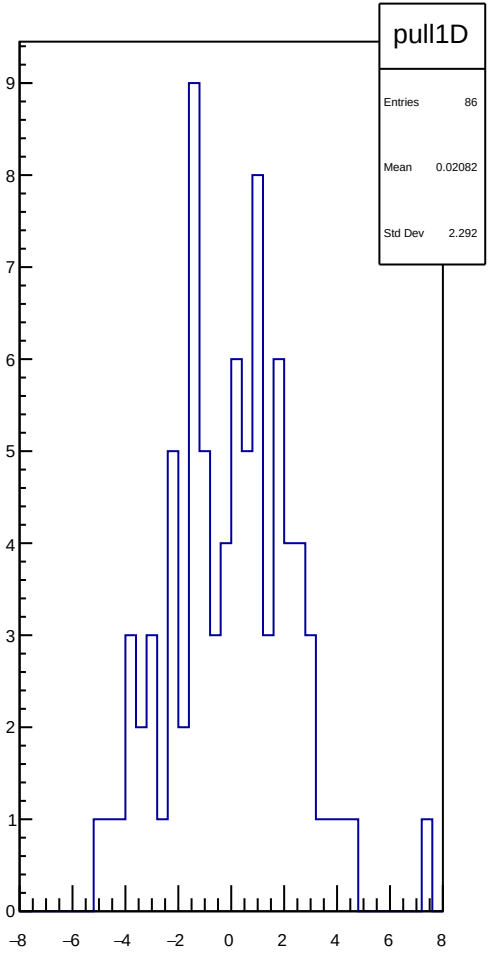

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 24.88 / 85
p0 32.07 ± 2.495
pull
Entries 86
Mean 348.5
Std Dev 303.8

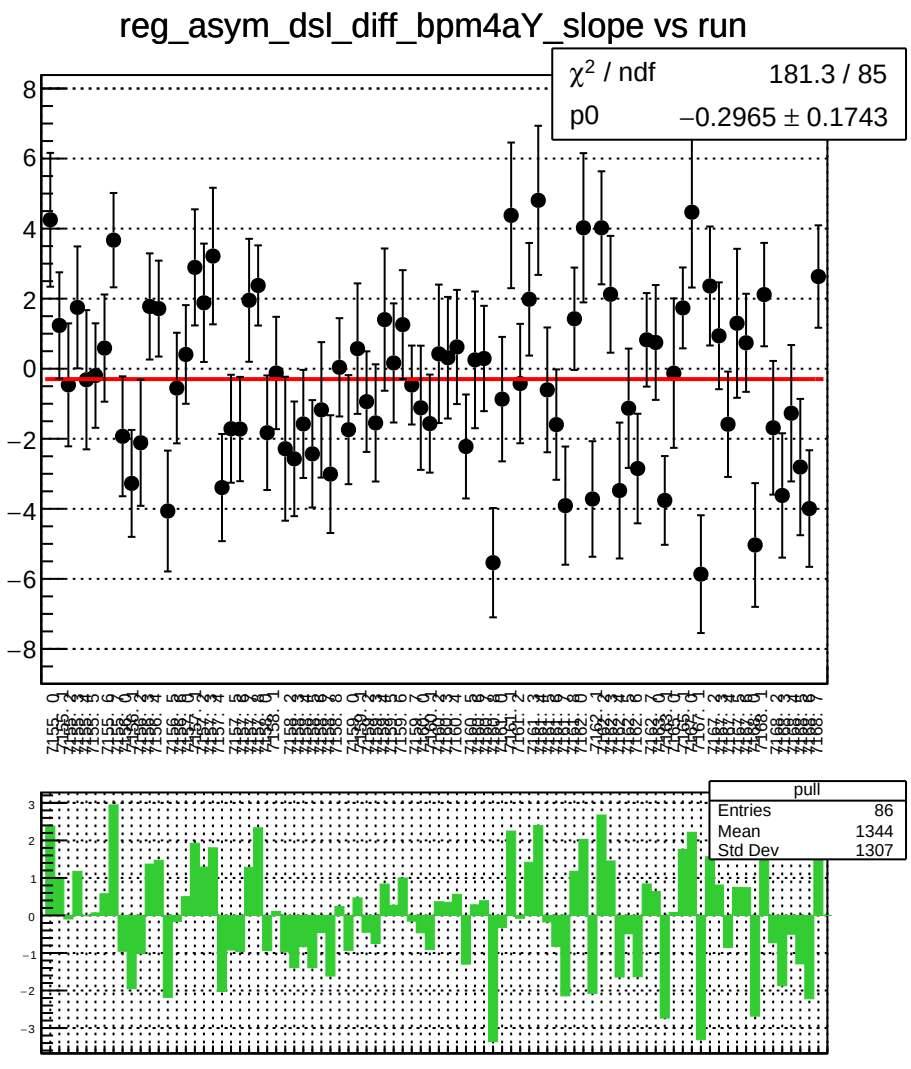

pull1D
Entries 86
Mean −0.02194
Std Dev 0.5374

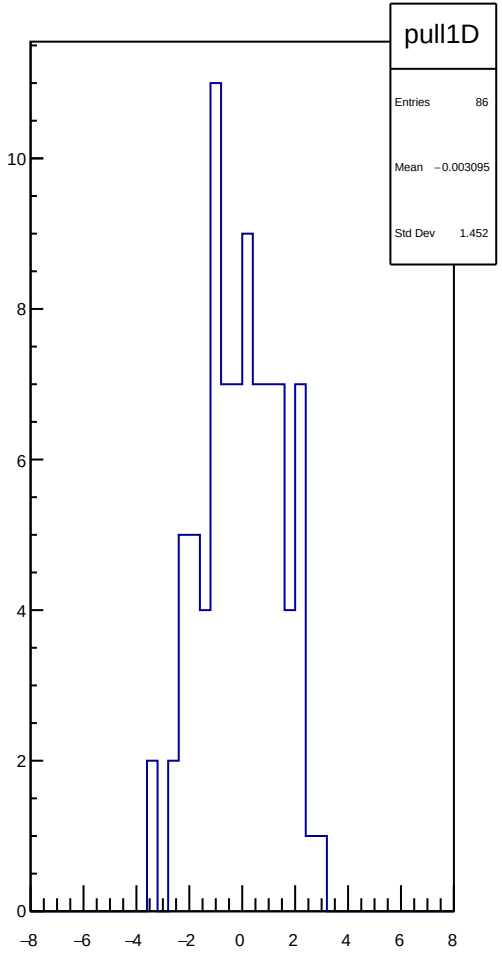

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 31.24 / 85
p0 −38.28 ± 0.09747
−36
−37
−38
−39
−40
−41
pull
Entries 86
Mean 170.8
Std Dev 130.7
1
0.5
0
−0.5
−1
−1.5

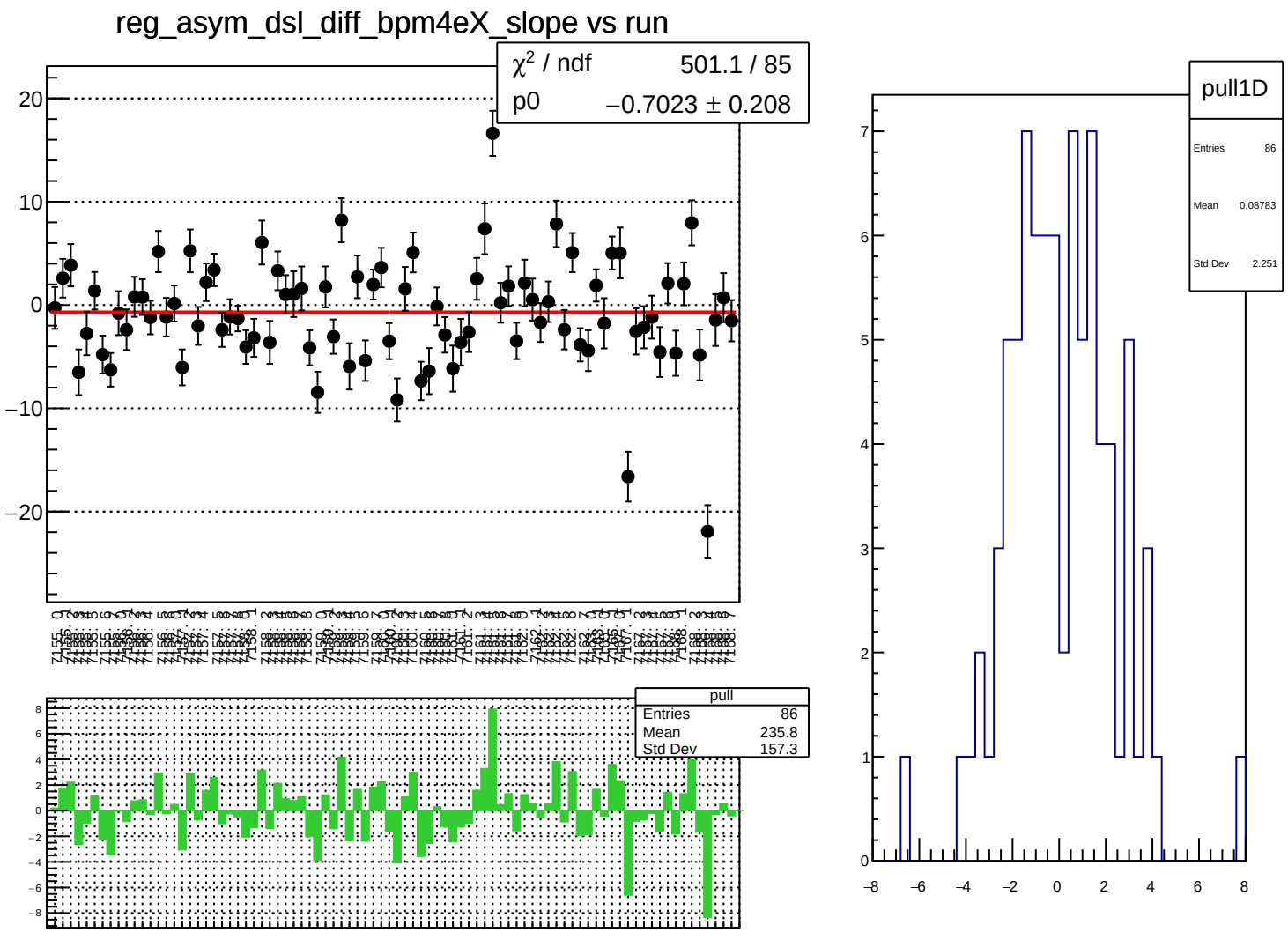

pull1D
Entries 86
Mean −0.01828
Std Dev 0.6025
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

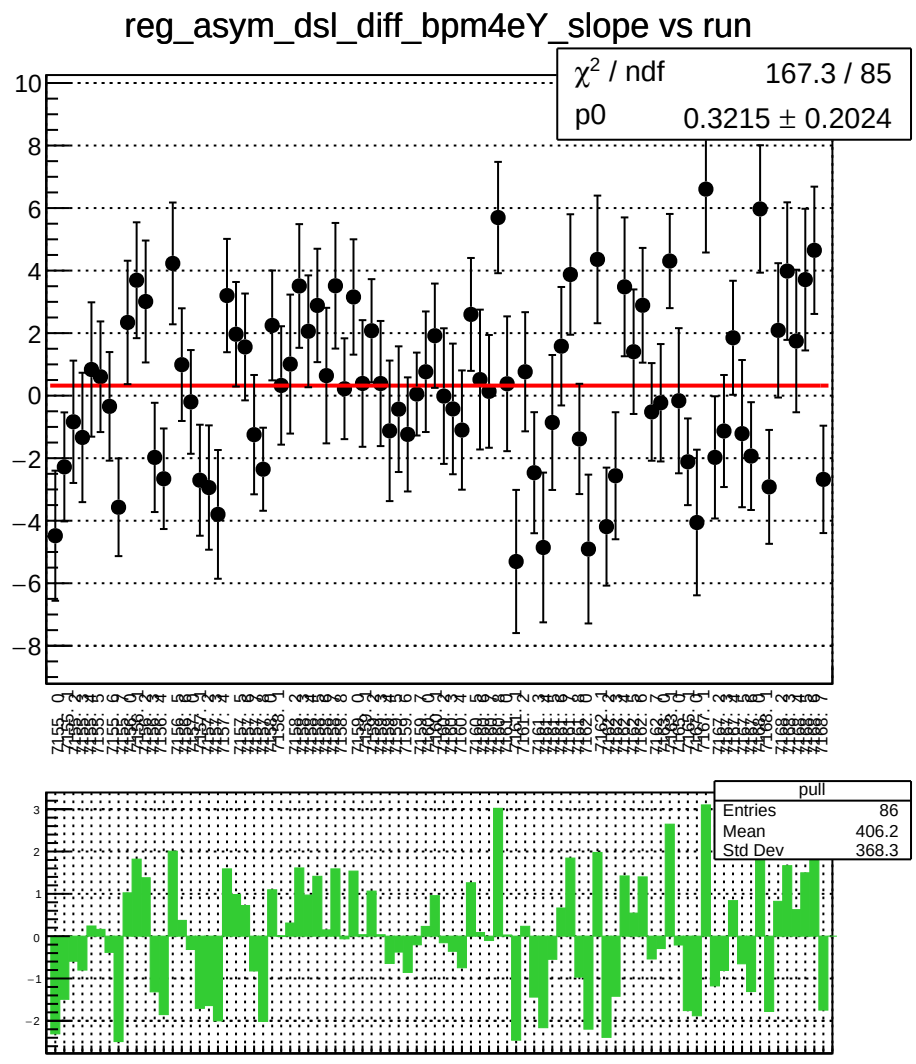

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 607.9 / 85
p0 0.6154 ± 0.2054
pull
Entries 86
Mean 276.5
Std Dev 207.9

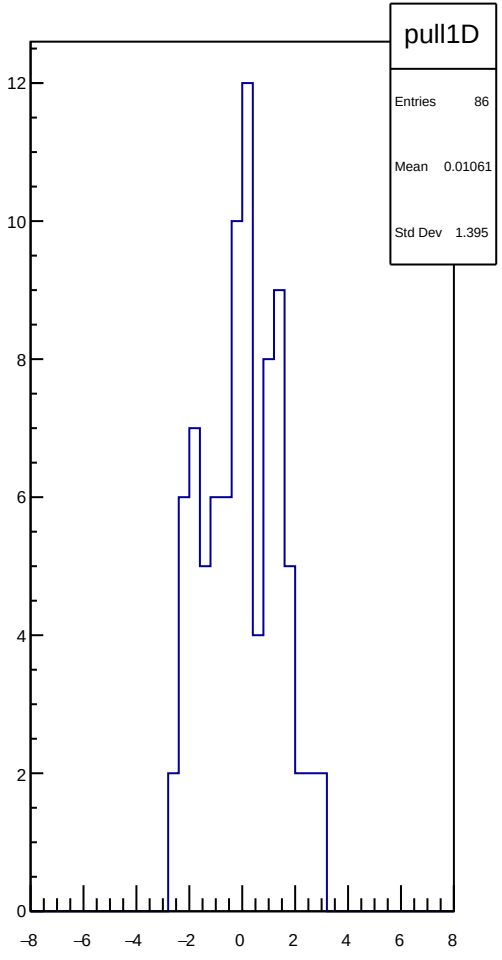

pull1D
Entries 86
Mean 0.02082
Std Dev 2.292

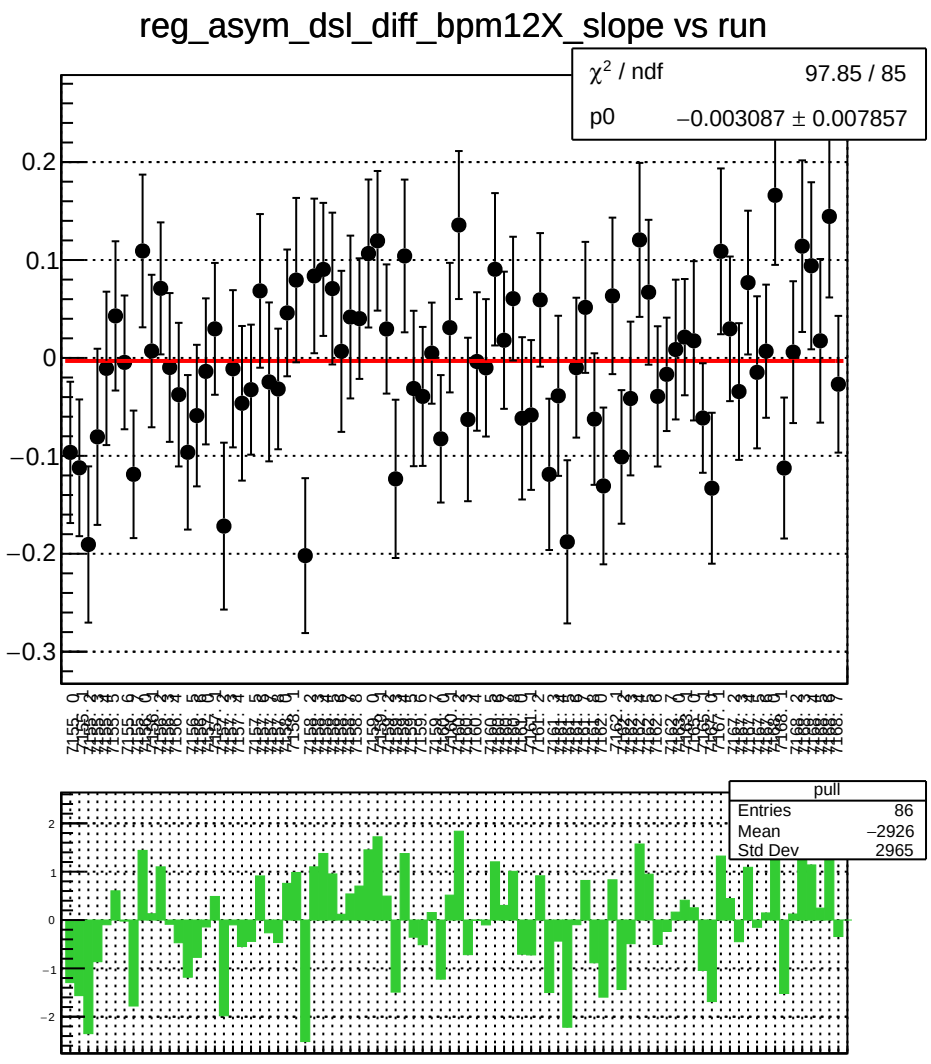

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 181.3 / 85
p0 −0.2965 ± 0.1743
pull
Entries 86
Mean 1344
Std Dev 1307

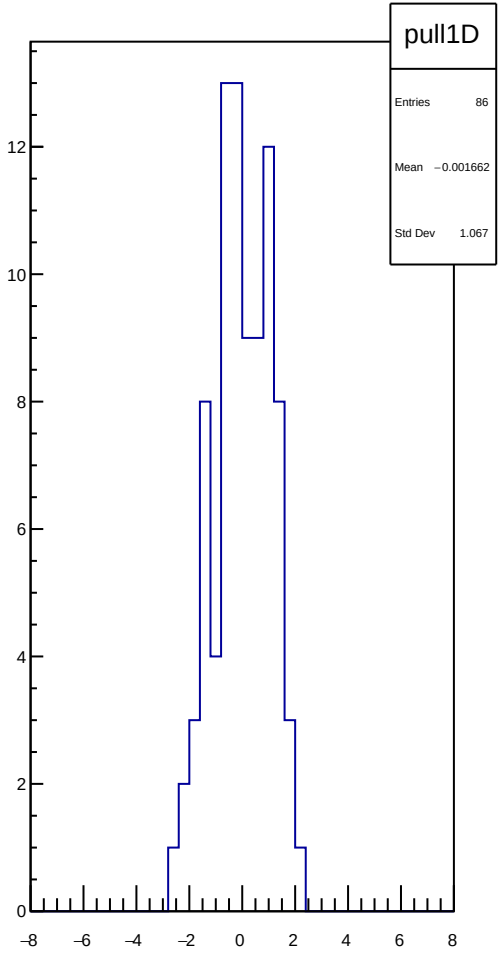

pull1D
Entries 86
Mean −0.003095
Std Dev 1.452

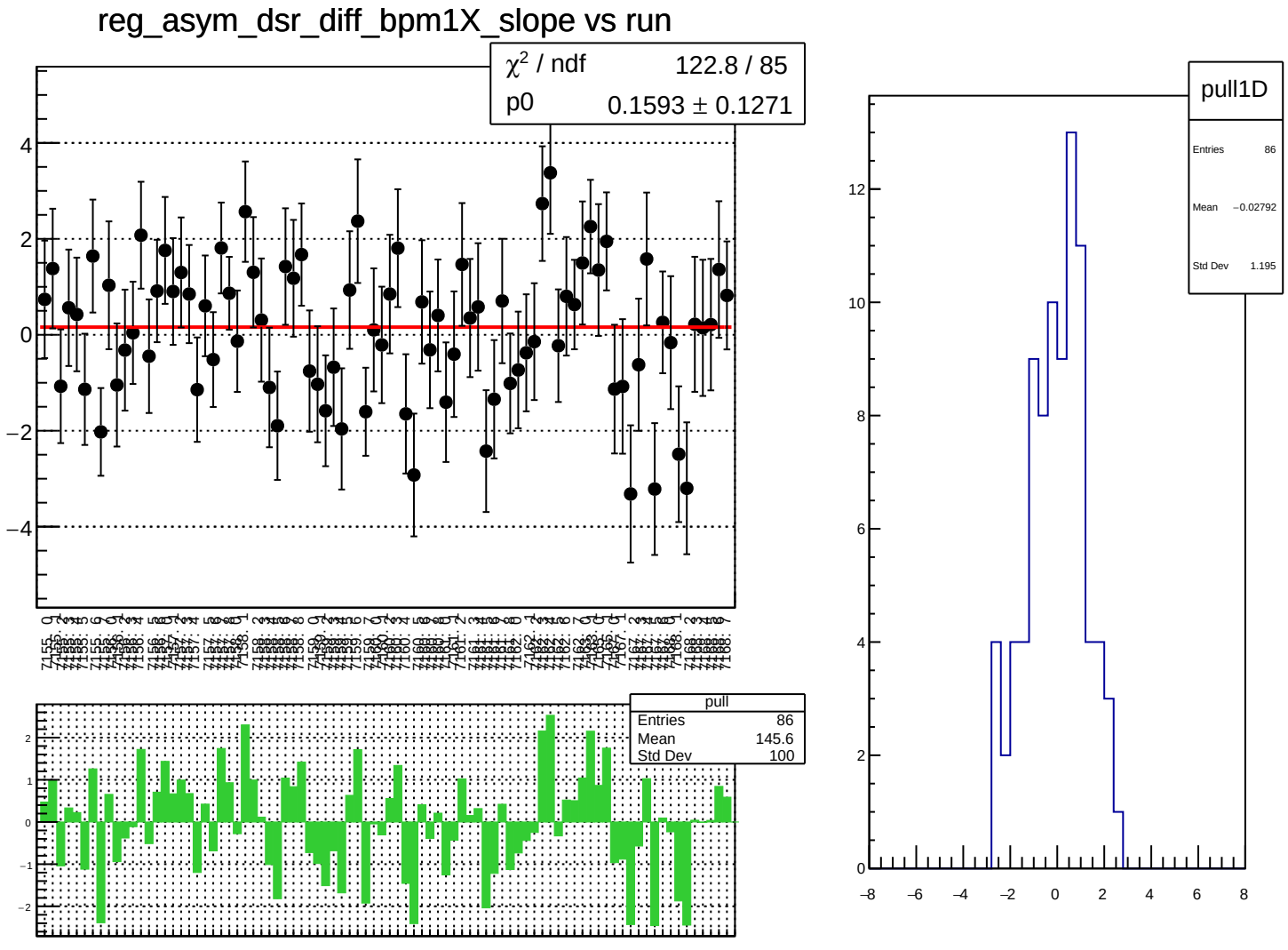

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 501.1 / 85
p0 −0.7023 ± 0.208
pull
Entries 86
Mean 235.8
Std Dev 157.3
pull1D
Entries 86
Mean 0.08783
Std Dev 2.251

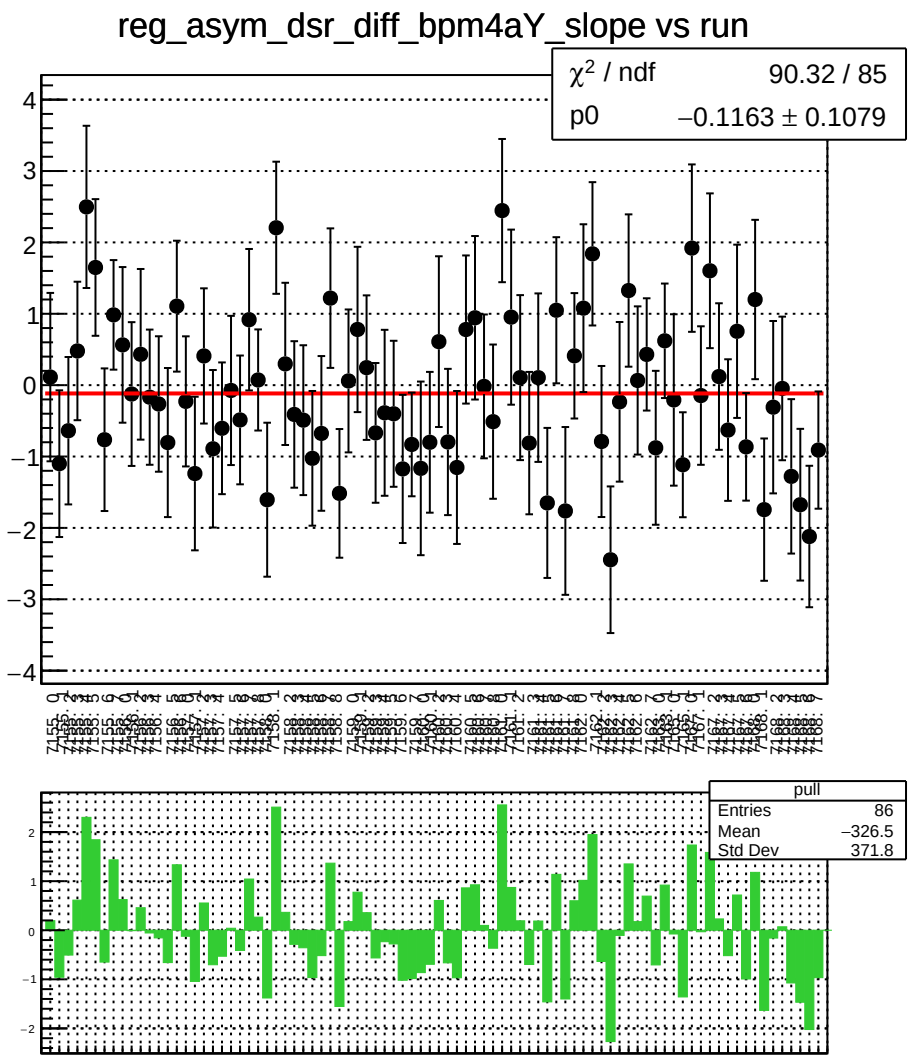

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 167.3 / 85
p0 0.3215 ± 0.2024
pull
Entries 86
Mean 406.2
Std Dev 368.3

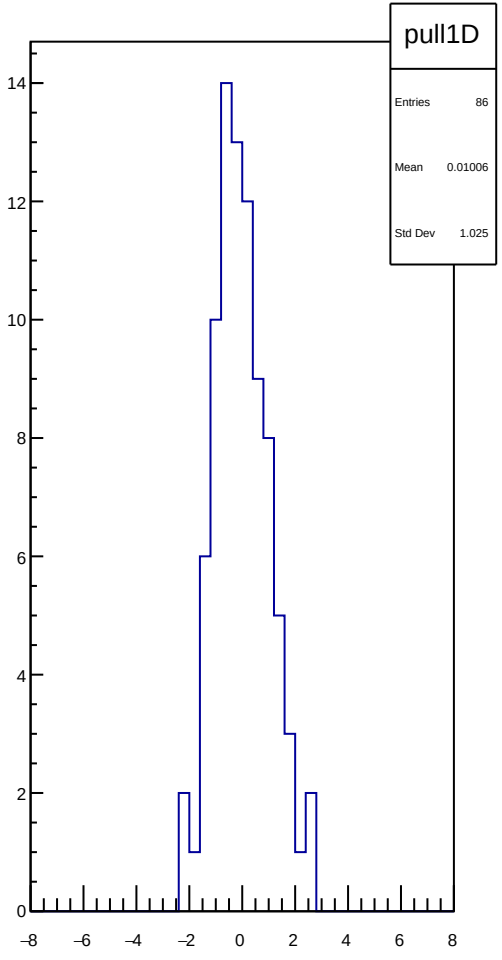

pull1D
Entries 86
Mean 0.01061
Std Dev 1.395

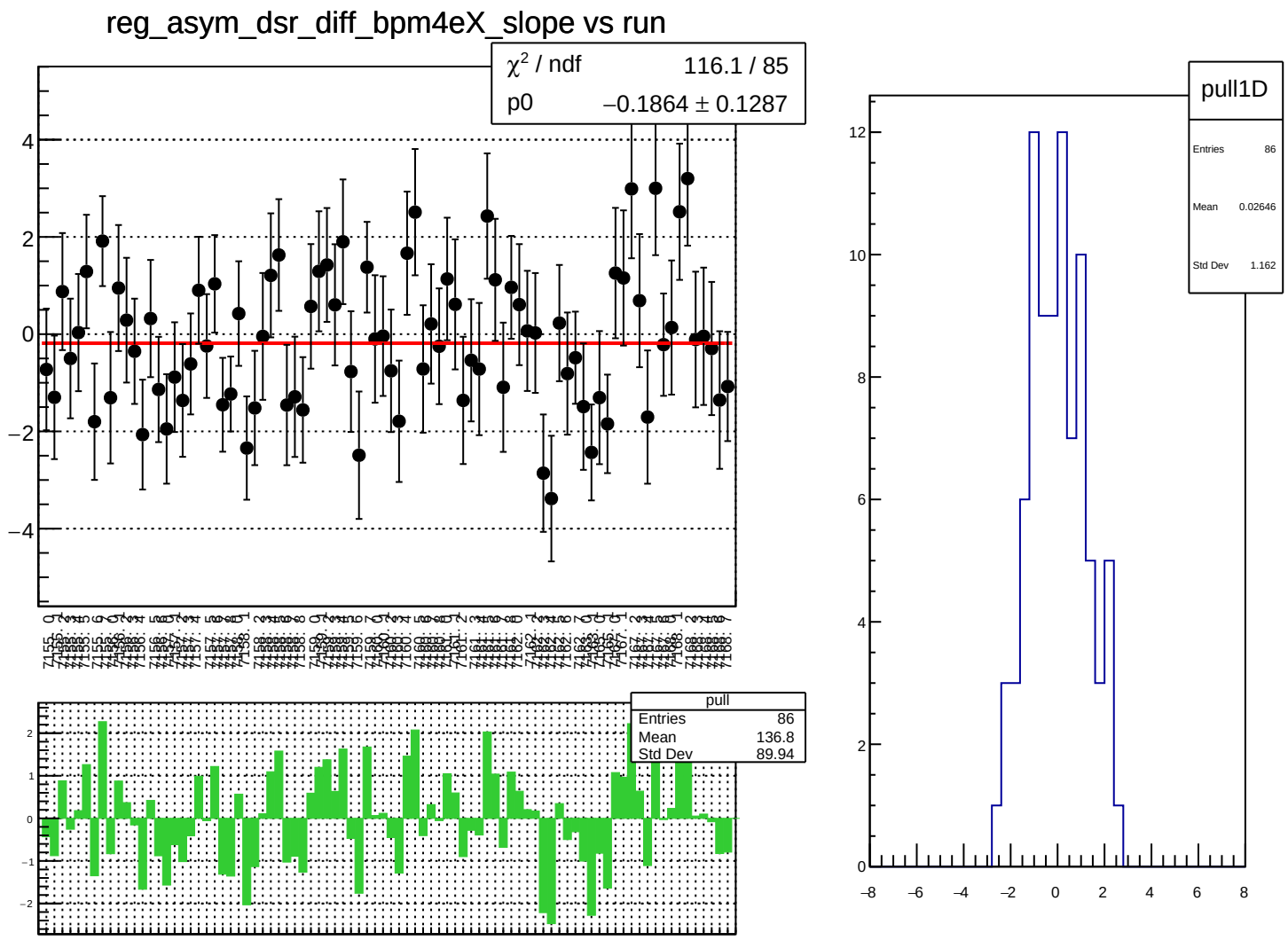

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 97.85 / 85
p0 −0.003087 ± 0.007857
pull
Entries 86
Mean −2926
Std Dev 2965

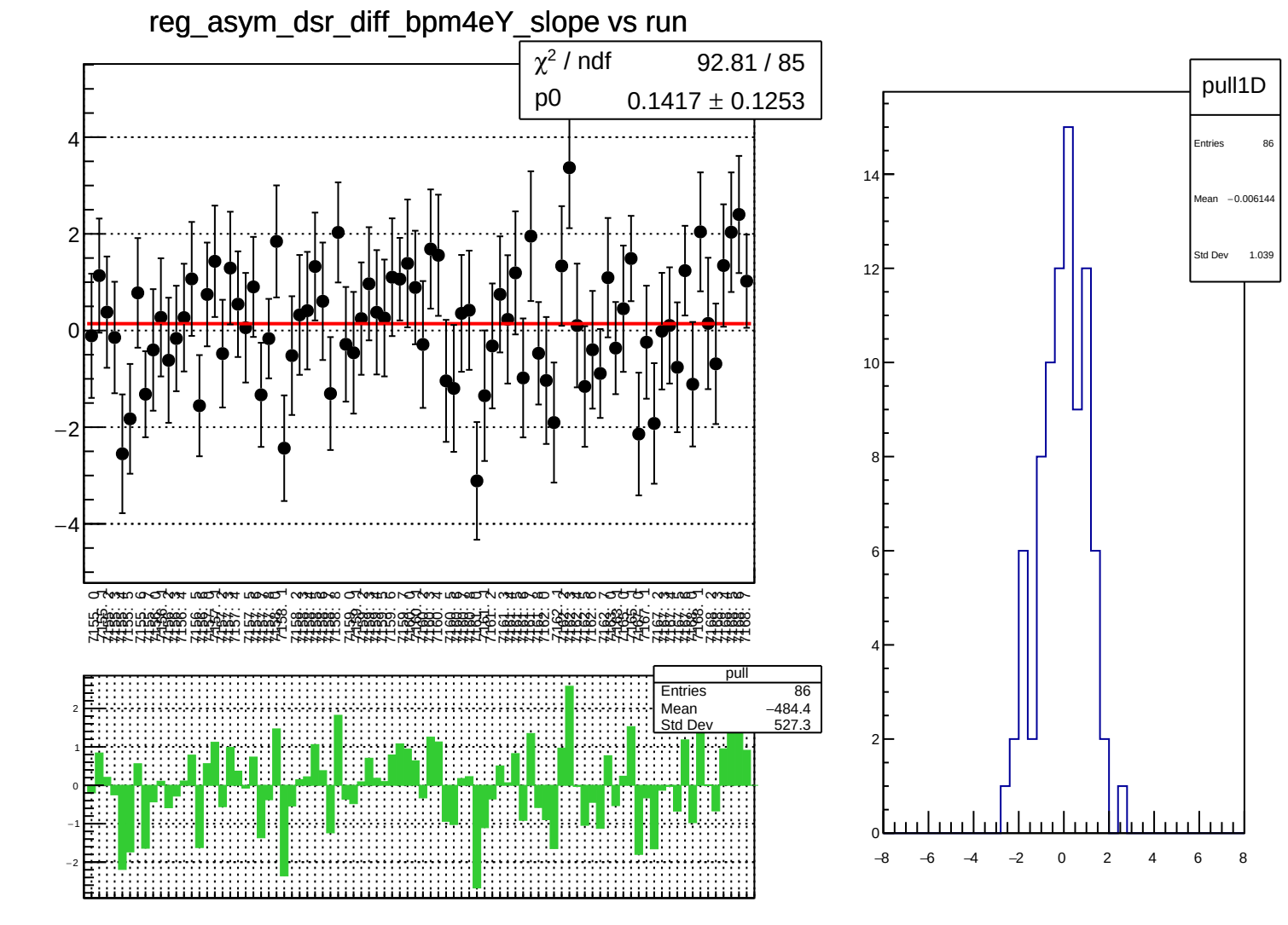

pull1D
Entries 86
Mean −0.001662
Std Dev 1.067

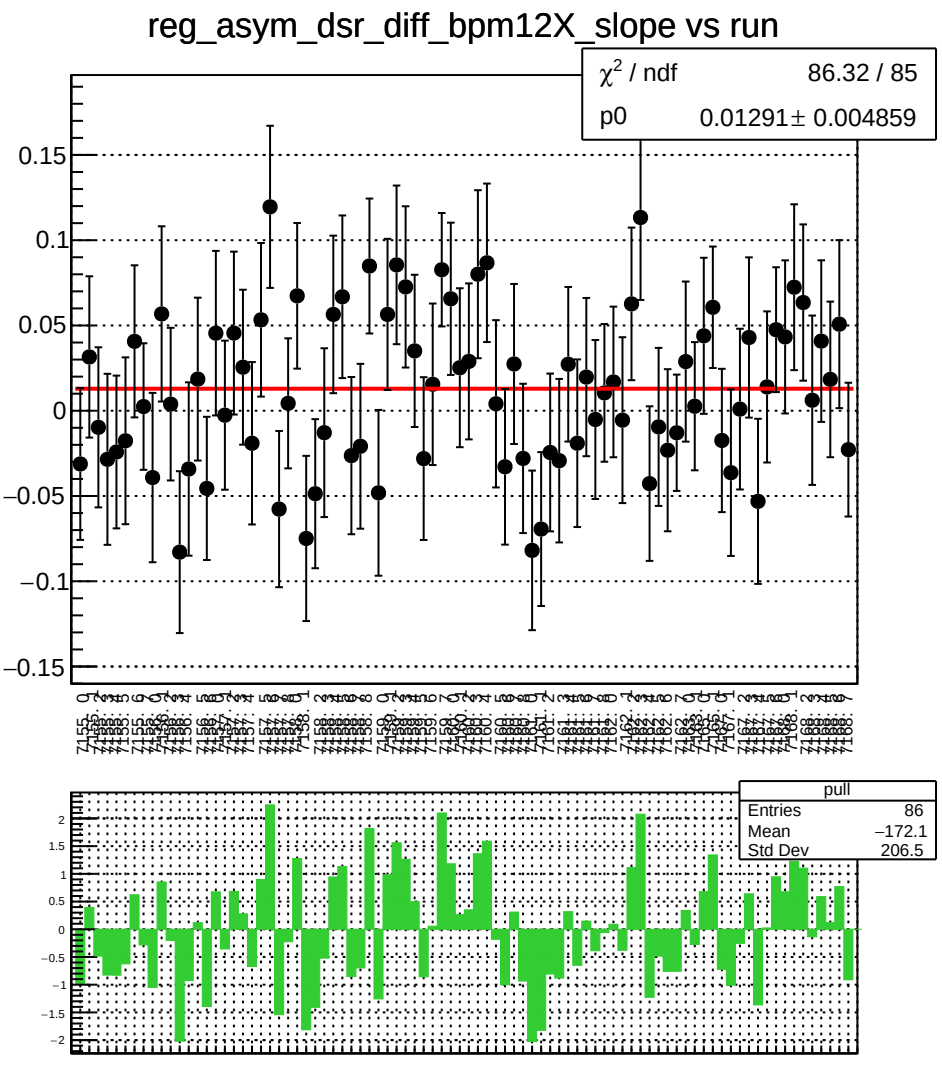

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 122.8 / 85
p0 0.1593 ± 0.1271
pull
Entries 86
Mean 145.6
Std Dev 100
pull1D
Entries 86
Mean −0.02792
Std Dev 1.195

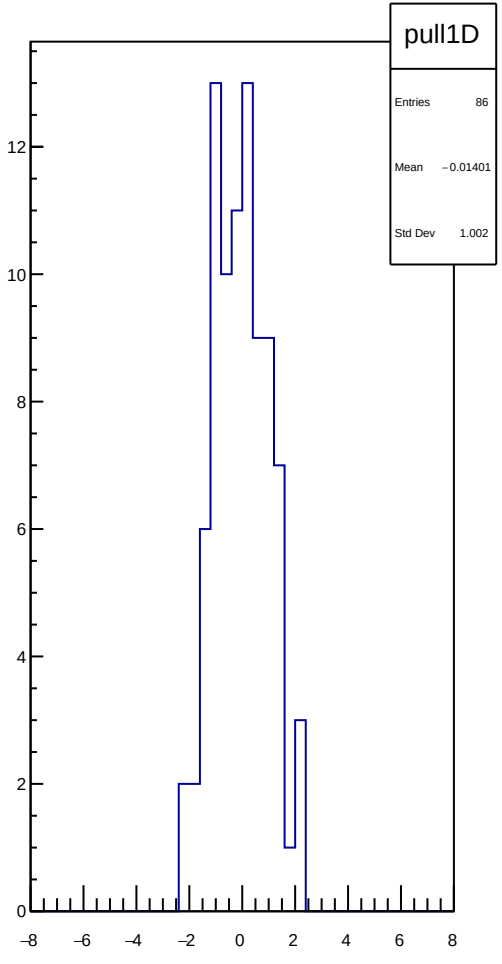

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 90.32 / 85
p0 −0.1163 ± 0.1079
pull
Entries 86
Mean −326.5
Std Dev 371.8

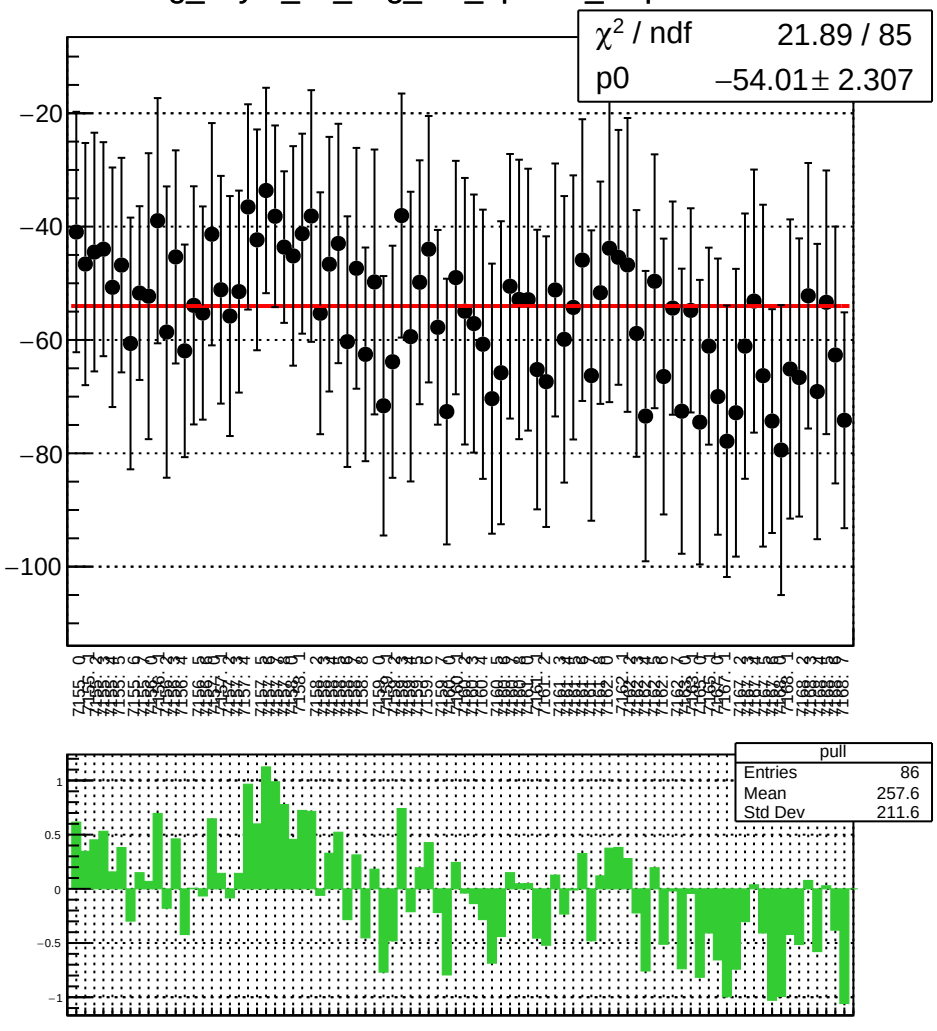

pull1D
Entries 86
Mean 0.01006
Std Dev 1.025

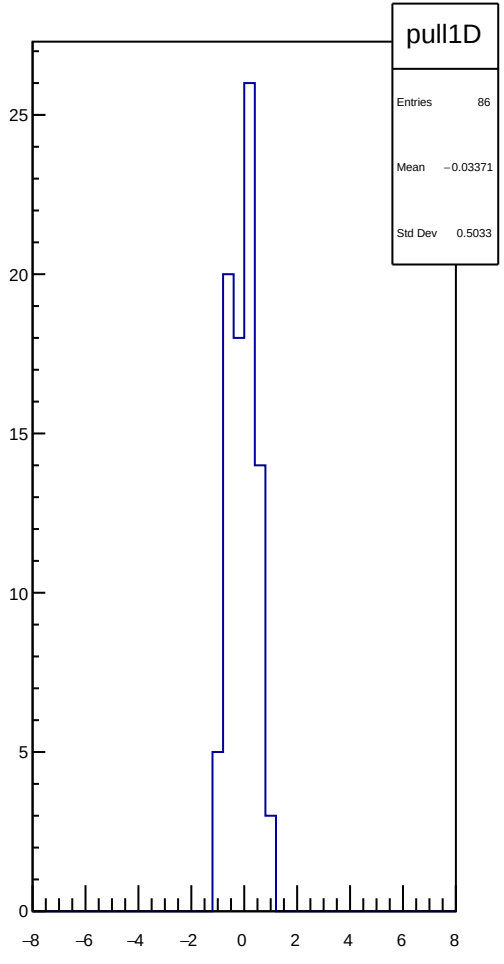

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 116.1 / 85
p0 −0.1864 ± 0.1287
pull
Entries 86
Mean 136.8
Std Dev 89.94
pull1D
Entries 86
Mean 0.02646
Std Dev 1.162

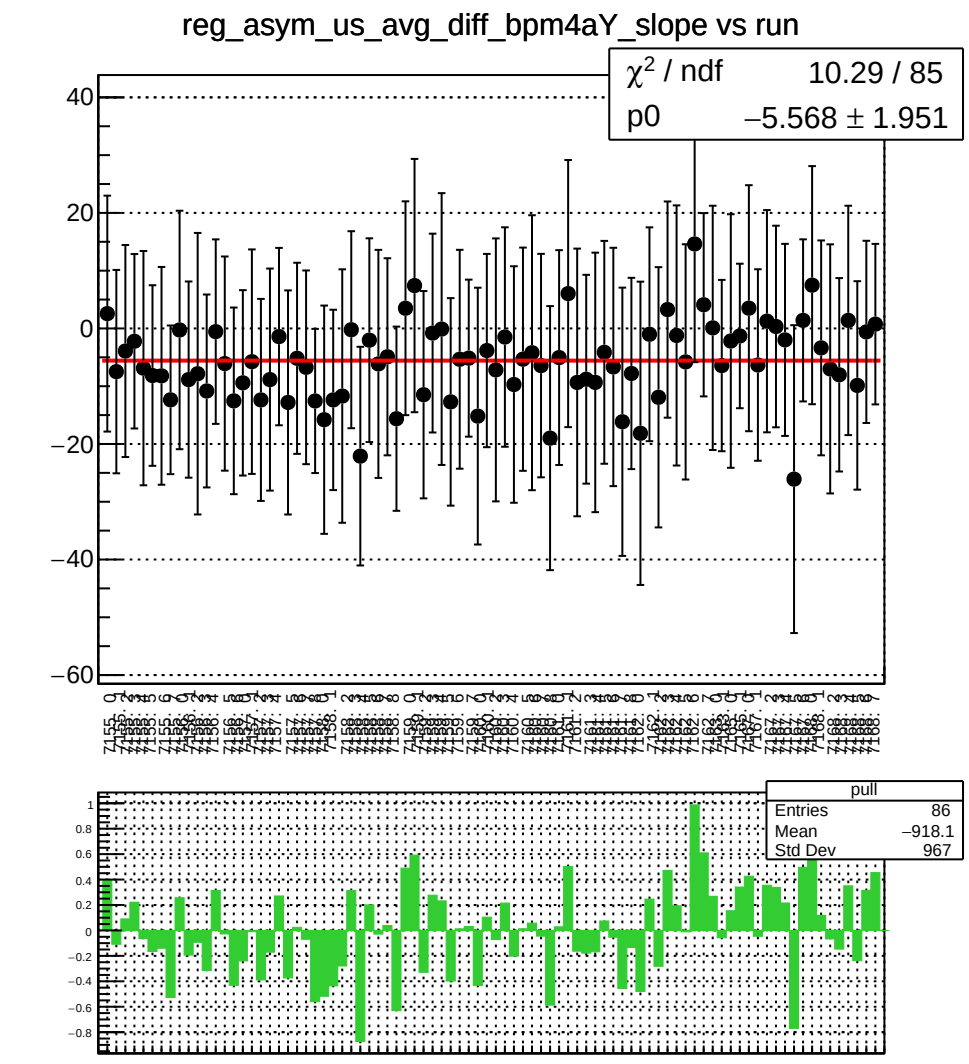

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 92.81 / 85
p0 0.1417 ± 0.1253
pull
Entries 86
Mean −484.4
Std Dev 527.3
pull1D
Entries 86
Mean −0.006144
Std Dev 1.039

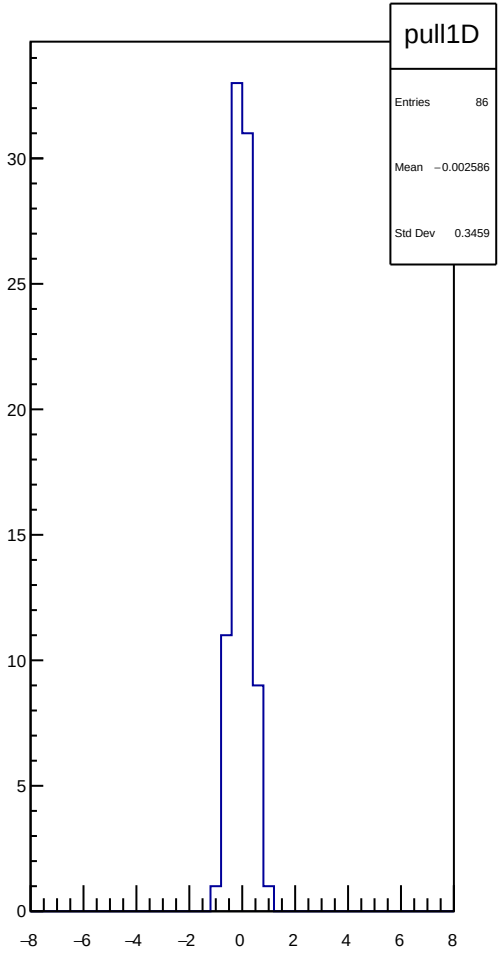

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 86.32 / 85
p0 0.01291 ± 0.004859
pull
Entries 86
Mean −172.1
Std Dev 206.5

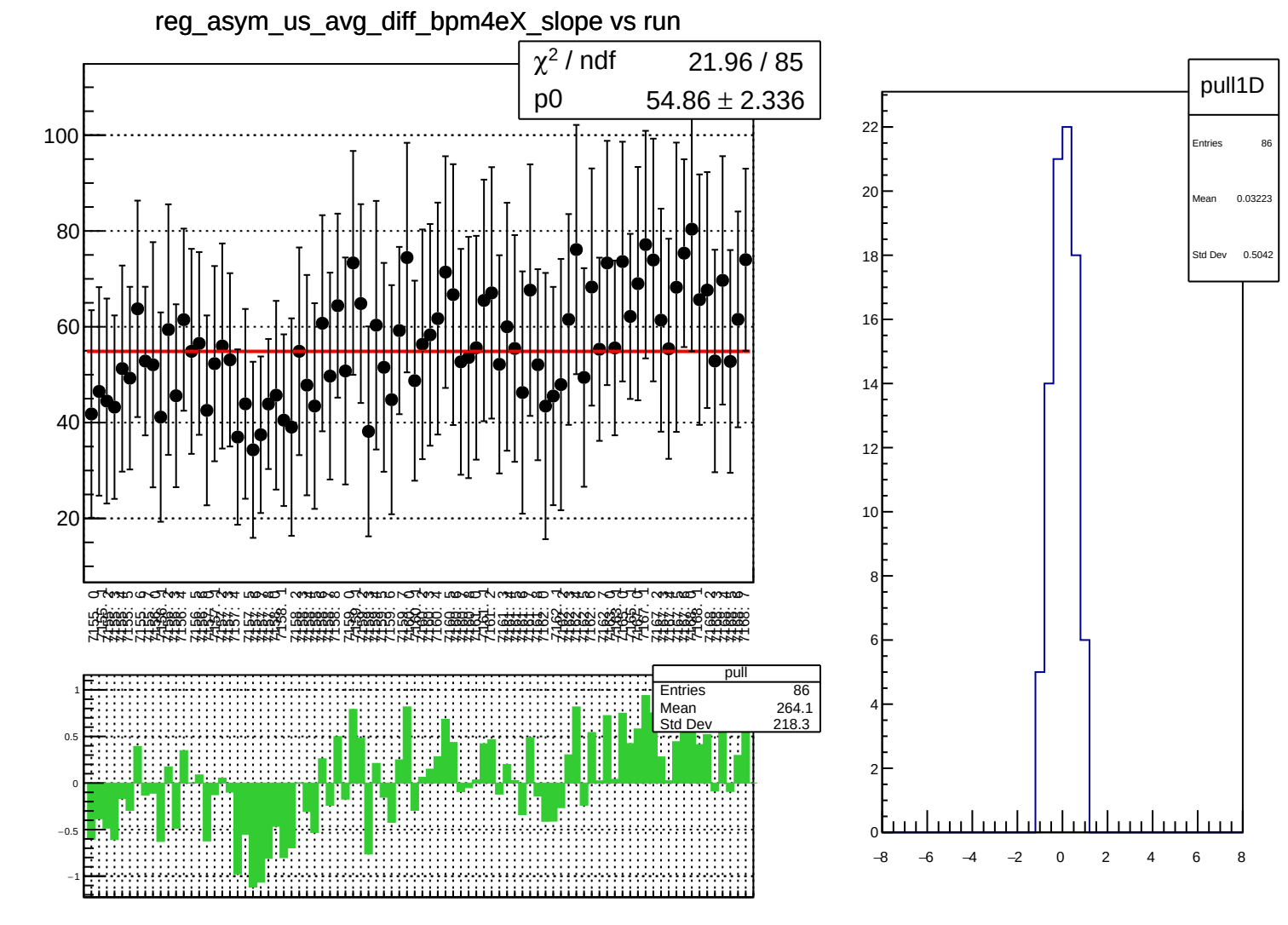

pull1D
Entries 86
Mean −0.01401
Std Dev 1.002

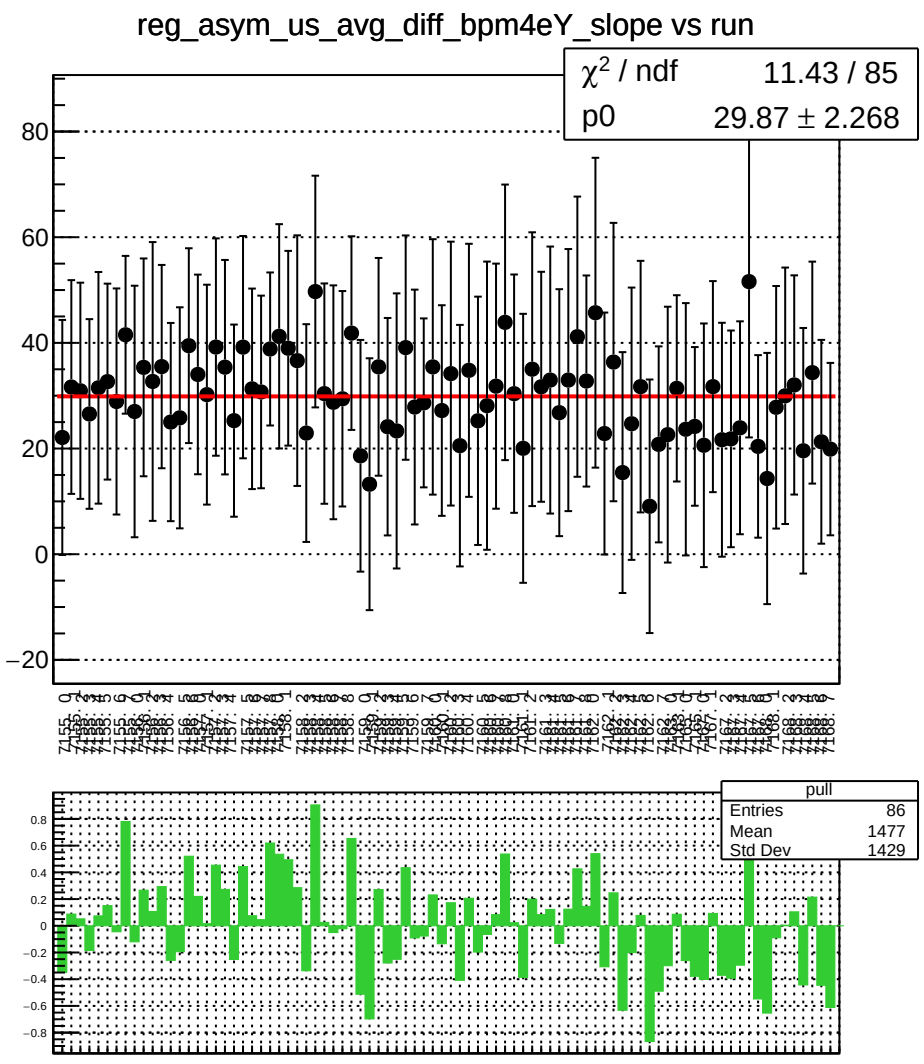

reg_asym_us_avg_diff_bpm1X_slope vs run
χ^2 / ndf 21.89 / 85
p0 −54.01± 2.307
−20
−40
−60
−80
−100
pull
Entries 86
Mean 257.6
Std Dev 211.6
1
0.5
0
−0.5
−1

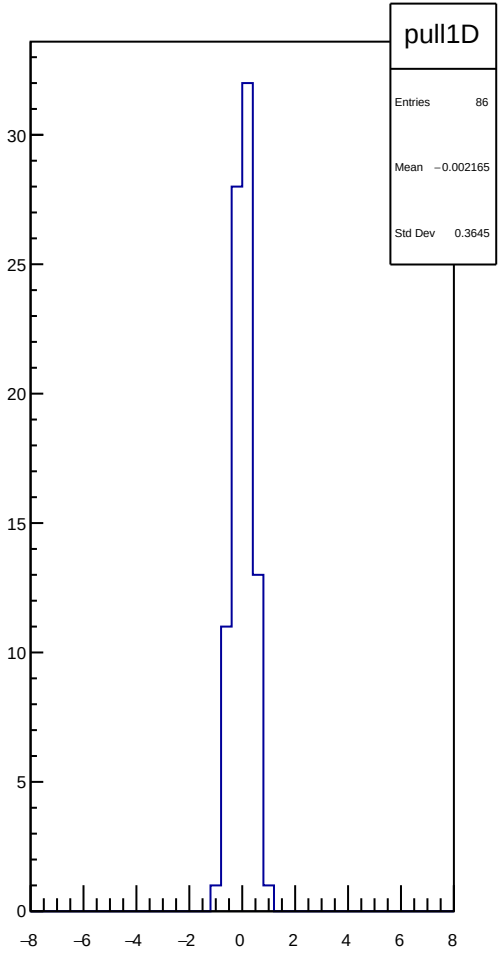

pull1D
Entries 86
Mean −0.03371
Std Dev 0.5033
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

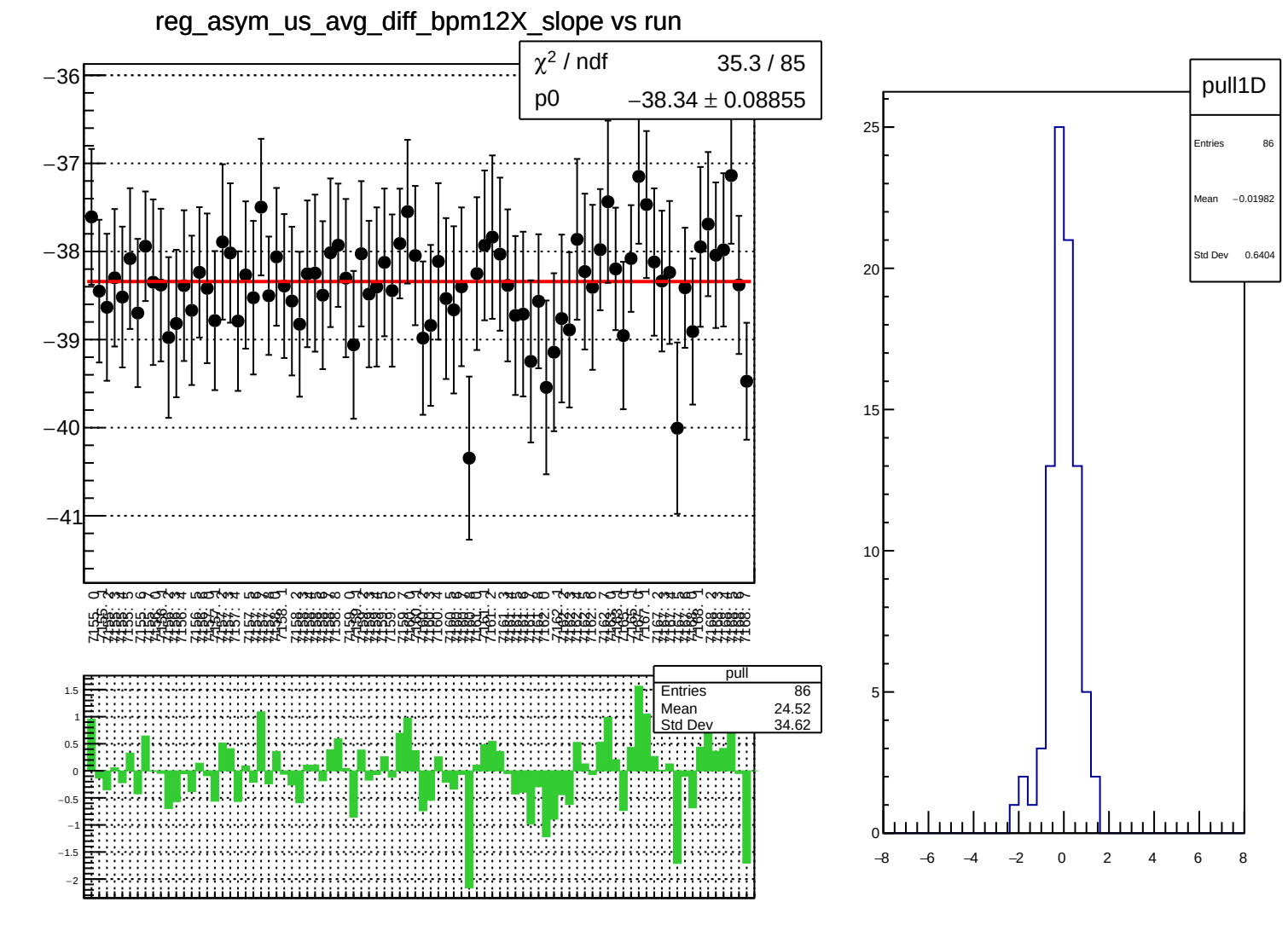

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.29 / 85
p0 −5.568 ± 1.951
pull
Entries 86
Mean −918.1
Std Dev 967

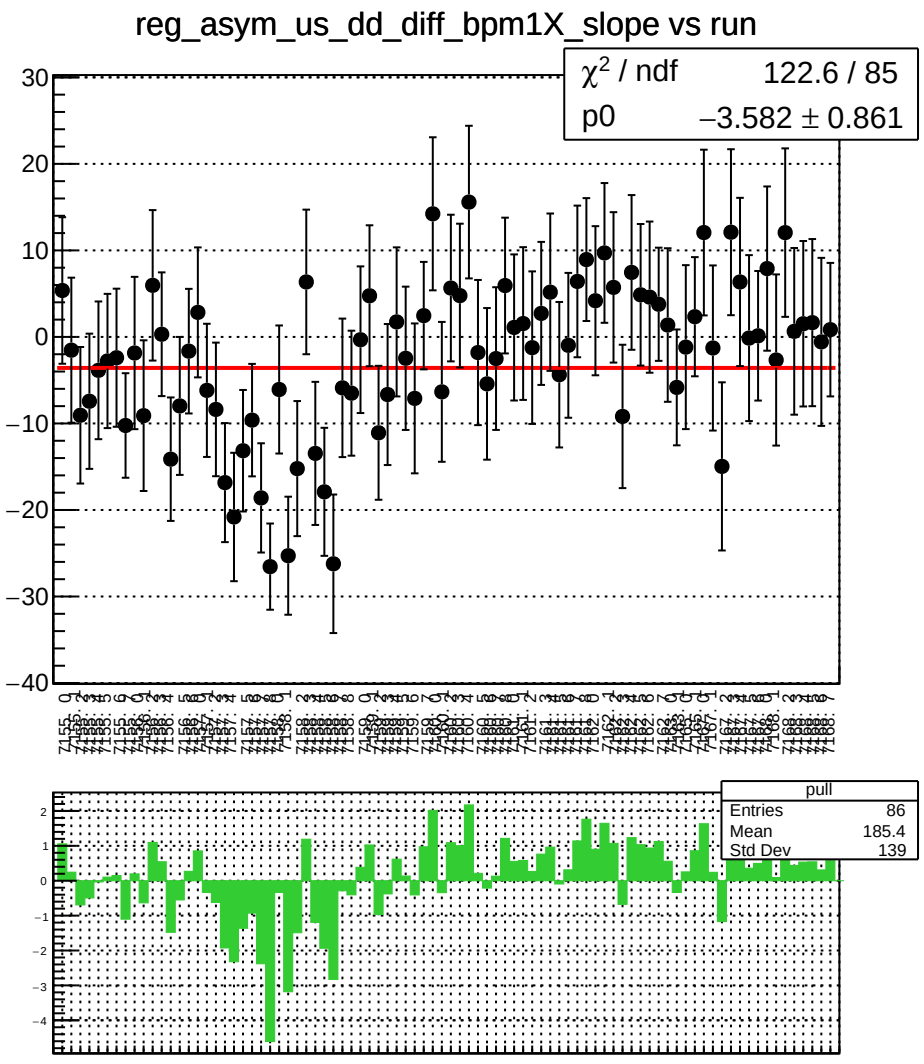

pull1D
Entries 86
Mean −0.002586
Std Dev 0.3459

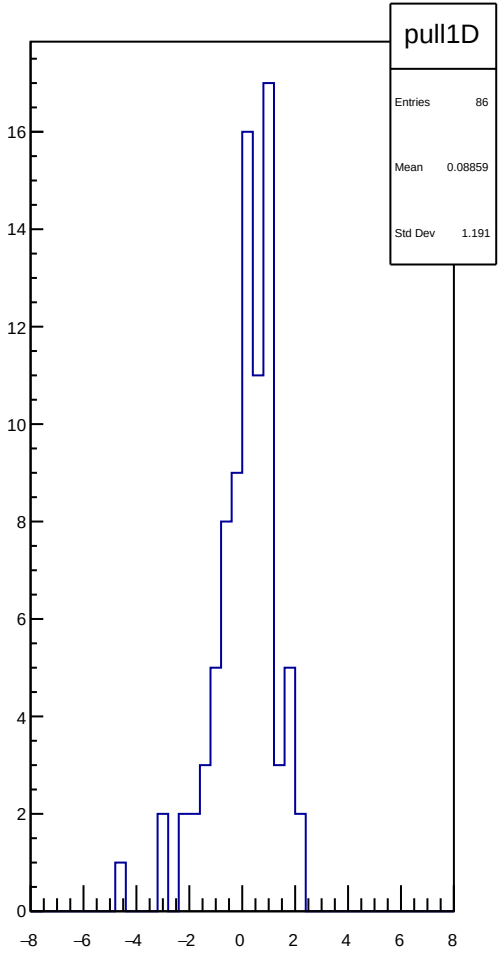

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 21.96 / 85
p0 54.86 ± 2.336
pull
Entries 86
Mean 264.1
Std Dev 218.3
pull1D
Entries 86
Mean 0.03223
Std Dev 0.5042

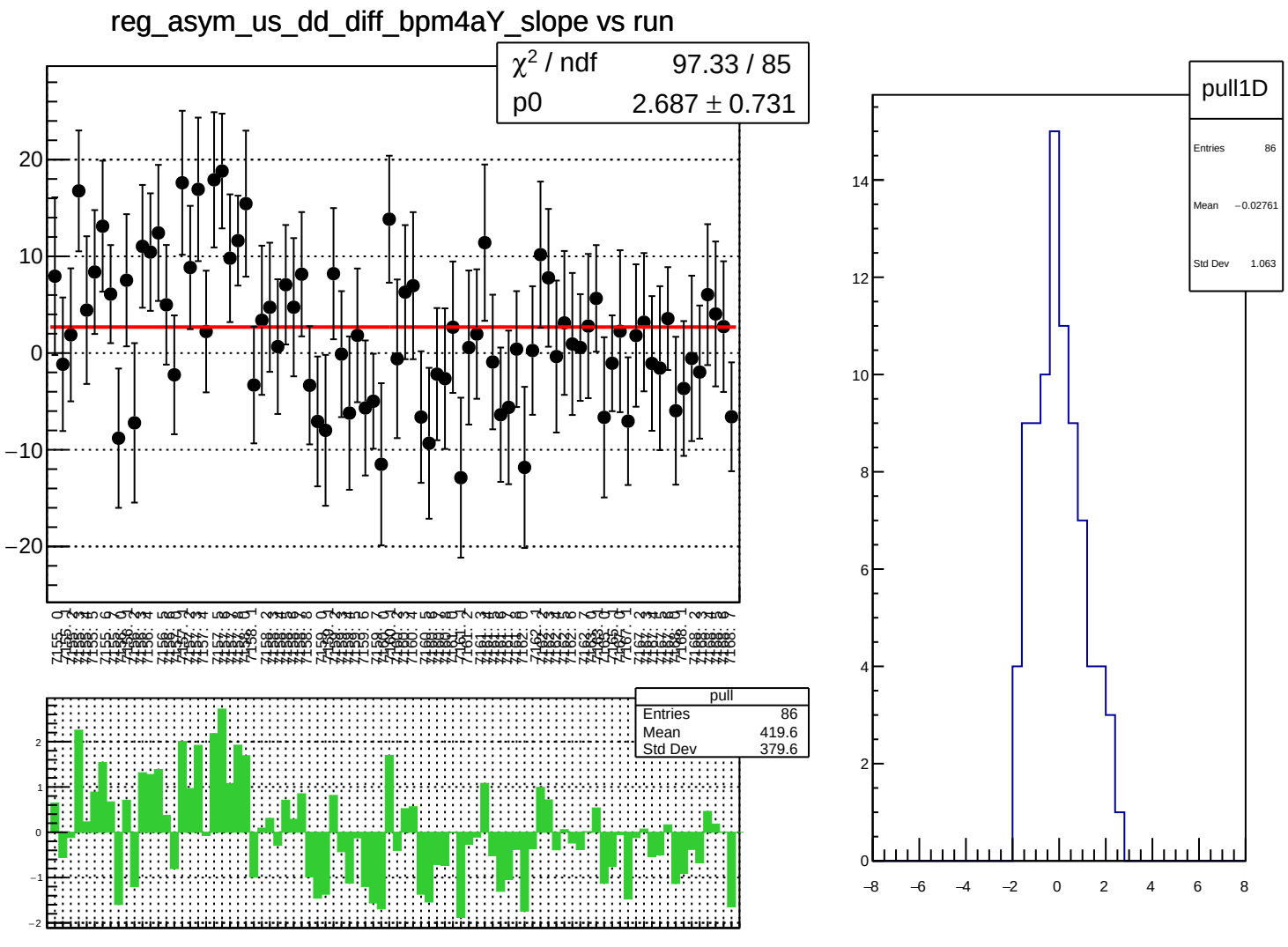

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 11.43 / 85
p0 29.87 ± 2.268
pull
Entries 86
Mean 1477
Std Dev 1429

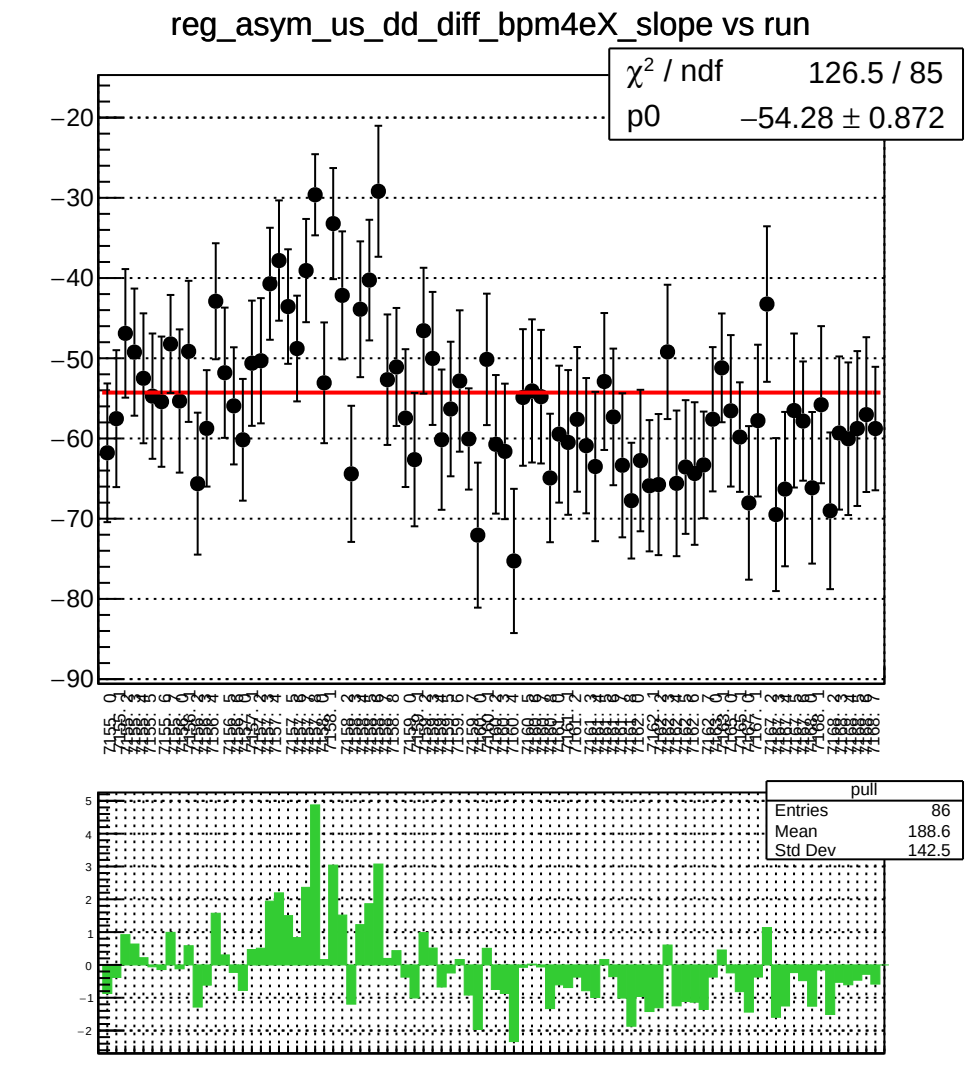

pull1D
Entries 86
Mean −0.002165
Std Dev 0.3645

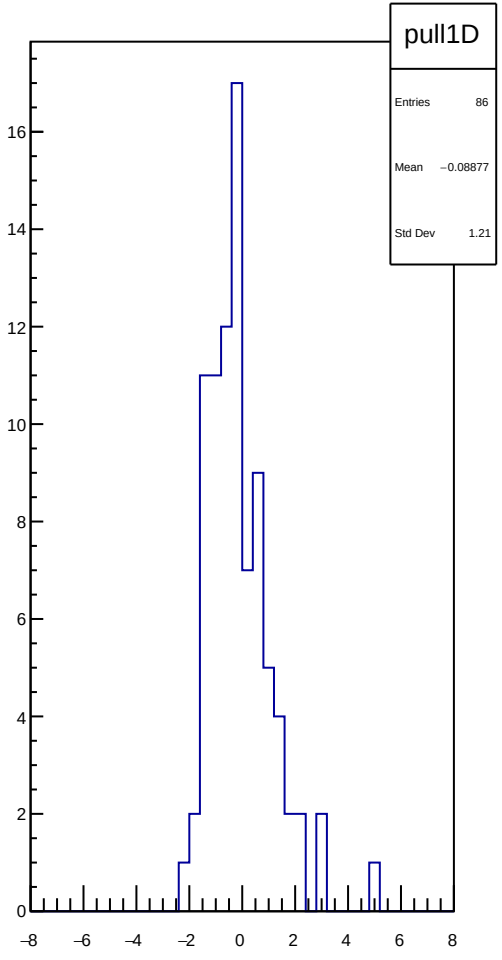

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 35.3 / 85
p0 −38.34 ± 0.08855
pull
Entries 86
Mean 24.52
Std Dev 34.62
pull1D
Entries 86
Mean −0.01982
Std Dev 0.6404

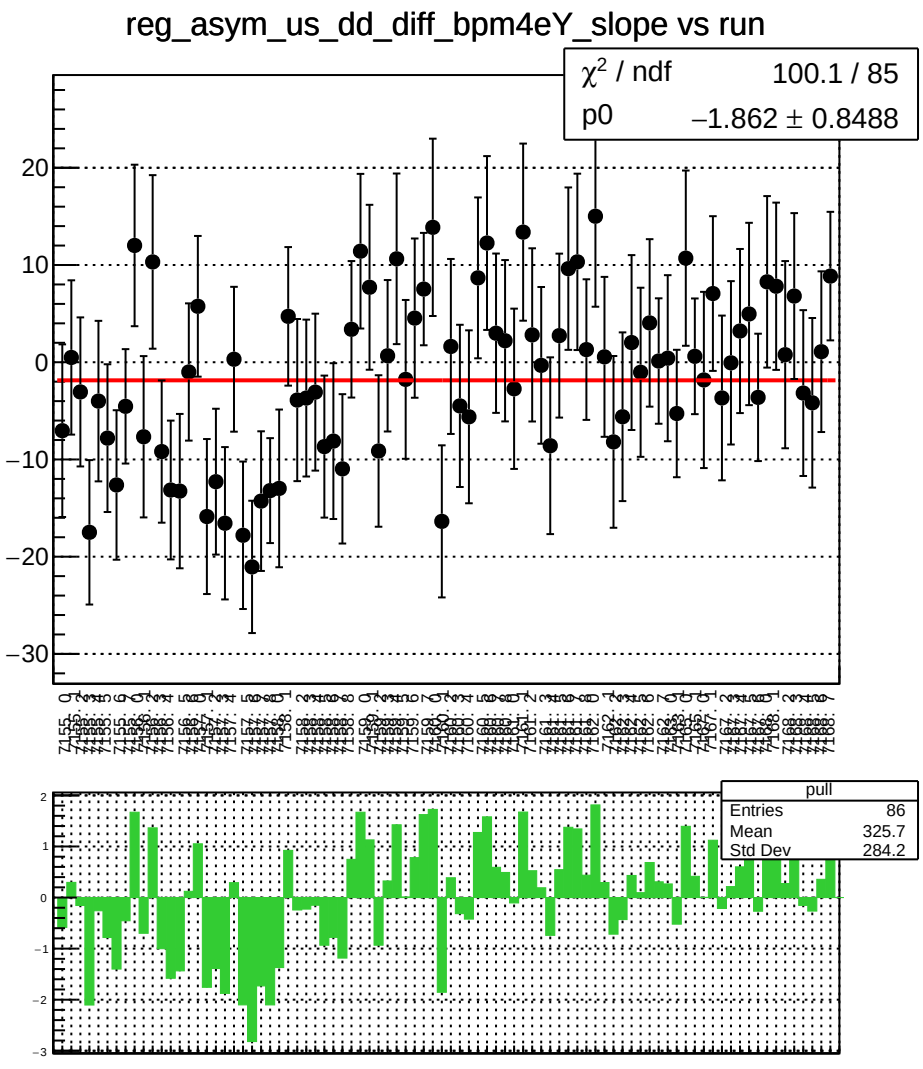

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 122.6 / 85
p0 −3.582 ± 0.861
pull
Entries 86
Mean 185.4
Std Dev 139

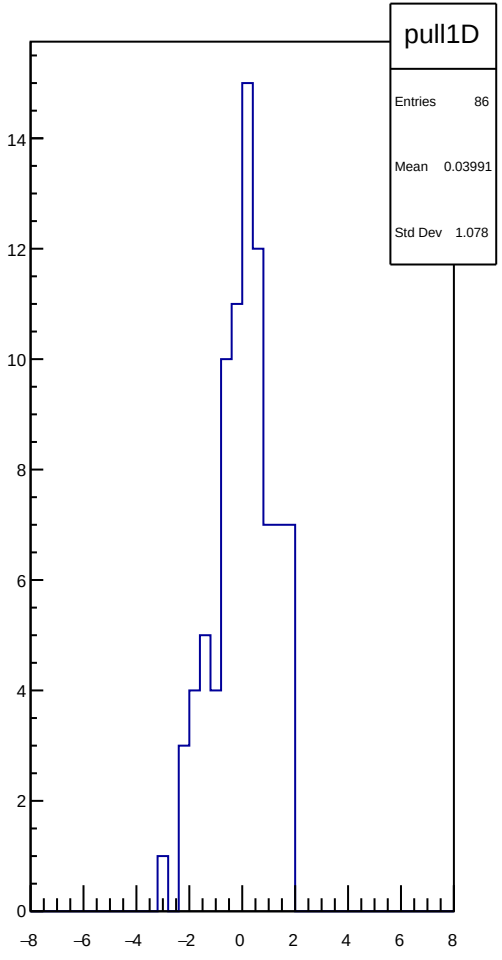

pull1D
Entries 86
Mean 0.08859
Std Dev 1.191

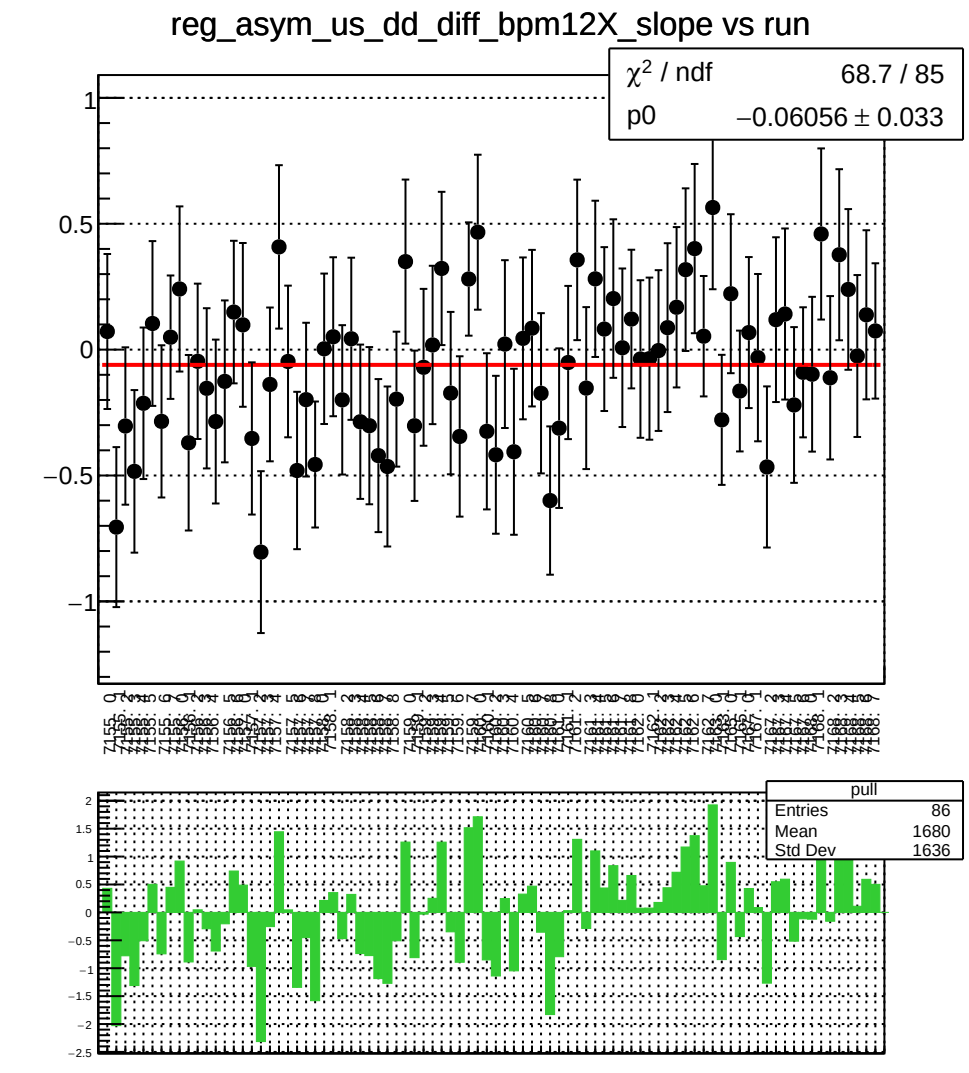

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 97.33 / 85
p0 2.687 ± 0.731
pull
Entries 86
Mean 419.6
Std Dev 379.6
pull1D
Entries 86
Mean −0.02761
Std Dev 1.063

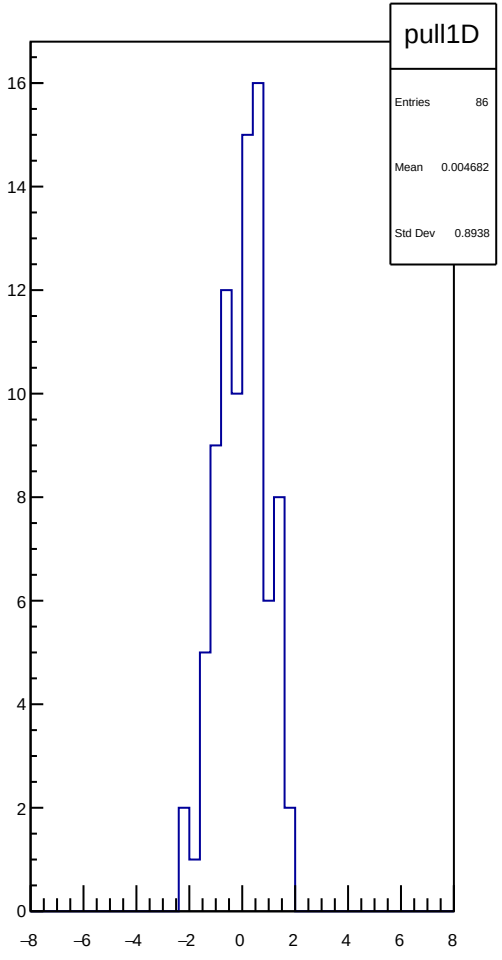

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 126.5 / 85
p0 −54.28 ± 0.872
pull
Entries 86
Mean 188.6
Std Dev 142.5

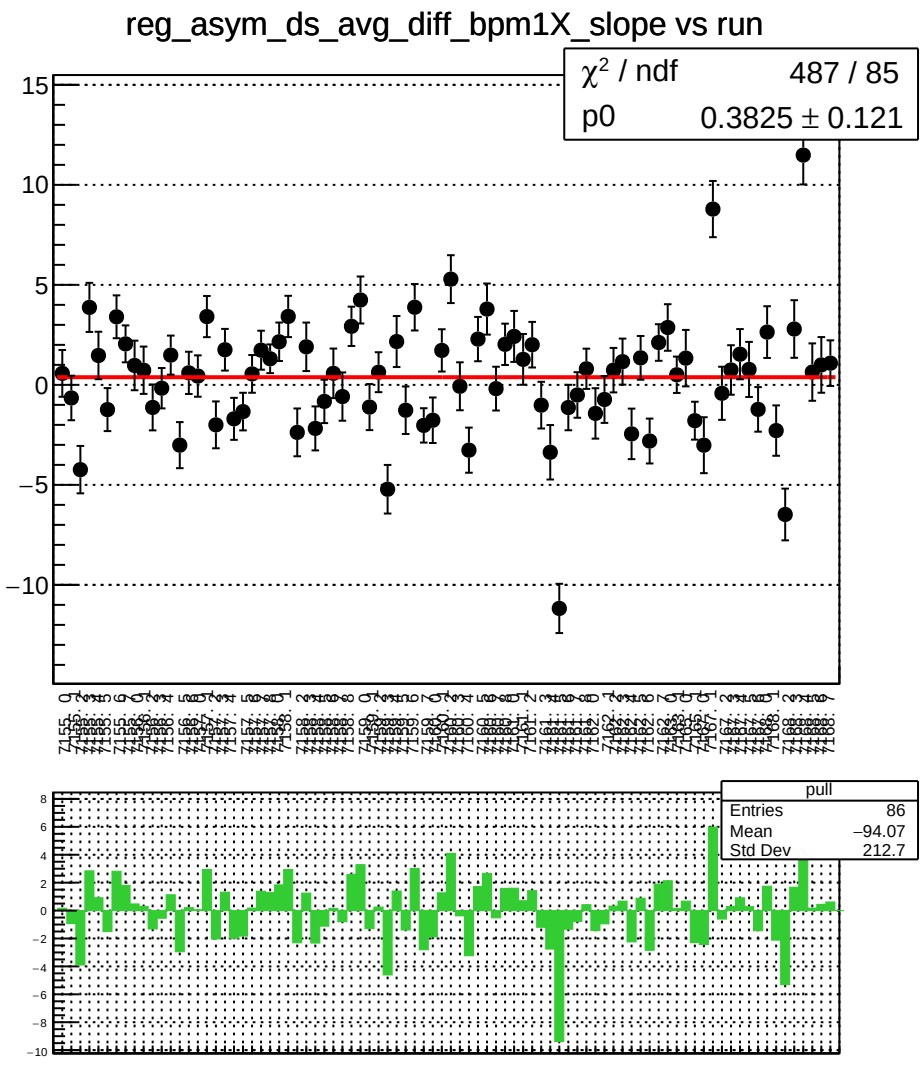

pull1D
Entries 86
Mean −0.08877
Std Dev 1.21

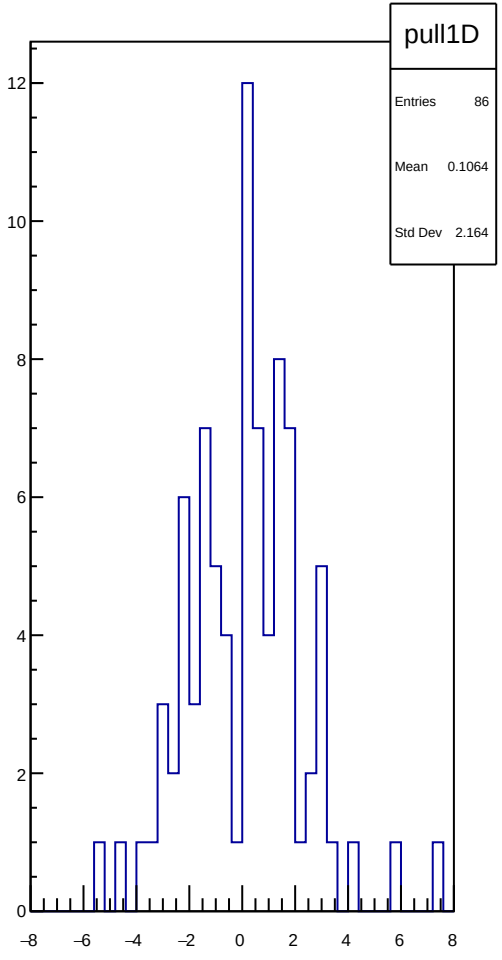

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 100.1 / 85
p0 −1.862 ± 0.8488
pull
Entries 86
Mean 325.7
Std Dev 284.2

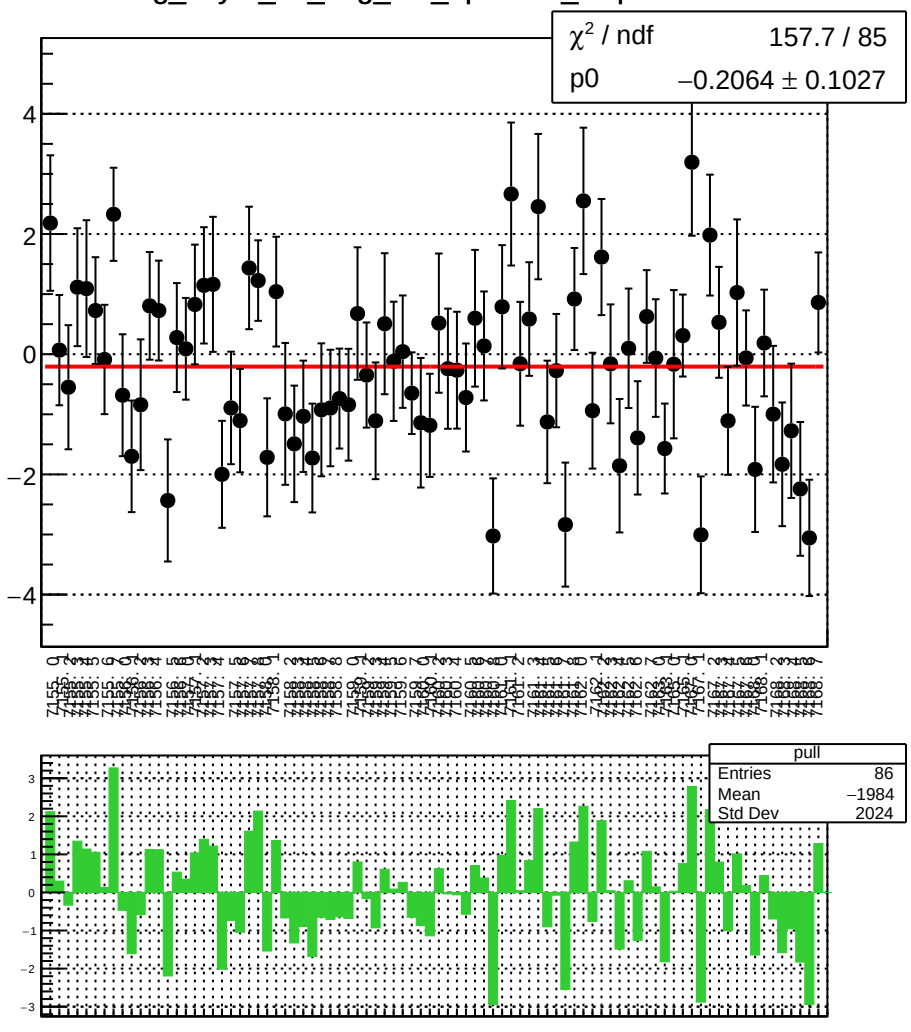

pull1D
Entries 86
Mean 0.03991
Std Dev 1.078

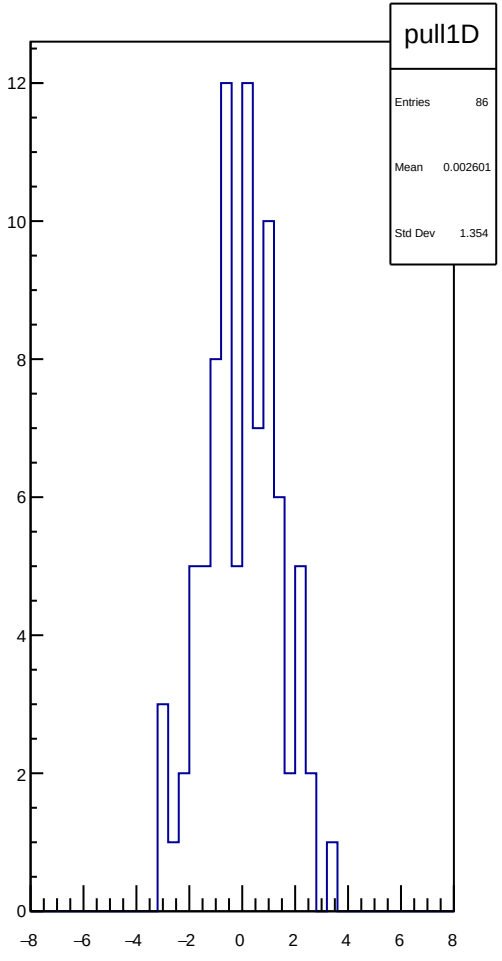

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 68.7 / 85
p0 −0.06056 ± 0.033
pull
Entries 86
Mean 1680
Std Dev 1636

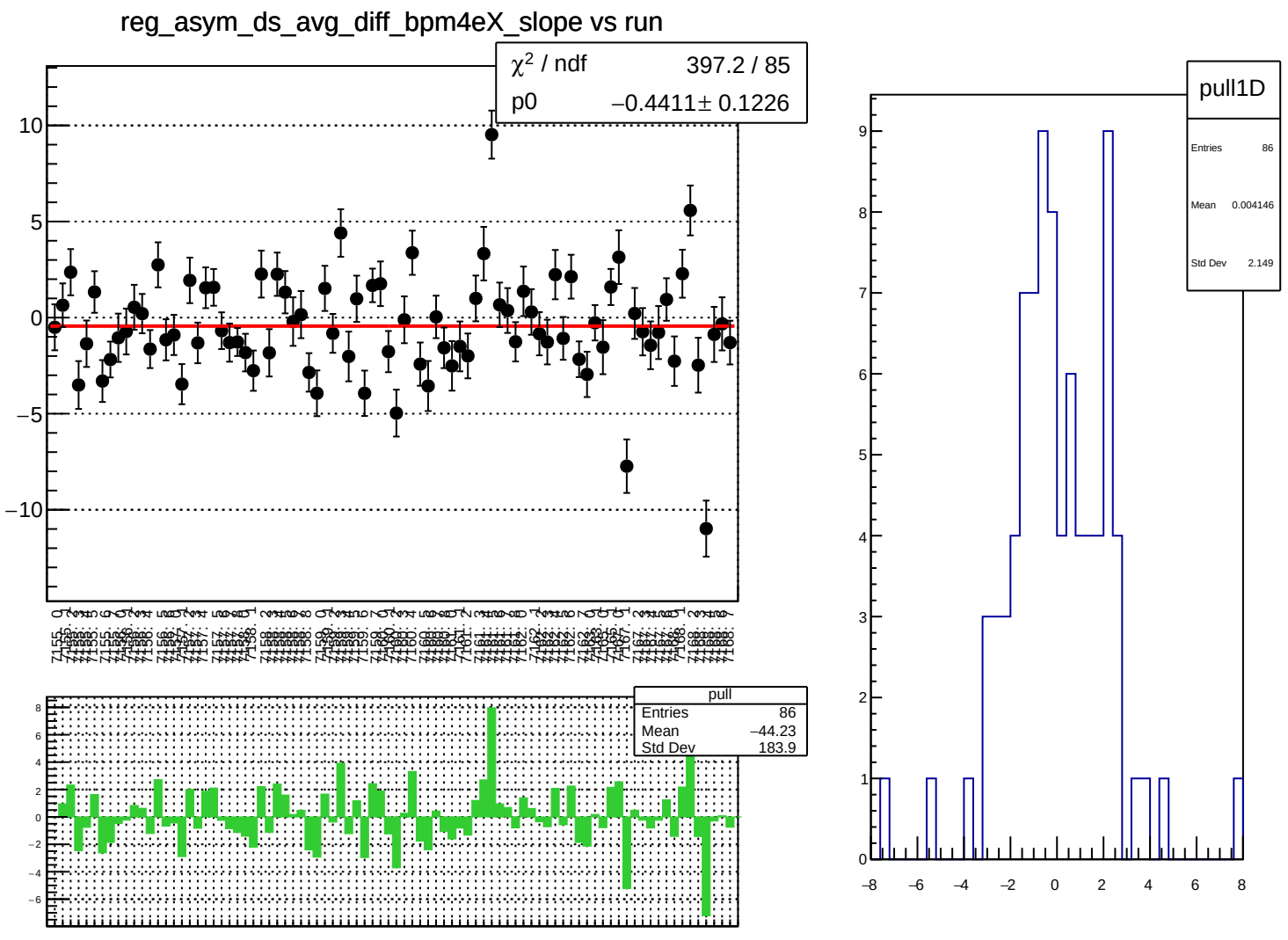

pull1D
Entries 86
Mean 0.004682
Std Dev 0.8938

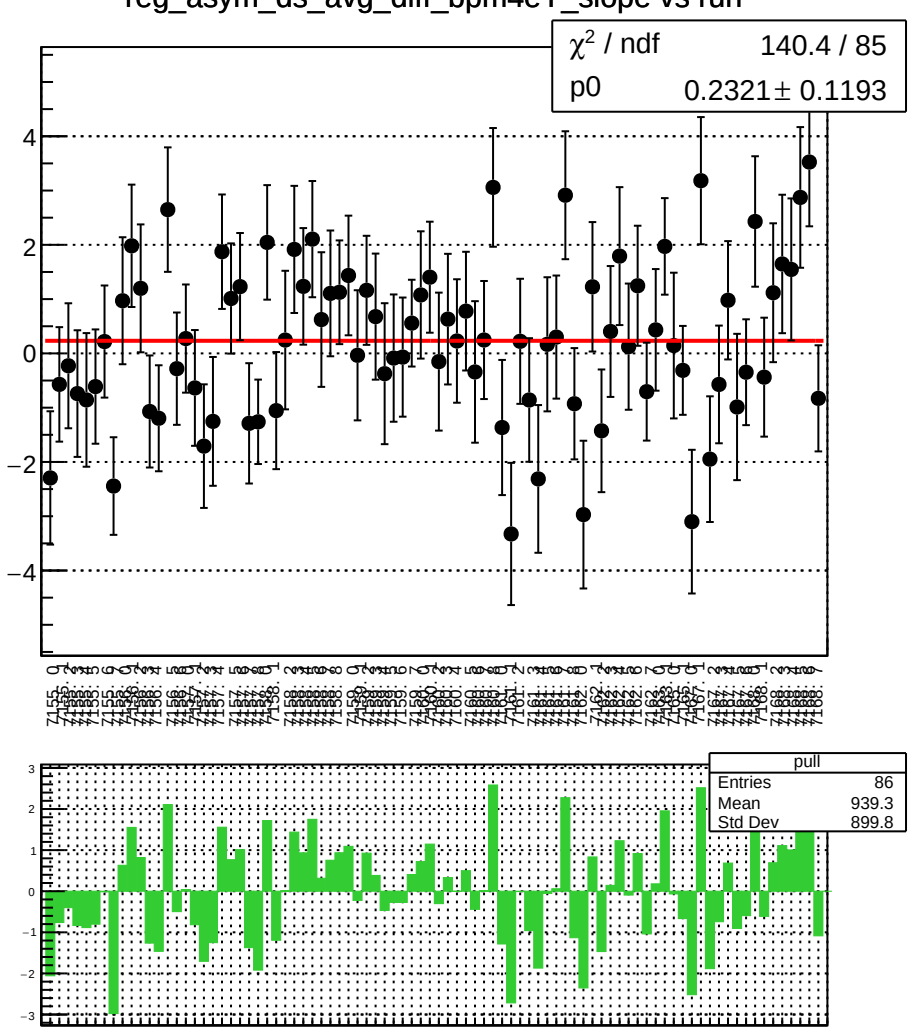

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 487 / 85
p0 0.3825 ± 0.121
pull
Entries 86
Mean −94.07
Std Dev 212.7

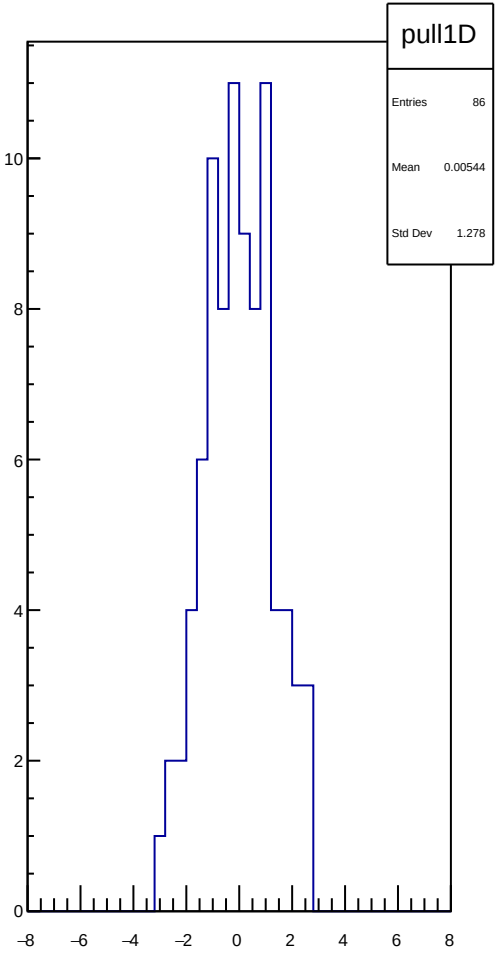

pull1D
Entries 86
Mean 0.1064
Std Dev 2.164

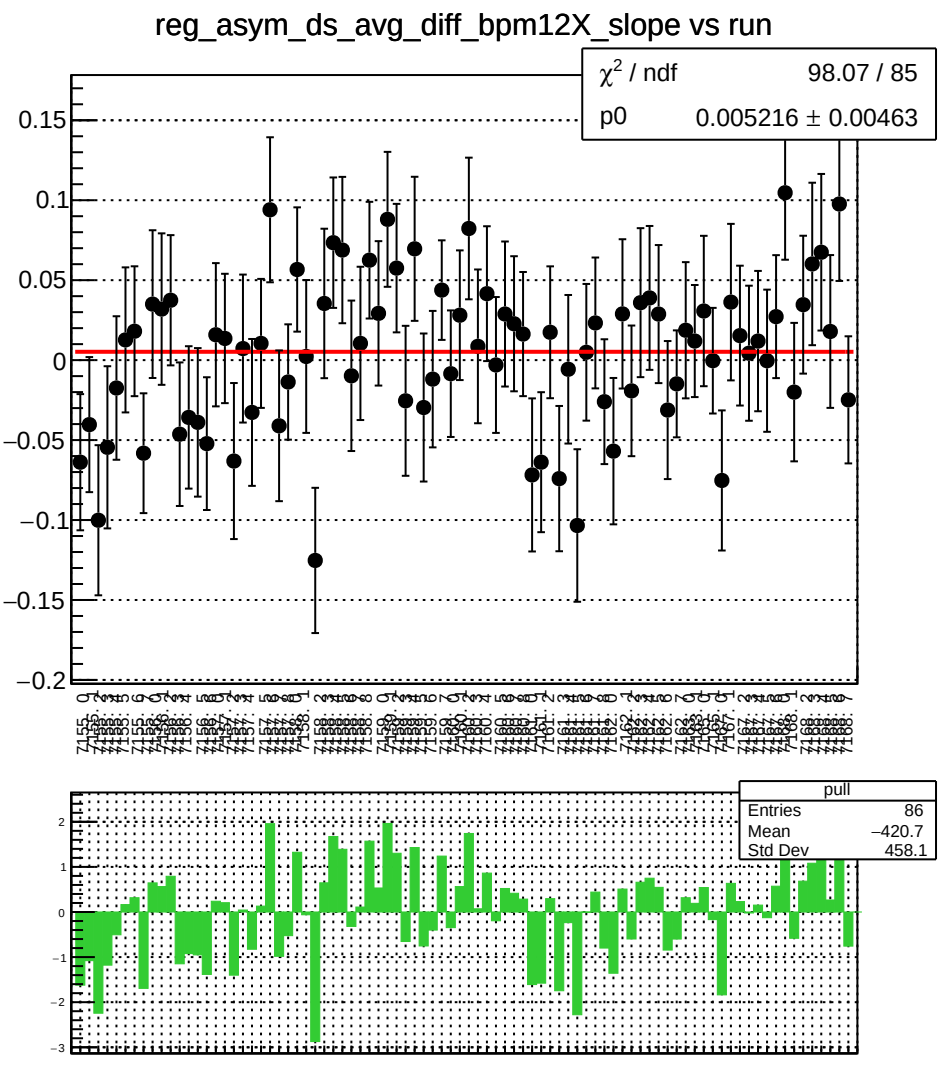

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 157.7 / 85
p0 −0.2064 ± 0.1027
pull
Entries 86
Mean −1984
Std Dev 2024

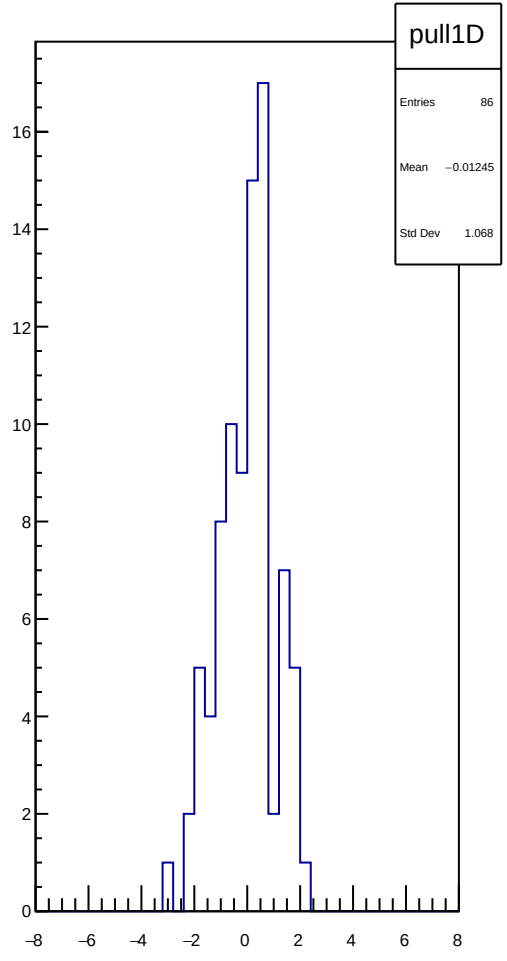

pull1D
Entries 86
Mean 0.002601
Std Dev 1.354

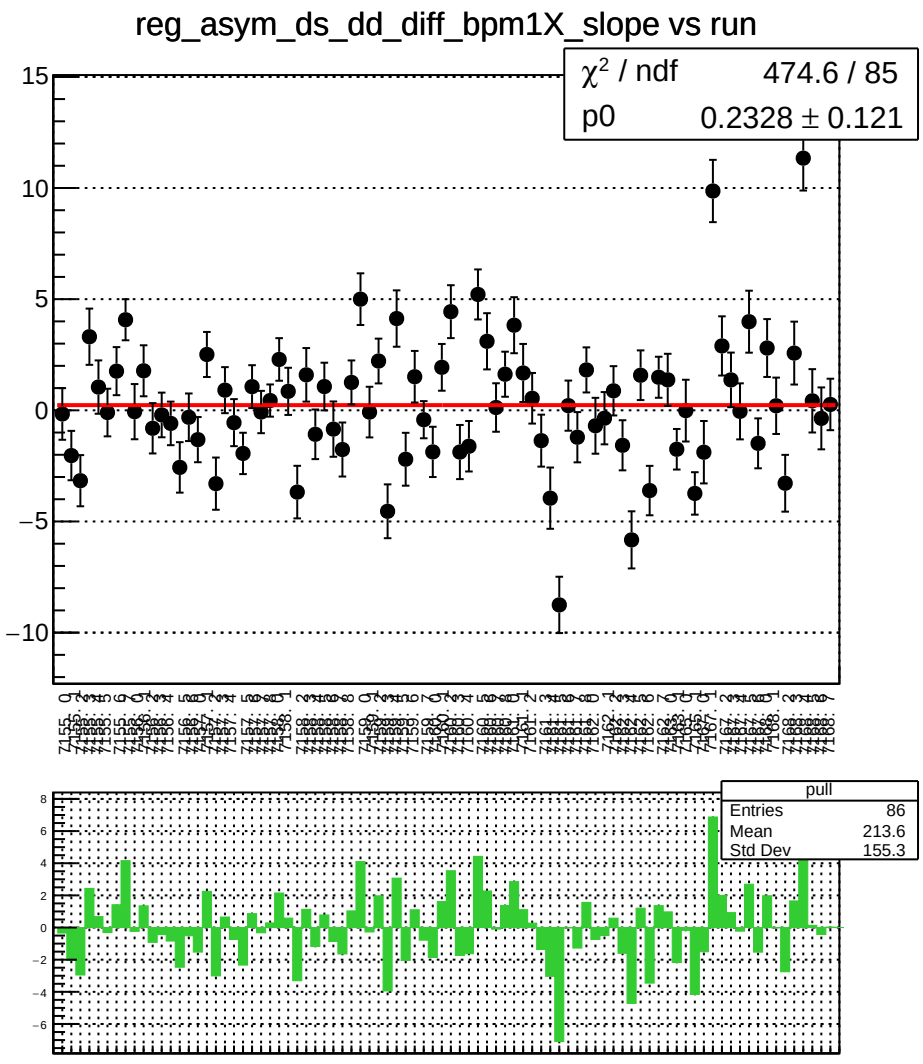

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 397.2 / 85
p0 −0.4411± 0.1226
pull
Entries 86
Mean −44.23
Std Dev 183.9
pull1D
Entries 86
Mean 0.004146
Std Dev 2.149

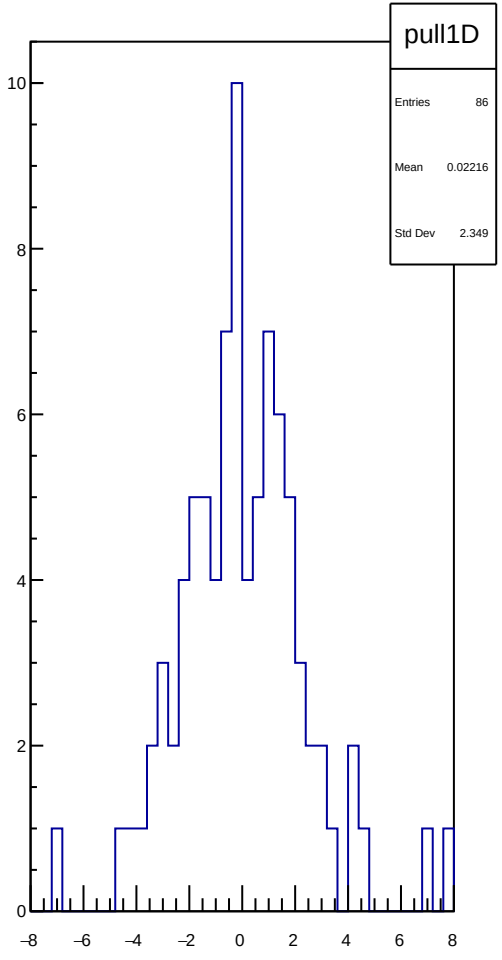

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 140.4 / 85
p0 0.2321± 0.1193
pull
Entries 86
Mean 939.3
Std Dev 899.8

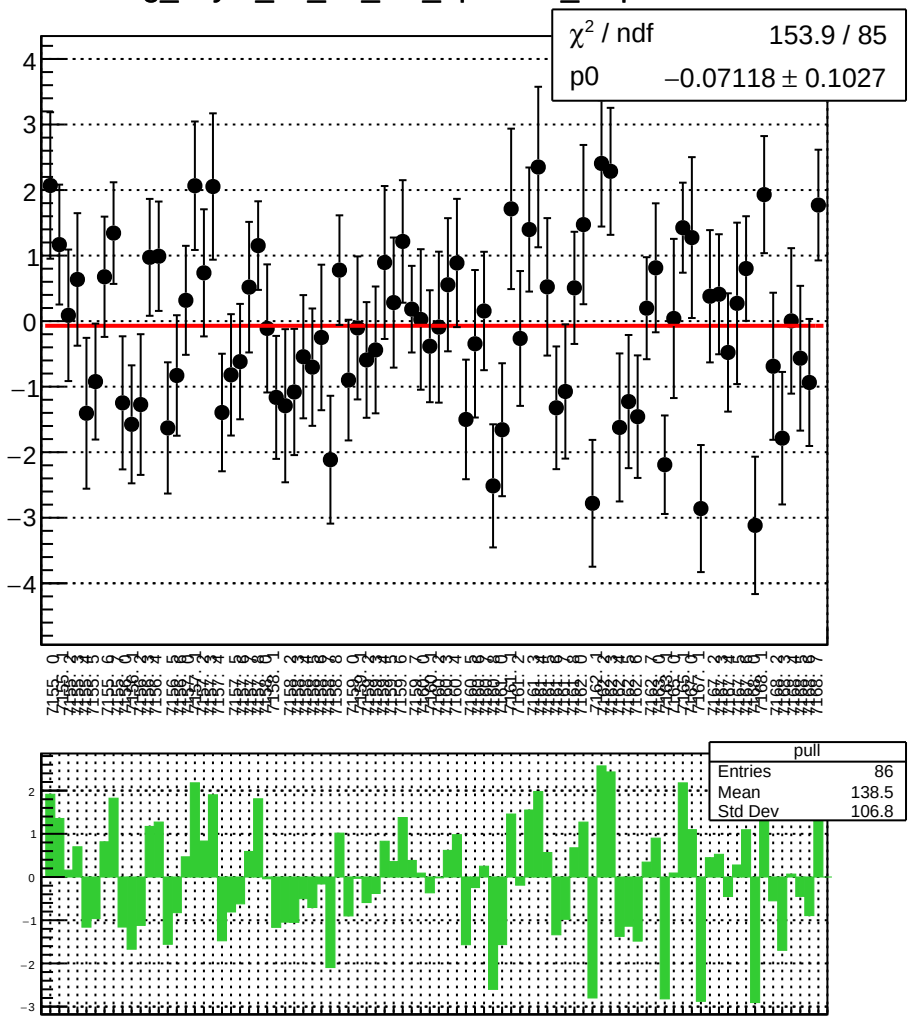

pull1D
Entries 86
Mean 0.00544
Std Dev 1.278

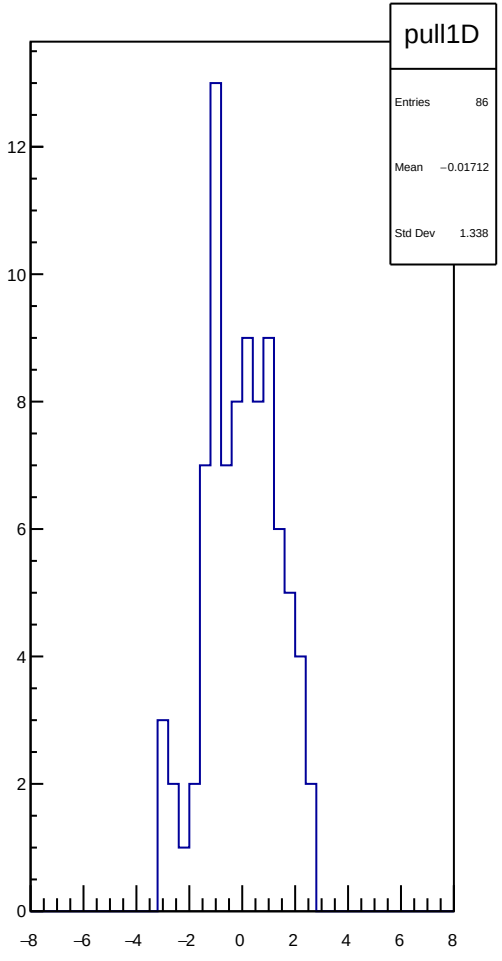

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 98.07 / 85
p0 0.005216 ± 0.00463
pull
Entries 86
Mean −420.7
Std Dev 458.1

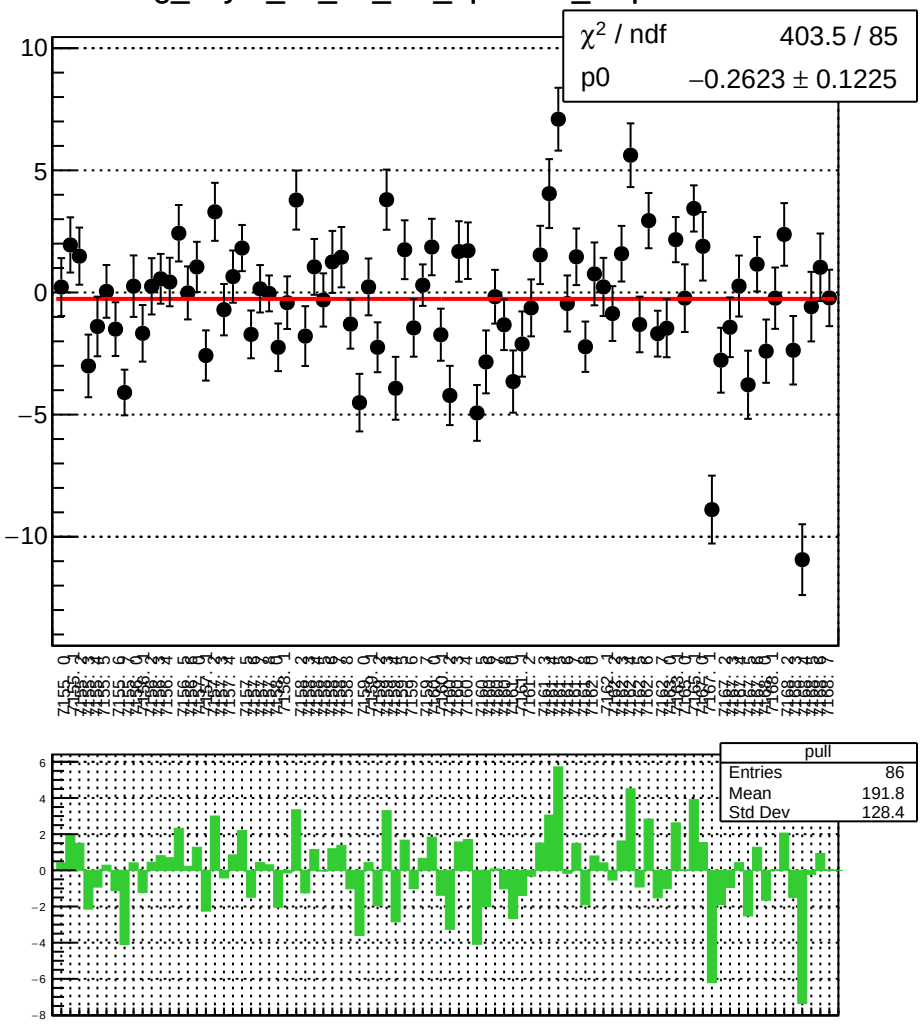

pull1D
Entries 86
Mean −0.01245
Std Dev 1.068

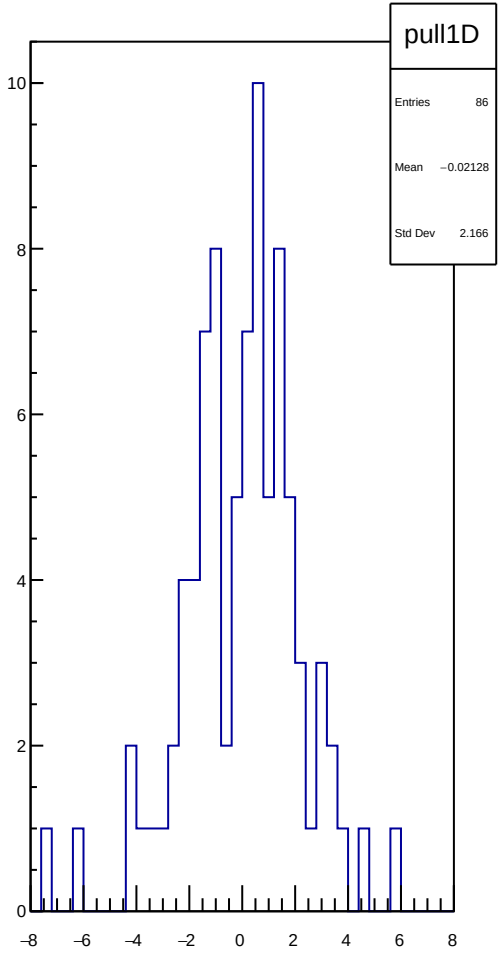

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 474.6 / 85
p0 0.2328 ± 0.121
pull
Entries 86
Mean 213.6
Std Dev 155.3

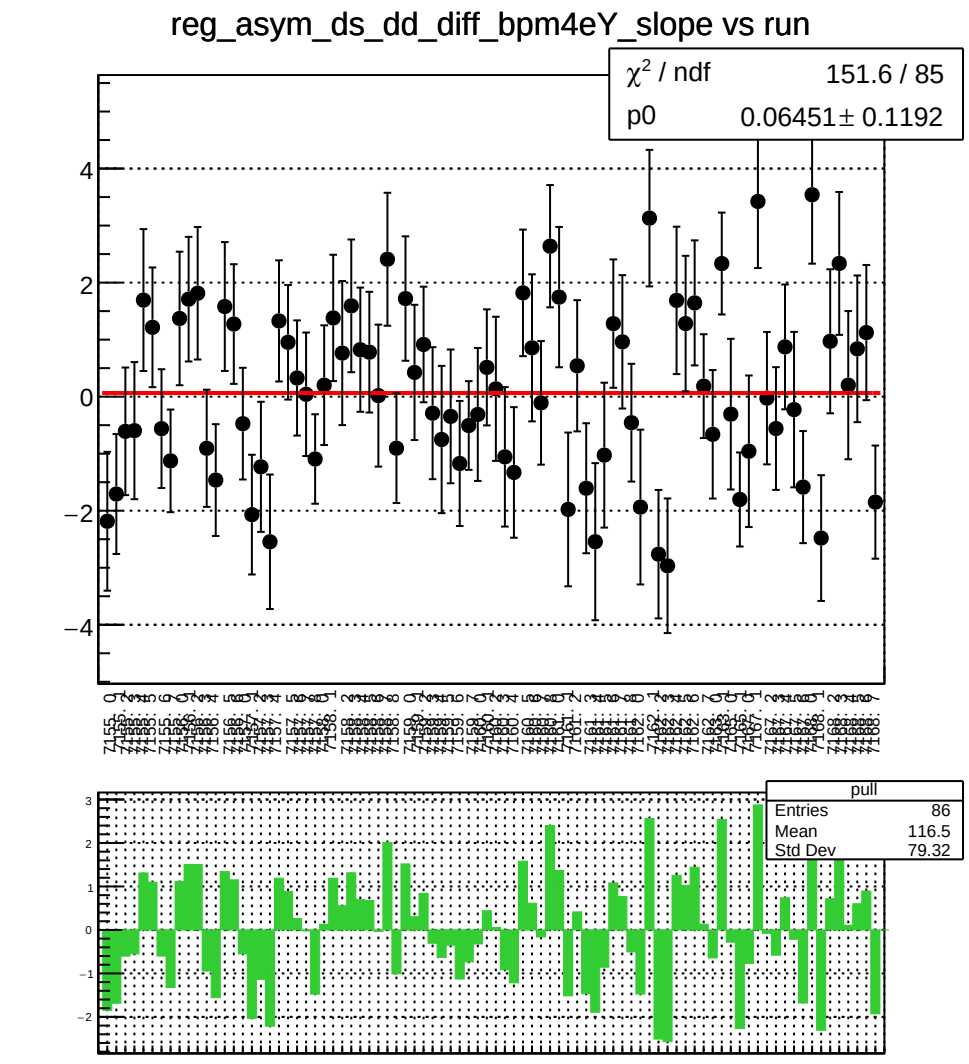

pull1D
Entries 86
Mean 0.02216
Std Dev 2.349

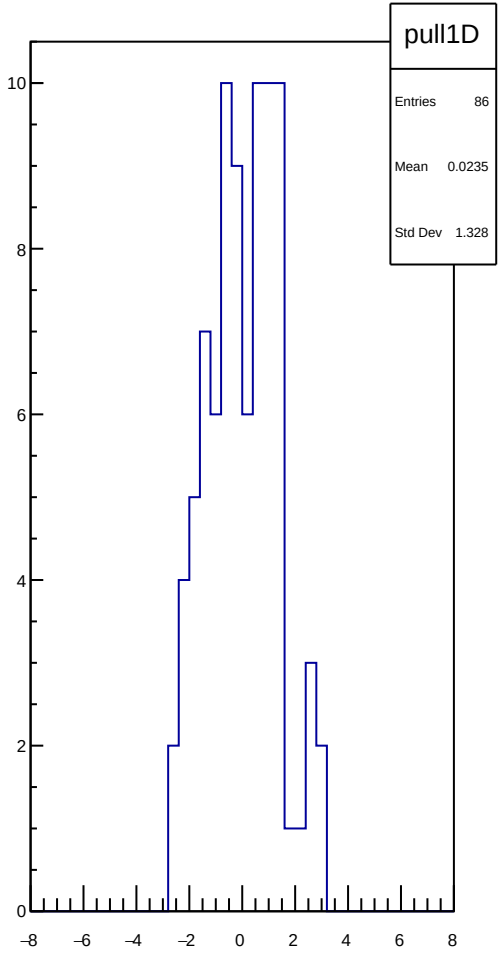

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 153.9 / 85
p0 −0.07118 ± 0.1027
pull
Entries 86
Mean 138.5
Std Dev 106.8

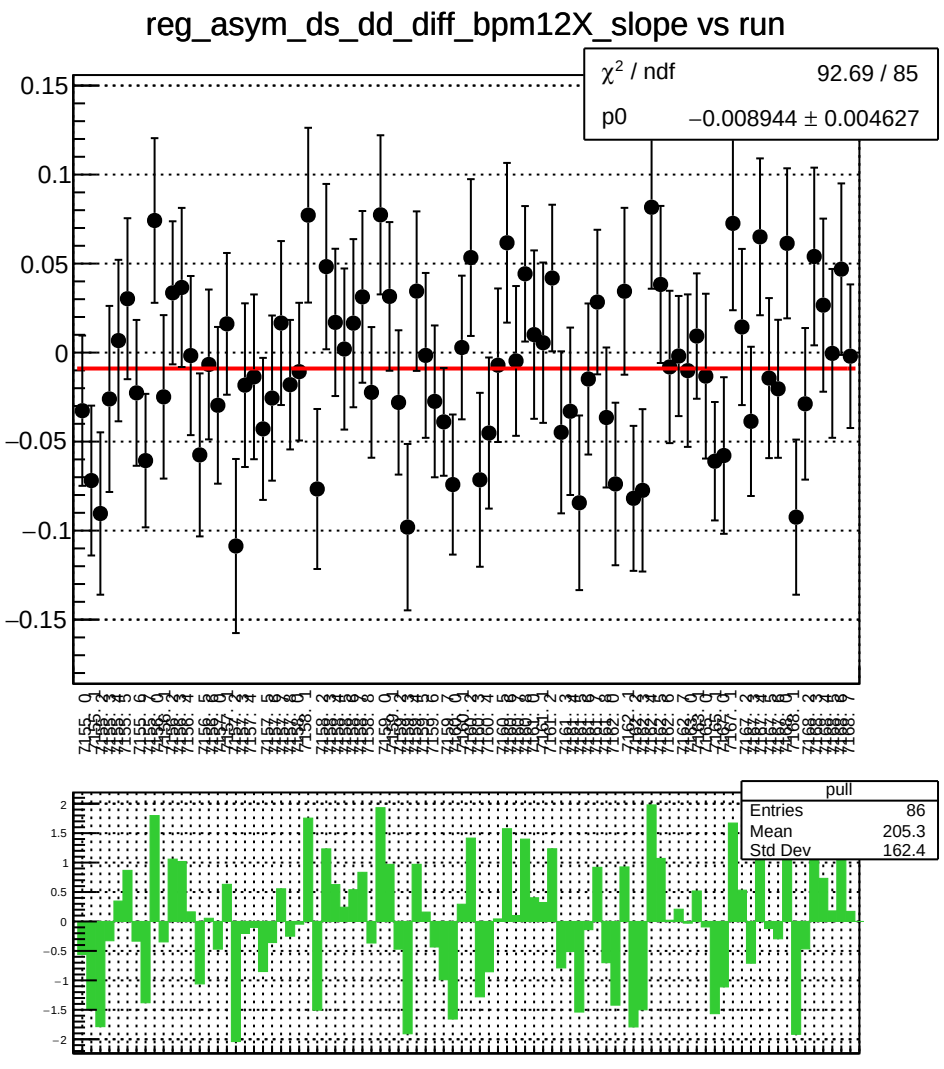

pull1D
Entries 86
Mean −0.01712
Std Dev 1.338

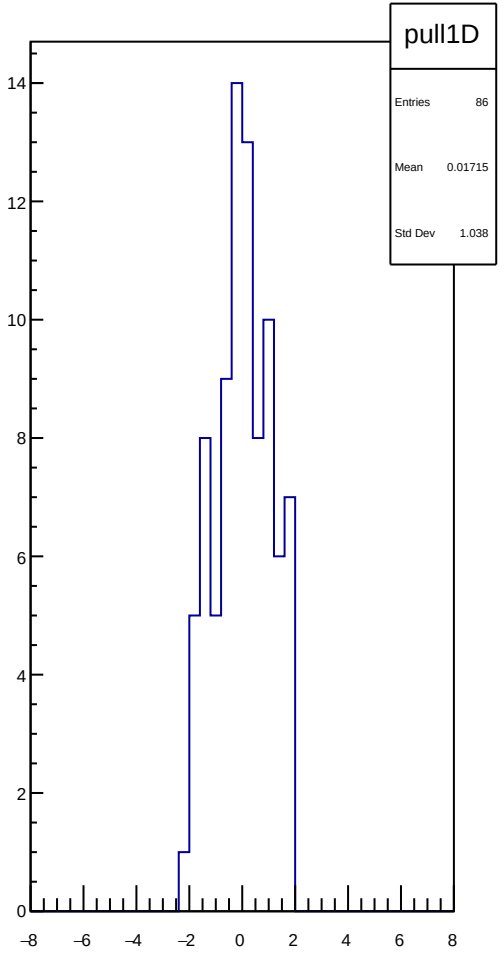

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 403.5 / 85
p0 −0.2623 ± 0.1225
pull
Entries 86
Mean 191.8
Std Dev 128.4

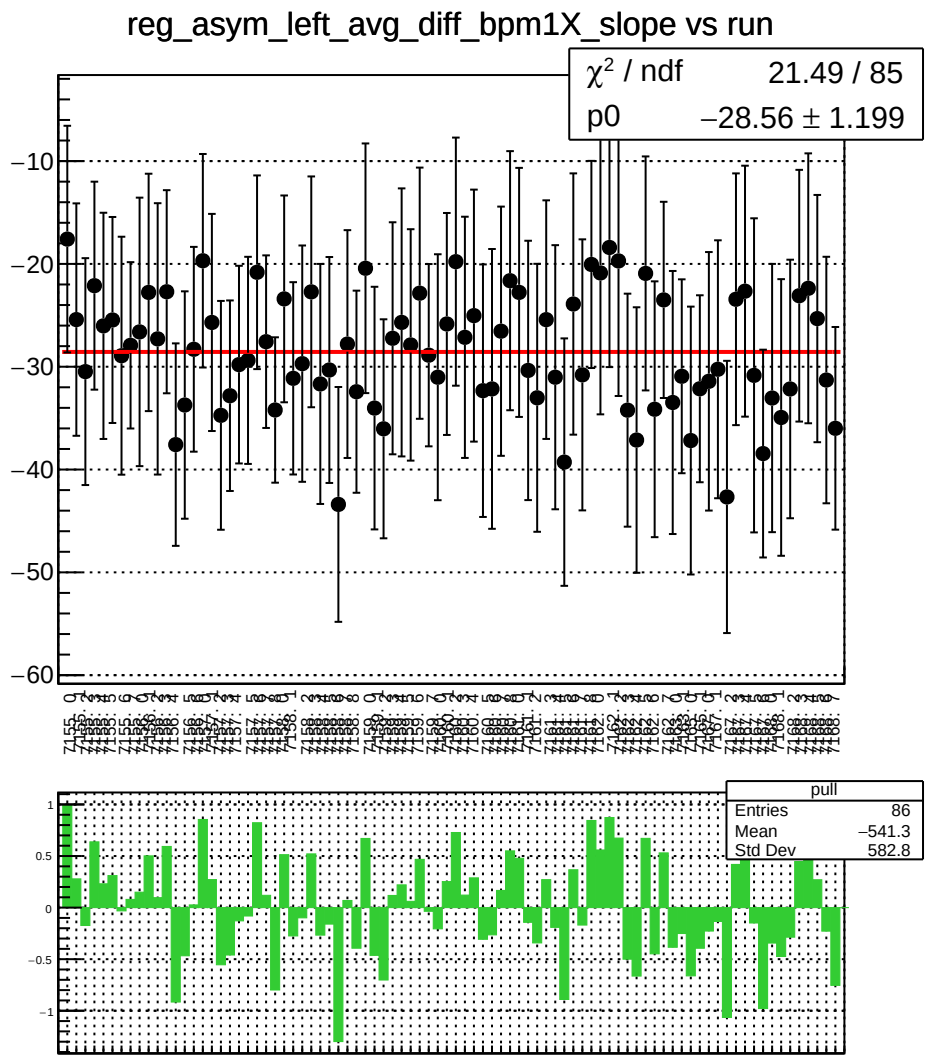

pull1D
Entries 86
Mean −0.02128
Std Dev 2.166

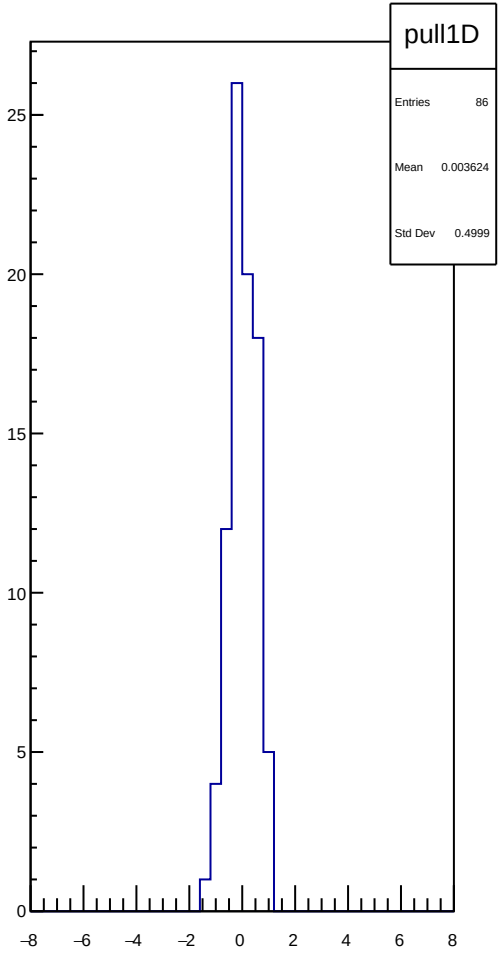

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 151.6 / 85
p0 0.06451 ± 0.1192
pull
Entries 86
Mean 116.5
Std Dev 79.32

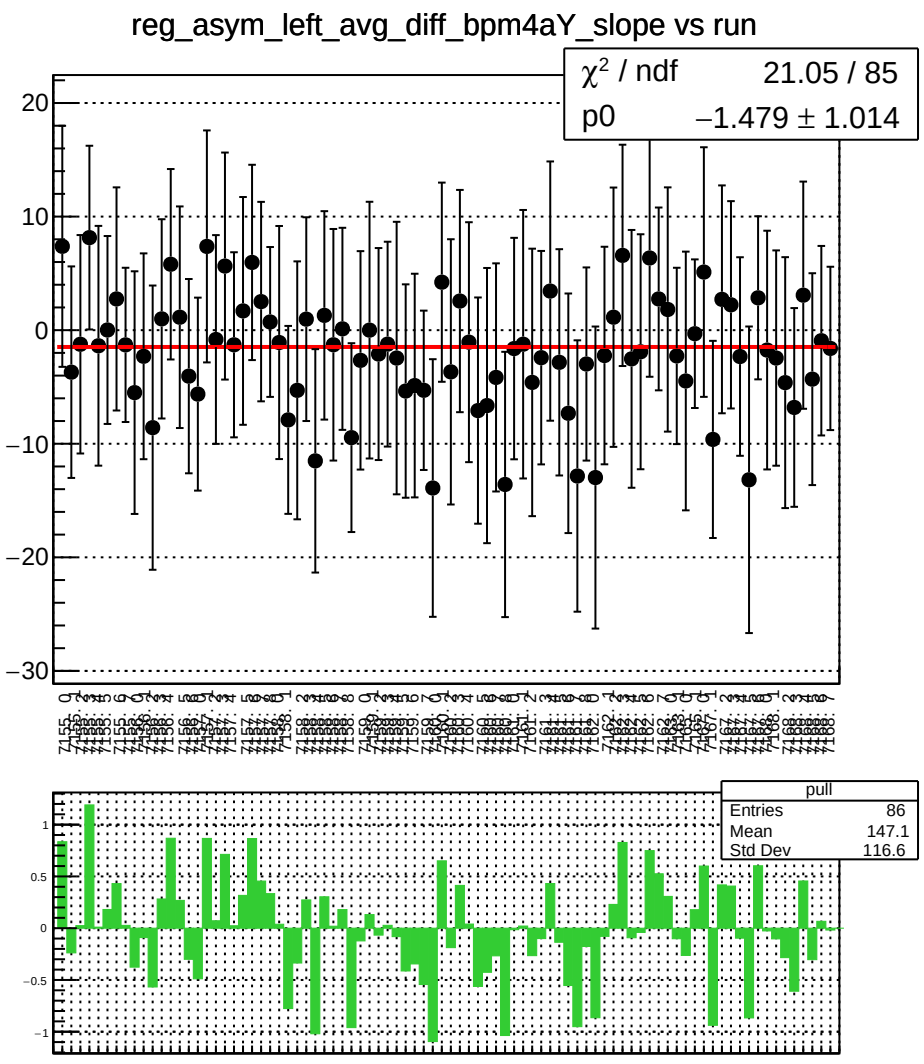

pull1D
Entries 86
Mean 0.0235
Std Dev 1.328

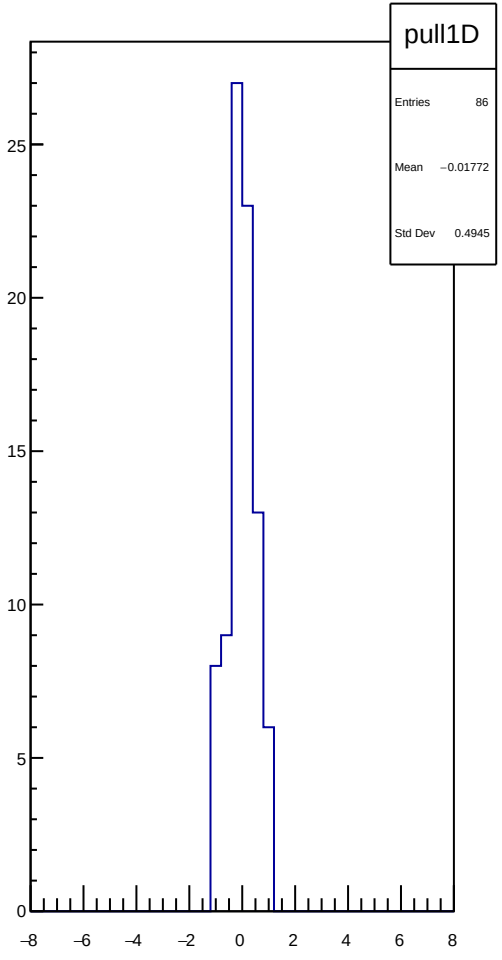

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 92.69 / 85
p0 −0.008944 ± 0.004627
pull
Entries 86
Mean 205.3
Std Dev 162.4

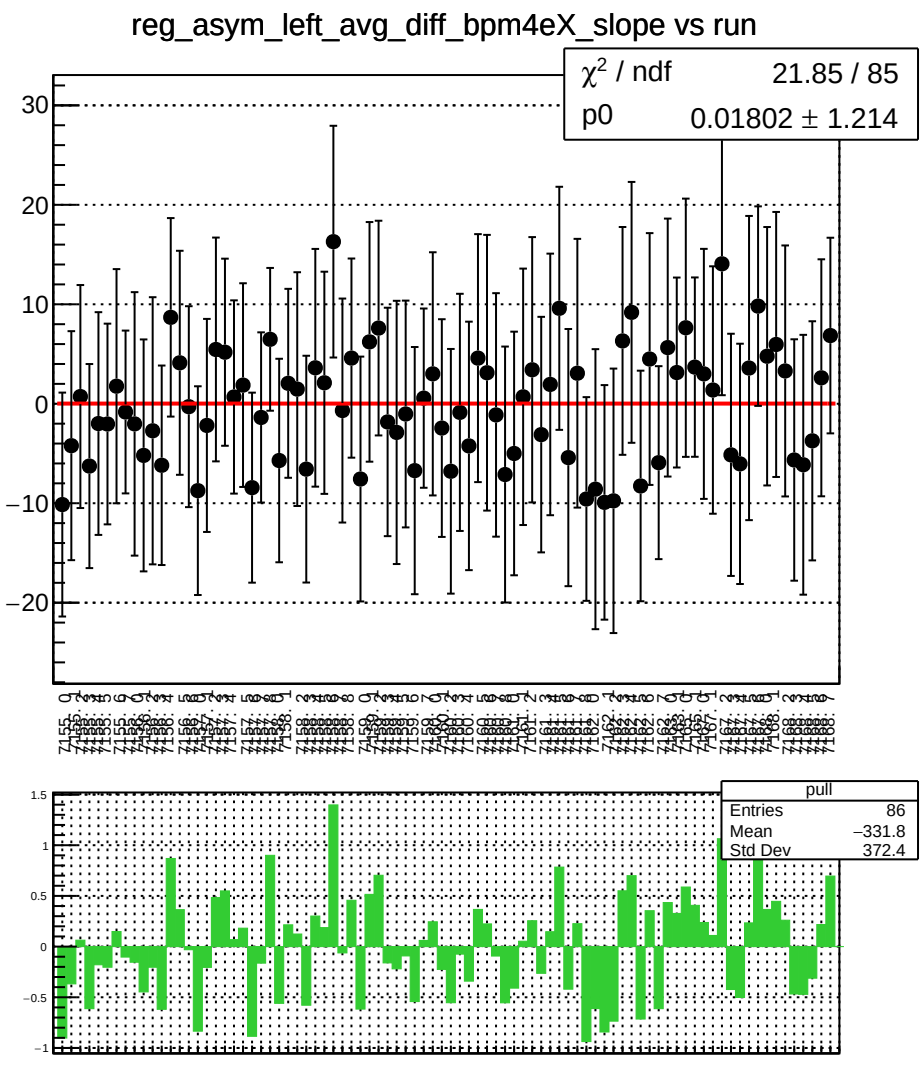

pull1D
Entries 86
Mean 0.01715
Std Dev 1.038

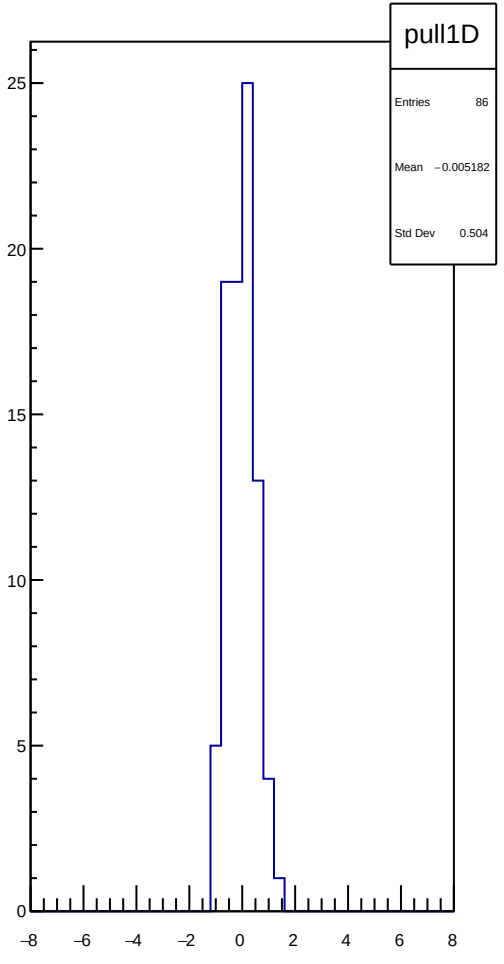

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 21.49 / 85
p0 −28.56 ± 1.199
pull
Entries 86
Mean −541.3
Std Dev 582.8

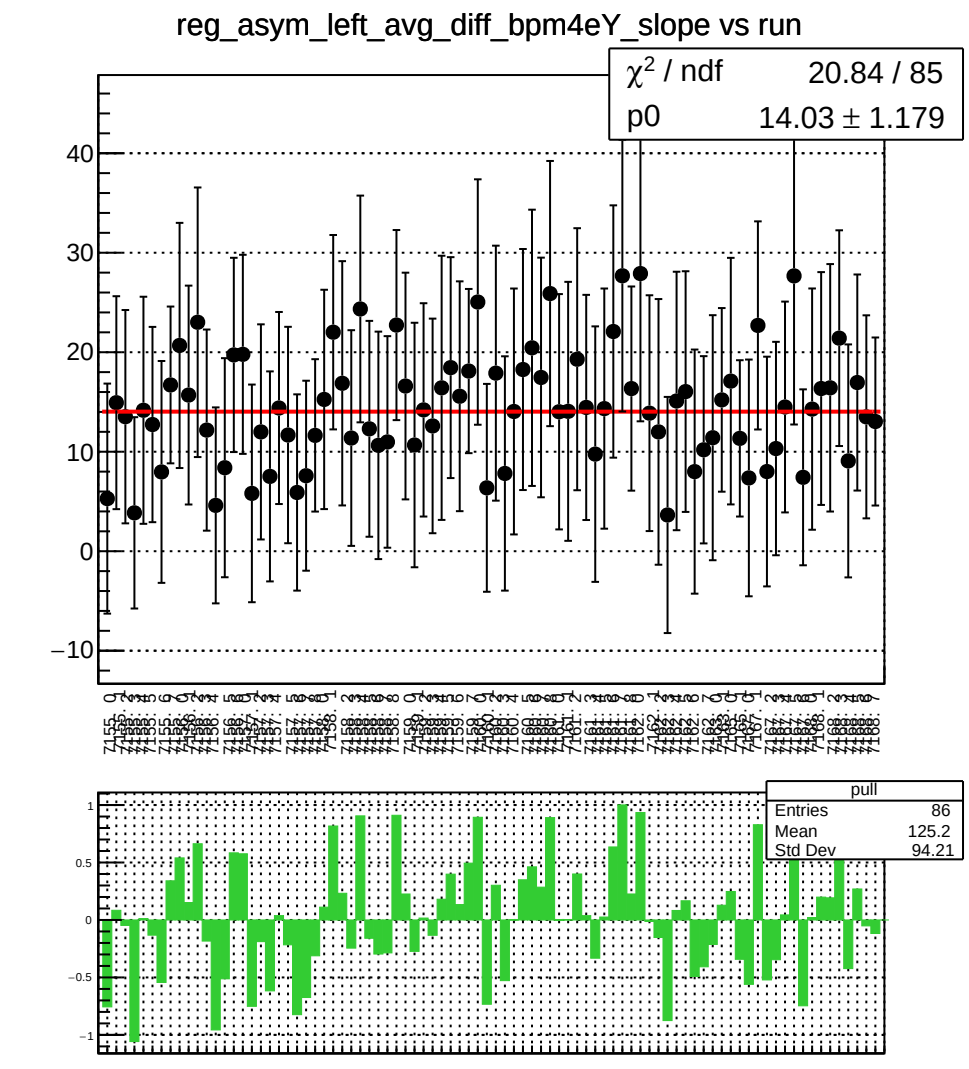

pull1D
Entries 86
Mean 0.003624
Std Dev 0.4999

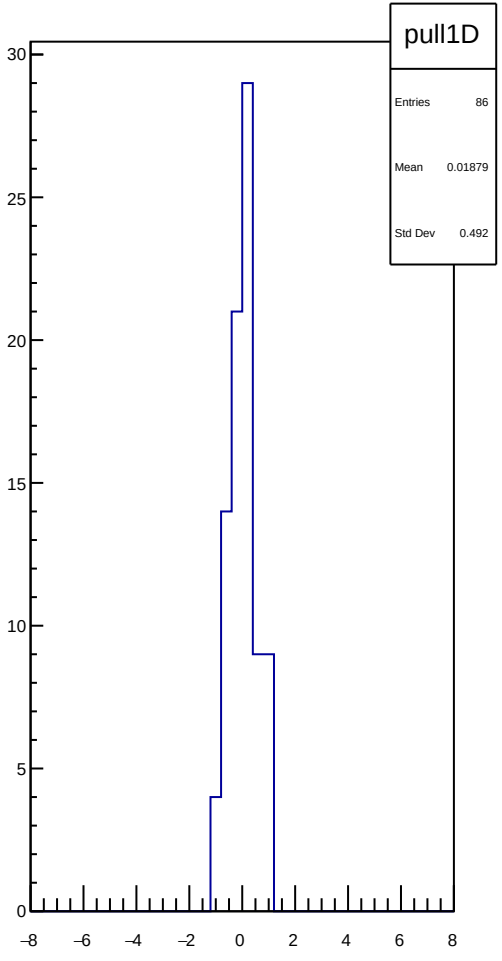

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 21.05 / 85
p0 −1.479 ± 1.014
pull
Entries 86
Mean 147.1
Std Dev 116.6

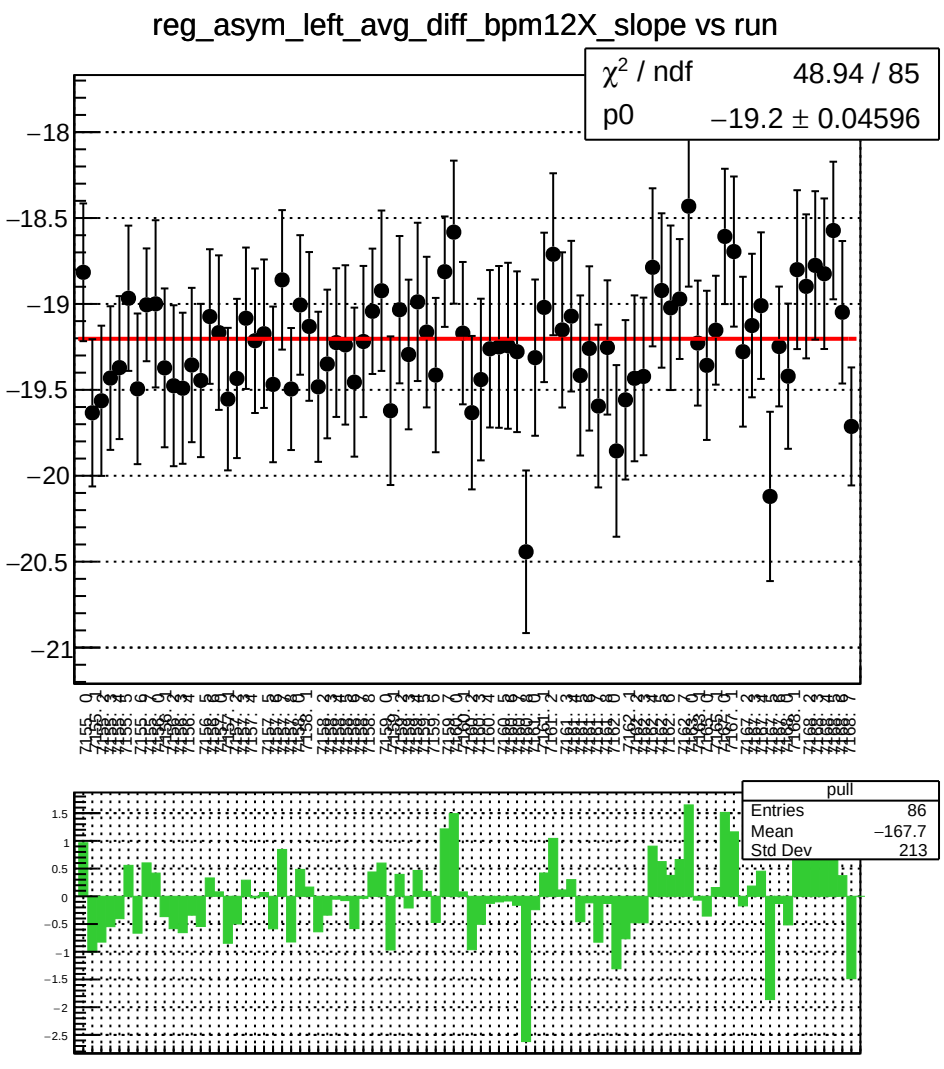

pull1D
Entries 86
Mean −0.01772
Std Dev 0.4945

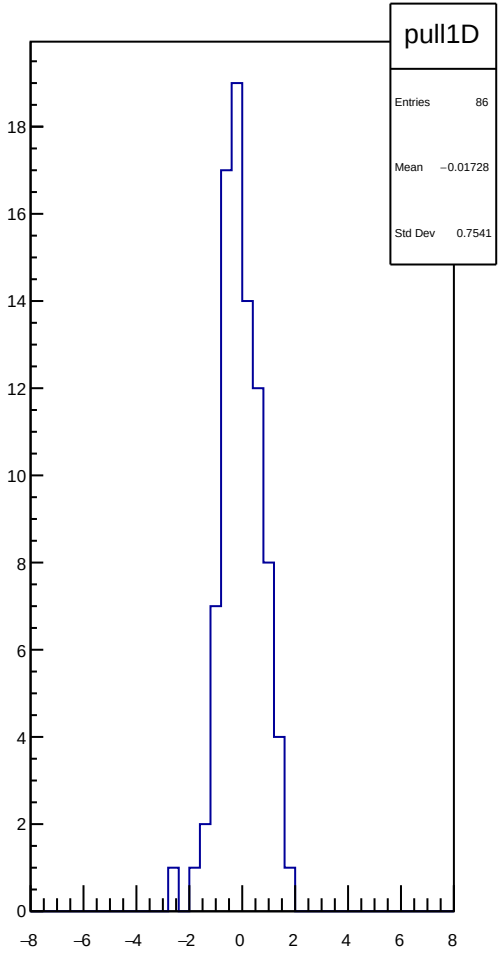

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 21.85 / 85
p0 0.01802 ± 1.214
pull
Entries 86
Mean −331.8
Std Dev 372.4

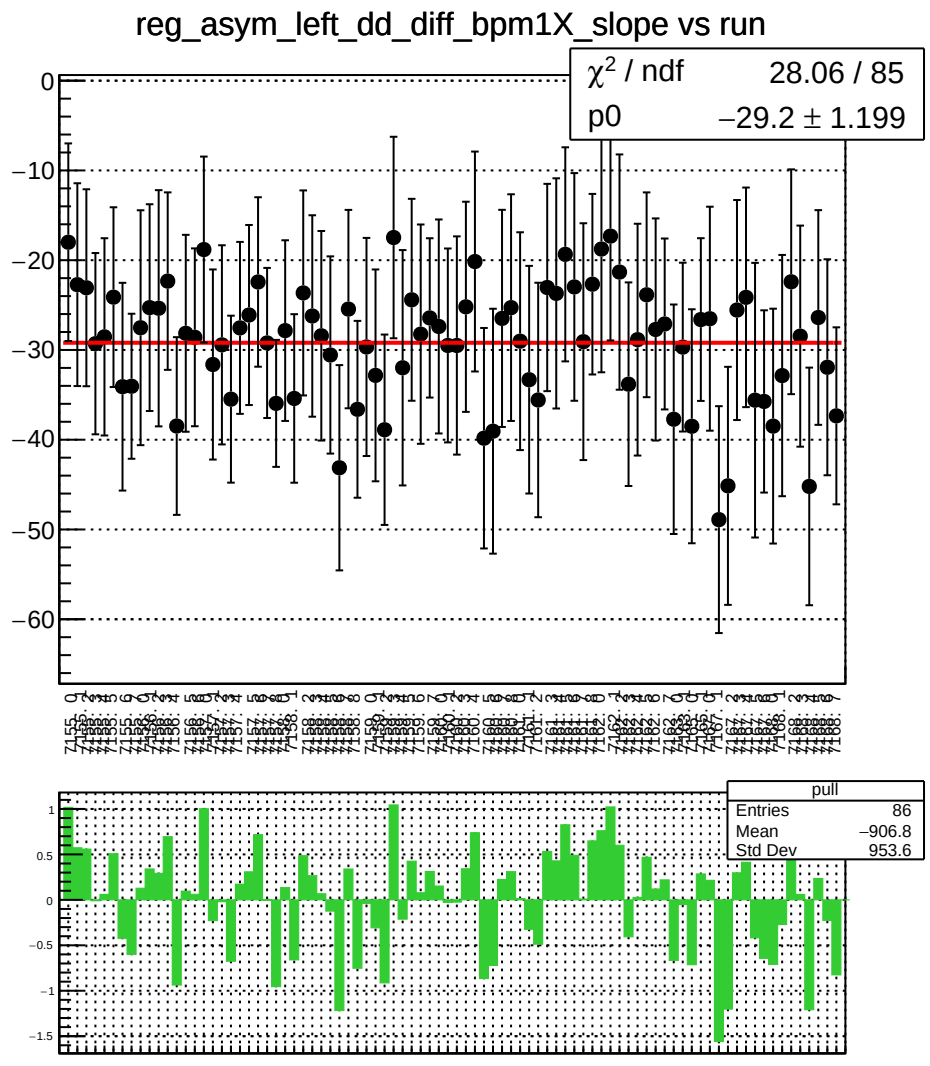

pull1D
Entries 86
Mean −0.005182
Std Dev 0.504

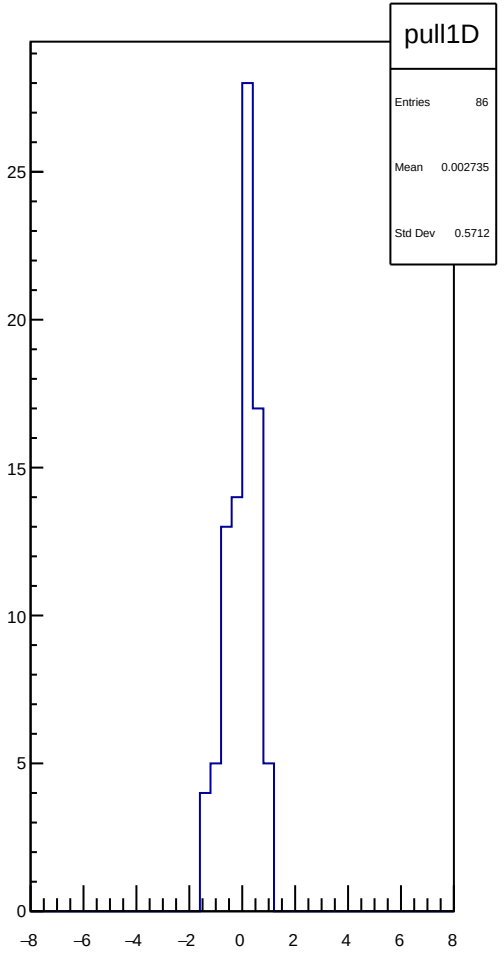

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ^2 / ndf 20.84 / 85
p0 14.03 ± 1.179
pull
Entries 86
Mean 125.2
Std Dev 94.21

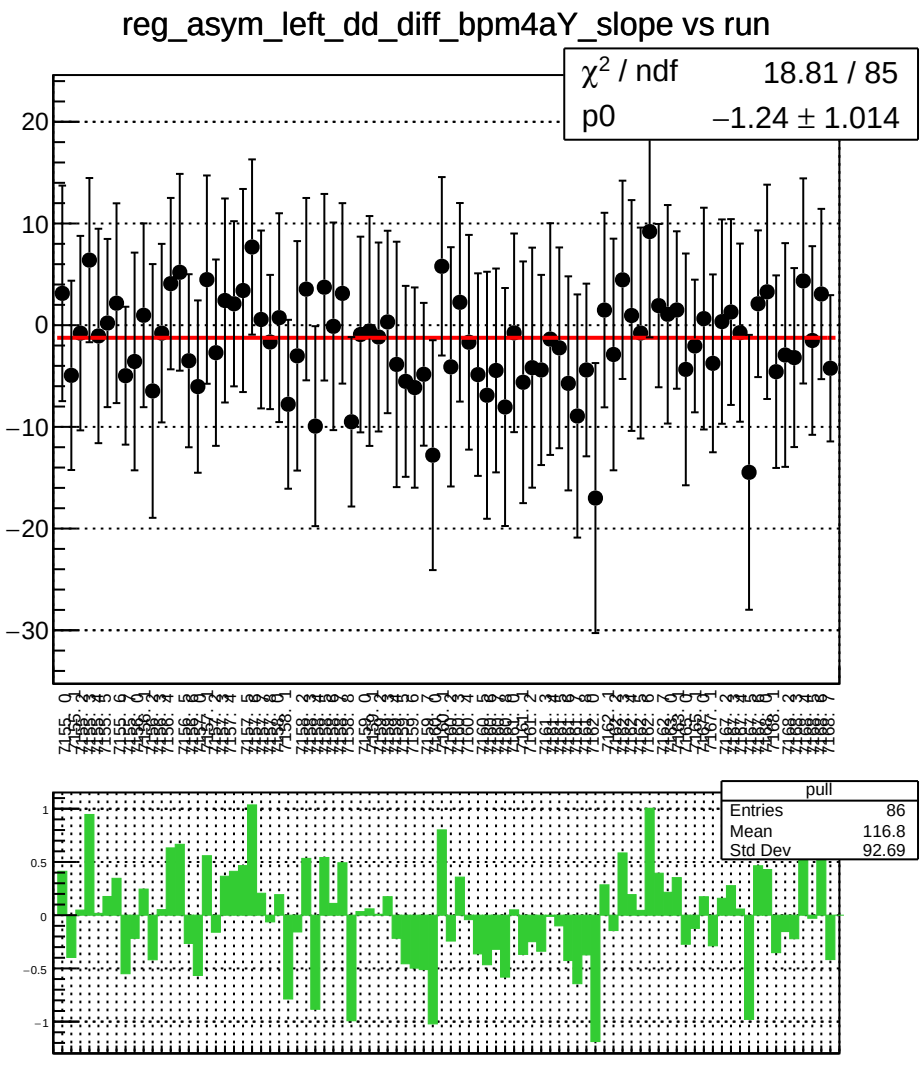

pull1D
Entries 86
Mean 0.01879
Std Dev 0.492

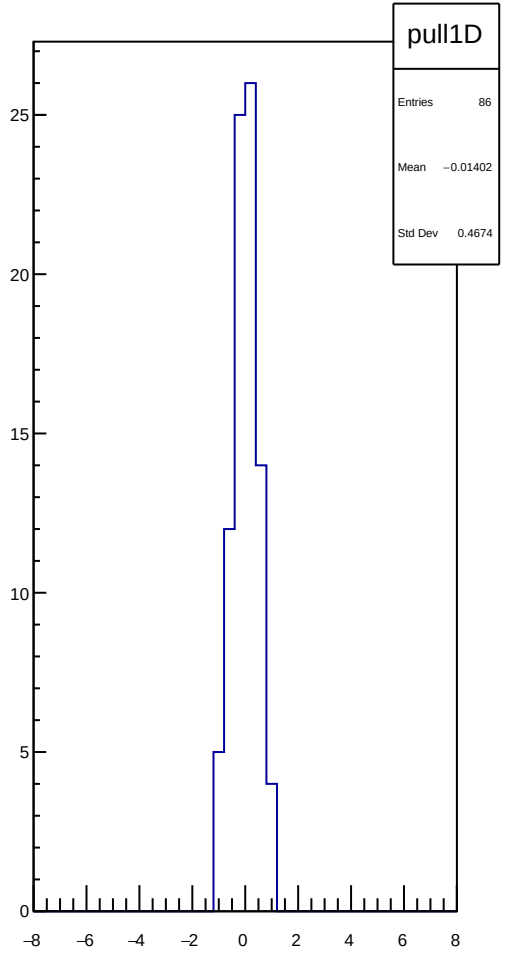

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 48.94 / 85
p0 −19.2 ± 0.04596
pull
Entries 86
Mean −167.7
Std Dev 213

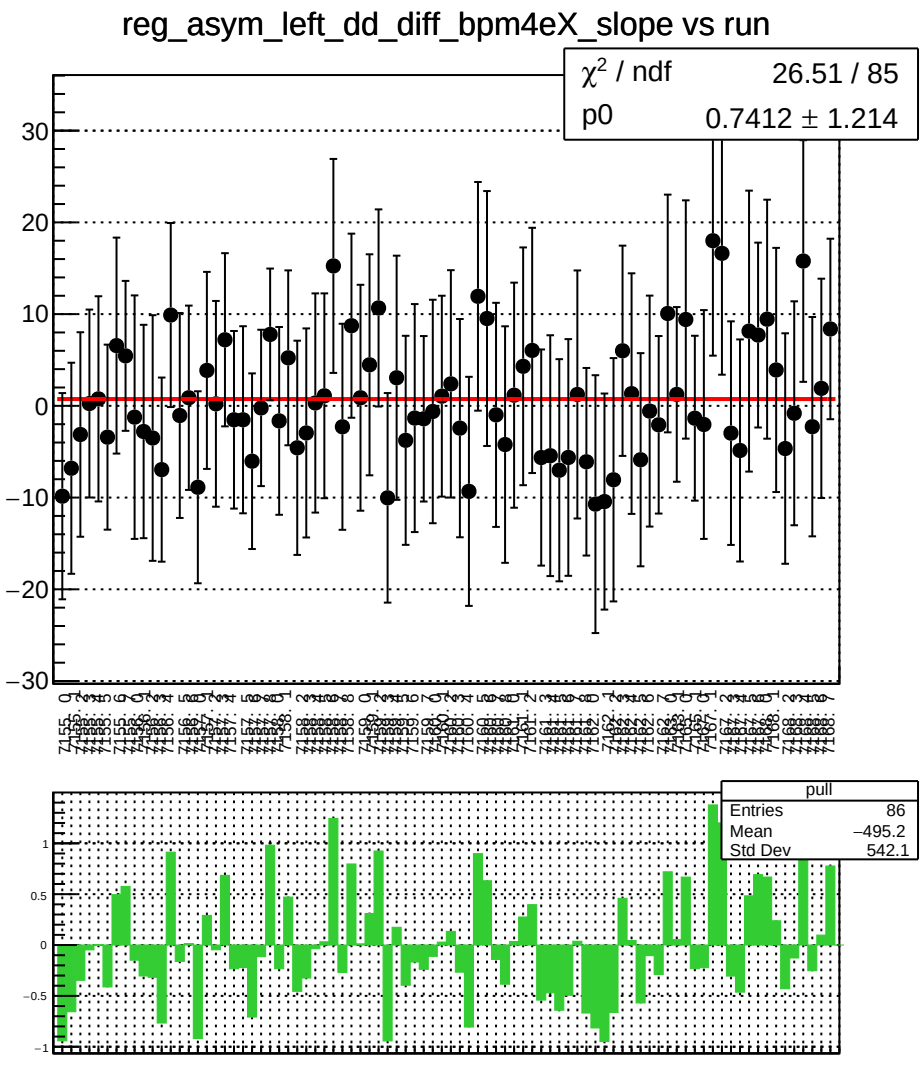

pull1D
Entries 86
Mean −0.01728
Std Dev 0.7541

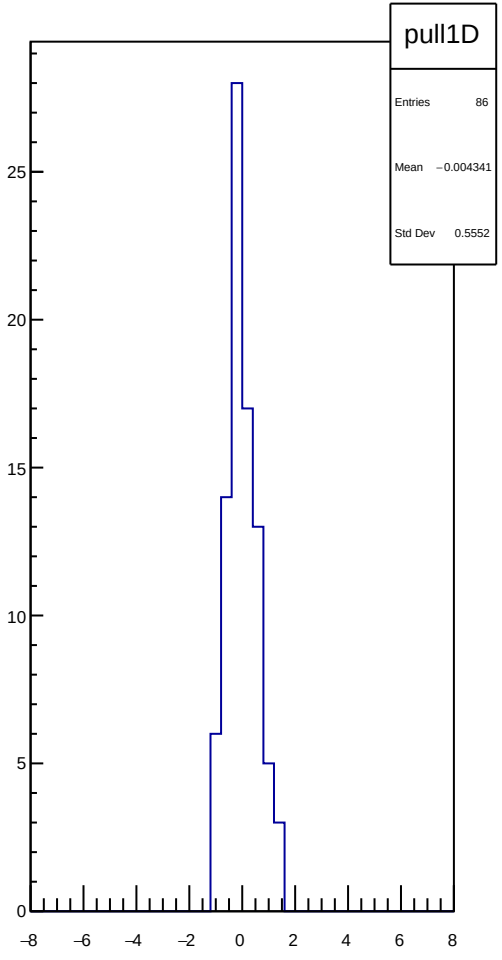

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 28.06 / 85
p0 −29.2 ± 1.199
pull
Entries 86
Mean −906.8
Std Dev 953.6

