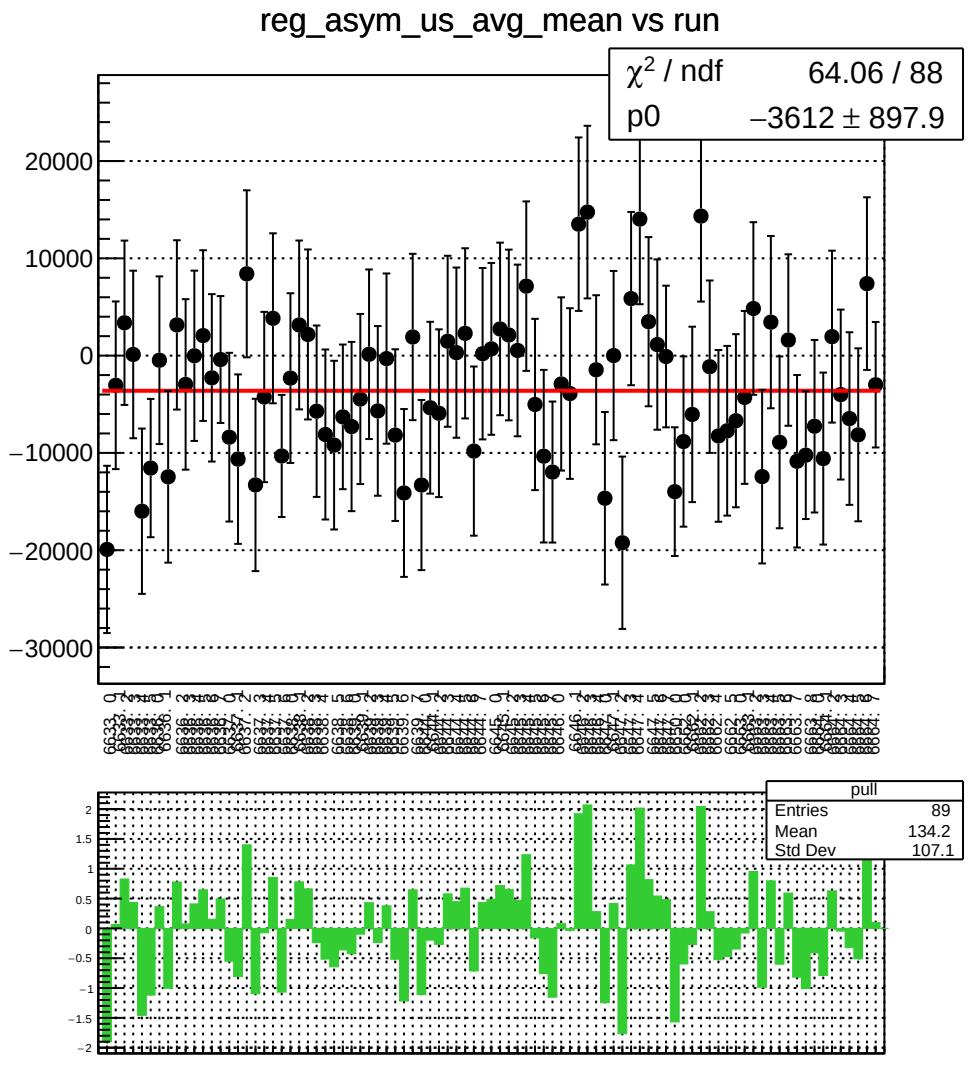
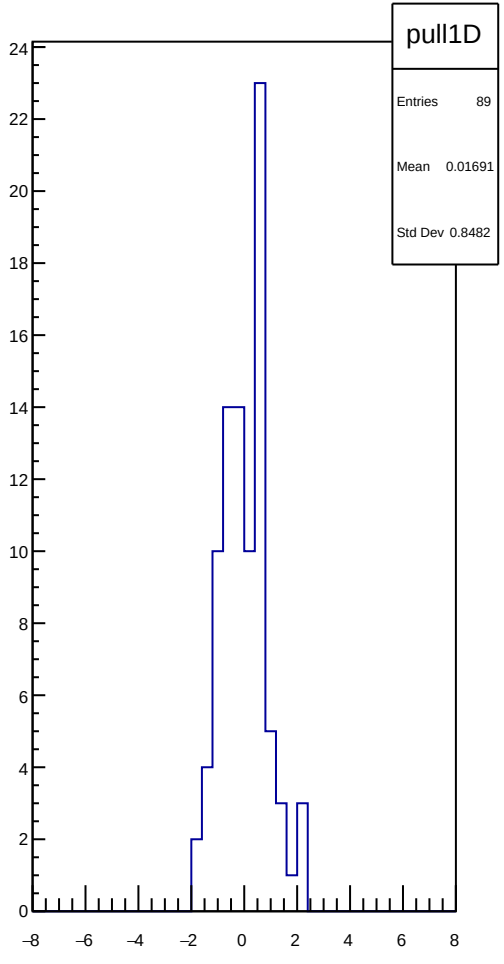
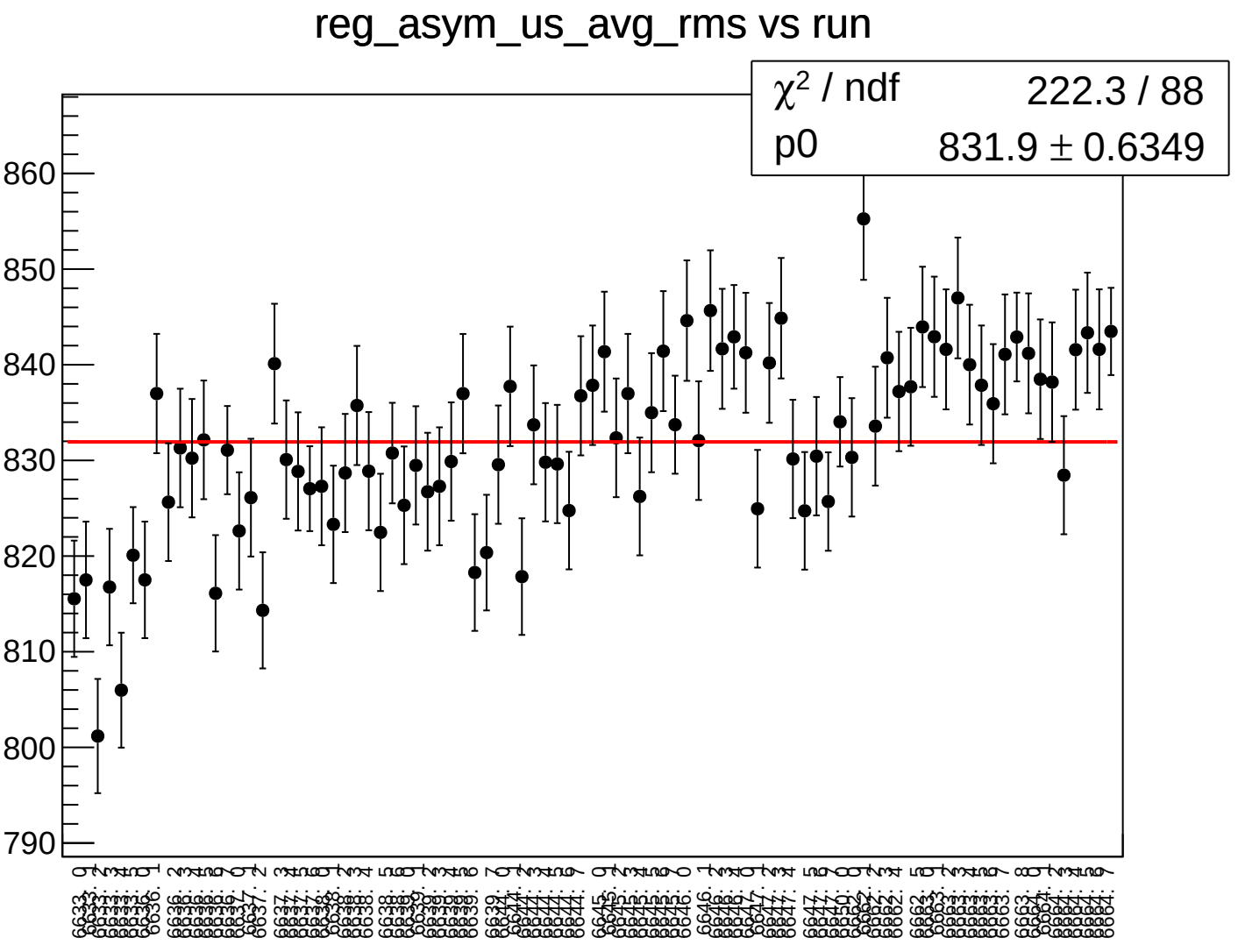
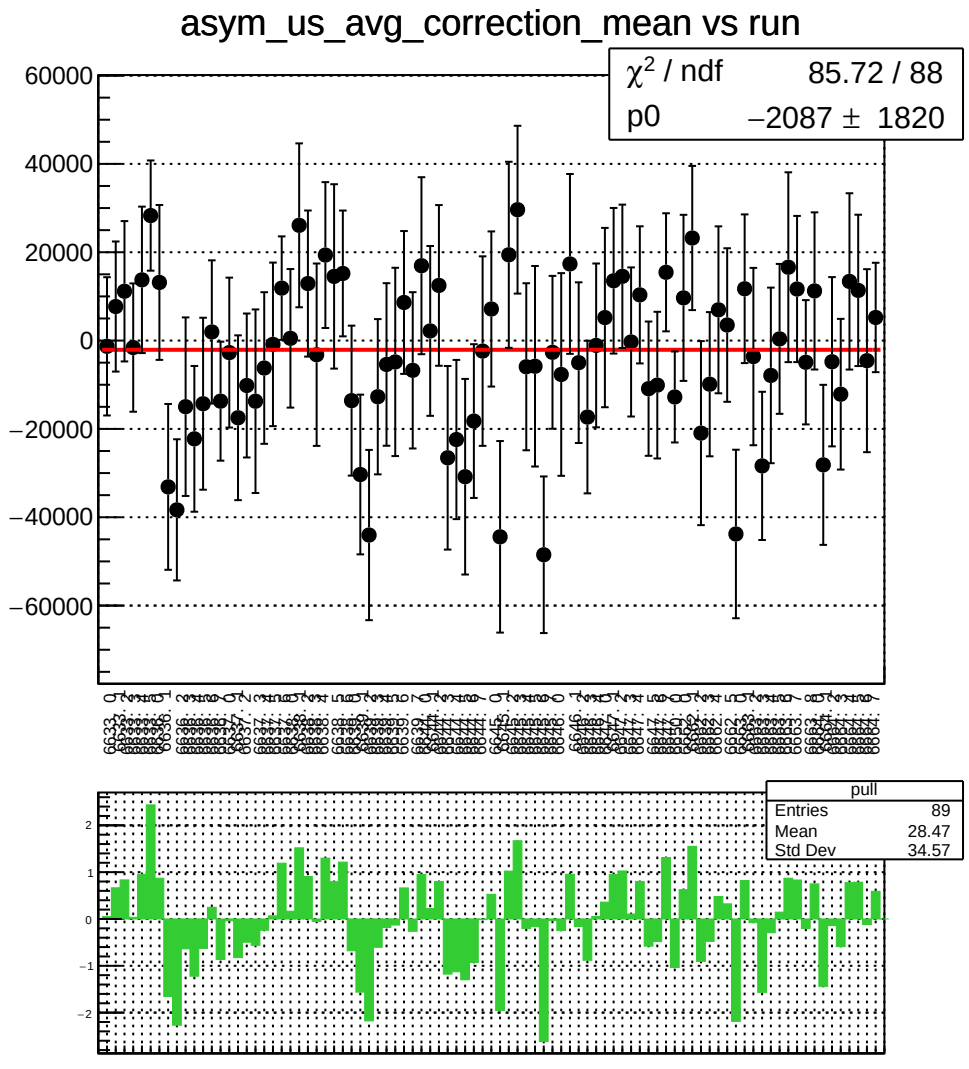
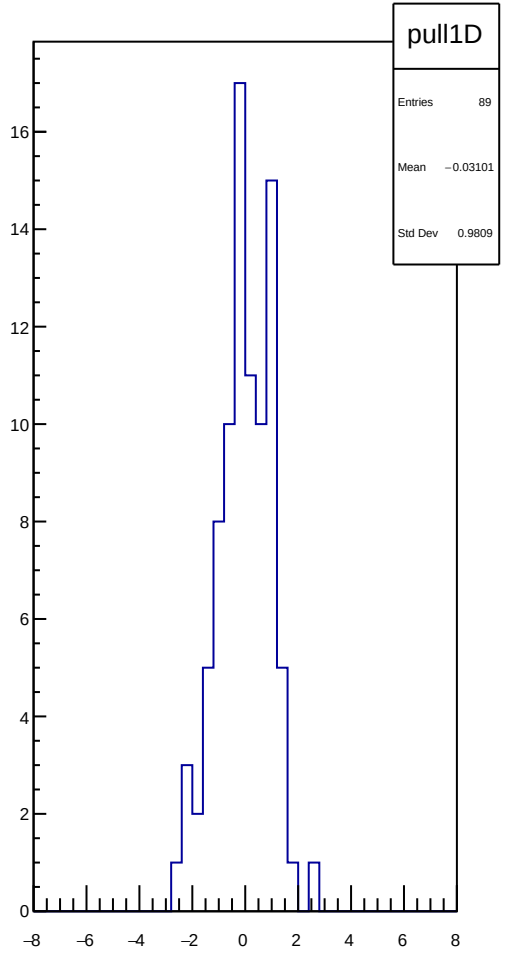
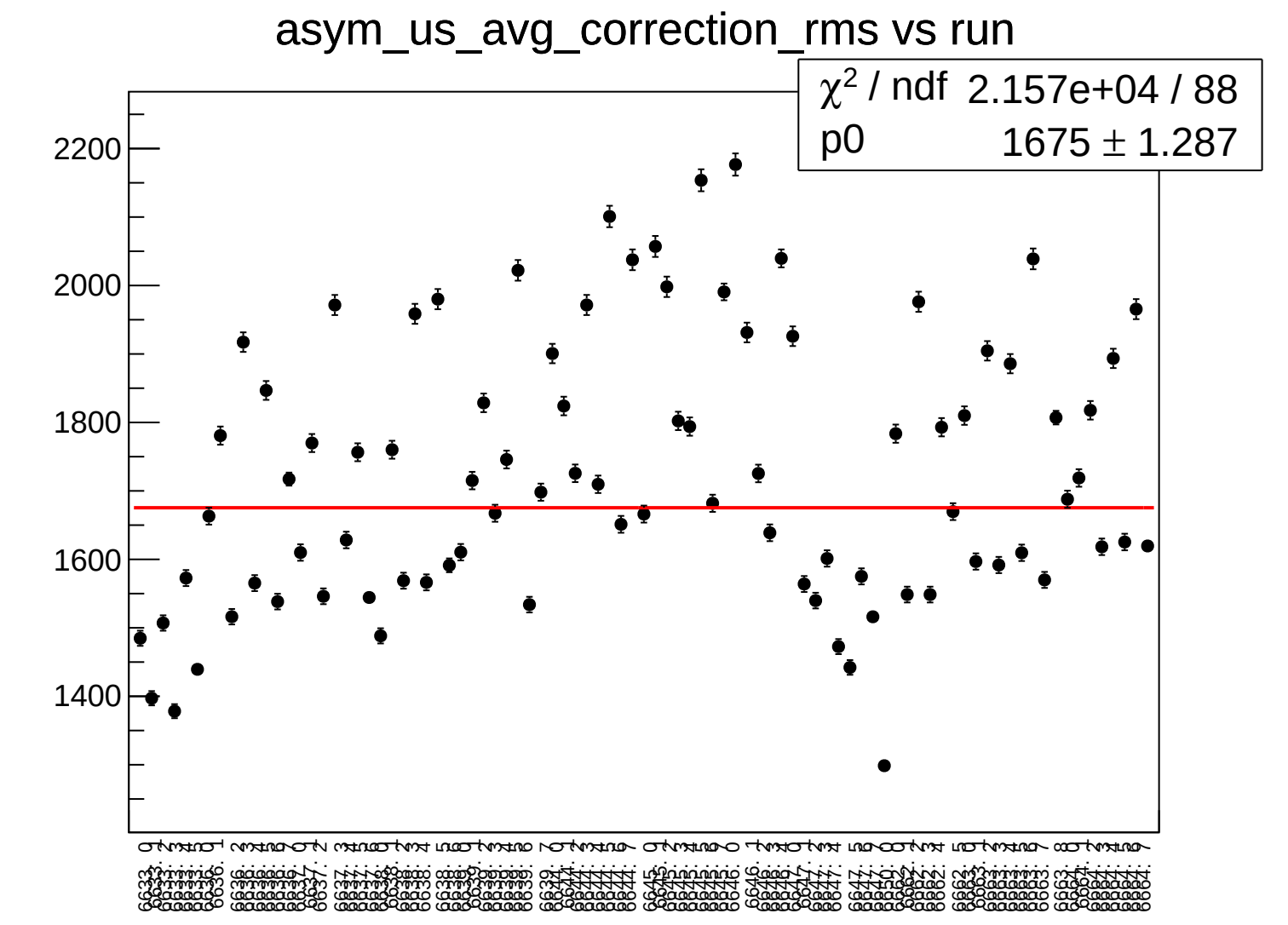

reg_asym_us_avg_mean vs run
χ² / ndf 64.06 / 88
p0 −3612 ± 897.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 134.2
Std Dev 107.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

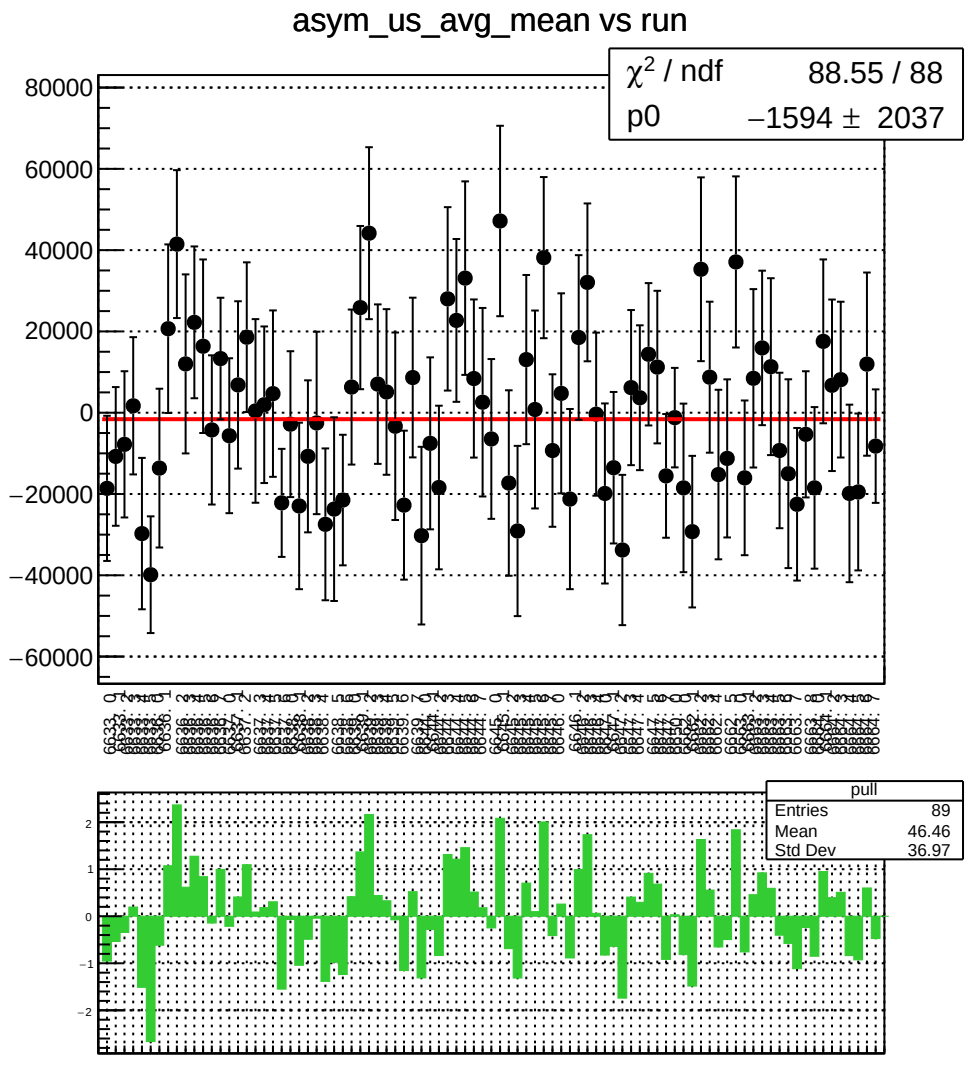

pull1D
Entries 89
Mean 0.01691
Std Dev 0.8482
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

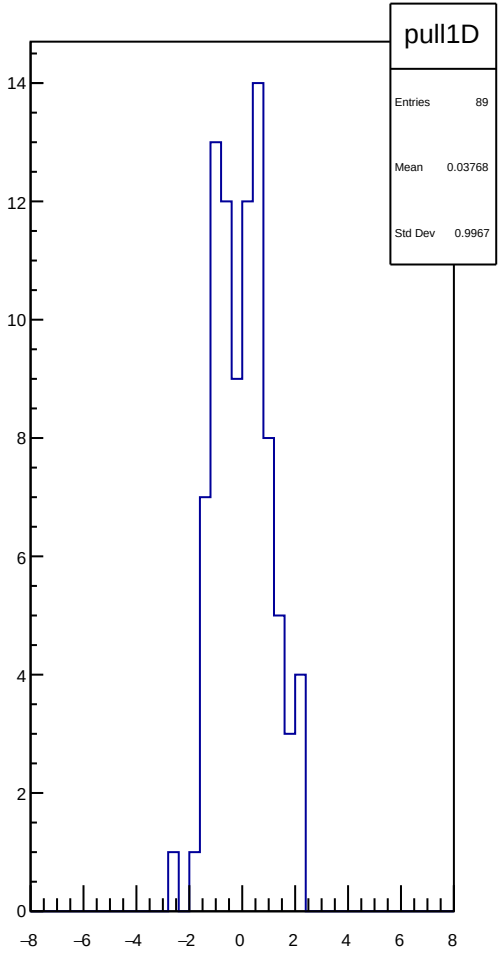

reg_asym_us_avg_rms vs run
χ² / ndf 222.3 / 88
p0 831.9 ± 0.6349
860
850
840
830
820
810
800
790

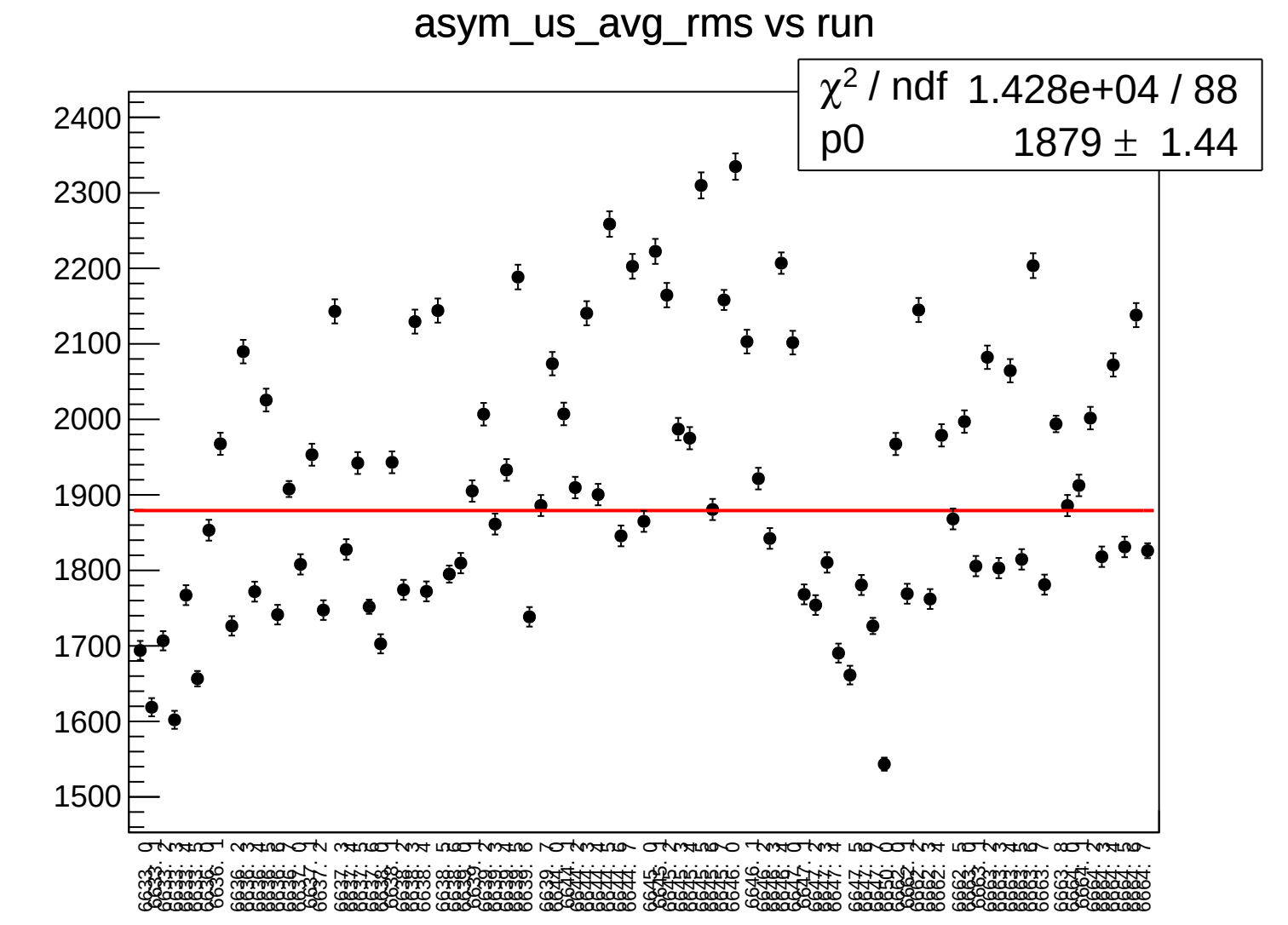

asym_us_avg_correction_mean vs run
χ² / ndf 85.72 / 88
p0 −2087 ± 1820
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 28.47
Std Dev 34.57
2
1
0
−1
−2

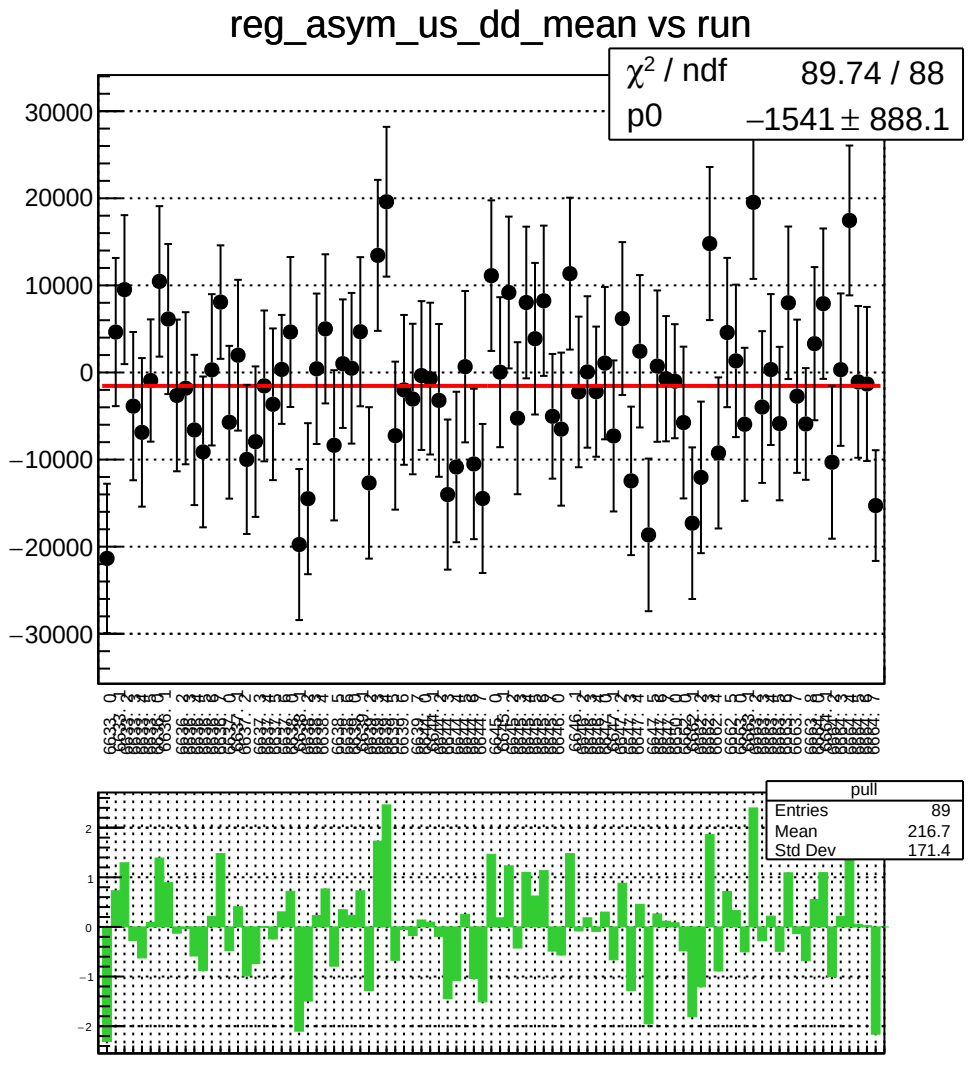

pull1D
Entries 89
Mean −0.03101
Std Dev 0.9809
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

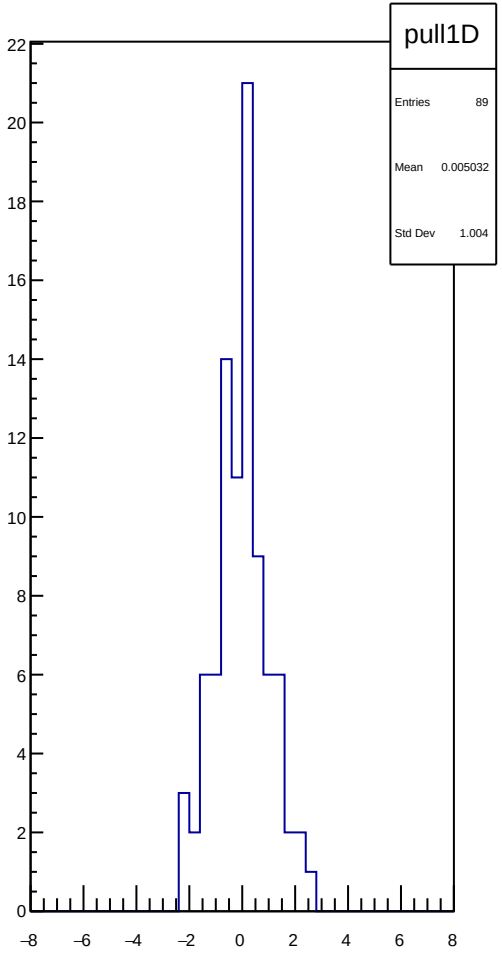

asym_us_avg_correction_rms vs run
χ^2 / ndf 2.157e+04 / 88
p0 1675 ± 1.287
2200
2000
1800
1600
1400

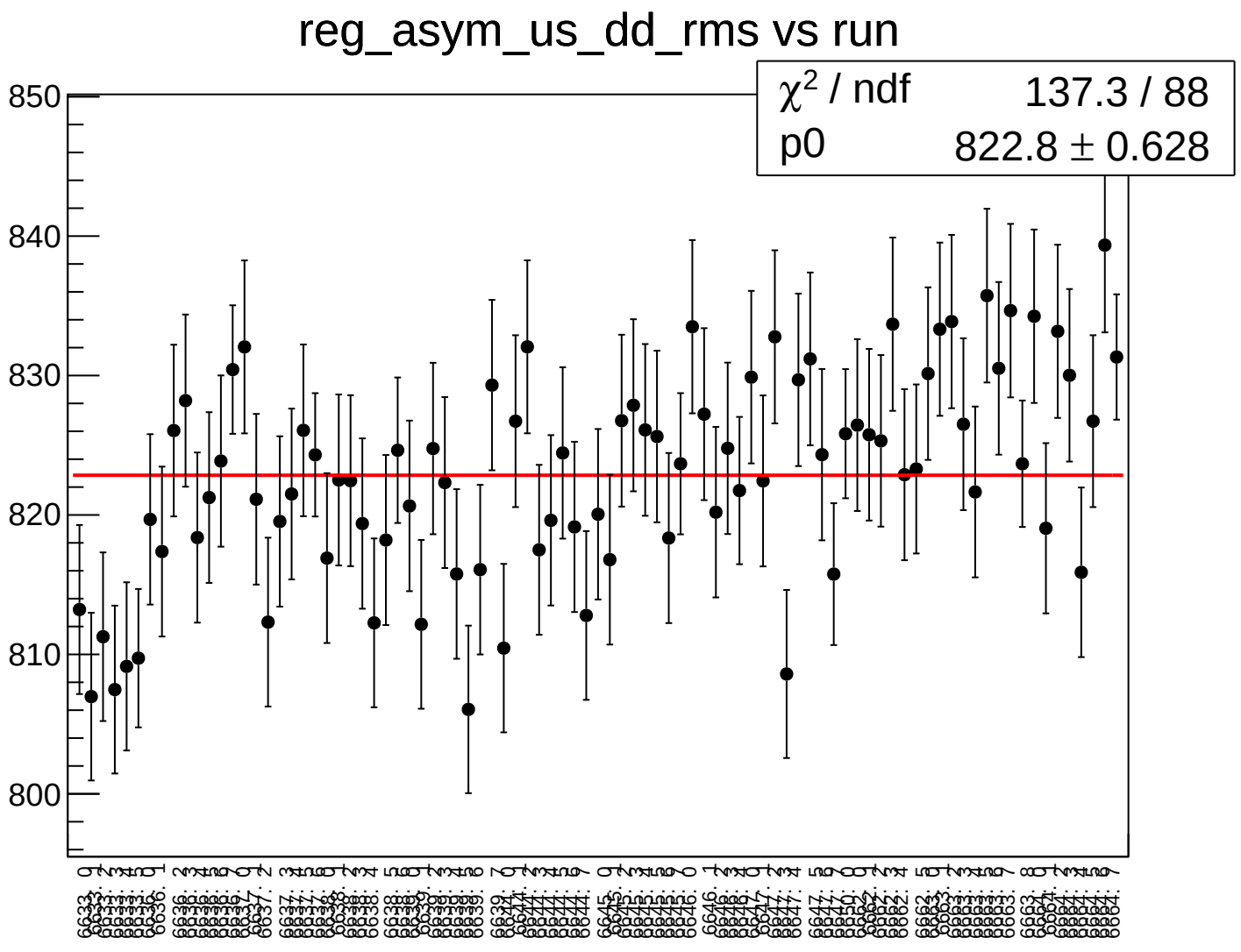

asym_us_avg_mean vs run
χ² / ndf 88.55 / 88
p0 −1594 ± 2037
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 46.46
Std Dev 36.97
2
1
0
−1
−2

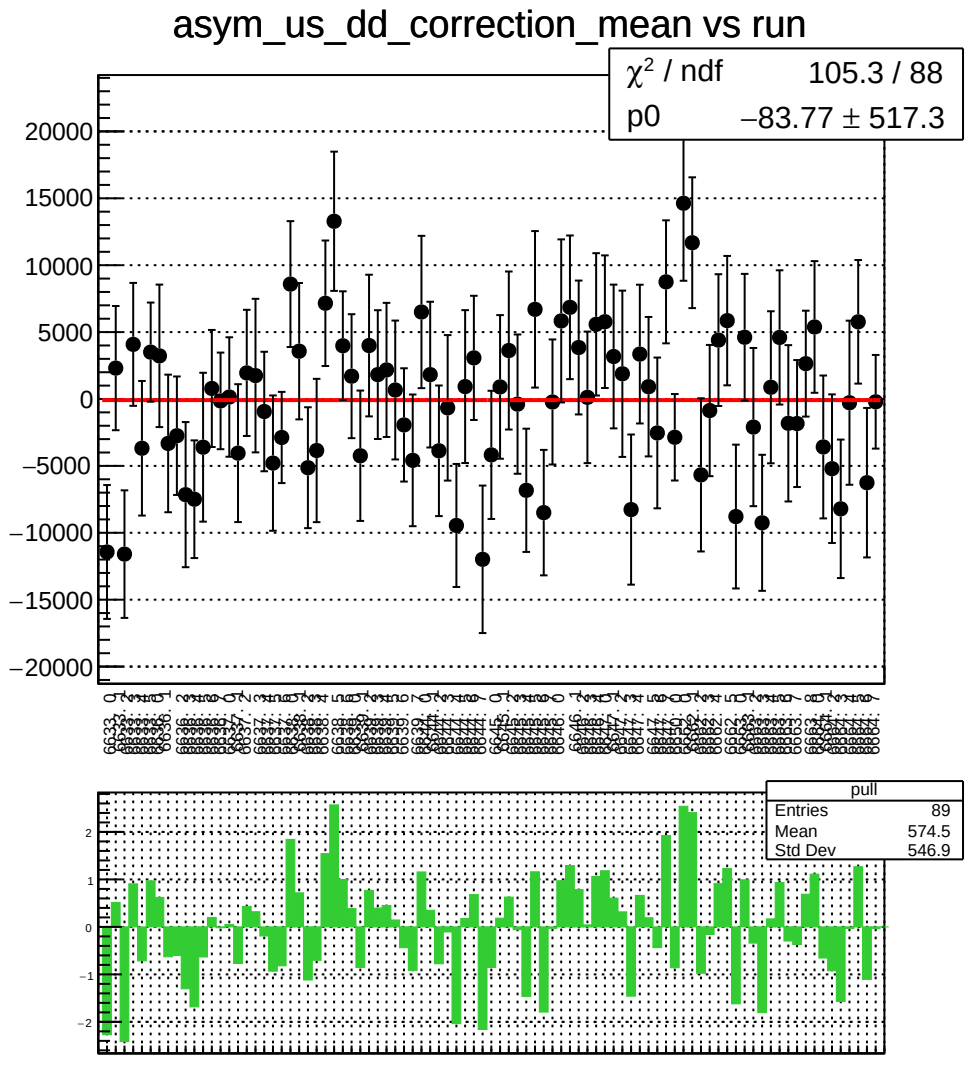

pull1D
Entries 89
Mean 0.03768
Std Dev 0.9967
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

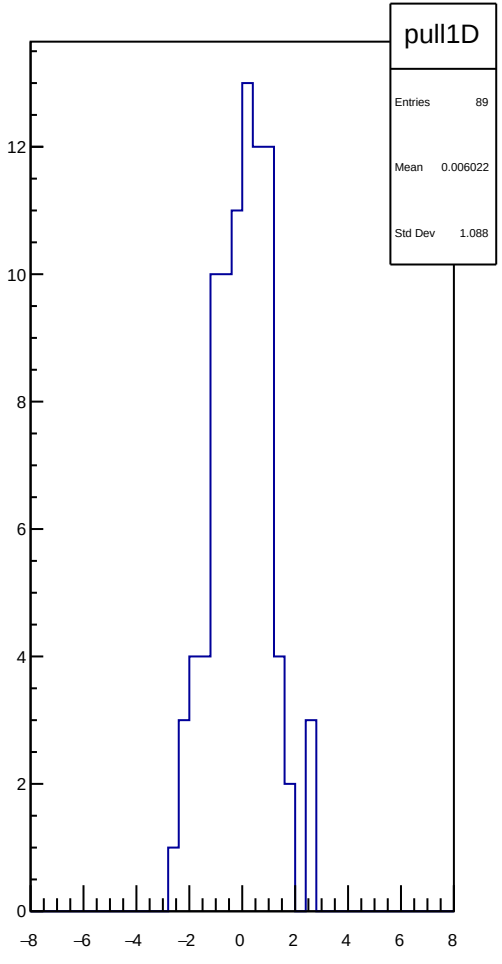

asym_us_avg_rms vs run
χ² / ndf 1.428e+04 / 88
p0 1879 ± 1.44
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500

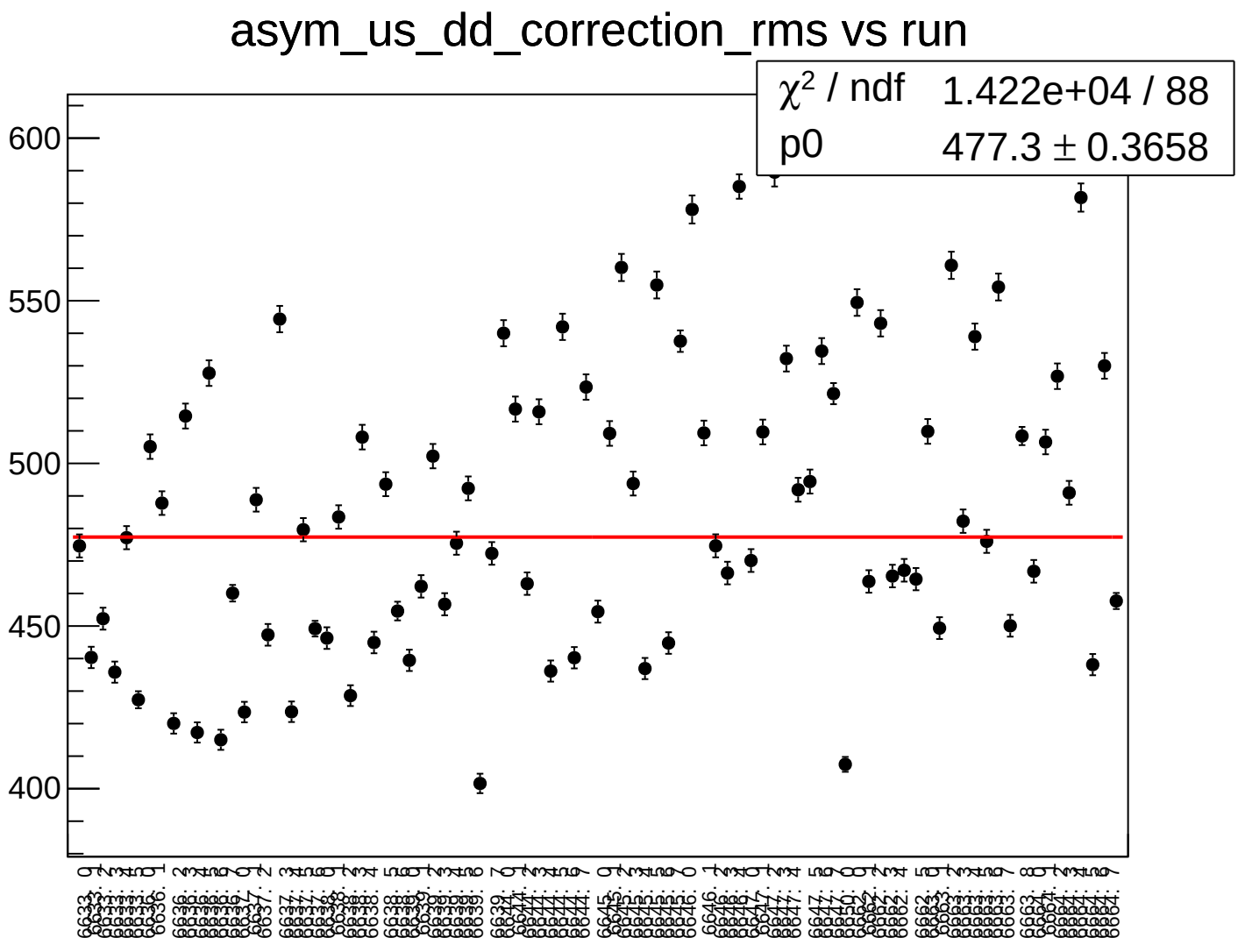

reg_asym_us_dd_mean vs run
χ² / ndf 89.74 / 88
p0 −1541 ± 888.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 216.7
Std Dev 171.4
2
1
0
−1
−2

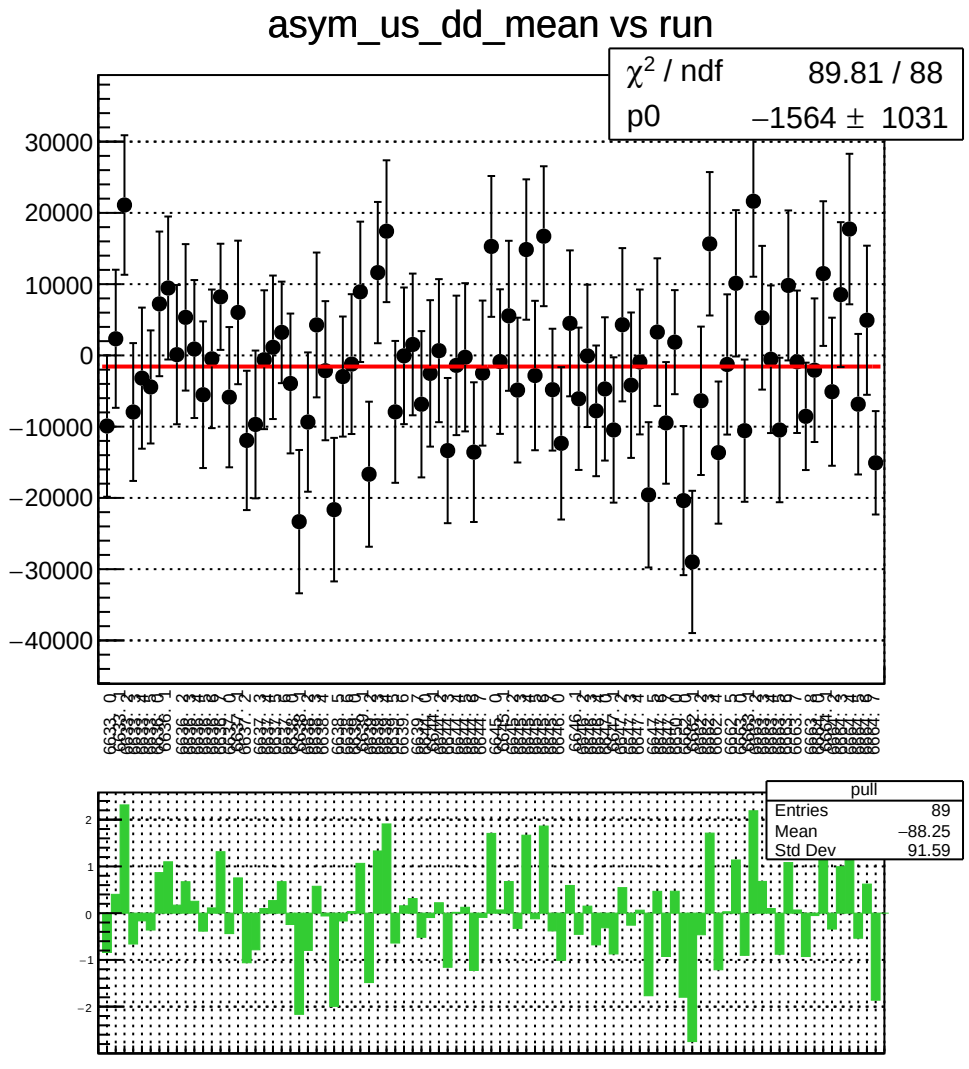

pull1D
Entries 89
Mean 0.005032
Std Dev 1.004
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

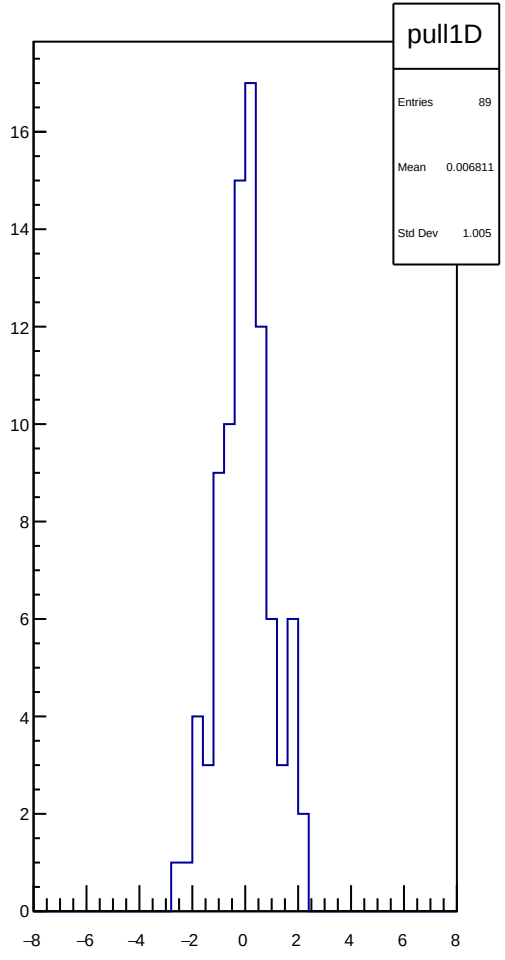

reg_asym_us_dd_rms vs run
χ² / ndf 137.3 / 88
p0 822.8 ± 0.628
850
840
830
820
810
800

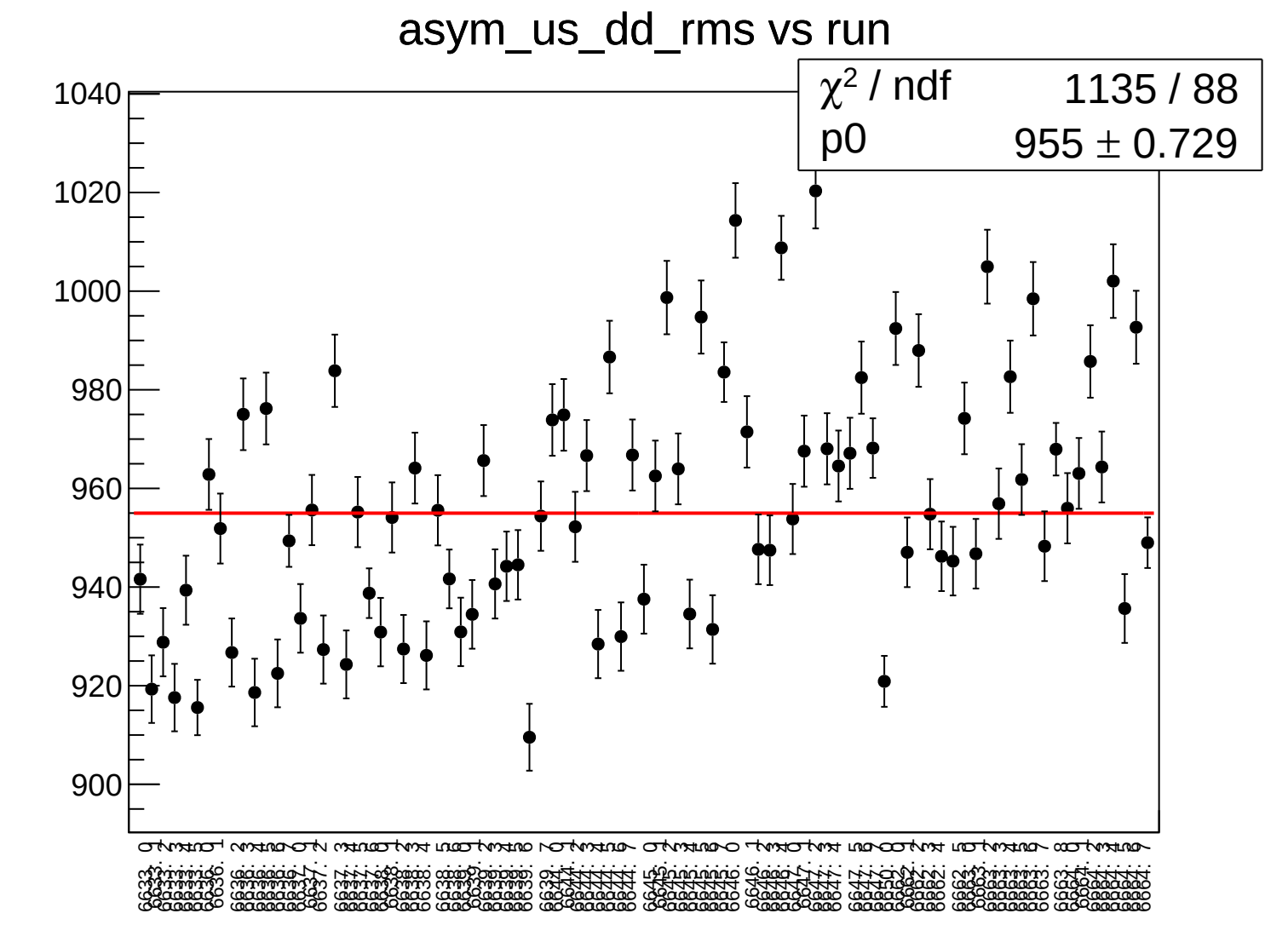

asym_us_dd_correction_mean vs run
χ² / ndf 105.3 / 88
p0 −83.77 ± 517.3
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 89
Mean 574.5
Std Dev 546.9
2
1
0
−1
−2

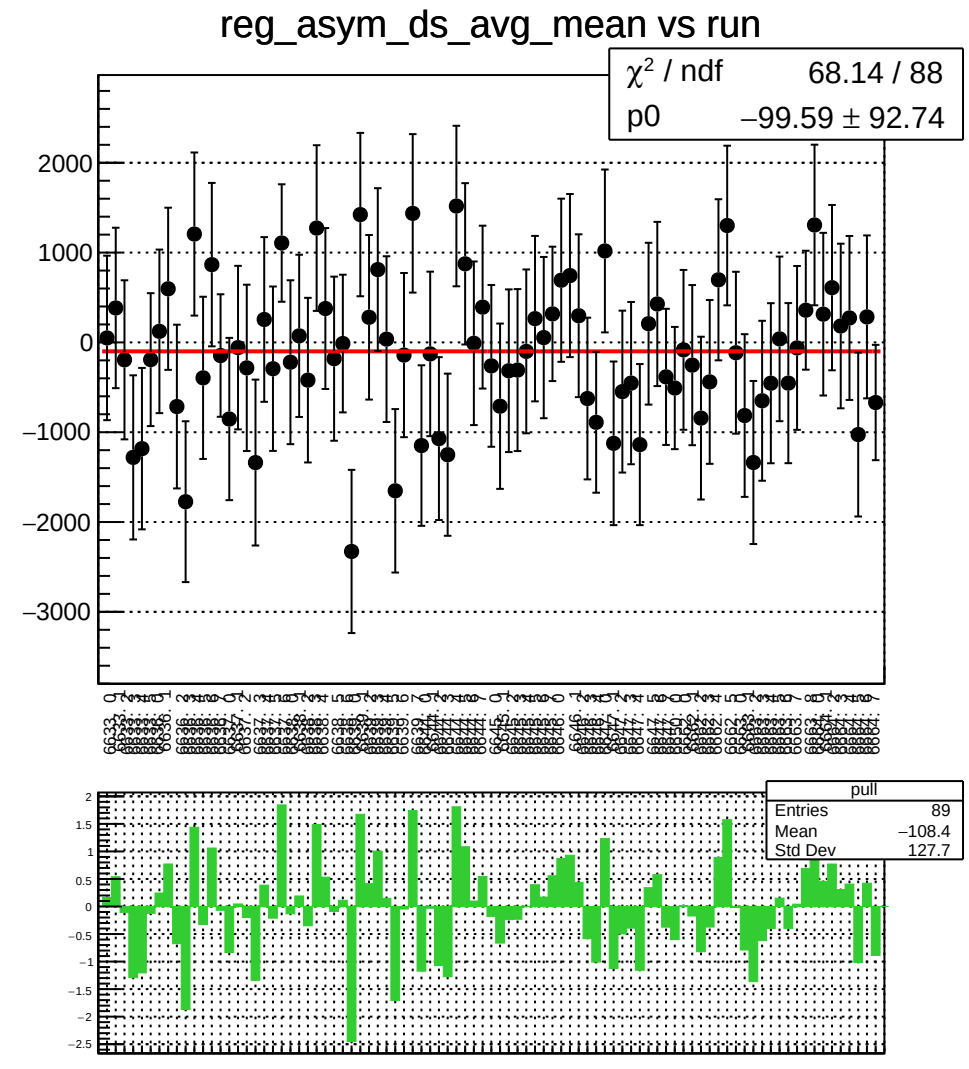

pull1D
Entries 89
Mean 0.006022
Std Dev 1.088
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

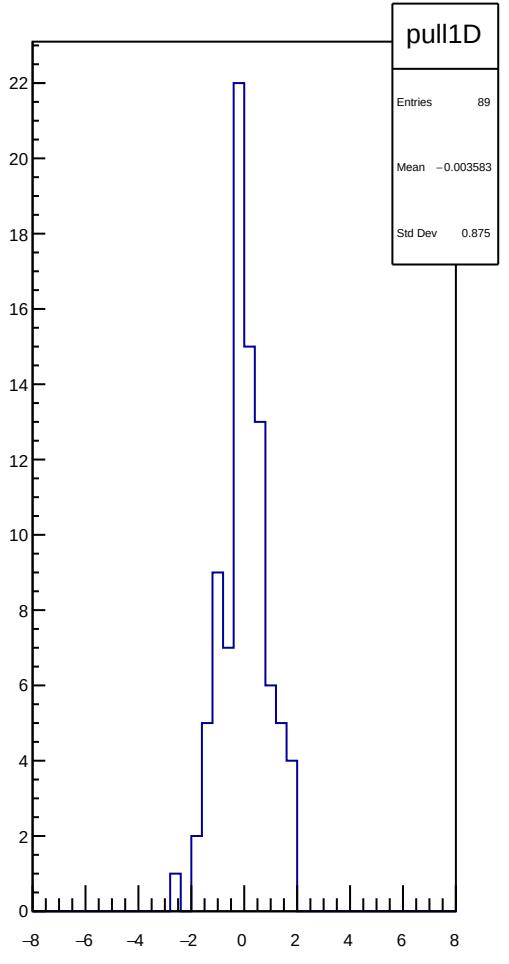

asym_us_dd_correction_rms vs run
χ² / ndf 1.422e+04 / 88
p0 477.3 ± 0.3658
600
550
500
450
400

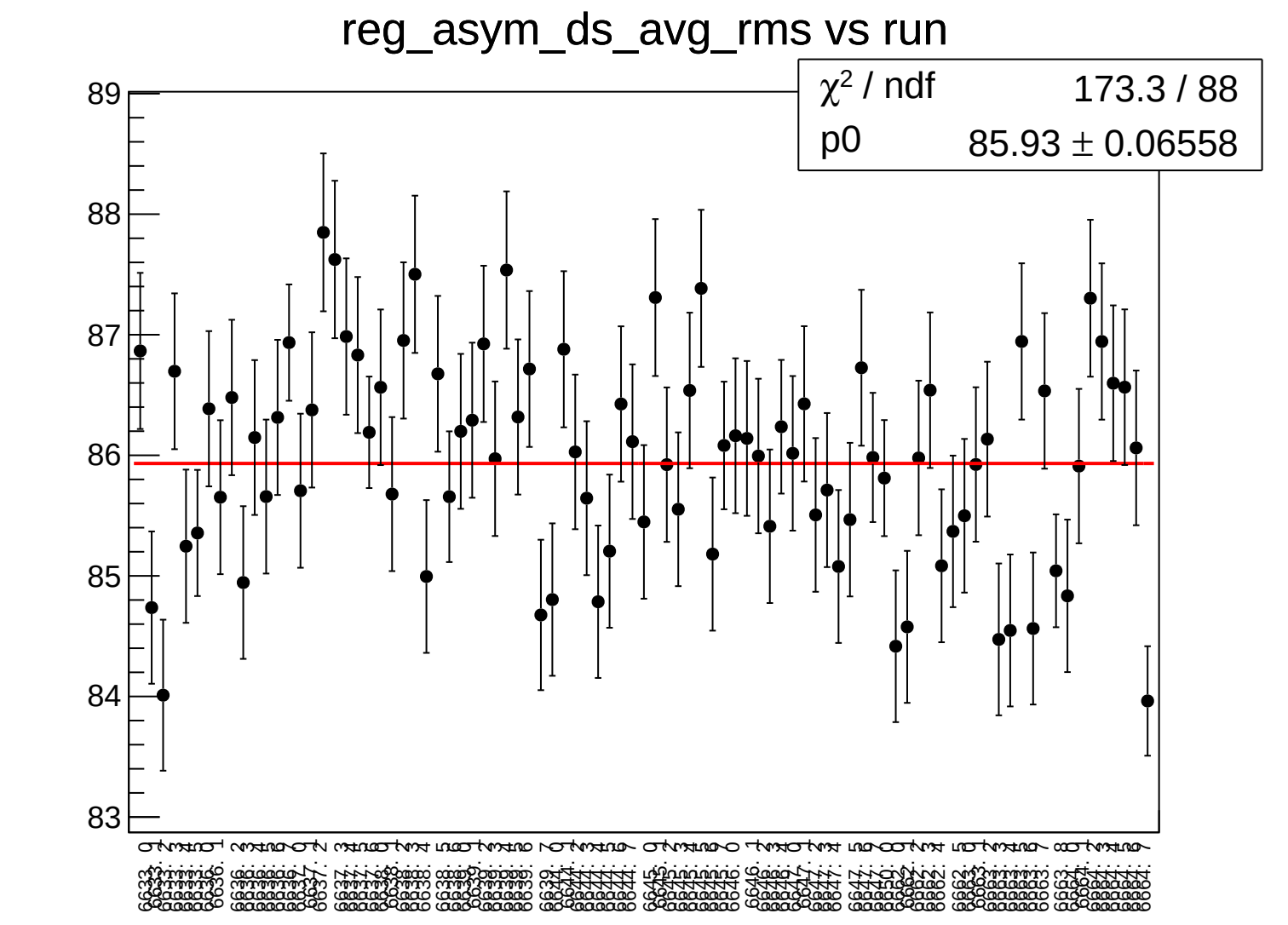

asym_us_dd_mean vs run
χ² / ndf 89.81 / 88
p0 −1564 ± 1031
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −88.25
Std Dev 91.59
2
1
0
−1
−2

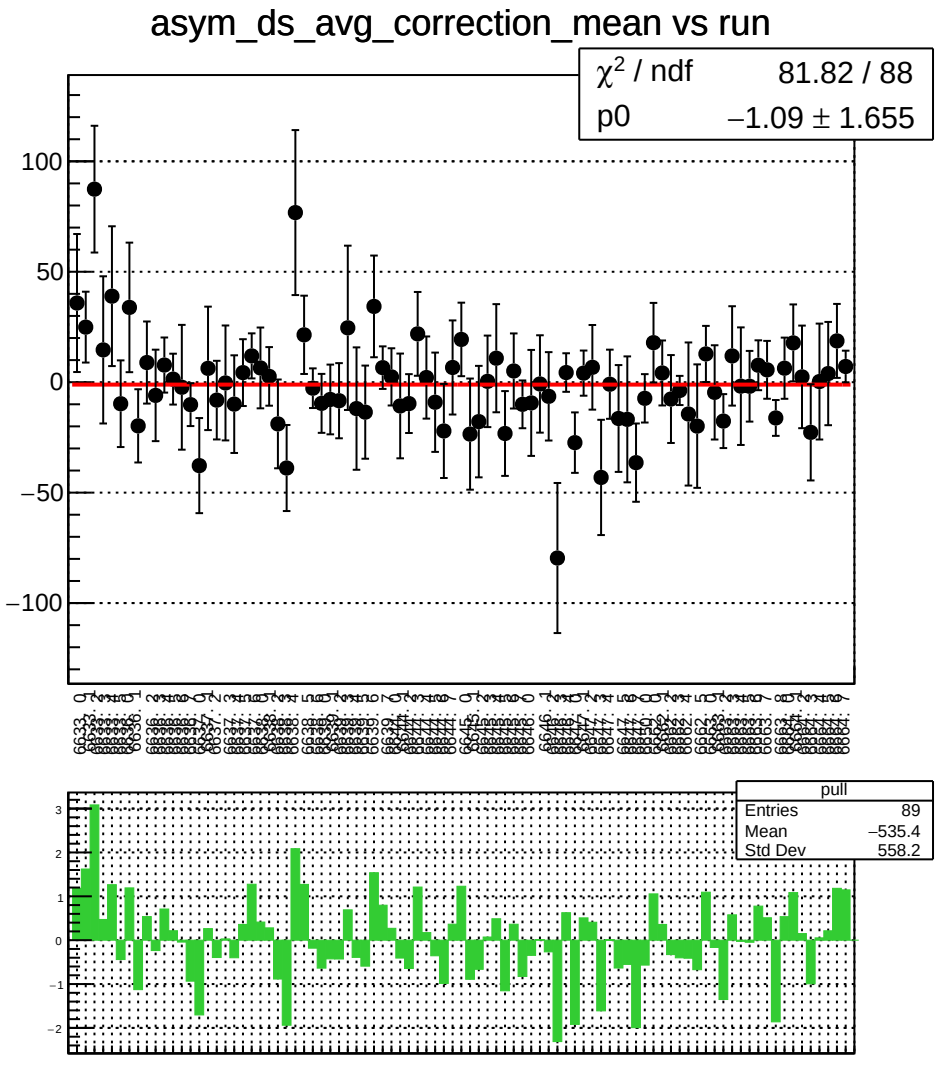

pull1D
Entries 89
Mean 0.006811
Std Dev 1.005
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

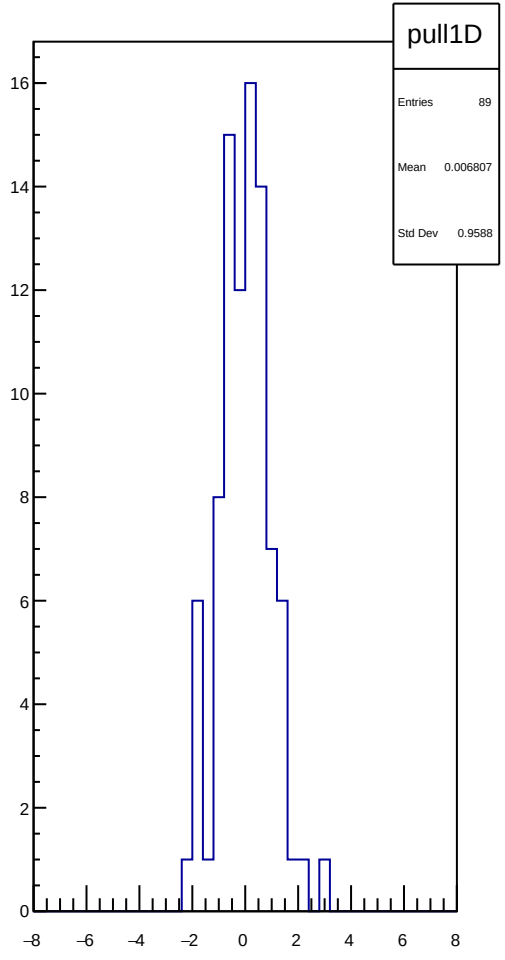

asym_us_dd_rms vs run
χ² / ndf 1135 / 88
p0 955 ± 0.729
1040
1020
1000
980
960
940
920
900

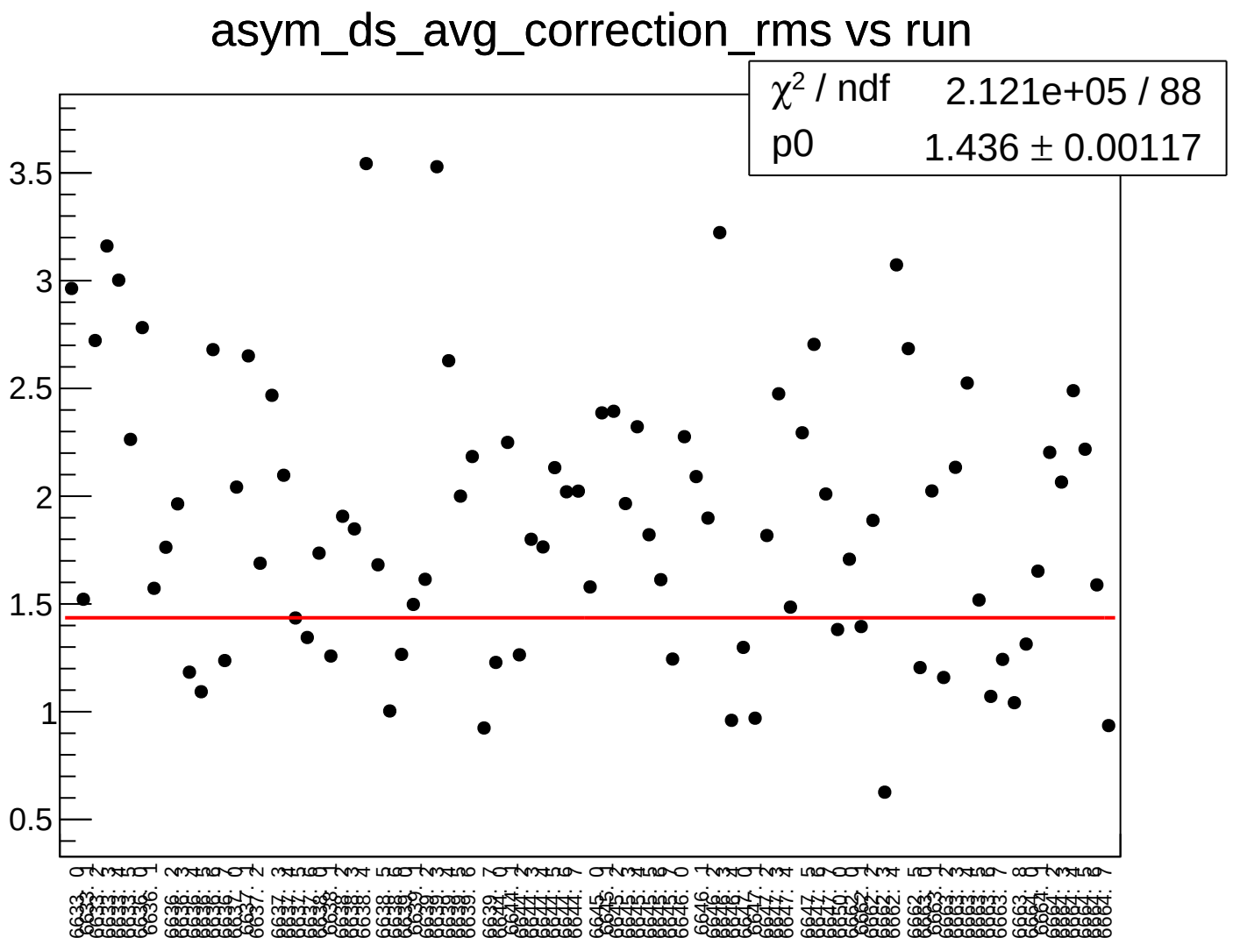

reg_asym_ds_avg_mean vs run
χ² / ndf 68.14 / 88
p0 −99.59 ± 92.74
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean −108.4
Std Dev 127.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

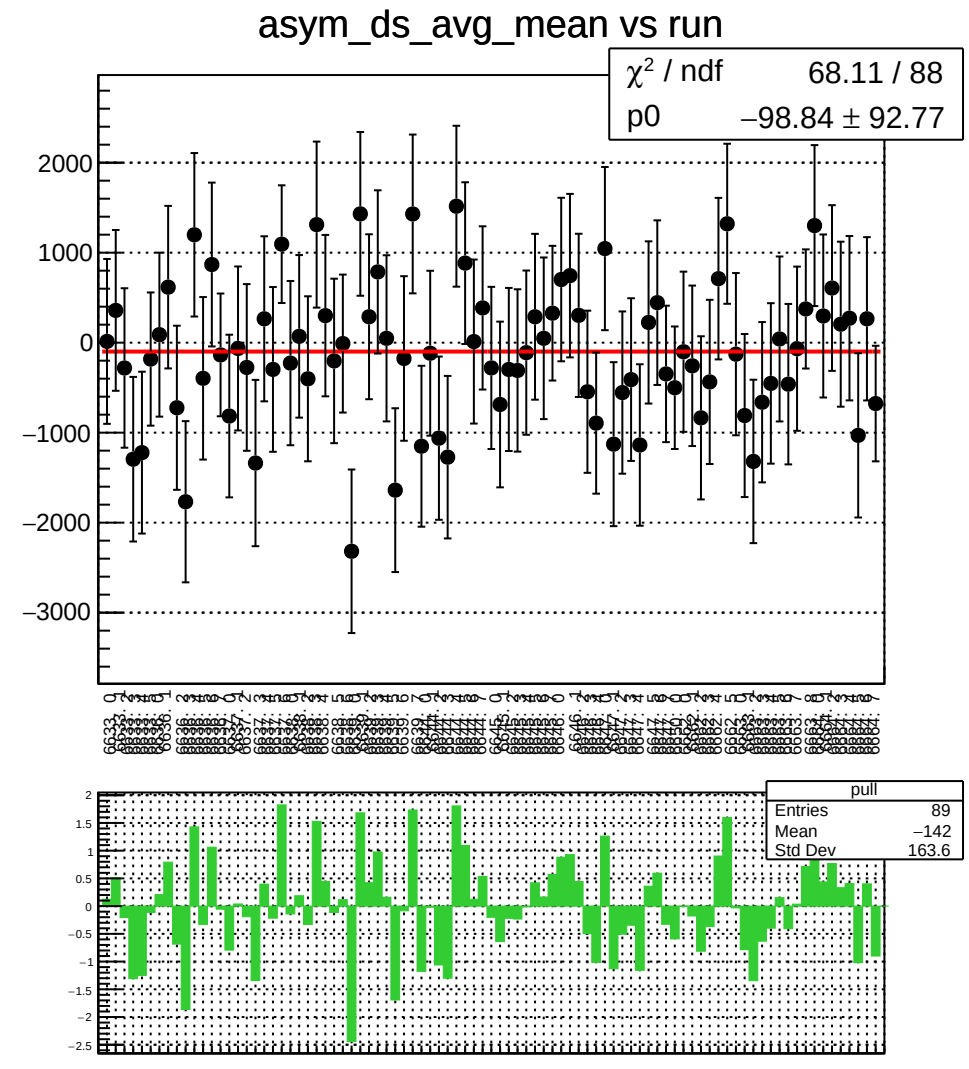

pull1D
Entries 89
Mean −0.003583
Std Dev 0.875
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

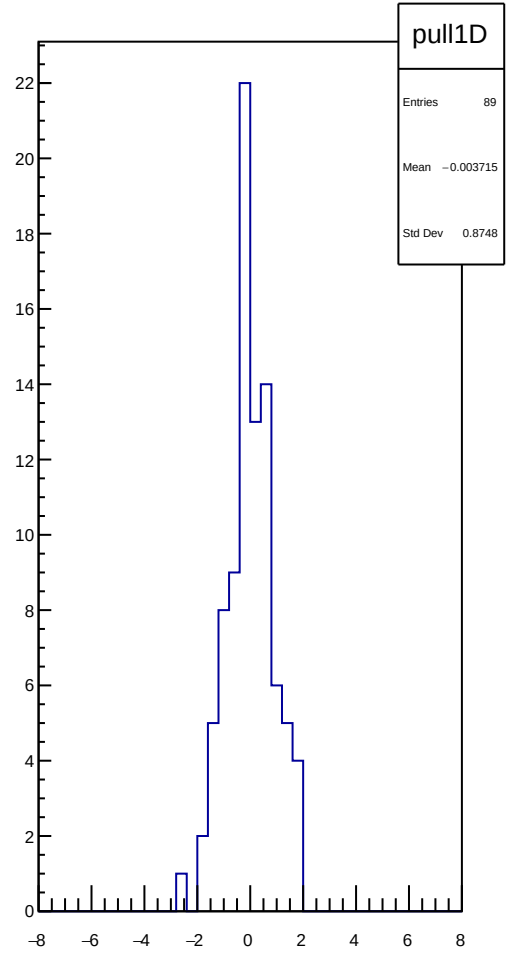

reg_asym_ds_avg_rms vs run
χ² / ndf 173.3 / 88
p0 85.93 ± 0.06558
89
88
87
86
85
84
83

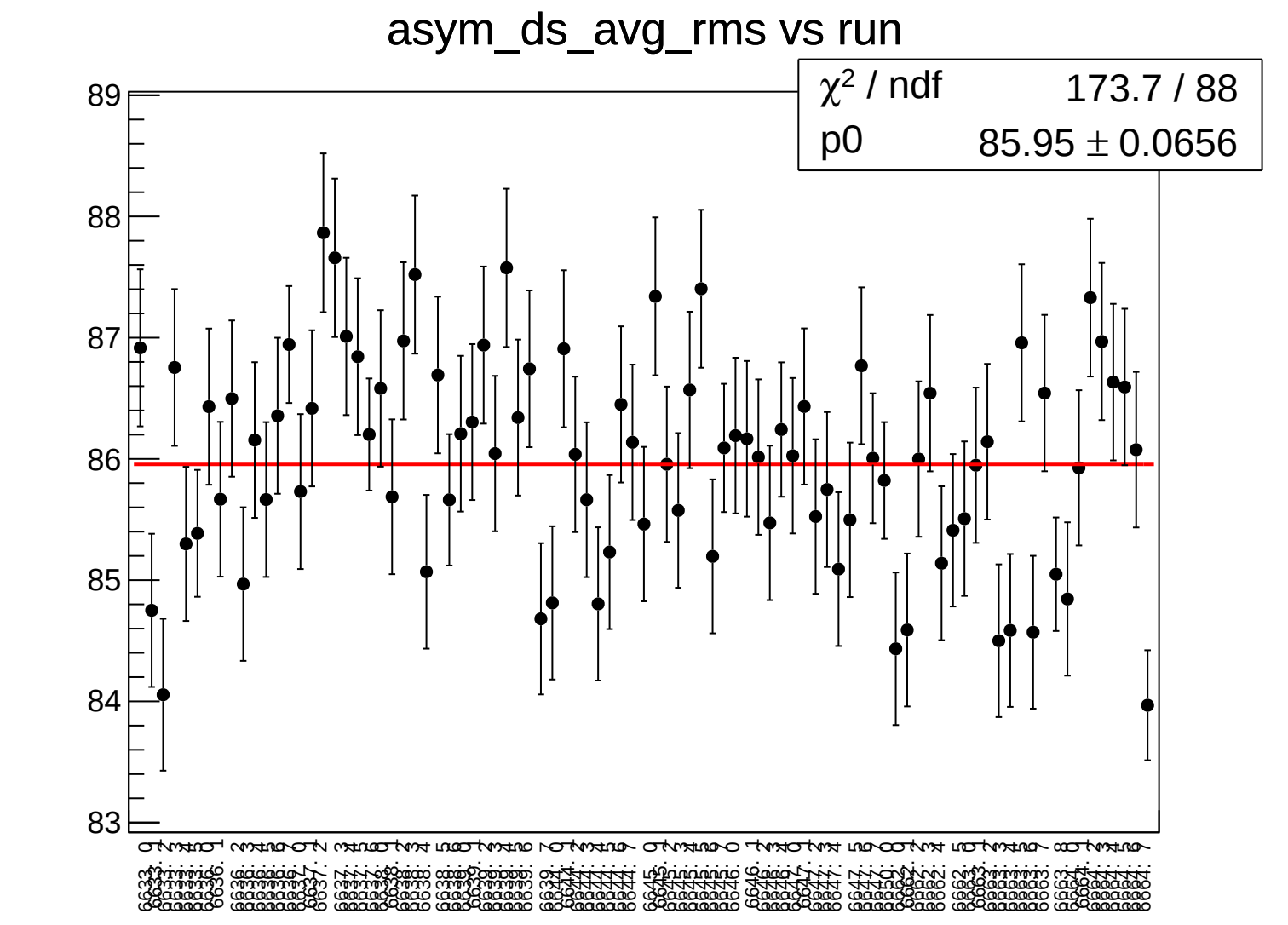

asym_ds_avg_correction_mean vs run
χ² / ndf 81.82 / 88
p0 −1.09 ± 1.655
100
50
0
−50
−100
pull
Entries 89
Mean −535.4
Std Dev 558.2
3
2
1
0
−1
−2

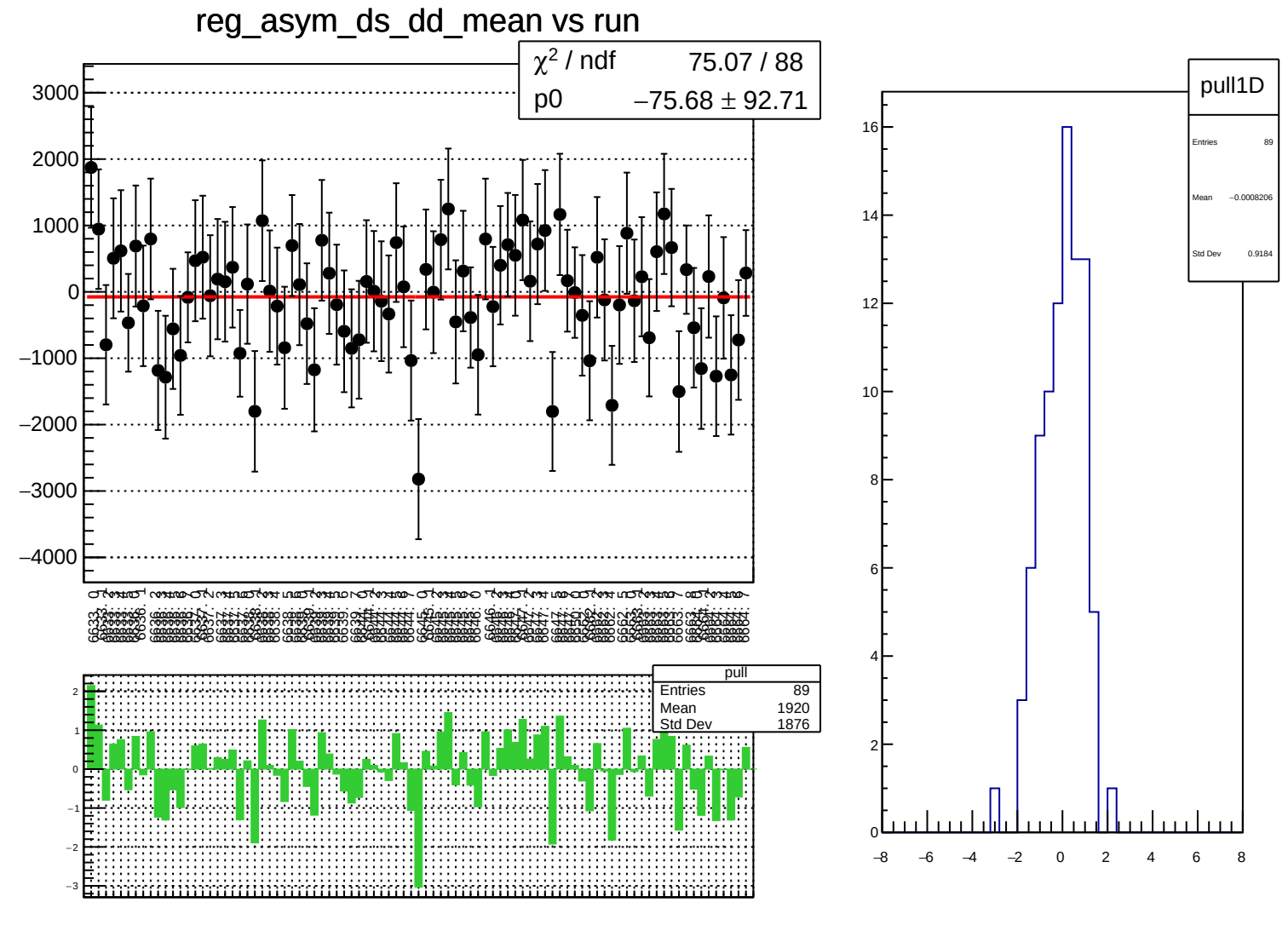

pull1D
Entries 89
Mean 0.006807
Std Dev 0.9588
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

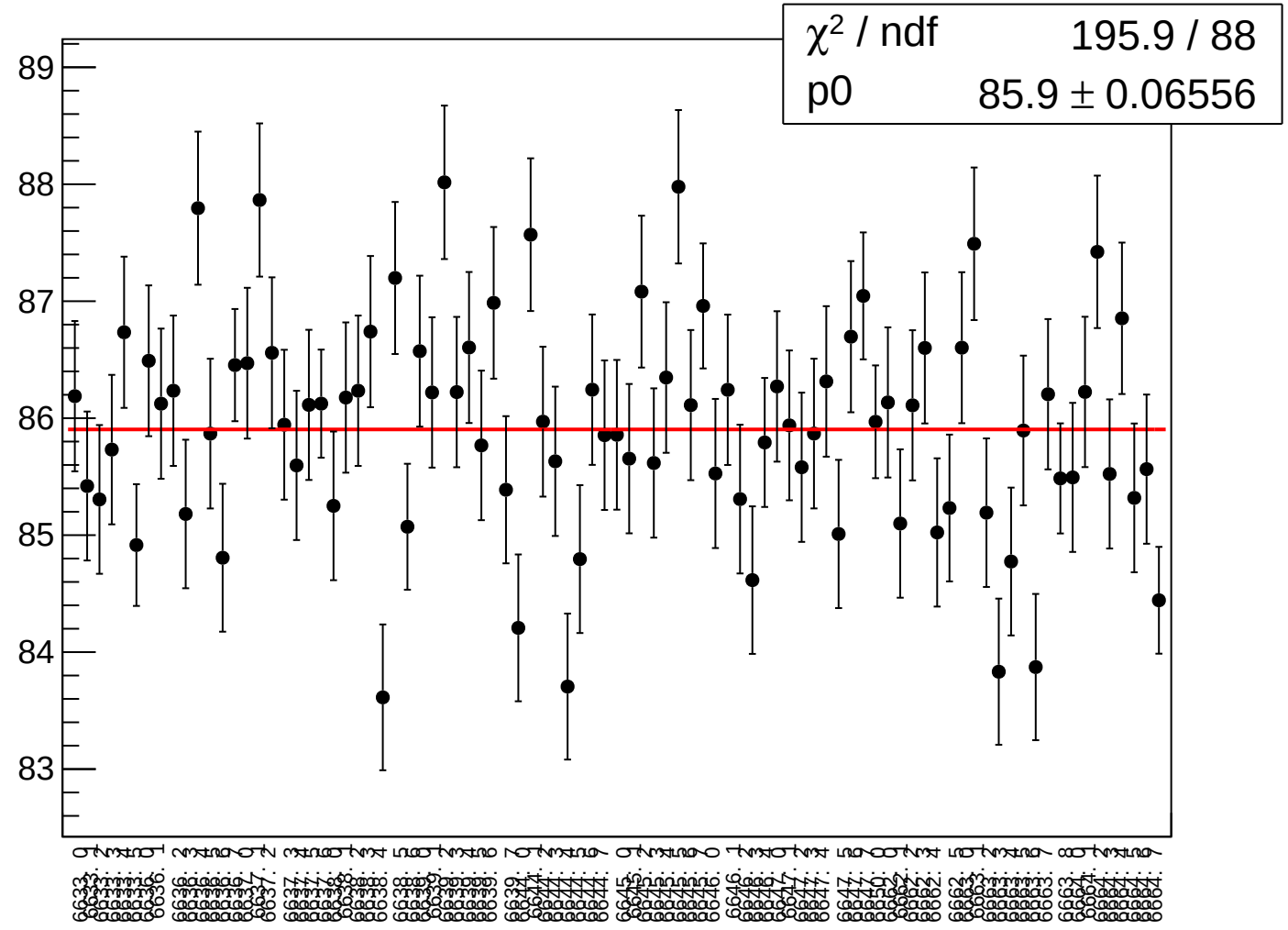

asym_ds_avg_correction_rms vs run
χ² / ndf 2.121e+05 / 88
p0 1.436 ± 0.00117
3.5
3
2.5
2
1.5
1
0.5

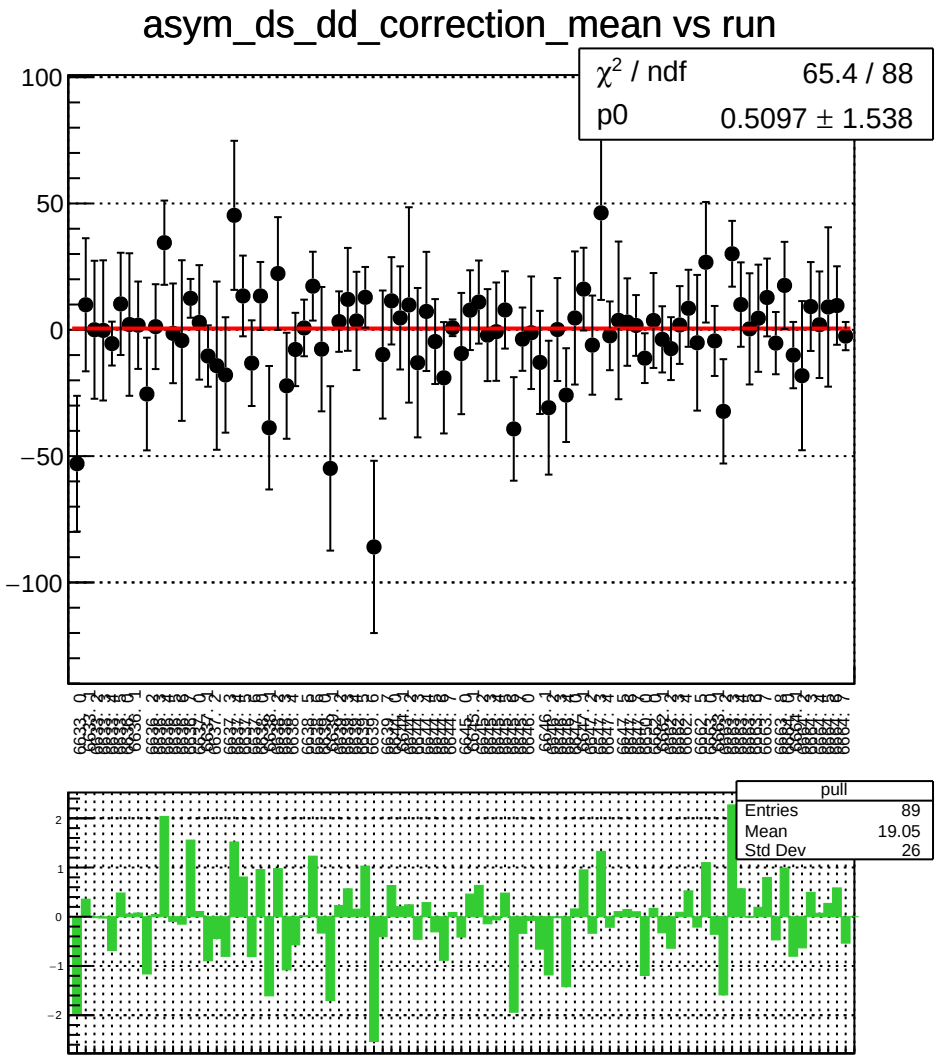

asym_ds_avg_mean vs run
χ² / ndf 68.11 / 88
p0 −98.84 ± 92.77
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean −142
Std Dev 163.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

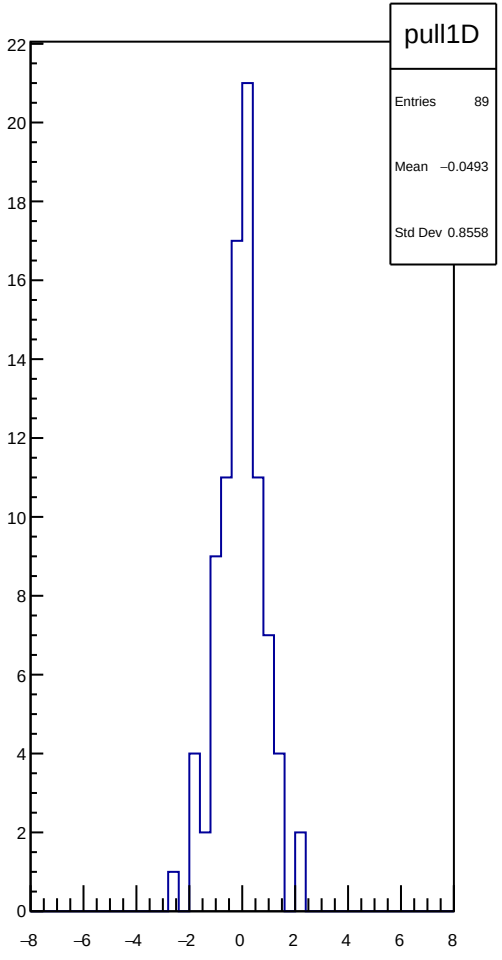

pull1D
Entries 89
Mean −0.003715
Std Dev 0.8748
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

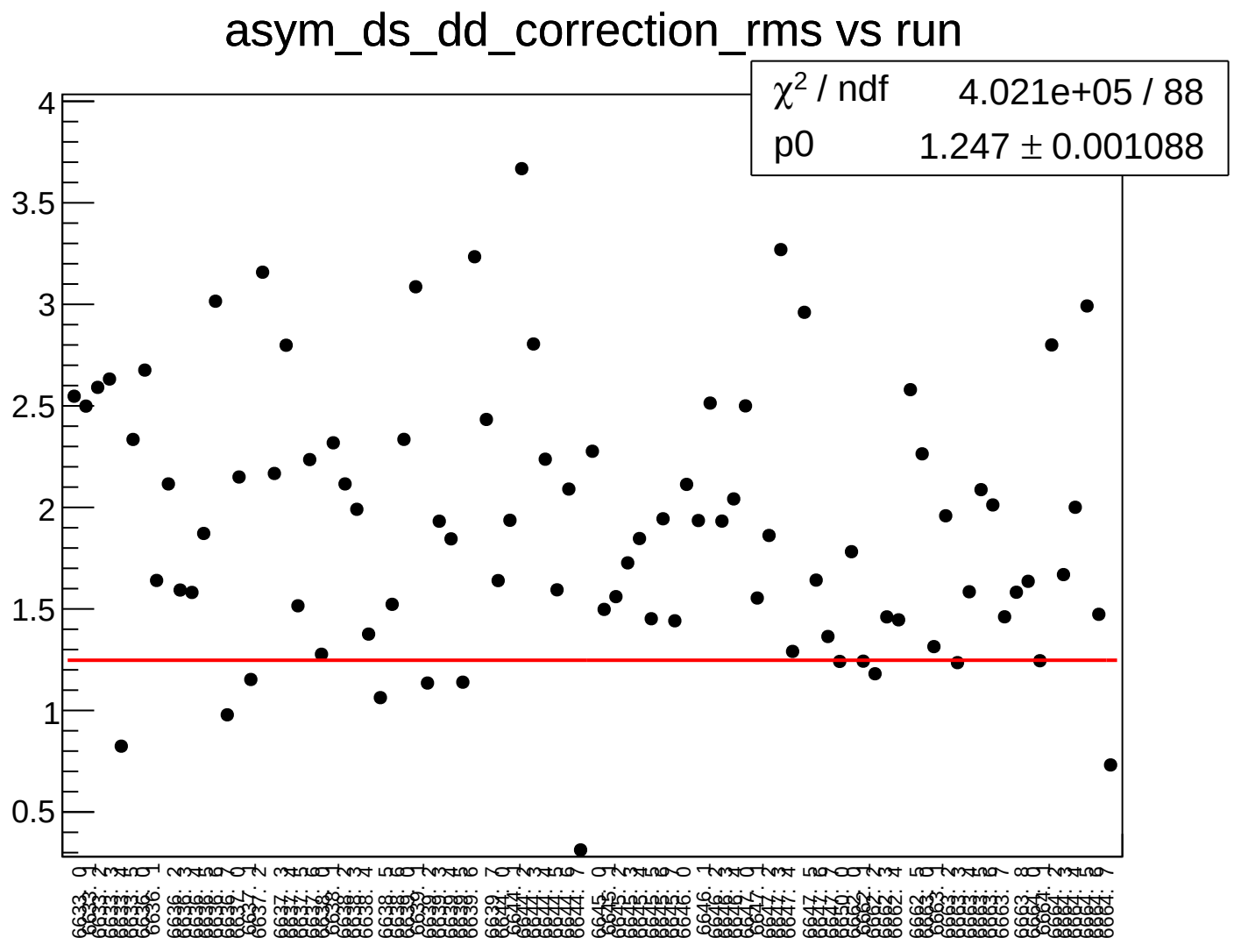

asym_ds_avg_rms vs run
χ^2 / ndf 173.7 / 88
p0 85.95 ± 0.0656
89
88
87
86
85
84
83

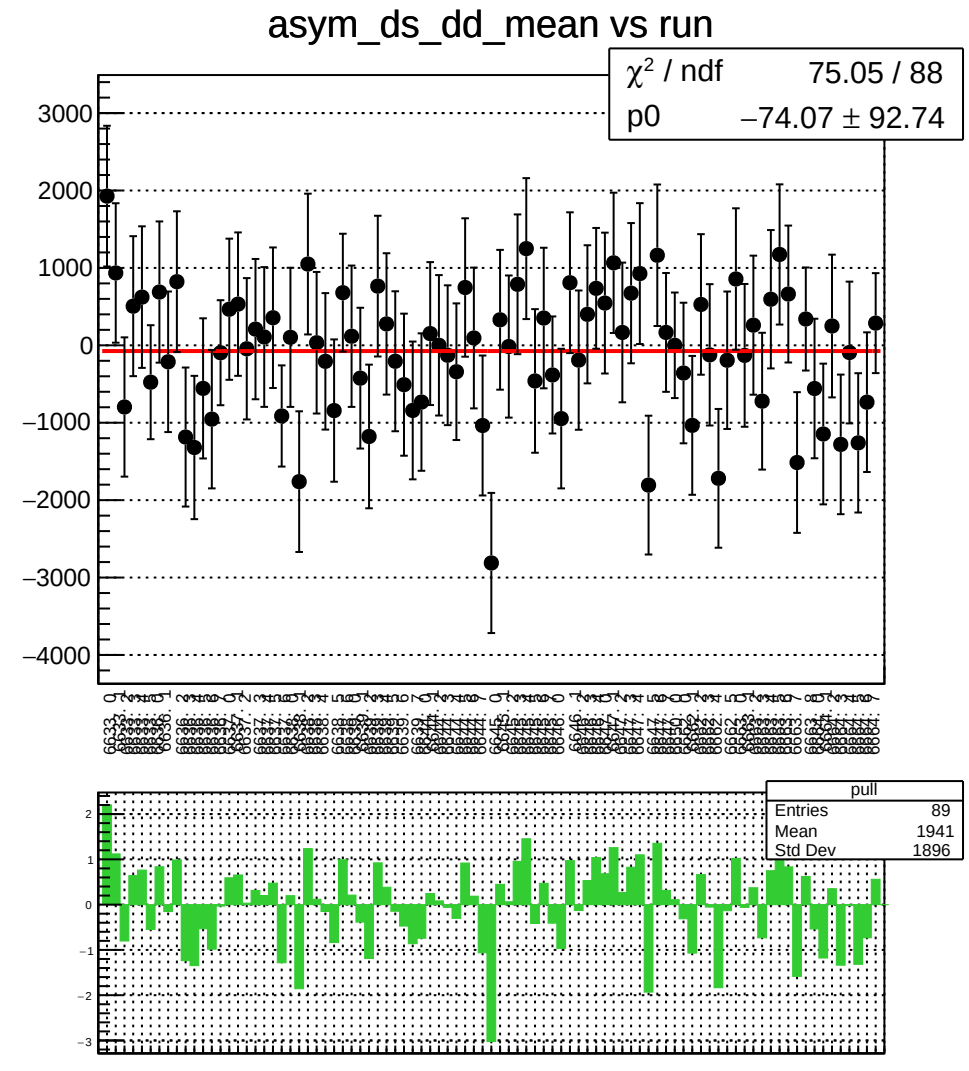

reg_asym_ds_dd_mean vs run
χ² / ndf 75.07 / 88
p0 −75.68 ± 92.71
pull
Entries 89
Mean 1920
Std Dev 1876
pull1D
Entries 89
Mean −0.0008206
Std Dev 0.9184

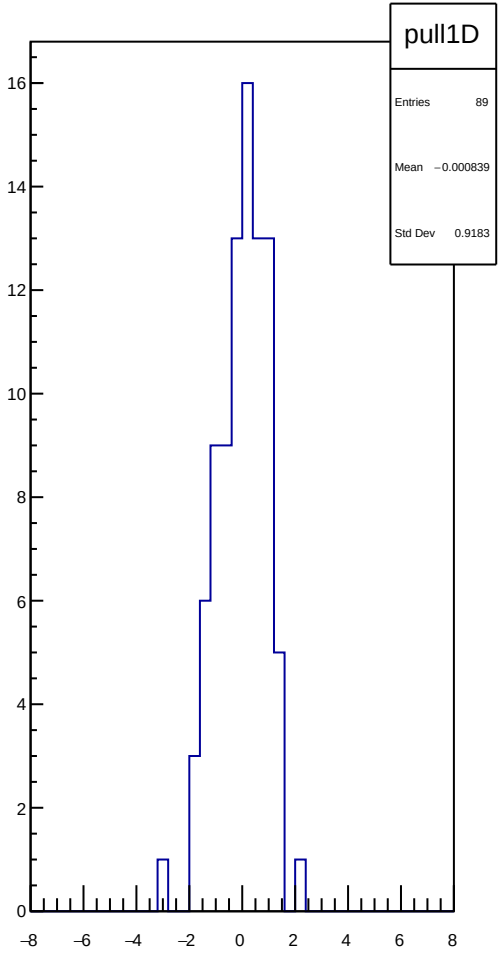

reg_asym_ds_dd_rms vs run
χ² / ndf 195.9 / 88
p0 85.9 ± 0.06556
89
88
87
86
85
84
83

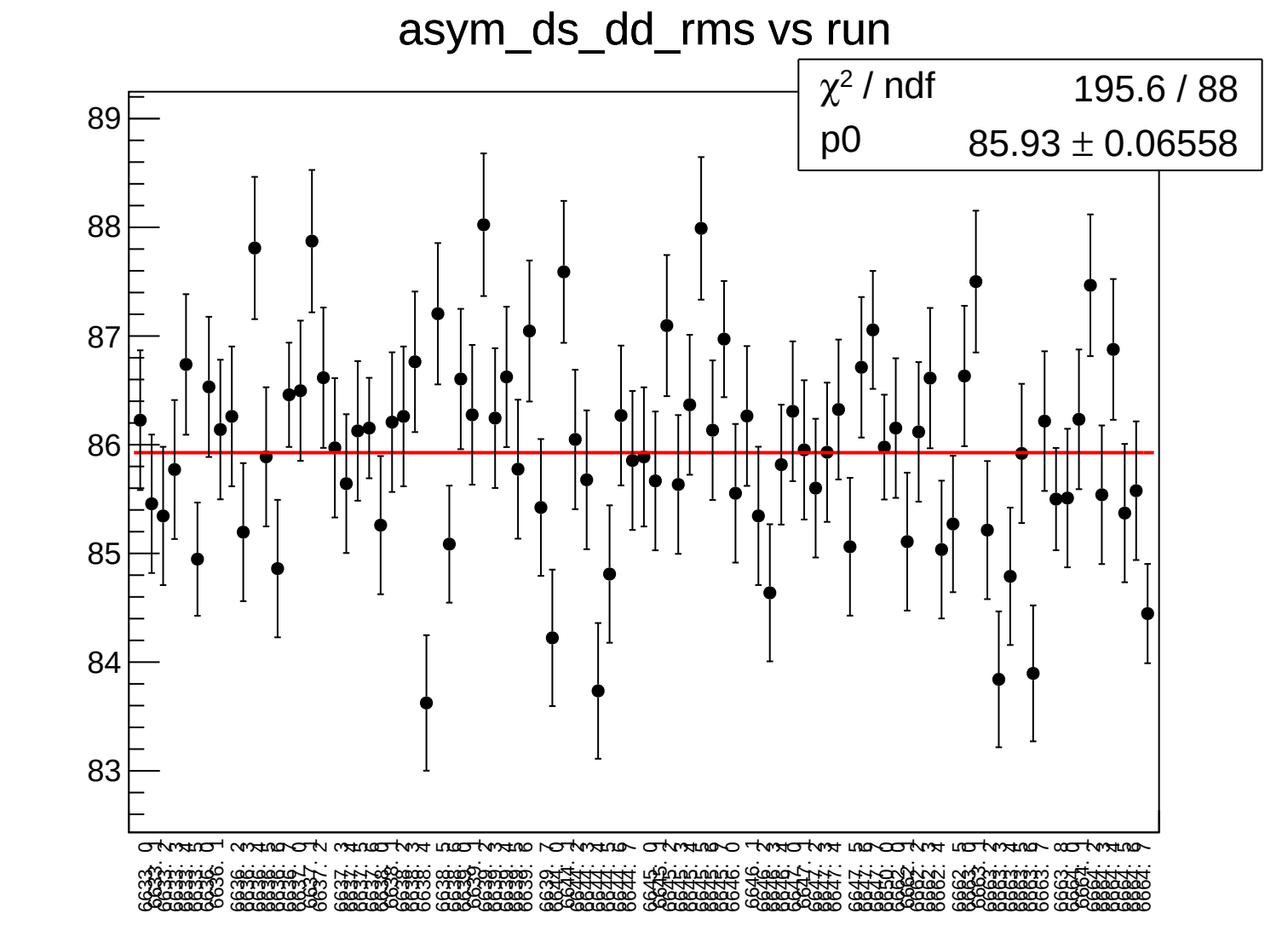

asym_ds_dd_correction_mean vs run
χ² / ndf 65.4 / 88
p0 0.5097 ± 1.538
pull
Entries 89
Mean 19.05
Std Dev 26

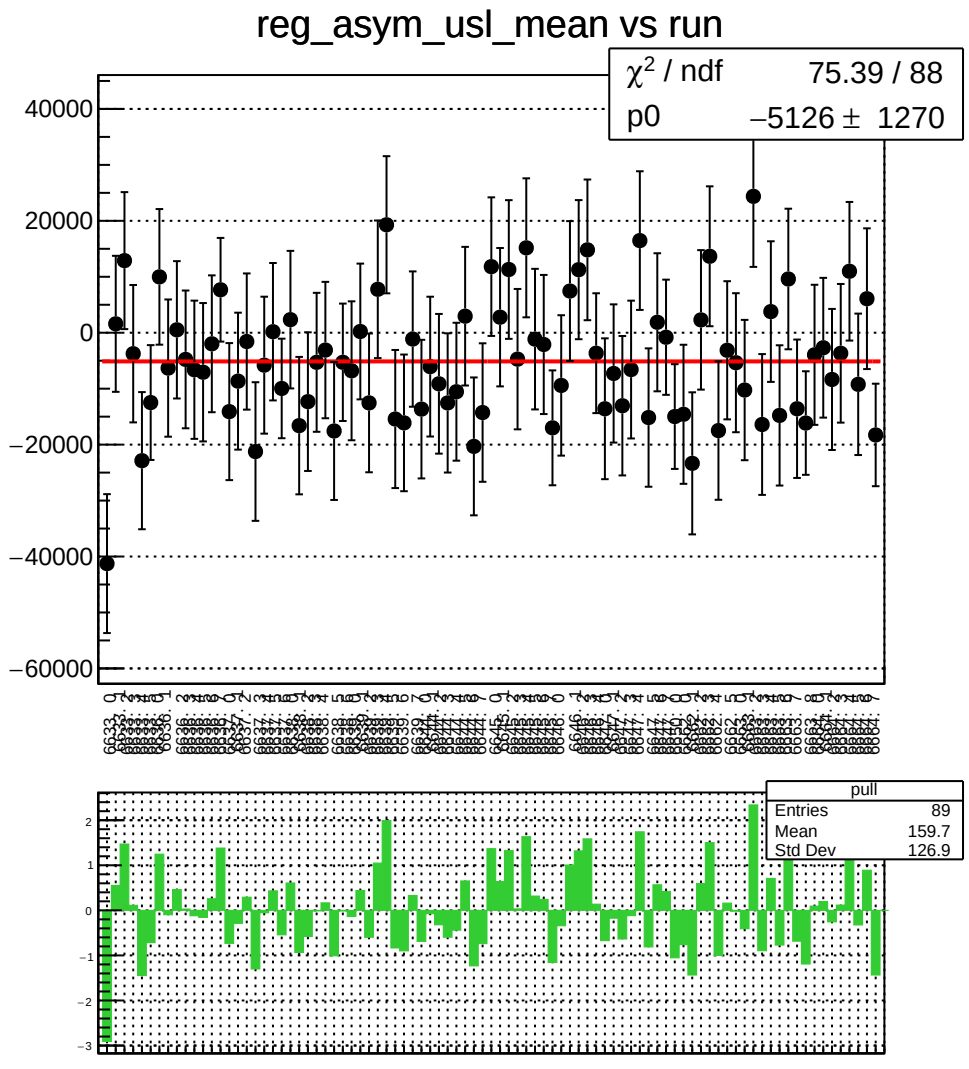

pull1D
Entries 89
Mean −0.0493
Std Dev 0.8558

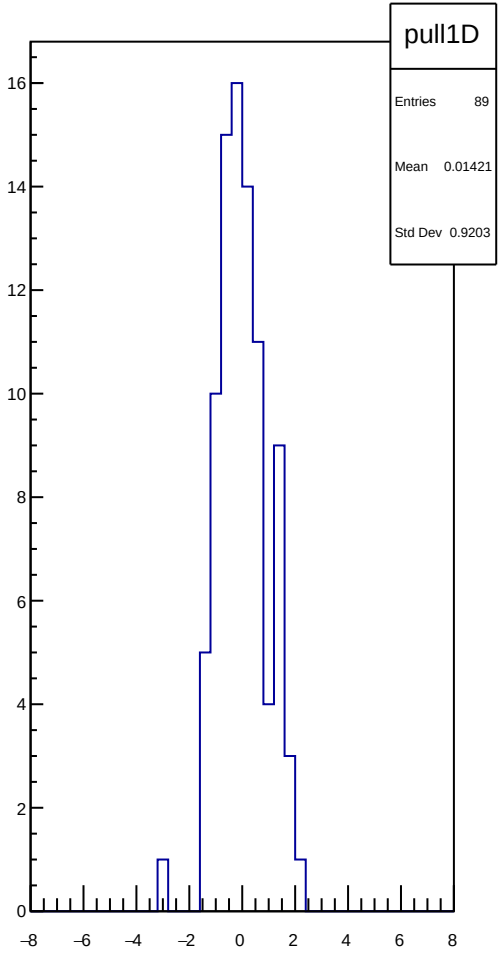

asym_ds_dd_correction_rms vs run
χ^2 / ndf 4.021e+05 / 88
p0 1.247 ± 0.001088
4
3.5
3
2.5
2
1.5
1
0.5

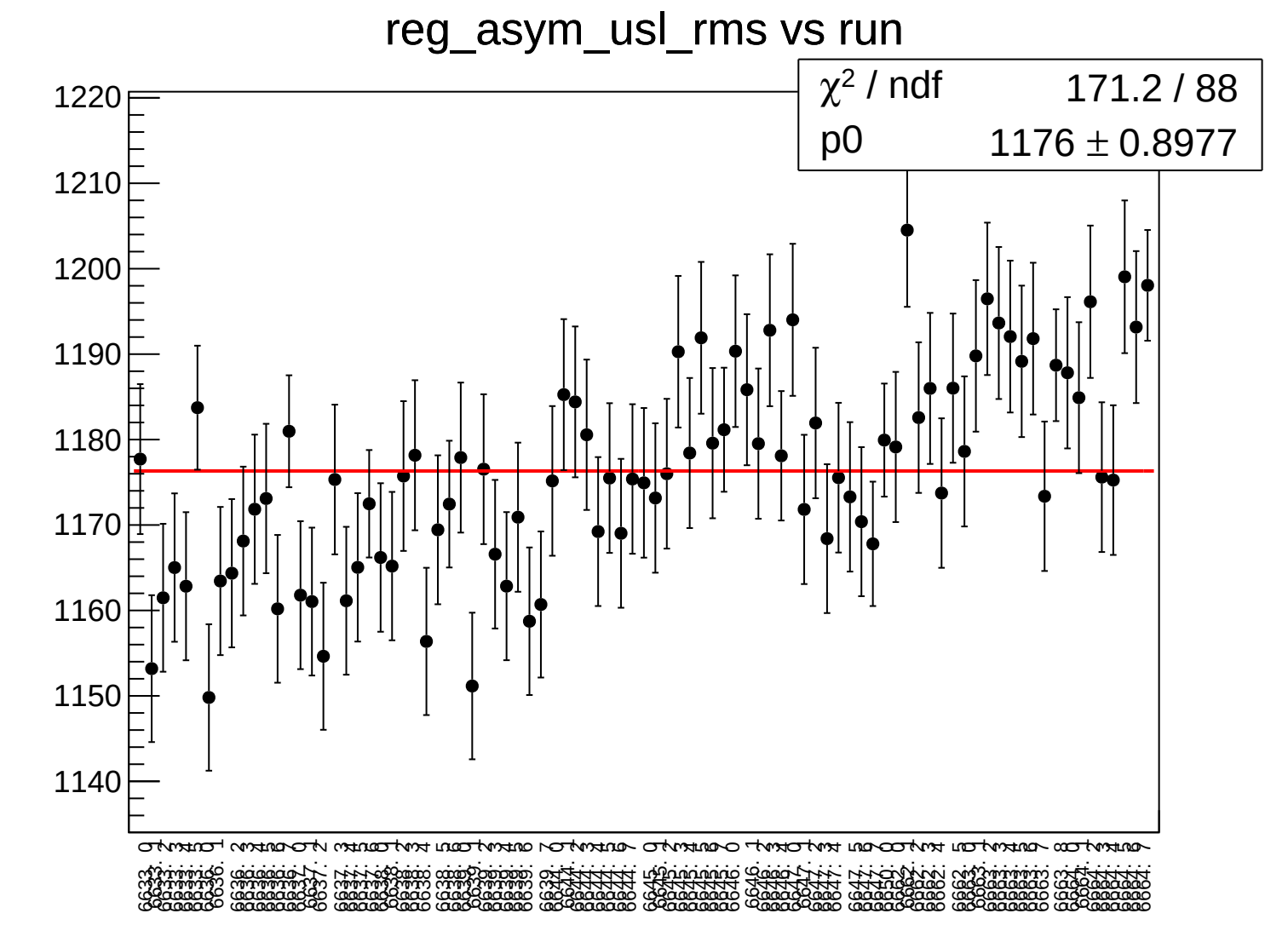

asym_ds_dd_mean vs run
χ² / ndf 75.05 / 88
p0 −74.07 ± 92.74
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 89
Mean 1941
Std Dev 1896
2
1
0
−1
−2
−3

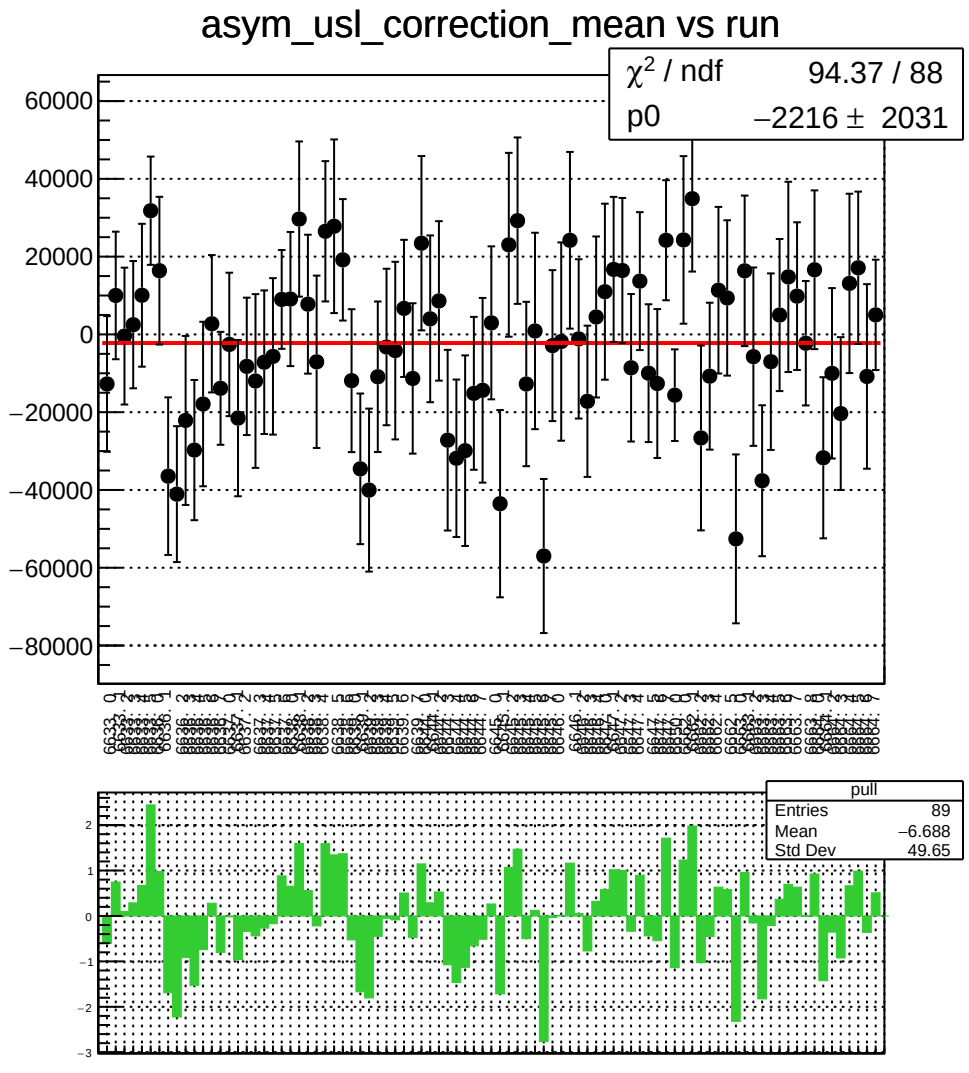

pull1D
Entries 89
Mean −0.000839
Std Dev 0.9183
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

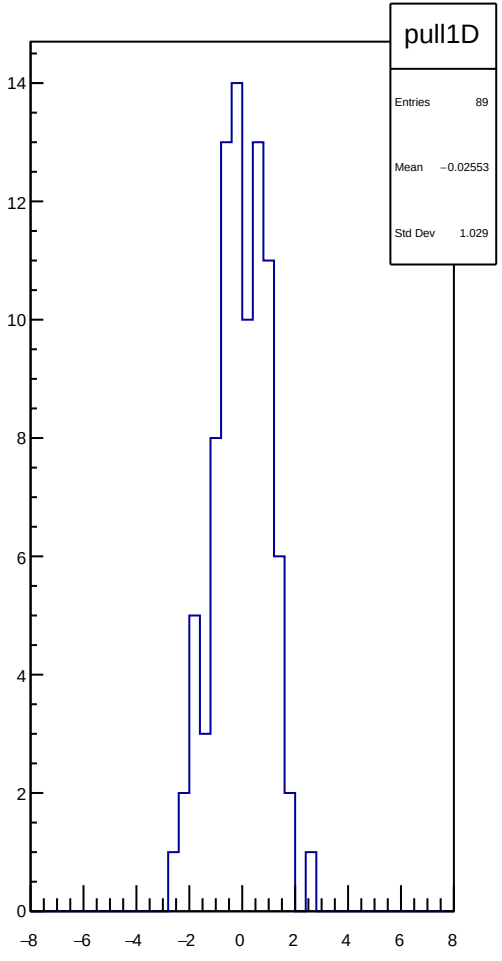

asym_ds_dd_rms vs run
χ^2 / ndf 195.6 / 88
p0 85.93 ± 0.06558
89
88
87
86
85
84
83

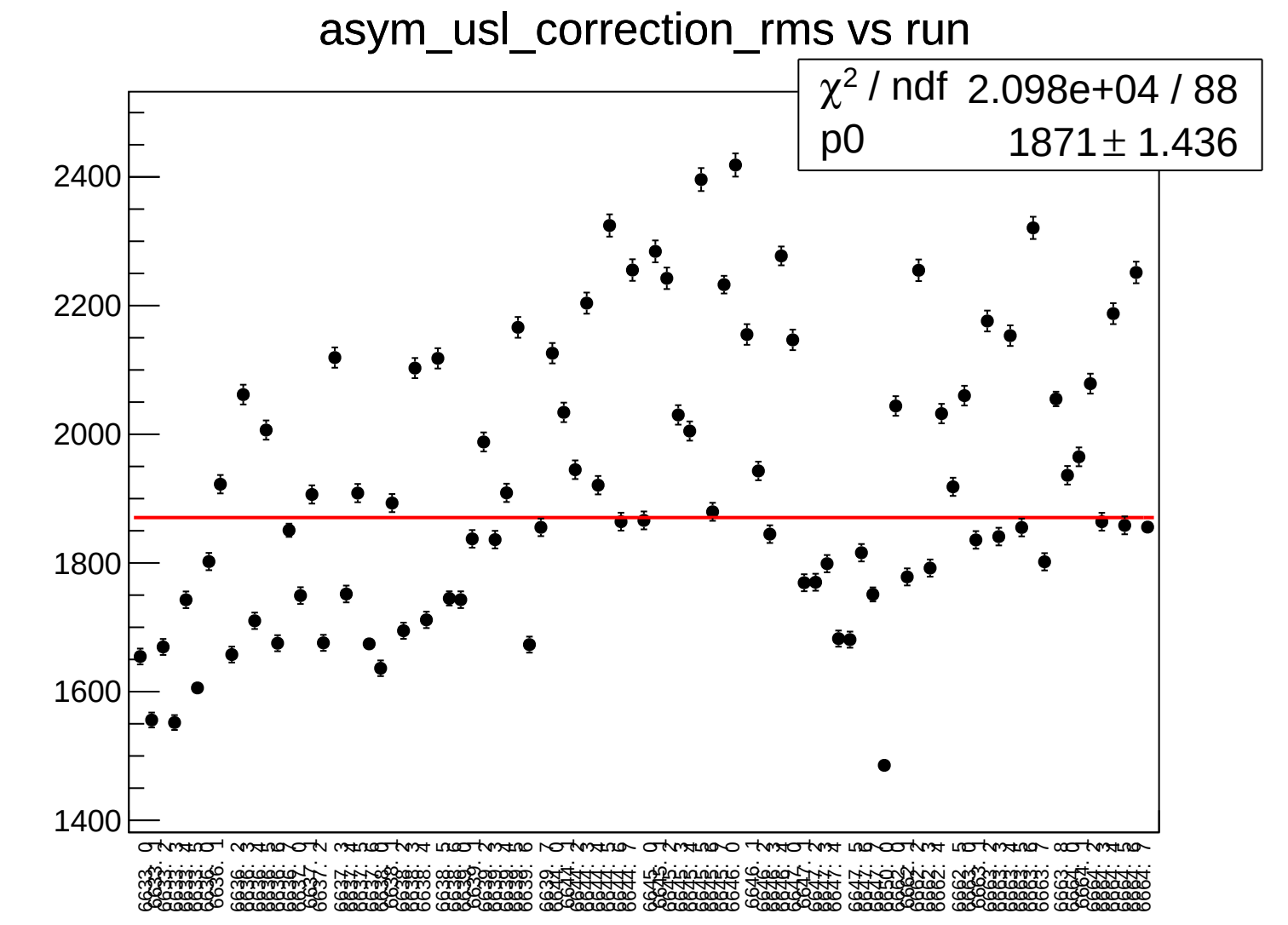

reg_asym_usl_mean vs run
χ² / ndf 75.39 / 88
p0 −5126 ± 1270
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 159.7
Std Dev 126.9
2
1
0
−1
−2
−3

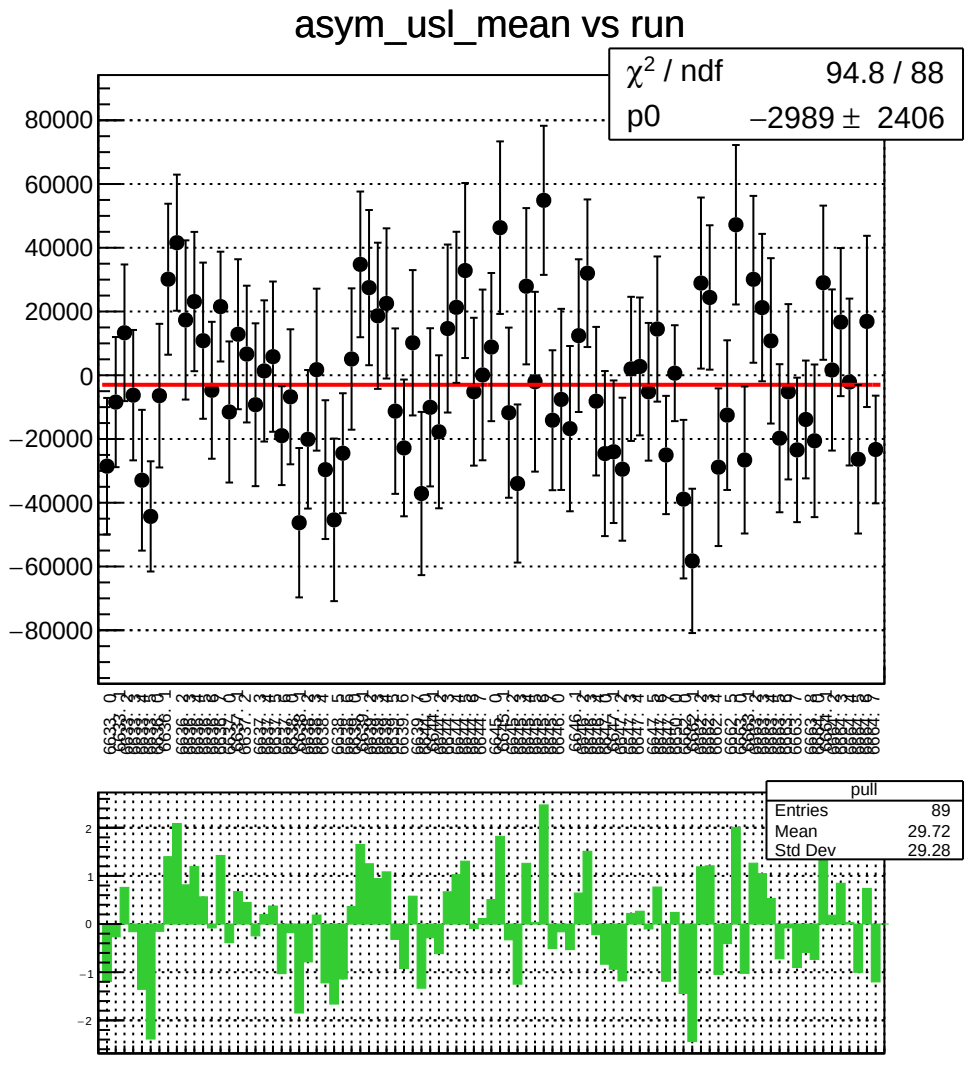

pull1D
Entries 89
Mean 0.01421
Std Dev 0.9203
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

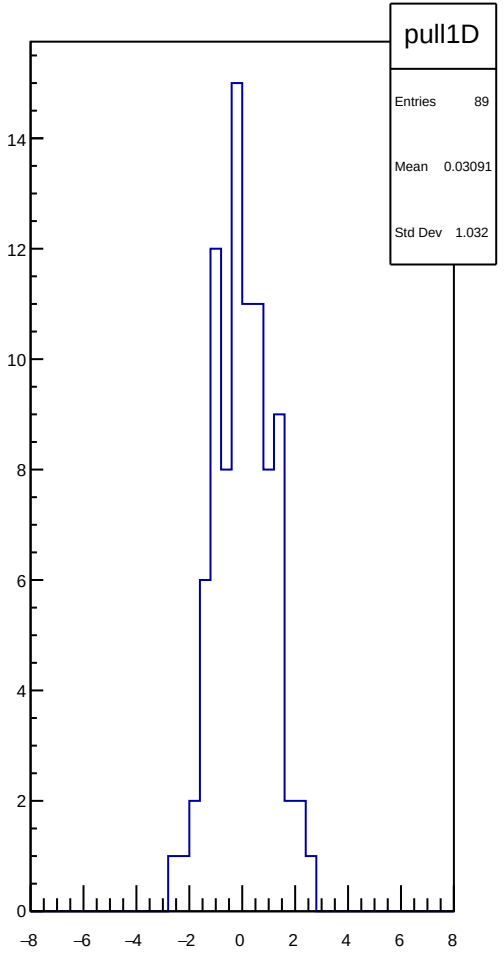

reg_asym_usl_rms vs run
χ² / ndf 171.2 / 88
p0 1176 ± 0.8977
1220
1210
1200
1190
1180
1170
1160
1150
1140

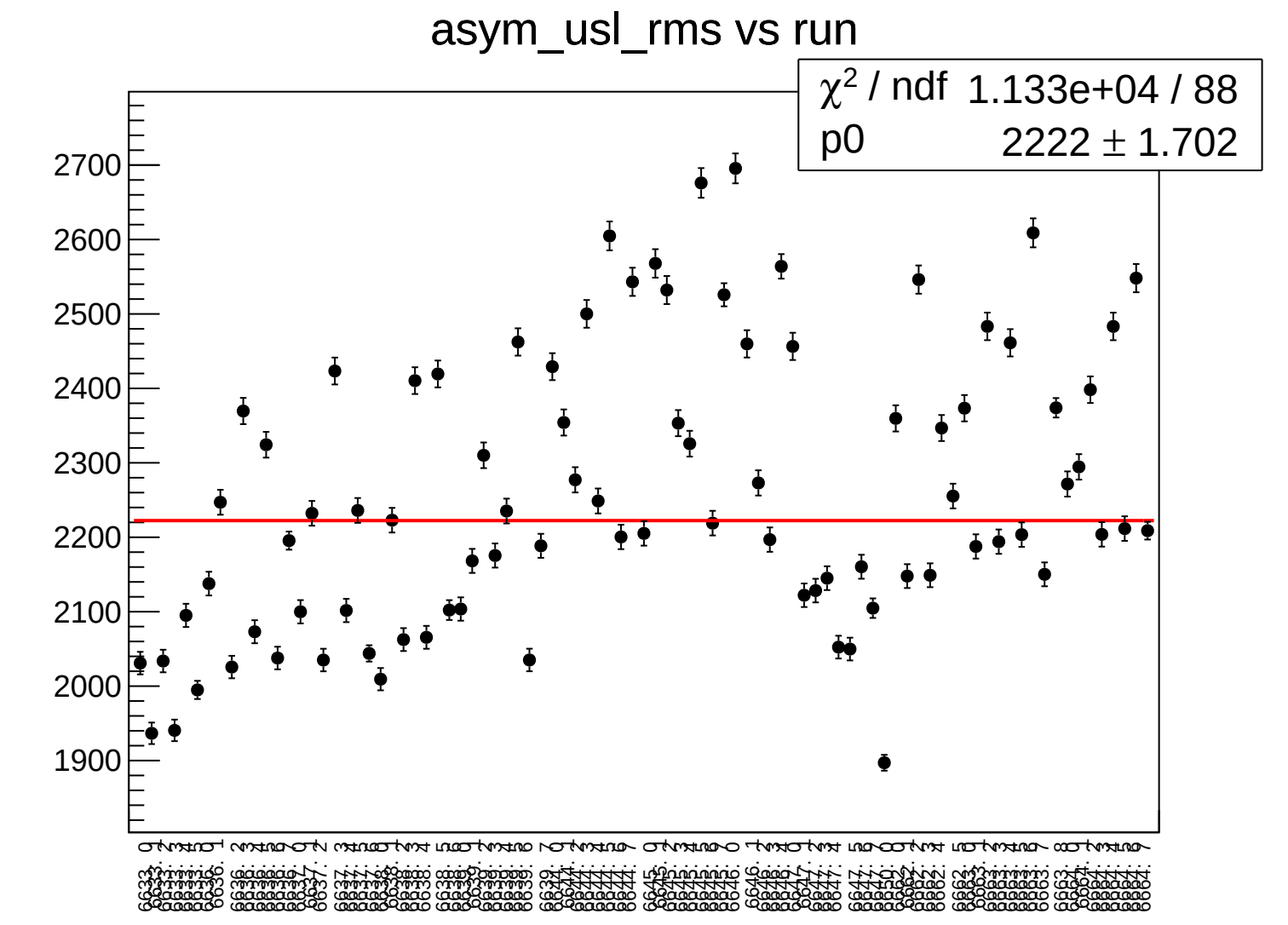

asym_usl_correction_mean vs run
χ² / ndf 94.37 / 88
p0 −2216 ± 2031
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean −6.688
Std Dev 49.65
2
1
0
−1
−2
−3

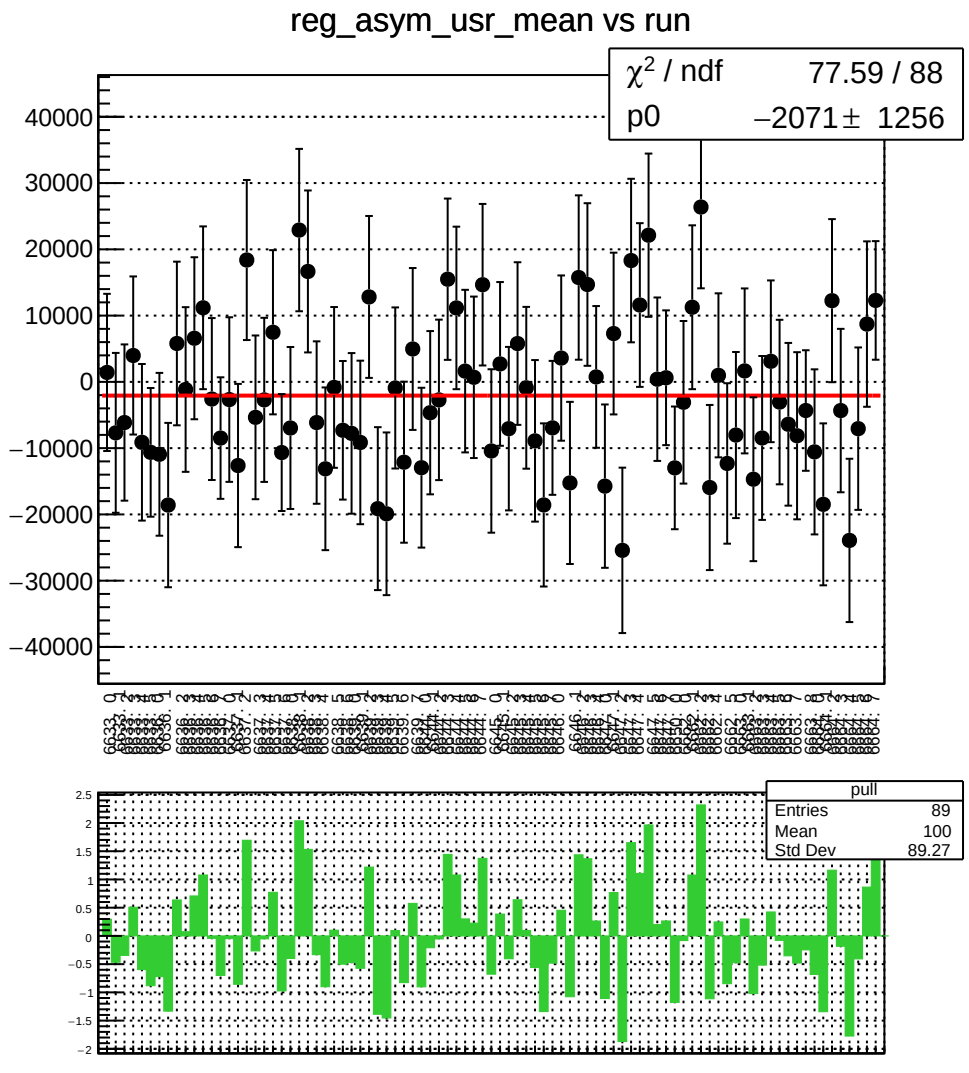

pull1D
Entries 89
Mean −0.02553
Std Dev 1.029
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

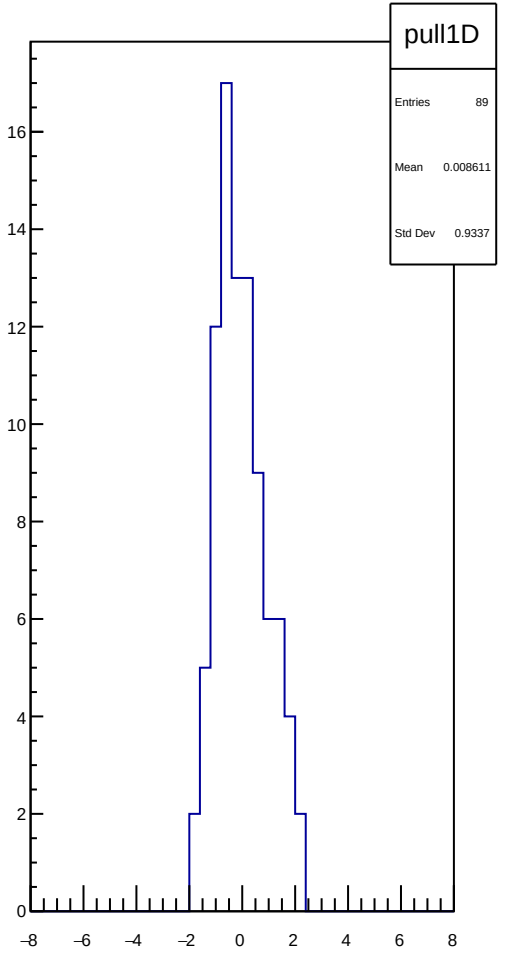

asym_usl_correction_rms vs run
χ² / ndf 2.098e+04 / 88
p0 1871 ± 1.436
2400
2200
2000
1800
1600
1400

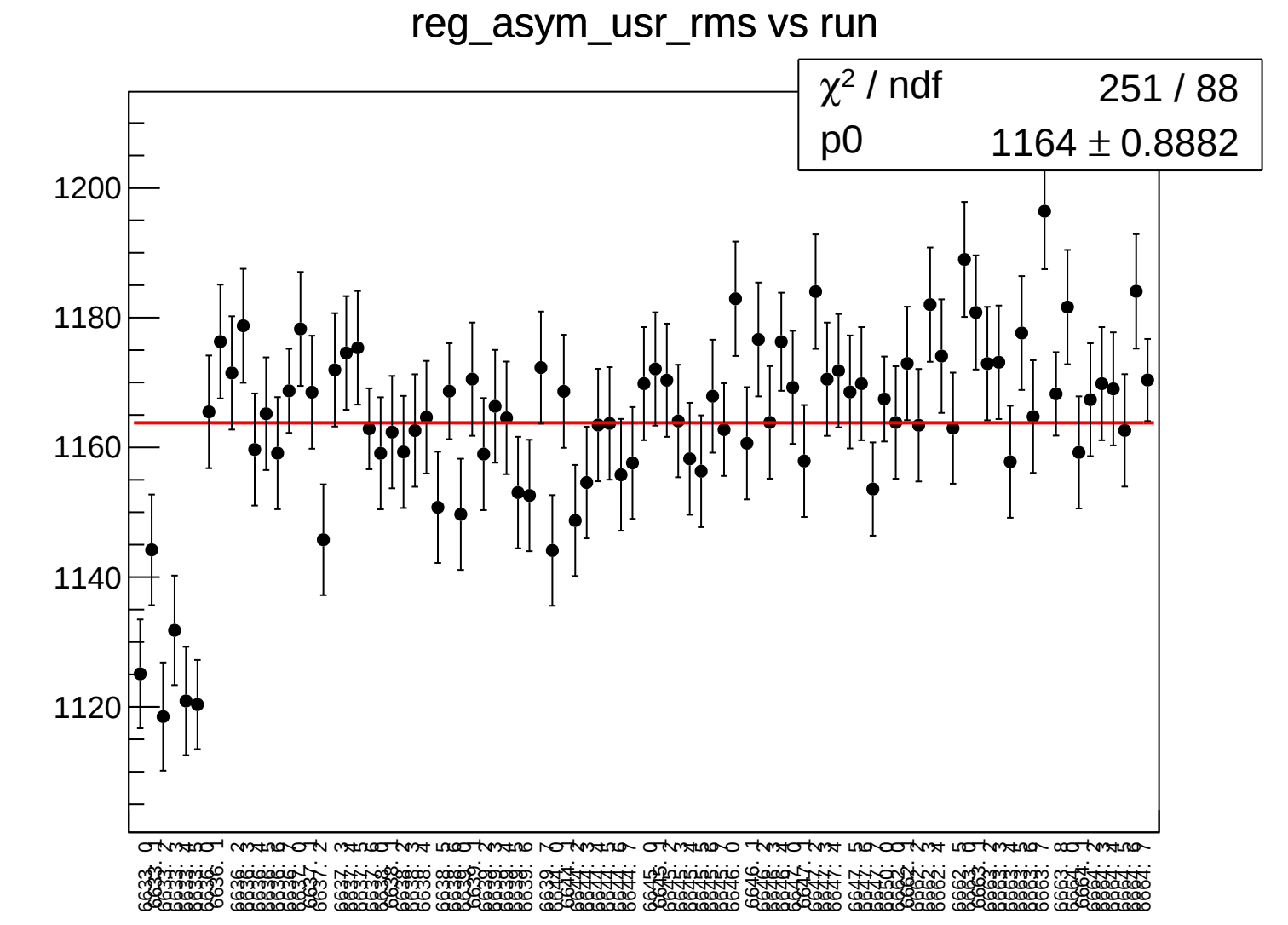

asym_usl_mean vs run
χ^2 / ndf 94.8 / 88
p0 −2989 ± 2406
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean 29.72
Std Dev 29.28
2
1
0
−1
−2

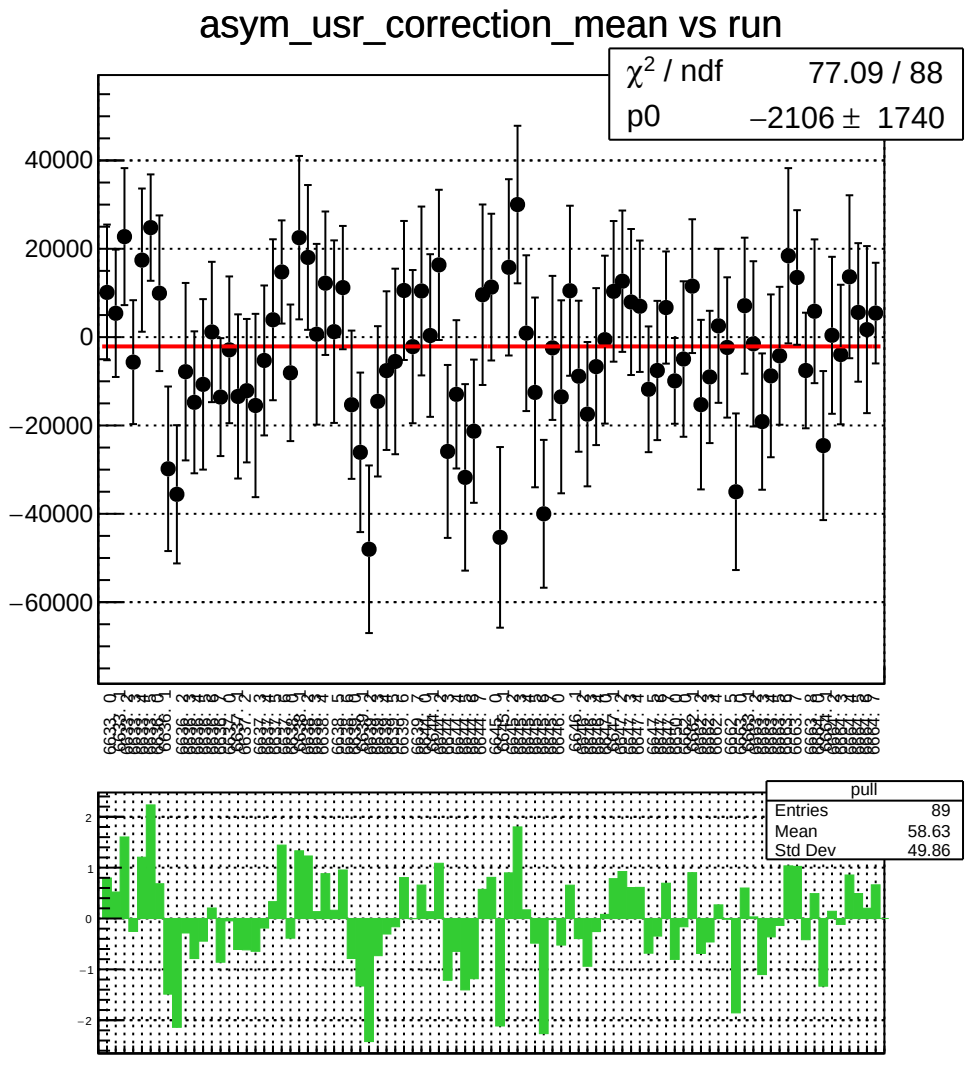

pull1D
Entries 89
Mean 0.03091
Std Dev 1.032
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

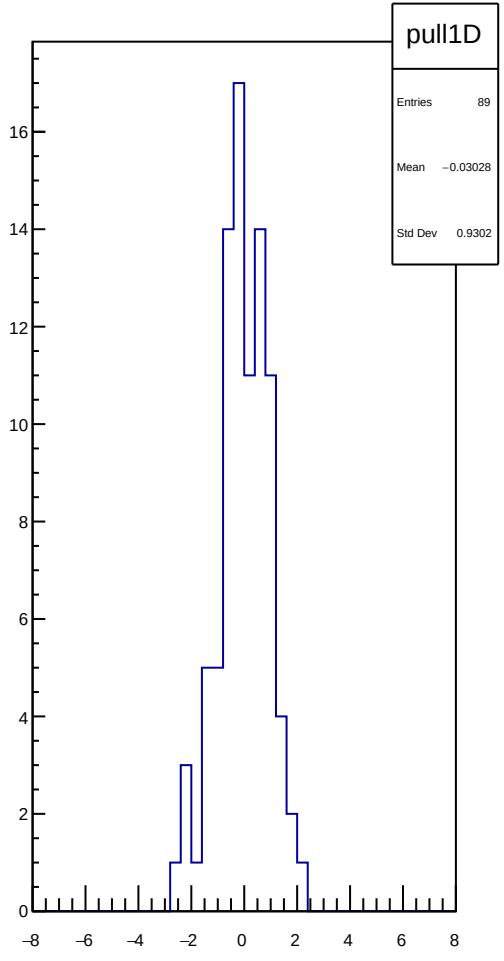

asym_usl_rms vs run
χ² / ndf 1.133e+04 / 88
p0 2222 ± 1.702
2700
2600
2500
2400
2300
2200
2100
2000
1900

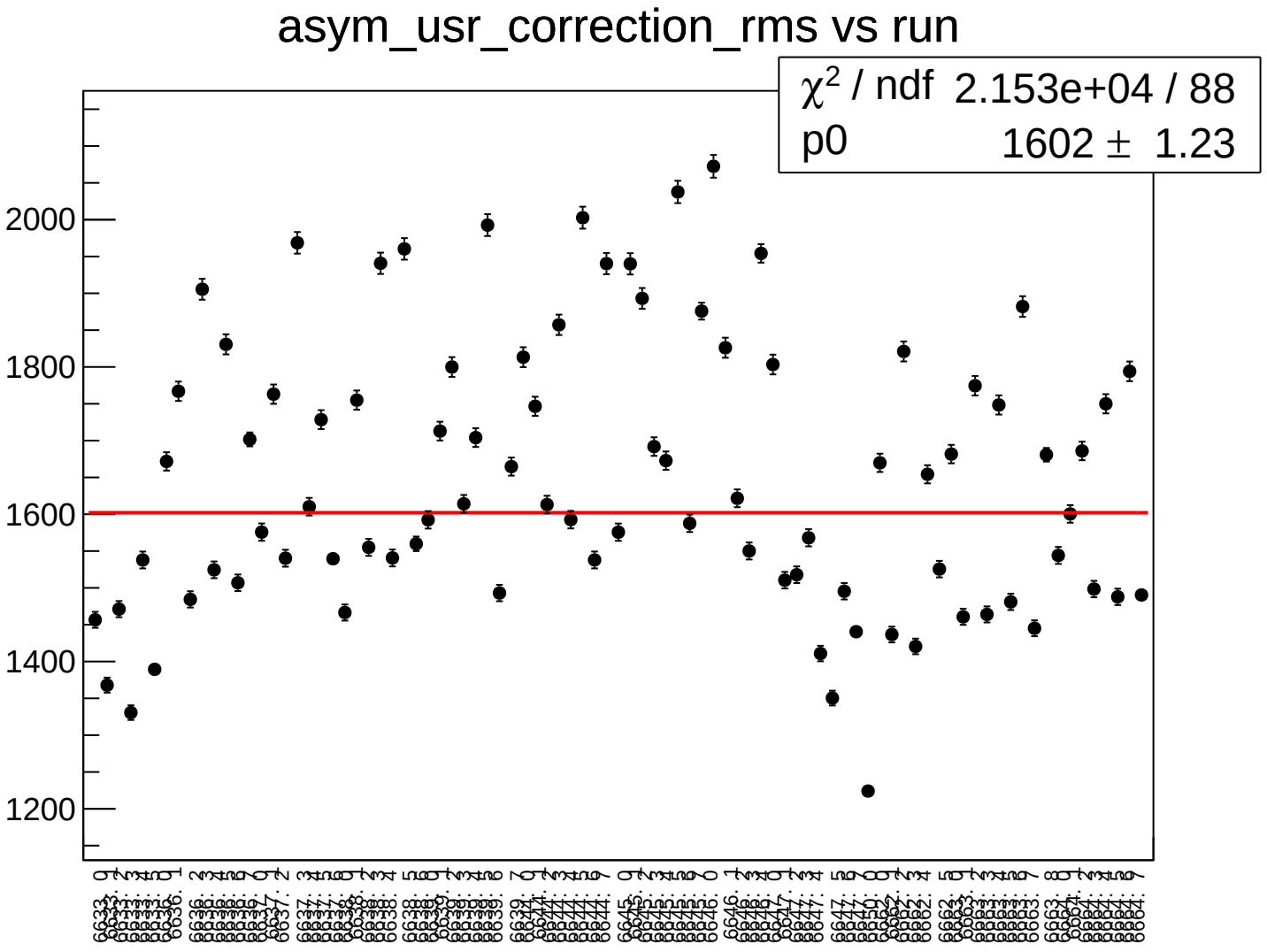

reg_asym_usr_mean vs run
χ² / ndf 77.59 / 88
p0 −2071 ± 1256
pull
Entries 89
Mean 100
Std Dev 89.27

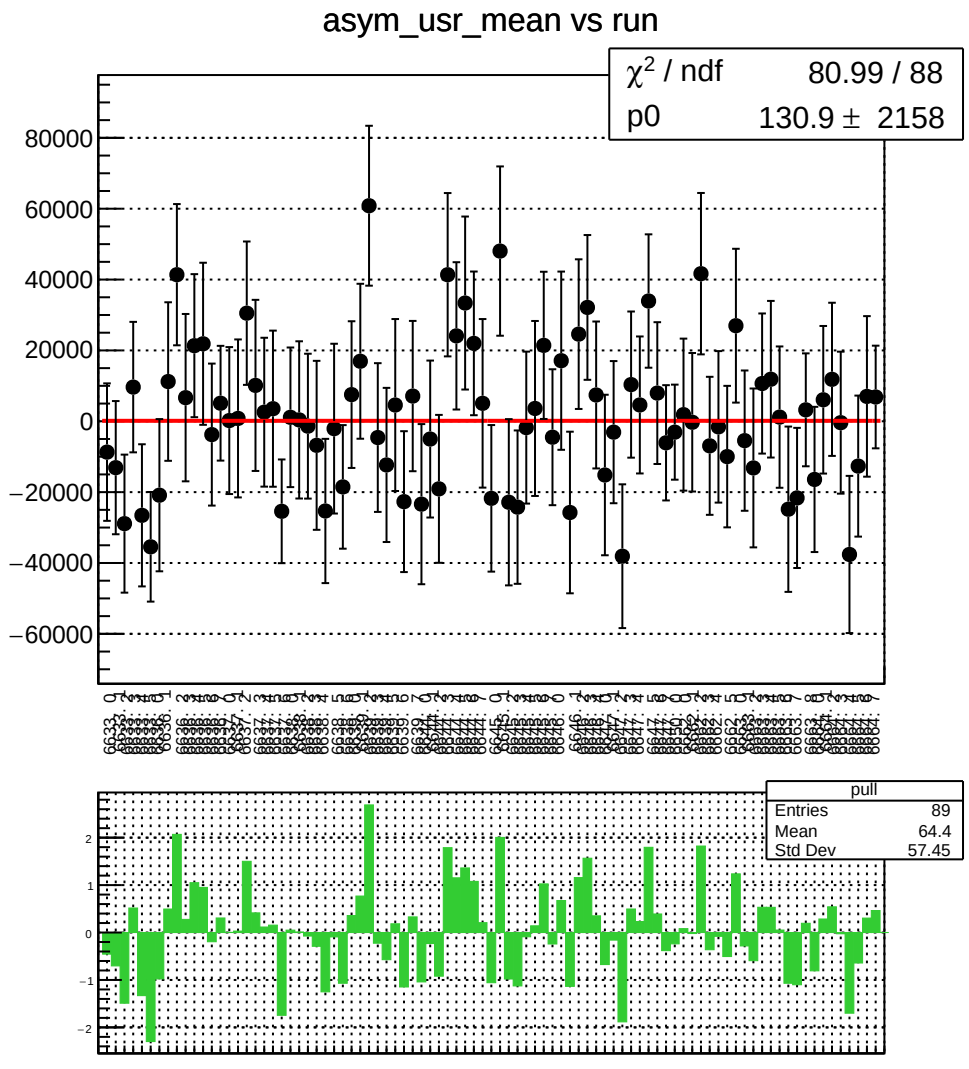

pull1D
Entries 89
Mean 0.008611
Std Dev 0.9337

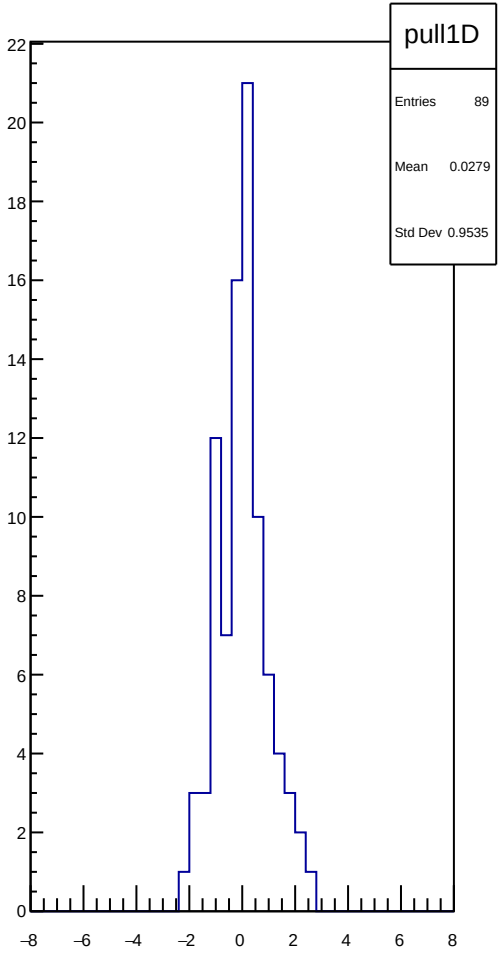

reg_asym_usr_rms vs run
χ² / ndf 251 / 88
p0 1164 ± 0.8882
1200
1180
1160
1140
1120

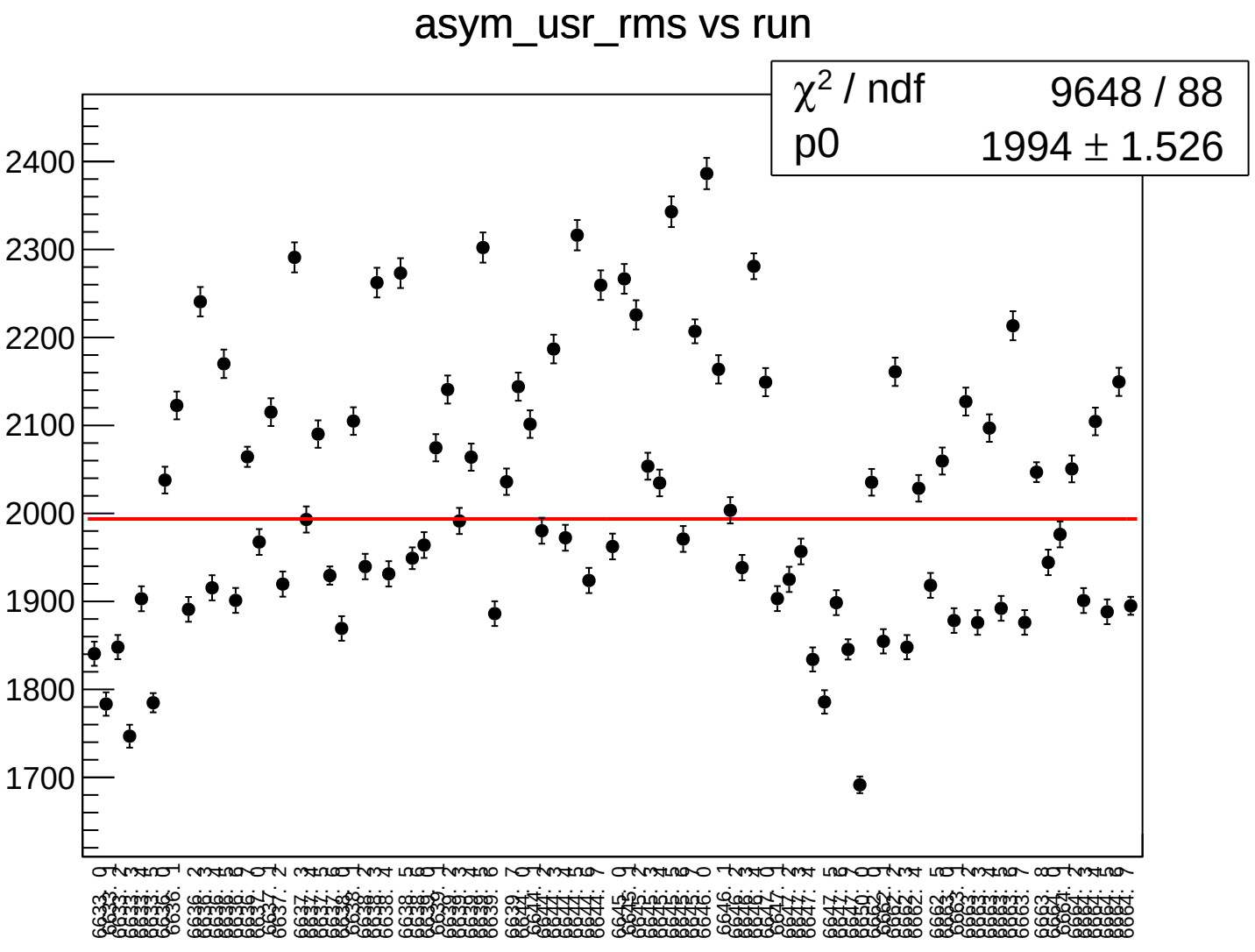

asym_usr_correction_mean vs run
χ² / ndf 77.09 / 88
p0 −2106 ± 1740
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 58.63
Std Dev 49.86
2
1
0
−1
−2

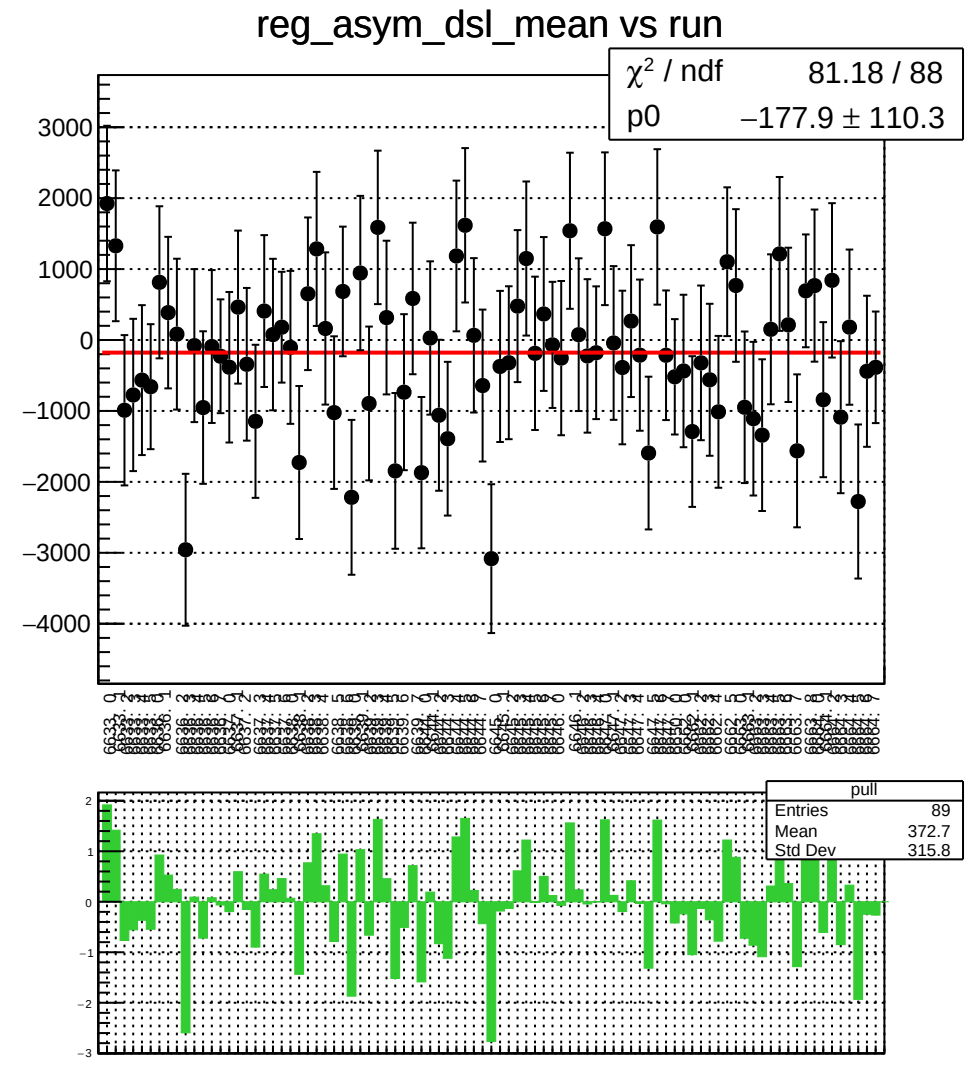

pull1D
Entries 89
Mean −0.03028
Std Dev 0.9302
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

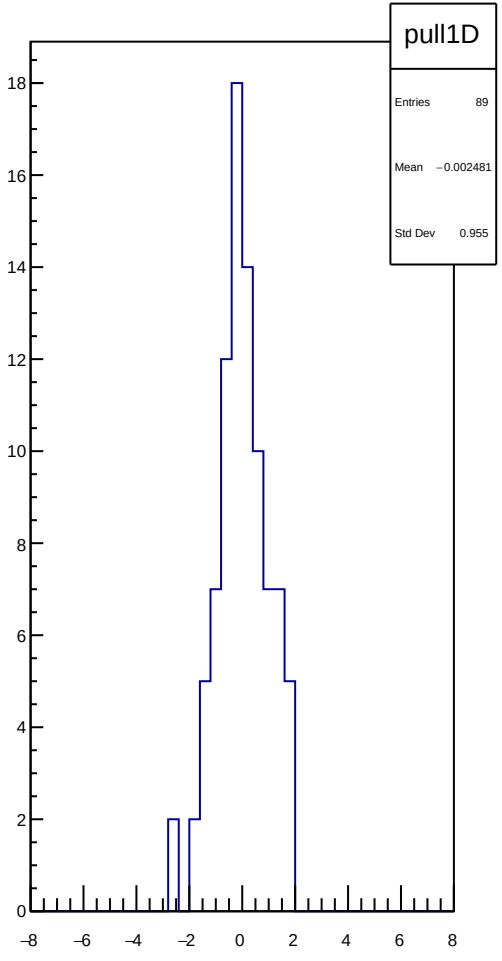

asym_usr_correction_rms vs run
χ² / ndf 2.153e+04 / 88
p0 1602 ± 1.23
2000
1800
1600
1400
1200

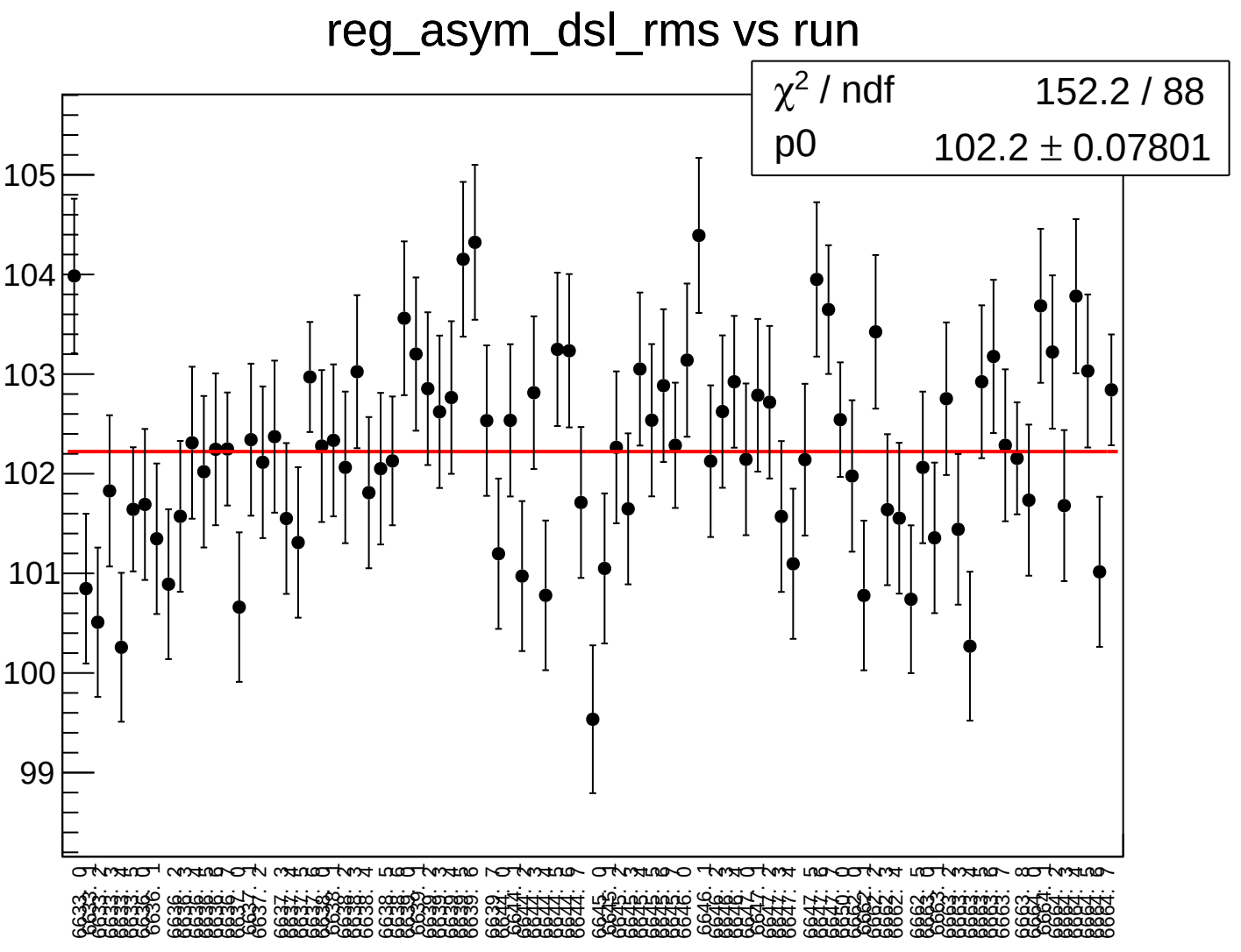

asym_usr_mean vs run
χ² / ndf 80.99 / 88
p0 130.9 ± 2158
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 64.4
Std Dev 57.45
2
1
0
−1
−2

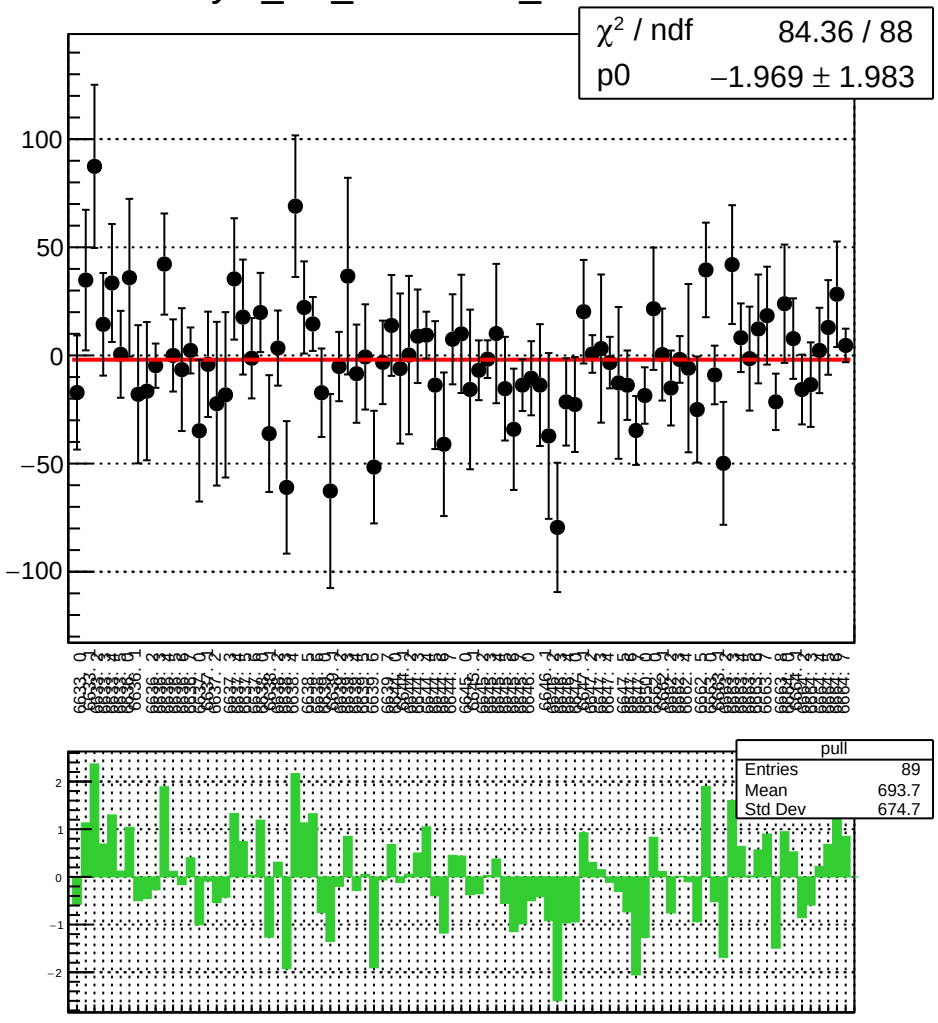

pull1D
Entries 89
Mean 0.0279
Std Dev 0.9535
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

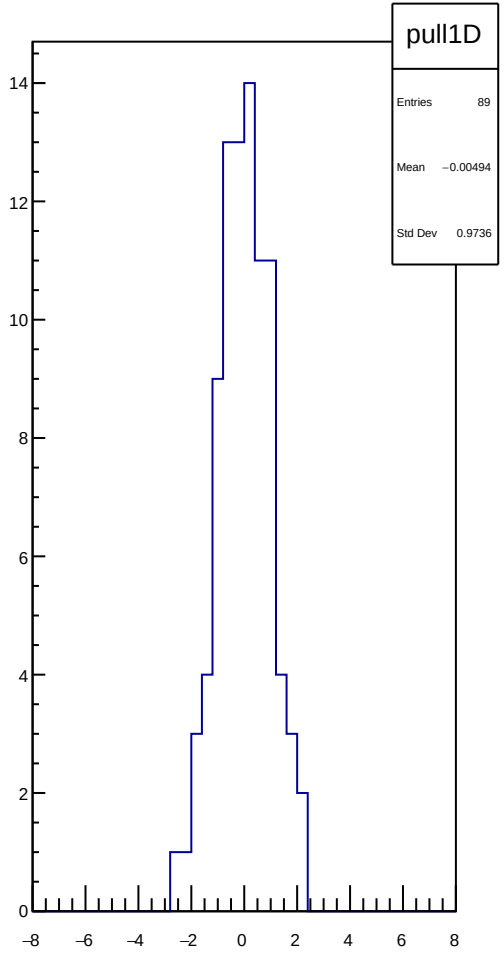

asym_usr_rms vs run
χ^2 / ndf 9648 / 88
p0 1994 ± 1.526
2400
2300
2200
2100
2000
1900
1800
1700

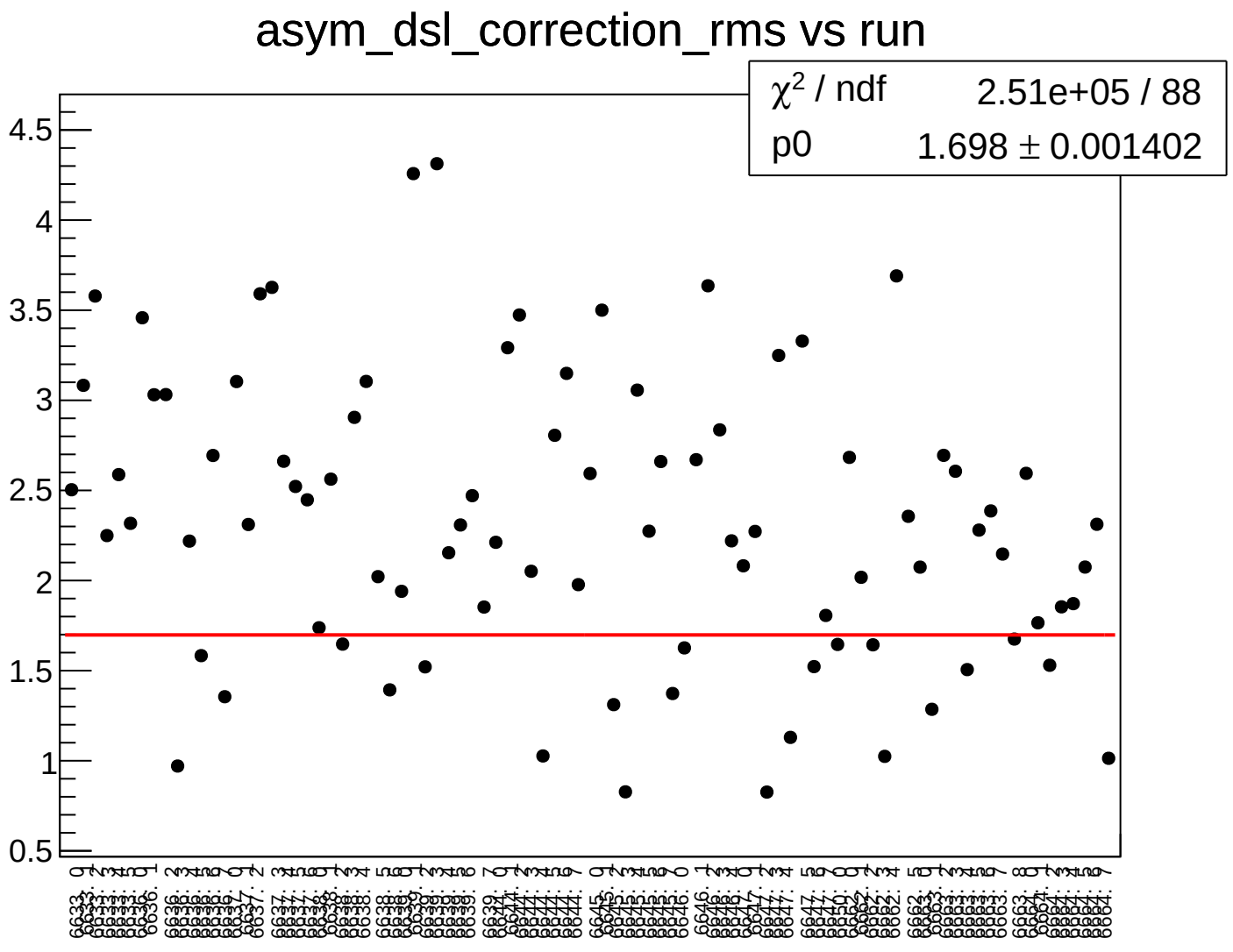

reg_asym_dsl_mean vs run
χ² / ndf 81.18 / 88
p0 −177.9 ± 110.3
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 89
Mean 372.7
Std Dev 315.8
2
1
0
−1
−2
−3

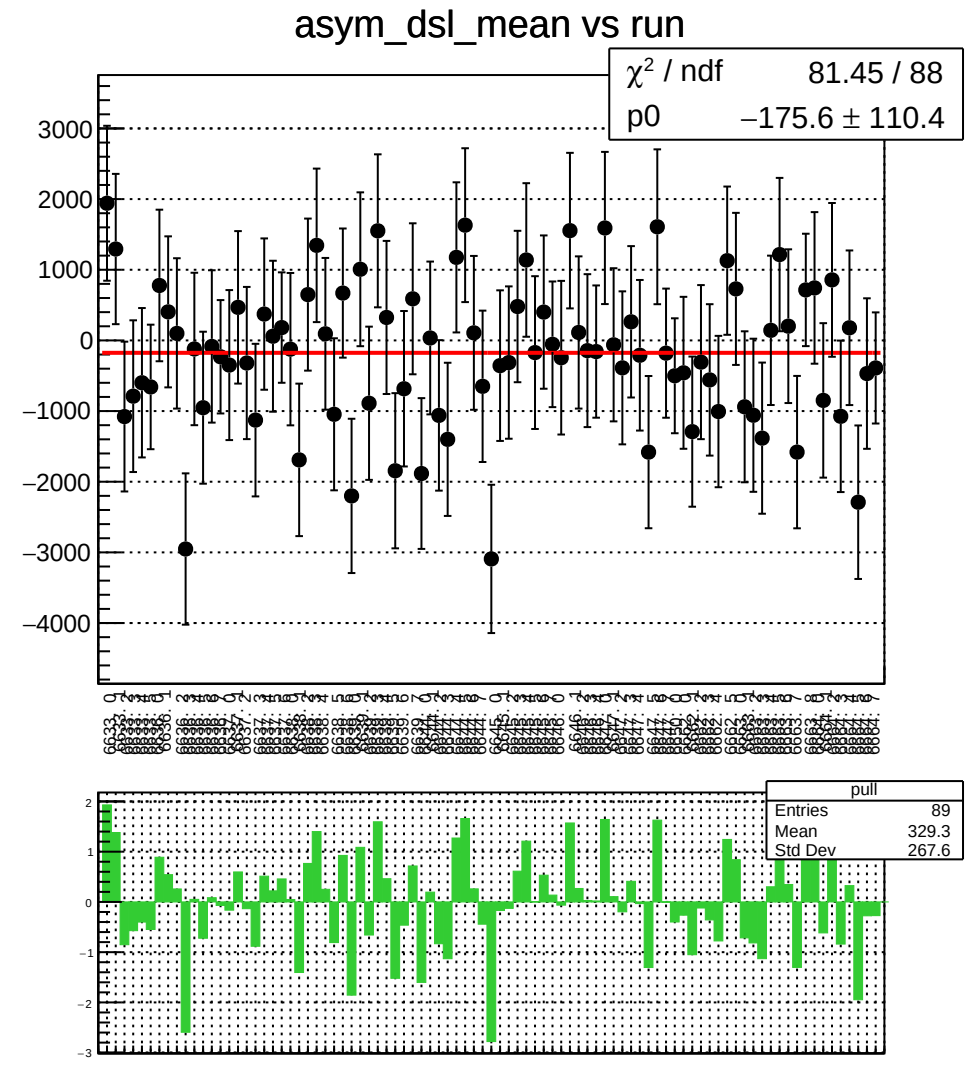

pull1D
Entries 89
Mean −0.002481
Std Dev 0.955
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

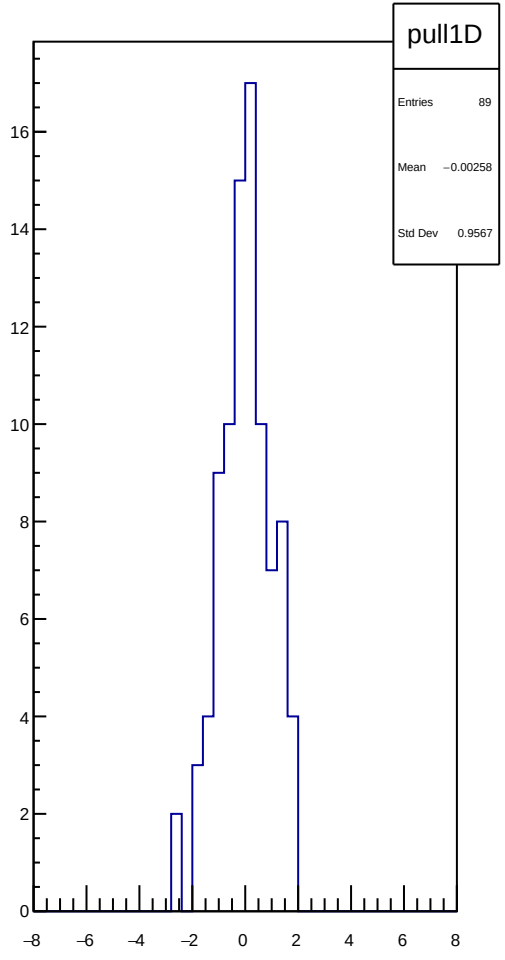

reg_asym_dsl_rms vs run
χ² / ndf 152.2 / 88
p0 102.2 ± 0.07801
105
104
103
102
101
100
99

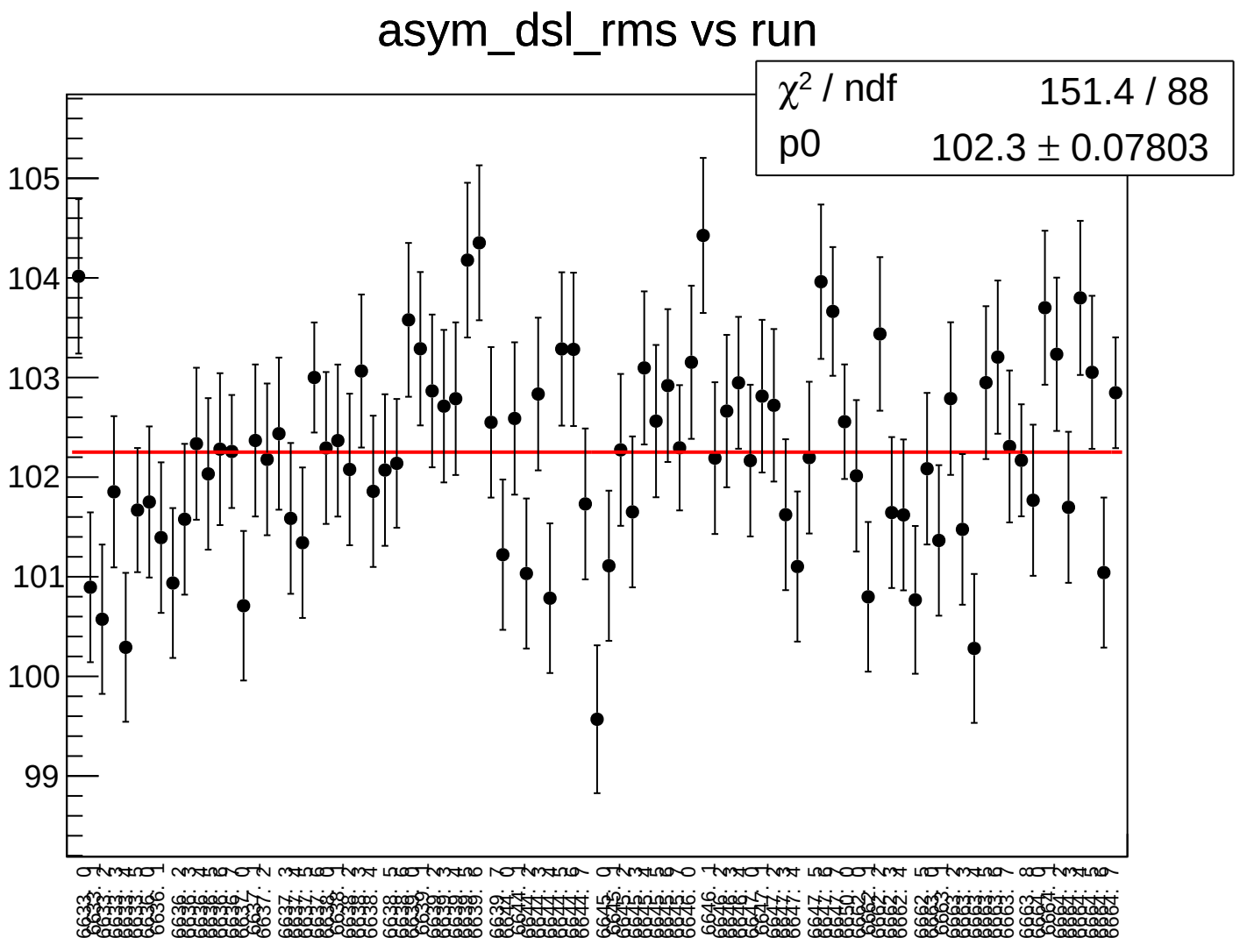

asym_dsl_correction_mean vs run
χ² / ndf 84.36 / 88
p0 −1.969 ± 1.983
100
50
0
−50
−100
pull
Entries 89
Mean 693.7
Std Dev 674.7
2
1
0
−1
−2

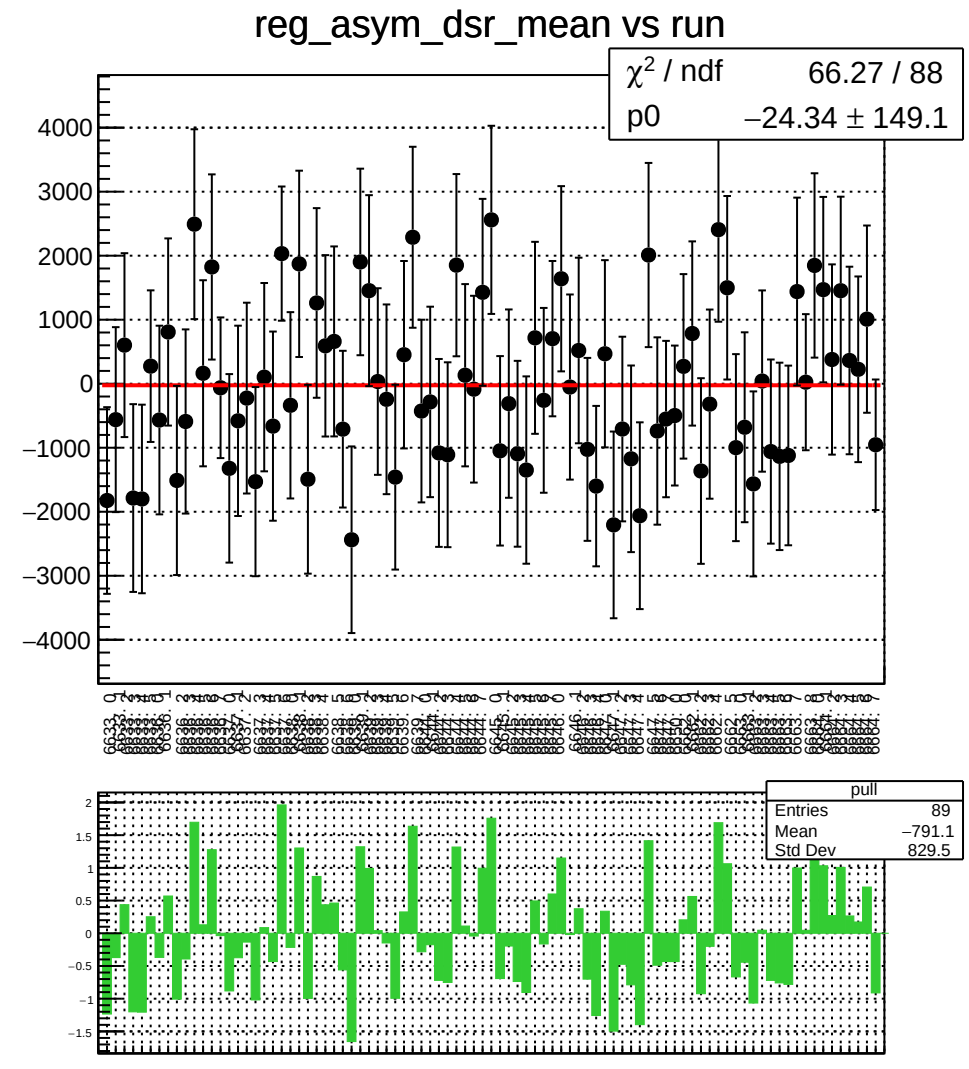

pull1D
Entries 89
Mean −0.00494
Std Dev 0.9736
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

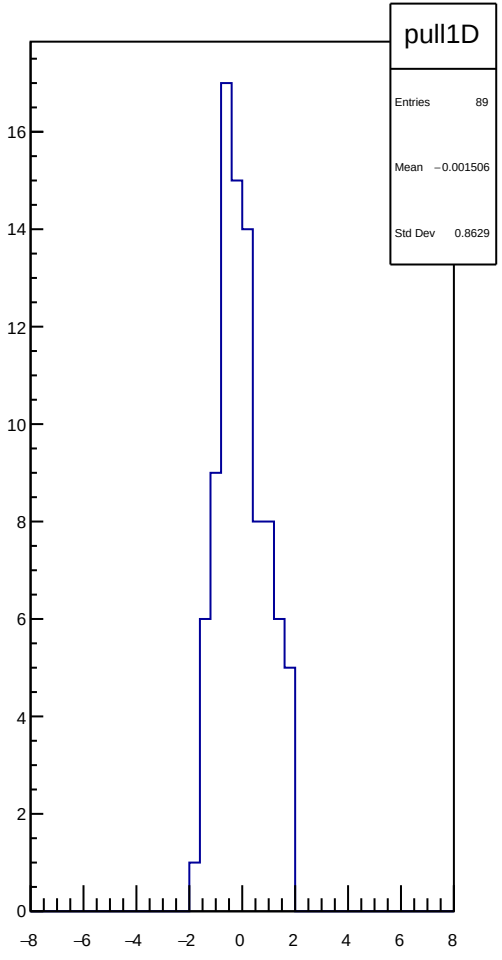

asym_dsl_correction_rms vs run
χ² / ndf 2.51e+05 / 88
p0 1.698 ± 0.001402
4.5
4
3.5
3
2.5
2
1.5
1
0.5

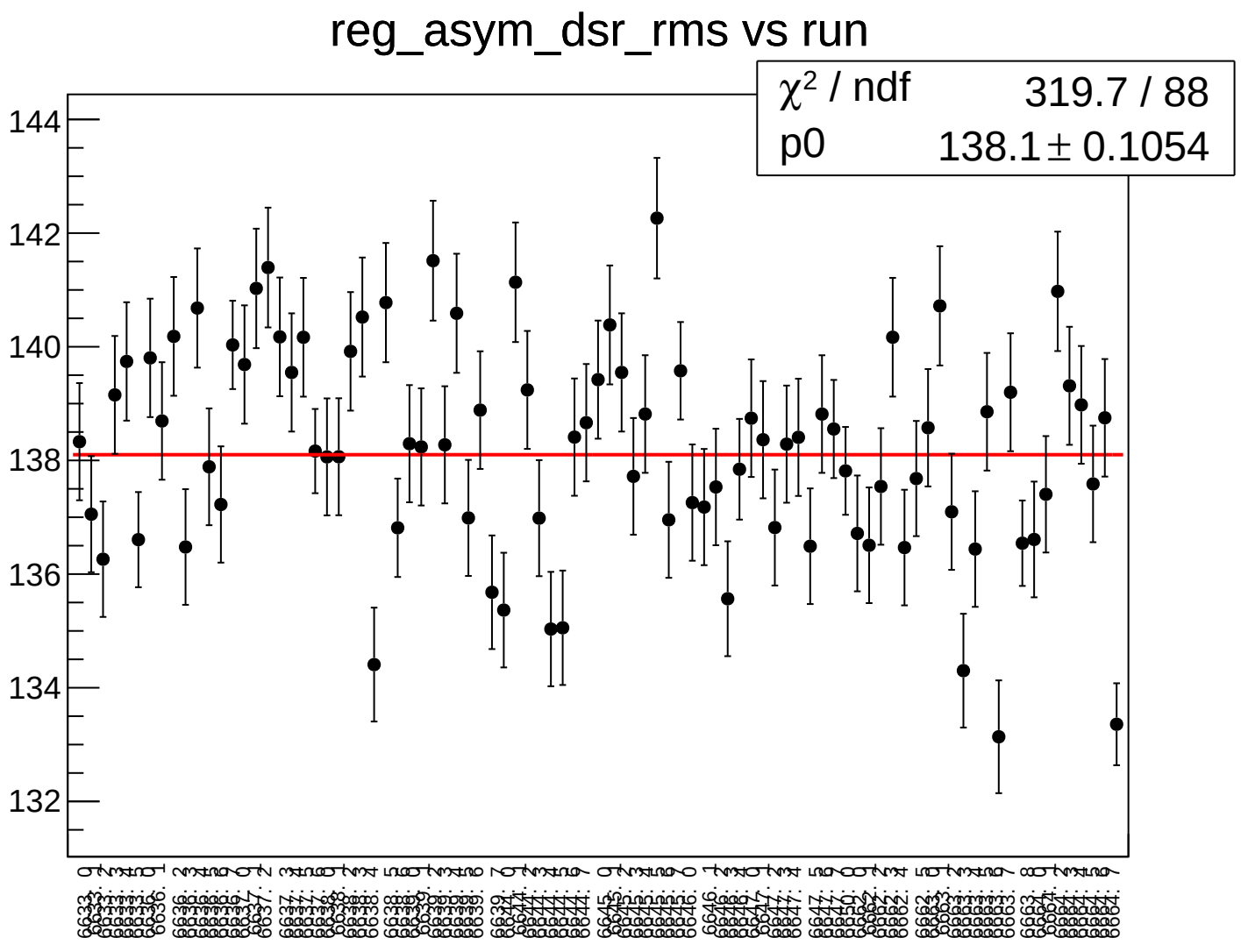

asym_dsl_mean vs run
χ² / ndf 81.45 / 88
p0 −175.6 ± 110.4
pull
Entries 89
Mean 329.3
Std Dev 267.6

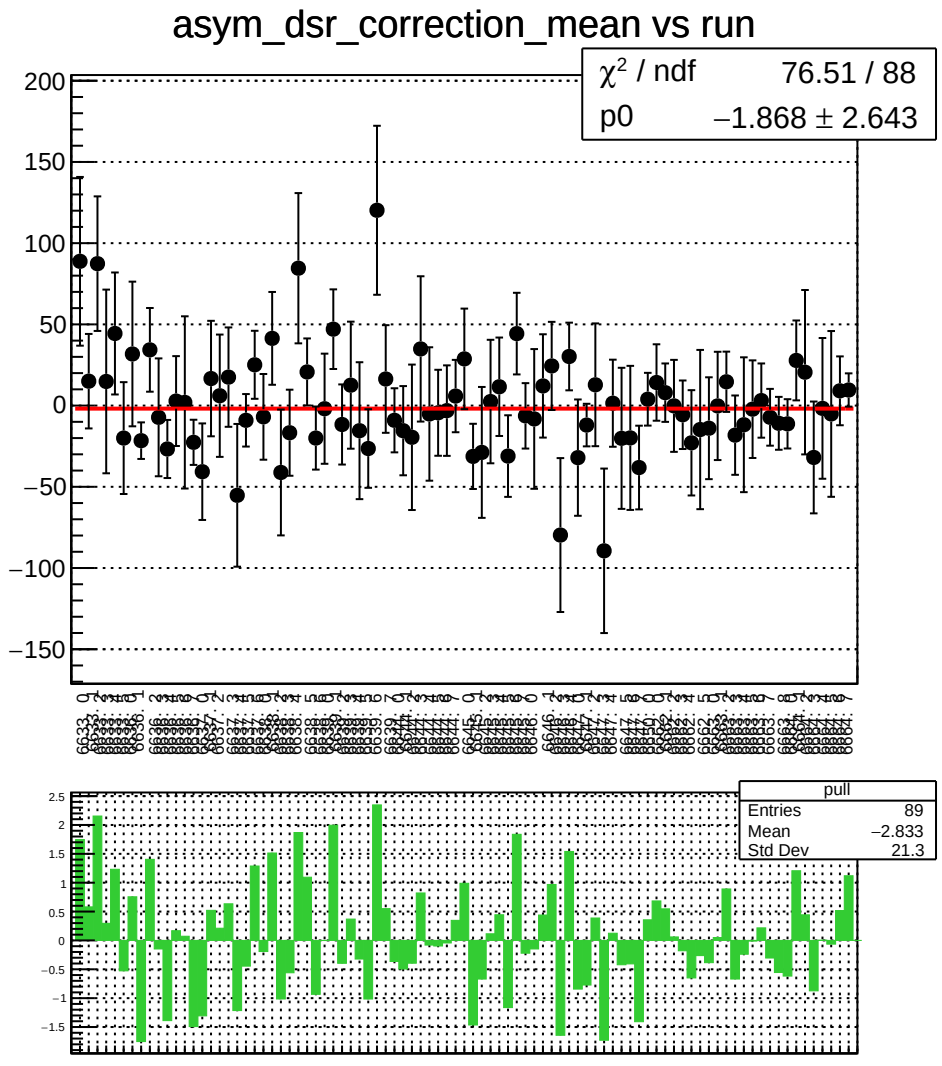

pull1D
Entries 89
Mean −0.00258
Std Dev 0.9567

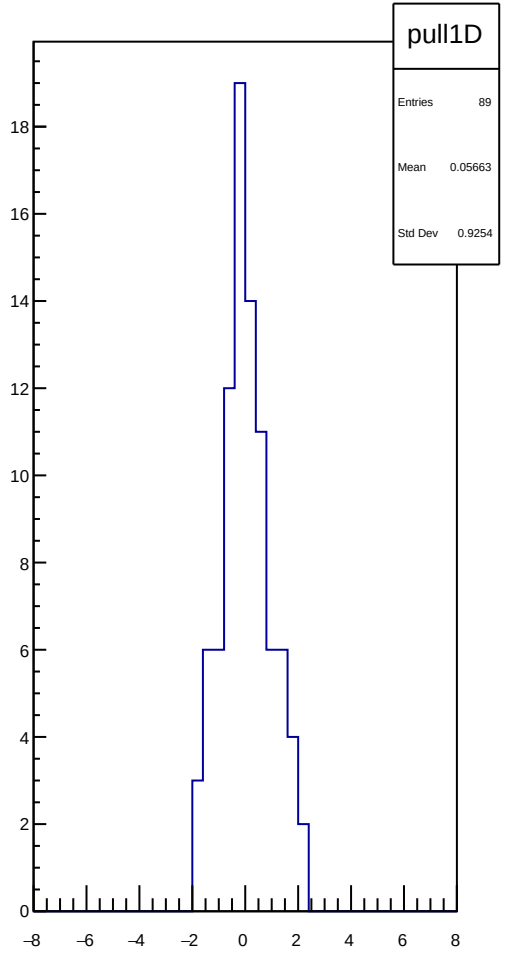

asym_dsl_rms vs run
χ² / ndf 151.4 / 88
p0 102.3 ± 0.07803
105
104
103
102
101
100
99

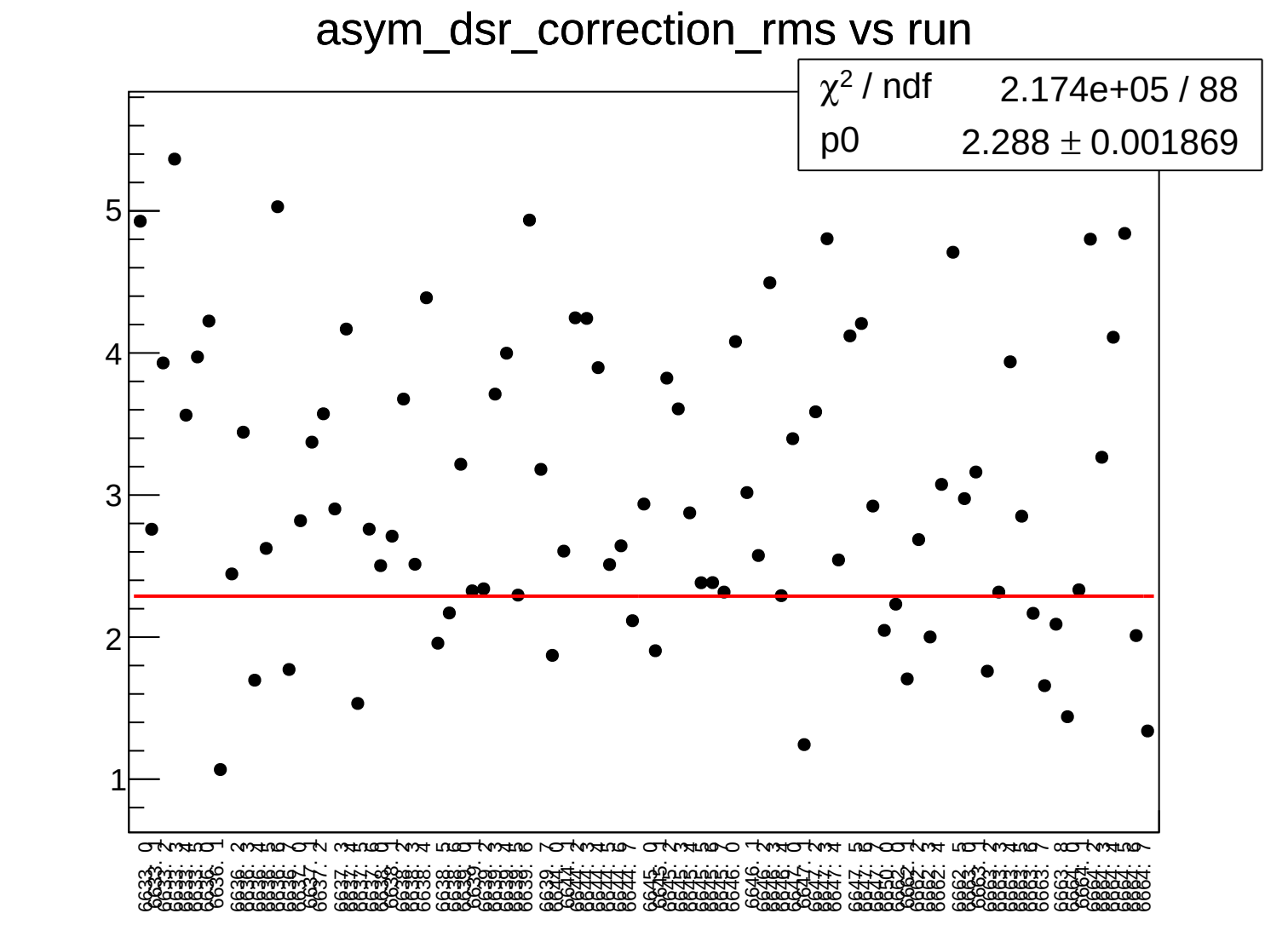

reg_asym_dsr_mean vs run
χ² / ndf 66.27 / 88
p0 −24.34 ± 149.1
pull
Entries 89
Mean −791.1
Std Dev 829.5

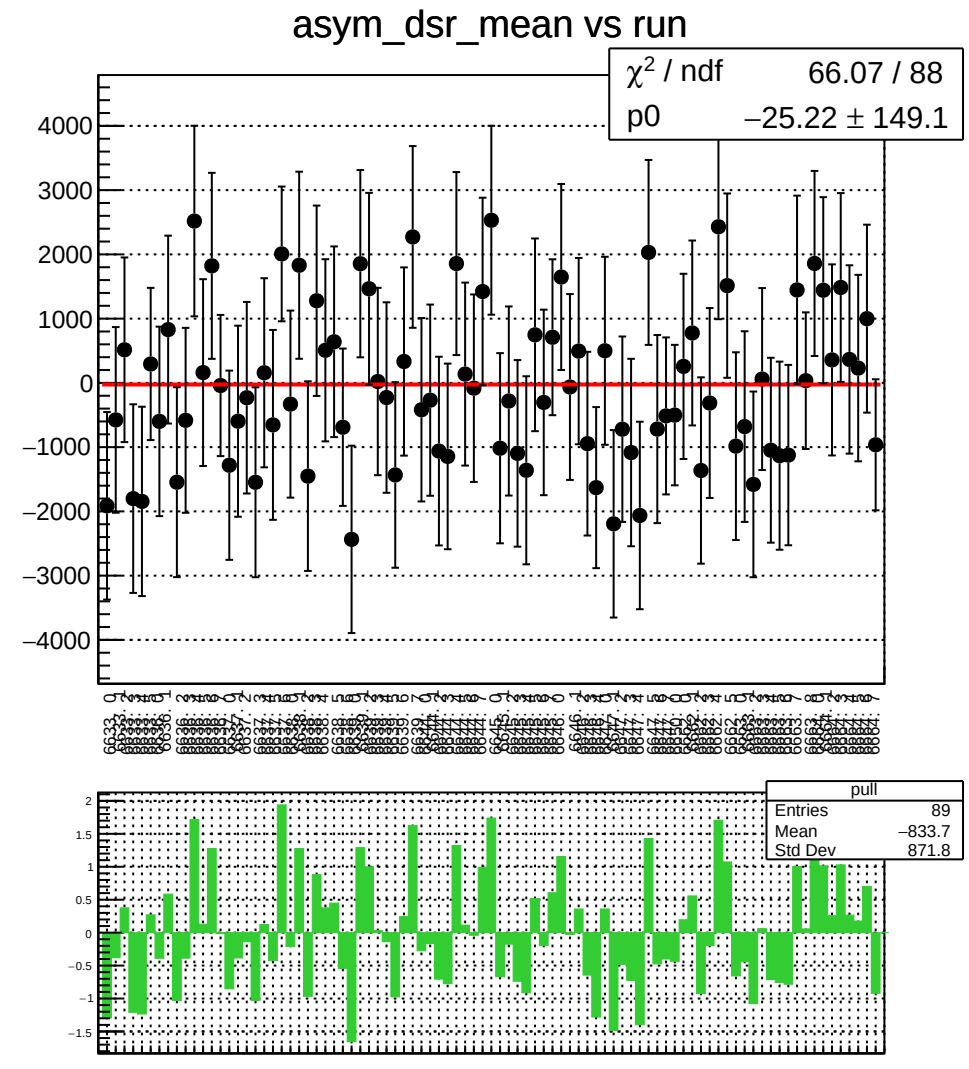

pull1D
Entries 89
Mean −0.001506
Std Dev 0.8629

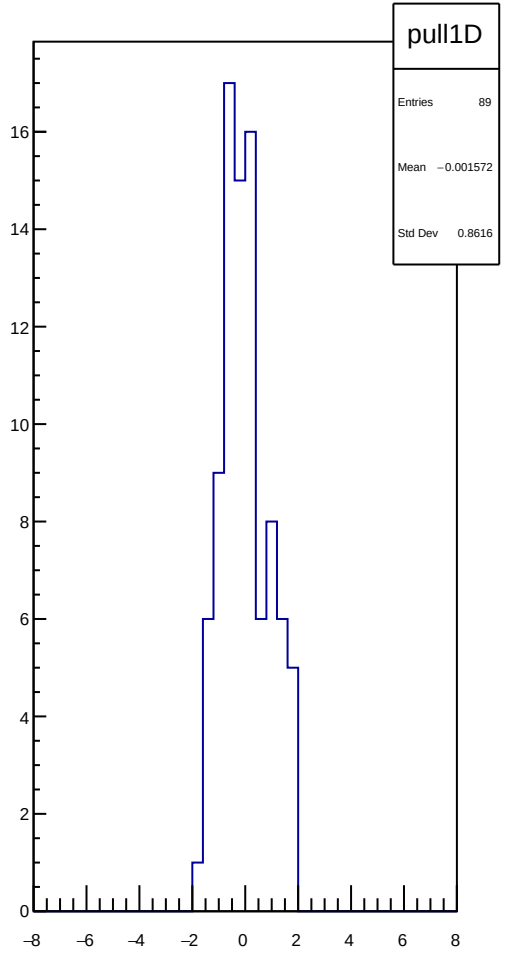

reg_asym_dsr_rms vs run
χ² / ndf 319.7 / 88
p0 138.1 ± 0.1054
144
142
140
138
136
134
132

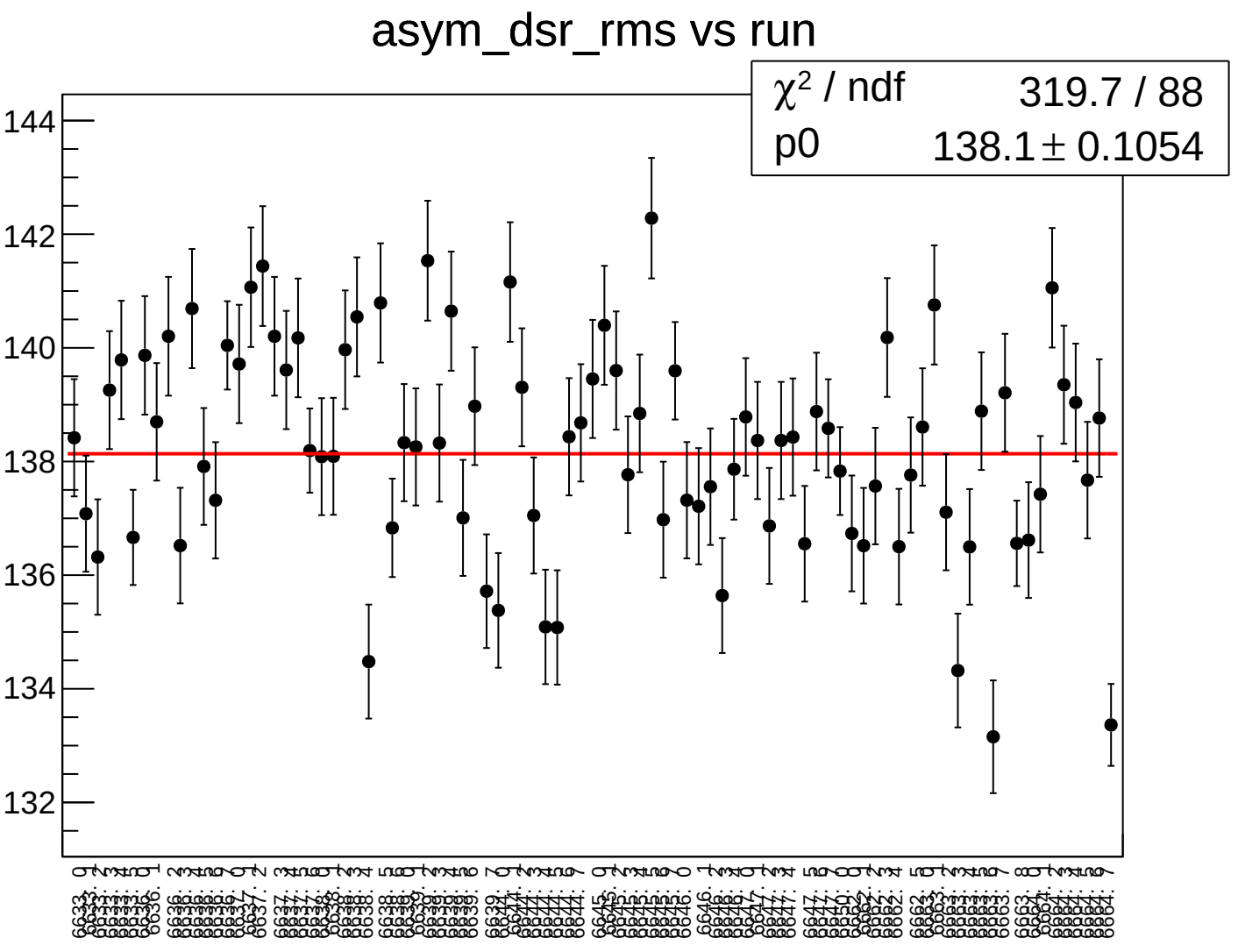

asym_dsr_correction_mean vs run
χ² / ndf 76.51 / 88
p0 −1.868 ± 2.643
pull
Entries 89
Mean −2.833
Std Dev 21.3

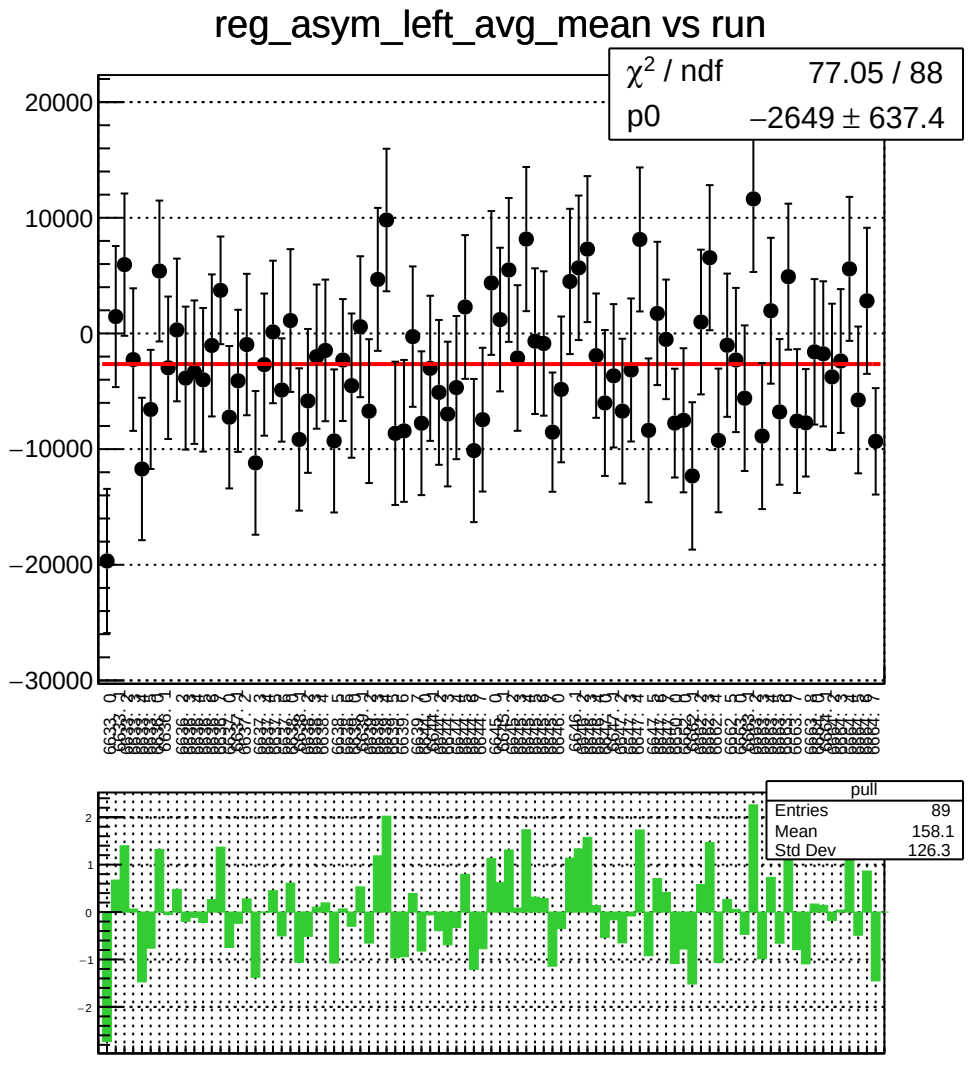

pull1D
Entries 89
Mean 0.05663
Std Dev 0.9254

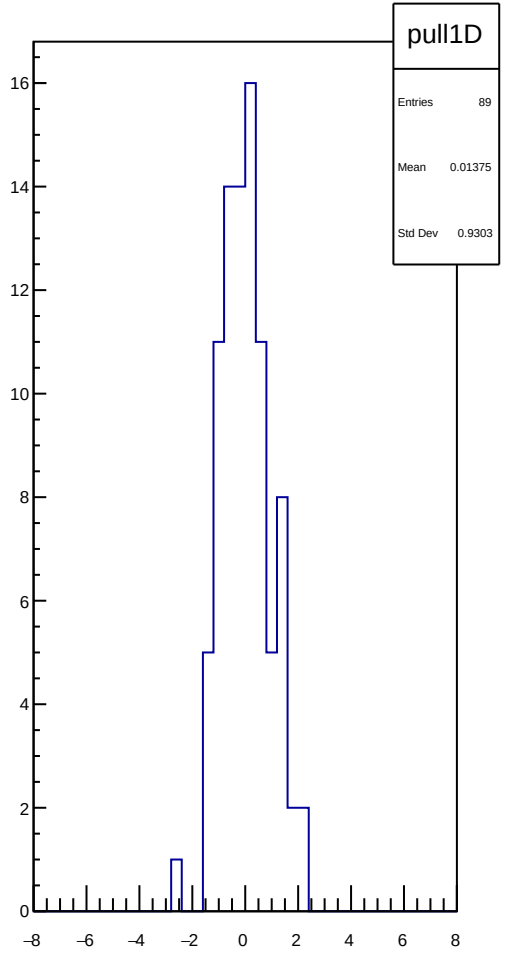

asym_dsr_correction_rms vs run
χ^2 / ndf 2.174e+05 / 88
p0 2.288 ± 0.001869
5
4
3
2
1

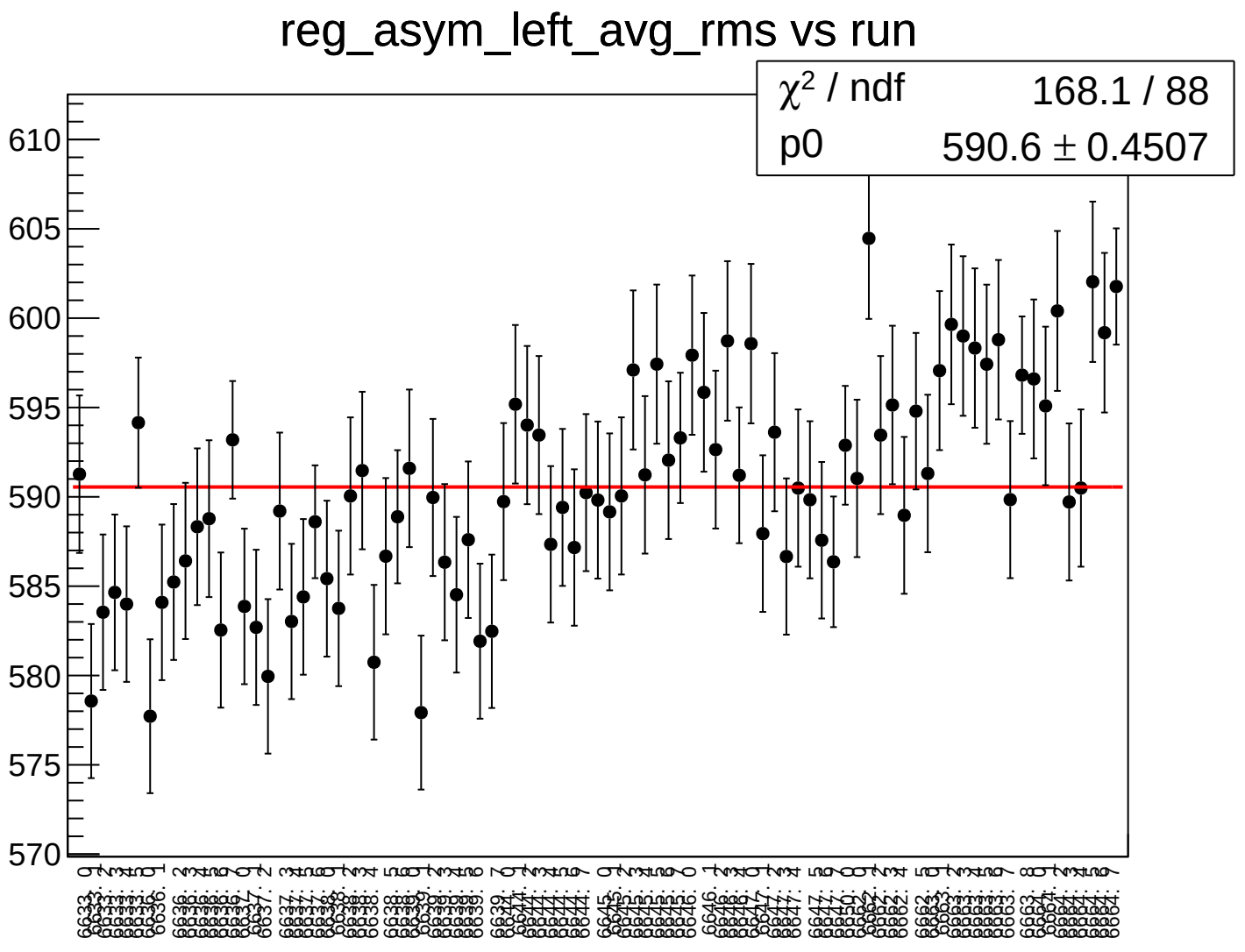

asym_dsr_mean vs run
χ² / ndf 66.07 / 88
p0 −25.22 ± 149.1
pull
Entries 89
Mean −833.7
Std Dev 871.8

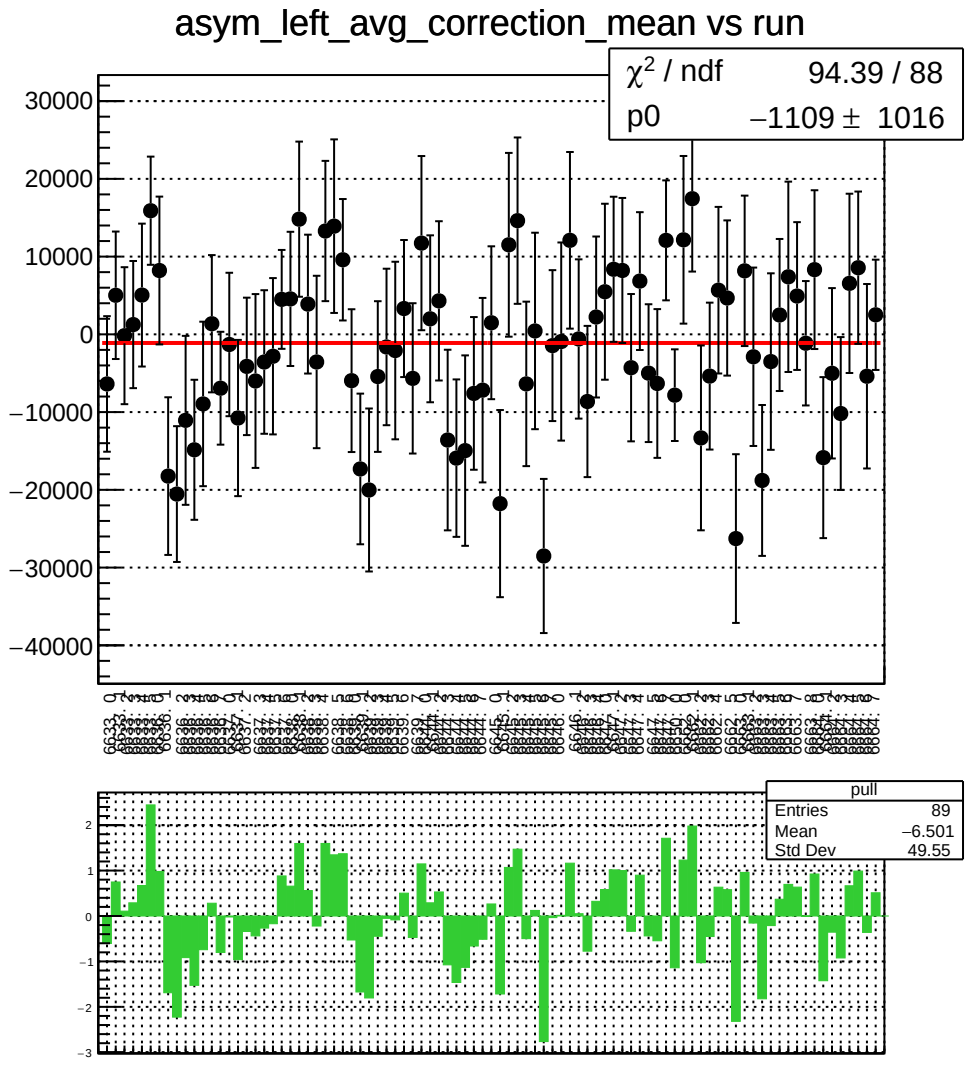

pull1D
Entries 89
Mean −0.001572
Std Dev 0.8616

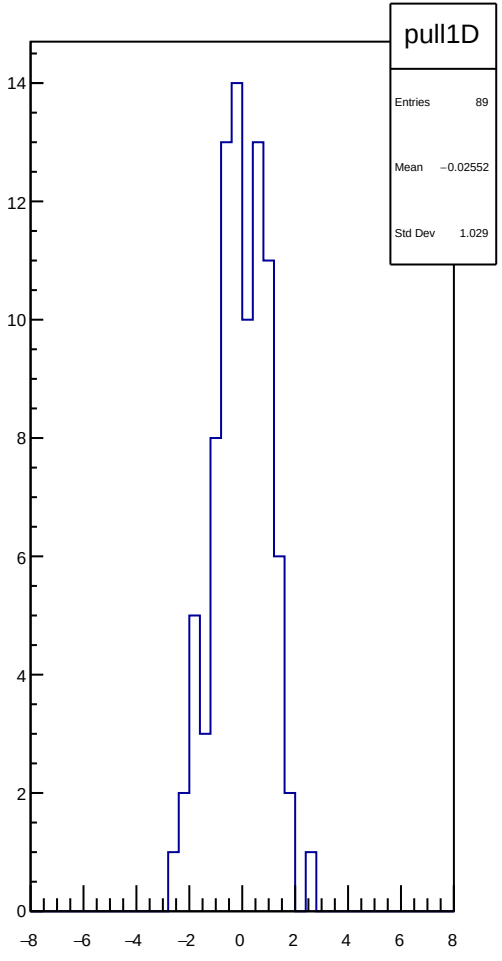

asym_dsr_rms vs run
χ² / ndf 319.7 / 88
p0 138.1 ± 0.1054
144
142
140
138
136
134
132

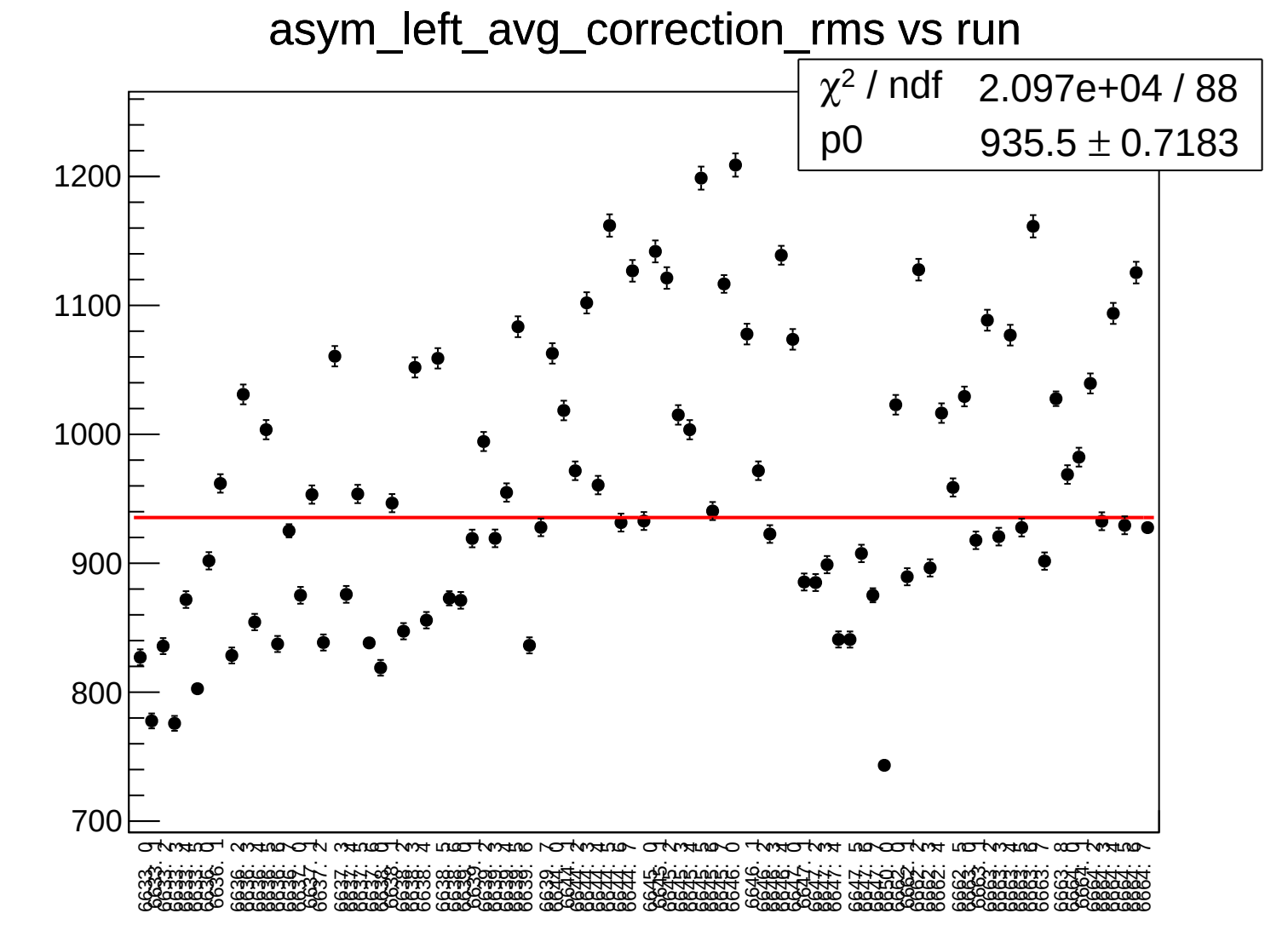

reg_asym_left_avg_mean vs run
χ² / ndf 77.05 / 88
p0 −2649 ± 637.4
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 158.1
Std Dev 126.3
2
1
0
−1
−2

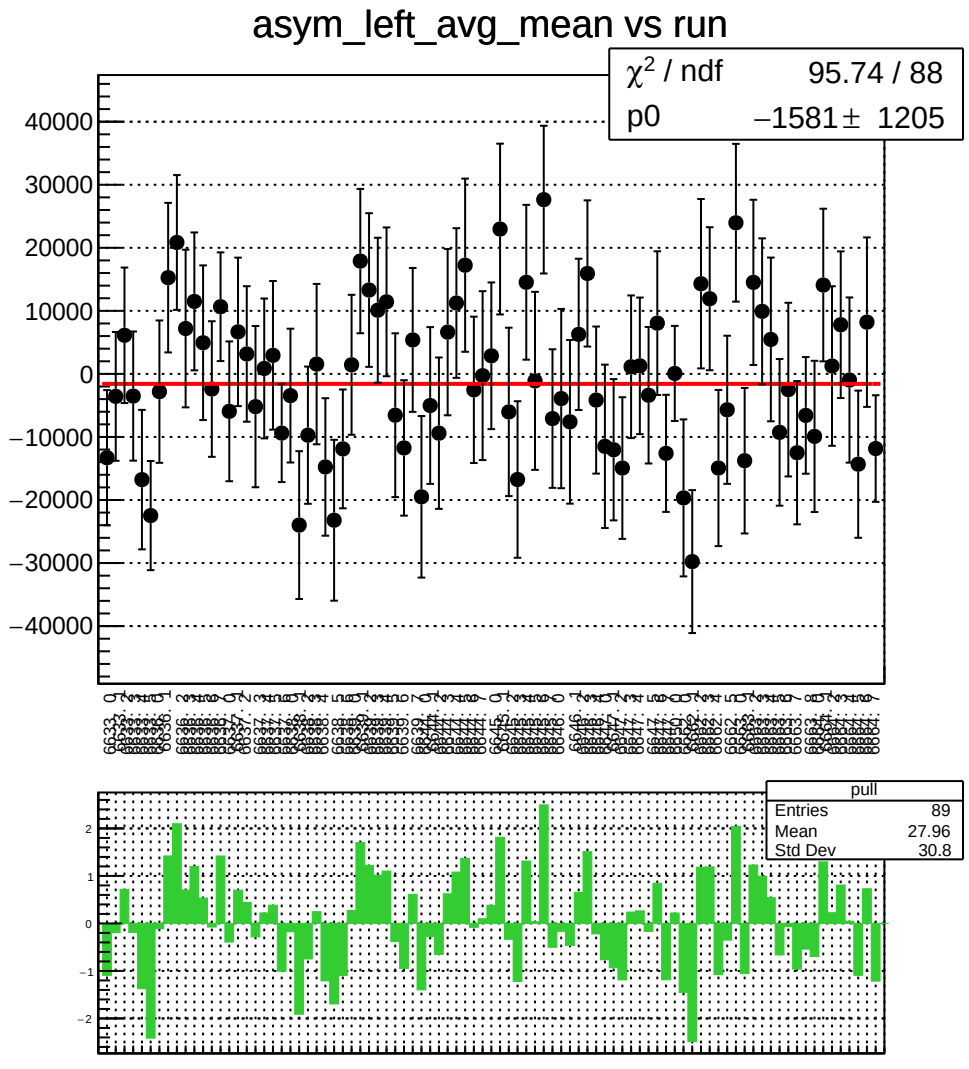

pull1D
Entries 89
Mean 0.01375
Std Dev 0.9303
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

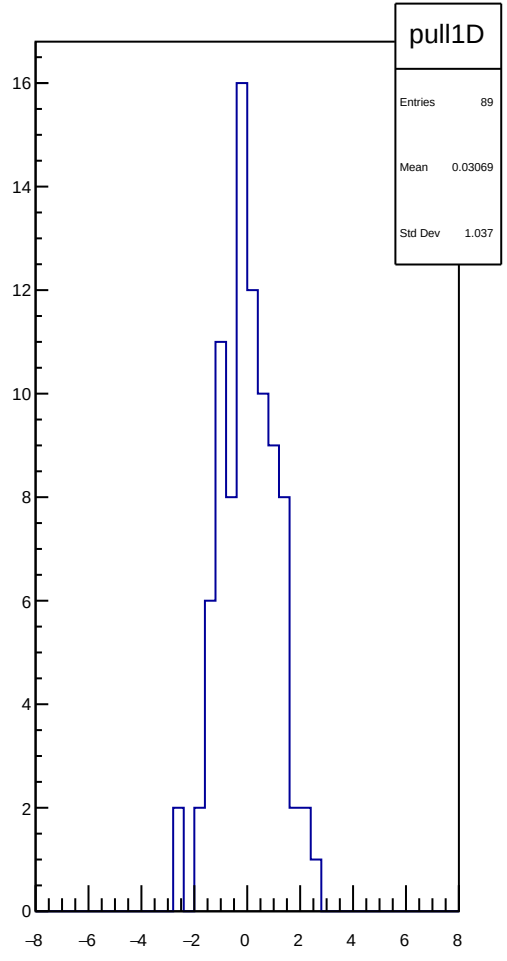

reg_asym_left_avg_rms vs run
χ² / ndf 168.1 / 88
p0 590.6 ± 0.4507
610
605
600
595
590
585
580
575
570

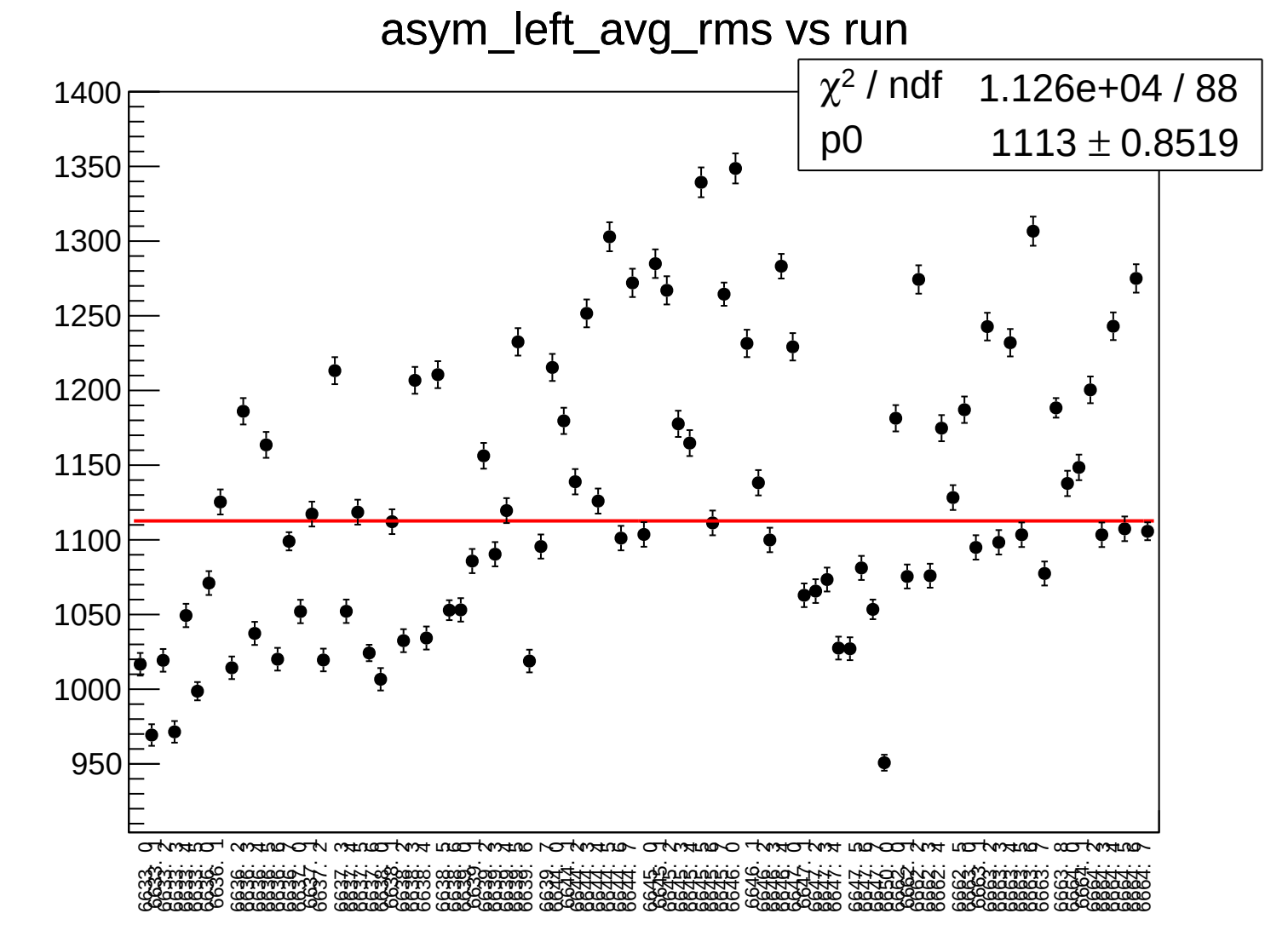

asym_left_avg_correction_mean vs run
χ² / ndf 94.39 / 88
p0 −1109 ± 1016
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −6.501
Std Dev 49.55
2
1
0
−1
−2
−3

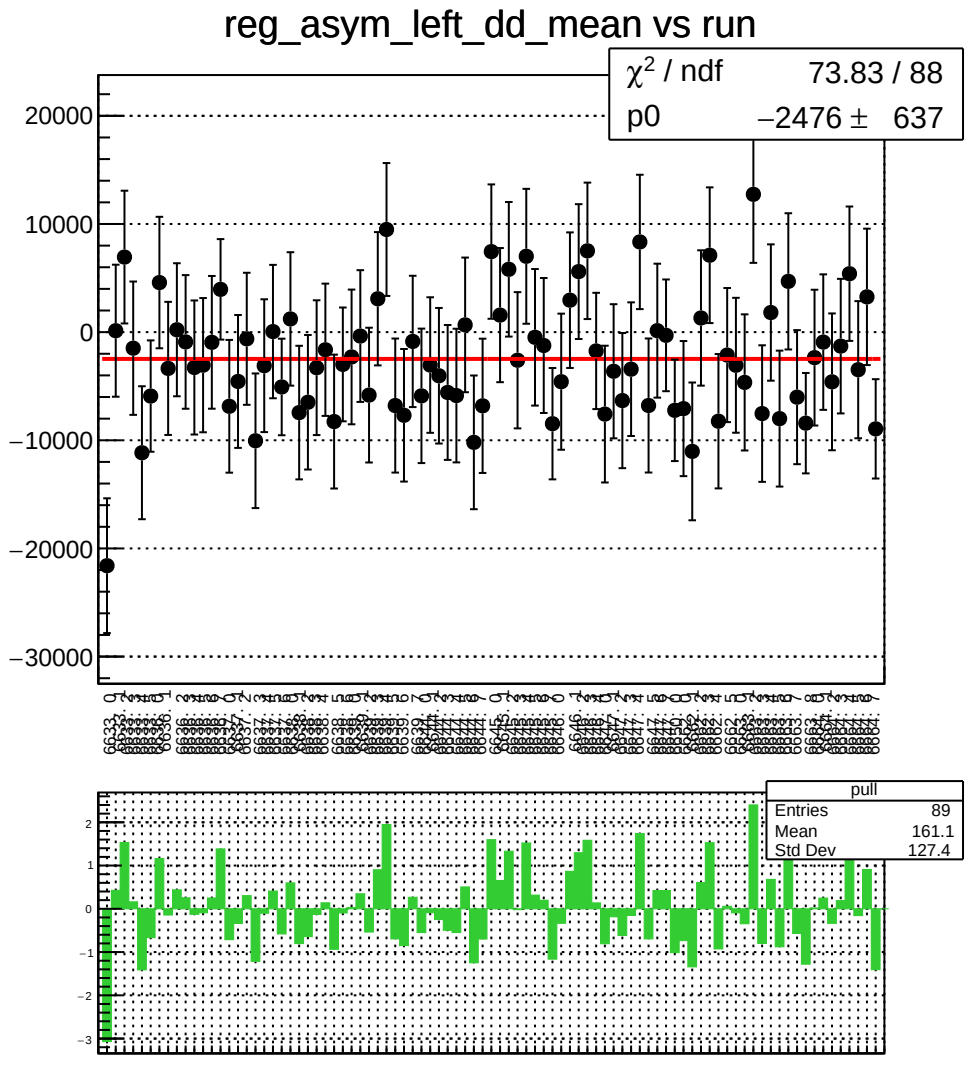

pull1D
Entries 89
Mean −0.02552
Std Dev 1.029
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

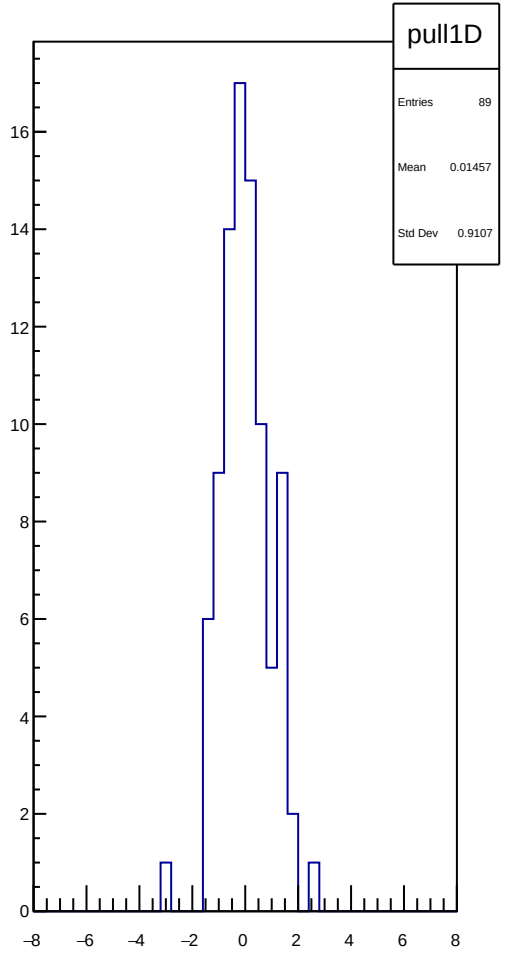

asym_left_avg_correction_rms vs run
χ² / ndf 2.097e+04 / 88
p0 935.5 ± 0.7183
1200
1100
1000
900
800
700

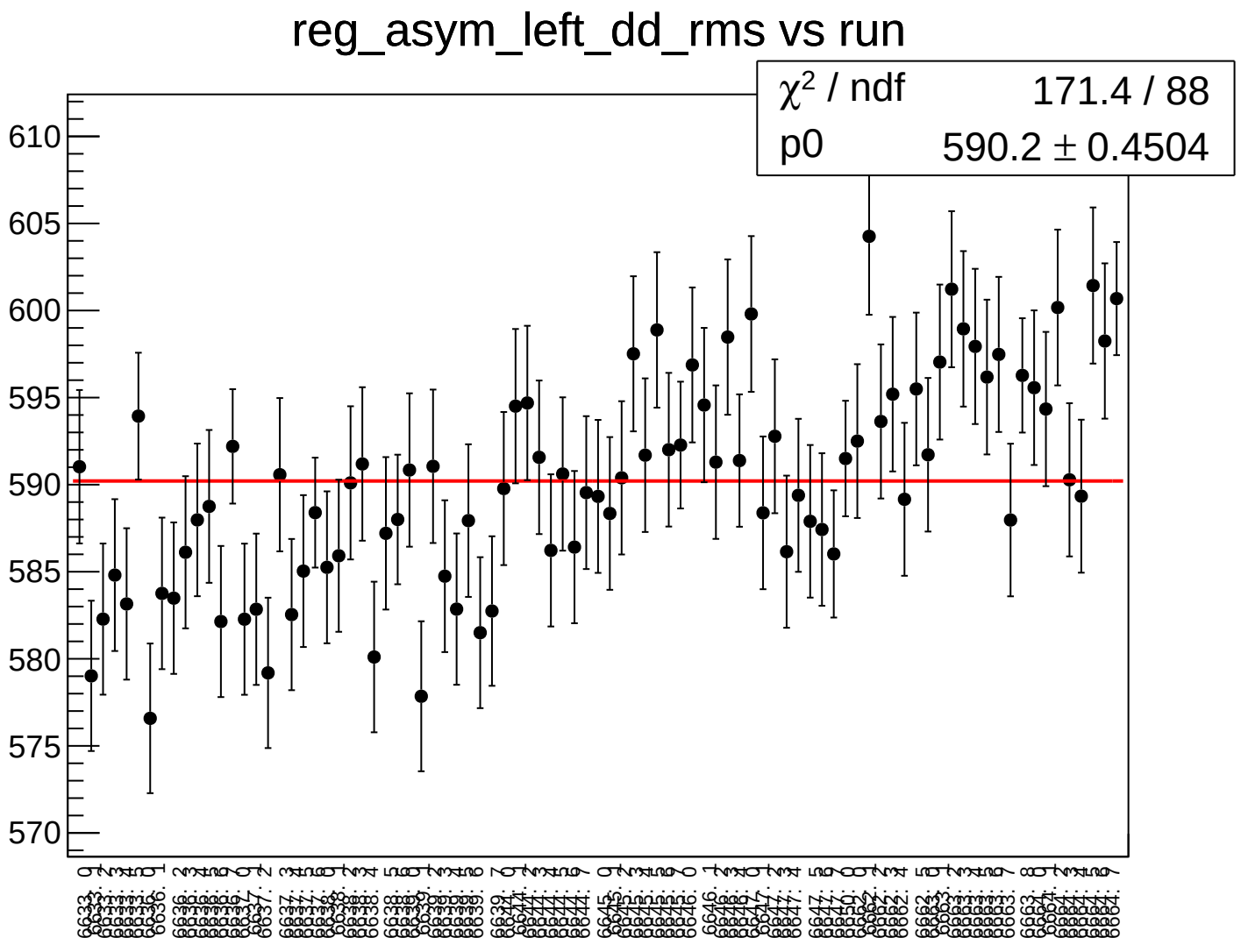

asym_left_avg_mean vs run
χ^2 / ndf 95.74 / 88
p0 −1581 ± 1205
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean 27.96
Std Dev 30.8
2
1
0
−1
−2

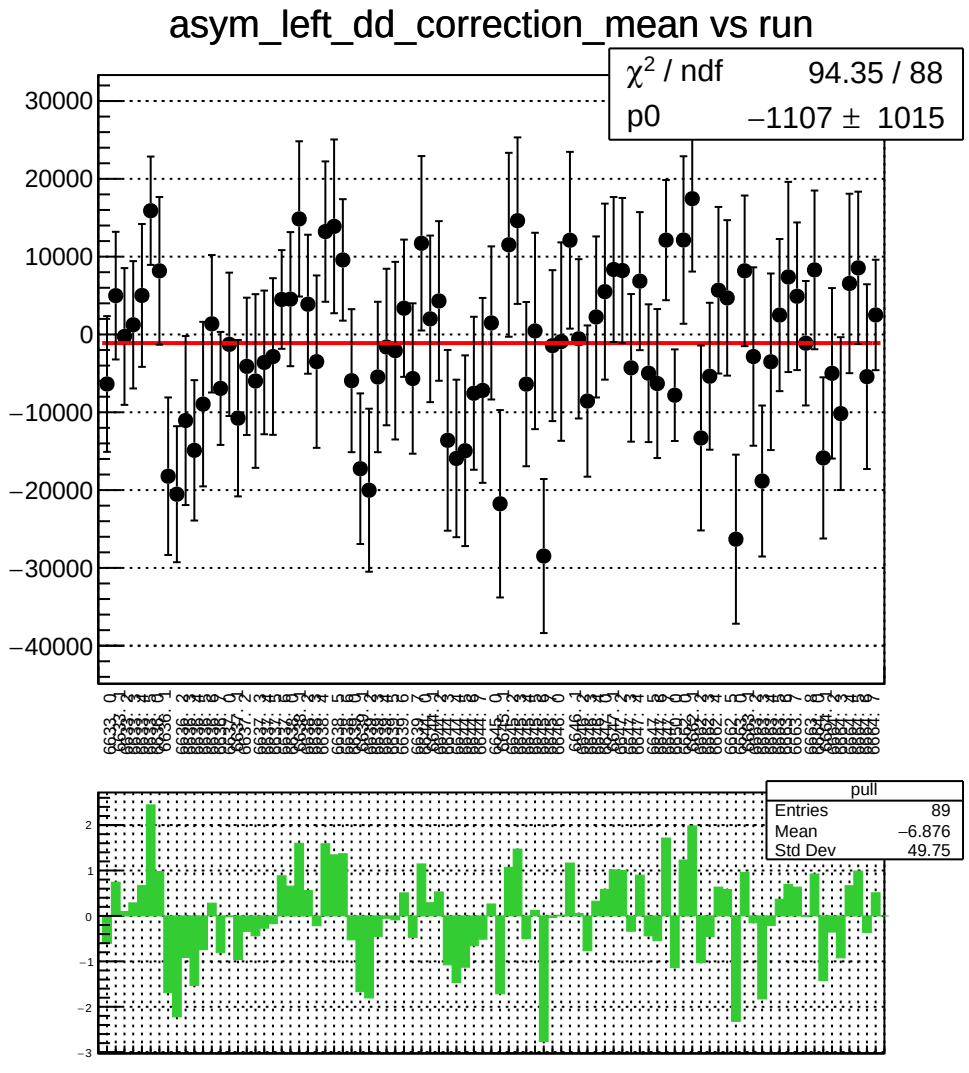

pull1D
Entries 89
Mean 0.03069
Std Dev 1.037
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

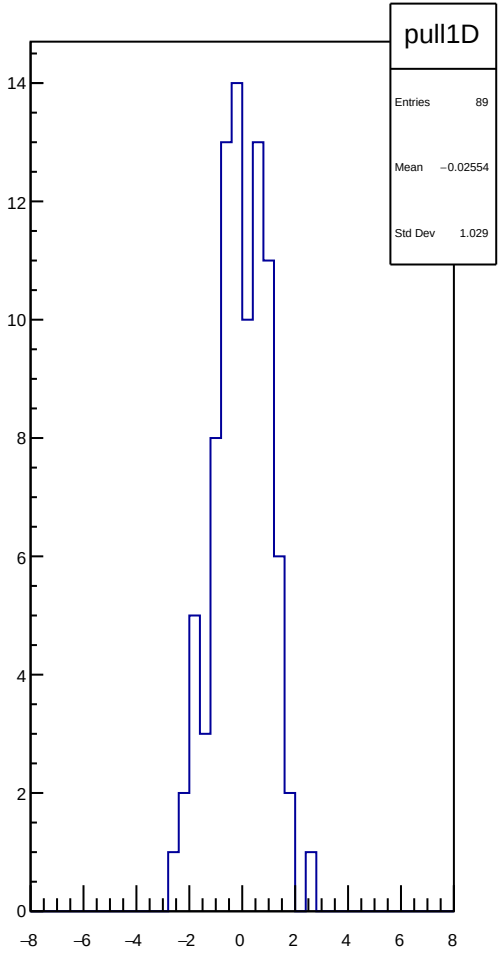

asym_left_avg_rms vs run
χ² / ndf 1.126e+04 / 88
p0 1113 ± 0.8519
1400
1350
1300
1250
1200
1150
1100
1050
1000
950

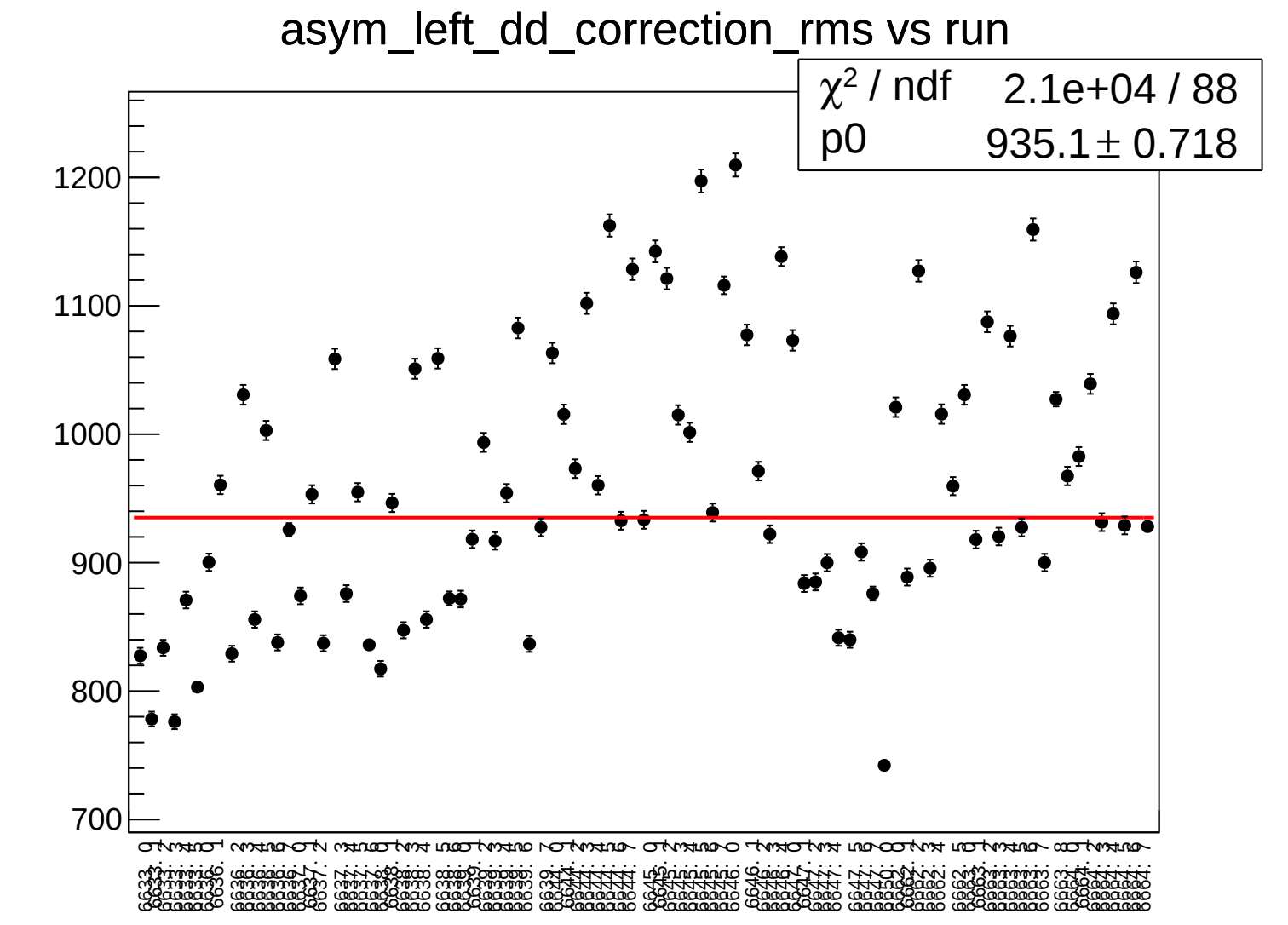

reg_asym_left_dd_mean vs run
χ² / ndf 73.83 / 88
p0 −2476 ± 637
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 161.1
Std Dev 127.4
2
1
0
−1
−2
−3

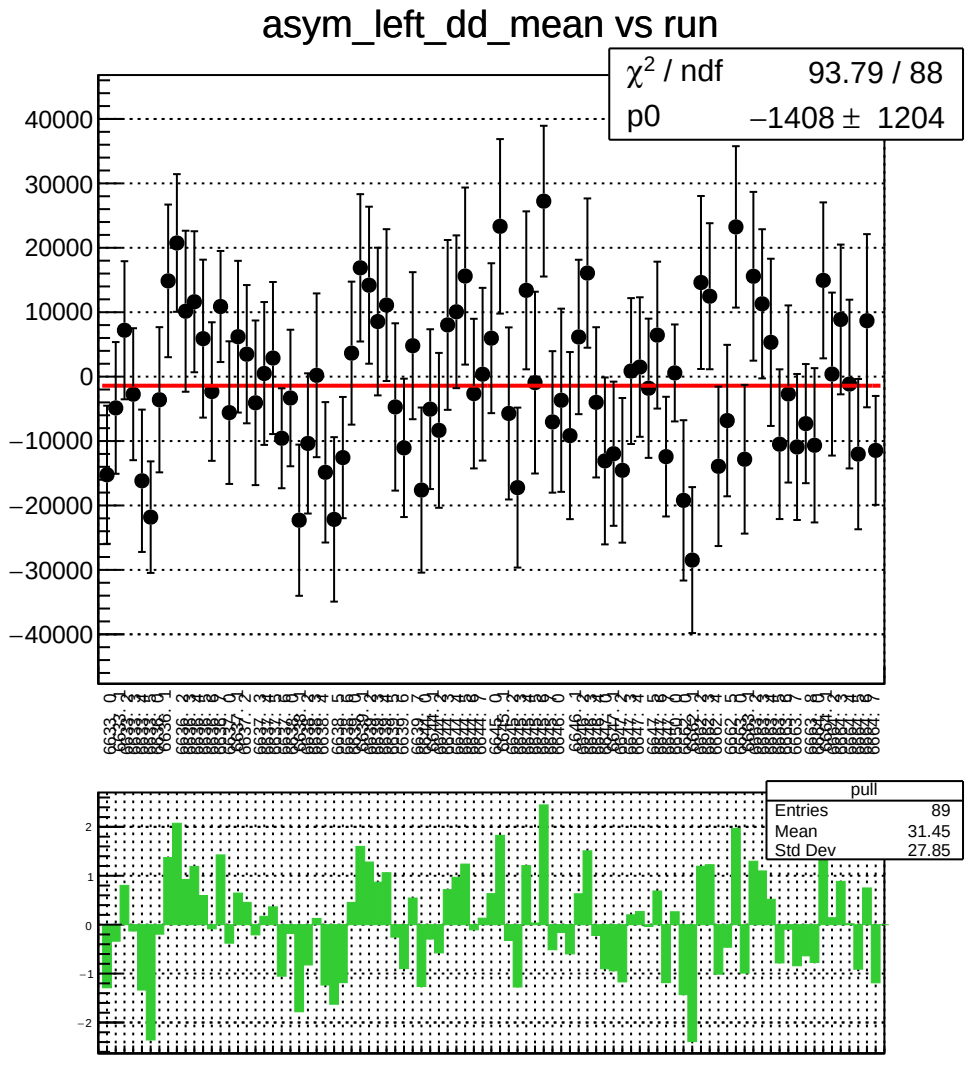

pull1D
Entries 89
Mean 0.01457
Std Dev 0.9107
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

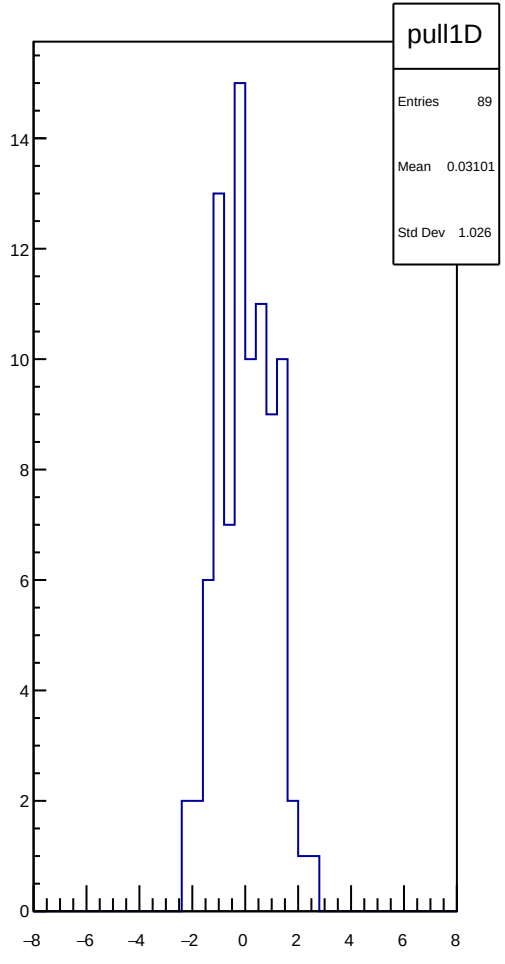

reg_asym_left_dd_rms vs run
χ² / ndf 171.4 / 88
p0 590.2 ± 0.4504
610
605
600
595
590
585
580
575
570

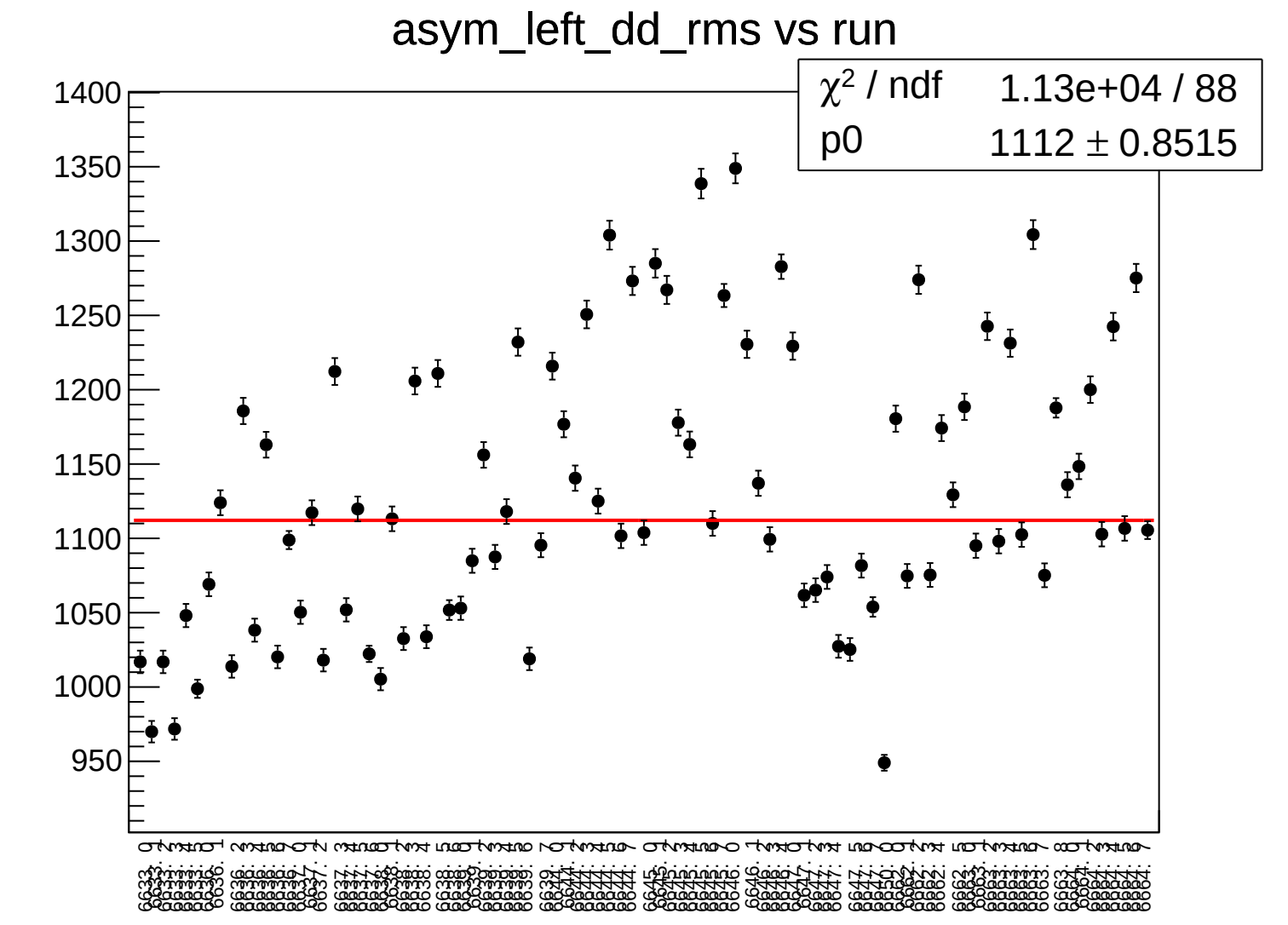

asym_left_dd_correction_mean vs run
χ² / ndf 94.35 / 88
p0 −1107 ± 1015
pull
Entries 89
Mean −6.876
Std Dev 49.75

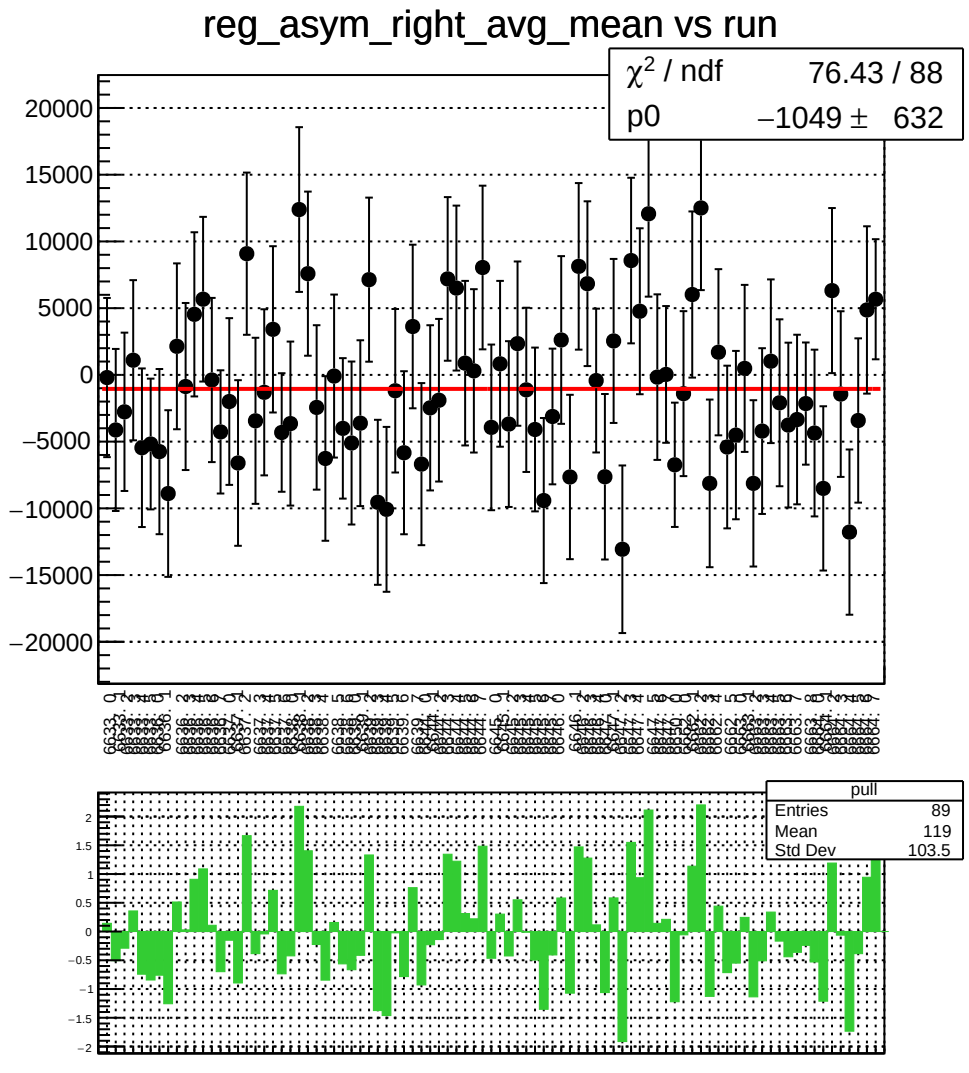

pull1D
Entries 89
Mean −0.02554
Std Dev 1.029

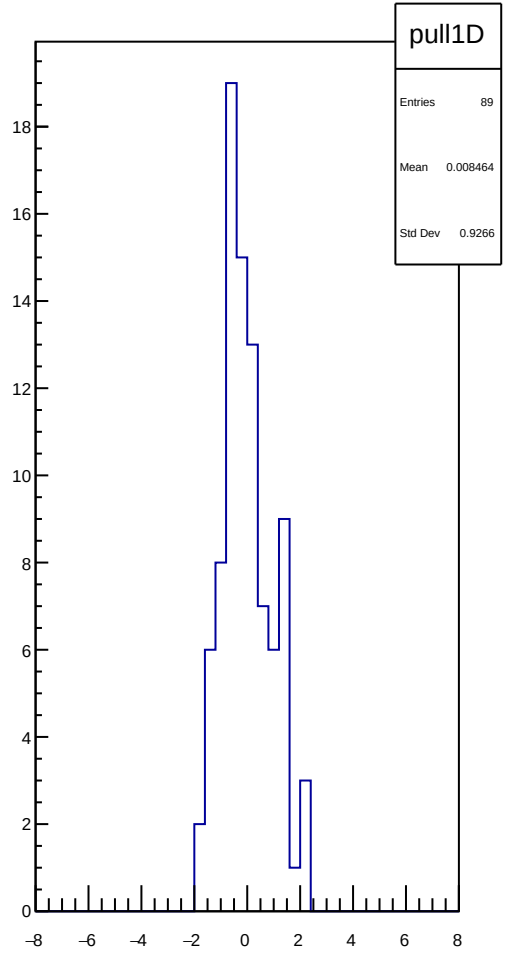

asym_left_dd_correction_rms vs run
χ² / ndf 2.1e+04 / 88
p0 935.1 ± 0.718
1200
1100
1000
900
800
700

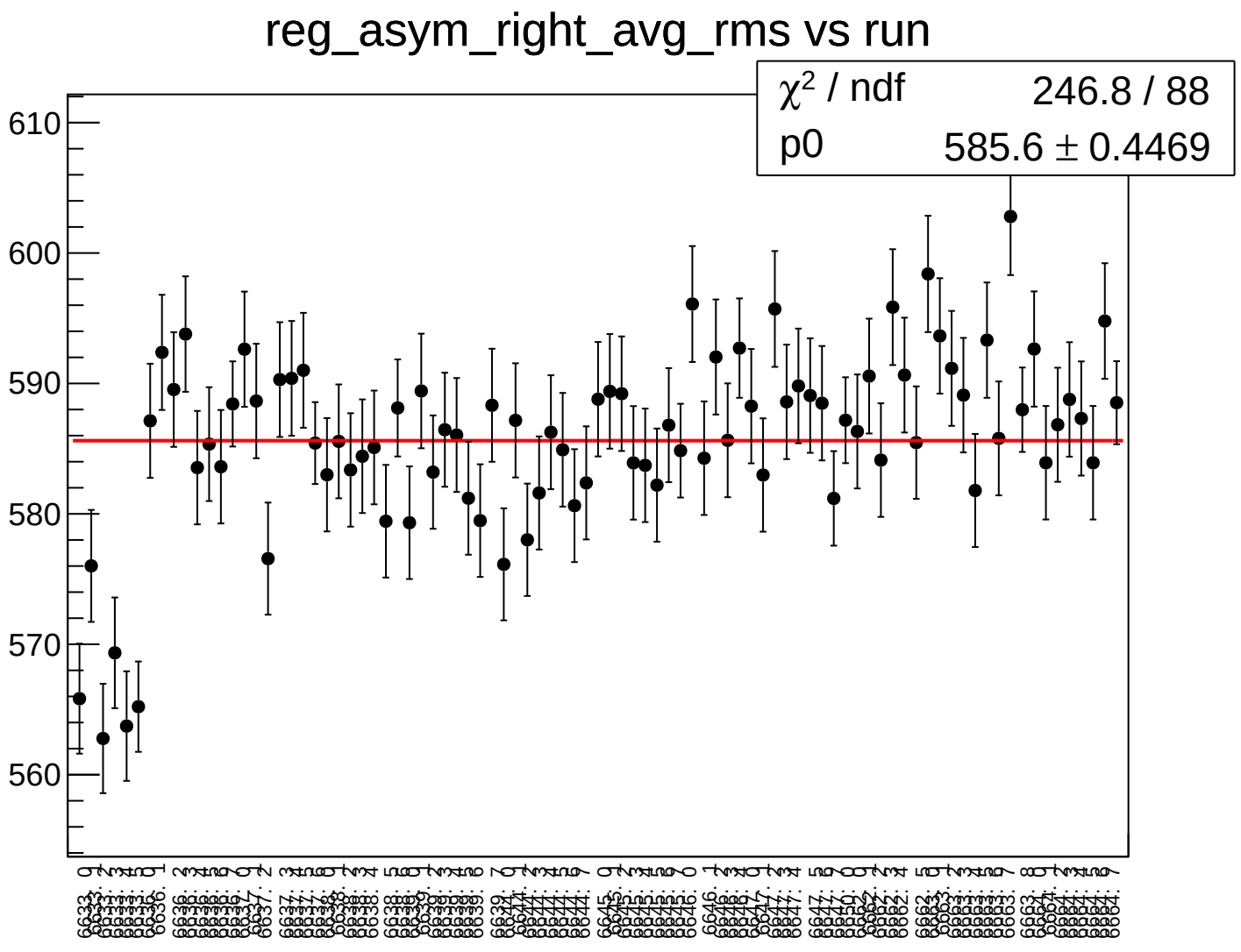

asym_left_dd_mean vs run
χ^2 / ndf 93.79 / 88
p0 −1408 ± 1204
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean 31.45
Std Dev 27.85
2
1
0
−1
−2

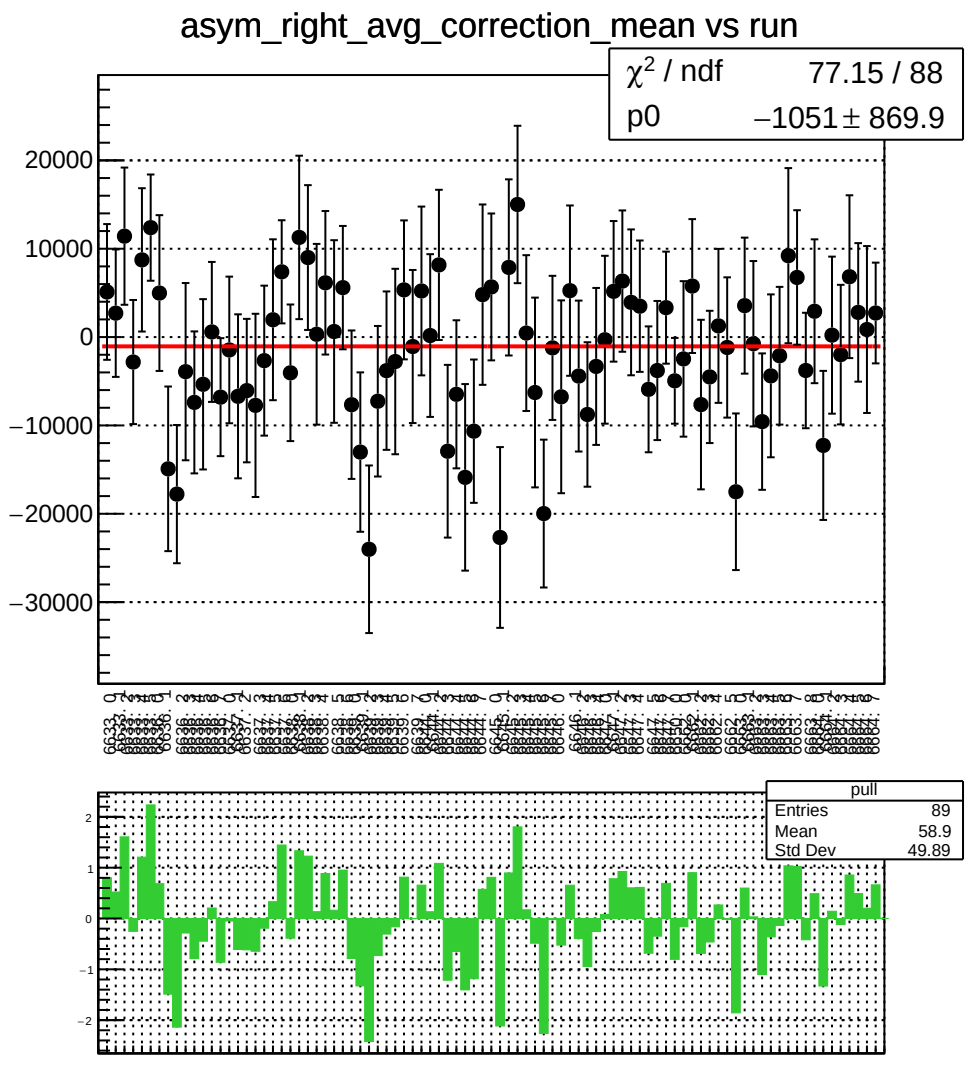

pull1D
Entries 89
Mean 0.03101
Std Dev 1.026
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

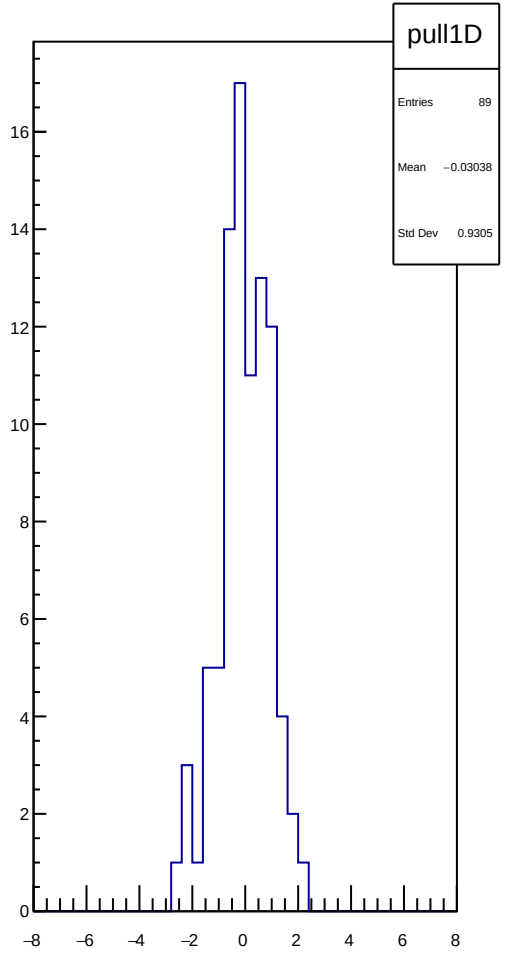

asym_left_dd_rms vs run
χ² / ndf 1.13e+04 / 88
p0 1112 ± 0.8515
1400
1350
1300
1250
1200
1150
1100
1050
1000
950

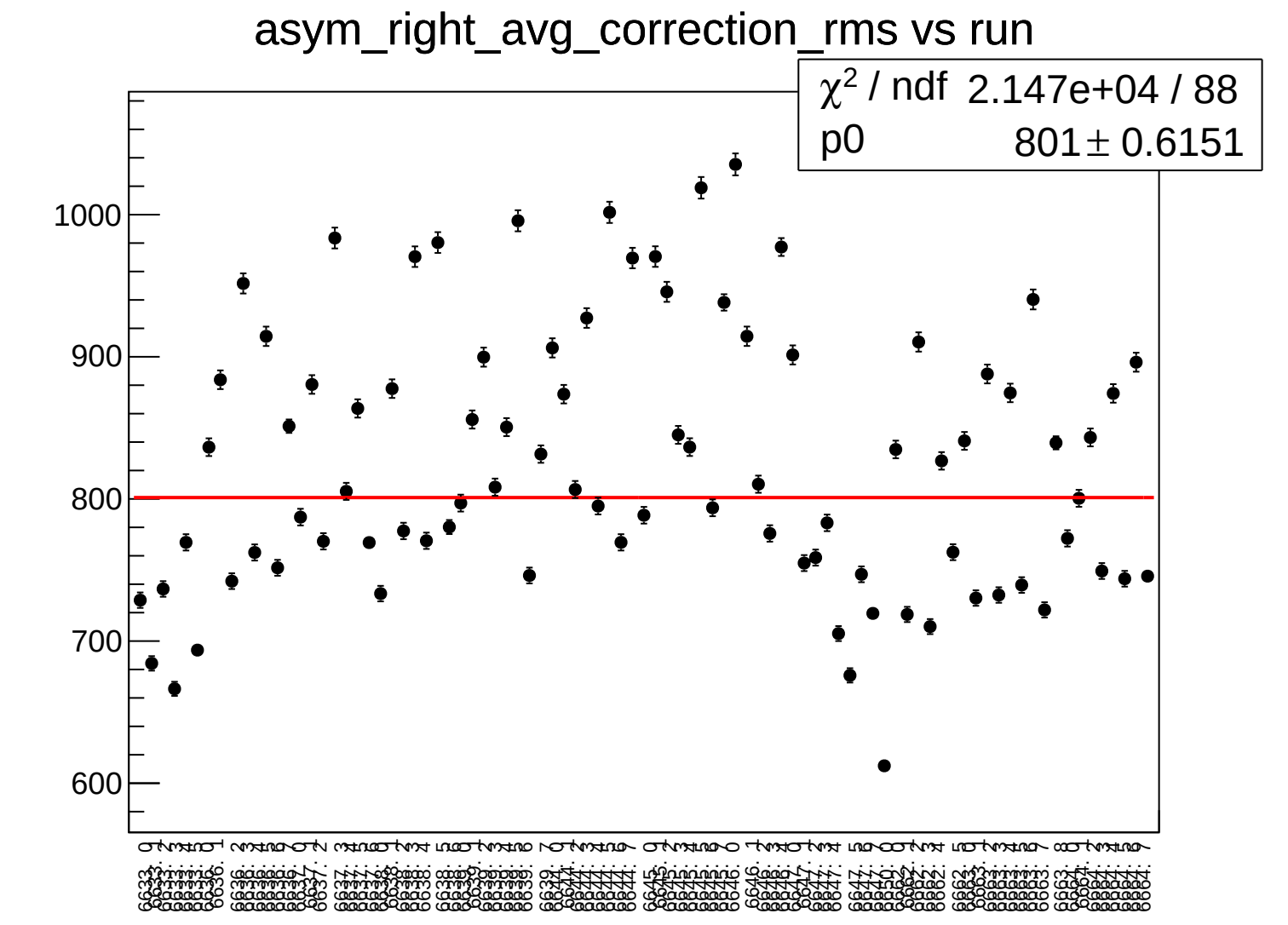

reg_asym_right_avg_mean vs run
χ² / ndf 76.43 / 88
p0 −1049 ± 632
pull
Entries 89
Mean 119
Std Dev 103.5

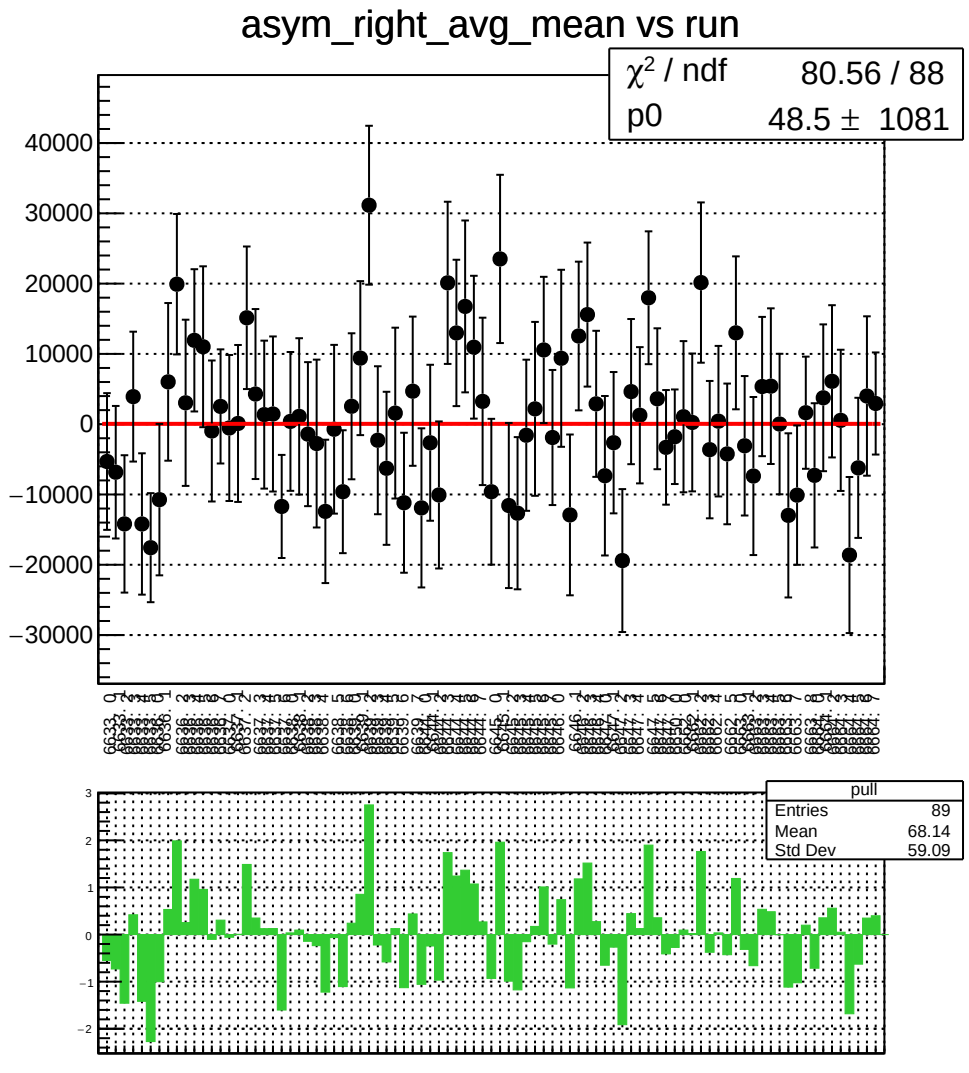

pull1D
Entries 89
Mean 0.008464
Std Dev 0.9266

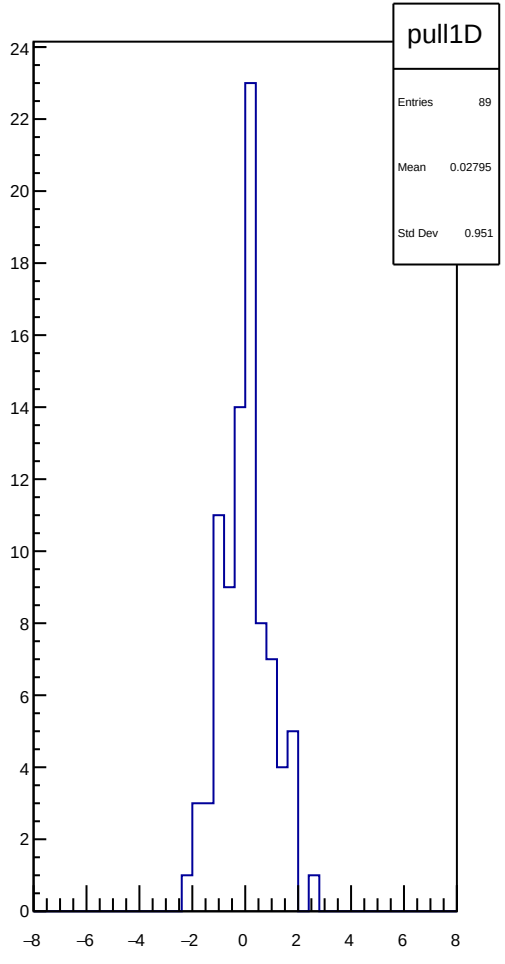

reg_asym_right_avg_rms vs run
χ² / ndf 246.8 / 88
p0 585.6 ± 0.4469
610
600
590
580
570
560

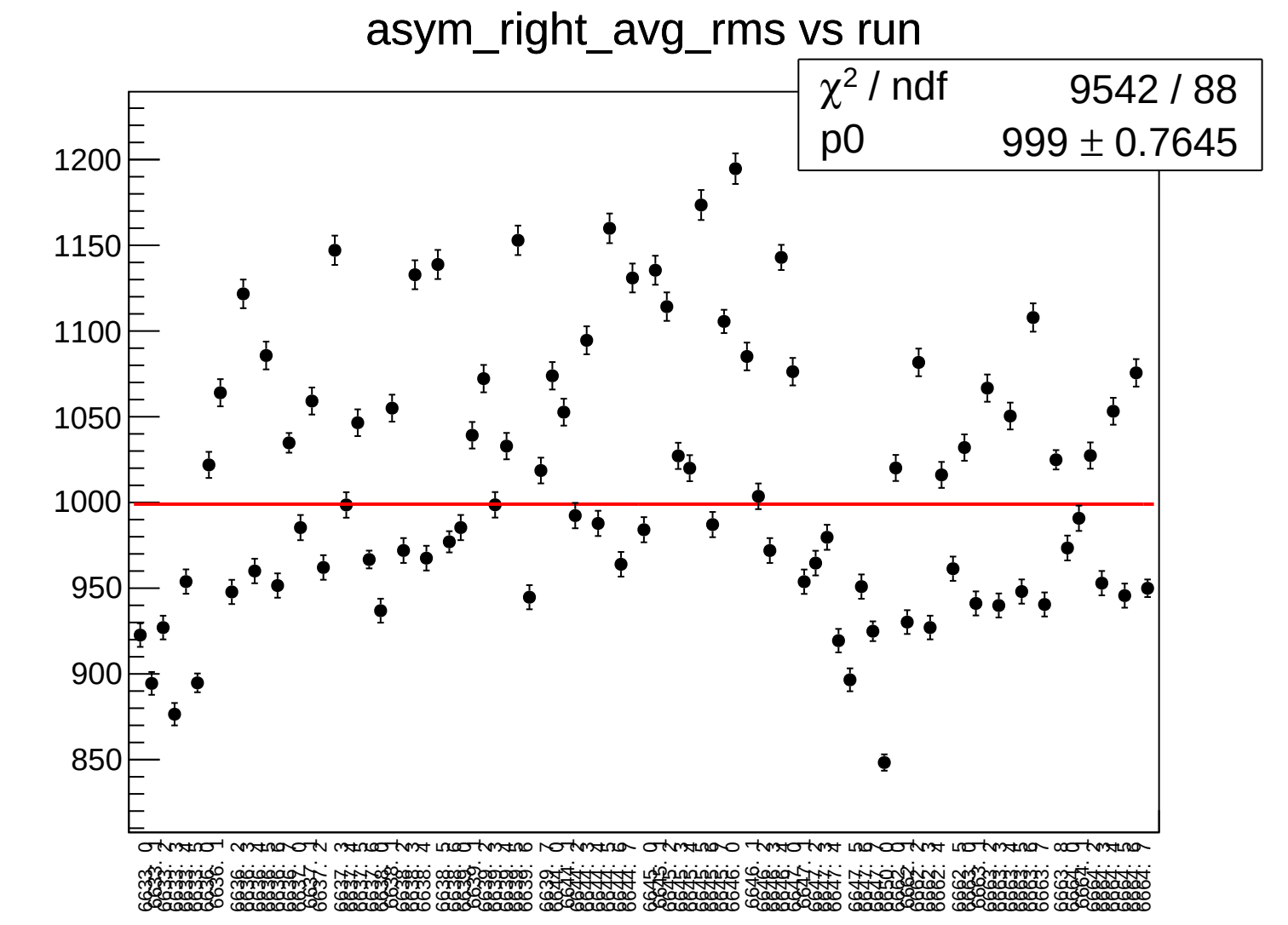

asym_right_avg_correction_mean vs run
χ² / ndf 77.15 / 88
p0 −1051 ± 869.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 58.9
Std Dev 49.89
2
1
0
−1
−2

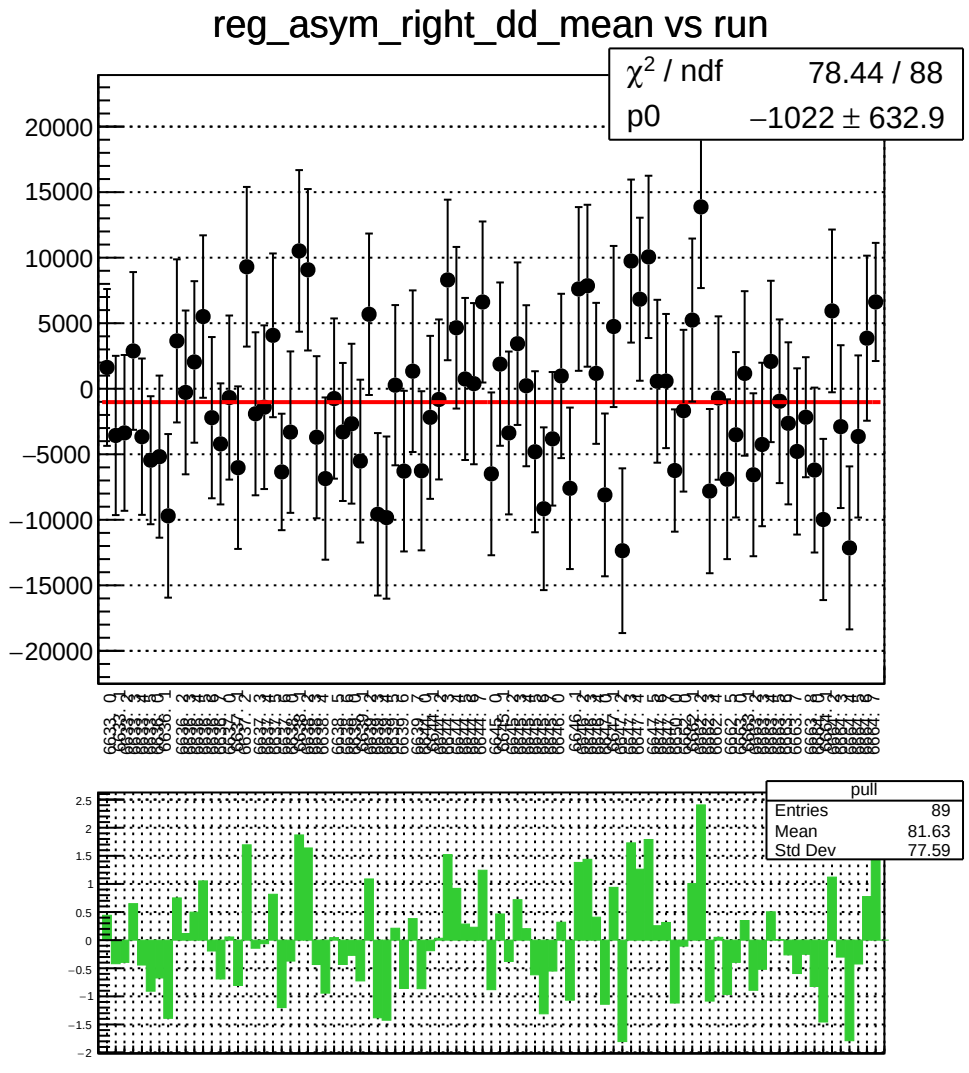

pull1D
Entries 89
Mean −0.03038
Std Dev 0.9305
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

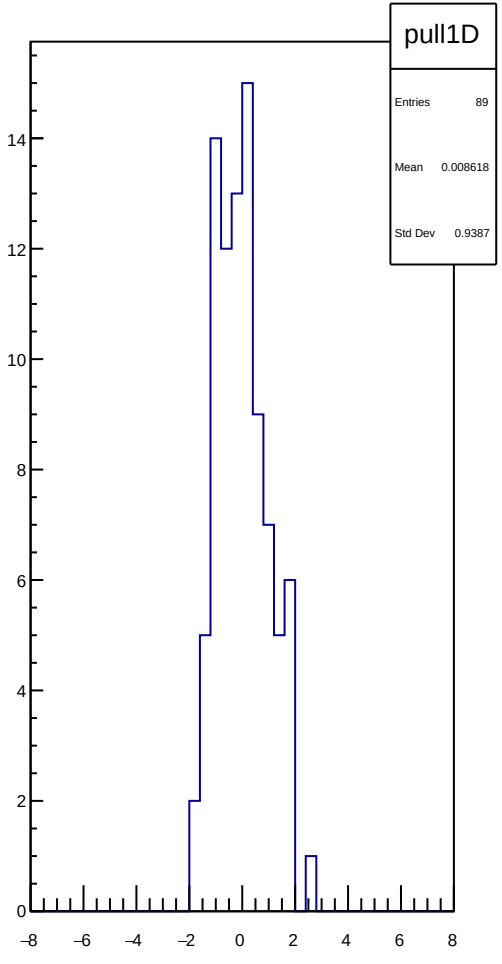

asym_right_avg_correction_rms vs run
χ^2 / ndf 2.147e+04 / 88
p0 801 ± 0.6151
1000
900
800
700
600

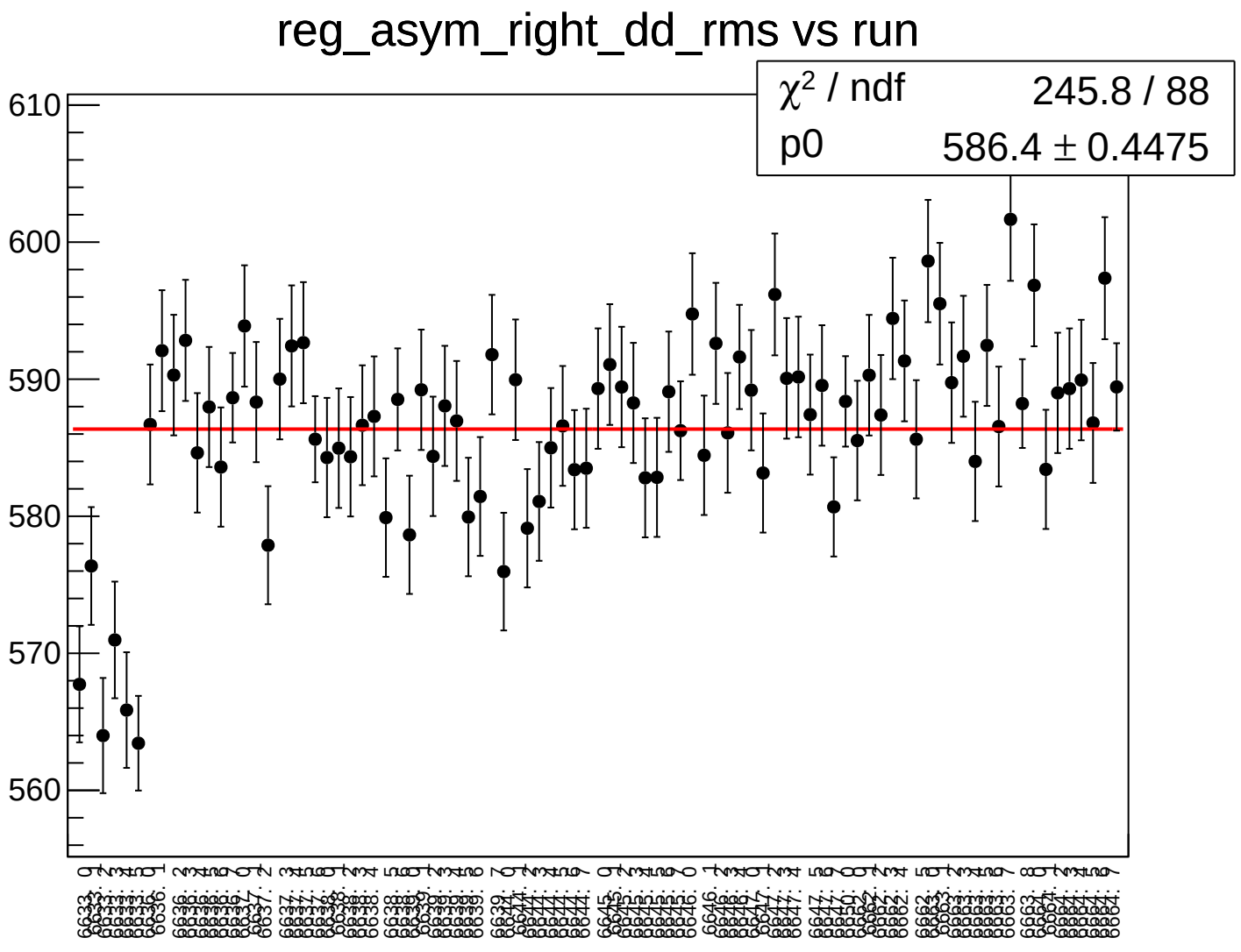

asym_right_avg_mean vs run
χ² / ndf 80.56 / 88
p0 48.5 ± 1081
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 68.14
Std Dev 59.09
3
2
1
0
−1
−2

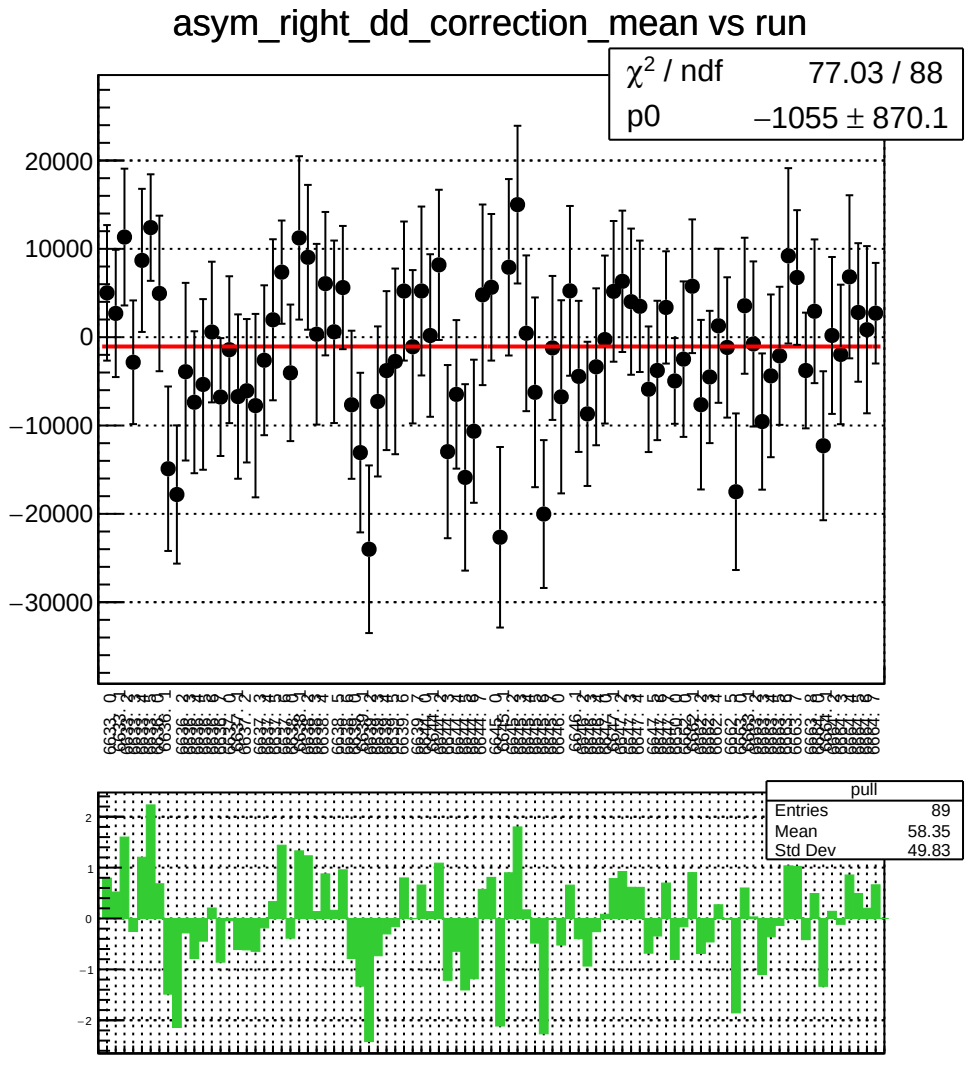

pull1D
Entries 89
Mean 0.02795
Std Dev 0.951
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

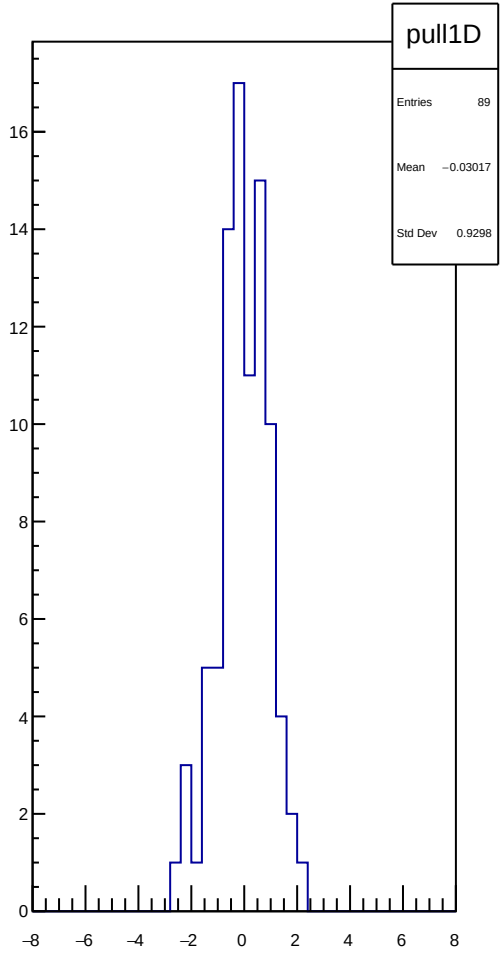

asym_right_avg_rms vs run
χ^2 / ndf 9542 / 88
p0 999 ± 0.7645
1200
1150
1100
1050
1000
950
900
850

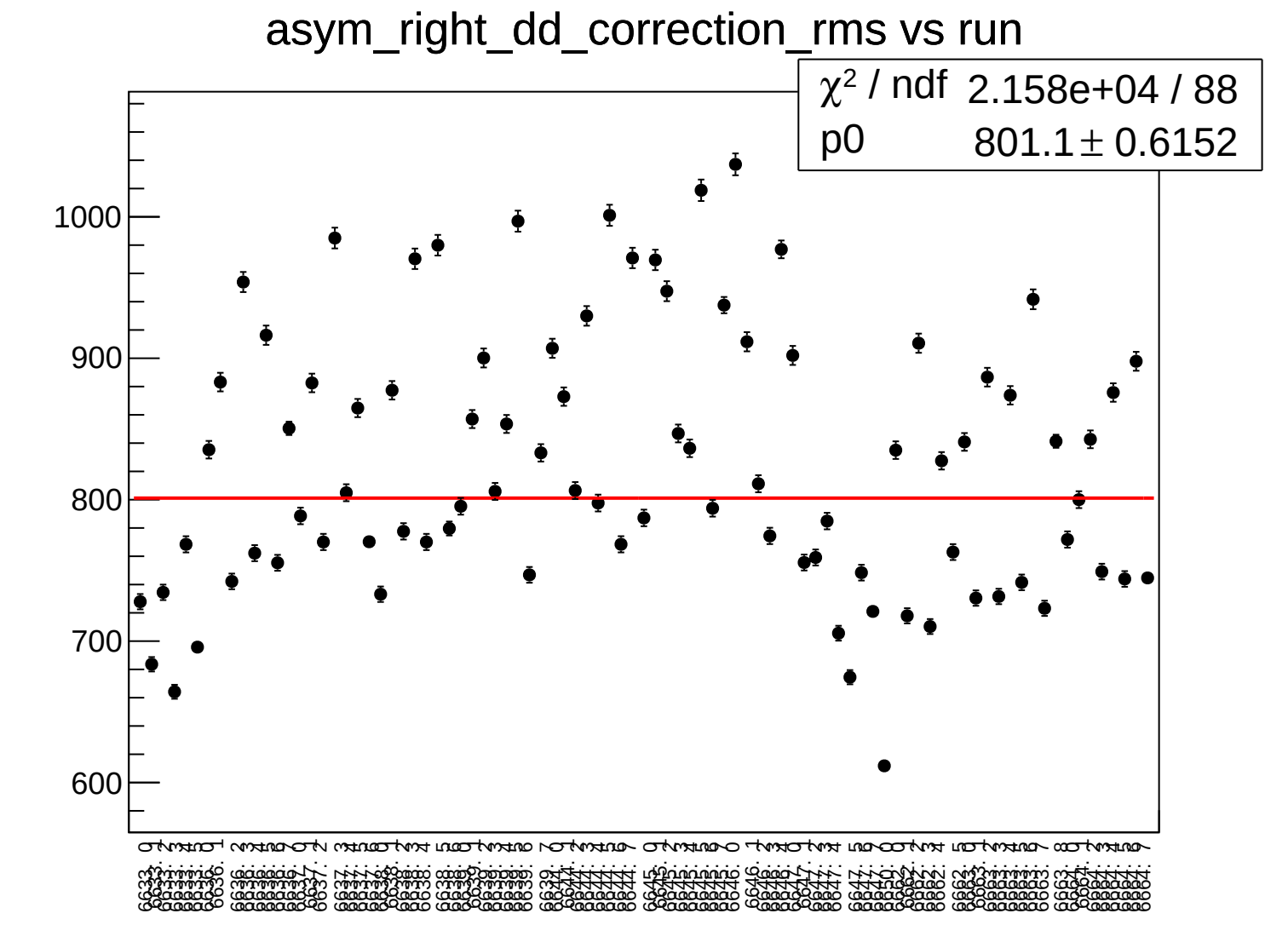

reg_asym_right_dd_mean vs run
χ² / ndf 78.44 / 88
p0 −1022 ± 632.9
pull
Entries 89
Mean 81.63
Std Dev 77.59

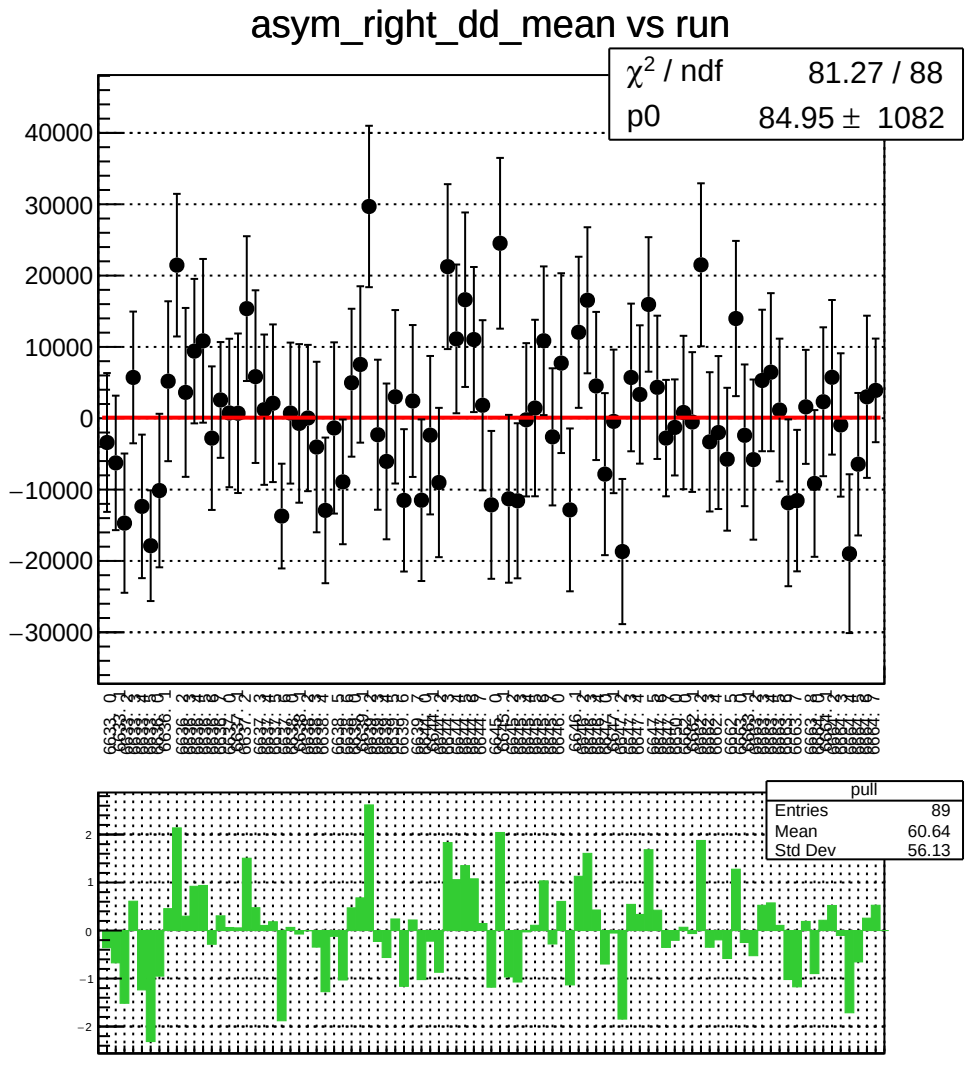

pull1D
Entries 89
Mean 0.008618
Std Dev 0.9387

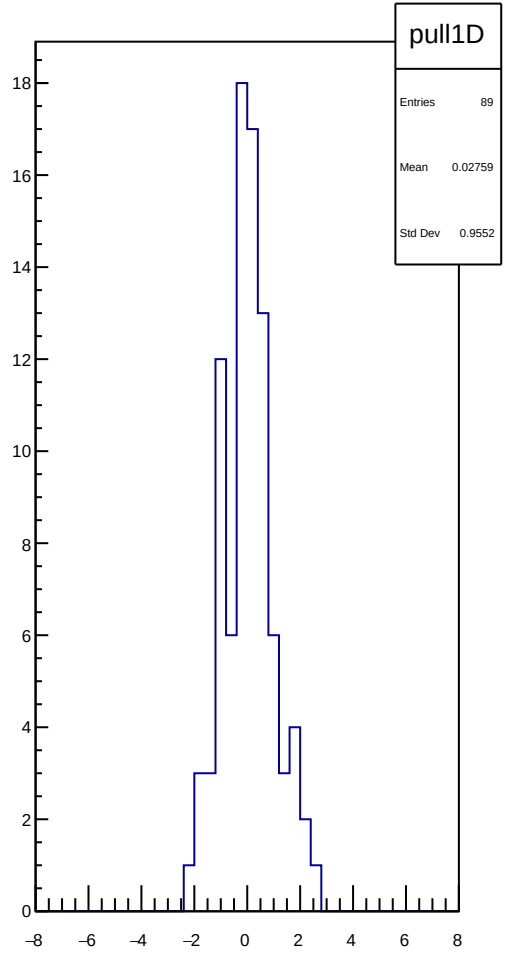

reg_asym_right_dd_rms vs run
χ² / ndf 245.8 / 88
p0 586.4 ± 0.4475
610
600
590
580
570
560

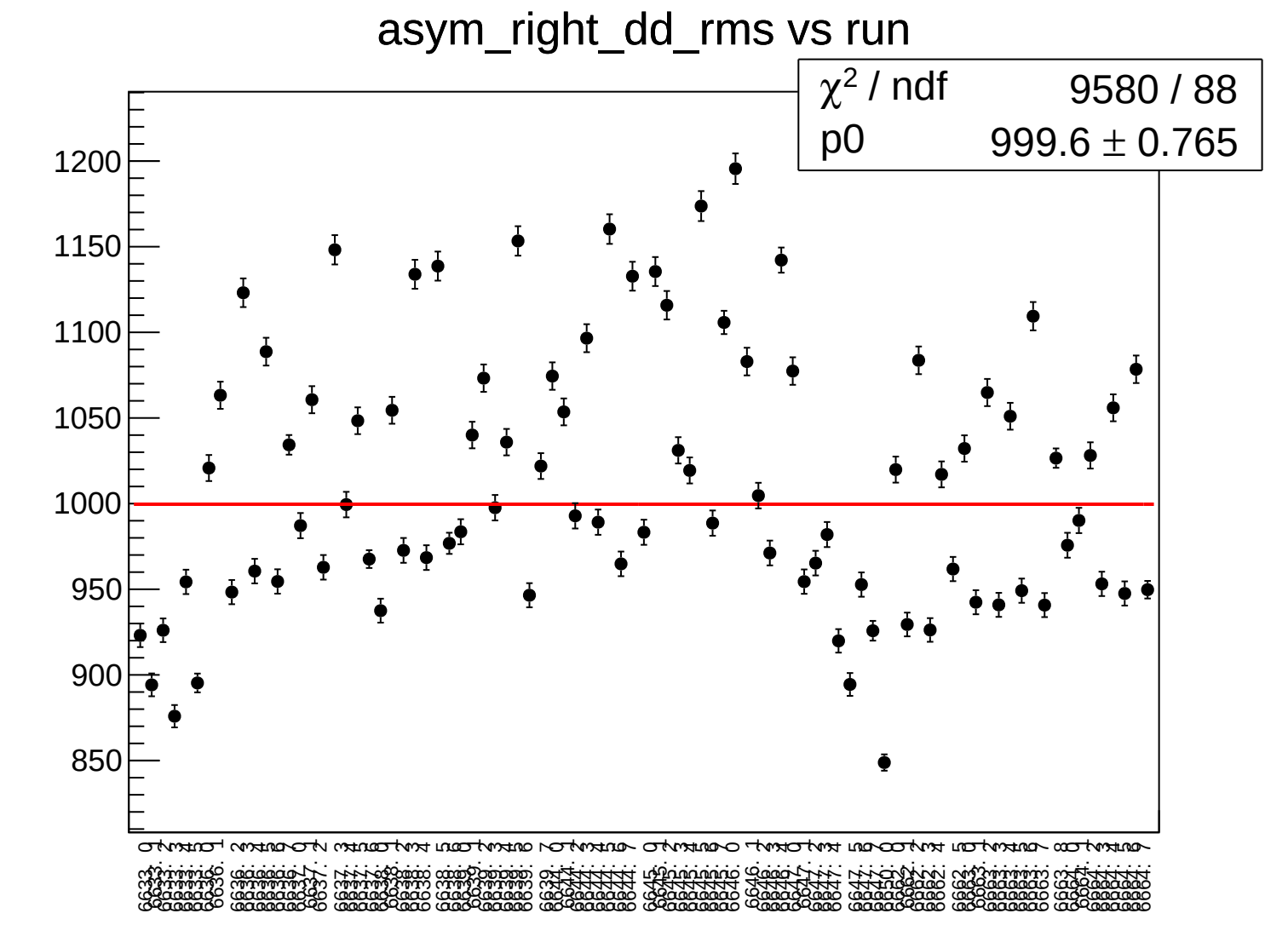

asym_right_dd_correction_mean vs run
χ² / ndf 77.03 / 88
p0 −1055 ± 870.1
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 58.35
Std Dev 49.83
2
1
0
−1
−2

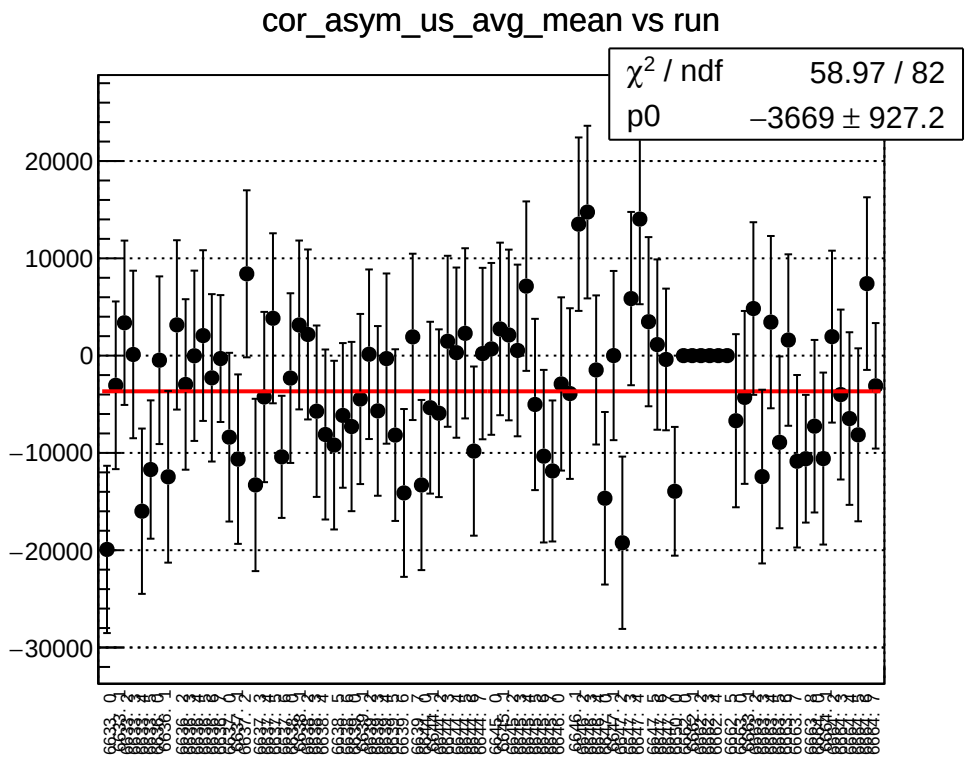

pull1D
Entries 89
Mean −0.03017
Std Dev 0.9298
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

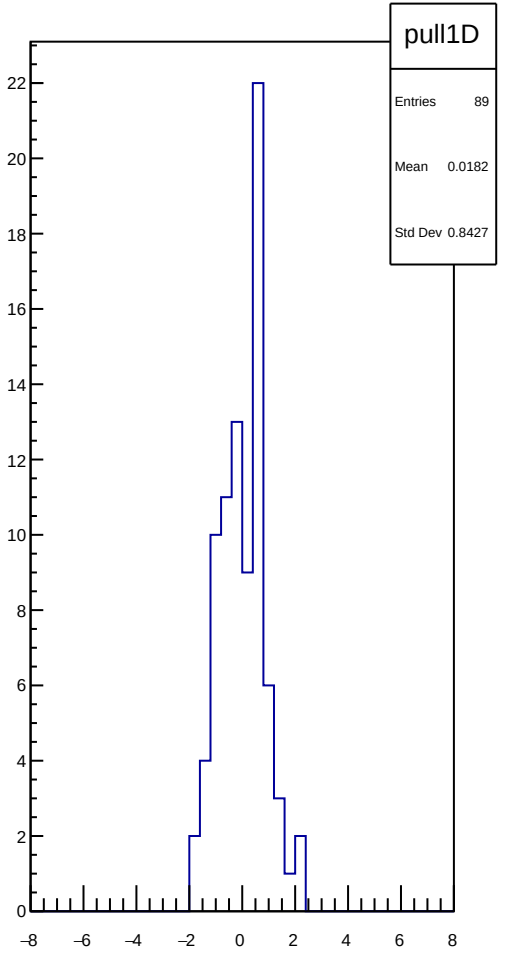

asym_right_dd_correction_rms vs run
χ² / ndf 2.158e+04 / 88
p0 801.1 ± 0.6152
1000
900
800
700
600

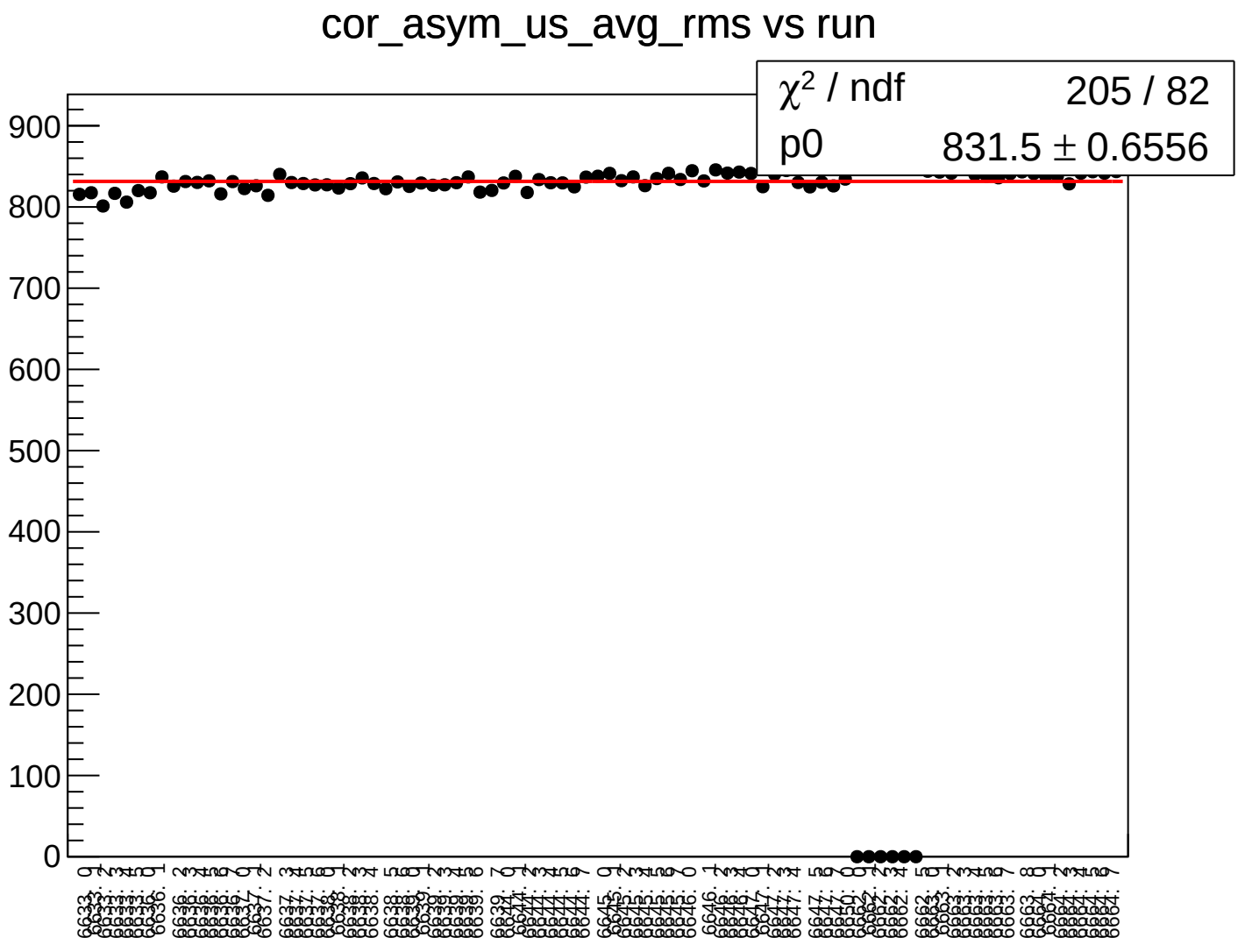

asym_right_dd_mean vs run
χ² / ndf 81.27 / 88
p0 84.95 ± 1082
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 60.64
Std Dev 56.13
2
1
0
−1
−2

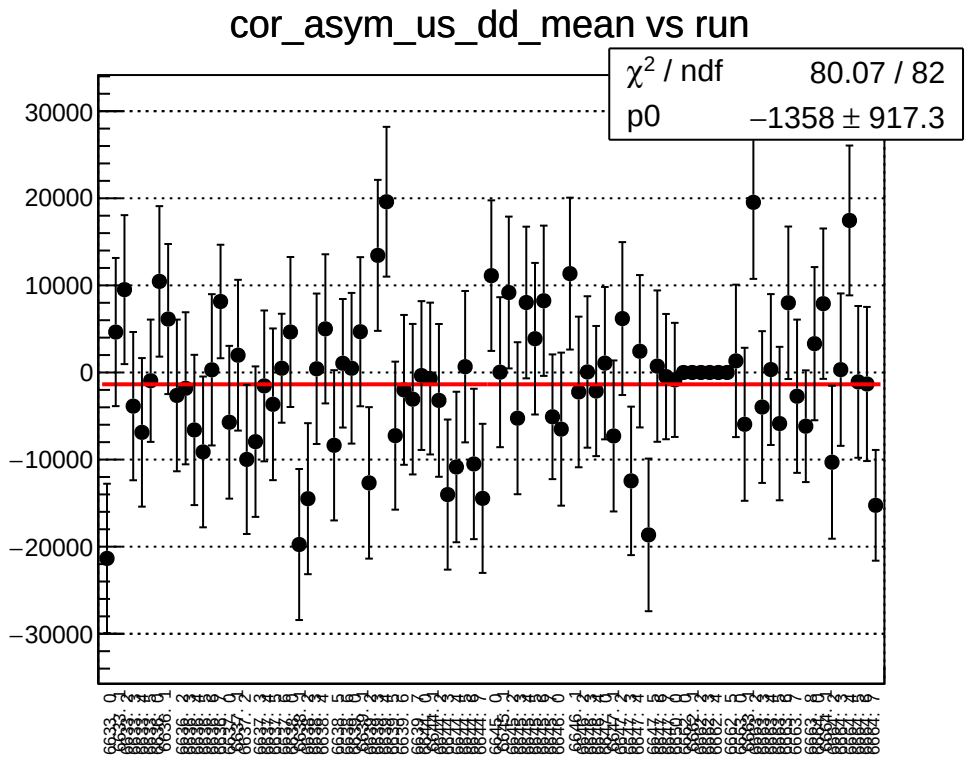

pull1D
Entries 89
Mean 0.02759
Std Dev 0.9552
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

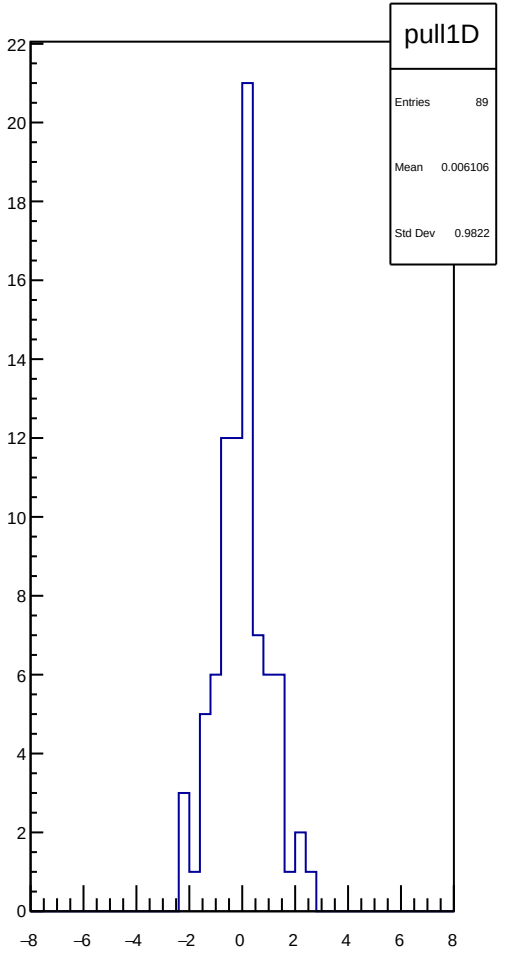

asym_right_dd_rms vs run
χ^2 / ndf 9580 / 88
p0 999.6 ± 0.765
1200
1150
1100
1050
1000
950
900
850

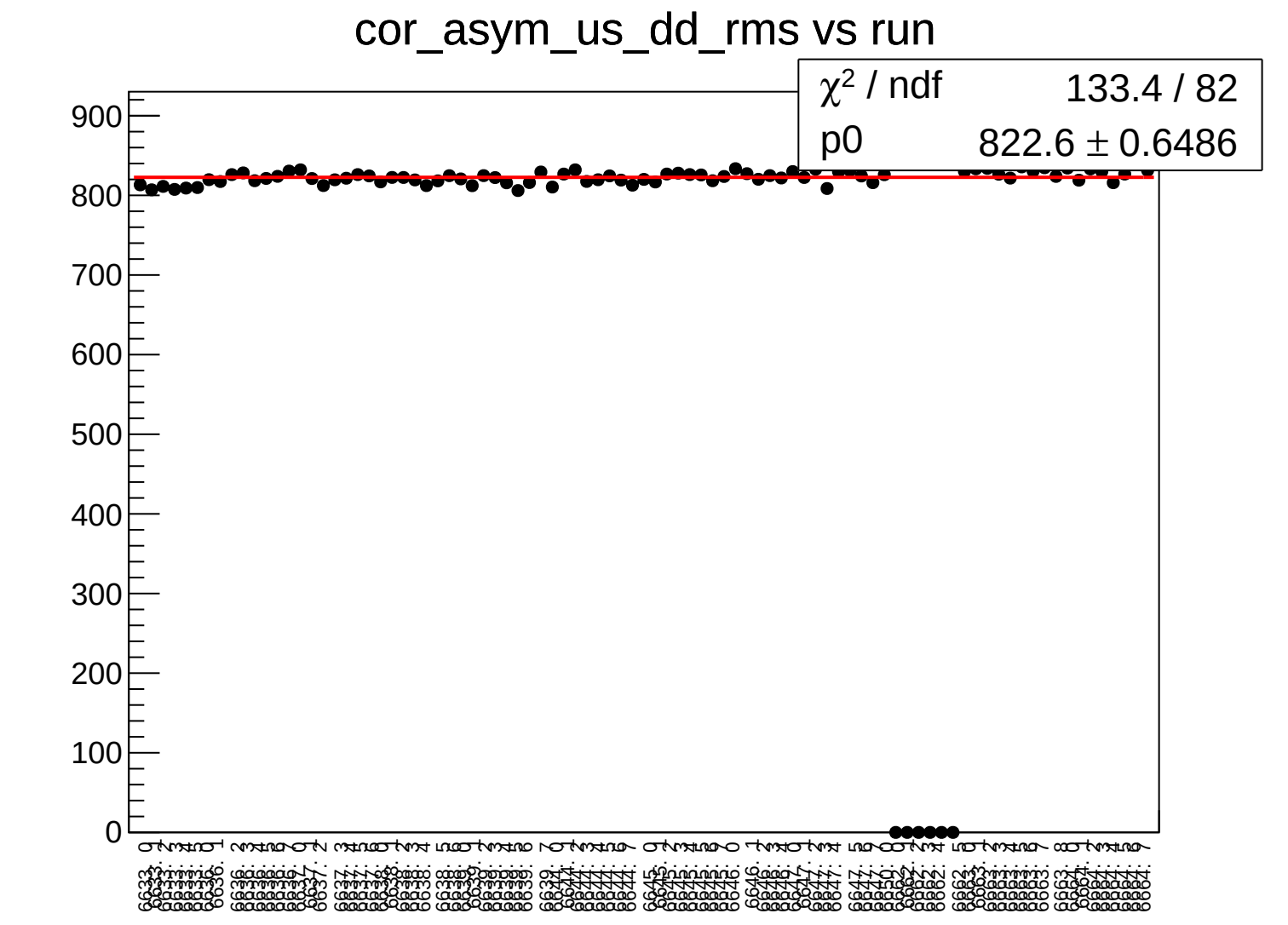

cor_asym_us_avg_mean vs run
χ² / ndf 58.97 / 82
p0 −3669 ± 927.2
20000
10000
0
−10000
−20000
−30000

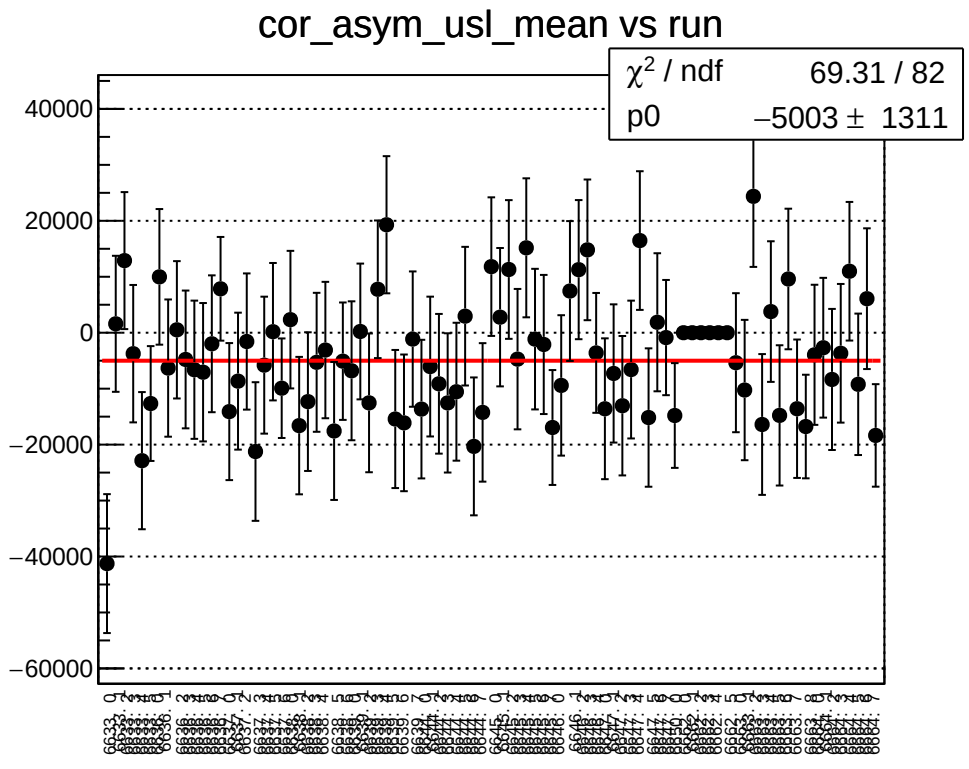

pull1D
Entries 89
Mean 0.0182
Std Dev 0.8427
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

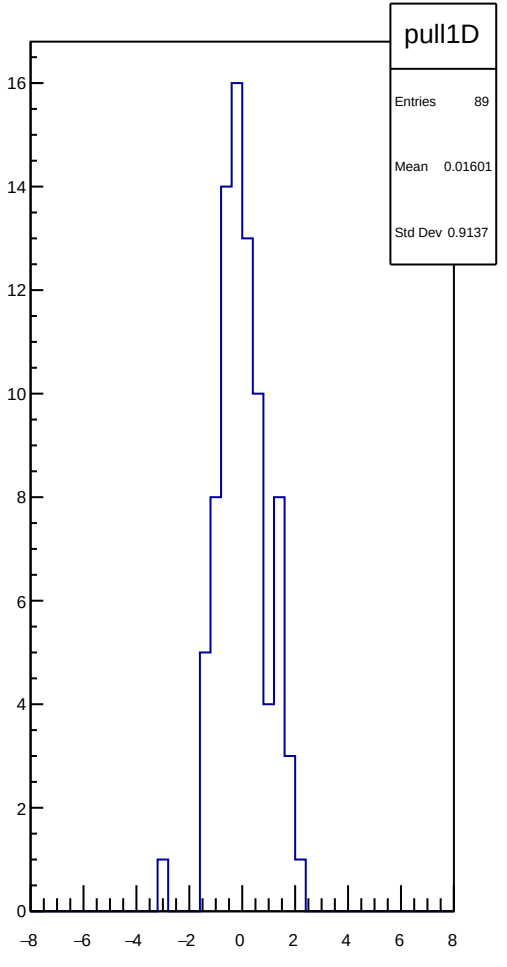

cor_asym_us_avg_rms vs run
χ^2 / ndf 205 / 82
p0 831.5 ± 0.6556
900
800
700
600
500
400
300
200
100
0

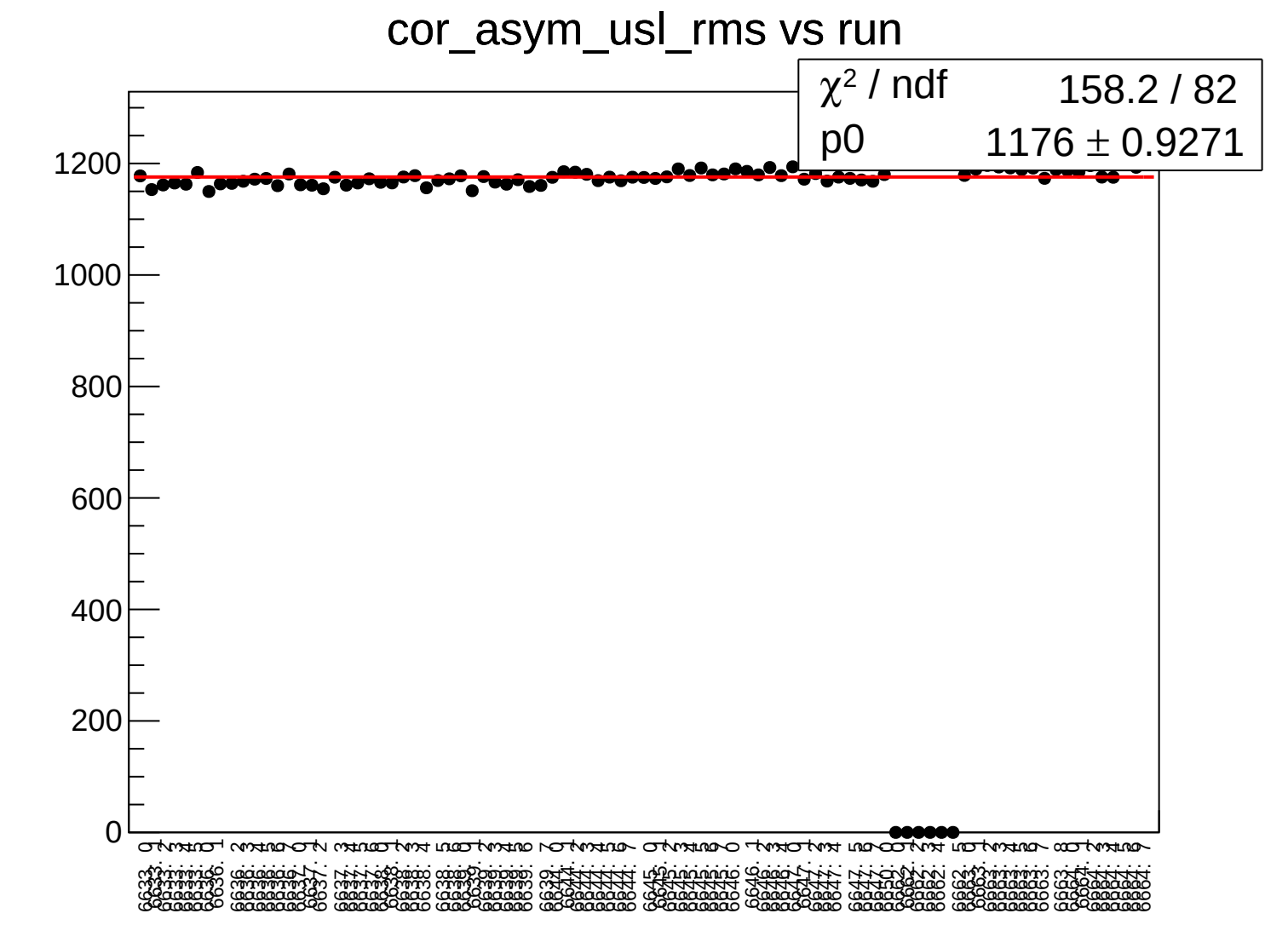

cor_asym_us_dd_mean vs run
χ² / ndf 80.07 / 82
p0 −1358 ± 917.3
30000
20000
10000
0
−10000
−20000
−30000

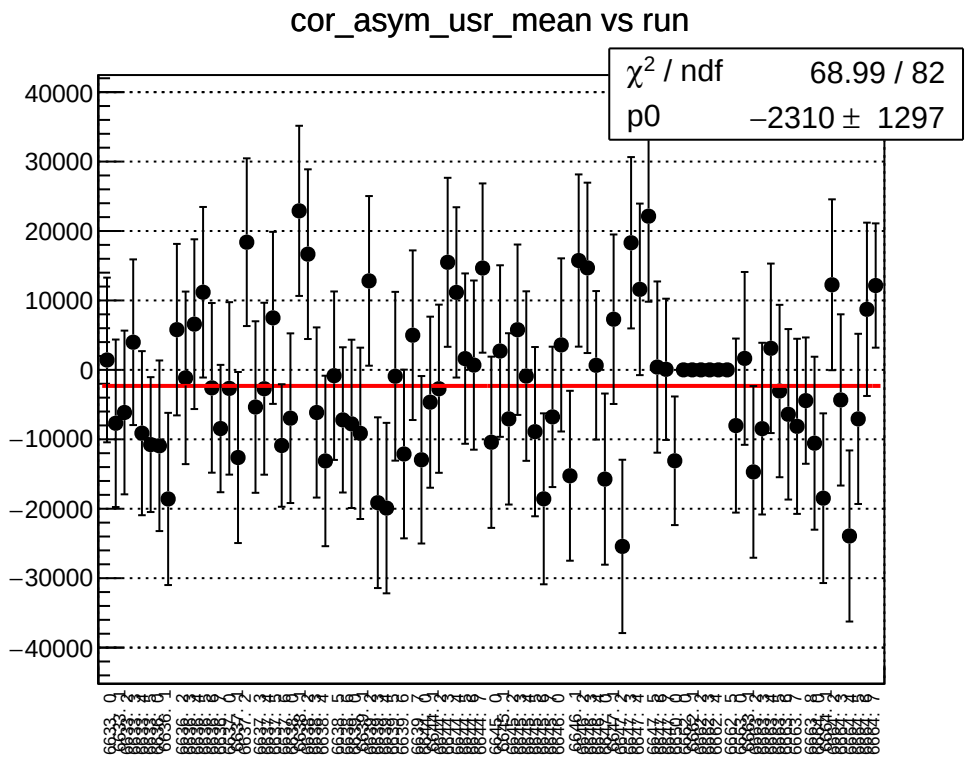

pull1D
Entries 89
Mean 0.006106
Std Dev 0.9822
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

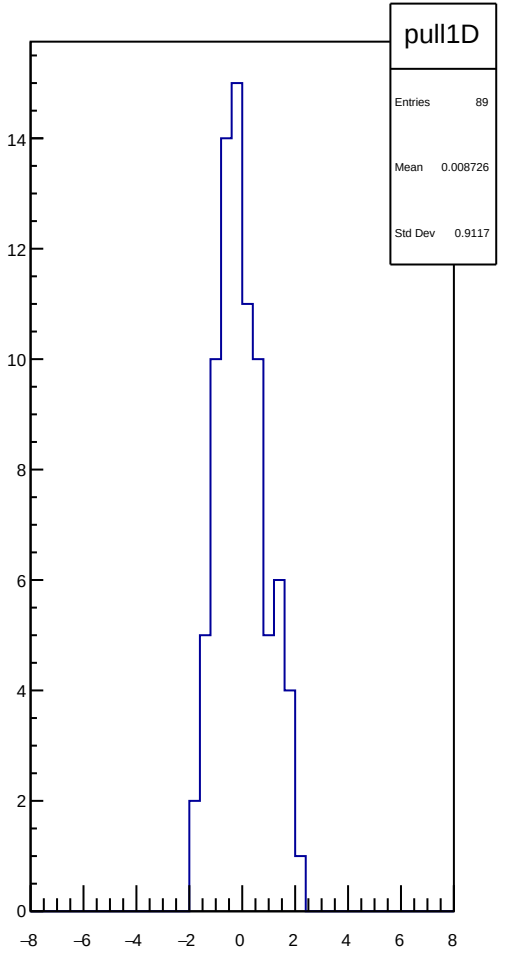

cor_asym_us_dd_rms vs run
χ² / ndf 133.4 / 82
p0 822.6 ± 0.6486
900
800
700
600
500
400
300
200
100
0

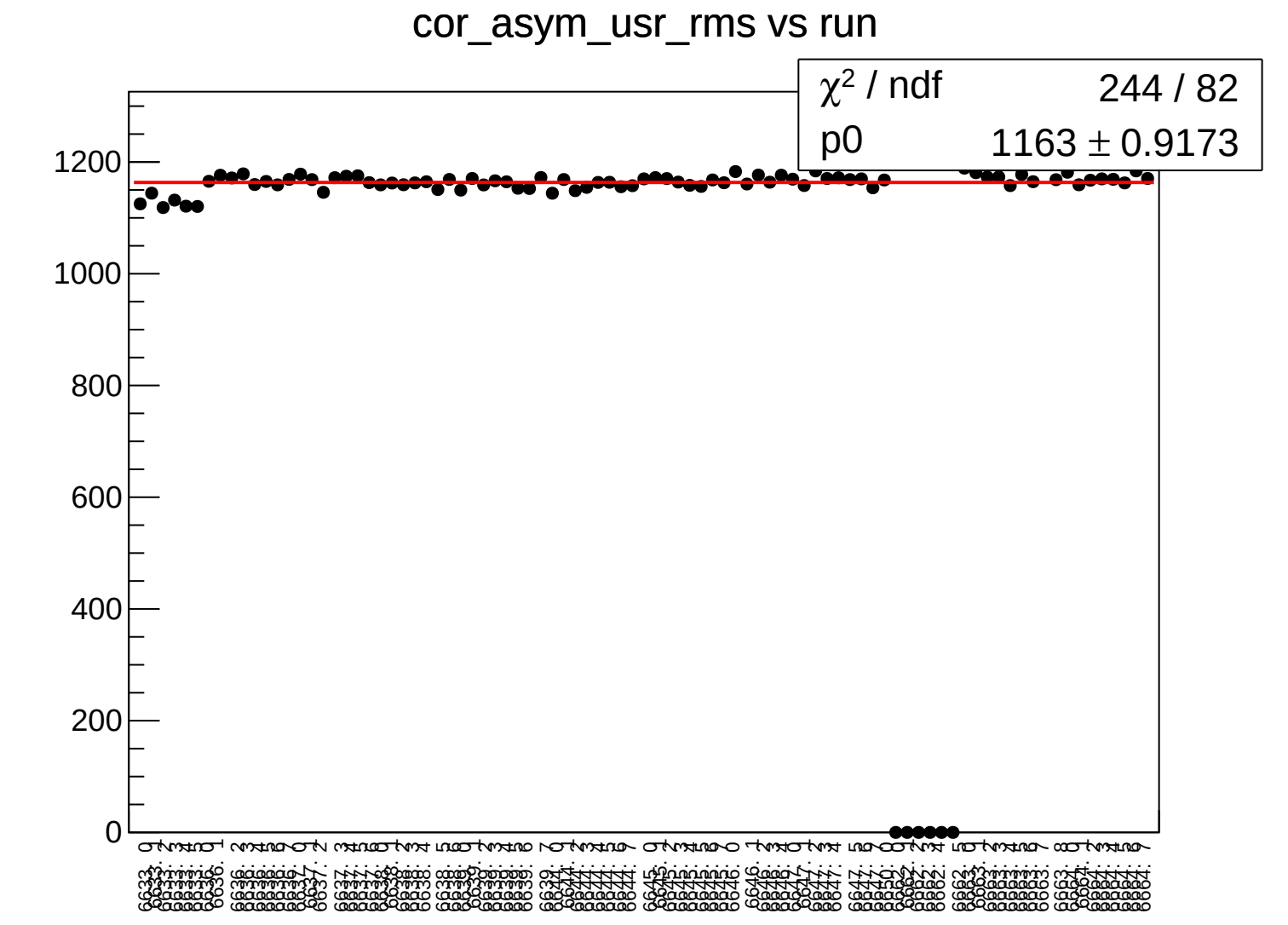

cor_asym_usl_mean vs run
χ^2 / ndf 69.31 / 82
p0 −5003 ± 1311
40000
20000
0
−20000
−40000
−60000

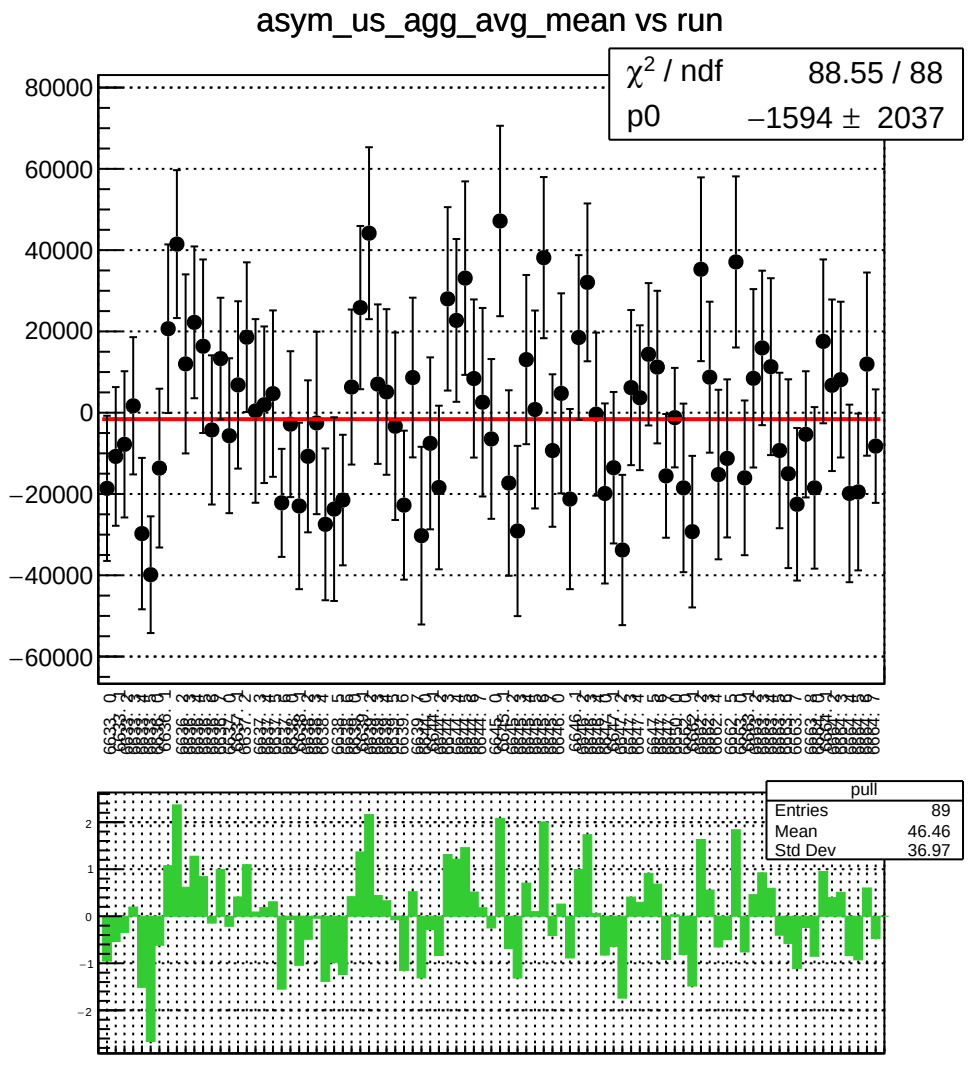

pull1D
Entries 89
Mean 0.01601
Std Dev 0.9137
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

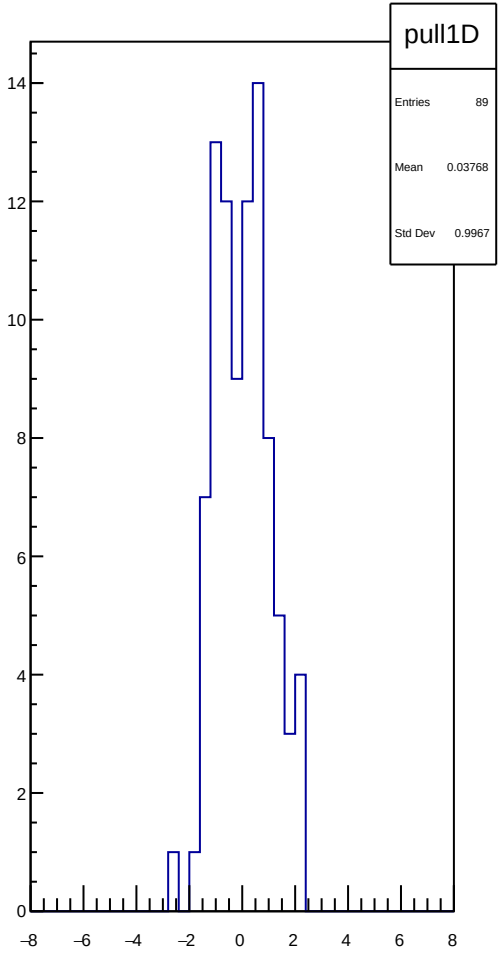

cor_asym_usl_rms vs run
χ² / ndf 158.2 / 82
p0 1176 ± 0.9271
1200
1000
800
600
400
200
0

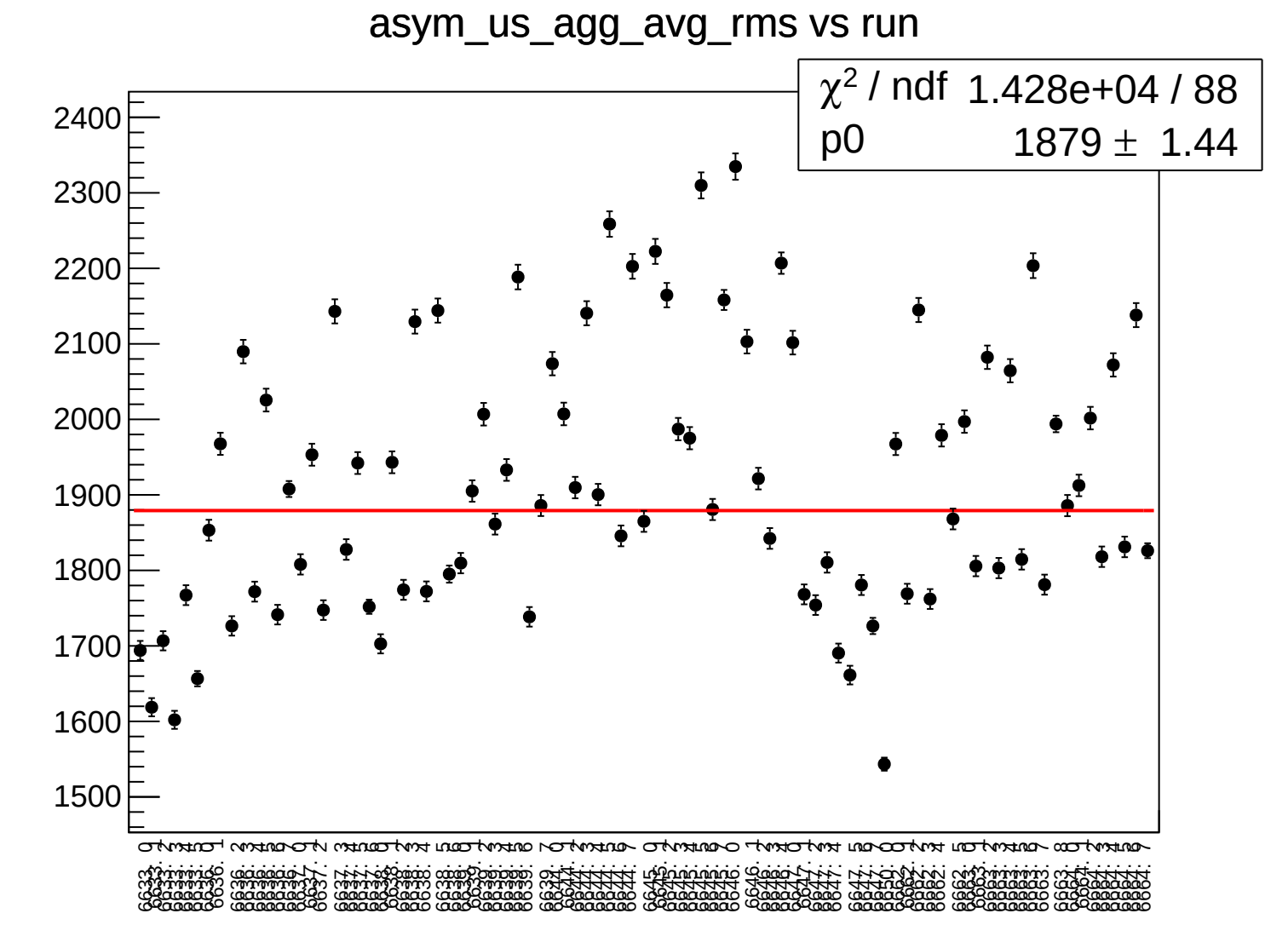

cor_asym_usr_mean vs run
χ^2 / ndf 68.99 / 82
p0 −2310 ± 1297
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000

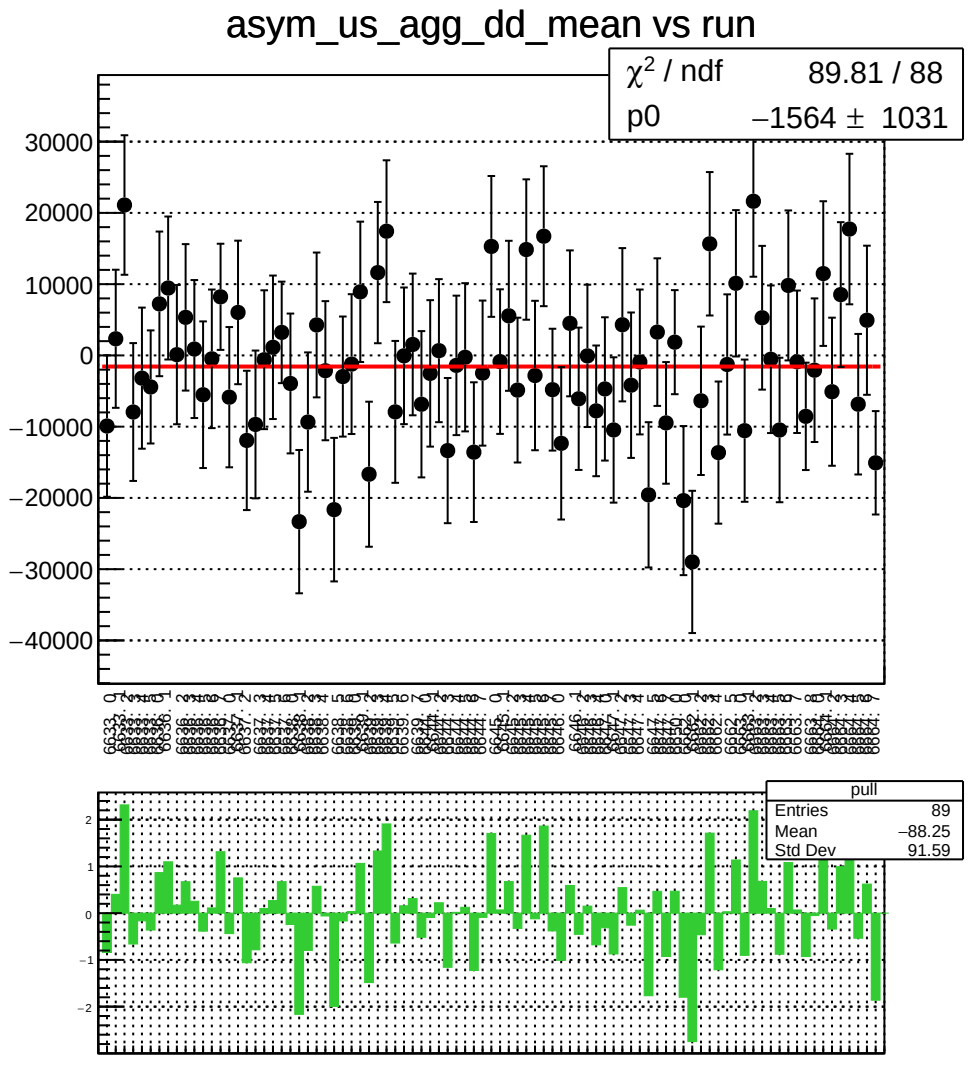

pull1D
Entries 89
Mean 0.008726
Std Dev 0.9117
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

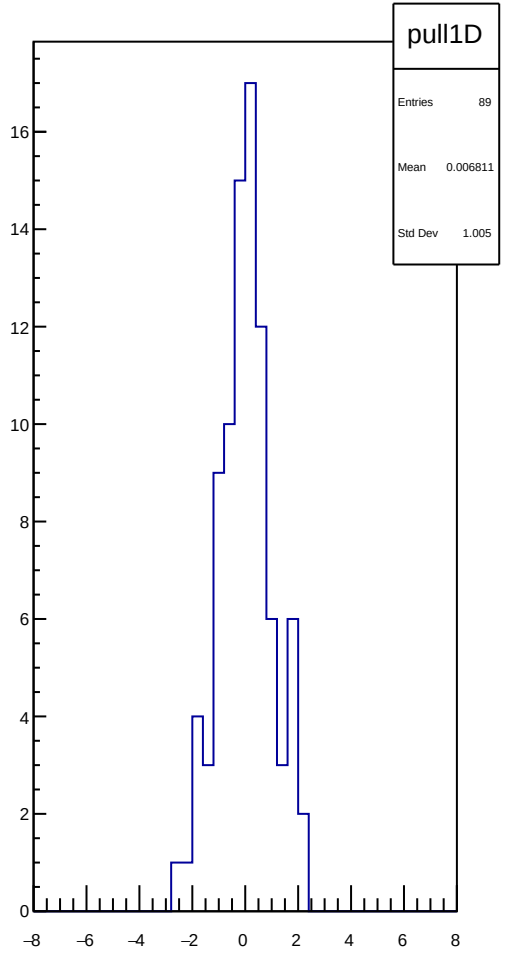

cor_asym_usr_rms vs run
χ² / ndf 244 / 82
p0 1163 ± 0.9173
1200
1000
800
600
400
200
0

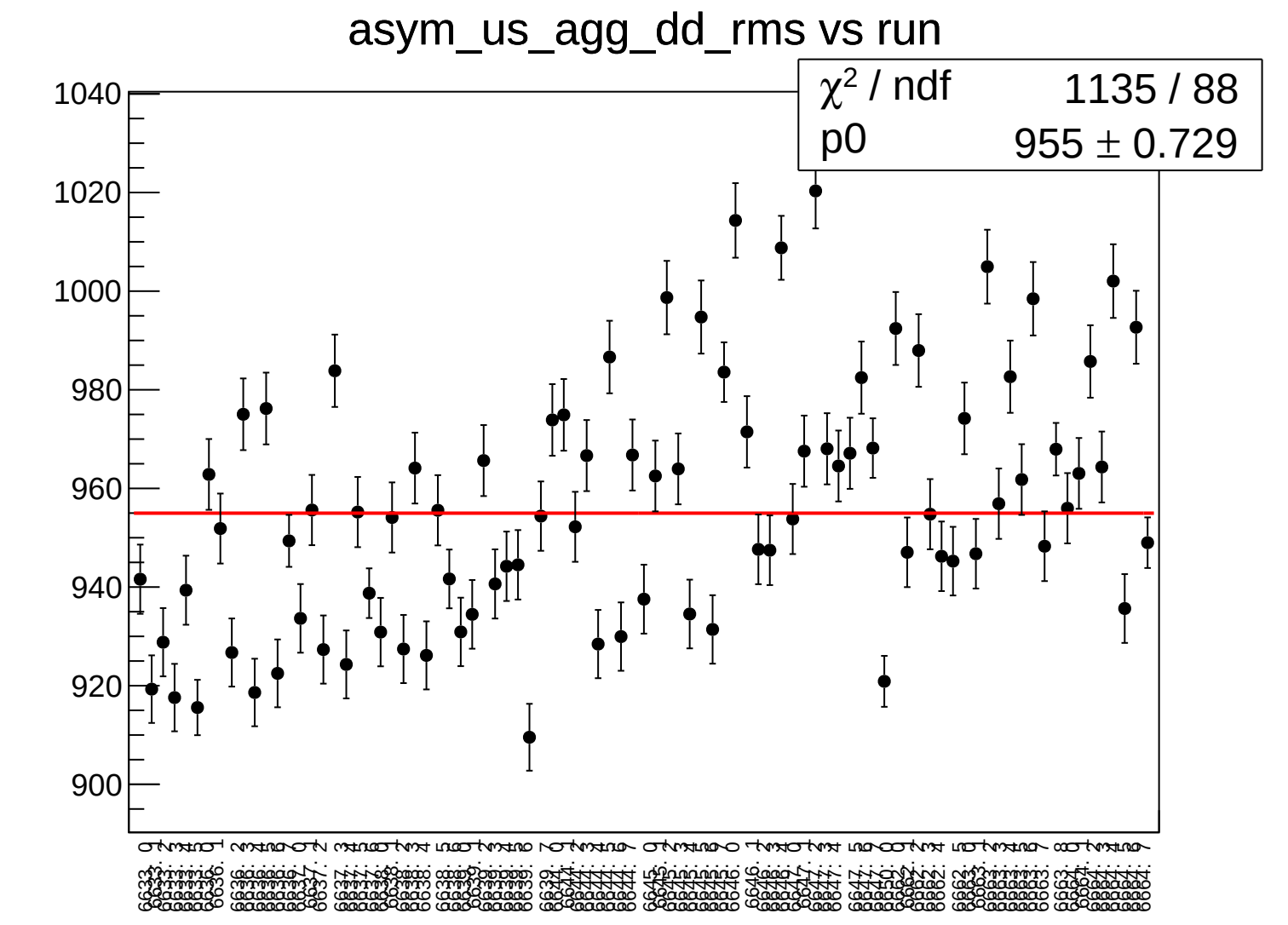

asym_us_agg_avg_mean vs run
χ² / ndf 88.55 / 88
p0 −1594 ± 2037
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 46.46
Std Dev 36.97
2
1
0
−1
−2

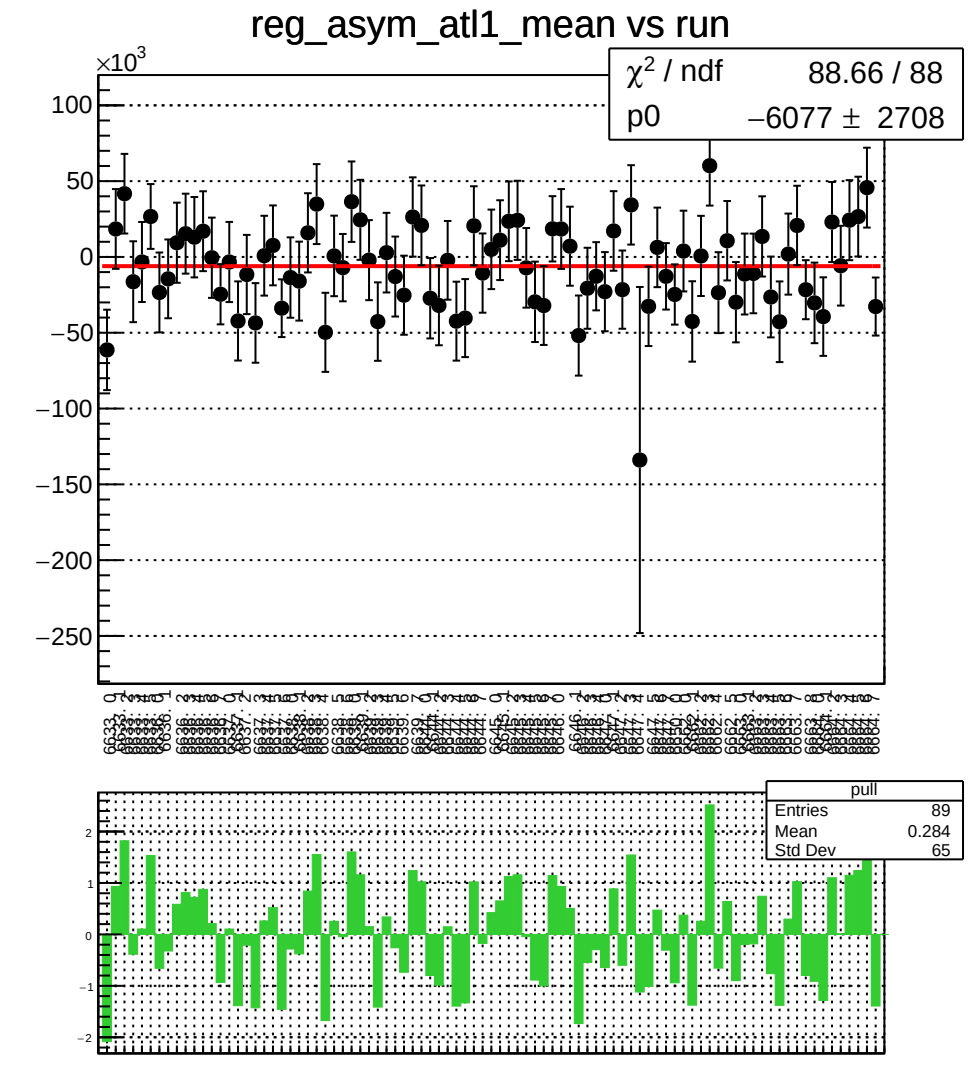

pull1D
Entries 89
Mean 0.03768
Std Dev 0.9967
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

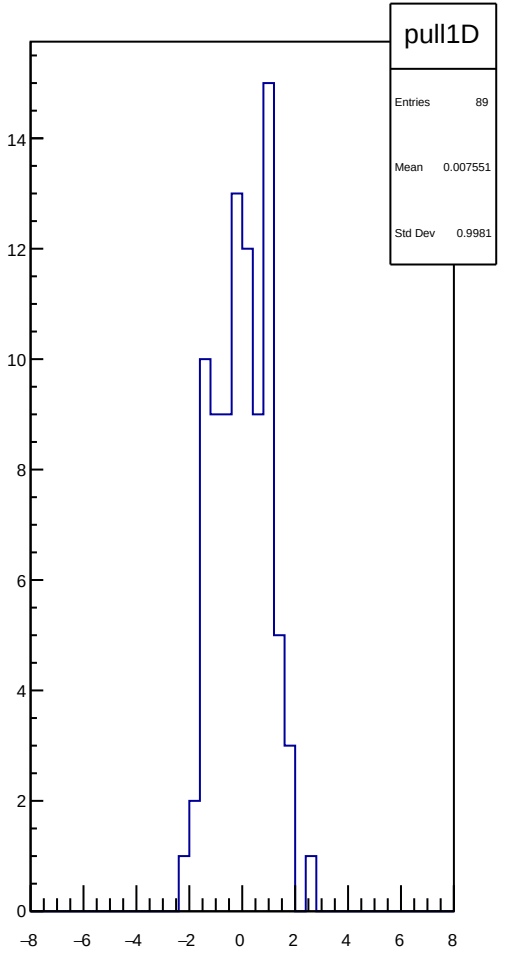

asym_us_agg_avg_rms vs run
χ² / ndf 1.428e+04 / 88
p0 1879 ± 1.44
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500

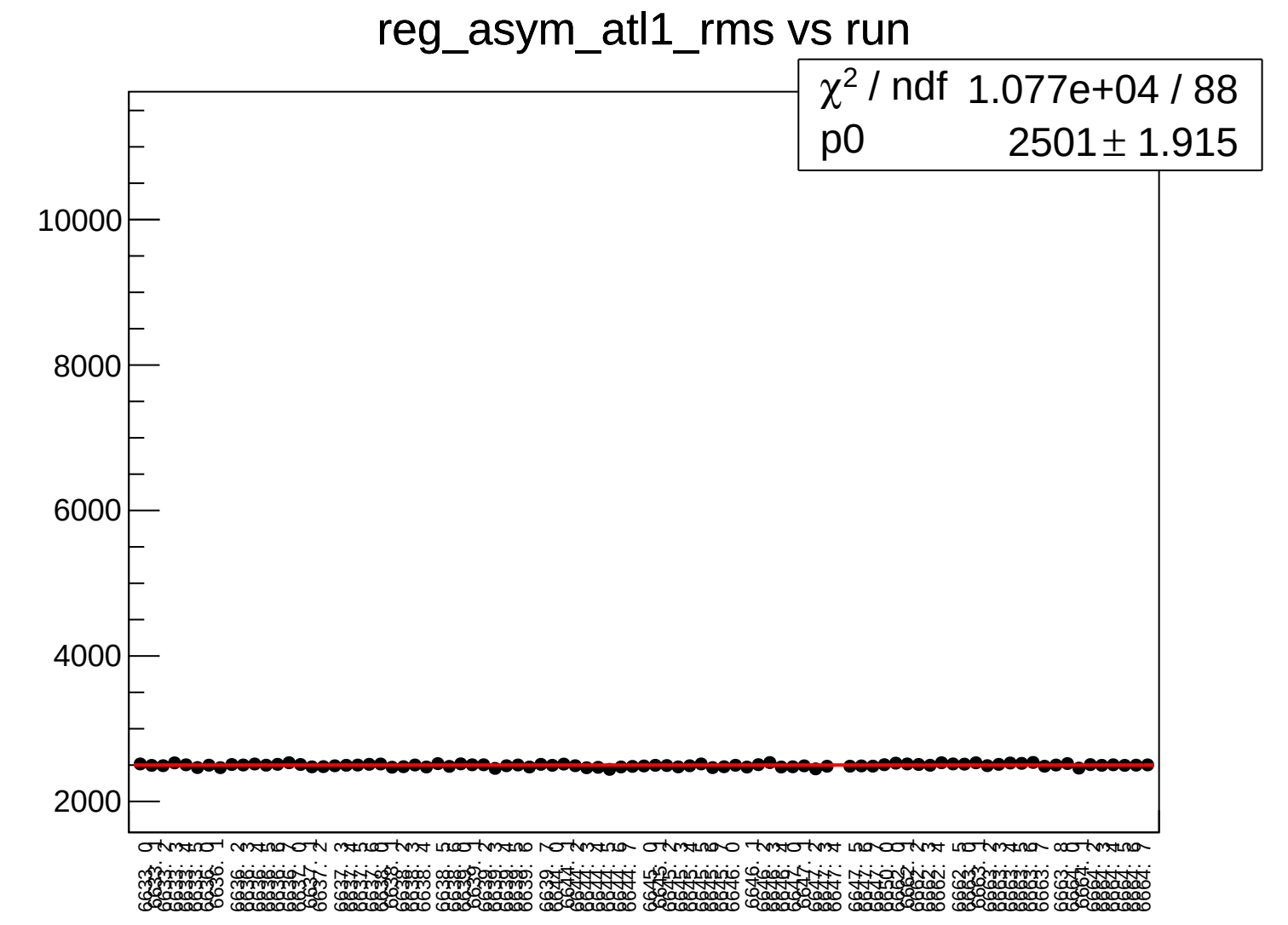

asym_us_agg_dd_mean vs run
χ² / ndf 89.81 / 88
p0 −1564 ± 1031
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −88.25
Std Dev 91.59
2
1
0
−1
−2

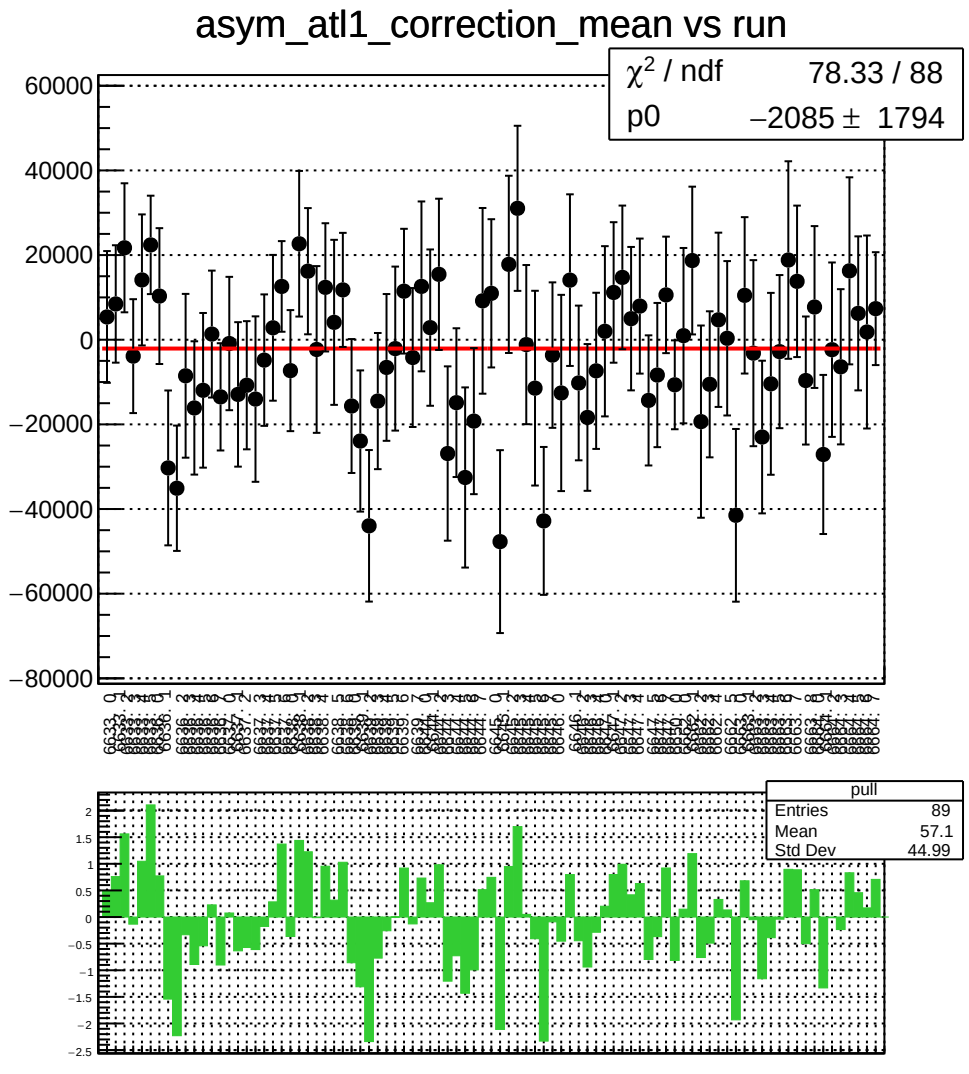

pull1D
Entries 89
Mean 0.006811
Std Dev 1.005
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

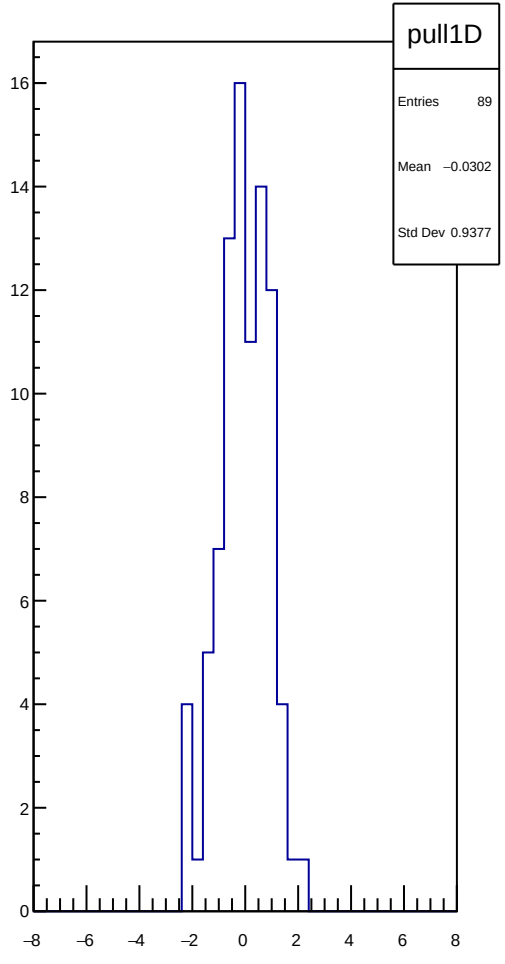

asym_us_agg_dd_rms vs run
χ² / ndf 1135 / 88
p0 955 ± 0.729
1040
1020
1000
980
960
940
920
900

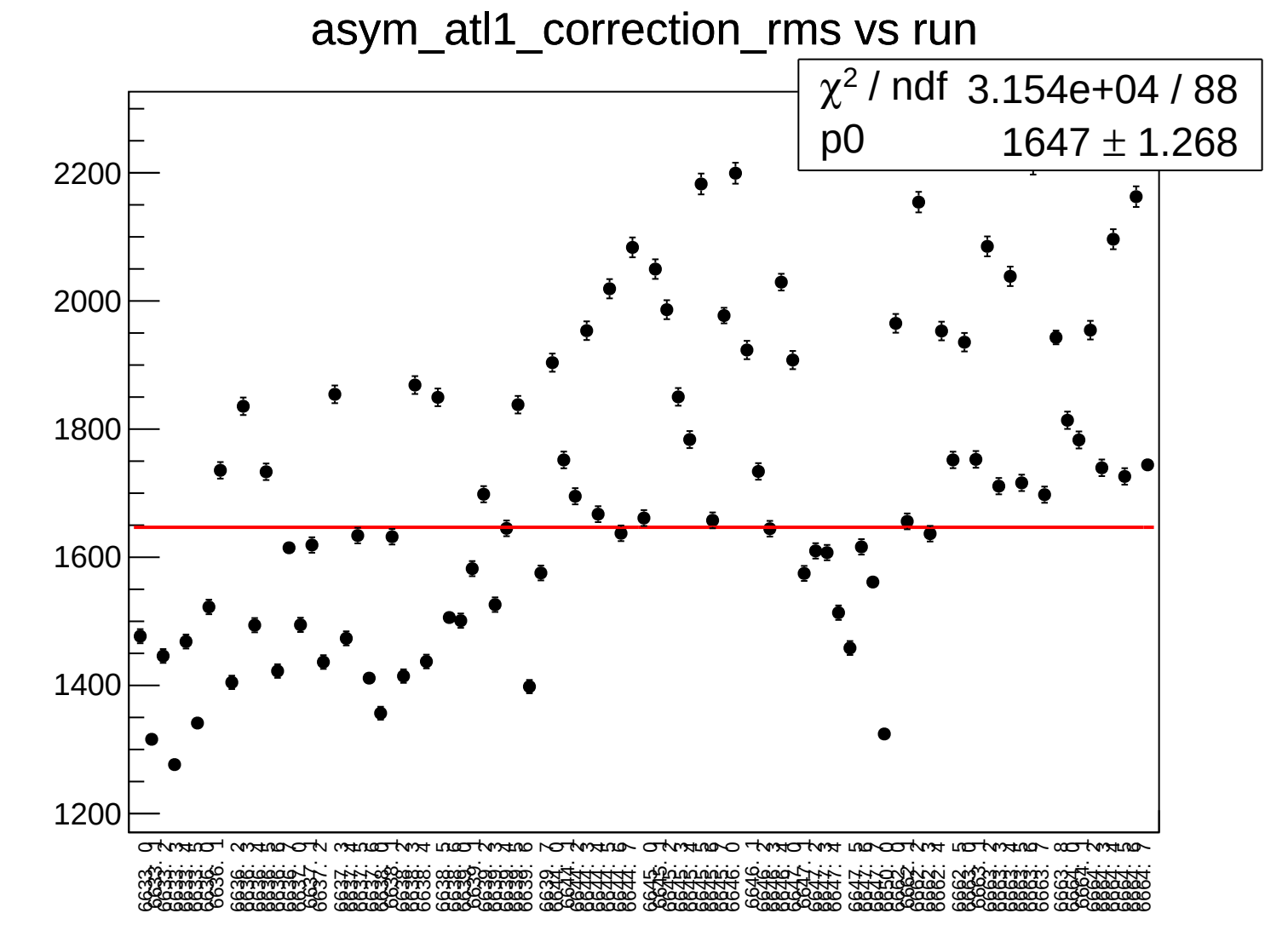

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 88.66 / 88
p0 −6077 ± 2708
100
50
0
−50
−100
−150
−200
−250
pull
Entries 89
Mean 0.284
Std Dev 65
2
1
0
−1
−2

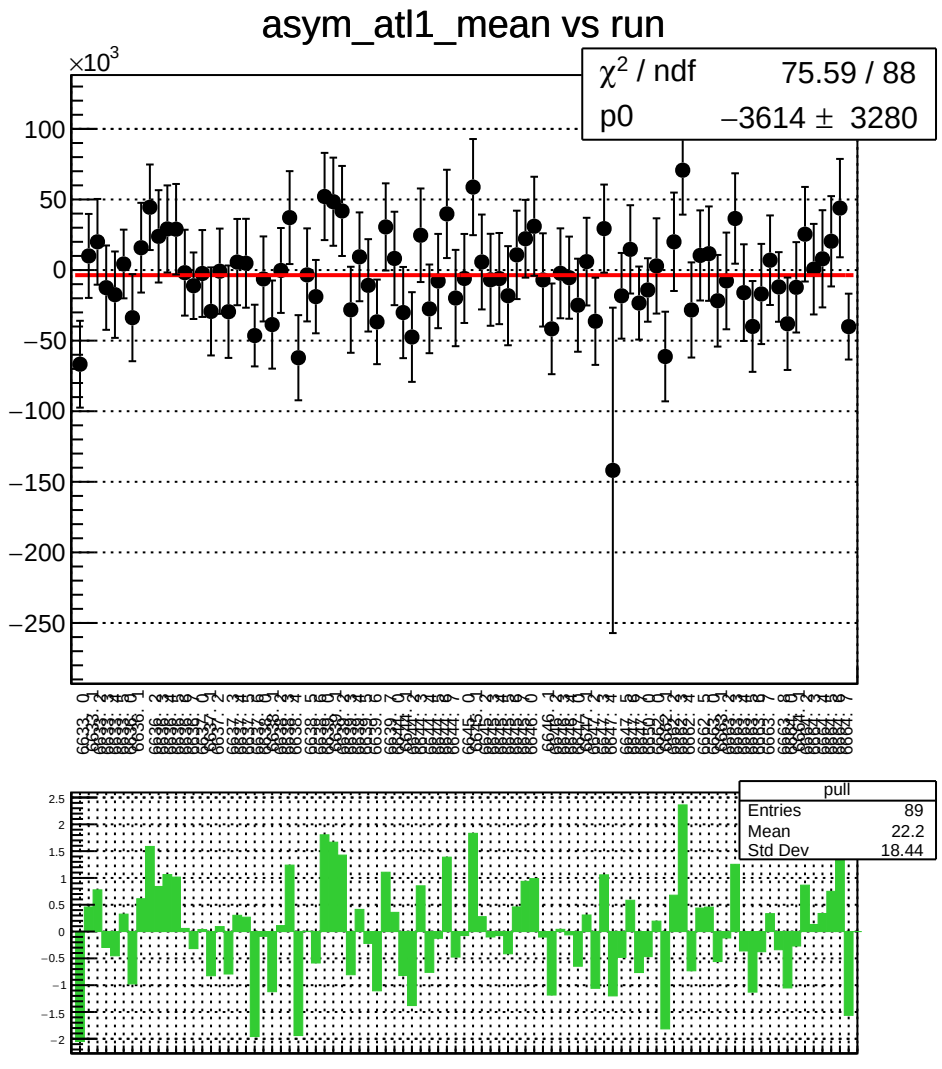

pull1D
Entries 89
Mean 0.007551
Std Dev 0.9981
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

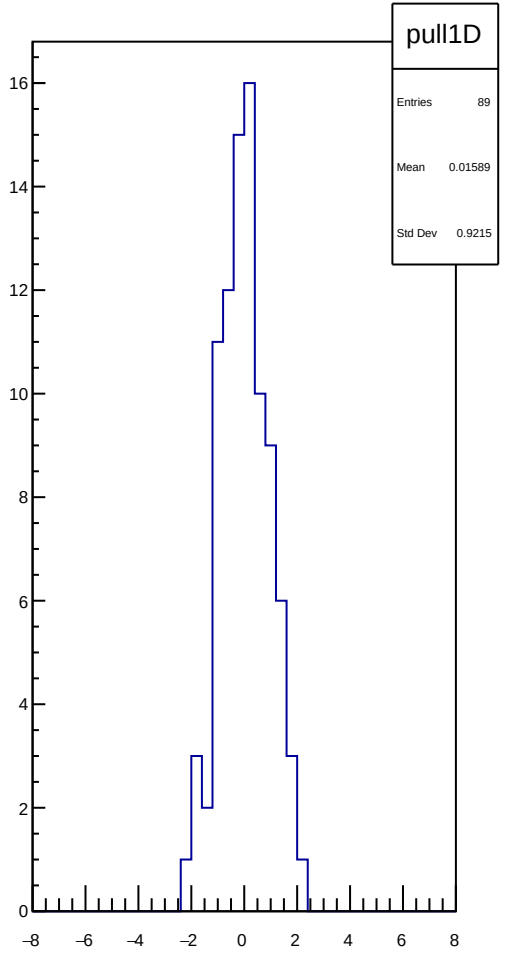

reg_asym_atl1_rms vs run
χ² / ndf 1.077e+04 / 88
p0 2501 ± 1.915
10000
8000
6000
4000
2000

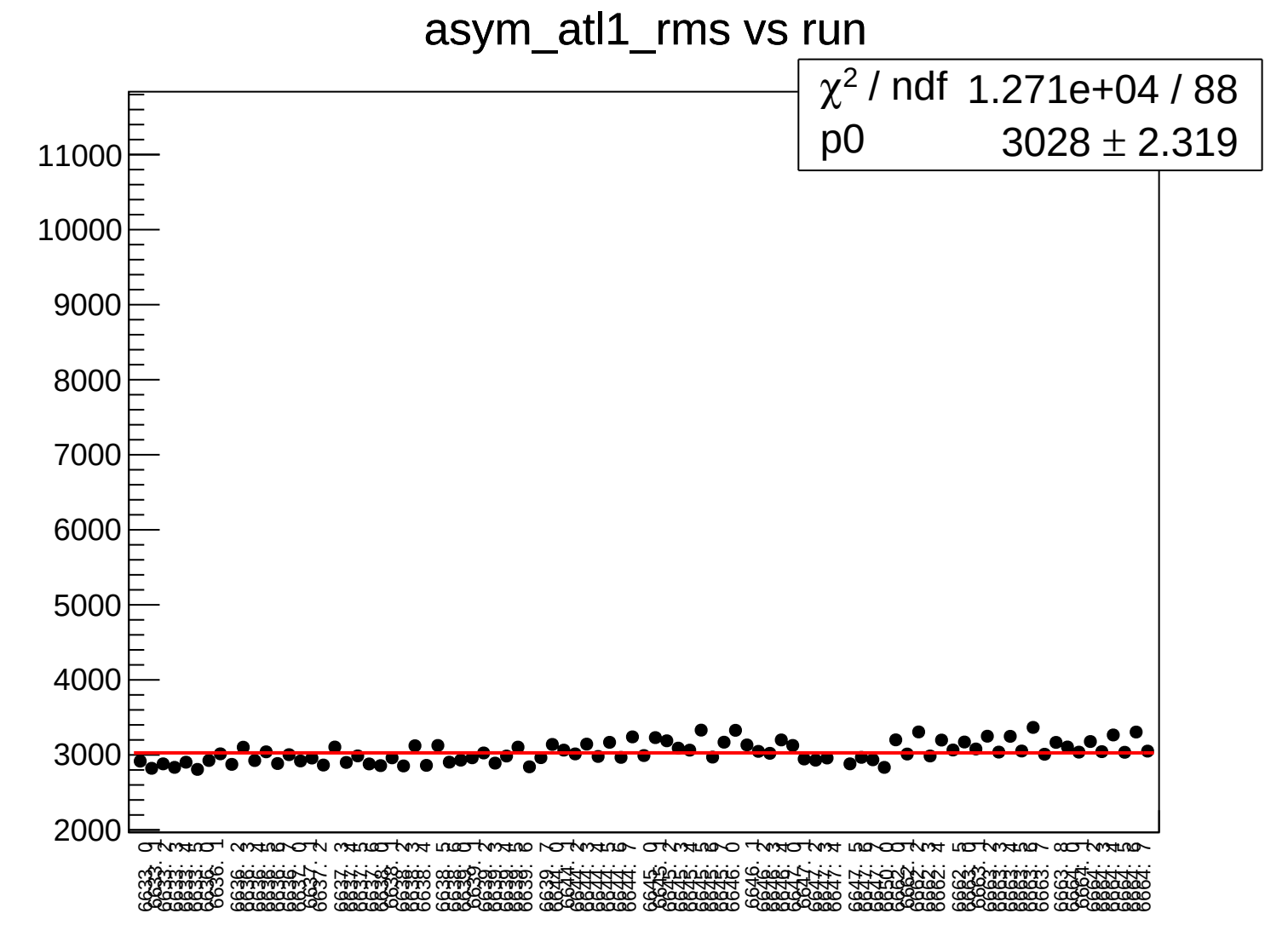

asym_atl1_correction_mean vs run
χ² / ndf 78.33 / 88
p0 −2085 ± 1794
pull
Entries 89
Mean 57.1
Std Dev 44.99

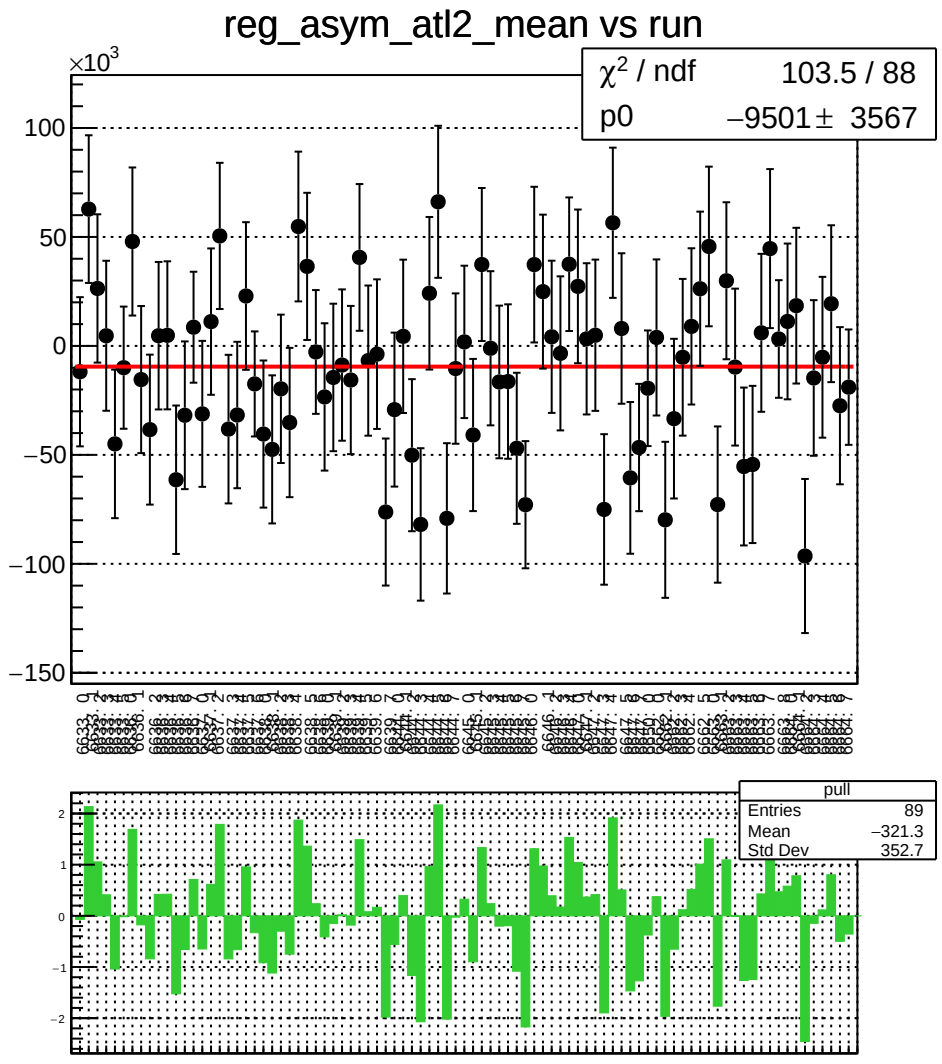

pull1D
Entries 89
Mean −0.0302
Std Dev 0.9377

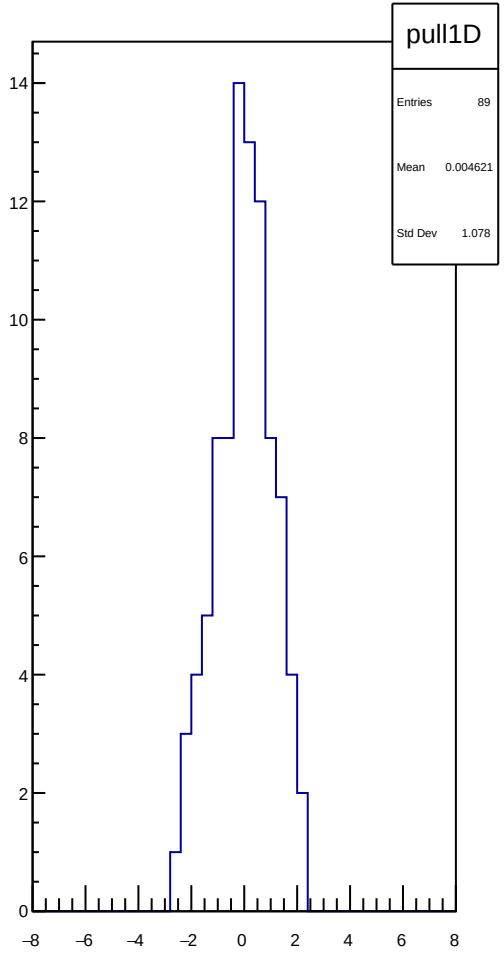

asym_atl1_correction_rms vs run
χ² / ndf 3.154e+04 / 88
p0 1647 ± 1.268
2200
2000
1800
1600
1400
1200

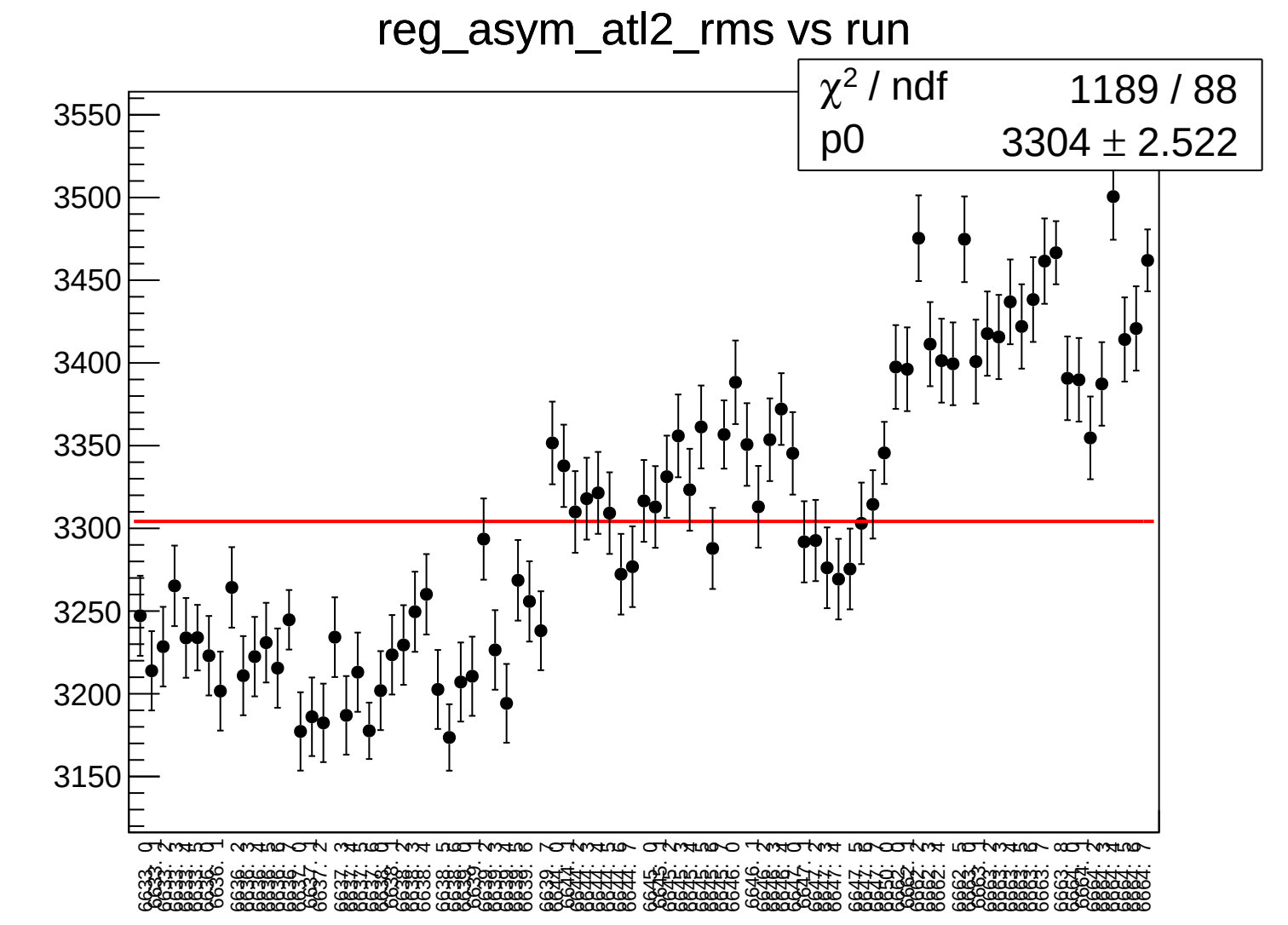

asym_atl1_mean vs run
×10^3
χ² / ndf 75.59 / 88
p0 −3614 ± 3280
100
50
0
−50
−100
−150
−200
−250
pull
Entries 89
Mean 22.2
Std Dev 18.44
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

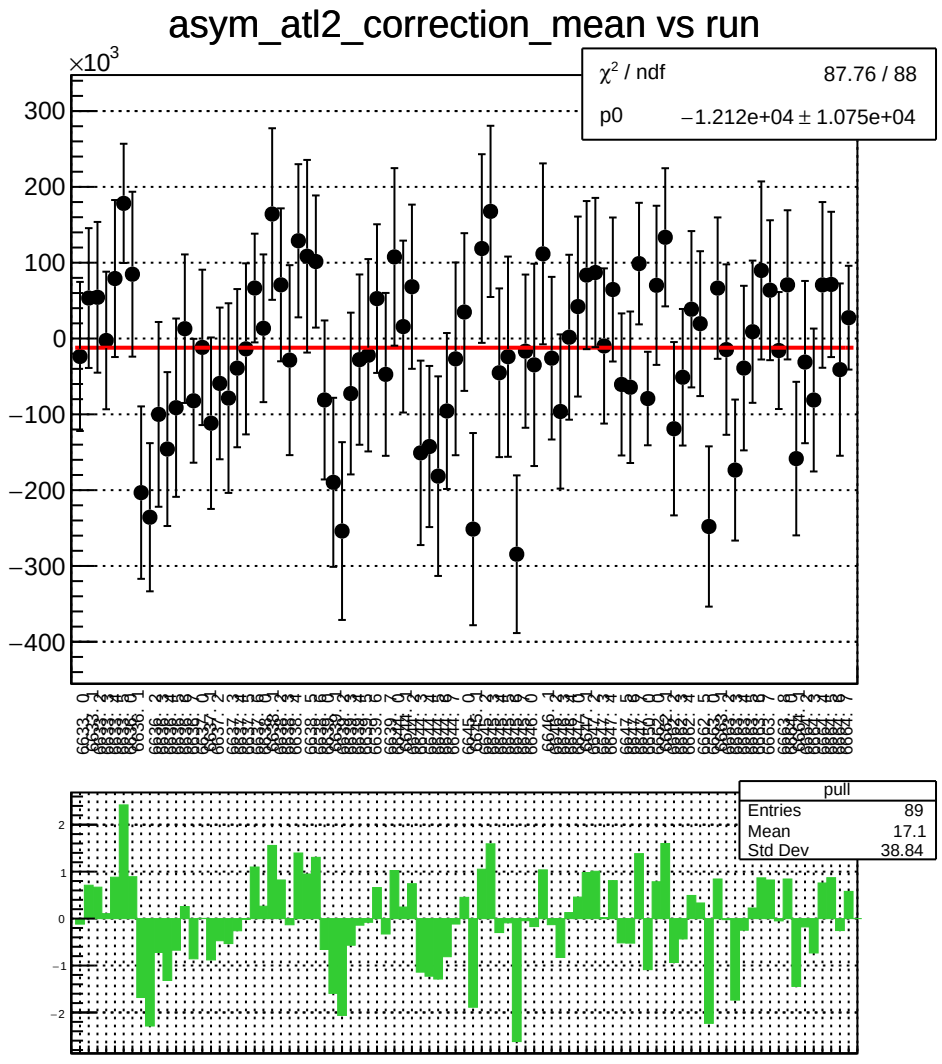

pull1D
Entries 89
Mean 0.01589
Std Dev 0.9215
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

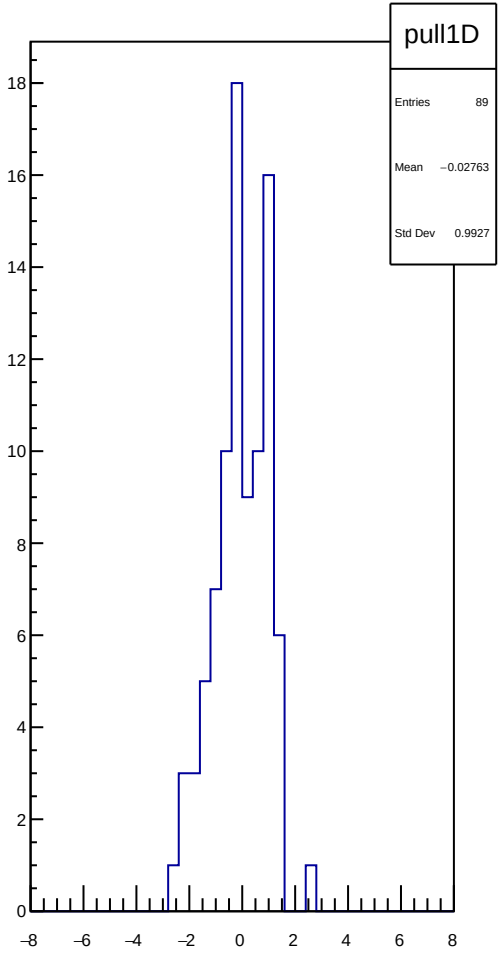

asym_atl1_rms vs run
χ² / ndf 1.271e+04 / 88
p0 3028 ± 2.319
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

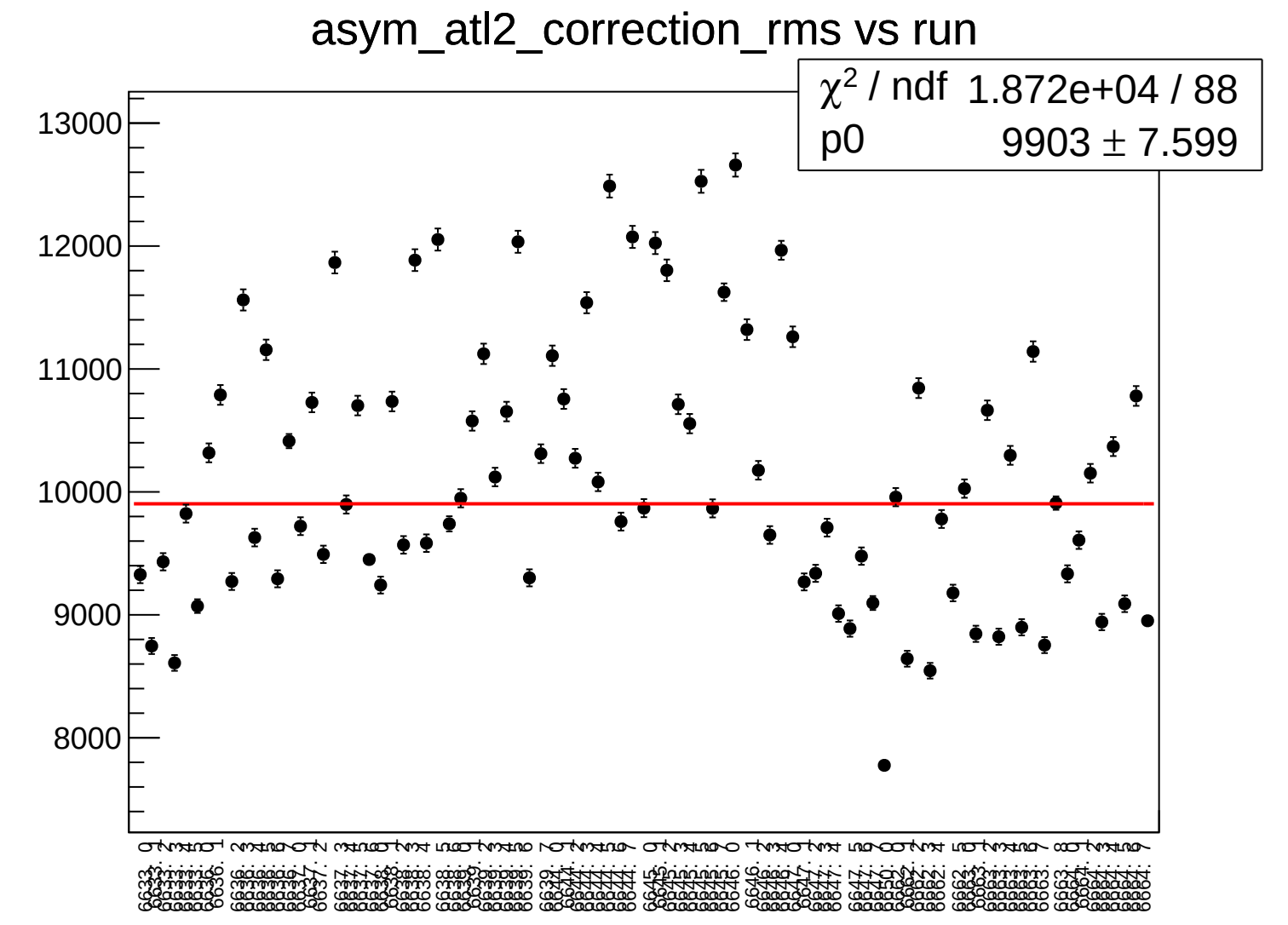

reg_asym_atl2_mean vs run
×10^3
χ^2 / ndf 103.5 / 88
p0 −9501 ± 3567
100
50
0
−50
−100
−150
pull
Entries 89
Mean −321.3
Std Dev 352.7
2
1
0
−1
−2

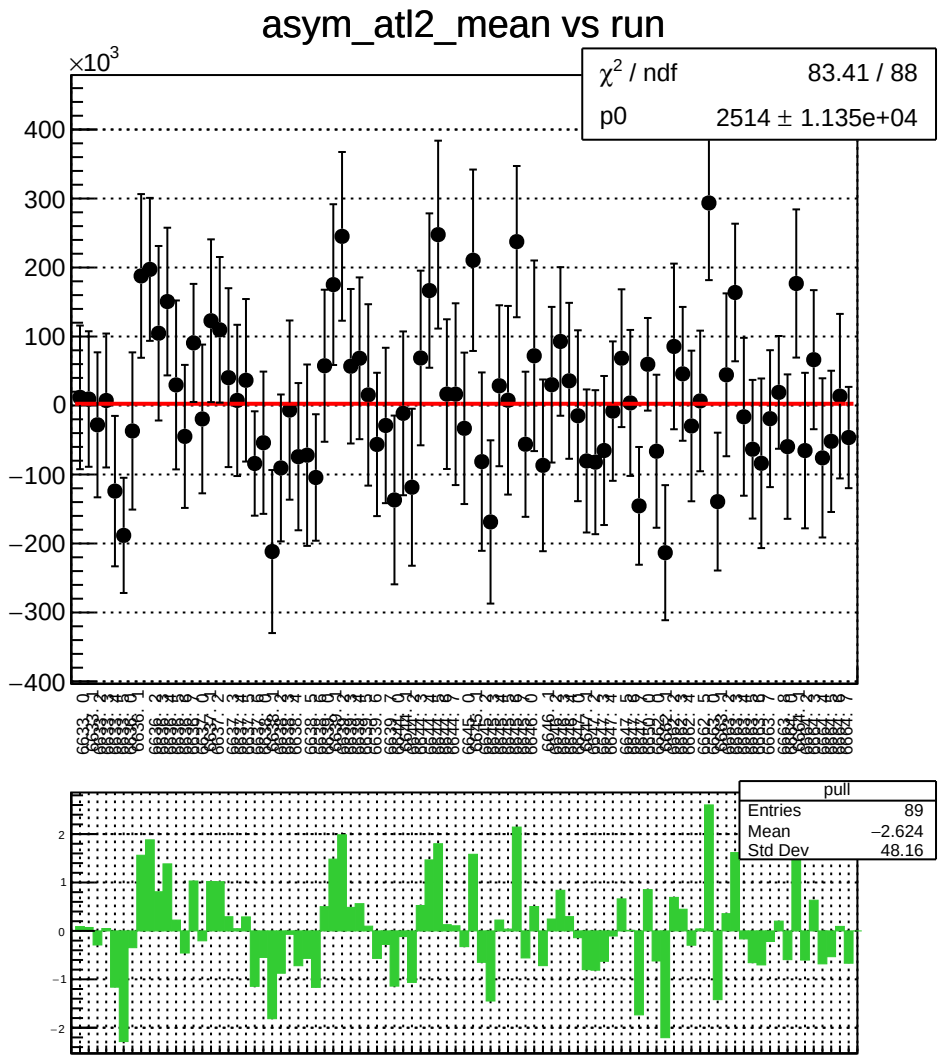

pull1D
Entries 89
Mean 0.004621
Std Dev 1.078
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

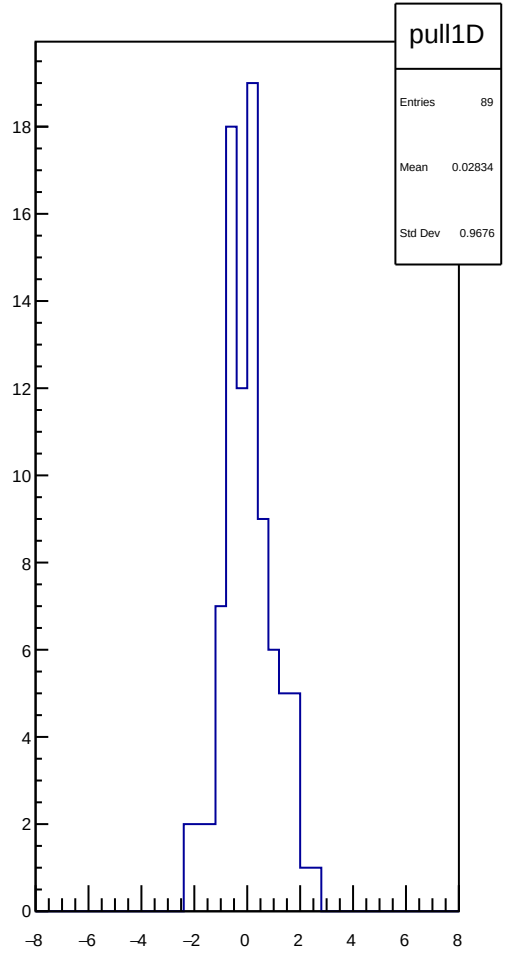

reg_asym_atl2_rms vs run
χ² / ndf 1189 / 88
p0 3304 ± 2.522
3550
3500
3450
3400
3350
3300
3250
3200
3150

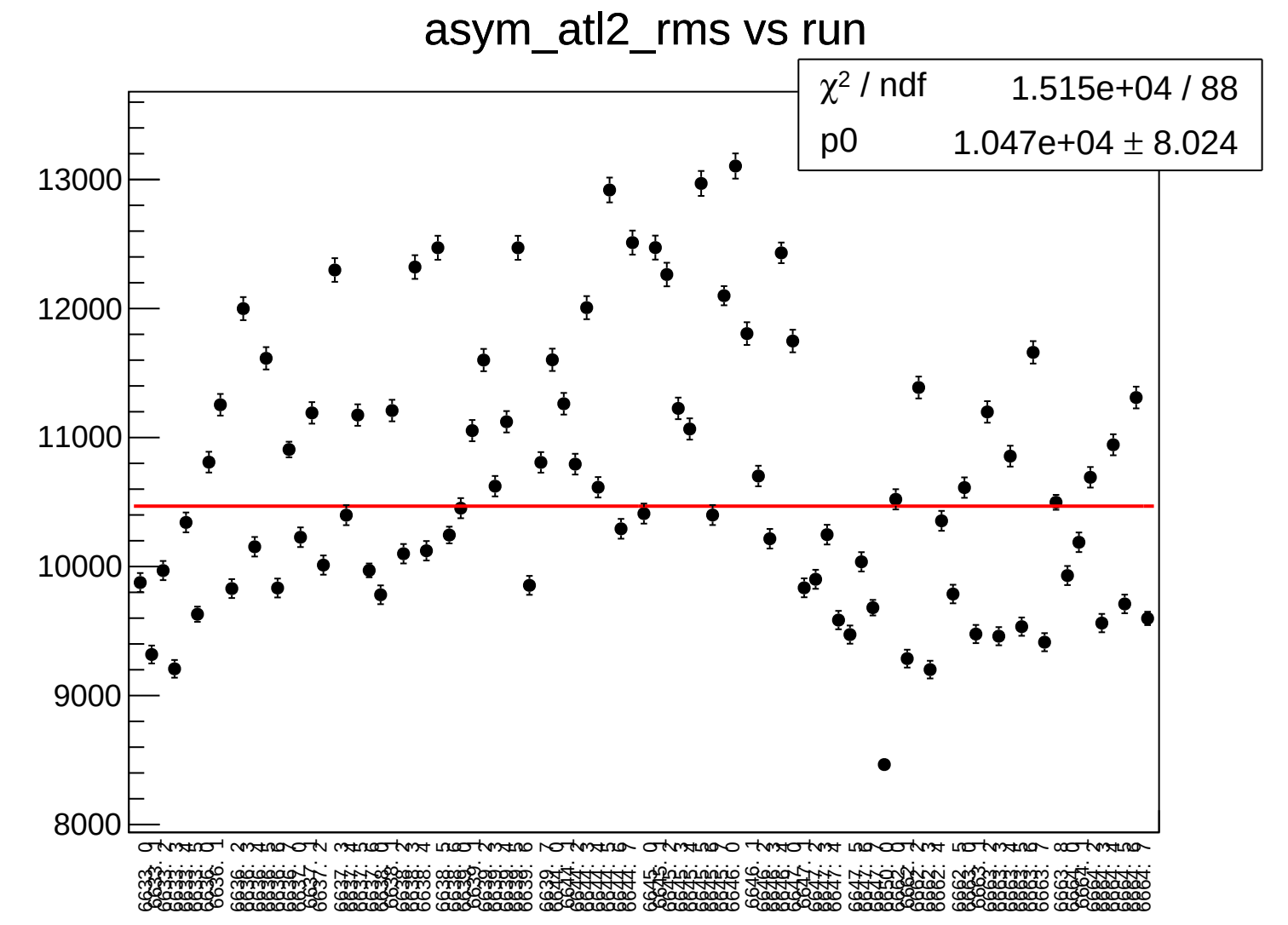

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 87.76 / 88
p0 −1.212e+04 ± 1.075e+04
pull
Entries 89
Mean 17.1
Std Dev 38.84

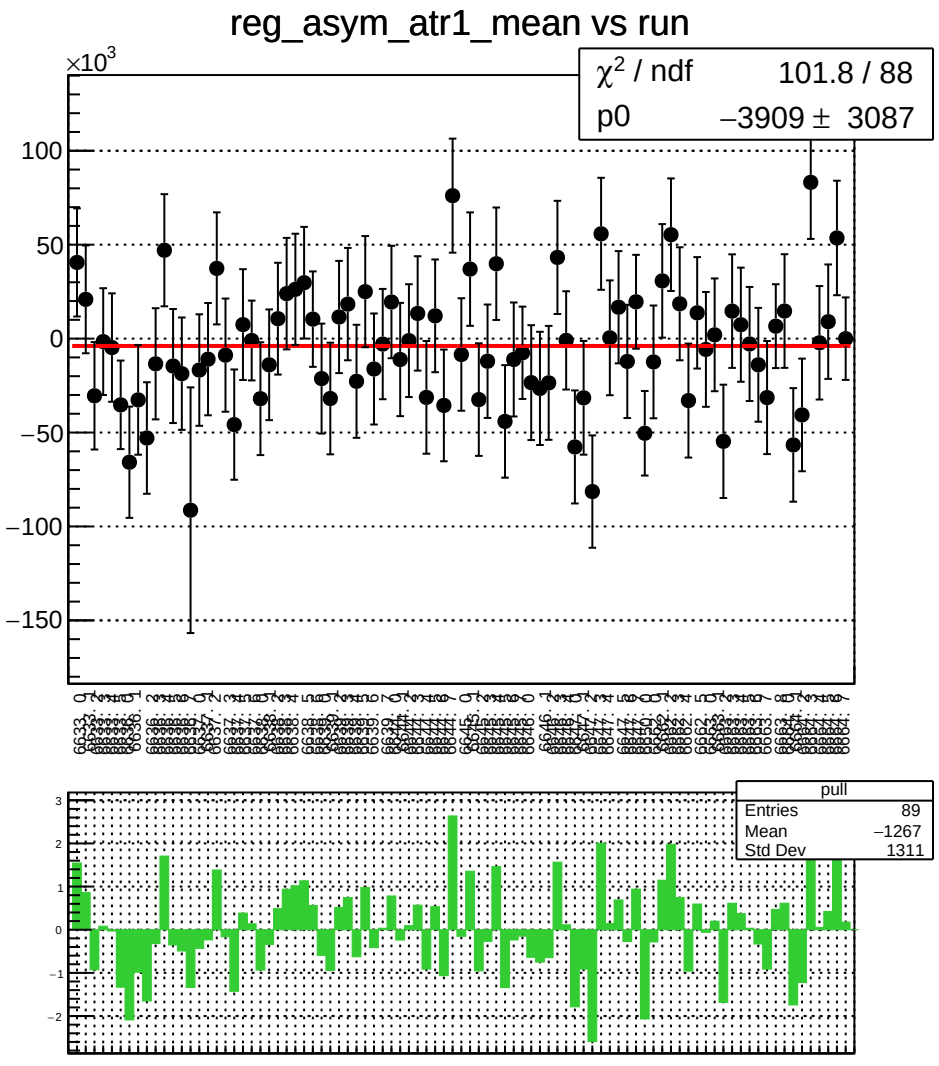

pull1D
Entries 89
Mean −0.02763
Std Dev 0.9927

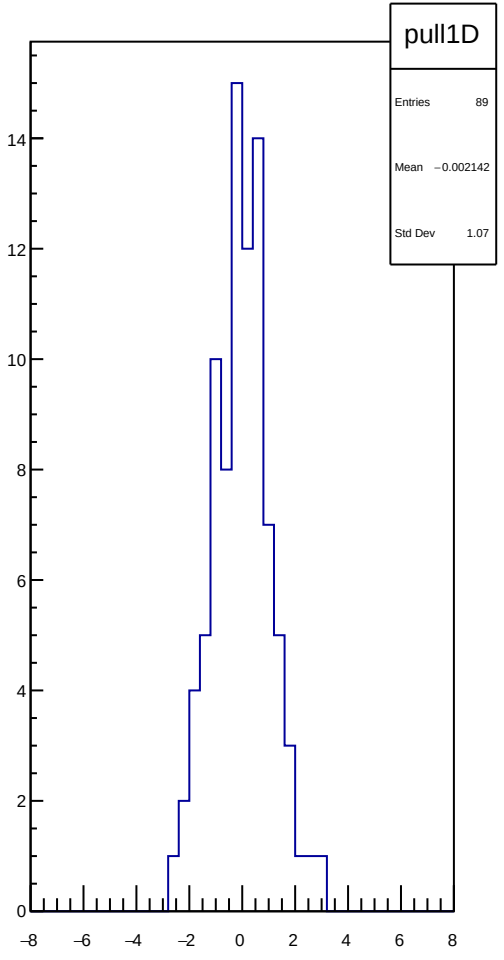

asym_atl2_correction_rms vs run
χ² / ndf 1.872e+04 / 88
p0 9903 ± 7.599
13000
12000
11000
10000
9000
8000

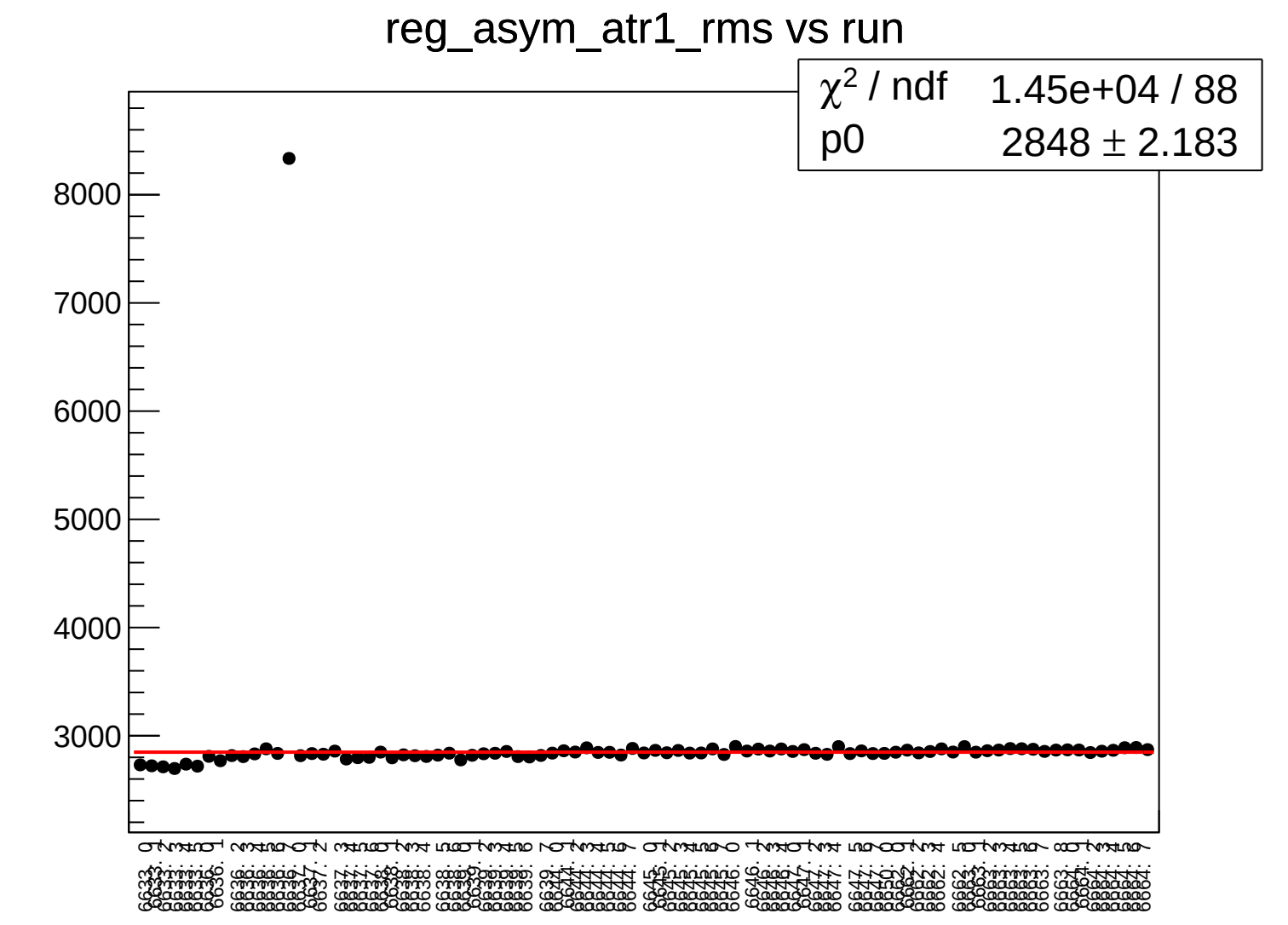

asym_atl2_mean vs run
×10^3
χ² / ndf 83.41 / 88
p0 2514 ± 1.135e+04
pull
Entries 89
Mean −2.624
Std Dev 48.16

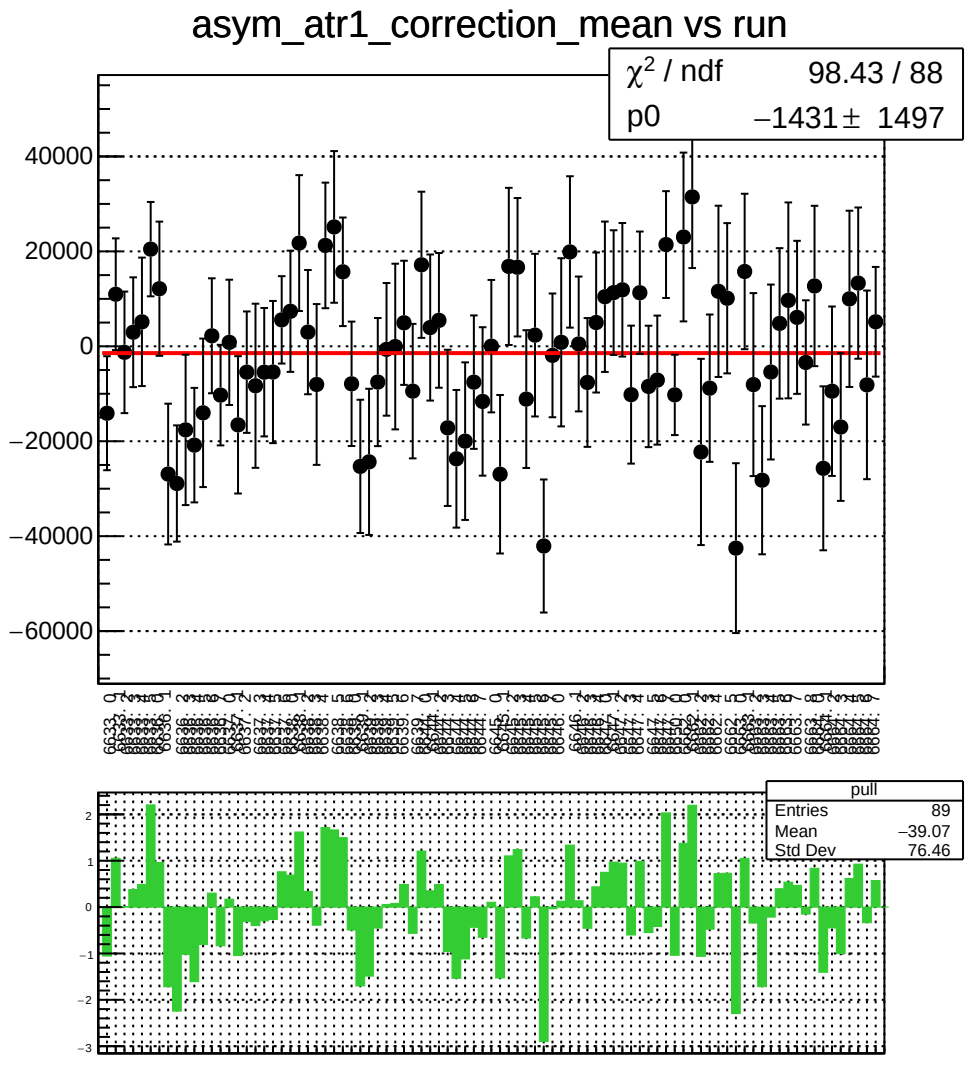

pull1D
Entries 89
Mean 0.02834
Std Dev 0.9676

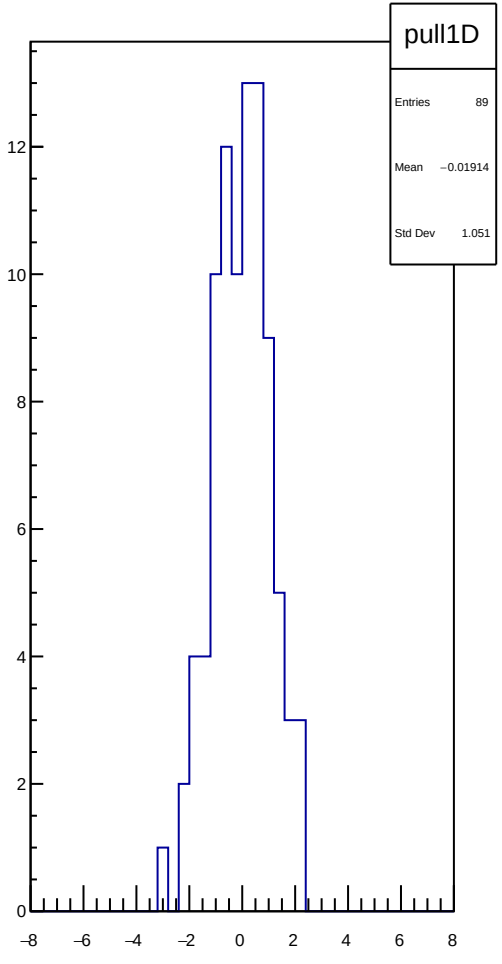

asym_atl2_rms vs run
χ² / ndf 1.515e+04 / 88
p0 1.047e+04 ± 8.024
13000
12000
11000
10000
9000
8000

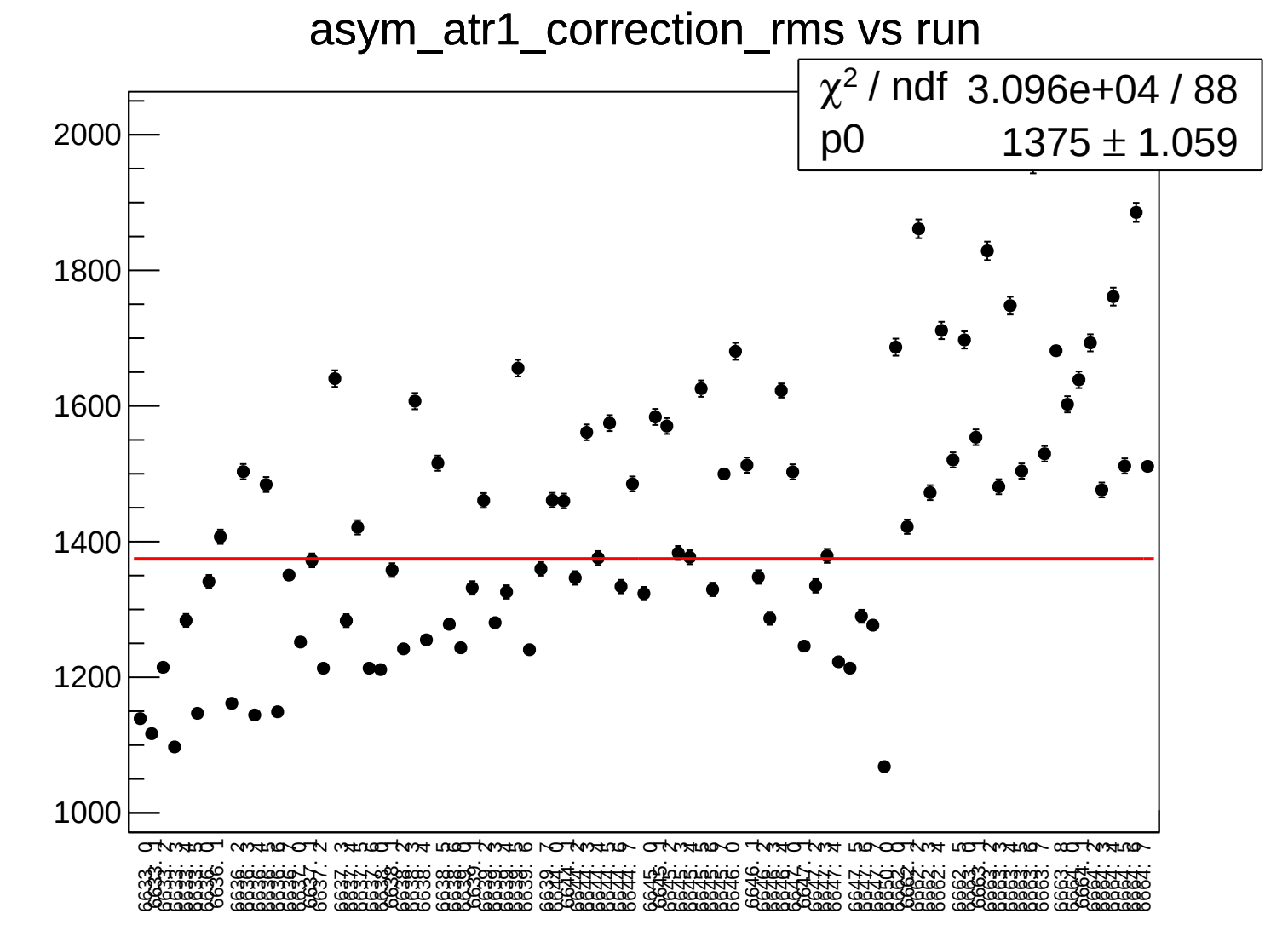

reg_asym_atr1_mean vs run
×10^3
χ^2 / ndf 101.8 / 88
p0 −3909 ± 3087
100
50
0
−50
−100
−150
pull
Entries 89
Mean −1267
Std Dev 1311
3
2
1
0
−1
−2

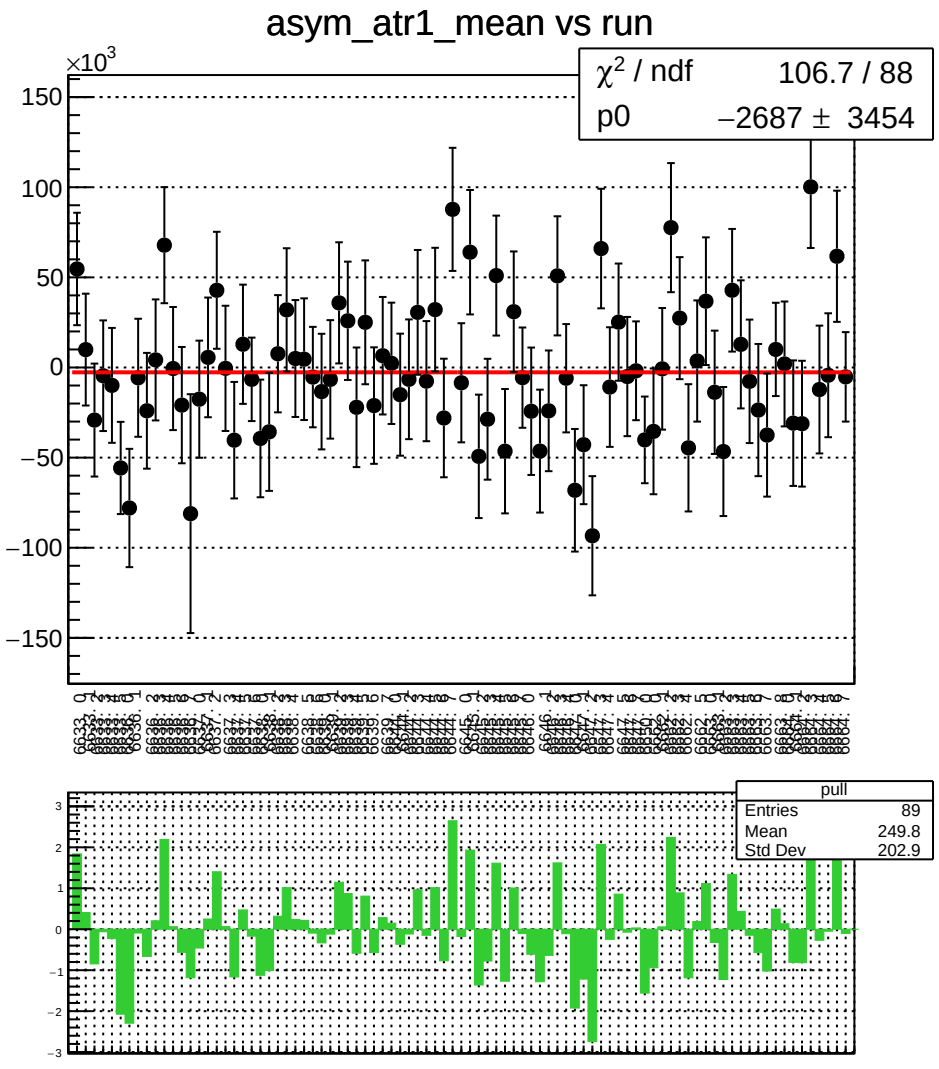

pull1D
Entries 89
Mean −0.002142
Std Dev 1.07
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

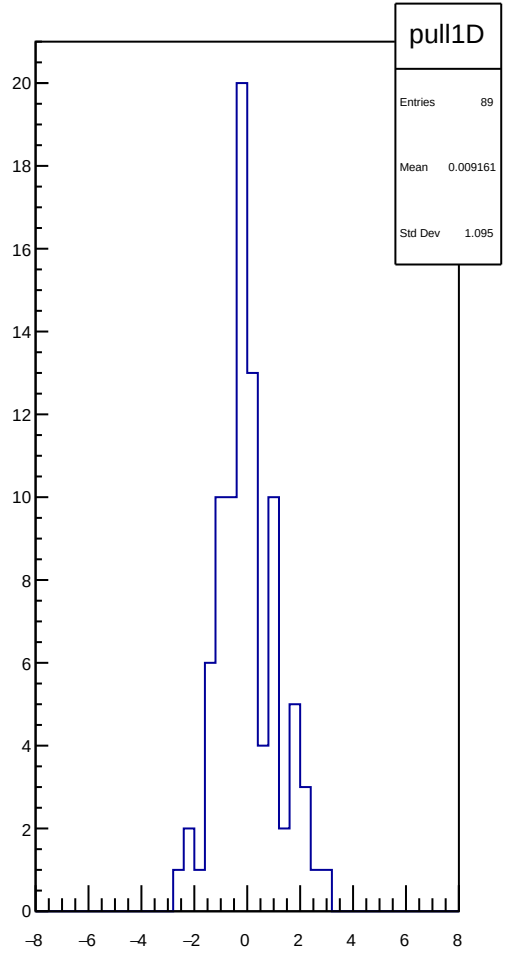

reg_asym_atr1_rms vs run
χ² / ndf 1.45e+04 / 88
p0 2848 ± 2.183
8000
7000
6000
5000
4000
3000

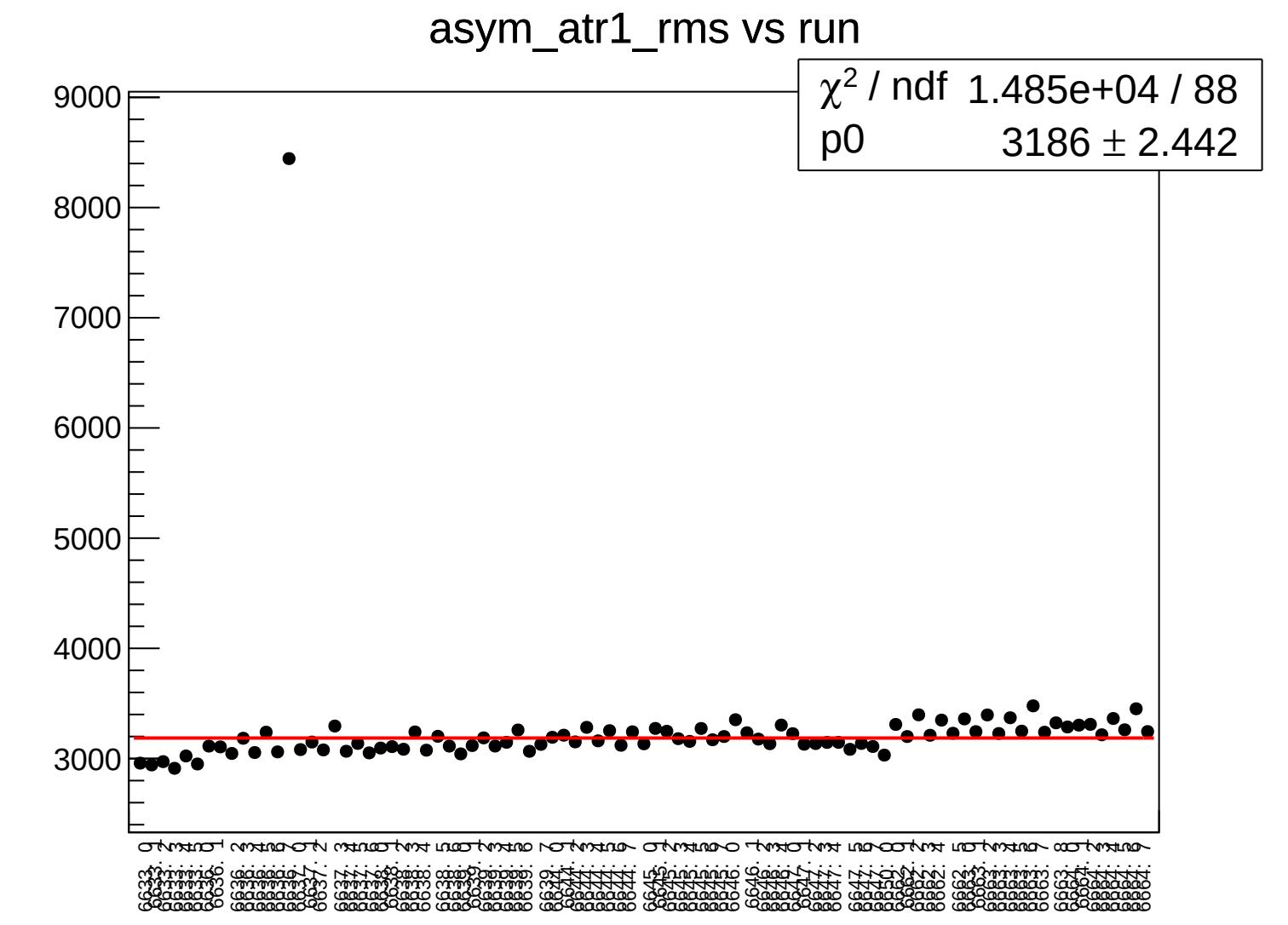

asym_atr1_correction_mean vs run
χ² / ndf 98.43 / 88
p0 −1431 ± 1497
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −39.07
Std Dev 76.46
2
1
0
−1
−2
−3

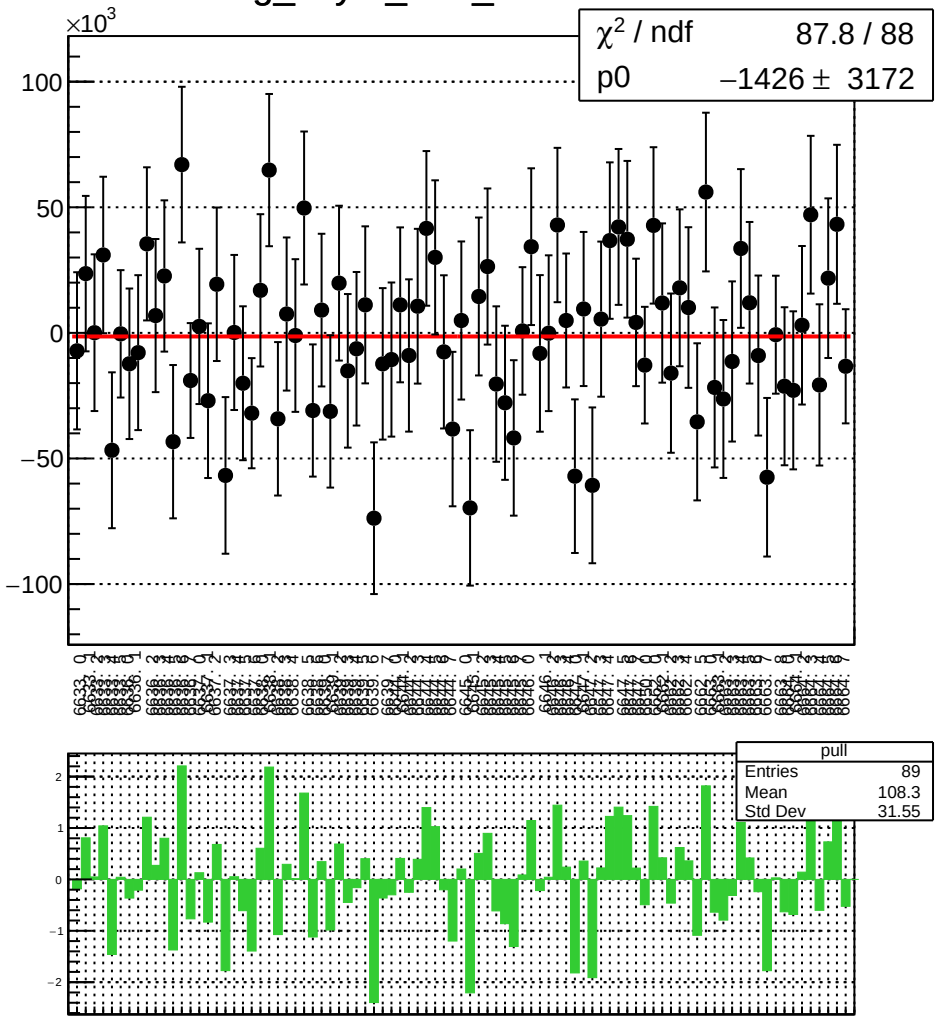

pull1D
Entries 89
Mean −0.01914
Std Dev 1.051
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

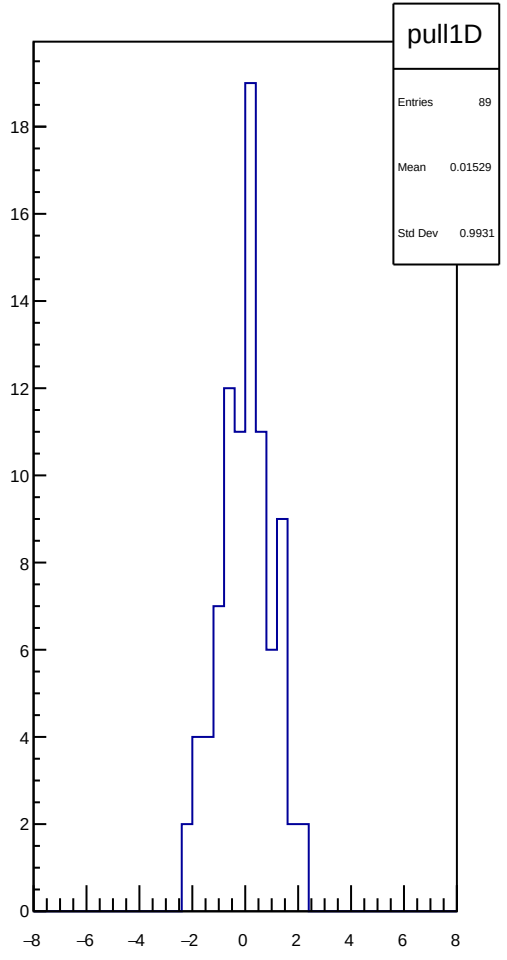

asym_atr1_correction_rms vs run
χ² / ndf 3.096e+04 / 88
p0 1375 ± 1.059
2000
1800
1600
1400
1200
1000

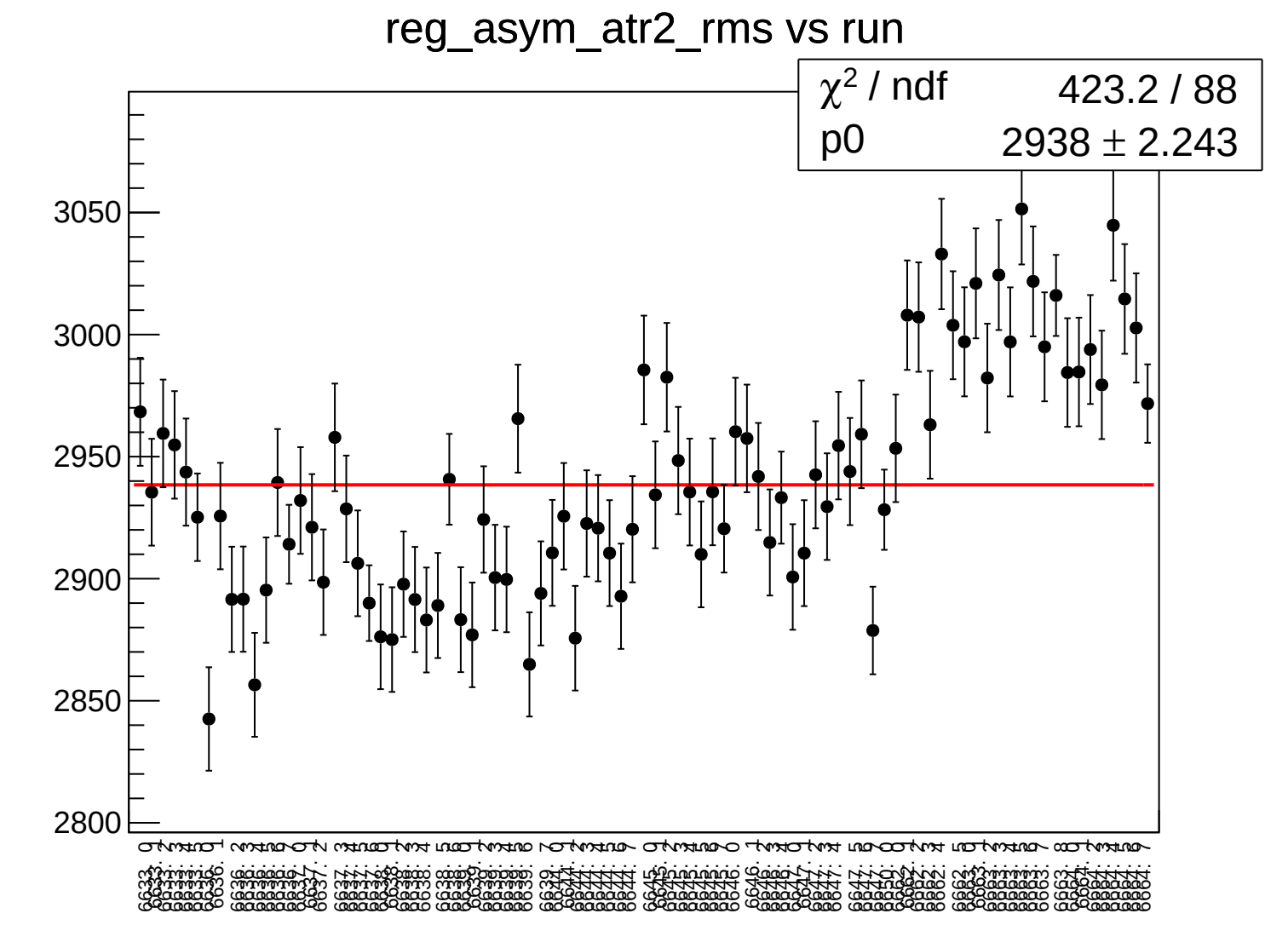

asym_atr1_mean vs run
×10^3
χ² / ndf 106.7 / 88
p0 −2687 ± 3454
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 249.8
Std Dev 202.9
3
2
1
0
−1
−2
−3

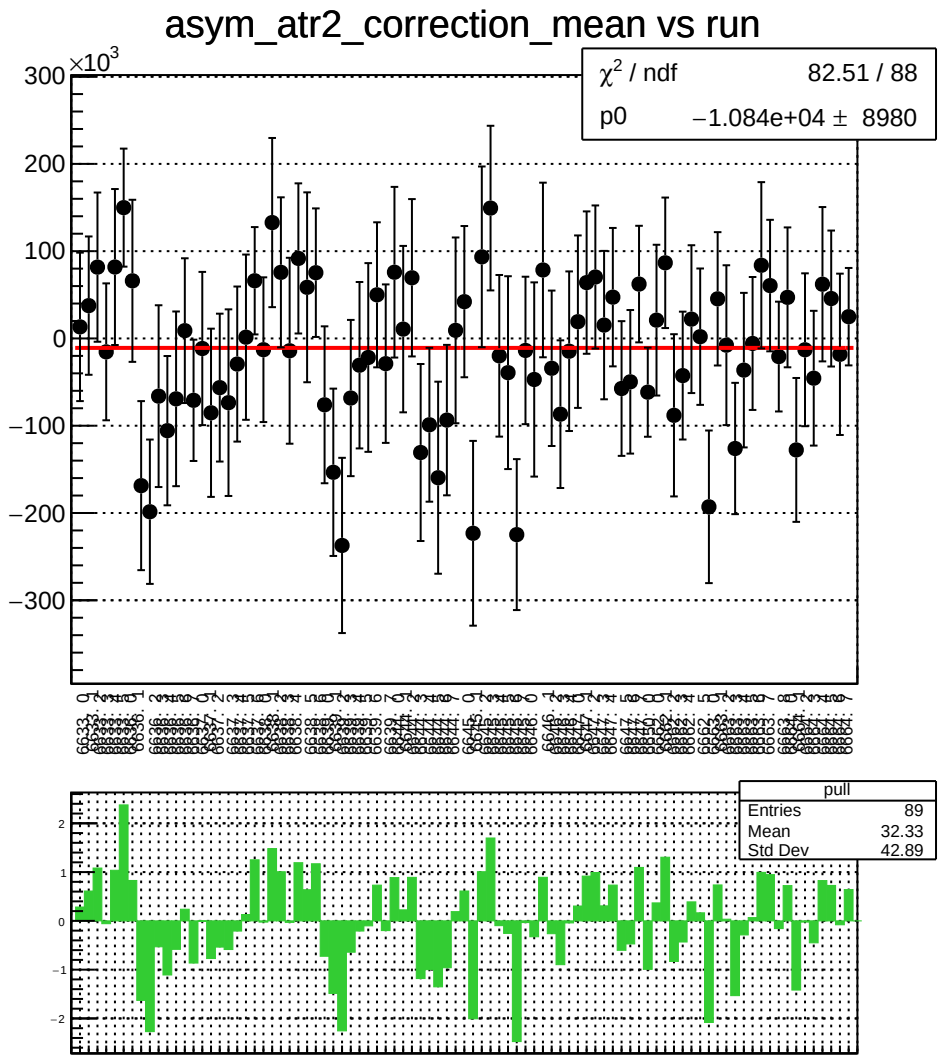

pull1D
Entries 89
Mean 0.009161
Std Dev 1.095
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

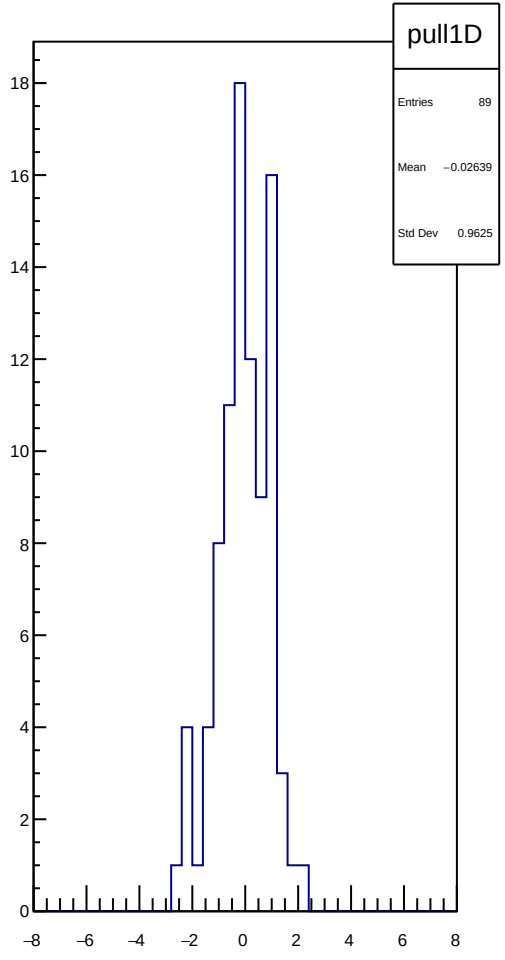

asym_atr1_rms vs run
χ^2 / ndf 1.485e+04 / 88
p0 3186 ± 2.442
9000
8000
7000
6000
5000
4000
3000

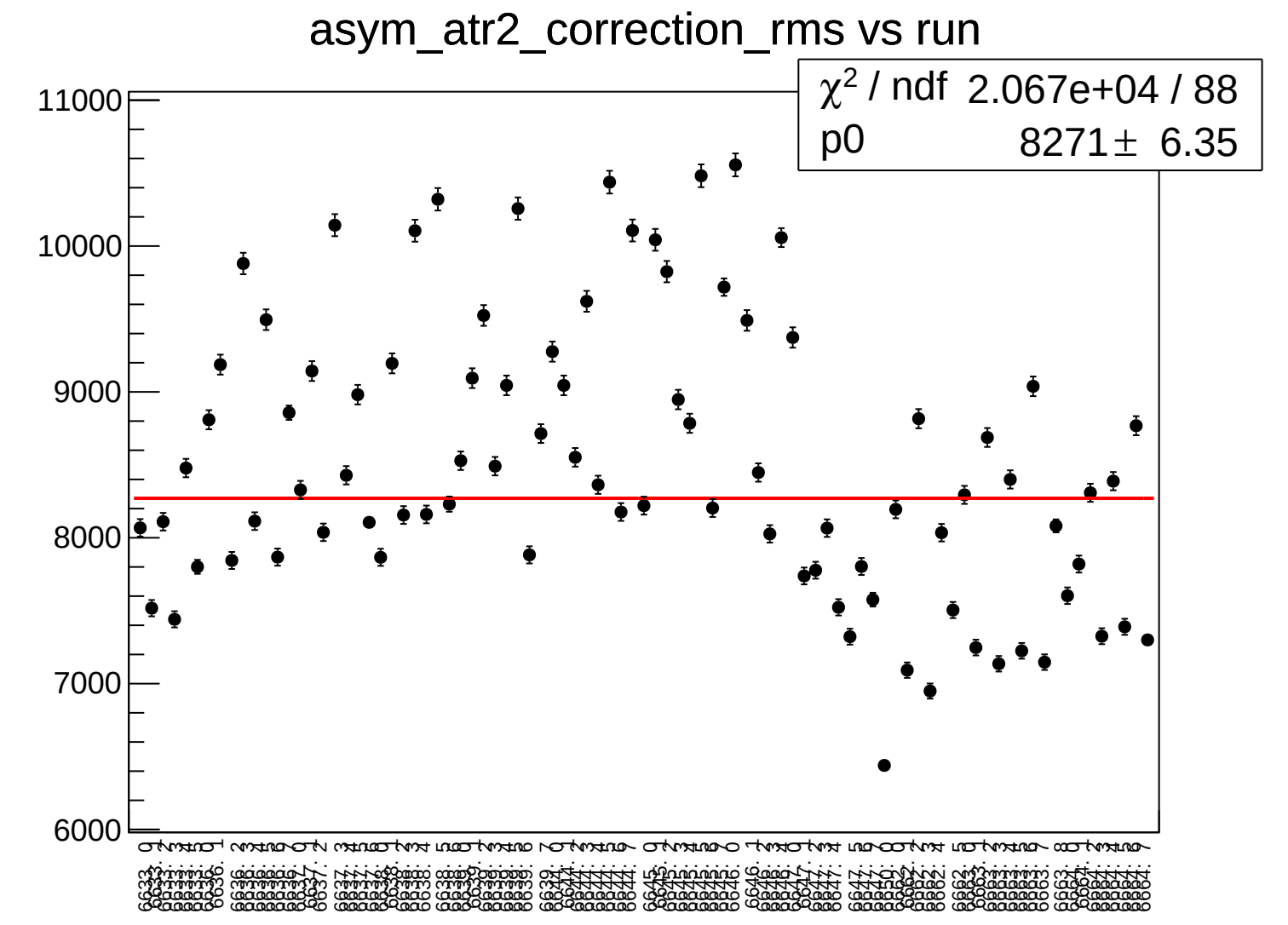

reg_asym_atr2_mean vs run
×10^3
χ² / ndf 87.8 / 88
p0 −1426 ± 3172
100
50
0
−50
−100
pull
Entries 89
Mean 108.3
Std Dev 31.55
2
1
0
−1
−2

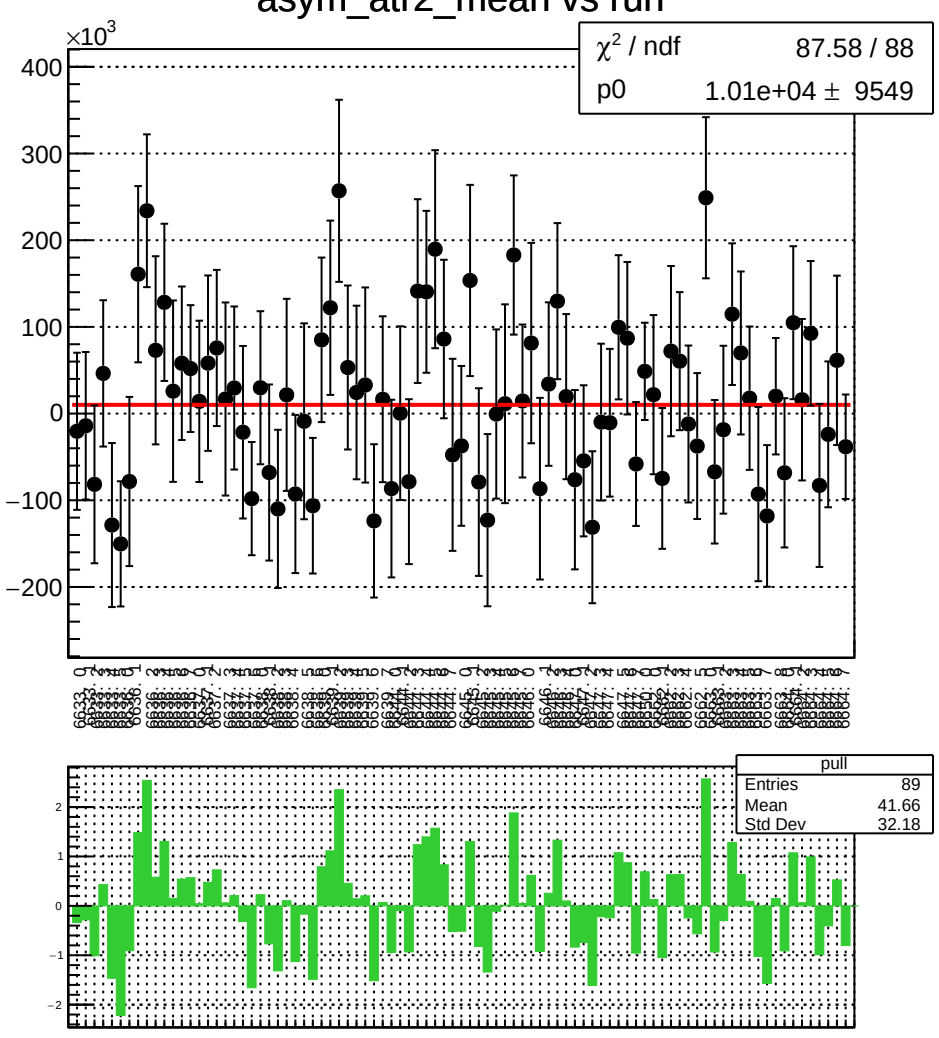

pull1D
Entries 89
Mean 0.01529
Std Dev 0.9931
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

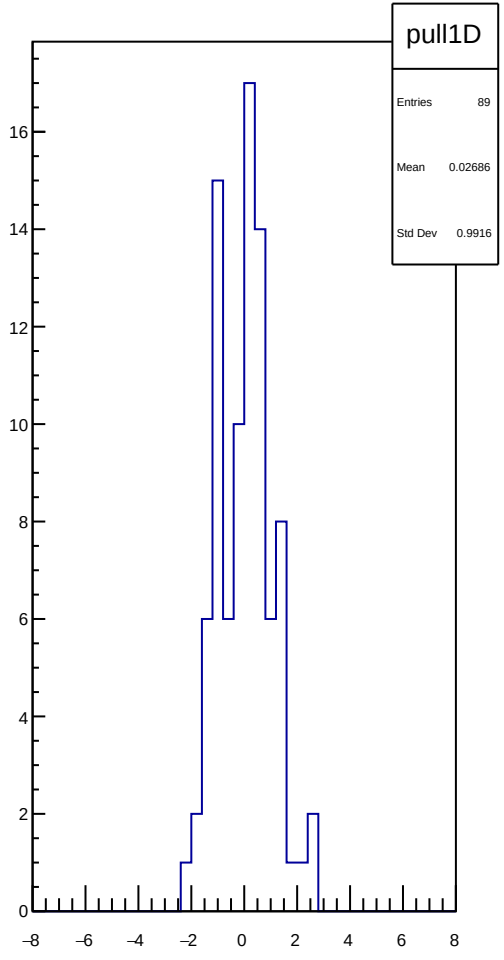

reg_asym_atr2_rms vs run
χ^2 / ndf 423.2 / 88
p0 2938 ± 2.243
3050
3000
2950
2900
2850
2800

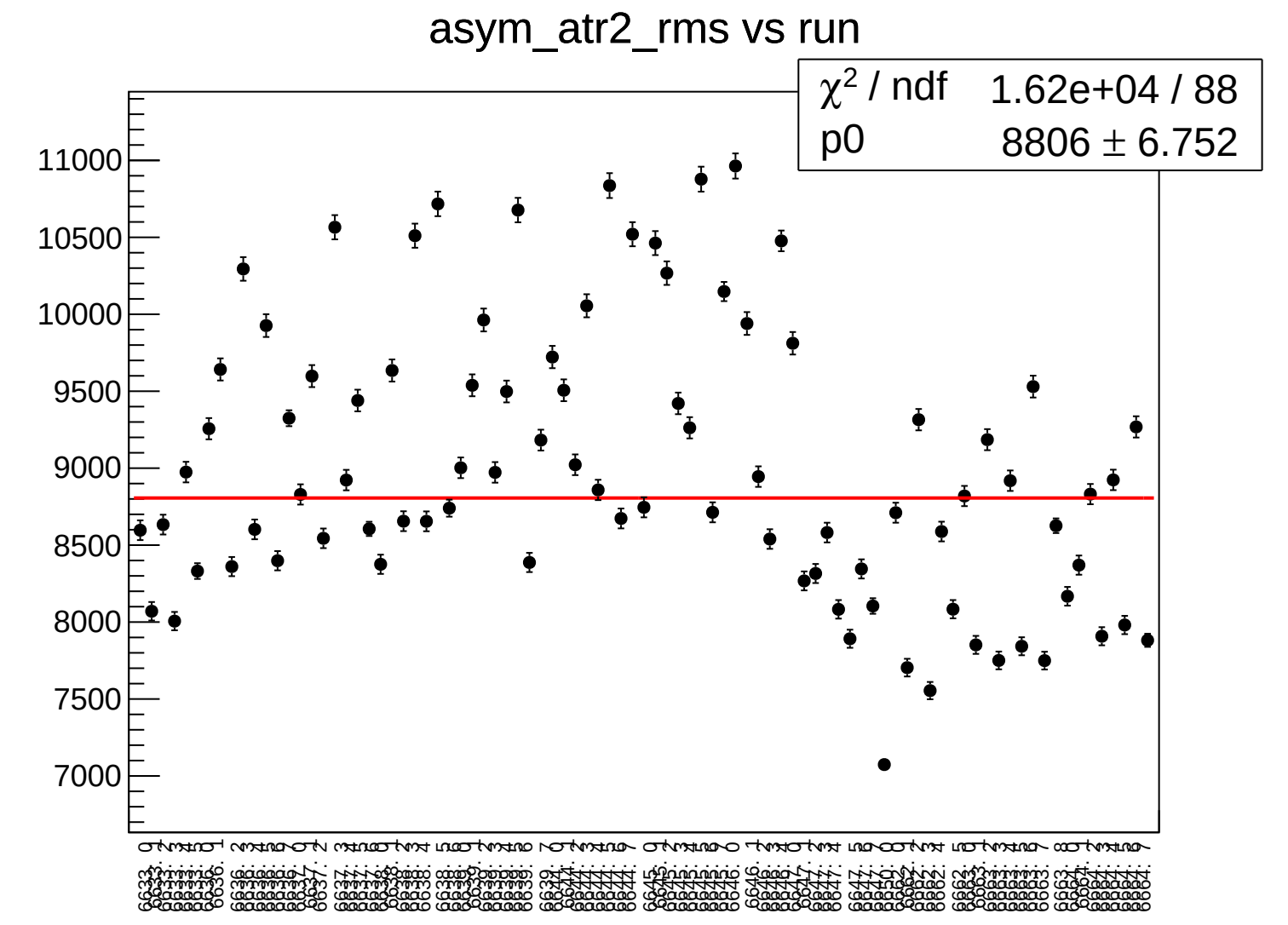

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 82.51 / 88
p0 −1.084e+04 ± 8980
pull
Entries 89
Mean 32.33
Std Dev 42.89

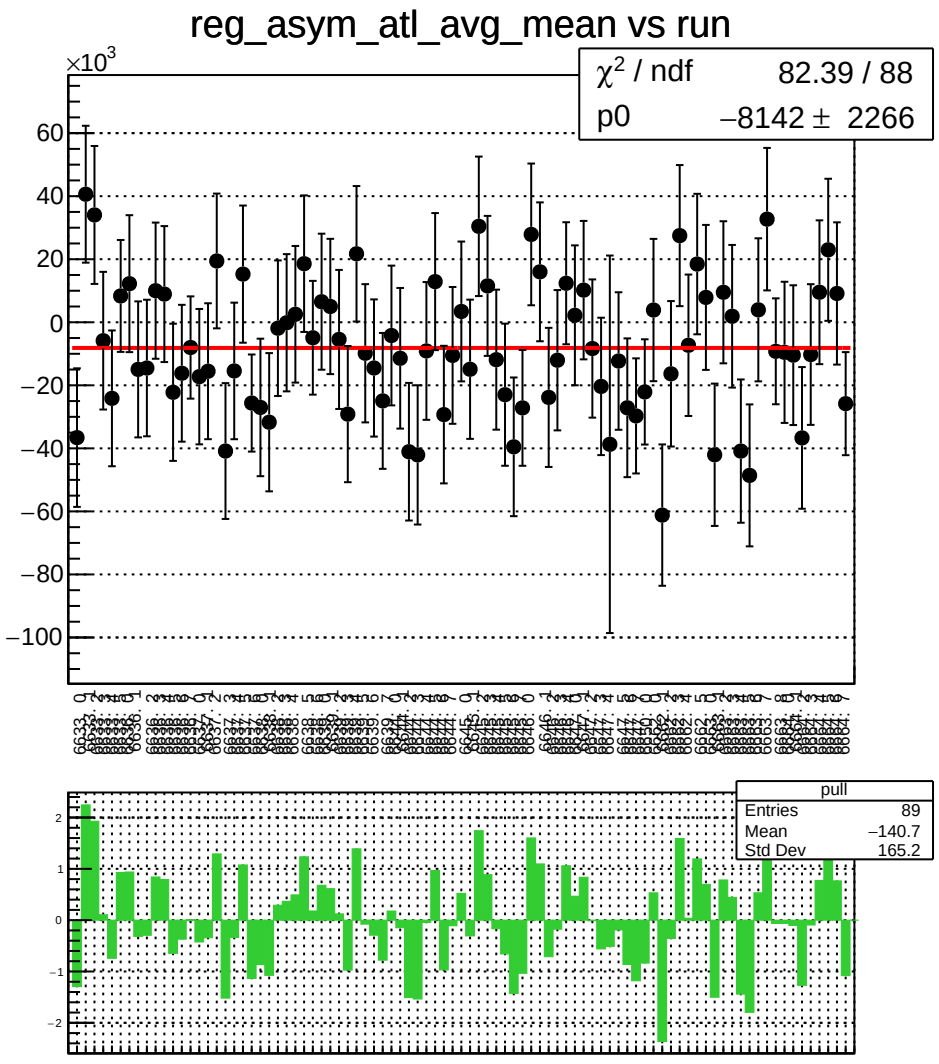

pull1D
Entries 89
Mean −0.02639
Std Dev 0.9625

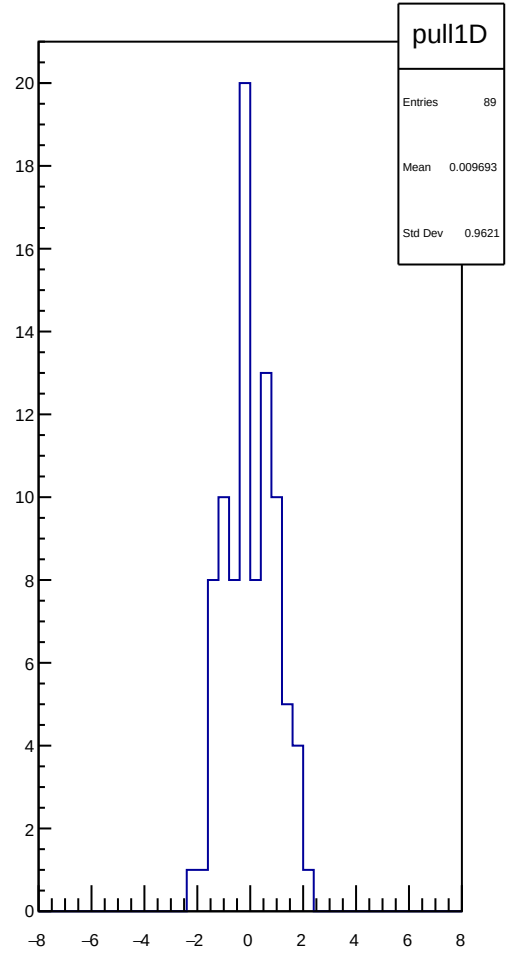

asym_atr2_correction_rms vs run
χ² / ndf 2.067e+04 / 88
p0 8271 ± 6.35
11000
10000
9000
8000
7000
6000

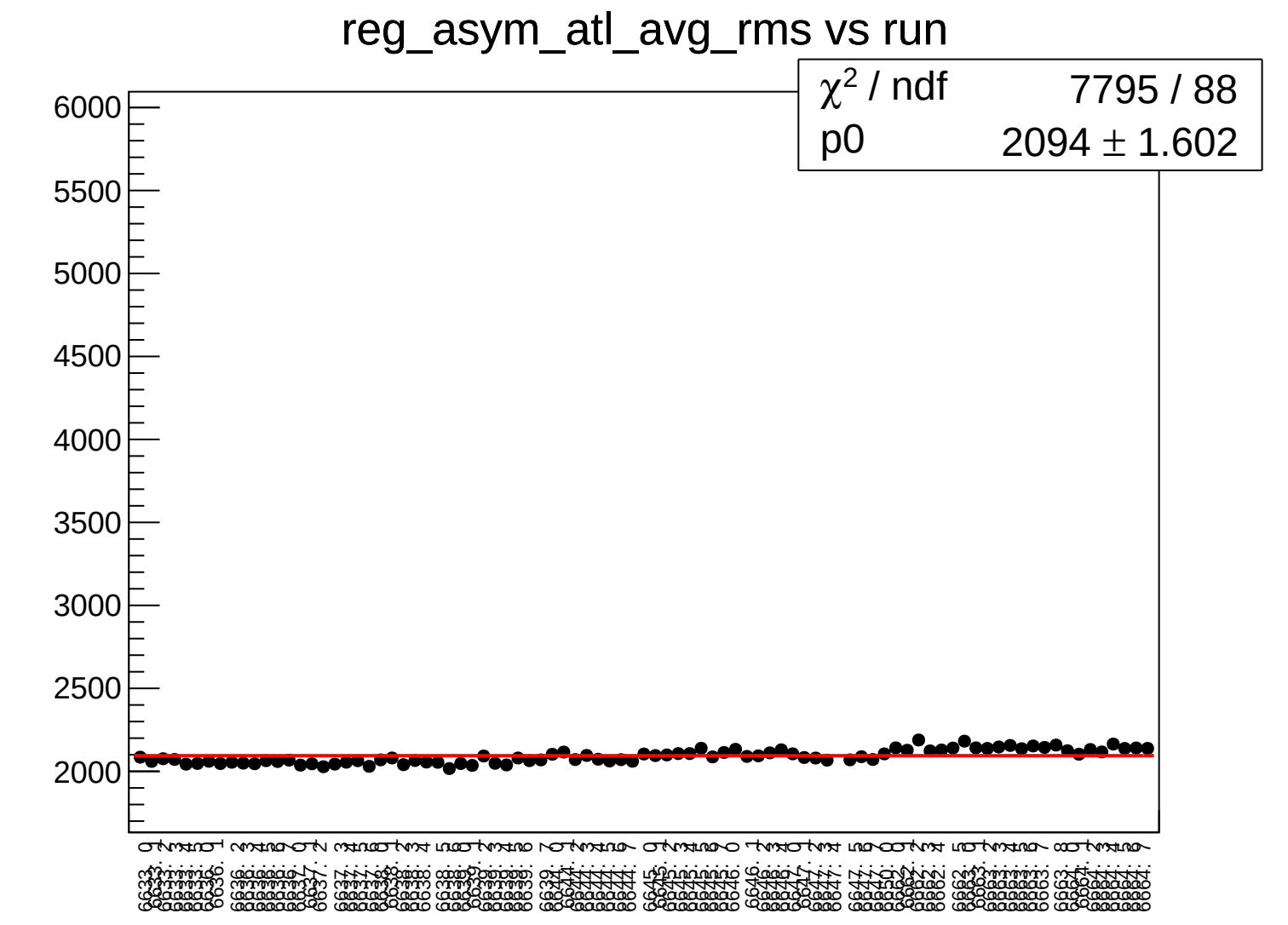

asym_atr2_mean vs run
×10^3
χ² / ndf 87.58 / 88
p0 1.01e+04 ± 9549
pull
Entries 89
Mean 41.66
Std Dev 32.18

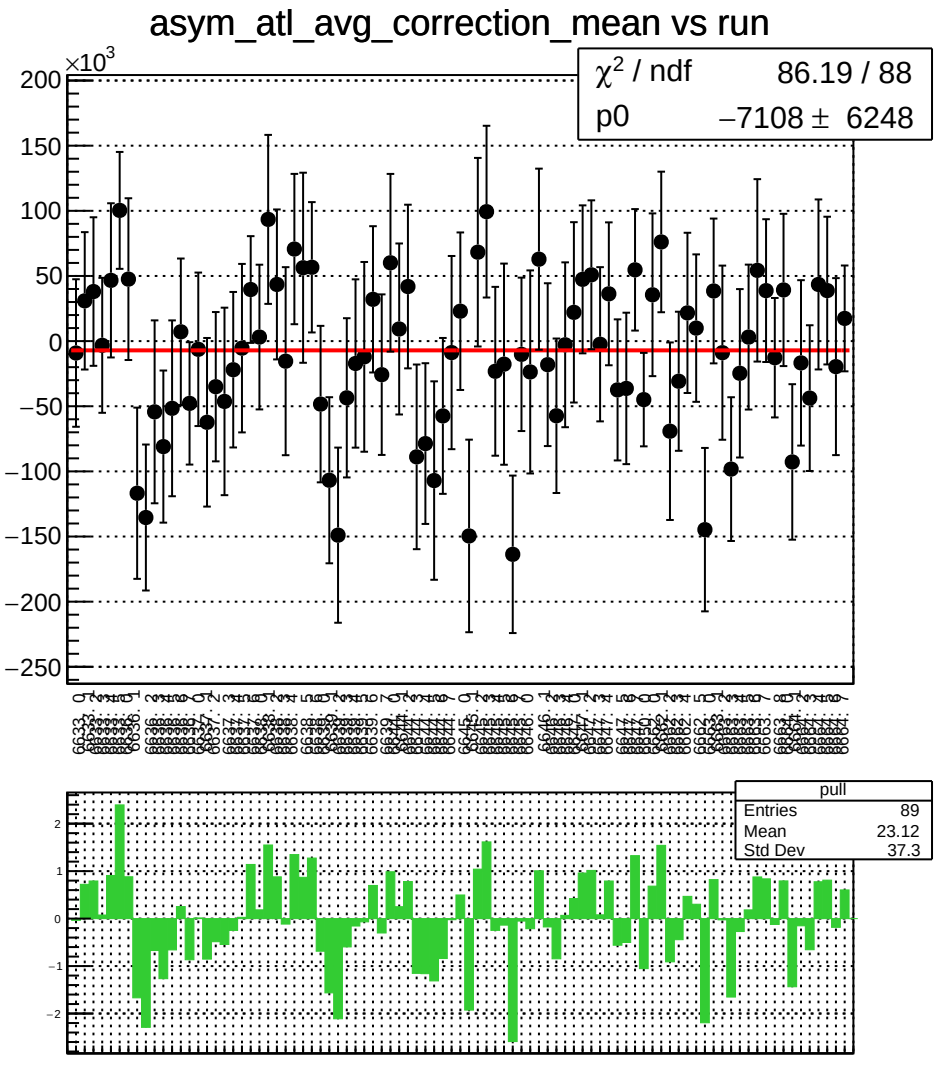

pull1D
Entries 89
Mean 0.02686
Std Dev 0.9916

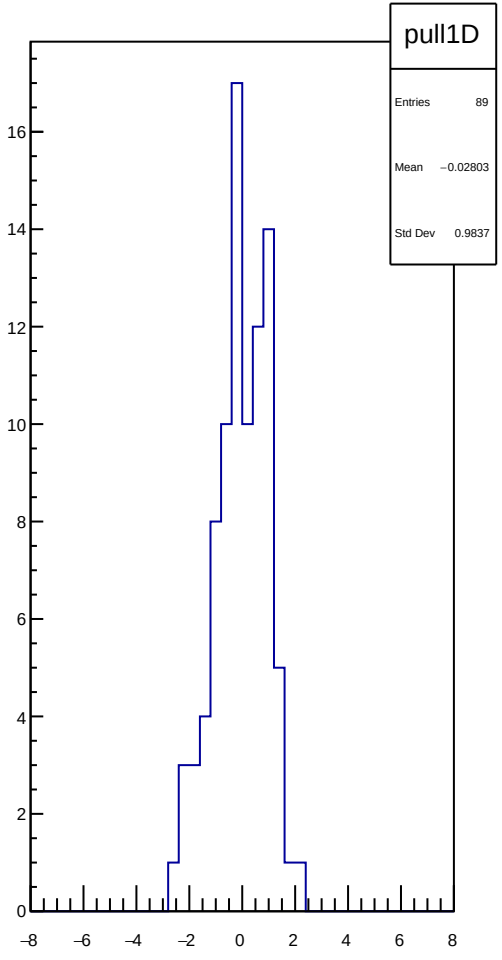

asym_atr2_rms vs run
χ^2 / ndf 1.62e+04 / 88
p0 8806 ± 6.752
11000
10500
10000
9500
9000
8500
8000
7500
7000

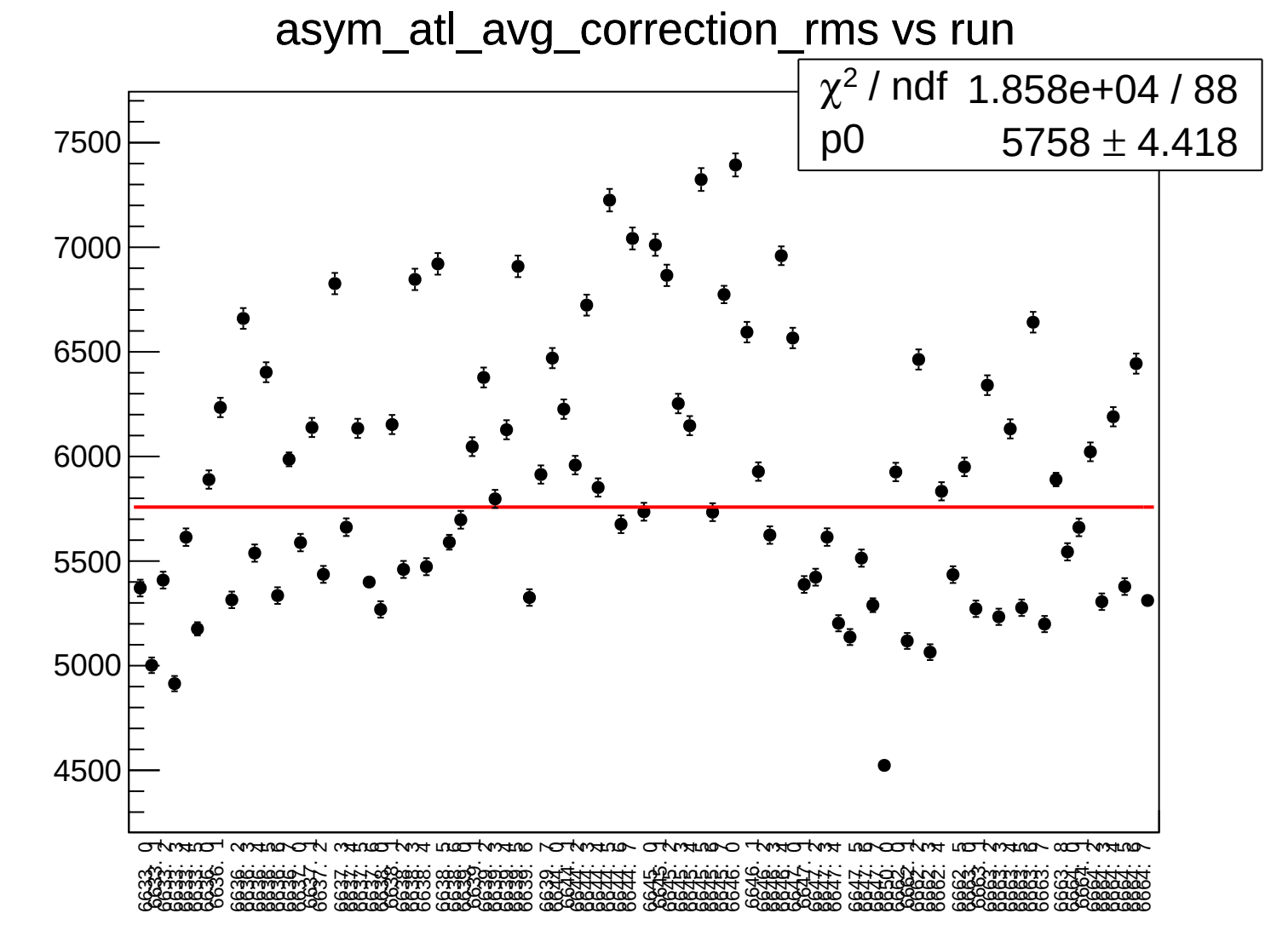

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 82.39 / 88
p0 −8142 ± 2266
pull
Entries 89
Mean −140.7
Std Dev 165.2

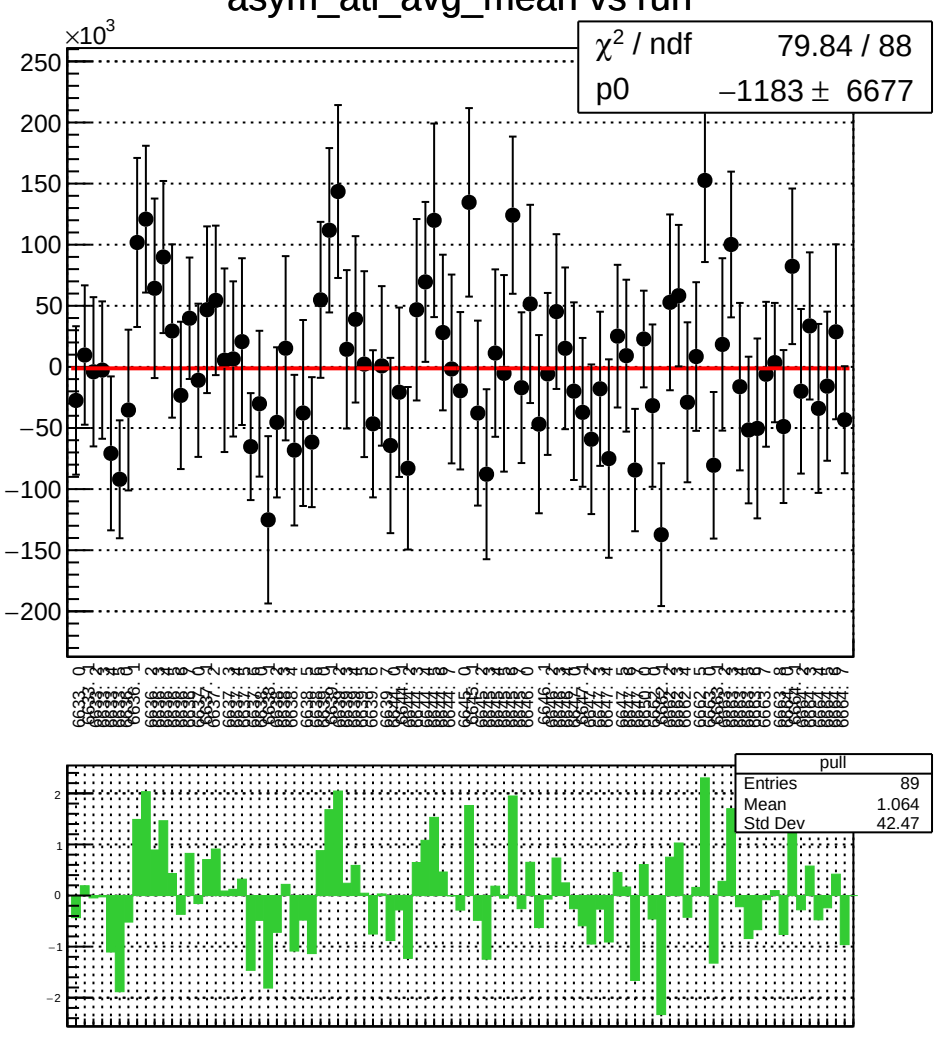

pull1D
Entries 89
Mean 0.009693
Std Dev 0.9621

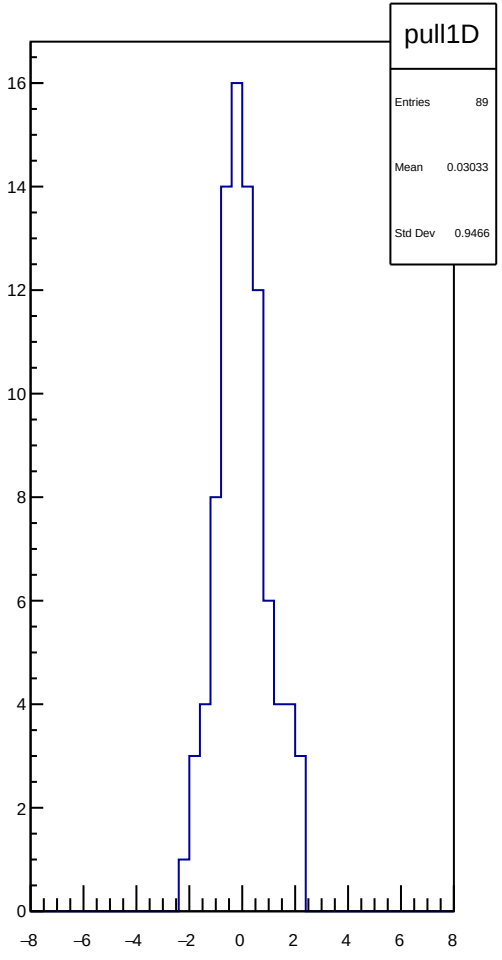

reg_asym_atl_avg_rms vs run
χ² / ndf 7795 / 88
p0 2094 ± 1.602
6000
5500
5000
4500
4000
3500
3000
2500
2000

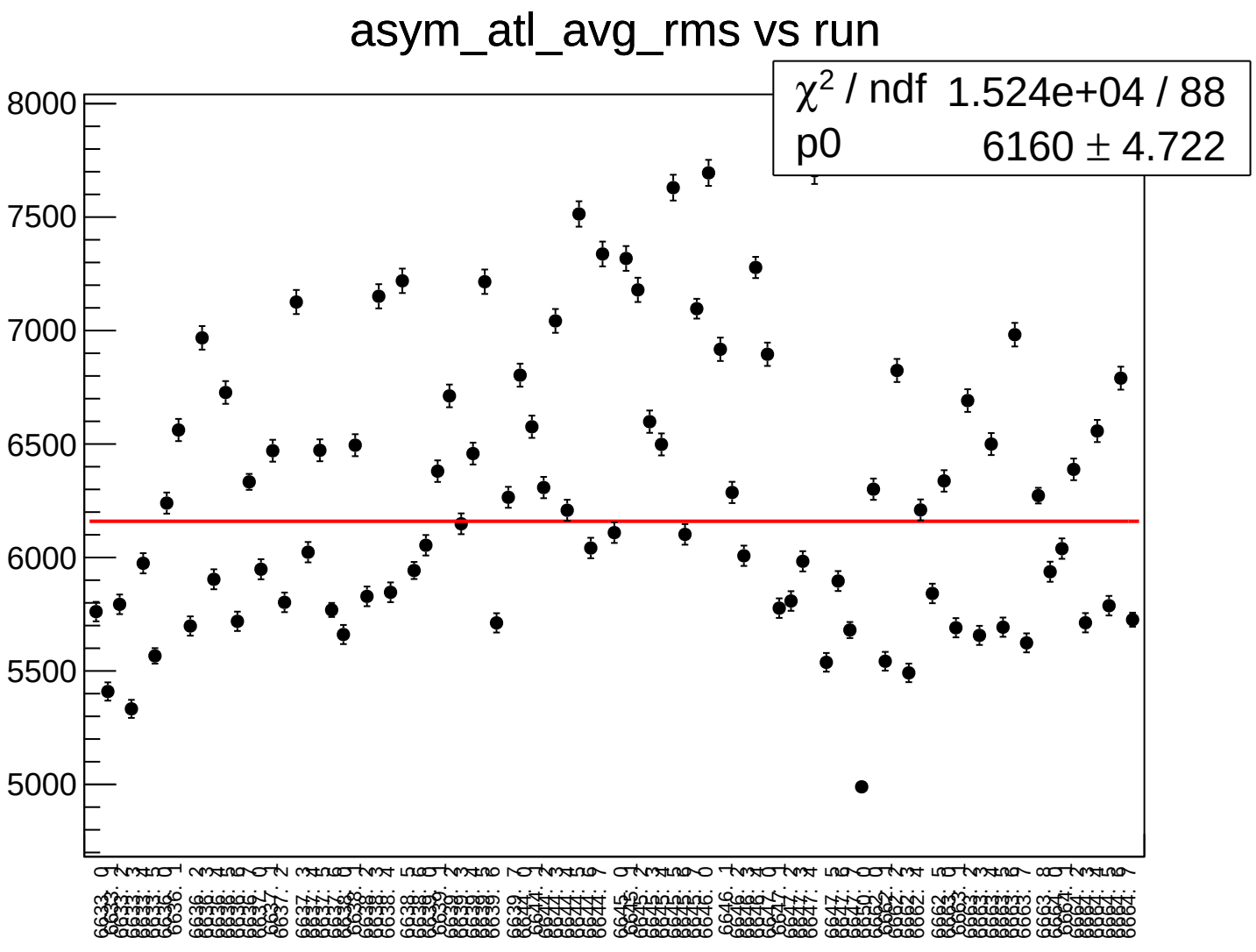

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 86.19 / 88
p0 −7108 ± 6248
pull
Entries 89
Mean 23.12
Std Dev 37.3

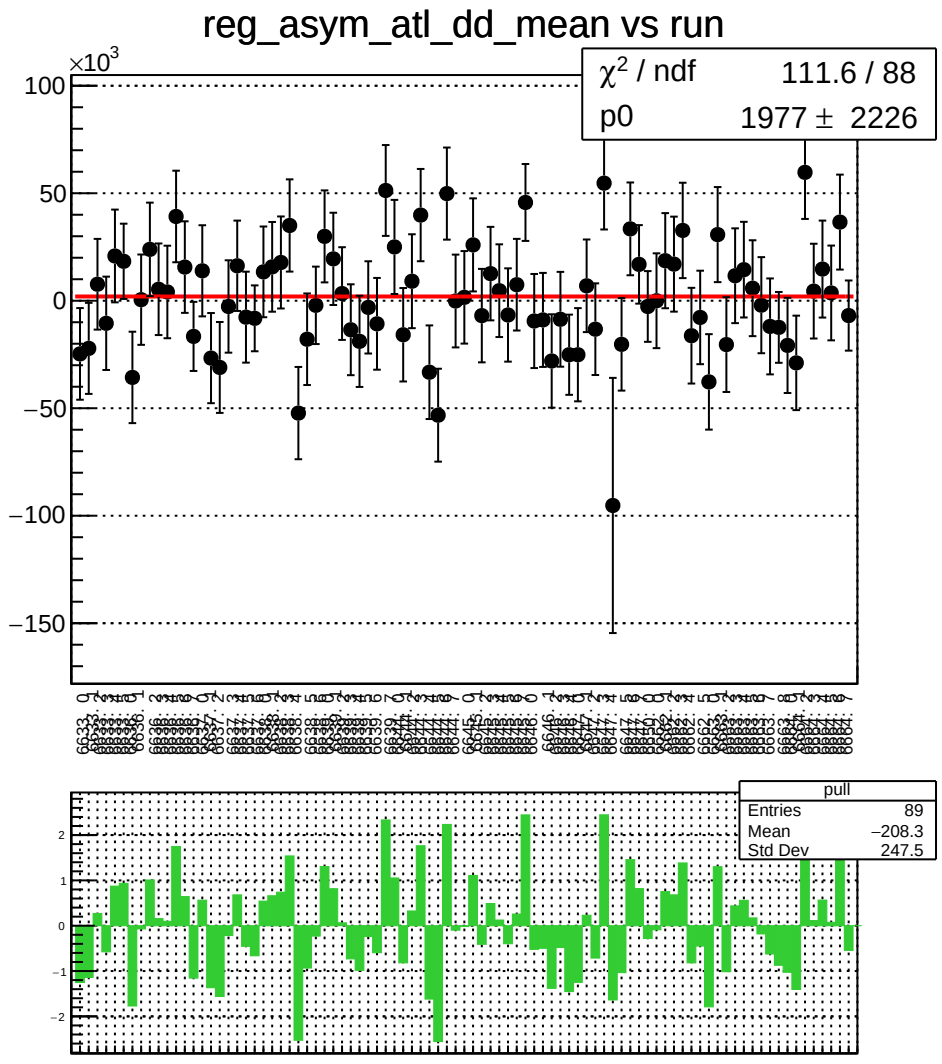

pull1D
Entries 89
Mean −0.02803
Std Dev 0.9837

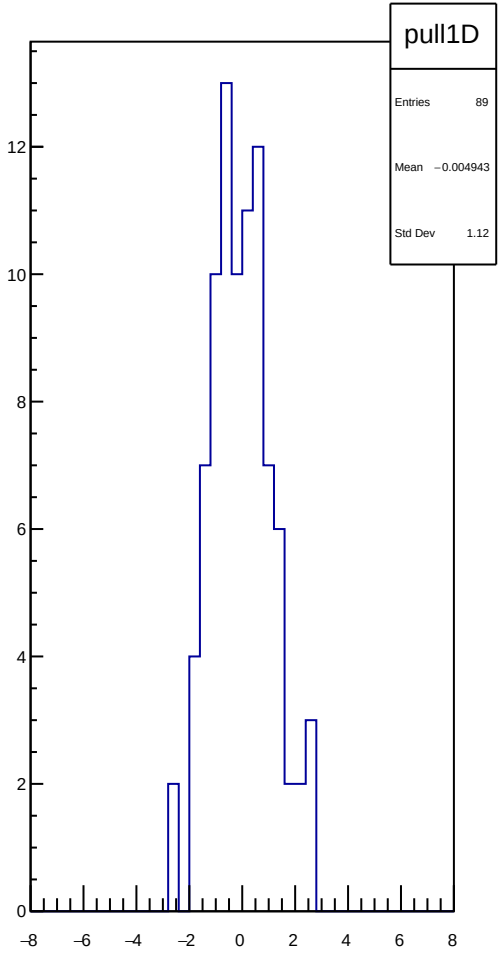

asym_atl_avg_correction_rms vs run
χ² / ndf 1.858e+04 / 88
p0 5758 ± 4.418
7500
7000
6500
6000
5500
5000
4500

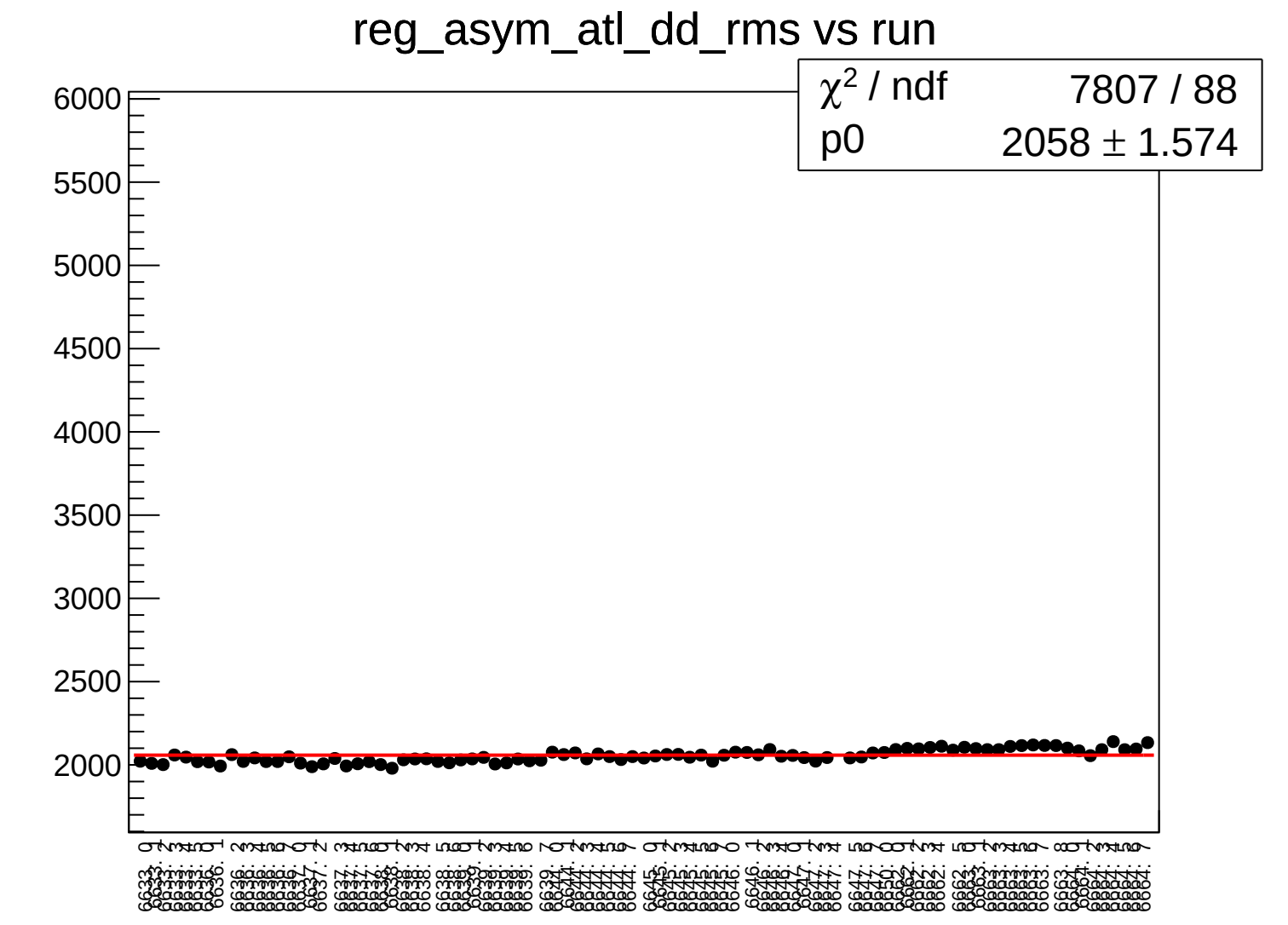

asym_atl_avg_mean vs run
×10^3
χ² / ndf 79.84 / 88
p0 −1183 ± 6677
pull
Entries 89
Mean 1.064
Std Dev 42.47

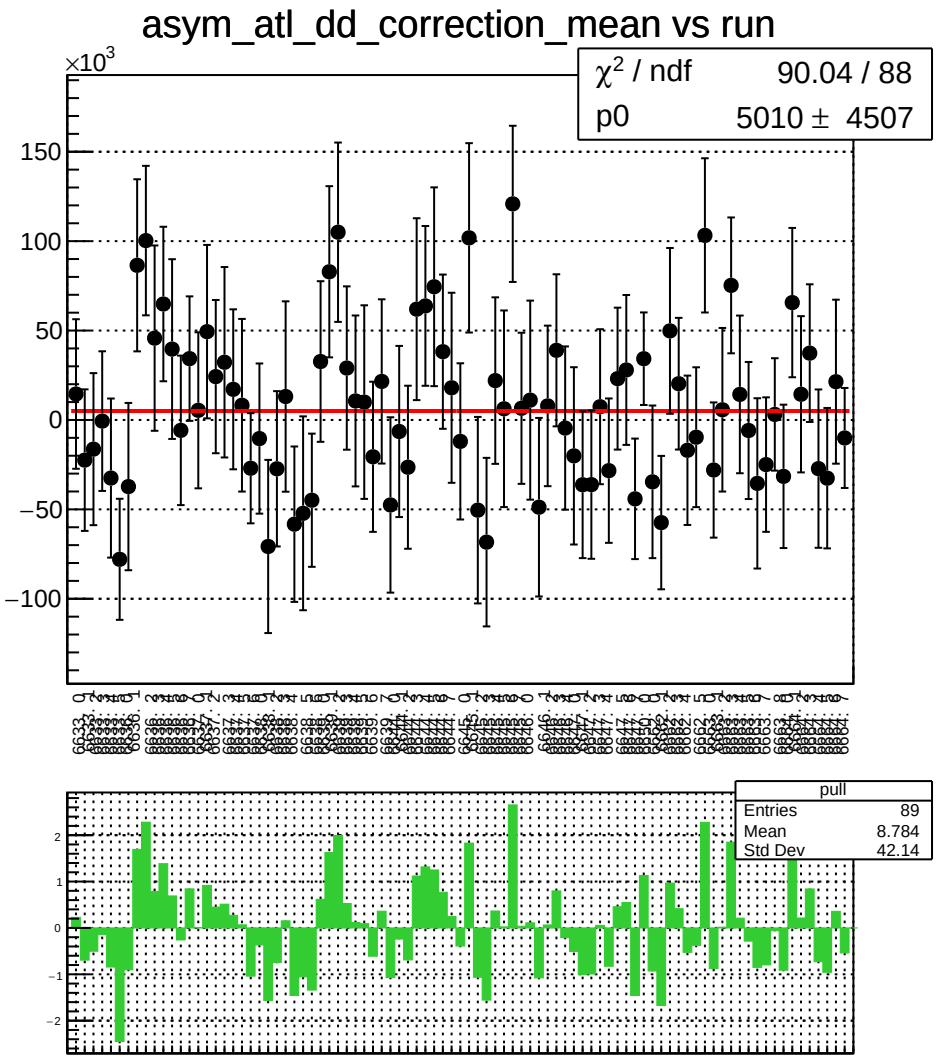

pull1D
Entries 89
Mean 0.03033
Std Dev 0.9466

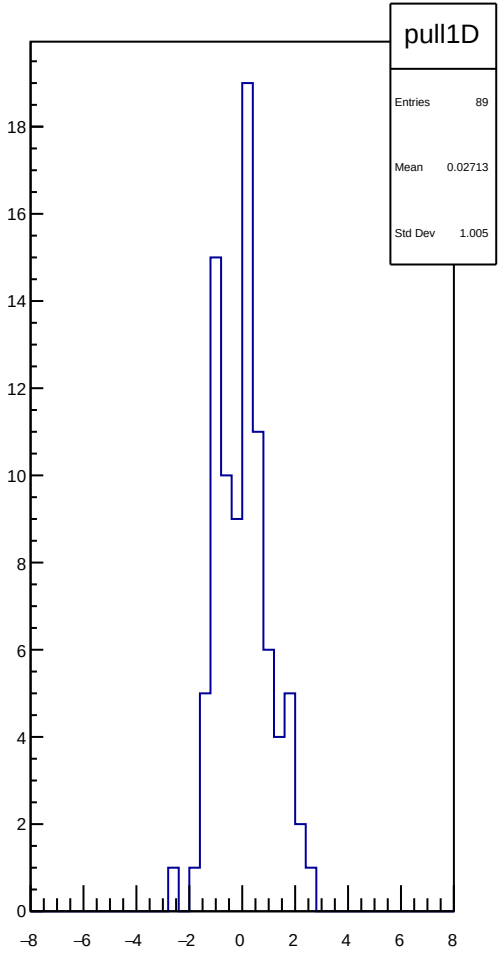

asym_atl_avg_rms vs run
χ² / ndf 1.524e+04 / 88
p0 6160 ± 4.722
8000
7500
7000
6500
6000
5500
5000

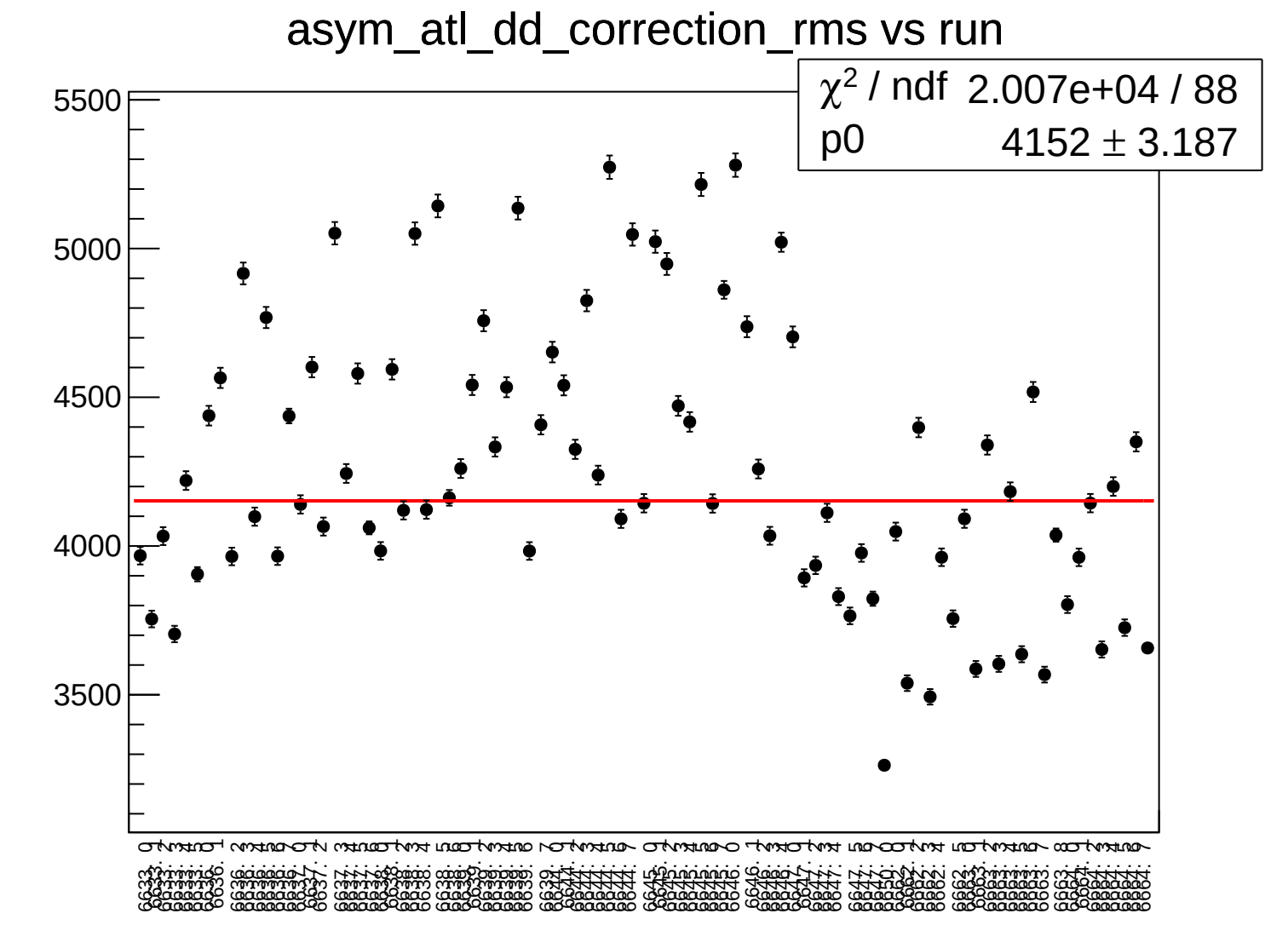

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 111.6 / 88
p0 1977 ± 2226
100
50
0
−50
−100
−150
pull
Entries 89
Mean −208.3
Std Dev 247.5
2
1
0
−1
−2

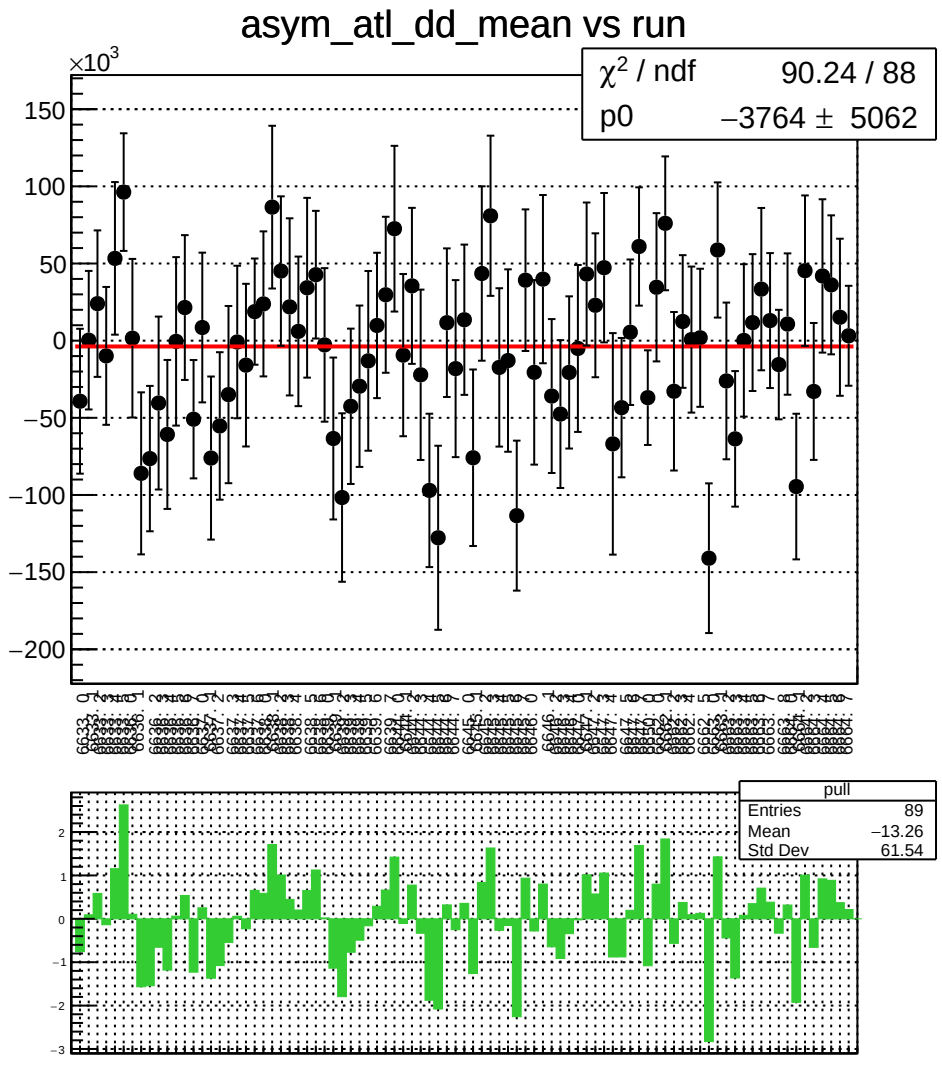

pull1D
Entries 89
Mean −0.004943
Std Dev 1.12
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

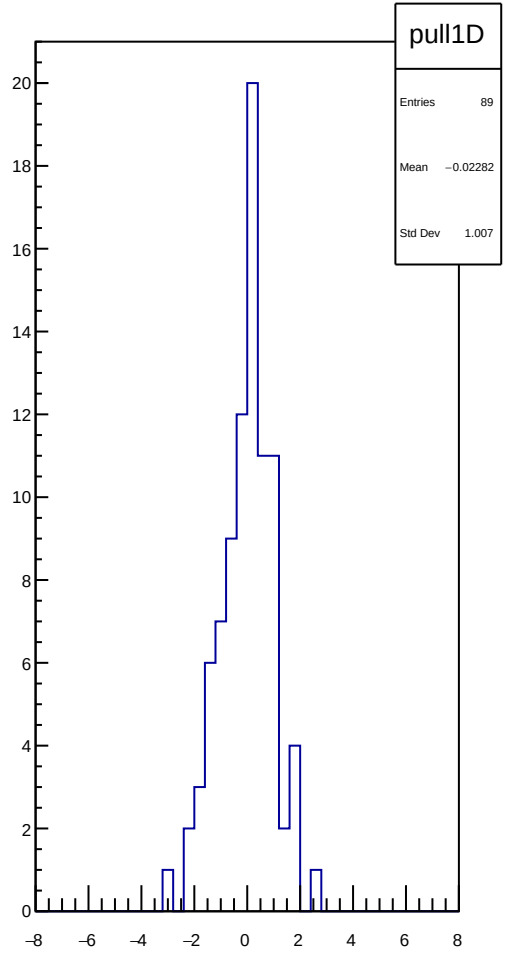

reg_asym_atl_dd_rms vs run
χ^2 / ndf 7807 / 88
p0 2058 ± 1.574
6000
5500
5000
4500
4000
3500
3000
2500
2000

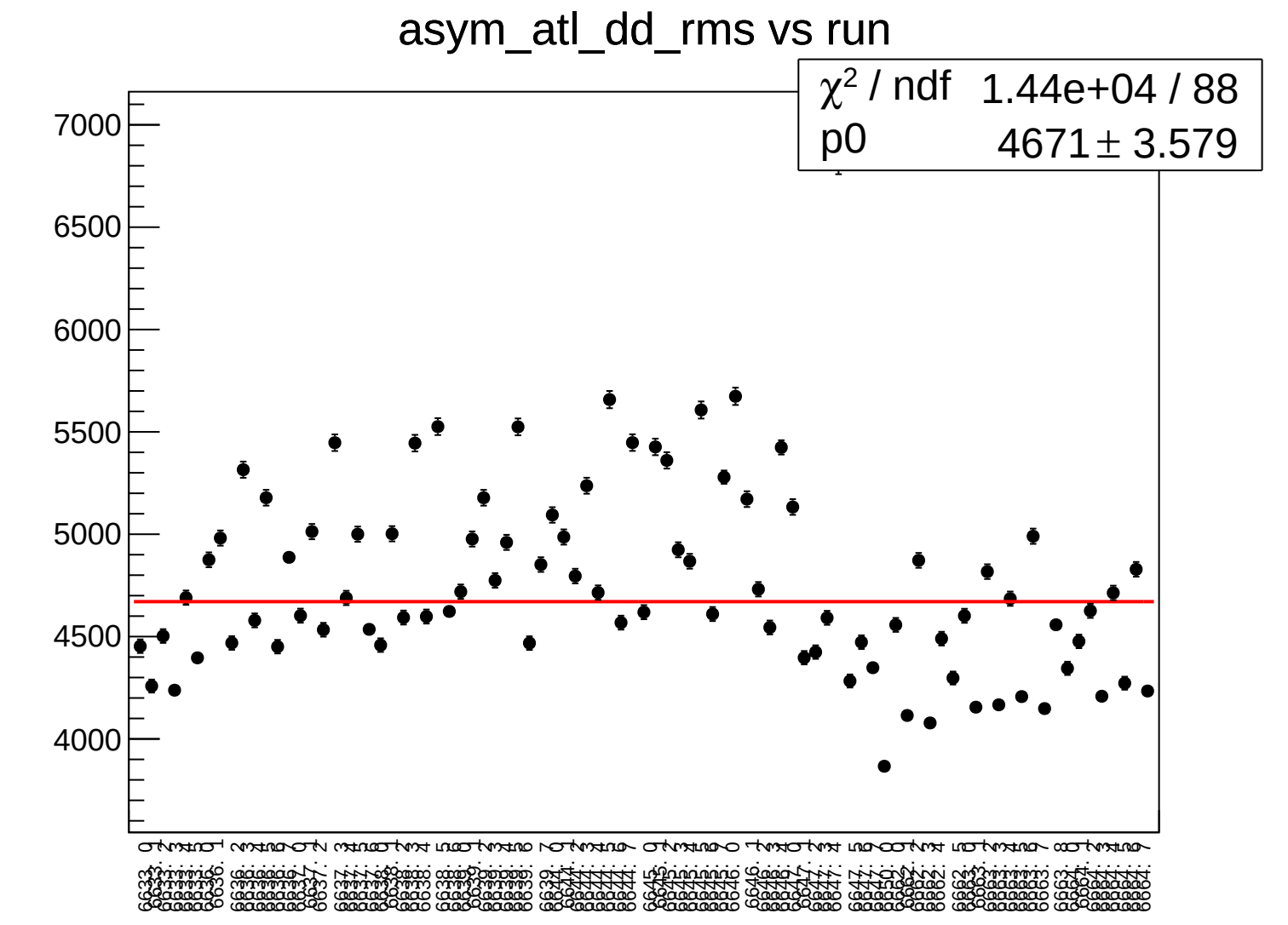

asym_atl_dd_correction_mean vs run
χ² / ndf 90.04 / 88
p0 5010 ± 4507
×10³
150
100
50
0
−50
−100
pull
Entries 89
Mean 8.784
Std Dev 42.14
2
1
0
−1
−2

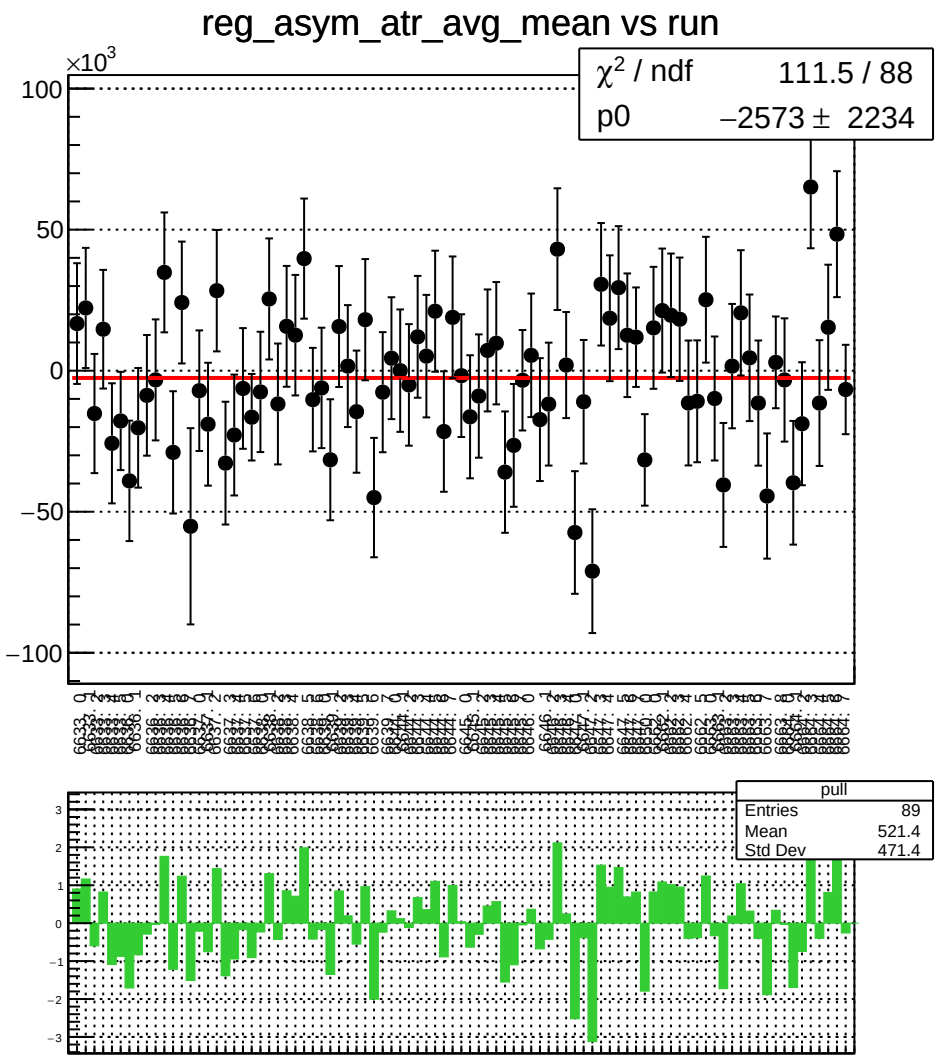

pull1D
Entries 89
Mean 0.02713
Std Dev 1.005
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

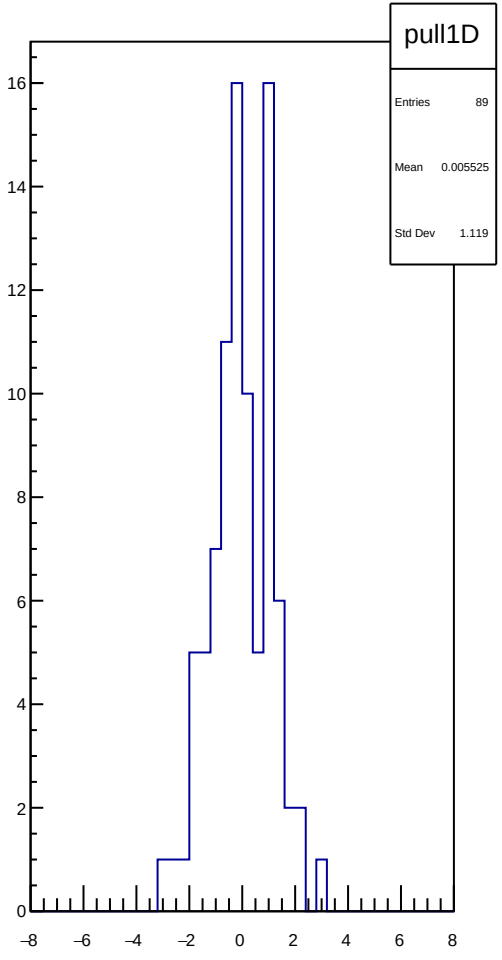

asym_atl_dd_correction_rms vs run
χ^2 / ndf 2.007e+04 / 88
p0 4152 ± 3.187
5500
5000
4500
4000
3500

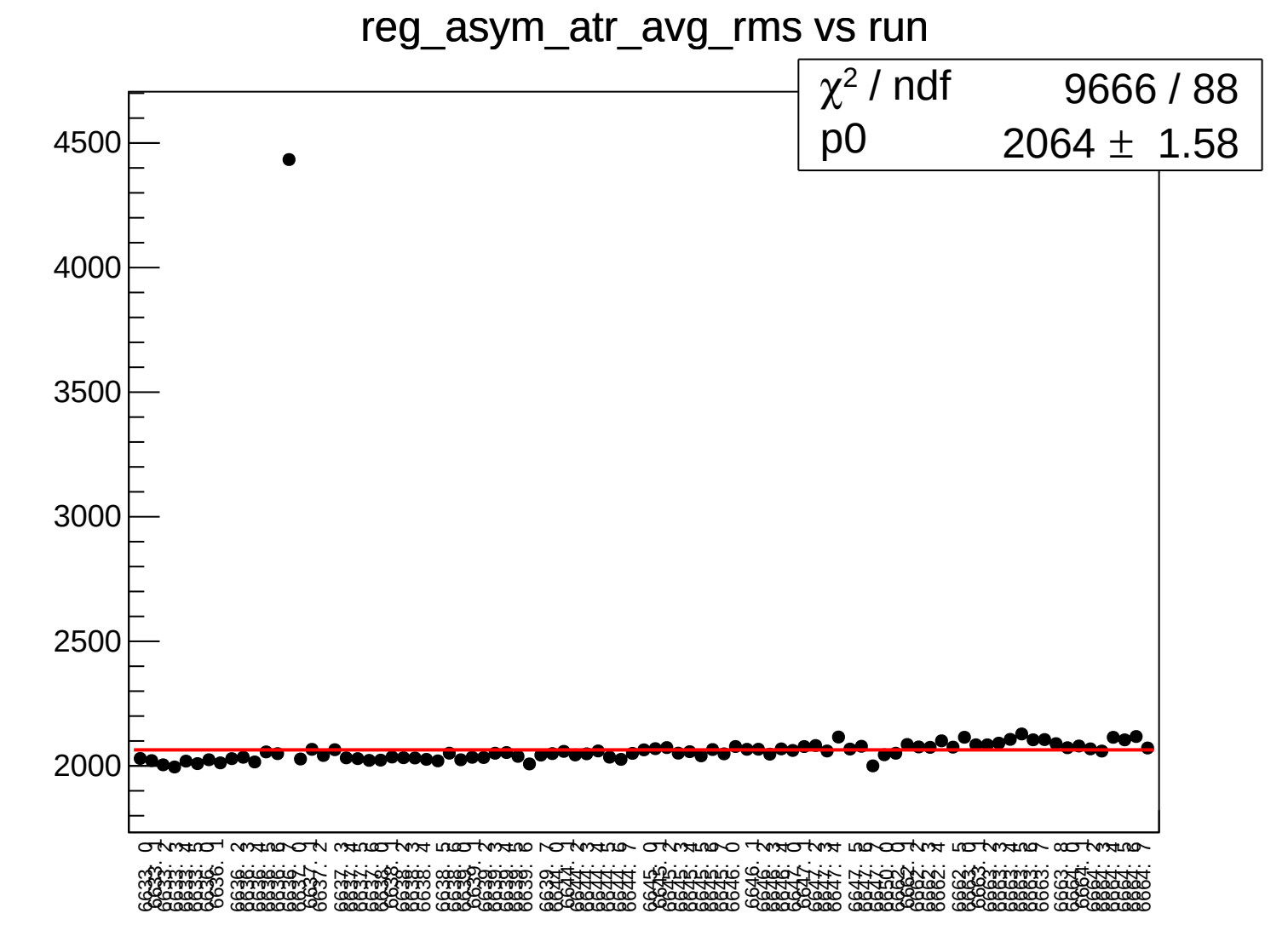

asym_atl_dd_mean vs run
×10^3
χ² / ndf 90.24 / 88
p0 −3764 ± 5062
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean −13.26
Std Dev 61.54
2
1
0
−1
−2
−3

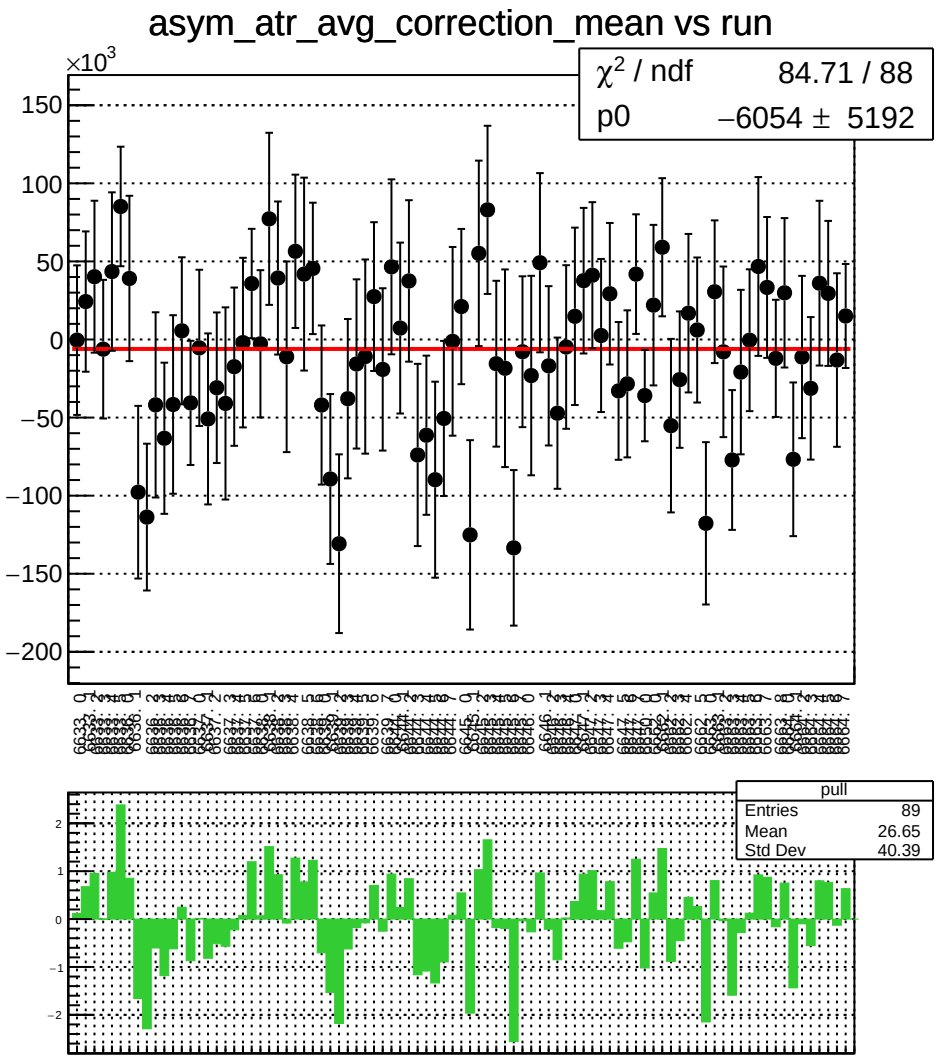

pull1D
Entries 89
Mean −0.02282
Std Dev 1.007
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

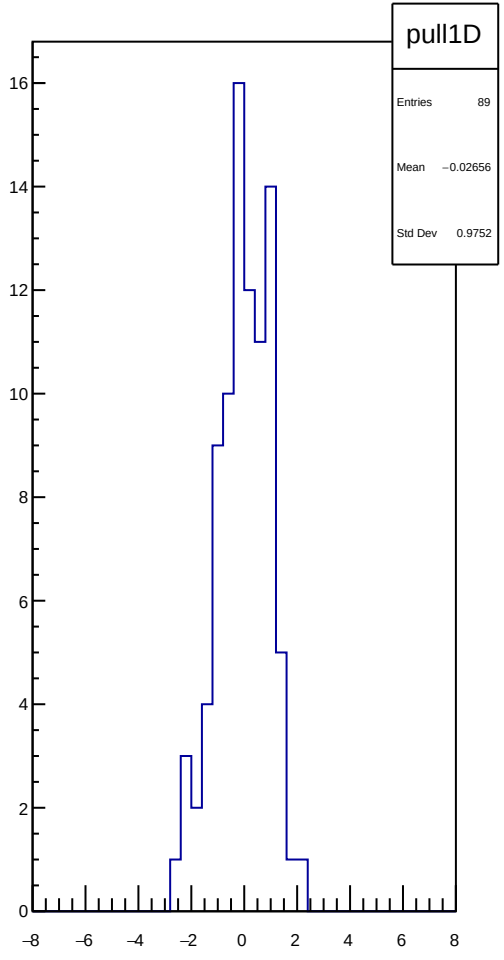

asym_atl_dd_rms vs run
χ² / ndf 1.44e+04 / 88
p0 4671 ± 3.579
7000
6500
6000
5500
5000
4500
4000

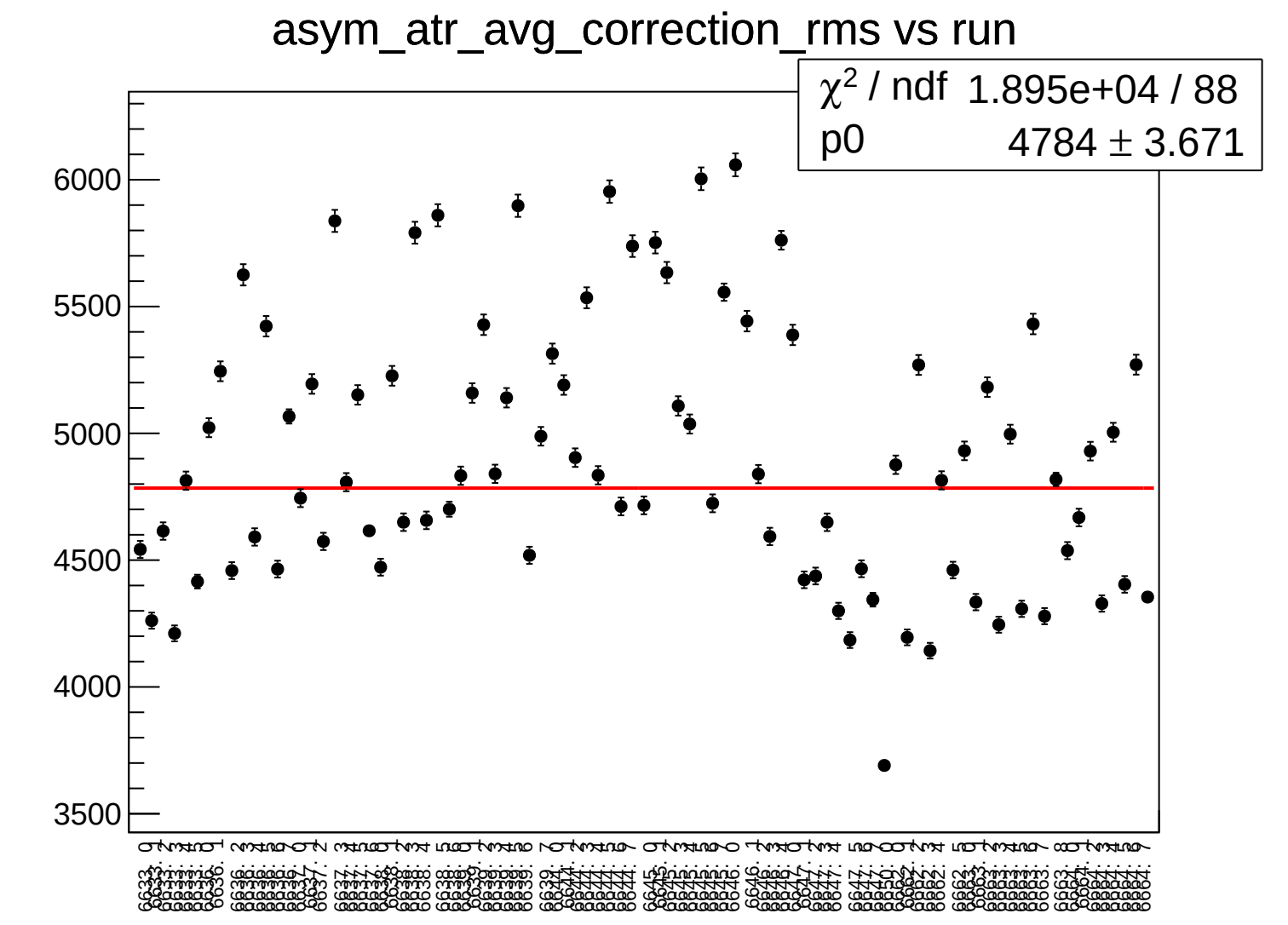

reg_asym_atr_avg_mean vs run
×10^3
χ² / ndf 111.5 / 88
p0 −2573 ± 2234
100
50
0
−50
−100
pull
Entries 89
Mean 521.4
Std Dev 471.4
3
2
1
0
−1
−2
−3

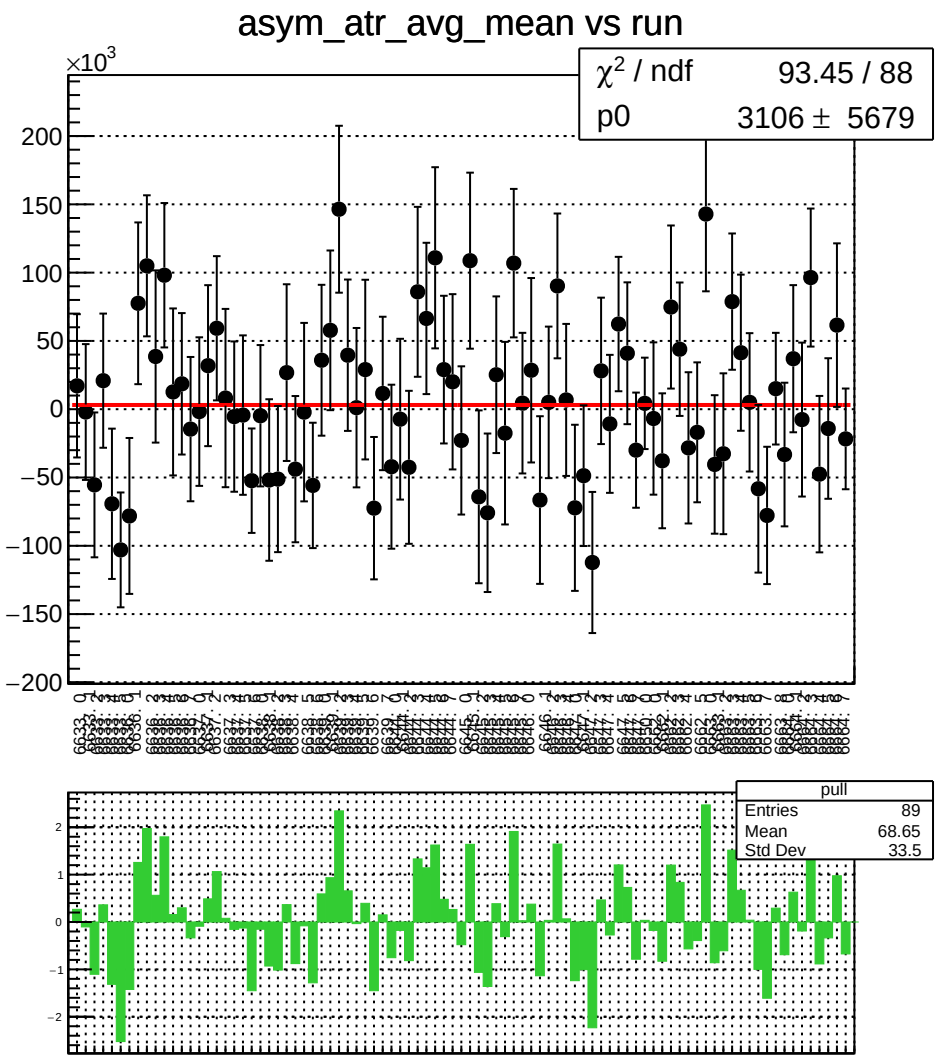

pull1D
Entries 89
Mean 0.005525
Std Dev 1.119
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