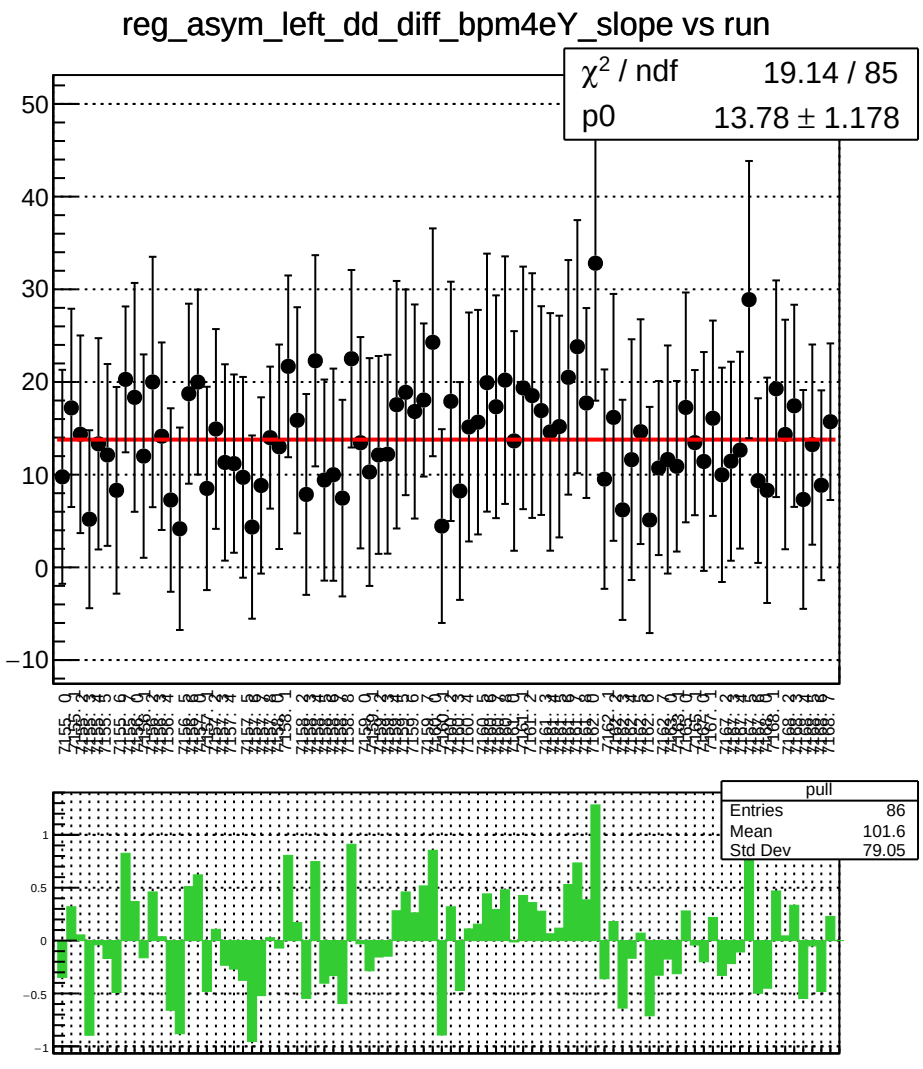

pull1D
Entries 86
Mean 0.002735
Std Dev 0.5712

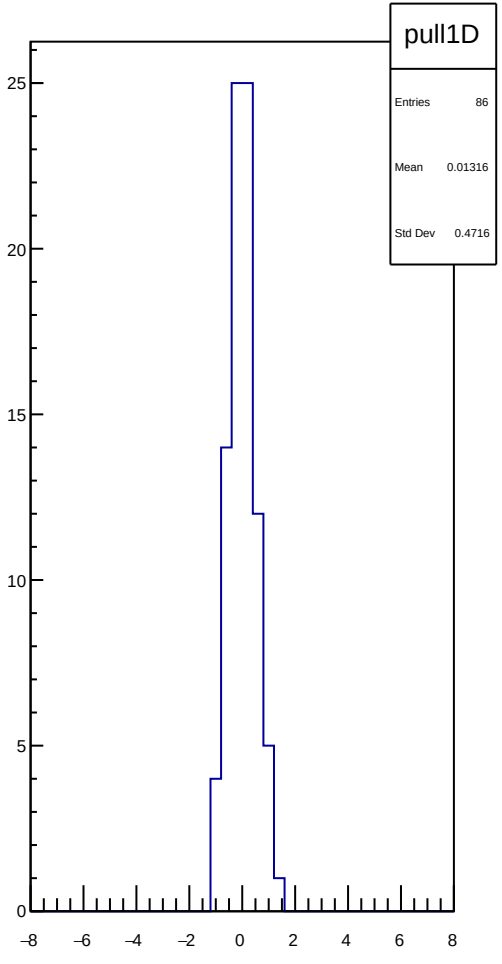

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.81 / 85
p0 −1.24 ± 1.014
pull
Entries 86
Mean 116.8
Std Dev 92.69

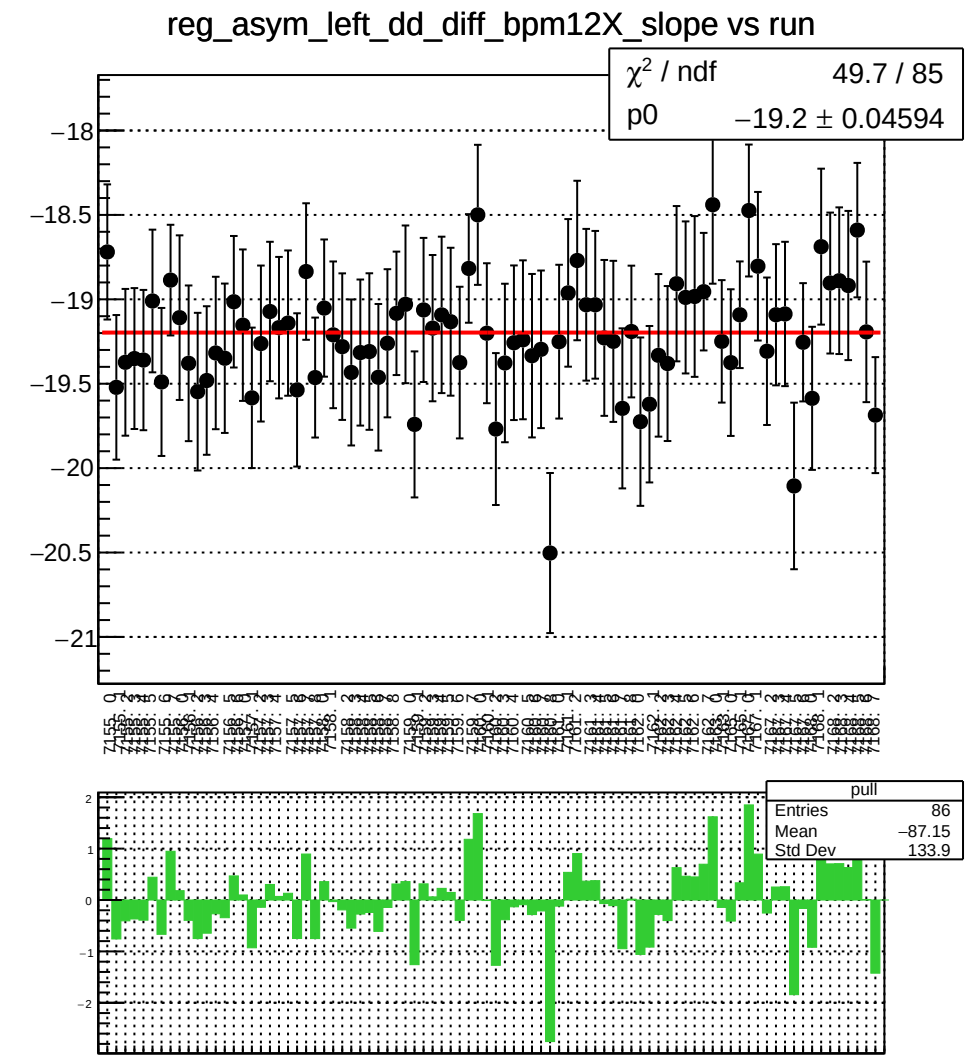

pull1D
Entries 86
Mean −0.01402
Std Dev 0.4674

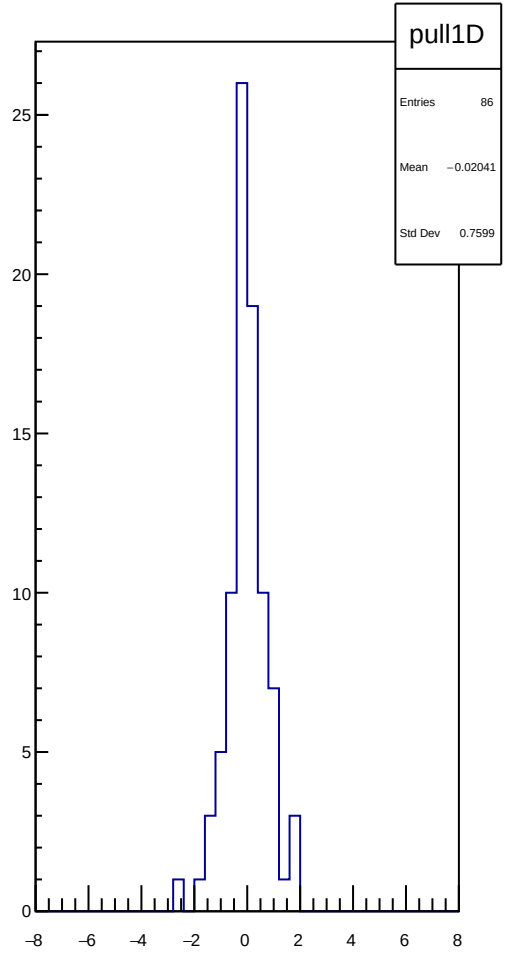

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 26.51 / 85
p0 0.7412 ± 1.214
pull
Entries 86
Mean −495.2
Std Dev 542.1

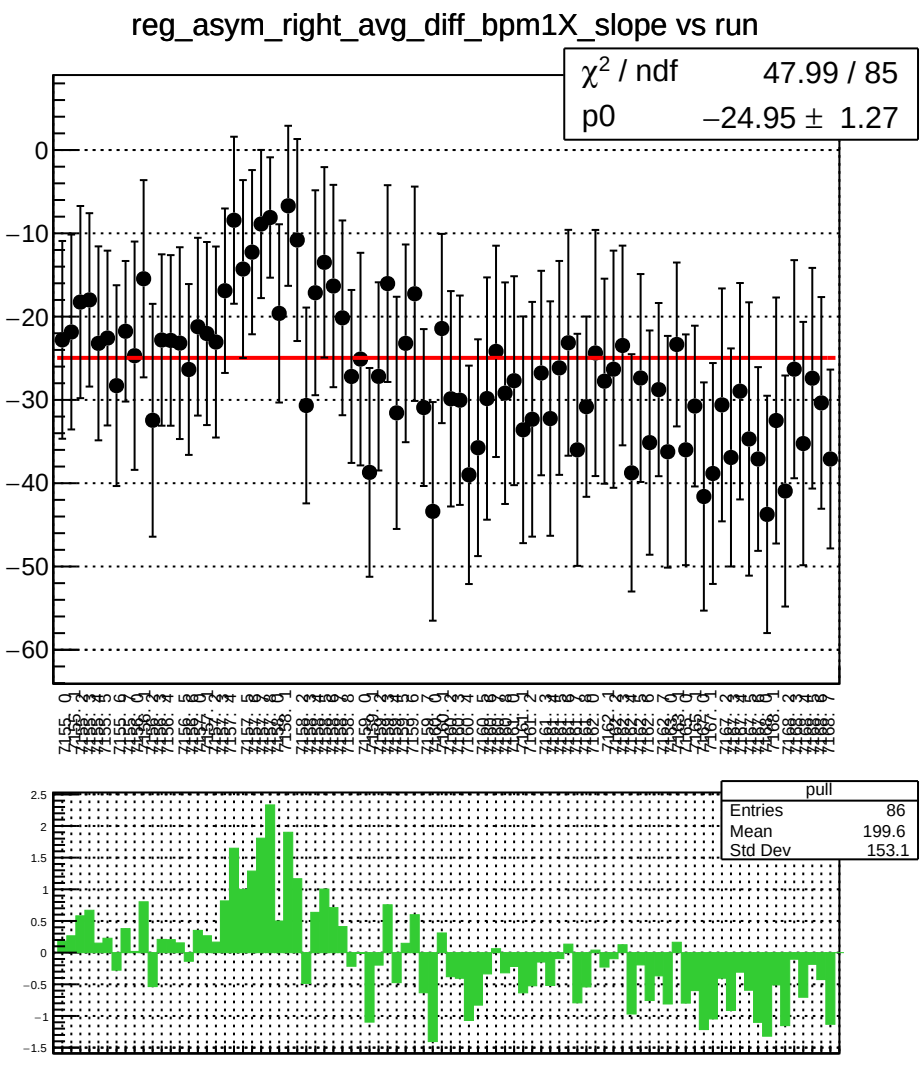

pull1D
Entries 86
Mean −0.004341
Std Dev 0.5552

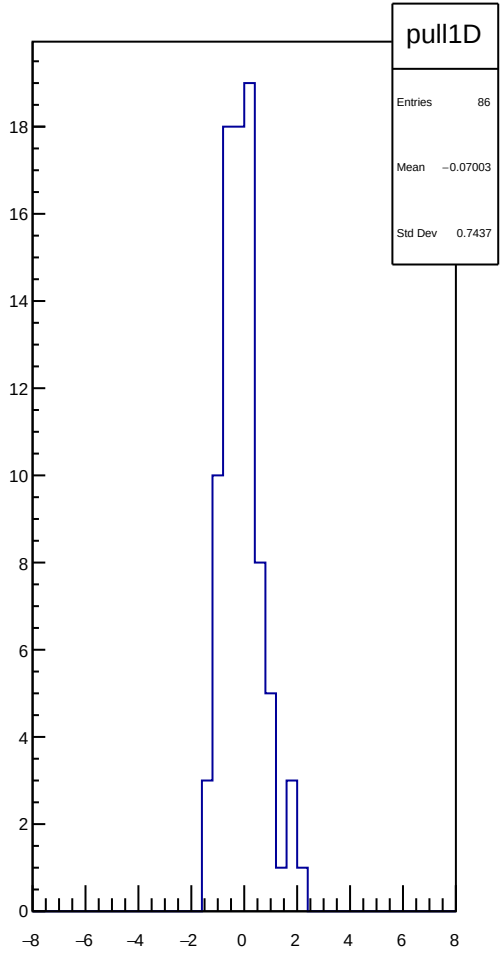

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 19.14 / 85
p0 13.78 ± 1.178
pull
Entries 86
Mean 101.6
Std Dev 79.05

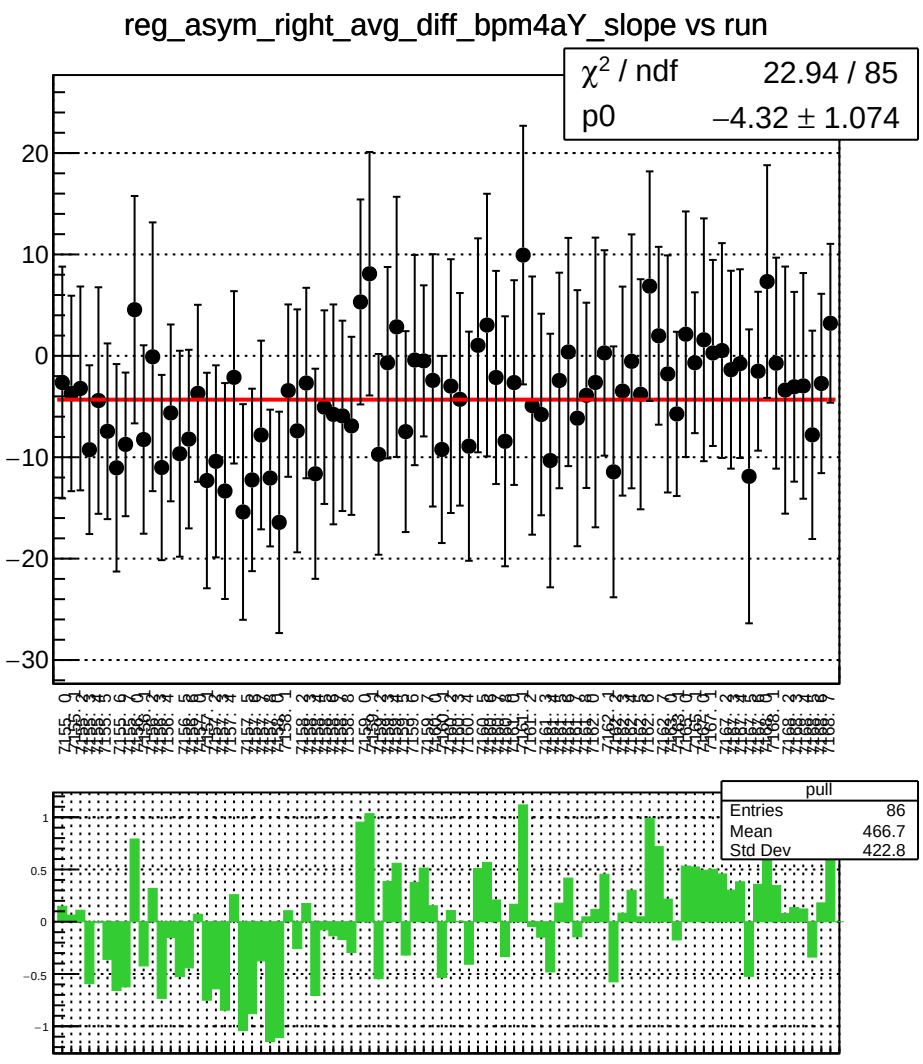

pull1D
Entries 86
Mean 0.01316
Std Dev 0.4716

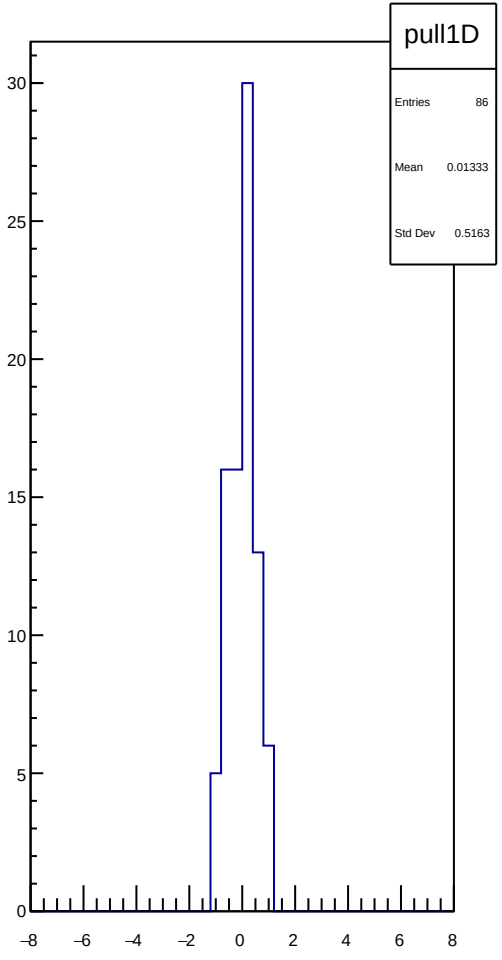

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 49.7 / 85
p0 −19.2 ± 0.04594
−18
−18.5
−19
−19.5
−20
−20.5
−21
pull
Entries 86
Mean −87.15
Std Dev 133.9
2
1
0
−1
−2

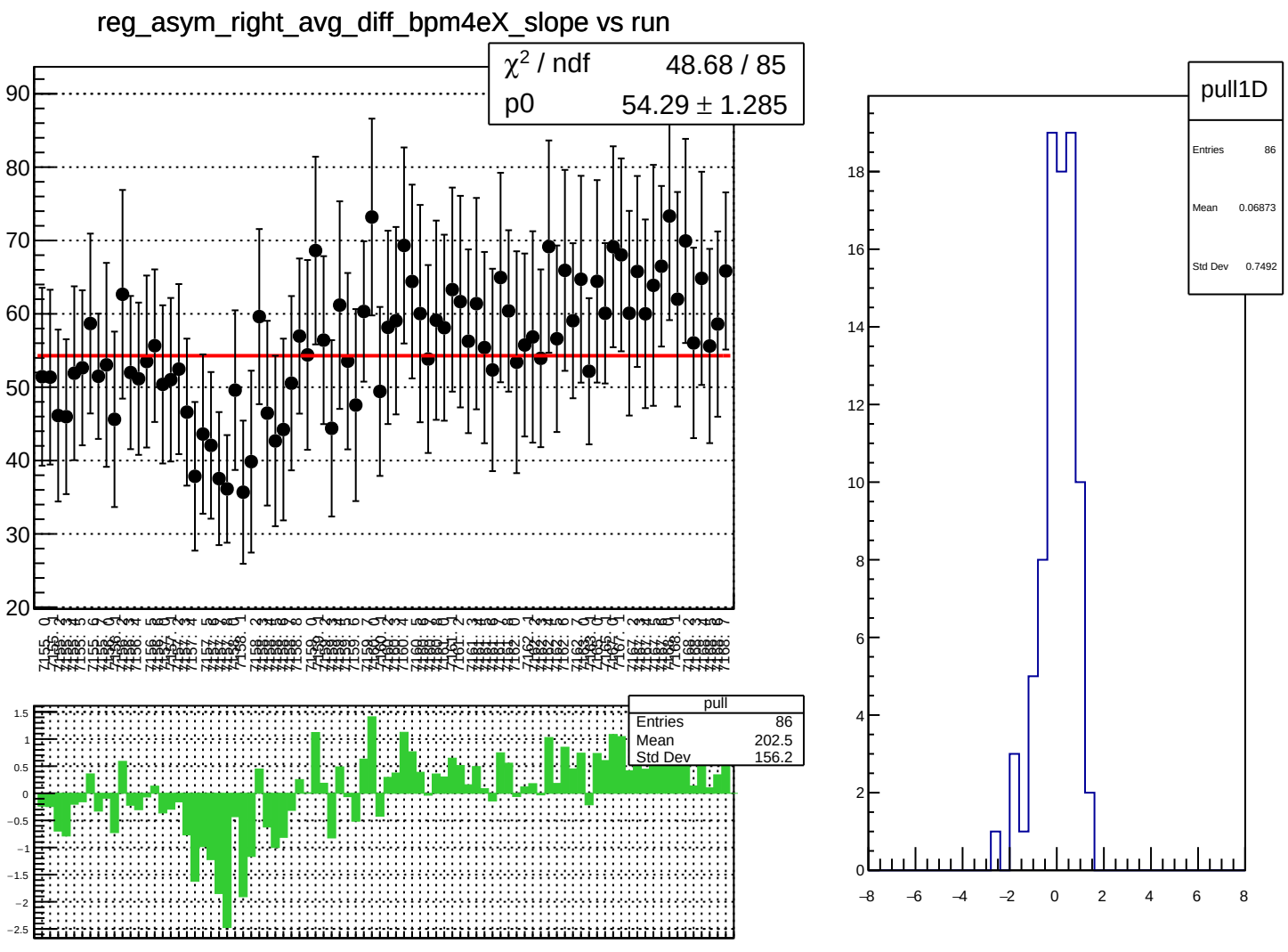

pull1D
Entries 86
Mean −0.02041
Std Dev 0.7599
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

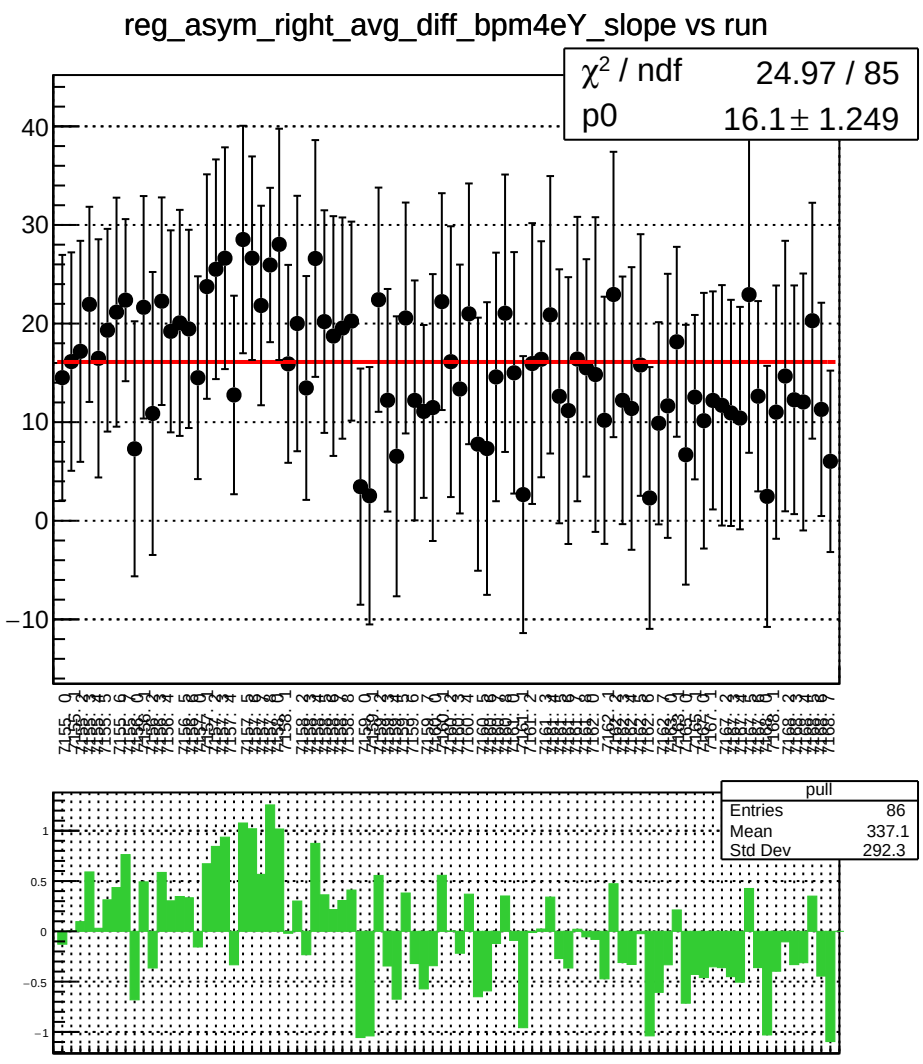

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 47.99 / 85
p0 −24.95 ± 1.27
pull
Entries 86
Mean 199.6
Std Dev 153.1

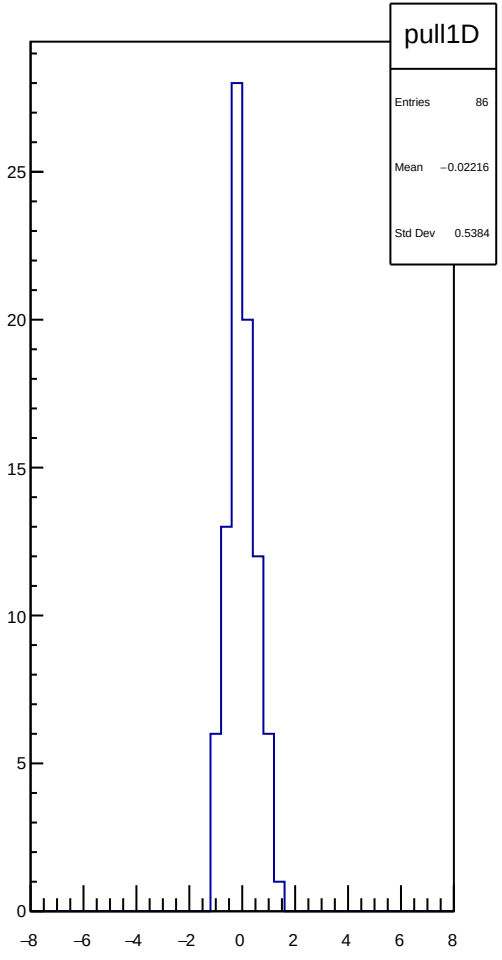

pull1D
Entries 86
Mean −0.07003
Std Dev 0.7437

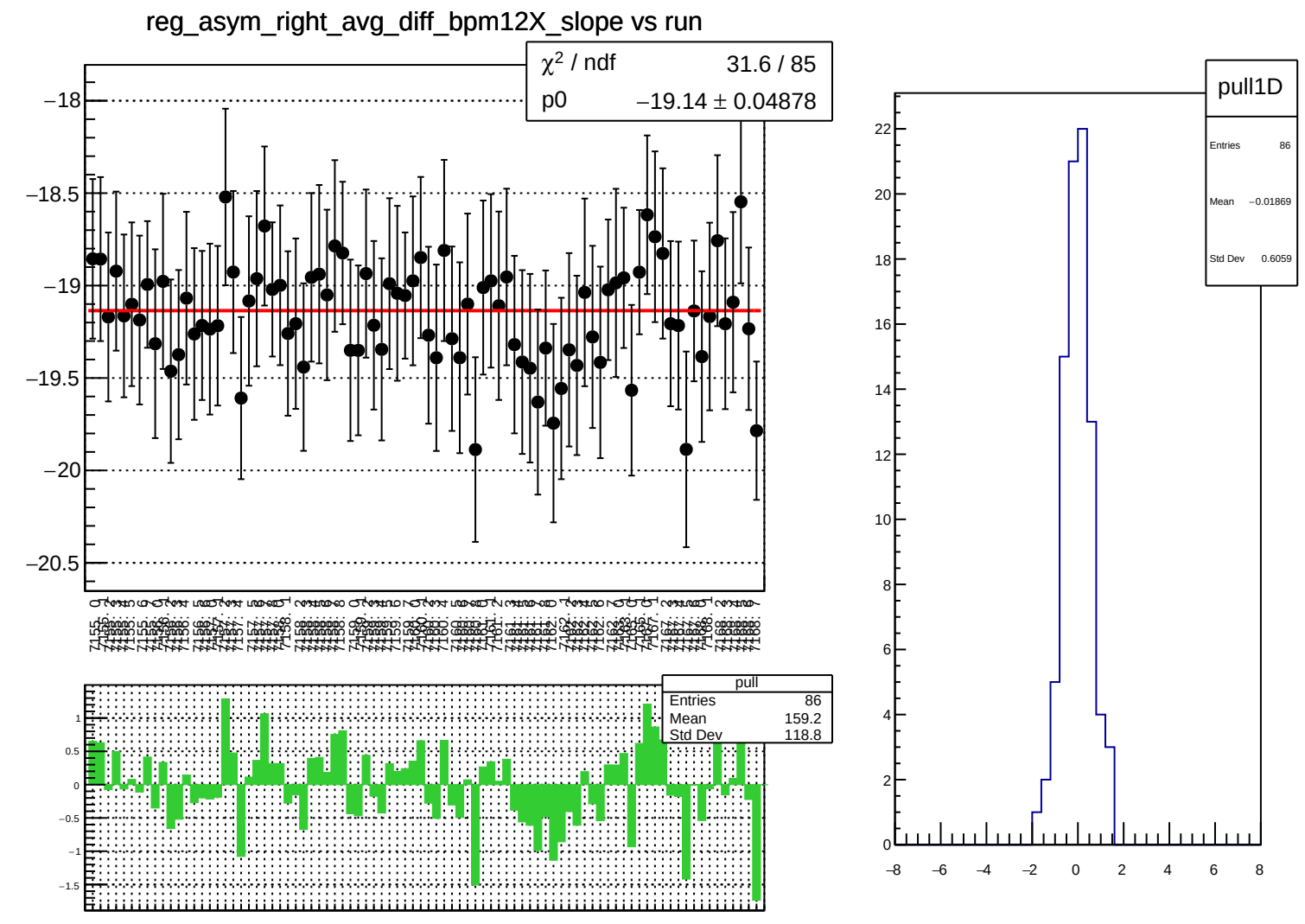

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 22.94 / 85
p0 −4.32 ± 1.074
pull
Entries 86
Mean 466.7
Std Dev 422.8

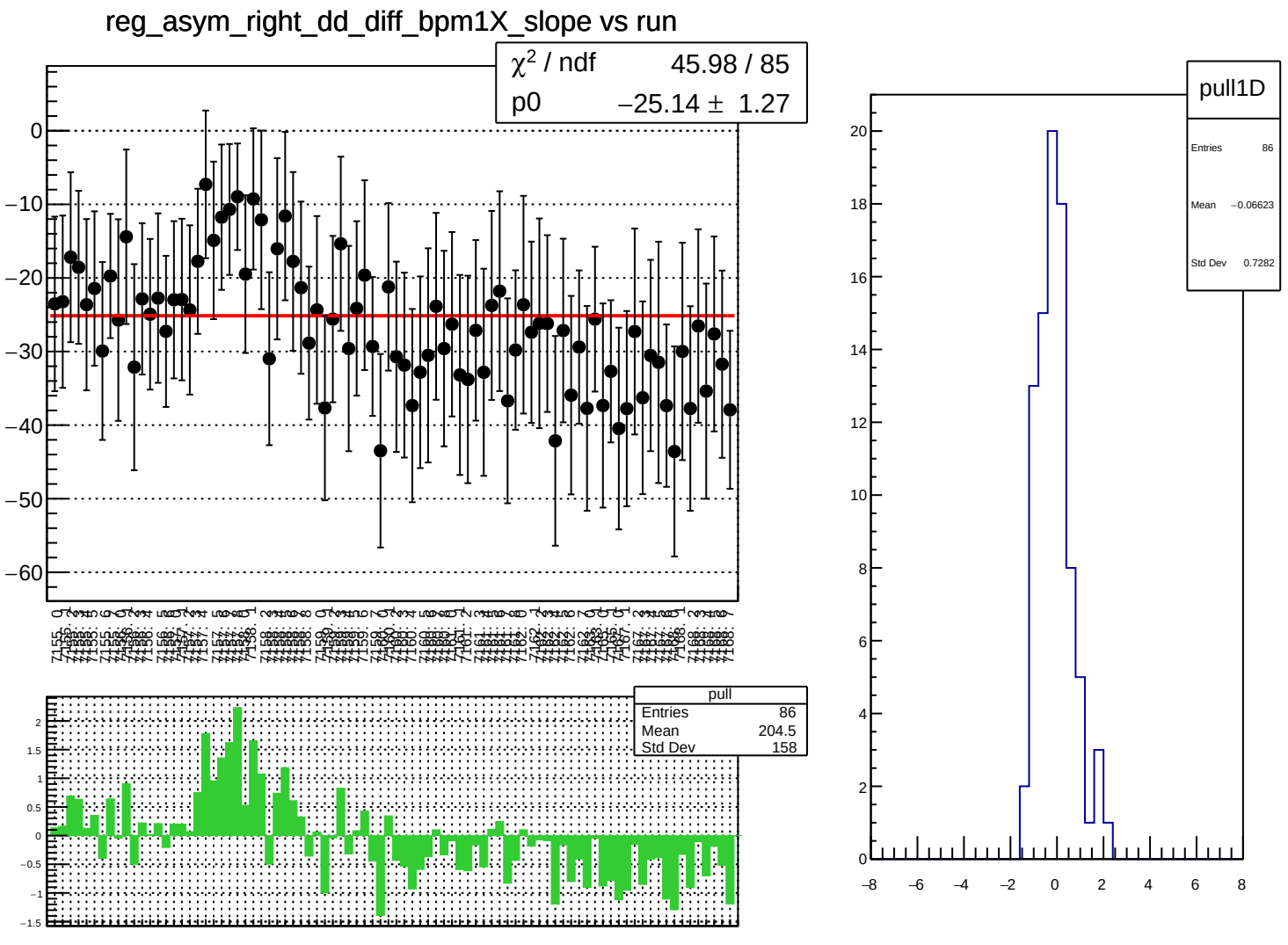

pull1D
Entries 86
Mean 0.01333
Std Dev 0.5163

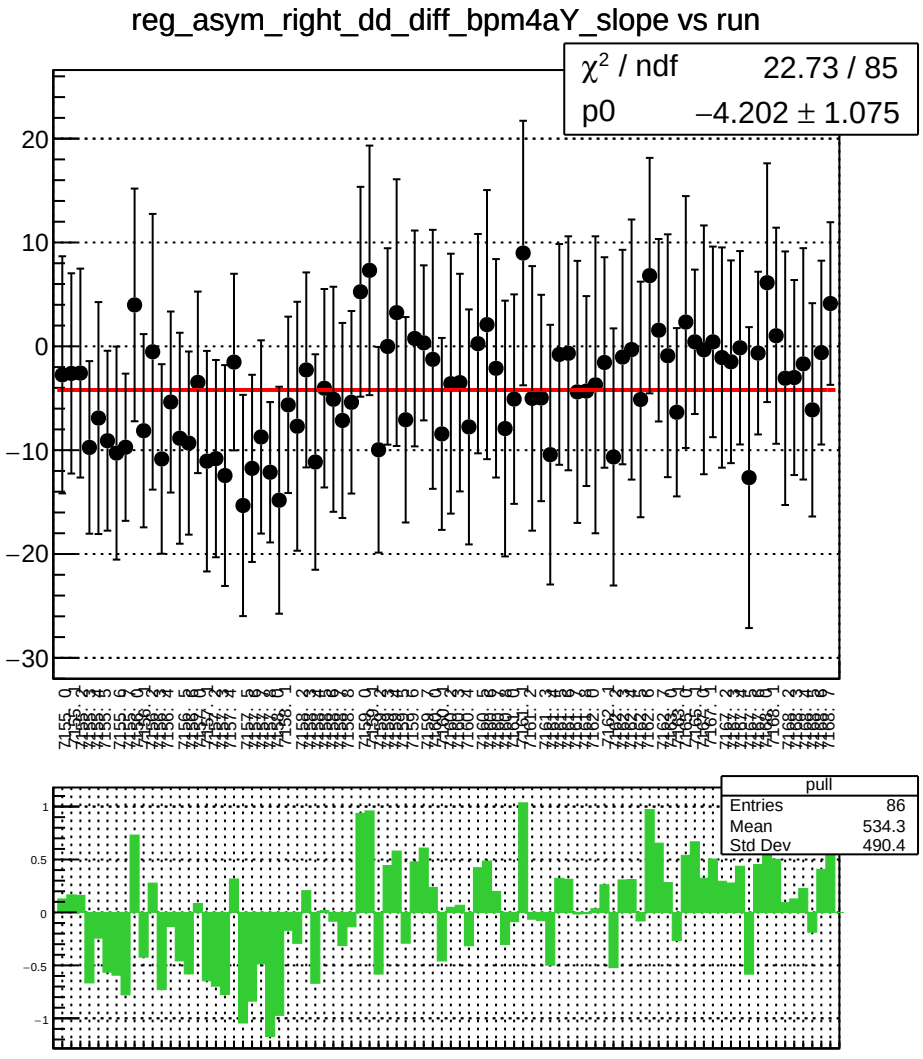

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 48.68 / 85
p0 54.29 ± 1.285
pull
Entries 86
Mean 202.5
Std Dev 156.2
pull1D
Entries 86
Mean 0.06873
Std Dev 0.7492

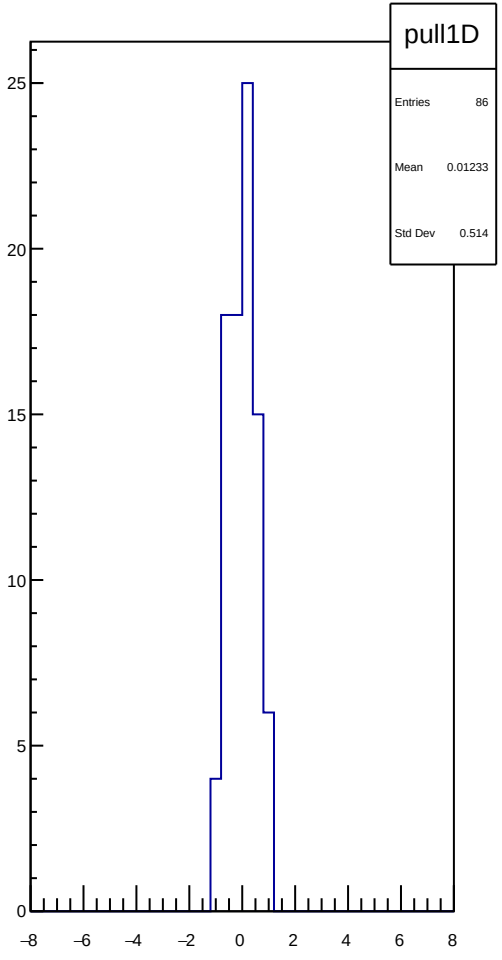

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 24.97 / 85
p0 16.1 ± 1.249
pull
Entries 86
Mean 337.1
Std Dev 292.3

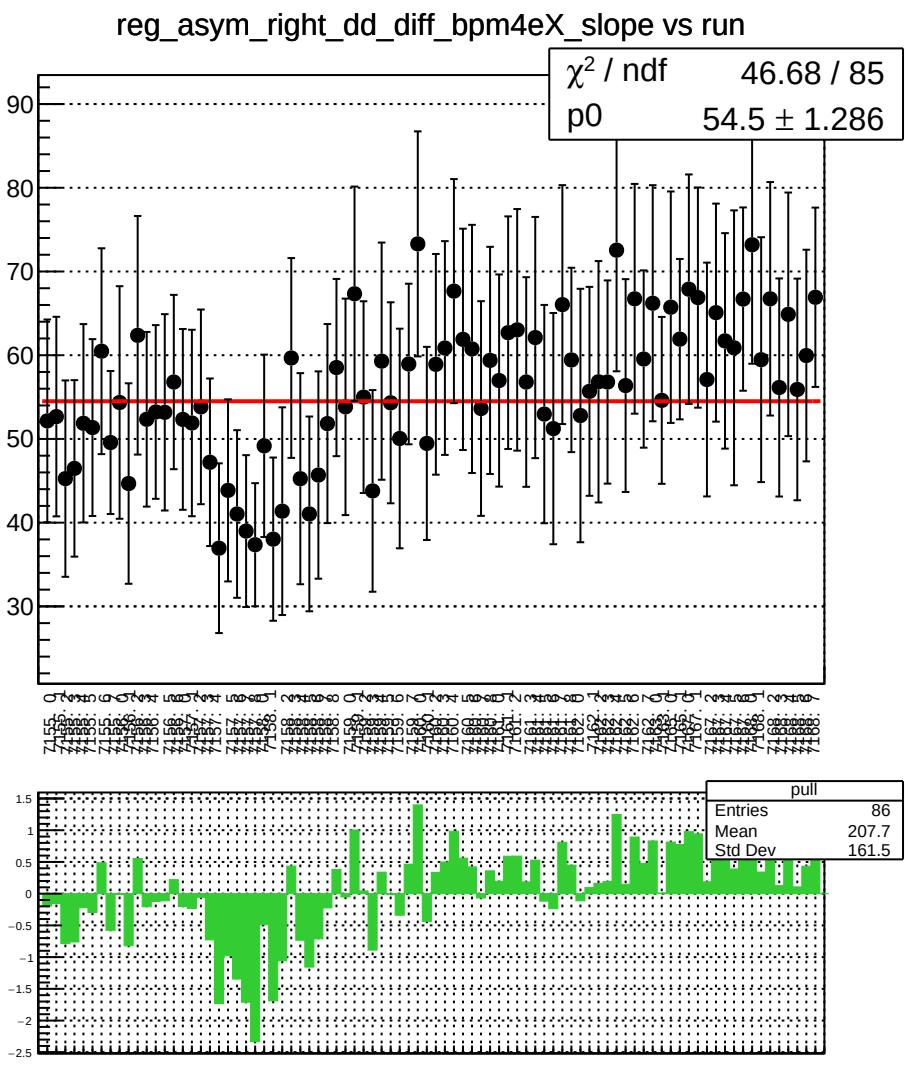

pull1D
Entries 86
Mean −0.02216
Std Dev 0.5384

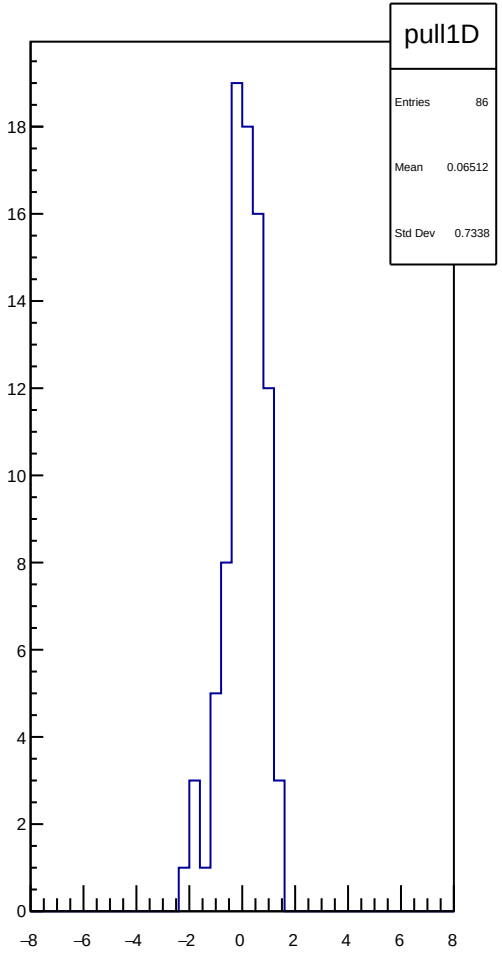

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 31.6 / 85
p0 −19.14 ± 0.04878
−18
−18.5
−19
−19.5
−20
−20.5
pull
Entries 86
Mean 159.2
Std Dev 118.8
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean −0.01869
Std Dev 0.6059
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

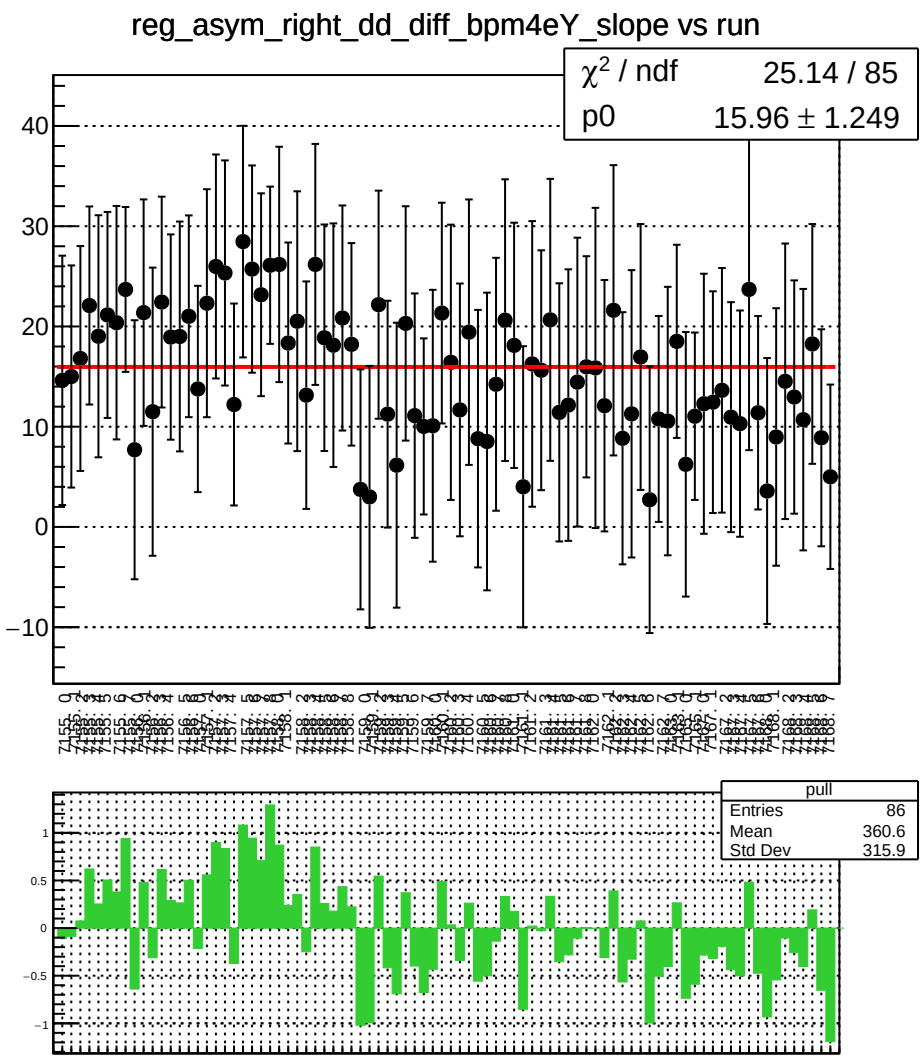

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 45.98 / 85
p0 −25.14 ± 1.27
pull
Entries 86
Mean 204.5
Std Dev 158
pull1D
Entries 86
Mean −0.06623
Std Dev 0.7282

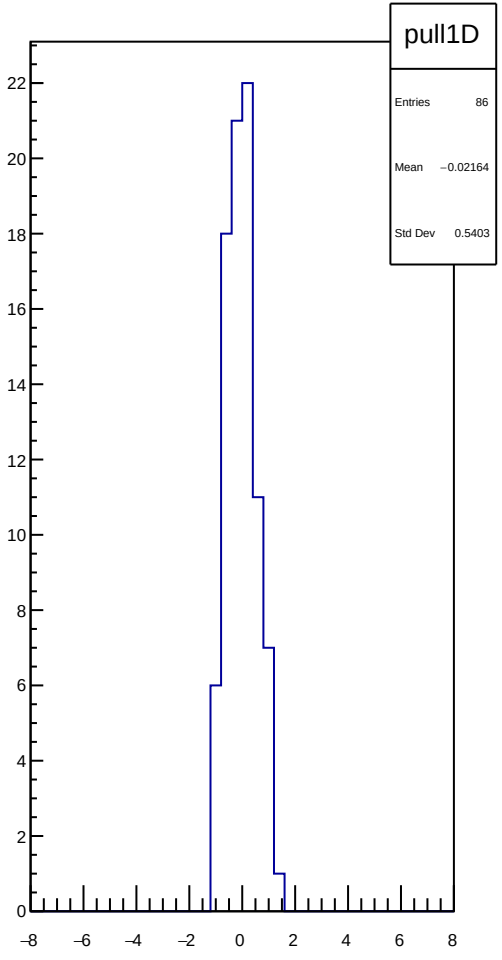

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 22.73 / 85
p0 −4.202 ± 1.075
pull
Entries 86
Mean 534.3
Std Dev 490.4

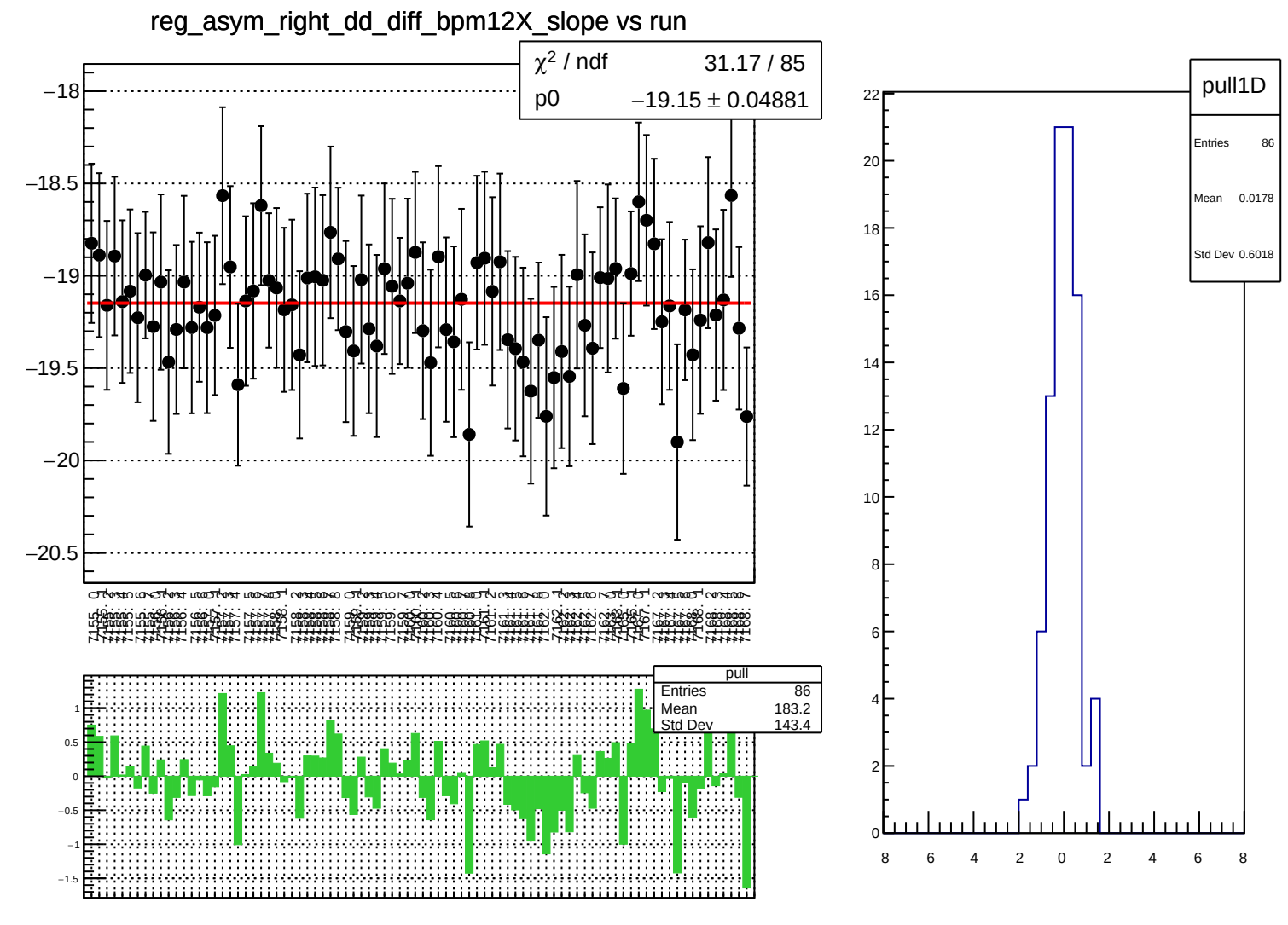

pull1D
Entries 86
Mean 0.01233
Std Dev 0.514

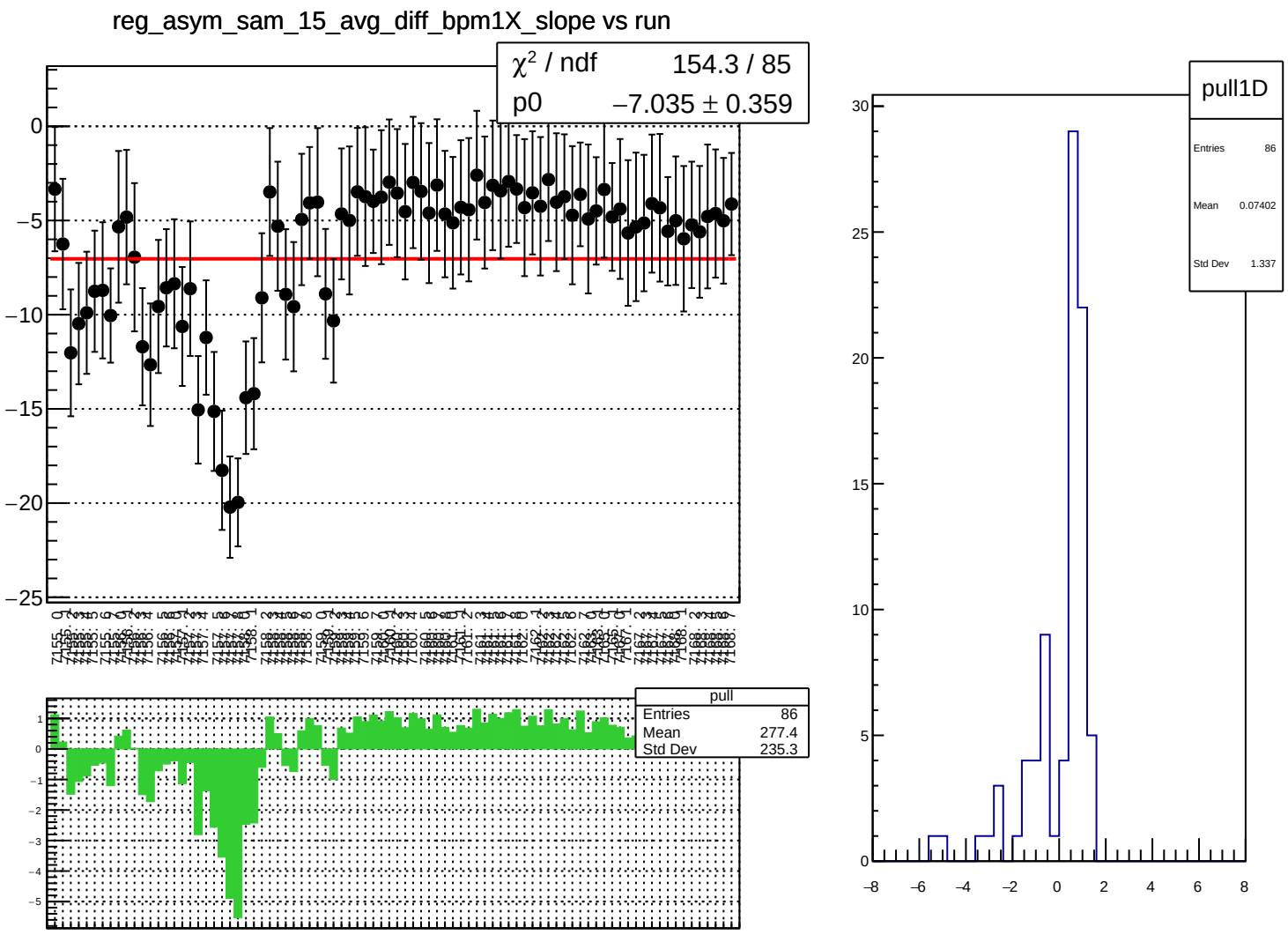

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 46.68 / 85
p0 54.5 ± 1.286
pull
Entries 86
Mean 207.7
Std Dev 161.5

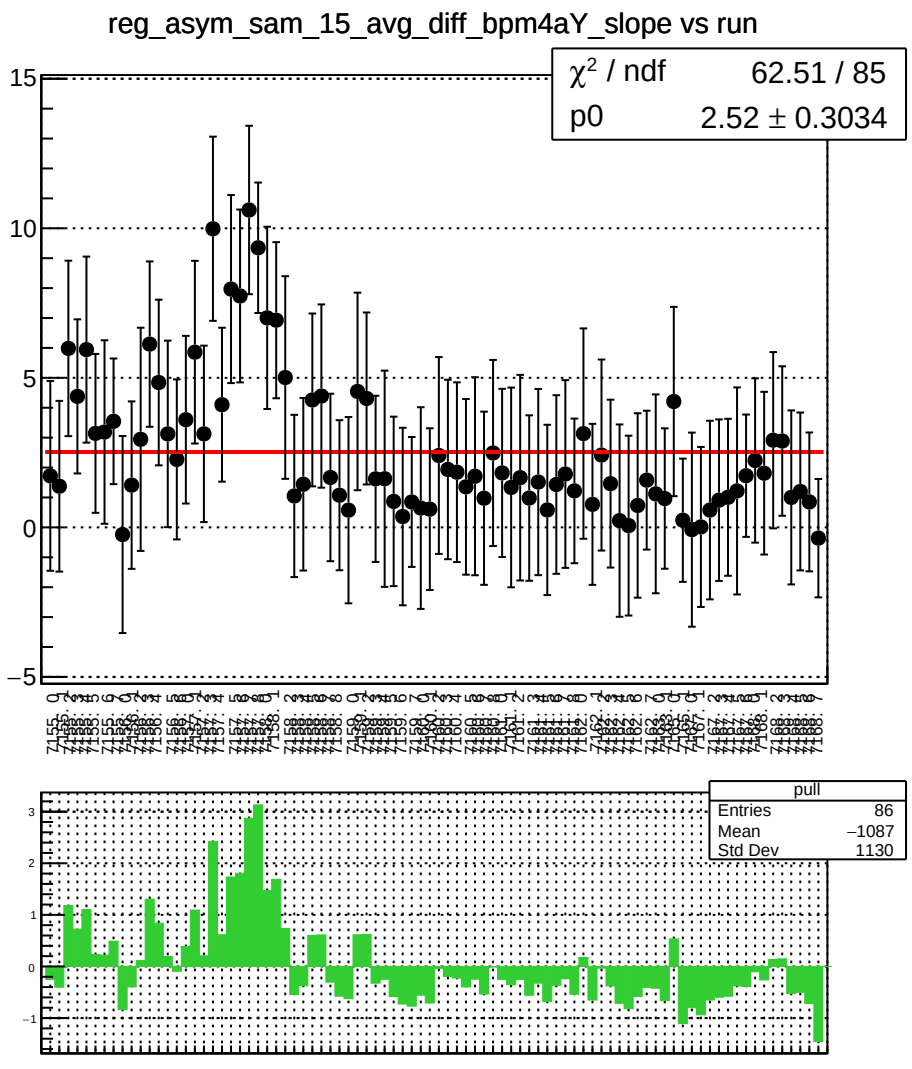

pull1D
Entries 86
Mean 0.06512
Std Dev 0.7338

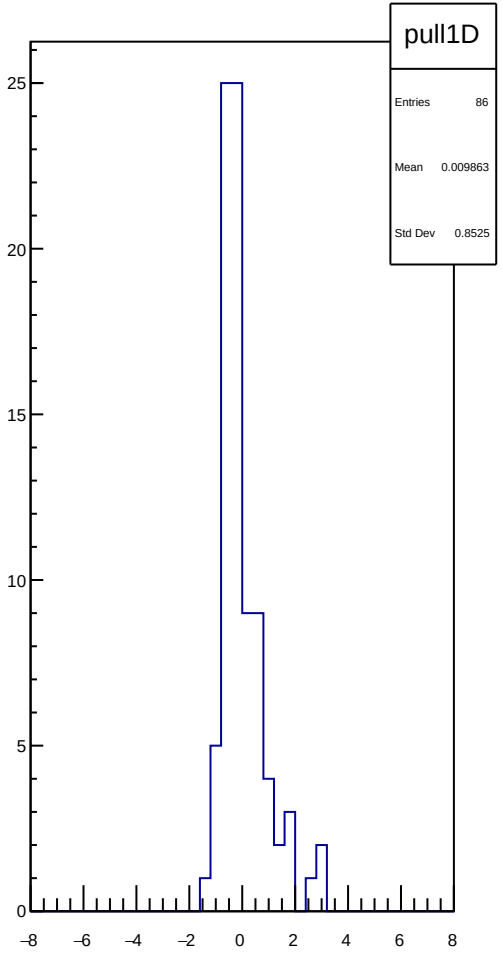

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 25.14 / 85
p0 15.96 ± 1.249
pull
Entries 86
Mean 360.6
Std Dev 315.9

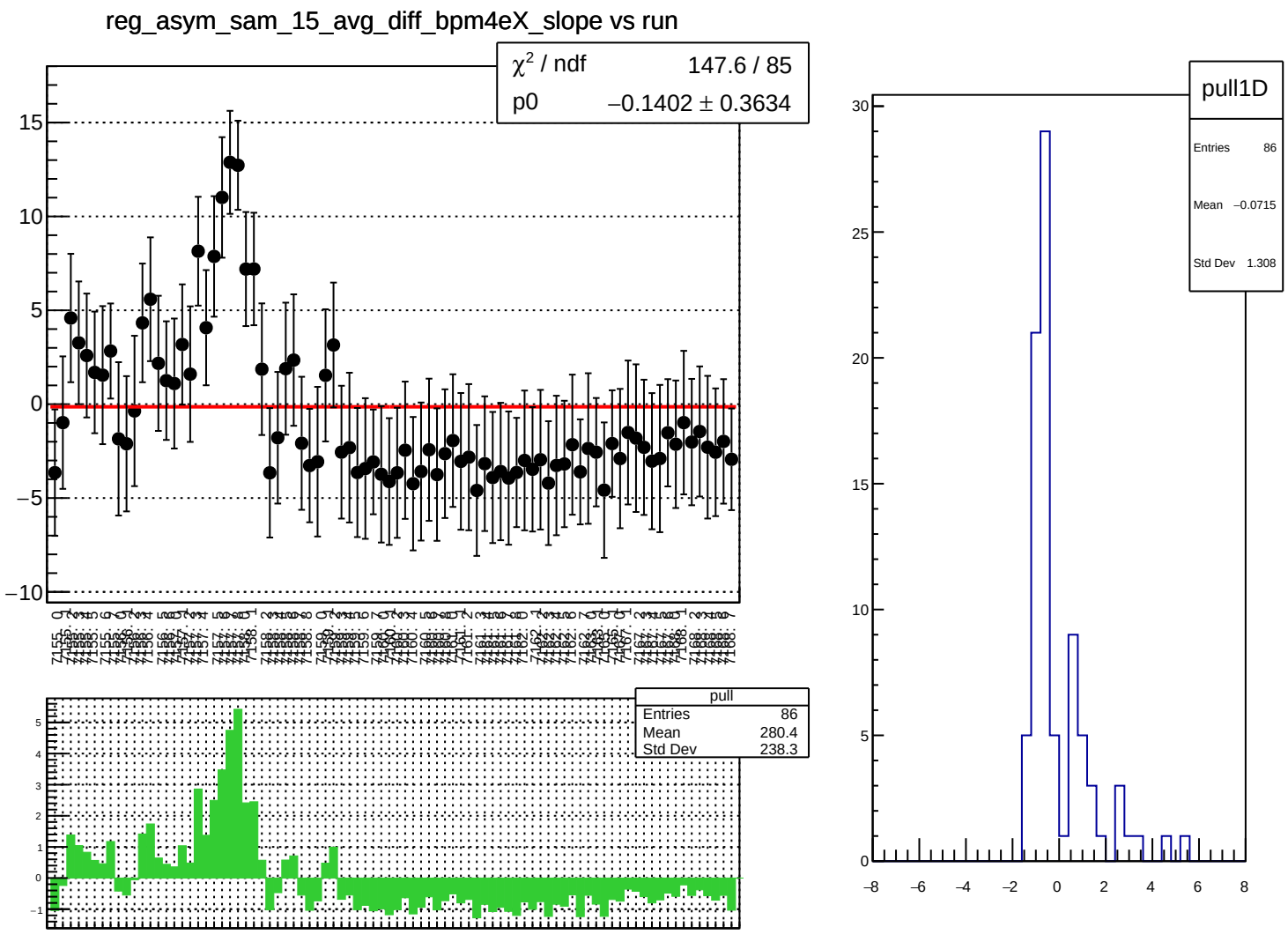

pull1D
Entries 86
Mean −0.02164
Std Dev 0.5403

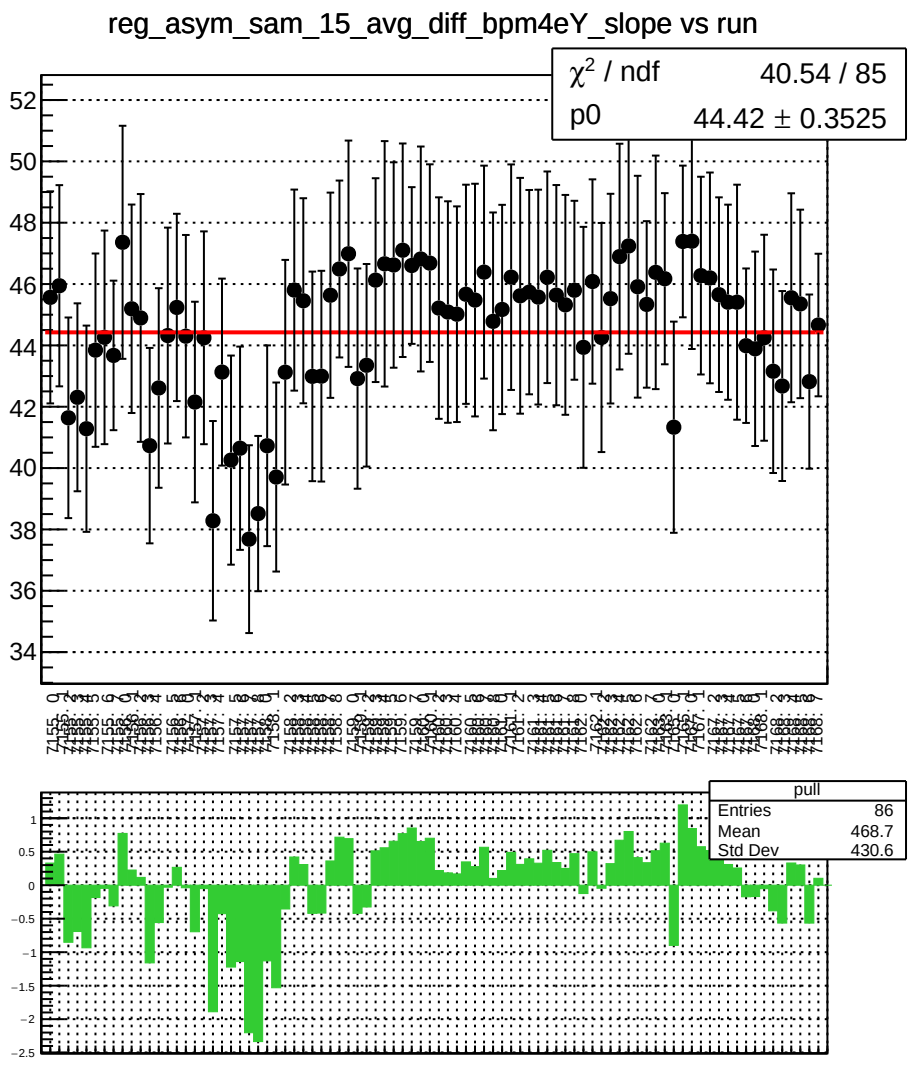

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 31.17 / 85
p0 −19.15 ± 0.04881
−18
−18.5
−19
−19.5
−20
−20.5
pull
Entries 86
Mean 183.2
Std Dev 143.4
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean −0.0178
Std Dev 0.6018
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

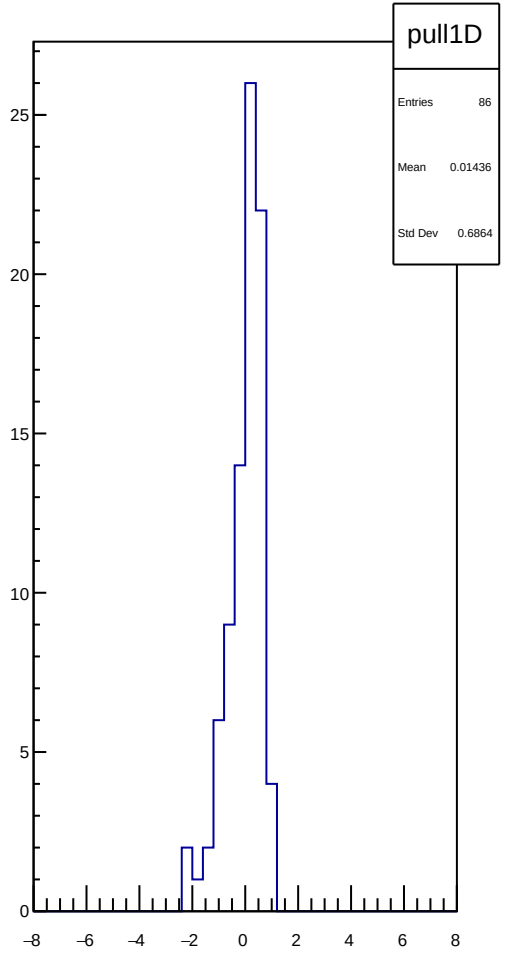

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 154.3 / 85
p0 −7.035 ± 0.359
pull
Entries 86
Mean 277.4
Std Dev 235.3
pull1D
Entries 86
Mean 0.07402
Std Dev 1.337

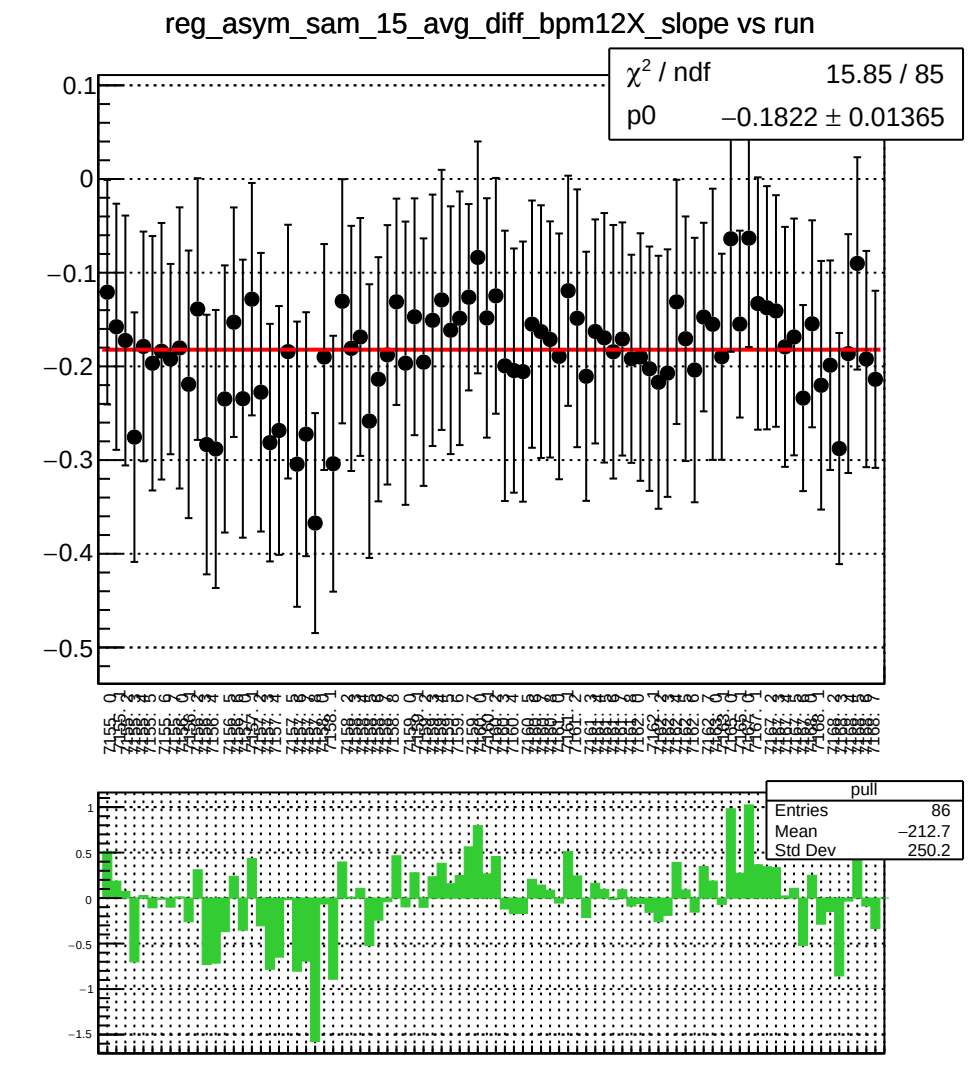

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 62.51 / 85
p0 2.52 ± 0.3034
pull
Entries 86
Mean −1087
Std Dev 1130

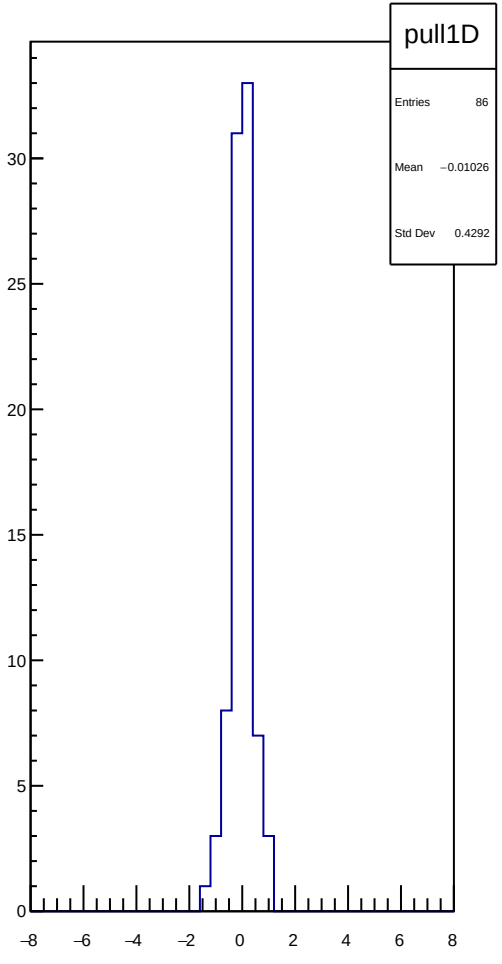

pull1D
Entries 86
Mean 0.009863
Std Dev 0.8525

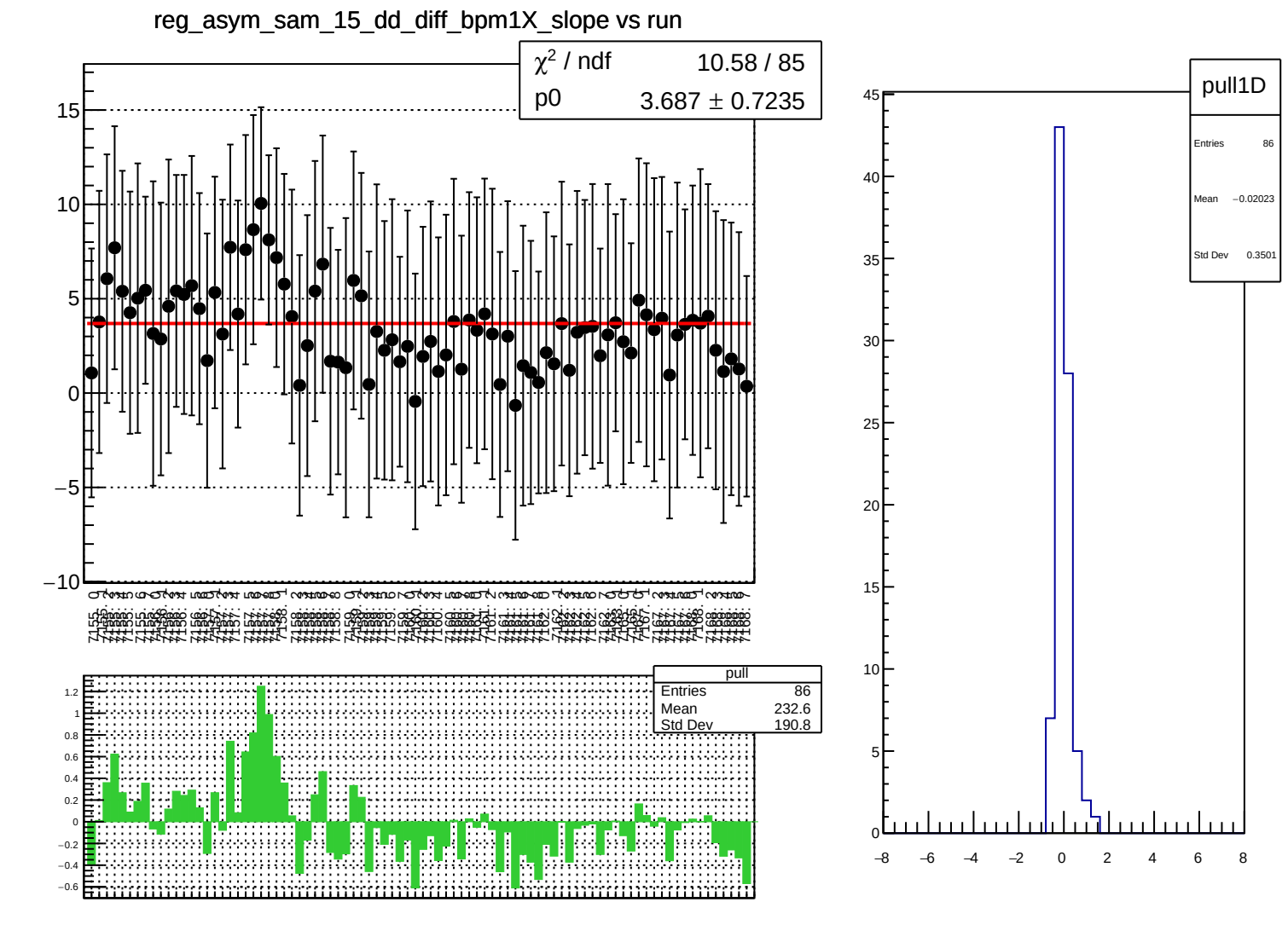

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 147.6 / 85
p0 −0.1402 ± 0.3634
pull
Entries 86
Mean 280.4
Std Dev 238.3
pull1D
Entries 86
Mean −0.0715
Std Dev 1.308

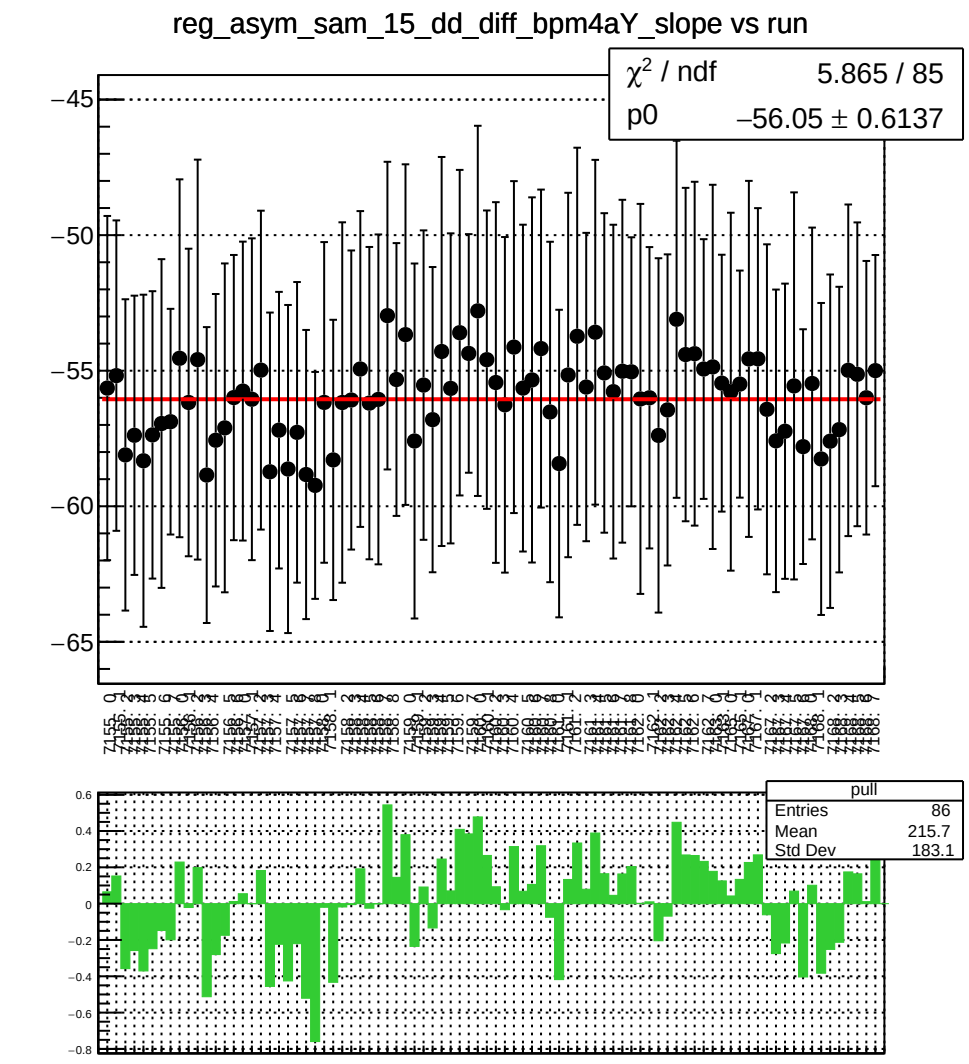

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 40.54 / 85
p0 44.42 ± 0.3525
pull
Entries 86
Mean 468.7
Std Dev 430.6

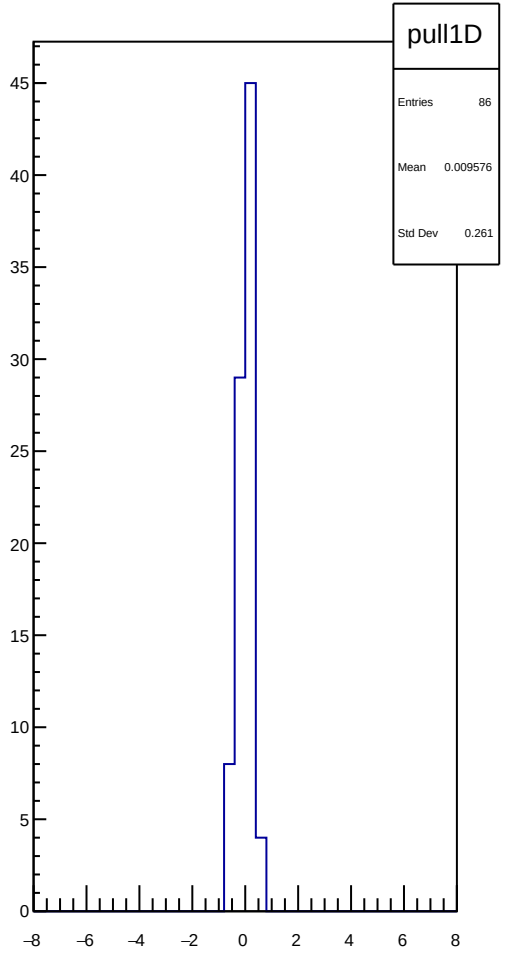

pull1D
Entries 86
Mean 0.01436
Std Dev 0.6864

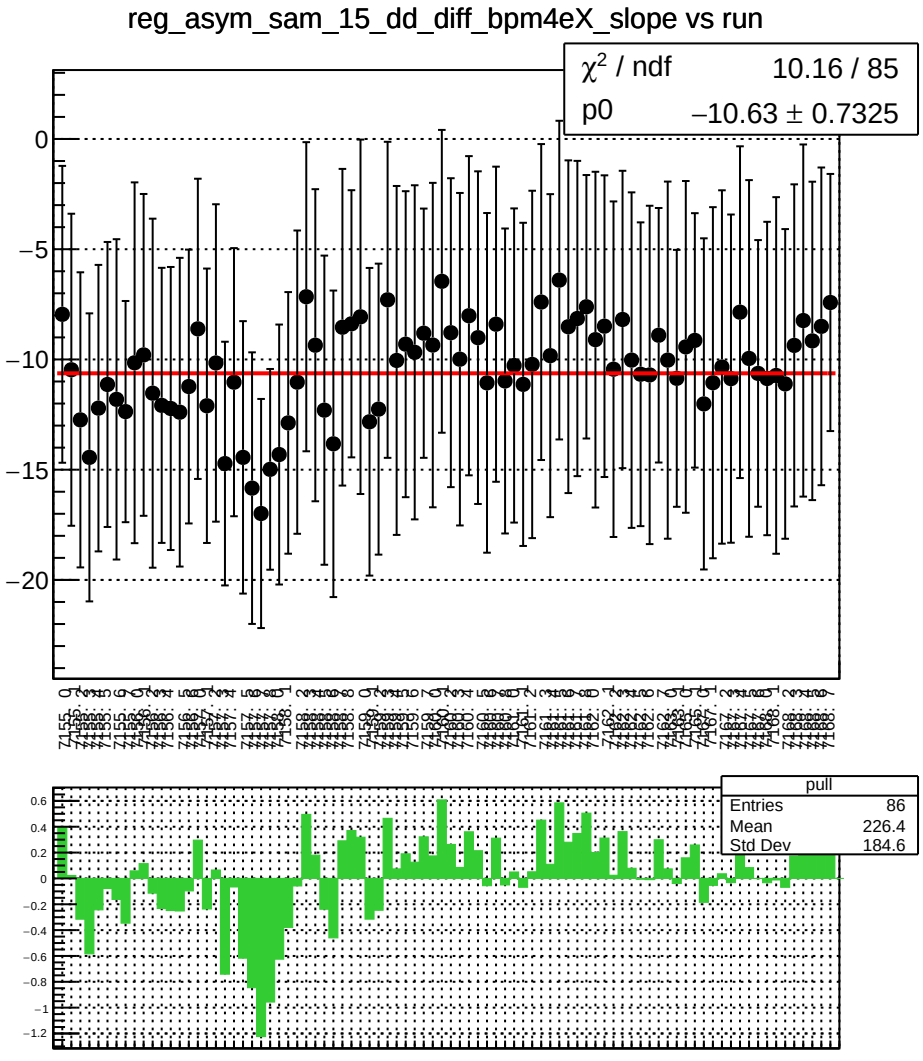

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 15.85 / 85
p0 −0.1822 ± 0.01365
pull
Entries 86
Mean −212.7
Std Dev 250.2

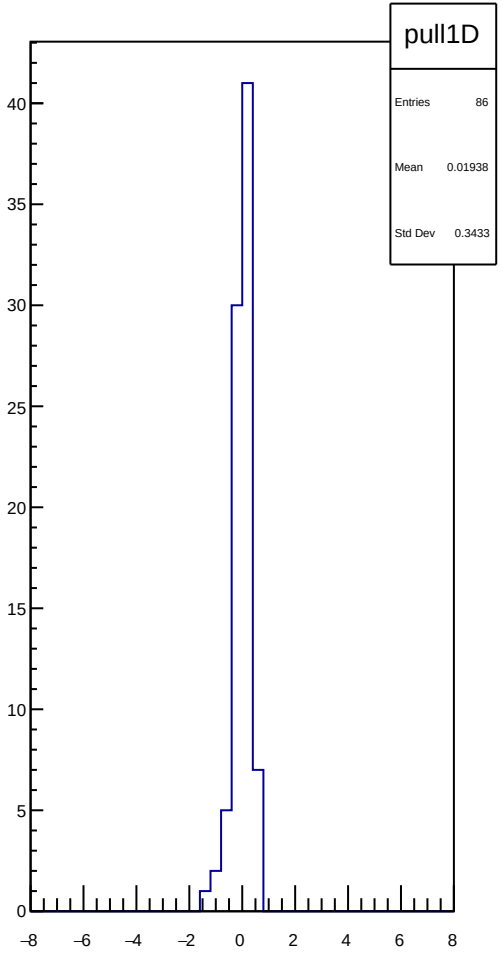

pull1D
Entries 86
Mean −0.01026
Std Dev 0.4292

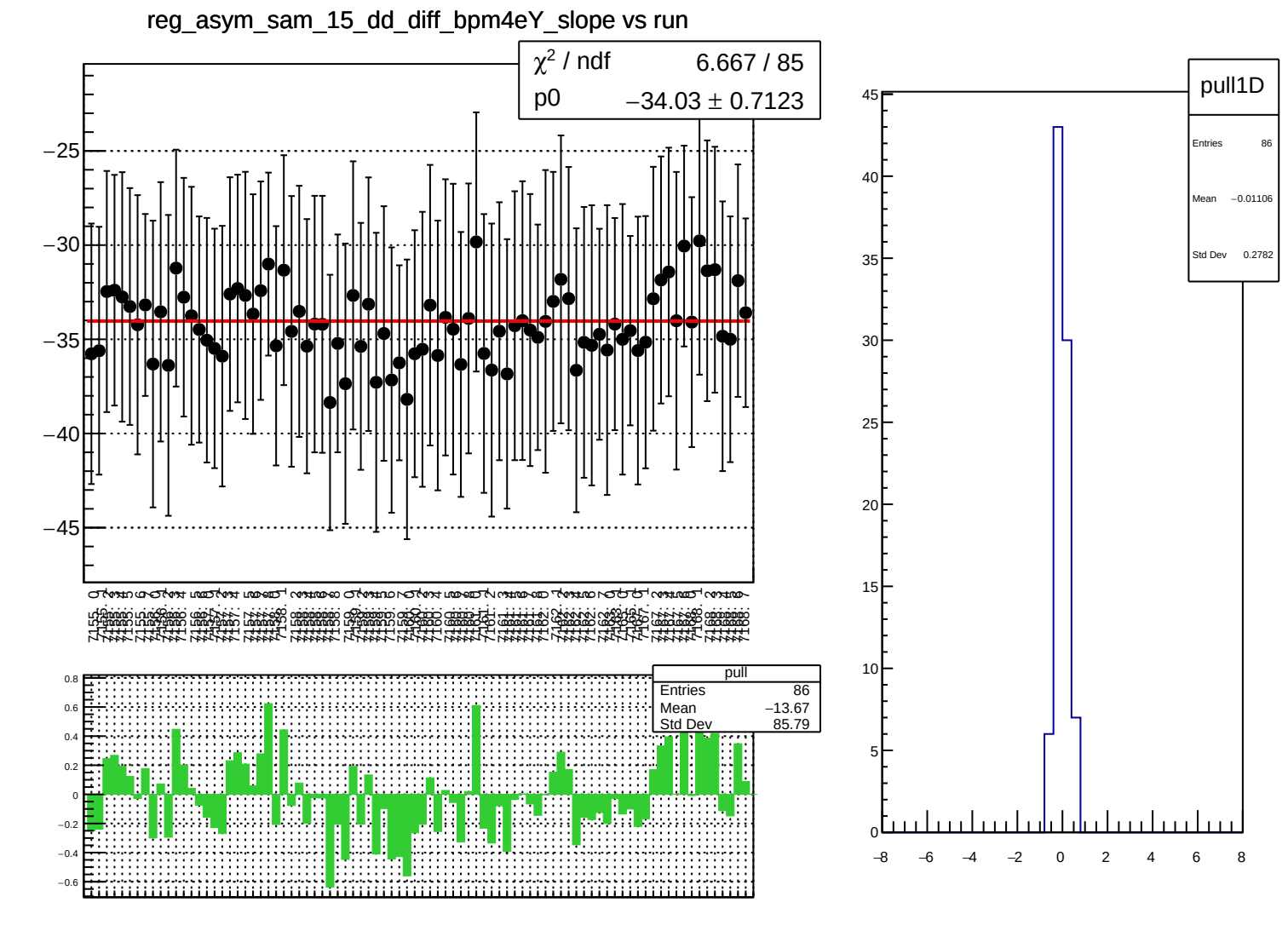

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 10.58 / 85
p0 3.687 ± 0.7235
pull
Entries 86
Mean 232.6
Std Dev 190.8
pull1D
Entries 86
Mean −0.02023
Std Dev 0.3501

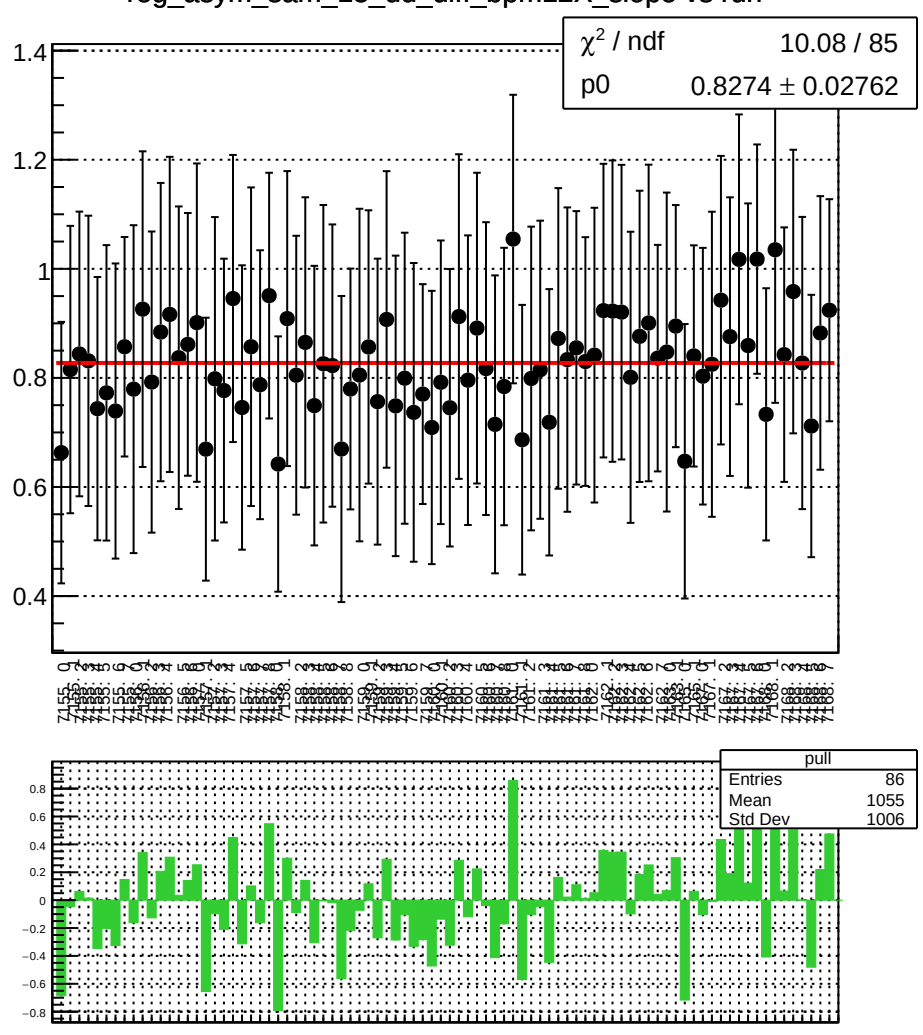

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.865 / 85
p0 −56.05 ± 0.6137
−45
−50
−55
−60
−65
pull
Entries 86
Mean 215.7
Std Dev 183.1
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

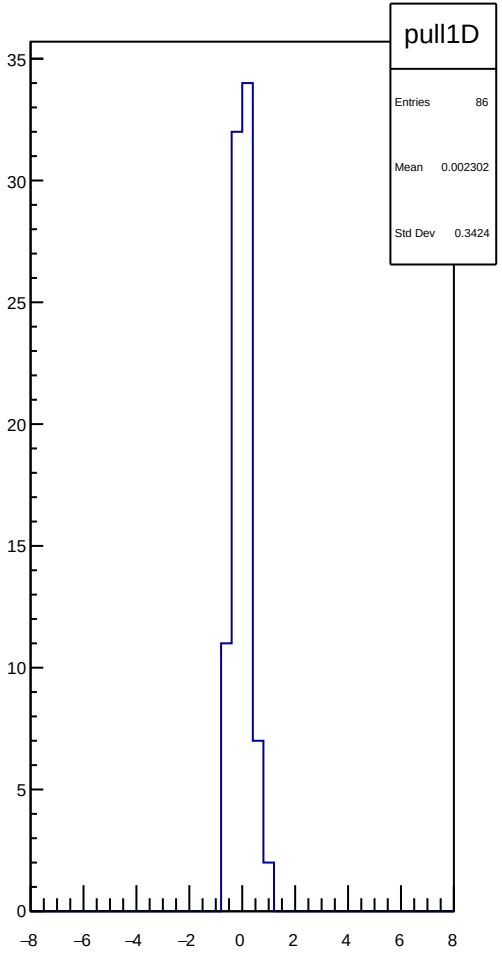

pull1D
Entries 86
Mean 0.009576
Std Dev 0.261
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

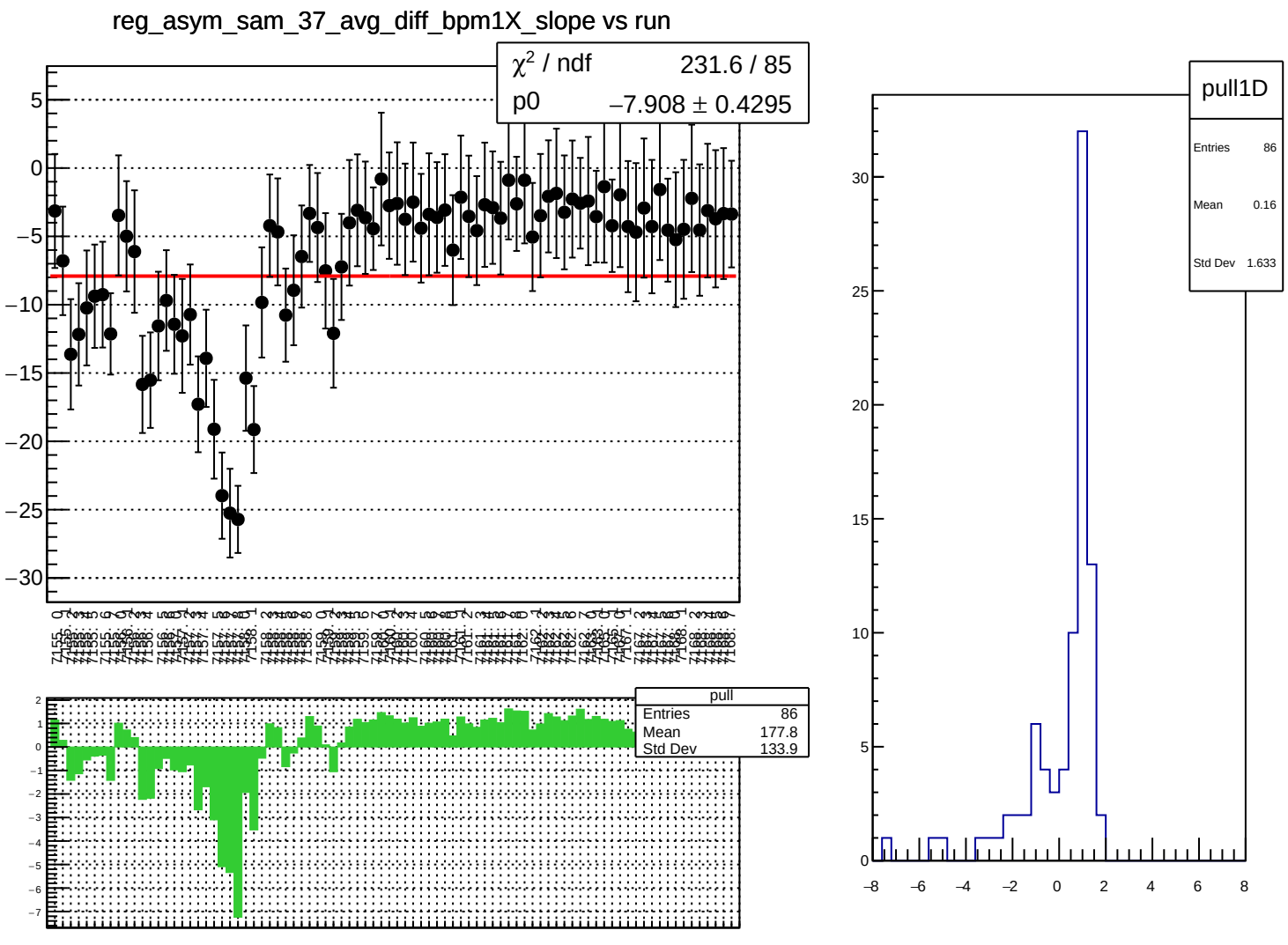

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 10.16 / 85
p0 −10.63 ± 0.7325
pull
Entries 86
Mean 226.4
Std Dev 184.6

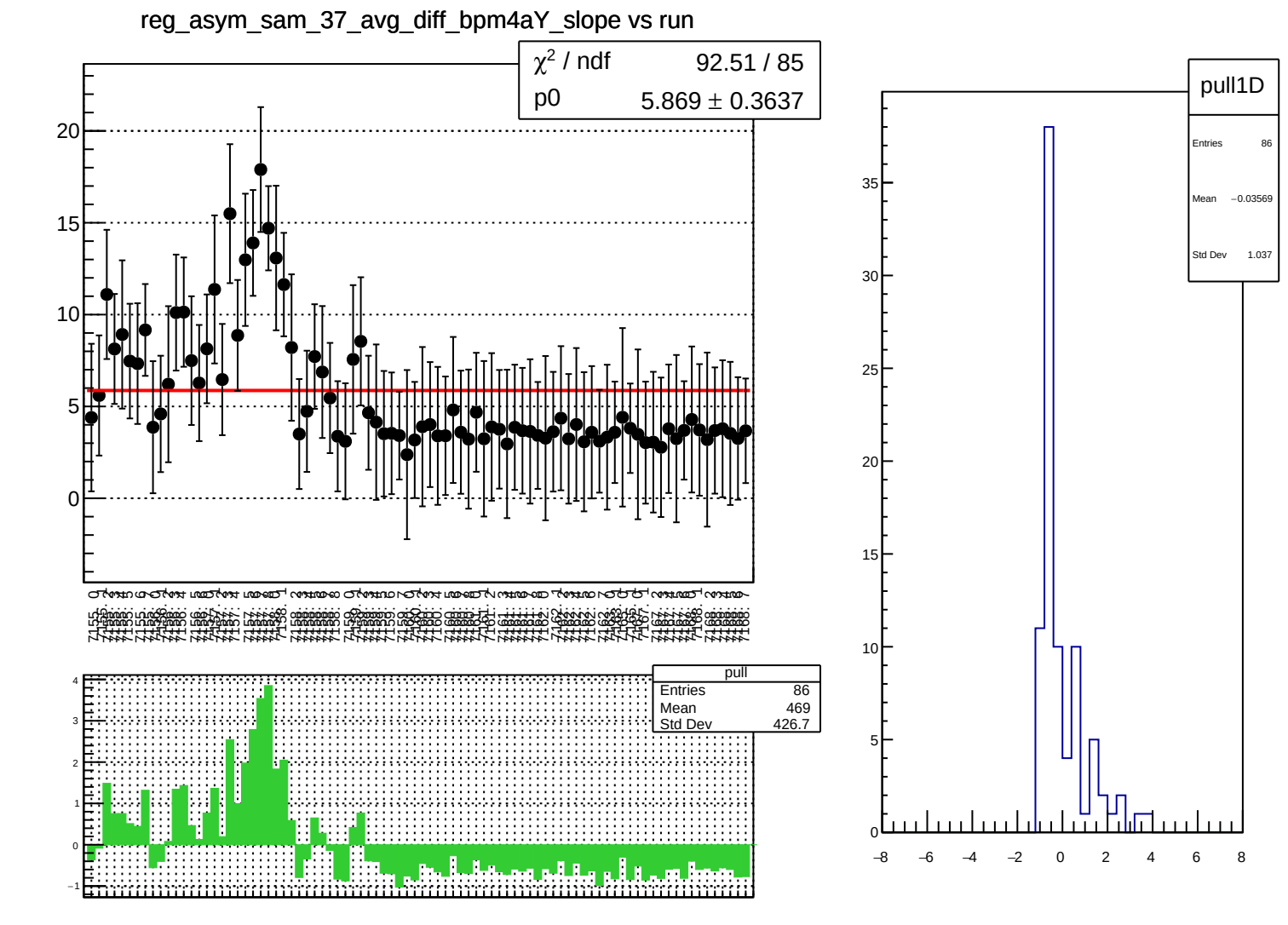

pull1D
Entries 86
Mean 0.01938
Std Dev 0.3433

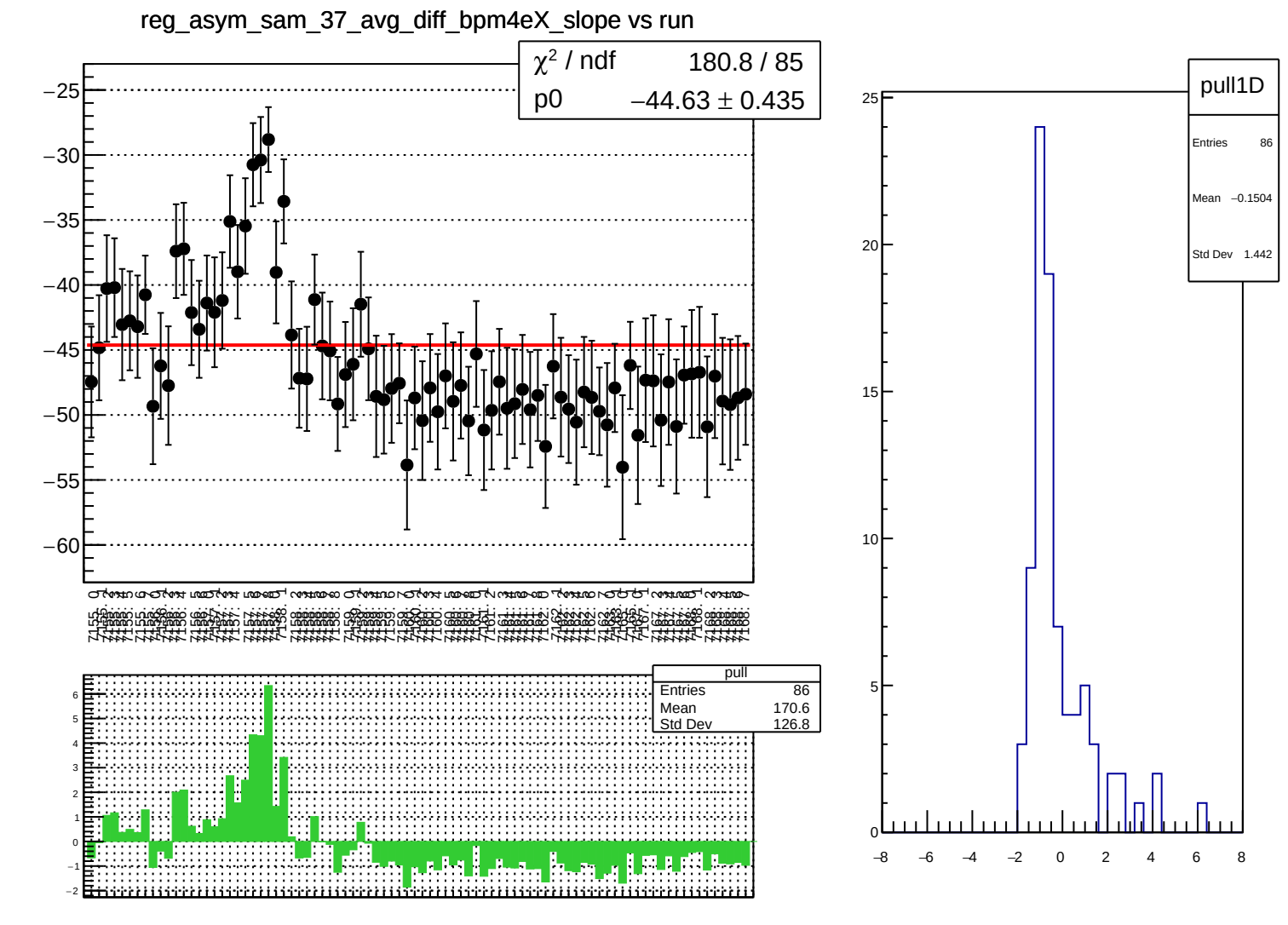

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.667 / 85
p0 −34.03 ± 0.7123
pull
Entries 86
Mean −13.67
Std Dev 85.79
pull1D
Entries 86
Mean −0.01106
Std Dev 0.2782

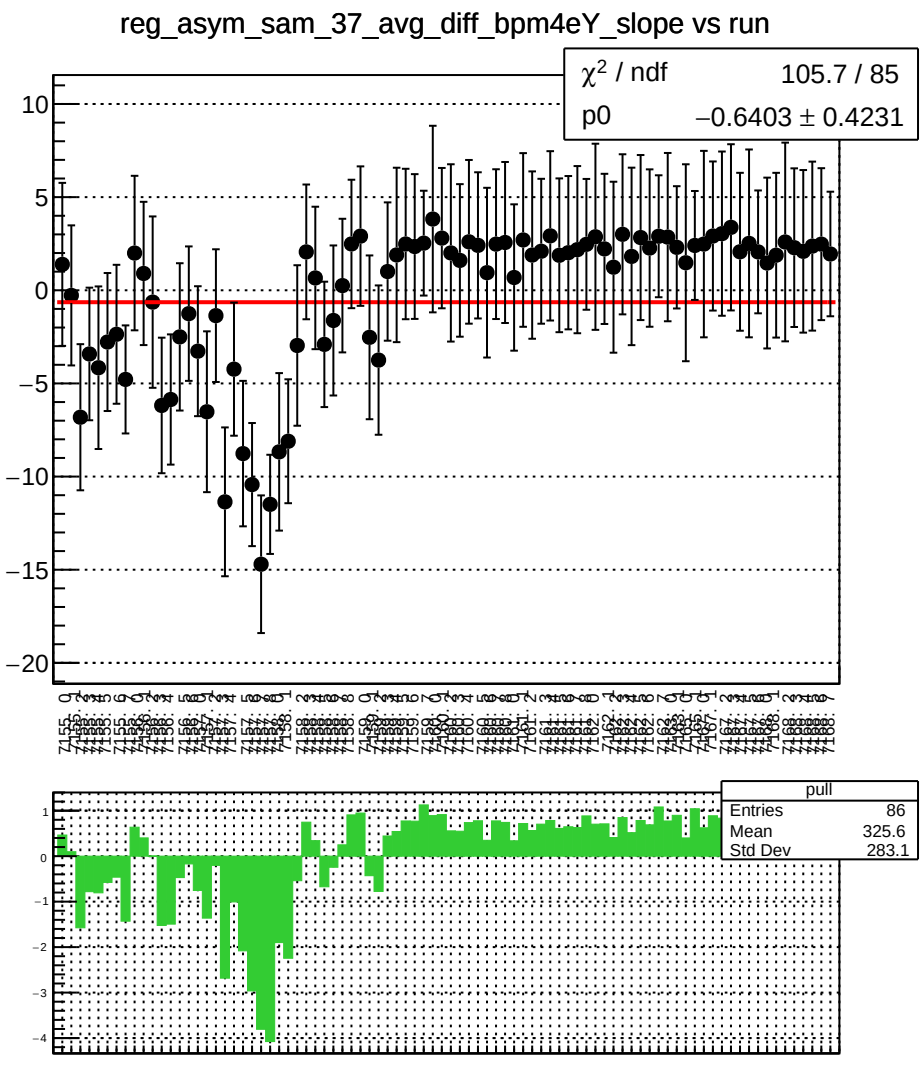

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 10.08 / 85
p0 0.8274 ± 0.02762
pull
Entries 86
Mean 1055
Std Dev 1006

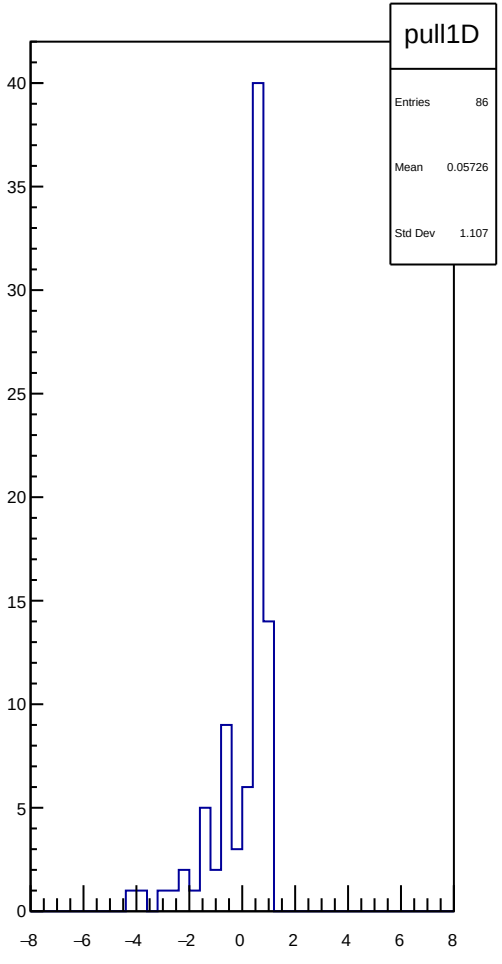

pull1D
Entries 86
Mean 0.002302
Std Dev 0.3424

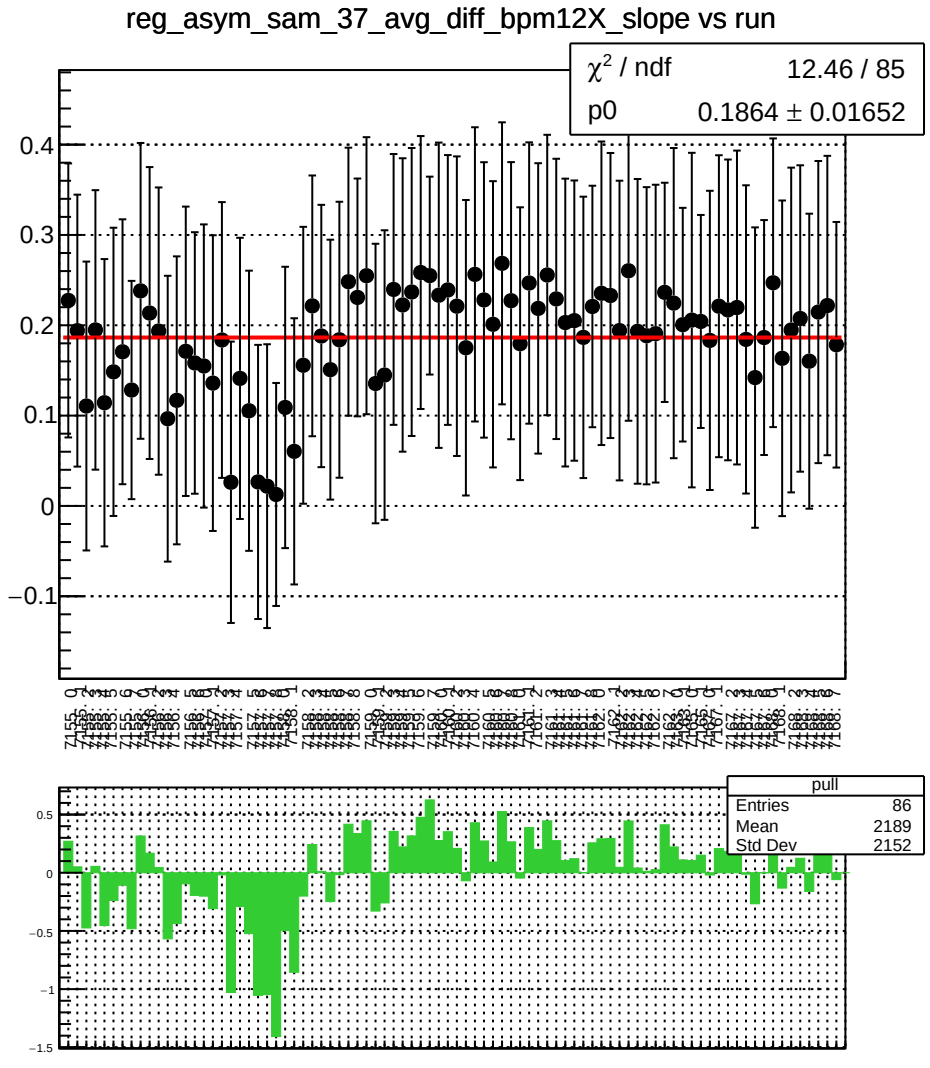

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 231.6 / 85
p0 −7.908 ± 0.4295
pull
Entries 86
Mean 177.8
Std Dev 133.9
pull1D
Entries 86
Mean 0.16
Std Dev 1.633

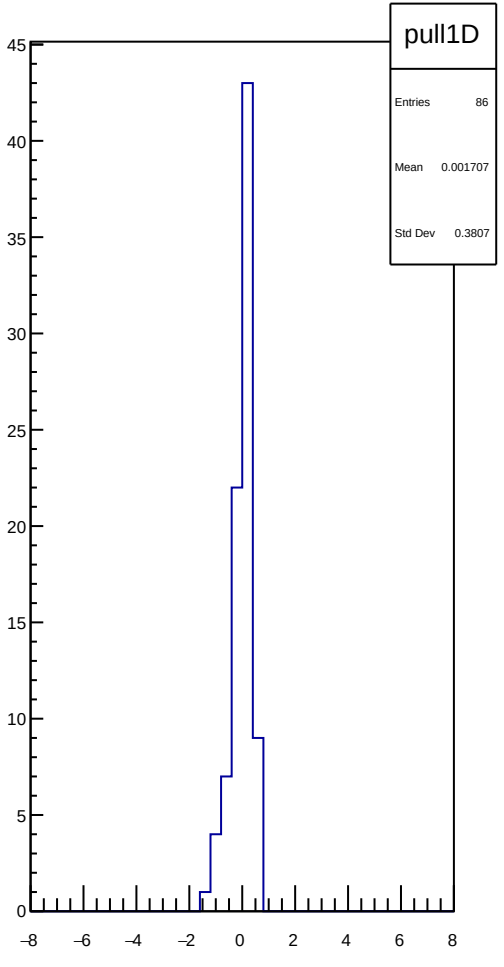

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 92.51 / 85
p0 5.869 ± 0.3637
pull
Entries 86
Mean 469
Std Dev 426.7
pull1D
Entries 86
Mean −0.03569
Std Dev 1.037

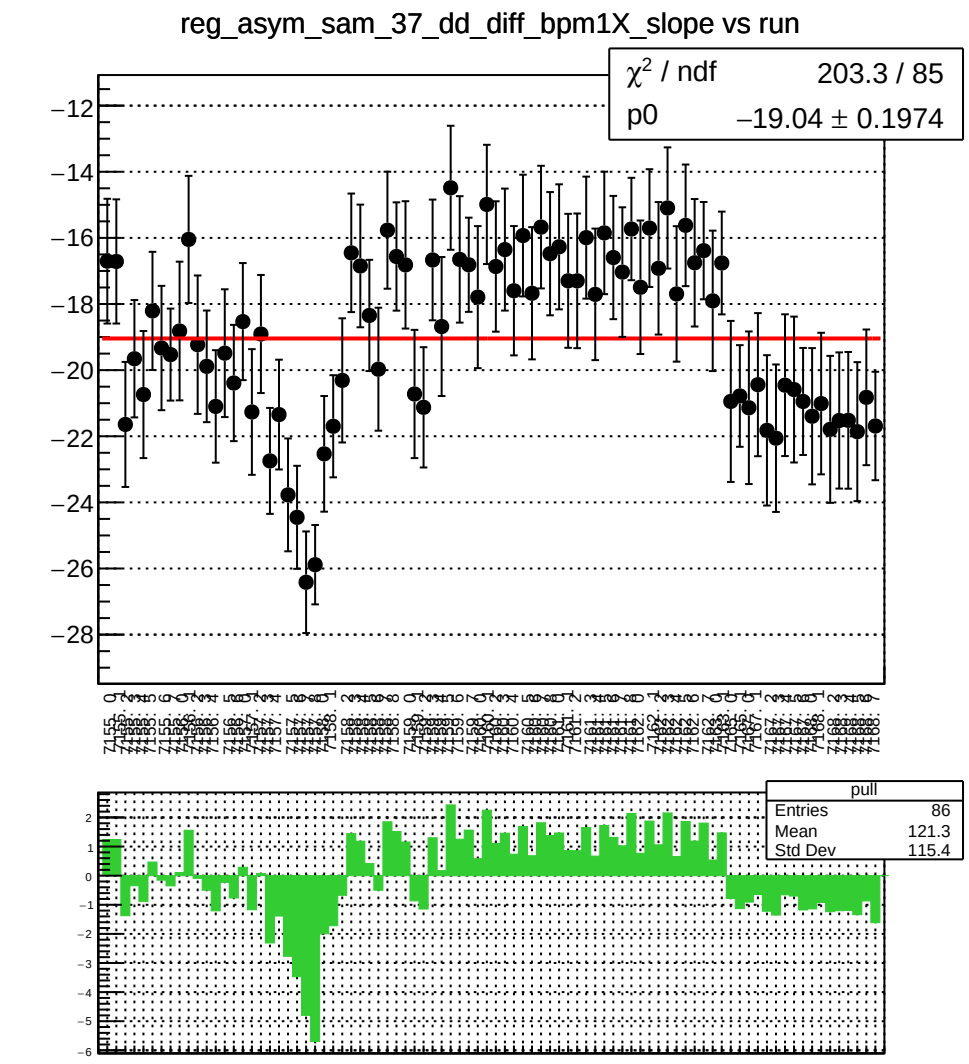

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 180.8 / 85
p0 −44.63 ± 0.435
pull
Entries 86
Mean 170.6
Std Dev 126.8
pull1D
Entries 86
Mean −0.1504
Std Dev 1.442

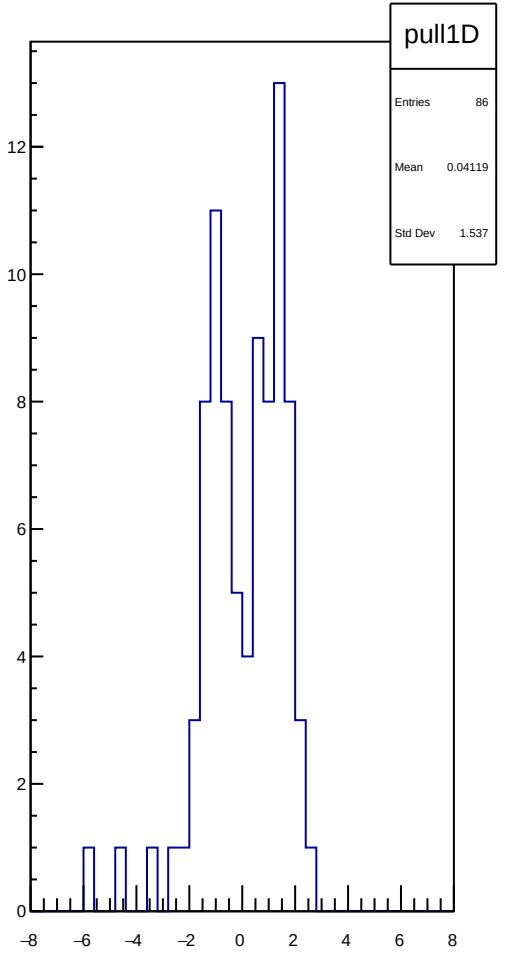

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 105.7 / 85
p0 −0.6403 ± 0.4231
pull
Entries 86
Mean 325.6
Std Dev 283.1

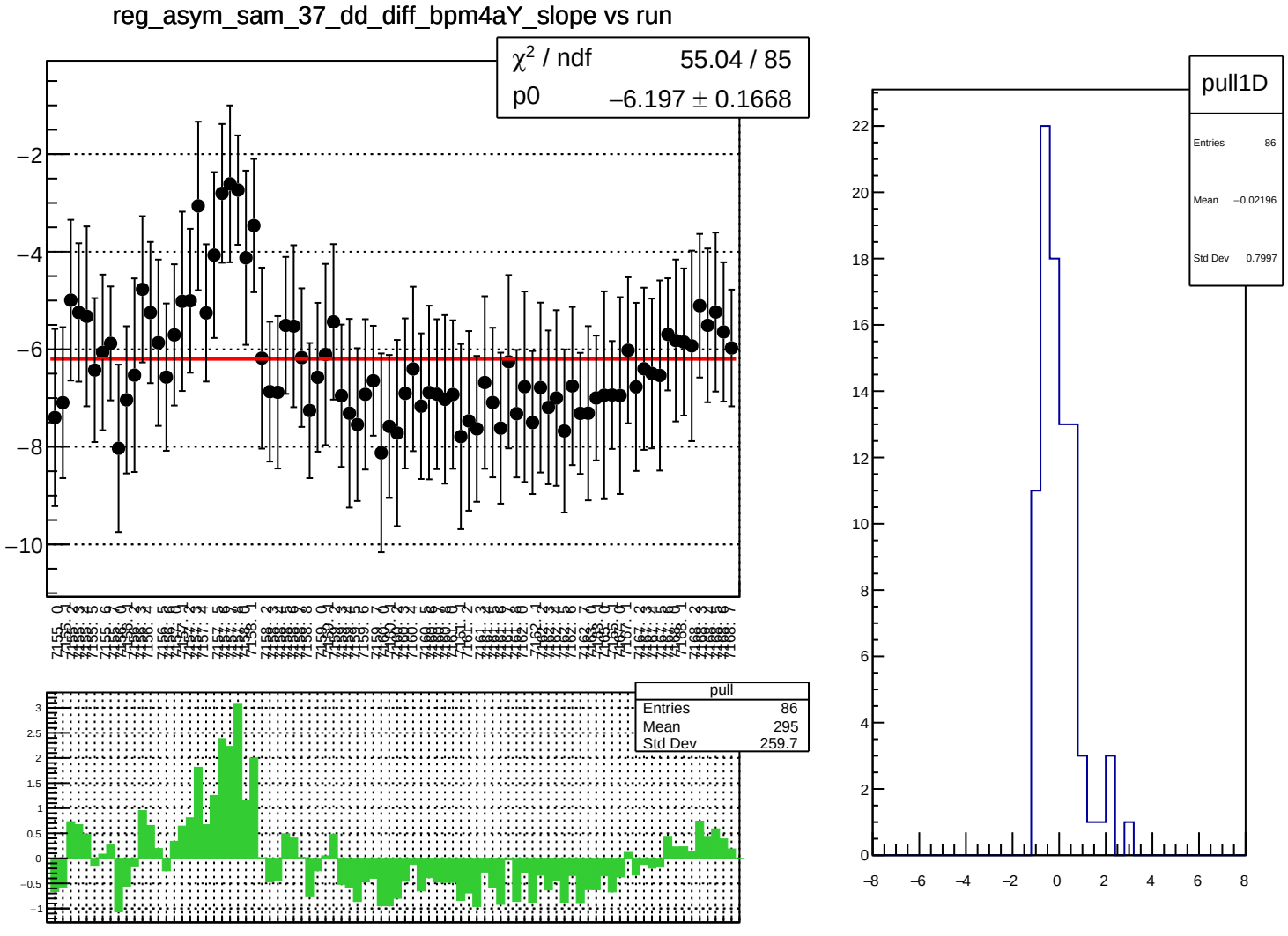

pull1D
Entries 86
Mean 0.05726
Std Dev 1.107

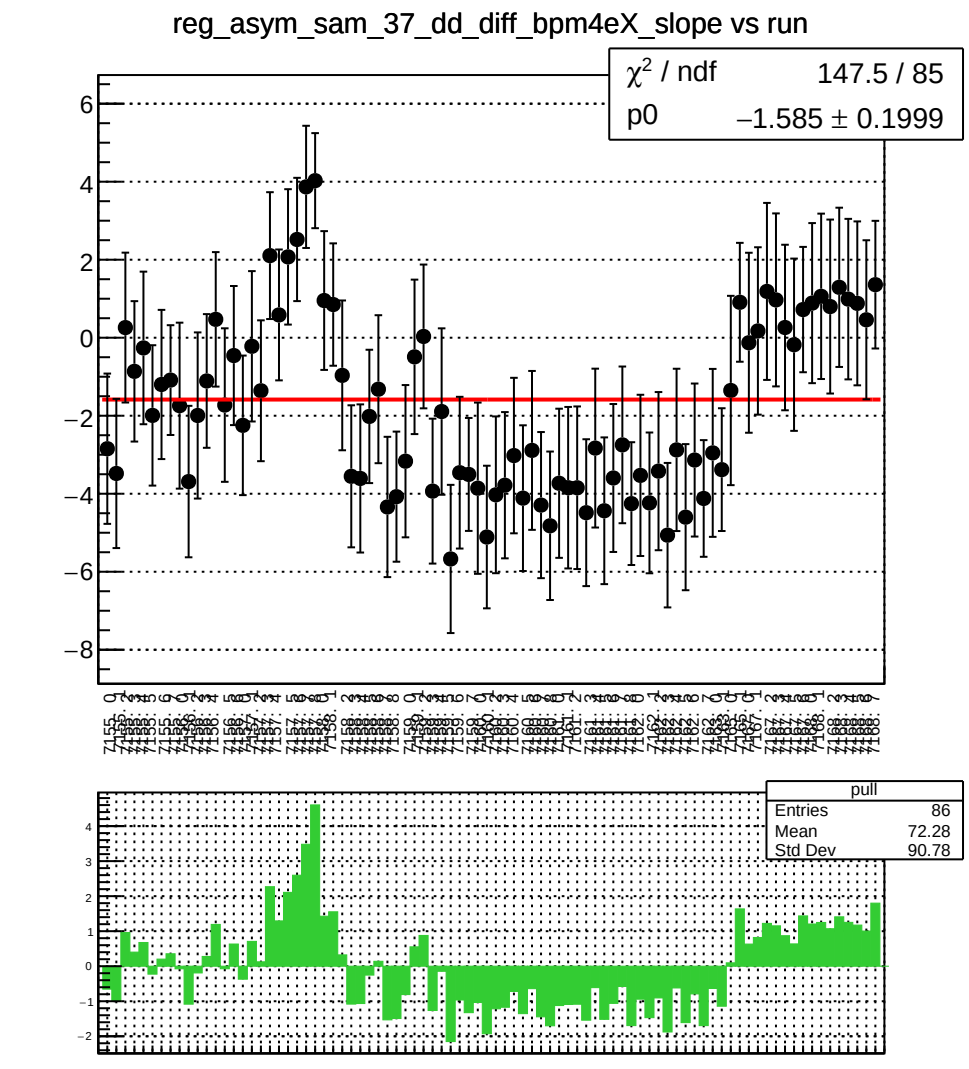

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 12.46 / 85
p0 0.1864 ± 0.01652
pull
Entries 86
Mean 2189
Std Dev 2152

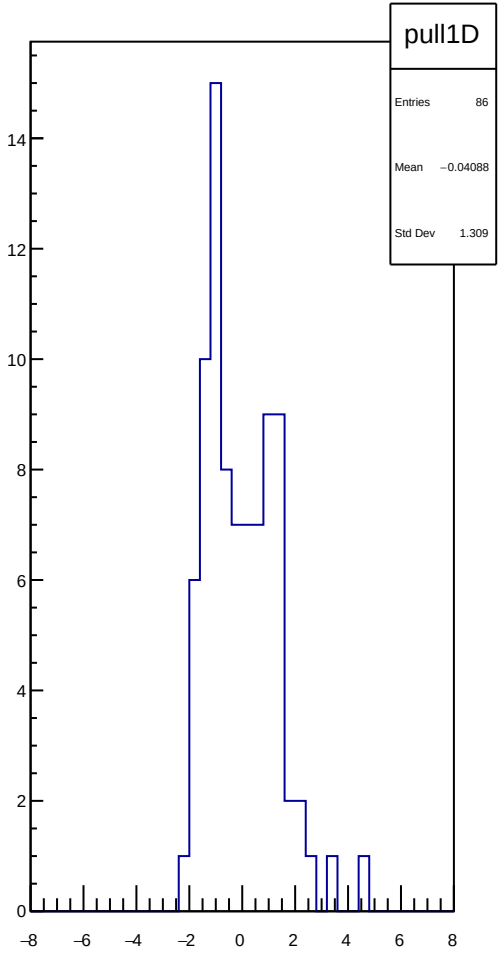

pull1D
Entries 86
Mean 0.001707
Std Dev 0.3807

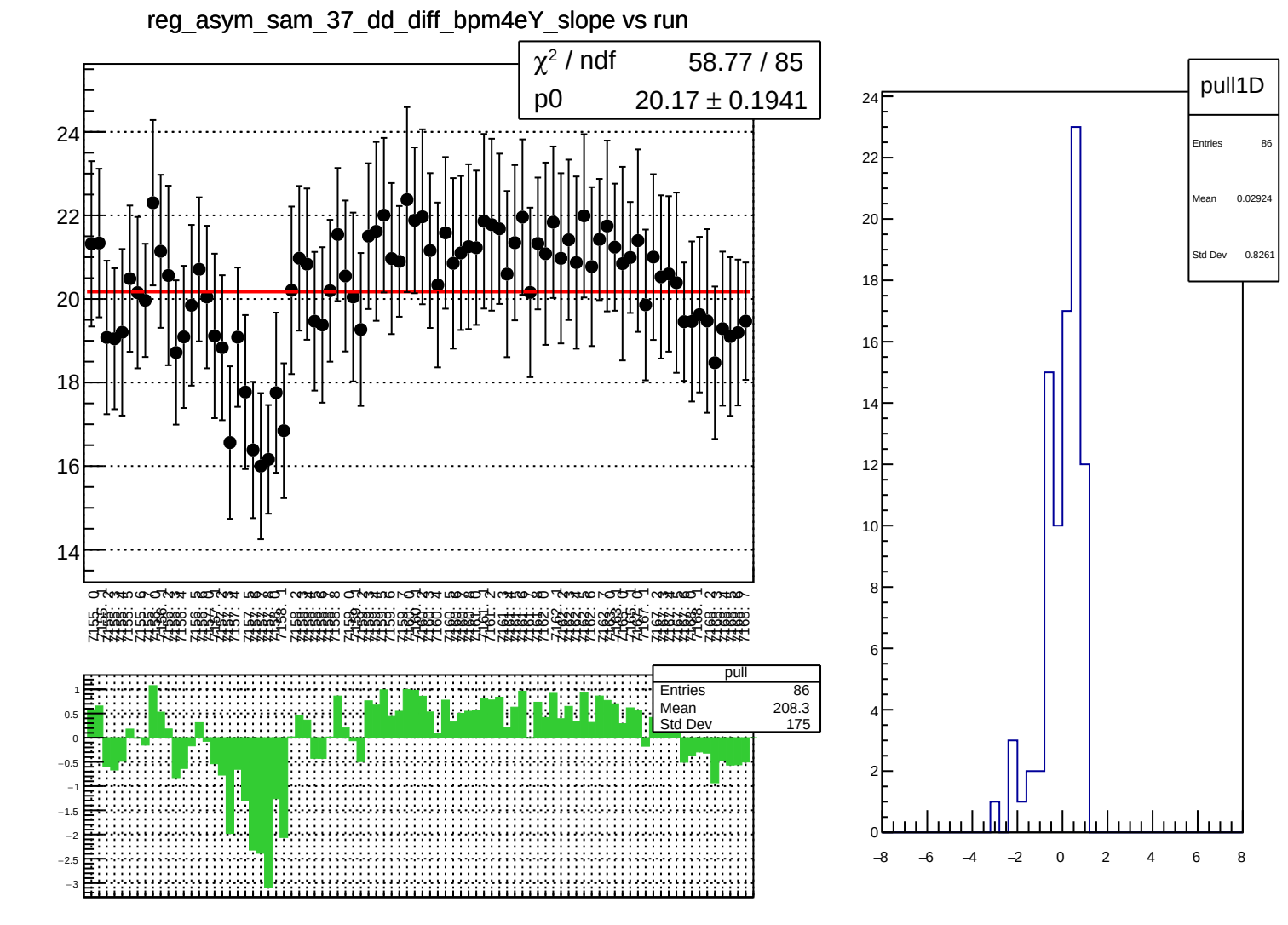

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 203.3 / 85
p0 −19.04 ± 0.1974
pull
Entries 86
Mean 121.3
Std Dev 115.4

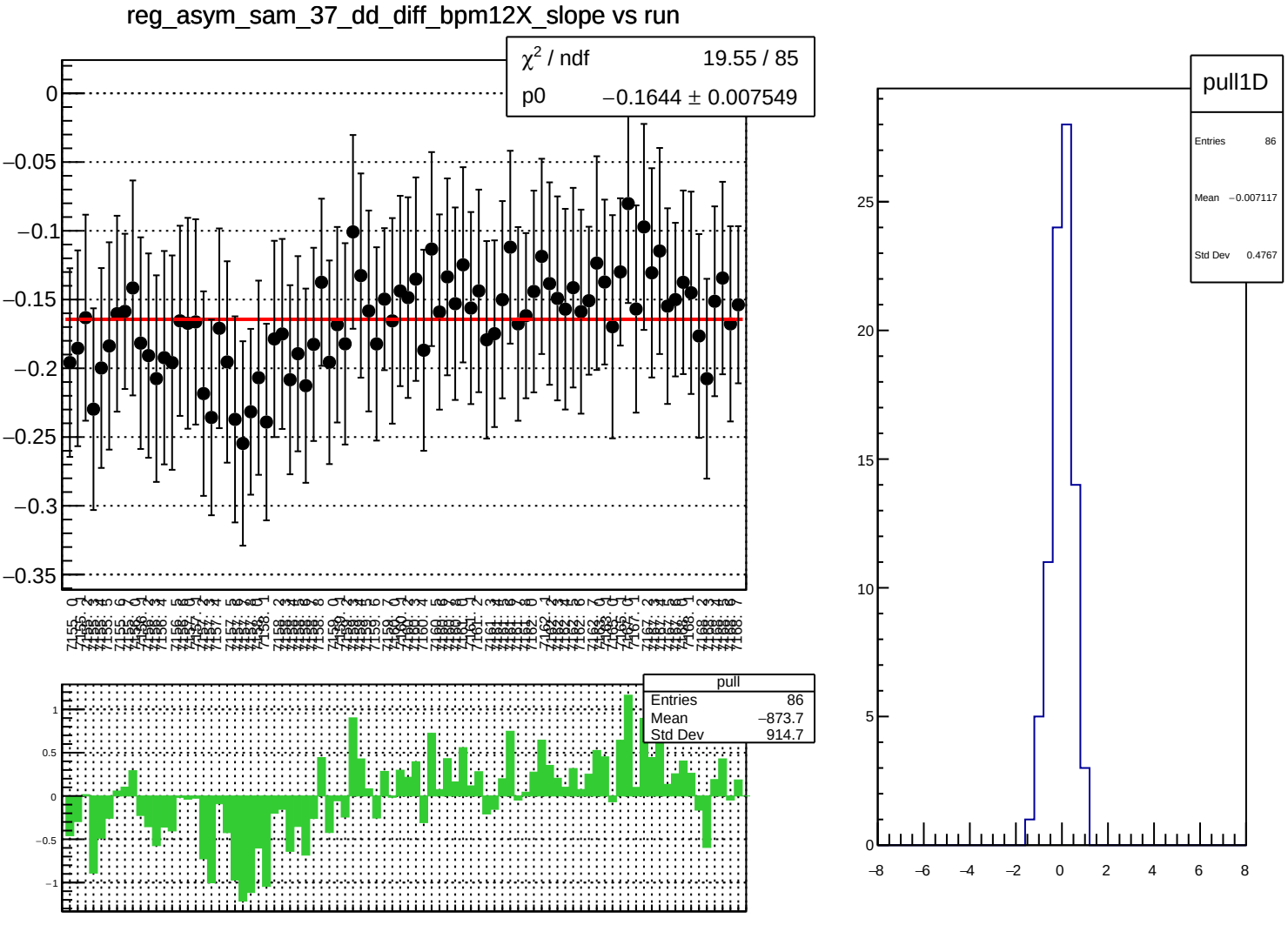

pull1D
Entries 86
Mean 0.04119
Std Dev 1.537

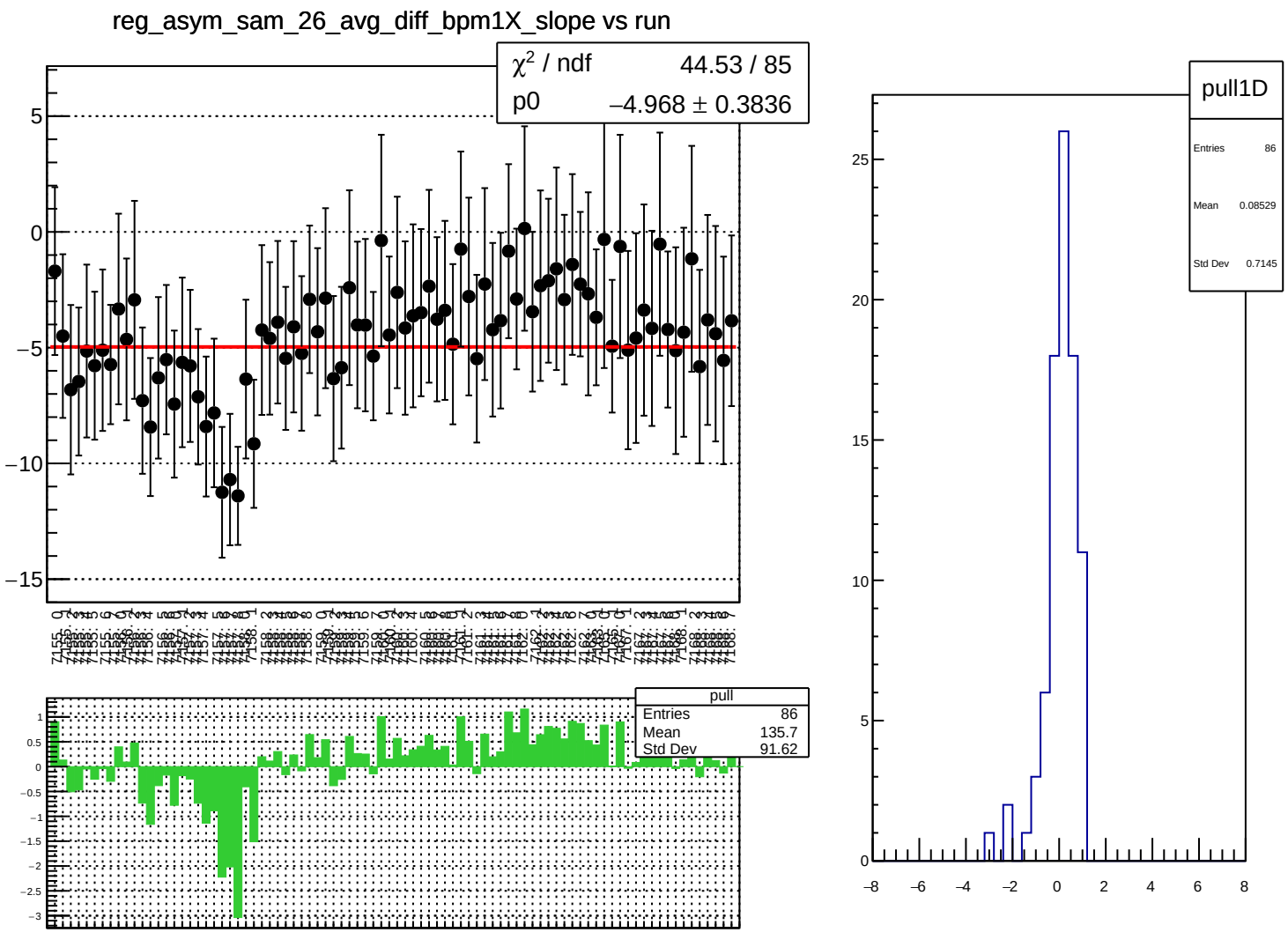

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 55.04 / 85
p0 −6.197 ± 0.1668
pull
Entries 86
Mean 295
Std Dev 259.7
pull1D
Entries 86
Mean −0.02196
Std Dev 0.7997

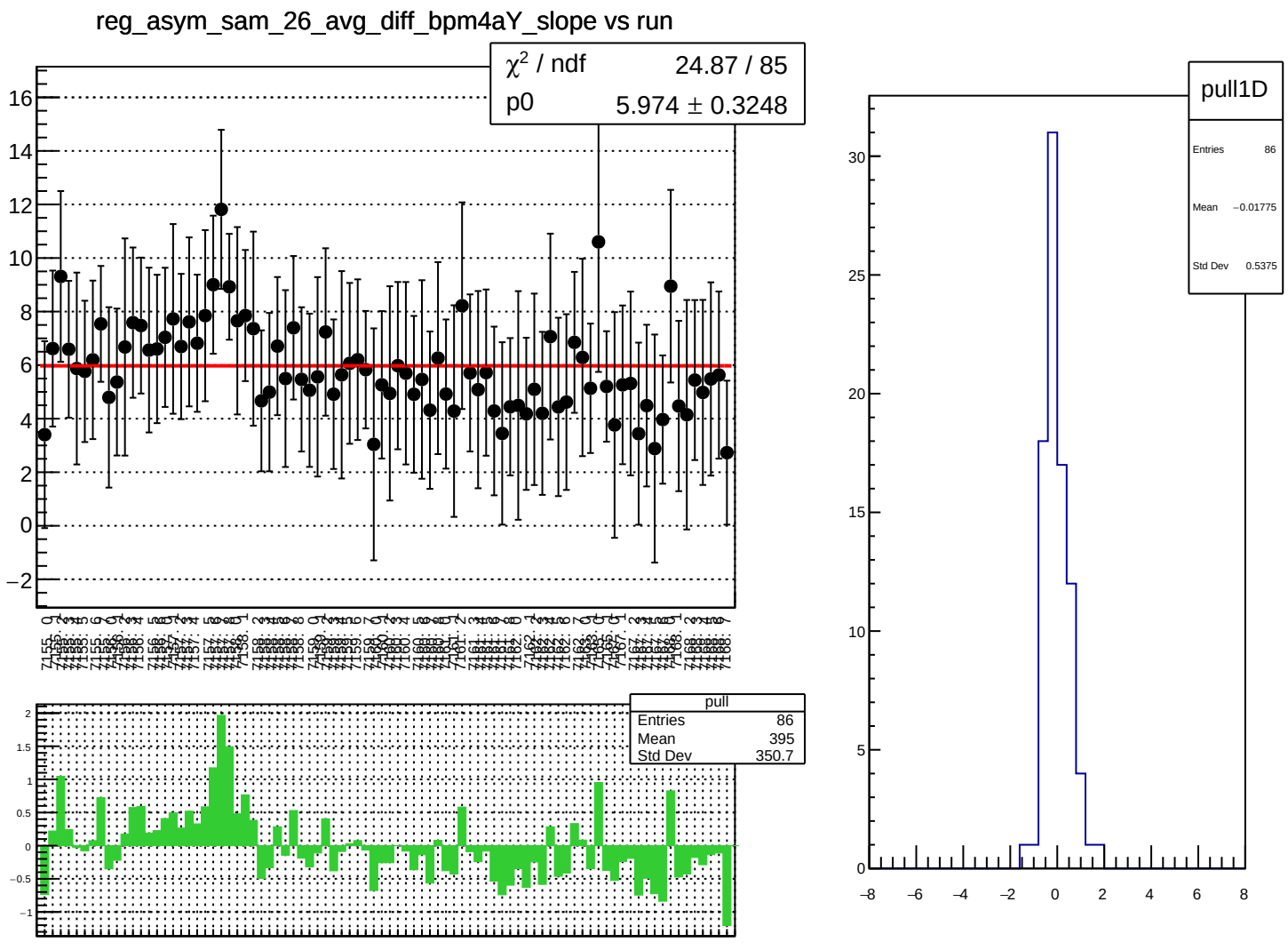

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 147.5 / 85
p0 −1.585 ± 0.1999
pull
Entries 86
Mean 72.28
Std Dev 90.78

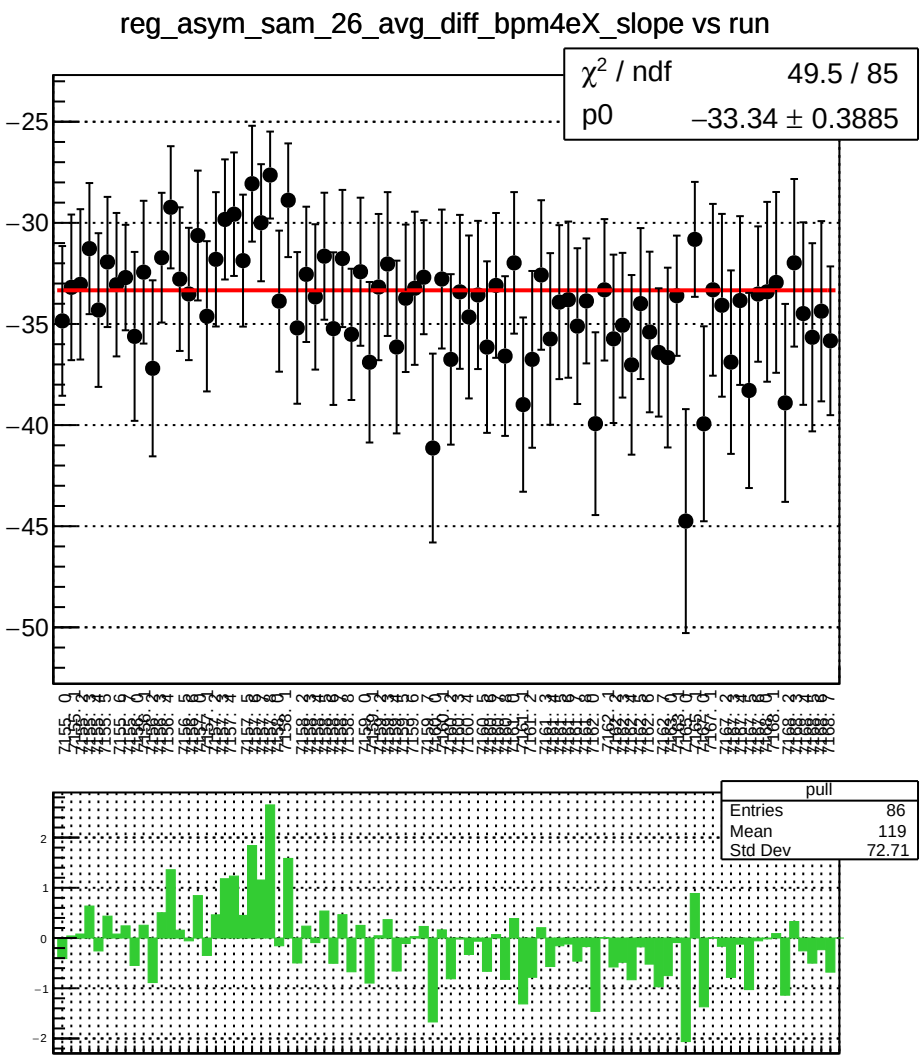

pull1D
Entries 86
Mean −0.04088
Std Dev 1.309

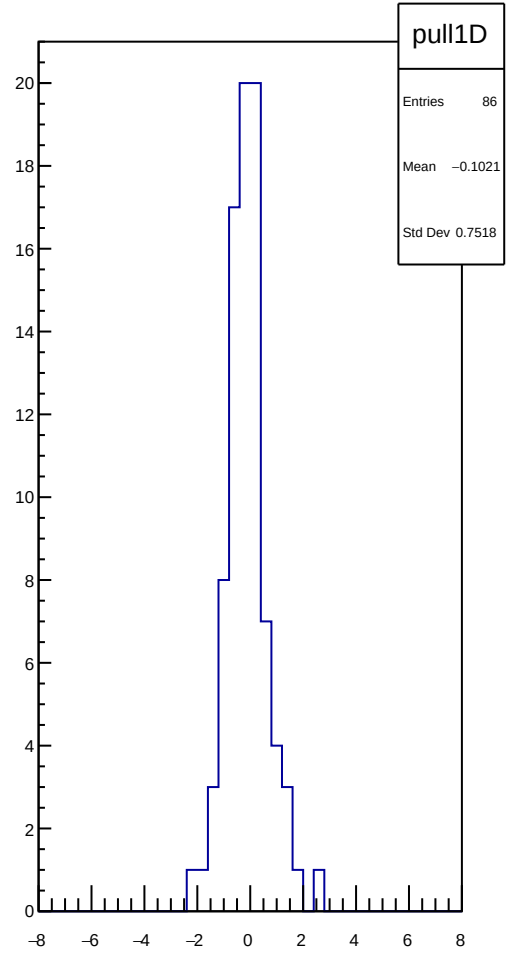

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 58.77 / 85
p0 20.17 ± 0.1941
pull
Entries 86
Mean 208.3
Std Dev 175
pull1D
Entries 86
Mean 0.02924
Std Dev 0.8261

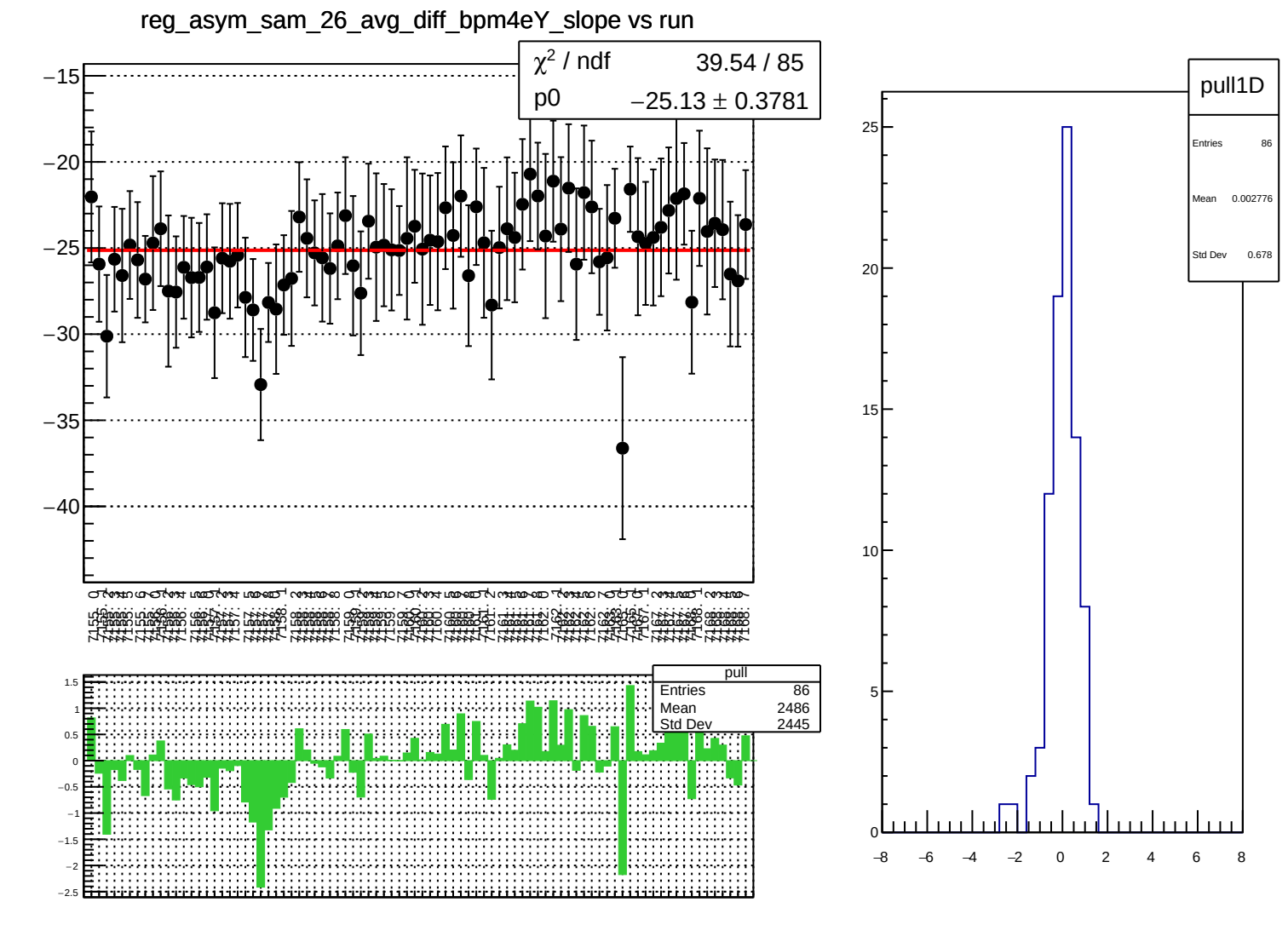

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 19.55 / 85
p0 −0.1644 ± 0.007549
pull
Entries 86
Mean −873.7
Std Dev 914.7
pull1D
Entries 86
Mean −0.007117
Std Dev 0.4767

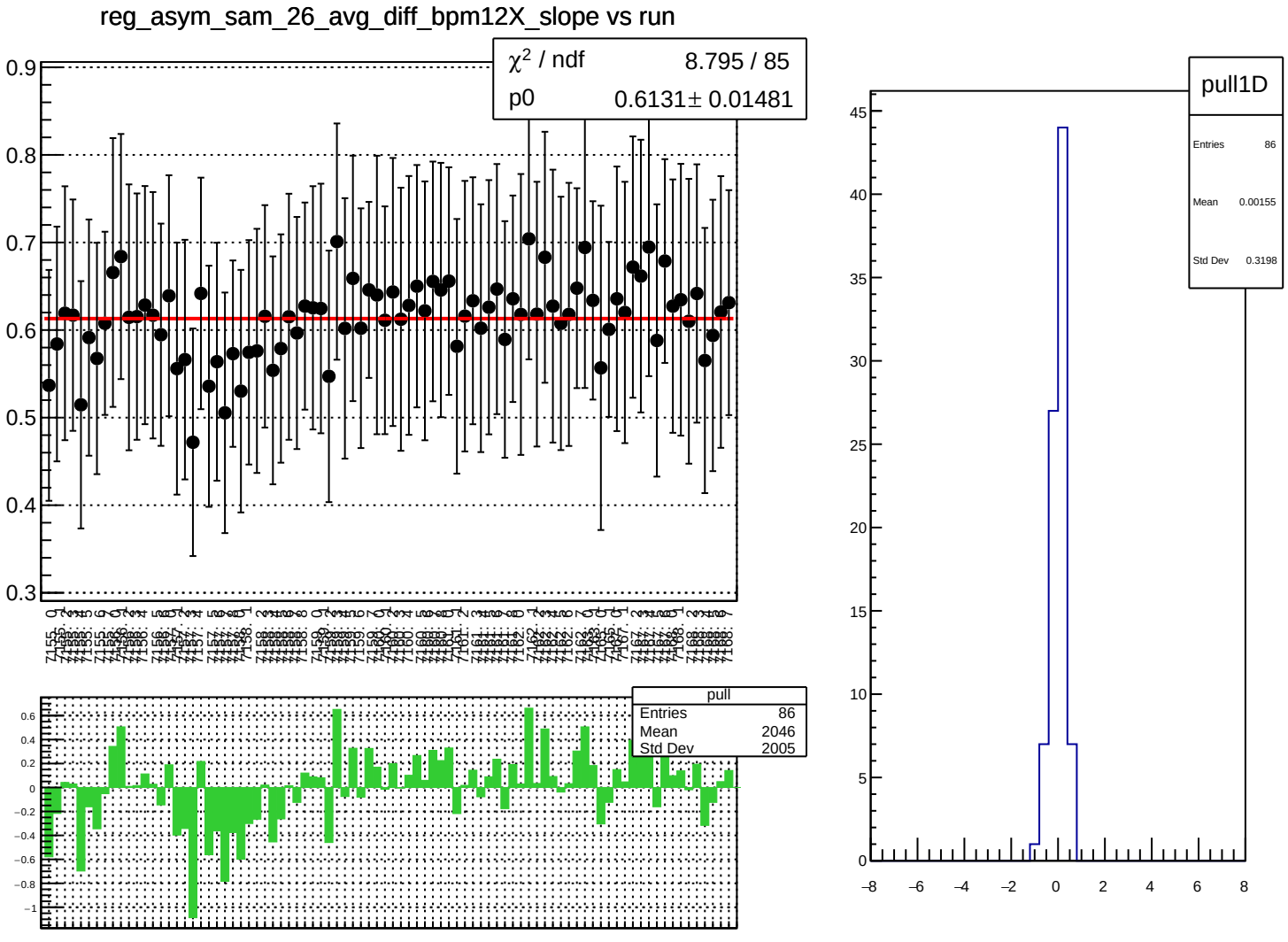

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 44.53 / 85
p0 −4.968 ± 0.3836
pull
Entries 86
Mean 135.7
Std Dev 91.62
pull1D
Entries 86
Mean 0.08529
Std Dev 0.7145

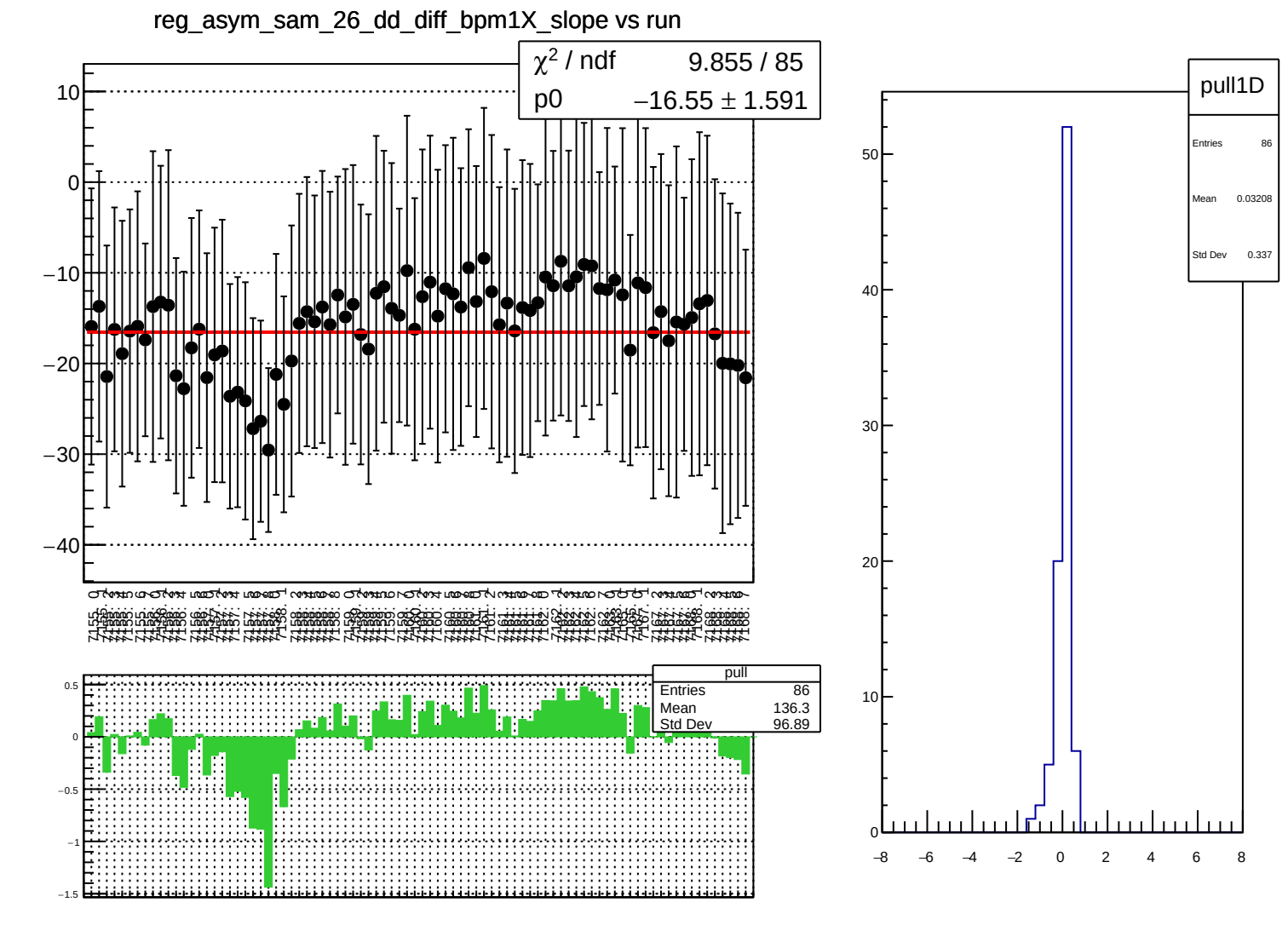

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 24.87 / 85
p0 5.974 ± 0.3248
pull
Entries 86
Mean 395
Std Dev 350.7
pull1D
Entries 86
Mean −0.01775
Std Dev 0.5375

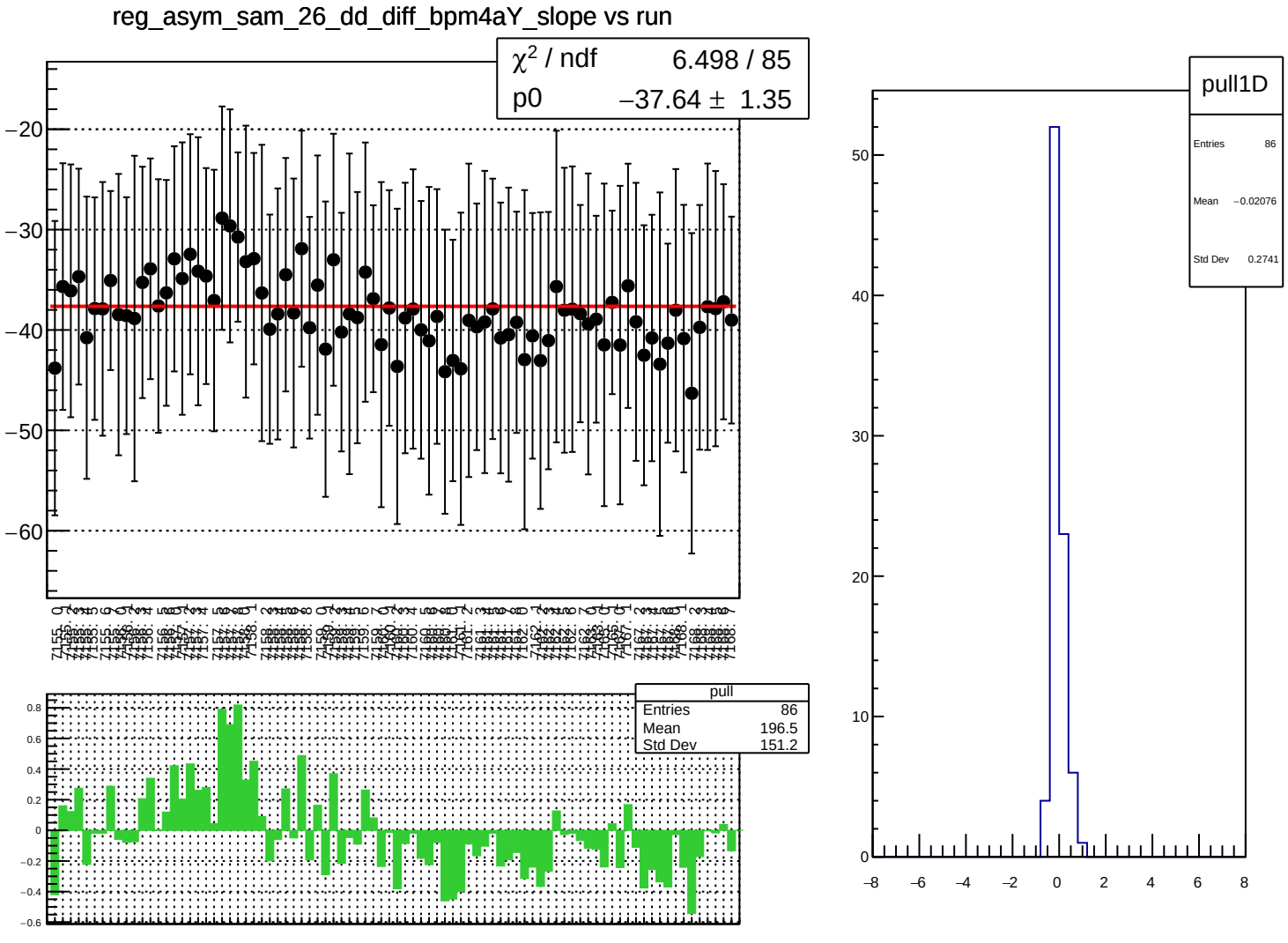

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 49.5 / 85
p0 −33.34 ± 0.3885
pull
Entries 86
Mean 119
Std Dev 72.71

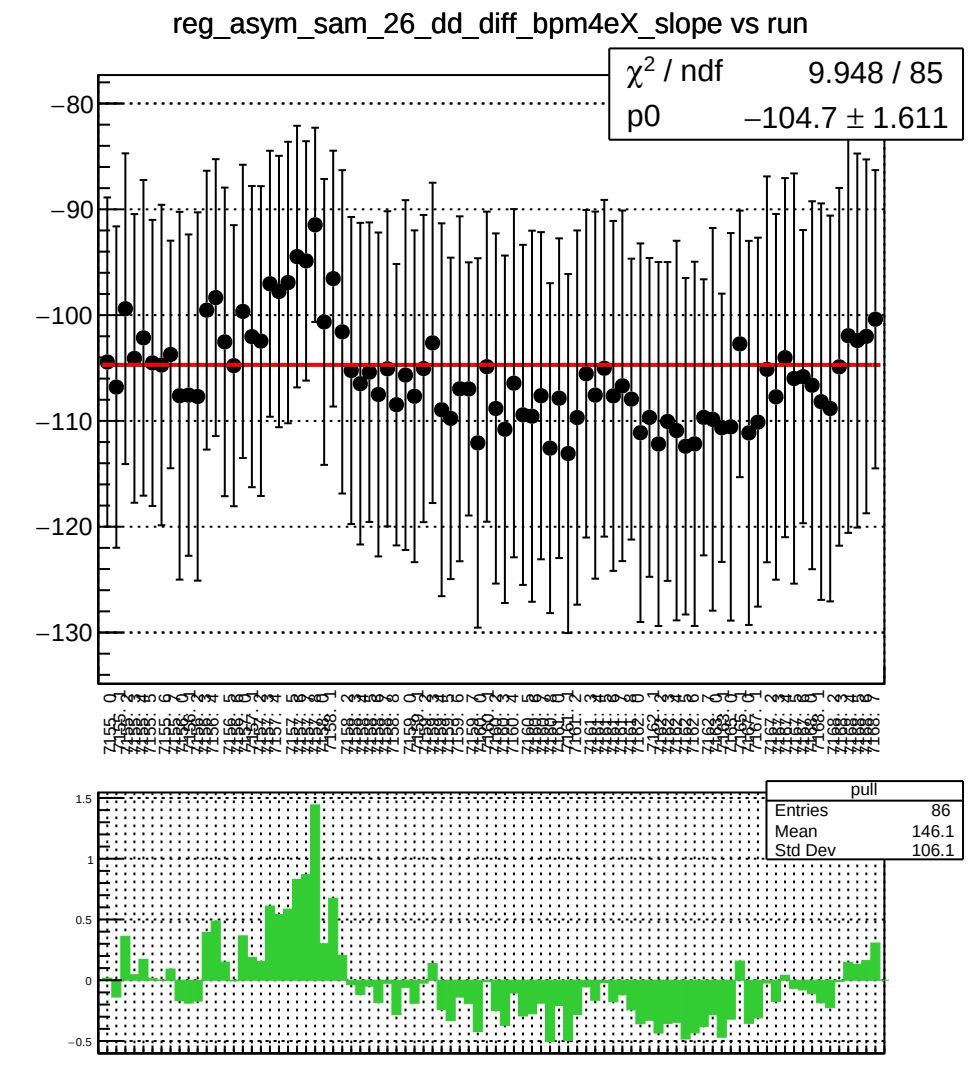

pull1D
Entries 86
Mean −0.1021
Std Dev 0.7518

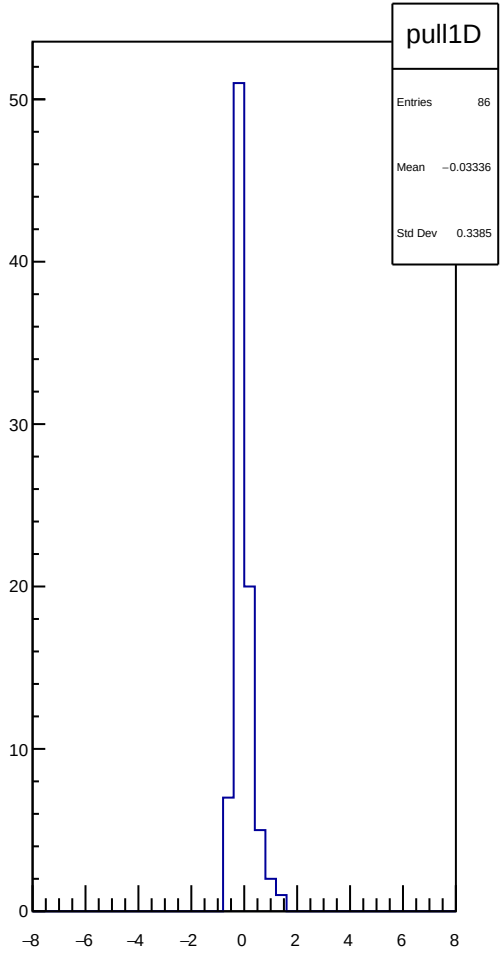

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 39.54 / 85
p0 −25.13 ± 0.3781
pull
Entries 86
Mean 2486
Std Dev 2445
pull1D
Entries 86
Mean 0.002776
Std Dev 0.678