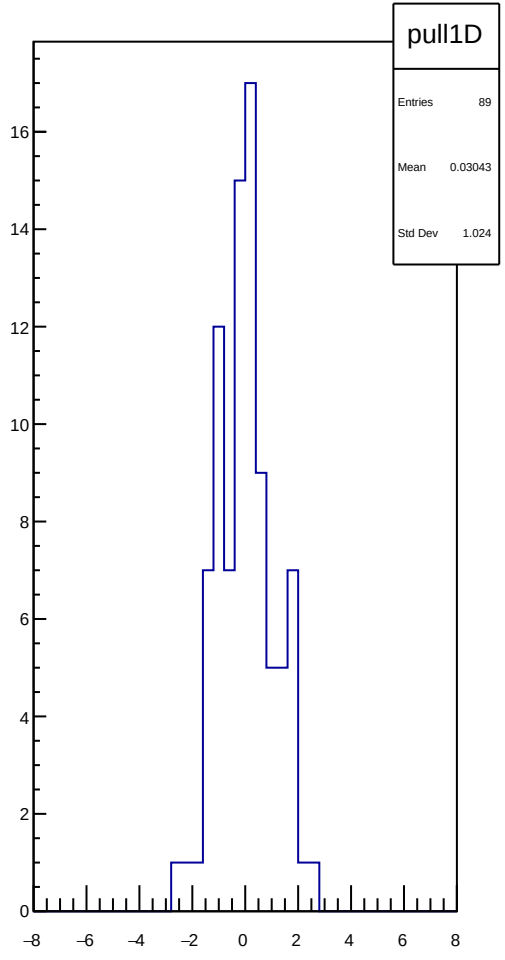

reg_asym_atr_avg_rms vs run
χ² / ndf 9666 / 88
p0 2064 ± 1.58
4500
4000
3500
3000
2500
2000

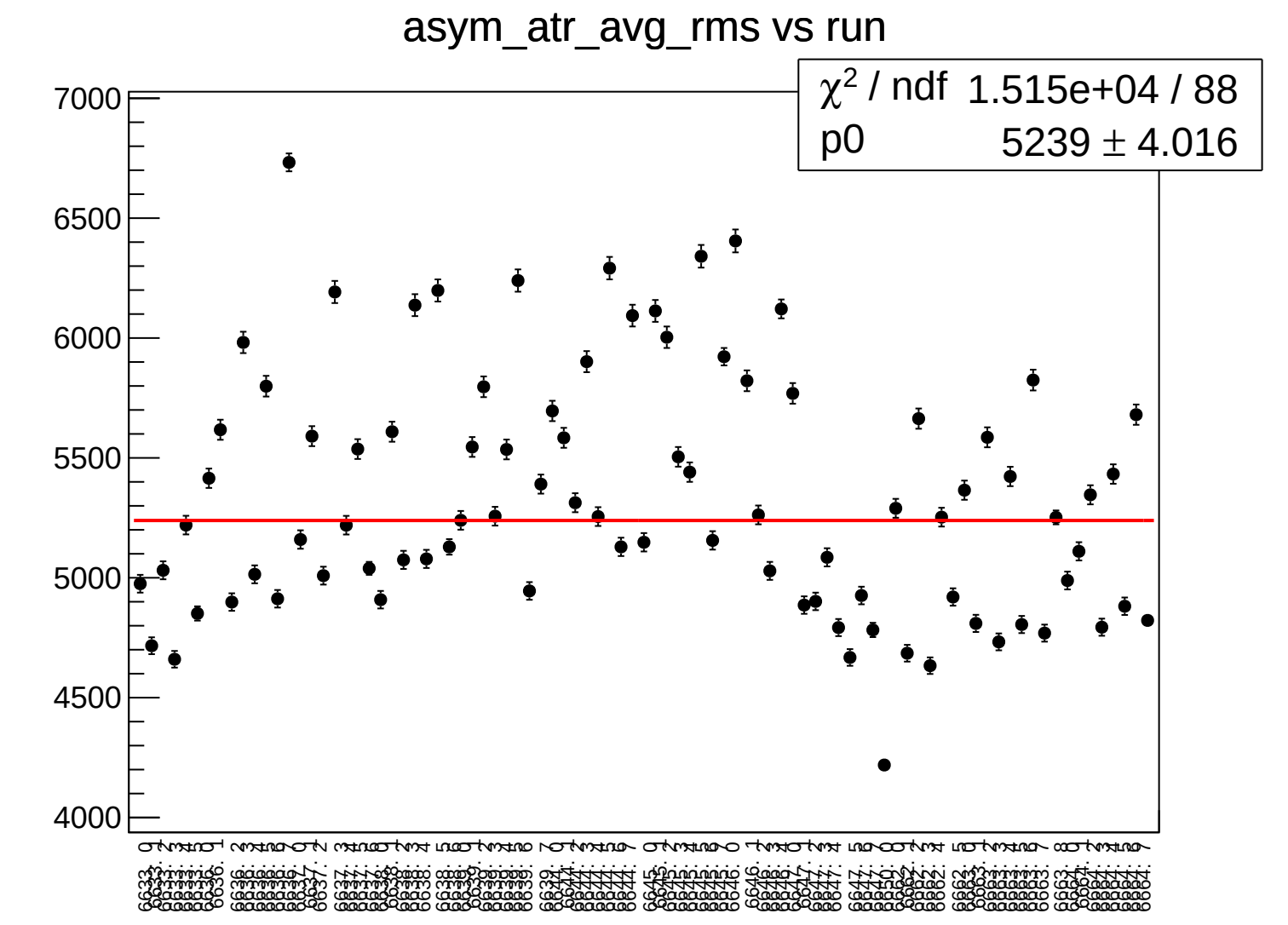

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 84.71 / 88
p0 −6054 ± 5192
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 26.65
Std Dev 40.39
2
1
0
−1
−2

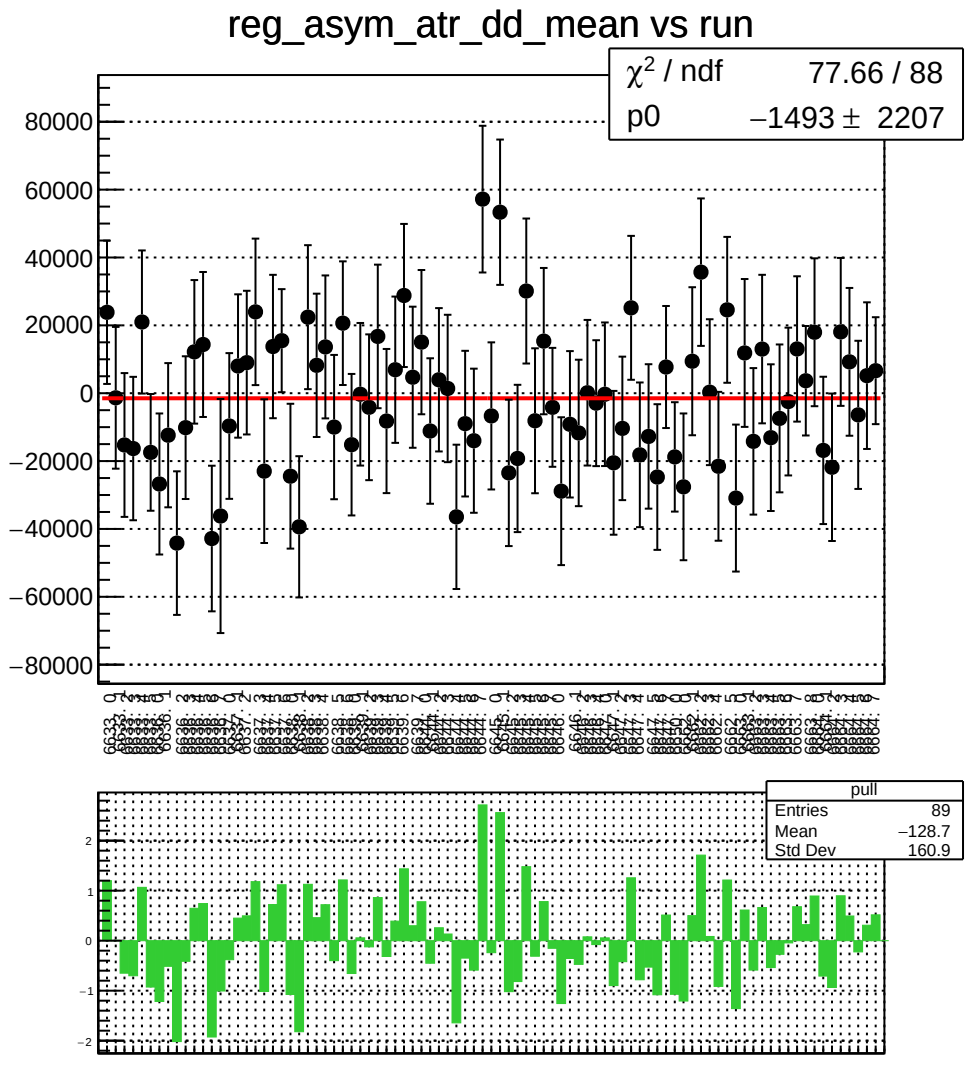

pull1D
Entries 89
Mean −0.02656
Std Dev 0.9752
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

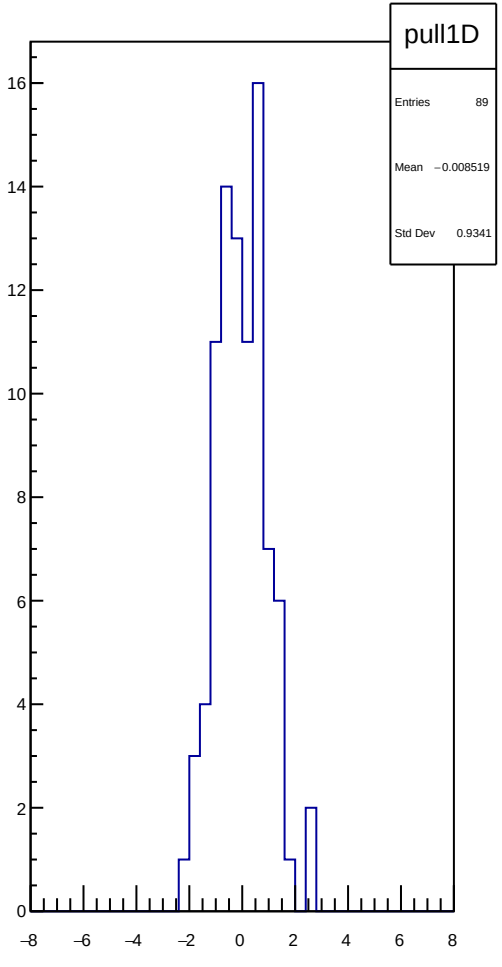

asym_atr_avg_correction_rms vs run
χ² / ndf 1.895e+04 / 88
p0 4784 ± 3.671
6000
5500
5000
4500
4000
3500

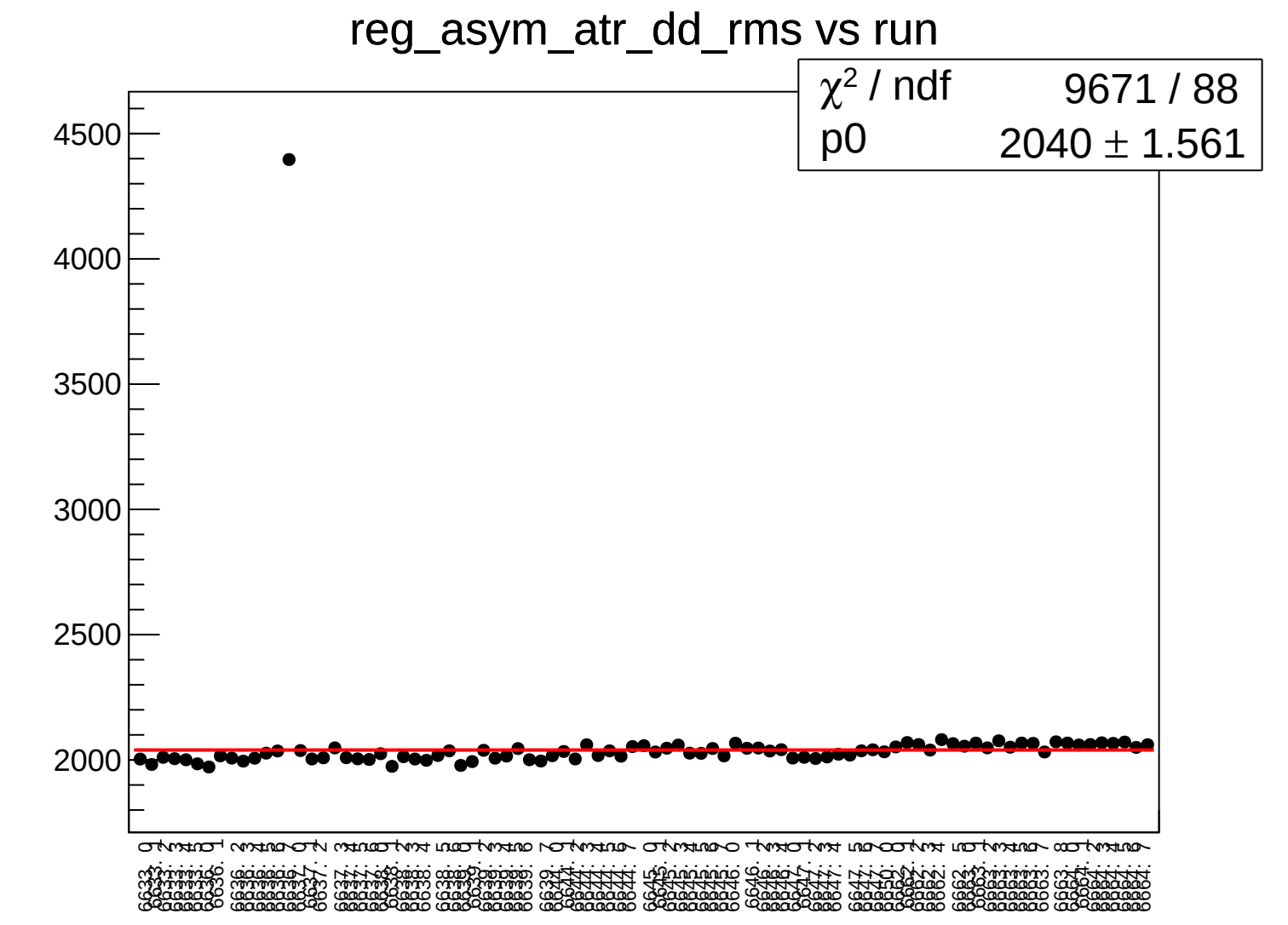

asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 93.45 / 88
p0 3106 ± 5679
pull
Entries 89
Mean 68.65
Std Dev 33.5

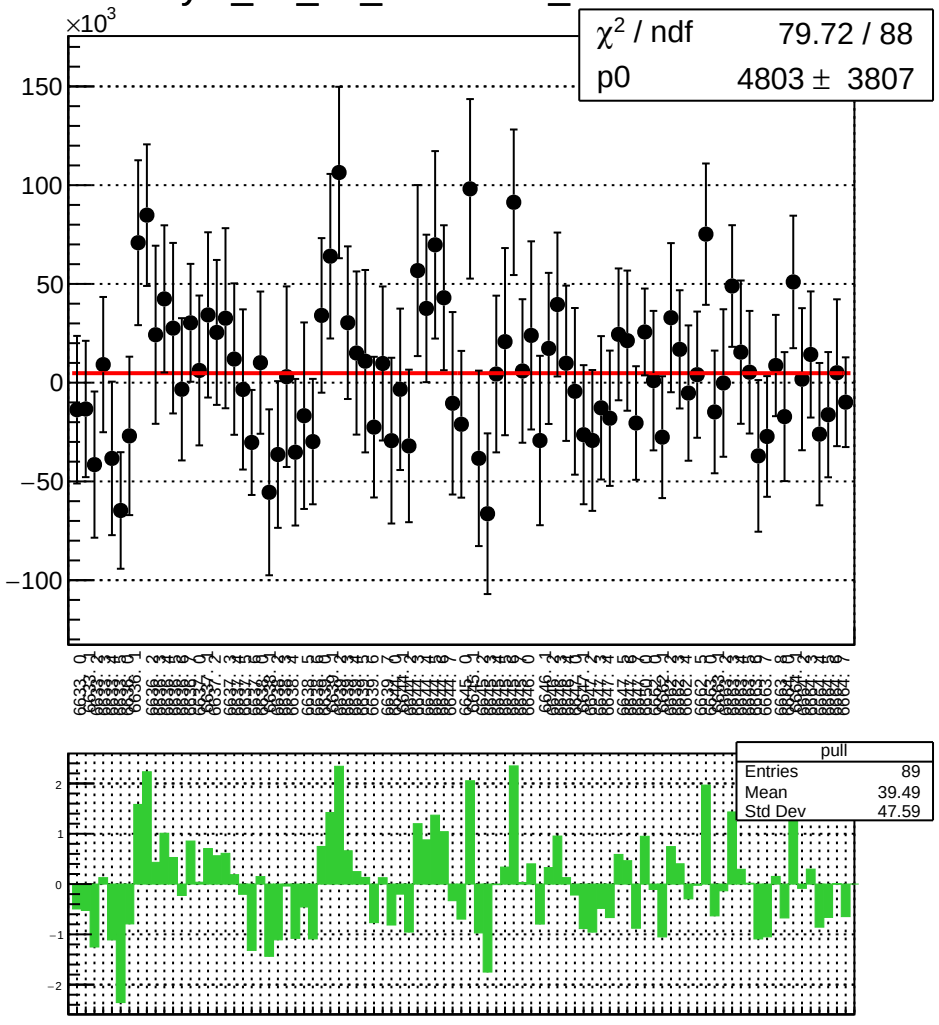

pull1D
Entries 89
Mean 0.03043
Std Dev 1.024

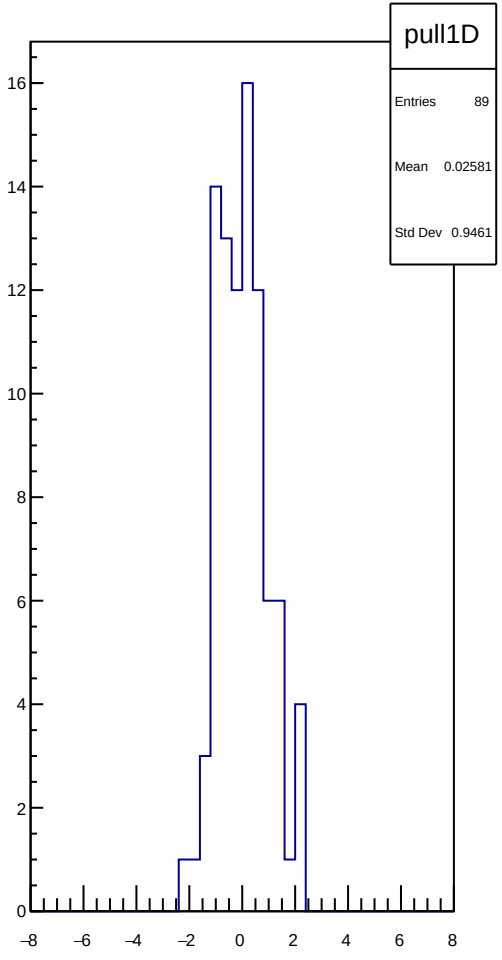

asym_atr_avg_rms vs run
χ^2 / ndf 1.515e+04 / 88
p0 5239 ± 4.016
7000
6500
6000
5500
5000
4500
4000

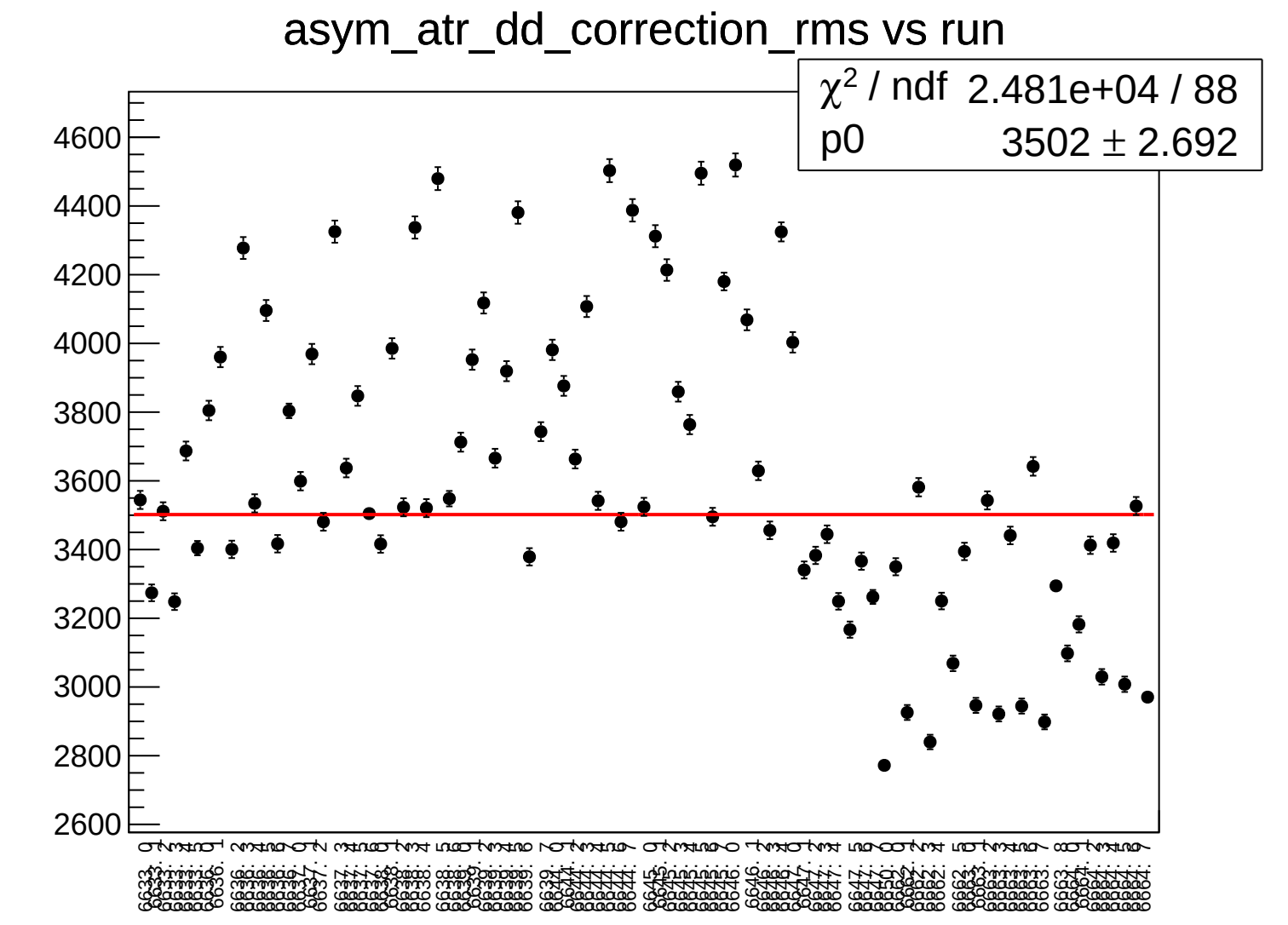

reg_asym_atr_dd_mean vs run
χ² / ndf 77.66 / 88
p0 −1493 ± 2207
pull
Entries 89
Mean −128.7
Std Dev 160.9

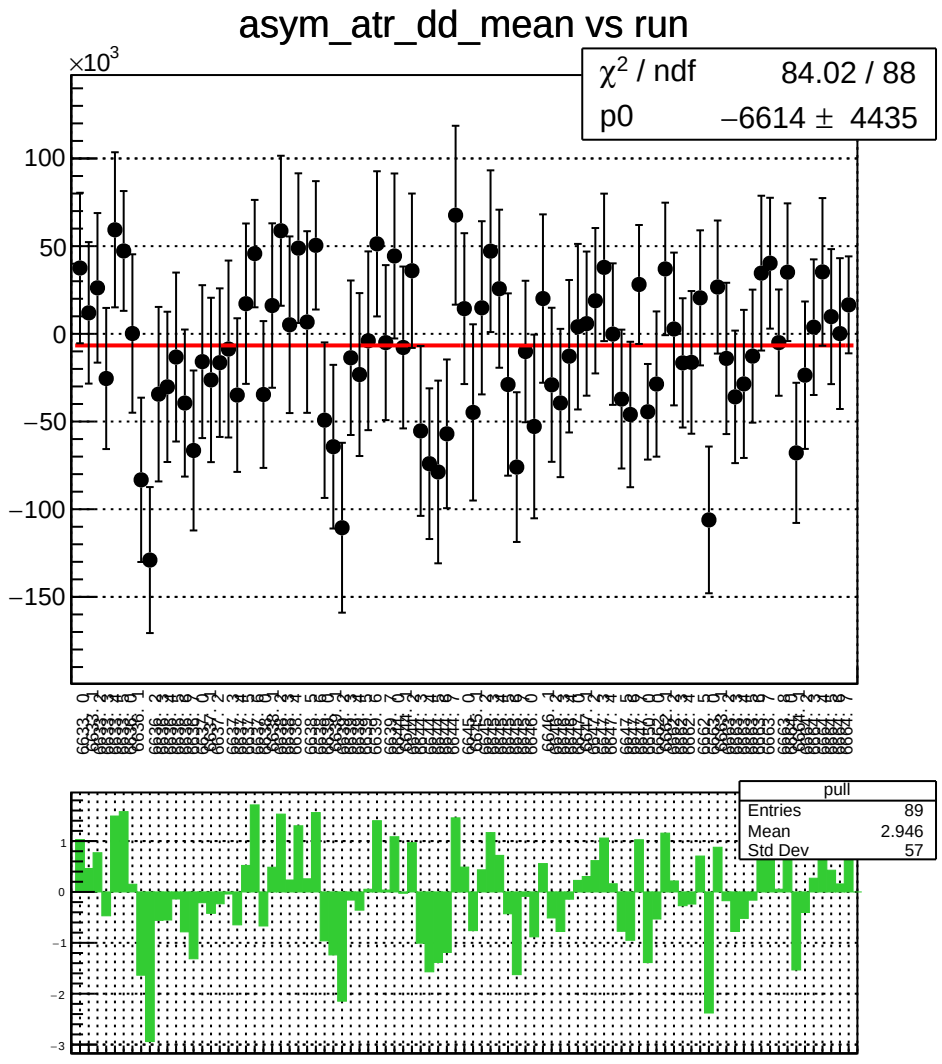

pull1D
Entries 89
Mean −0.008519
Std Dev 0.9341

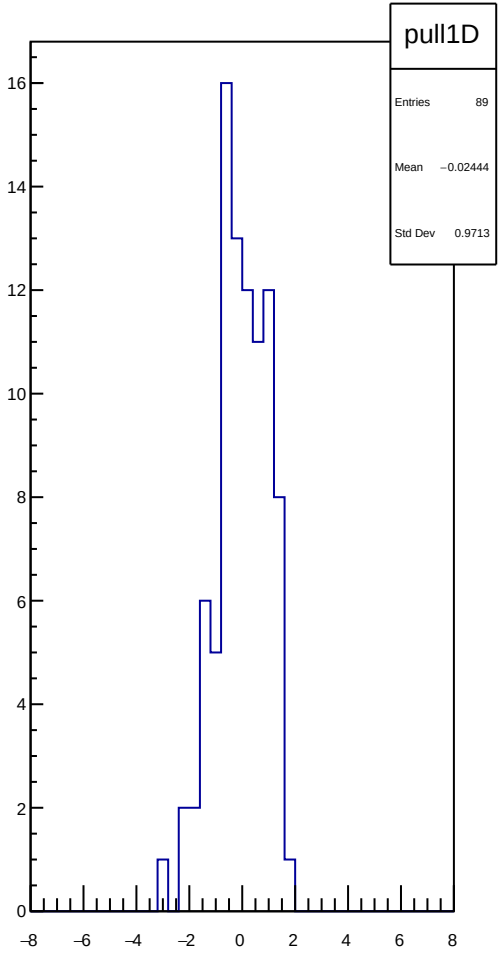

reg_asym_atr_dd_rms vs run
χ^2 / ndf 9671 / 88
p0 2040 ± 1.561
4500
4000
3500
3000
2500
2000

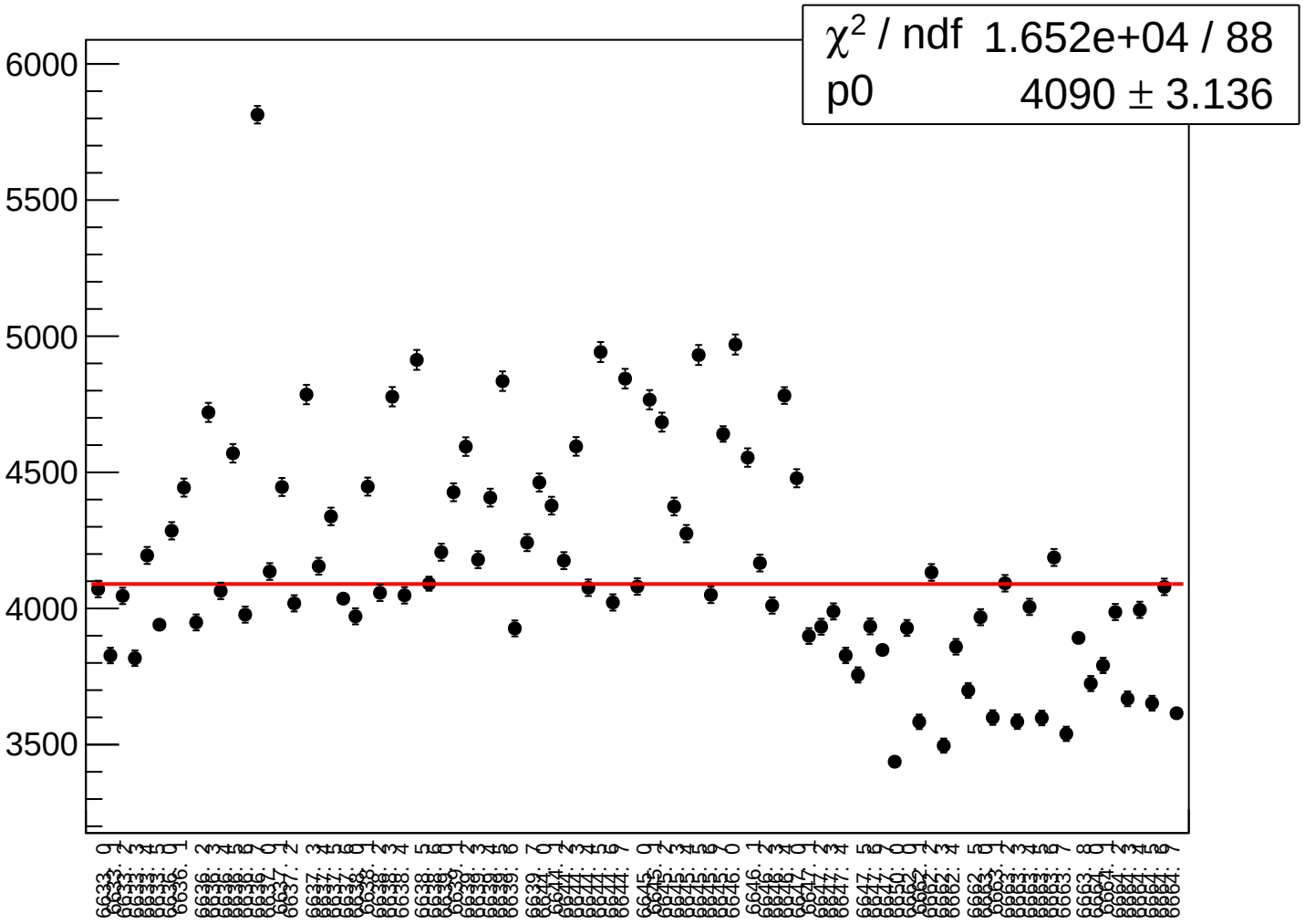

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 79.72 / 88
p0 4803 ± 3807
150
100
50
0
−50
−100
pull
Entries 89
Mean 39.49
Std Dev 47.59
2
1
0
−1
−2

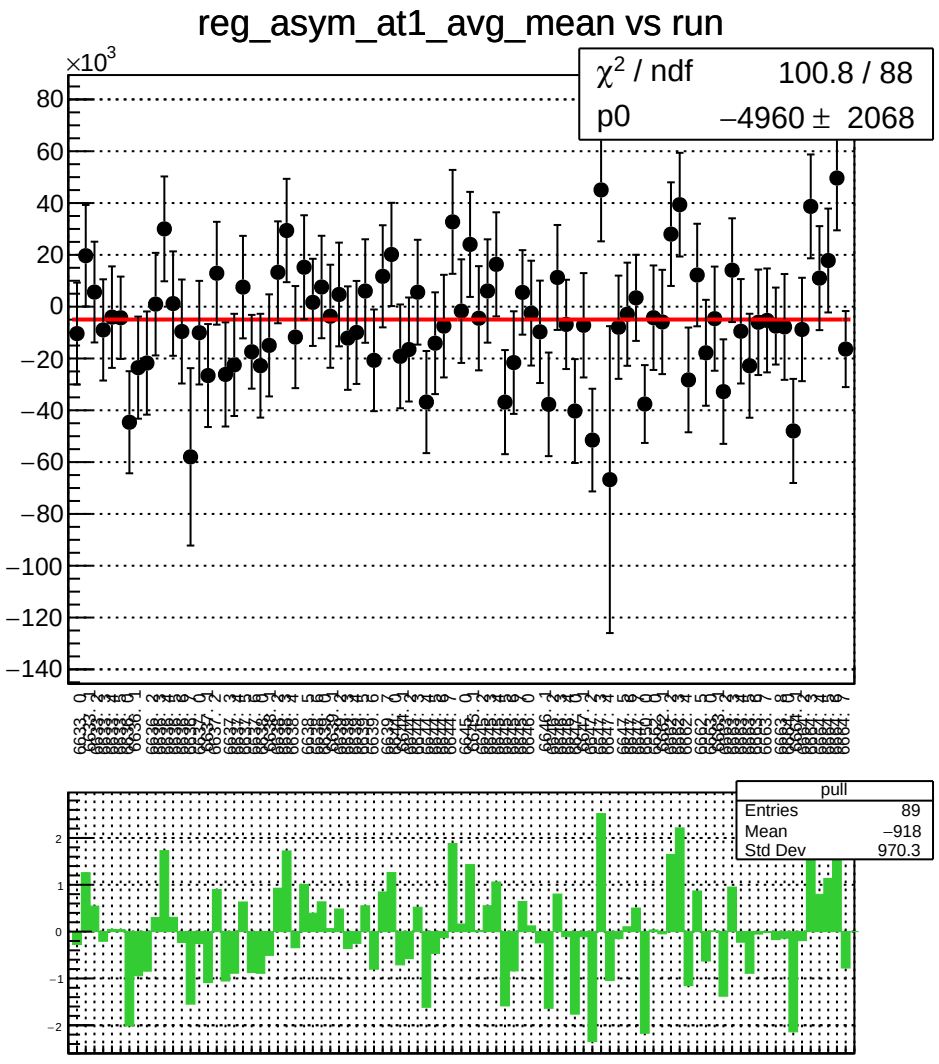

pull1D
Entries 89
Mean 0.02581
Std Dev 0.9461
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

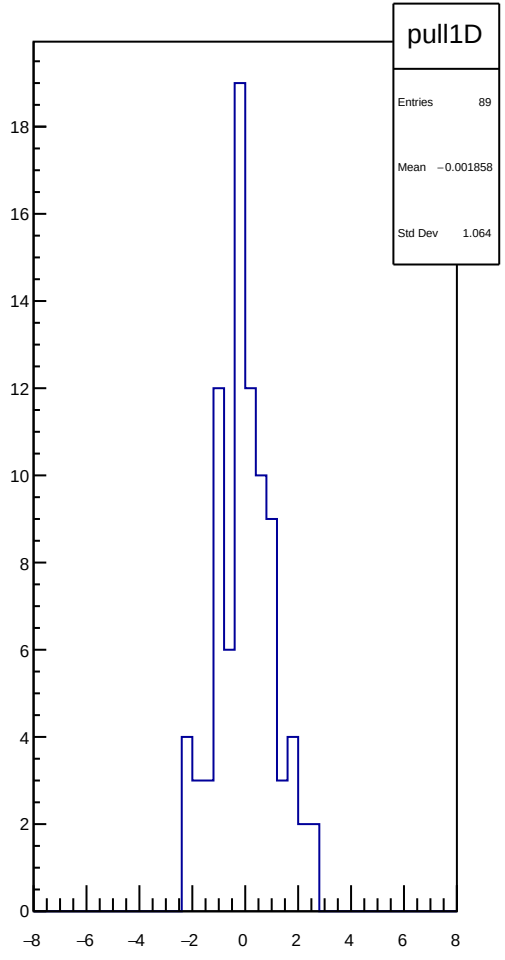

asym_atr_dd_correction_rms vs run
χ² / ndf 2.481e+04 / 88
p0 3502 ± 2.692
4600
4400
4200
4000
3800
3600
3400
3200
3000
2800
2600

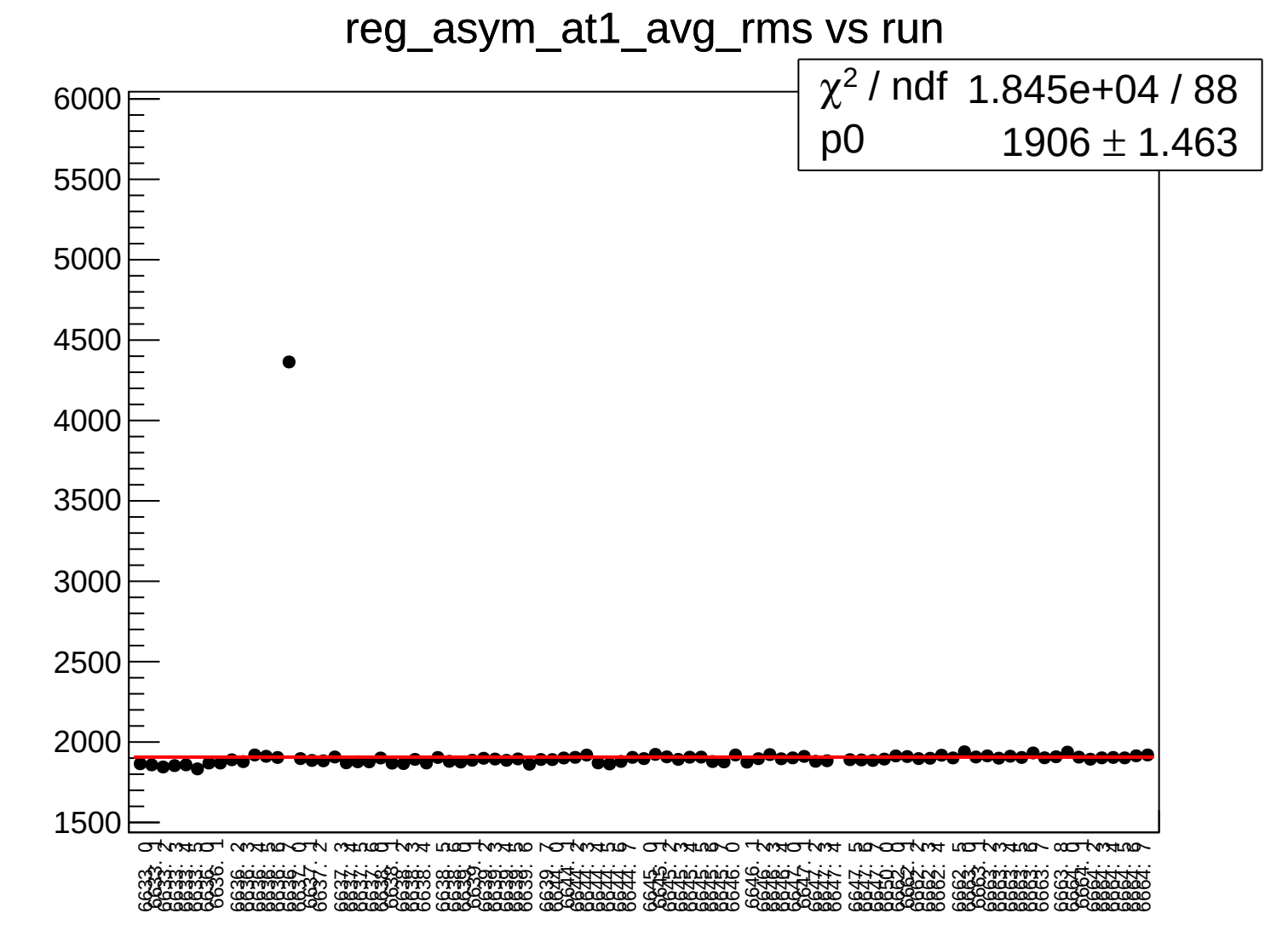

asym_atr_dd_mean vs run
×10^3
χ² / ndf 84.02 / 88
p0 −6614 ± 4435
100
50
0
−50
−100
−150
pull
Entries 89
Mean 2.946
Std Dev 57
1
0
−1
−2
−3

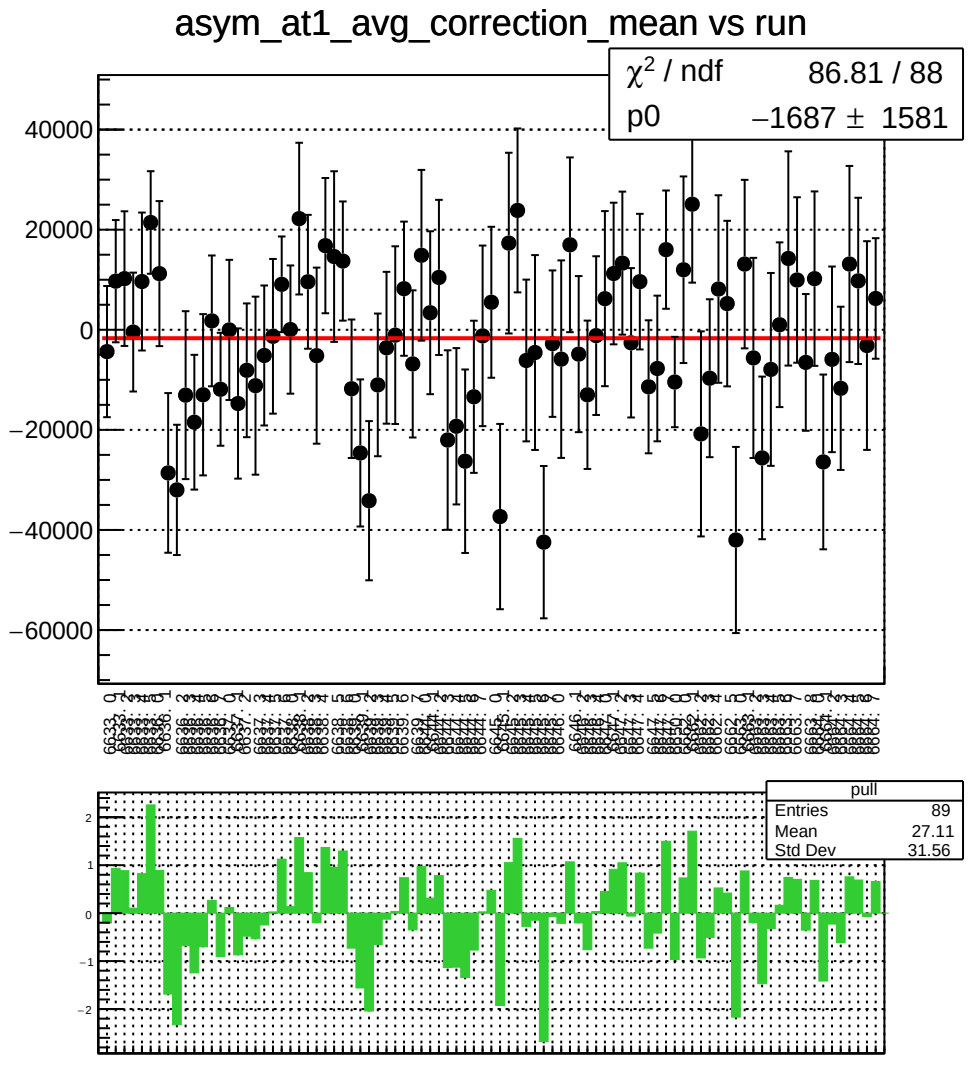

pull1D
Entries 89
Mean −0.02444
Std Dev 0.9713
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

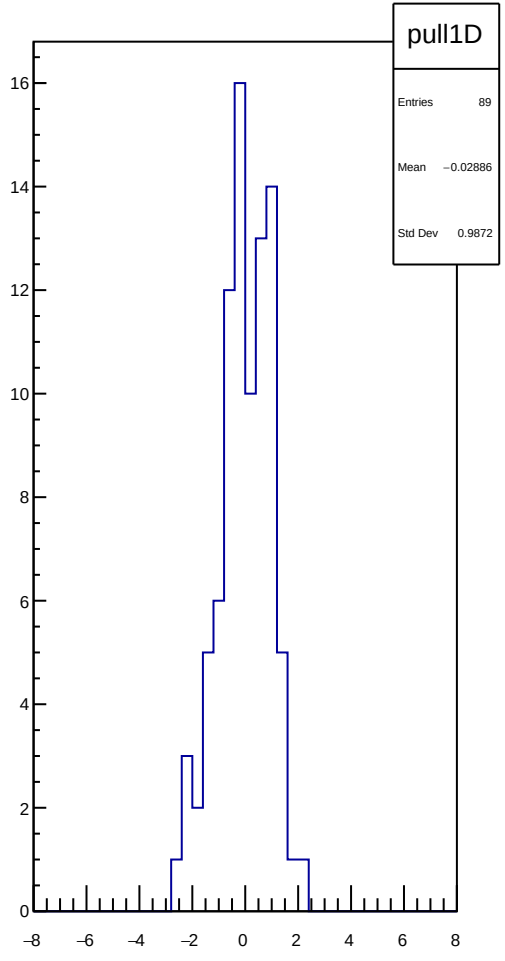

asym_atr_dd_rms vs run
χ² / ndf 1.652e+04 / 88
p0 4090 ± 3.136
6000
5500
5000
4500
4000
3500

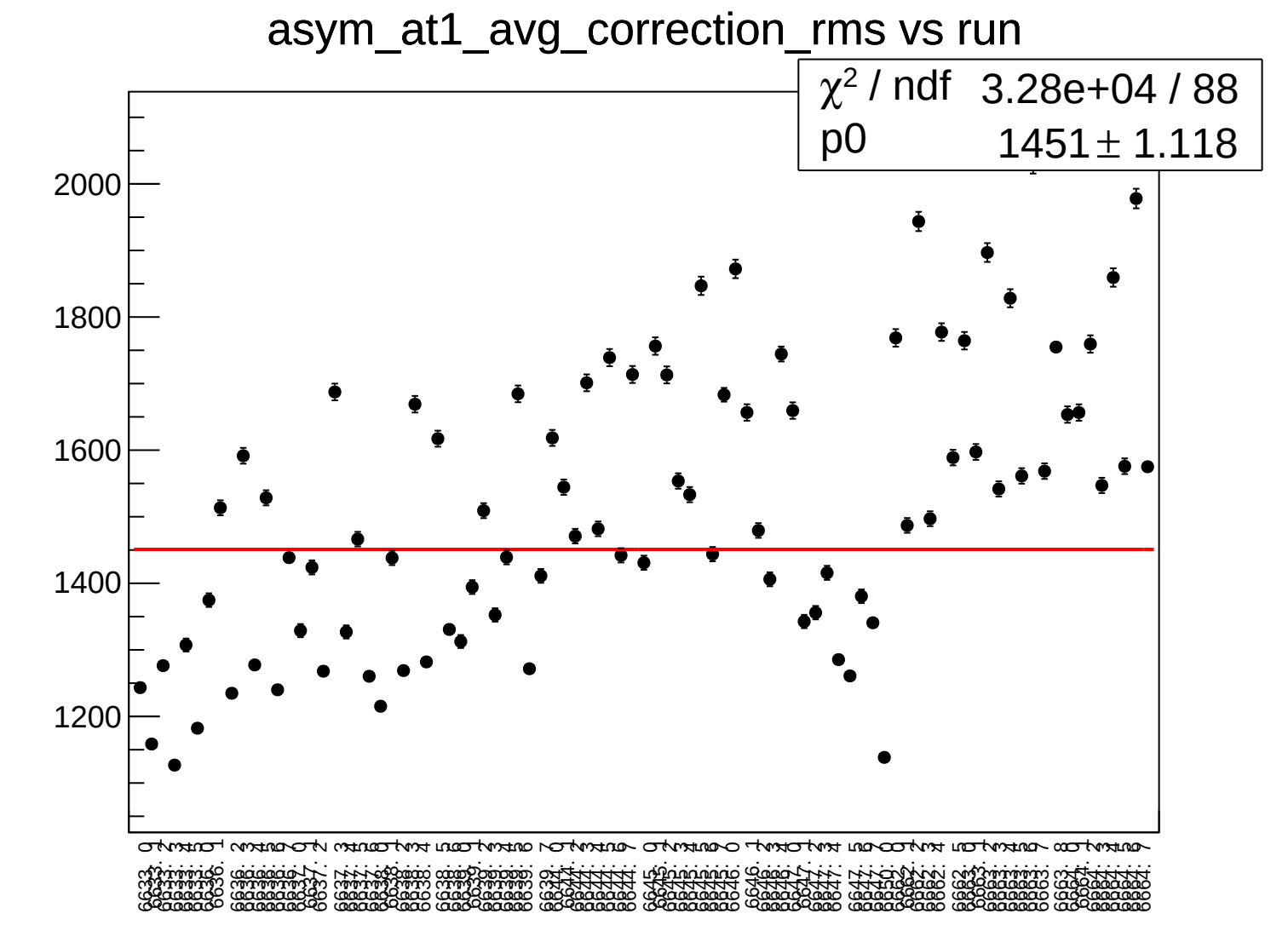

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 100.8 / 88
p0 −4960 ± 2068
pull
Entries 89
Mean −918
Std Dev 970.3

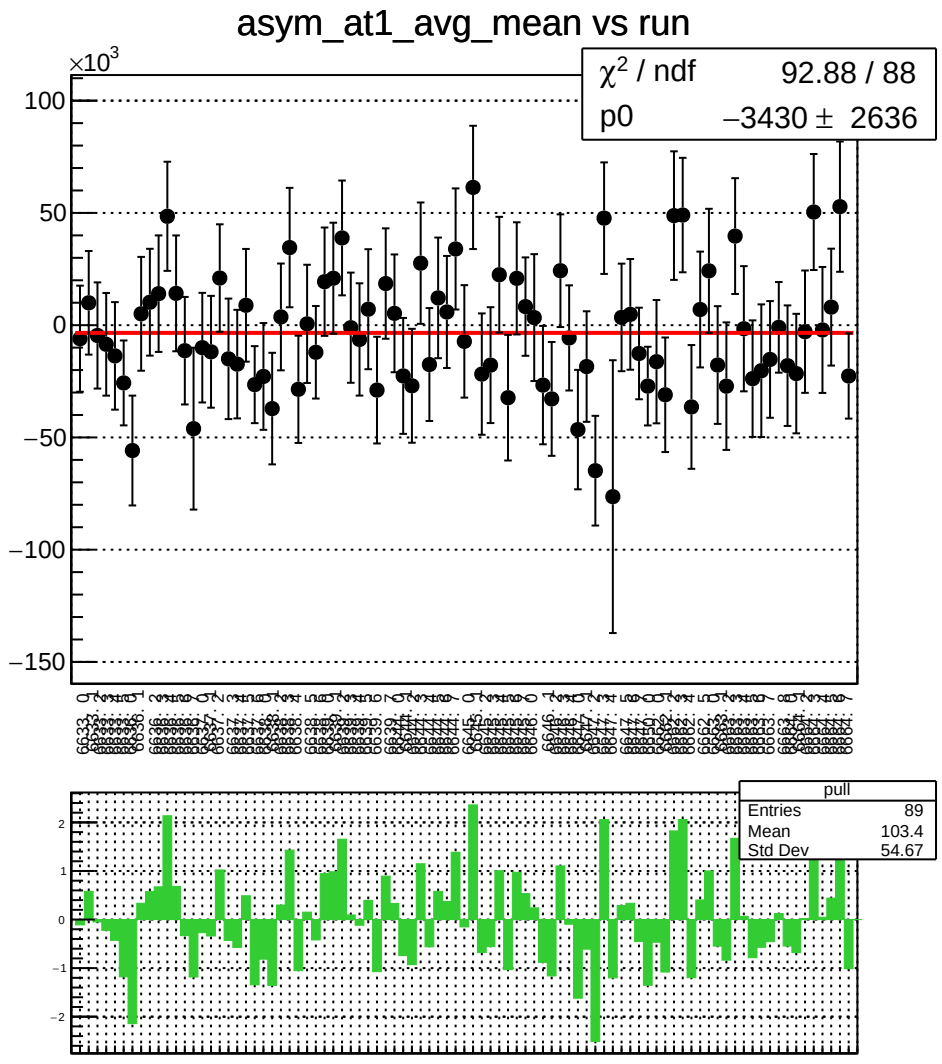

pull1D
Entries 89
Mean −0.001858
Std Dev 1.064

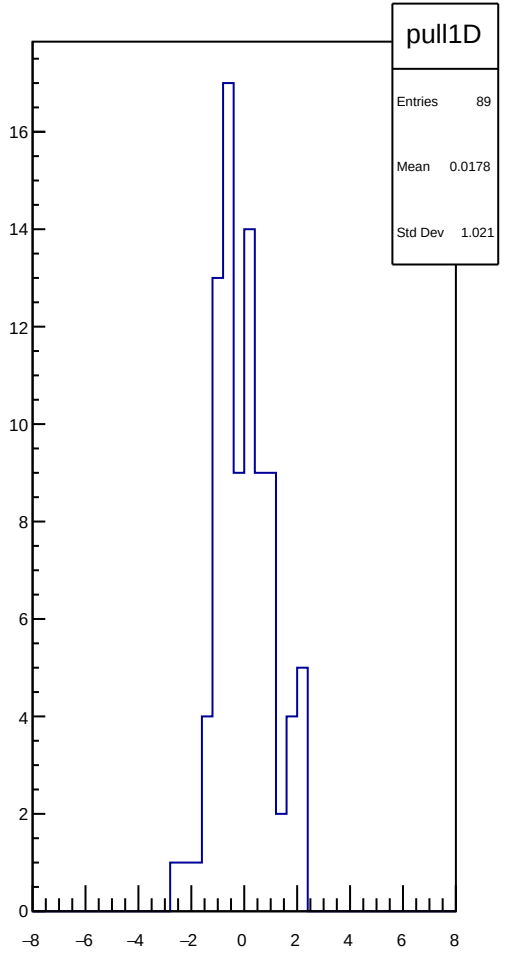

reg_asym_at1_avg_rms vs run
χ² / ndf 1.845e+04 / 88
p0 1906 ± 1.463
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

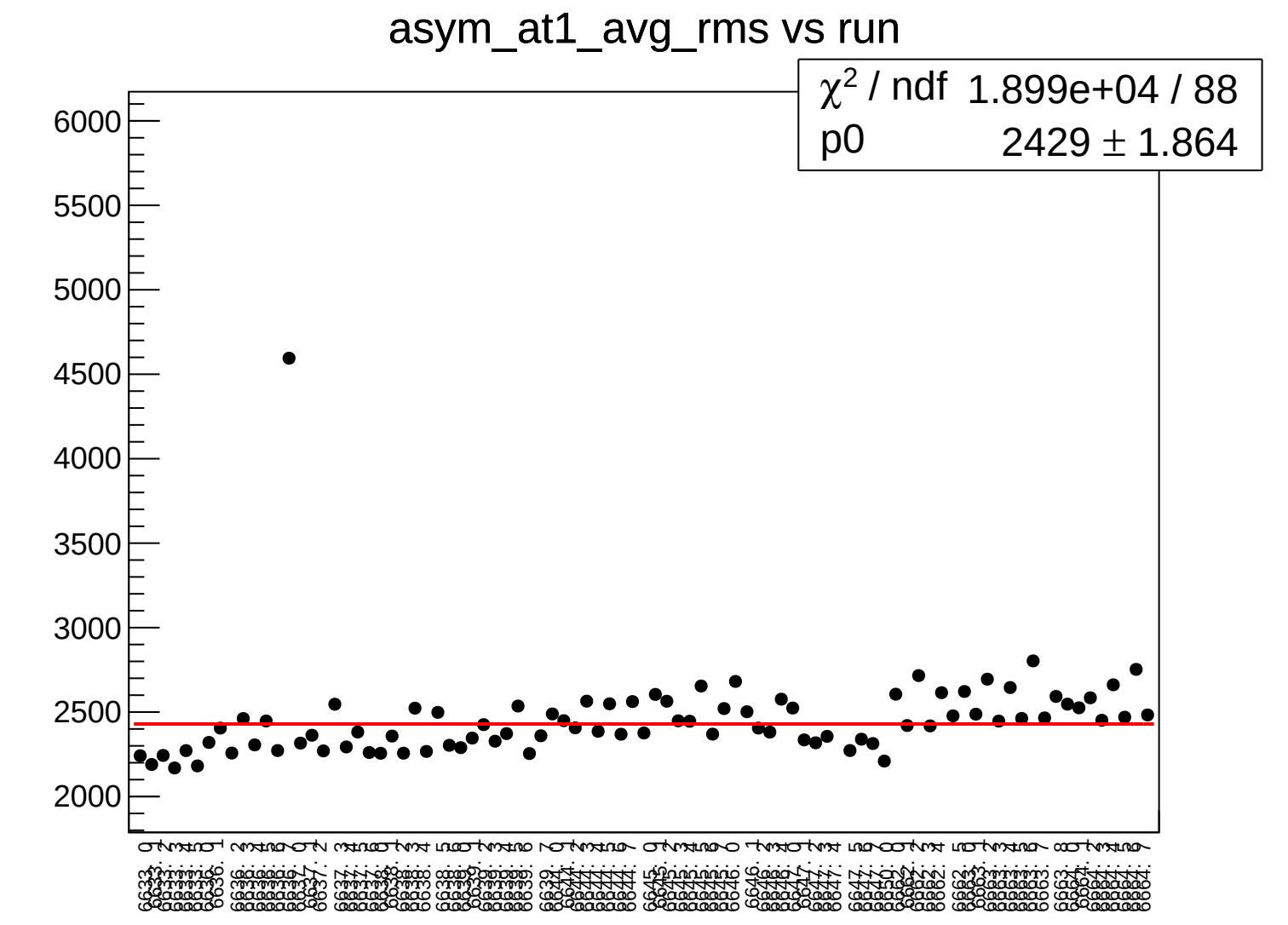

asym_at1_avg_correction_mean vs run
χ² / ndf 86.81 / 88
p0 −1687 ± 1581
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 27.11
Std Dev 31.56
2
1
0
−1
−2

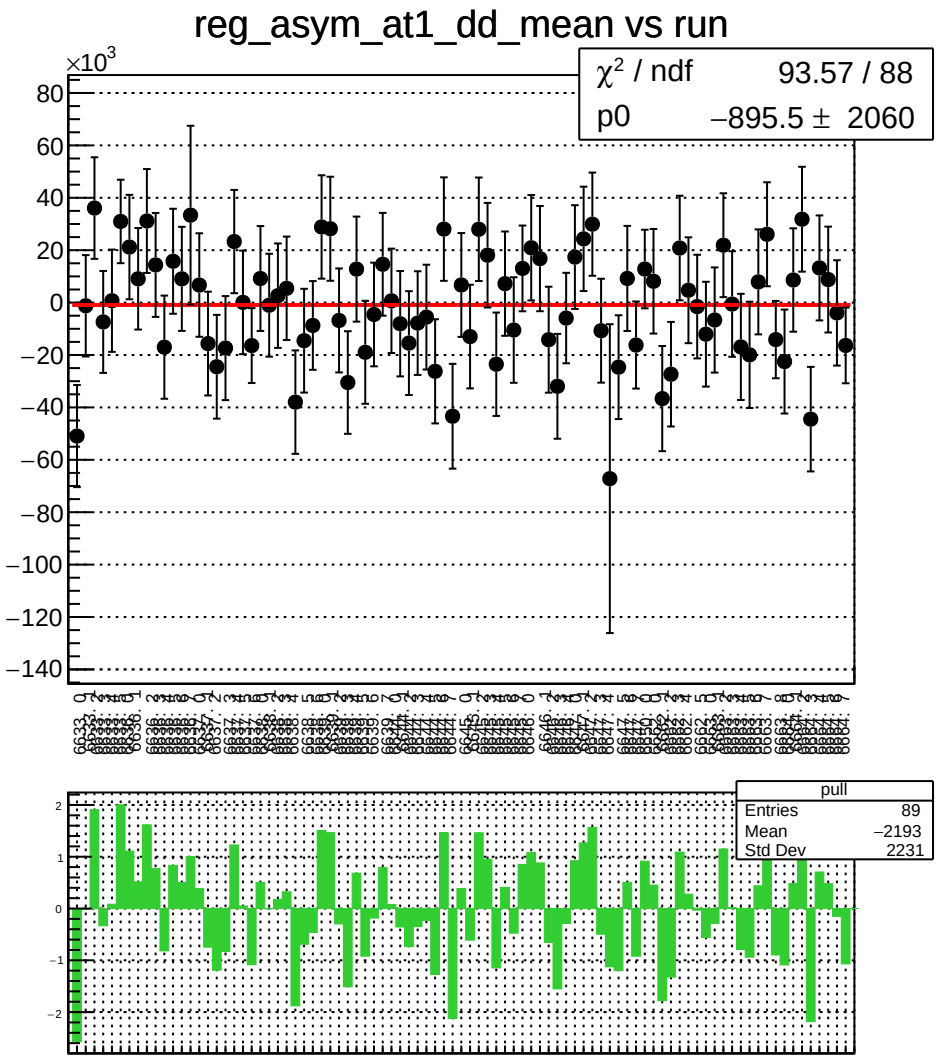

pull1D
Entries 89
Mean −0.02886
Std Dev 0.9872
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

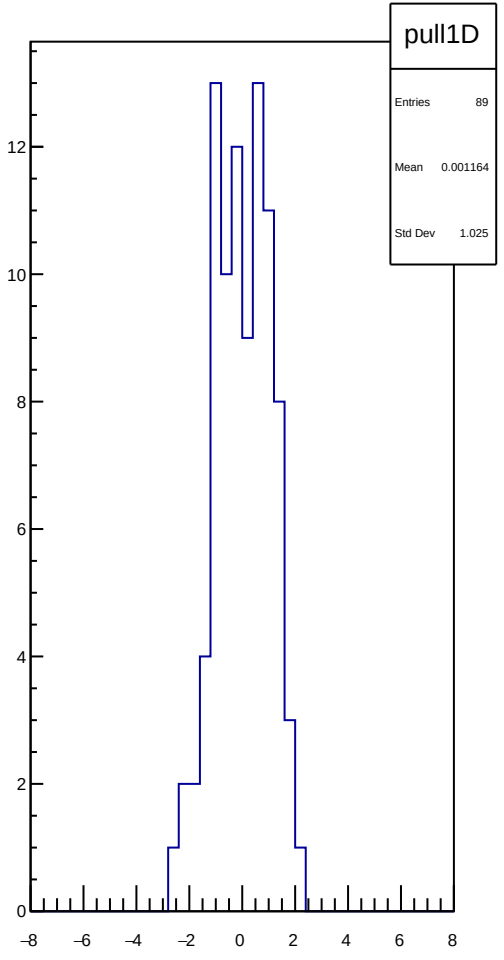

asym_at1_avg_correction_rms vs run
χ² / ndf 3.28e+04 / 88
p0 1451 ± 1.118
2000
1800
1600
1400
1200

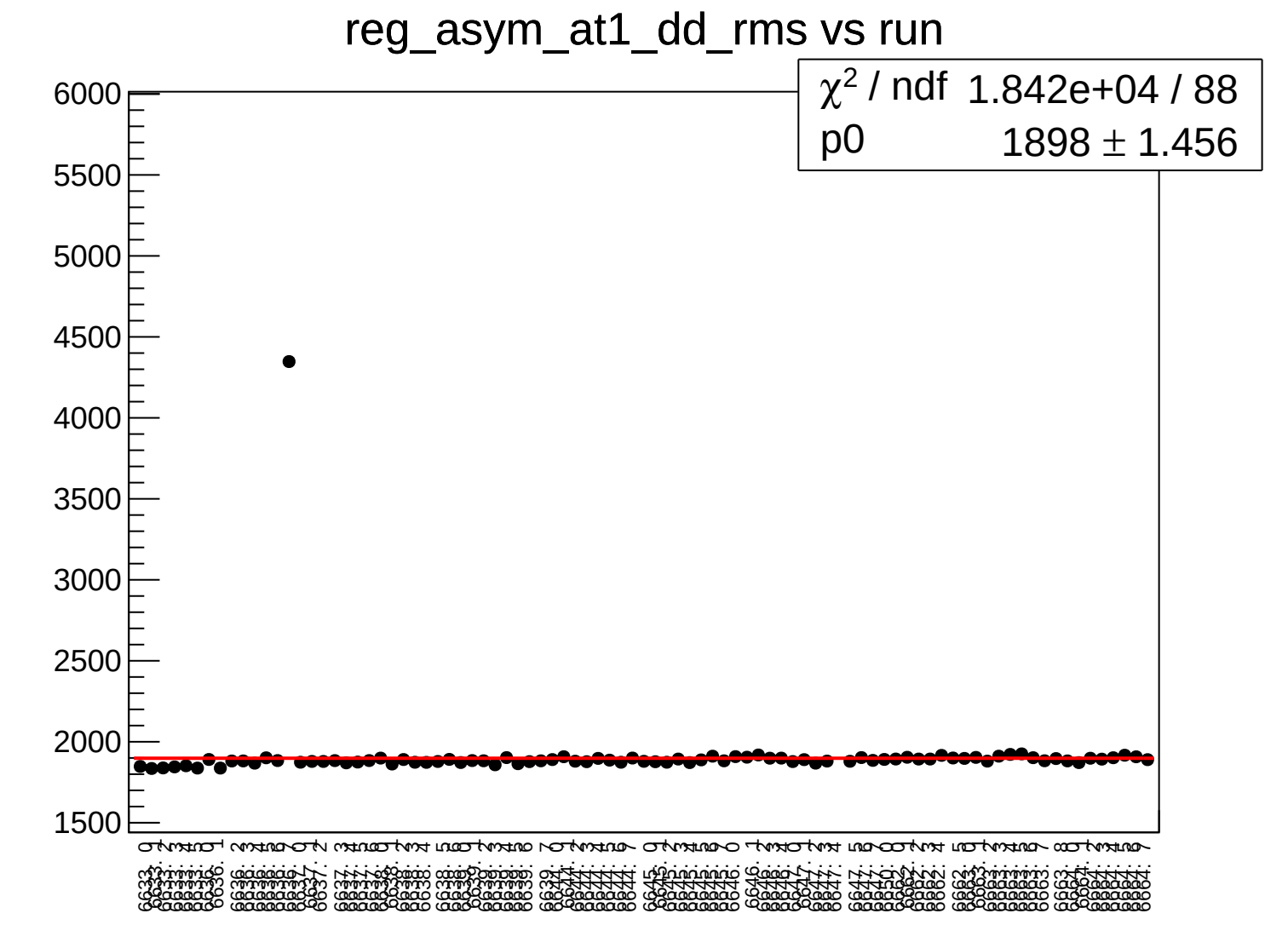

asym_at1_avg_mean vs run
×10^3
χ² / ndf 92.88 / 88
p0 −3430 ± 2636
100
50
0
−50
−100
−150
pull
Entries 89
Mean 103.4
Std Dev 54.67
2
1
0
−1
−2

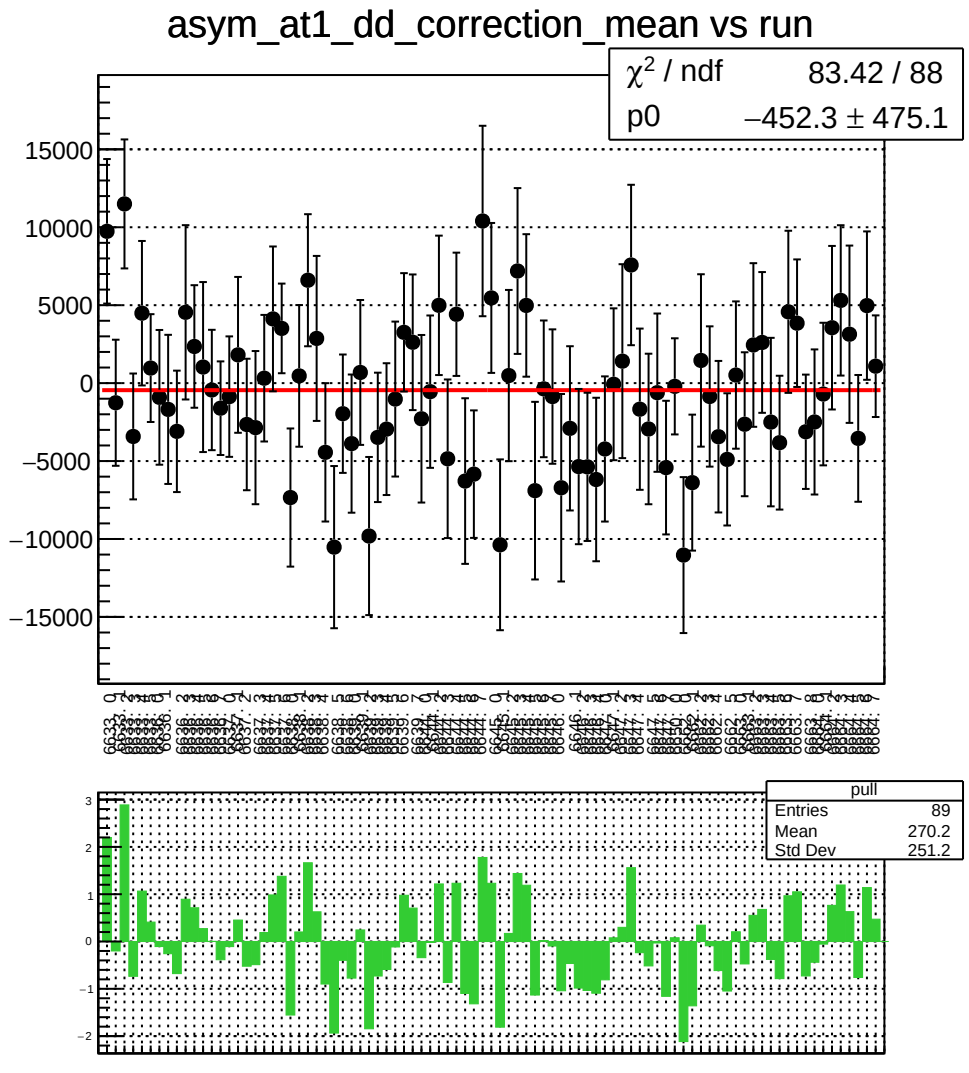

pull1D
Entries 89
Mean 0.0178
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

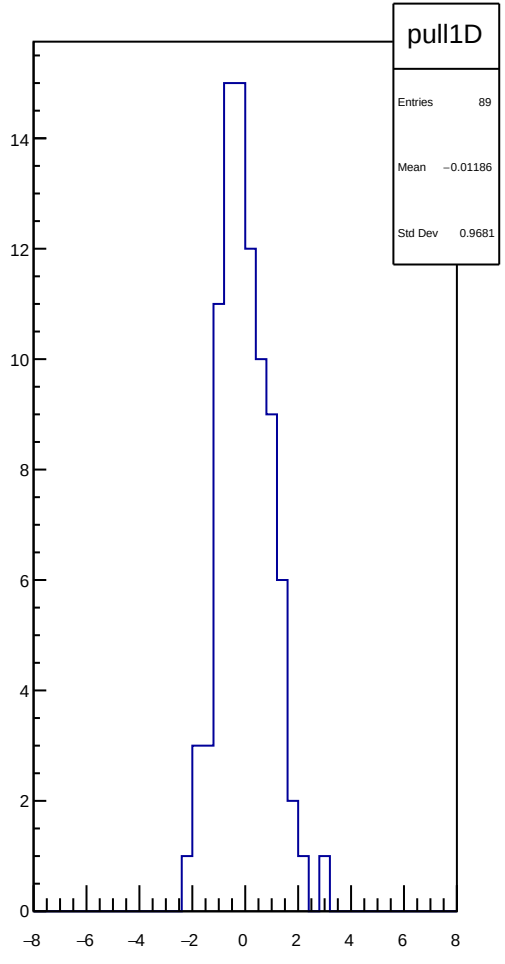

asym_at1_avg_rms vs run
χ^2 / ndf 1.899e+04 / 88
p0 2429 ± 1.864
6000
5500
5000
4500
4000
3500
3000
2500
2000

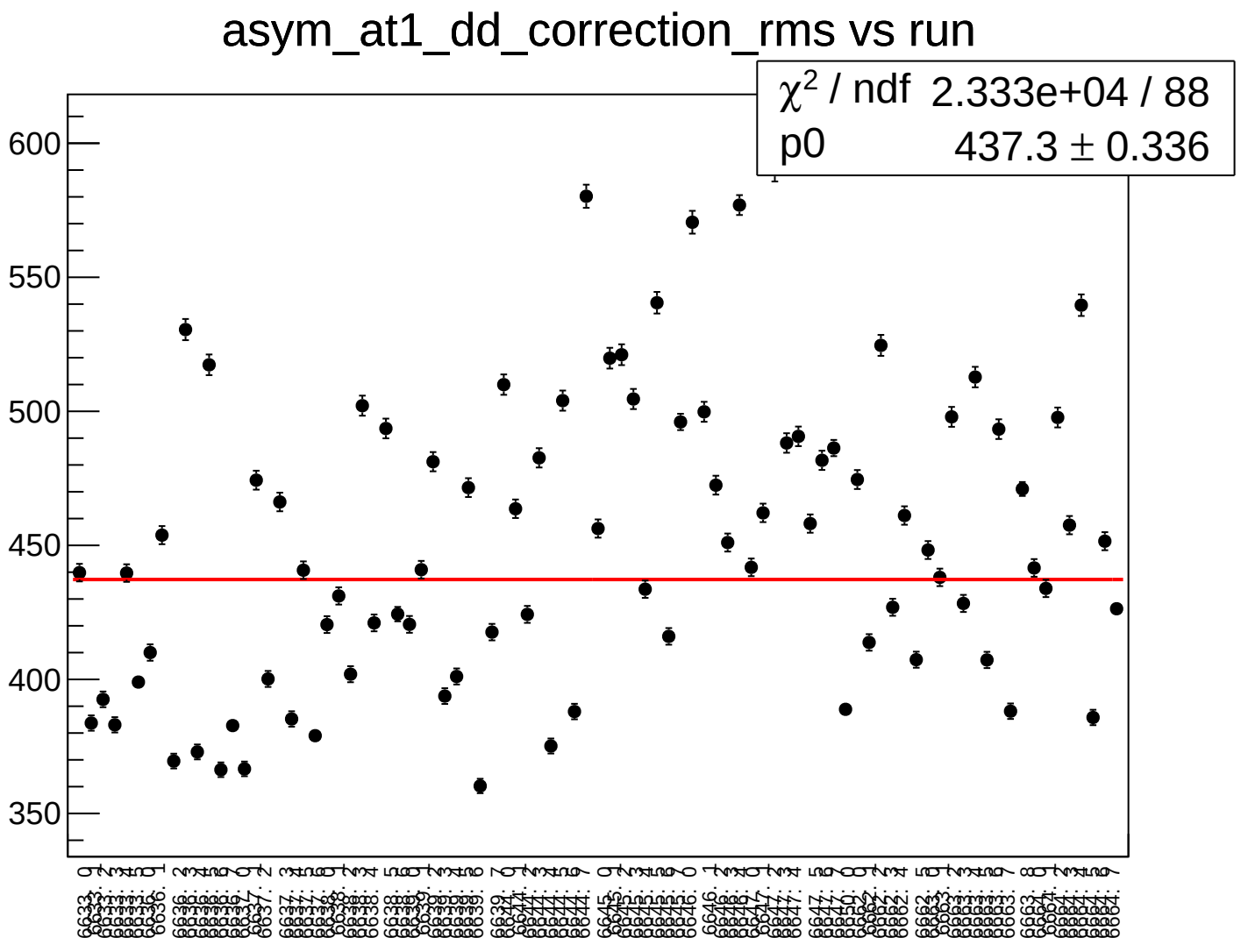

reg_asym_at1_dd_mean vs run
×10^3
χ² / ndf 93.57 / 88
p0 −895.5 ± 2060
pull
Entries 89
Mean −2193
Std Dev 2231

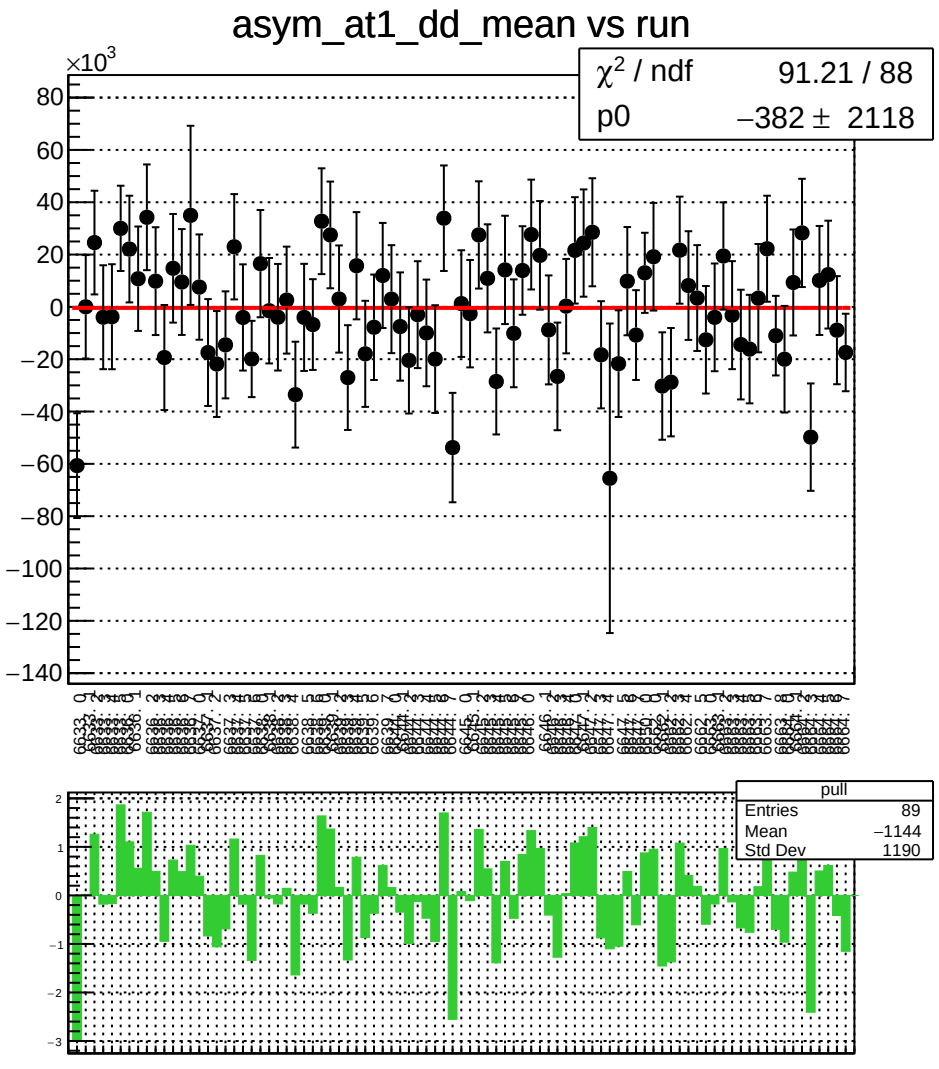

pull1D
Entries 89
Mean 0.001164
Std Dev 1.025

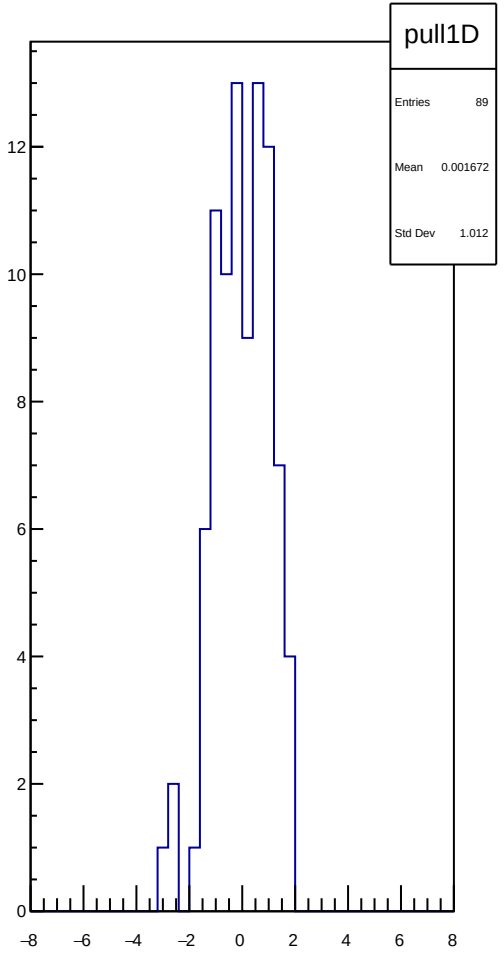

reg_asym_at1_dd_rms vs run
χ² / ndf 1.842e+04 / 88
p0 1898 ± 1.456
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

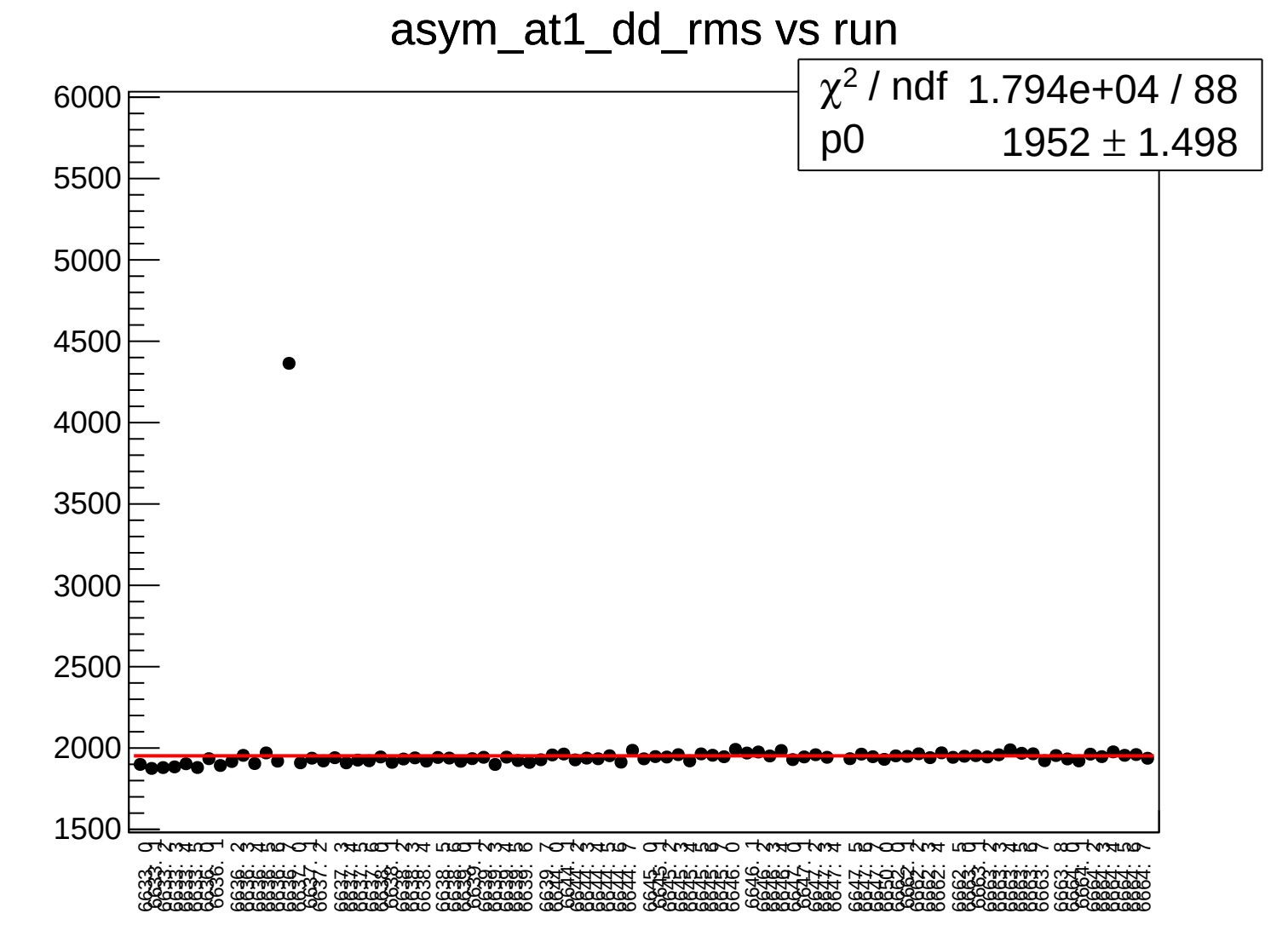

asym_at1_dd_correction_mean vs run
χ² / ndf 83.42 / 88
p0 −452.3 ± 475.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 270.2
Std Dev 251.2
3
2
1
0
−1
−2

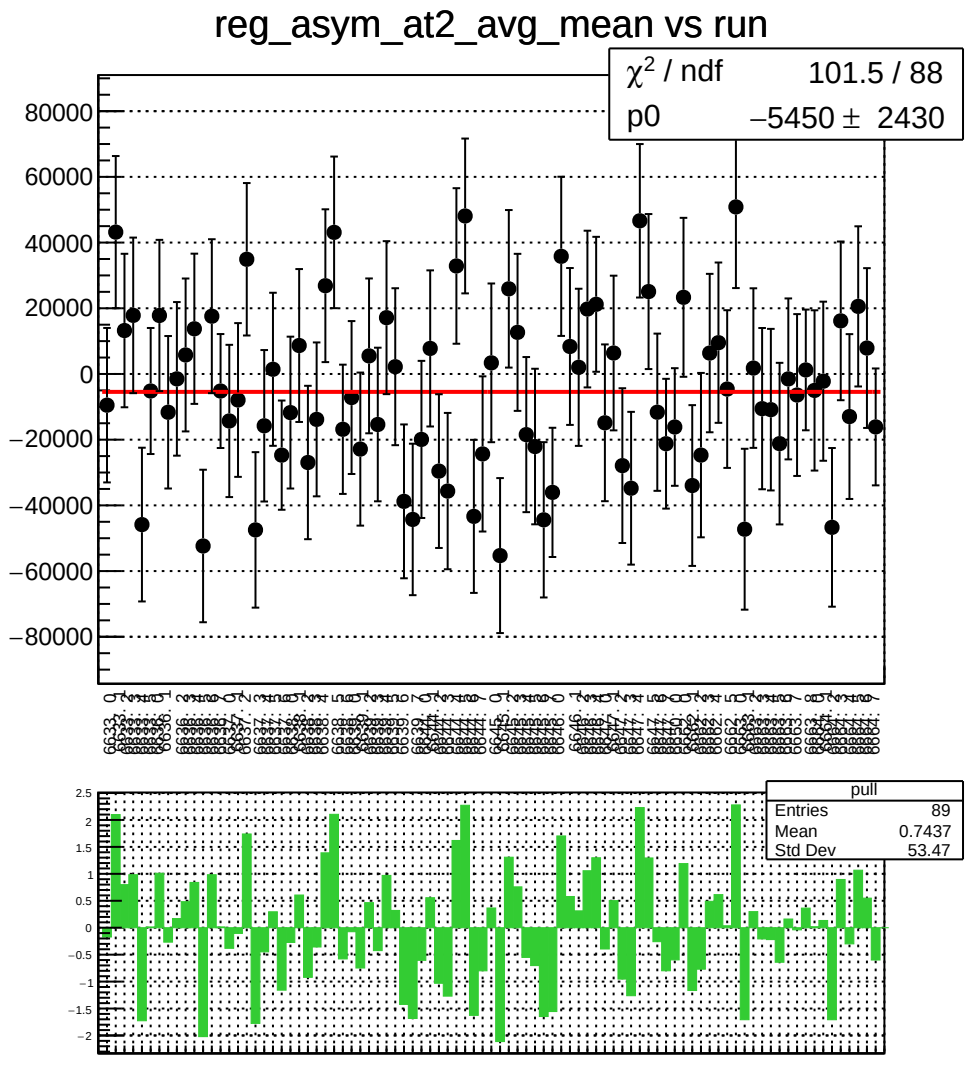

pull1D
Entries 89
Mean −0.01186
Std Dev 0.9681
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

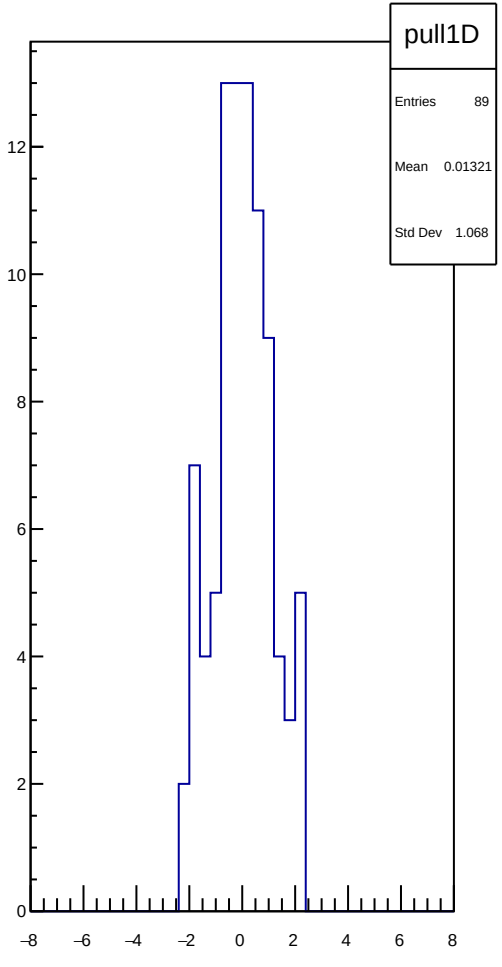

asym_at1_dd_correction_rms vs run
χ^2 / ndf 2.333e+04 / 88
p0 437.3 ± 0.336
600
550
500
450
400
350

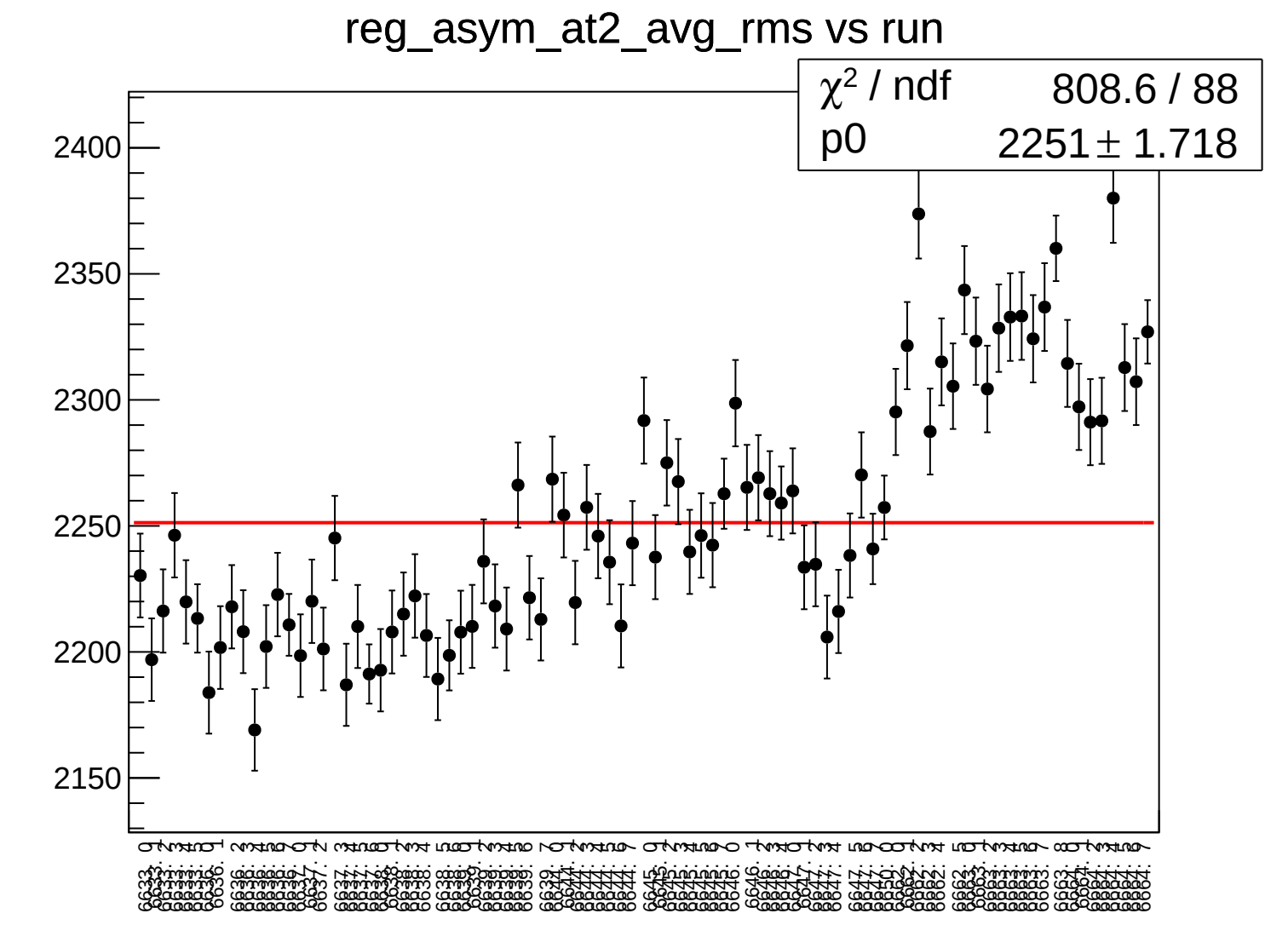

asym_at1_dd_mean vs run
×10^3
χ² / ndf 91.21 / 88
p0 −382 ± 2118
pull
Entries 89
Mean −1144
Std Dev 1190

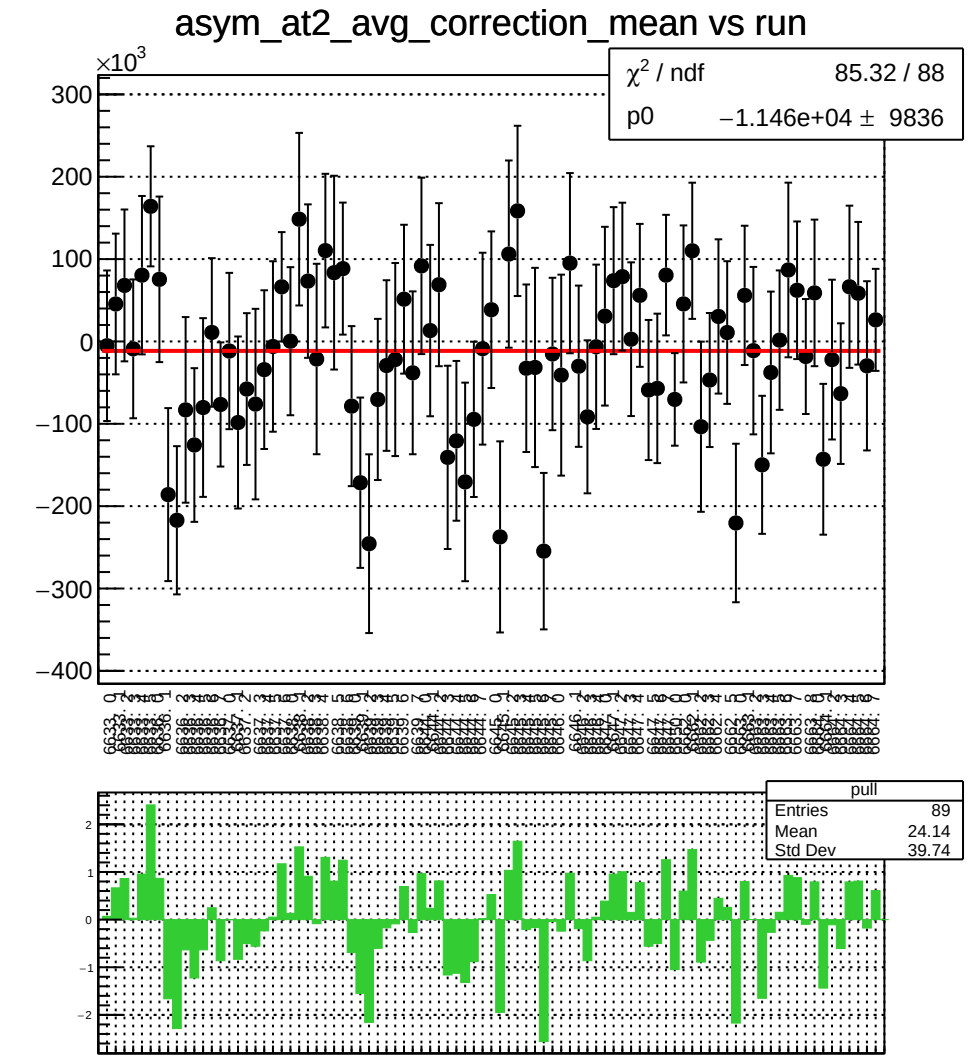

pull1D
Entries 89
Mean 0.001672
Std Dev 1.012

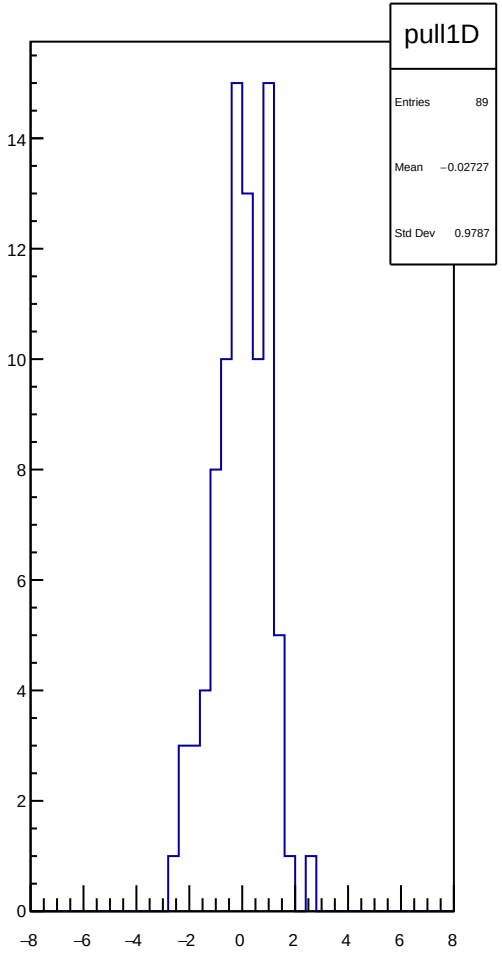

asym_at1_dd_rms vs run
χ^2 / ndf 1.794e+04 / 88
p0 1952 ± 1.498
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

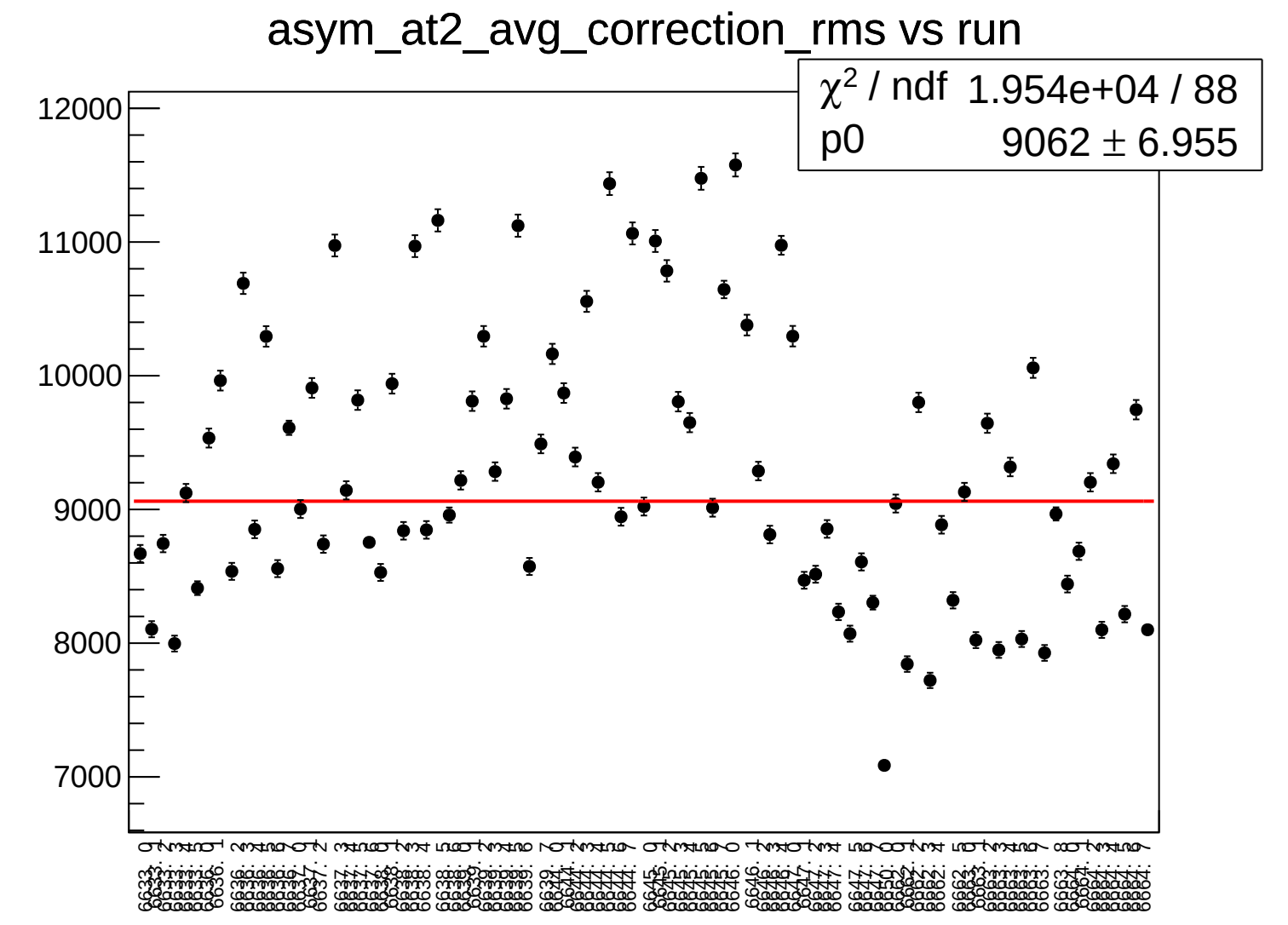

reg_asym_at2_avg_mean vs run
χ² / ndf 101.5 / 88
p0 −5450 ± 2430
pull
Entries 89
Mean 0.7437
Std Dev 53.47

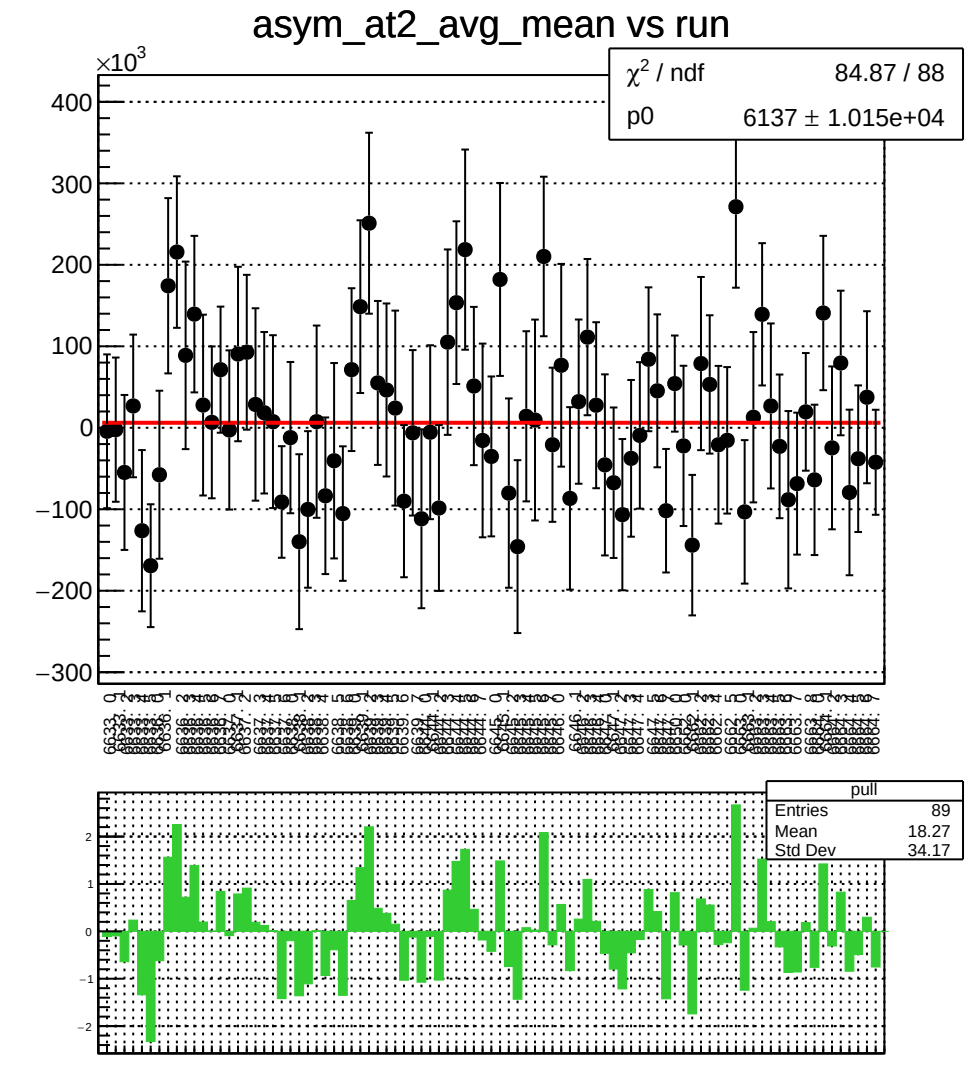

pull1D
Entries 89
Mean 0.01321
Std Dev 1.068

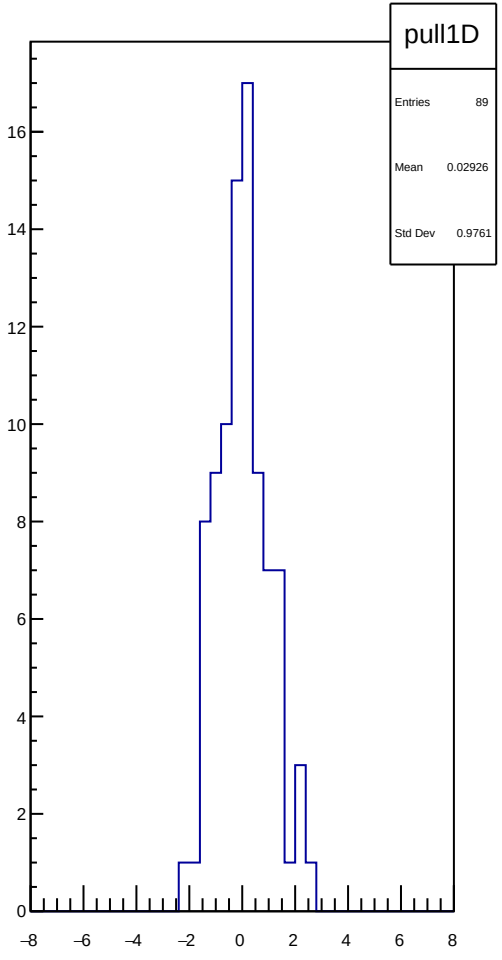

reg_asym_at2_avg_rms vs run
χ² / ndf 808.6 / 88
p0 2251 ± 1.718
2400
2350
2300
2250
2200
2150

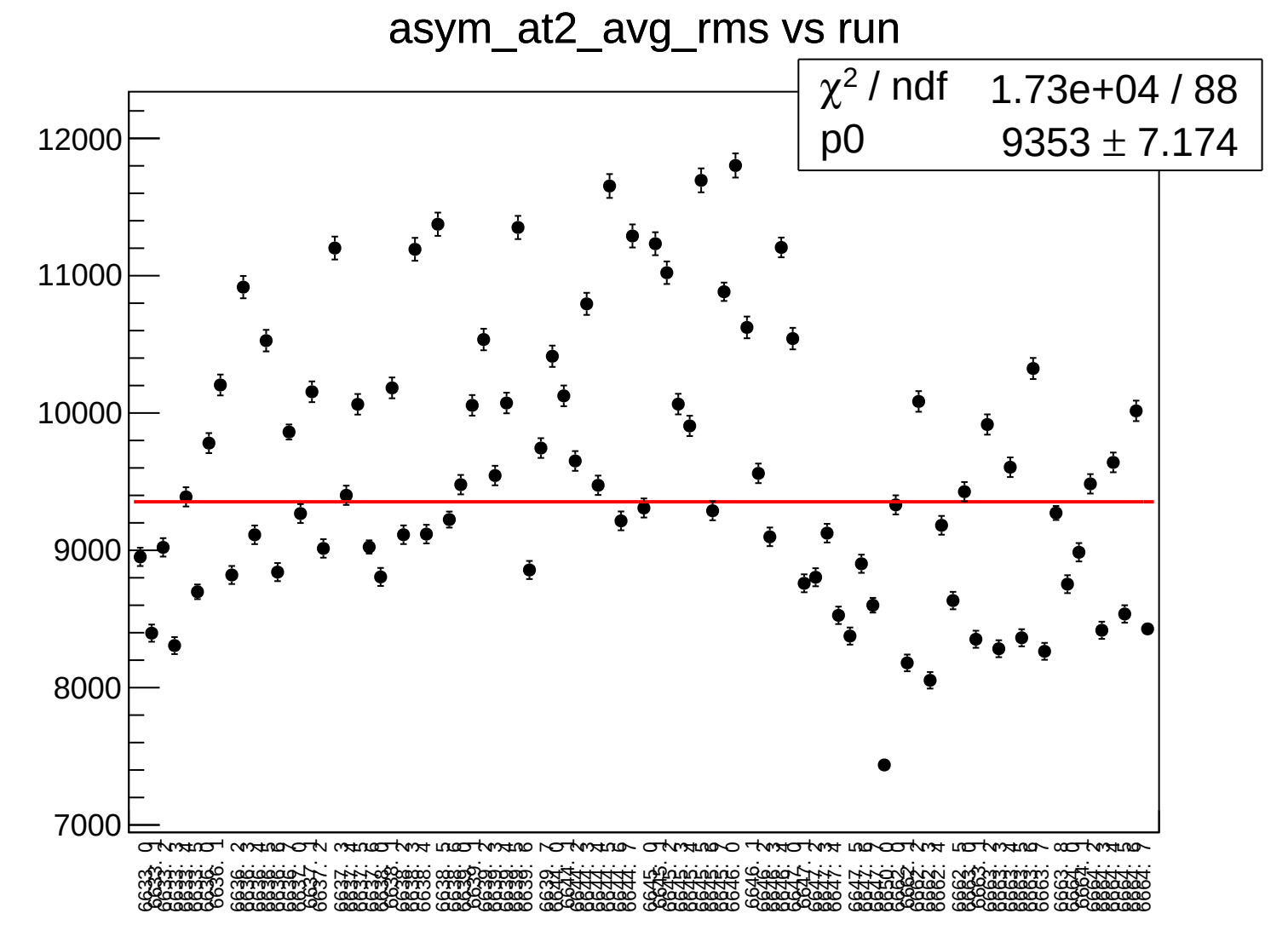

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 85.32 / 88
p0 −1.146e+04 ± 9836
pull
Entries 89
Mean 24.14
Std Dev 39.74

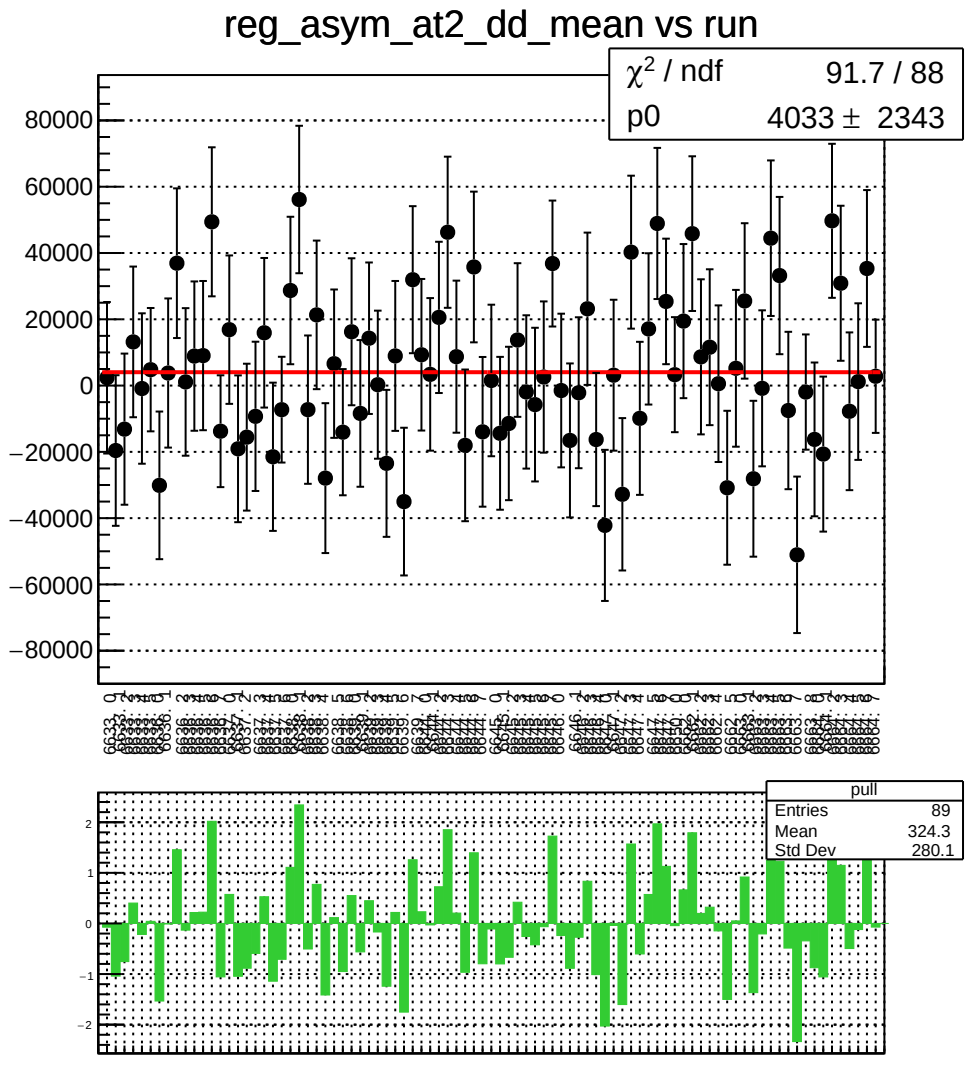

pull1D
Entries 89
Mean −0.02727
Std Dev 0.9787

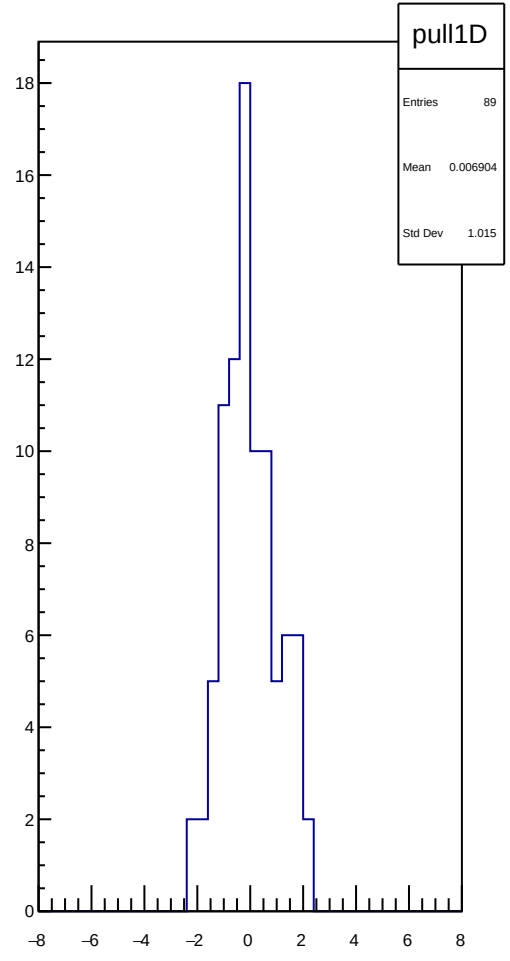

asym_at2_avg_correction_rms vs run
χ² / ndf 1.954e+04 / 88
p0 9062 ± 6.955
12000
11000
10000
9000
8000
7000

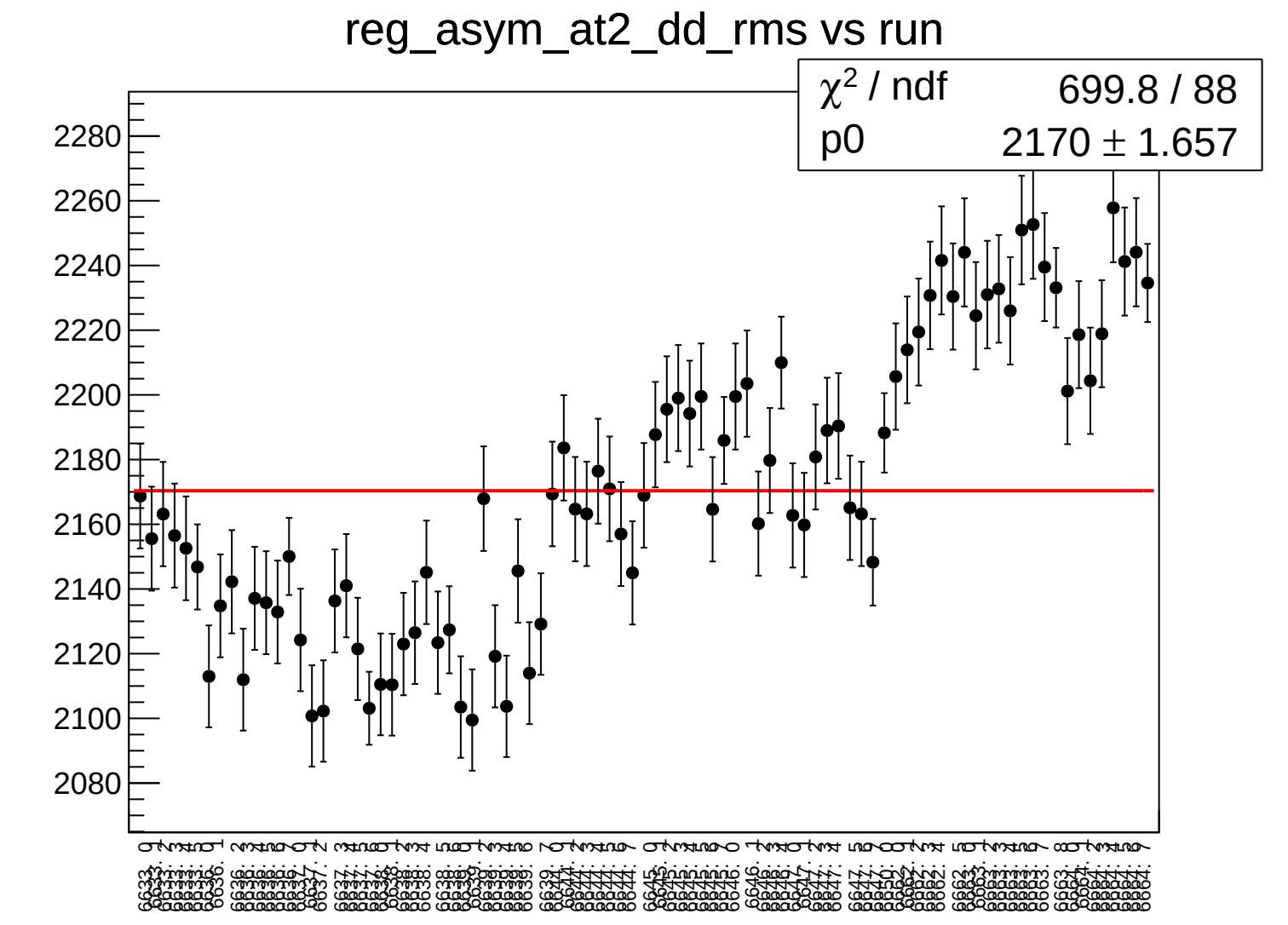

asym_at2_avg_mean vs run
×10^3
χ² / ndf 84.87 / 88
p0 6137 ± 1.015e+04
pull
Entries 89
Mean 18.27
Std Dev 34.17

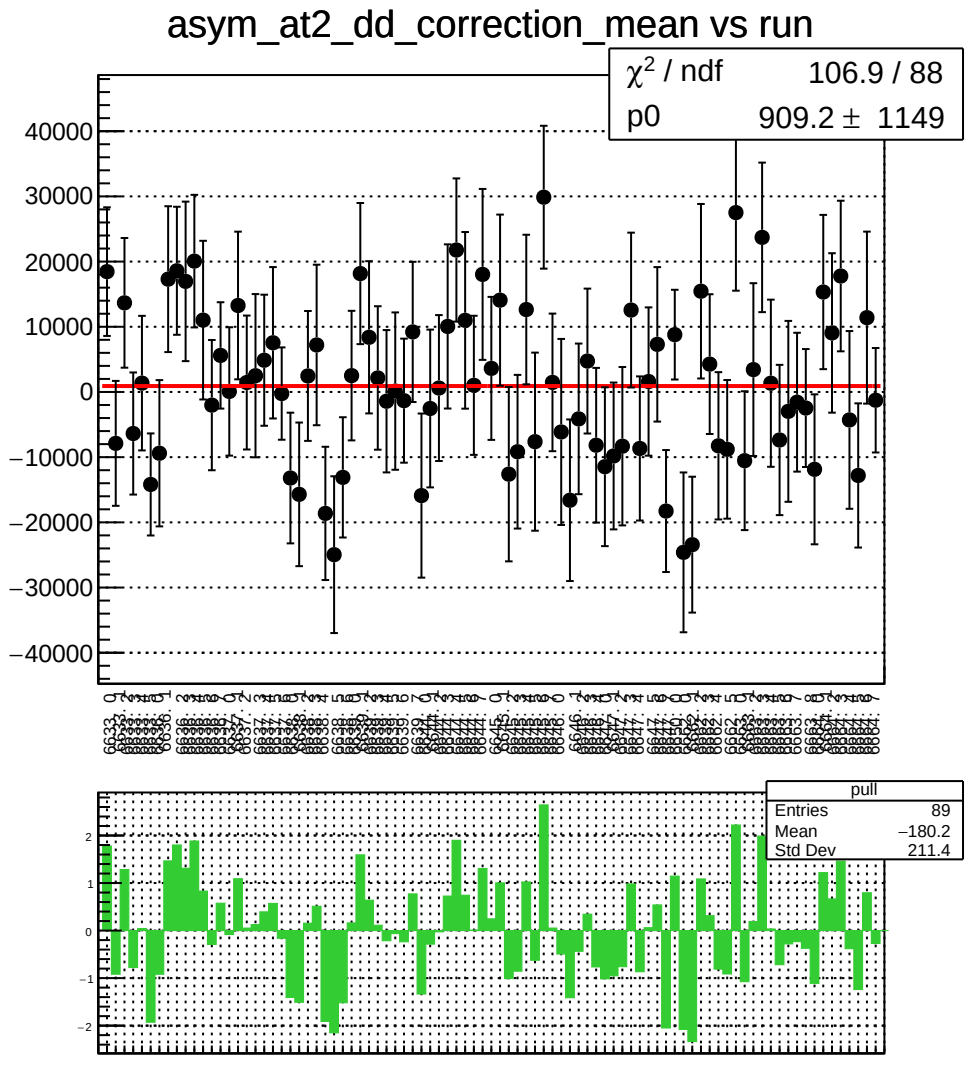

pull1D
Entries 89
Mean 0.02926
Std Dev 0.9761

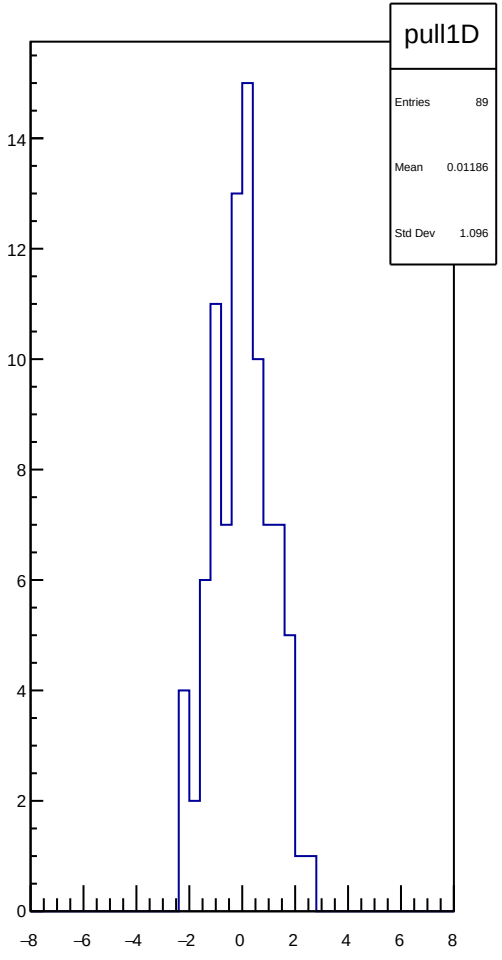

asym_at2_avg_rms vs run
χ^2 / ndf 1.73e+04 / 88
p0 9353 ± 7.174
12000
11000
10000
9000
8000
7000

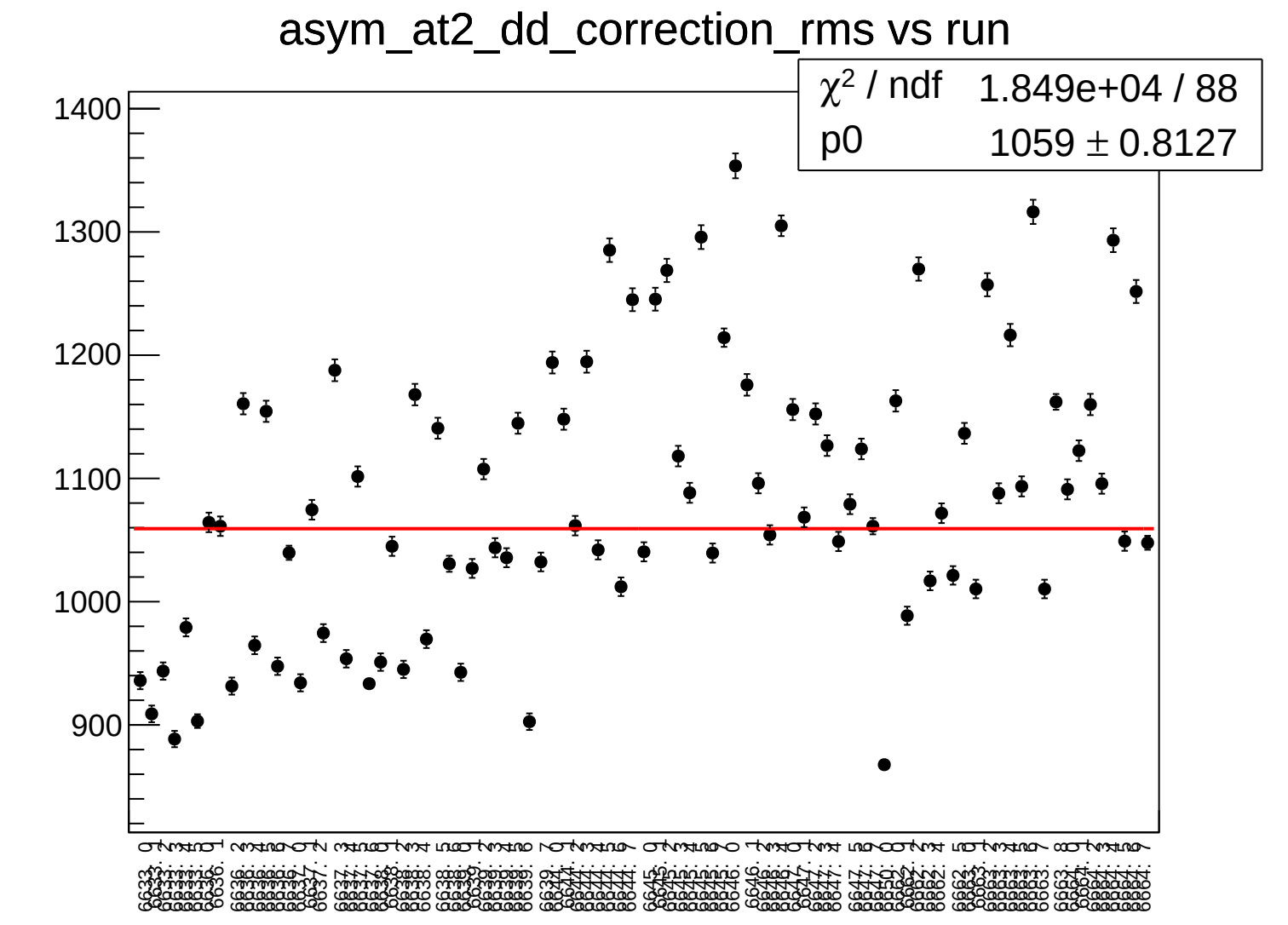

reg_asym_at2_dd_mean vs run
χ² / ndf 91.7 / 88
p0 4033 ± 2343
pull
Entries 89
Mean 324.3
Std Dev 280.1

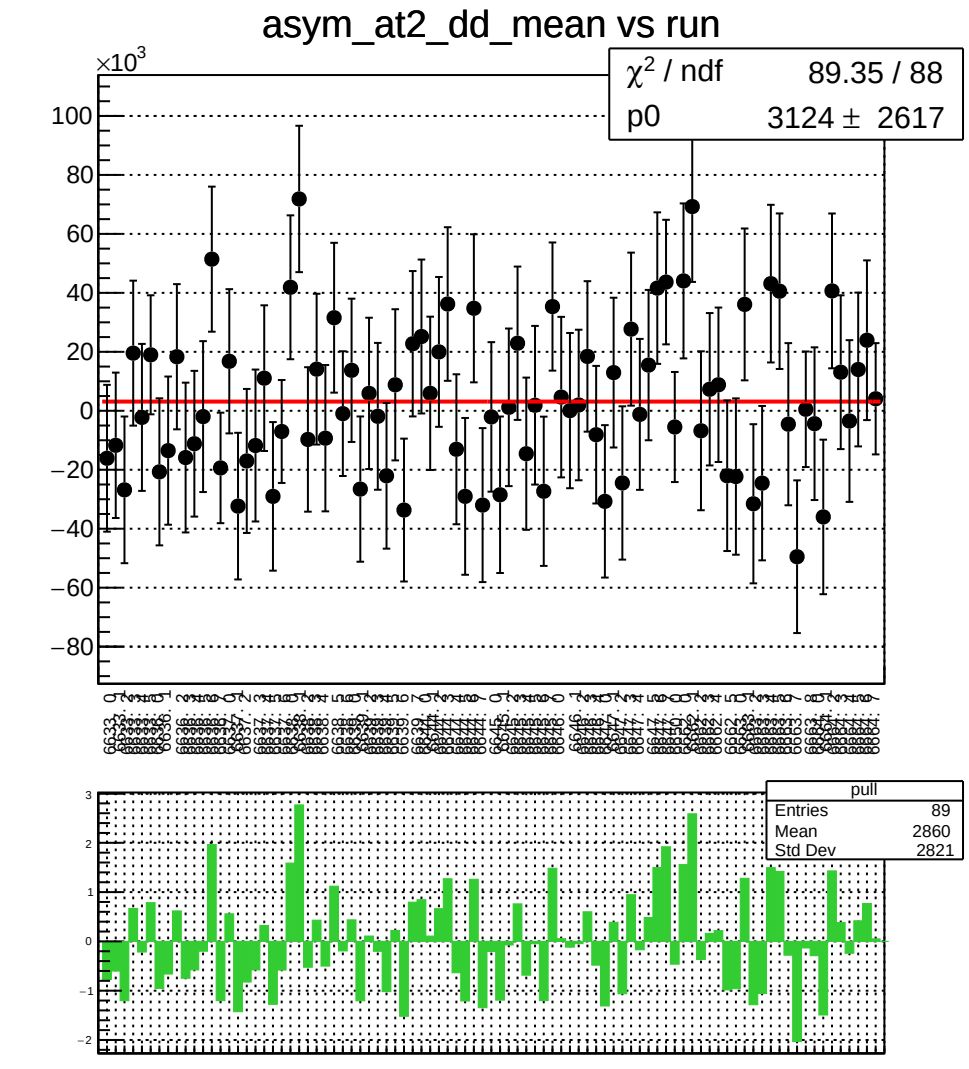

pull1D
Entries 89
Mean 0.006904
Std Dev 1.015

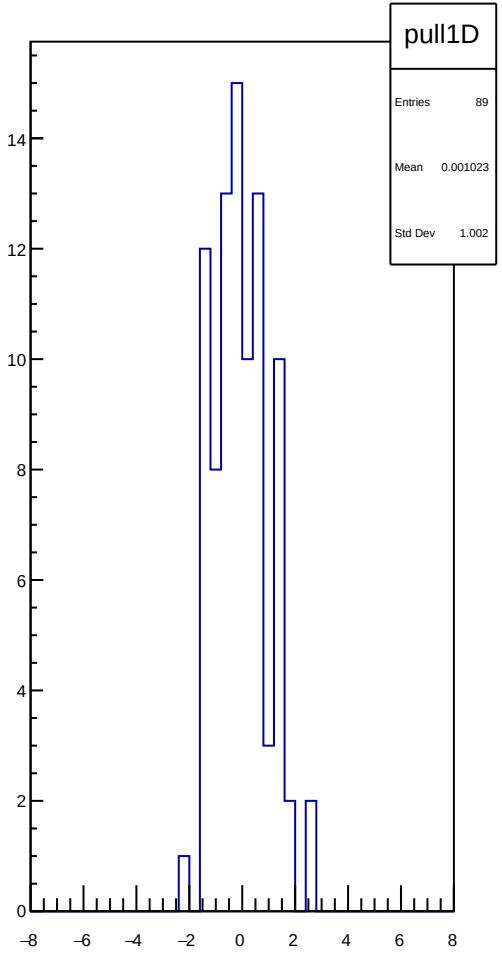

reg_asym_at2_dd_rms vs run
χ² / ndf 699.8 / 88
p0 2170 ± 1.657
2280
2260
2240
2220
2200
2180
2160
2140
2120
2100
2080

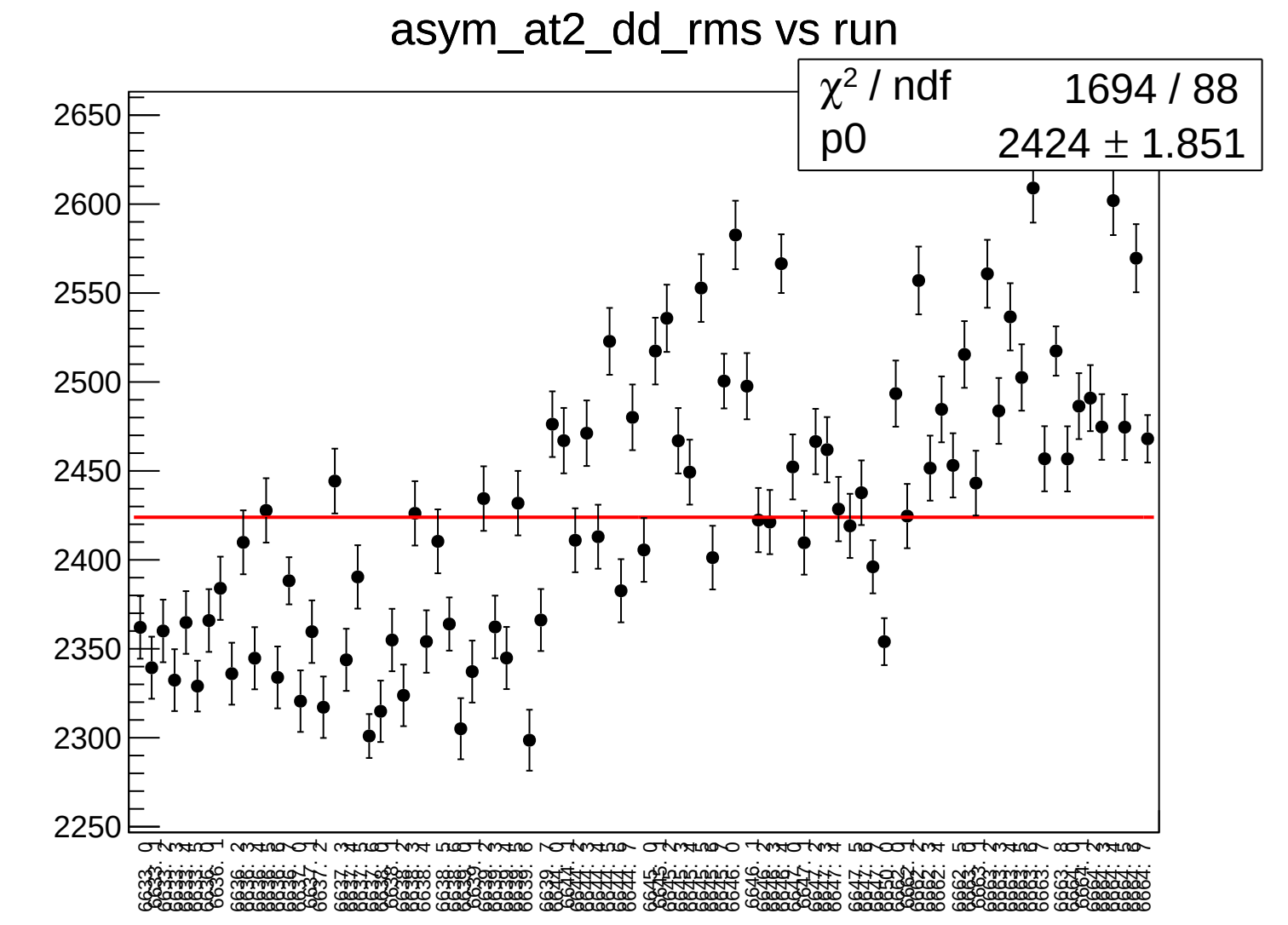

asym_at2_dd_correction_mean vs run
χ² / ndf 106.9 / 88
p0 909.2 ± 1149
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −180.2
Std Dev 211.4
2
1
0
−1
−2

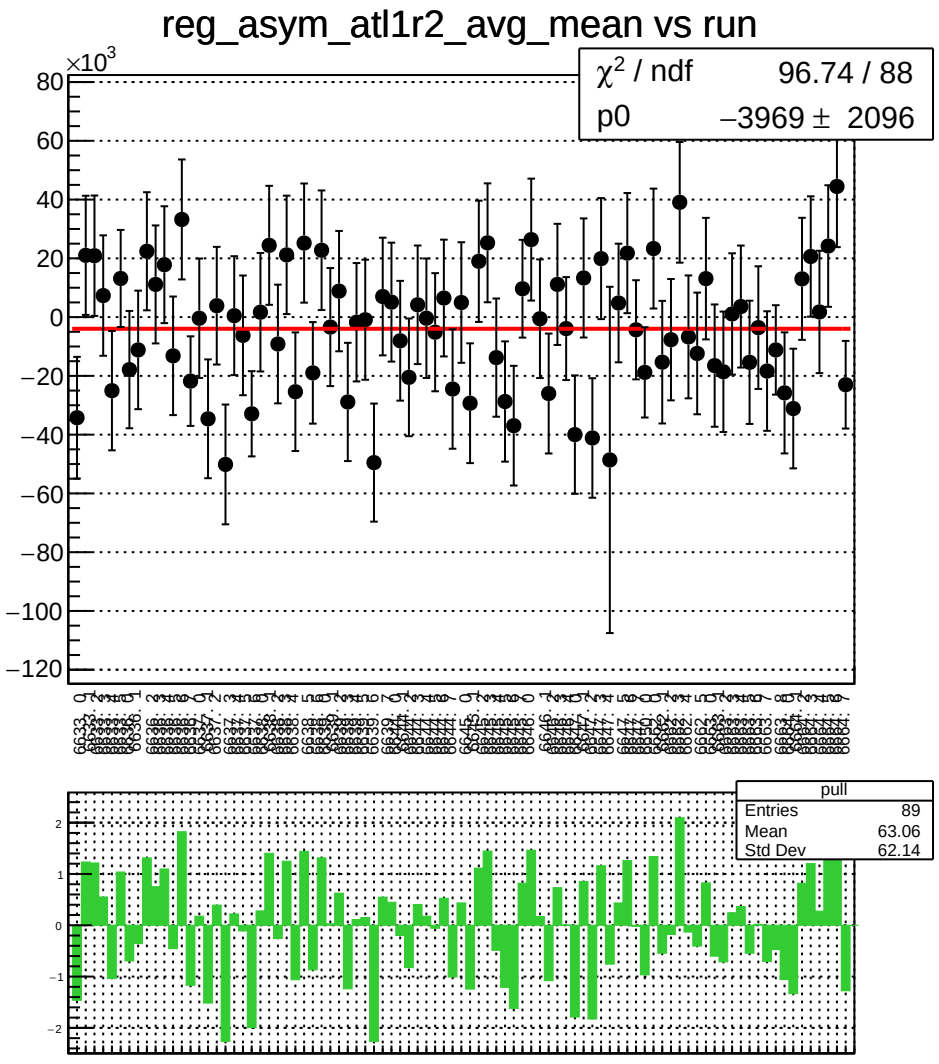

pull1D
Entries 89
Mean 0.01186
Std Dev 1.096
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

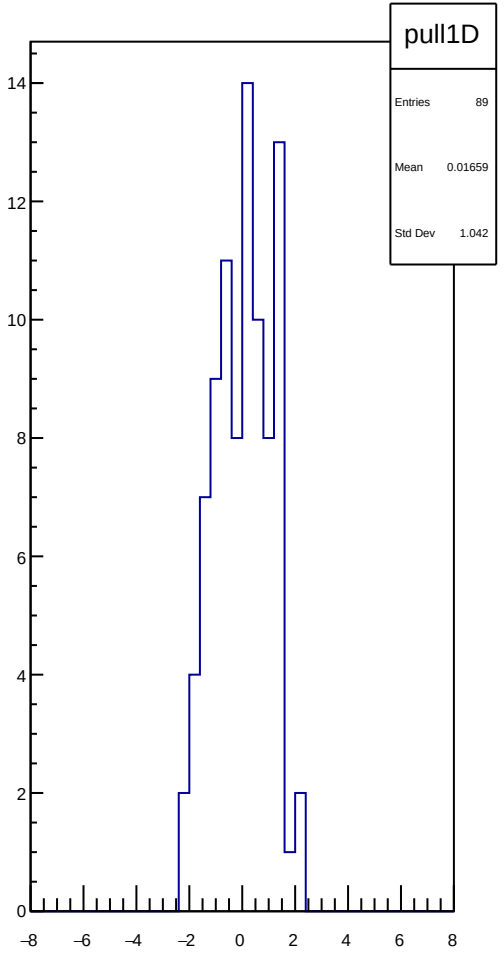

asym_at2_dd_correction_rms vs run
χ² / ndf 1.849e+04 / 88
p0 1059 ± 0.8127
1400
1300
1200
1100
1000
900

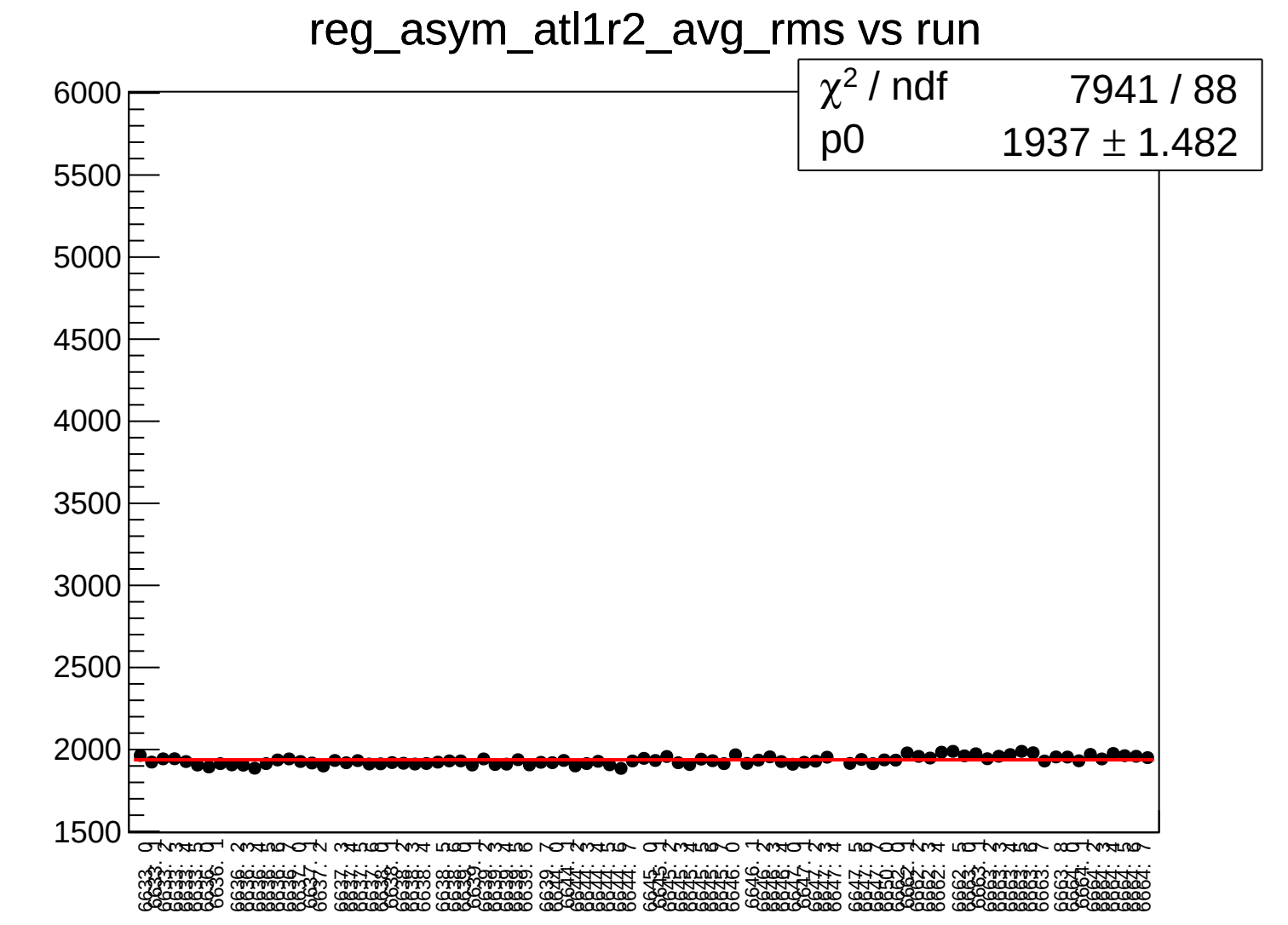

asym_at2_dd_mean vs run
×10^3
χ² / ndf 89.35 / 88
p0 3124 ± 2617
pull
Entries 89
Mean 2860
Std Dev 2821

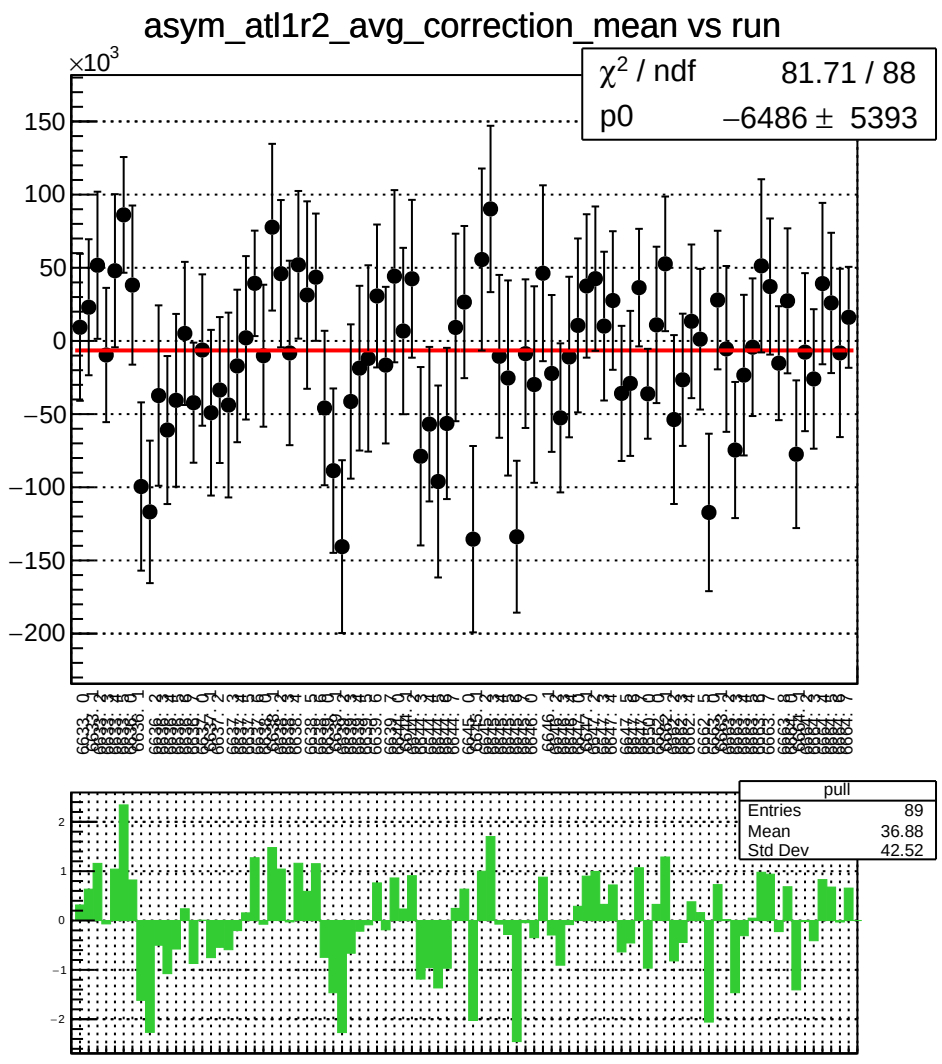

pull1D
Entries 89
Mean 0.001023
Std Dev 1.002

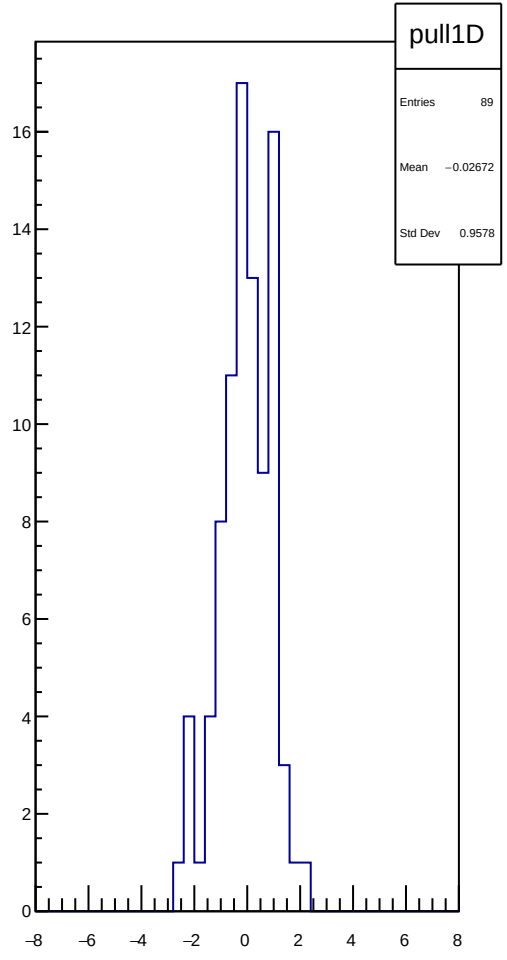

asym_at2_dd_rms vs run
χ² / ndf 1694 / 88
p0 2424 ± 1.851
2650
2600
2550
2500
2450
2400
2350
2300
2250

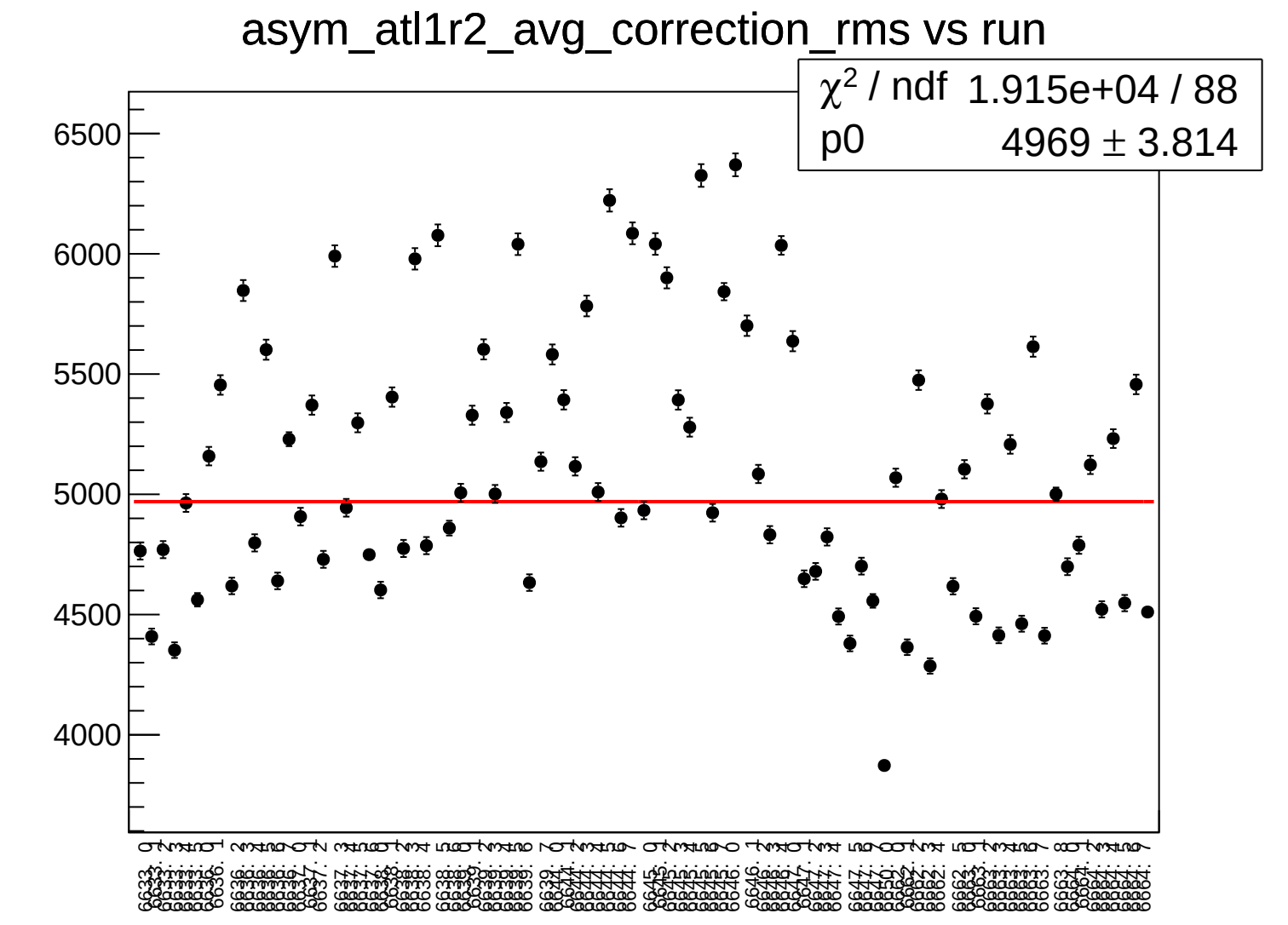

reg_asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 96.74 / 88
p0 −3969 ± 2096
pull
Entries 89
Mean 63.06
Std Dev 62.14

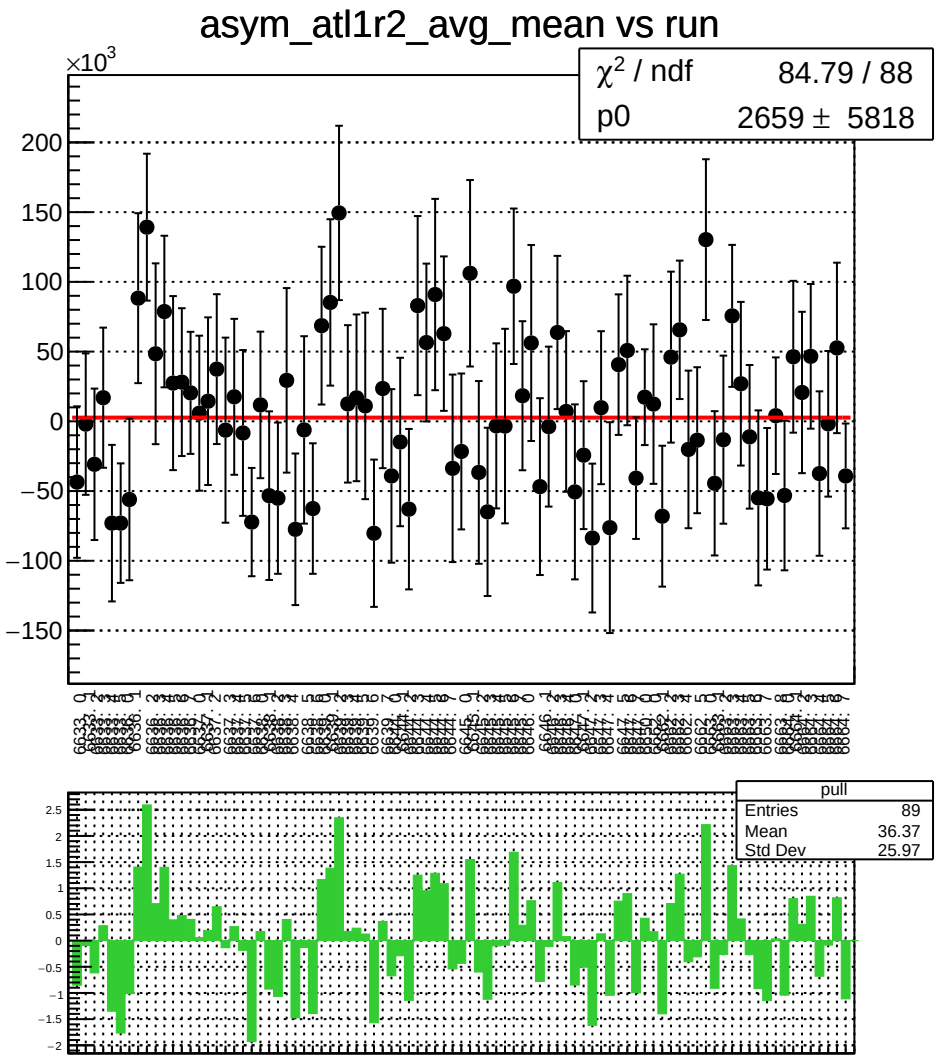

pull1D
Entries 89
Mean 0.01659
Std Dev 1.042

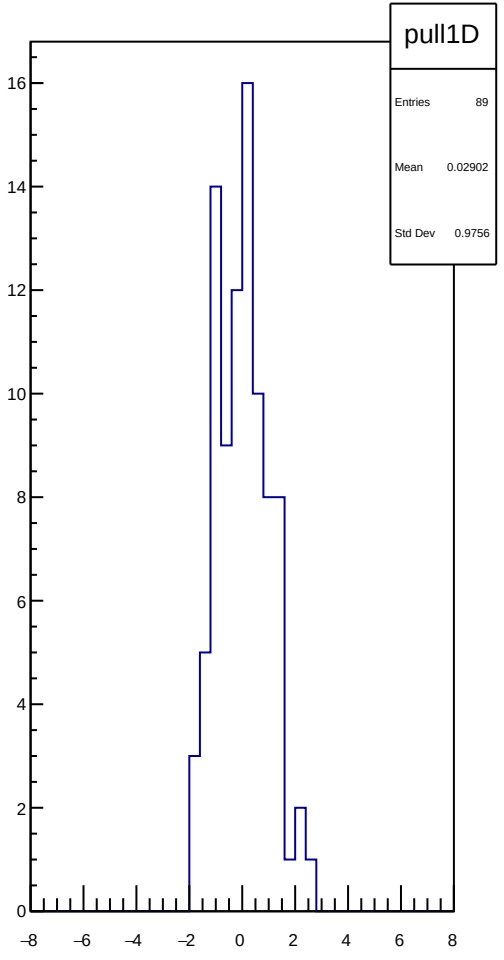

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 7941 / 88
p0 1937 ± 1.482
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

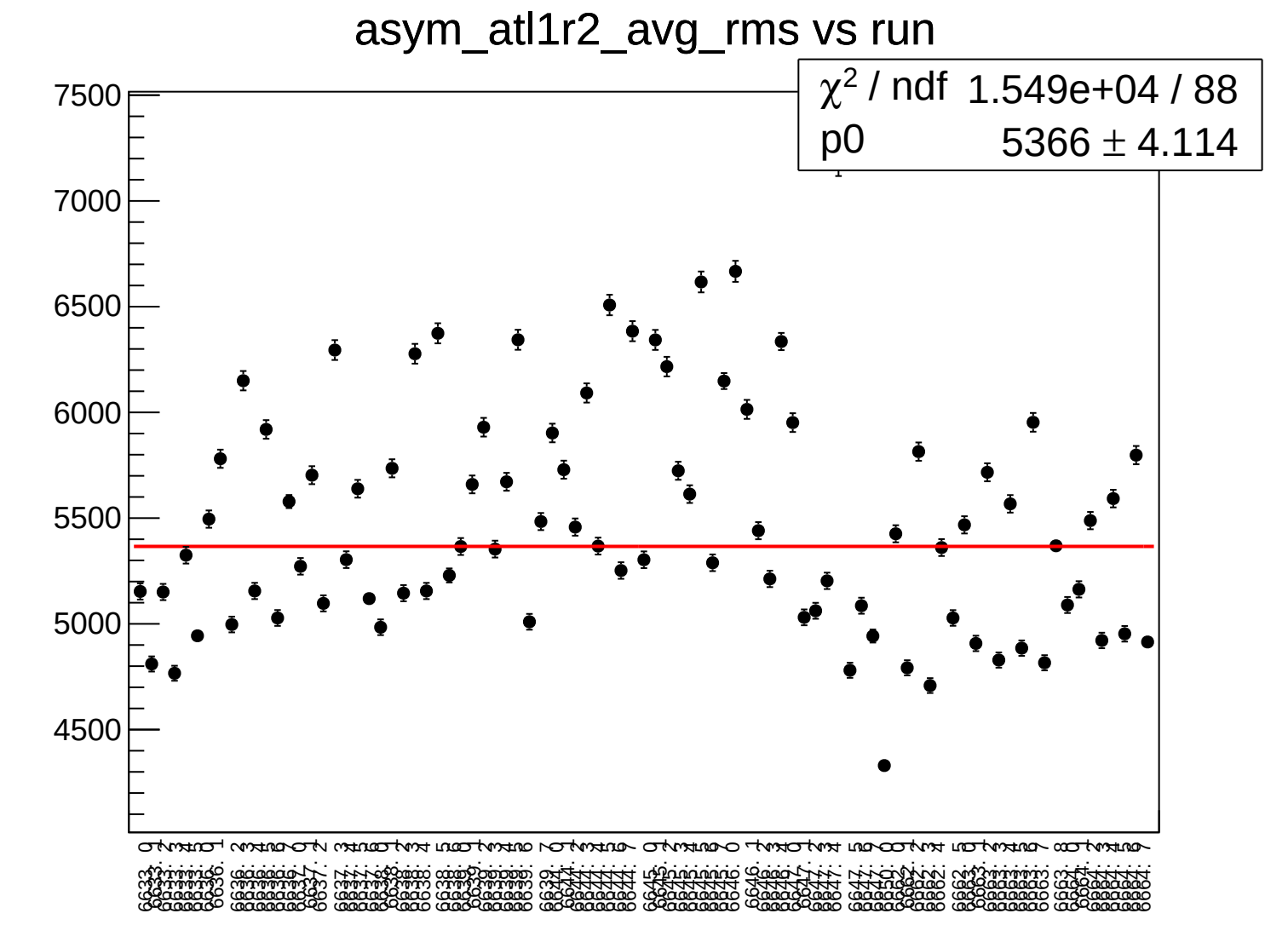

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 81.71 / 88
p0 −6486 ± 5393
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 36.88
Std Dev 42.52
2
1
0
−1
−2

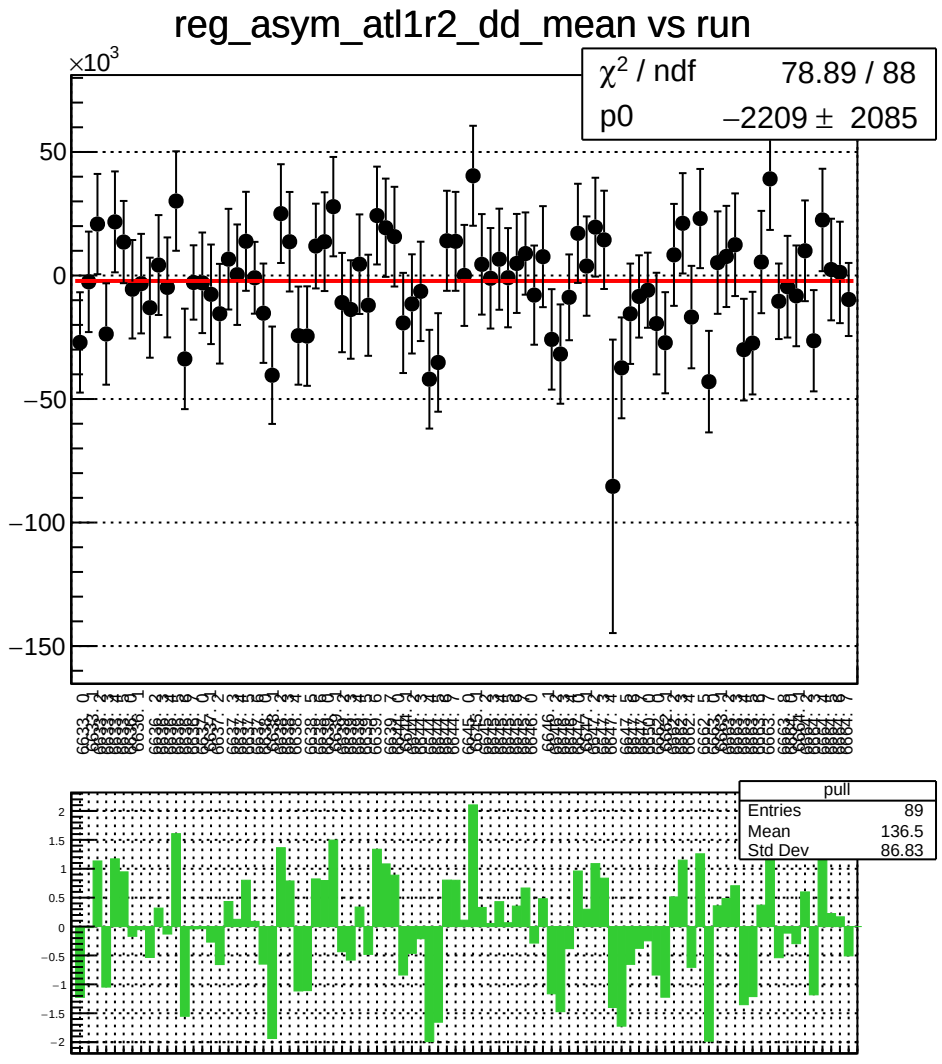

pull1D
Entries 89
Mean −0.02672
Std Dev 0.9578
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

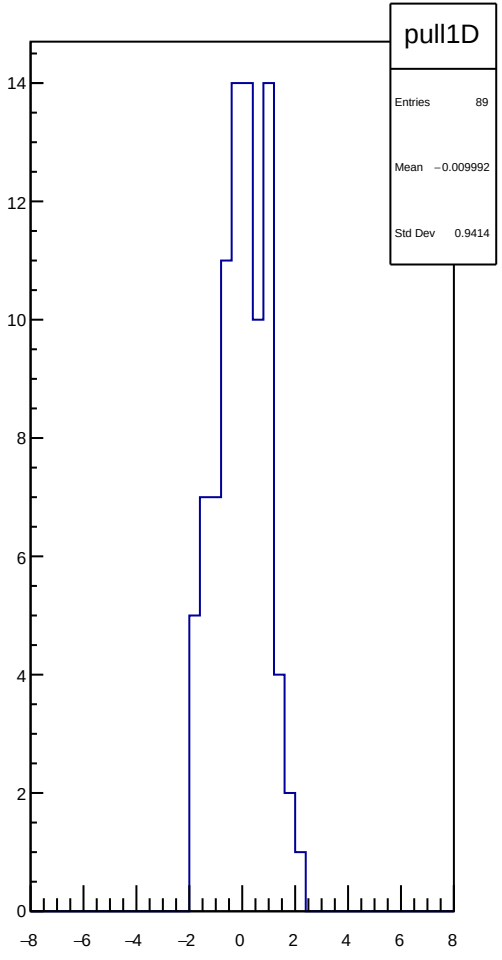

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 1.915e+04 / 88
p0 4969 ± 3.814
6500
6000
5500
5000
4500
4000

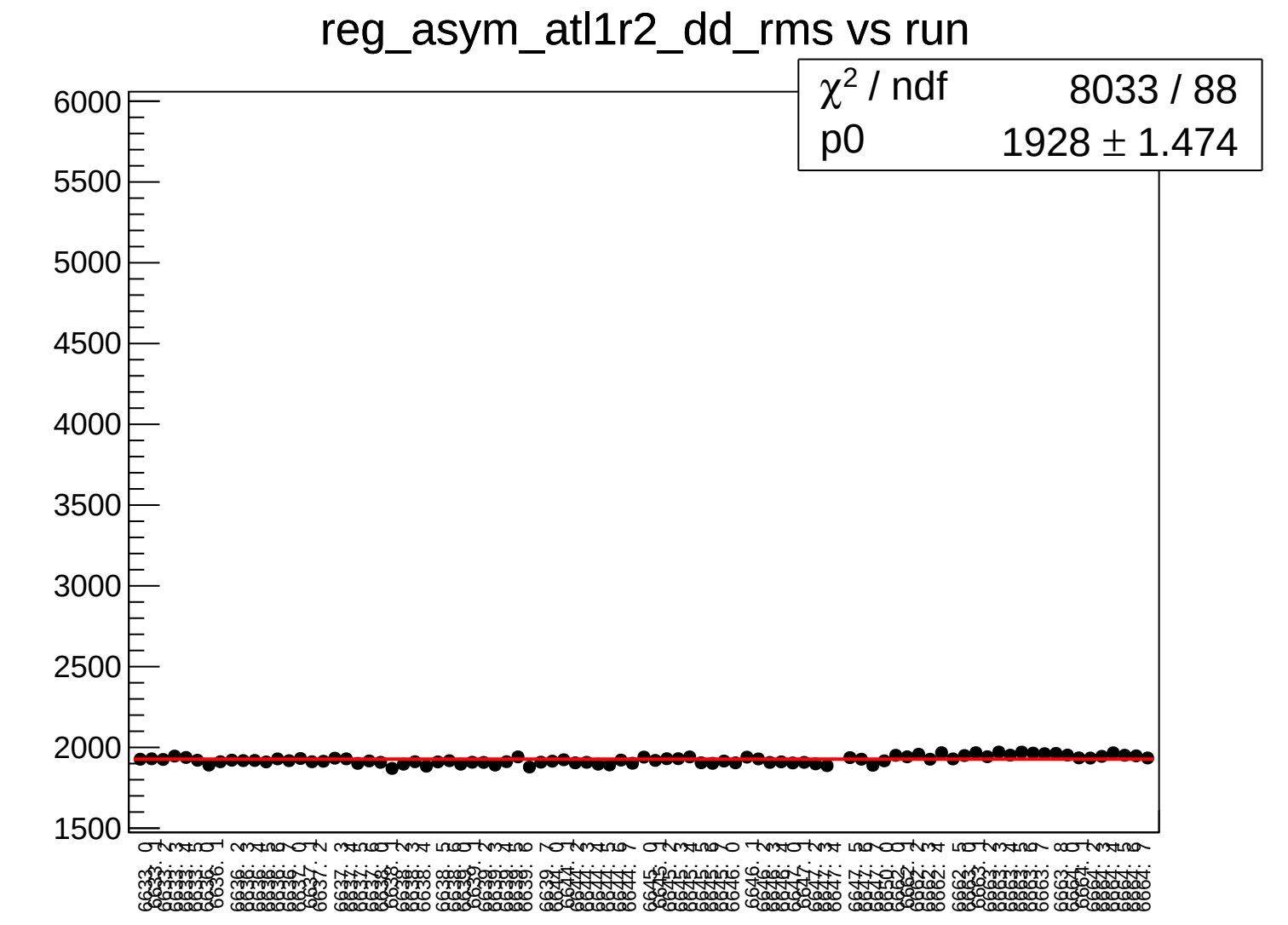

asym_atl1r2_avg_mean vs run
χ² / ndf 84.79 / 88
p0 2659 ± 5818
×10³
pull
Entries 89
Mean 36.37
Std Dev 25.97

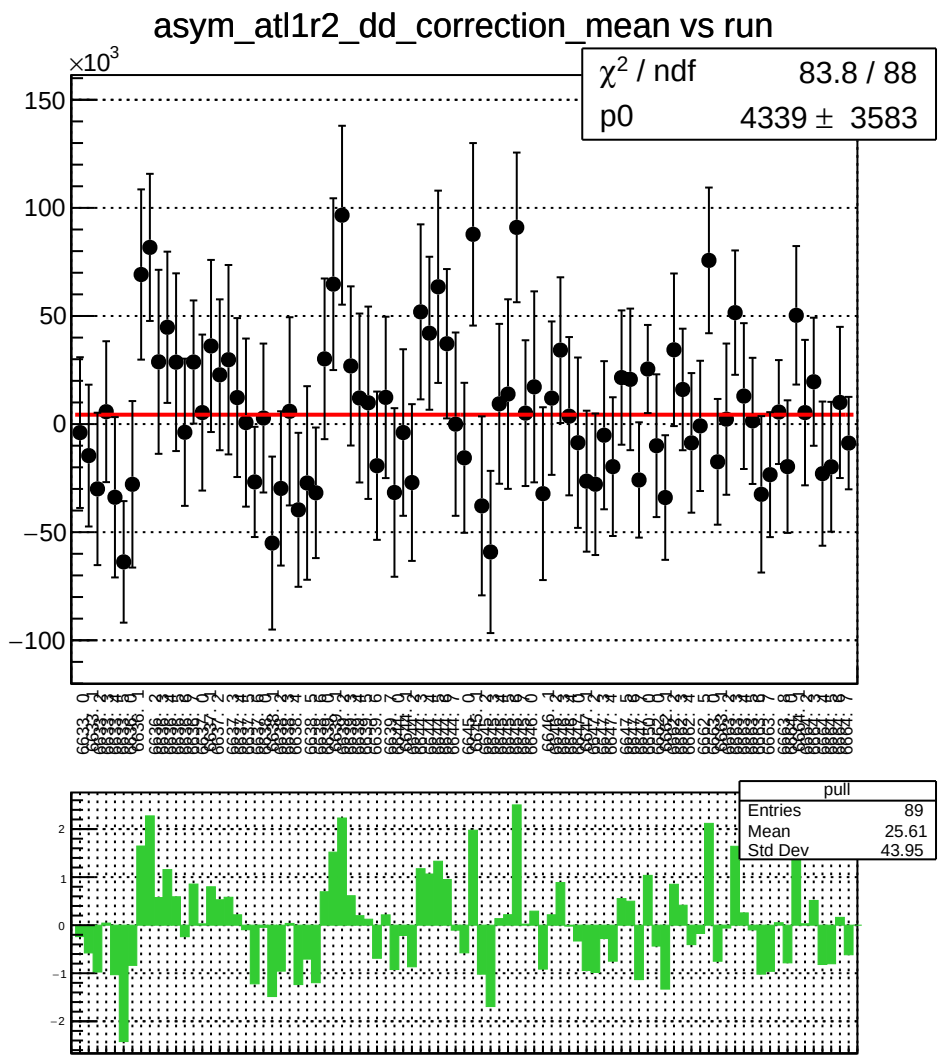

pull1D
Entries 89
Mean 0.02902
Std Dev 0.9756

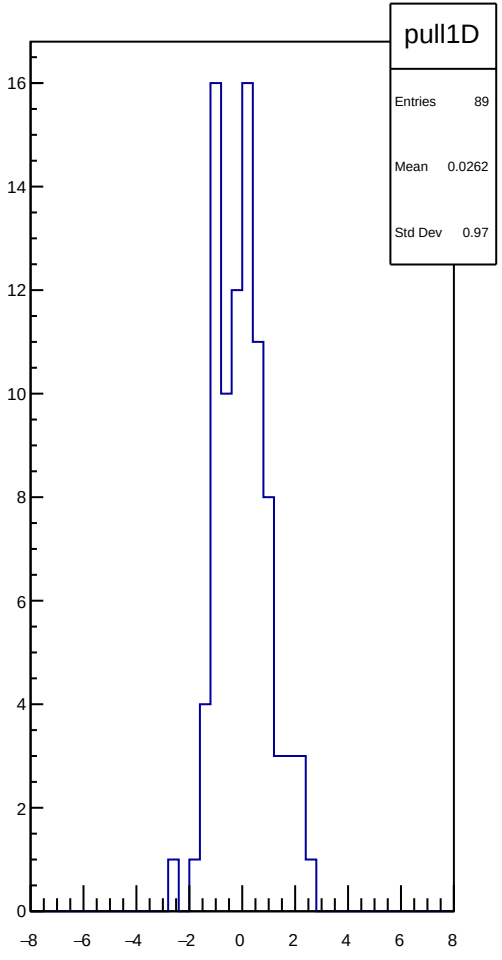

asym_atl1r2_avg_rms vs run
χ² / ndf 1.549e+04 / 88
p0 5366 ± 4.114
7500
7000
6500
6000
5500
5000
4500

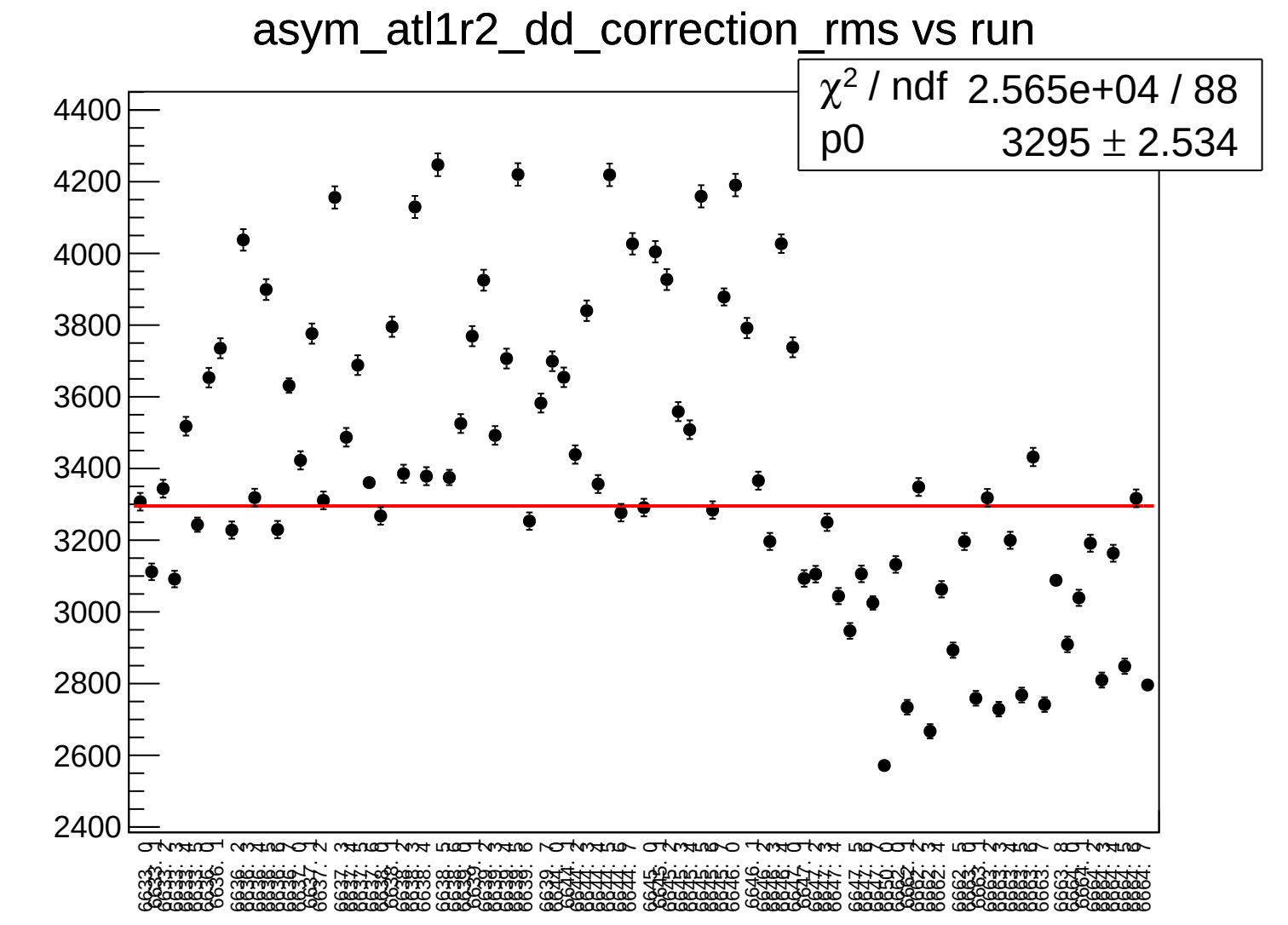

reg_asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 78.89 / 88
p0 −2209 ± 2085
50
0
−50
−100
−150
pull
Entries 89
Mean 136.5
Std Dev 86.83
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

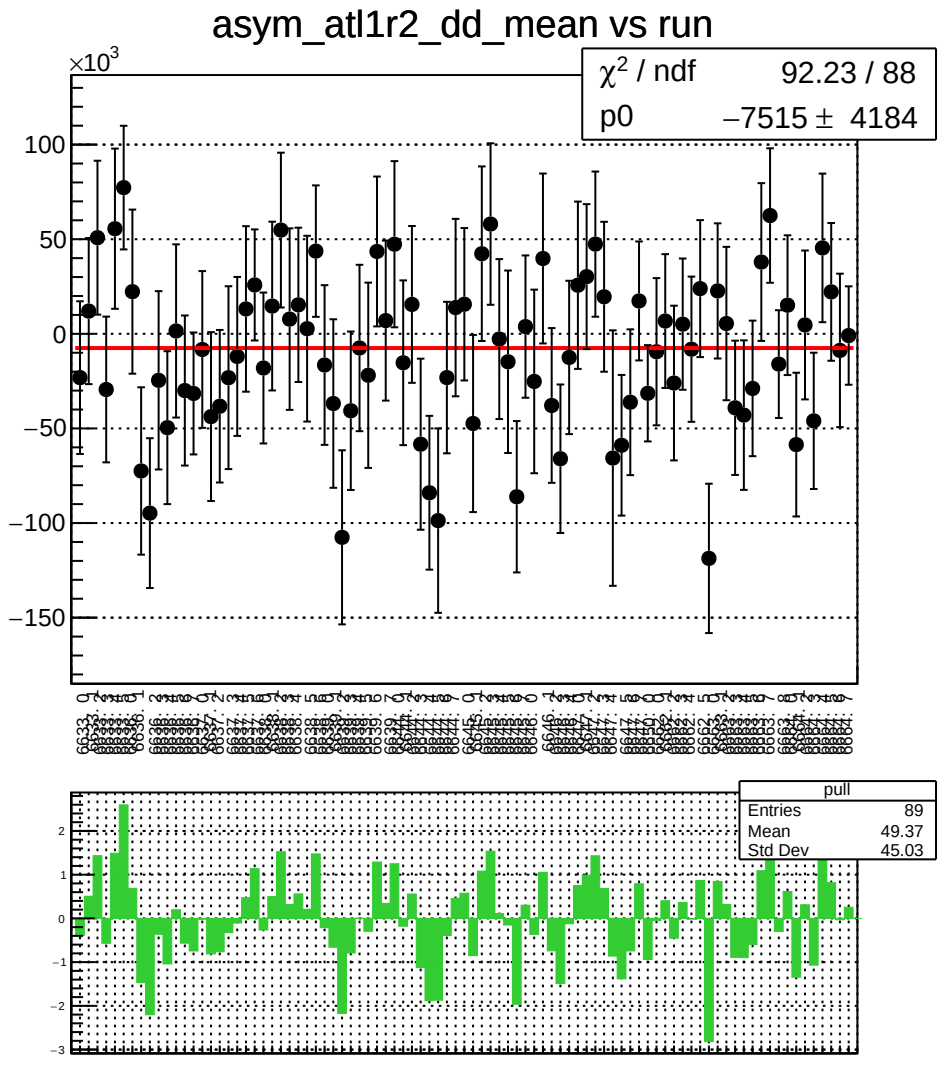

pull1D
Entries 89
Mean −0.009992
Std Dev 0.9414
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

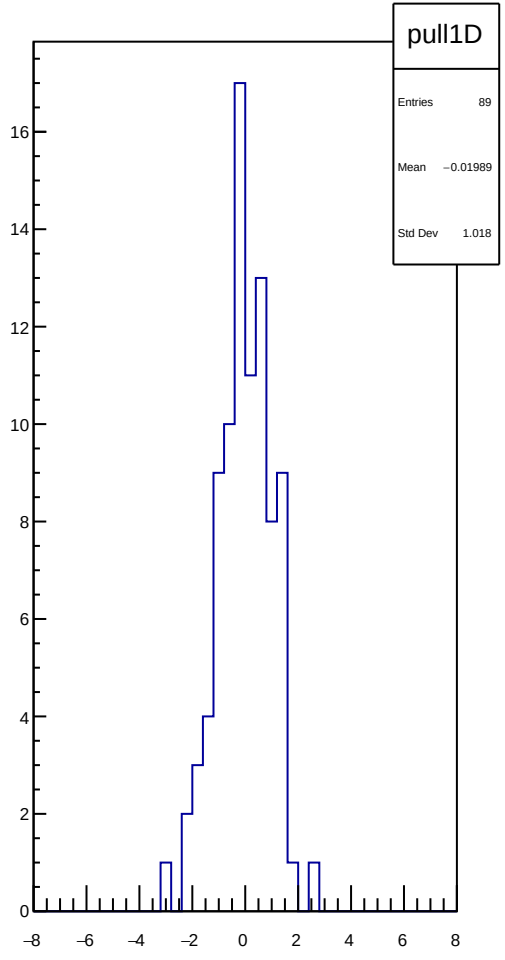

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 8033 / 88
p0 1928 ± 1.474
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

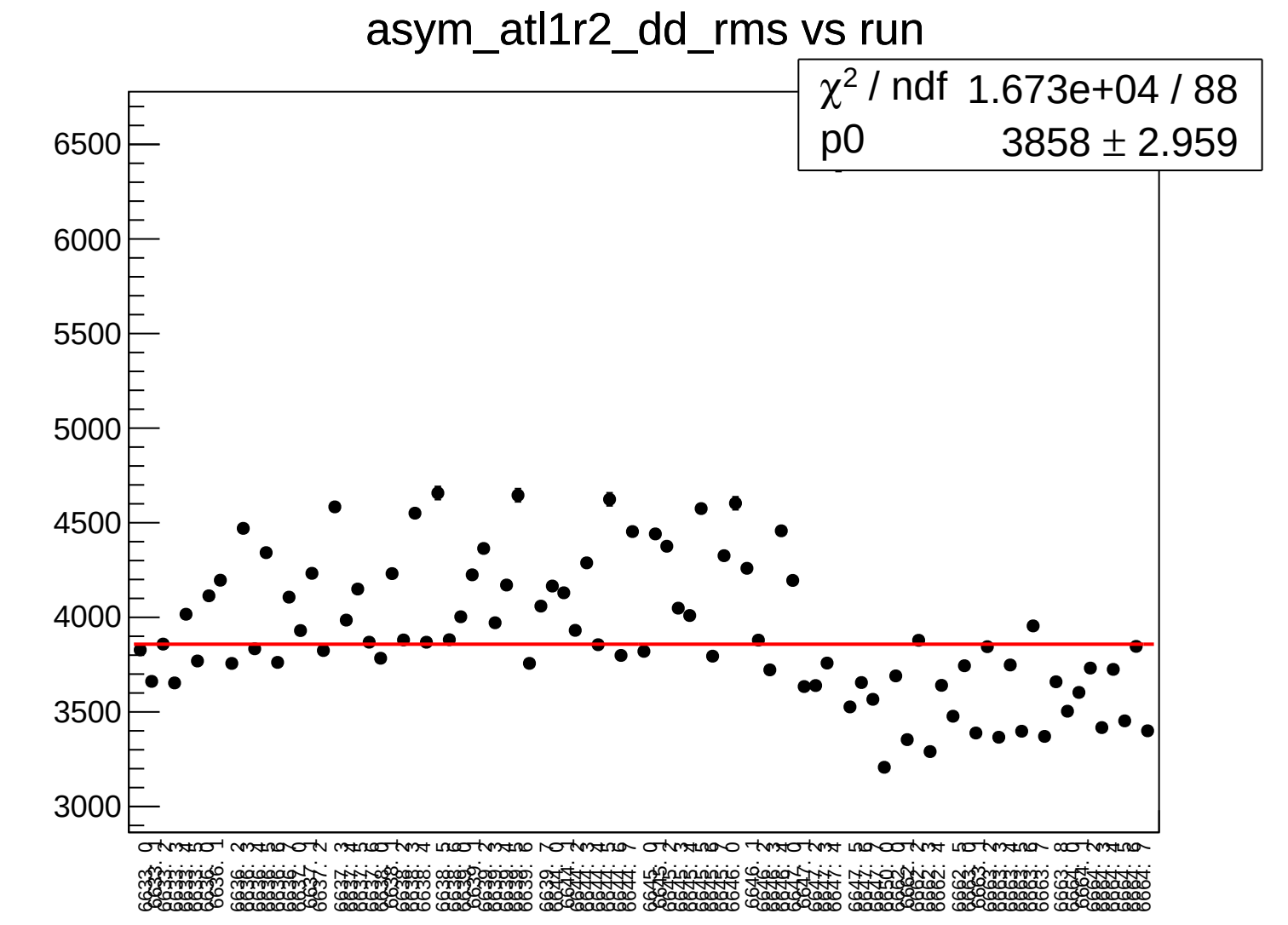

asym_atl1r2_dd_correction_mean vs run
×10^3
χ^2 / ndf 83.8 / 88
p0 4339 ± 3583
150
100
50
0
−50
−100
pull
Entries 89
Mean 25.61
Std Dev 43.95
2
1
0
−1
−2

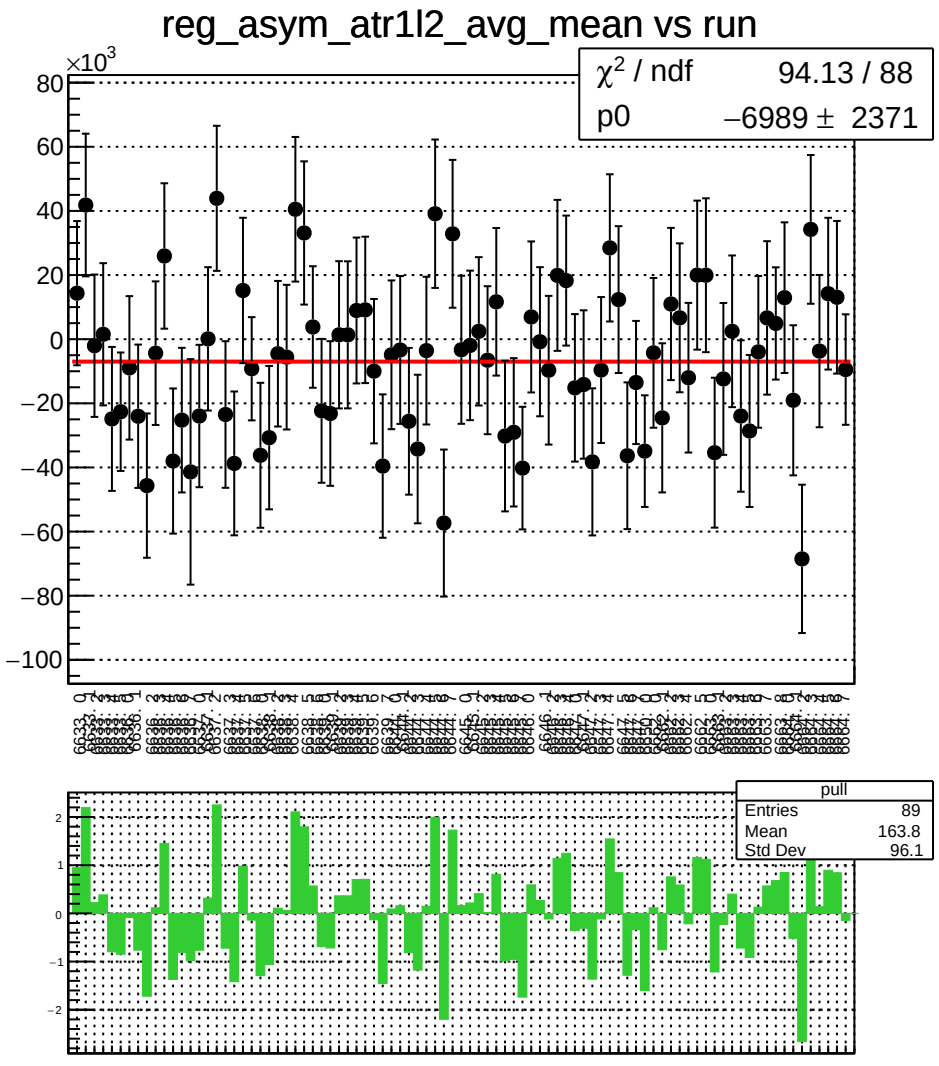

pull1D
Entries 89
Mean 0.0262
Std Dev 0.97
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

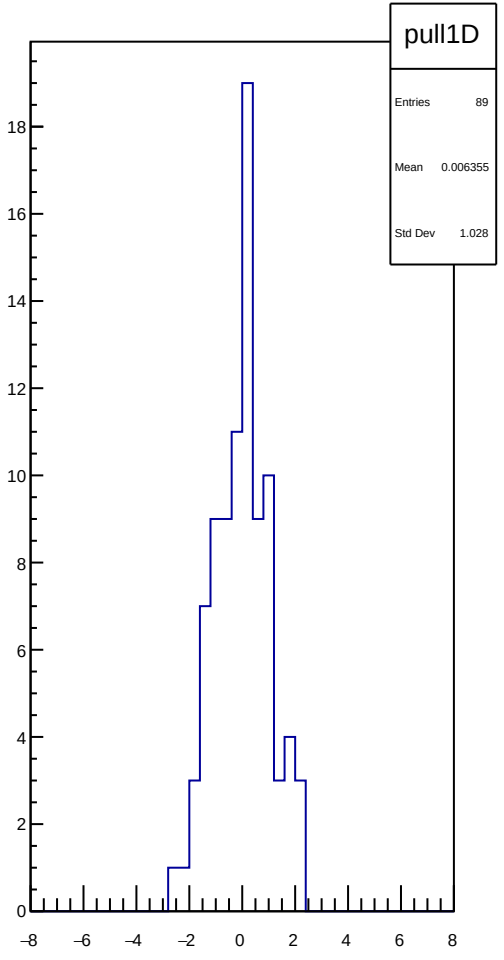

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 2.565e+04 / 88
p0 3295 ± 2.534
4400
4200
4000
3800
3600
3400
3200
3000
2800
2600
2400

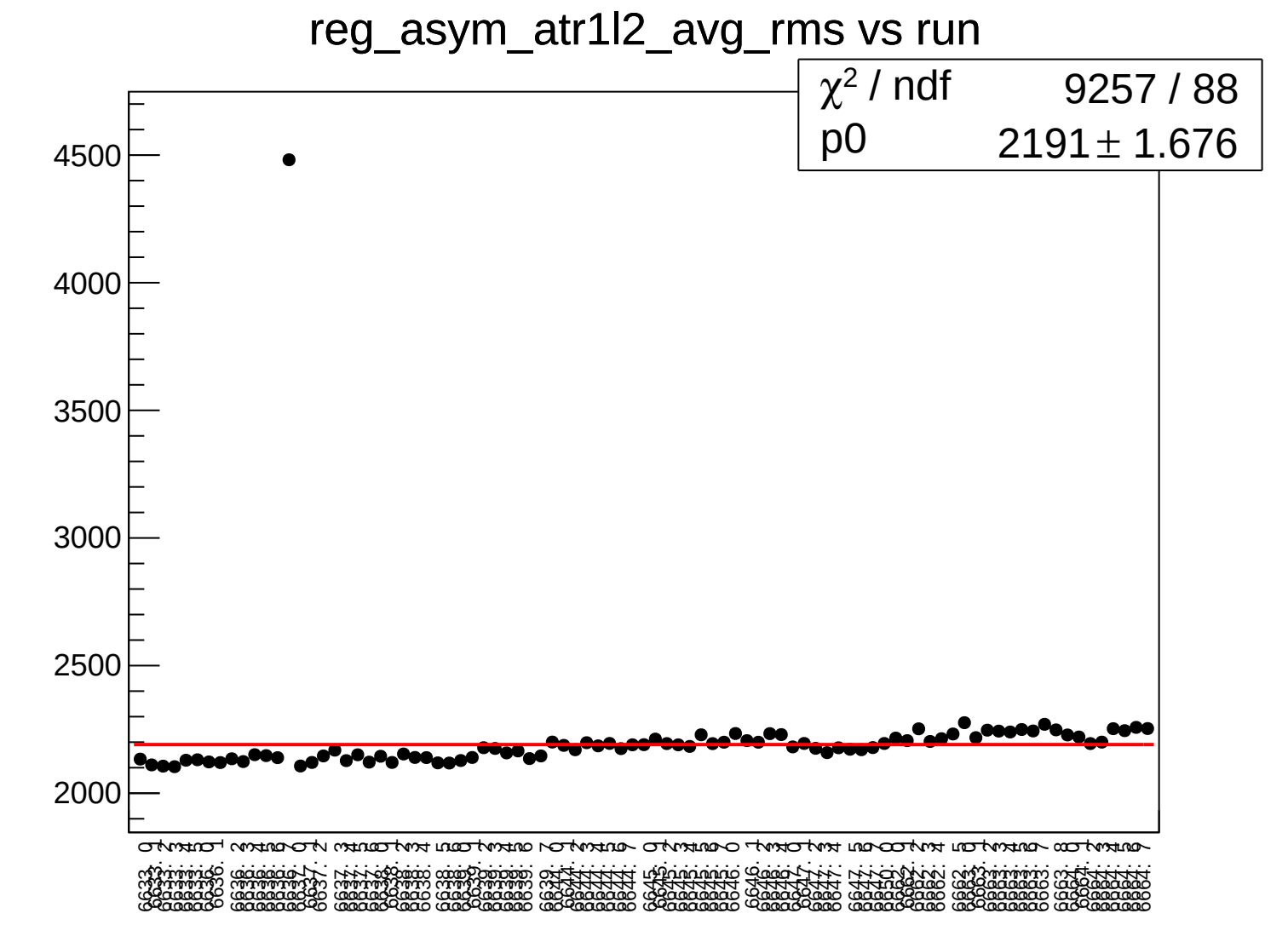

asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 92.23 / 88
p0 −7515 ± 4184
100
50
0
−50
−100
−150
pull
Entries 89
Mean 49.37
Std Dev 45.03
2
1
0
−1
−2
−3

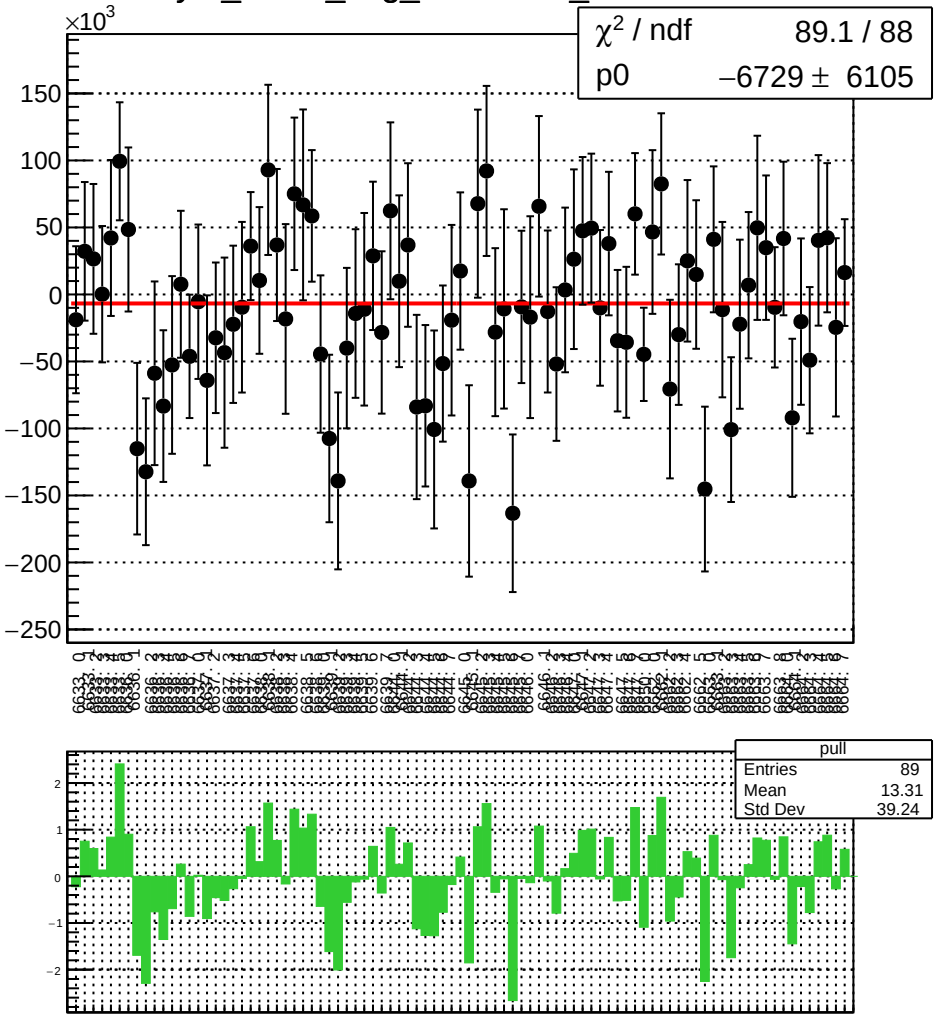

pull1D
Entries 89
Mean −0.01989
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

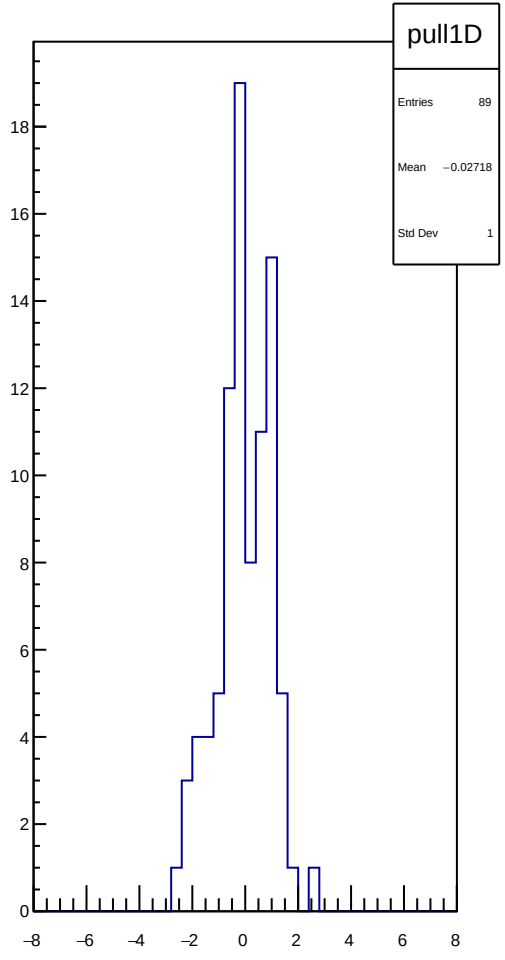

asym_atl1r2_dd_rms vs run
χ² / ndf 1.673e+04 / 88
p0 3858 ± 2.959
6500
6000
5500
5000
4500
4000
3500
3000

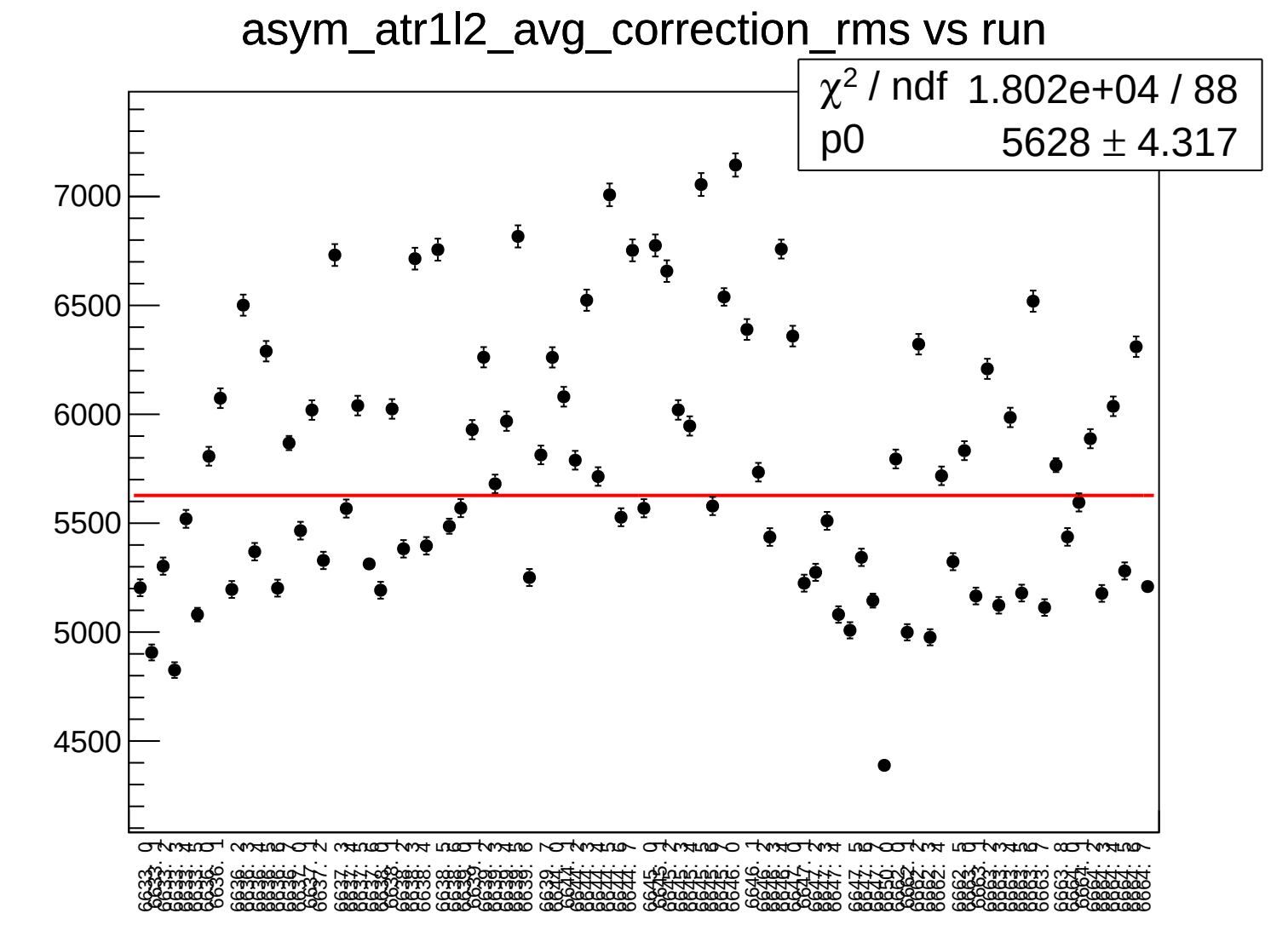

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 94.13 / 88
p0 −6989 ± 2371
×10³
pull
Entries 89
Mean 163.8
Std Dev 96.1

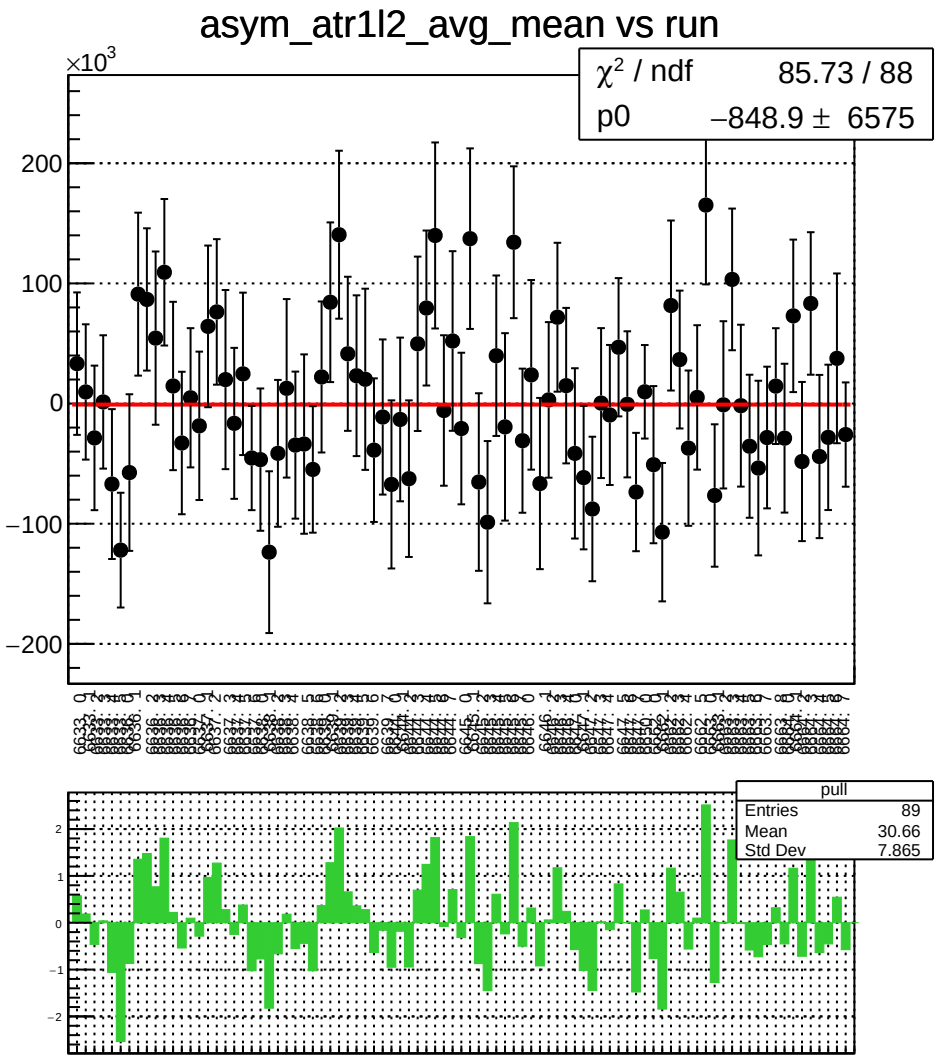

pull1D
Entries 89
Mean 0.006355
Std Dev 1.028

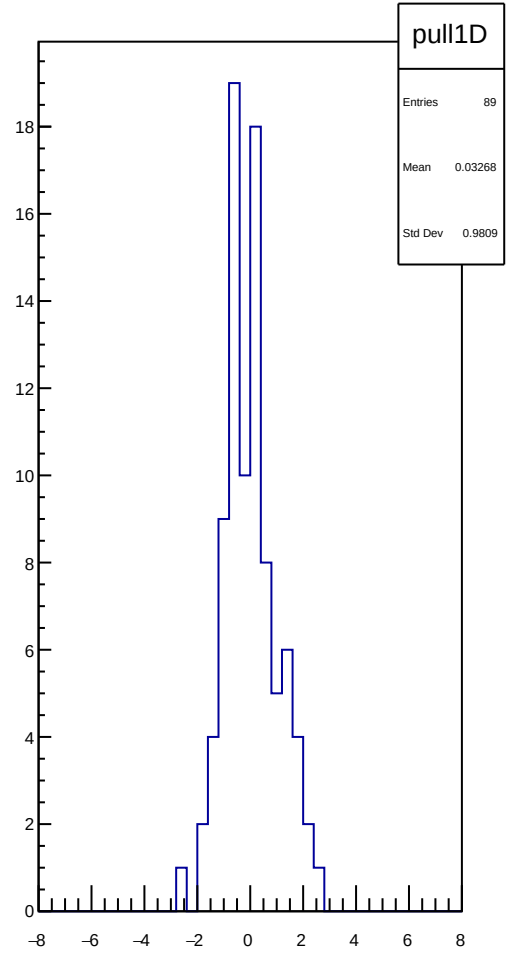

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 9257 / 88
p0 2191 ± 1.676
4500
4000
3500
3000
2500
2000

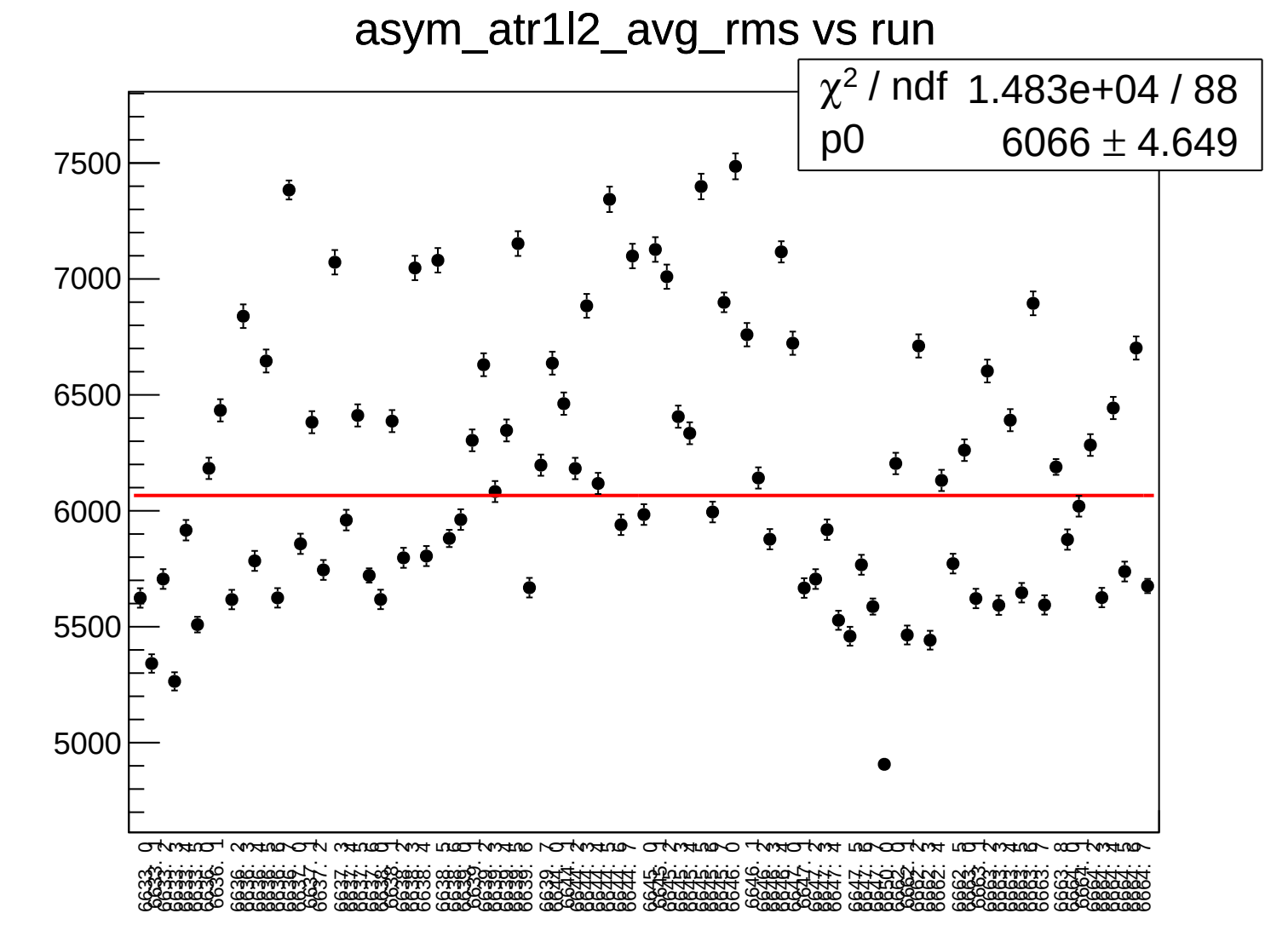

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 89.1 / 88
p0 −6729 ± 6105
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 89
Mean 13.31
Std Dev 39.24
2
1
0
−1
−2

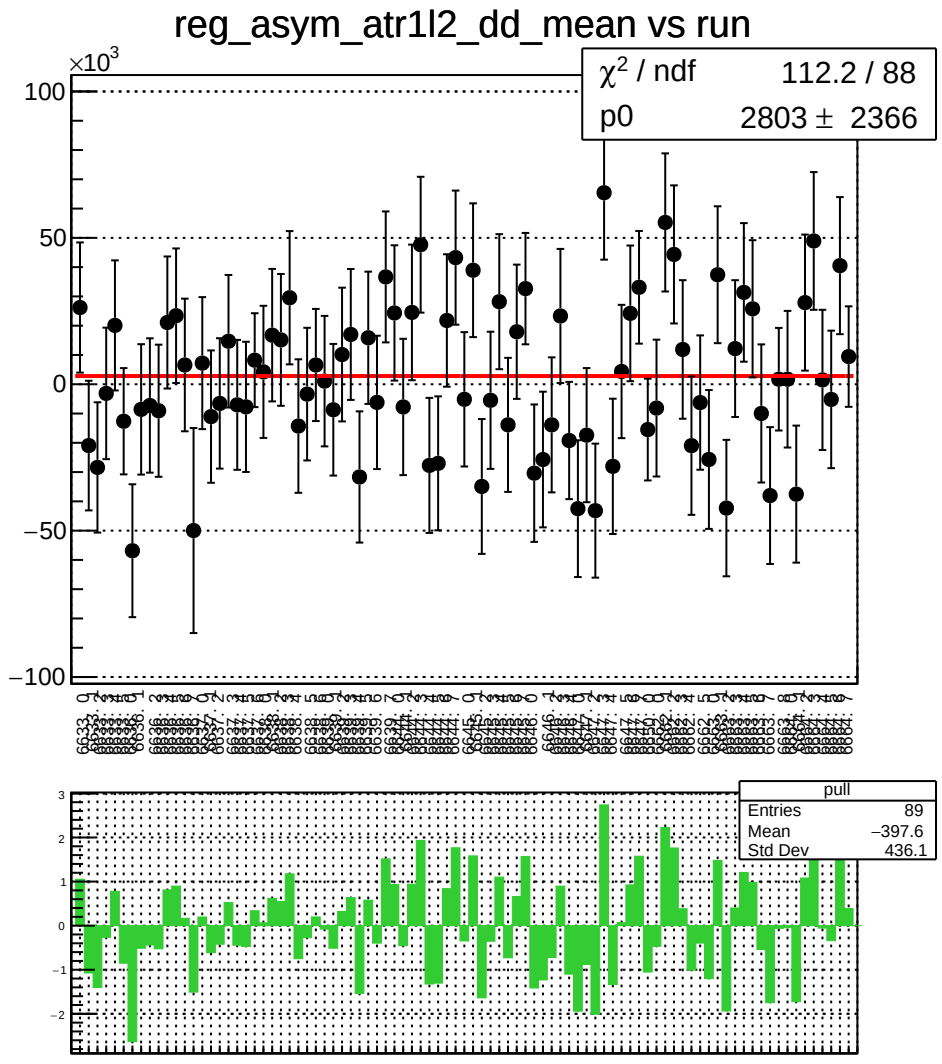

pull1D
Entries 89
Mean −0.02718
Std Dev 1
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

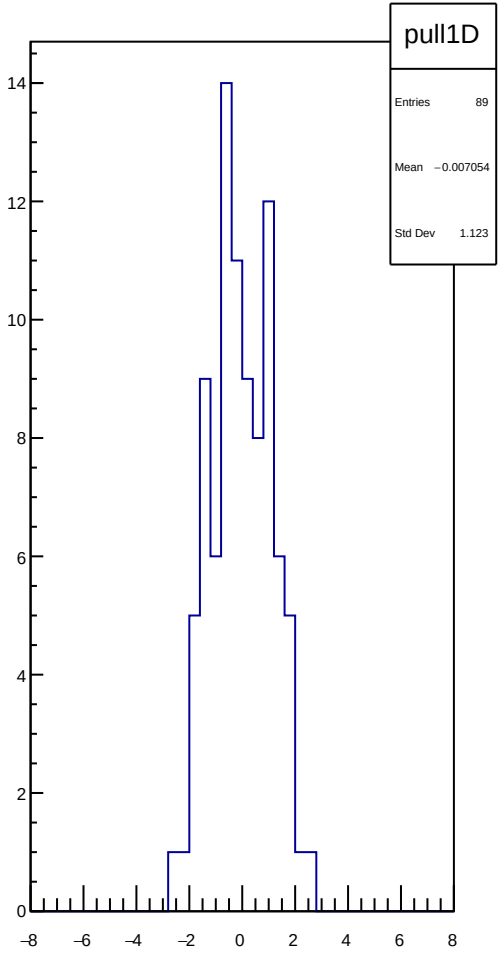

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 1.802e+04 / 88
p0 5628 ± 4.317
7000
6500
6000
5500
5000
4500

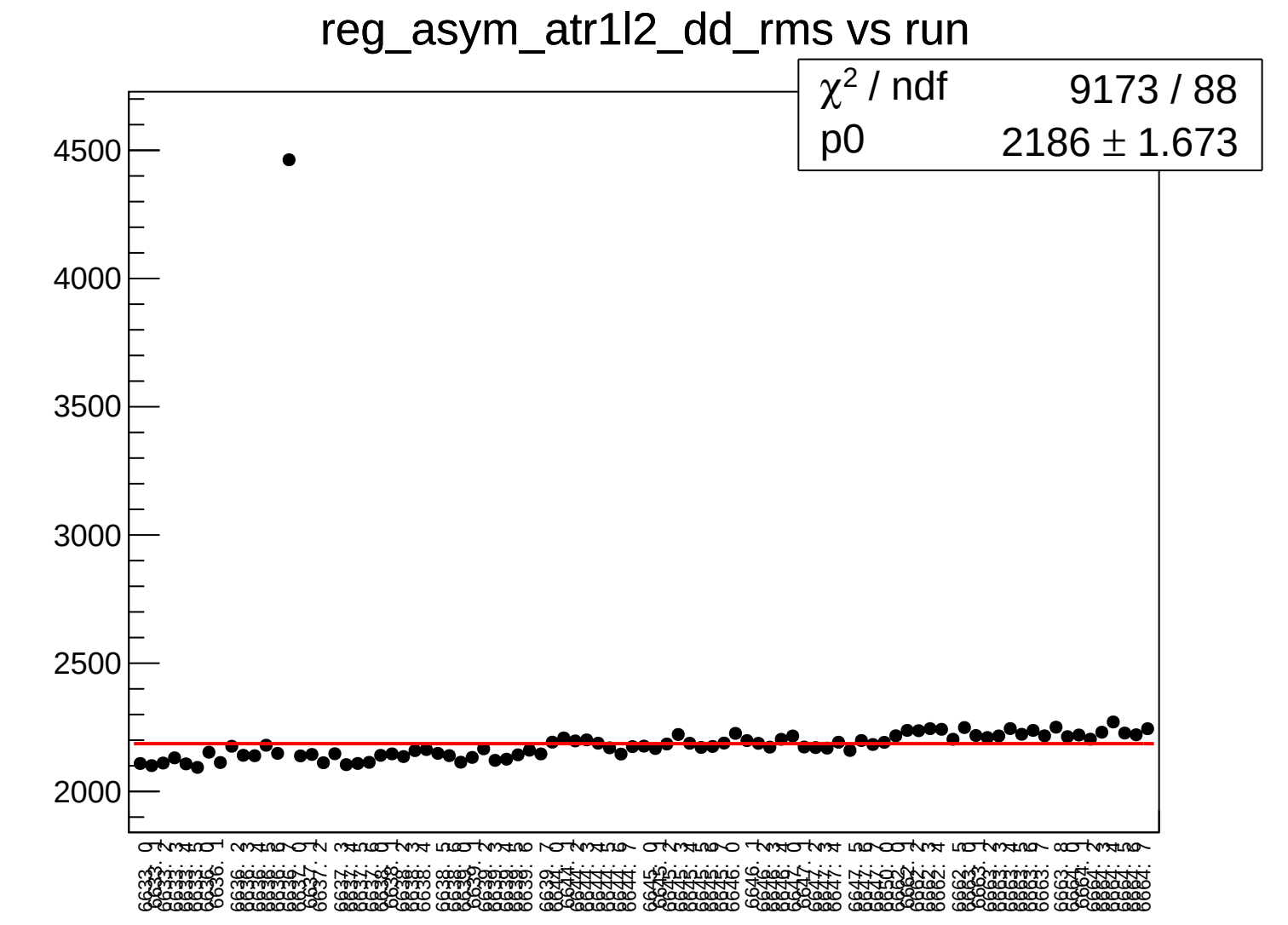

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 85.73 / 88
p0 −848.9 ± 6575
200
100
0
−100
−200
pull
Entries 89
Mean 30.66
Std Dev 7.865
2
1
0
−1
−2

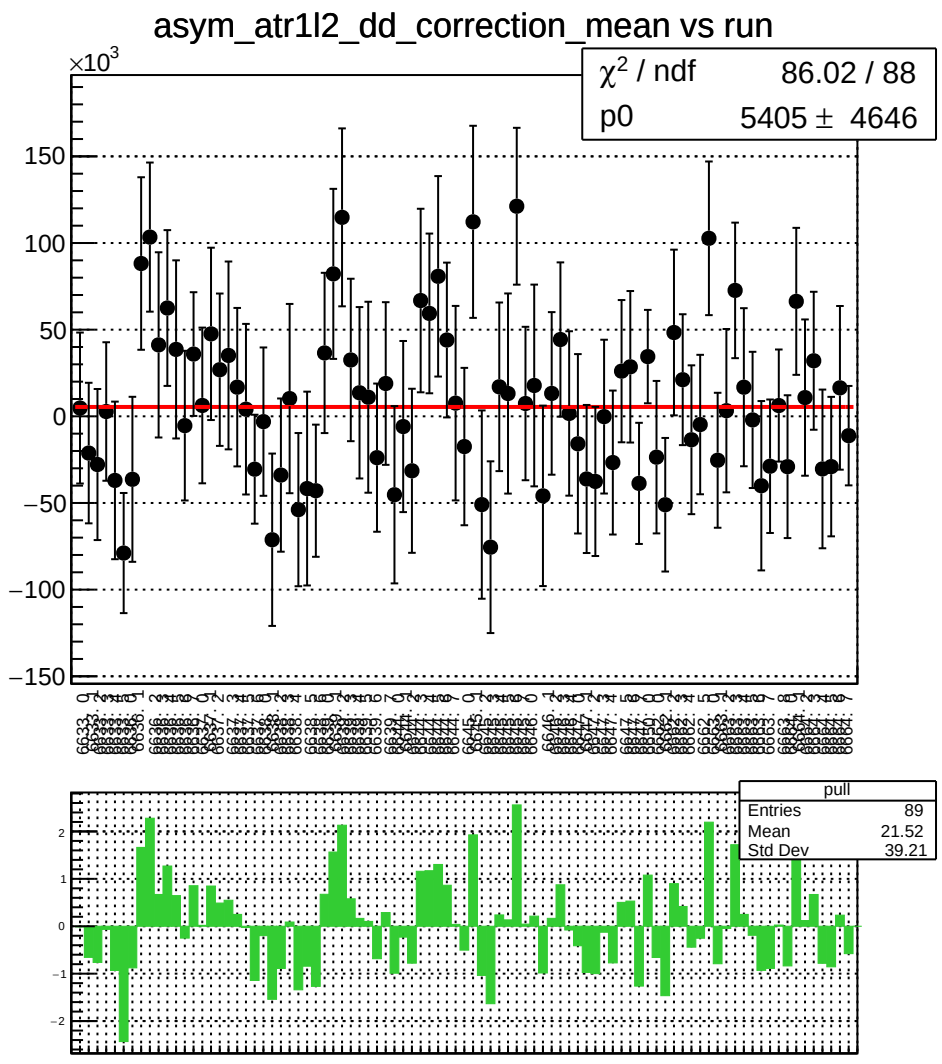

pull1D
Entries 89
Mean 0.03268
Std Dev 0.9809
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

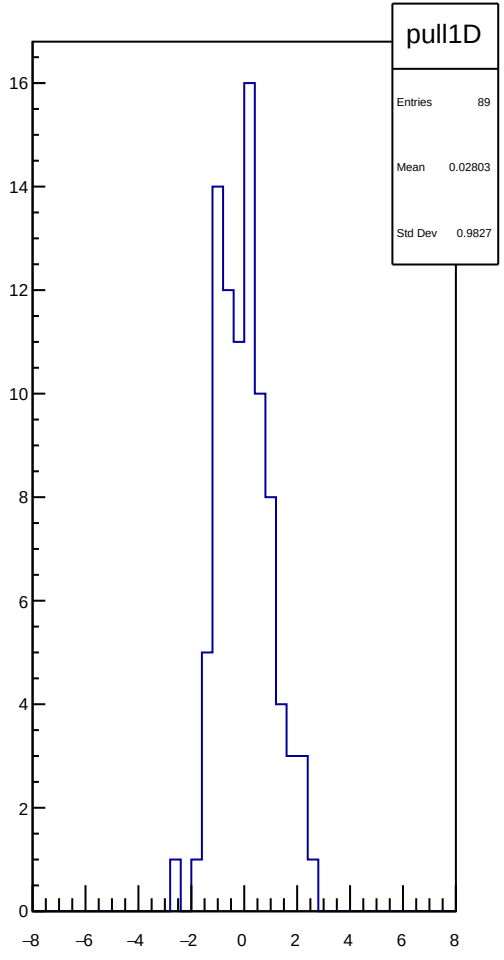

asym_atr1l2_avg_rms vs run
χ² / ndf 1.483e+04 / 88
p0 6066 ± 4.649
7500
7000
6500
6000
5500
5000

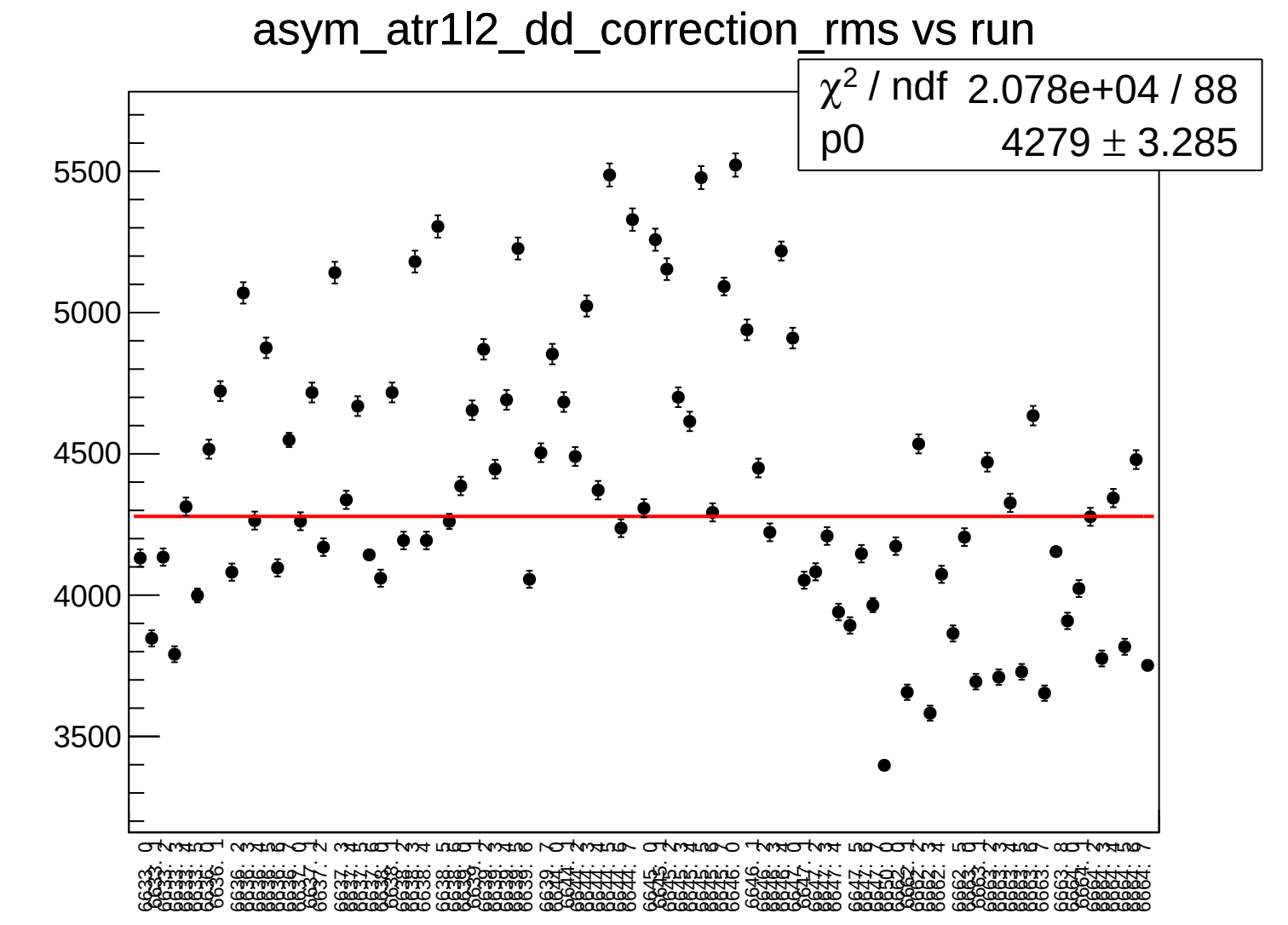

reg_asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 112.2 / 88
p0 2803 ± 2366
100
50
0
−50
−100
pull
Entries 89
Mean −397.6
Std Dev 436.1
3
2
1
0
−1
−2

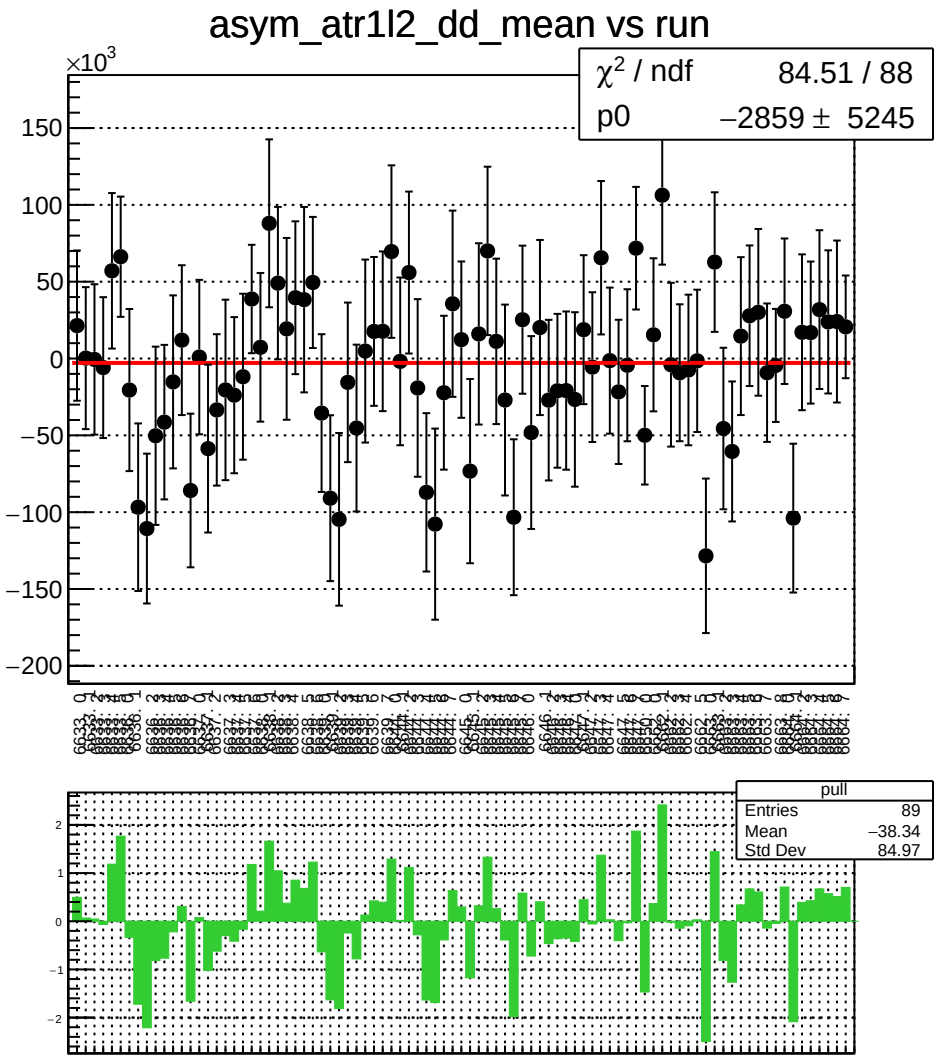

pull1D
Entries 89
Mean −0.007054
Std Dev 1.123
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

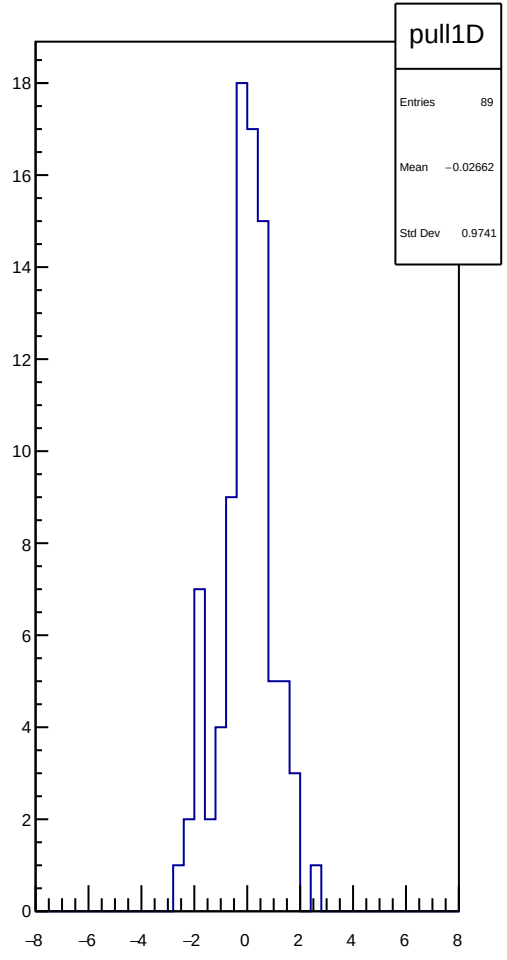

reg_asym_atr1l2_dd_rms vs run
χ^2 / ndf 9173 / 88
p0 2186 ± 1.673
4500
4000
3500
3000
2500
2000

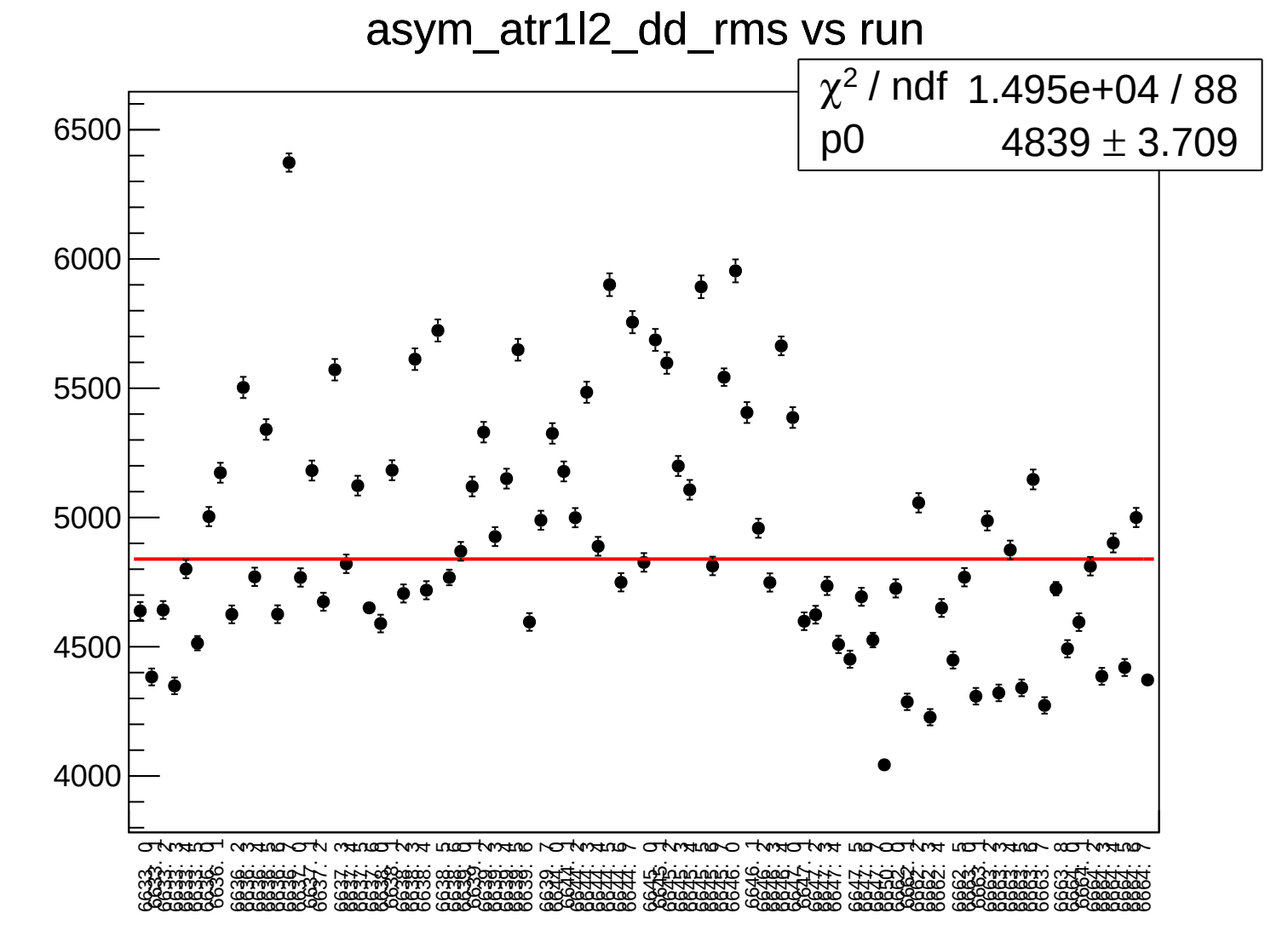

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 86.02 / 88
p0 5405 ± 4646
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 21.52
Std Dev 39.21
2
1
0
−1
−2

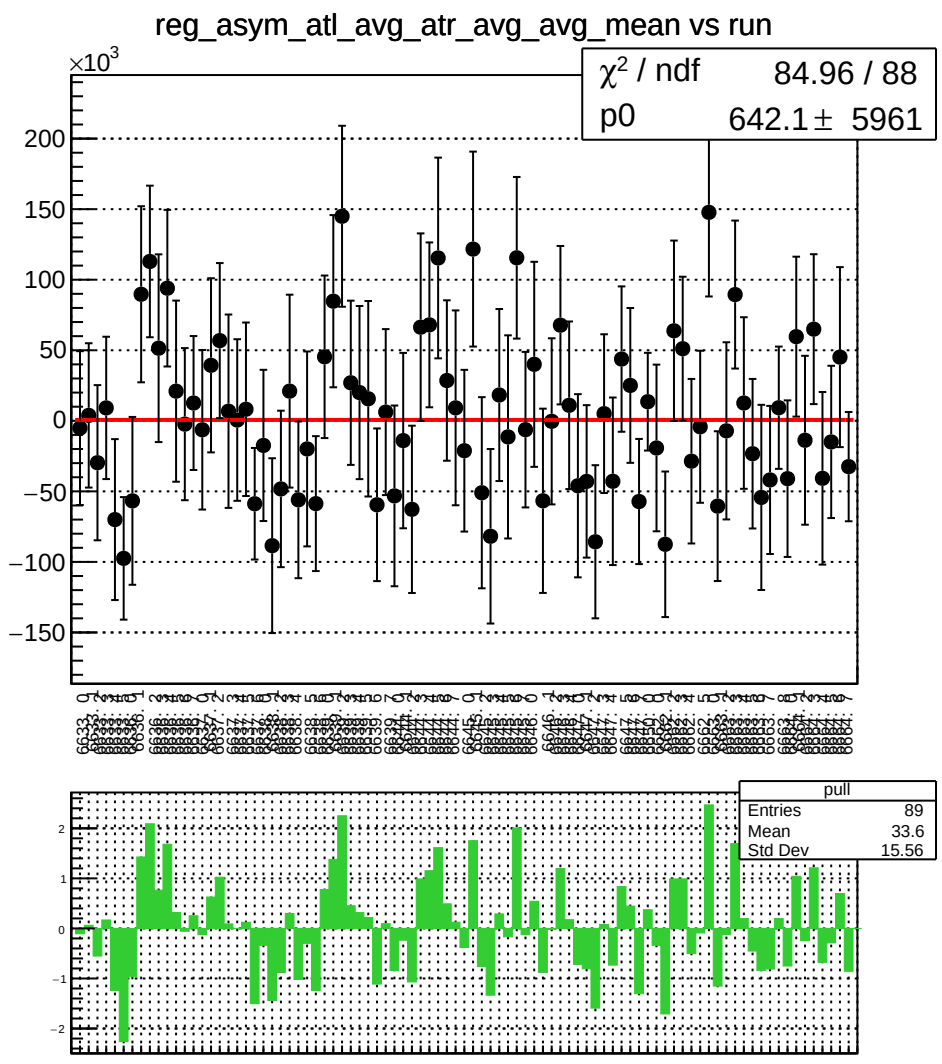

pull1D
Entries 89
Mean 0.02803
Std Dev 0.9827
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

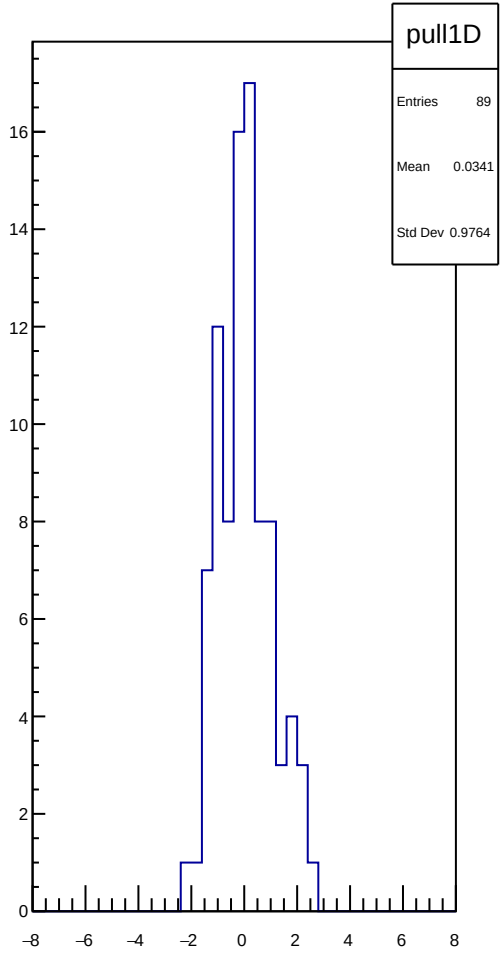

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 2.078e+04 / 88
p0 4279 ± 3.285
5500
5000
4500
4000
3500

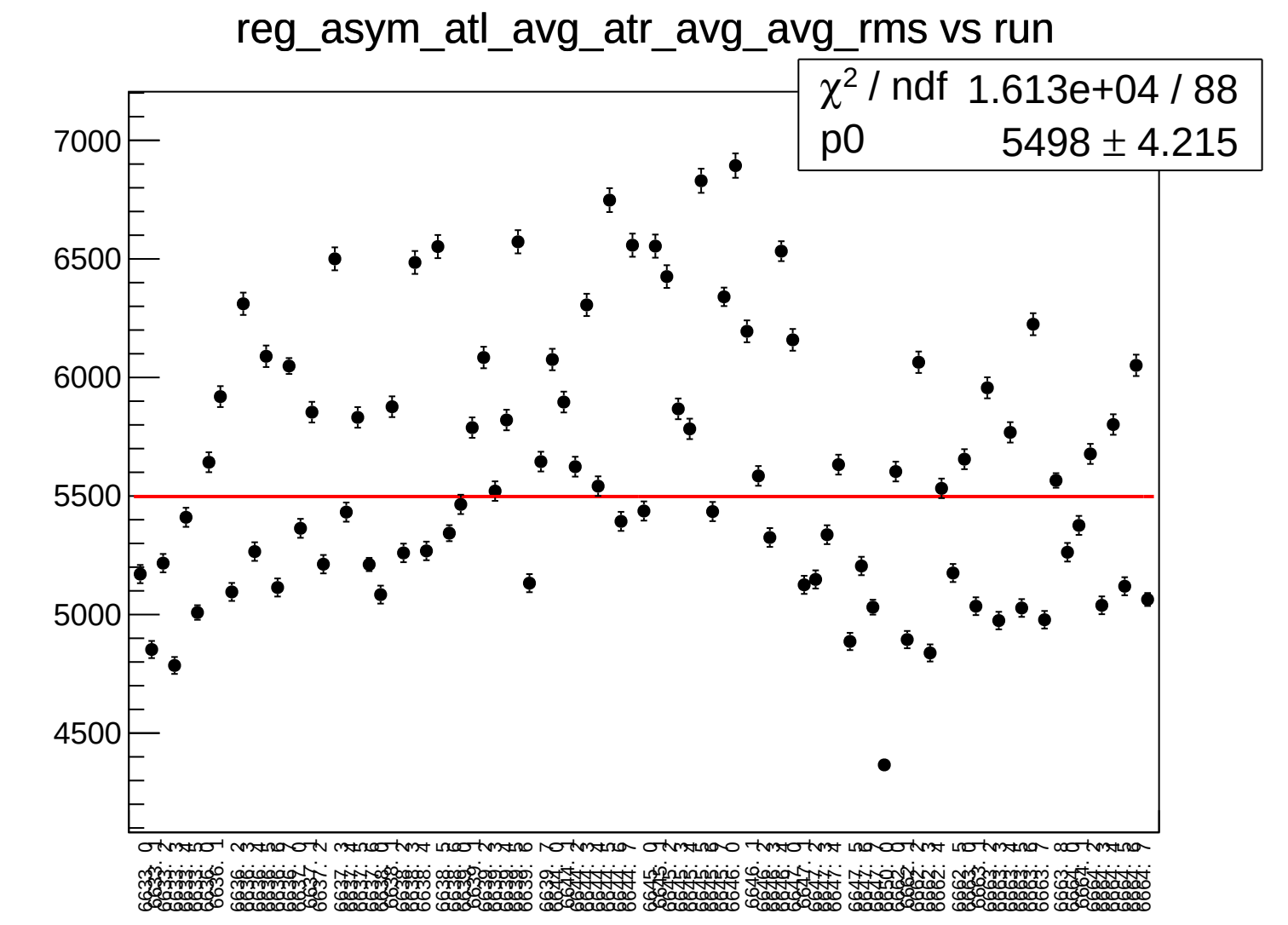

asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 84.51 / 88
p0 −2859 ± 5245
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean −38.34
Std Dev 84.97
2
1
0
−1
−2

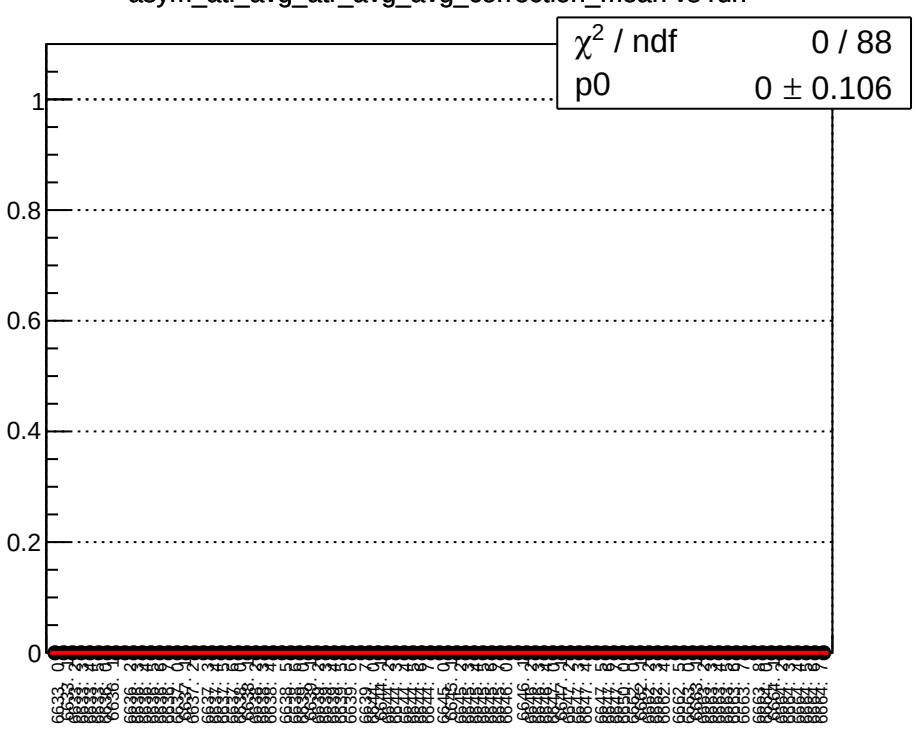

pull1D
Entries 89
Mean −0.02662
Std Dev 0.9741
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

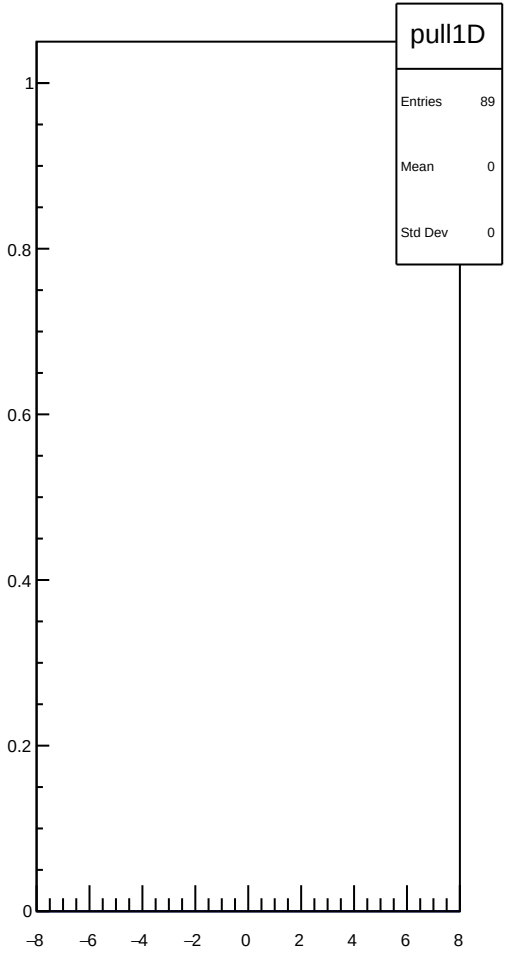

asym_atr1l2_dd_rms vs run
χ² / ndf 1.495e+04 / 88
p0 4839 ± 3.709
6500
6000
5500
5000
4500
4000

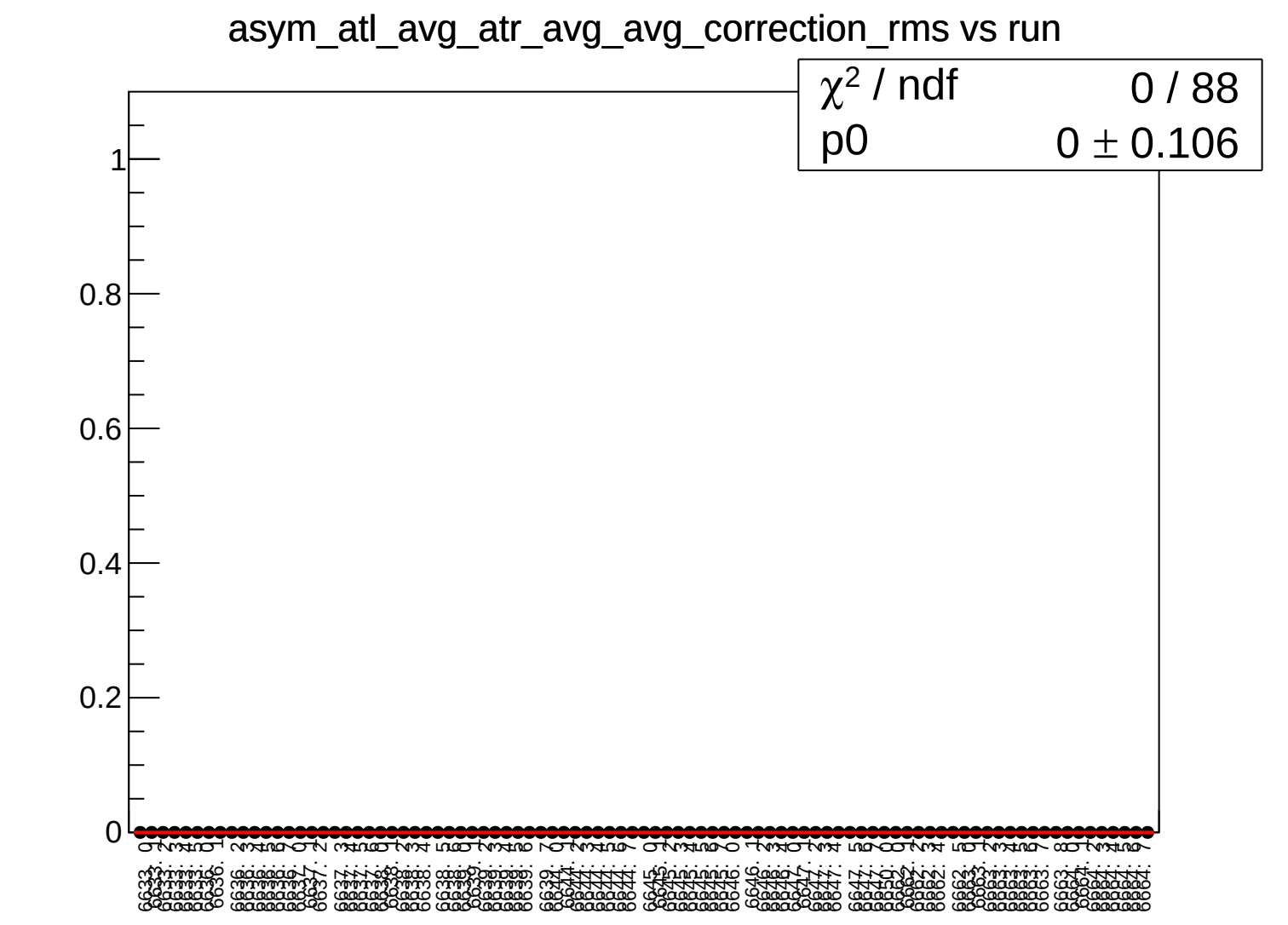

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 84.96 / 88
p0 642.1 ± 5961
200
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 33.6
Std Dev 15.56
2
1
0
−1
−2

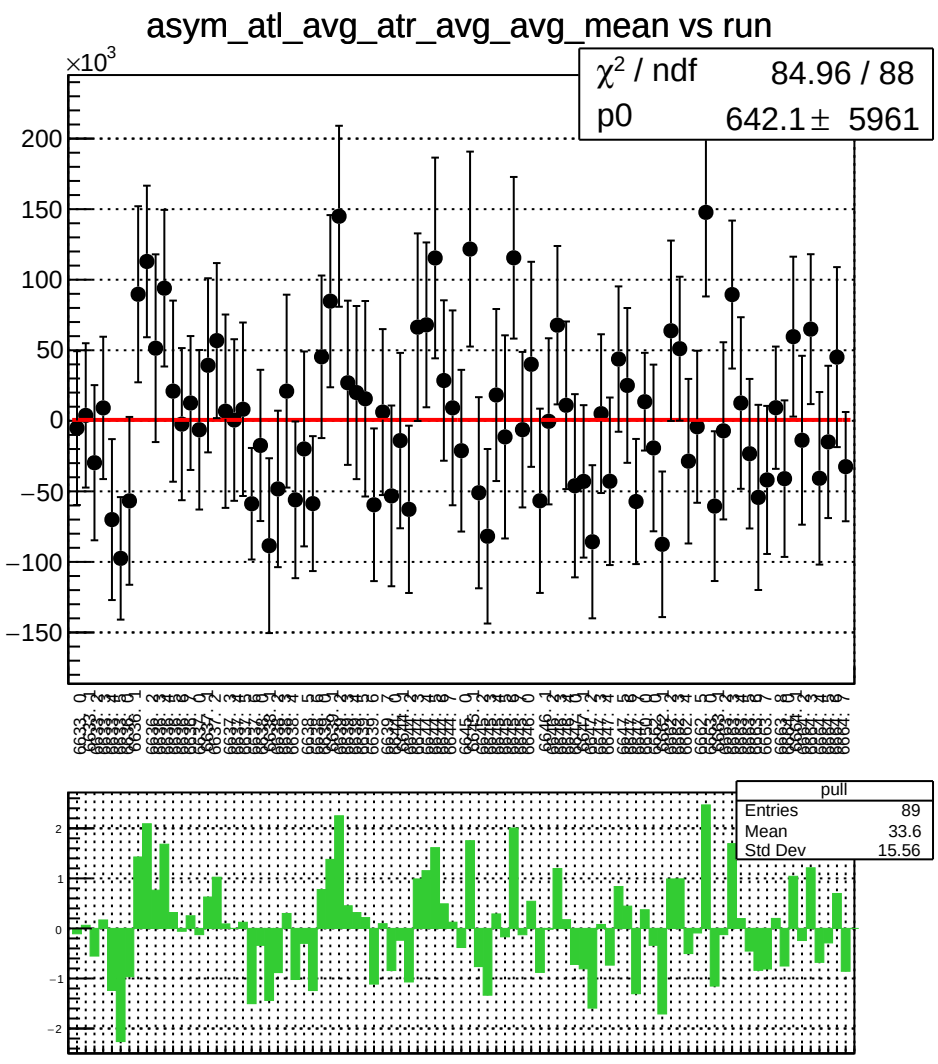

pull1D
Entries 89
Mean 0.0341
Std Dev 0.9764
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

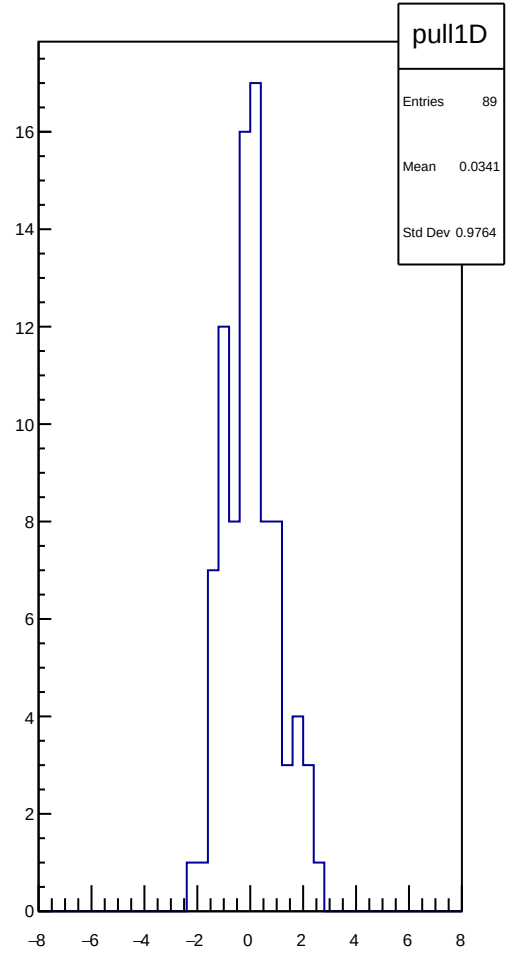

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.613e+04 / 88
p0 5498 ± 4.215
7000
6500
6000
5500
5000
4500

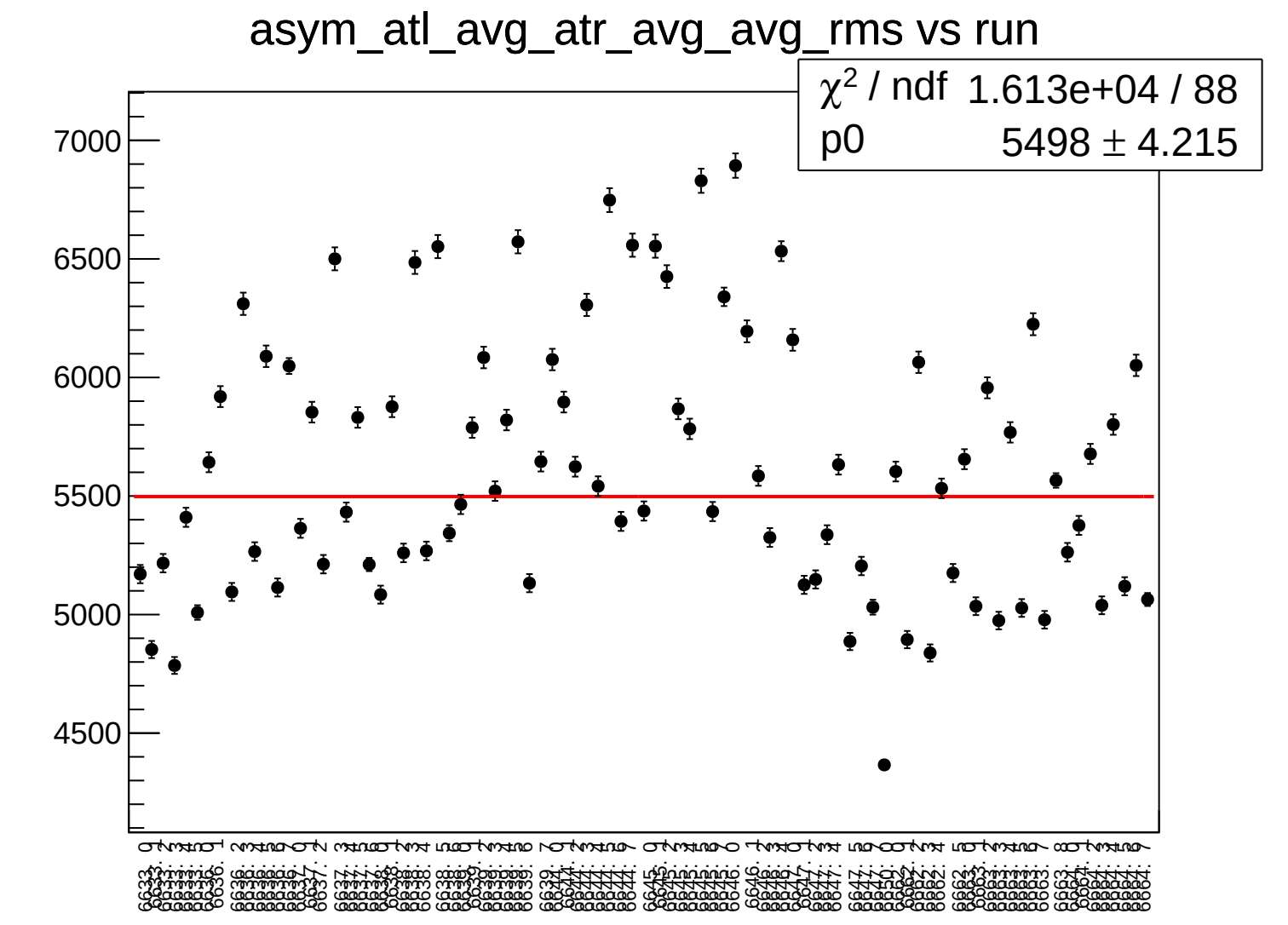

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

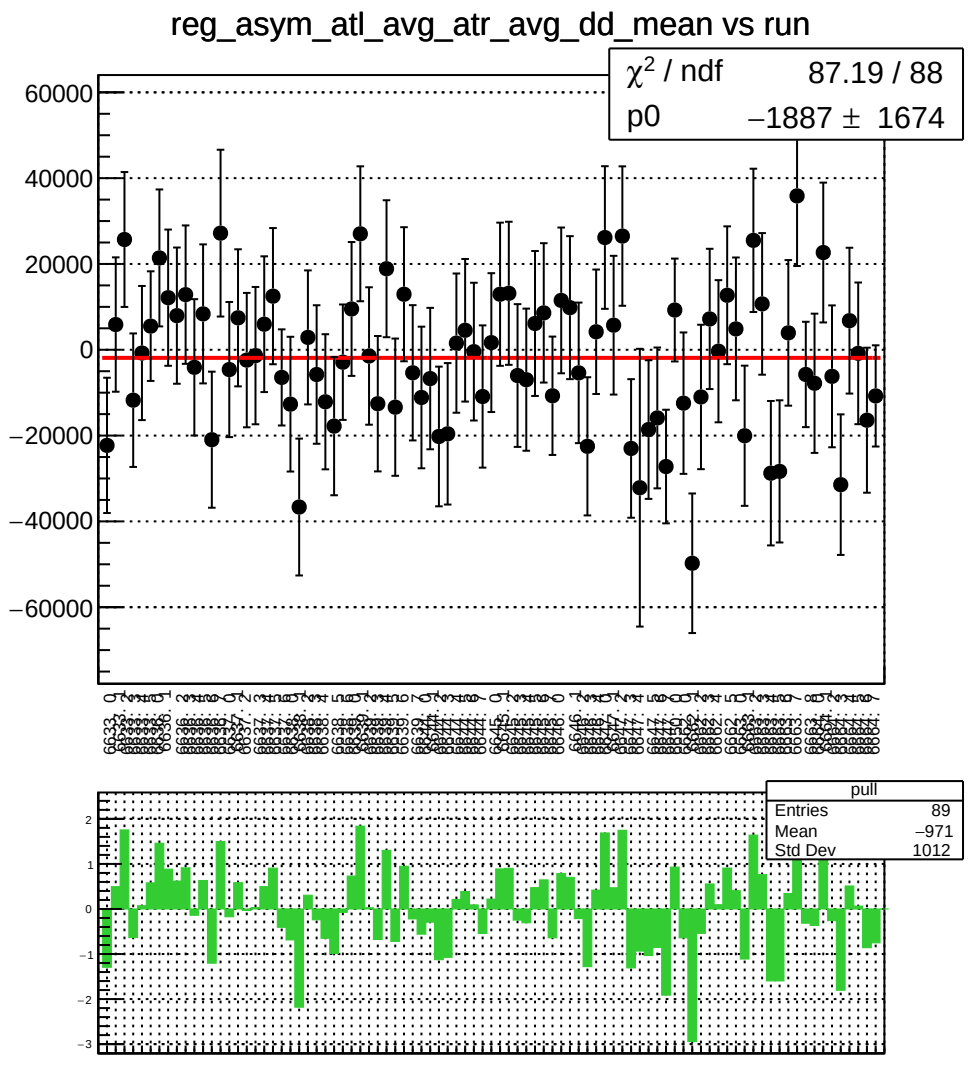

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

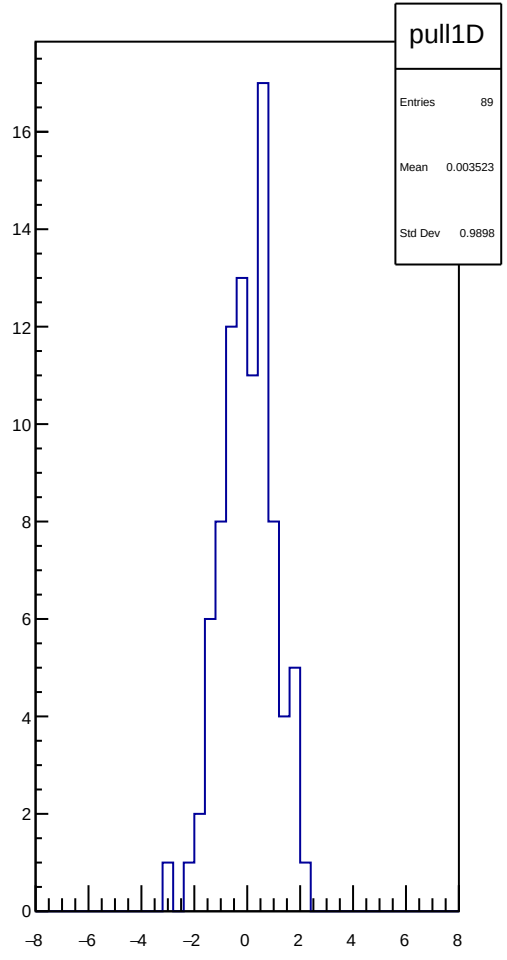

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

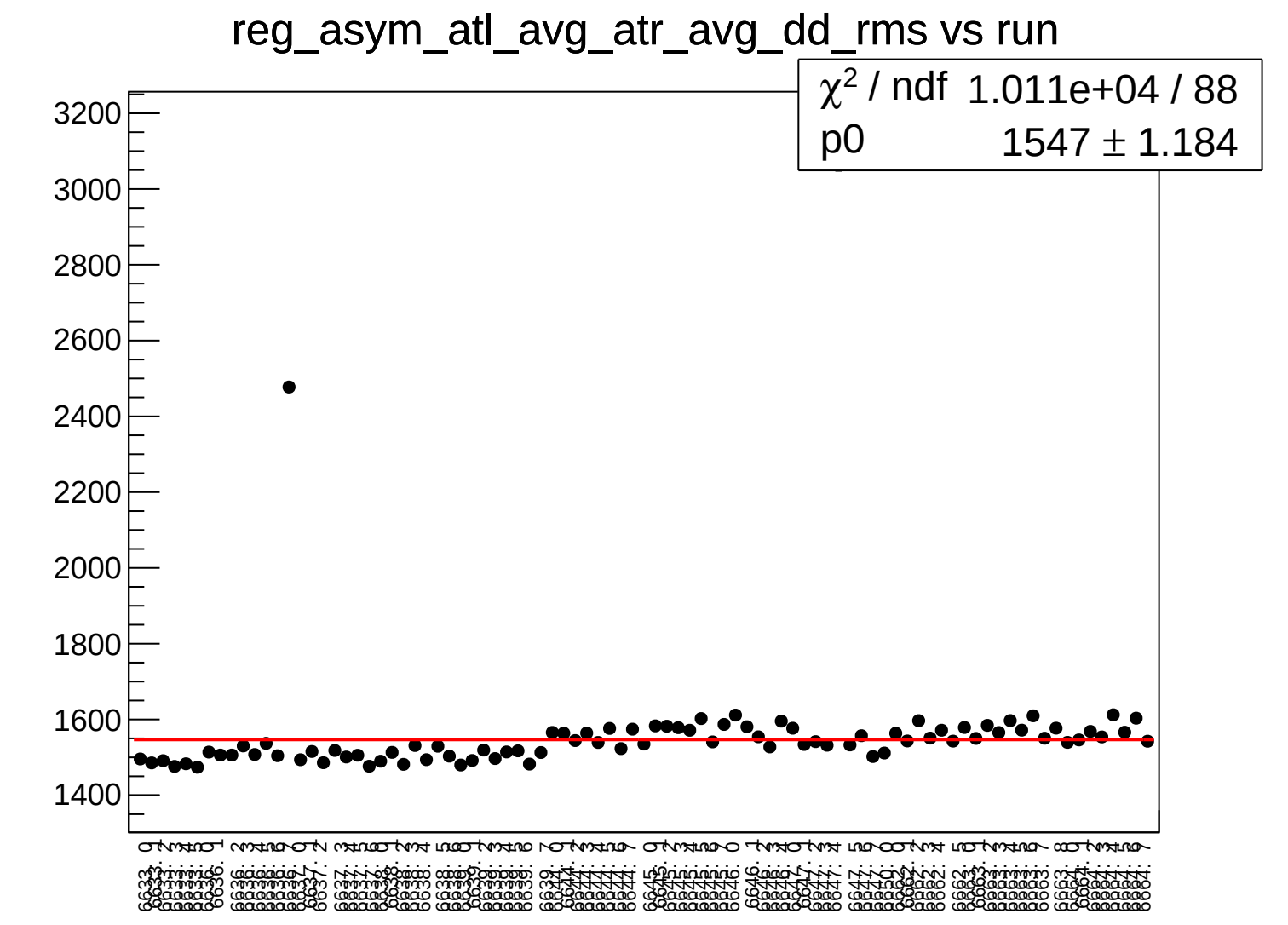

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 84.96 / 88
p0 642.1 ± 5961
200
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 33.6
Std Dev 15.56
2
1
0
−1
−2