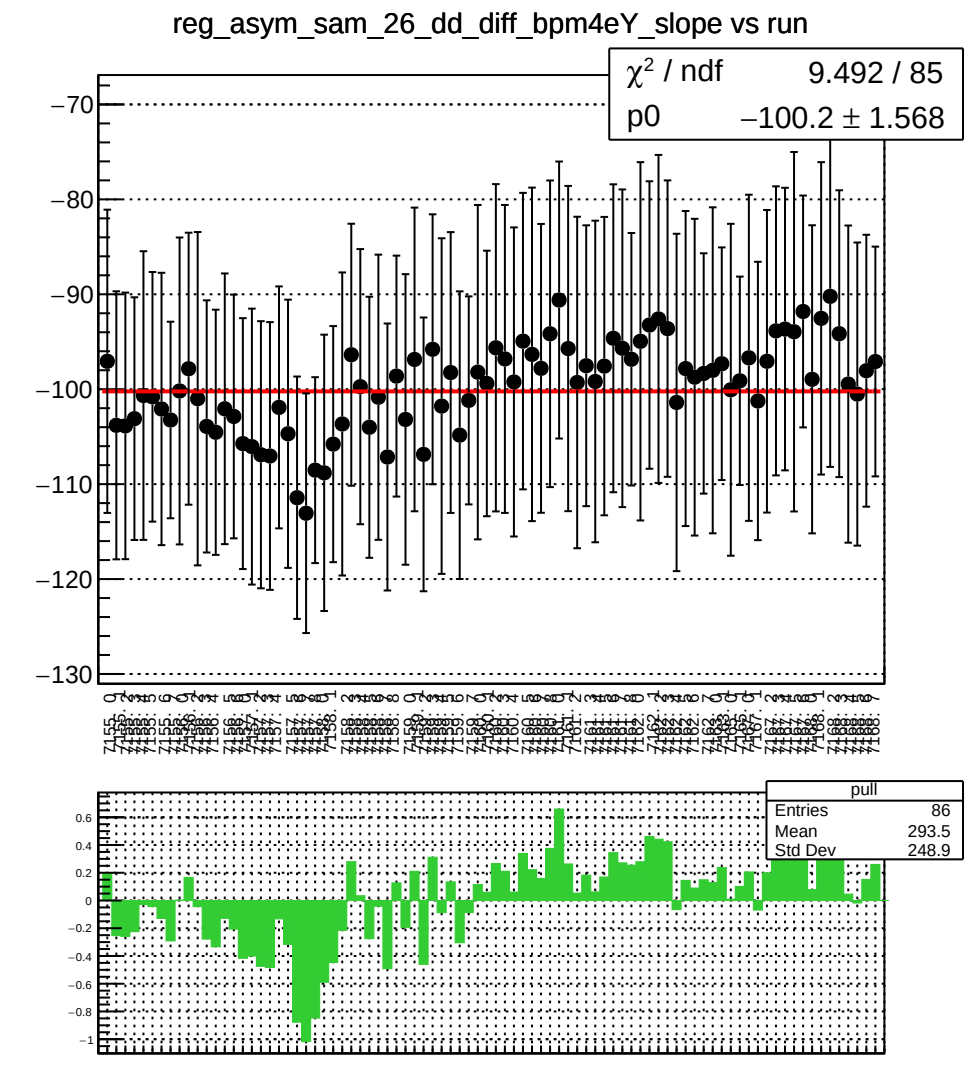

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 8.795 / 85
p0 0.6131± 0.01481
pull
Entries 86
Mean 2046
Std Dev 2005
pull1D
Entries 86
Mean 0.00155
Std Dev 0.3198

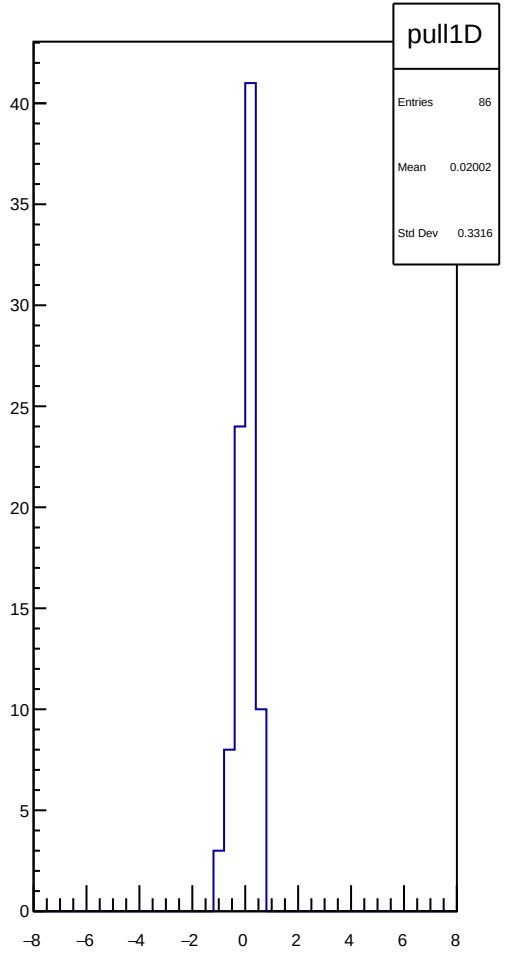

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 9.855 / 85
p0 −16.55 ± 1.591
pull
Entries 86
Mean 136.3
Std Dev 96.89
pull1D
Entries 86
Mean 0.03208
Std Dev 0.337

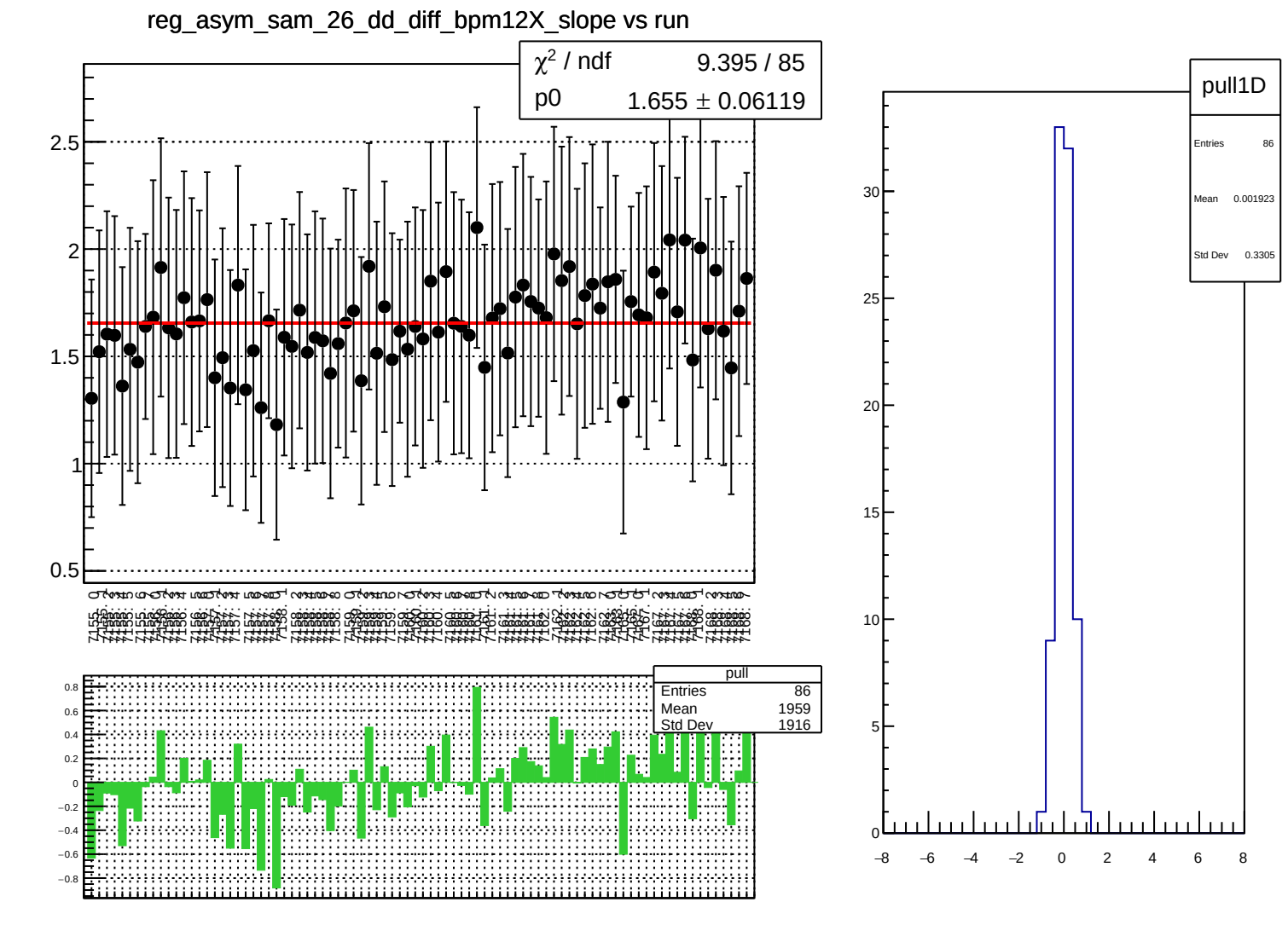

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.498 / 85
p0 −37.64 ± 1.35
−20
−30
−40
−50
−60
pull
Entries 86
Mean 196.5
Std Dev 151.2
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 86
Mean −0.02076
Std Dev 0.2741
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

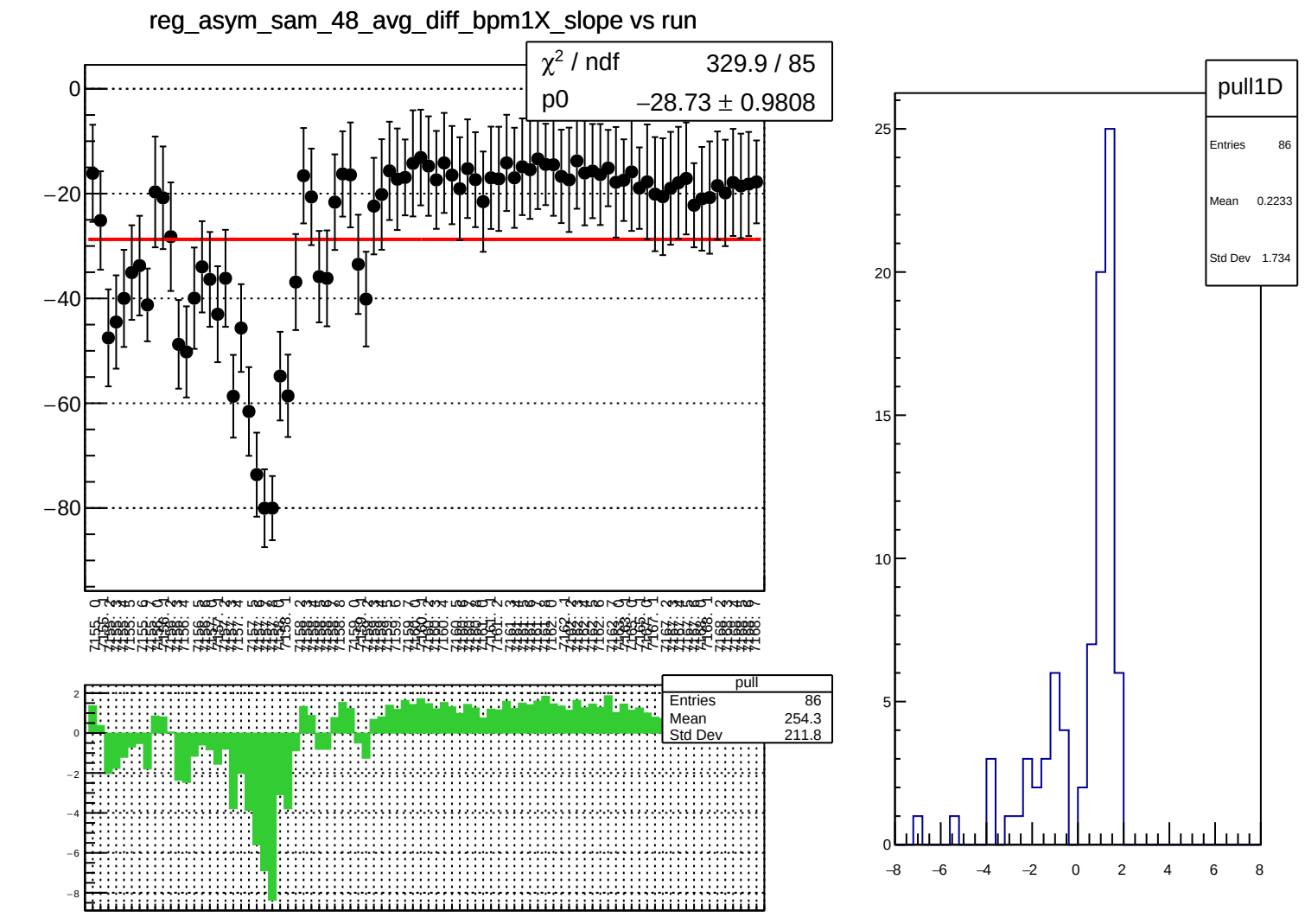

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 9.948 / 85
p0 −104.7 ± 1.611
−80
−90
−100
−110
−120
−130
pull
Entries 86
Mean 146.1
Std Dev 106.1
1.5
1
0.5
0
−0.5

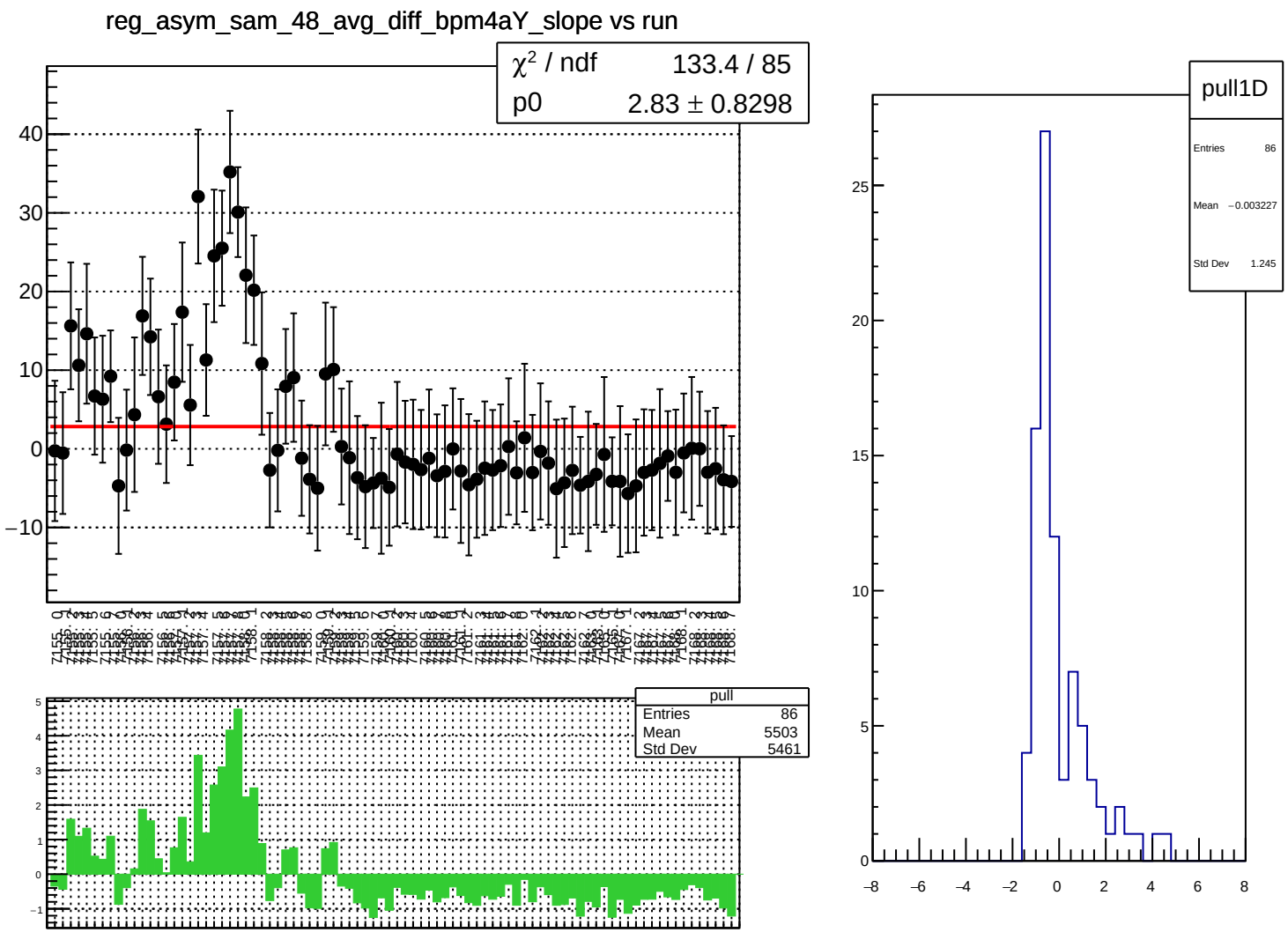

pull1D
Entries 86
Mean −0.03336
Std Dev 0.3385
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

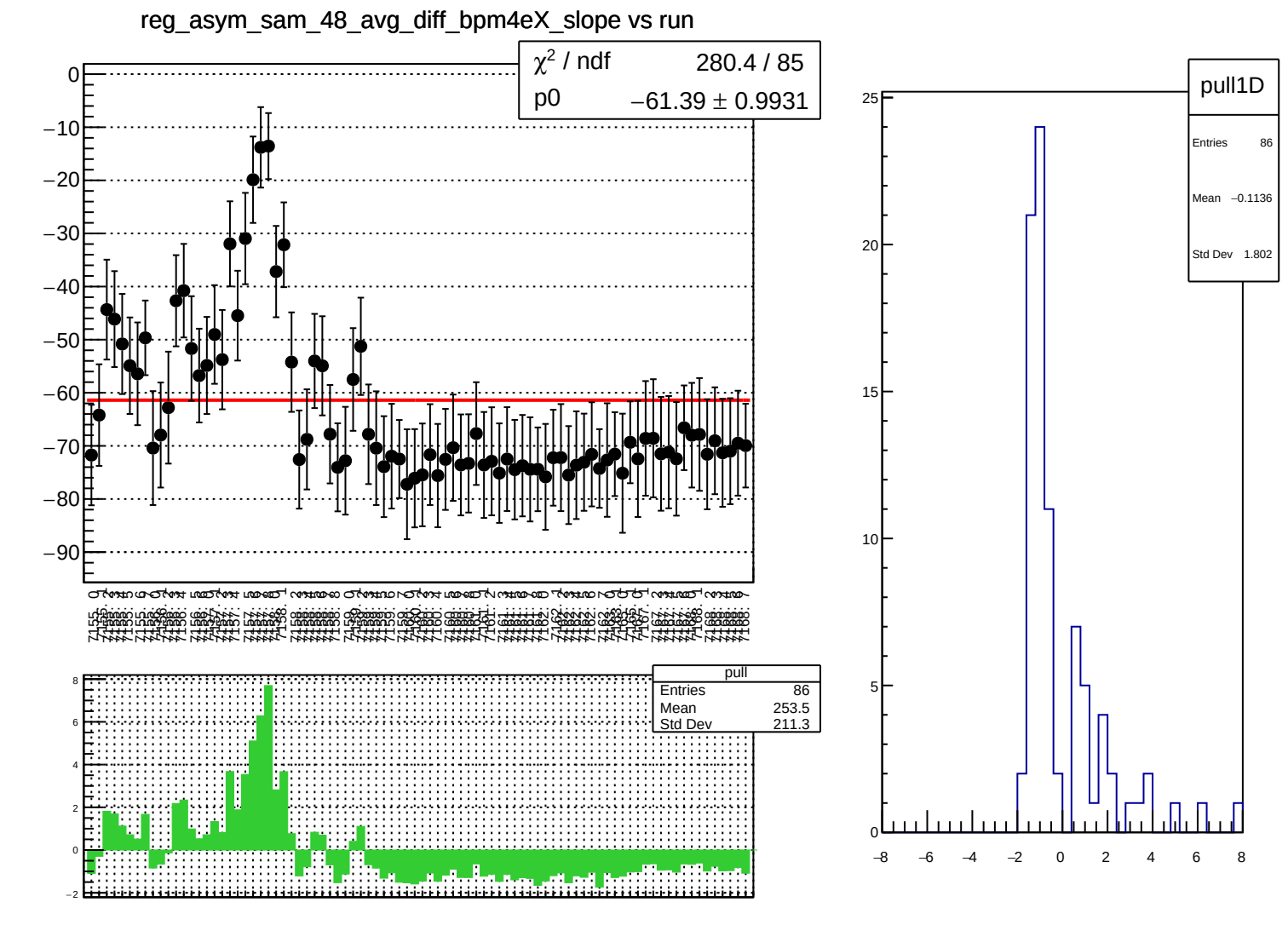

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 9.492 / 85
p0 −100.2 ± 1.568
pull
Entries 86
Mean 293.5
Std Dev 248.9

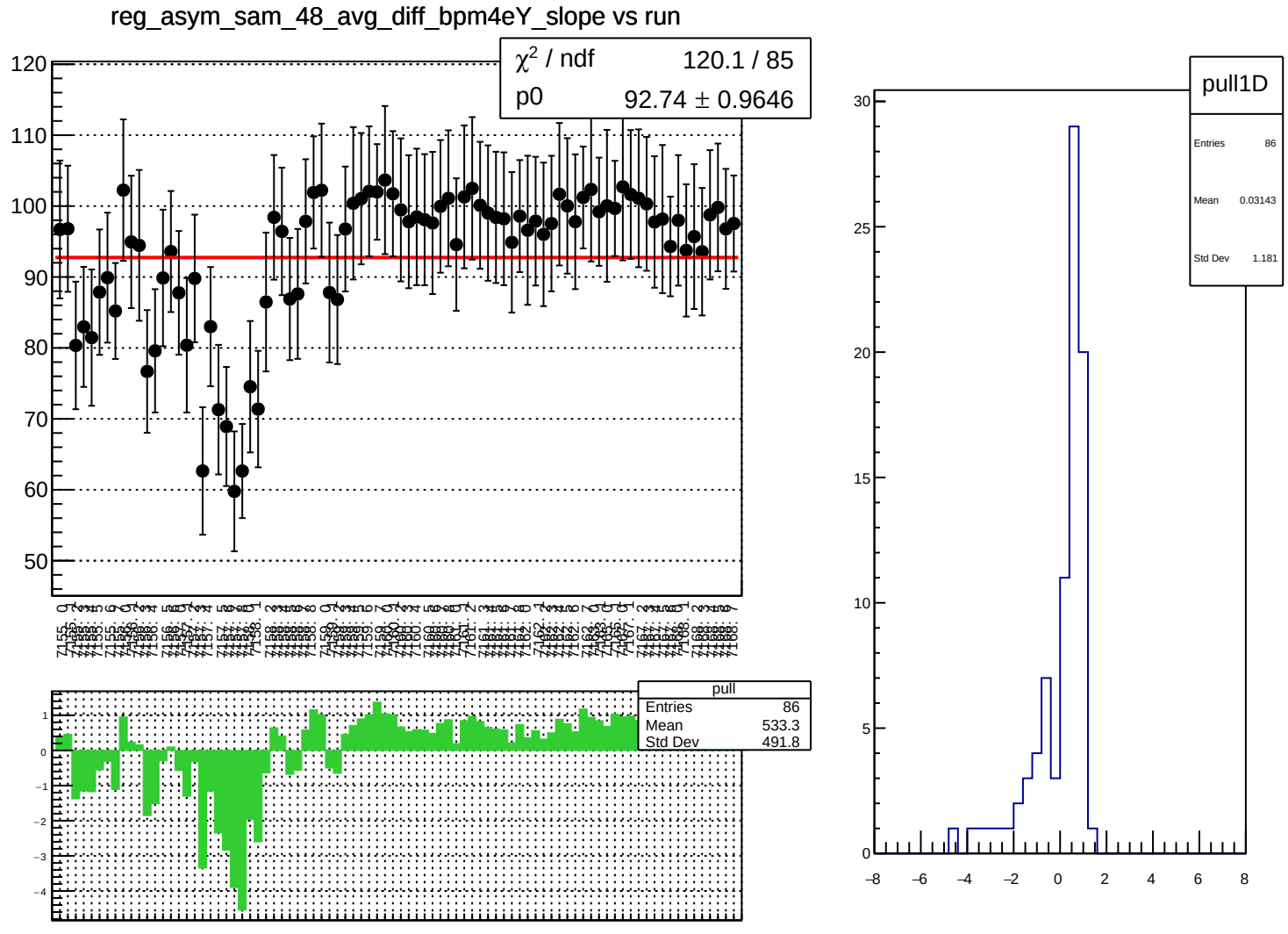

pull1D
Entries 86
Mean 0.02002
Std Dev 0.3316

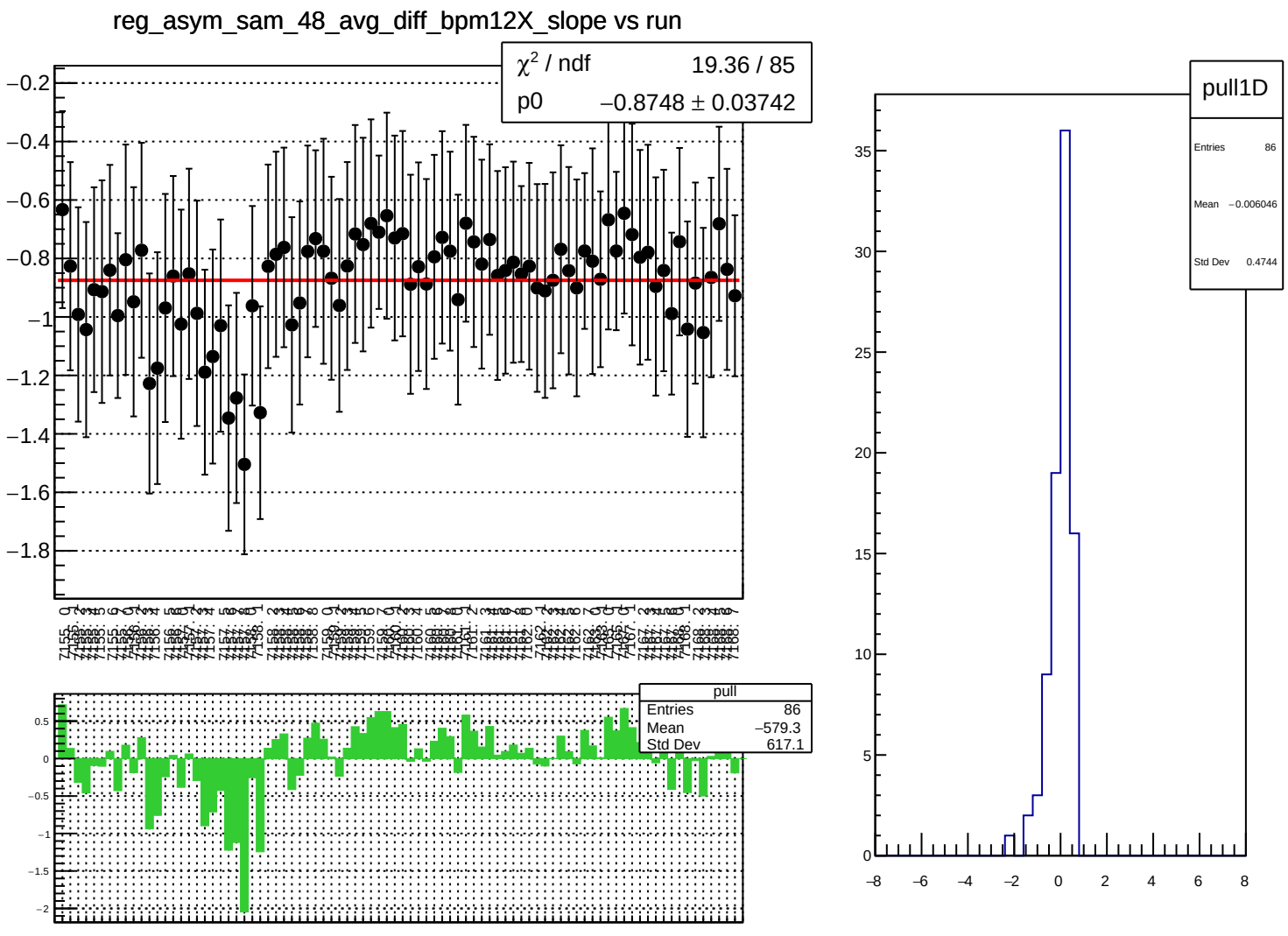

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 9.395 / 85
p0 1.655 ± 0.06119
pull
Entries 86
Mean 1959
Std Dev 1916
pull1D
Entries 86
Mean 0.001923
Std Dev 0.3305

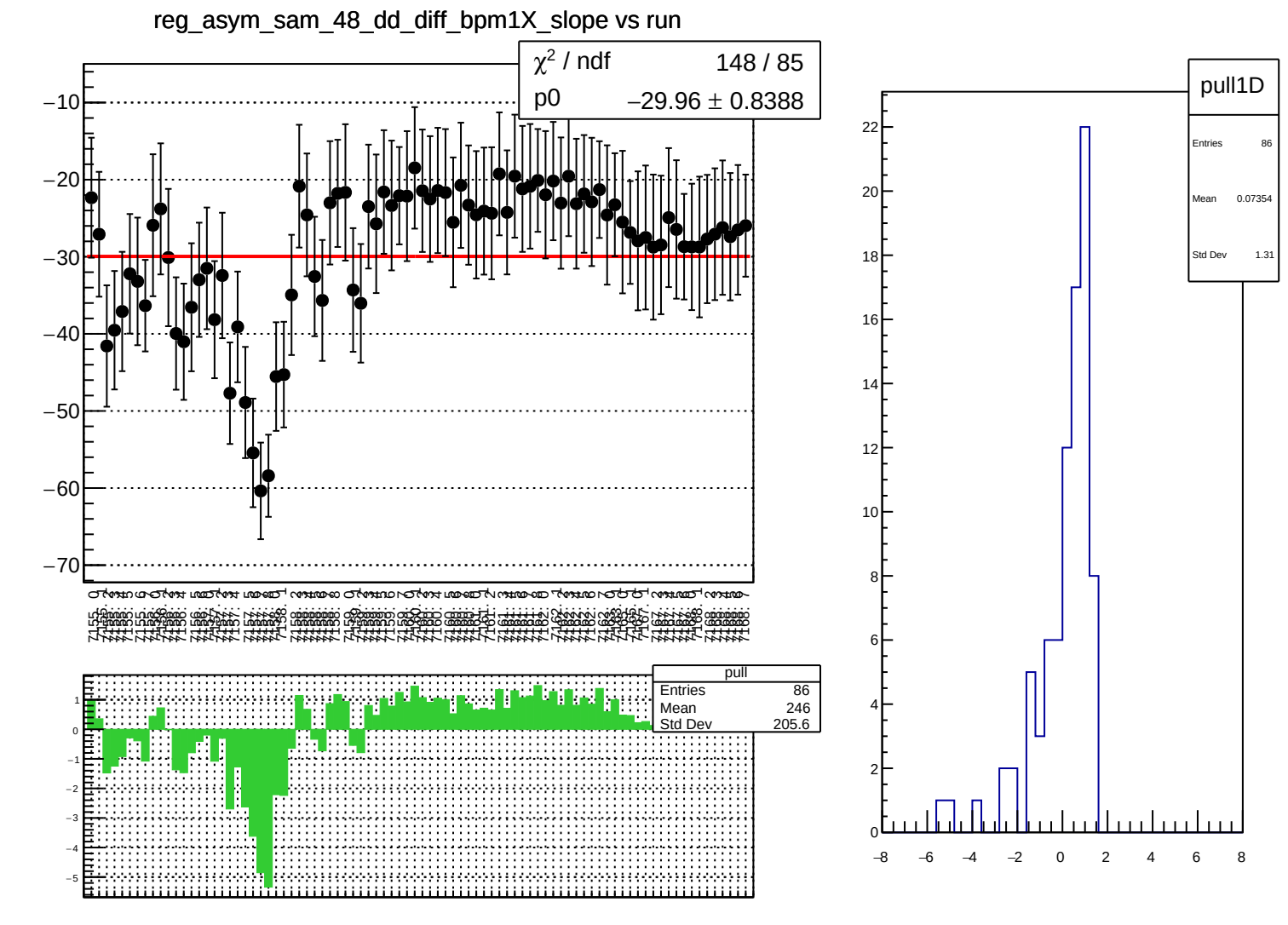

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 329.9 / 85
p0 −28.73 ± 0.9808
pull
Entries 86
Mean 254.3
Std Dev 211.8
pull1D
Entries 86
Mean 0.2233
Std Dev 1.734

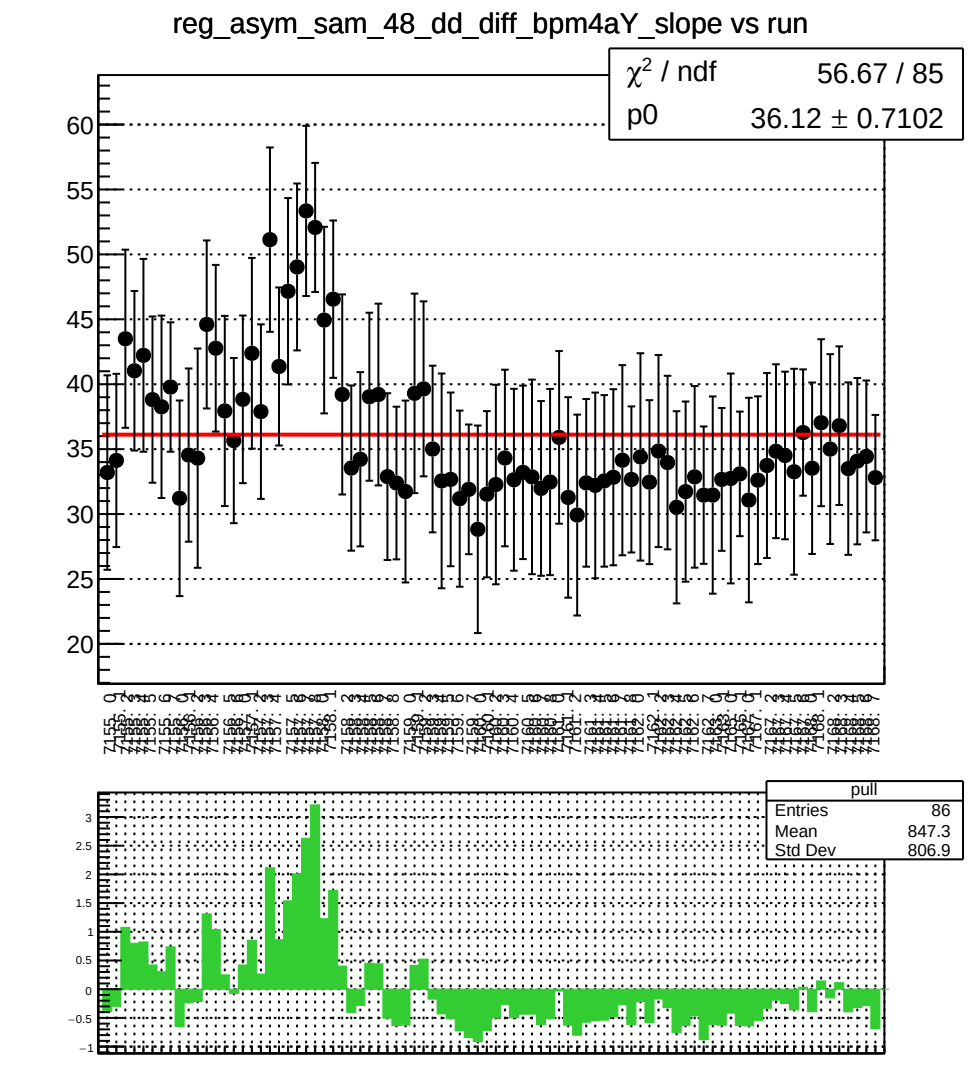

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 133.4 / 85
p0 2.83 ± 0.8298
40
30
20
10
0
−10
pull
Entries 86
Mean 5503
Std Dev 5461
pull1D
Entries 86
Mean −0.003227
Std Dev 1.245
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

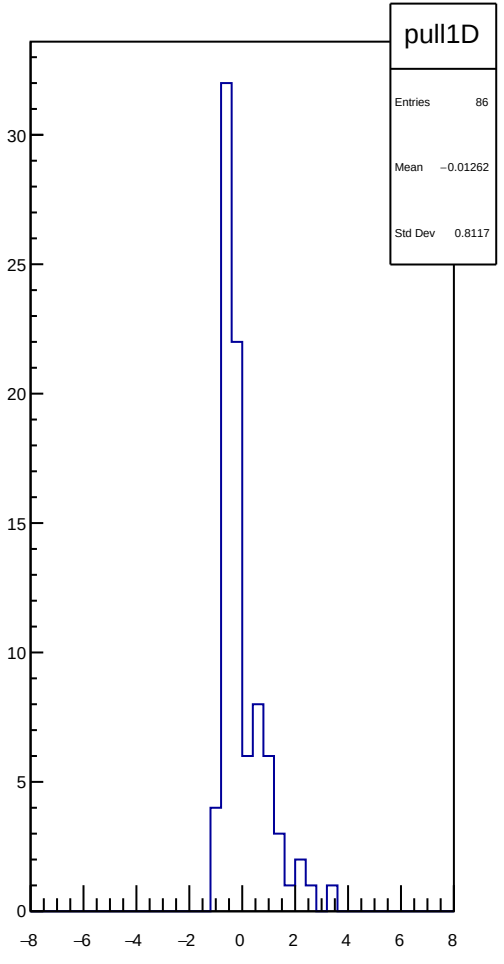

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 280.4 / 85
p0 −61.39 ± 0.9931
pull
Entries 86
Mean 253.5
Std Dev 211.3
pull1D
Entries 86
Mean −0.1136
Std Dev 1.802

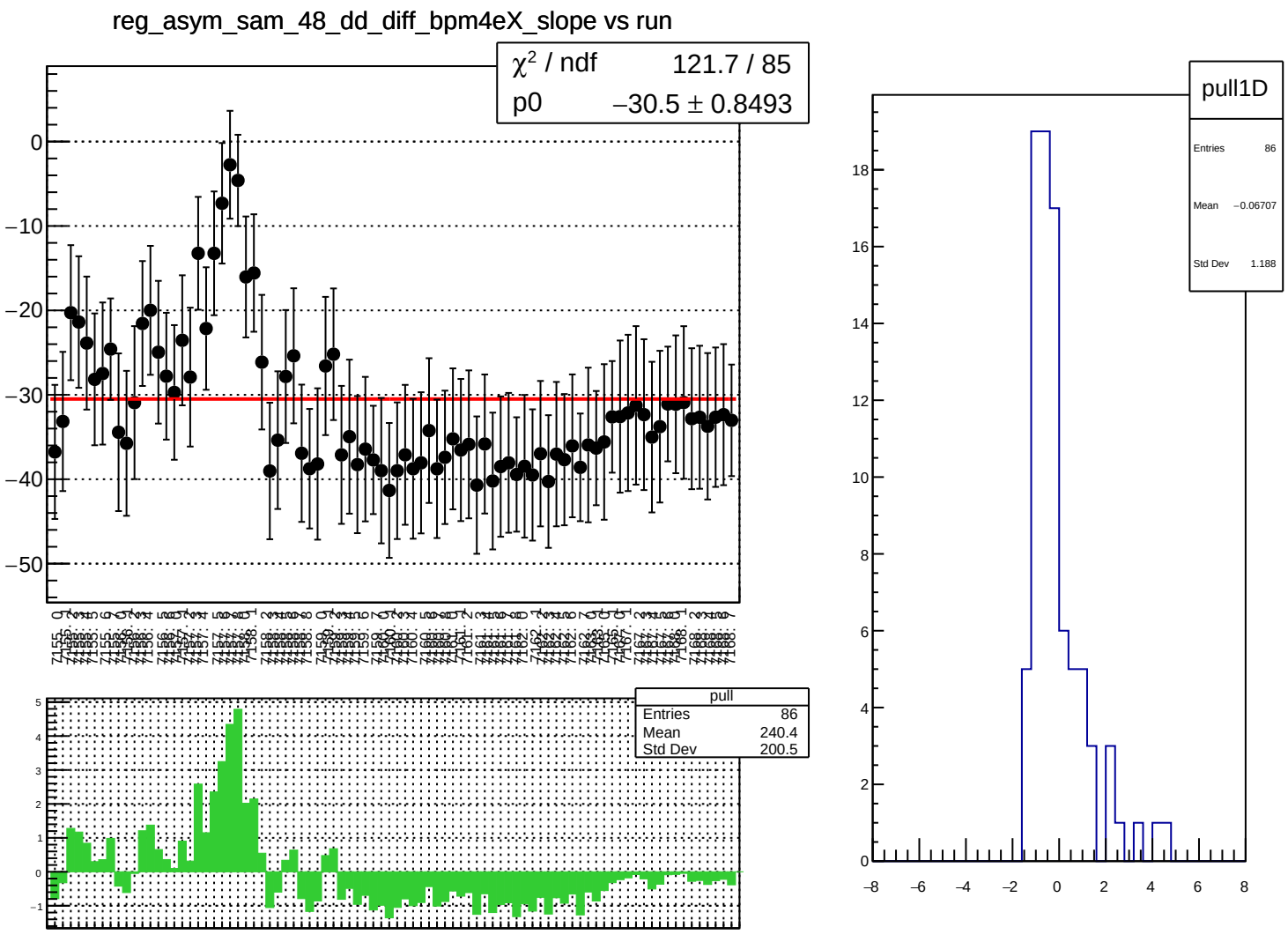

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 120.1 / 85
p0 92.74 ± 0.9646
pull
Entries 86
Mean 533.3
Std Dev 491.8
pull1D
Entries 86
Mean 0.03143
Std Dev 1.181

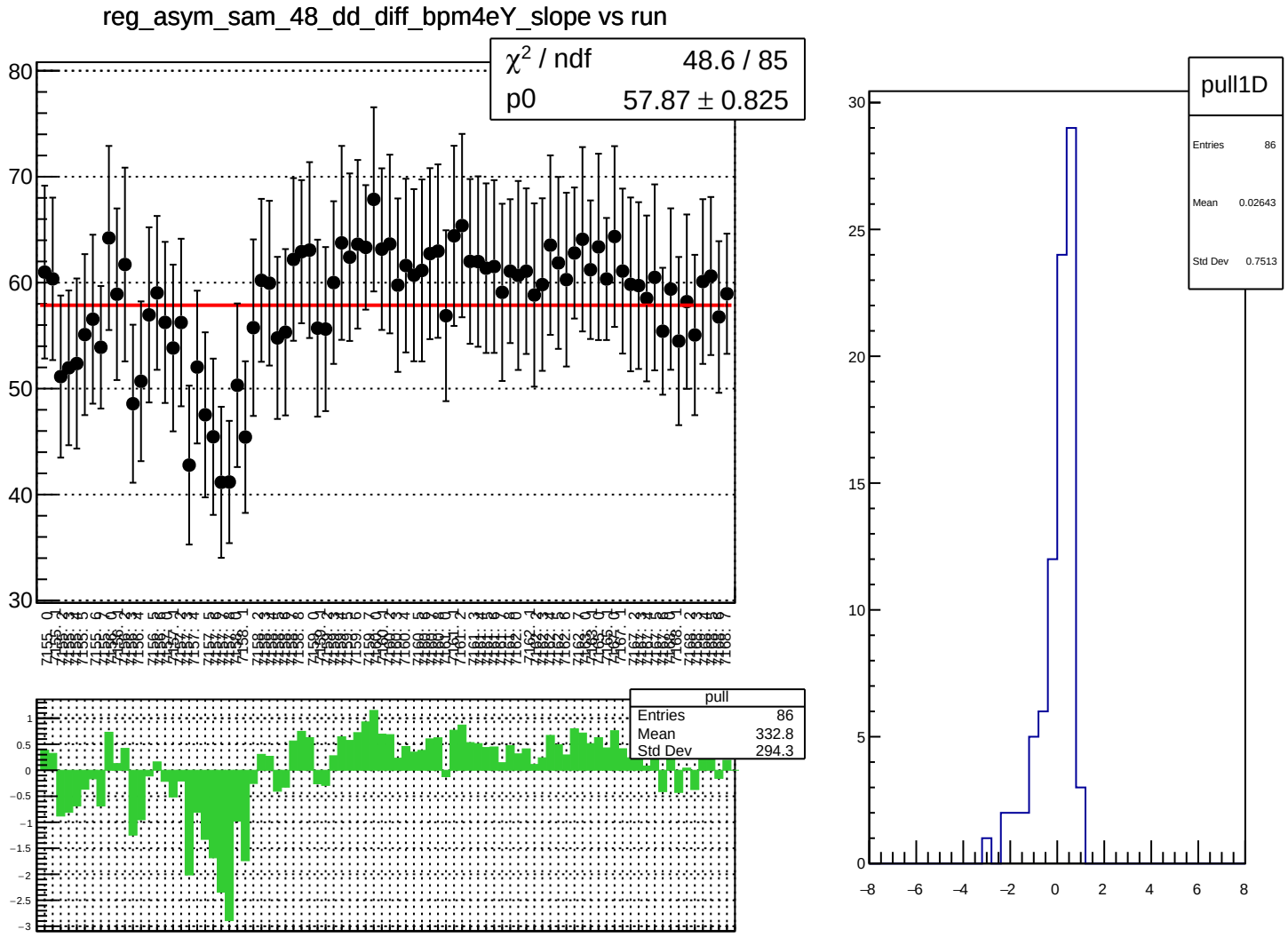

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 19.36 / 85
p0 −0.8748 ± 0.03742
pull
Entries 86
Mean −579.3
Std Dev 617.1
pull1D
Entries 86
Mean −0.006046
Std Dev 0.4744

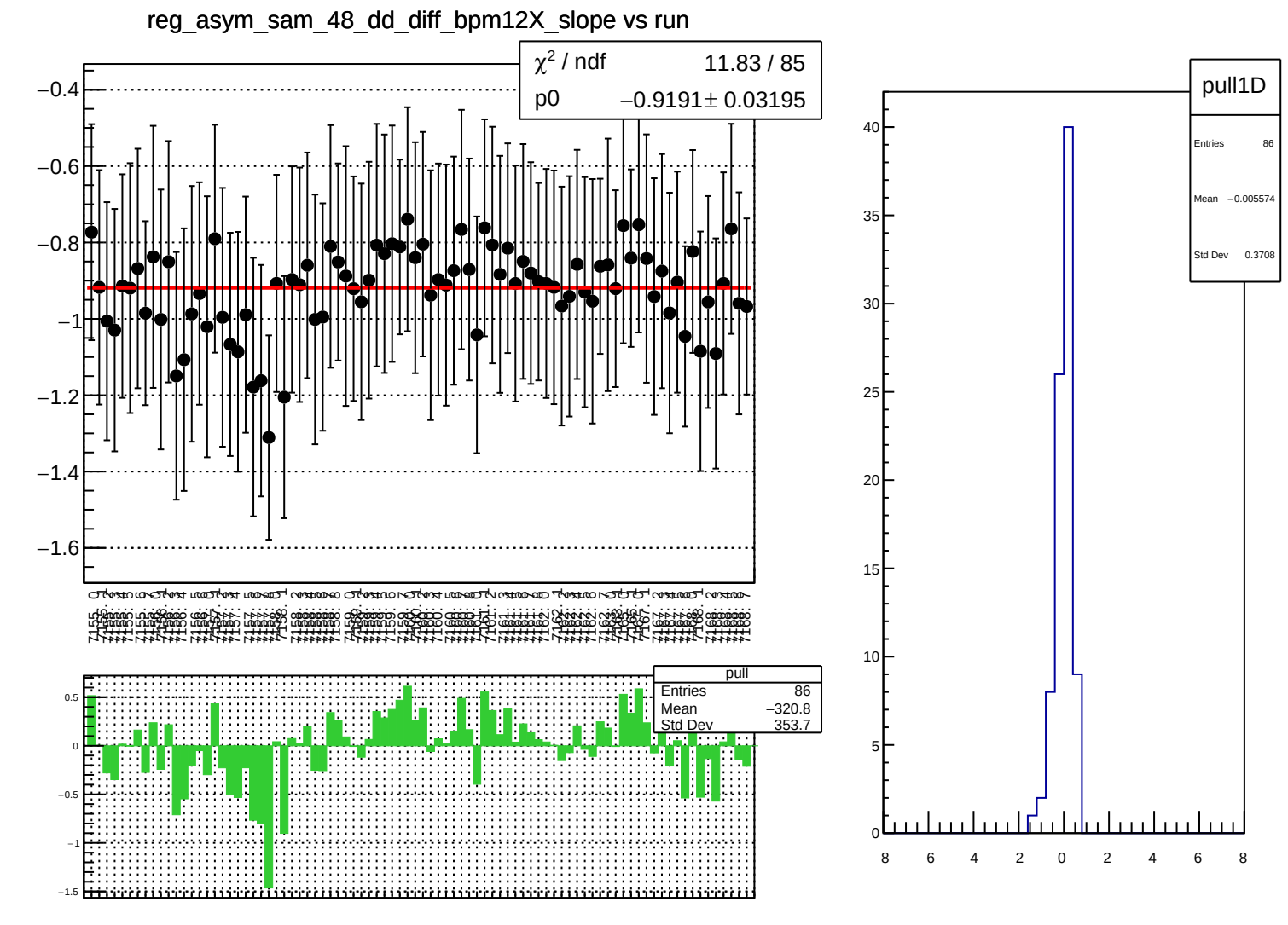

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 148 / 85
p0 −29.96 ± 0.8388
pull
Entries 86
Mean 246
Std Dev 205.6
pull1D
Entries 86
Mean 0.07354
Std Dev 1.31

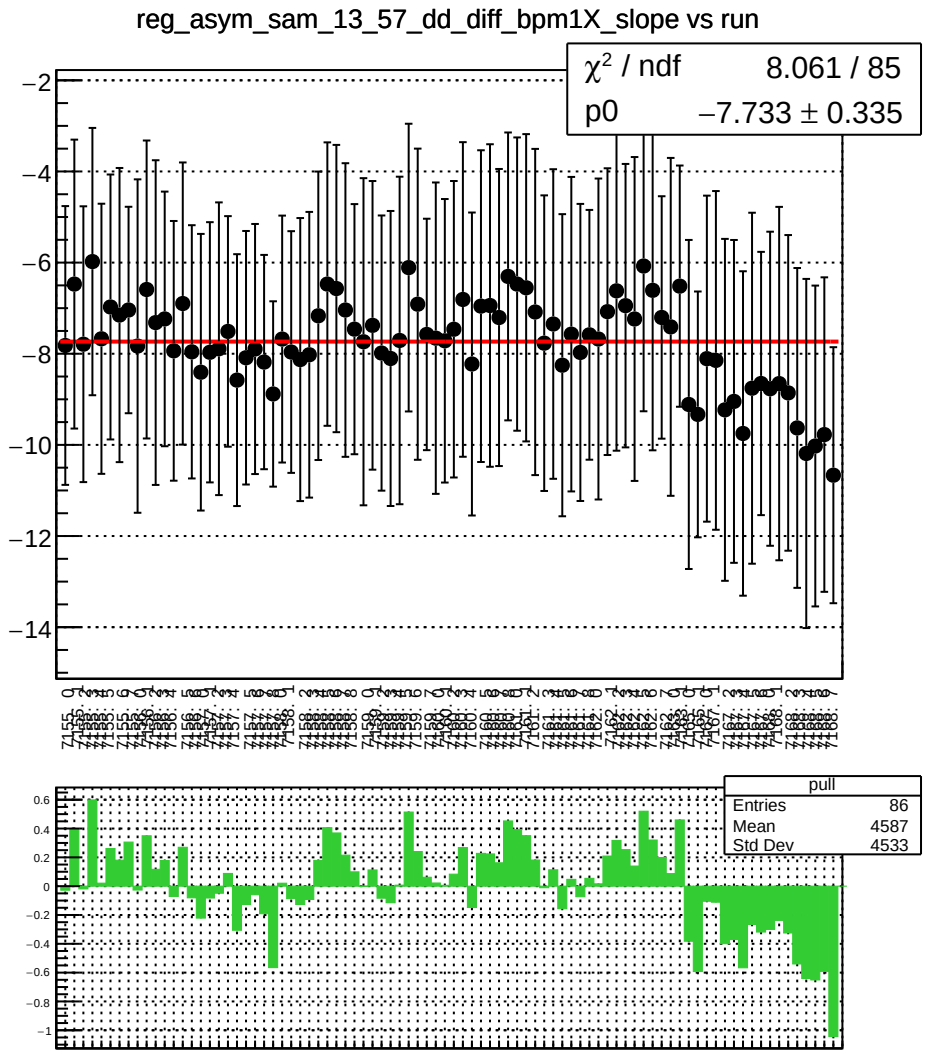

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 56.67 / 85
p0 36.12 ± 0.7102
pull
Entries 86
Mean 847.3
Std Dev 806.9

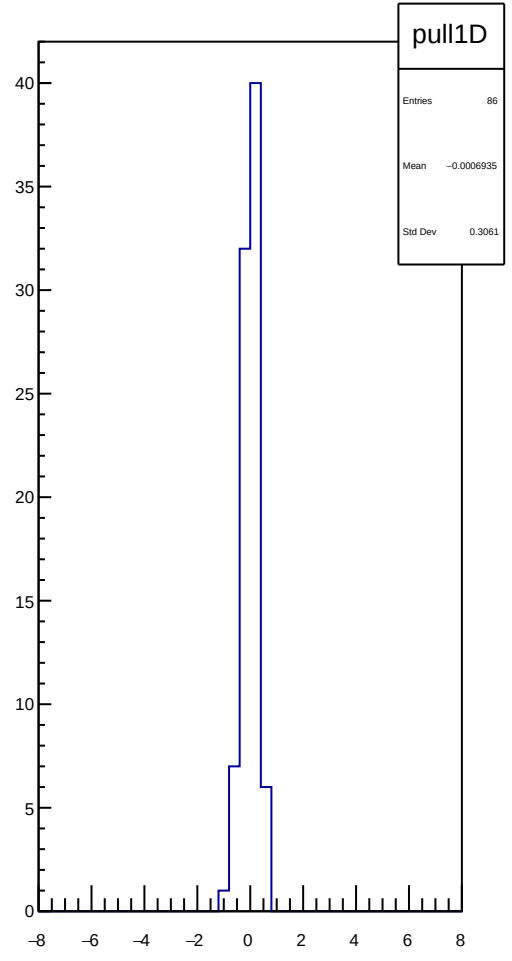

pull1D
Entries 86
Mean −0.01262
Std Dev 0.8117

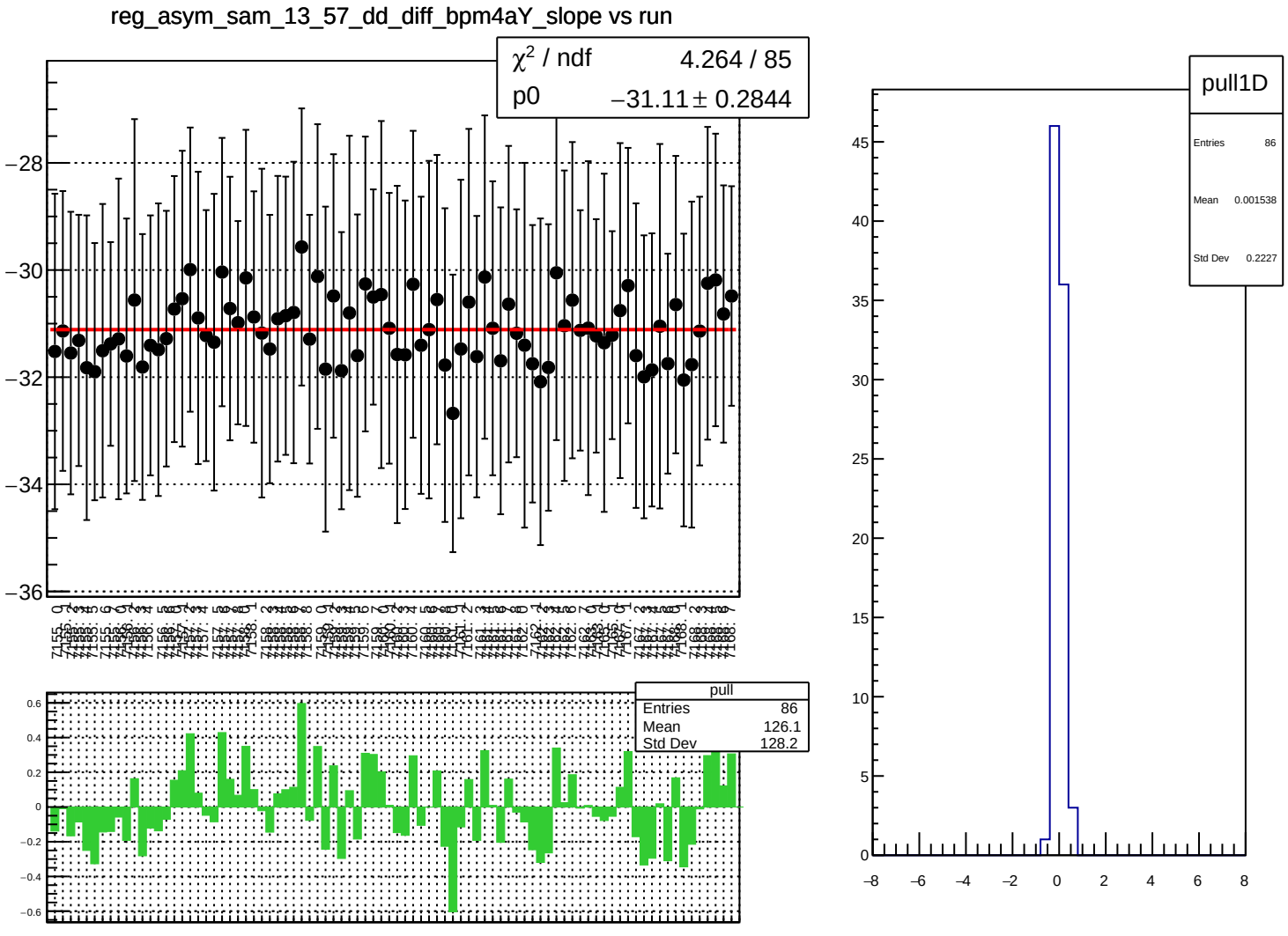

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 121.7 / 85
p0 −30.5 ± 0.8493
pull
Entries 86
Mean 240.4
Std Dev 200.5
pull1D
Entries 86
Mean −0.06707
Std Dev 1.188

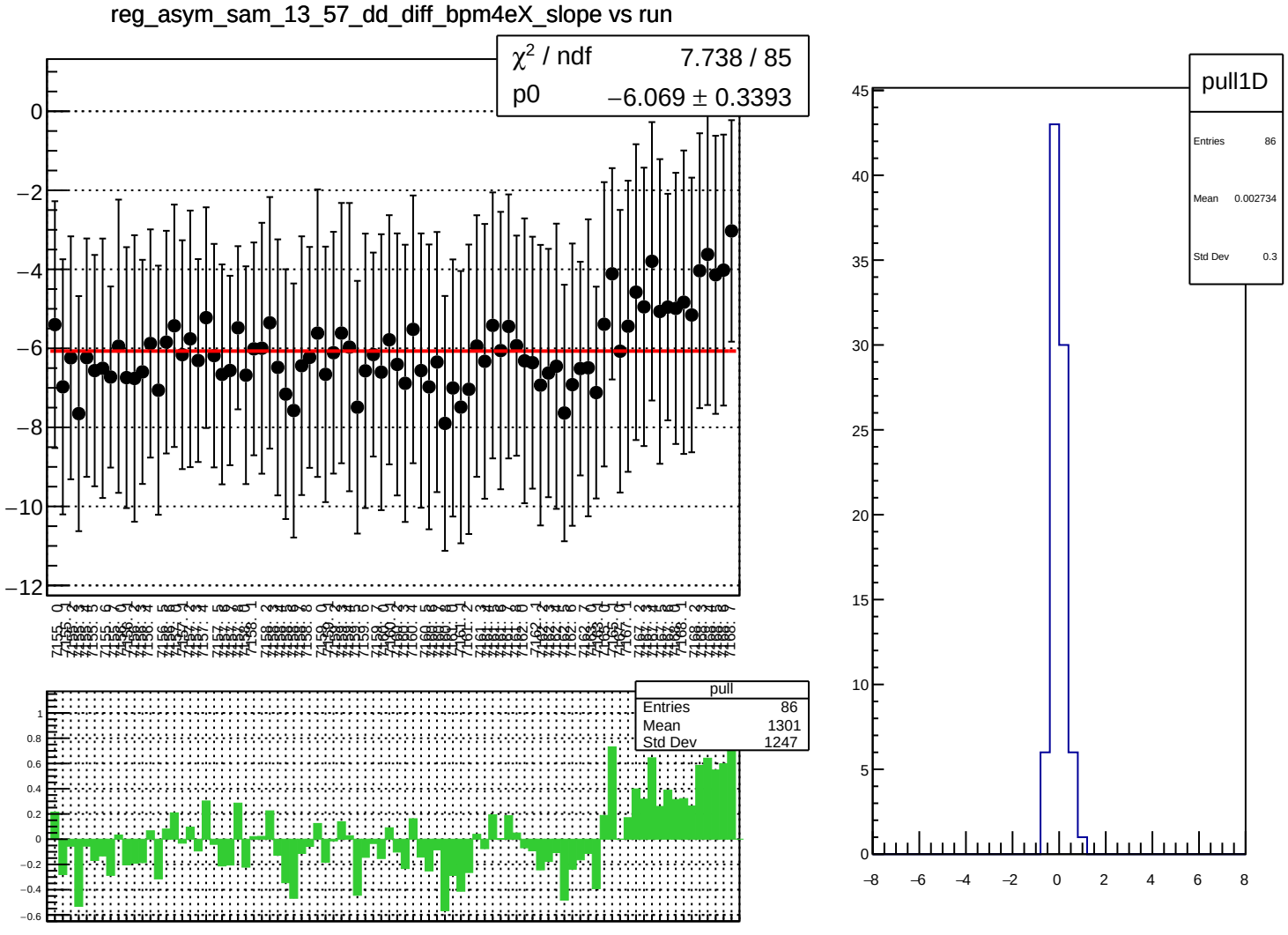

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 48.6 / 85
p0 57.87 ± 0.825
pull
Entries 86
Mean 332.8
Std Dev 294.3
pull1D
Entries 86
Mean 0.02643
Std Dev 0.7513

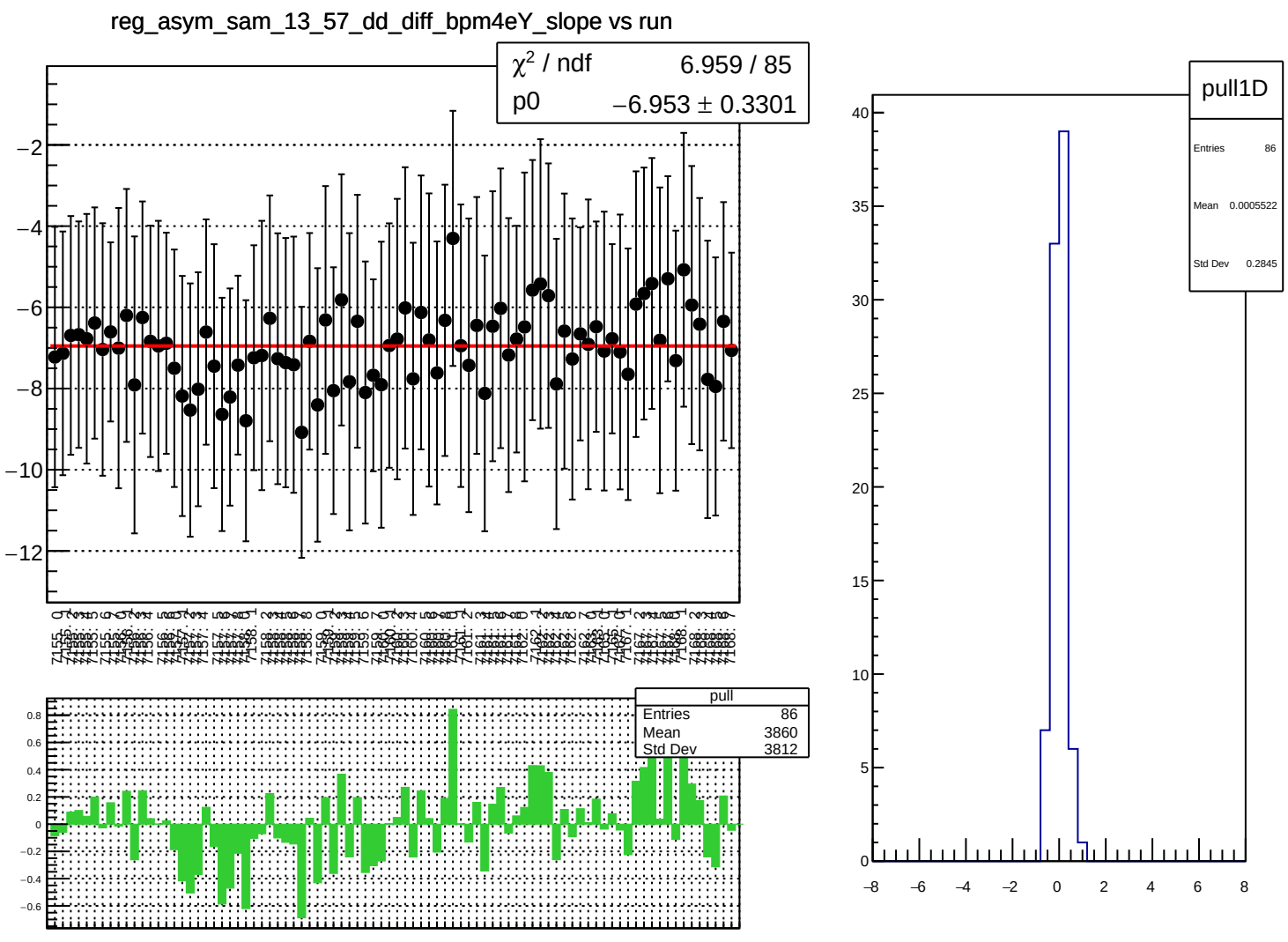

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 11.83 / 85
p0 −0.9191 ± 0.03195
pull
Entries 86
Mean −320.8
Std Dev 353.7
pull1D
Entries 86
Mean −0.005574
Std Dev 0.3708

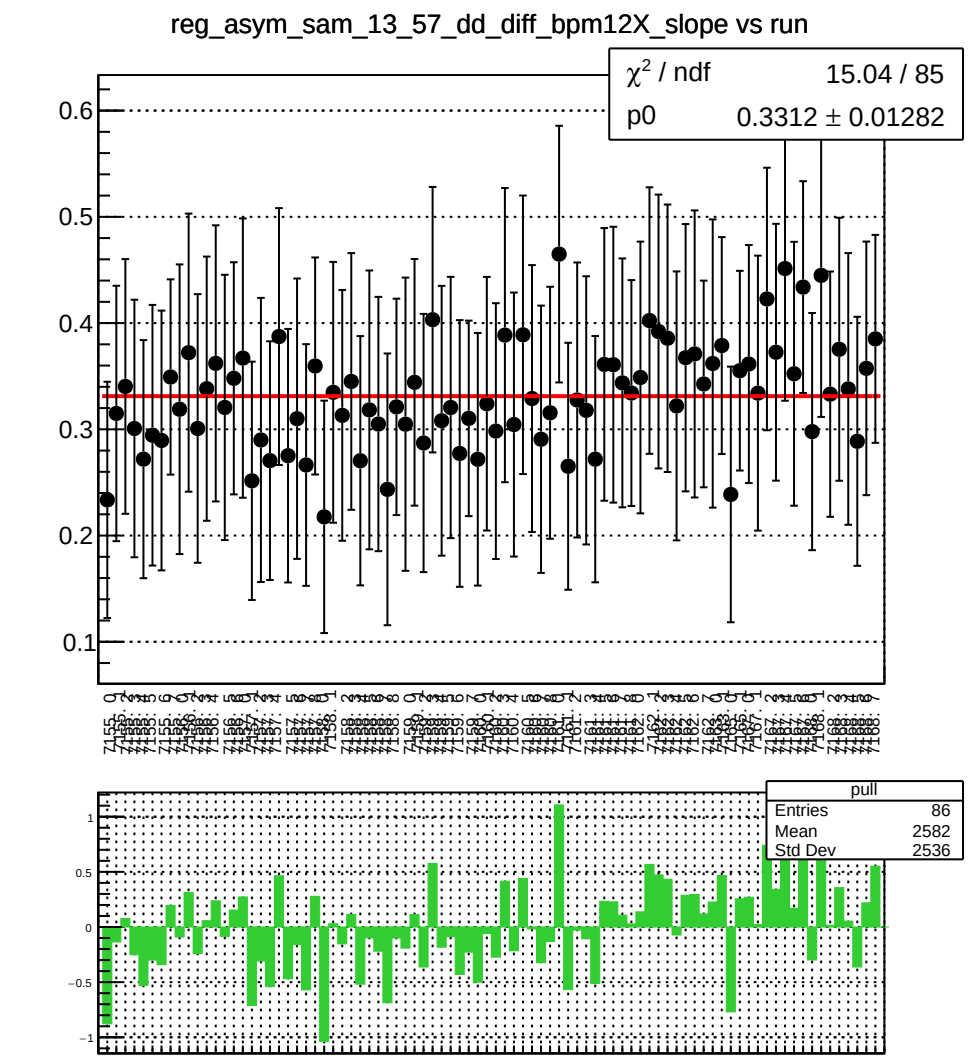

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 8.061 / 85
p0 −7.733 ± 0.335
pull
Entries 86
Mean 4587
Std Dev 4533

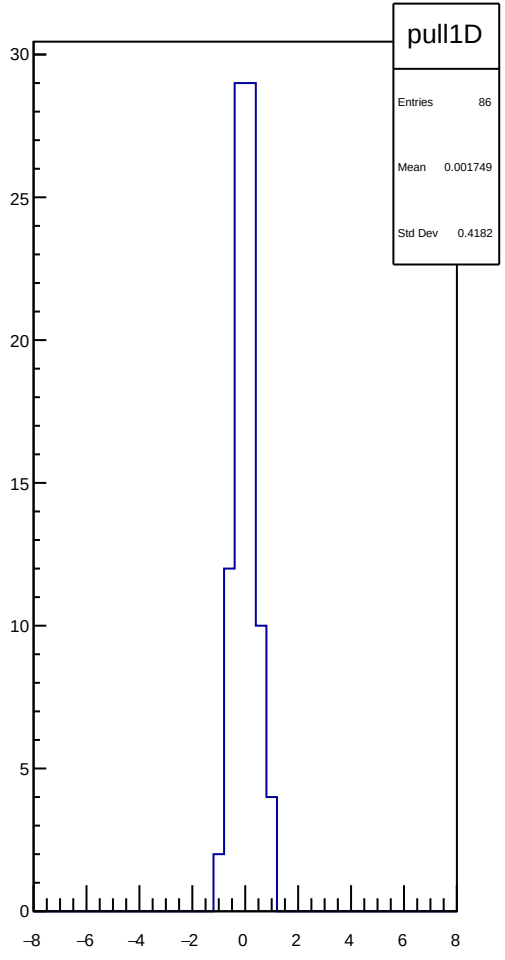

pull1D
Entries 86
Mean −0.0006935
Std Dev 0.3061

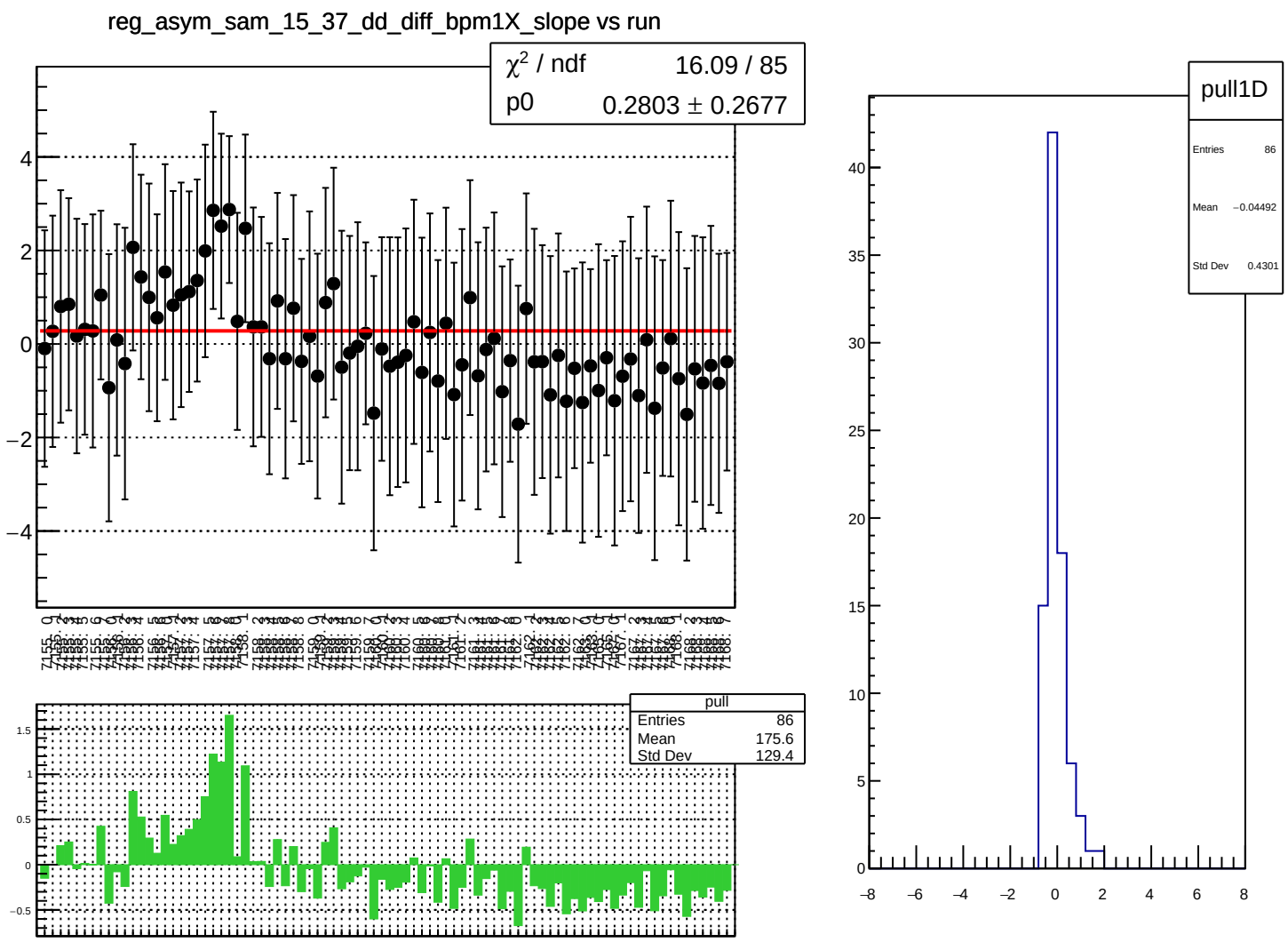

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.264 / 85
p0 −31.11 ± 0.2844
−28
−30
−32
−34
−36
pull
Entries 86
Mean 126.1
Std Dev 128.2
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 86
Mean 0.001538
Std Dev 0.2227
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

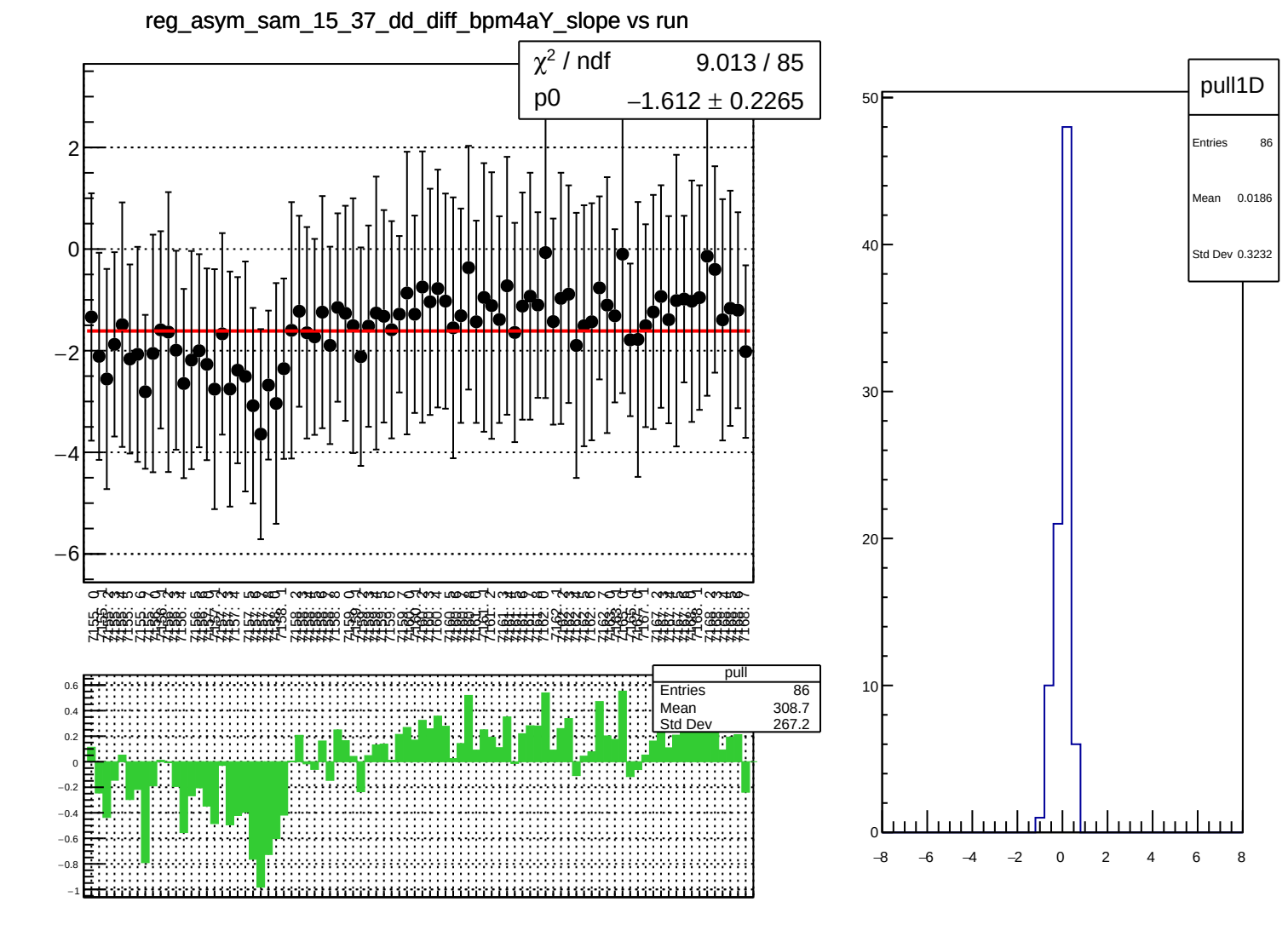

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 7.738 / 85
p0 −6.069 ± 0.3393
pull
Entries 86
Mean 1301
Std Dev 1247
pull1D
Entries 86
Mean 0.002734
Std Dev 0.3

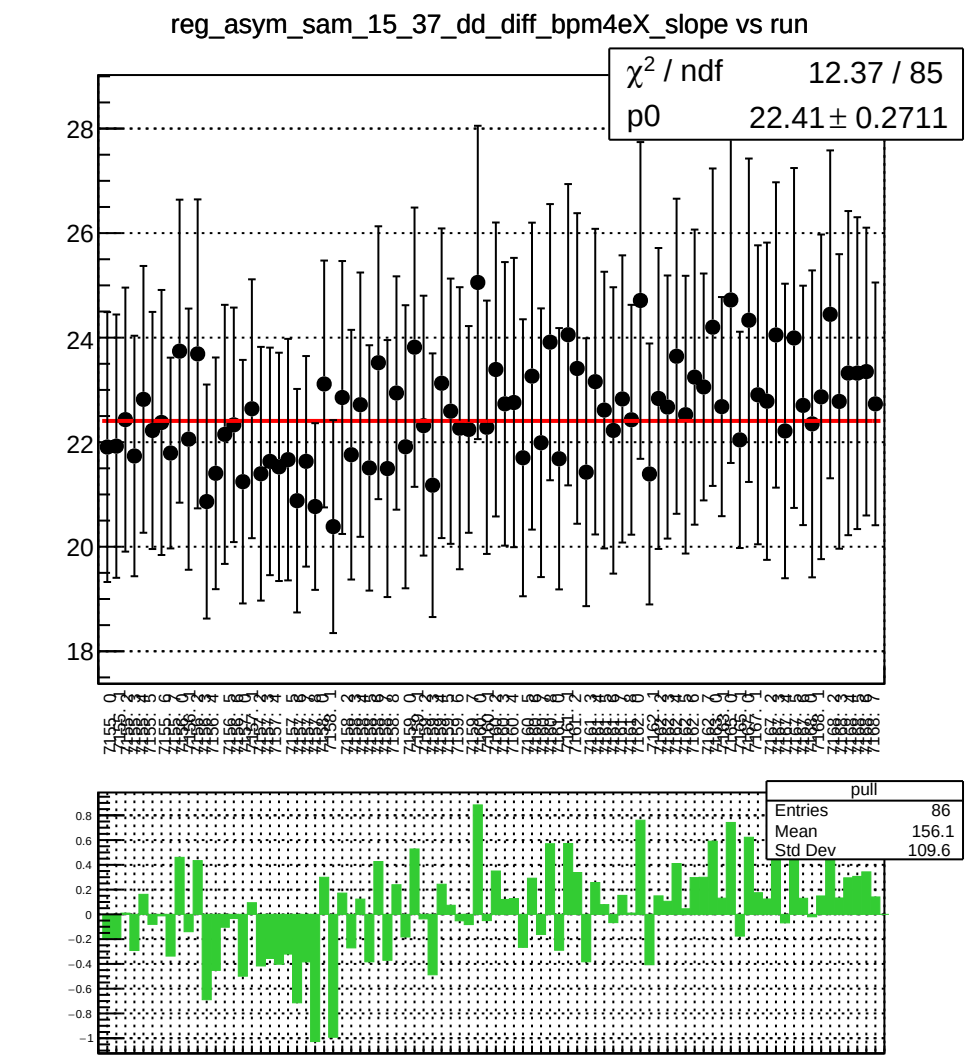

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.959 / 85
p0 −6.953 ± 0.3301
pull
Entries 86
Mean 3860
Std Dev 3812
pull1D
Entries 86
Mean 0.0005522
Std Dev 0.2845

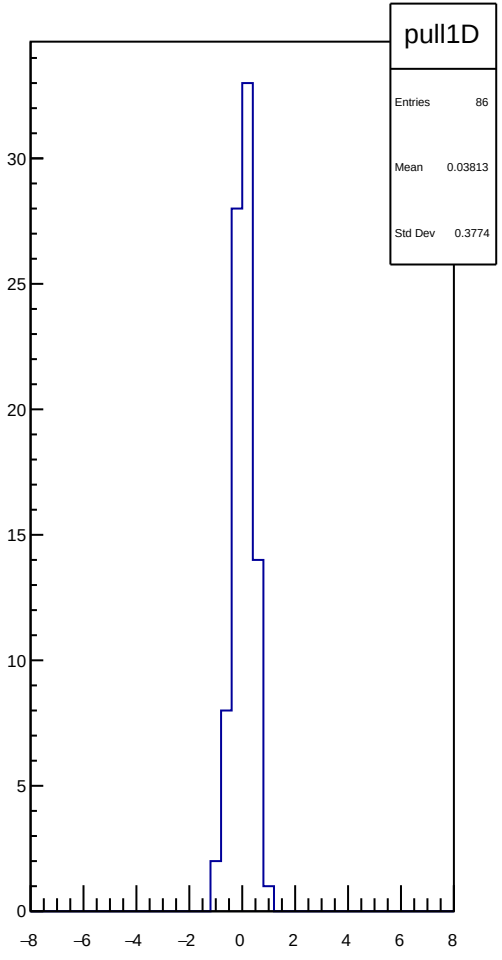

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 15.04 / 85
p0 0.3312 ± 0.01282
0.6
0.5
0.4
0.3
0.2
0.1
pull
Entries 86
Mean 2582
Std Dev 2536
1
0.5
0
−0.5
−1

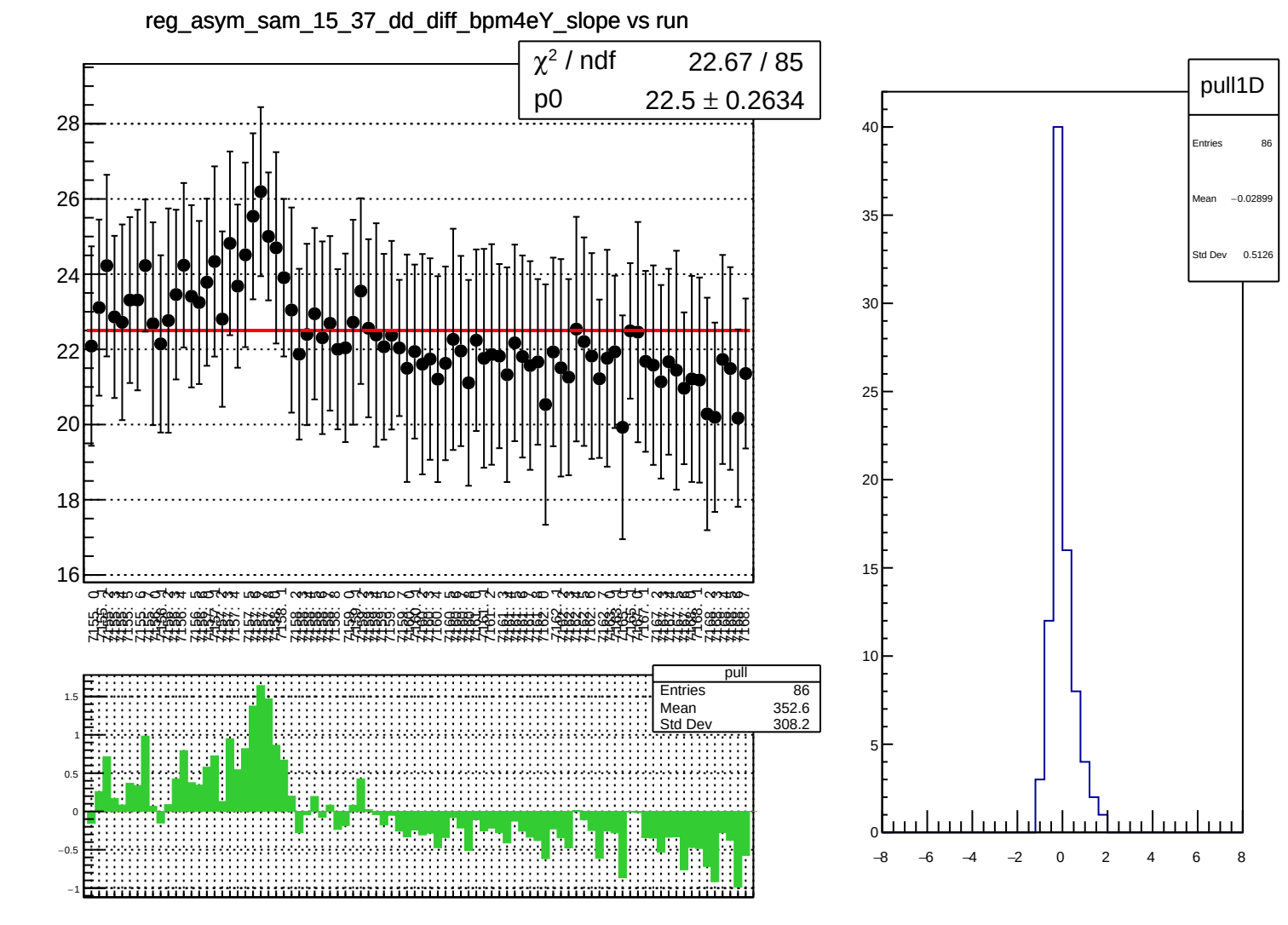

pull1D
Entries 86
Mean 0.001749
Std Dev 0.4182
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

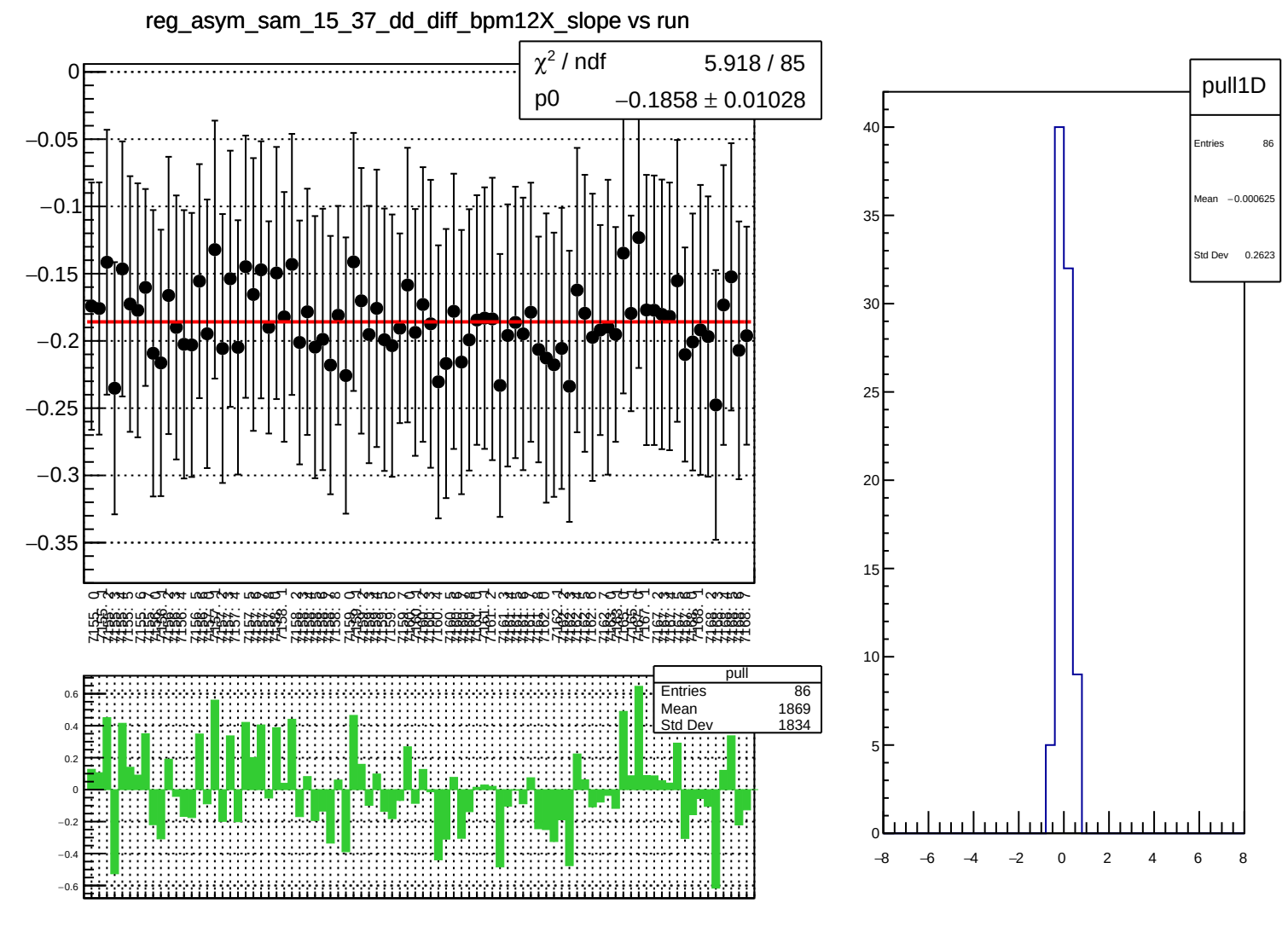

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 16.09 / 85
p0 0.2803 ± 0.2677
pull
Entries 86
Mean 175.6
Std Dev 129.4
pull1D
Entries 86
Mean −0.04492
Std Dev 0.4301

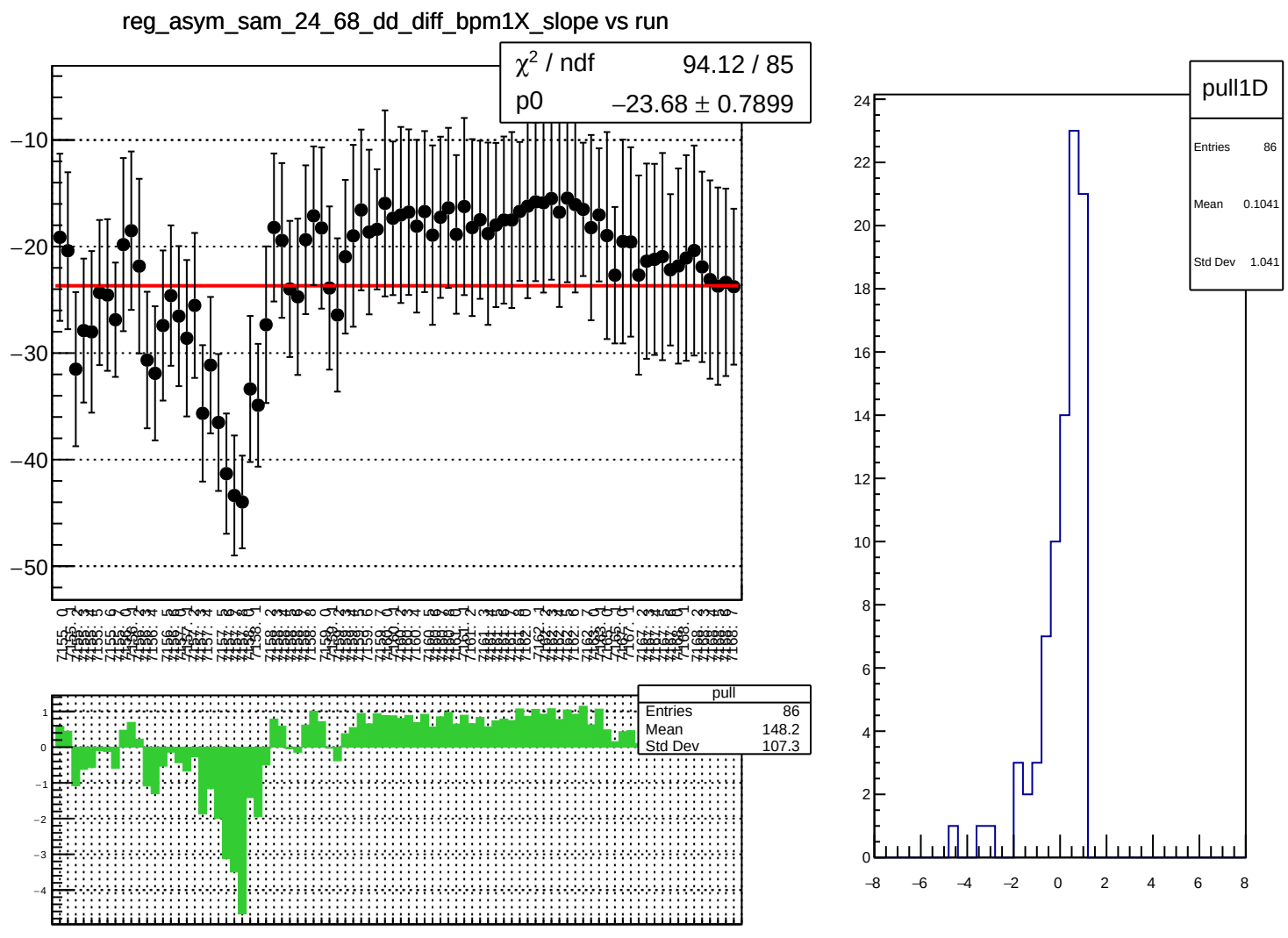

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 9.013 / 85
p0 −1.612 ± 0.2265
pull
Entries 86
Mean 308.7
Std Dev 267.2
pull1D
Entries 86
Mean 0.0186
Std Dev 0.3232

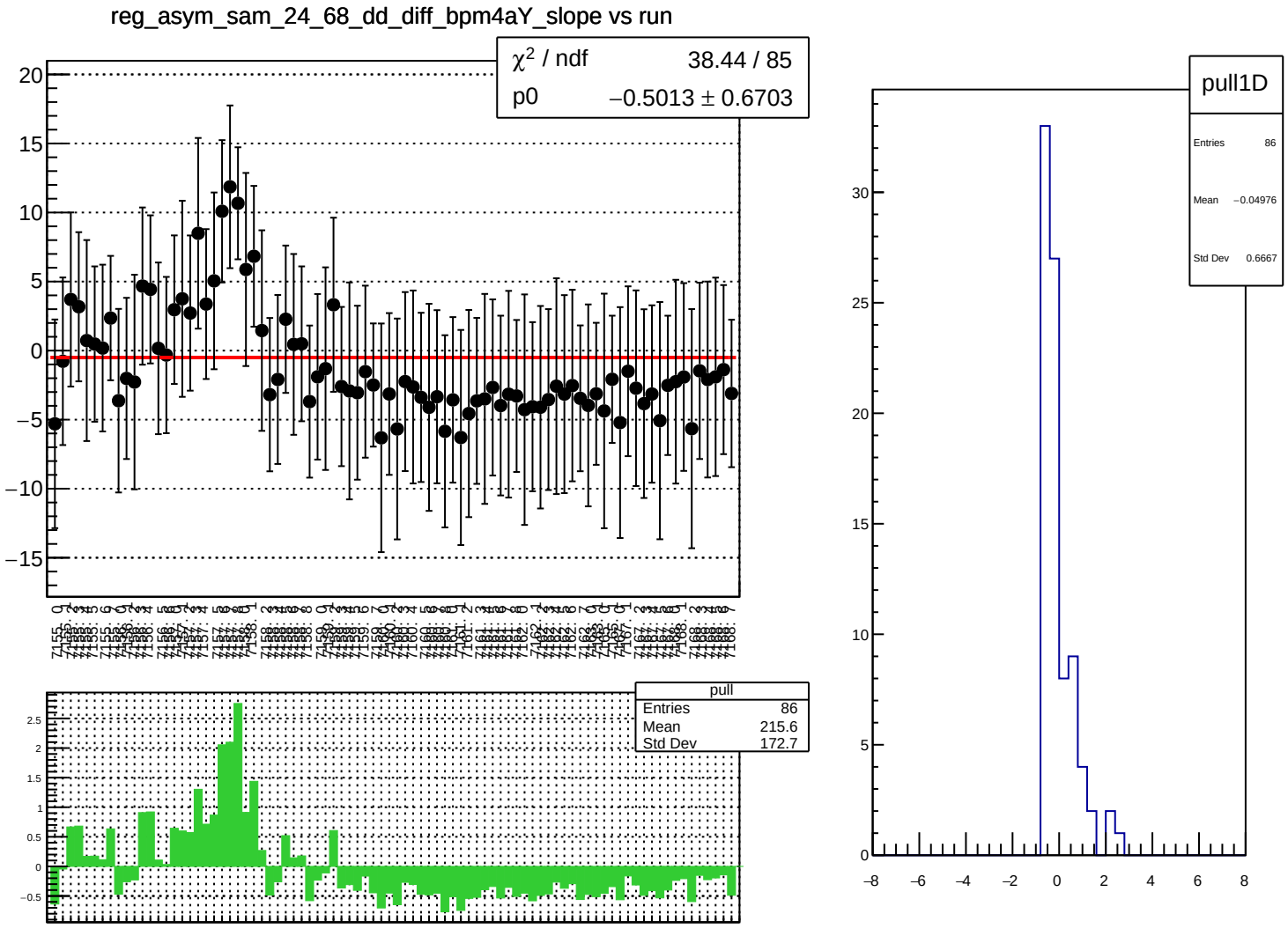

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.37 / 85
p0 22.41 ± 0.2711
pull
Entries 86
Mean 156.1
Std Dev 109.6

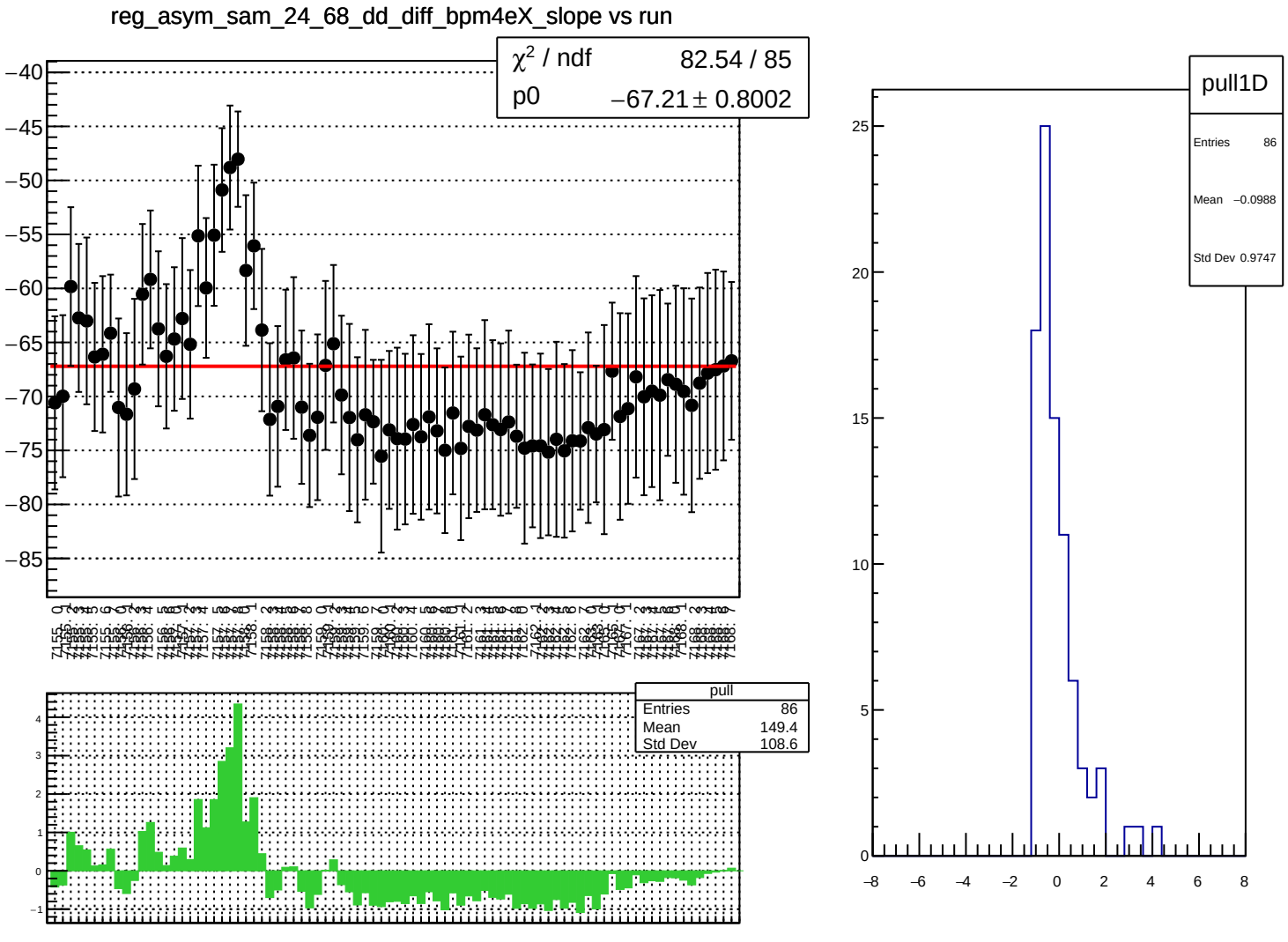

pull1D
Entries 86
Mean 0.03813
Std Dev 0.3774

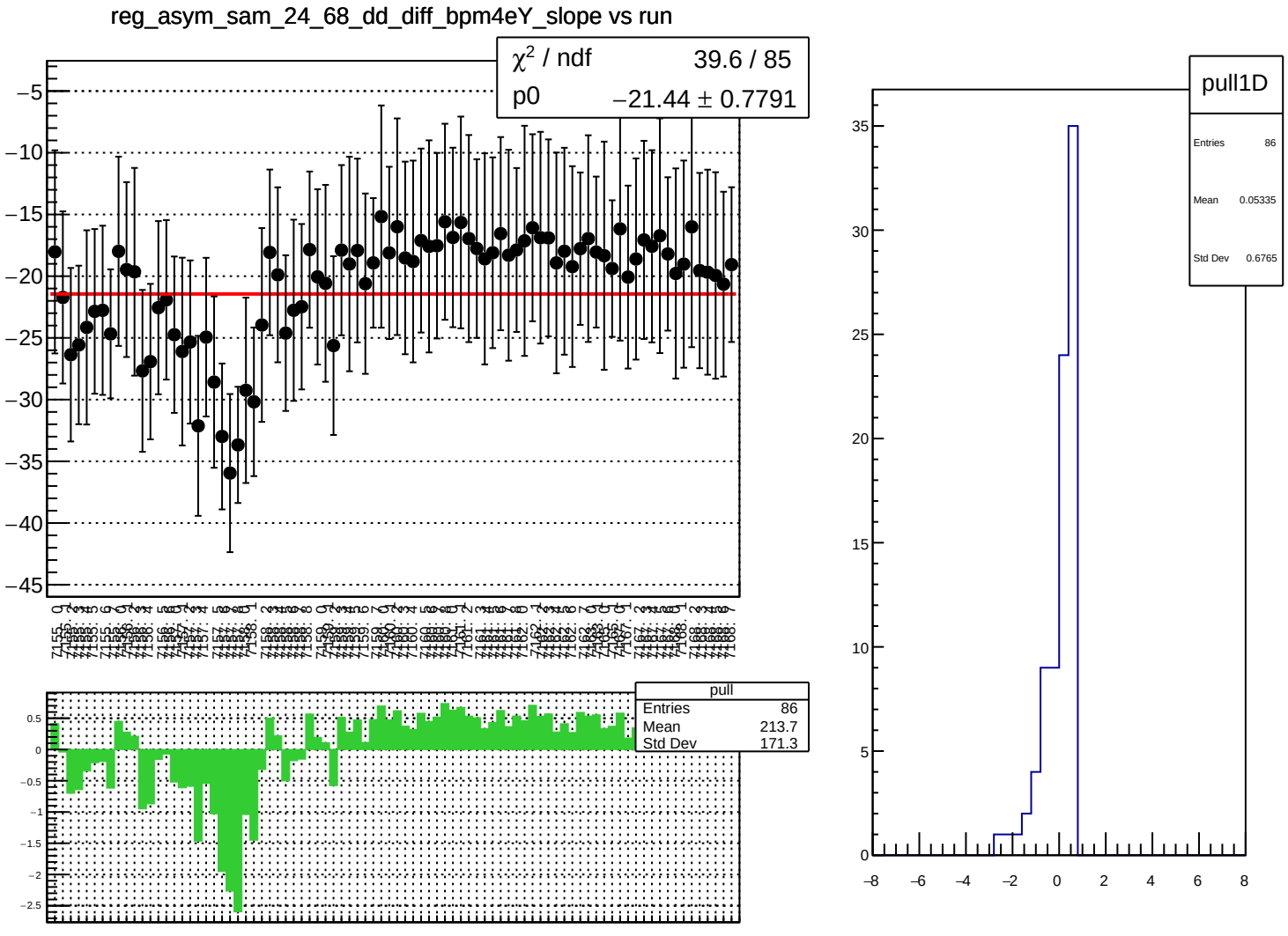

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 22.67 / 85
p0 22.5 ± 0.2634
pull
Entries 86
Mean 352.6
Std Dev 308.2
pull1D
Entries 86
Mean −0.02899
Std Dev 0.5126

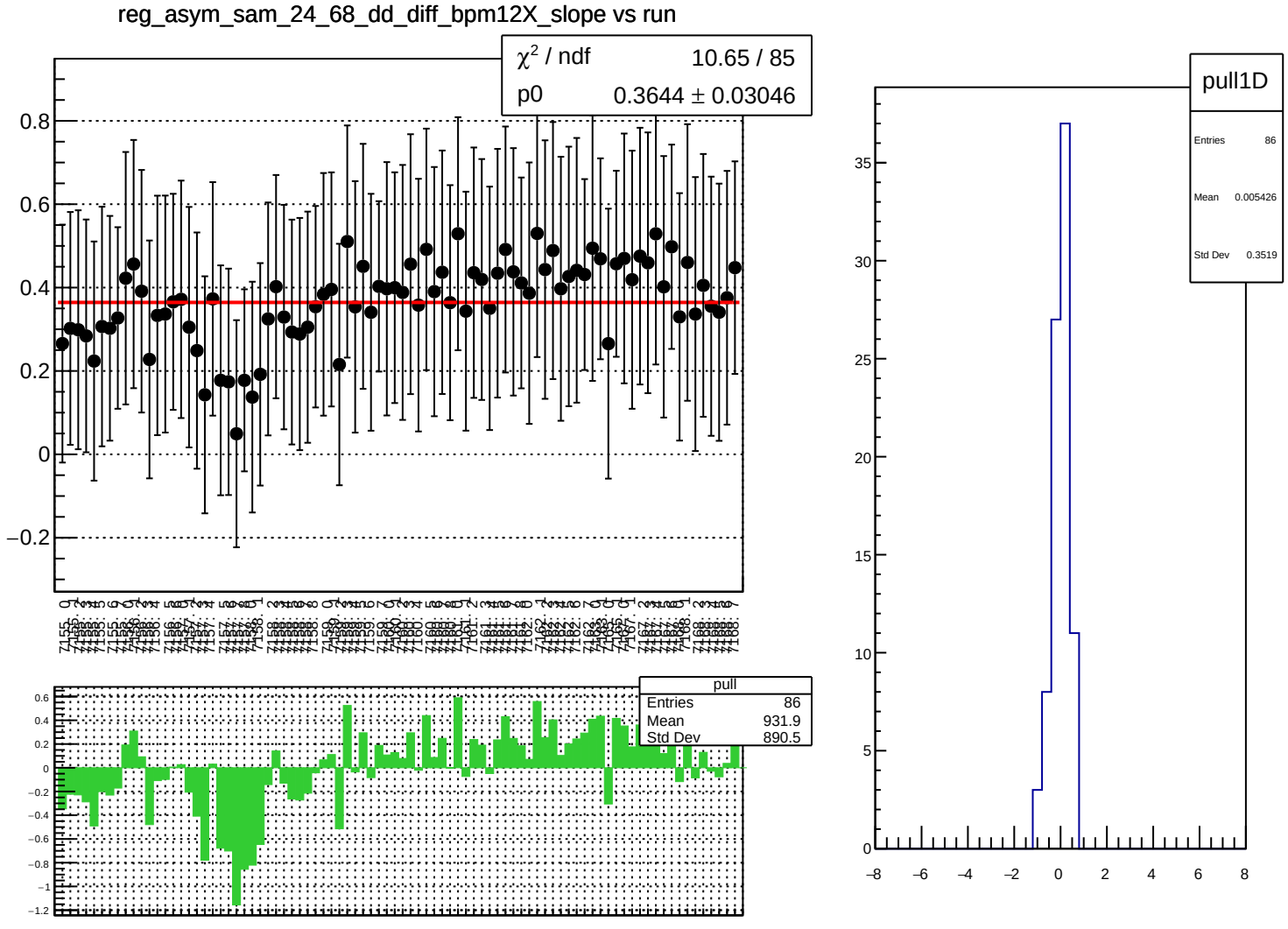

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 5.918 / 85
p0 −0.1858 ± 0.01028
pull
Entries 86
Mean 1869
Std Dev 1834
pull1D
Entries 86
Mean −0.000625
Std Dev 0.2623

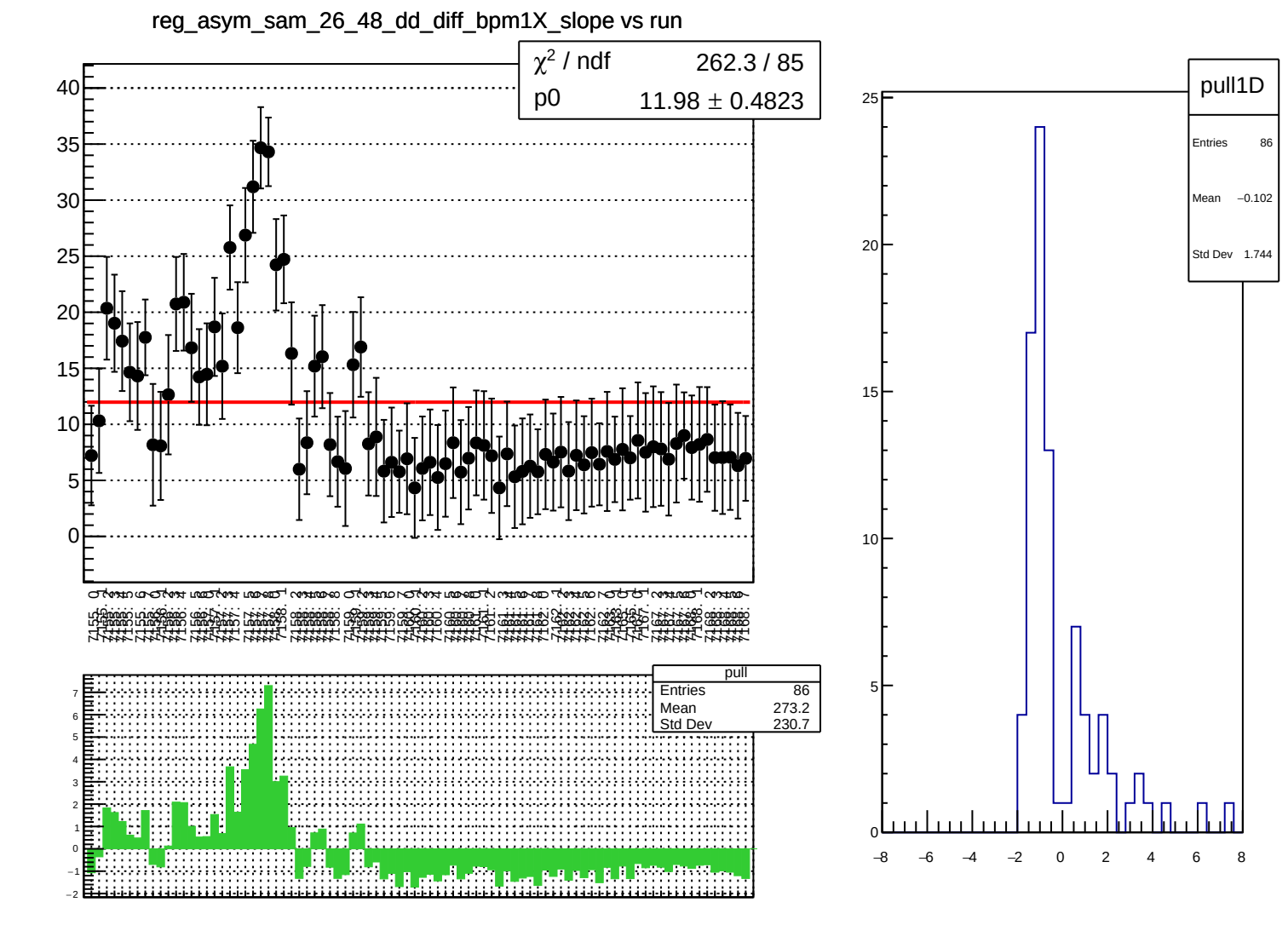

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 94.12 / 85
p0 −23.68 ± 0.7899
pull
Entries 86
Mean 148.2
Std Dev 107.3
pull1D
Entries 86
Mean 0.1041
Std Dev 1.041

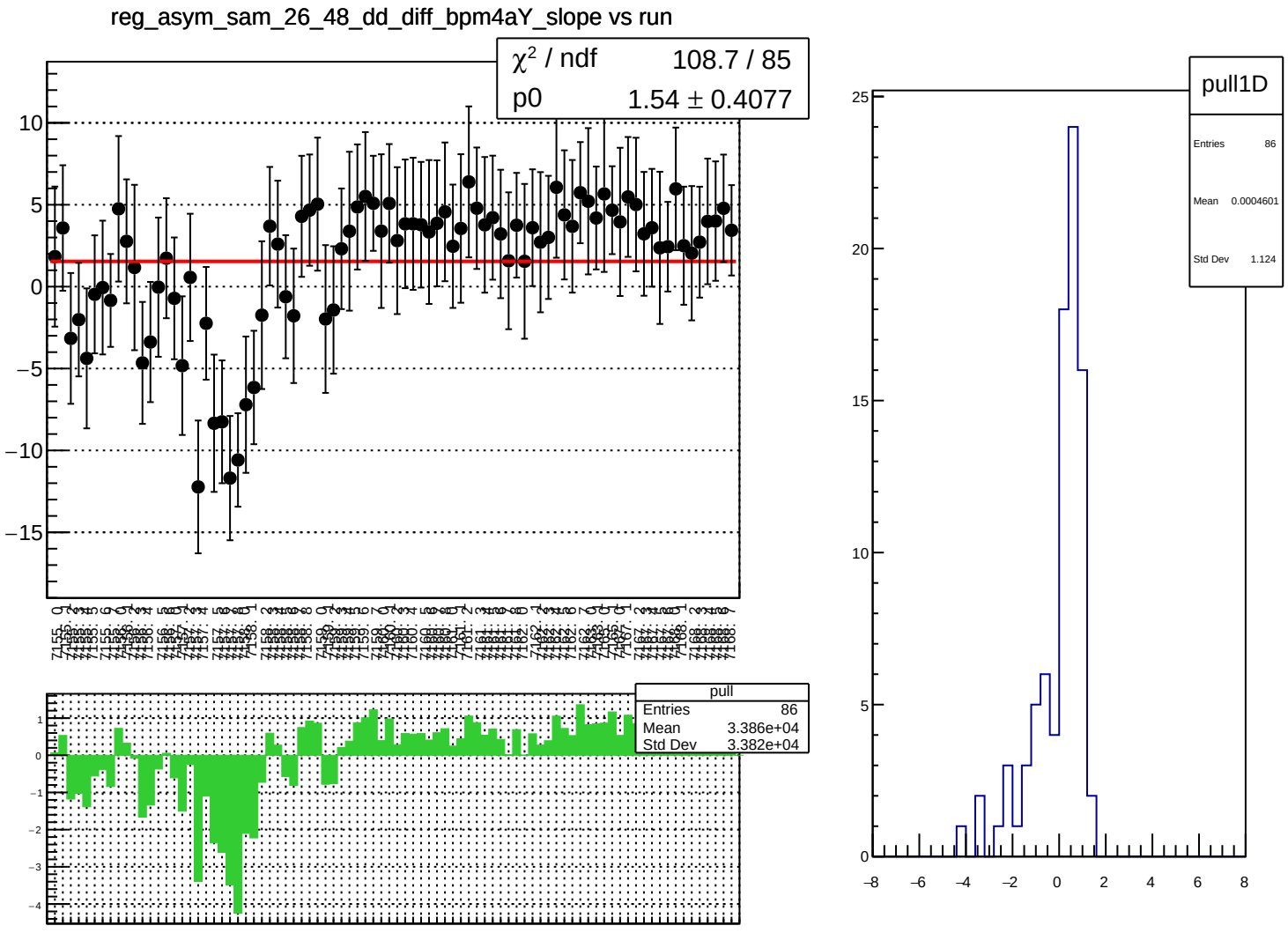

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 38.44 / 85
p0 −0.5013 ± 0.6703
pull
Entries 86
Mean 215.6
Std Dev 172.7
pull1D
Entries 86
Mean −0.04976
Std Dev 0.6667

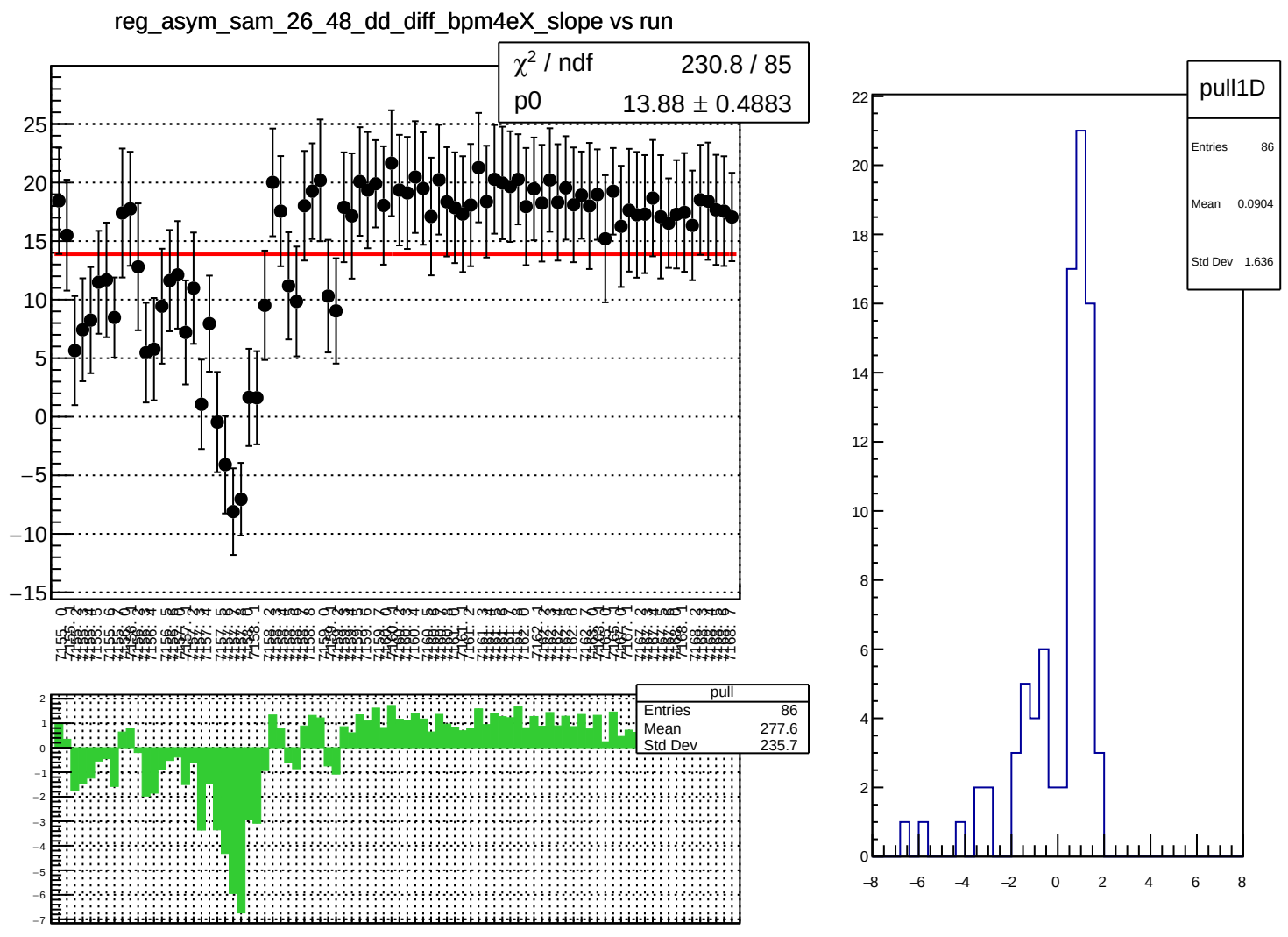

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 82.54 / 85
p0 −67.21 ± 0.8002
pull
Entries 86
Mean 149.4
Std Dev 108.6
pull1D
Entries 86
Mean −0.0988
Std Dev 0.9747

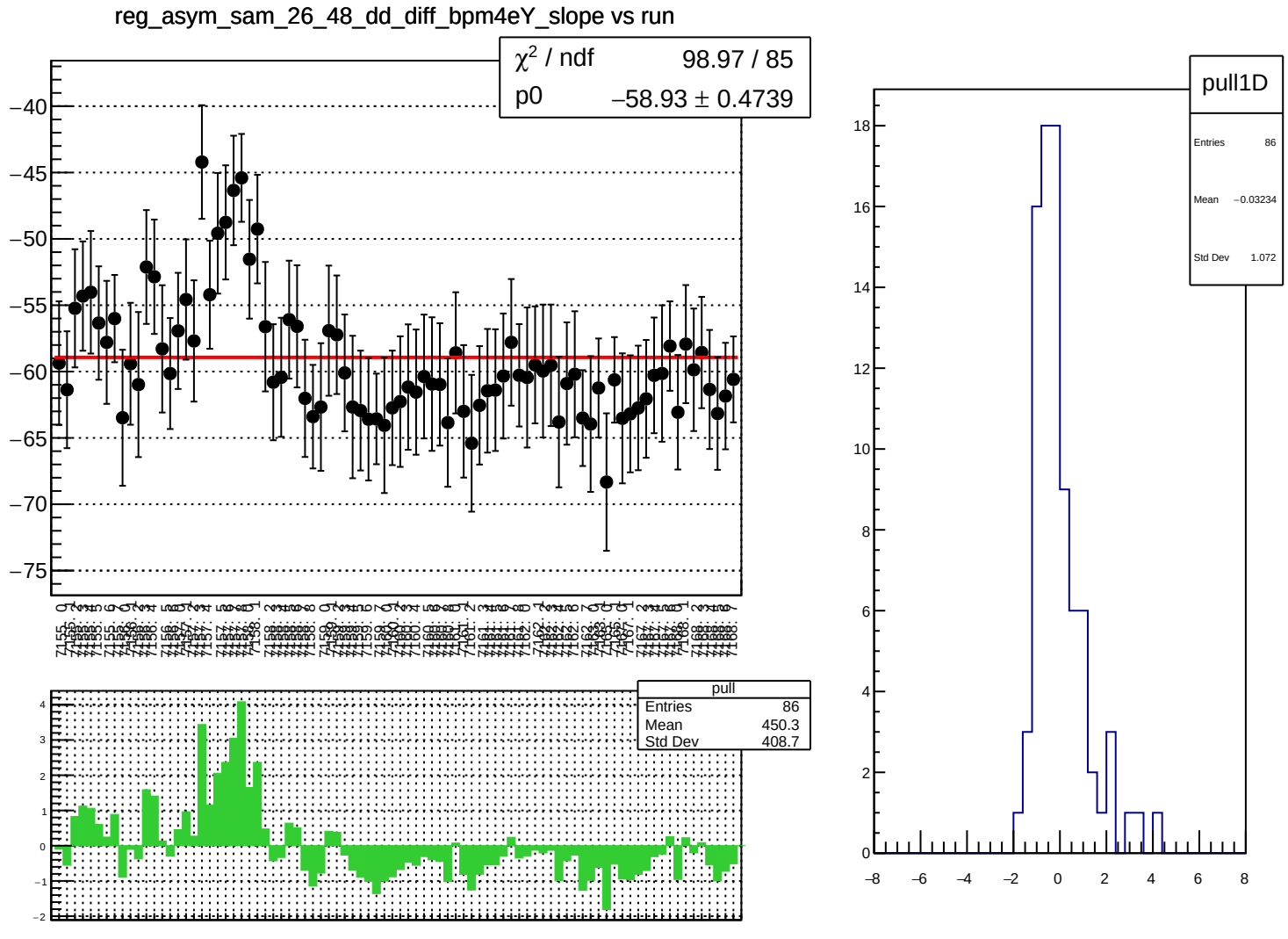

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 39.6 / 85
p0 −21.44 ± 0.7791
pull
Entries 86
Mean 213.7
Std Dev 171.3
pull1D
Entries 86
Mean 0.05335
Std Dev 0.6765

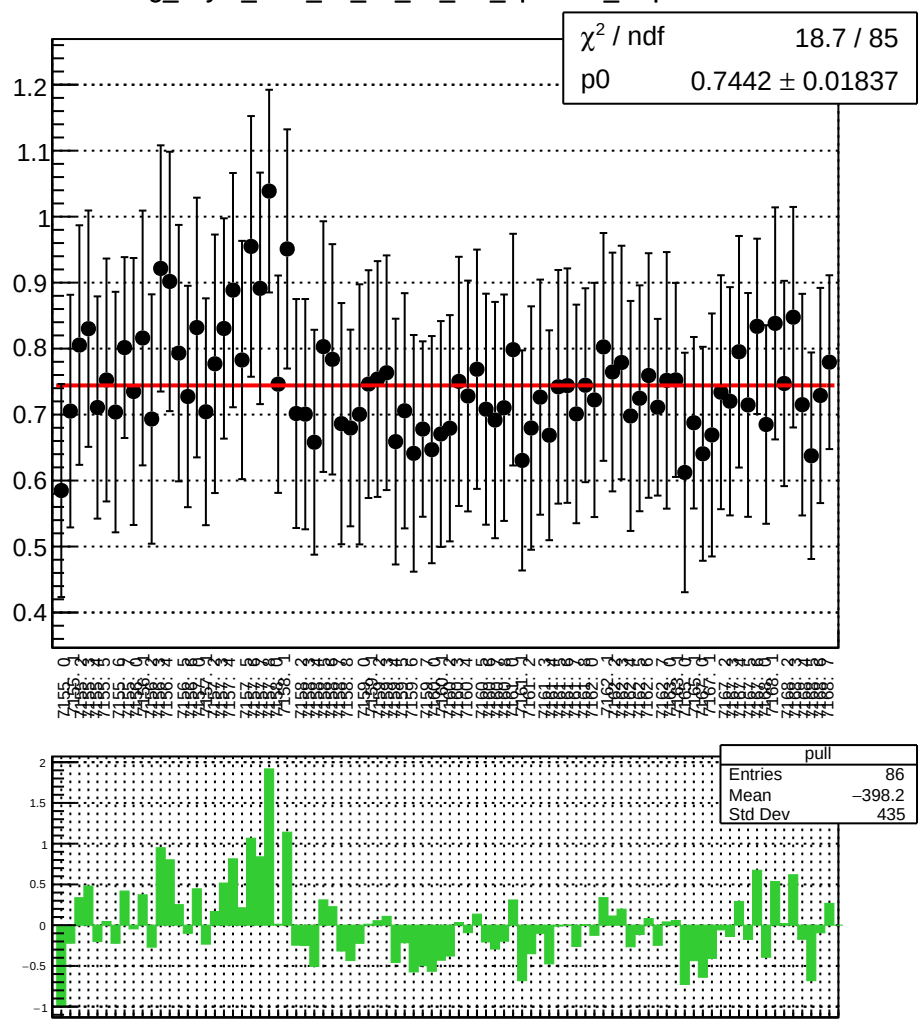

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 10.65 / 85
p0 0.3644 ± 0.03046
pull
Entries 86
Mean 931.9
Std Dev 890.5
pull1D
Entries 86
Mean 0.005426
Std Dev 0.3519

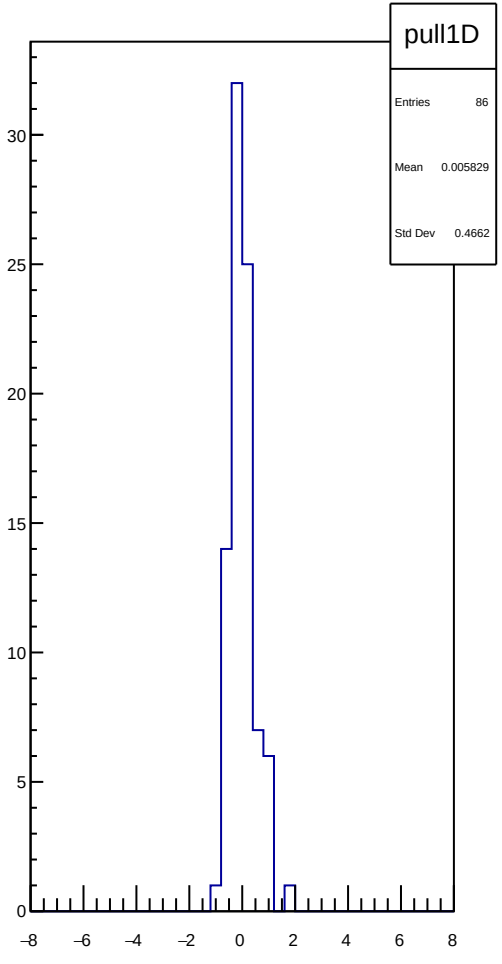

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 262.3 / 85
p0 11.98 ± 0.4823
pull
Entries 86
Mean 273.2
Std Dev 230.7
pull1D
Entries 86
Mean −0.102
Std Dev 1.744

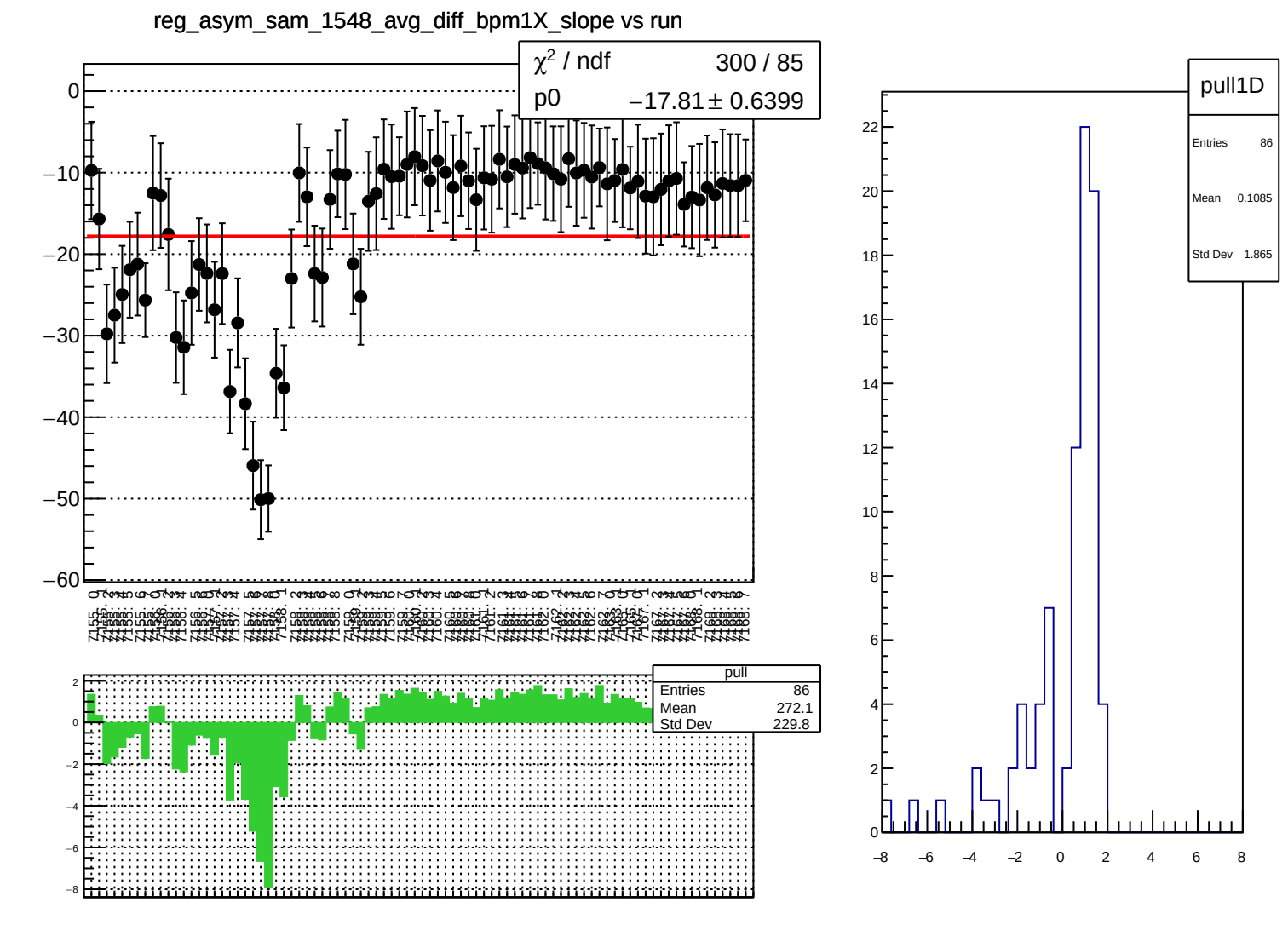

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 108.7 / 85
p0 1.54 ± 0.4077
pull
Entries 86
Mean 3.386e+04
Std Dev 3.382e+04
pull1D
Entries 86
Mean 0.0004601
Std Dev 1.124

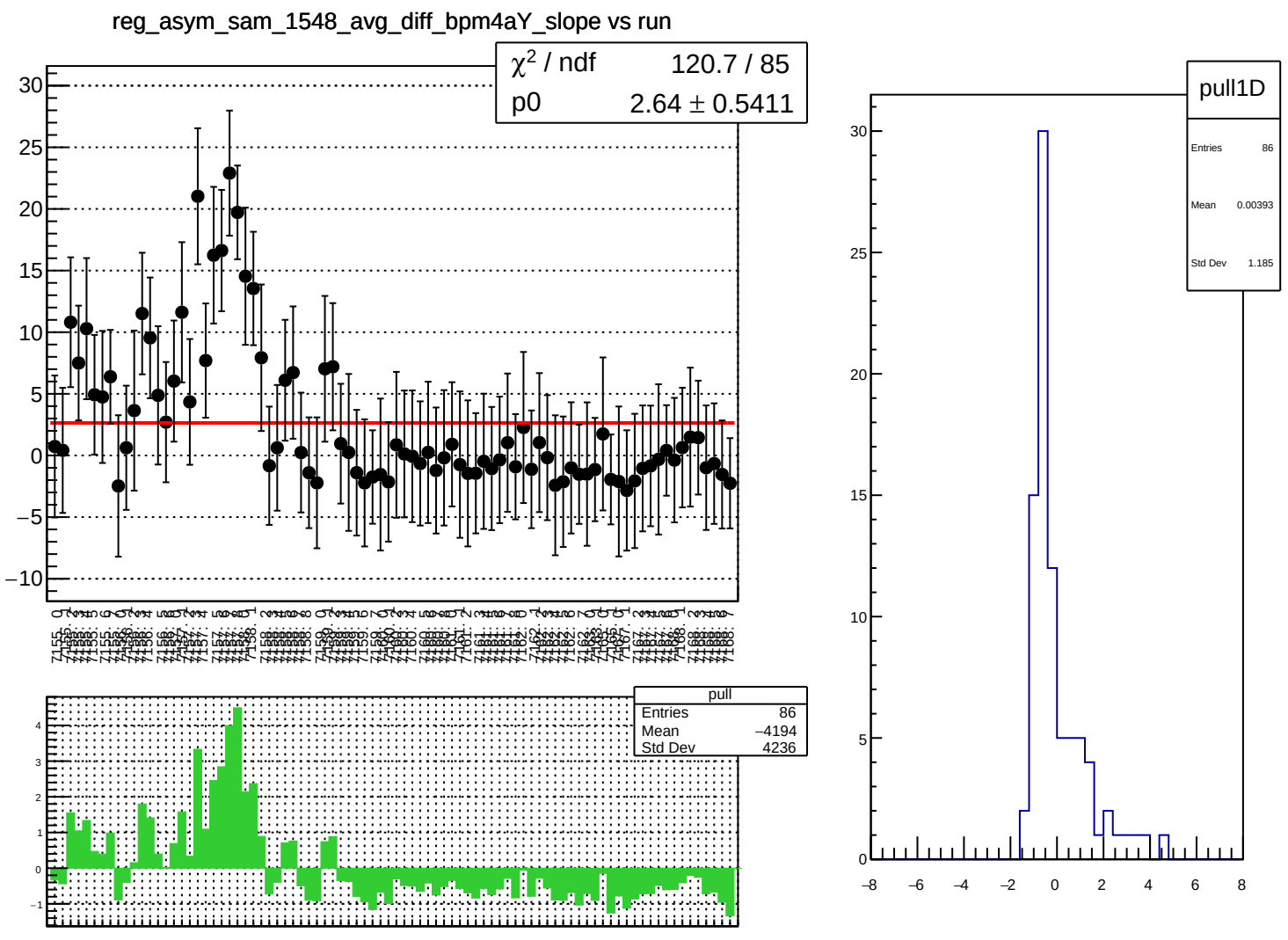

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 230.8 / 85
p0 13.88 ± 0.4883
pull
Entries 86
Mean 277.6
Std Dev 235.7
pull1D
Entries 86
Mean 0.0904
Std Dev 1.636

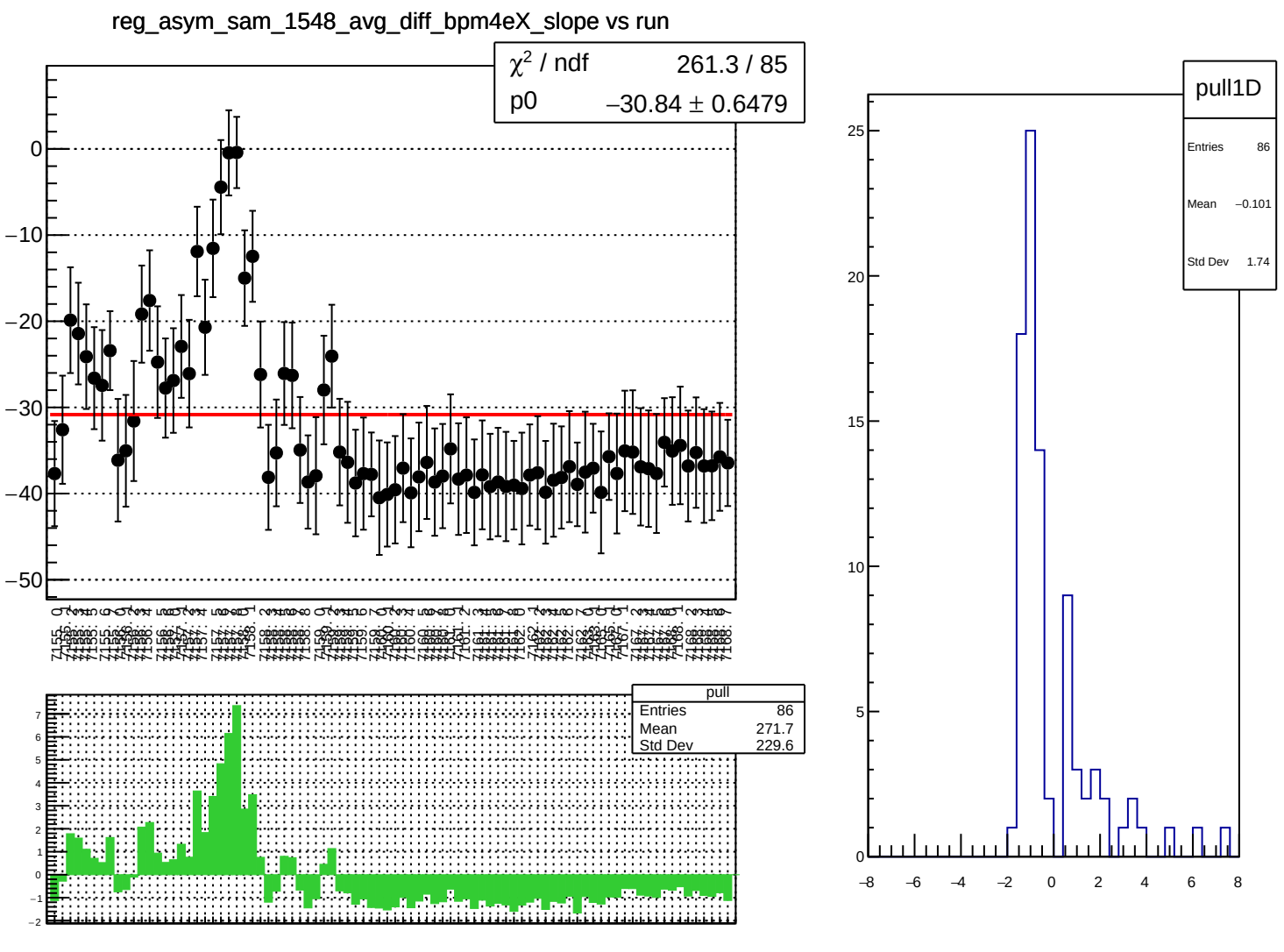

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 98.97 / 85
p0 −58.93 ± 0.4739
pull
Entries 86
Mean 450.3
Std Dev 408.7
pull1D
Entries 86
Mean −0.03234
Std Dev 1.072

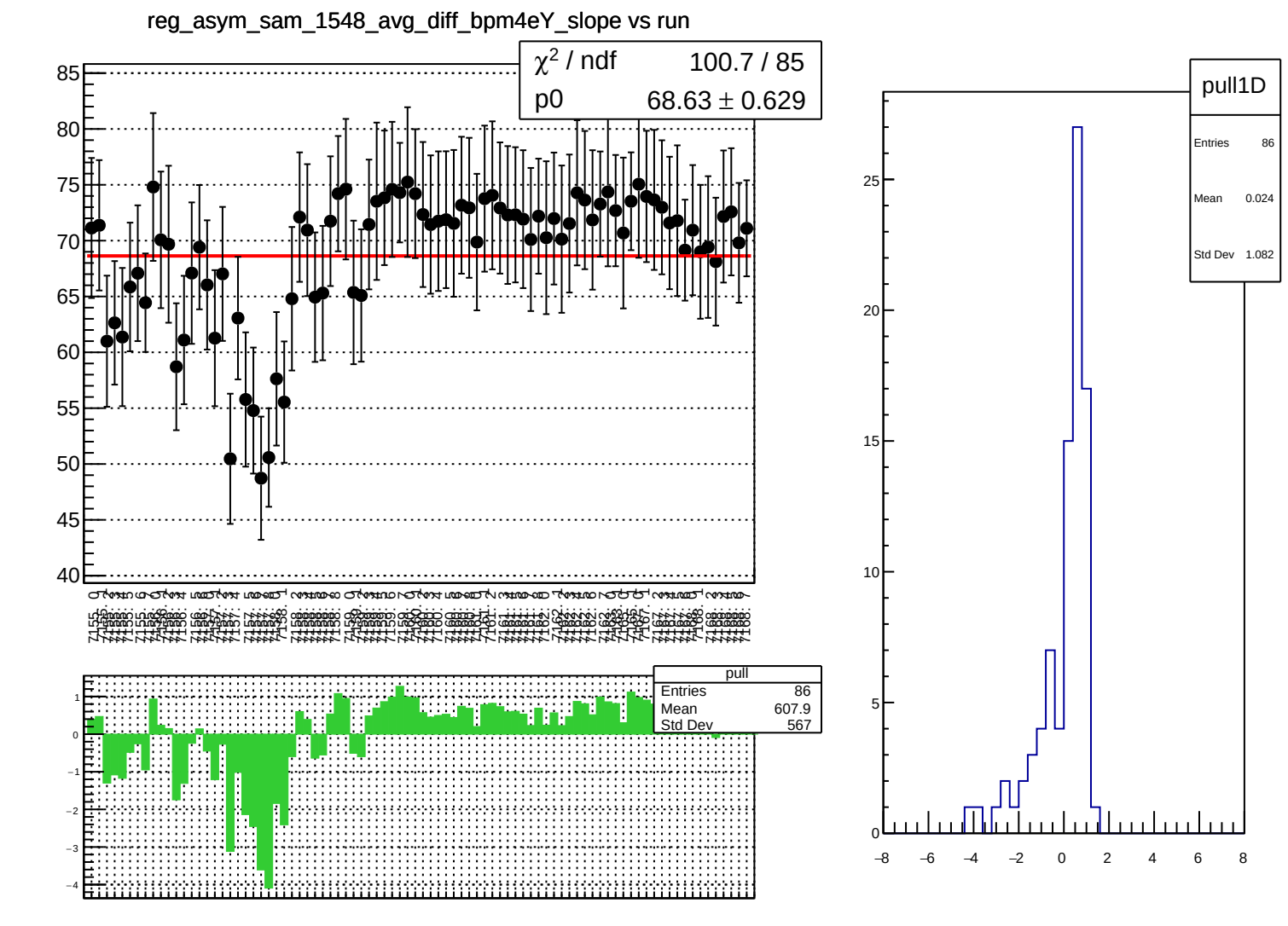

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 18.7 / 85
p0 0.7442 ± 0.01837
pull
Entries 86
Mean −398.2
Std Dev 435

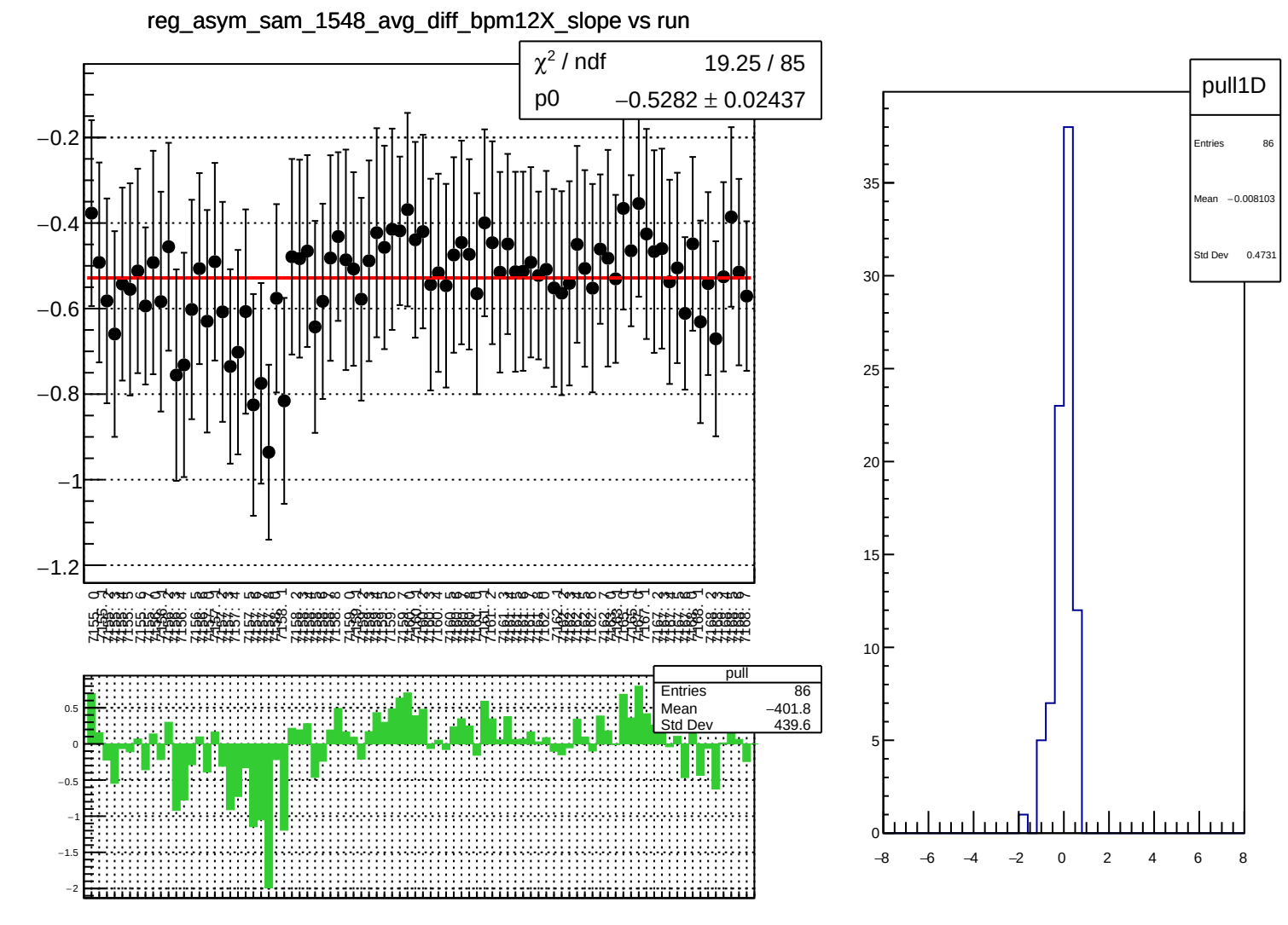

pull1D
Entries 86
Mean 0.005829
Std Dev 0.4662

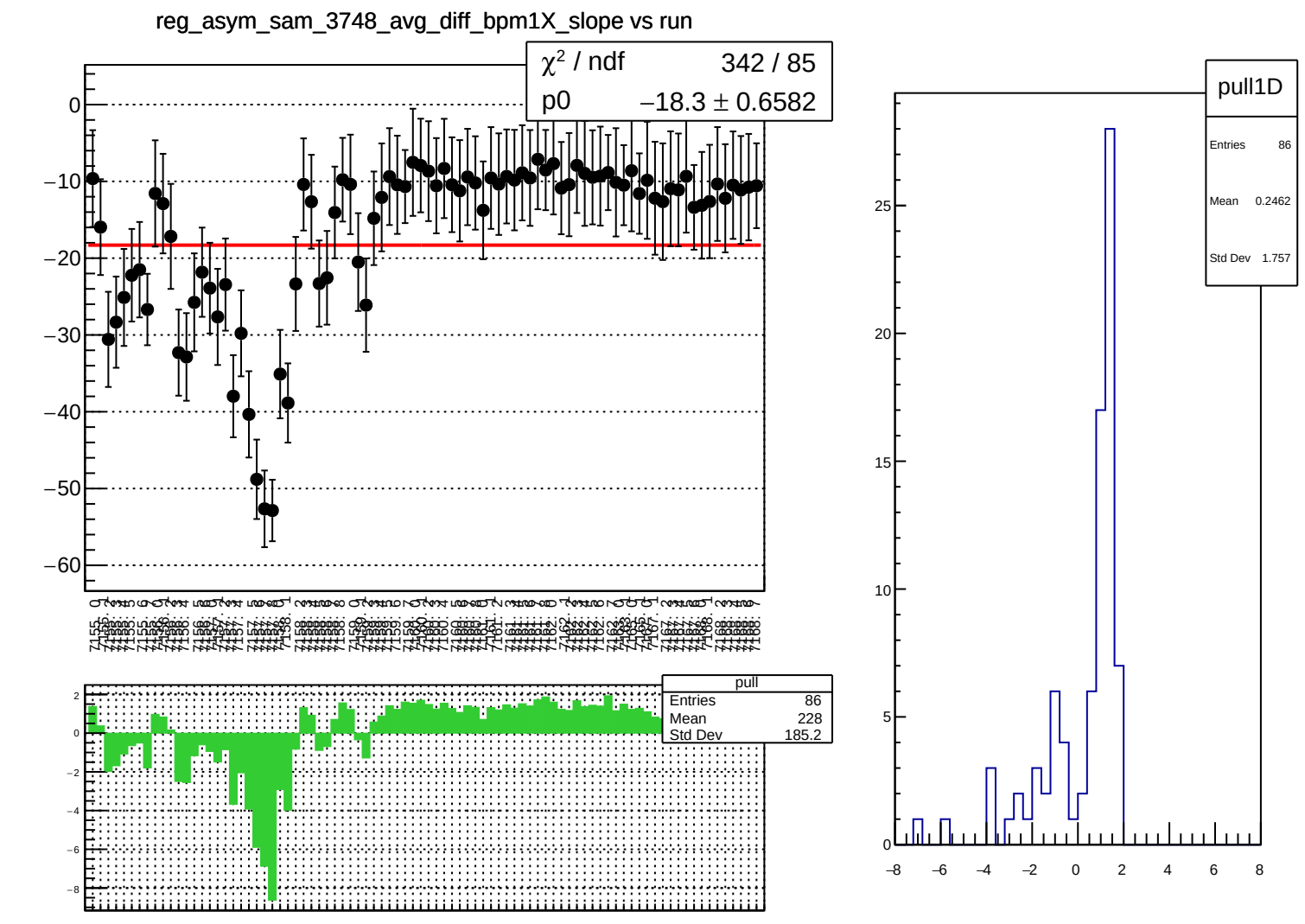

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 300 / 85
p0 −17.81 ± 0.6399
pull
Entries 86
Mean 272.1
Std Dev 229.8
pull1D
Entries 86
Mean 0.1085
Std Dev 1.865

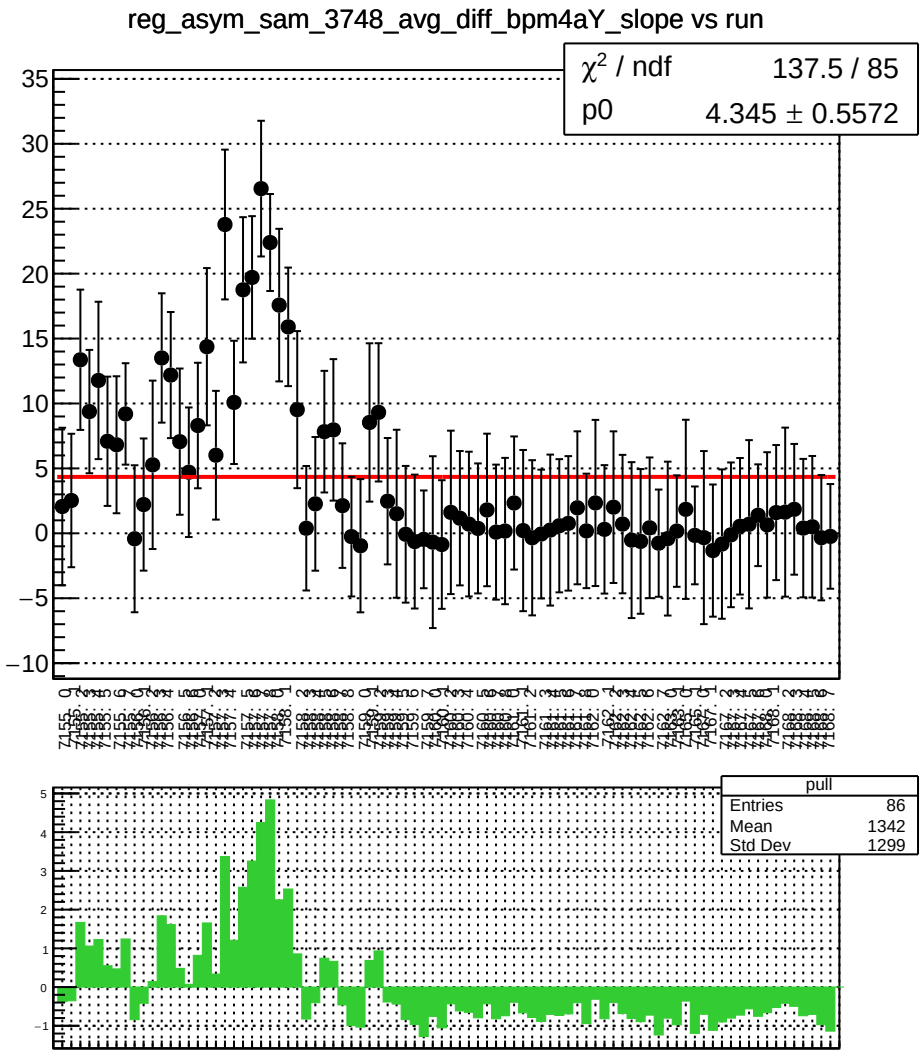

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 120.7 / 85
p0 2.64 ± 0.5411
pull
Entries 86
Mean −4194
Std Dev 4236
pull1D
Entries 86
Mean 0.00393
Std Dev 1.185

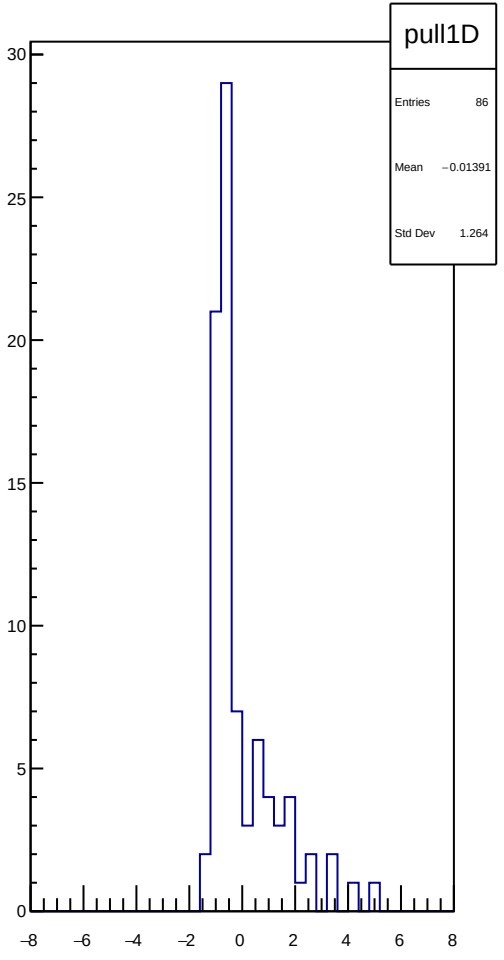

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 261.3 / 85
p0 −30.84 ± 0.6479
pull
Entries 86
Mean 271.7
Std Dev 229.6
pull1D
Entries 86
Mean −0.101
Std Dev 1.74

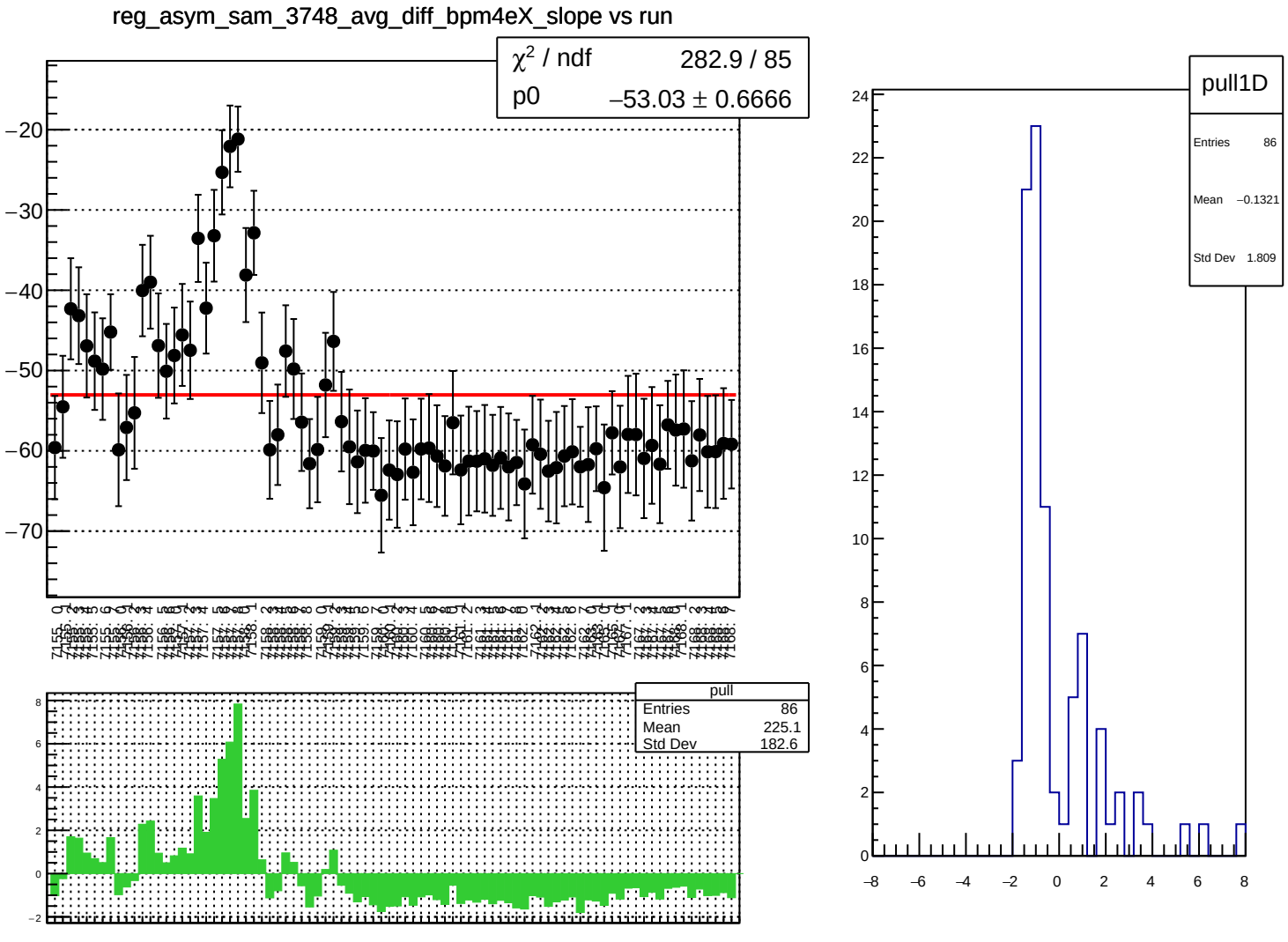

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 100.7 / 85
p0 68.63 ± 0.629
pull
Entries 86
Mean 607.9
Std Dev 567
pull1D
Entries 86
Mean 0.024
Std Dev 1.082

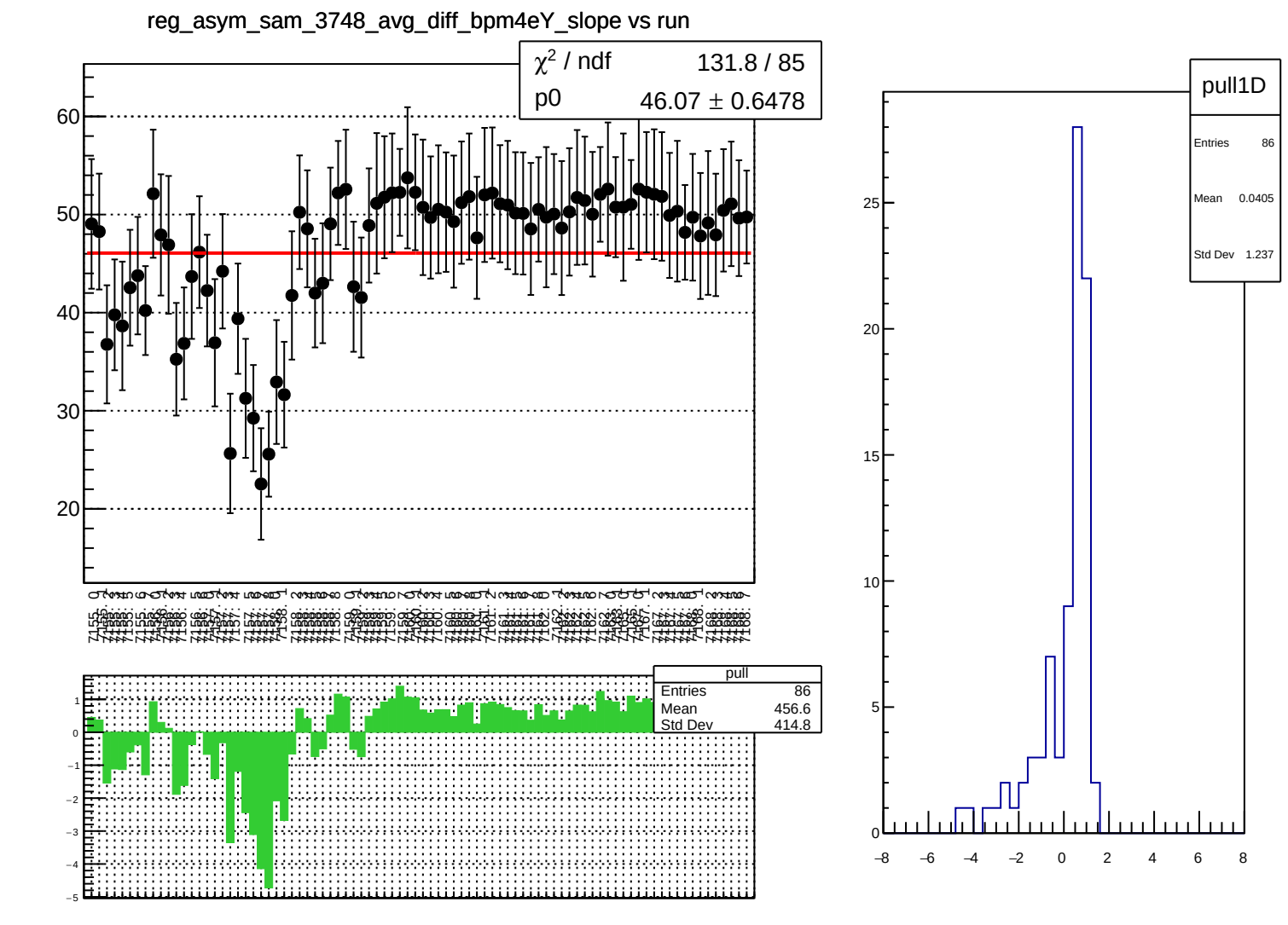

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 19.25 / 85
p0 −0.5282 ± 0.02437
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull
Entries 86
Mean −401.8
Std Dev 439.6
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean −0.008103
Std Dev 0.4731
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

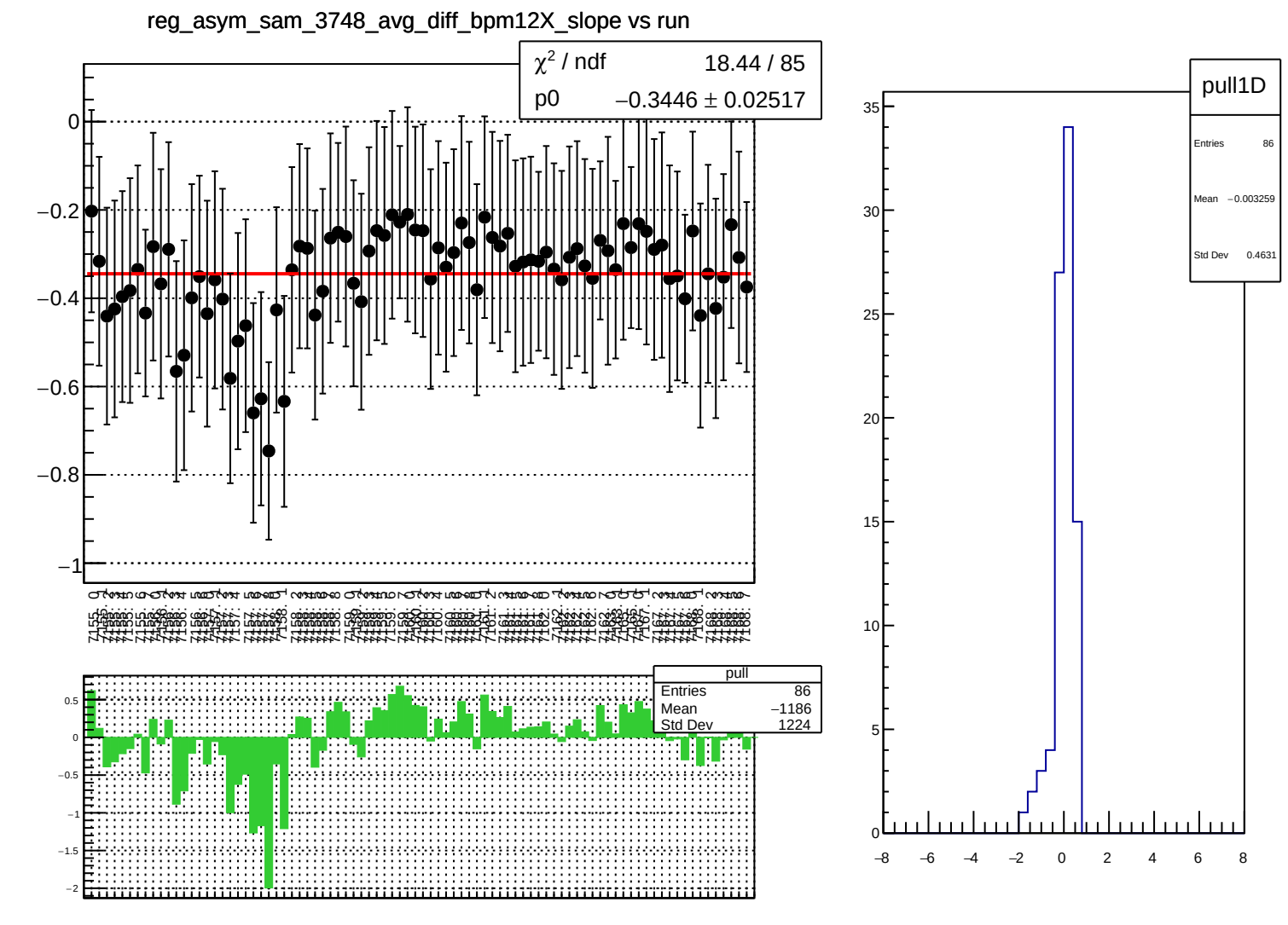

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 342 / 85
p0 −18.3 ± 0.6582
pull
Entries 86
Mean 228
Std Dev 185.2
pull1D
Entries 86
Mean 0.2462
Std Dev 1.757

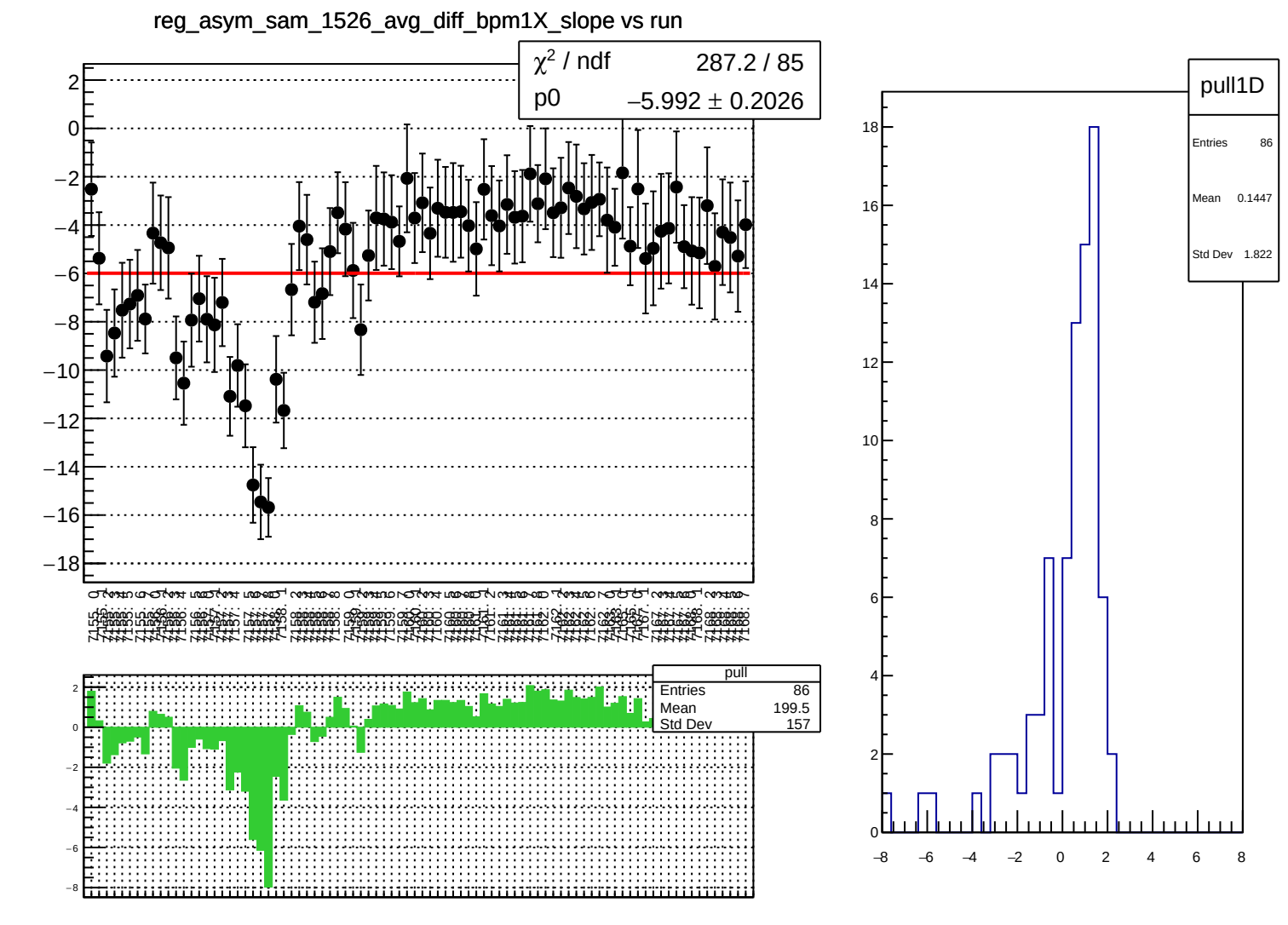

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 137.5 / 85
p0 4.345 ± 0.5572
pull
Entries 86
Mean 1342
Std Dev 1299

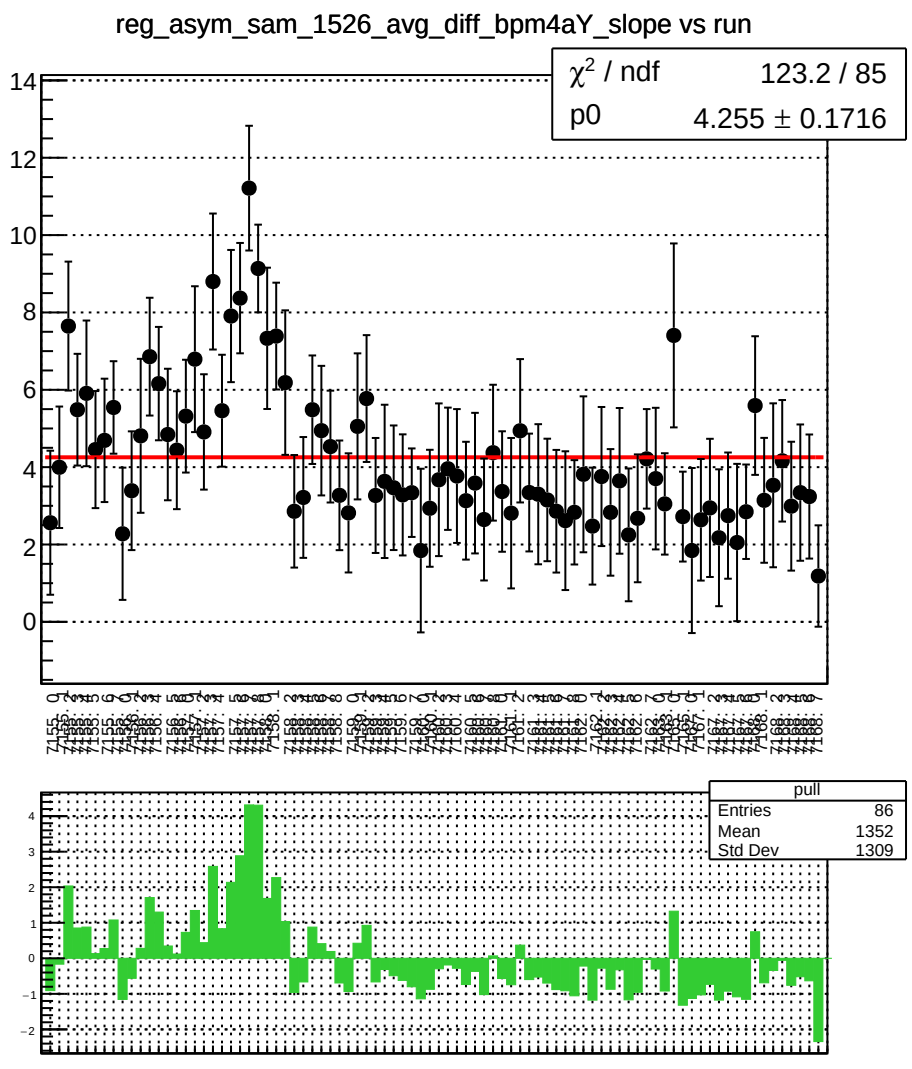

pull1D
Entries 86
Mean −0.01391
Std Dev 1.264

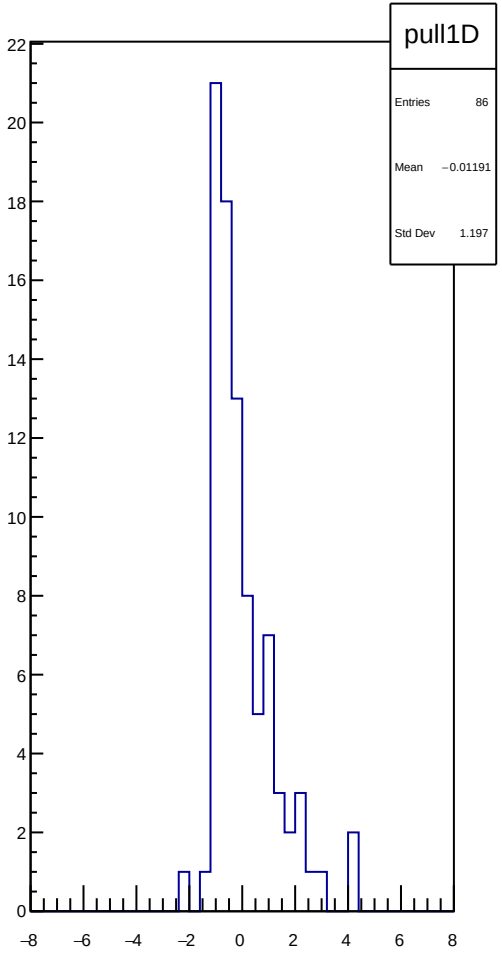

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 282.9 / 85
p0 −53.03 ± 0.6666
pull
Entries 86
Mean 225.1
Std Dev 182.6
pull1D
Entries 86
Mean −0.1321
Std Dev 1.809

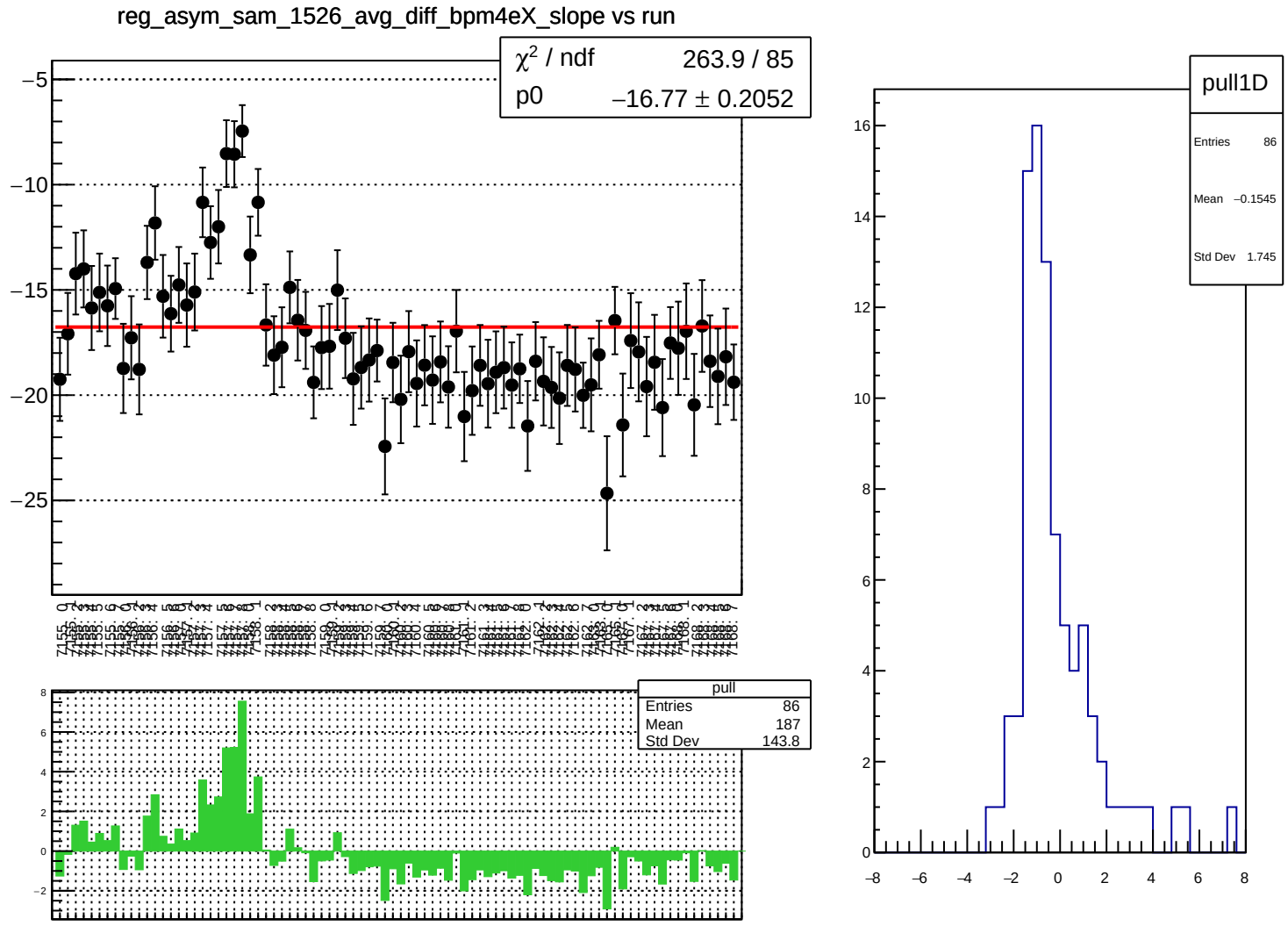

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 131.8 / 85
p0 46.07 ± 0.6478
pull
Entries 86
Mean 456.6
Std Dev 414.8
pull1D
Entries 86
Mean 0.0405
Std Dev 1.237

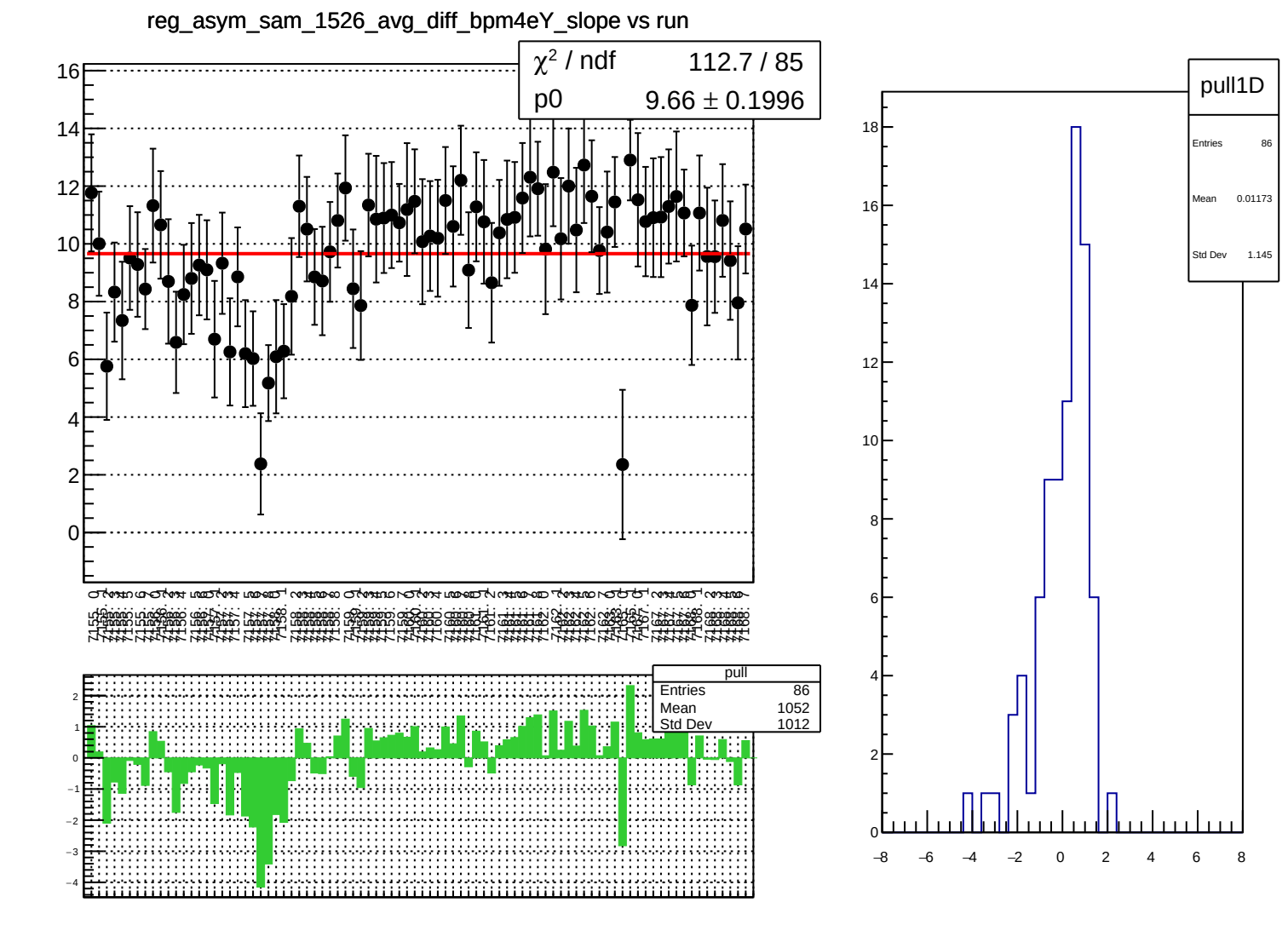

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 18.44 / 85
p0 −0.3446 ± 0.02517
pull
Entries 86
Mean −1186
Std Dev 1224
pull1D
Entries 86
Mean −0.003259
Std Dev 0.4631

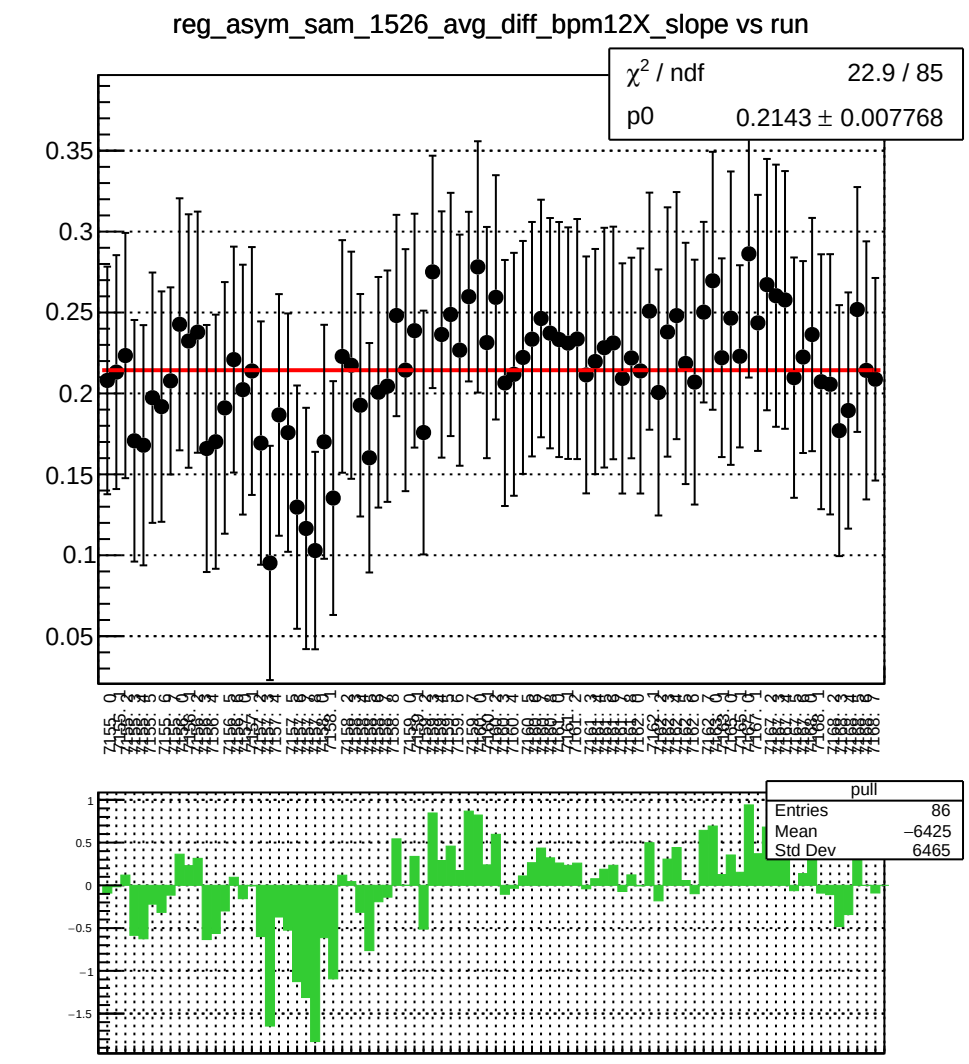

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 287.2 / 85
p0 −5.992 ± 0.2026
pull
Entries 86
Mean 199.5
Std Dev 157
pull1D
Entries 86
Mean 0.1447
Std Dev 1.822

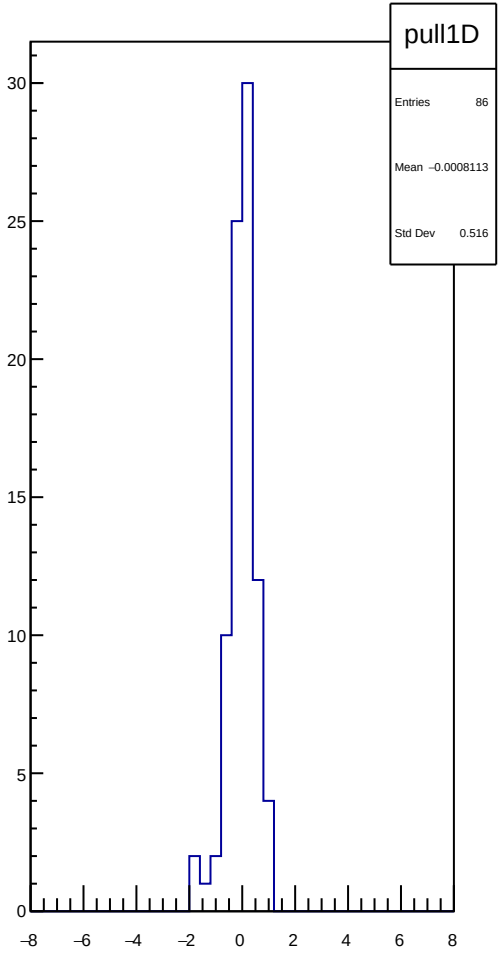

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 123.2 / 85
p0 4.255 ± 0.1716
pull
Entries 86
Mean 1352
Std Dev 1309

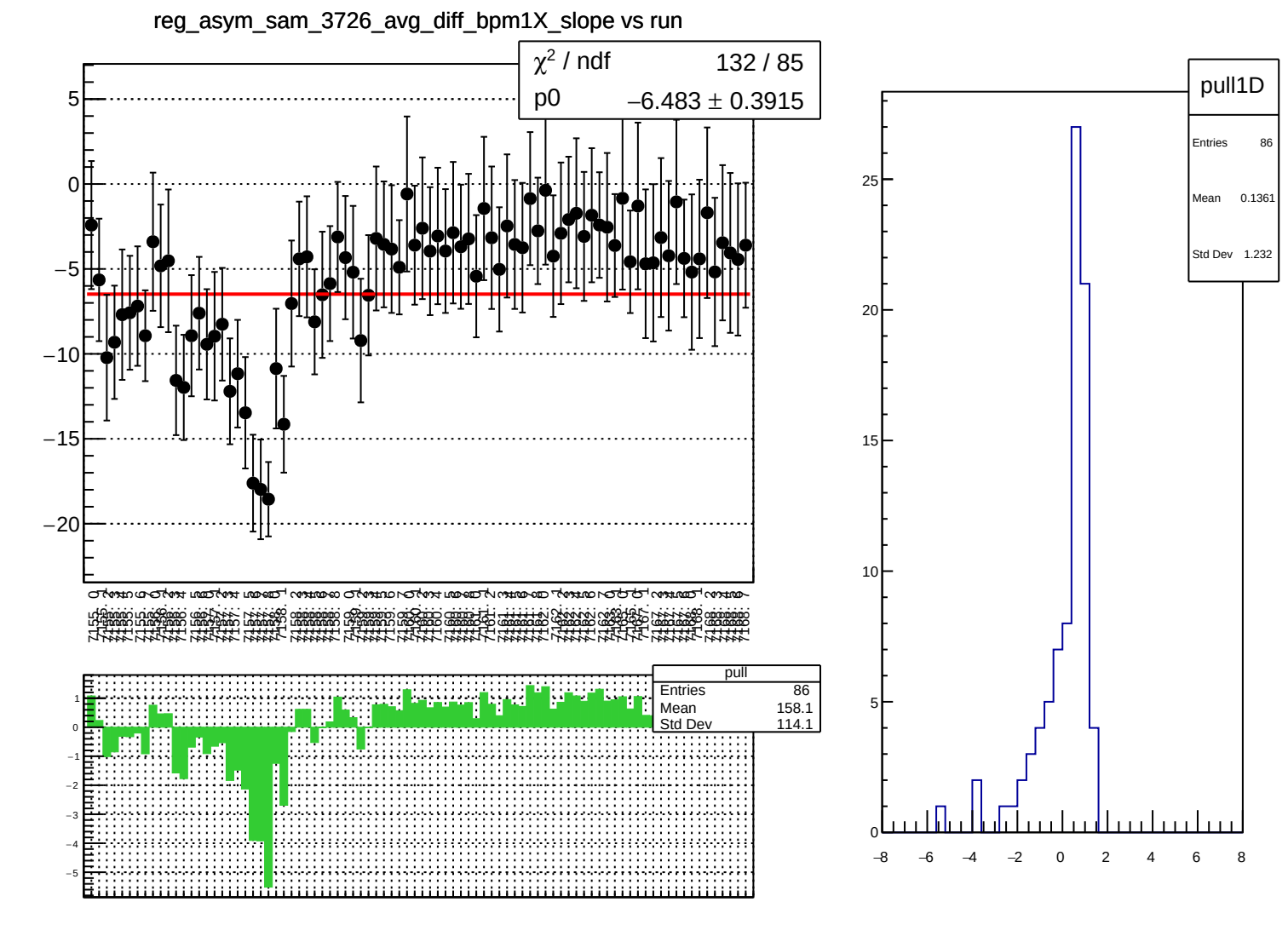

pull1D
Entries 86
Mean −0.01191
Std Dev 1.197

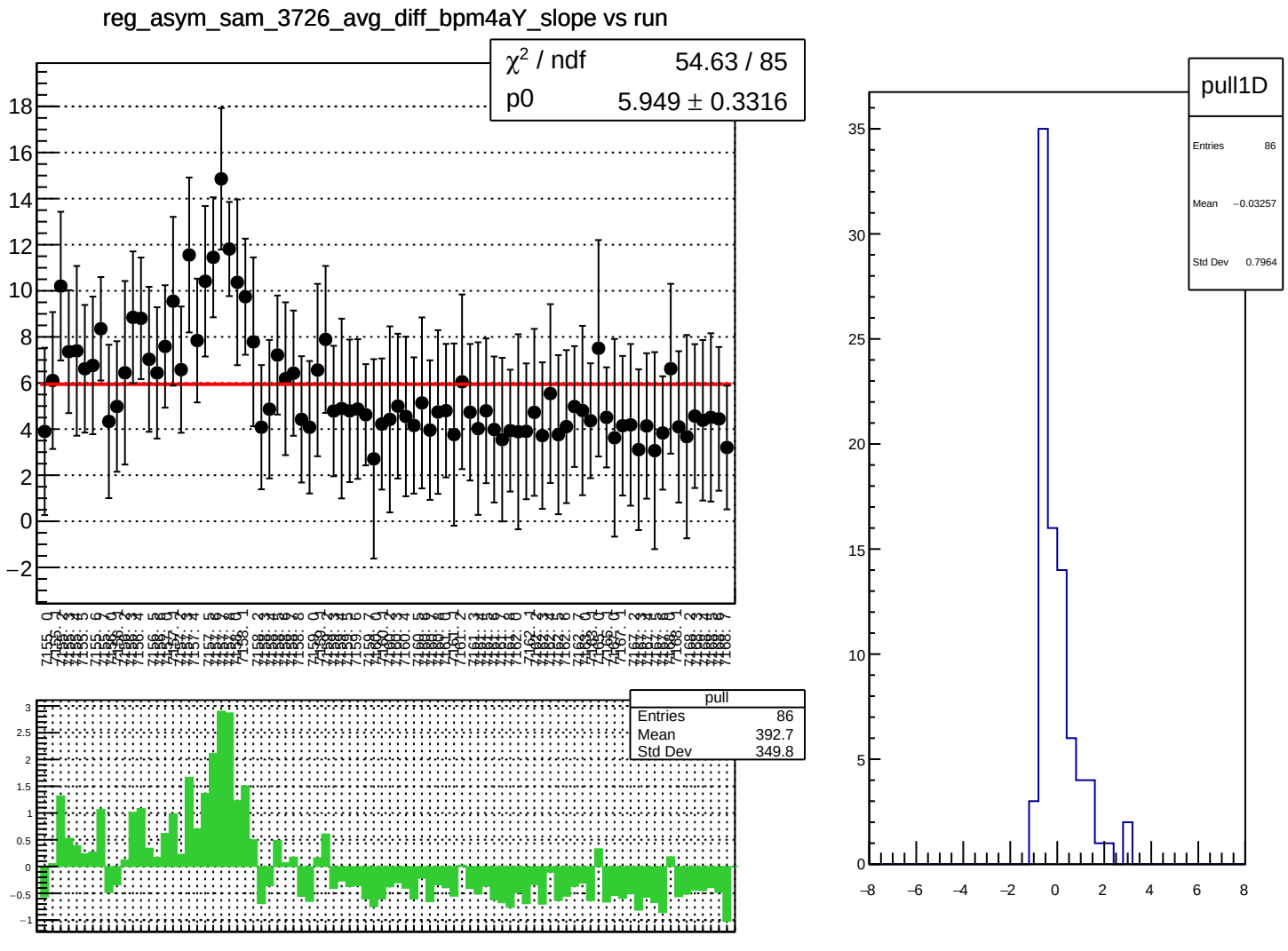

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 263.9 / 85
p0 −16.77 ± 0.2052
pull
Entries 86
Mean 187
Std Dev 143.8
pull1D
Entries 86
Mean −0.1545
Std Dev 1.745

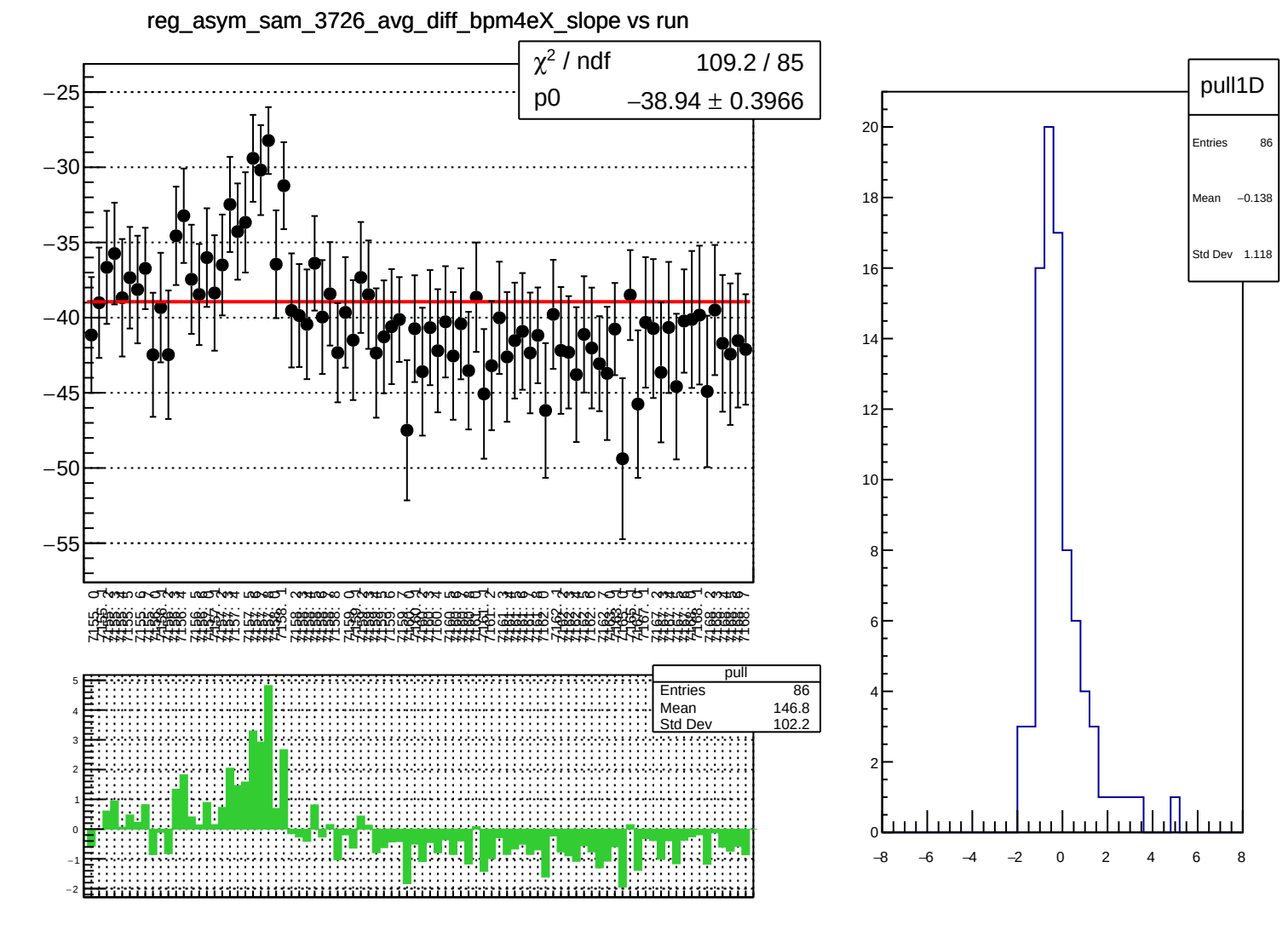

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 112.7 / 85
p0 9.66 ± 0.1996
pull
Entries 86
Mean 1052
Std Dev 1012
pull1D
Entries 86
Mean 0.01173
Std Dev 1.145

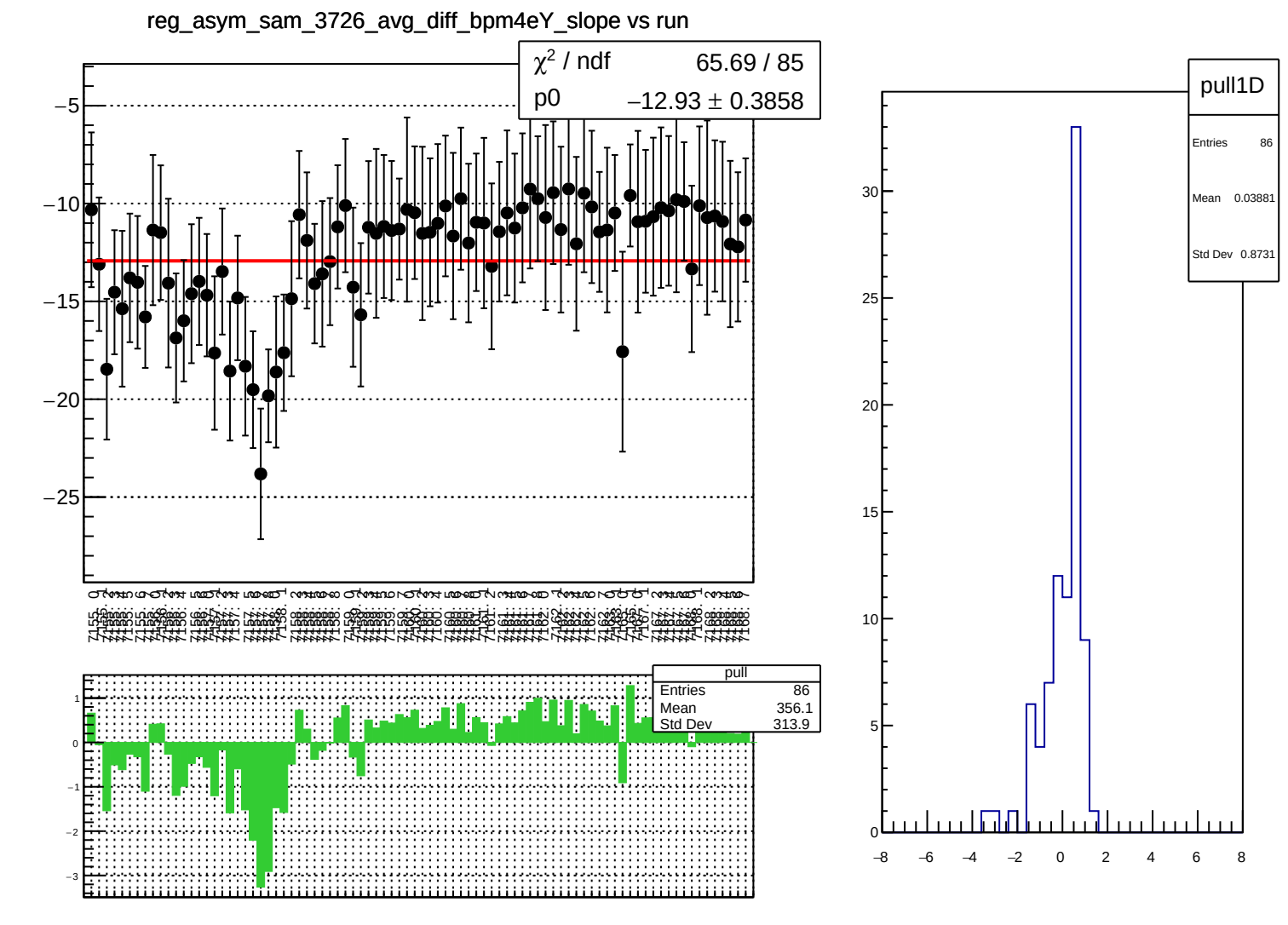

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 22.9 / 85
p0 0.2143 ± 0.007768
pull
Entries 86
Mean −6425
Std Dev 6465

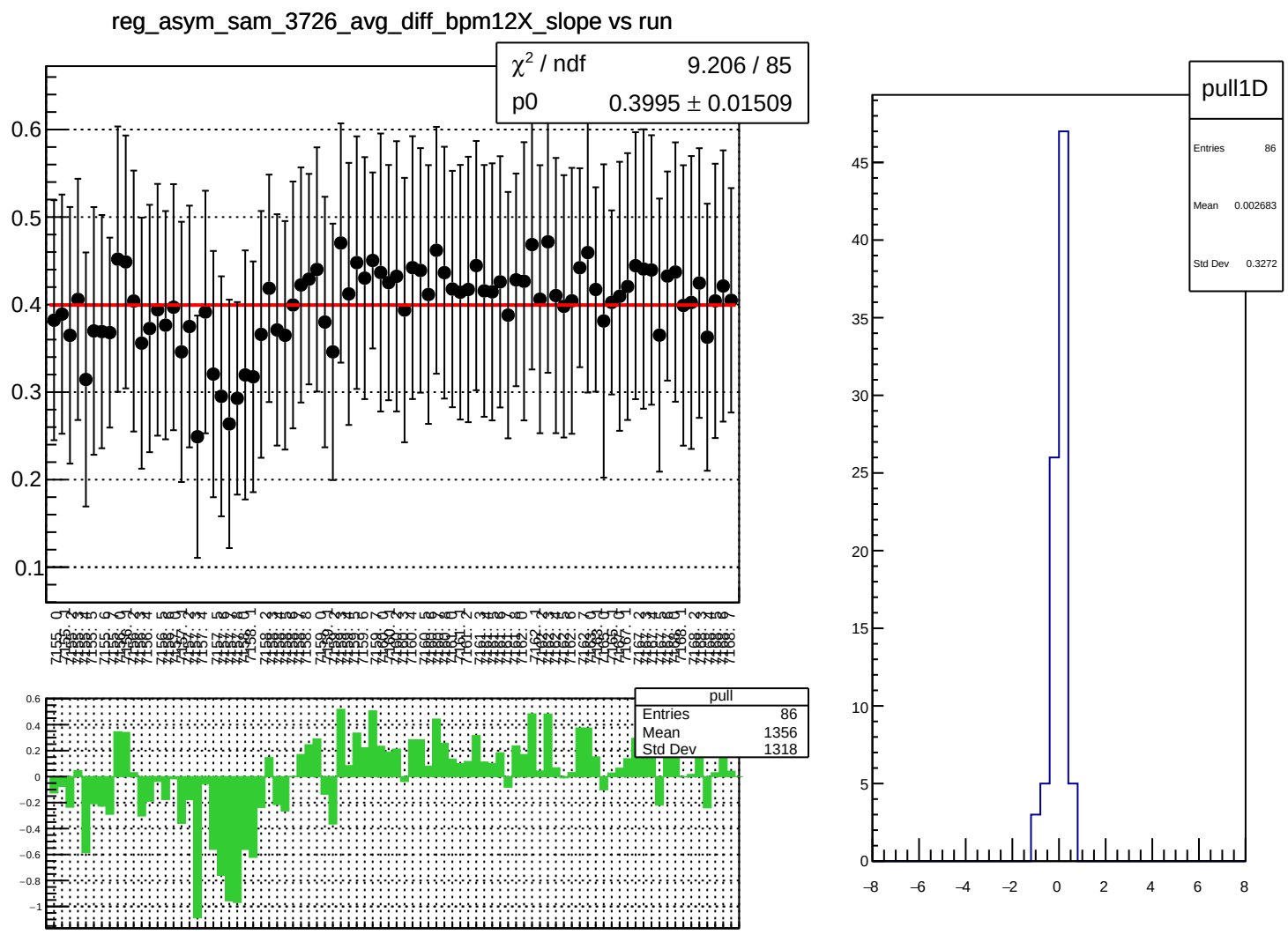

pull1D
Entries 86
Mean −0.0008113
Std Dev 0.516

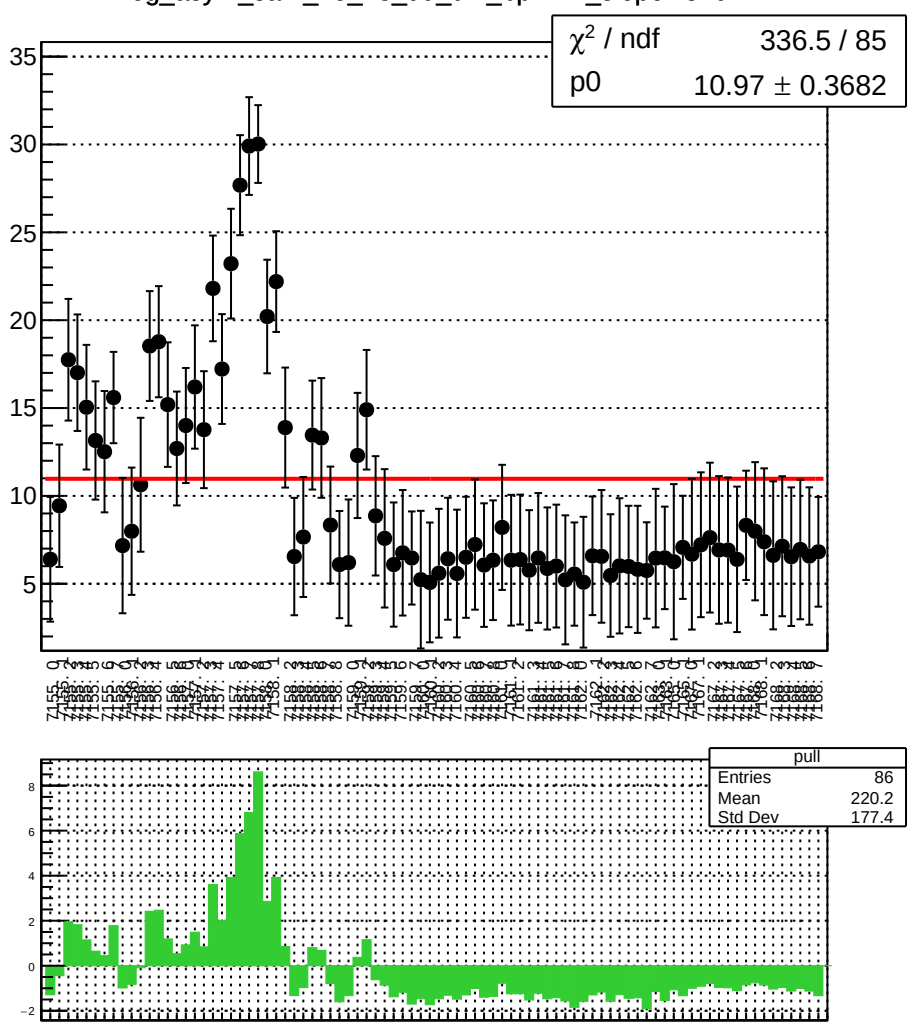

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 132 / 85
p0 −6.483 ± 0.3915
pull
Entries 86
Mean 158.1
Std Dev 114.1
pull1D
Entries 86
Mean 0.1361
Std Dev 1.232

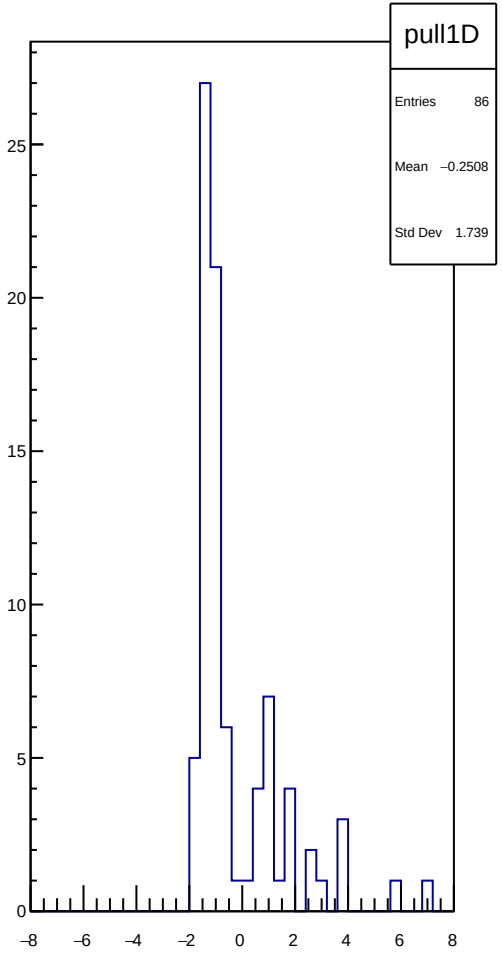

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 54.63 / 85
p0 5.949 ± 0.3316
pull
Entries 86
Mean 392.7
Std Dev 349.8
pull1D
Entries 86
Mean −0.03257
Std Dev 0.7964

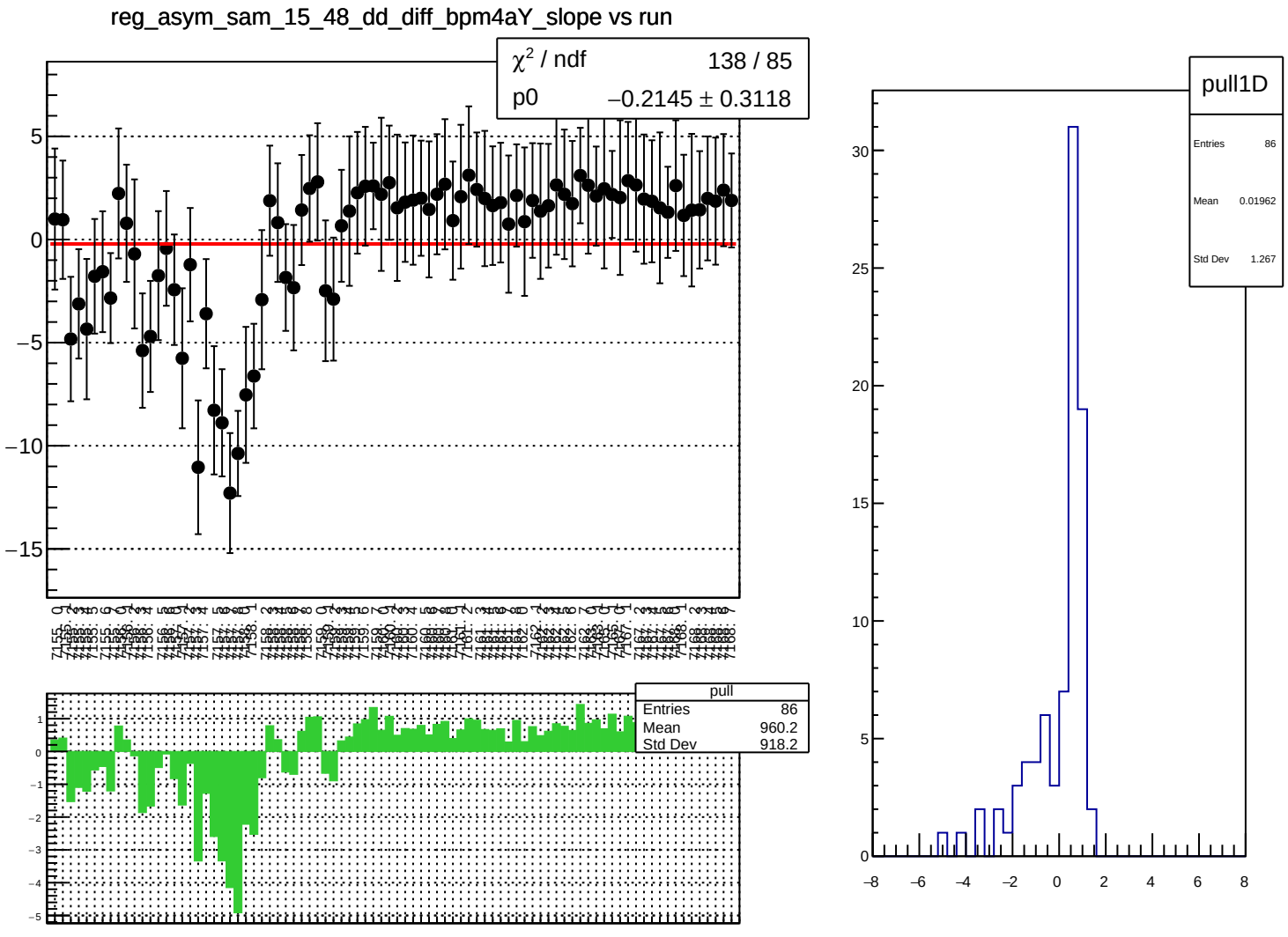

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 109.2 / 85
p0 −38.94 ± 0.3966
pull
Entries 86
Mean 146.8
Std Dev 102.2
pull1D
Entries 86
Mean −0.138
Std Dev 1.118

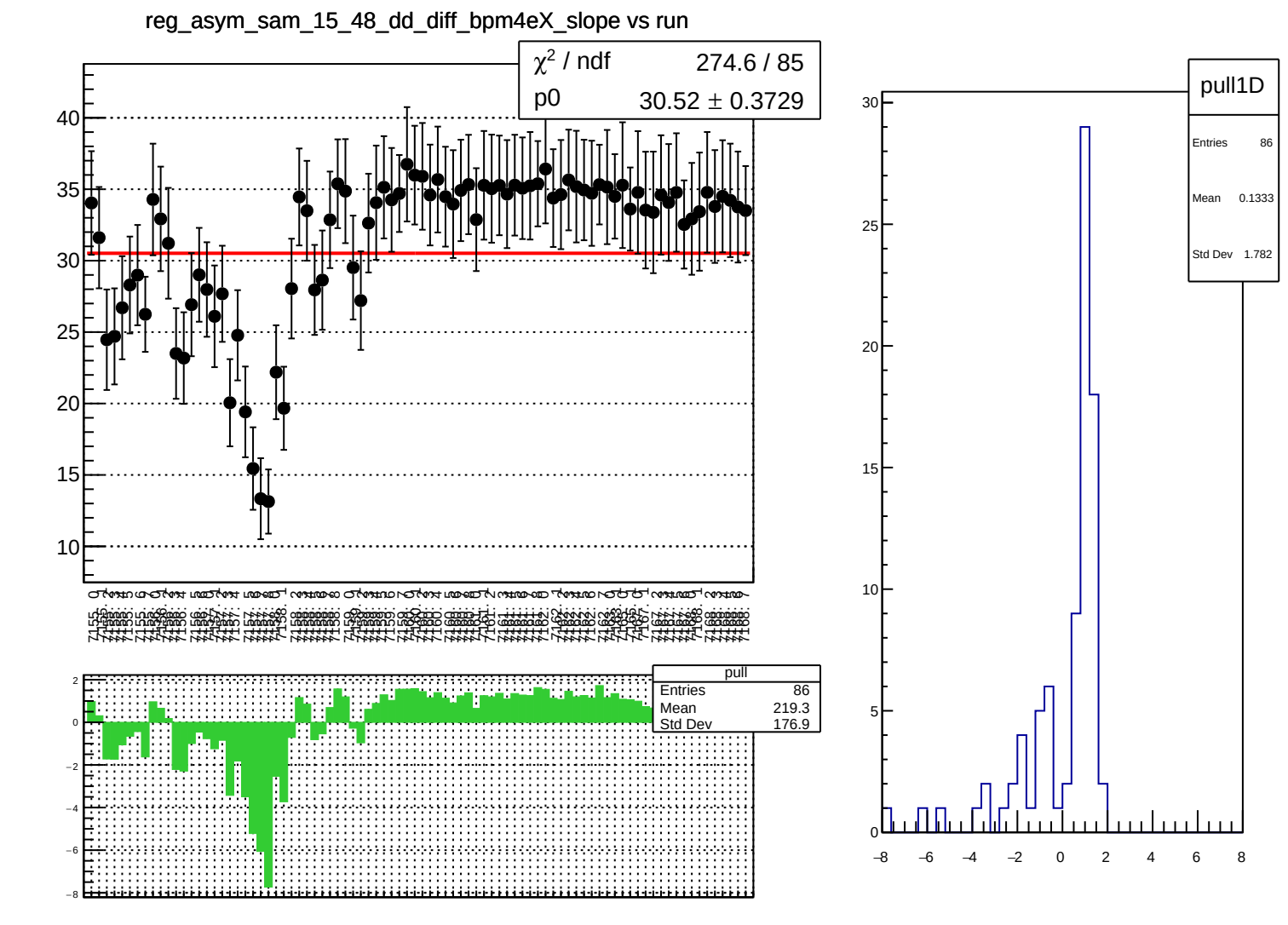

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 65.69 / 85
p0 −12.93 ± 0.3858
pull
Entries 86
Mean 356.1
Std Dev 313.9
pull1D
Entries 86
Mean 0.03881
Std Dev 0.8731

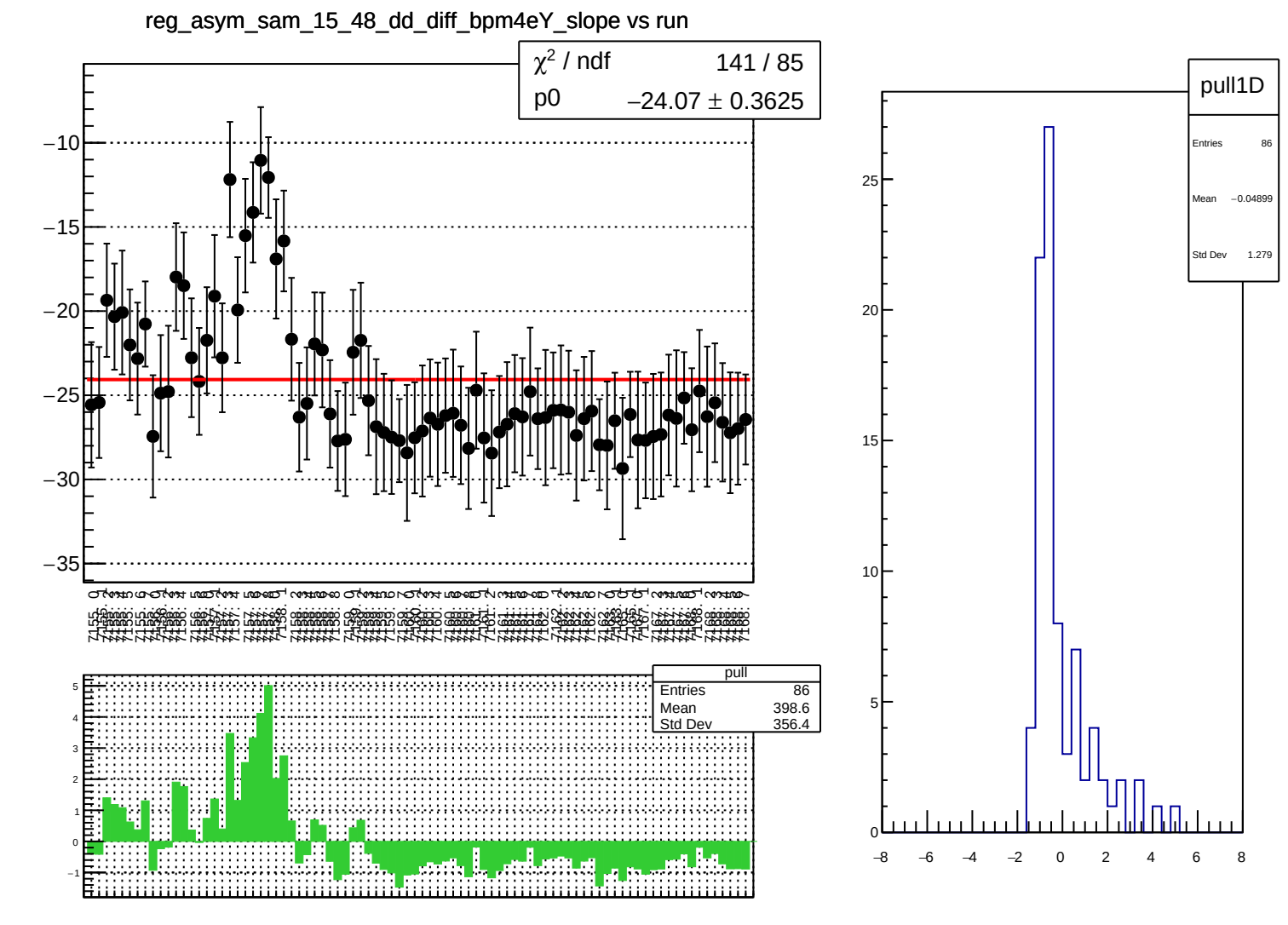

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 9.206 / 85
p0 0.3995 ± 0.01509
pull
Entries 86
Mean 1356
Std Dev 1318
pull1D
Entries 86
Mean 0.002683
Std Dev 0.3272

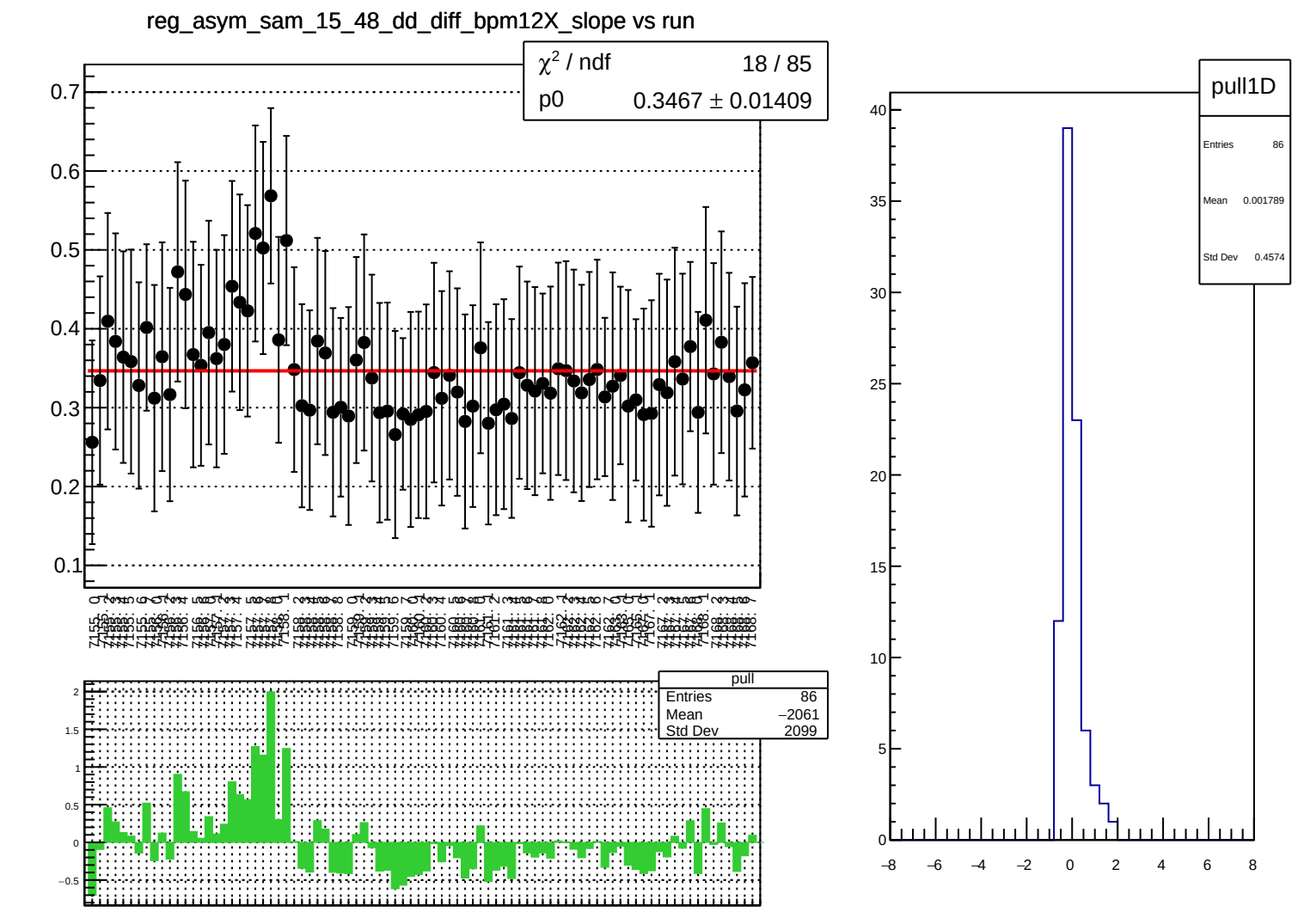

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 336.5 / 85
p0 10.97 ± 0.3682
pull
Entries 86
Mean 220.2
Std Dev 177.4

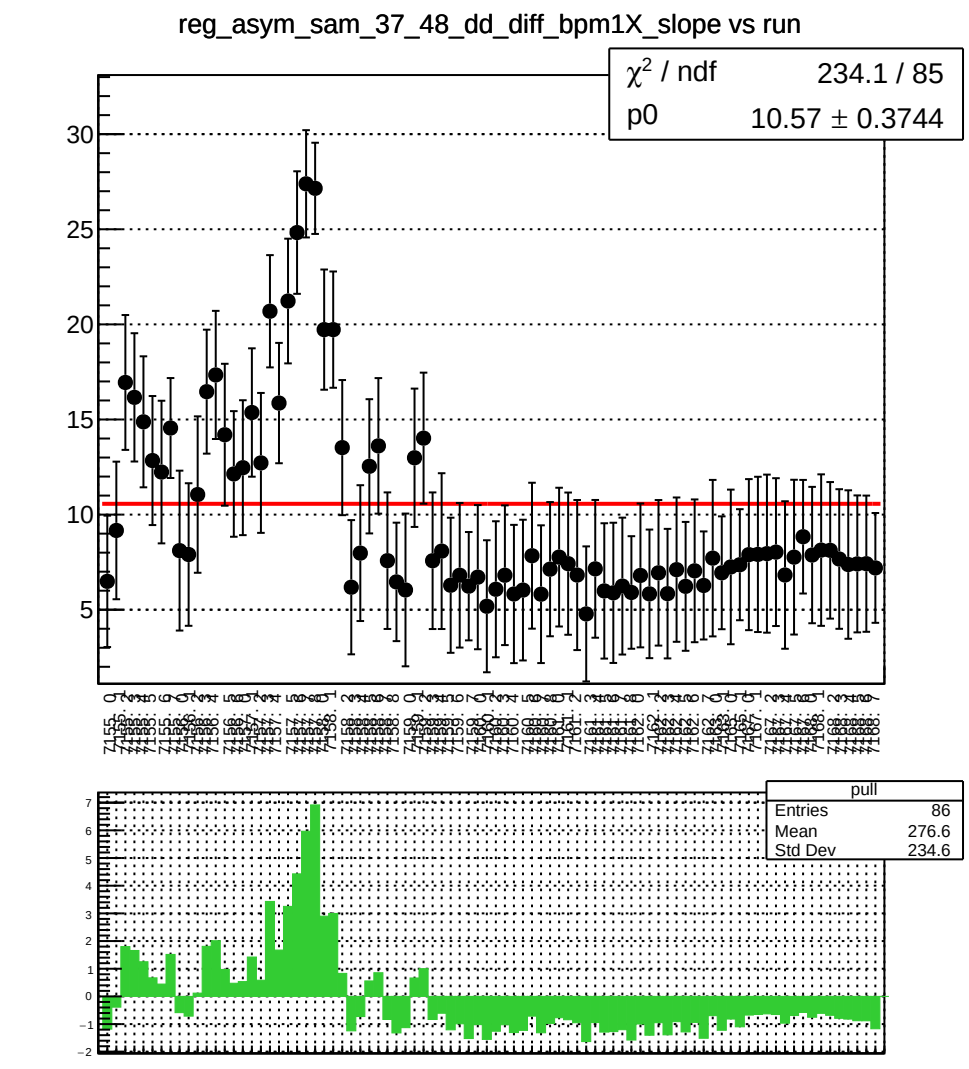

pull1D
Entries 86
Mean −0.2508
Std Dev 1.739

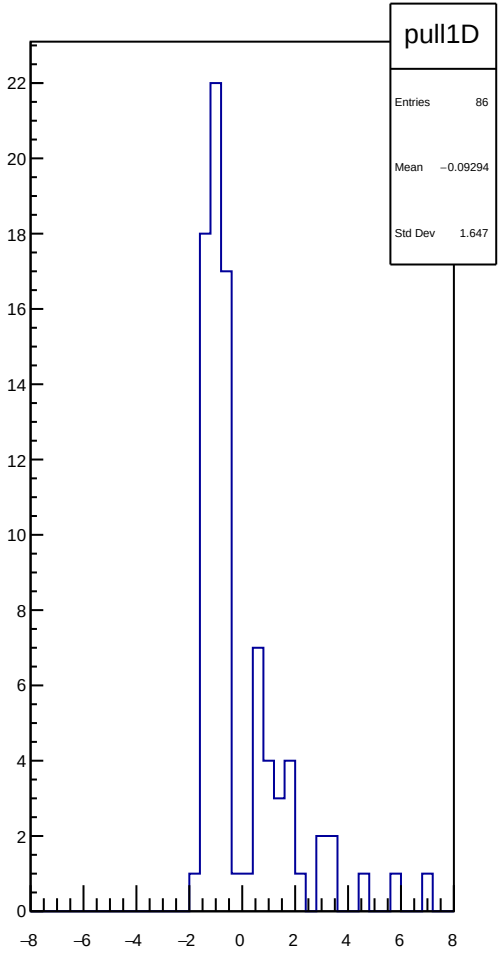

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 138 / 85
p0 −0.2145 ± 0.3118
pull
Entries 86
Mean 960.2
Std Dev 918.2
pull1D
Entries 86
Mean 0.01962
Std Dev 1.267

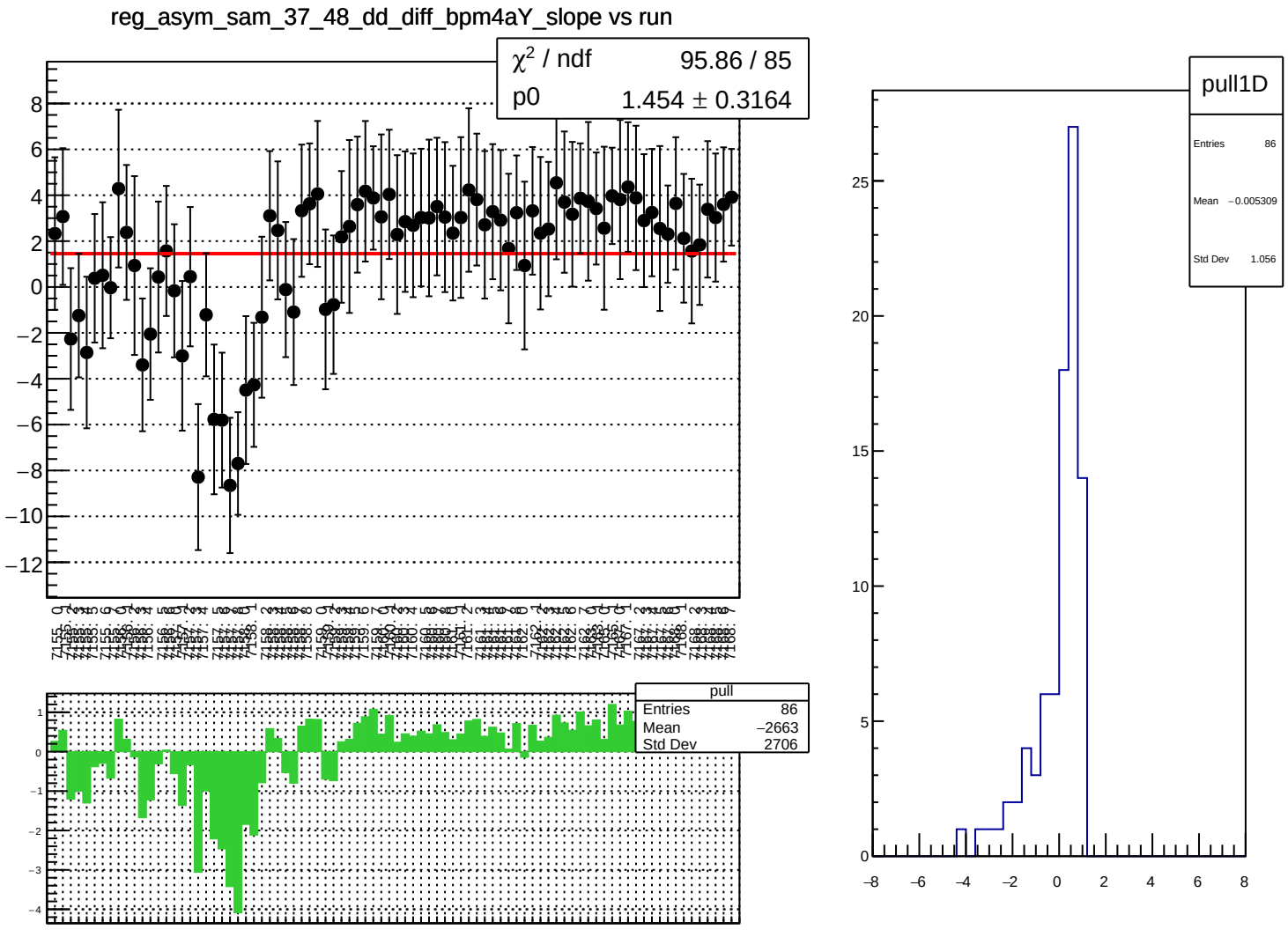

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 274.6 / 85
p0 30.52 ± 0.3729
pull
Entries 86
Mean 219.3
Std Dev 176.9
pull1D
Entries 86
Mean 0.1333
Std Dev 1.782

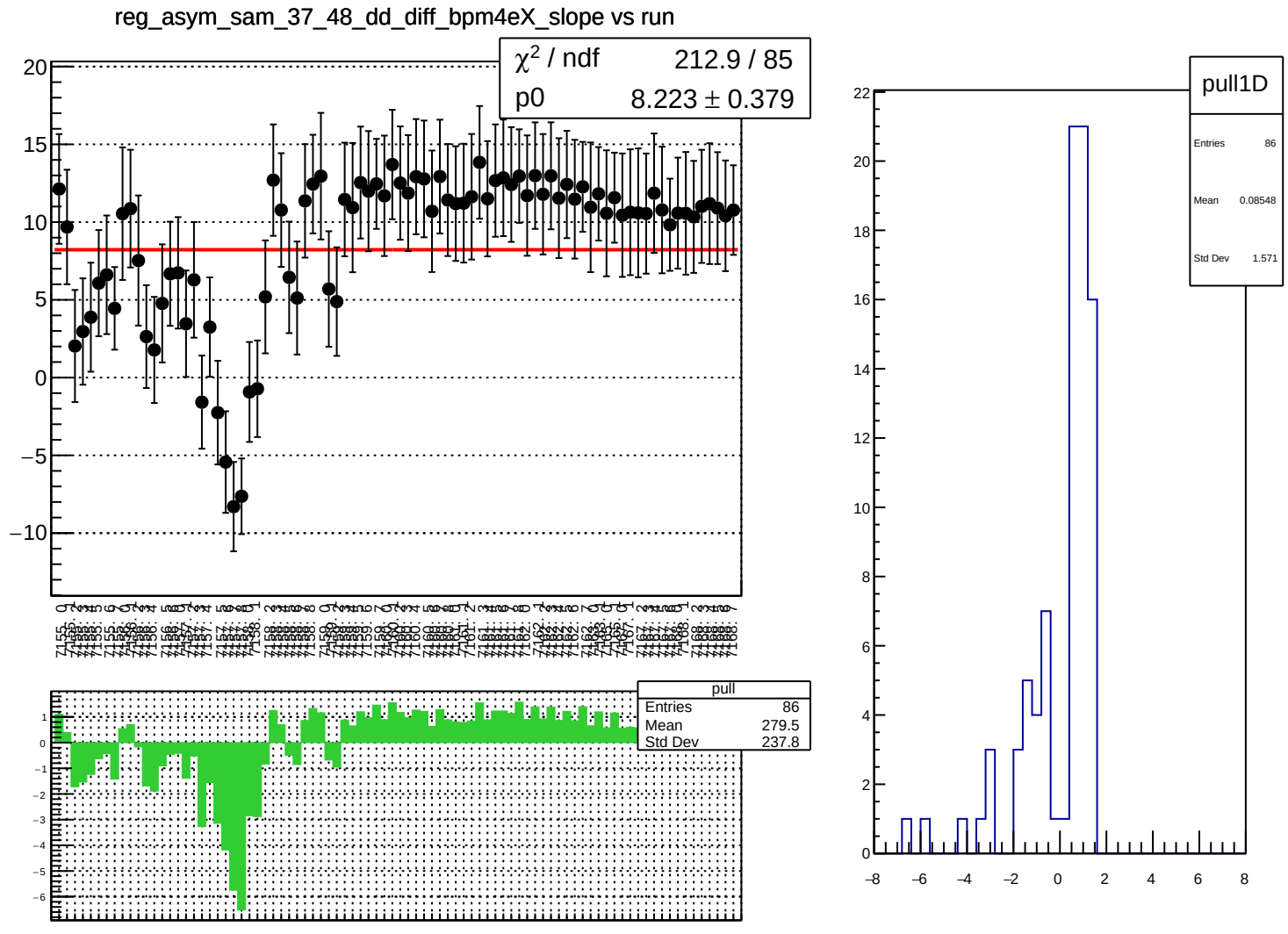

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 141 / 85
p0 −24.07 ± 0.3625
pull
Entries 86
Mean 398.6
Std Dev 356.4
pull1D
Entries 86
Mean −0.04899
Std Dev 1.279

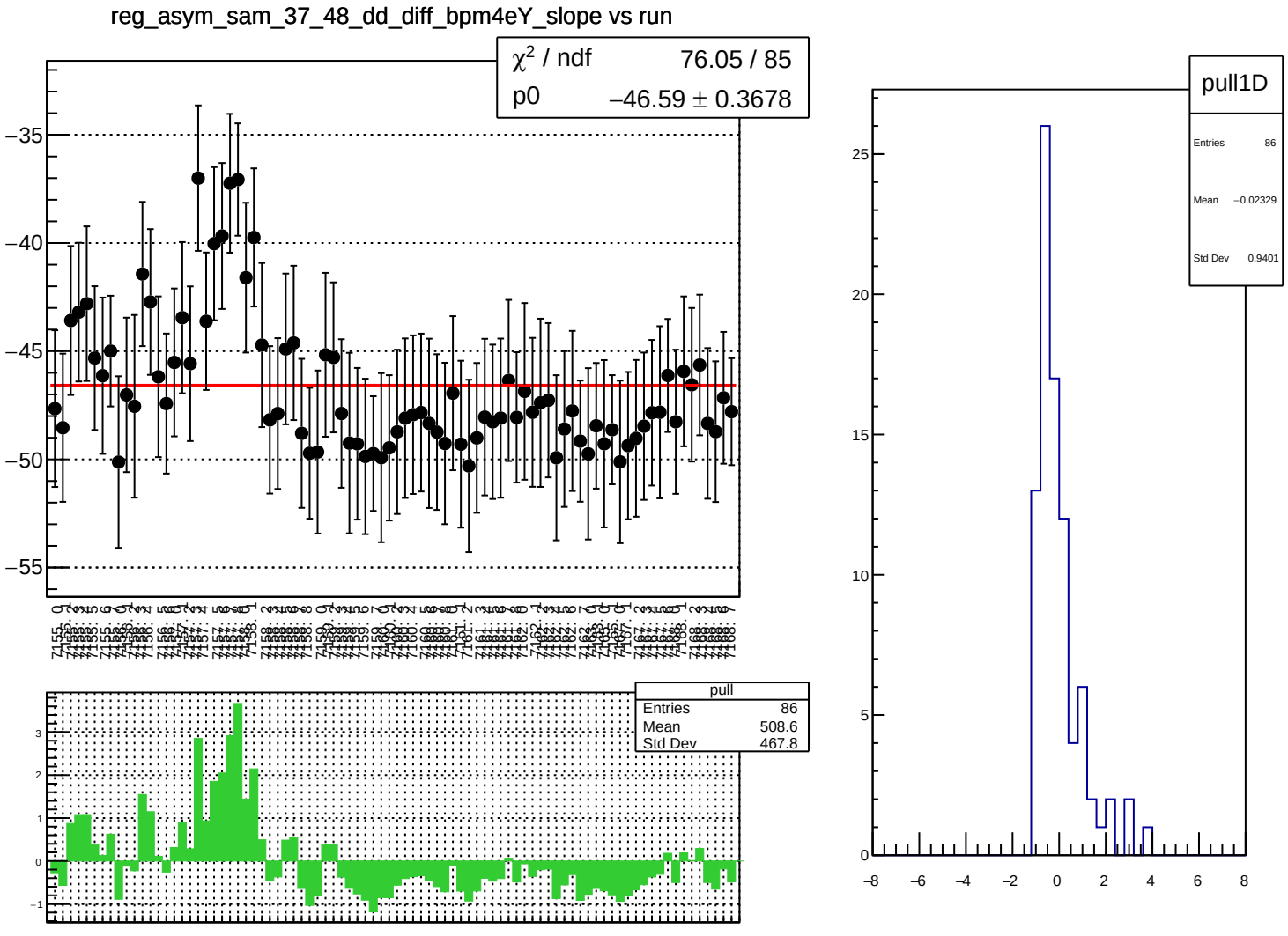

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 18 / 85
p0 0.3467 ± 0.01409
pull
Entries 86
Mean −2061
Std Dev 2099
pull1D
Entries 86
Mean 0.001789
Std Dev 0.4574

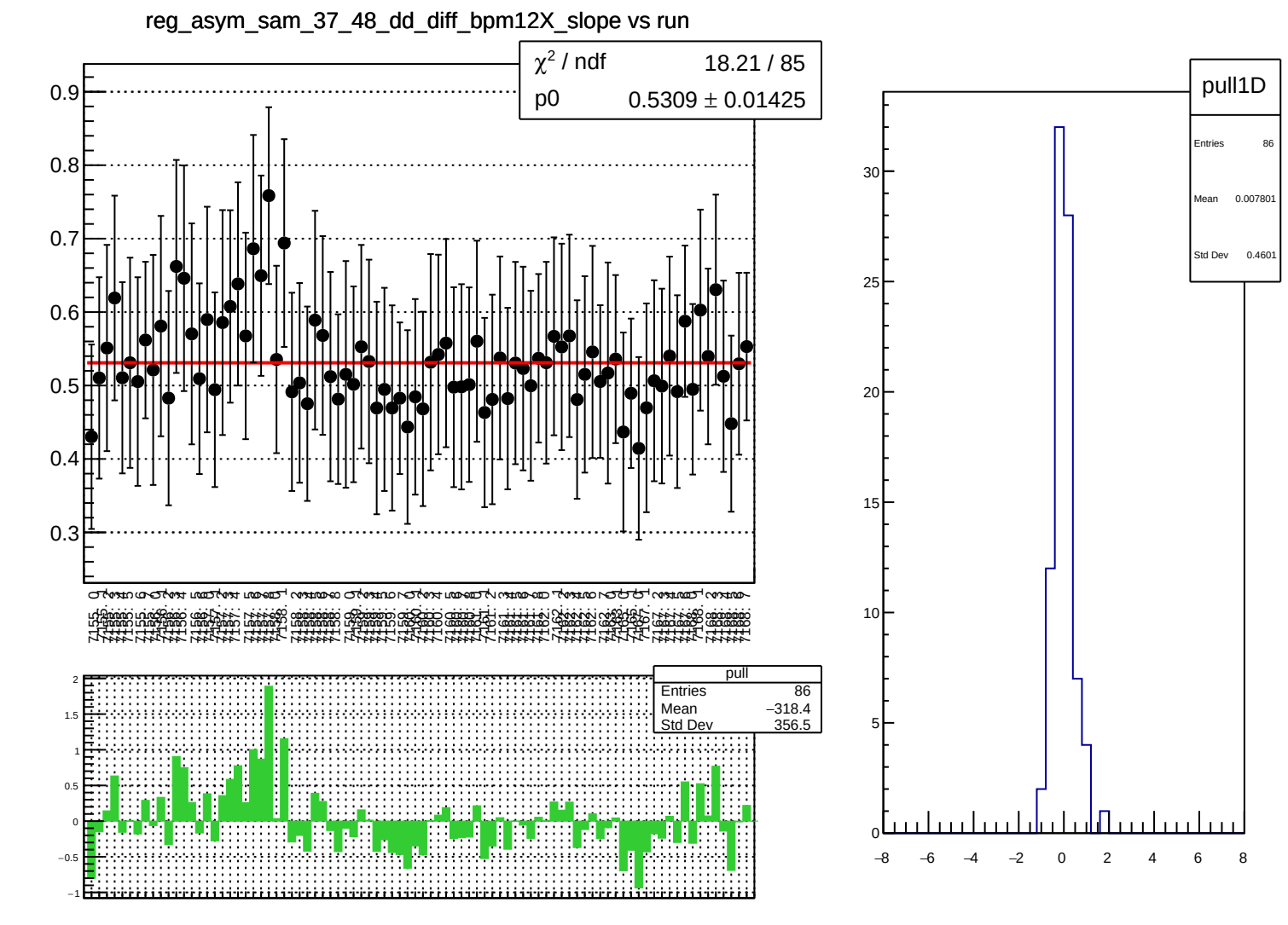

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 234.1 / 85
p0 10.57 ± 0.3744
pull
Entries 86
Mean 276.6
Std Dev 234.6

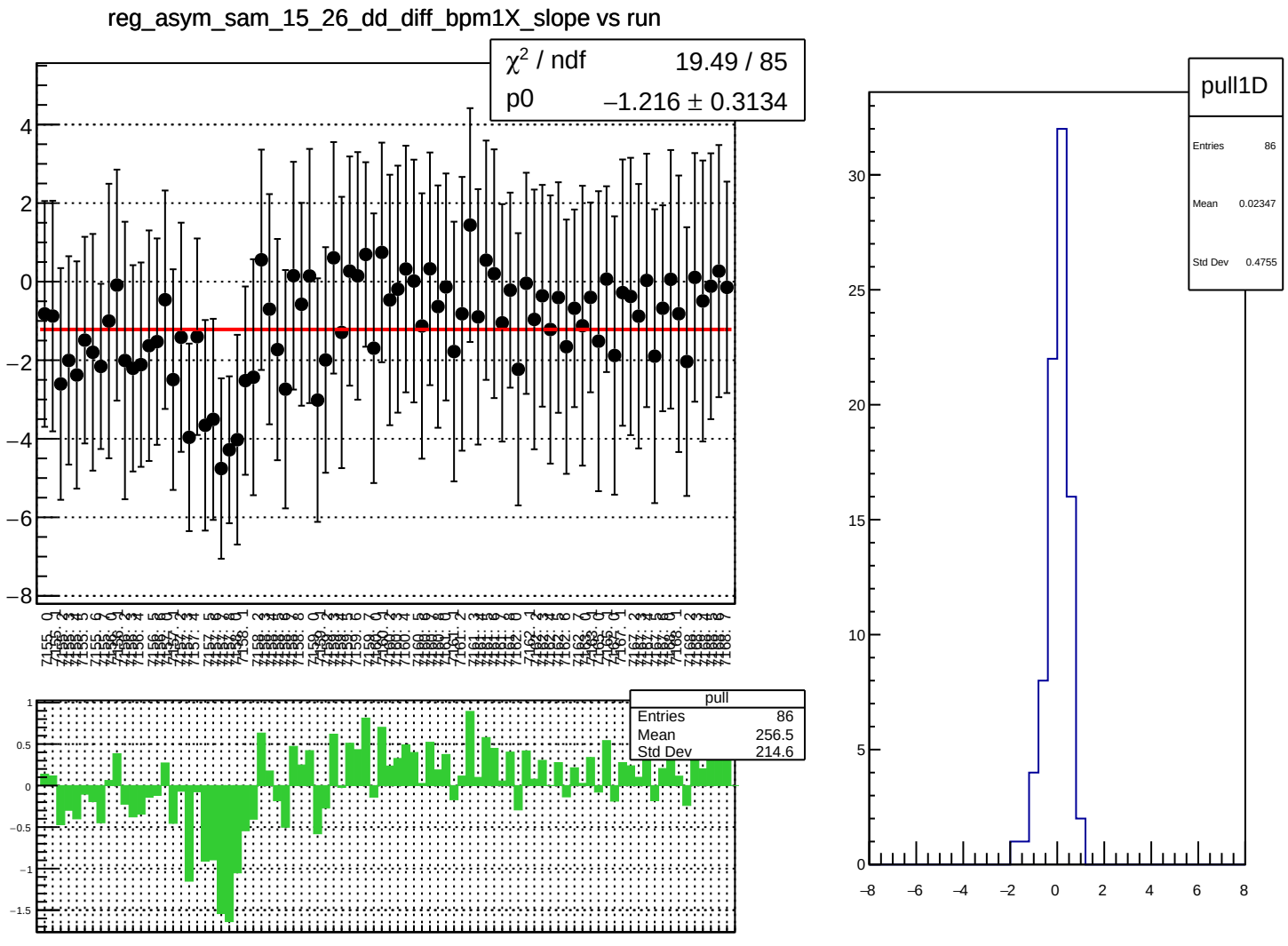

pull1D
Entries 86
Mean −0.09294
Std Dev 1.647

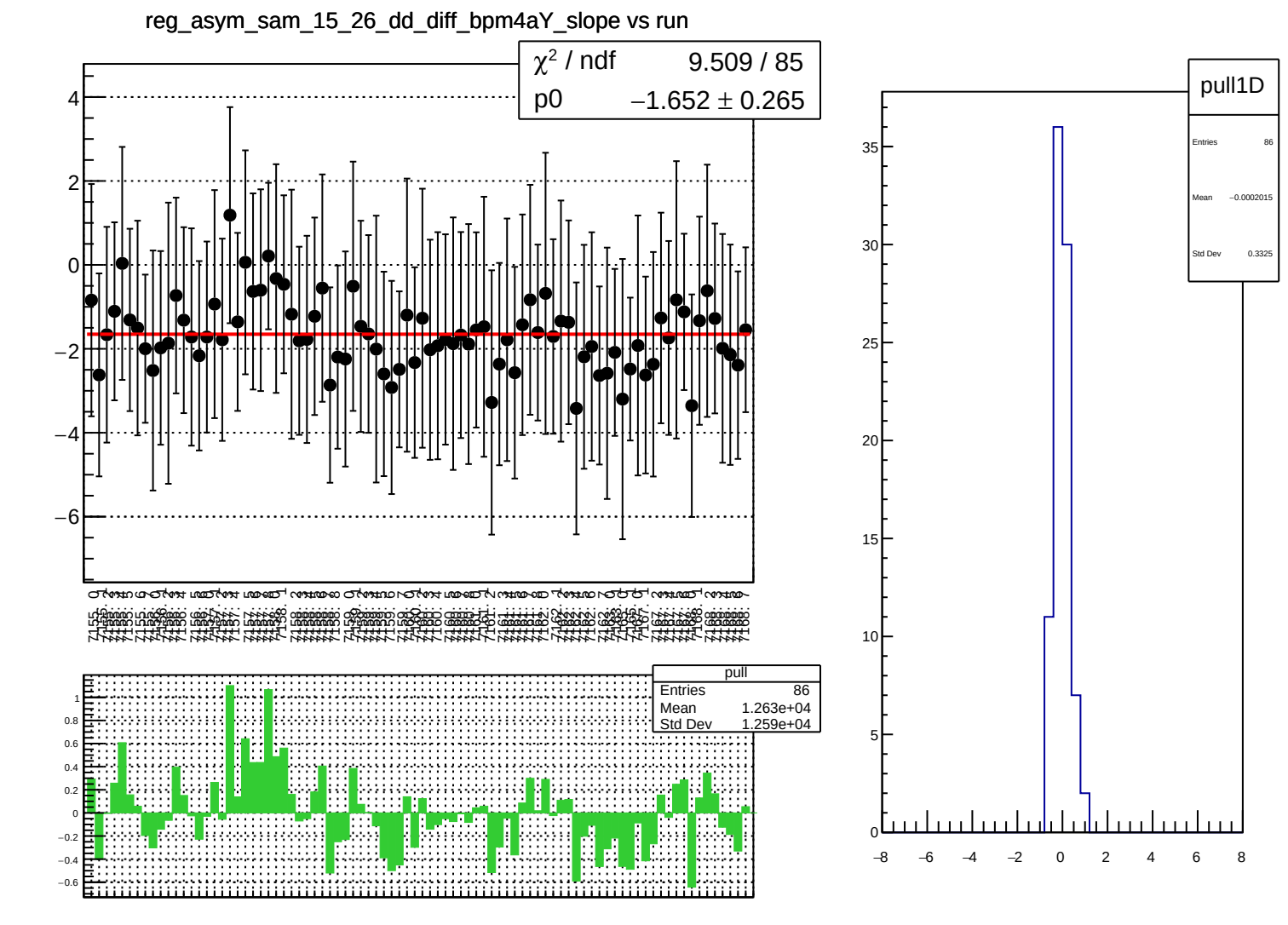

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 95.86 / 85
p0 1.454 ± 0.3164
pull
Entries 86
Mean −2663
Std Dev 2706
pull1D
Entries 86
Mean −0.005309
Std Dev 1.056

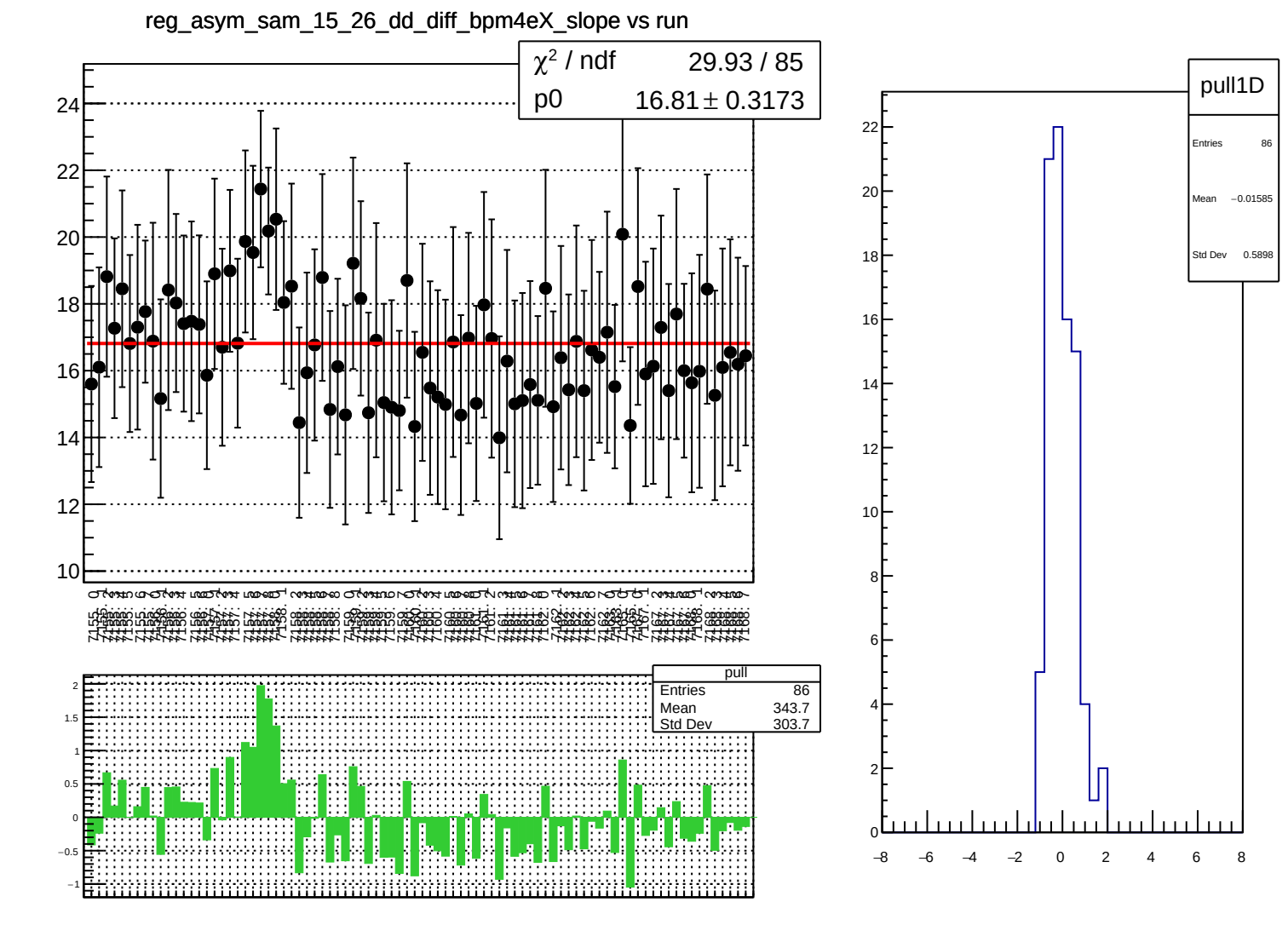

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 212.9 / 85
p0 8.223 ± 0.379
pull
Entries 86
Mean 279.5
Std Dev 237.8
pull1D
Entries 86
Mean 0.08548
Std Dev 1.571

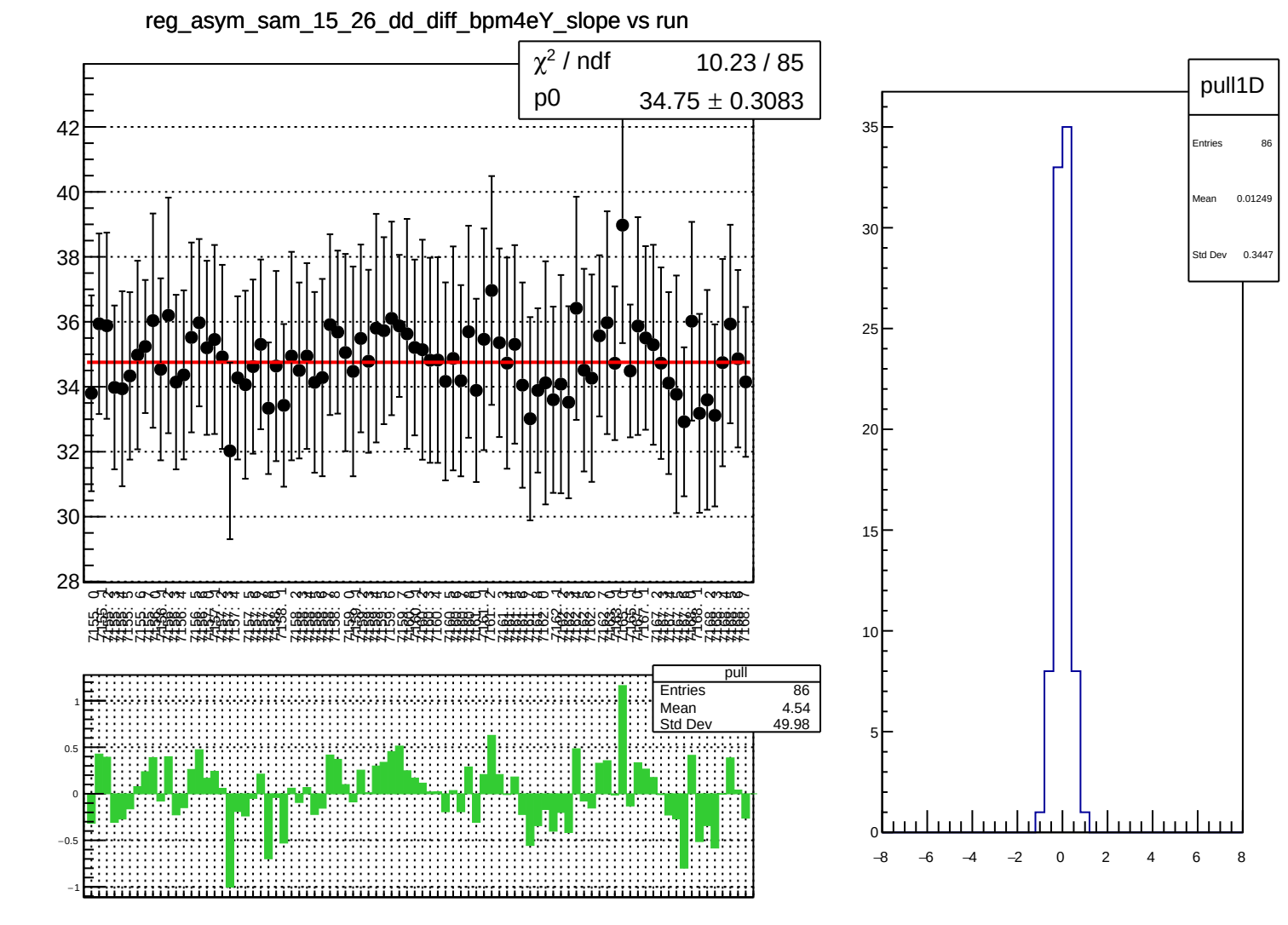

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 76.05 / 85
p0 −46.59 ± 0.3678
−35
−40
−45
−50
−55
pull
Entries 86
Mean 508.6
Std Dev 467.8
3
2
1
0
−1
pull1D
Entries 86
Mean −0.02329
Std Dev 0.9401
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

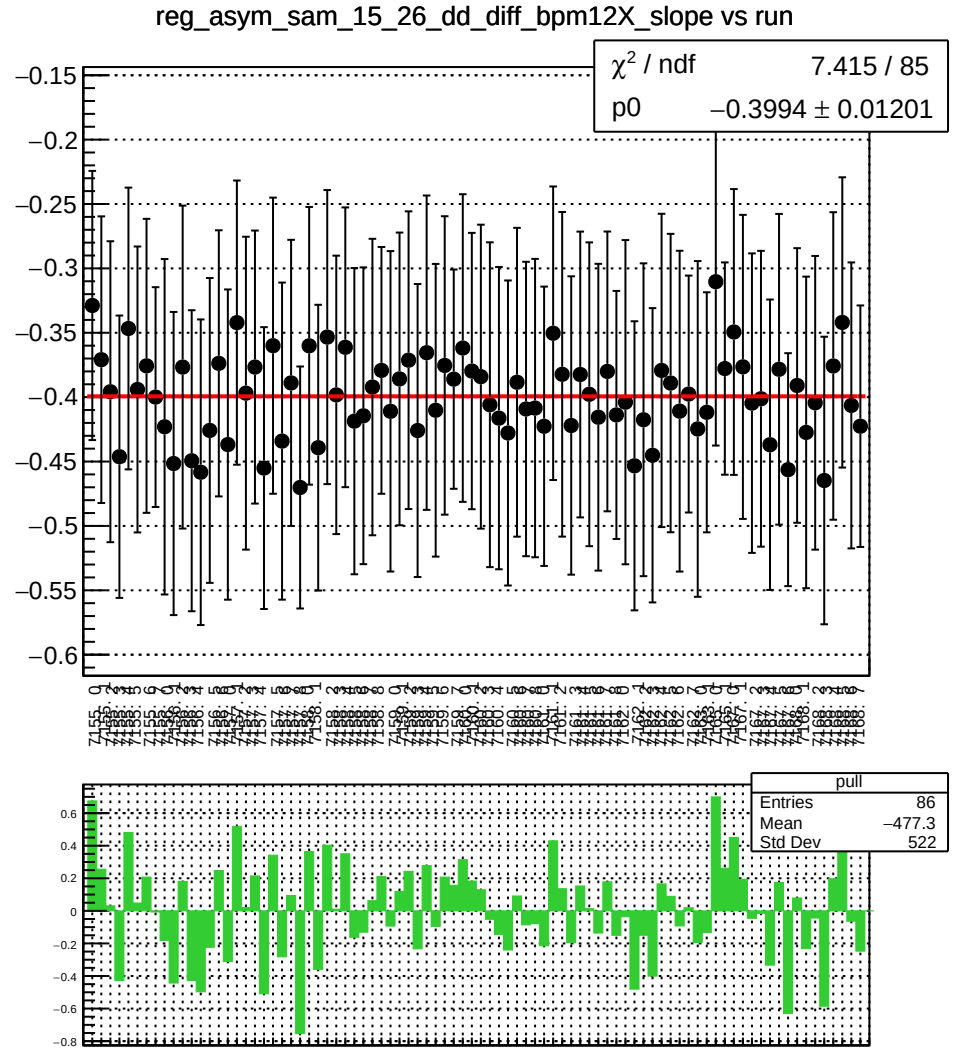

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 18.21 / 85
p0 0.5309 ± 0.01425
pull
Entries 86
Mean −318.4
Std Dev 356.5
pull1D
Entries 86
Mean 0.007801
Std Dev 0.4601

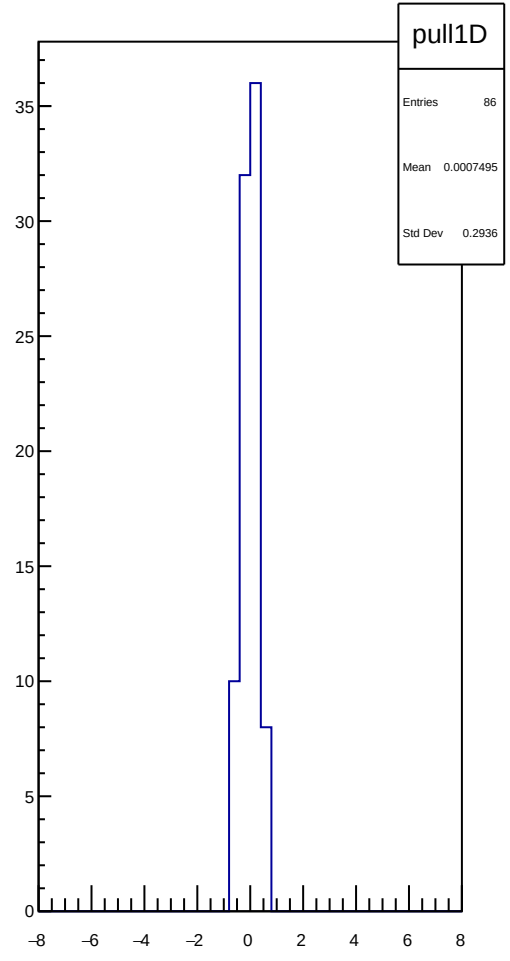

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 19.49 / 85
p0 −1.216 ± 0.3134
pull
Entries 86
Mean 256.5
Std Dev 214.6
pull1D
Entries 86
Mean 0.02347
Std Dev 0.4755

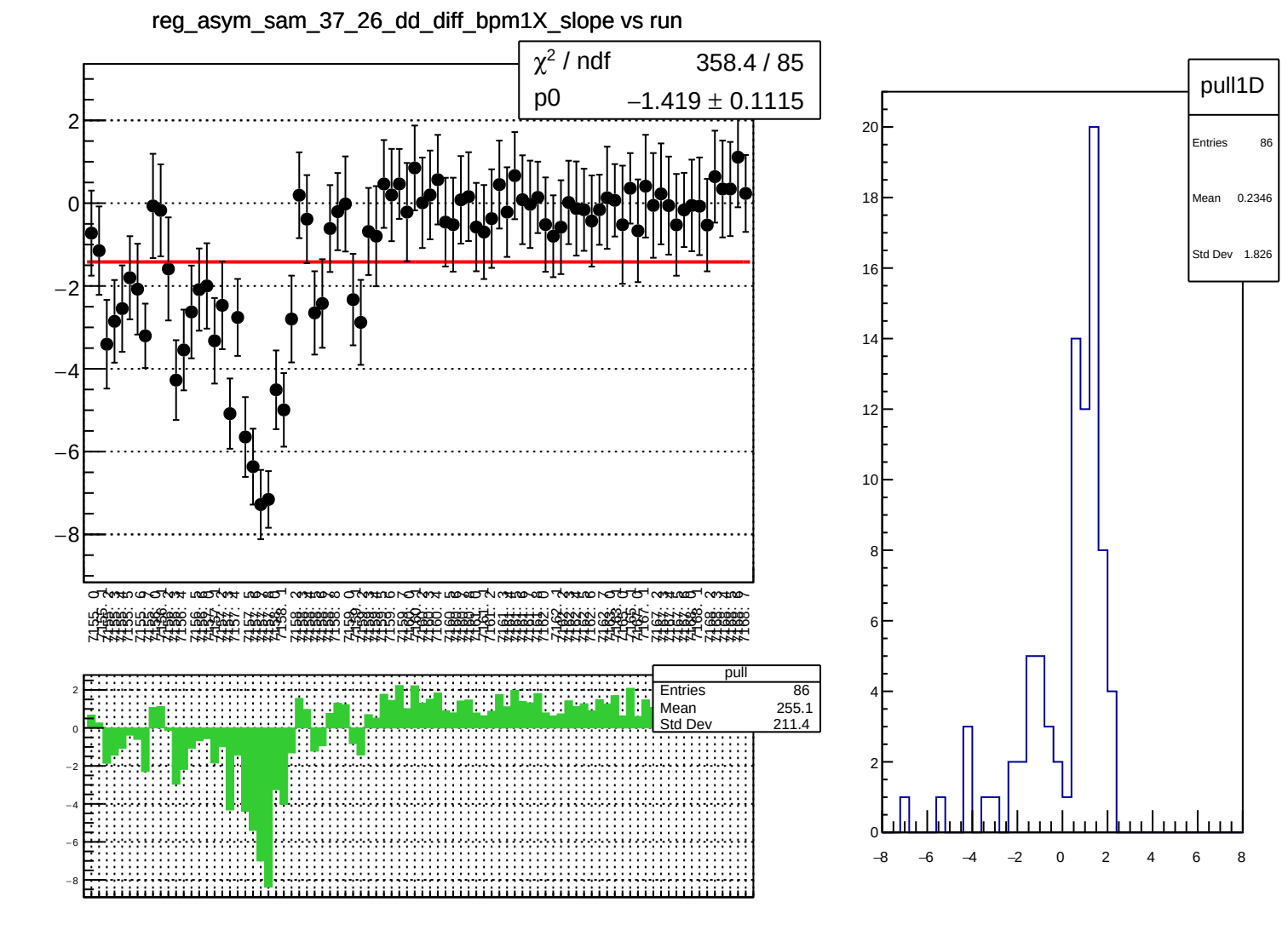

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 9.509 / 85
p0 −1.652 ± 0.265
pull
Entries 86
Mean 1.263e+04
Std Dev 1.259e+04
pull1D
Entries 86
Mean −0.0002015
Std Dev 0.3325

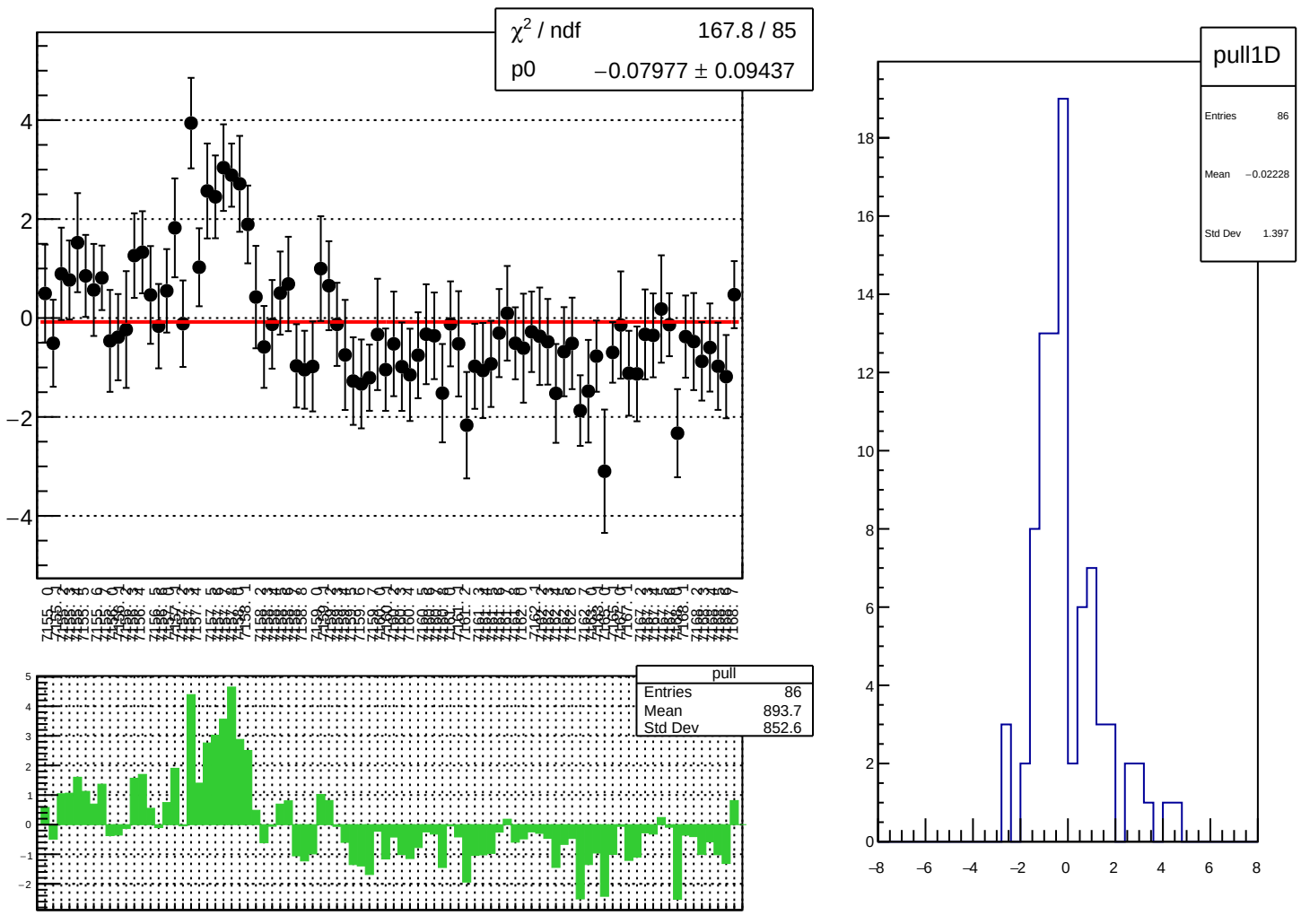

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 29.93 / 85
p0 16.81 ± 0.3173
pull
Entries 86
Mean 343.7
Std Dev 303.7
pull1D
Entries 86
Mean −0.01585
Std Dev 0.5898

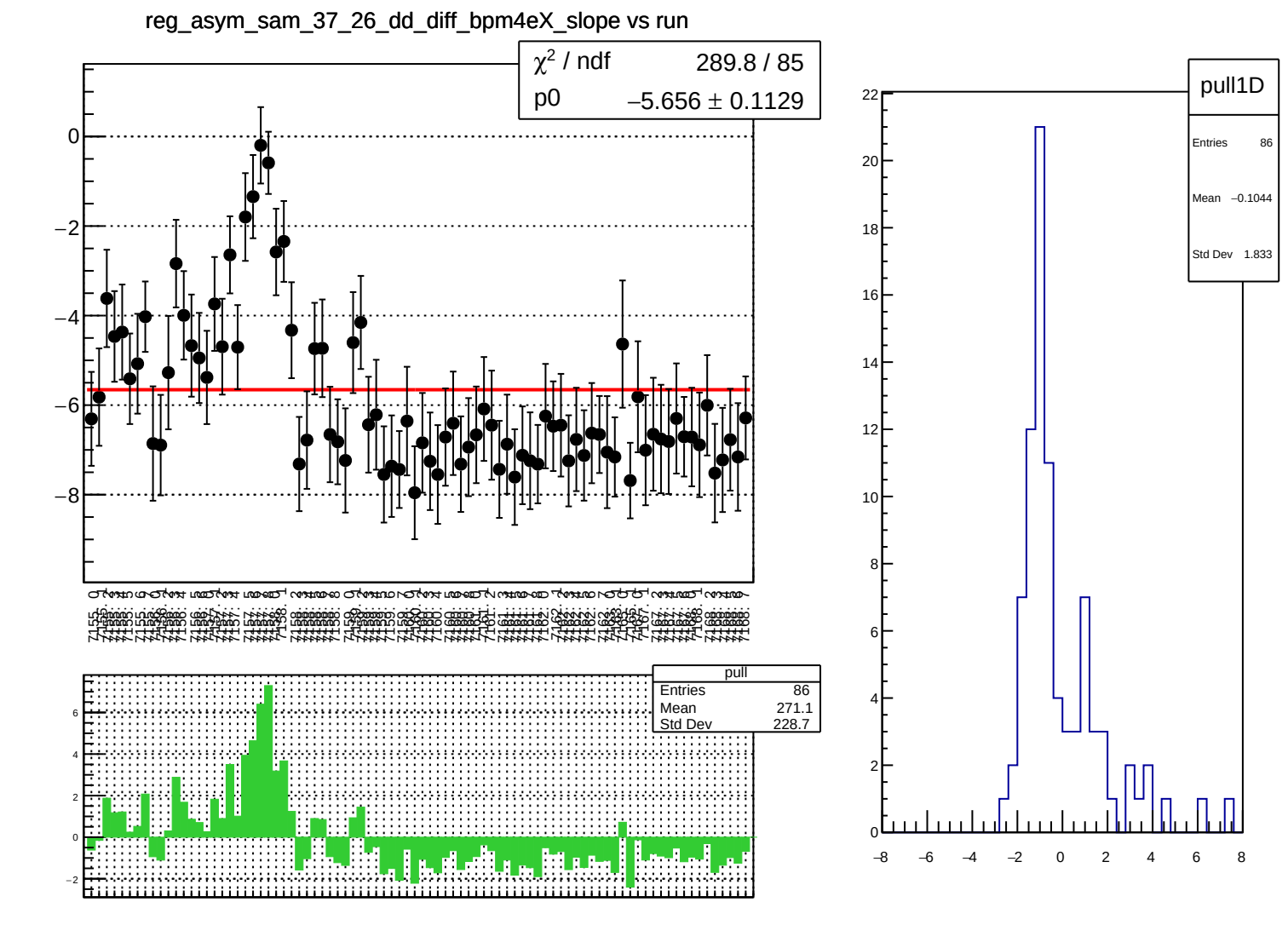

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.23 / 85
p0 34.75 ± 0.3083
pull
Entries 86
Mean 4.54
Std Dev 49.98
pull1D
Entries 86
Mean 0.01249
Std Dev 0.3447

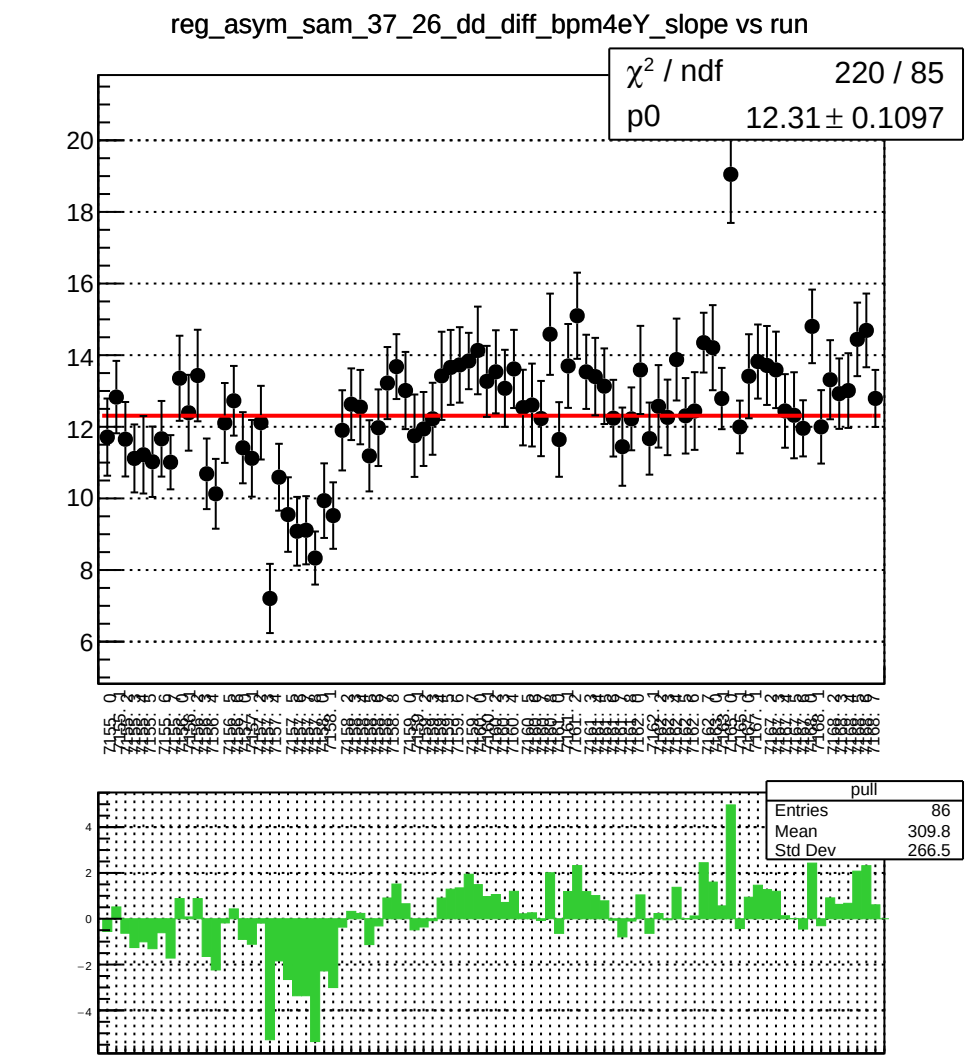

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 7.415 / 85
p0 −0.3994 ± 0.01201
pull
Entries 86
Mean −477.3
Std Dev 522

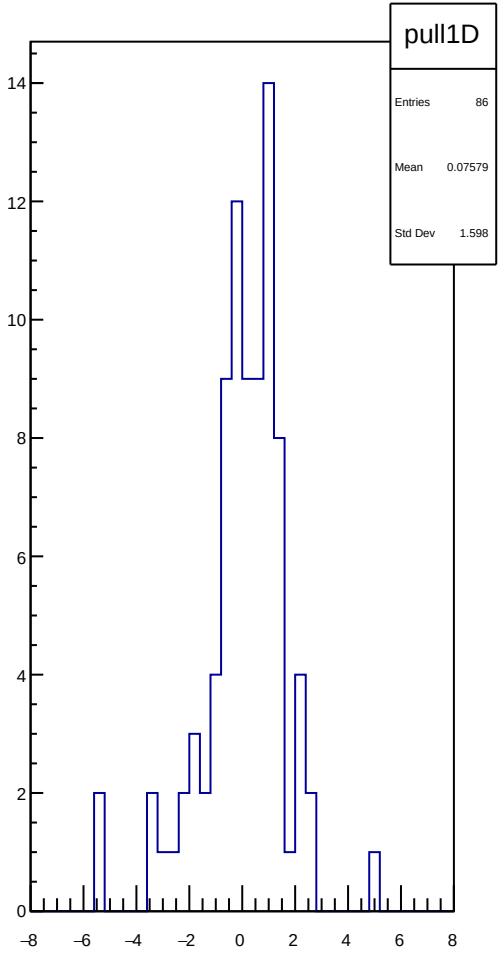

pull1D
Entries 86
Mean 0.0007495
Std Dev 0.2936

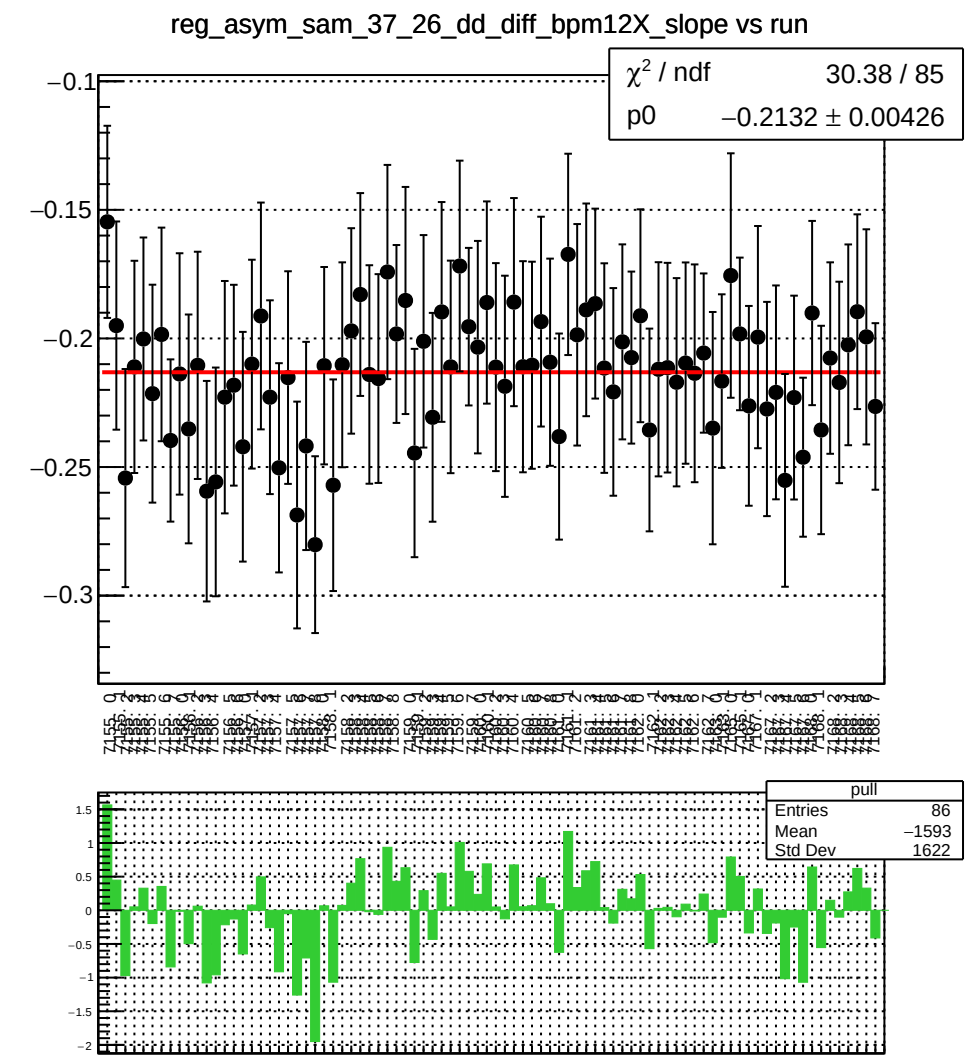

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 358.4 / 85
p0 −1.419 ± 0.1115
pull
Entries 86
Mean 255.1
Std Dev 211.4
pull1D
Entries 86
Mean 0.2346
Std Dev 1.826

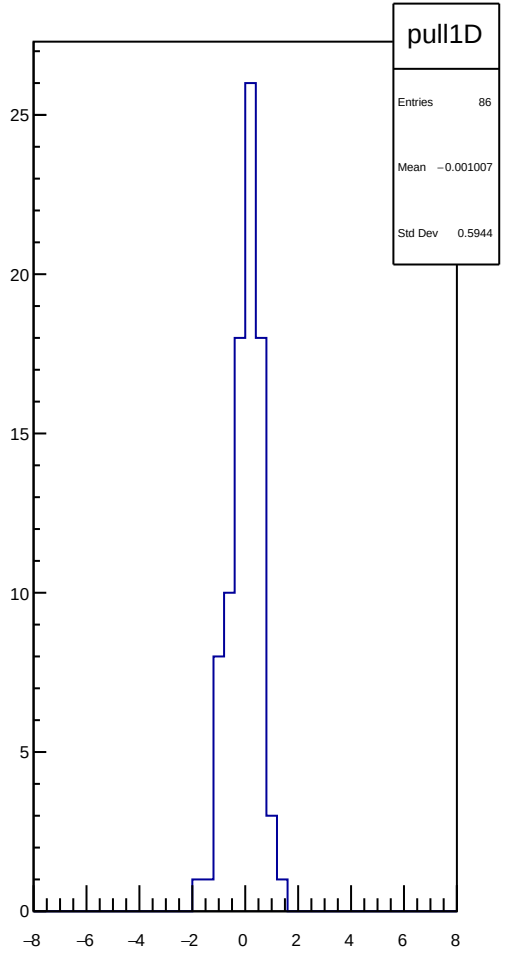

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 167.8 / 85
p0 −0.07977 ± 0.09437
pull
Entries 86
Mean 893.7
Std Dev 852.6
pull1D
Entries 86
Mean −0.02228
Std Dev 1.397

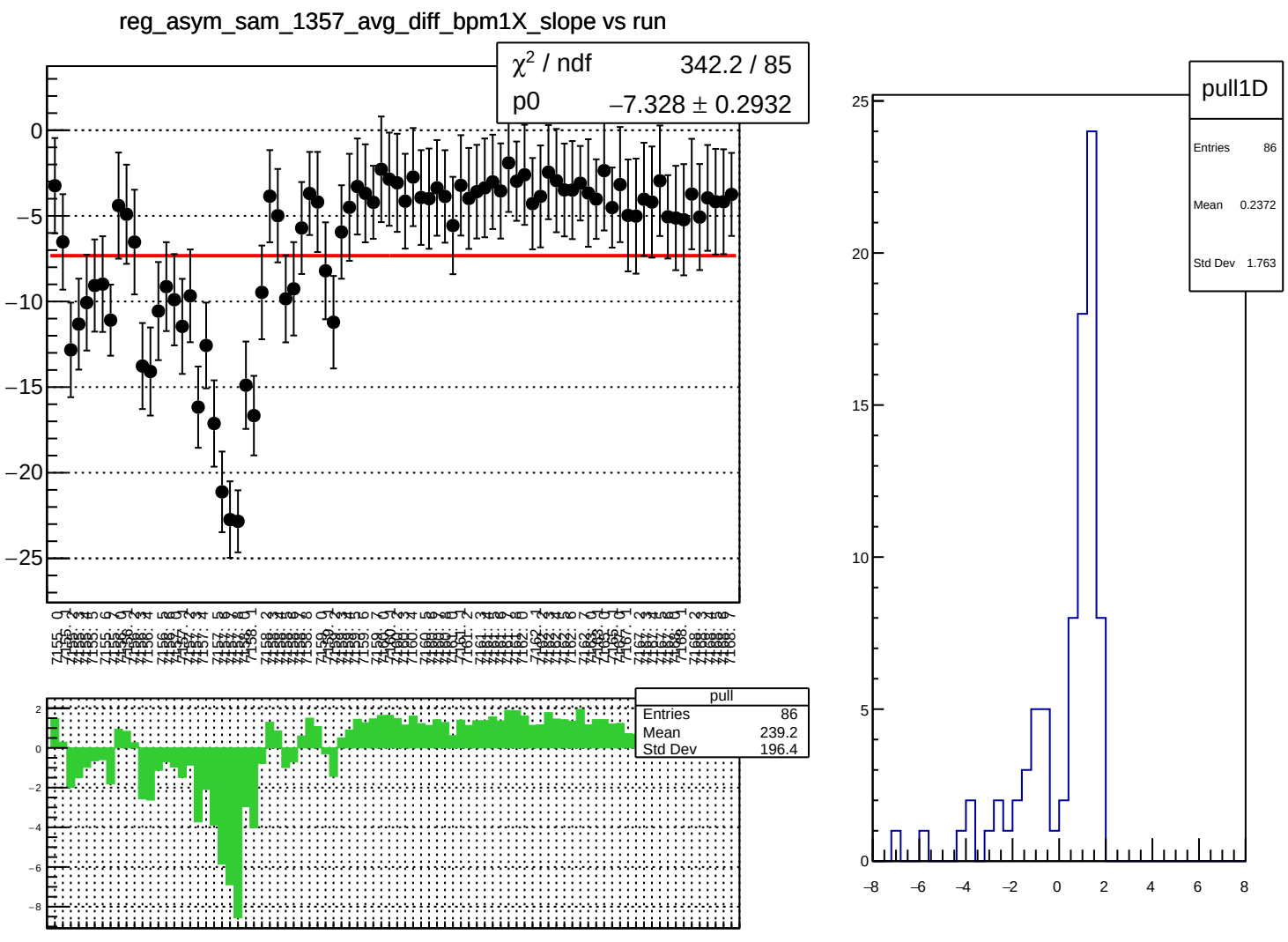

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 289.8 / 85
p0 −5.656 ± 0.1129
pull
Entries 86
Mean 271.1
Std Dev 228.7
pull1D
Entries 86
Mean −0.1044
Std Dev 1.833

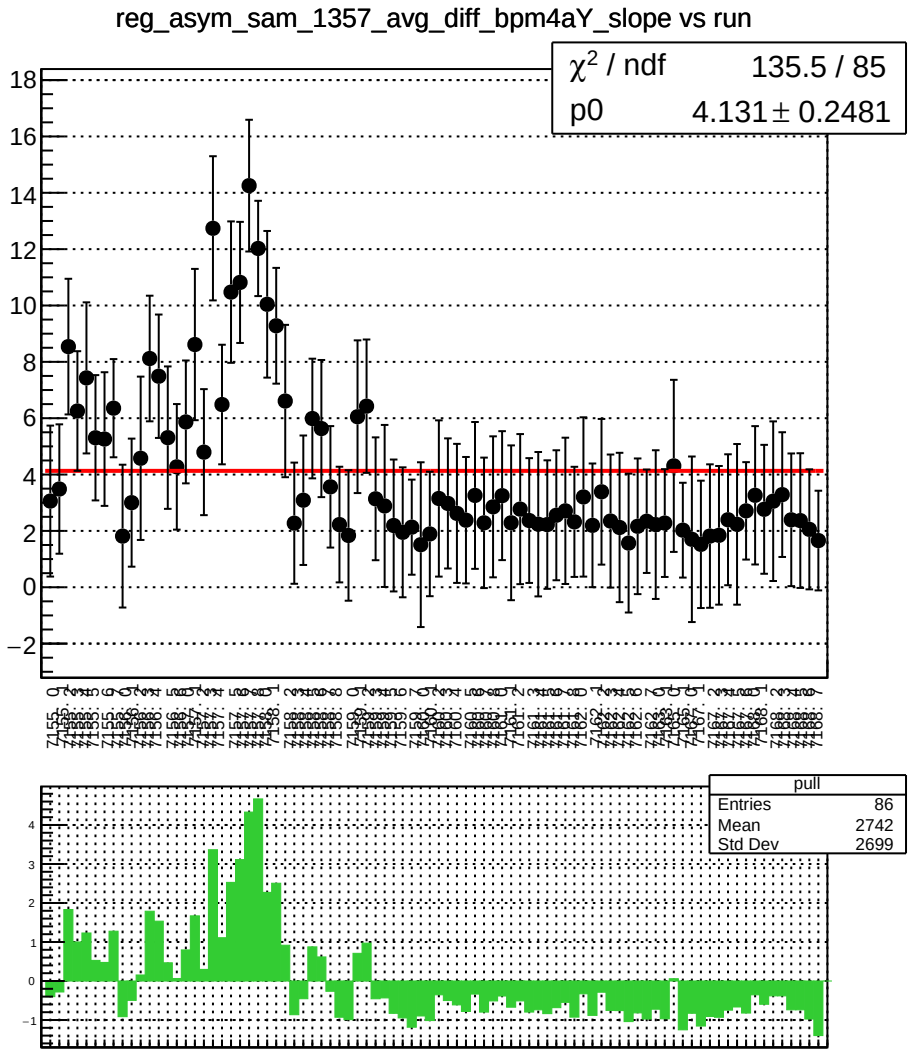

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 220 / 85
p0 12.31 ± 0.1097
pull
Entries 86
Mean 309.8
Std Dev 266.5

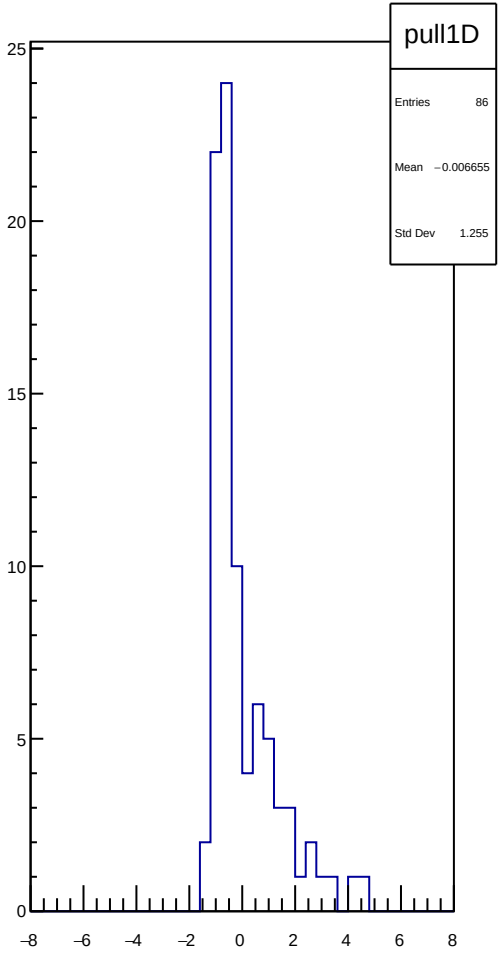

pull1D
Entries 86
Mean 0.07579
Std Dev 1.598

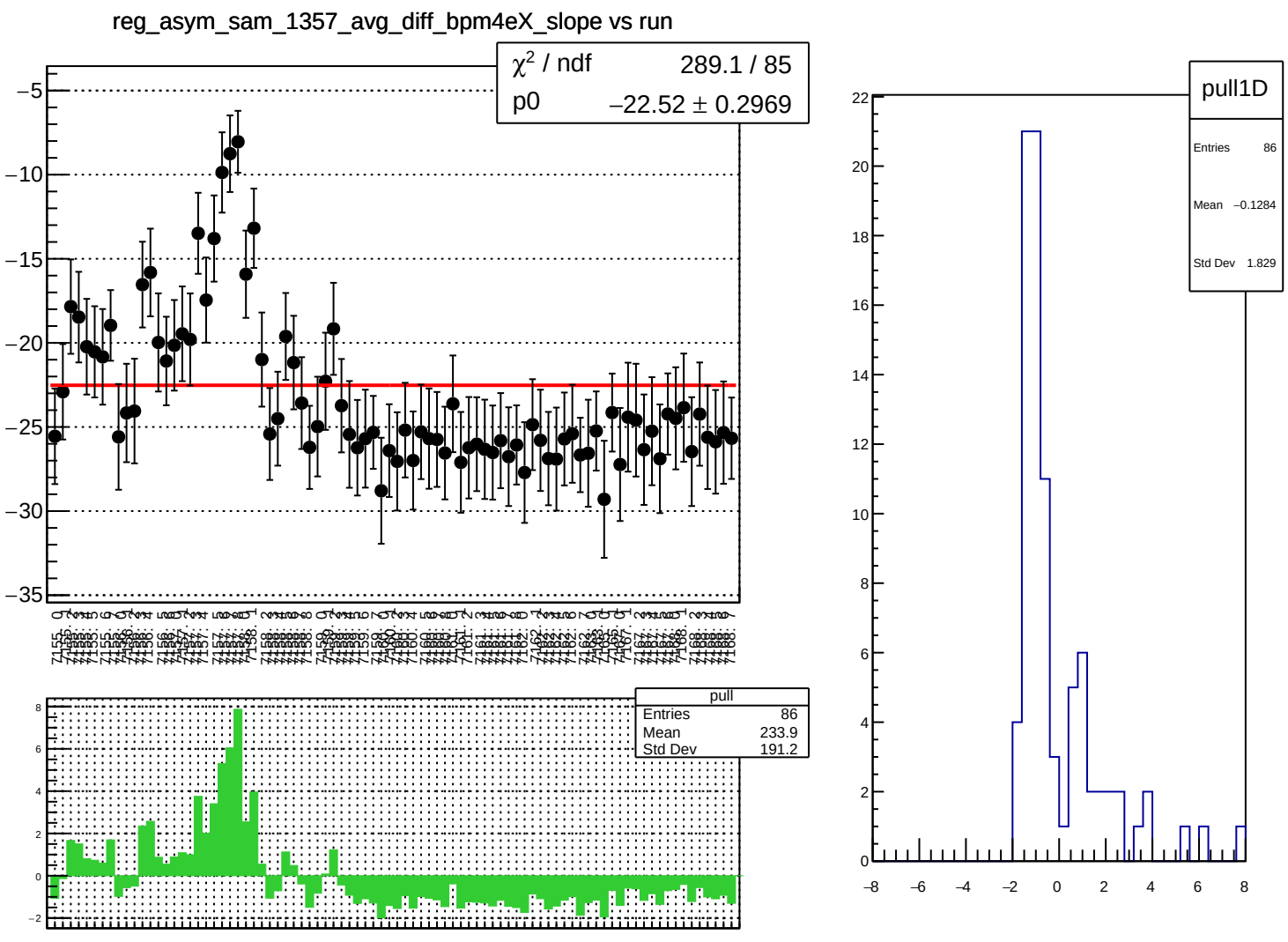

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 30.38 / 85
p0 −0.2132 ± 0.00426
−0.1
−0.15
−0.2
−0.25
−0.3
pull
Entries 86
Mean −1593
Std Dev 1622
1.5
1
0.5
0
−0.5
−1
−1.5
−2

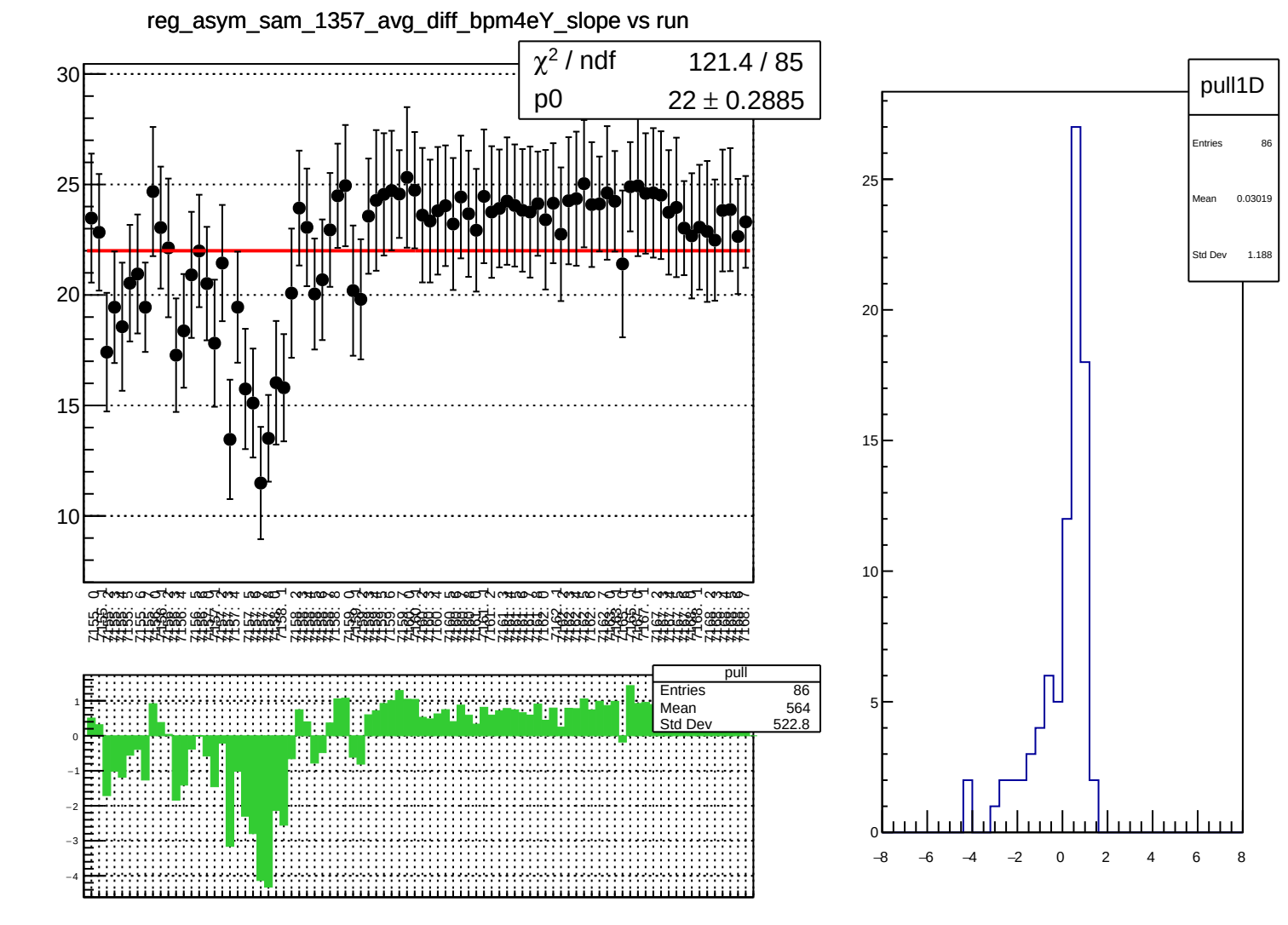

pull1D
Entries 86
Mean −0.001007
Std Dev 0.5944
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

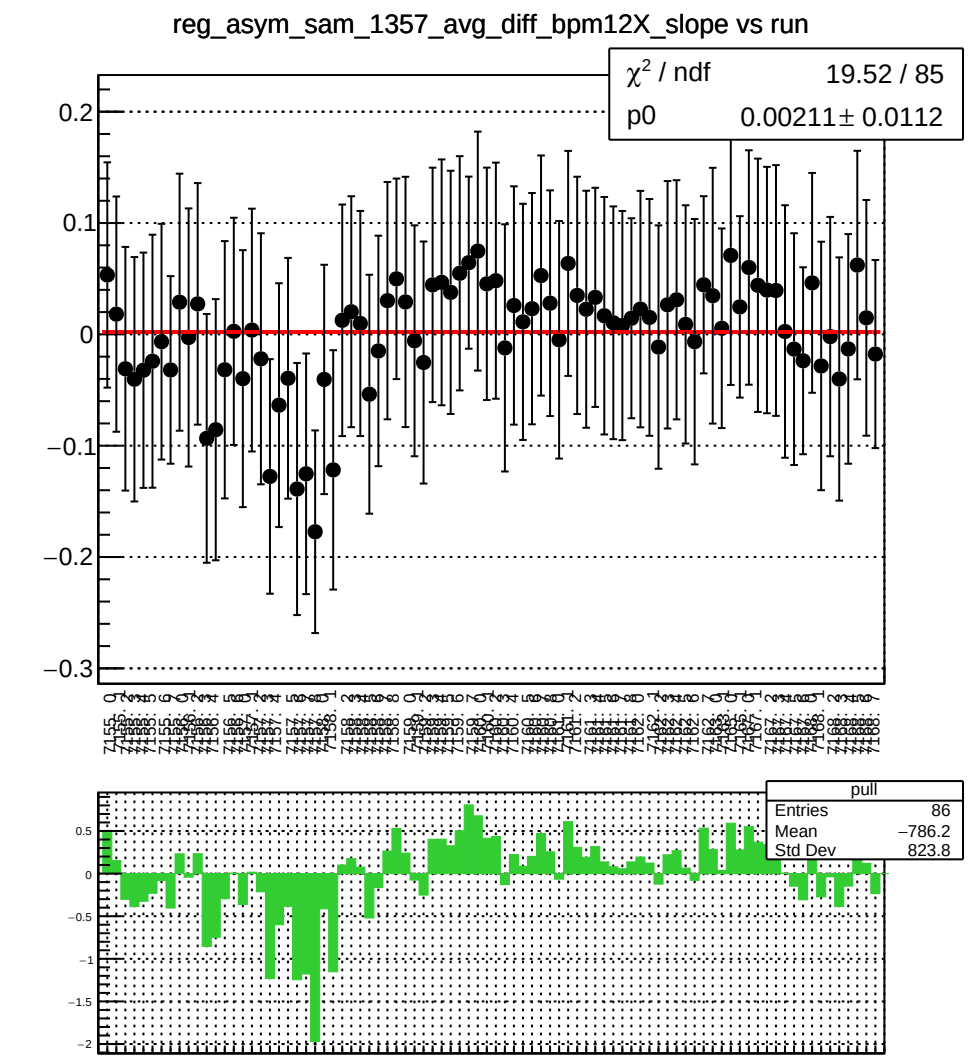

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 342.2 / 85
p0 −7.328 ± 0.2932
pull
Entries 86
Mean 239.2
Std Dev 196.4
pull1D
Entries 86
Mean 0.2372
Std Dev 1.763

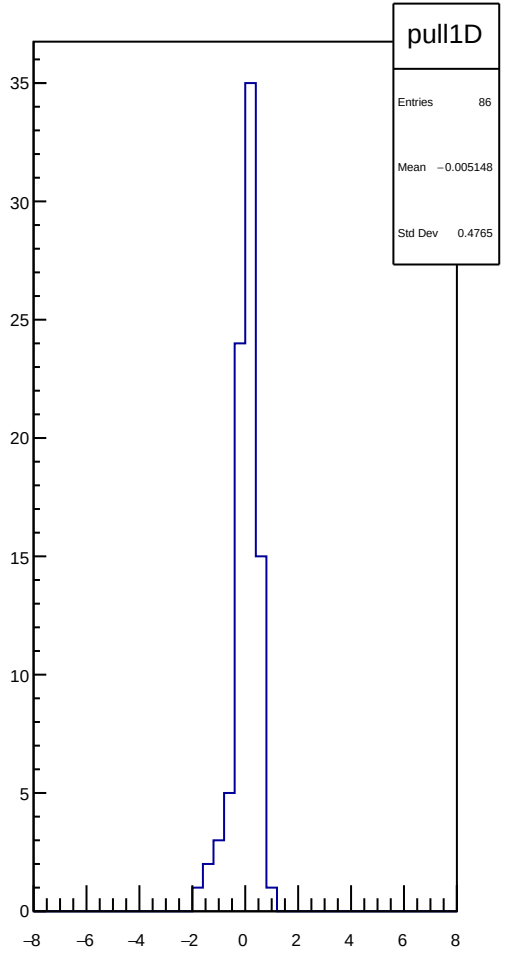

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 135.5 / 85
p0 4.131 ± 0.2481
pull
Entries 86
Mean 2742
Std Dev 2699

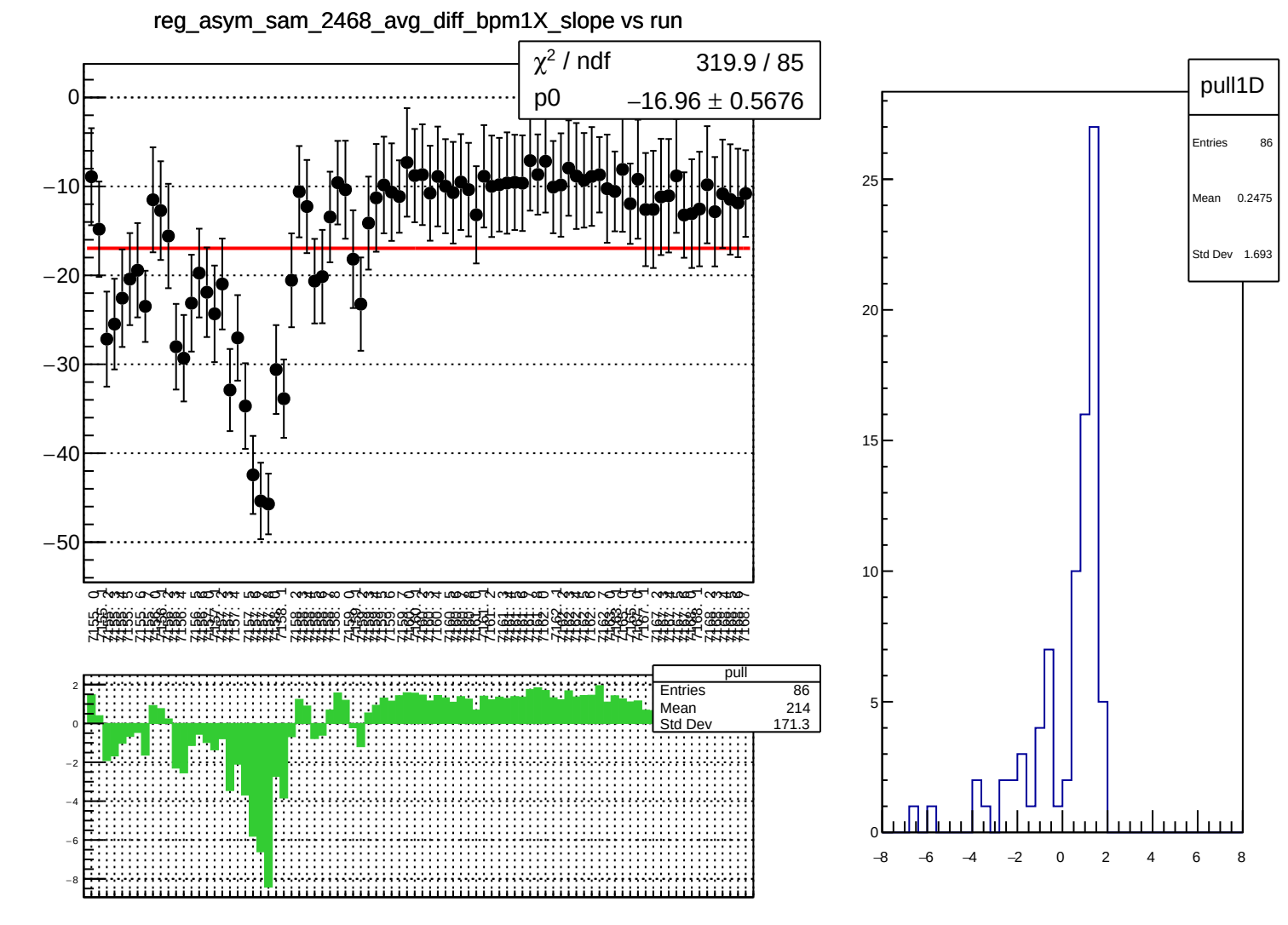

pull1D
Entries 86
Mean −0.006655
Std Dev 1.255

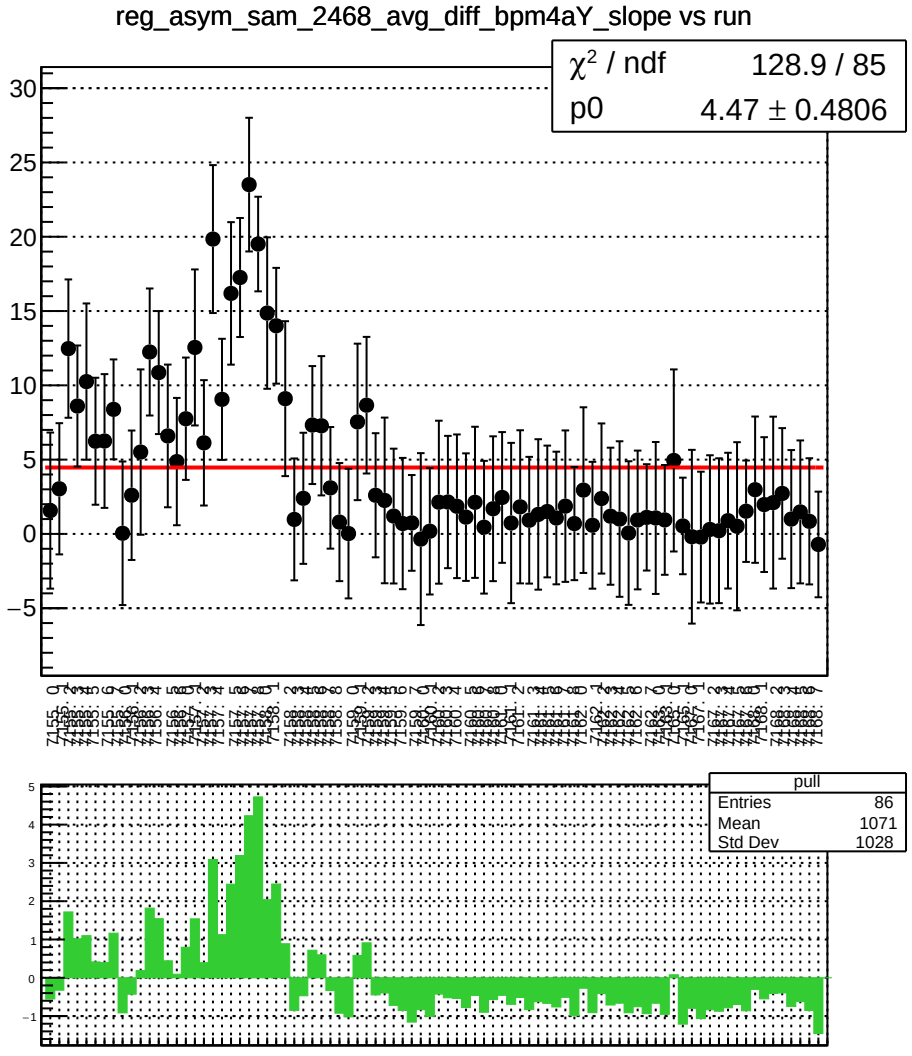

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 289.1 / 85
p0 −22.52 ± 0.2969
pull
Entries 86
Mean 233.9
Std Dev 191.2
pull1D
Entries 86
Mean −0.1284
Std Dev 1.829

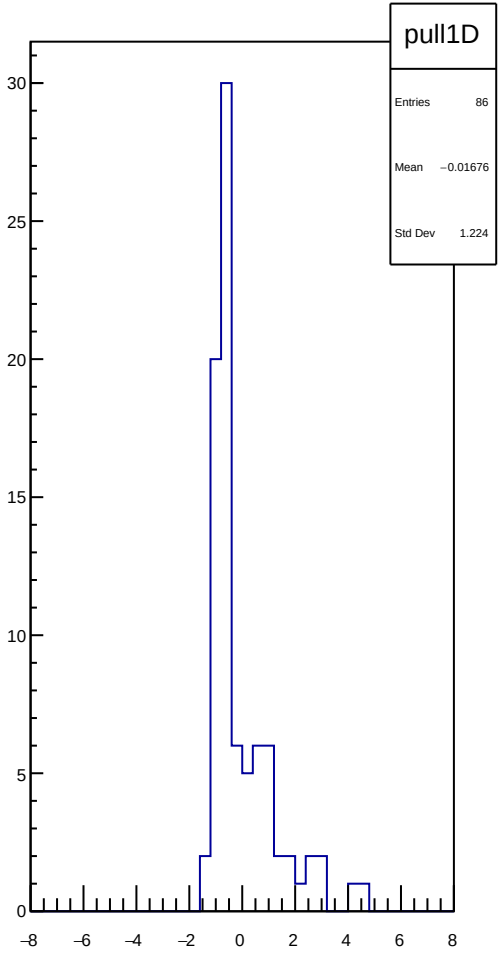

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 121.4 / 85
p0 22 ± 0.2885
pull
Entries 86
Mean 564
Std Dev 522.8
pull1D
Entries 86
Mean 0.03019
Std Dev 1.188

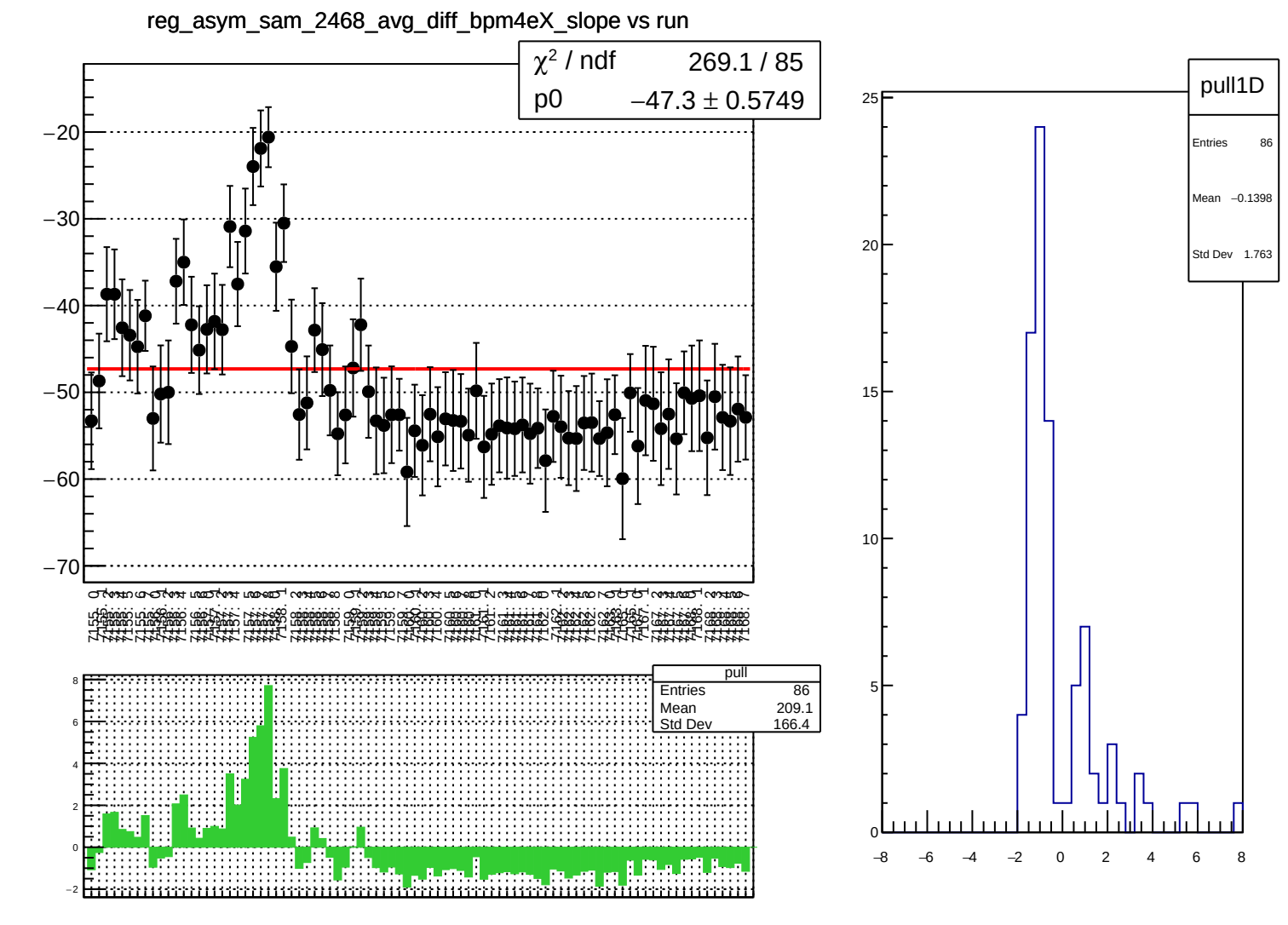

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 19.52 / 85
p0 0.00211 ± 0.0112
pull
Entries 86
Mean −786.2
Std Dev 823.8

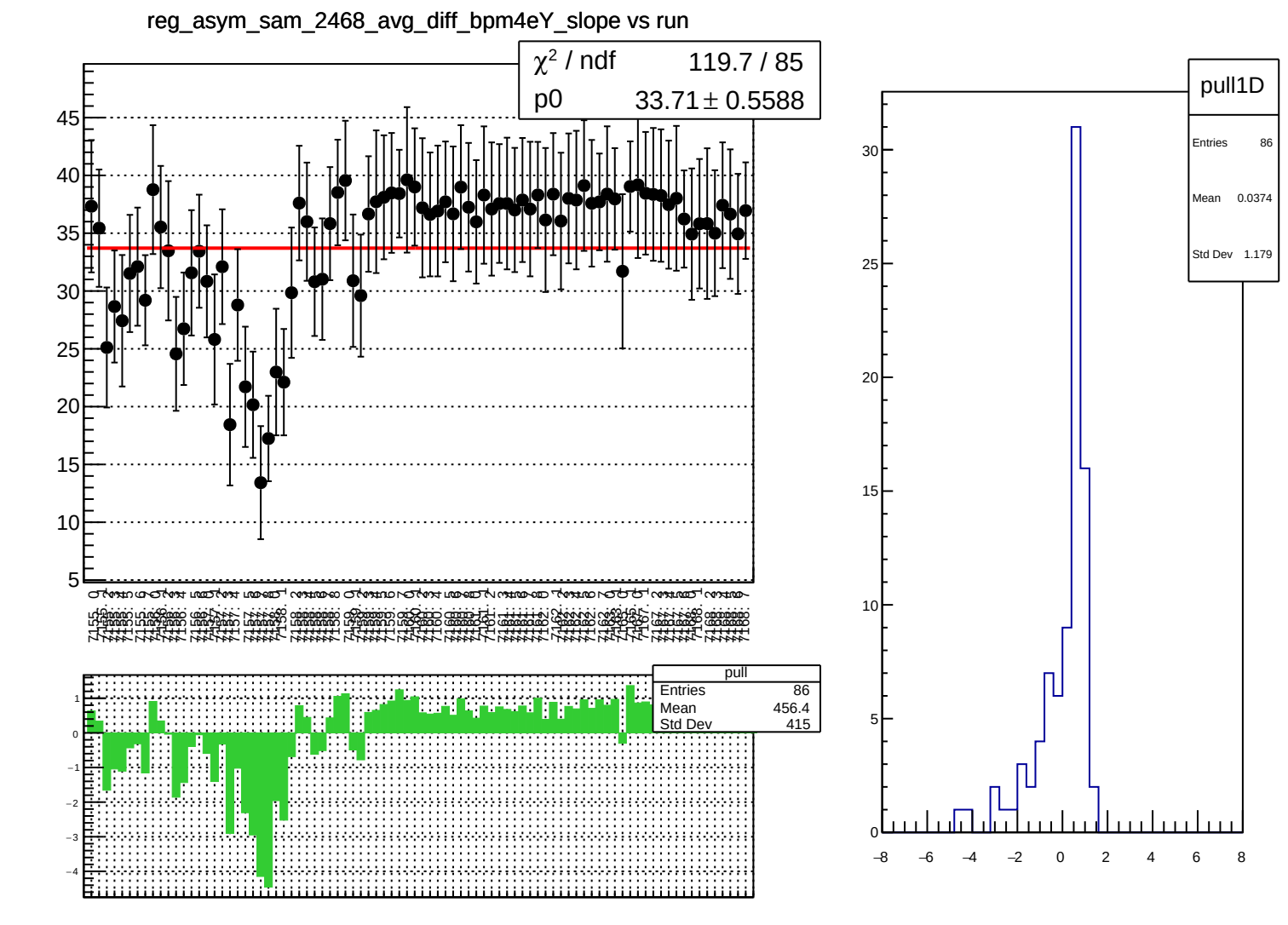

pull1D
Entries 86
Mean −0.005148
Std Dev 0.4765

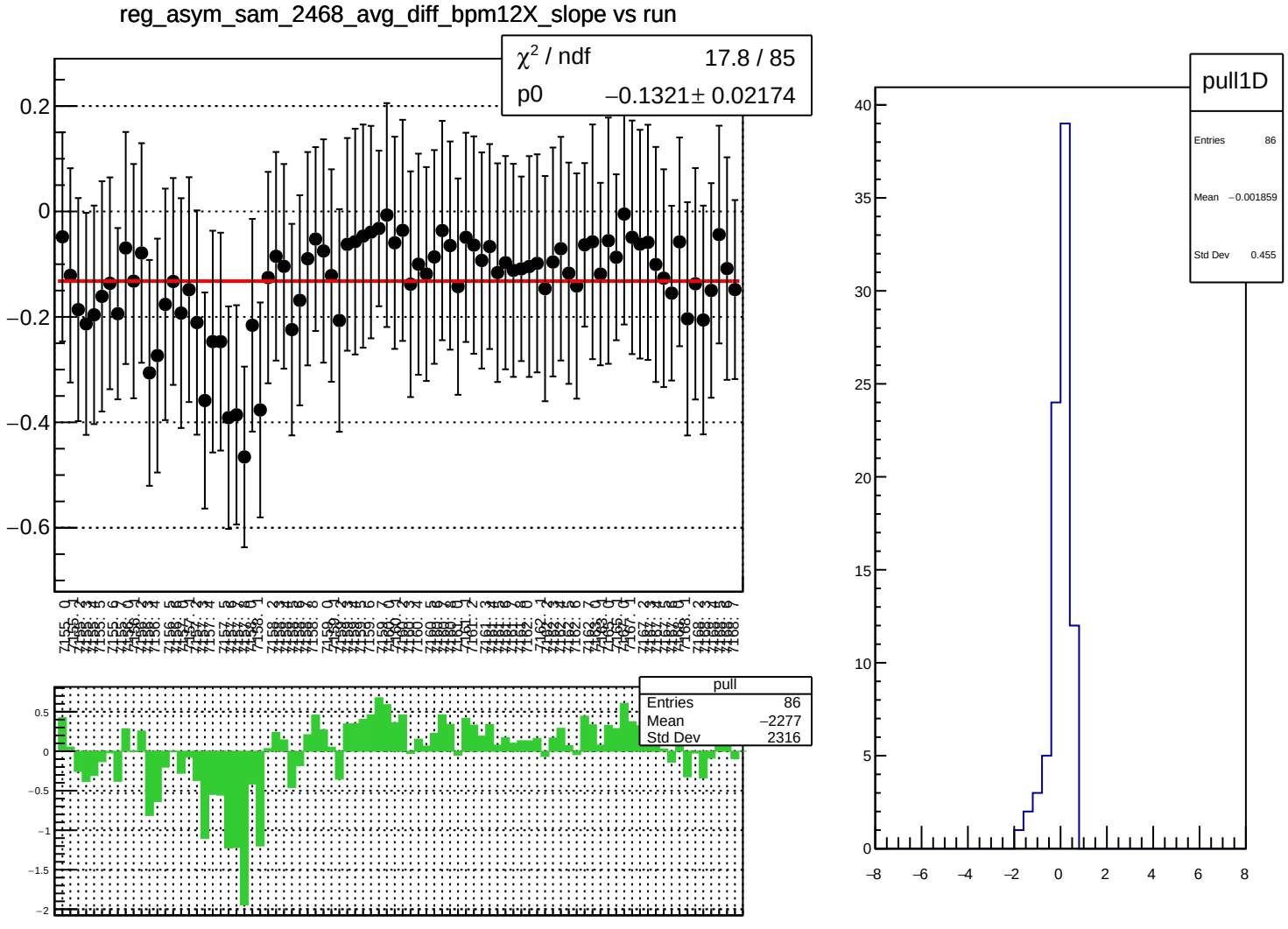

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 319.9 / 85
p0 −16.96 ± 0.5676
pull
Entries 86
Mean 214
Std Dev 171.3
pull1D
Entries 86
Mean 0.2475
Std Dev 1.693

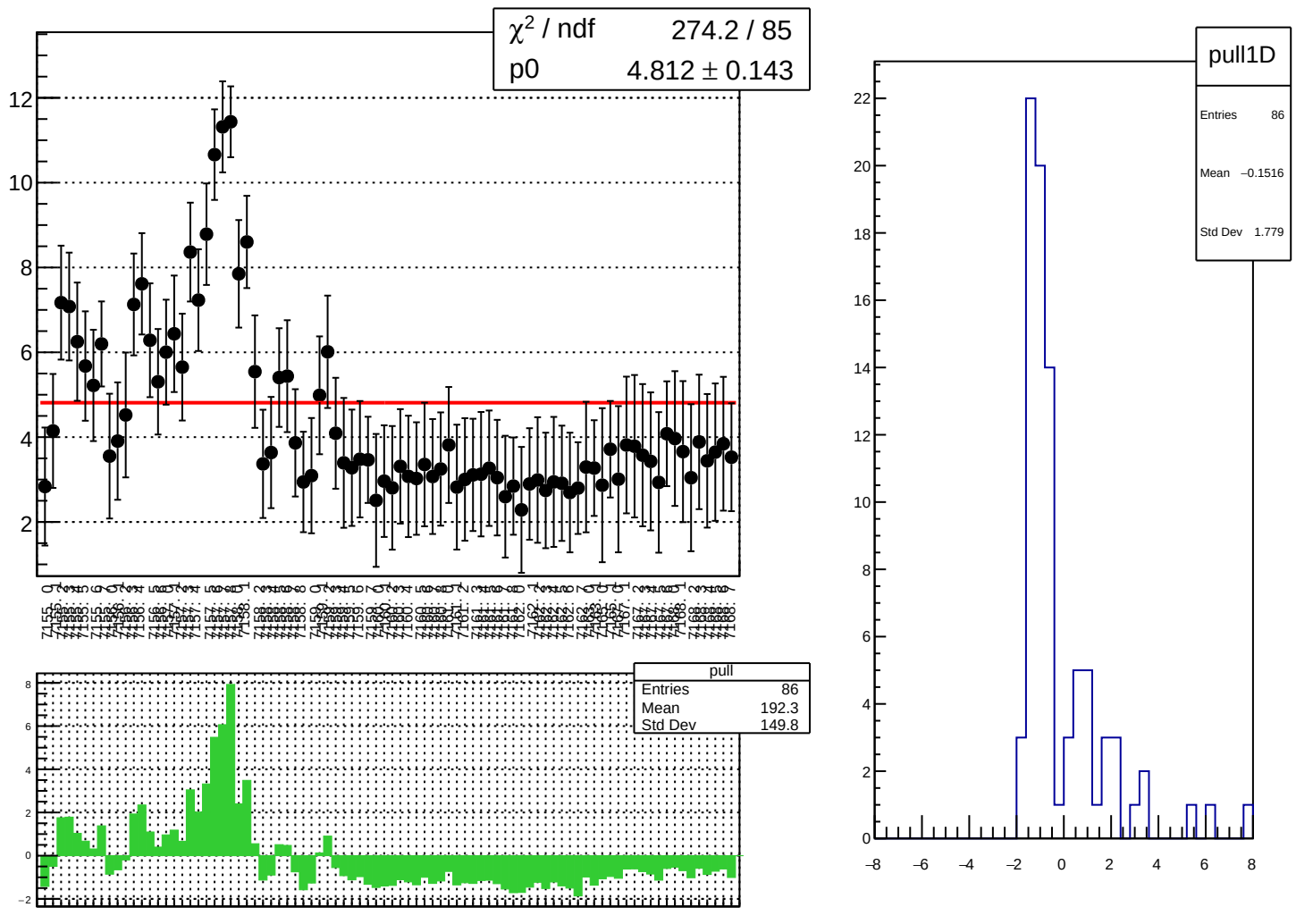

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 128.9 / 85
p0 4.47 ± 0.4806
pull
Entries 86
Mean 1071
Std Dev 1028