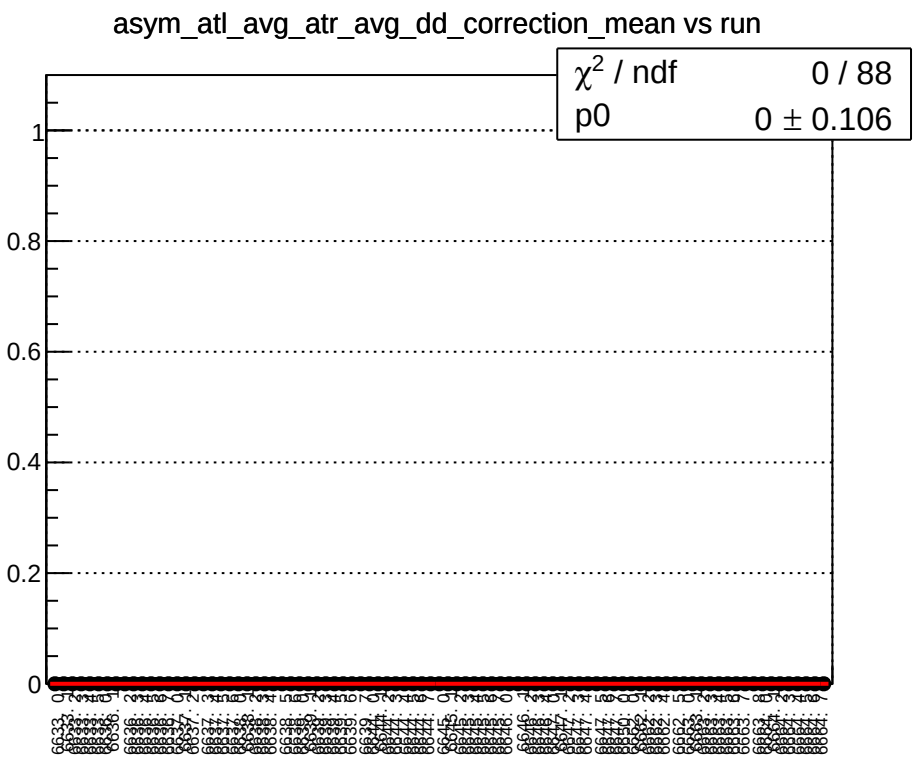

pull1D
Entries 89
Mean 0.0341
Std Dev 0.9764
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

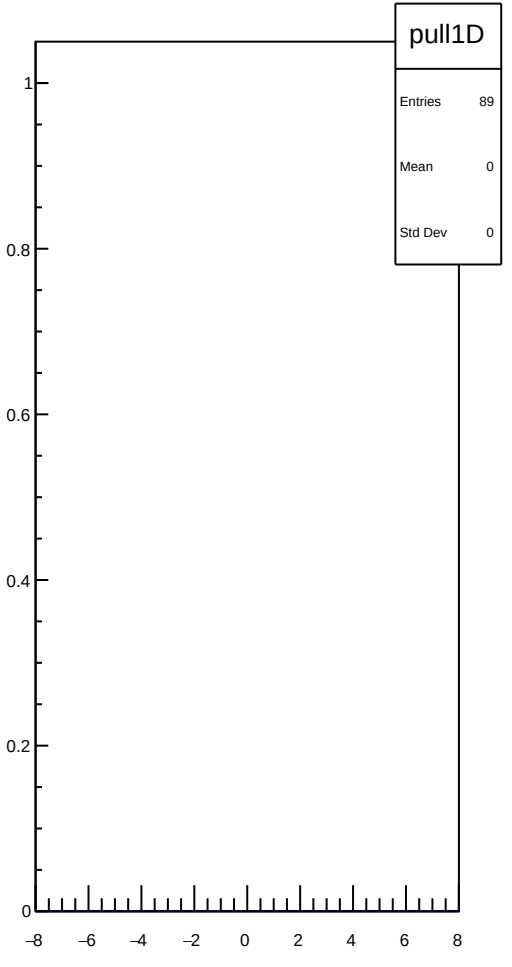

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.613e+04 / 88
p0 5498 ± 4.215
7000
6500
6000
5500
5000
4500

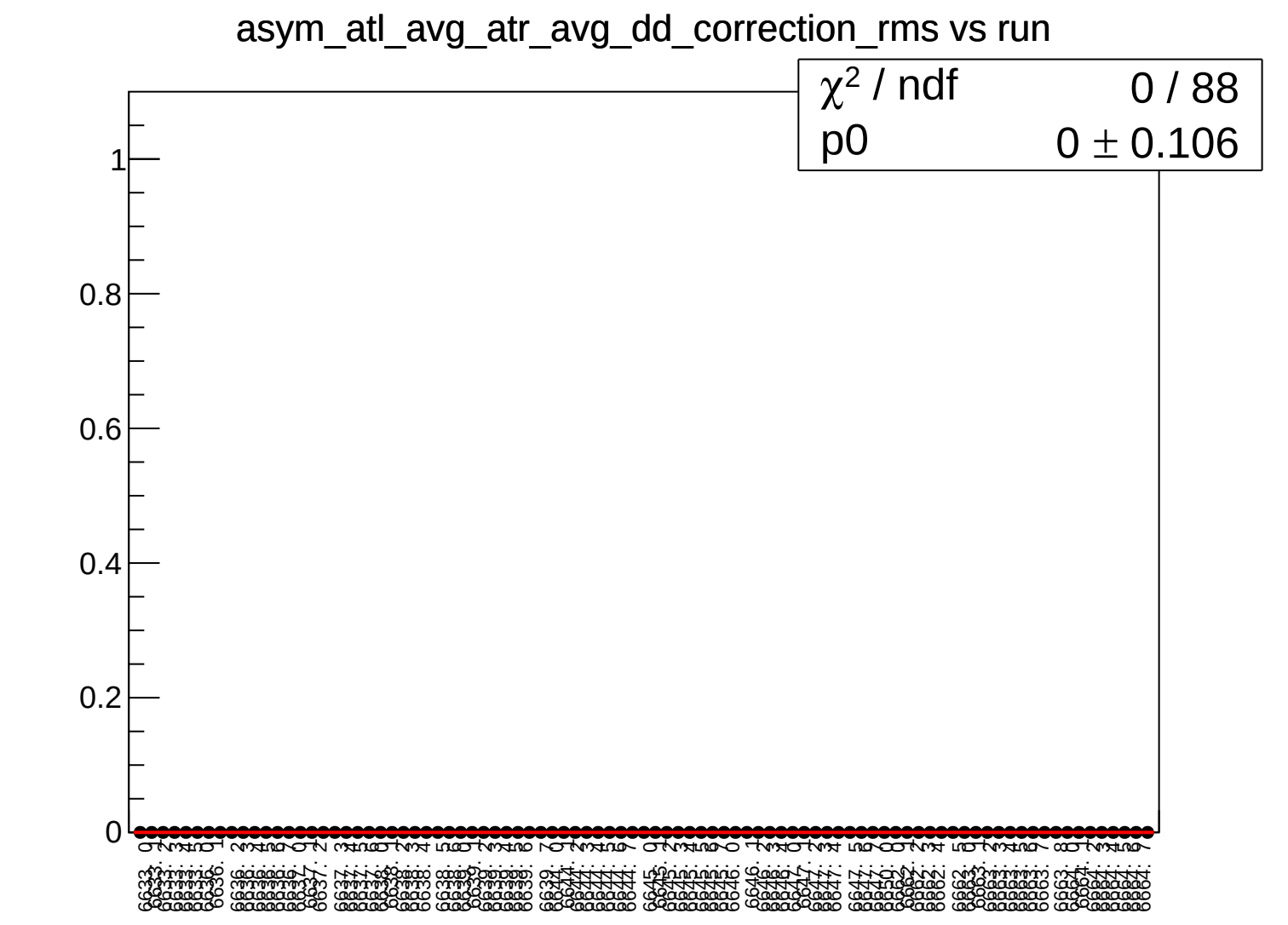

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 87.19 / 88
p0 −1887 ± 1674
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −971
Std Dev 1012
2
1
0
−1
−2
−3

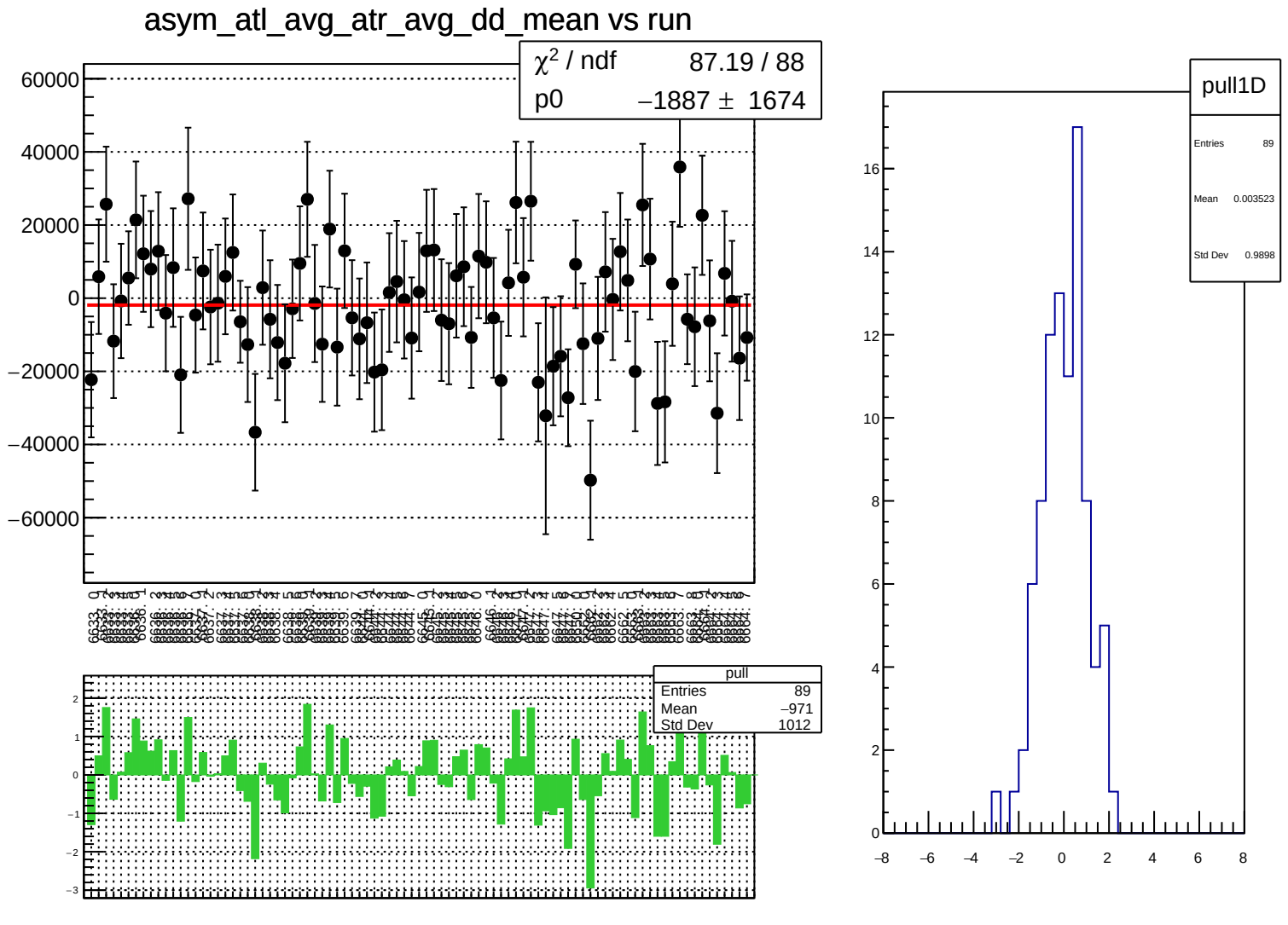

pull1D
Entries 89
Mean 0.003523
Std Dev 0.9898
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

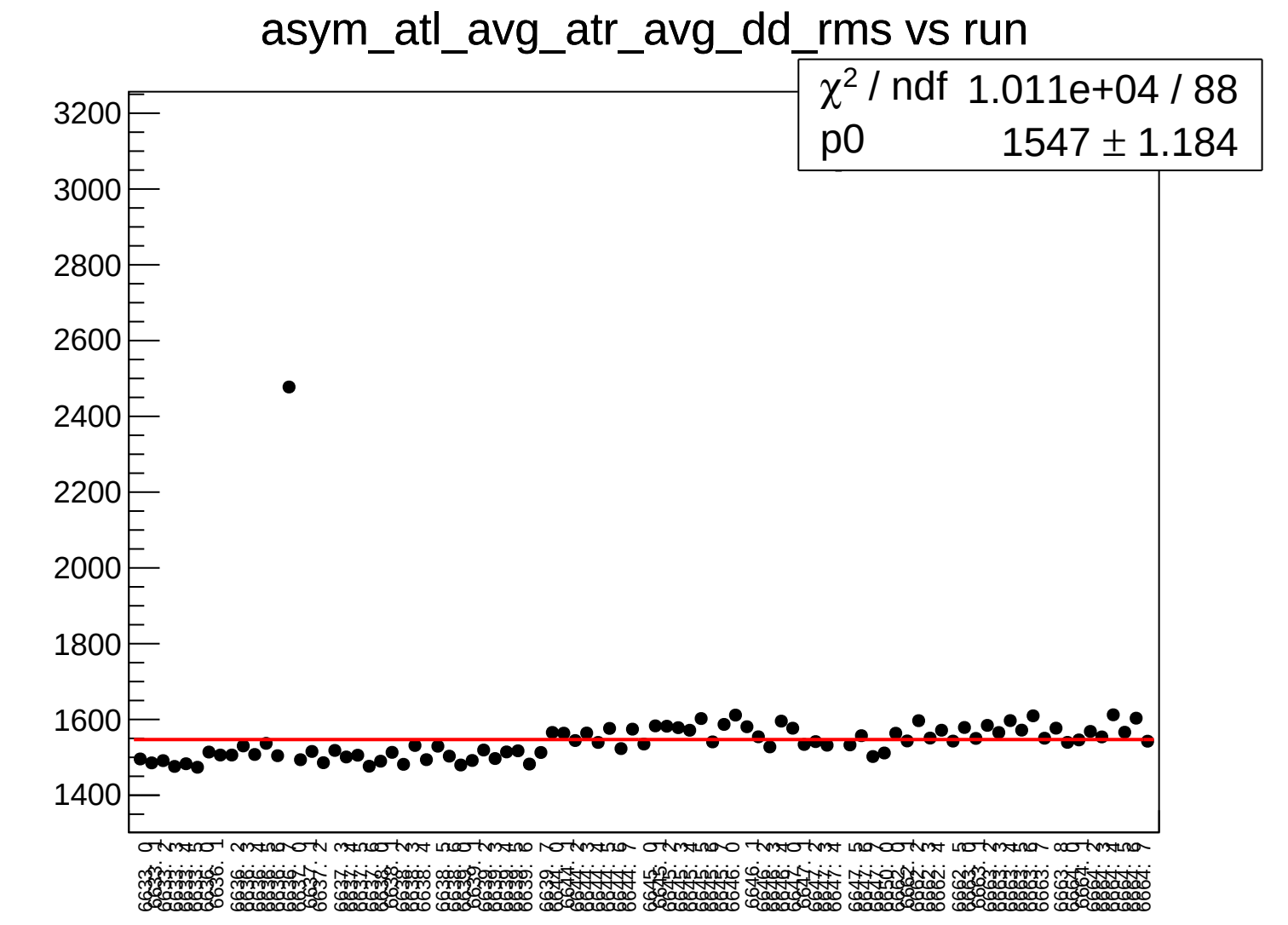

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.011e+04 / 88
p0 1547 ± 1.184
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

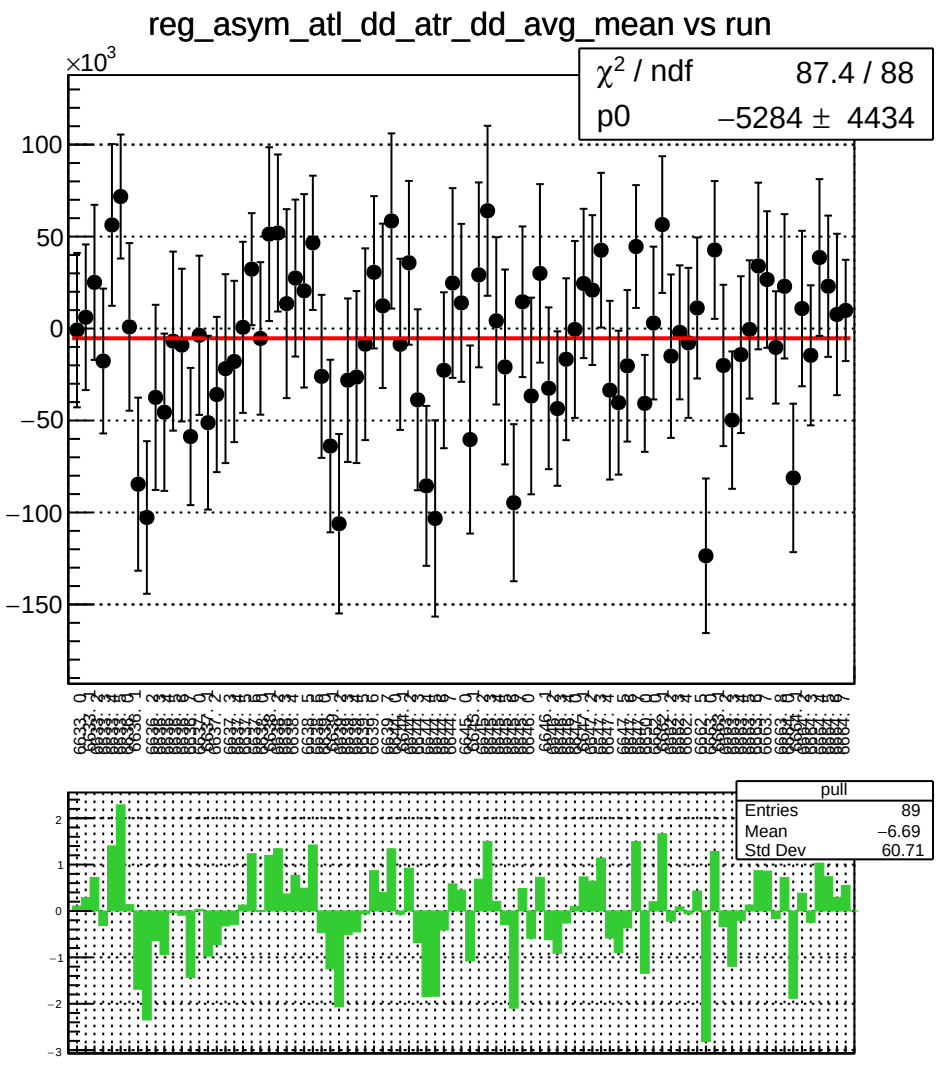

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

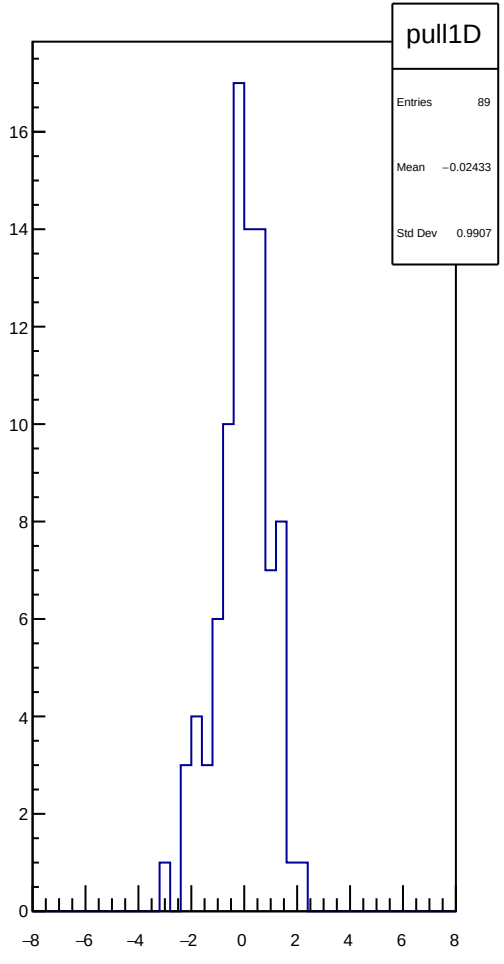

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

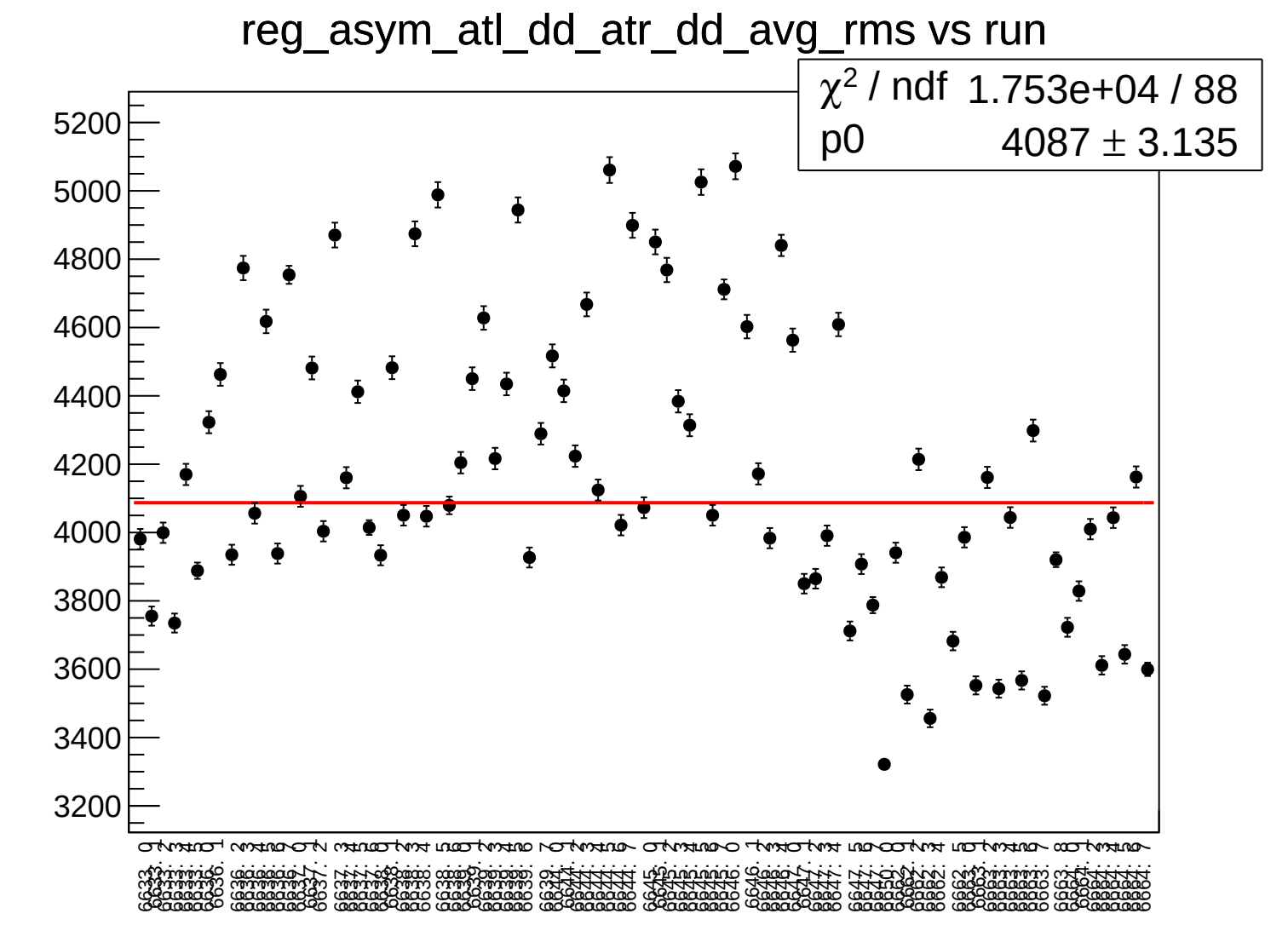

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

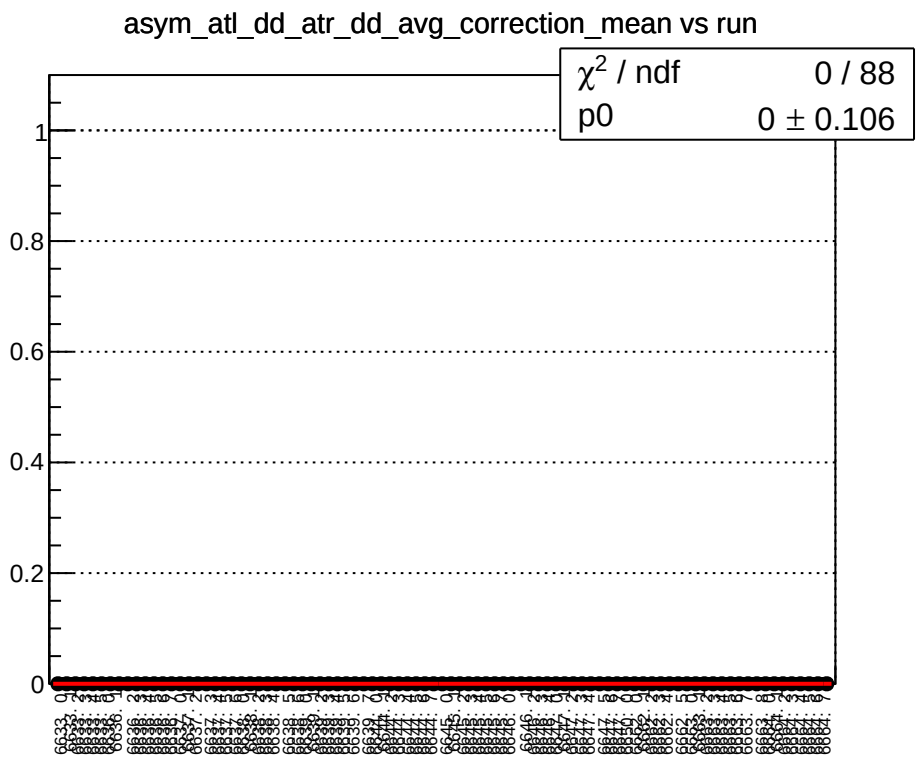

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 87.19 / 88
p0 −1887 ± 1674
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −971
Std Dev 1012
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean 0.003523
Std Dev 0.9898
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

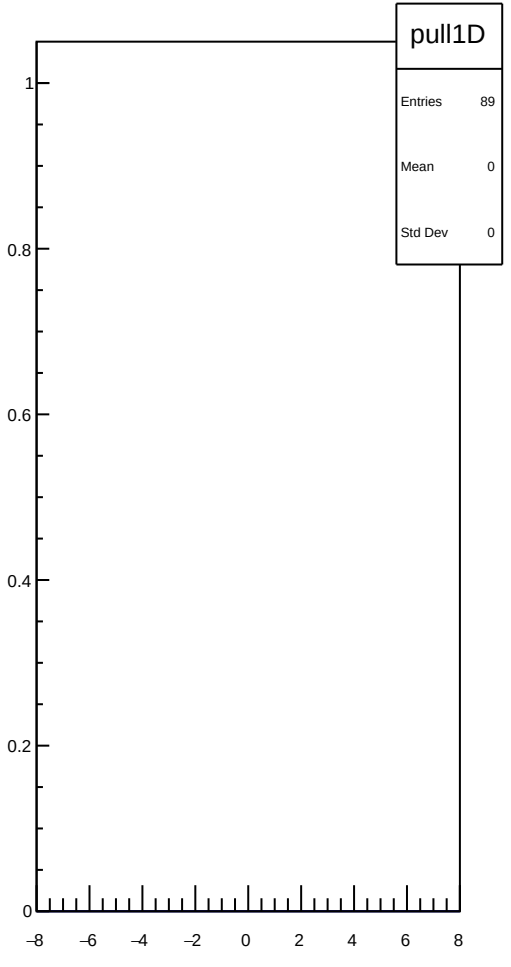

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.011e+04 / 88
p0 1547 ± 1.184
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

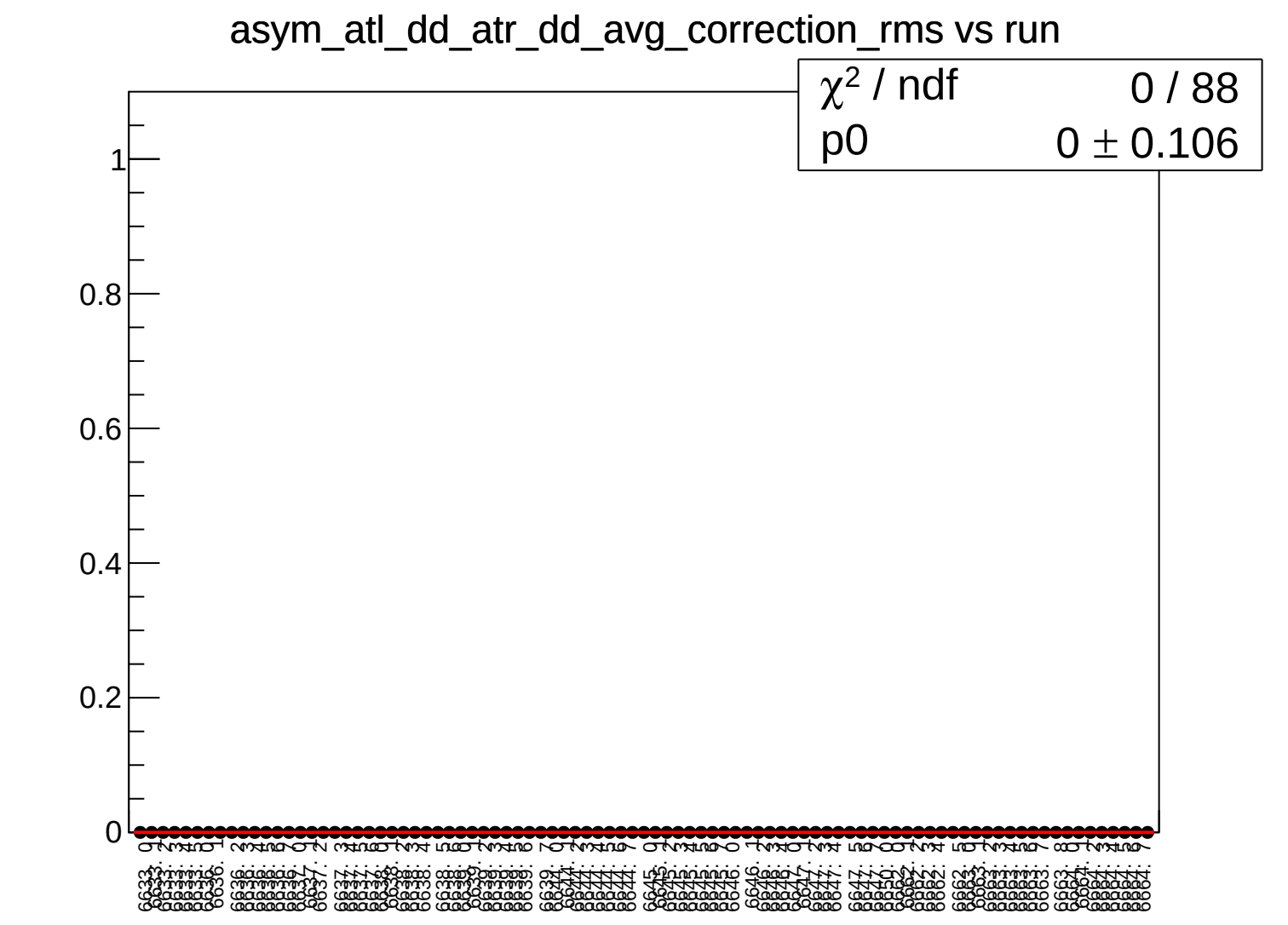

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ^2 / ndf 87.4 / 88
p0 −5284 ± 4434
100
50
0
−50
−100
−150
pull
Entries 89
Mean −6.69
Std Dev 60.71
2
1
0
−1
−2
−3

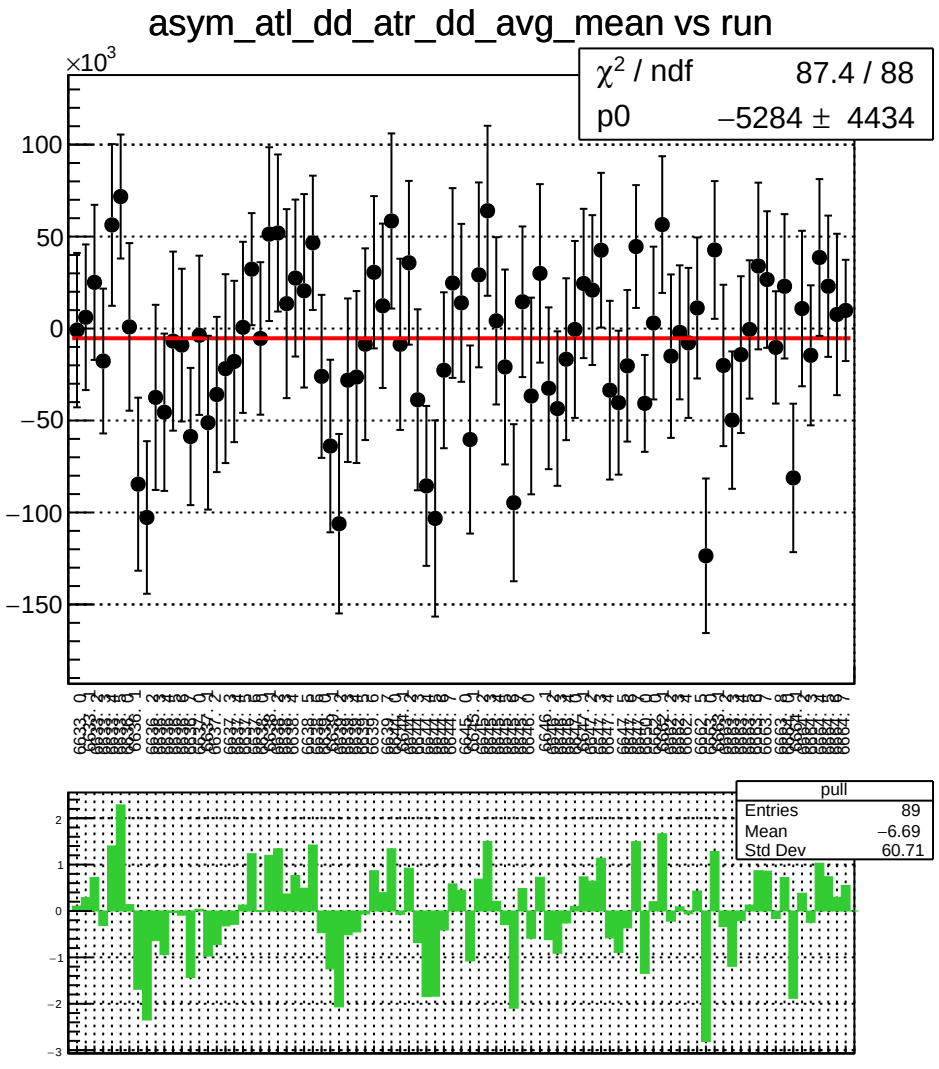

pull1D
Entries 89
Mean −0.02433
Std Dev 0.9907
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

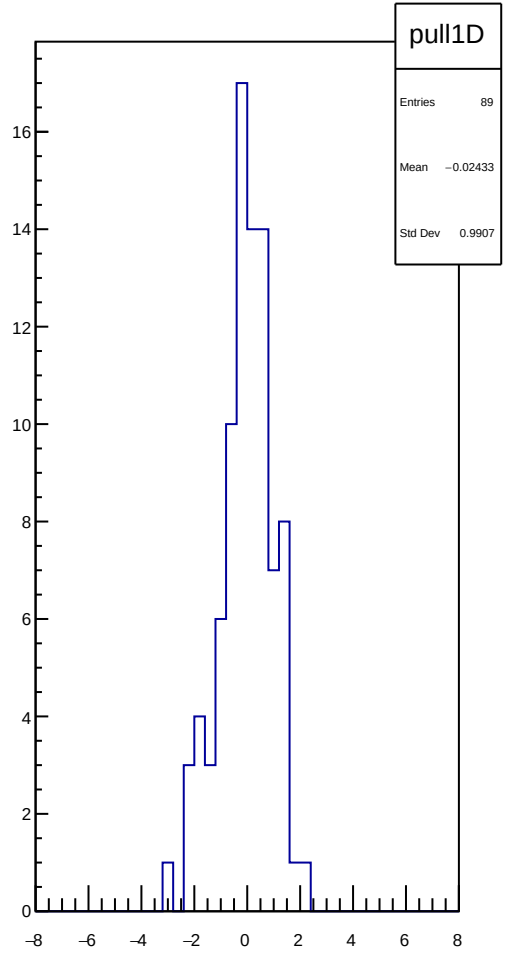

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 1.753e+04 / 88
p0 4087 ± 3.135
5200
5000
4800
4600
4400
4200
4000
3800
3600
3400
3200

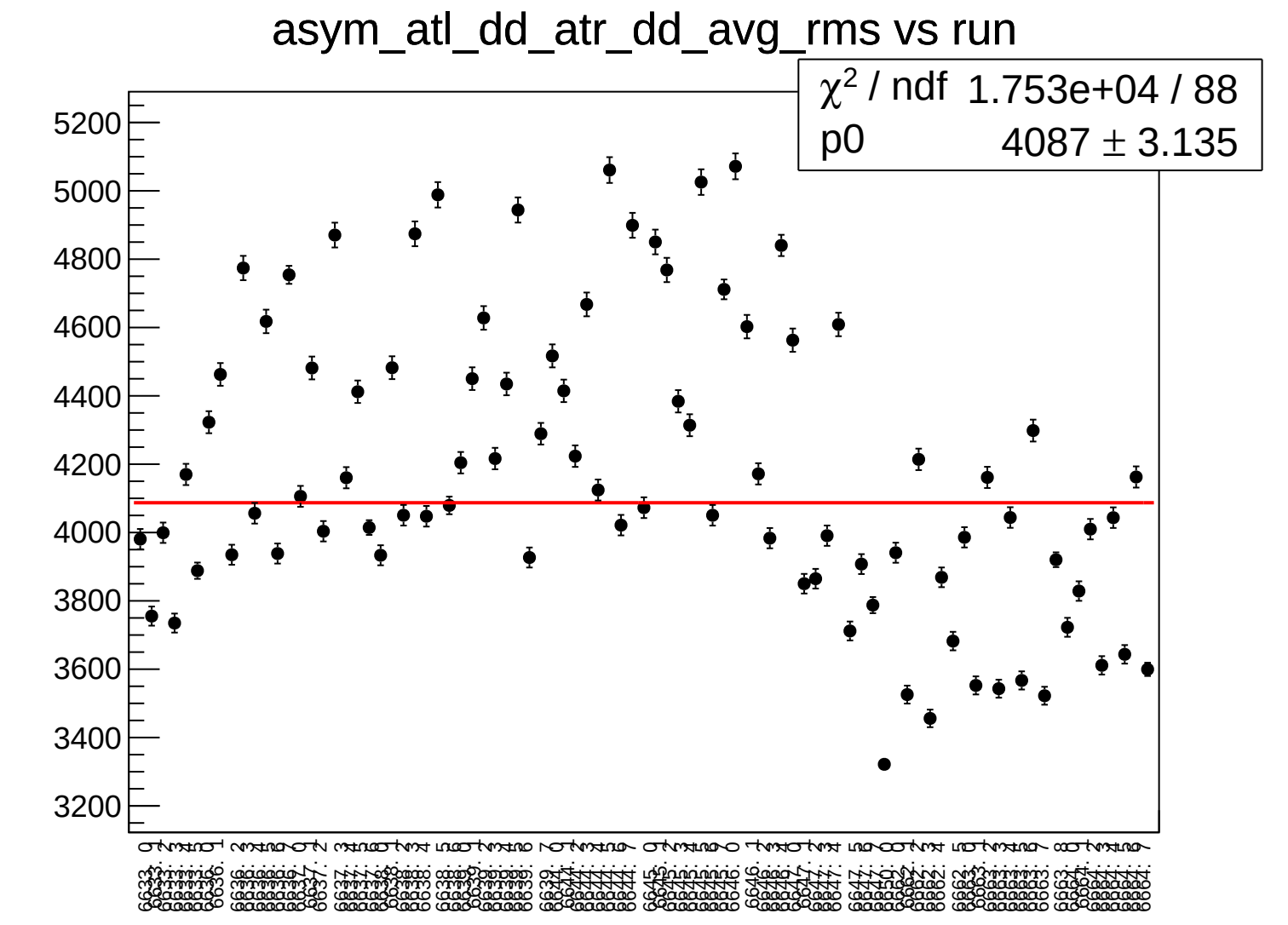

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ^2 / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

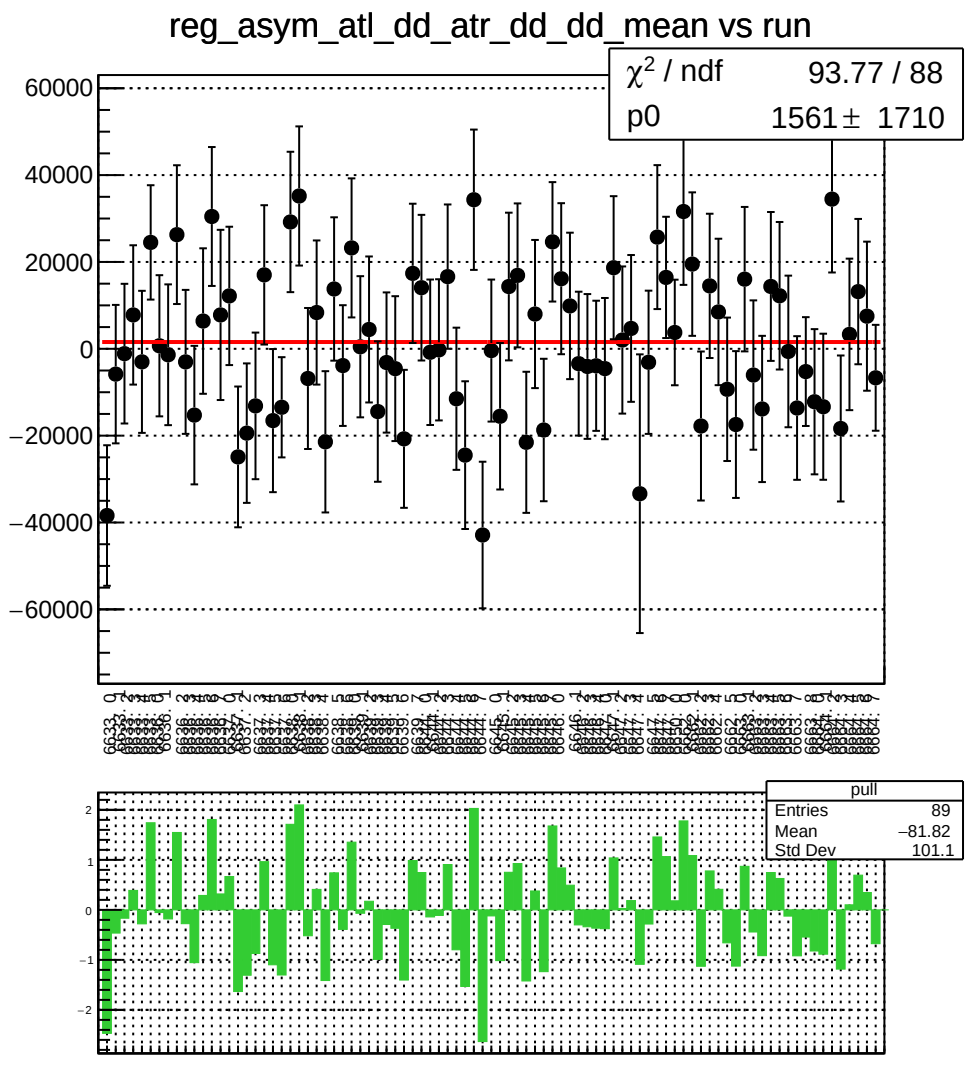

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

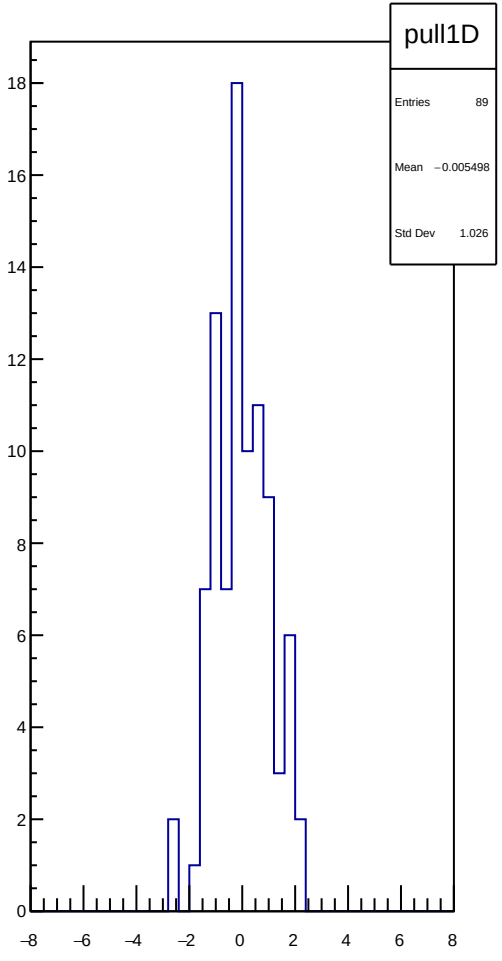

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

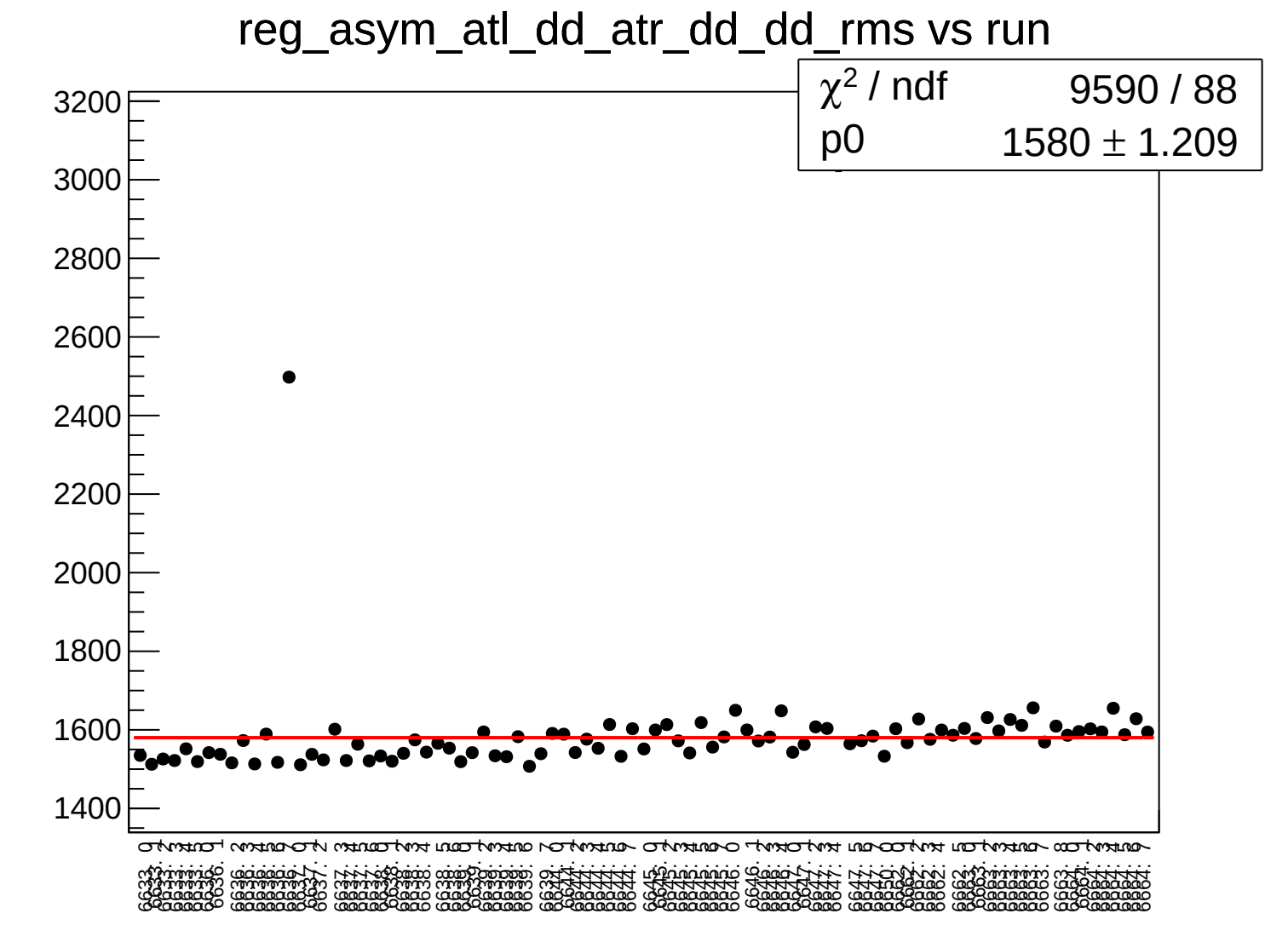

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ^2 / ndf 87.4 / 88
p0 −5284 ± 4434
100
50
0
−50
−100
−150
pull
Entries 89
Mean −6.69
Std Dev 60.71
2
1
0
−1
−2
−3

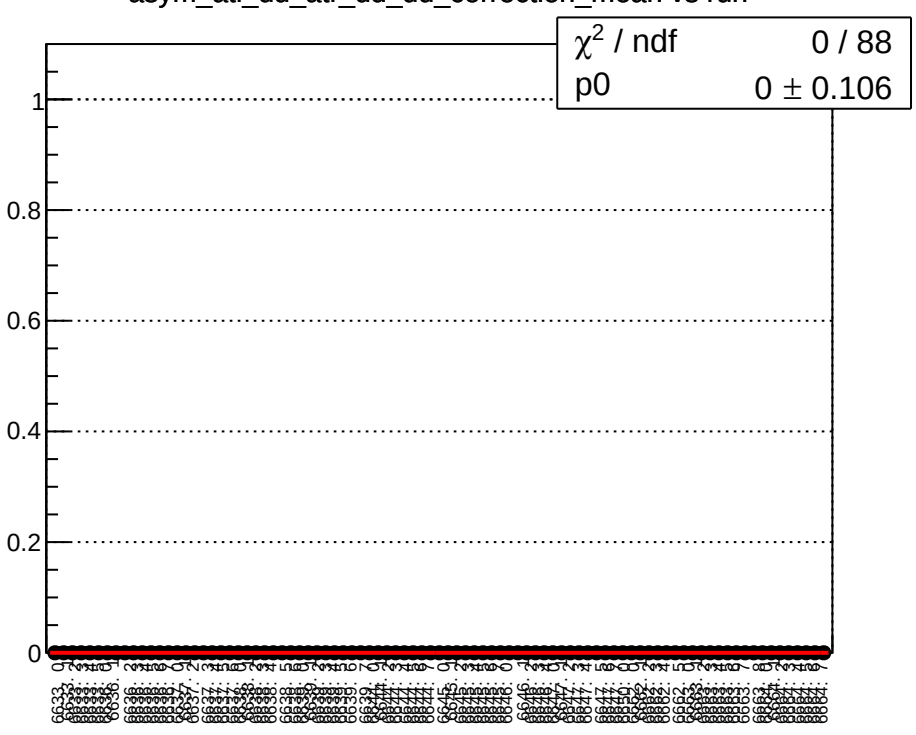

pull1D
Entries 89
Mean −0.02433
Std Dev 0.9907
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

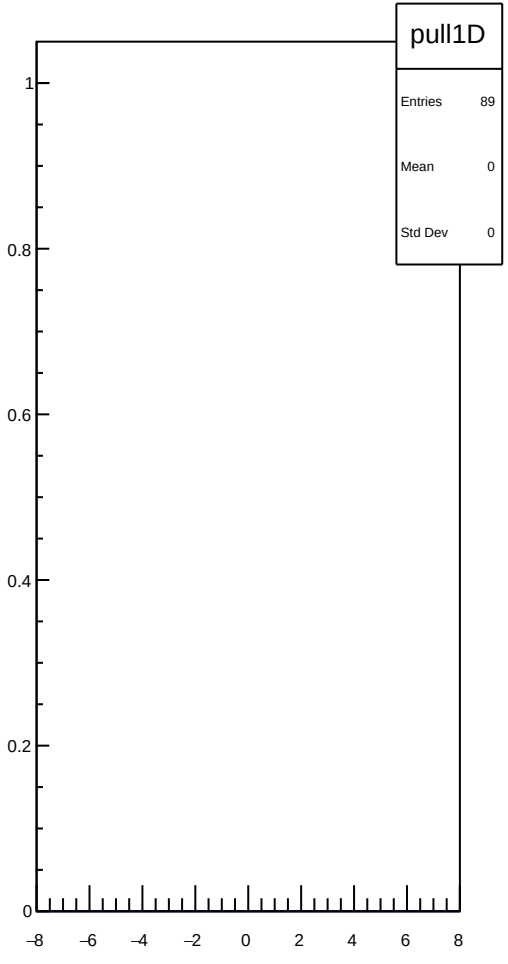

asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 1.753e+04 / 88
p0 4087 ± 3.135
5200
5000
4800
4600
4400
4200
4000
3800
3600
3400
3200

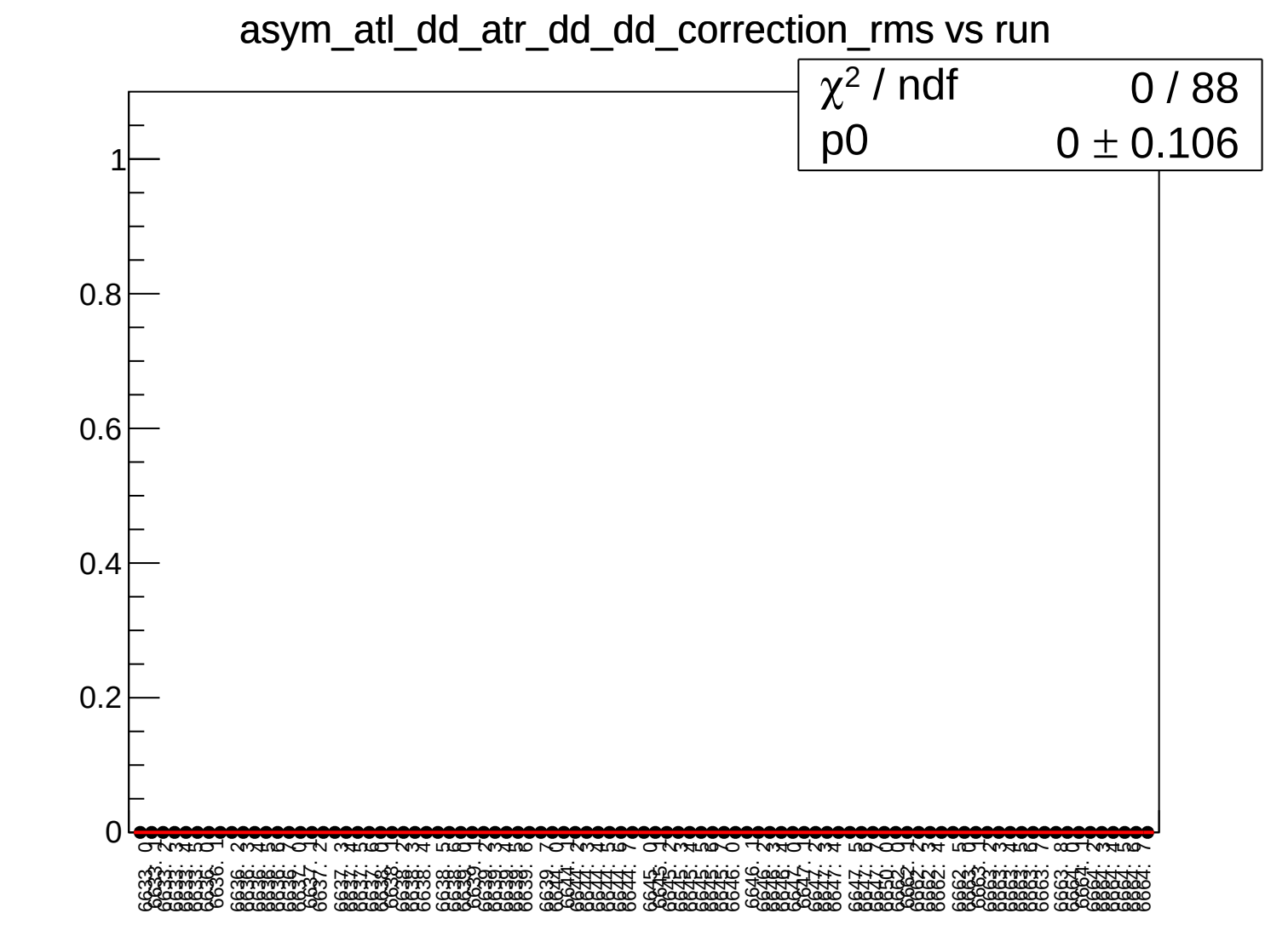

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 93.77 / 88
p0 1561 ± 1710
pull
Entries 89
Mean −81.82
Std Dev 101.1

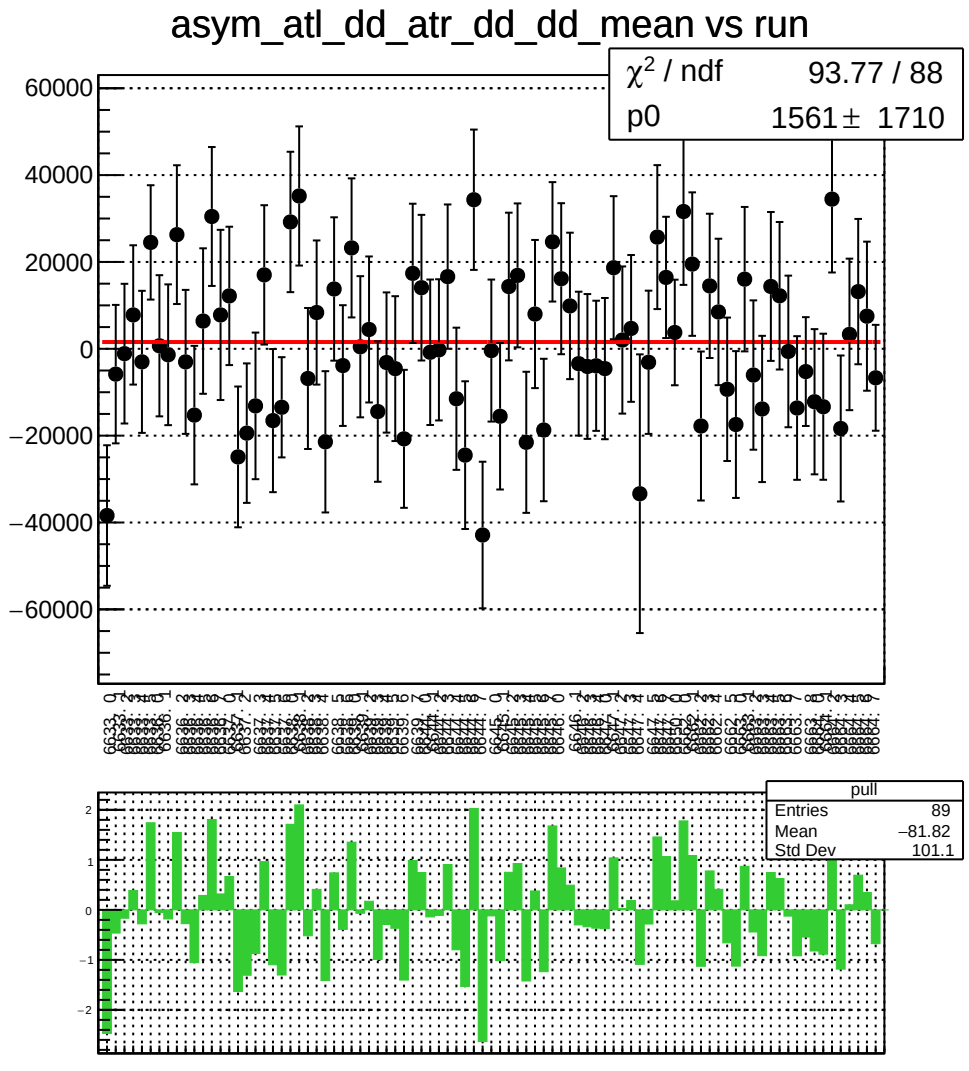

pull1D
Entries 89
Mean −0.005498
Std Dev 1.026

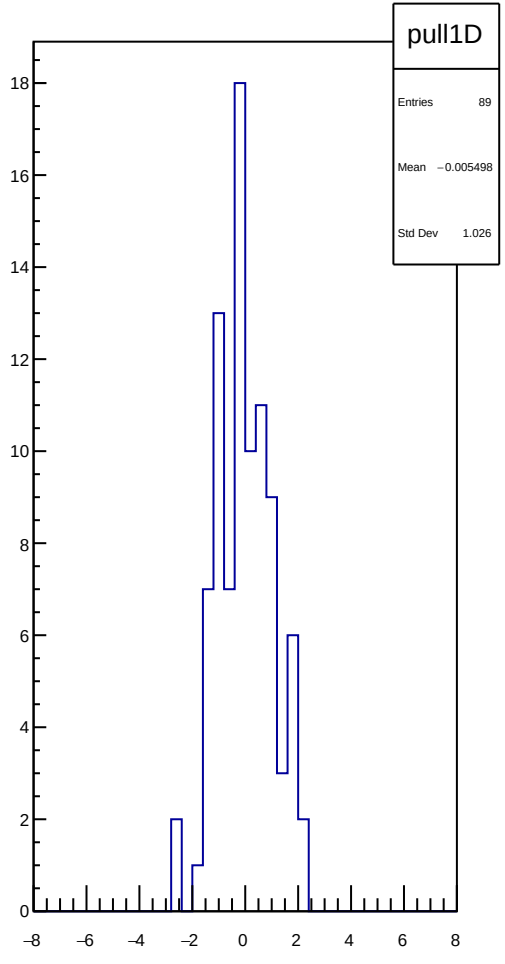

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 9590 / 88
p0 1580 ± 1.209
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

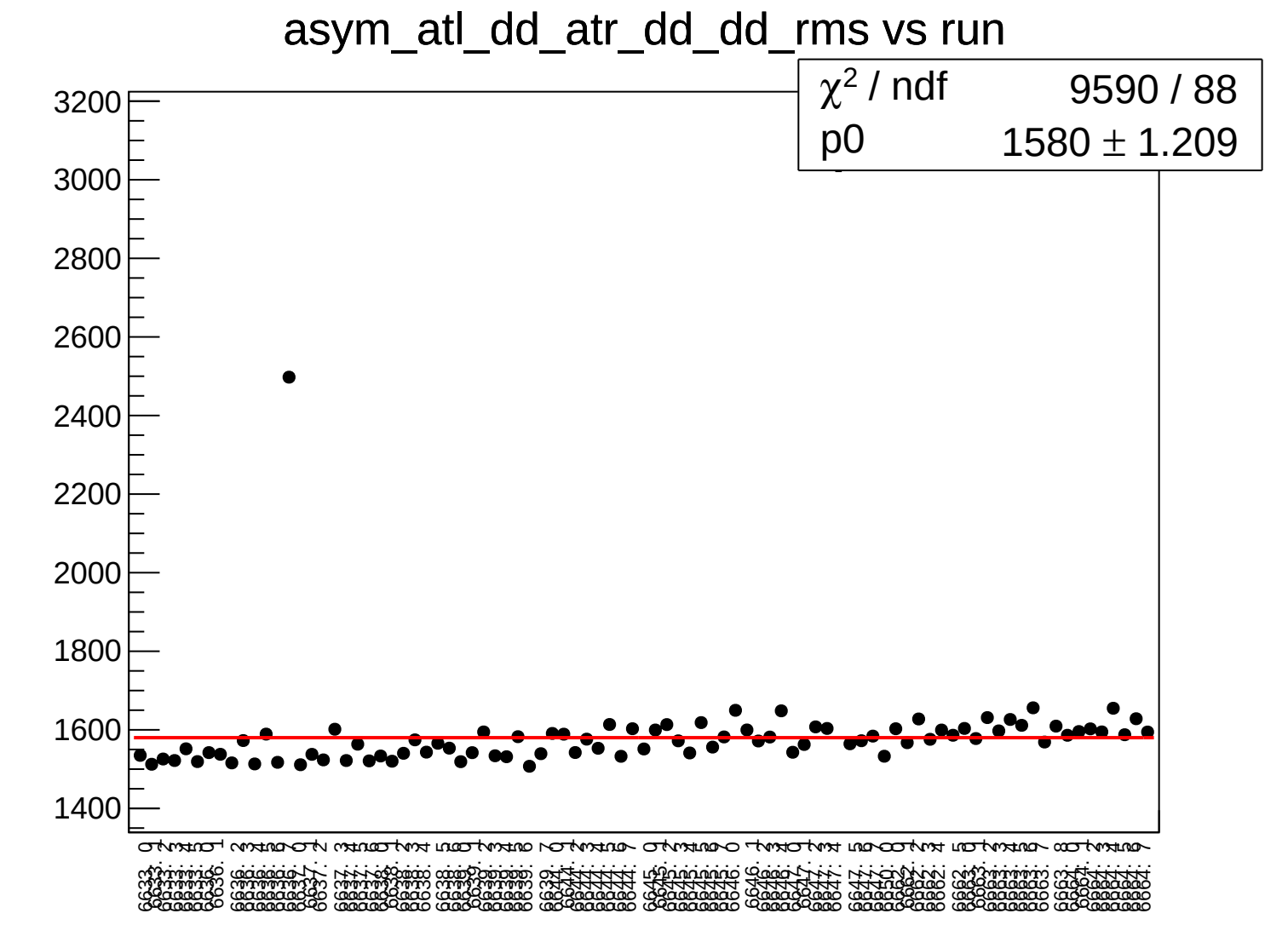

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ^2 / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

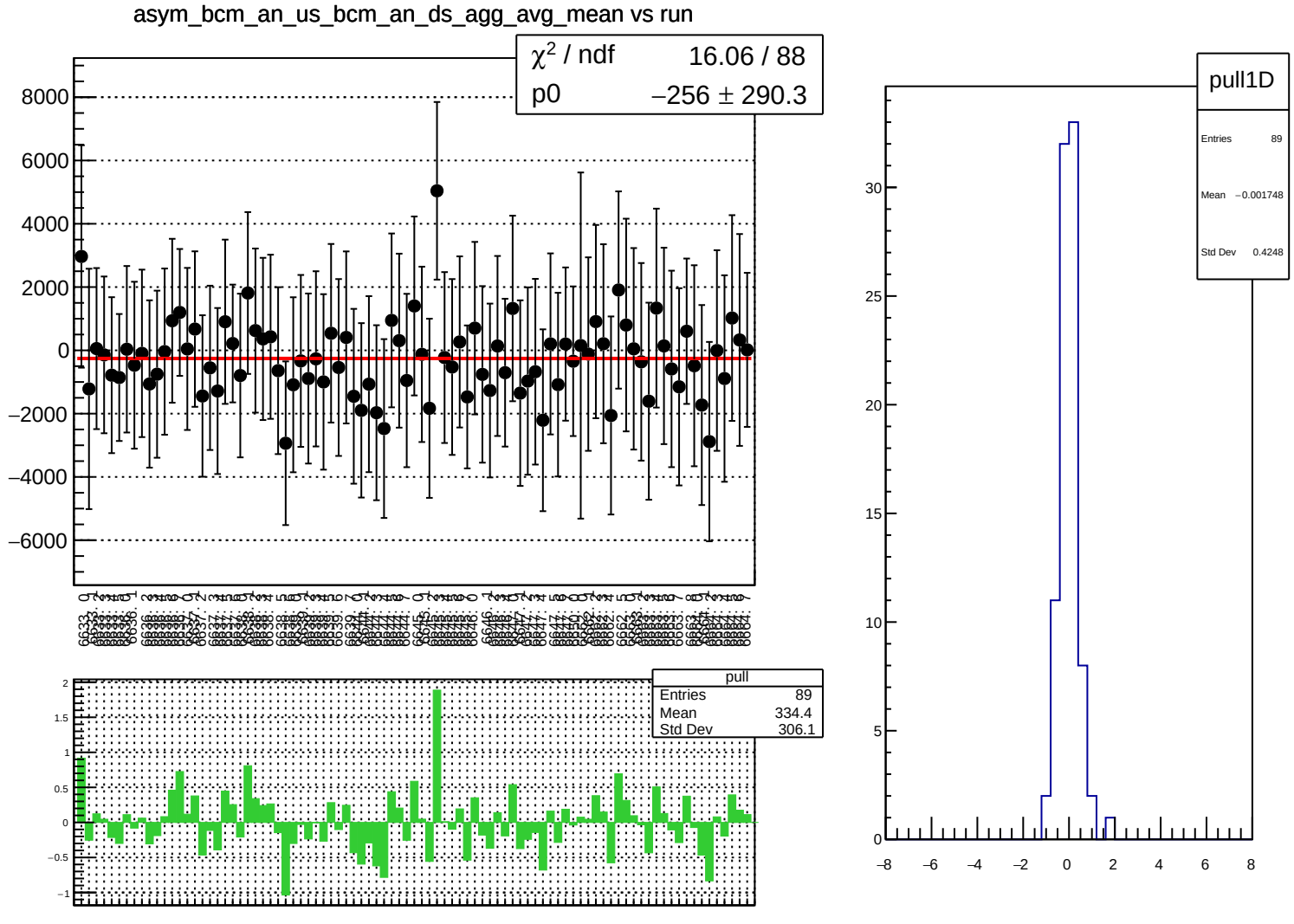

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

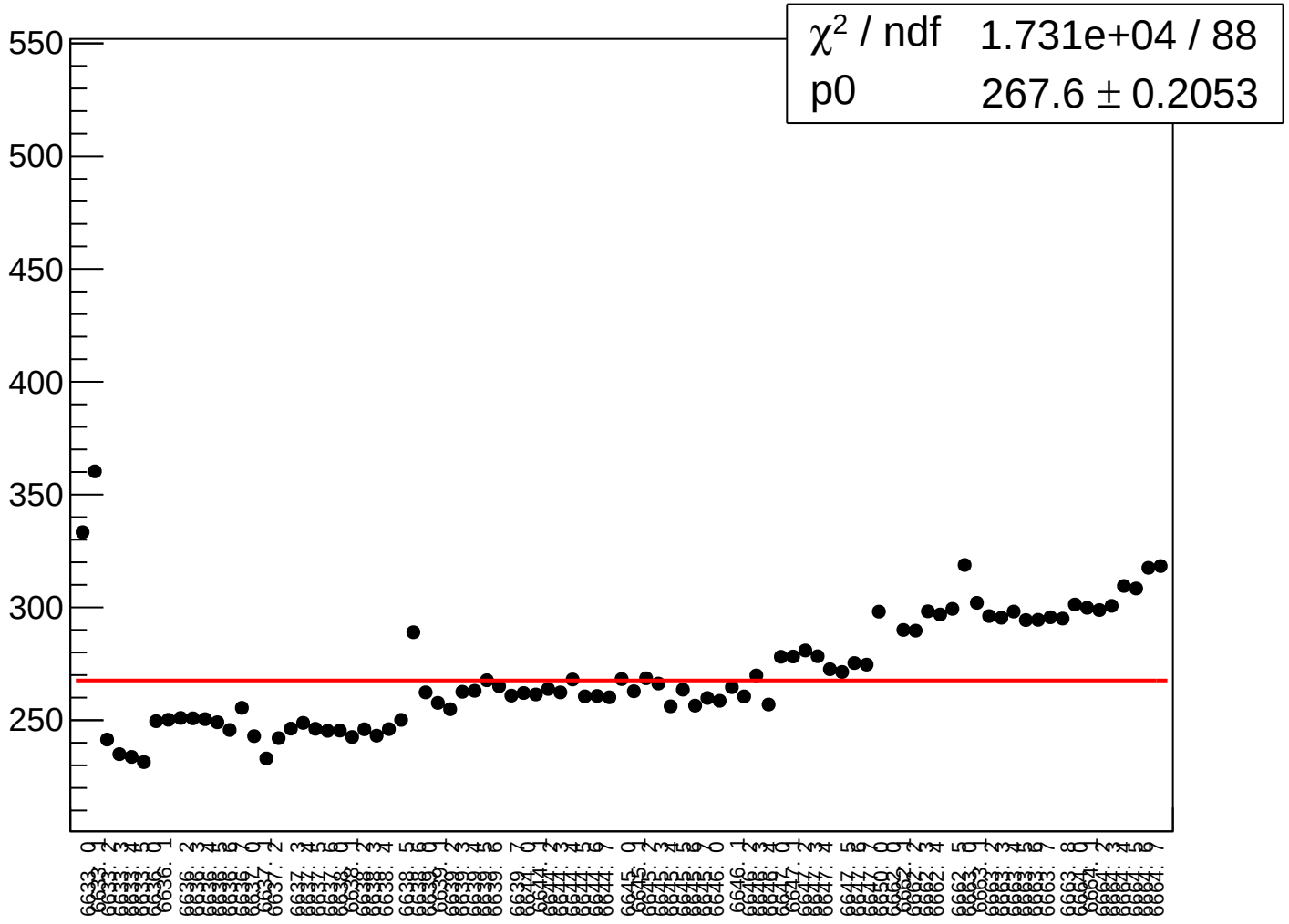

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

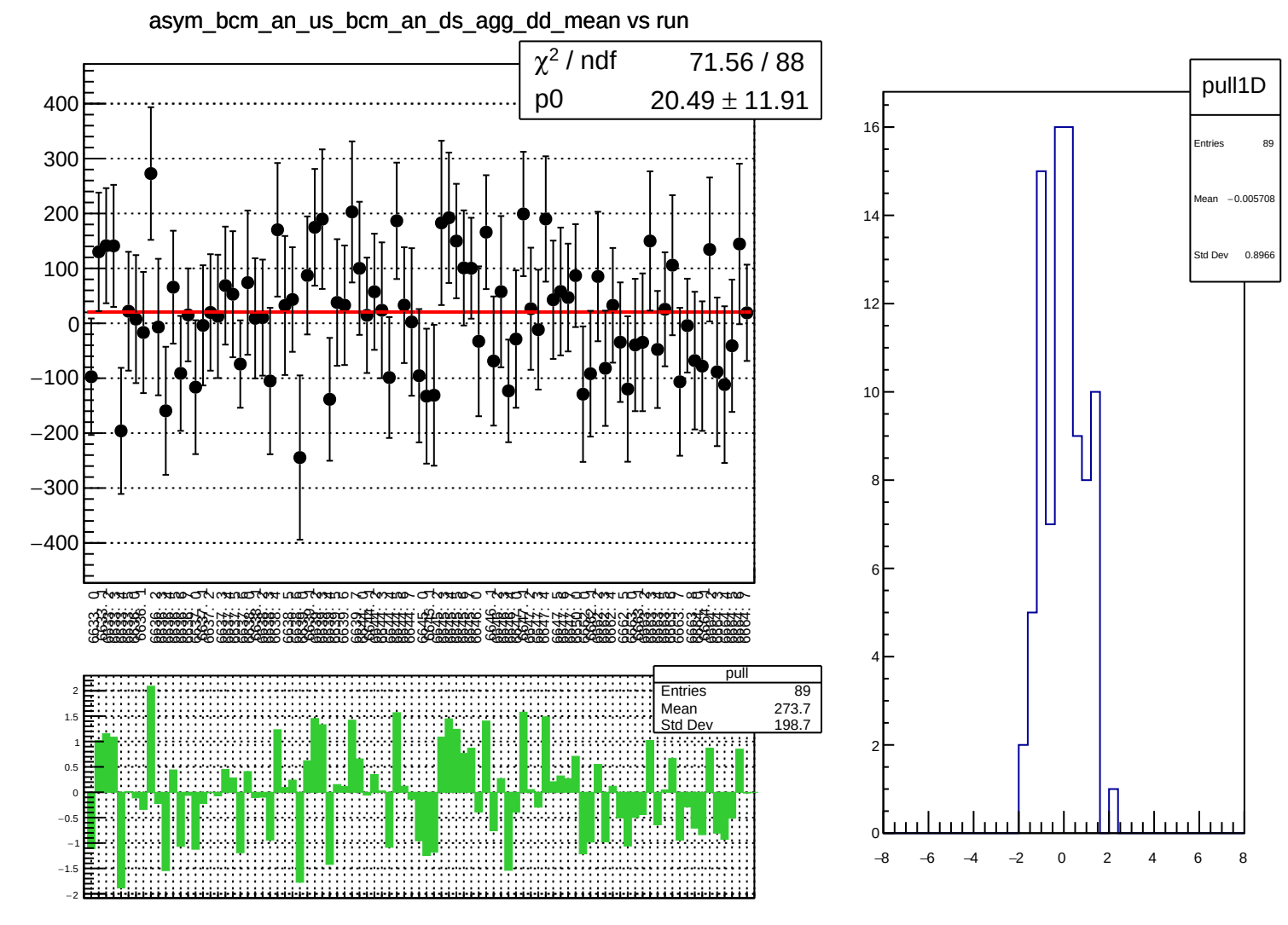

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 93.77 / 88
p0 1561 ± 1710
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −81.82
Std Dev 101.1
2
1
0
−1
−2

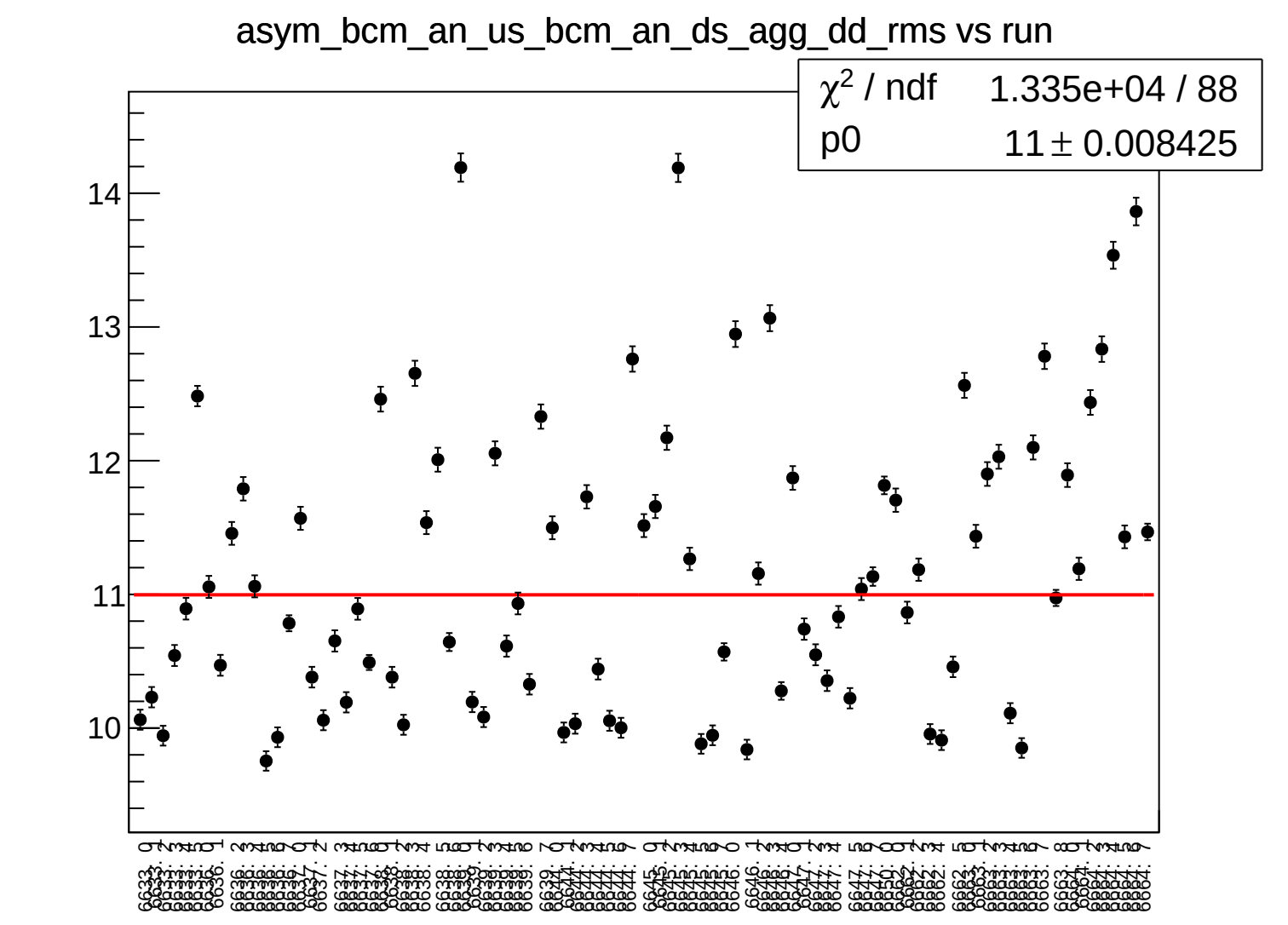

pull1D
Entries 89
Mean −0.005498
Std Dev 1.026
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

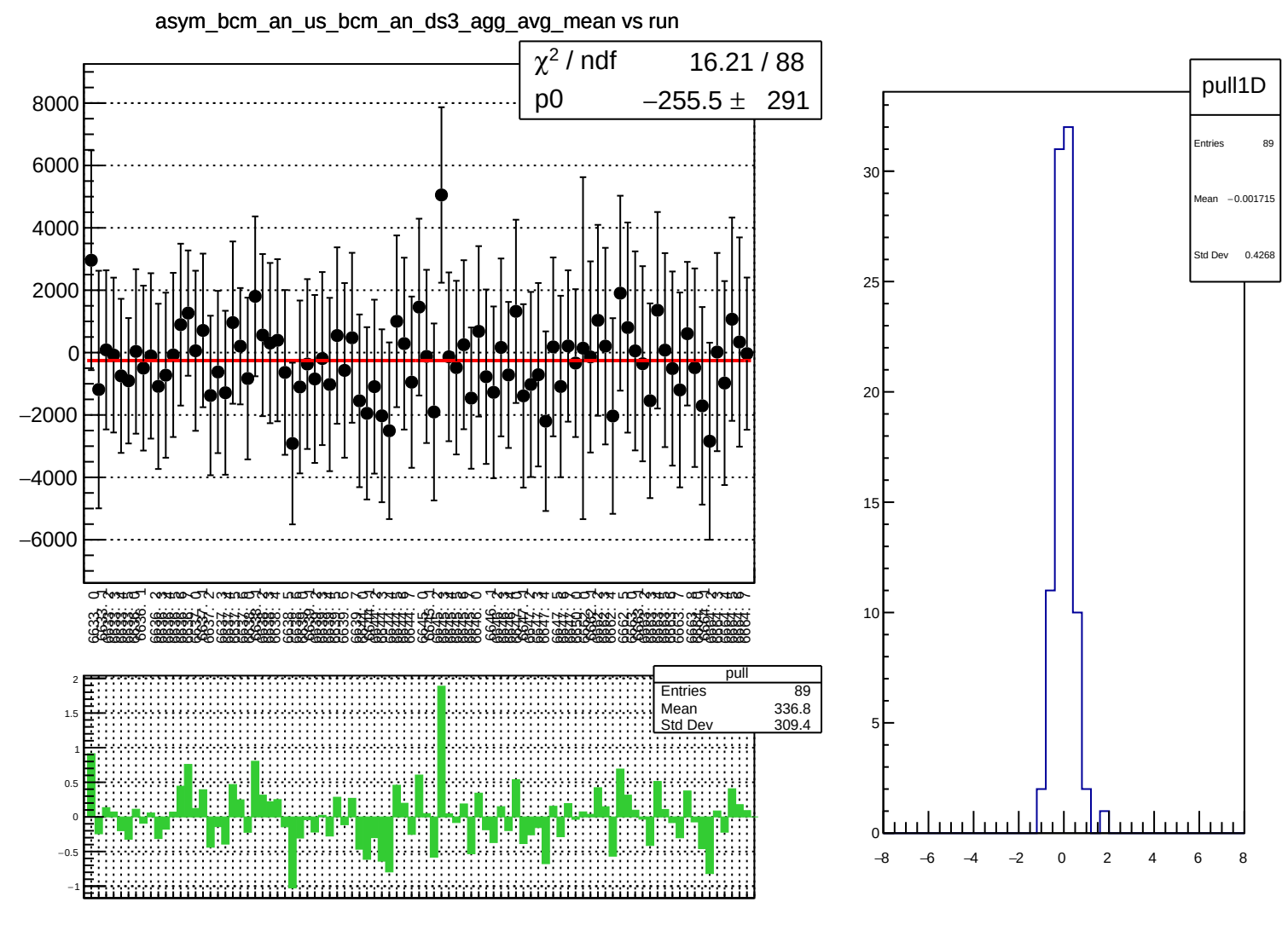

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 9590 / 88
p0 1580 ± 1.209
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

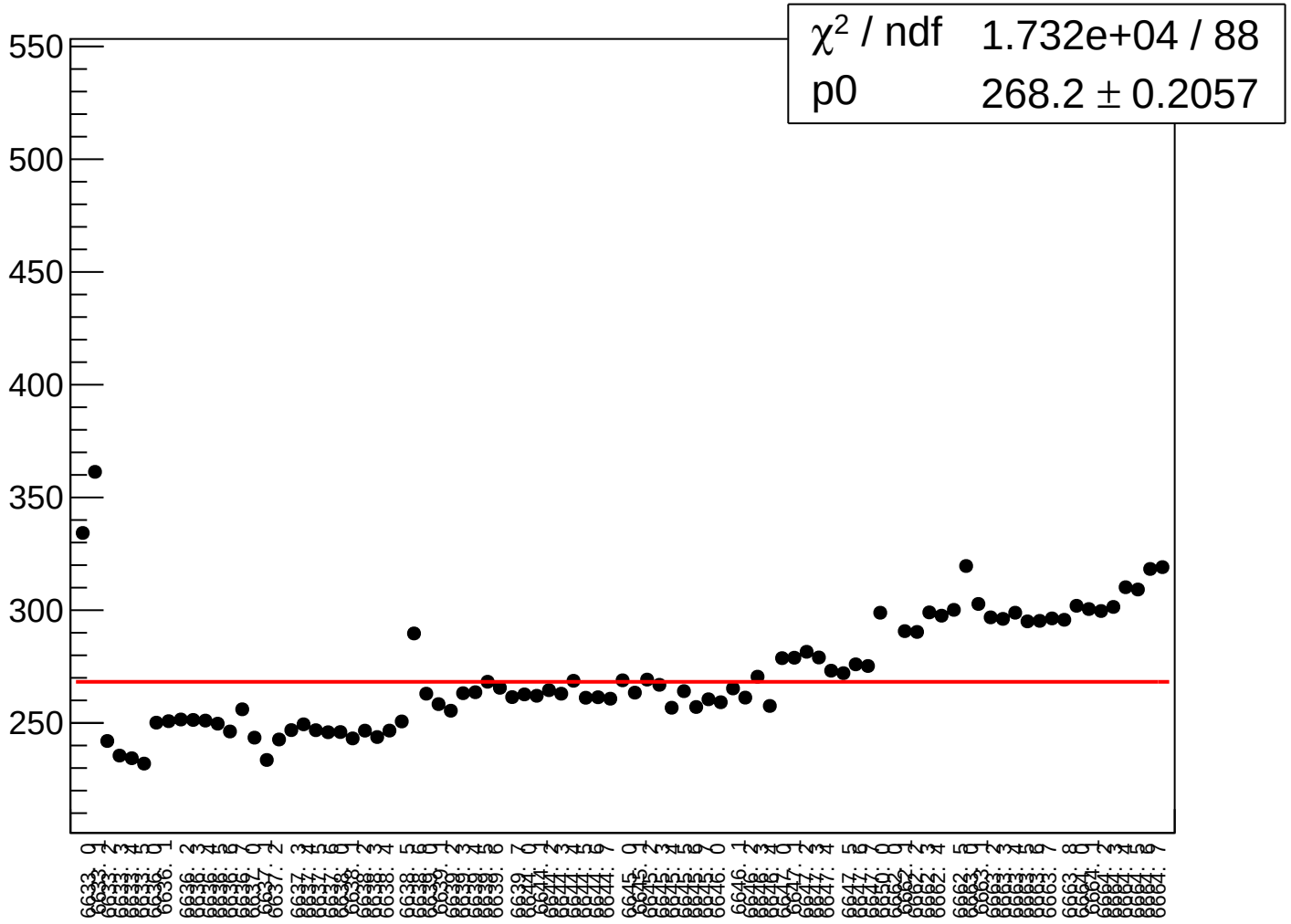

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.06 / 88
p0 −256 ± 290.3
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 334.4
Std Dev 306.1
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean −0.001748
Std Dev 0.4248
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

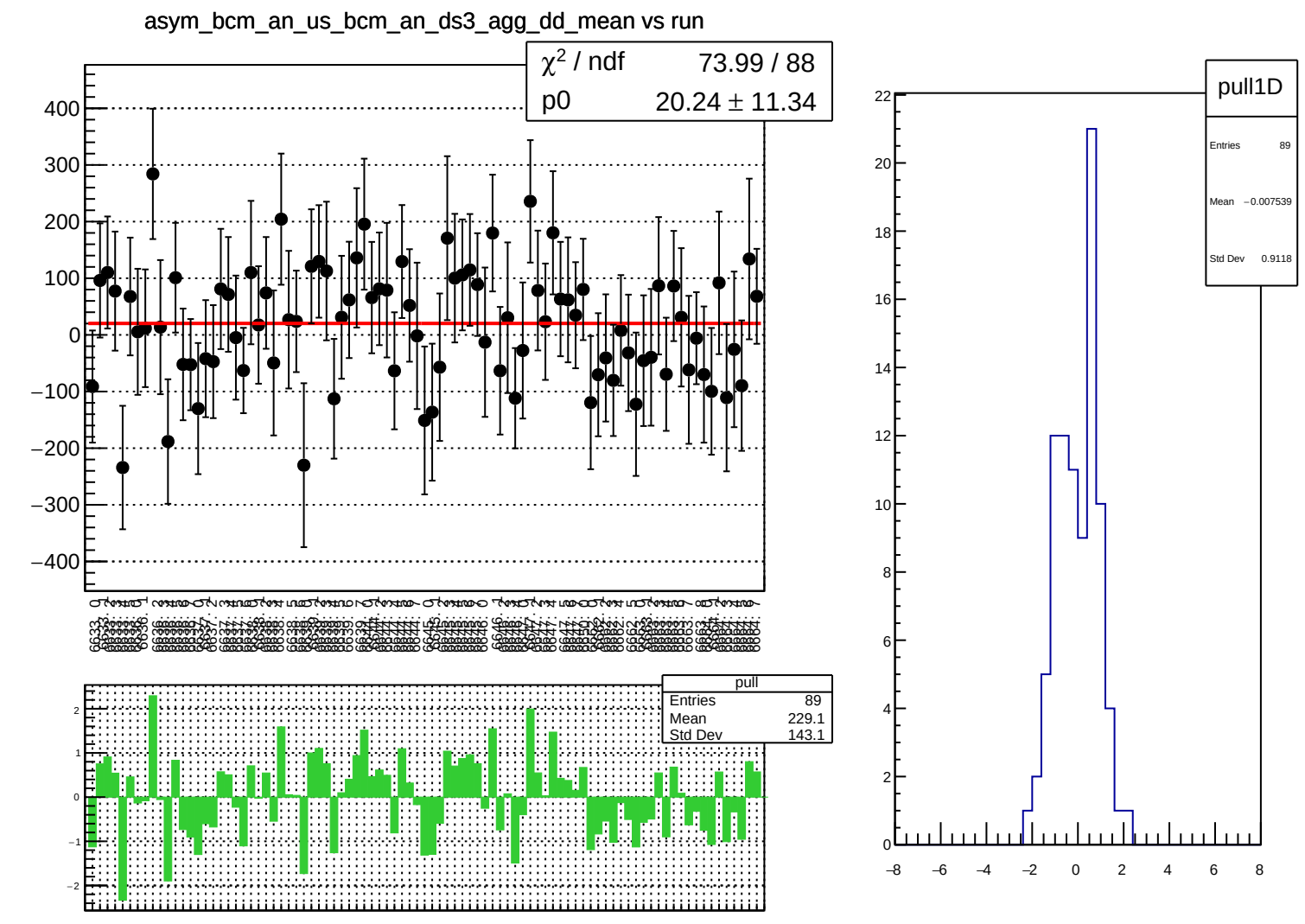

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ^2 / ndf 1.731e+04 / 88
p0 267.6 ± 0.2053
550
500
450
400
350
300
250

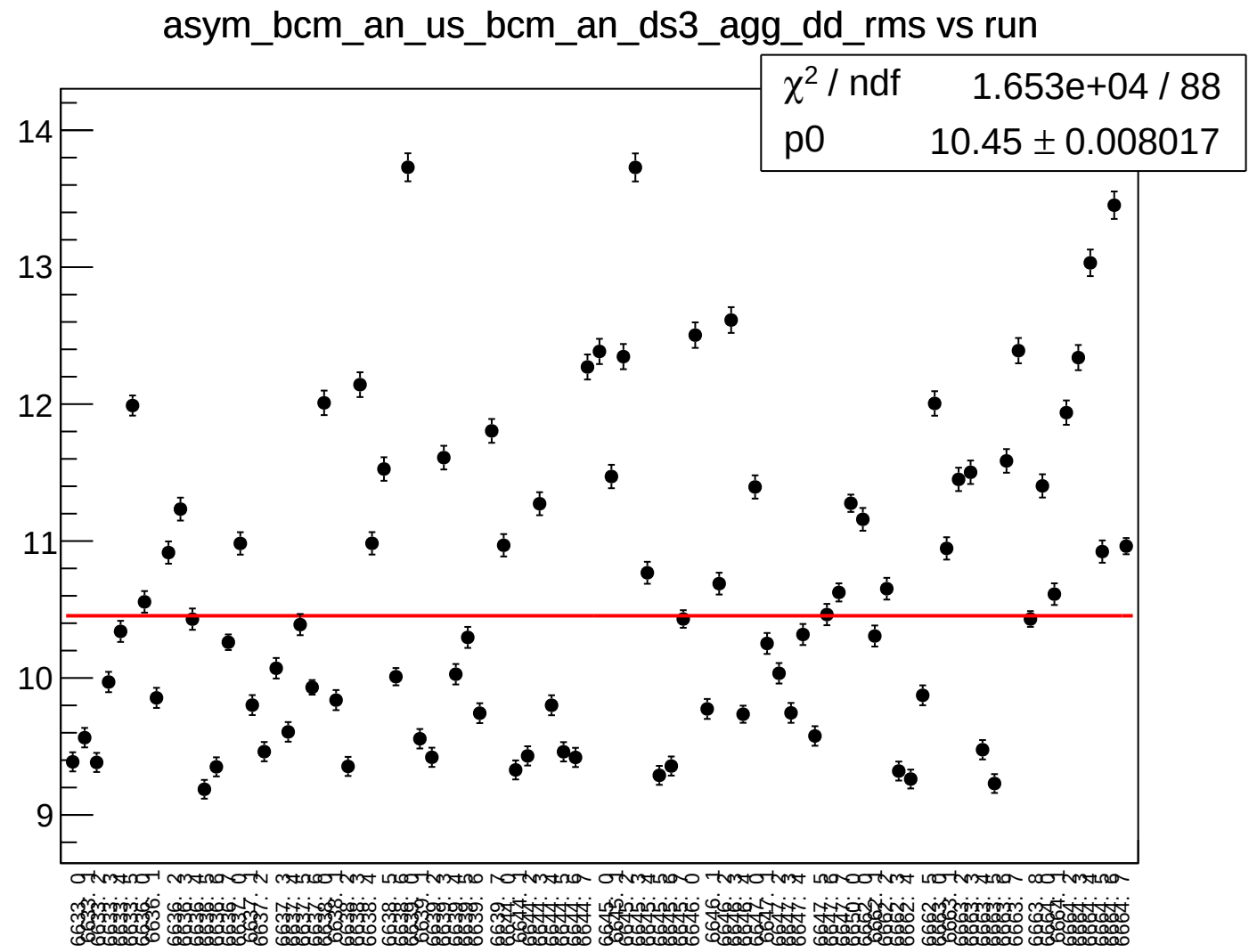

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 71.56 / 88
p0 20.49 ± 11.91
pull
Entries 89
Mean 273.7
Std Dev 198.7
pull1D
Entries 89
Mean −0.005708
Std Dev 0.8966

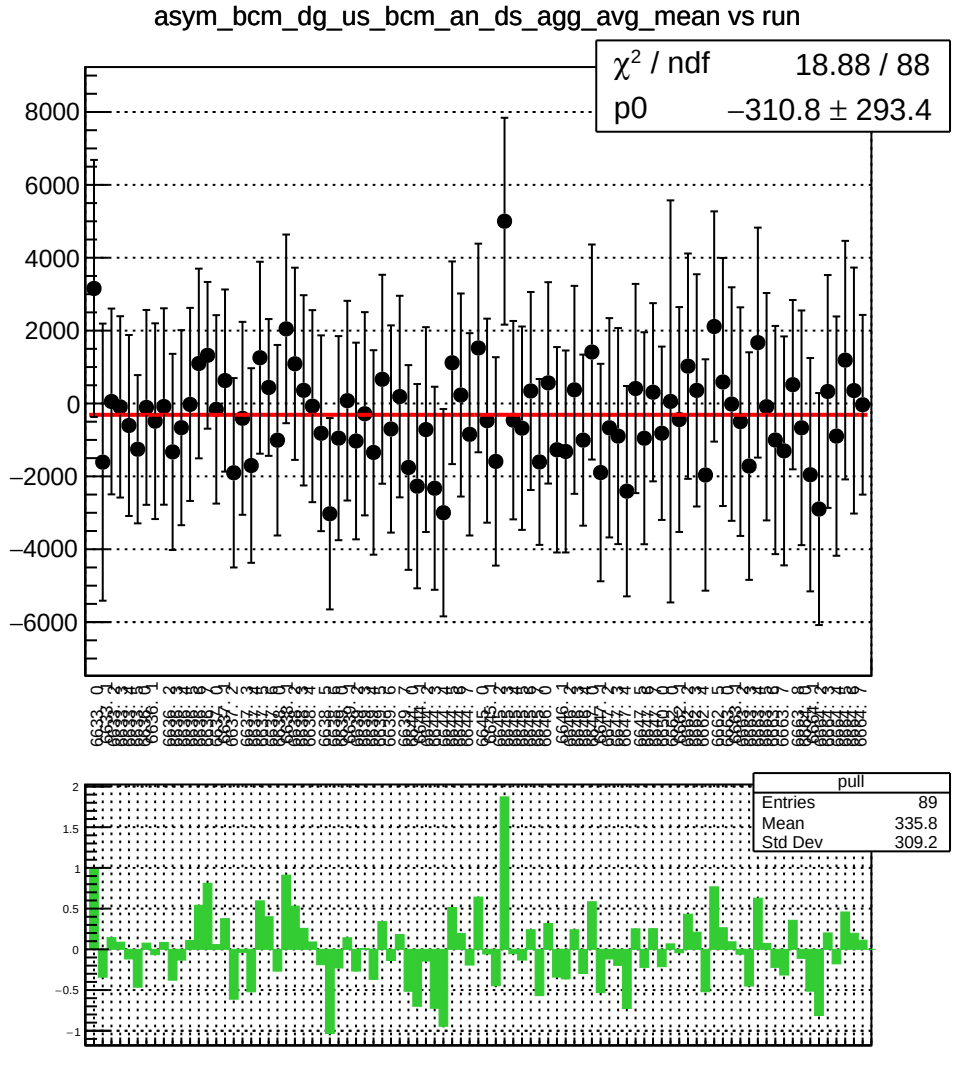

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.335e+04 / 88
p0 11 ± 0.008425
14
13
12
11
10

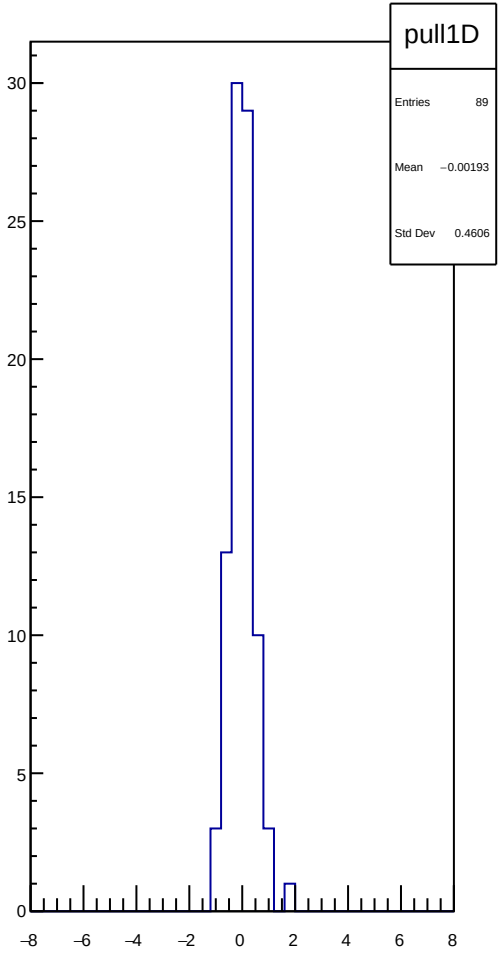

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 16.21 / 88
p0 −255.5 ± 291
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 336.8
Std Dev 309.4
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean −0.001715
Std Dev 0.4268
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

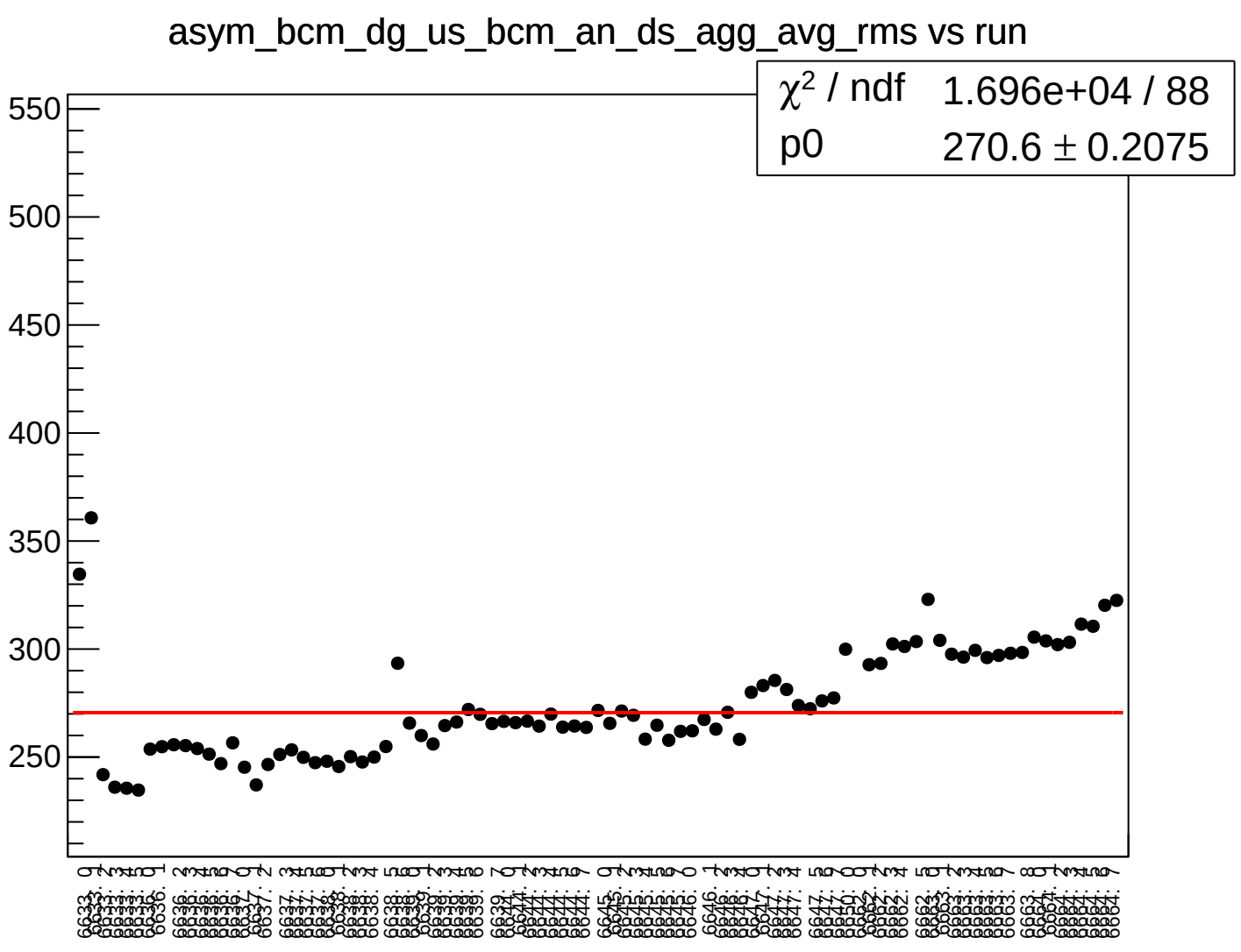

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.732e+04 / 88
p0 268.2 ± 0.2057
550
500
450
400
350
300
250

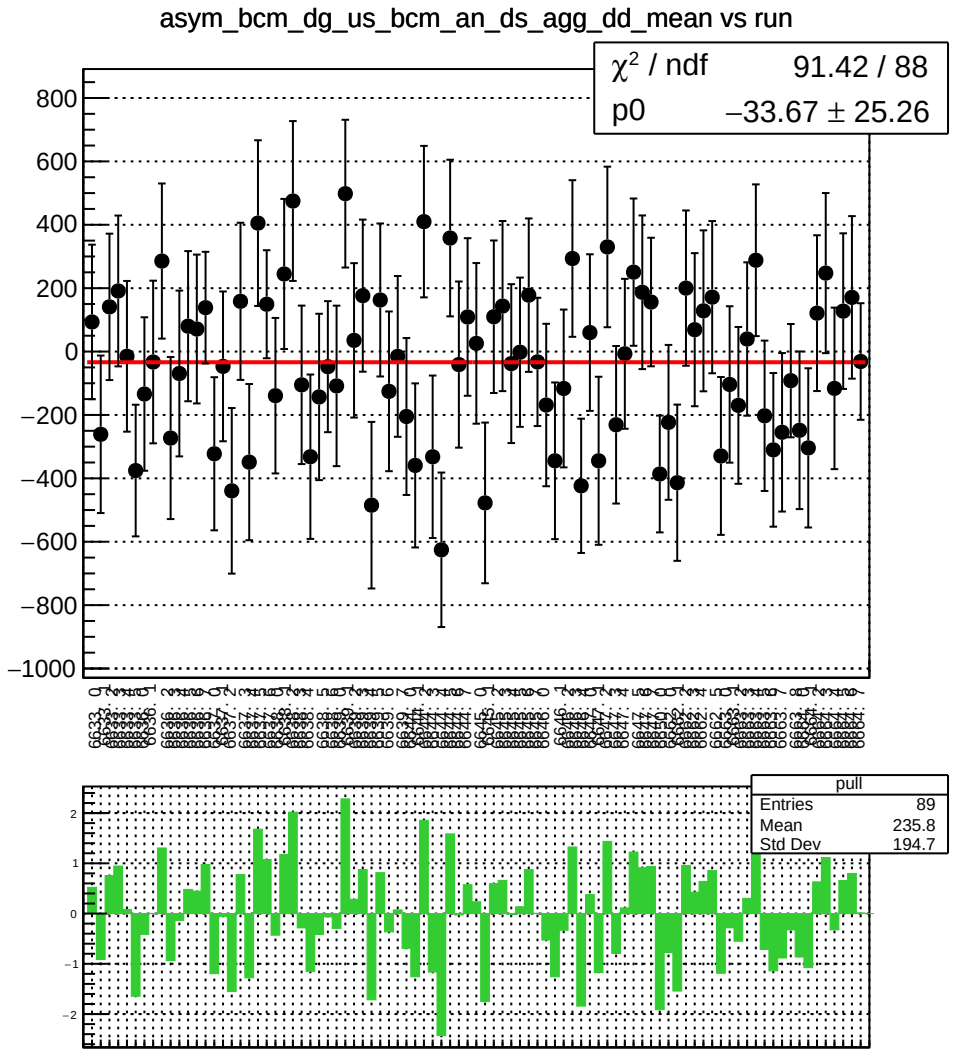

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 73.99 / 88
p0 20.24 ± 11.34
pull
Entries 89
Mean 229.1
Std Dev 143.1
pull1D
Entries 89
Mean −0.007539
Std Dev 0.9118

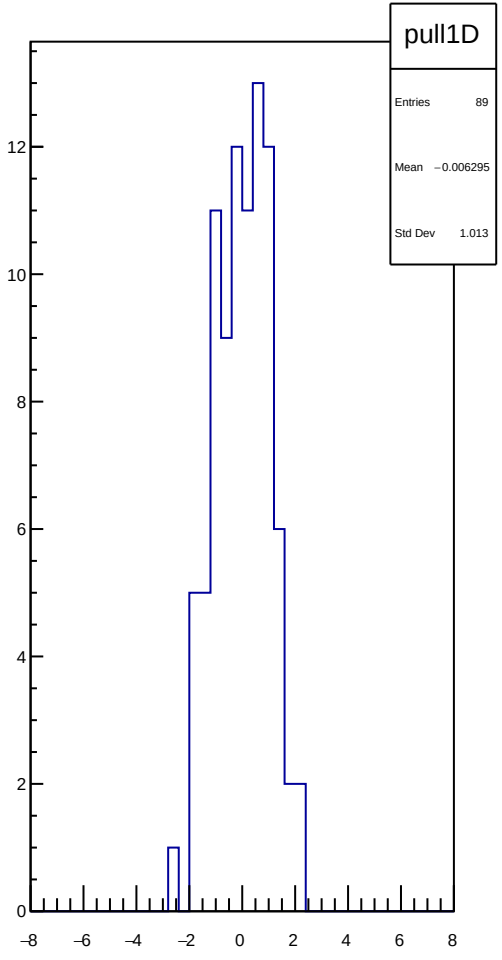

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.653e+04 / 88
p0 10.45 ± 0.008017
14
13
12
11
10
9

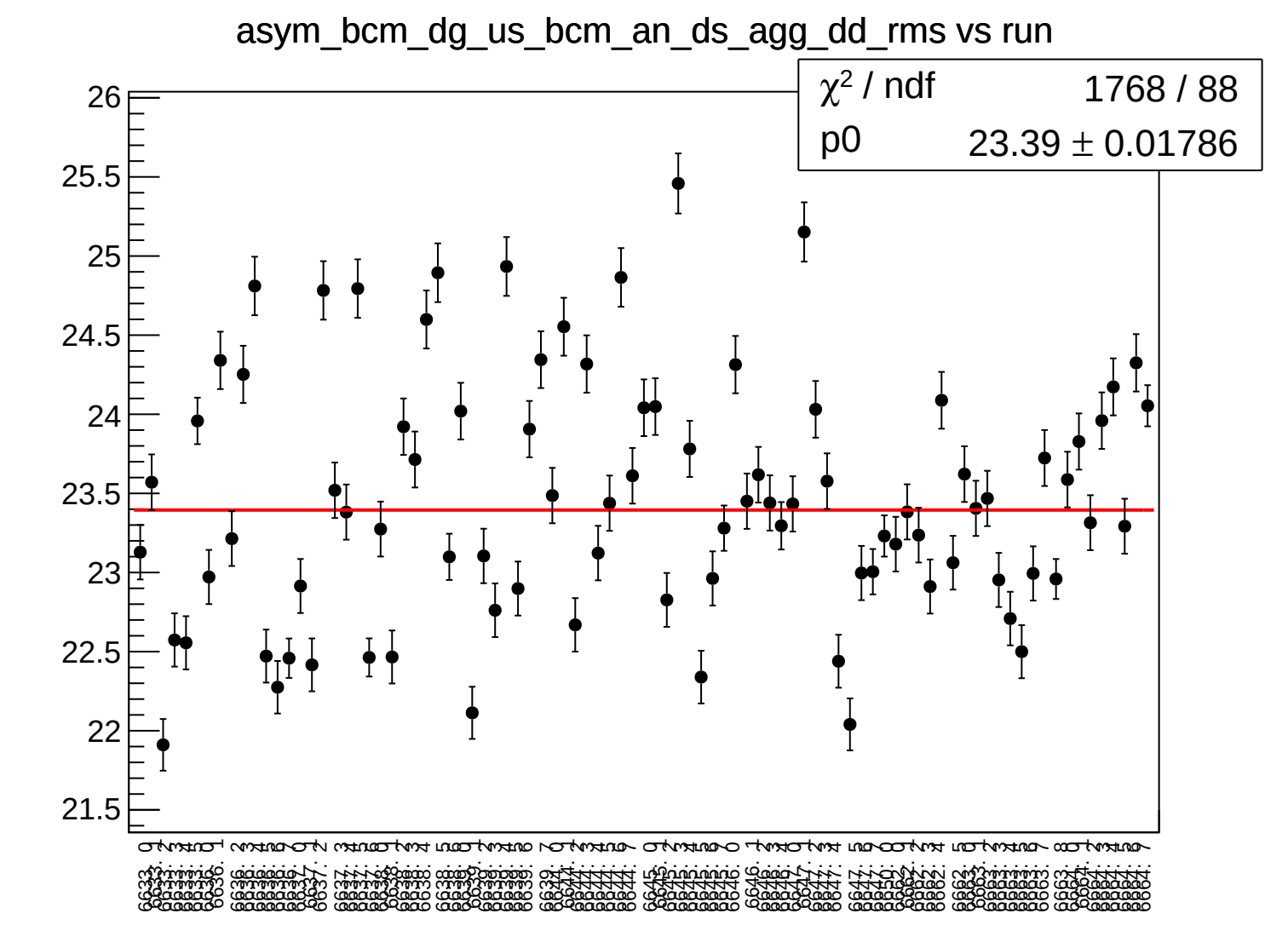

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.88 / 88
p0 −310.8 ± 293.4
pull
Entries 89
Mean 335.8
Std Dev 309.2

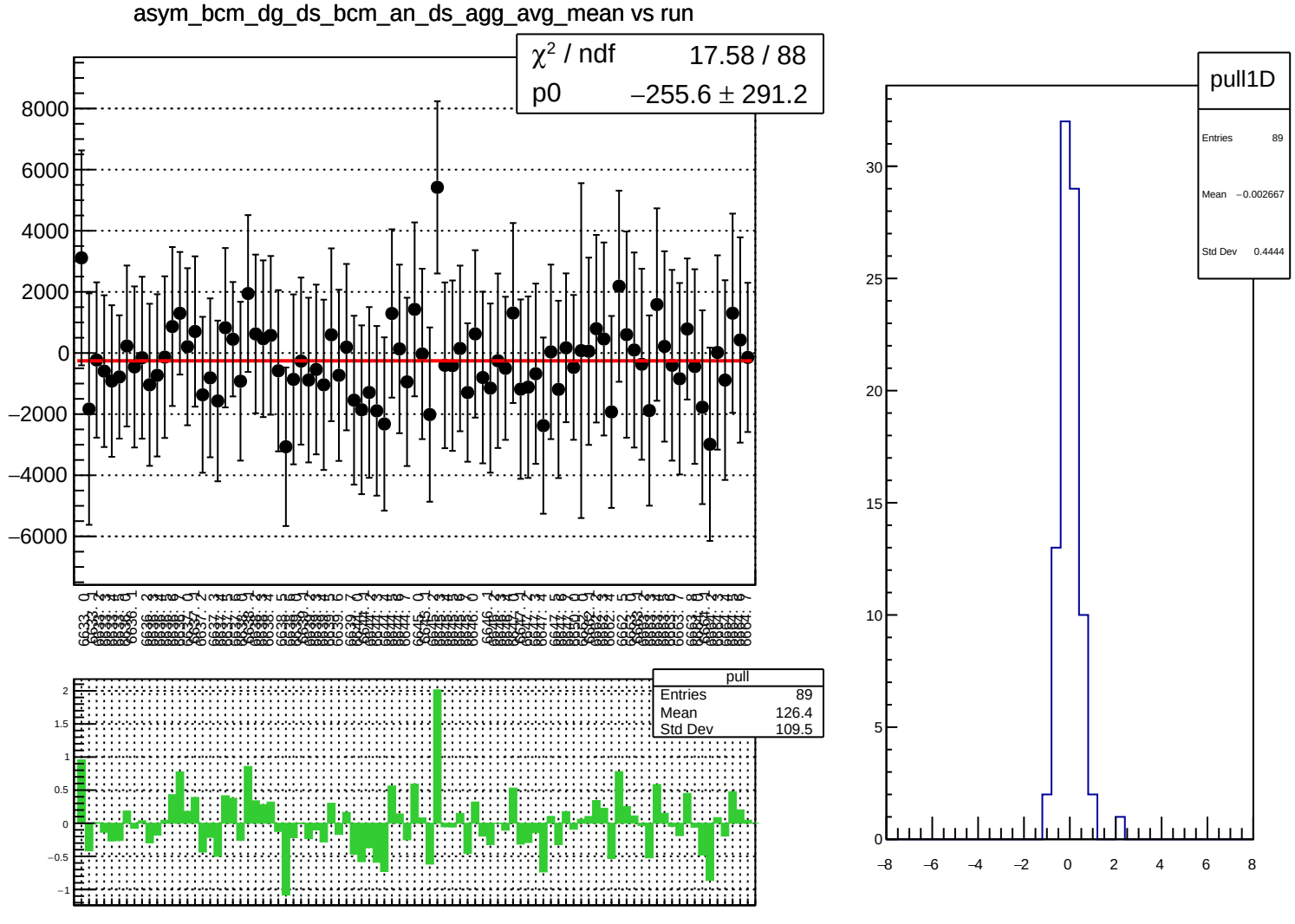

pull1D
Entries 89
Mean −0.00193
Std Dev 0.4606

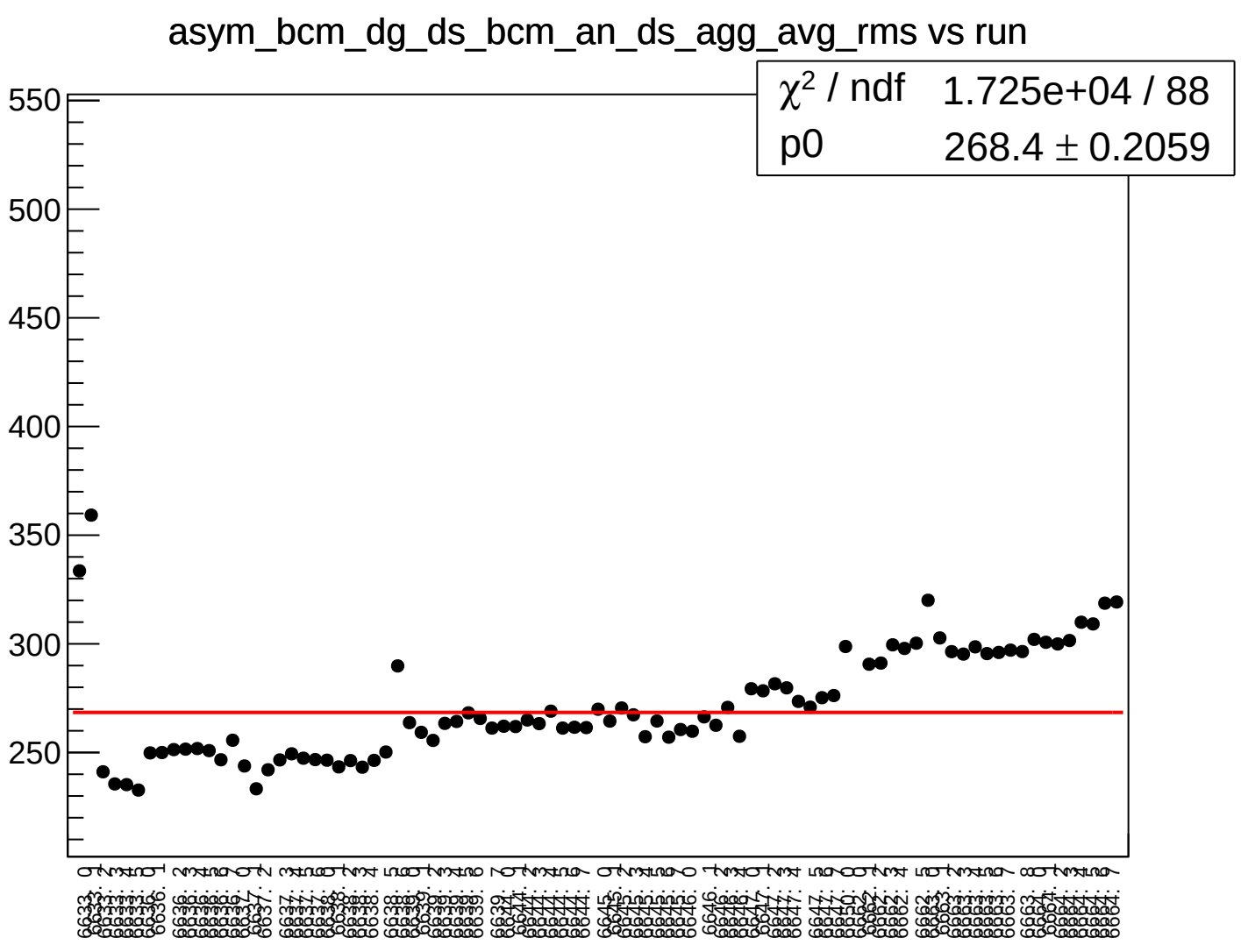

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.696e+04 / 88
p0 270.6 ± 0.2075
550
500
450
400
350
300
250

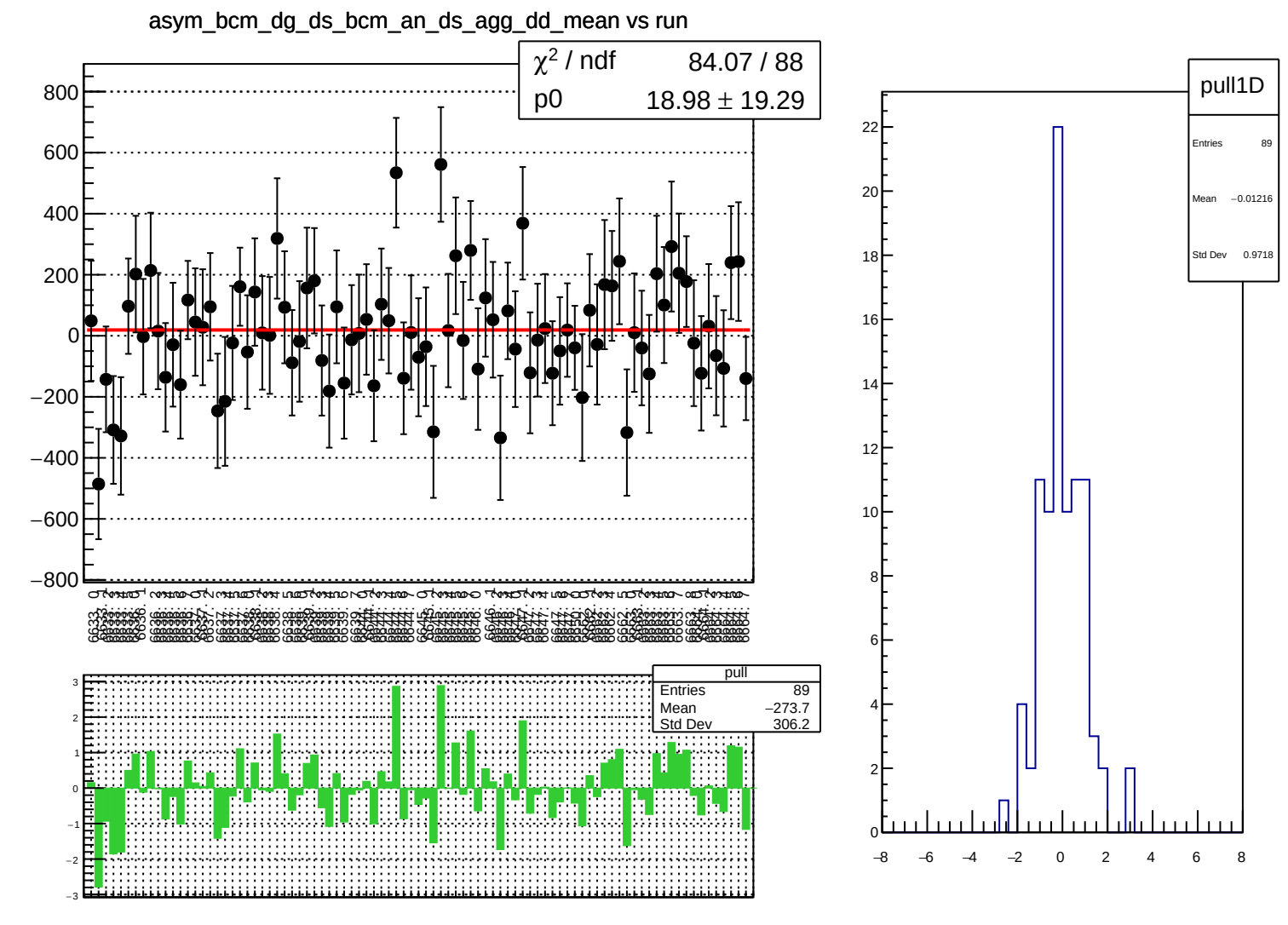

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.42 / 88
p0 −33.67 ± 25.26
pull
Entries 89
Mean 235.8
Std Dev 194.7

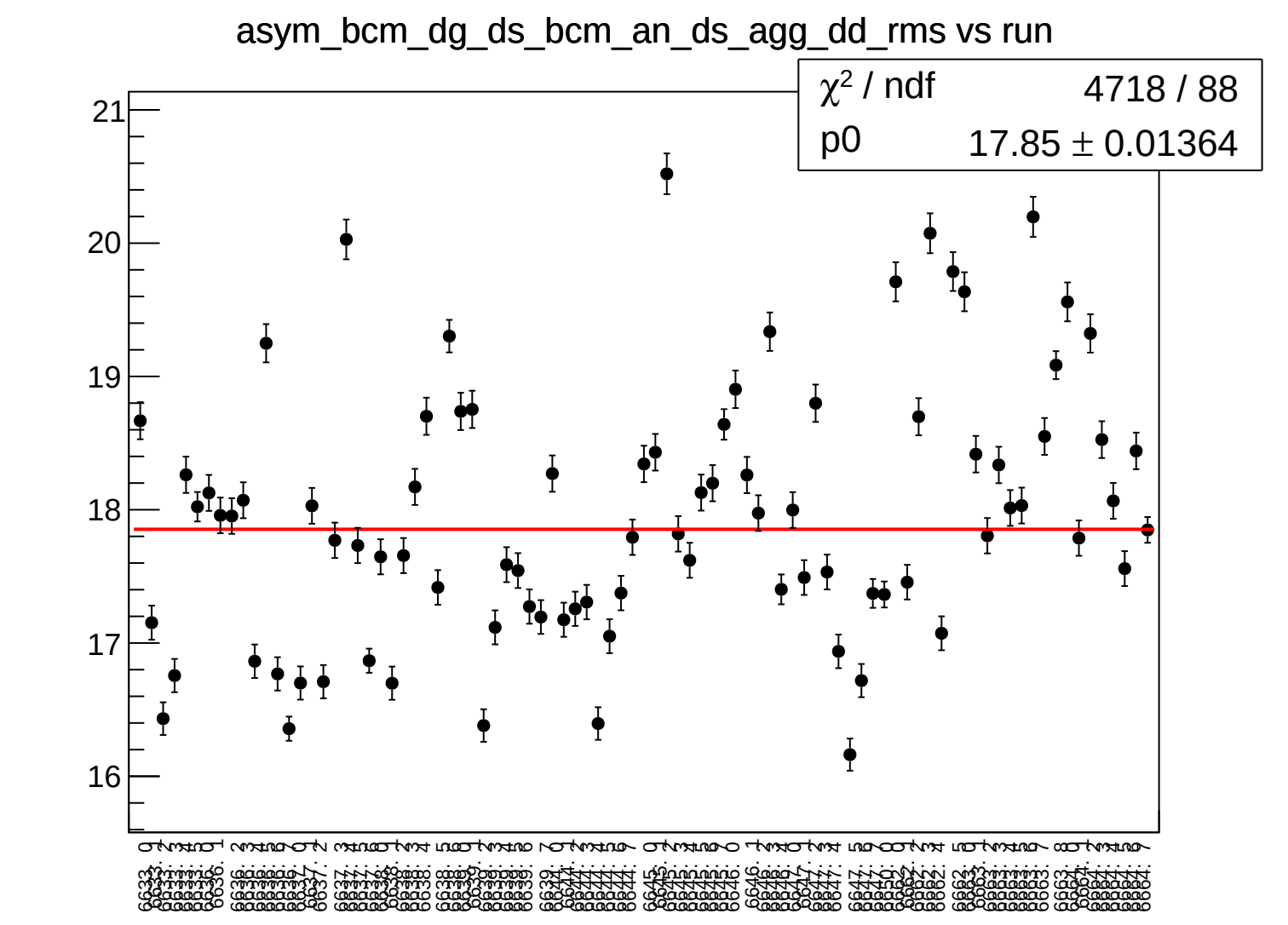

pull1D
Entries 89
Mean −0.006295
Std Dev 1.013

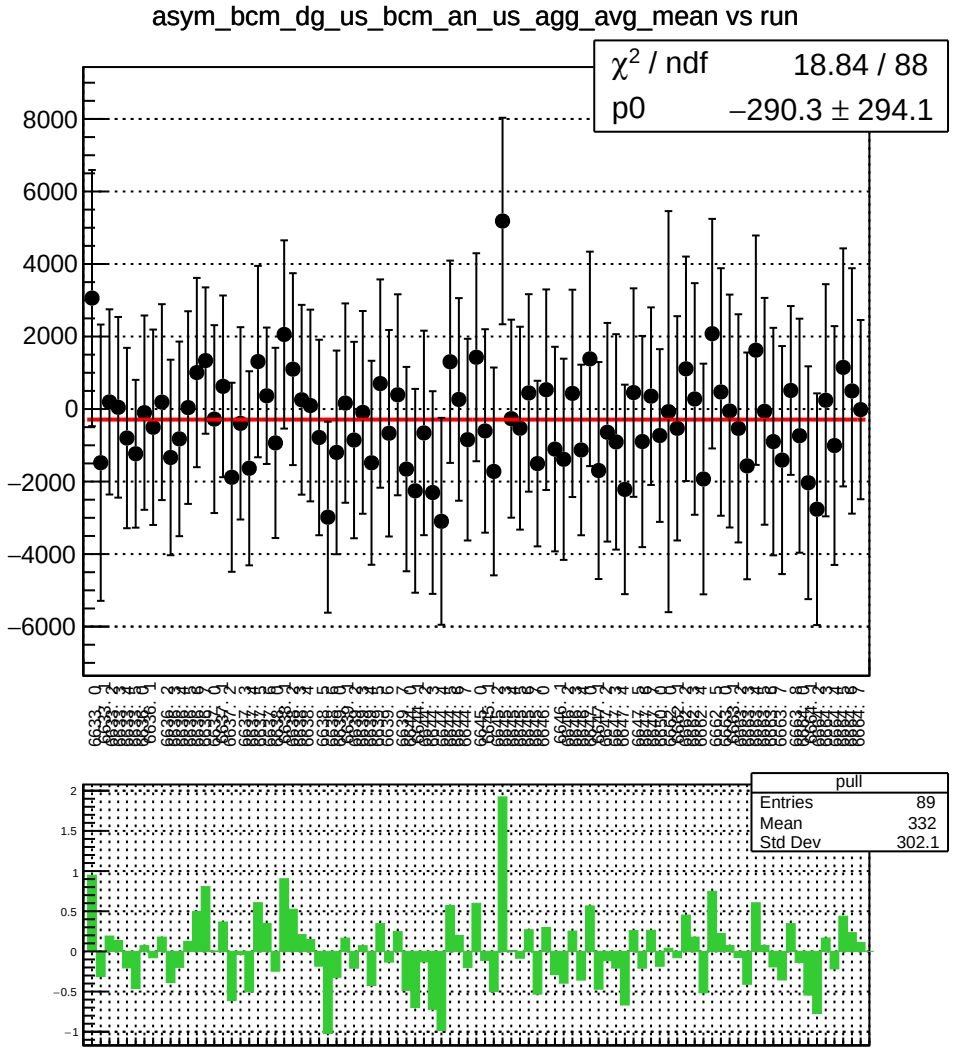

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1768 / 88
p0 23.39 ± 0.01786
26
25.5
25
24.5
24
23.5
23
22.5
22
21.5

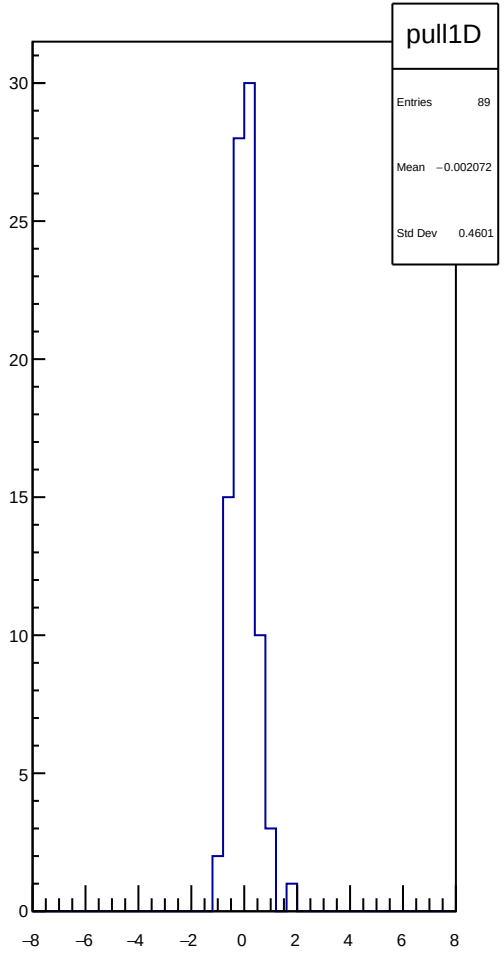

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.58 / 88
p0 −255.6 ± 291.2
pull
Entries 89
Mean 126.4
Std Dev 109.5
pull1D
Entries 89
Mean −0.002667
Std Dev 0.4444

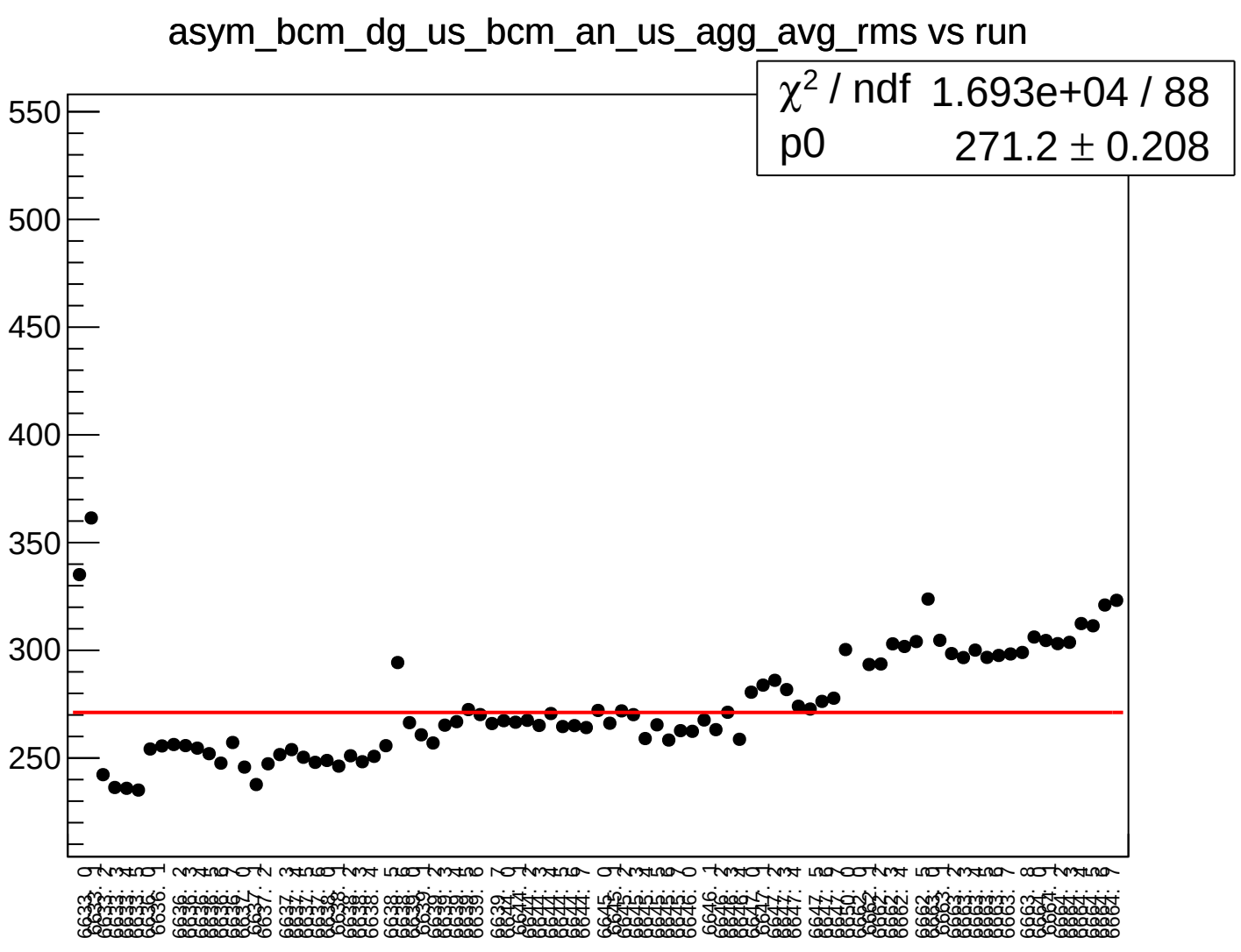

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.725e+04 / 88
p0 268.4 ± 0.2059
550
500
450
400
350
300
250

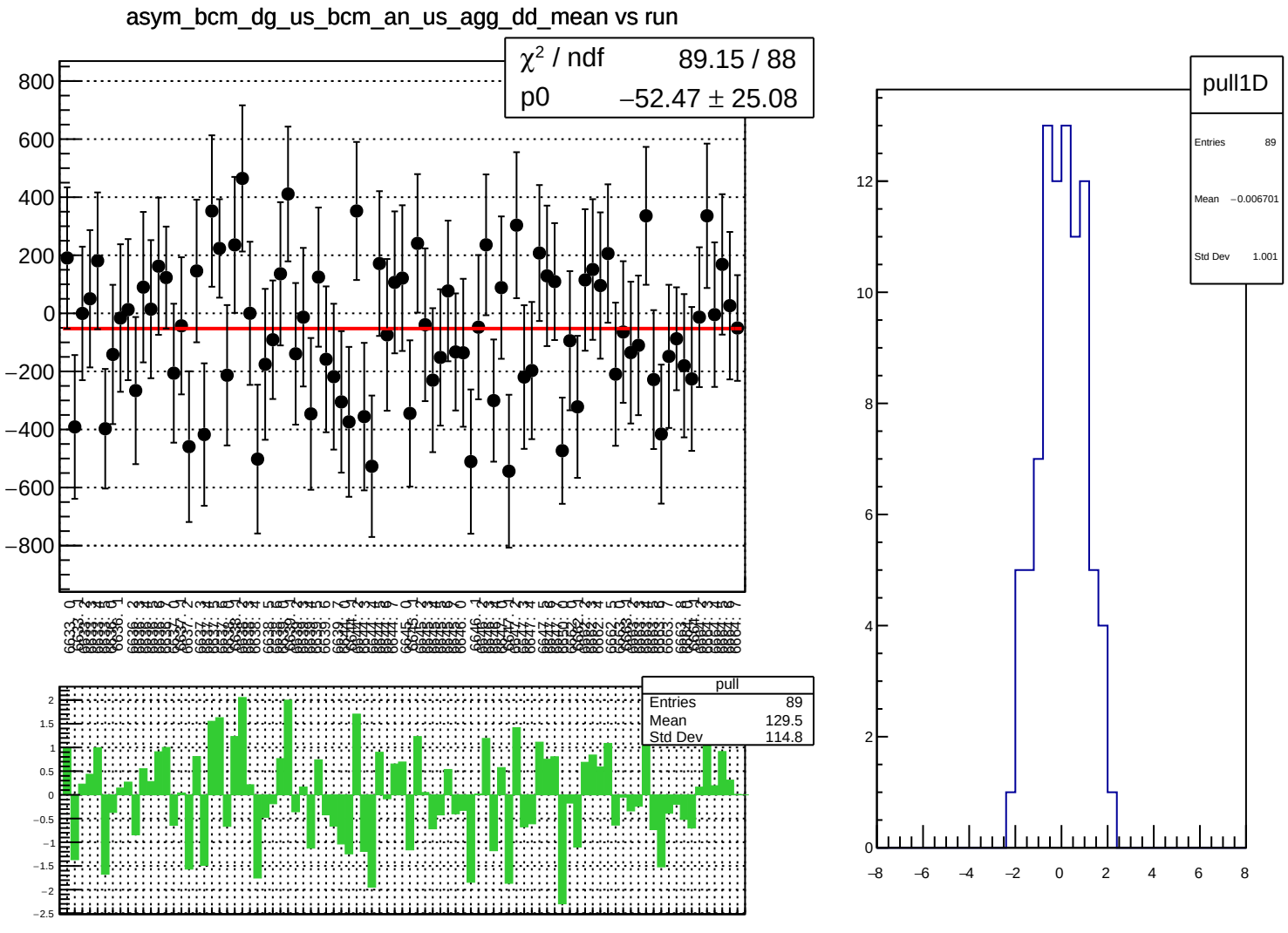

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 84.07 / 88
p0 18.98 ± 19.29
pull
Entries 89
Mean −273.7
Std Dev 306.2
pull1D
Entries 89
Mean −0.01216
Std Dev 0.9718

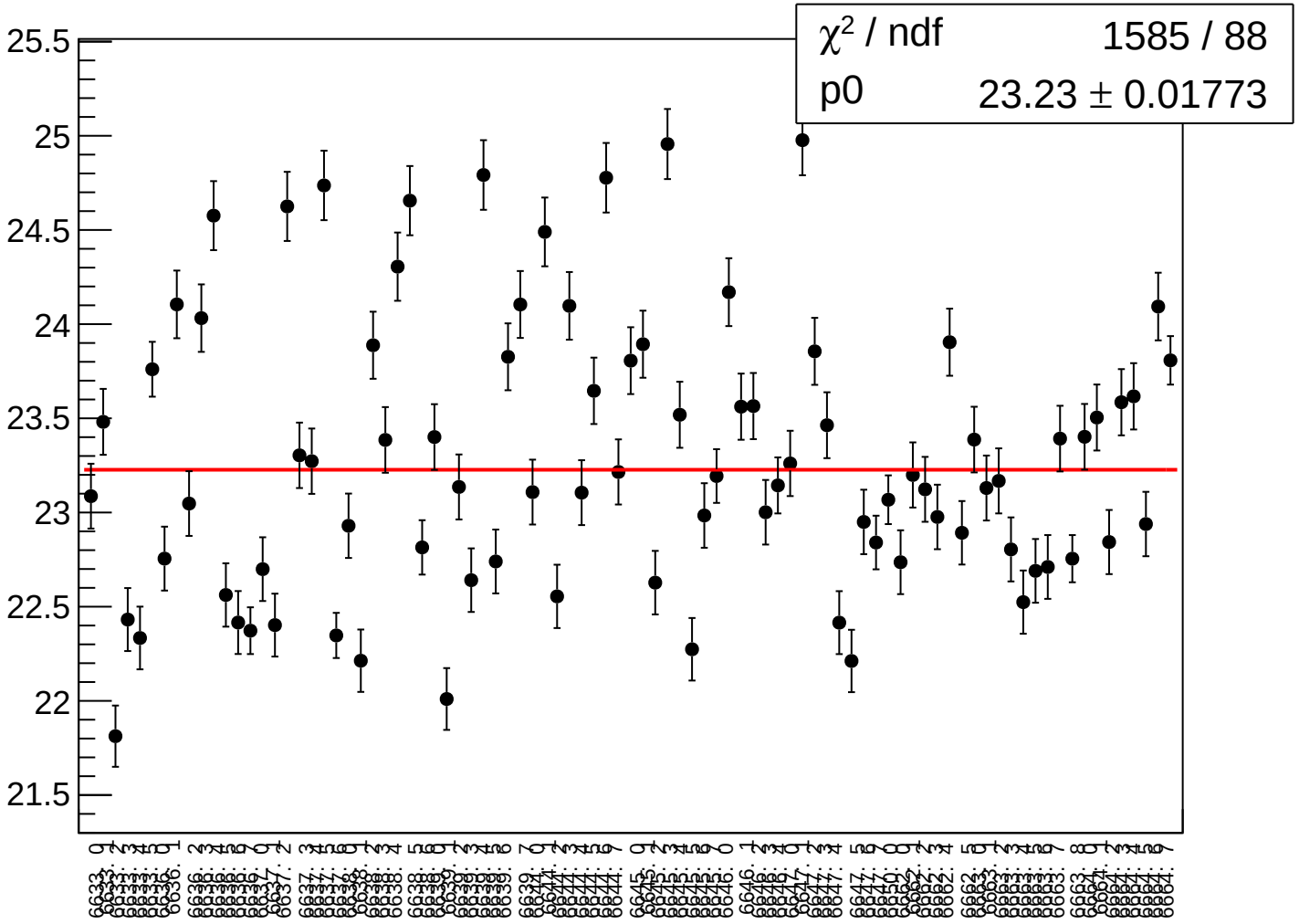

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4718 / 88
p0 17.85 ± 0.01364
21
20
19
18
17
16

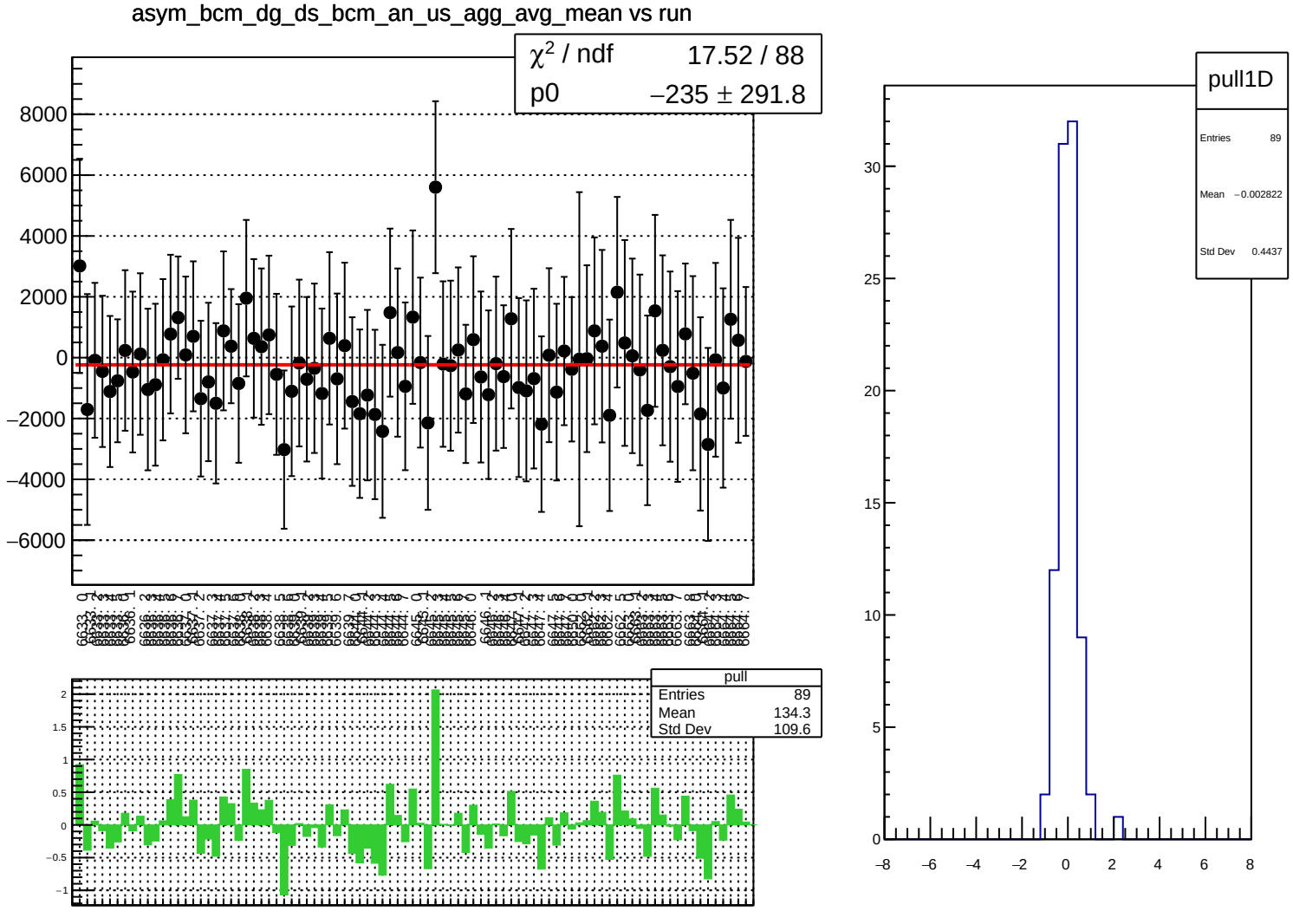

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.84 / 88
p0 −290.3 ± 294.1
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 332
Std Dev 302.1
2
1.5
1
0.5
0
−0.5
−1

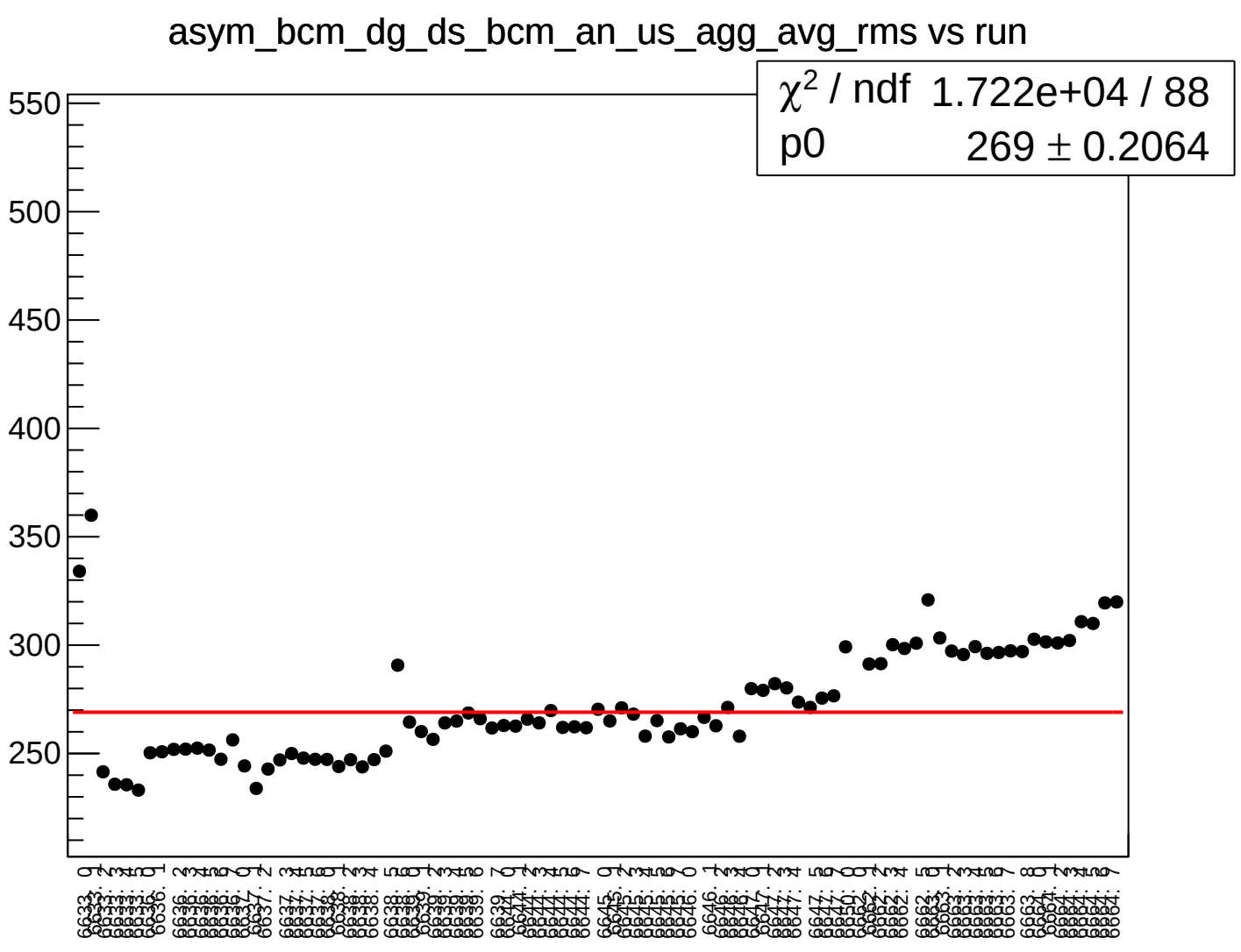

pull1D
Entries 89
Mean −0.002072
Std Dev 0.4601
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

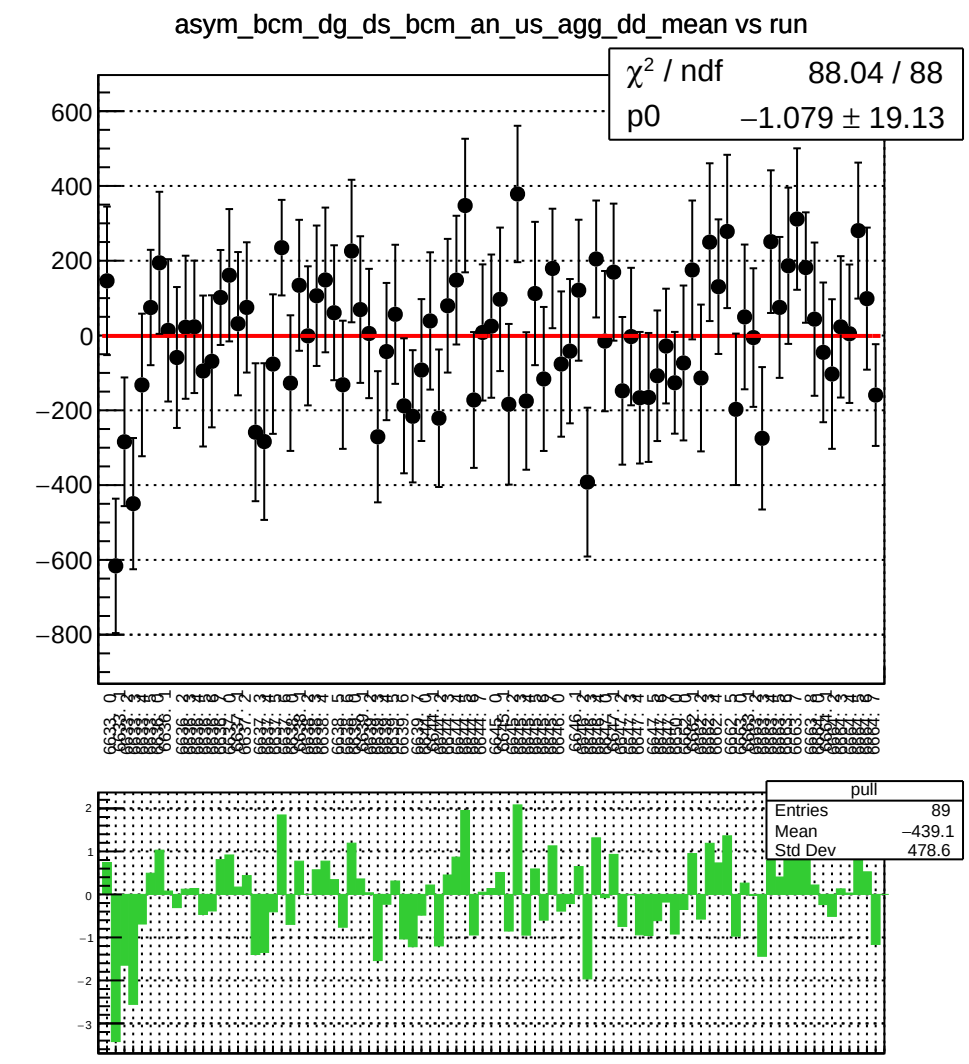

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.693e+04 / 88
p0 271.2 ± 0.208
550
500
450
400
350
300
250

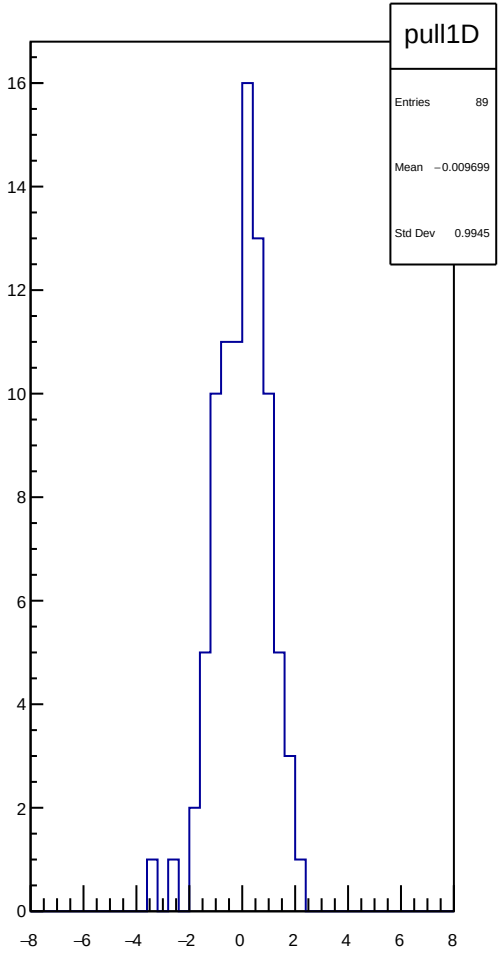

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 89.15 / 88
p0 −52.47 ± 25.08
pull
Entries 89
Mean 129.5
Std Dev 114.8
pull1D
Entries 89
Mean −0.006701
Std Dev 1.001

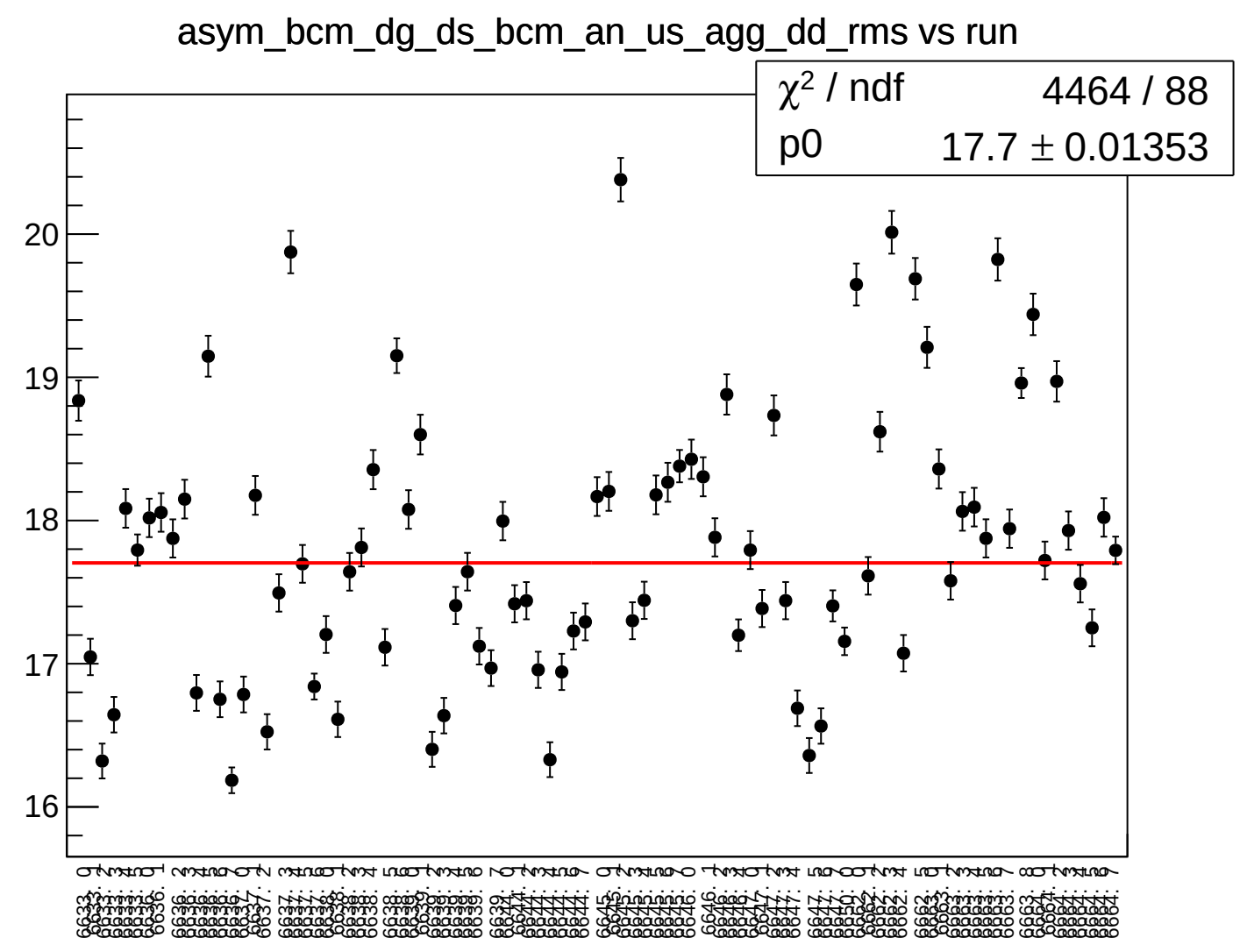

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1585 / 88
p0 23.23 ± 0.01773
25.5
25
24.5
24
23.5
23
22.5
22
21.5

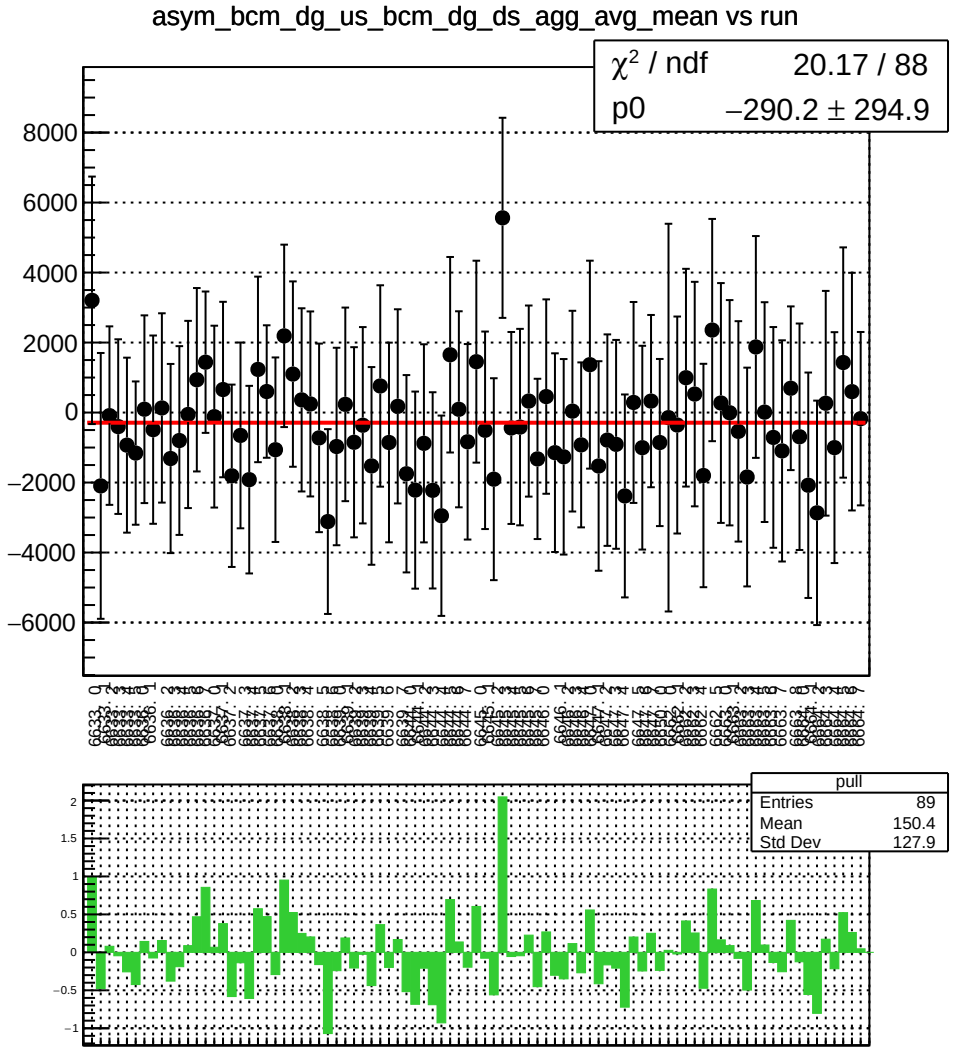

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.52 / 88
p0 −235 ± 291.8
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 134.3
Std Dev 109.6
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean −0.002822
Std Dev 0.4437
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

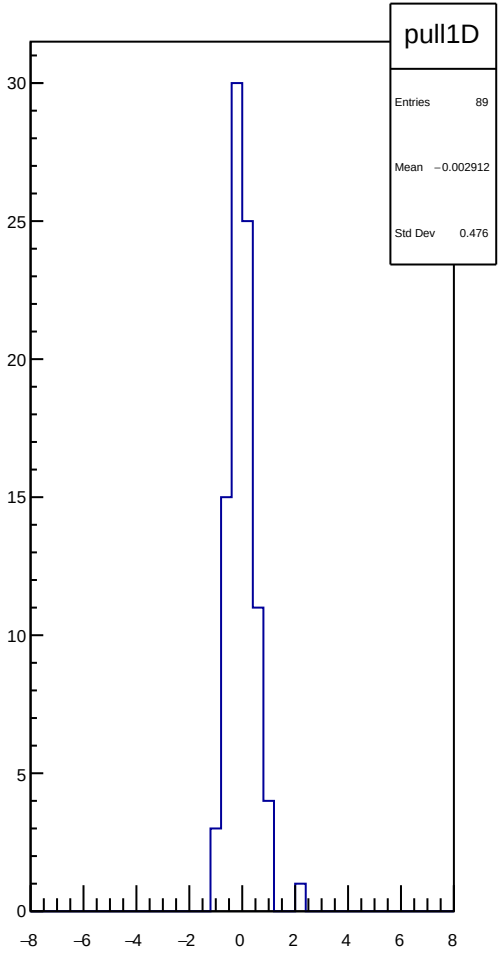

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.722e+04 / 88
p0 269 ± 0.2064
550
500
450
400
350
300
250

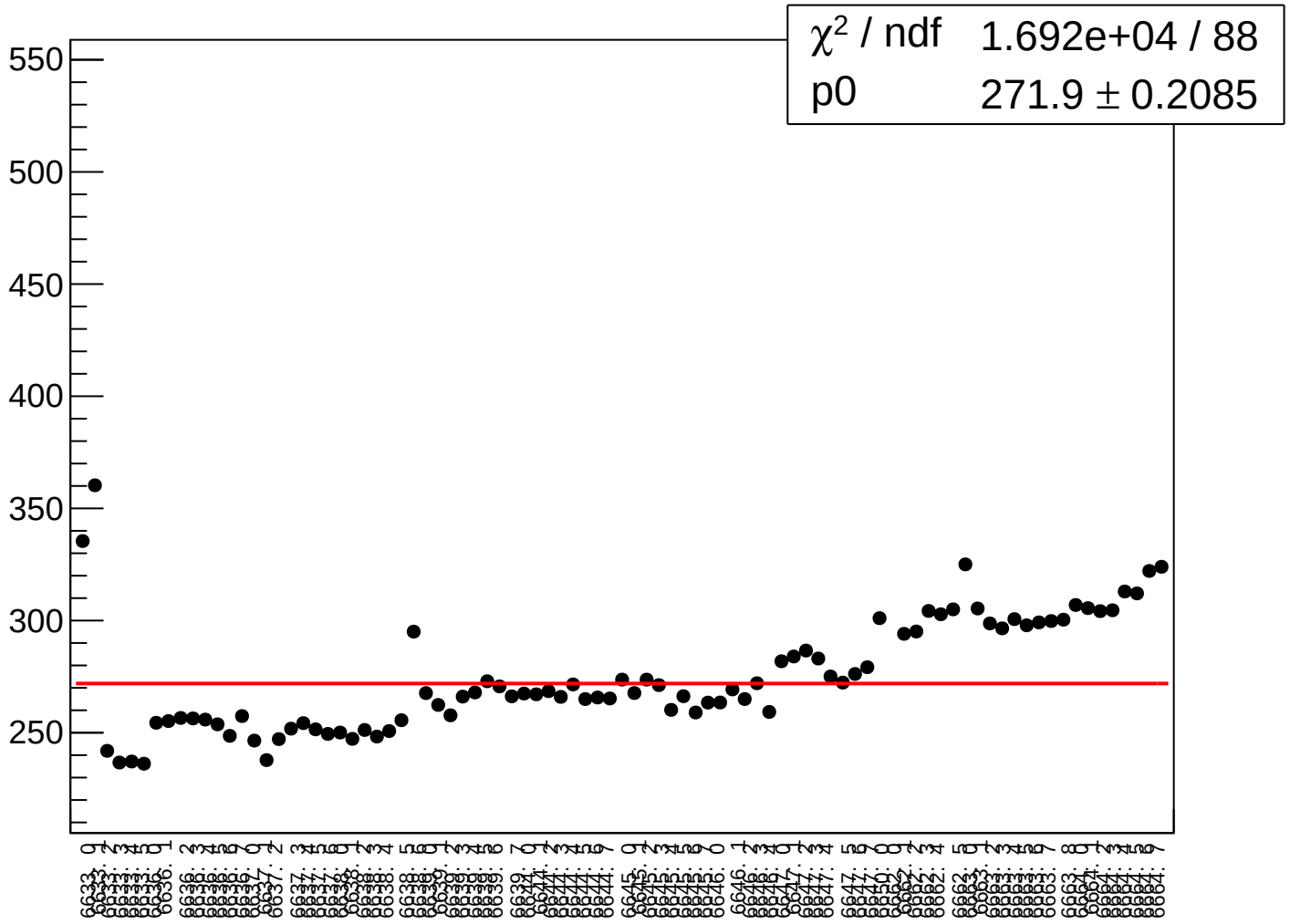

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 88.04 / 88
p0 −1.079 ± 19.13
pull
Entries 89
Mean −439.1
Std Dev 478.6

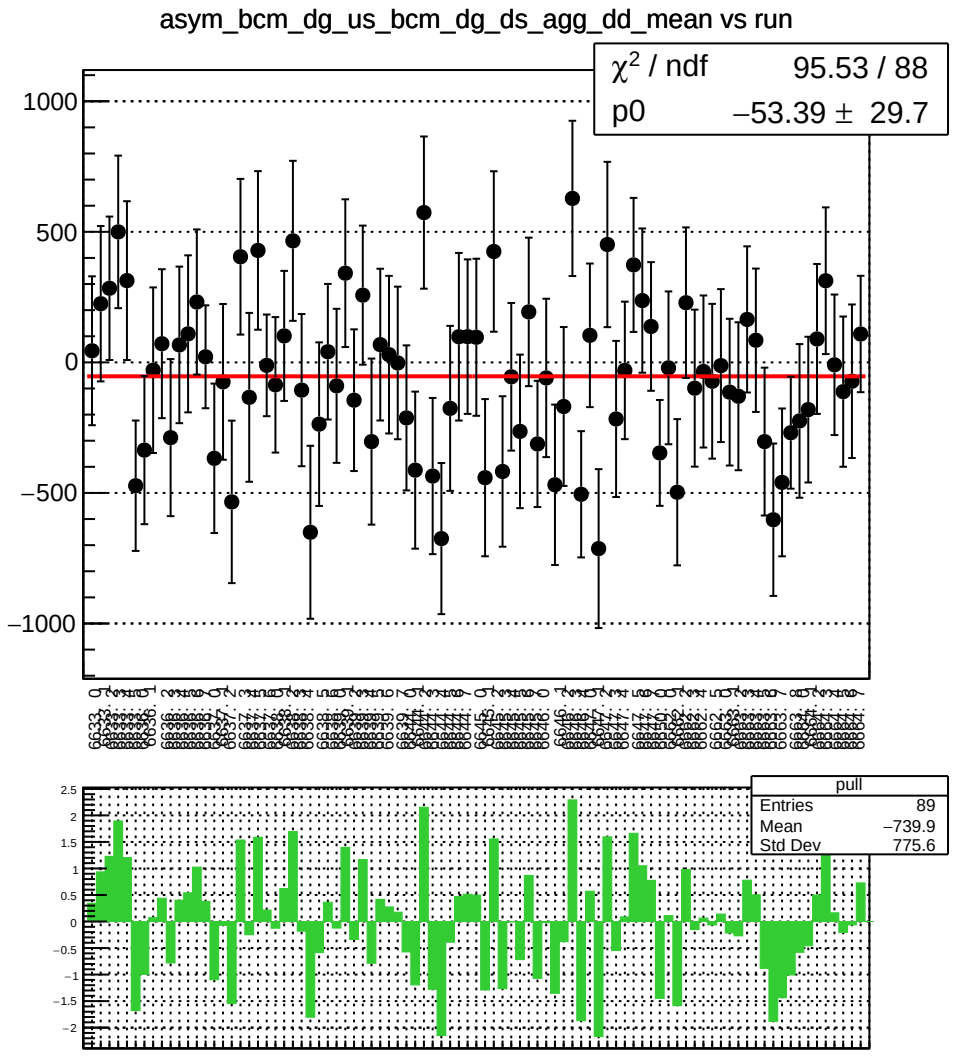

pull1D
Entries 89
Mean −0.009699
Std Dev 0.9945

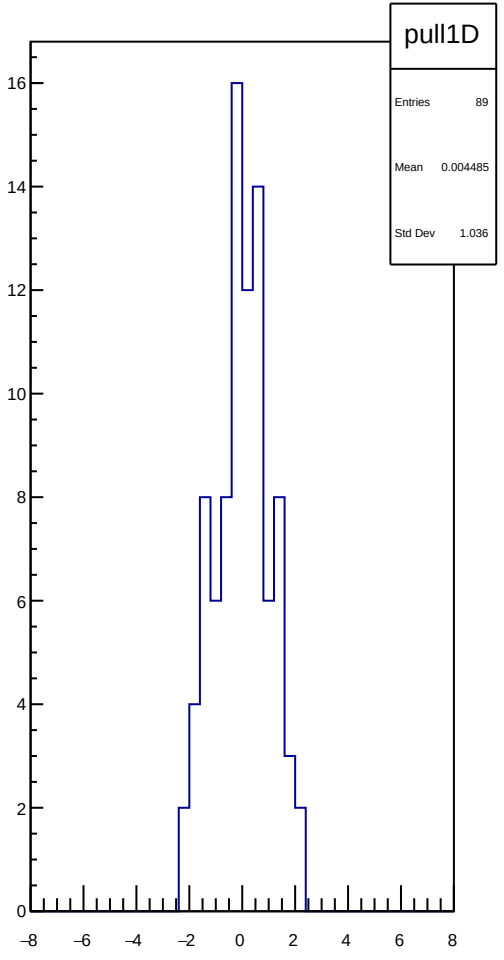

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4464 / 88
p0 17.7 ± 0.01353
20
19
18
17
16

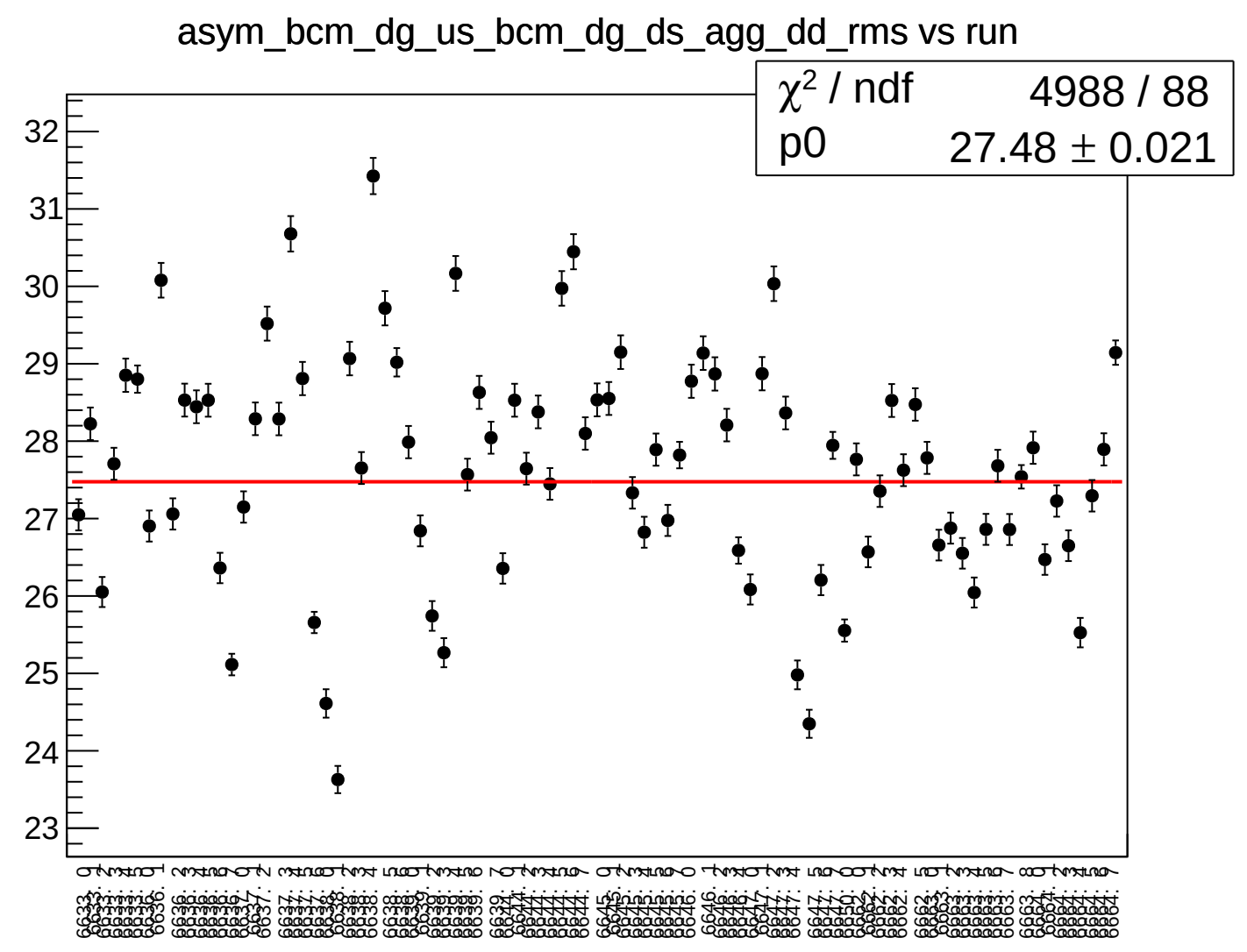

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 20.17 / 88
p0 −290.2 ± 294.9
pull
Entries 89
Mean 150.4
Std Dev 127.9

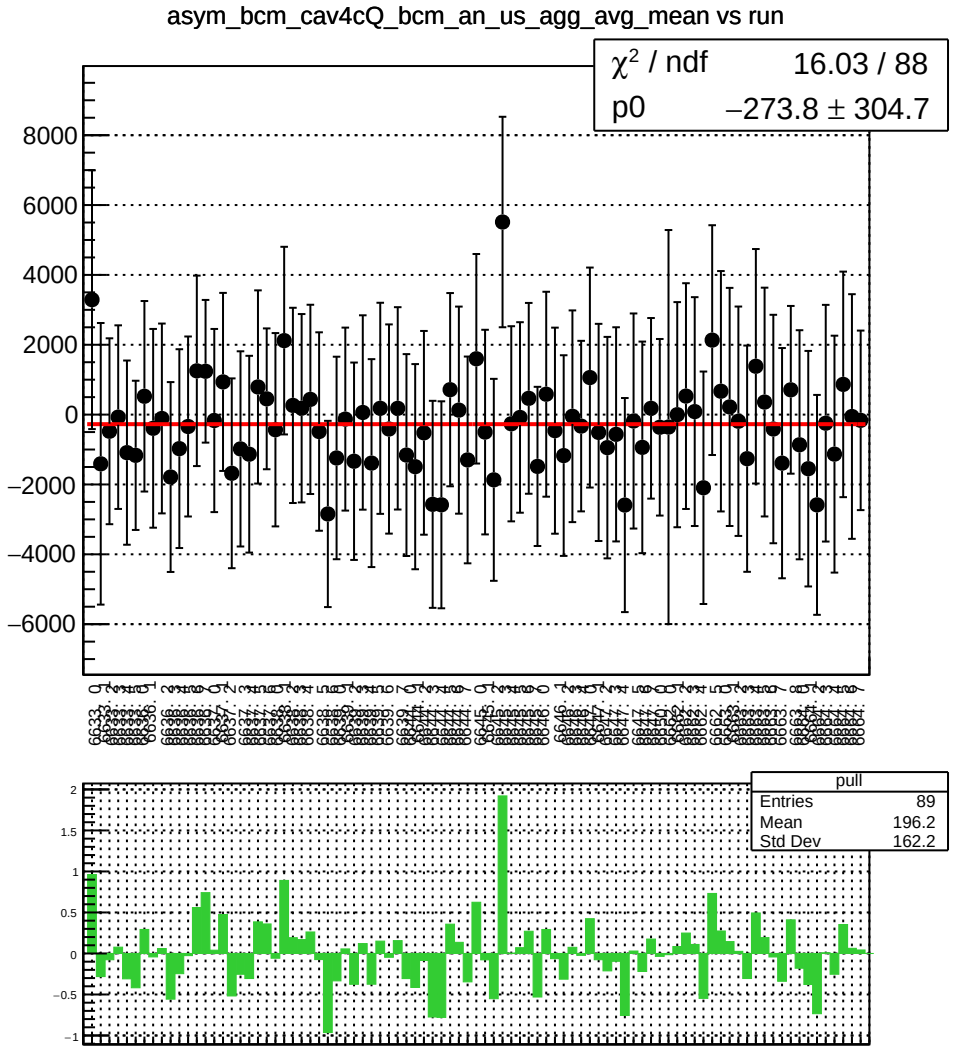

pull1D
Entries 89
Mean −0.002912
Std Dev 0.476

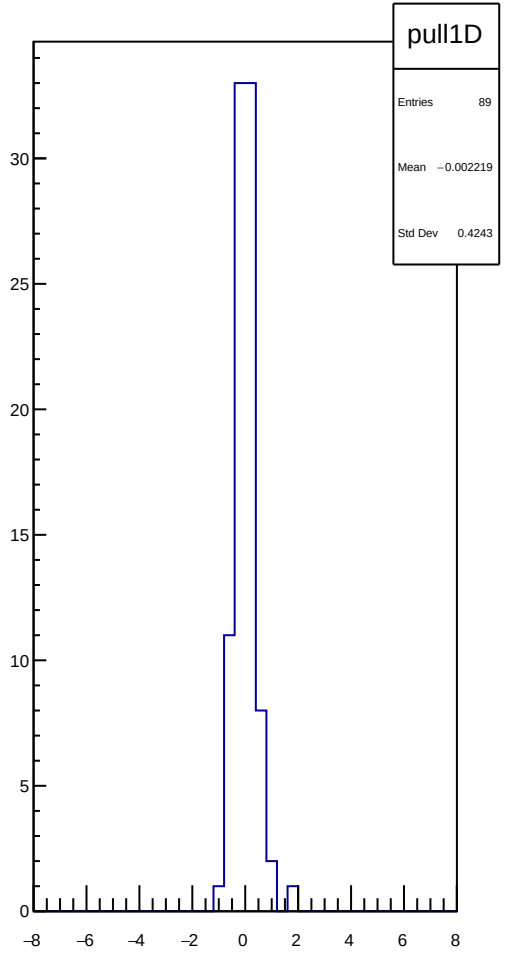

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.692e+04 / 88
p0 271.9 ± 0.2085
550
500
450
400
350
300
250

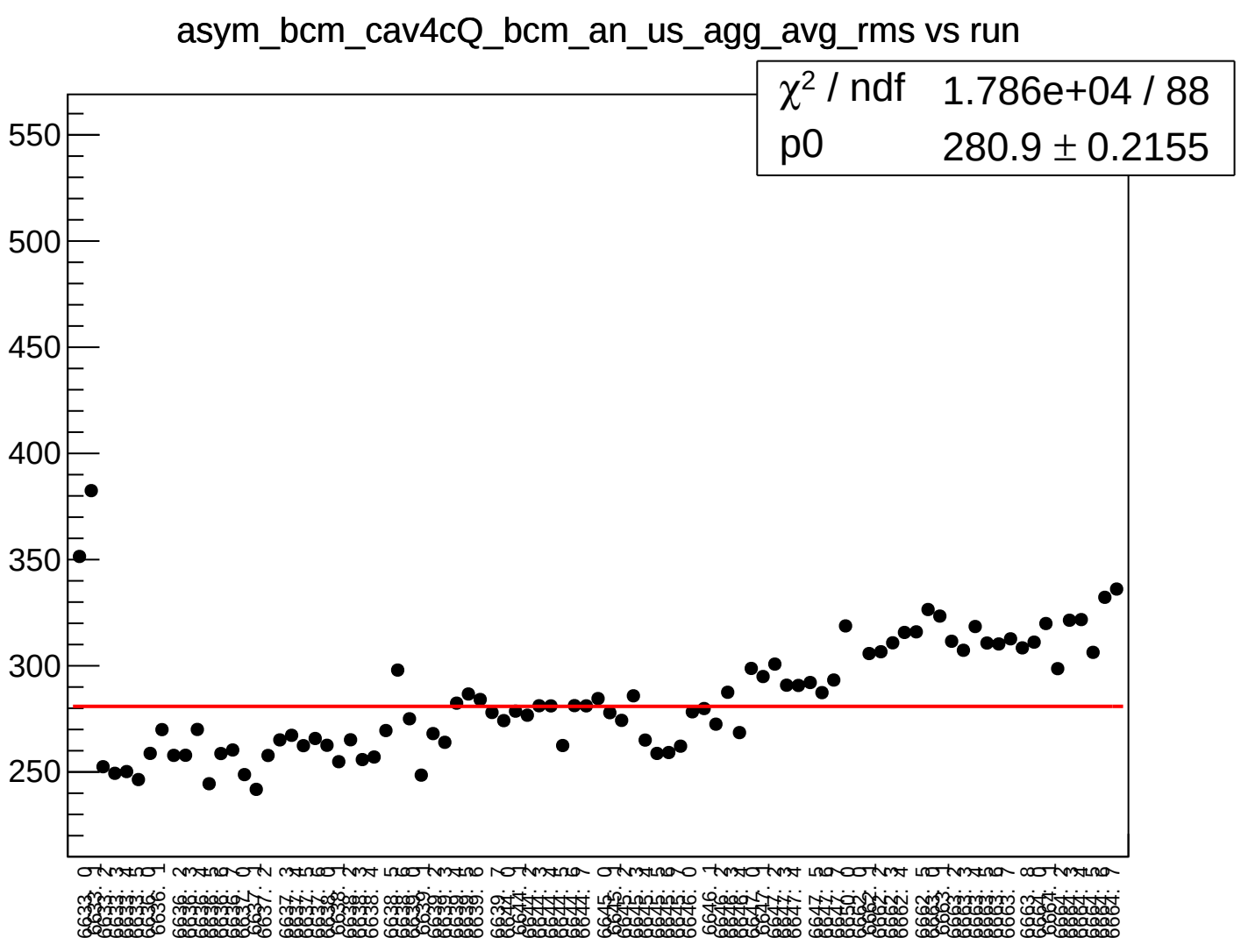

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 95.53 / 88
p0 −53.39 ± 29.7
1000
500
0
−500
−1000
pull
Entries 89
Mean −739.9
Std Dev 775.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

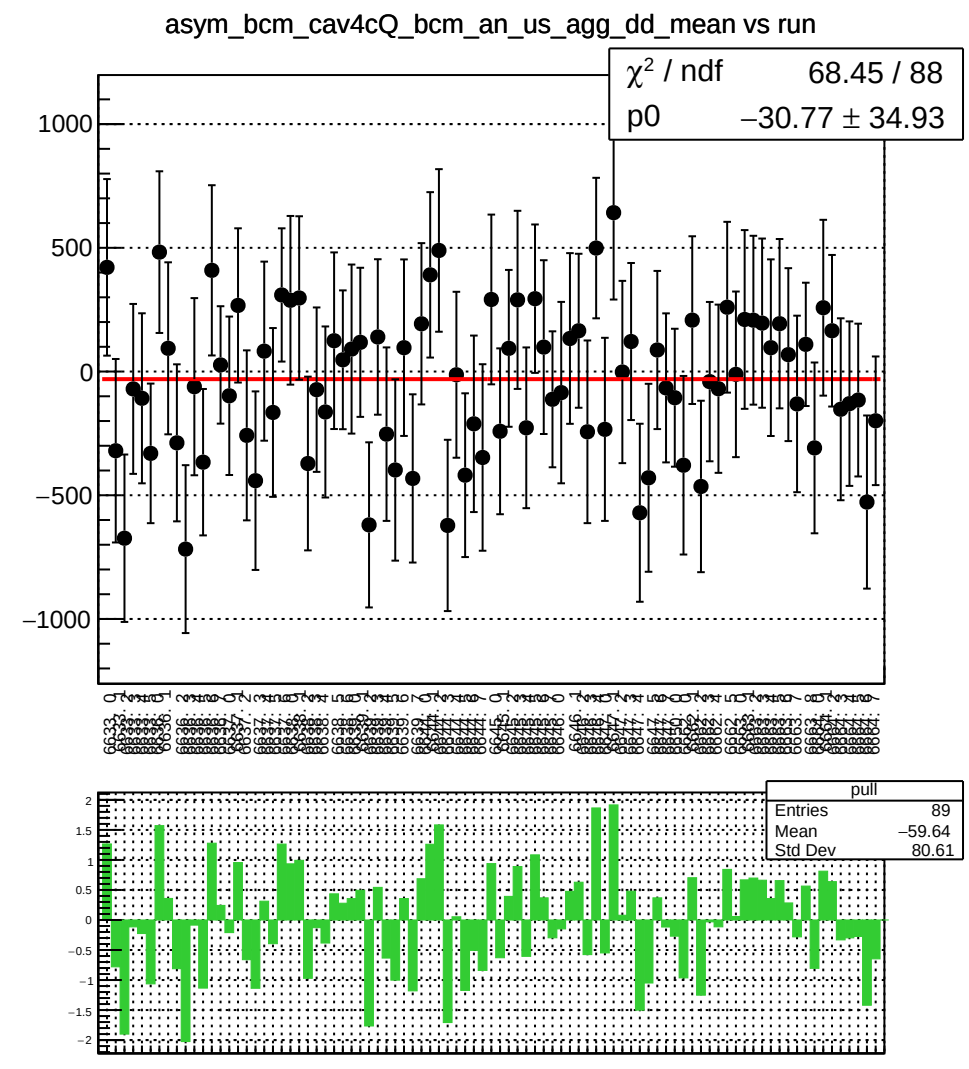

pull1D
Entries 89
Mean 0.004485
Std Dev 1.036
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

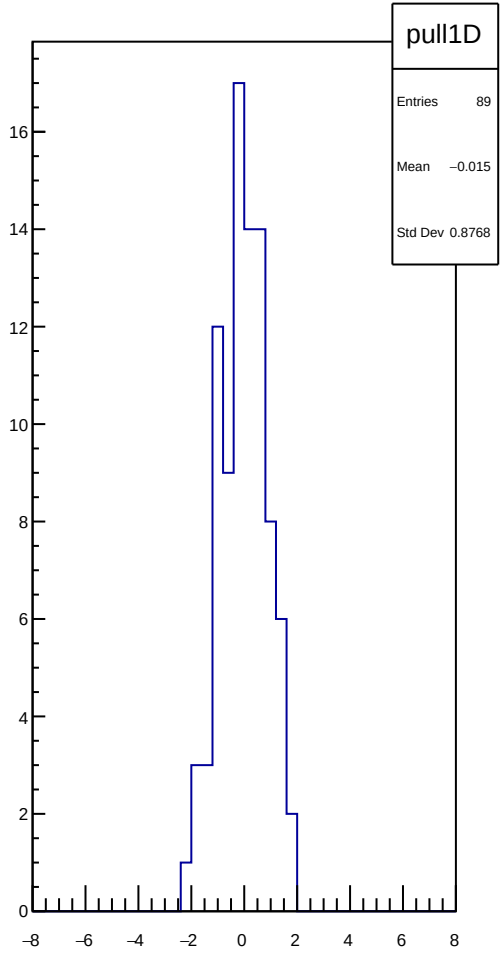

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4988 / 88
p0 27.48 ± 0.021
32
31
30
29
28
27
26
25
24
23

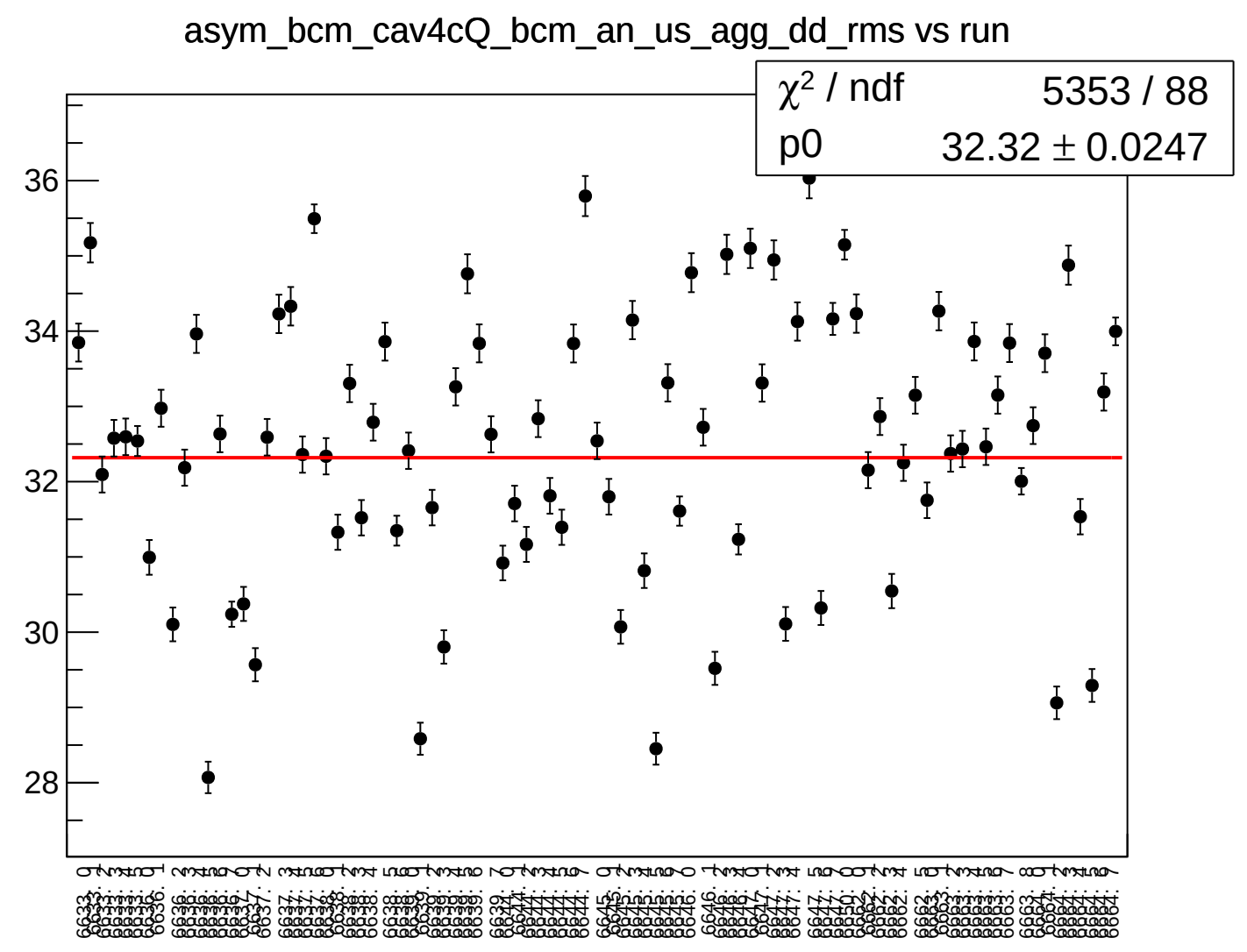

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.03 / 88
p0 −273.8 ± 304.7
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 196.2
Std Dev 162.2
2
1.5
1
0.5
0
−0.5
−1

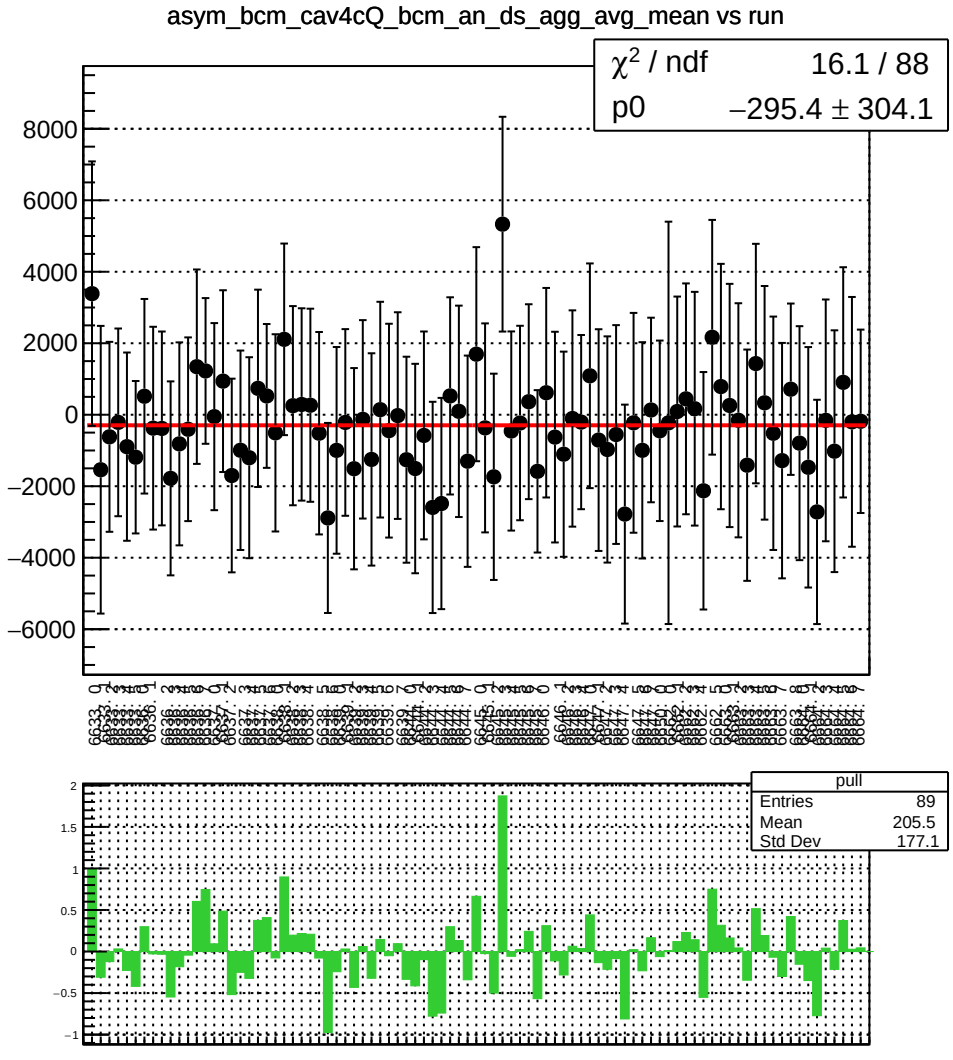

pull1D
Entries 89
Mean −0.002219
Std Dev 0.4243
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

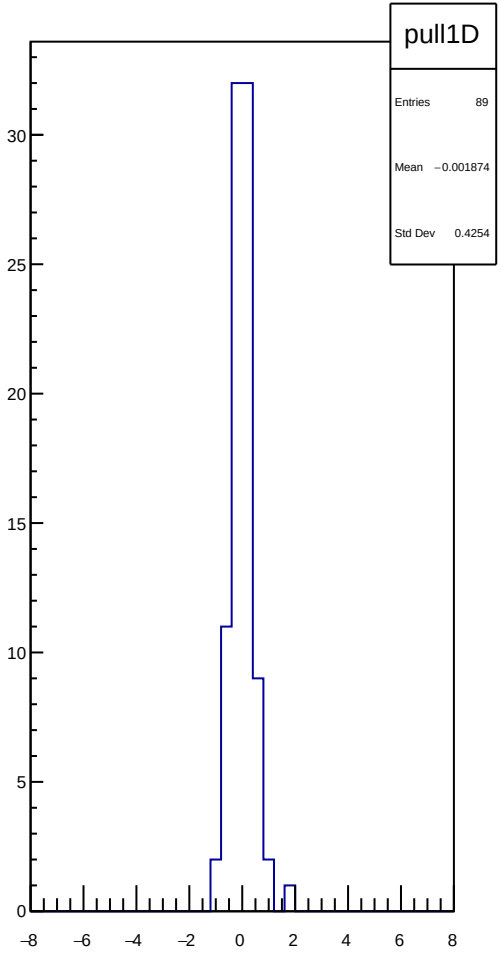

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.786e+04 / 88
p0 280.9 ± 0.2155
550
500
450
400
350
300
250

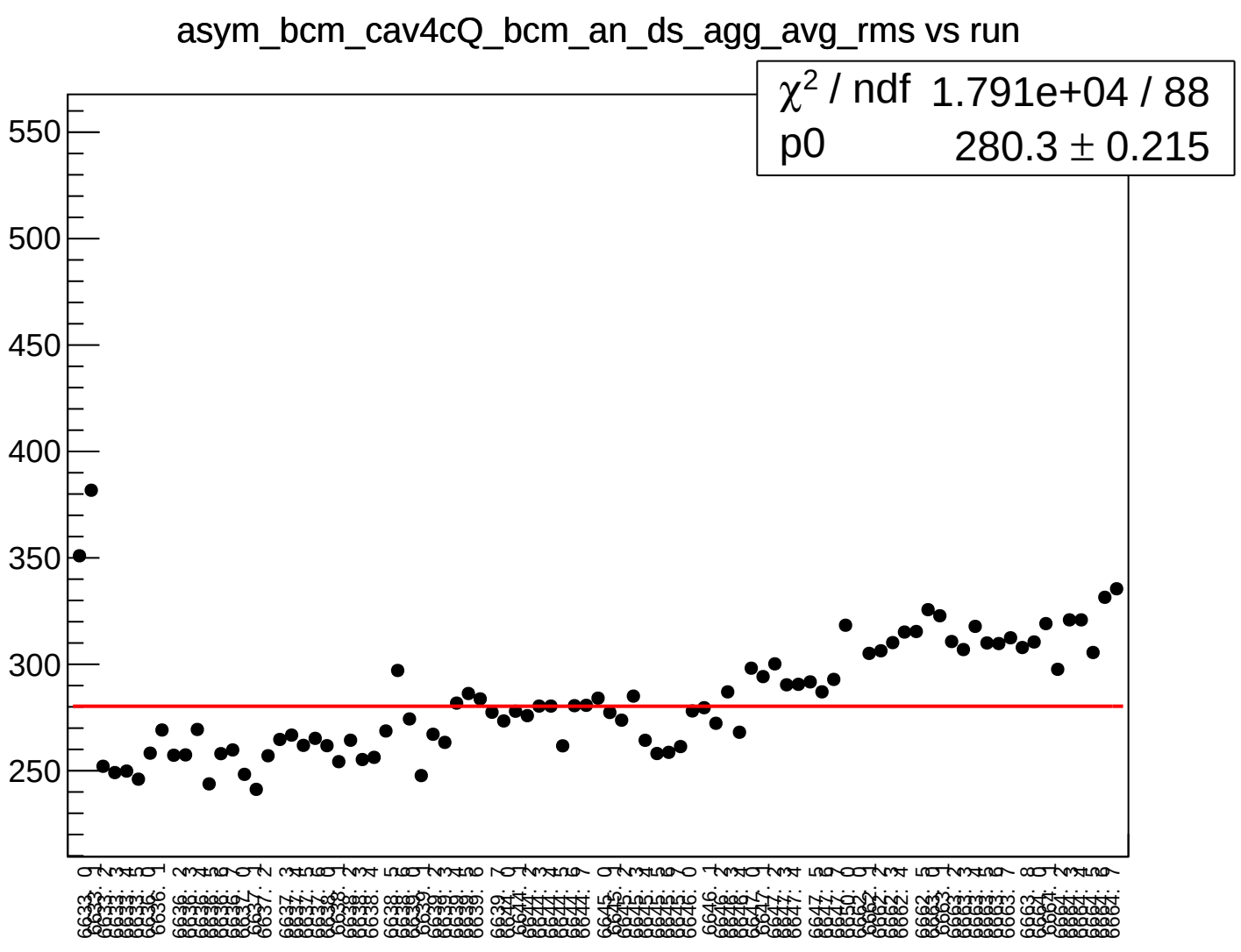

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 68.45 / 88
p0 −30.77 ± 34.93
1000
500
0
−500
−1000
pull
Entries 89
Mean −59.64
Std Dev 80.61
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

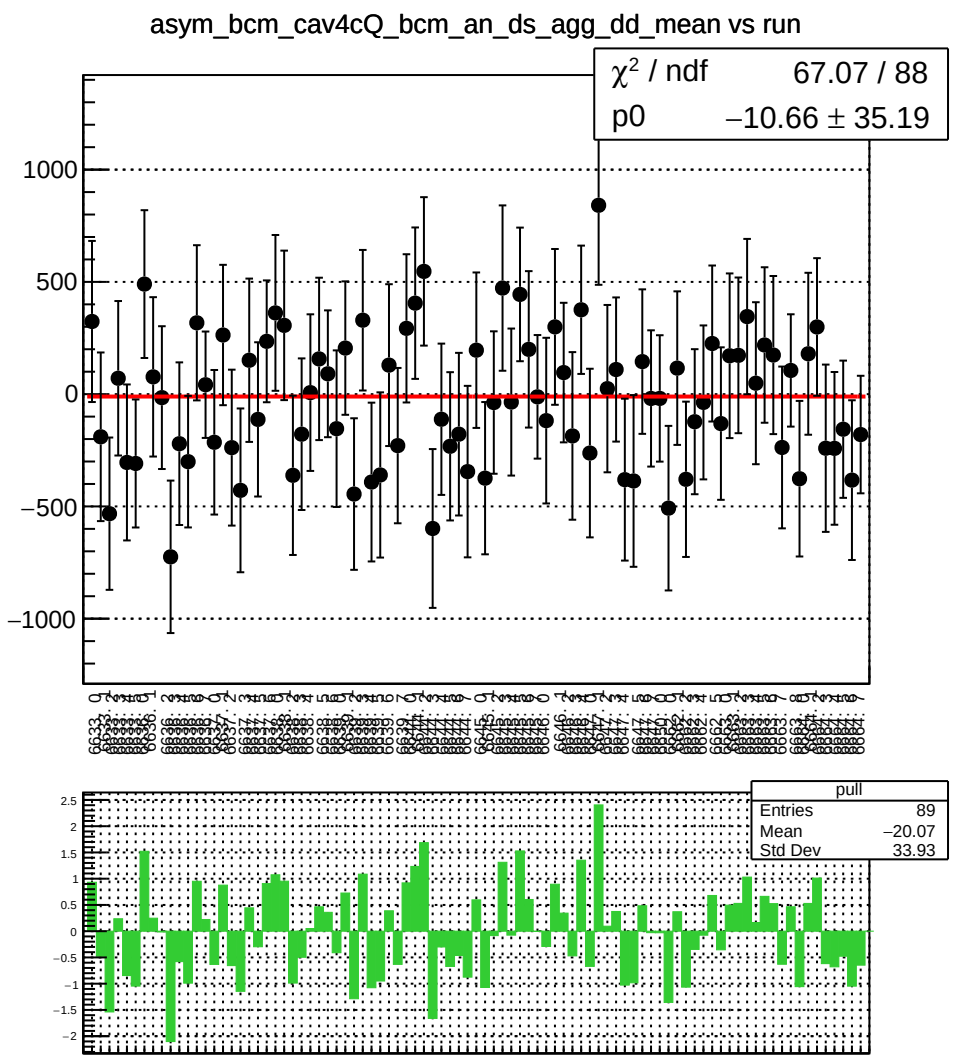

pull1D
Entries 89
Mean −0.015
Std Dev 0.8768
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

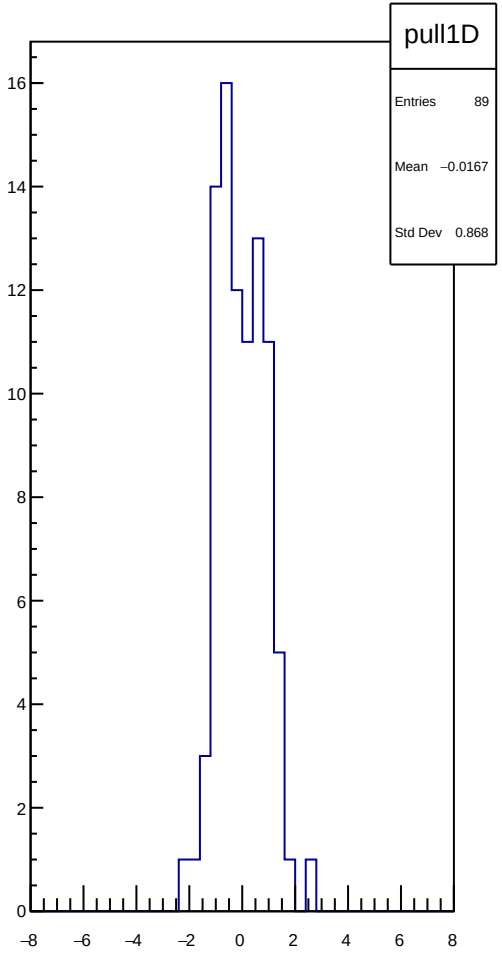

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5353 / 88
p0 32.32 ± 0.0247
36
34
32
30
28

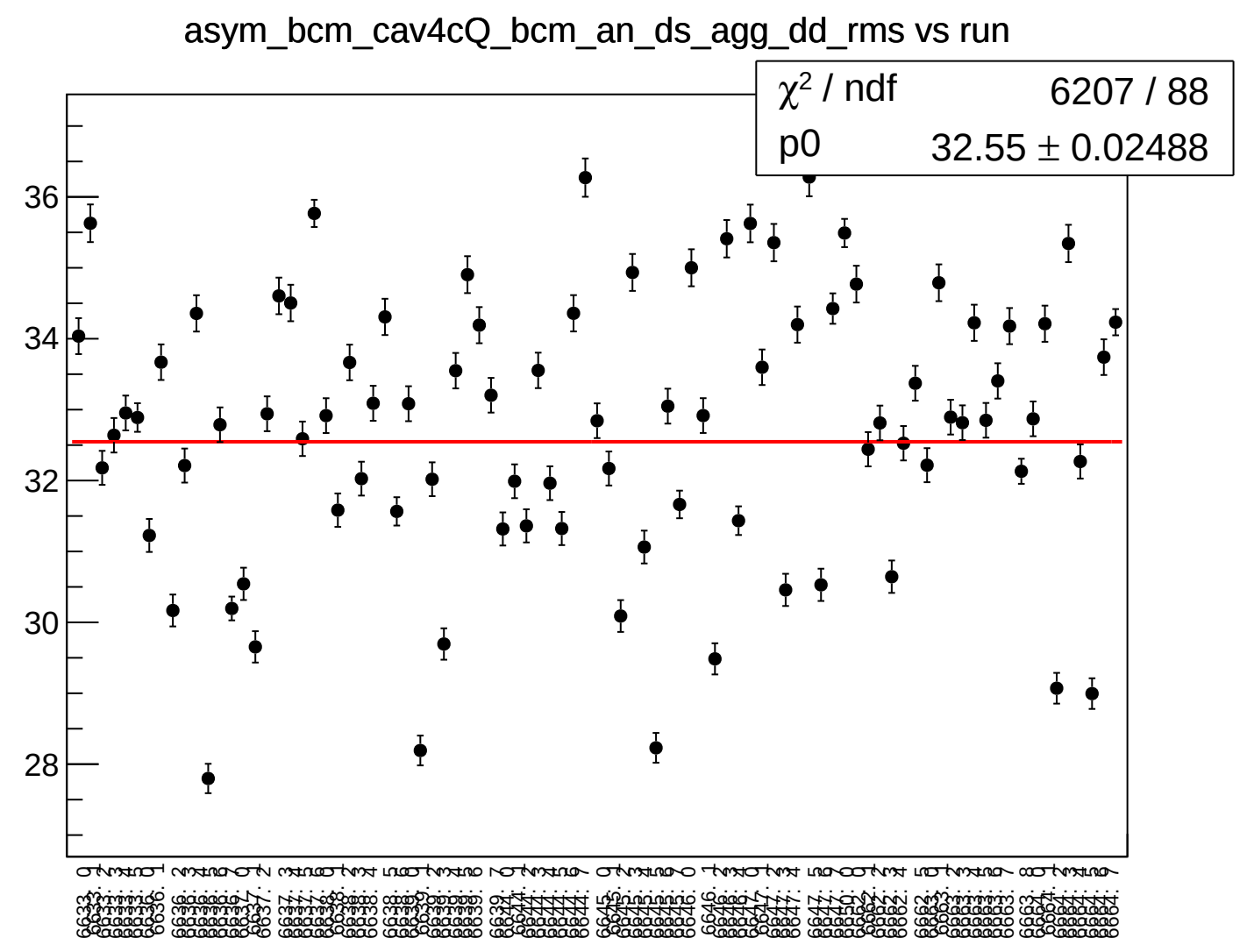

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.1 / 88
p0 −295.4 ± 304.1
pull
Entries 89
Mean 205.5
Std Dev 177.1

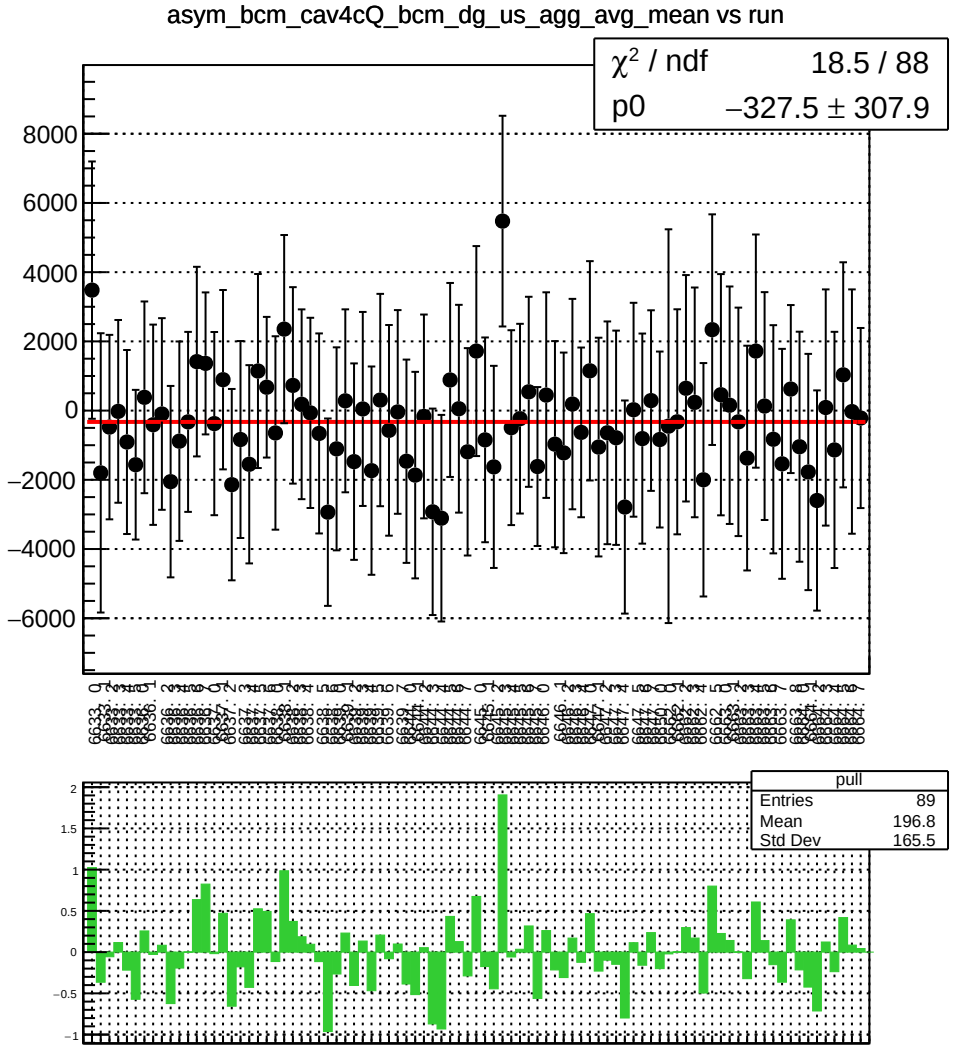

pull1D
Entries 89
Mean −0.001874
Std Dev 0.4254

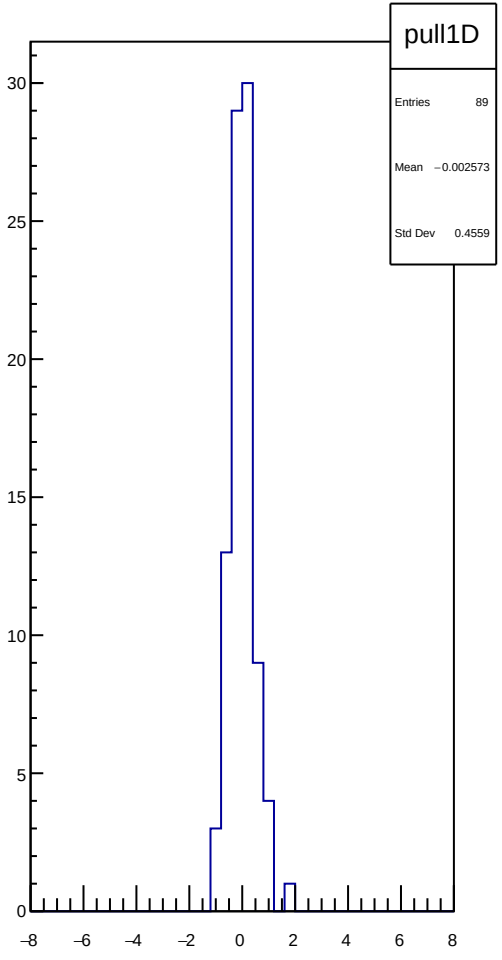

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.791e+04 / 88
p0 280.3 ± 0.215
550
500
450
400
350
300
250

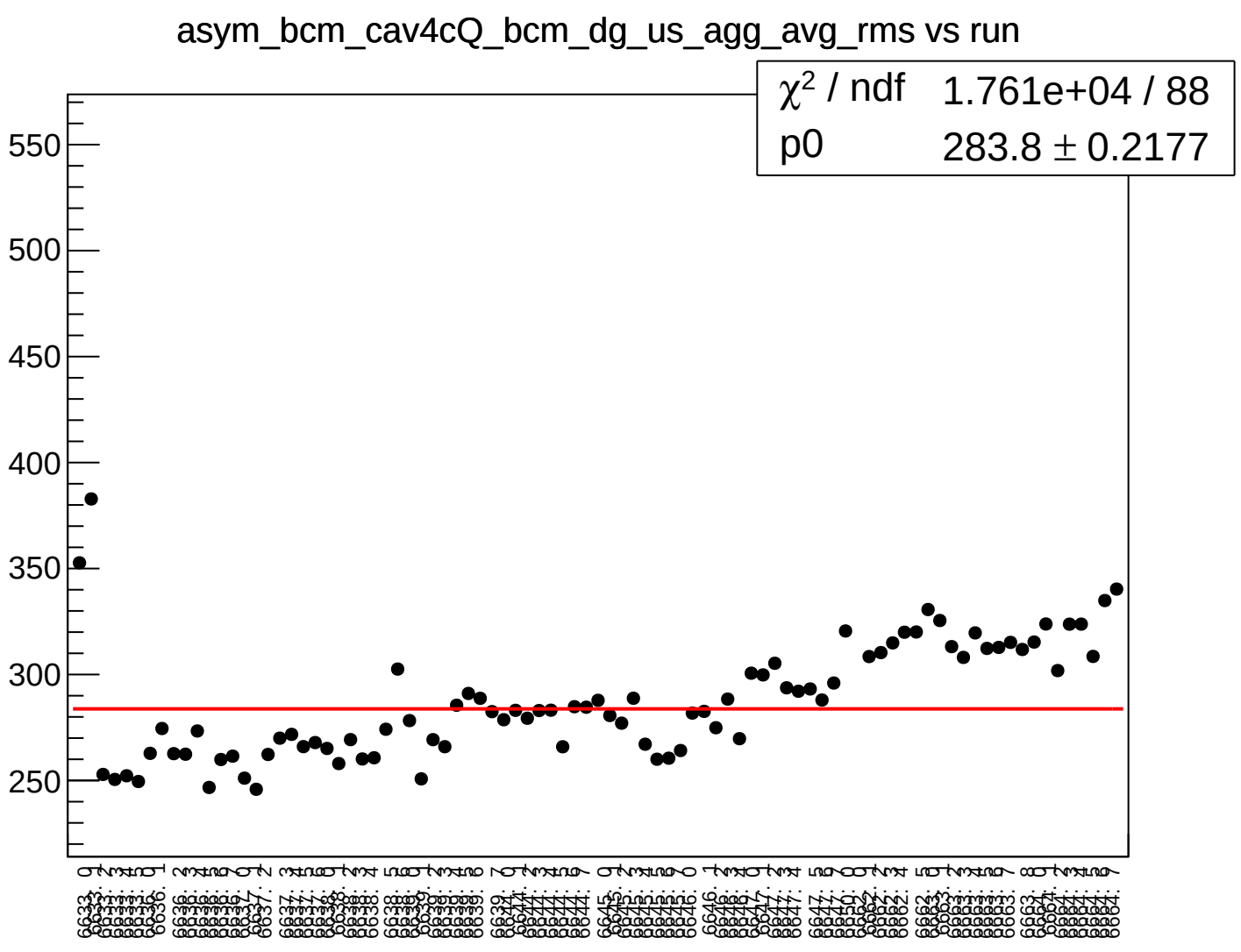

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 67.07 / 88
p0 −10.66 ± 35.19
1000
500
0
−500
−1000
pull
Entries 89
Mean −20.07
Std Dev 33.93
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

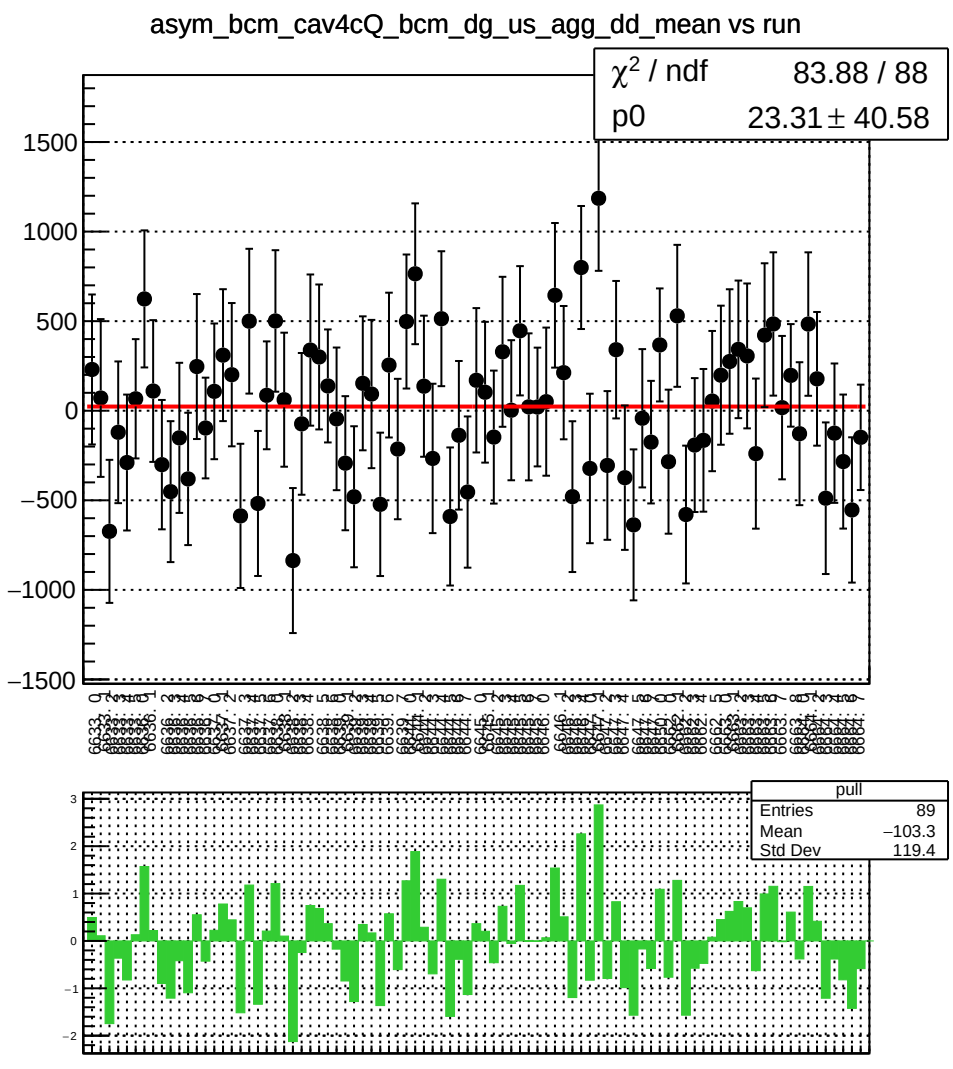

pull1D
Entries 89
Mean −0.0167
Std Dev 0.868
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

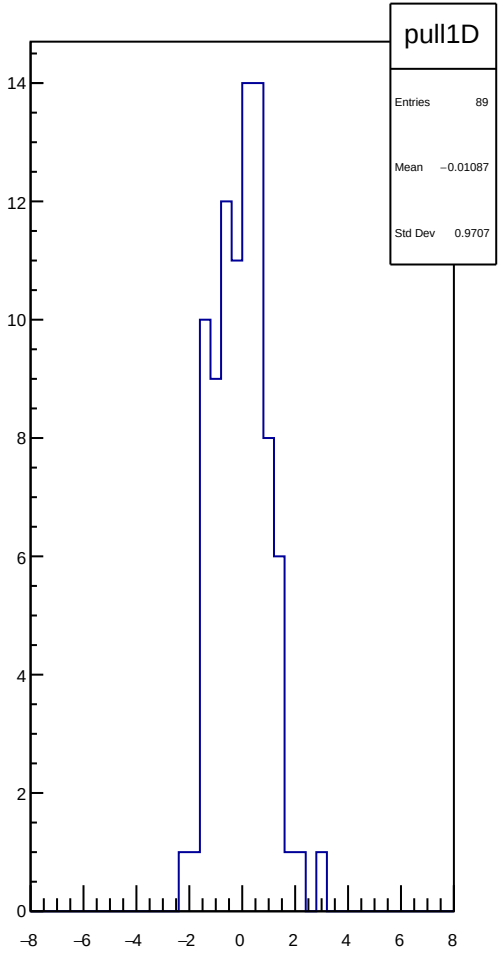

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 6207 / 88
p0 32.55 ± 0.02488
36
34
32
30
28

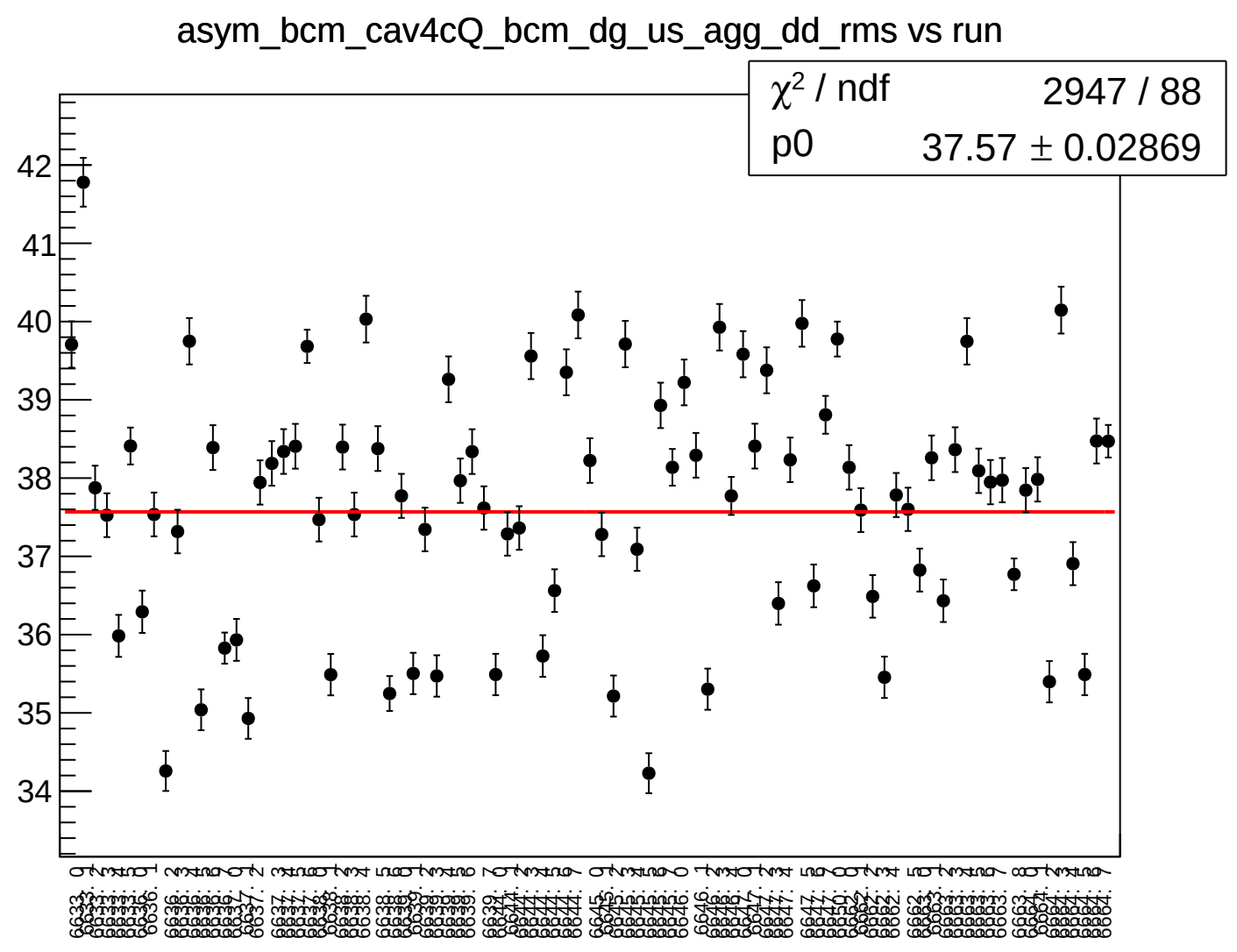

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 18.5 / 88
p0 −327.5 ± 307.9
pull
Entries 89
Mean 196.8
Std Dev 165.5

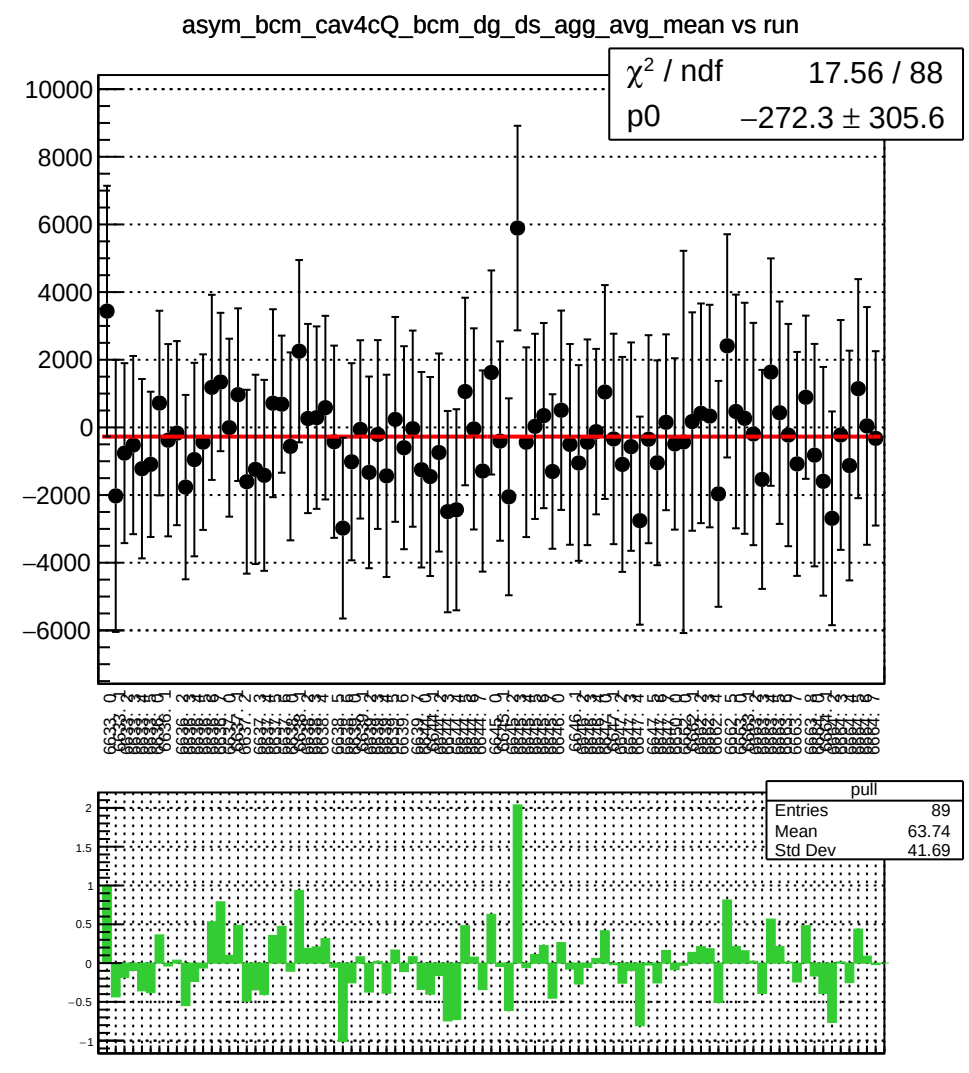

pull1D
Entries 89
Mean −0.002573
Std Dev 0.4559

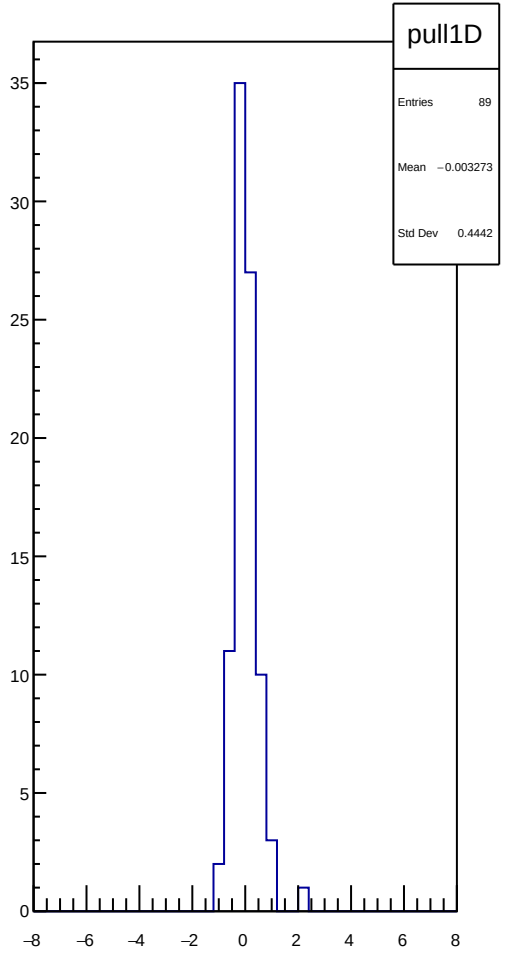

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.761e+04 / 88
p0 283.8 ± 0.2177
550
500
450
400
350
300
250

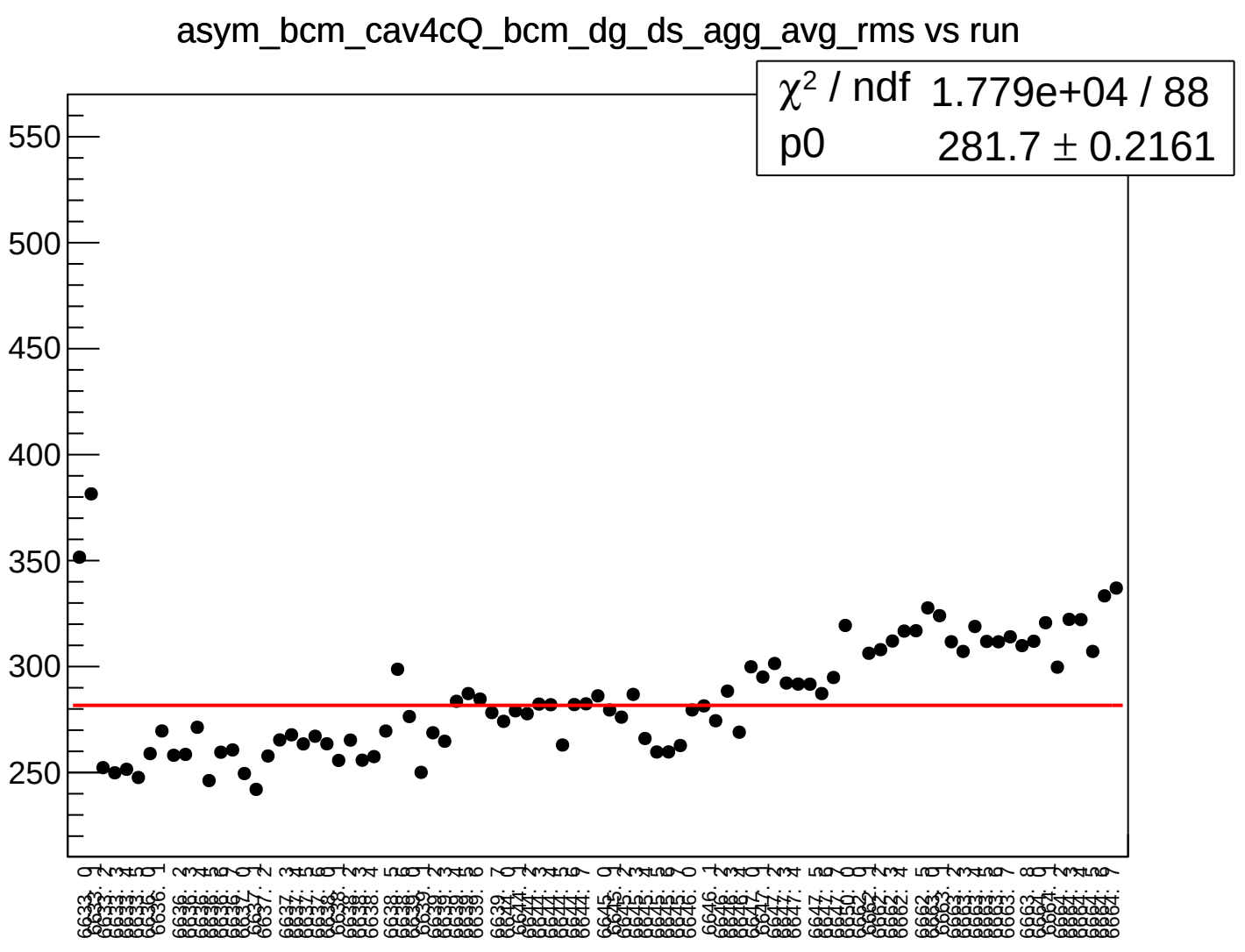

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 83.88 / 88
p0 23.31 ± 40.58
1500
1000
500
0
−500
−1000
−1500
pull
Entries 89
Mean −103.3
Std Dev 119.4
3
2
1
0
−1
−2

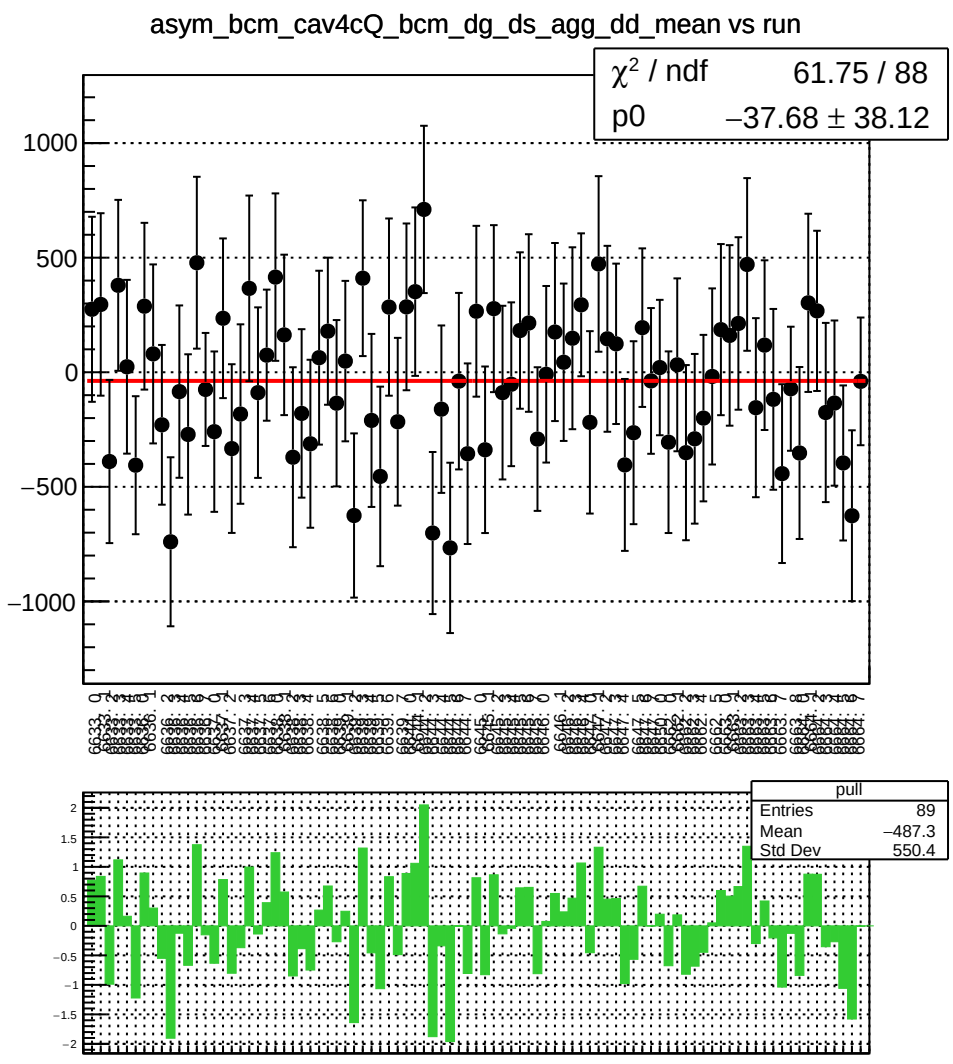

pull1D
Entries 89
Mean −0.01087
Std Dev 0.9707
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

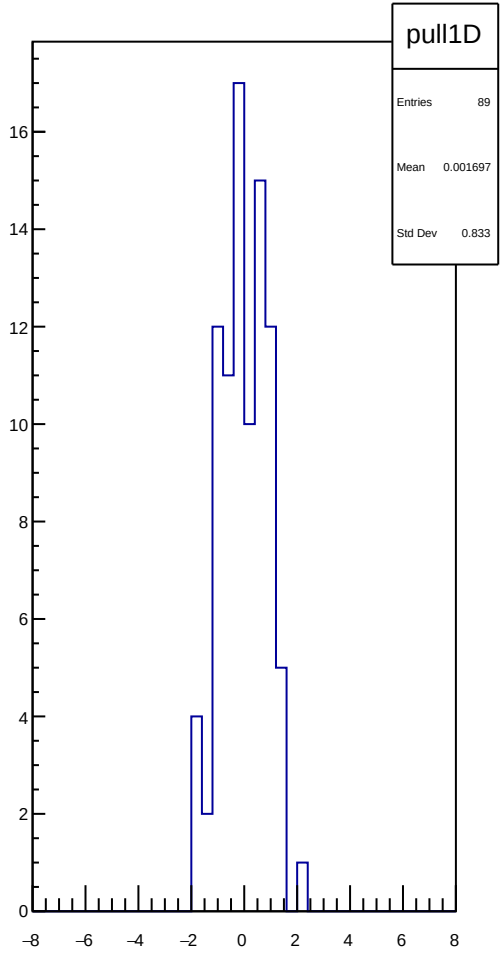

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2947 / 88
p0 37.57 ± 0.02869
42
41
40
39
38
37
36
35
34

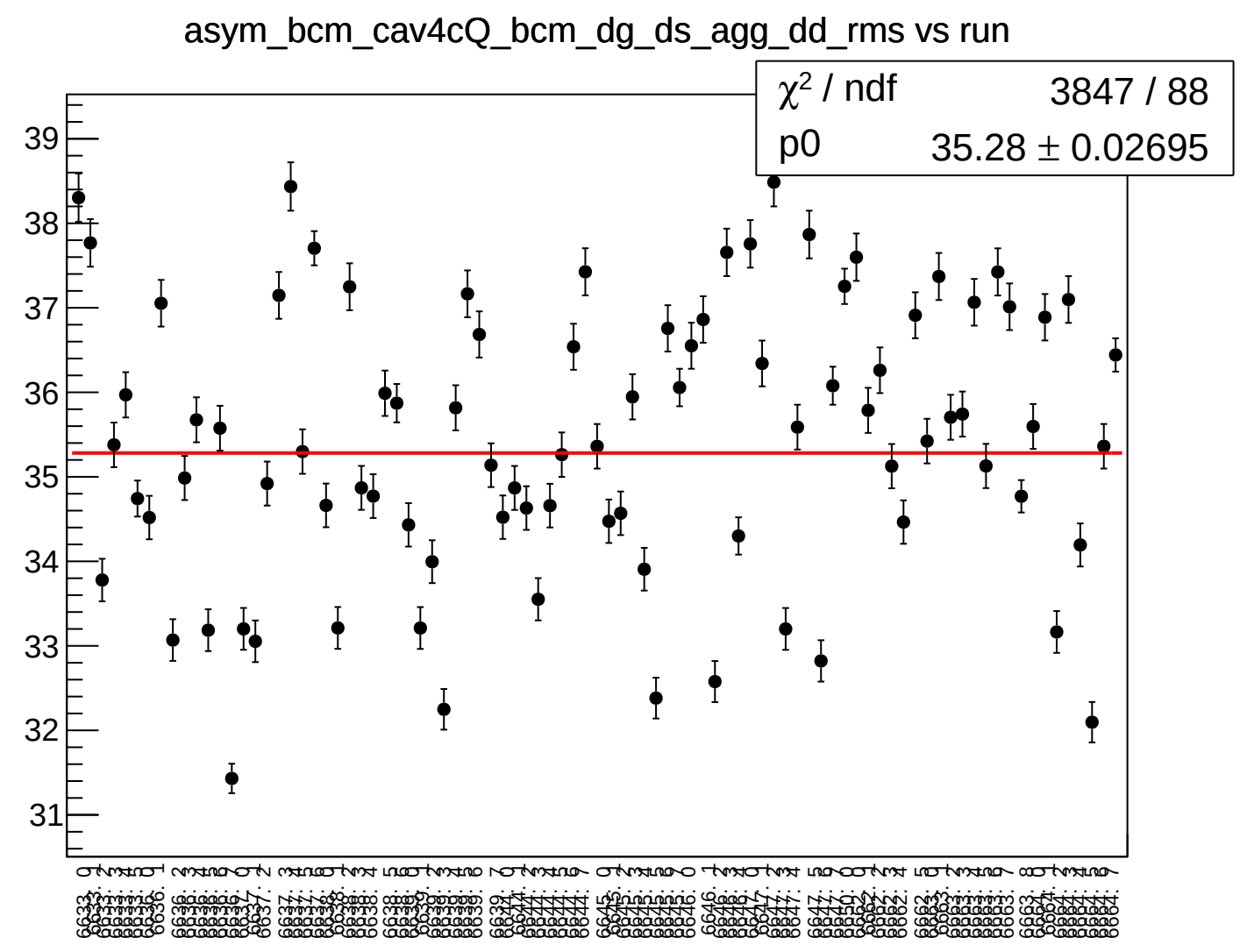

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 17.56 / 88
p0 −272.3 ± 305.6
pull
Entries 89
Mean 63.74
Std Dev 41.69

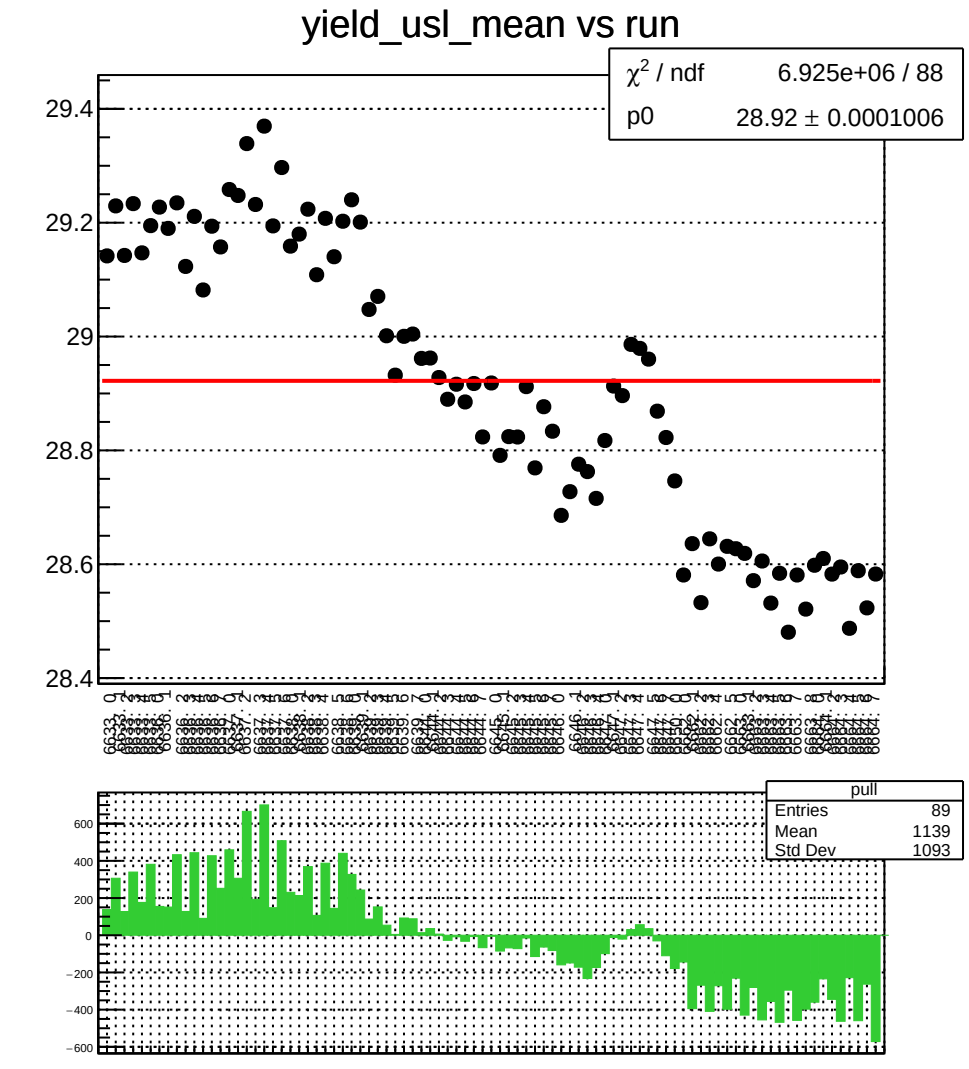

pull1D
Entries 89
Mean −0.003273
Std Dev 0.4442

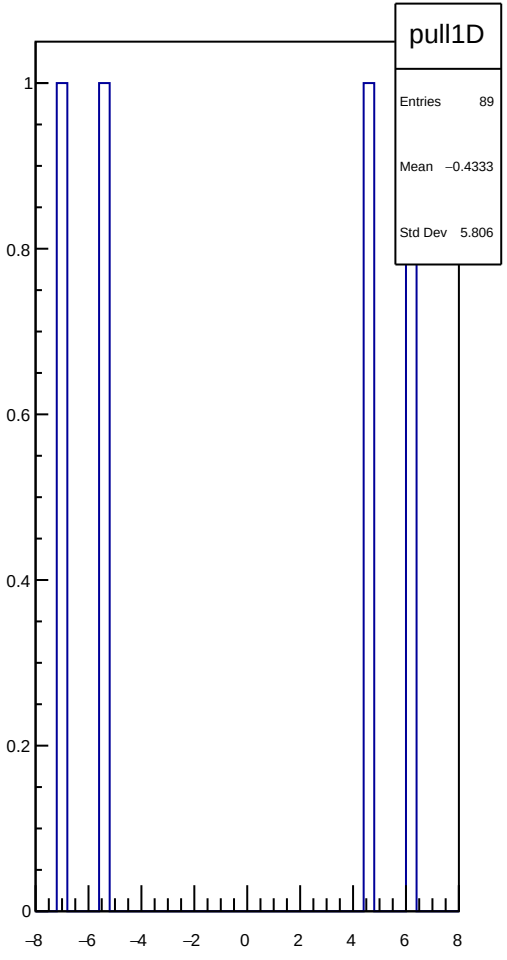

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.779e+04 / 88
p0 281.7 ± 0.2161
550
500
450
400
350
300
250

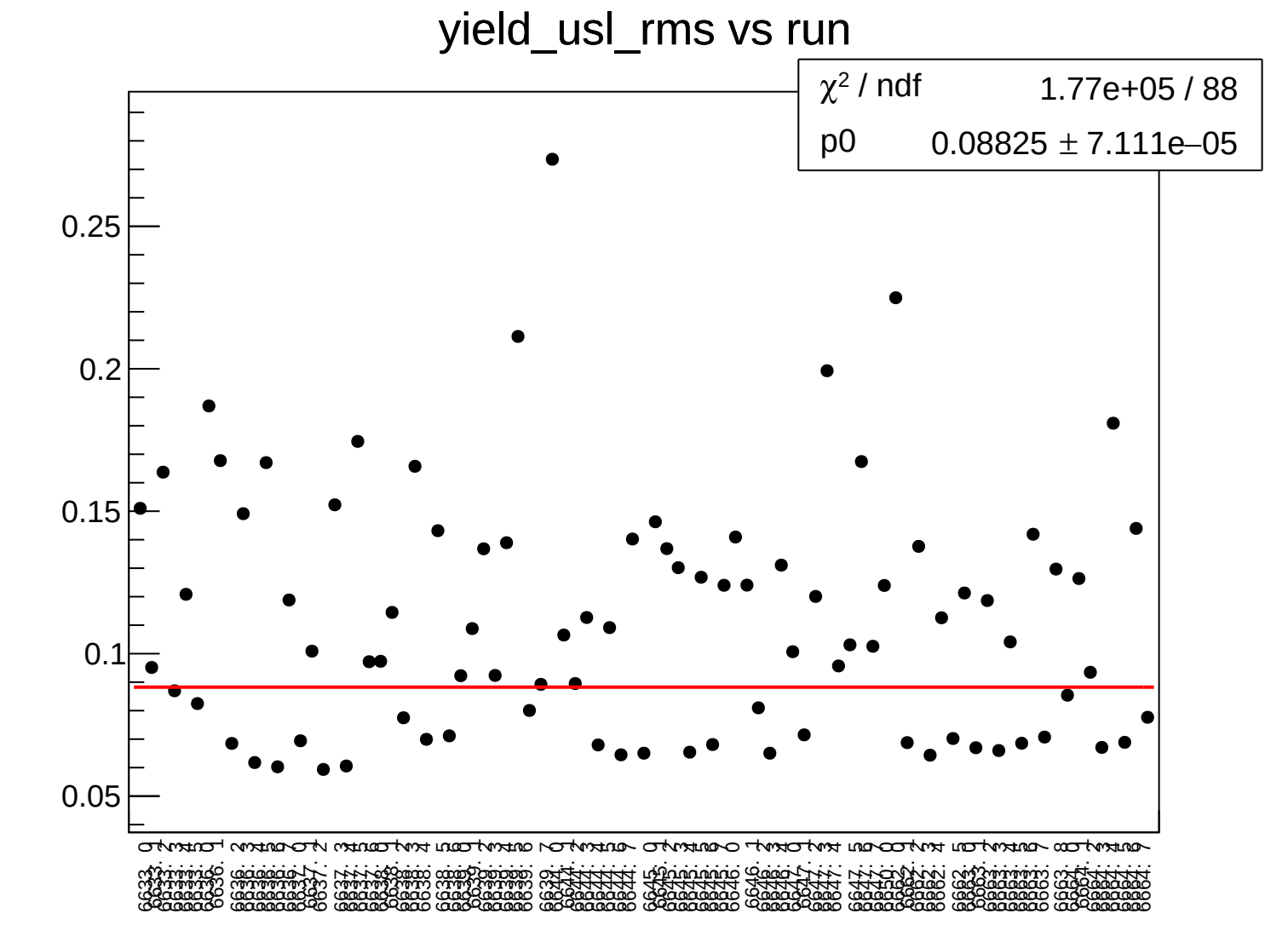

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 61.75 / 88
p0 −37.68 ± 38.12
1000
500
0
−500
−1000
pull
Entries 89
Mean −487.3
Std Dev 550.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

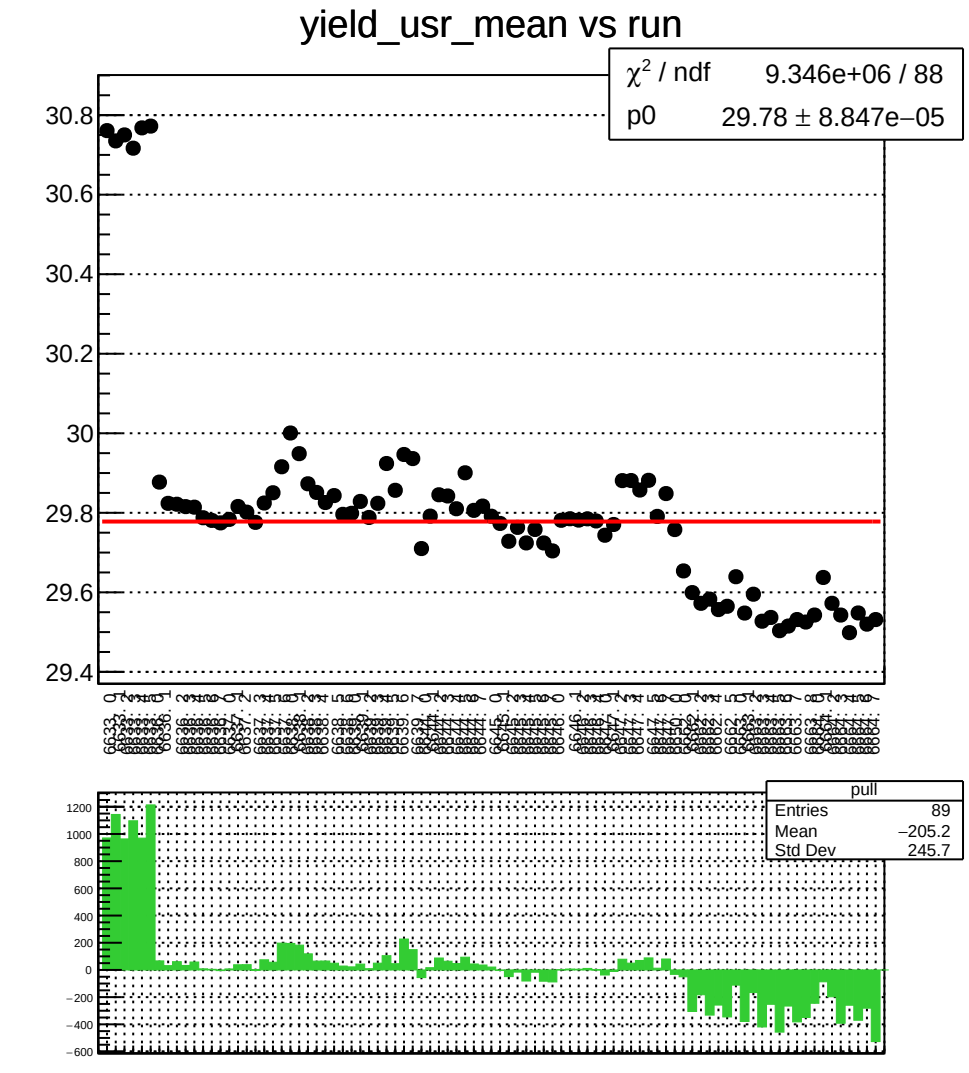

pull1D
Entries 89
Mean 0.001697
Std Dev 0.833
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

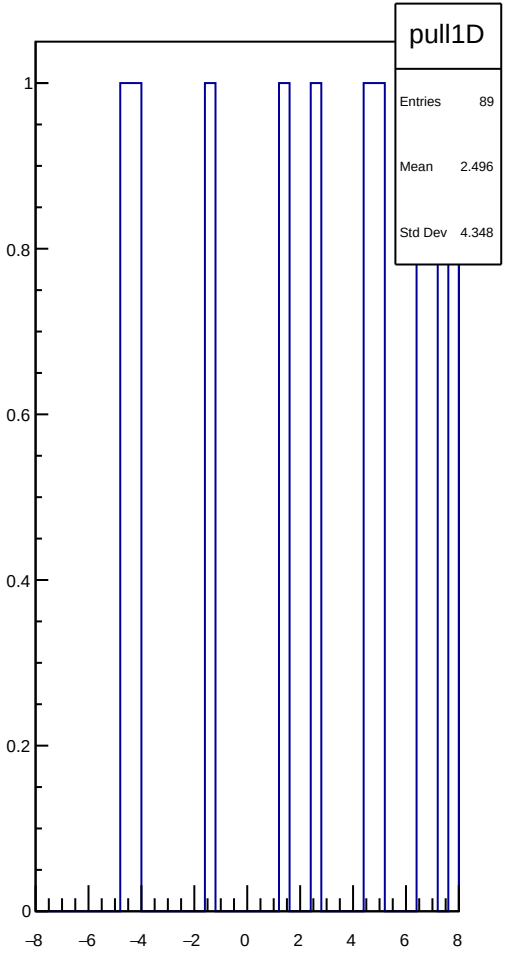

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3847 / 88
p0 35.28 ± 0.02695
39
38
37
36
35
34
33
32
31

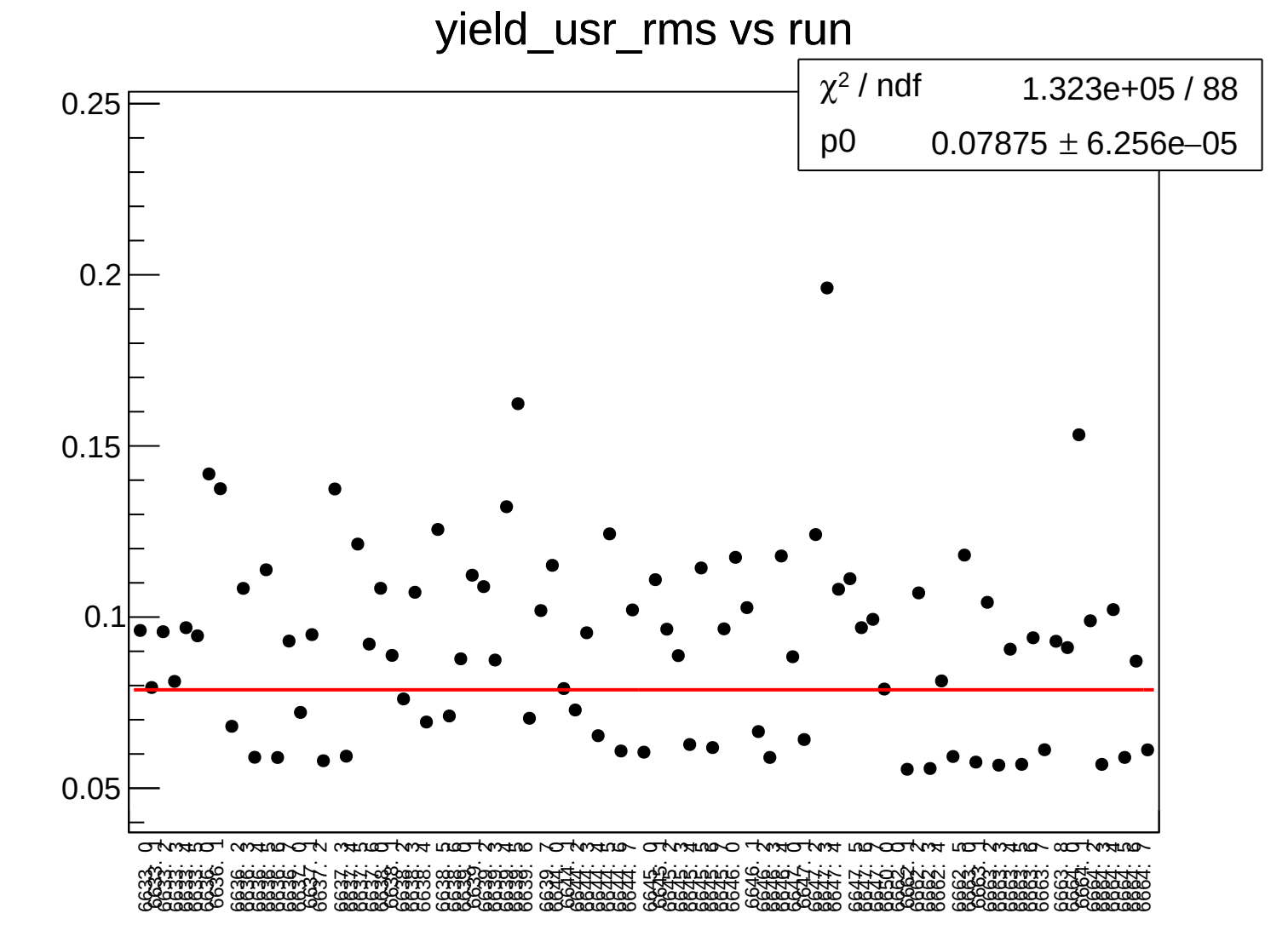

yield_usl_mean vs run
χ² / ndf 6.925e+06 / 88
p0 28.92 ± 0.0001006
29.4
29.2
29
28.8
28.6
28.4
pull
Entries 89
Mean 1139
Std Dev 1093
600
400
200
0
−200
−400
−600

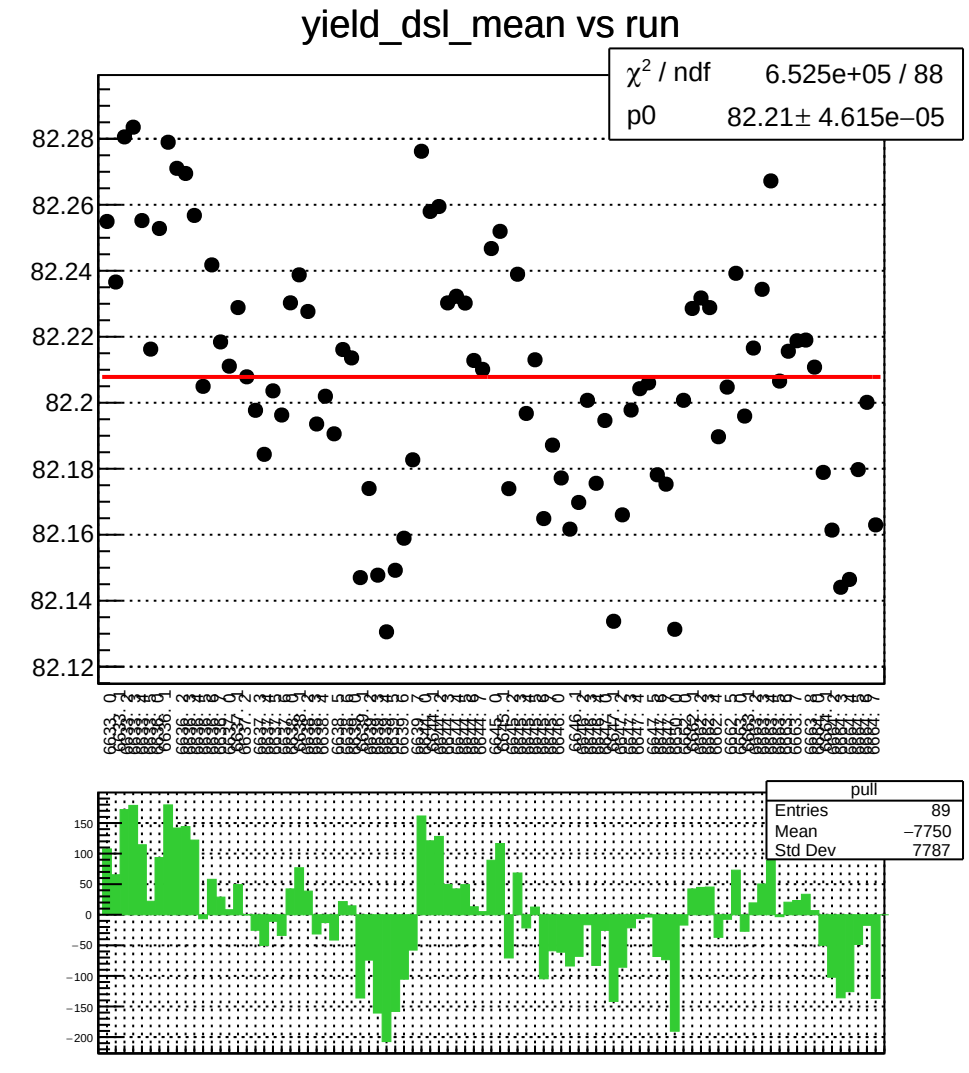

pull1D
Entries 89
Mean −0.4333
Std Dev 5.806
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