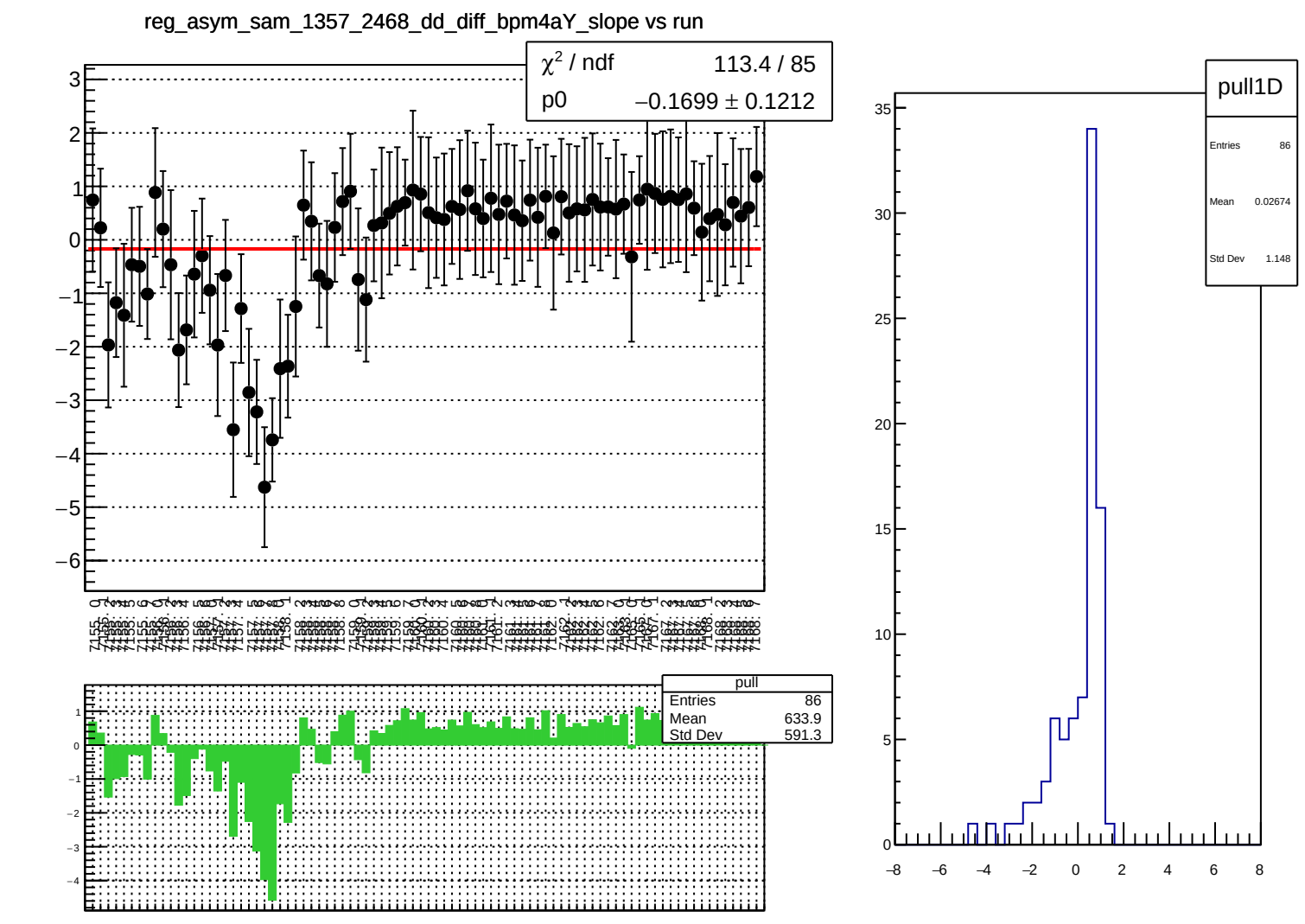

pull1D
Entries 86
Mean −0.01676
Std Dev 1.224

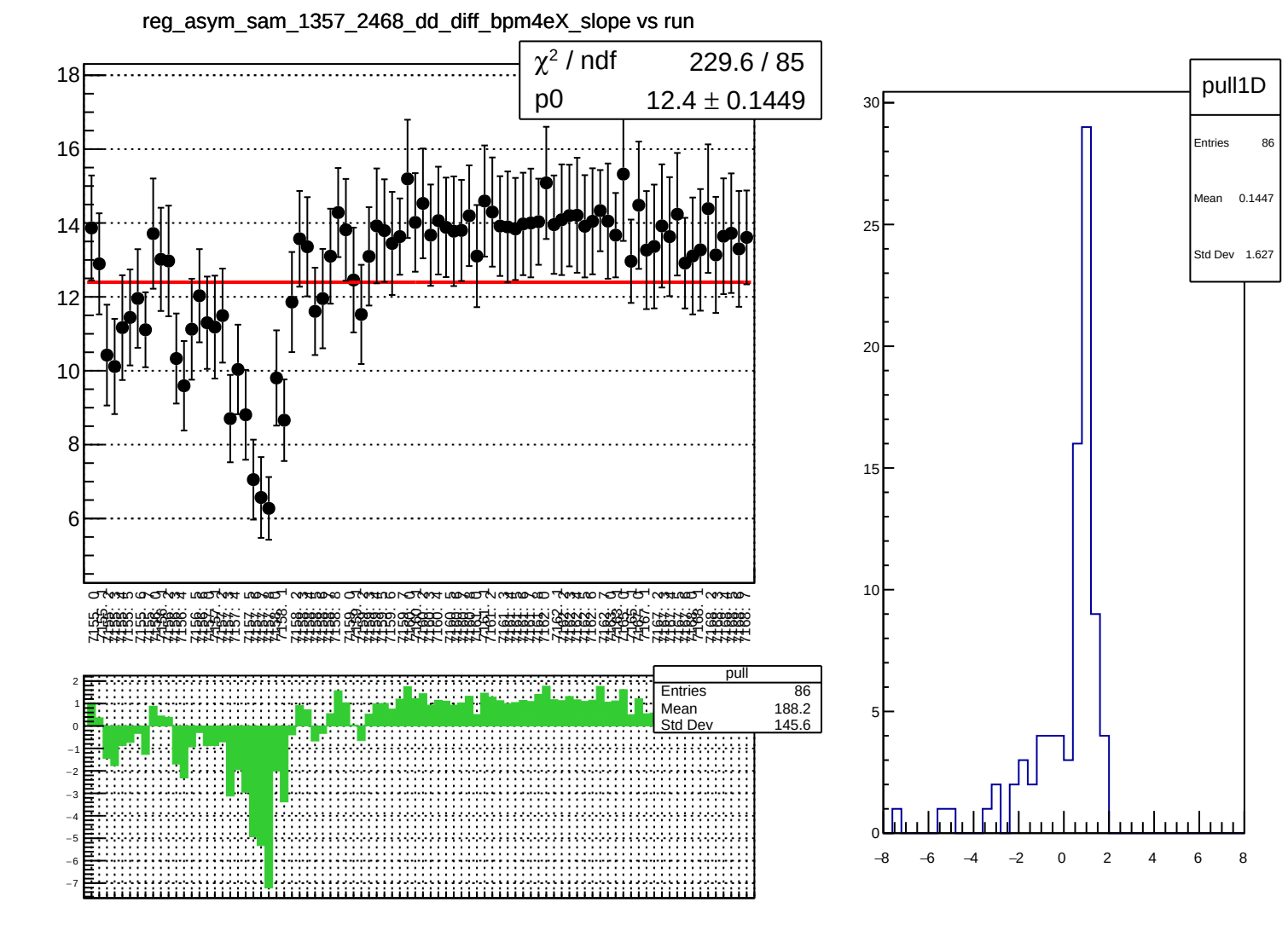

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 269.1 / 85
p0 −47.3 ± 0.5749
pull
Entries 86
Mean 209.1
Std Dev 166.4
pull1D
Entries 86
Mean −0.1398
Std Dev 1.763

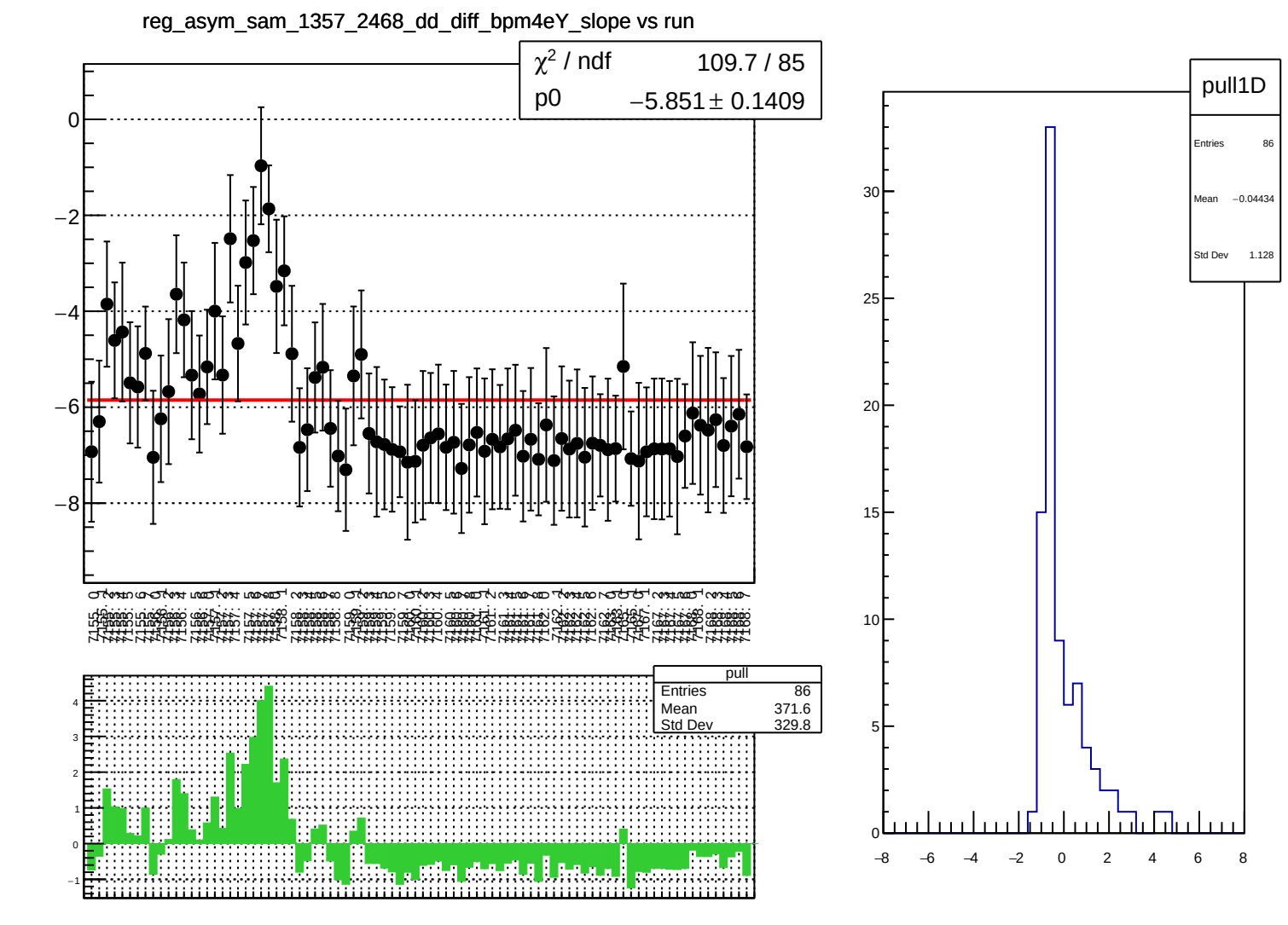

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 119.7 / 85
p0 33.71 ± 0.5588
pull
Entries 86
Mean 456.4
Std Dev 415
pull1D
Entries 86
Mean 0.0374
Std Dev 1.179

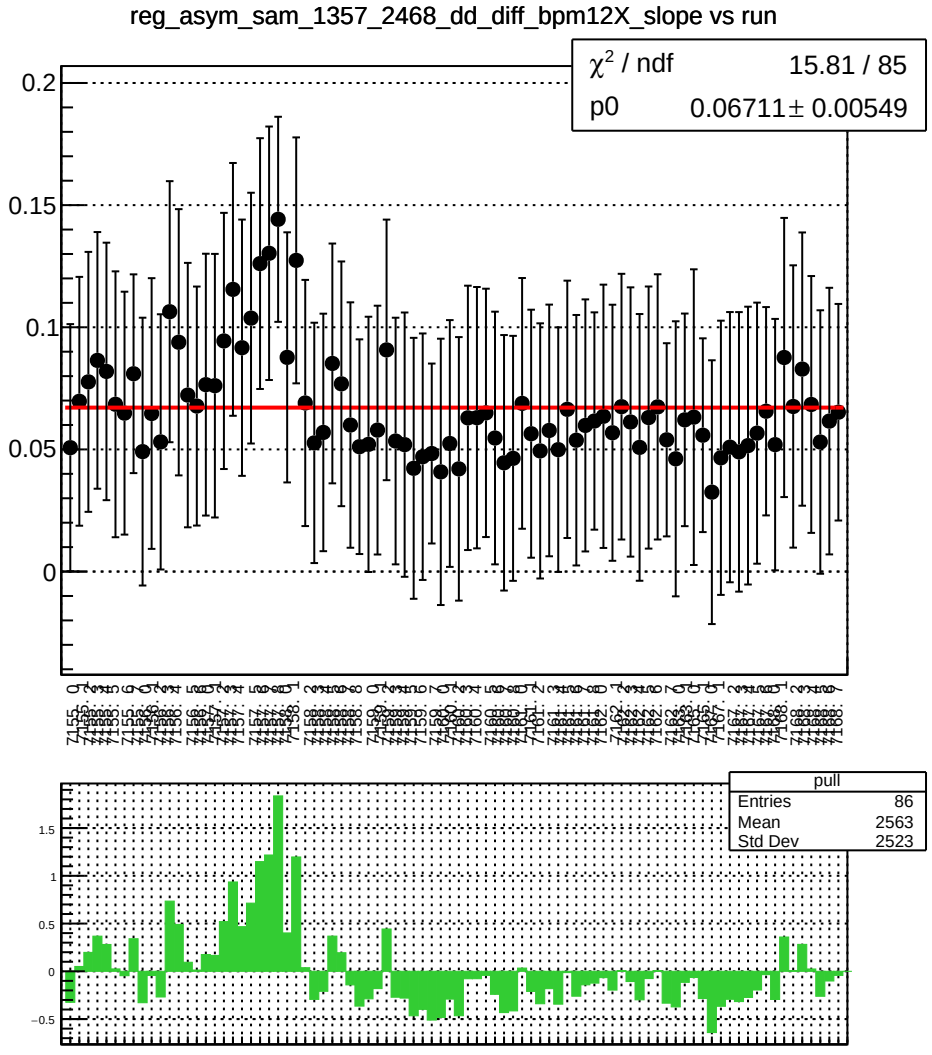

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 17.8 / 85
p0 −0.1321± 0.02174
0.2
0
−0.2
−0.4
−0.6
pull
Entries 86
Mean −2277
Std Dev 2316
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean −0.001859
Std Dev 0.455
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

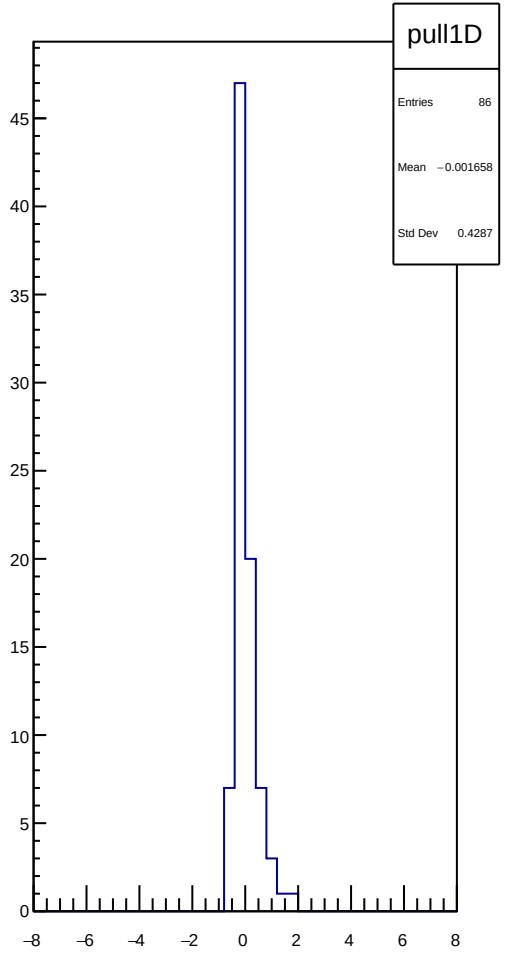

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 274.2 / 85
p0 4.812 ± 0.143
pull
Entries 86
Mean 192.3
Std Dev 149.8
pull1D
Entries 86
Mean −0.1516
Std Dev 1.779

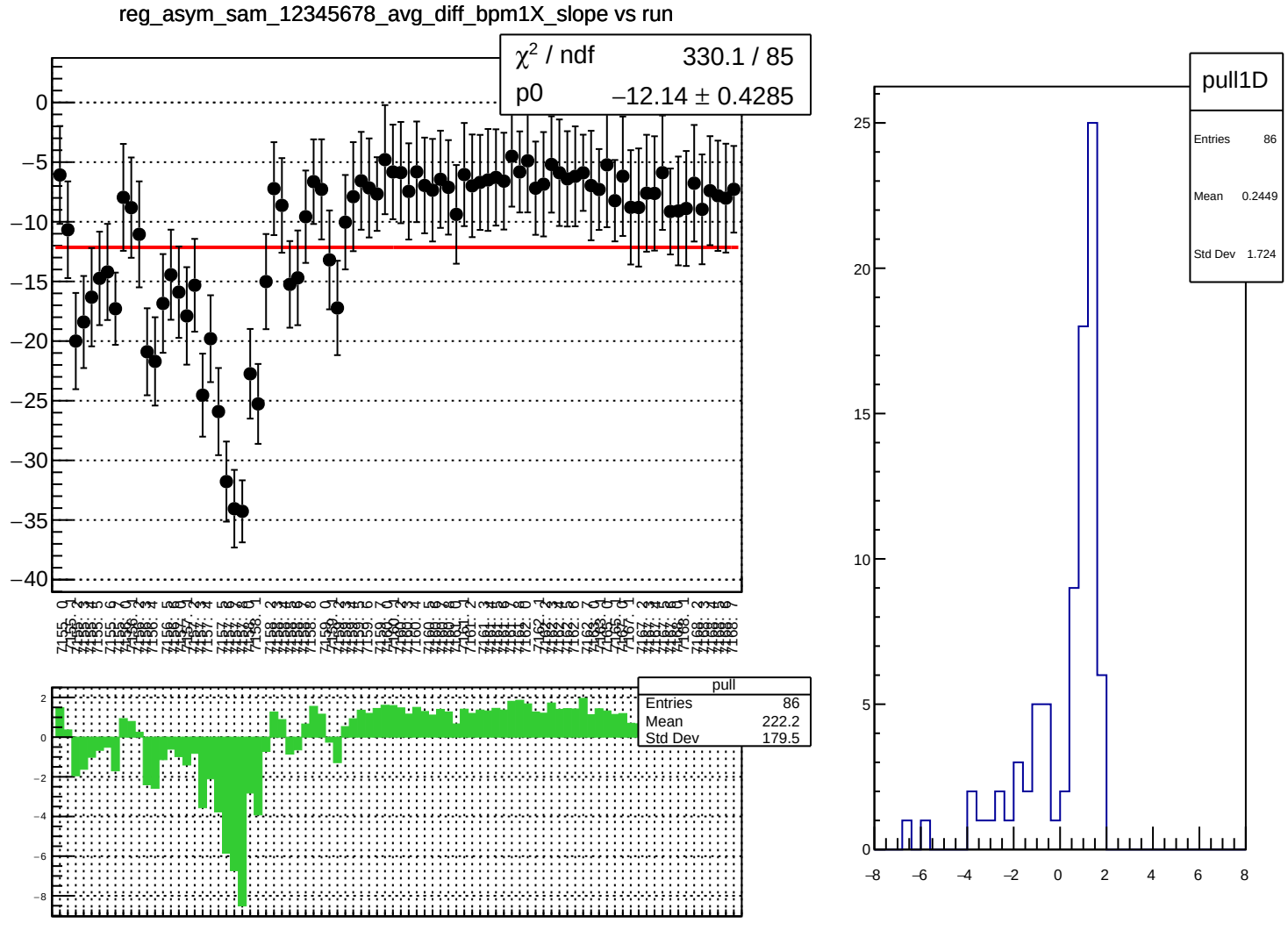

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 113.4 / 85
p0 −0.1699 ± 0.1212
pull
Entries 86
Mean 633.9
Std Dev 591.3
pull1D
Entries 86
Mean 0.02674
Std Dev 1.148

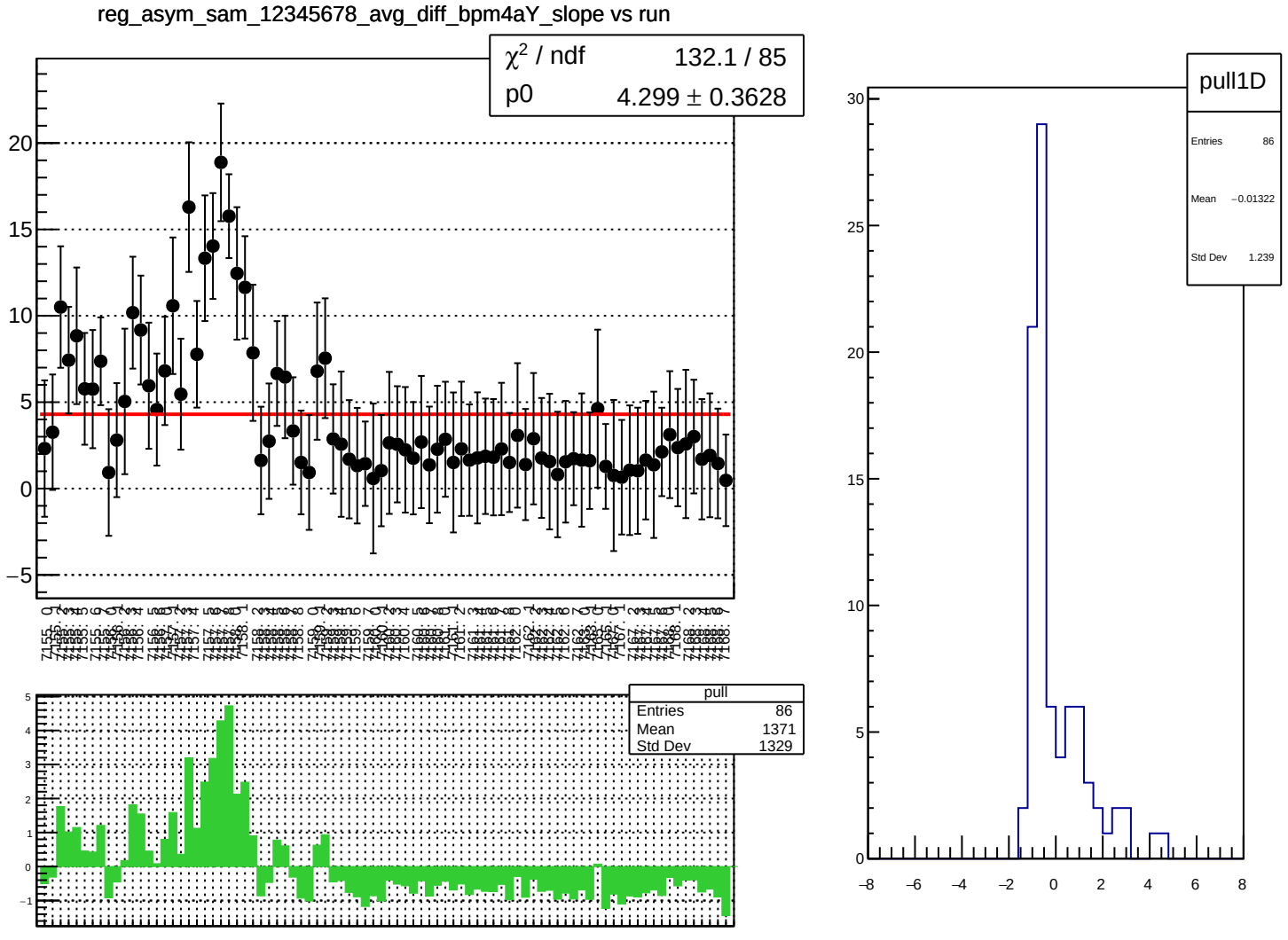

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 229.6 / 85
p0 12.4 ± 0.1449
pull
Entries 86
Mean 188.2
Std Dev 145.6
pull1D
Entries 86
Mean 0.1447
Std Dev 1.627

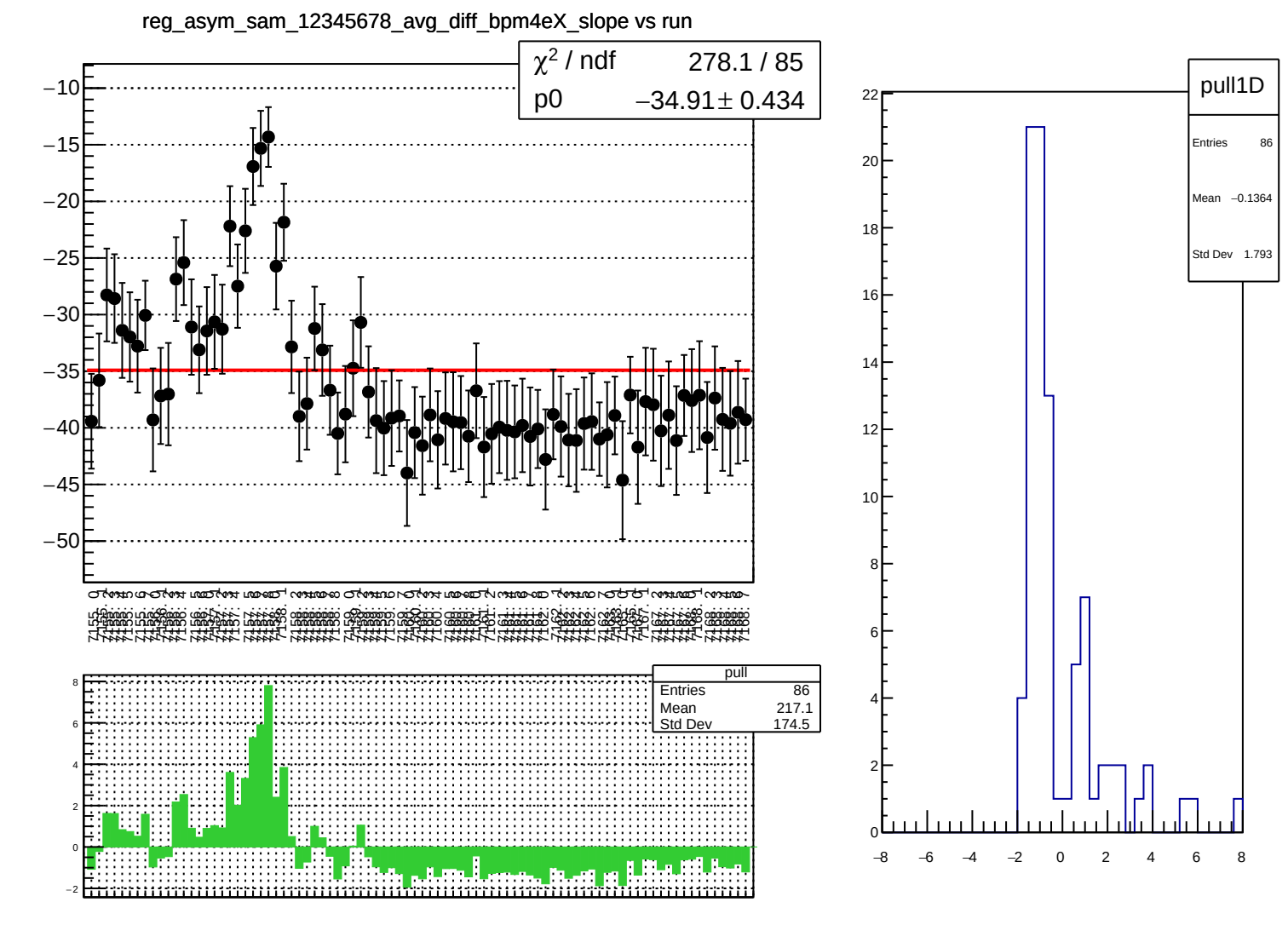

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 109.7 / 85
p0 −5.851 ± 0.1409
pull
Entries 86
Mean 371.6
Std Dev 329.8
pull1D
Entries 86
Mean −0.04434
Std Dev 1.128

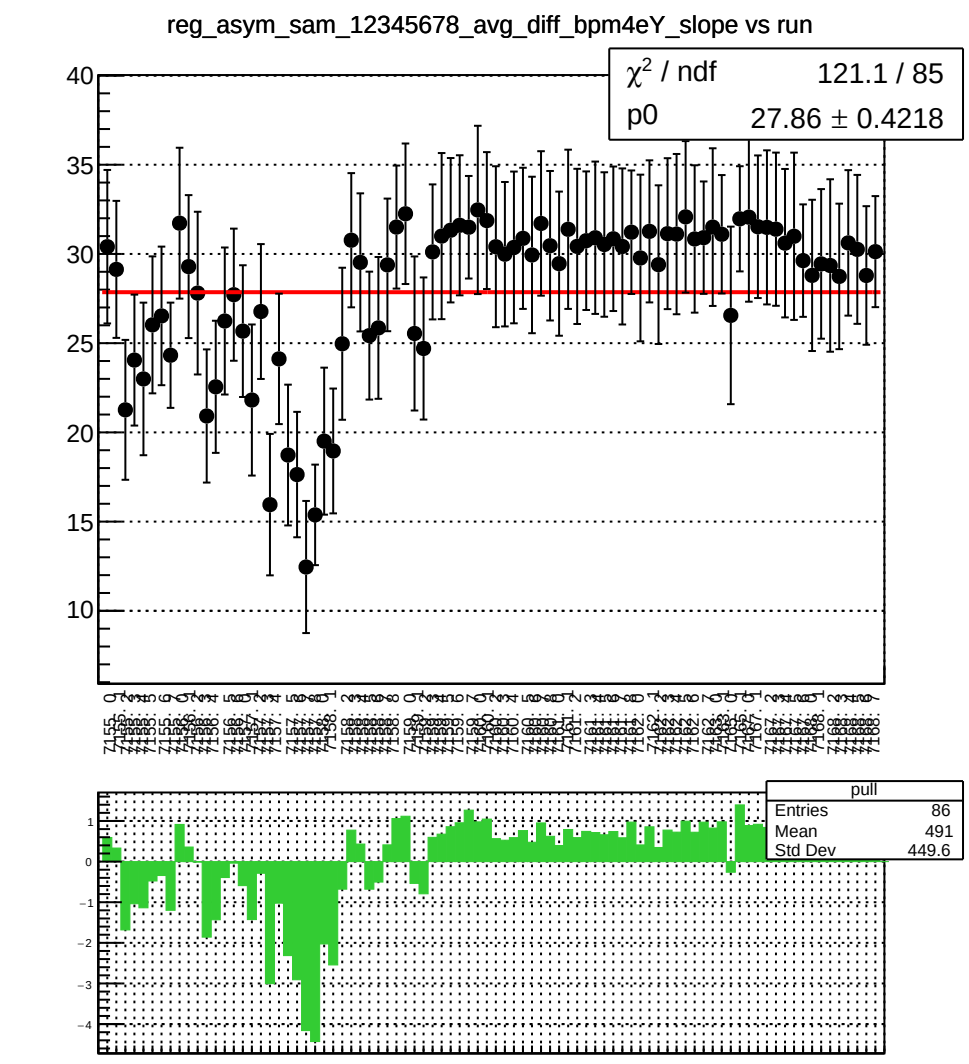

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 15.81 / 85
p0 0.06711 ± 0.00549
pull
Entries 86
Mean 2563
Std Dev 2523

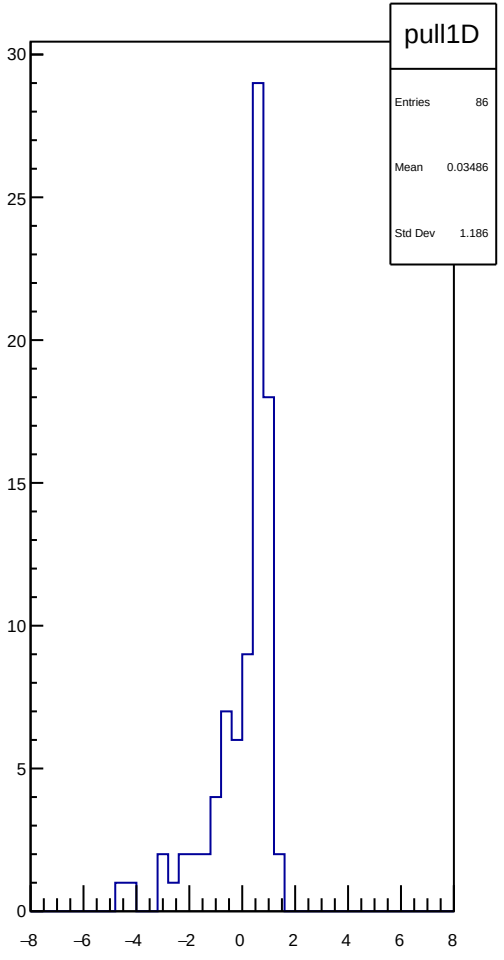

pull1D
Entries 86
Mean −0.001658
Std Dev 0.4287

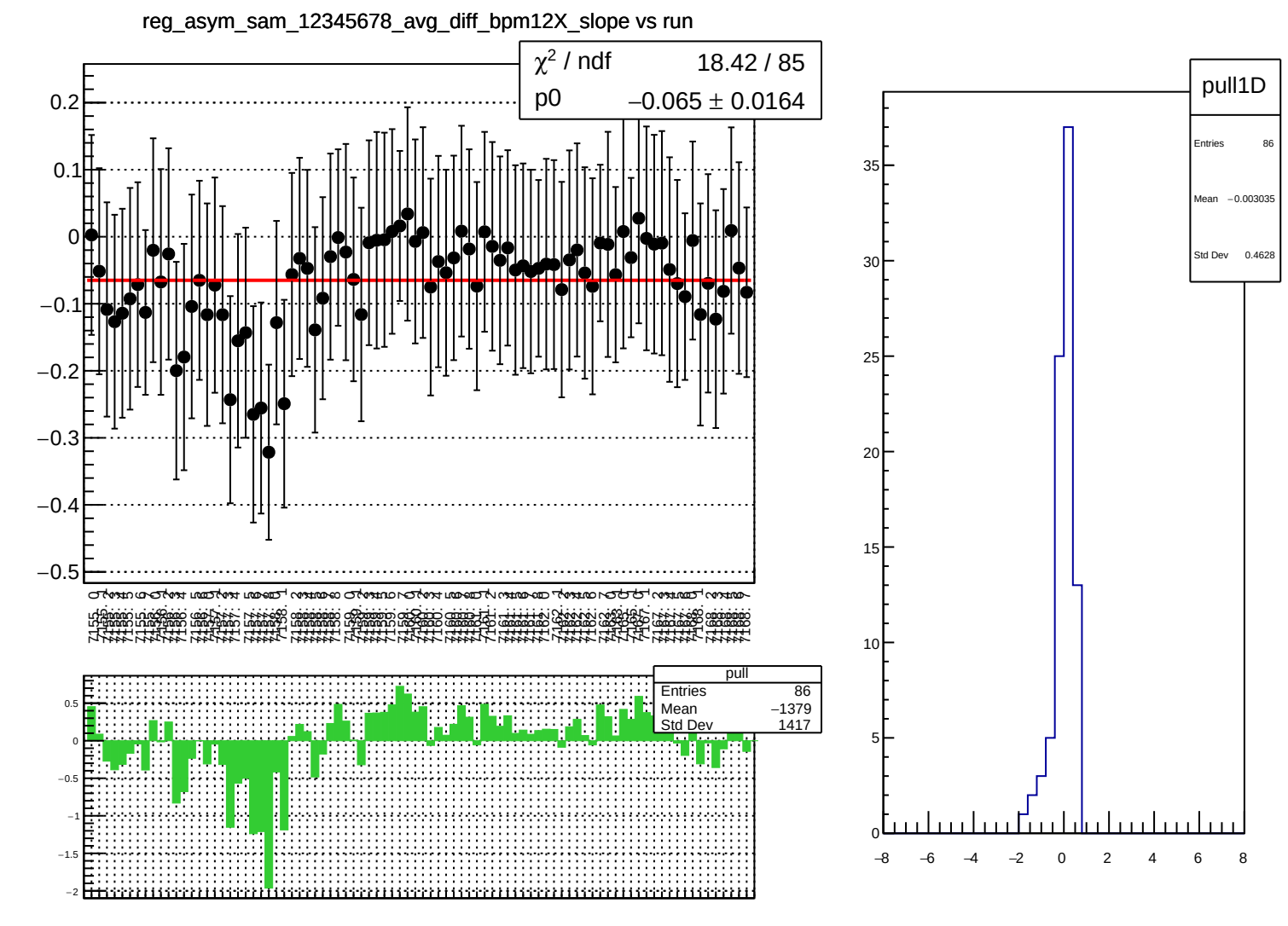

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 330.1 / 85
p0 −12.14 ± 0.4285
pull
Entries 86
Mean 222.2
Std Dev 179.5
pull1D
Entries 86
Mean 0.2449
Std Dev 1.724

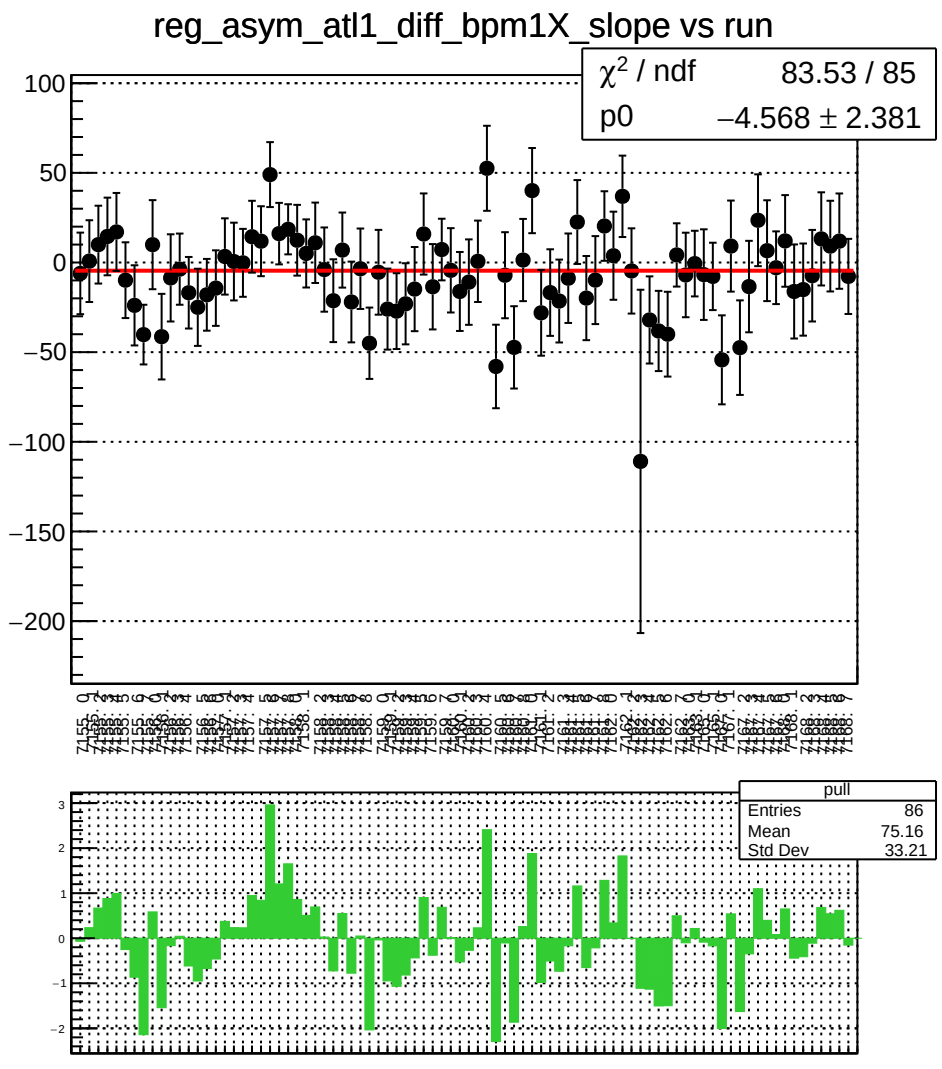

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 132.1 / 85
p0 4.299 ± 0.3628
pull
Entries 86
Mean 1371
Std Dev 1329
pull1D
Entries 86
Mean −0.01322
Std Dev 1.239

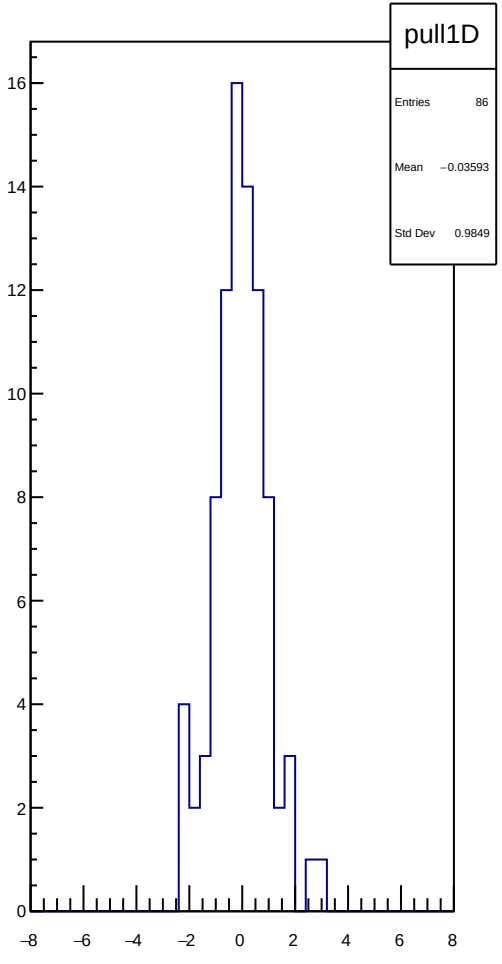

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 278.1 / 85
p0 −34.91 ± 0.434
pull
Entries 86
Mean 217.1
Std Dev 174.5
pull1D
Entries 86
Mean −0.1364
Std Dev 1.793

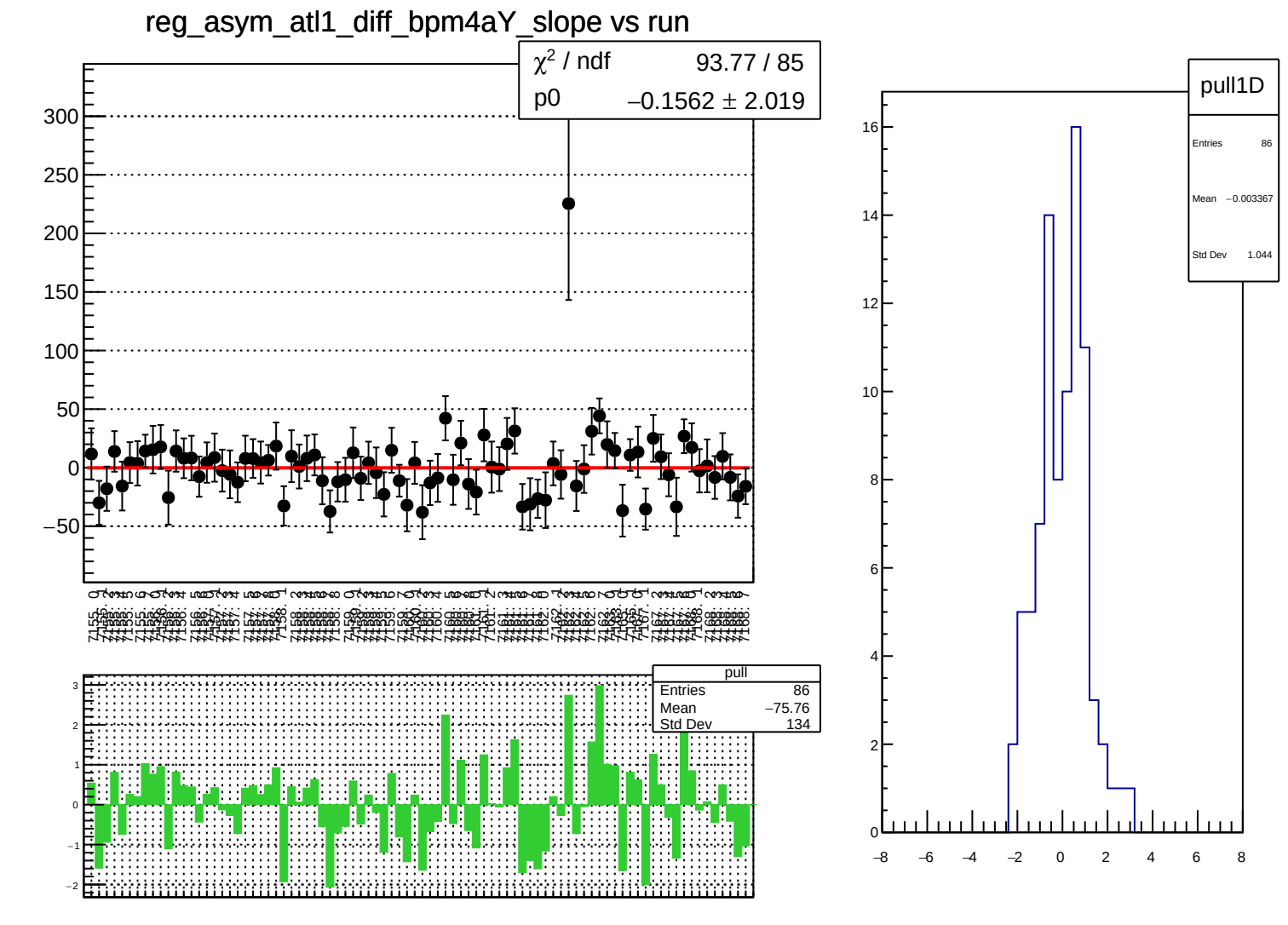

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 121.1 / 85
p0 27.86 ± 0.4218
pull
Entries 86
Mean 491
Std Dev 449.6

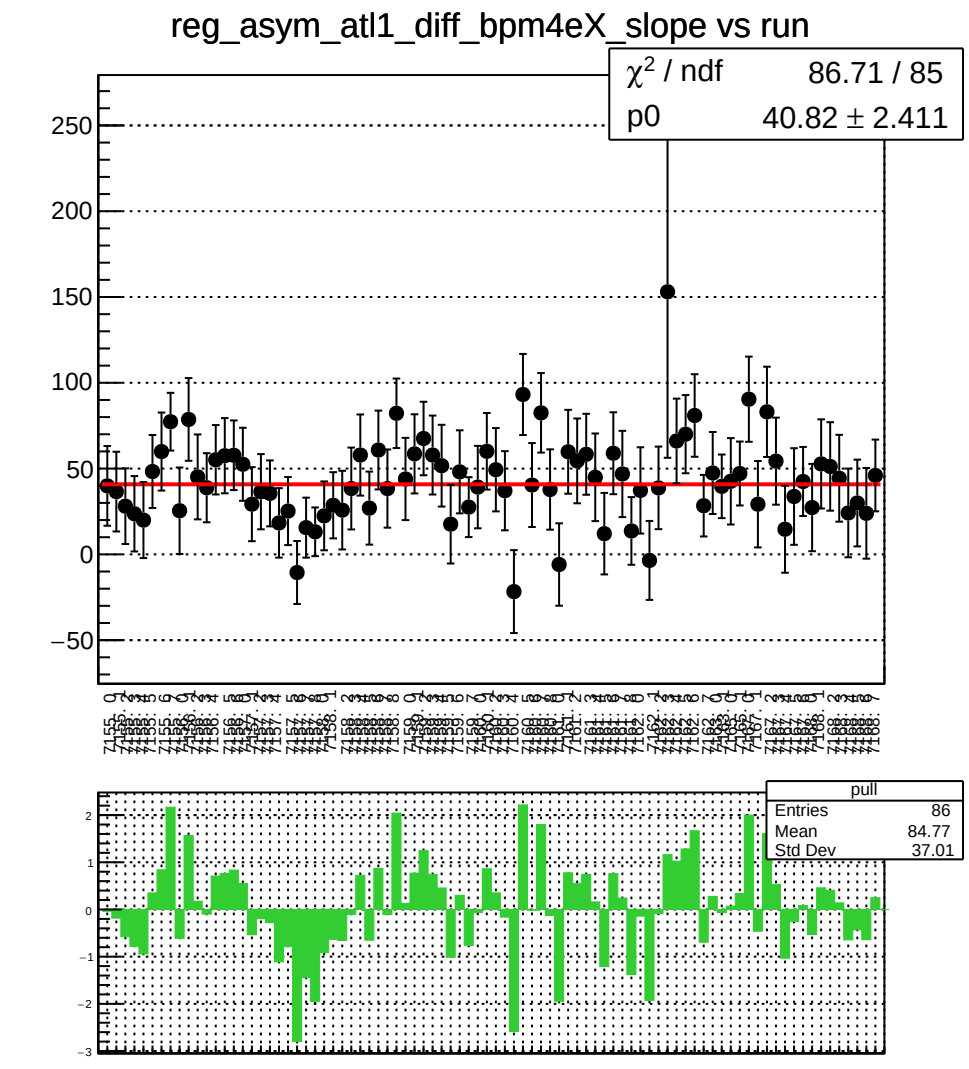

pull1D
Entries 86
Mean 0.03486
Std Dev 1.186

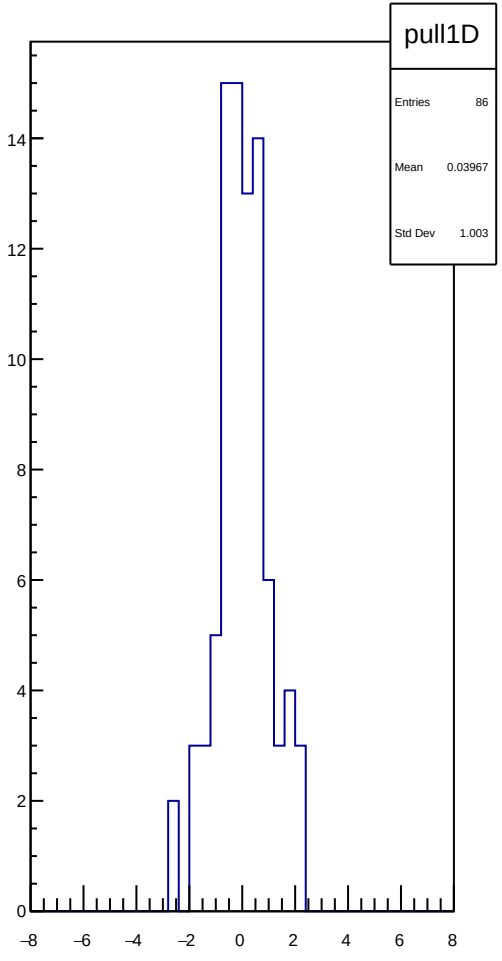

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 18.42 / 85
p0 −0.065 ± 0.0164
pull
Entries 86
Mean −1379
Std Dev 1417
pull1D
Entries 86
Mean −0.003035
Std Dev 0.4628

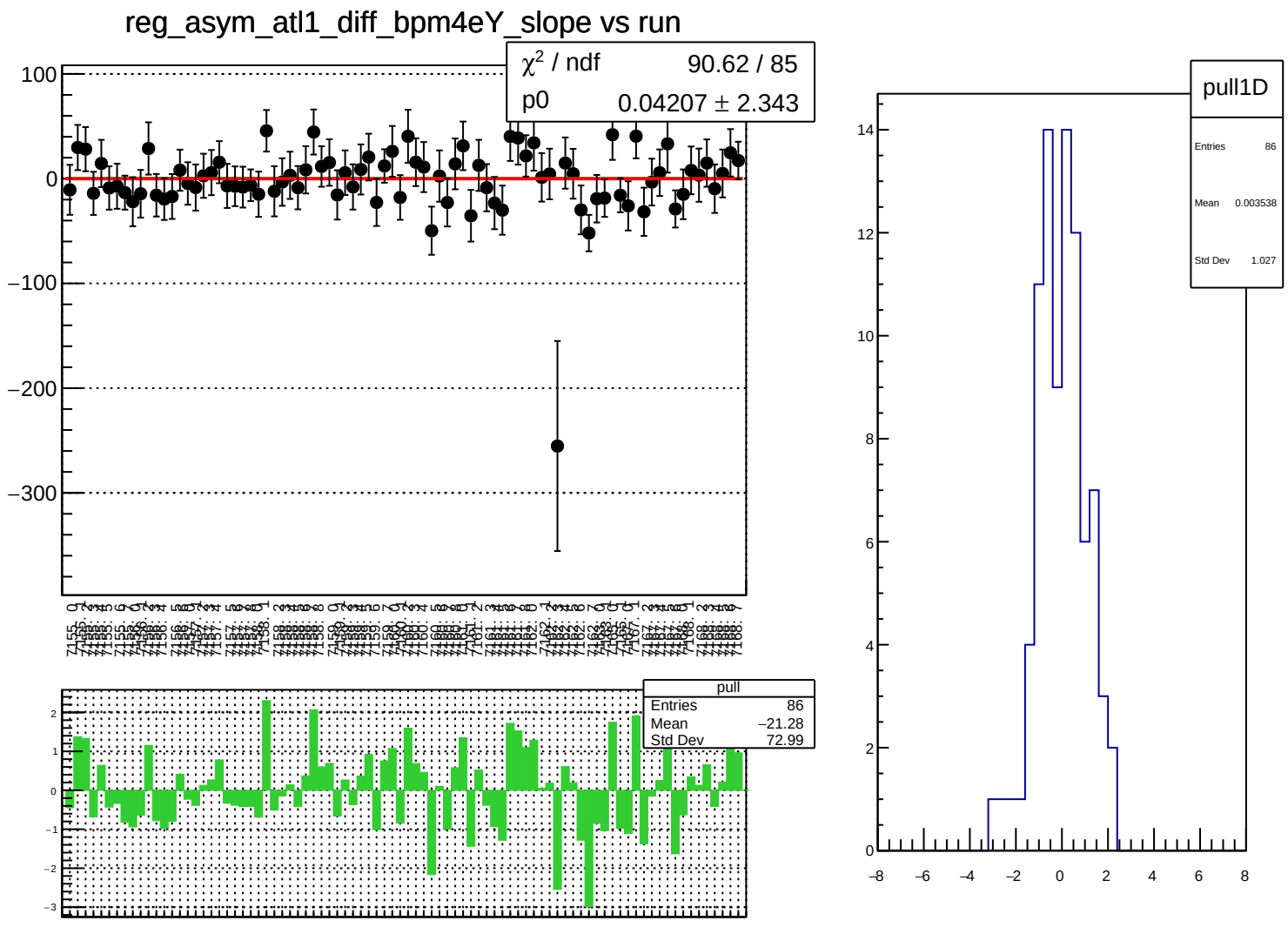

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 83.53 / 85
p0 −4.568 ± 2.381
pull
Entries 86
Mean 75.16
Std Dev 33.21

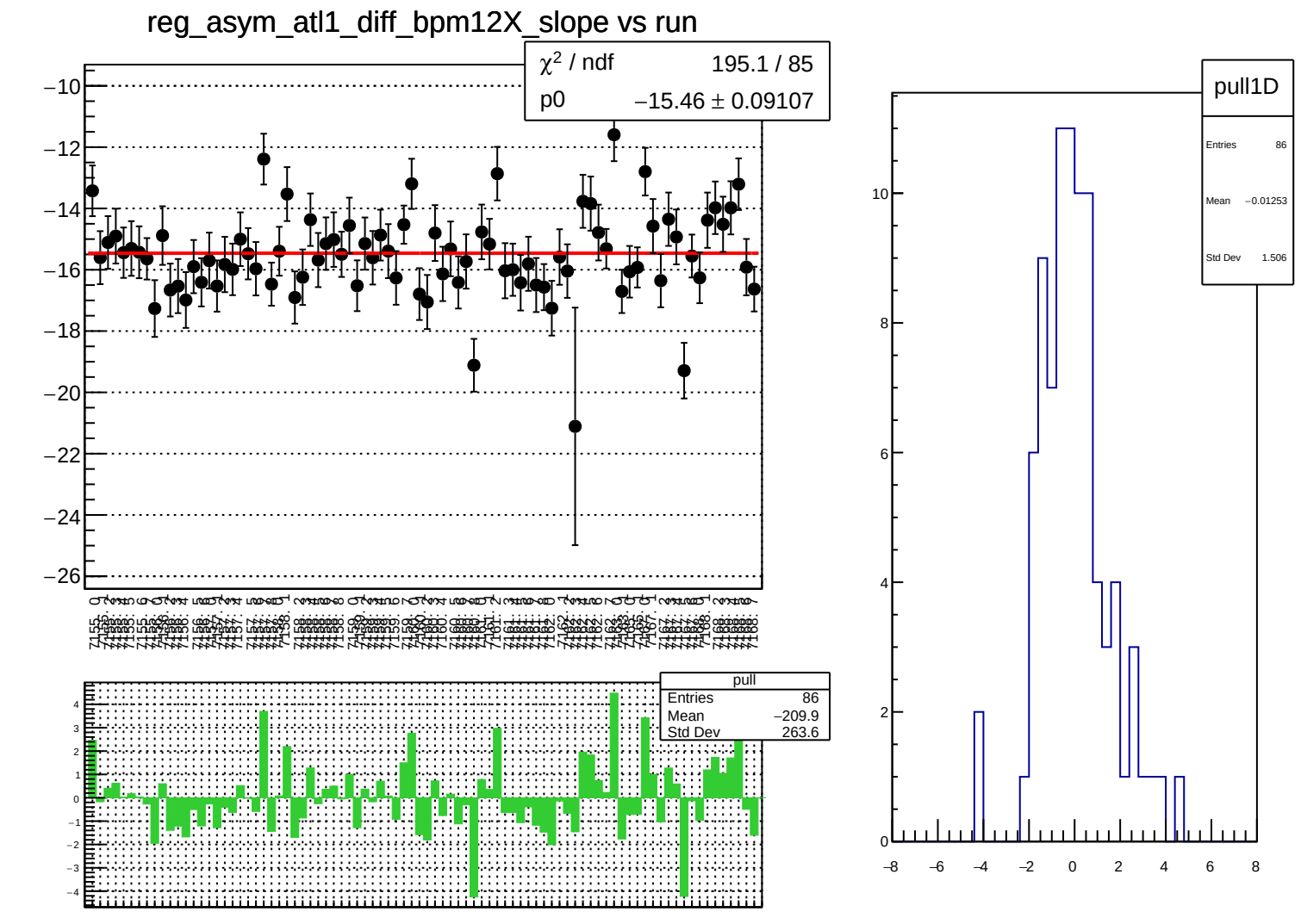

pull1D
Entries 86
Mean −0.03593
Std Dev 0.9849

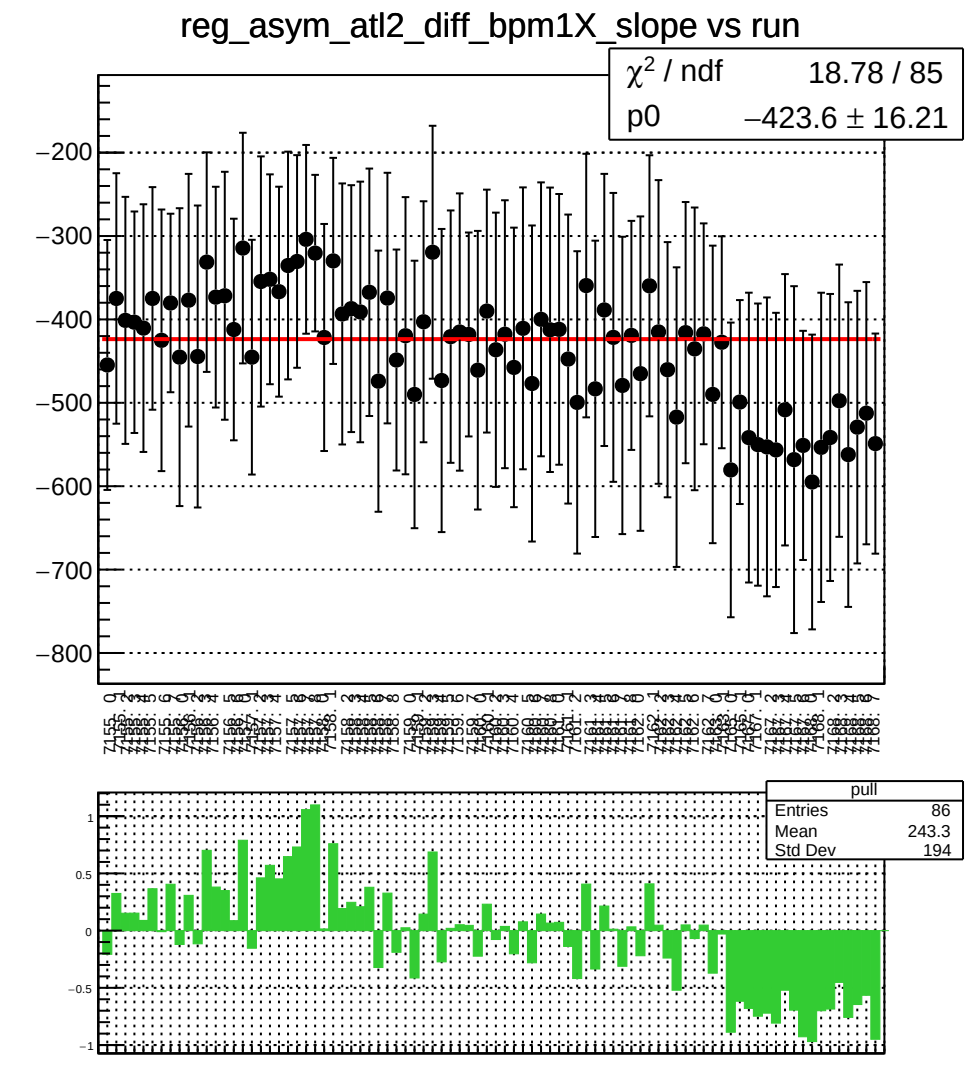

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 93.77 / 85
p0 −0.1562 ± 2.019
300
250
200
150
100
50
0
−50
pull
Entries 86
Mean −75.76
Std Dev 134
3
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.003367
Std Dev 1.044
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

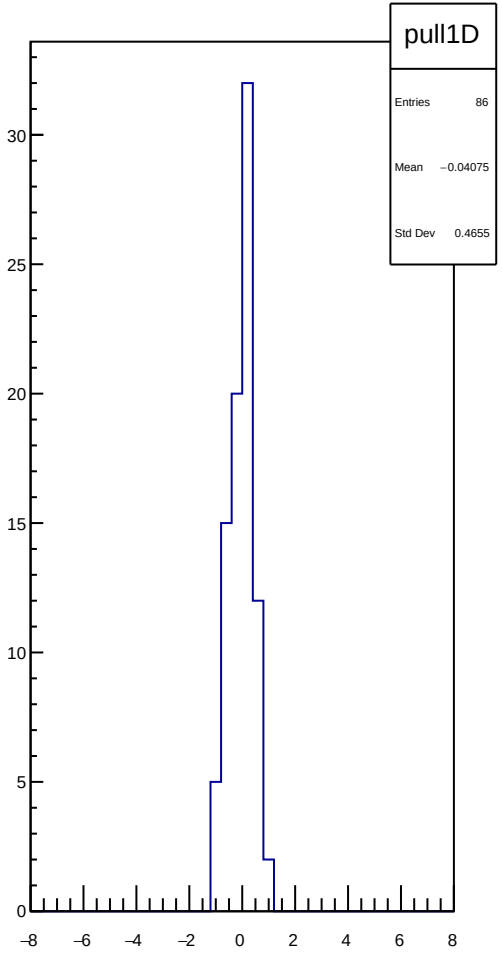

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 86.71 / 85
p0 40.82 ± 2.411
pull
Entries 86
Mean 84.77
Std Dev 37.01

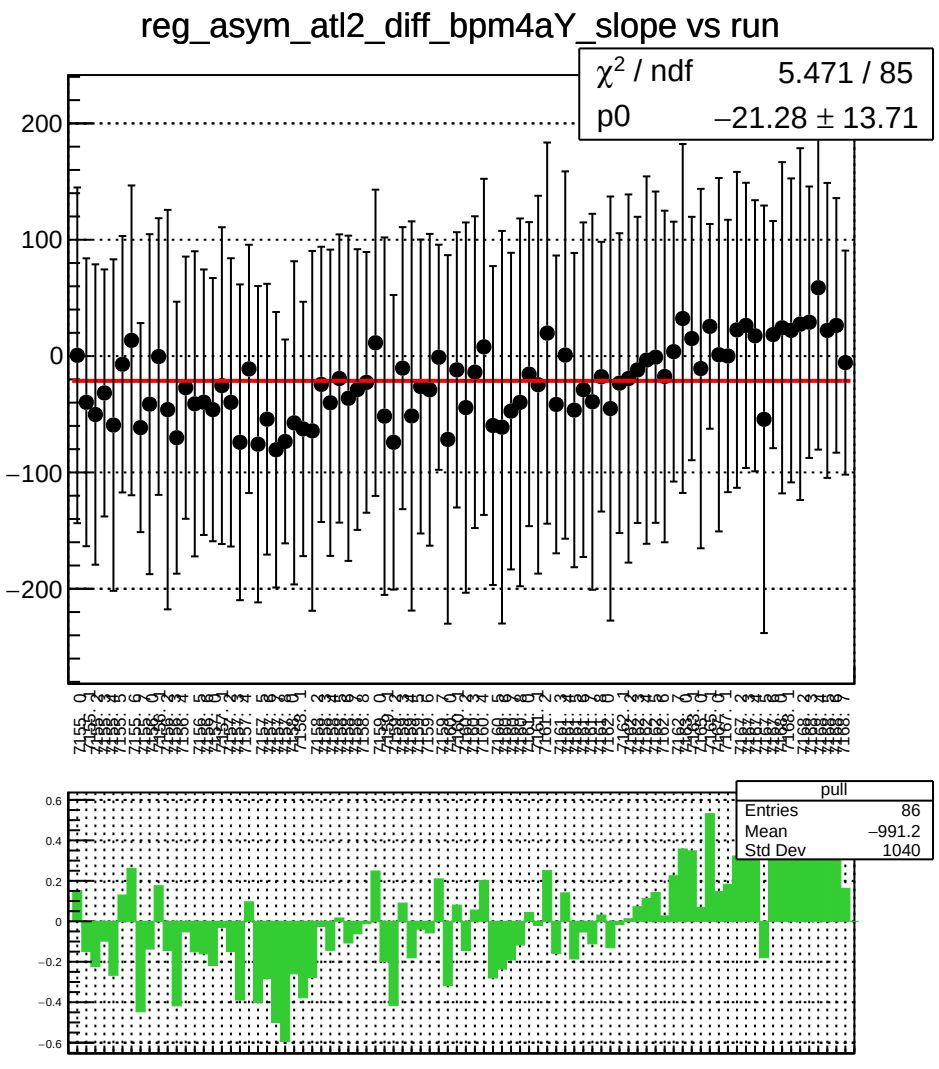

pull1D
Entries 86
Mean 0.03967
Std Dev 1.003

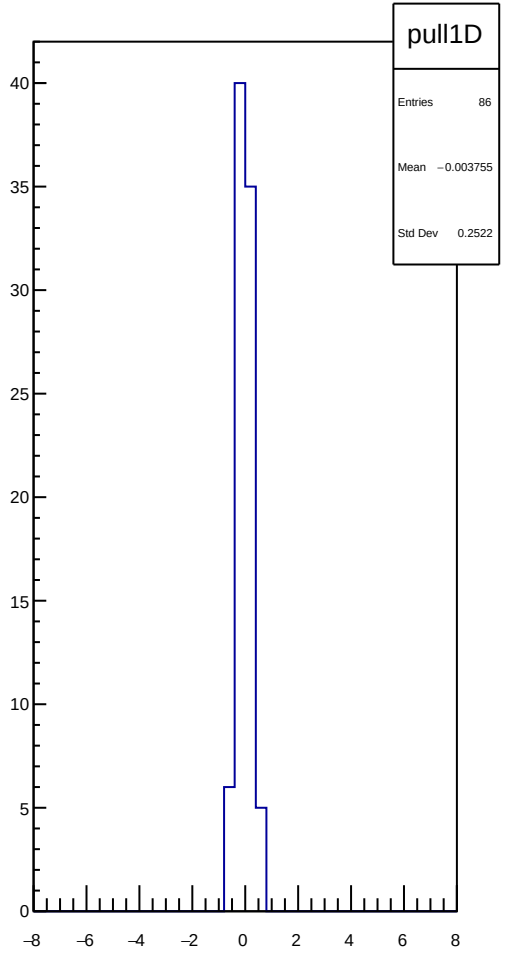

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 90.62 / 85
p0 0.04207 ± 2.343
100
0
−100
−200
−300
pull
Entries 86
Mean −21.28
Std Dev 72.99
2
1
0
−1
−2
−3
pull1D
Entries 86
Mean 0.003538
Std Dev 1.027
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

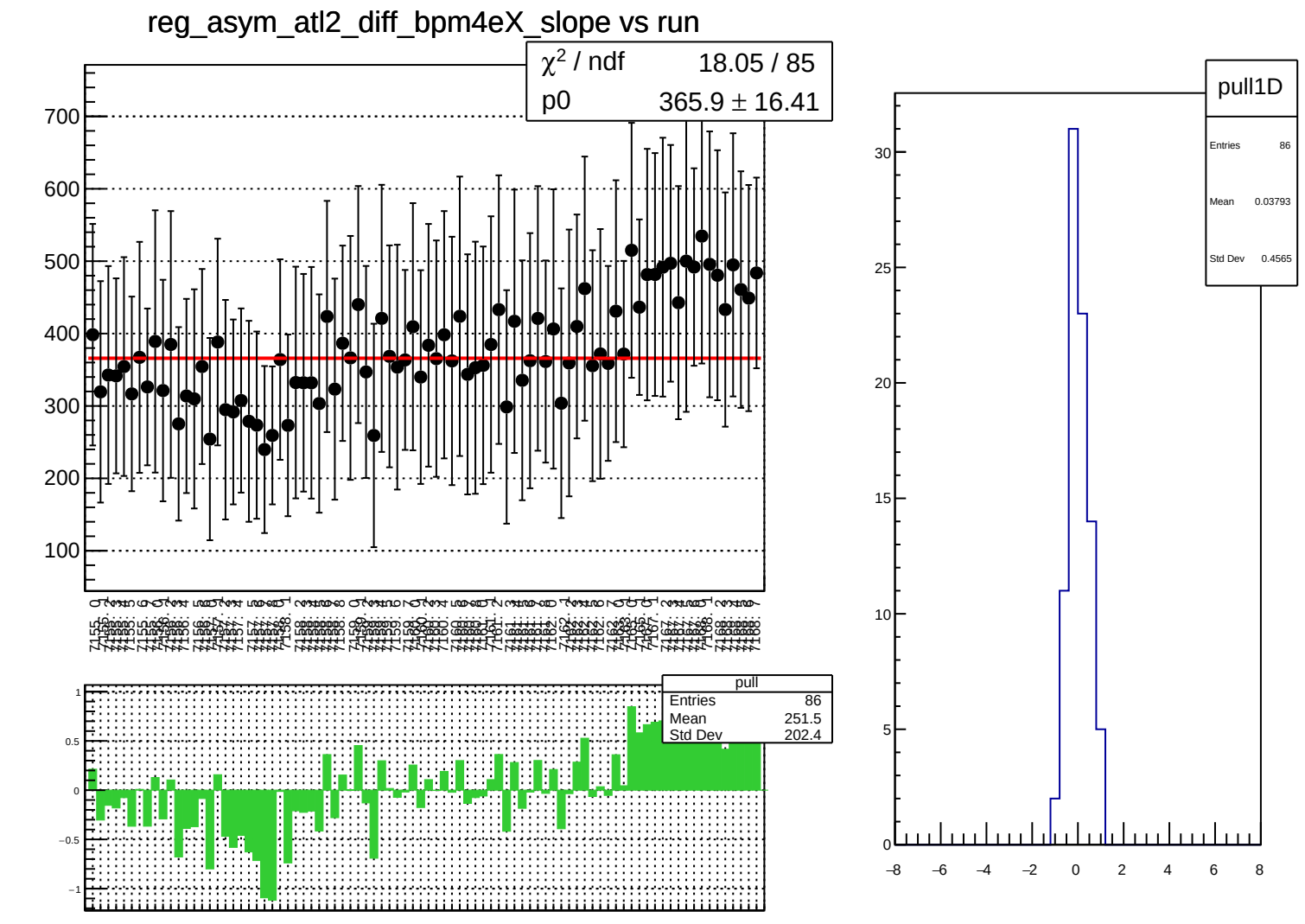

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 195.1 / 85
p0 −15.46 ± 0.09107
pull
Entries 86
Mean −209.9
Std Dev 263.6
pull1D
Entries 86
Mean −0.01253
Std Dev 1.506

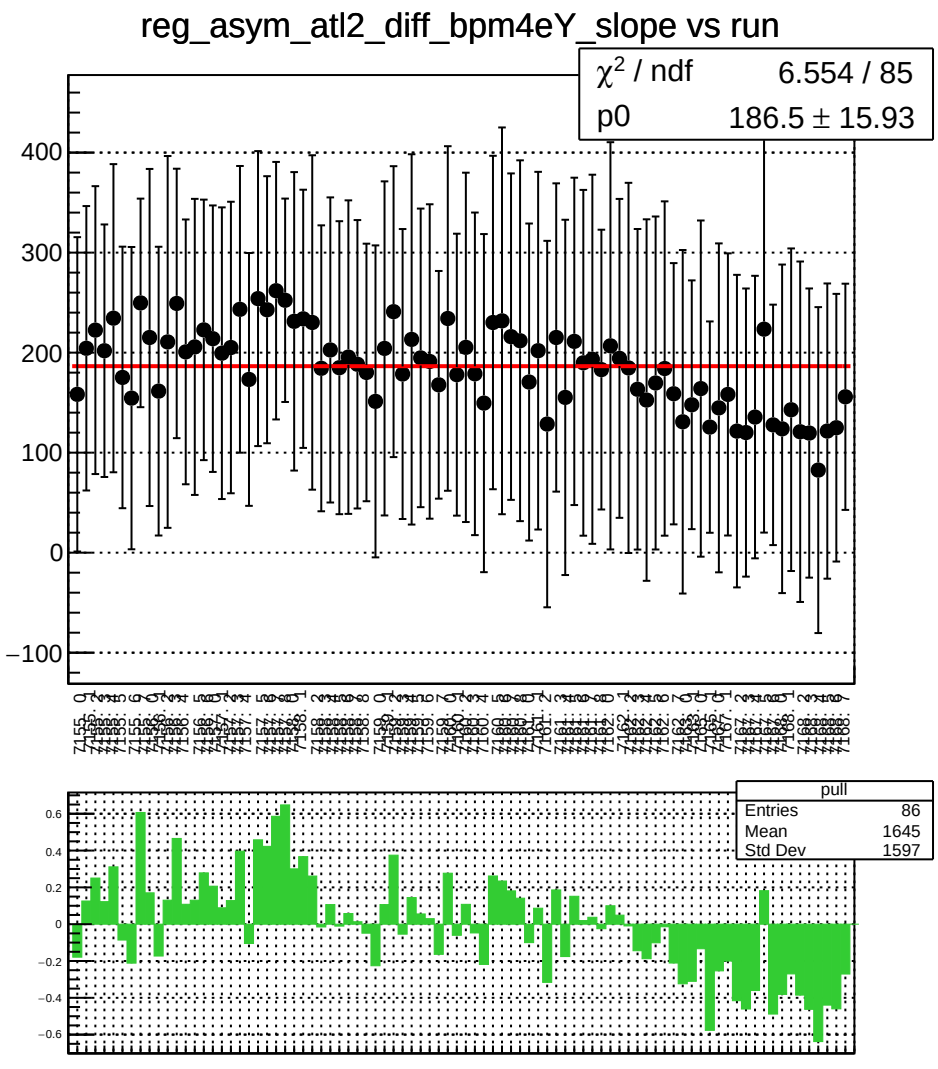

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 18.78 / 85
p0 −423.6 ± 16.21
pull
Entries 86
Mean 243.3
Std Dev 194

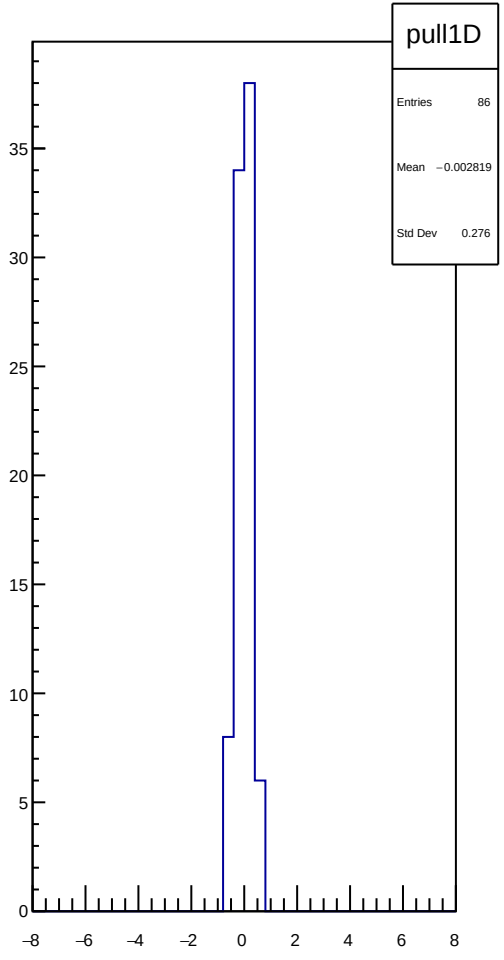

pull1D
Entries 86
Mean −0.04075
Std Dev 0.4655

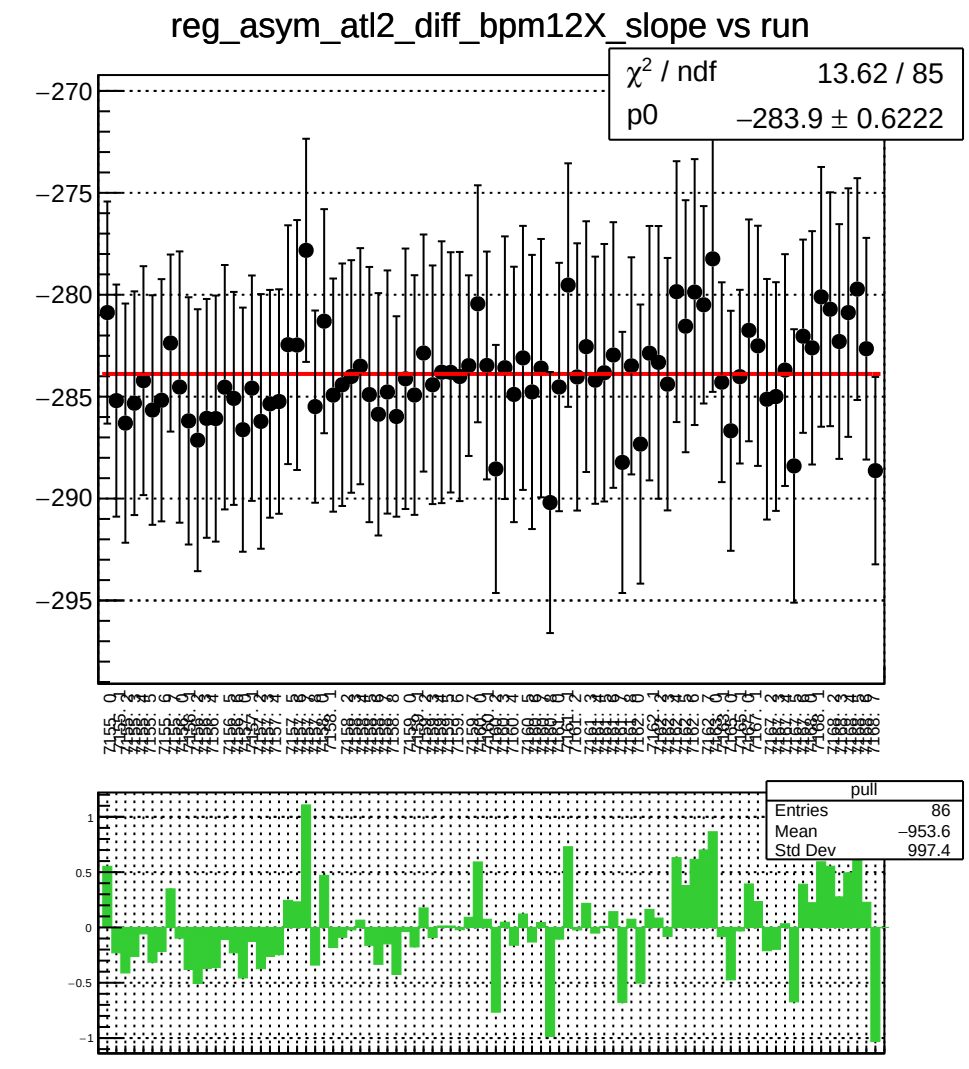

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 5.471 / 85
p0 −21.28 ± 13.71
200
100
0
−100
−200
pull
Entries 86
Mean −991.2
Std Dev 1040
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

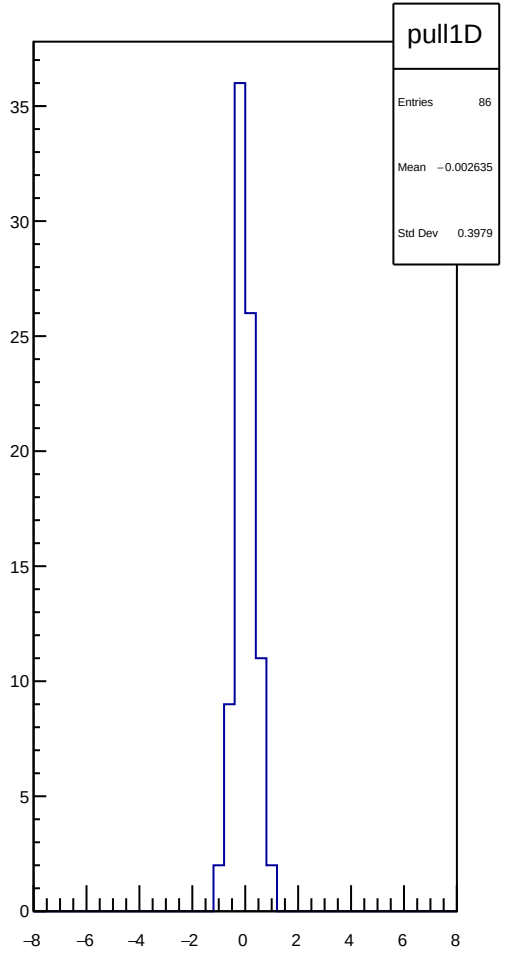

pull1D
Entries 86
Mean −0.003755
Std Dev 0.2522
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

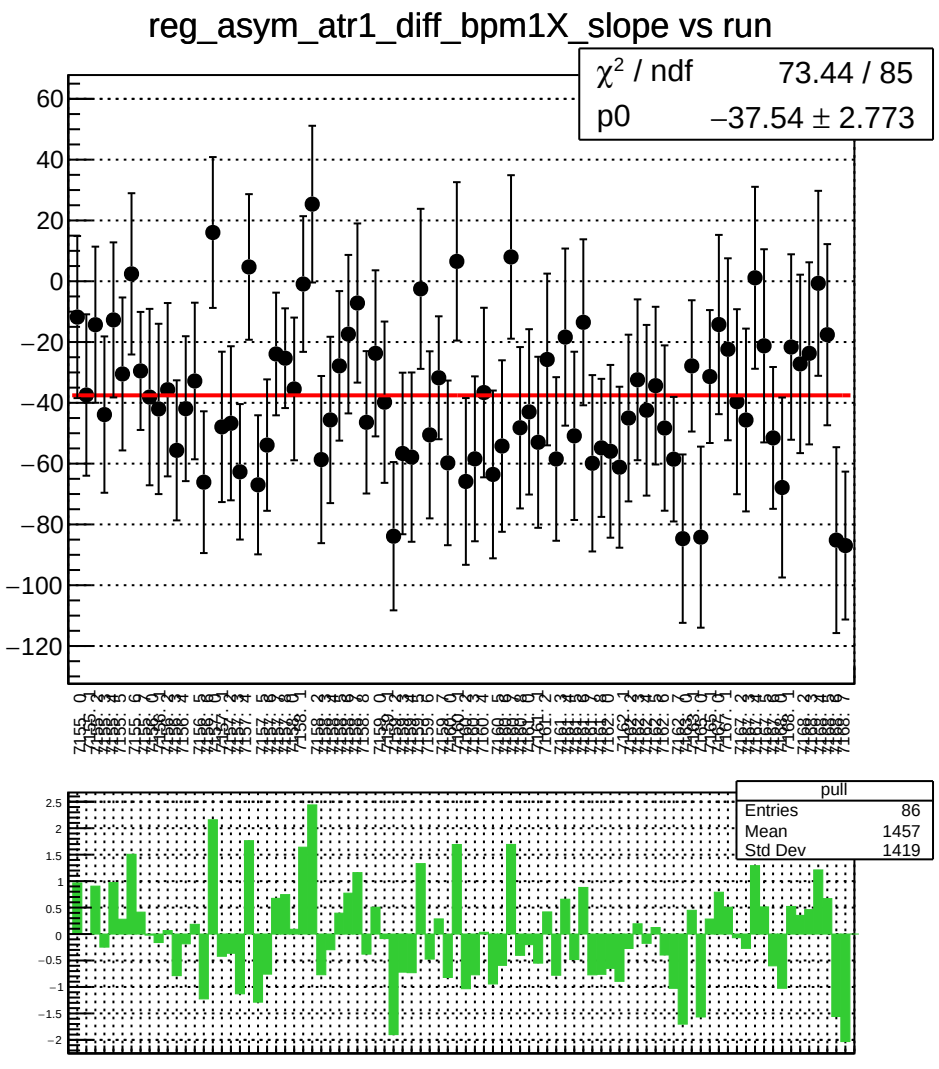

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 18.05 / 85
p0 365.9 ± 16.41
700
600
500
400
300
200
100
pull
Entries 86
Mean 251.5
Std Dev 202.4
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean 0.03793
Std Dev 0.4565
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

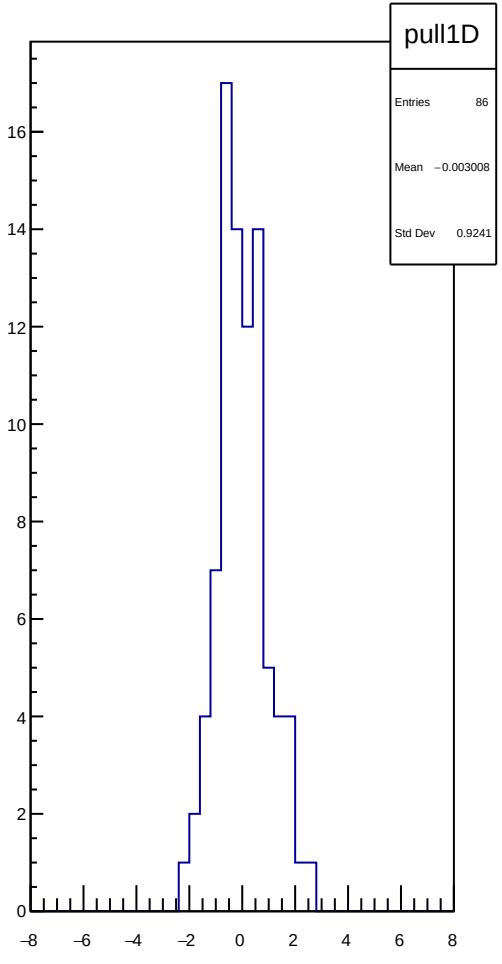

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 6.554 / 85
p0 186.5 ± 15.93
400
300
200
100
0
−100
pull
Entries 86
Mean 1645
Std Dev 1597
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

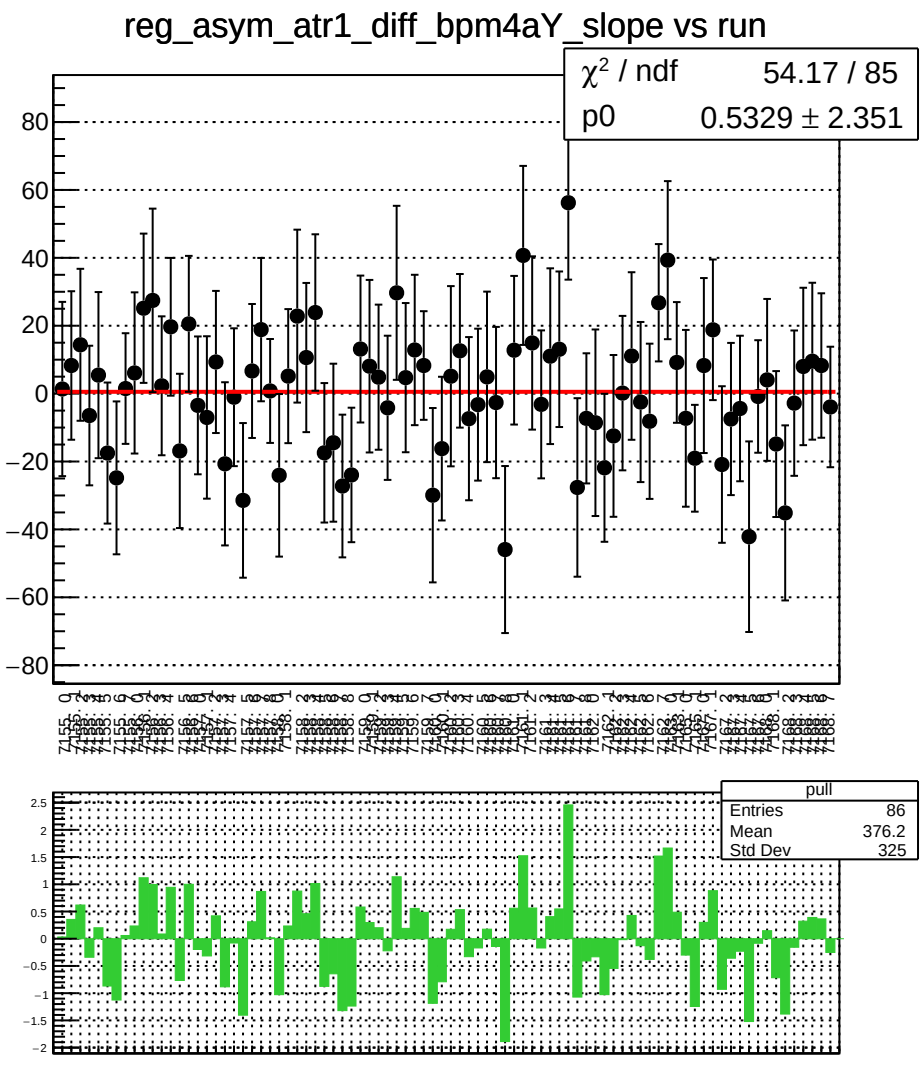

pull1D
Entries 86
Mean −0.002819
Std Dev 0.276
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

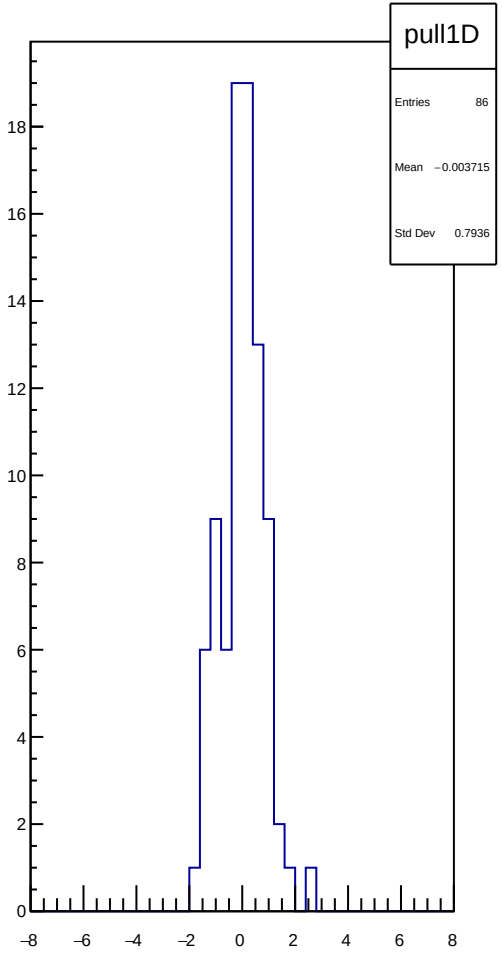

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 13.62 / 85
p0 −283.9 ± 0.6222
−270
−275
−280
−285
−290
−295
pull
Entries 86
Mean −953.6
Std Dev 997.4
1
0.5
0
−0.5
−1

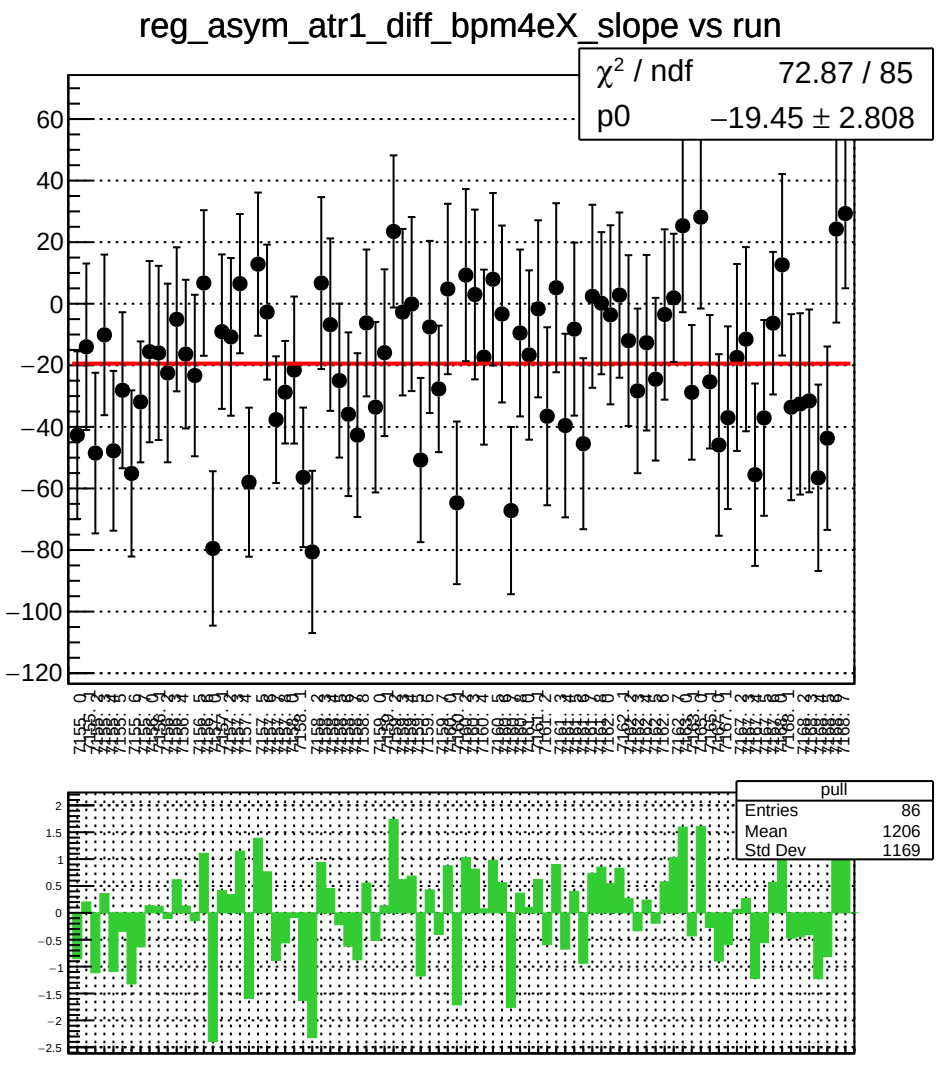

pull1D
Entries 86
Mean −0.002635
Std Dev 0.3979
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

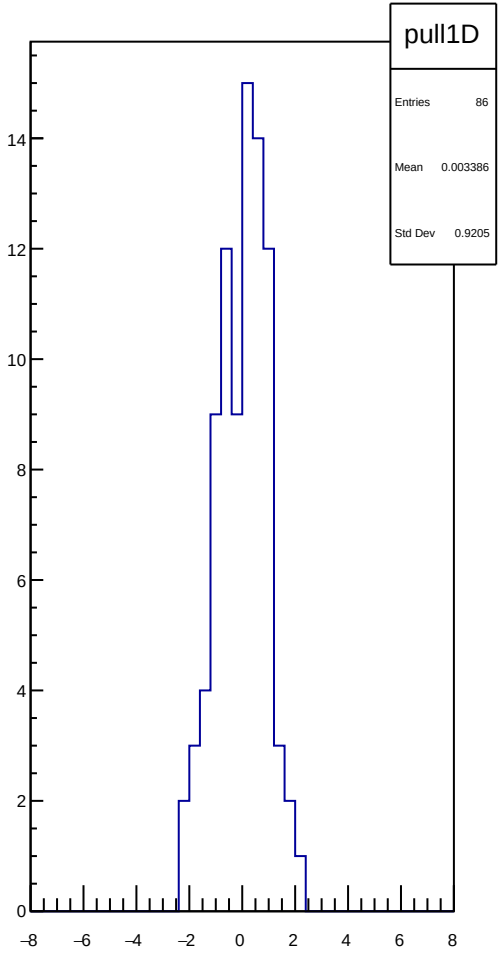

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 73.44 / 85
p0 −37.54 ± 2.773
pull
Entries 86
Mean 1457
Std Dev 1419

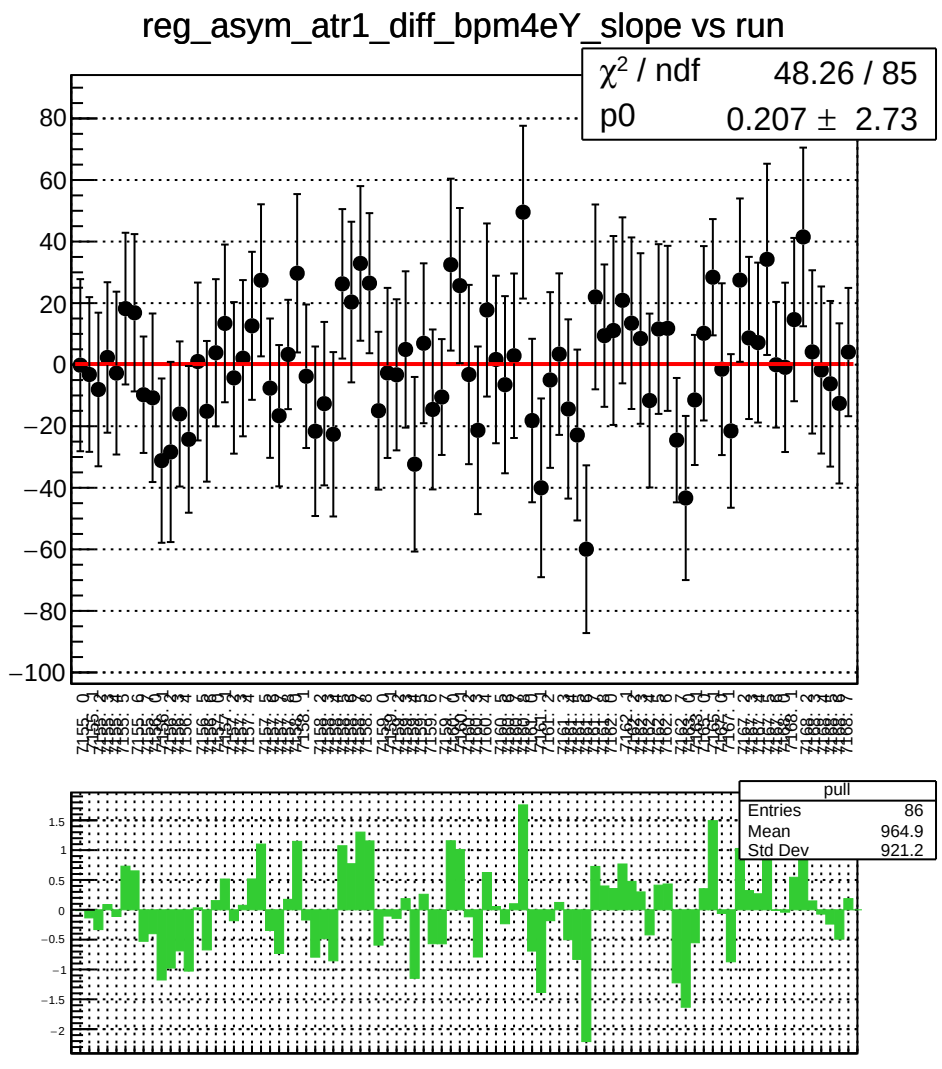

pull1D
Entries 86
Mean −0.003008
Std Dev 0.9241

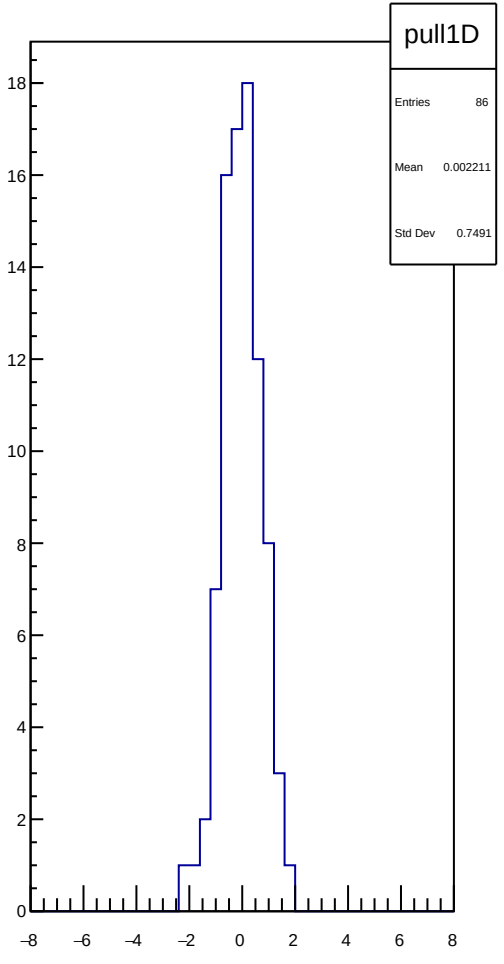

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 54.17 / 85
p0 0.5329 ± 2.351
pull
Entries 86
Mean 376.2
Std Dev 325

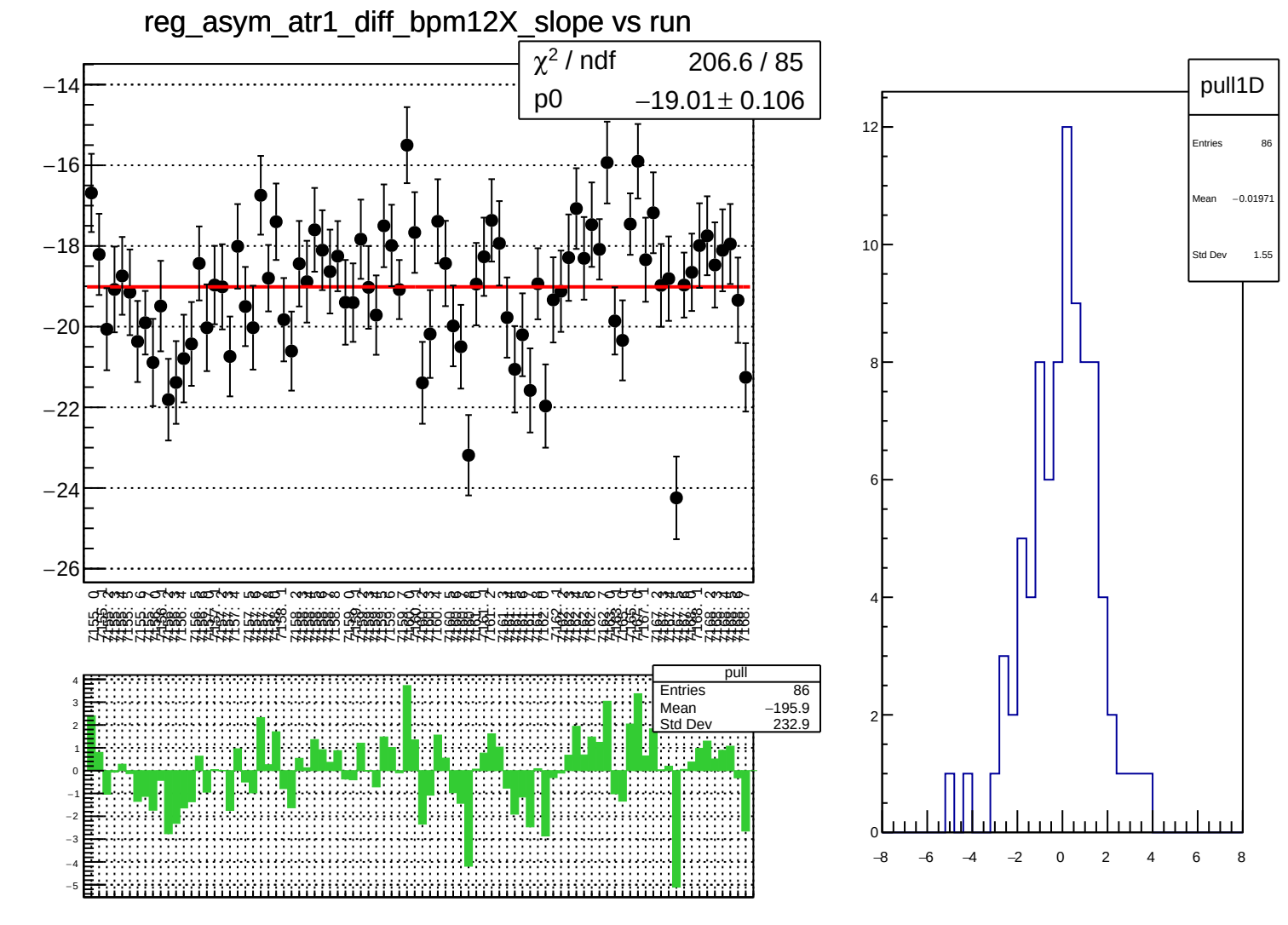

pull1D
Entries 86
Mean −0.003715
Std Dev 0.7936

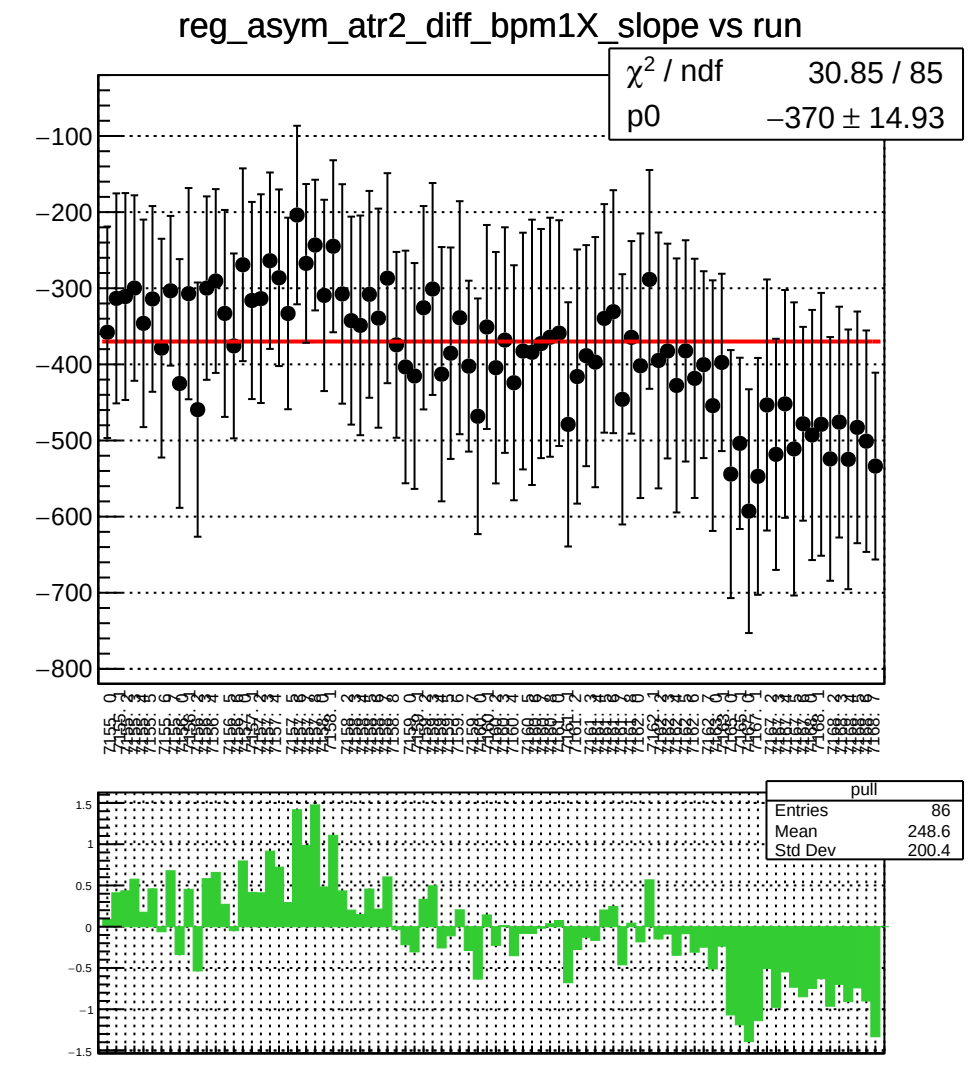

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 72.87 / 85
p0 −19.45 ± 2.808
pull
Entries 86
Mean 1206
Std Dev 1169

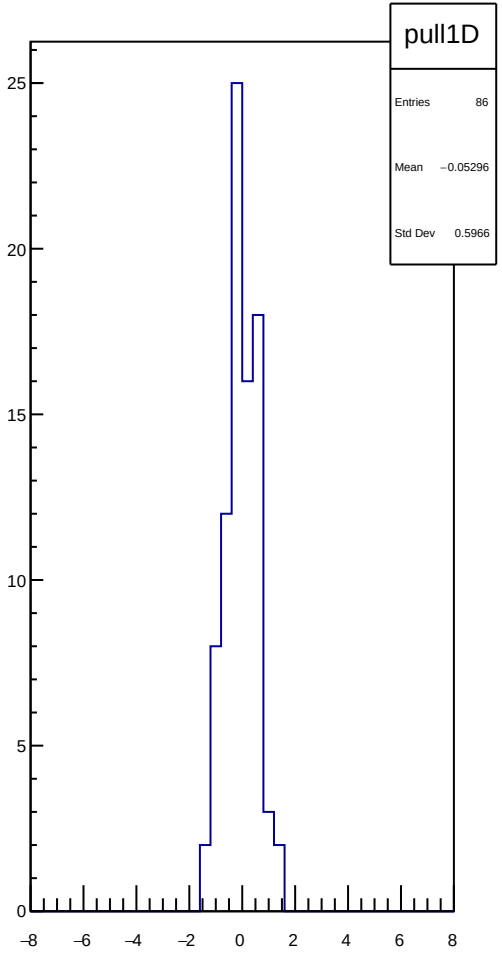

pull1D
Entries 86
Mean 0.003386
Std Dev 0.9205

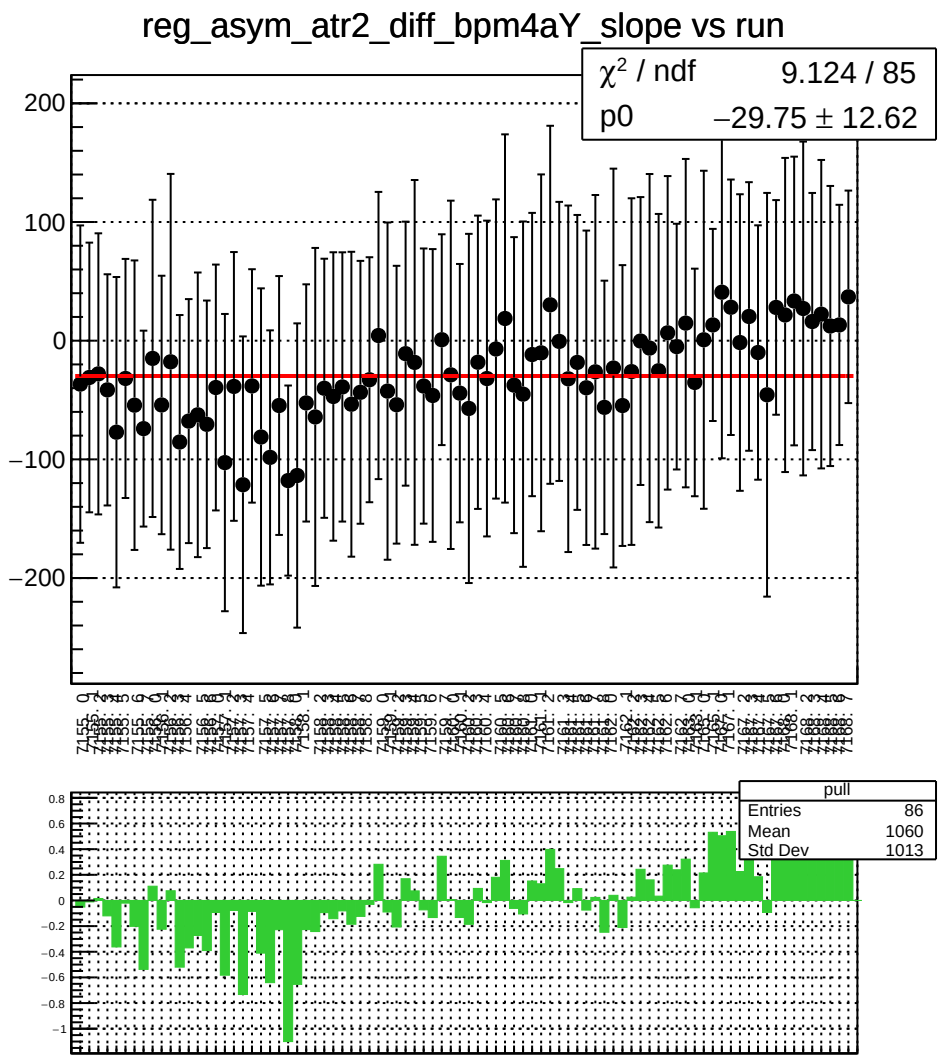

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 48.26 / 85
p0 0.207 ± 2.73
pull
Entries 86
Mean 964.9
Std Dev 921.2

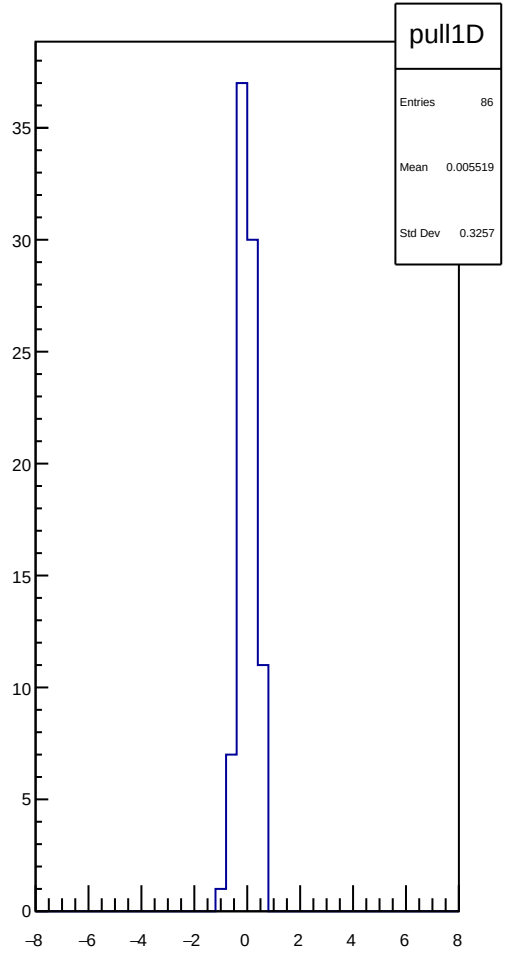

pull1D
Entries 86
Mean 0.002211
Std Dev 0.7491

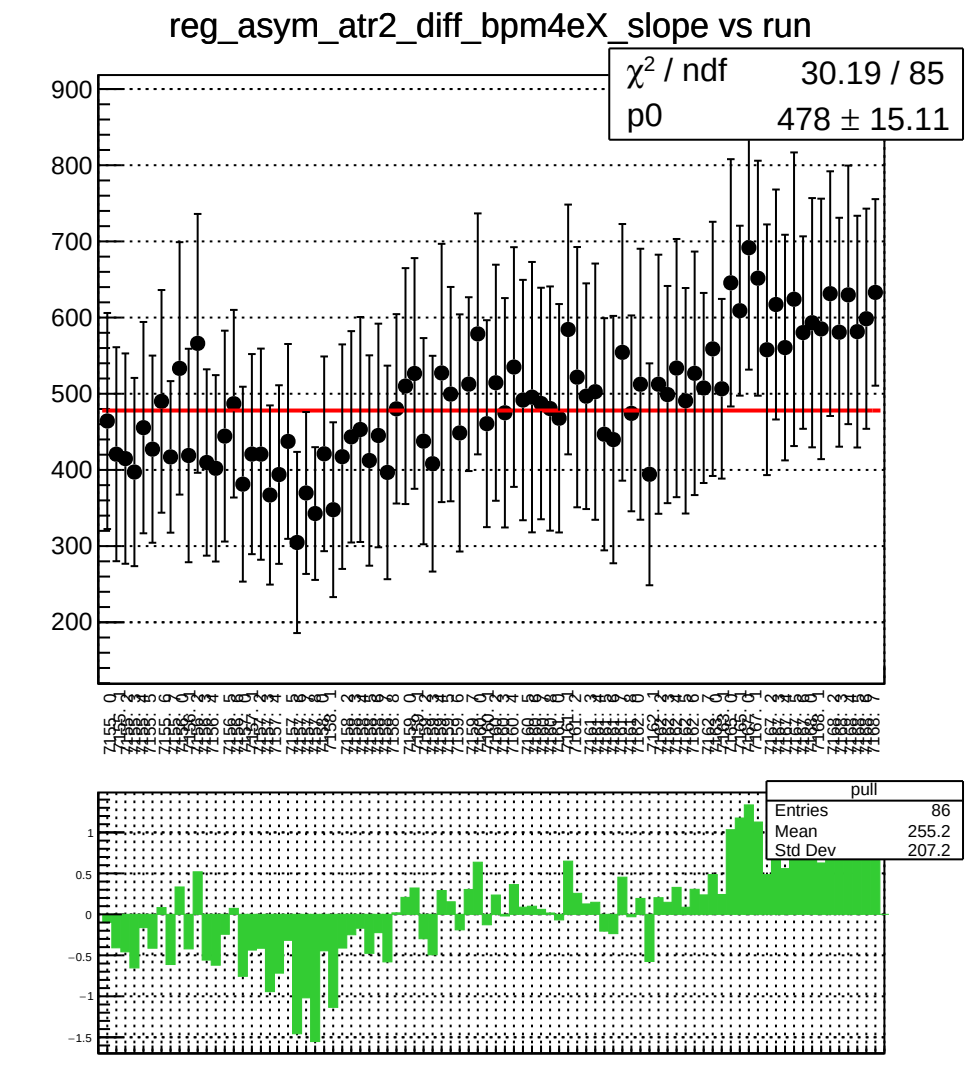

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 206.6 / 85
p0 −19.01 ± 0.106
pull
Entries 86
Mean −195.9
Std Dev 232.9
pull1D
Entries 86
Mean −0.01971
Std Dev 1.55

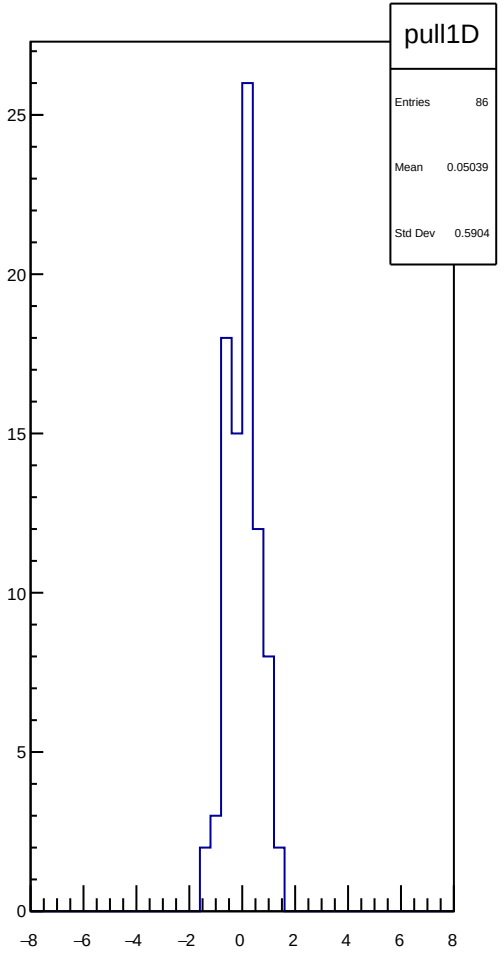

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 30.85 / 85
p0 −370 ± 14.93
pull
Entries 86
Mean 248.6
Std Dev 200.4

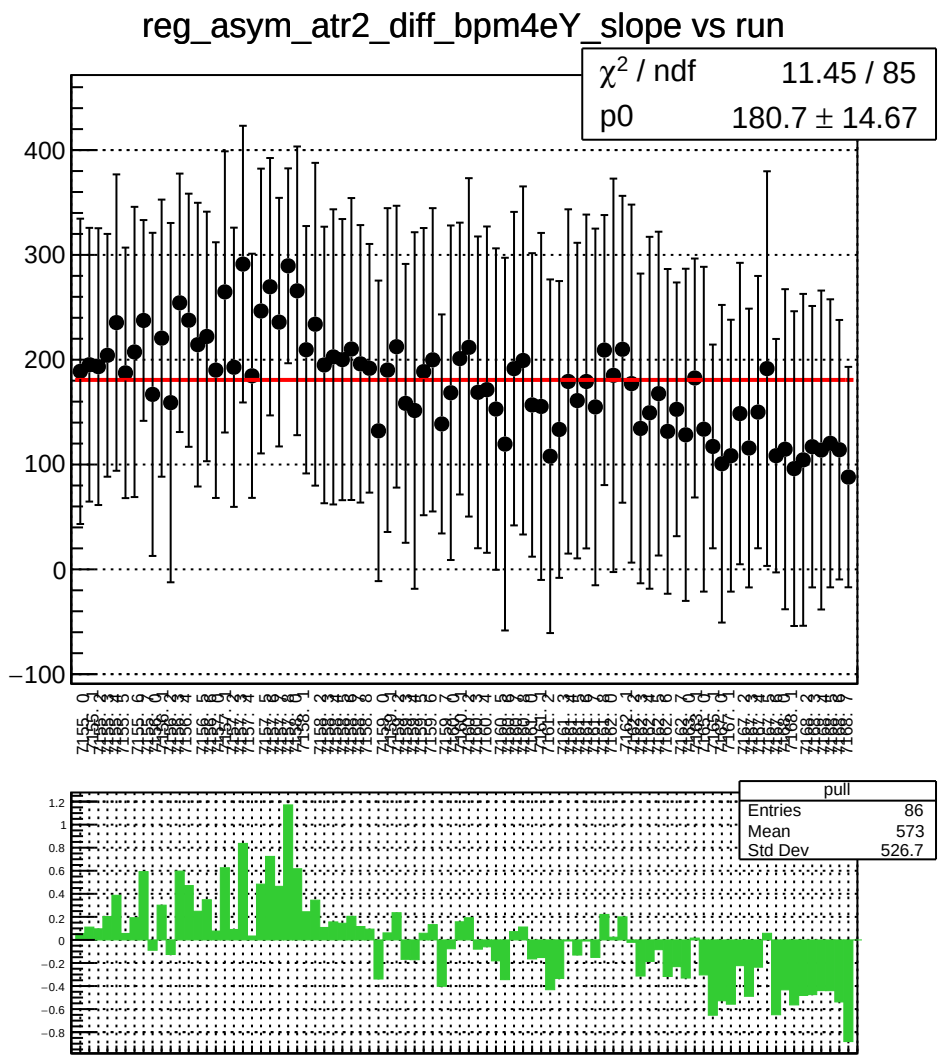

pull1D
Entries 86
Mean −0.05296
Std Dev 0.5966

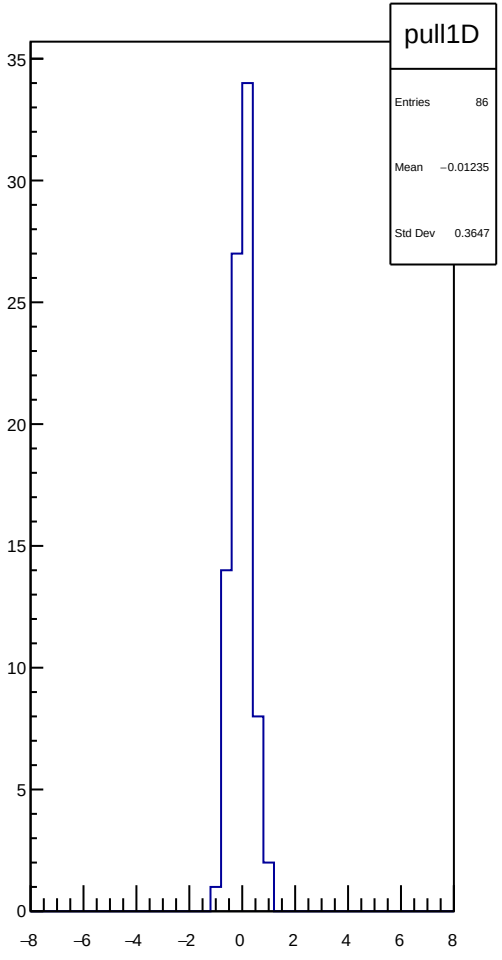

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 9.124 / 85
p0 −29.75 ± 12.62
200
100
0
−100
−200
pull
Entries 86
Mean 1060
Std Dev 1013
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

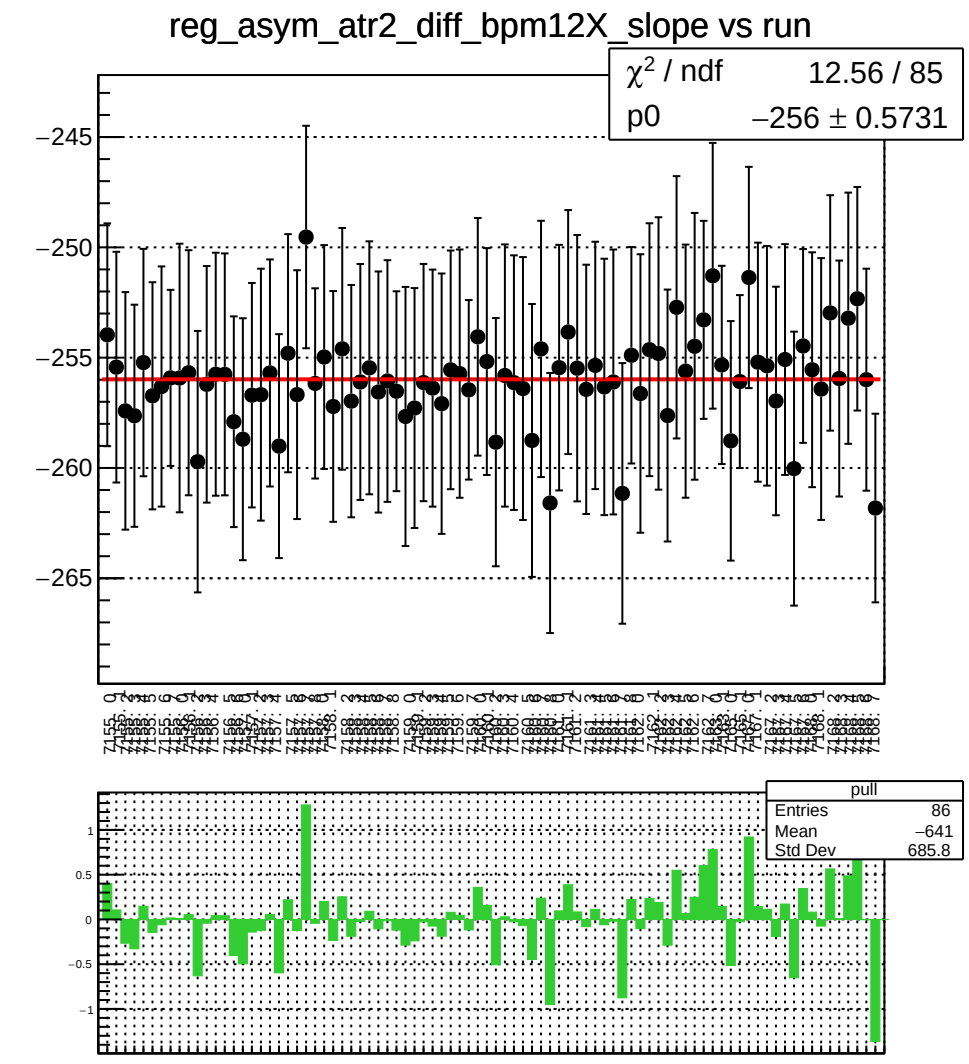

pull1D
Entries 86
Mean 0.005519
Std Dev 0.3257
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

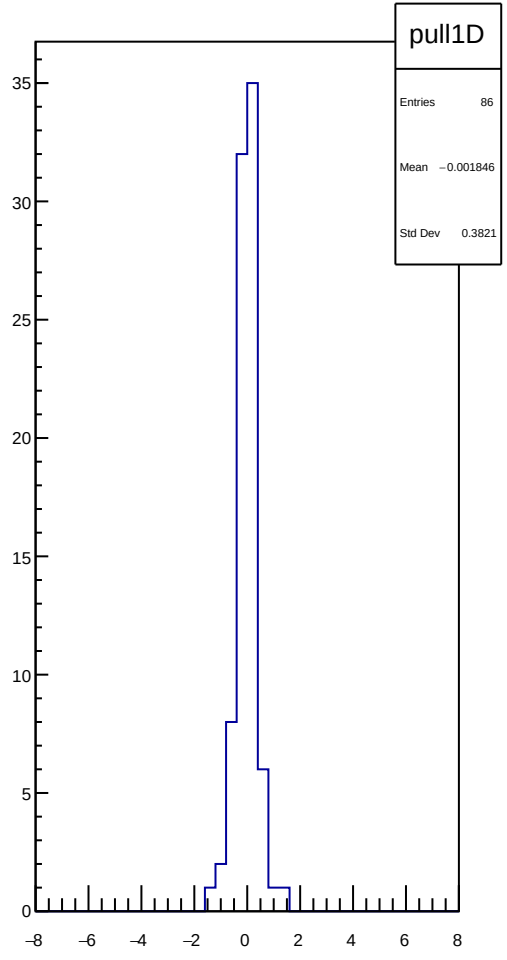

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 30.19 / 85
p0 478 ± 15.11
900
800
700
600
500
400
300
200
pull
Entries 86
Mean 255.2
Std Dev 207.2
1
0.5
0
−0.5
−1
−1.5

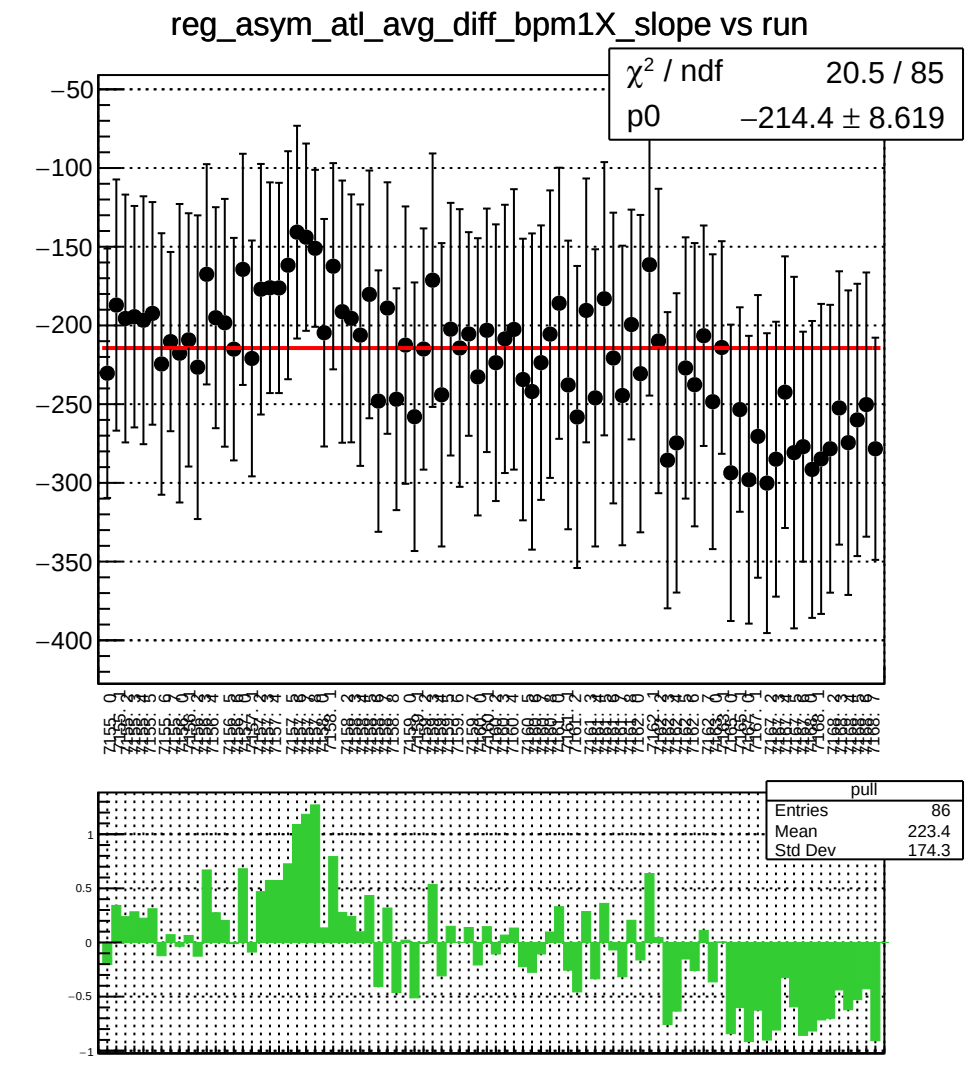

pull1D
Entries 86
Mean 0.05039
Std Dev 0.5904
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

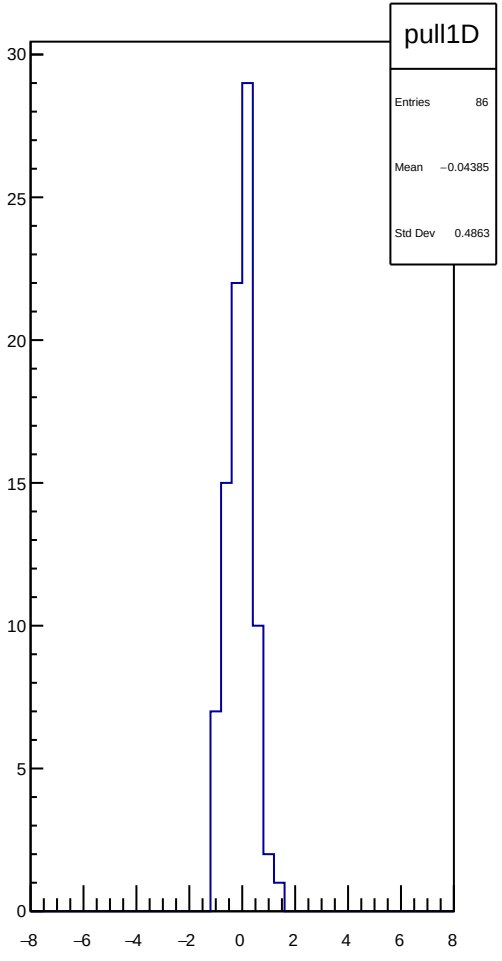

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 11.45 / 85
p0 180.7 ± 14.67
pull
Entries 86
Mean 573
Std Dev 526.7

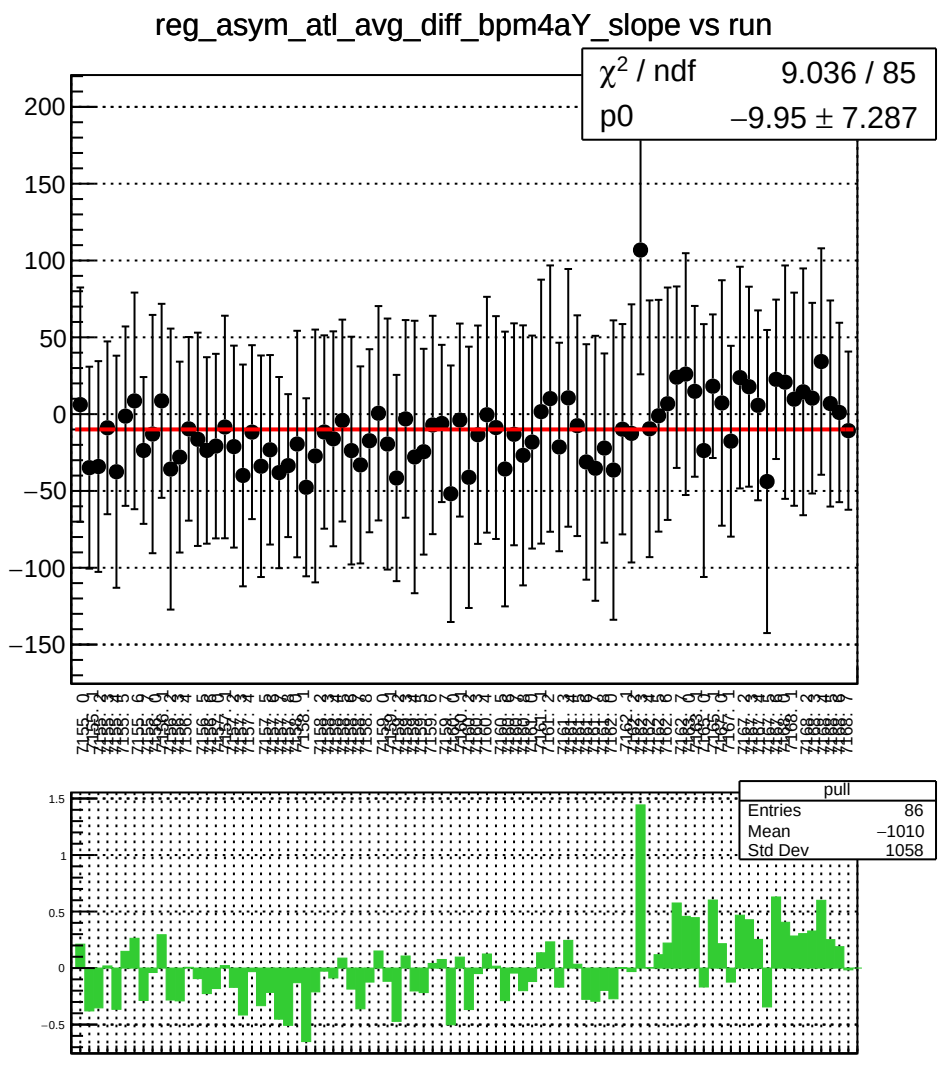

pull1D
Entries 86
Mean −0.01235
Std Dev 0.3647

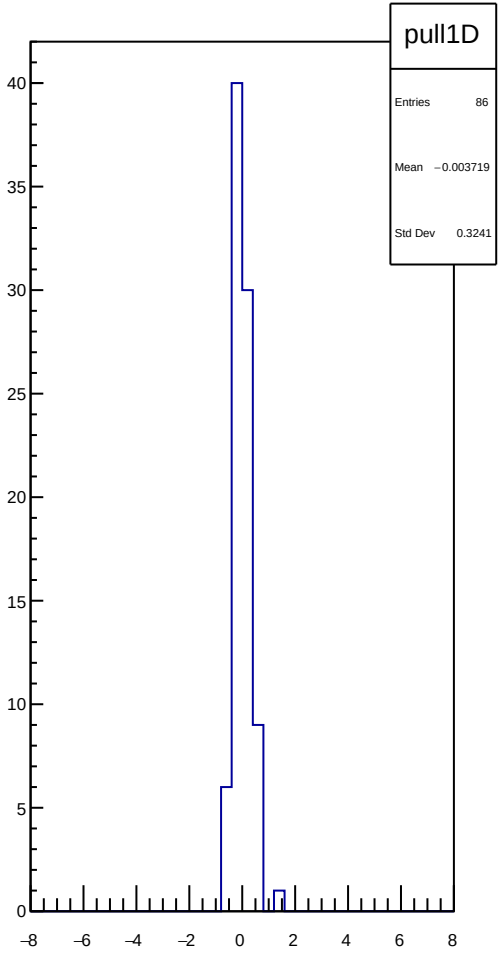

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 12.56 / 85
p0 −256 ± 0.5731
−245
−250
−255
−260
−265
pull
Entries 86
Mean −641
Std Dev 685.8
1
0.5
0
−0.5
−1

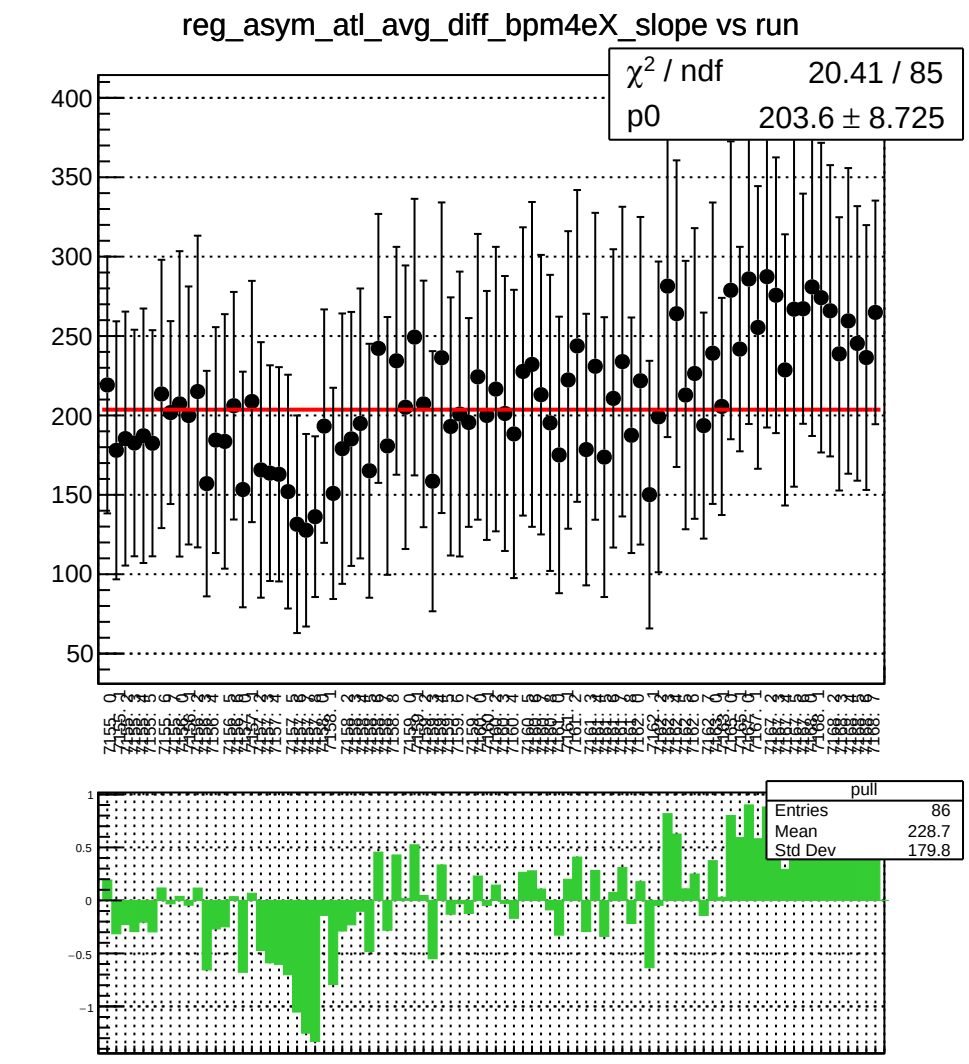

pull1D
Entries 86
Mean −0.001846
Std Dev 0.3821
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

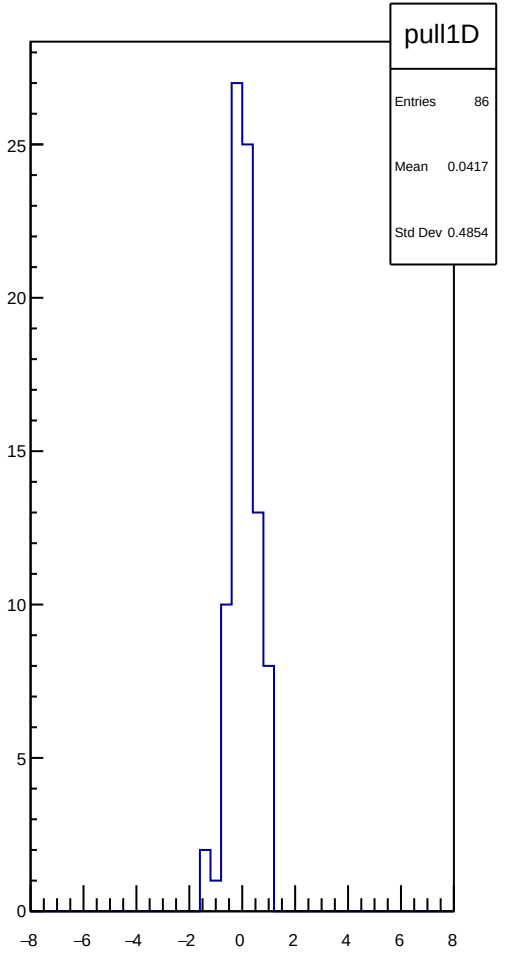

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 20.5 / 85
p0 −214.4 ± 8.619
pull
Entries 86
Mean 223.4
Std Dev 174.3

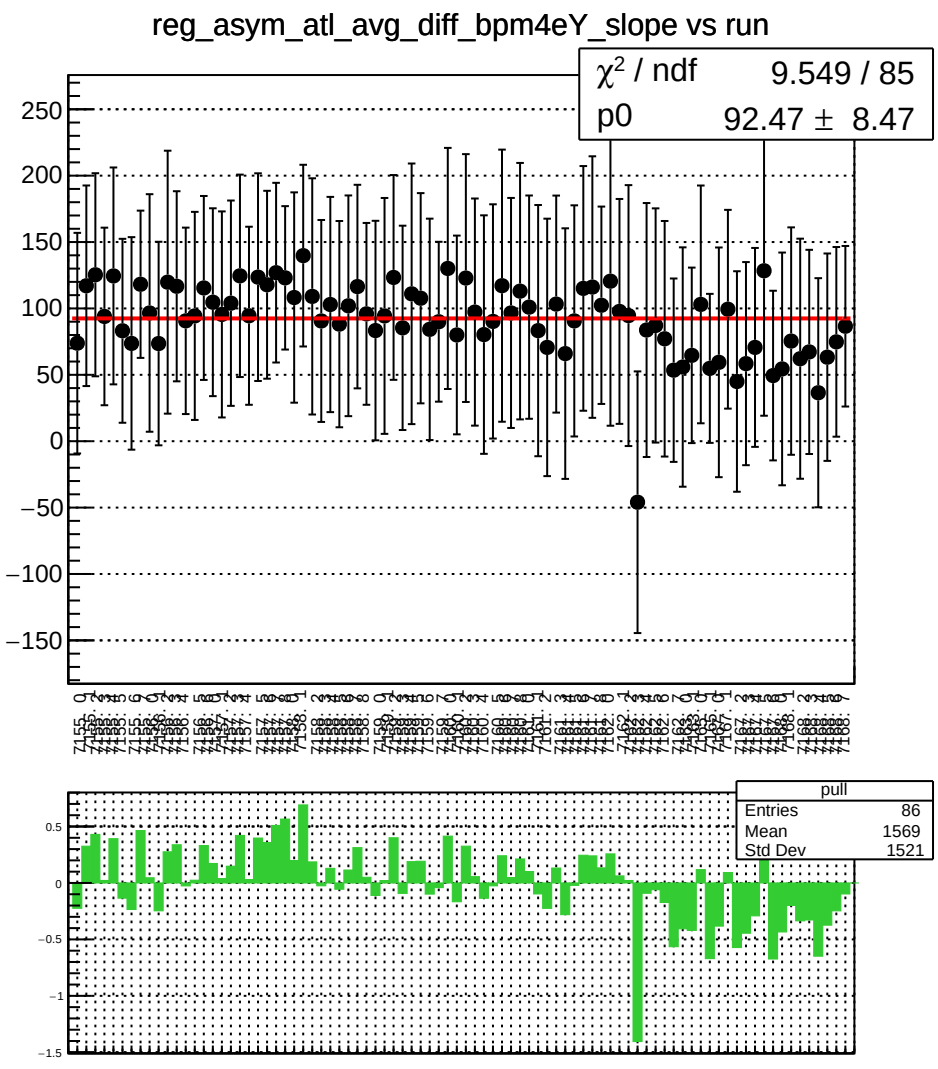

pull1D
Entries 86
Mean −0.04385
Std Dev 0.4863

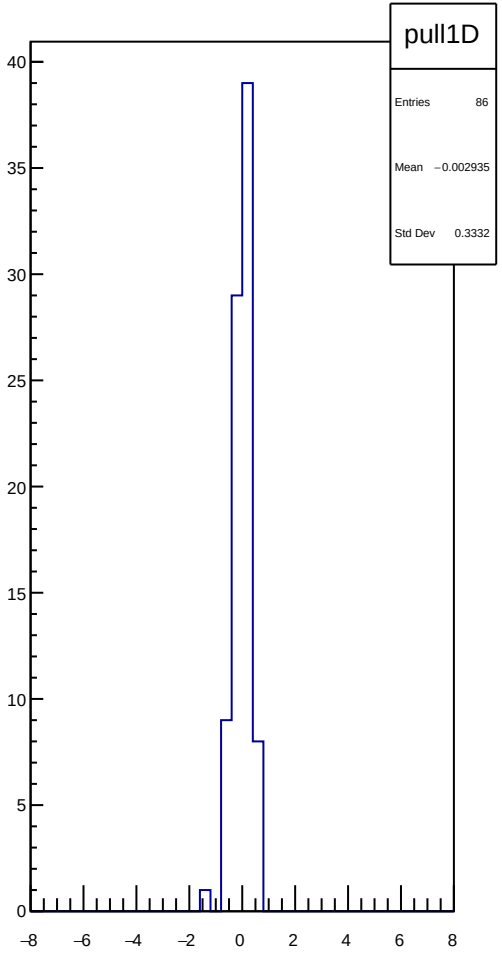

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.036 / 85
p0 −9.95 ± 7.287
pull
Entries 86
Mean −1010
Std Dev 1058

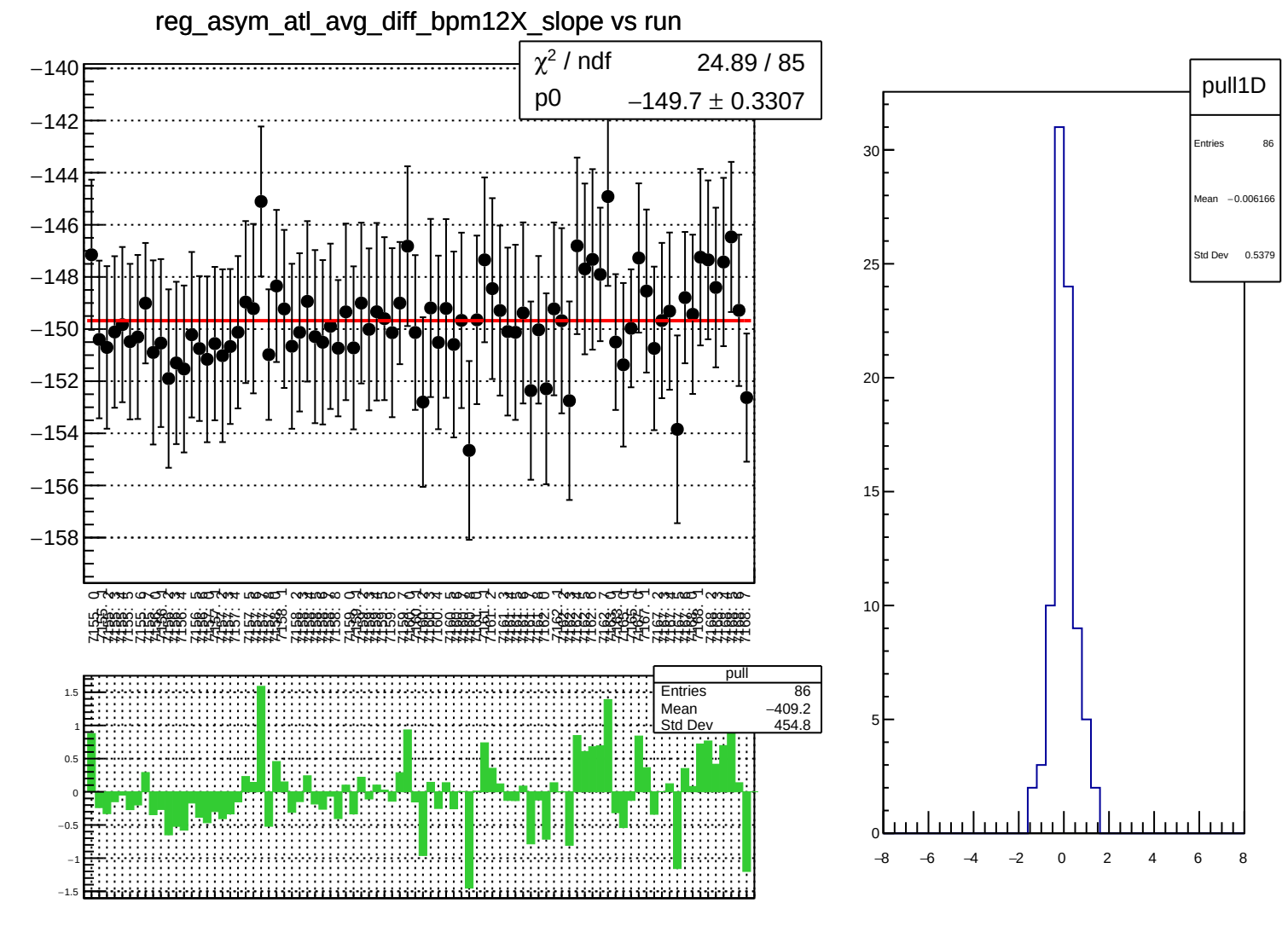

pull1D
Entries 86
Mean −0.003719
Std Dev 0.3241

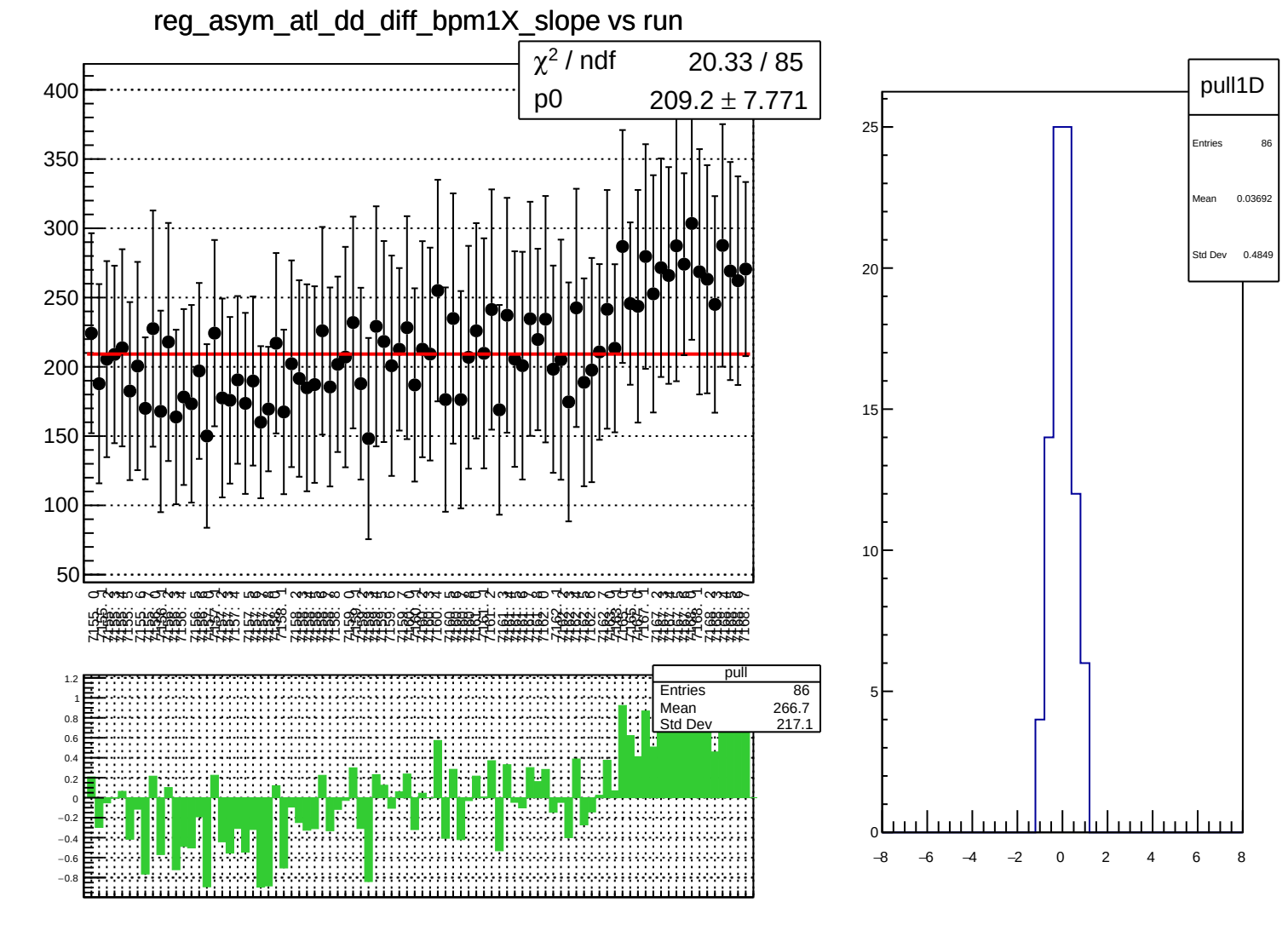

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 20.41 / 85
p0 203.6 ± 8.725
pull
Entries 86
Mean 228.7
Std Dev 179.8

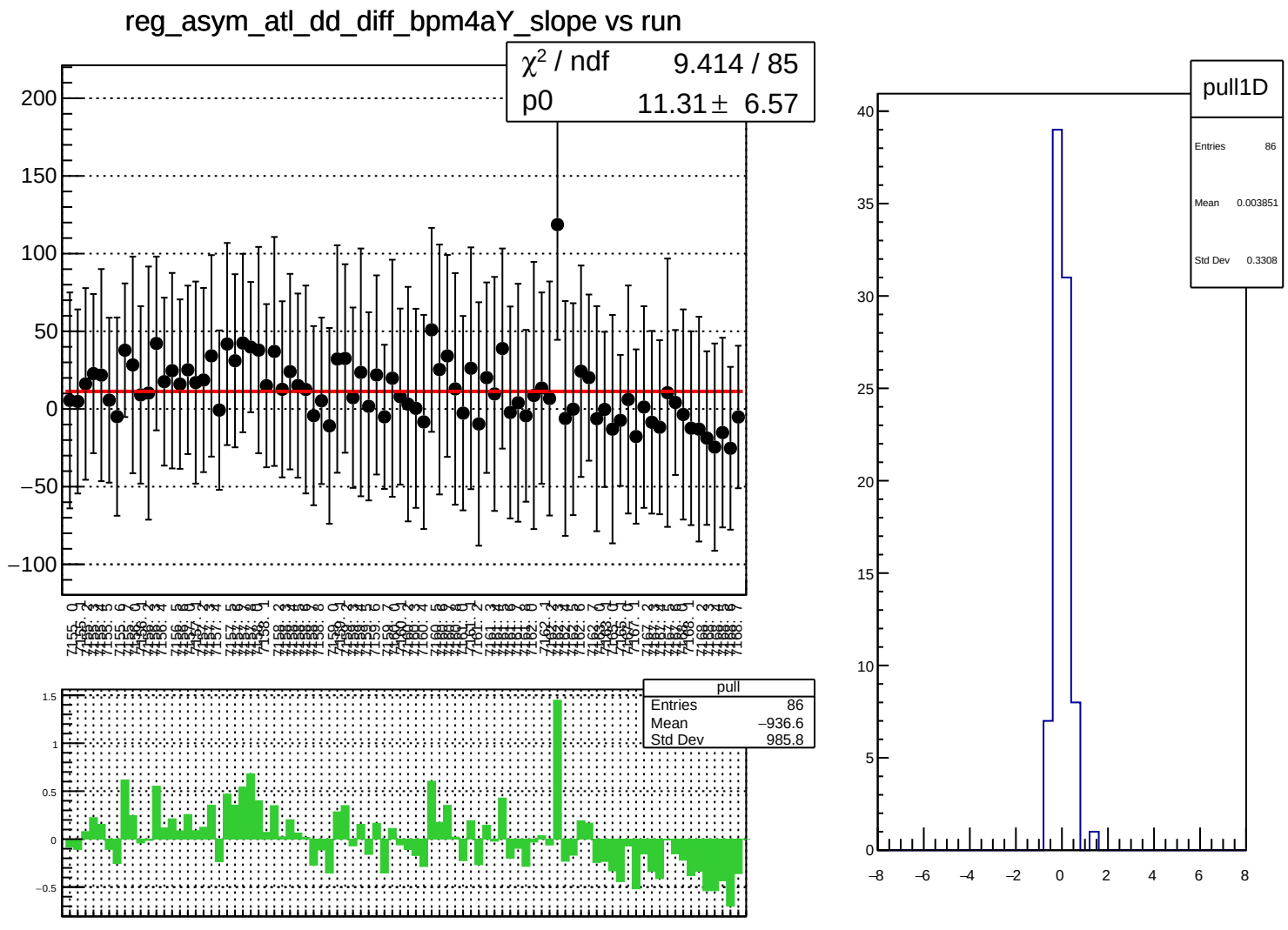

pull1D
Entries 86
Mean 0.0417
Std Dev 0.4854

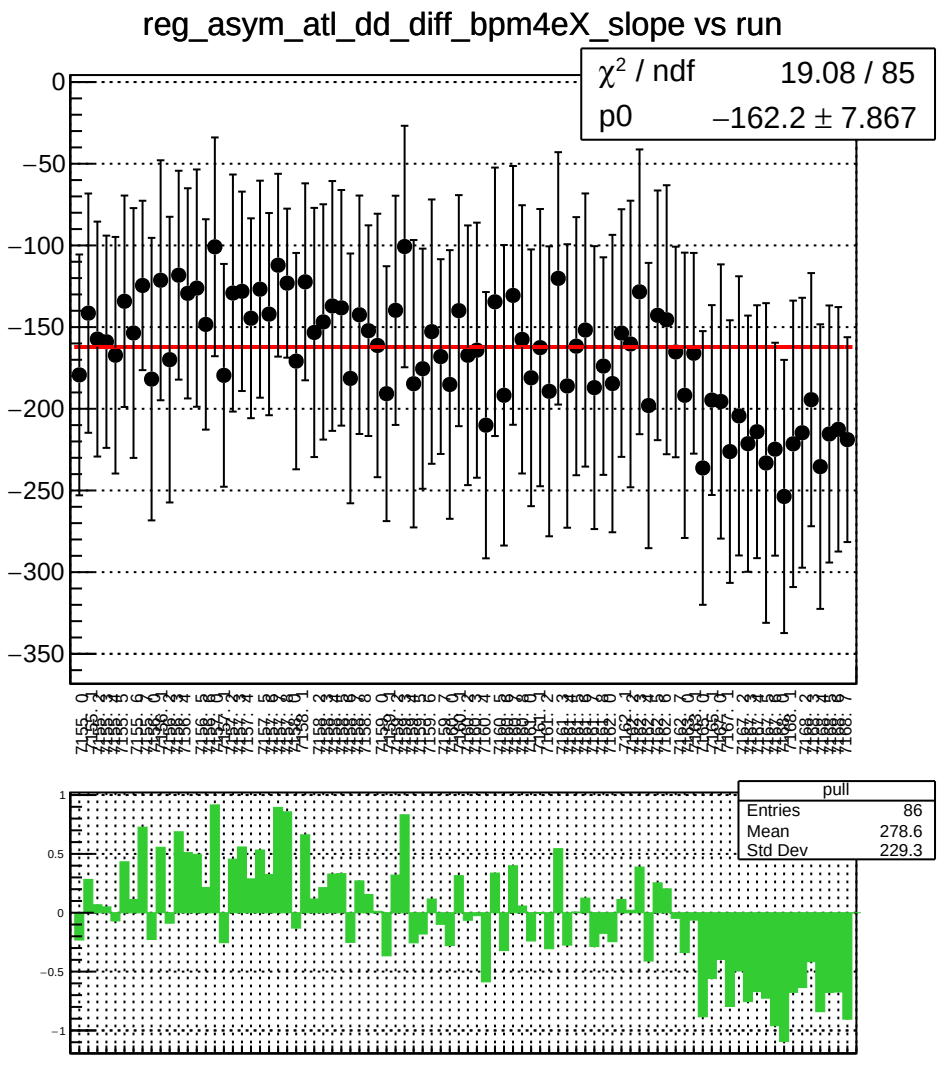

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.549 / 85
p0 92.47 ± 8.47
pull
Entries 86
Mean 1569
Std Dev 1521

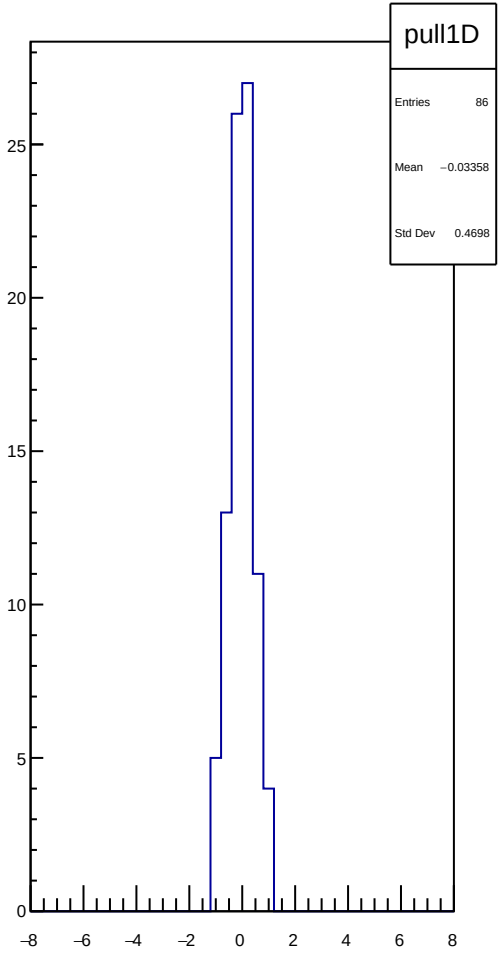

pull1D
Entries 86
Mean −0.002935
Std Dev 0.3332

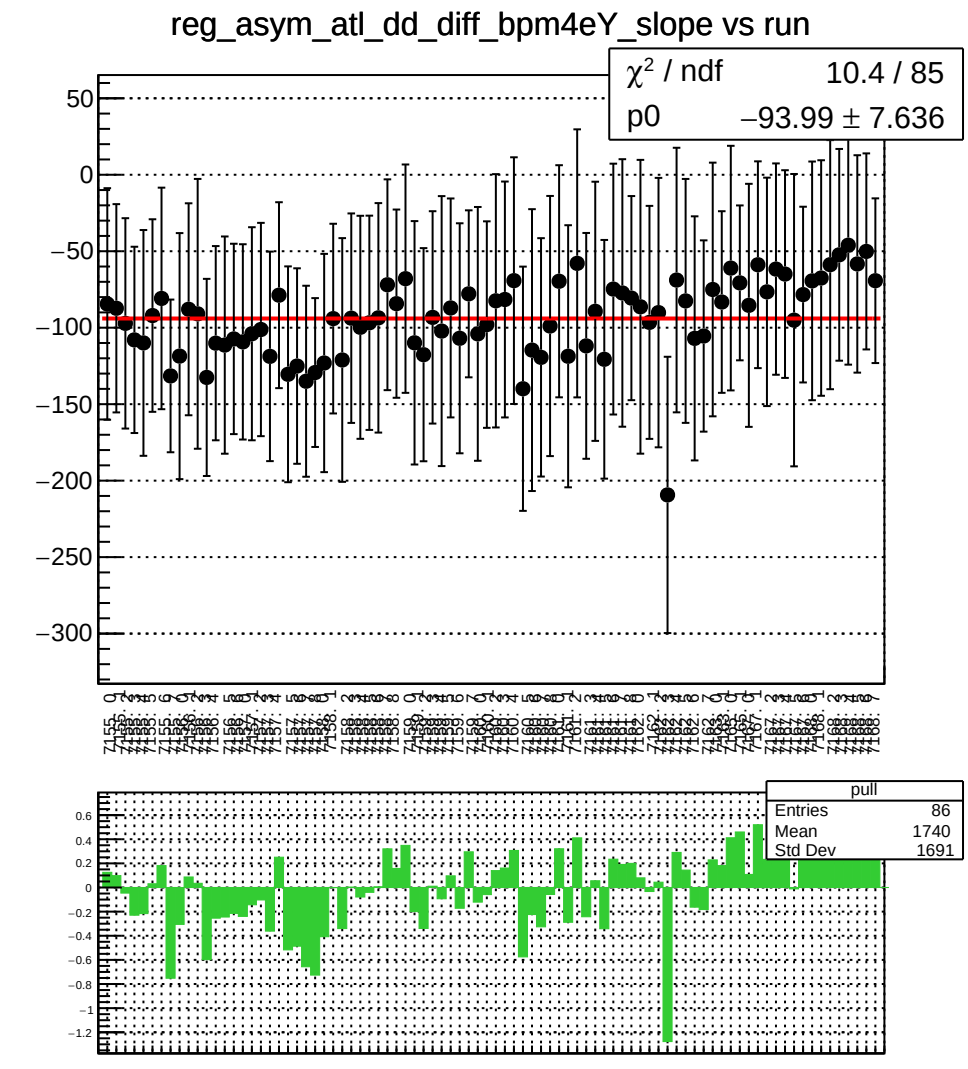

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 24.89 / 85
p0 −149.7 ± 0.3307
pull
Entries 86
Mean −409.2
Std Dev 454.8
pull1D
Entries 86
Mean −0.006166
Std Dev 0.5379

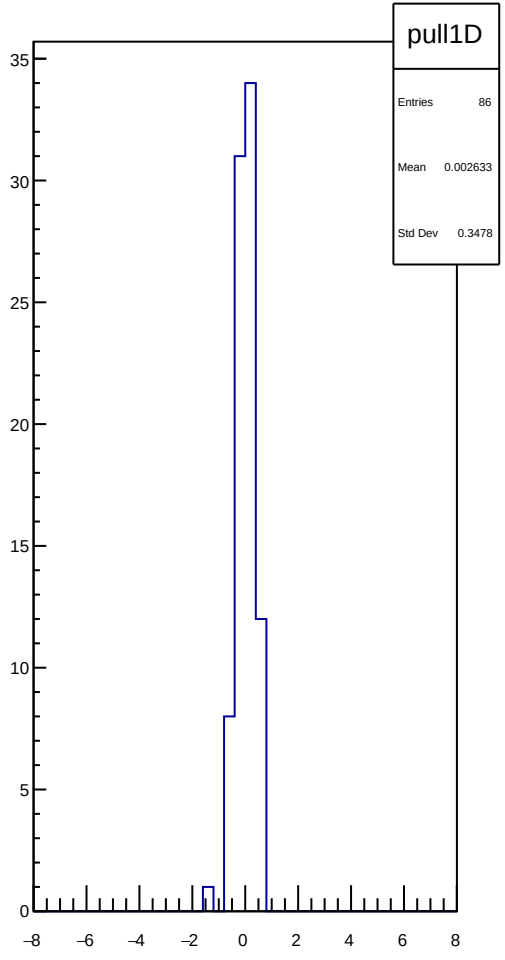

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 20.33 / 85
p0 209.2 ± 7.771
pull
Entries 86
Mean 266.7
Std Dev 217.1
pull1D
Entries 86
Mean 0.03692
Std Dev 0.4849