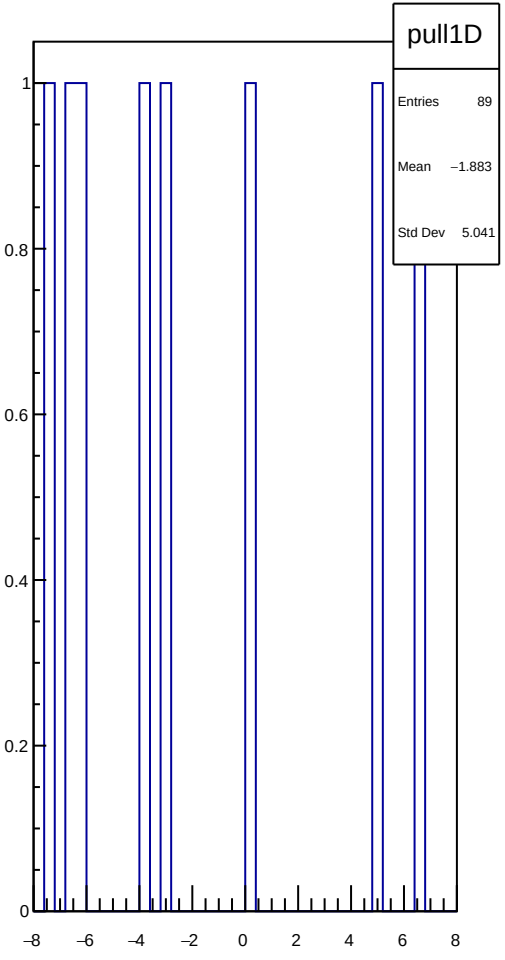

yield_usl_rms vs run
χ² / ndf 1.77e+05 / 88
p0 0.08825 ± 7.111e−05
0.25
0.2
0.15
0.1
0.05

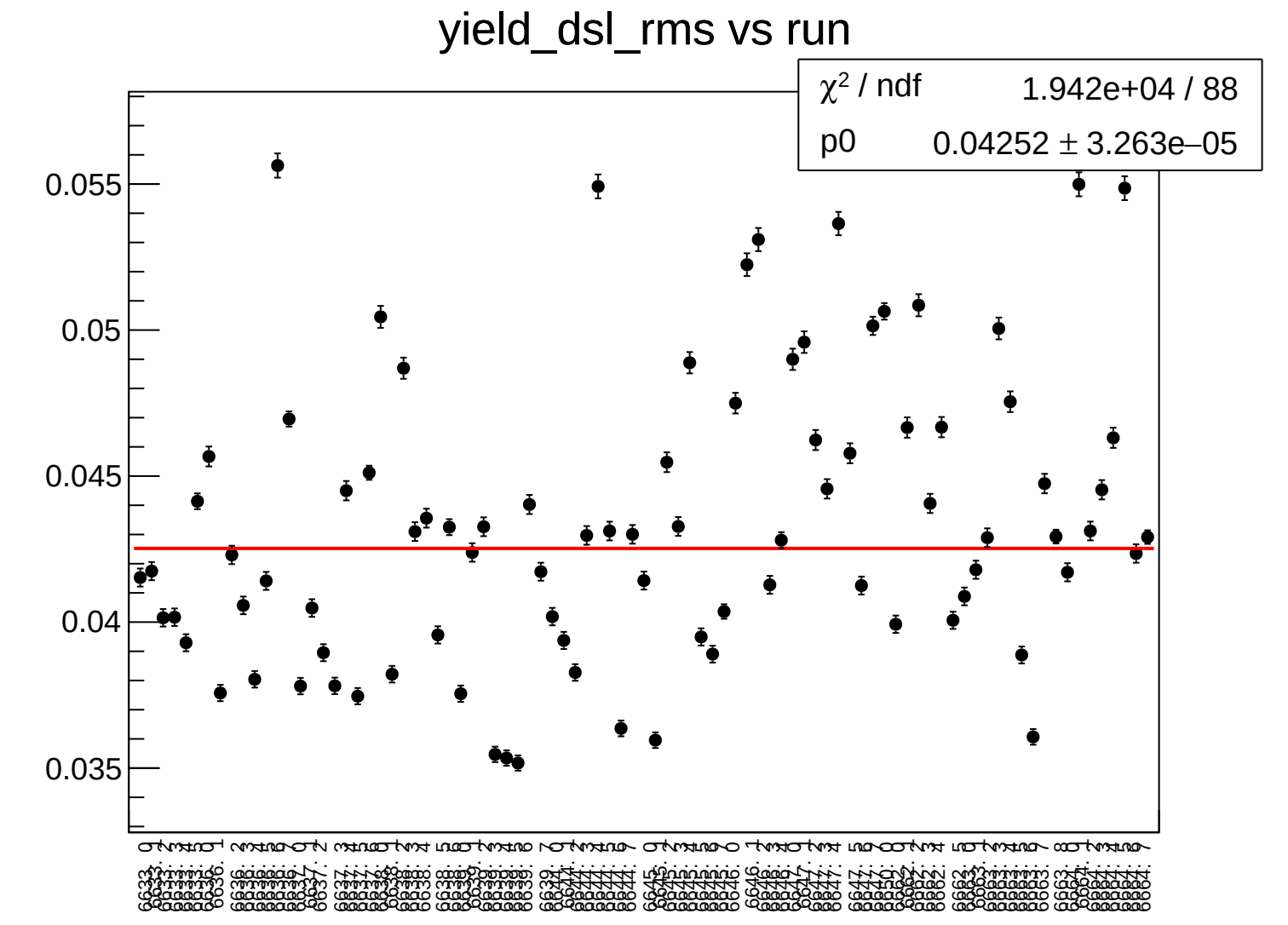

yield_usr_mean vs run
χ^2 / ndf 9.346e+06 / 88
p0 29.78 ± 8.847e−05
30.8
30.6
30.4
30.2
30
29.8
29.6
29.4
pull
Entries 89
Mean −205.2
Std Dev 245.7
1200
1000
800
600
400
200
0
−200
−400
−600

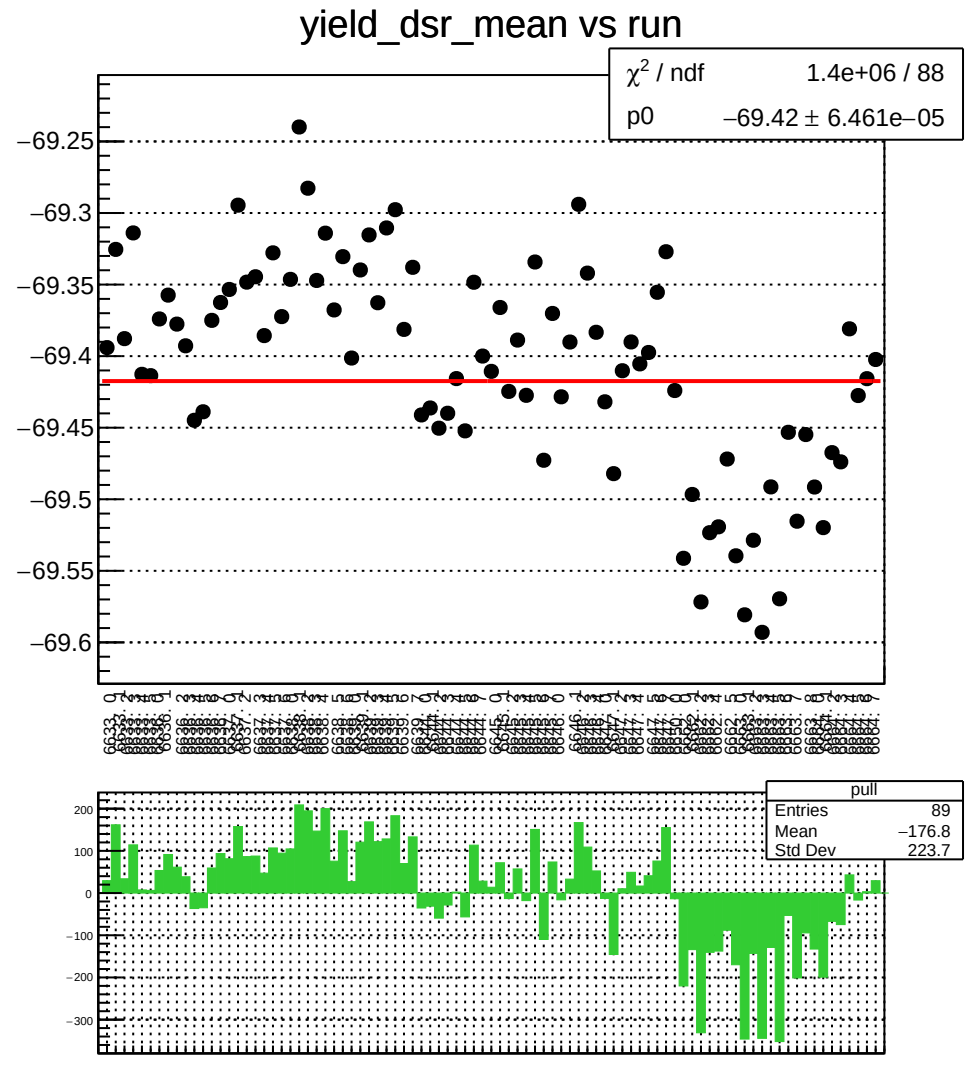

pull1D
Entries 89
Mean 2.496
Std Dev 4.348
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

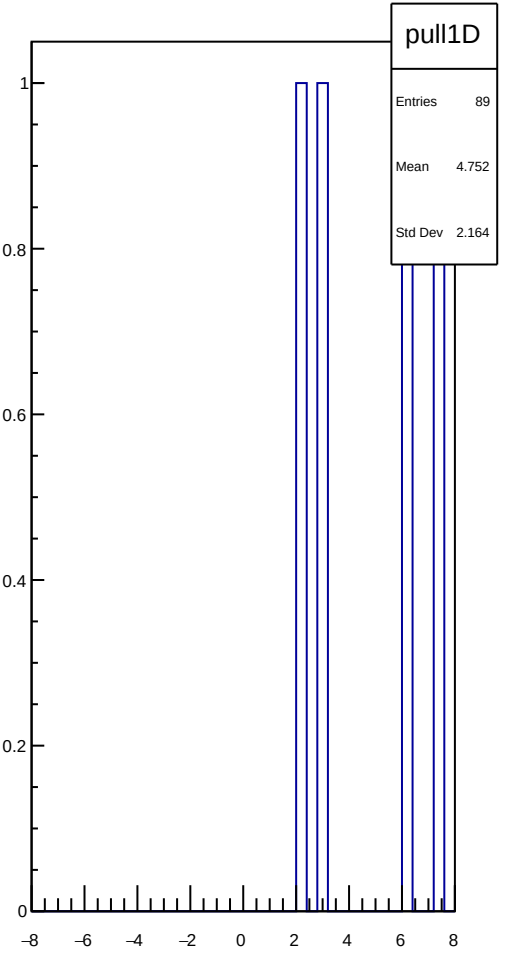

yield_usr_rms vs run
χ² / ndf 1.323e+05 / 88
p0 0.07875 ± 6.256e−05
0.25
0.2
0.15
0.1
0.05

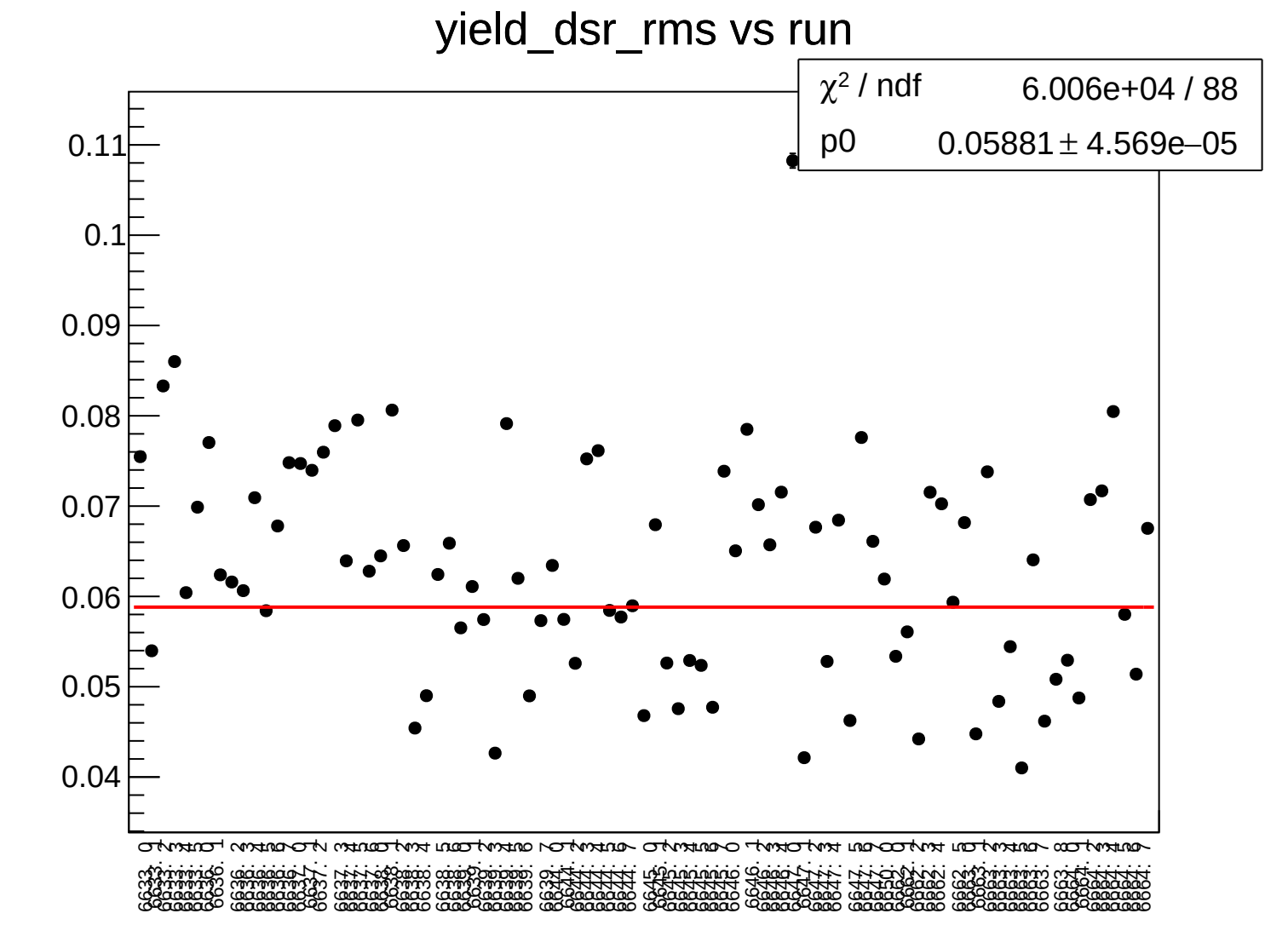

yield_dsl_mean vs run
χ² / ndf 6.525e+05 / 88
p0 82.21± 4.615e−05
82.28
82.26
82.24
82.22
82.2
82.18
82.16
82.14
82.12
pull
Entries 89
Mean −7750
Std Dev 7787
150
100
50
0
−50
−100
−150
−200

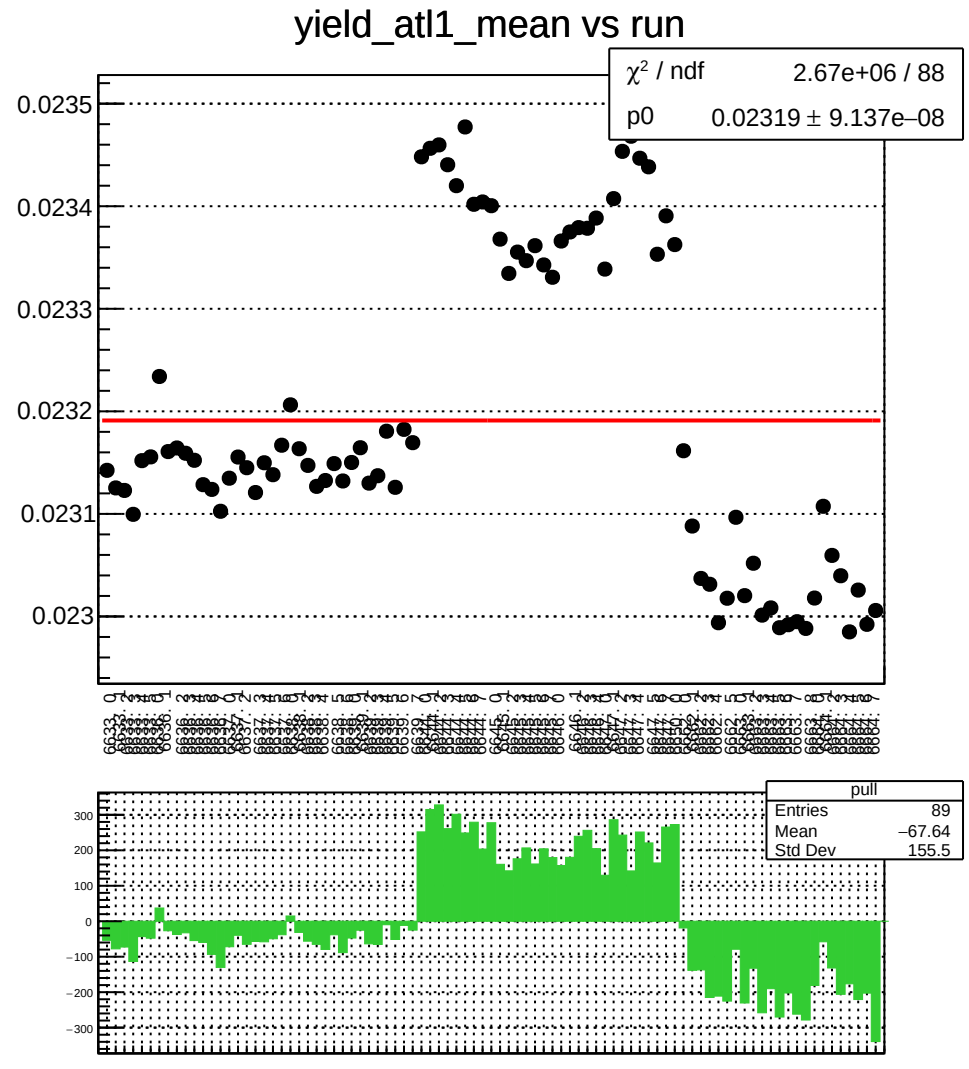

pull1D
Entries 89
Mean −1.883
Std Dev 5.041
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

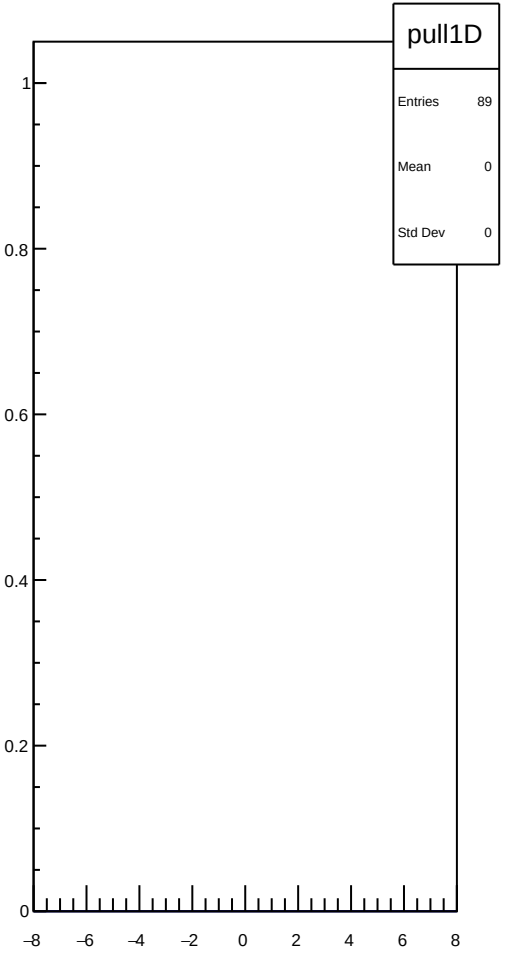

yield_dsl_rms vs run
χ² / ndf 1.942e+04 / 88
p0 0.04252 ± 3.263e−05
0.055
0.05
0.045
0.04
0.035

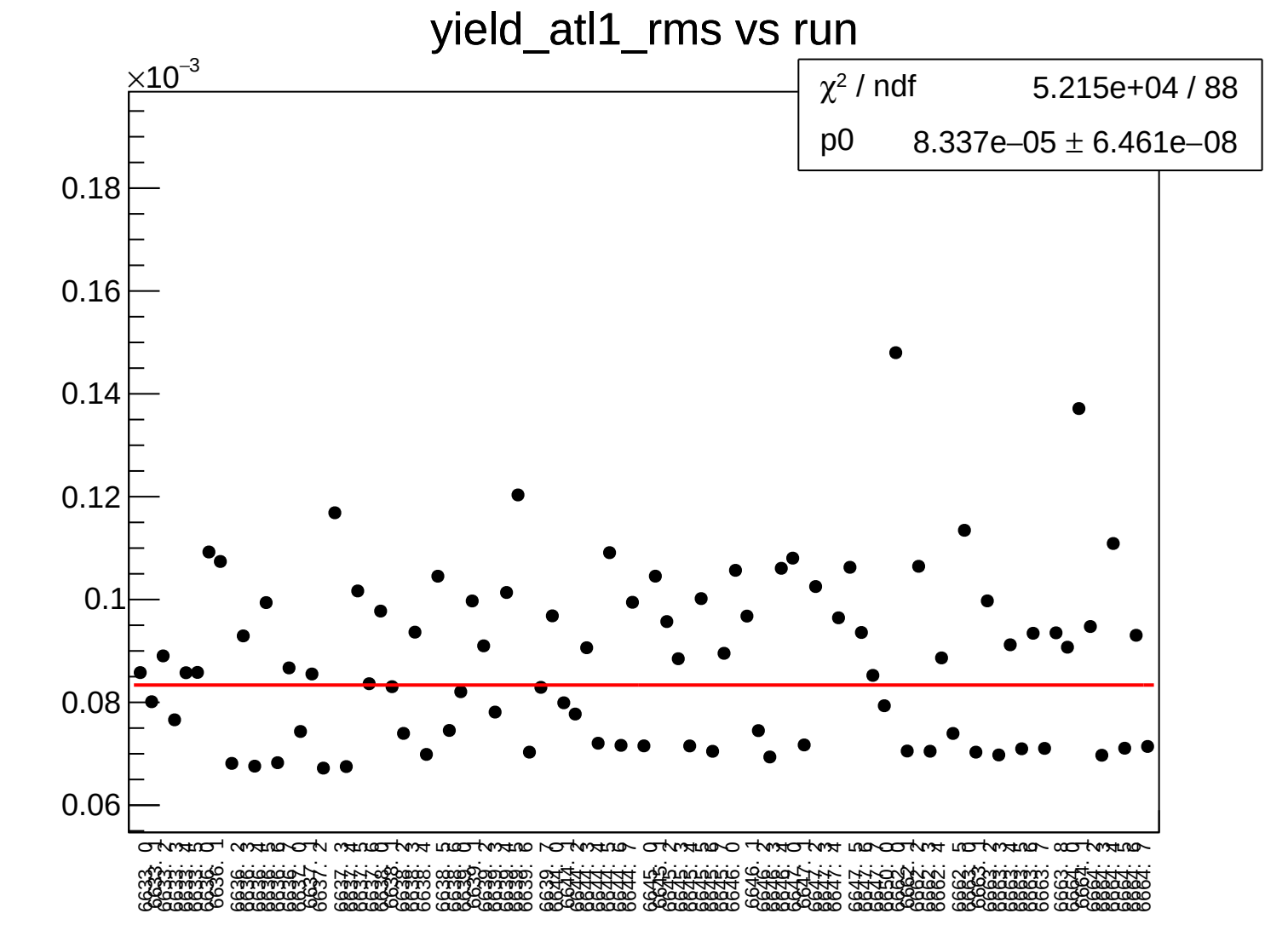

yield_dsr_mean vs run
χ² / ndf 1.4e+06 / 88
p0 −69.42 ± 6.461e−05
−69.25
−69.3
−69.35
−69.4
−69.45
−69.5
−69.55
−69.6
pull
Entries 89
Mean −176.8
Std Dev 223.7
200
100
0
−100
−200
−300

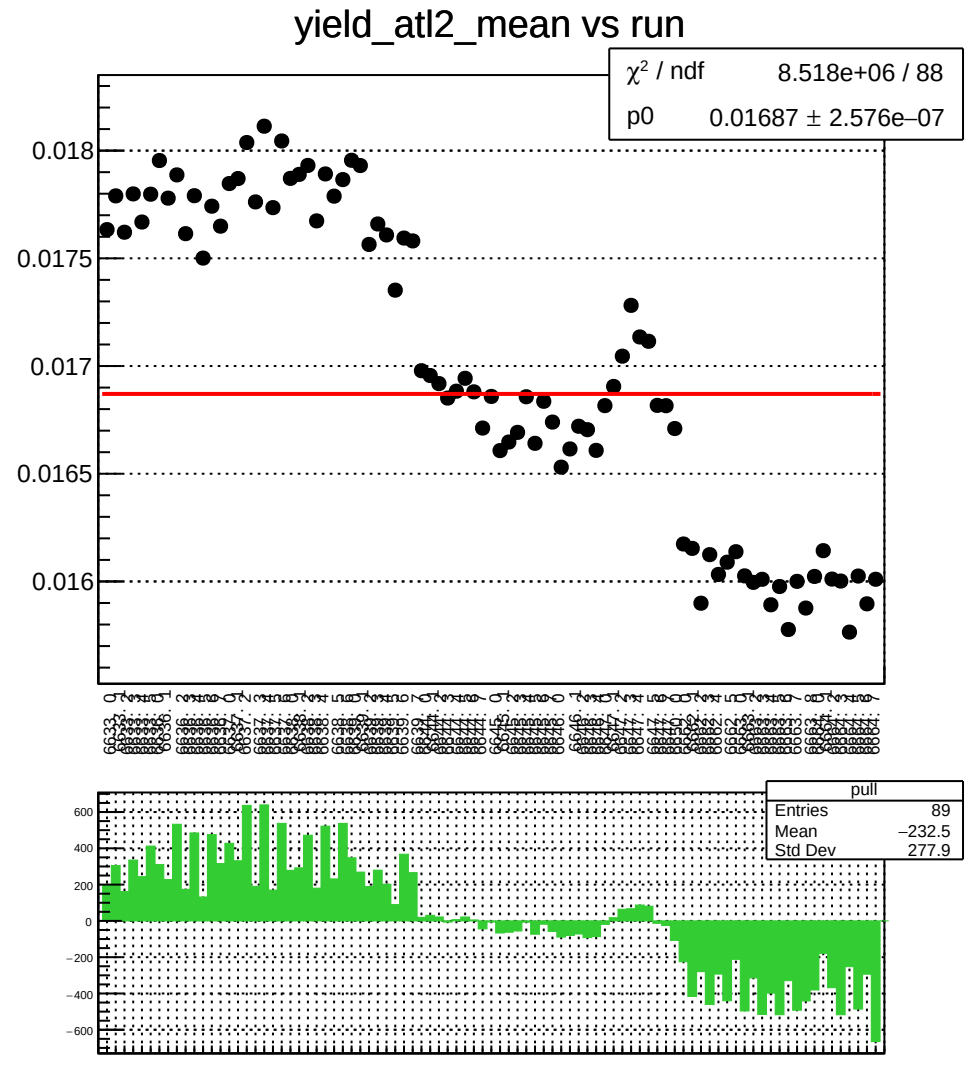

pull1D
Entries 89
Mean 4.752
Std Dev 2.164
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

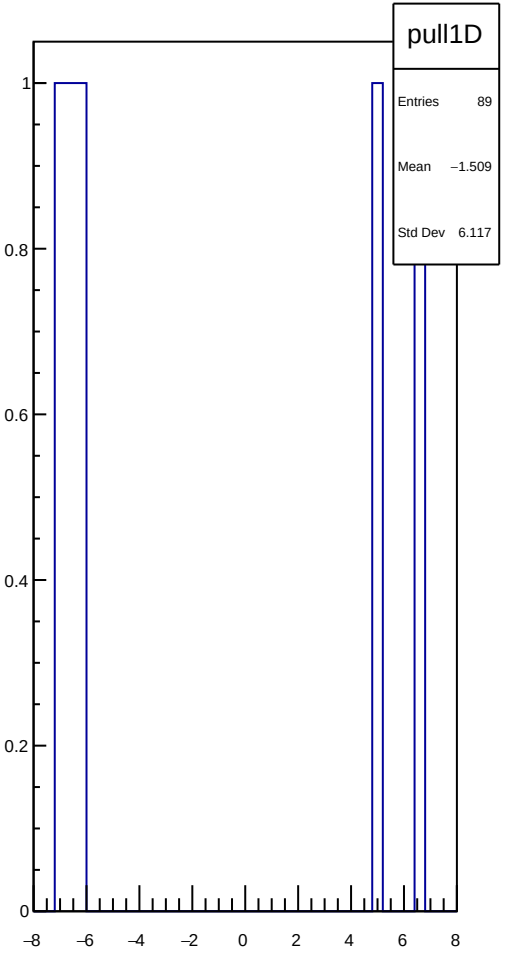

yield_dsr_rms vs run
χ² / ndf 6.006e+04 / 88
p0 0.05881 ± 4.569e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

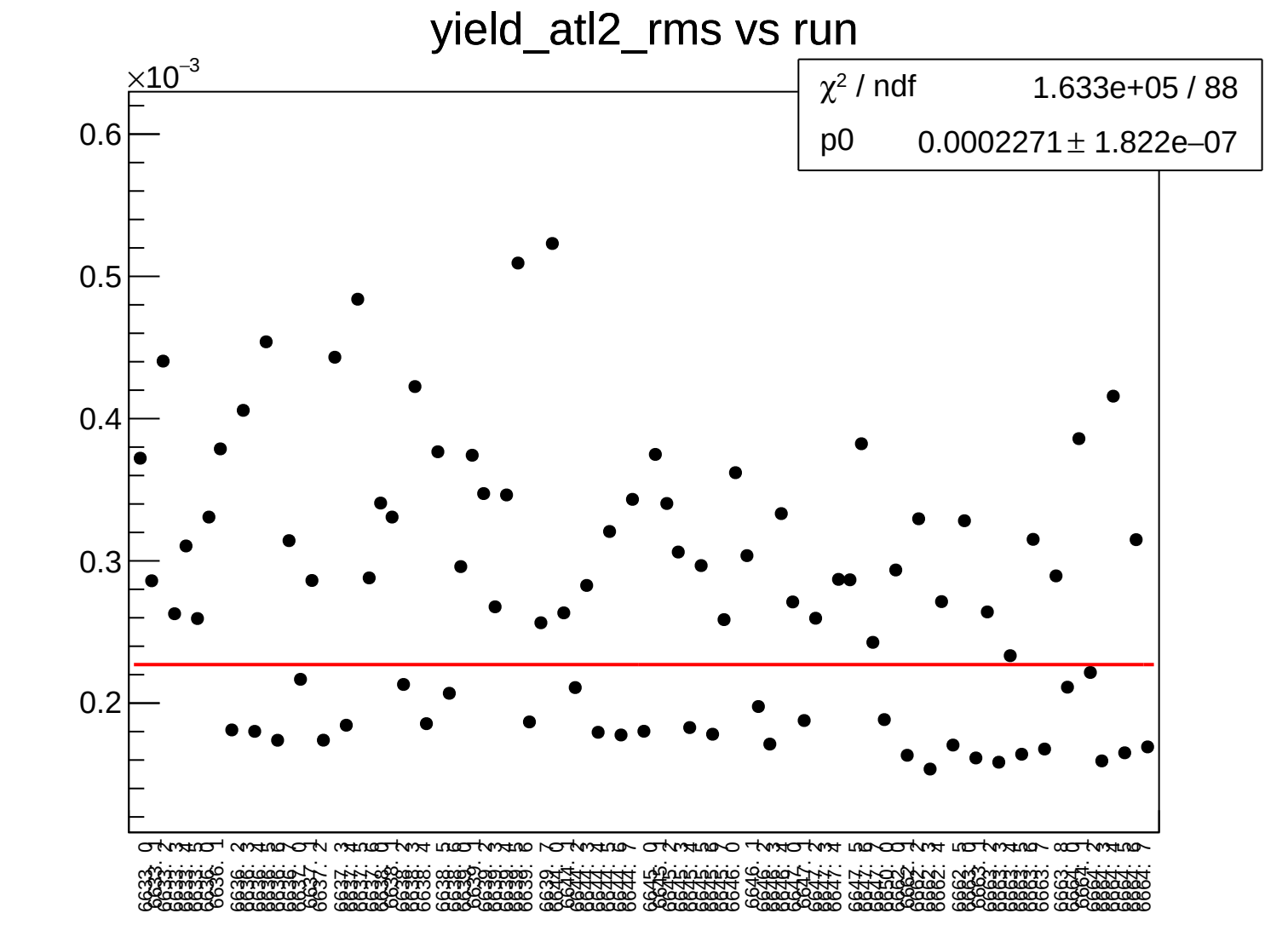

yield_atl1_mean vs run
χ² / ndf 2.67e+06 / 88
p0 0.02319 ± 9.137e−08
0.0235
0.0234
0.0233
0.0232
0.0231
0.023
pull
Entries 89
Mean −67.64
Std Dev 155.5
300
200
100
0
−100
−200
−300

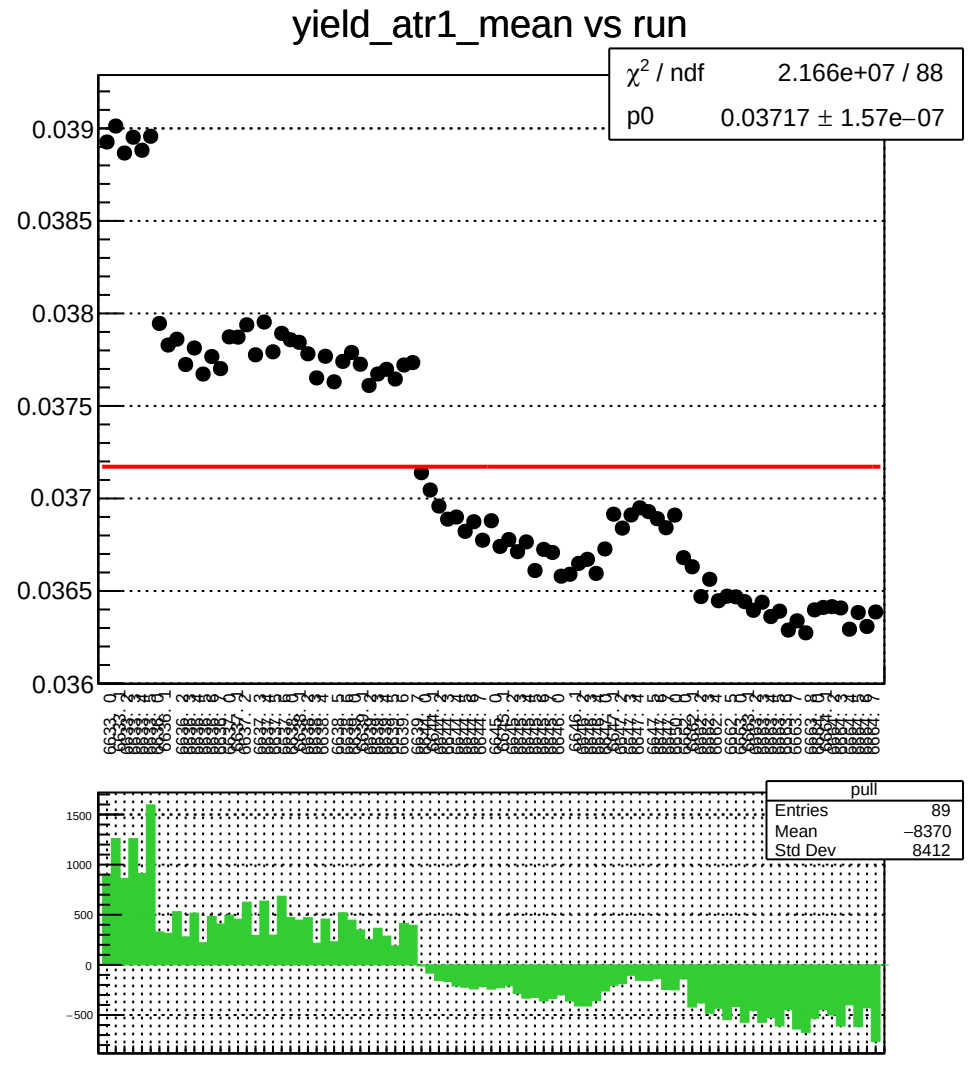

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

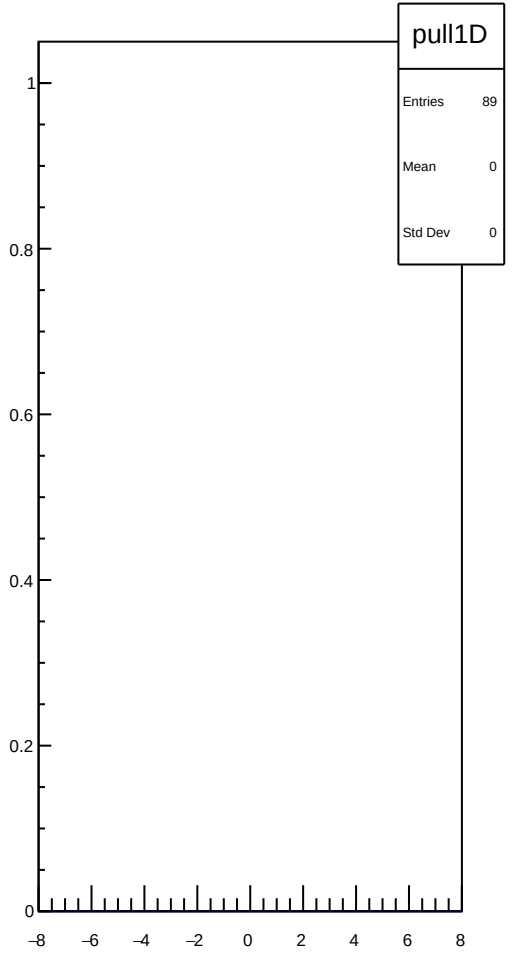

yield_atl1_rms vs run
×10⁻³
χ² / ndf 5.215e+04 / 88
p0 8.337e−05 ± 6.461e−08
0.18
0.16
0.14
0.12
0.1
0.08
0.06

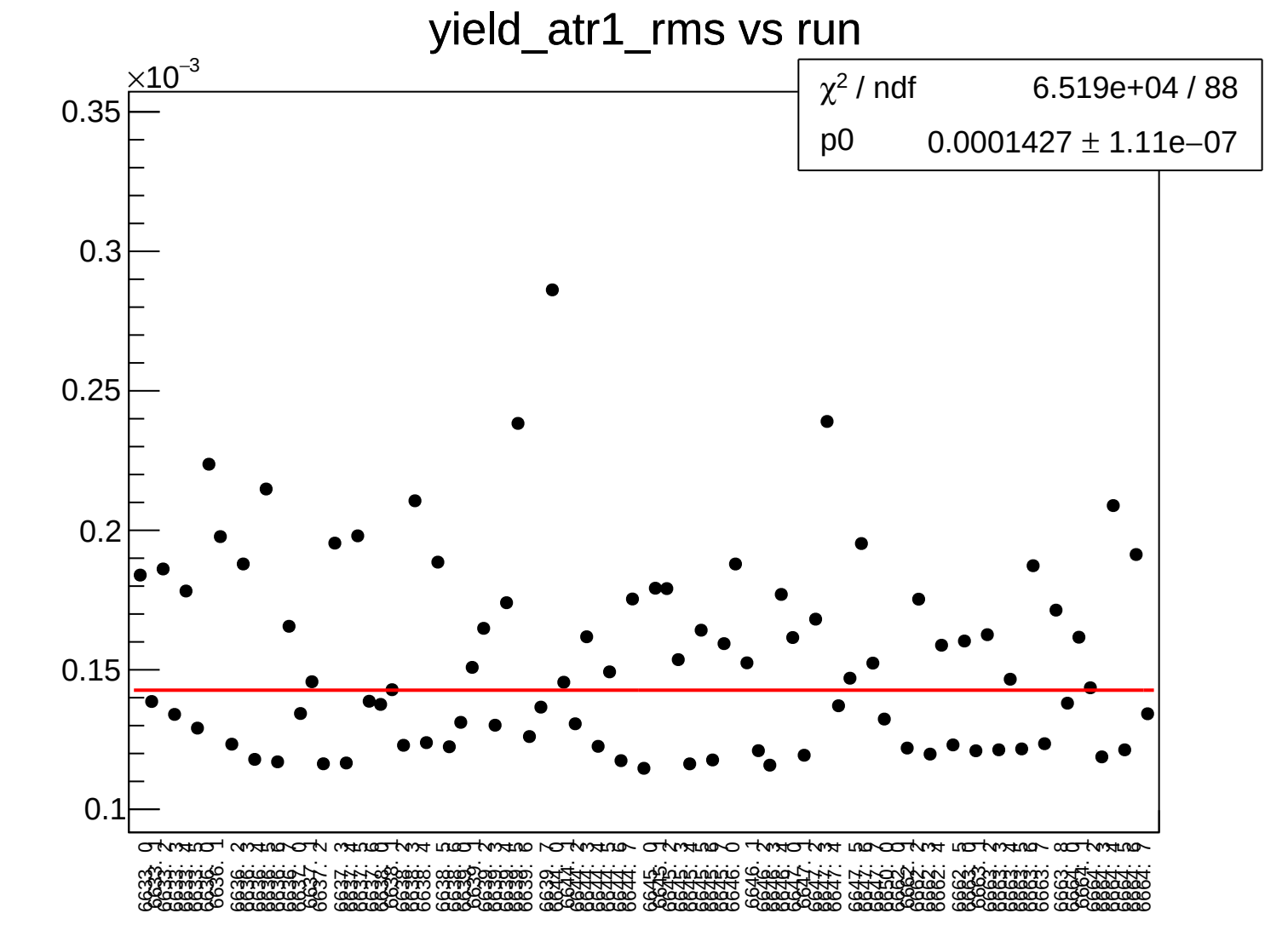

yield_atl2_mean vs run
χ² / ndf 8.518e+06 / 88
p0 0.01687 ± 2.576e–07
0.018
0.0175
0.017
0.0165
0.016
pull
Entries 89
Mean –232.5
Std Dev 277.9
600
400
200
0
–200
–400
–600

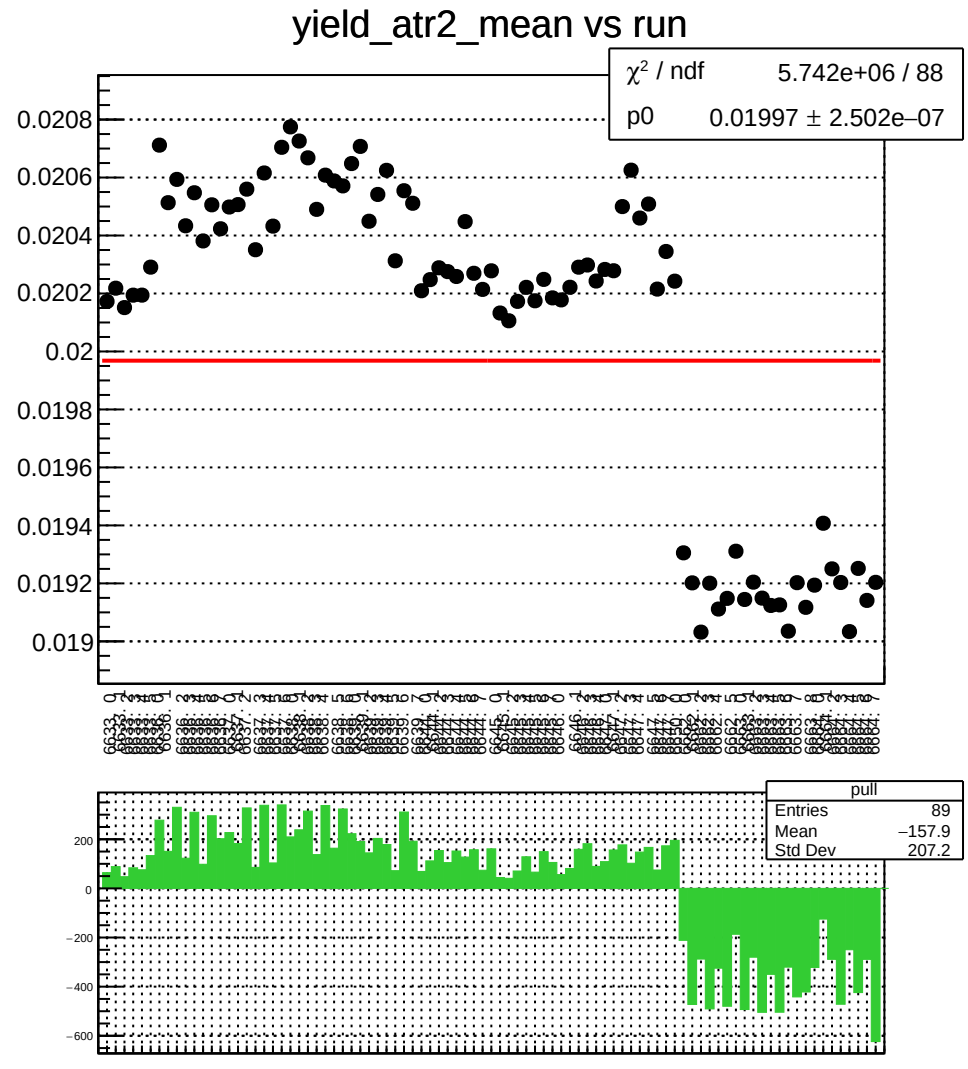

pull1D
Entries 89
Mean –1.509
Std Dev 6.117
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

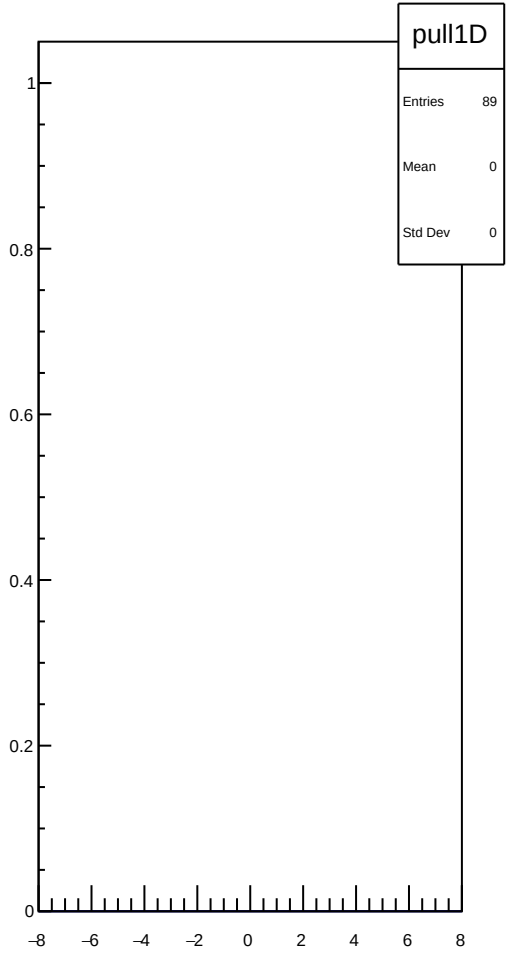

yield_atl2_rms vs run
×10⁻³
χ² / ndf 1.633e+05 / 88
p0 0.0002271 ± 1.822e–07
0.6
0.5
0.4
0.3
0.2

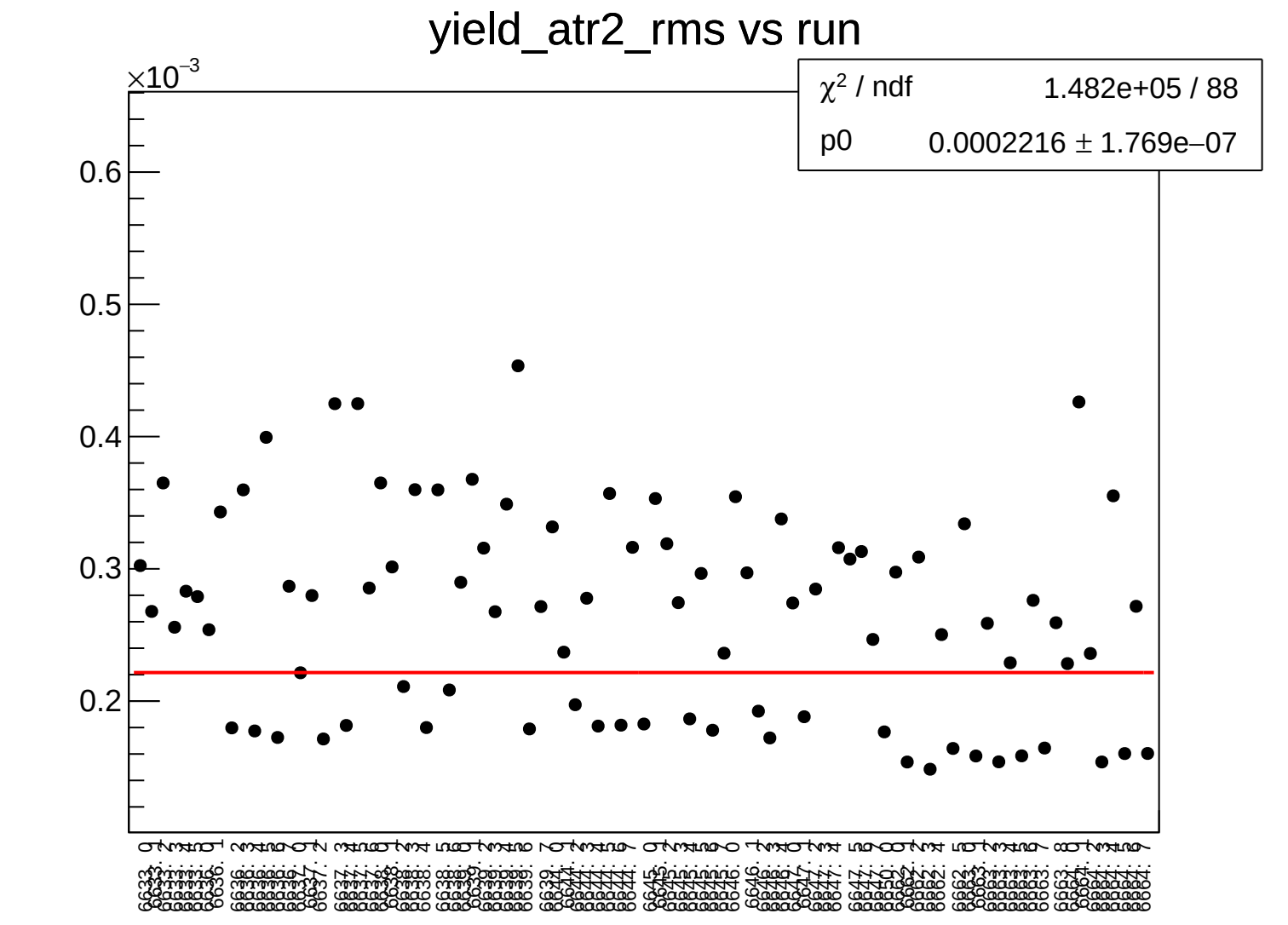

yield_atr1_mean vs run
χ² / ndf 2.166e+07 / 88
p0 0.03717 ± 1.57e−07
0.039
0.0385
0.038
0.0375
0.037
0.0365
0.036
pull
Entries 89
Mean −8370
Std Dev 8412
1500
1000
500
0
−500

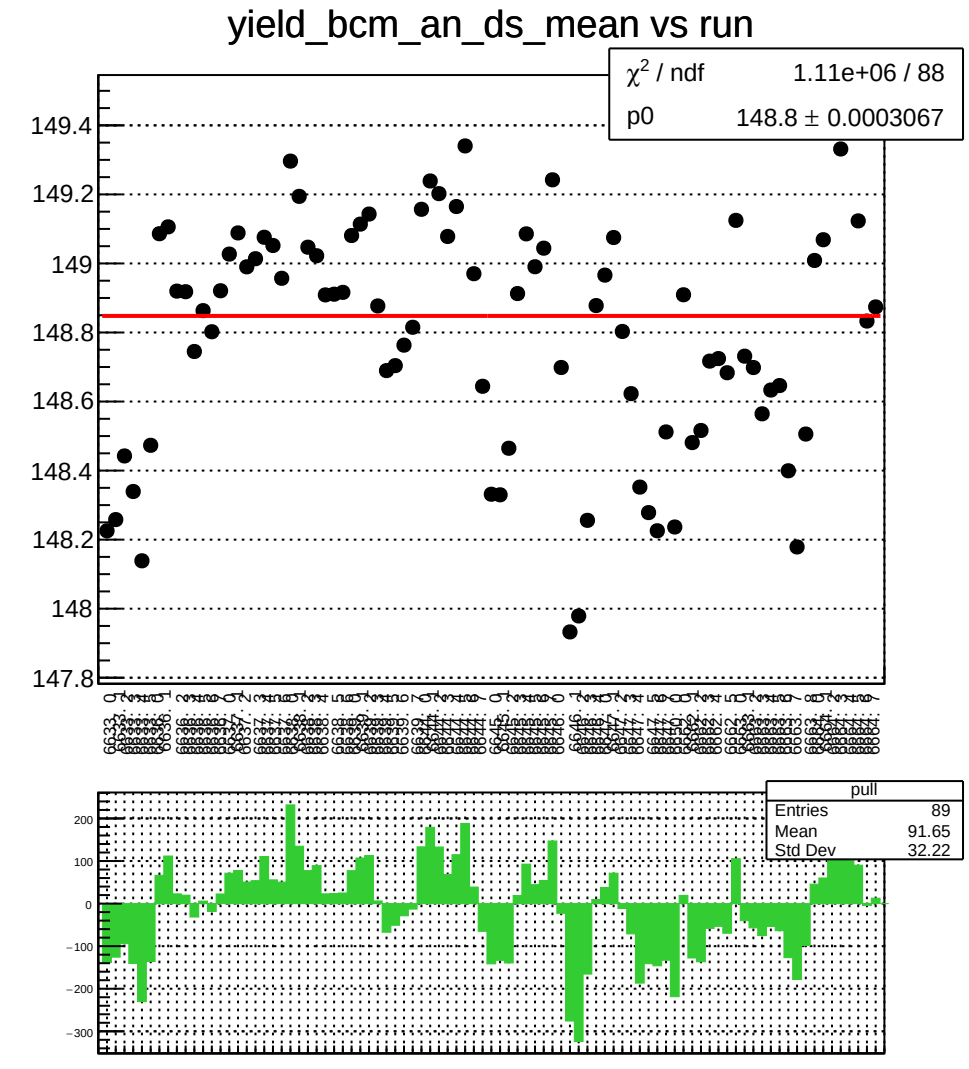

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

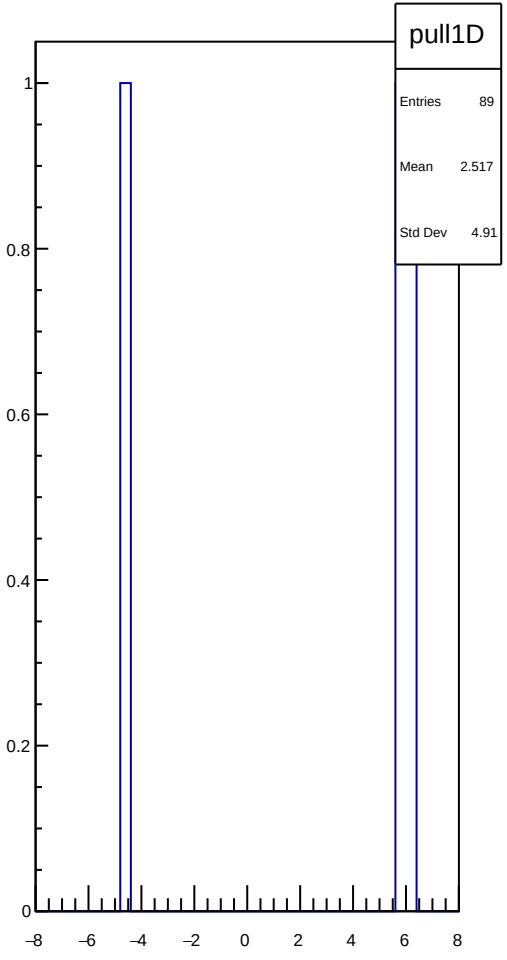

yield_atr1_rms vs run
×10⁻³
χ² / ndf 6.519e+04 / 88
p0 0.0001427 ± 1.11e−07
0.35
0.3
0.25
0.2
0.15
0.1

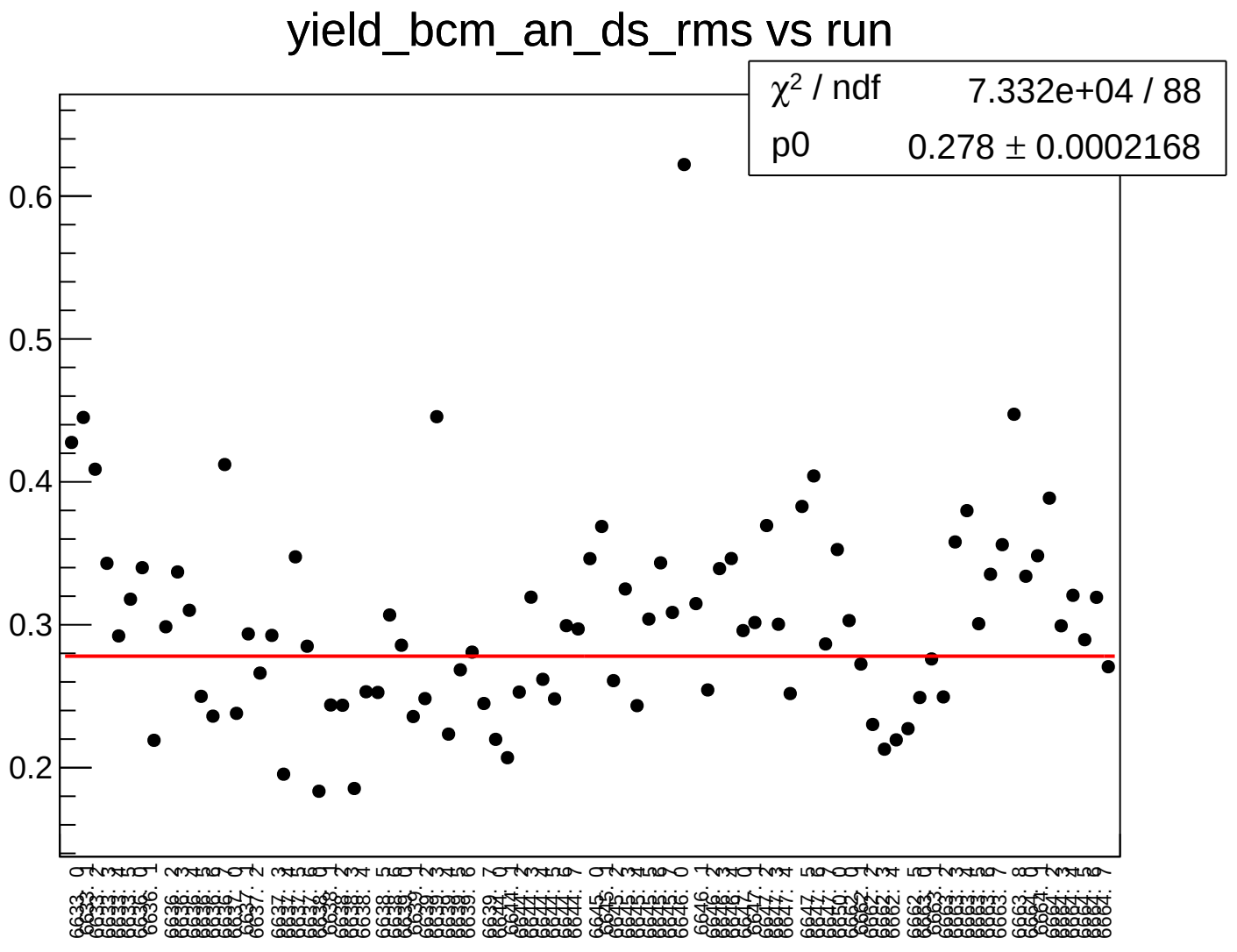

yield_atr2_mean vs run
χ² / ndf 5.742e+06 / 88
p0 0.01997 ± 2.502e–07
0.0208
0.0206
0.0204
0.0202
0.02
0.0198
0.0196
0.0194
0.0192
0.019
pull
Entries 89
Mean –157.9
Std Dev 207.2
200
0
–200
–400
–600

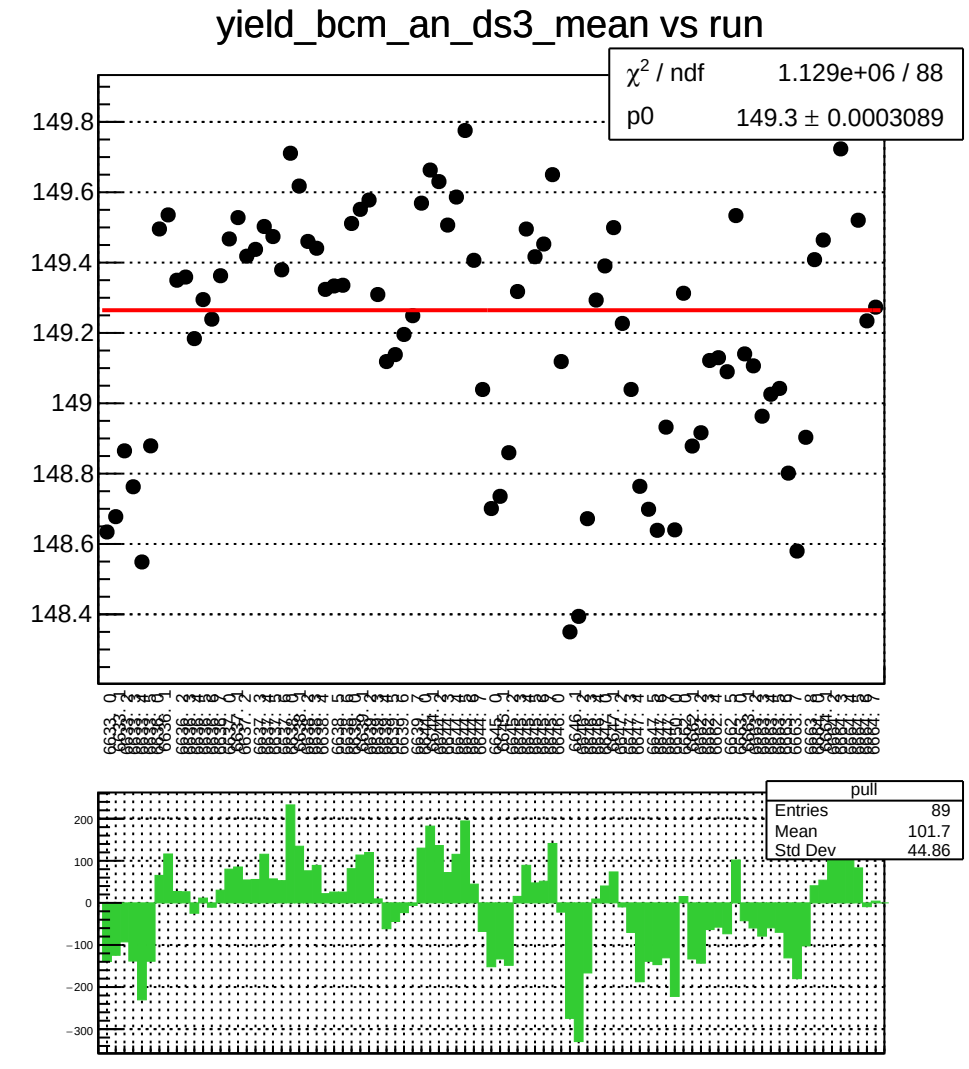

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

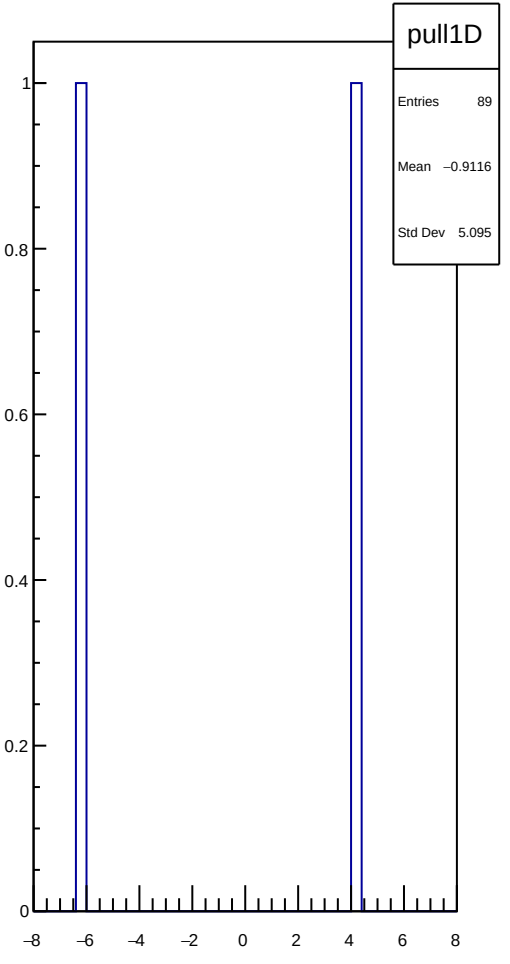

yield_atr2_rms vs run
×10⁻³
χ² / ndf 1.482e+05 / 88
p0 0.0002216 ± 1.769e−07
0.6
0.5
0.4
0.3
0.2

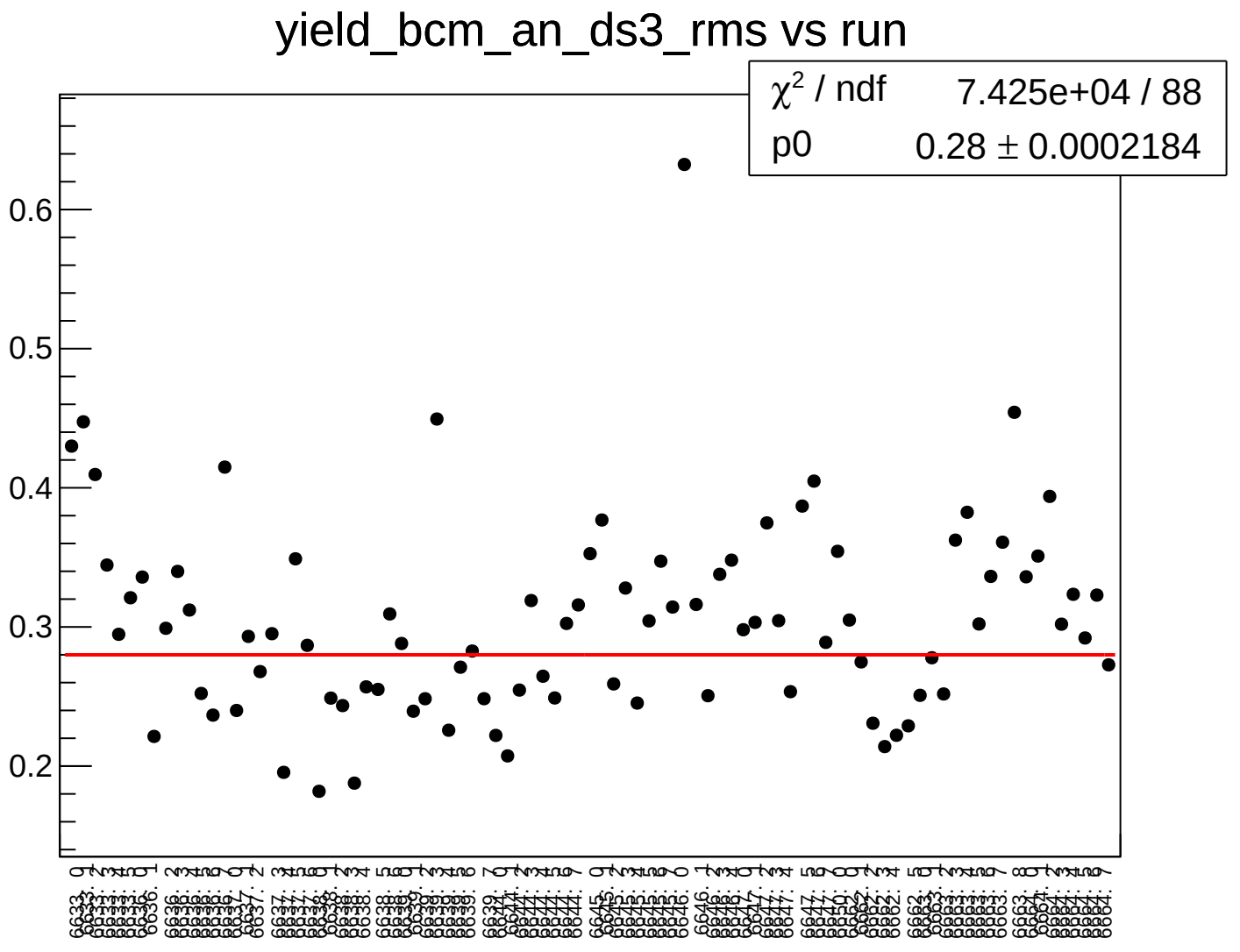

yield_bcm_an_ds_mean vs run
χ² / ndf 1.11e+06 / 88
p0 148.8 ± 0.0003067
149.4
149.2
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 89
Mean 91.65
Std Dev 32.22
200
100
0
−100
−200
−300

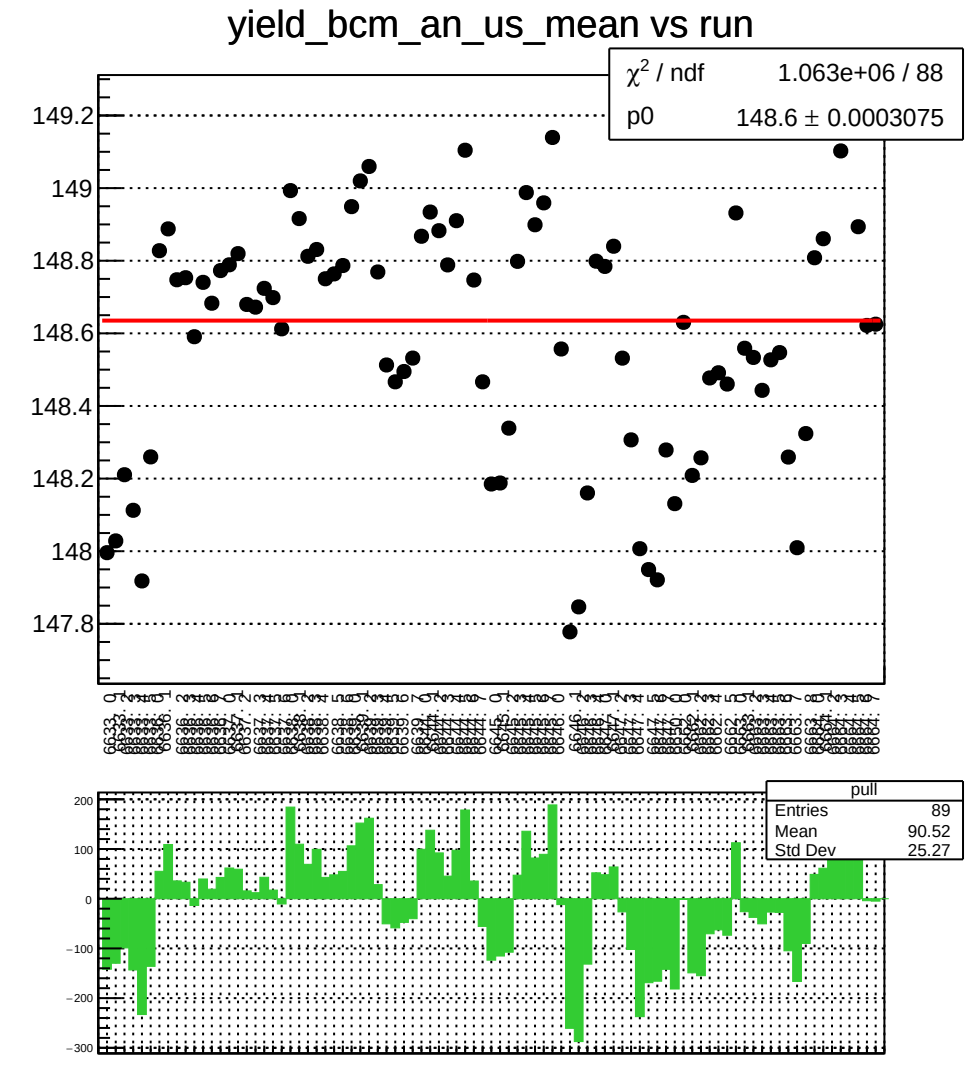

pull1D
Entries 89
Mean 2.517
Std Dev 4.91
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

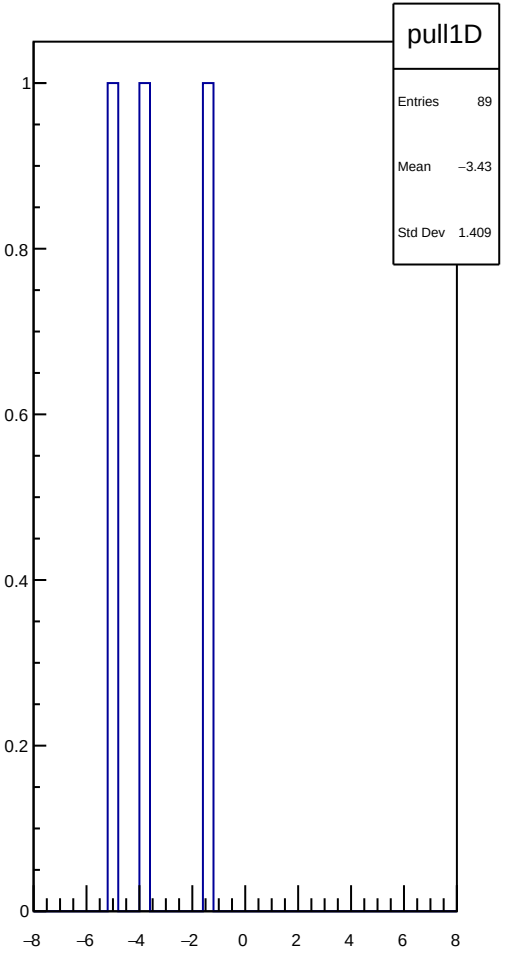

yield_bcm_an_ds_rms vs run
χ² / ndf 7.332e+04 / 88
p0 0.278 ± 0.0002168
0.6
0.5
0.4
0.3
0.2

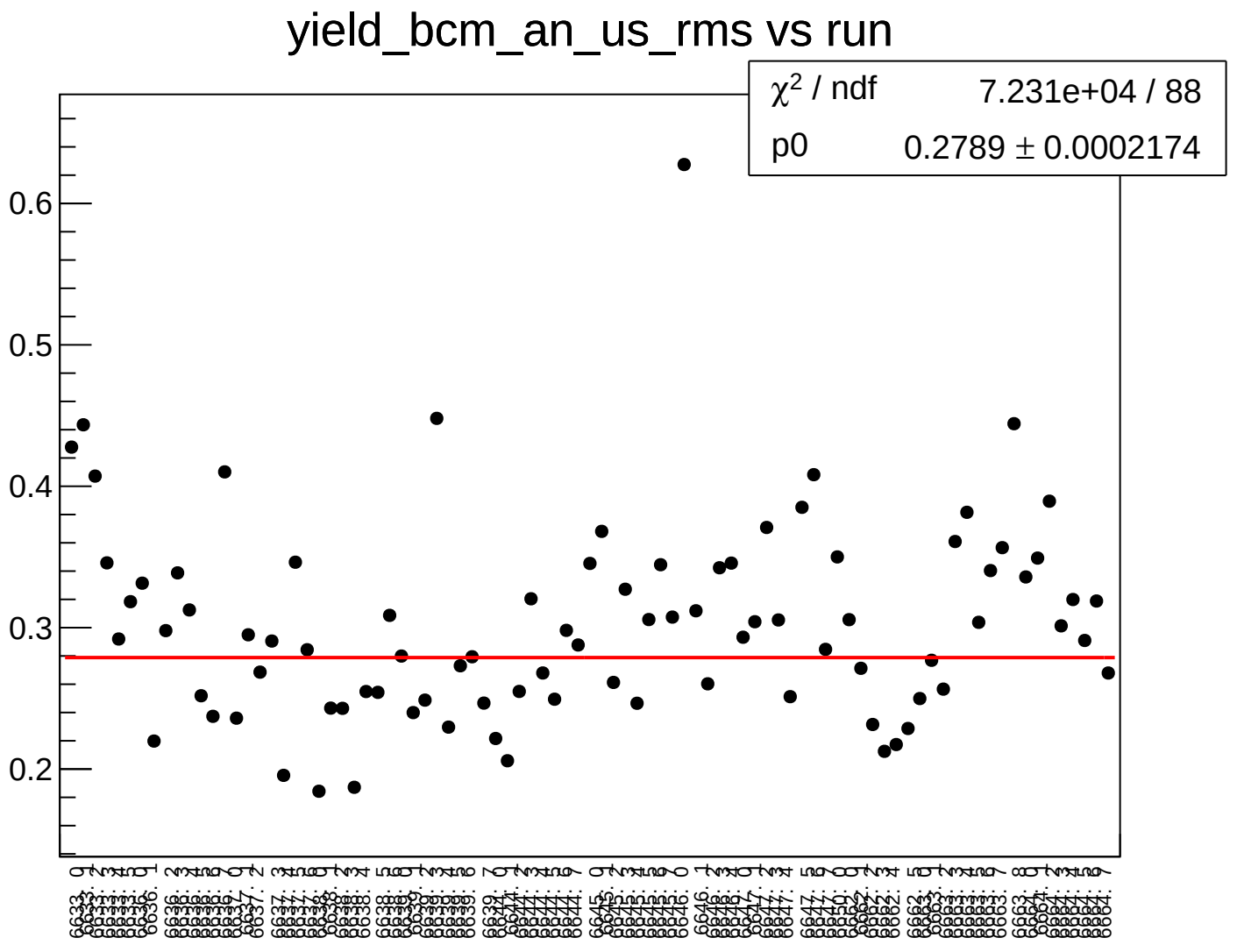

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.129e+06 / 88
p0 149.3 ± 0.0003089
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
pull
Entries 89
Mean 101.7
Std Dev 44.86
200
100
0
−100
−200
−300

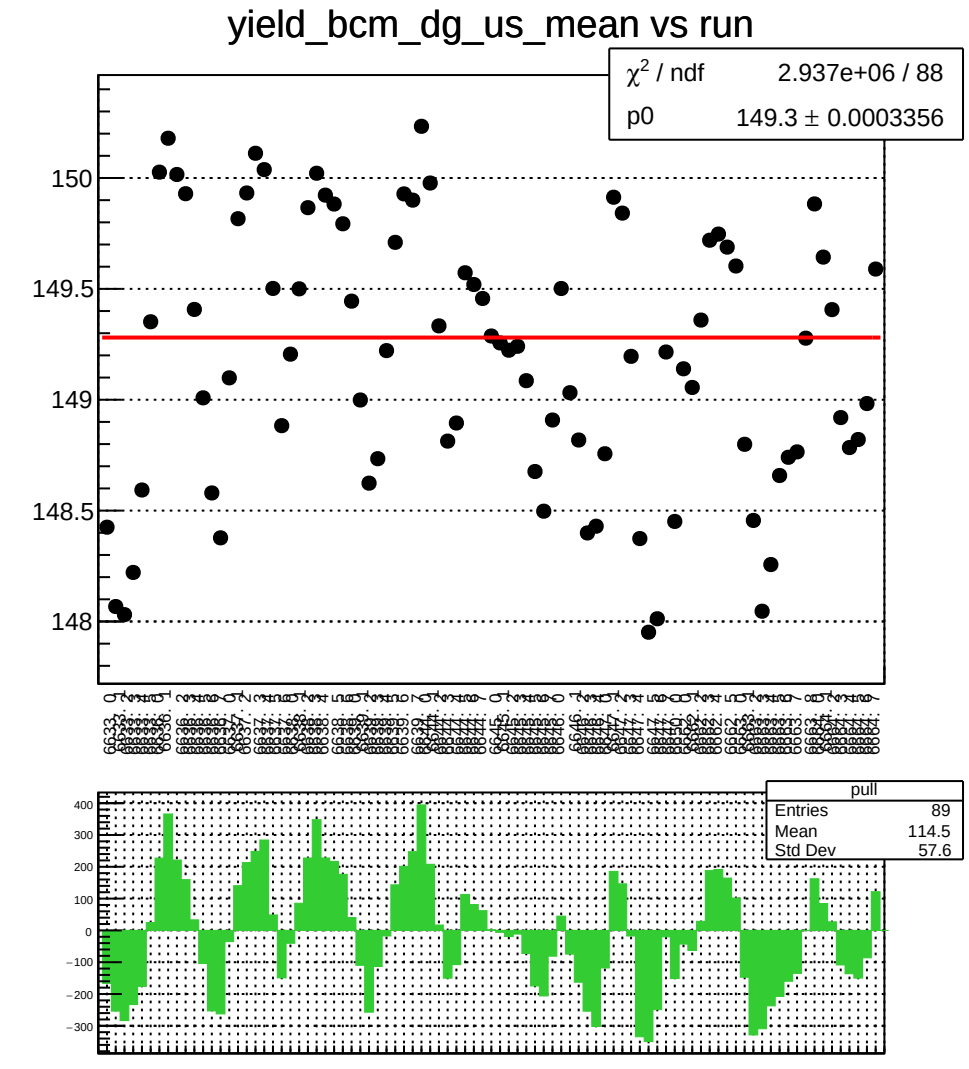

pull1D
Entries 89
Mean −0.9116
Std Dev 5.095
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

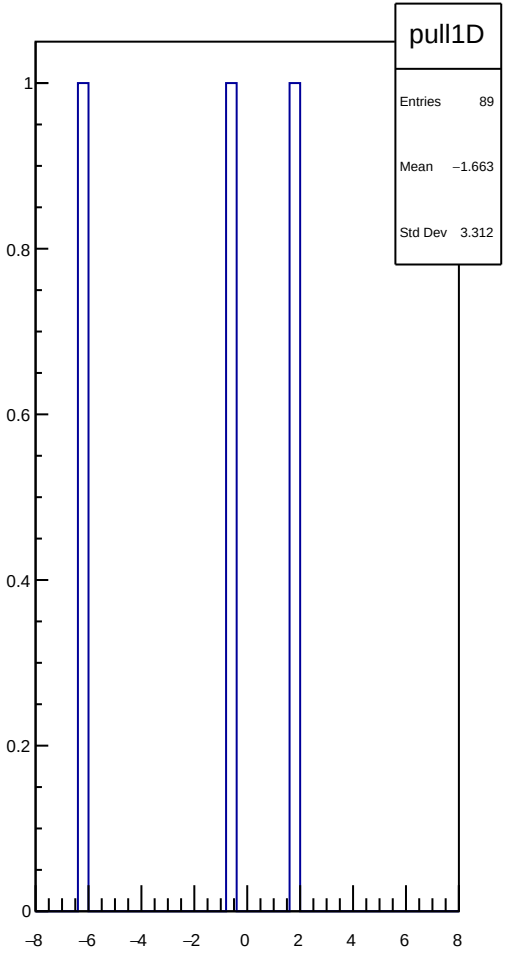

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 7.425e+04 / 88
p0 0.28 ± 0.0002184
0.6
0.5
0.4
0.3
0.2

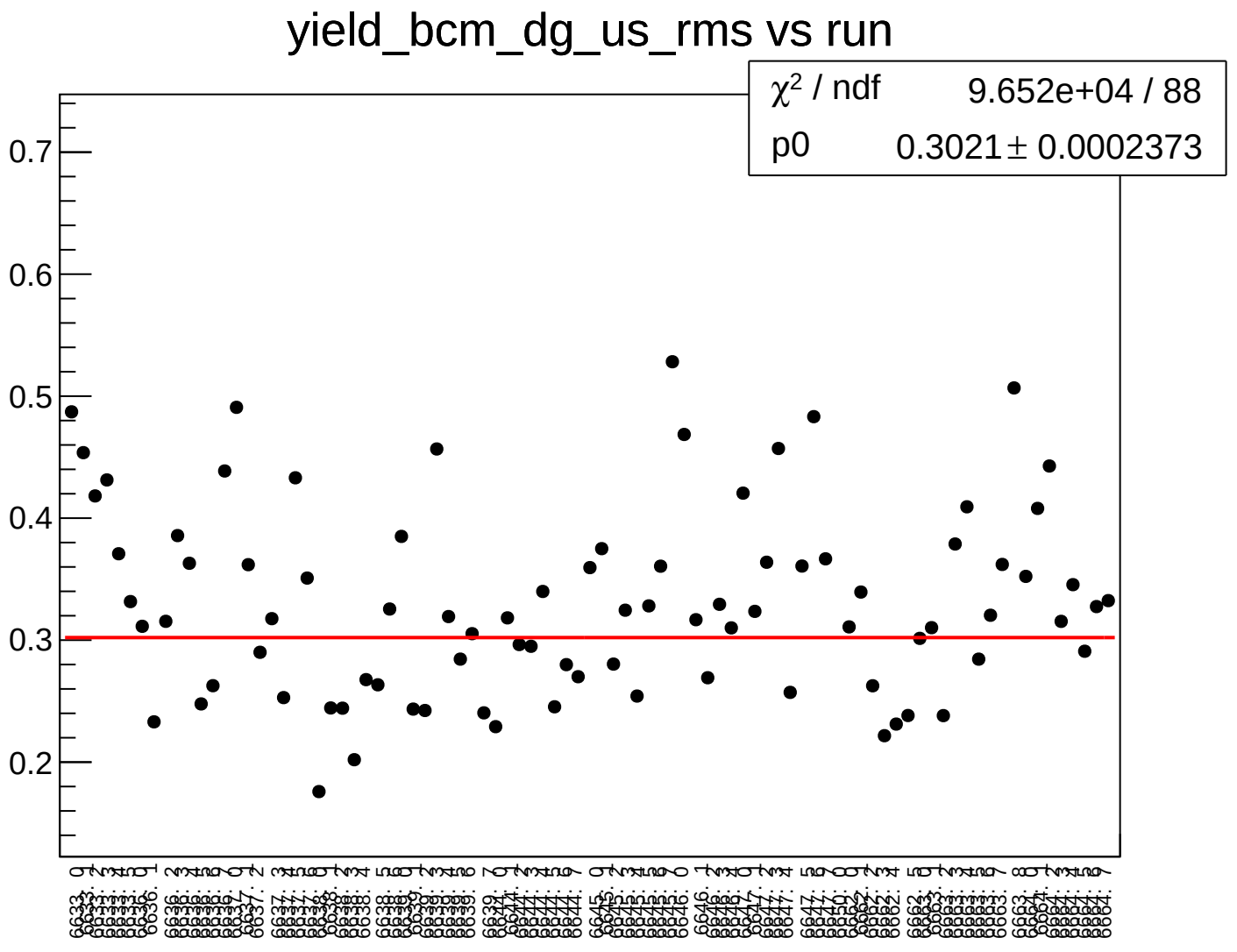

yield_bcm_an_us_mean vs run
χ² / ndf 1.063e+06 / 88
p0 148.6 ± 0.0003075
149.2
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 89
Mean 90.52
Std Dev 25.27
200
100
0
−100
−200
−300

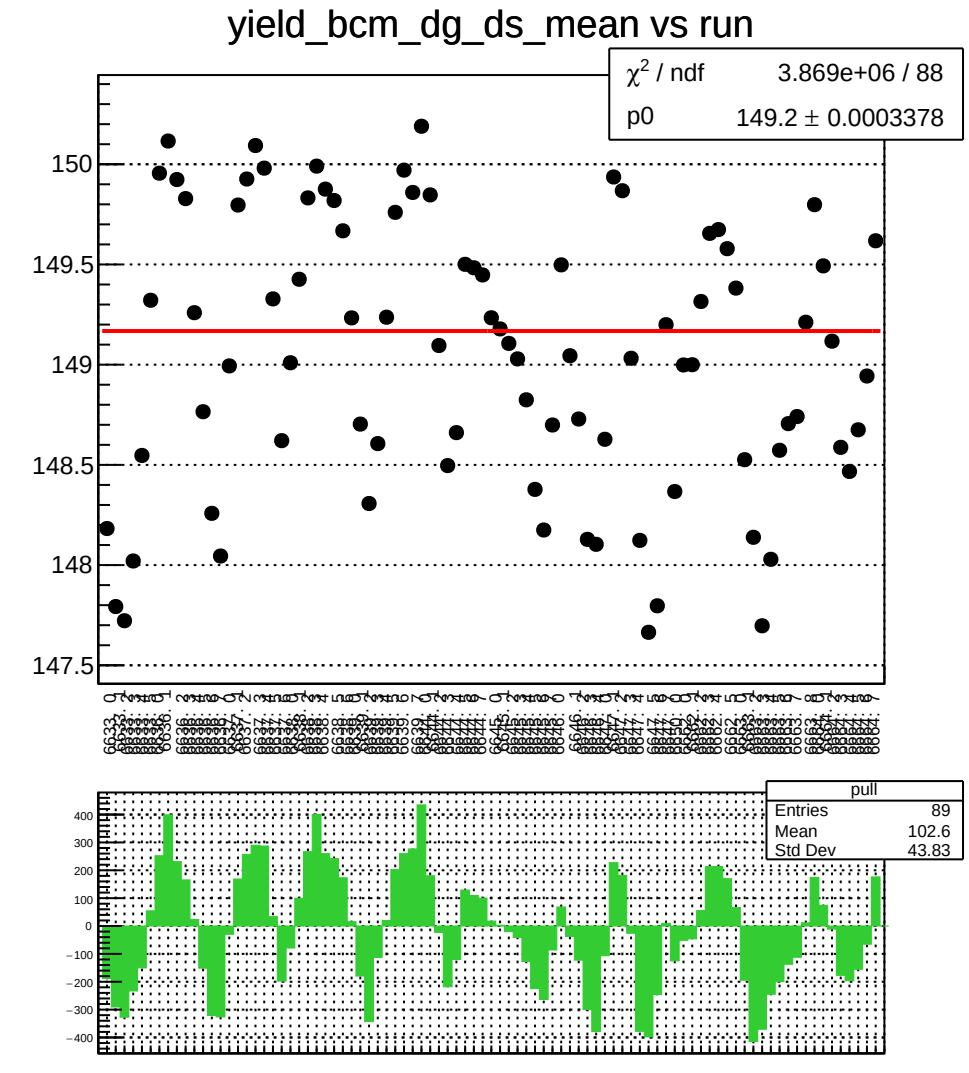

pull1D
Entries 89
Mean −3.43
Std Dev 1.409
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

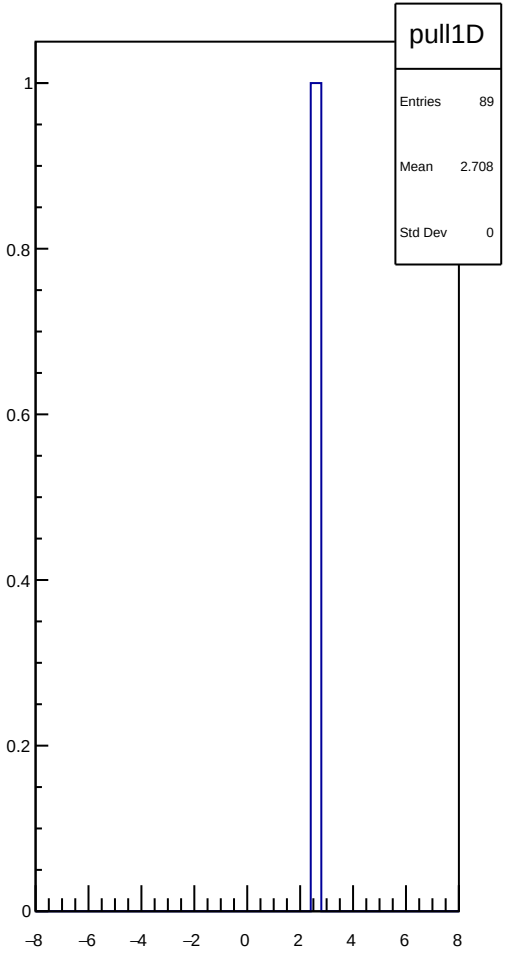

yield_bcm_an_us_rms vs run
χ² / ndf 7.231e+04 / 88
p0 0.2789 ± 0.0002174
0.6
0.5
0.4
0.3
0.2

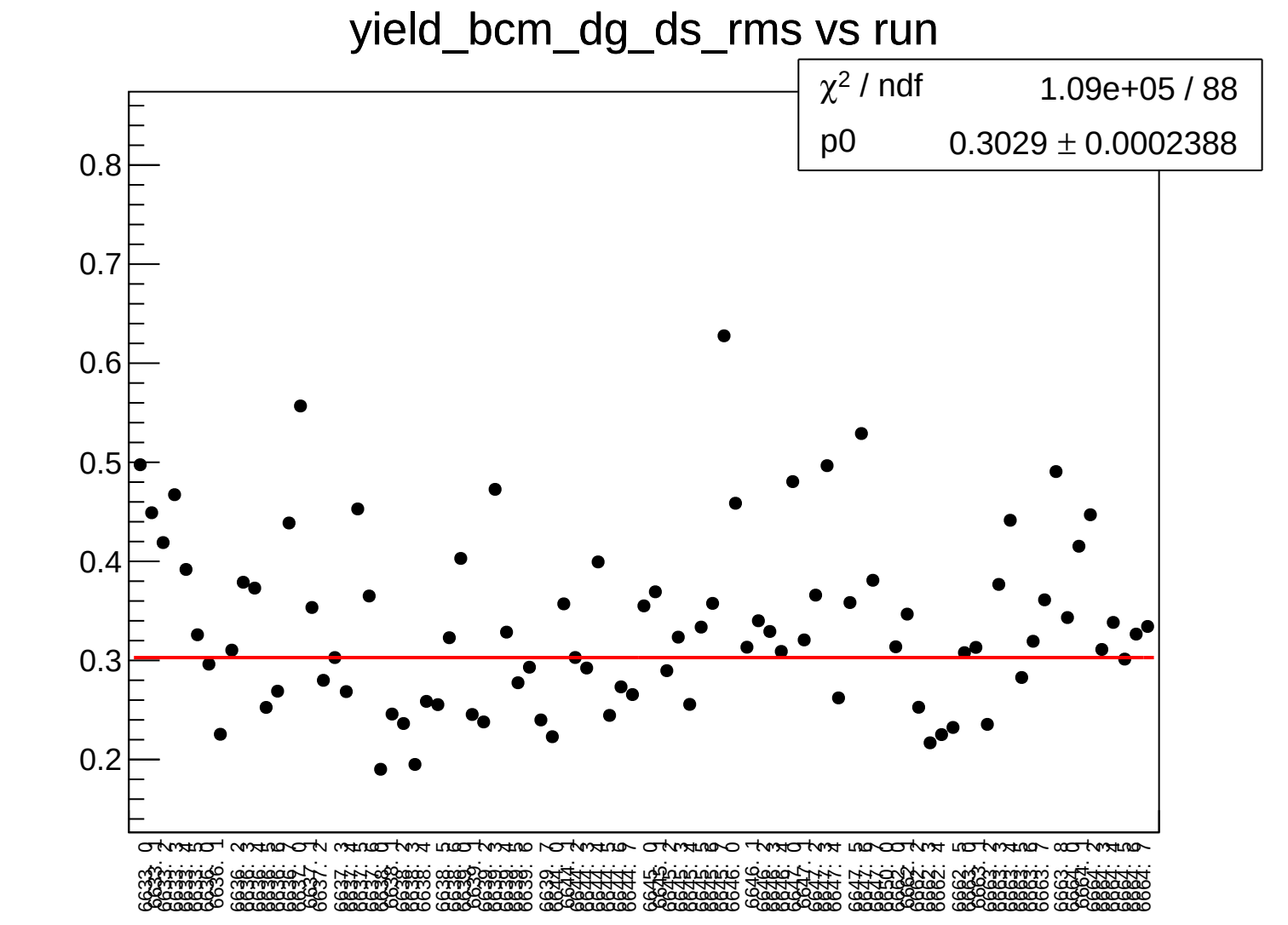

yield_bcm_dg_us_mean vs run
χ² / ndf 2.937e+06 / 88
p0 149.3 ± 0.0003356
150
149.5
149
148.5
148
pull
Entries 89
Mean 114.5
Std Dev 57.6
400
300
200
100
0
−100
−200
−300

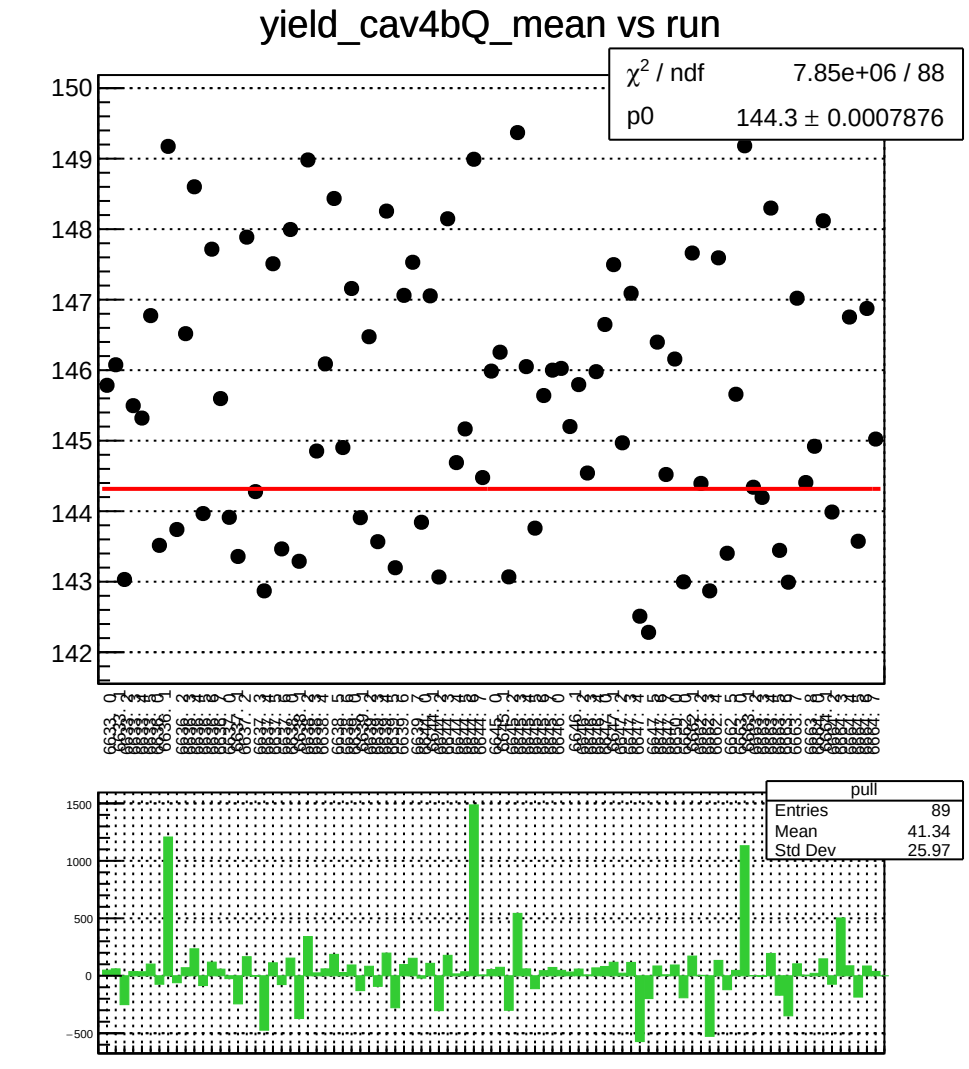

pull1D
Entries 89
Mean −1.663
Std Dev 3.312
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

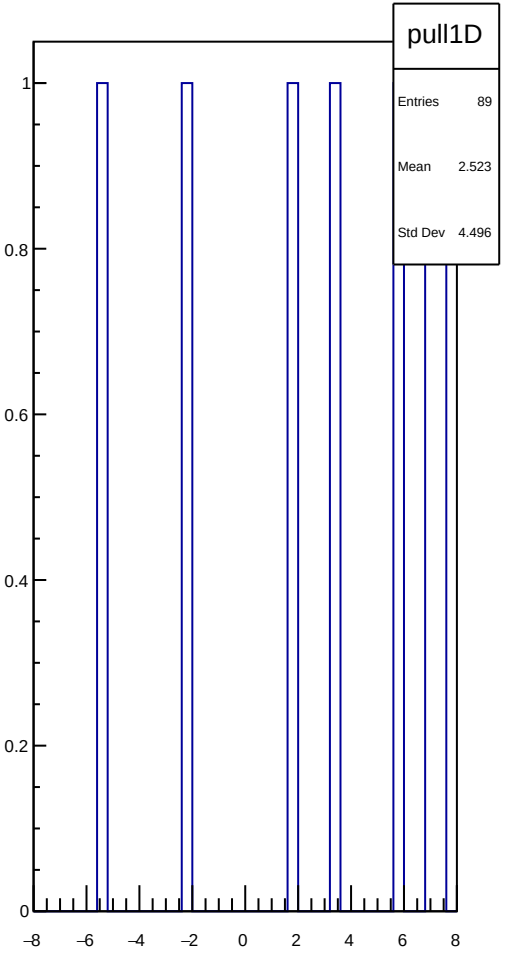

yield_bcm_dg_us_rms vs run
χ² / ndf 9.652e+04 / 88
p0 0.3021 ± 0.0002373
0.7
0.6
0.5
0.4
0.3
0.2

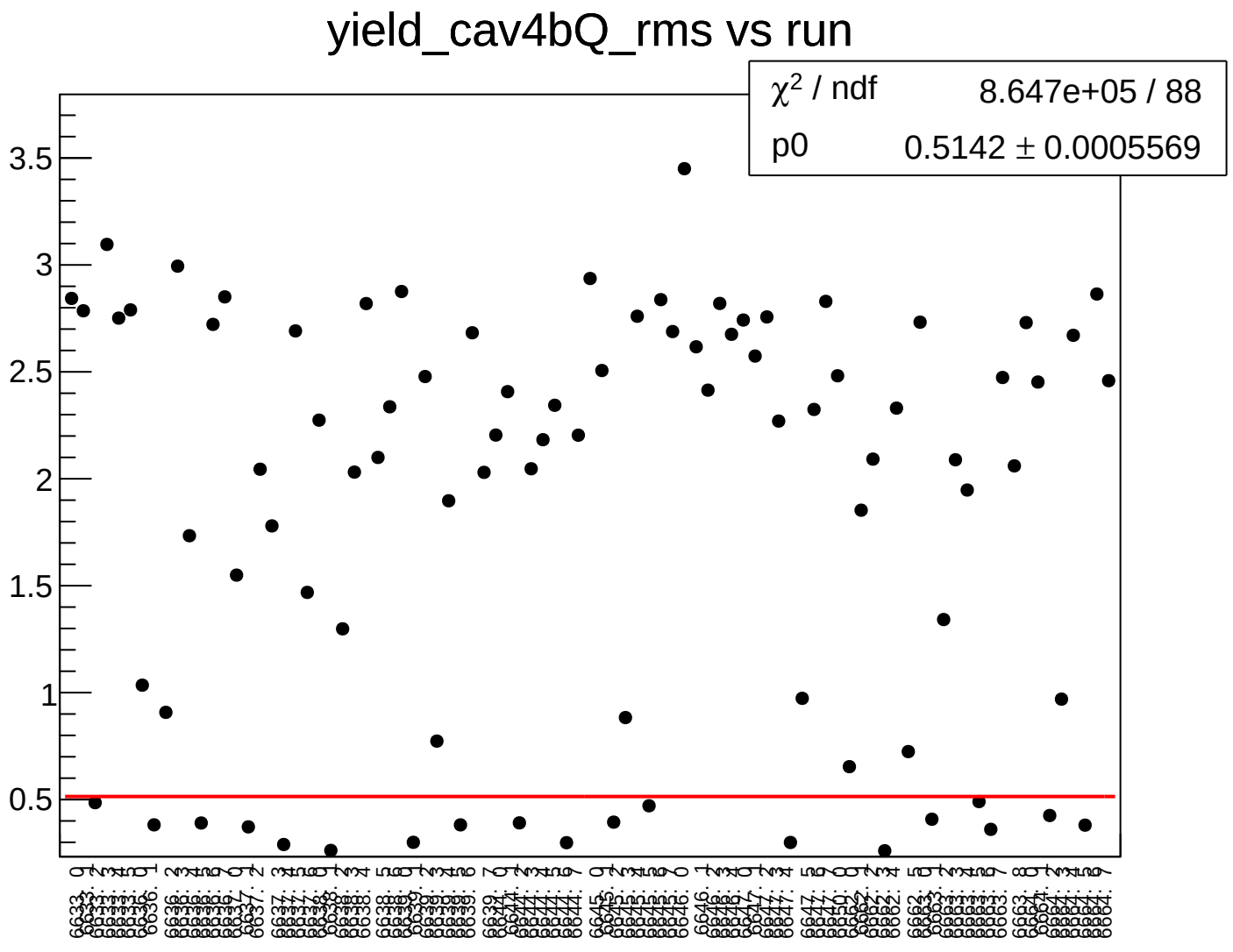

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.869e+06 / 88
p0 149.2 ± 0.0003378
150
149.5
149
148.5
148
147.5
pull
Entries 89
Mean 102.6
Std Dev 43.83
400
300
200
100
0
−100
−200
−300
−400

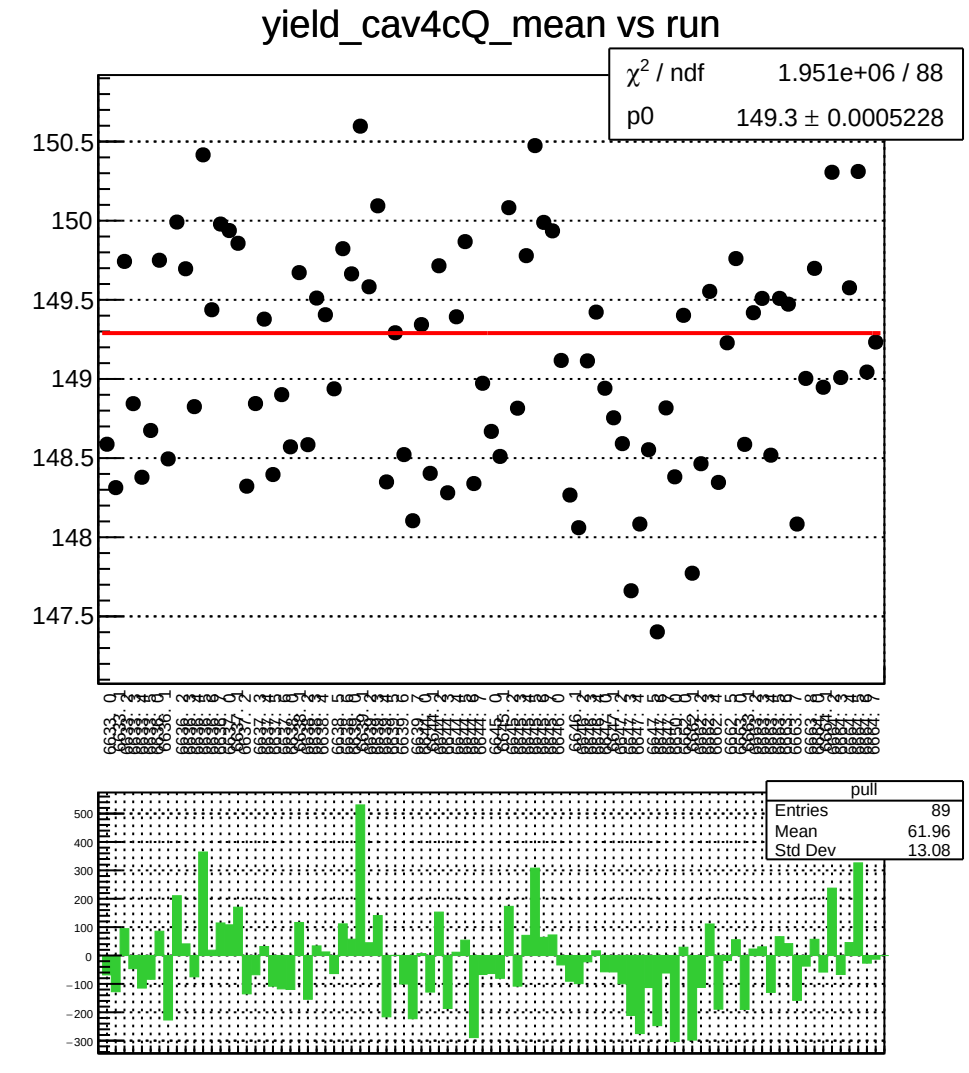

pull1D
Entries 89
Mean 2.708
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

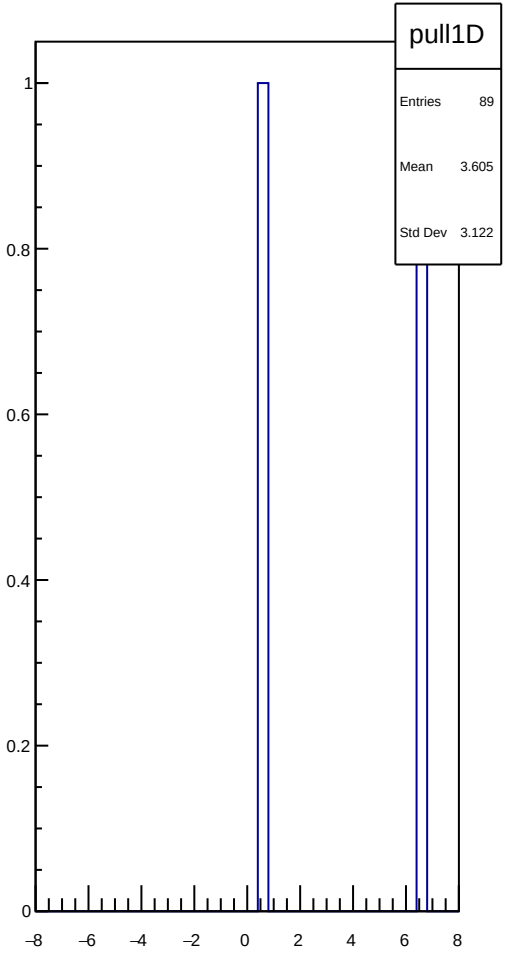

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.09e+05 / 88
p0 0.3029 ± 0.0002388
0.8
0.7
0.6
0.5
0.4
0.3
0.2

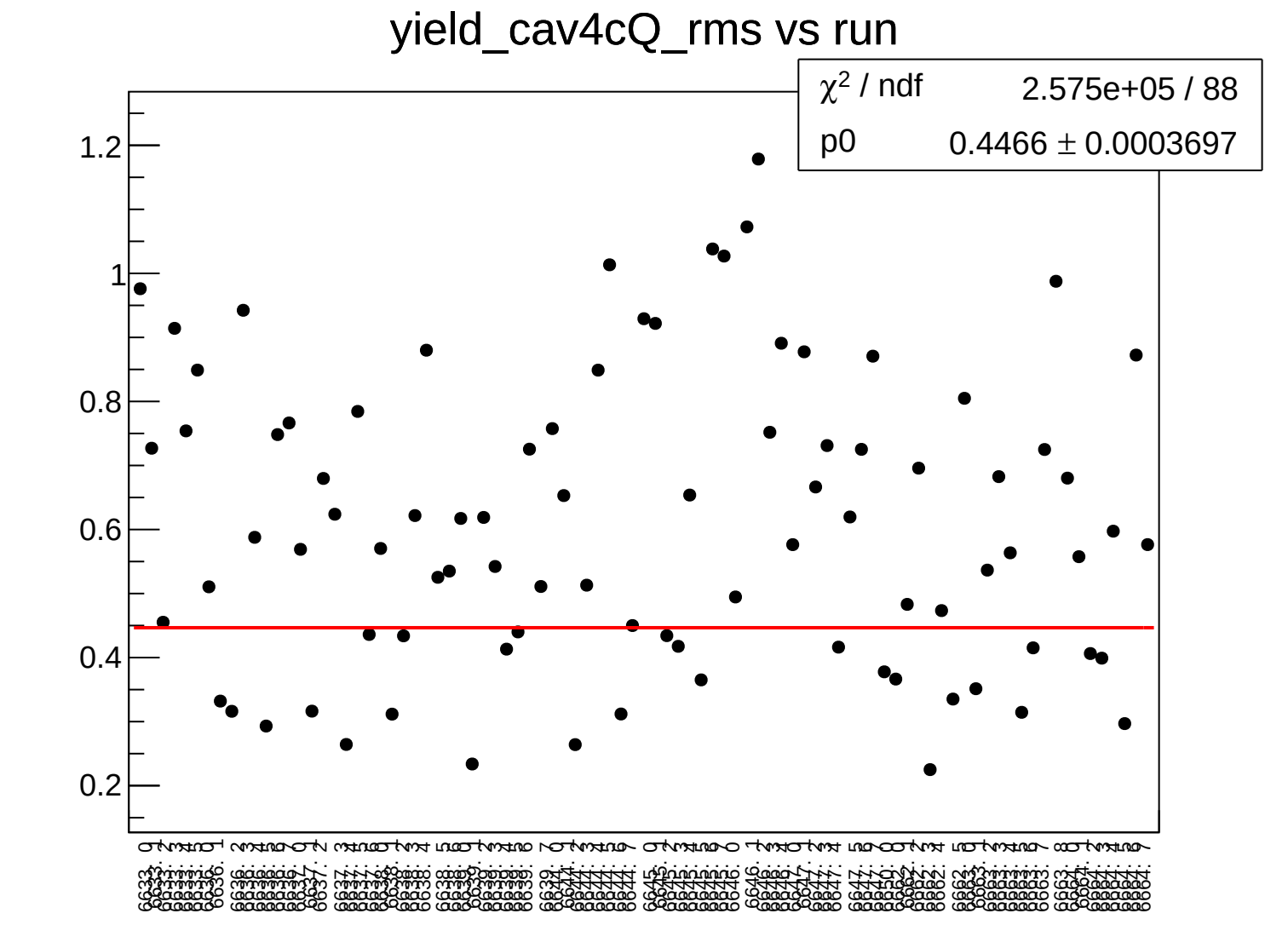

yield_cav4bQ_mean vs run
χ² / ndf 7.85e+06 / 88
p0 144.3 ± 0.0007876
150
149
148
147
146
145
144
143
142
pull
Entries 89
Mean 41.34
Std Dev 25.97
1500
1000
500
0
−500

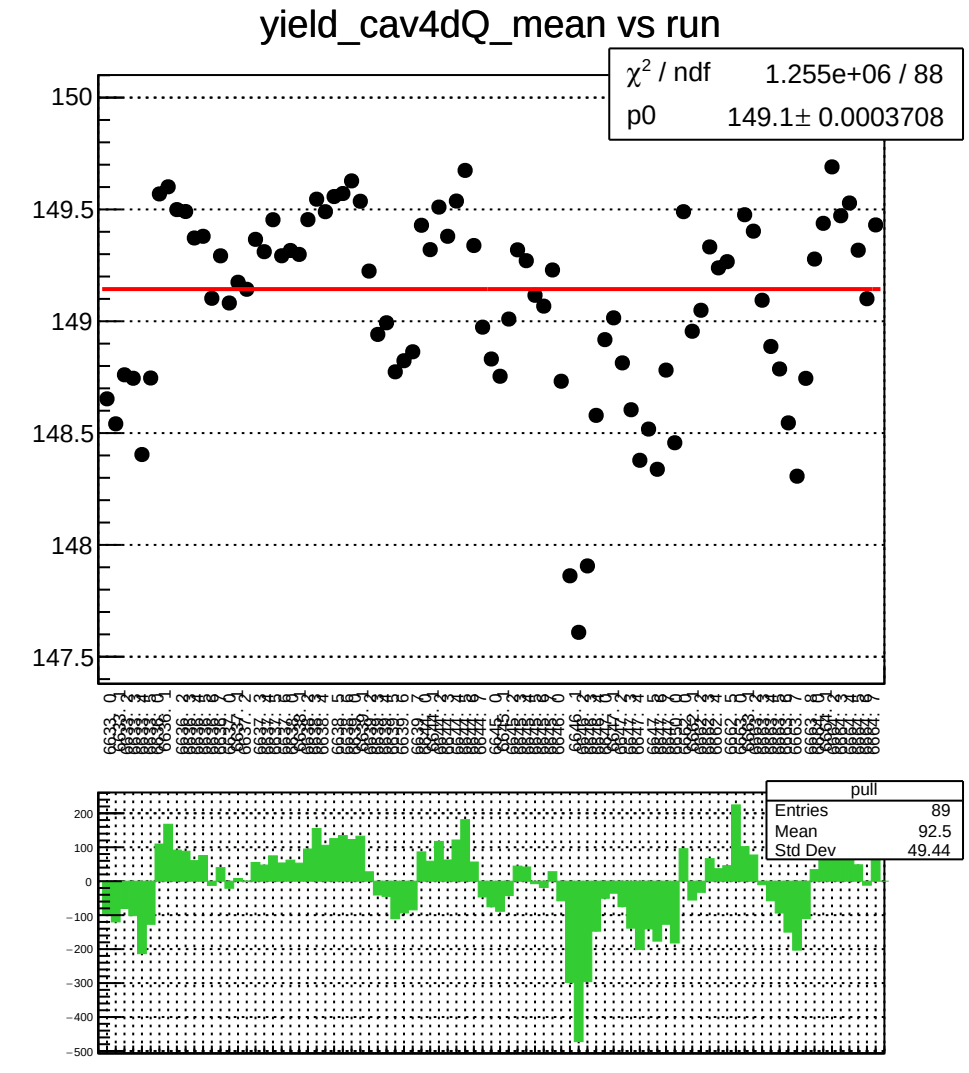

pull1D
Entries 89
Mean 2.523
Std Dev 4.496
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

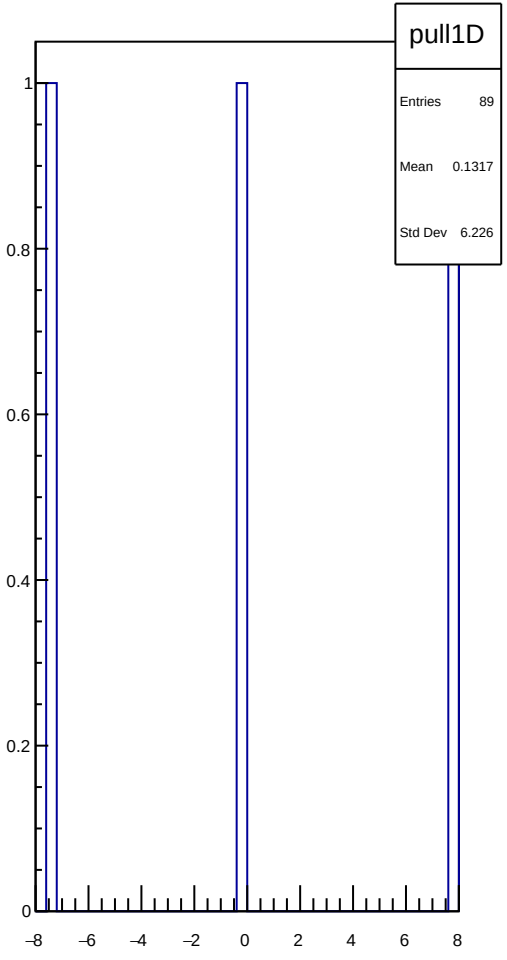

yield_cav4bQ_rms vs run
χ2 / ndf 8.647e+05 / 88
p0 0.5142 ± 0.0005569
3.5
3
2.5
2
1.5
1
0.5

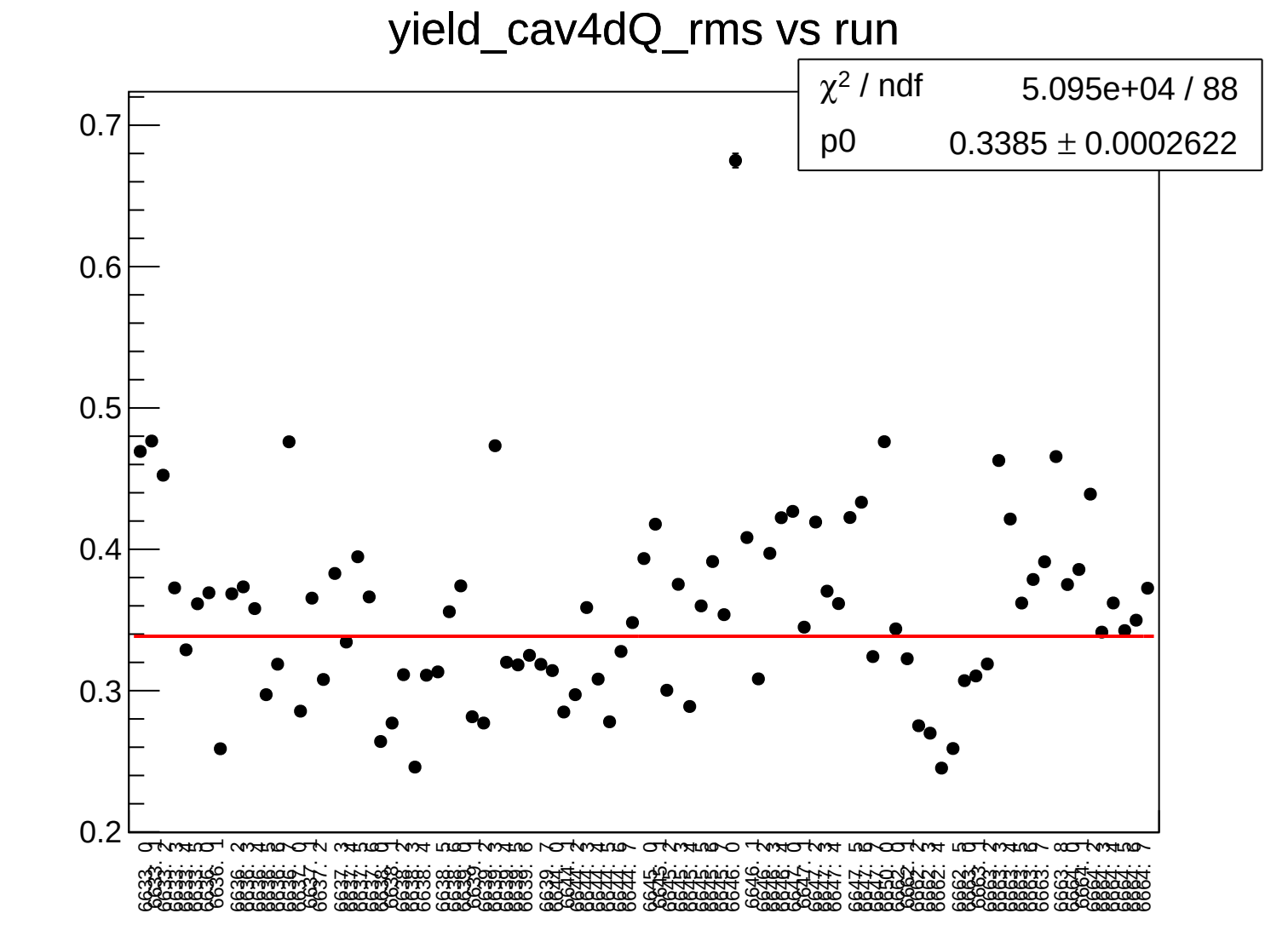

yield_cav4cQ_mean vs run
χ² / ndf 1.951e+06 / 88
p0 149.3 ± 0.0005228
150.5
150
149.5
149
148.5
148
147.5
pull
Entries 89
Mean 61.96
Std Dev 13.08
500
400
300
200
100
0
−100
−200
−300

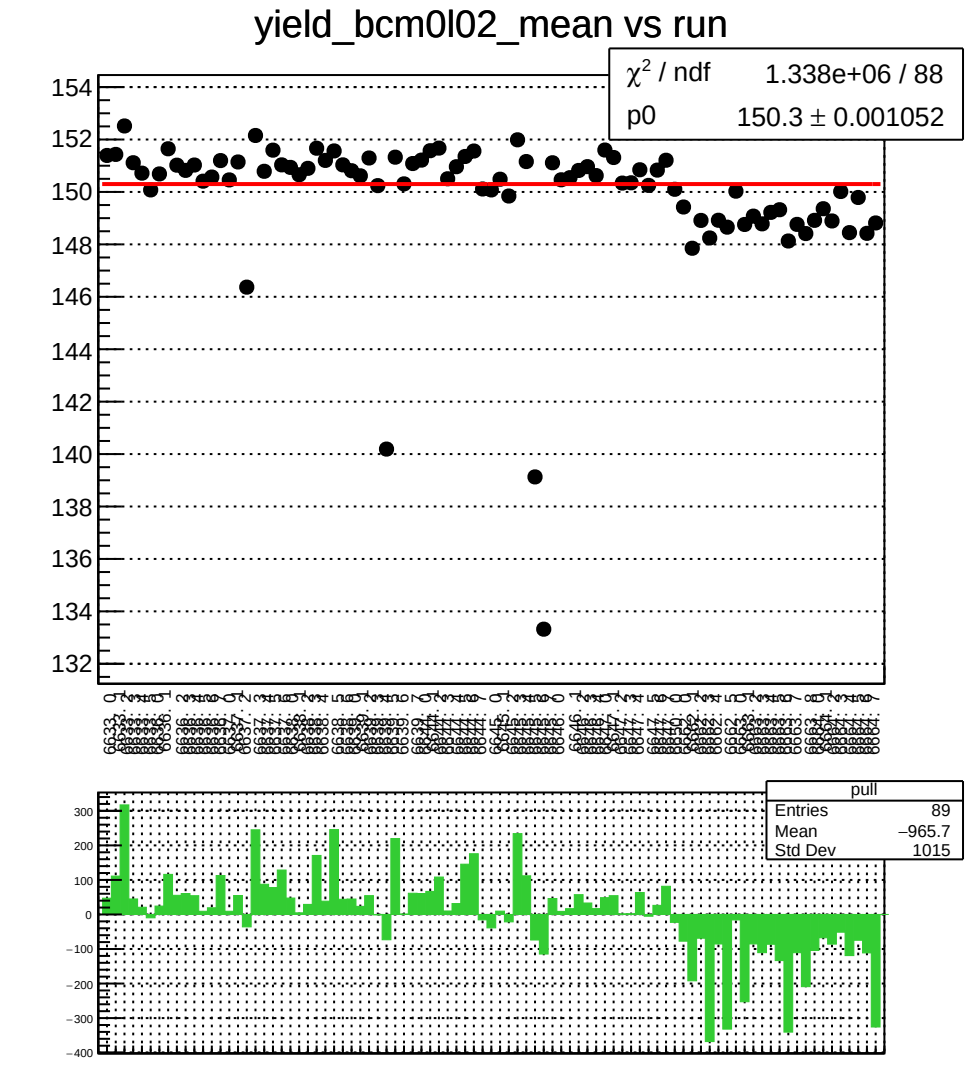

pull1D
Entries 89
Mean 3.605
Std Dev 3.122
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

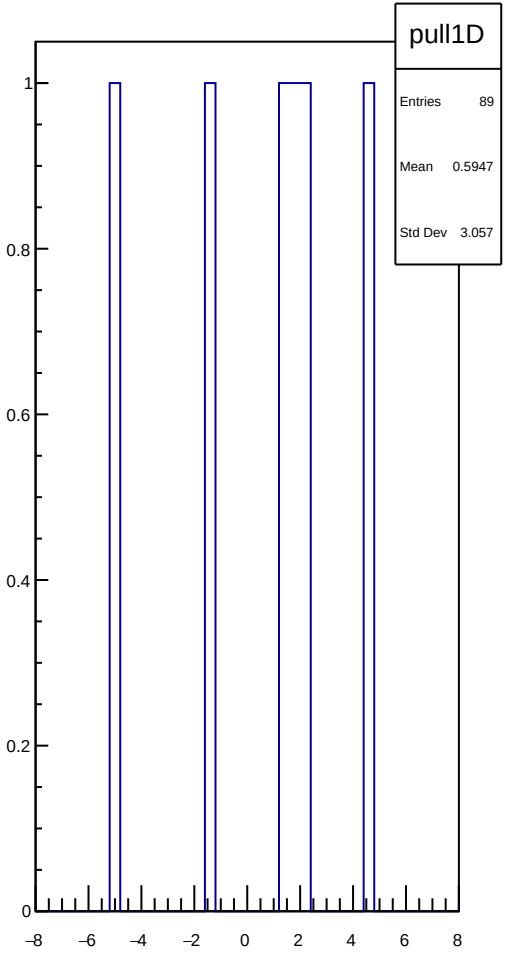

yield_cav4cQ_rms vs run
χ² / ndf 2.575e+05 / 88
p0 0.4466 ± 0.0003697
1.2
1
0.8
0.6
0.4
0.2

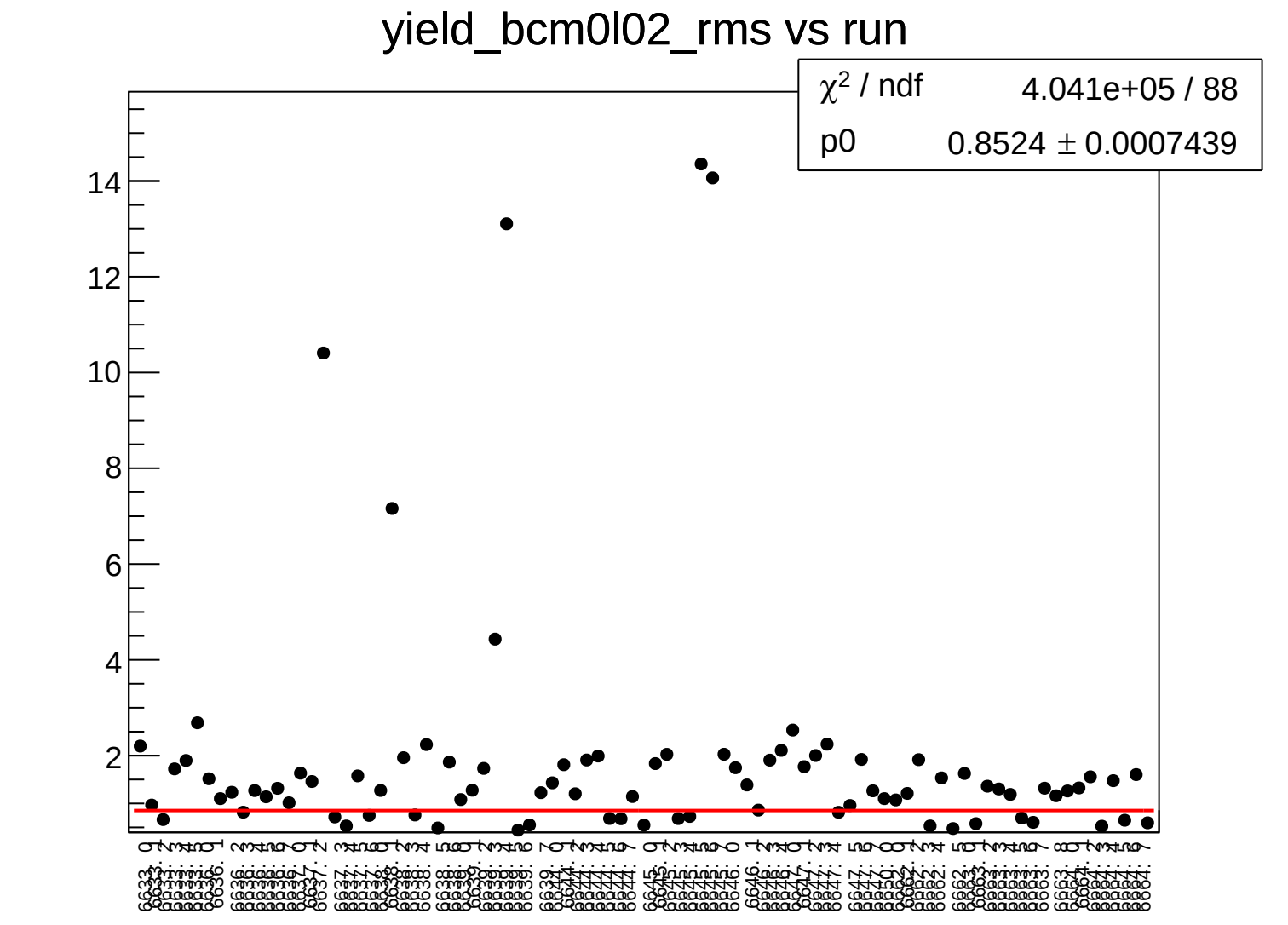

yield_cav4dQ_mean vs run
χ² / ndf 1.255e+06 / 88
p0 149.1± 0.0003708
150
149.5
149
148.5
148
147.5
pull
Entries 89
Mean 92.5
Std Dev 49.44
200
100
0
−100
−200
−300
−400
−500

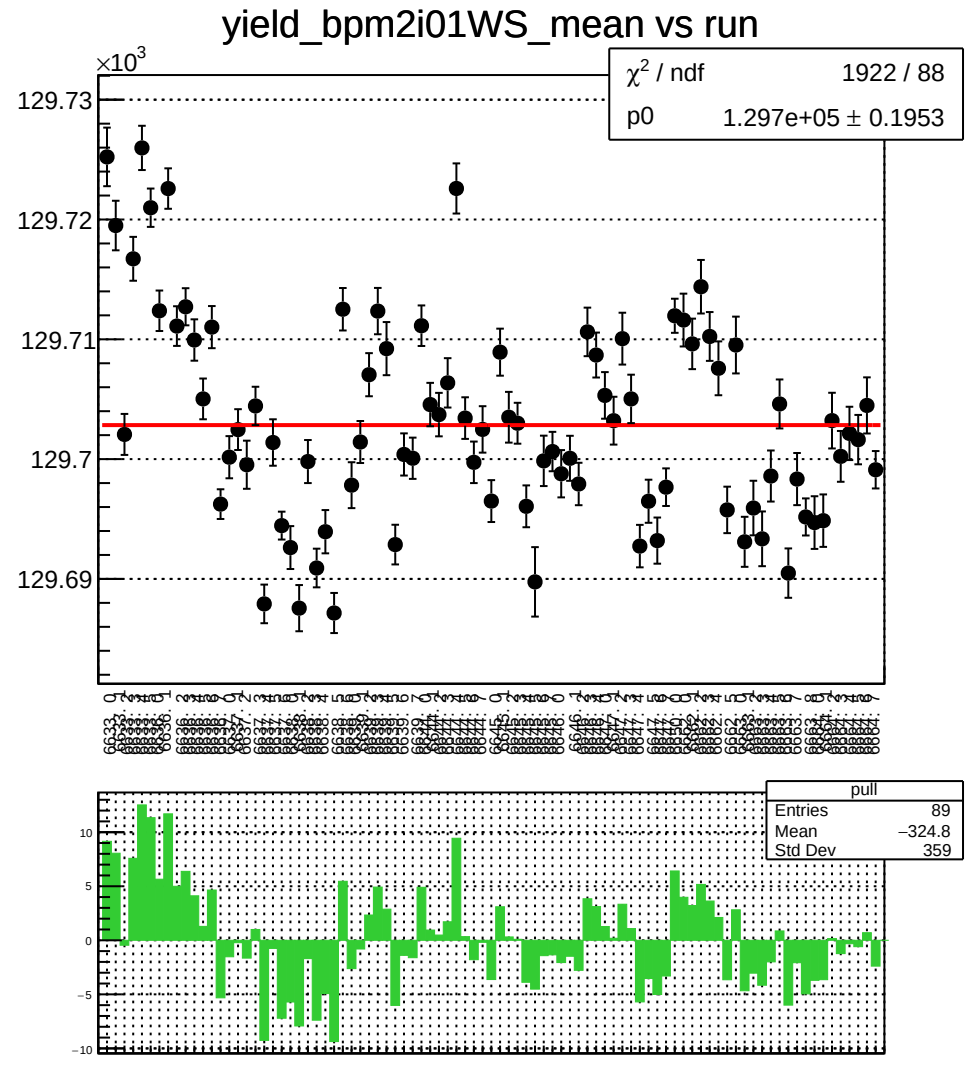

pull1D
Entries 89
Mean 0.1317
Std Dev 6.226
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

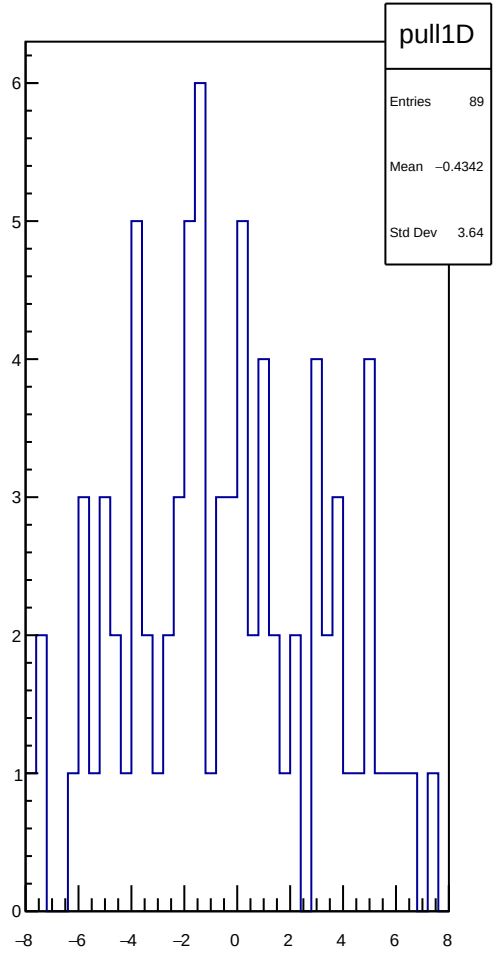

yield_cav4dQ_rms vs run
χ² / ndf 5.095e+04 / 88
p0 0.3385 ± 0.0002622
0.7
0.6
0.5
0.4
0.3
0.2

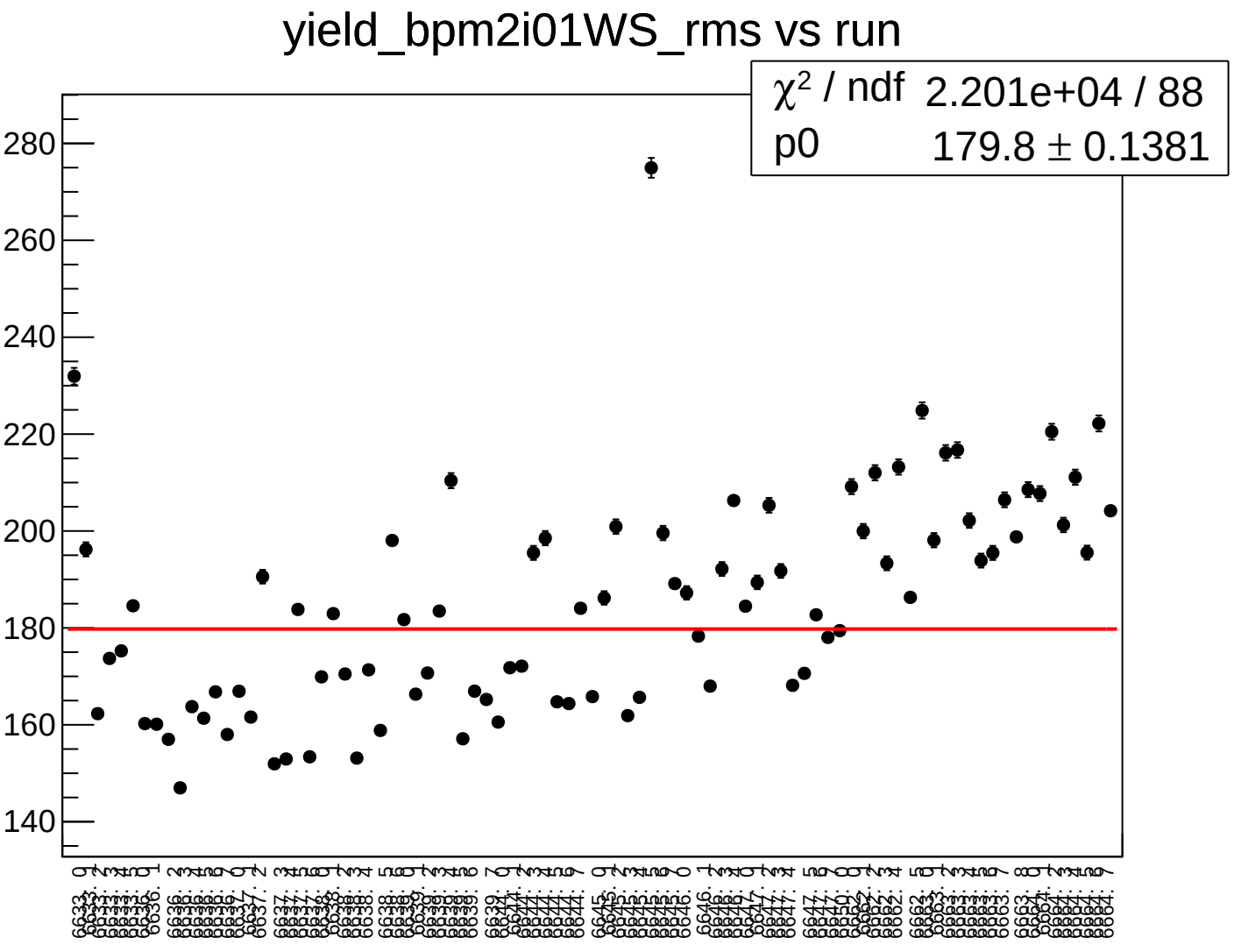

yield_bcm0l02_mean vs run
χ² / ndf 1.338e+06 / 88
p0 150.3 ± 0.001052
154
152
150
148
146
144
142
140
138
136
134
132
pull
Entries 89
Mean −965.7
Std Dev 1015
300
200
100
0
−100
−200
−300
−400

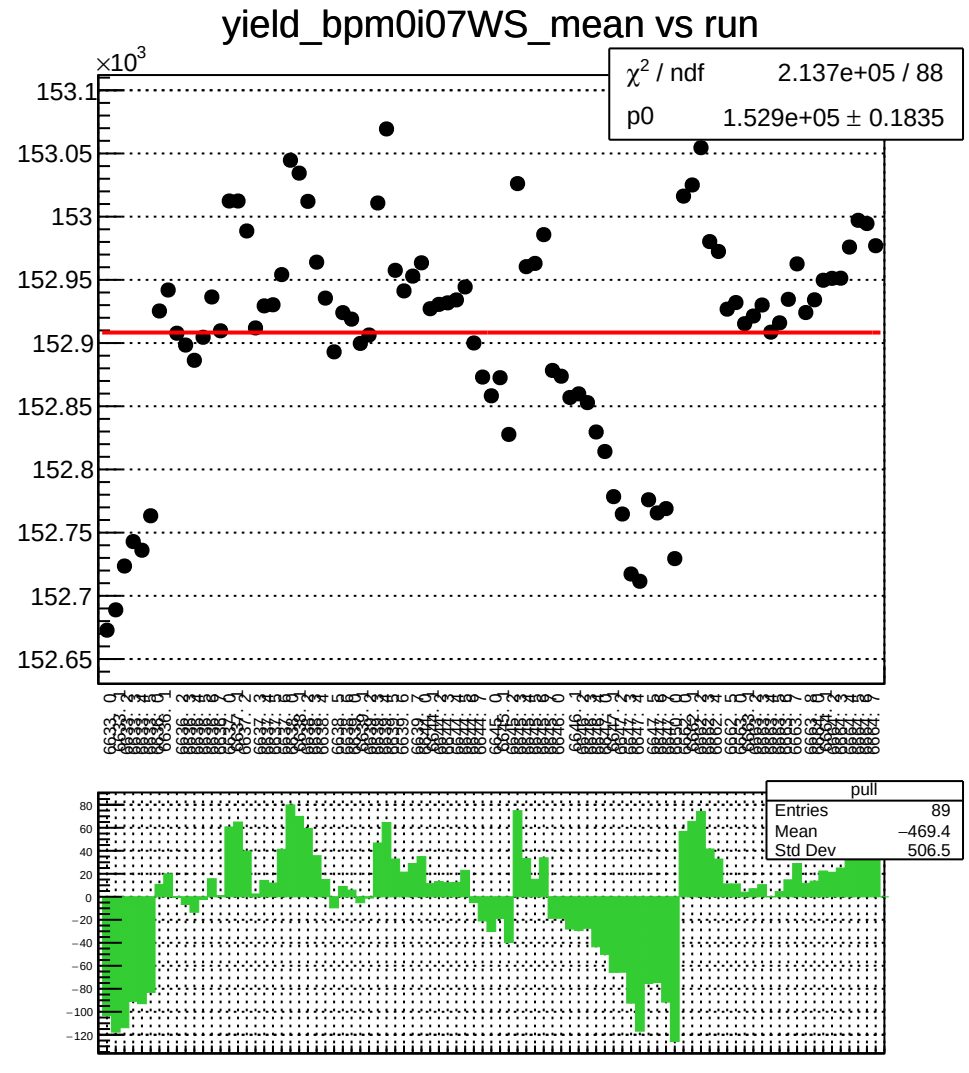

pull1D
Entries 89
Mean 0.5947
Std Dev 3.057
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

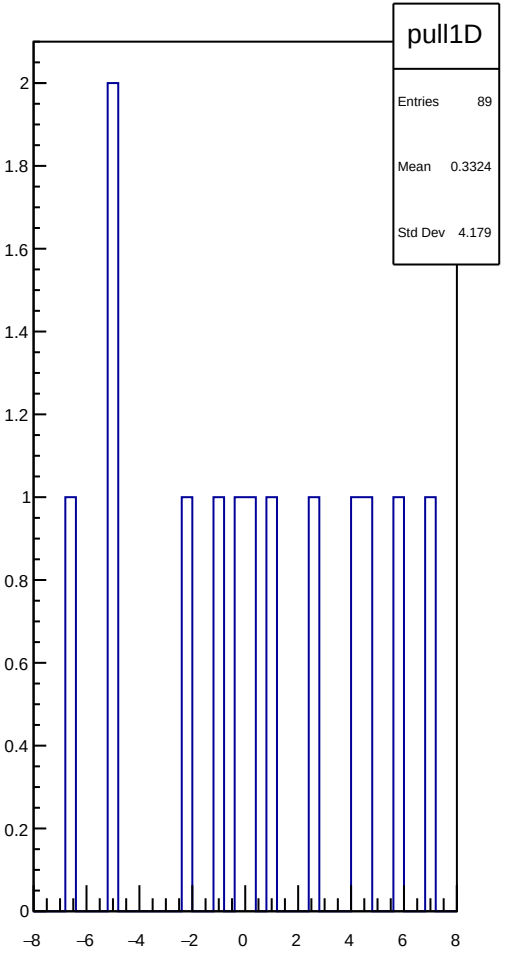

yield_bcm0l02_rms vs run
χ² / ndf 4.041e+05 / 88
p0 0.8524 ± 0.0007439
14
12
10
8
6
4
2

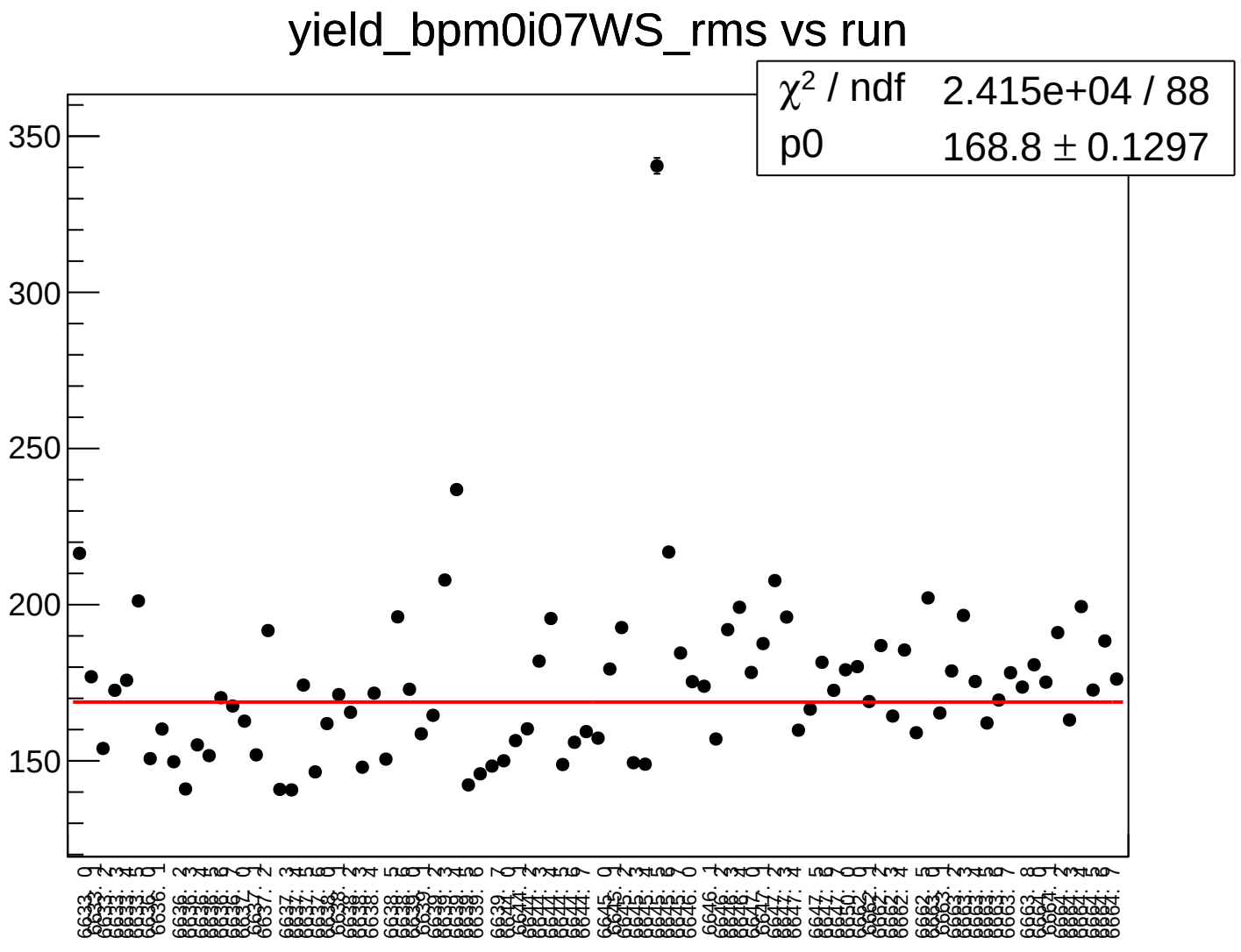

yield_bpm2i01WS_mean vs run
×10^3
129.73
129.72
129.71
129.7
129.69
χ² / ndf 1922 / 88
p0 1.297e+05 ± 0.1953
pull
Entries 89
Mean −324.8
Std Dev 359
10
5
0
−5
−10

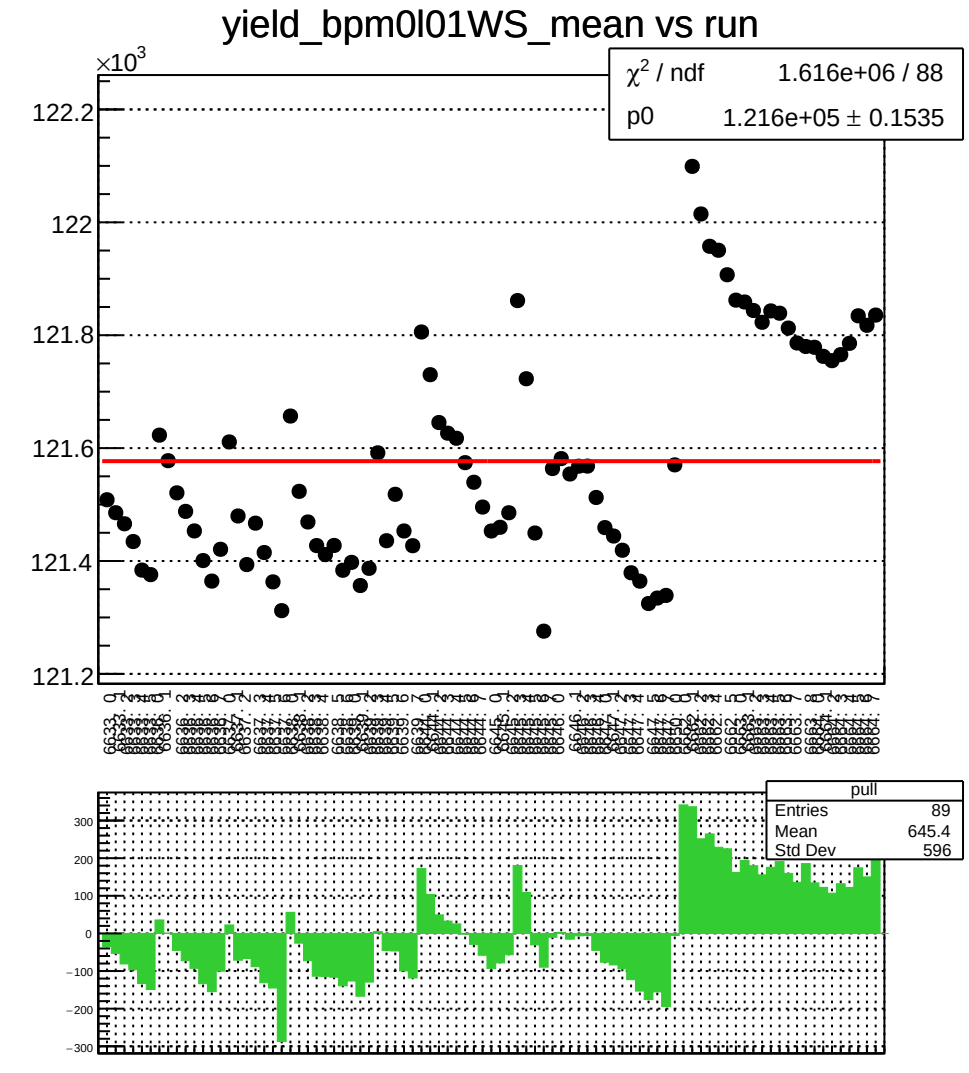

pull1D
Entries 89
Mean −0.4342
Std Dev 3.64
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

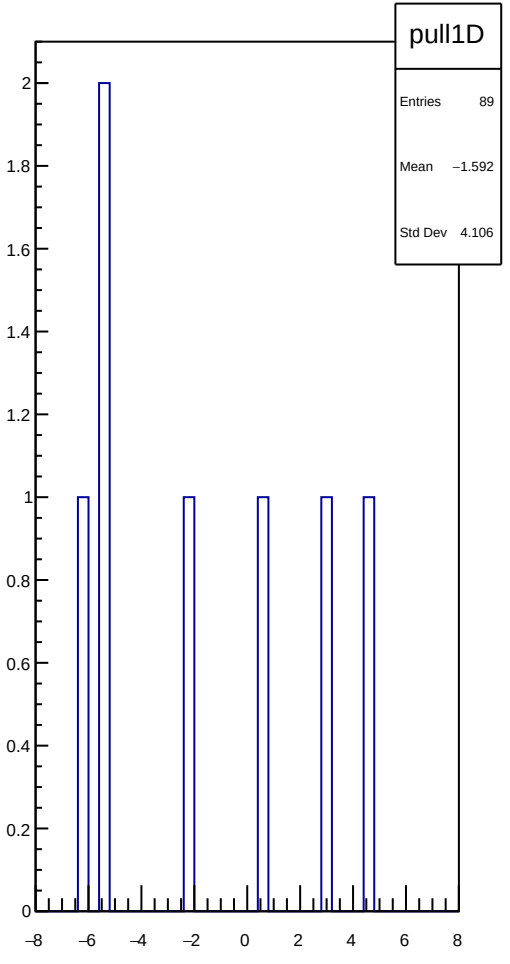

yield_bpm2i01WS_rms vs run
χ² / ndf 2.201e+04 / 88
p0 179.8 ± 0.1381
280
260
240
220
200
180
160
140

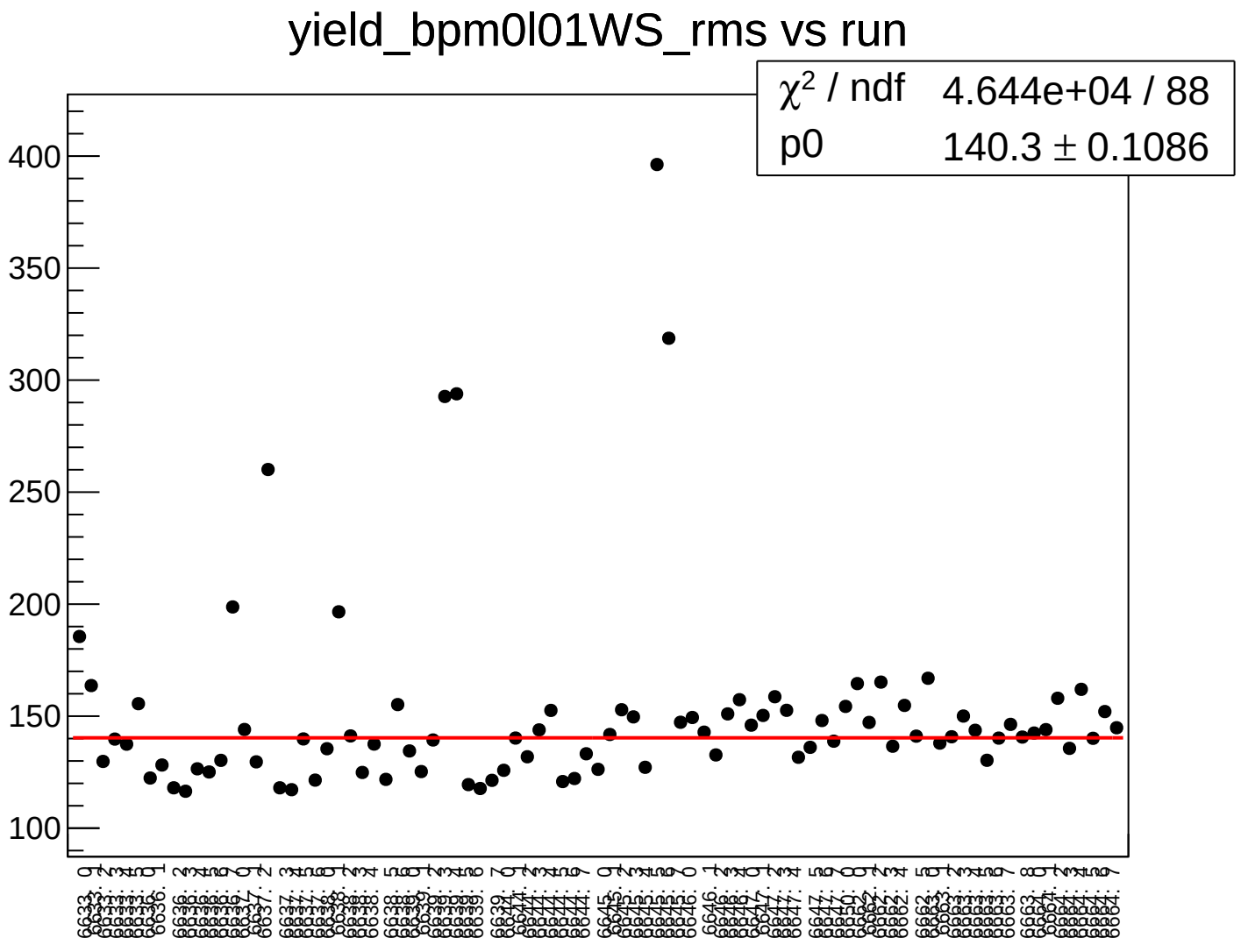

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 2.137e+05 / 88
p0 1.529e+05 ± 0.1835
153.1
153.05
153
152.95
152.9
152.85
152.8
152.75
152.7
152.65
pull
Entries 89
Mean −469.4
Std Dev 506.5
80
60
40
20
0
−20
−40
−60
−80
−100
−120

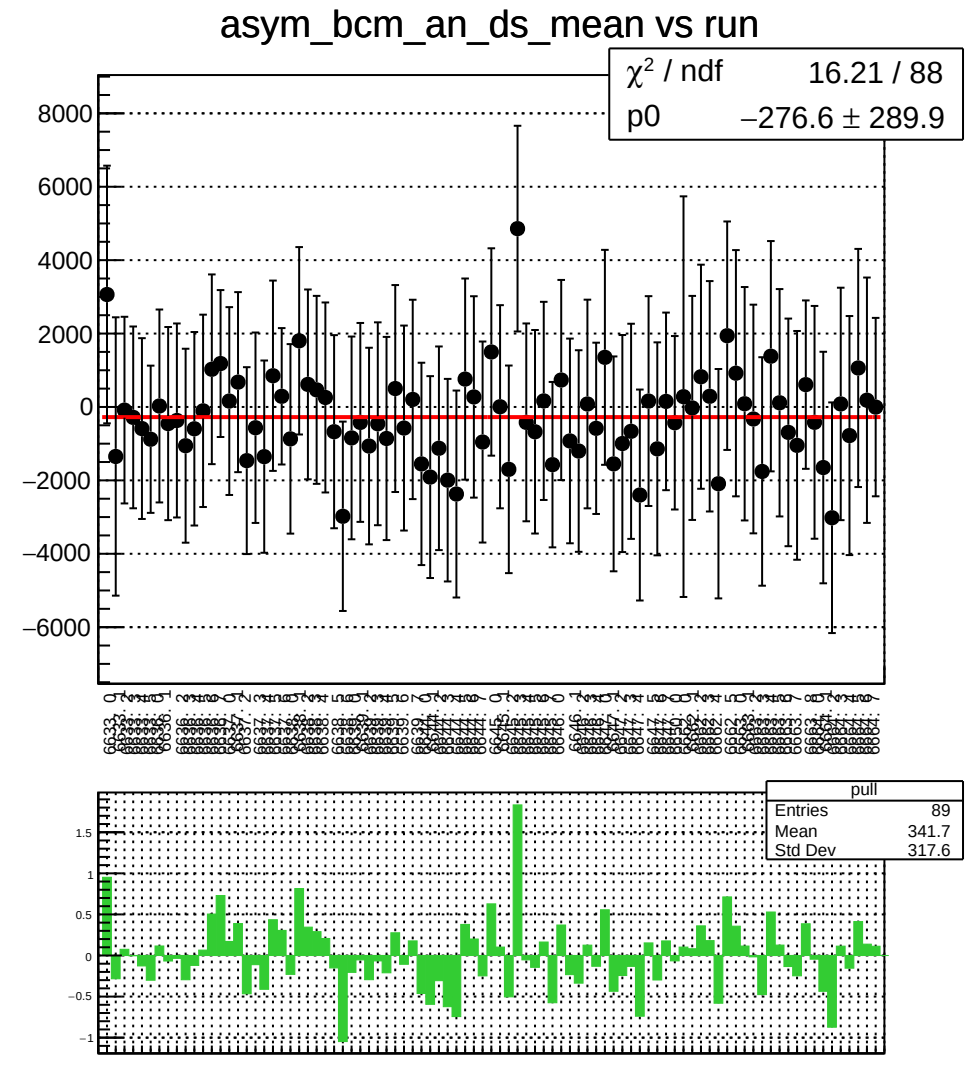

pull1D
Entries 89
Mean 0.3324
Std Dev 4.179
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

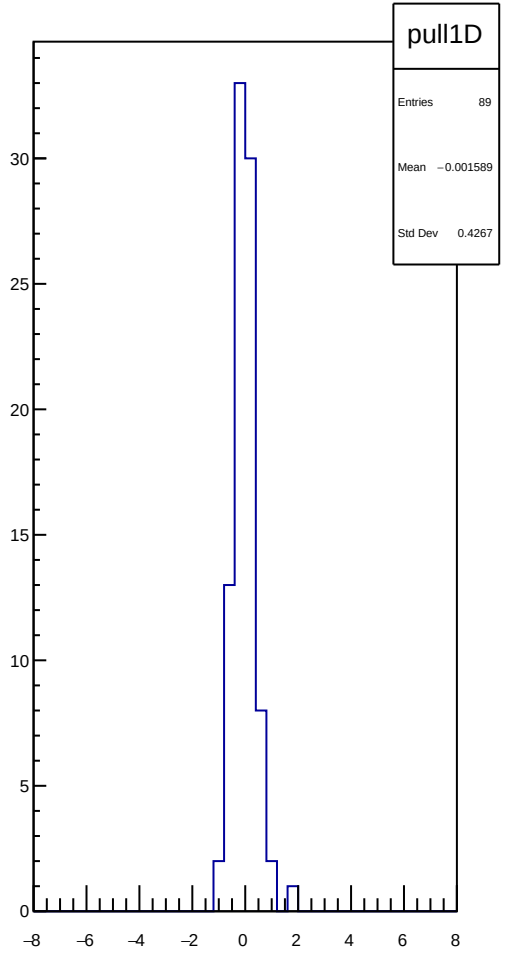

yield_bpm0i07WS_rms vs run
χ² / ndf 2.415e+04 / 88
p0 168.8 ± 0.1297
350
300
250
200
150

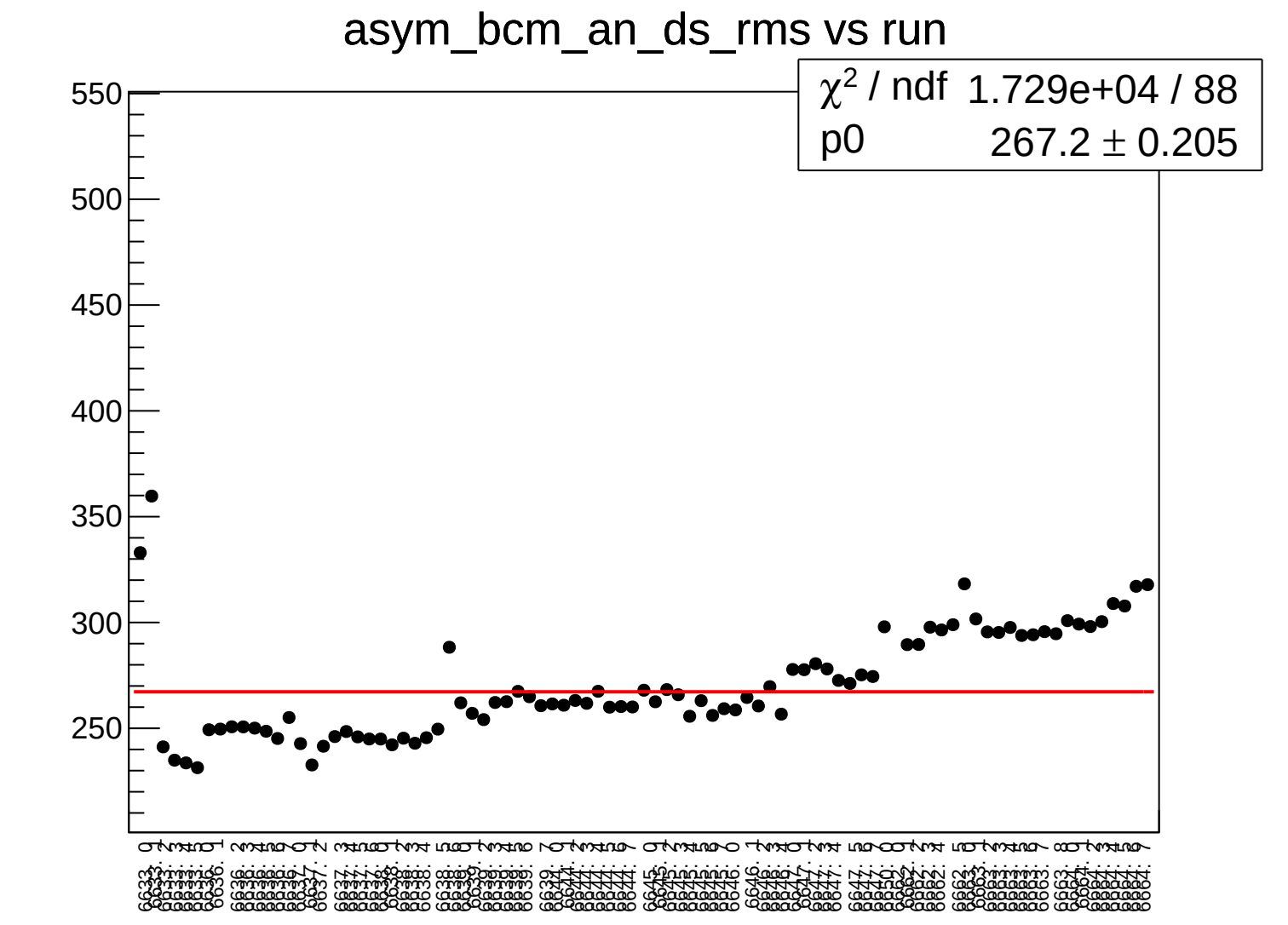

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 1.616e+06 / 88
p0 1.216e+05 ± 0.1535
122.2
122
121.8
121.6
121.4
121.2
pull
Entries 89
Mean 645.4
Std Dev 596
300
200
100
0
−100
−200
−300

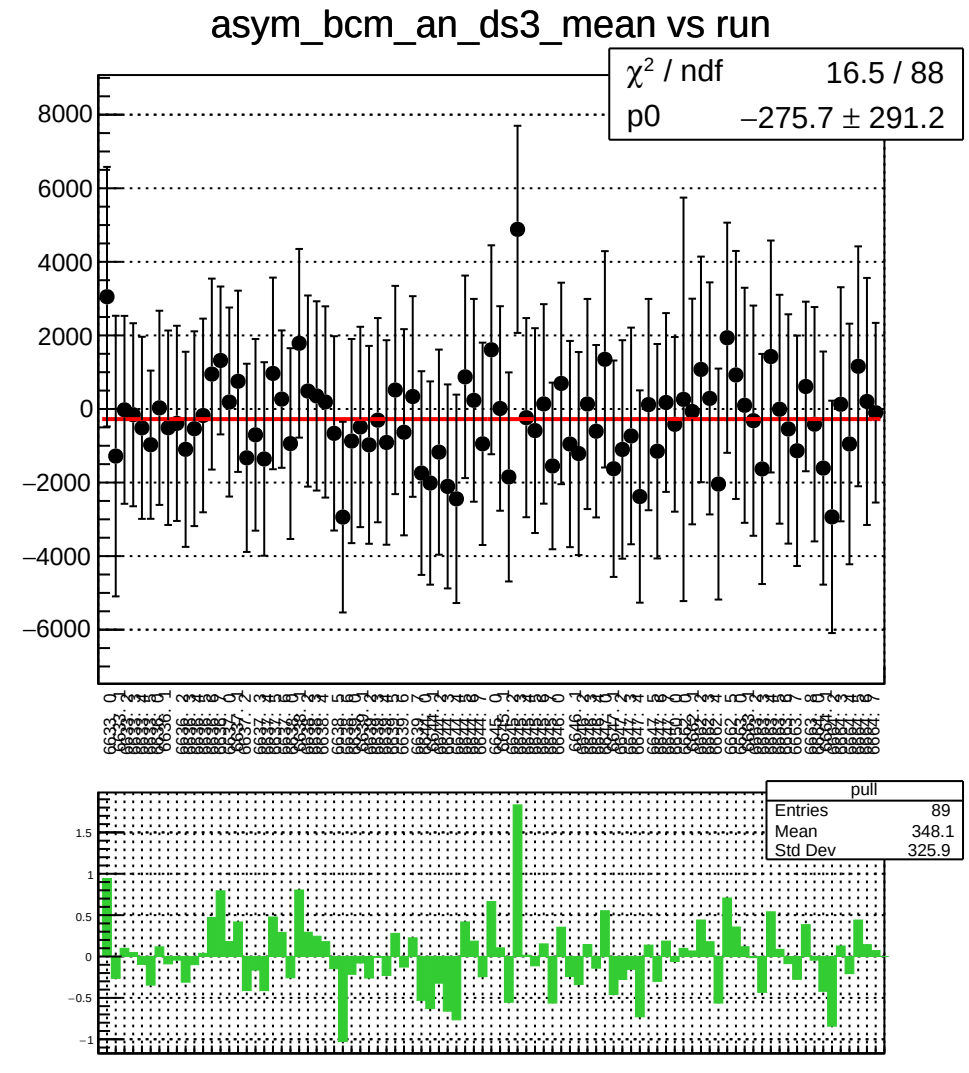

pull1D
Entries 89
Mean −1.592
Std Dev 4.106
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

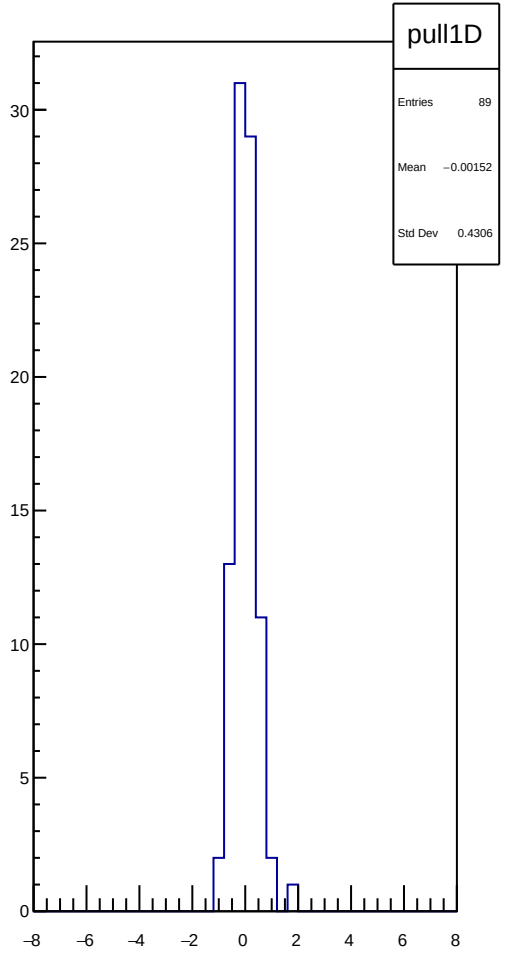

yield_bpm0l01WS_rms vs run
χ² / ndf 4.644e+04 / 88
p0 140.3 ± 0.1086
400
350
300
250
200
150
100

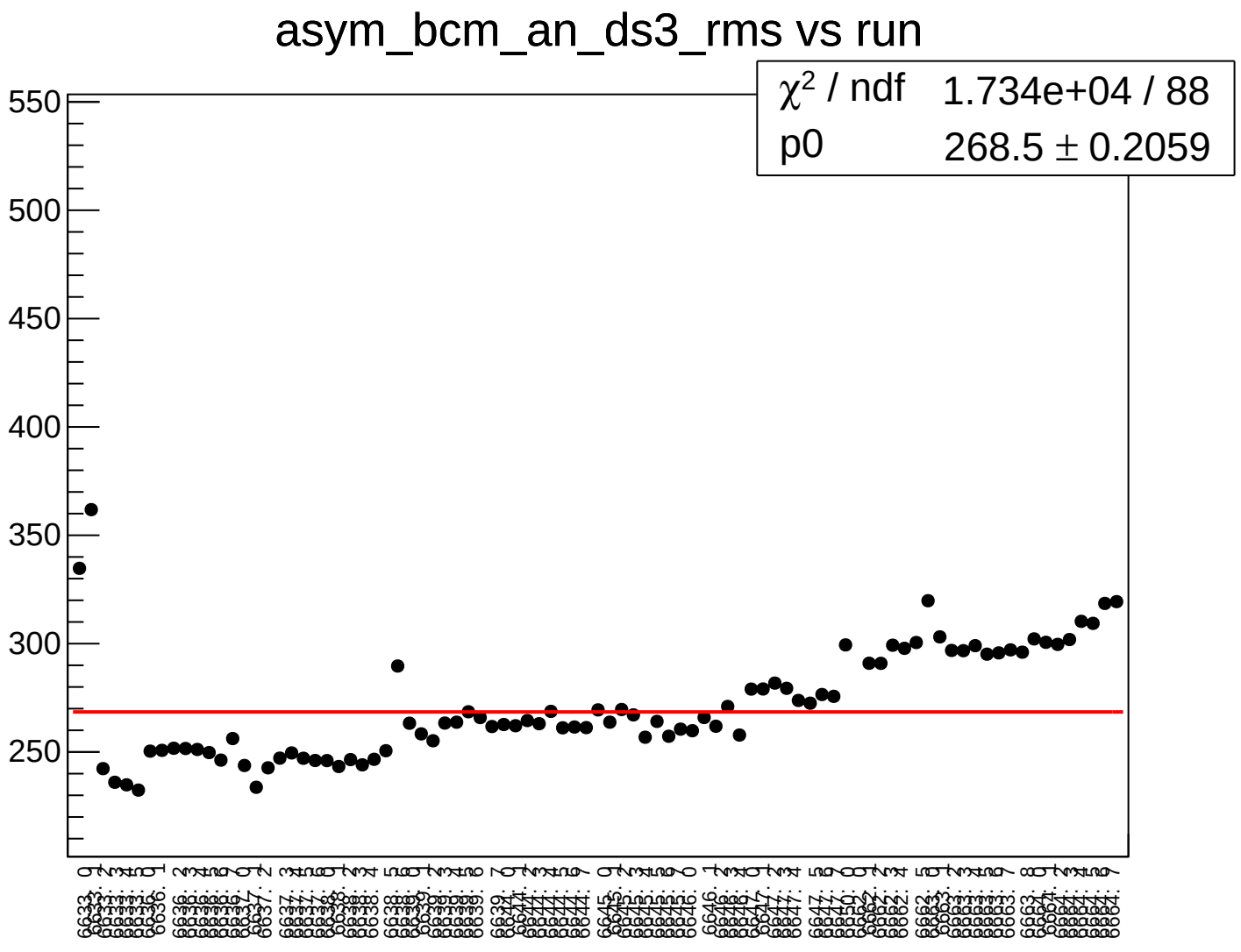

asym_bcm_an_ds_mean vs run
χ² / ndf 16.21 / 88
p0 −276.6 ± 289.9
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 341.7
Std Dev 317.6
1.5
1
0.5
0
−0.5
−1

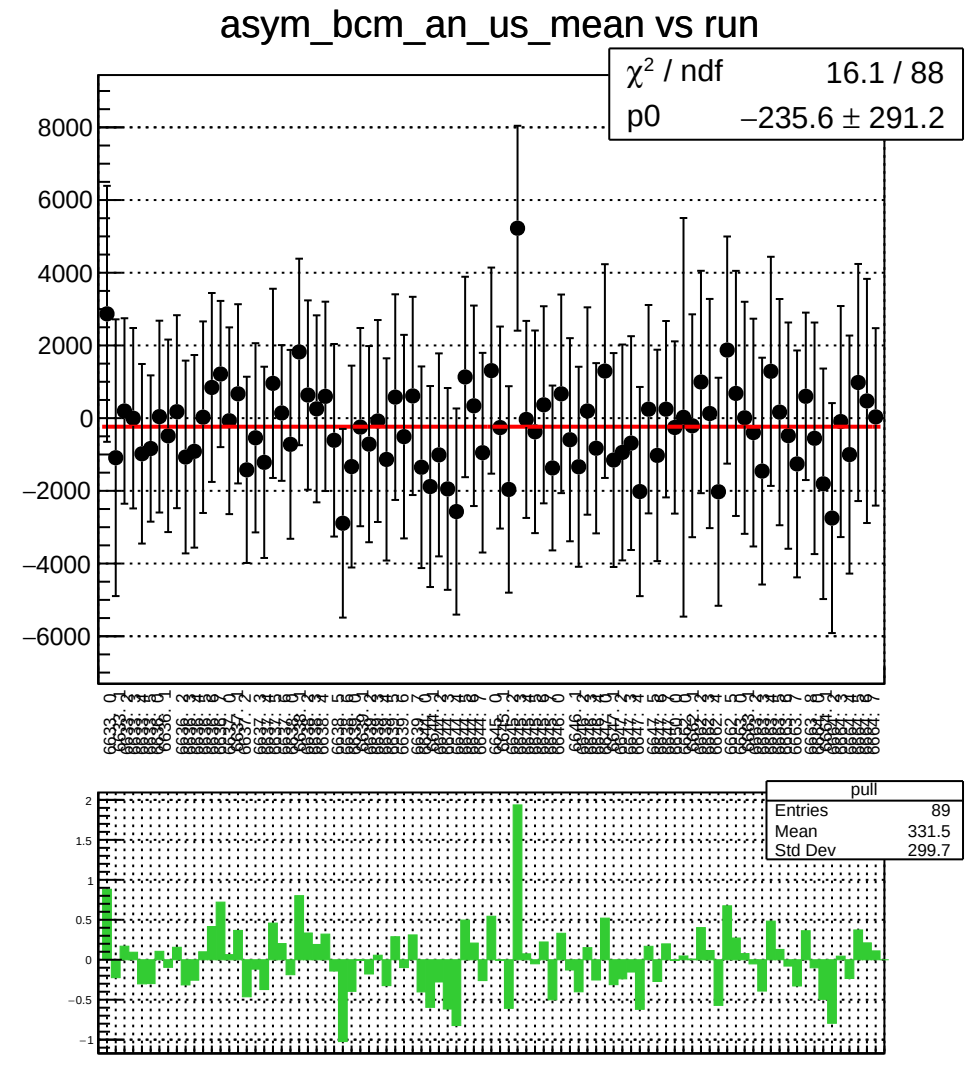

pull1D
Entries 89
Mean −0.001589
Std Dev 0.4267
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

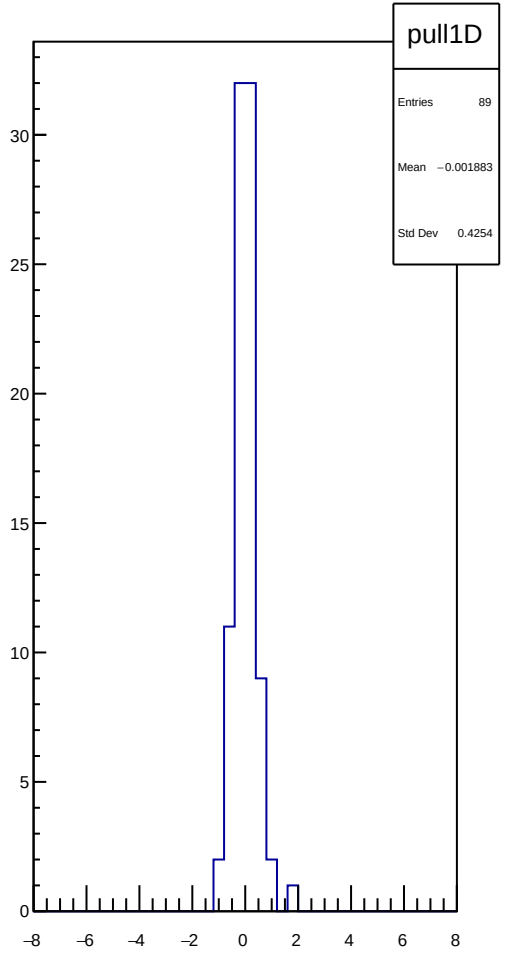

asym_bcm_an_ds_rms vs run
χ^2 / ndf 1.729e+04 / 88
p0 267.2 ± 0.205
550
500
450
400
350
300
250

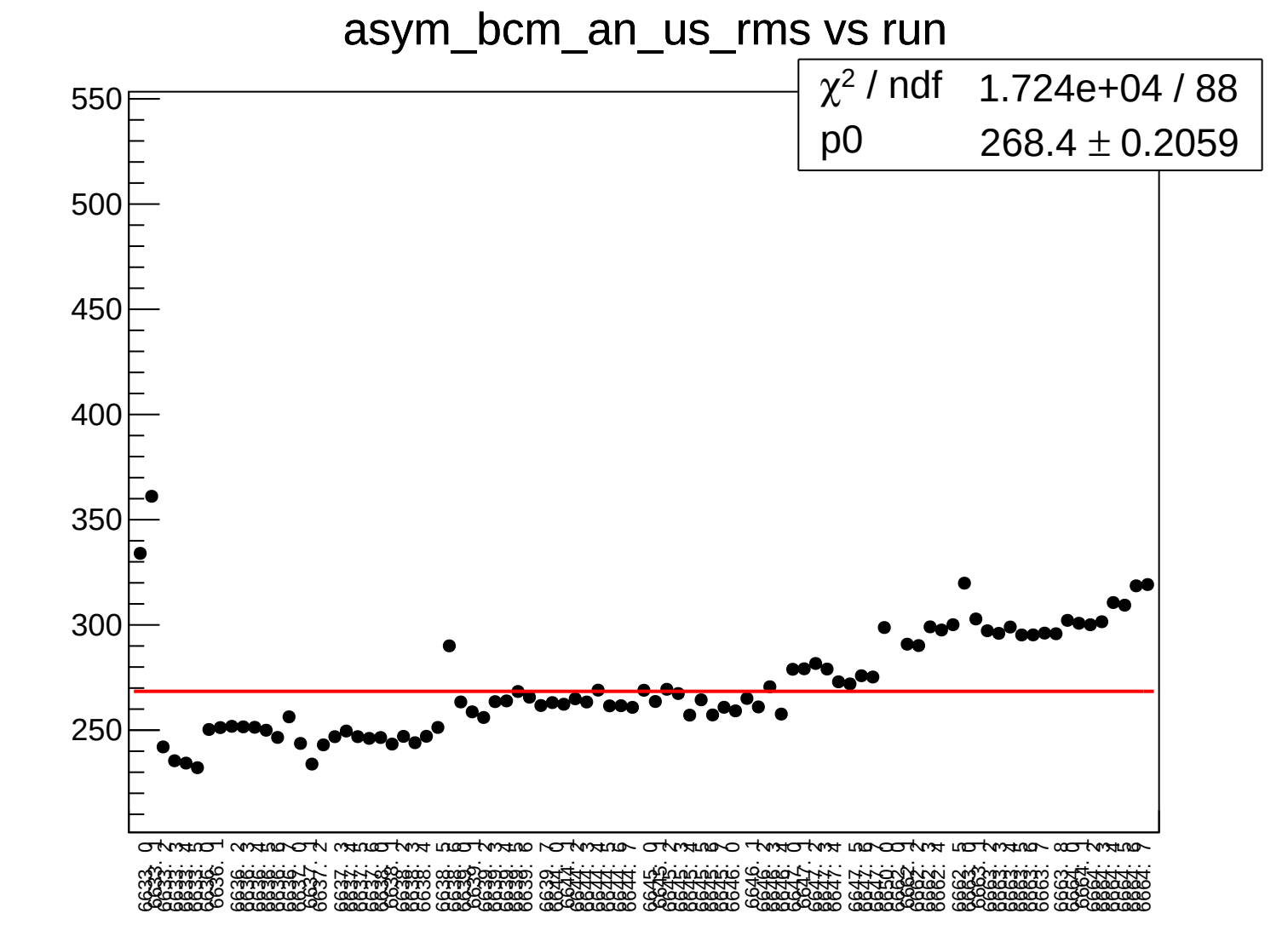

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.5 / 88
p0 −275.7 ± 291.2
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 348.1
Std Dev 325.9
1.5
1
0.5
0
−0.5
−1

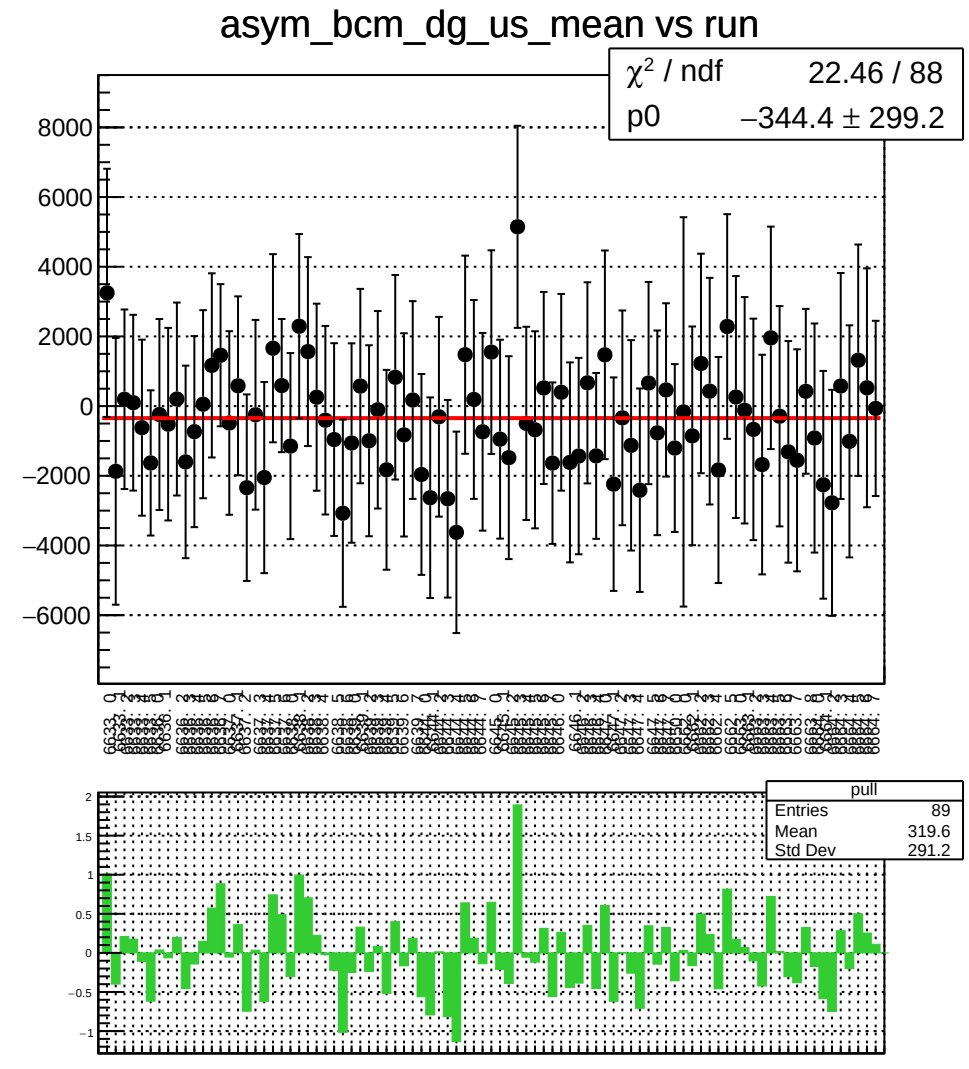

pull1D
Entries 89
Mean −0.00152
Std Dev 0.4306
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

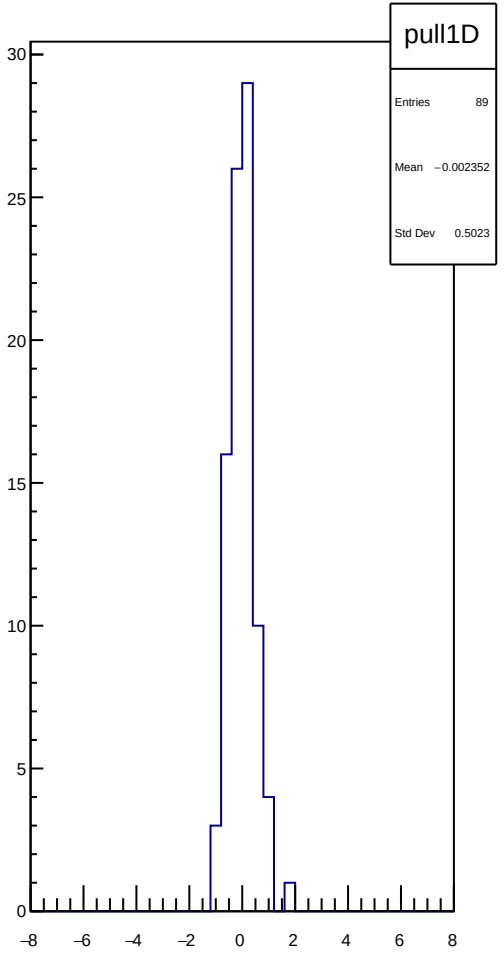

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 1.734e+04 / 88
p0 268.5 ± 0.2059
550
500
450
400
350
300
250

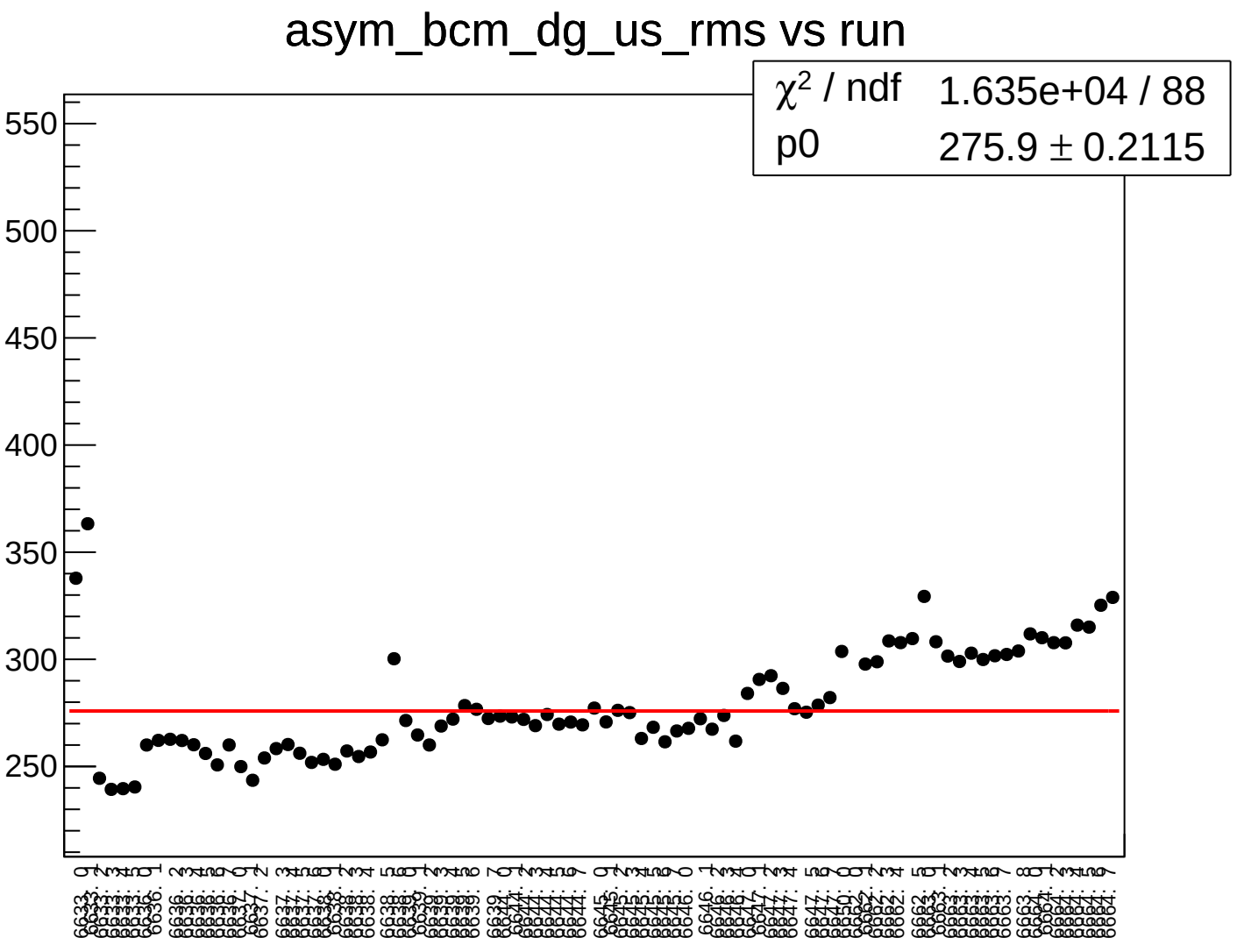

asym_bcm_an_us_mean vs run
χ² / ndf 16.1 / 88
p0 −235.6 ± 291.2
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 331.5
Std Dev 299.7
2
1.5
1
0.5
0
−0.5
−1

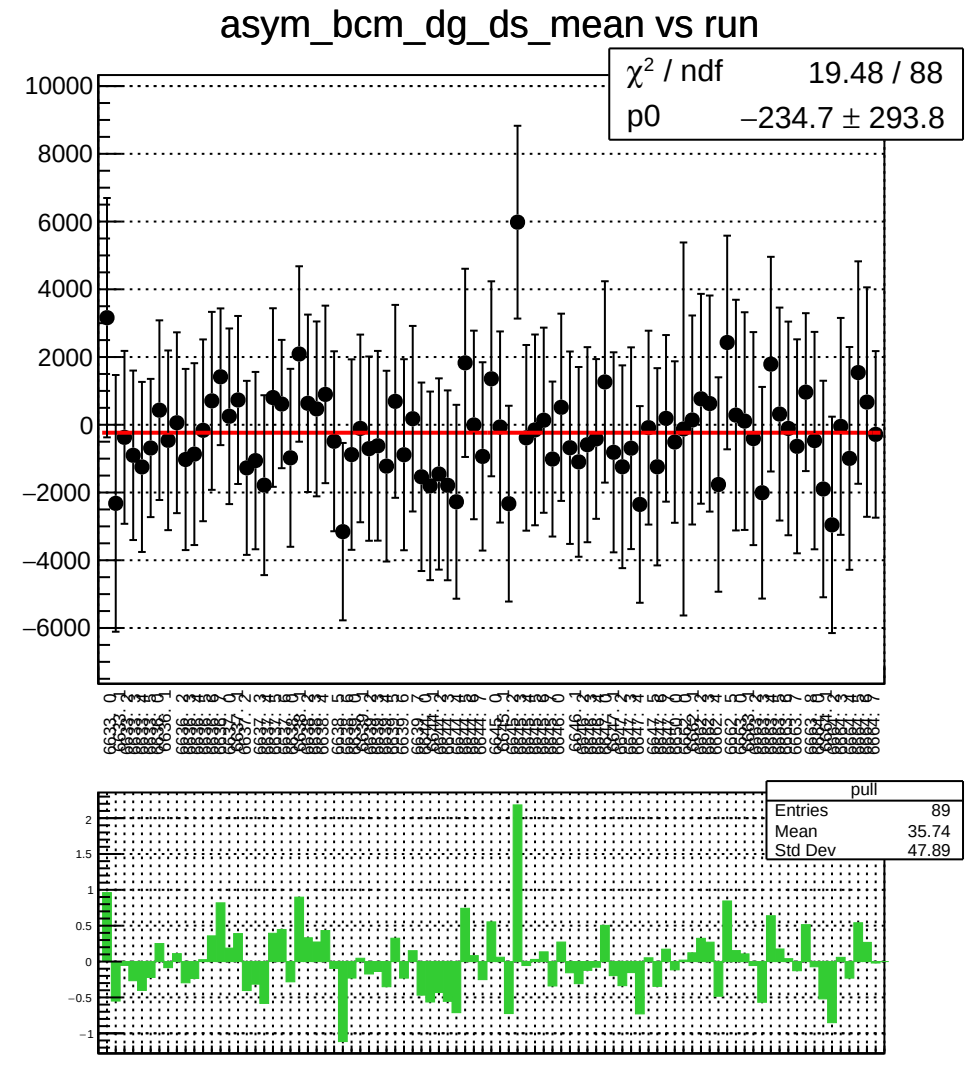

pull1D
Entries 89
Mean −0.001883
Std Dev 0.4254
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

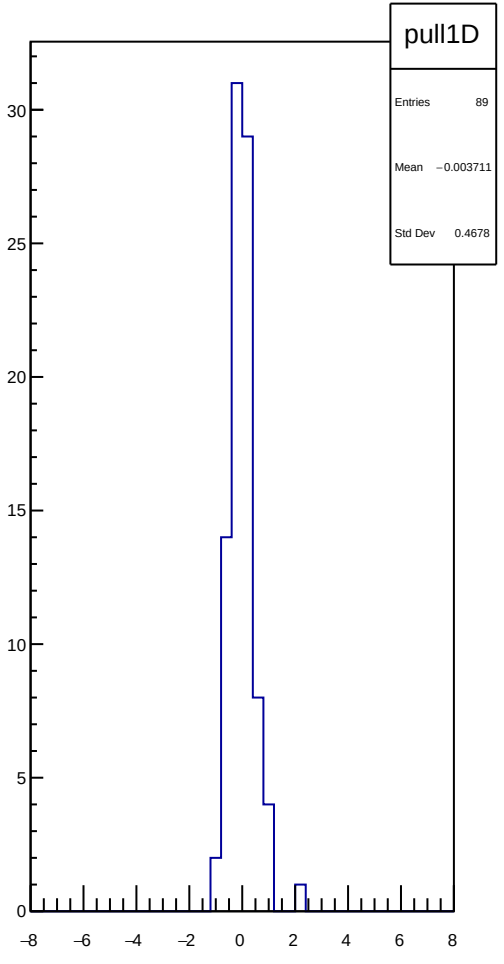

asym_bcm_an_us_rms vs run
χ^2 / ndf 1.724e+04 / 88
p0 268.4 ± 0.2059
550
500
450
400
350
300
250

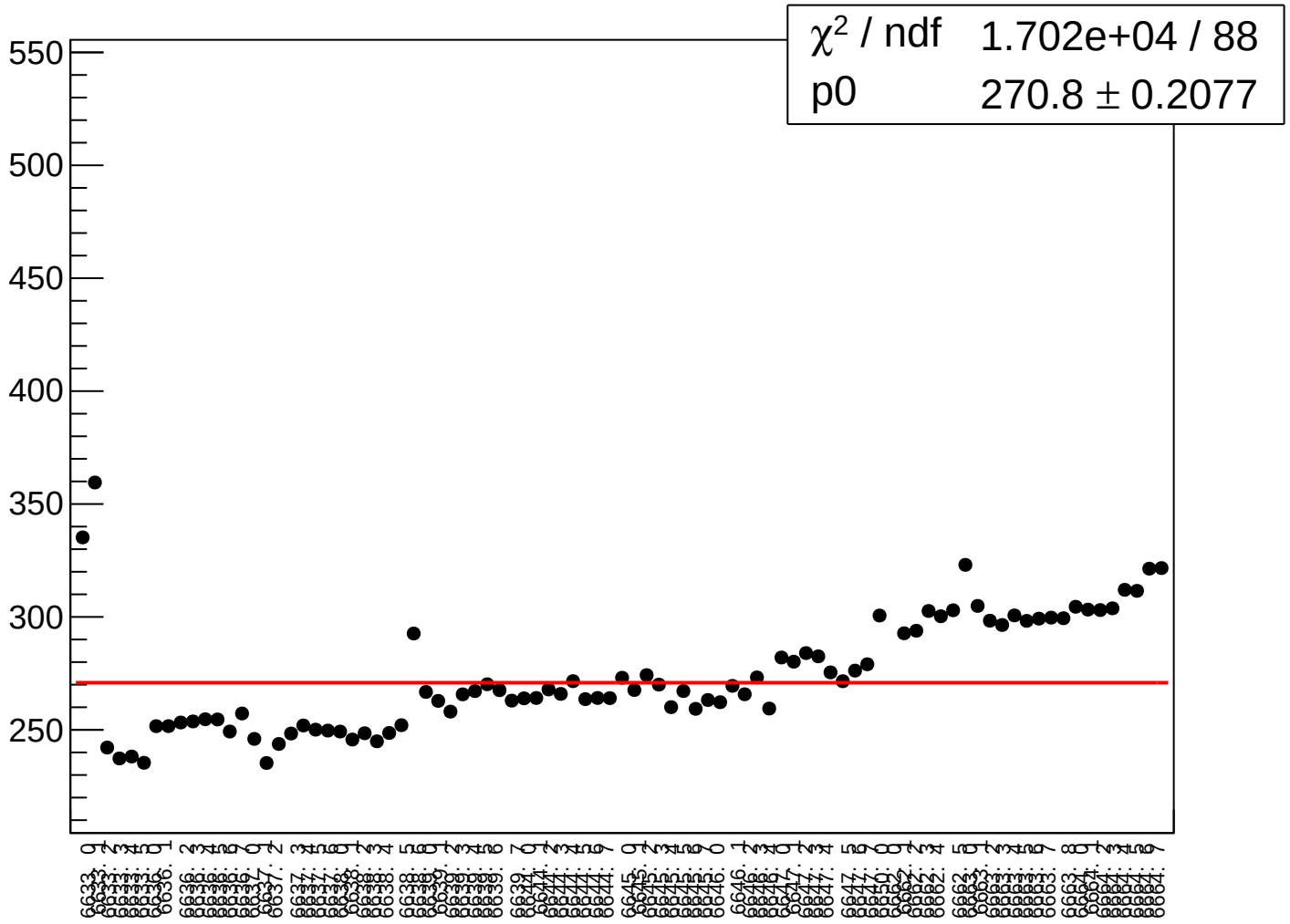

asym_bcm_dg_us_mean vs run
χ² / ndf 22.46 / 88
p0 −344.4 ± 299.2
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 319.6
Std Dev 291.2
2
1.5
1
0.5
0
−0.5
−1

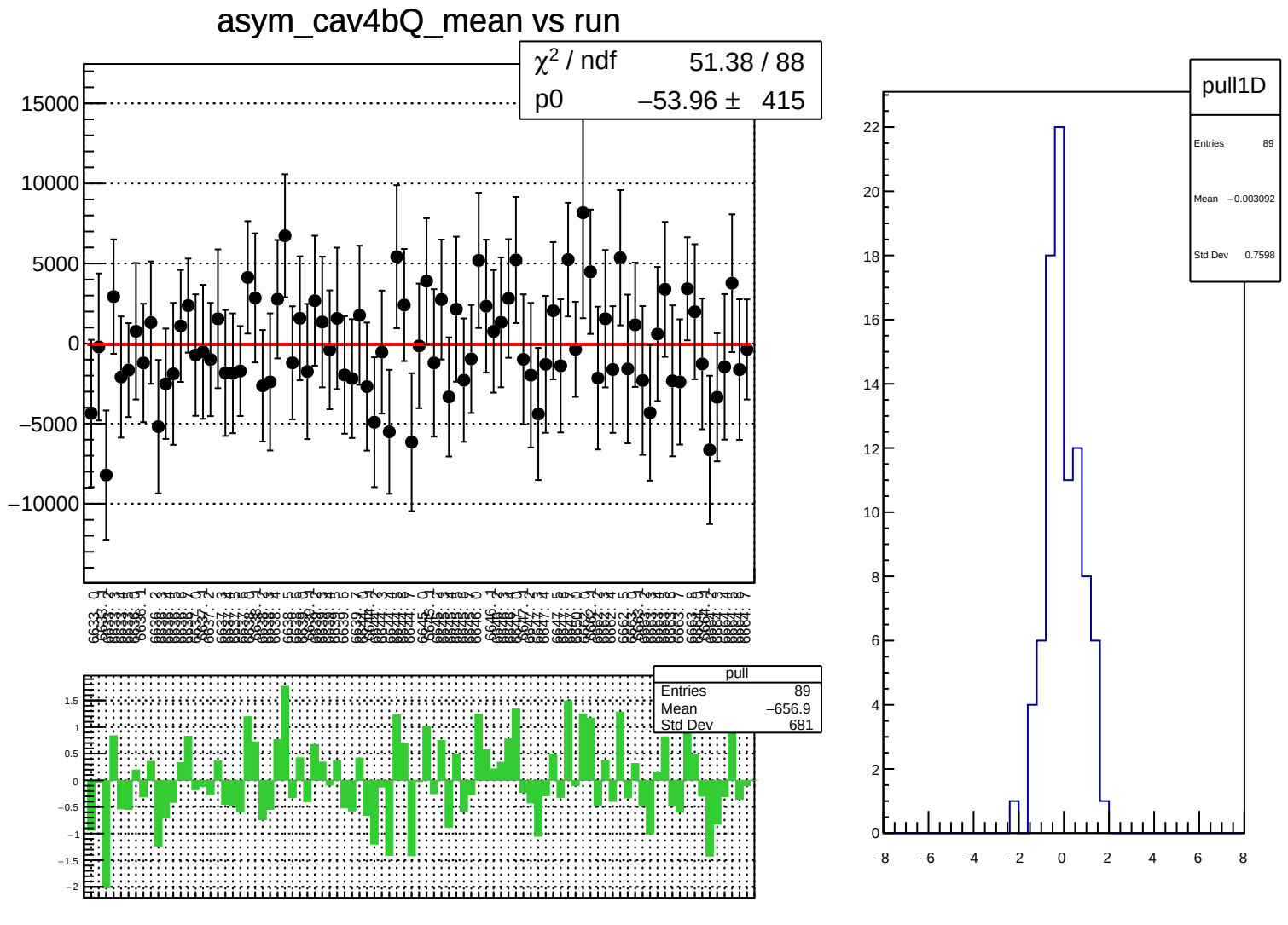

pull1D
Entries 89
Mean −0.002352
Std Dev 0.5023
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

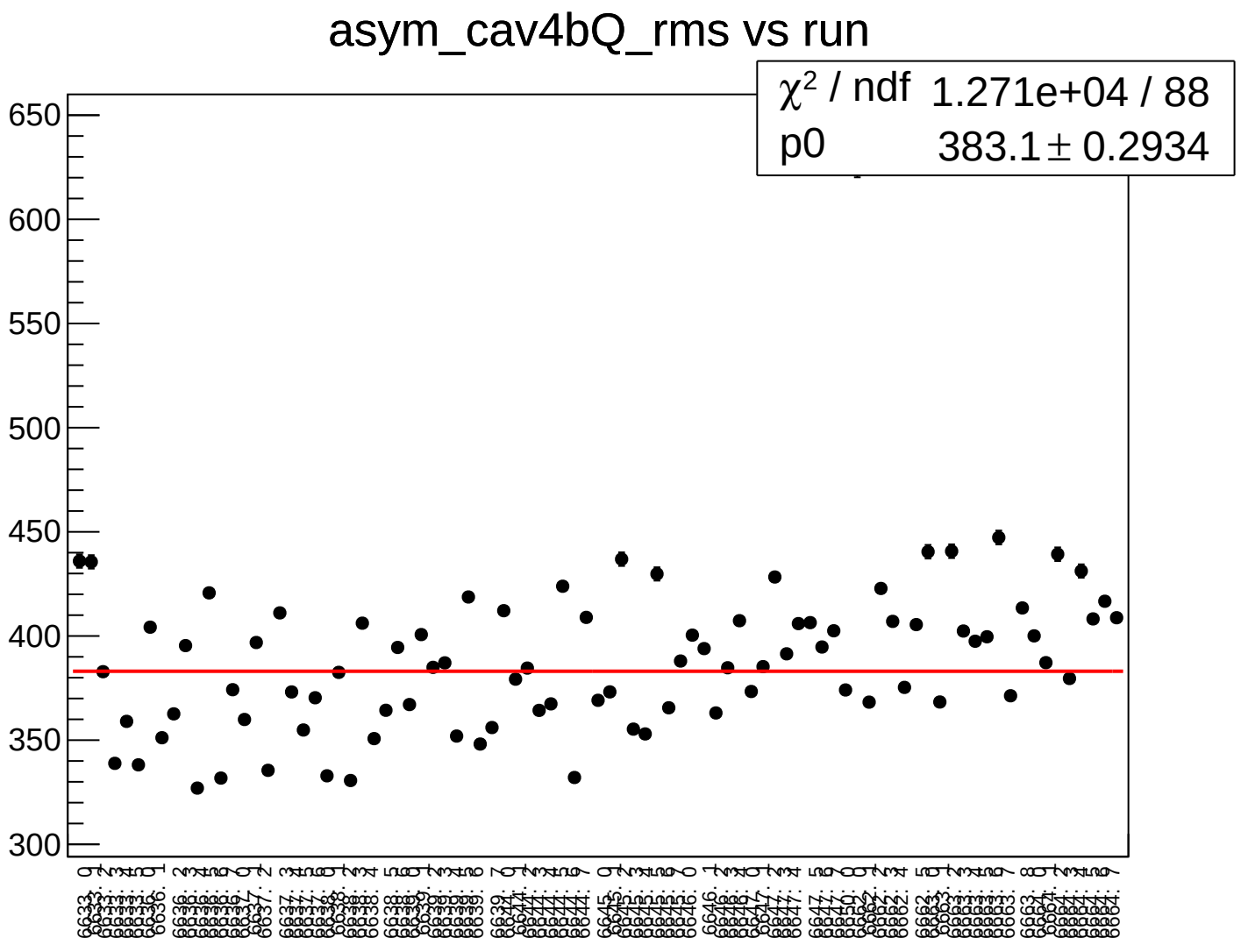

asym_bcm_dg_us_rms vs run
χ^2 / ndf 1.635e+04 / 88
p0 275.9 ± 0.2115
550
500
450
400
350
300
250

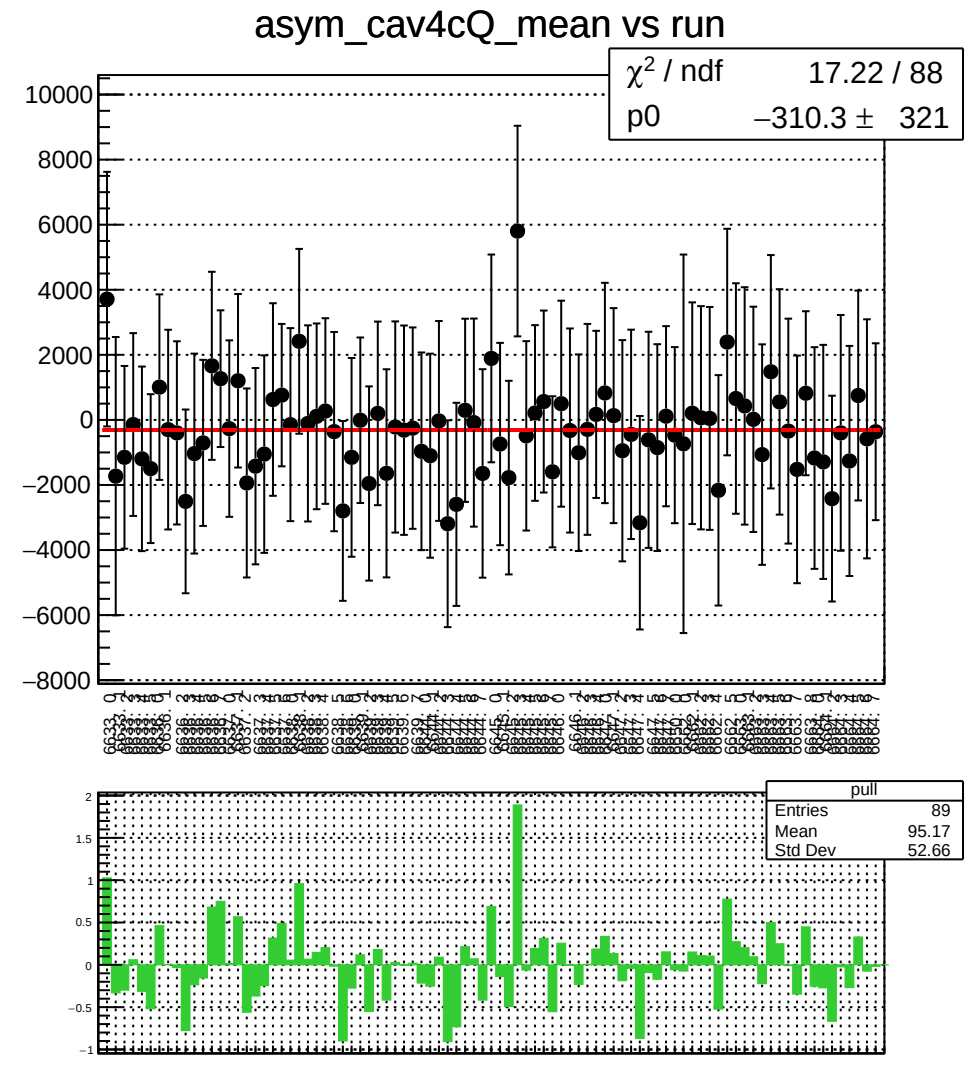

asym_bcm_dg_ds_mean vs run
χ² / ndf 19.48 / 88
p0 −234.7 ± 293.8
pull
Entries 89
Mean 35.74
Std Dev 47.89

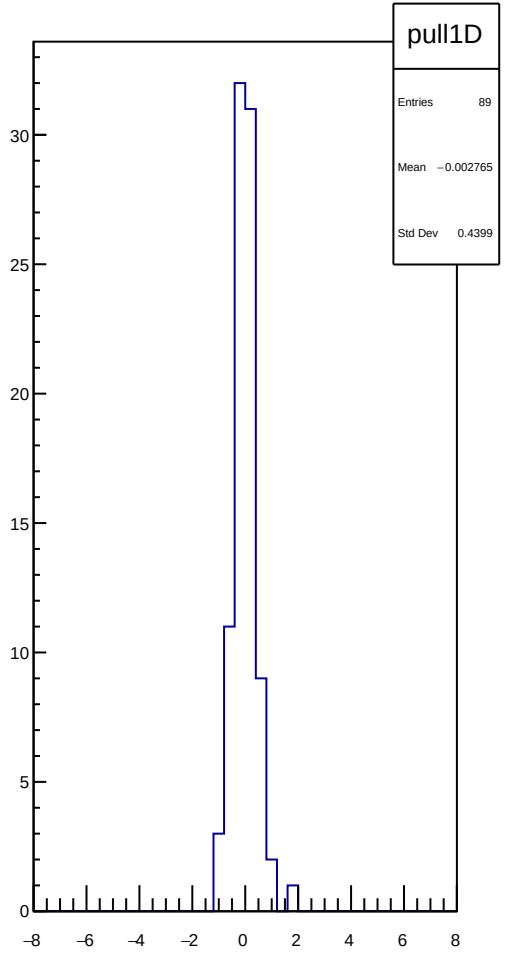

pull1D
Entries 89
Mean −0.003711
Std Dev 0.4678

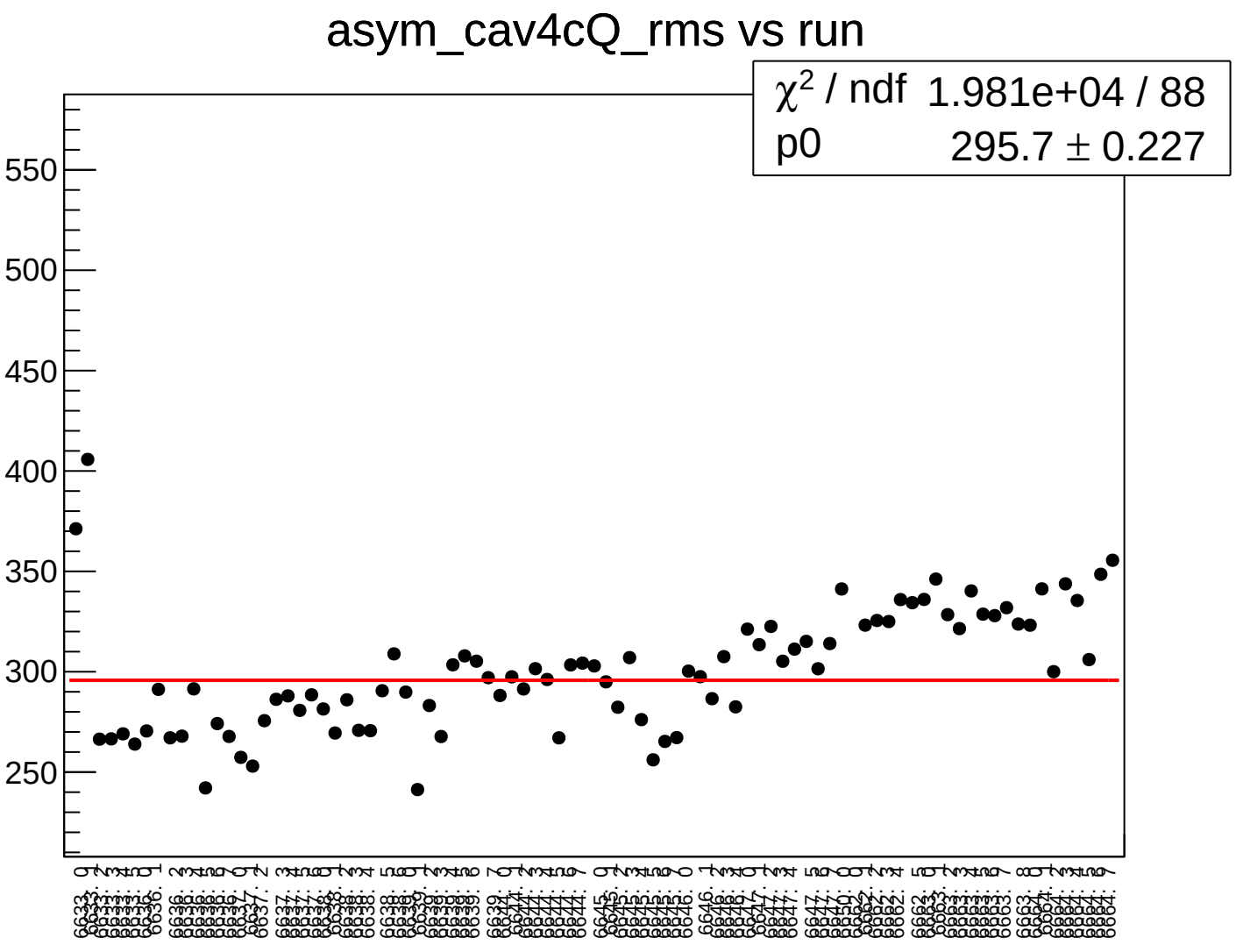

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.702e+04 / 88
p0 270.8 ± 0.2077
550
500
450
400
350
300
250

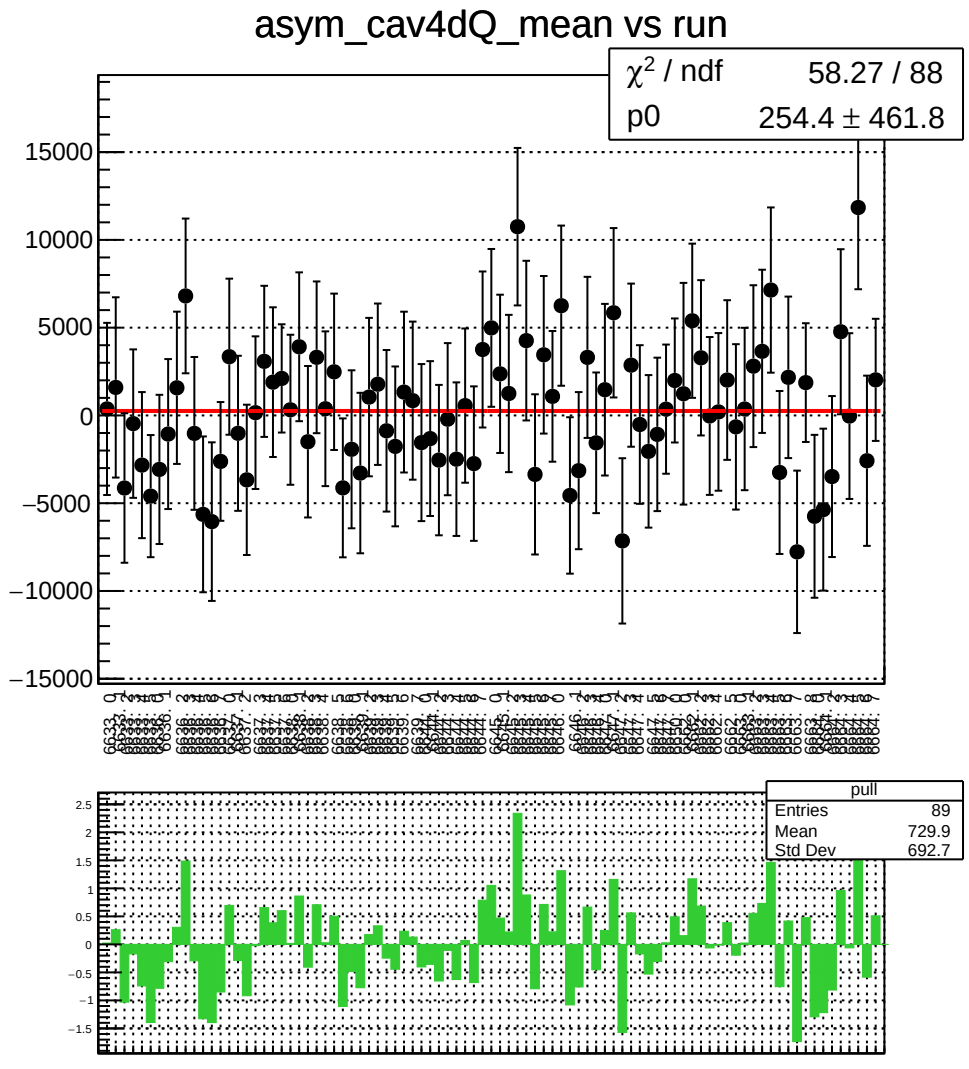

asym_cav4bQ_mean vs run
χ² / ndf 51.38 / 88
p0 −53.96 ± 415
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −656.9
Std Dev 681
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 89
Mean −0.003092
Std Dev 0.7598
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

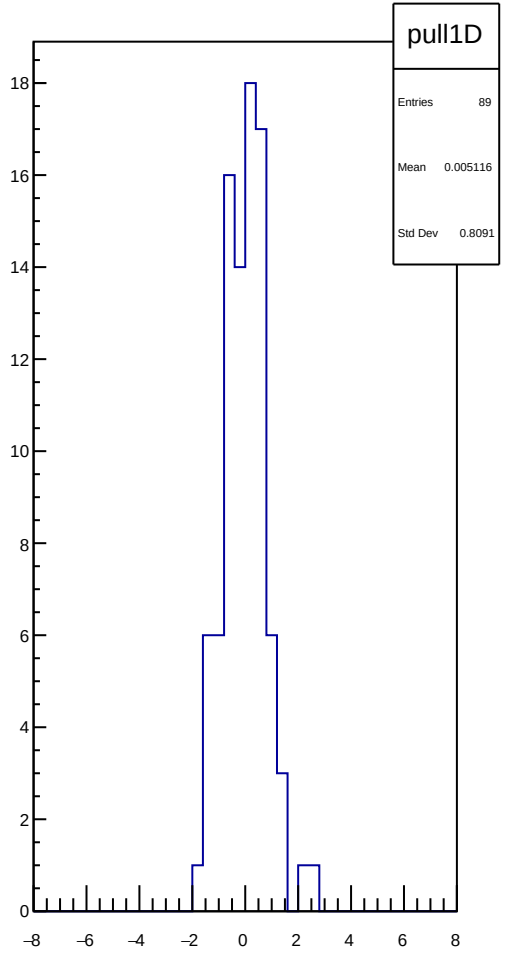

asym_cav4bQ_rms vs run
χ² / ndf 1.271e+04 / 88
p0 383.1 ± 0.2934
650
600
550
500
450
400
350
300

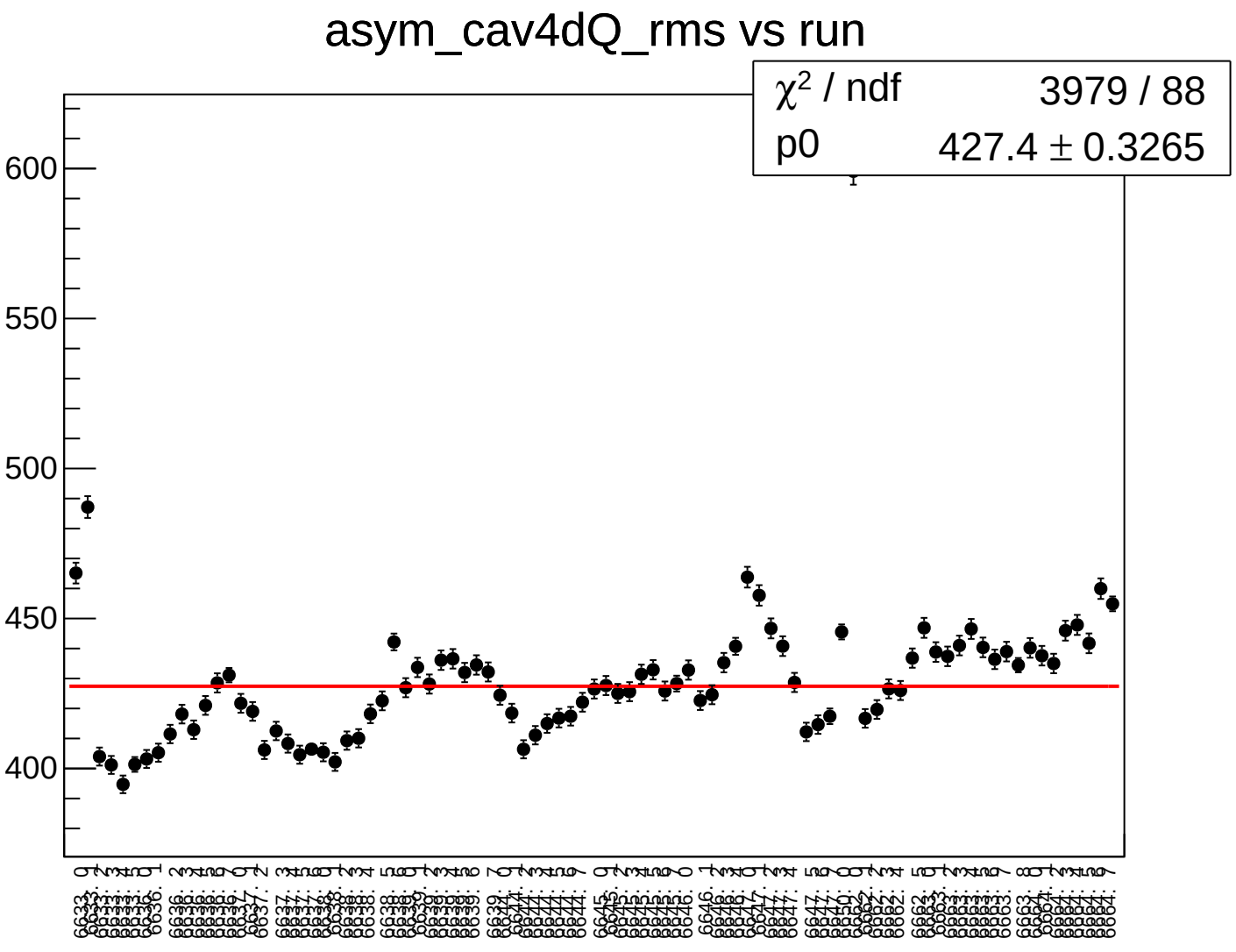

asym_cav4cQ_mean vs run
χ² / ndf 17.22 / 88
p0 −310.3 ± 321
pull
Entries 89
Mean 95.17
Std Dev 52.66

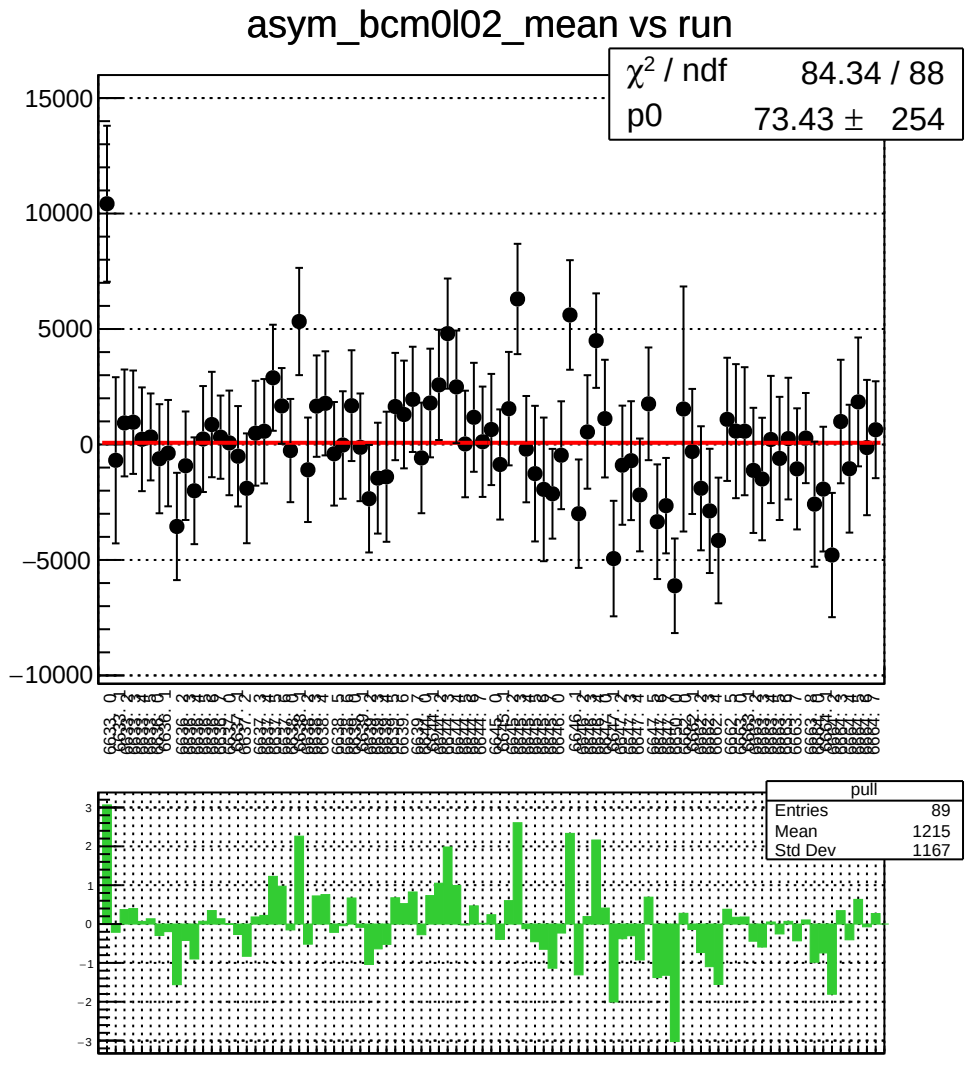

pull1D
Entries 89
Mean −0.002765
Std Dev 0.4399

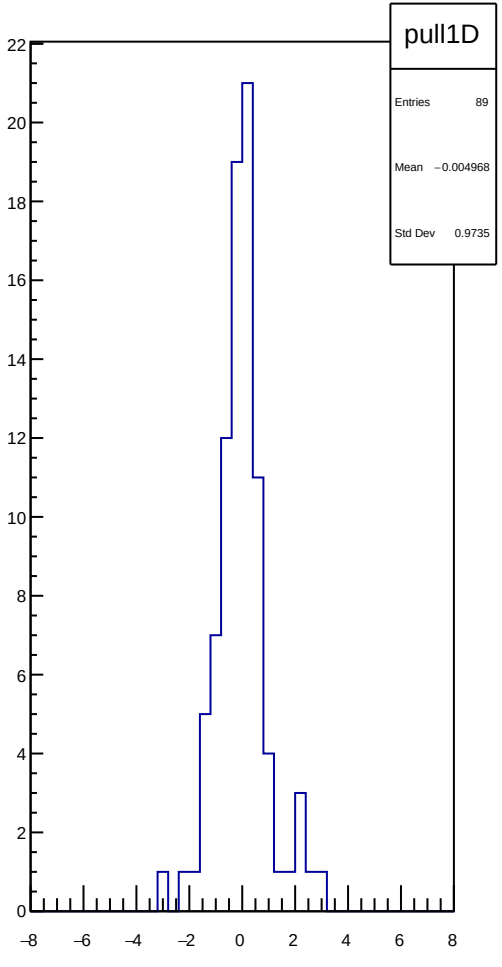

asym_cav4cQ_rms vs run
χ² / ndf 1.981e+04 / 88
p0 295.7 ± 0.227
550
500
450
400
350
300
250

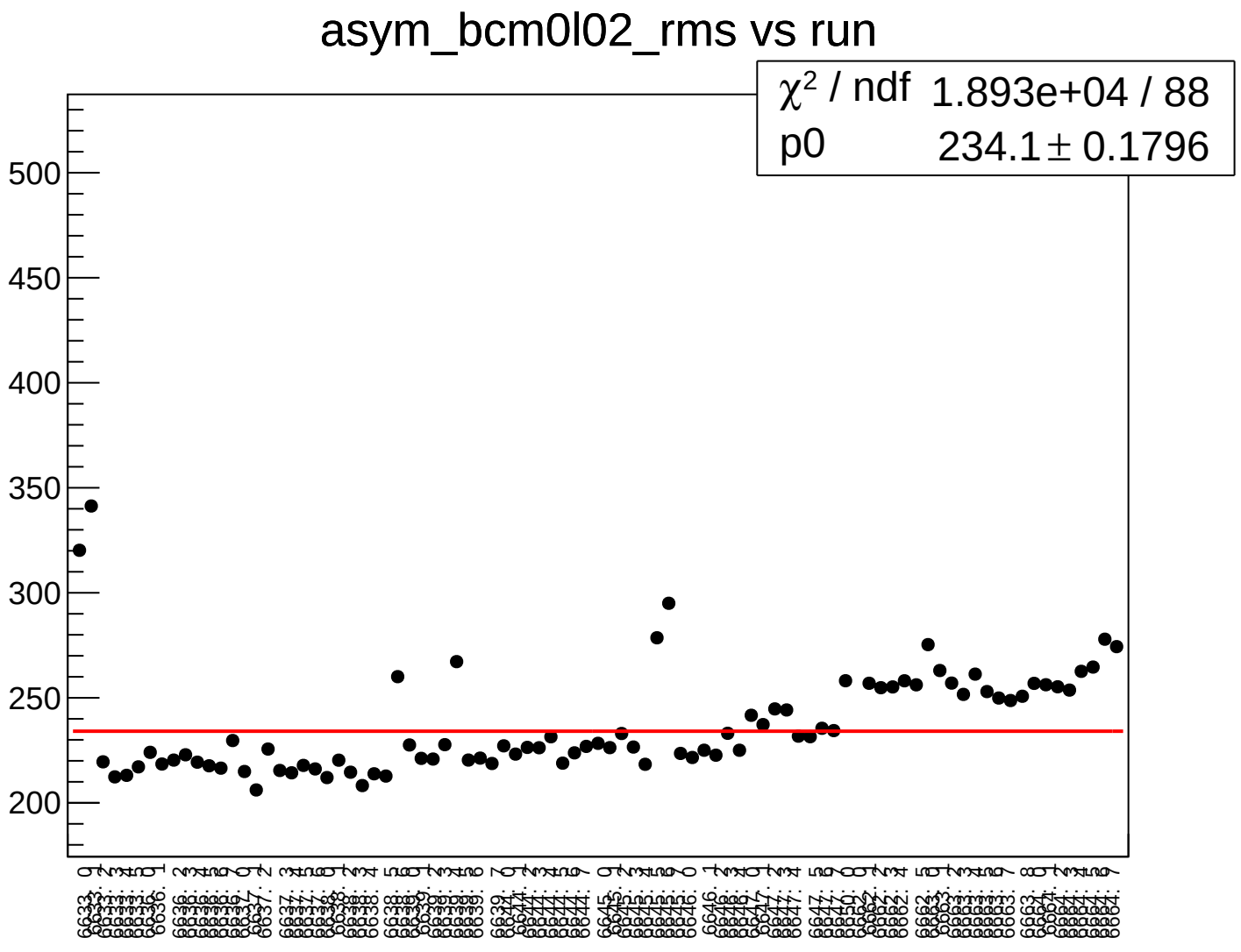

asym_cav4dQ_mean vs run
χ² / ndf 58.27 / 88
p0 254.4 ± 461.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 729.9
Std Dev 692.7
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

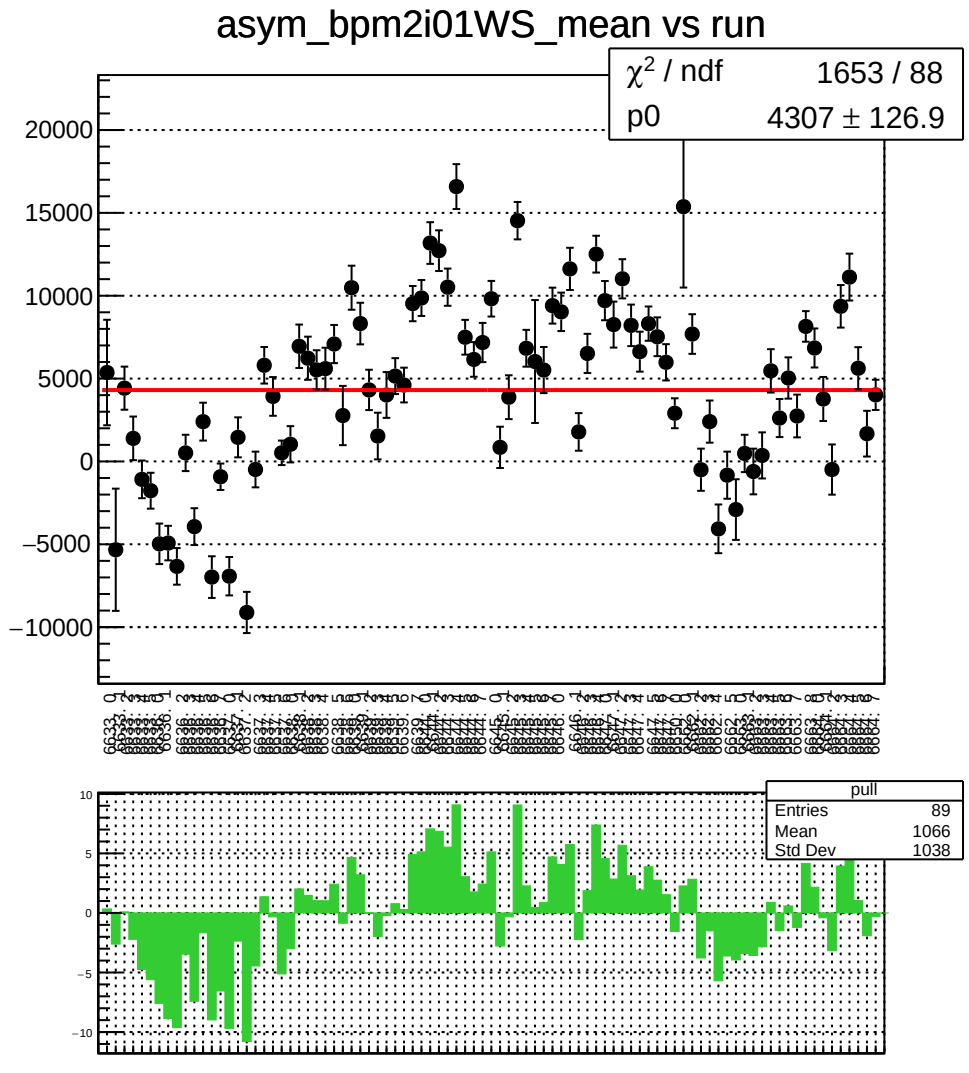

pull1D
Entries 89
Mean 0.005116
Std Dev 0.8091
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

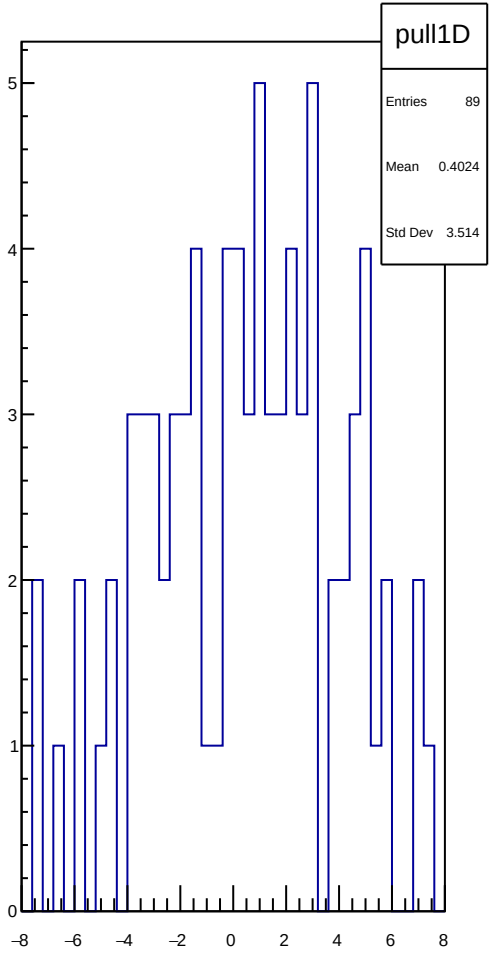

asym_cav4dQ_rms vs run
χ^2 / ndf 3979 / 88
p0 427.4 ± 0.3265
600
550
500
450
400

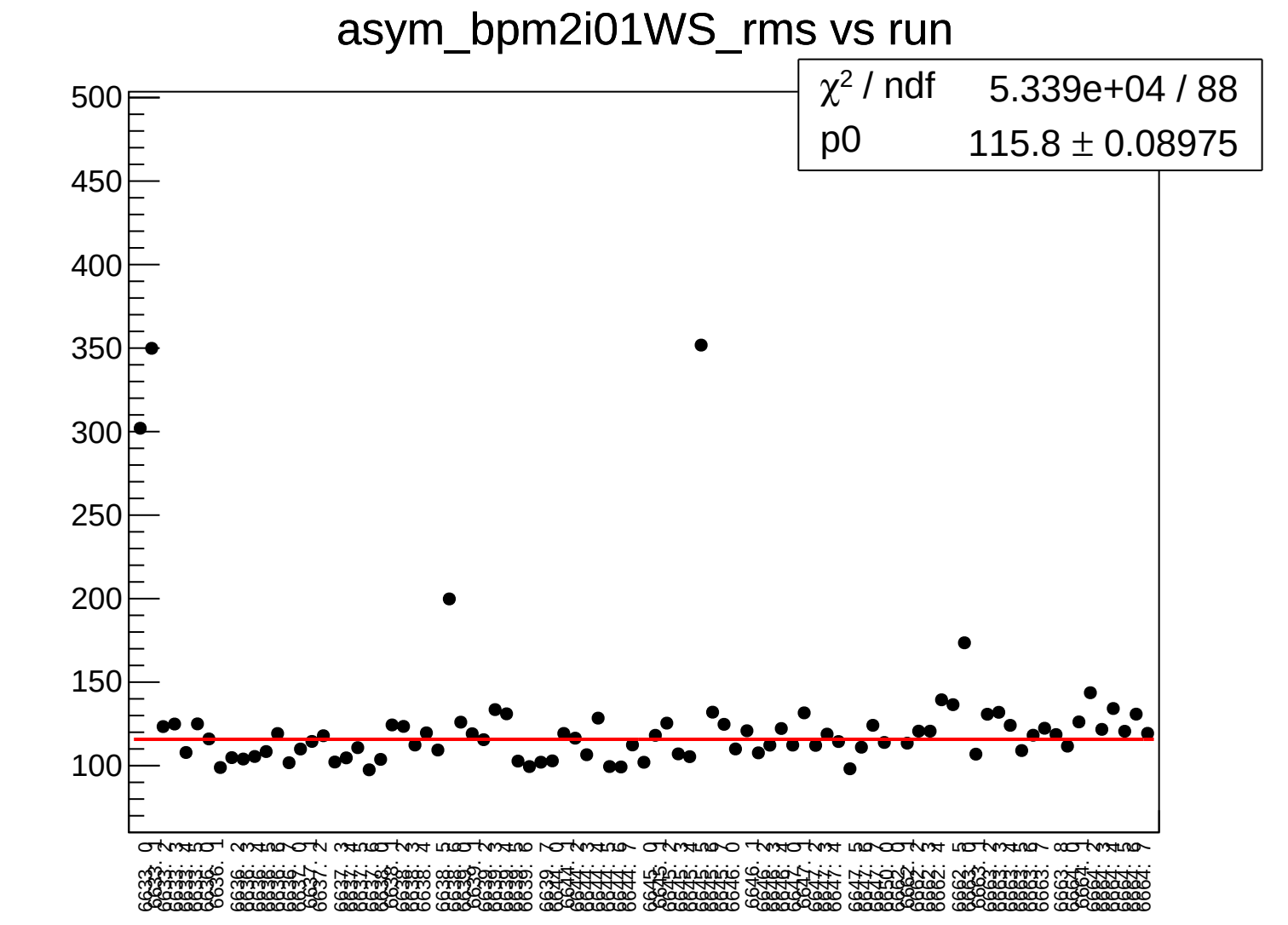

asym_bcm0l02_mean vs run
χ² / ndf 84.34 / 88
p0 73.43 ± 254
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 1215
Std Dev 1167
3
2
1
0
−1
−2
−3

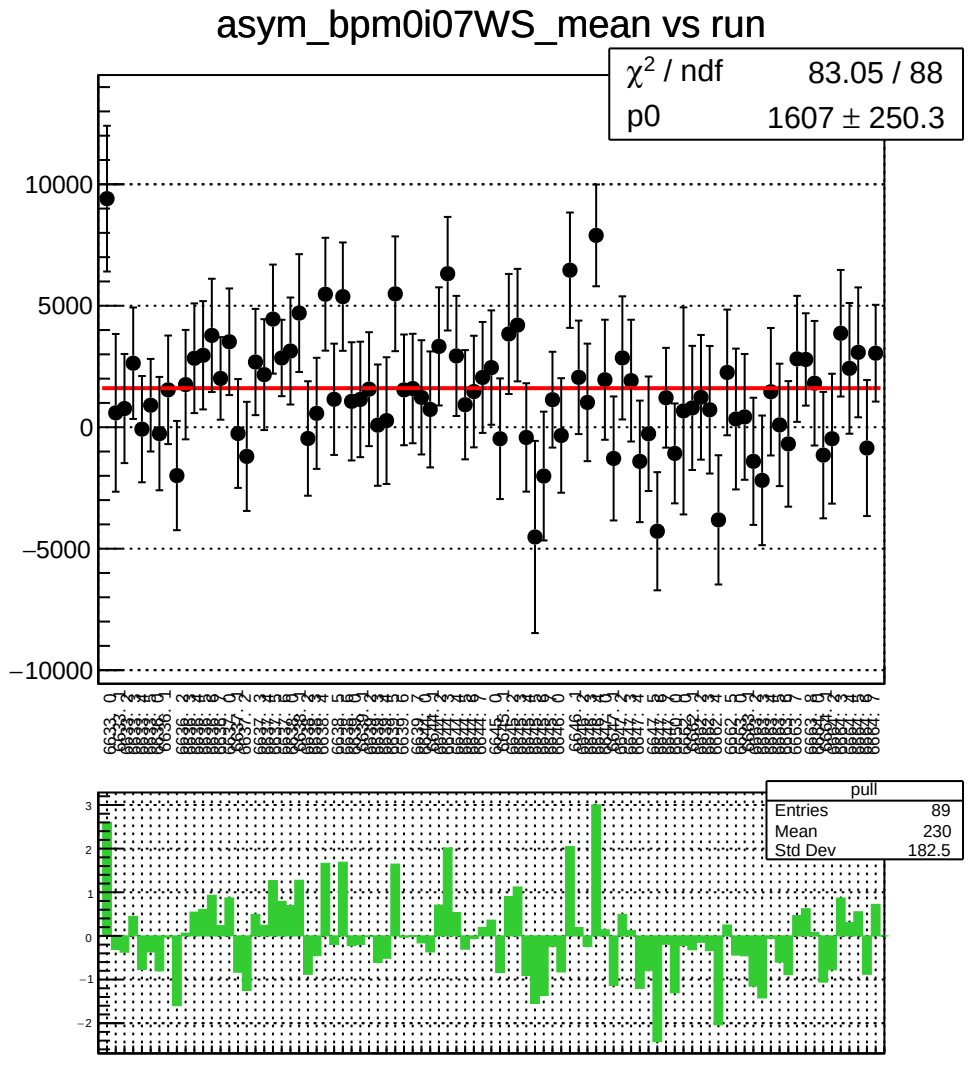

pull1D
Entries 89
Mean −0.004968
Std Dev 0.9735
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

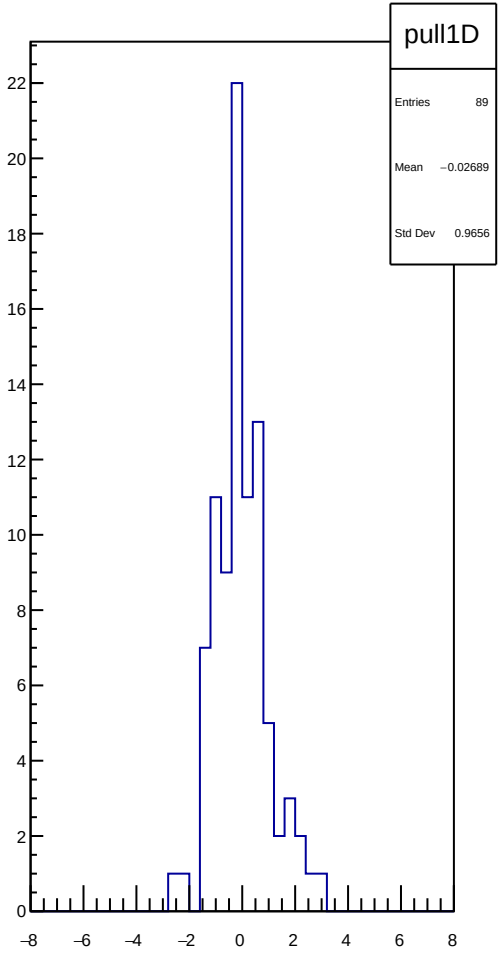

asym_bcm0l02_rms vs run
χ² / ndf 1.893e+04 / 88
p0 234.1 ± 0.1796
500
450
400
350
300
250
200

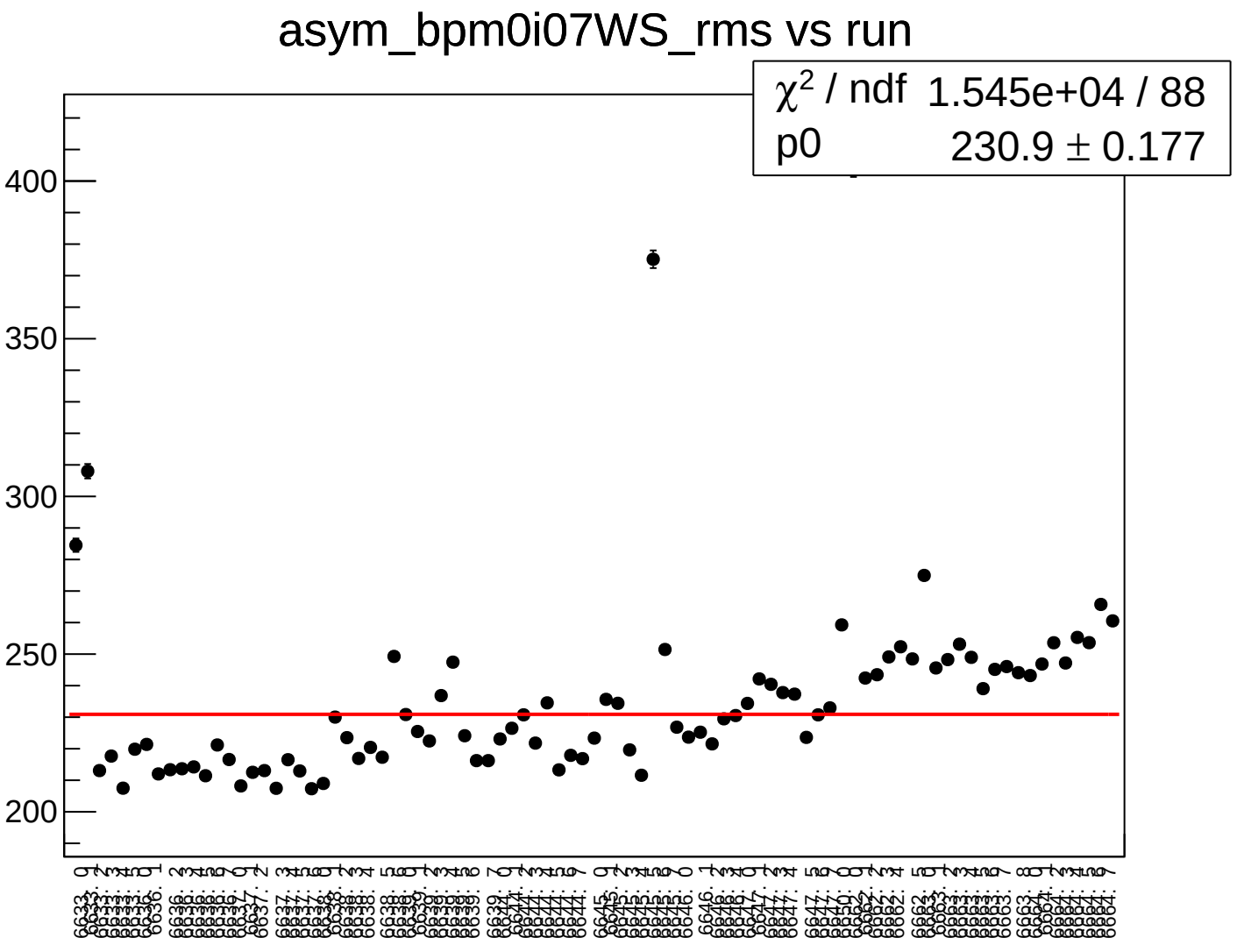

asym_bpm2i01WS_mean vs run
χ^2 / ndf 1653 / 88
p0 4307 ± 126.9
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 1066
Std Dev 1038
10
5
0
−5
−10

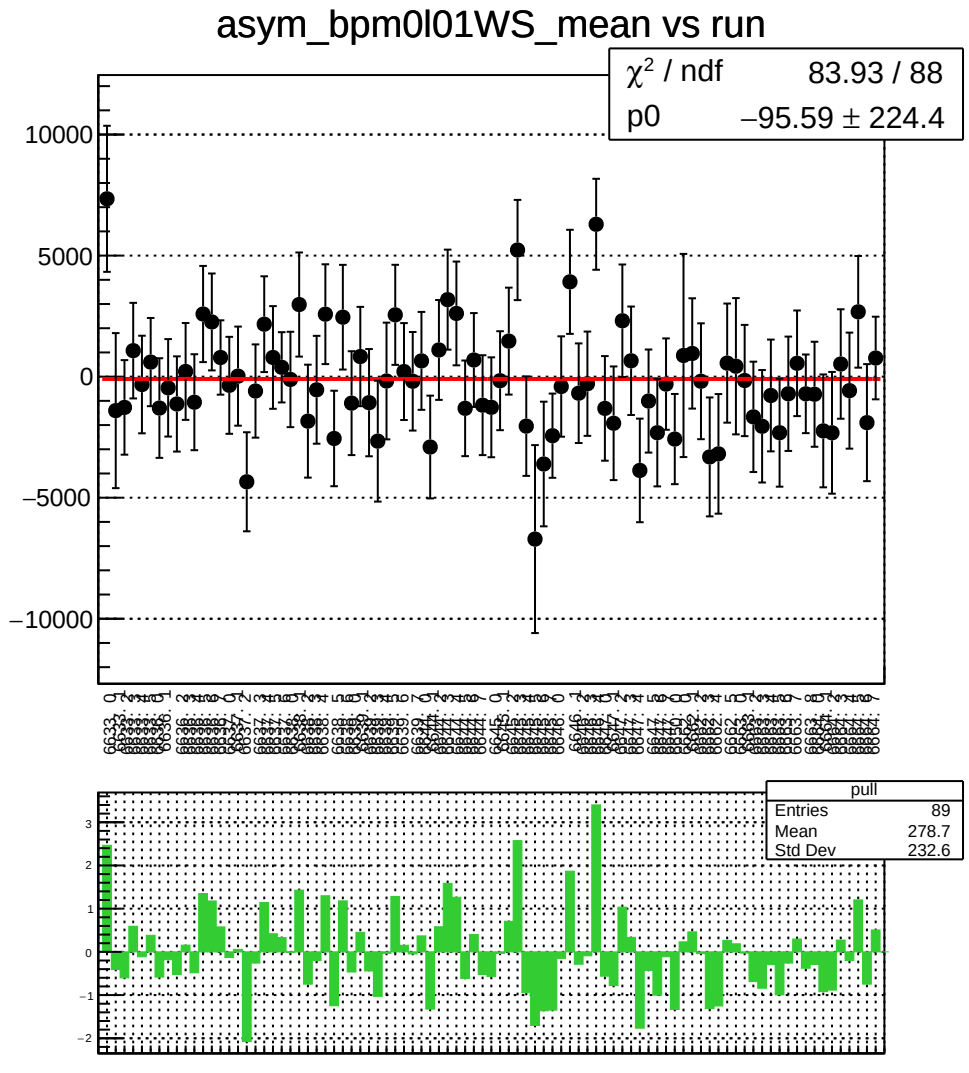

pull1D
Entries 89
Mean 0.4024
Std Dev 3.514
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

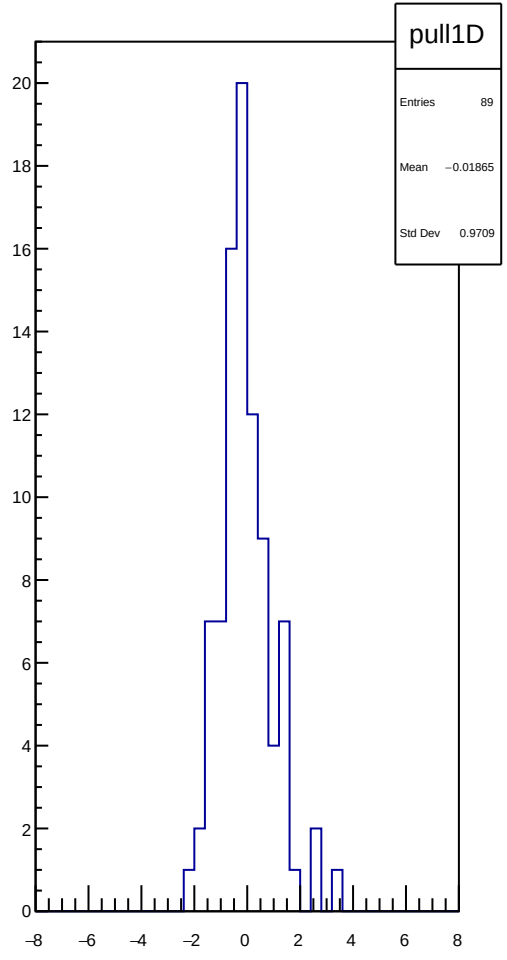

asym_bpm2i01WS_rms vs run
χ^2 / ndf 5.339e+04 / 88
p0 115.8 ± 0.08975
500
450
400
350
300
250
200
150
100

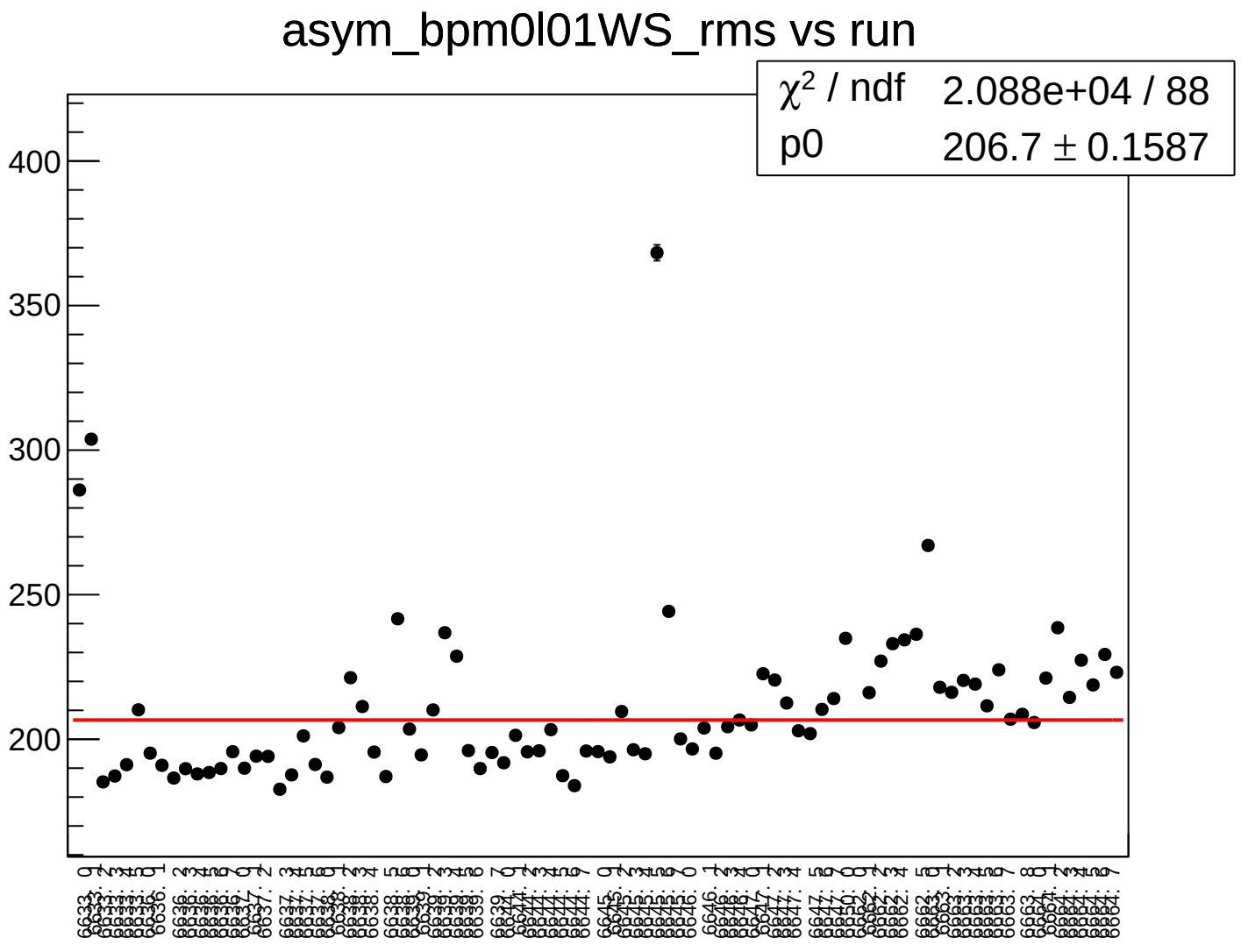

asym_bpm0i07WS_mean vs run
χ² / ndf 83.05 / 88
p0 1607 ± 250.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 230
Std Dev 182.5
3
2
1
0
−1
−2

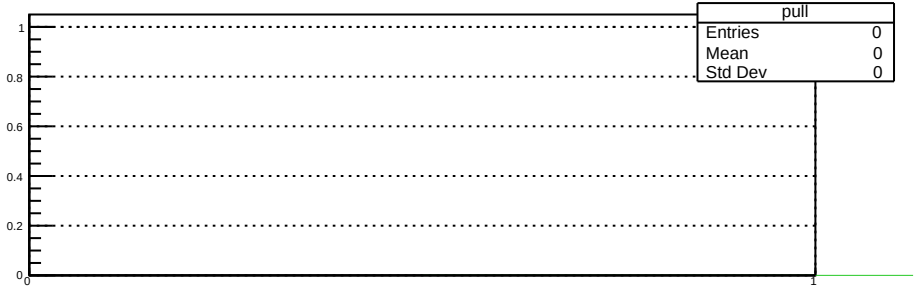

pull1D
Entries 89
Mean −0.02689
Std Dev 0.9656
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

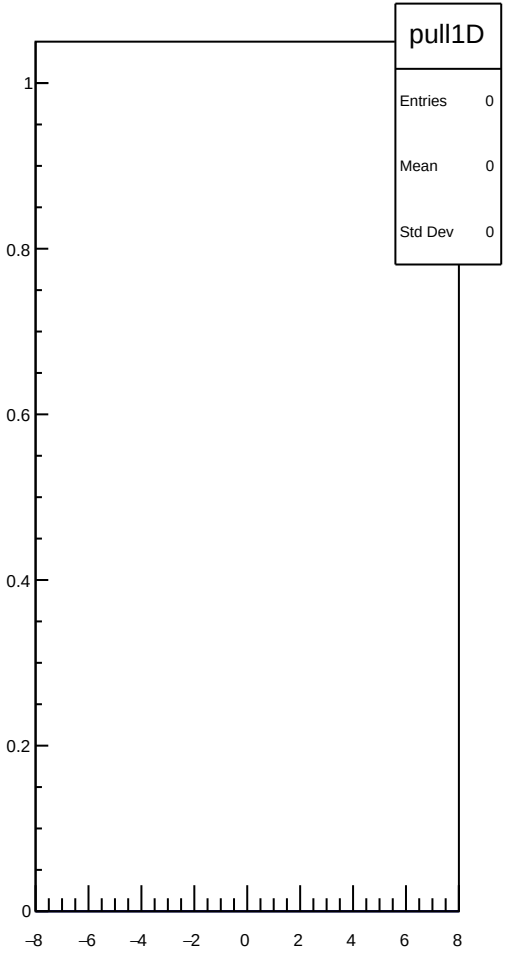

asym_bpm0i07WS_rms vs run
χ² / ndf 1.545e+04 / 88
p0 230.9 ± 0.177
400
350
300
250
200

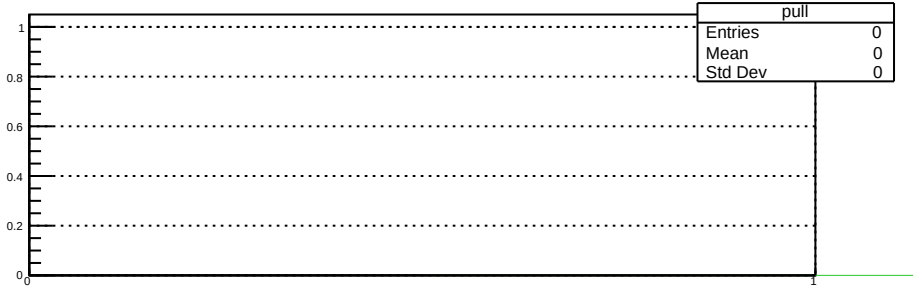

asym_bpm0l01WS_mean vs run
χ² / ndf 83.93 / 88
p0 −95.59 ± 224.4
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 278.7
Std Dev 232.6
3
2
1
0
−1
−2

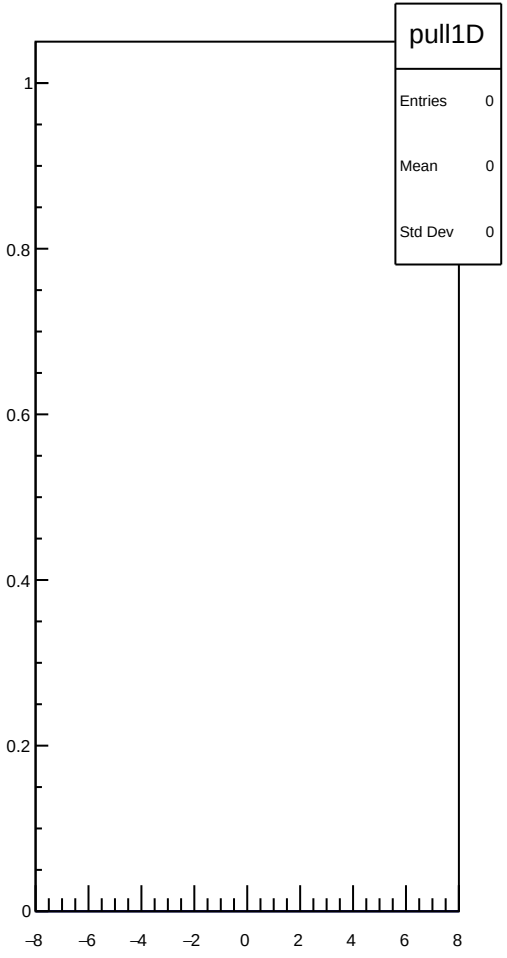

pull1D
Entries 89
Mean −0.01865
Std Dev 0.9709
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

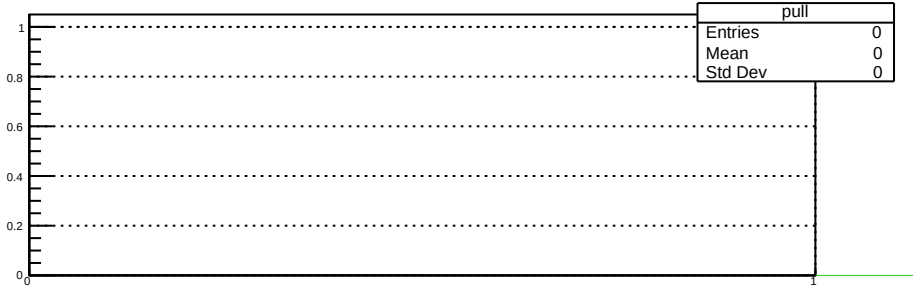

asym_bpm0l01WS_rms vs run
χ² / ndf 2.088e+04 / 88
p0 206.7 ± 0.1587
400
350
300
250
200

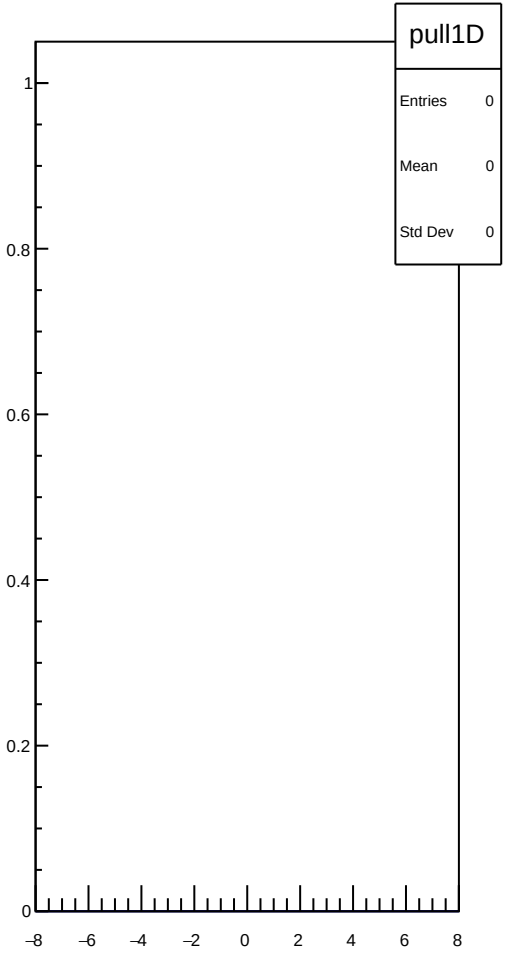

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

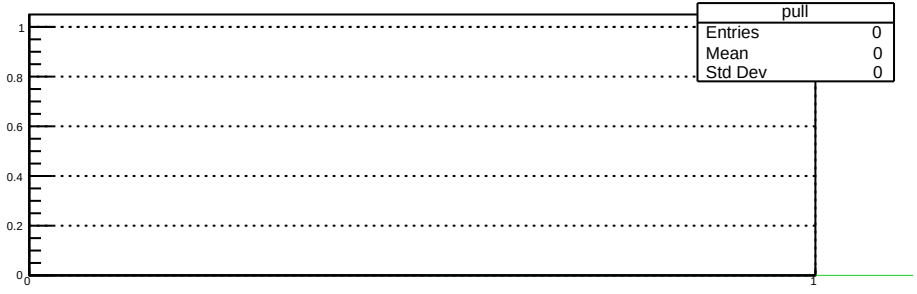

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

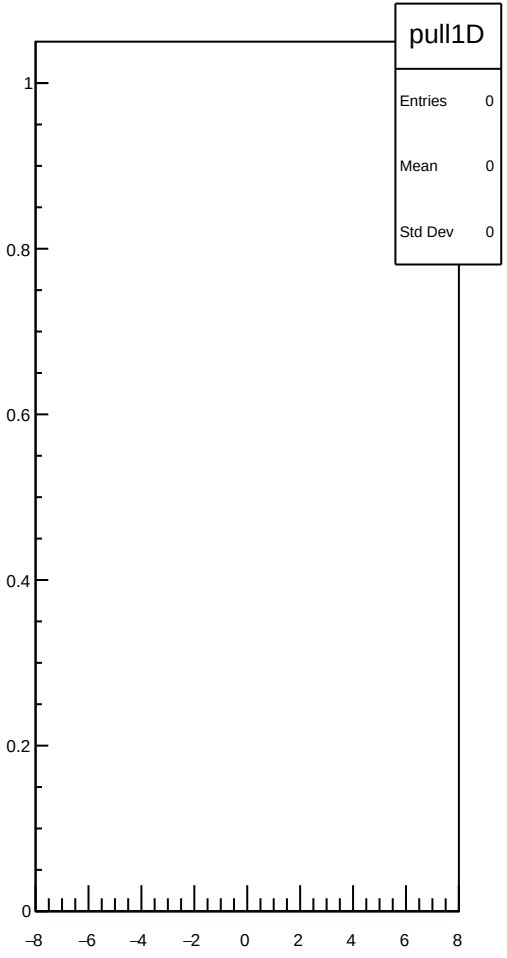

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

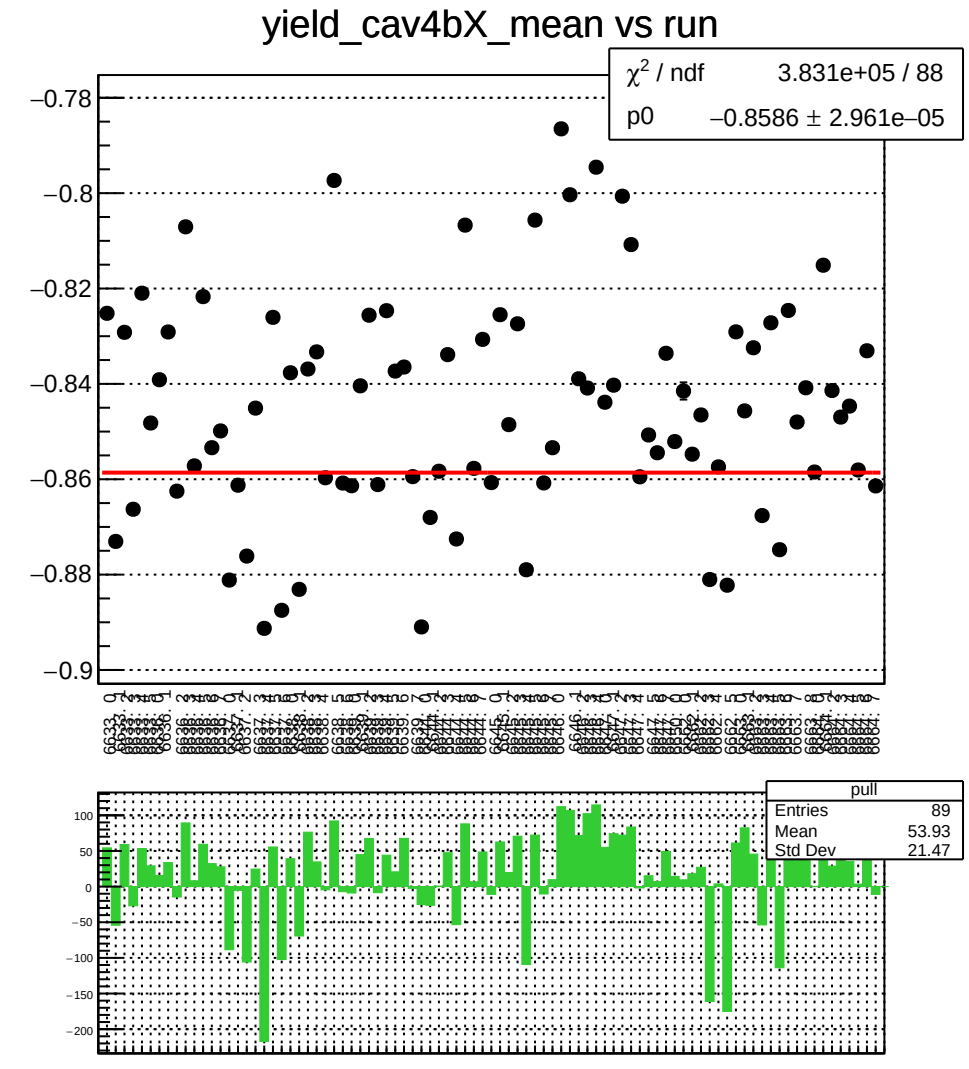

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

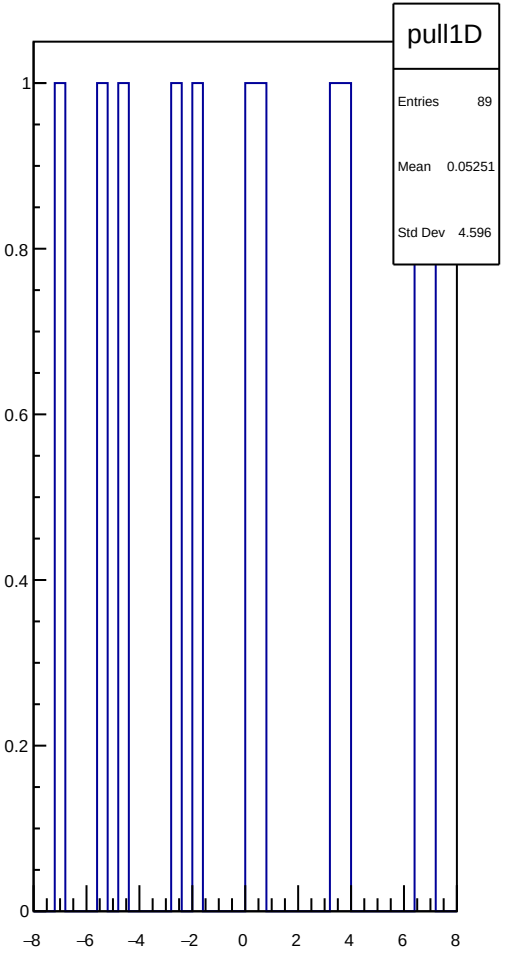

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

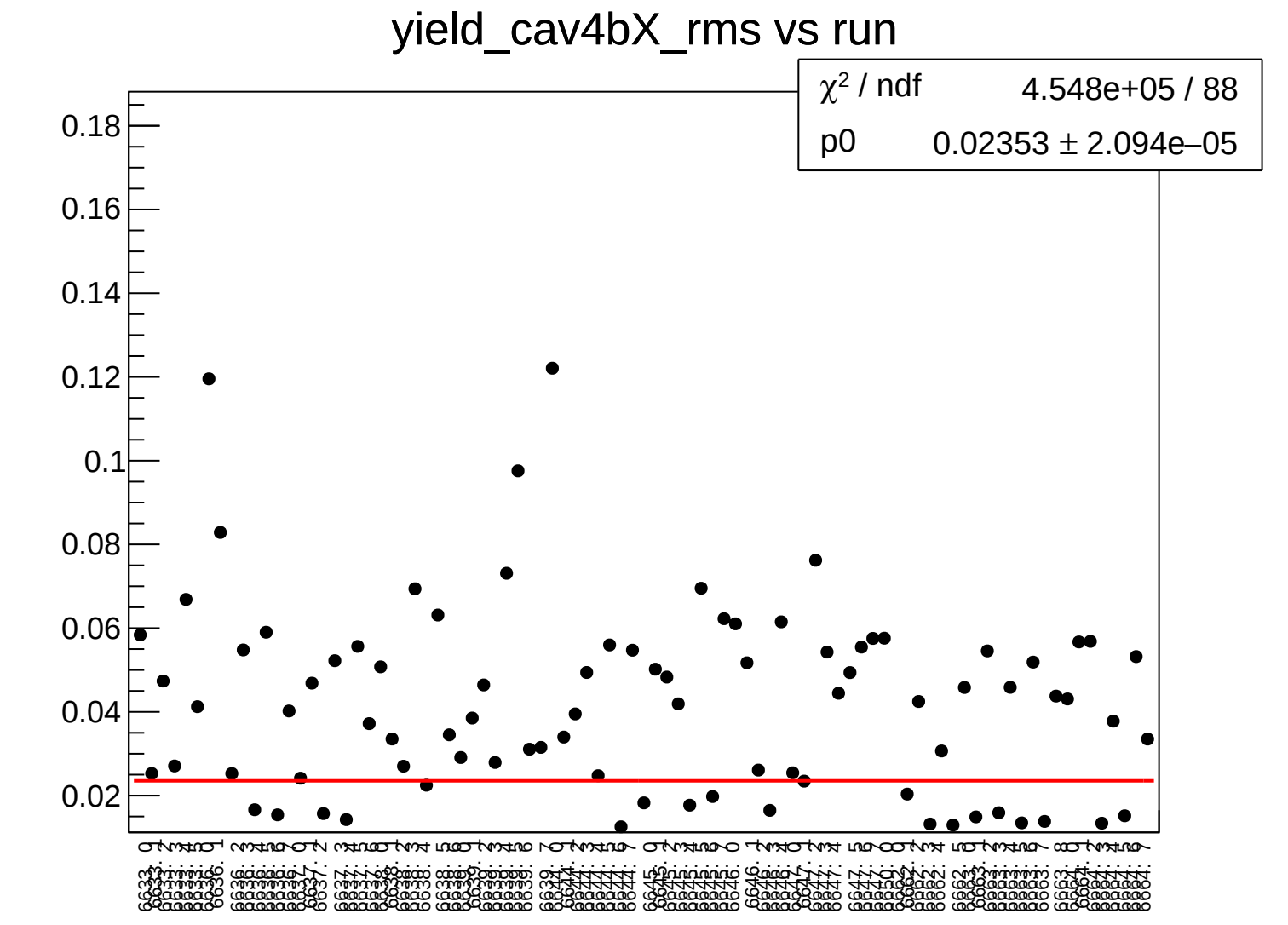

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

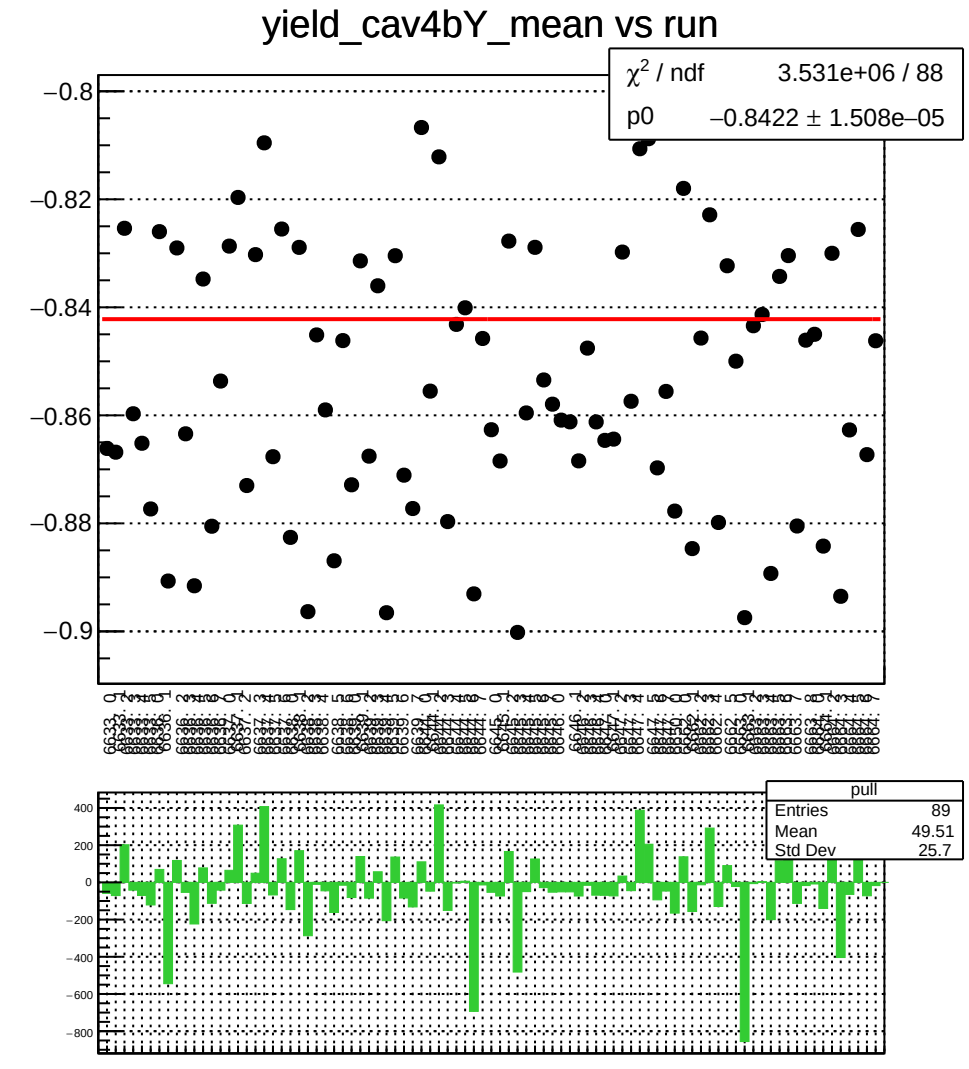

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

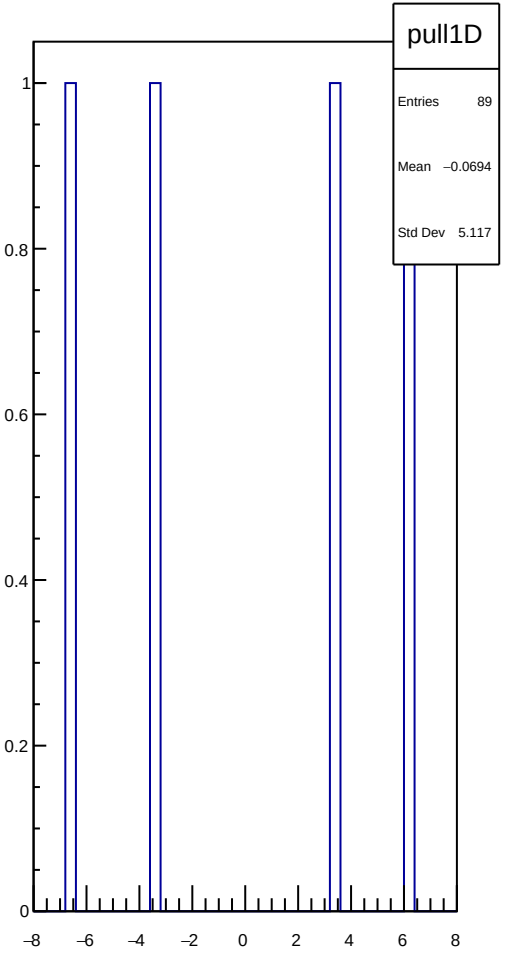

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

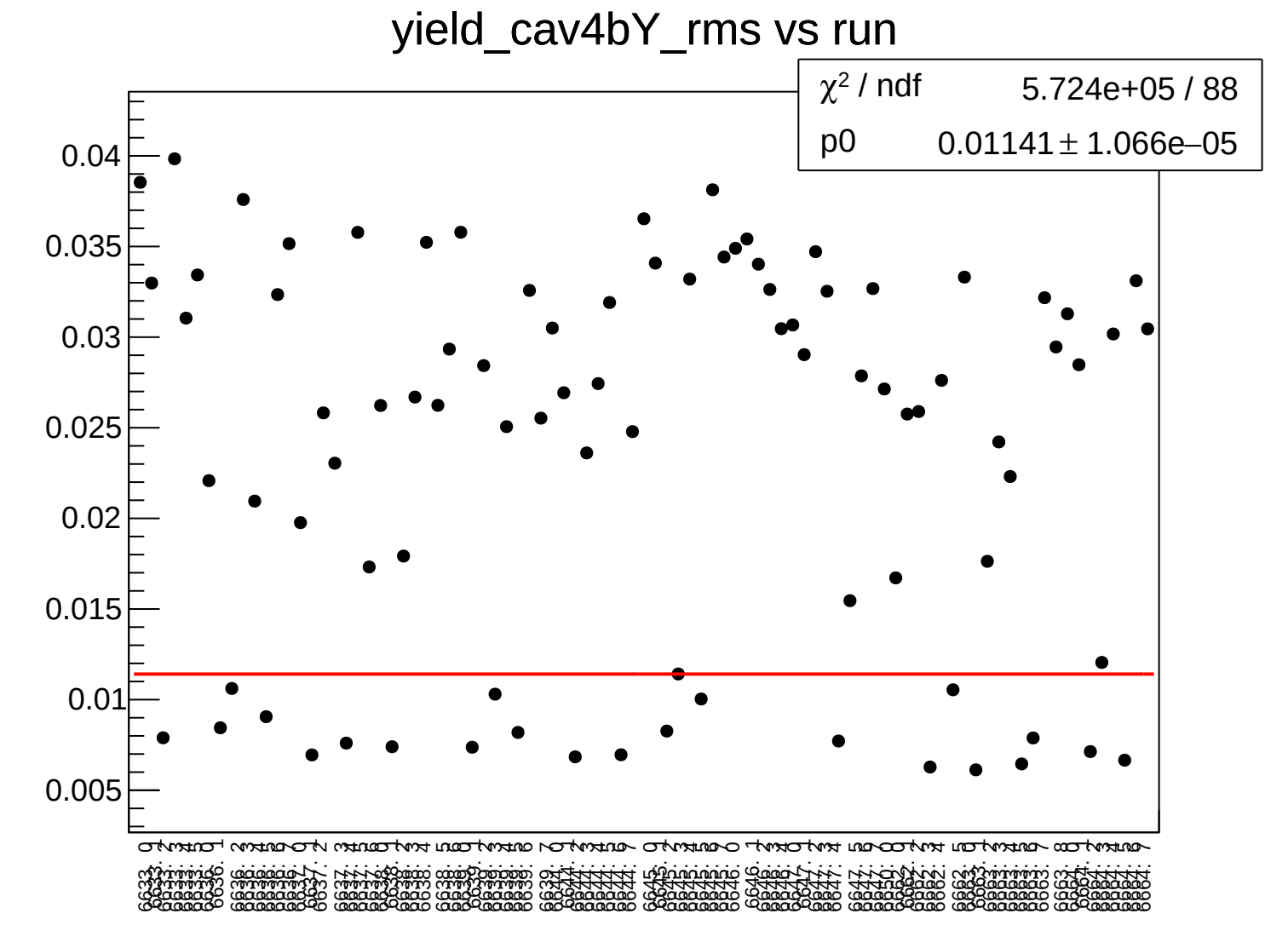

yield_cav4bX_mean vs run
χ² / ndf 3.831e+05 / 88
p0 −0.8586 ± 2.961e−05
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
pull
Entries 89
Mean 53.93
Std Dev 21.47
100
50
0
−50
−100
−150
−200

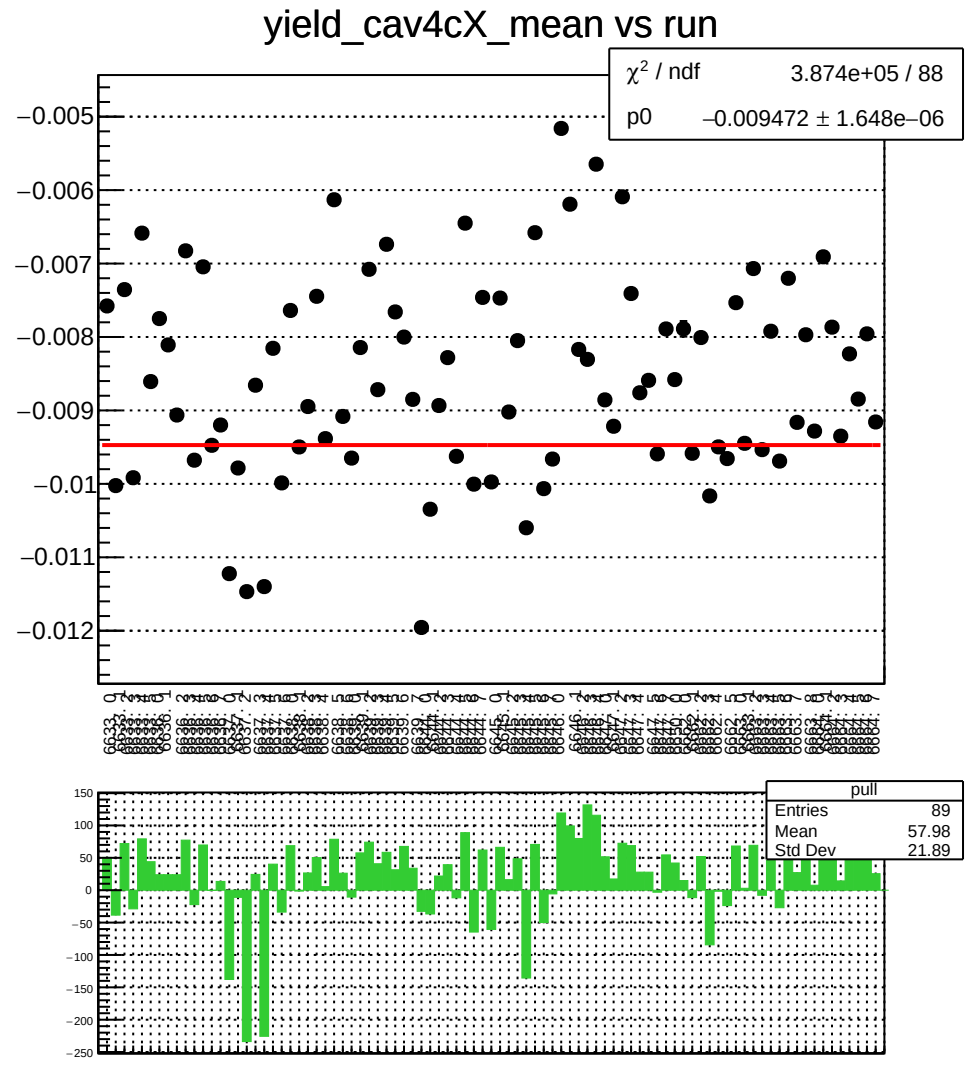

pull1D
Entries 89
Mean 0.05251
Std Dev 4.596
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

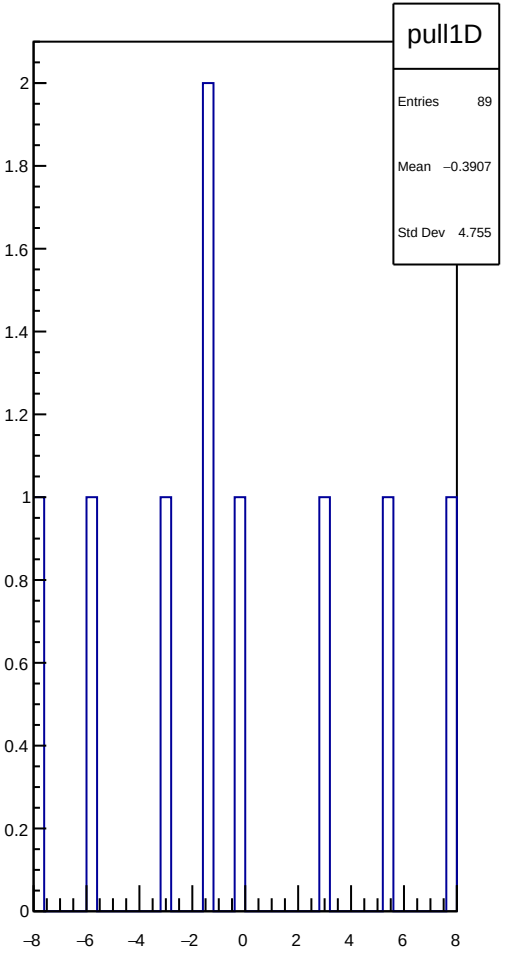

yield_cav4bX_rms vs run
χ² / ndf 4.548e+05 / 88
p0 0.02353 ± 2.094e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

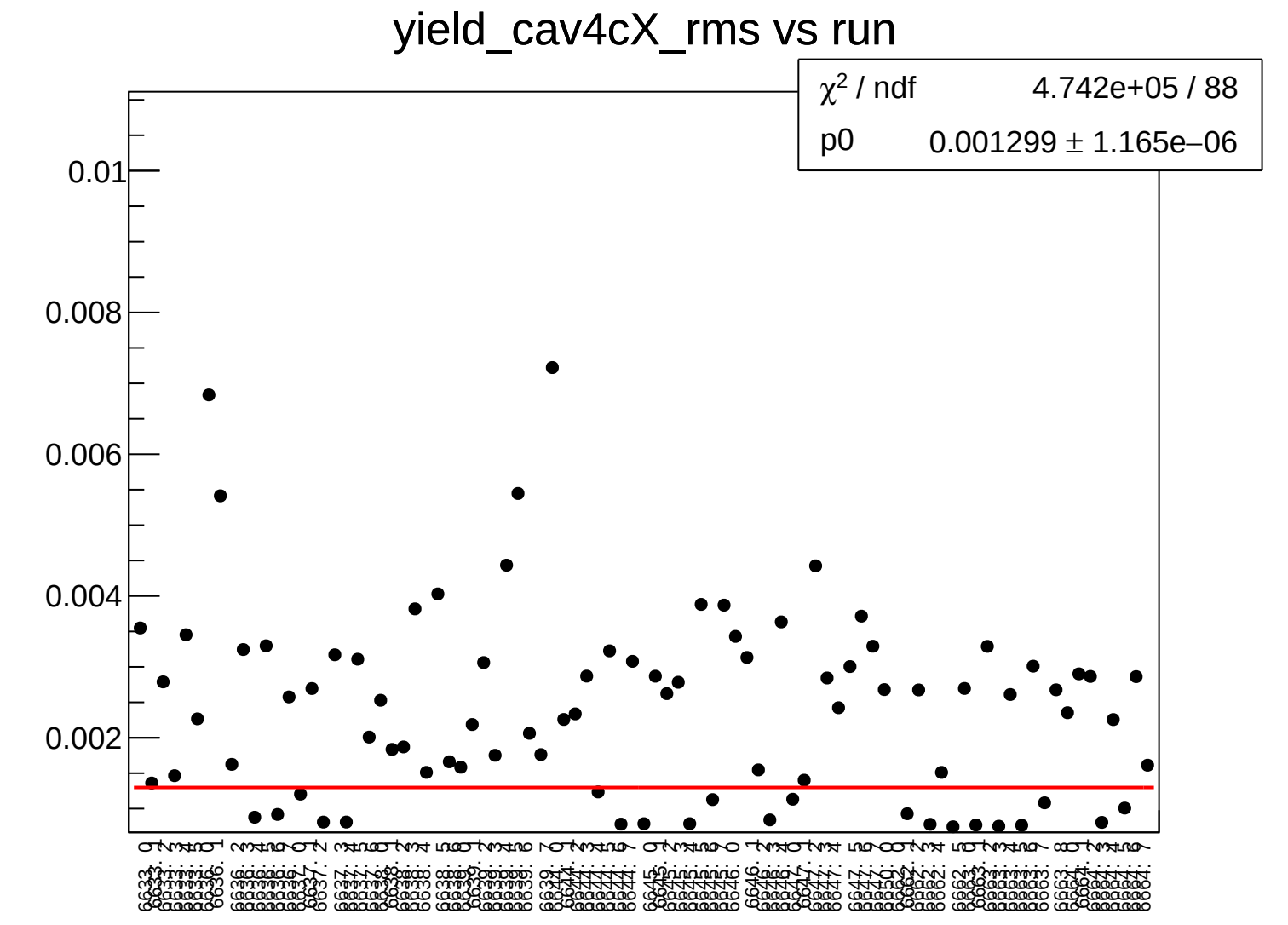

yield_cav4bY_mean vs run
χ² / ndf 3.531e+06 / 88
p0 −0.8422 ± 1.508e−05
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
pull
Entries 89
Mean 49.51
Std Dev 25.7
400
200
0
−200
−400
−600
−800

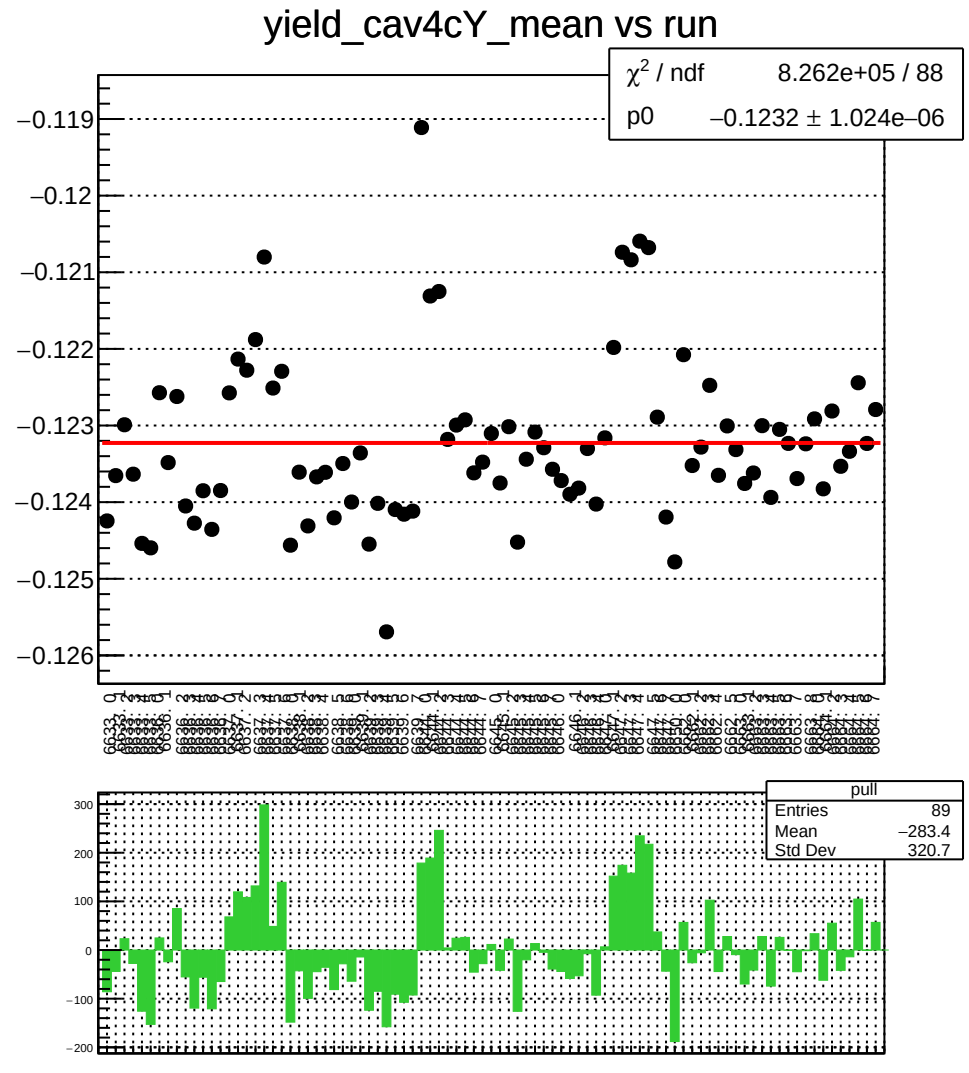

pull1D
Entries 89
Mean −0.0694
Std Dev 5.117
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

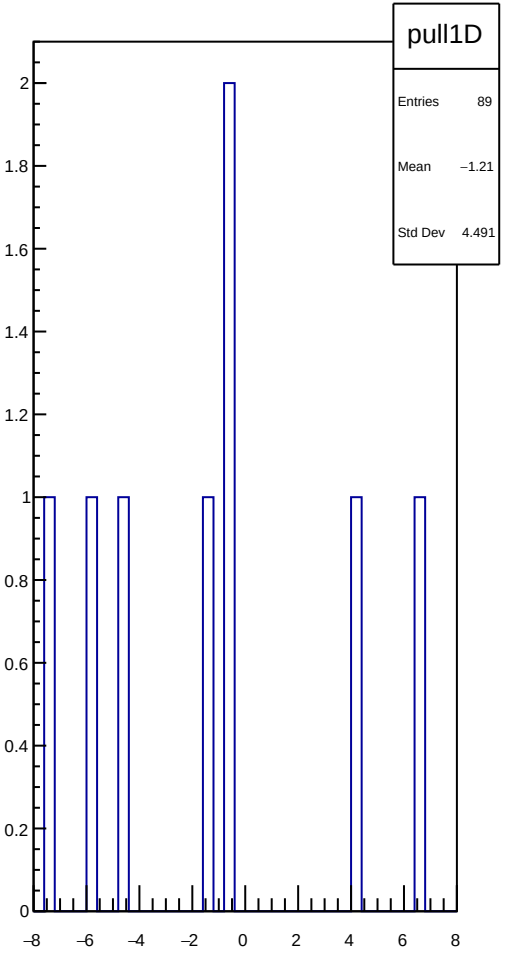

yield_cav4bY_rms vs run
χ² / ndf 5.724e+05 / 88
p0 0.01141 ± 1.066e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

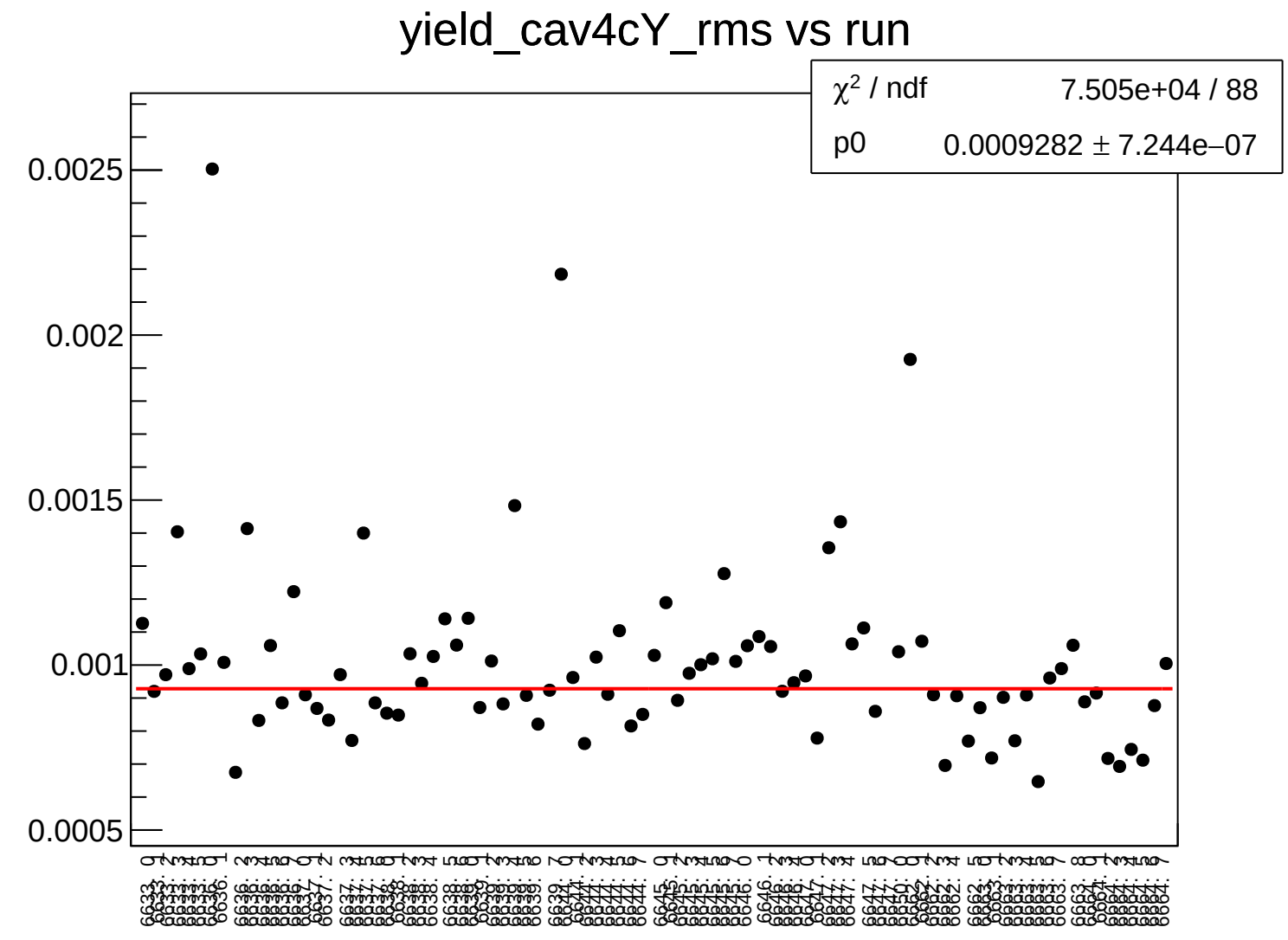

yield_cav4cX_mean vs run
χ² / ndf 3.874e+05 / 88
p0 −0.009472 ± 1.648e−06
−0.005
−0.006
−0.007
−0.008
−0.009
−0.01
−0.011
−0.012
pull
Entries 89
Mean 57.98
Std Dev 21.89
150
100
50
0
−50
−100
−150
−200
−250

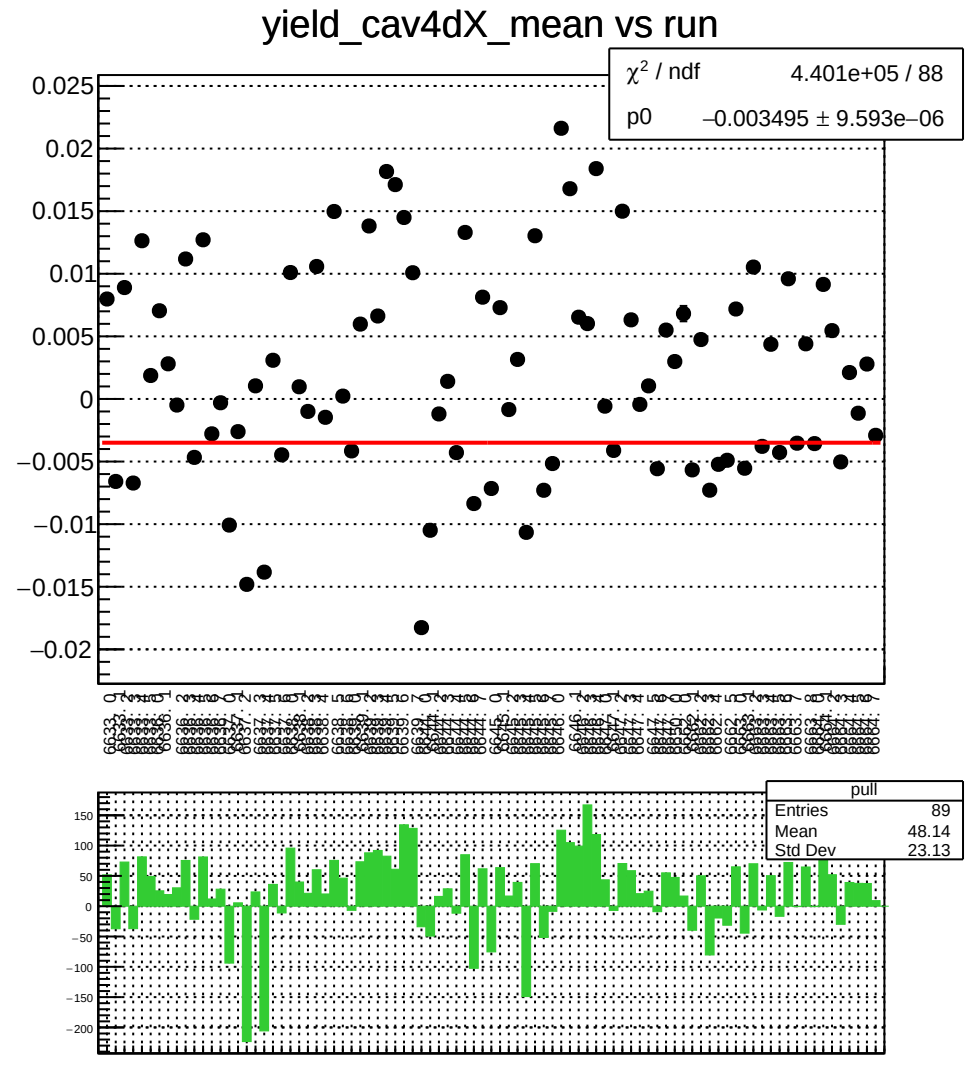

pull1D
Entries 89
Mean −0.3907
Std Dev 4.755
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

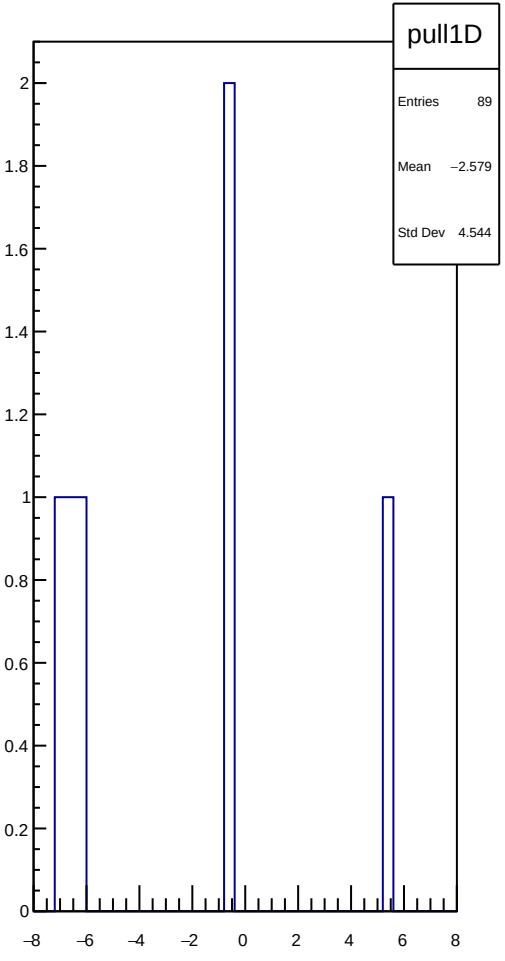

yield_cav4cX_rms vs run
χ² / ndf 4.742e+05 / 88
p0 0.001299 ± 1.165e−06
0.01
0.008
0.006
0.004
0.002

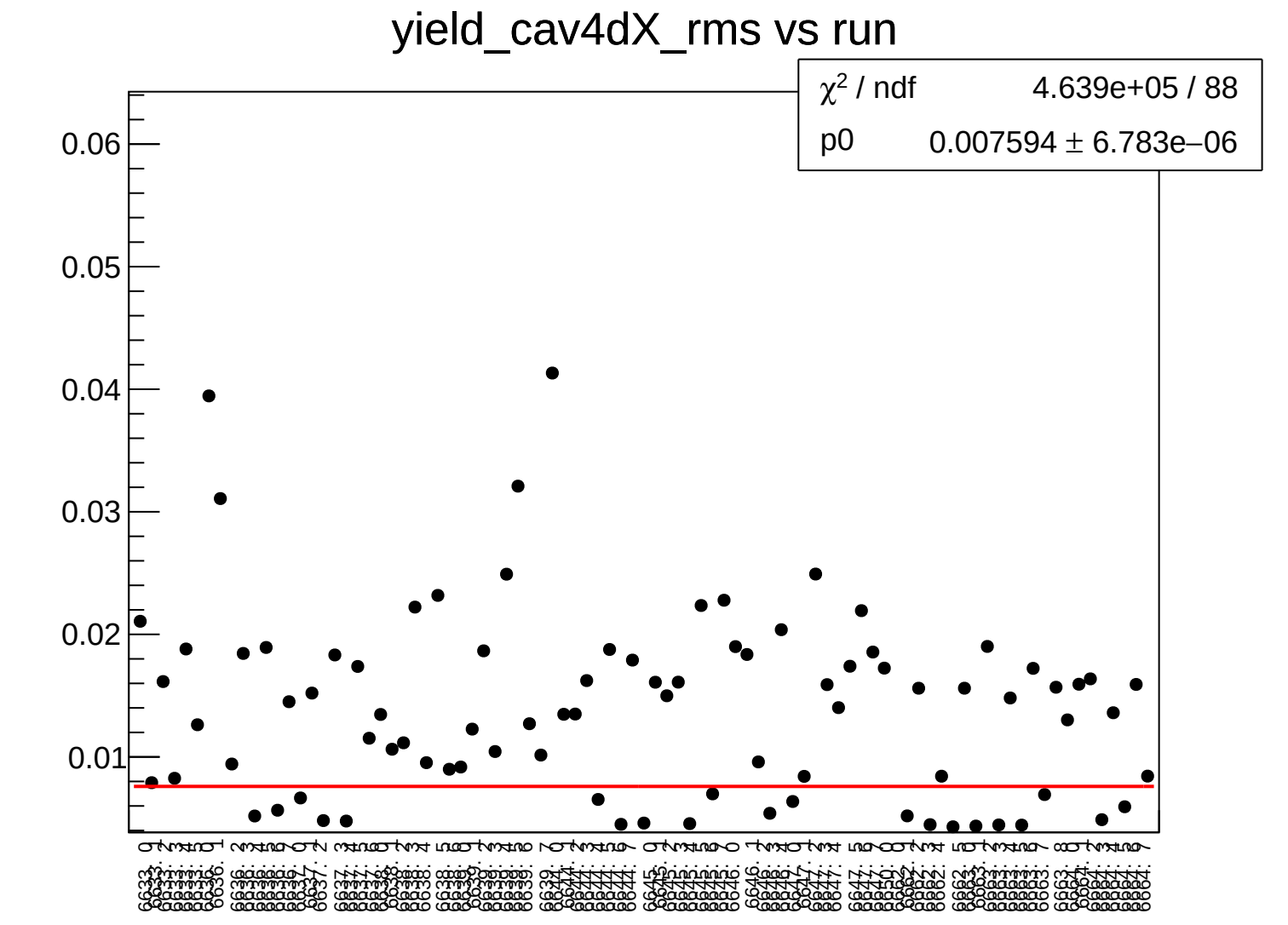

yield_cav4cY_mean vs run
χ² / ndf 8.262e+05 / 88
p0 −0.1232 ± 1.024e−06
−0.119
−0.12
−0.121
−0.122
−0.123
−0.124
−0.125
−0.126
pull
Entries 89
Mean −283.4
Std Dev 320.7
300
200
100
0
−100
−200

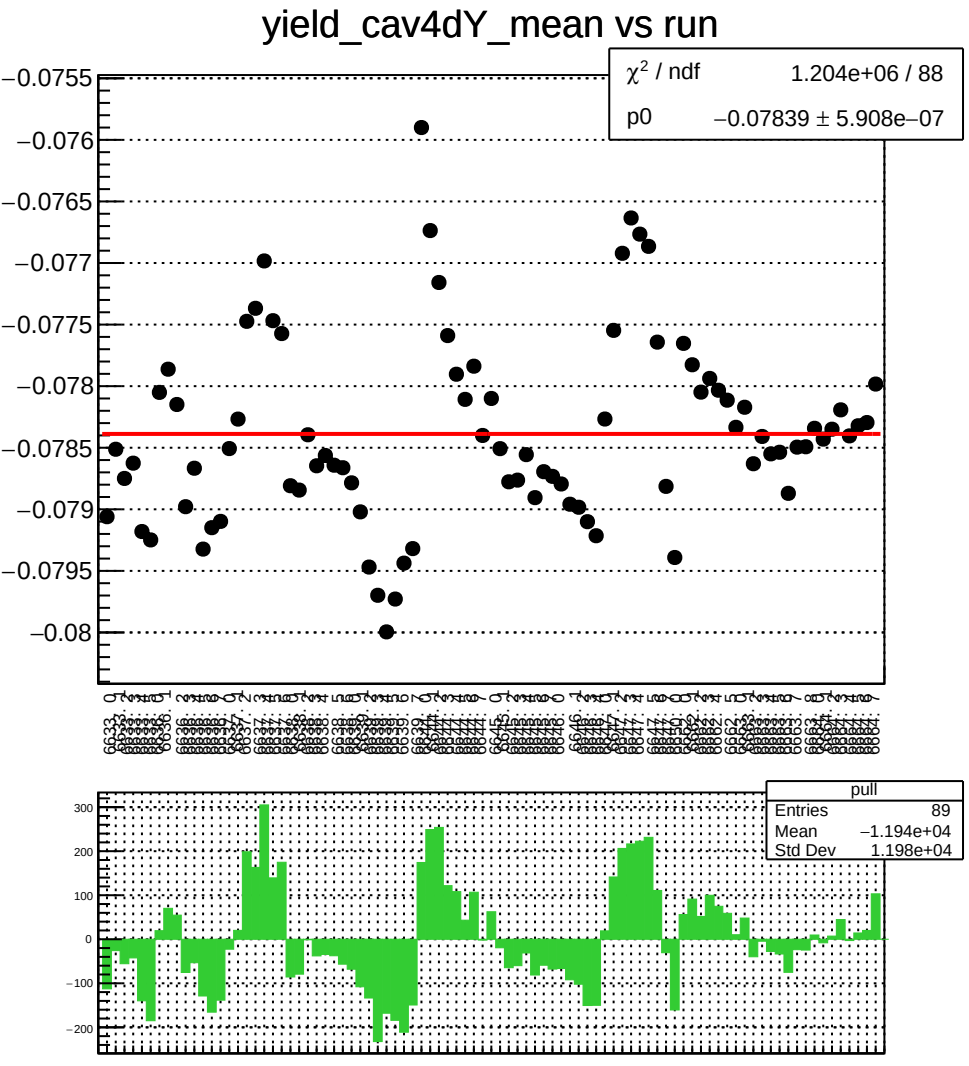

pull1D
Entries 89
Mean −1.21
Std Dev 4.491
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

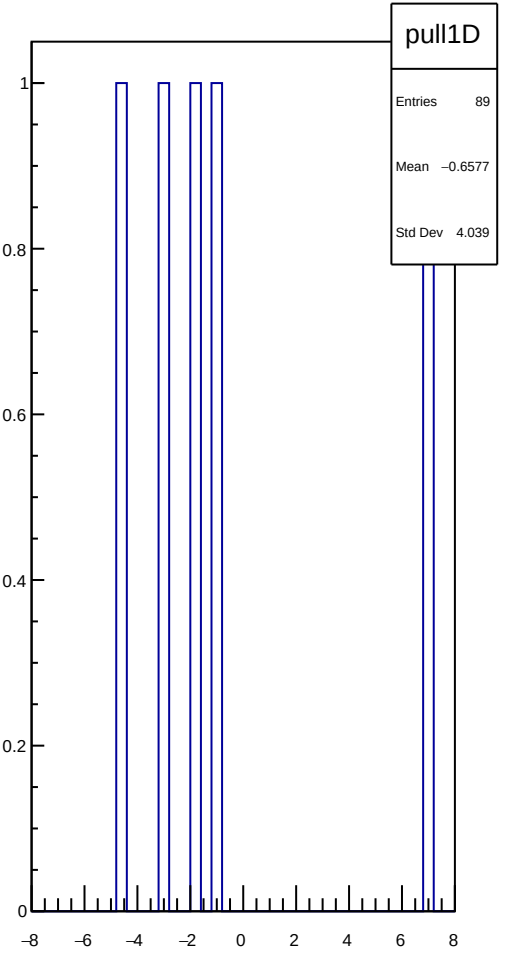

yield_cav4cY_rms vs run
χ² / ndf 7.505e+04 / 88
p0 0.0009282 ± 7.244e−07
0.0025
0.002
0.0015
0.001
0.0005

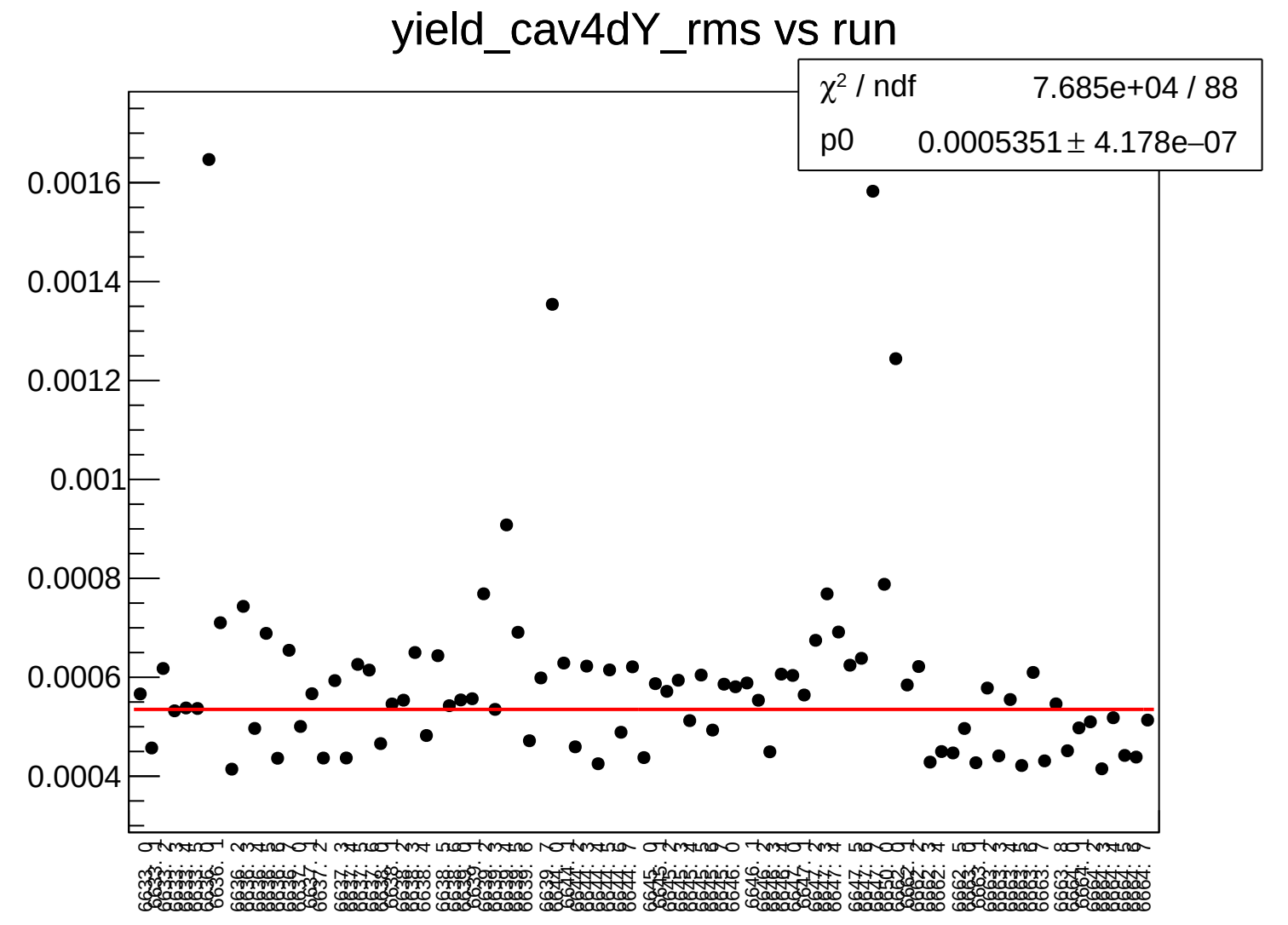

yield_cav4dX_mean vs run
χ² / ndf 4.401e+05 / 88
p0 −0.003495 ± 9.593e−06
pull
Entries 89
Mean 48.14
Std Dev 23.13

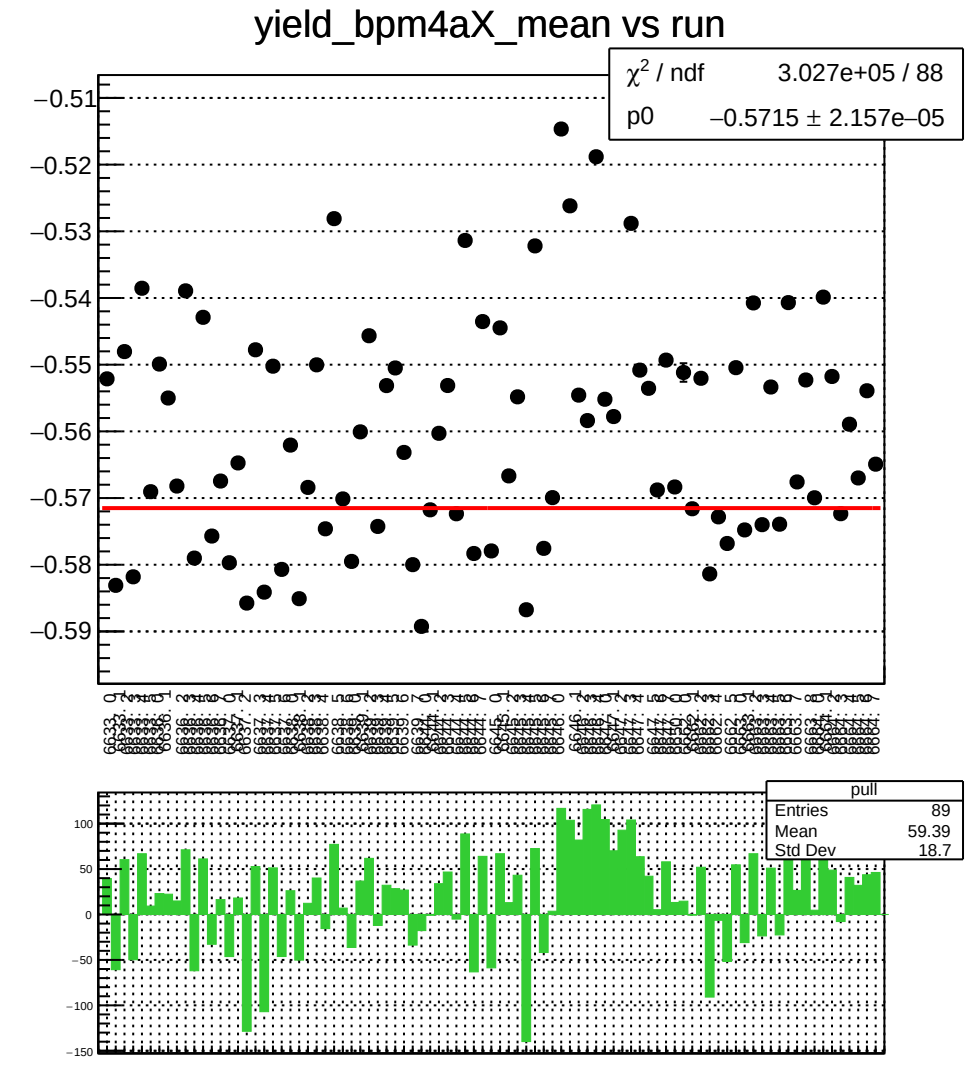

pull1D
Entries 89
Mean −2.579
Std Dev 4.544

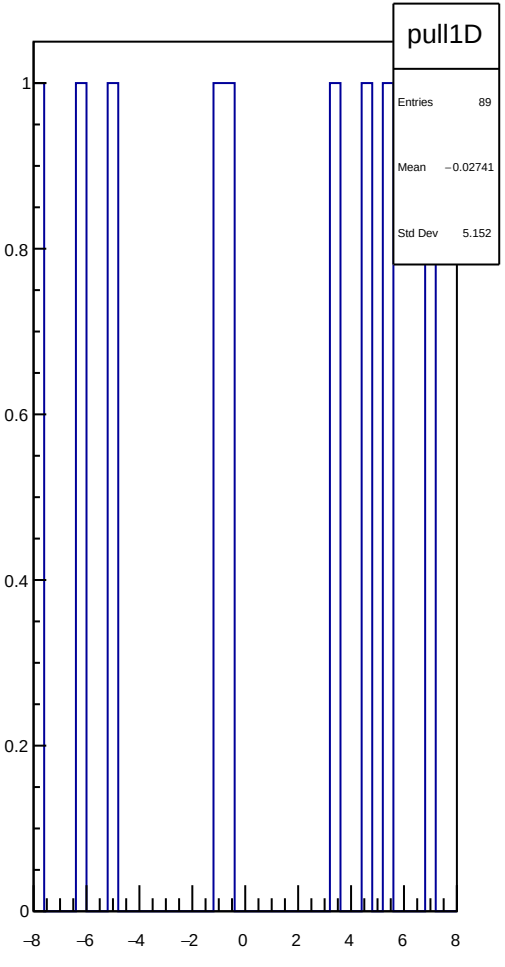

yield_cav4dX_rms vs run
χ² / ndf 4.639e+05 / 88
p0 0.007594 ± 6.783e−06
0.06
0.05
0.04
0.03
0.02
0.01

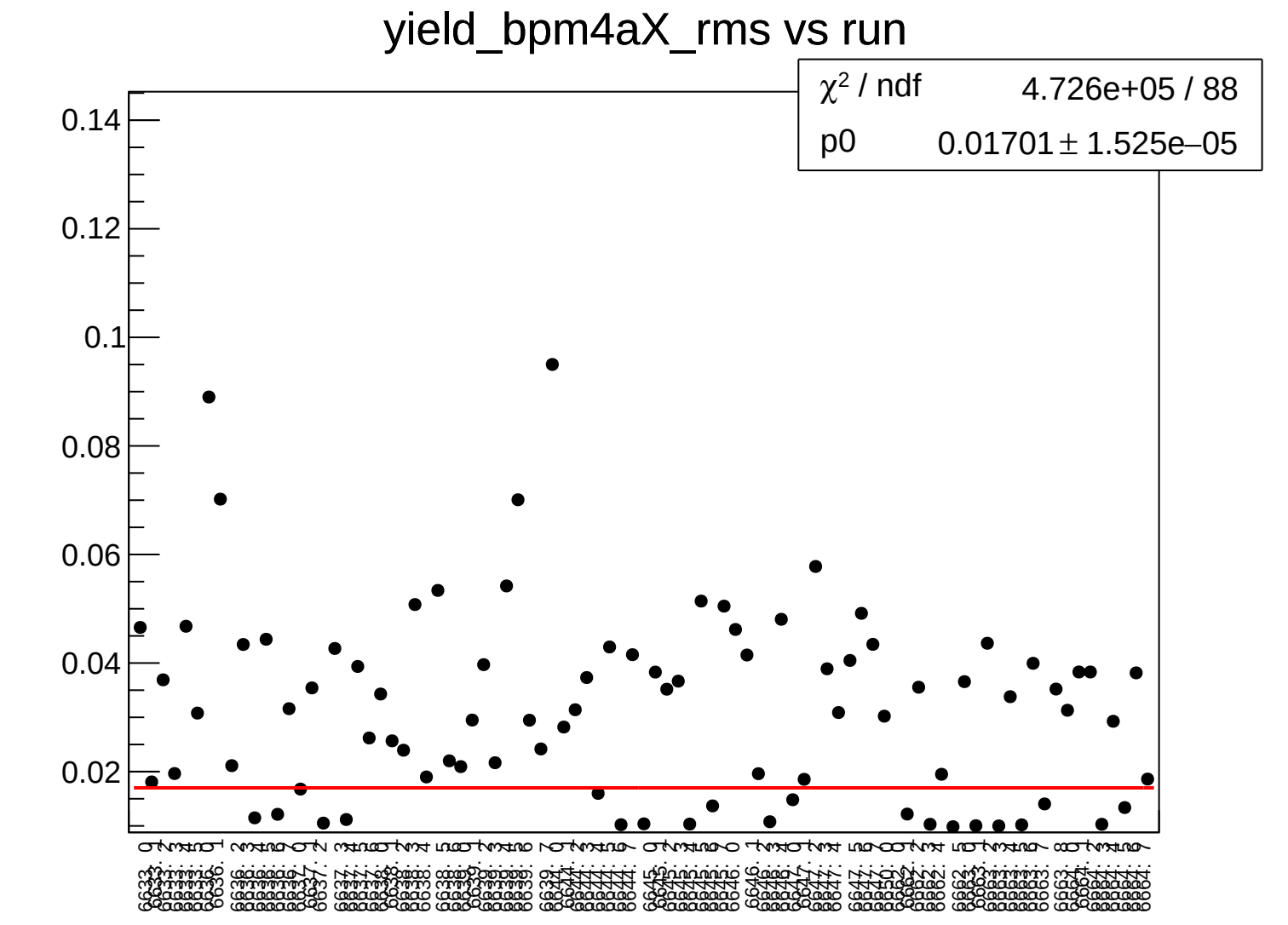

yield_cav4dY_mean vs run
χ² / ndf 1.204e+06 / 88
p0 −0.07839 ± 5.908e−07
−0.0755
−0.076
−0.0765
−0.077
−0.0775
−0.078
−0.0785
−0.079
−0.0795
−0.08
pull
Entries 89
Mean −1.194e+04
Std Dev 1.198e+04
300
200
100
0
−100
−200

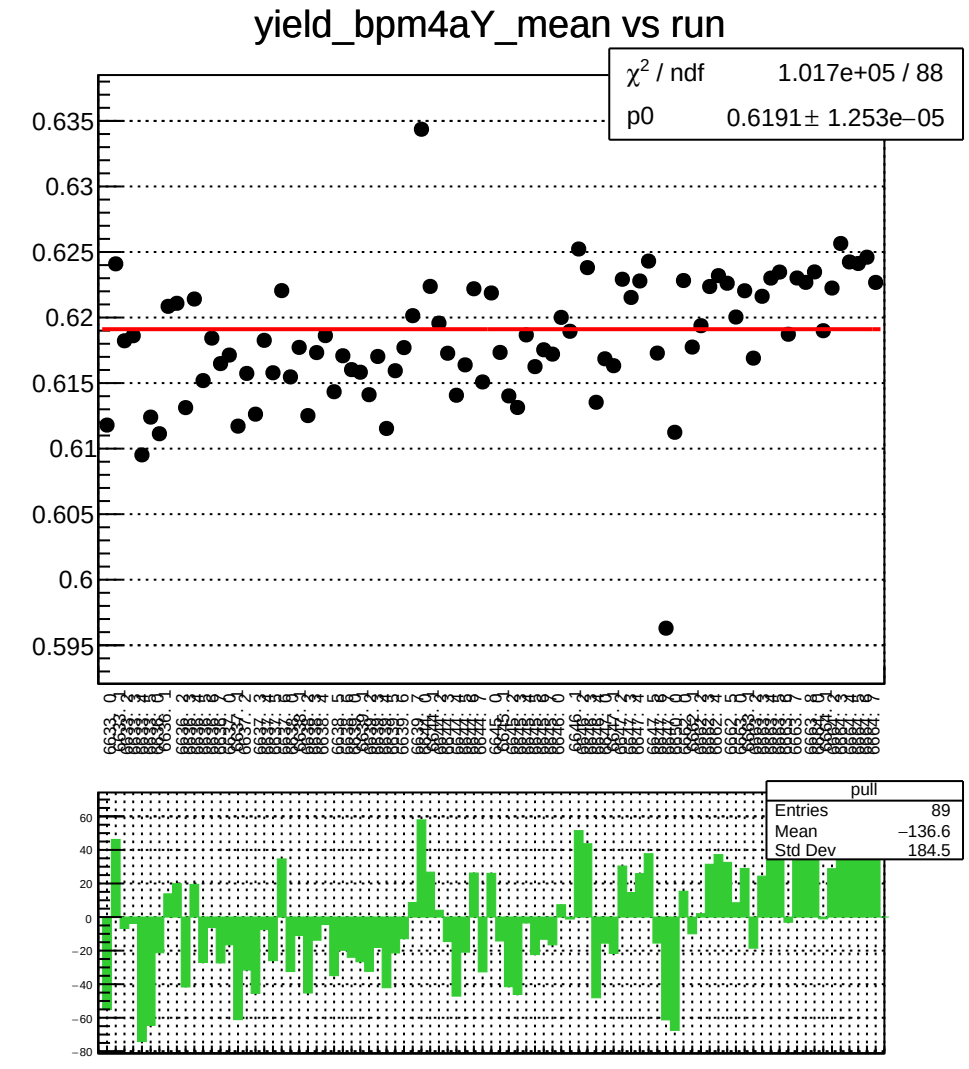

pull1D
Entries 89
Mean −0.6577
Std Dev 4.039
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

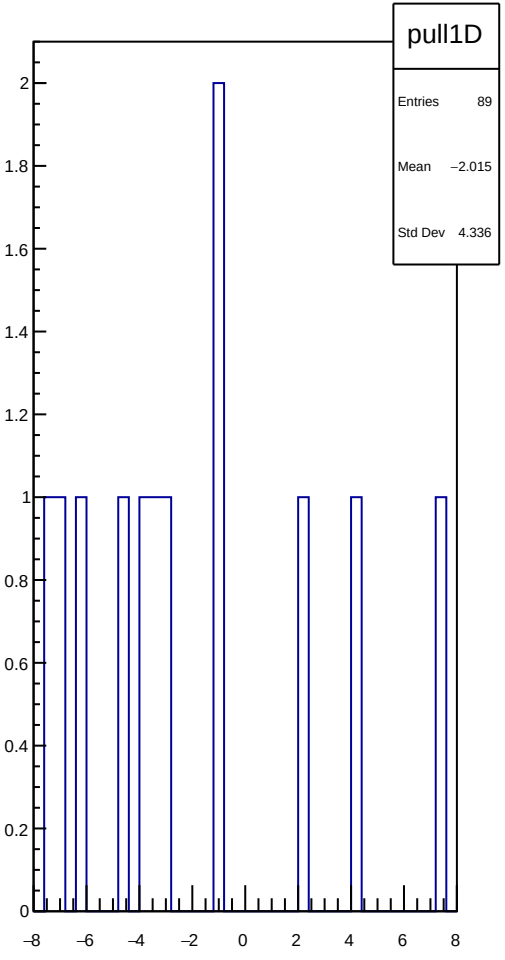

yield_cav4dY_rms vs run
χ² / ndf 7.685e+04 / 88
p0 0.0005351 ± 4.178e−07
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

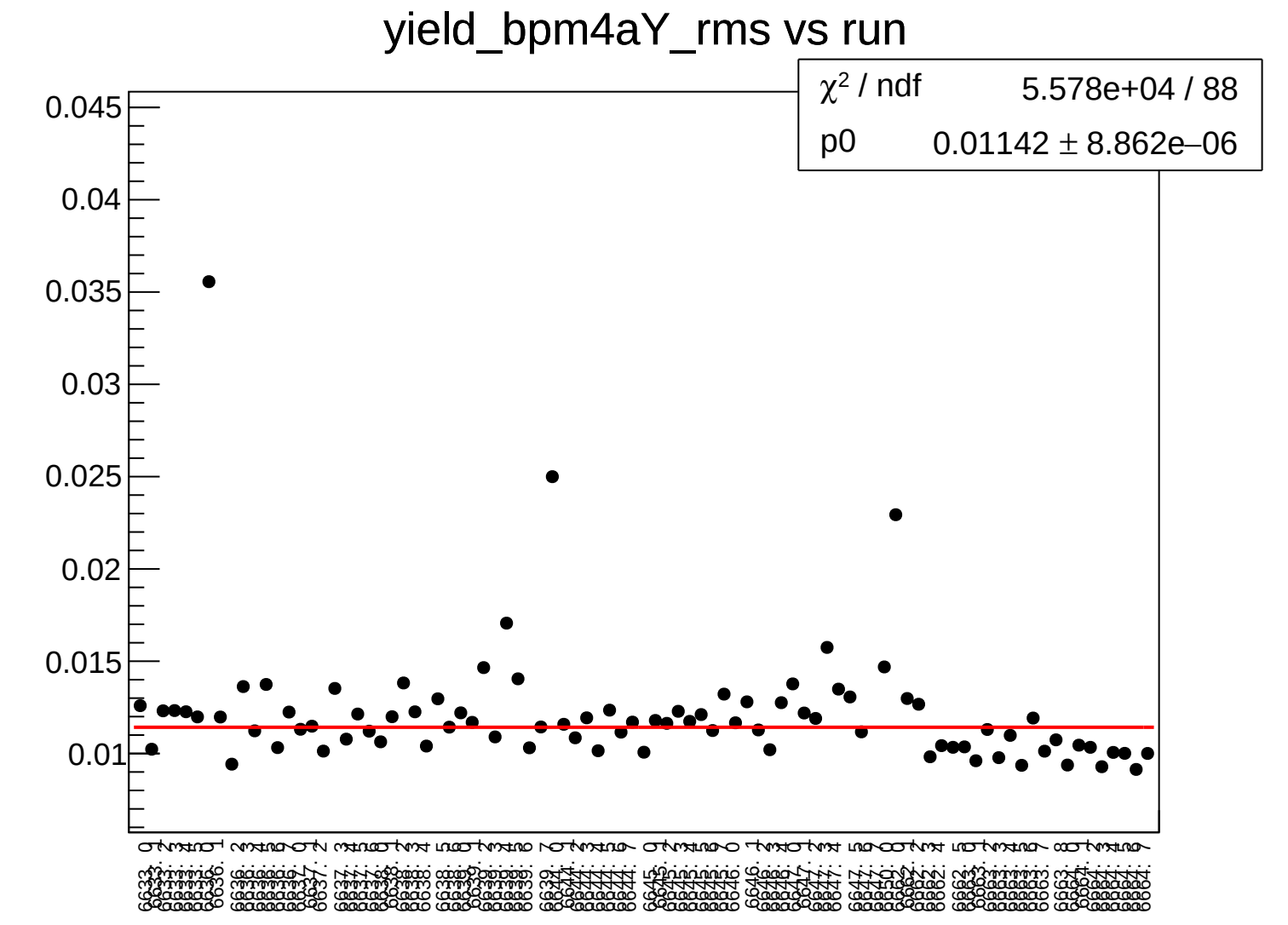

yield_bpm4aX_mean vs run
χ² / ndf 3.027e+05 / 88
p0 −0.5715 ± 2.157e−05
−0.51
−0.52
−0.53
−0.54
−0.55
−0.56
−0.57
−0.58
−0.59
pull
Entries 89
Mean 59.39
Std Dev 18.7
100
50
0
−50
−100
−150

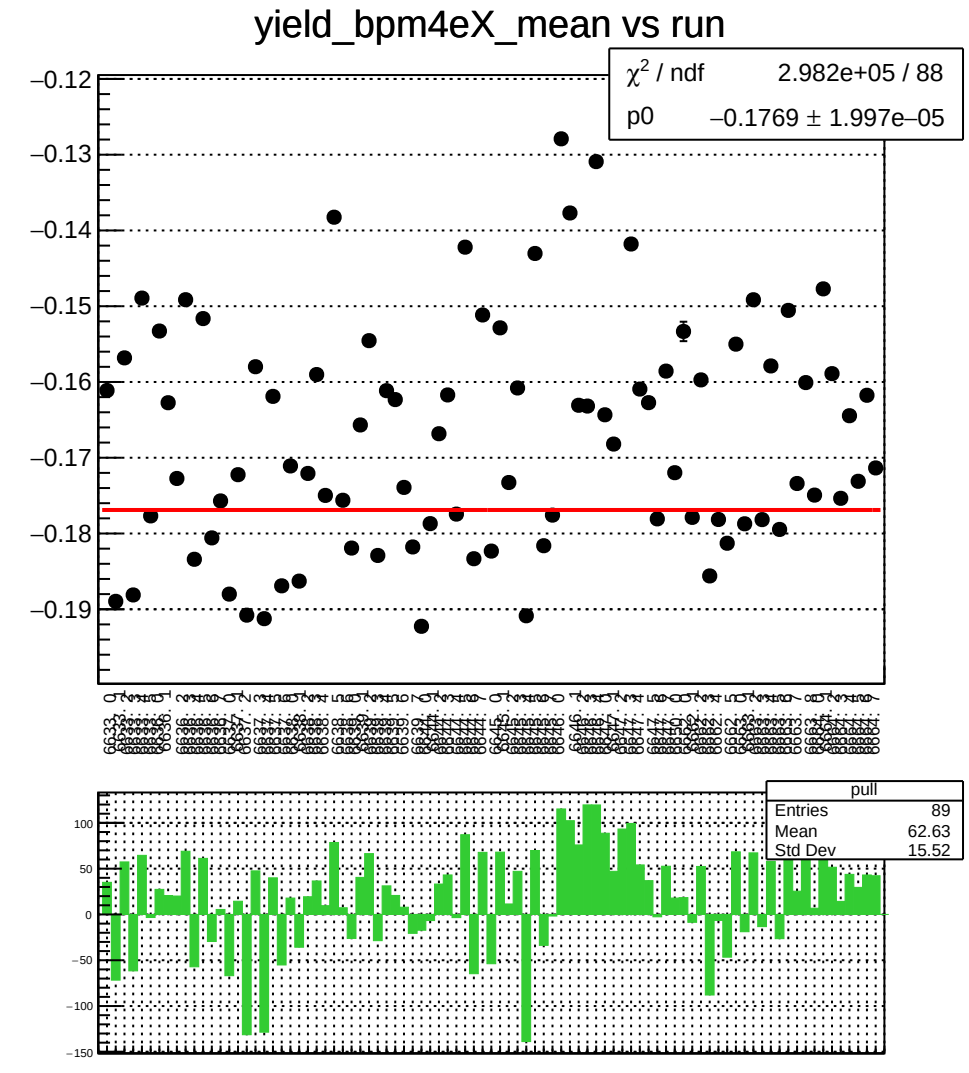

pull1D
Entries 89
Mean −0.02741
Std Dev 5.152
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

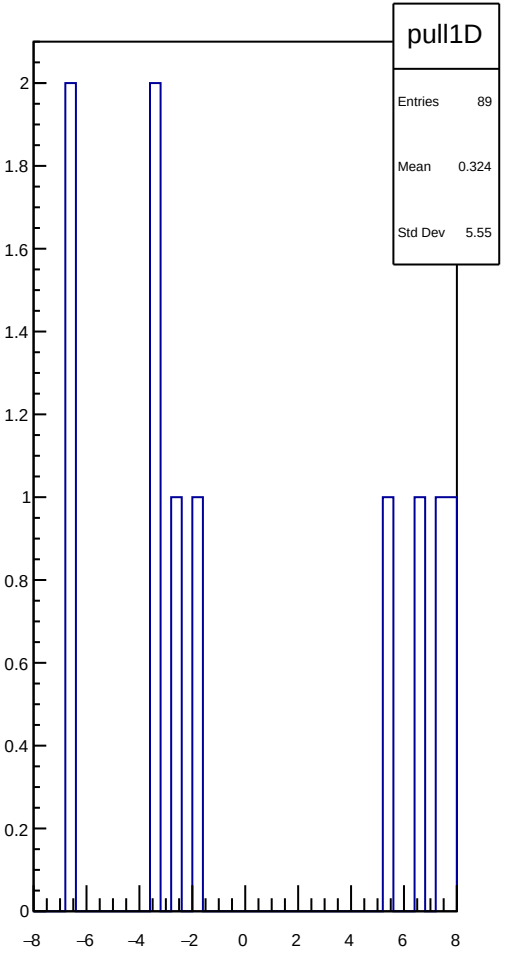

yield_bpm4aX_rms vs run
χ² / ndf 4.726e+05 / 88
p0 0.01701 ± 1.525e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

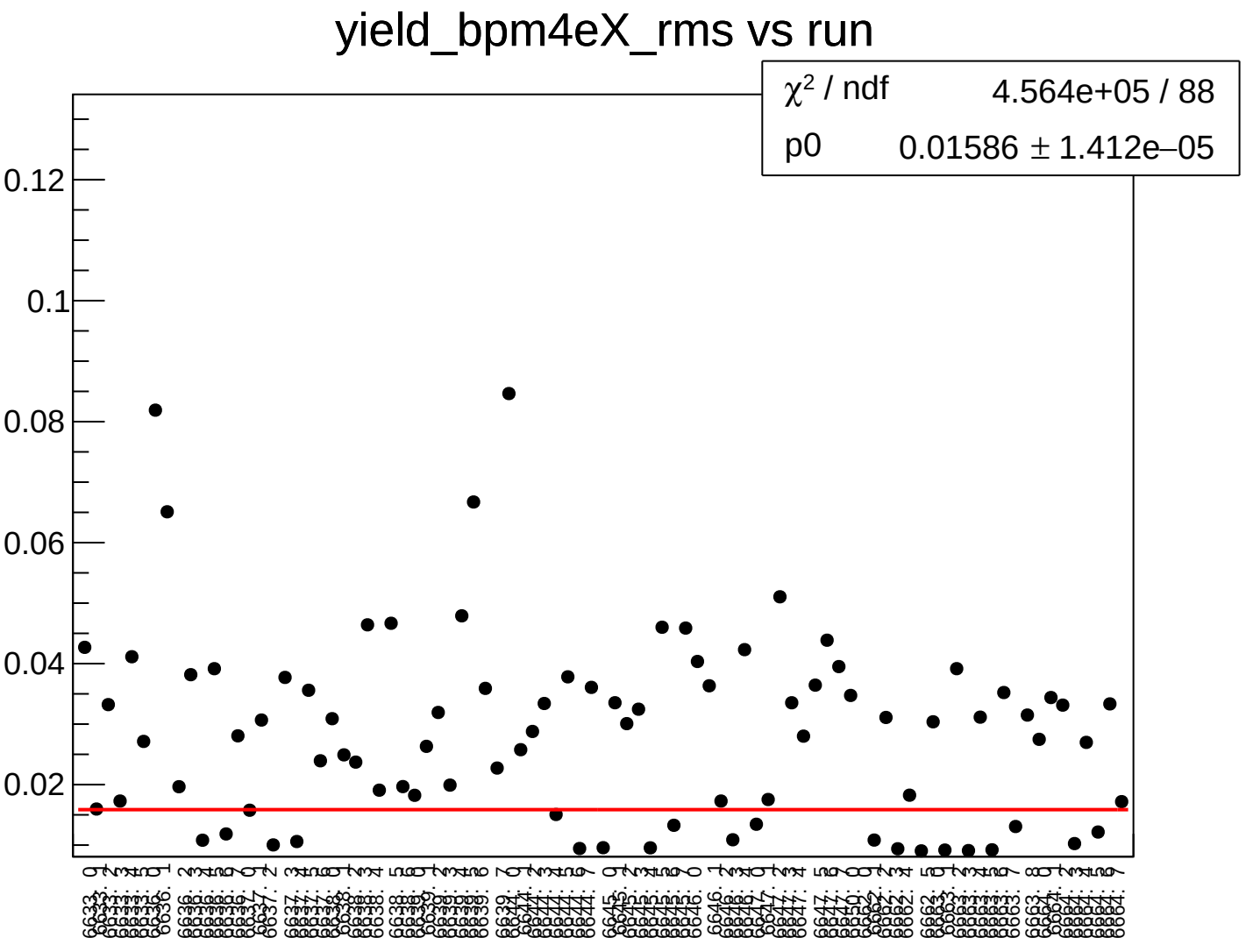

yield_bpm4aY_mean vs run
χ² / ndf 1.017e+05 / 88
p0 0.6191 ± 1.253e−05
0.635
0.63
0.625
0.62
0.615
0.61
0.605
0.6
0.595
pull
Entries 89
Mean −136.6
Std Dev 184.5
60
40
20
0
−20
−40
−60
−80

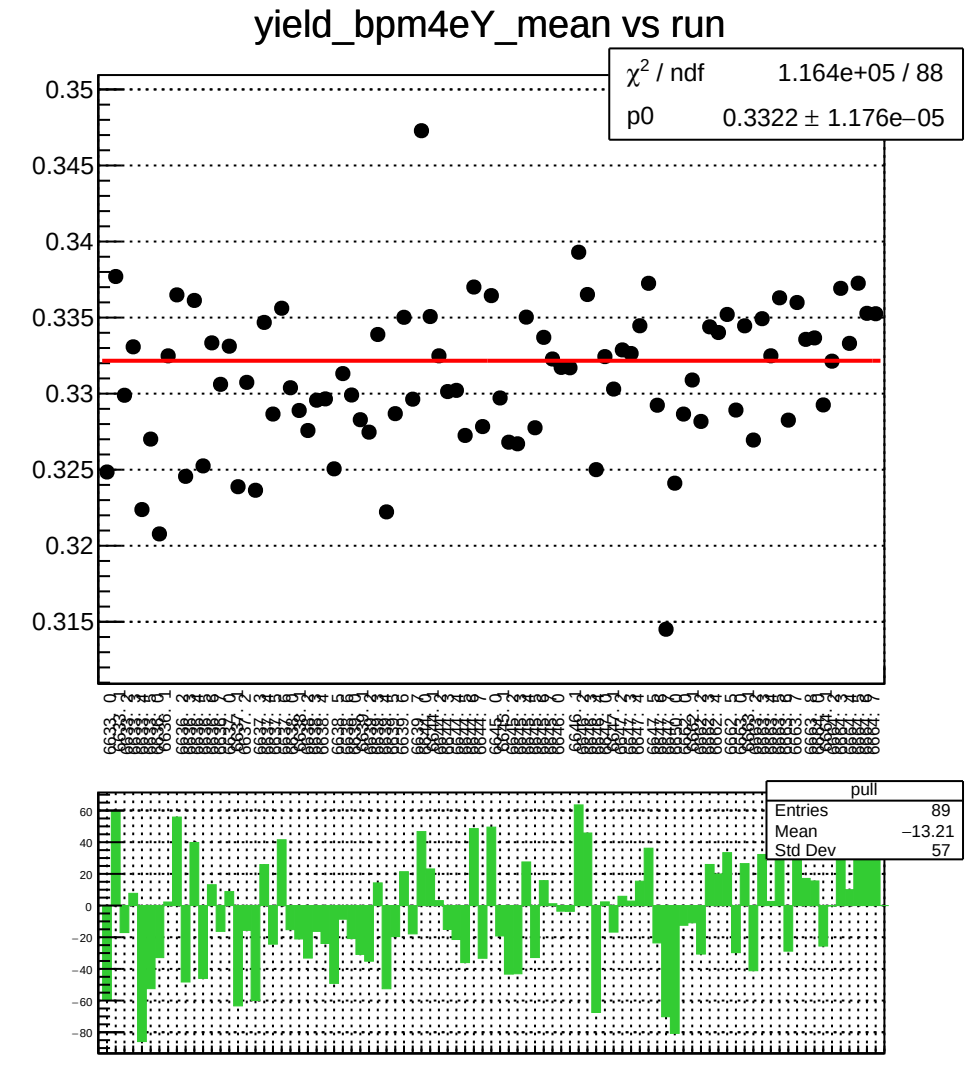

pull1D
Entries 89
Mean −2.015
Std Dev 4.336
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

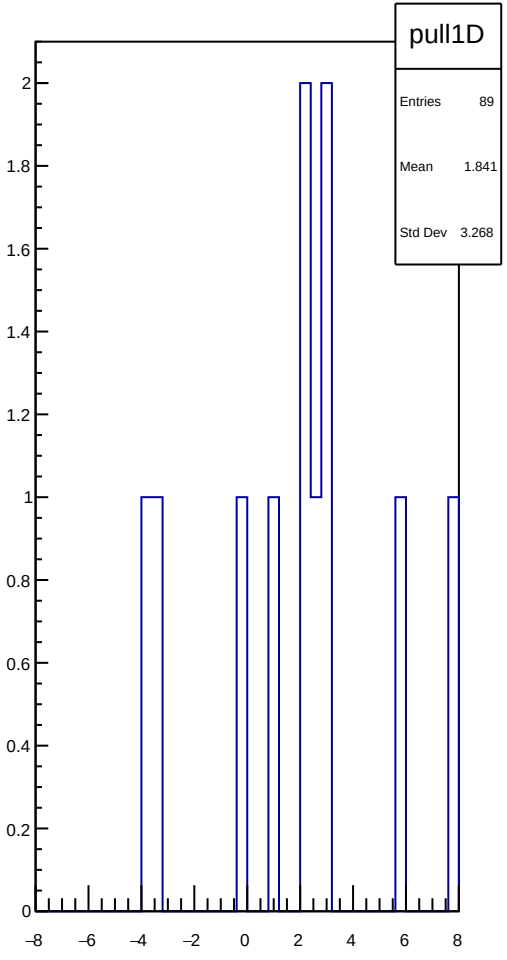

yield_bpm4aY_rms vs run
χ² / ndf 5.578e+04 / 88
p0 0.01142 ± 8.862e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

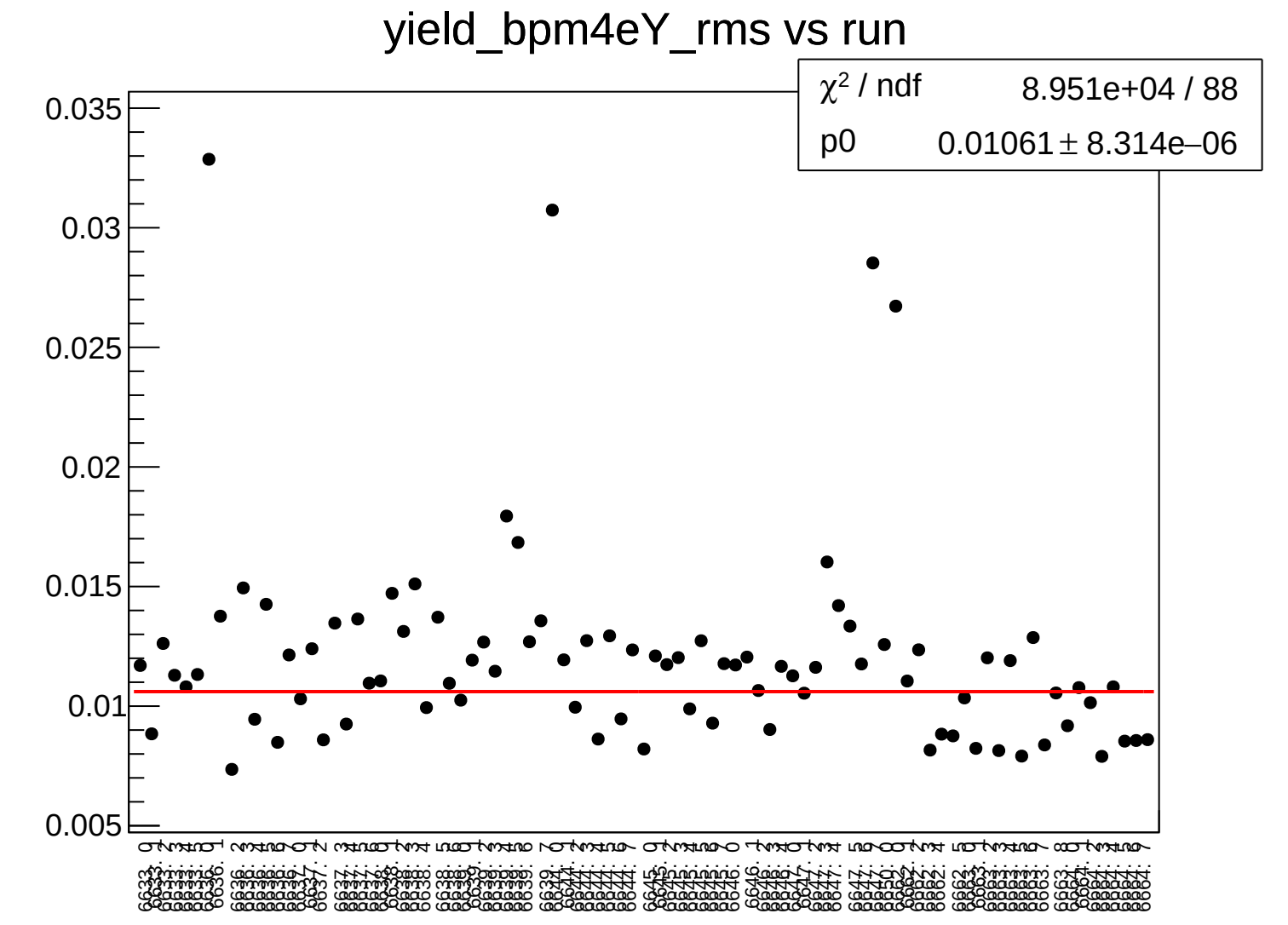

yield_bpm4eX_mean vs run
χ² / ndf 2.982e+05 / 88
p0 −0.1769 ± 1.997e−05
−0.12
−0.13
−0.14
−0.15
−0.16
−0.17
−0.18
−0.19
pull
Entries 89
Mean 62.63
Std Dev 15.52
100
50
0
−50
−100
−150

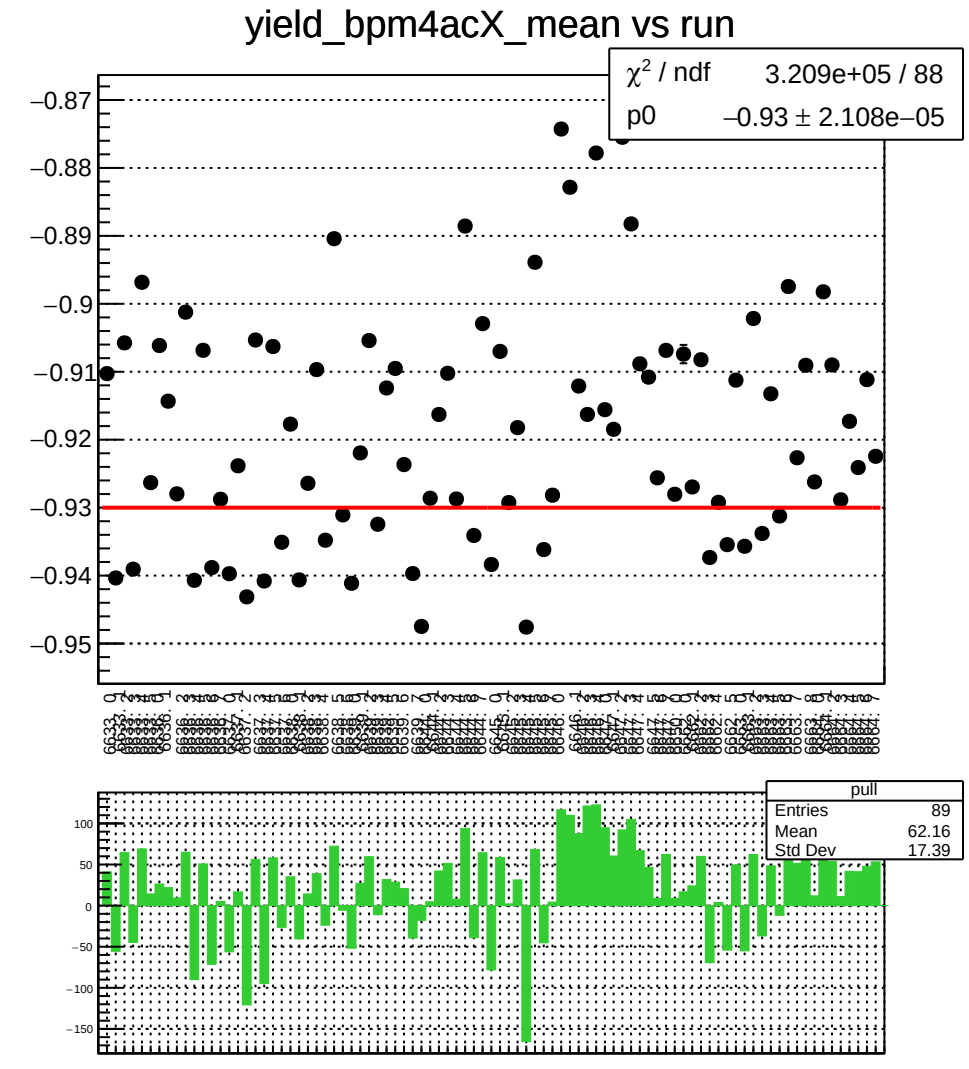

pull1D
Entries 89
Mean 0.324
Std Dev 5.55
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

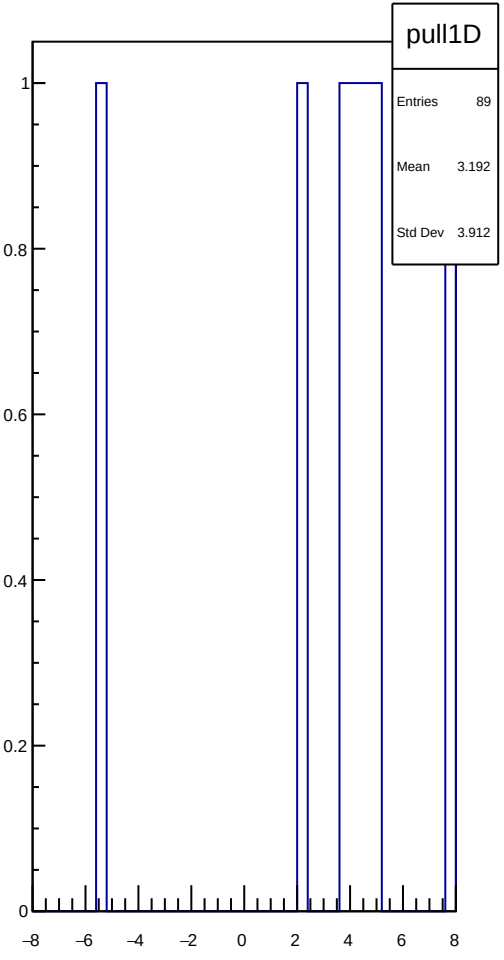

yield_bpm4eX_rms vs run
χ² / ndf 4.564e+05 / 88
p0 0.01586 ± 1.412e−05
0.12
0.1
0.08
0.06
0.04
0.02

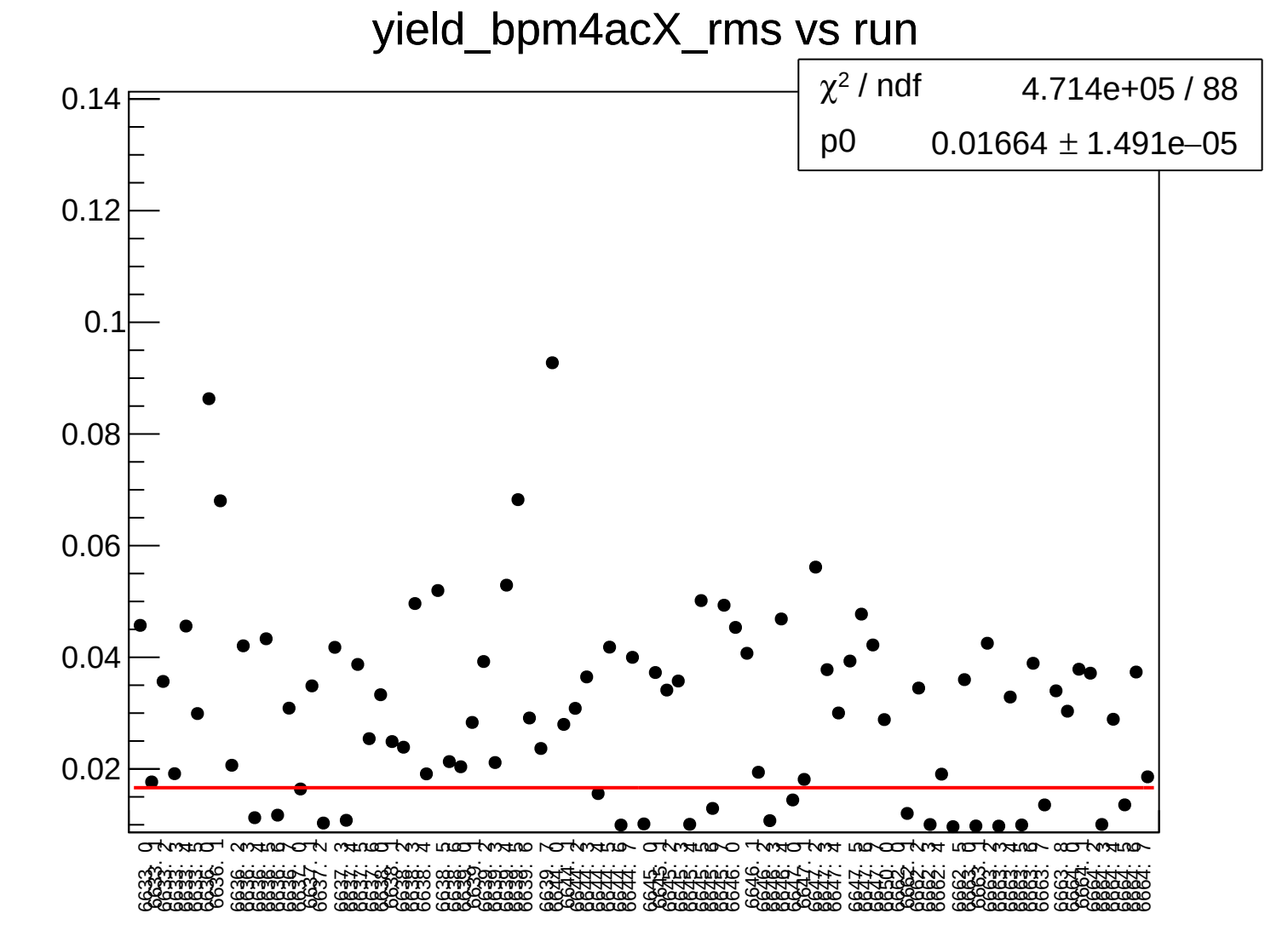

yield_bpm4eY_mean vs run
χ² / ndf 1.164e+05 / 88
p0 0.3322 ± 1.176e−05
0.35
0.345
0.34
0.335
0.33
0.325
0.32
0.315
pull
Entries 89
Mean −13.21
Std Dev 57
60
40
20
0
−20
−40
−60
−80

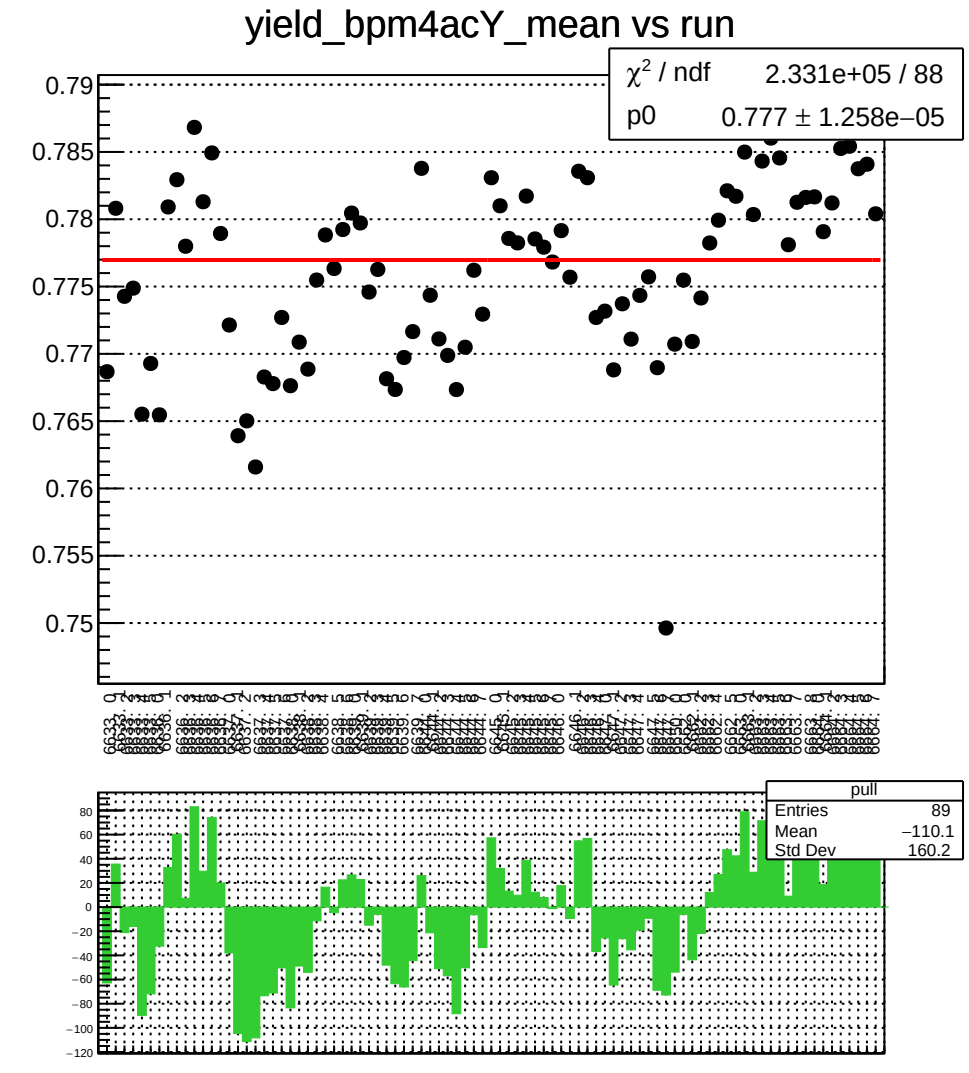

pull1D
Entries 89
Mean 1.841
Std Dev 3.268
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

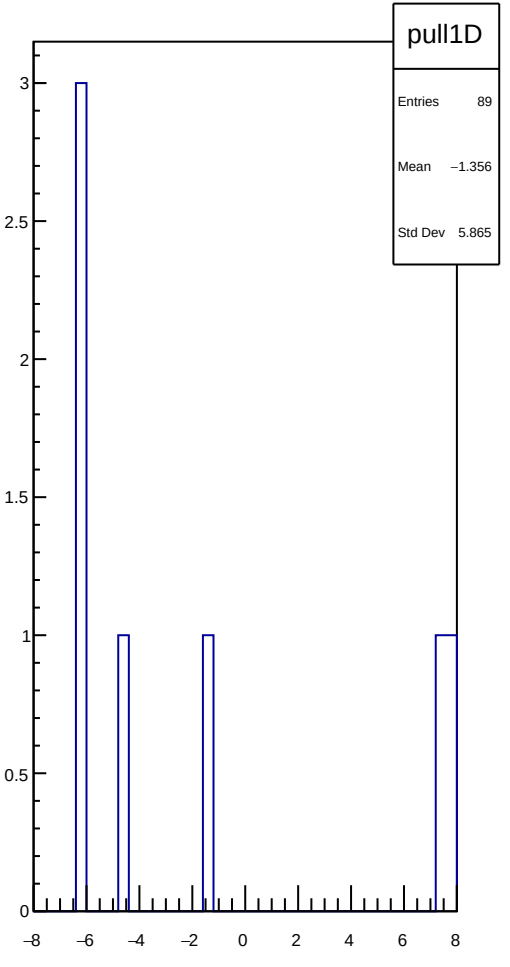

yield_bpm4eY_rms vs run
χ² / ndf 8.951e+04 / 88
p0 0.01061 ± 8.314e–06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

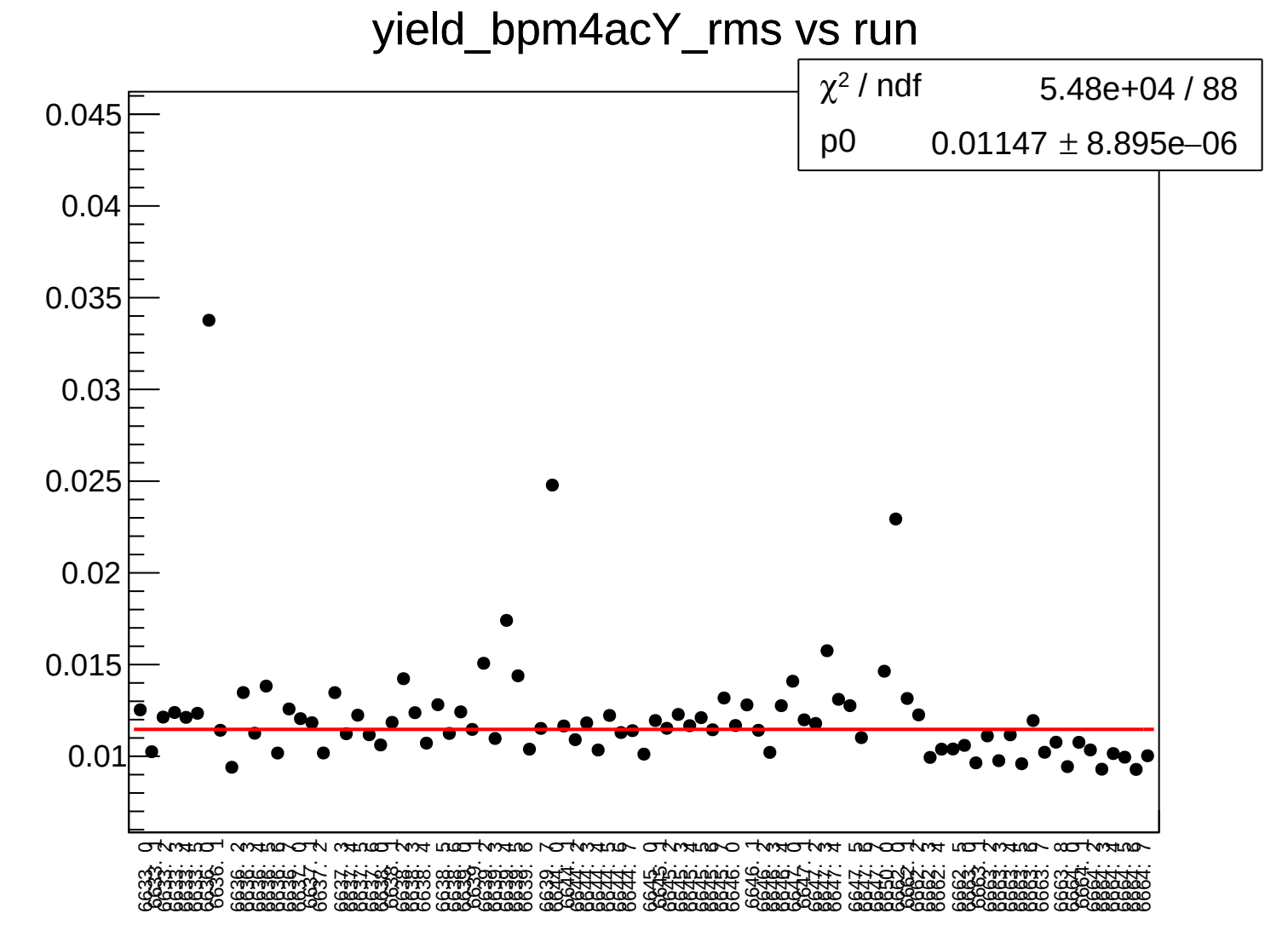

yield_bpm4acX_mean vs run
χ² / ndf 3.209e+05 / 88
p0 −0.93 ± 2.108e−05
−0.87
−0.88
−0.89
−0.9
−0.91
−0.92
−0.93
−0.94
−0.95
pull
Entries 89
Mean 62.16
Std Dev 17.39
100
50
0
−50
−100
−150

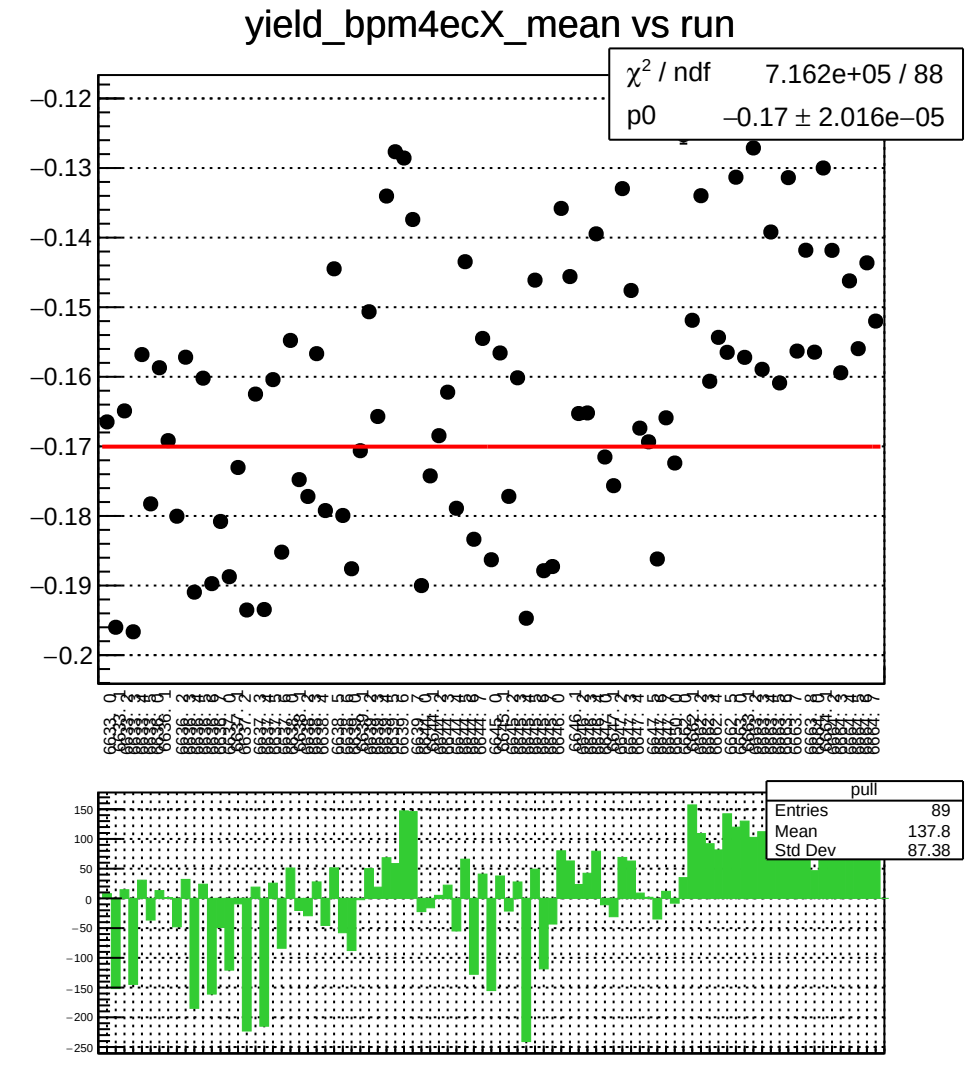

pull1D
Entries 89
Mean 3.192
Std Dev 3.912
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

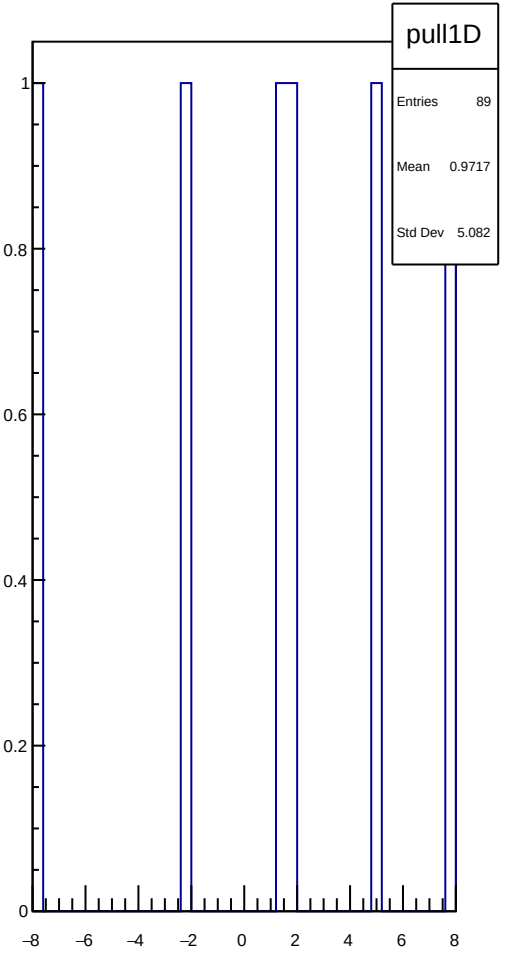

yield_bpm4acX_rms vs run
χ² / ndf 4.714e+05 / 88
p0 0.01664 ± 1.491e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

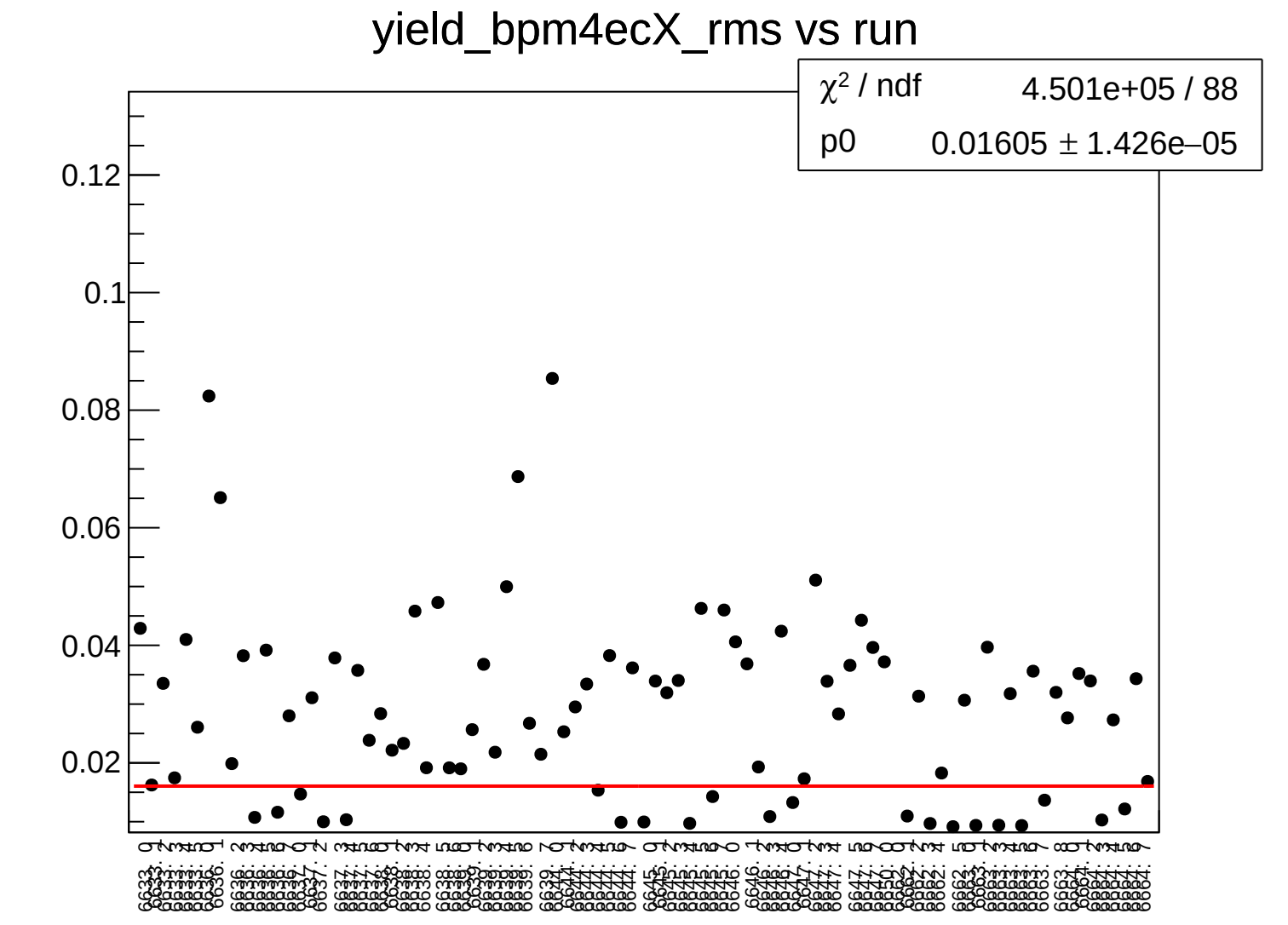

yield_bpm4acY_mean vs run
χ² / ndf 2.331e+05 / 88
p0 0.777 ± 1.258e−05
0.79
0.785
0.78
0.775
0.77
0.765
0.76
0.755
0.75
pull
Entries 89
Mean −110.1
Std Dev 160.2
80
60
40
20
0
−20
−40
−60
−80
−100
−120

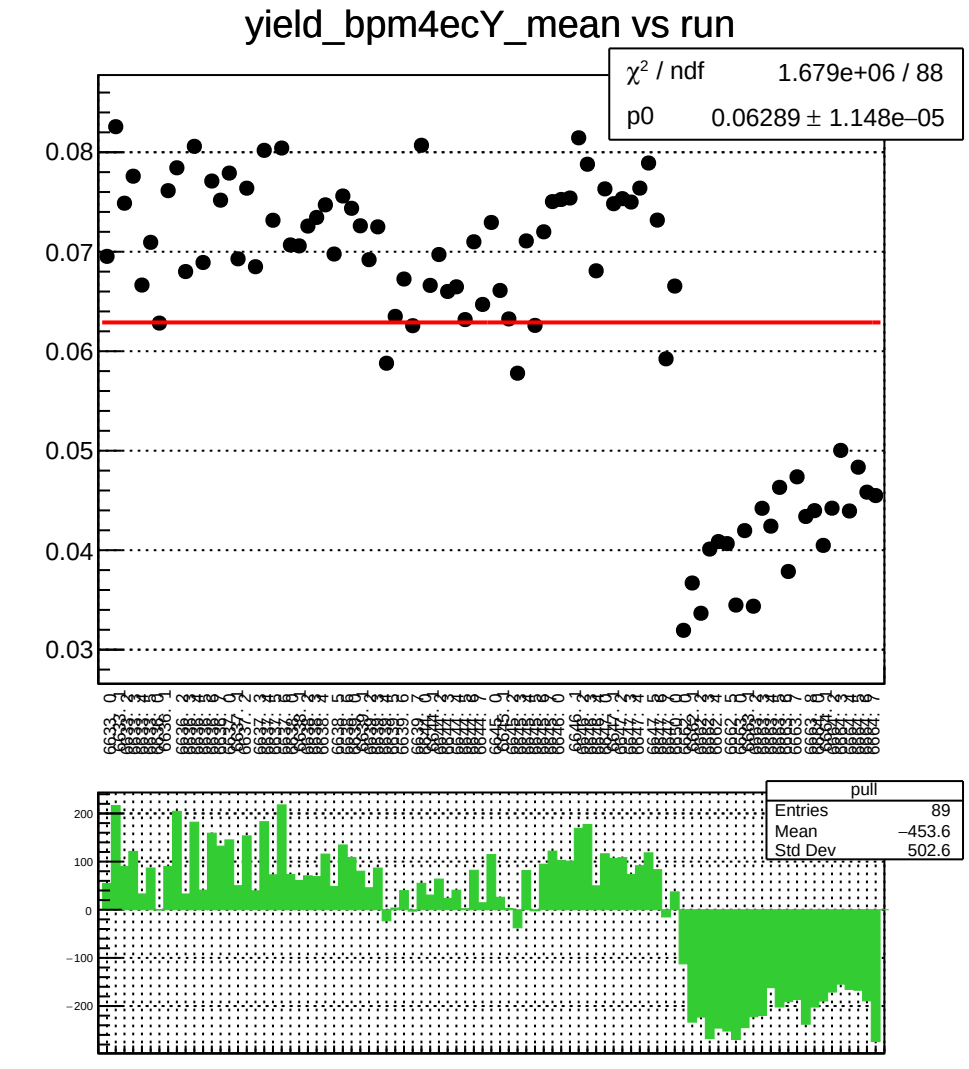

pull1D
Entries 89
Mean −1.356
Std Dev 5.865
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

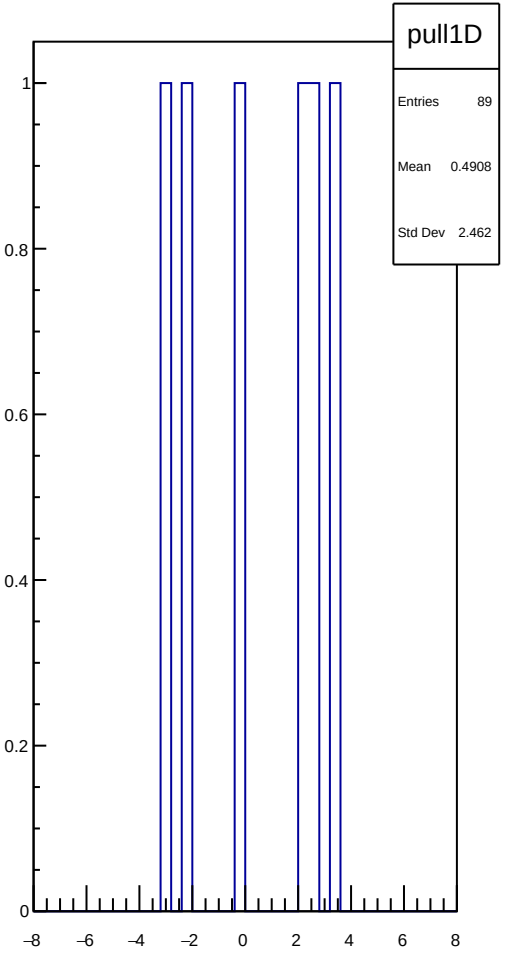

yield_bpm4acY_rms vs run
χ² / ndf 5.48e+04 / 88
p0 0.01147 ± 8.895e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

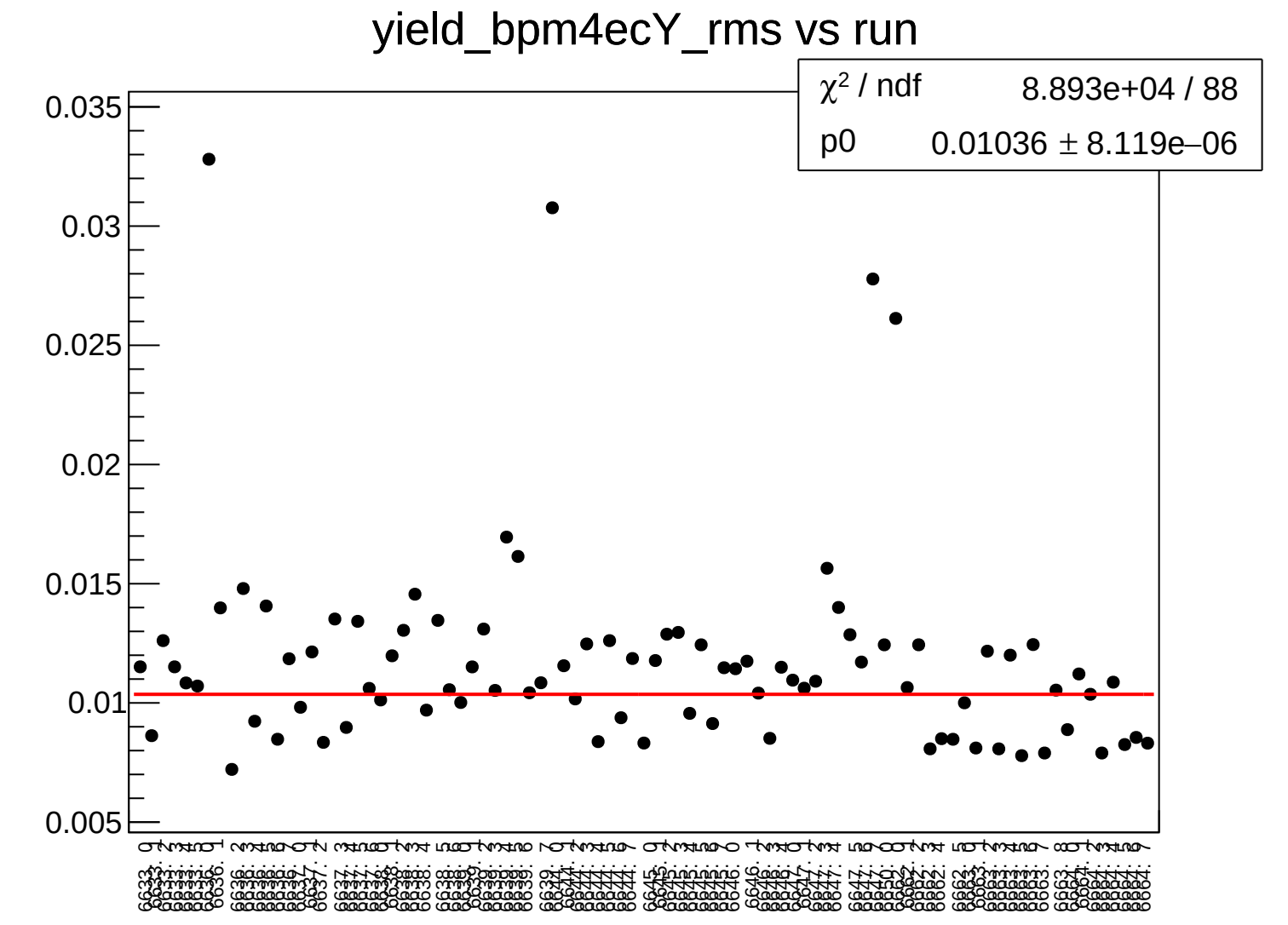

yield_bpm4ecX_mean vs run
χ² / ndf 7.162e+05 / 88
p0 −0.17 ± 2.016e−05
−0.12
−0.13
−0.14
−0.15
−0.16
−0.17
−0.18
−0.19
−0.2
pull
Entries 89
Mean 137.8
Std Dev 87.38
150
100
50
0
−50
−100
−150
−200
−250

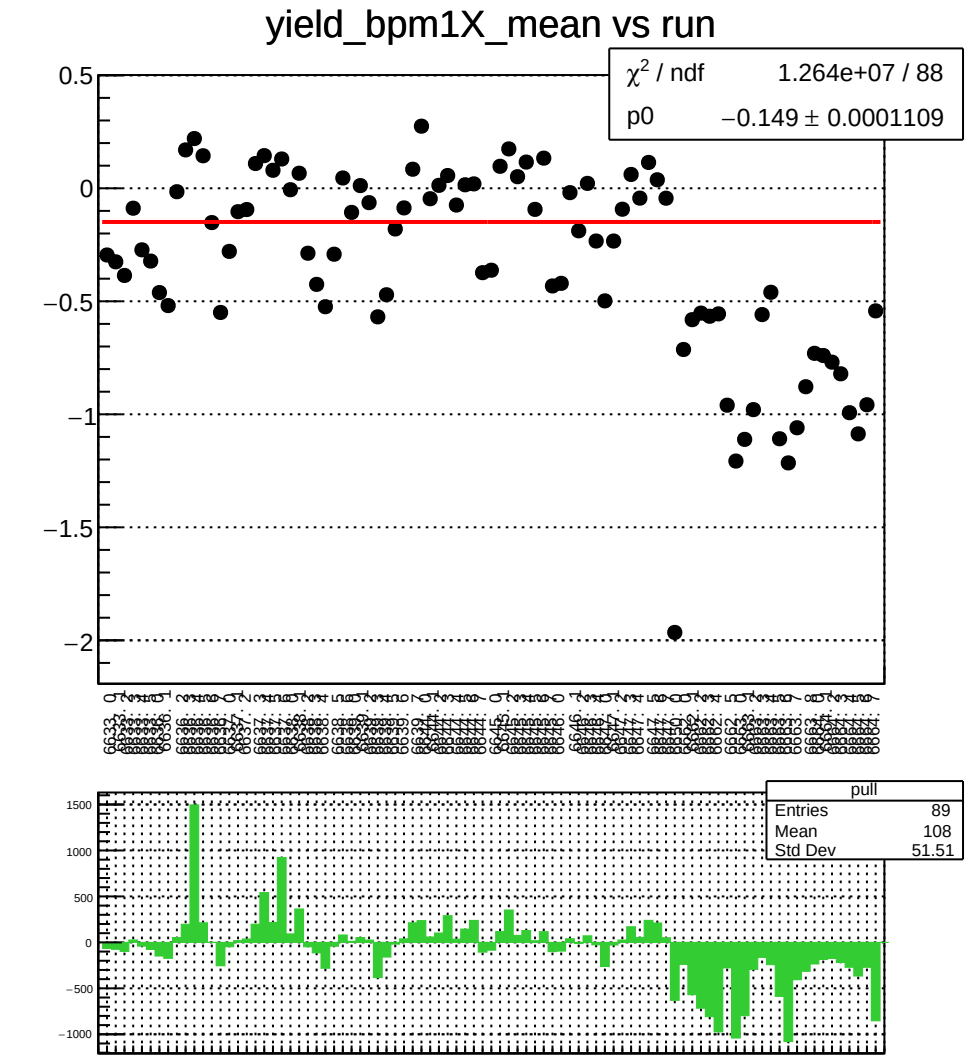

pull1D
Entries 89
Mean 0.9717
Std Dev 5.082
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

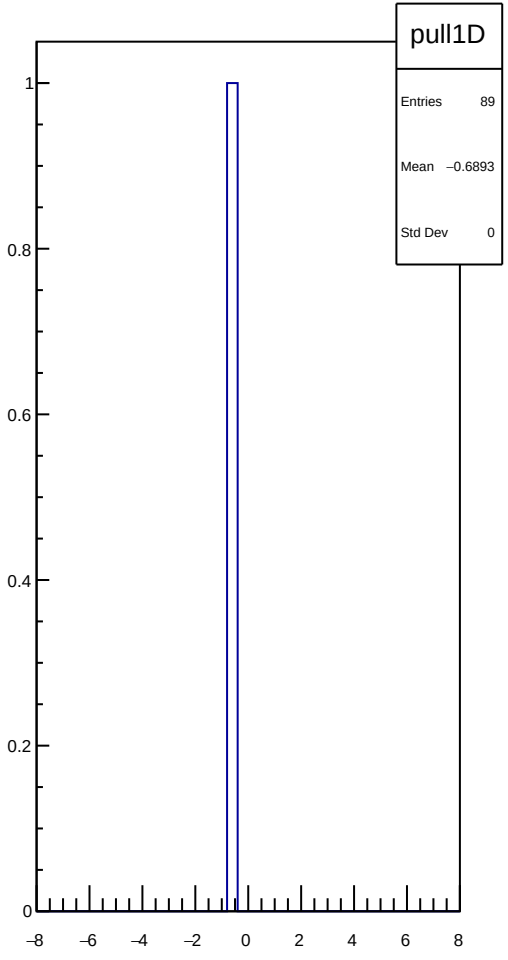

yield_bpm4ecX_rms vs run
χ² / ndf 4.501e+05 / 88
p0 0.01605 ± 1.426e−05
0.12
0.1
0.08
0.06
0.04
0.02

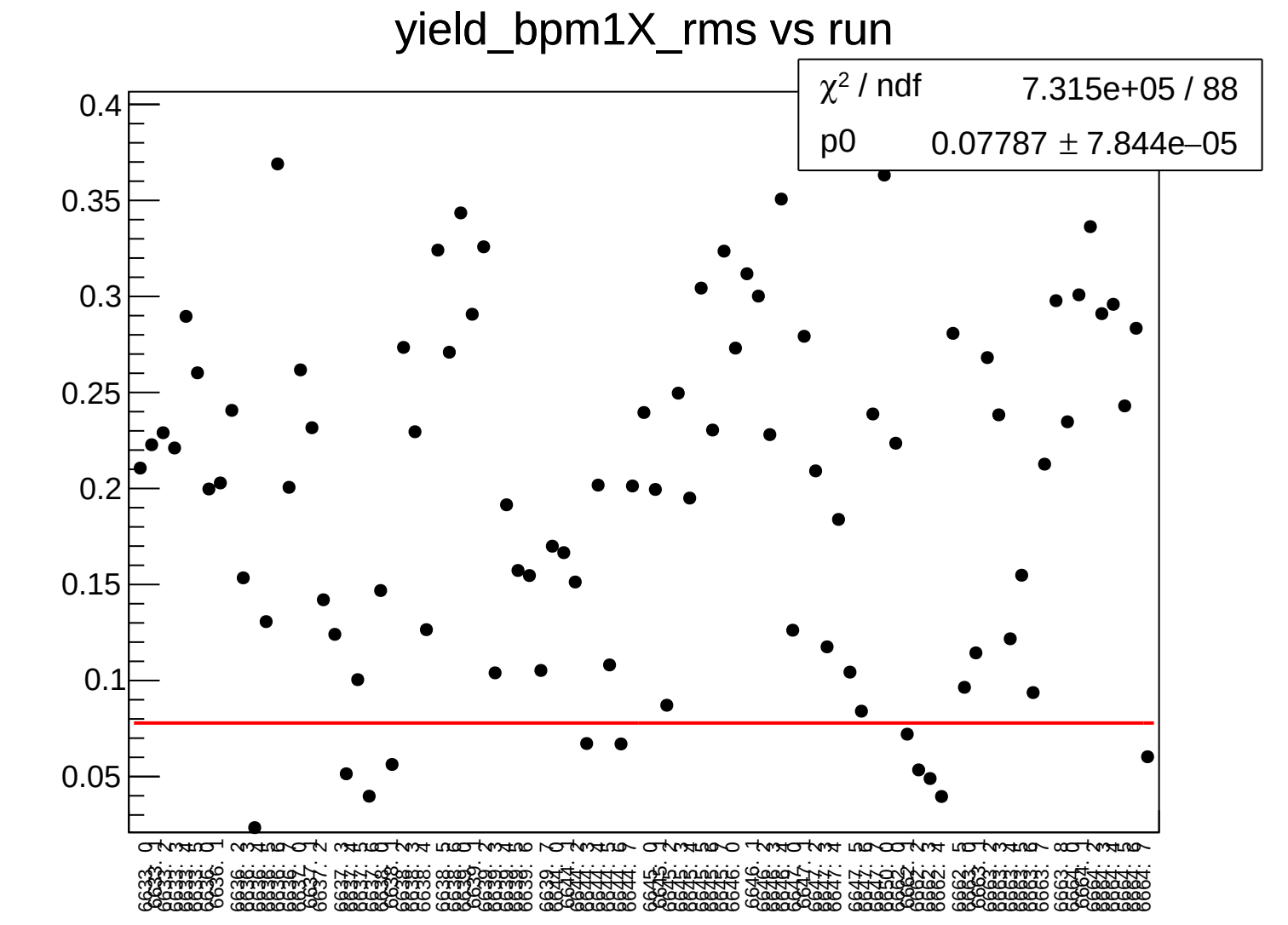

yield_bpm4ecY_mean vs run
χ² / ndf 1.679e+06 / 88
p0 0.06289 ± 1.148e−05
0.08
0.07
0.06
0.05
0.04
0.03
pull
Entries 89
Mean −453.6
Std Dev 502.6
200
100
0
−100
−200

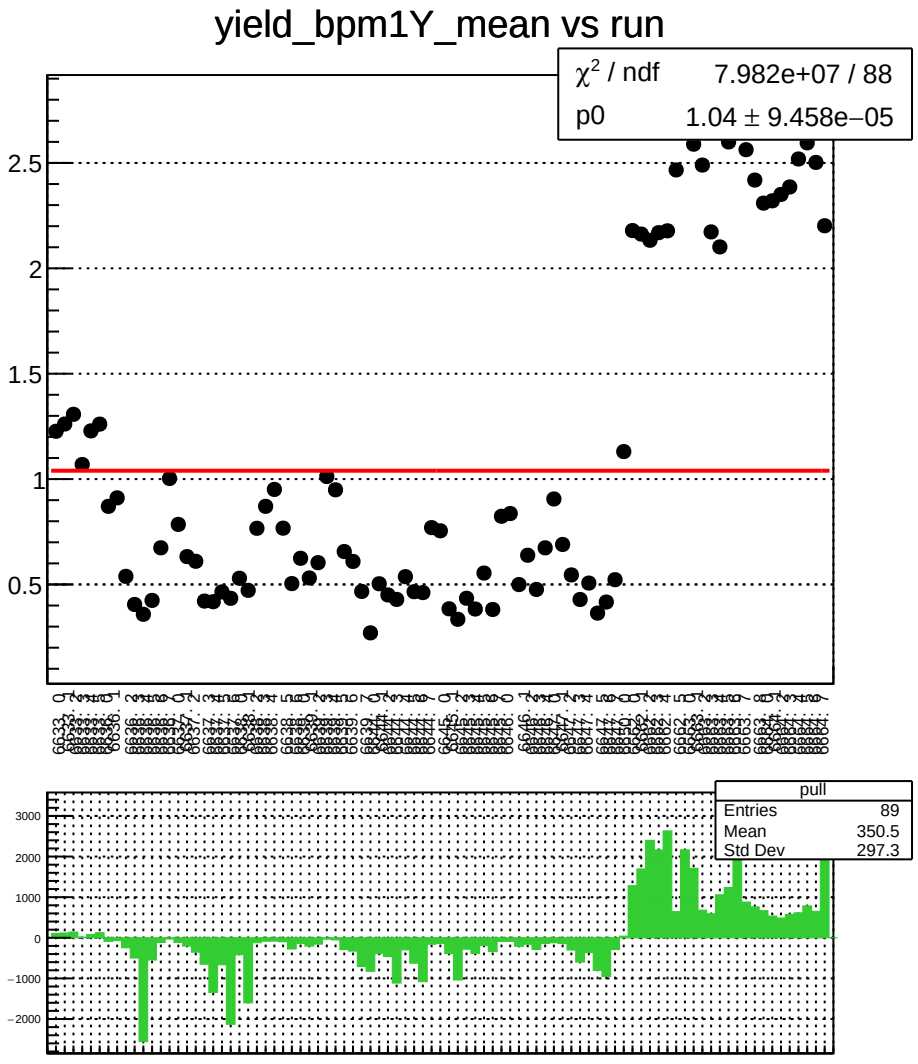

pull1D
Entries 89
Mean 0.4908
Std Dev 2.462
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

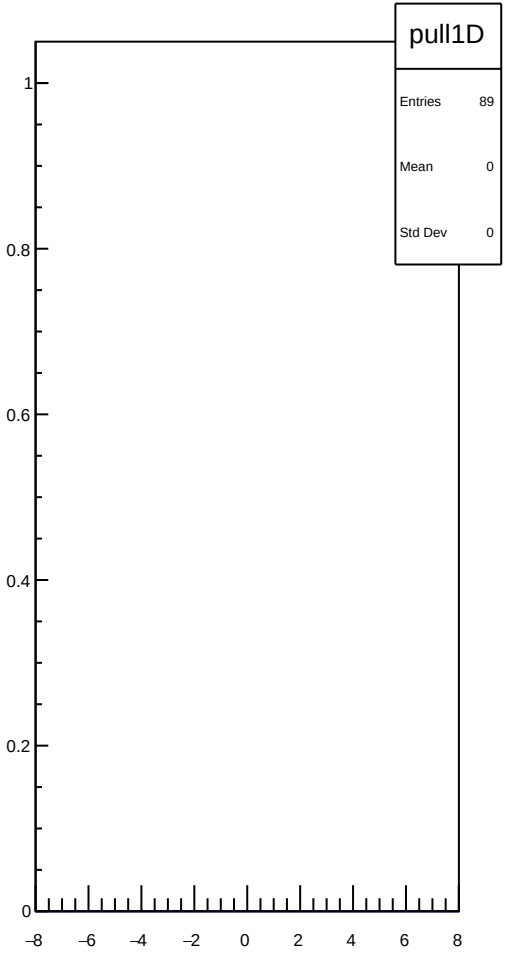

yield_bpm4ecY_rms vs run
χ² / ndf 8.893e+04 / 88
p0 0.01036 ± 8.119e–06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

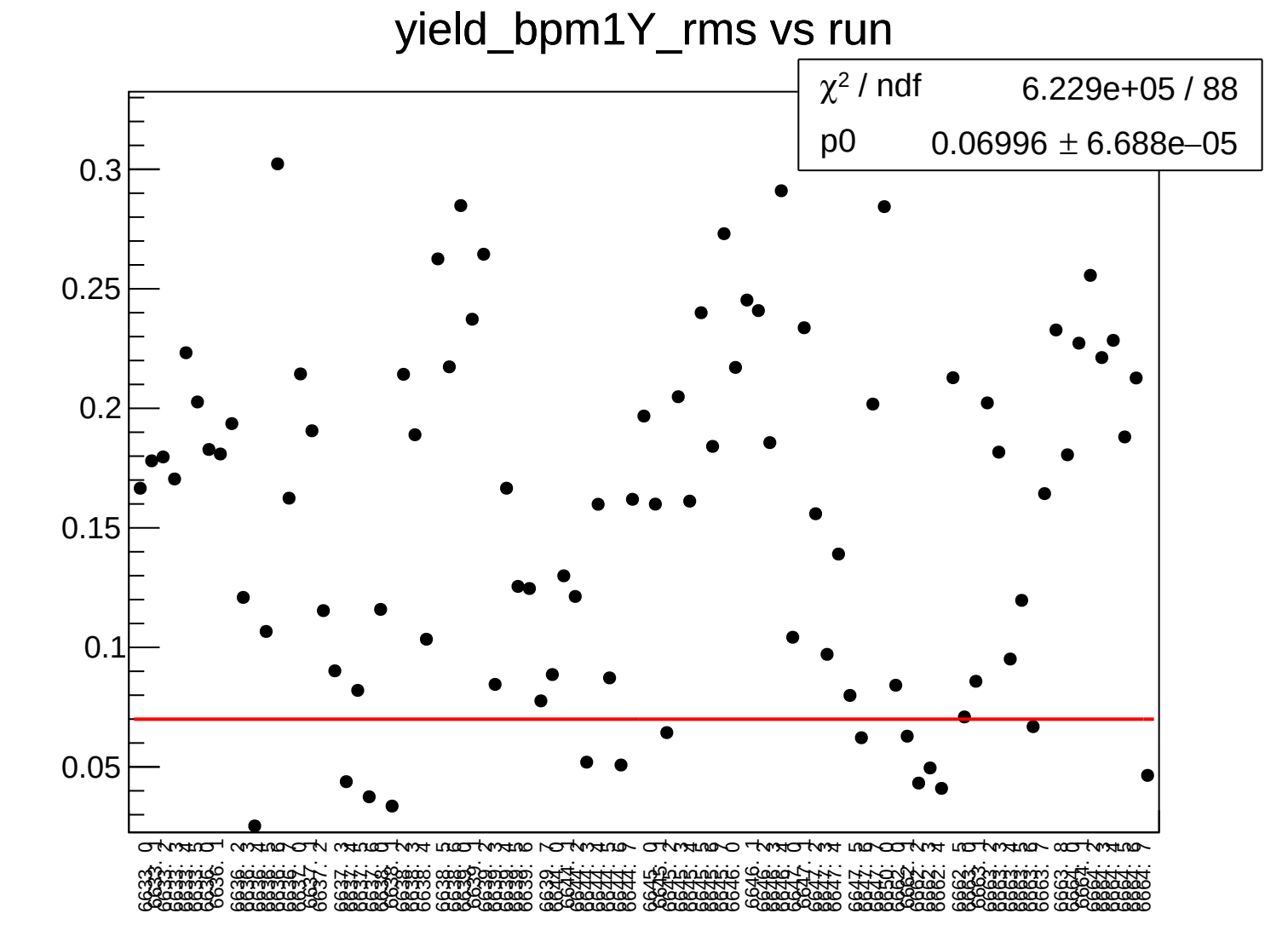

yield_bpm1X_mean vs run
χ² / ndf 1.264e+07 / 88
p0 −0.149 ± 0.0001109
0.5
0
−0.5
−1
−1.5
−2
pull
Entries 89
Mean 108
Std Dev 51.51
1500
1000
500
0
−500
−1000

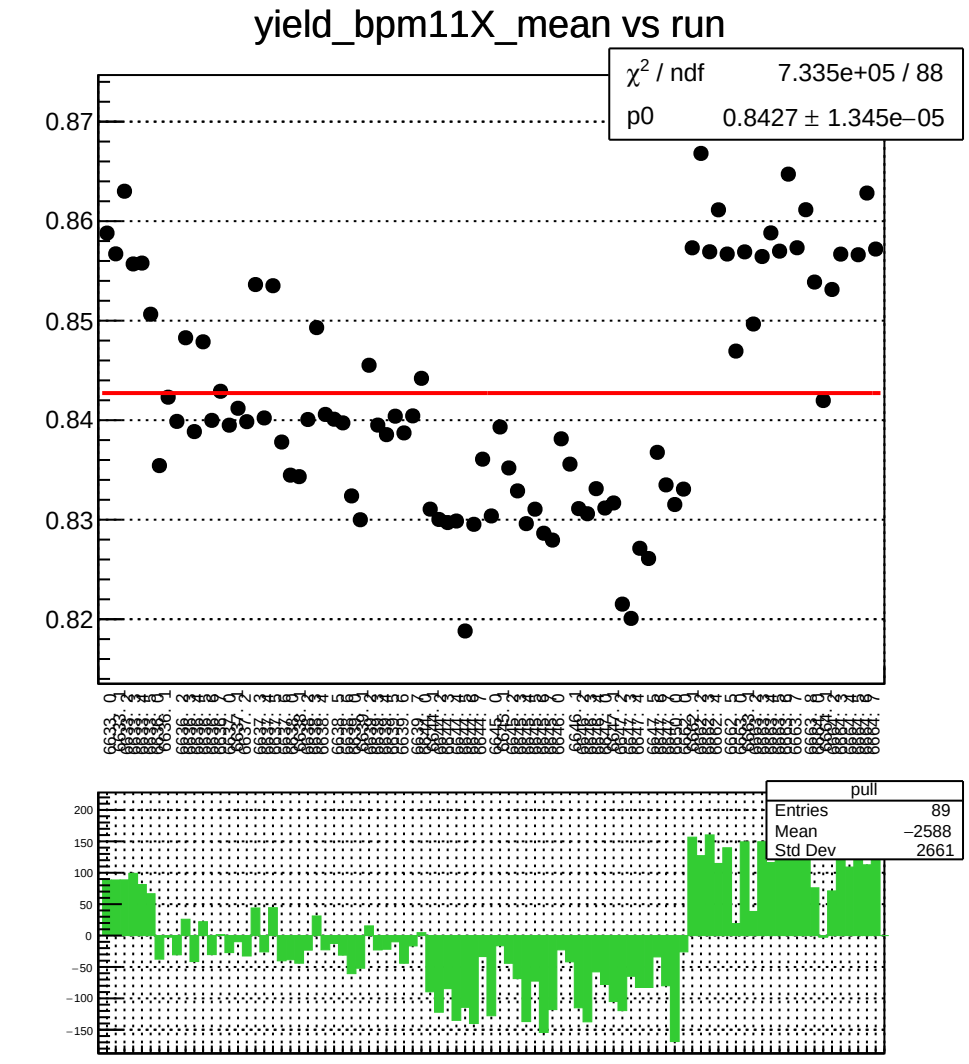

pull1D
Entries 89
Mean −0.6893
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

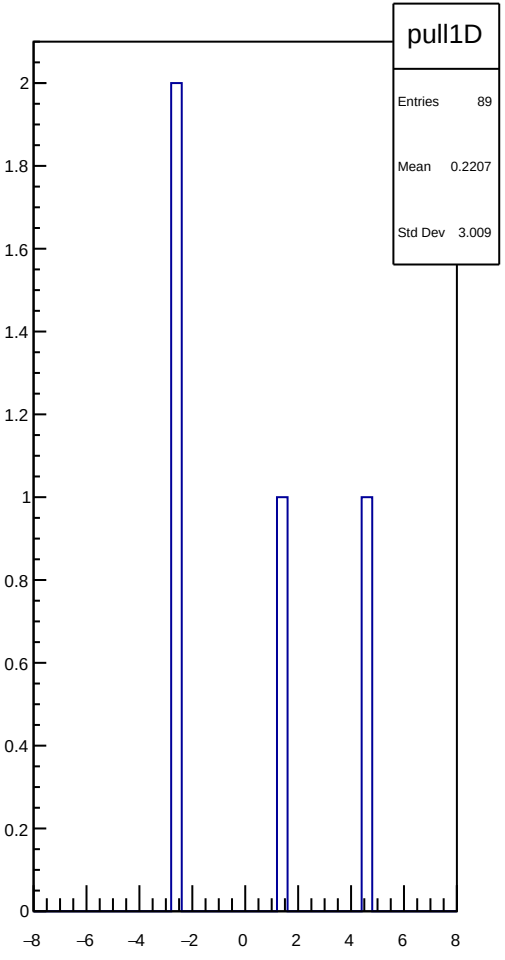

yield_bpm1X_rms vs run
χ² / ndf 7.315e+05 / 88
p0 0.07787 ± 7.844e–05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

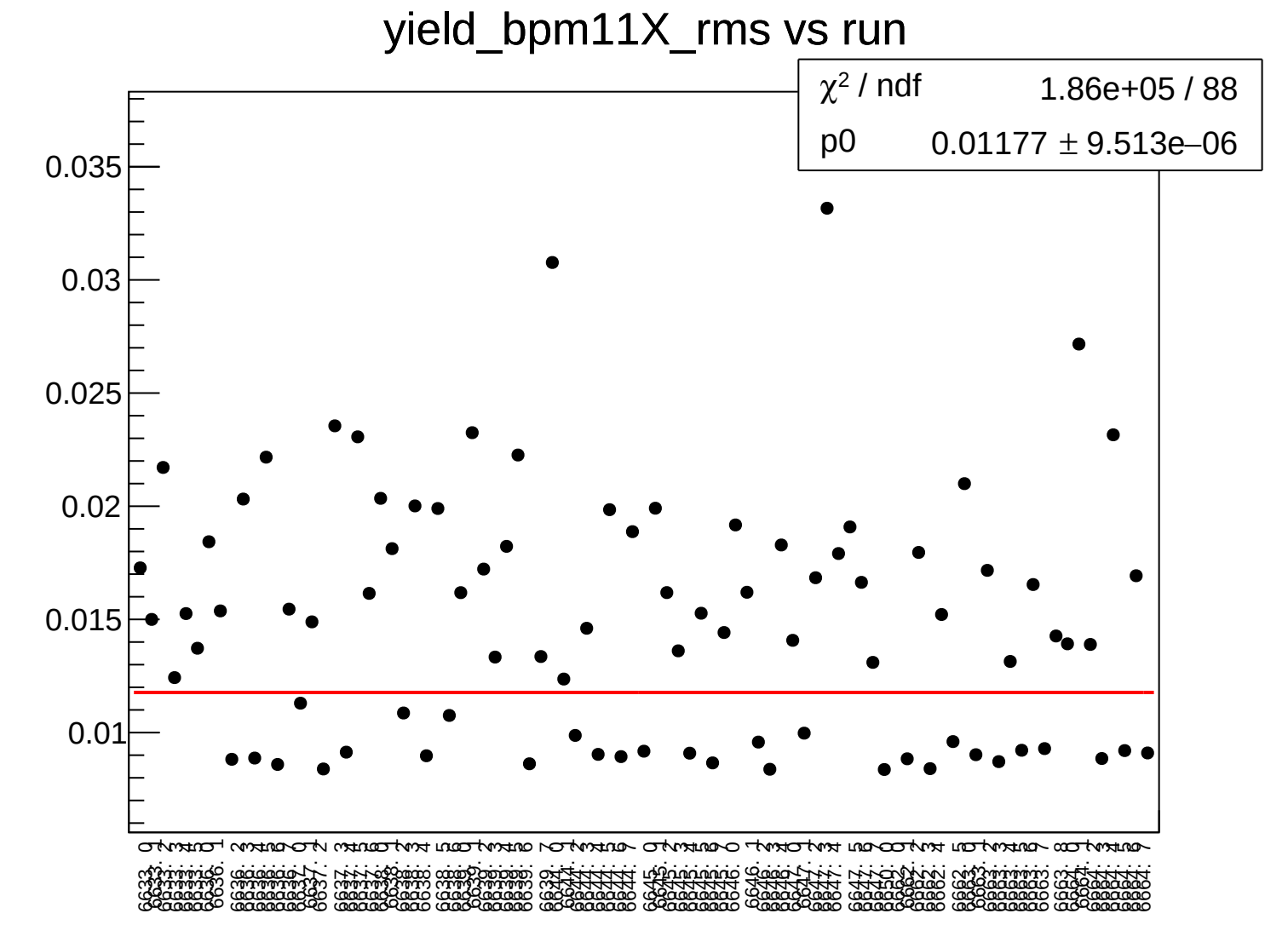

yield_bpm1Y_mean vs run
χ² / ndf 7.982e+07 / 88
p0 1.04 ± 9.458e−05
2.5
2
1.5
1
0.5
pull
Entries 89
Mean 350.5
Std Dev 297.3
3000
2000
1000
0
−1000
−2000

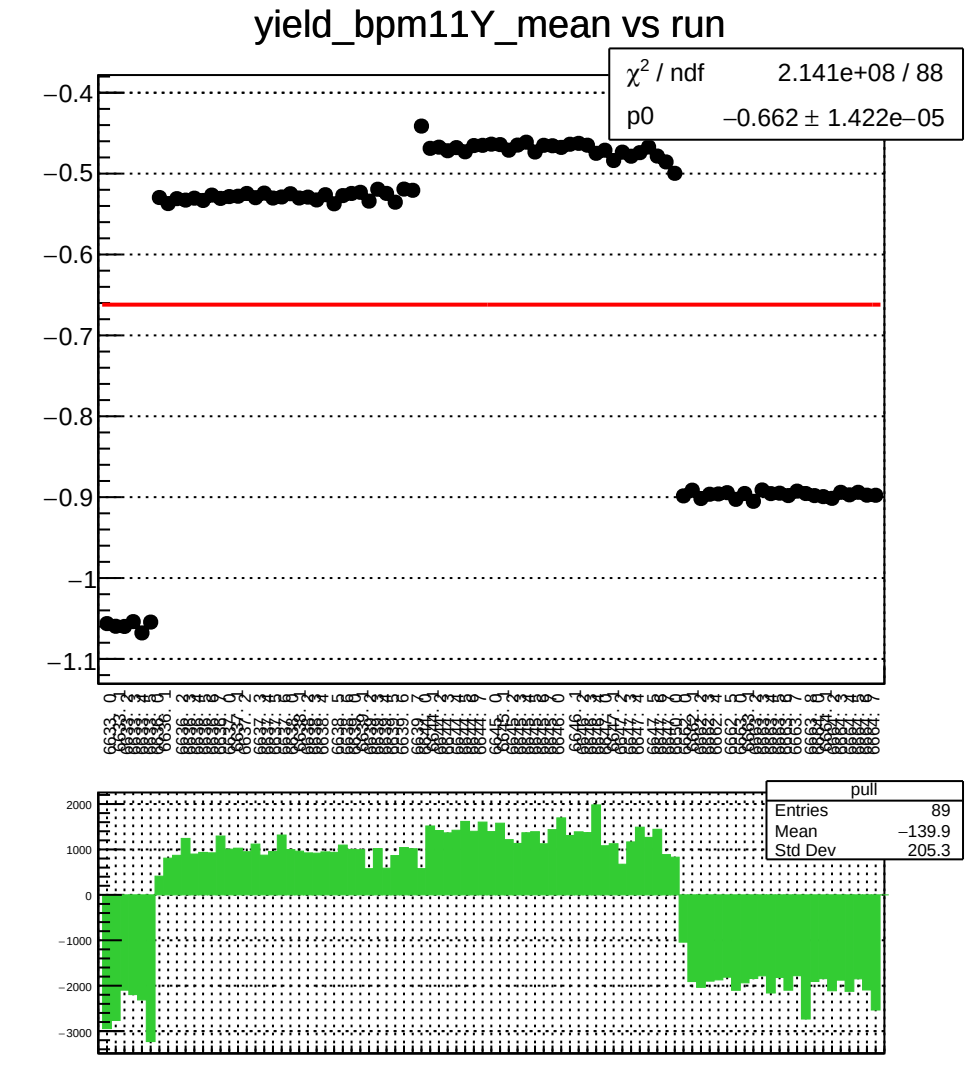

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

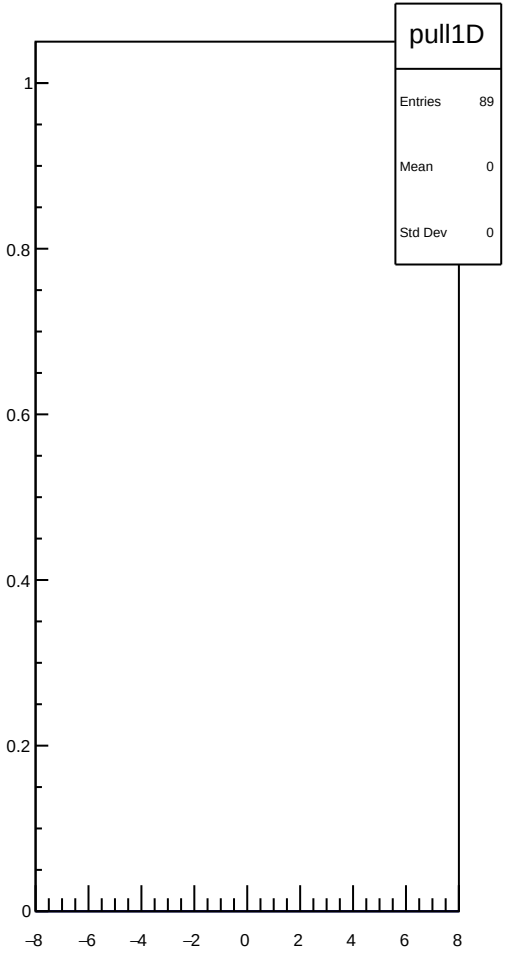

yield_bpm1Y_rms vs run
χ² / ndf 6.229e+05 / 88
p0 0.06996 ± 6.688e−05
0.3
0.25
0.2
0.15
0.1
0.05

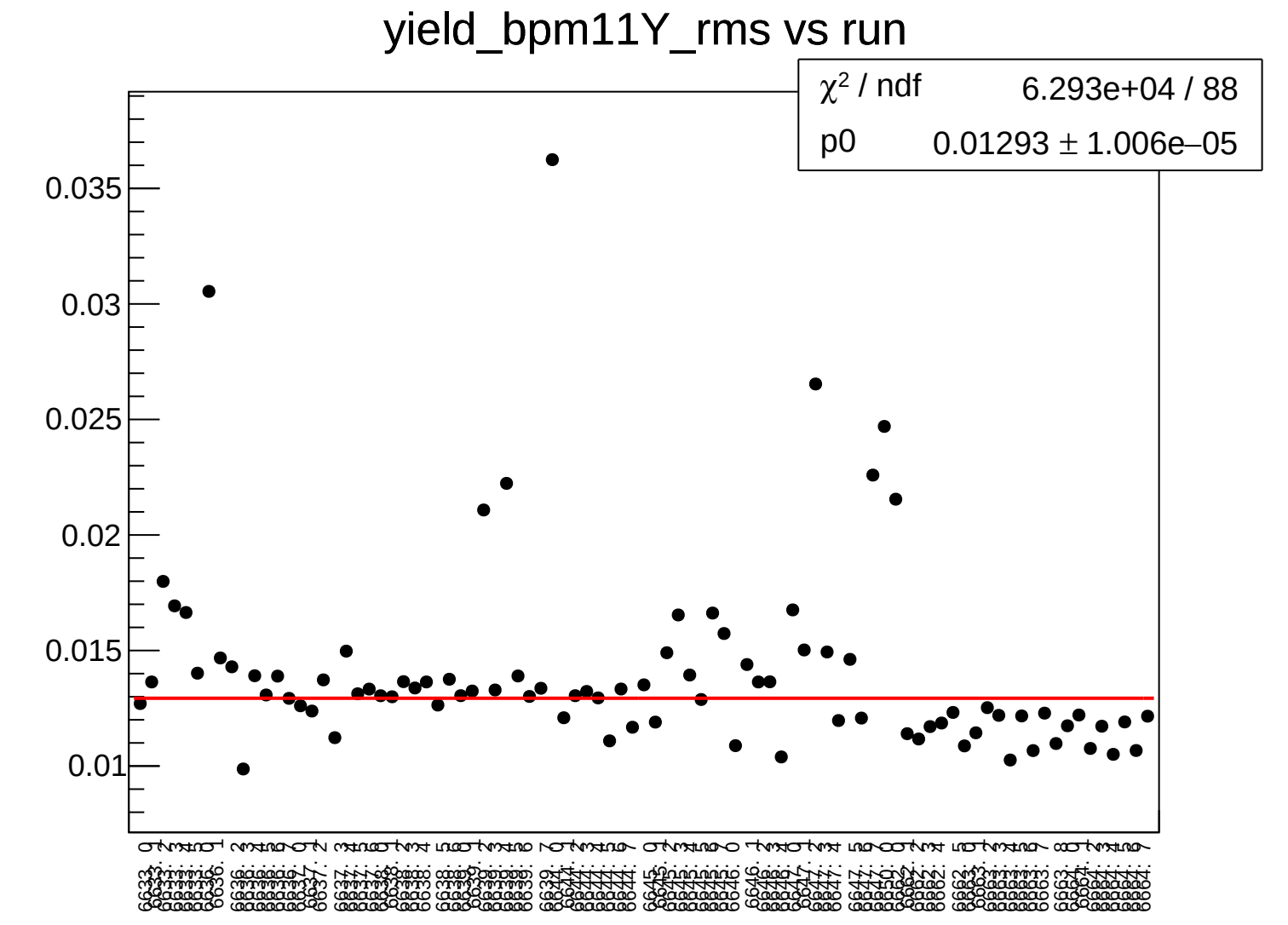

yield_bpm11X_mean vs run
χ² / ndf 7.335e+05 / 88
p0 0.8427 ± 1.345e−05
0.87
0.86
0.85
0.84
0.83
0.82
pull
Entries 89
Mean −2588
Std Dev 2661
200
150
100
50
0
−50
−100
−150

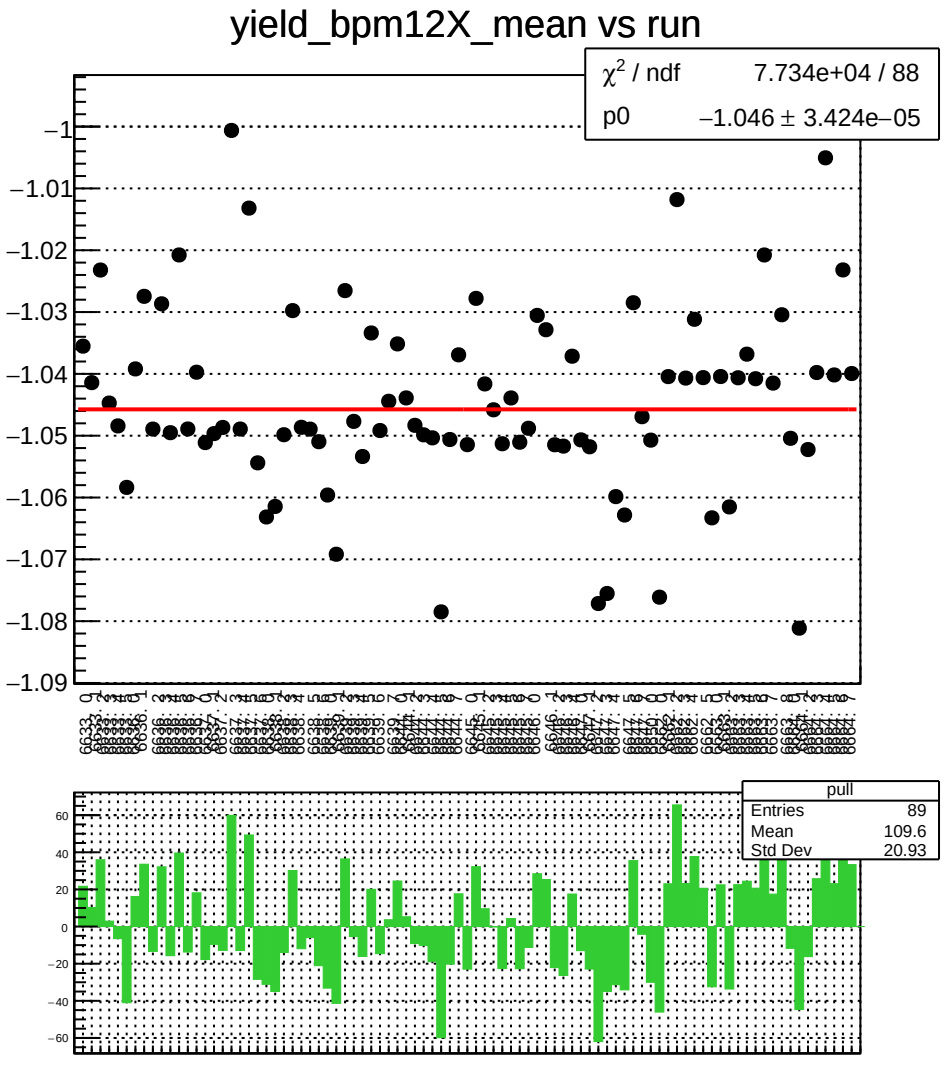

pull1D
Entries 89
Mean 0.2207
Std Dev 3.009
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

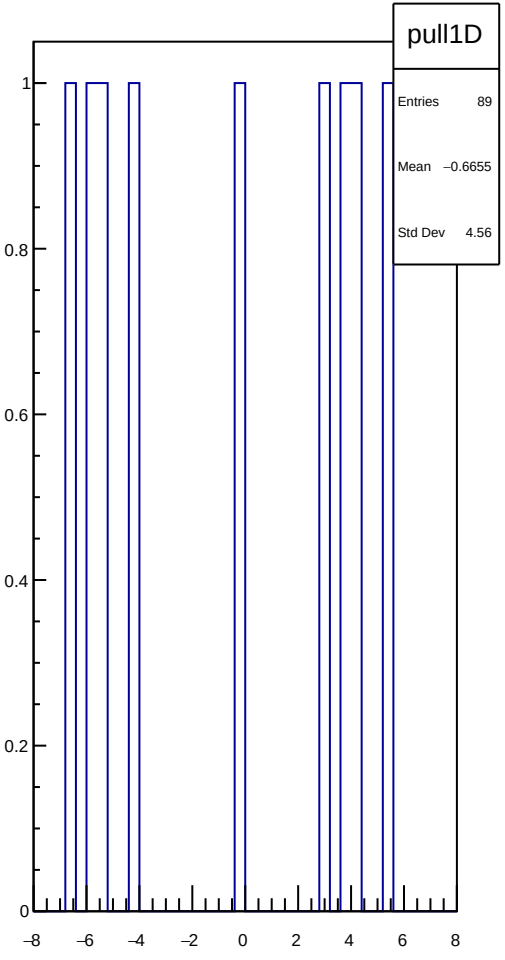

yield_bpm11X_rms vs run
χ² / ndf 1.86e+05 / 88
p0 0.01177 ± 9.513e–06
0.035
0.03
0.025
0.02
0.015
0.01

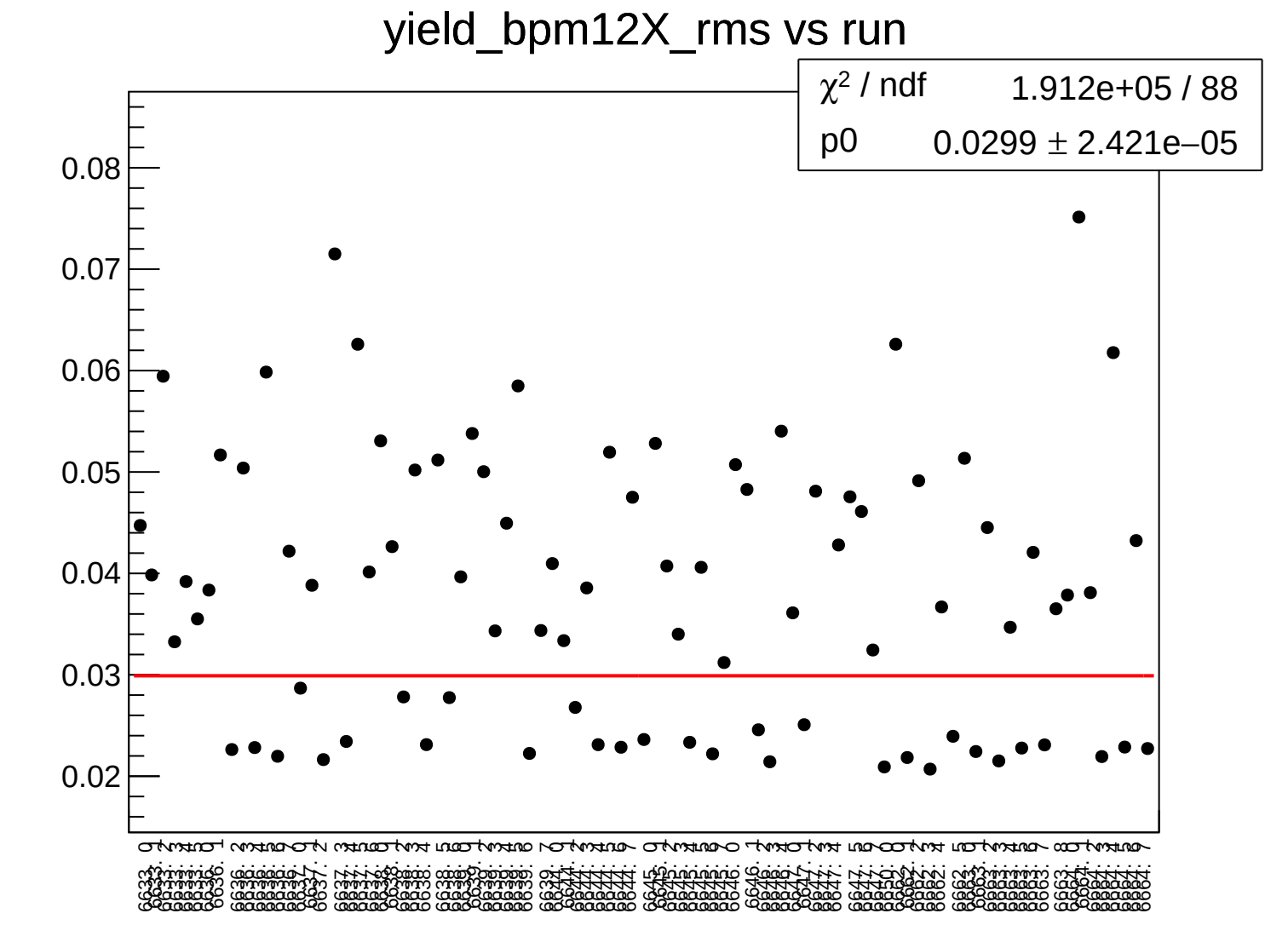

yield_bpm11Y_mean vs run
χ² / ndf 2.141e+08 / 88
p0 −0.662 ± 1.422e−05
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
−1
−1.1
pull
Entries 89
Mean −139.9
Std Dev 205.3
2000
1000
0
−1000
−2000
−3000

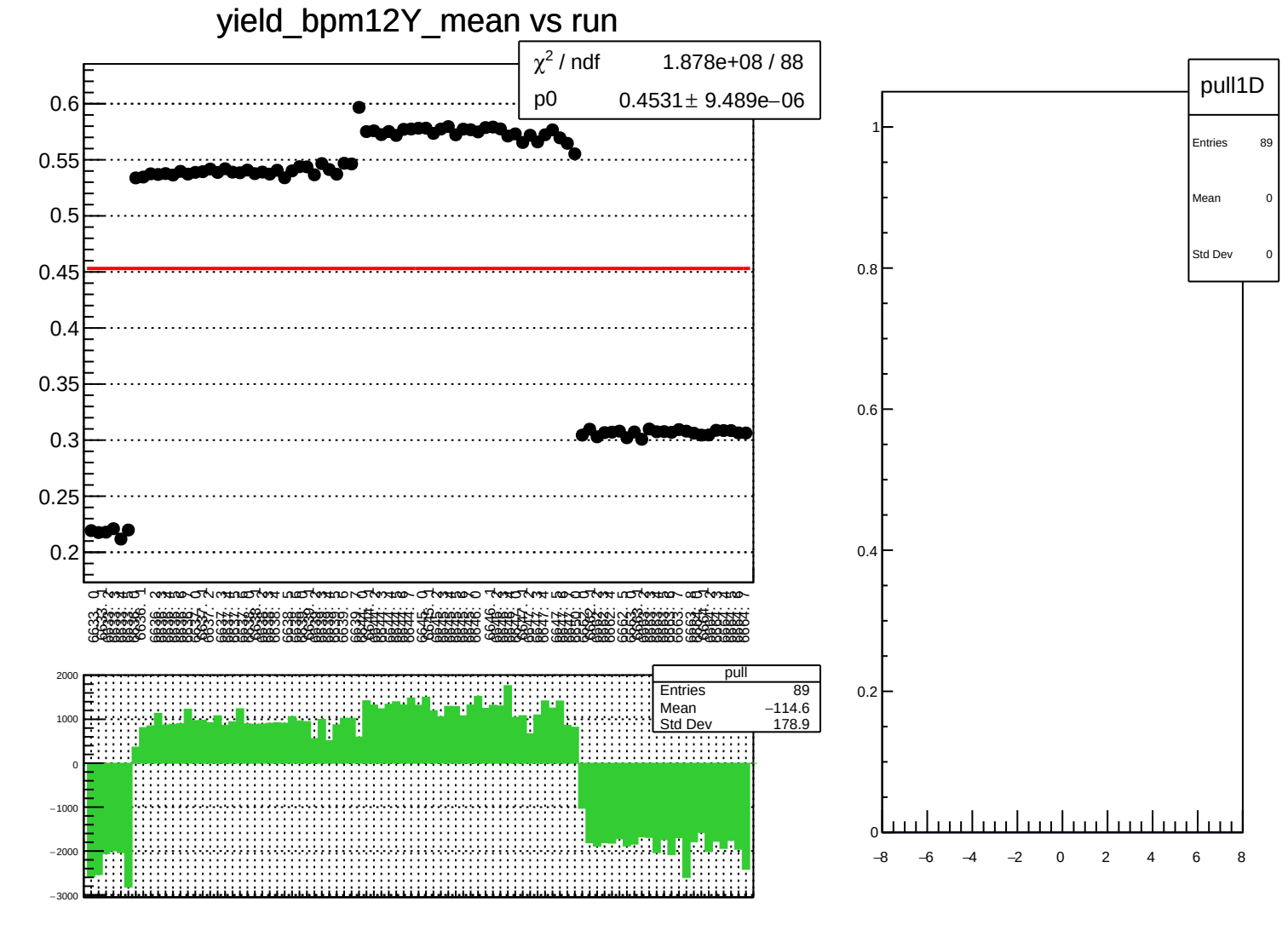

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

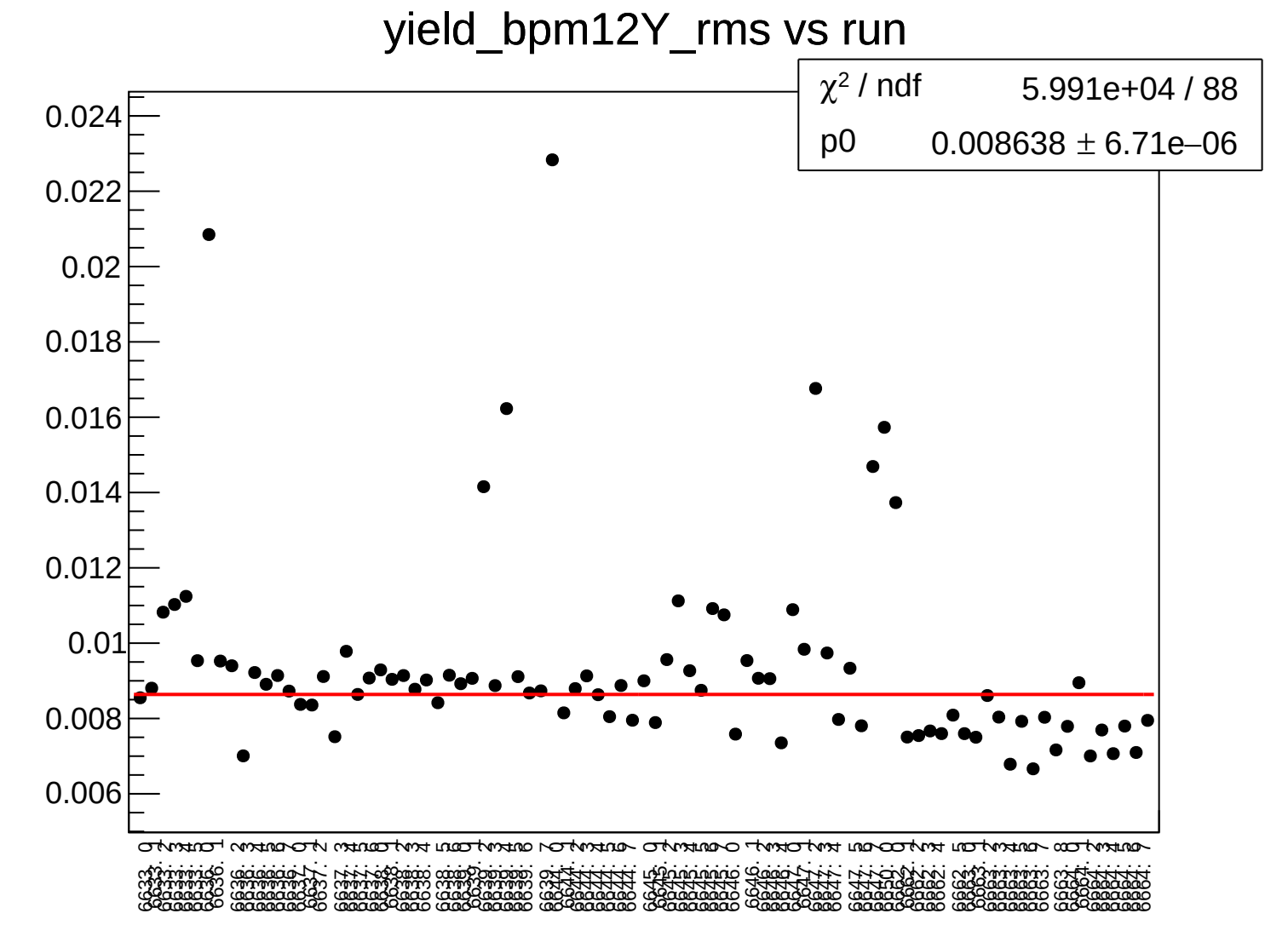

yield_bpm11Y_rms vs run
χ² / ndf 6.293e+04 / 88
p0 0.01293 ± 1.006e–05
0.035
0.03
0.025
0.02
0.015
0.01

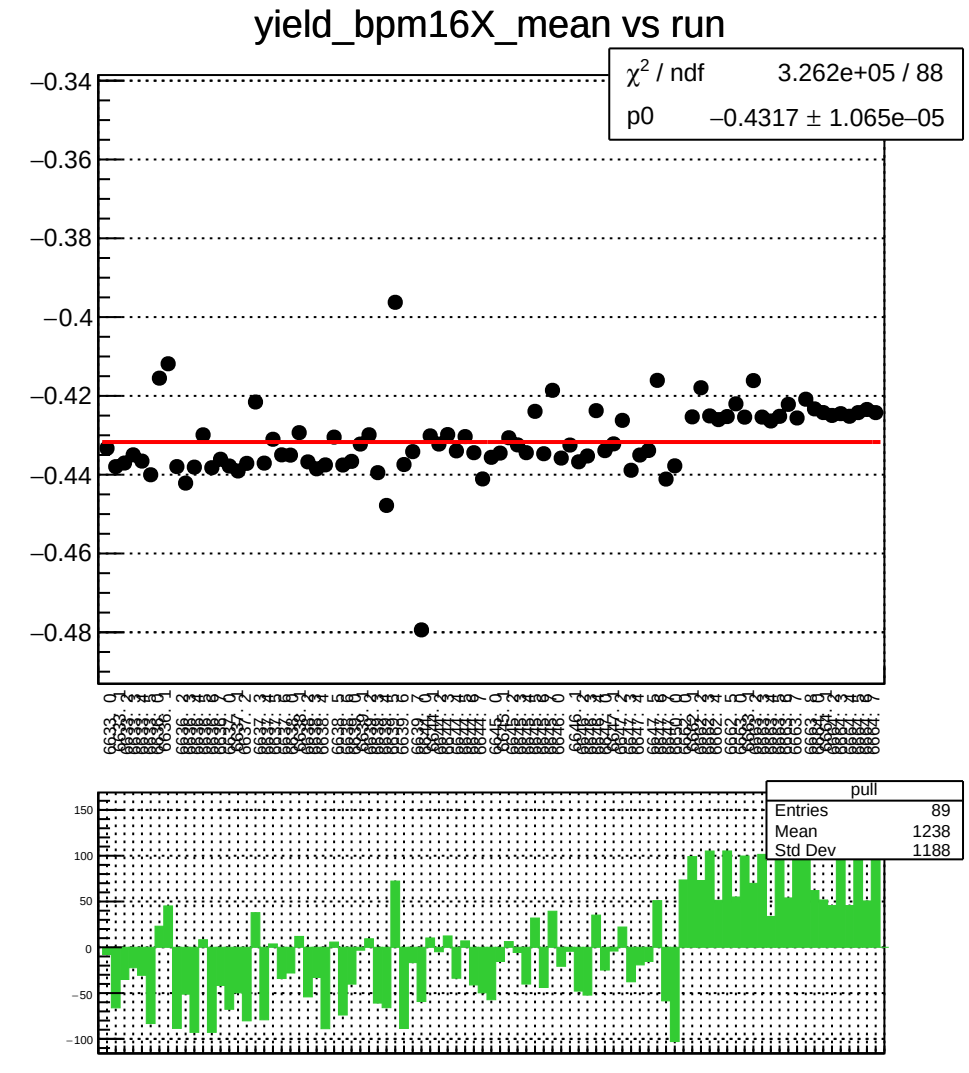

yield_bpm12X_mean vs run
χ² / ndf 7.734e+04 / 88
p0 −1.046 ± 3.424e−05
pull
Entries 89
Mean 109.6
Std Dev 20.93

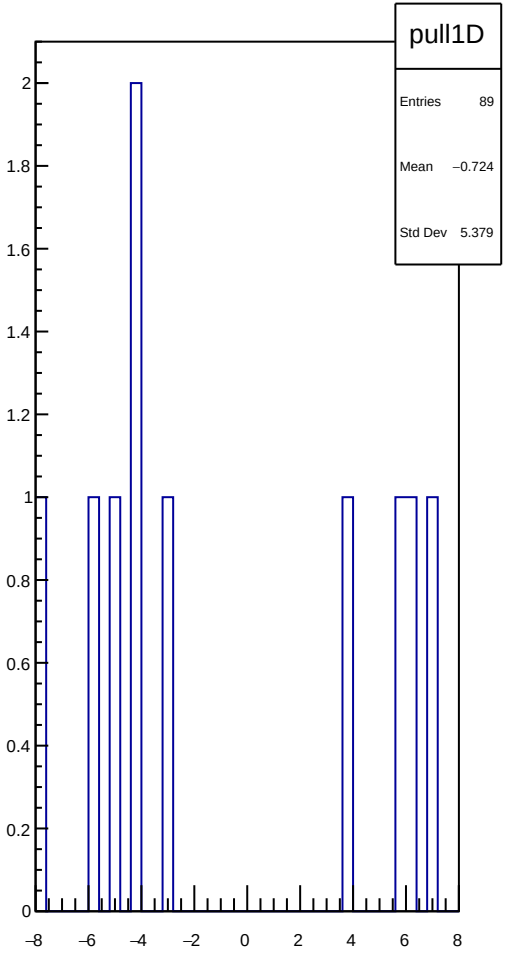

pull1D
Entries 89
Mean −0.6655
Std Dev 4.56

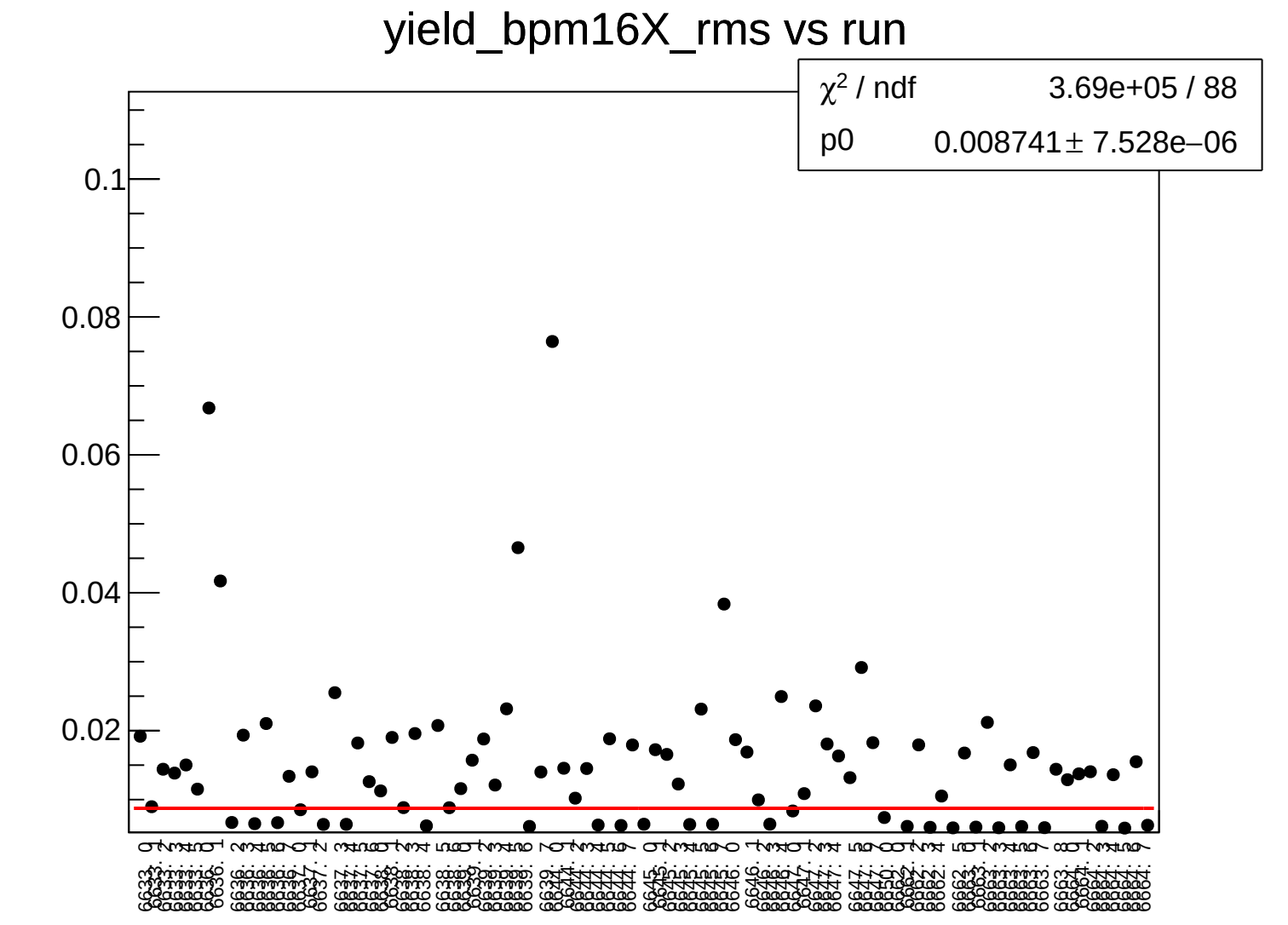

yield_bpm12X_rms vs run
χ² / ndf 1.912e+05 / 88
p0 0.0299 ± 2.421e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

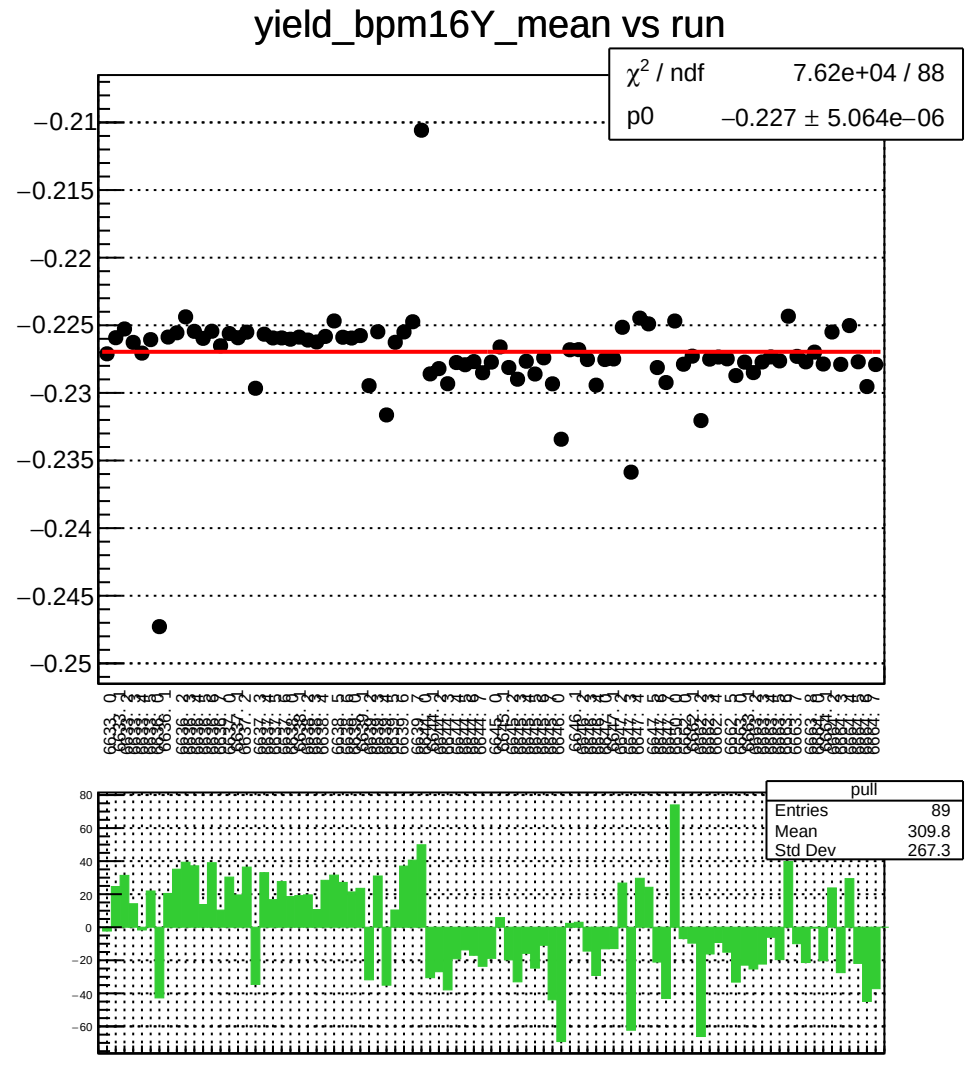

yield_bpm12Y_mean vs run
χ² / ndf 1.878e+08 / 88
p0 0.4531 ± 9.489e−06
pull
Entries 89
Mean −114.6
Std Dev 178.9
pull1D
Entries 89
Mean 0
Std Dev 0

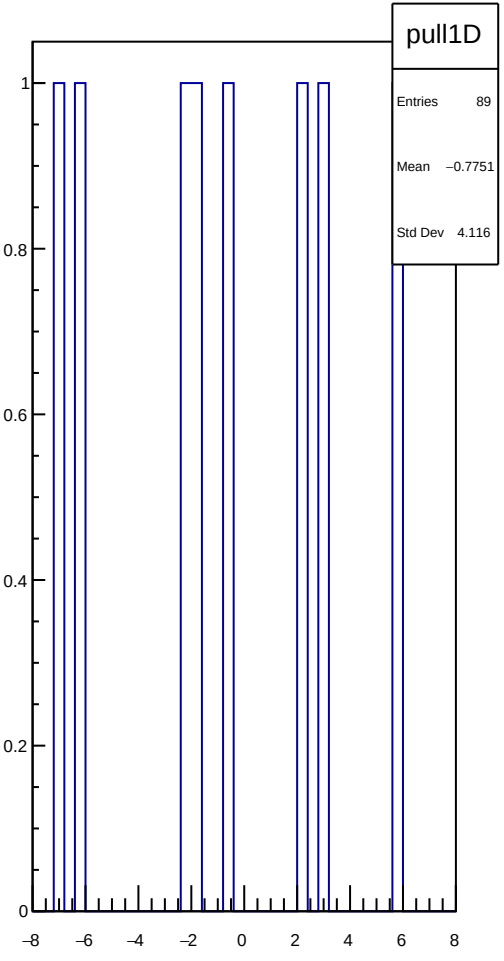

yield_bpm12Y_rms vs run
χ² / ndf 5.991e+04 / 88
p0 0.008638 ± 6.71e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

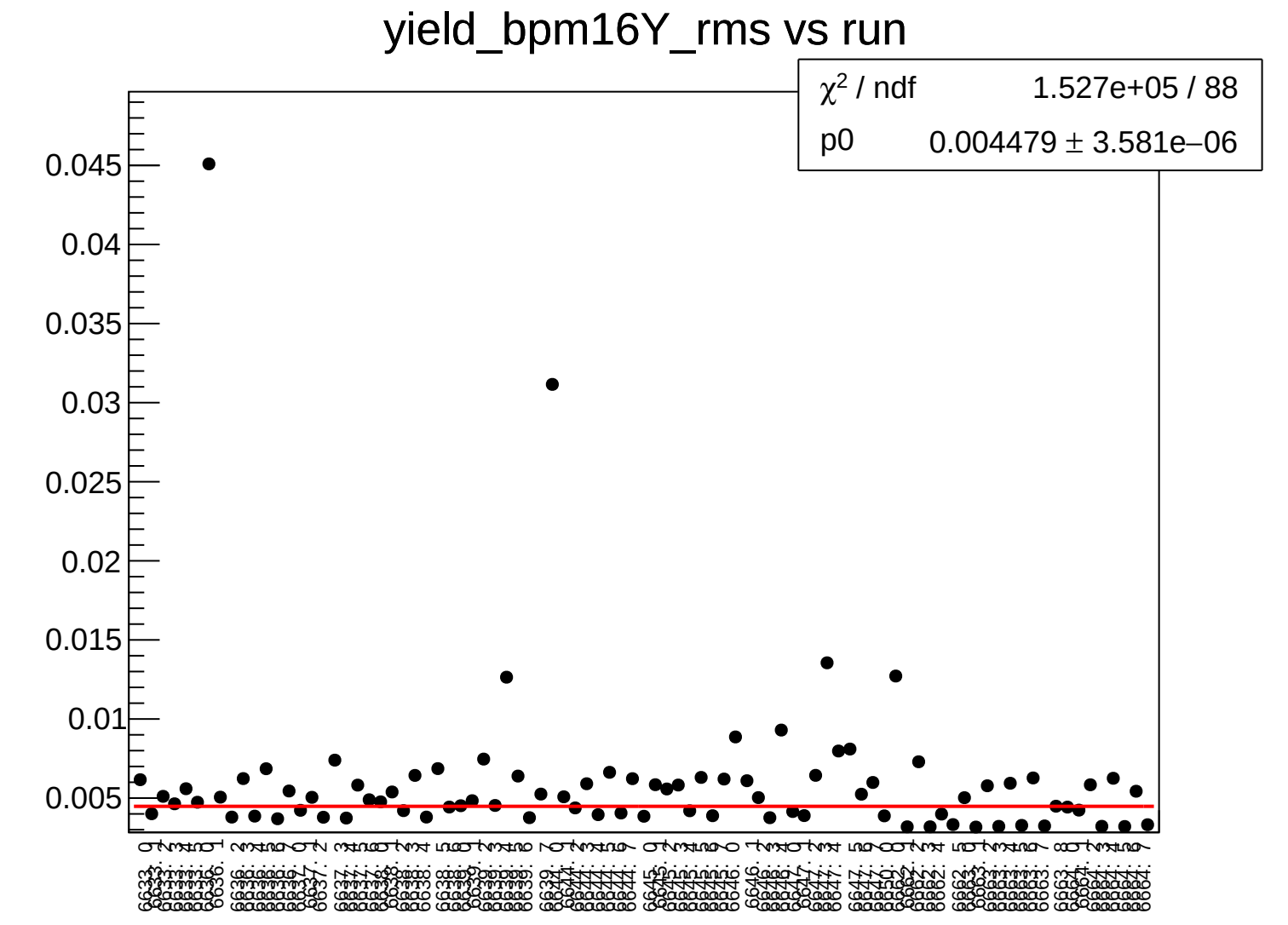

yield_bpm16X_mean vs run
χ² / ndf 3.262e+05 / 88
p0 −0.4317 ± 1.065e−05
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
−0.46
−0.48
pull
Entries 89
Mean 1238
Std Dev 1188
150
100
50
0
−50
−100

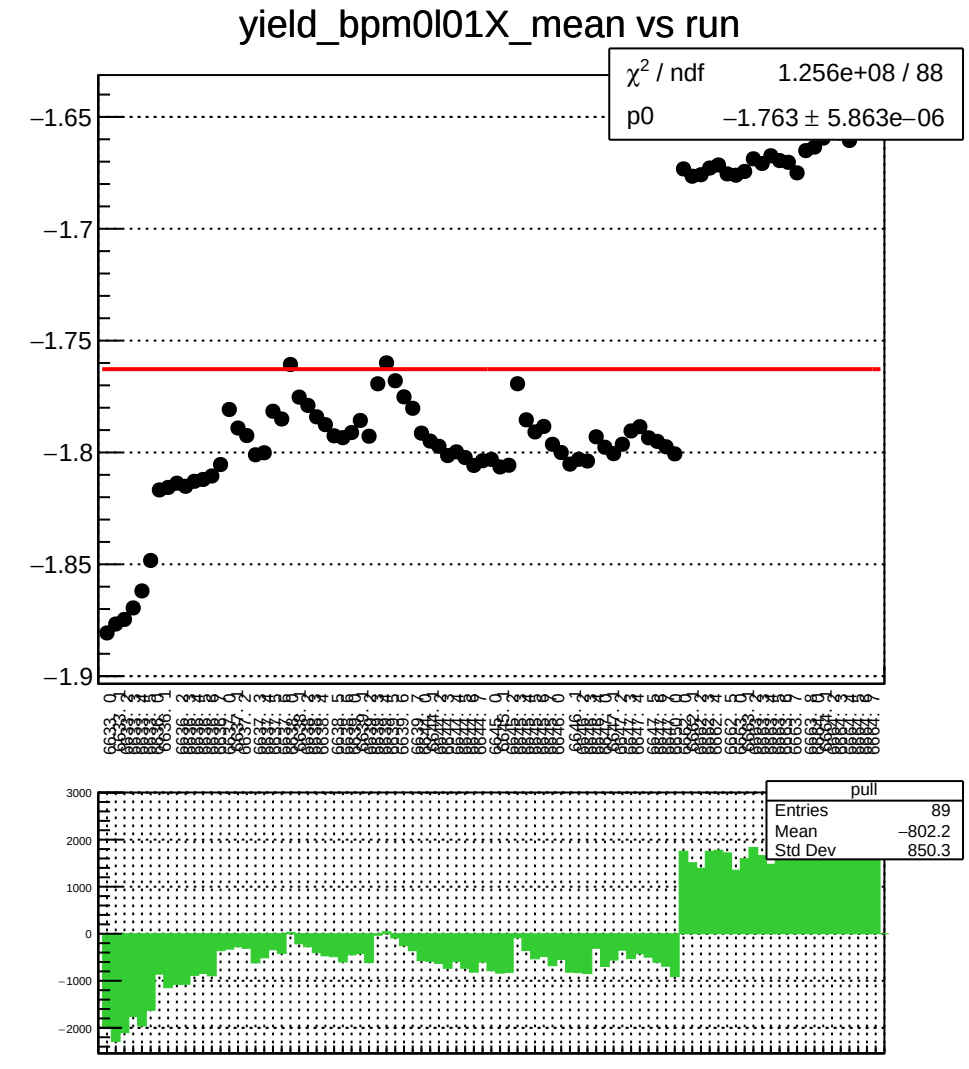

pull1D
Entries 89
Mean −0.724
Std Dev 5.379
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

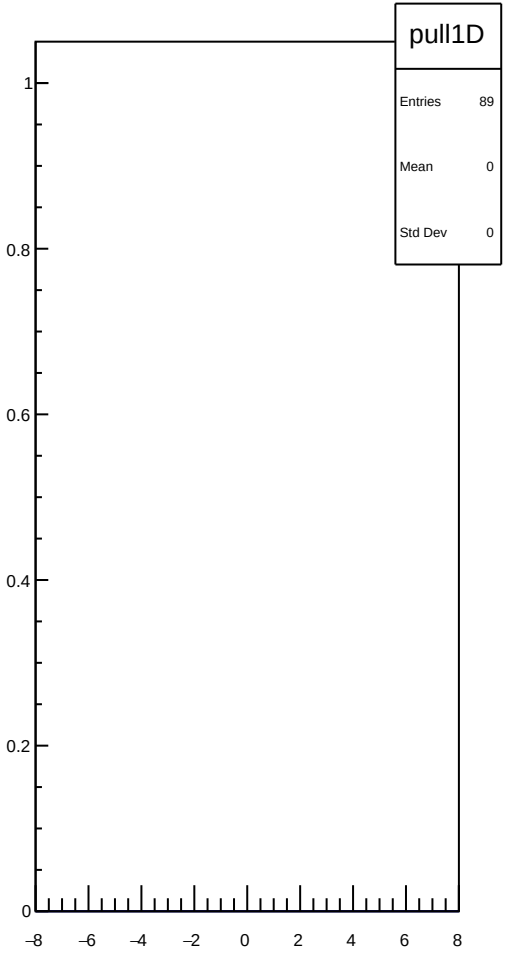

yield_bpm16X_rms vs run
χ² / ndf 3.69e+05 / 88
p0 0.008741 ± 7.528e−06
0.1
0.08
0.06
0.04
0.02

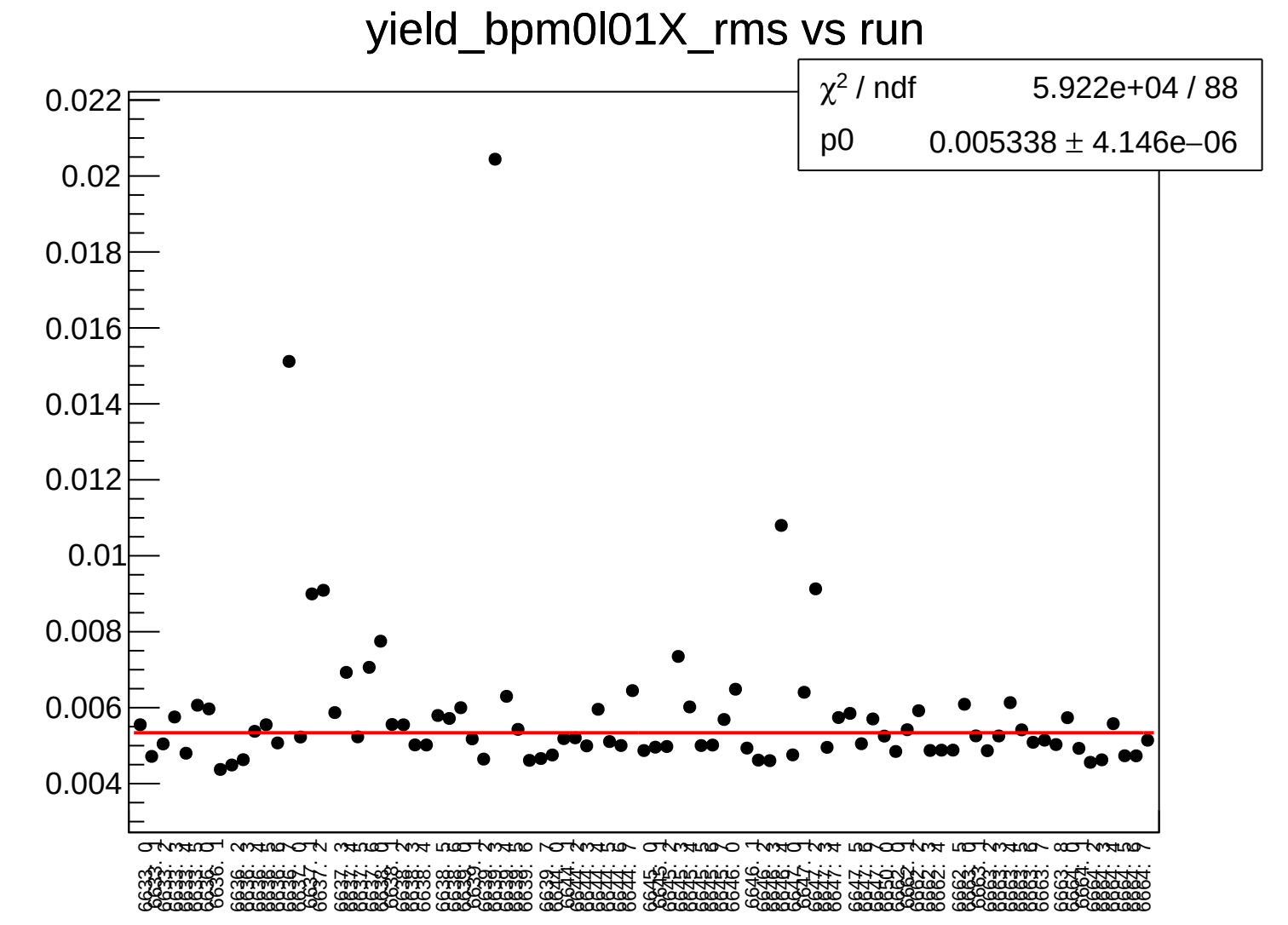

yield_bpm16Y_mean vs run
χ² / ndf 7.62e+04 / 88
p0 −0.227 ± 5.064e−06
−0.21
−0.215
−0.22
−0.225
−0.23
−0.235
−0.24
−0.245
−0.25
pull
Entries 89
Mean 309.8
Std Dev 267.3
80
60
40
20
0
−20
−40
−60

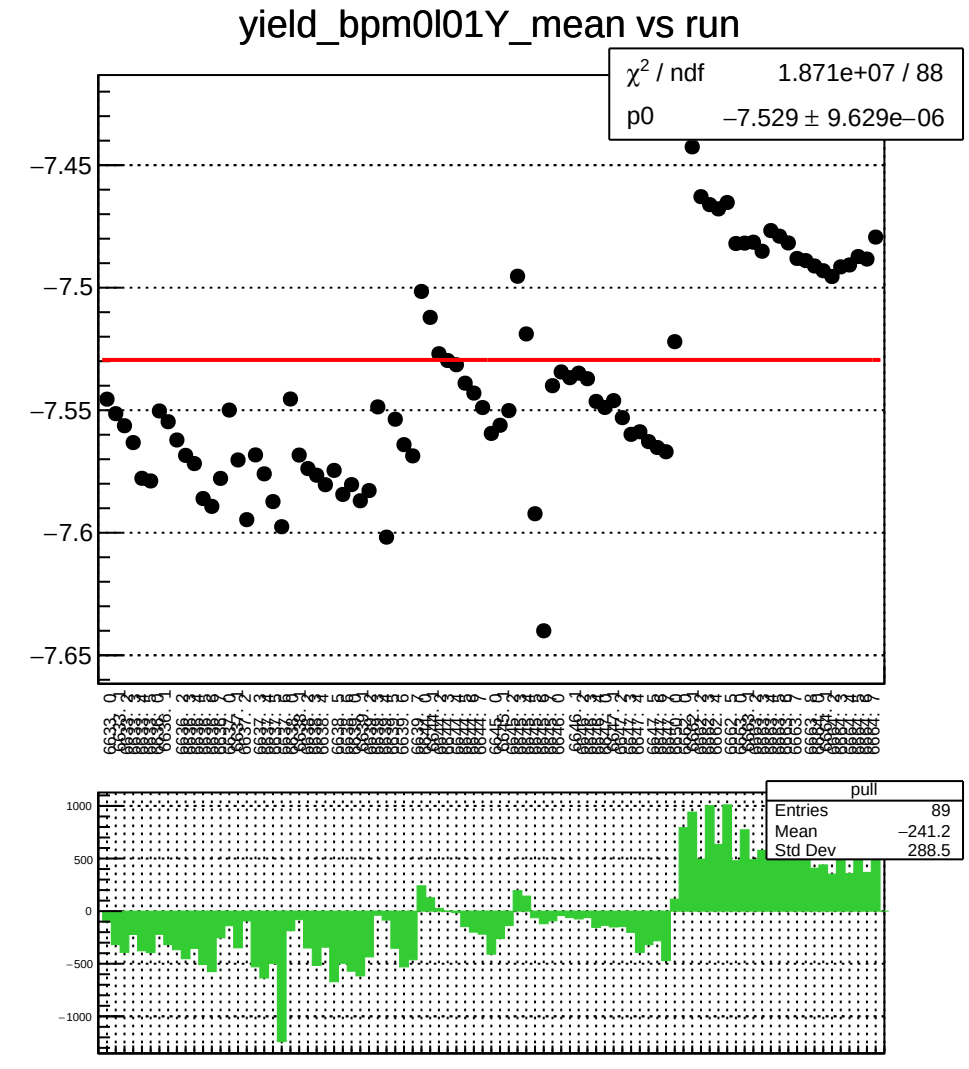

pull1D
Entries 89
Mean −0.7751
Std Dev 4.116
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

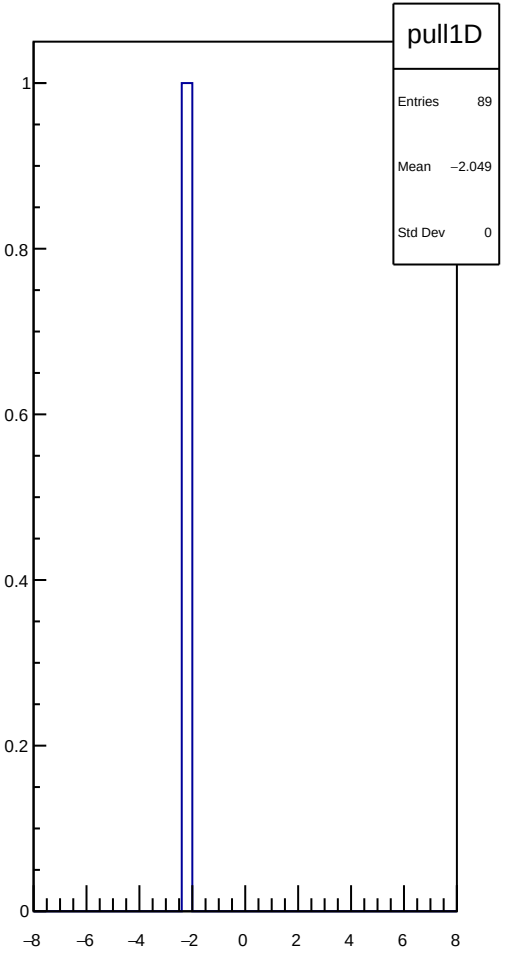

yield_bpm16Y_rms vs run
χ² / ndf 1.527e+05 / 88
p0 0.004479 ± 3.581e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

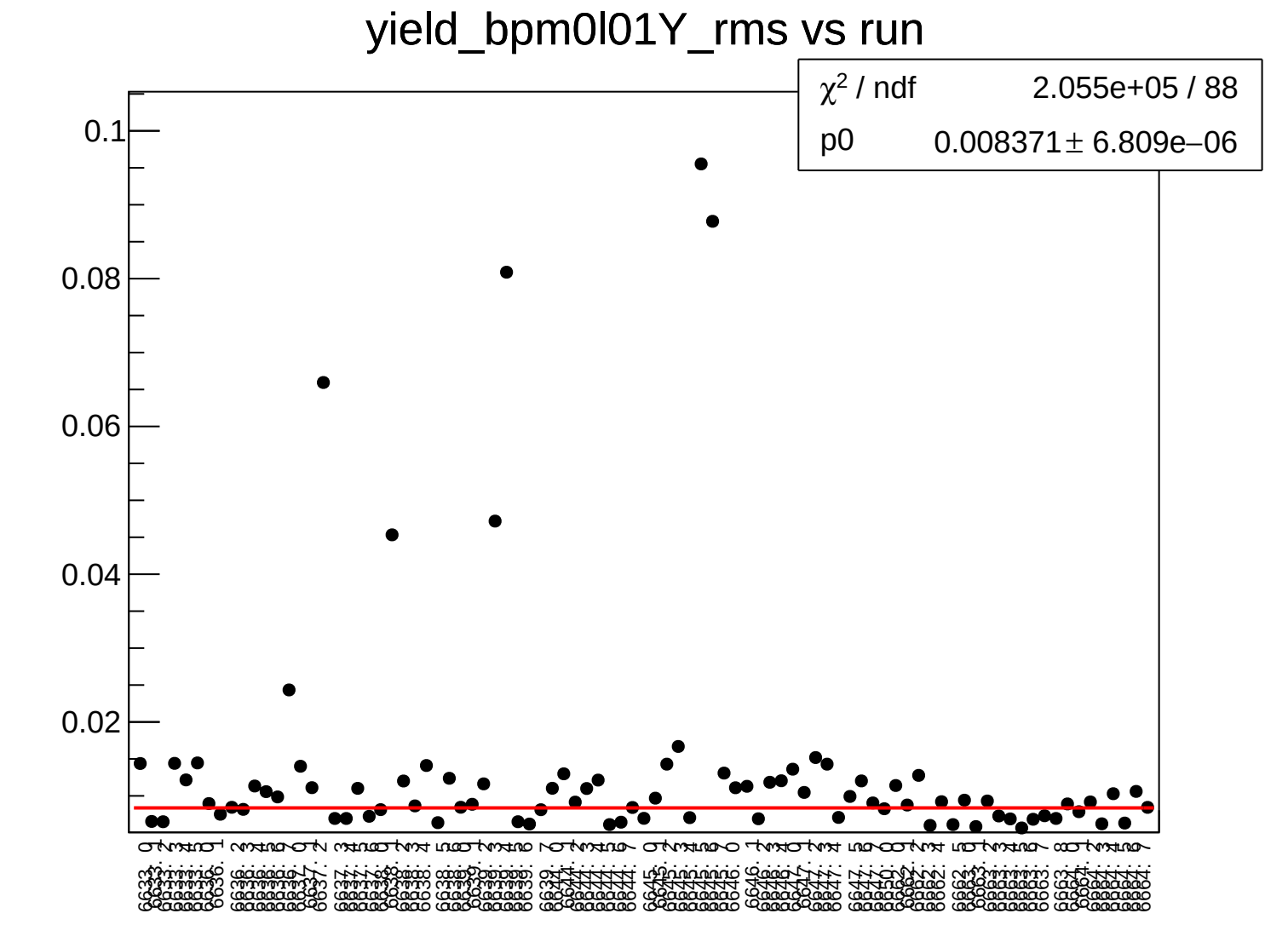

yield_bpm0l01X_mean vs run
χ² / ndf 1.256e+08 / 88
p0 −1.763 ± 5.863e−06
−1.65
−1.7
−1.75
−1.8
−1.85
−1.9
pull
Entries 89
Mean −802.2
Std Dev 850.3
3000
2000
1000
0
−1000
−2000

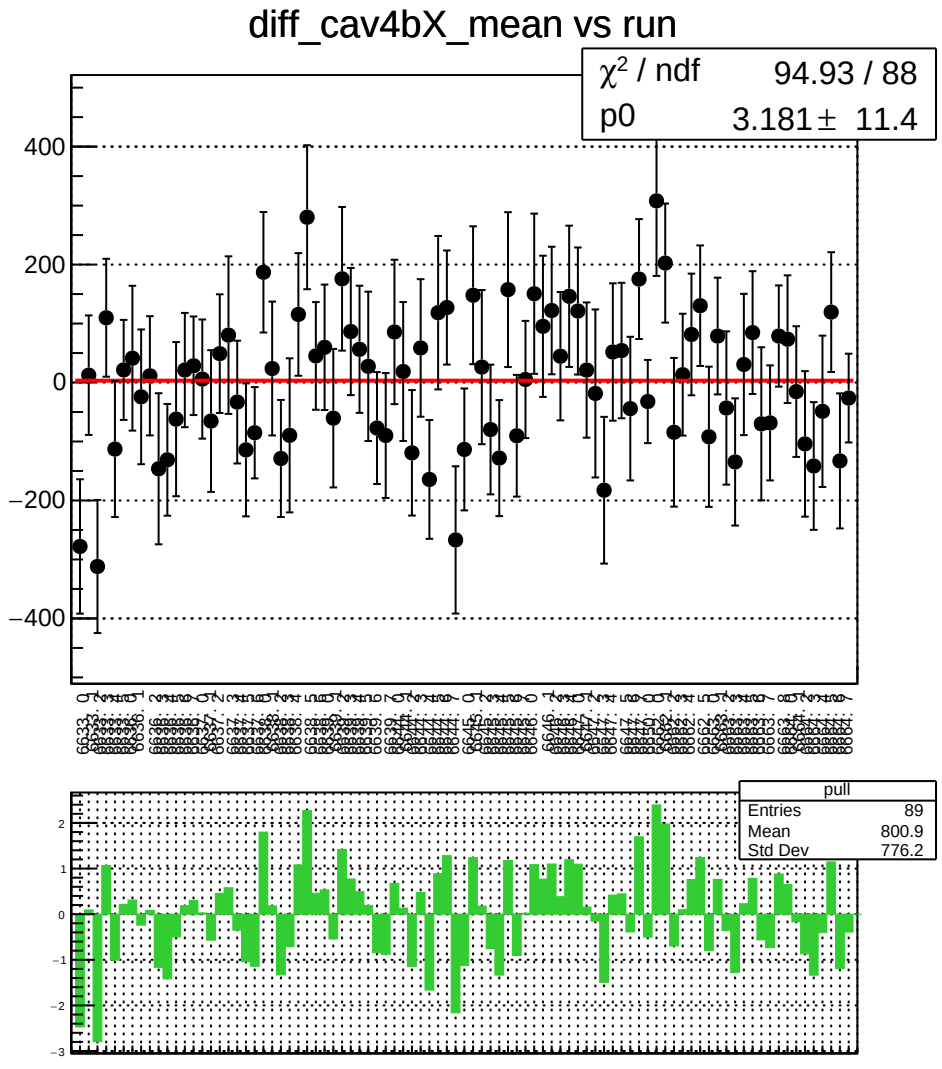

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

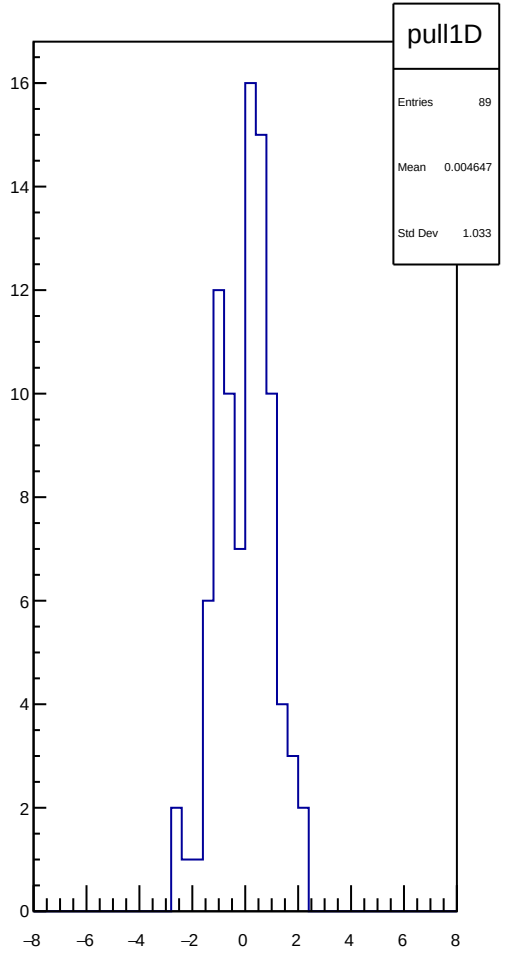

yield_bpm0l01X_rms vs run
χ^2 / ndf 5.922e+04 / 88
p0 0.005338 ± 4.146e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

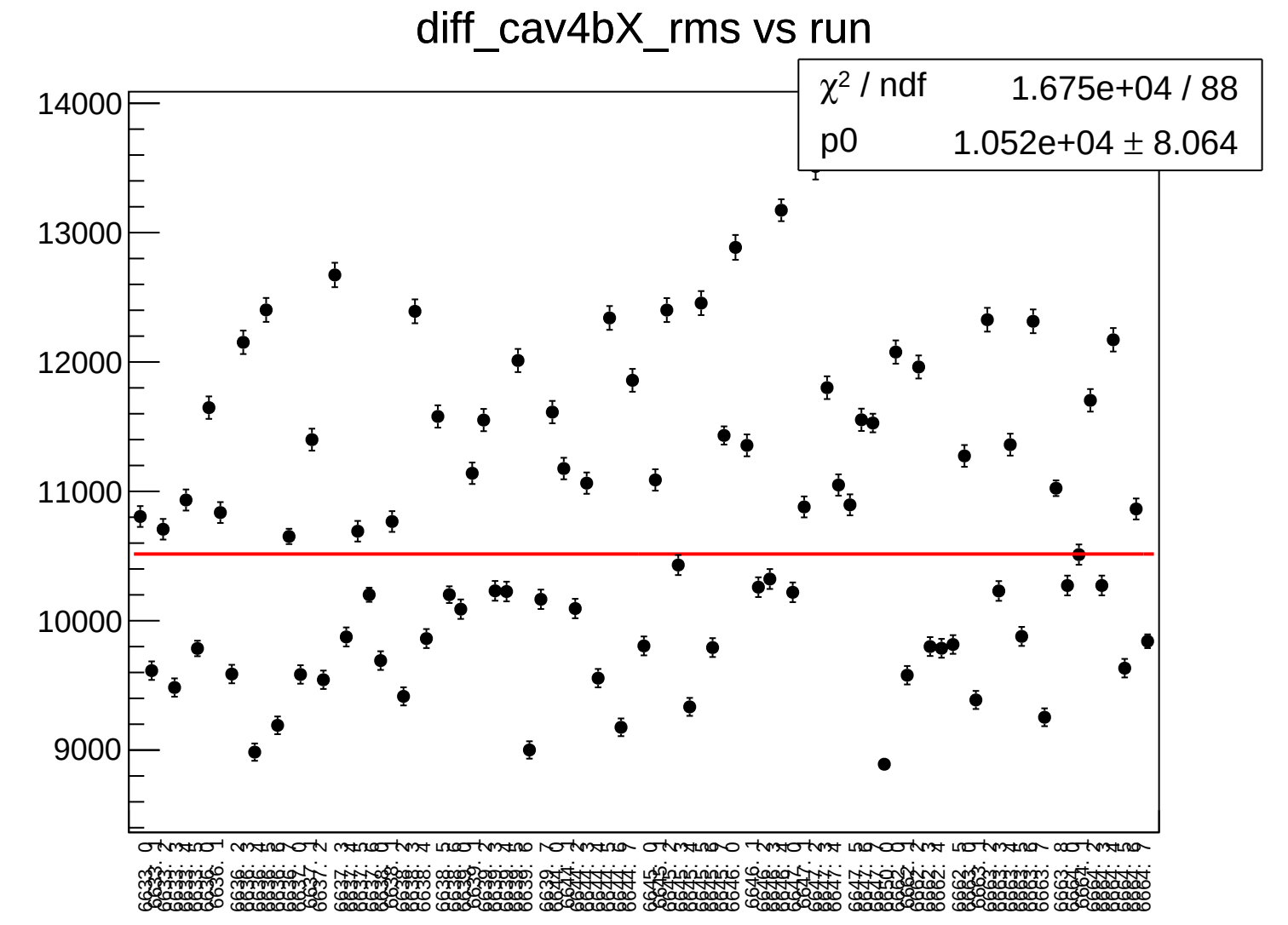

yield_bpm0l01Y_mean vs run
χ² / ndf 1.871e+07 / 88
p0 −7.529 ± 9.629e−06
−7.45
−7.5
−7.55
−7.6
−7.65
pull
Entries 89
Mean −241.2
Std Dev 288.5
1000
500
0
−500
−1000

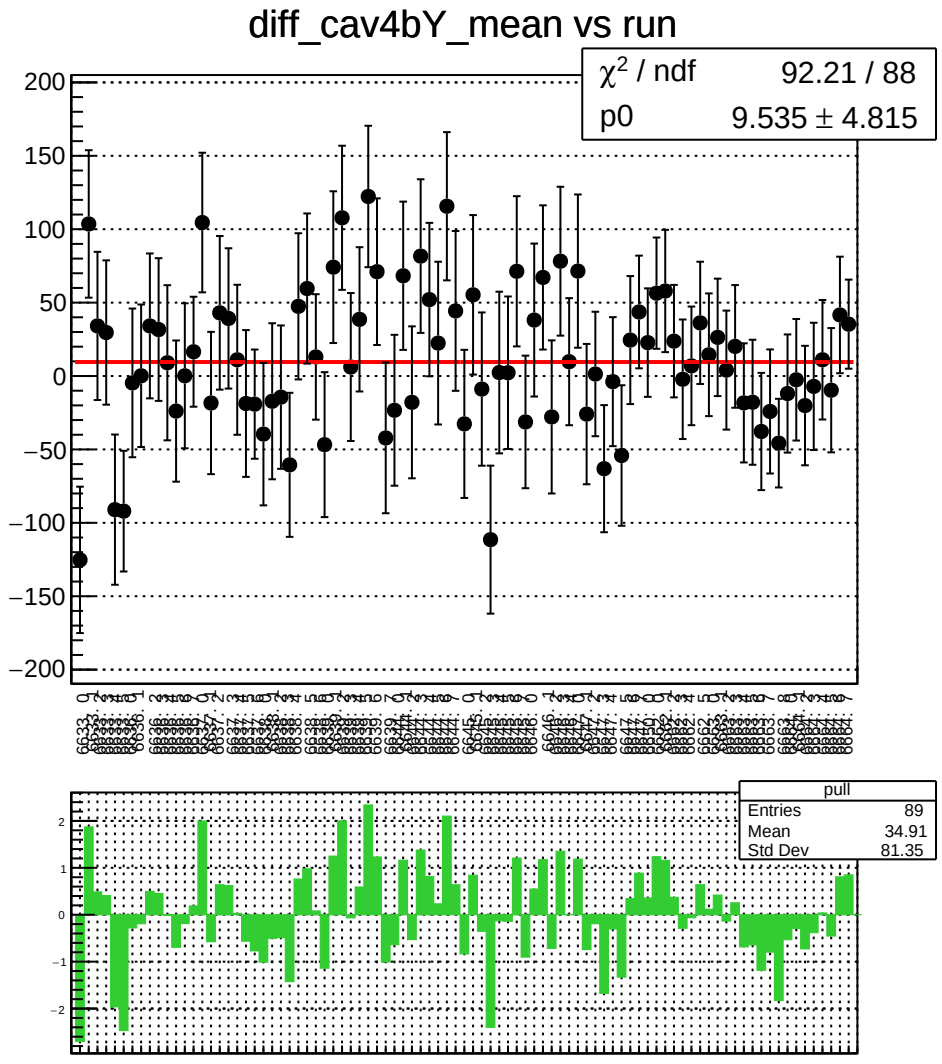

pull1D
Entries 89
Mean −2.049
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

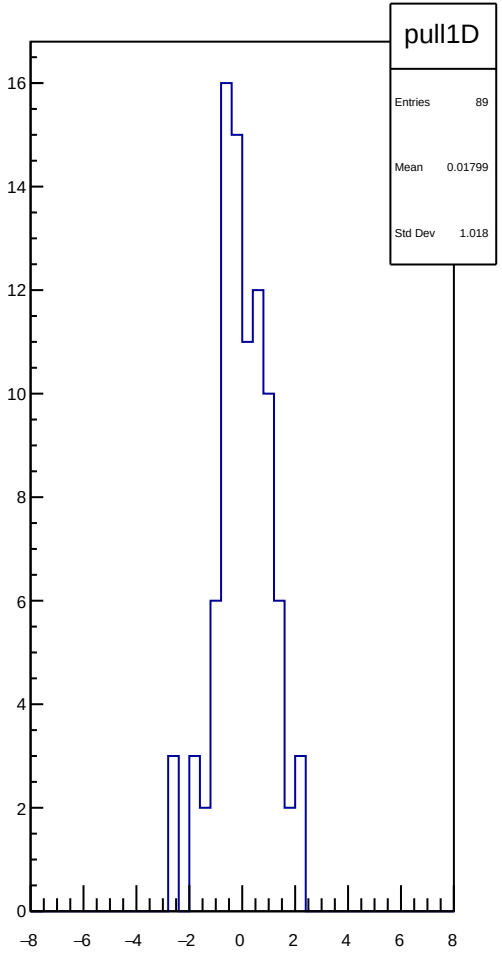

yield_bpm0l01Y_rms vs run
χ² / ndf 2.055e+05 / 88
p0 0.008371 ± 6.809e−06
0.1
0.08
0.06
0.04
0.02

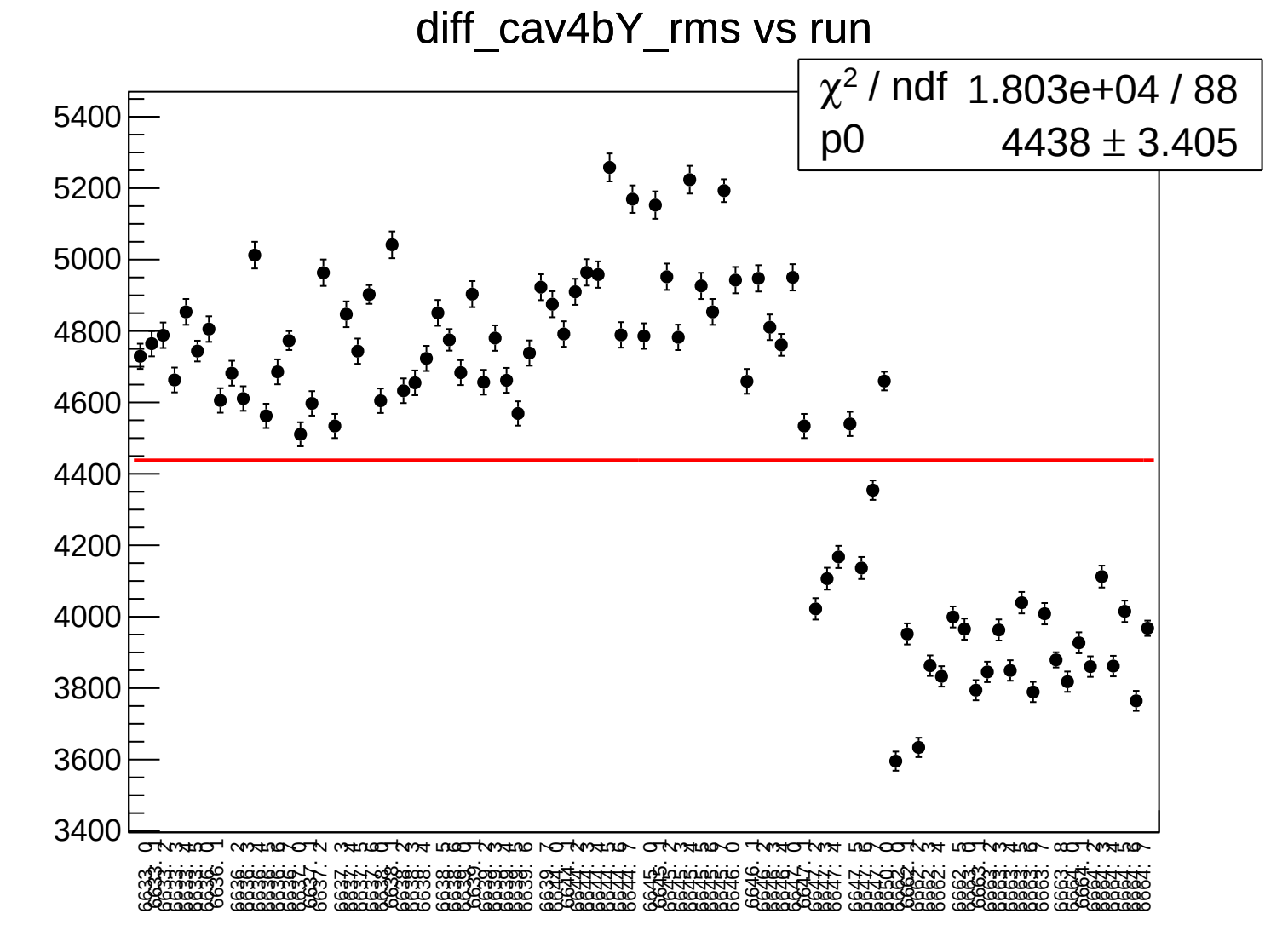

diff_cav4bX_mean vs run
χ² / ndf 94.93 / 88
p0 3.181 ± 11.4
400
200
0
−200
−400
pull
Entries 89
Mean 800.9
Std Dev 776.2
2
1
0
−1
−2
−3

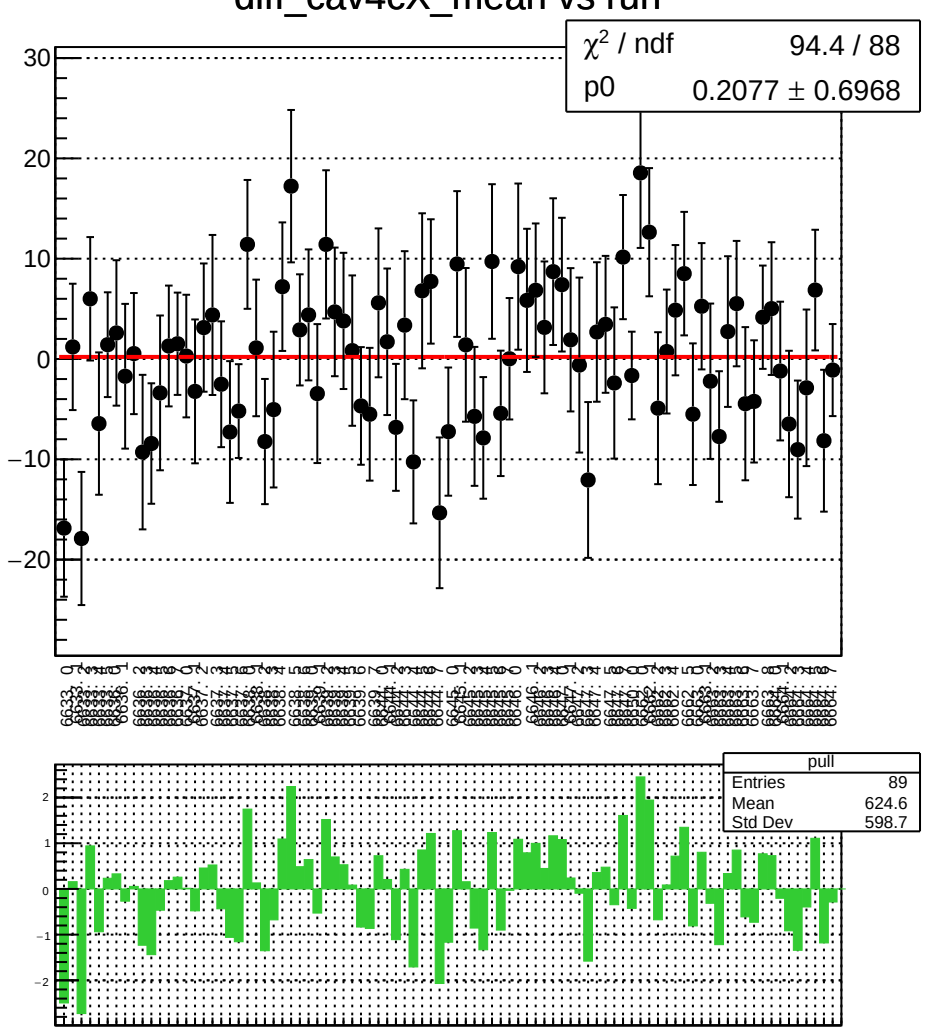

pull1D
Entries 89
Mean 0.004647
Std Dev 1.033
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

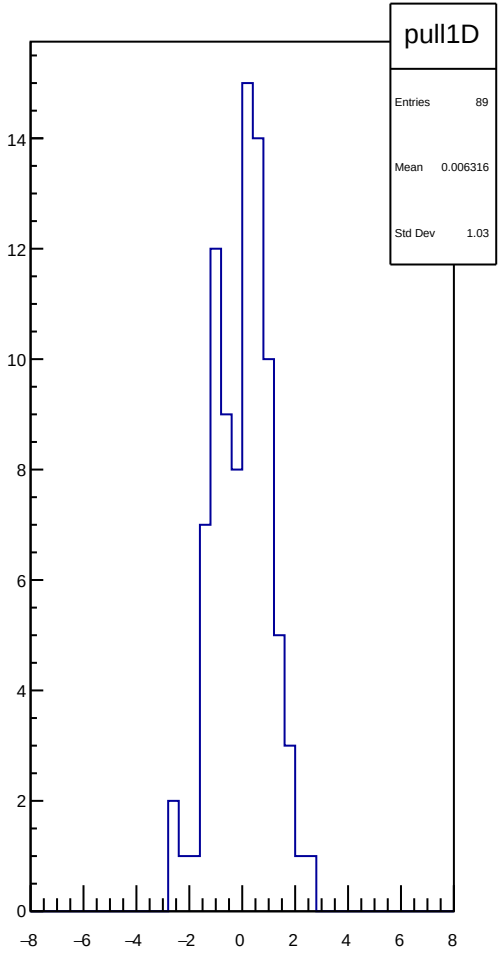

diff_cav4bX_rms vs run
χ² / ndf 1.675e+04 / 88
p0 1.052e+04 ± 8.064
14000
13000
12000
11000
10000
9000

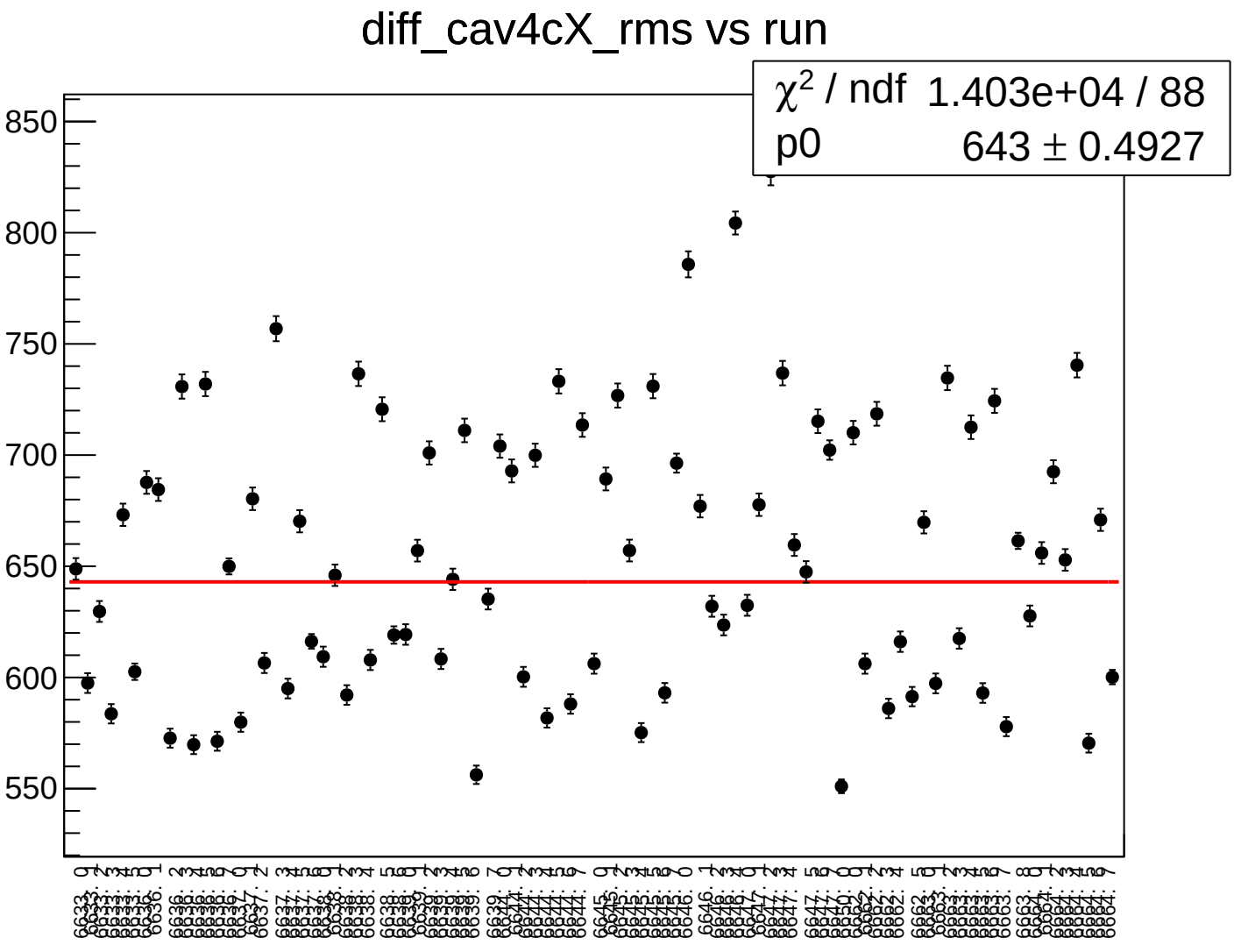

diff_cav4bY_mean vs run
χ^2 / ndf 92.21 / 88
p0 9.535 ± 4.815
pull
Entries 89
Mean 34.91
Std Dev 81.35

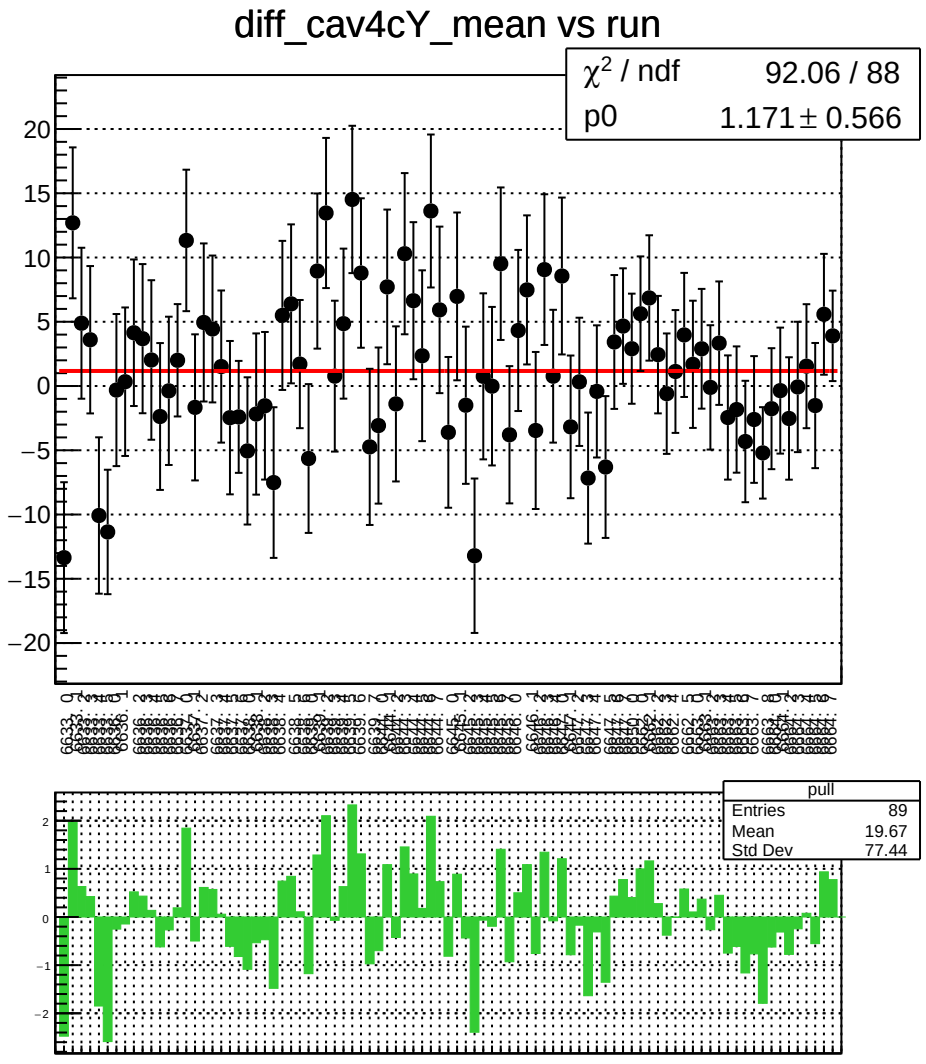

pull1D
Entries 89
Mean 0.01799
Std Dev 1.018

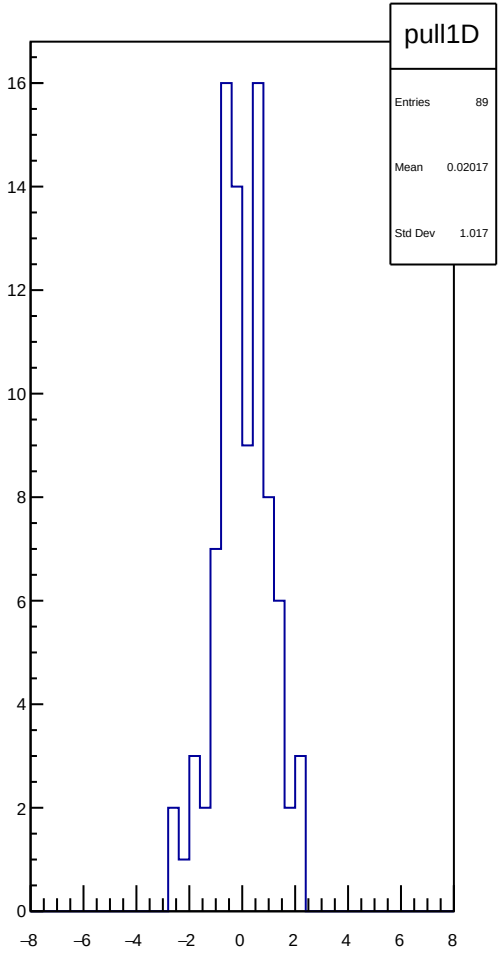

diff_cav4bY_rms vs run
χ^2 / ndf 1.803e+04 / 88
p0 4438 ± 3.405
5400
5200
5000
4800
4600
4400
4200
4000
3800
3600
3400

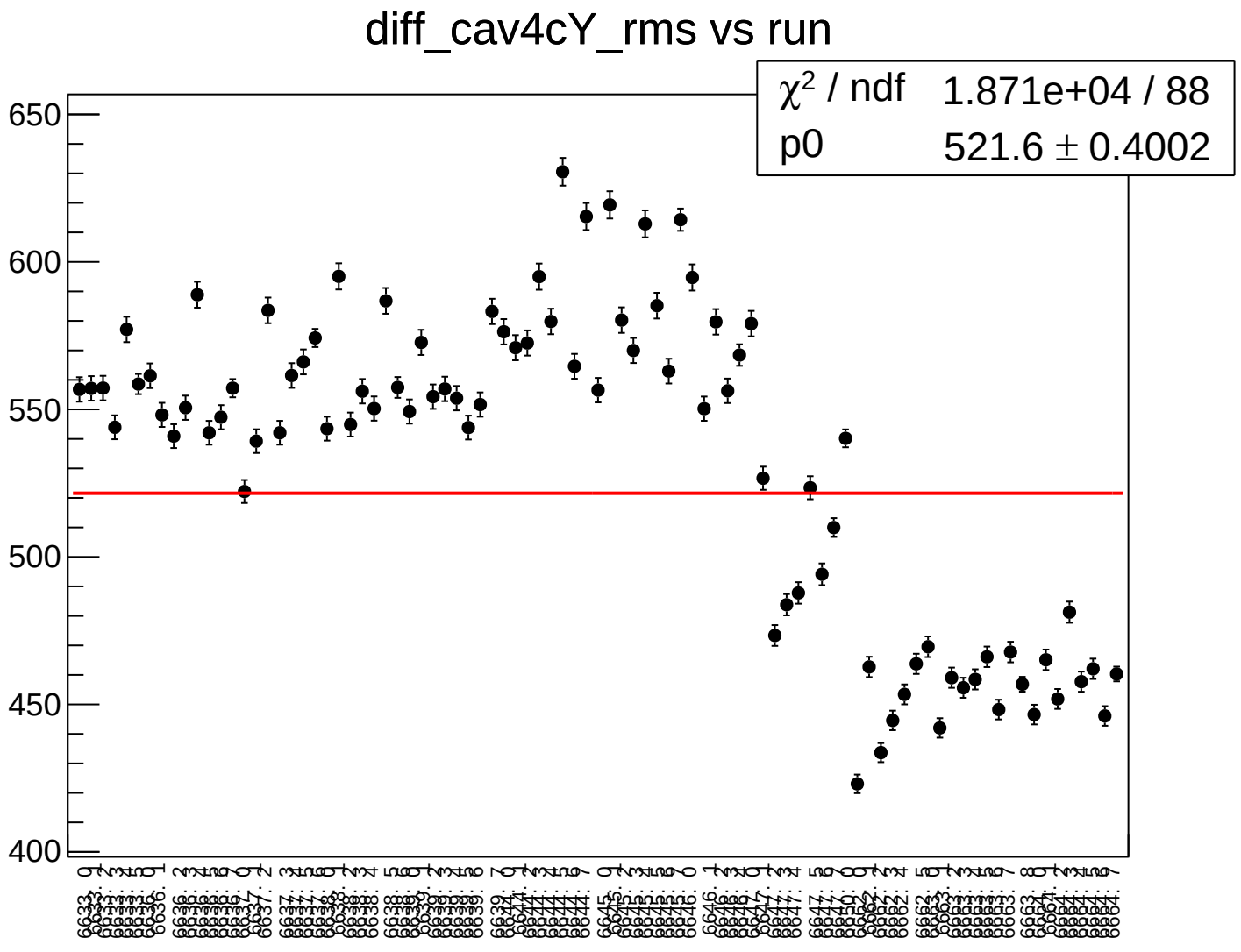

diff_cav4cX_mean vs run
χ² / ndf 94.4 / 88
p0 0.2077 ± 0.6968
pull
Entries 89
Mean 624.6
Std Dev 598.7

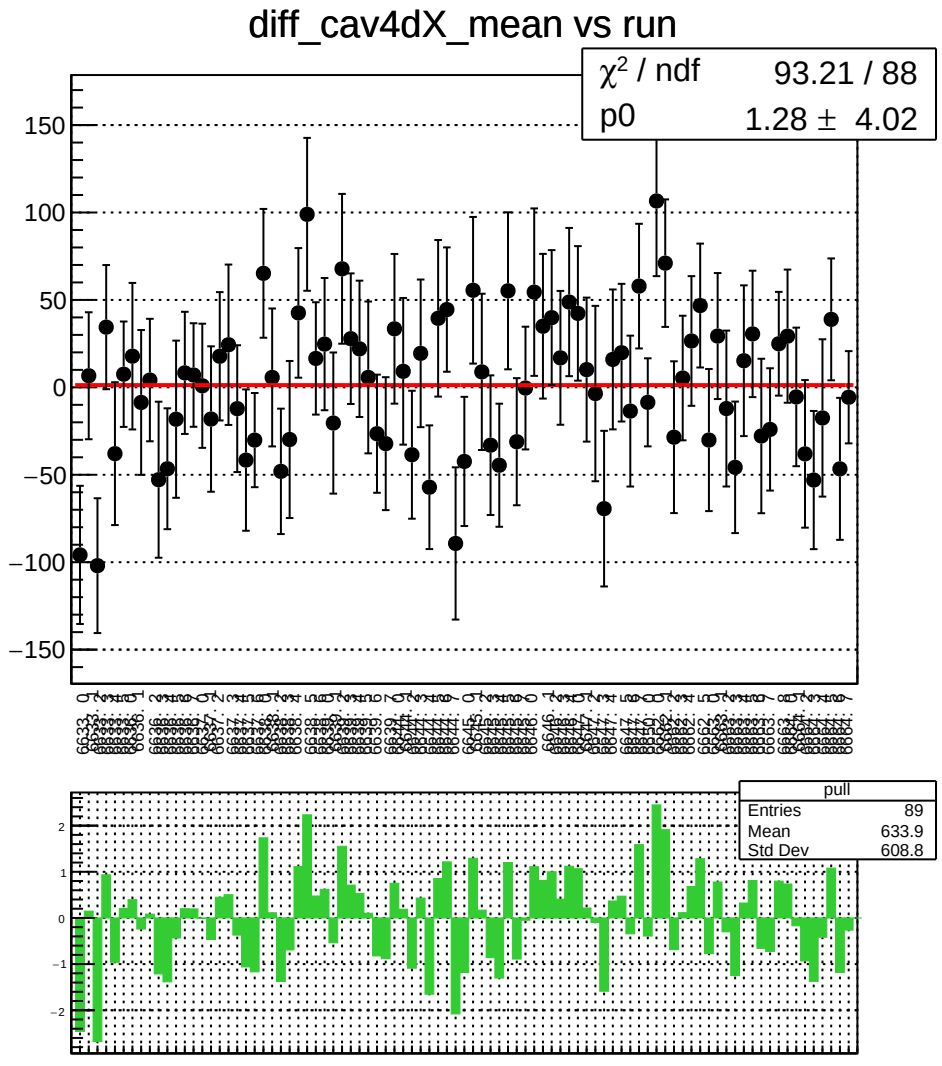

pull1D
Entries 89
Mean 0.006316
Std Dev 1.03

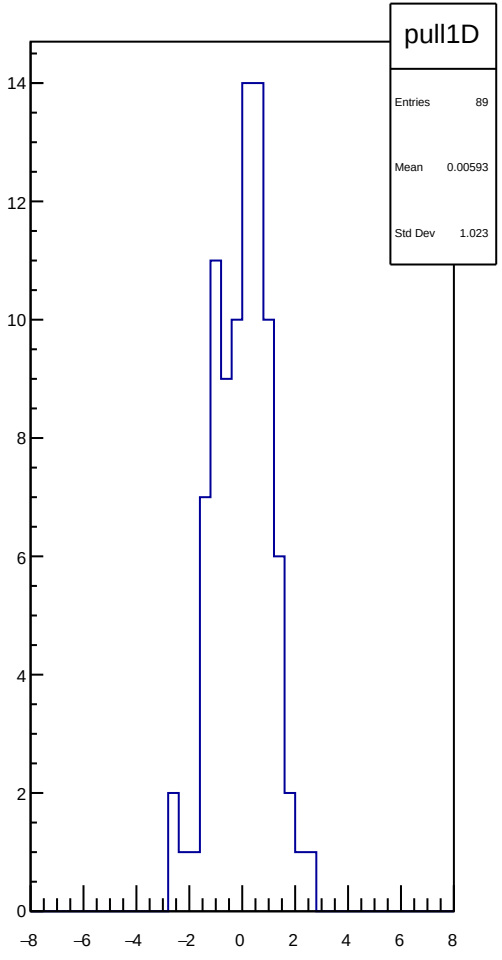

diff_cav4cX_rms vs run
χ² / ndf 1.403e+04 / 88
p0 643 ± 0.4927
850
800
750
700
650
600
550

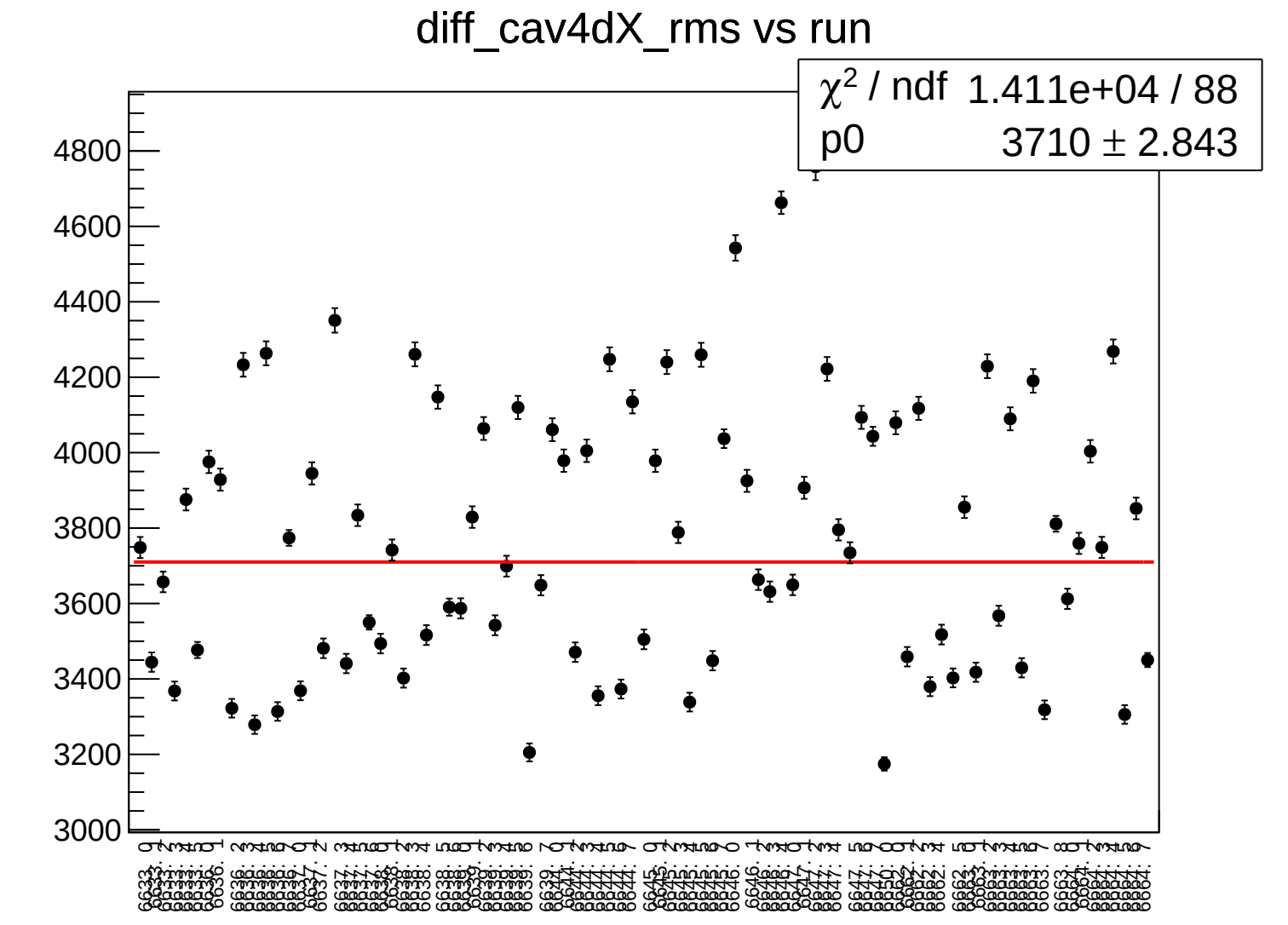

diff_cav4cY_mean vs run
χ² / ndf 92.06 / 88
p0 1.171 ± 0.566
pull
Entries 89
Mean 19.67
Std Dev 77.44

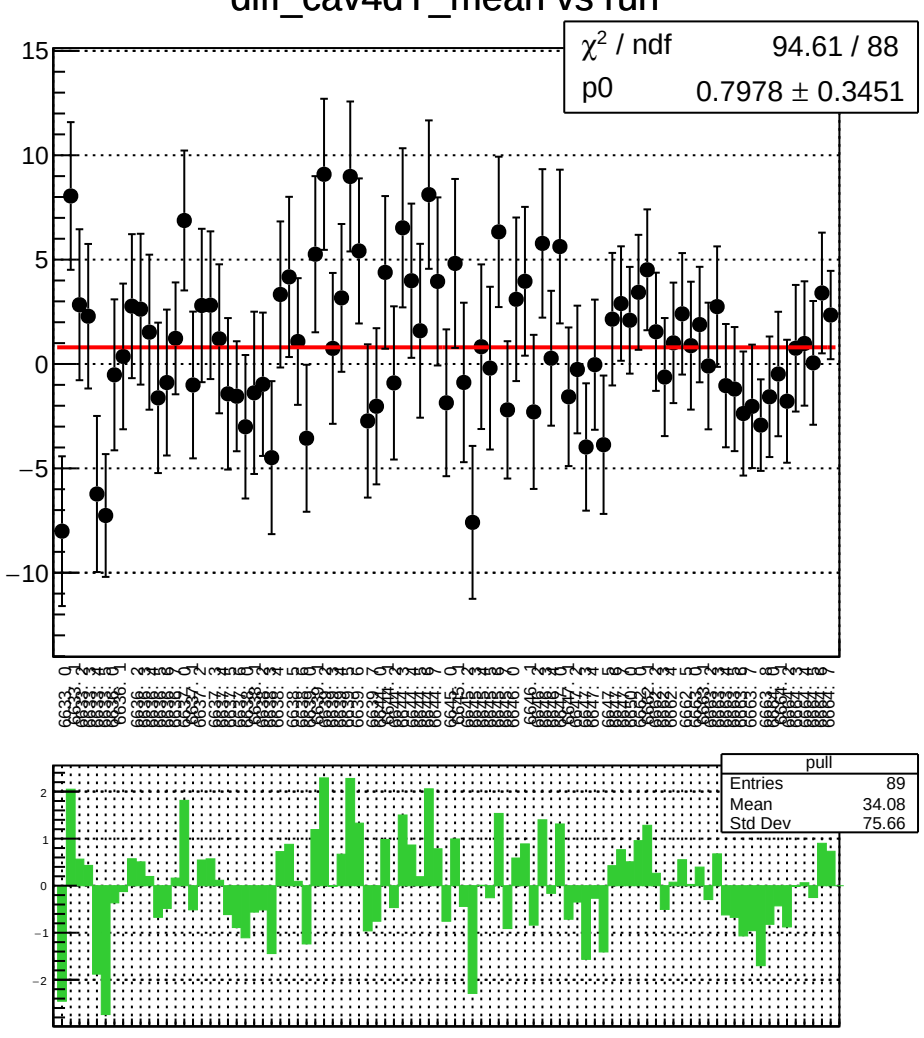

pull1D
Entries 89
Mean 0.02017
Std Dev 1.017

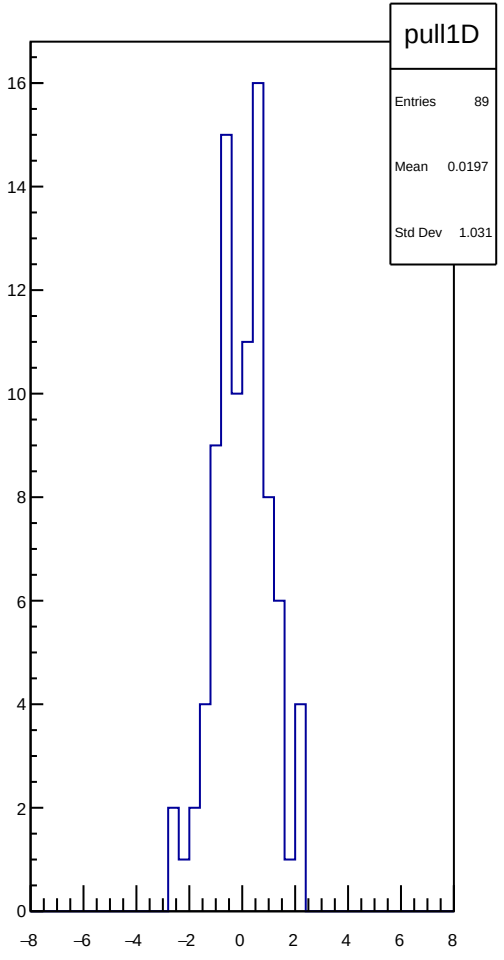

diff_cav4cY_rms vs run
χ² / ndf 1.871e+04 / 88
p0 521.6 ± 0.4002
650
600
550
500
450
400

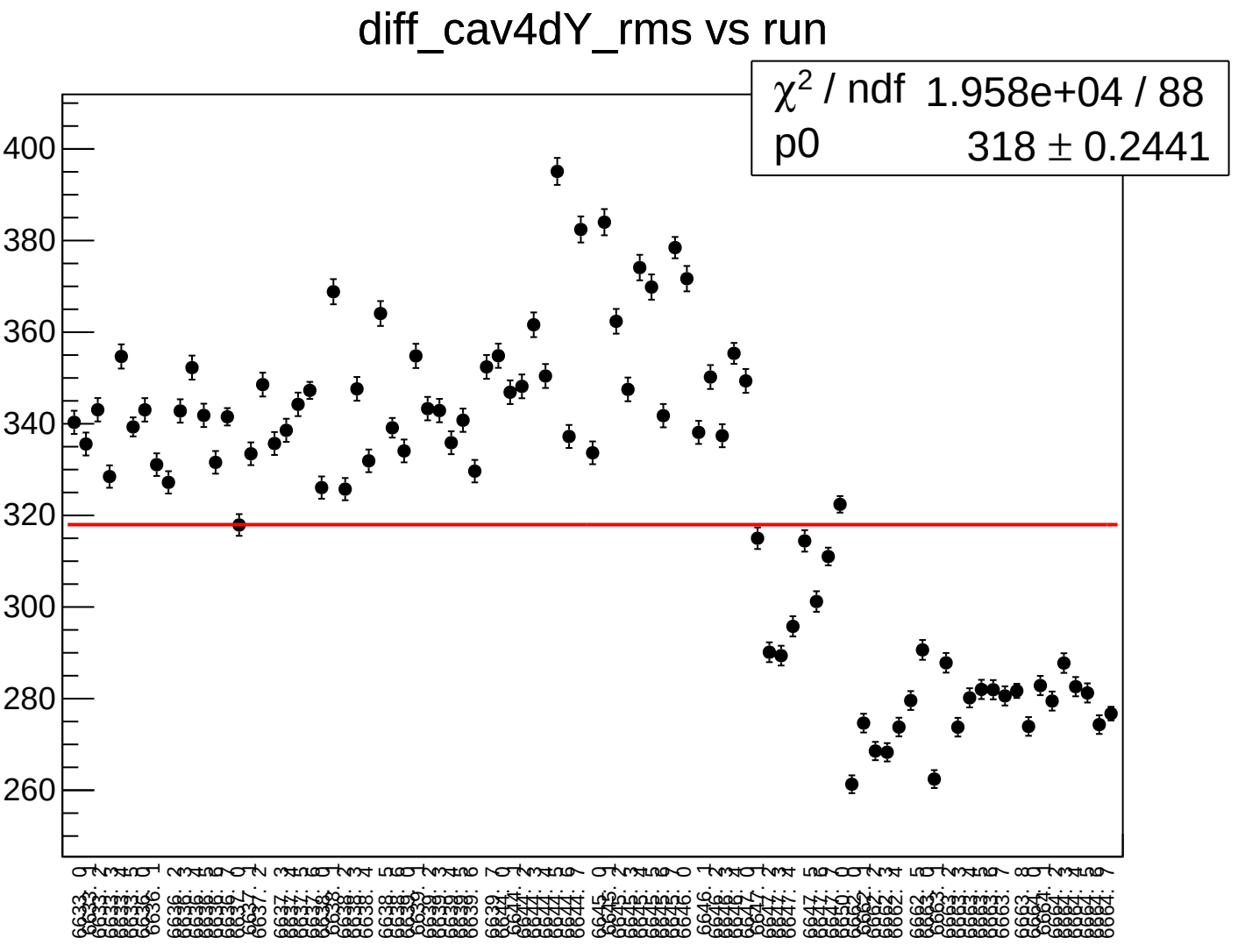

diff_cav4dX_mean vs run
χ^2 / ndf 93.21 / 88
p0 1.28 ± 4.02
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 633.9
Std Dev 608.8
2
1
0
−1
−2

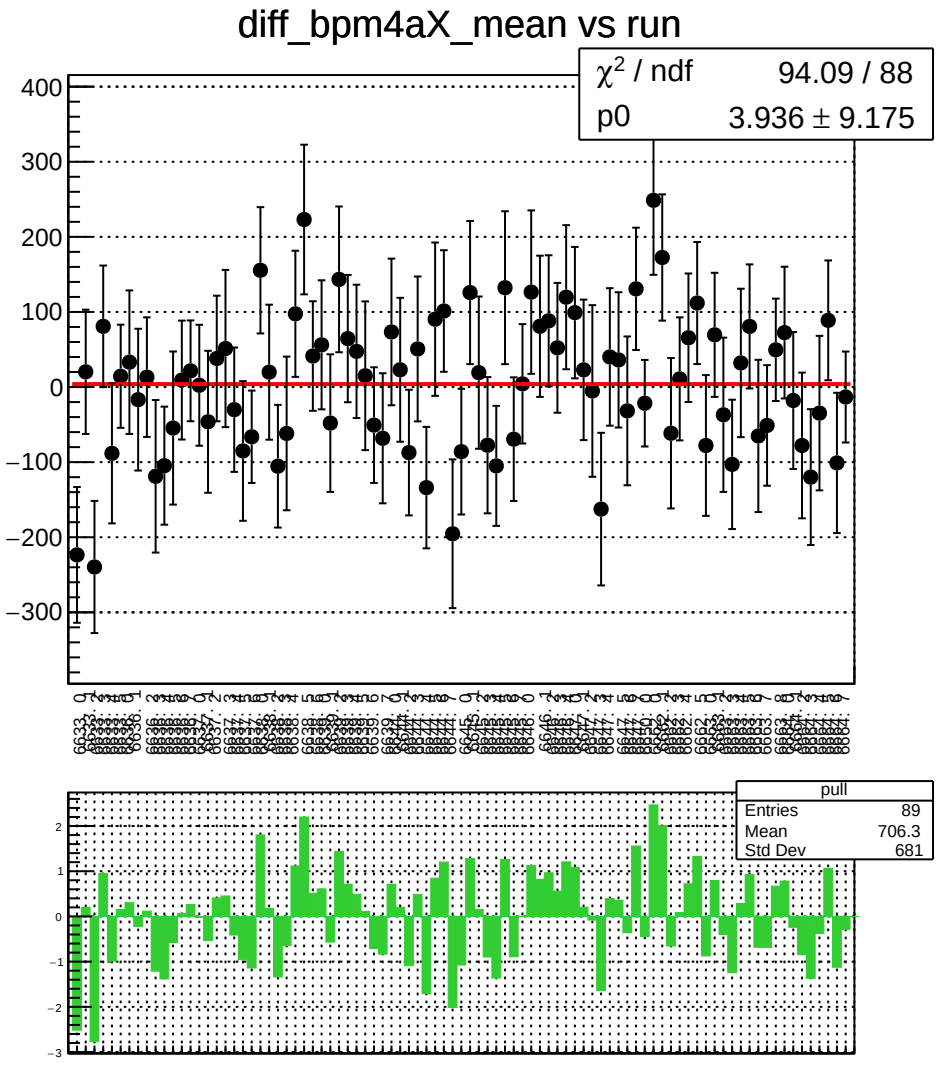

pull1D
Entries 89
Mean 0.00593
Std Dev 1.023
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