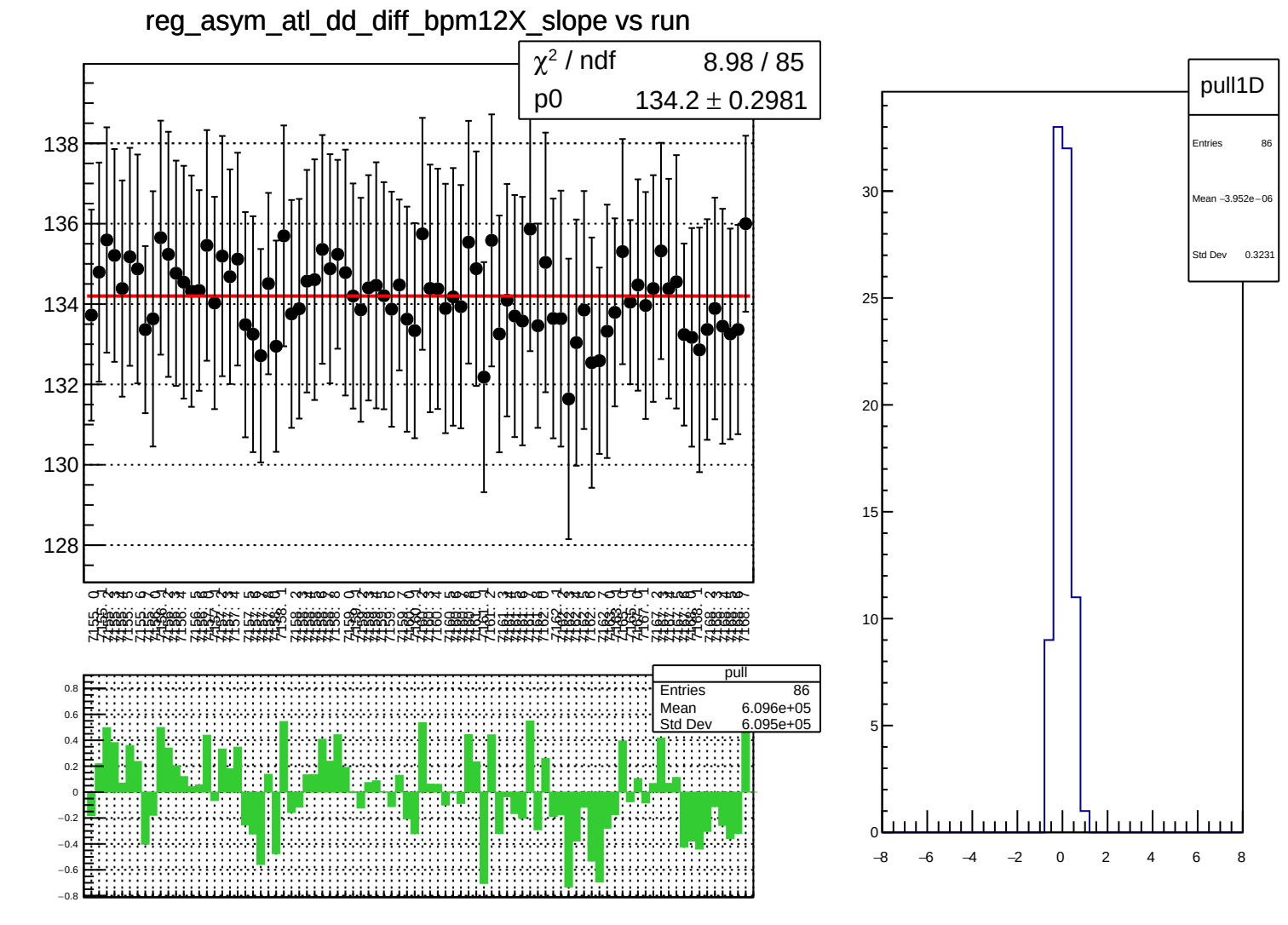

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 9.414 / 85
p0 11.31 ± 6.57
200
150
100
50
0
−50
−100
pull
Entries 86
Mean −936.6
Std Dev 985.8
1.5
1
0.5
0
−0.5
pull1D
Entries 86
Mean 0.003851
Std Dev 0.3308
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

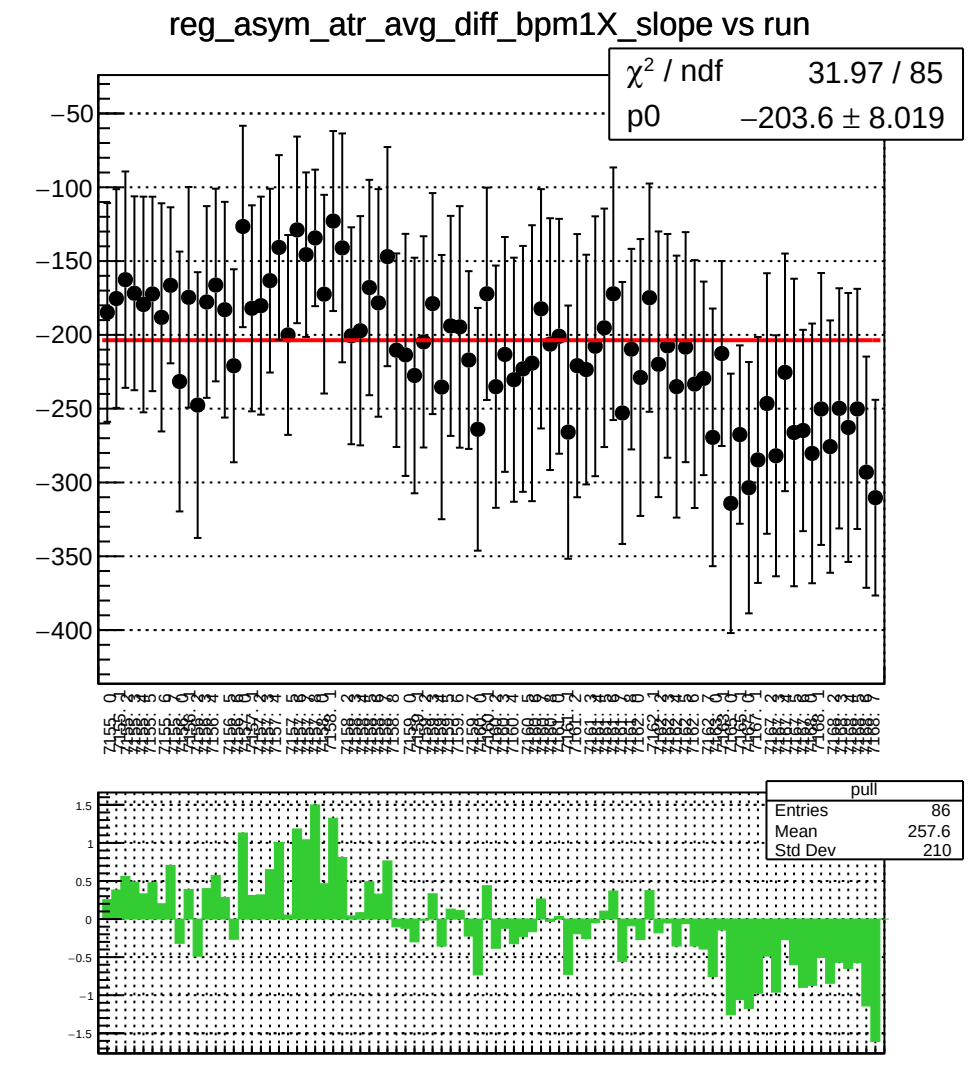

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 19.08 / 85
p0 −162.2 ± 7.867
pull
Entries 86
Mean 278.6
Std Dev 229.3

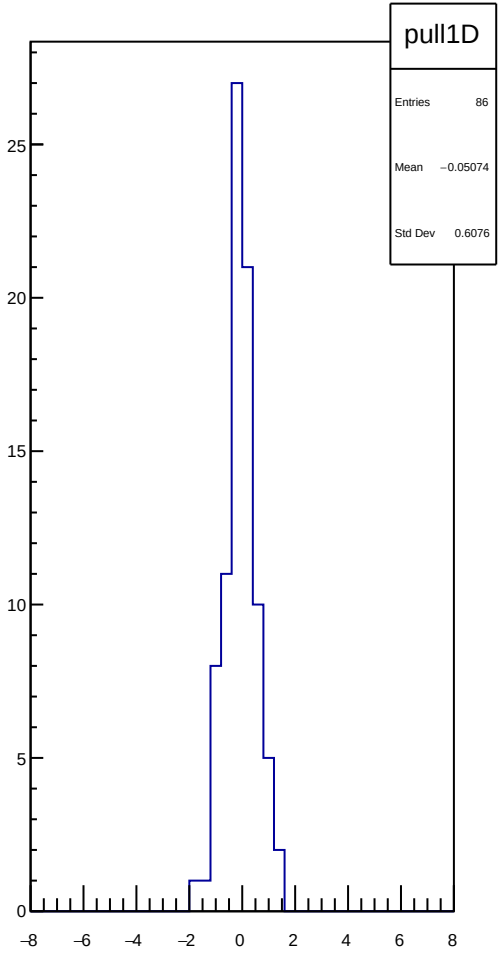

pull1D
Entries 86
Mean −0.03358
Std Dev 0.4698

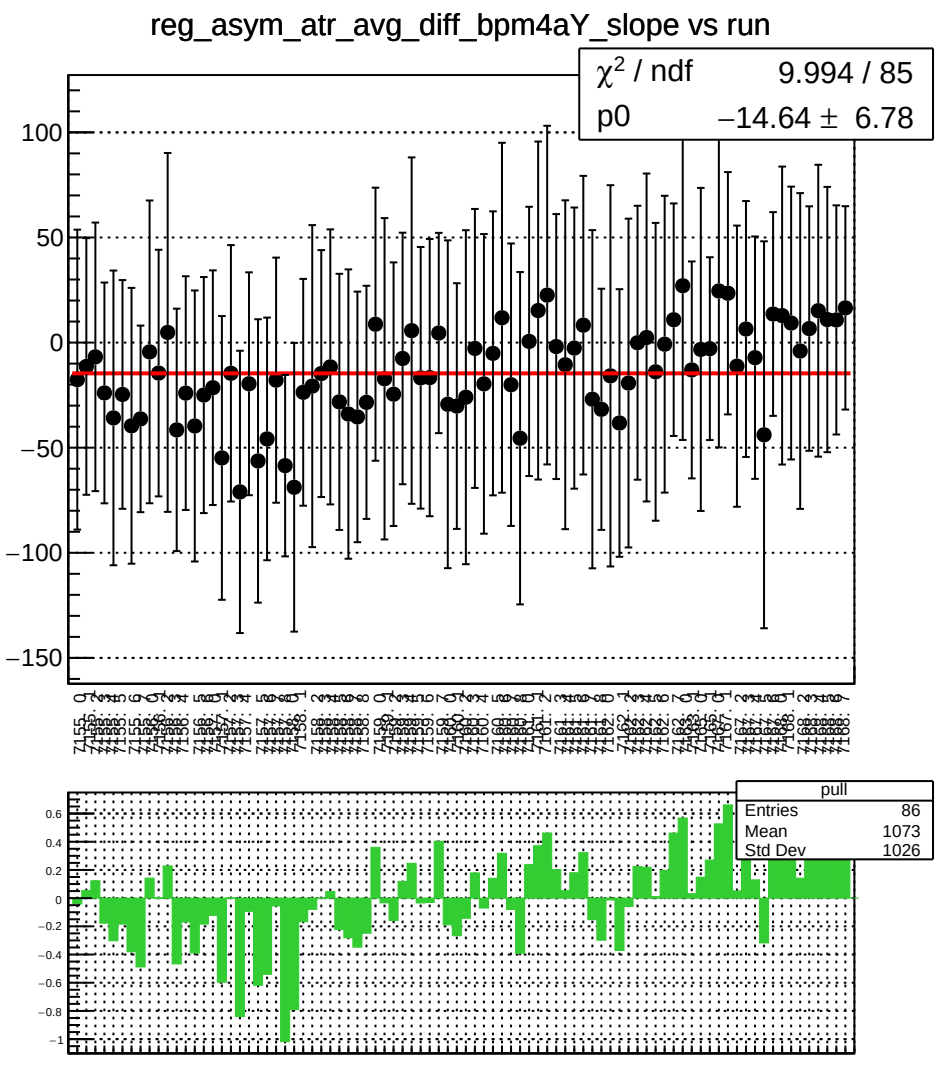

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.4 / 85
p0 −93.99 ± 7.636
50
0
−50
−100
−150
−200
−250
−300
pull
Entries 86
Mean 1740
Std Dev 1691
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

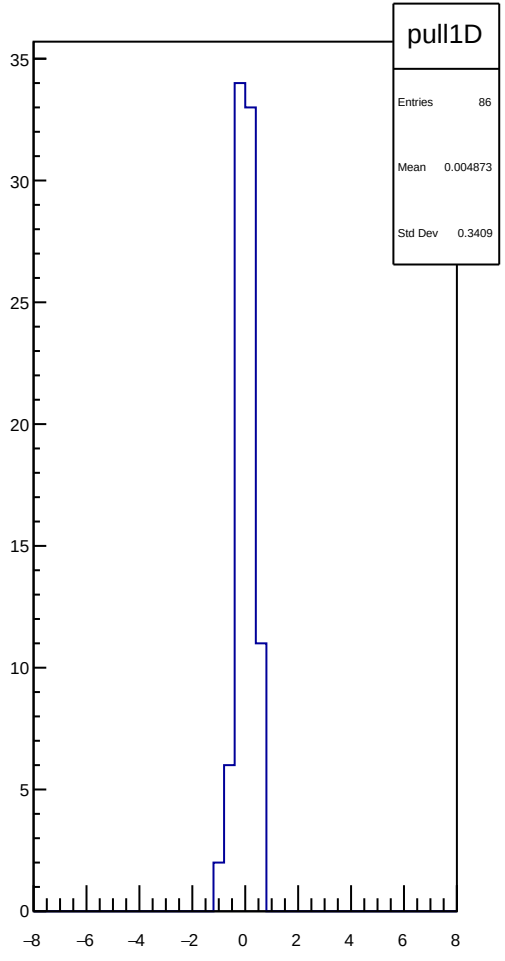

pull1D
Entries 86
Mean 0.002633
Std Dev 0.3478
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

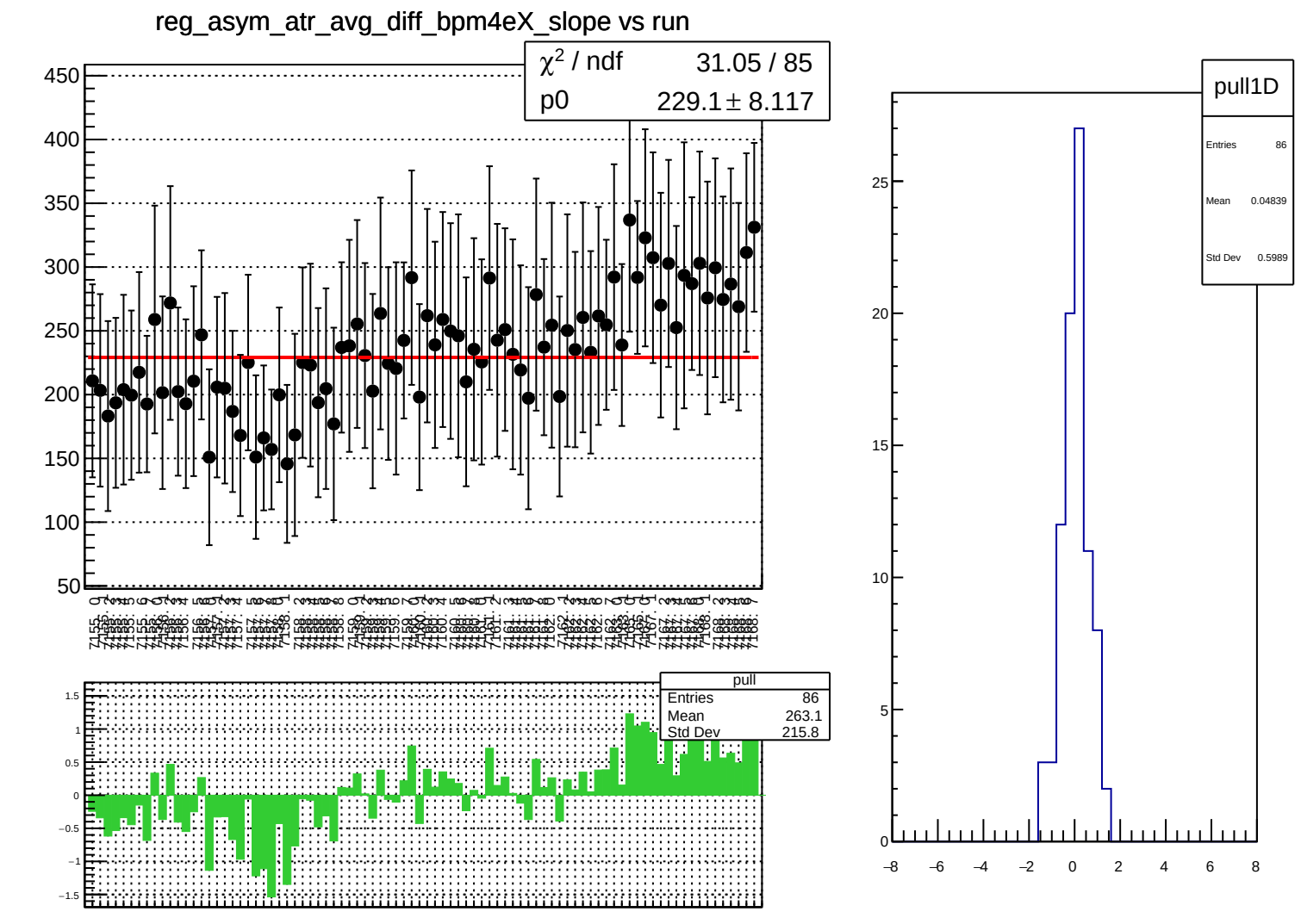

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 8.98 / 85
p0 134.2 ± 0.2981
pull
Entries 86
Mean 6.096e+05
Std Dev 6.095e+05
pull1D
Entries 86
Mean −3.952e−06
Std Dev 0.3231

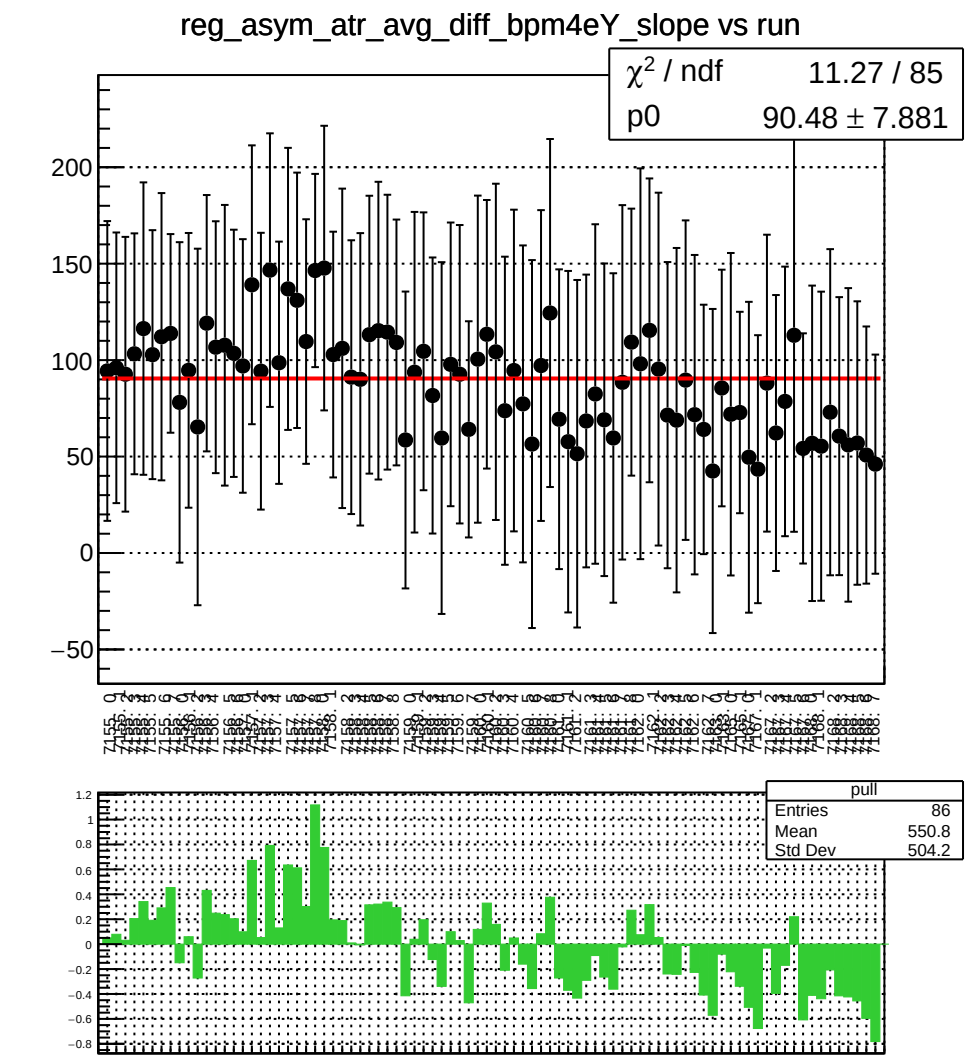

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 31.97 / 85
p0 −203.6 ± 8.019
pull
Entries 86
Mean 257.6
Std Dev 210

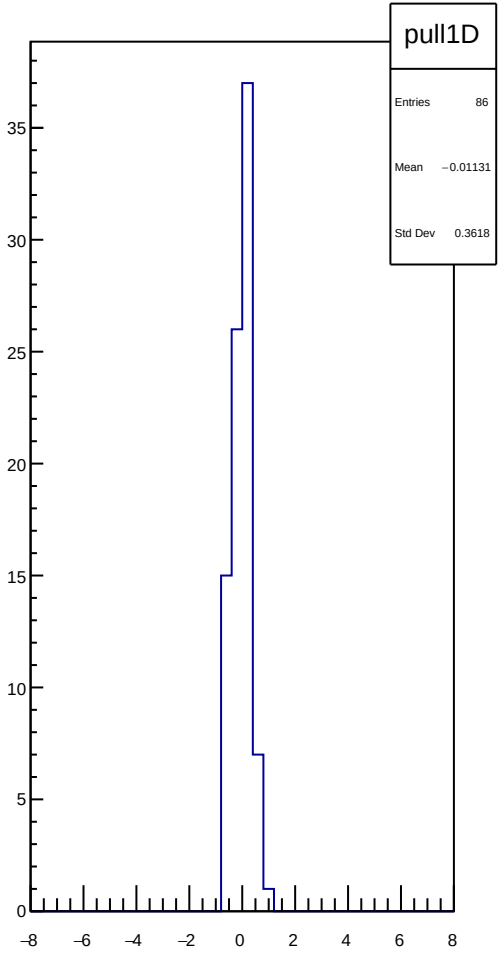

pull1D
Entries 86
Mean −0.05074
Std Dev 0.6076

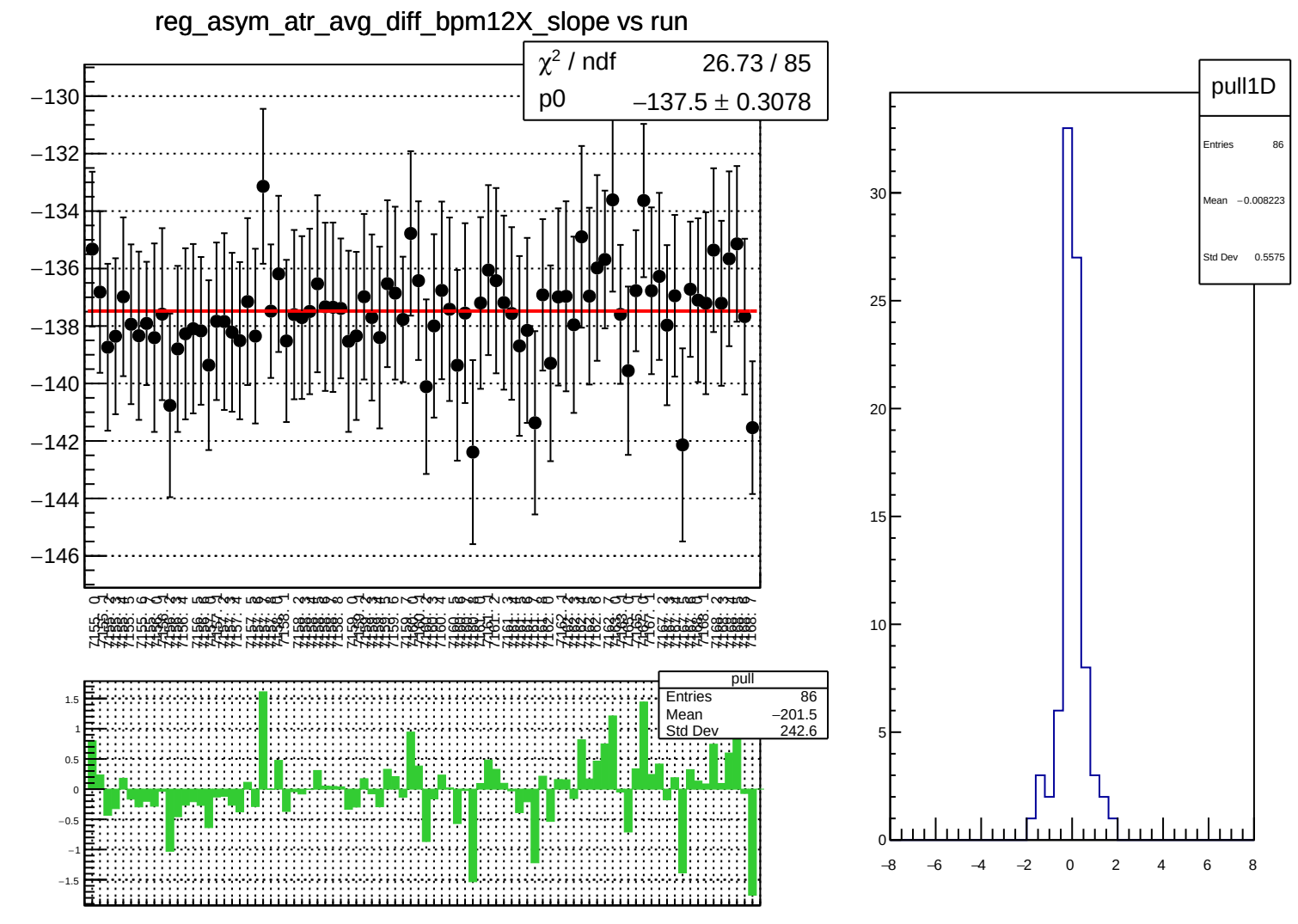

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.994 / 85
p0 −14.64 ± 6.78
100
50
0
−50
−100
−150
pull
Entries 86
Mean 1073
Std Dev 1026
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

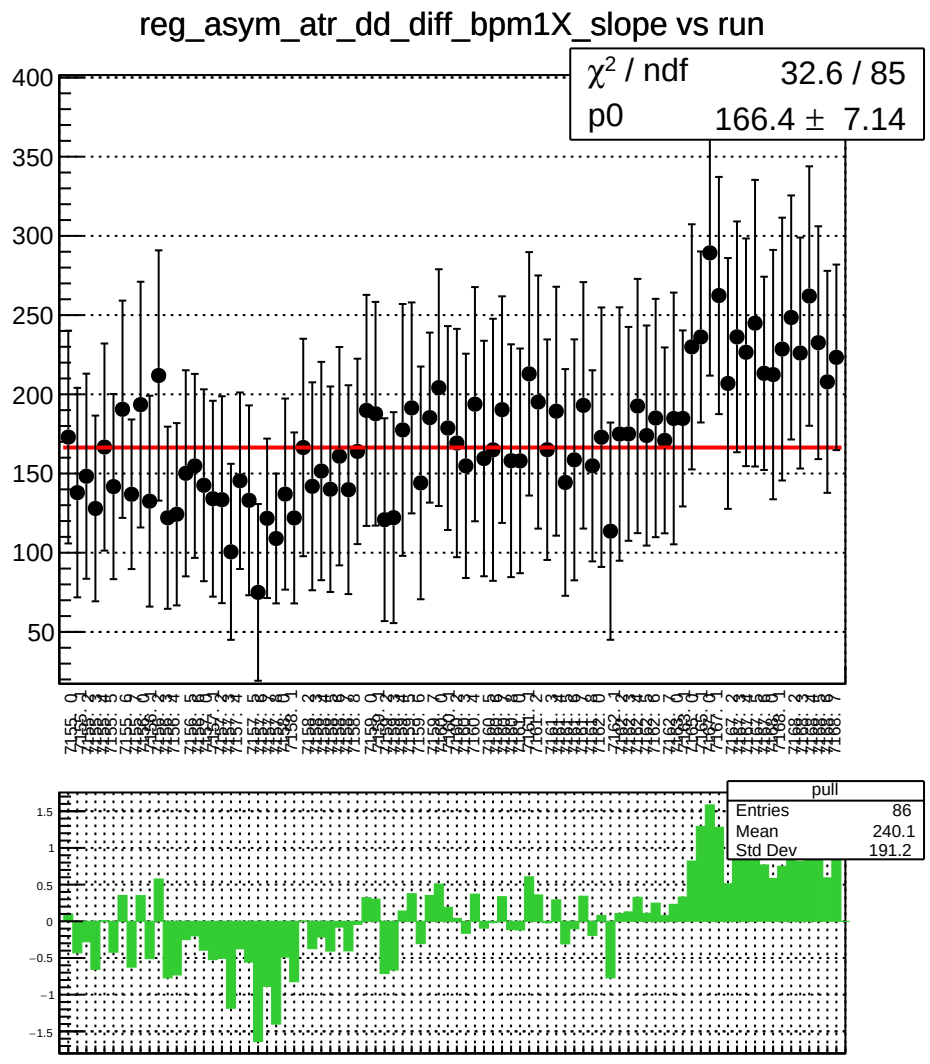

pull1D
Entries 86
Mean 0.004873
Std Dev 0.3409
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

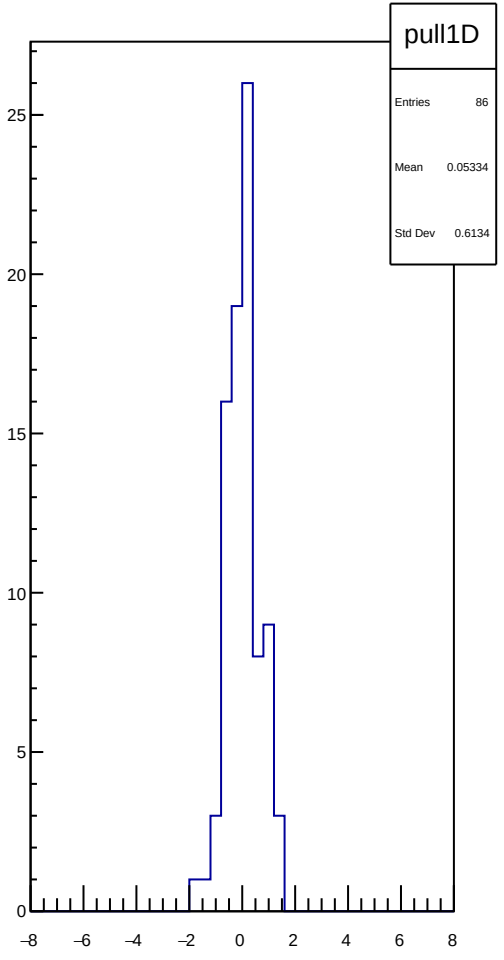

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ^2 / ndf 31.05 / 85
p0 229.1 ± 8.117
pull
Entries 86
Mean 263.1
Std Dev 215.8
pull1D
Entries 86
Mean 0.04839
Std Dev 0.5989

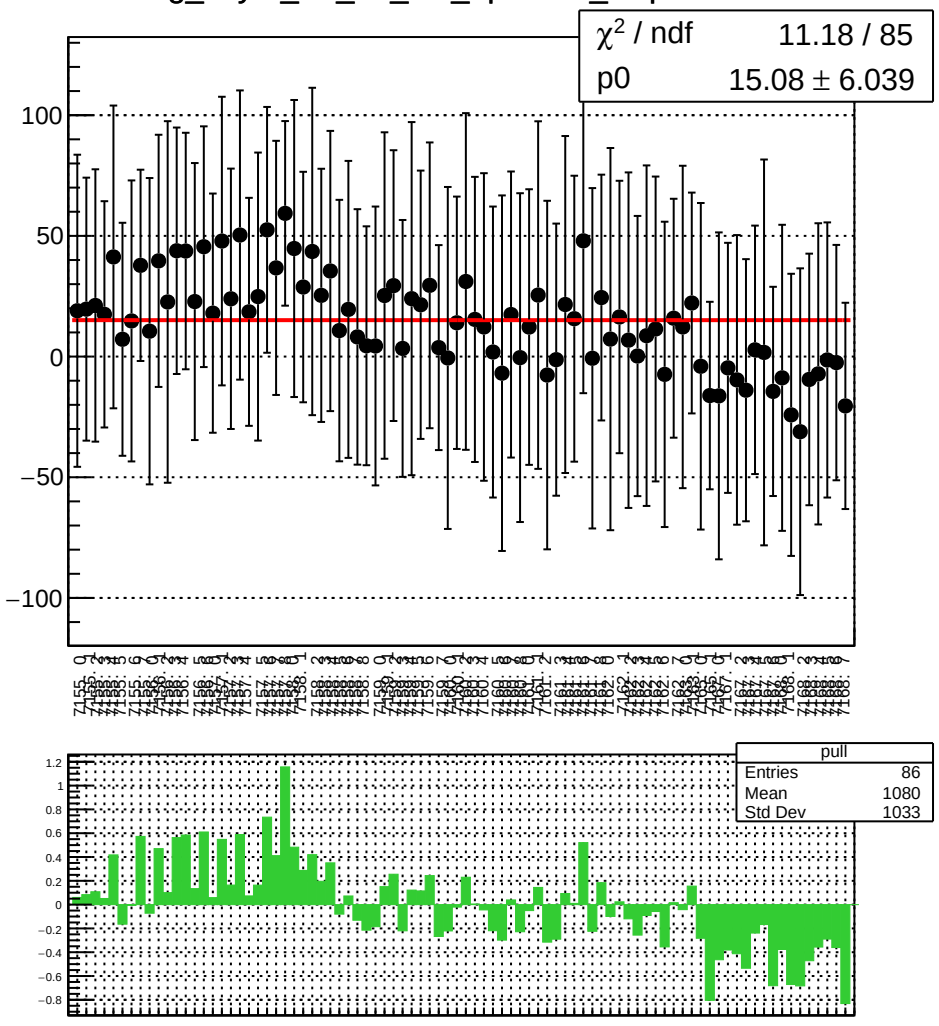

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 11.27 / 85
p0 90.48 ± 7.881
200
150
100
50
0
−50
pull
Entries 86
Mean 550.8
Std Dev 504.2
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

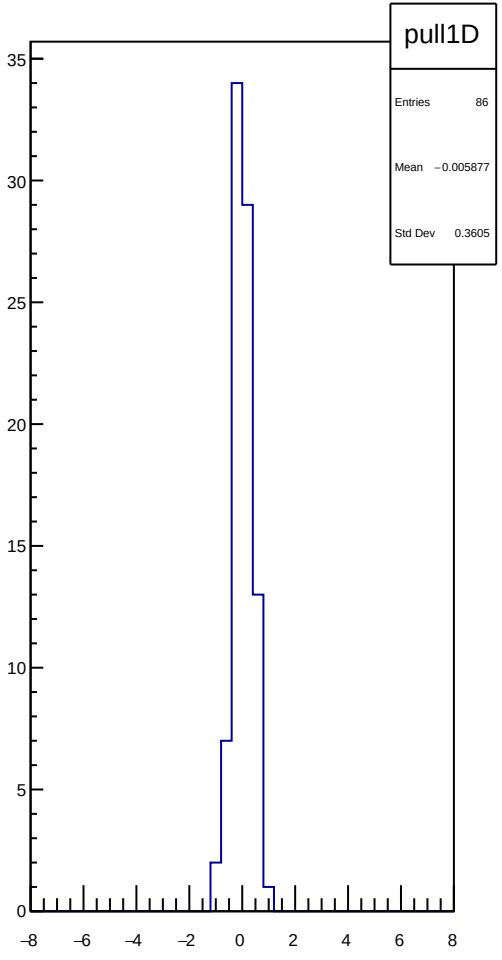

pull1D
Entries 86
Mean −0.01131
Std Dev 0.3618
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

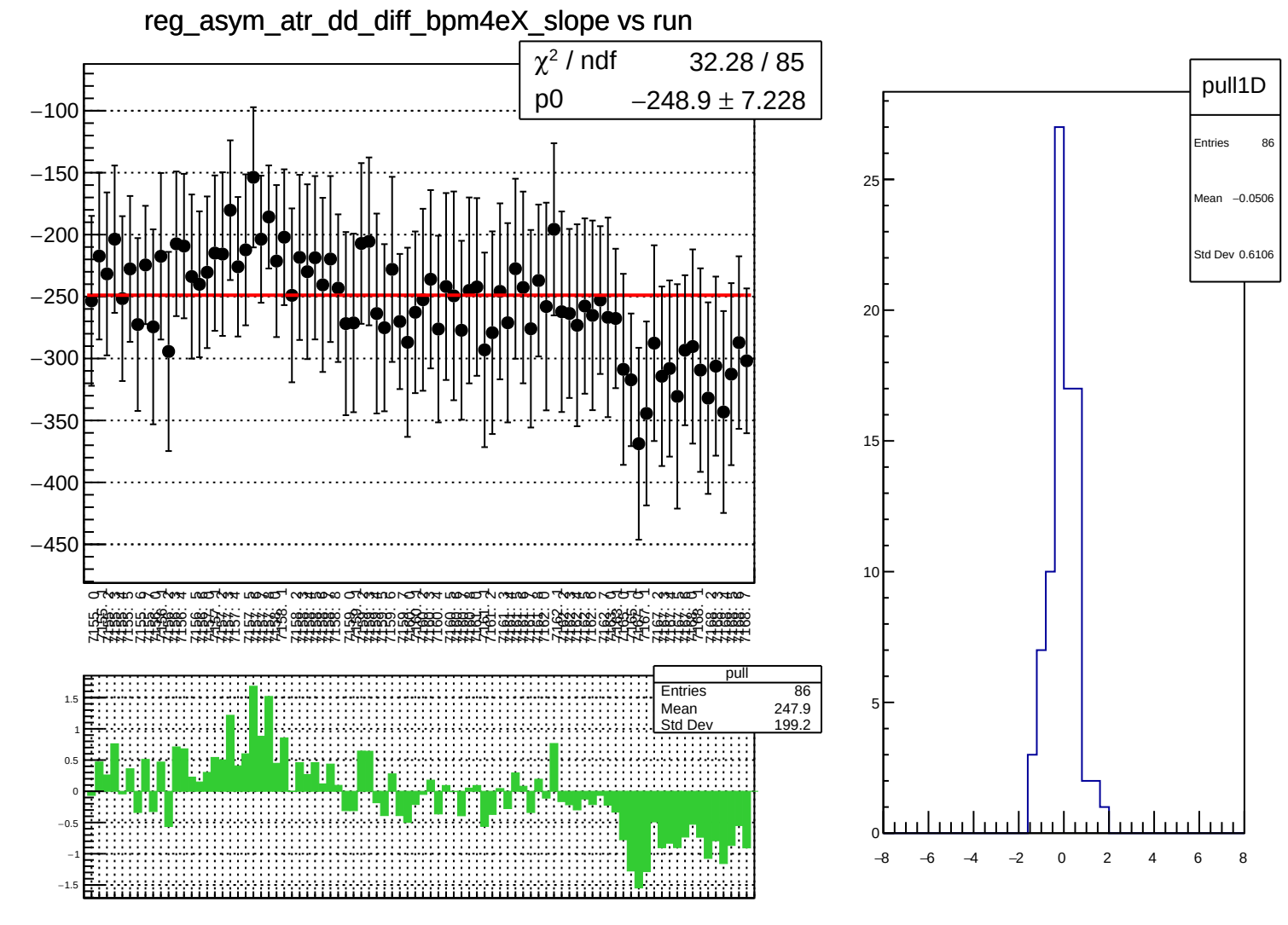

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 26.73 / 85
p0 −137.5 ± 0.3078
−130
−132
−134
−136
−138
−140
−142
−144
−146
pull
Entries 86
Mean −201.5
Std Dev 242.6
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean −0.008223
Std Dev 0.5575
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

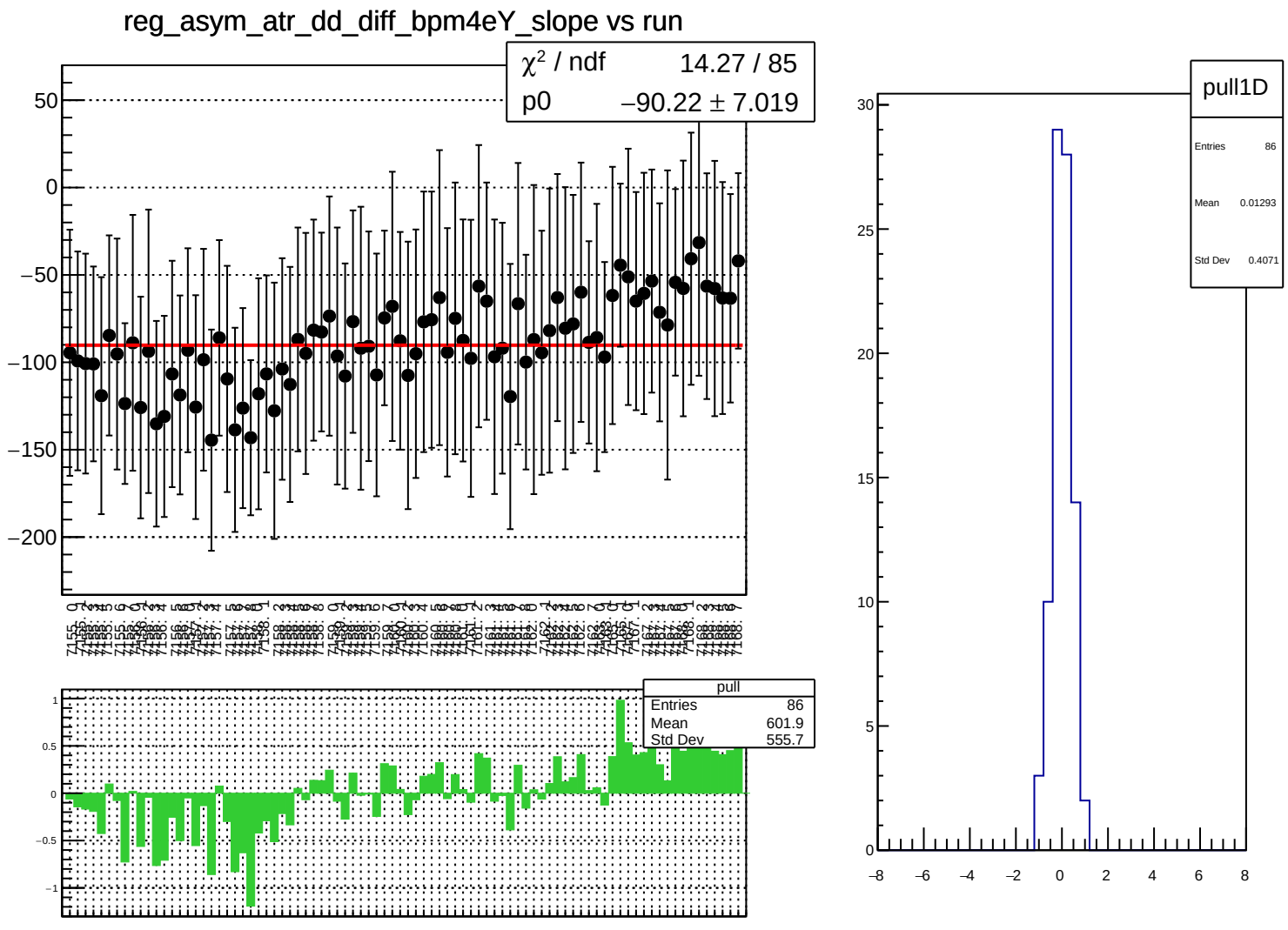

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 32.6 / 85
p0 166.4 ± 7.14
pull
Entries 86
Mean 240.1
Std Dev 191.2

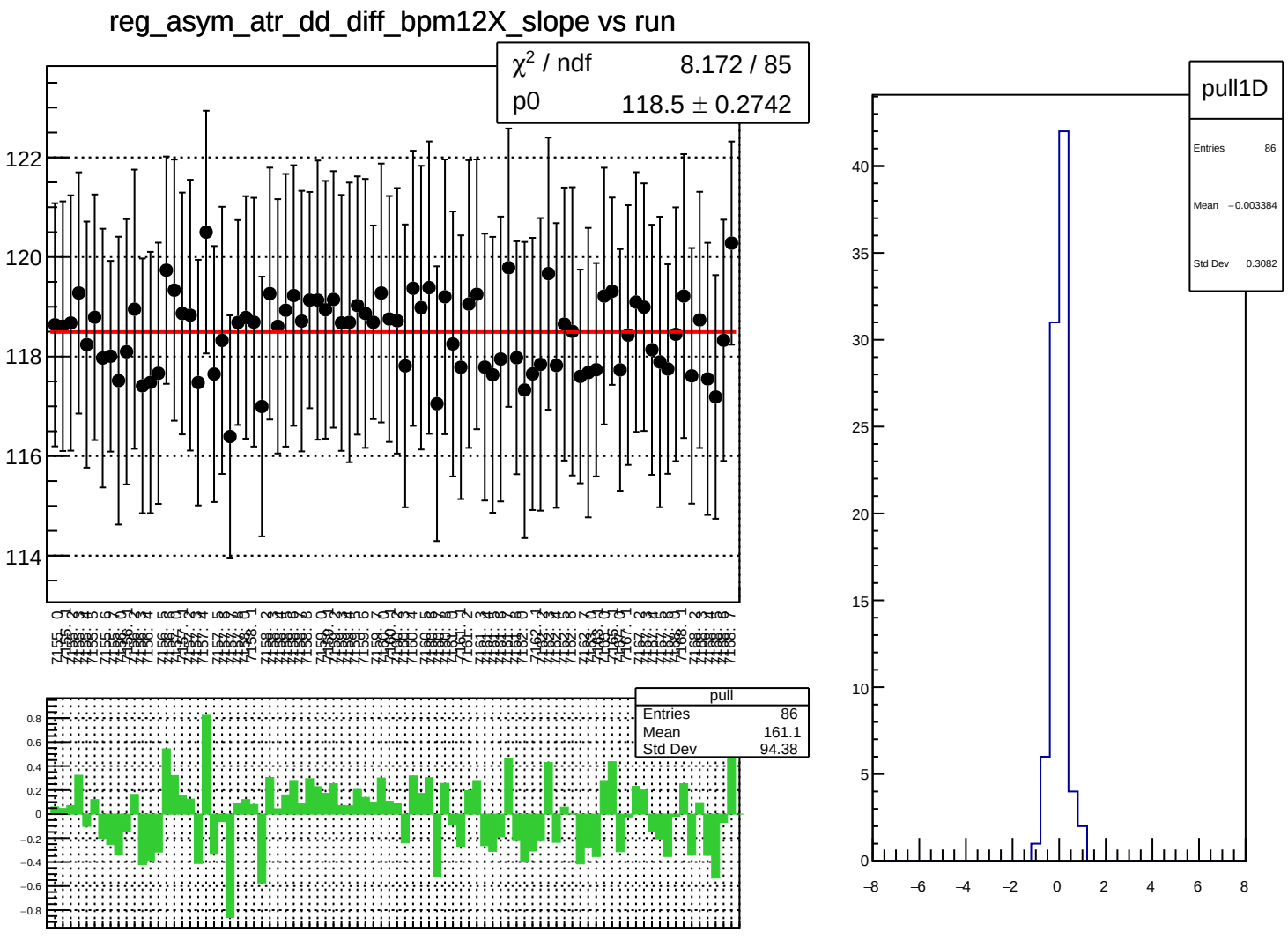

pull1D
Entries 86
Mean 0.05334
Std Dev 0.6134

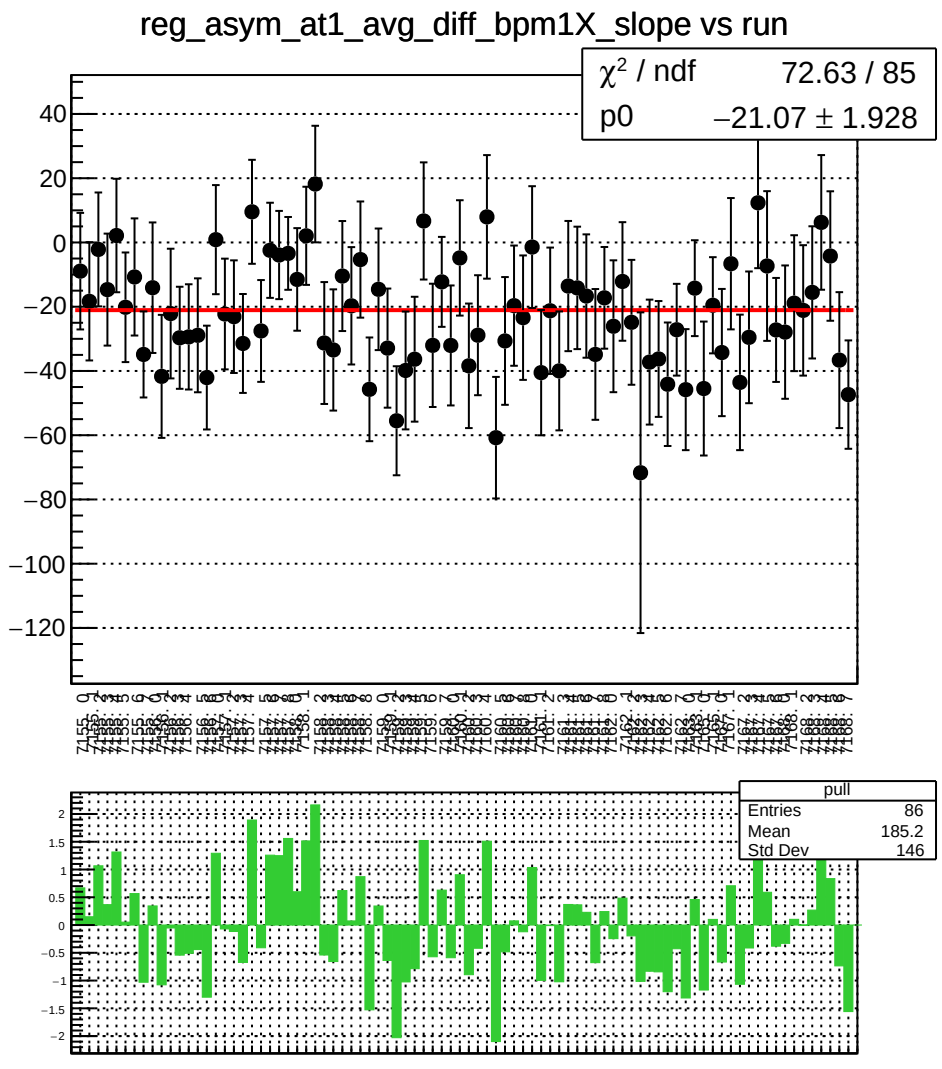

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.18 / 85
p0 15.08 ± 6.039
pull
Entries 86
Mean 1080
Std Dev 1033

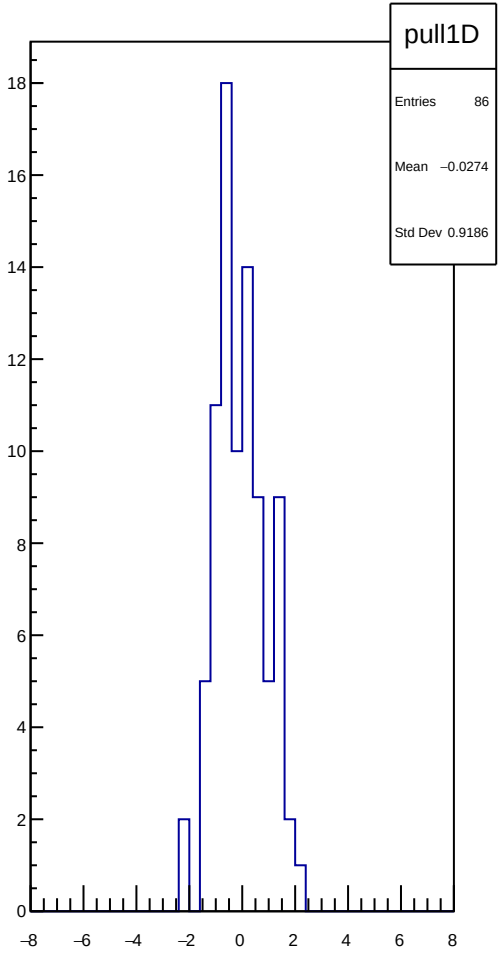

pull1D
Entries 86
Mean −0.005877
Std Dev 0.3605

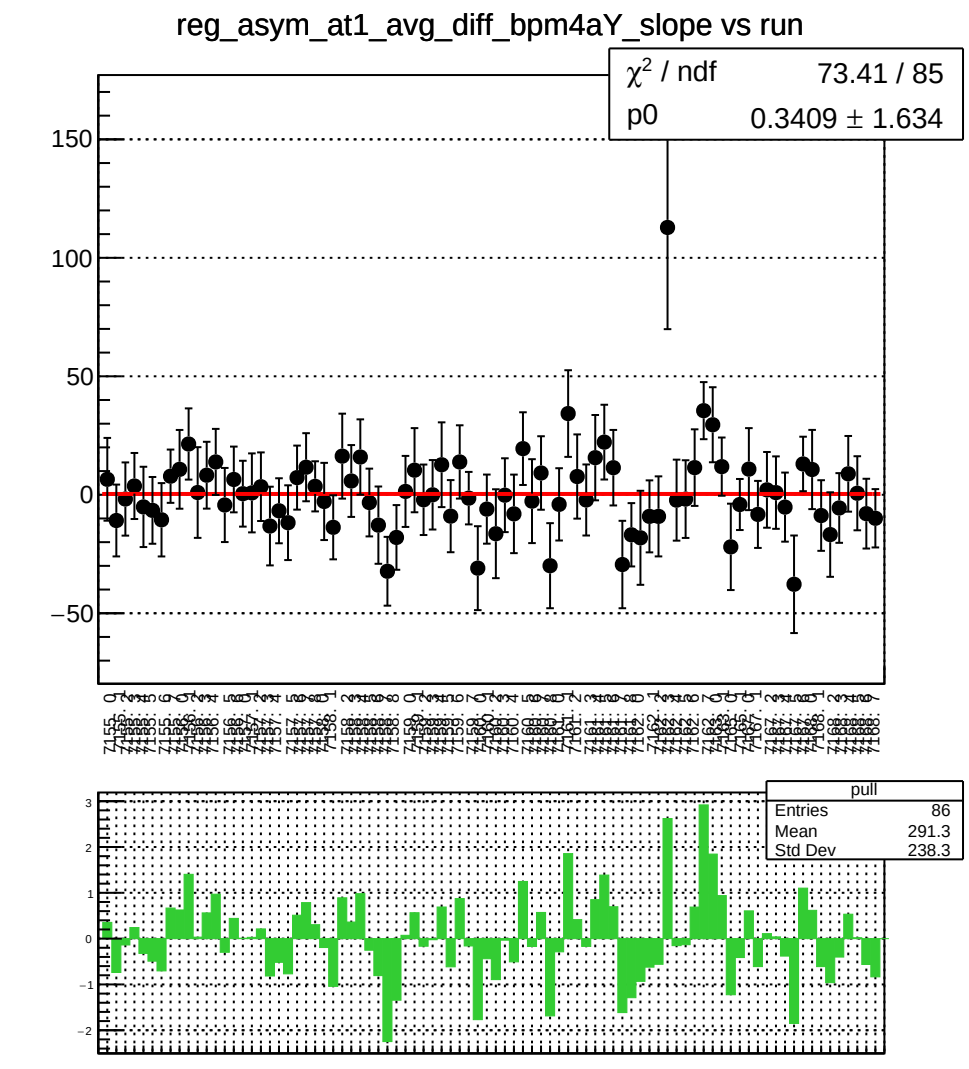

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 32.28 / 85
p0 −248.9 ± 7.228
−100
−150
−200
−250
−300
−350
−400
−450
pull
Entries 86
Mean 247.9
Std Dev 199.2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean −0.0506
Std Dev 0.6106
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

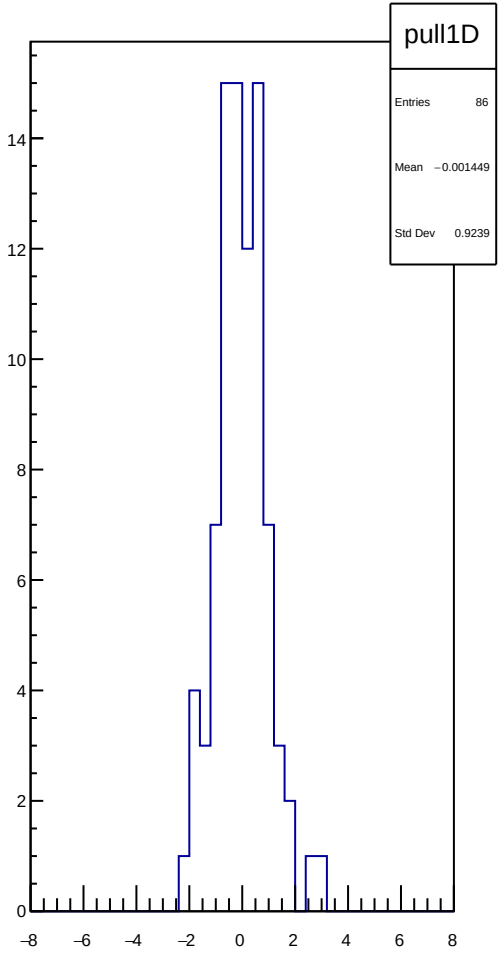

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.27 / 85
p0 −90.22 ± 7.019
50
0
−50
−100
−150
−200
pull
Entries 86
Mean 601.9
Std Dev 555.7
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean 0.01293
Std Dev 0.4071
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

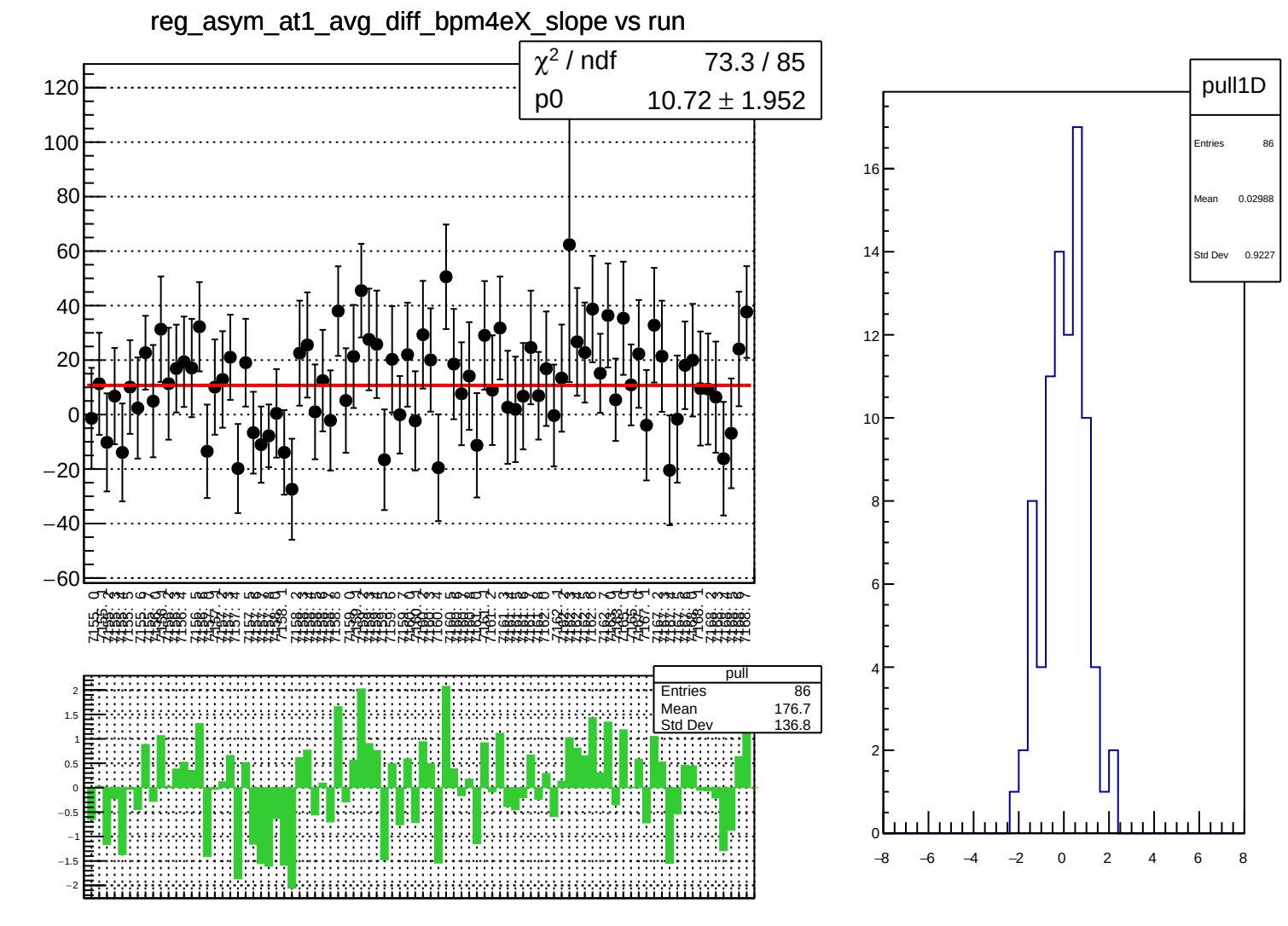

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 8.172 / 85
p0 118.5 ± 0.2742
122
120
118
116
114
pull
Entries 86
Mean 161.1
Std Dev 94.38
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 86
Mean −0.003384
Std Dev 0.3082
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

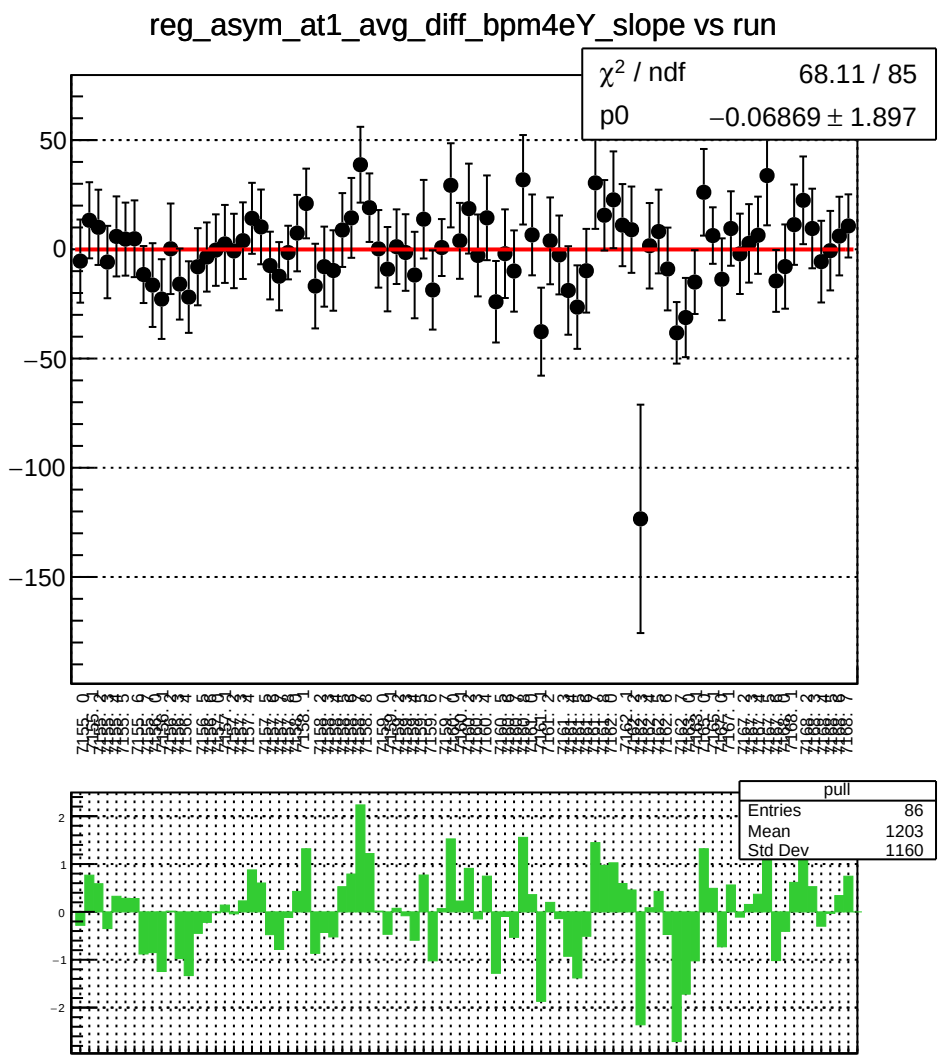

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 72.63 / 85
p0 −21.07 ± 1.928
pull
Entries 86
Mean 185.2
Std Dev 146

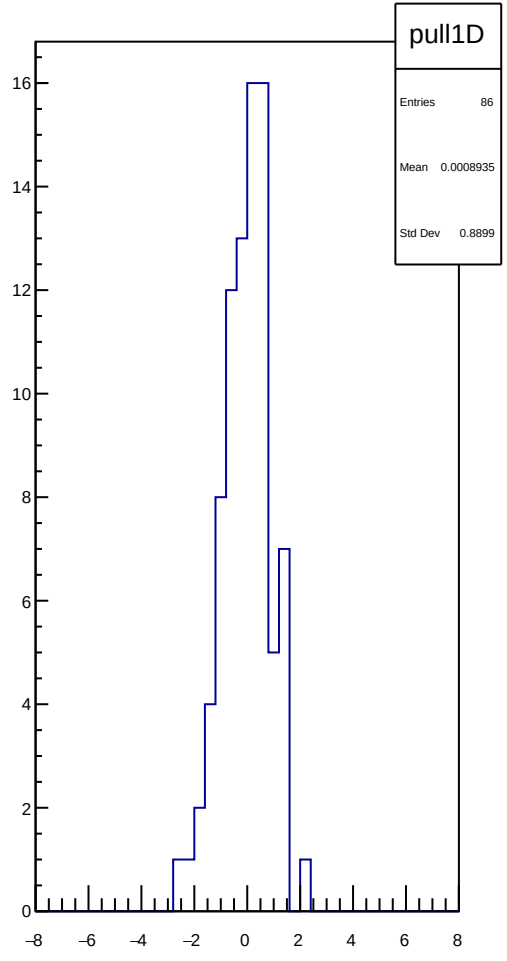

pull1D
Entries 86
Mean −0.0274
Std Dev 0.9186

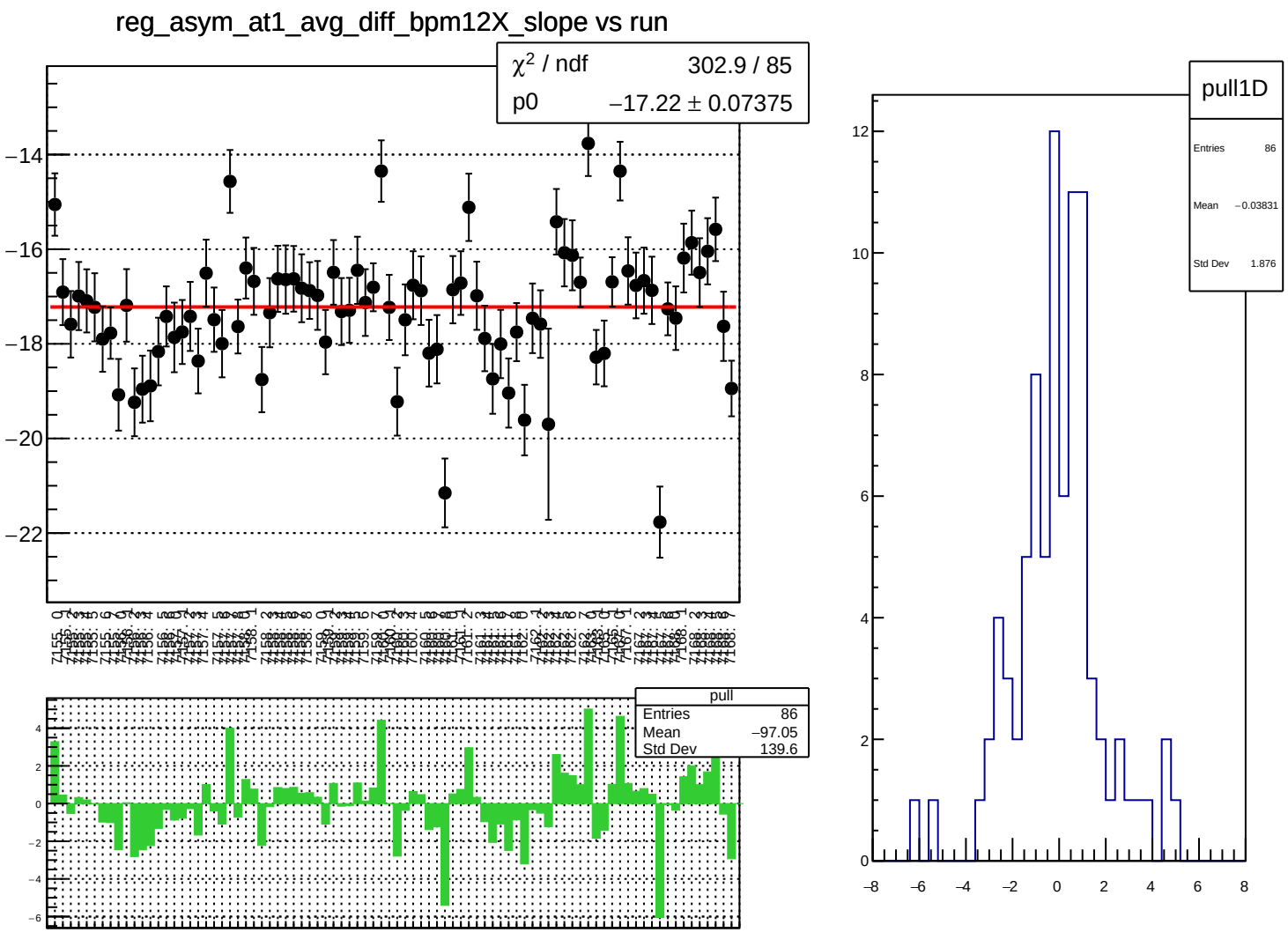

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 73.41 / 85
p0 0.3409 ± 1.634
150
100
50
0
−50
pull
Entries 86
Mean 291.3
Std Dev 238.3
3
2
1
0
−1
−2

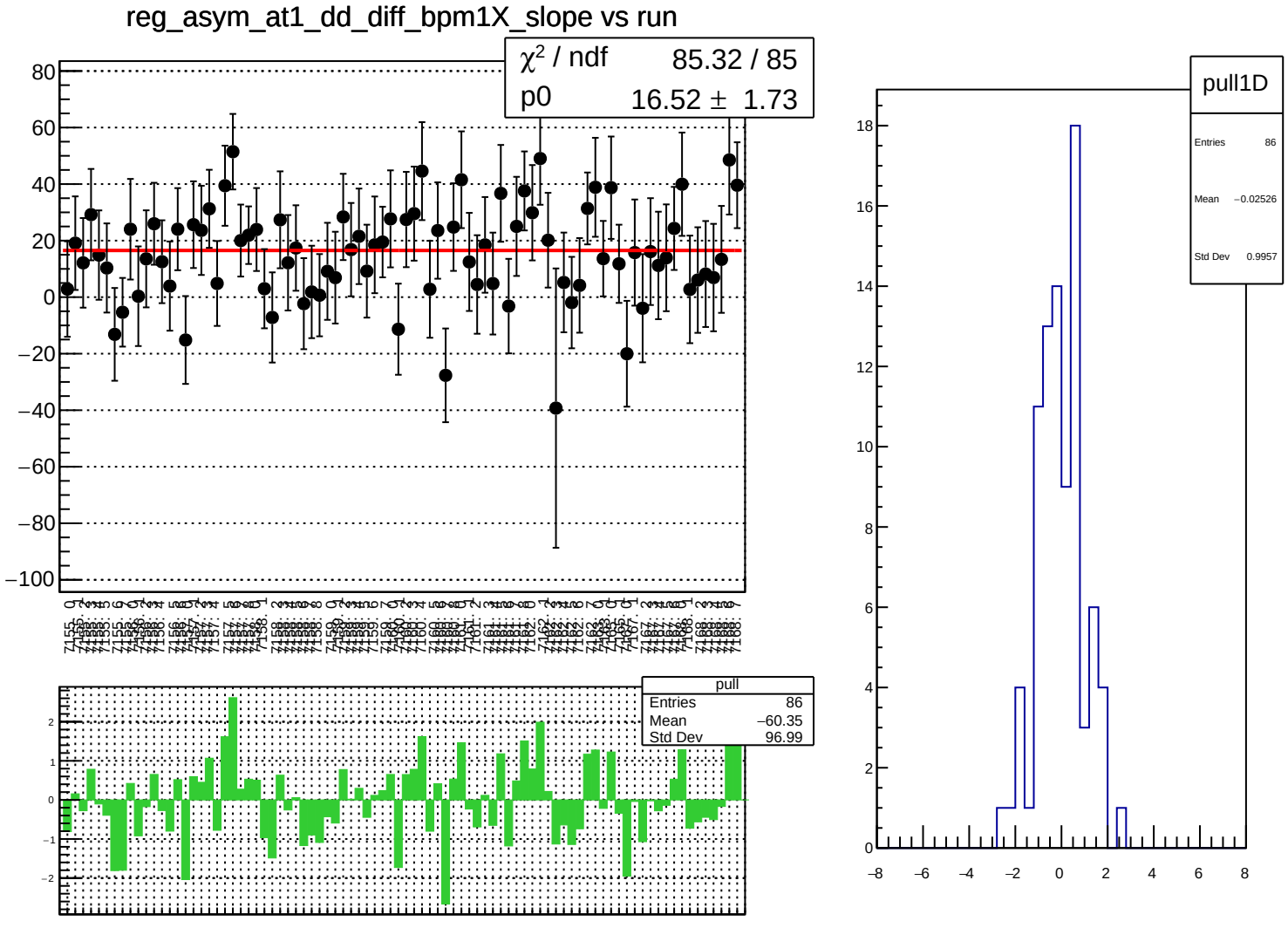

pull1D
Entries 86
Mean −0.001449
Std Dev 0.9239
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

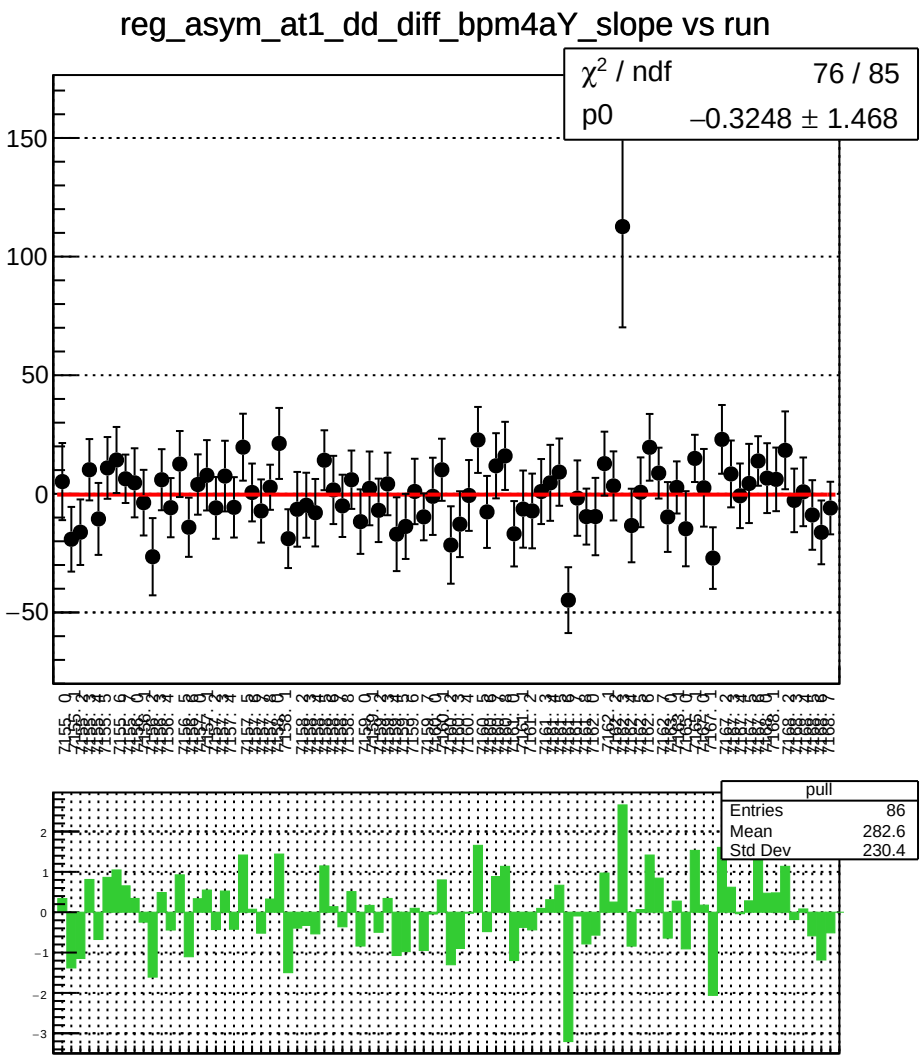

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 73.3 / 85
p0 10.72 ± 1.952
pull
Entries 86
Mean 176.7
Std Dev 136.8
pull1D
Entries 86
Mean 0.02988
Std Dev 0.9227

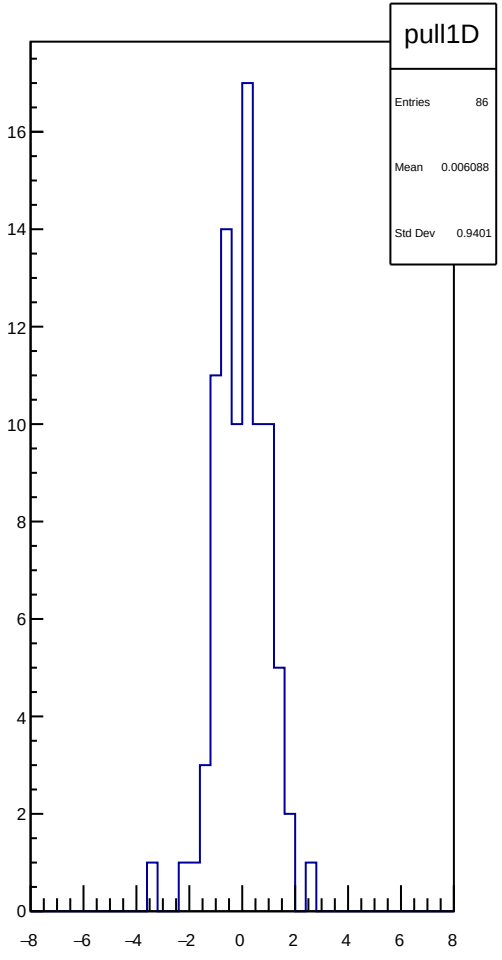

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 68.11 / 85
p0 −0.06869 ± 1.897
50
0
−50
−100
−150
pull
Entries 86
Mean 1203
Std Dev 1160
2
1
0
−1
−2

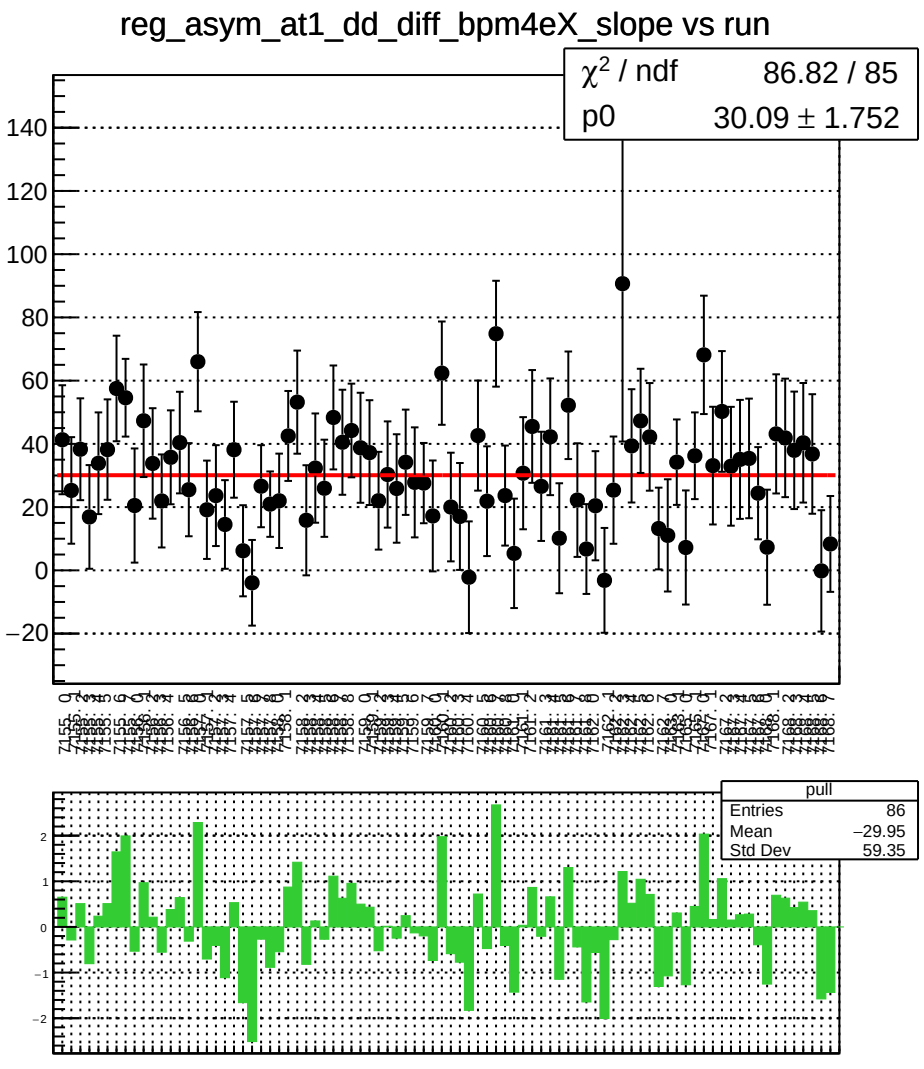

pull1D
Entries 86
Mean 0.0008935
Std Dev 0.8899
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

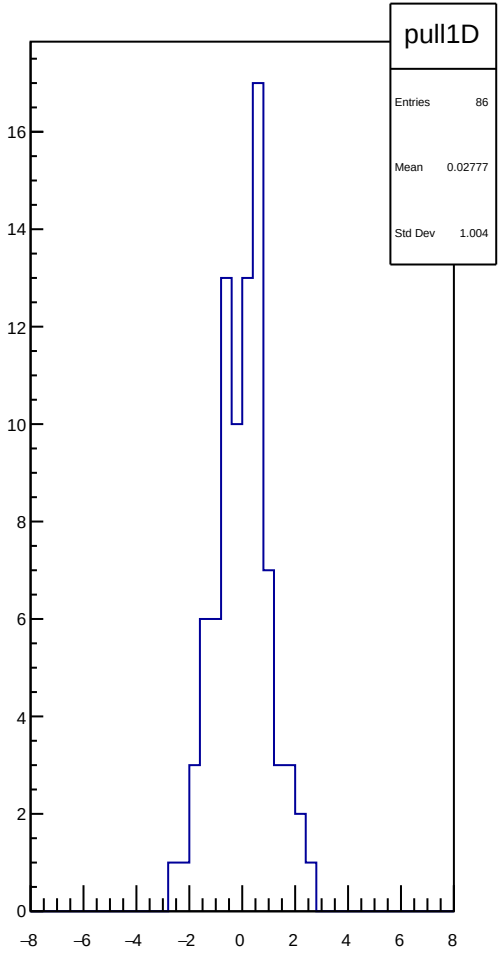

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 302.9 / 85
p0 −17.22 ± 0.07375
−14
−16
−18
−20
−22
pull
Entries 86
Mean −97.05
Std Dev 139.6
pull1D
Entries 86
Mean −0.03831
Std Dev 1.876

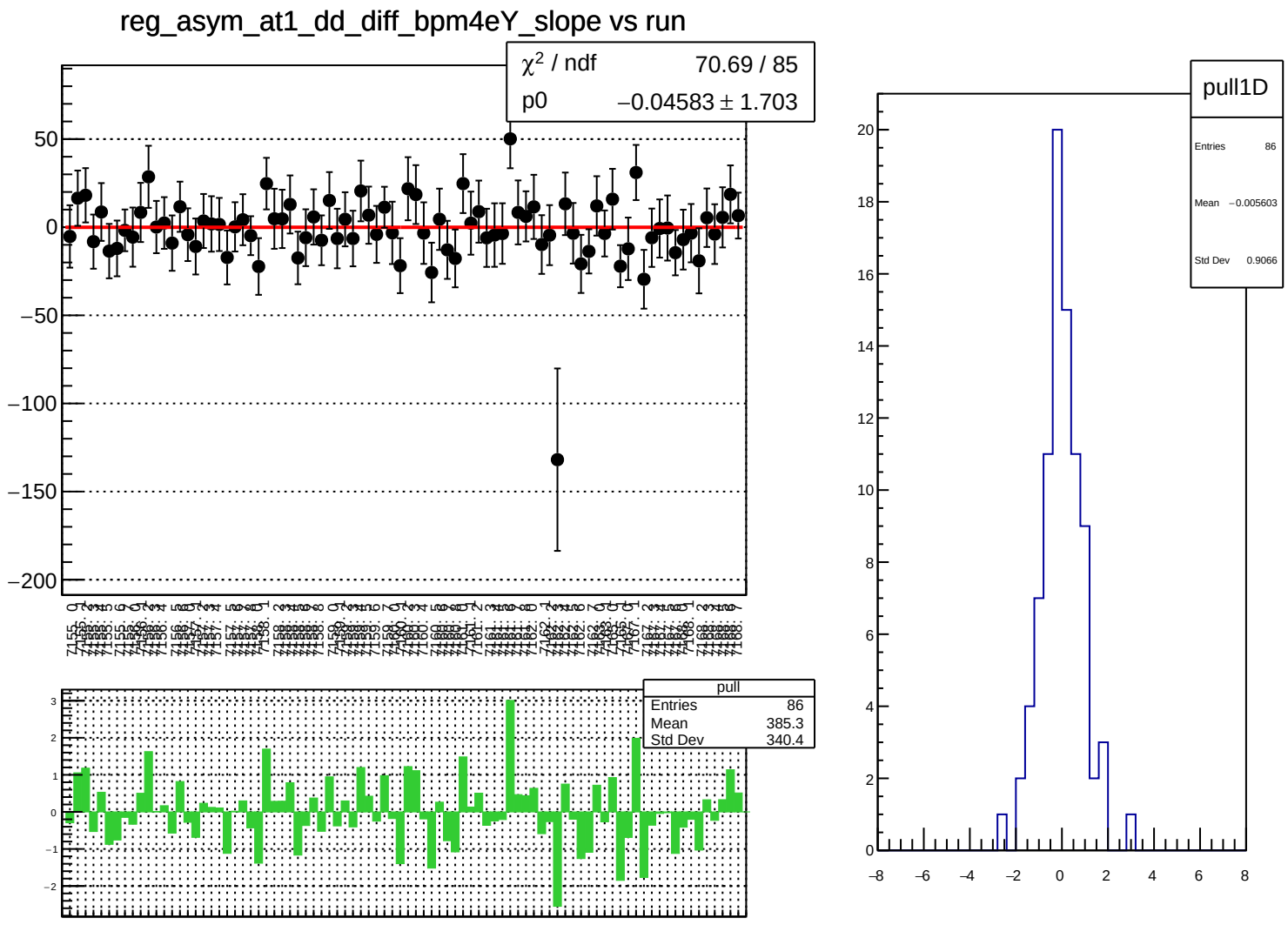

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 85.32 / 85
p0 16.52 ± 1.73
pull
Entries 86
Mean −60.35
Std Dev 96.99
pull1D
Entries 86
Mean −0.02526
Std Dev 0.9957

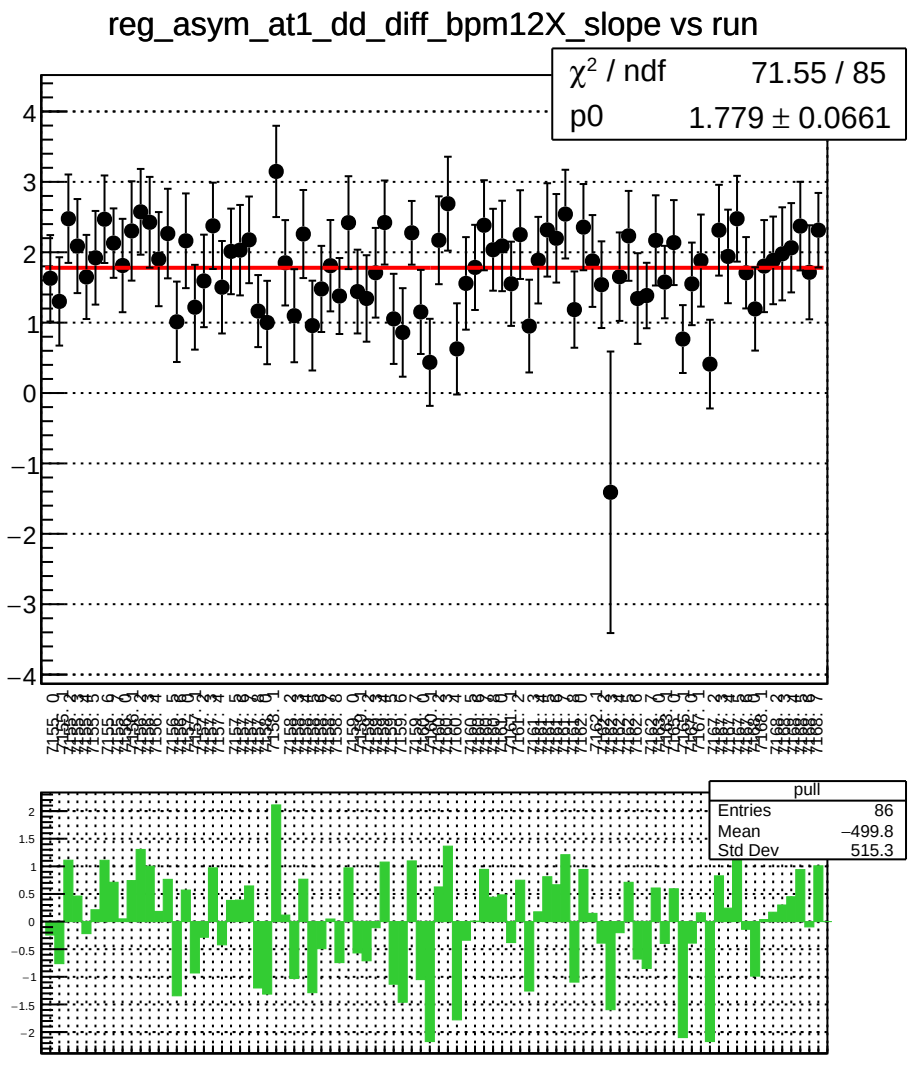

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 76 / 85
p0 −0.3248 ± 1.468
150
100
50
0
−50
pull
Entries 86
Mean 282.6
Std Dev 230.4
2
1
0
−1
−2
−3

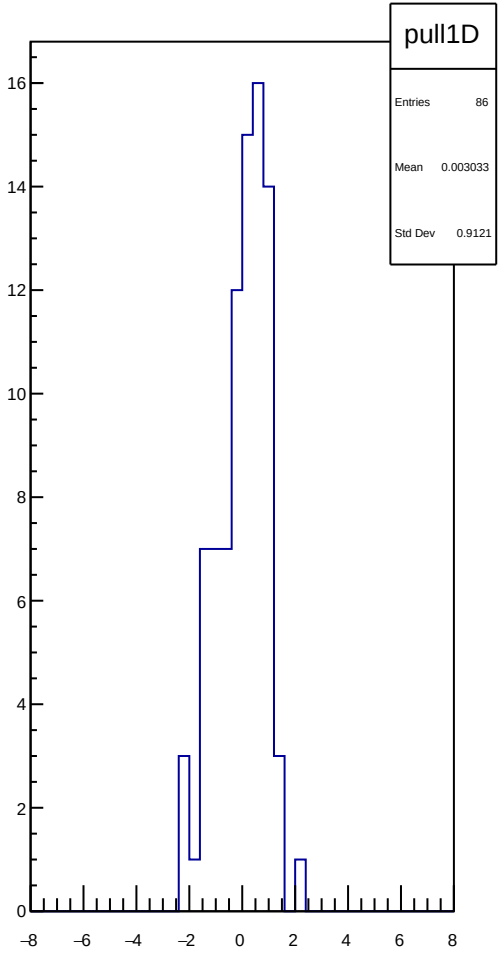

pull1D
Entries 86
Mean 0.006088
Std Dev 0.9401
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

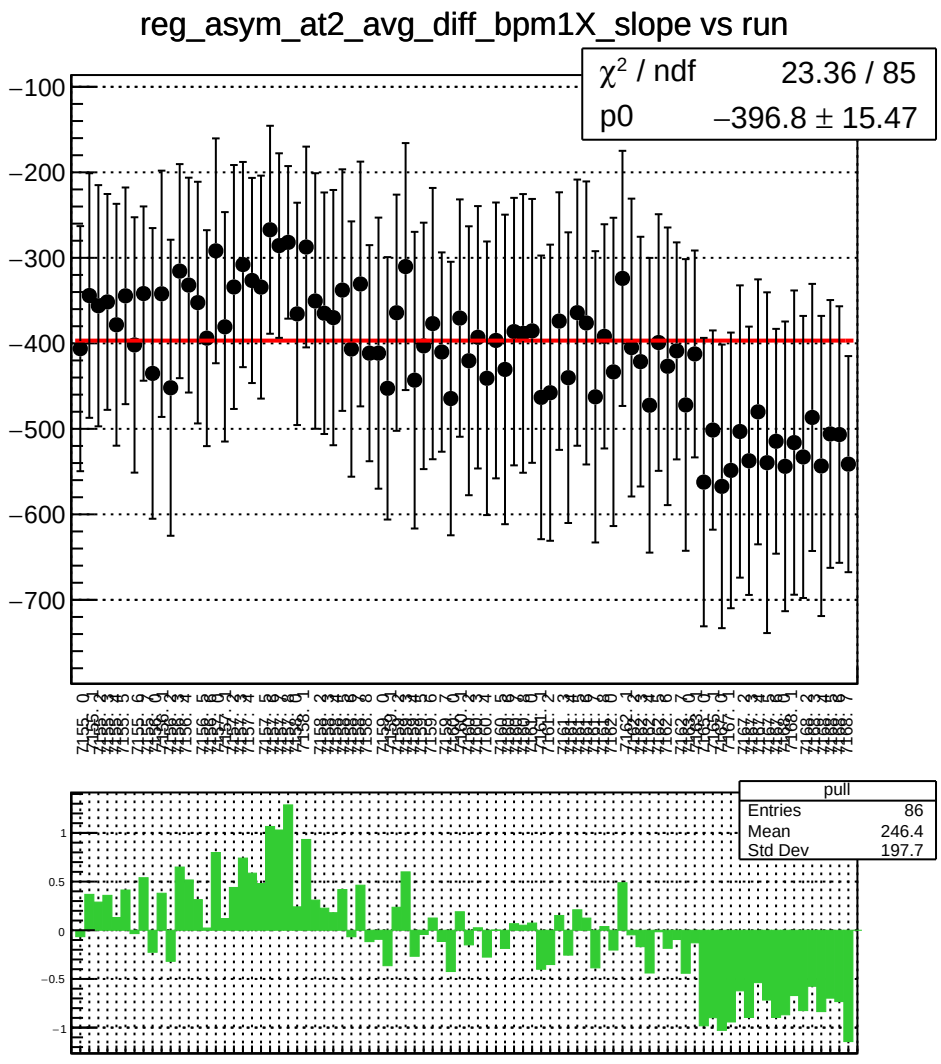

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 86.82 / 85
p0 30.09 ± 1.752
pull
Entries 86
Mean −29.95
Std Dev 59.35

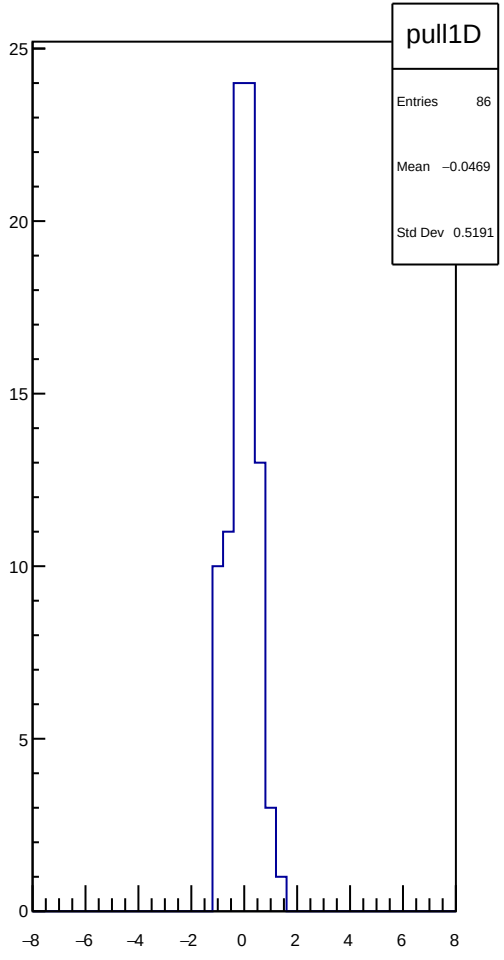

pull1D
Entries 86
Mean 0.02777
Std Dev 1.004

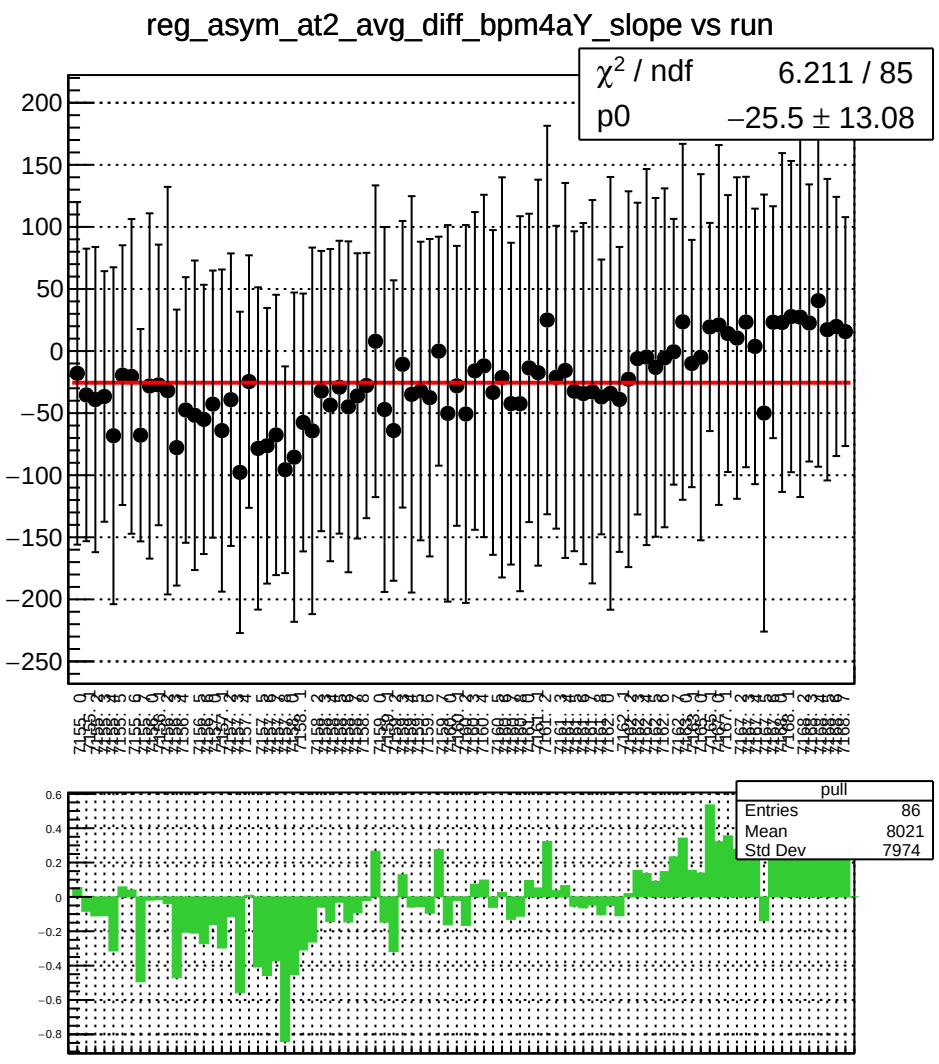

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 70.69 / 85
p0 −0.04583 ± 1.703
50
0
−50
−100
−150
−200
pull
Entries 86
Mean 385.3
Std Dev 340.4
3
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.005603
Std Dev 0.9066
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

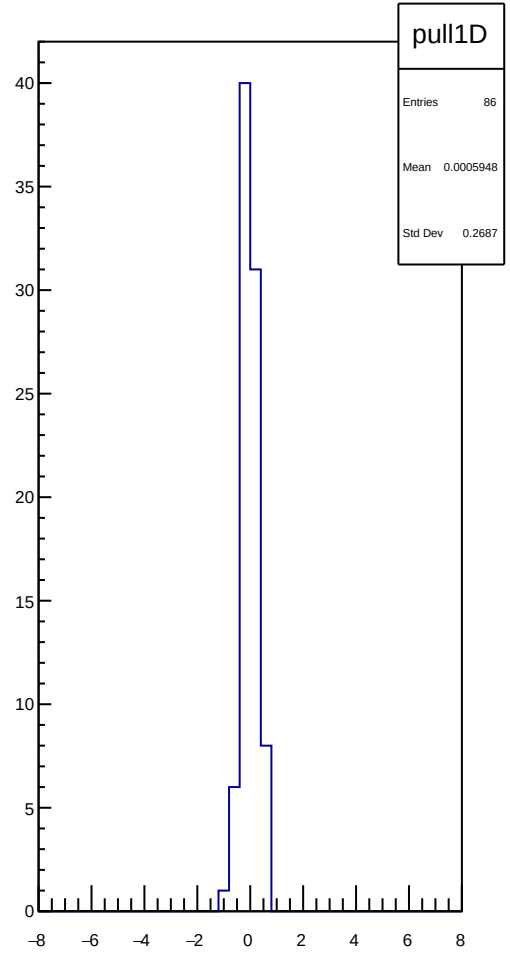

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 71.55 / 85
p0 1.779 ± 0.0661
pull
Entries 86
Mean −499.8
Std Dev 515.3

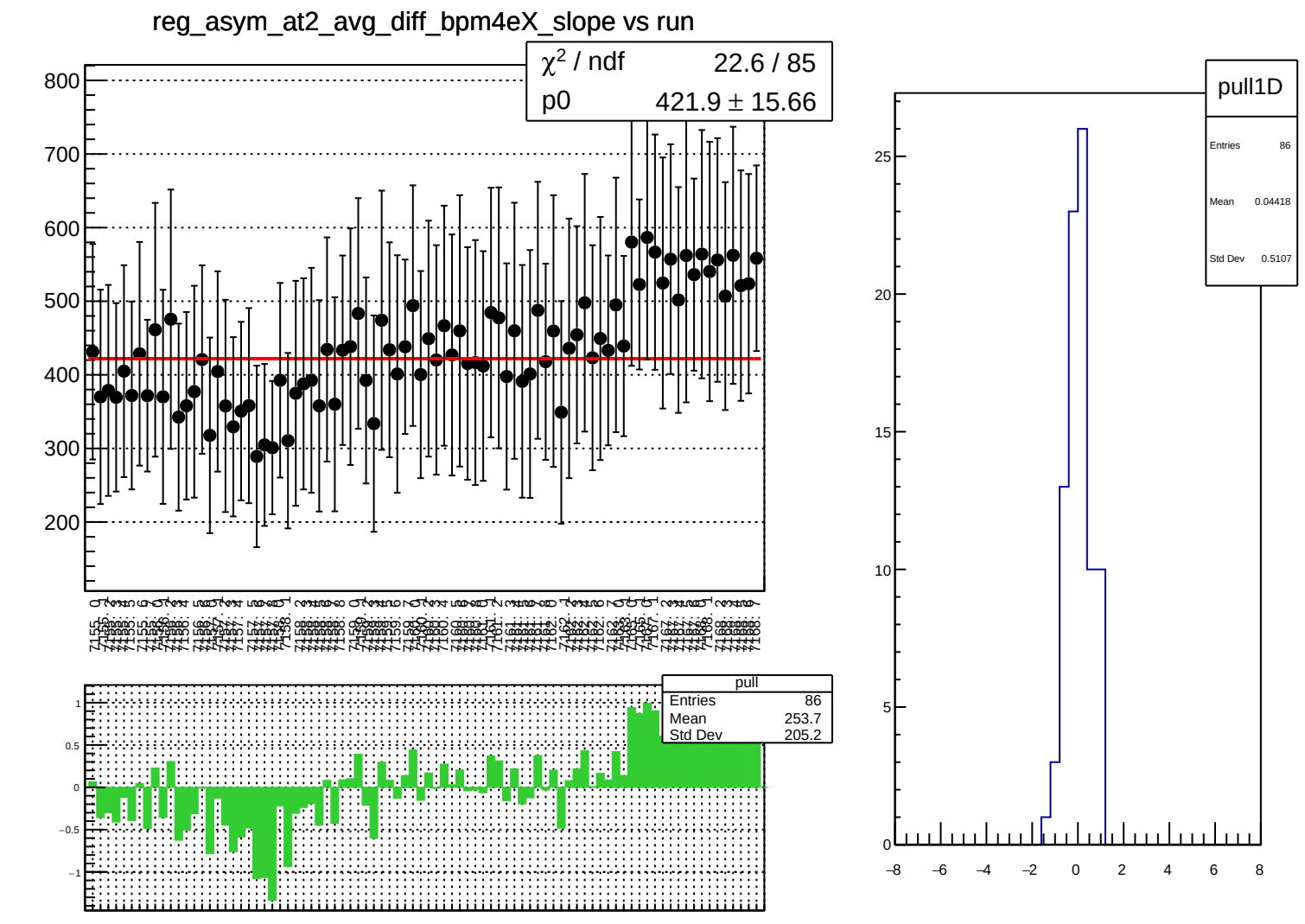

pull1D
Entries 86
Mean 0.003033
Std Dev 0.9121

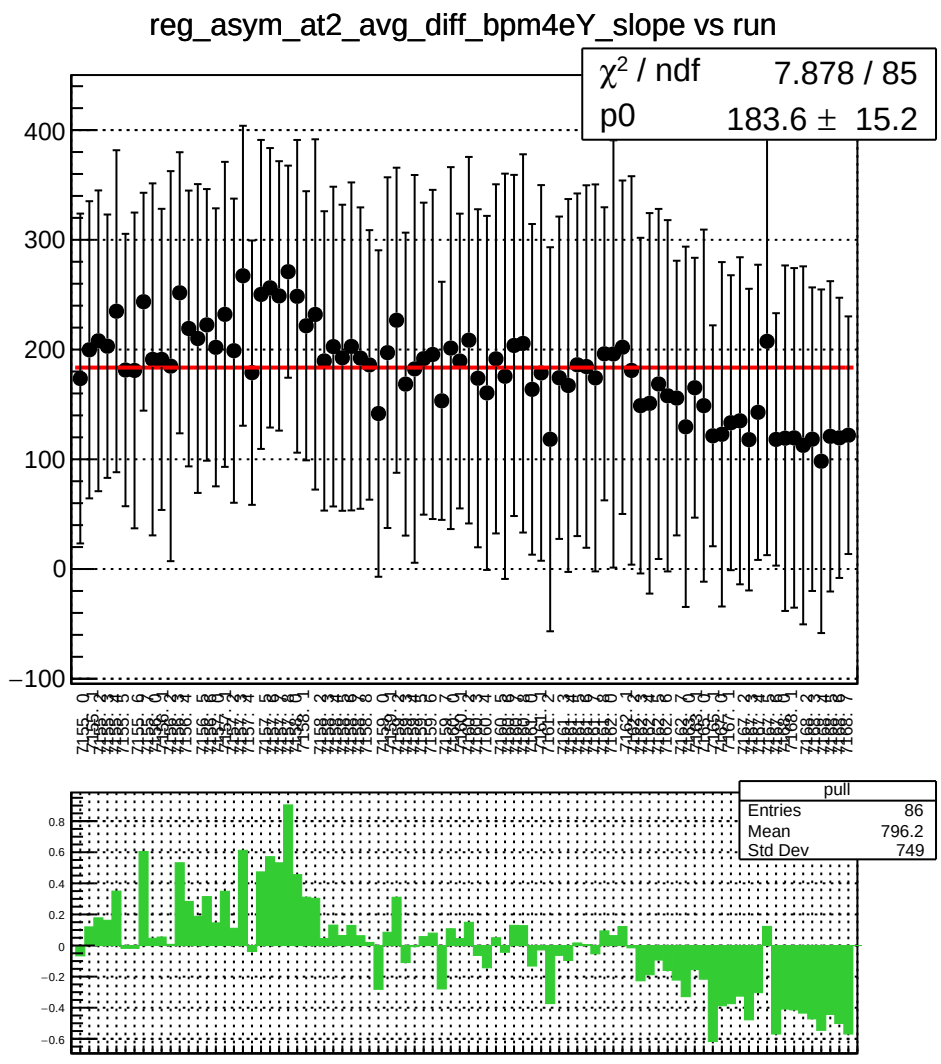

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 23.36 / 85
p0 −396.8 ± 15.47
−100
−200
−300
−400
−500
−600
−700
pull
Entries 86
Mean 246.4
Std Dev 197.7
1
0.5
0
−0.5
−1

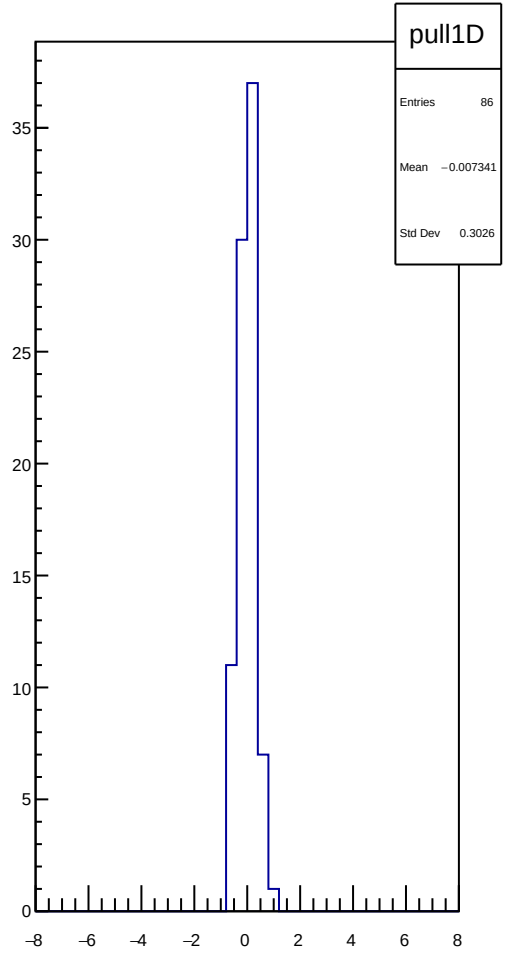

pull1D
Entries 86
Mean −0.0469
Std Dev 0.5191
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

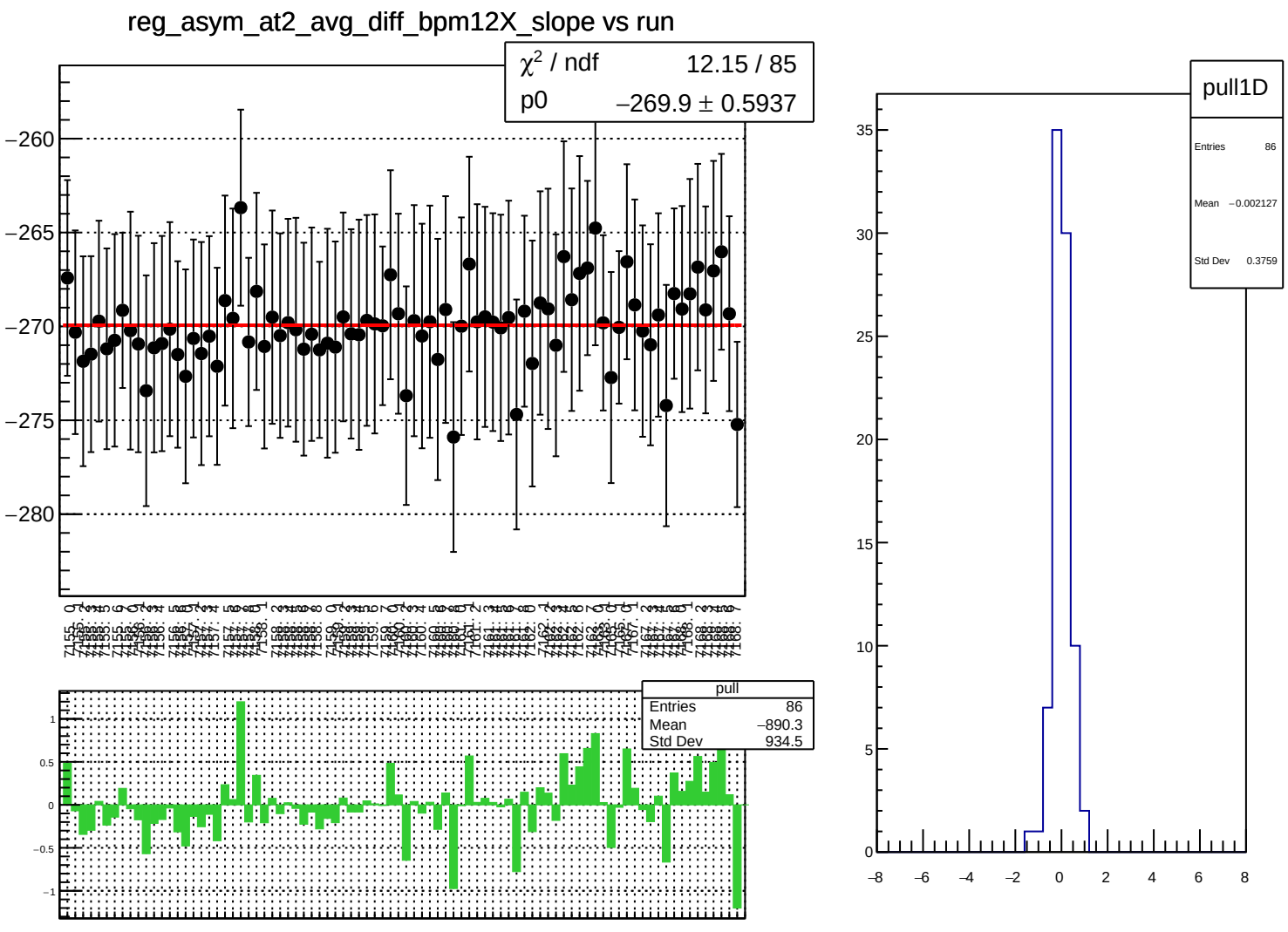

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.211 / 85
p0 −25.5 ± 13.08
pull
Entries 86
Mean 8021
Std Dev 7974

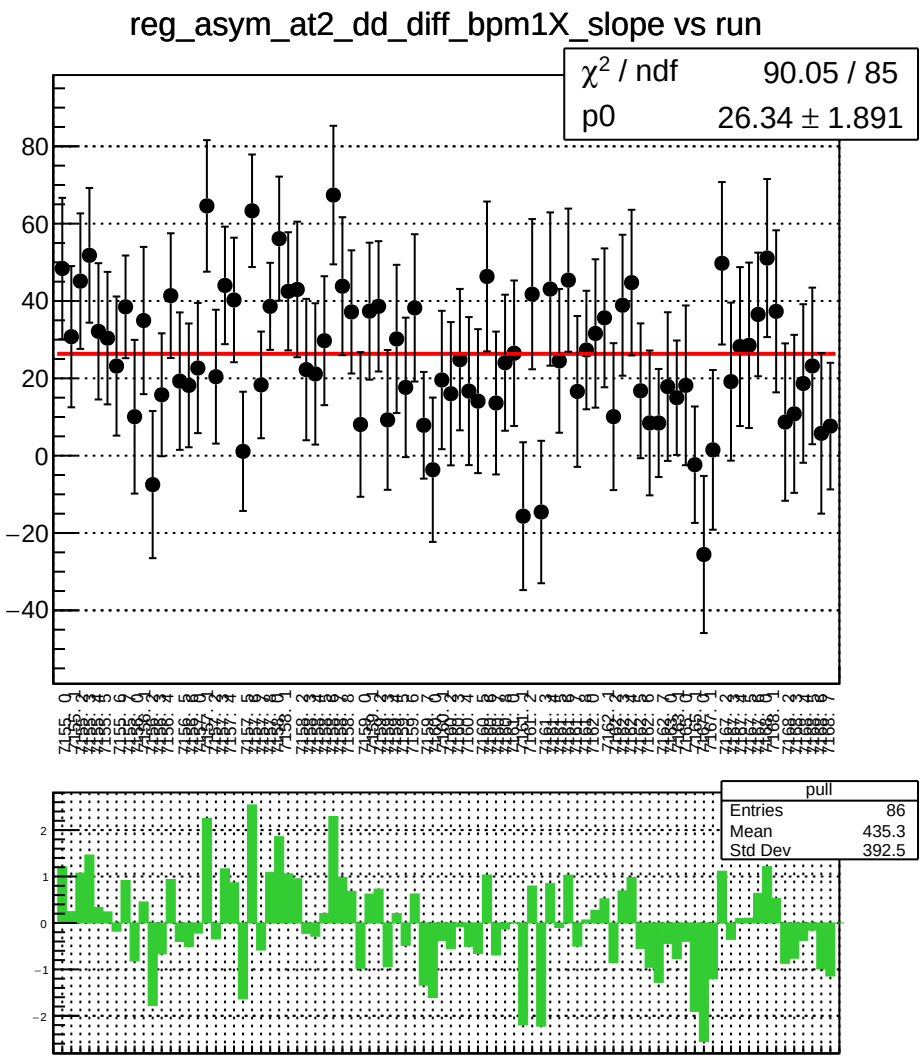

pull1D
Entries 86
Mean 0.0005948
Std Dev 0.2687

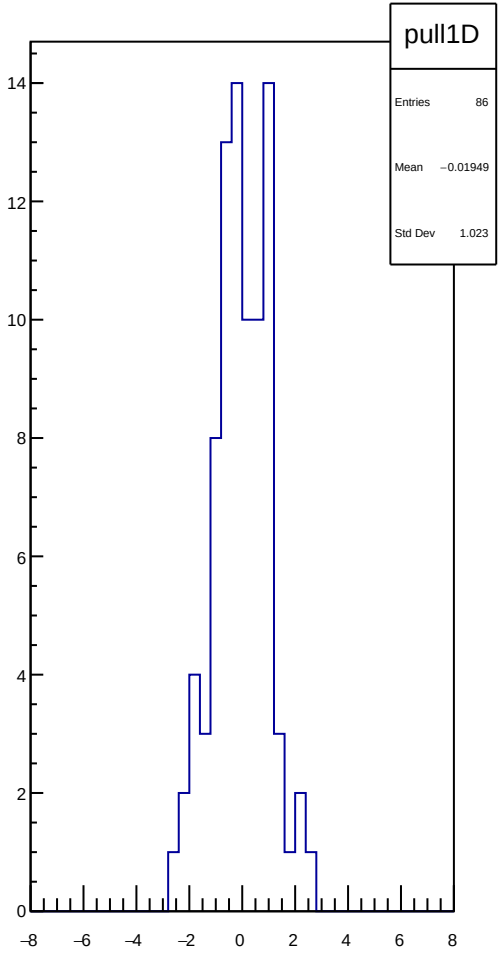

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 22.6 / 85
p0 421.9 ± 15.66
800
700
600
500
400
300
200
pull
Entries 86
Mean 253.7
Std Dev 205.2
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean 0.04418
Std Dev 0.5107
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

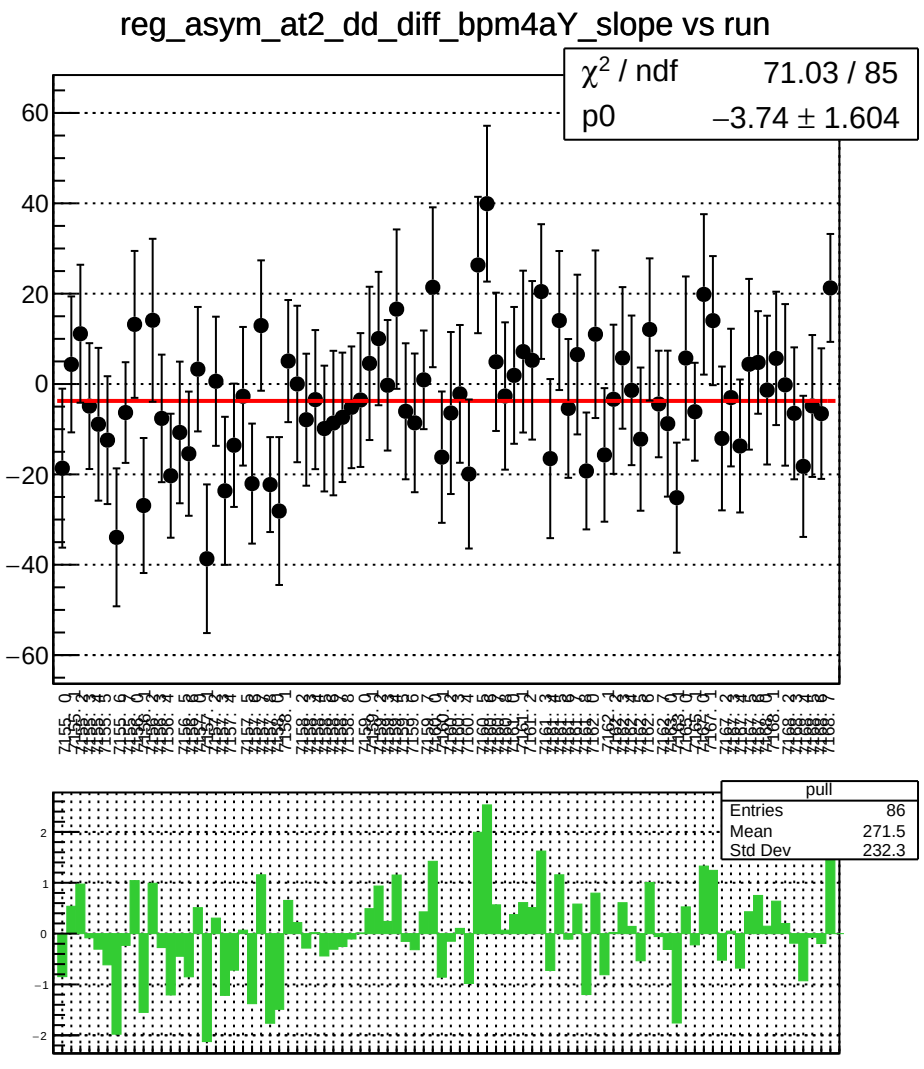

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.878 / 85
p0 183.6 ± 15.2
400
300
200
100
0
−100
pull
Entries 86
Mean 796.2
Std Dev 749
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

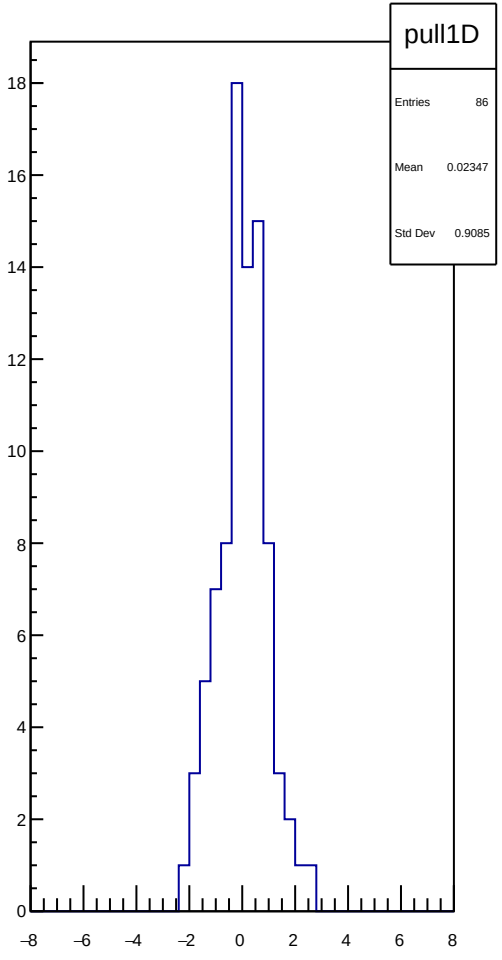

pull1D
Entries 86
Mean −0.007341
Std Dev 0.3026
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

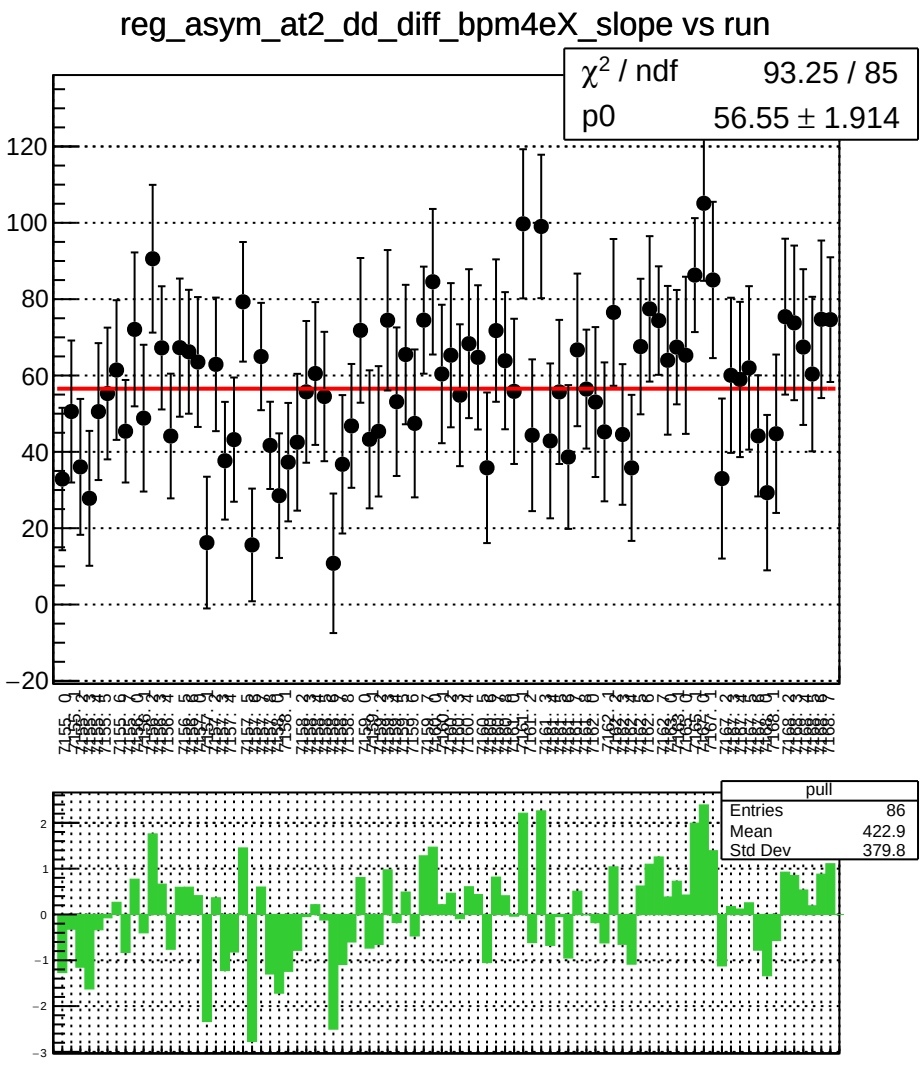

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 12.15 / 85
p0 −269.9 ± 0.5937
−260
−265
−270
−275
−280
pull
Entries 86
Mean −890.3
Std Dev 934.5
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean −0.002127
Std Dev 0.3759
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

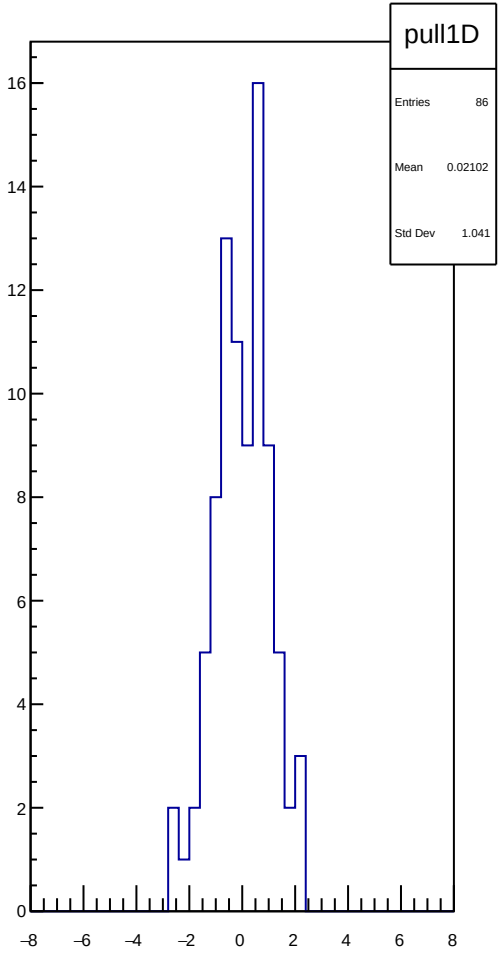

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 90.05 / 85
p0 26.34 ± 1.891
pull
Entries 86
Mean 435.3
Std Dev 392.5

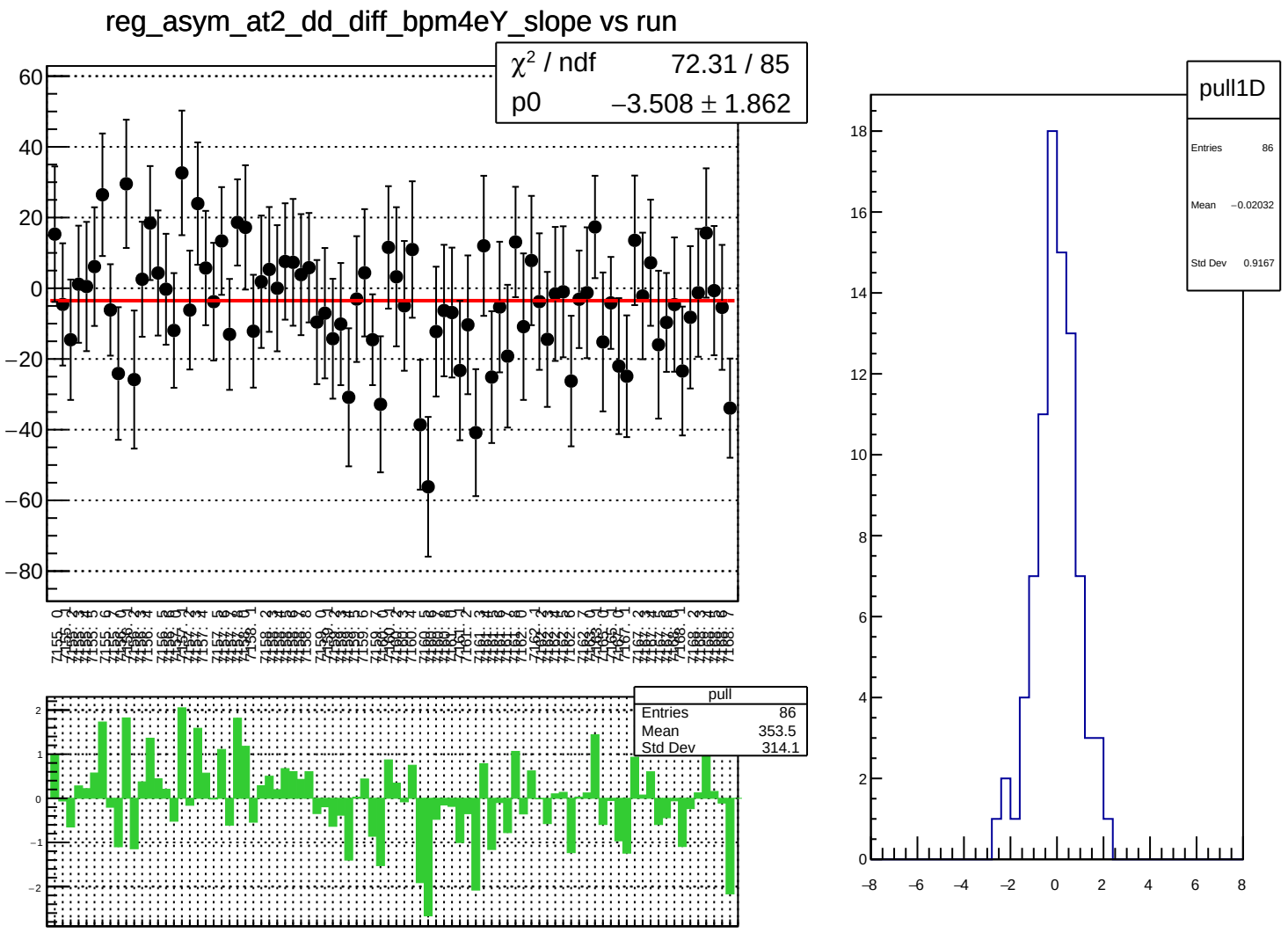

pull1D
Entries 86
Mean −0.01949
Std Dev 1.023

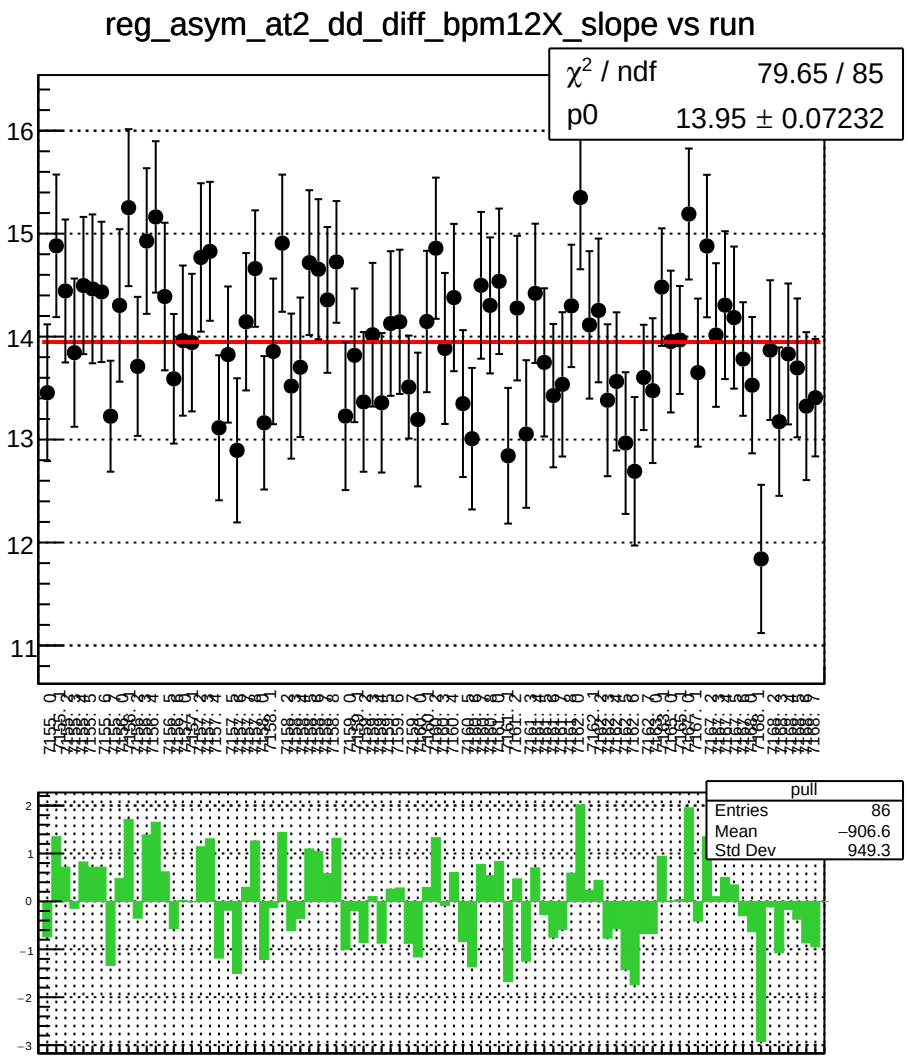

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 71.03 / 85
p0 −3.74 ± 1.604
pull
Entries 86
Mean 271.5
Std Dev 232.3

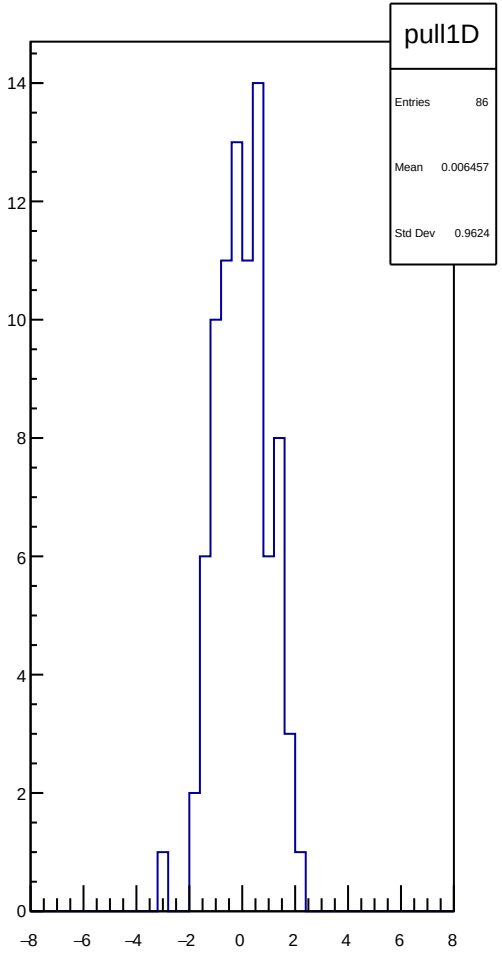

pull1D
Entries 86
Mean 0.02347
Std Dev 0.9085

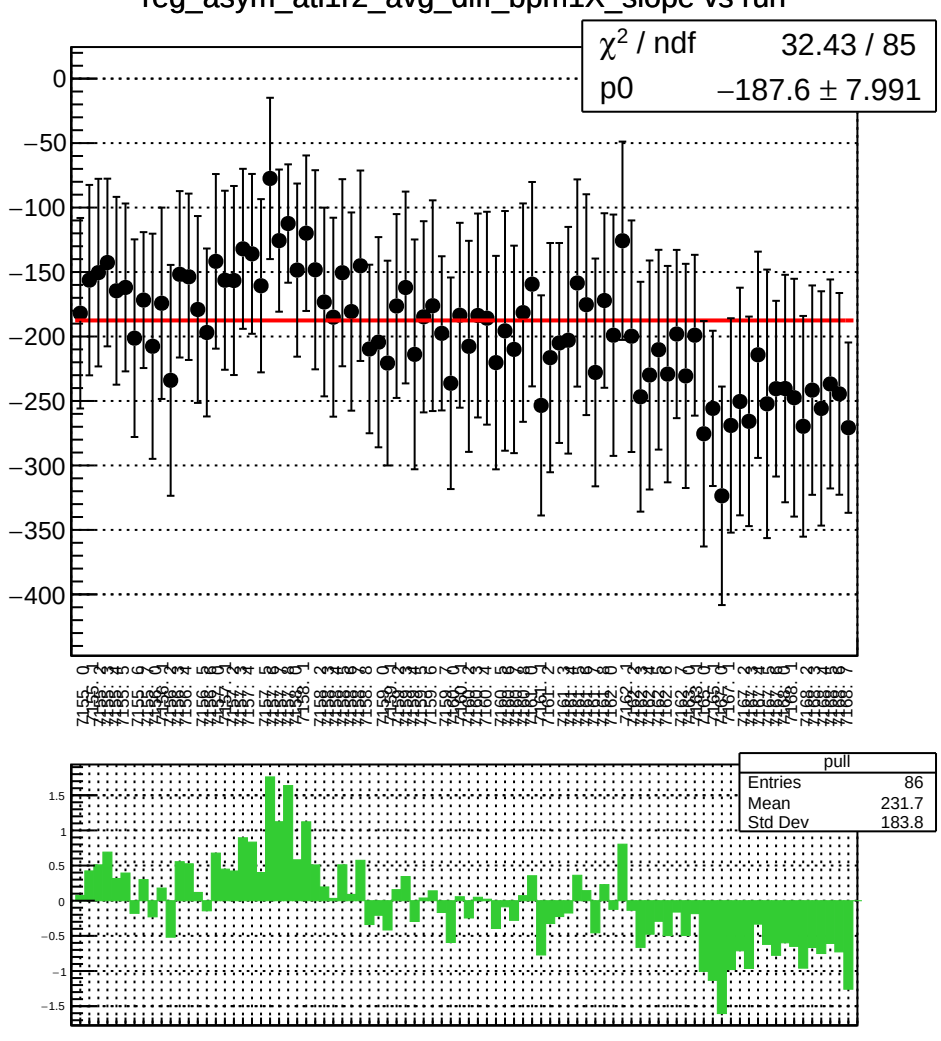

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 93.25 / 85
p0 56.55 ± 1.914
pull
Entries 86
Mean 422.9
Std Dev 379.8

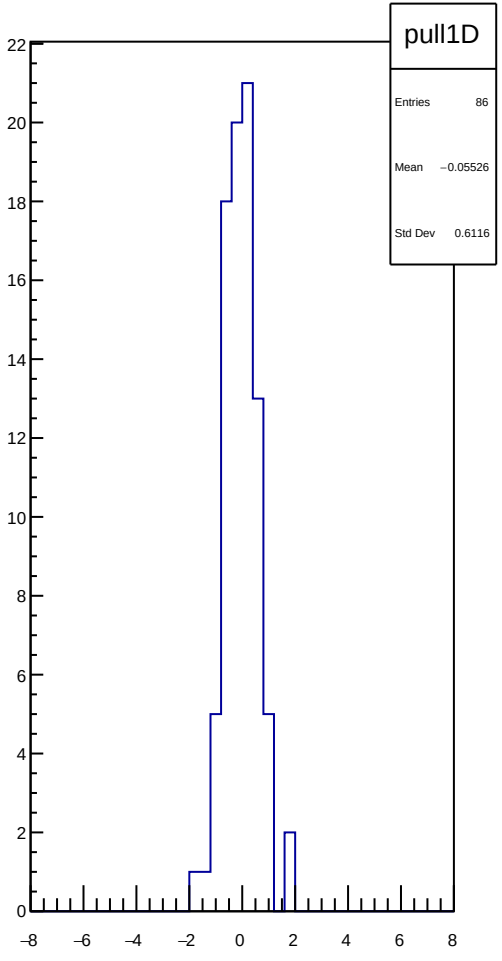

pull1D
Entries 86
Mean 0.02102
Std Dev 1.041

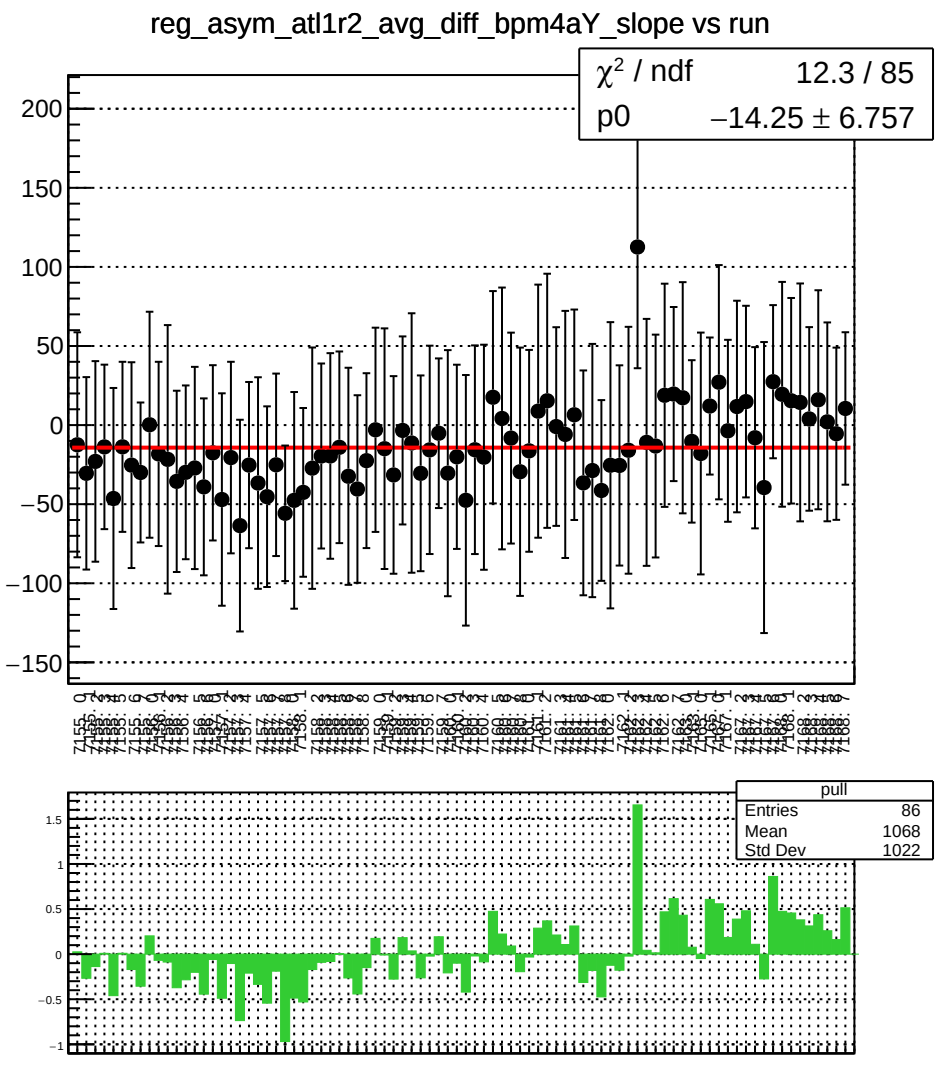

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 72.31 / 85
p0 −3.508 ± 1.862
pull
Entries 86
Mean 353.5
Std Dev 314.1
pull1D
Entries 86
Mean −0.02032
Std Dev 0.9167

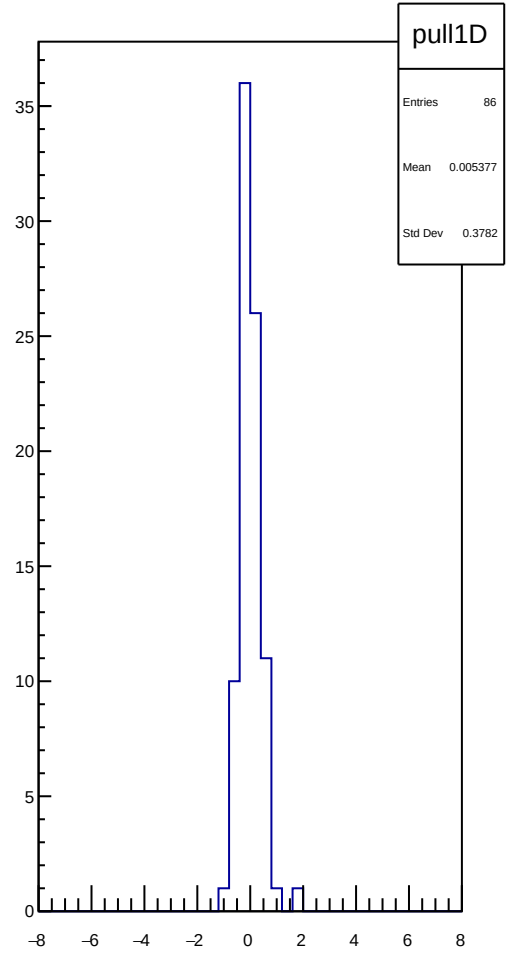

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 79.65 / 85
p0 13.95 ± 0.07232
pull
Entries 86
Mean −906.6
Std Dev 949.3

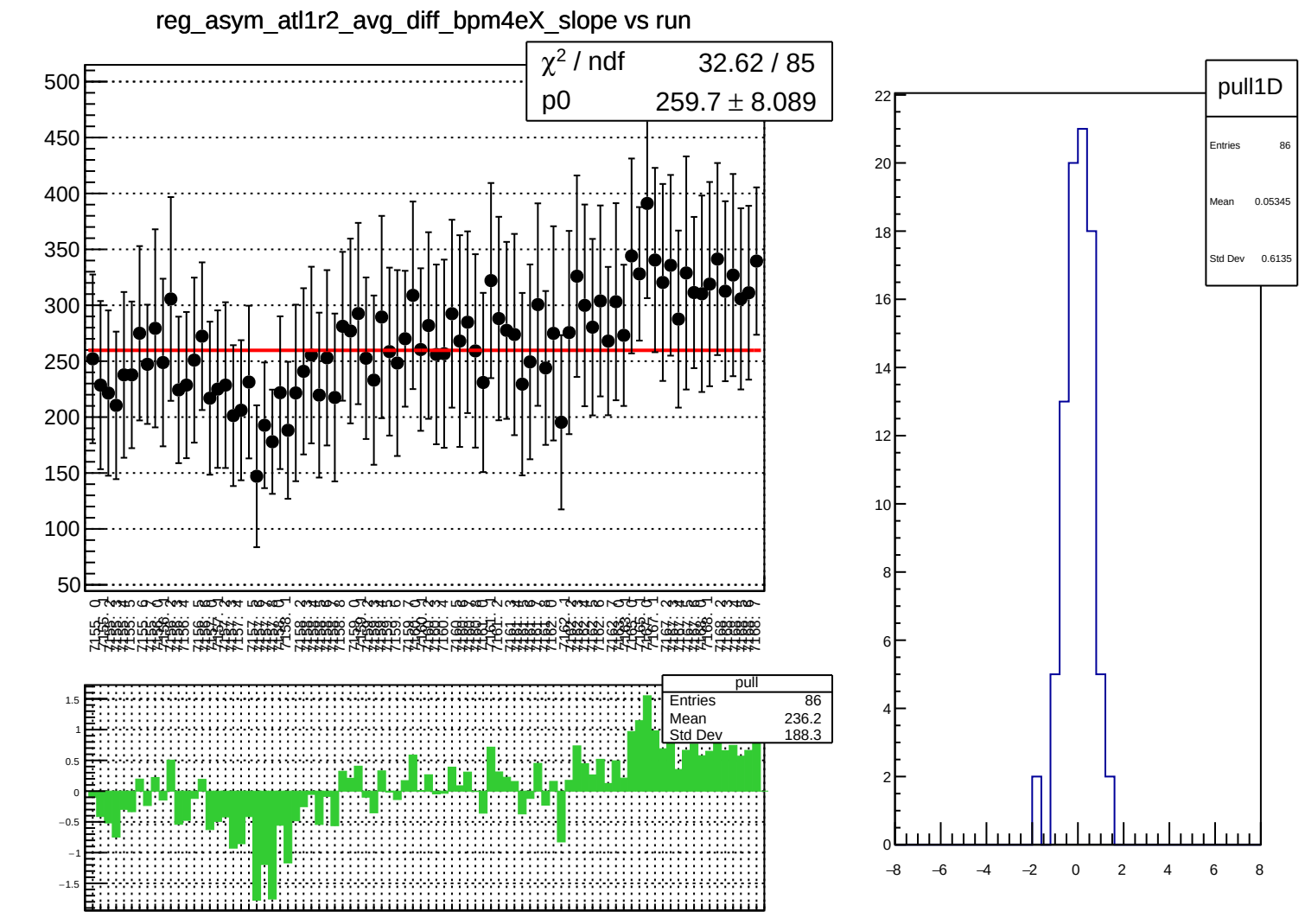

pull1D
Entries 86
Mean 0.006457
Std Dev 0.9624

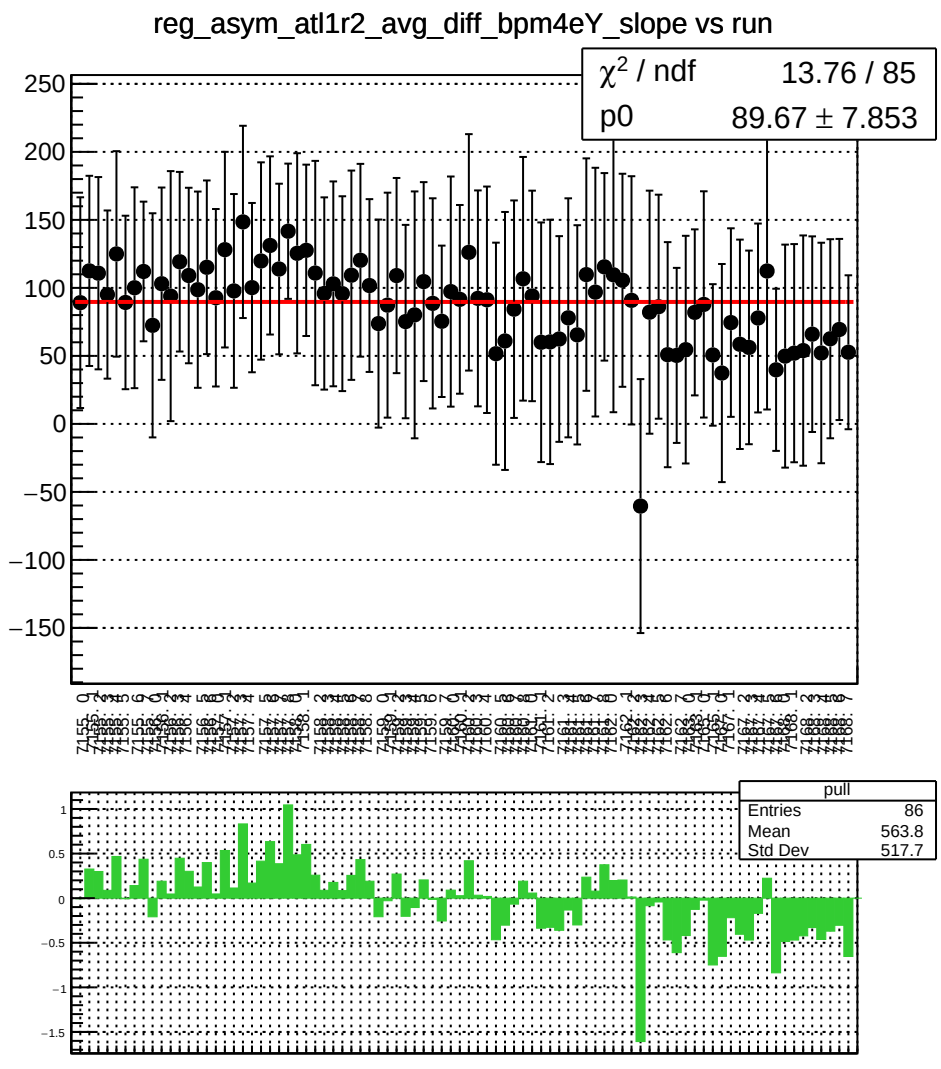

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 32.43 / 85
p0 −187.6 ± 7.991
pull
Entries 86
Mean 231.7
Std Dev 183.8

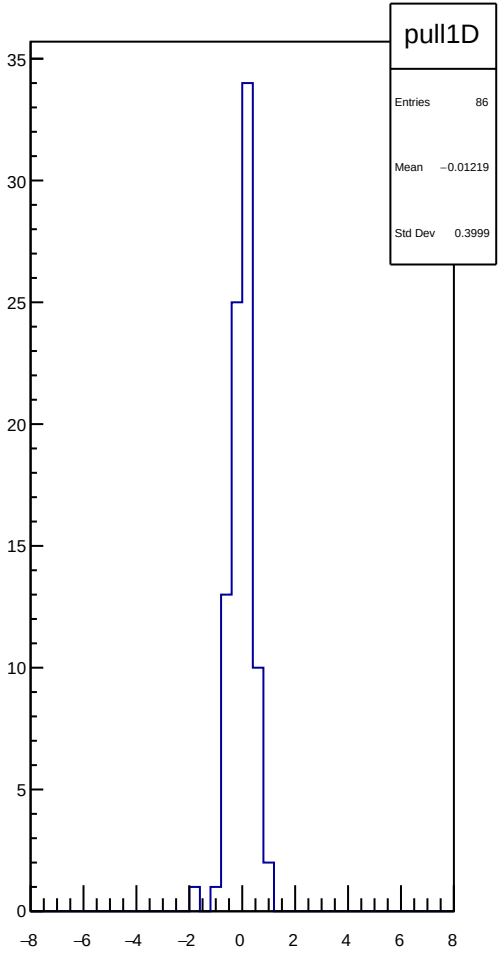

pull1D
Entries 86
Mean −0.05526
Std Dev 0.6116

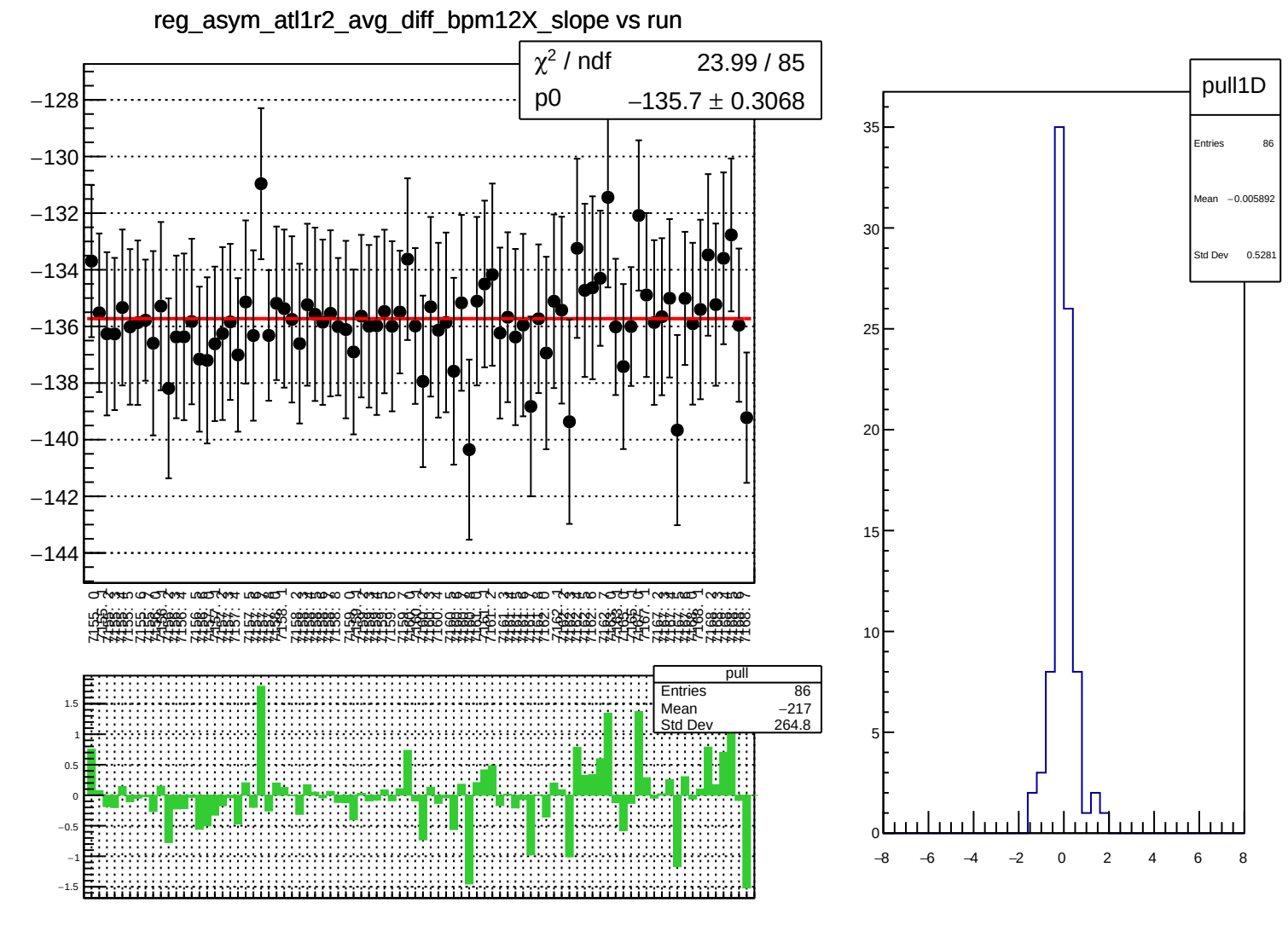

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 12.3 / 85
p0 −14.25 ± 6.757
200
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 1068
Std Dev 1022
1.5
1
0.5
0
−0.5
−1

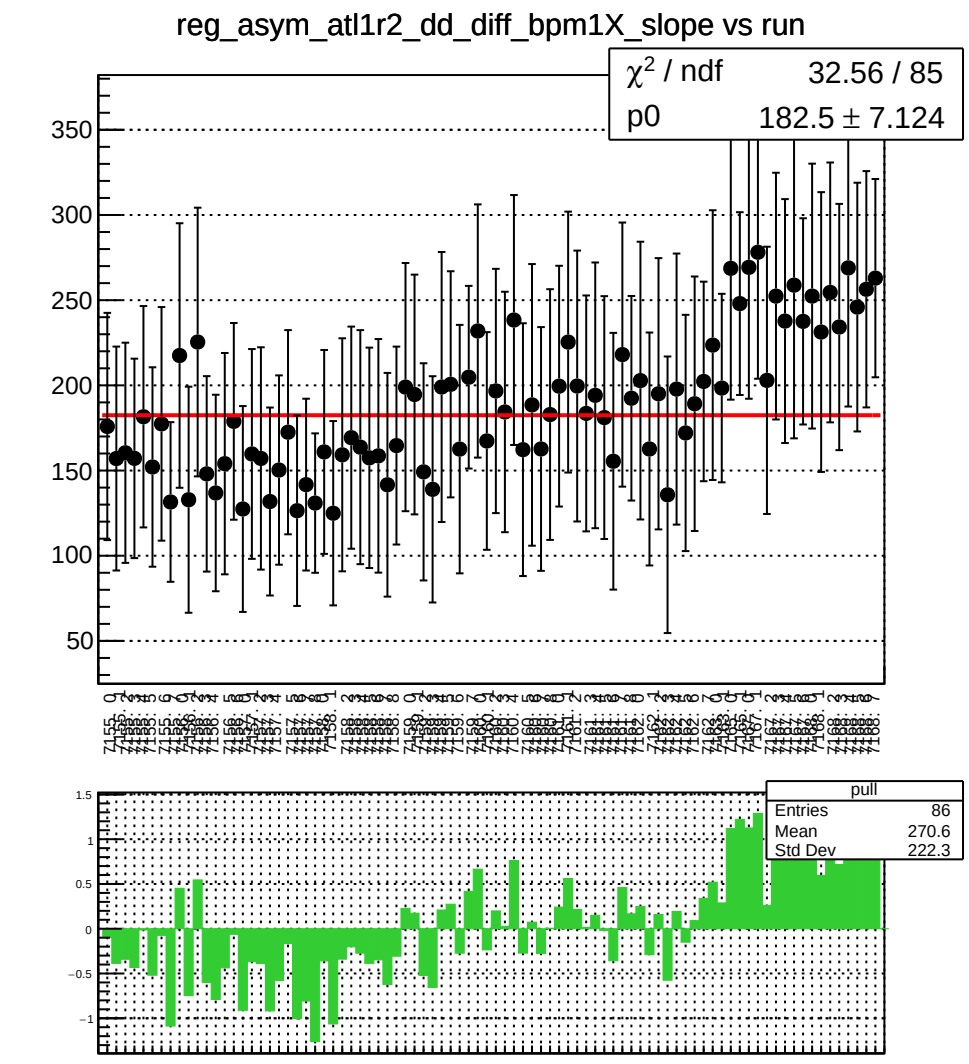

pull1D
Entries 86
Mean 0.005377
Std Dev 0.3782
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

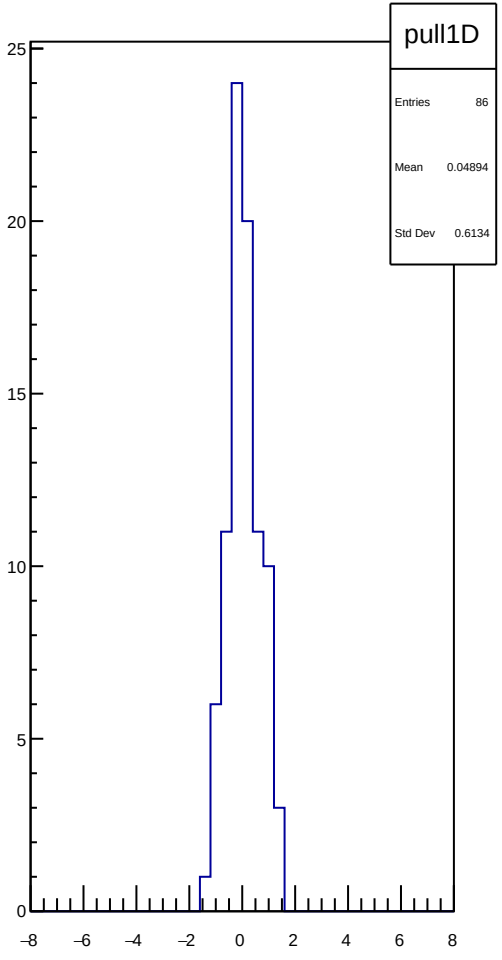

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 32.62 / 85
p0 259.7 ± 8.089
pull
Entries 86
Mean 236.2
Std Dev 188.3
pull1D
Entries 86
Mean 0.05345
Std Dev 0.6135

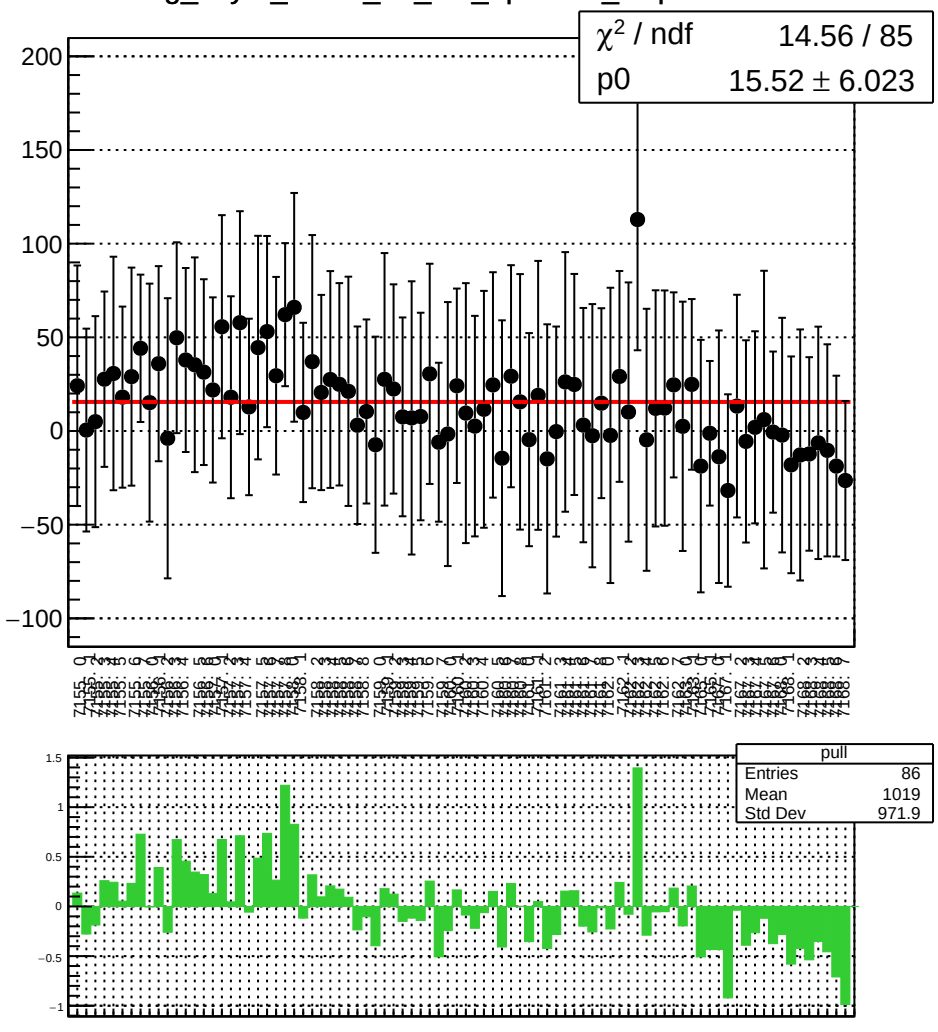

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 13.76 / 85
p0 89.67 ± 7.853
pull
Entries 86
Mean 563.8
Std Dev 517.7

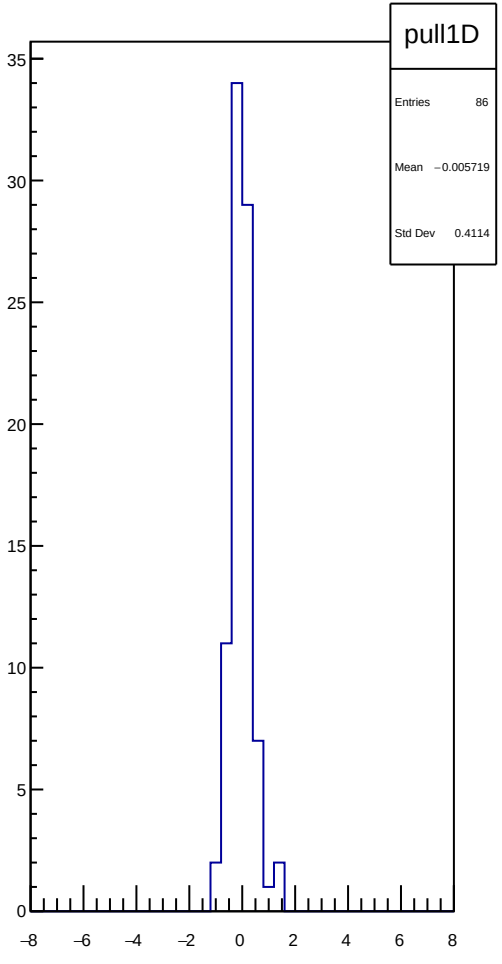

pull1D
Entries 86
Mean −0.01219
Std Dev 0.3999

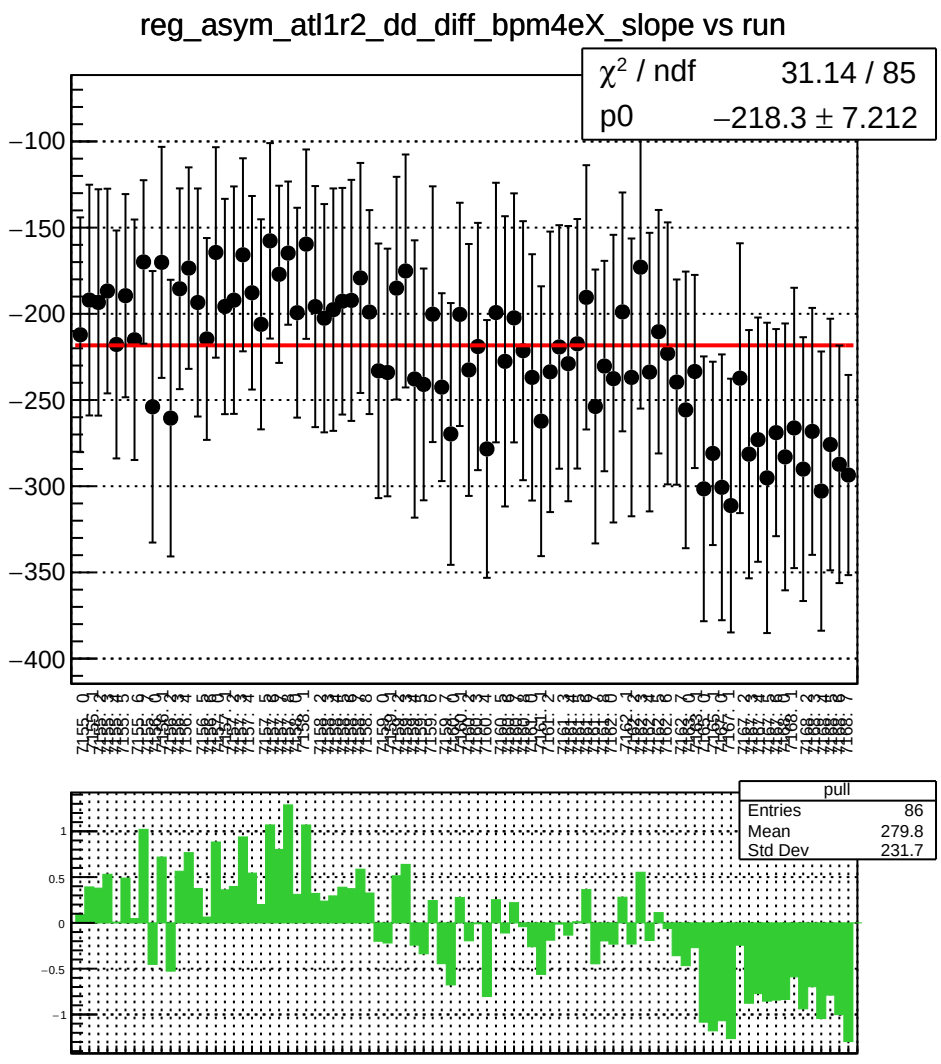

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 23.99 / 85
p0 −135.7 ± 0.3068
−128
−130
−132
−134
−136
−138
−140
−142
−144
pull
Entries 86
Mean −217
Std Dev 264.8
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 86
Mean −0.005892
Std Dev 0.5281
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