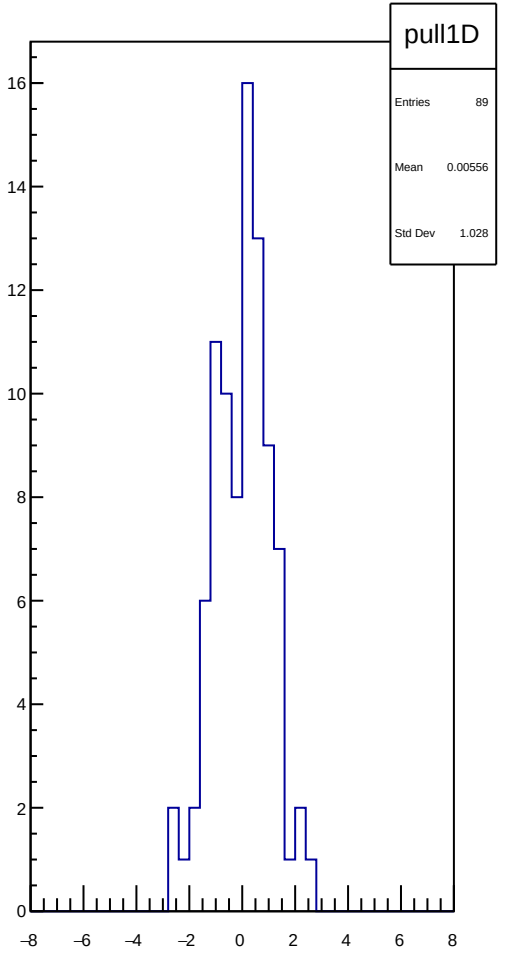

diff_cav4dX_rms vs run
χ^2 / ndf 1.411e+04 / 88
p0 3710 ± 2.843
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000

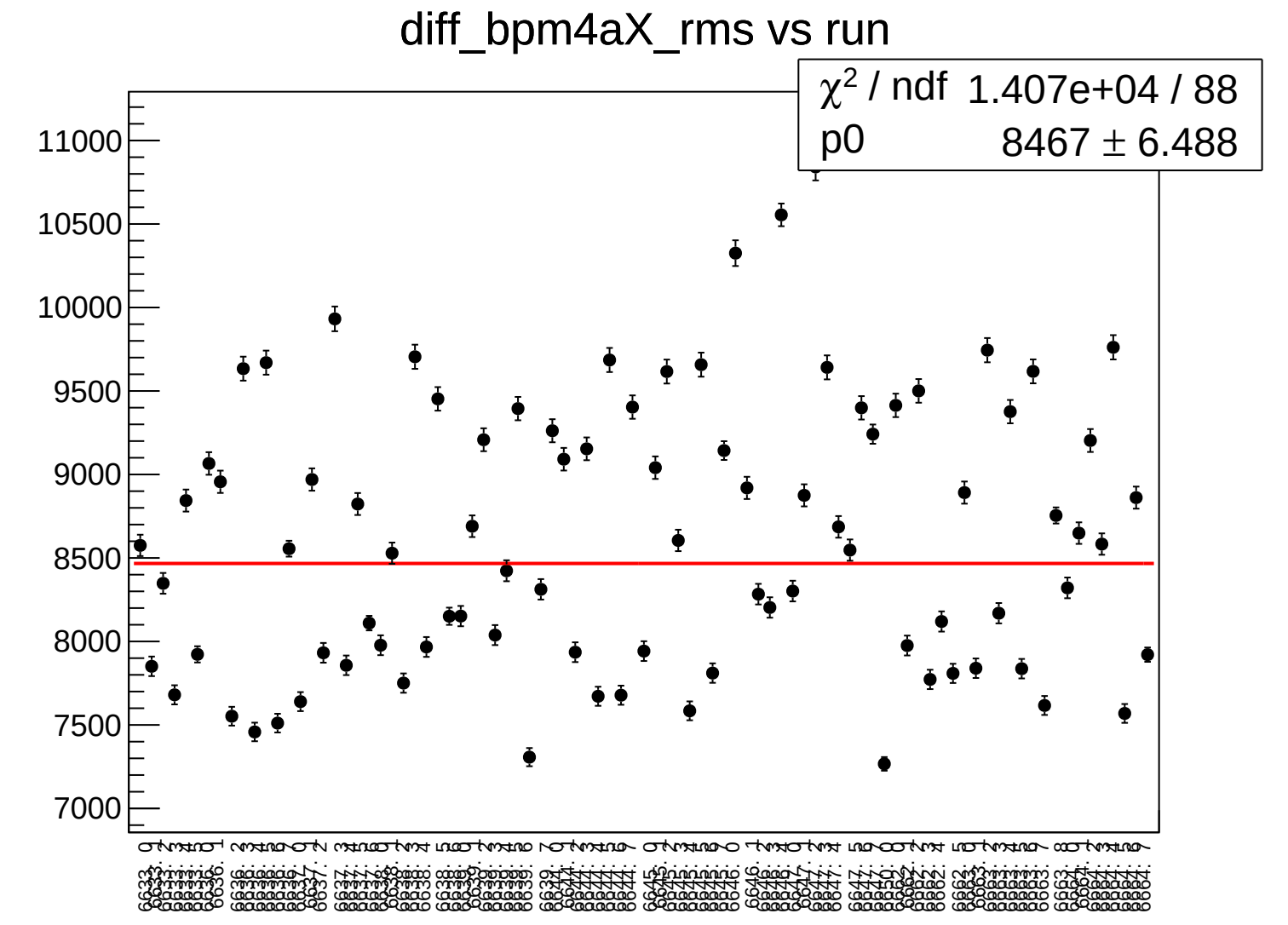

diff_cav4dY_mean vs run
χ² / ndf 94.61 / 88
p0 0.7978 ± 0.3451
pull
Entries 89
Mean 34.08
Std Dev 75.66

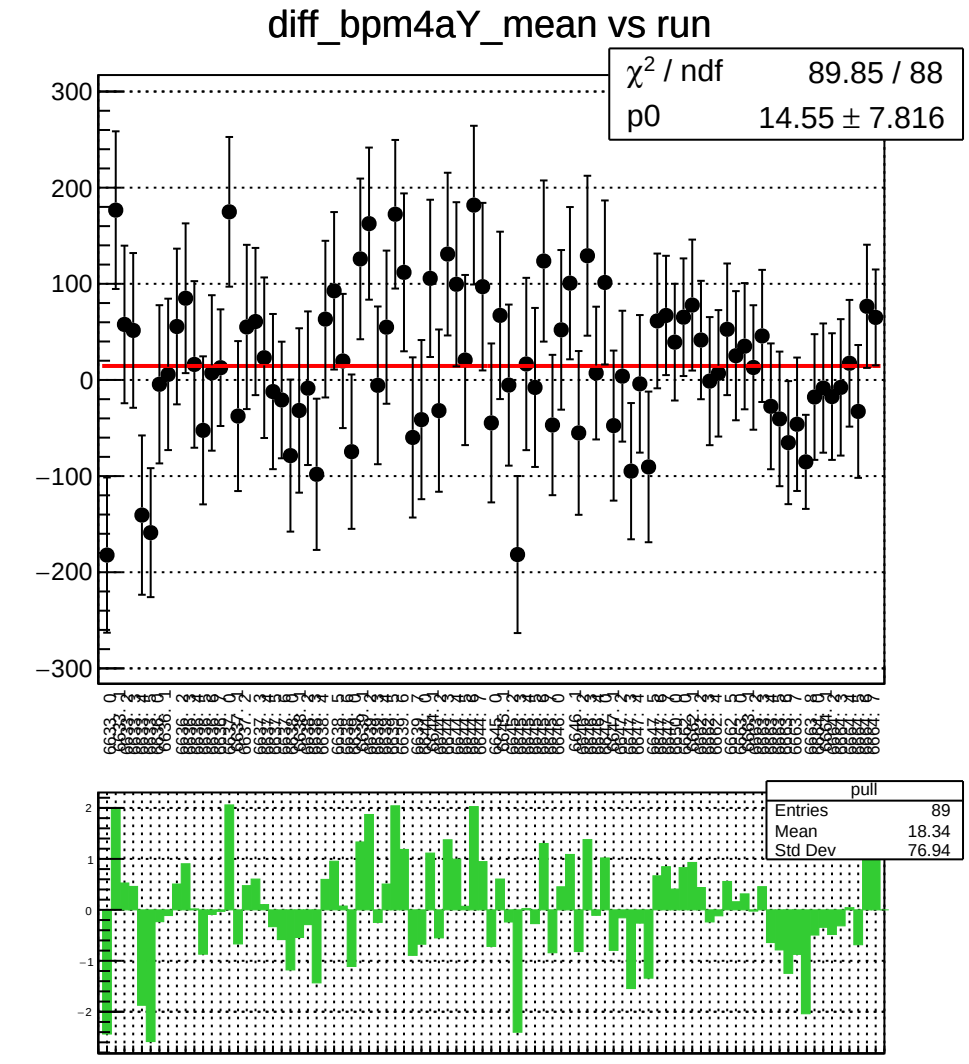

pull1D
Entries 89
Mean 0.0197
Std Dev 1.031

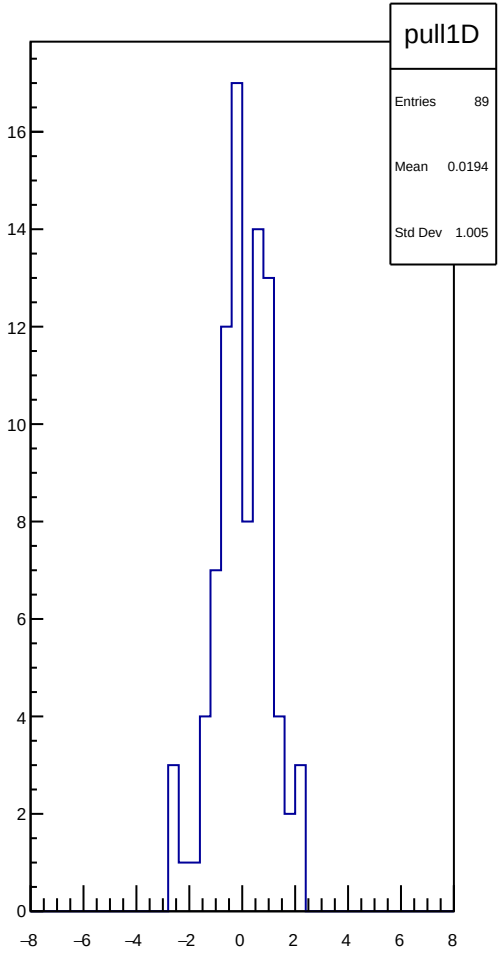

diff_cav4dY_rms vs run
χ² / ndf 1.958e+04 / 88
p0 318 ± 0.2441
400
380
360
340
320
300
280
260

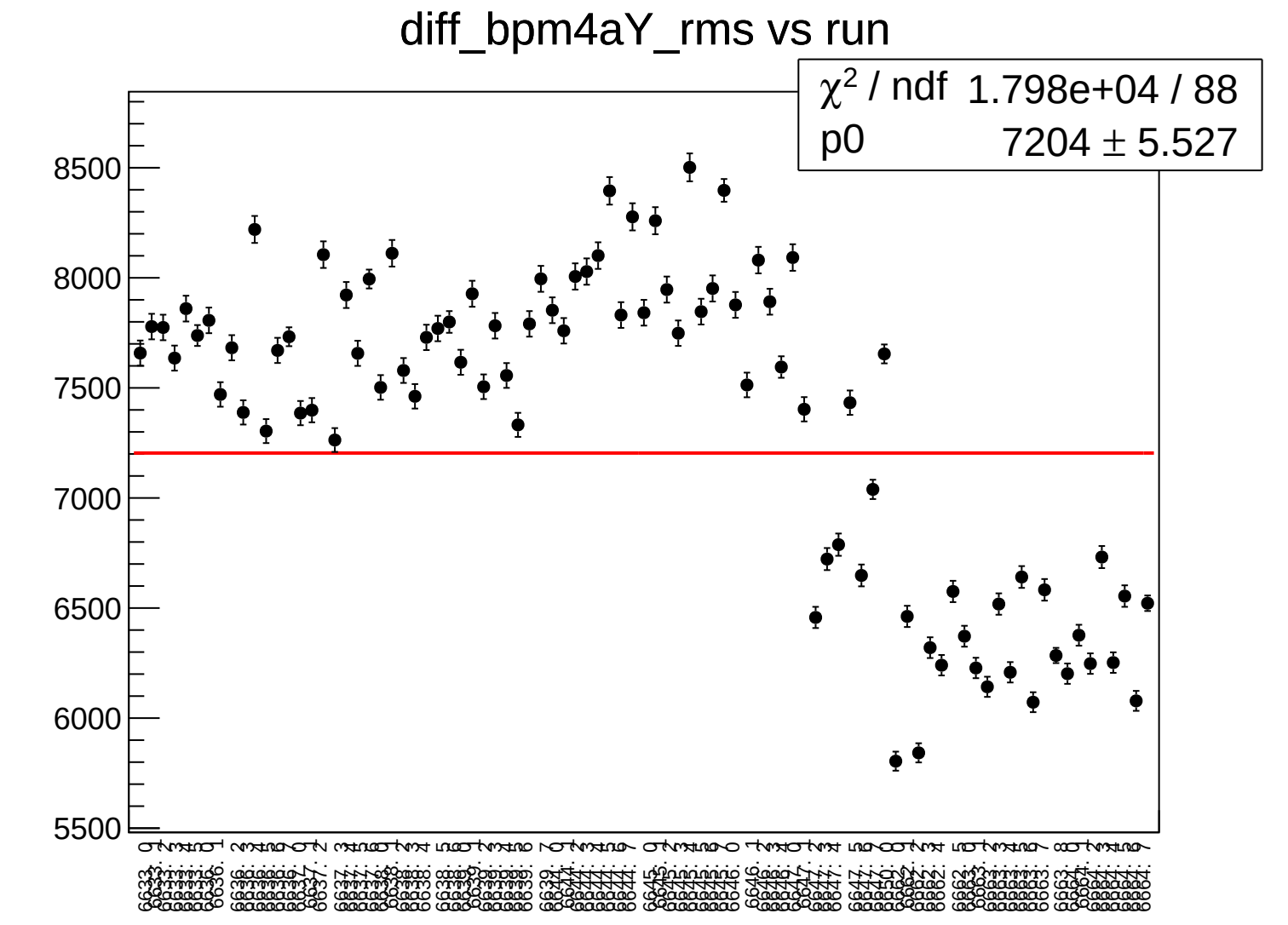

diff_bpm4aX_mean vs run
χ² / ndf 94.09 / 88
p0 3.936 ± 9.175
pull
Entries 89
Mean 706.3
Std Dev 681

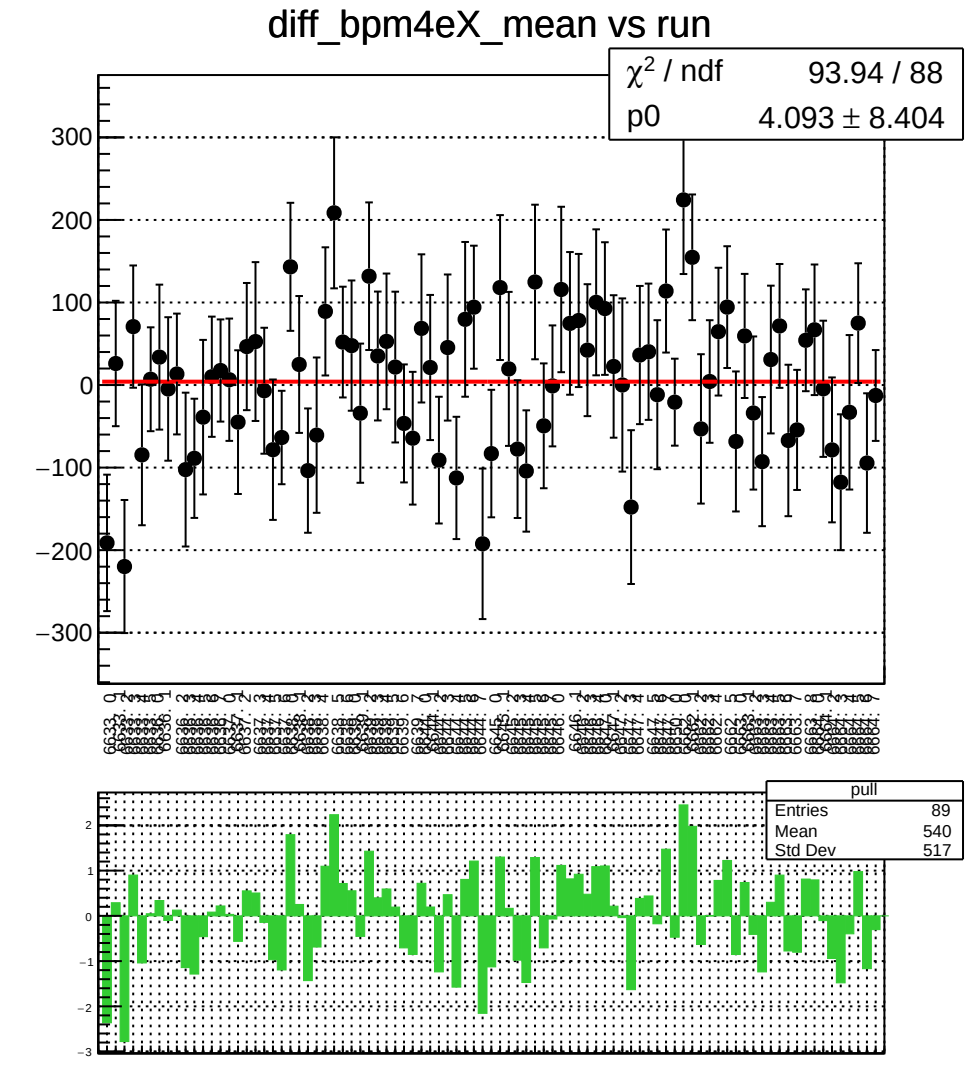

pull1D
Entries 89
Mean 0.00556
Std Dev 1.028

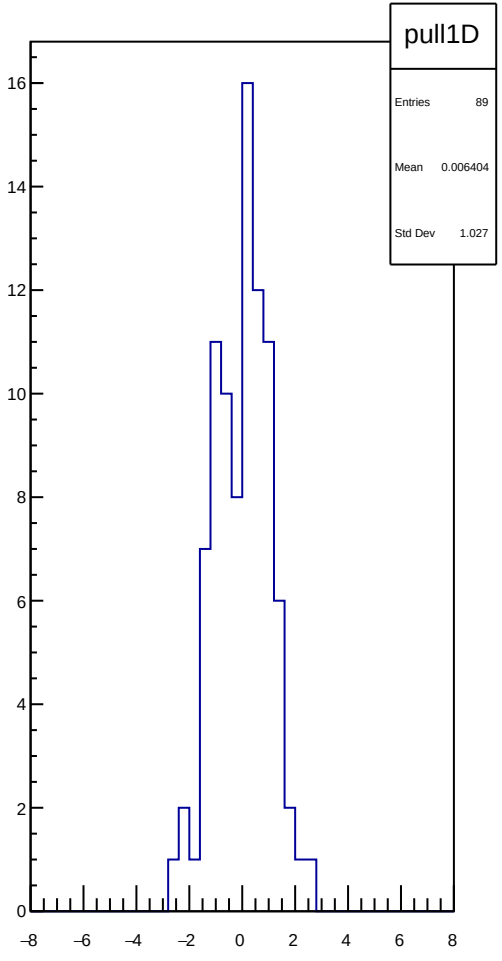

diff_bpm4aX_rms vs run
χ² / ndf 1.407e+04 / 88
p0 8467 ± 6.488
11000
10500
10000
9500
9000
8500
8000
7500
7000

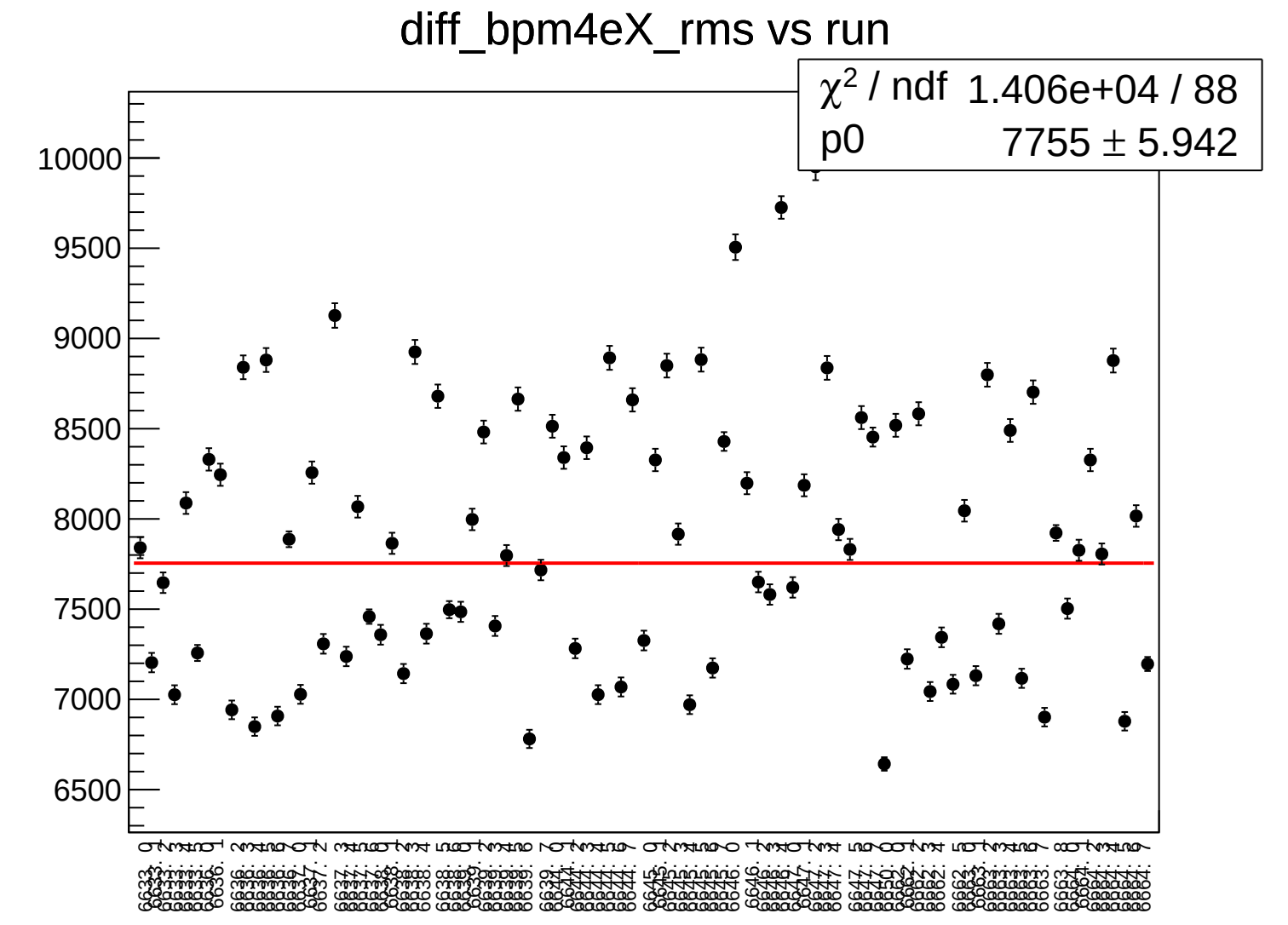

diff_bpm4aY_mean vs run
χ² / ndf 89.85 / 88
p0 14.55 ± 7.816
300
200
100
0
−100
−200
−300
pull
Entries 89
Mean 18.34
Std Dev 76.94
2
1
0
−1
−2

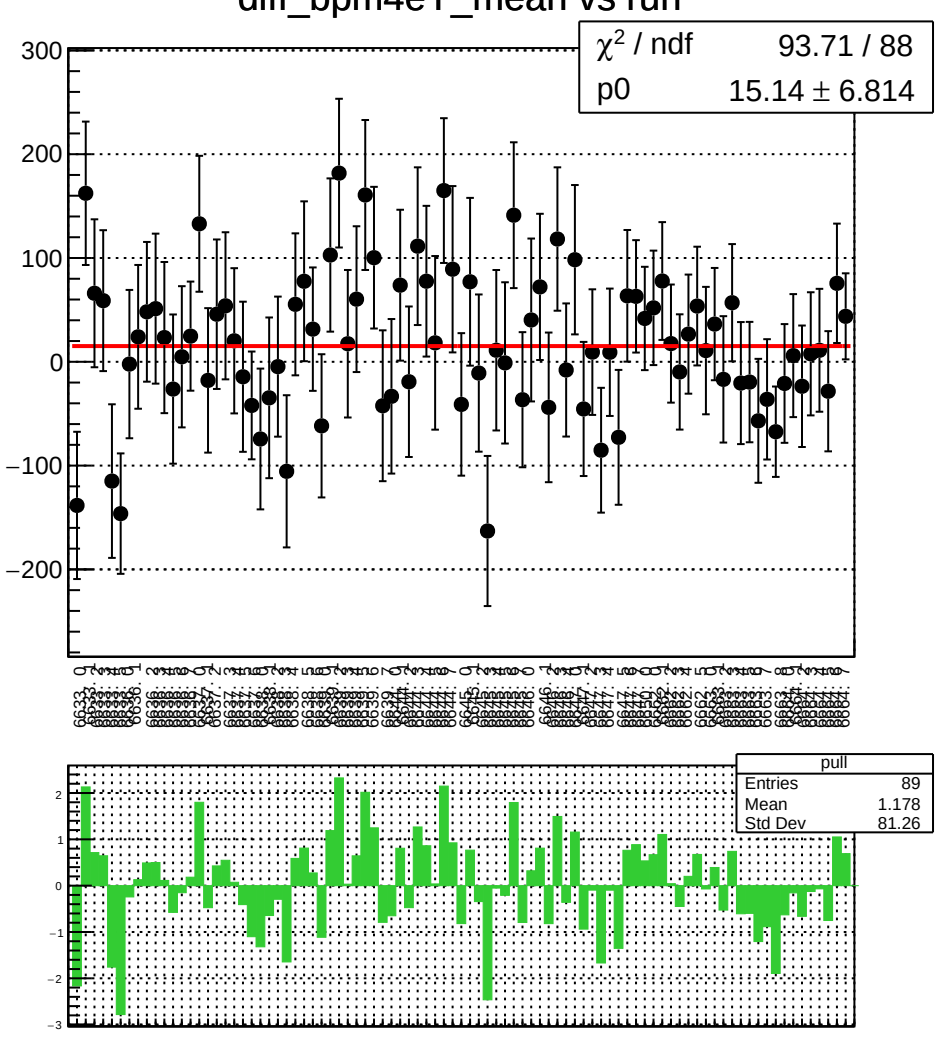

pull1D
Entries 89
Mean 0.0194
Std Dev 1.005
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

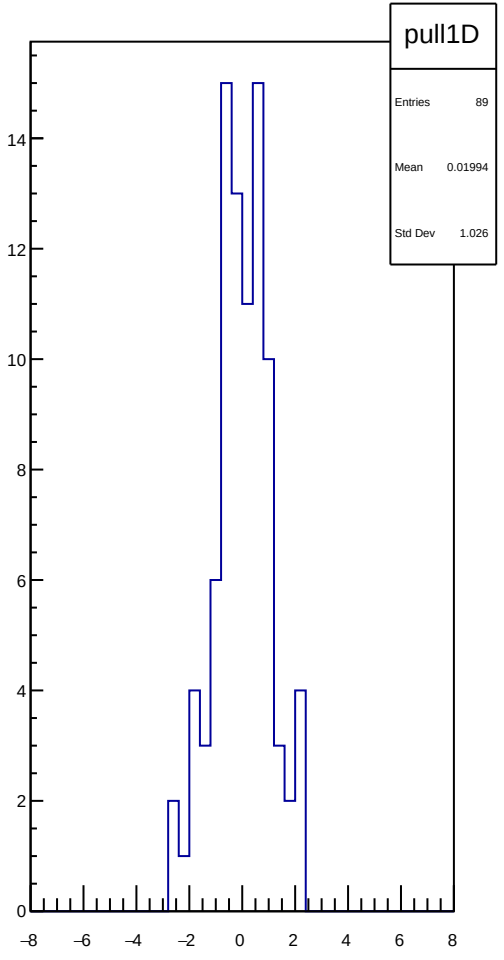

diff_bpm4aY_rms vs run
χ² / ndf 1.798e+04 / 88
p0 7204 ± 5.527
8500
8000
7500
7000
6500
6000
5500

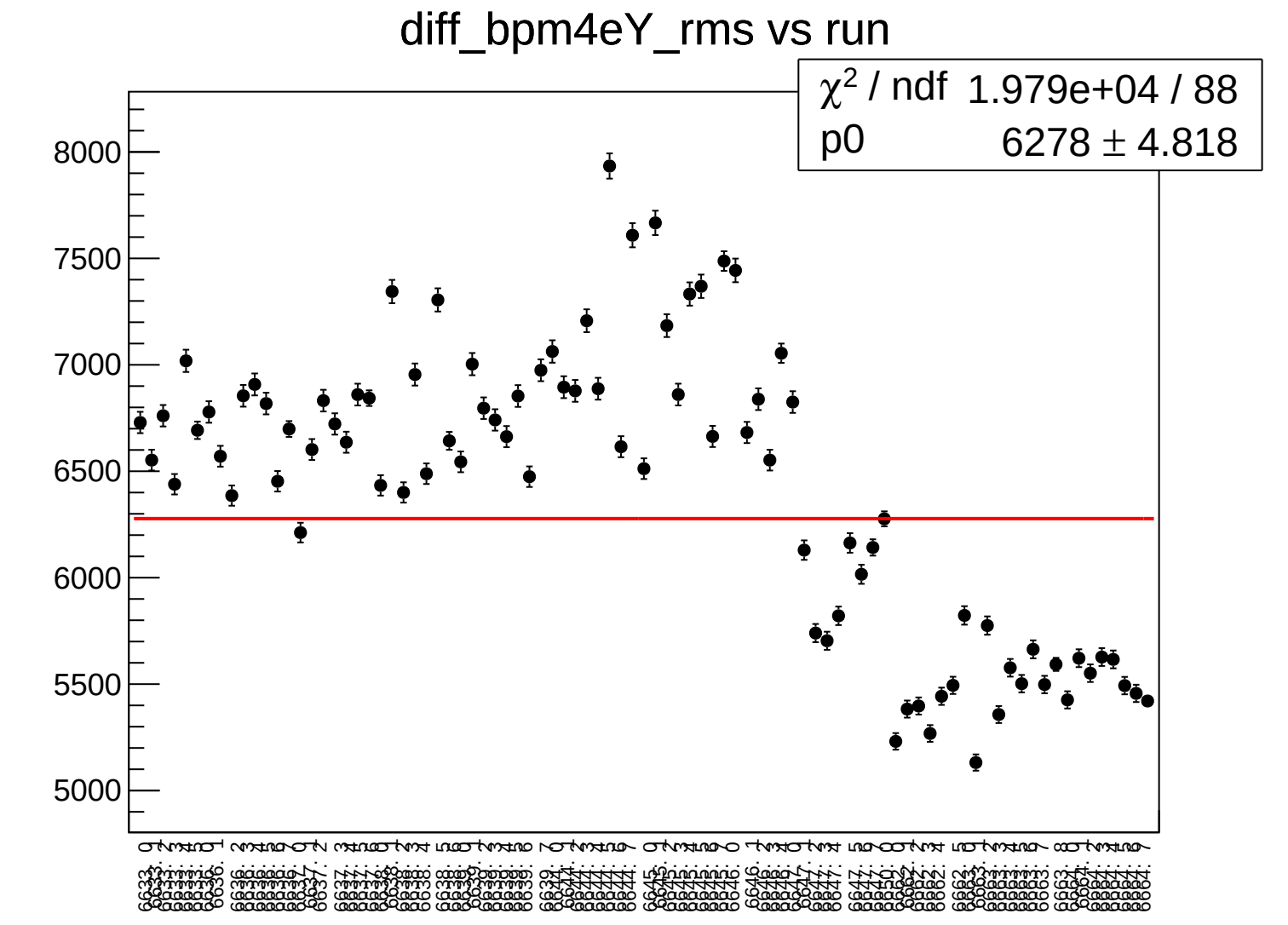

diff_bpm4eX_mean vs run
χ^2 / ndf 93.94 / 88
p0 4.093 ± 8.404
pull
Entries 89
Mean 540
Std Dev 517

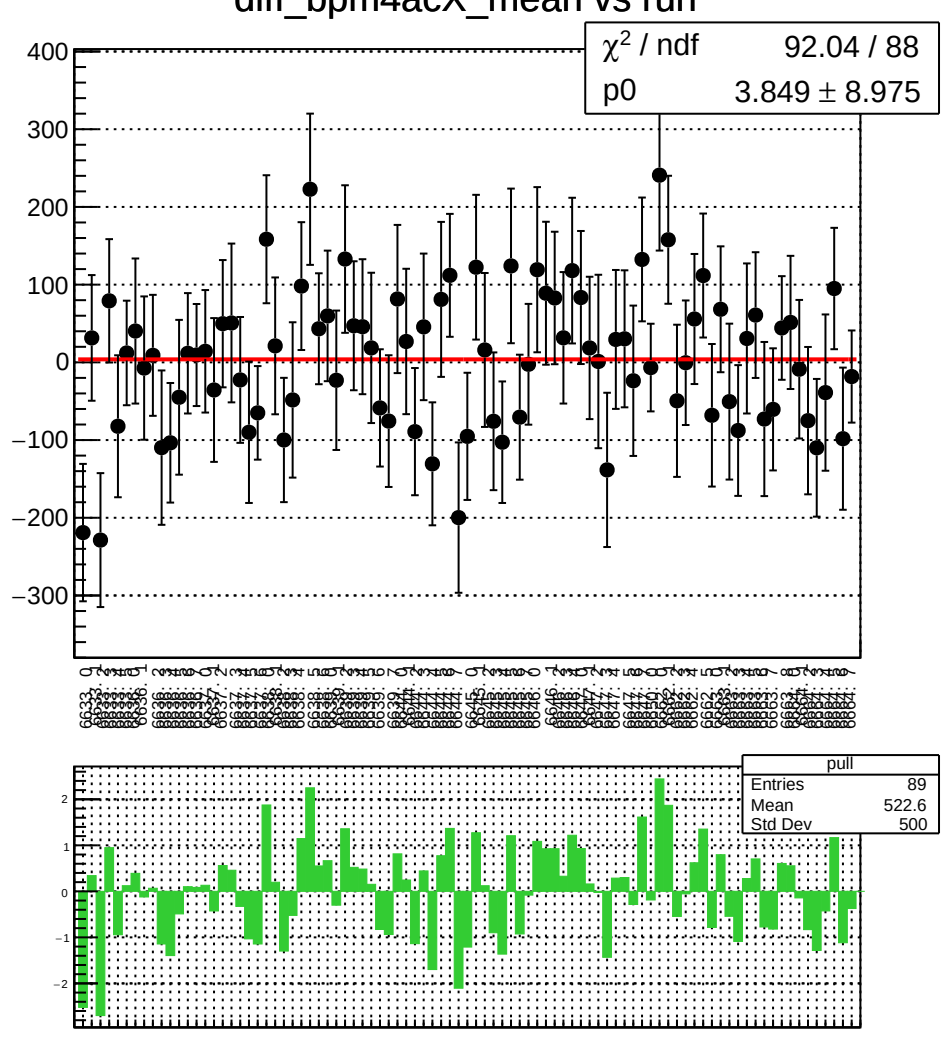

pull1D
Entries 89
Mean 0.006404
Std Dev 1.027

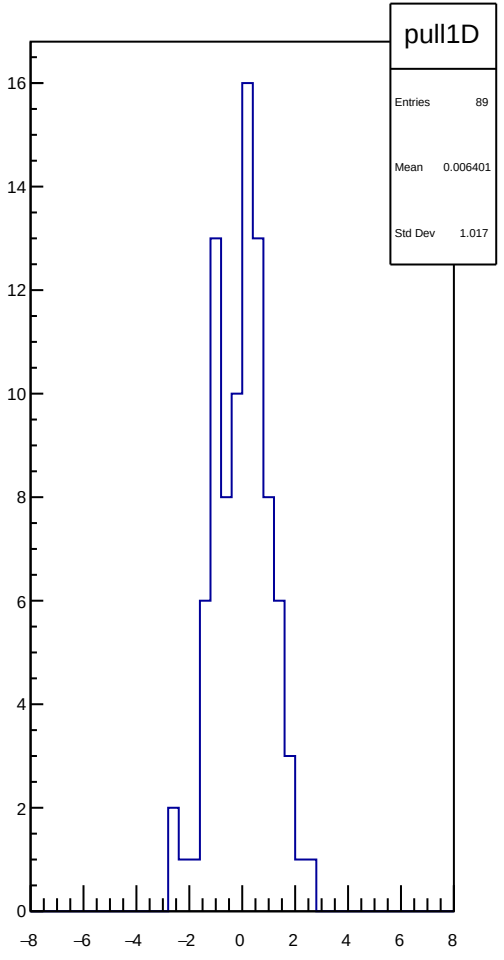

diff_bpm4eX_rms vs run
χ² / ndf 1.406e+04 / 88
p0 7755 ± 5.942
10000
9500
9000
8500
8000
7500
7000
6500

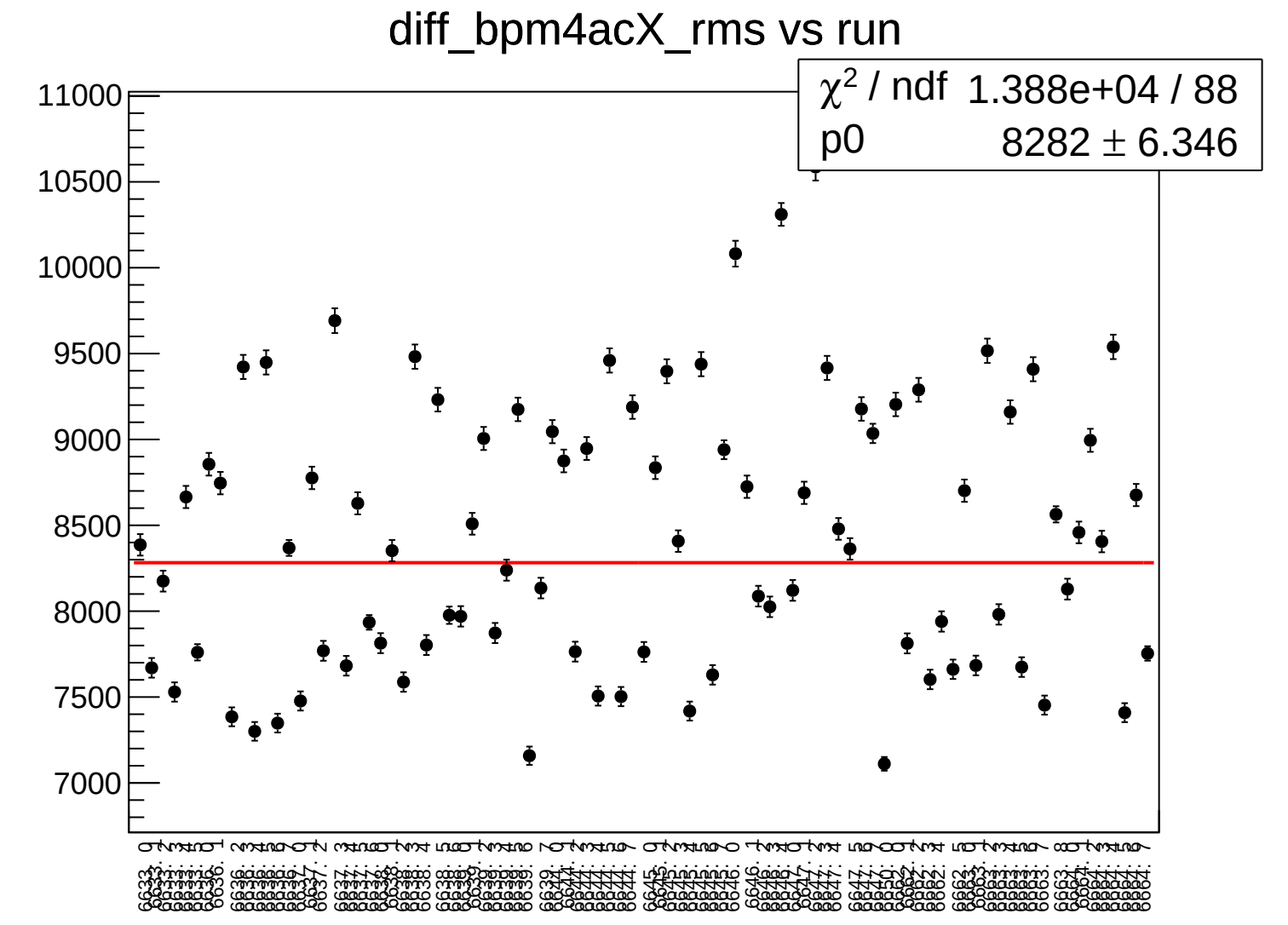

diff_bpm4eY_mean vs run
χ² / ndf 93.71 / 88
p0 15.14 ± 6.814
pull
Entries 89
Mean 1.178
Std Dev 81.26

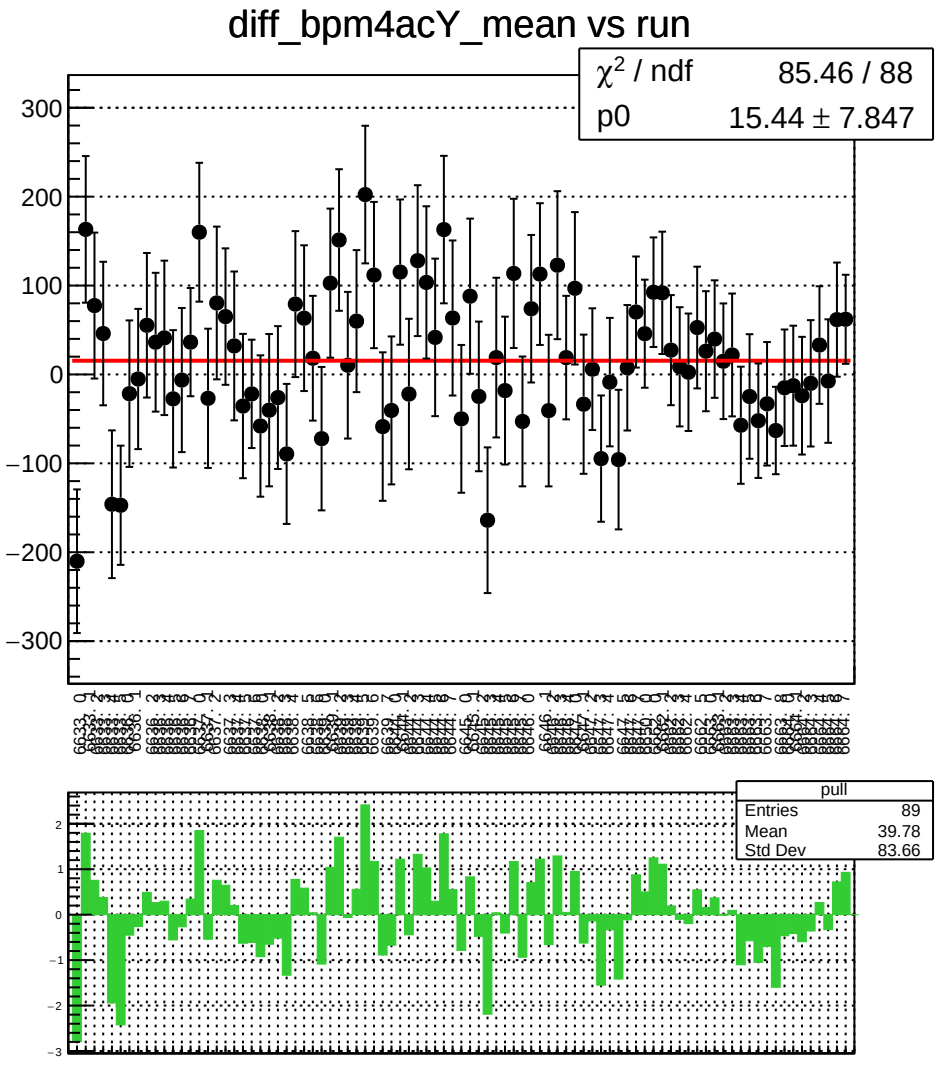

pull1D
Entries 89
Mean 0.01994
Std Dev 1.026

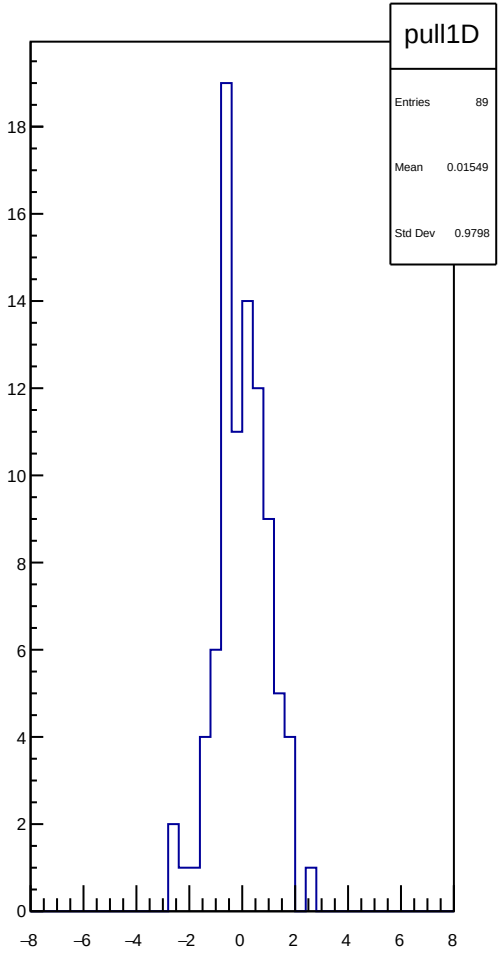

diff_bpm4eY_rms vs run
χ² / ndf 1.979e+04 / 88
p0 6278 ± 4.818
8000
7500
7000
6500
6000
5500
5000

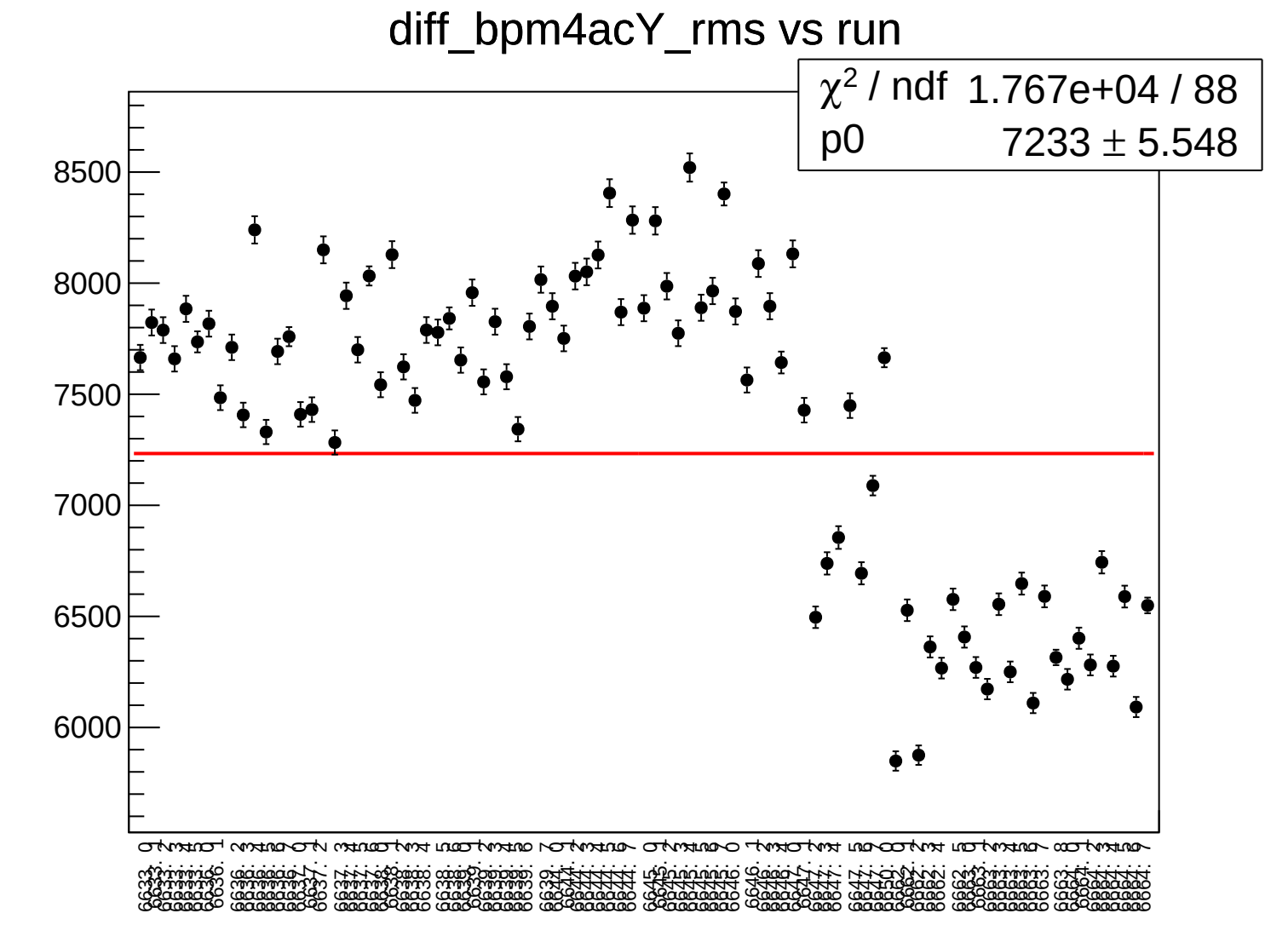

diff_bpm4acX_mean vs run
χ^2 / ndf 92.04 / 88
p0 3.849 ± 8.975
pull
Entries 89
Mean 522.6
Std Dev 500

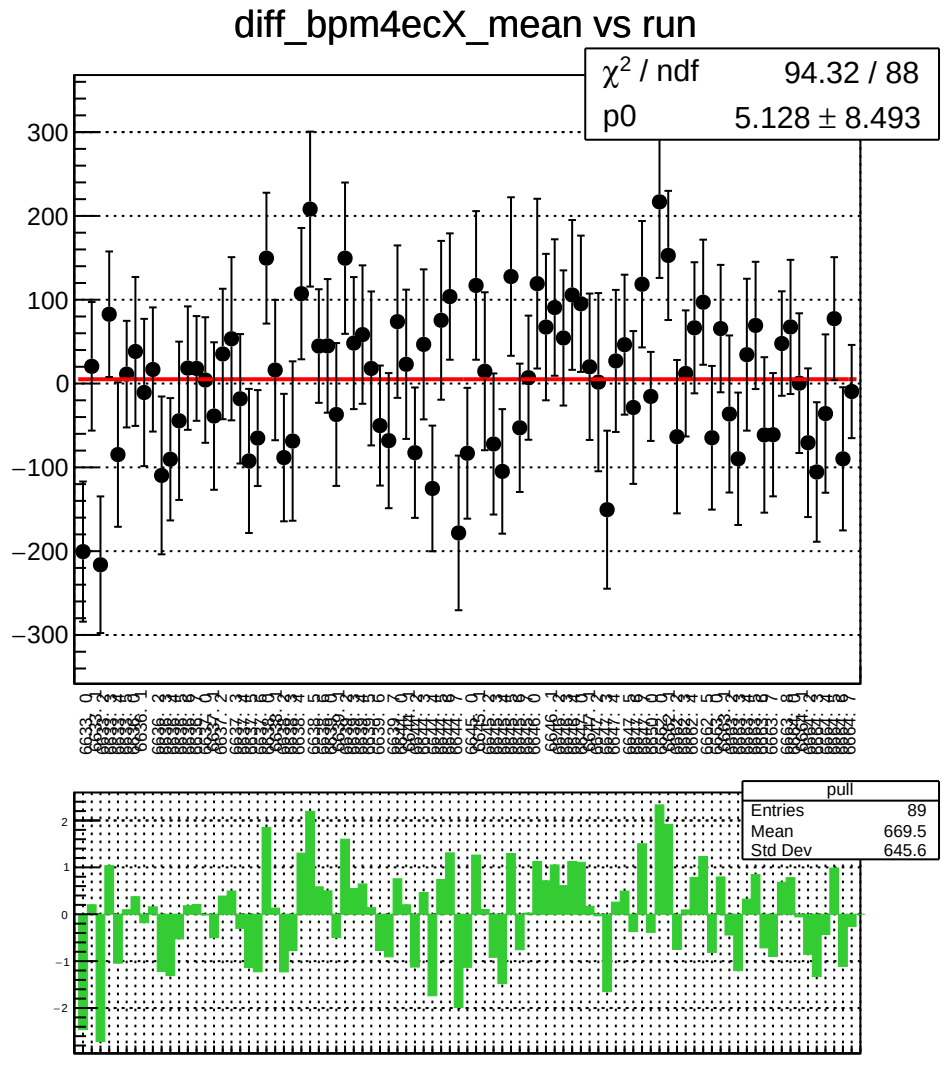

pull1D
Entries 89
Mean 0.006401
Std Dev 1.017

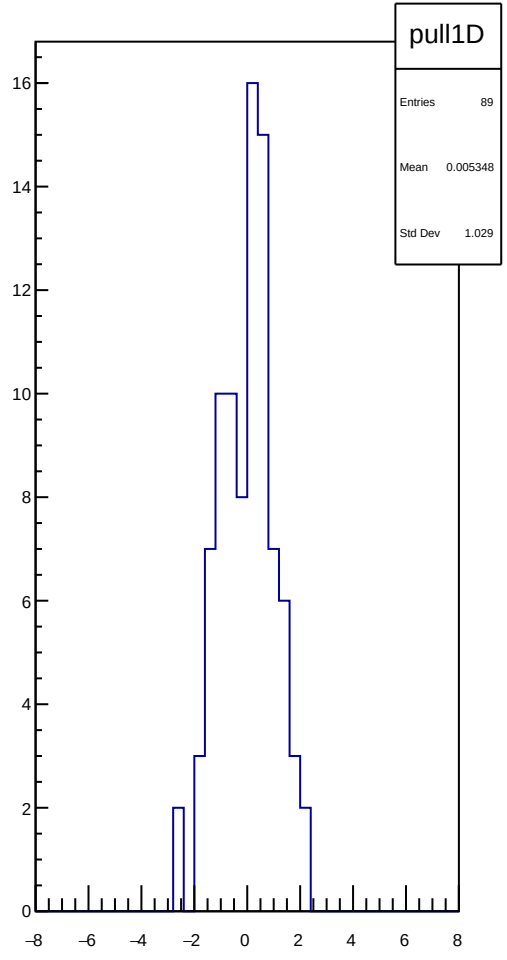

diff_bpm4acX_rms vs run
χ² / ndf 1.388e+04 / 88
p0 8282 ± 6.346
11000
10500
10000
9500
9000
8500
8000
7500
7000

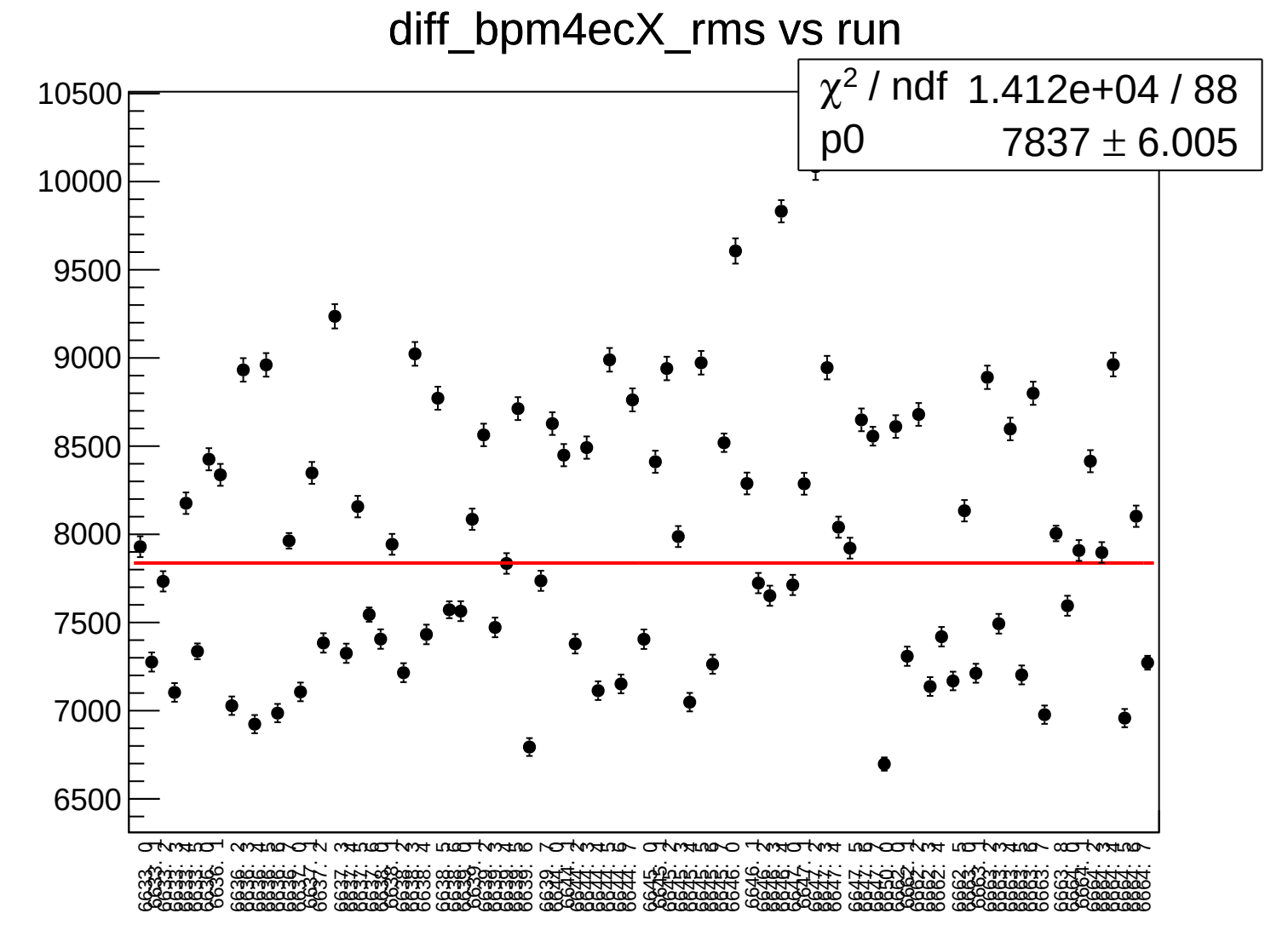

diff_bpm4acY_mean vs run
χ² / ndf 85.46 / 88
p0 15.44 ± 7.847
pull
Entries 89
Mean 39.78
Std Dev 83.66

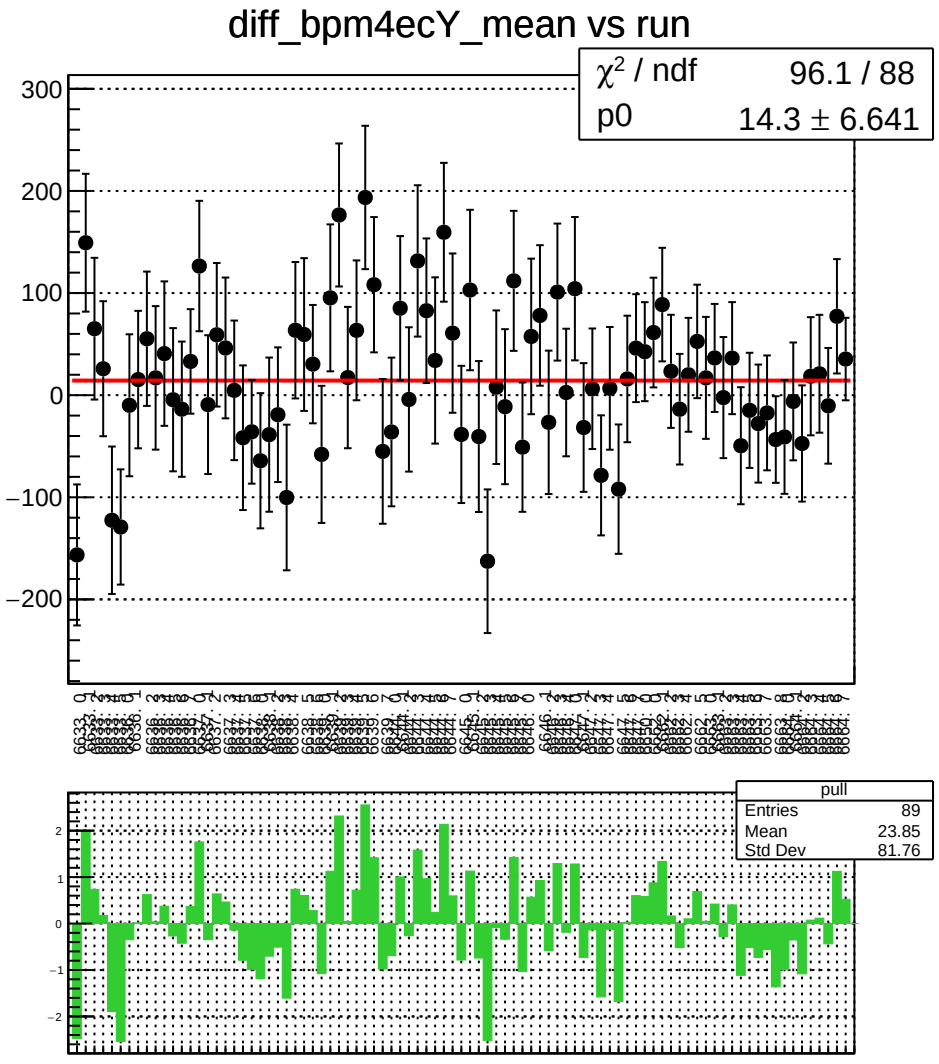

pull1D
Entries 89
Mean 0.01549
Std Dev 0.9798

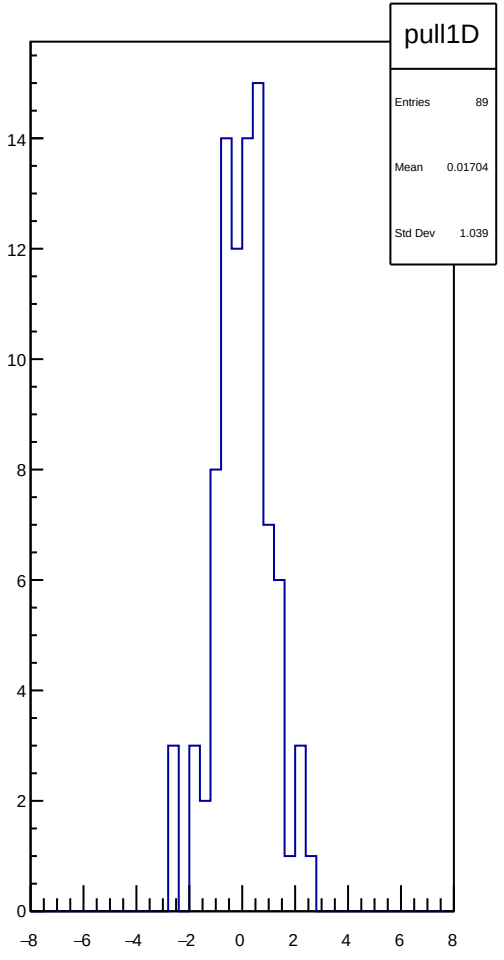

diff_bpm4acY_rms vs run
χ² / ndf 1.767e+04 / 88
p0 7233 ± 5.548
8500
8000
7500
7000
6500
6000

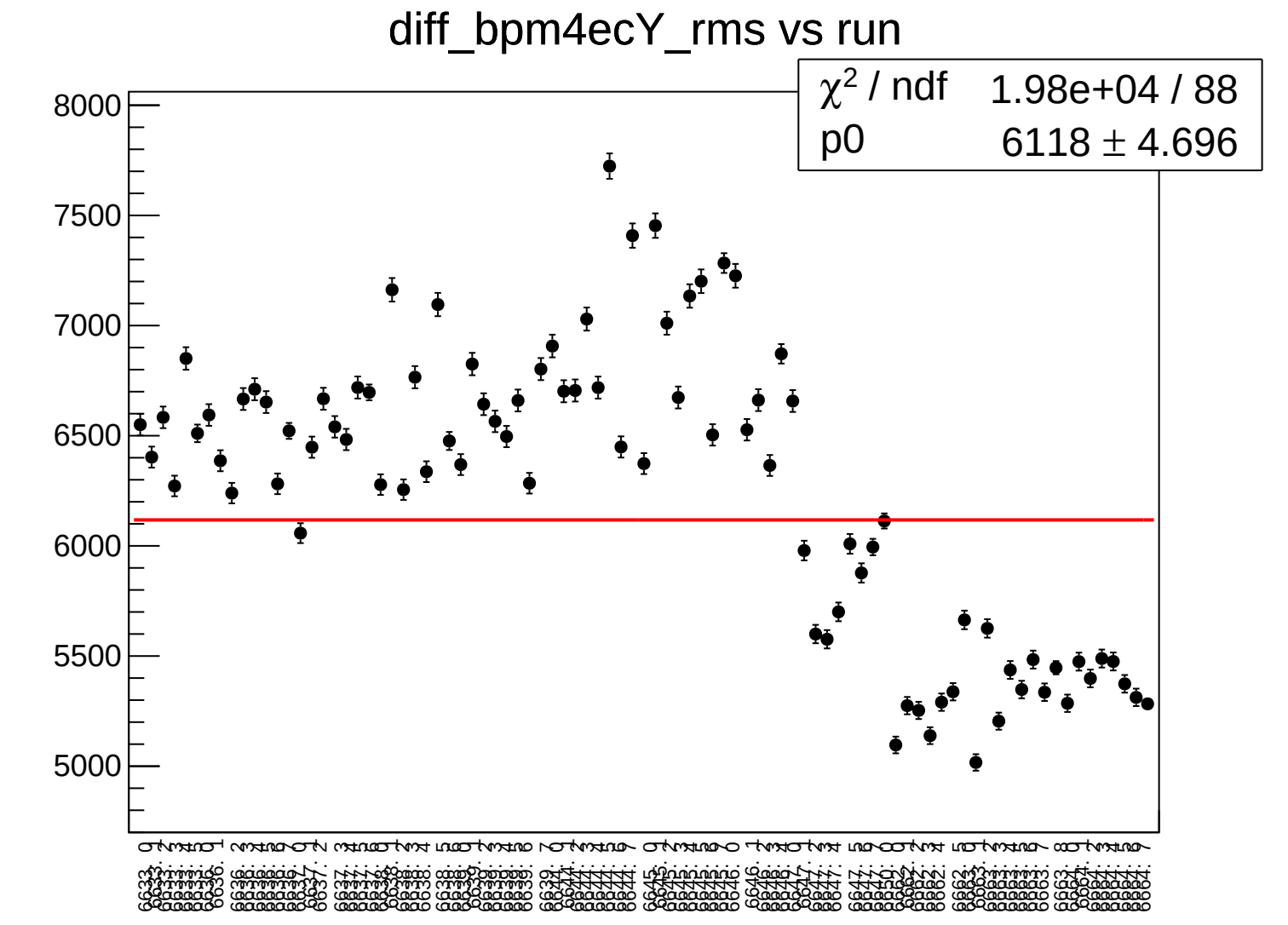

diff_bpm4ecX_mean vs run
χ^2 / ndf 94.32 / 88
p0 5.128 ± 8.493
300
200
100
0
−100
−200
−300
pull
Entries 89
Mean 669.5
Std Dev 645.6
2
1
0
−1
−2

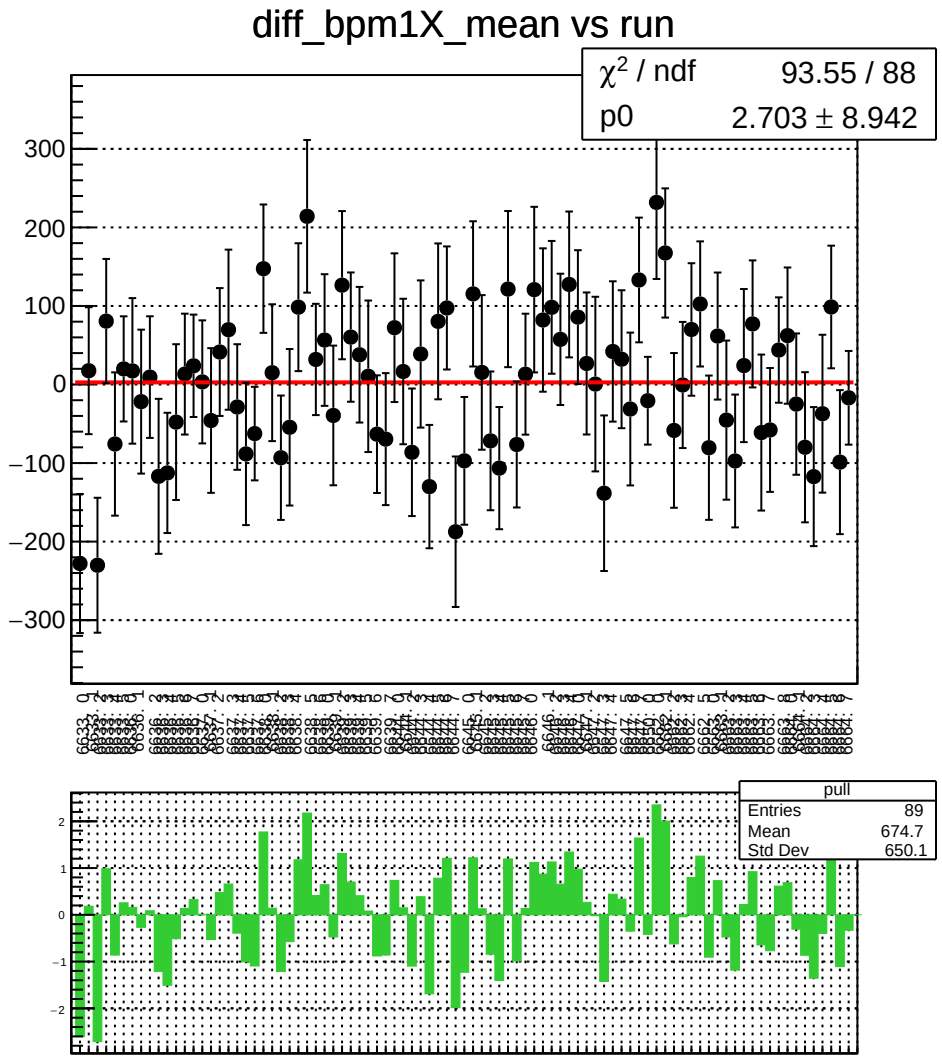

pull1D
Entries 89
Mean 0.005348
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

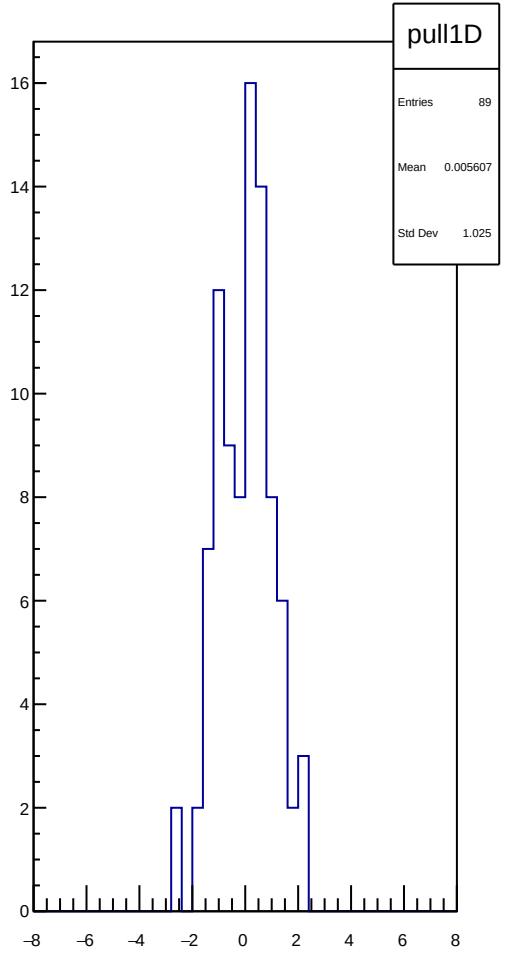

diff_bpm4ecX_rms vs run
χ² / ndf 1.412e+04 / 88
p0 7837 ± 6.005
10500
10000
9500
9000
8500
8000
7500
7000
6500

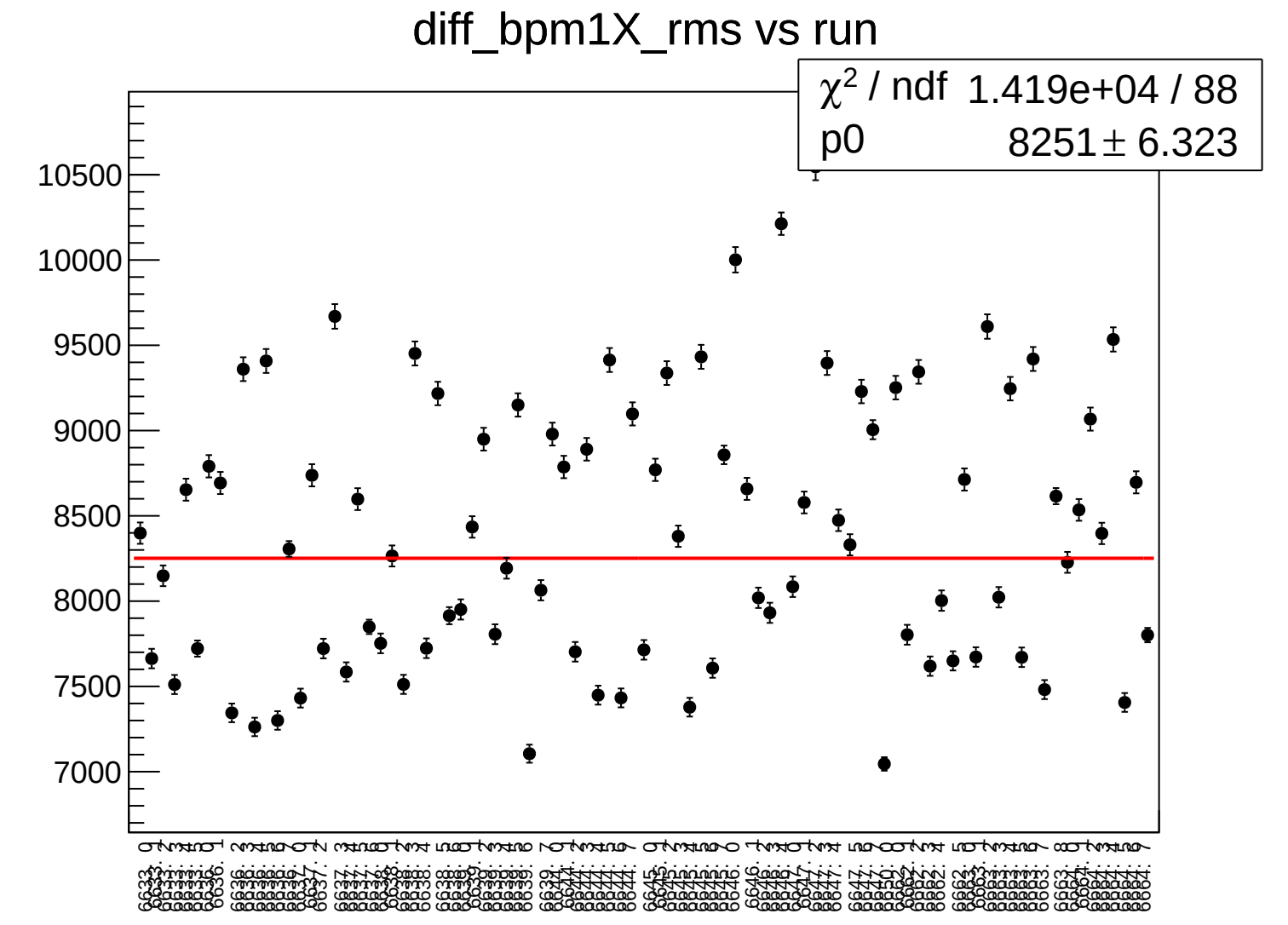

diff_bpm4ecY_mean vs run
χ² / ndf 96.1 / 88
p0 14.3 ± 6.641
300
200
100
0
−100
−200
pull
Entries 89
Mean 23.85
Std Dev 81.76
2
1
0
−1
−2

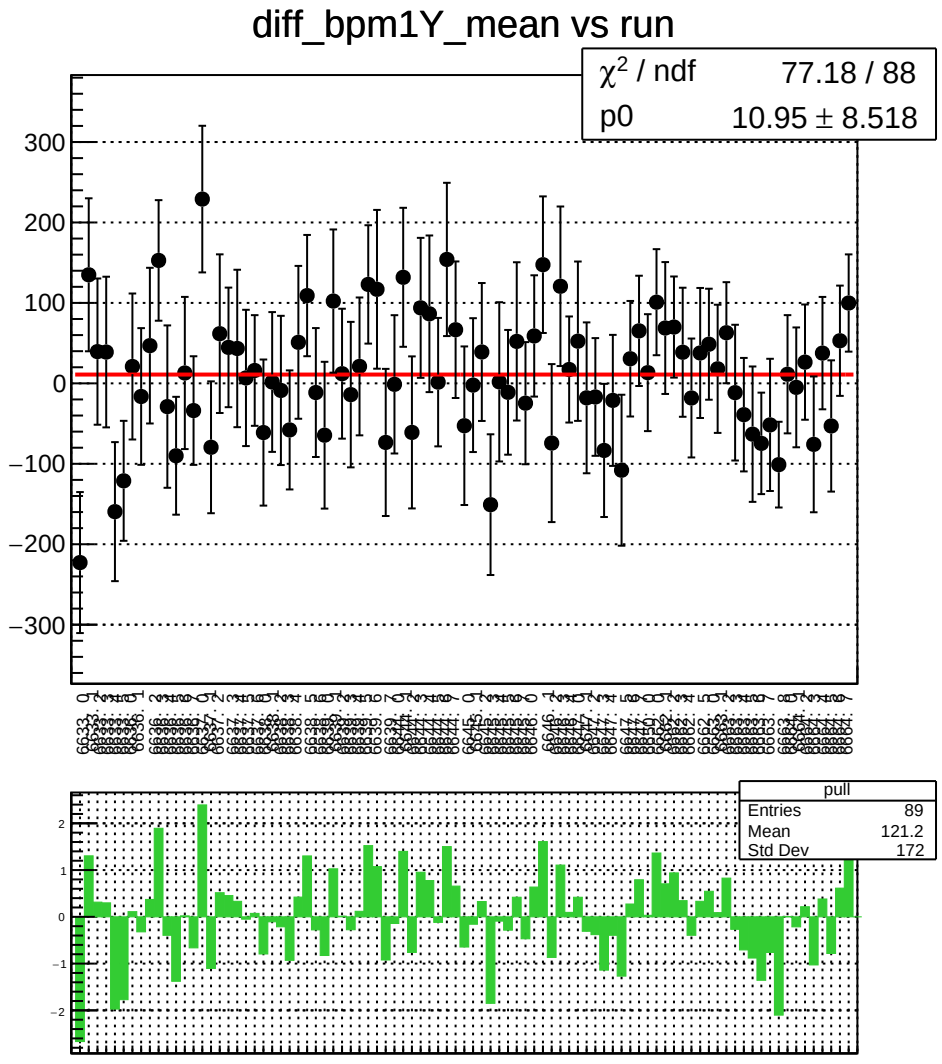

pull1D
Entries 89
Mean 0.01704
Std Dev 1.039
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

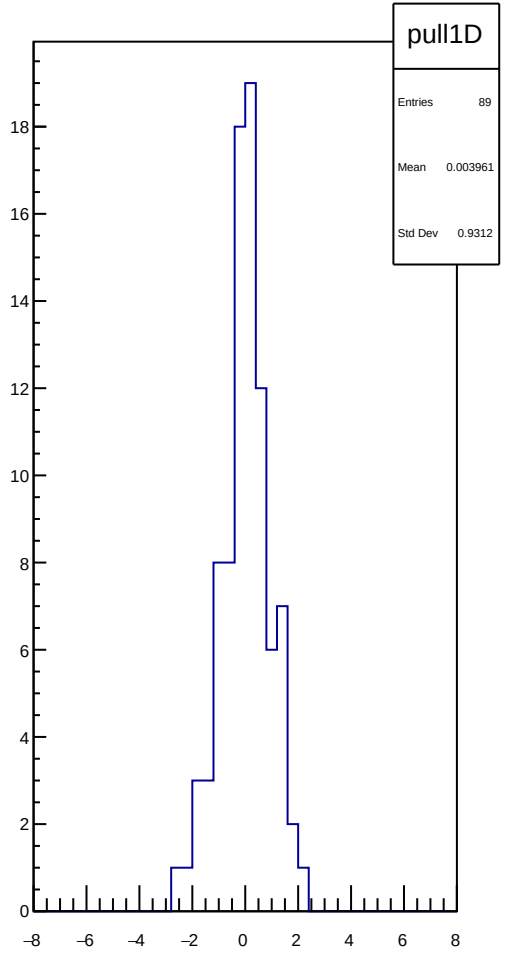

diff_bpm4ecY_rms vs run
χ² / ndf 1.98e+04 / 88
p0 6118 ± 4.696
8000
7500
7000
6500
6000
5500
5000

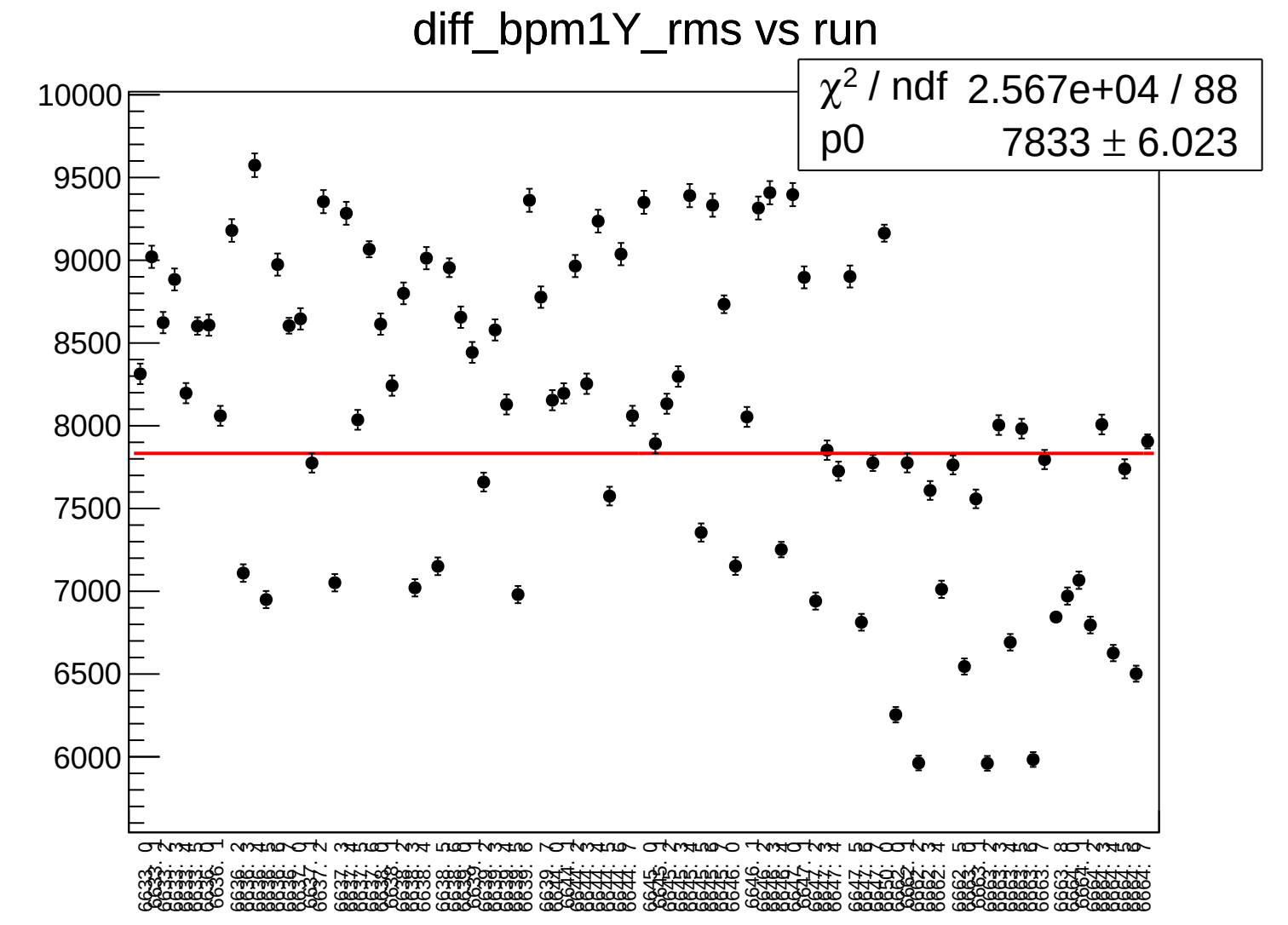

diff_bpm1X_mean vs run
χ² / ndf 93.55 / 88
p0 2.703 ± 8.942
300
200
100
0
−100
−200
−300
pull
Entries 89
Mean 674.7
Std Dev 650.1
2
1
0
−1
−2

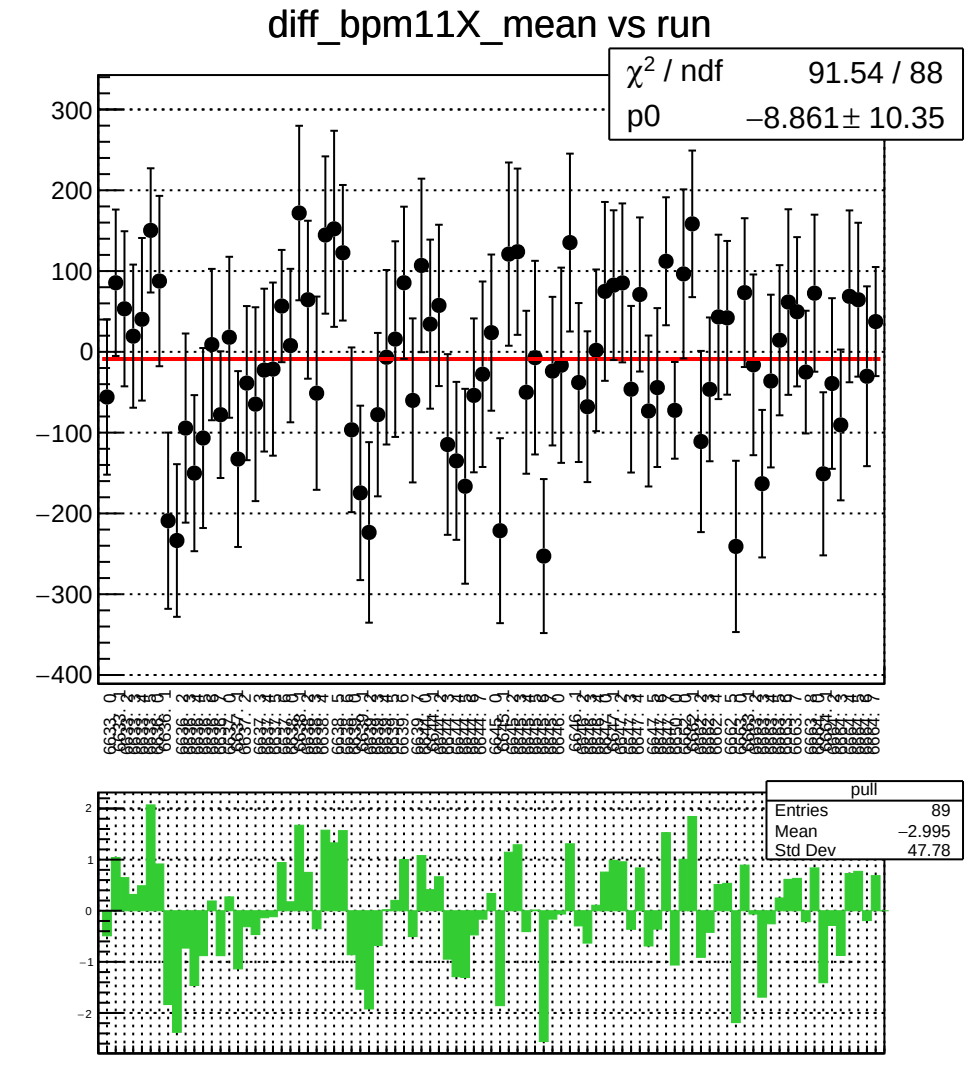

pull1D
Entries 89
Mean 0.005607
Std Dev 1.025
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

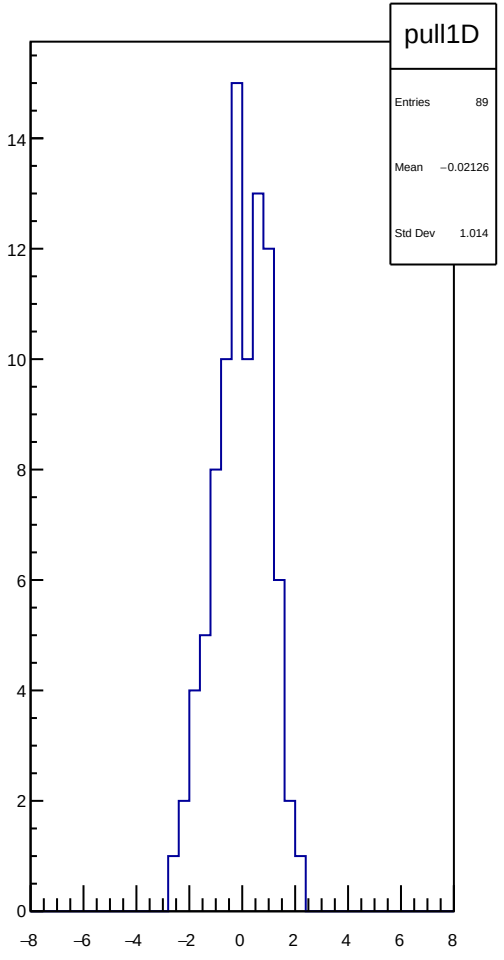

diff_bpm1X_rms vs run
χ² / ndf 1.419e+04 / 88
p0 8251 ± 6.323
10500
10000
9500
9000
8500
8000
7500
7000

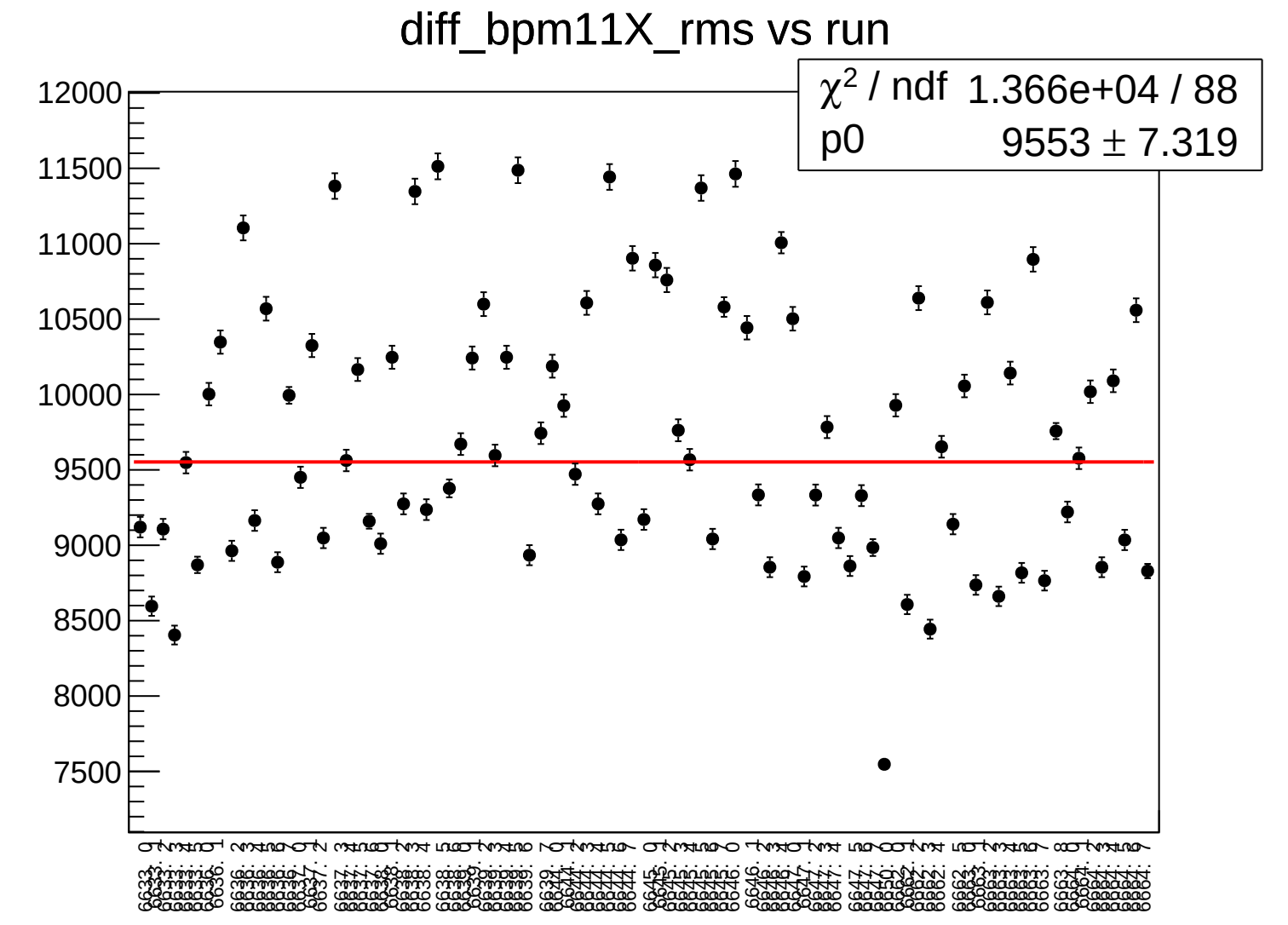

diff_bpm1Y_mean vs run
χ² / ndf 77.18 / 88
p0 10.95 ± 8.518
pull
Entries 89
Mean 121.2
Std Dev 172

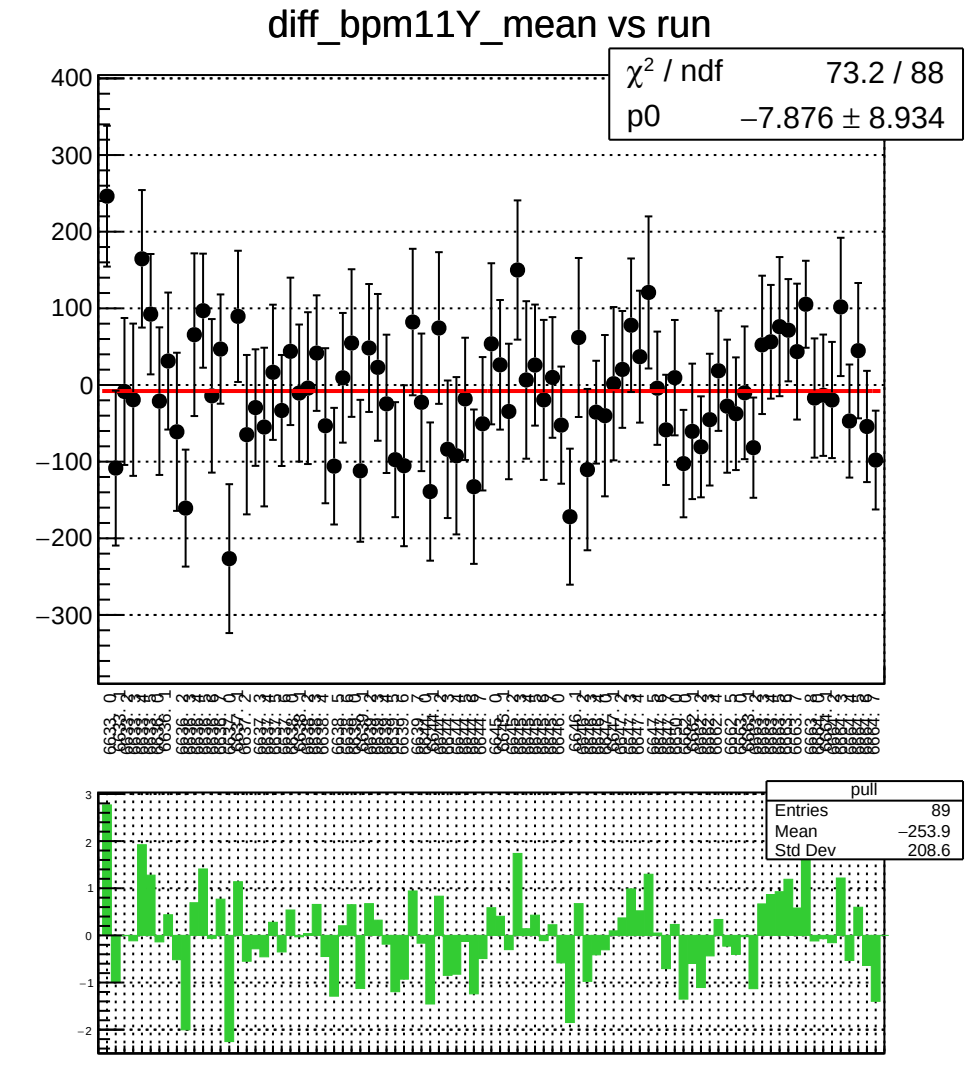

pull1D
Entries 89
Mean 0.003961
Std Dev 0.9312

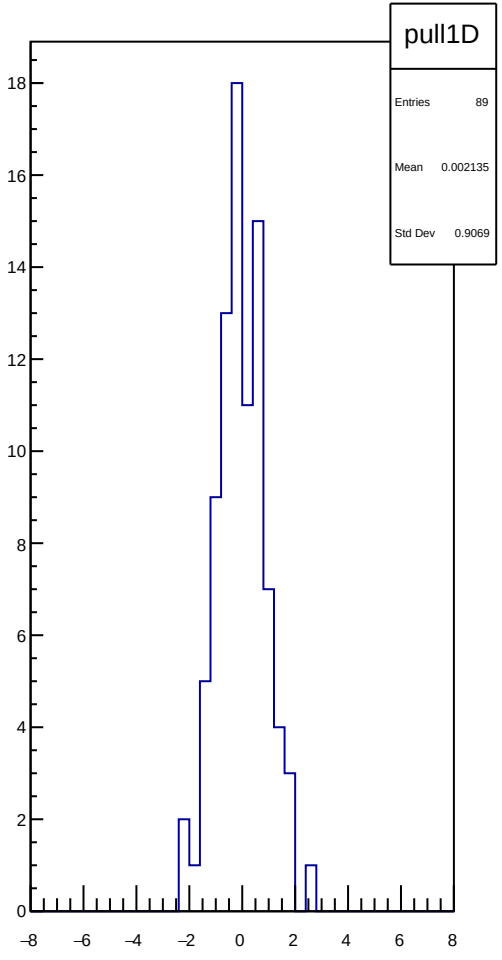

diff_bpm1Y_rms vs run
χ² / ndf 2.567e+04 / 88
p0 7833 ± 6.023
10000
9500
9000
8500
8000
7500
7000
6500
6000

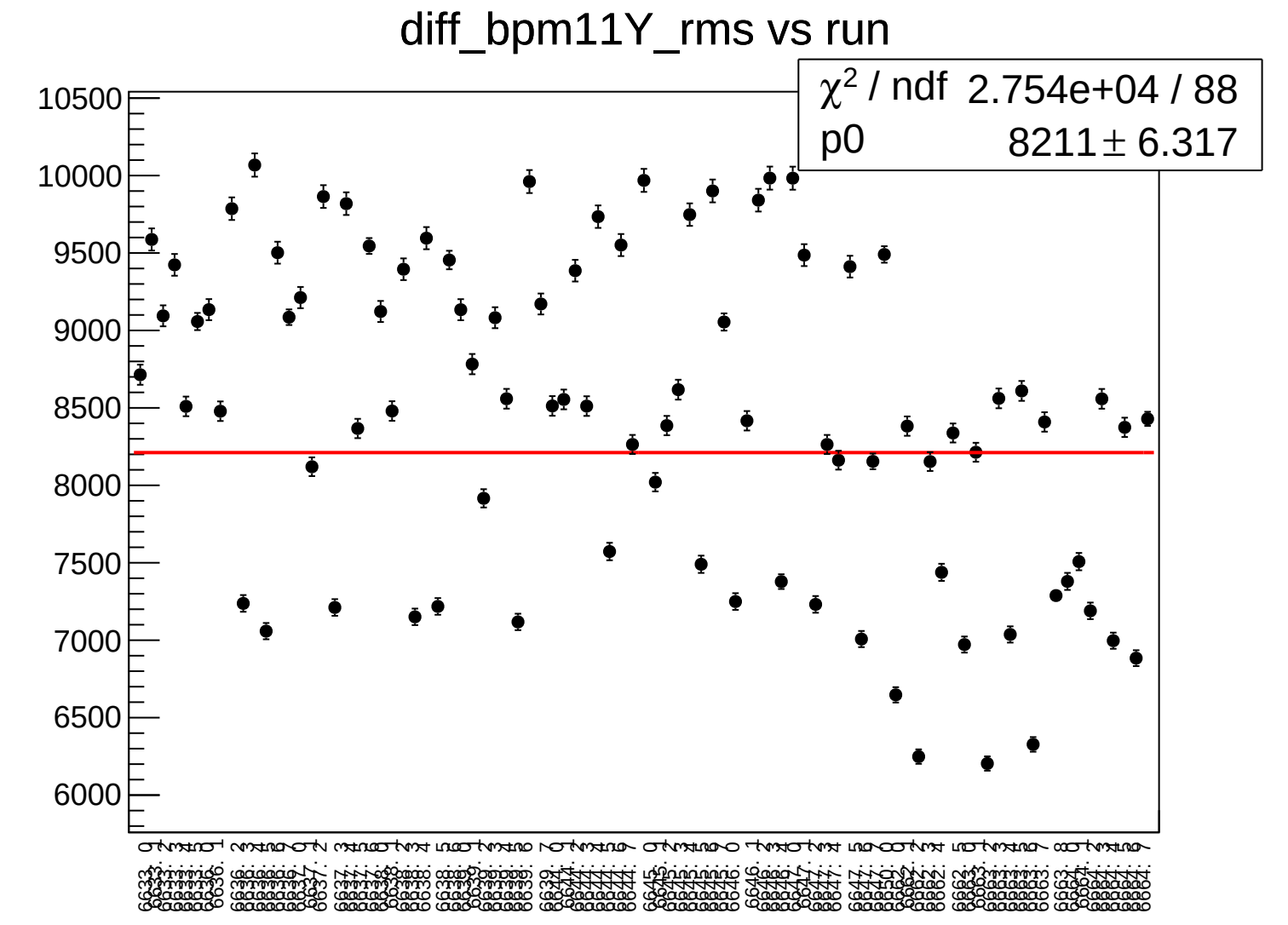

diff_bpm11X_mean vs run
χ² / ndf 91.54 / 88
p0 −8.861 ± 10.35
pull
Entries 89
Mean −2.995
Std Dev 47.78

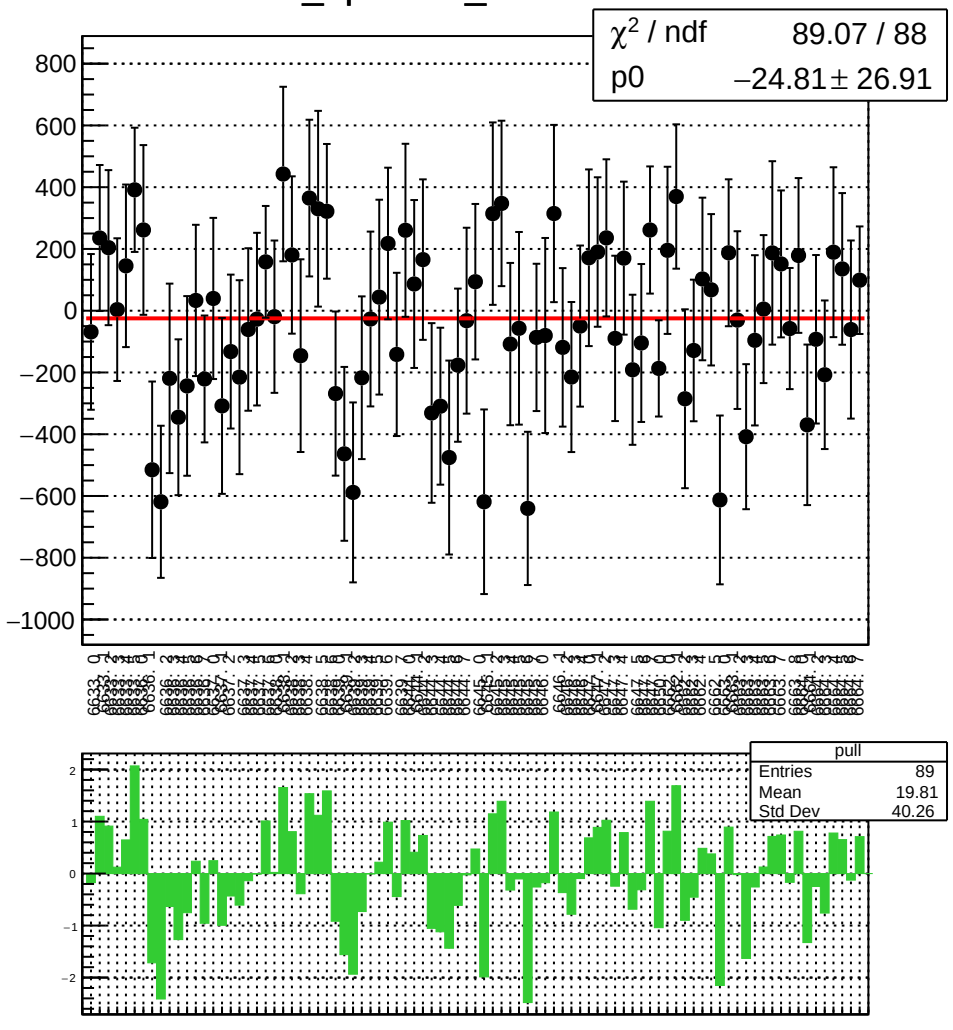

pull1D
Entries 89
Mean −0.02126
Std Dev 1.014

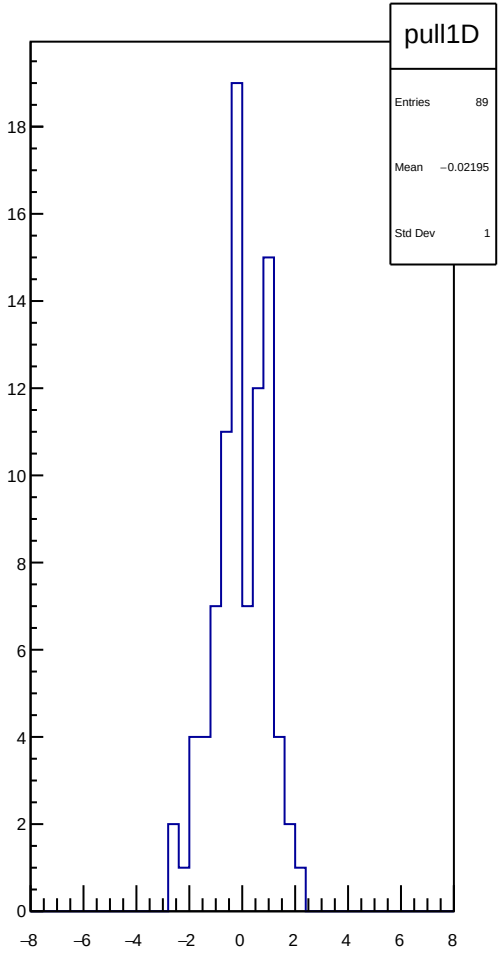

diff_bpm11X_rms vs run
χ² / ndf 1.366e+04 / 88
p0 9553 ± 7.319
12000
11500
11000
10500
10000
9500
9000
8500
8000
7500

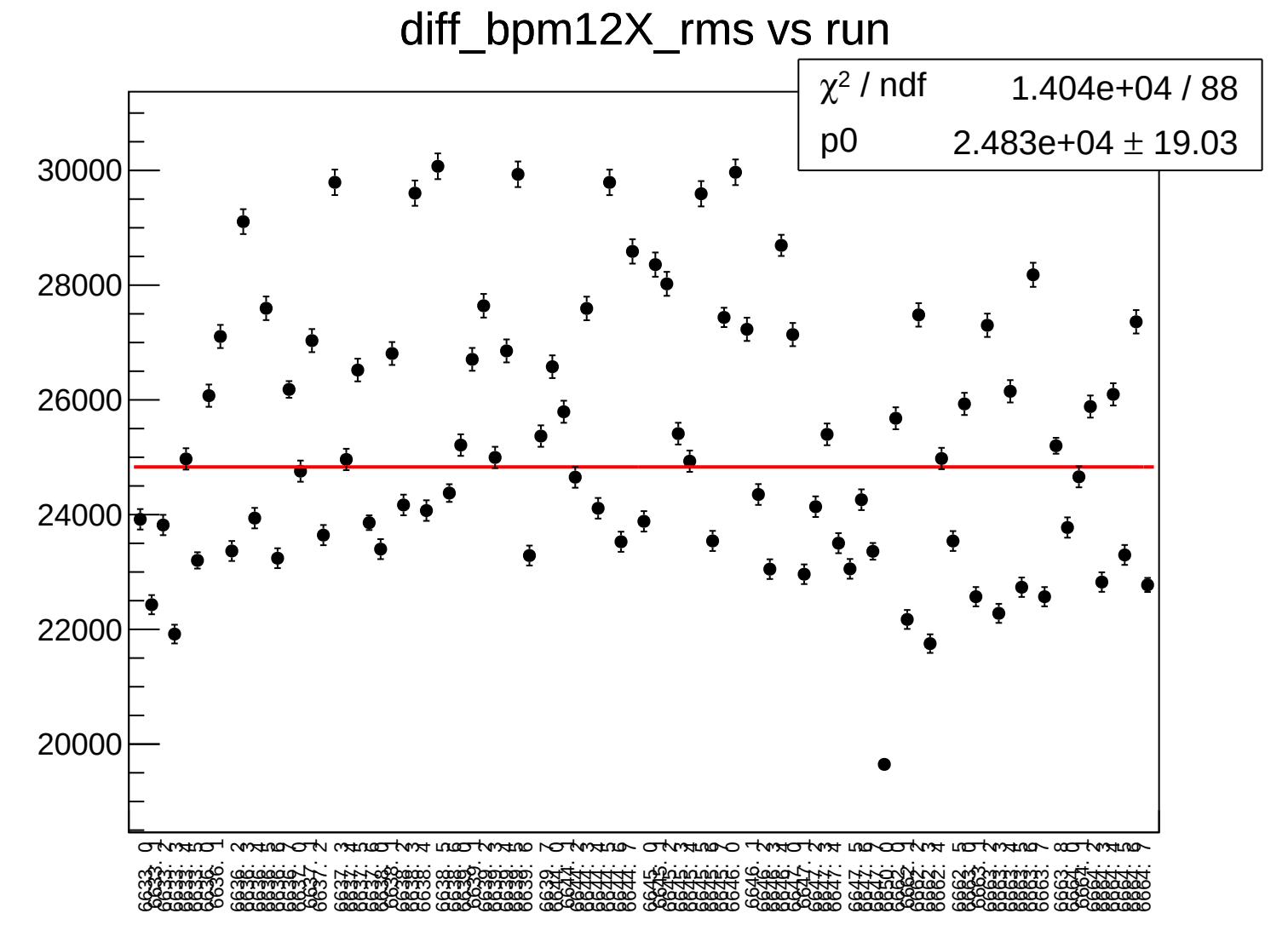

diff_bpm11Y_mean vs run
χ² / ndf 73.2 / 88
p0 −7.876 ± 8.934
pull
Entries 89
Mean −253.9
Std Dev 208.6

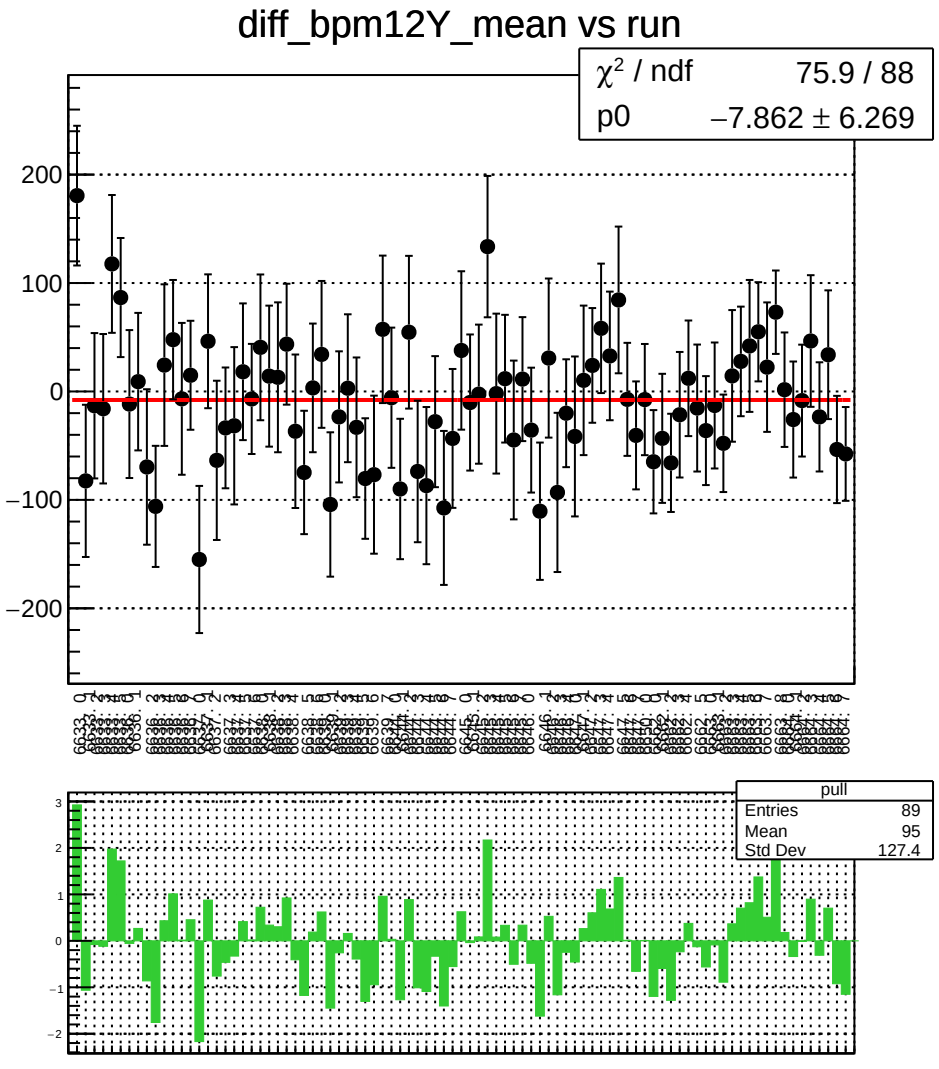

pull1D
Entries 89
Mean 0.002135
Std Dev 0.9069

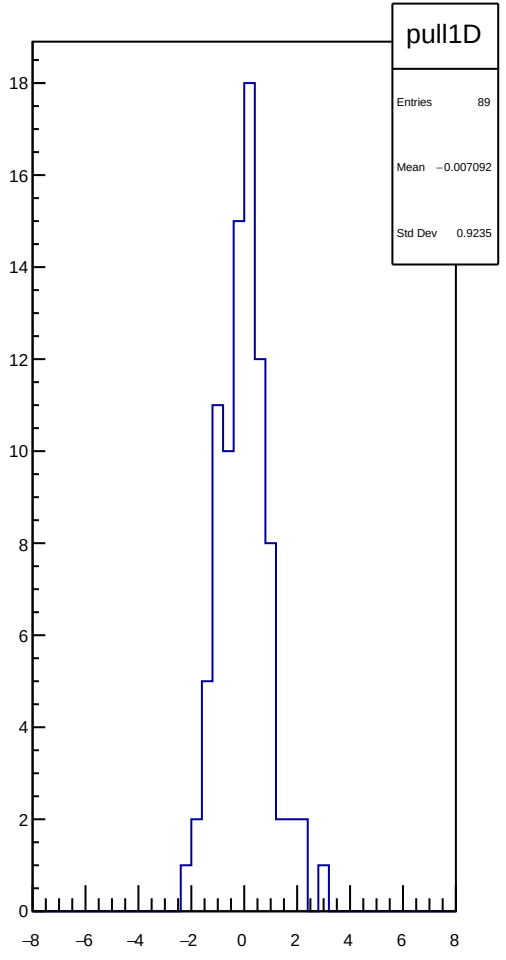

diff_bpm11Y_rms vs run
χ² / ndf 2.754e+04 / 88
p0 8211 ± 6.317
10500
10000
9500
9000
8500
8000
7500
7000
6500
6000

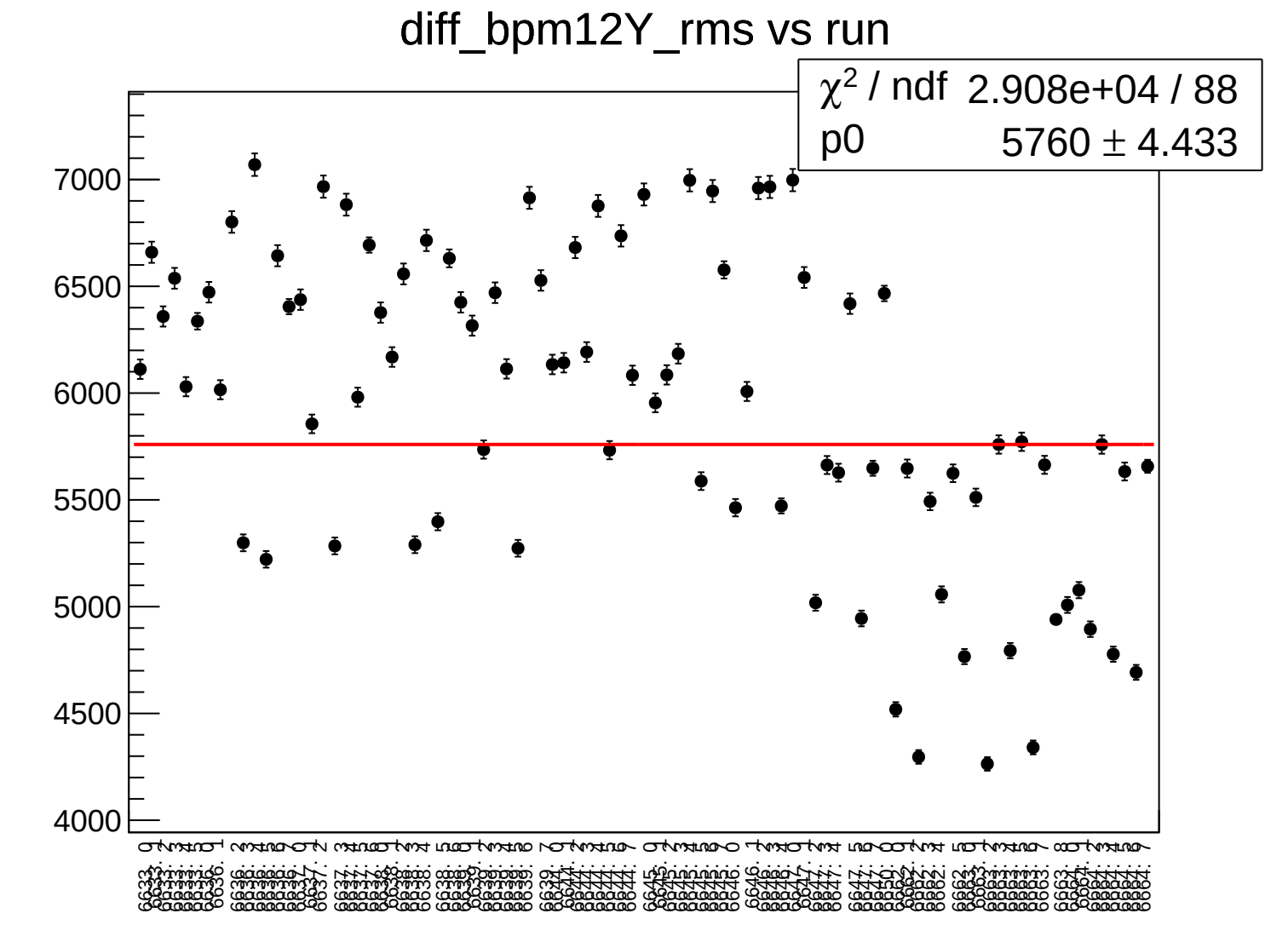

diff_bpm12X_mean vs run
χ² / ndf 89.07 / 88
p0 −24.81 ± 26.91
pull
Entries 89
Mean 19.81
Std Dev 40.26

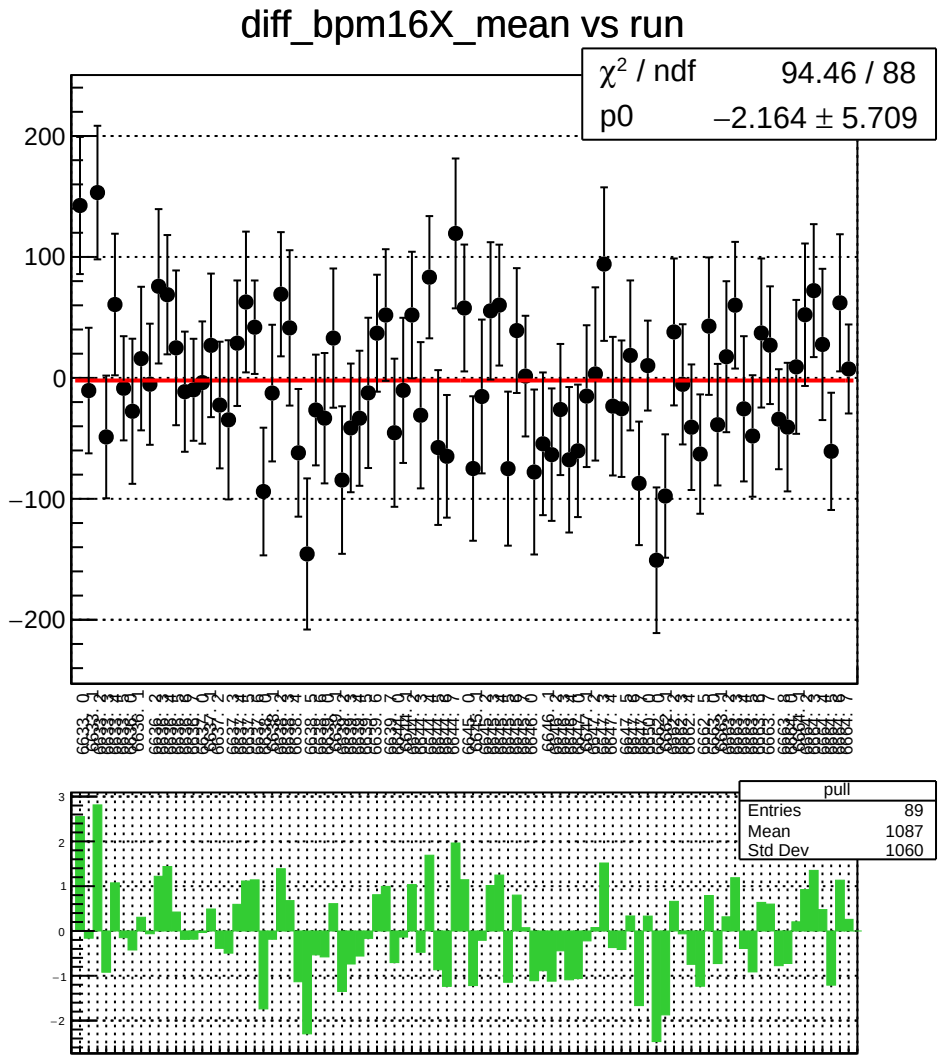

pull1D
Entries 89
Mean −0.02195
Std Dev 1

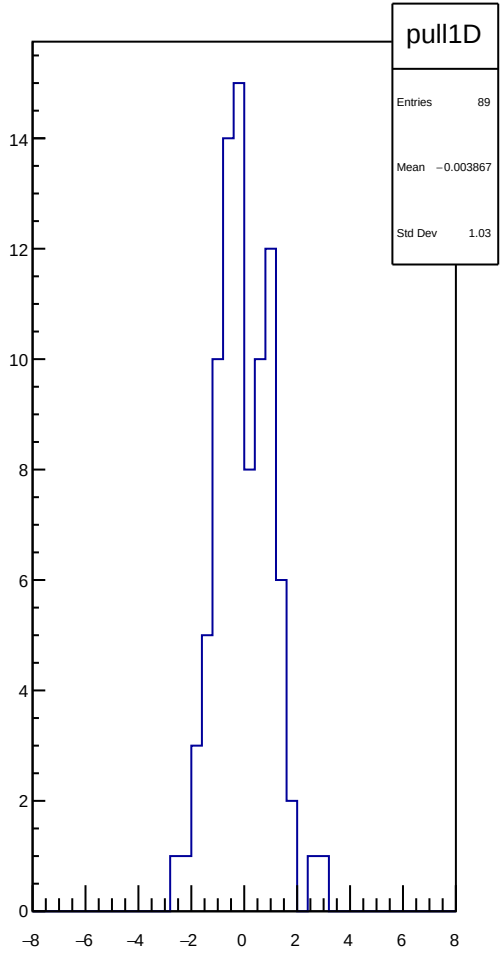

diff_bpm12X_rms vs run
χ² / ndf 1.404e+04 / 88
p0 2.483e+04 ± 19.03
30000
28000
26000
24000
22000
20000

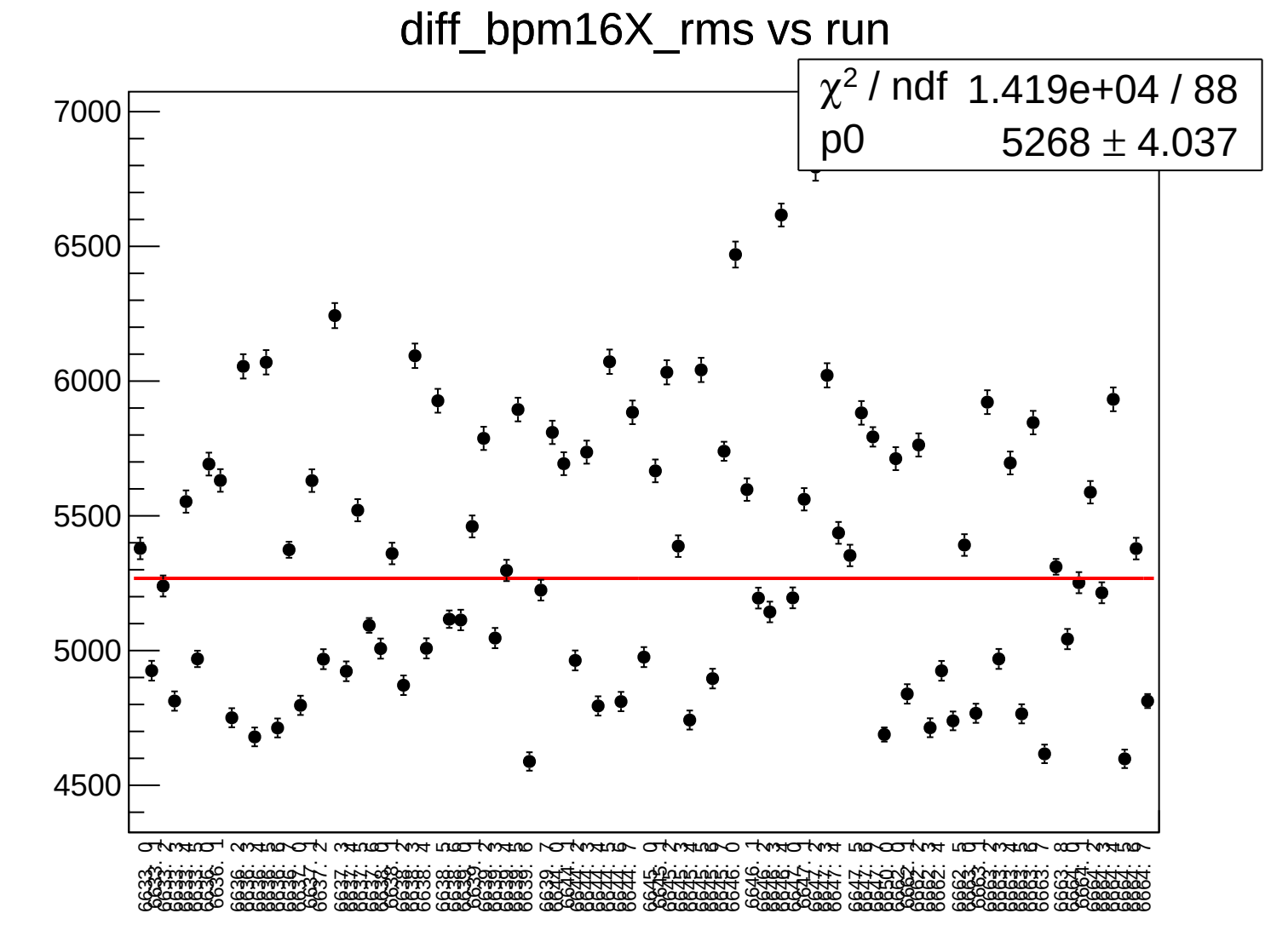

diff_bpm12Y_mean vs run
χ² / ndf 75.9 / 88
p0 −7.862 ± 6.269
200
100
0
−100
−200
pull
Entries 89
Mean 95
Std Dev 127.4
3
2
1
0
−1
−2

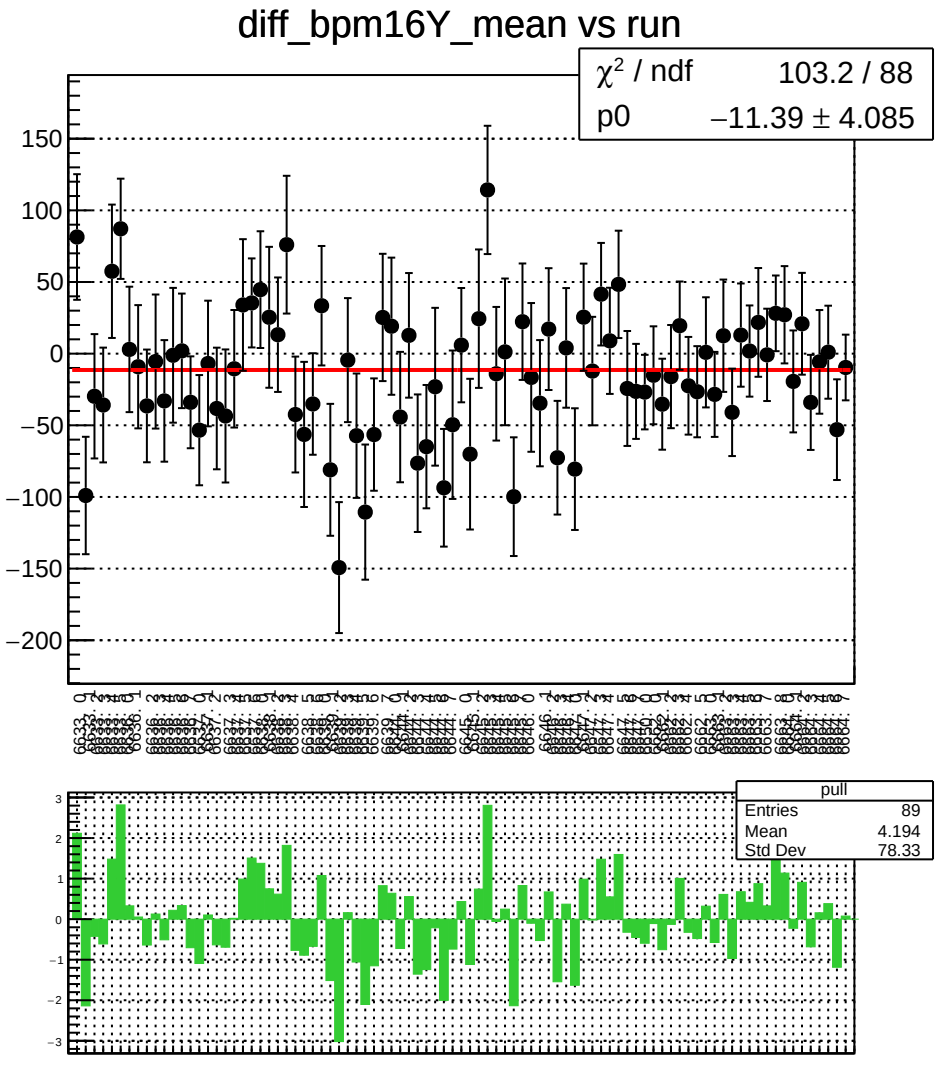

pull1D
Entries 89
Mean −0.007092
Std Dev 0.9235
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

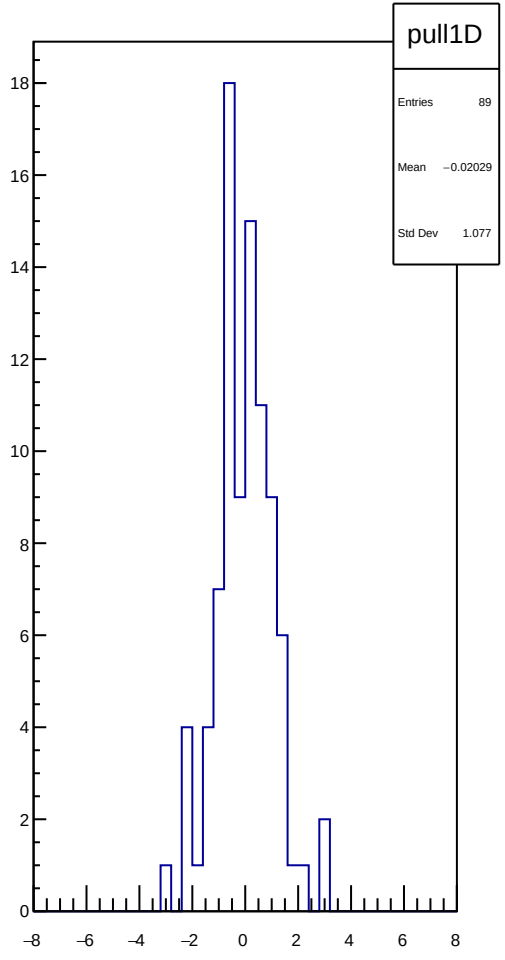

diff_bpm12Y_rms vs run
χ² / ndf 2.908e+04 / 88
p0 5760 ± 4.433
7000
6500
6000
5500
5000
4500
4000

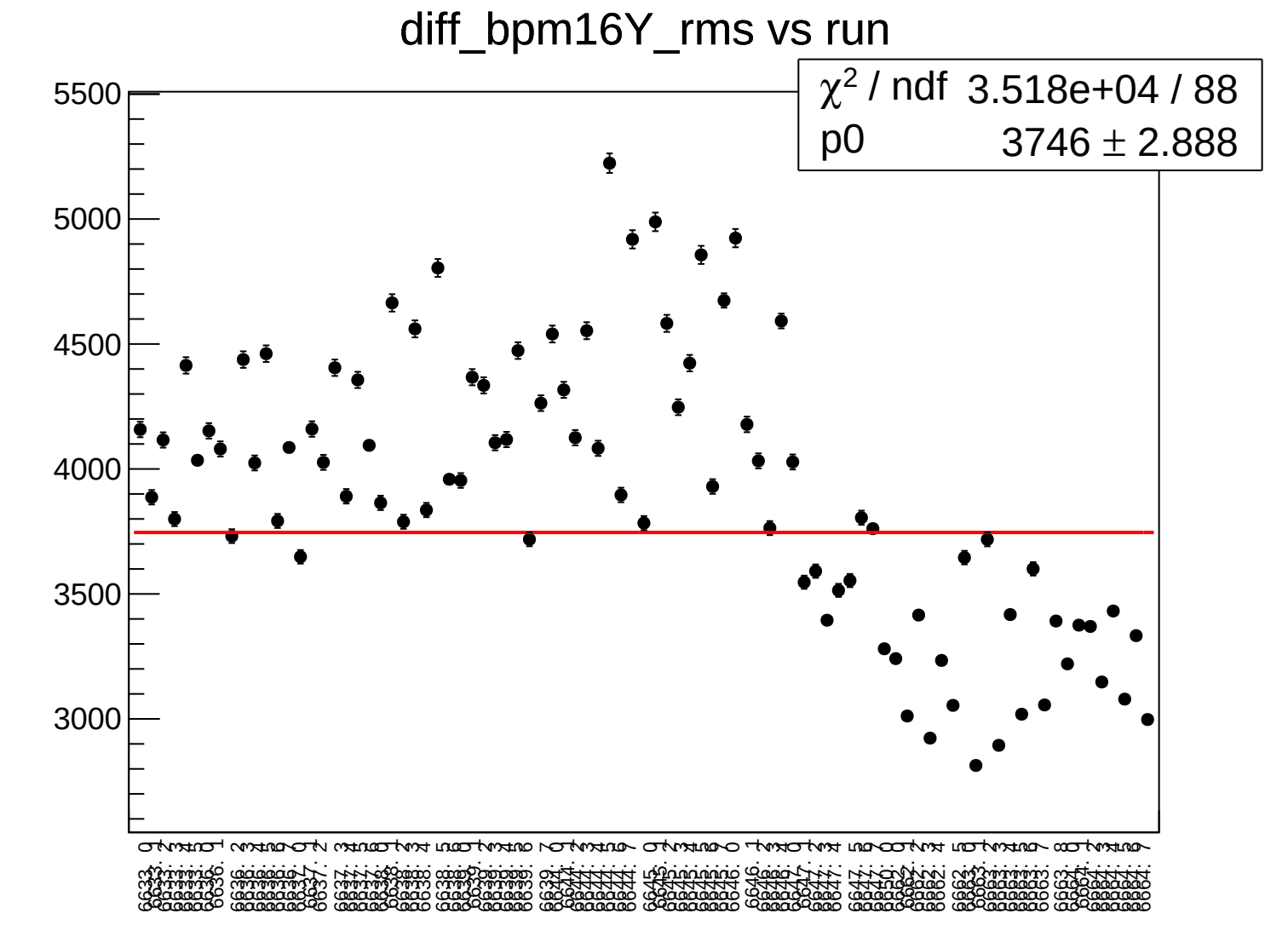

diff_bpm16X_mean vs run
χ² / ndf 94.46 / 88
p0 −2.164 ± 5.709
200
100
0
−100
−200
pull
Entries 89
Mean 1087
Std Dev 1060
3
2
1
0
−1
−2

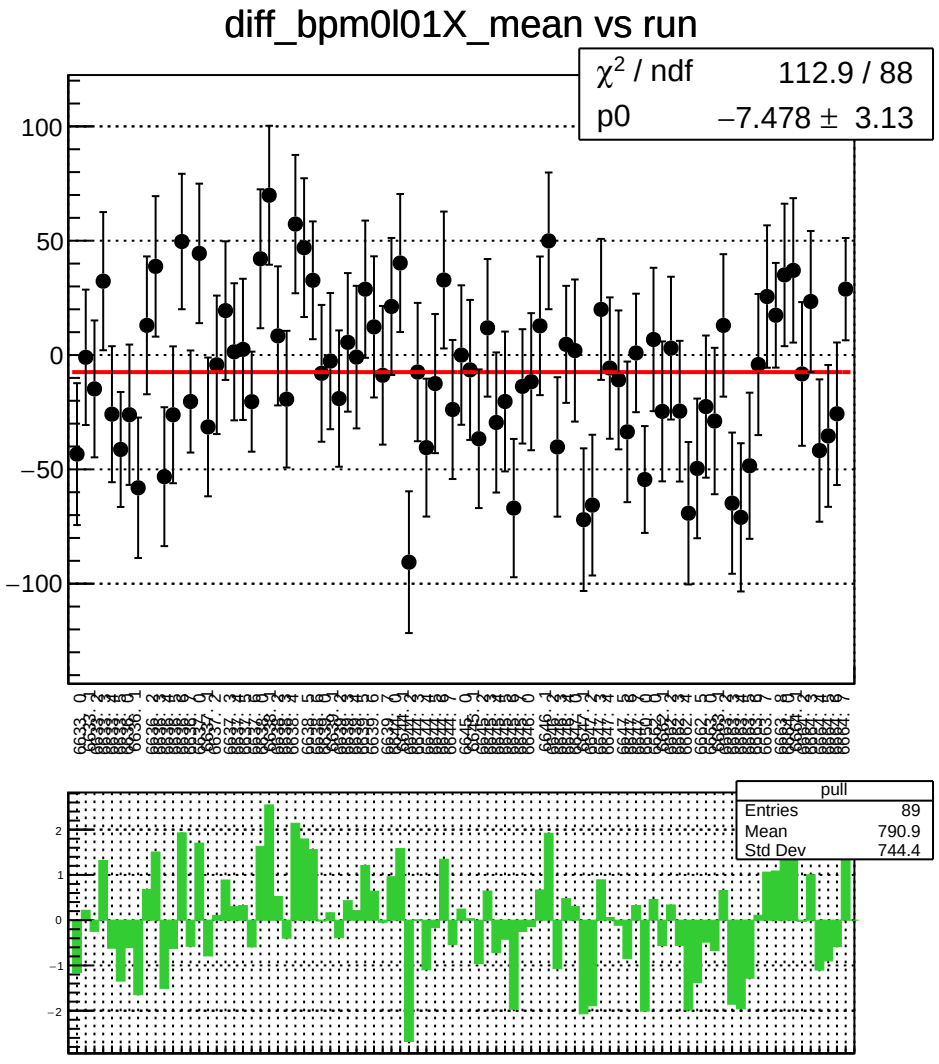

pull1D
Entries 89
Mean −0.003867
Std Dev 1.03
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

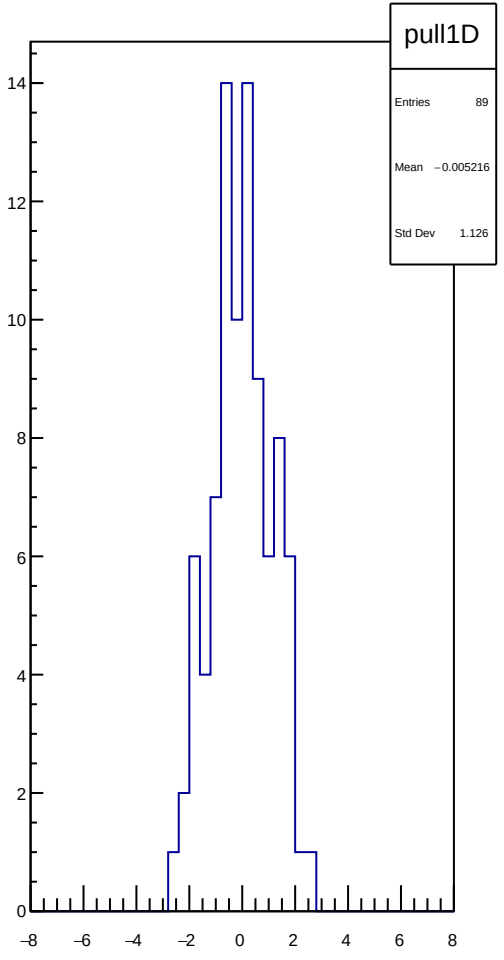

diff_bpm16X_rms vs run
χ^2 / ndf 1.419e+04 / 88
p0 5268 ± 4.037
7000
6500
6000
5500
5000
4500

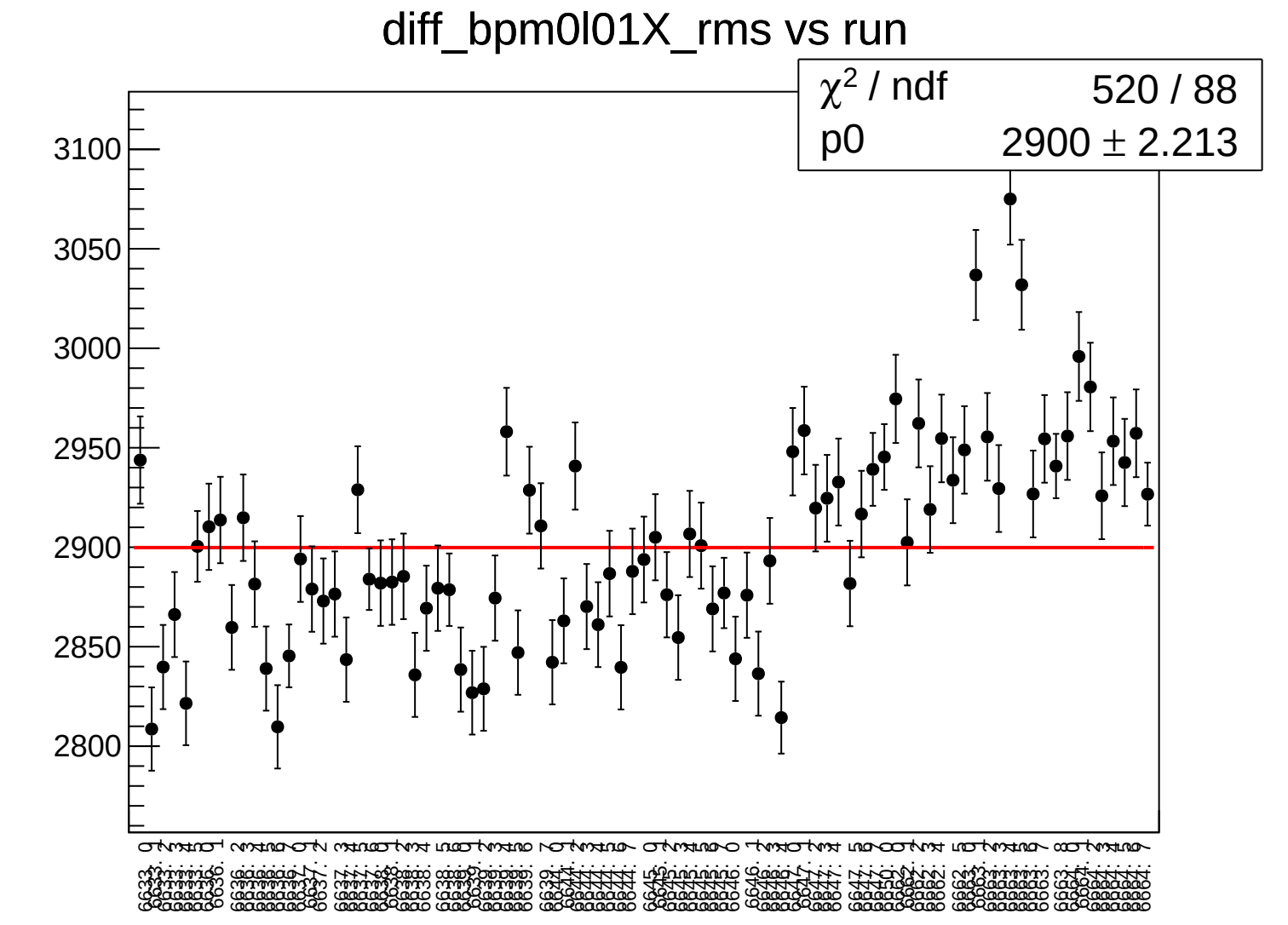

diff_bpm16Y_mean vs run
χ² / ndf 103.2 / 88
p0 −11.39 ± 4.085
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 4.194
Std Dev 78.33
3
2
1
0
−1
−2
−3

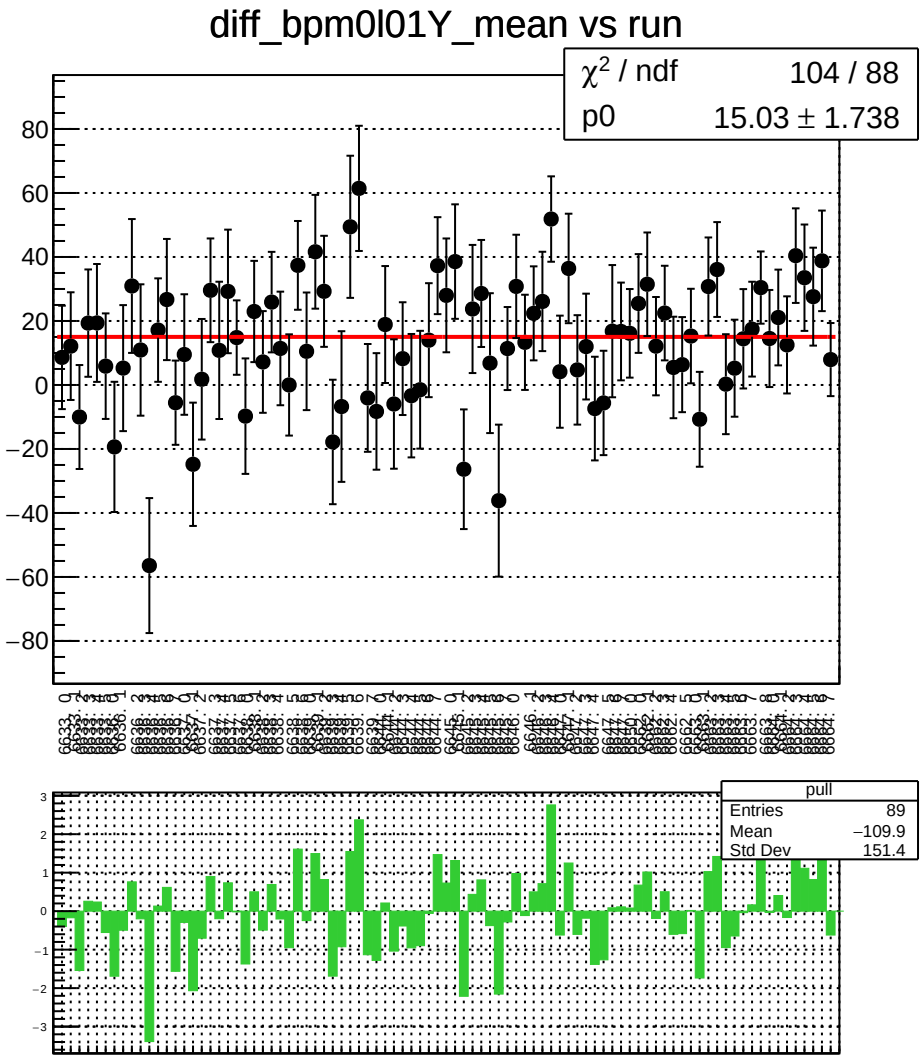

pull1D
Entries 89
Mean −0.02029
Std Dev 1.077
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

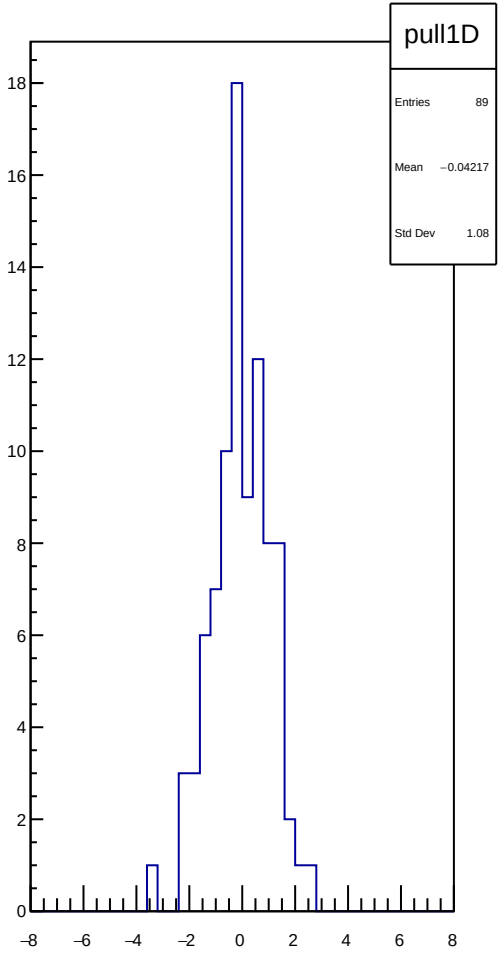

diff_bpm16Y_rms vs run
χ² / ndf 3.518e+04 / 88
p0 3746 ± 2.888
5500
5000
4500
4000
3500
3000

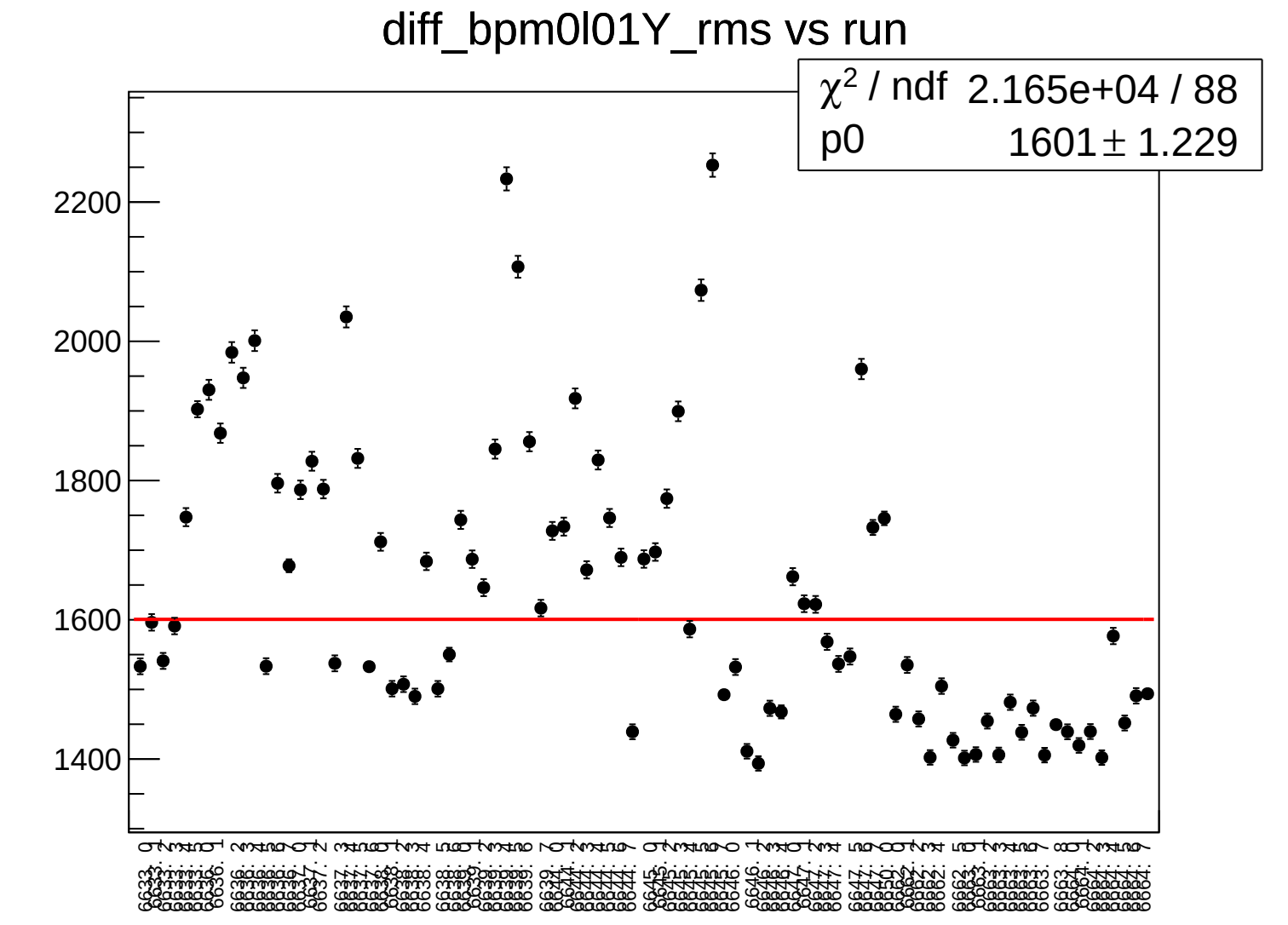

diff_bpm0l01X_mean vs run
χ² / ndf 112.9 / 88
p0 −7.478 ± 3.13
100
50
0
−50
−100
pull
Entries 89
Mean 790.9
Std Dev 744.4
2
1
0
−1
−2

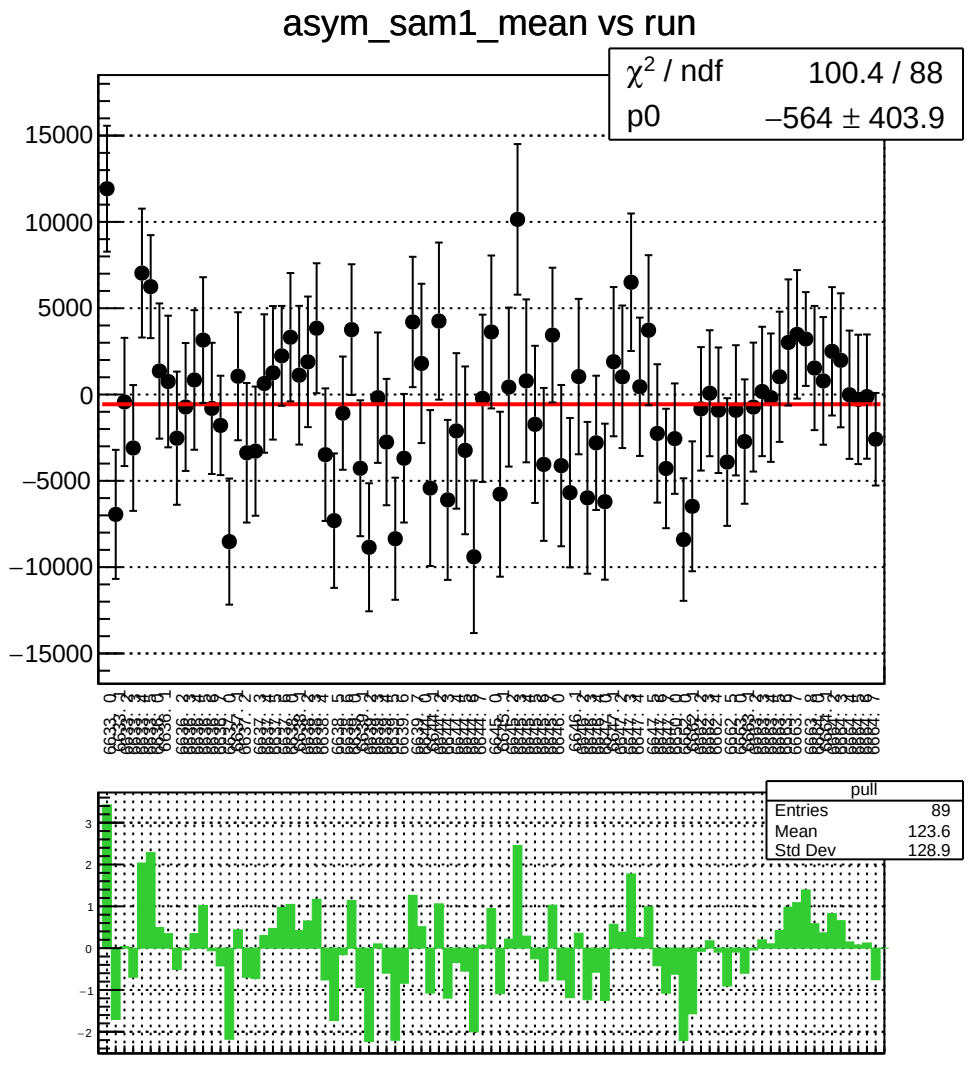

pull1D
Entries 89
Mean −0.005216
Std Dev 1.126
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

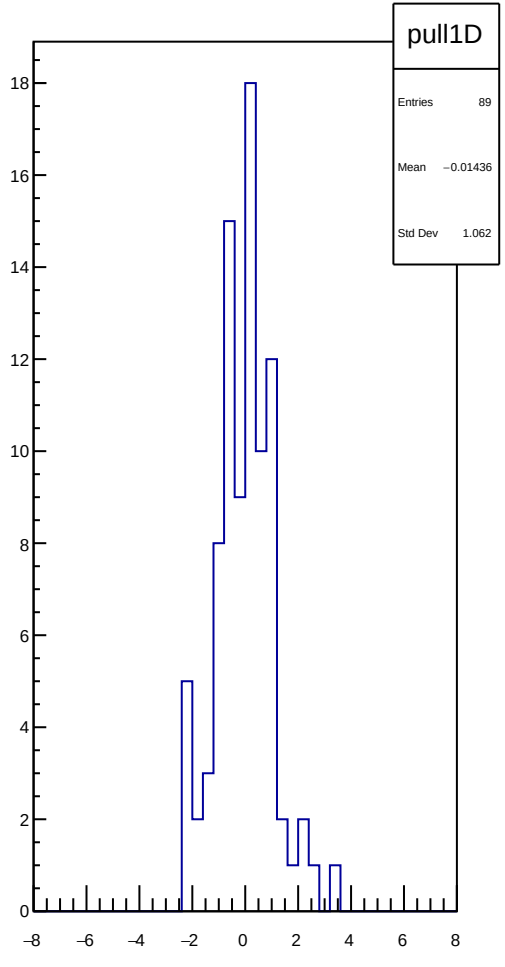

diff_bpm0l01X_rms vs run
χ² / ndf 520 / 88
p0 2900 ± 2.213
3100
3050
3000
2950
2900
2850
2800

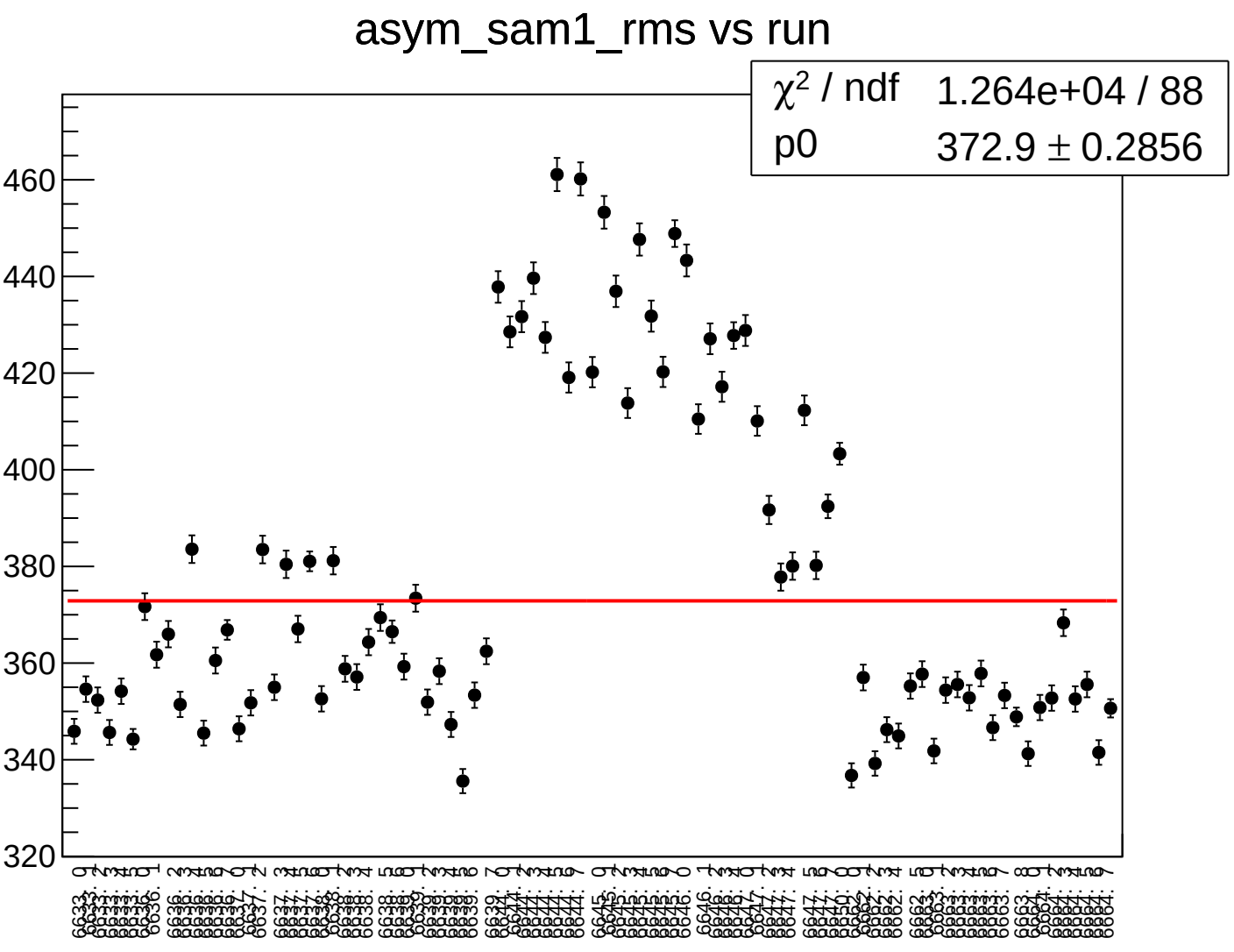

diff_bpm0l01Y_mean vs run
χ² / ndf 104 / 88
p0 15.03 ± 1.738
pull
Entries 89
Mean −109.9
Std Dev 151.4

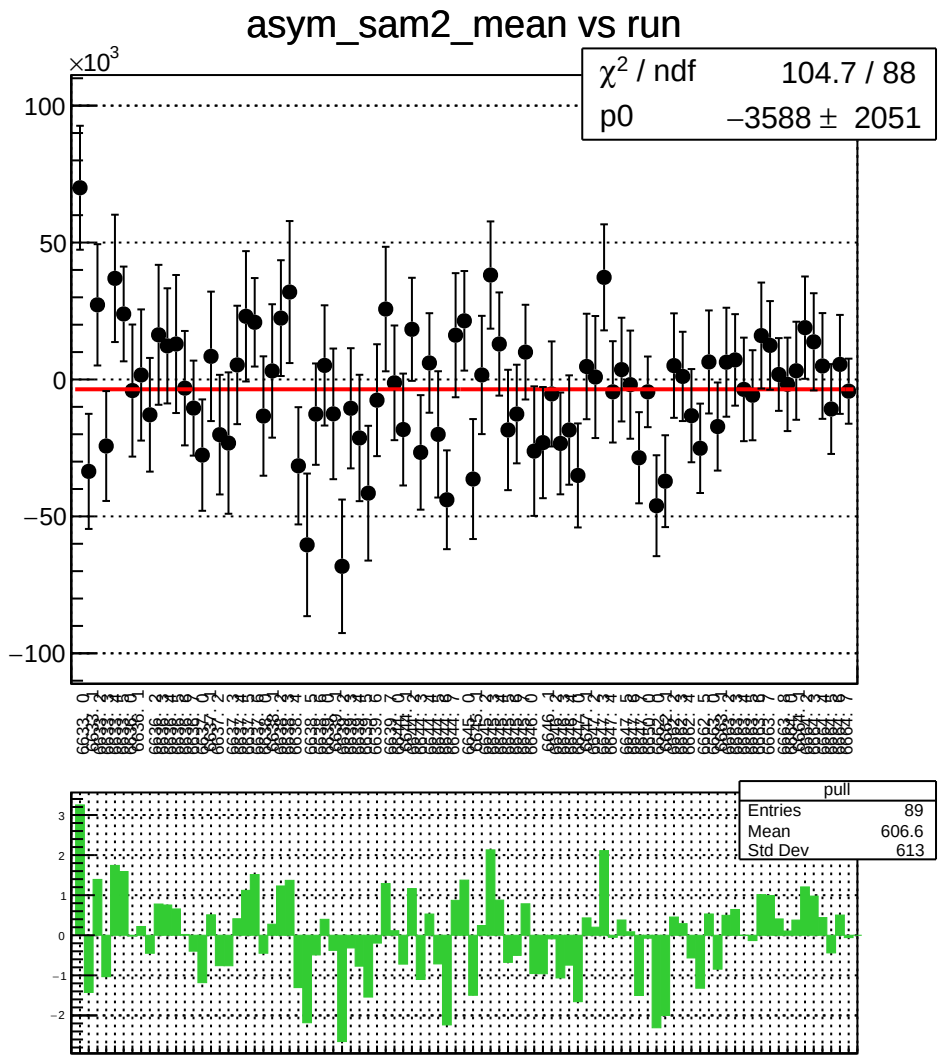

pull1D
Entries 89
Mean −0.04217
Std Dev 1.08

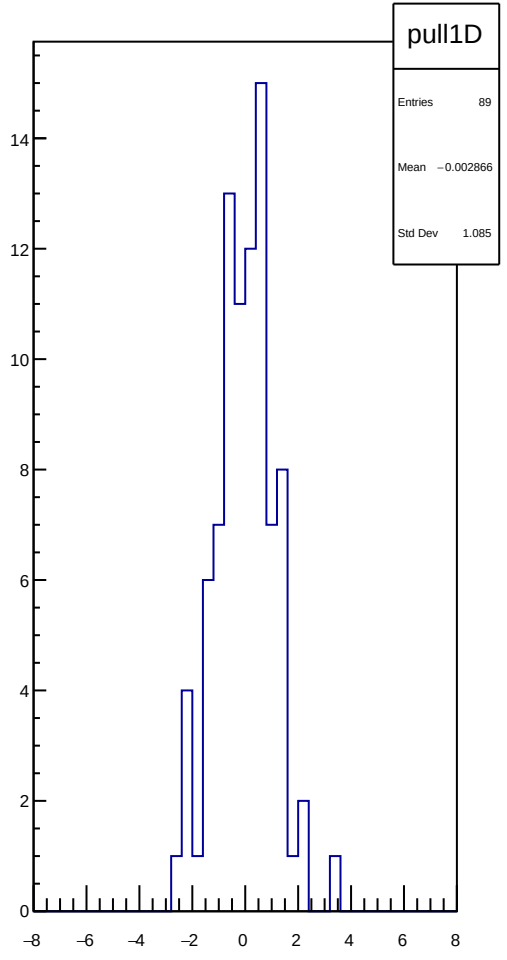

diff_bpm0l01Y_rms vs run
χ² / ndf 2.165e+04 / 88
p0 1601 ± 1.229
2200
2000
1800
1600
1400

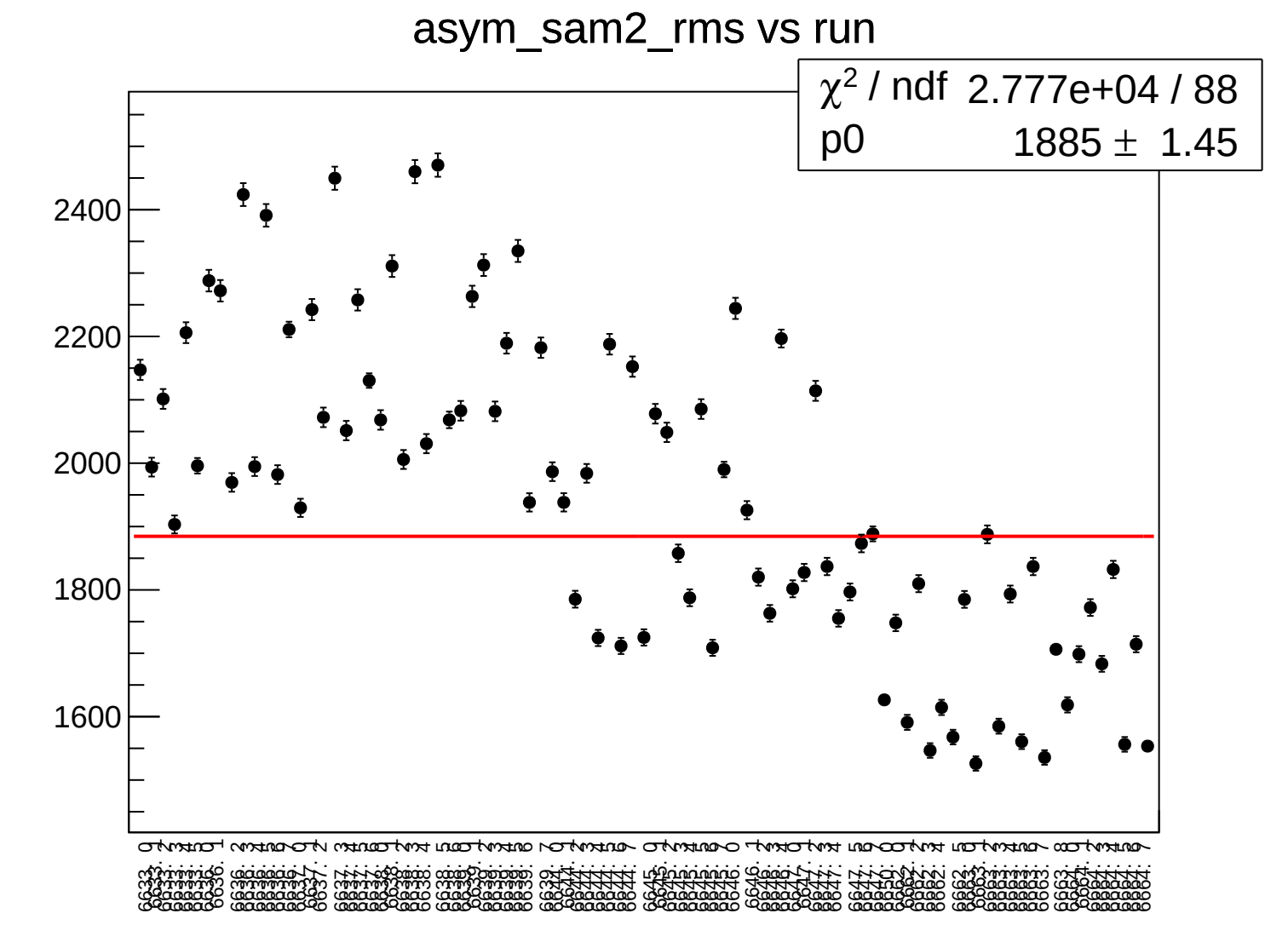

asym_sam1_mean vs run
χ² / ndf 100.4 / 88
p0 −564 ± 403.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 123.6
Std Dev 128.9
3
2
1
0
−1
−2

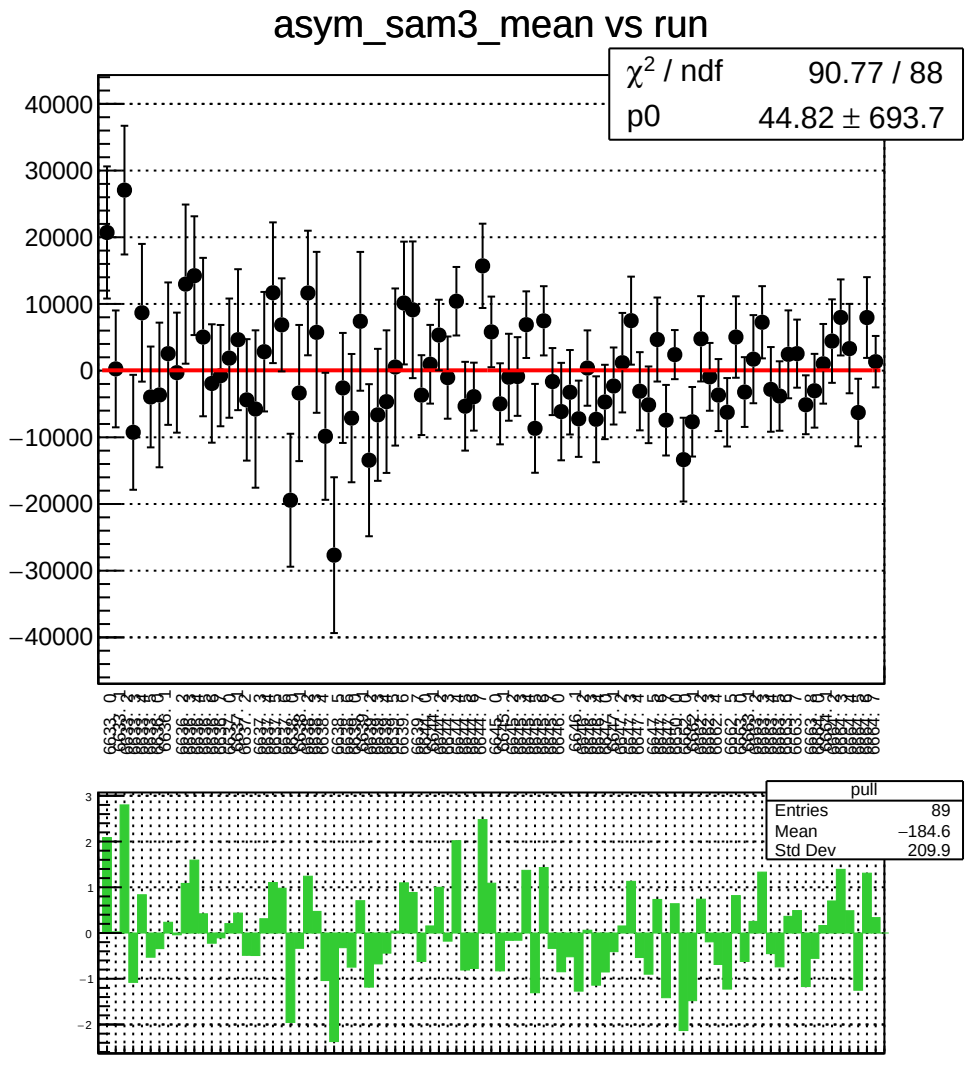

pull1D
Entries 89
Mean −0.01436
Std Dev 1.062
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

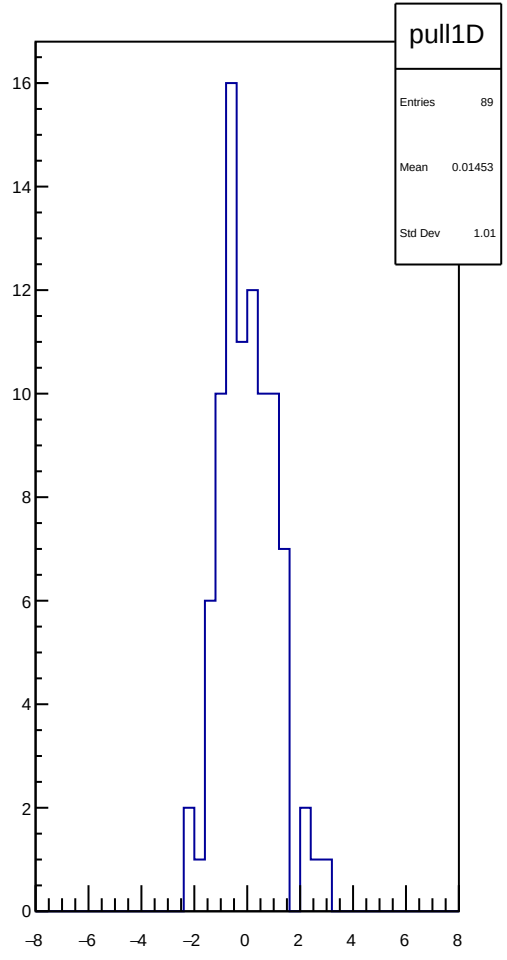

asym_sam1_rms vs run
χ² / ndf 1.264e+04 / 88
p0 372.9 ± 0.2856
460
440
420
400
380
360
340
320

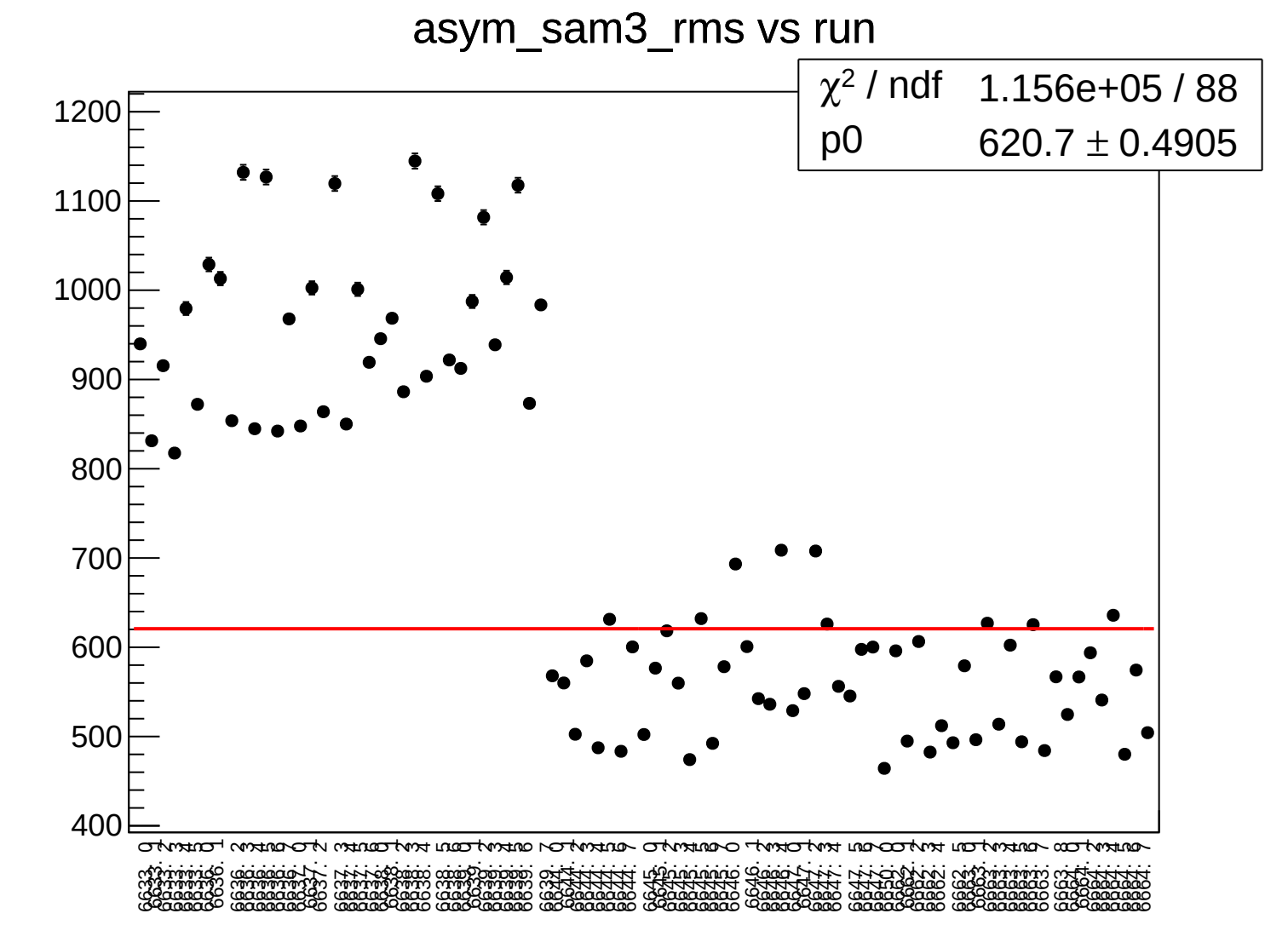

asym_sam2_mean vs run
×10^3
χ² / ndf 104.7 / 88
p0 −3588 ± 2051
100
50
0
−50
−100
pull
Entries 89
Mean 606.6
Std Dev 613
3
2
1
0
−1
−2

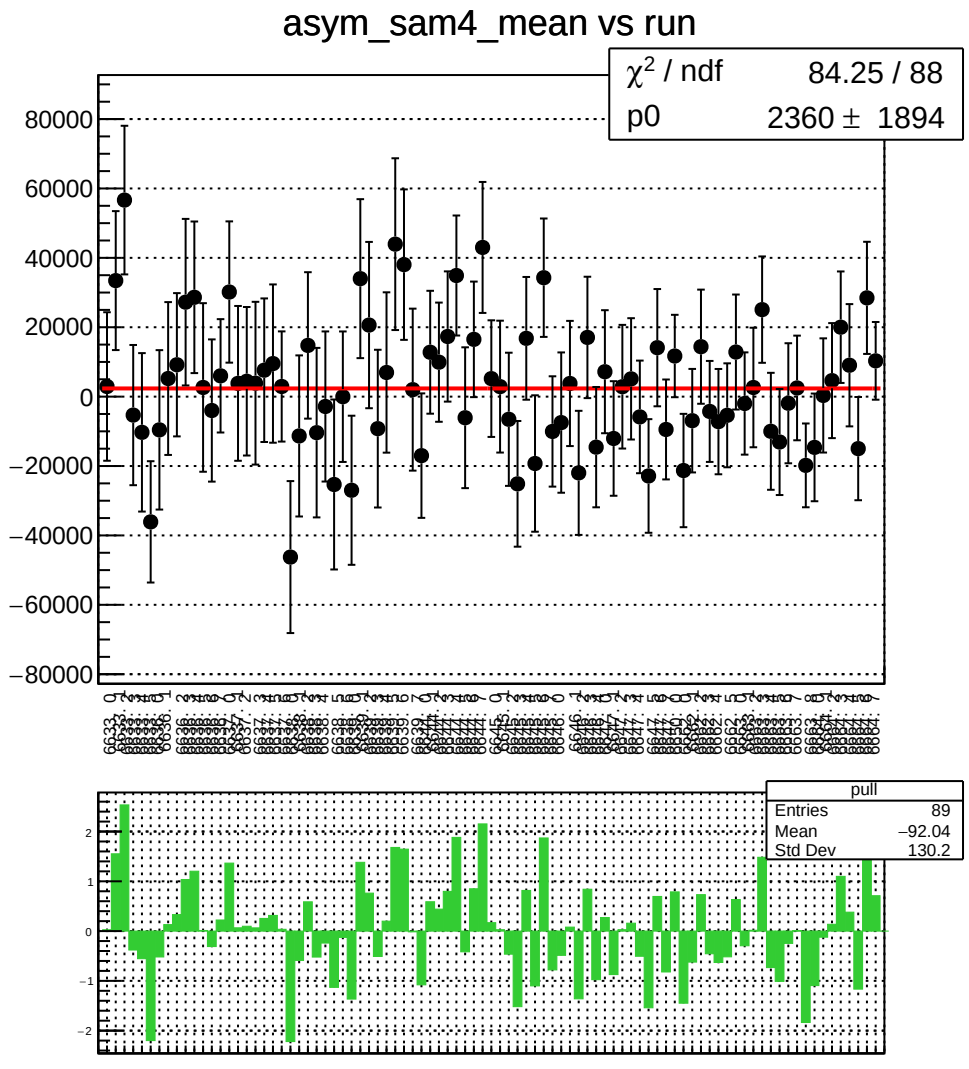

pull1D
Entries 89
Mean −0.002866
Std Dev 1.085
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

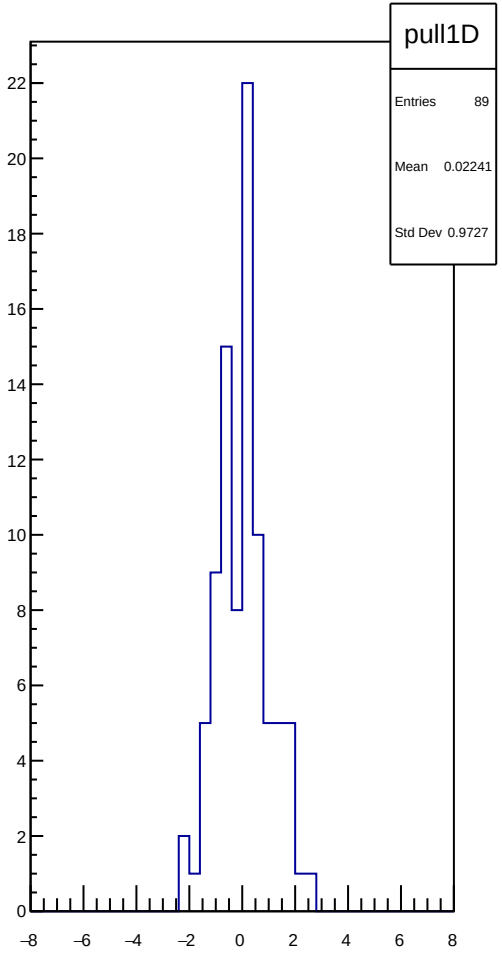

asym_sam2_rms vs run
χ^2 / ndf 2.777e+04 / 88
p0 1885 ± 1.45
2400
2200
2000
1800
1600

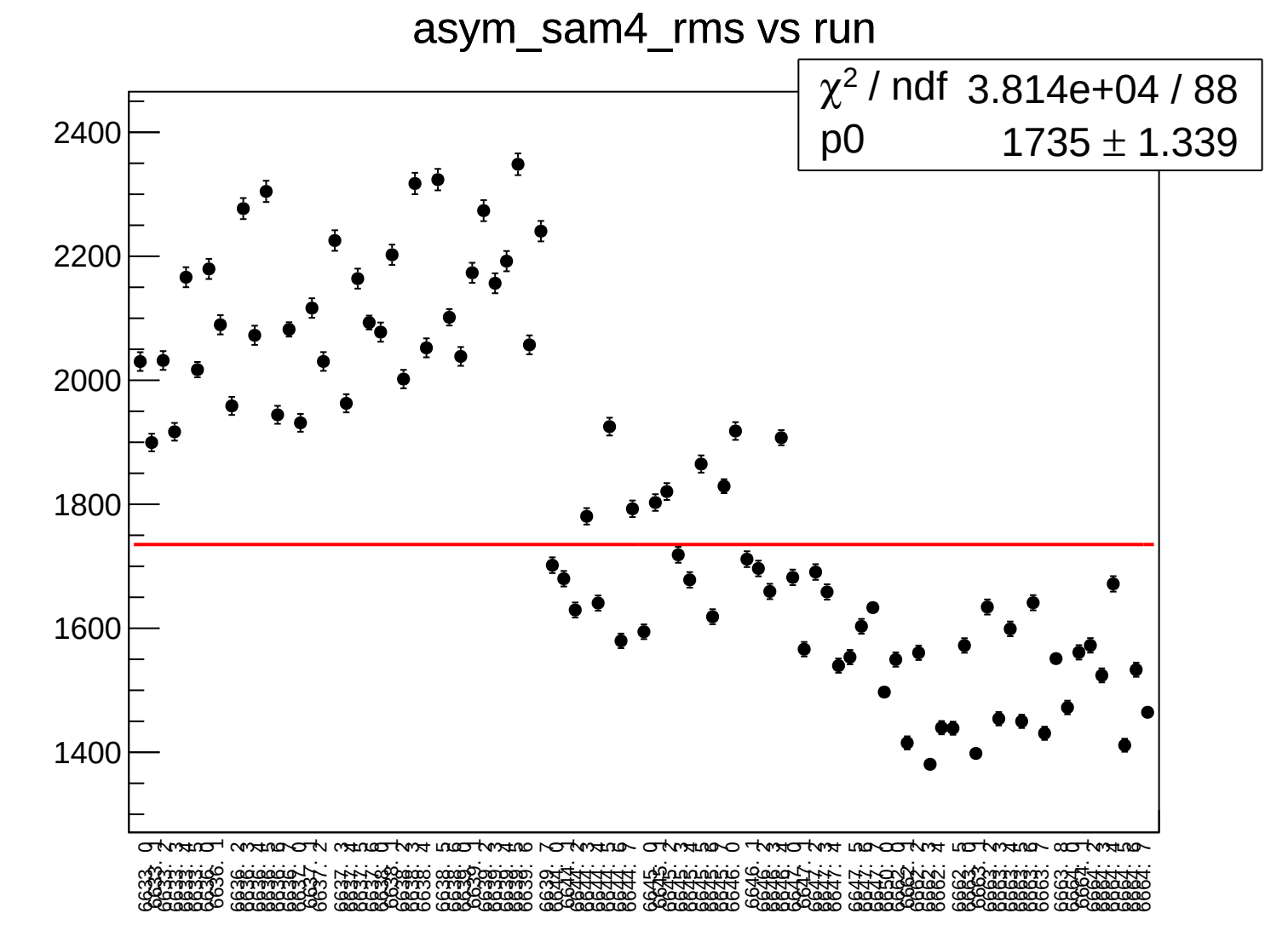

asym_sam3_mean vs run
χ² / ndf 90.77 / 88
p0 44.82 ± 693.7
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −184.6
Std Dev 209.9
3
2
1
0
−1
−2

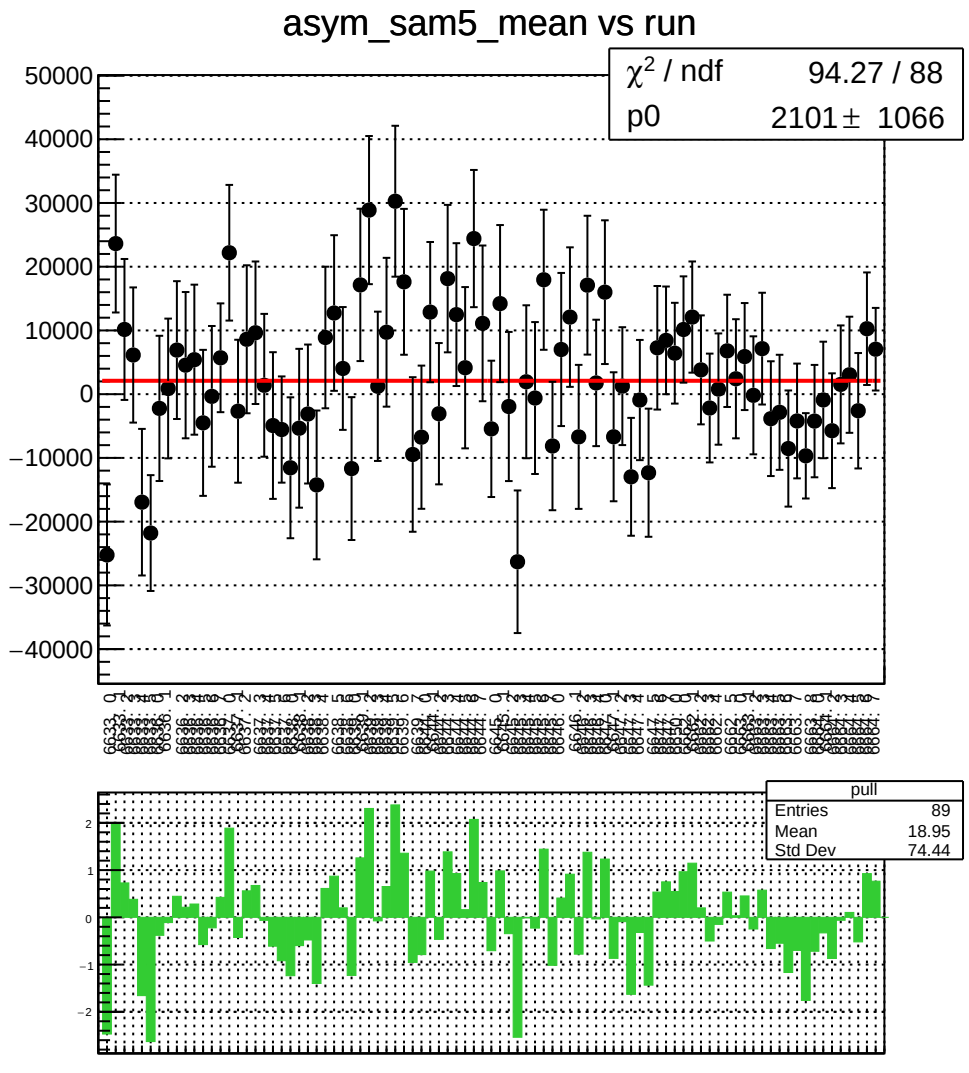

pull1D
Entries 89
Mean 0.01453
Std Dev 1.01
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

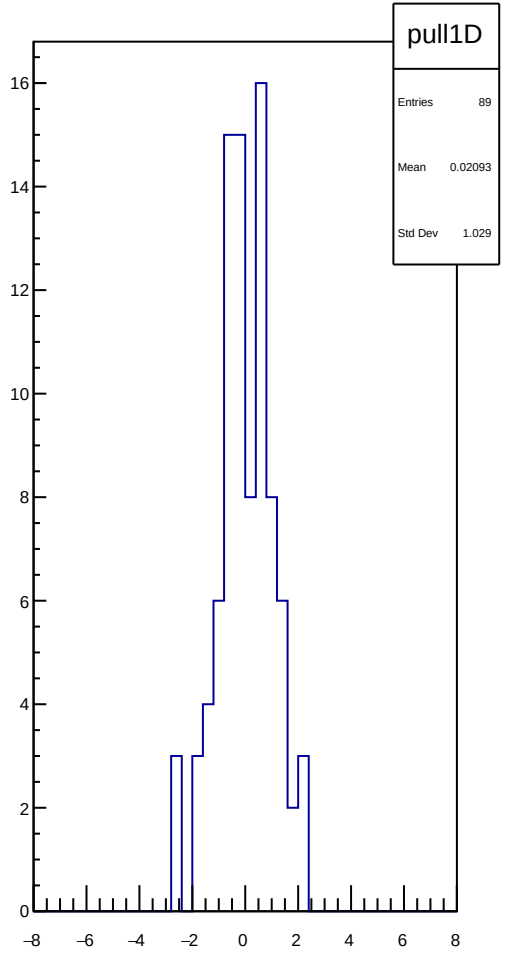

asym_sam3_rms vs run
χ^2 / ndf 1.156e+05 / 88
p0 620.7 ± 0.4905
1200
1100
1000
900
800
700
600
500
400

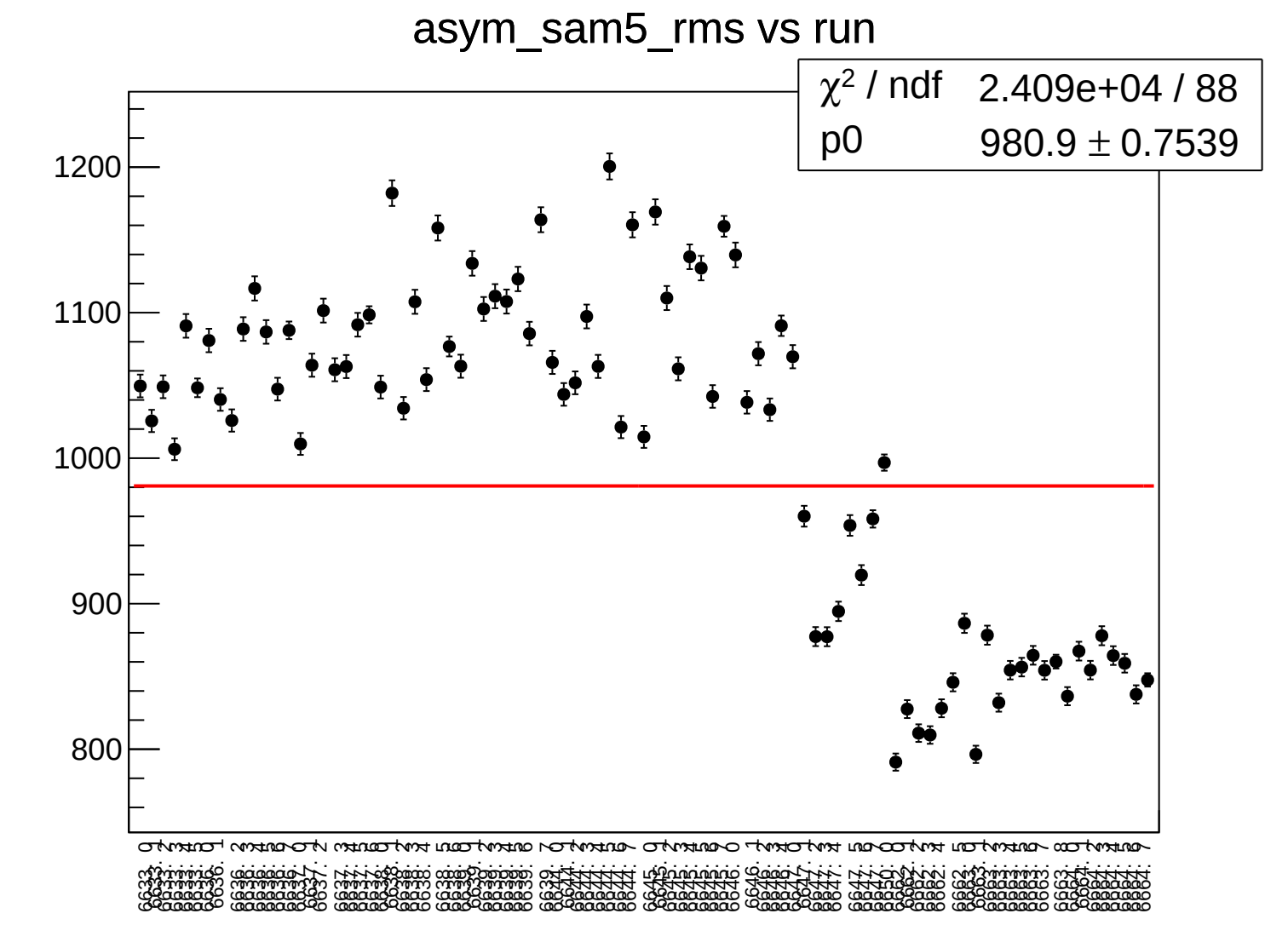

asym_sam4_mean vs run
χ² / ndf 84.25 / 88
p0 2360 ± 1894
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean −92.04
Std Dev 130.2
2
1
0
−1
−2

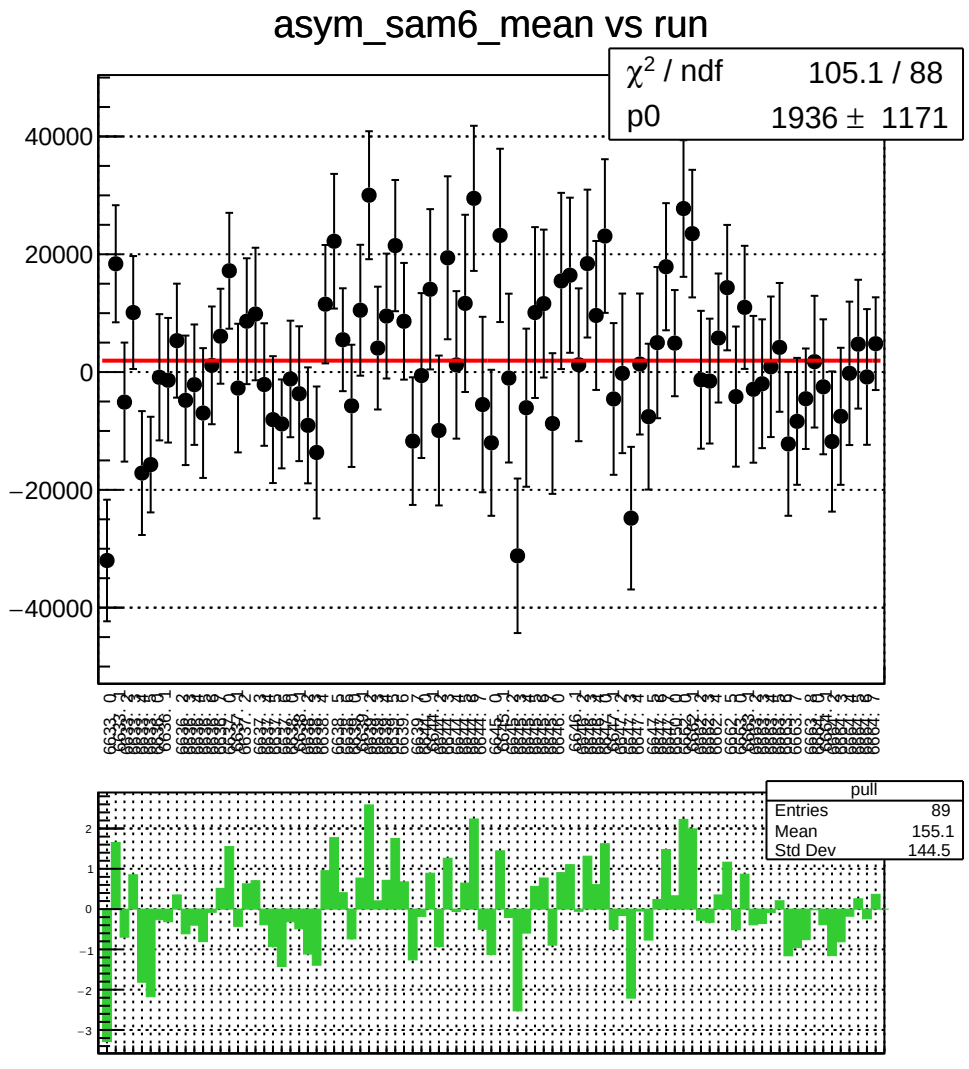

pull1D
Entries 89
Mean 0.02241
Std Dev 0.9727
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

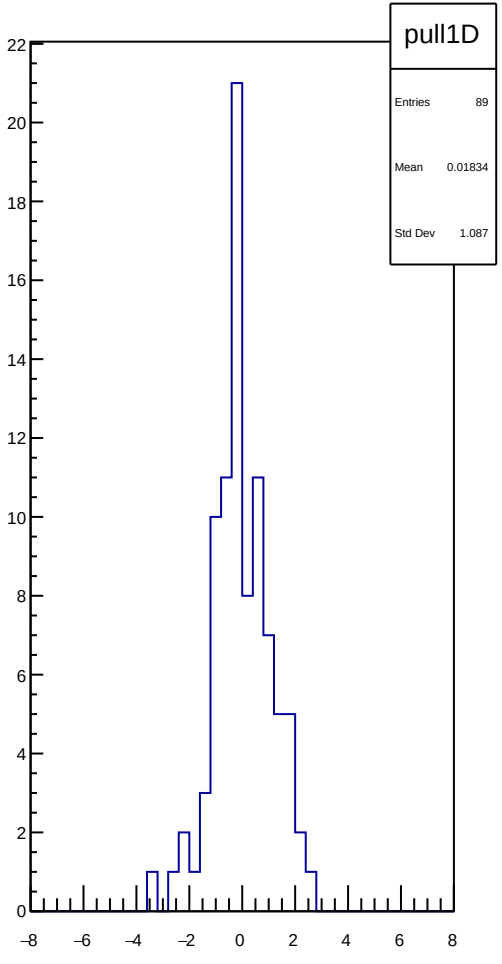

asym_sam4_rms vs run
χ² / ndf 3.814e+04 / 88
p0 1735 ± 1.339
2400
2200
2000
1800
1600
1400

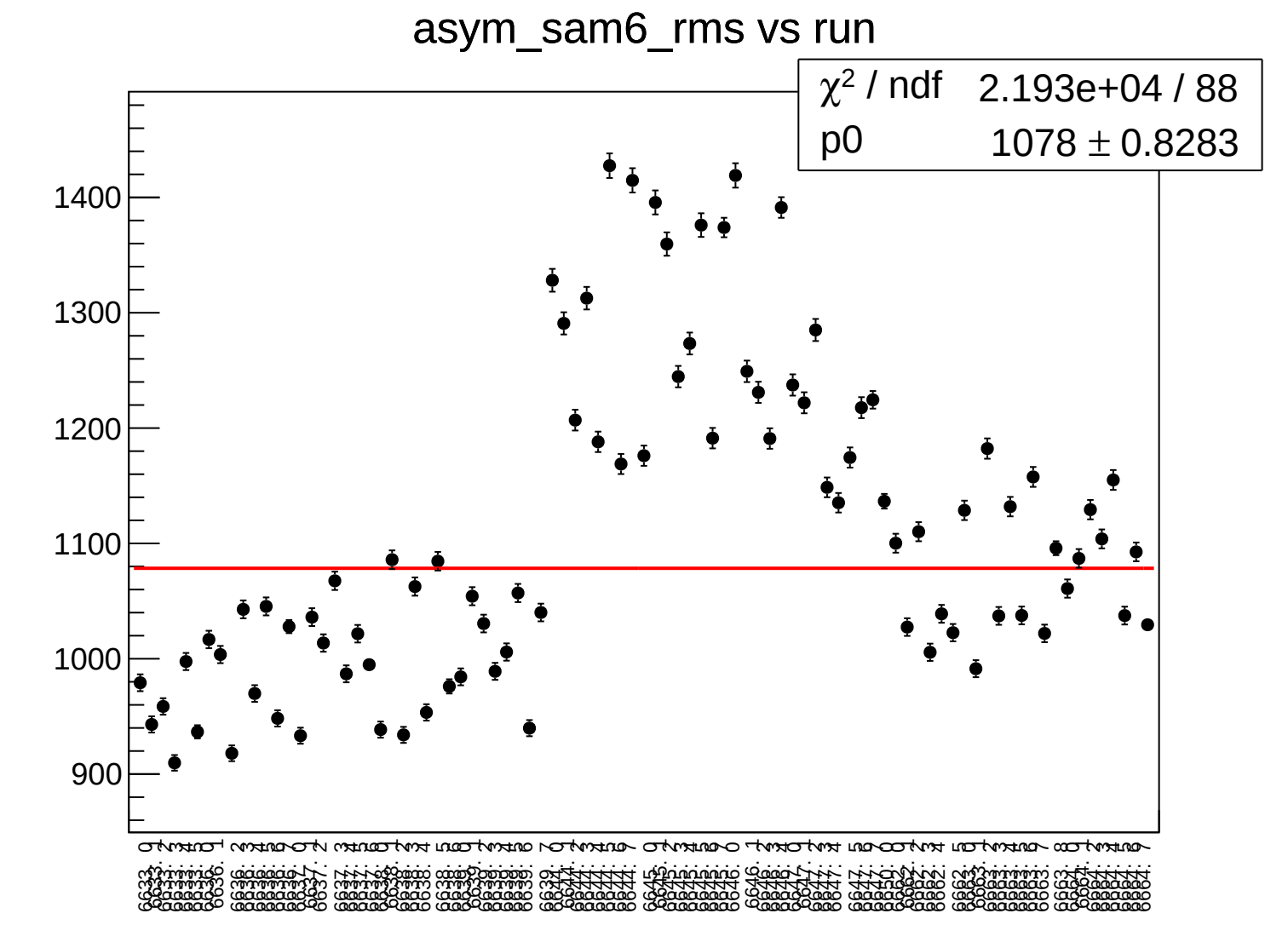

asym_sam5_mean vs run
χ² / ndf 94.27 / 88
p0 2101 ± 1066
pull
Entries 89
Mean 18.95
Std Dev 74.44

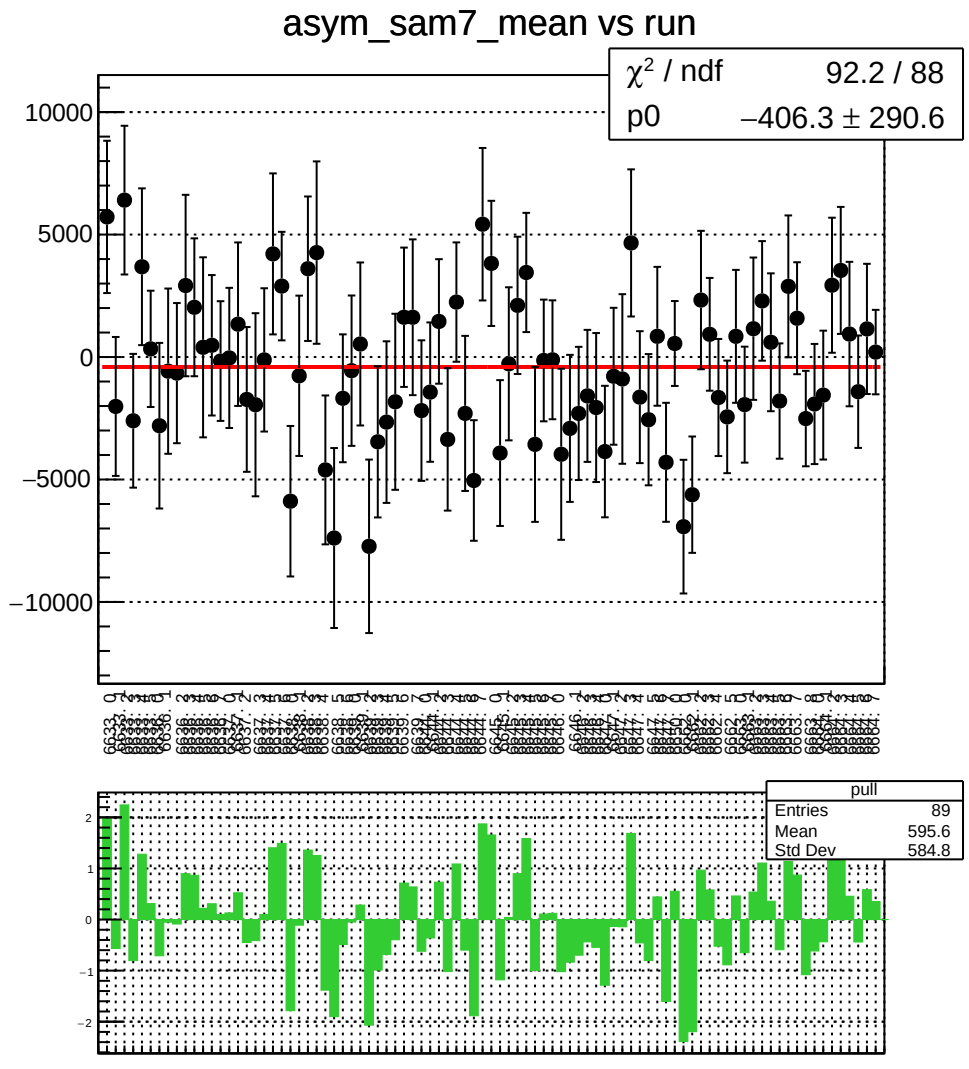

pull1D
Entries 89
Mean 0.02093
Std Dev 1.029

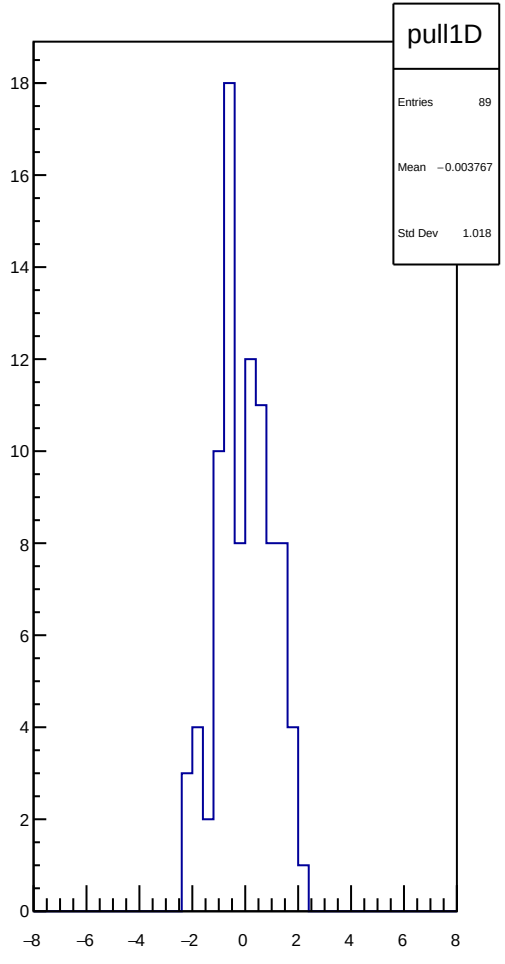

asym_sam5_rms vs run
χ² / ndf 2.409e+04 / 88
p0 980.9 ± 0.7539
1200
1100
1000
900
800

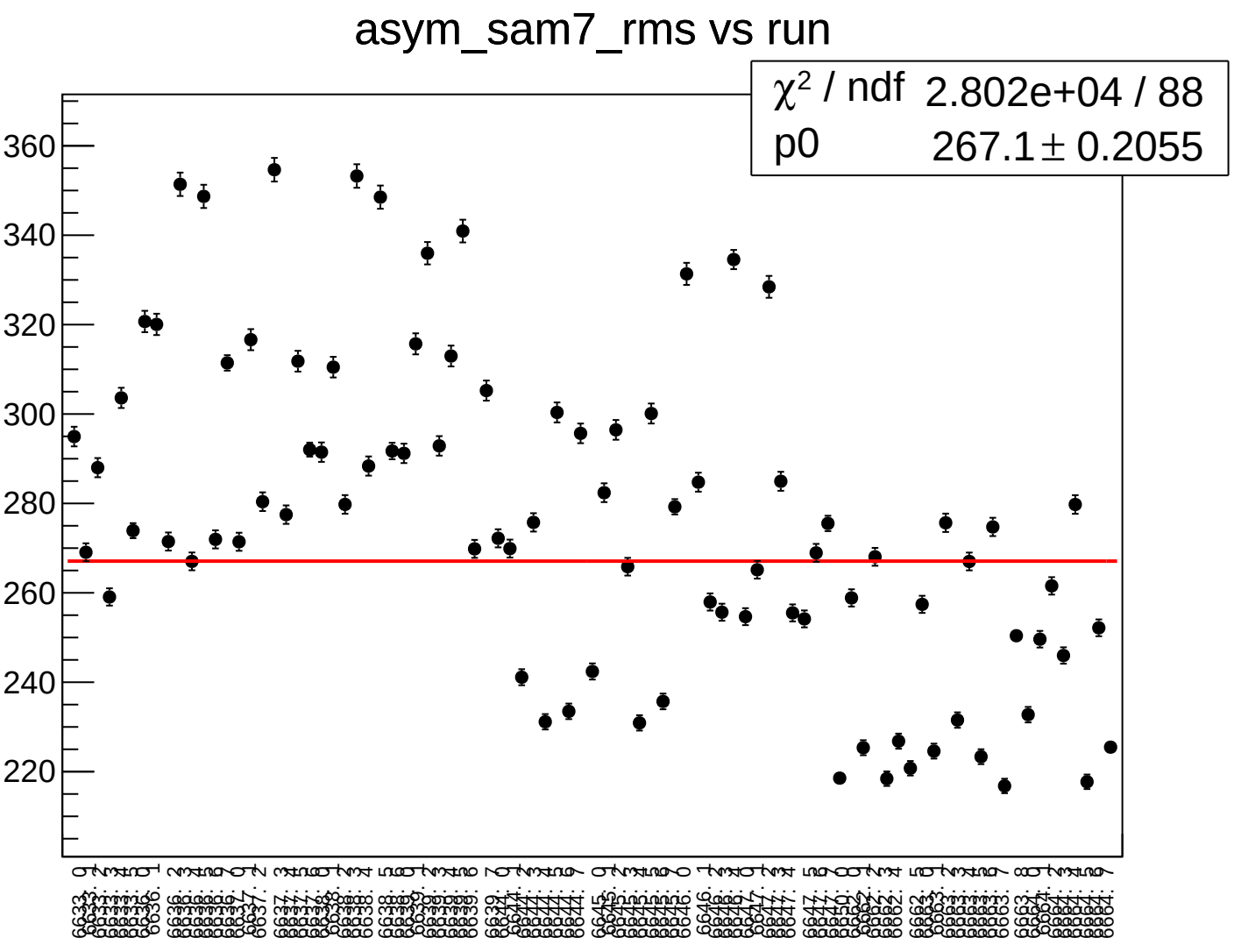

asym_sam6_mean vs run
χ² / ndf 105.1 / 88
p0 1936 ± 1171
40000
20000
0
−20000
−40000
pull
Entries 89
Mean 155.1
Std Dev 144.5
2
1
0
−1
−2
−3

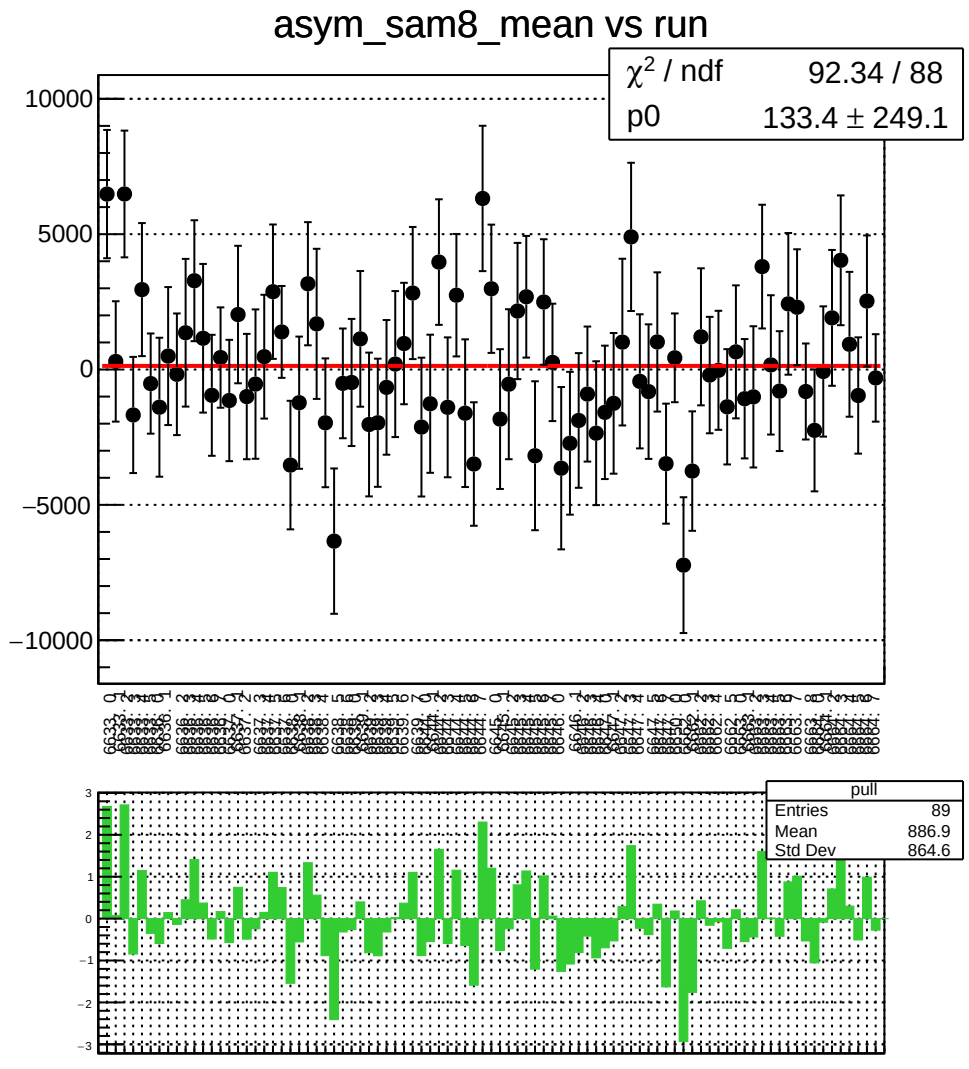

pull1D
Entries 89
Mean 0.01834
Std Dev 1.087
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

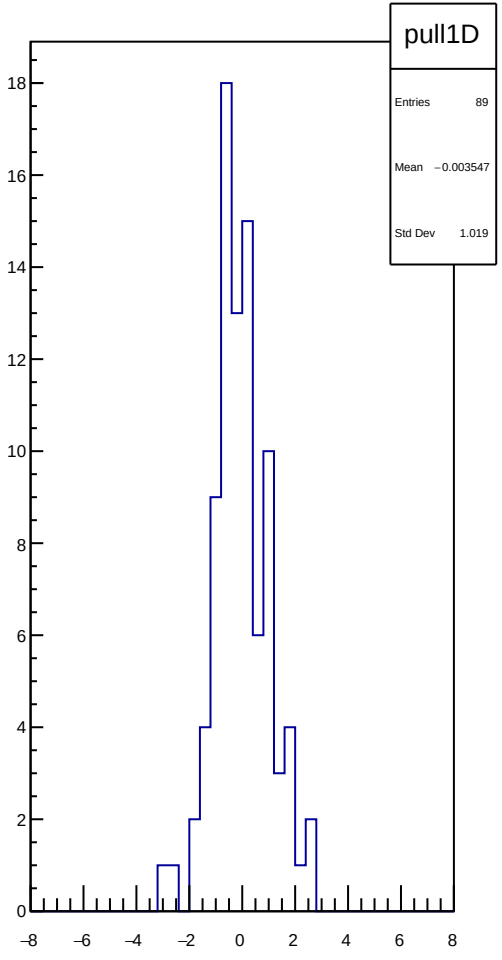

asym_sam6_rms vs run
χ^2 / ndf 2.193e+04 / 88
p0 1078 ± 0.8283
1400
1300
1200
1100
1000
900

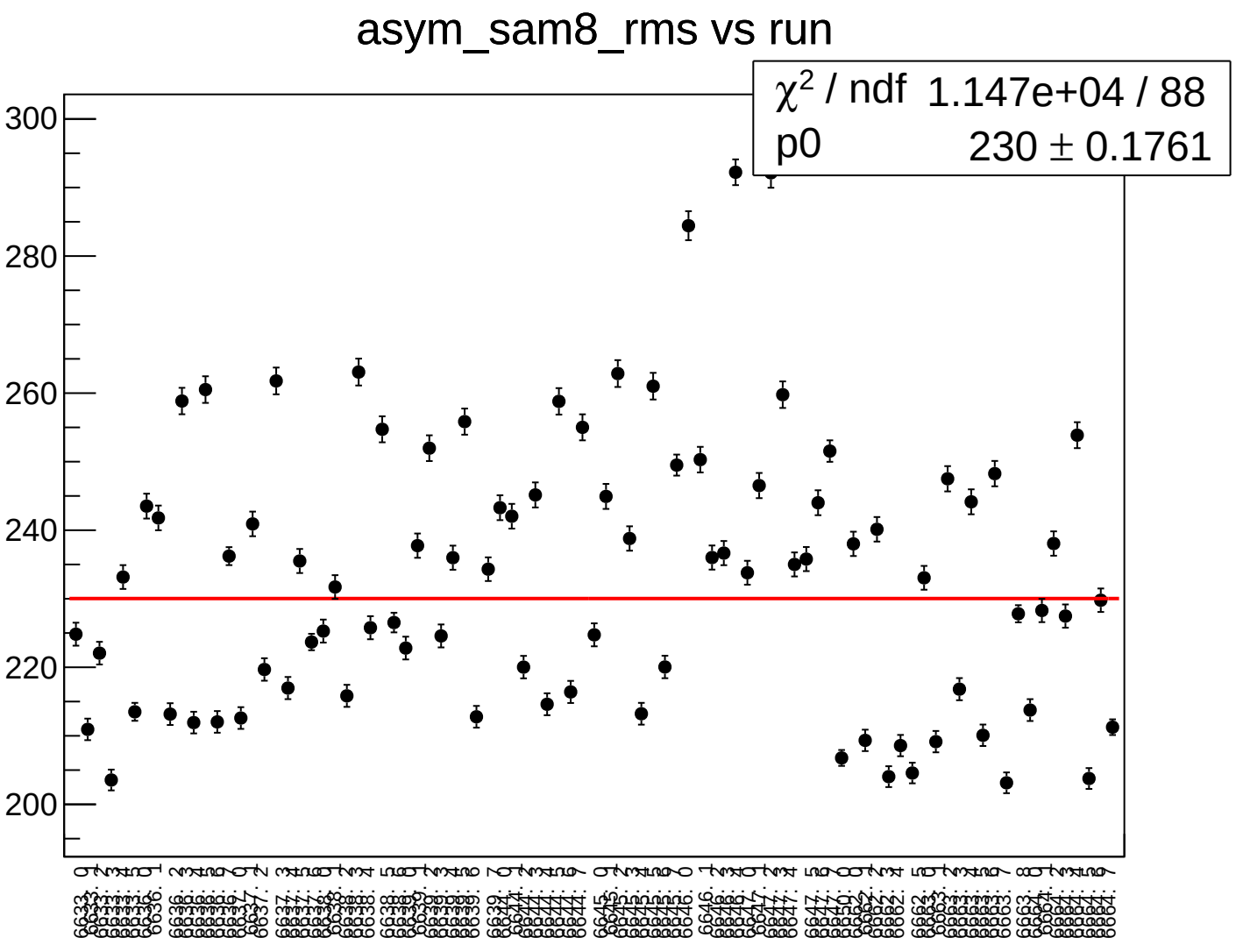

asym_sam7_mean vs run
χ² / ndf 92.2 / 88
p0 −406.3 ± 290.6
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 595.6
Std Dev 584.8
2
1
0
−1
−2

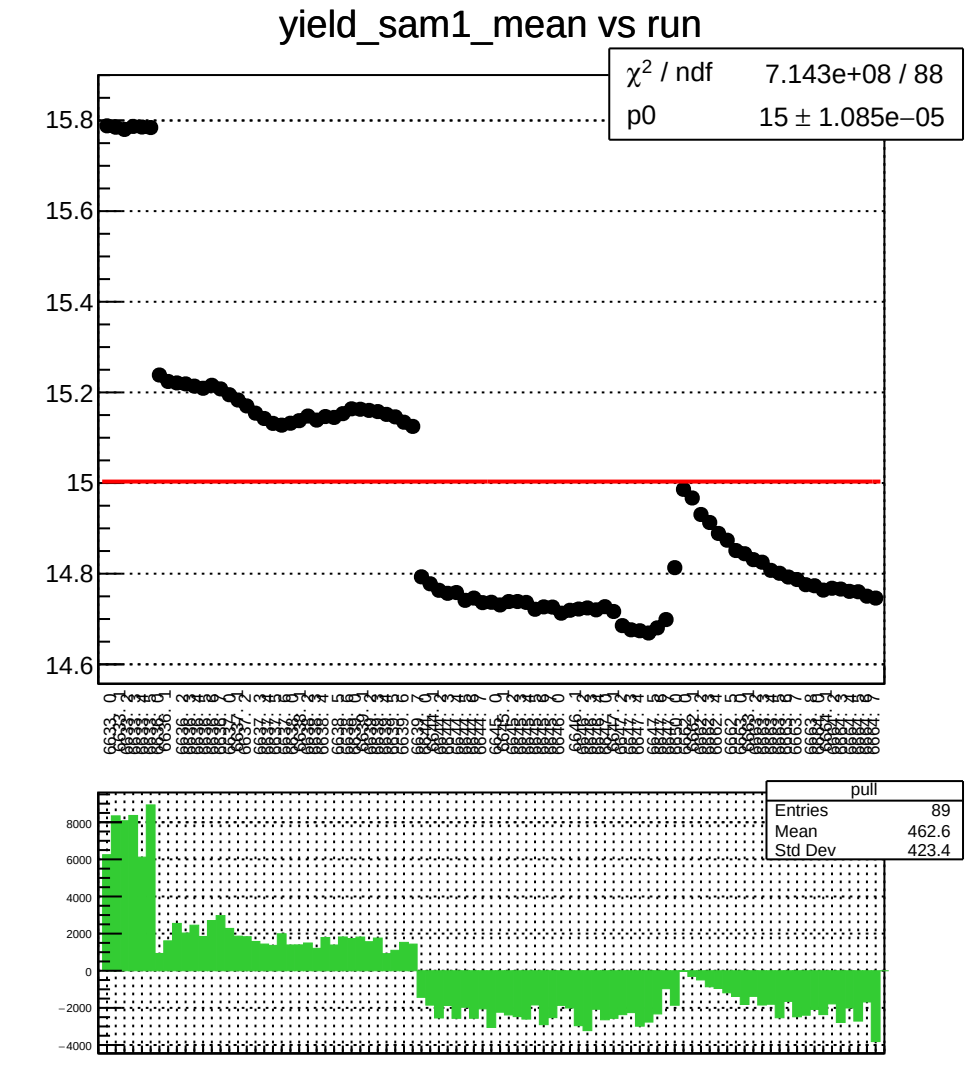

pull1D
Entries 89
Mean −0.003767
Std Dev 1.018
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

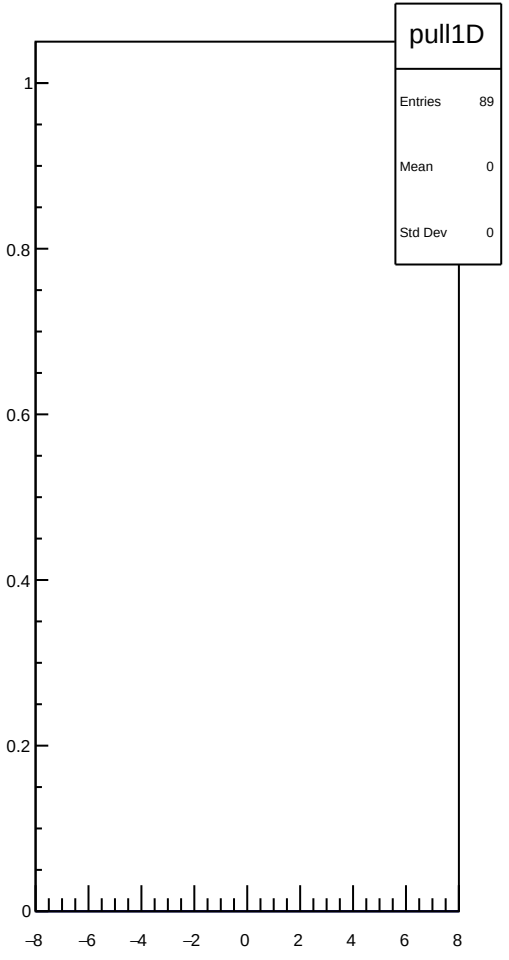

asym_sam7_rms vs run
χ² / ndf 2.802e+04 / 88
p0 267.1 ± 0.2055
360
340
320
300
280
260
240
220

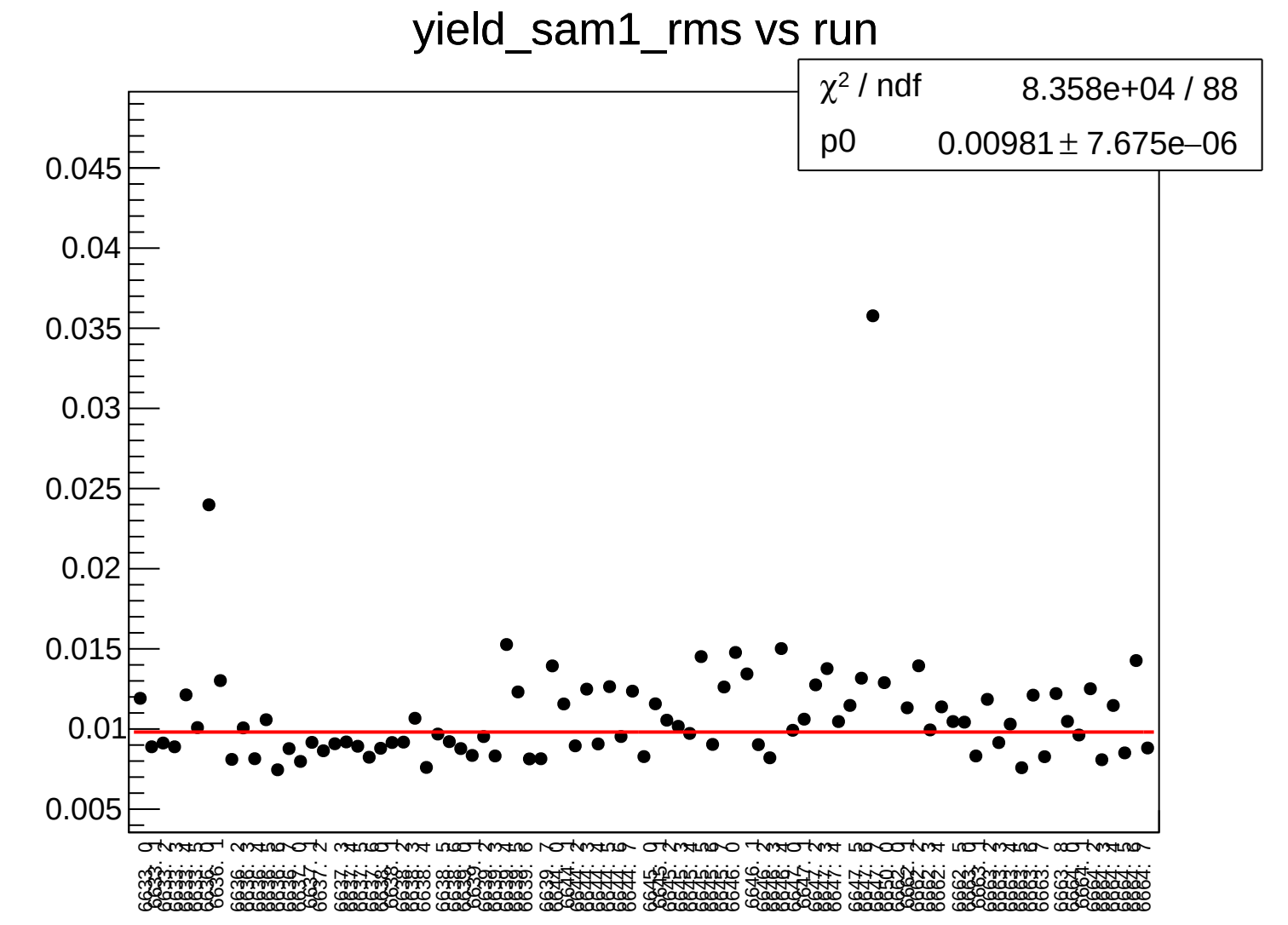

asym_sam8_mean vs run
χ² / ndf 92.34 / 88
p0 133.4 ± 249.1
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 886.9
Std Dev 864.6
3
2
1
0
−1
−2
−3

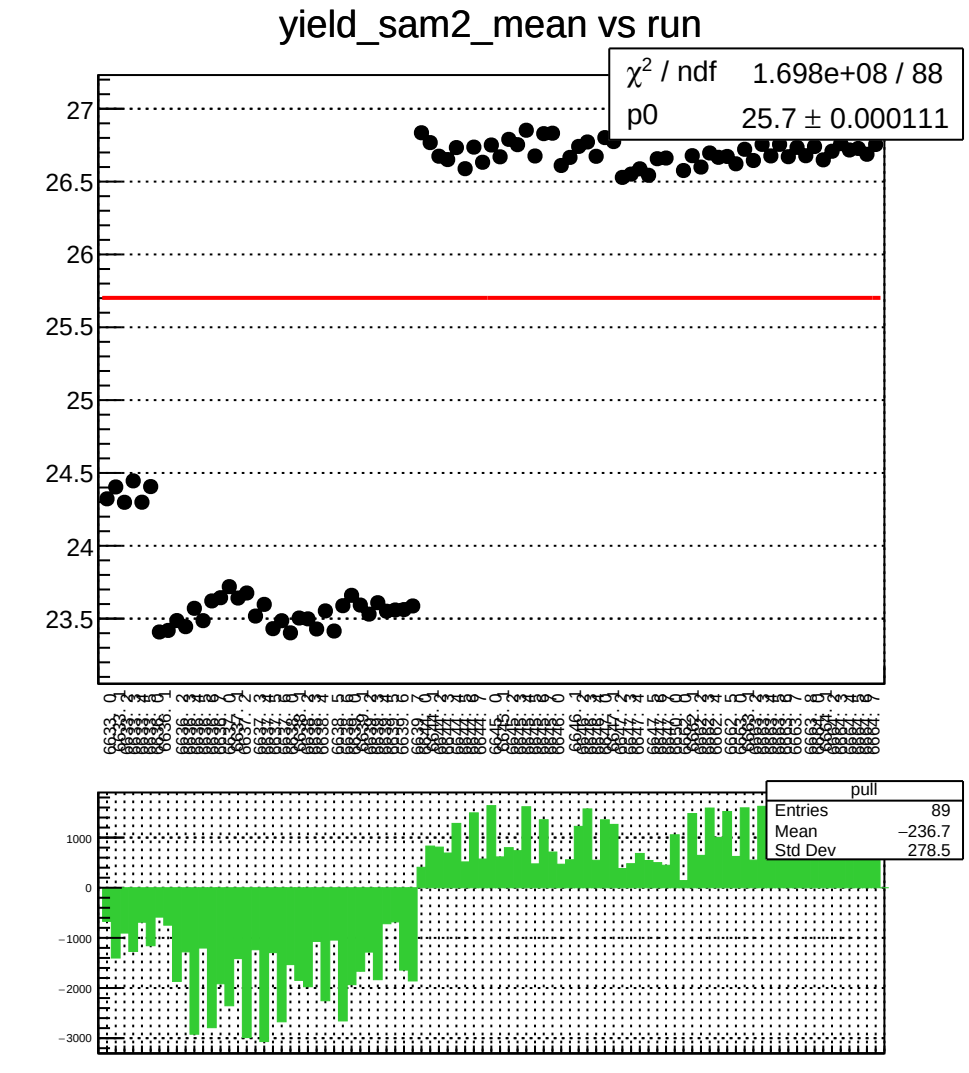

pull1D
Entries 89
Mean −0.003547
Std Dev 1.019
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

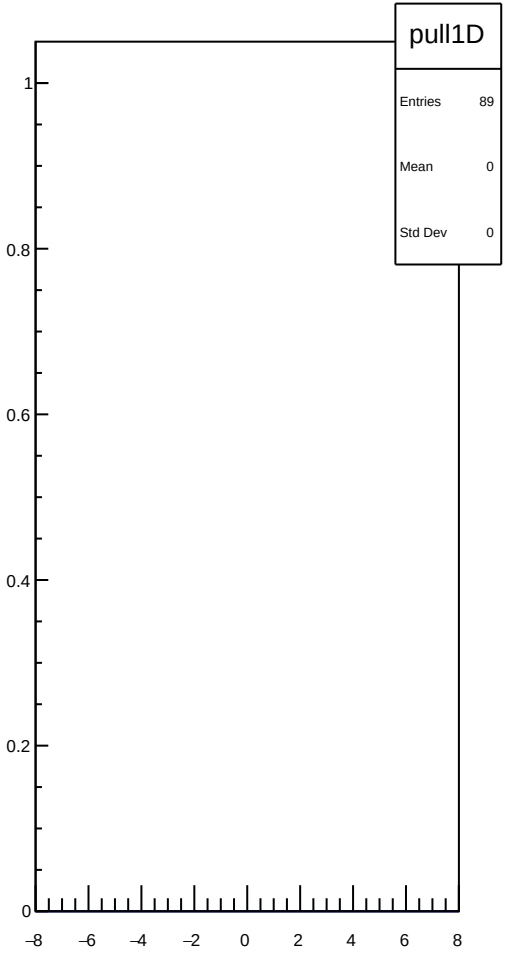

asym_sam8_rms vs run
χ^2 / ndf 1.147e+04 / 88
p0 230 ± 0.1761
300
280
260
240
220
200

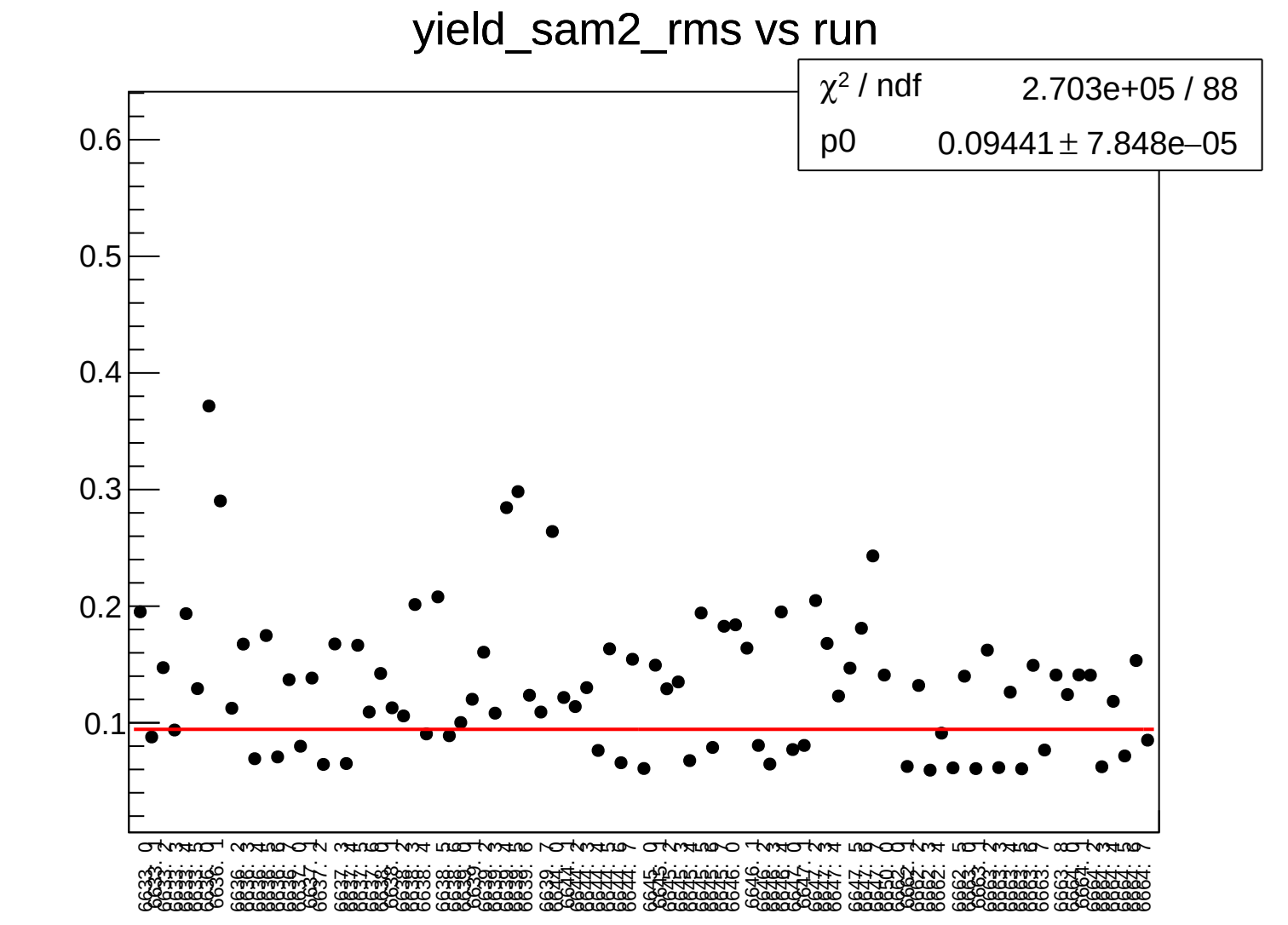

yield_sam1_mean vs run
χ² / ndf 7.143e+08 / 88
p0 15 ± 1.085e−05
15.8
15.6
15.4
15.2
15
14.8
14.6
pull
Entries 89
Mean 462.6
Std Dev 423.4
8000
6000
4000
2000
0
−2000
−4000

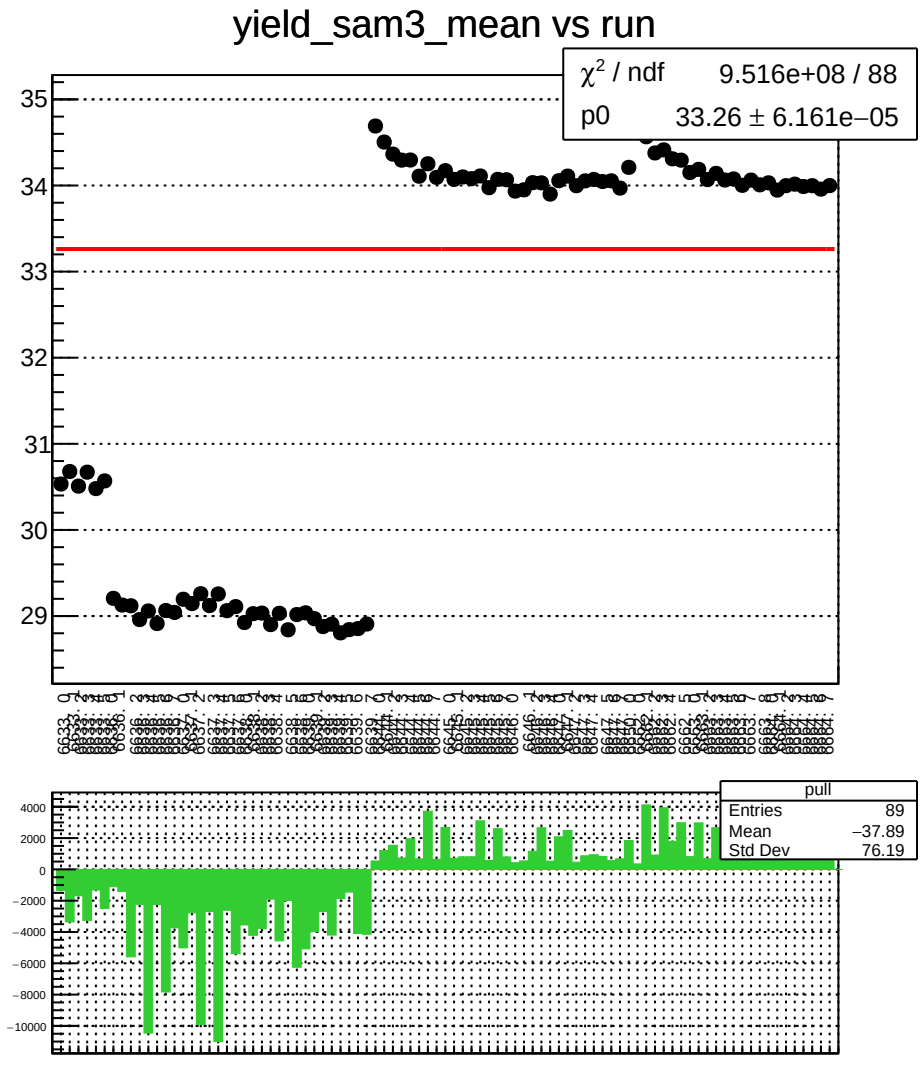

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

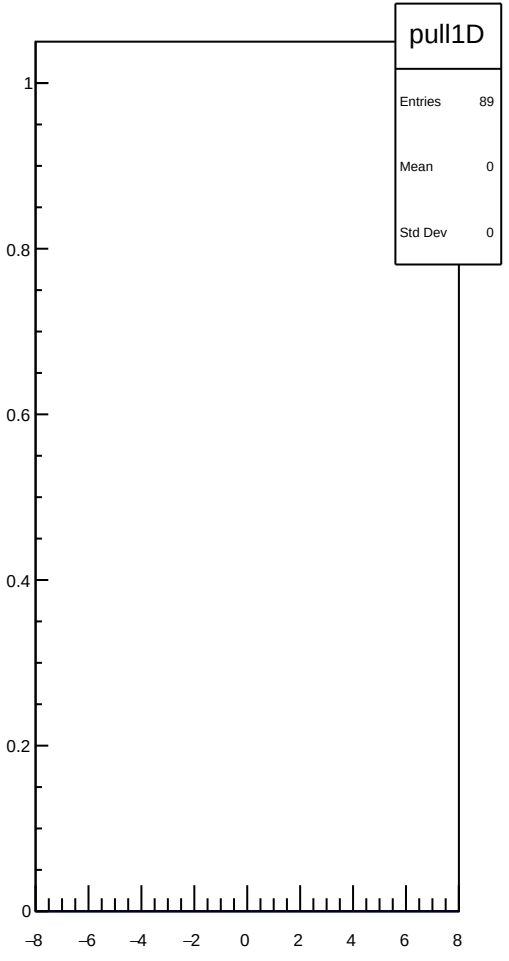

yield_sam1_rms vs run
χ² / ndf 8.358e+04 / 88
p0 0.00981 ± 7.675e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

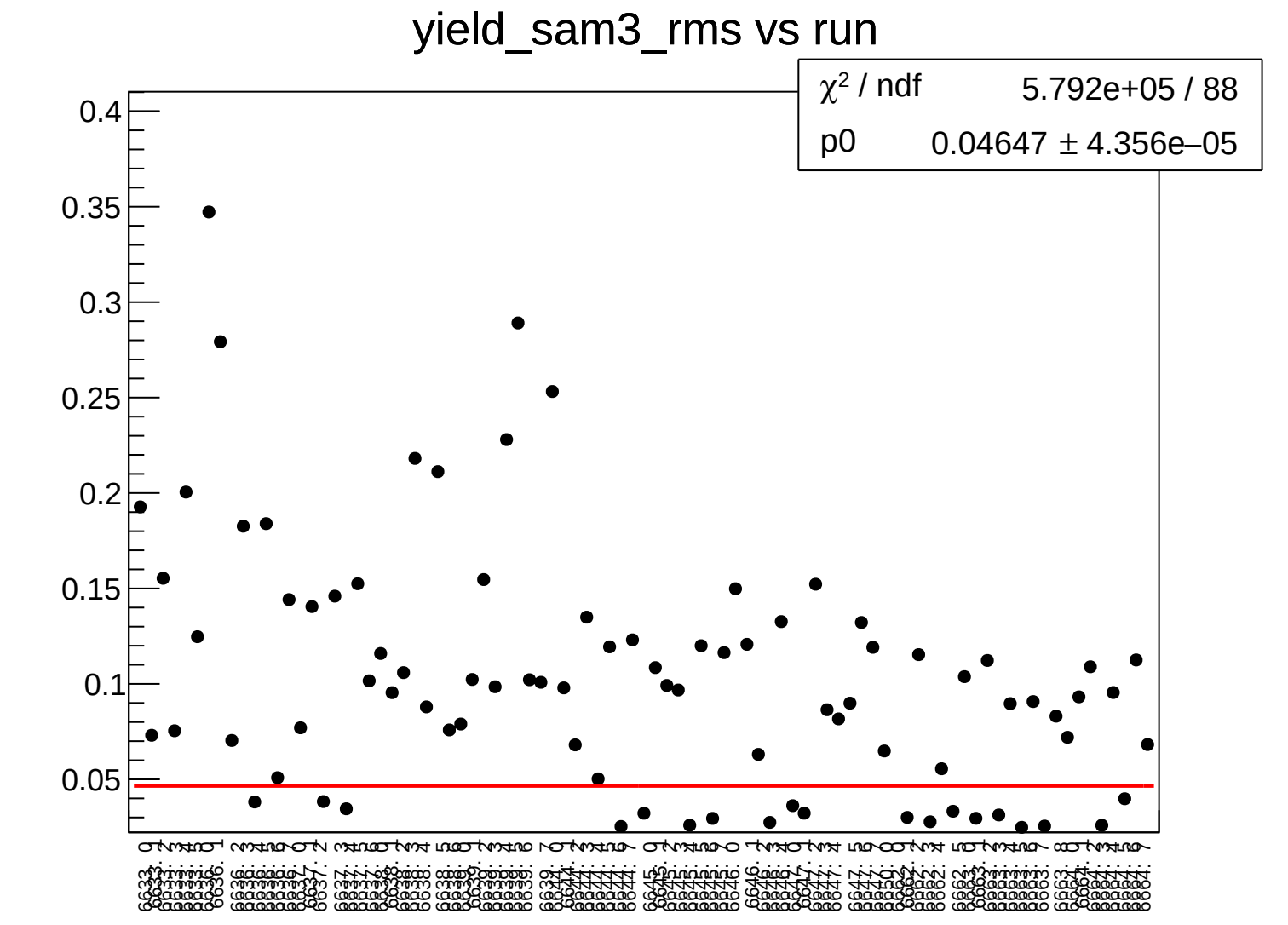

yield_sam2_mean vs run
χ² / ndf 1.698e+08 / 88
p0 25.7 ± 0.000111
27
26.5
26
25.5
25
24.5
24
23.5
pull
Entries 89
Mean −236.7
Std Dev 278.5
1000
0
−1000
−2000
−3000

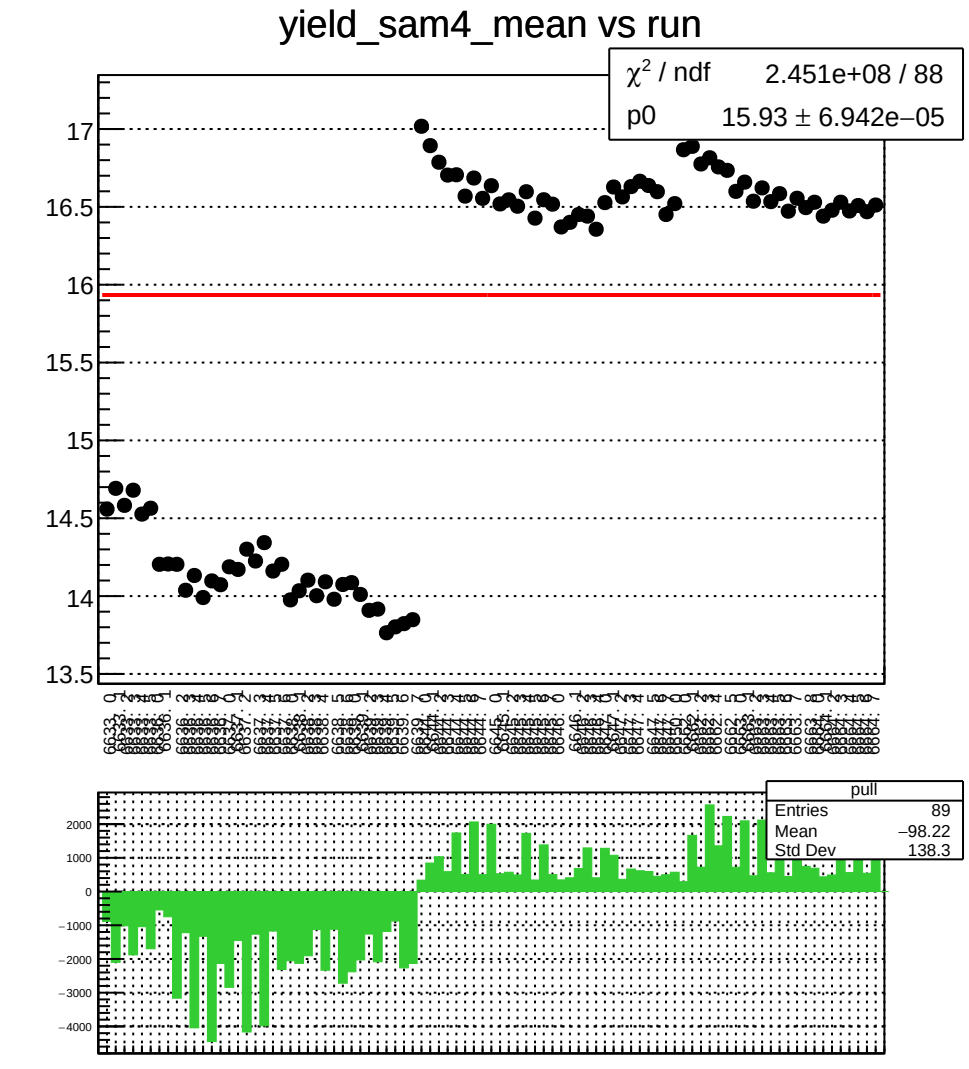

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

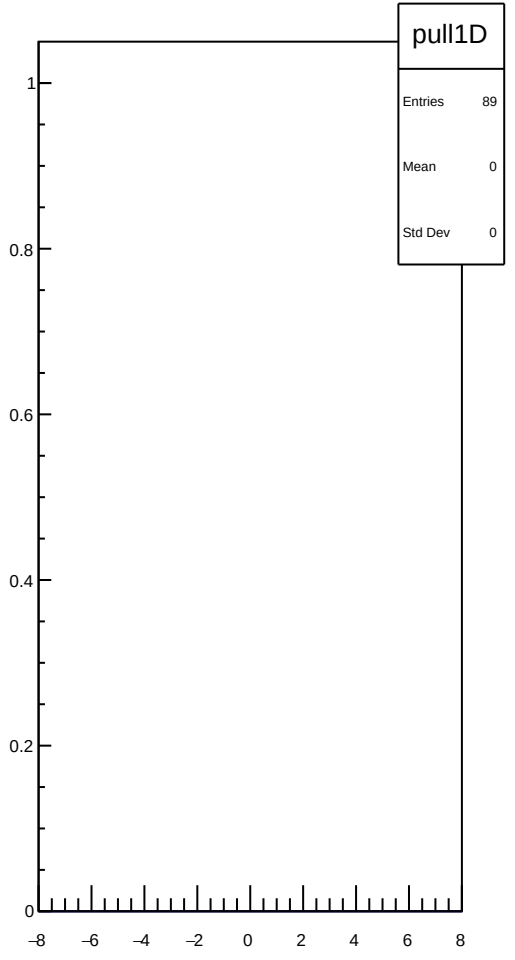

yield_sam2_rms vs run
χ² / ndf 2.703e+05 / 88
p0 0.09441 ± 7.848e–05
0.6
0.5
0.4
0.3
0.2
0.1

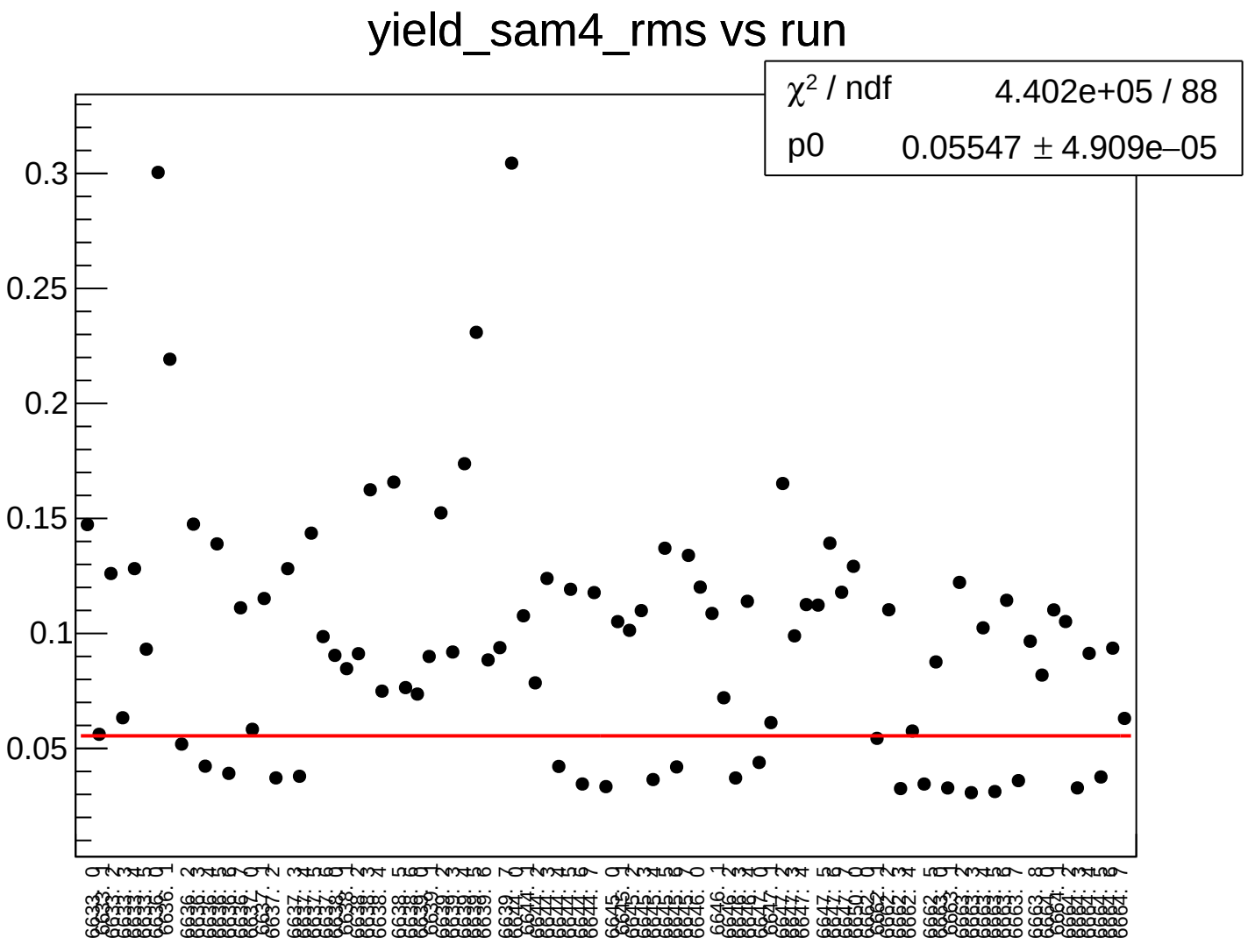

yield_sam3_mean vs run
χ² / ndf 9.516e+08 / 88
p0 33.26 ± 6.161e−05
35
34
33
32
31
30
29
pull
Entries 89
Mean −37.89
Std Dev 76.19
4000
2000
0
−2000
−4000
−6000
−8000
−10000

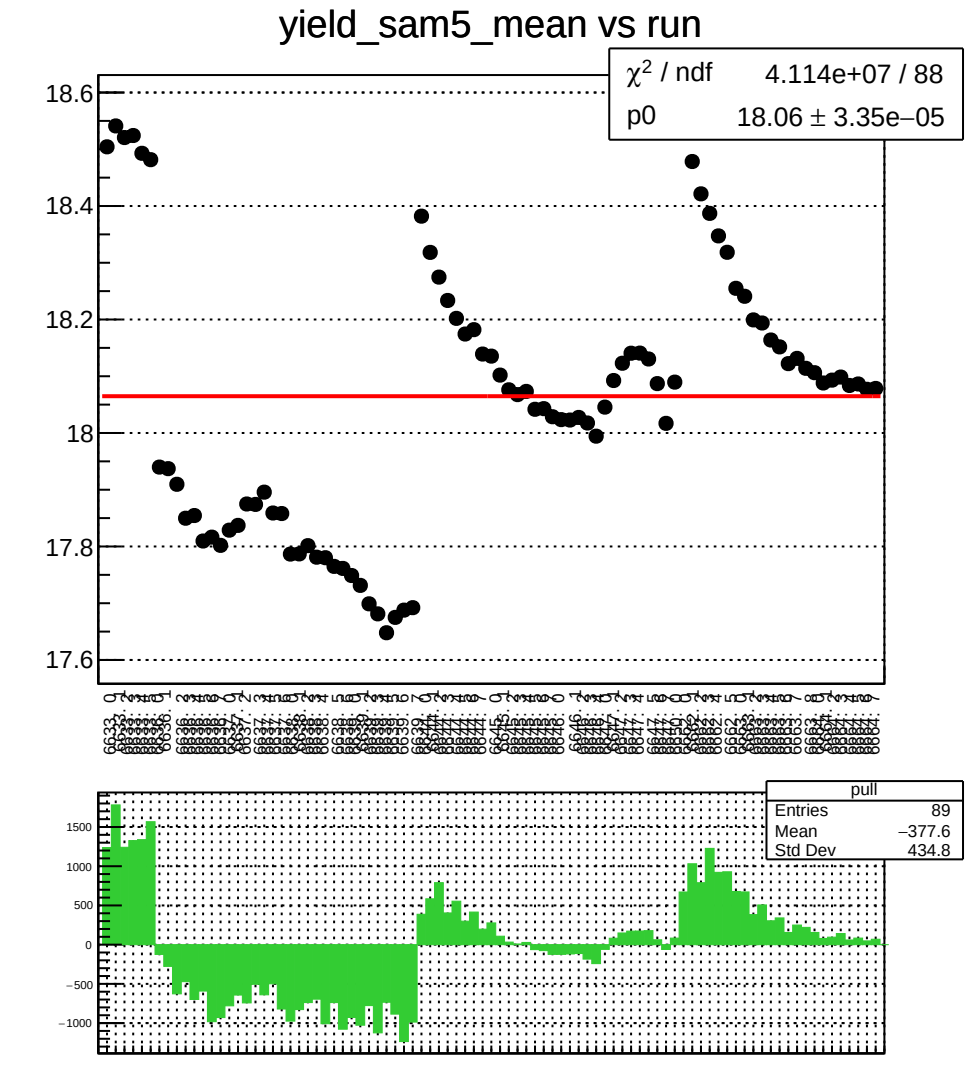

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

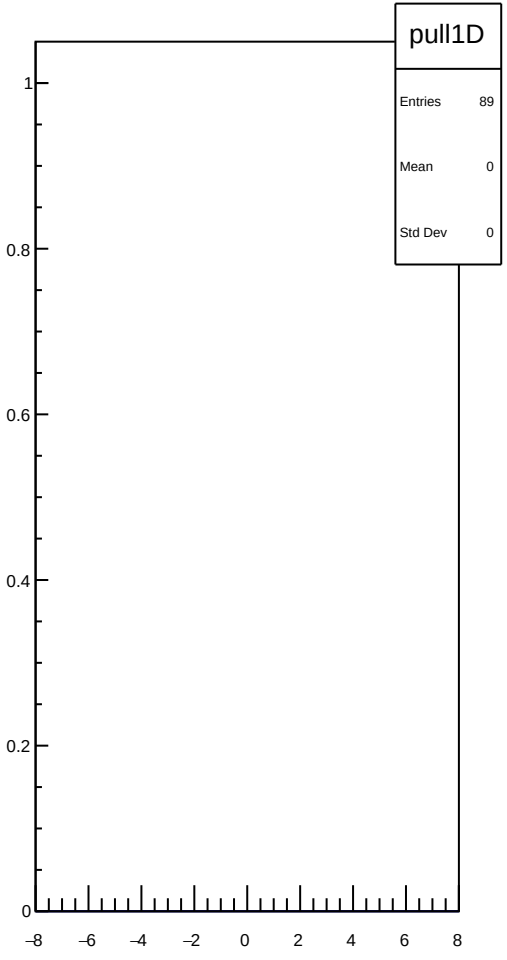

yield_sam3_rms vs run
χ² / ndf 5.792e+05 / 88
p0 0.04647 ± 4.356e−05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

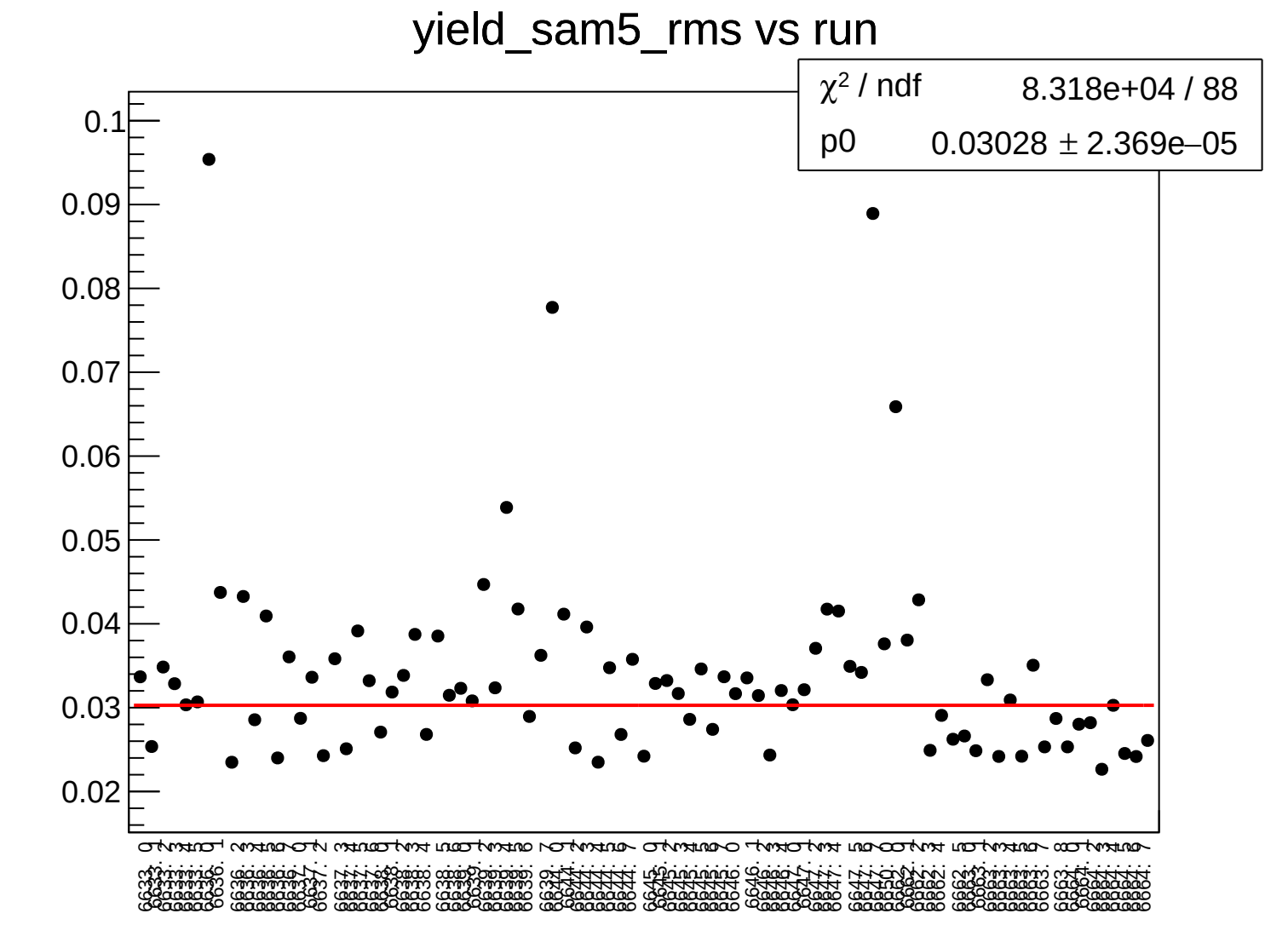

yield_sam4_mean vs run
χ² / ndf 2.451e+08 / 88
p0 15.93 ± 6.942e−05
17
16.5
16
15.5
15
14.5
14
13.5
pull
Entries 89
Mean −98.22
Std Dev 138.3
2000
1000
0
−1000
−2000
−3000
−4000