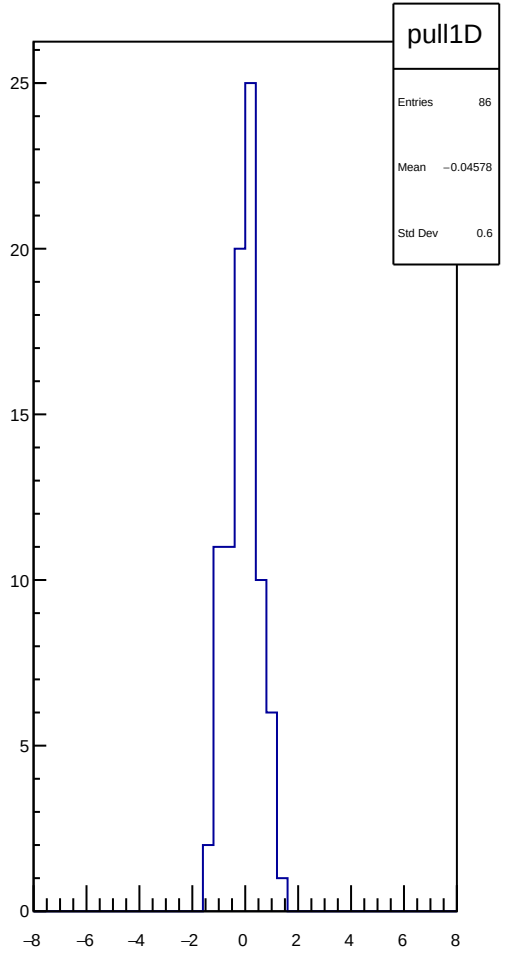

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 32.56 / 85
p0 182.5 ± 7.124
350
300
250
200
150
100
50
pull
Entries 86
Mean 270.6
Std Dev 222.3
1.5
1
0.5
0
−0.5
−1

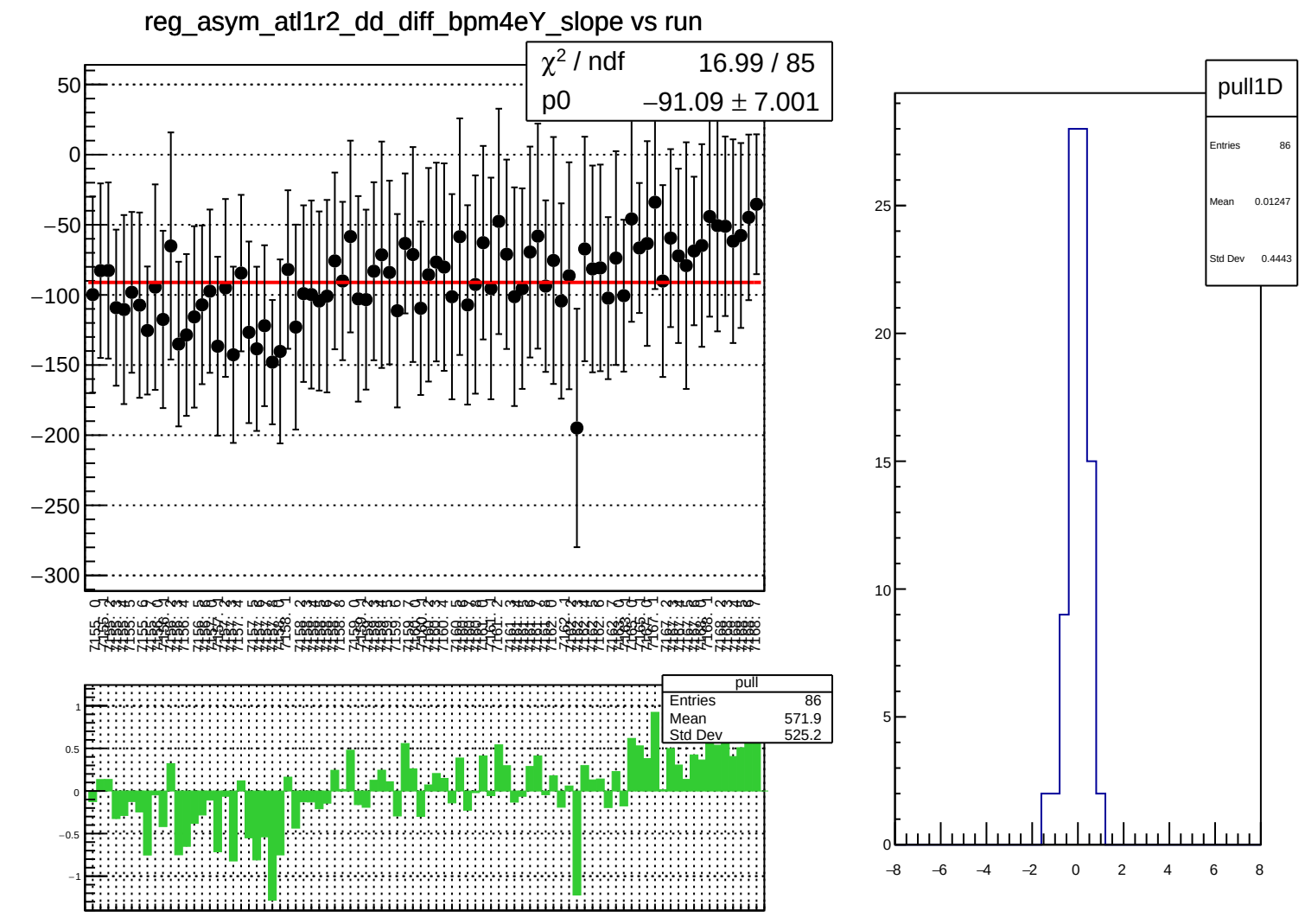

pull1D
Entries 86
Mean 0.04894
Std Dev 0.6134
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

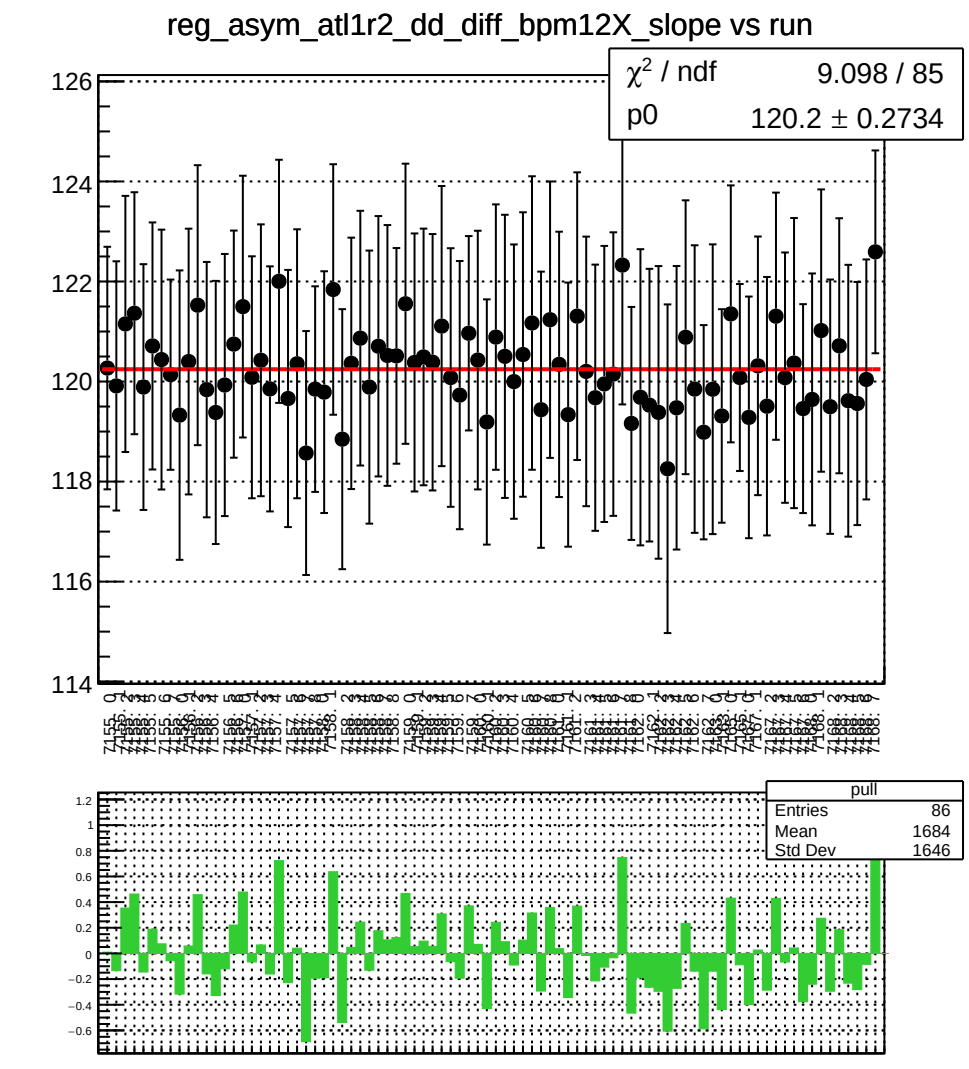

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 14.56 / 85
p0 15.52 ± 6.023
pull
Entries 86
Mean 1019
Std Dev 971.9

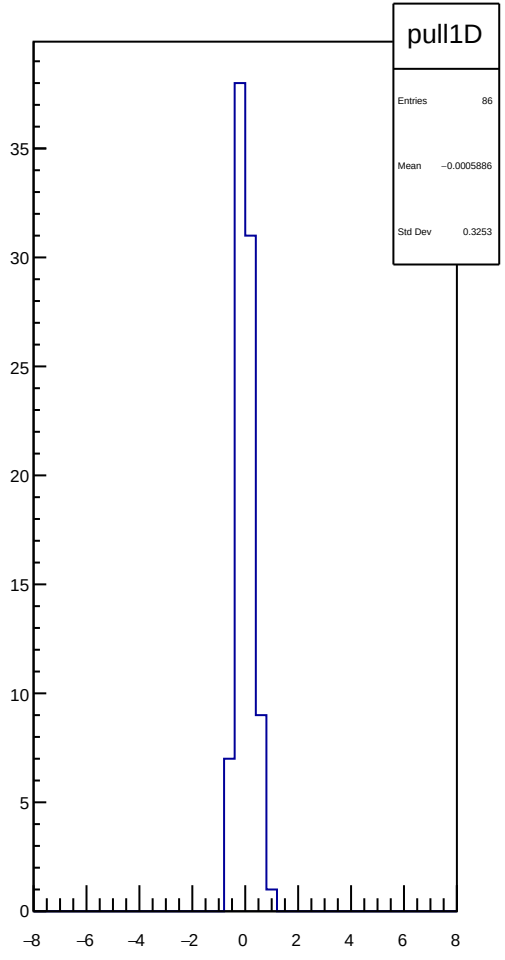

pull1D
Entries 86
Mean −0.005719
Std Dev 0.4114

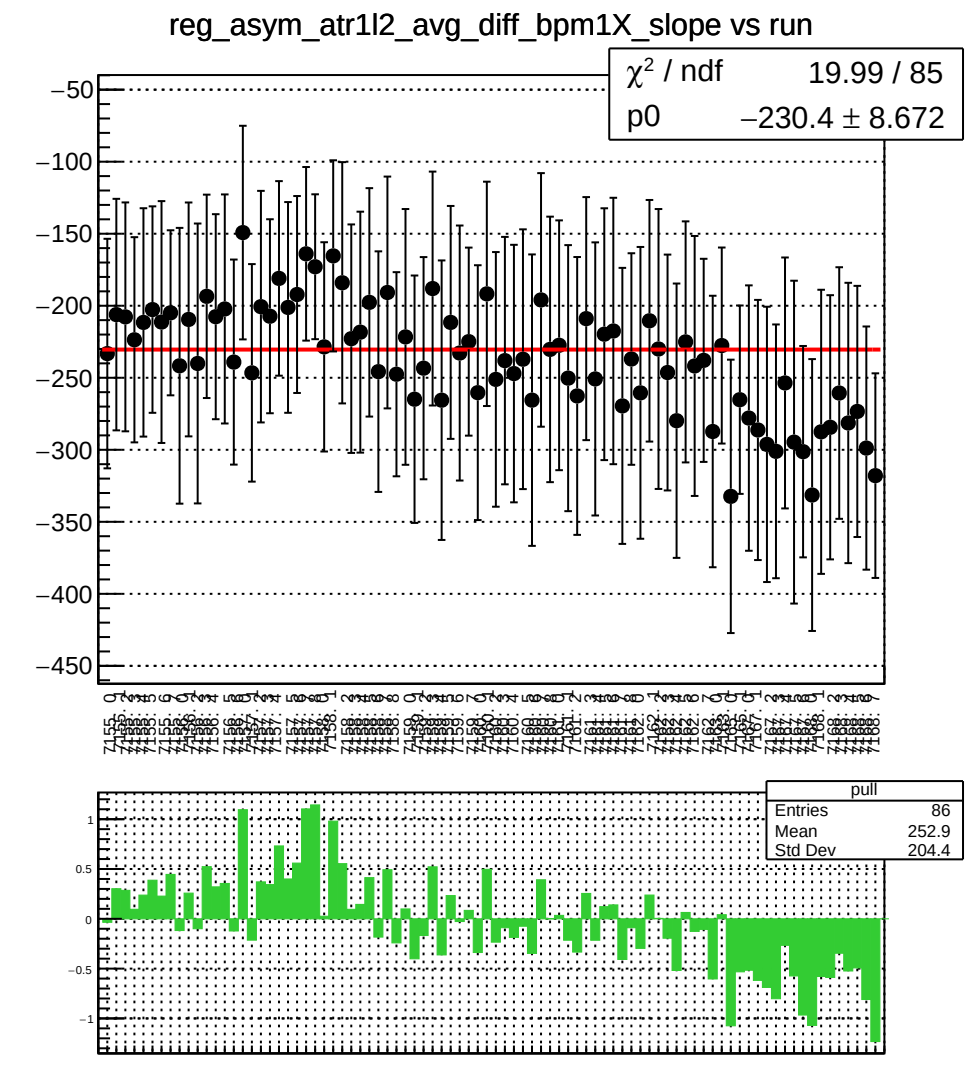

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 31.14 / 85
p0 −218.3 ± 7.212
−100
−150
−200
−250
−300
−350
−400
pull
Entries 86
Mean 279.8
Std Dev 231.7
1
0.5
0
−0.5
−1

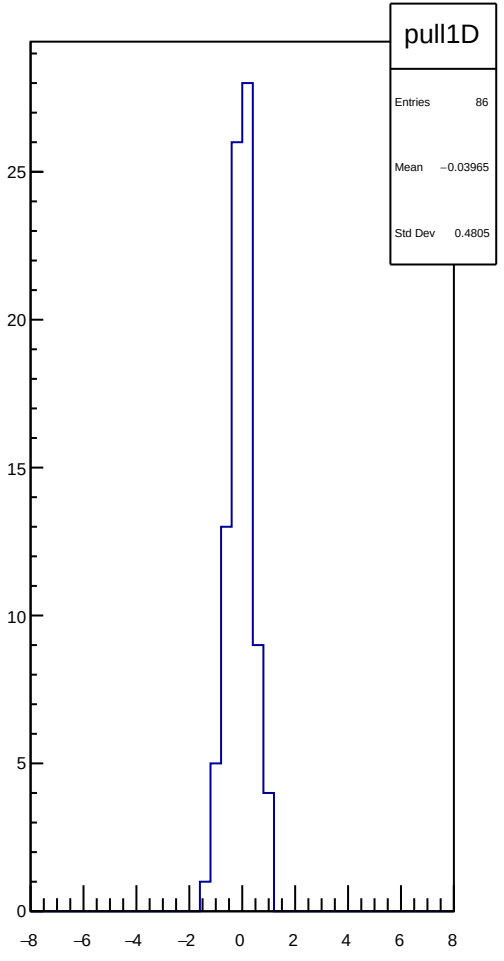

pull1D
Entries 86
Mean −0.04578
Std Dev 0.6
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

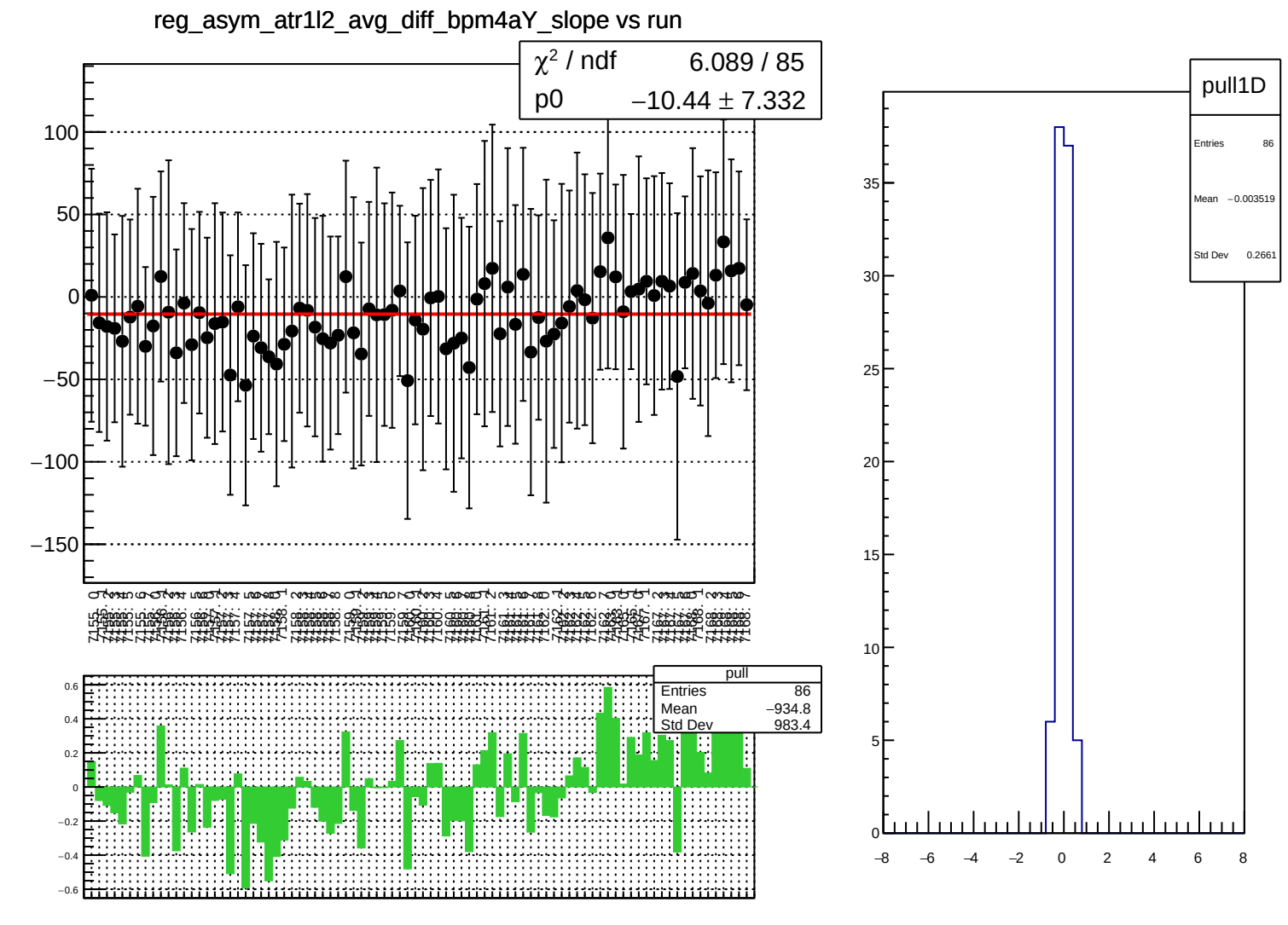

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 16.99 / 85
p0 −91.09 ± 7.001
50
0
−50
−100
−150
−200
−250
−300
pull
Entries 86
Mean 571.9
Std Dev 525.2
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean 0.01247
Std Dev 0.4443
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

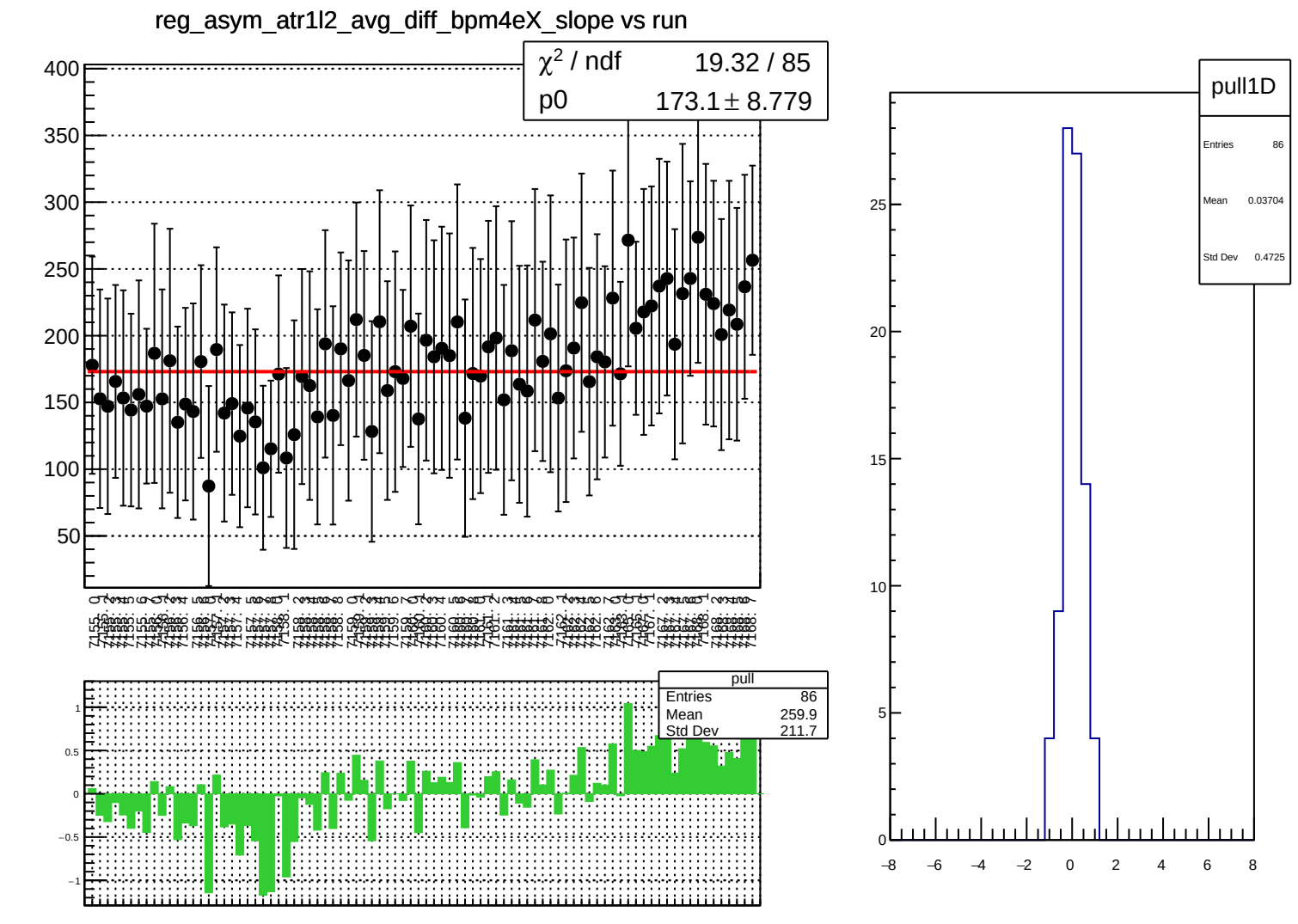

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 9.098 / 85
p0 120.2 ± 0.2734
126
124
122
120
118
116
114
pull
Entries 86
Mean 1684
Std Dev 1646
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

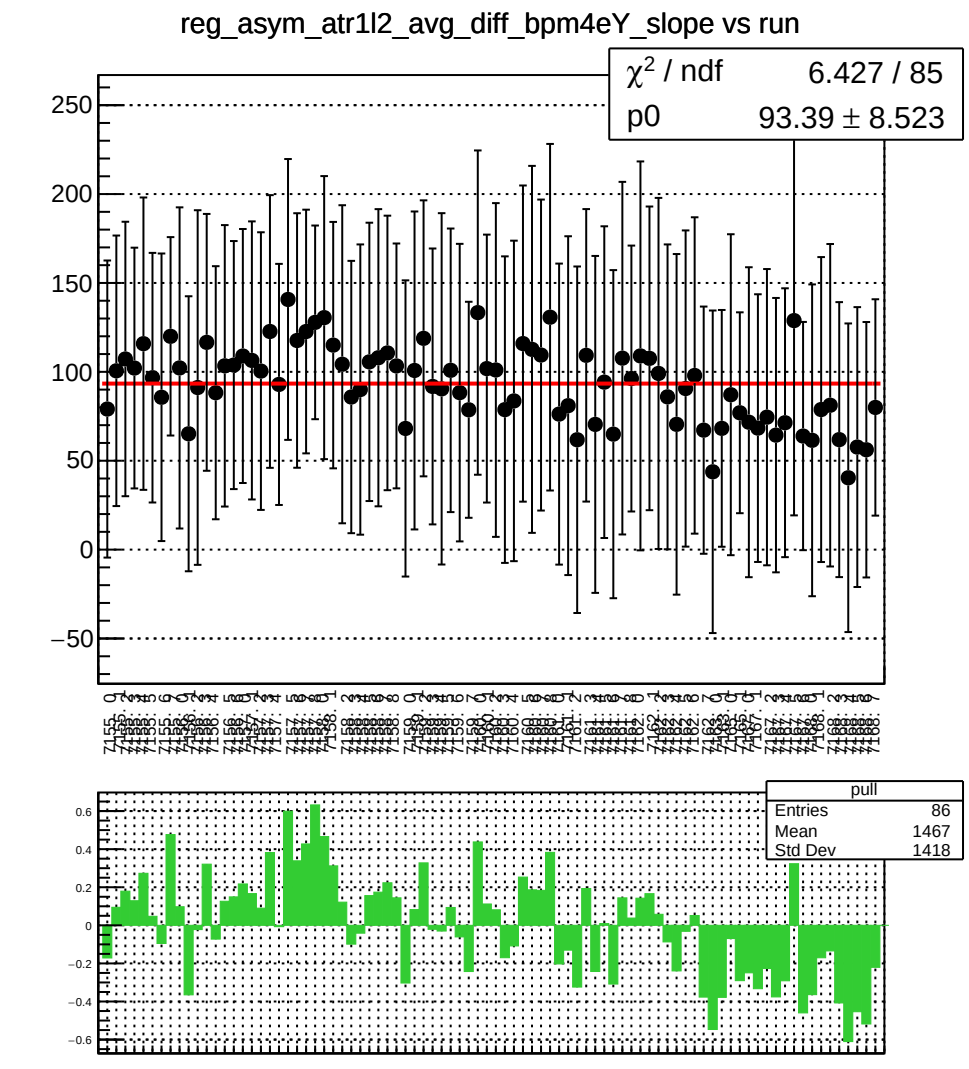

pull1D
Entries 86
Mean −0.0005886
Std Dev 0.3253
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

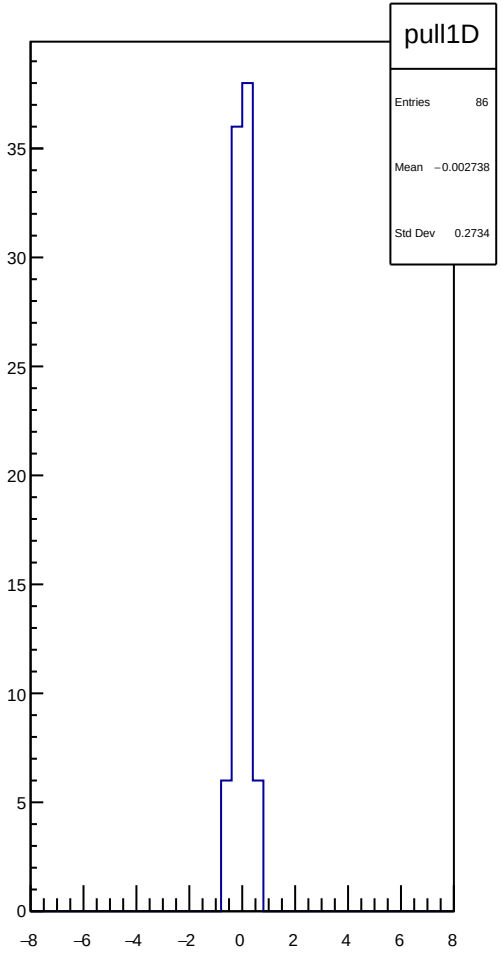

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 19.99 / 85
p0 −230.4 ± 8.672
pull
Entries 86
Mean 252.9
Std Dev 204.4

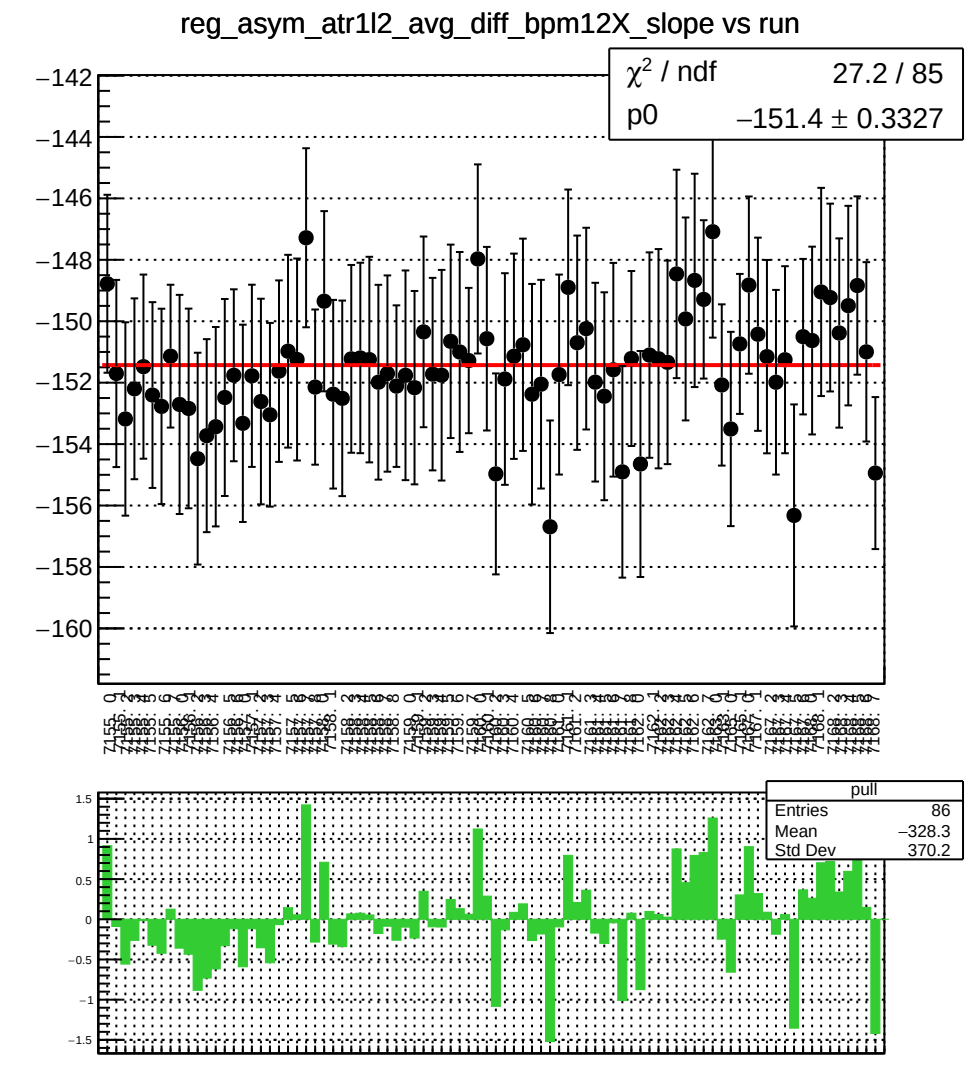

pull1D
Entries 86
Mean −0.03965
Std Dev 0.4805

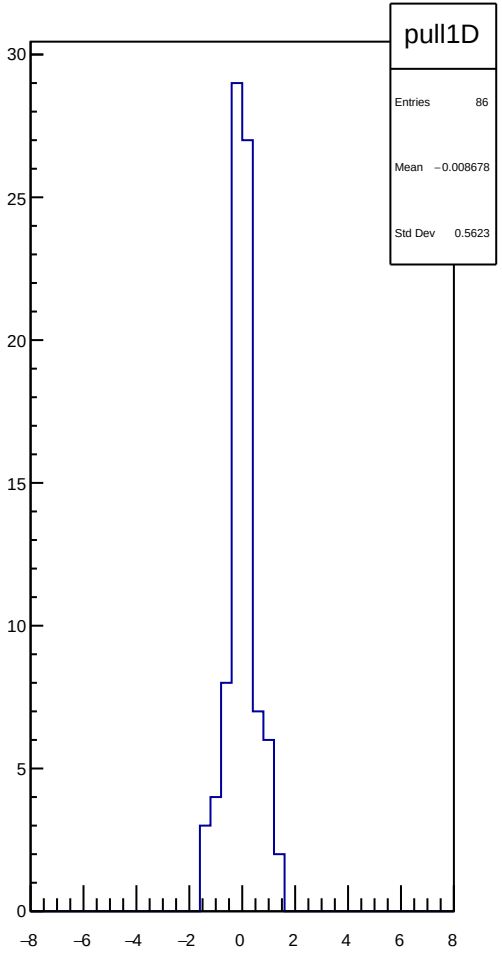

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.089 / 85
p0 −10.44 ± 7.332
100
50
0
−50
−100
−150
pull
Entries 86
Mean −934.8
Std Dev 983.4
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 86
Mean −0.003519
Std Dev 0.2661
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

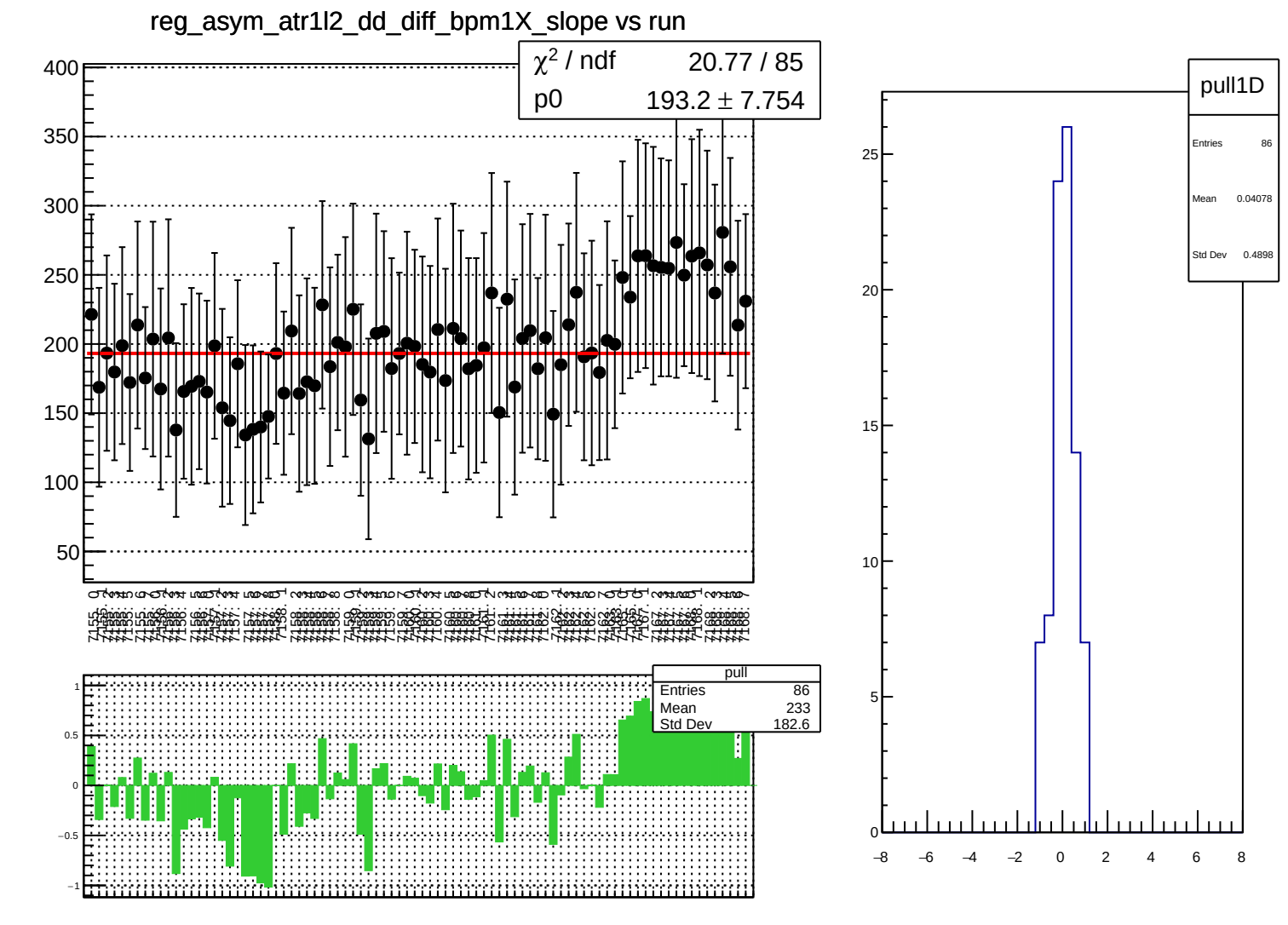

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 19.32 / 85
p0 173.1 ± 8.779
pull
Entries 86
Mean 259.9
Std Dev 211.7
pull1D
Entries 86
Mean 0.03704
Std Dev 0.4725

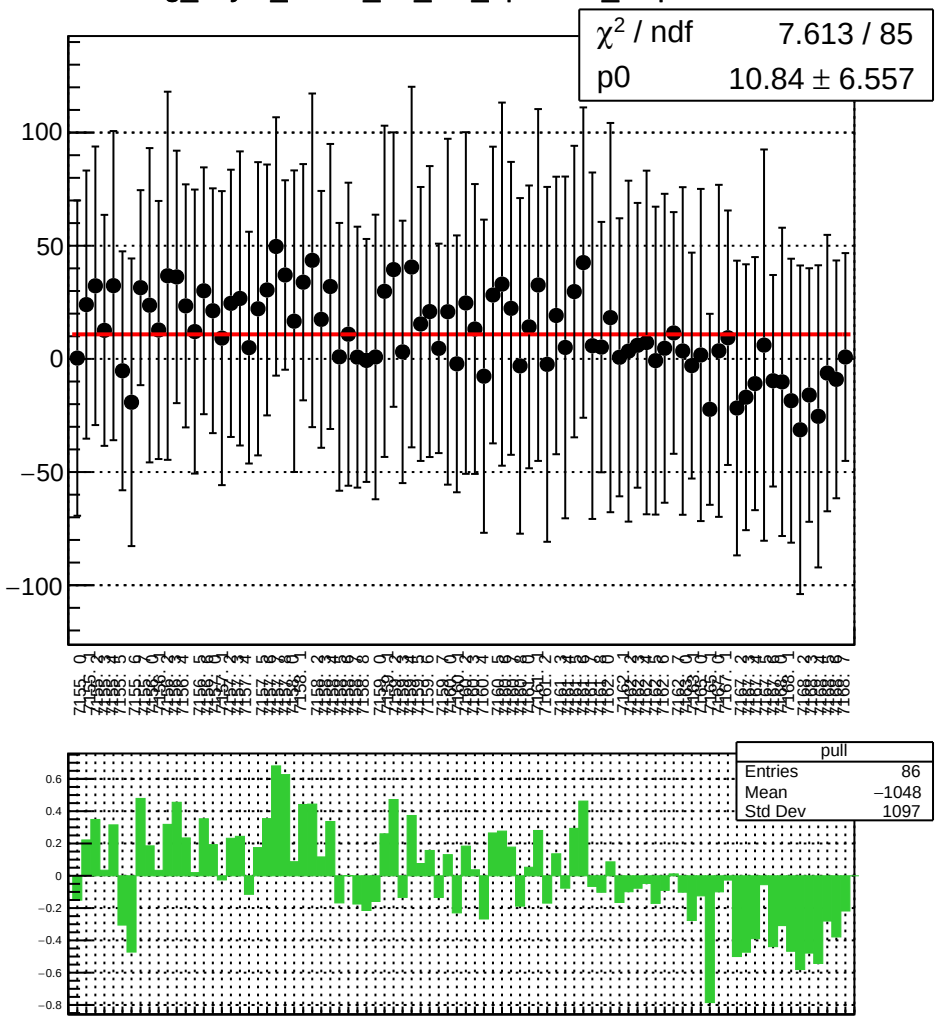

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.427 / 85
p0 93.39 ± 8.523
250
200
150
100
50
0
−50
pull
Entries 86
Mean 1467
Std Dev 1418
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

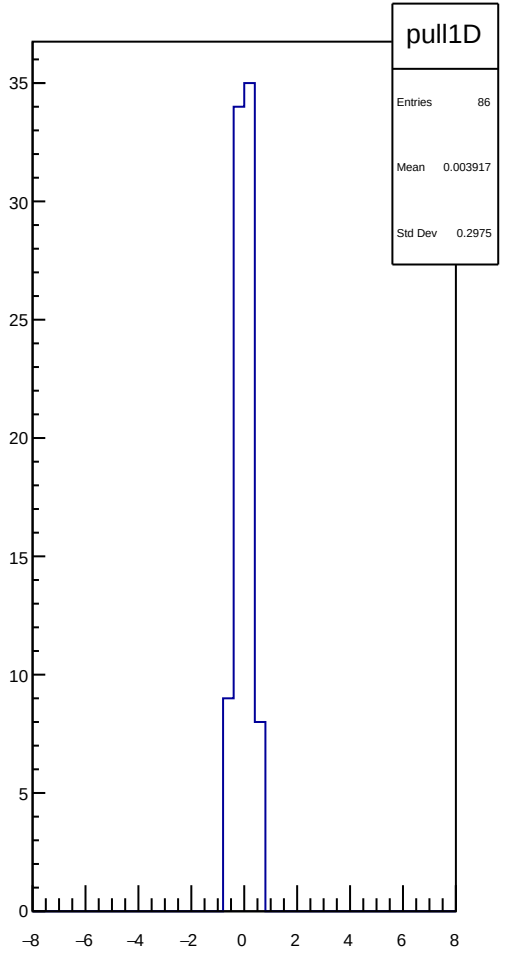

pull1D
Entries 86
Mean −0.002738
Std Dev 0.2734
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

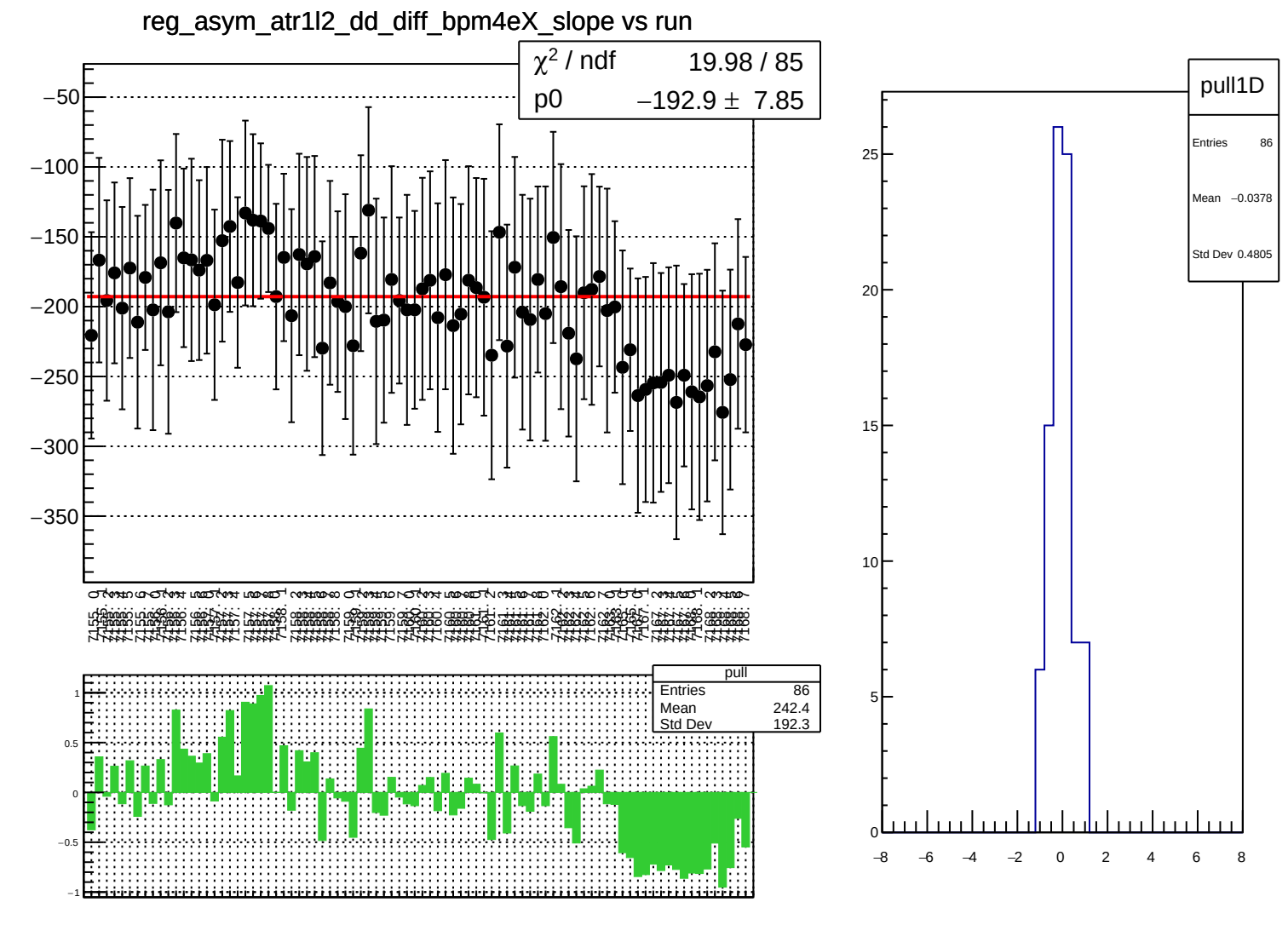

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 27.2 / 85
p0 −151.4 ± 0.3327
pull
Entries 86
Mean −328.3
Std Dev 370.2

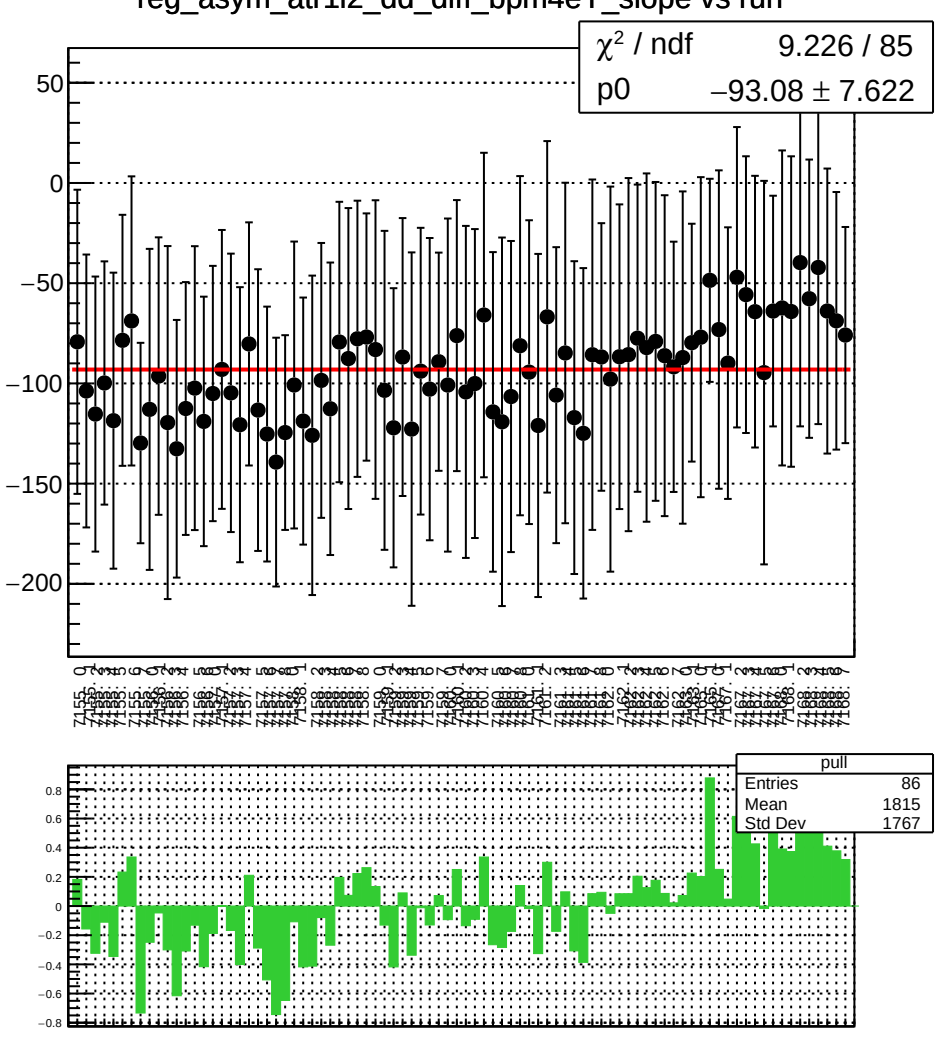

pull1D
Entries 86
Mean −0.008678
Std Dev 0.5623

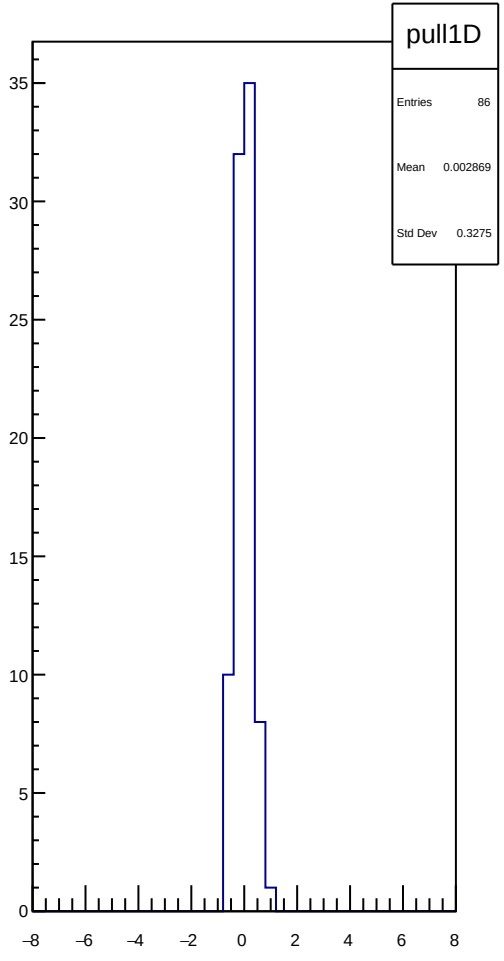

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ^2 / ndf 20.77 / 85
p0 193.2 ± 7.754
pull
Entries 86
Mean 233
Std Dev 182.6
pull1D
Entries 86
Mean 0.04078
Std Dev 0.4898

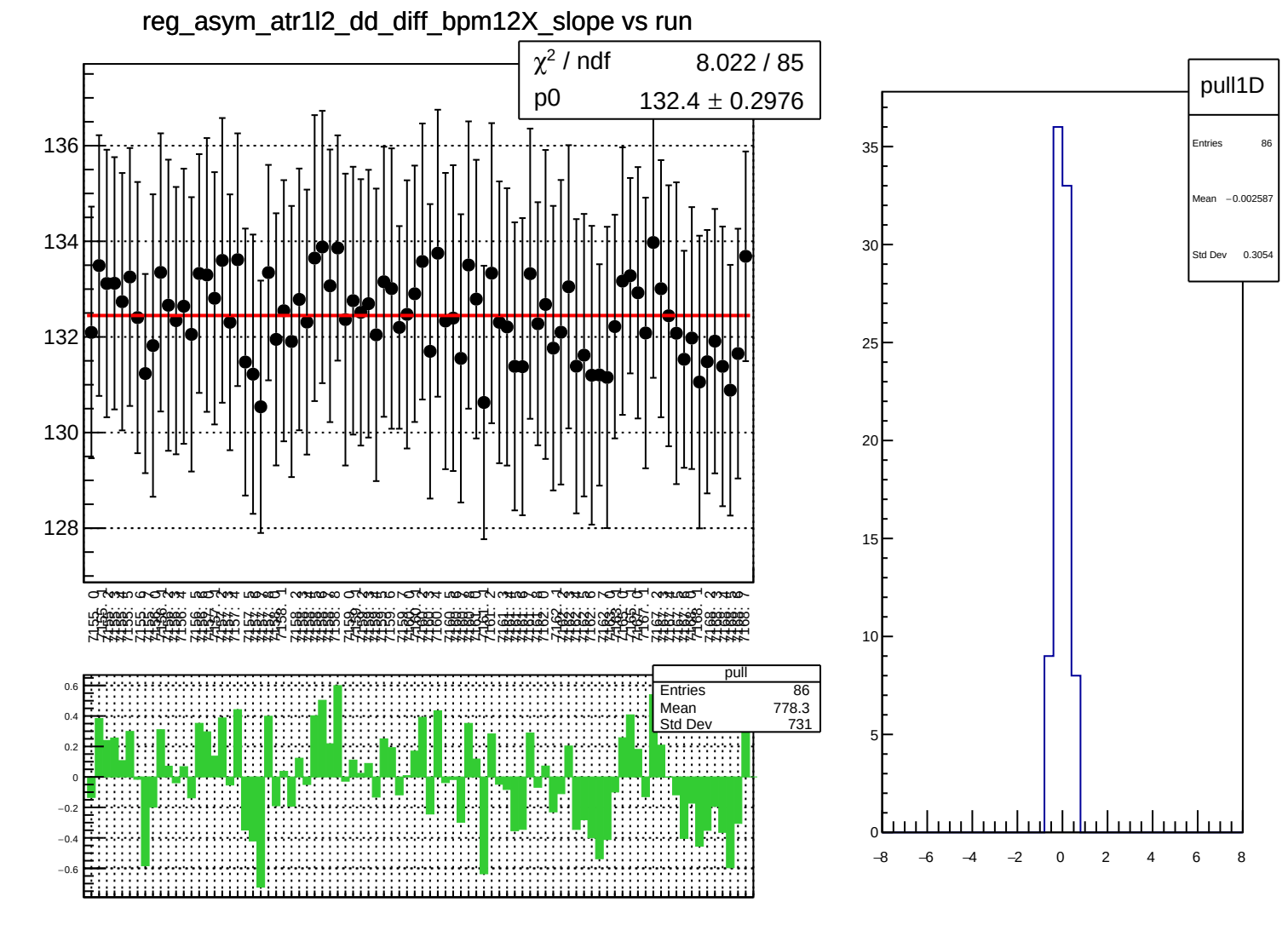

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.613 / 85
p0 10.84 ± 6.557
100
50
0
−50
−100
pull
Entries 86
Mean −1048
Std Dev 1097
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

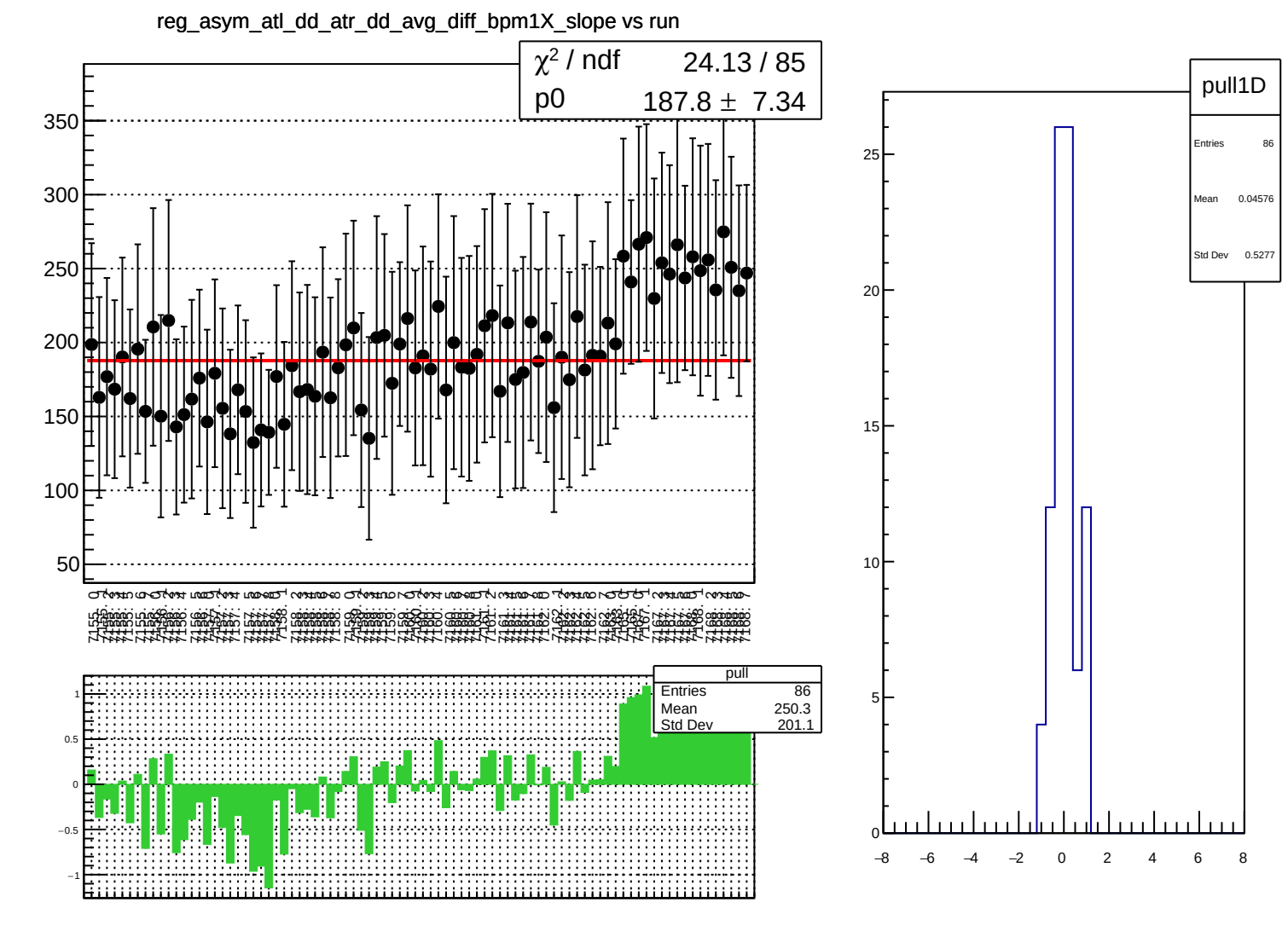

pull1D
Entries 86
Mean 0.003917
Std Dev 0.2975
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

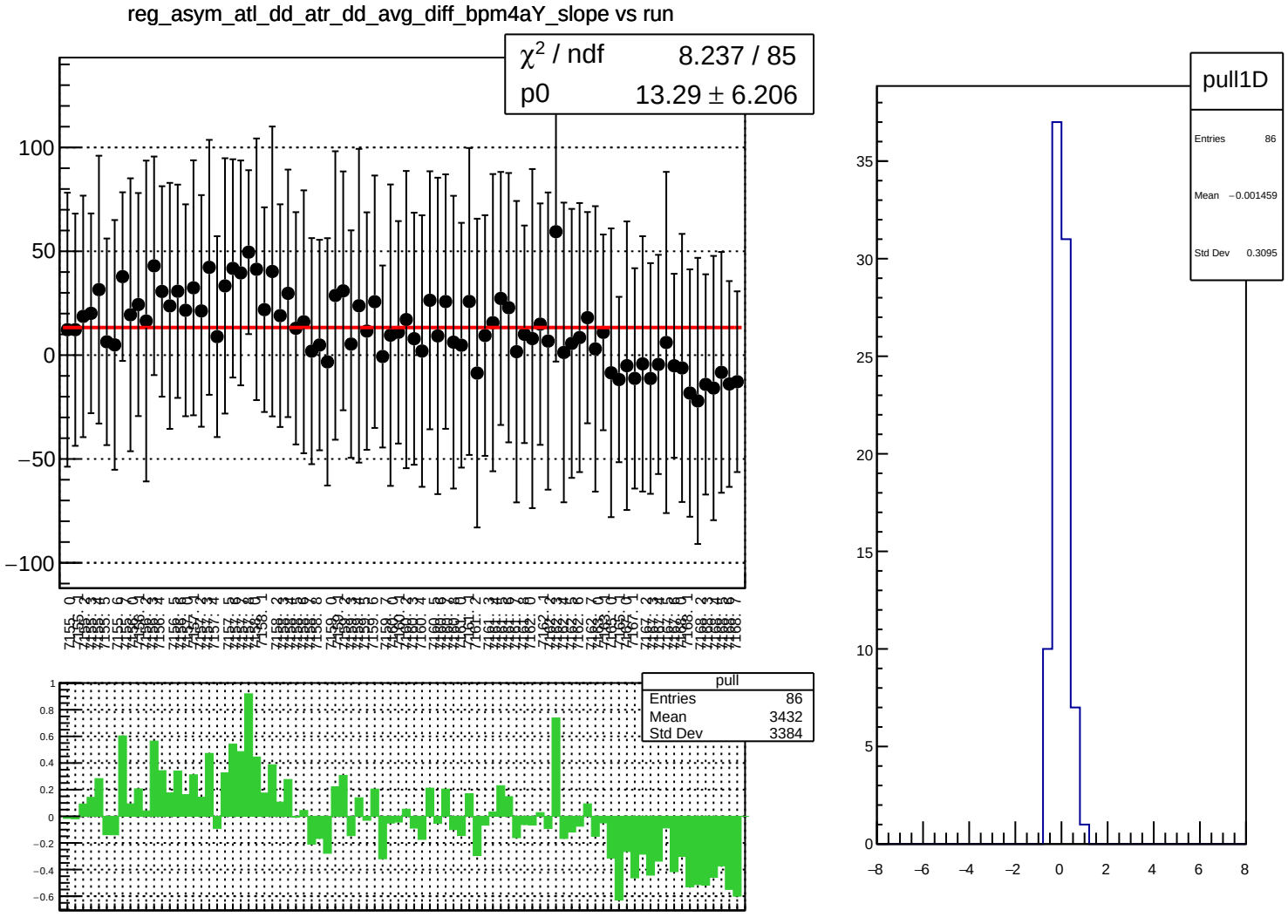

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 19.98 / 85
p0 −192.9 ± 7.85
−50
−100
−150
−200
−250
−300
−350
pull
Entries 86
Mean 242.4
Std Dev 192.3
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean −0.0378
Std Dev 0.4805
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

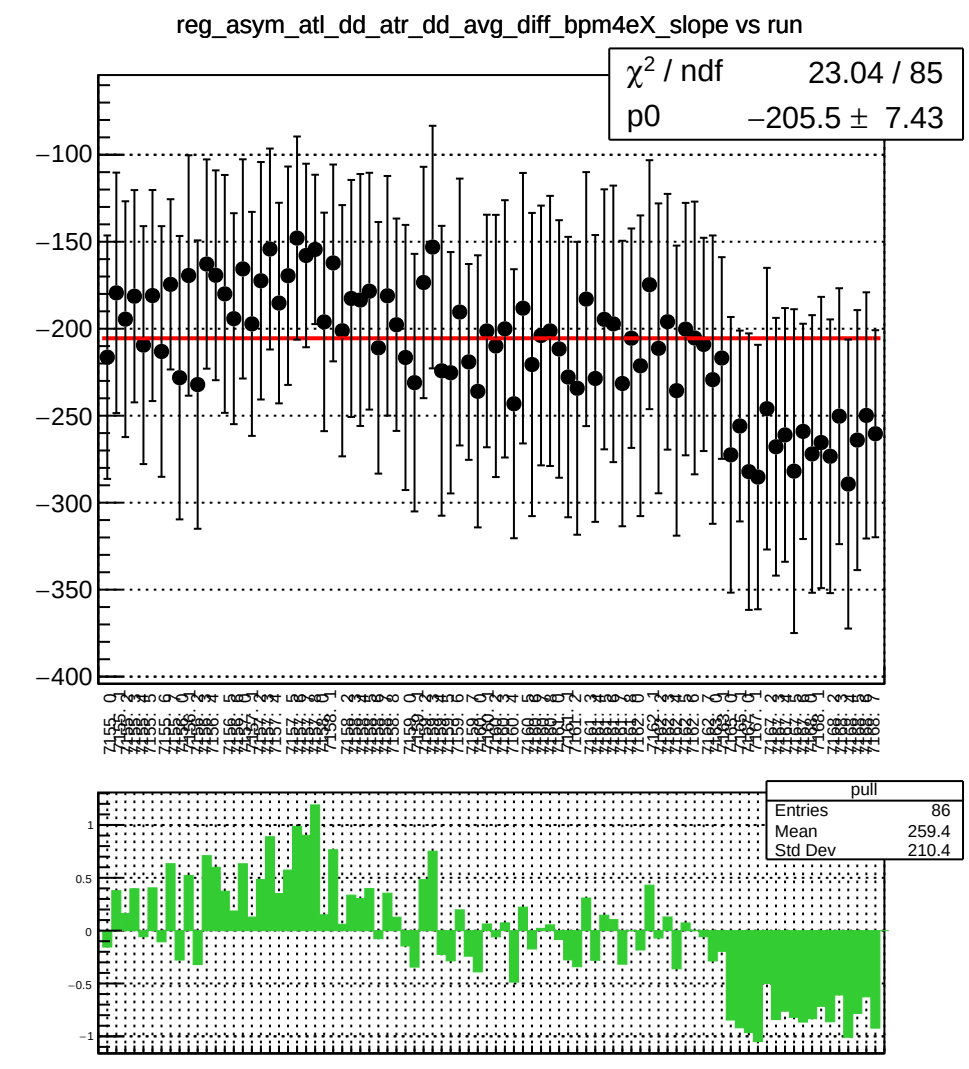

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 9.226 / 85
p0 −93.08 ± 7.622
pull
Entries 86
Mean 1815
Std Dev 1767

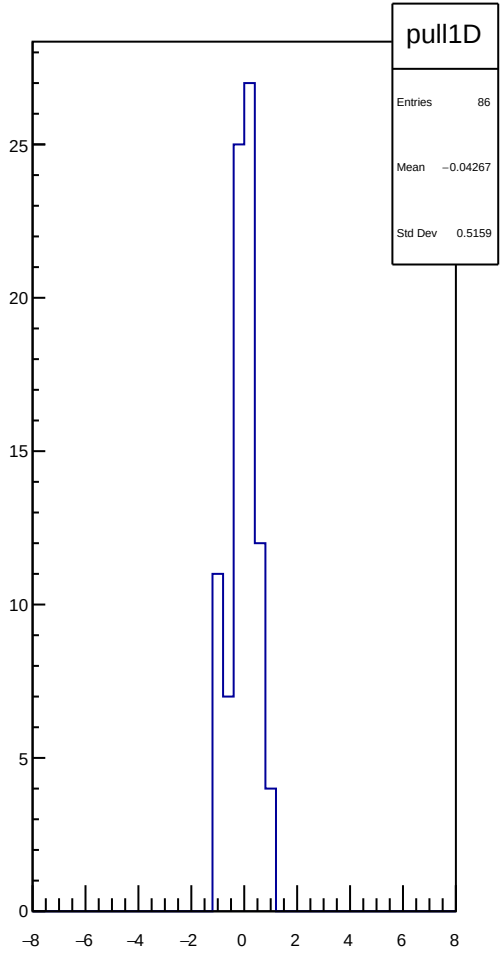

pull1D
Entries 86
Mean 0.002869
Std Dev 0.3275

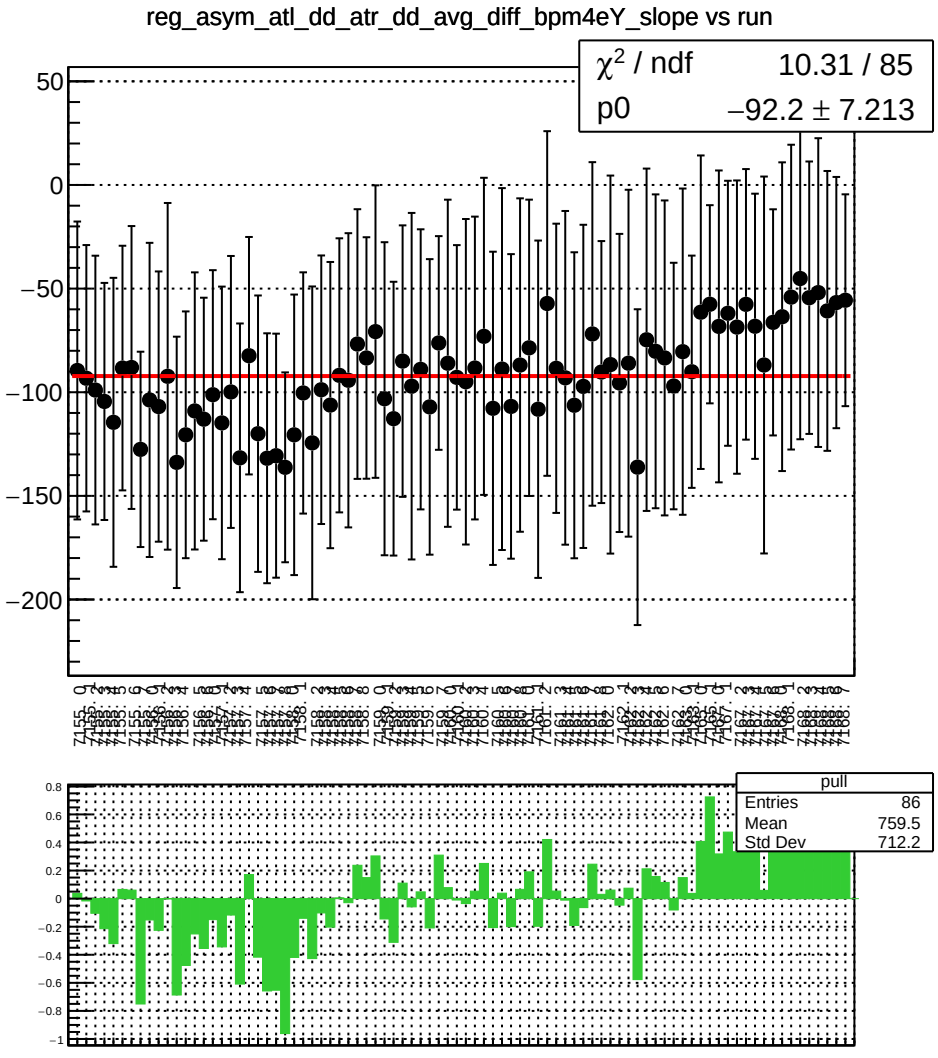

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 8.022 / 85
p0 132.4 ± 0.2976
136
134
132
130
128
pull
Entries 86
Mean 778.3
Std Dev 731
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 86
Mean −0.002587
Std Dev 0.3054
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

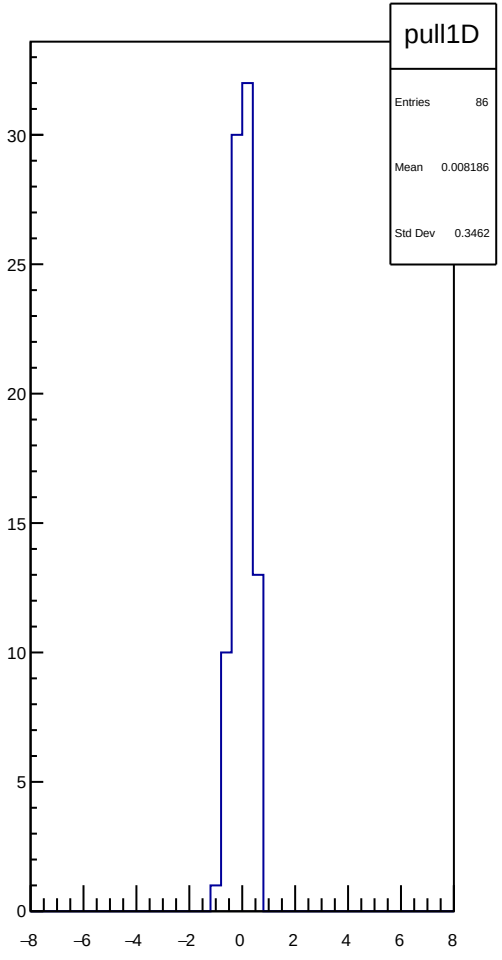

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 24.13 / 85
p0 187.8 ± 7.34
pull
Entries 86
Mean 250.3
Std Dev 201.1
pull1D
Entries 86
Mean 0.04576
Std Dev 0.5277

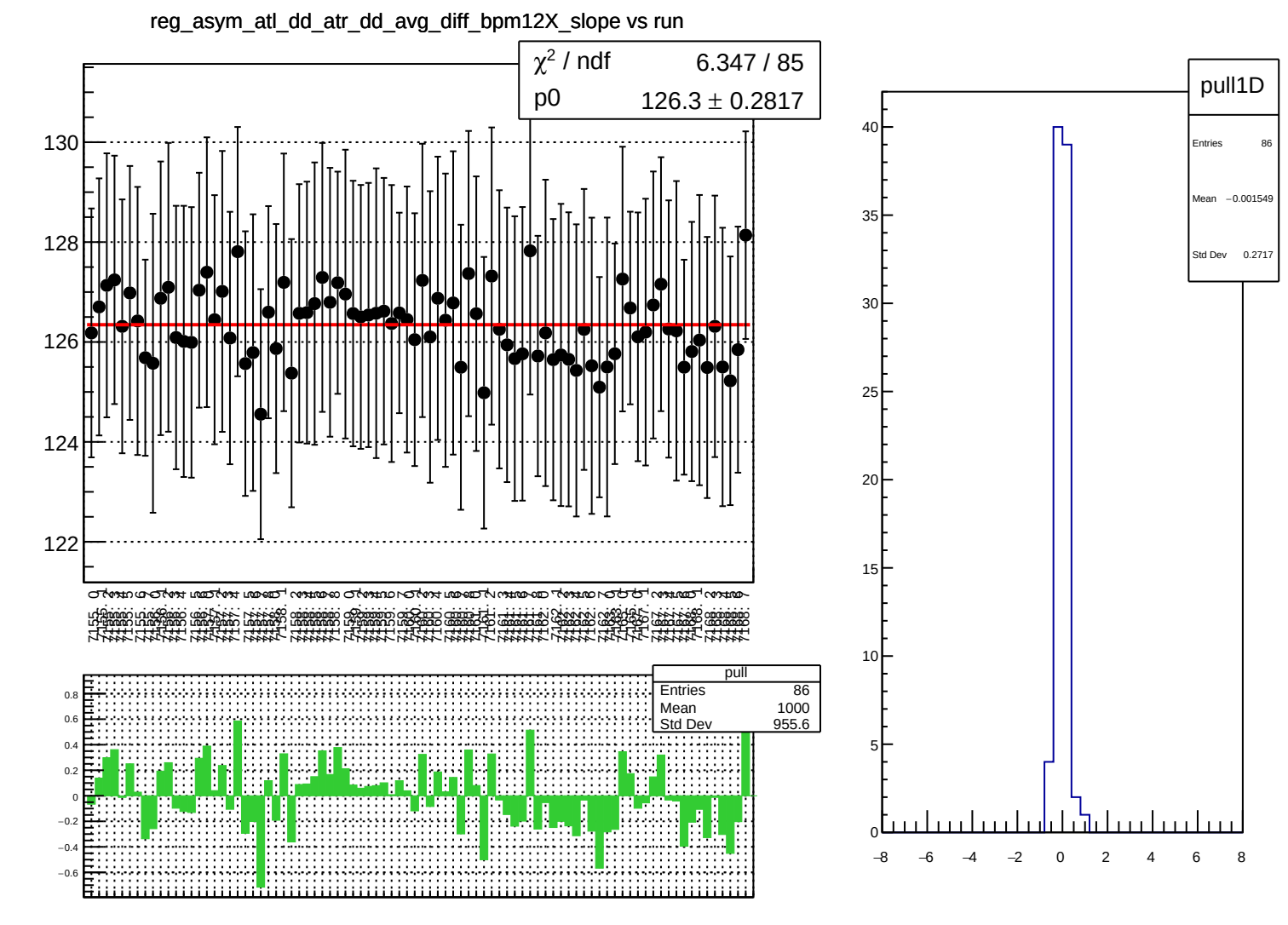

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.237 / 85
p0 13.29 ± 6.206
pull
Entries 86
Mean 3432
Std Dev 3384
pull1D
Entries 86
Mean −0.001459
Std Dev 0.3095

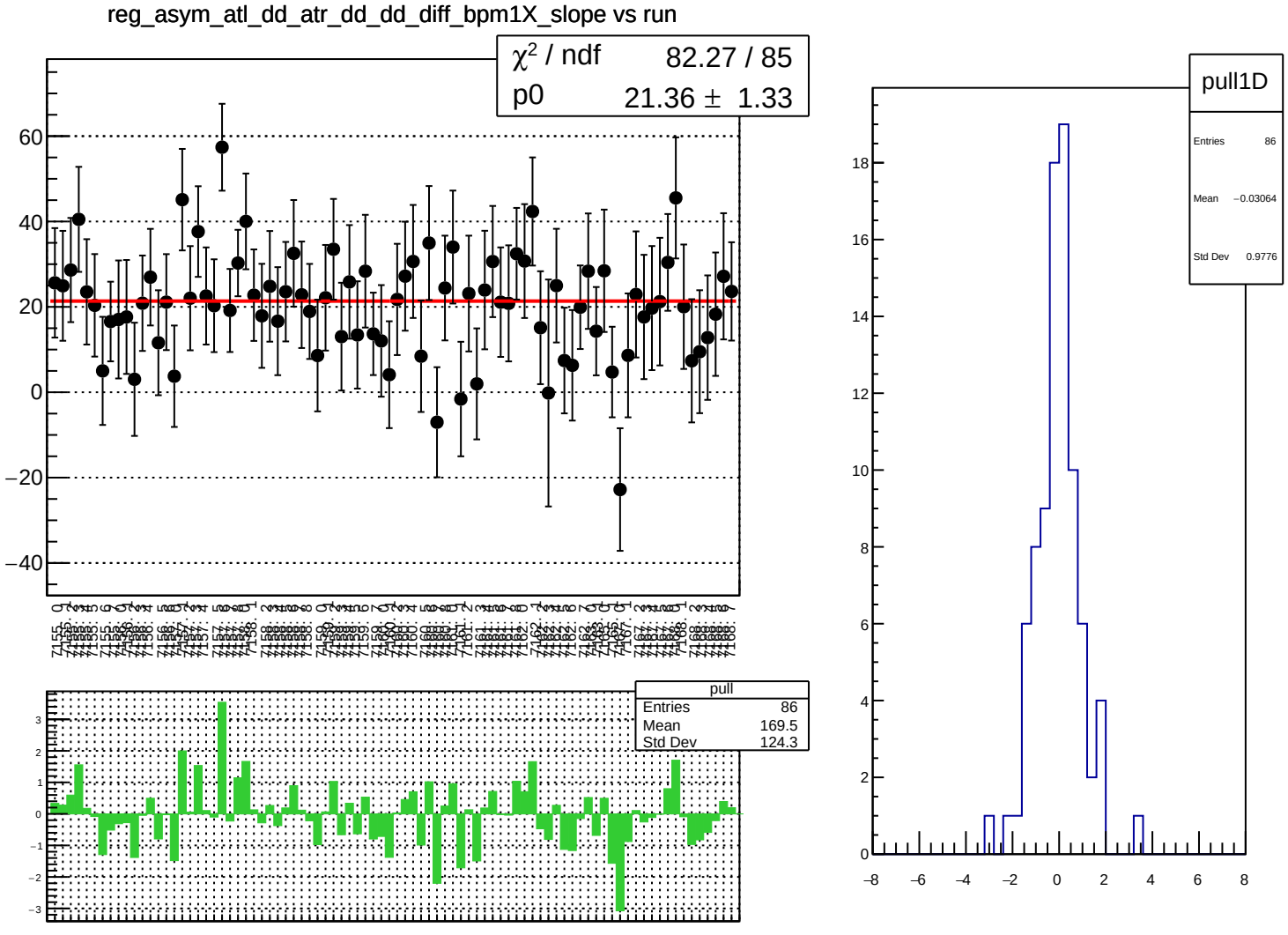

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 23.04 / 85
p0 −205.5 ± 7.43
−100
−150
−200
−250
−300
−350
−400
pull
Entries 86
Mean 259.4
Std Dev 210.4
1
0.5
0
−0.5
−1

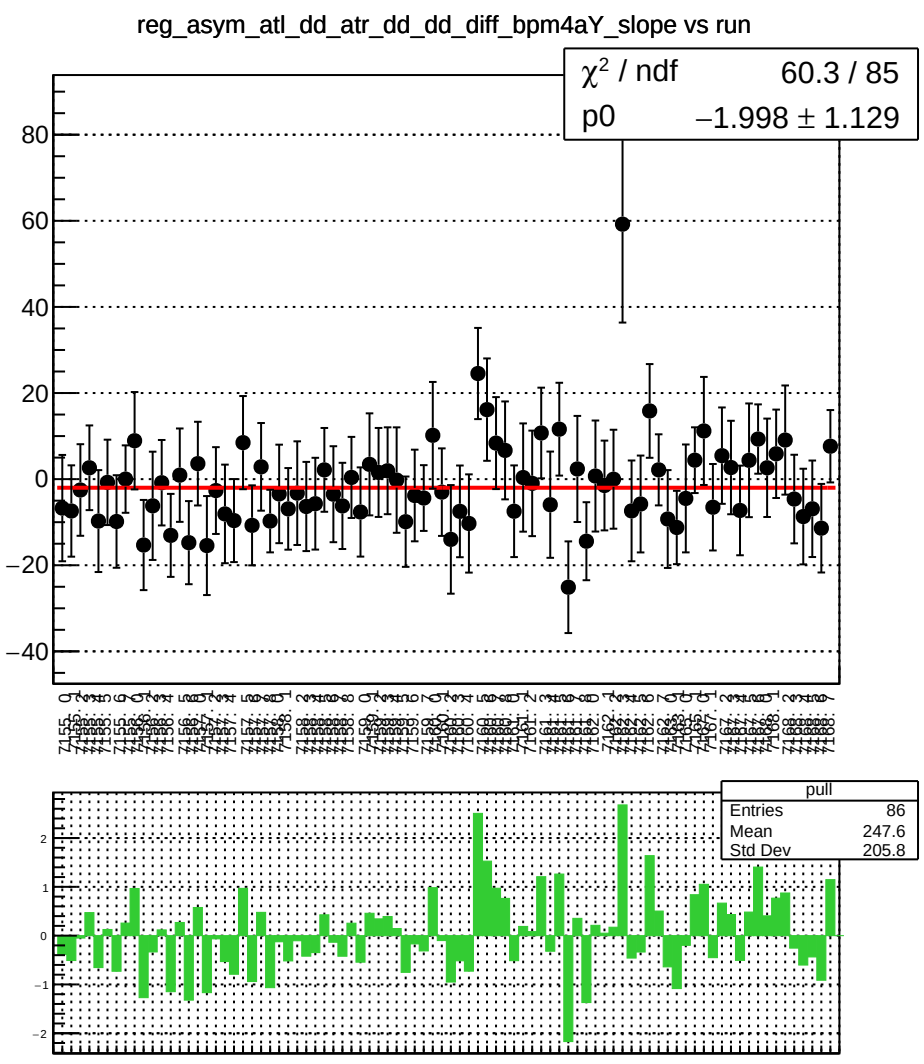

pull1D
Entries 86
Mean −0.04267
Std Dev 0.5159
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

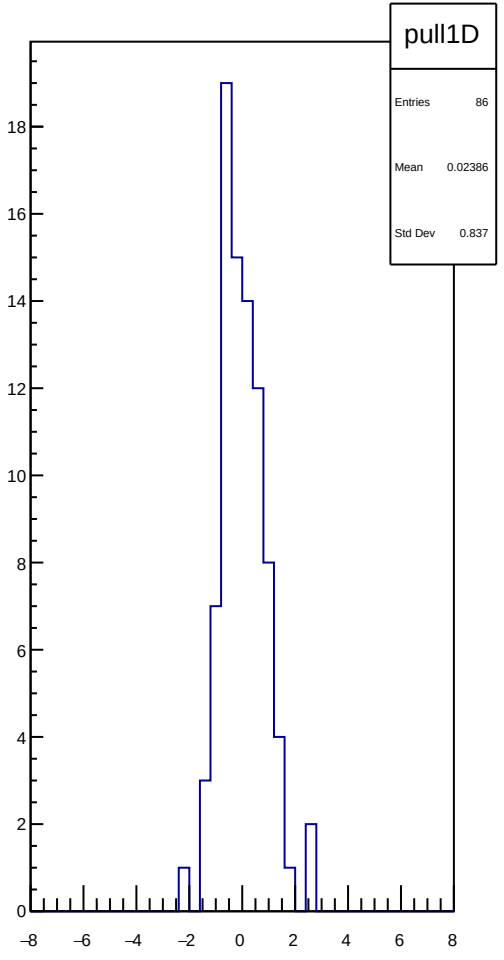

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.31 / 85
p0 −92.2 ± 7.213
pull
Entries 86
Mean 759.5
Std Dev 712.2

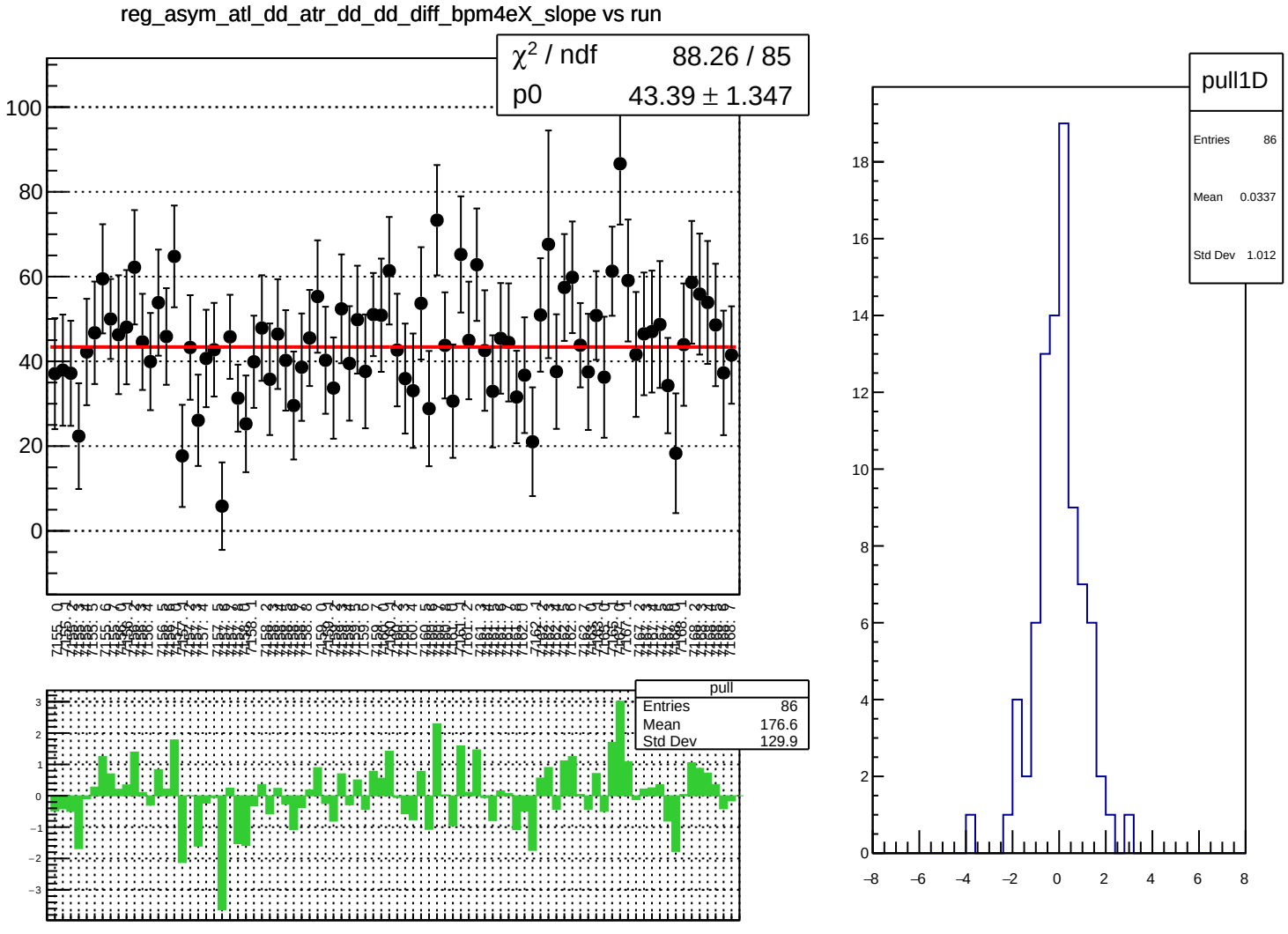

pull1D
Entries 86
Mean 0.008186
Std Dev 0.3462

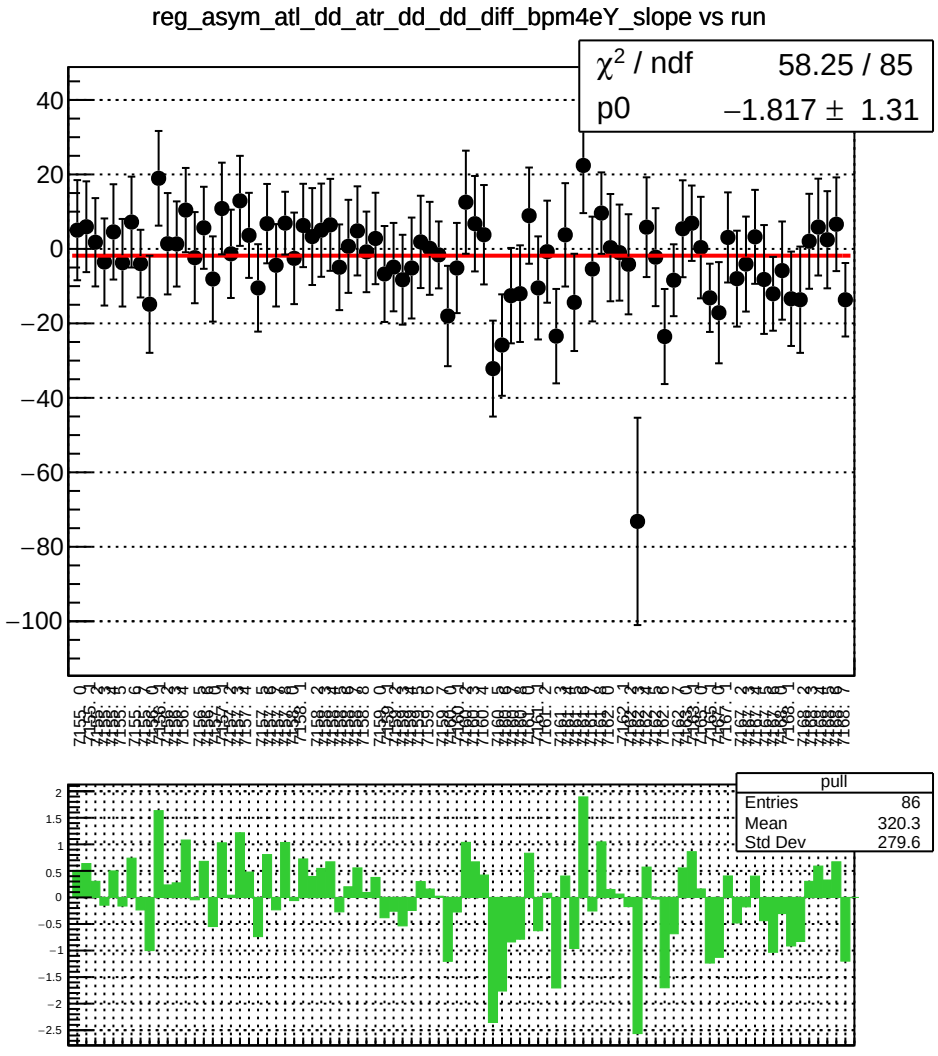

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 6.347 / 85
p0 126.3 ± 0.2817
130
128
126
124
122
pull
Entries 86
Mean 1000
Std Dev 955.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 86
Mean −0.001549
Std Dev 0.2717
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

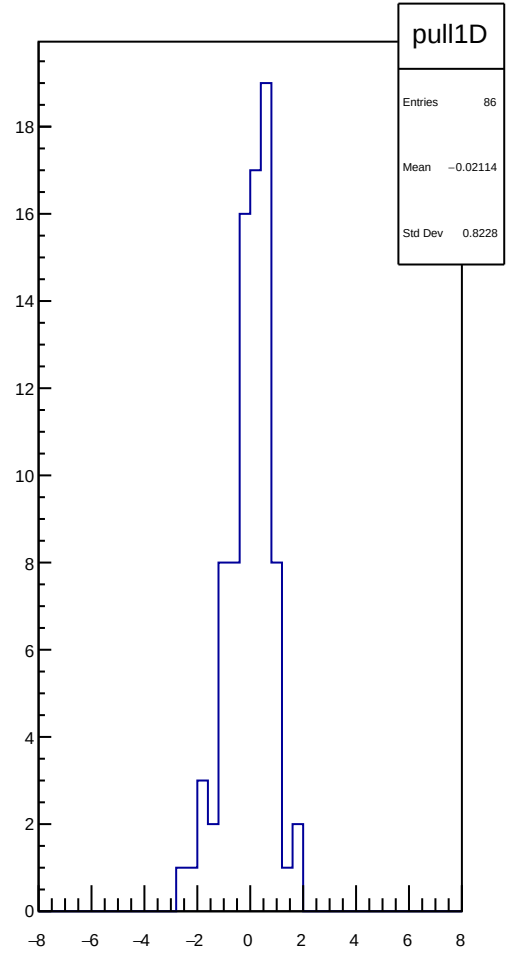

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 82.27 / 85
p0 21.36 ± 1.33
pull
Entries 86
Mean 169.5
Std Dev 124.3
pull1D
Entries 86
Mean −0.03064
Std Dev 0.9776

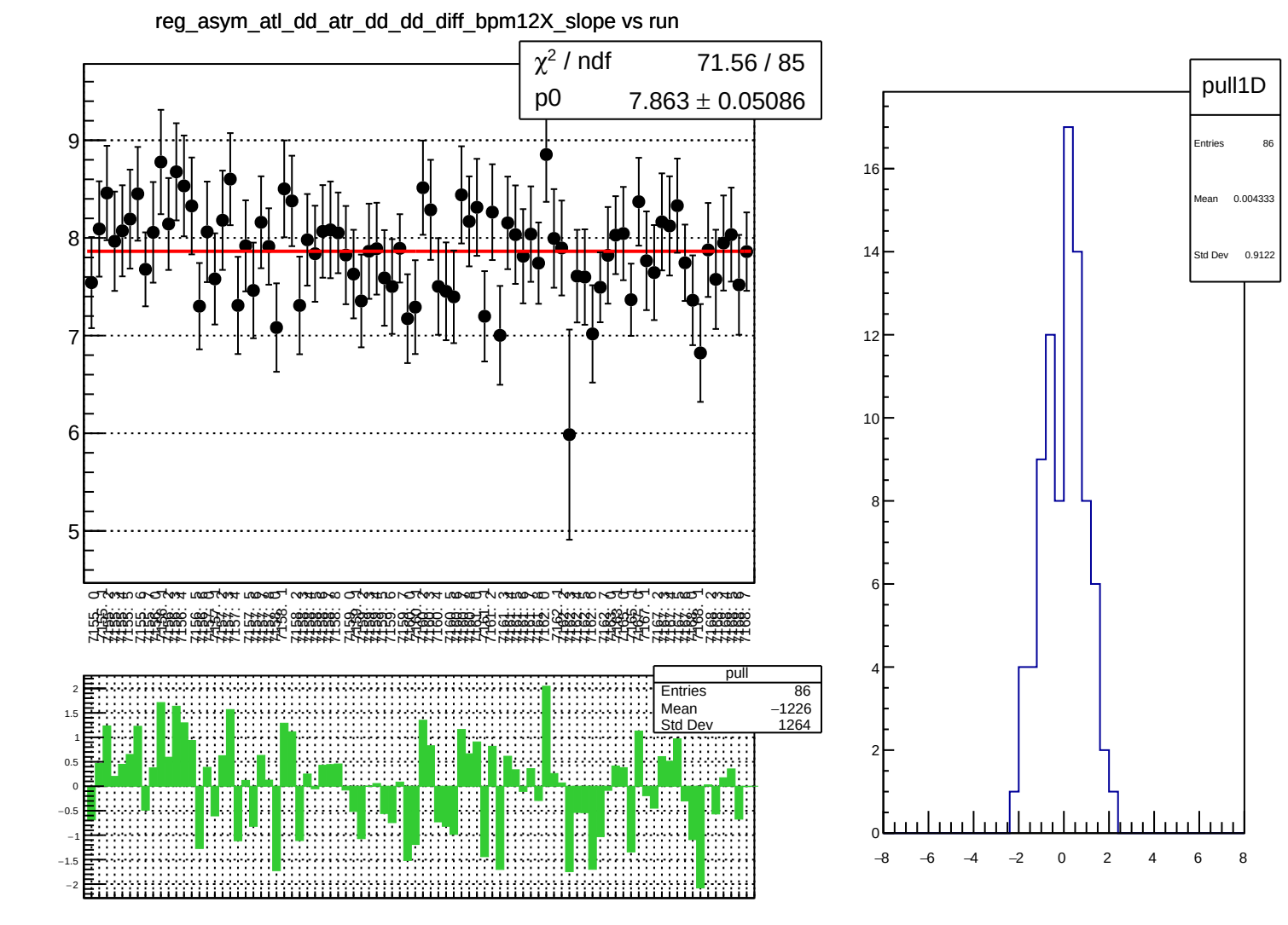

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 60.3 / 85
p0 −1.998 ± 1.129
pull
Entries 86
Mean 247.6
Std Dev 205.8

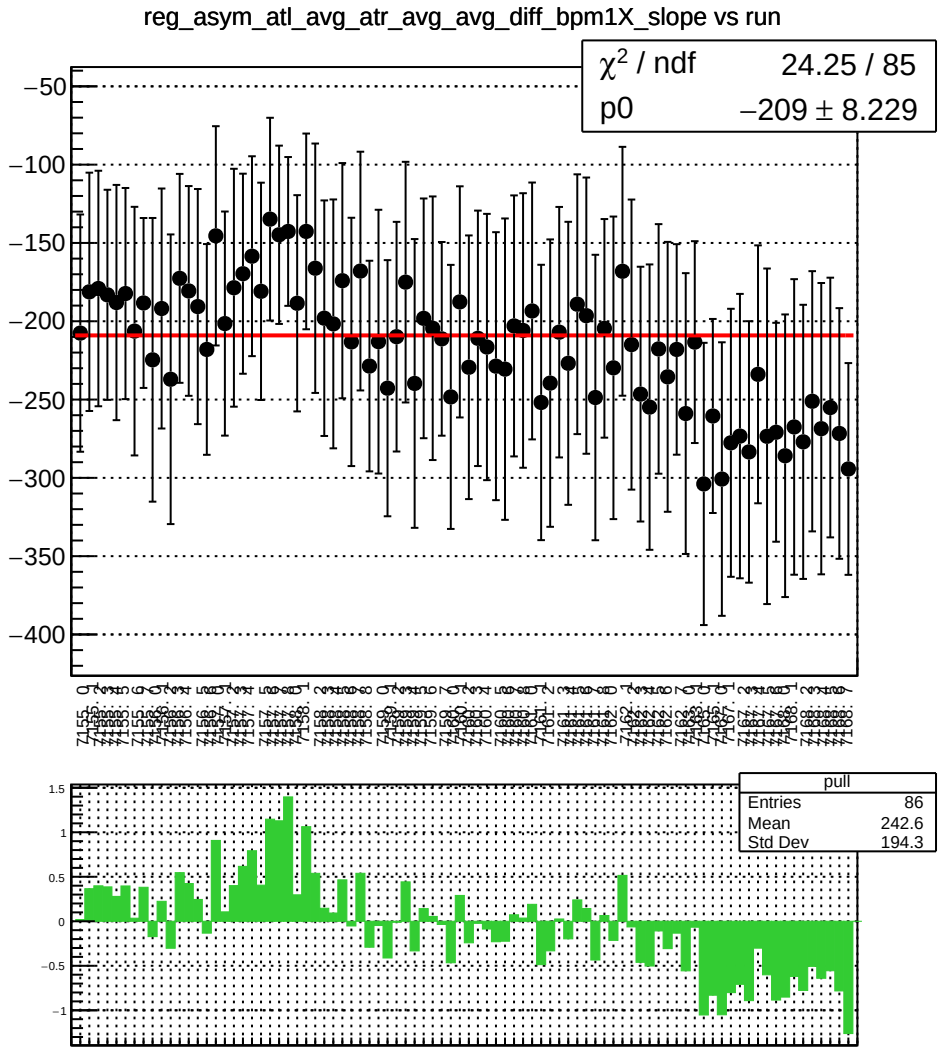

pull1D
Entries 86
Mean 0.02386
Std Dev 0.837

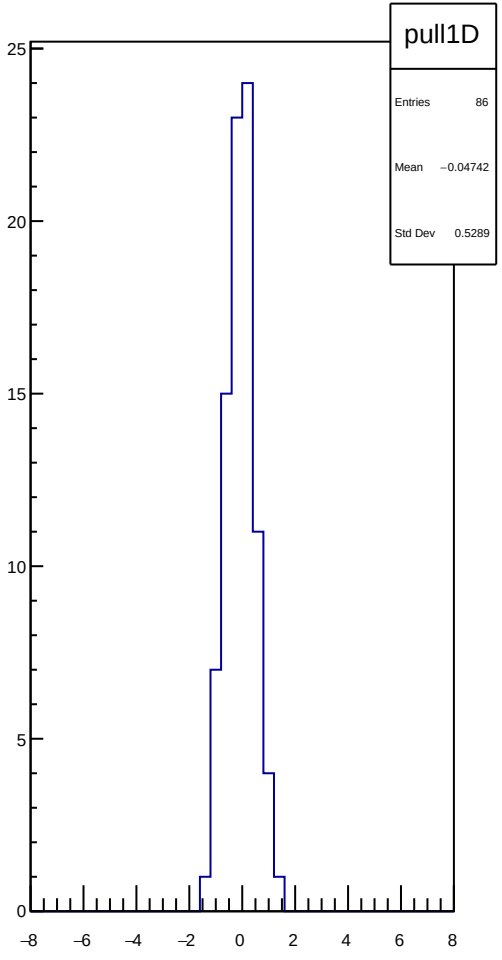

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 88.26 / 85
p0 43.39 ± 1.347
pull
Entries 86
Mean 176.6
Std Dev 129.9
pull1D
Entries 86
Mean 0.0337
Std Dev 1.012

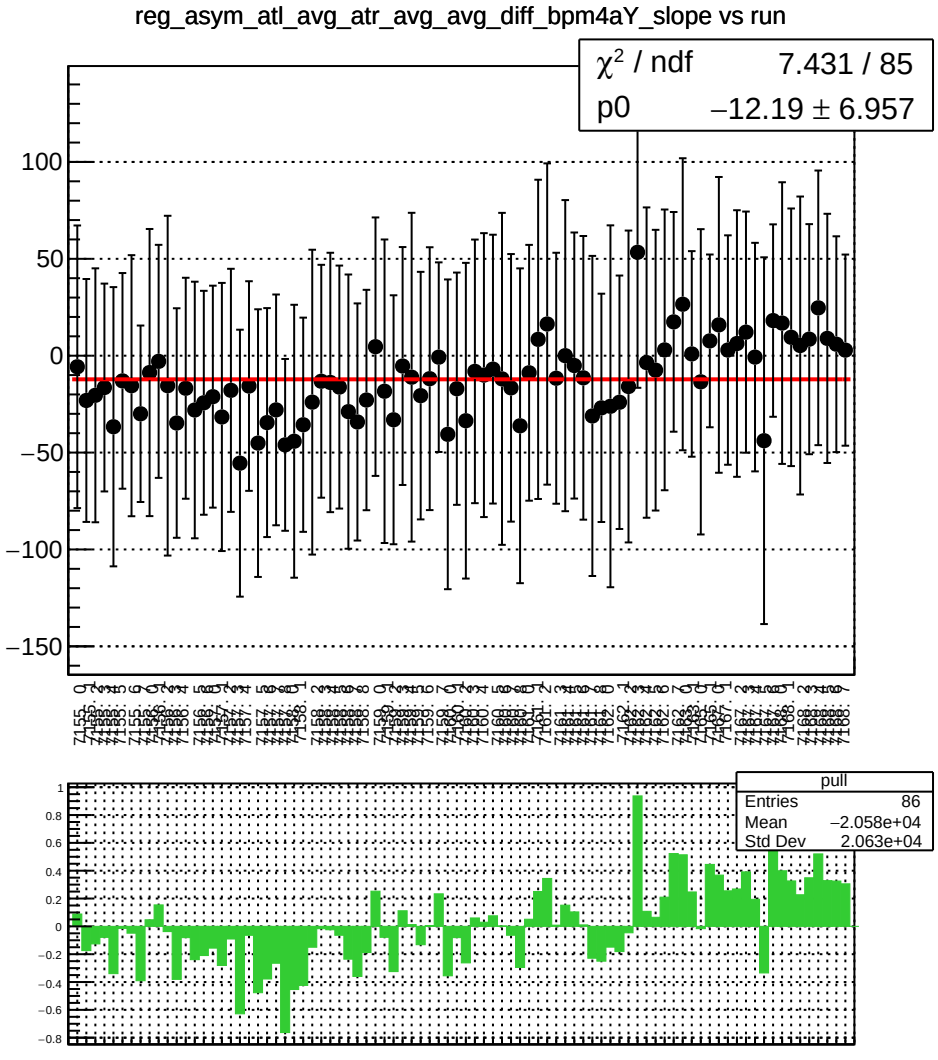

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 58.25 / 85
p0 −1.817 ± 1.31
pull
Entries 86
Mean 320.3
Std Dev 279.6

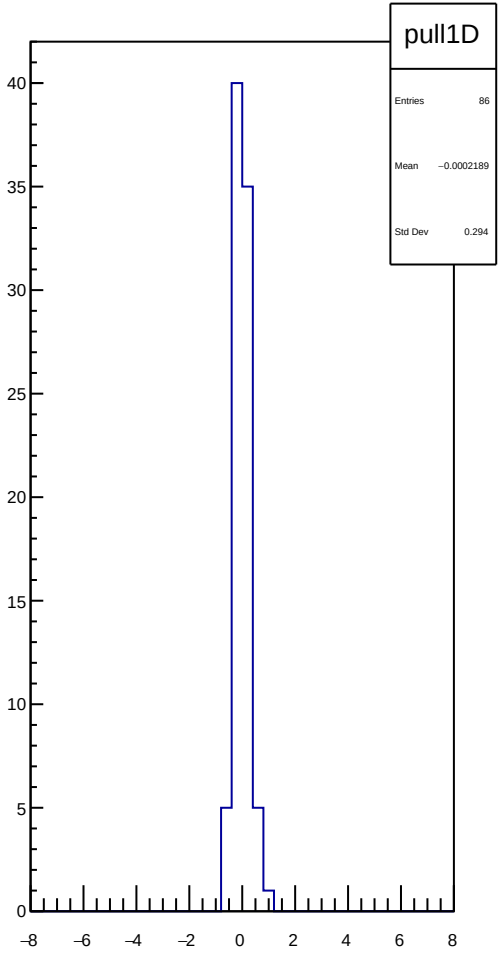

pull1D
Entries 86
Mean −0.02114
Std Dev 0.8228

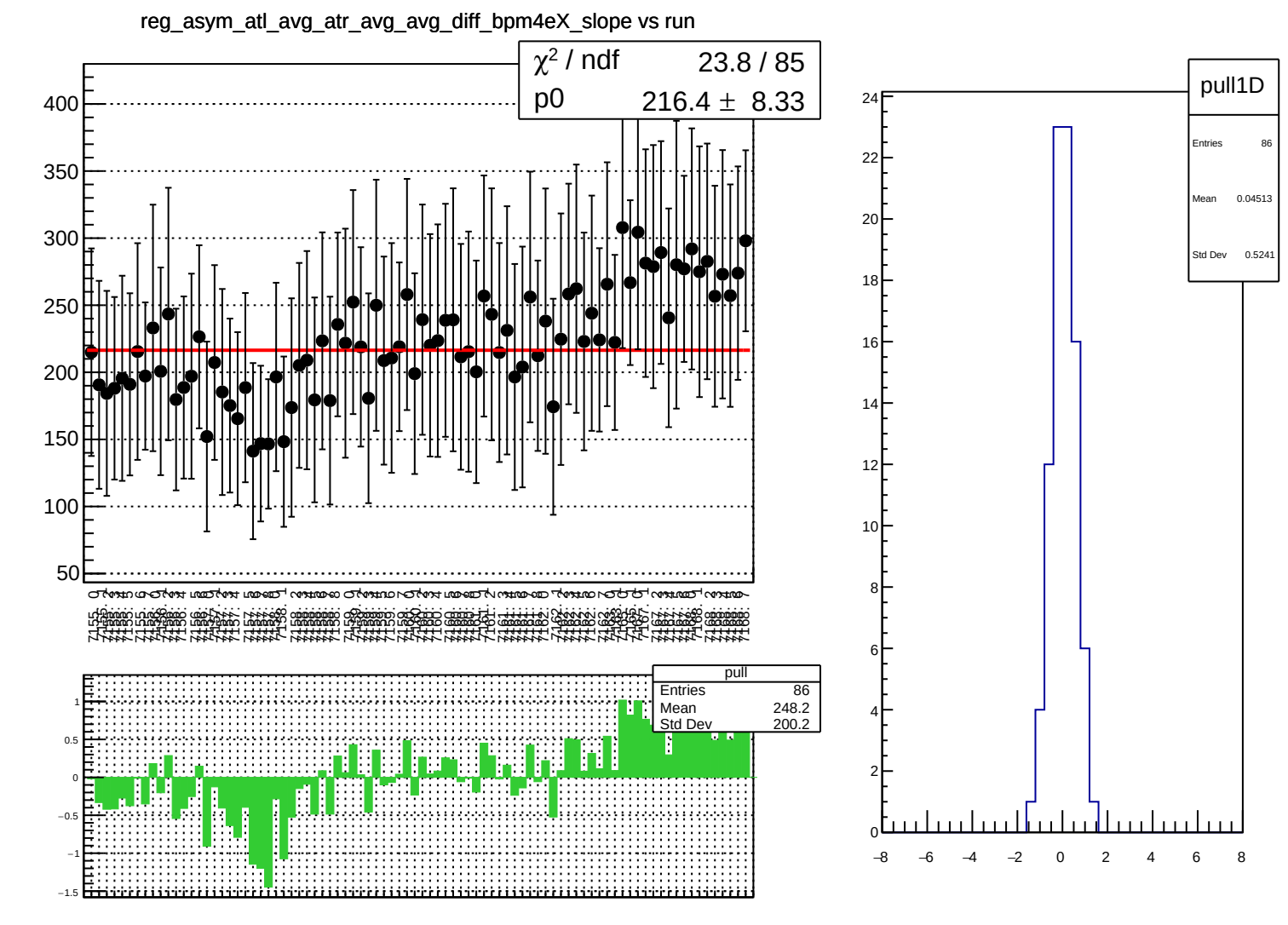

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 71.56 / 85
p0 7.863 ± 0.05086
pull
Entries 86
Mean −1226
Std Dev 1264
pull1D
Entries 86
Mean 0.004333
Std Dev 0.9122

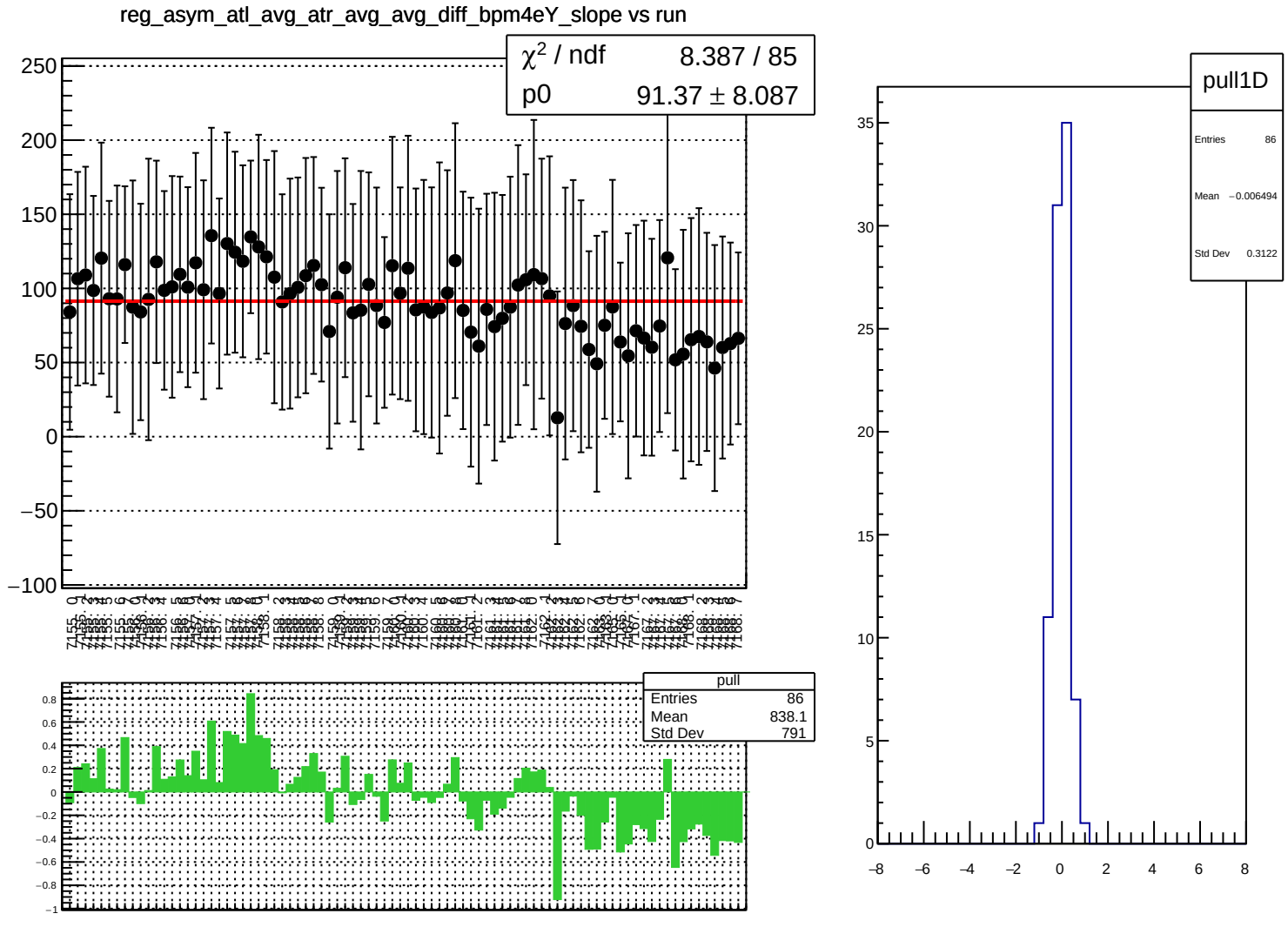

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 24.25 / 85
p0 −209 ± 8.229
pull
Entries 86
Mean 242.6
Std Dev 194.3

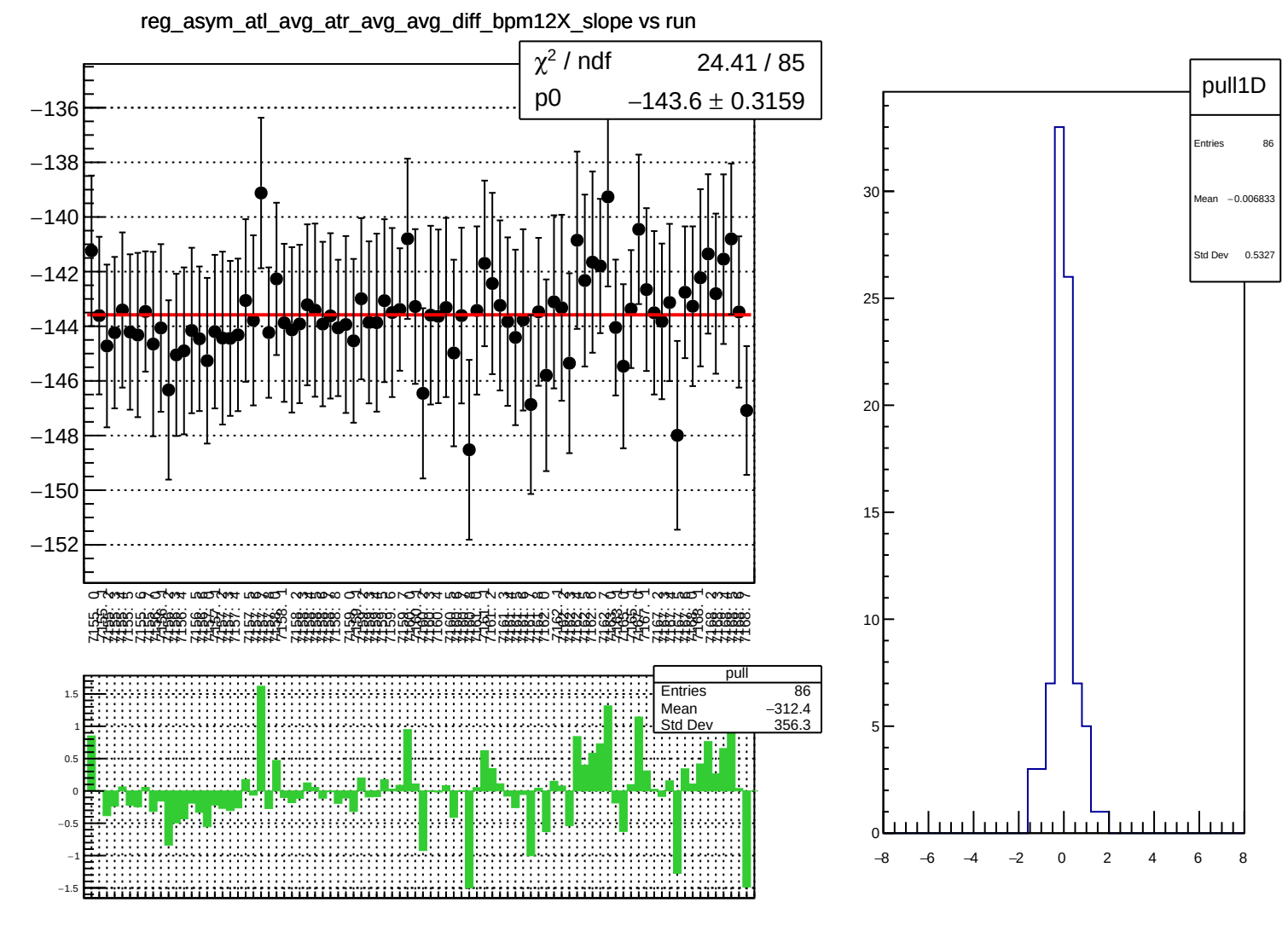

pull1D
Entries 86
Mean −0.04742
Std Dev 0.5289

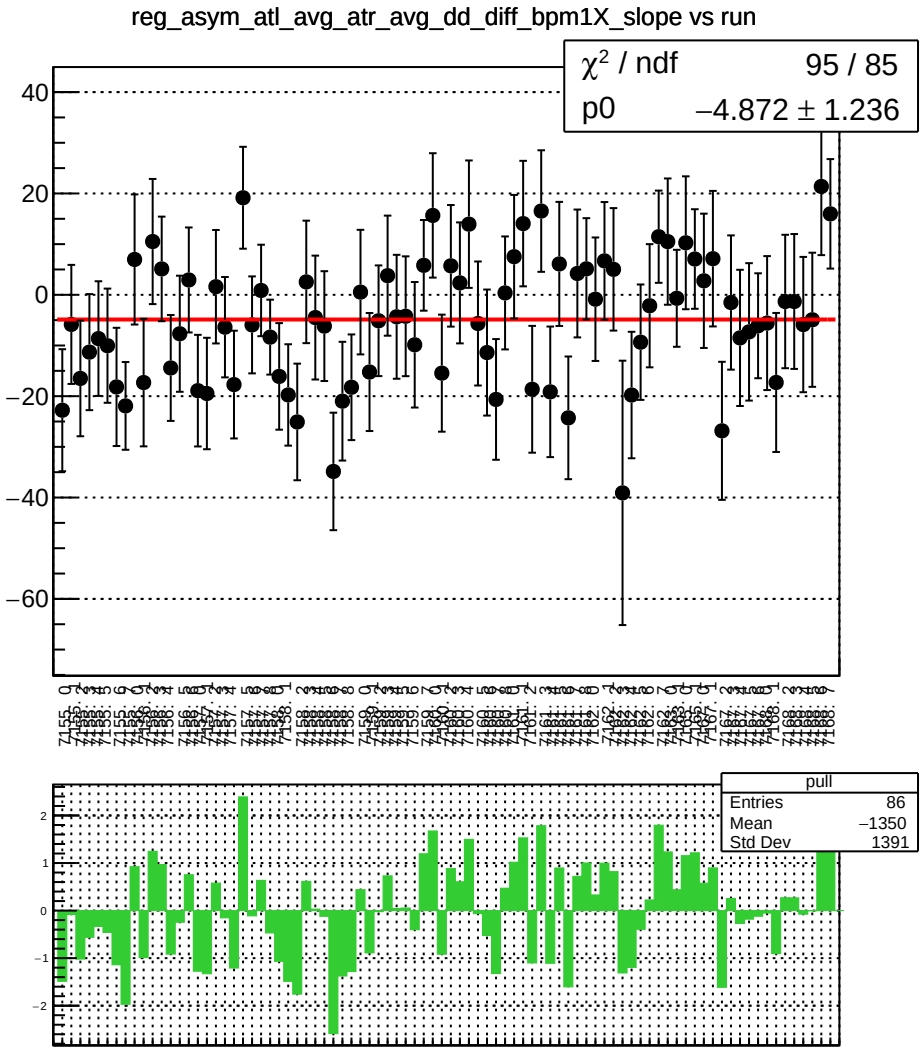

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.431 / 85
p0 −12.19 ± 6.957
pull
Entries 86
Mean −2.058e+04
Std Dev 2.063e+04

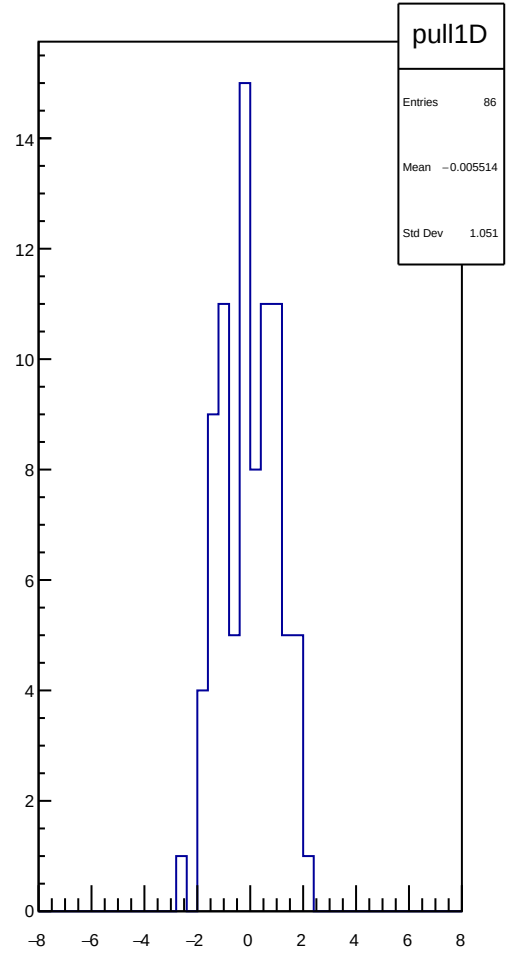

pull1D
Entries 86
Mean −0.0002189
Std Dev 0.294

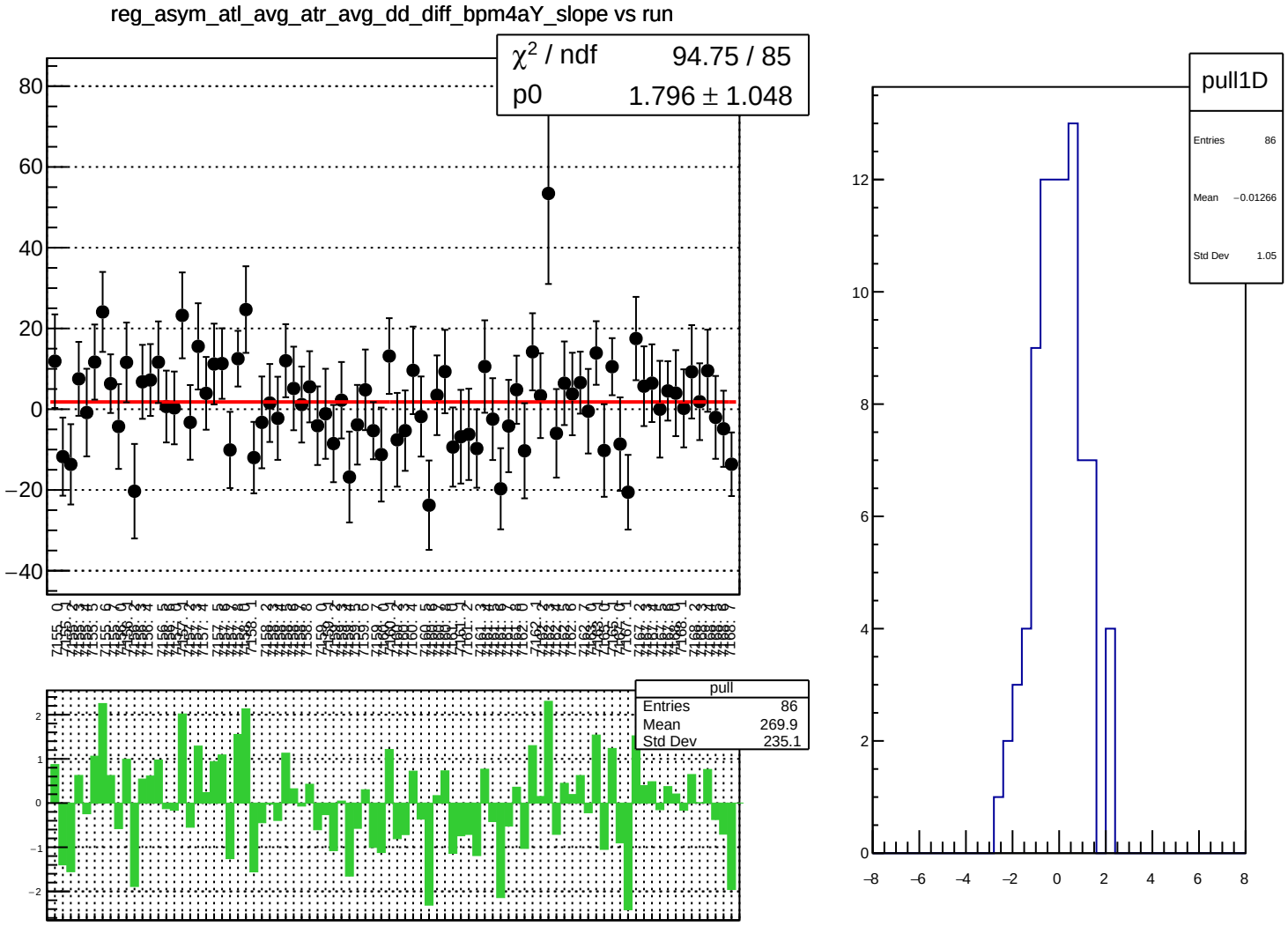

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 23.8 / 85
p0 216.4 ± 8.33
pull
Entries 86
Mean 248.2
Std Dev 200.2
pull1D
Entries 86
Mean 0.04513
Std Dev 0.5241

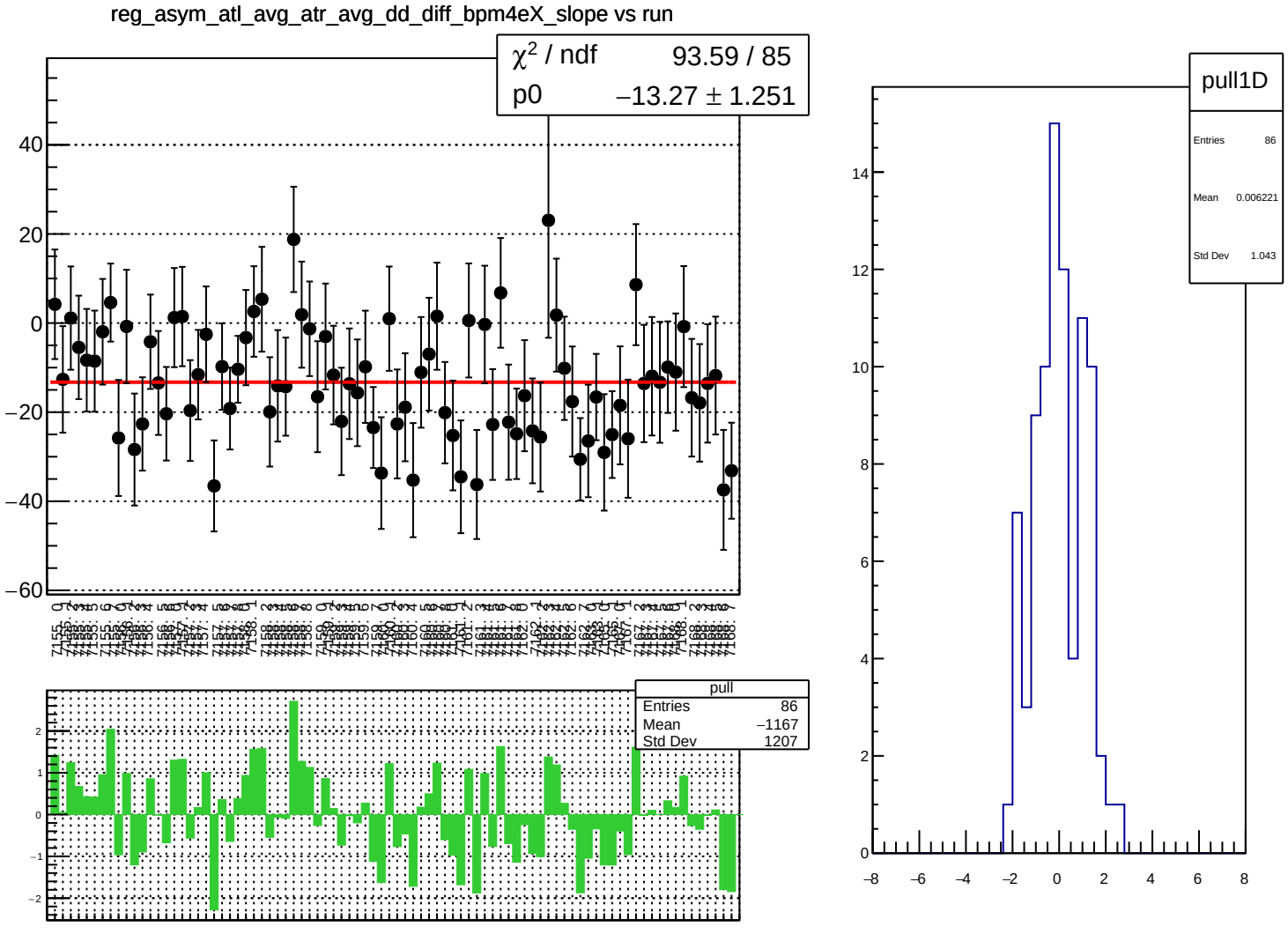

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.387 / 85
p0 91.37 ± 8.087
pull
Entries 86
Mean 838.1
Std Dev 791
pull1D
Entries 86
Mean −0.006494
Std Dev 0.3122

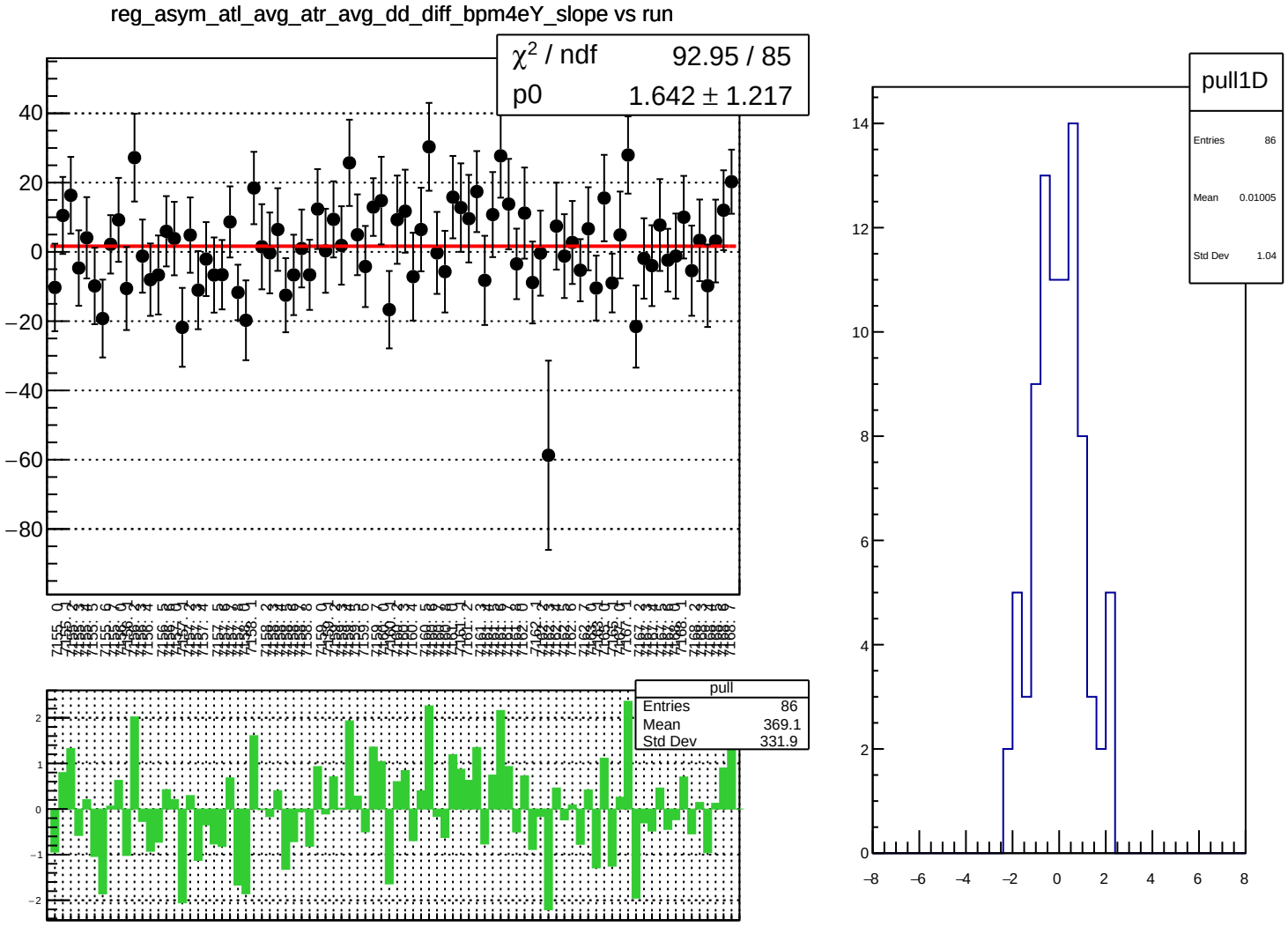

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 24.41 / 85
p0 −143.6 ± 0.3159
pull
Entries 86
Mean −312.4
Std Dev 356.3
pull1D
Entries 86
Mean −0.006833
Std Dev 0.5327

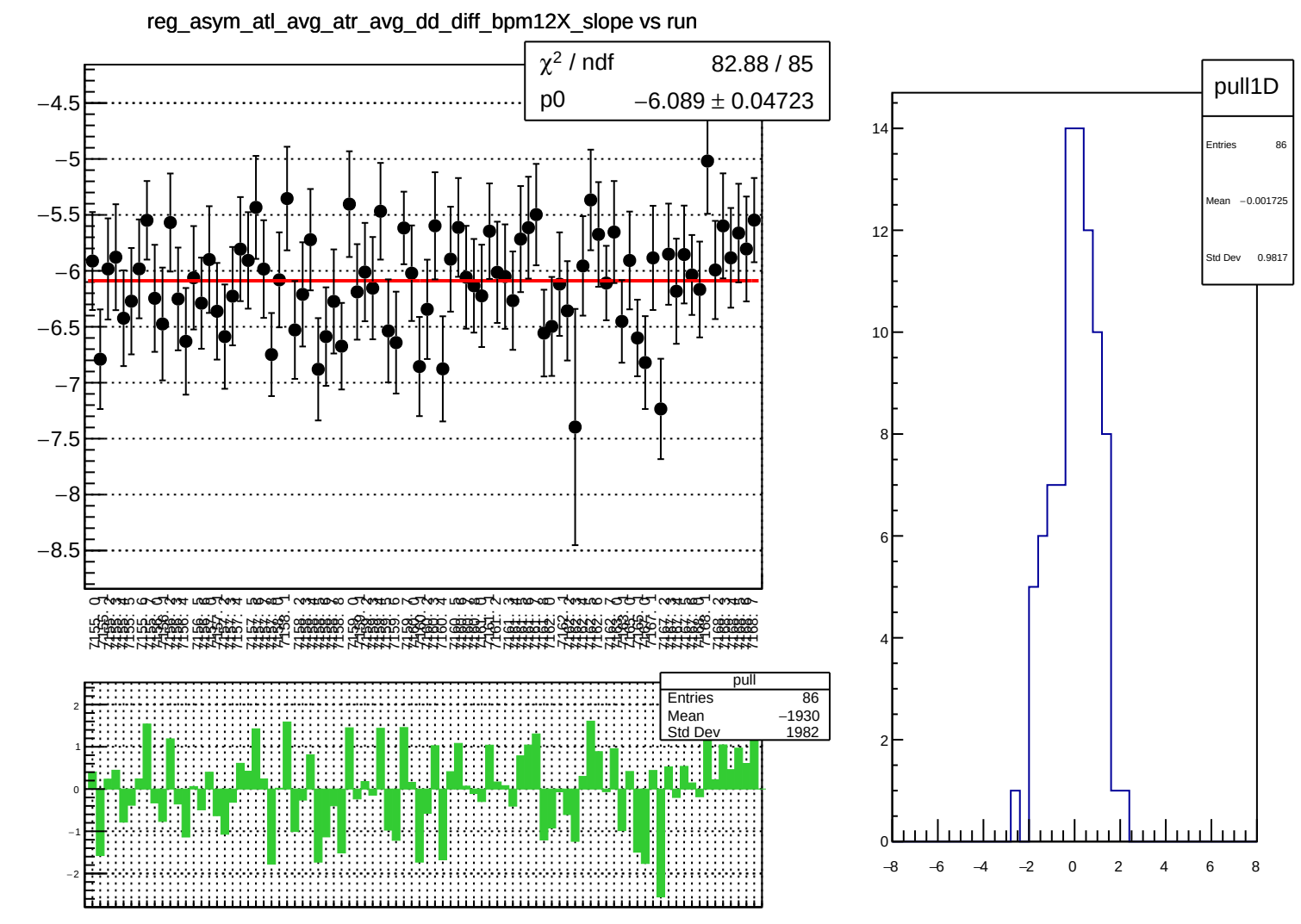

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 95 / 85
p0 −4.872 ± 1.236
pull
Entries 86
Mean −1350
Std Dev 1391

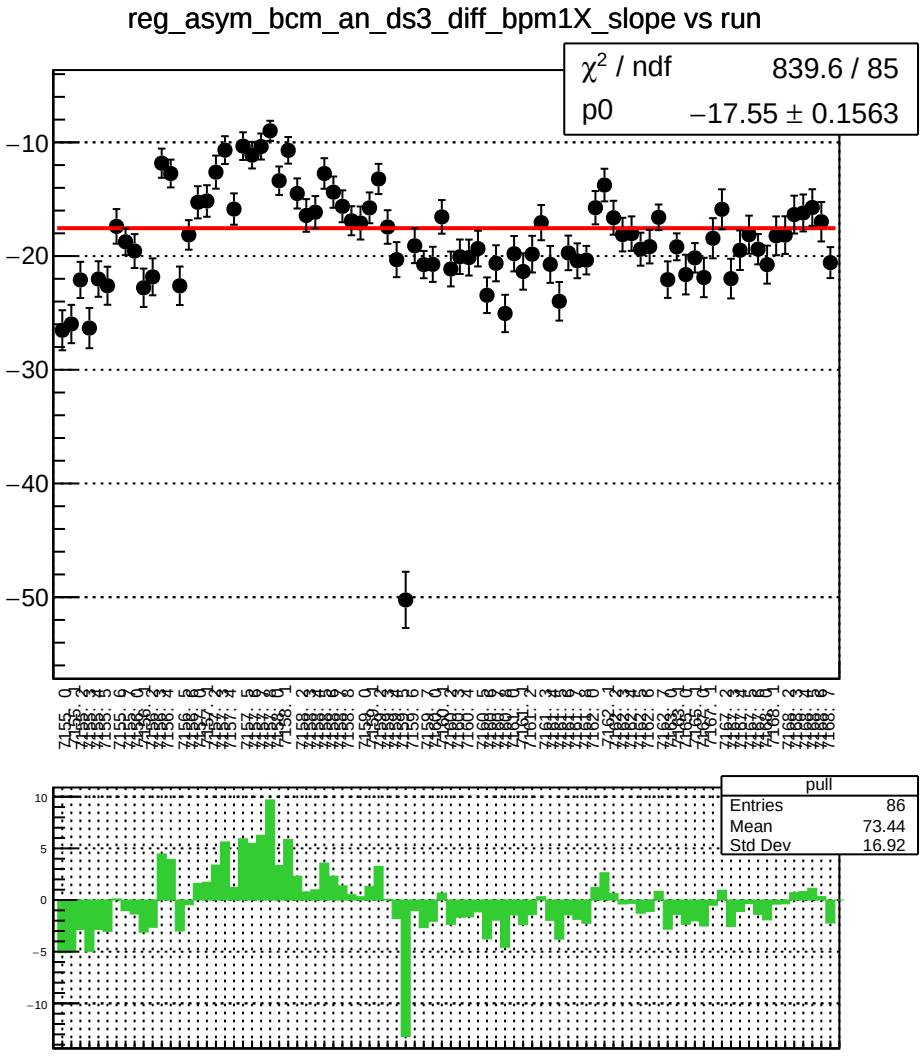

pull1D
Entries 86
Mean −0.005514
Std Dev 1.051

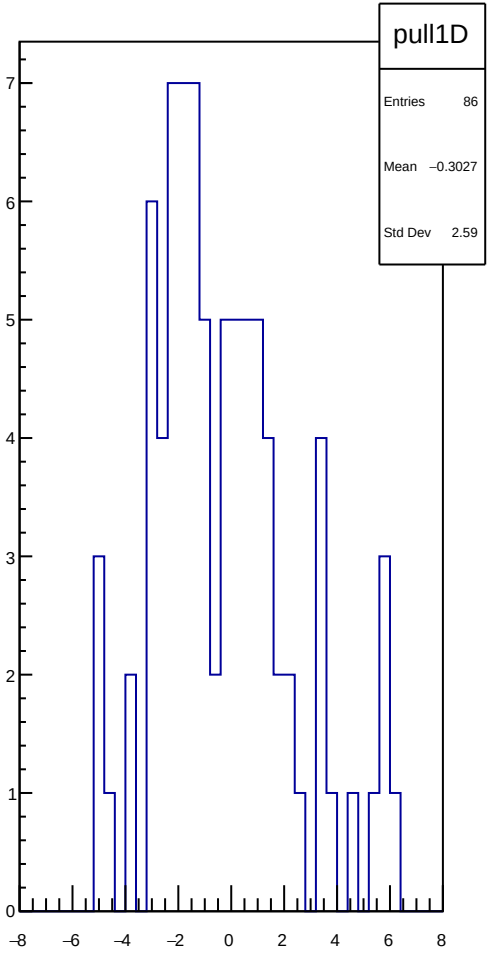

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 94.75 / 85
p0 1.796 ± 1.048
pull
Entries 86
Mean 269.9
Std Dev 235.1
pull1D
Entries 86
Mean −0.01266
Std Dev 1.05

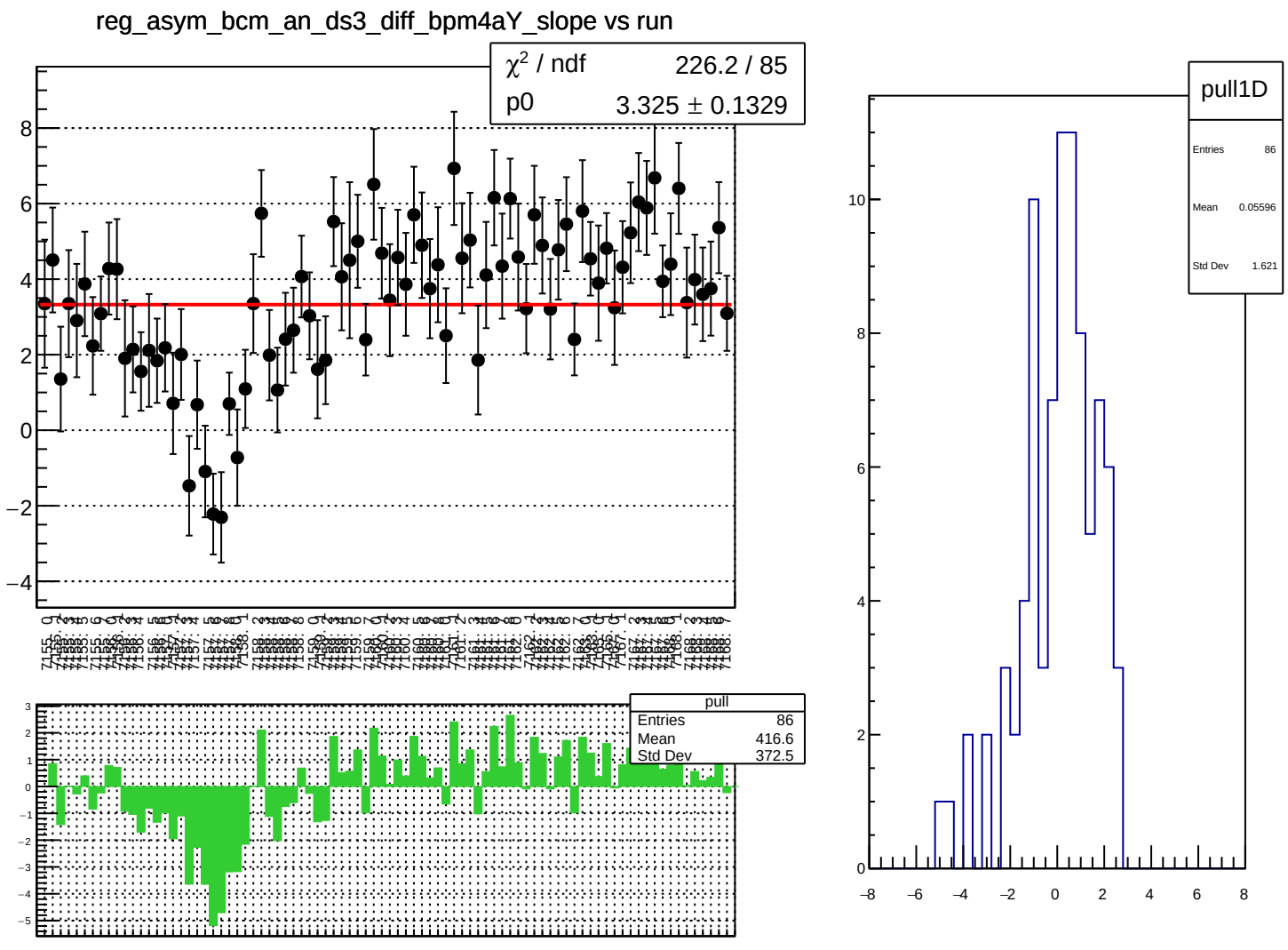

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 93.59 / 85
p0 −13.27 ± 1.251
pull
Entries 86
Mean −1167
Std Dev 1207
pull1D
Entries 86
Mean 0.006221
Std Dev 1.043

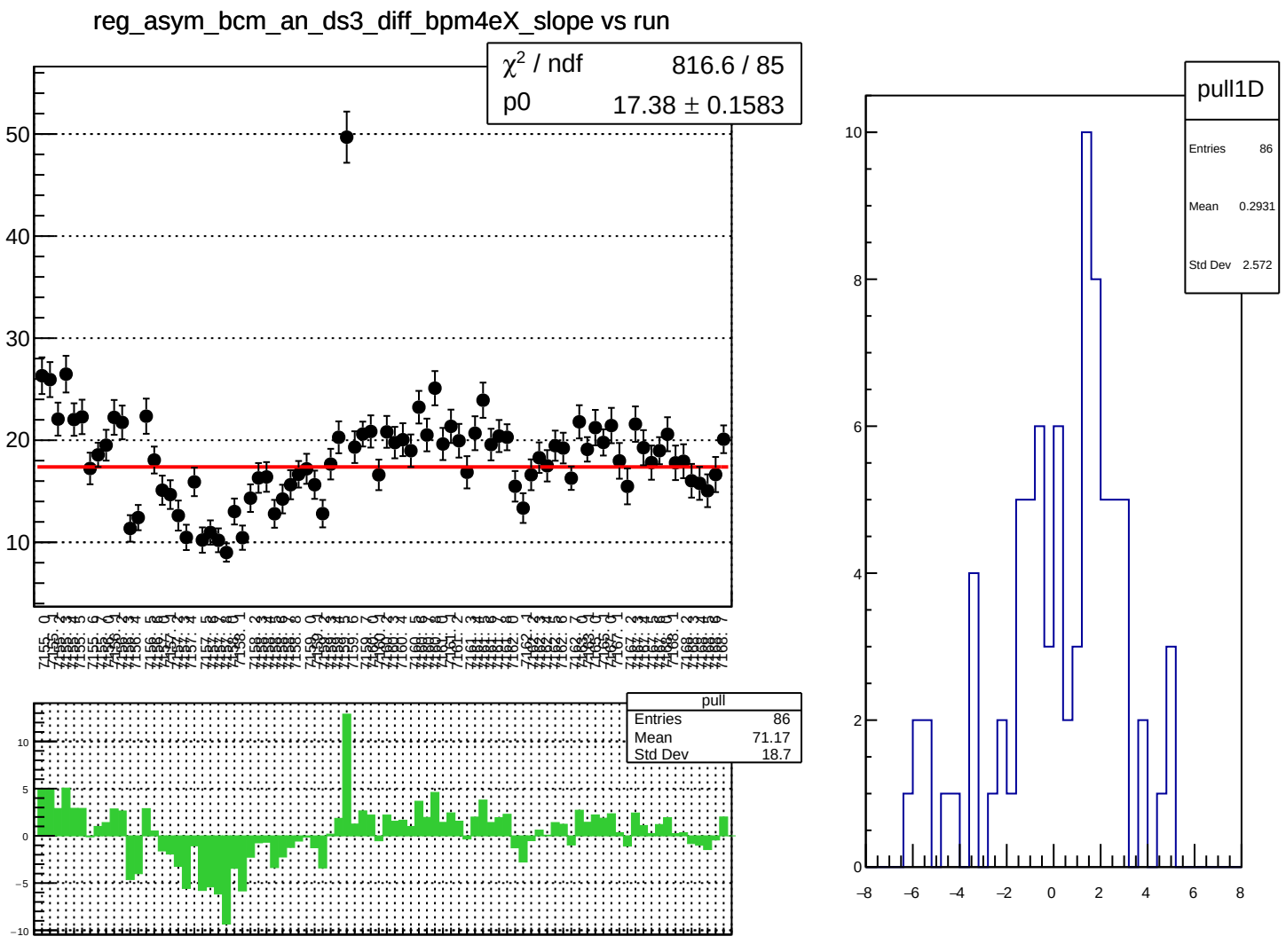

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 92.95 / 85
p0 1.642 ± 1.217
pull
Entries 86
Mean 369.1
Std Dev 331.9
pull1D
Entries 86
Mean 0.01005
Std Dev 1.04

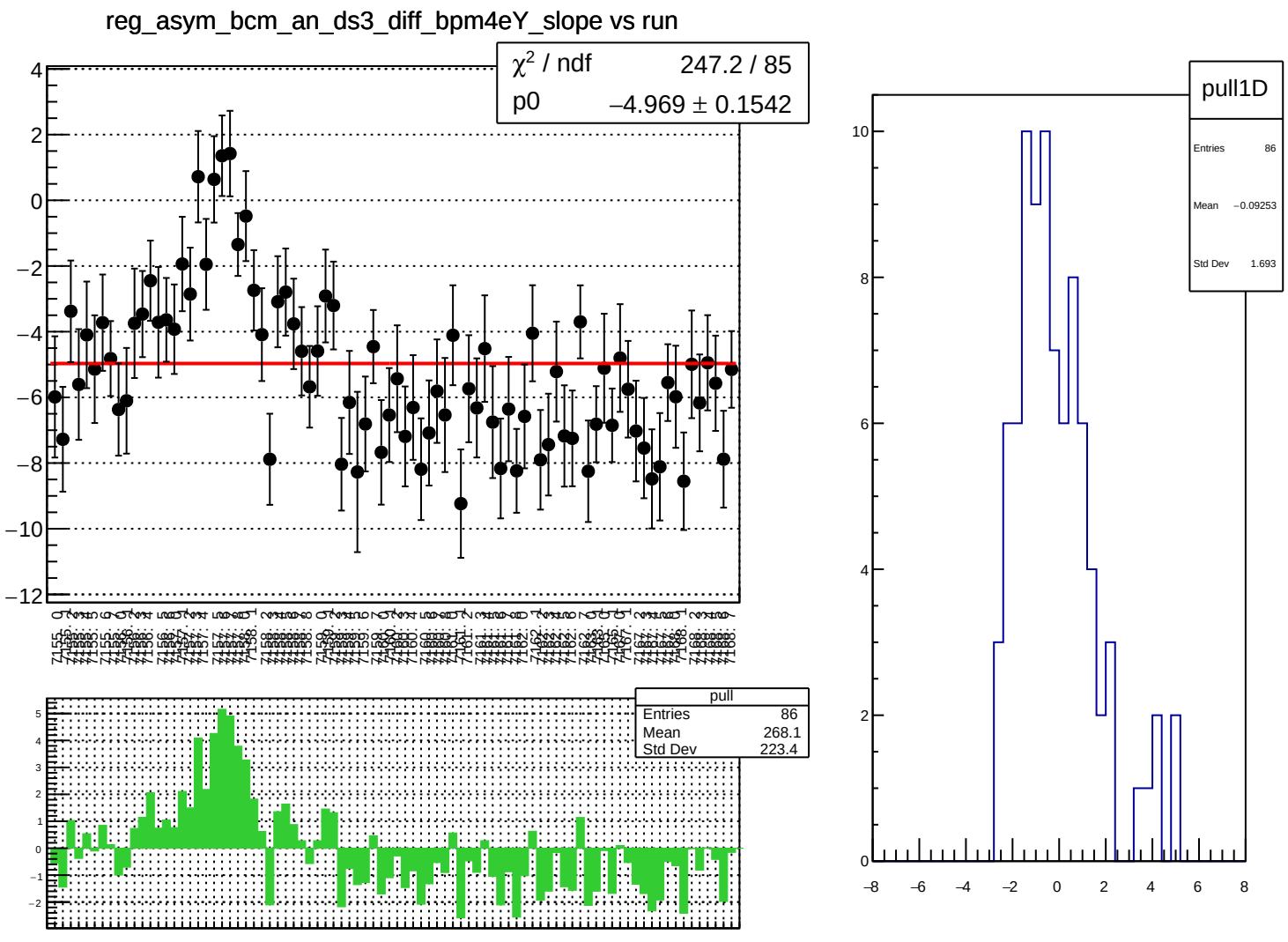

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 82.88 / 85
p0 −6.089 ± 0.04723
pull
Entries 86
Mean −1930
Std Dev 1982
pull1D
Entries 86
Mean −0.001725
Std Dev 0.9817

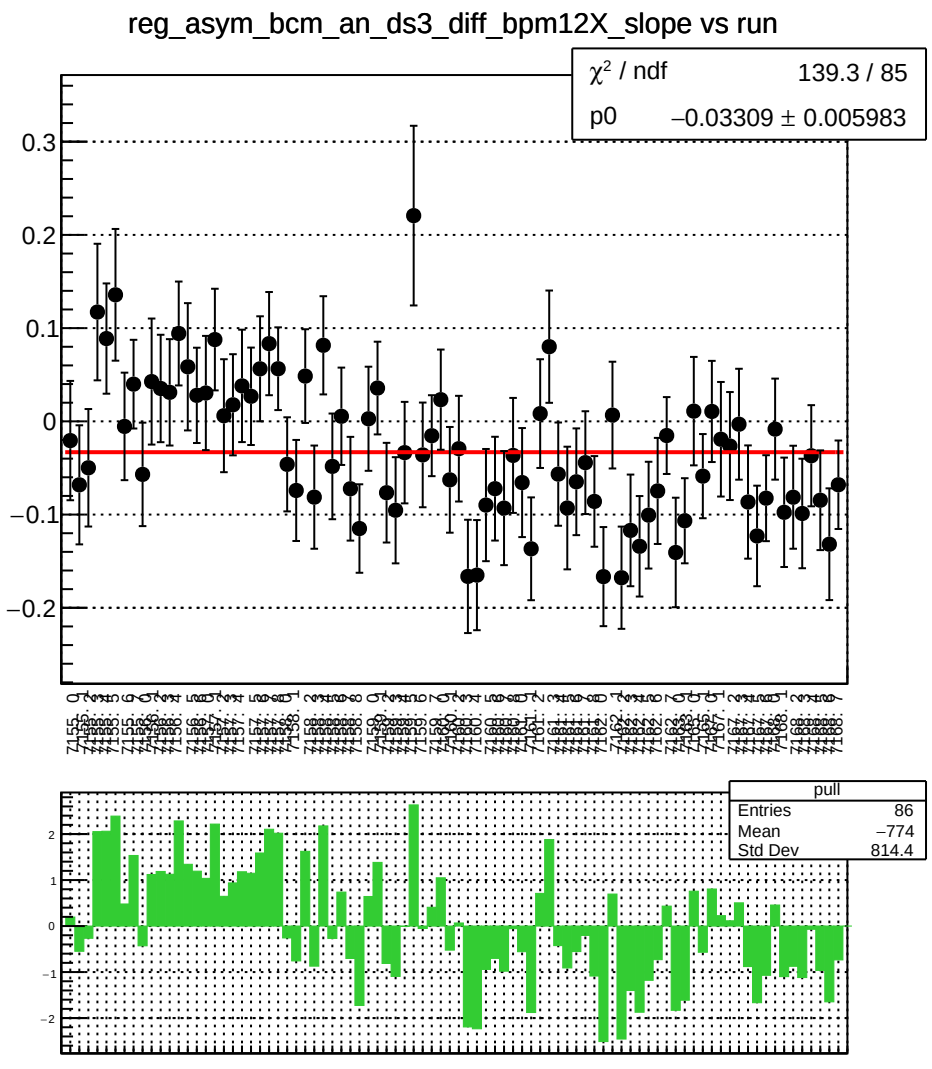

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 839.6 / 85
p0 −17.55 ± 0.1563
pull
Entries 86
Mean 73.44
Std Dev 16.92

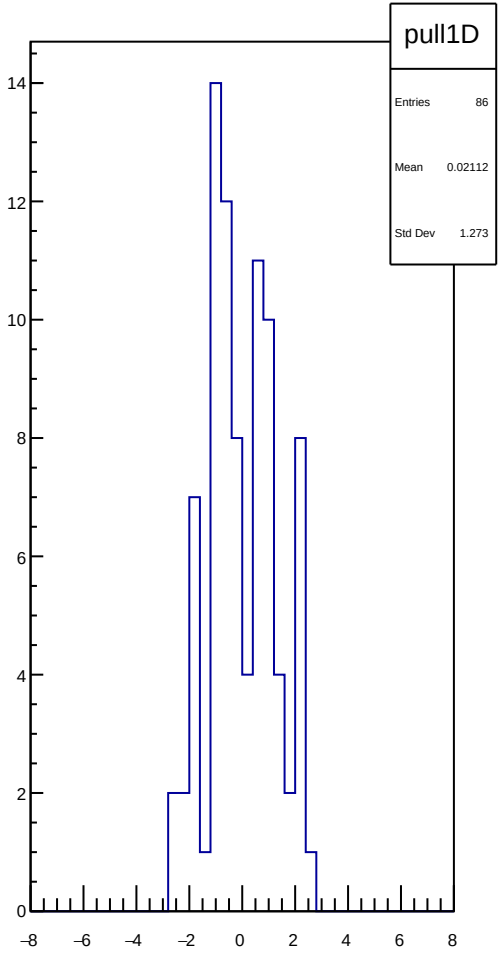

pull1D
Entries 86
Mean −0.3027
Std Dev 2.59

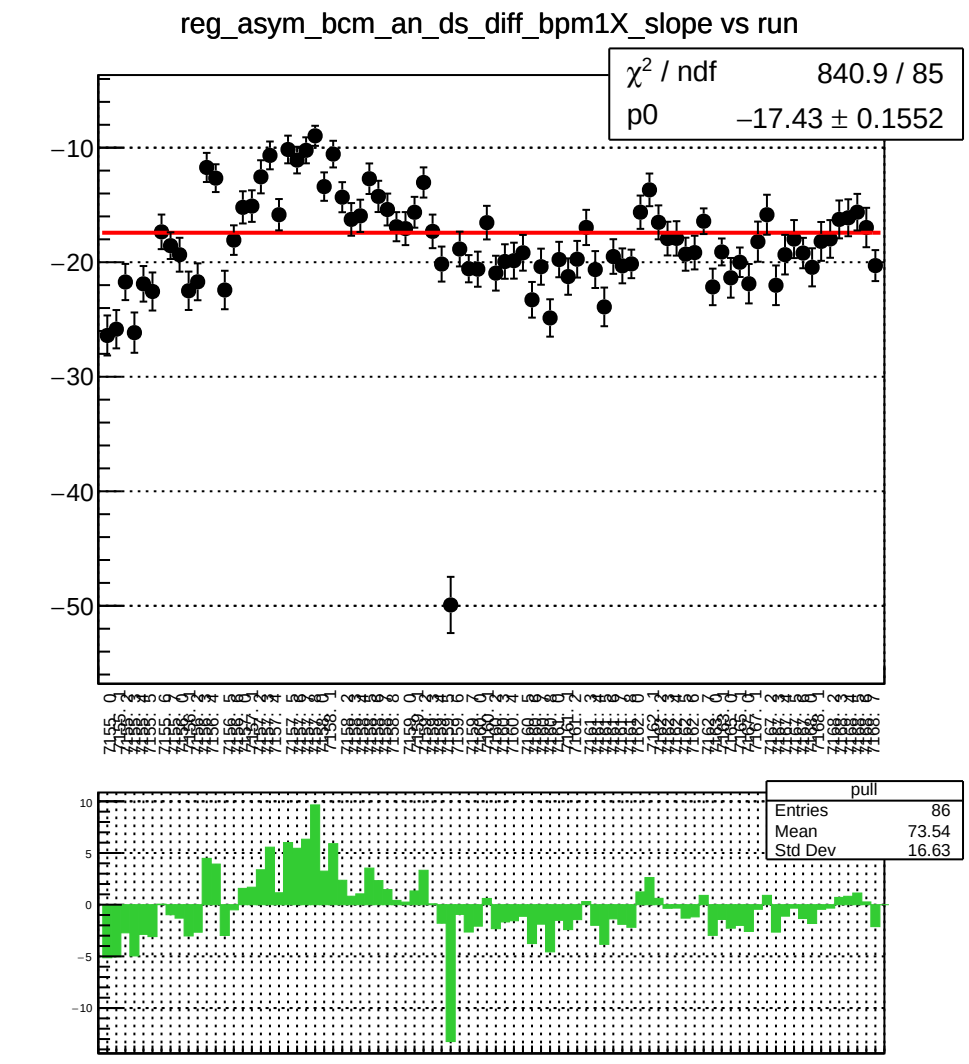

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 226.2 / 85
p0 3.325 ± 0.1329
pull
Entries 86
Mean 416.6
Std Dev 372.5
pull1D
Entries 86
Mean 0.05596
Std Dev 1.621

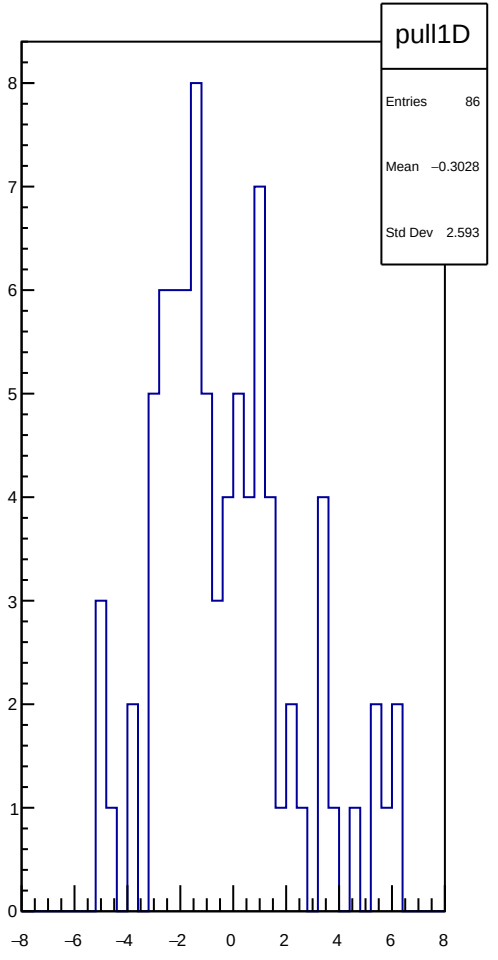

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 816.6 / 85
p0 17.38 ± 0.1583
pull
Entries 86
Mean 71.17
Std Dev 18.7
pull1D
Entries 86
Mean 0.2931
Std Dev 2.572

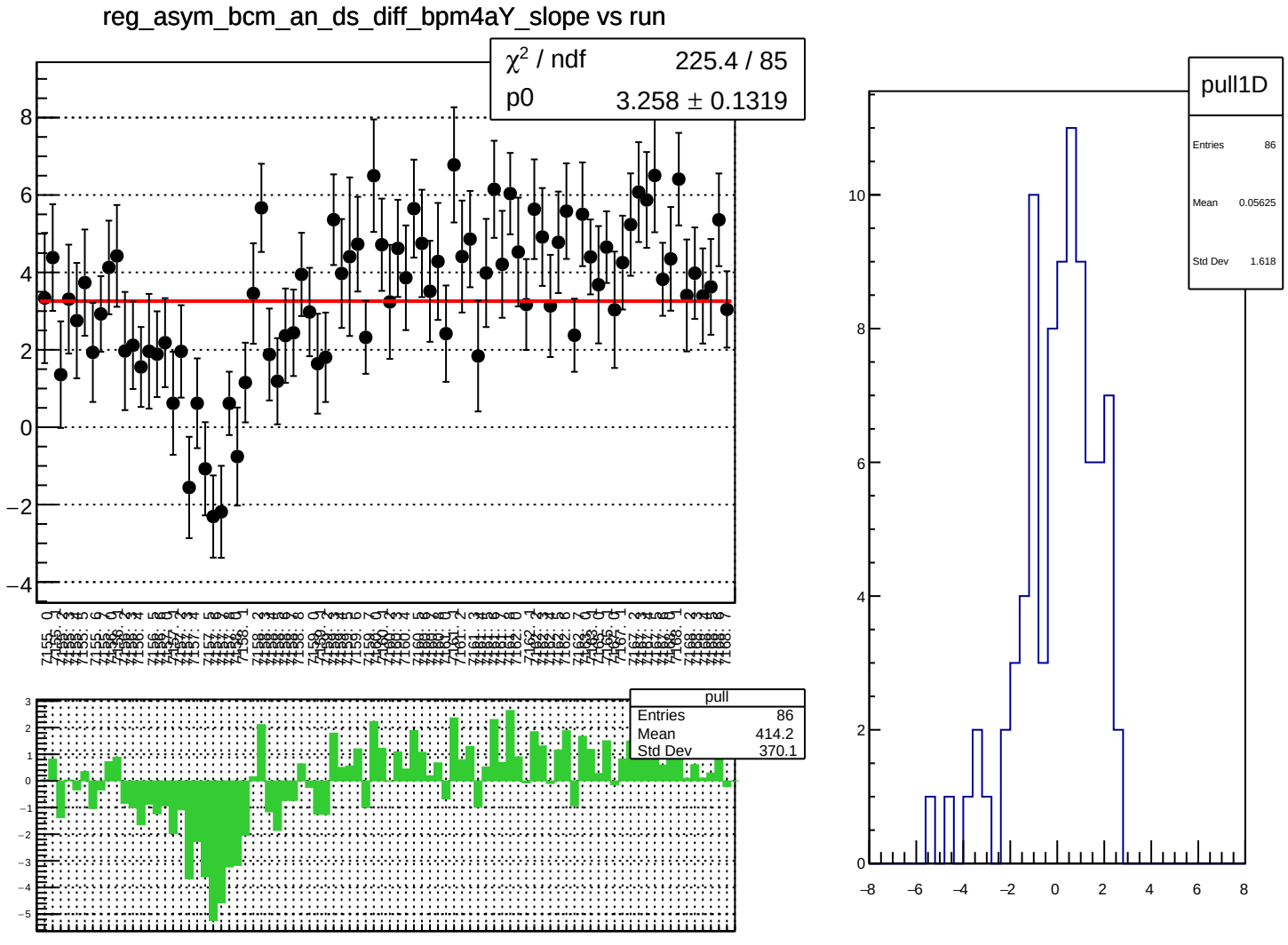

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 247.2 / 85
p0 −4.969 ± 0.1542
pull
Entries 86
Mean 268.1
Std Dev 223.4
pull1D
Entries 86
Mean −0.09253
Std Dev 1.693

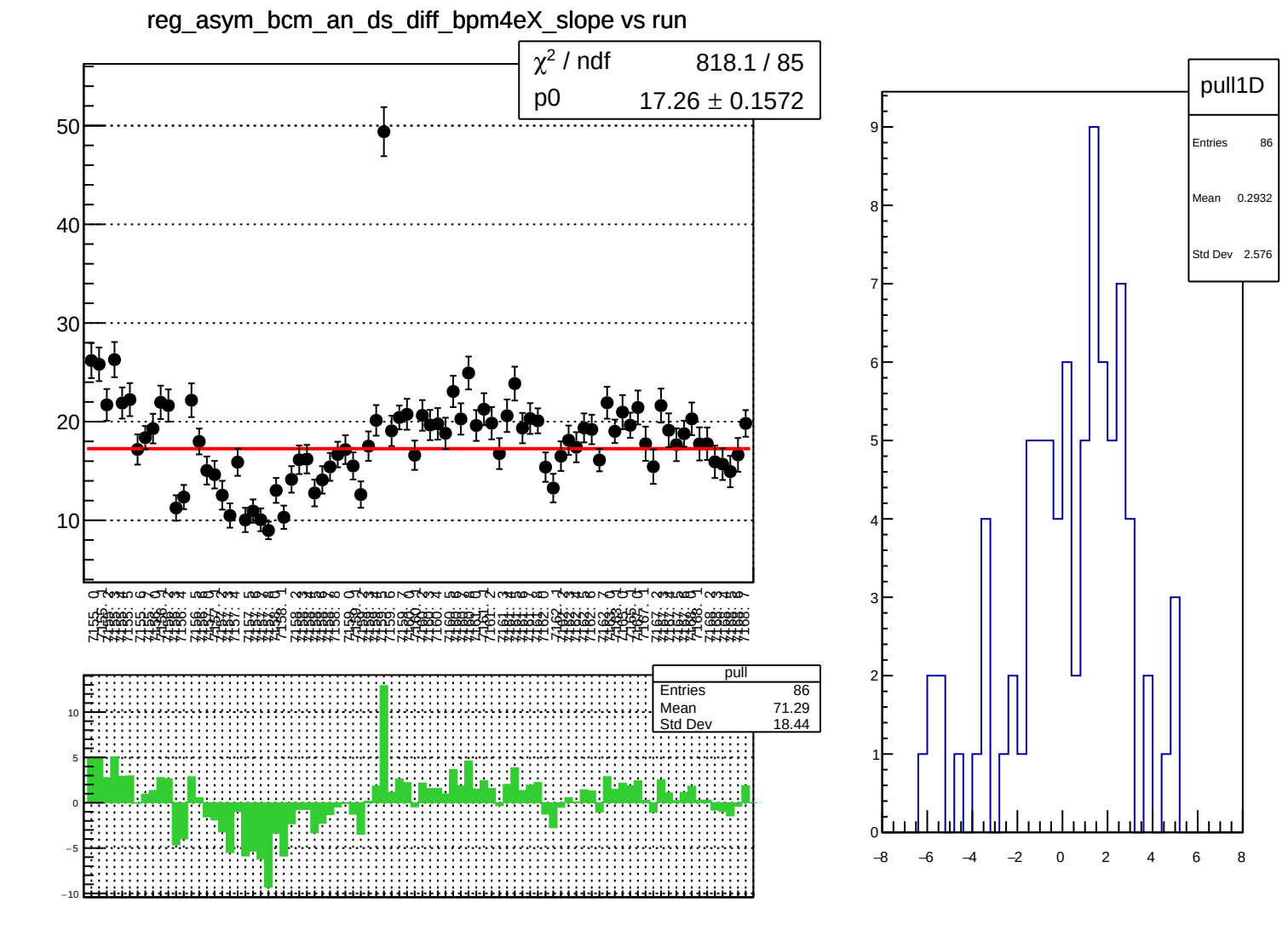

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 139.3 / 85
p0 −0.03309 ± 0.005983
pull
Entries 86
Mean −774
Std Dev 814.4

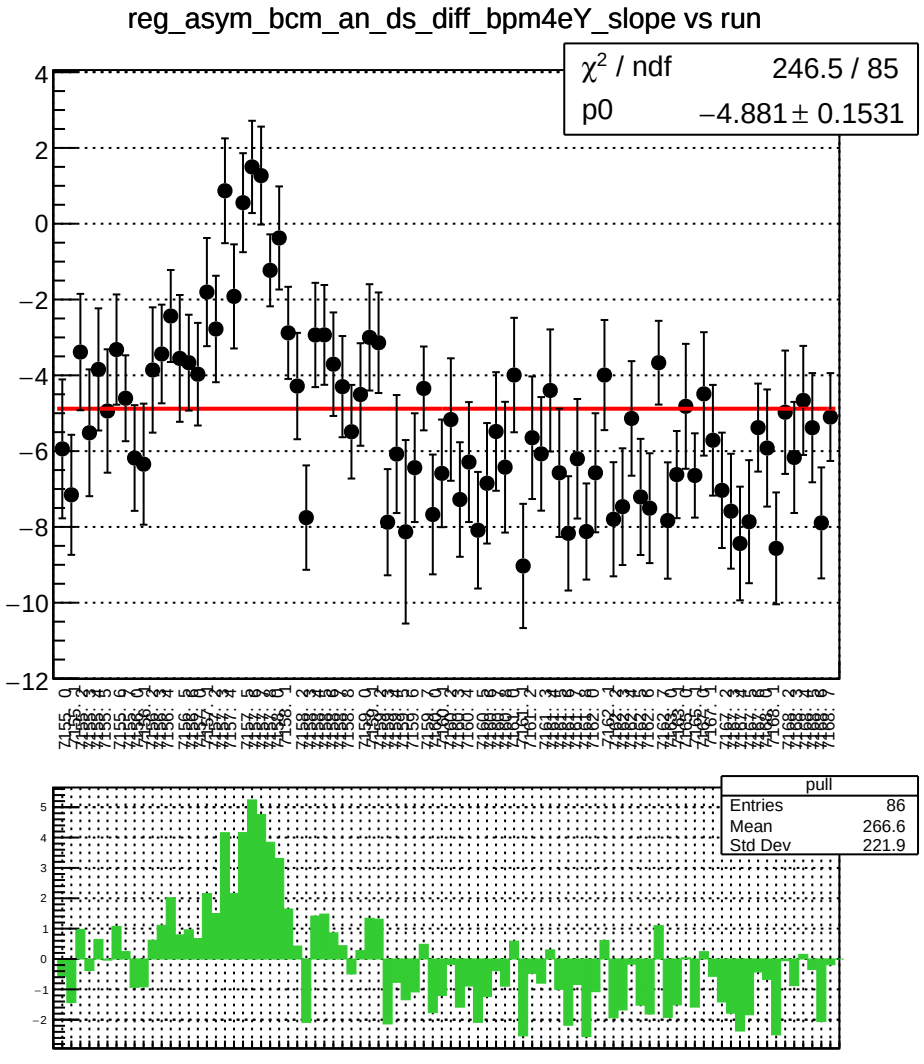

pull1D
Entries 86
Mean 0.02112
Std Dev 1.273

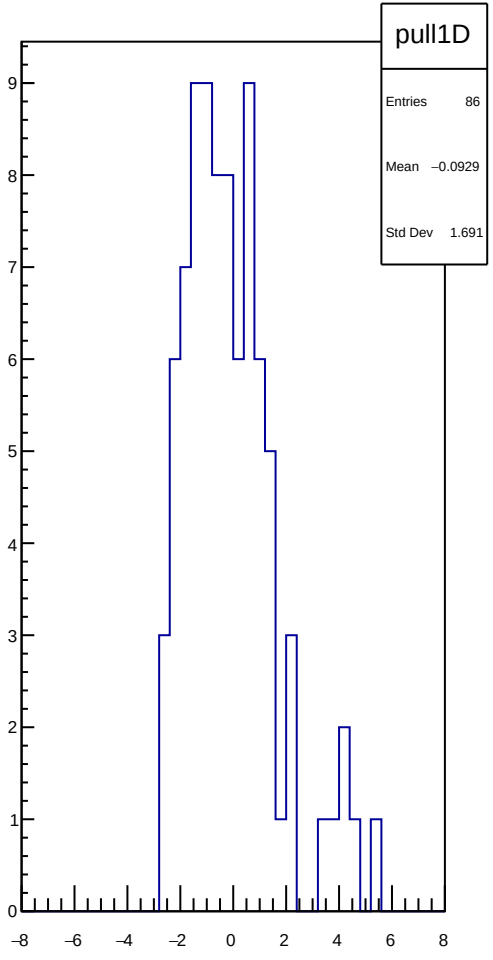

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 840.9 / 85
p0 −17.43 ± 0.1552
pull
Entries 86
Mean 73.54
Std Dev 16.63

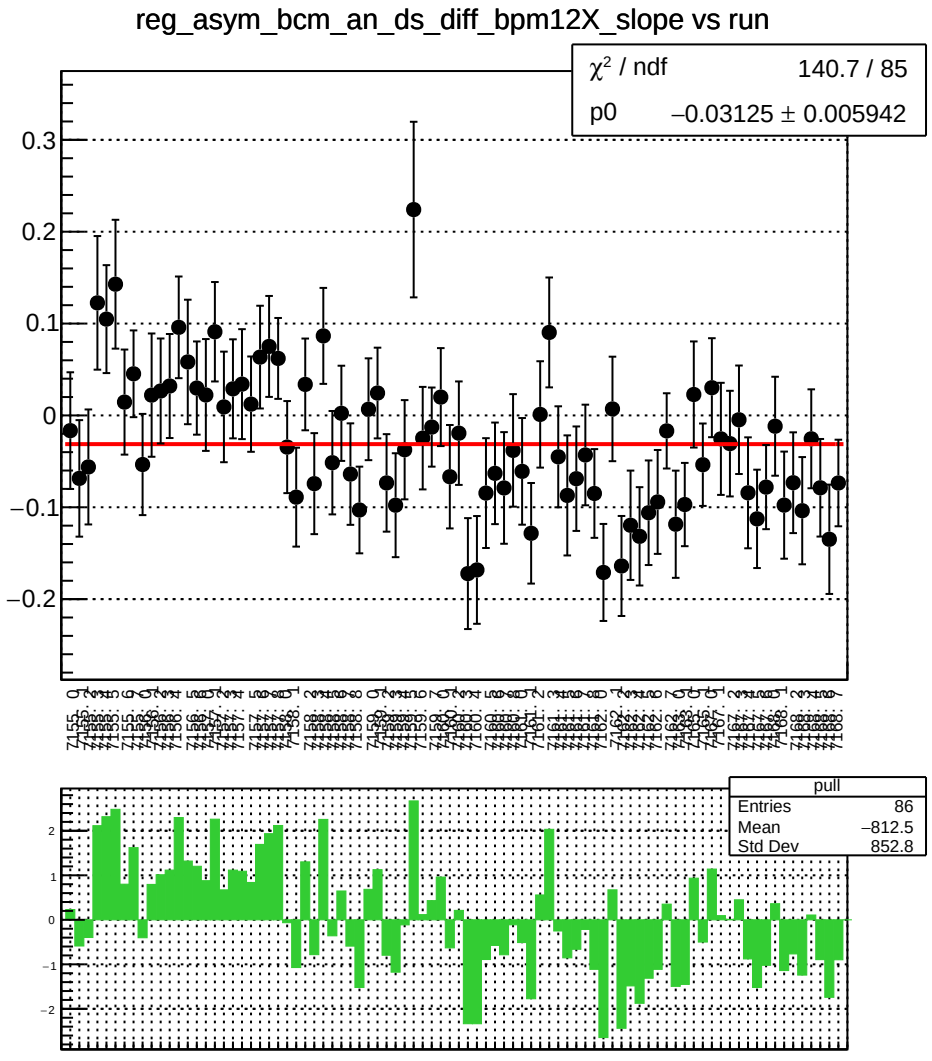

pull1D
Entries 86
Mean −0.3028
Std Dev 2.593

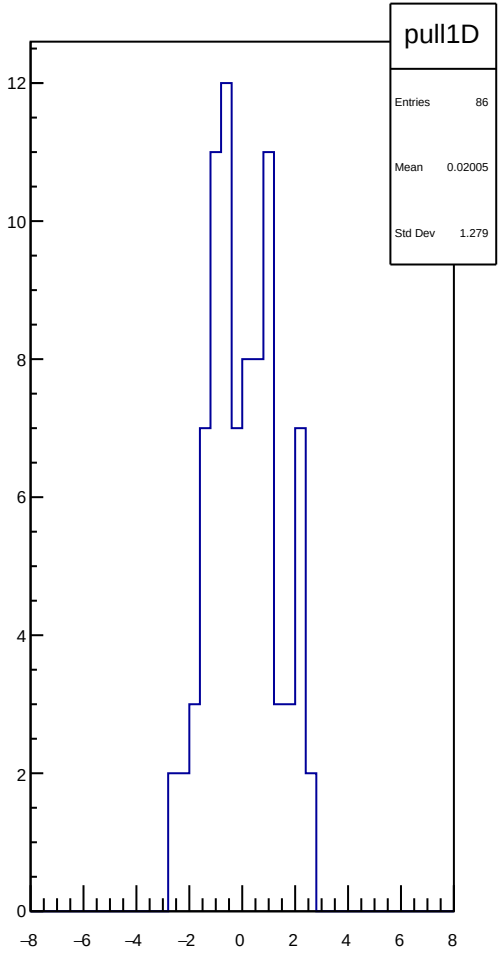

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 225.4 / 85
p0 3.258 ± 0.1319
pull
Entries 86
Mean 414.2
Std Dev 370.1
pull1D
Entries 86
Mean 0.05625
Std Dev 1.618

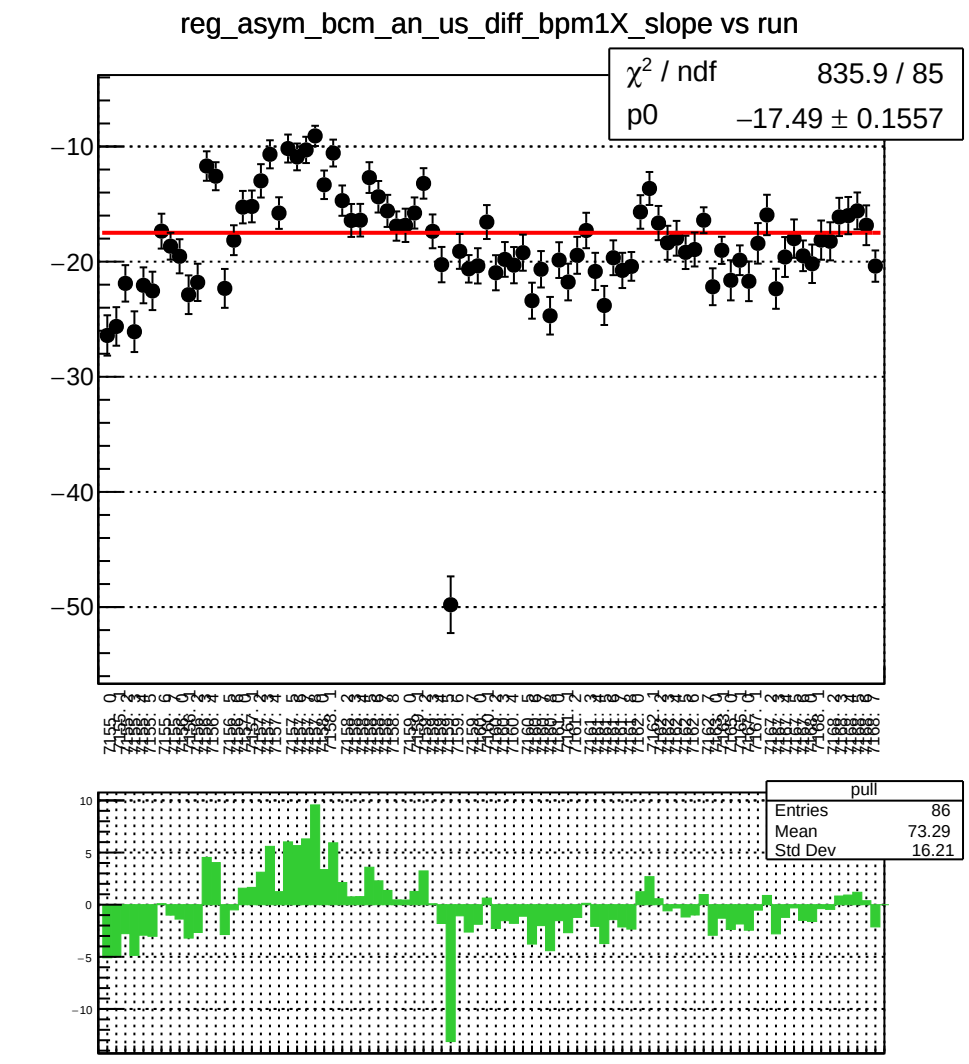

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 818.1 / 85
p0 17.26 ± 0.1572
pull
Entries 86
Mean 71.29
Std Dev 18.44
pull1D
Entries 86
Mean 0.2932
Std Dev 2.576

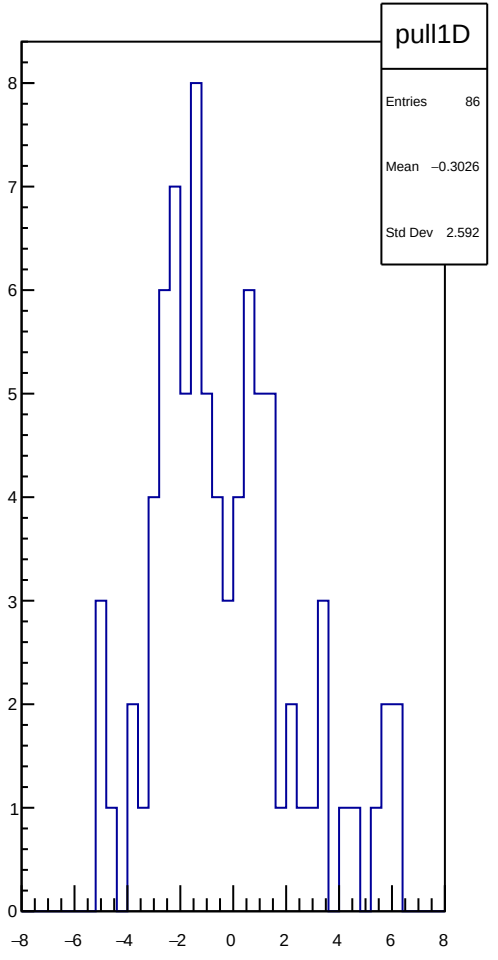

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 246.5 / 85
p0 −4.881 ± 0.1531
pull
Entries 86
Mean 266.6
Std Dev 221.9

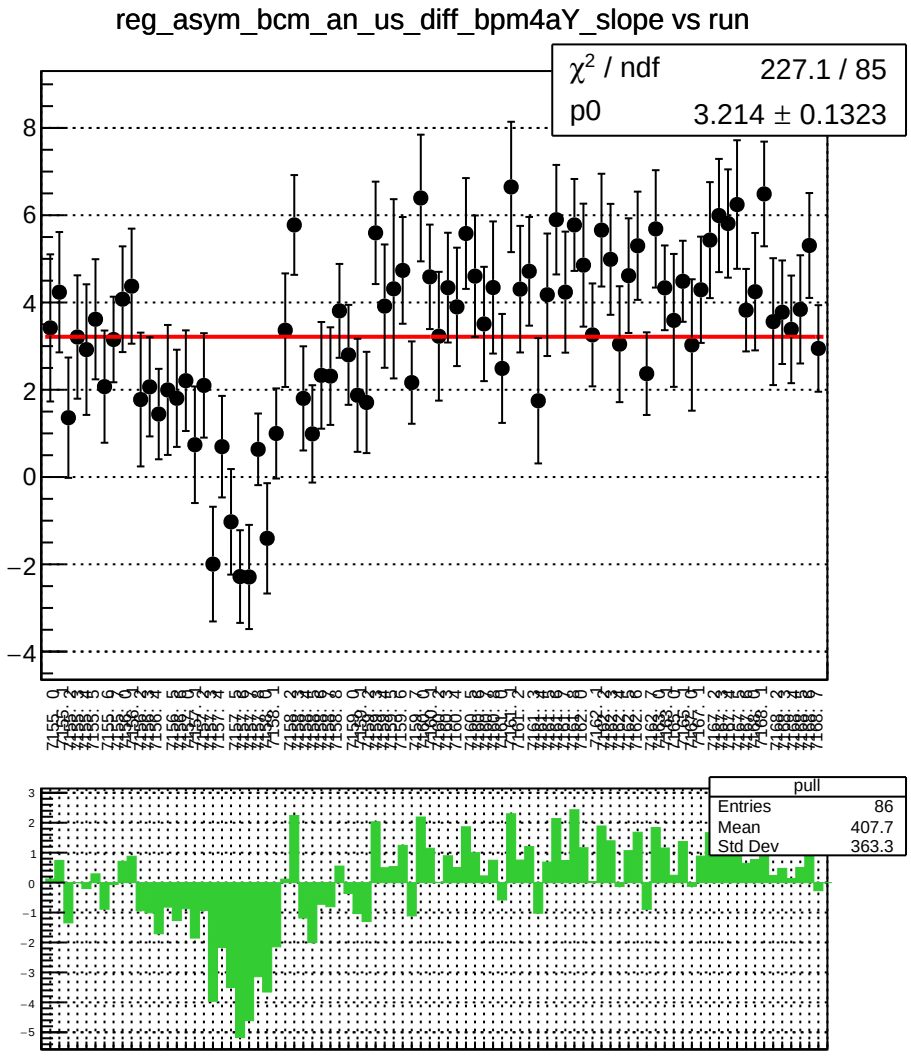

pull1D
Entries 86
Mean −0.0929
Std Dev 1.691

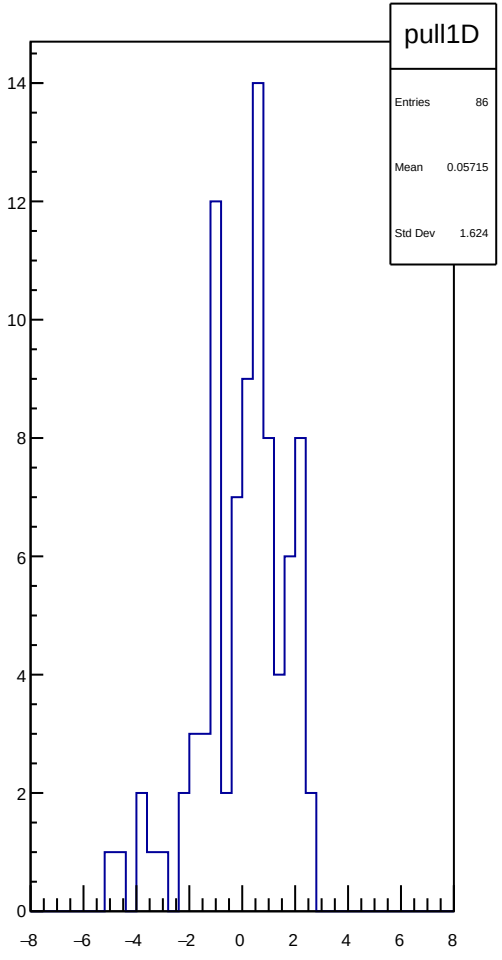

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 140.7 / 85
p0 −0.03125 ± 0.005942
pull
Entries 86
Mean −812.5
Std Dev 852.8

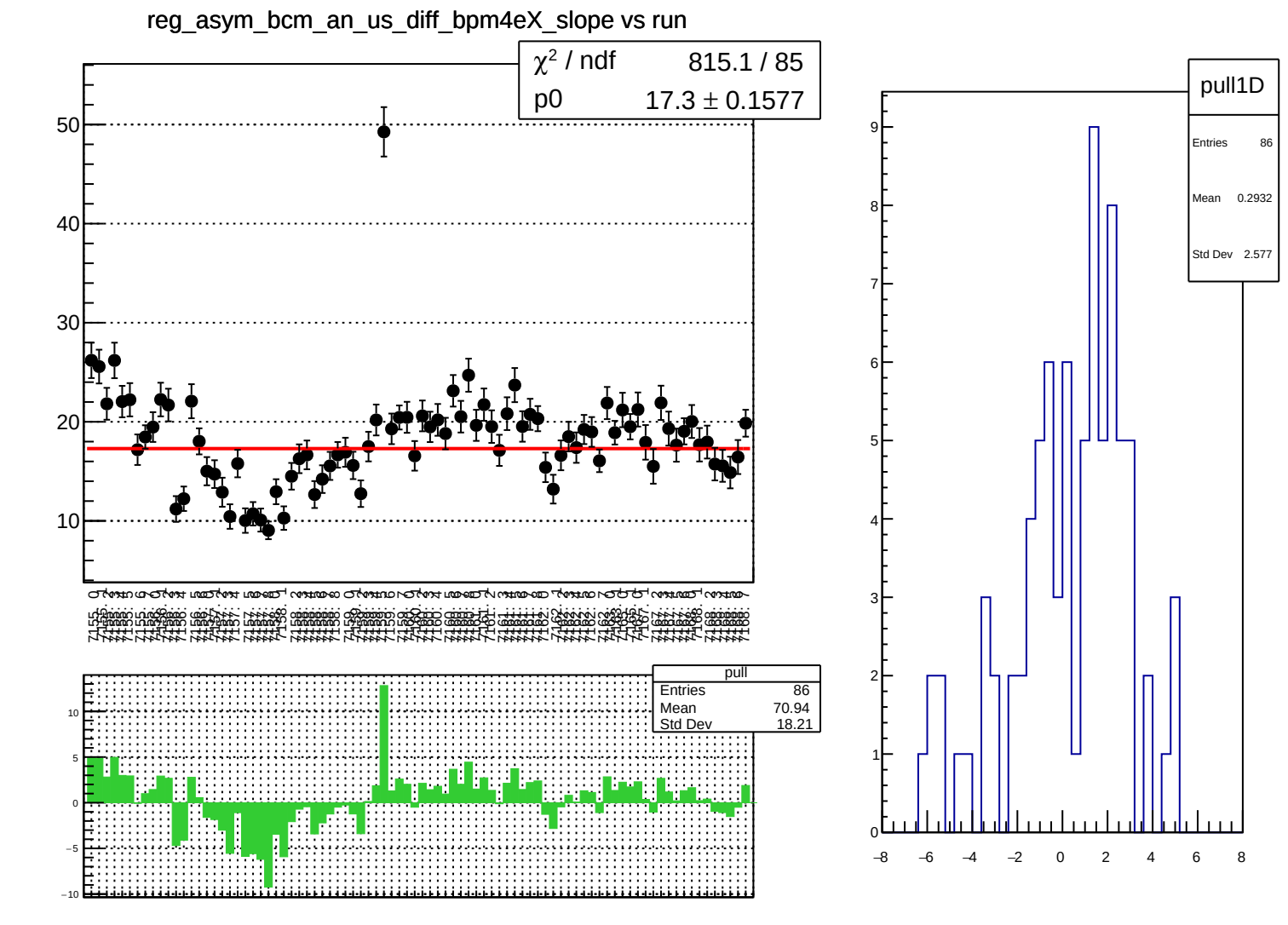

pull1D
Entries 86
Mean 0.02005
Std Dev 1.279

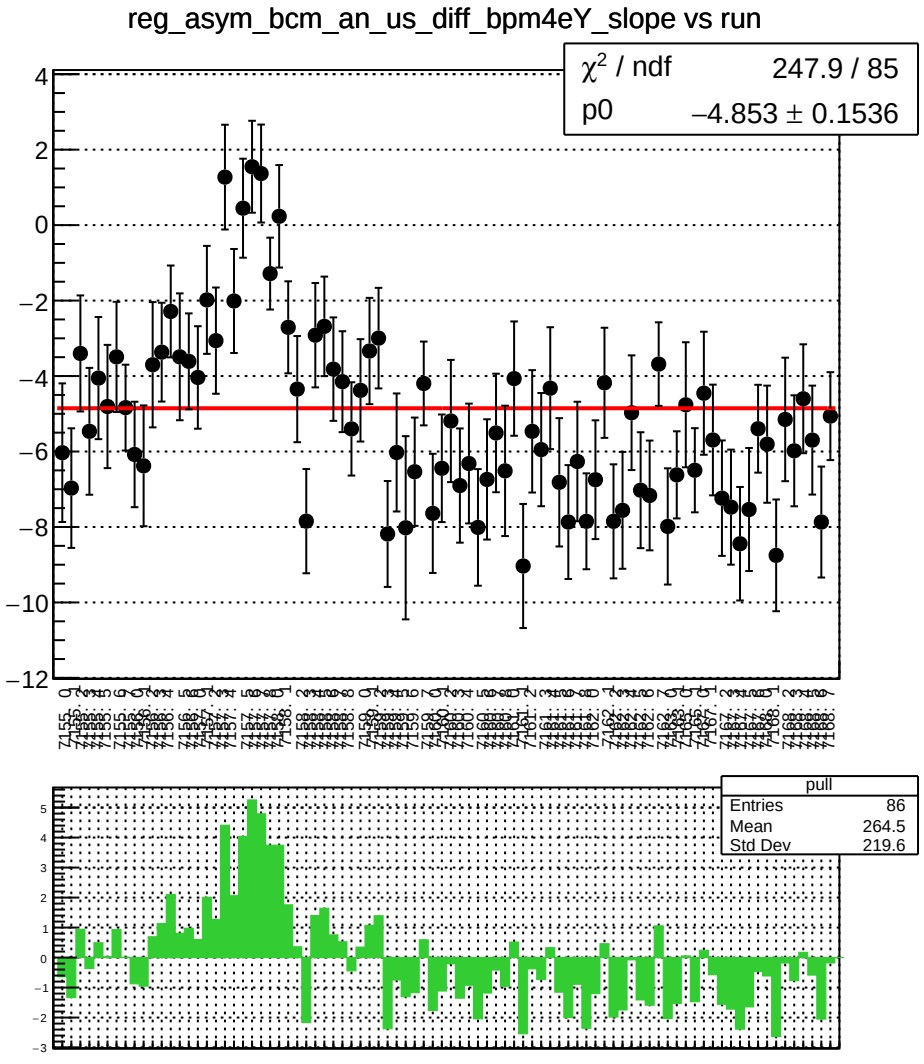

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 835.9 / 85
p0 −17.49 ± 0.1557
pull
Entries 86
Mean 73.29
Std Dev 16.21

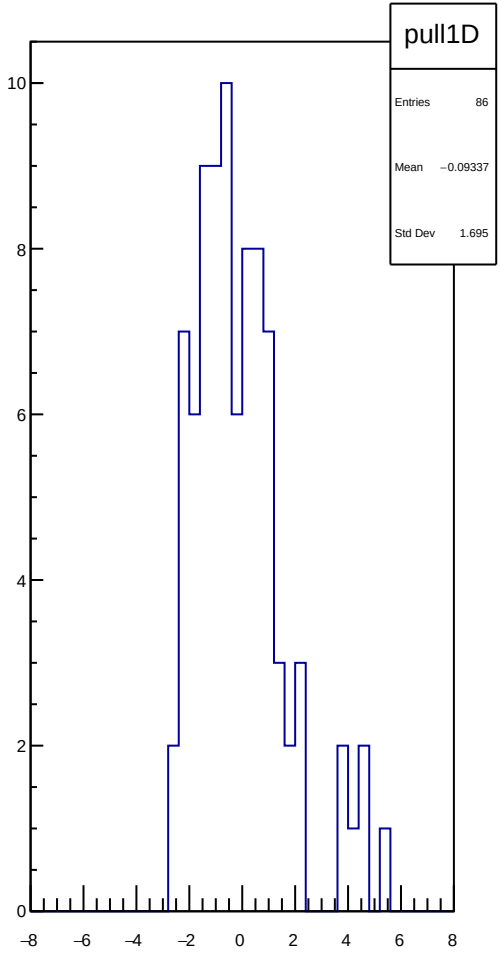

pull1D
Entries 86
Mean −0.3026
Std Dev 2.592

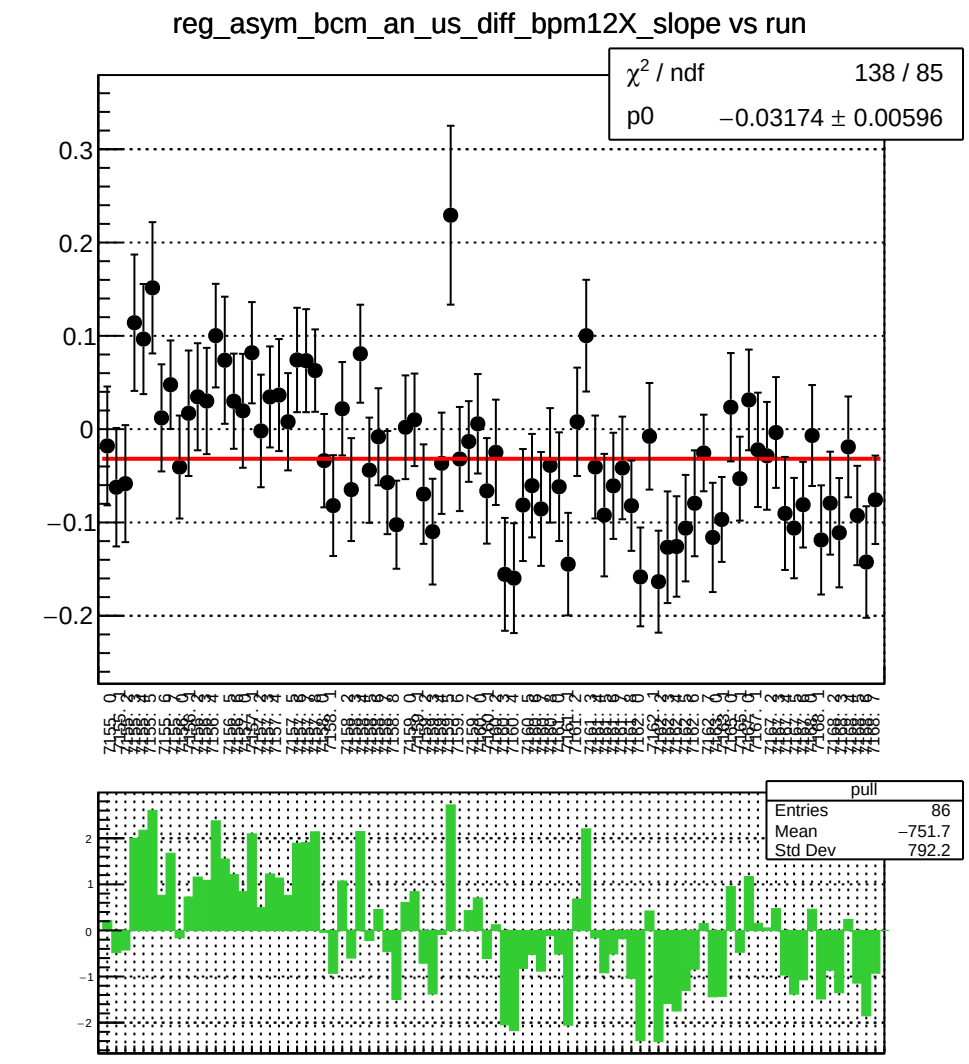

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 227.1 / 85
p0 3.214 ± 0.1323
pull
Entries 86
Mean 407.7
Std Dev 363.3

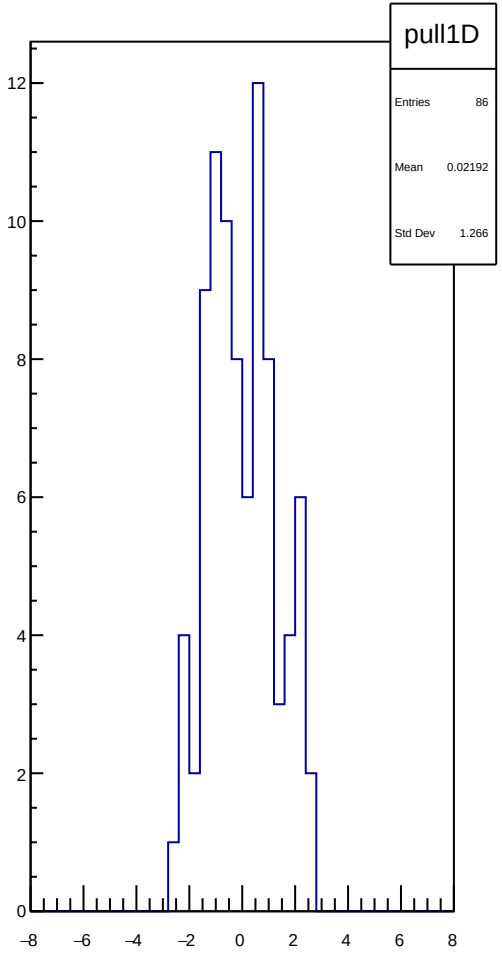

pull1D
Entries 86
Mean 0.05715
Std Dev 1.624

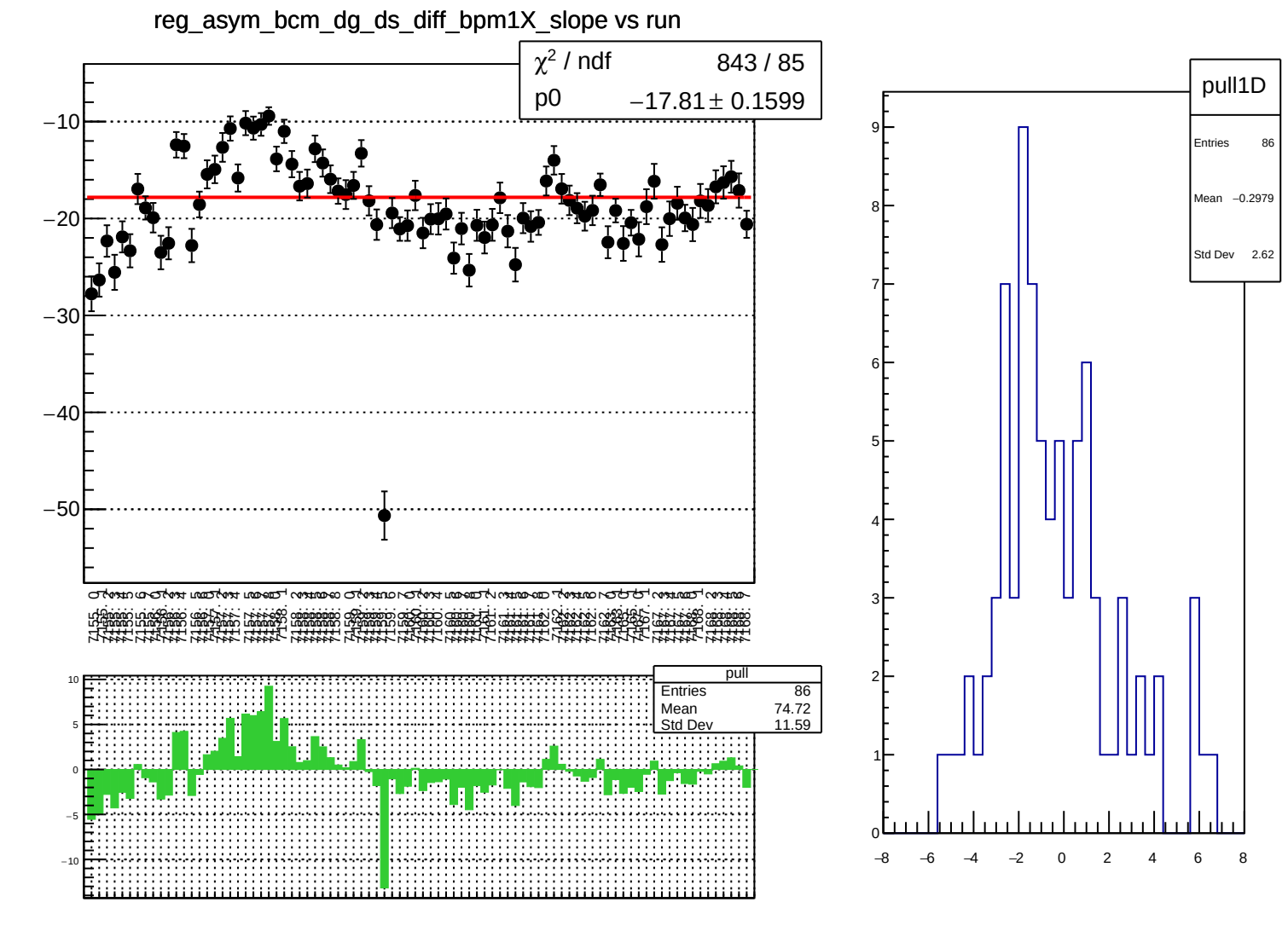

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 815.1 / 85
p0 17.3 ± 0.1577
pull
Entries 86
Mean 70.94
Std Dev 18.21
pull1D
Entries 86
Mean 0.2932
Std Dev 2.577

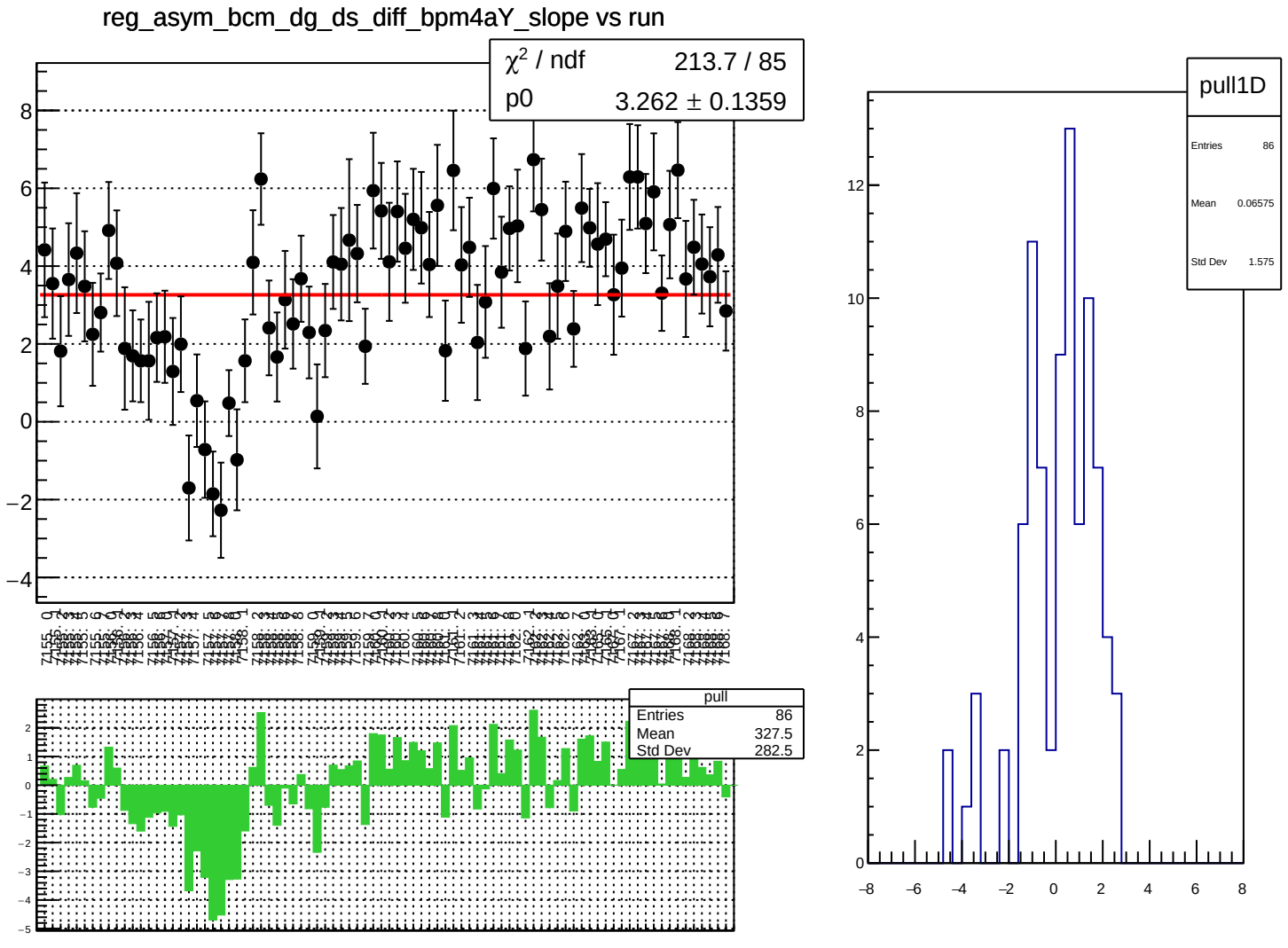

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 247.9 / 85
p0 −4.853 ± 0.1536
pull
Entries 86
Mean 264.5
Std Dev 219.6

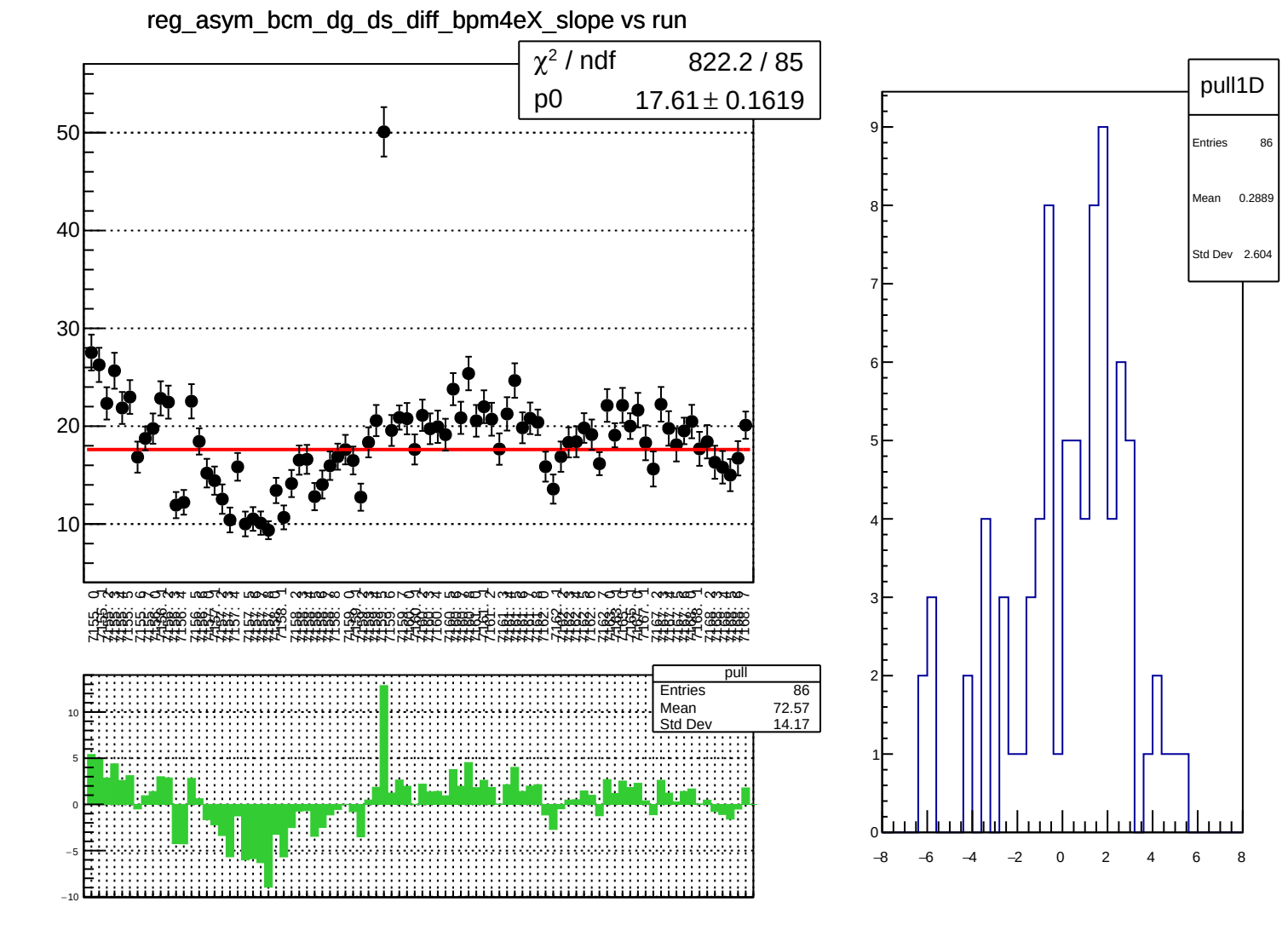

pull1D
Entries 86
Mean −0.09337
Std Dev 1.695

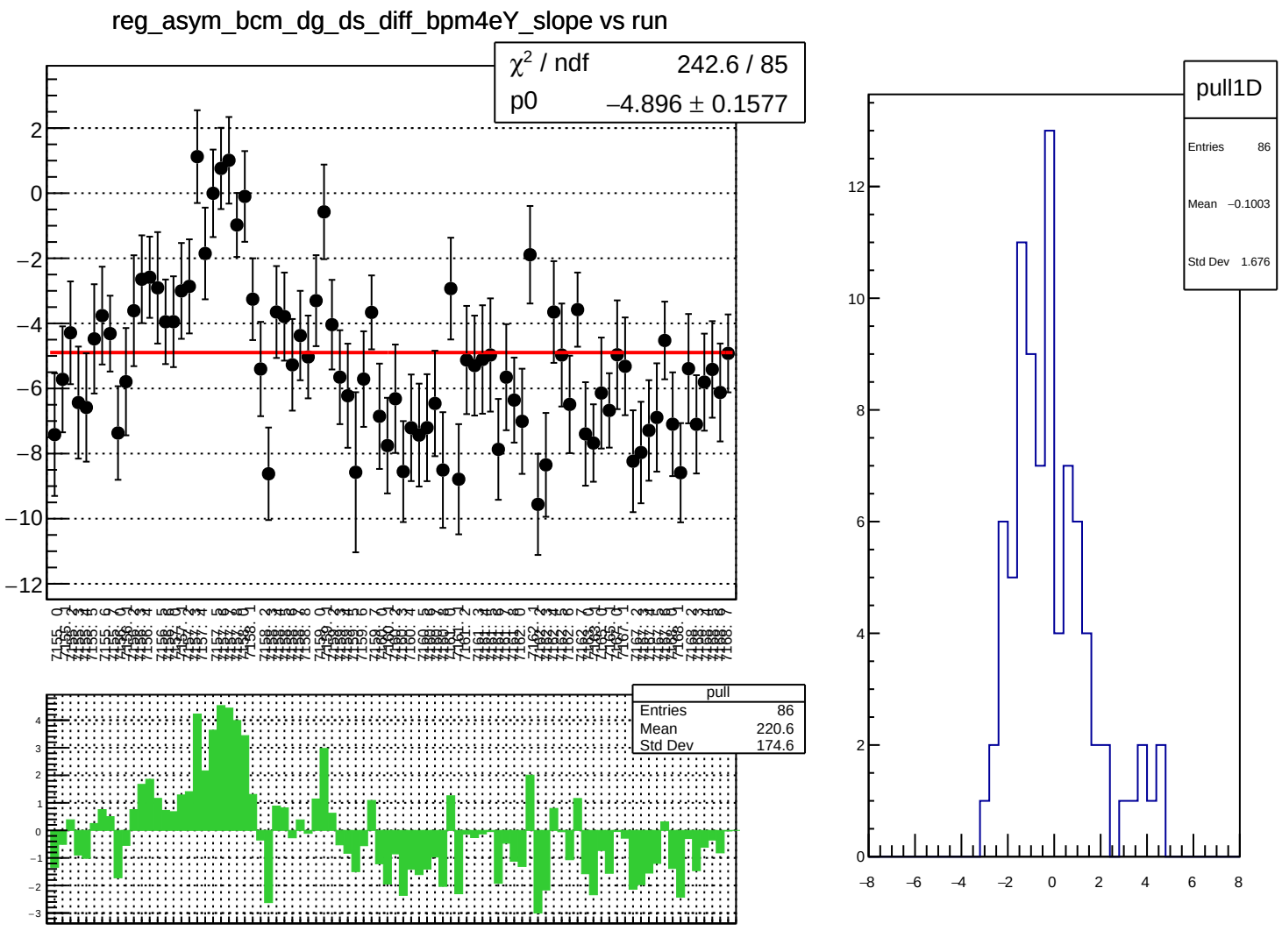

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 138 / 85
p0 −0.03174 ± 0.00596
pull
Entries 86
Mean −751.7
Std Dev 792.2

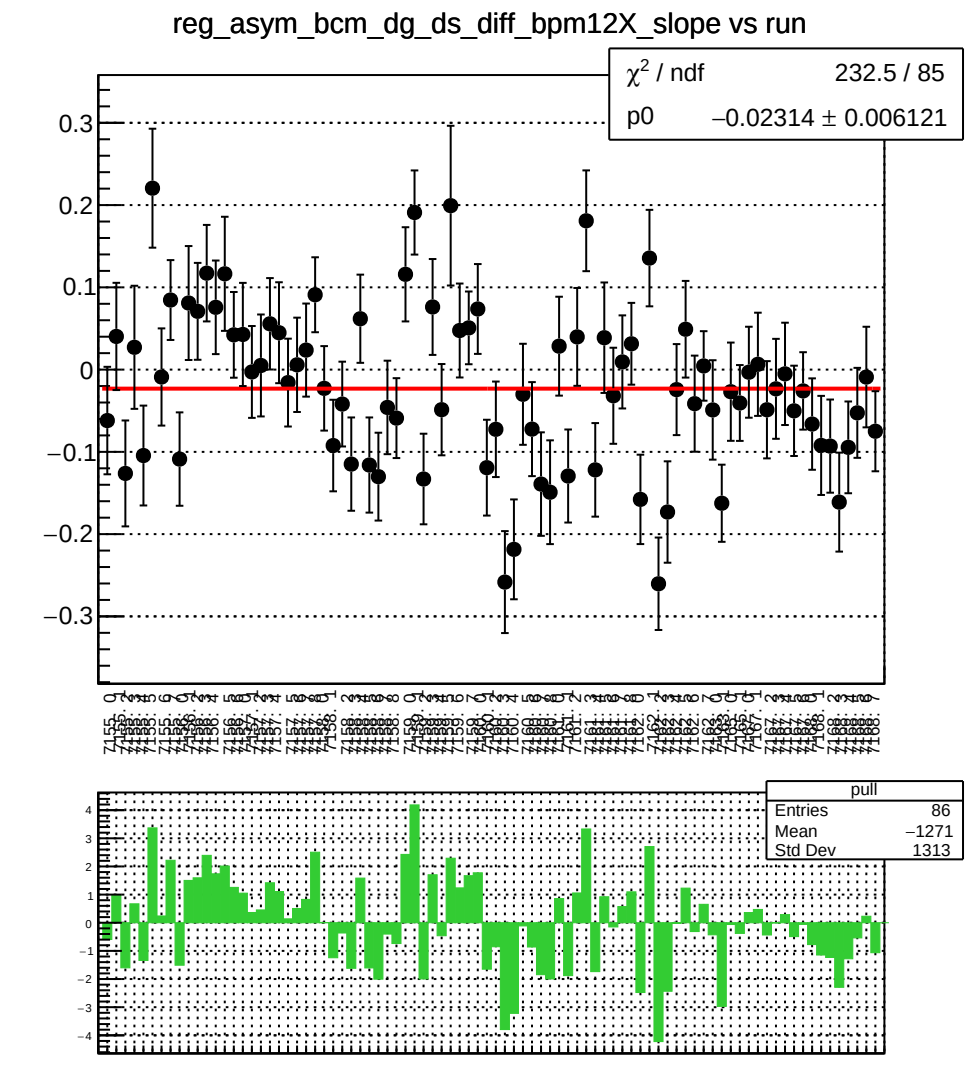

pull1D
Entries 86
Mean 0.02192
Std Dev 1.266

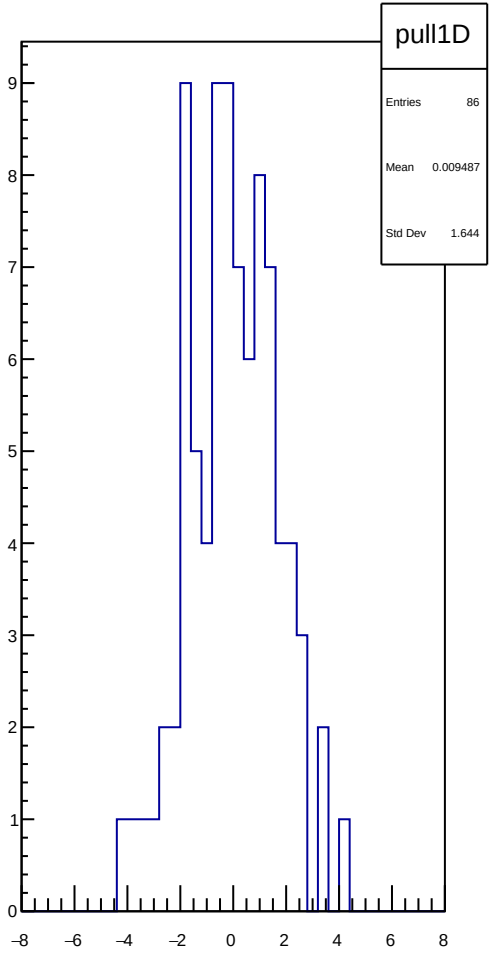

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 843 / 85
p0 −17.81 ± 0.1599
−10
−20
−30
−40
−50
pull
Entries 86
Mean 74.72
Std Dev 11.59
10
5
0
−5
−10
pull1D
Entries 86
Mean −0.2979
Std Dev 2.62
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

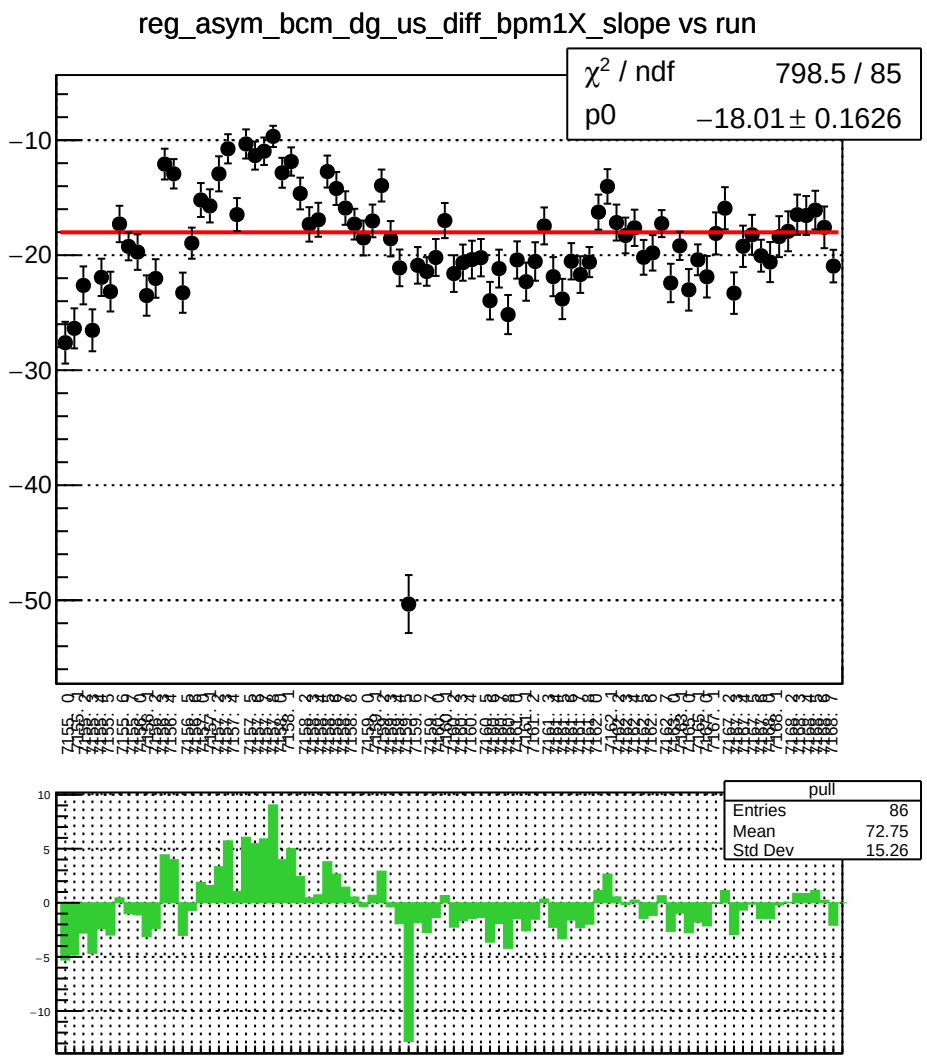

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 213.7 / 85
p0 3.262 ± 0.1359
pull
Entries 86
Mean 327.5
Std Dev 282.5
pull1D
Entries 86
Mean 0.06575
Std Dev 1.575

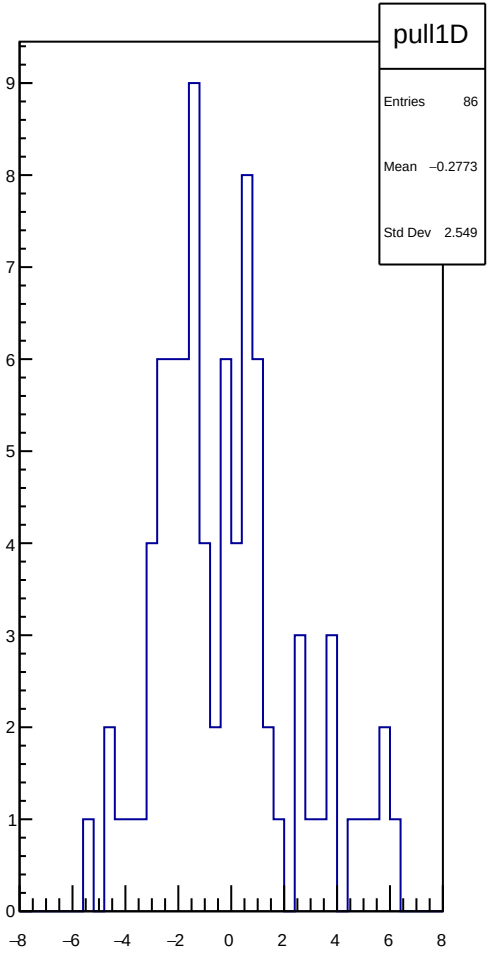

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 822.2 / 85
p0 17.61 ± 0.1619
pull
Entries 86
Mean 72.57
Std Dev 14.17
pull1D
Entries 86
Mean 0.2889
Std Dev 2.604

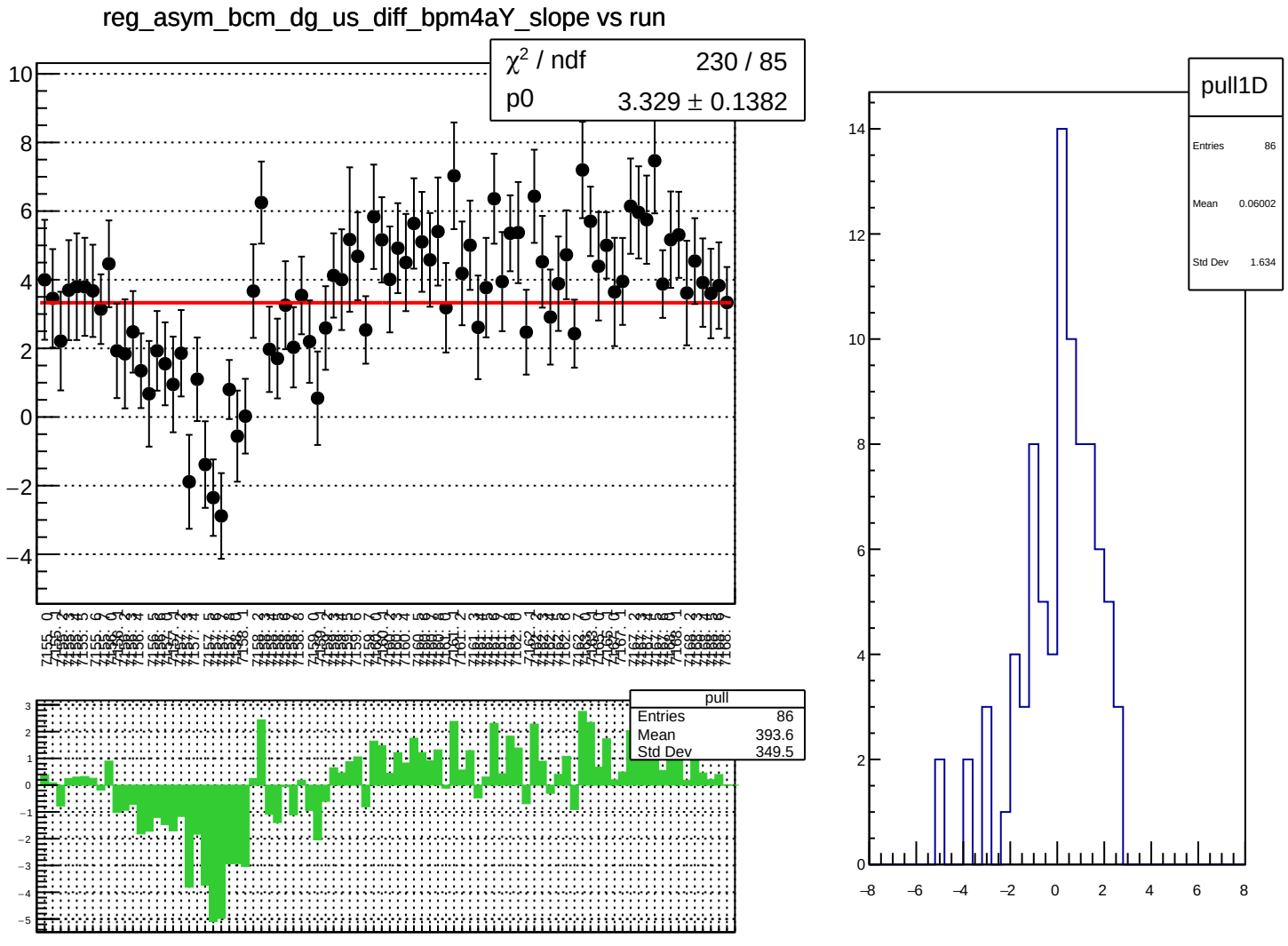

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 242.6 / 85
p0 −4.896 ± 0.1577
pull
Entries 86
Mean 220.6
Std Dev 174.6
pull1D
Entries 86
Mean −0.1003
Std Dev 1.676

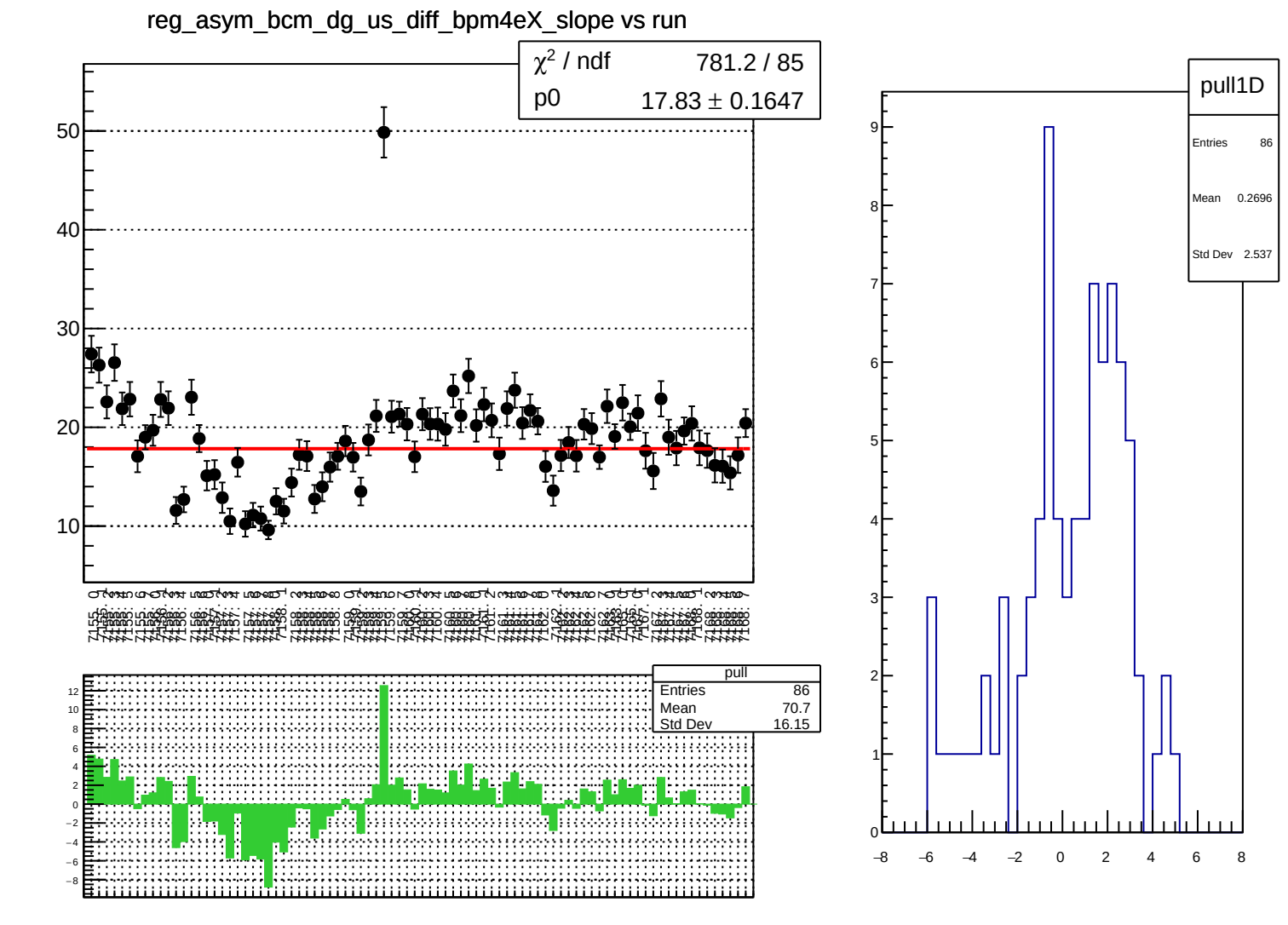

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 232.5 / 85
p0 −0.02314 ± 0.006121
pull
Entries 86
Mean −1271
Std Dev 1313

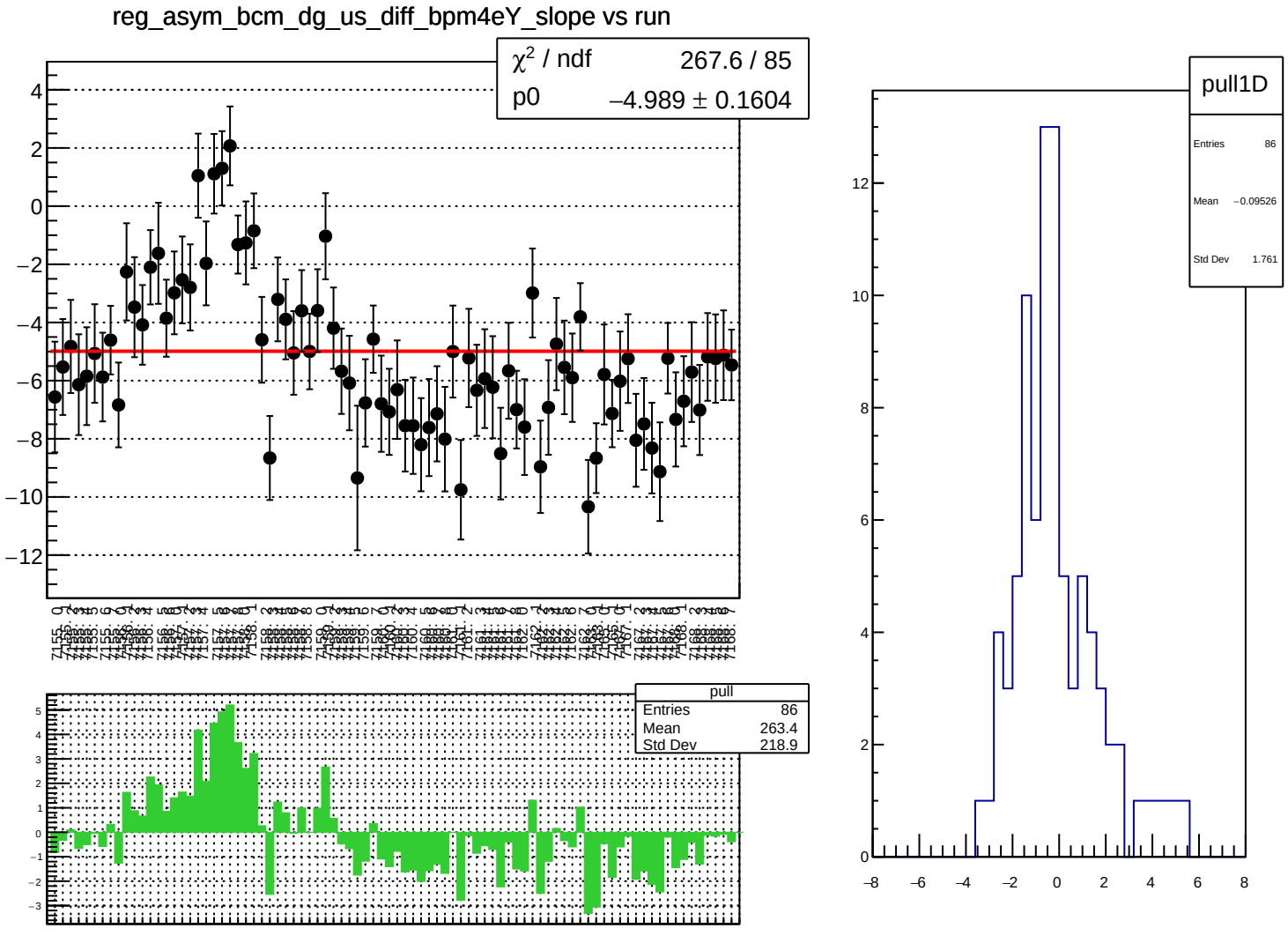

pull1D
Entries 86
Mean 0.009487
Std Dev 1.644

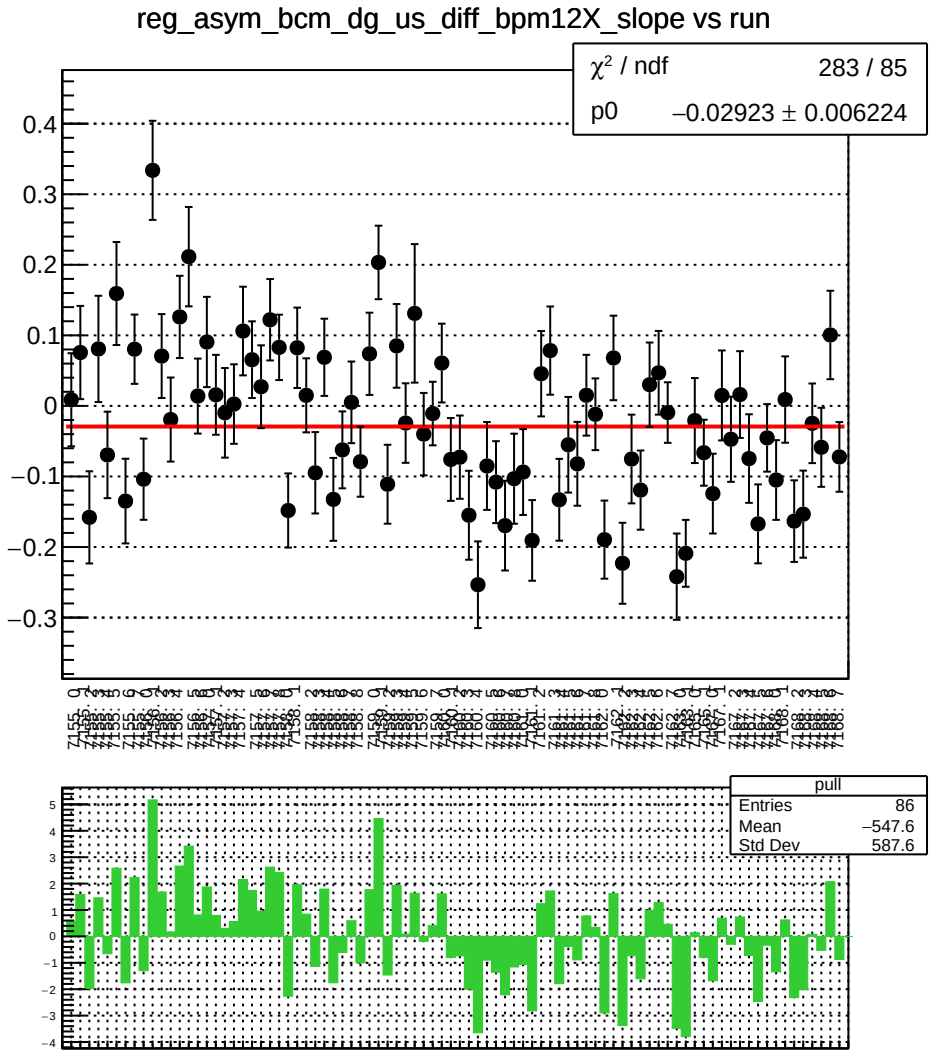

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 798.5 / 85
p0 −18.01 ± 0.1626
pull
Entries 86
Mean 72.75
Std Dev 15.26

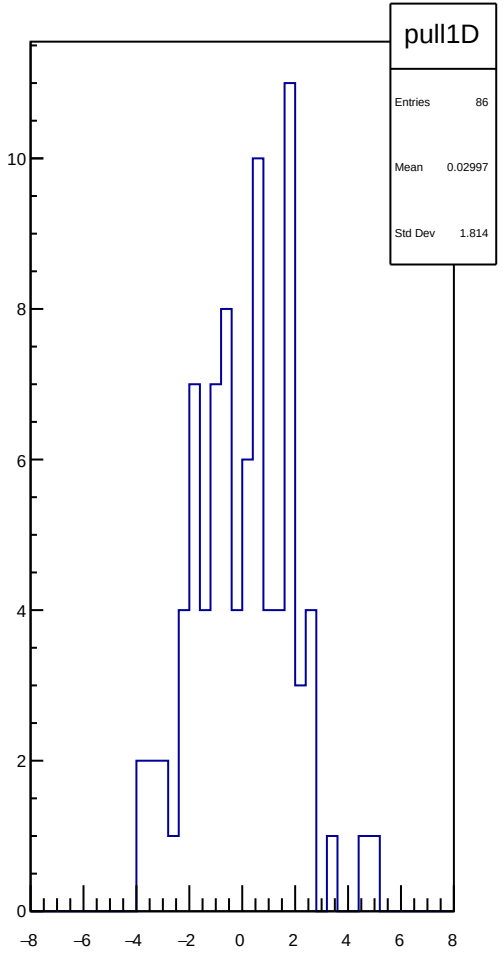

pull1D
Entries 86
Mean −0.2773
Std Dev 2.549

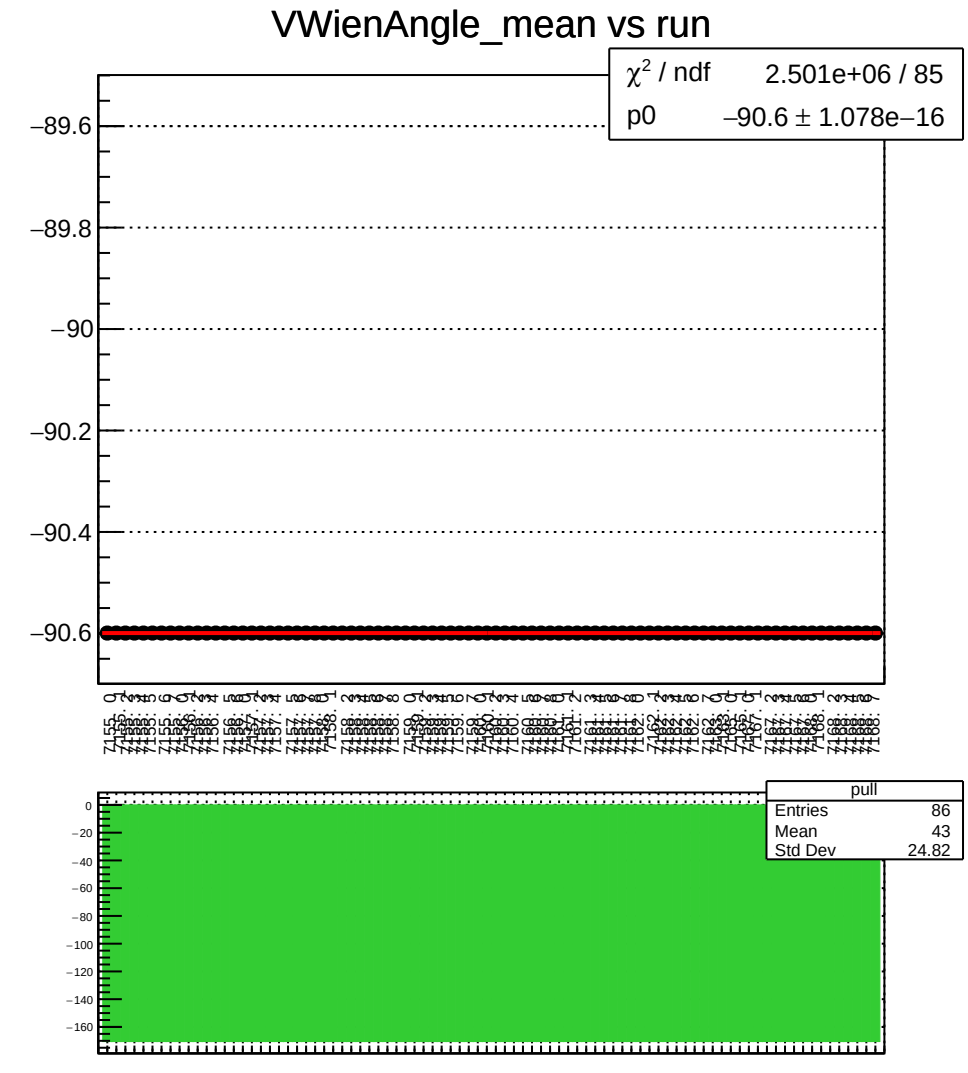

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 230 / 85
p0 3.329 ± 0.1382
pull
Entries 86
Mean 393.6
Std Dev 349.5
pull1D
Entries 86
Mean 0.06002
Std Dev 1.634

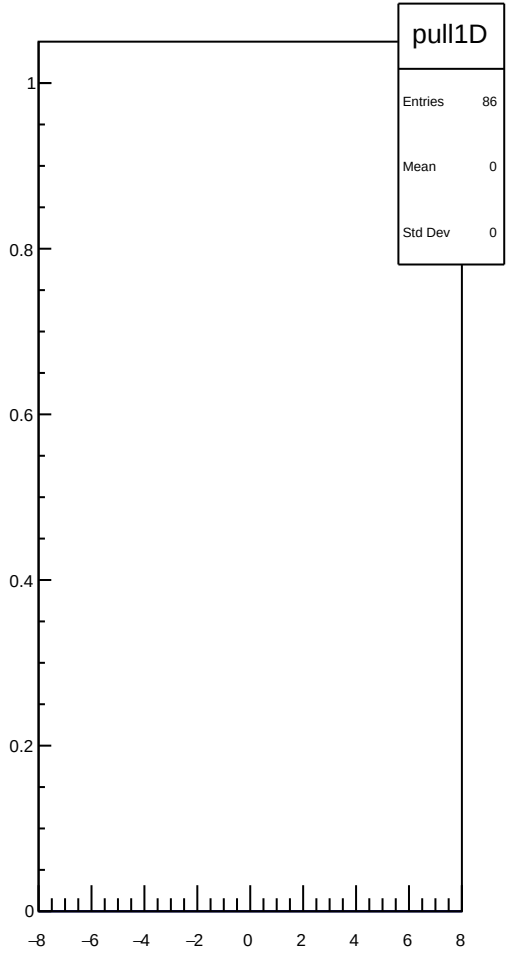

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 781.2 / 85
p0 17.83 ± 0.1647
pull
Entries 86
Mean 70.7
Std Dev 16.15
pull1D
Entries 86
Mean 0.2696
Std Dev 2.537

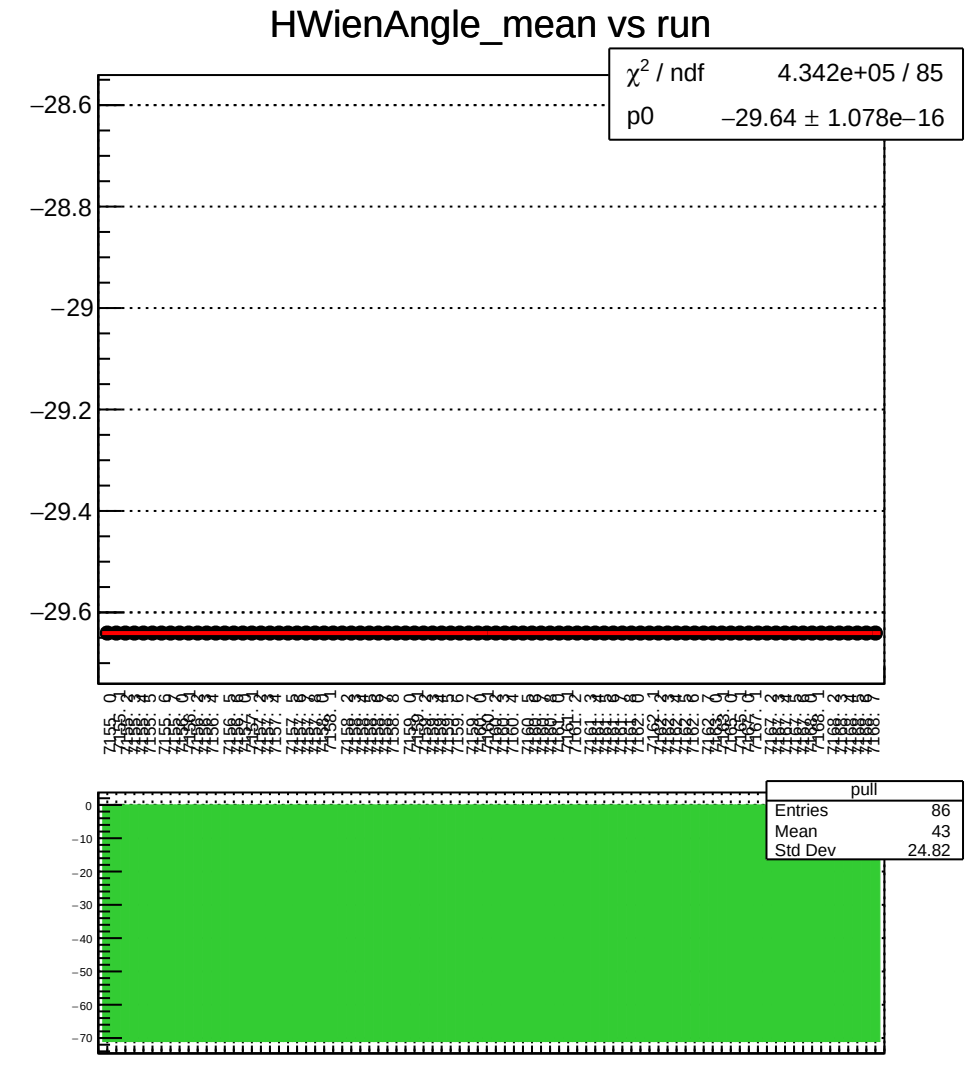

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 267.6 / 85
p0 −4.989 ± 0.1604
pull
Entries 86
Mean 263.4
Std Dev 218.9
pull1D
Entries 86
Mean −0.09526
Std Dev 1.761

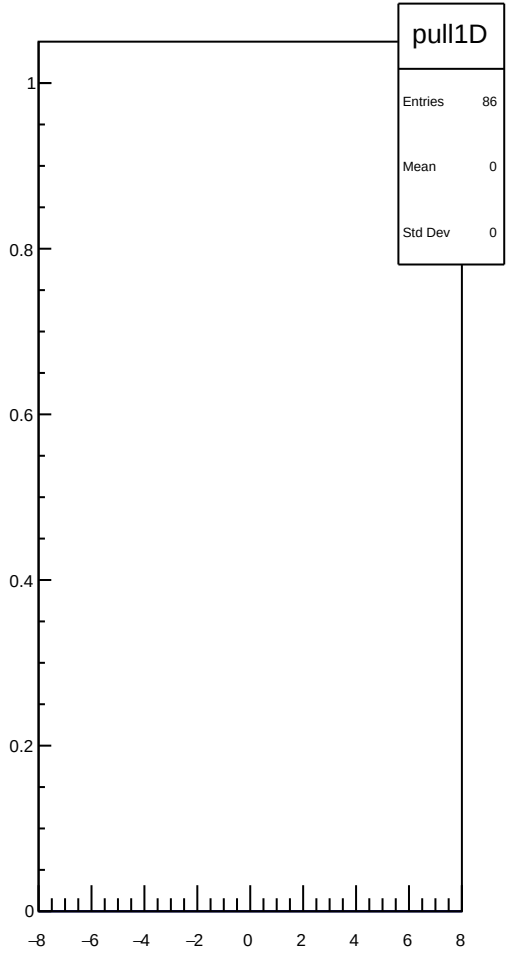

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 283 / 85
p0 −0.02923 ± 0.006224
pull
Entries 86
Mean −547.6
Std Dev 587.6

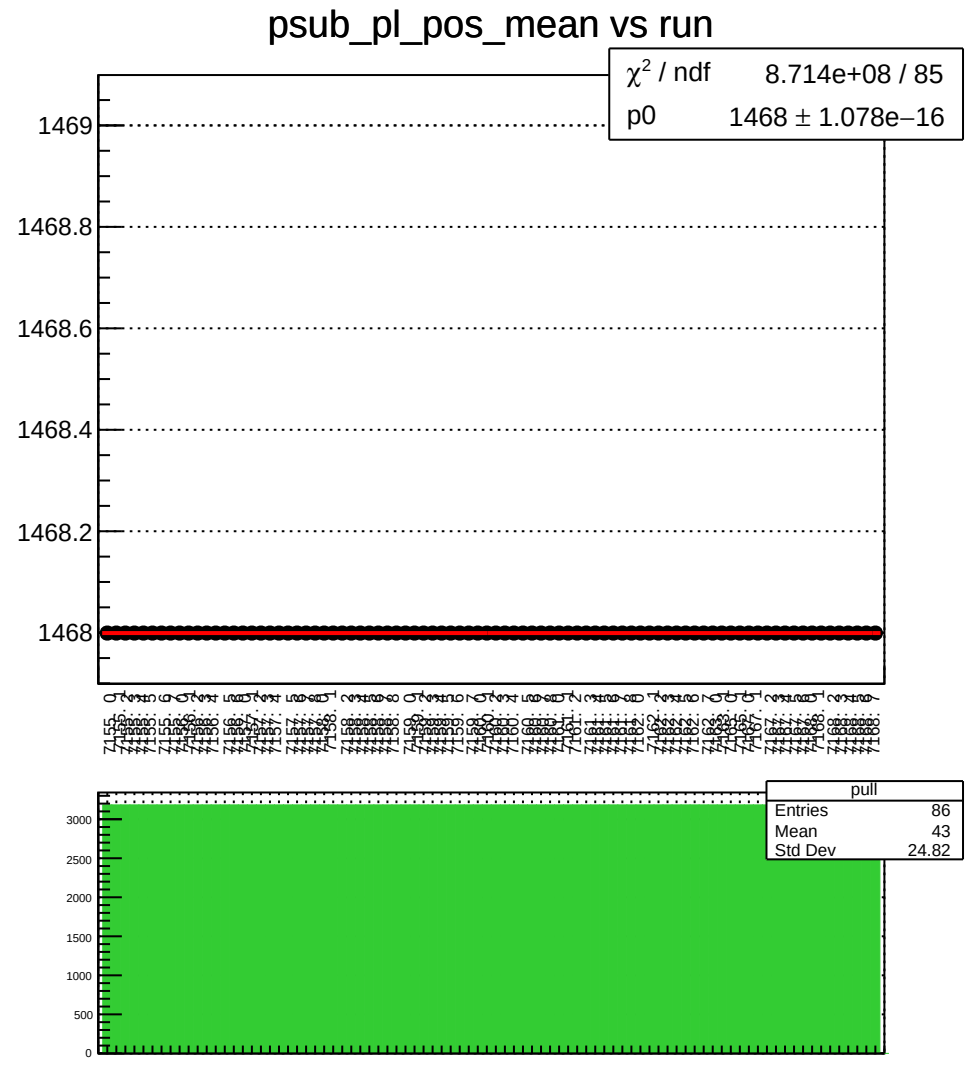

pull1D
Entries 86
Mean 0.02997
Std Dev 1.814

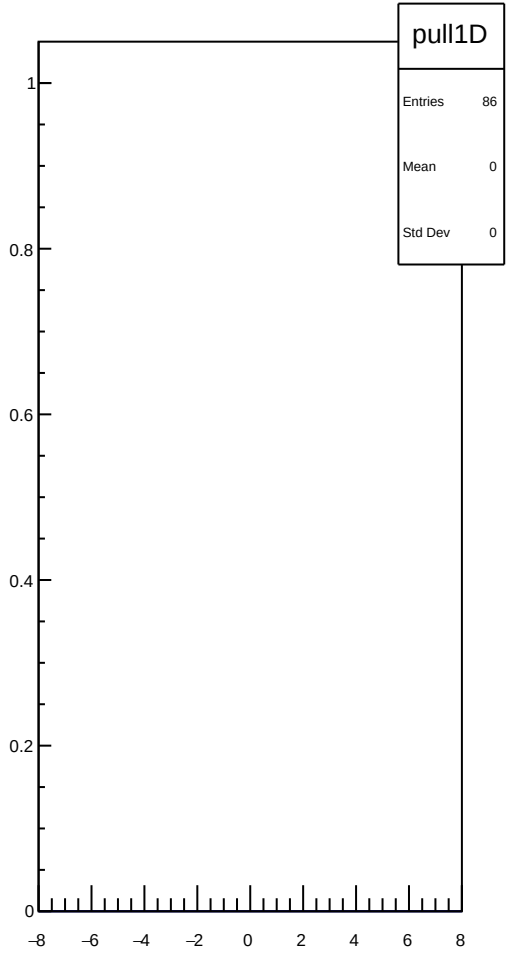

VWienAngle_mean vs run
χ² / ndf 2.501e+06 / 85
p0 −90.6 ± 1.078e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 86
Mean 43
Std Dev 24.82
0
−20
−40
−60
−80
−100
−120
−140
−160

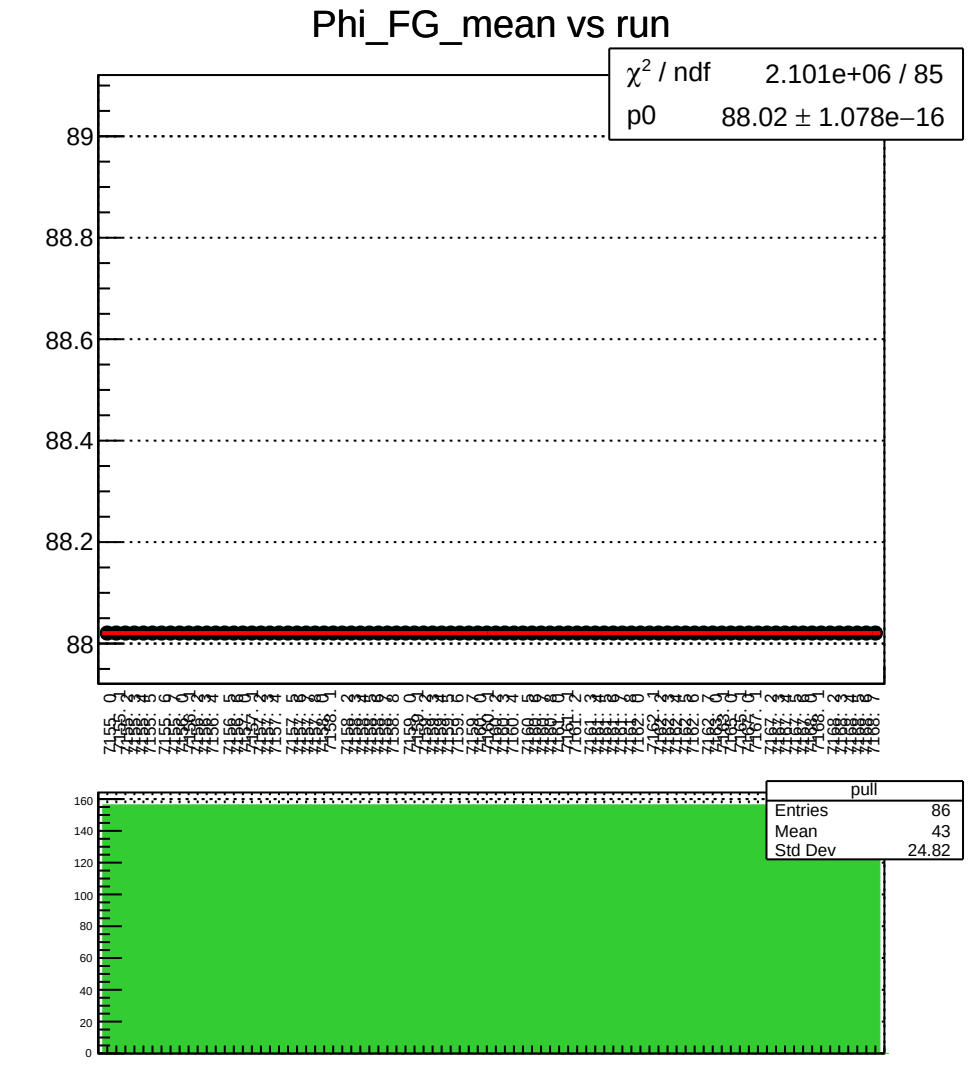

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

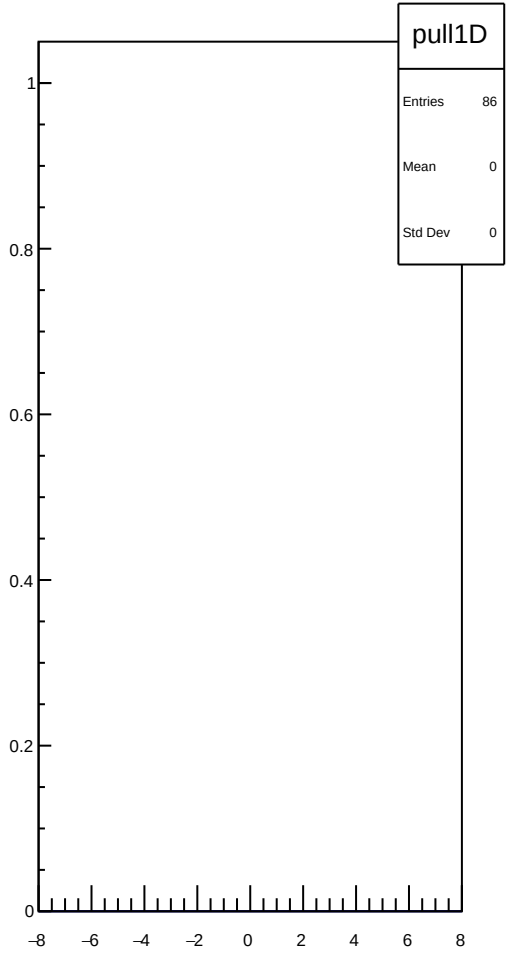

HWienAngle_mean vs run
χ² / ndf 4.342e+05 / 85
p0 −29.64 ± 1.078e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 86
Mean 43
Std Dev 24.82
0
−10
−20
−30
−40
−50
−60
−70

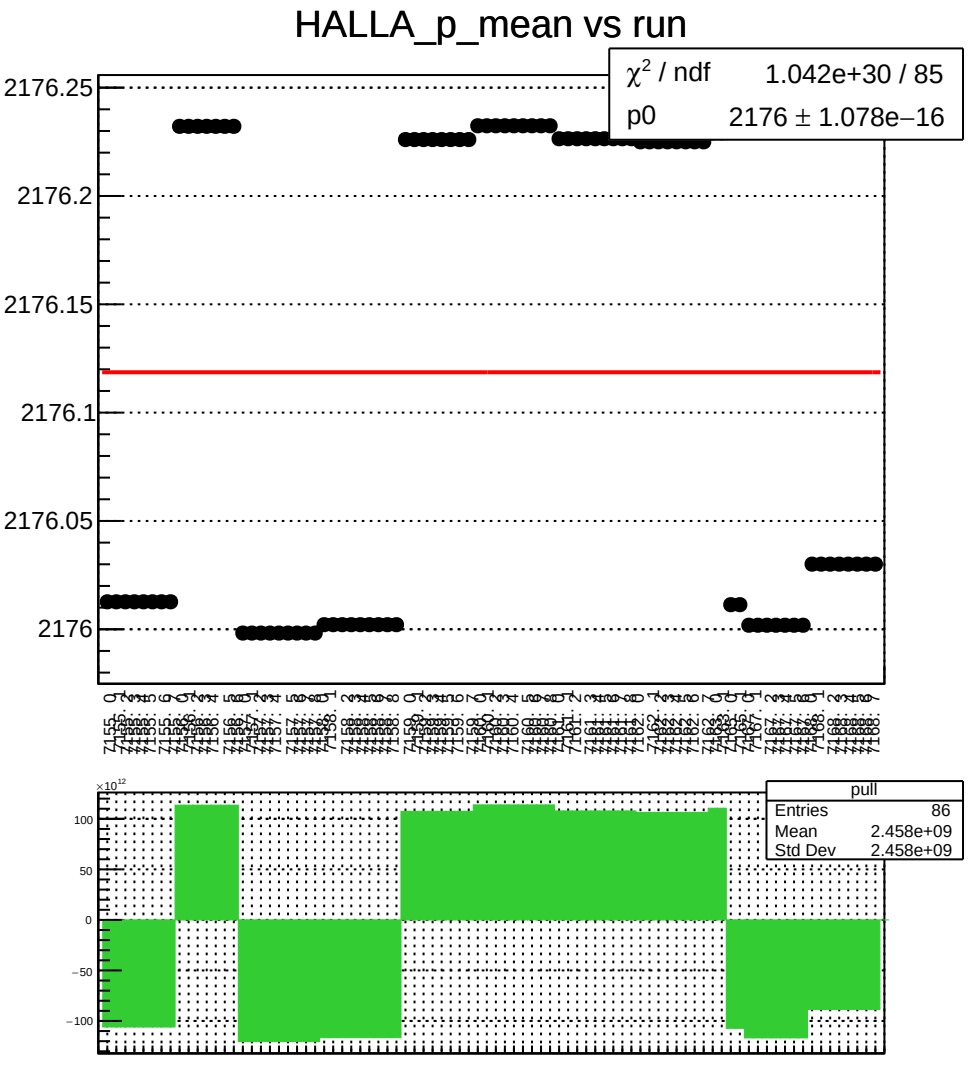

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

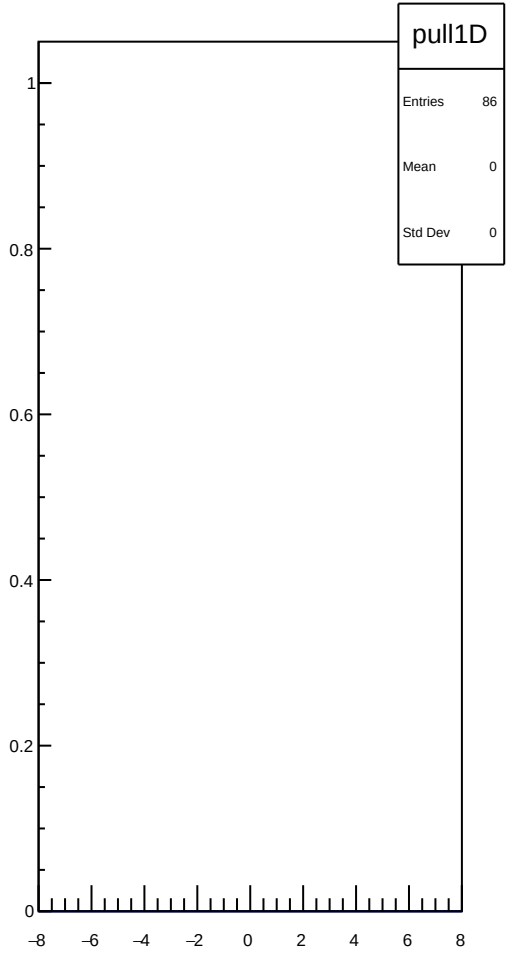

psub_pl_pos_mean vs run
χ² / ndf 8.714e+08 / 85
p0 1468 ± 1.078e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 86
Mean 43
Std Dev 24.82
3000
2500
2000
1500
1000
500
0

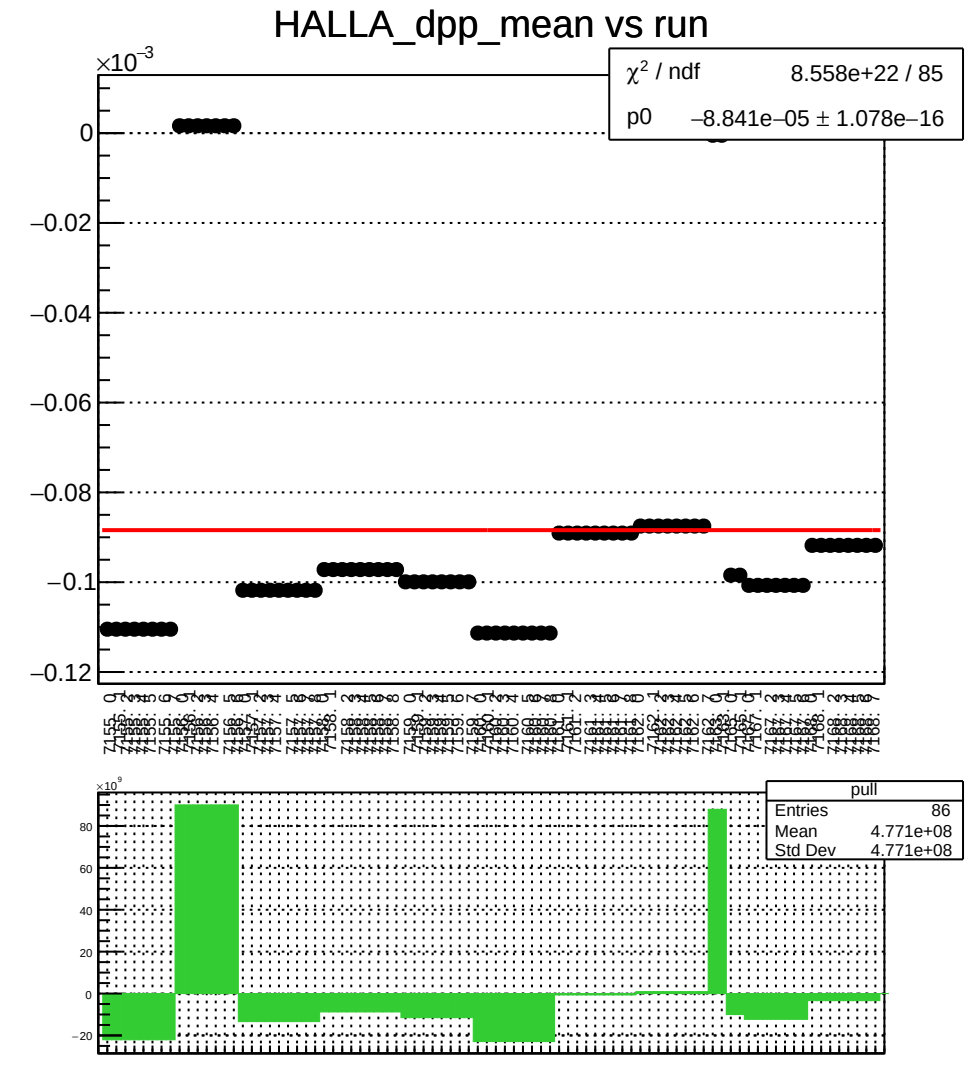

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

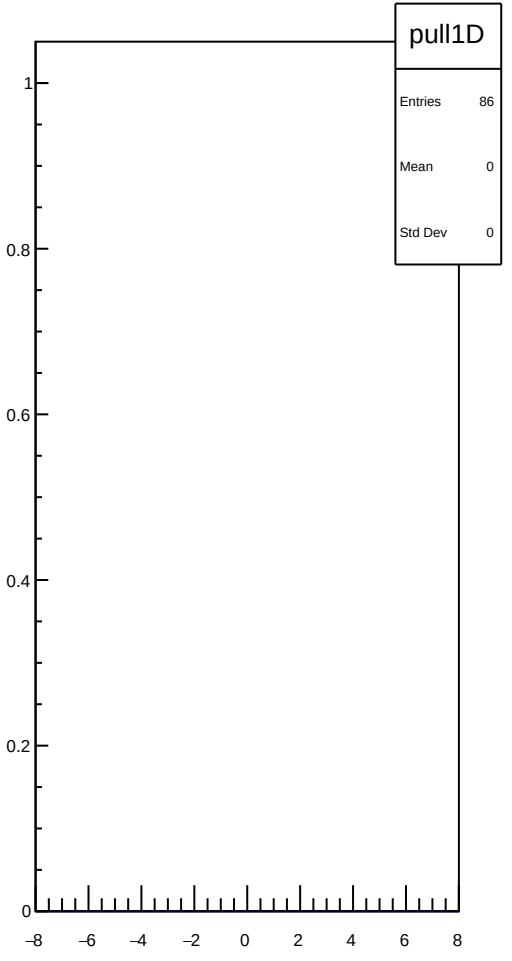

Phi_FG_mean vs run
χ² / ndf 2.101e+06 / 85
p0 88.02 ± 1.078e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 86
Mean 43
Std Dev 24.82
160
140
120
100
80
60
40
20
0

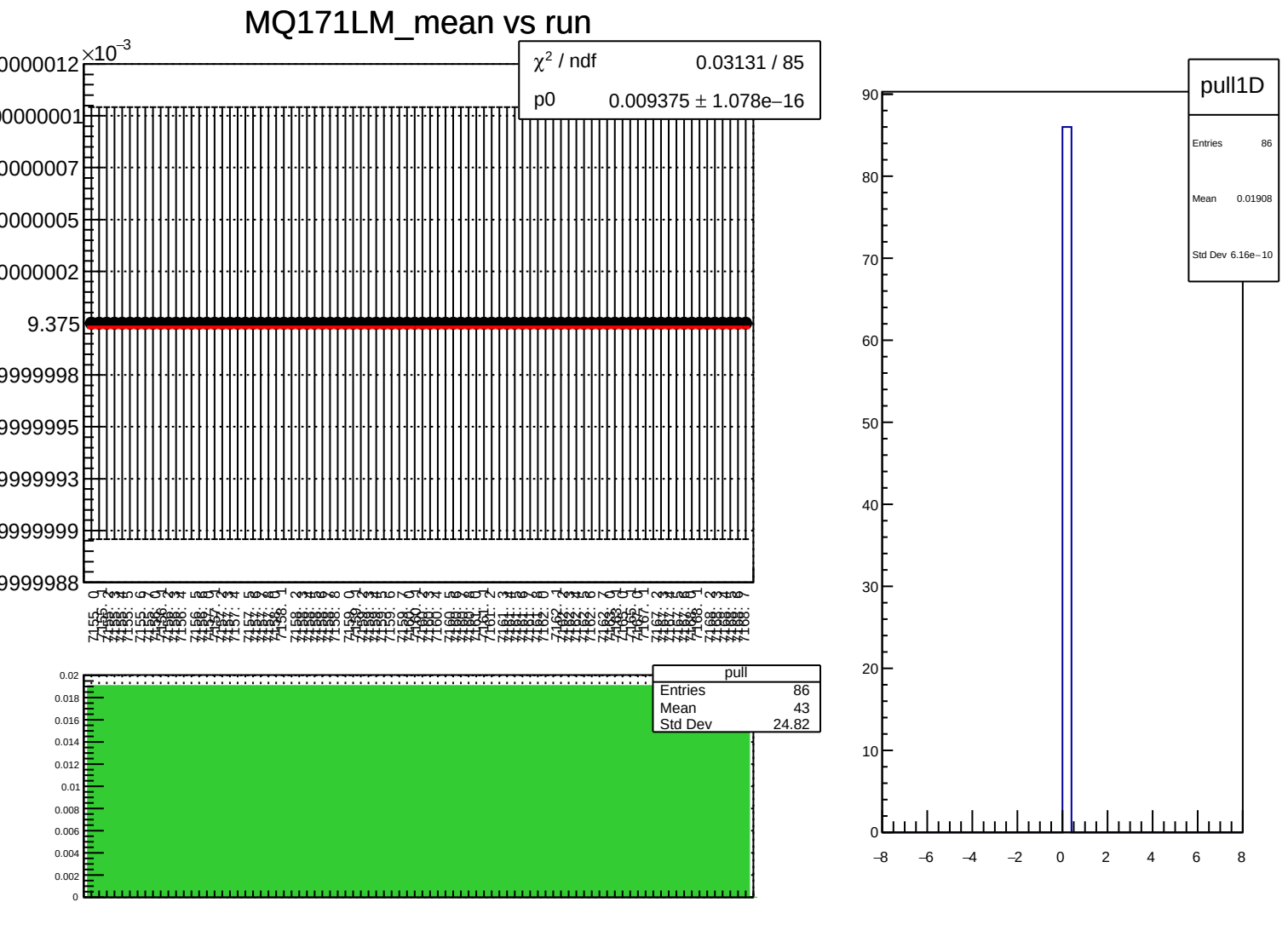

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

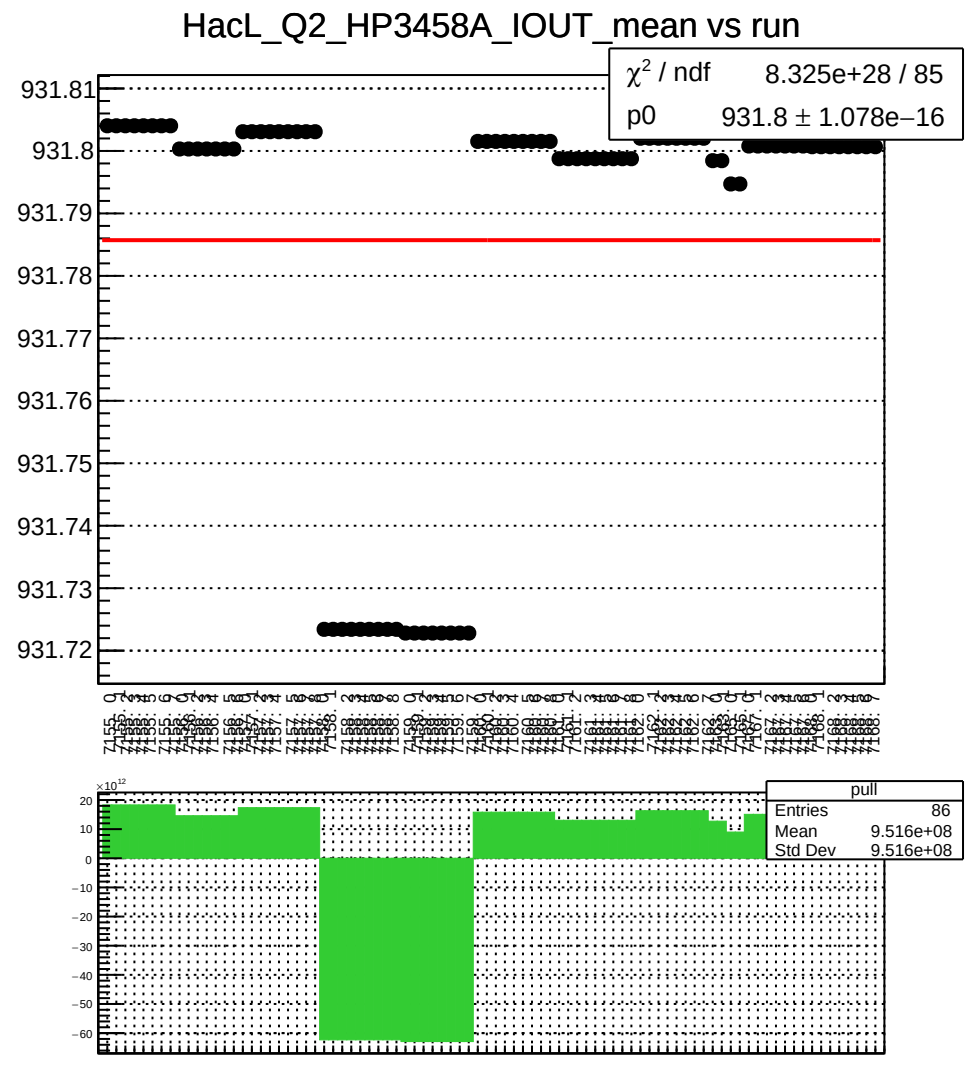

HALLA_p_mean vs run
χ² / ndf 1.042e+30 / 85
p0 2176 ± 1.078e−16
2176.25
2176.2
2176.15
2176.1
2176.05
2176
pull
Entries 86
Mean 2.458e+09
Std Dev 2.458e+09
×10¹²
100
50
0
−50
−100

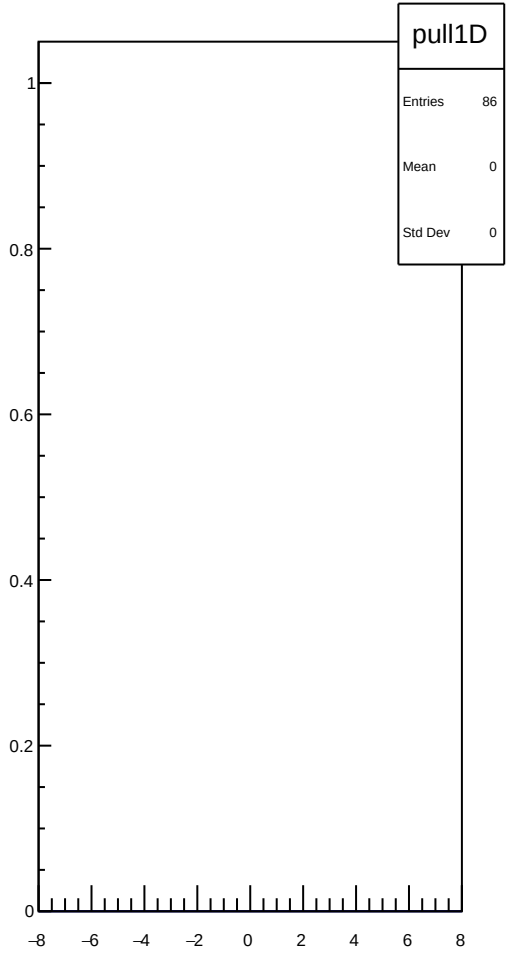

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

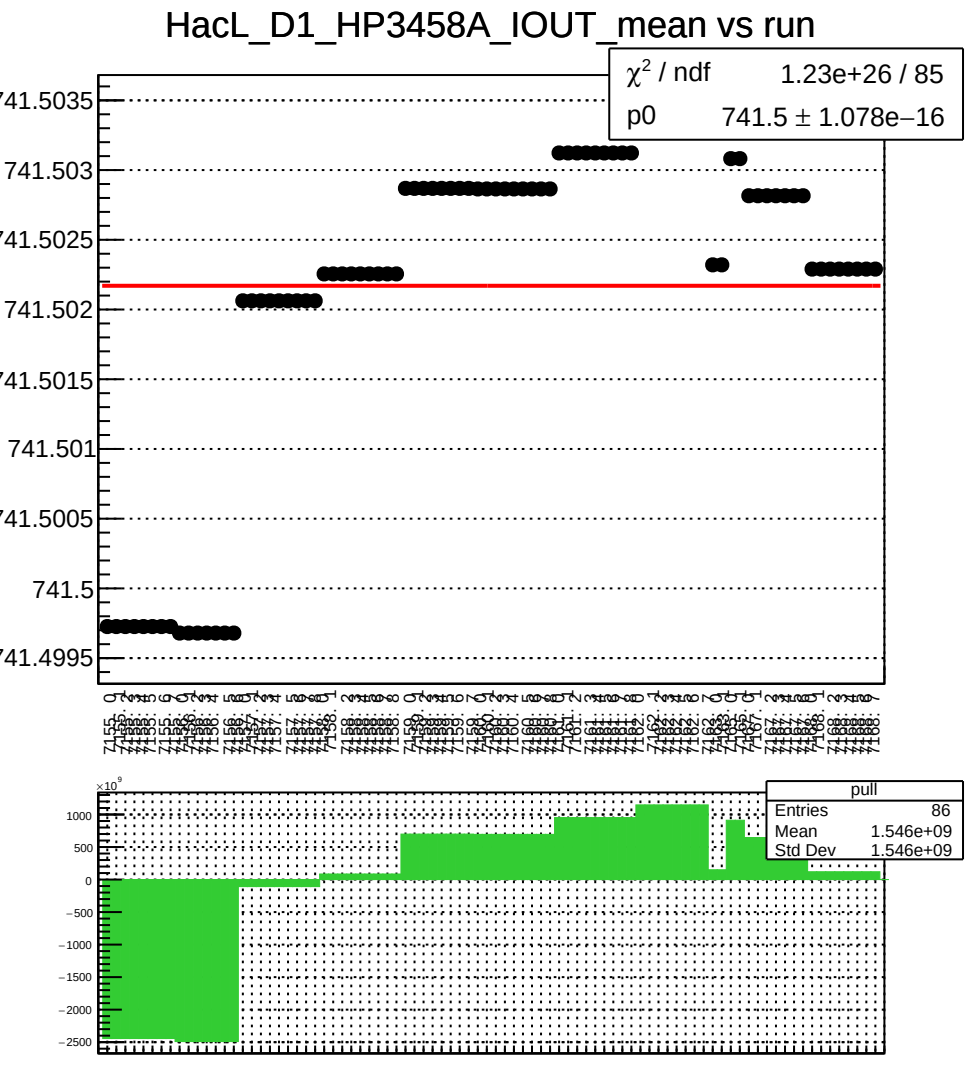

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 8.558e+22 / 85
p0 −8.841e−05 ± 1.078e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
×10⁹
pull
Entries 86
Mean 4.771e+08
Std Dev 4.771e+08
80
60
40
20
0
−20

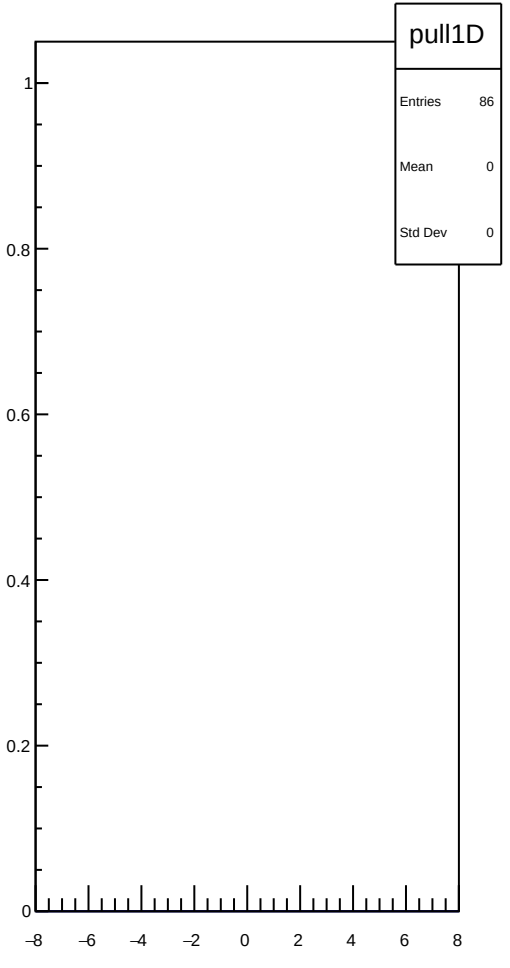

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

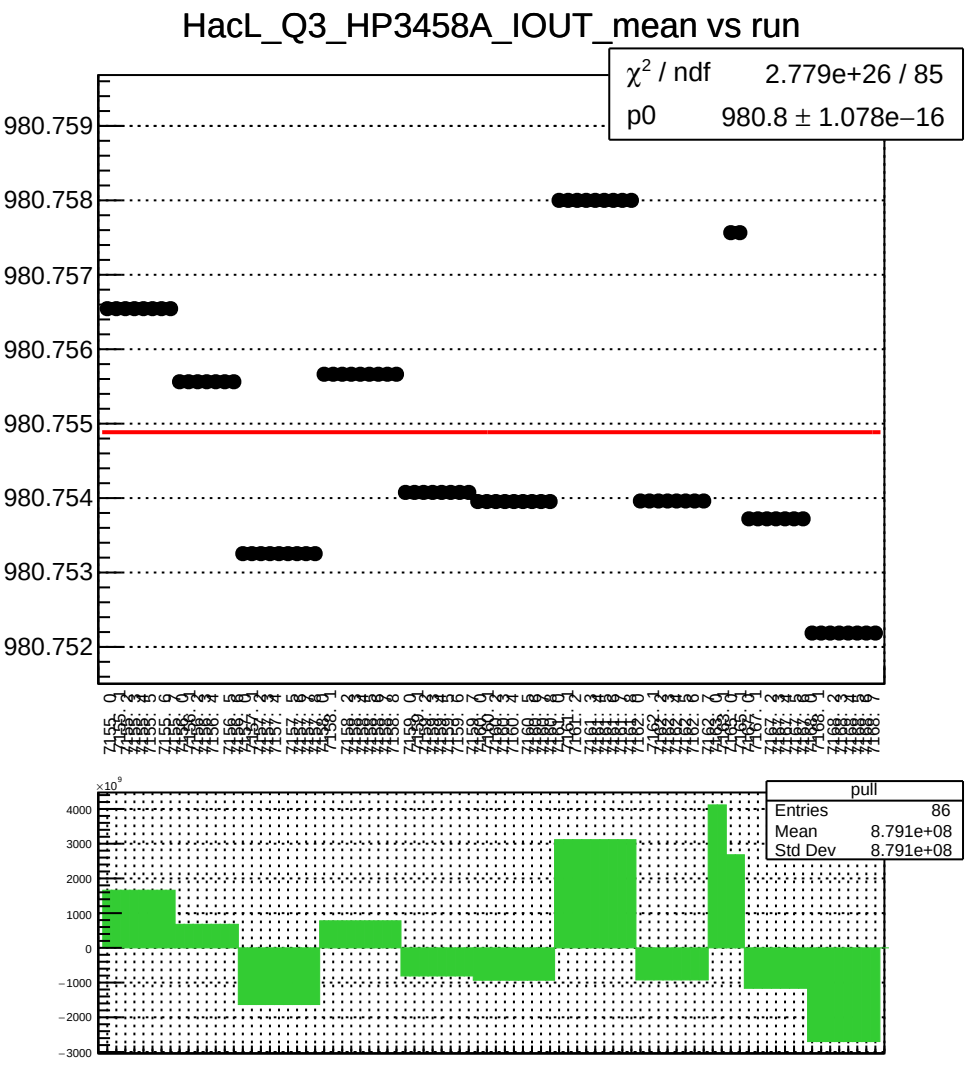

MQ171LM_mean vs run
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
×10⁻³
pull
Entries 86
Mean 43
Std Dev 24.82
pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

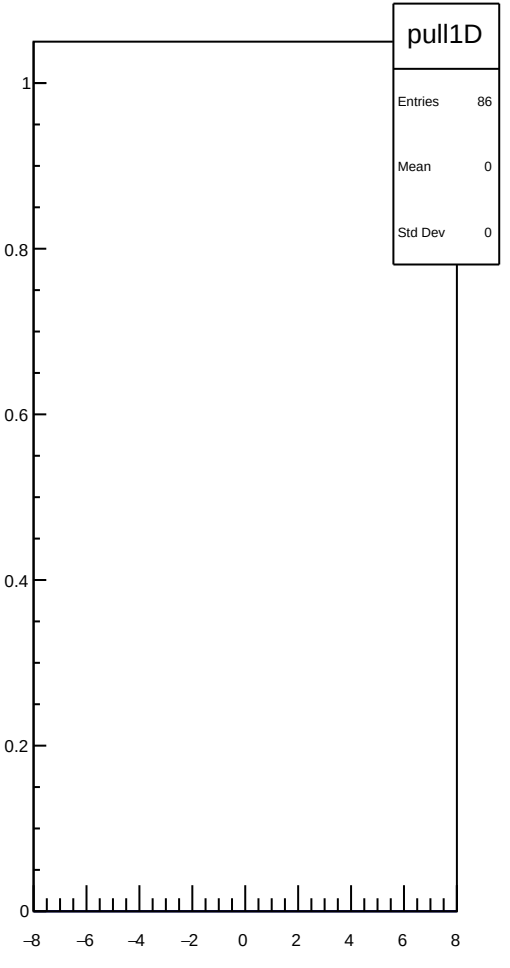

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 8.325e+28 / 85
p0 931.8 ± 1.078e−16
931.81
931.8
931.79
931.78
931.77
931.76
931.75
931.74
931.73
931.72
pull
Entries 86
Mean 9.516e+08
Std Dev 9.516e+08
×10¹²
20
10
0
−10
−20
−30
−40
−50
−60

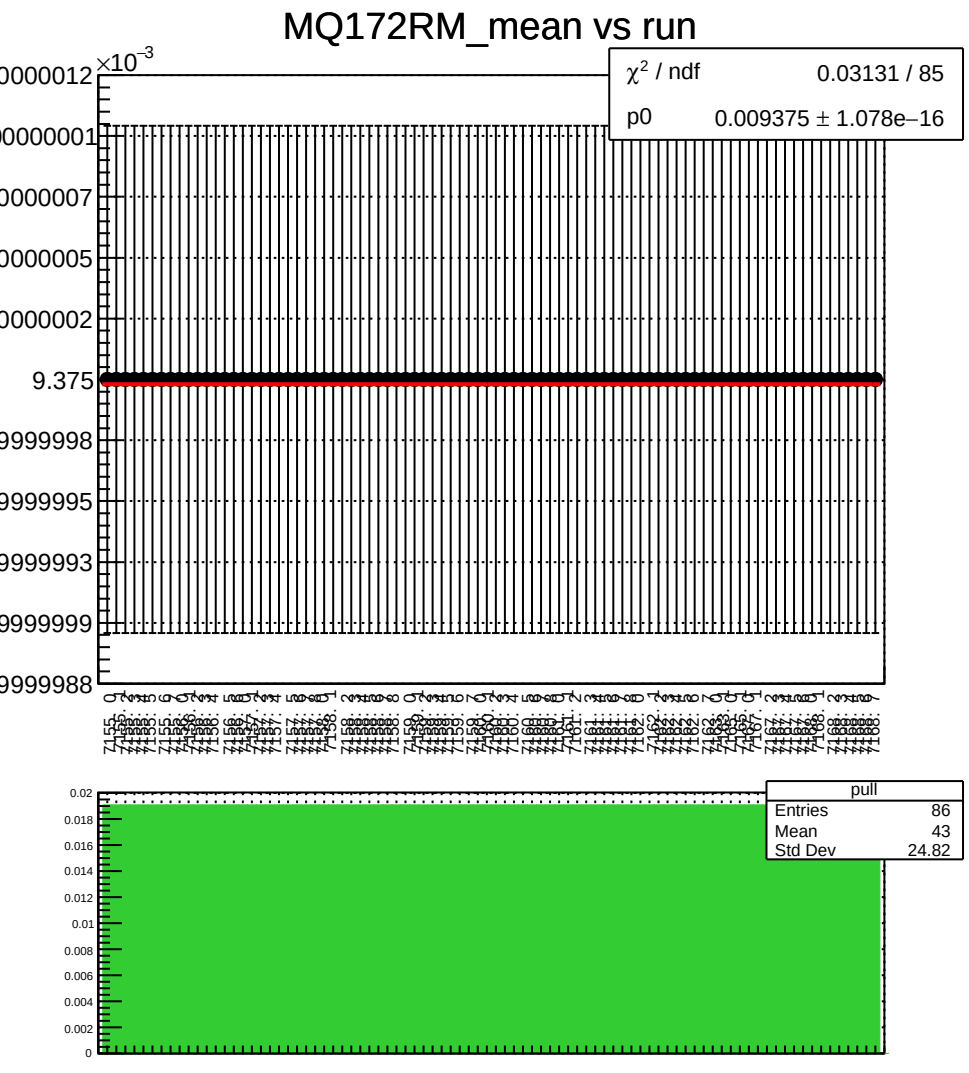

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

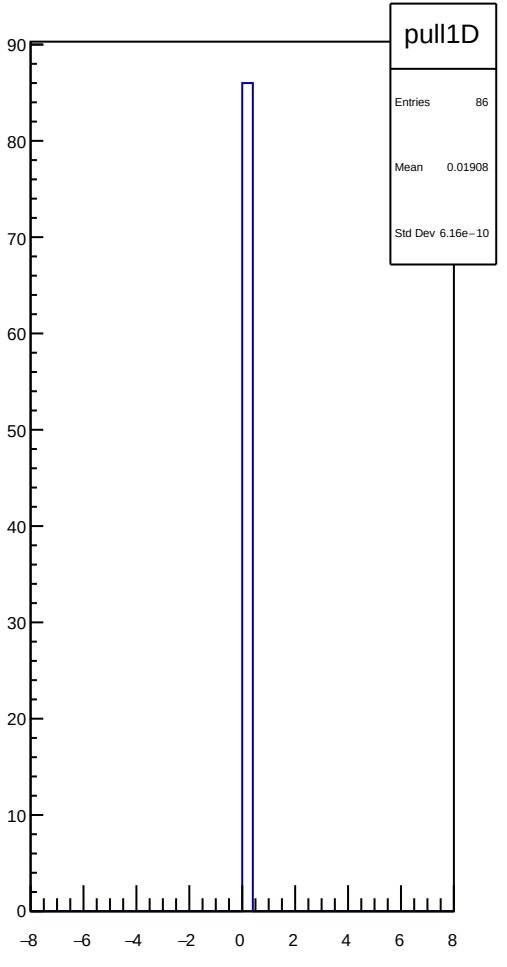

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.23e+26 / 85
p0 741.5 ± 1.078e−16
741.5035
741.503
741.5025
741.502
741.5015
741.501
741.5005
741.5
741.4995
pull
Entries 86
Mean 1.546e+09
Std Dev 1.546e+09
×10⁹
1000
500
0
−500
−1000
−1500
−2000
−2500

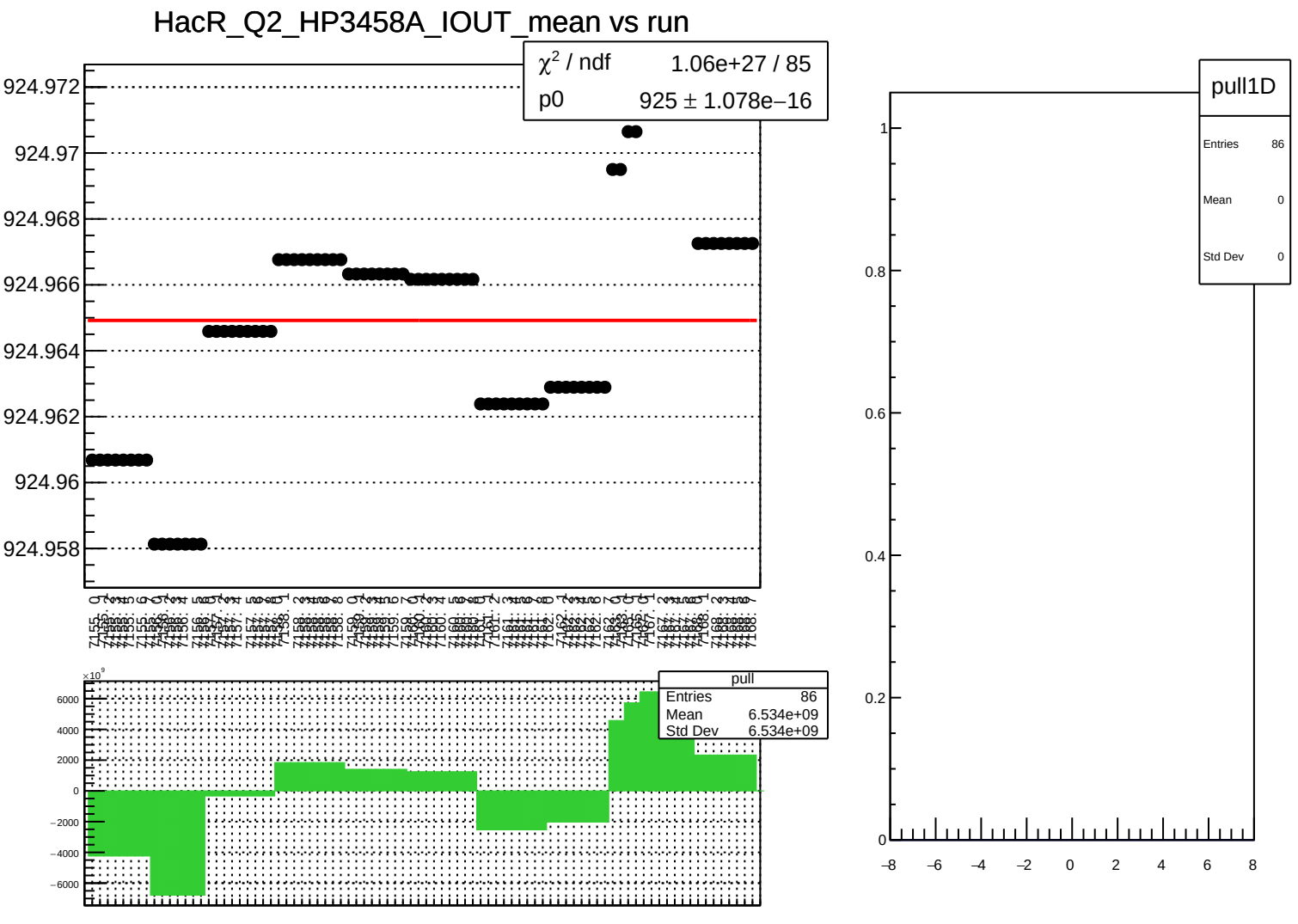

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

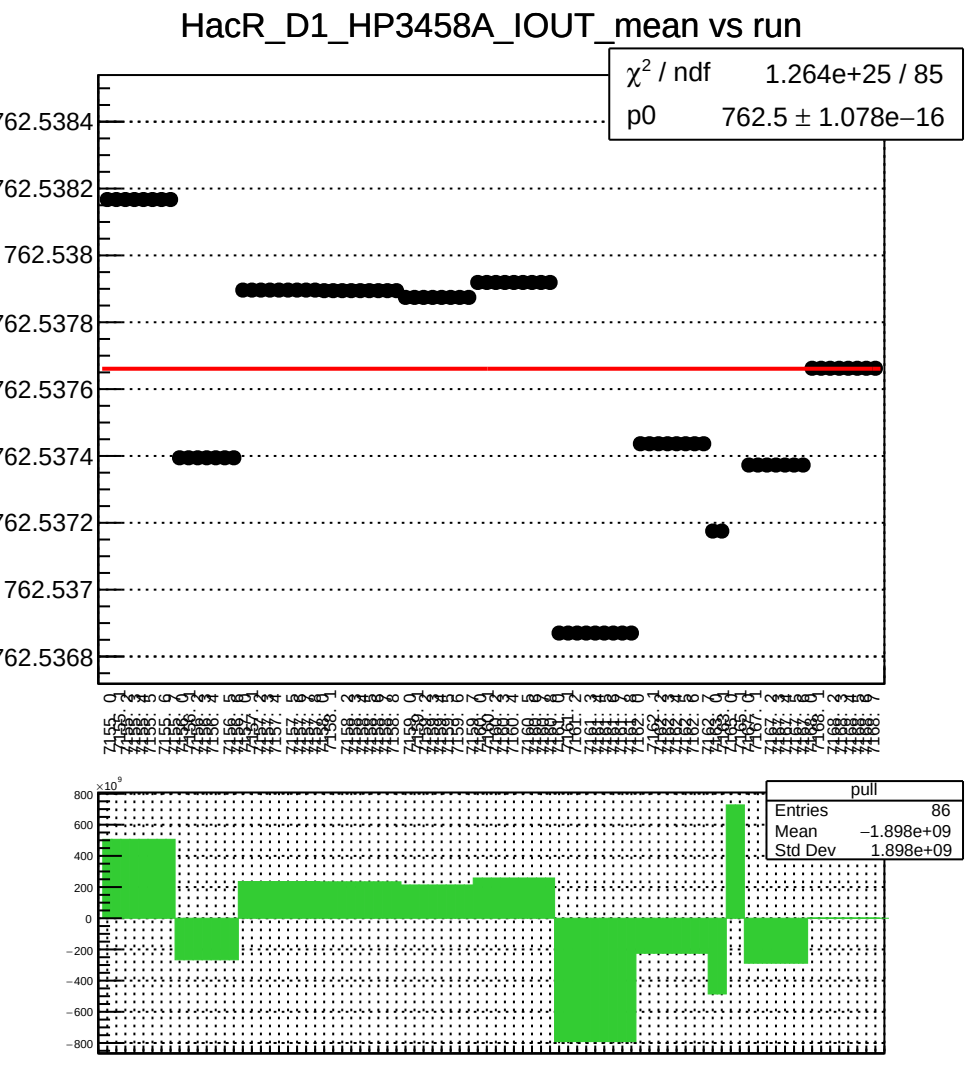

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.779e+26 / 85
p0 980.8 ± 1.078e−16
980.759
980.758
980.757
980.756
980.755
980.754
980.753
980.752
×10⁹
4000
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 8.791e+08
Std Dev 8.791e+08

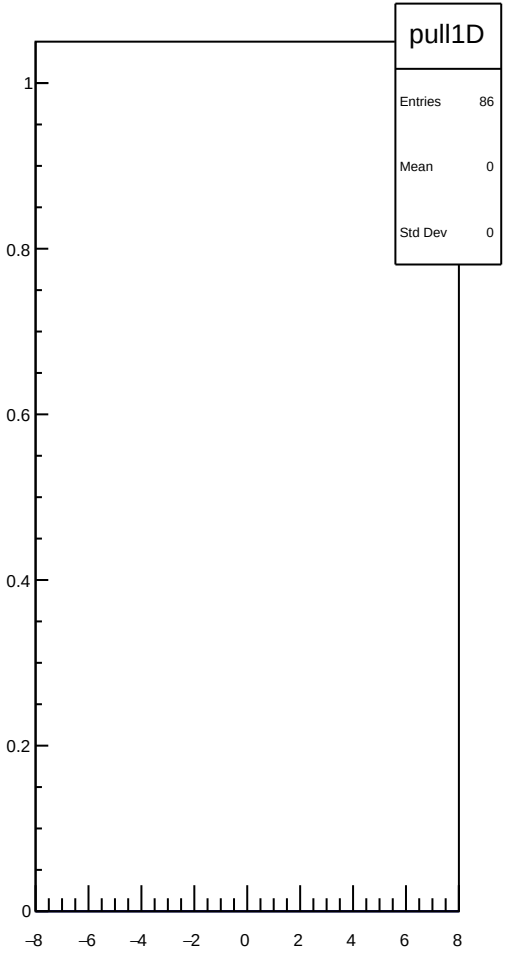

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

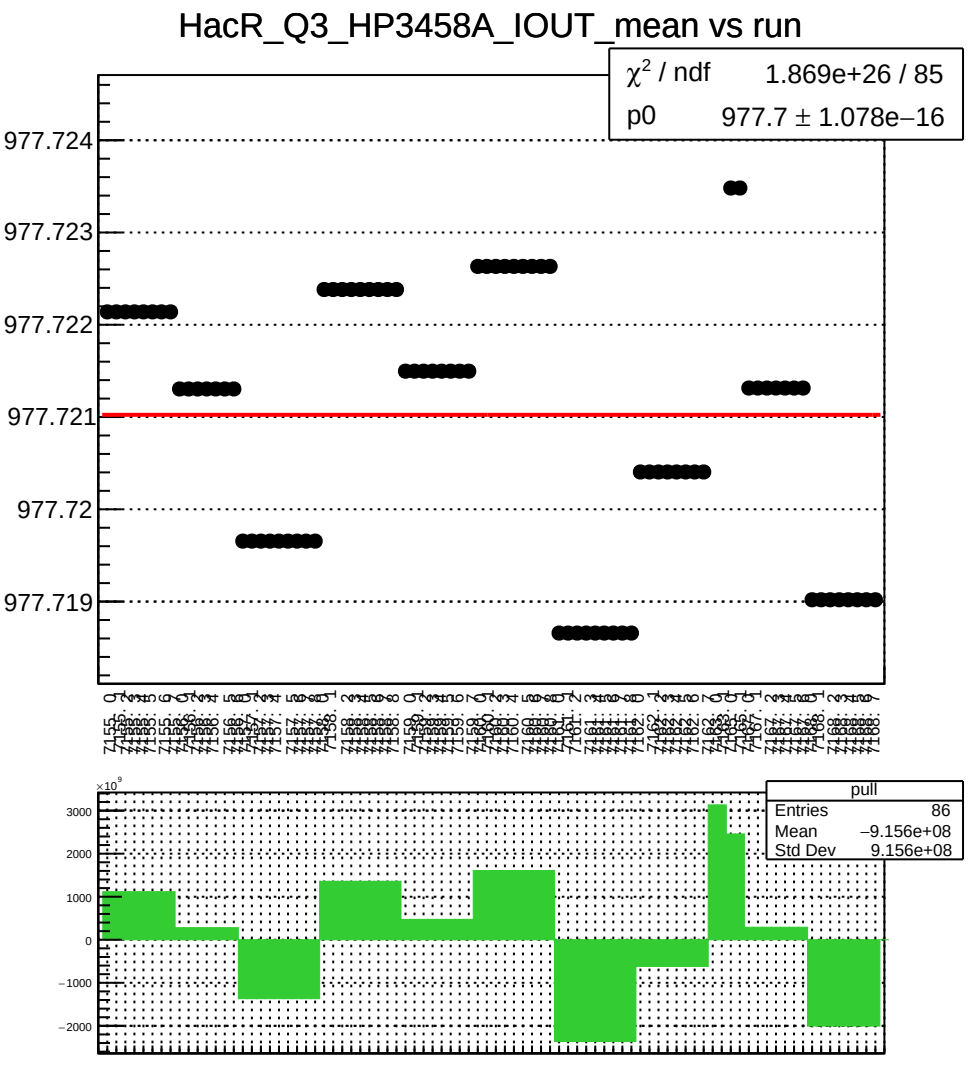

MQ172RM_mean vs run
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
×10⁻³
9.375
pull
Entries 86
Mean 43
Std Dev 24.82

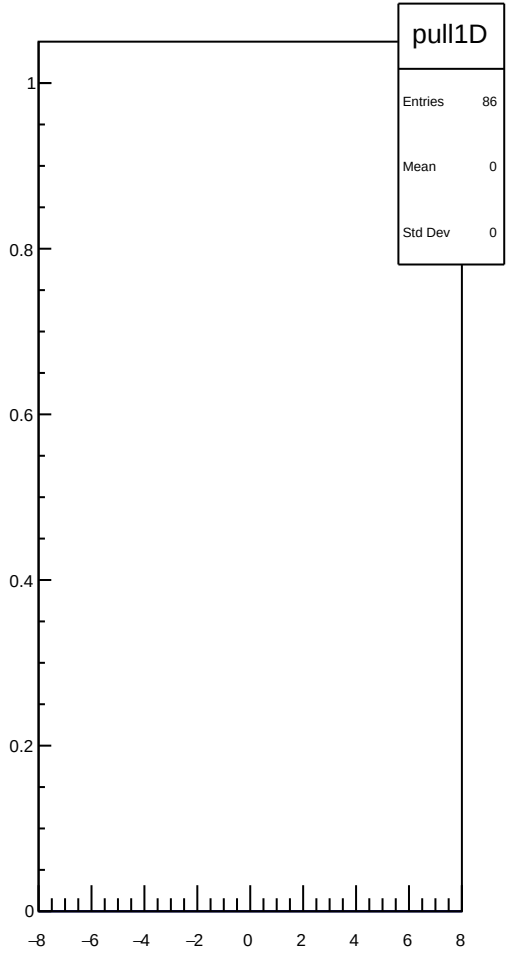

pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

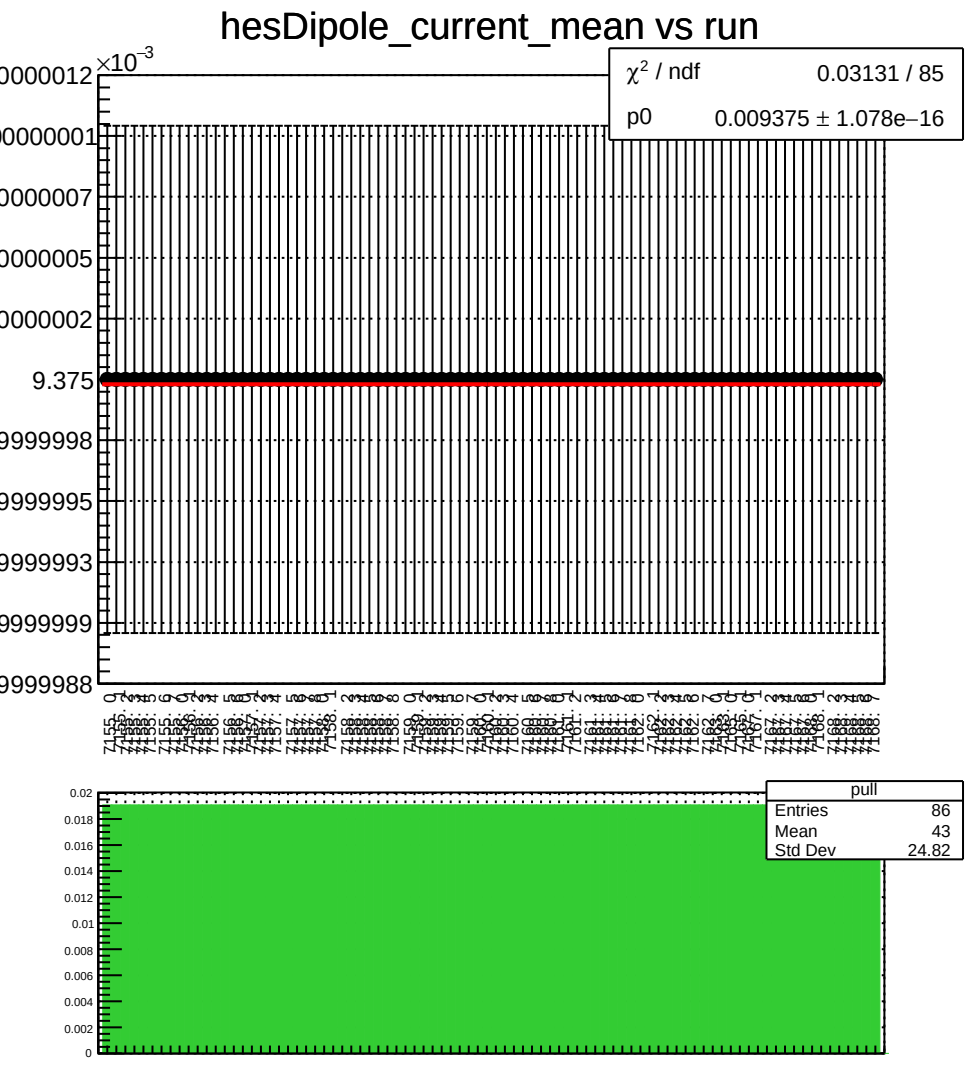

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.06e+27 / 85
p0 925 ± 1.078e−16
924.972
924.97
924.968
924.966
924.964
924.962
924.96
924.958
pull
Entries 86
Mean 6.534e+09
Std Dev 6.534e+09
×10⁹
6000
4000
2000
0
−2000
−4000
−6000
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

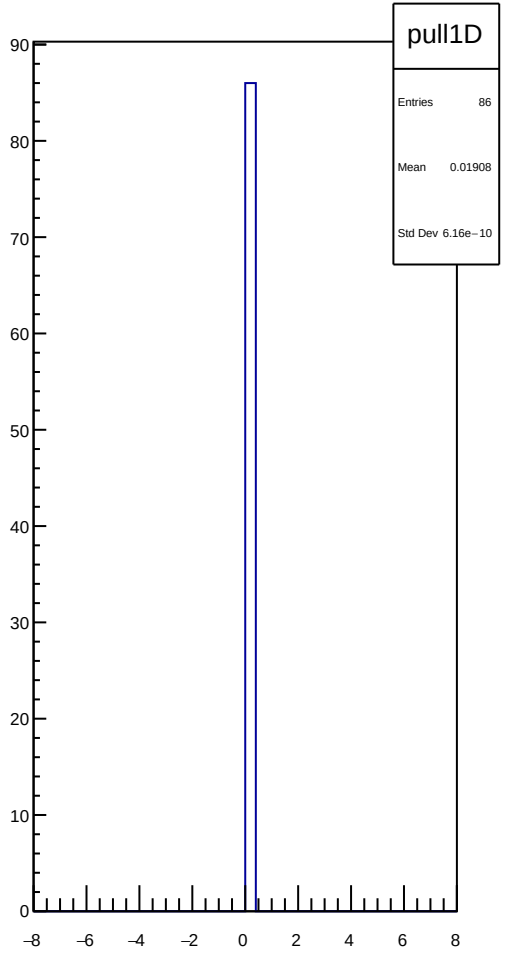

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.264e+25 / 85
p0 762.5 ± 1.078e−16
762.5384
762.5382
762.538
762.5378
762.5376
762.5374
762.5372
762.537
762.5368
×10⁹
800
600
400
200
0
−200
−400
−600
−800
pull
Entries 86
Mean −1.898e+09
Std Dev 1.898e+09

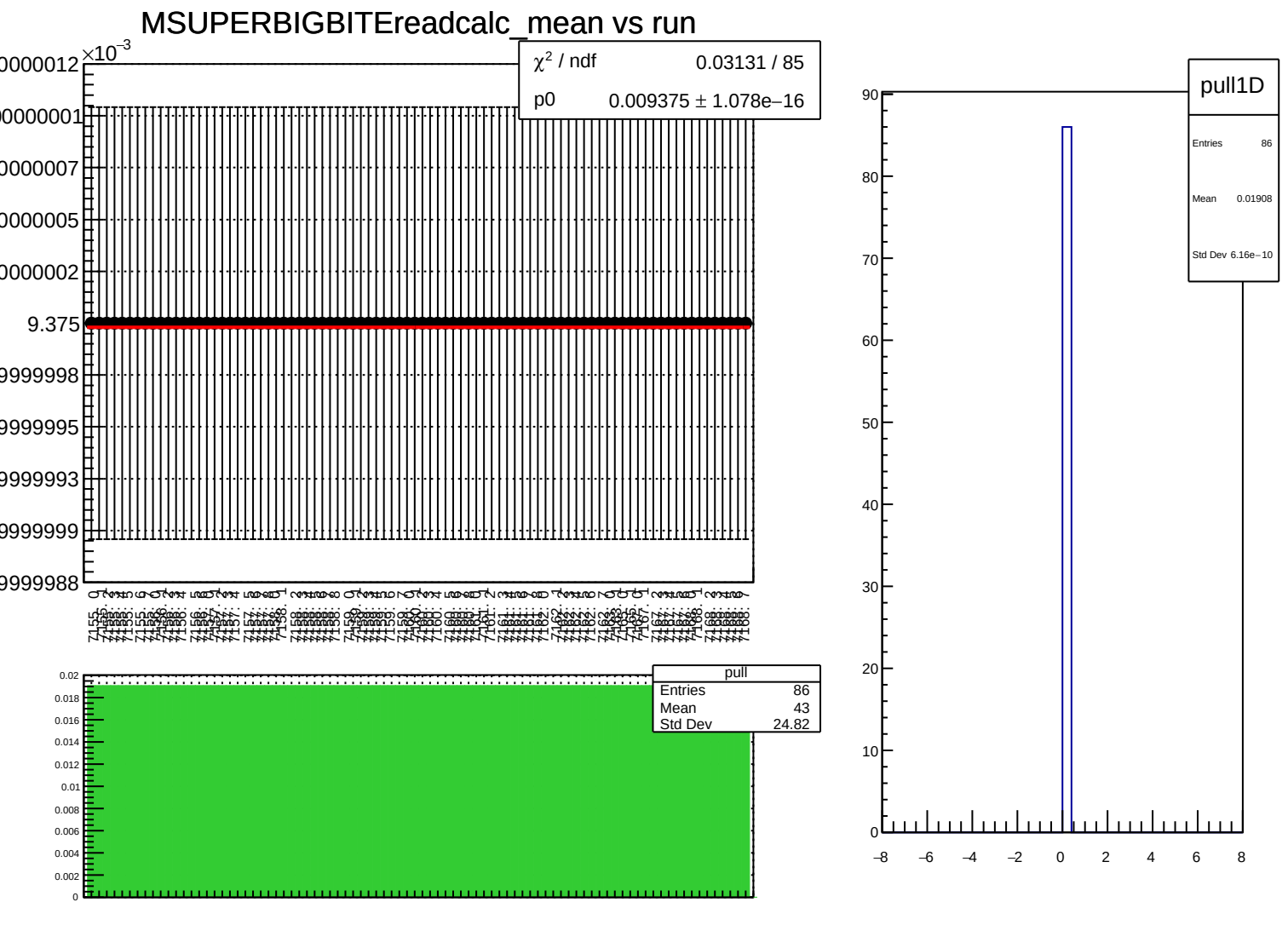

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

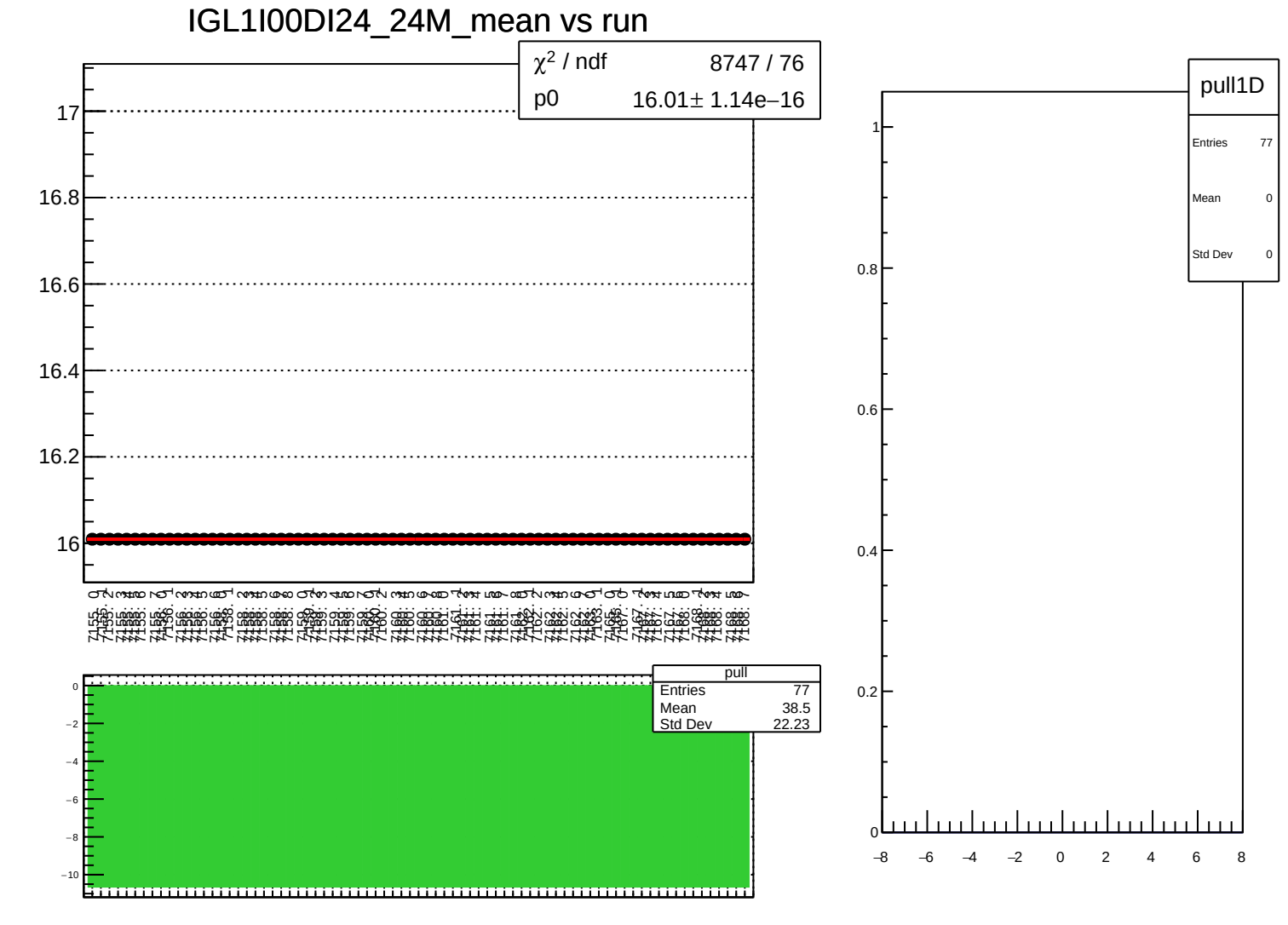

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.869e+26 / 85
p0 977.7 ± 1.078e−16
977.724
977.723
977.722
977.721
977.72
977.719
×10⁹
3000
2000
1000
0
−1000
−2000
pull
Entries 86
Mean −9.156e+08
Std Dev 9.156e+08

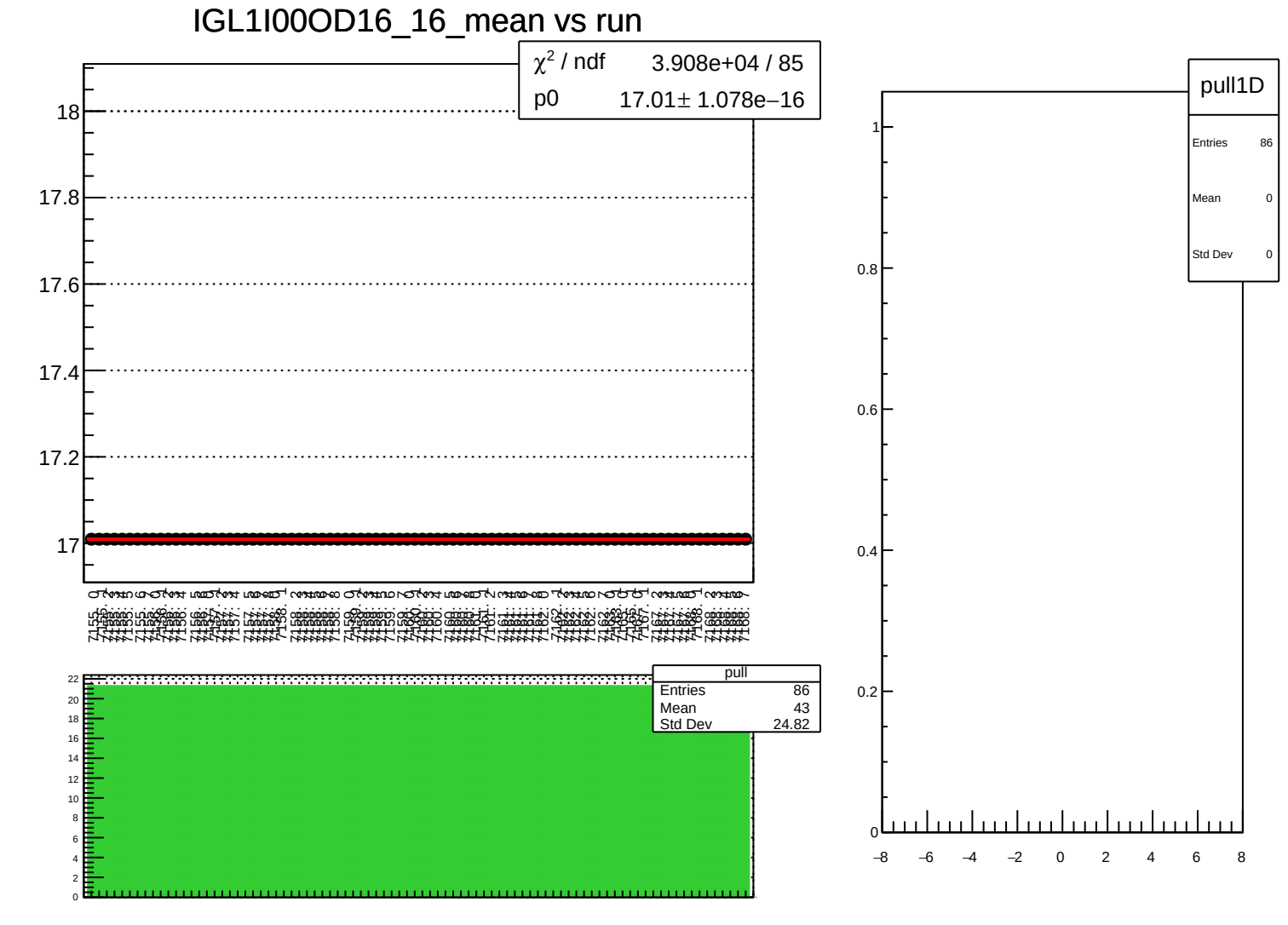

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

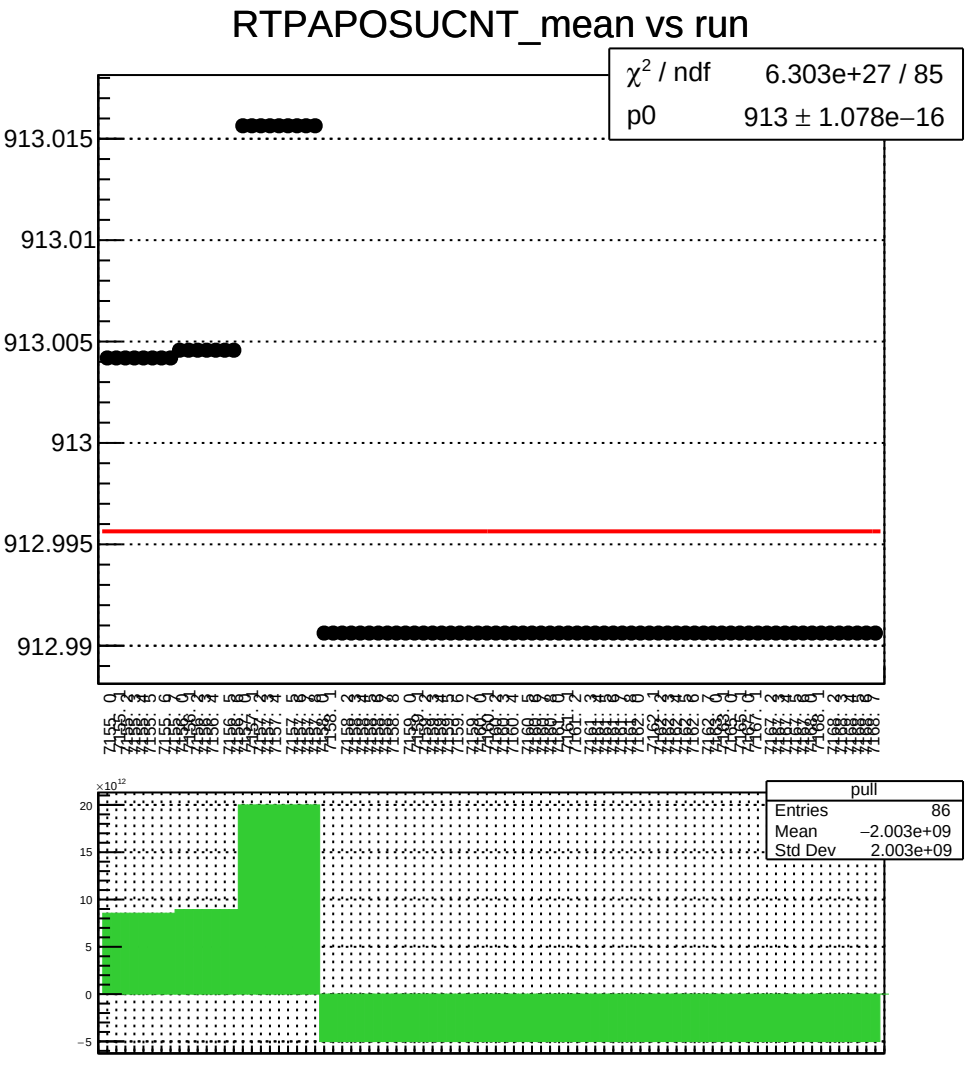

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
9.375
pull
Entries 86
Mean 43
Std Dev 24.82

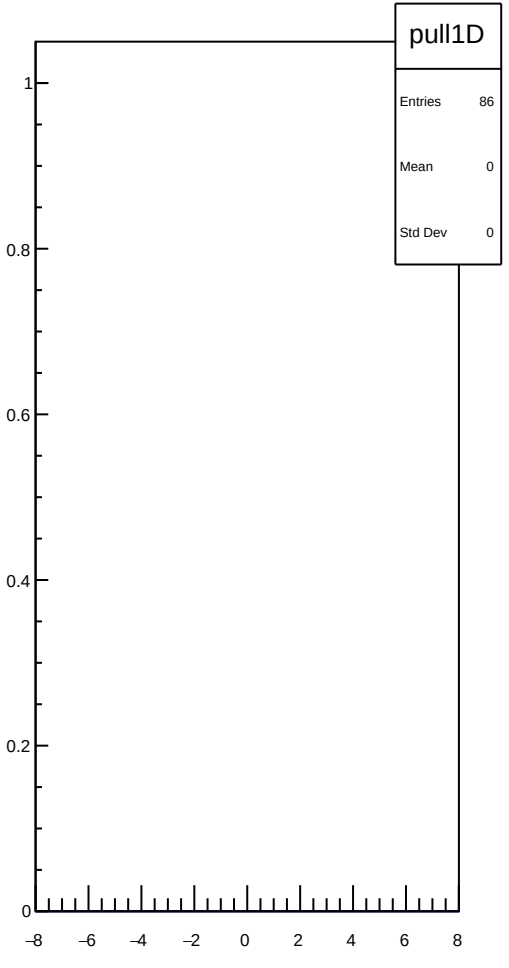

pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10

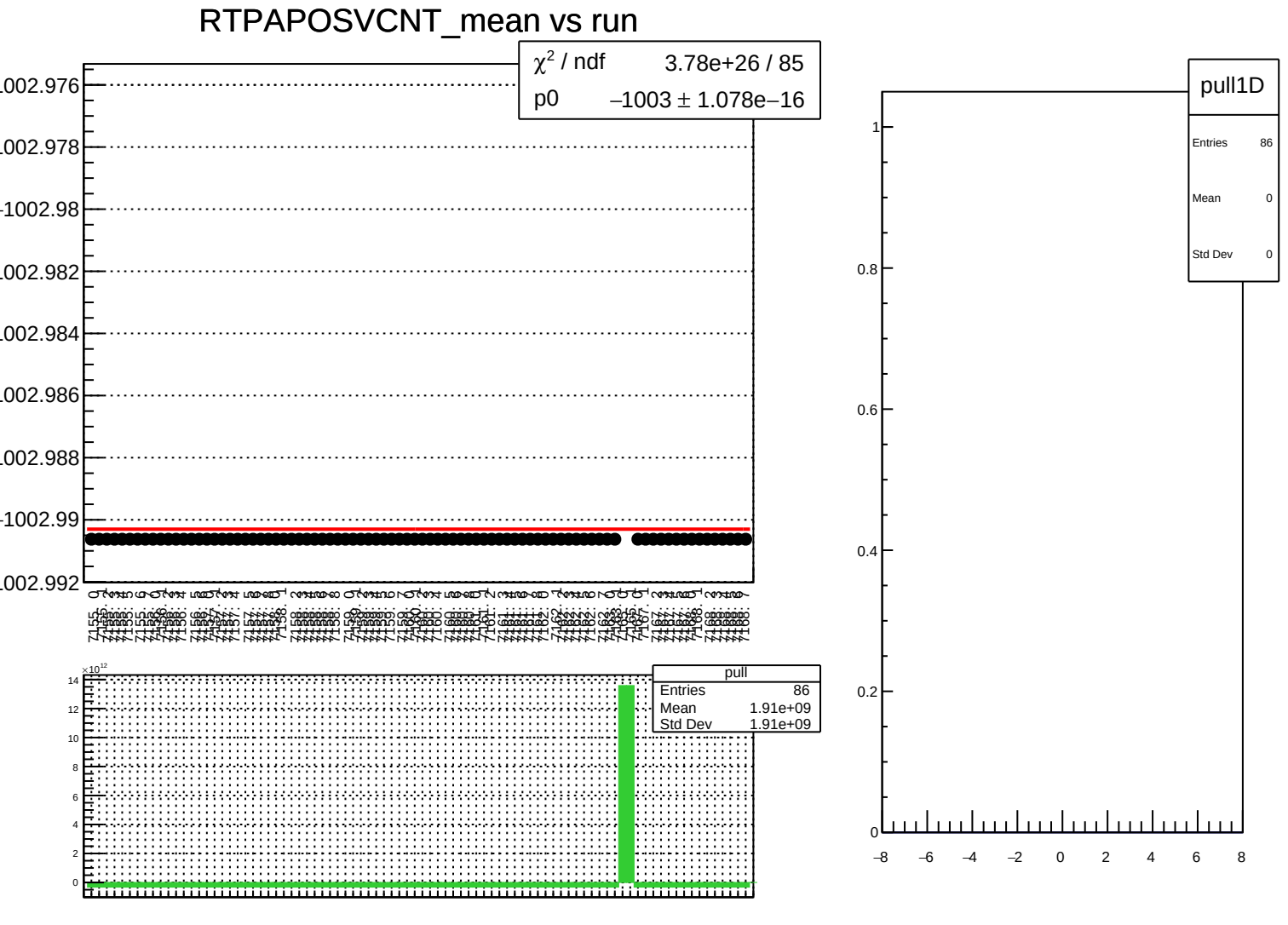

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.03131 / 85
p0 0.009375 ± 1.078e−16
×10⁻³
pull
Entries 86
Mean 43
Std Dev 24.82
pull1D
Entries 86
Mean 0.01908
Std Dev 6.16e−10


IGL1I00DI24_24M_mean vs run
χ² / ndf 8747 / 76
p0 16.01± 1.14e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−2
−4
−6
−8
−10
pull1D
Entries 77
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 3.908e+04 / 85
p0 17.01± 1.078e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 86
Mean 43
Std Dev 24.82
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 6.303e+27 / 85
p0 913 ± 1.078e−16
913.015
913.01
913.005
913
912.995
912.99
pull
Entries 86
Mean −2.003e+09
Std Dev 2.003e+09
×10¹²
20
15
10
5
0
−5


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


RTPAPOSVCNT_mean vs run
χ² / ndf 3.78e+26 / 85
p0 −1003 ± 1.078e−16
−1002.976
−1002.978
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
−1002.992
pull
Entries 86
Mean 1.91e+09
Std Dev 1.91e+09
×10¹²
14
12
10
8
6
4
2
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8