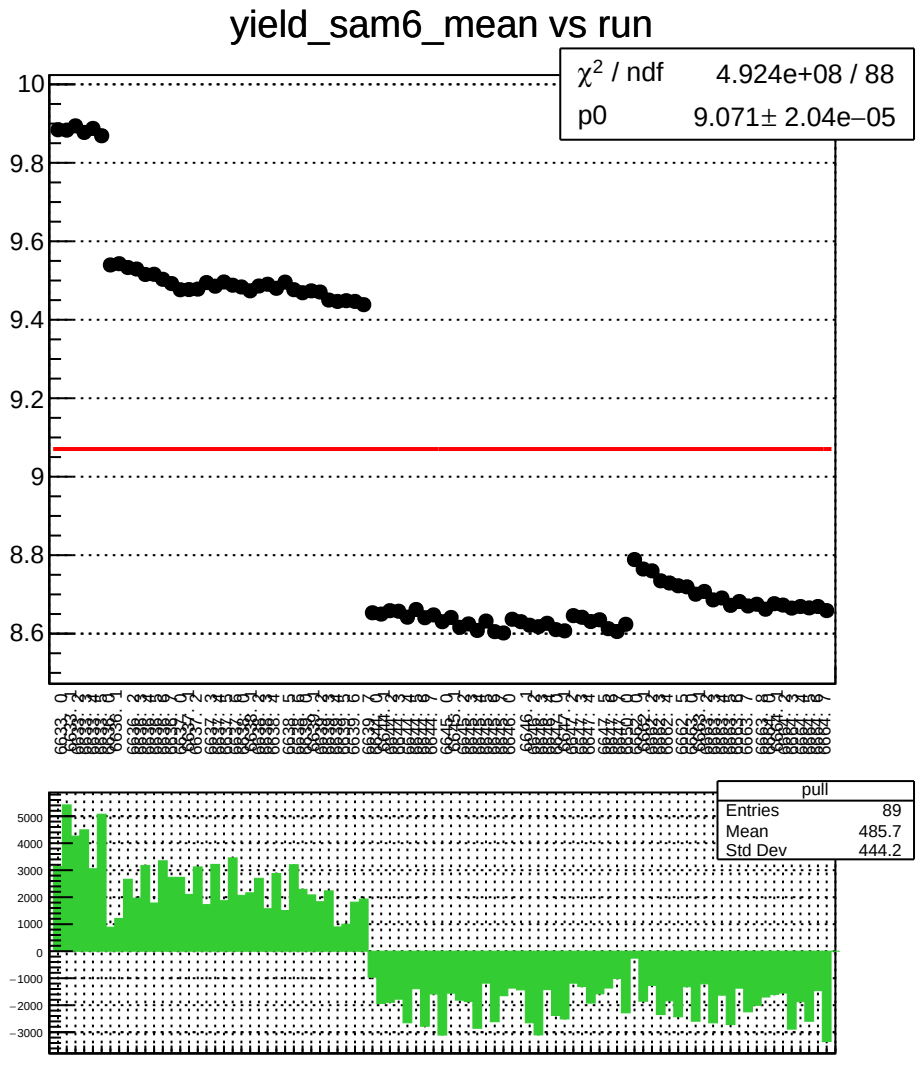

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

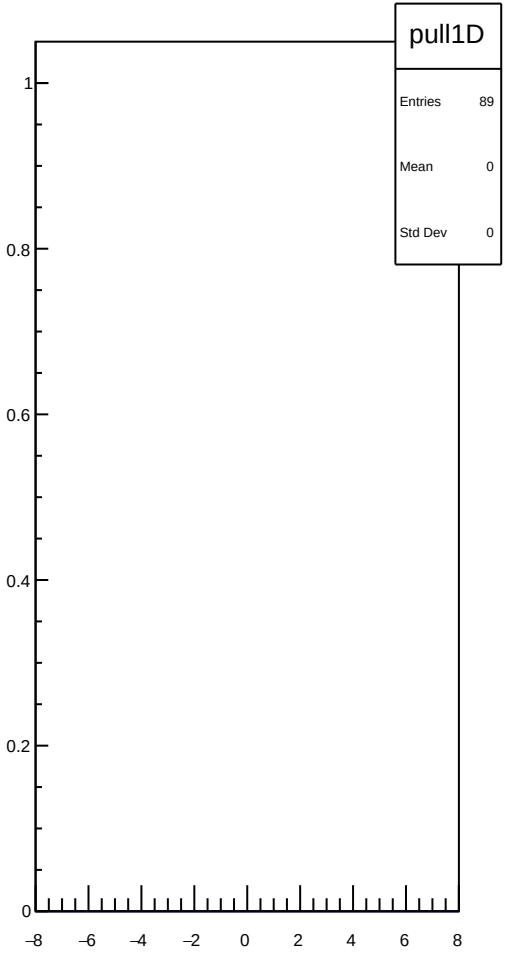

yield_sam4_rms vs run
χ² / ndf 4.402e+05 / 88
p0 0.05547 ± 4.909e−05
0.3
0.25
0.2
0.15
0.1
0.05

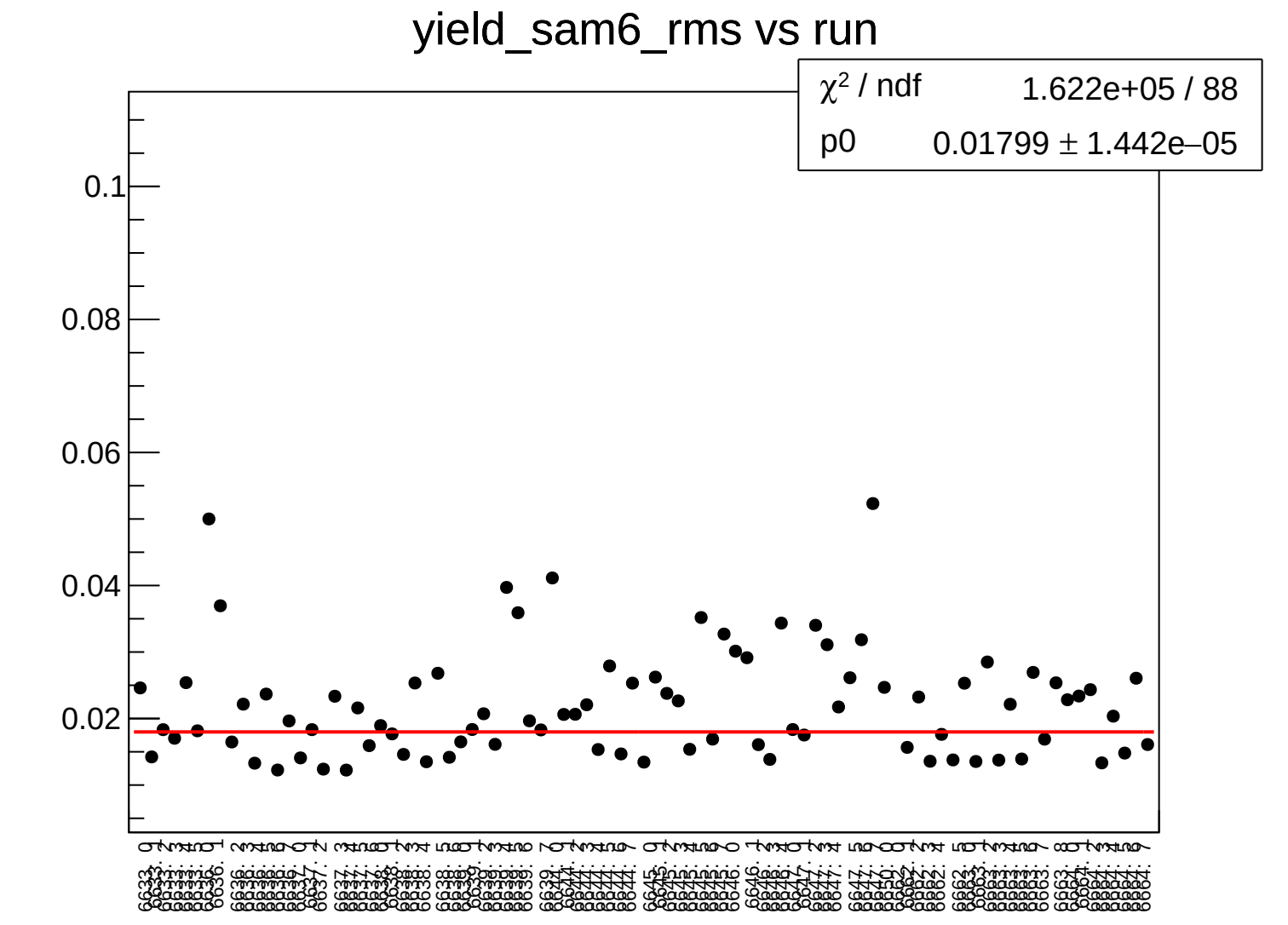

yield_sam5_mean vs run
χ² / ndf 4.114e+07 / 88
p0 18.06 ± 3.35e−05
18.6
18.4
18.2
18
17.8
17.6
pull
Entries 89
Mean −377.6
Std Dev 434.8
1500
1000
500
0
−500
−1000

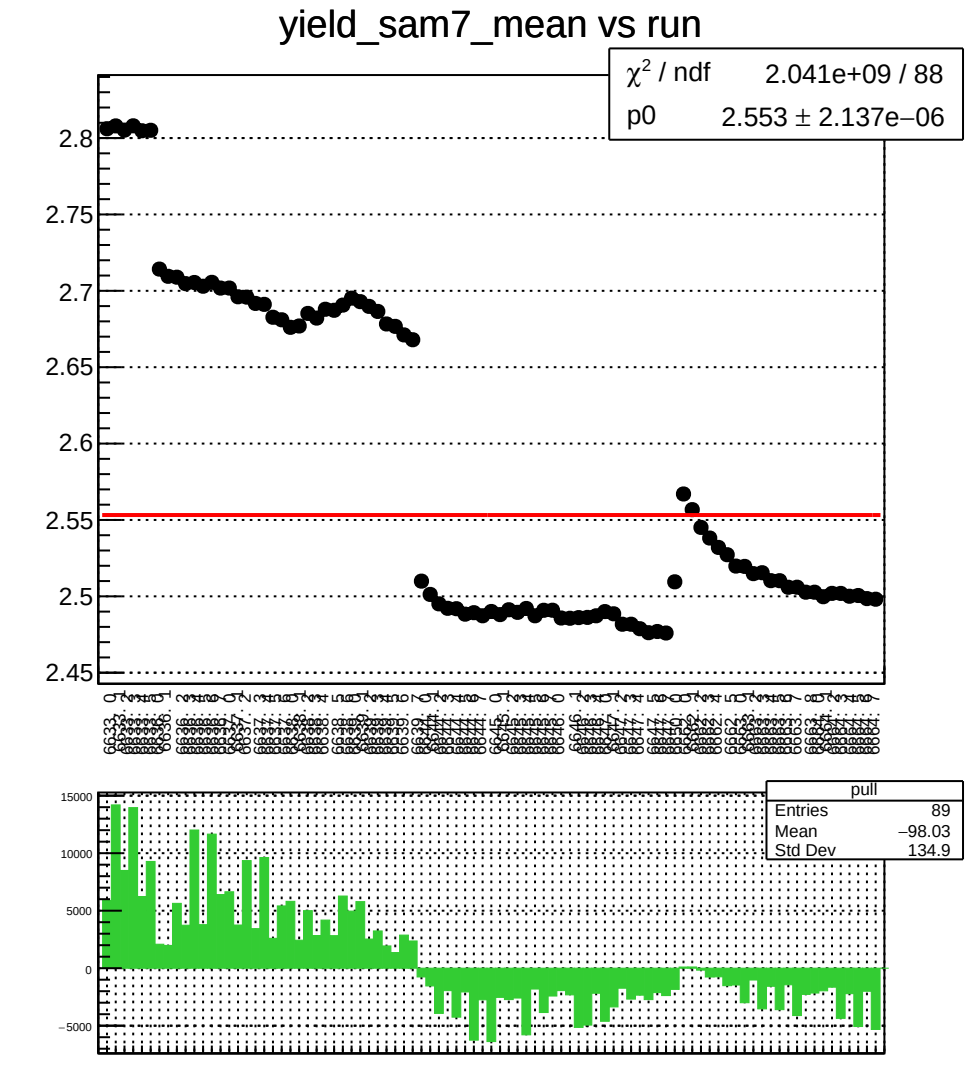

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

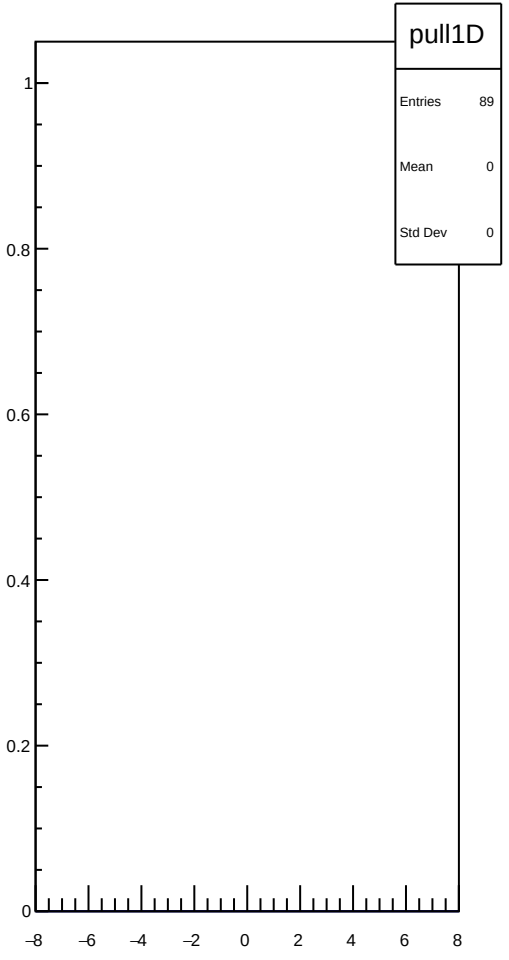

yield_sam5_rms vs run
χ² / ndf 8.318e+04 / 88
p0 0.03028 ± 2.369e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

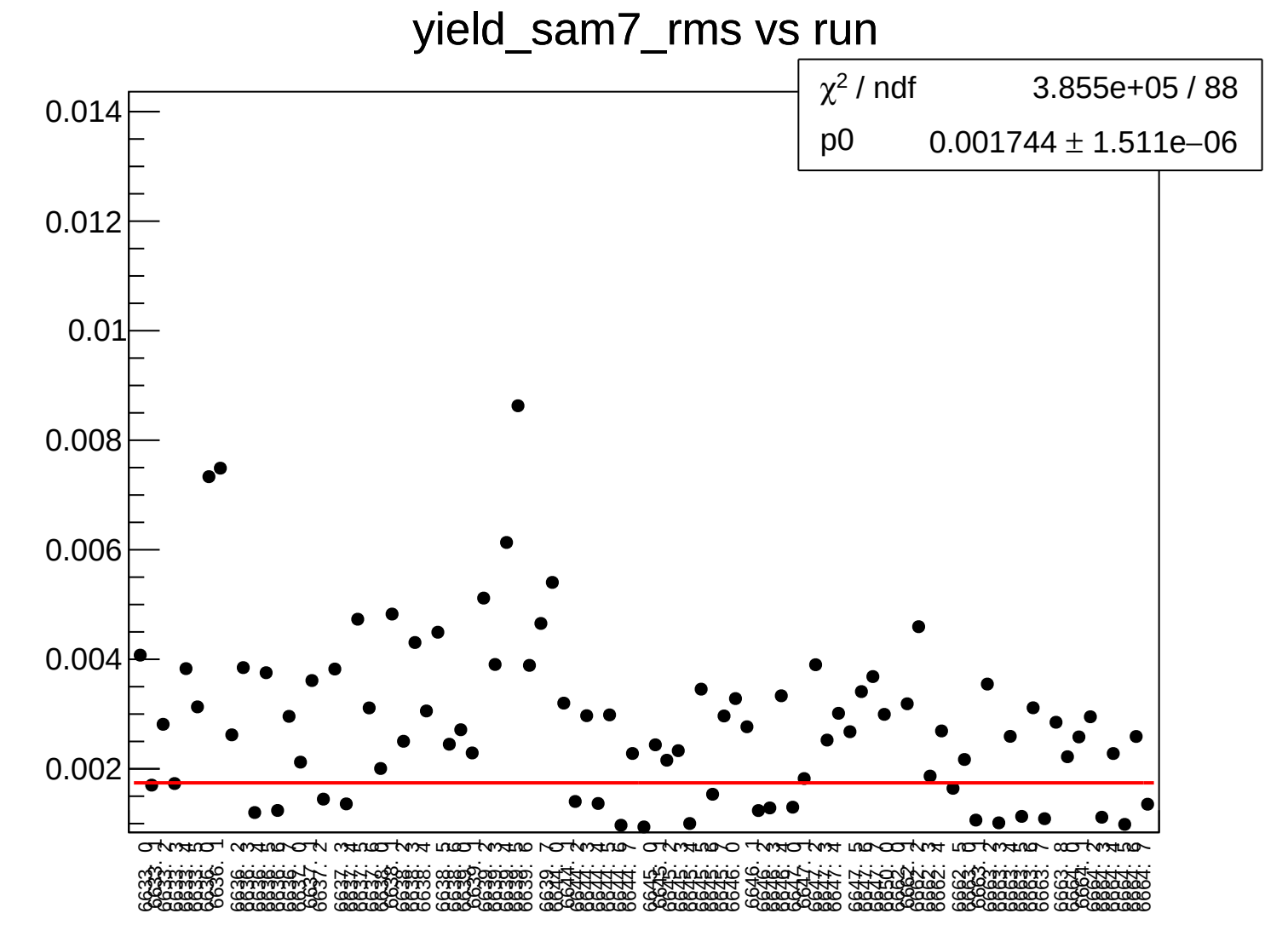

yield_sam6_mean vs run
χ² / ndf 4.924e+08 / 88
p0 9.071± 2.04e−05
10
9.8
9.6
9.4
9.2
9
8.8
8.6
pull
Entries 89
Mean 485.7
Std Dev 444.2
5000
4000
3000
2000
1000
0
−1000
−2000
−3000

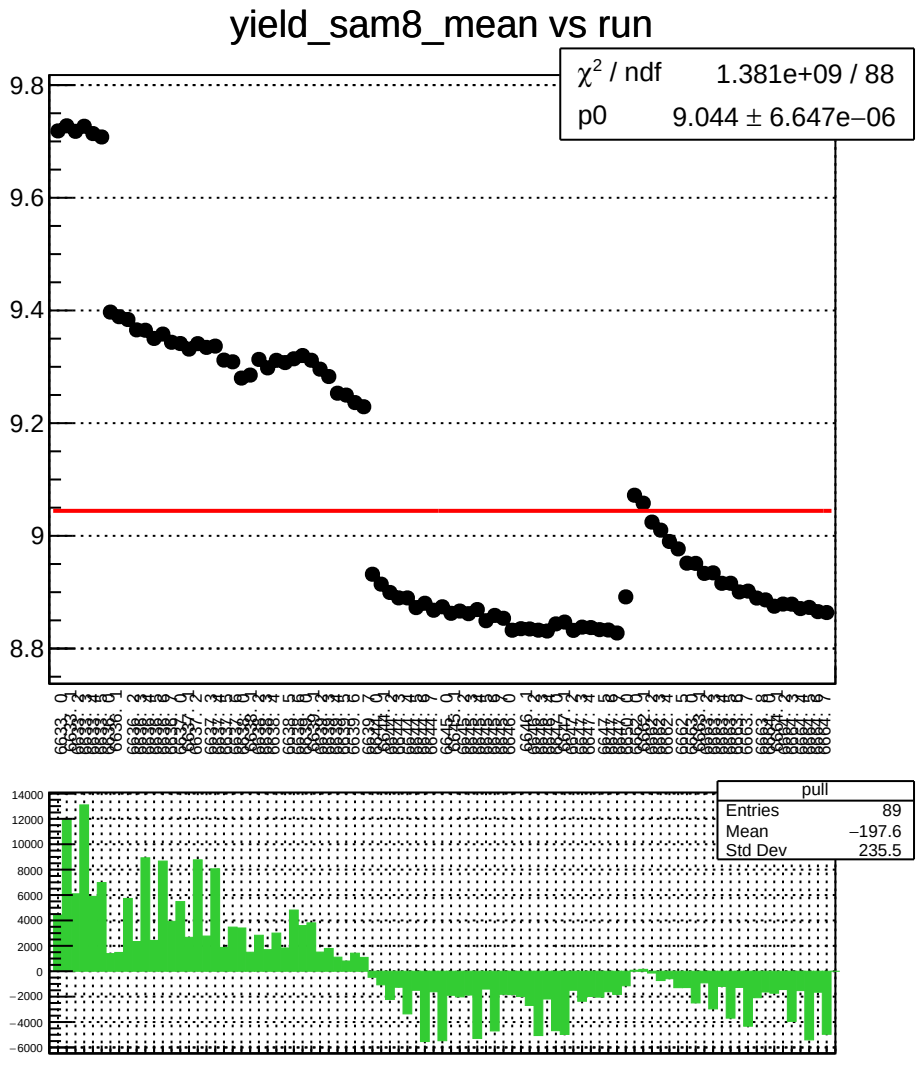

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

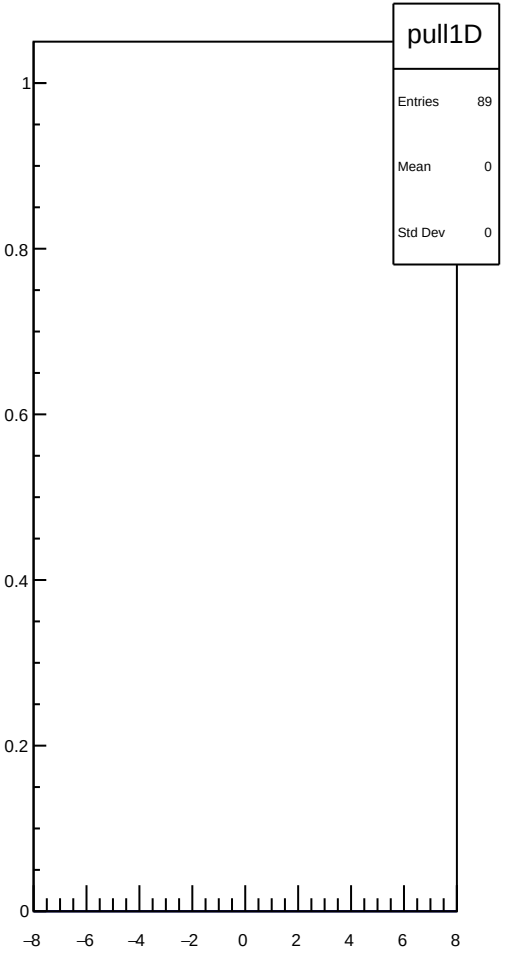

yield_sam6_rms vs run
χ² / ndf 1.622e+05 / 88
p0 0.01799 ± 1.442e−05
0.1
0.08
0.06
0.04
0.02

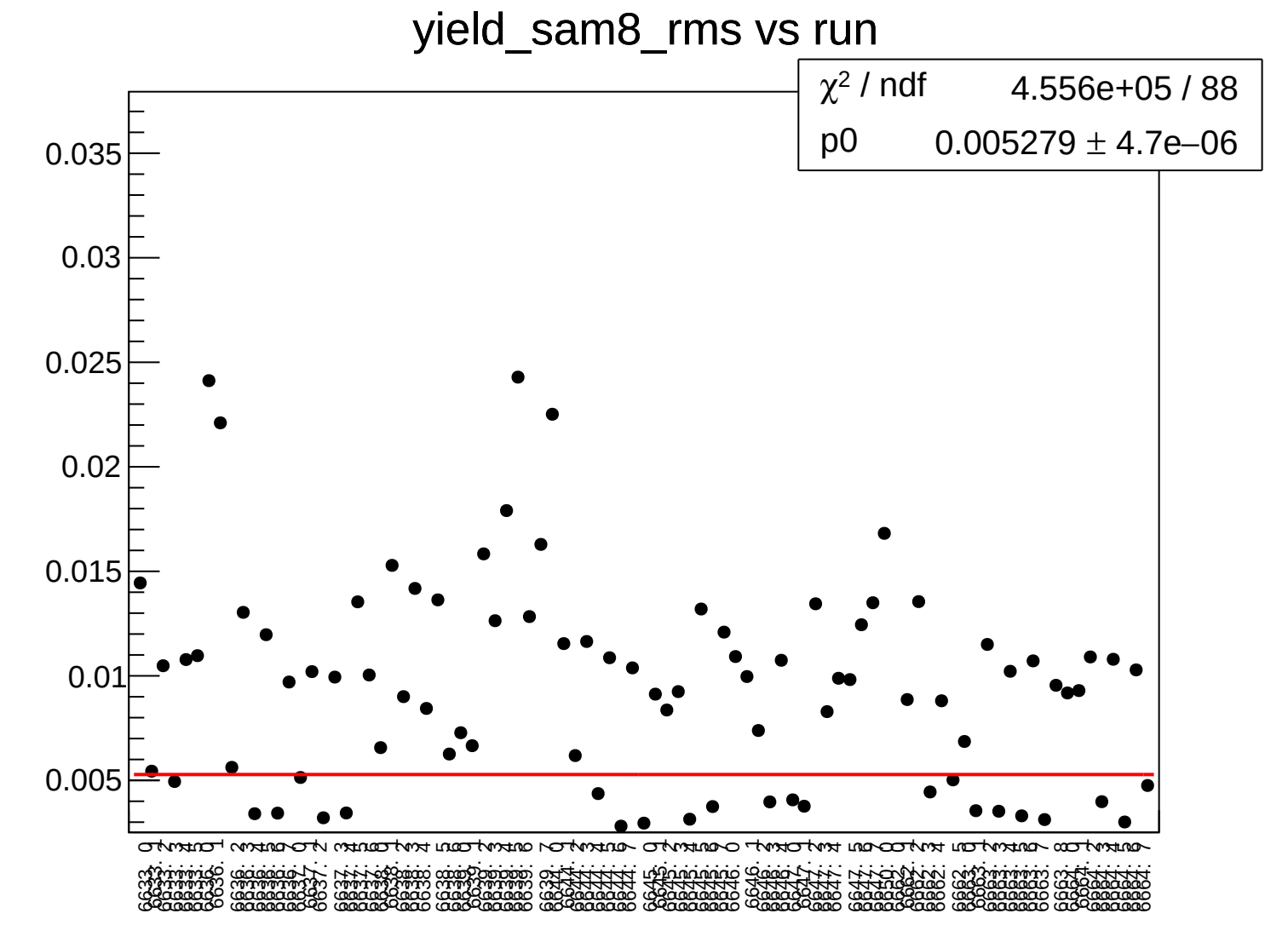

yield_sam7_mean vs run
χ² / ndf 2.041e+09 / 88
p0 2.553 ± 2.137e−06
2.8
2.75
2.7
2.65
2.6
2.55
2.5
2.45
pull
Entries 89
Mean −98.03
Std Dev 134.9
15000
10000
5000
0
−5000

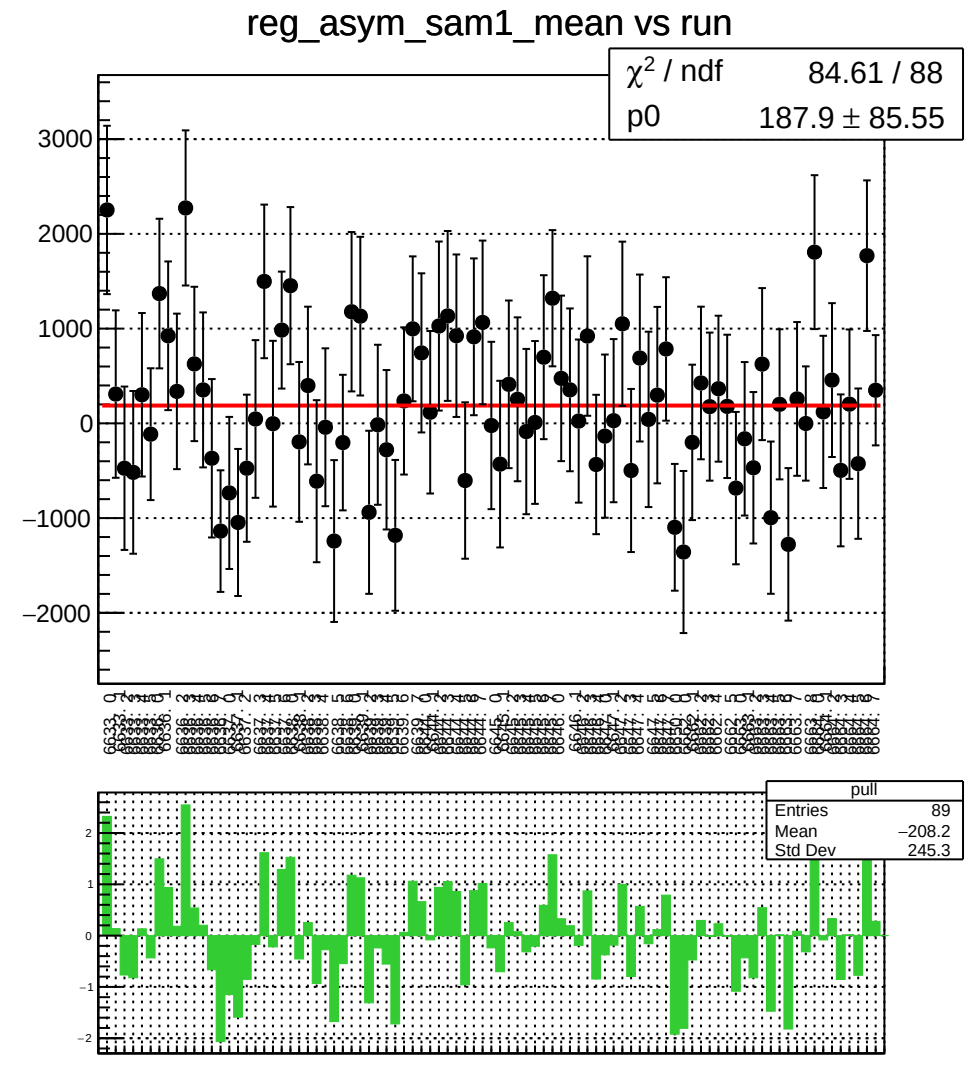

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

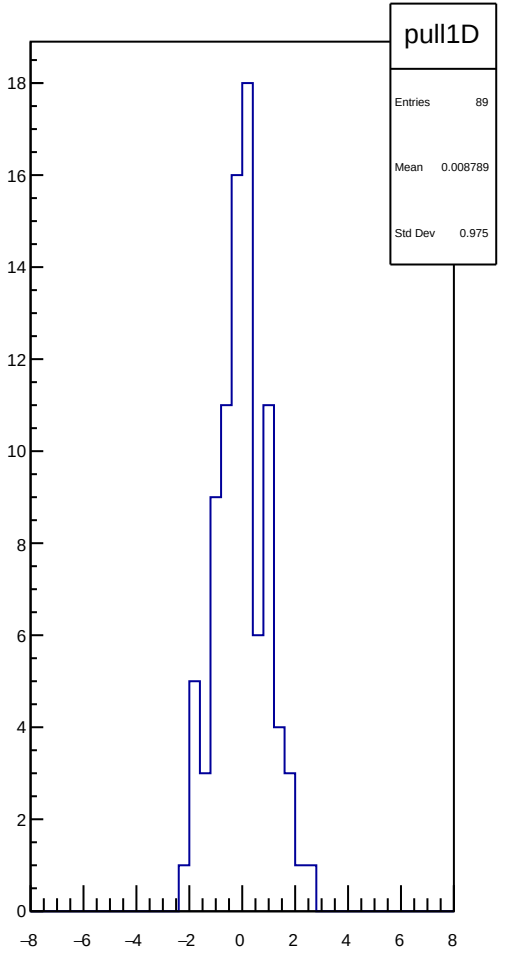

yield_sam7_rms vs run
χ^2 / ndf 3.855e+05 / 88
p0 0.001744 ± 1.511e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

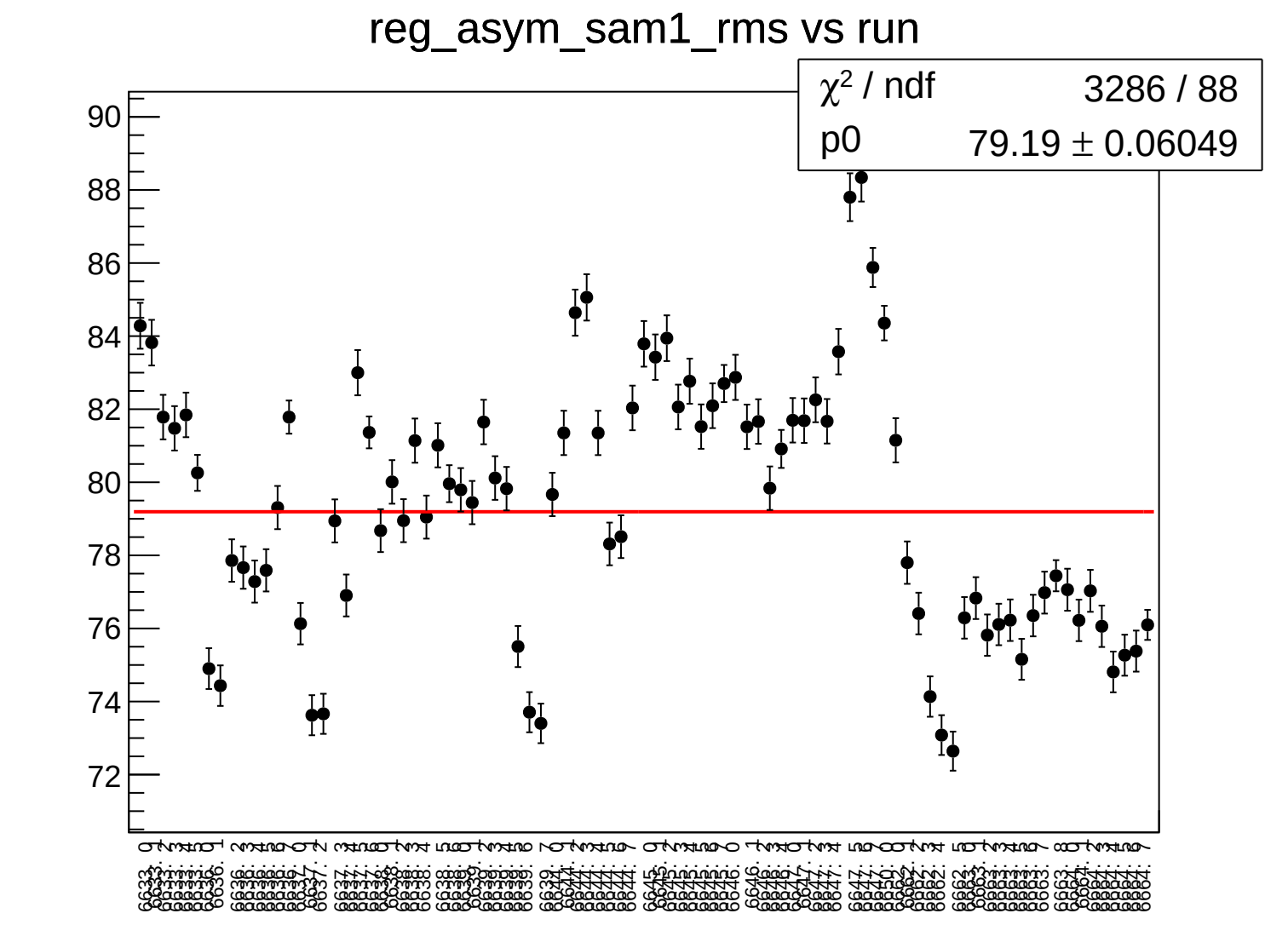

yield_sam8_mean vs run
χ² / ndf 1.381e+09 / 88
p0 9.044 ± 6.647e−06
9.8
9.6
9.4
9.2
9
8.8
pull
Entries 89
Mean −197.6
Std Dev 235.5
14000
12000
10000
8000
6000
4000
2000
0
−2000
−4000
−6000

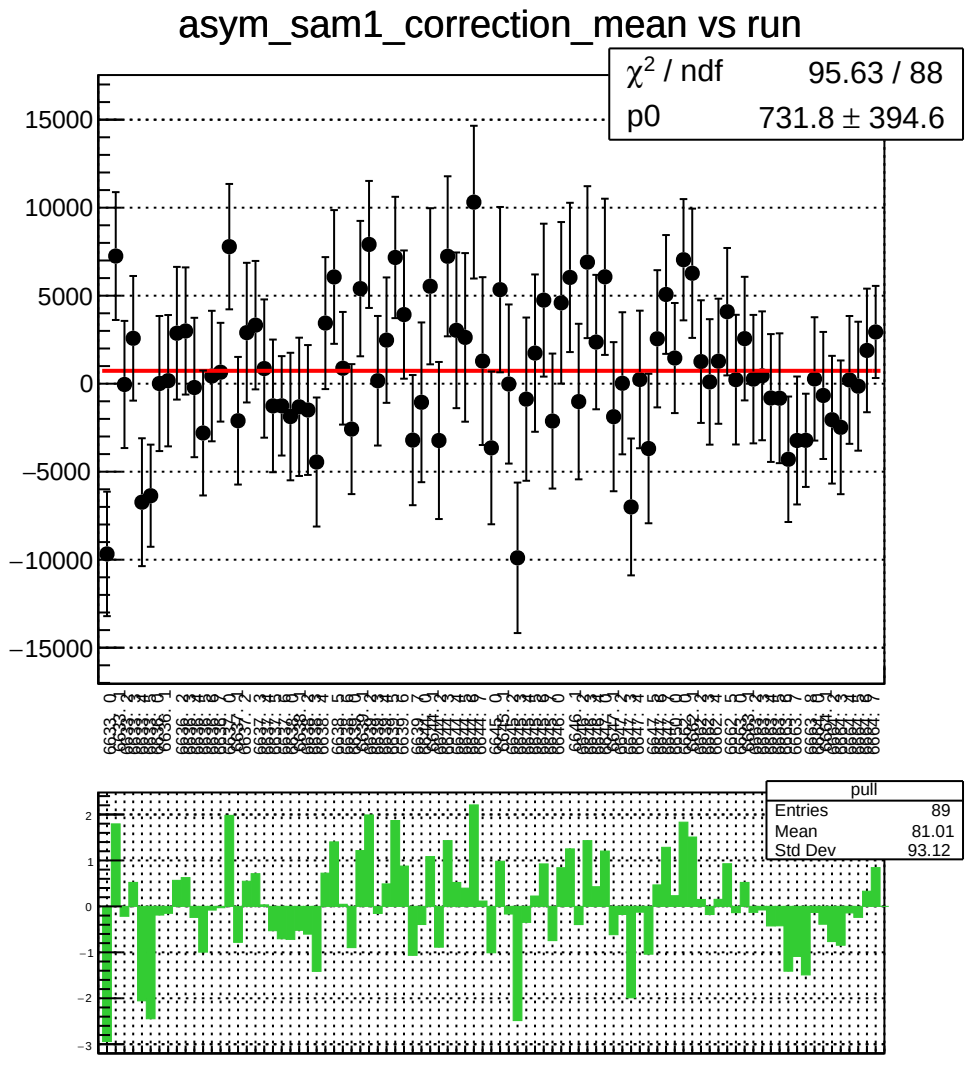

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

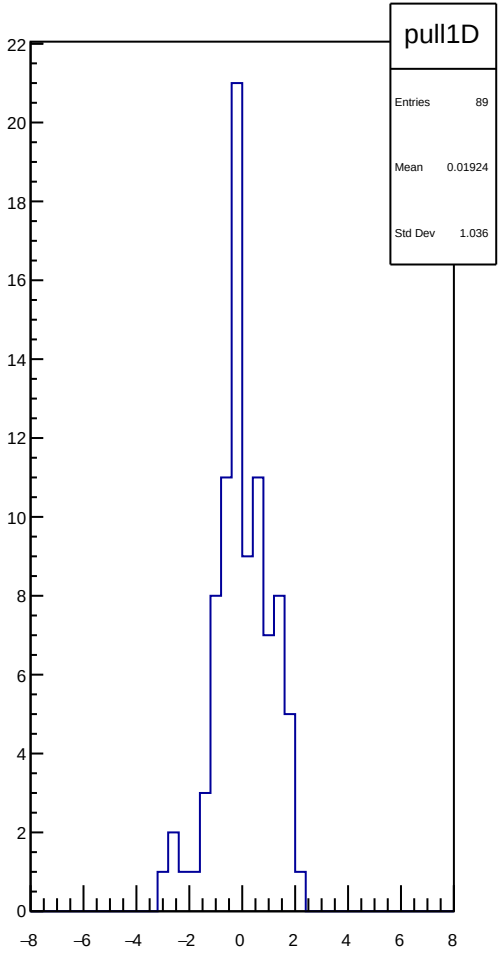

yield_sam8_rms vs run
χ² / ndf 4.556e+05 / 88
p0 0.005279 ± 4.7e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

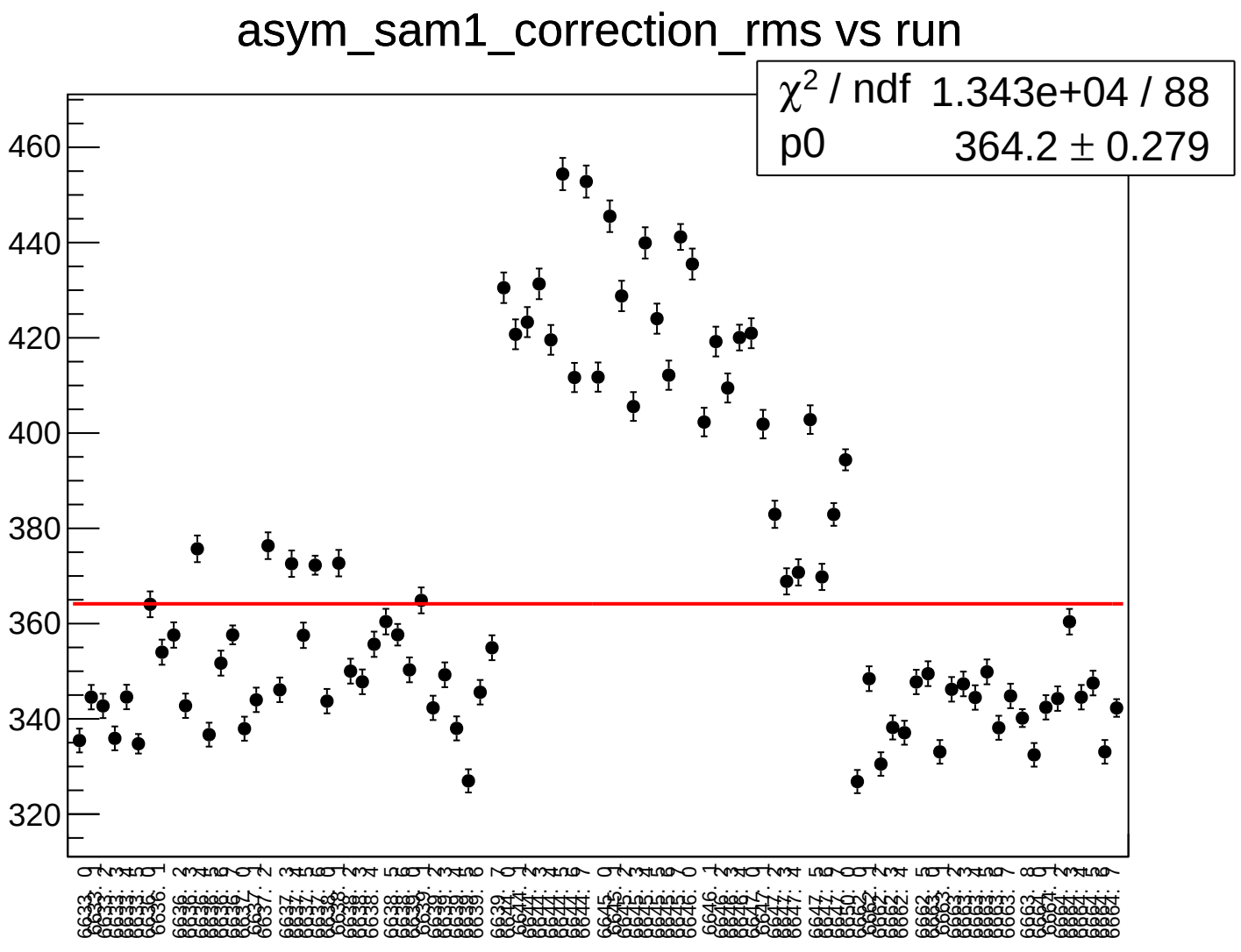

reg_asym_sam1_mean vs run
χ² / ndf 84.61 / 88
p0 187.9 ± 85.55
3000
2000
1000
0
−1000
−2000
pull
Entries 89
Mean −208.2
Std Dev 245.3
2
1
0
−1
−2

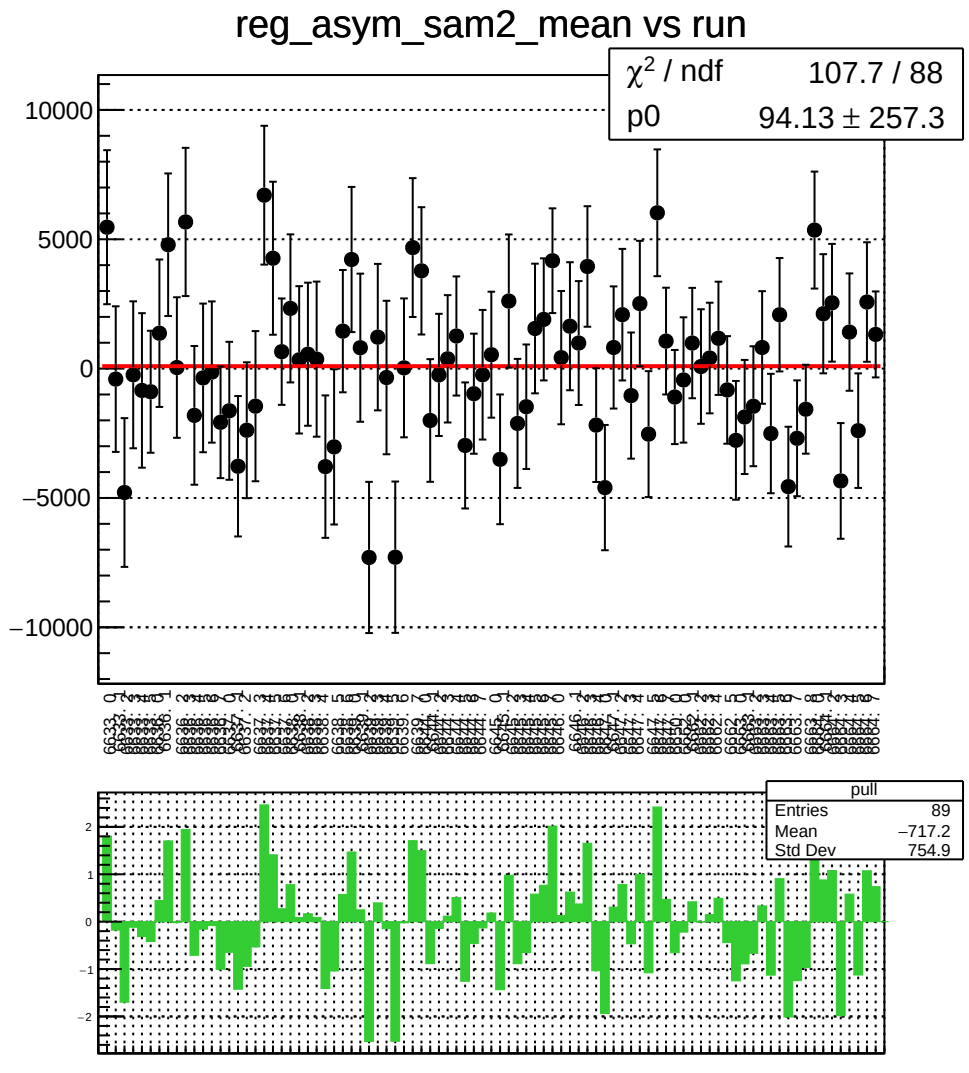

pull1D
Entries 89
Mean 0.008789
Std Dev 0.975
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

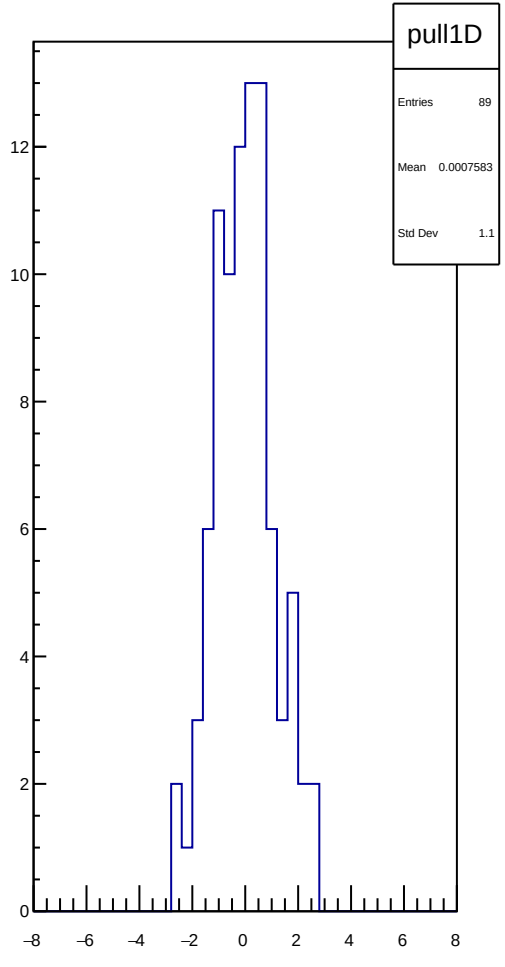

reg_asym_sam1_rms vs run
χ² / ndf 3286 / 88
p0 79.19 ± 0.06049
90
88
86
84
82
80
78
76
74
72

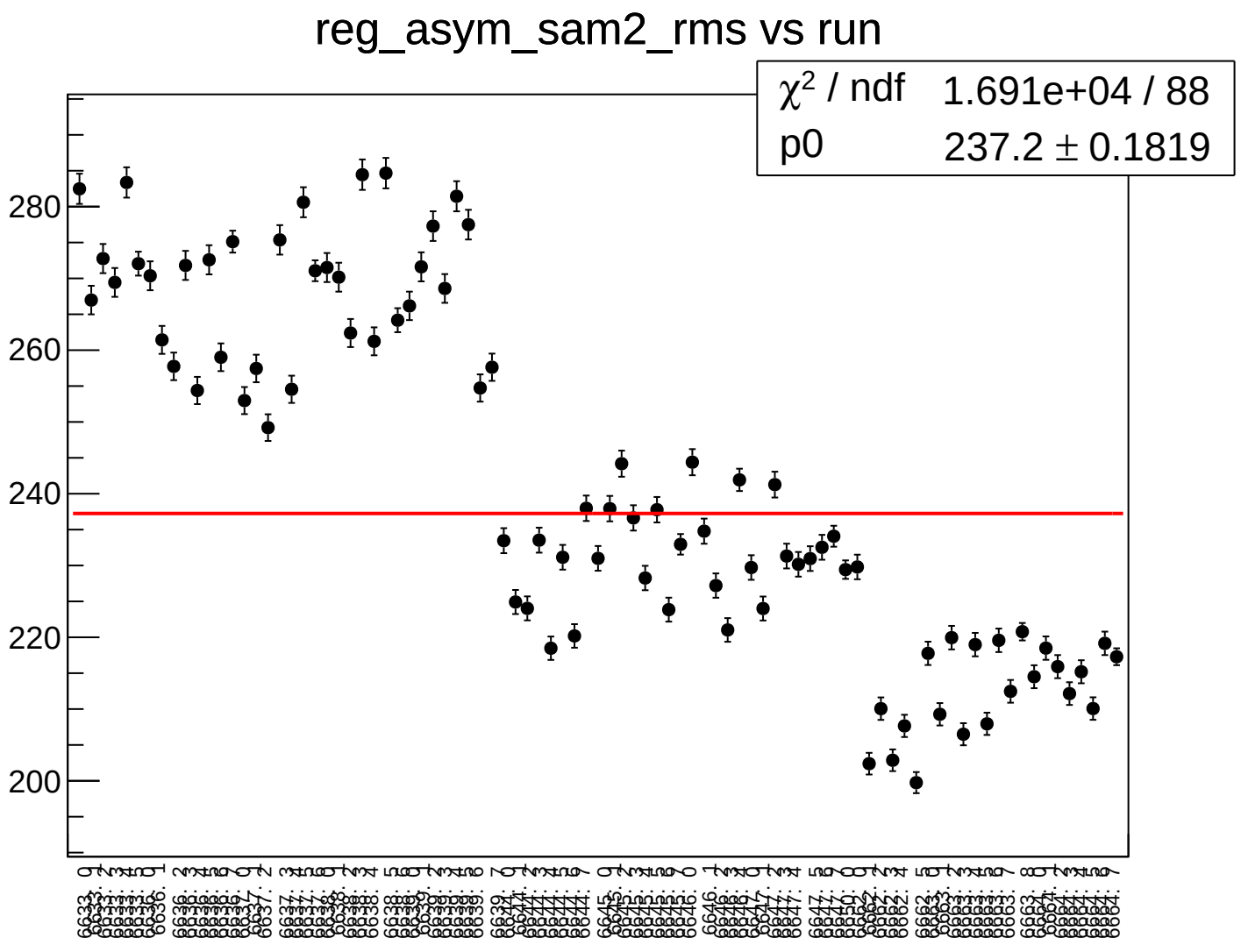

asym_sam1_correction_mean vs run
χ² / ndf 95.63 / 88
p0 731.8 ± 394.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 81.01
Std Dev 93.12
2
1
0
−1
−2
−3

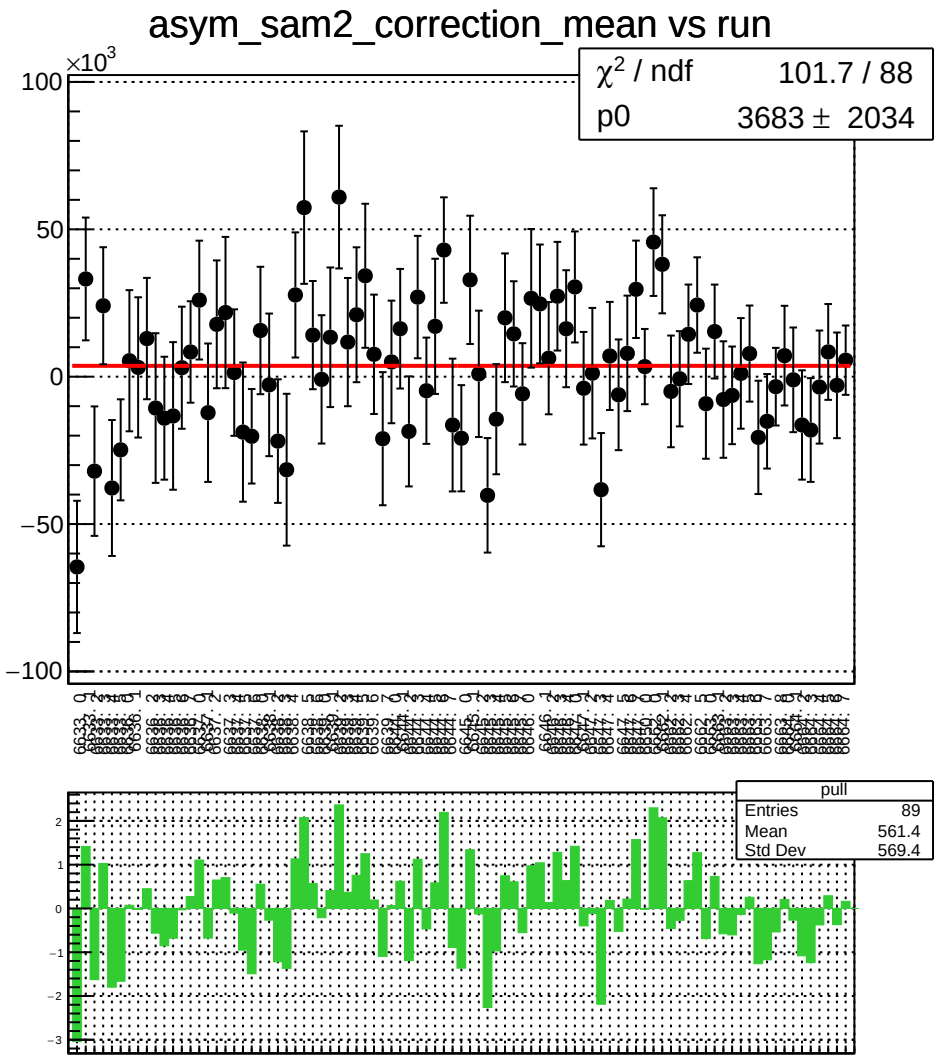

pull1D
Entries 89
Mean 0.01924
Std Dev 1.036
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

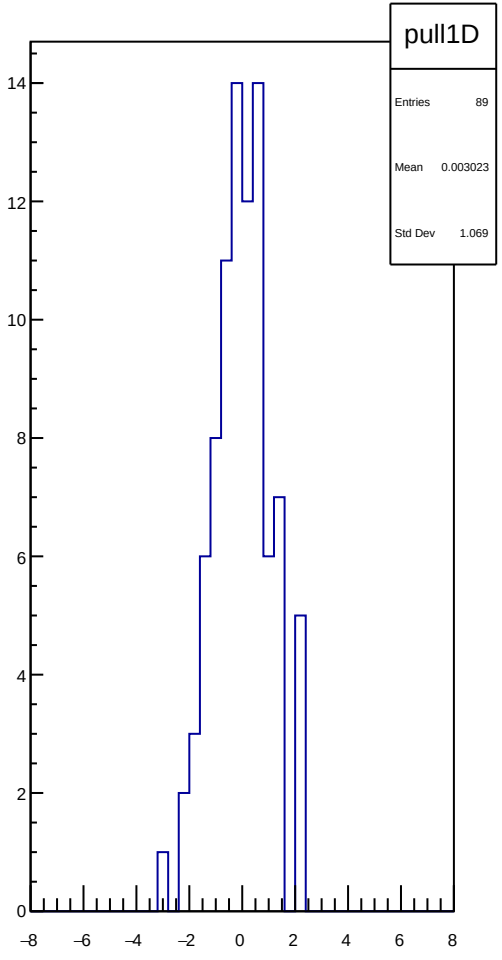

asym_sam1_correction_rms vs run
χ² / ndf 1.343e+04 / 88
p0 364.2 ± 0.279
460
440
420
400
380
360
340
320

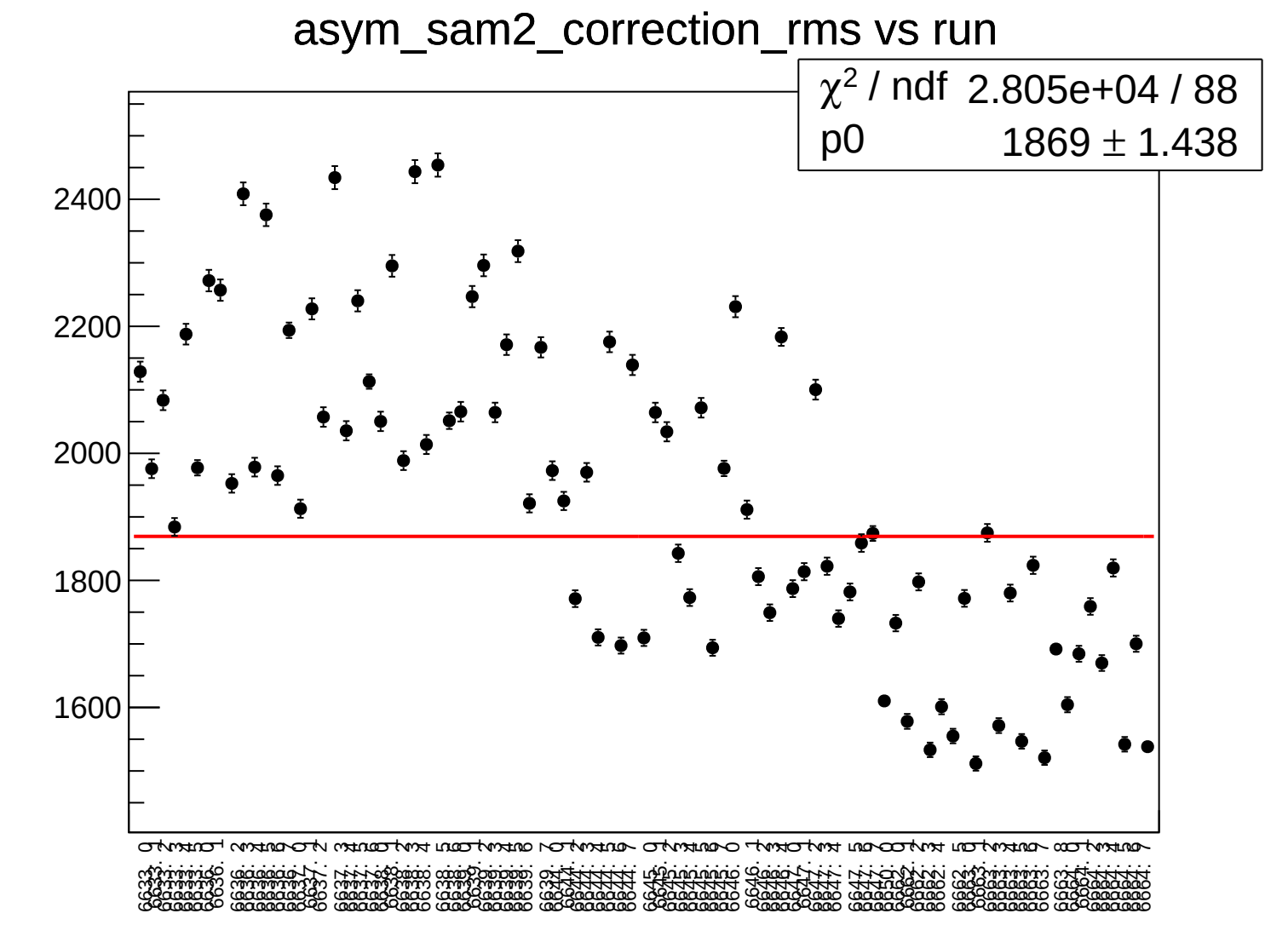

reg_asym_sam2_mean vs run
χ² / ndf 107.7 / 88
p0 94.13 ± 257.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −717.2
Std Dev 754.9
2
1
0
−1
−2

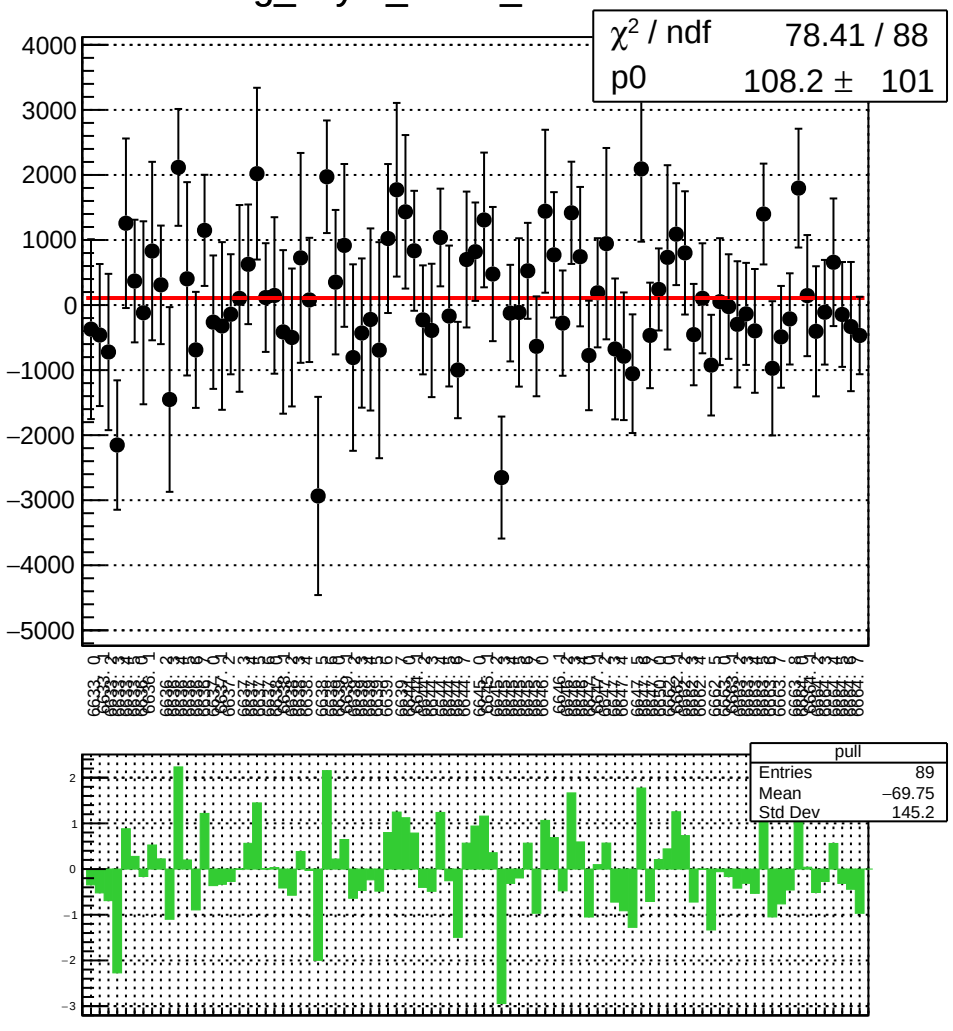

pull1D
Entries 89
Mean 0.0007583
Std Dev 1.1
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

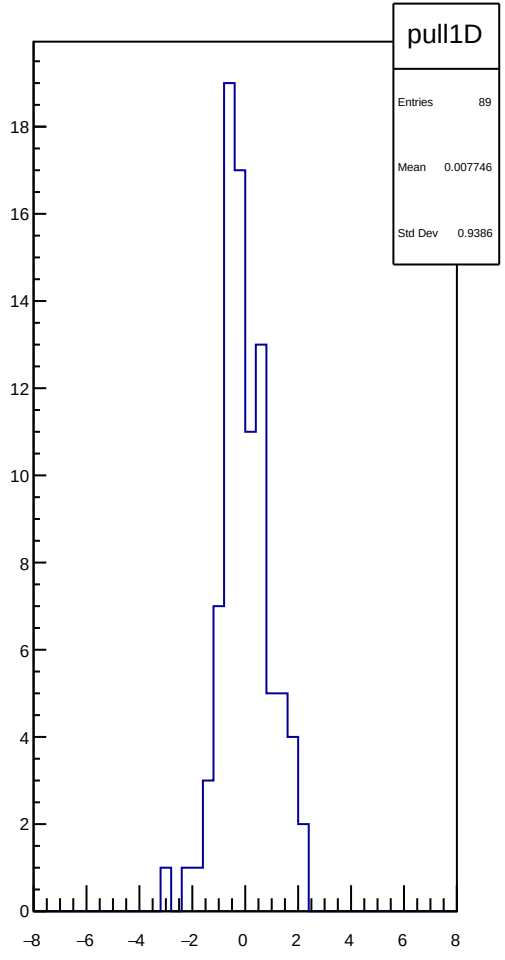

reg_asym_sam2_rms vs run
χ² / ndf 1.691e+04 / 88
p0 237.2 ± 0.1819
280
260
240
220
200

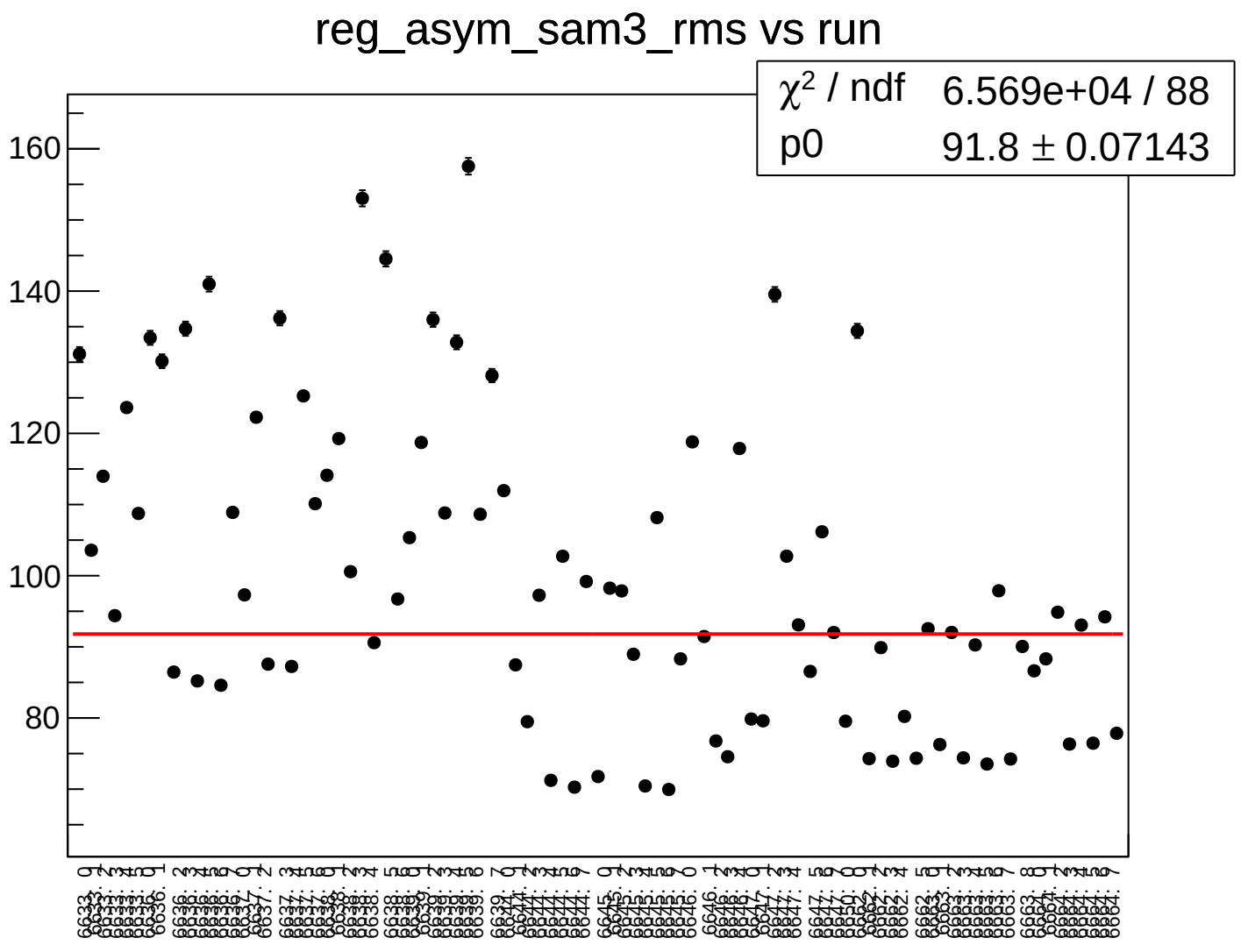

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 101.7 / 88
p0 3683 ± 2034
pull
Entries 89
Mean 561.4
Std Dev 569.4

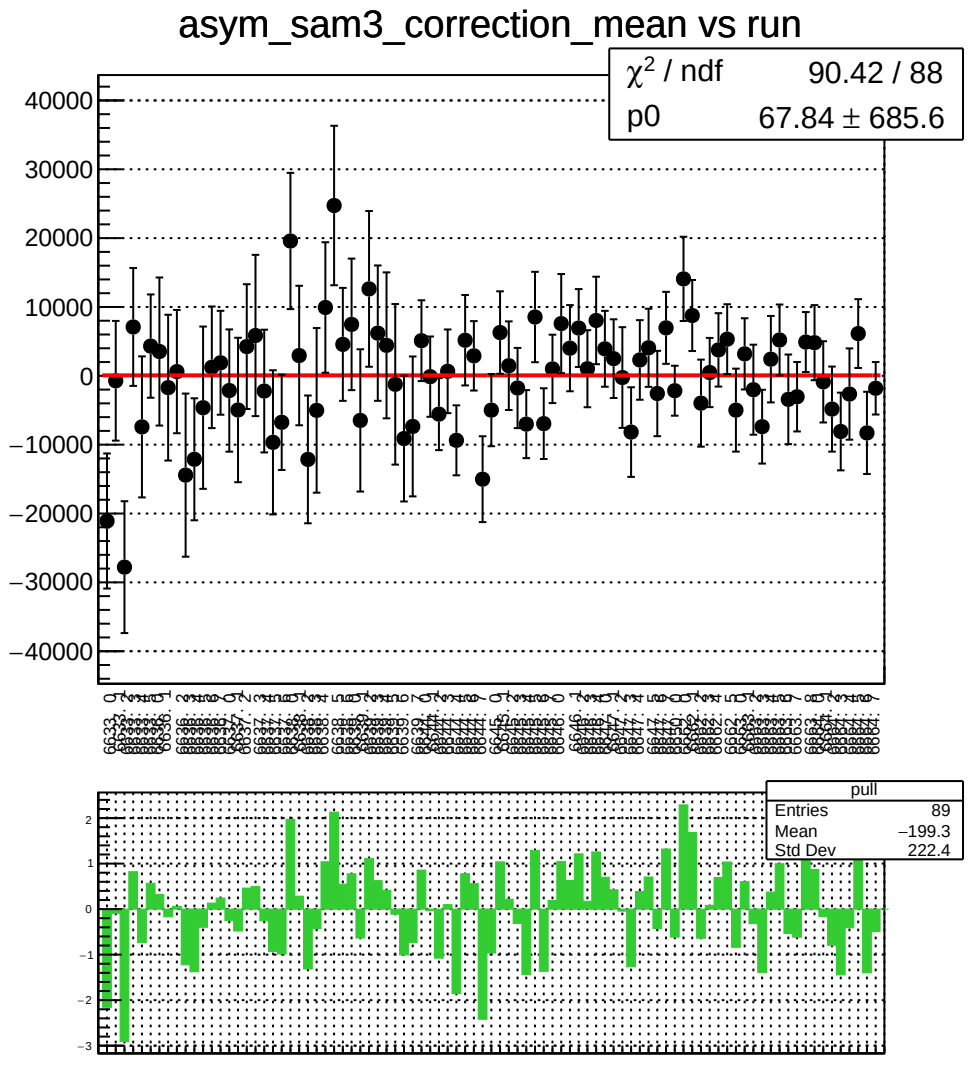

pull1D
Entries 89
Mean 0.003023
Std Dev 1.069

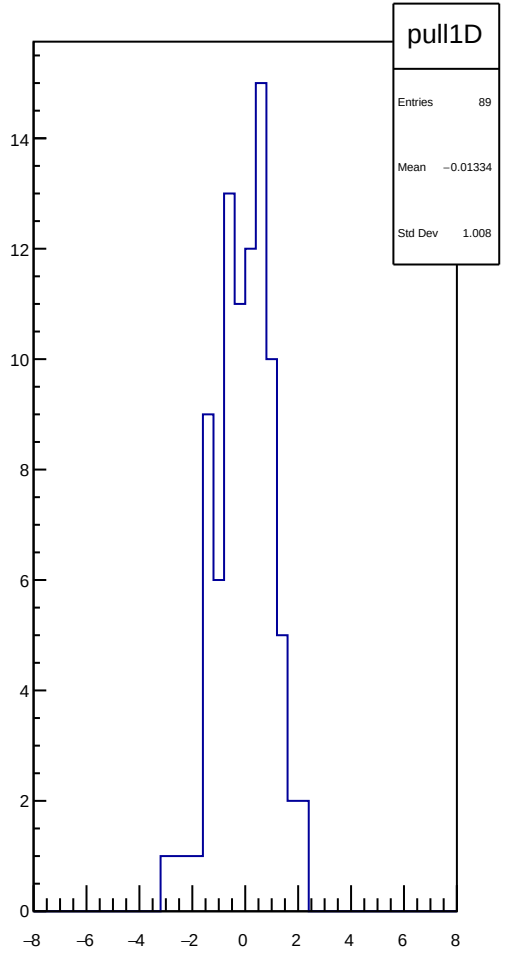

asym_sam2_correction_rms vs run
χ^2 / ndf 2.805e+04 / 88
p0 1869 ± 1.438
2400
2200
2000
1800
1600

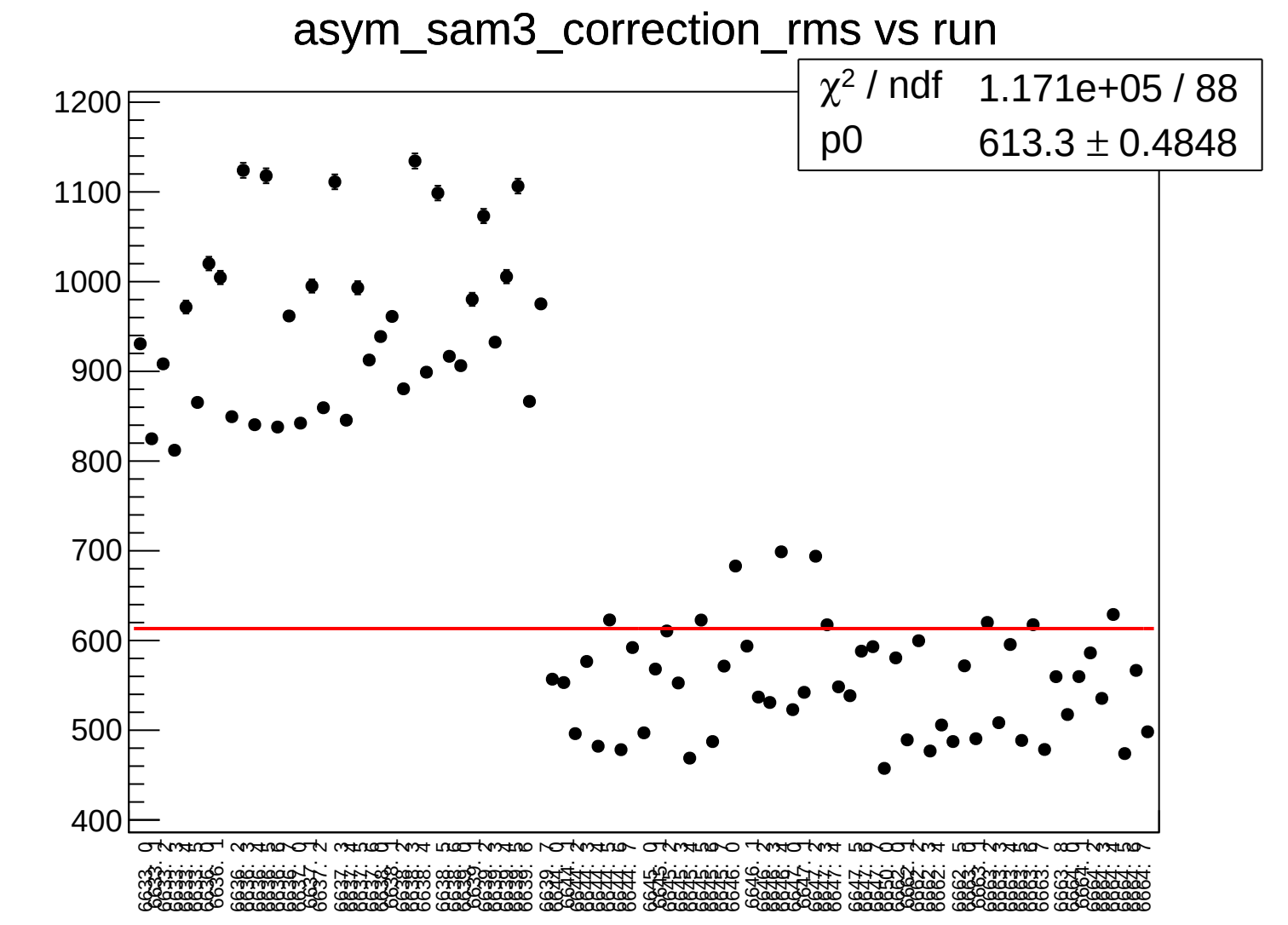

reg_asym_sam3_mean vs run
χ² / ndf 78.41 / 88
p0 108.2 ± 101
pull
Entries 89
Mean −69.75
Std Dev 145.2

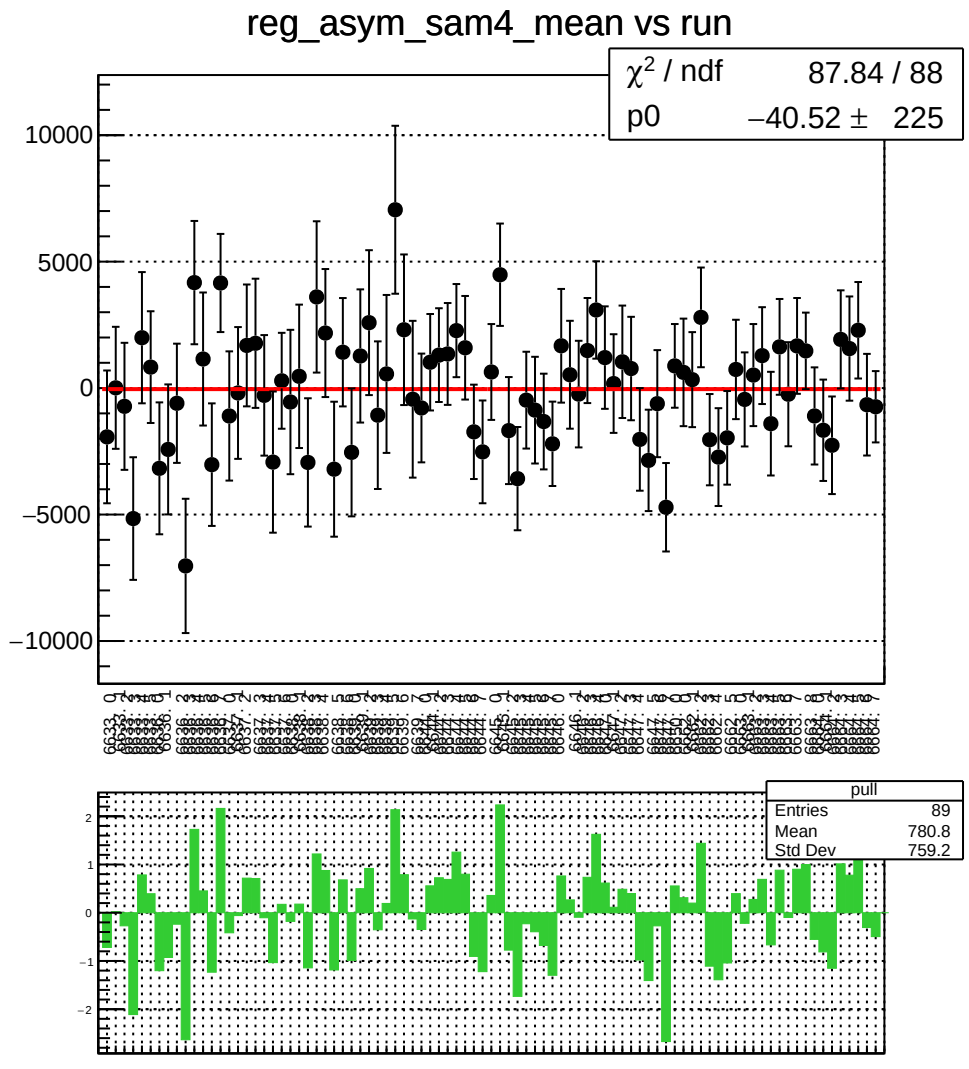

pull1D
Entries 89
Mean 0.007746
Std Dev 0.9386

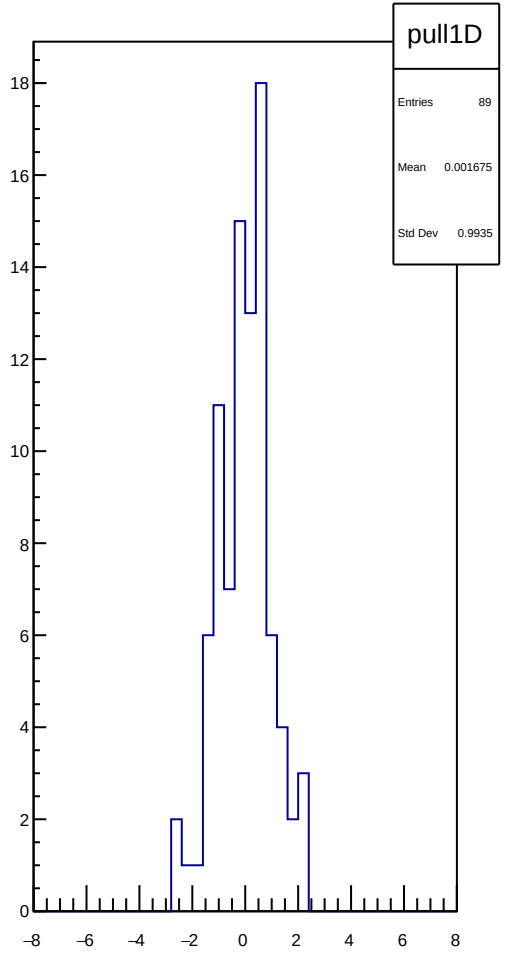

reg_asym_sam3_rms vs run
χ² / ndf 6.569e+04 / 88
p0 91.8 ± 0.07143
160
140
120
100
80

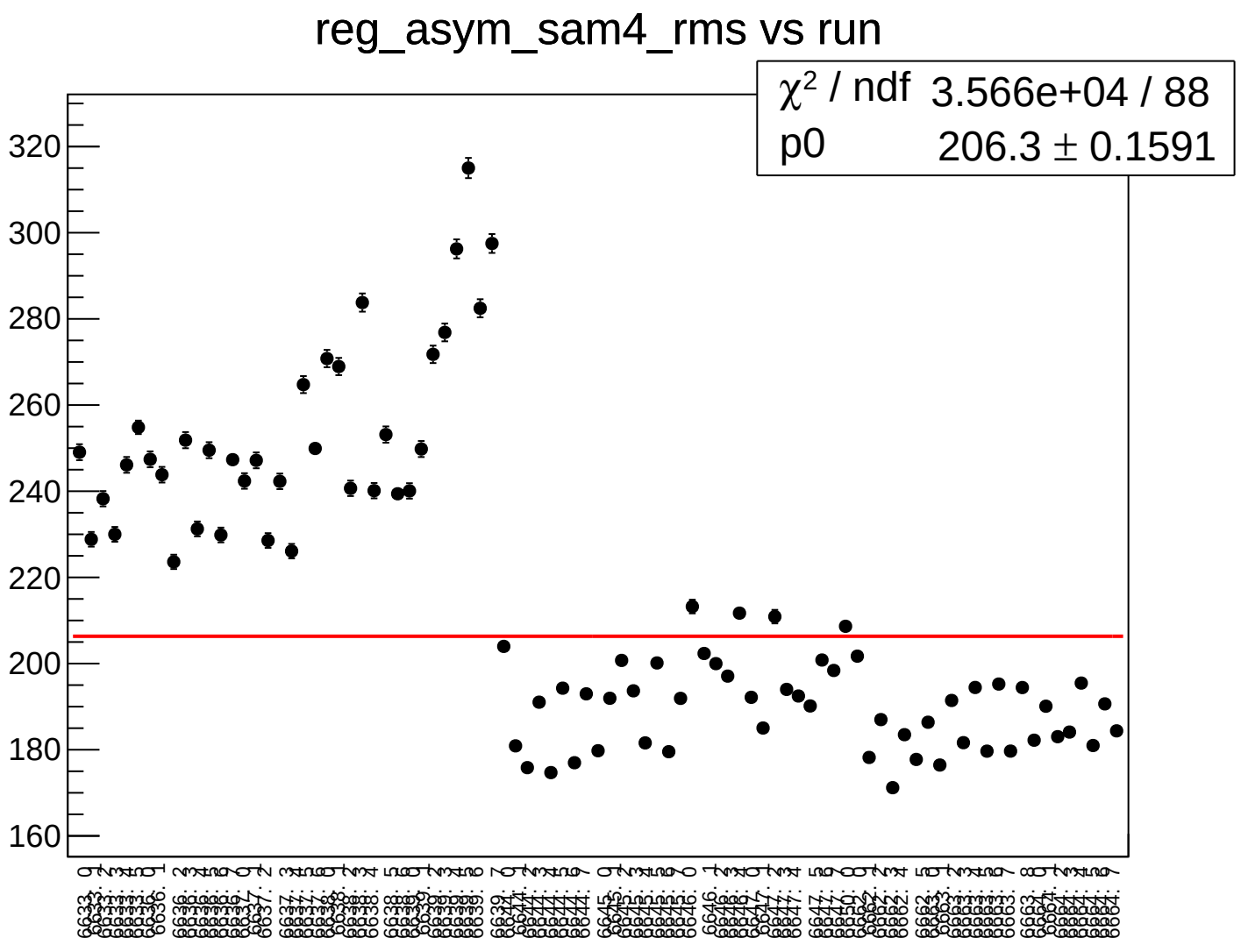

asym_sam3_correction_mean vs run
χ² / ndf 90.42 / 88
p0 67.84 ± 685.6
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −199.3
Std Dev 222.4
2
1
0
−1
−2
−3

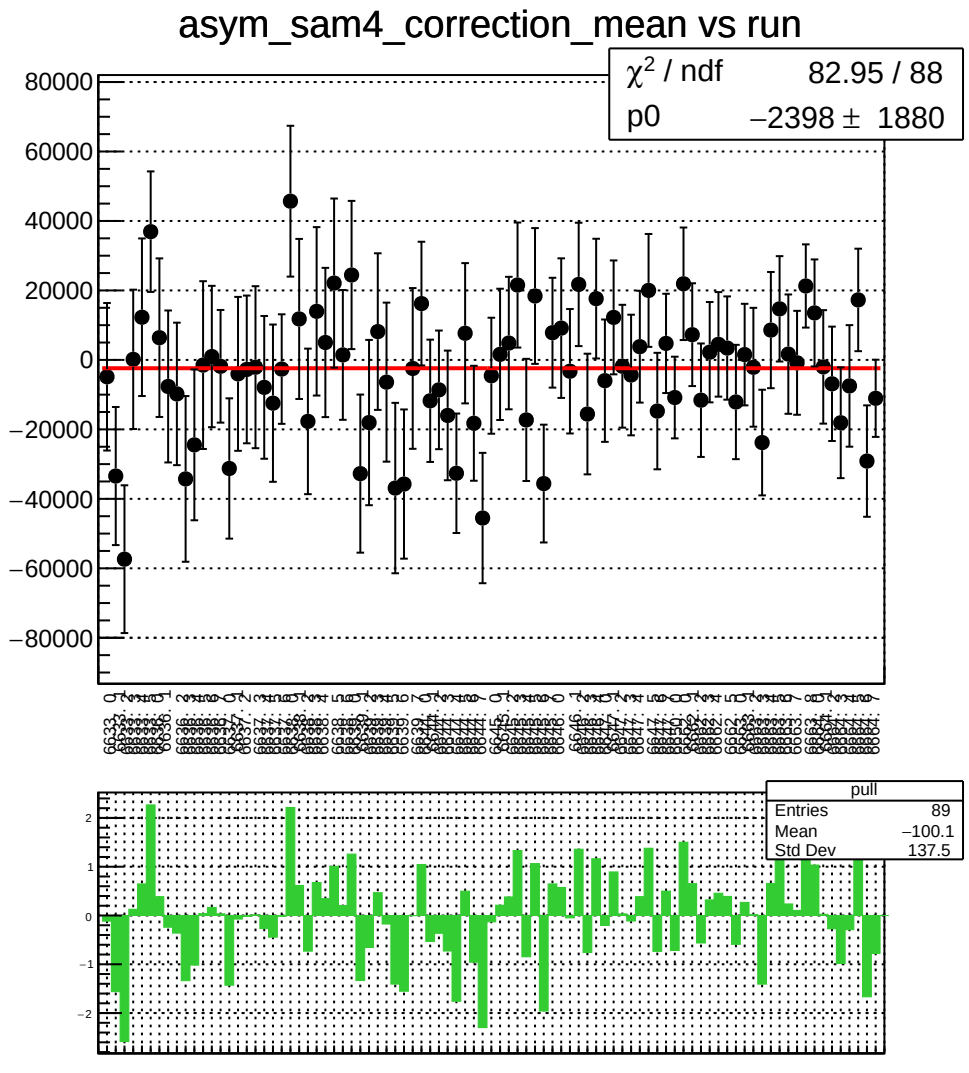

pull1D
Entries 89
Mean −0.01334
Std Dev 1.008
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

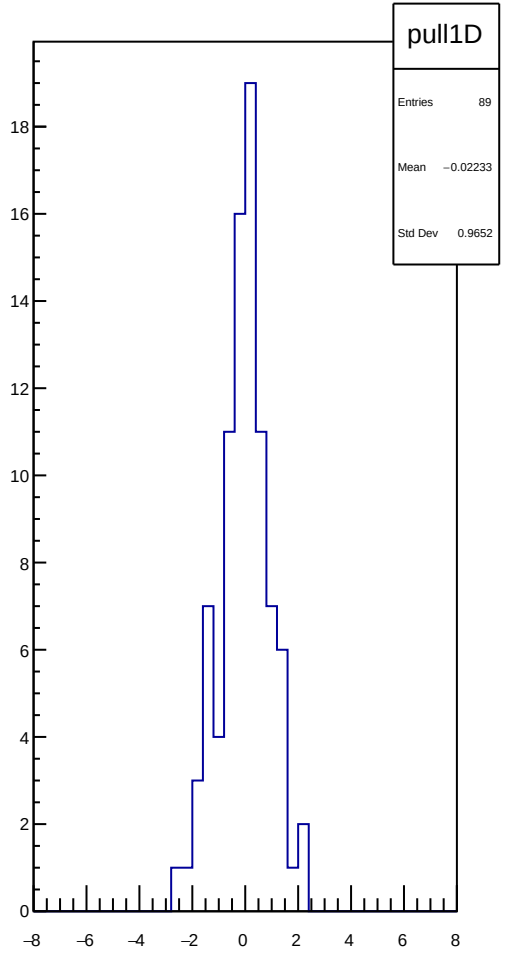

asym_sam3_correction_rms vs run
χ² / ndf 1.171e+05 / 88
p0 613.3 ± 0.4848
1200
1100
1000
900
800
700
600
500
400

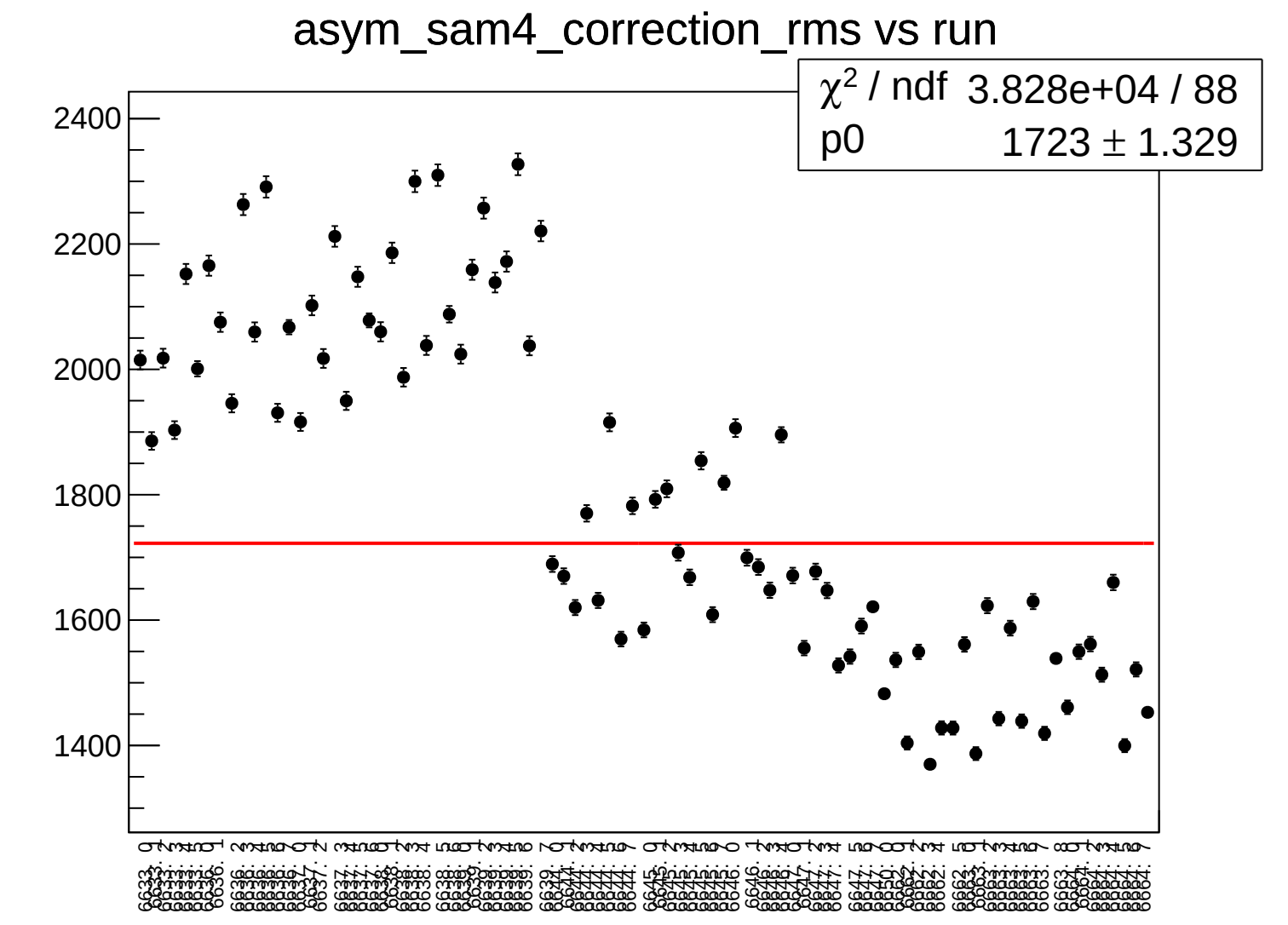

reg_asym_sam4_mean vs run
χ² / ndf 87.84 / 88
p0 −40.52 ± 225
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 780.8
Std Dev 759.2
2
1
0
−1
−2

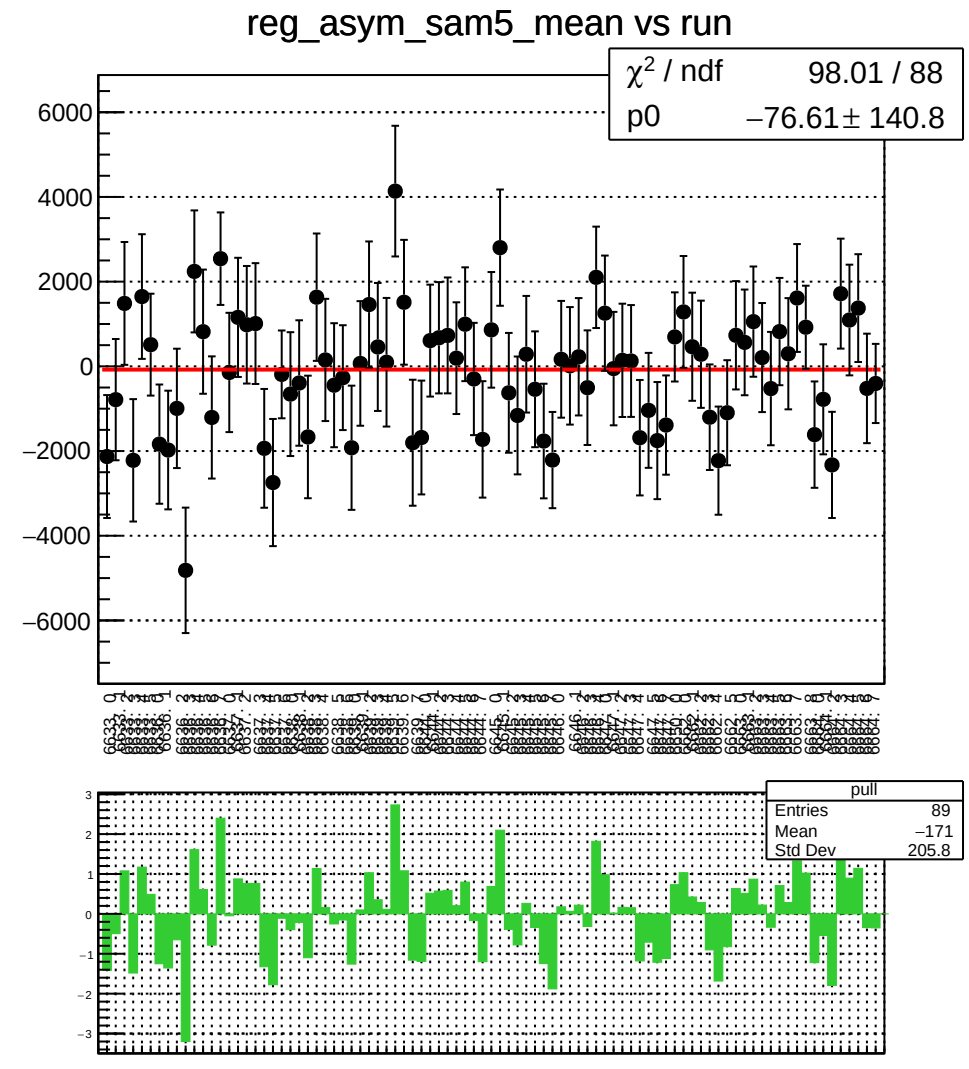

pull1D
Entries 89
Mean 0.001675
Std Dev 0.9935
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

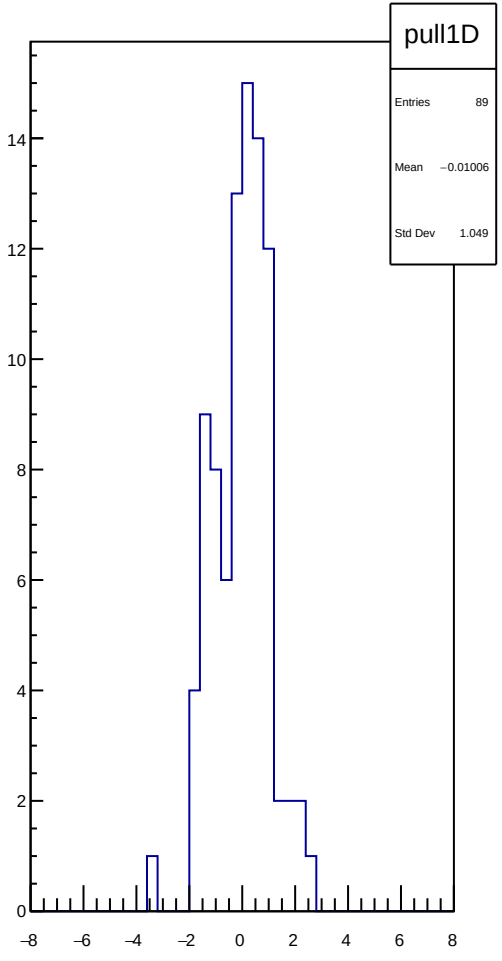

reg_asym_sam4_rms vs run
χ² / ndf 3.566e+04 / 88
p0 206.3 ± 0.1591
320
300
280
260
240
220
200
180
160

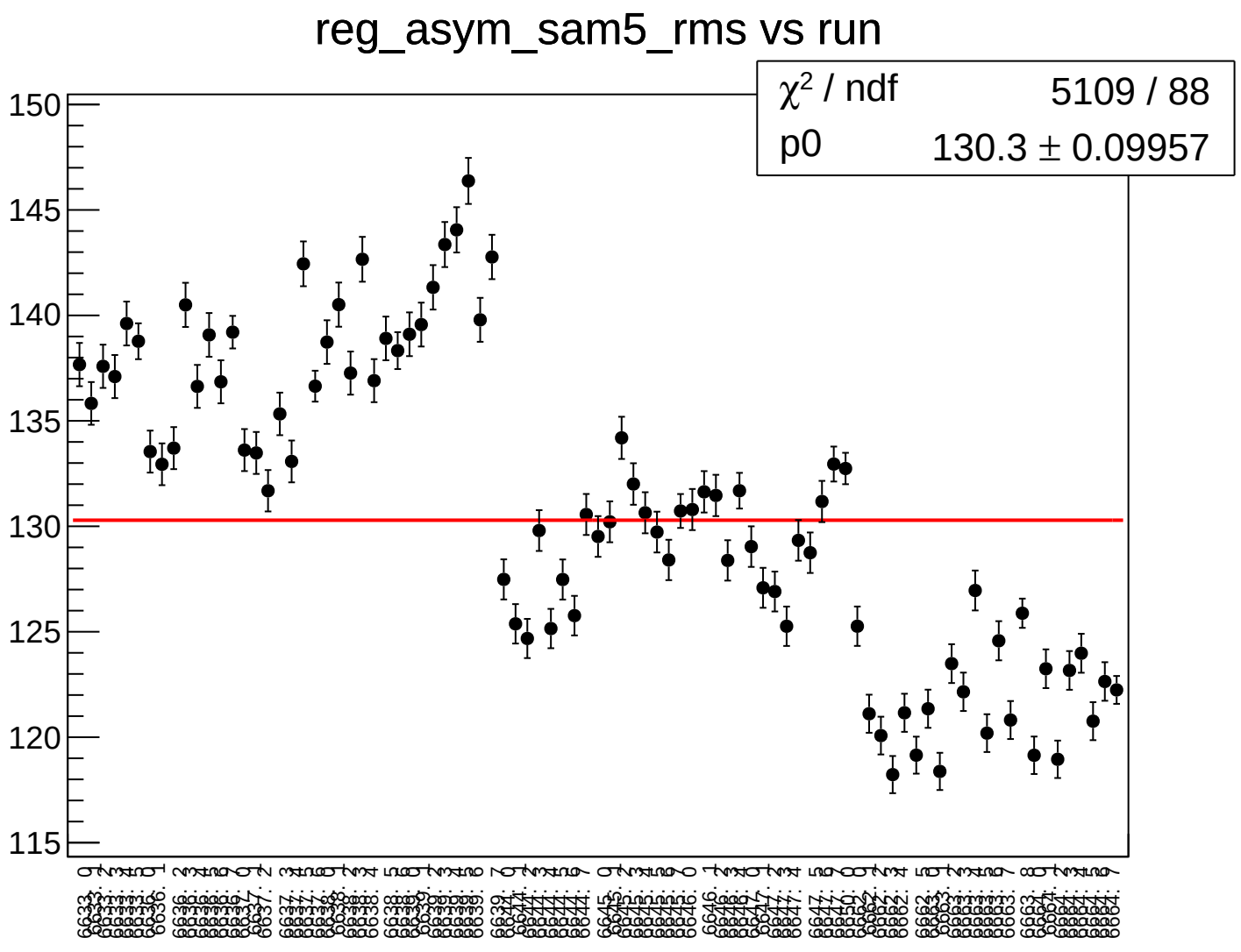

asym_sam4_correction_mean vs run
χ² / ndf 82.95 / 88
p0 −2398 ± 1880
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean −100.1
Std Dev 137.5
2
1
0
−1
−2

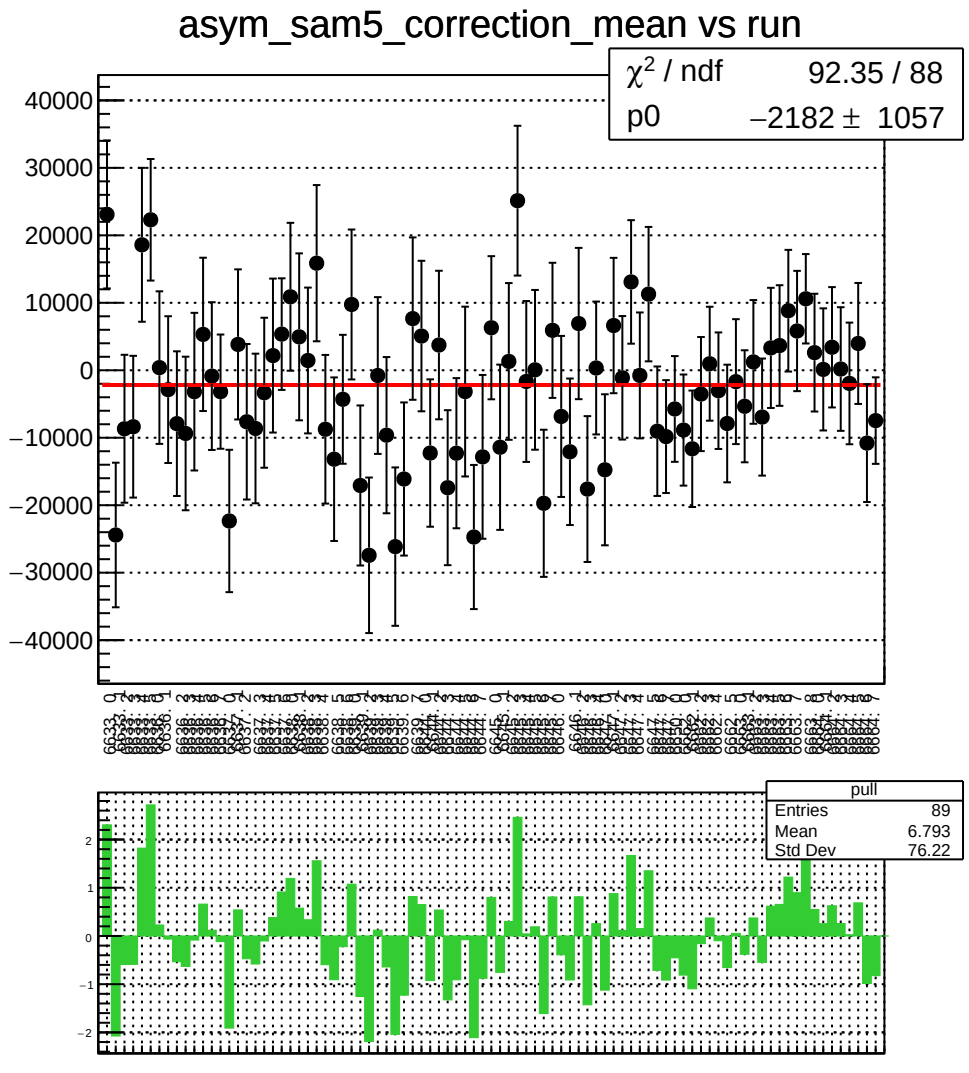

pull1D
Entries 89
Mean −0.02233
Std Dev 0.9652
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

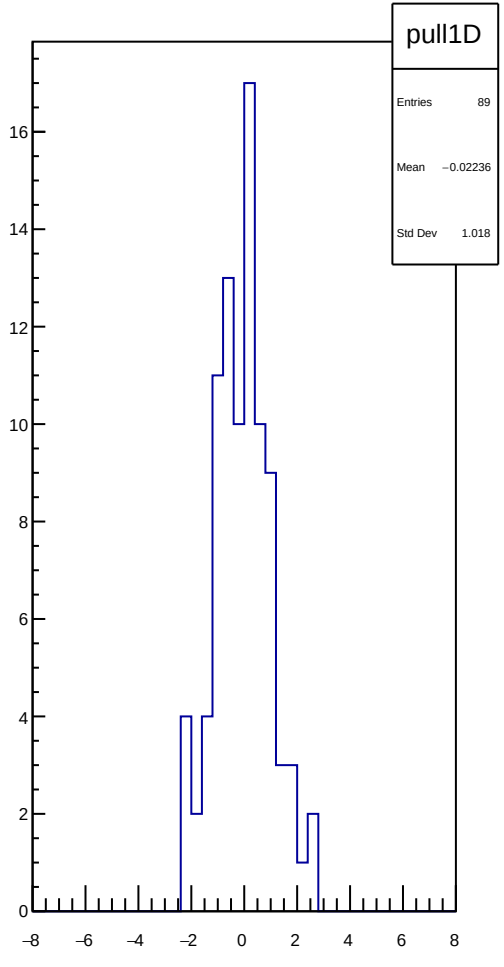

asym_sam4_correction_rms vs run
χ² / ndf 3.828e+04 / 88
p0 1723 ± 1.329
2400
2200
2000
1800
1600
1400

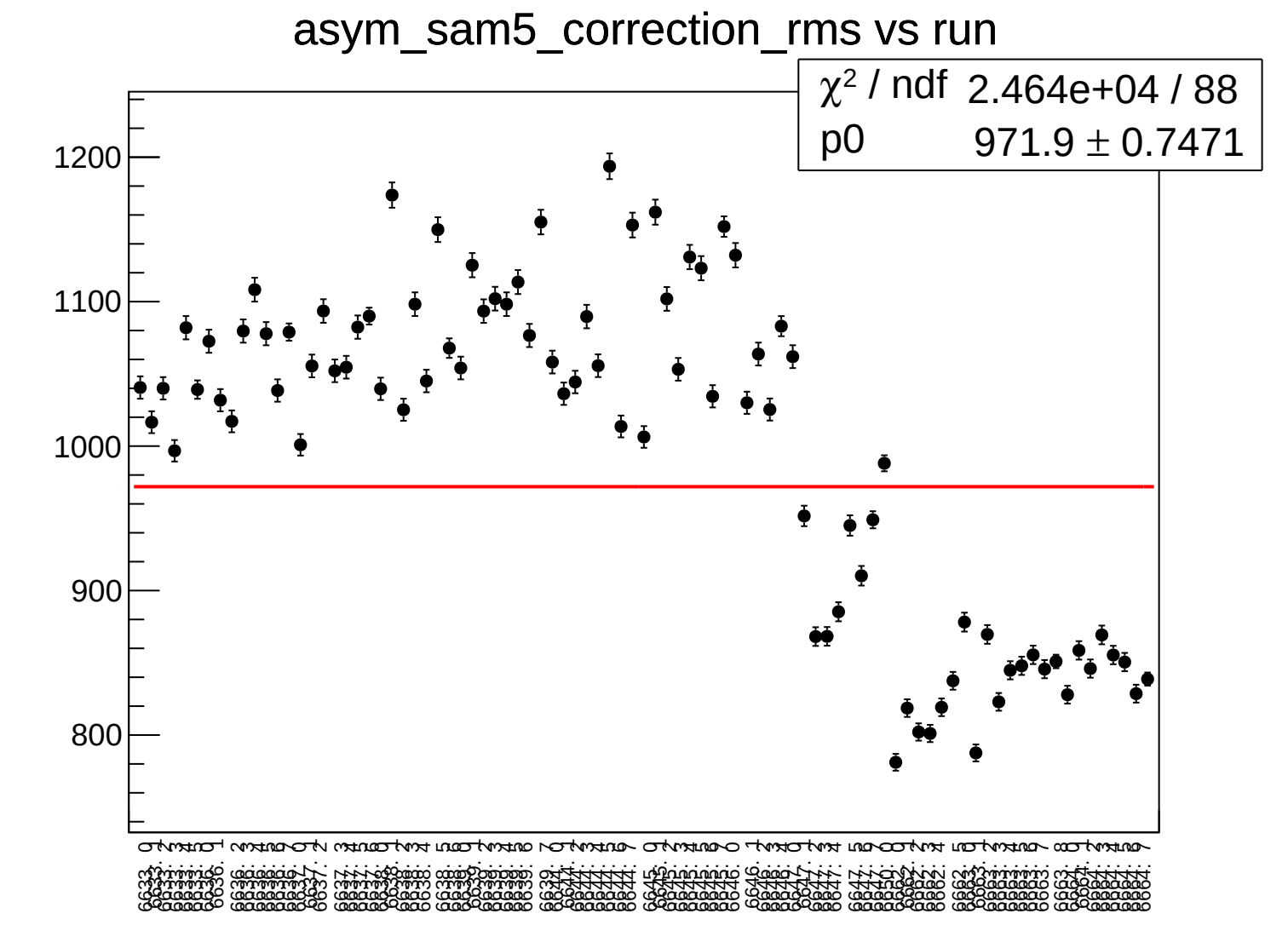

reg_asym_sam5_mean vs run
χ² / ndf 98.01 / 88
p0 −76.61 ± 140.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean −171
Std Dev 205.8
3
2
1
0
−1
−2
−3

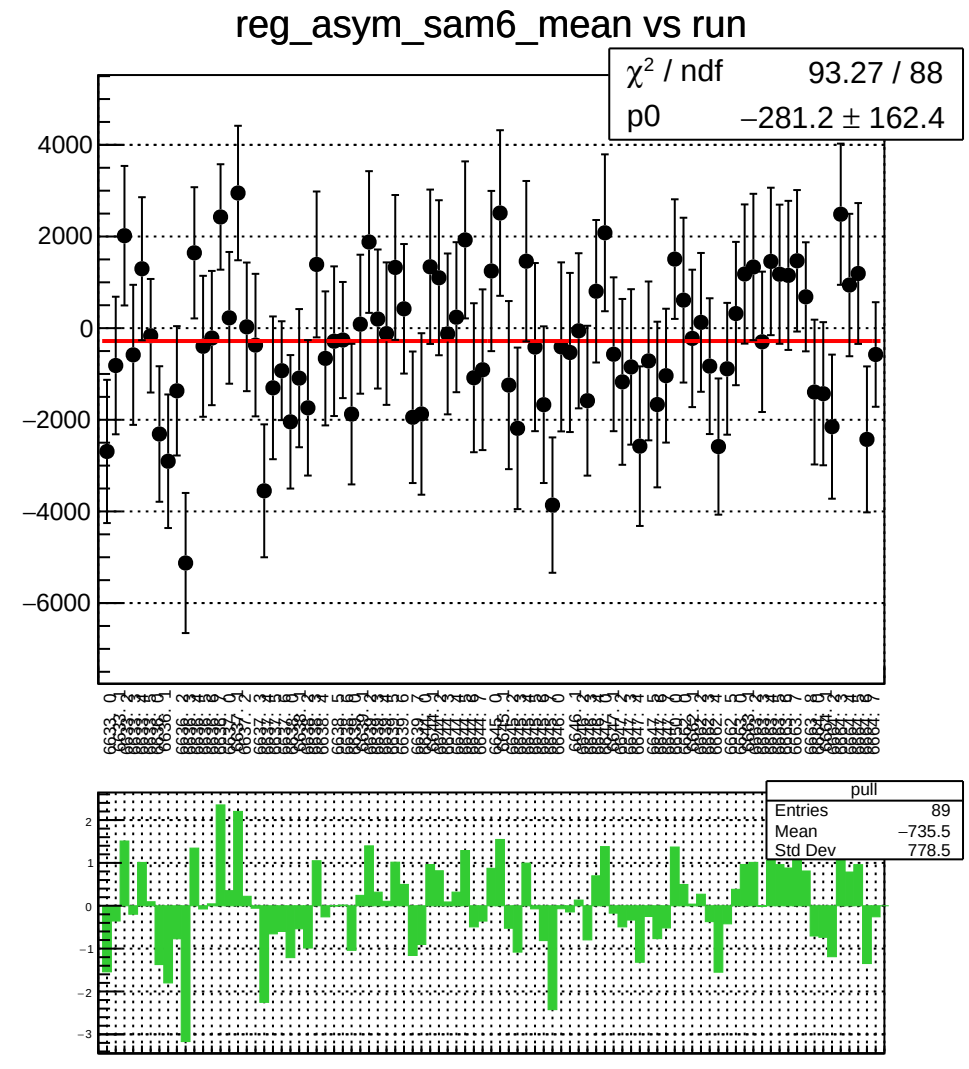

pull1D
Entries 89
Mean −0.01006
Std Dev 1.049
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

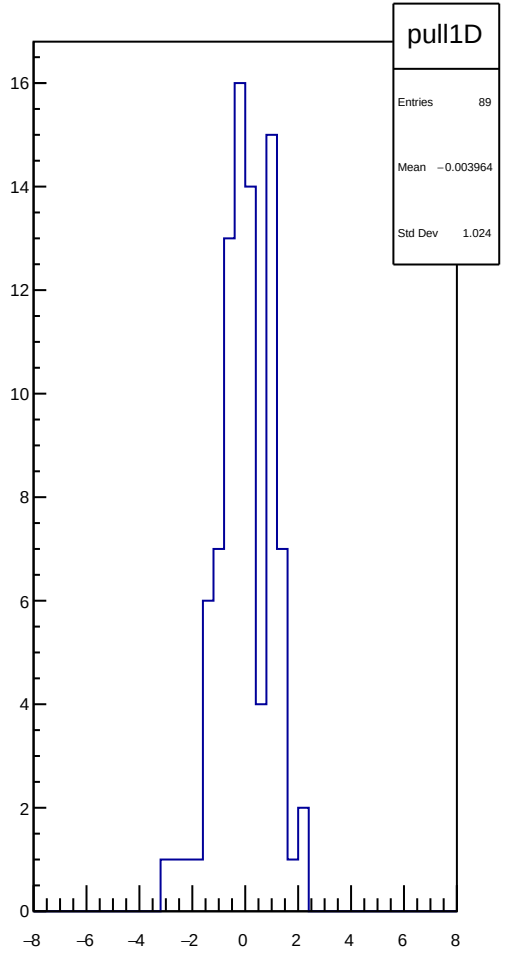

reg_asym_sam5_rms vs run
χ² / ndf 5109 / 88
p0 130.3 ± 0.09957
150
145
140
135
130
125
120
115

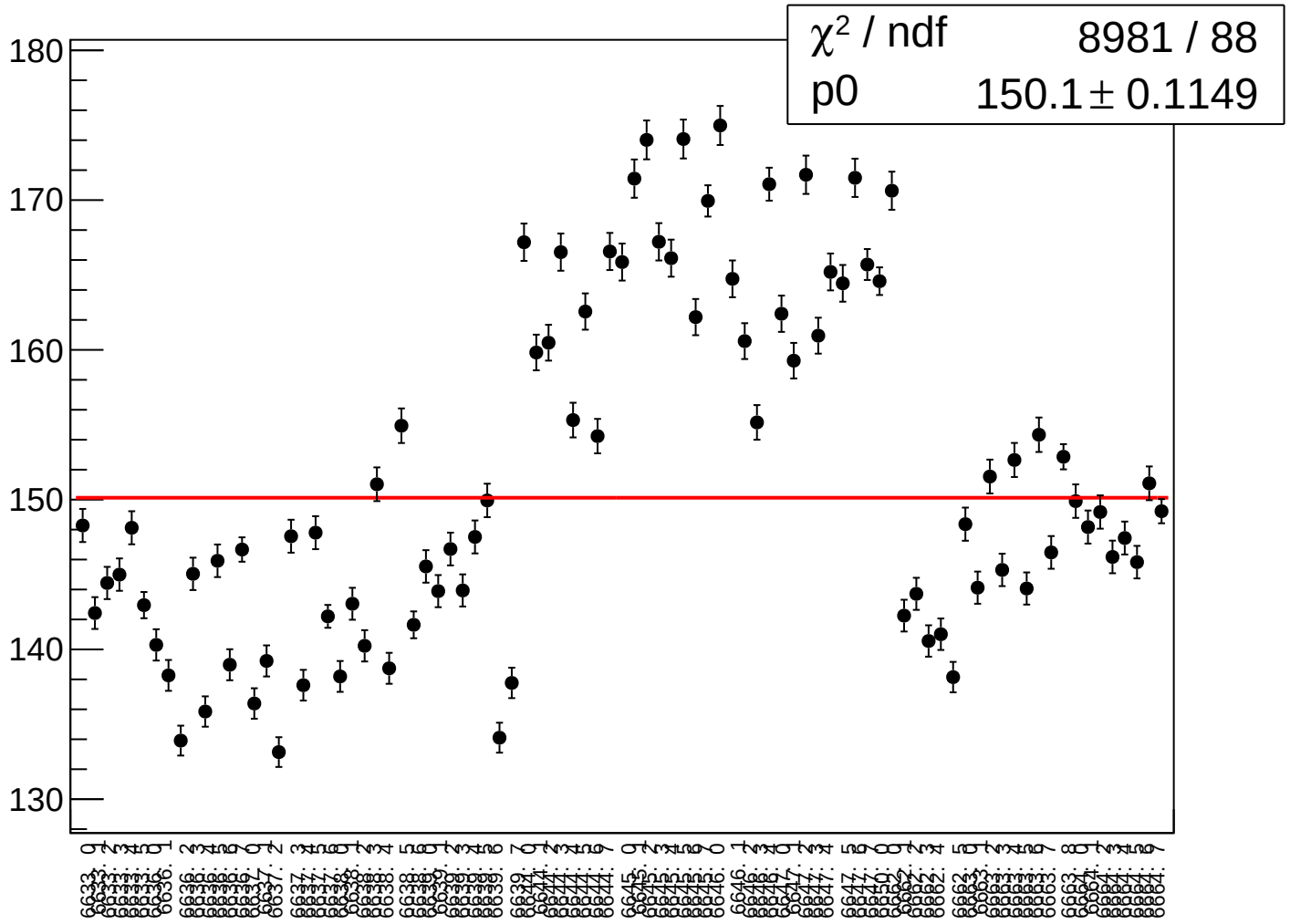

asym_sam5_correction_mean vs run
χ² / ndf 92.35 / 88
p0 −2182 ± 1057
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean 6.793
Std Dev 76.22
2
1
0
−1
−2

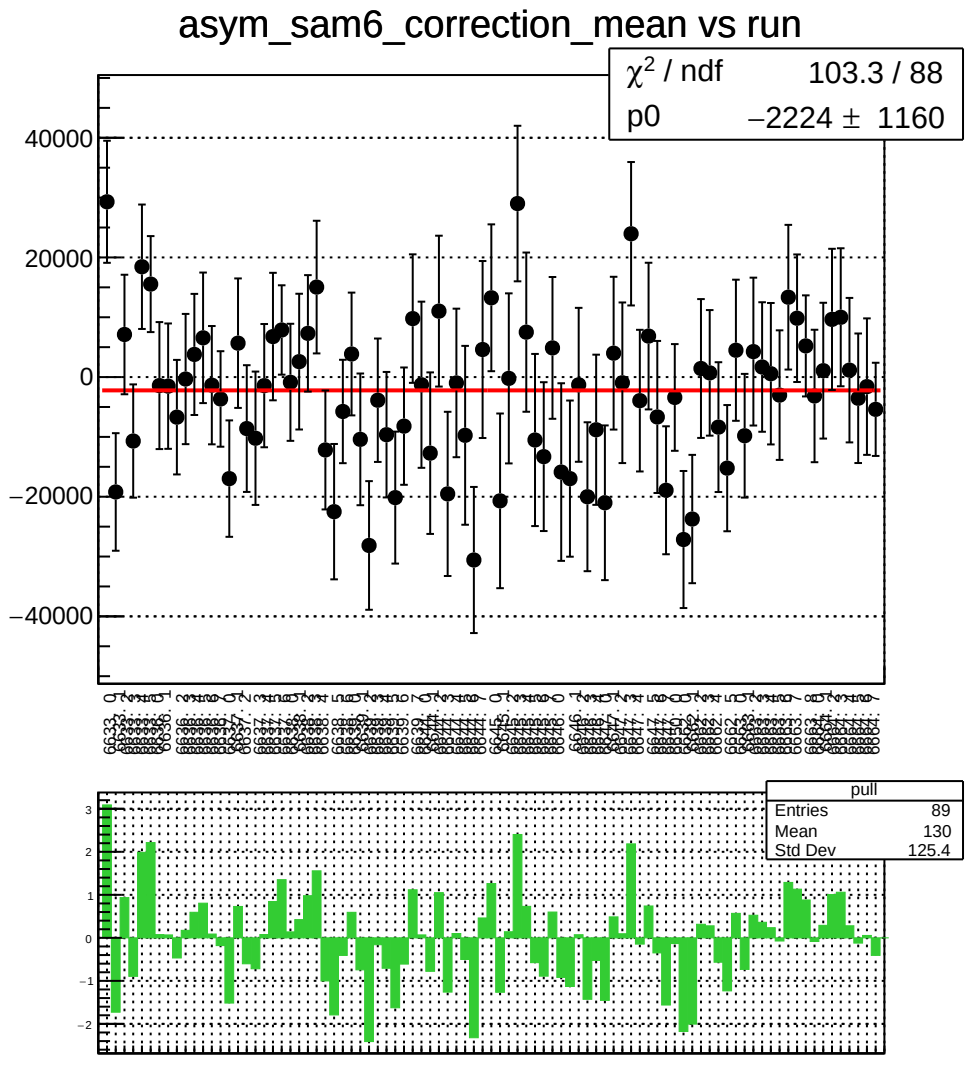

pull1D
Entries 89
Mean −0.02236
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

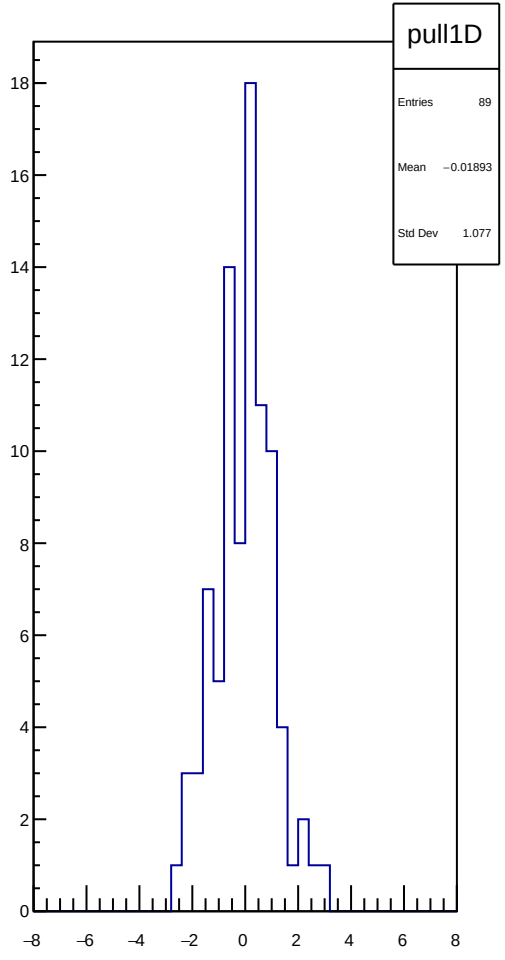

asym_sam5_correction_rms vs run
χ² / ndf 2.464e+04 / 88
p0 971.9 ± 0.7471
1200
1100
1000
900
800

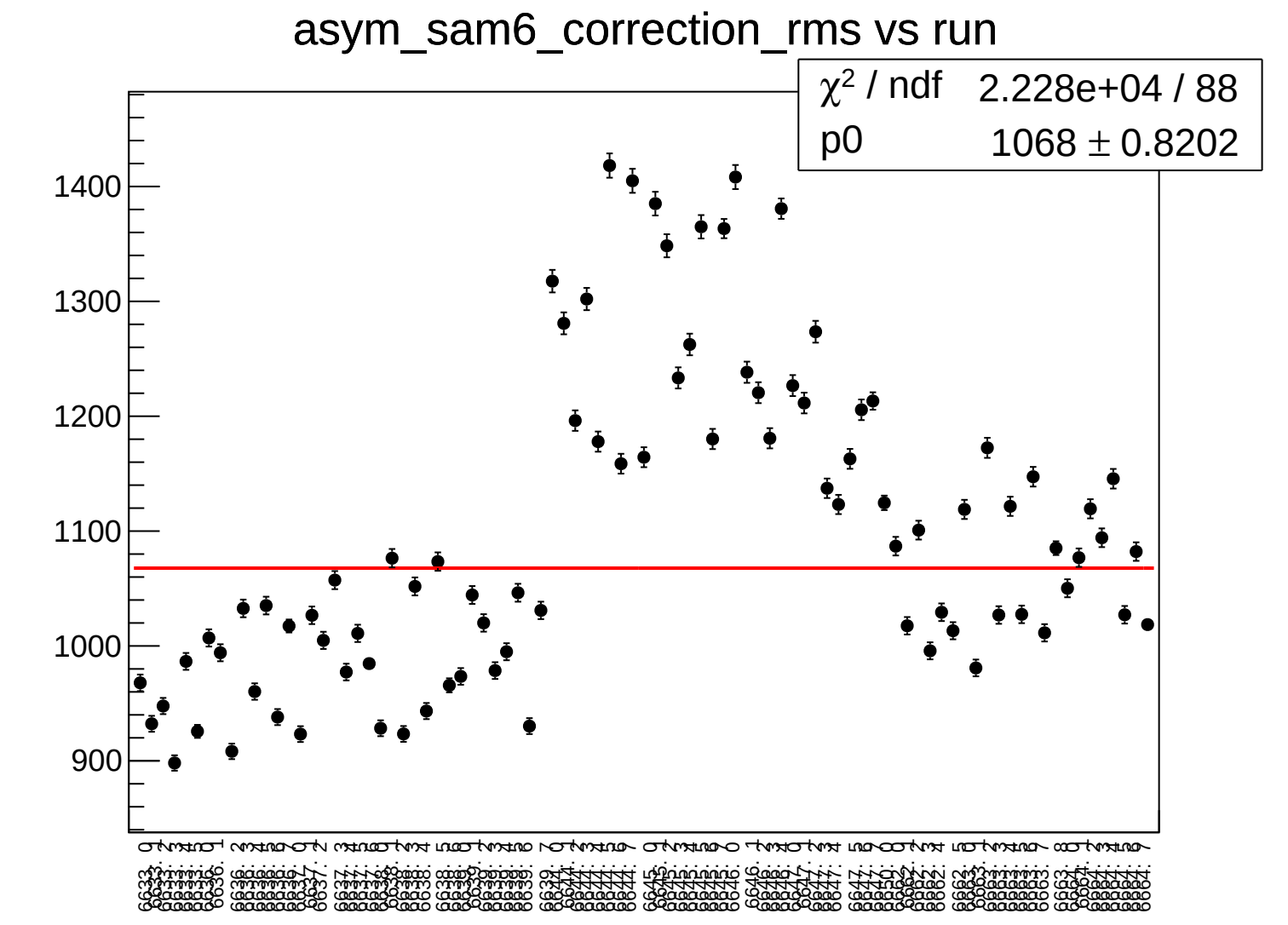

reg_asym_sam6_mean vs run
χ² / ndf 93.27 / 88
p0 −281.2 ± 162.4
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean −735.5
Std Dev 778.5
2
1
0
−1
−2
−3

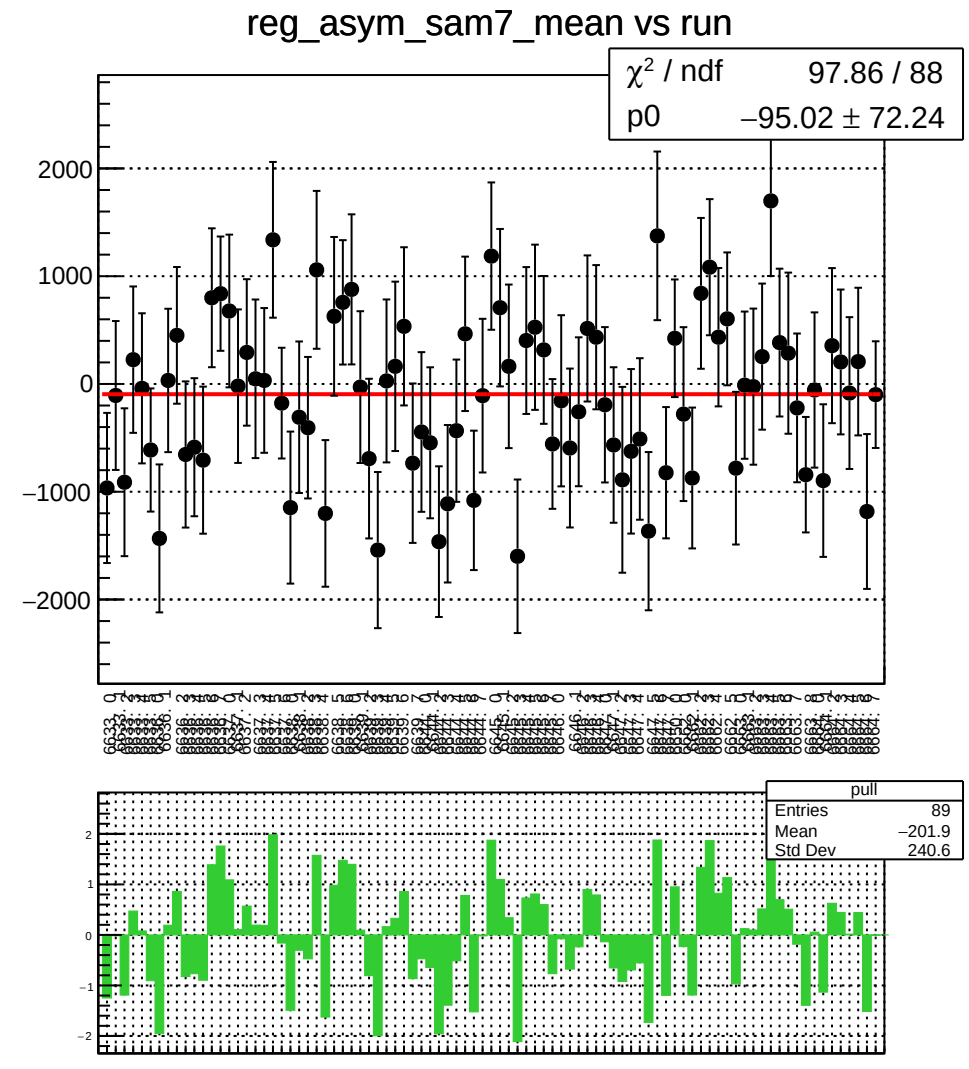

pull1D
Entries 89
Mean −0.003964
Std Dev 1.024
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

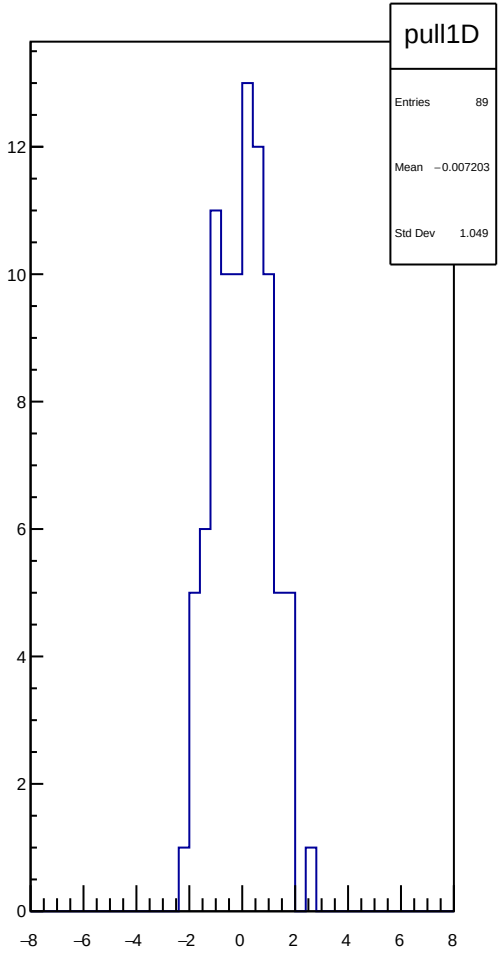

reg_asym_sam6_rms vs run
χ² / ndf 8981 / 88
p0 150.1 ± 0.1149
180
170
160
150
140
130

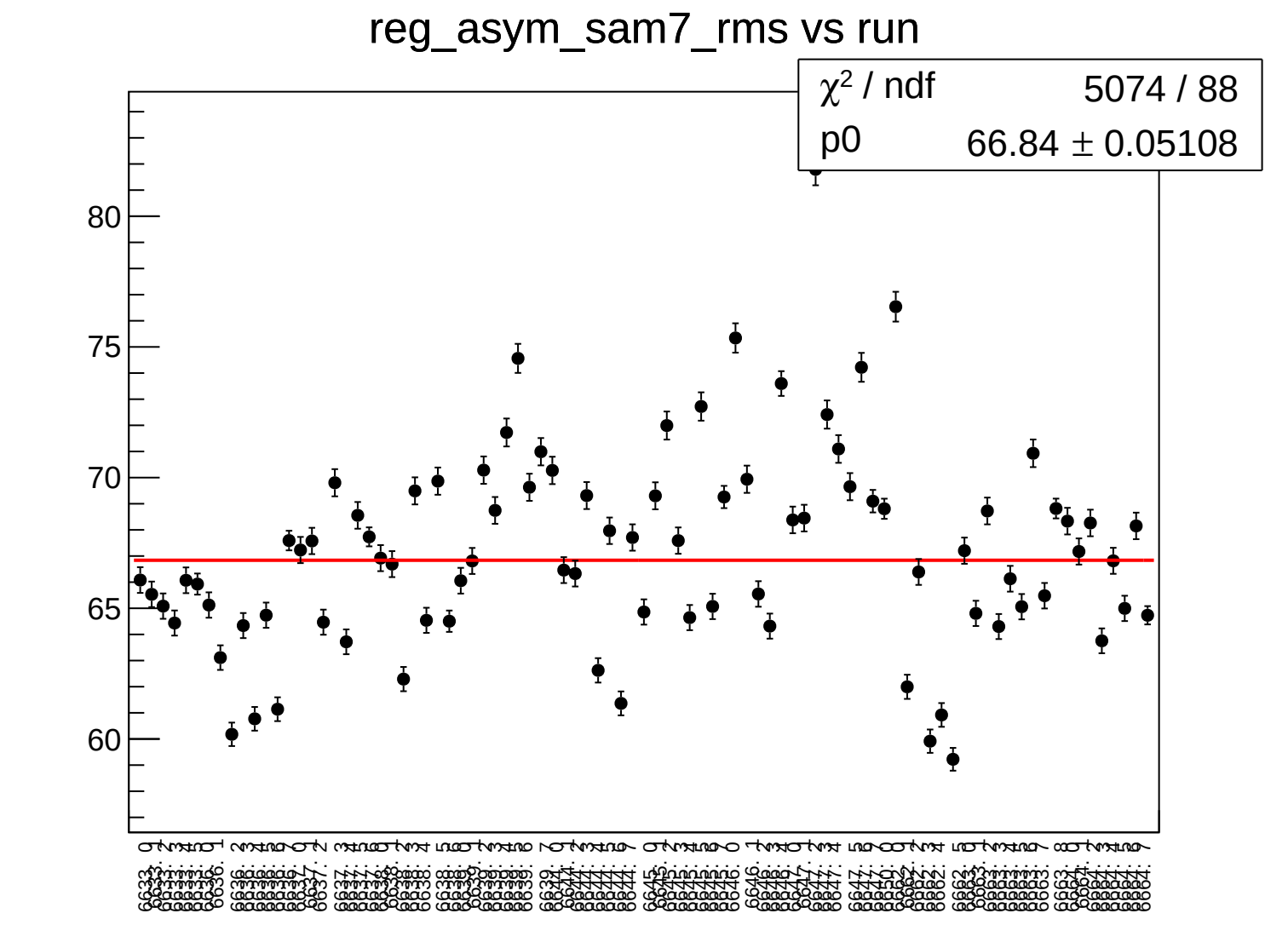

asym_sam6_correction_mean vs run
χ² / ndf 103.3 / 88
p0 −2224 ± 1160
40000
20000
0
−20000
−40000
pull
Entries 89
Mean 130
Std Dev 125.4
3
2
1
0
−1
−2

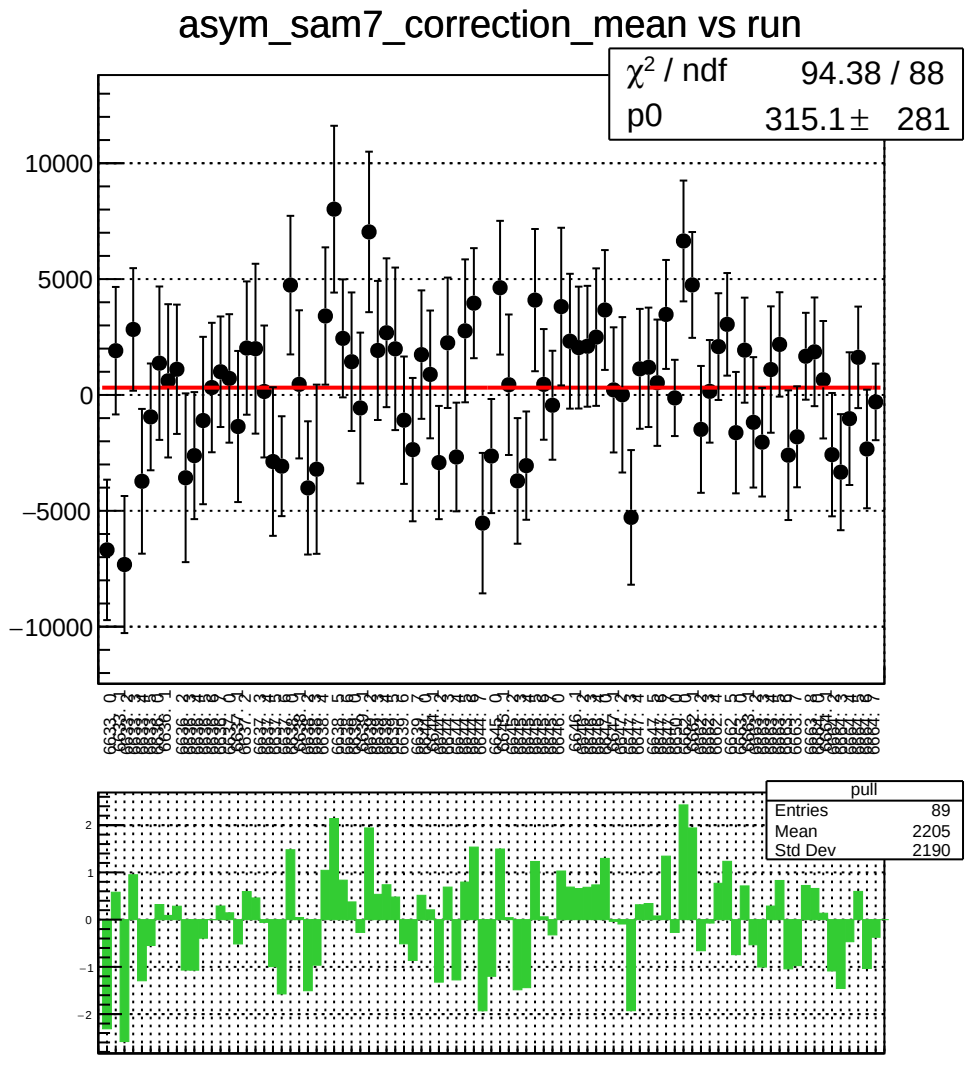

pull1D
Entries 89
Mean −0.01893
Std Dev 1.077
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

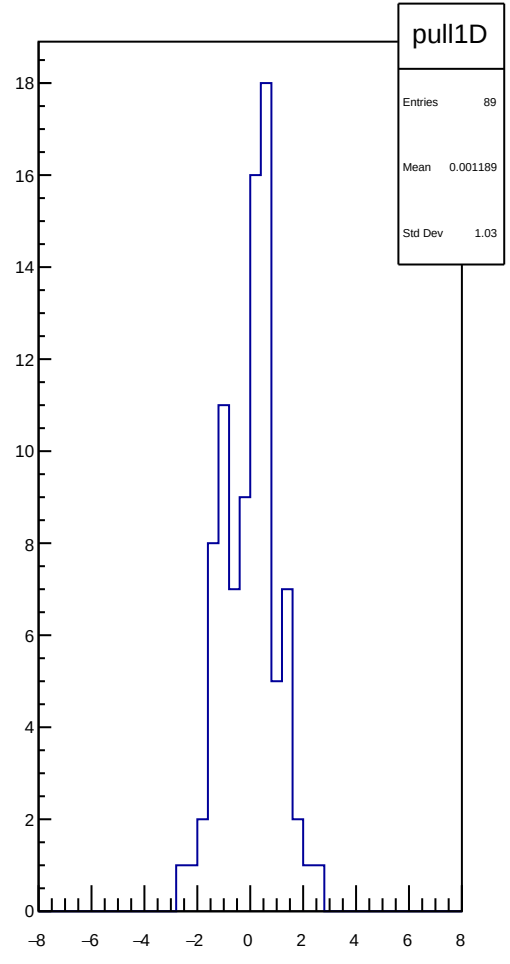

asym_sam6_correction_rms vs run
χ² / ndf 2.228e+04 / 88
p0 1068 ± 0.8202
1400
1300
1200
1100
1000
900

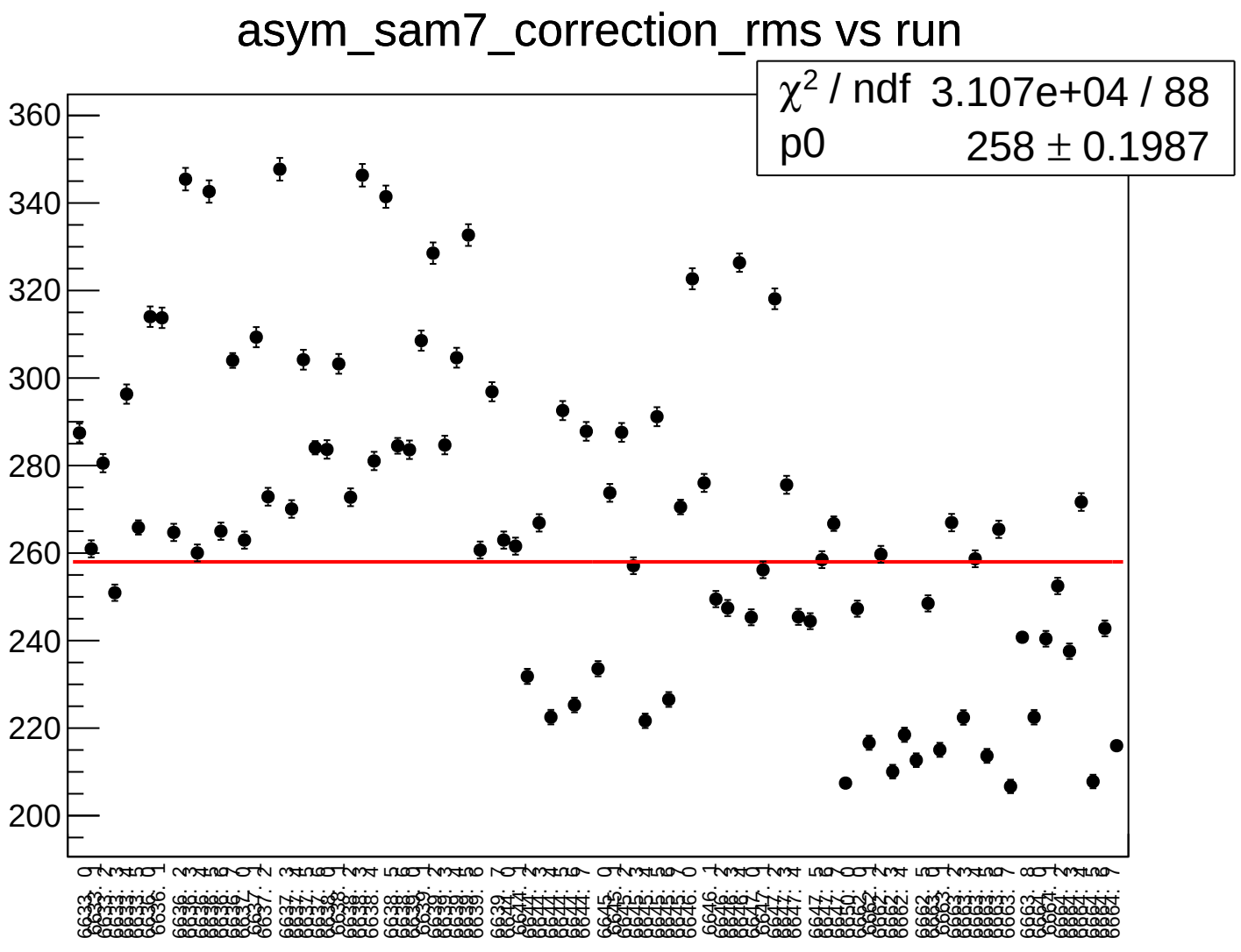

reg_asym_sam7_mean vs run
χ² / ndf 97.86 / 88
p0 −95.02 ± 72.24
2000
1000
0
−1000
−2000
pull
Entries 89
Mean −201.9
Std Dev 240.6
2
1
0
−1
−2

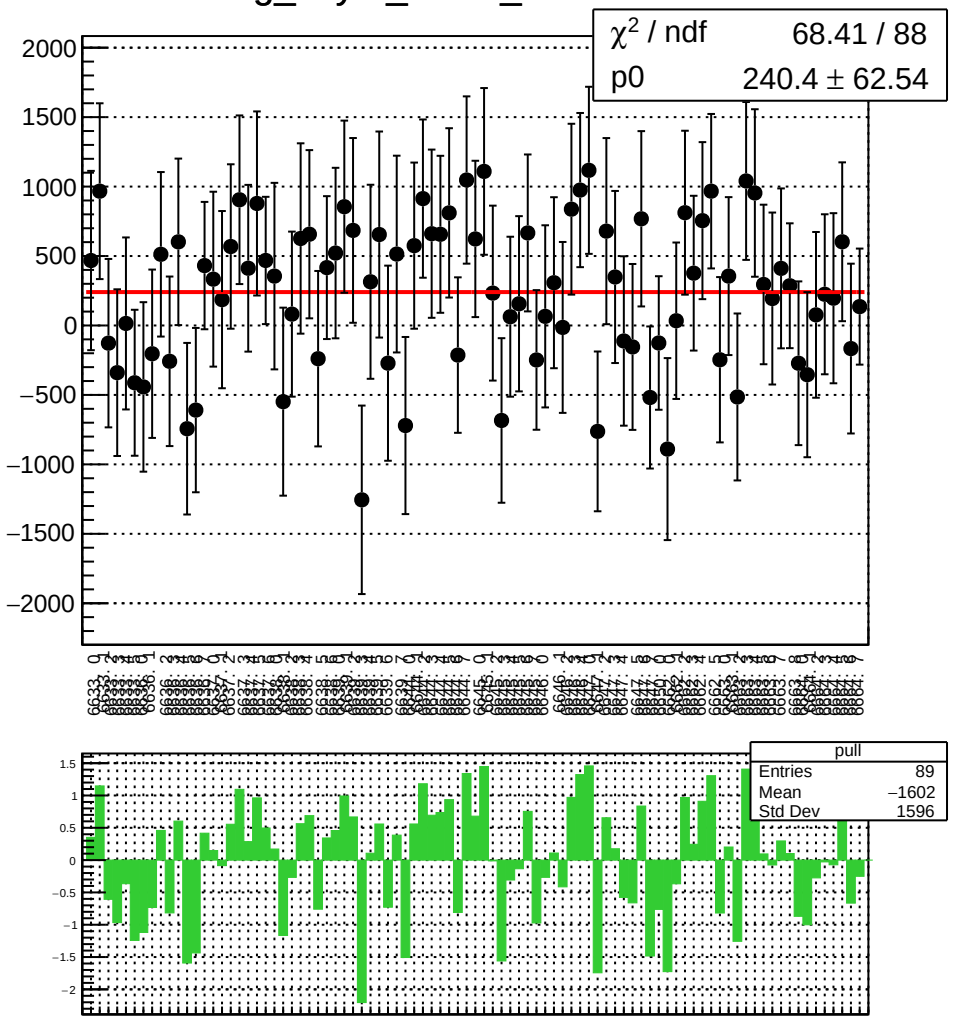

pull1D
Entries 89
Mean −0.007203
Std Dev 1.049
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

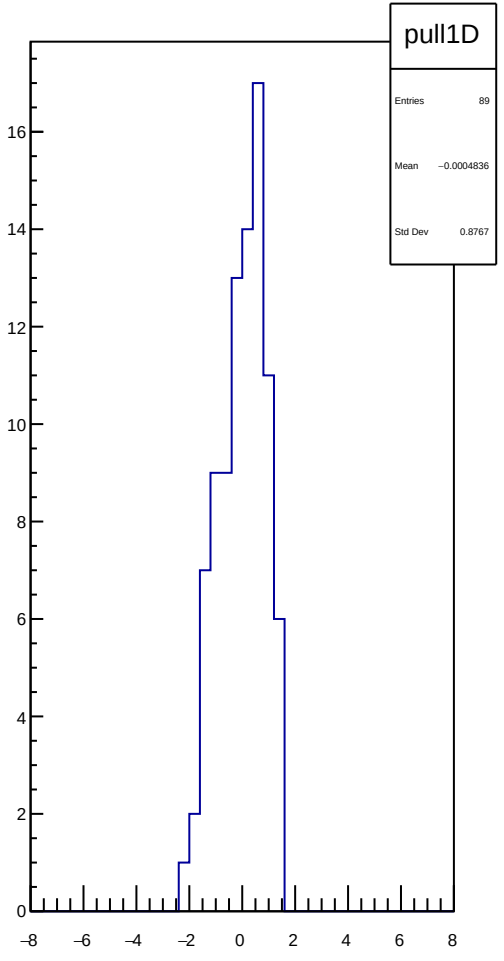

reg_asym_sam7_rms vs run
χ² / ndf 5074 / 88
p0 66.84 ± 0.05108
80
75
70
65
60

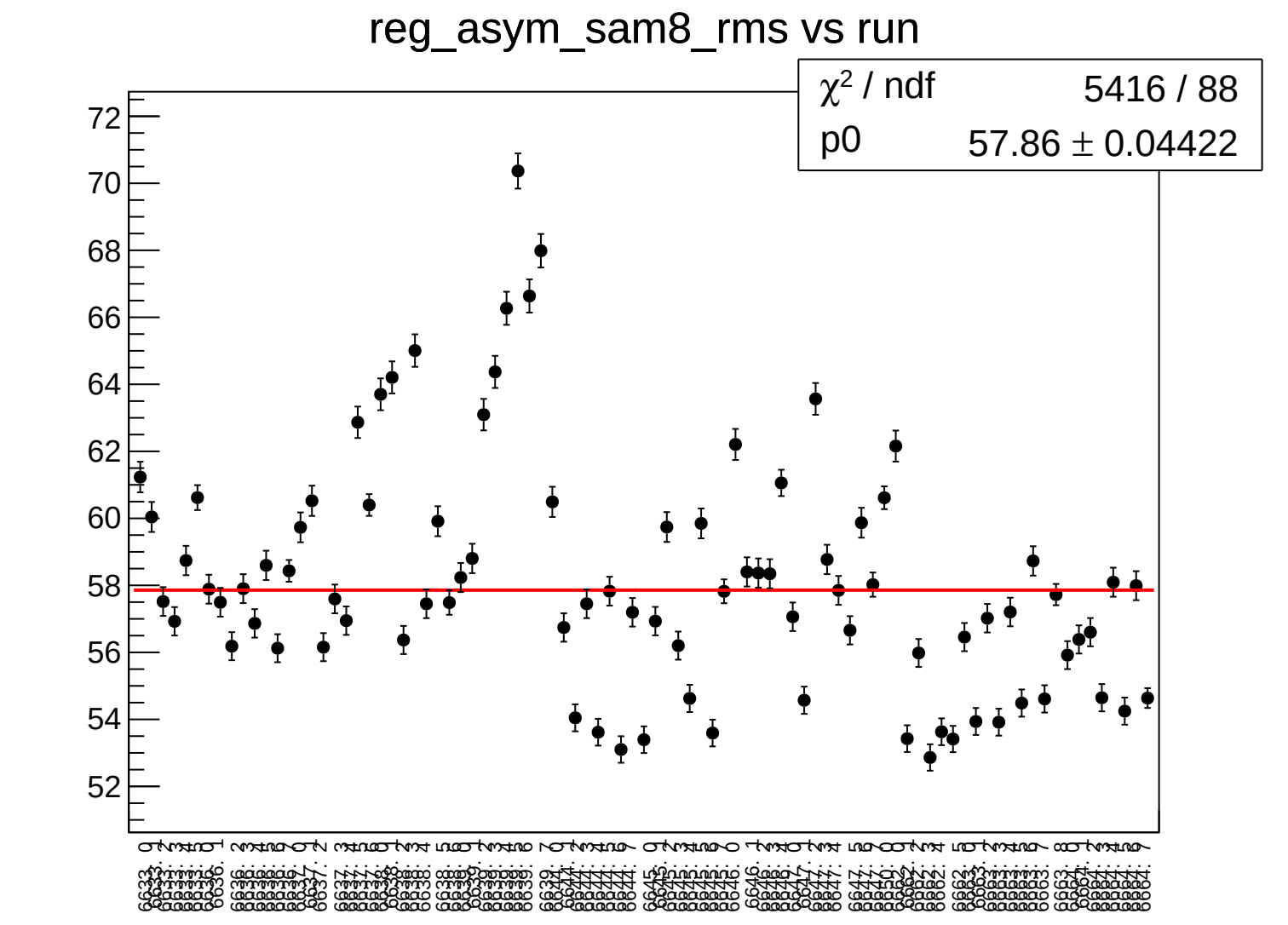

asym_sam7_correction_mean vs run
χ² / ndf 94.38 / 88
p0 315.1 ± 281
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 2205
Std Dev 2190
2
1
0
−1
−2

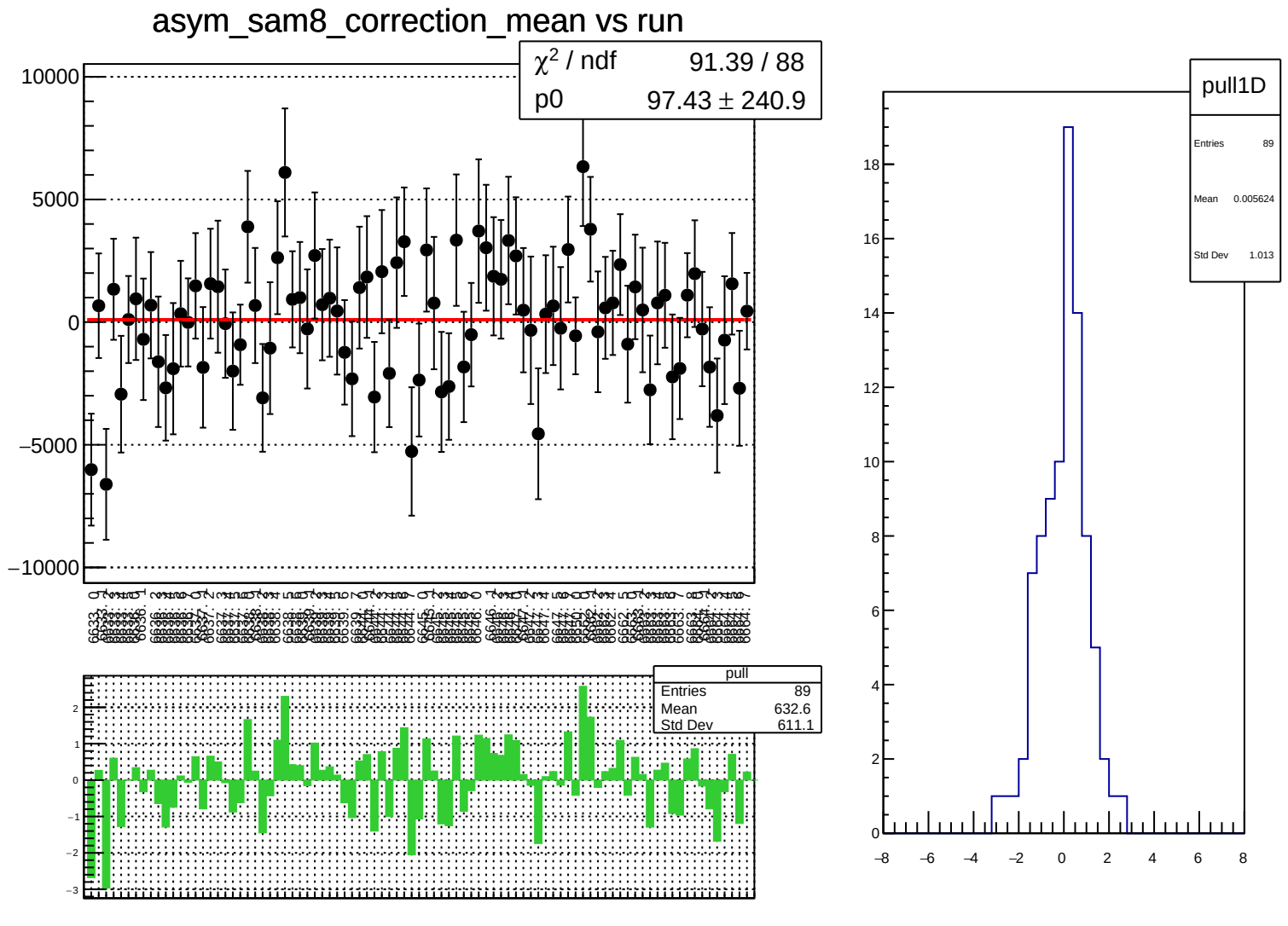

pull1D
Entries 89
Mean 0.001189
Std Dev 1.03
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

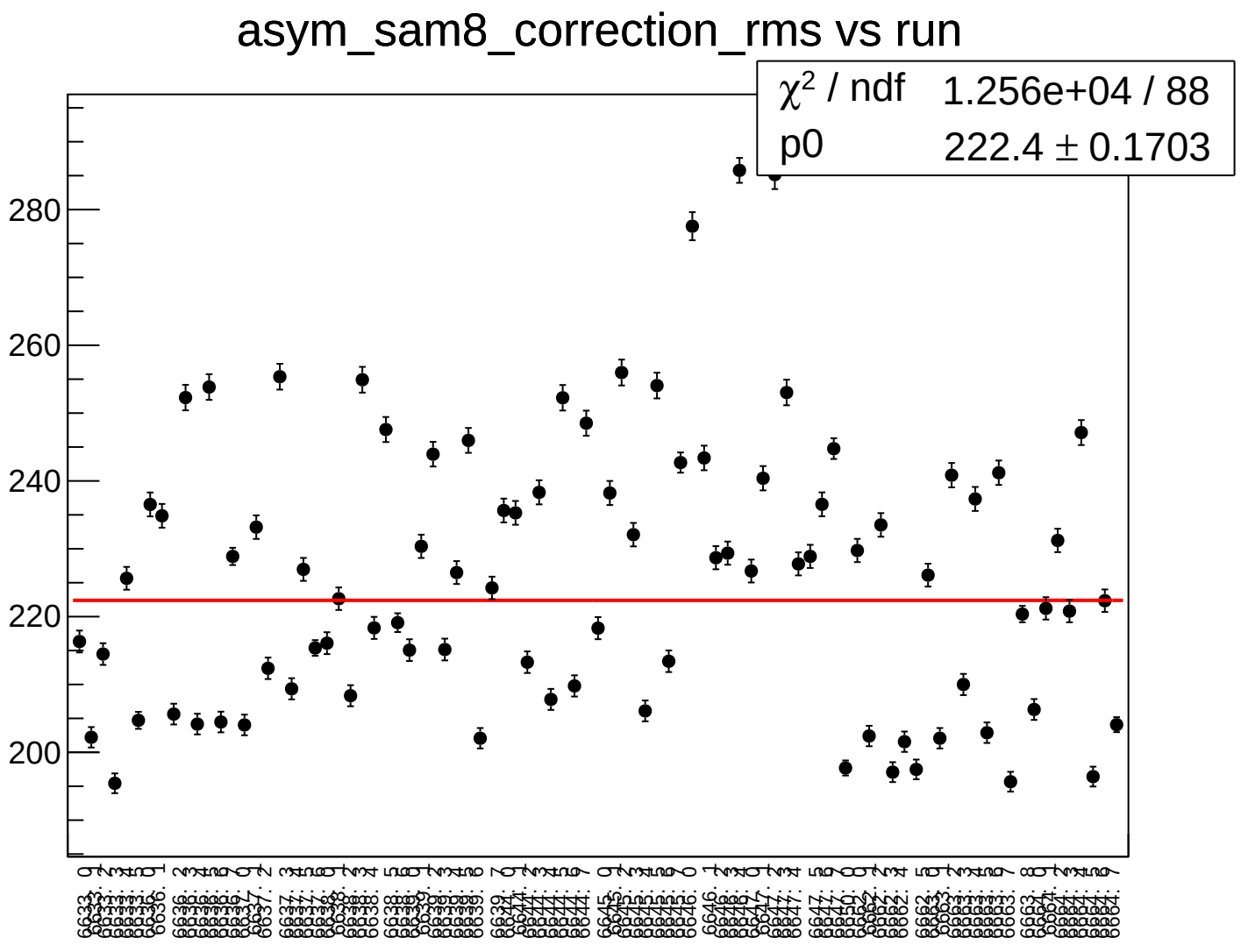

asym_sam7_correction_rms vs run
χ² / ndf 3.107e+04 / 88
p0 258 ± 0.1987
360
340
320
300
280
260
240
220
200

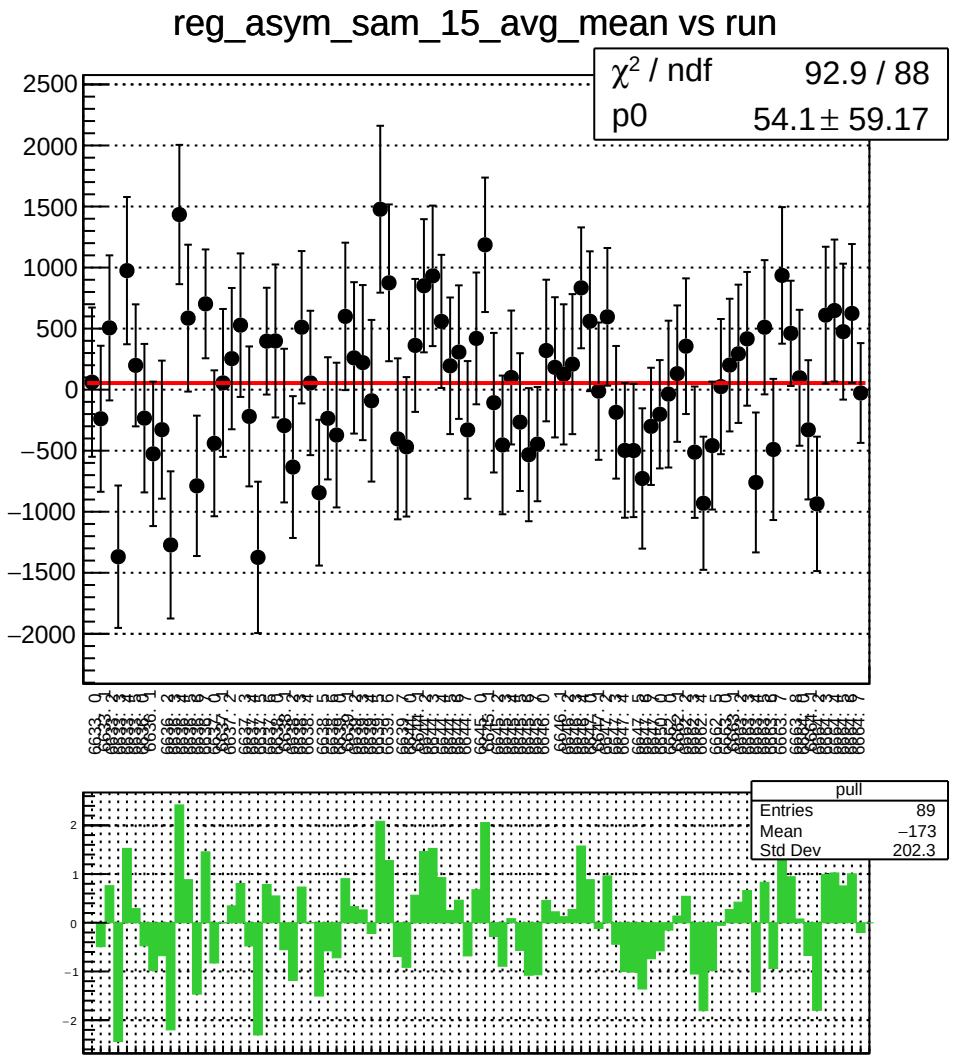

reg_asym_sam8_mean vs run
χ² / ndf 68.41 / 88
p0 240.4 ± 62.54
pull
Entries 89
Mean −1602
Std Dev 1596

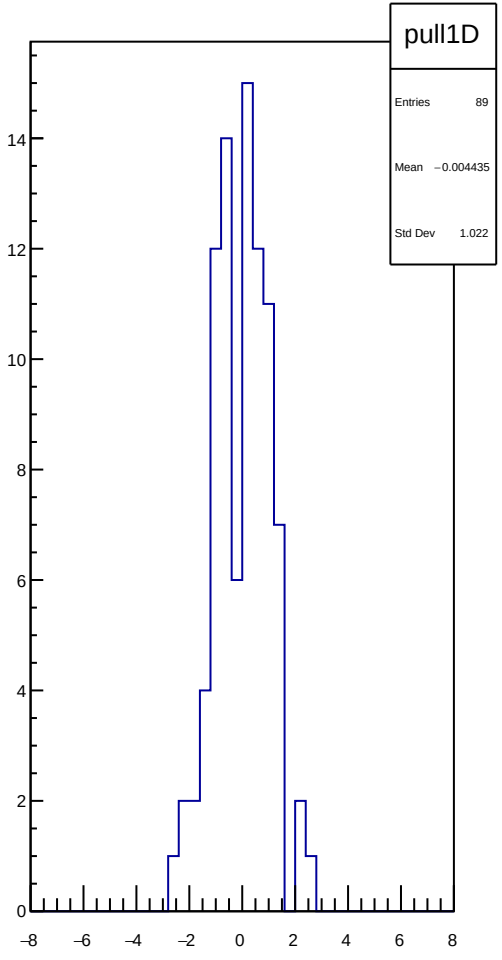

pull1D
Entries 89
Mean −0.0004836
Std Dev 0.8767

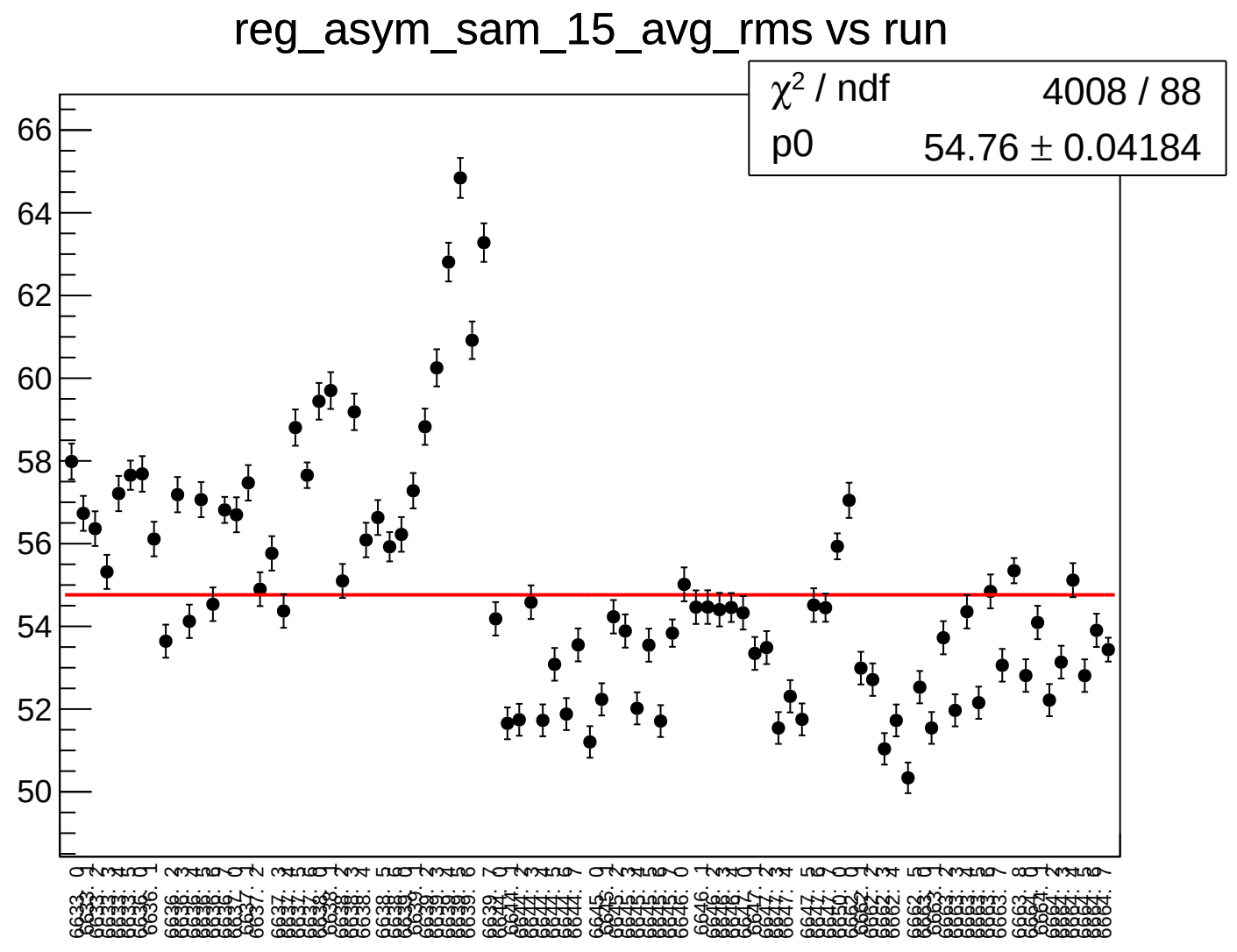

reg_asym_sam8_rms vs run
χ² / ndf 5416 / 88
p0 57.86 ± 0.04422
72
70
68
66
64
62
60
58
56
54
52

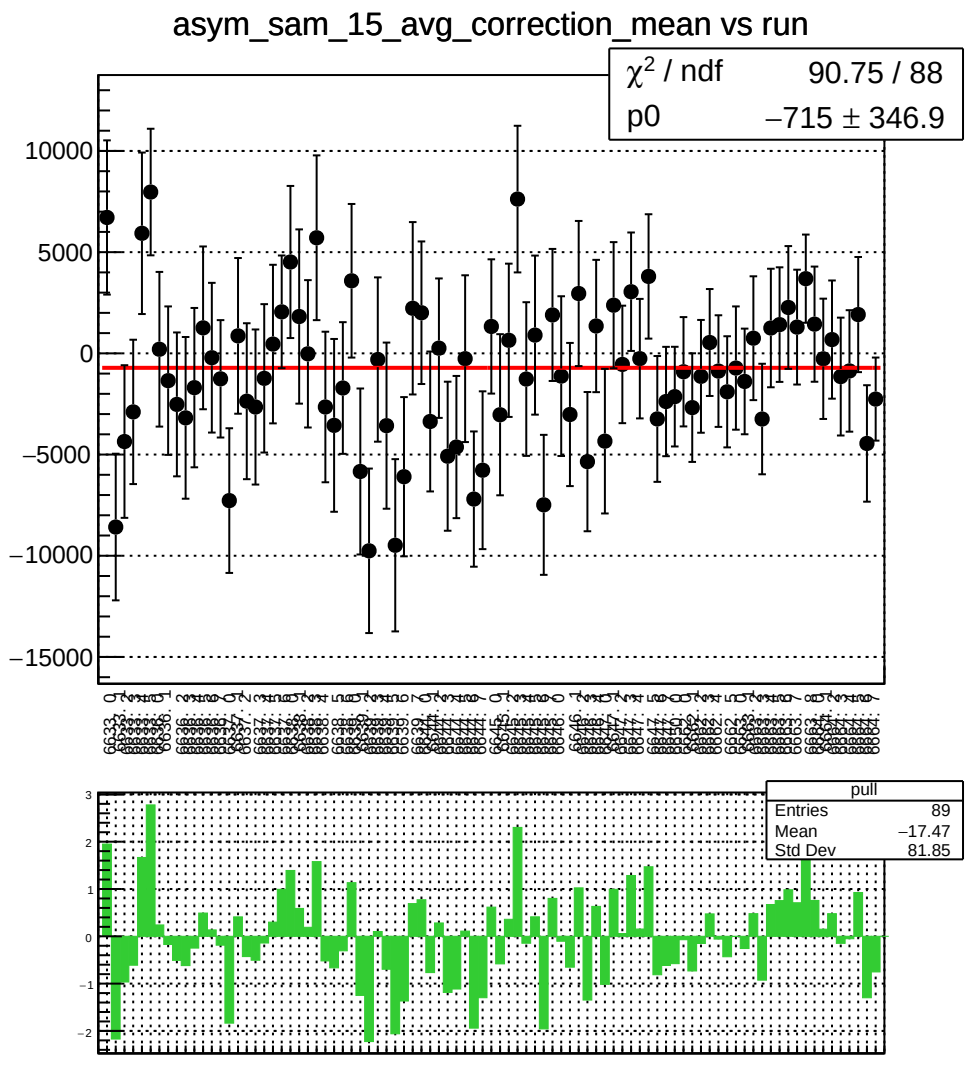

asym_sam8_correction_mean vs run
χ² / ndf 91.39 / 88
p0 97.43 ± 240.9
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 632.6
Std Dev 611.1
pull1D
Entries 89
Mean 0.005624
Std Dev 1.013

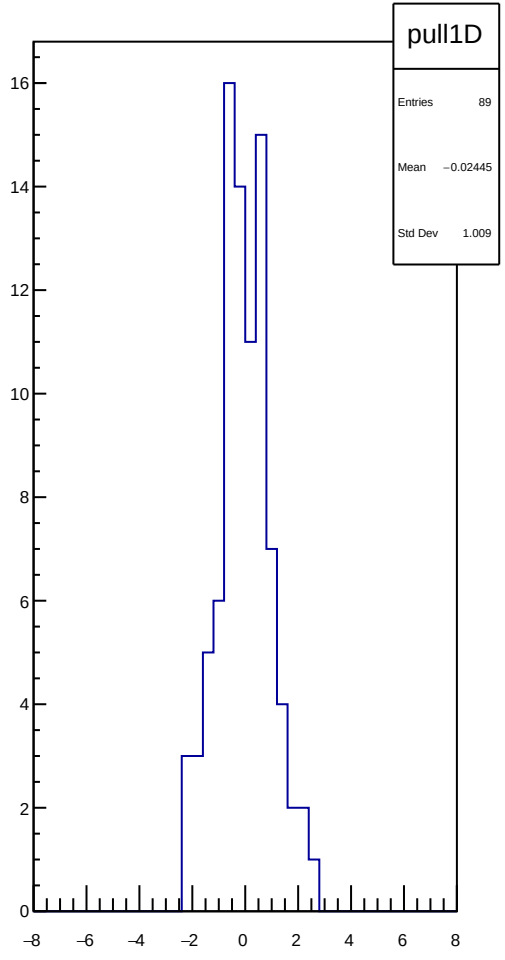

asym_sam8_correction_rms vs run
χ² / ndf 1.256e+04 / 88
p0 222.4 ± 0.1703
280
260
240
220
200

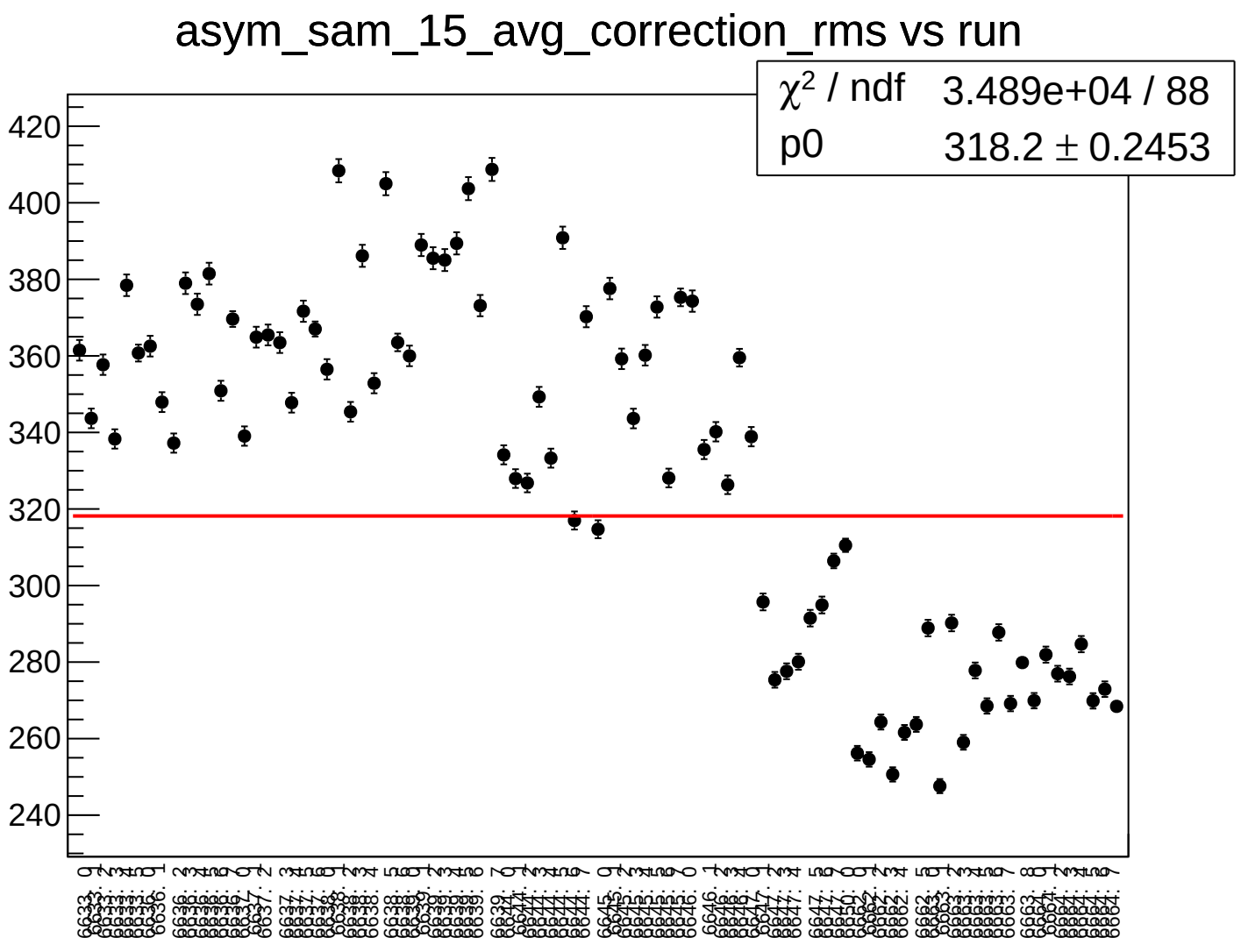

reg_asym_sam_15_avg_mean vs run
χ² / ndf 92.9 / 88
p0 54.1 ± 59.17
pull
Entries 89
Mean −173
Std Dev 202.3

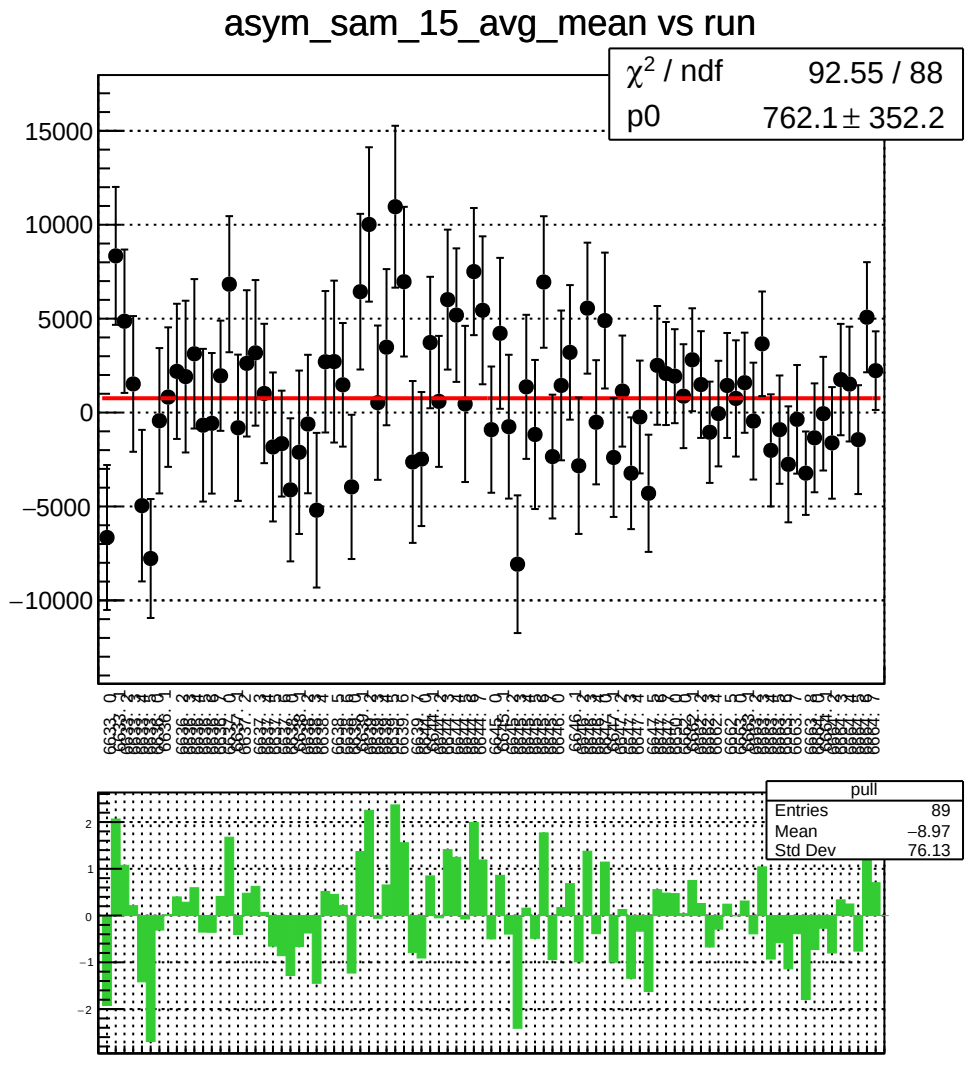

pull1D
Entries 89
Mean −0.004435
Std Dev 1.022

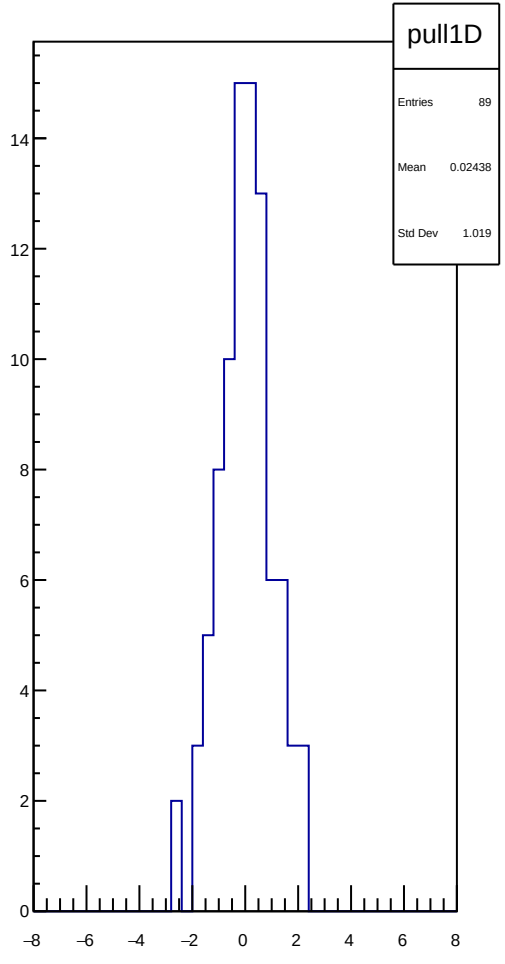

reg_asym_sam_15_avg_rms vs run
χ² / ndf 4008 / 88
p0 54.76 ± 0.04184
66
64
62
60
58
56
54
52
50

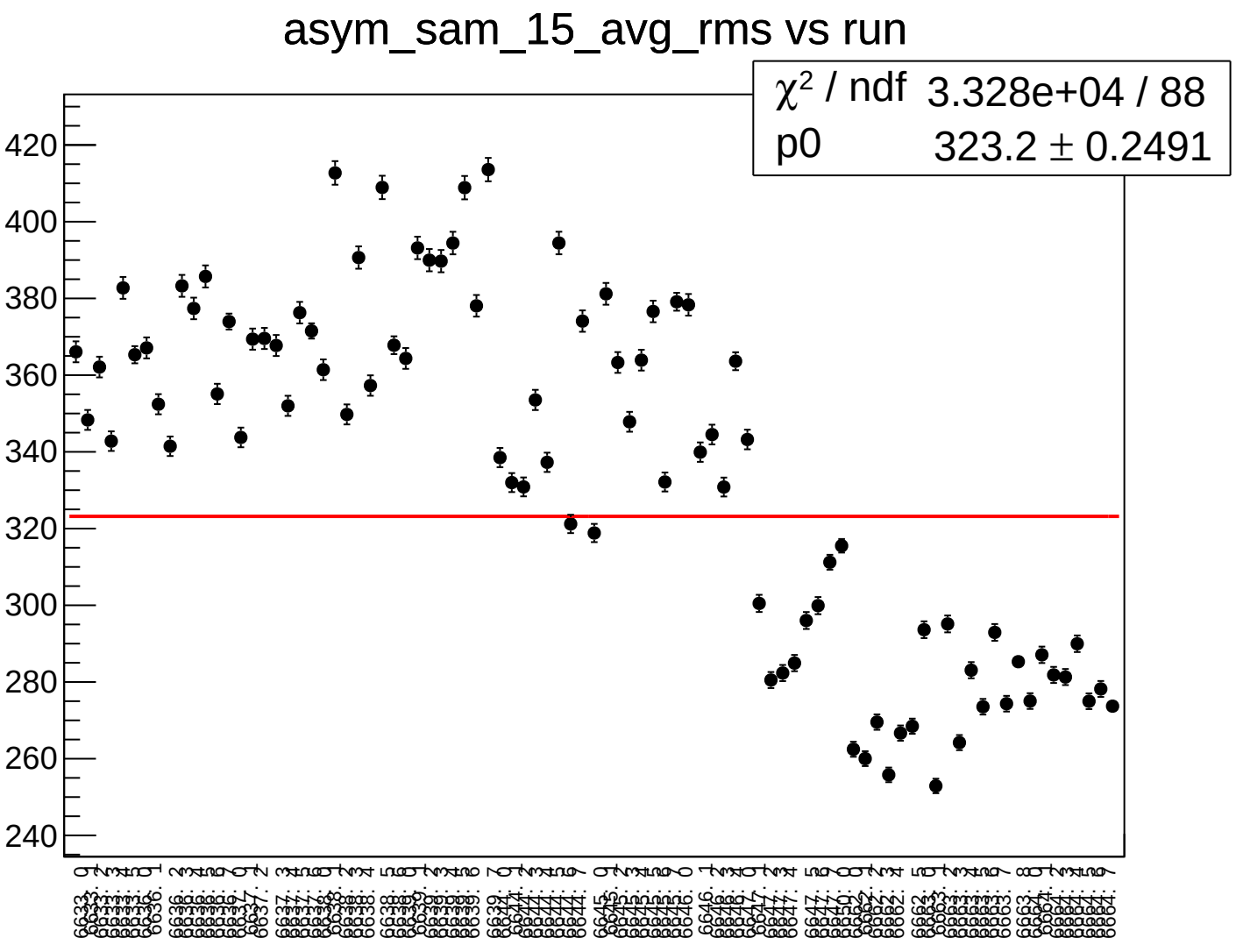

asym_sam_15_avg_correction_mean vs run
χ² / ndf 90.75 / 88
p0 −715 ± 346.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −17.47
Std Dev 81.85
3
2
1
0
−1
−2

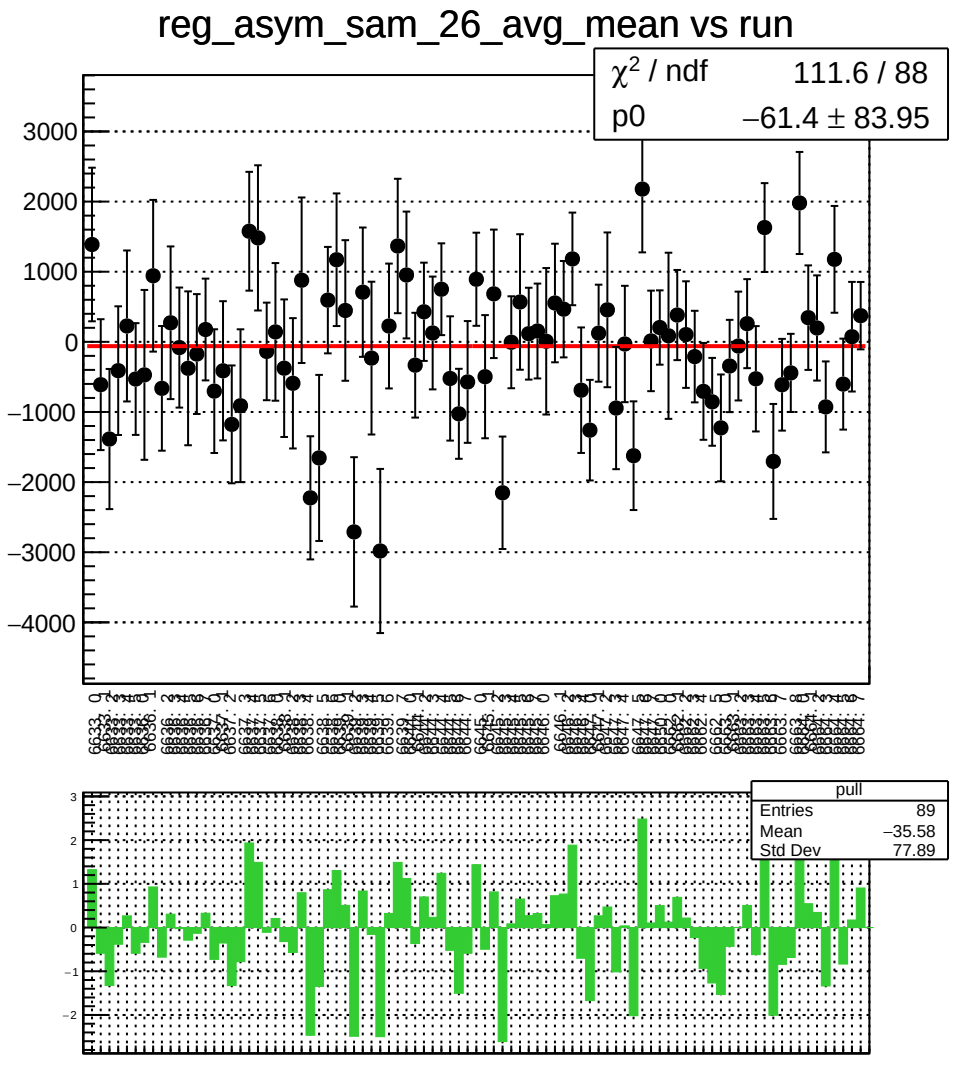

pull1D
Entries 89
Mean −0.02445
Std Dev 1.009
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

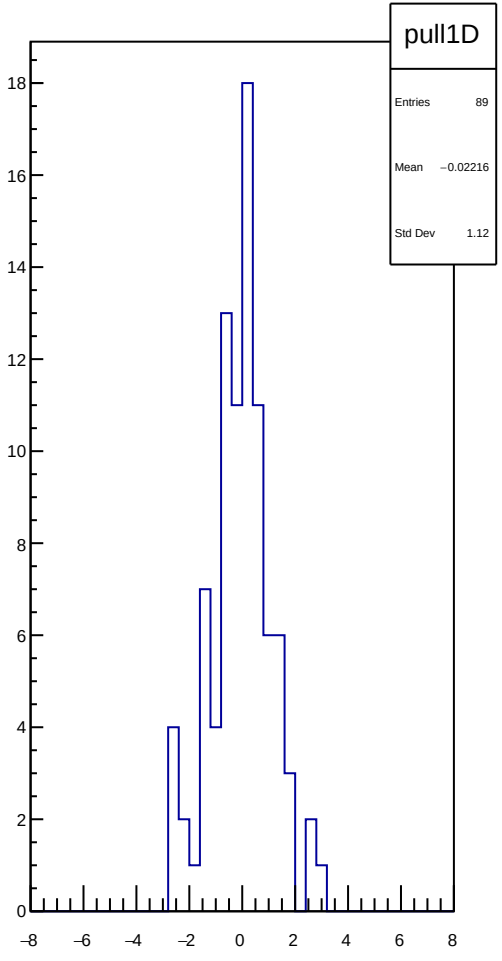

asym_sam_15_avg_correction_rms vs run
χ² / ndf 3.489e+04 / 88
p0 318.2 ± 0.2453
420
400
380
360
340
320
300
280
260
240

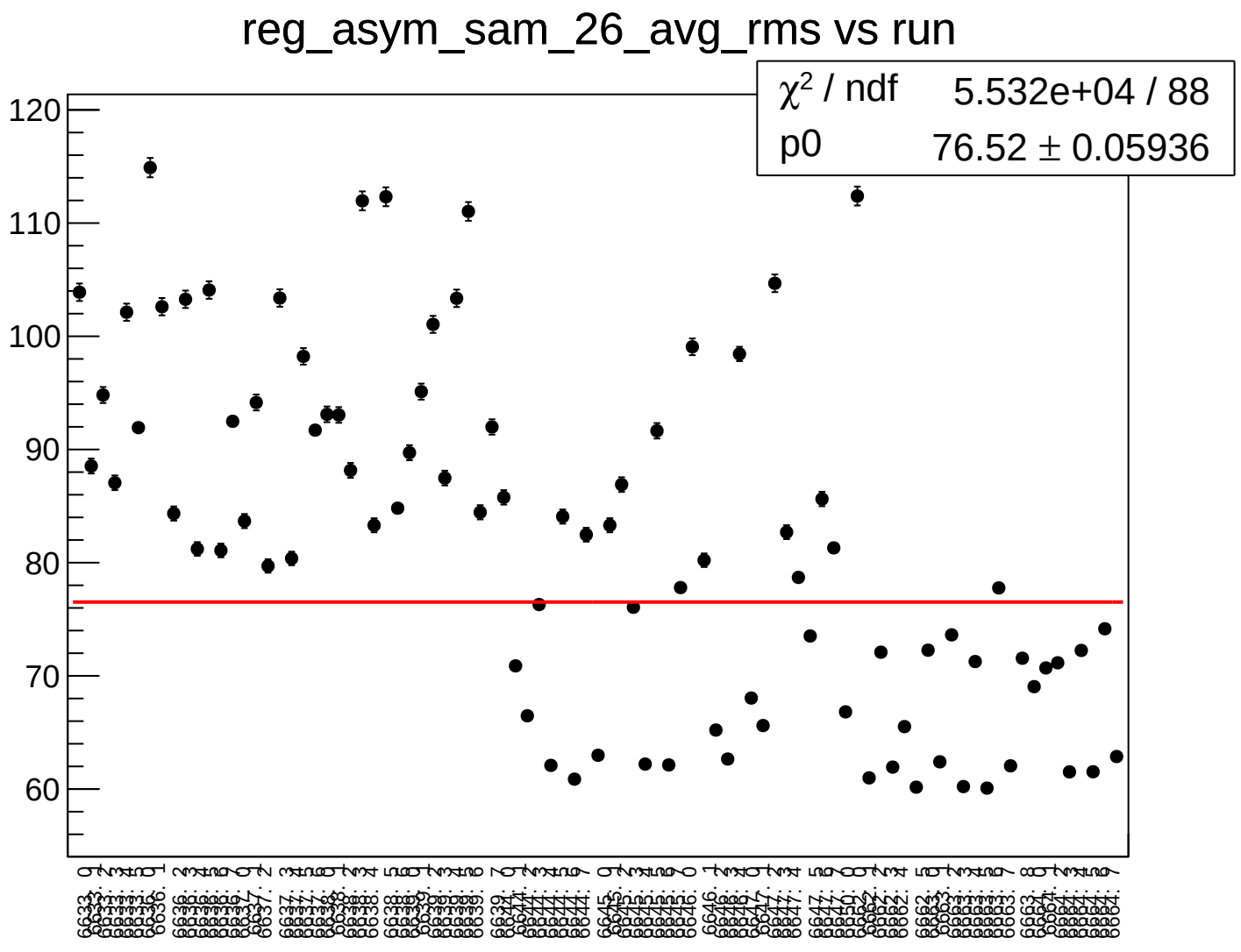

asym_sam_15_avg_mean vs run
χ² / ndf 92.55 / 88
p0 762.1 ± 352.2
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −8.97
Std Dev 76.13
2
1
0
−1
−2

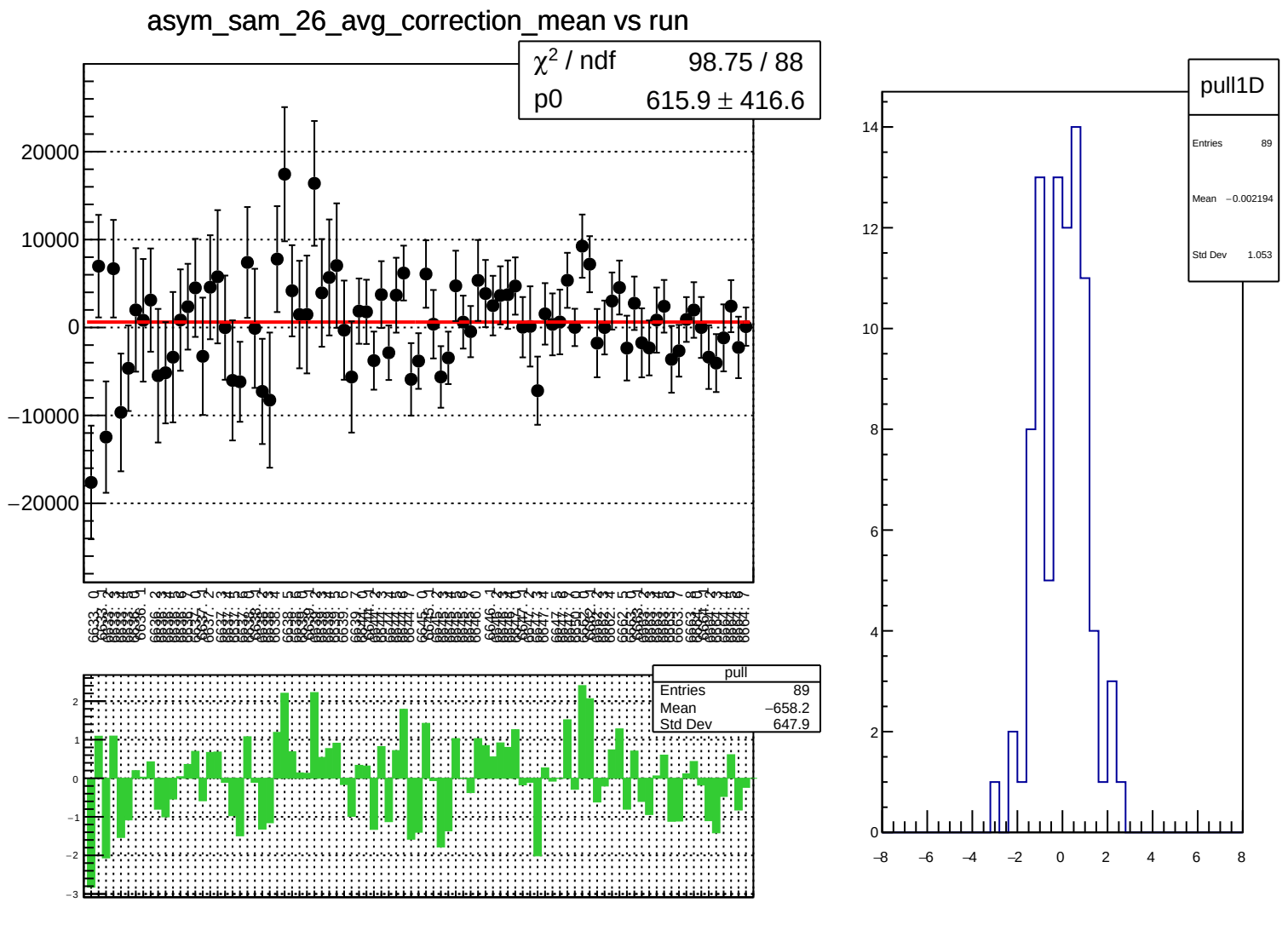

pull1D
Entries 89
Mean 0.02438
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

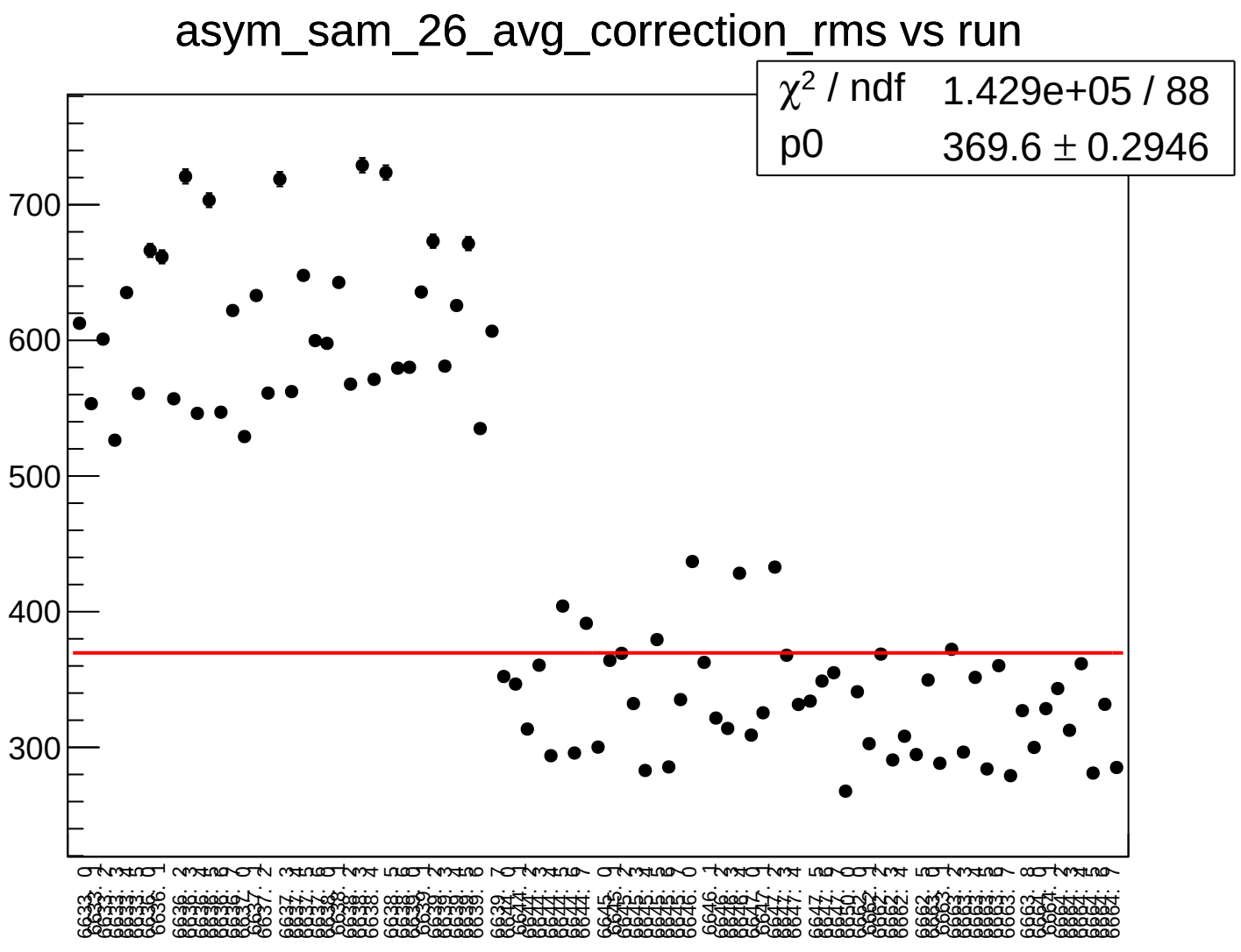

asym_sam_15_avg_rms vs run
χ² / ndf 3.328e+04 / 88
p0 323.2 ± 0.2491
420
400
380
360
340
320
300
280
260
240

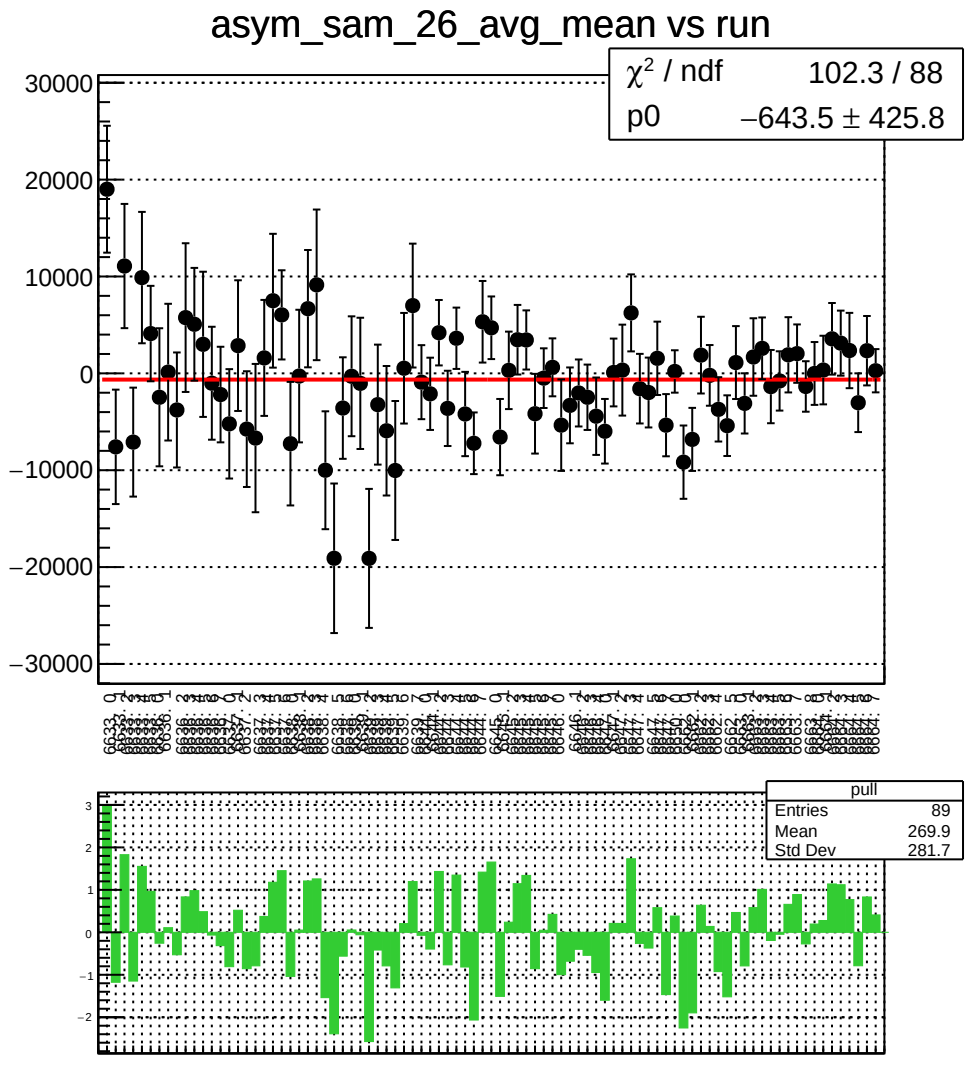

reg_asym_sam_26_avg_mean vs run
χ^2 / ndf 111.6 / 88
p0 −61.4 ± 83.95
pull
Entries 89
Mean −35.58
Std Dev 77.89

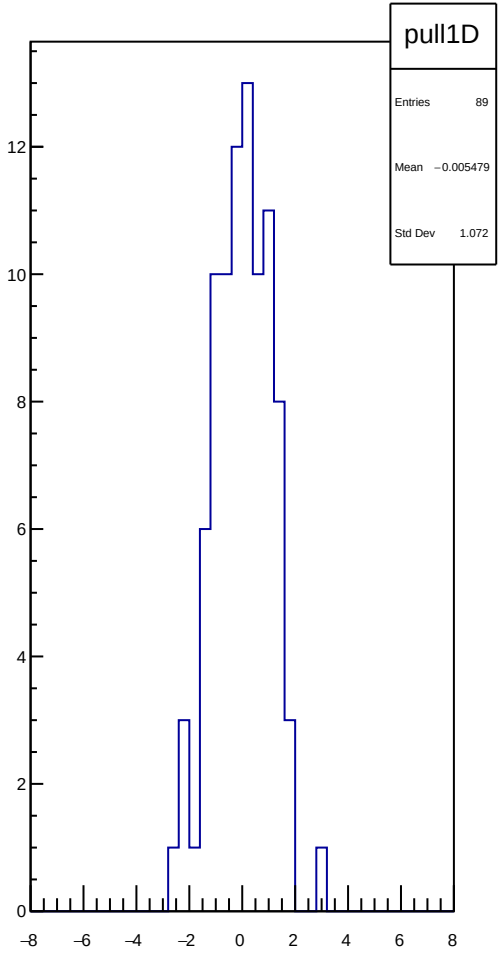

pull1D
Entries 89
Mean −0.02216
Std Dev 1.12

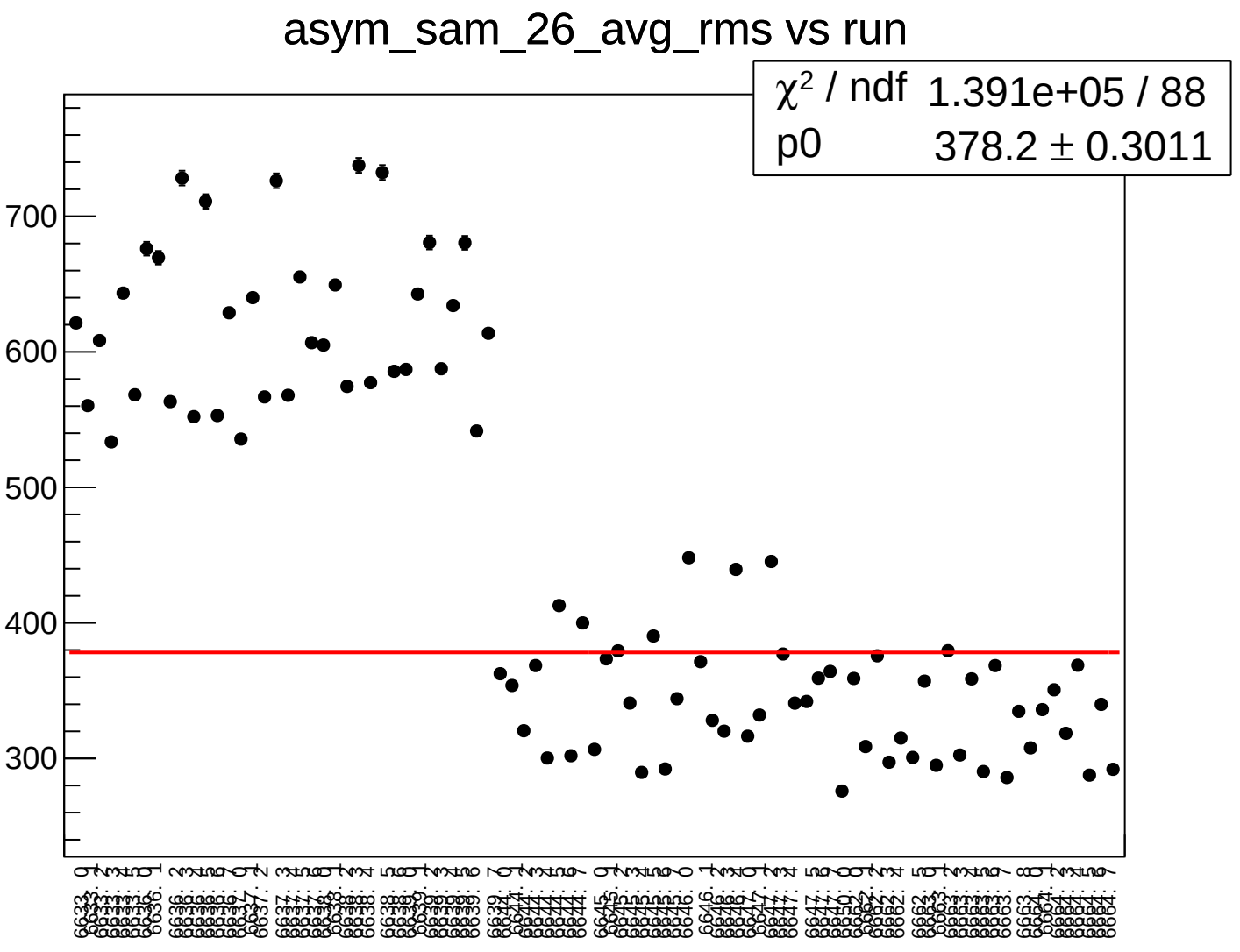

reg_asym_sam_26_avg_rms vs run
χ^2 / ndf 5.532e+04 / 88
p0 76.52 ± 0.05936
120
110
100
90
80
70
60

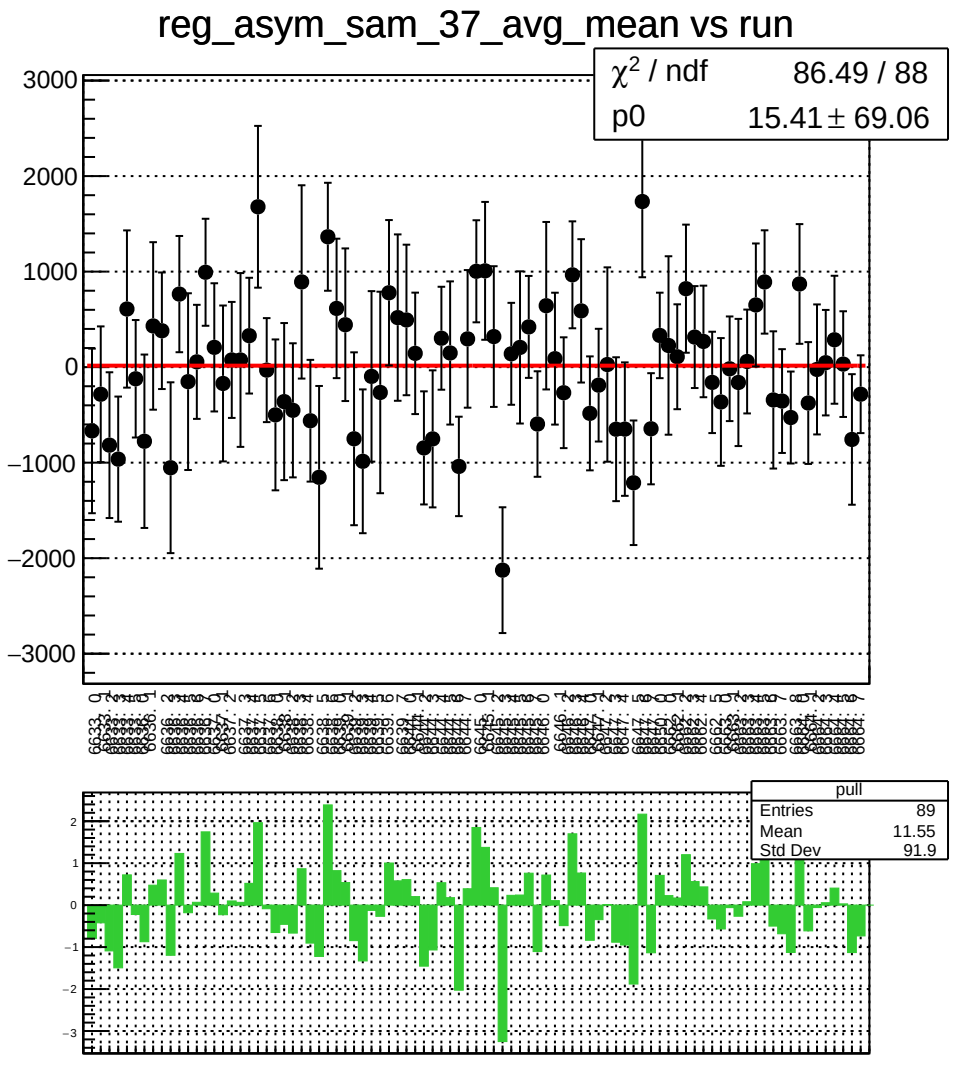

asym_sam_26_avg_correction_mean vs run
χ² / ndf 98.75 / 88
p0 615.9 ± 416.6
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −658.2
Std Dev 647.9
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.002194
Std Dev 1.053
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

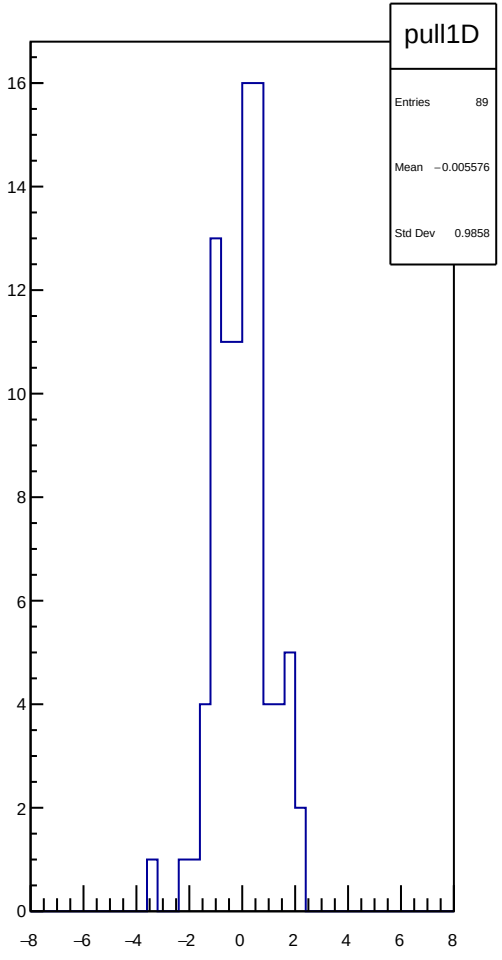

asym_sam_26_avg_correction_rms vs run
χ² / ndf 1.429e+05 / 88
p0 369.6 ± 0.2946
700
600
500
400
300

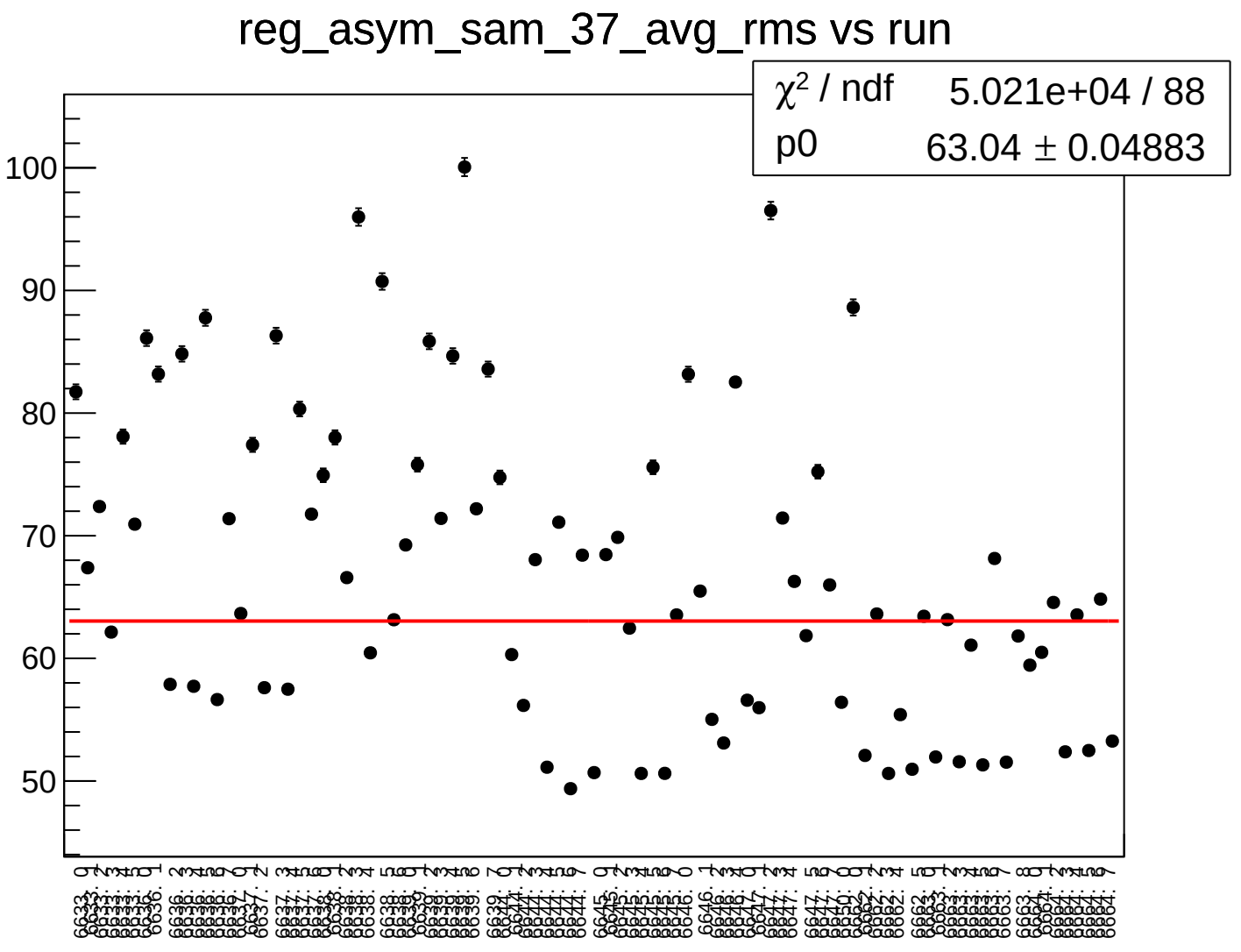

asym_sam_26_avg_mean vs run
χ² / ndf 102.3 / 88
p0 −643.5 ± 425.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 269.9
Std Dev 281.7
3
2
1
0
−1
−2

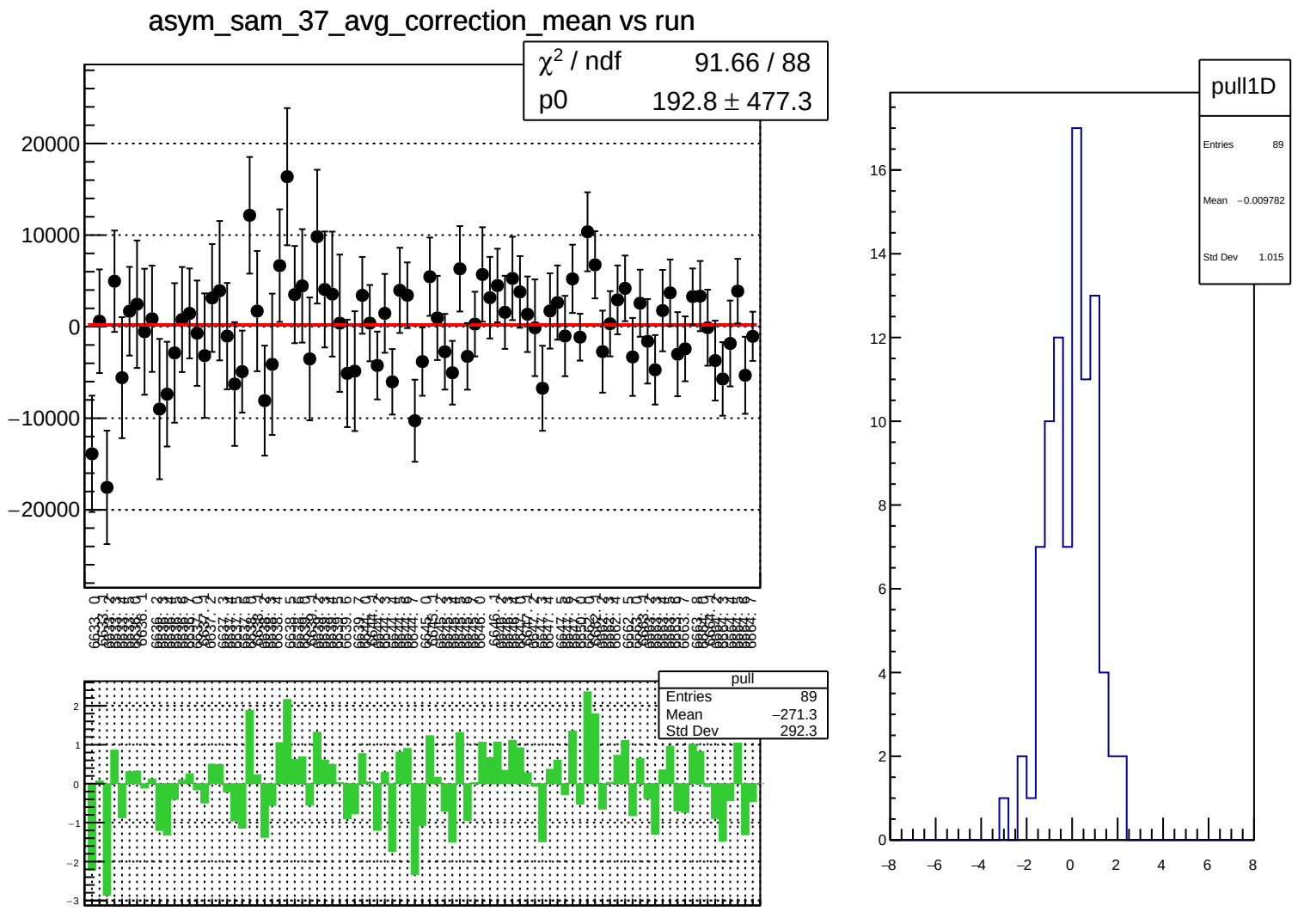

pull1D
Entries 89
Mean −0.005479
Std Dev 1.072
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

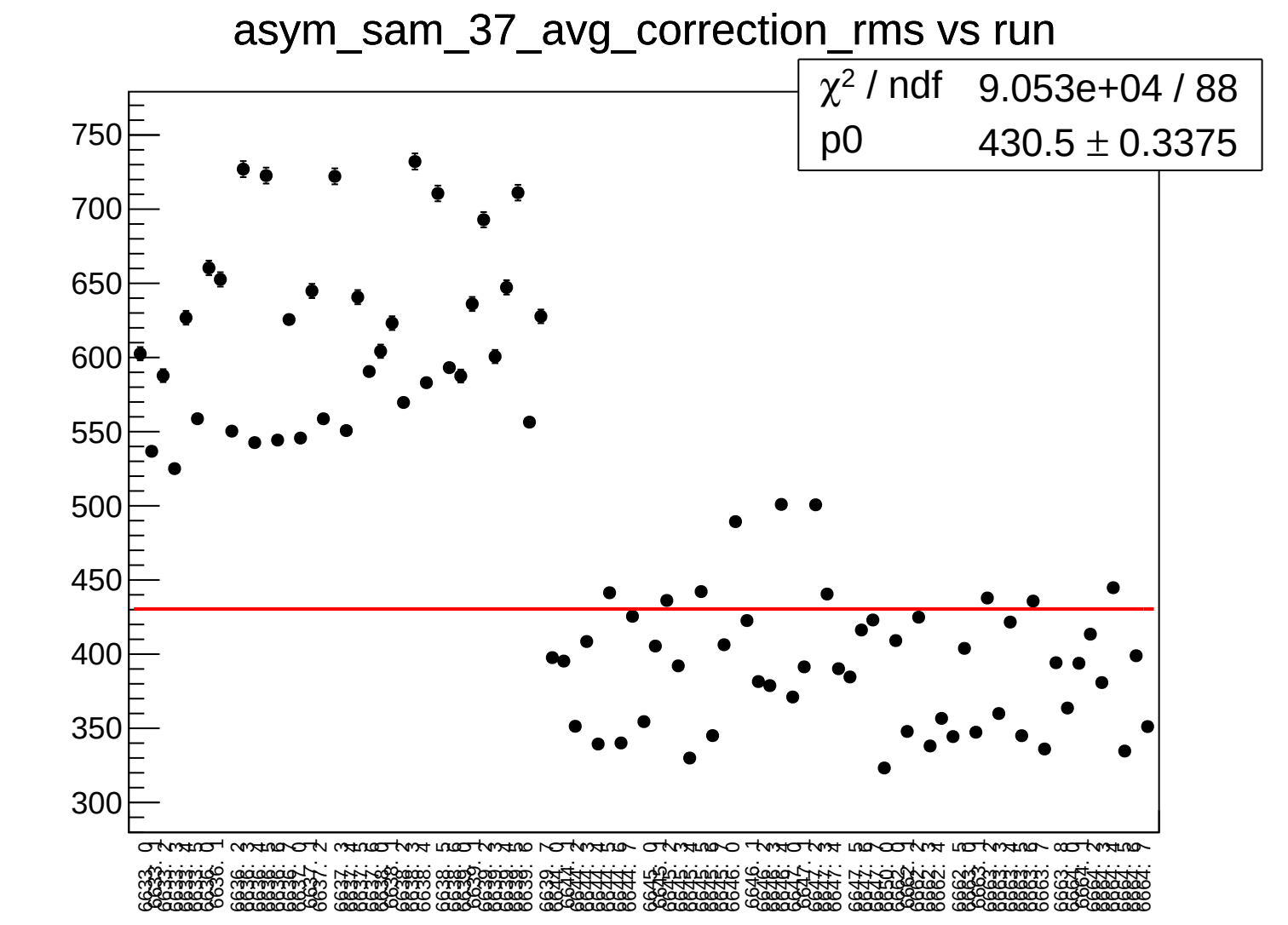

asym_sam_26_avg_rms vs run
χ² / ndf 1.391e+05 / 88
p0 378.2 ± 0.3011
700
600
500
400
300

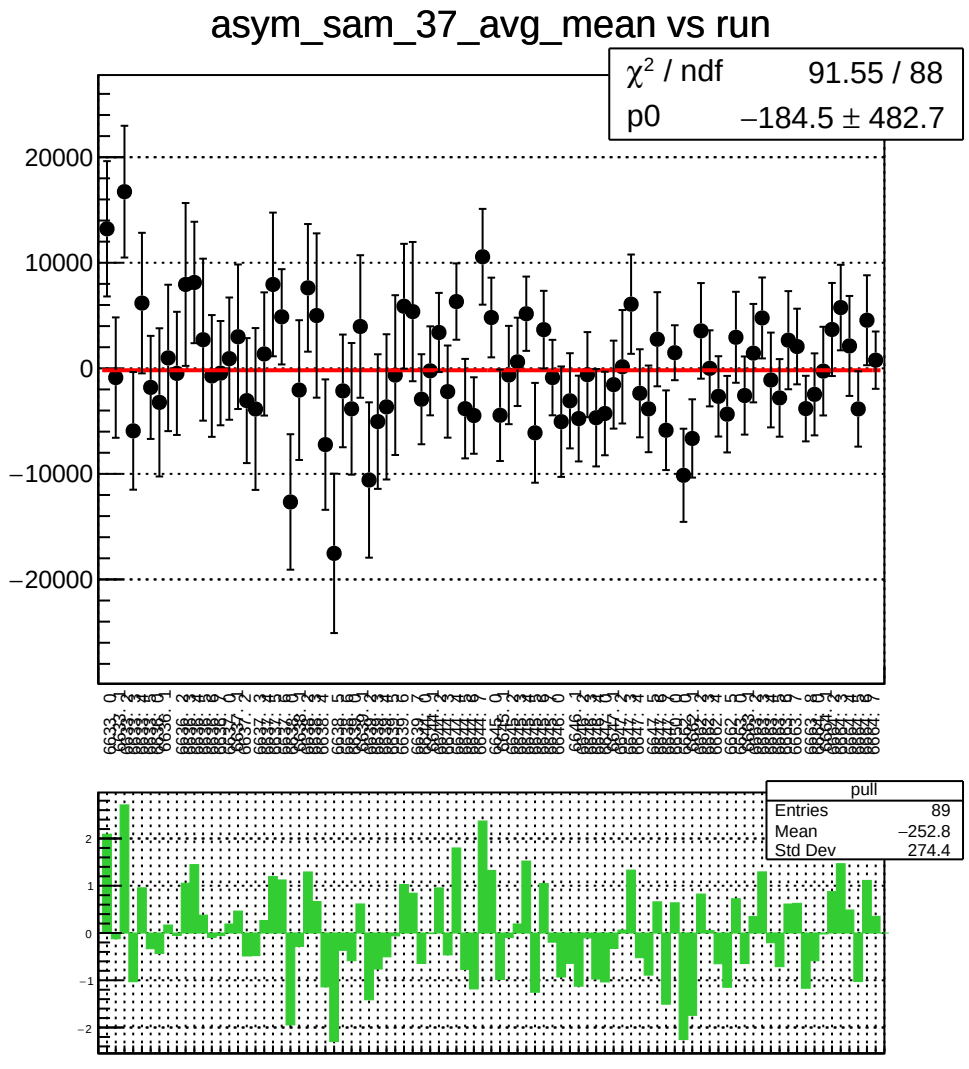

reg_asym_sam_37_avg_mean vs run
χ² / ndf 86.49 / 88
p0 15.41 ± 69.06
pull
Entries 89
Mean 11.55
Std Dev 91.9

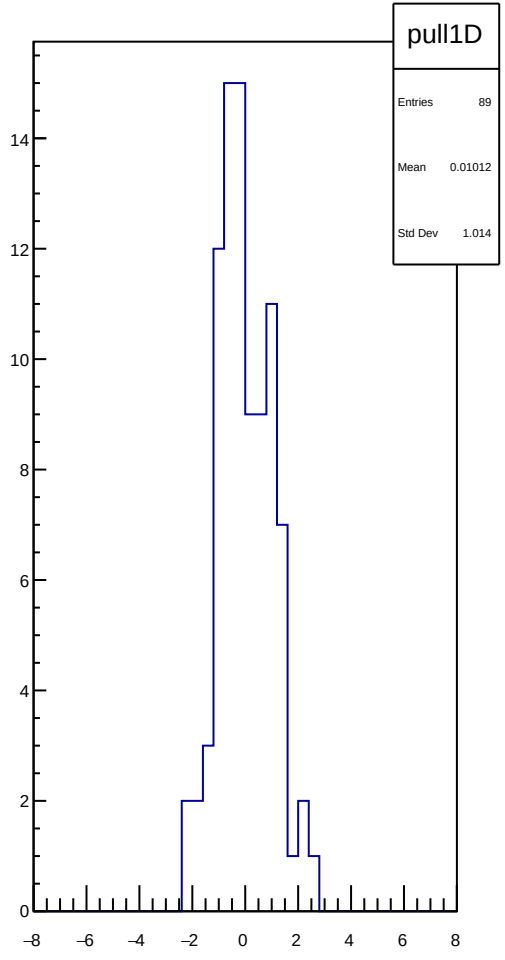

pull1D
Entries 89
Mean −0.005576
Std Dev 0.9858

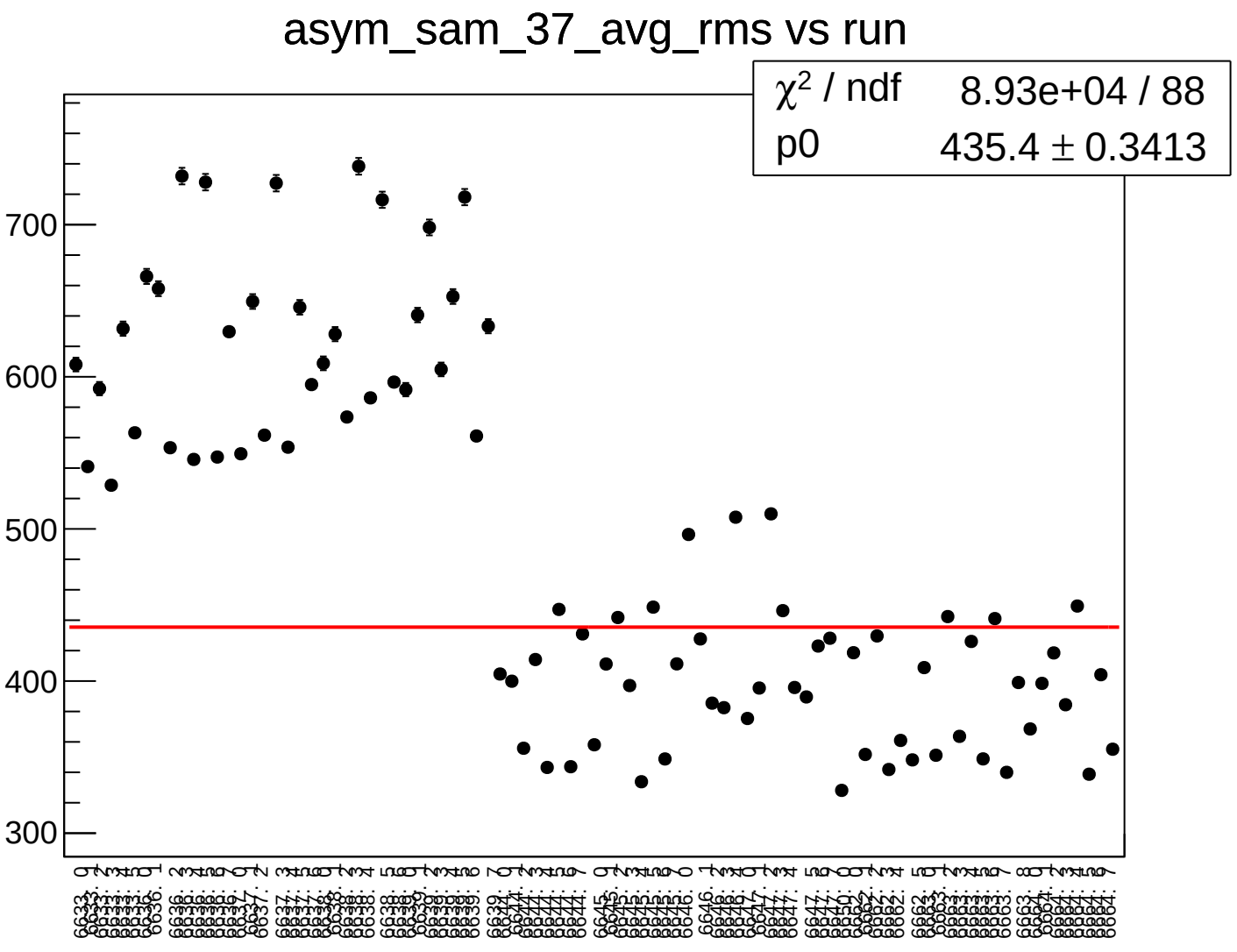

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 5.021e+04 / 88
p0 63.04 ± 0.04883
100
90
80
70
60
50

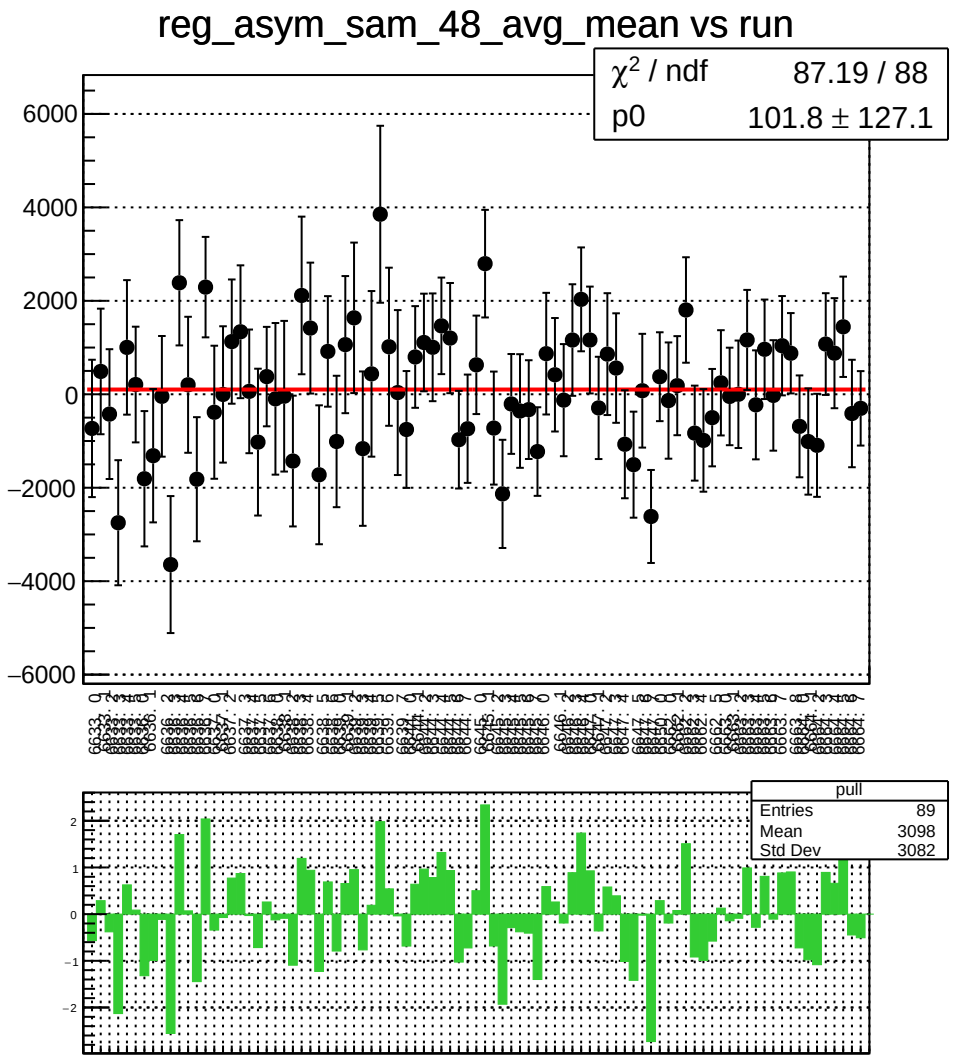

asym_sam_37_avg_correction_mean vs run
χ² / ndf 91.66 / 88
p0 192.8 ± 477.3
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −271.3
Std Dev 292.3
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.009782
Std Dev 1.015
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

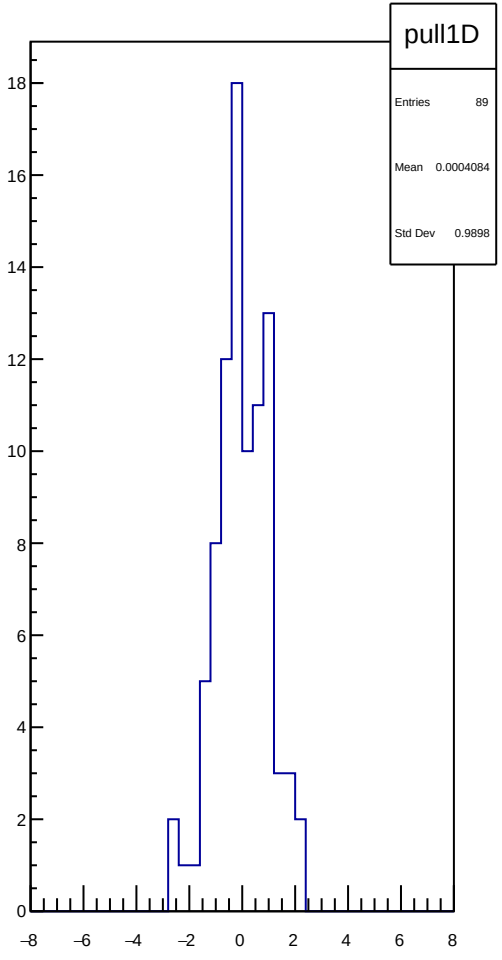

asym_sam_37_avg_correction_rms vs run
χ² / ndf 9.053e+04 / 88
p0 430.5 ± 0.3375
750
700
650
600
550
500
450
400
350
300

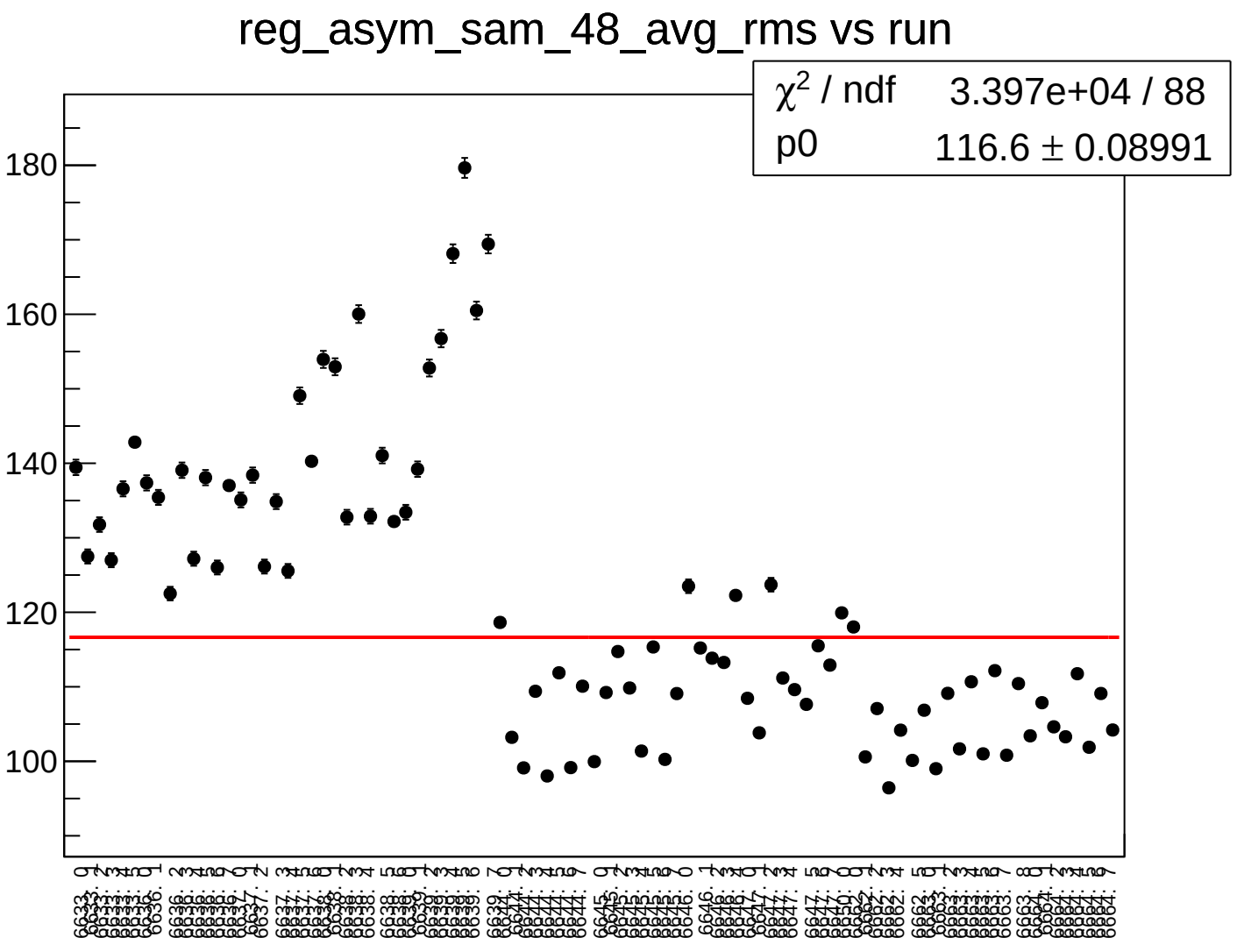

asym_sam_37_avg_mean vs run
χ² / ndf 91.55 / 88
p0 −184.5 ± 482.7
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −252.8
Std Dev 274.4
2
1
0
−1
−2

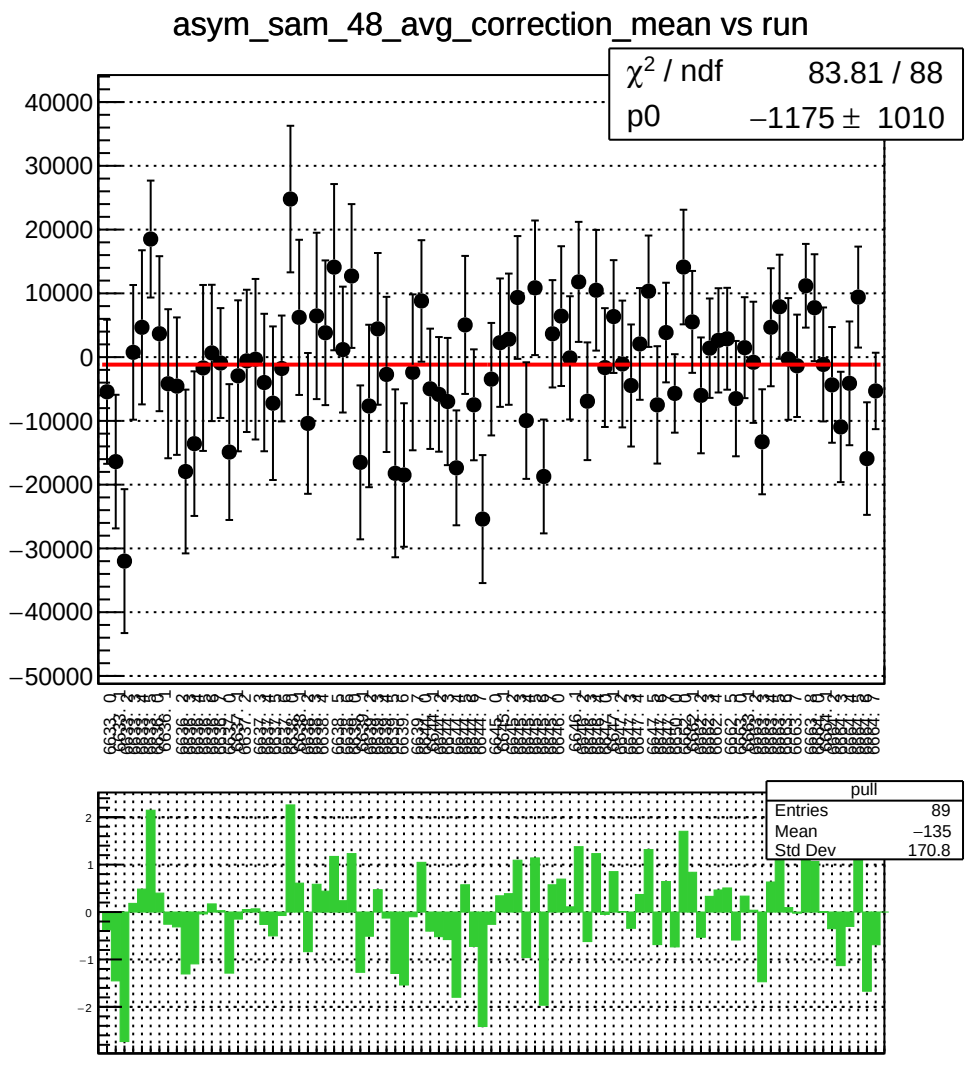

pull1D
Entries 89
Mean 0.01012
Std Dev 1.014
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

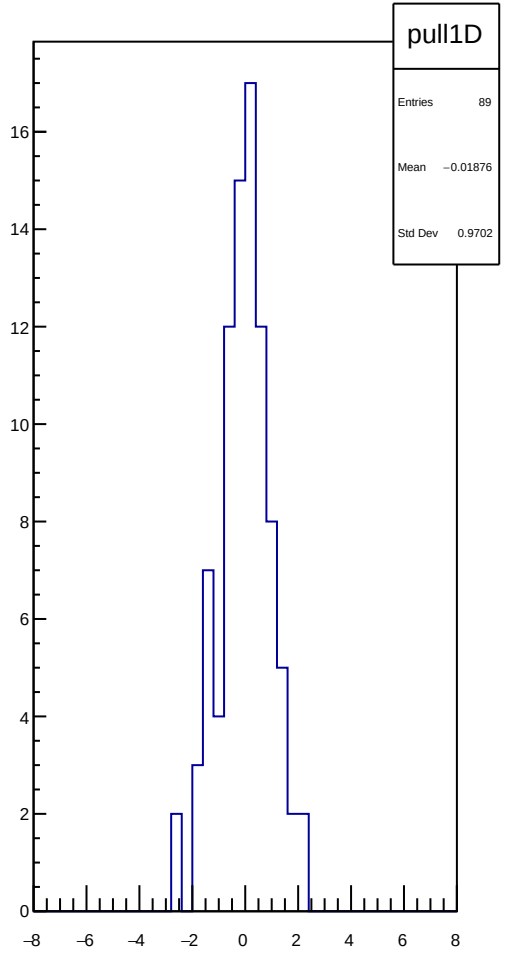

asym_sam_37_avg_rms vs run
χ² / ndf 8.93e+04 / 88
p0 435.4 ± 0.3413
700
600
500
400
300

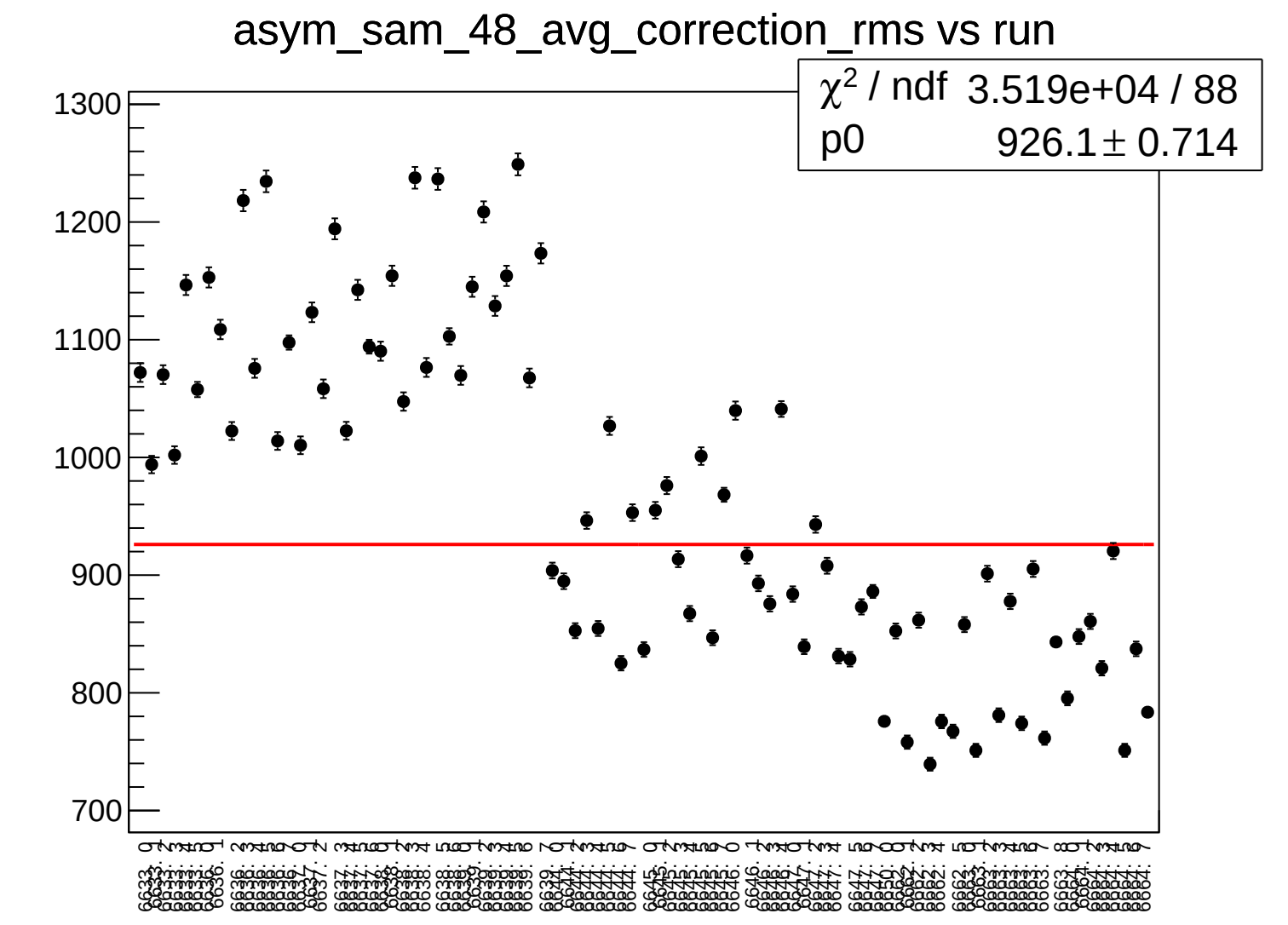

reg_asym_sam_48_avg_mean vs run
χ² / ndf 87.19 / 88
p0 101.8 ± 127.1
pull
Entries 89
Mean 3098
Std Dev 3082

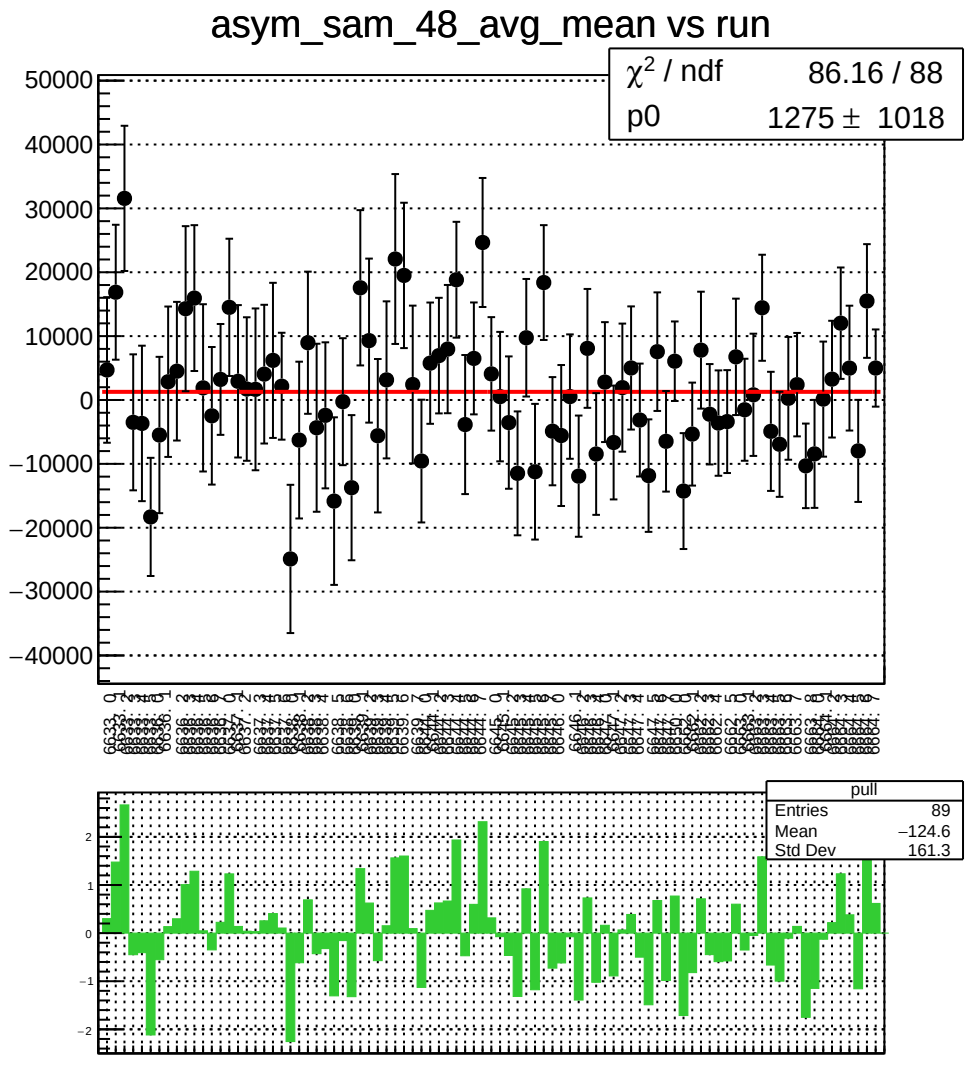

pull1D
Entries 89
Mean 0.0004084
Std Dev 0.9898

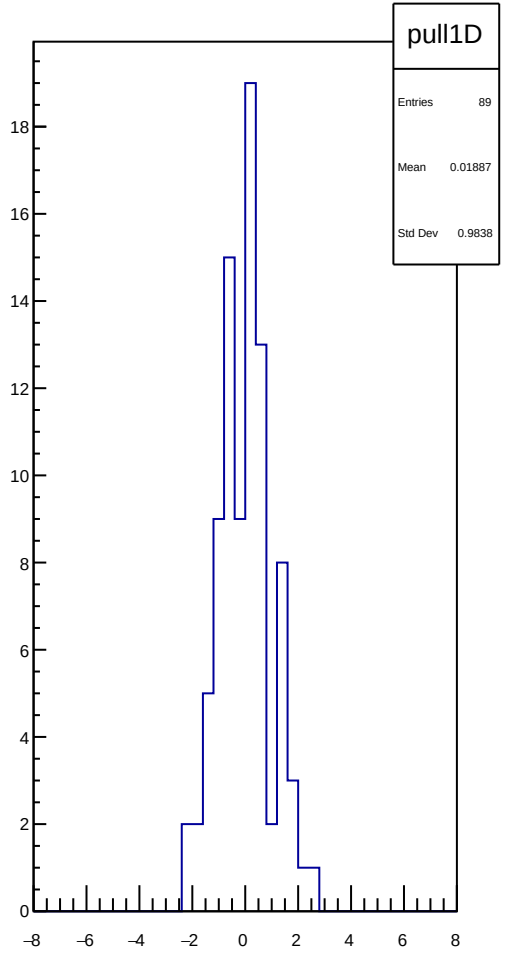

reg_asym_sam_48_avg_rms vs run
χ^2 / ndf 3.397e+04 / 88
p0 116.6 ± 0.08991
180
160
140
120
100

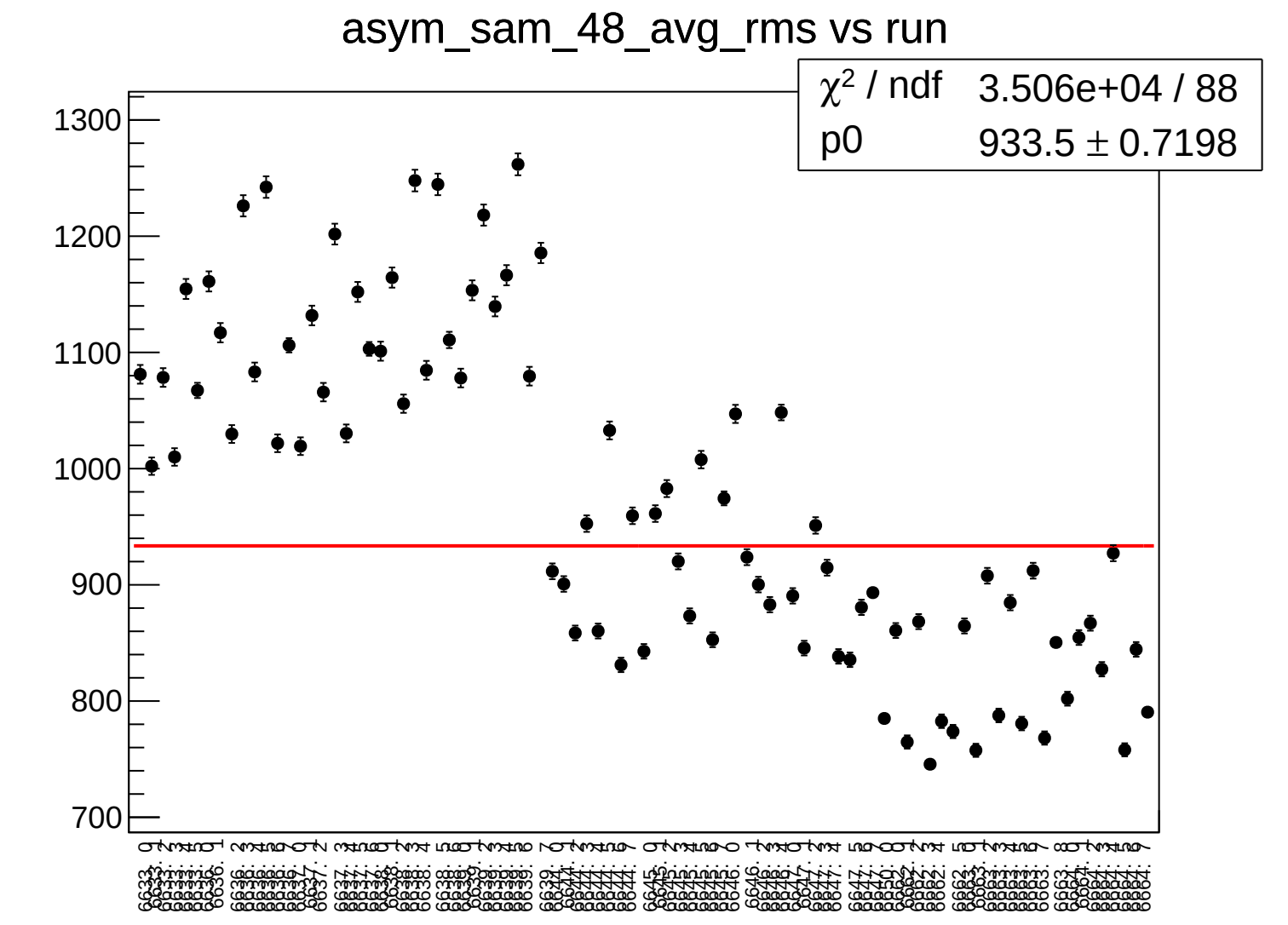

asym_sam_48_avg_correction_mean vs run
χ² / ndf 83.81 / 88
p0 −1175 ± 1010
pull
Entries 89
Mean −135
Std Dev 170.8

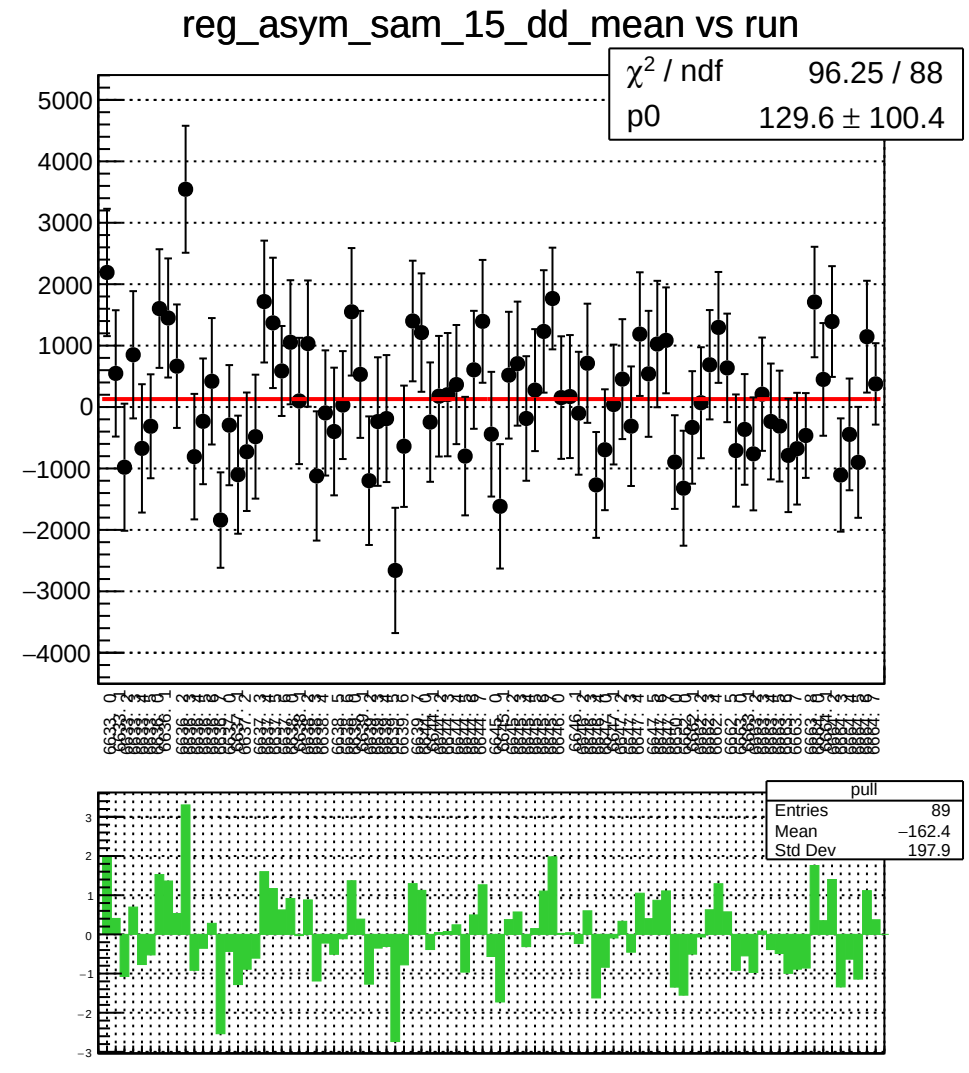

pull1D
Entries 89
Mean −0.01876
Std Dev 0.9702

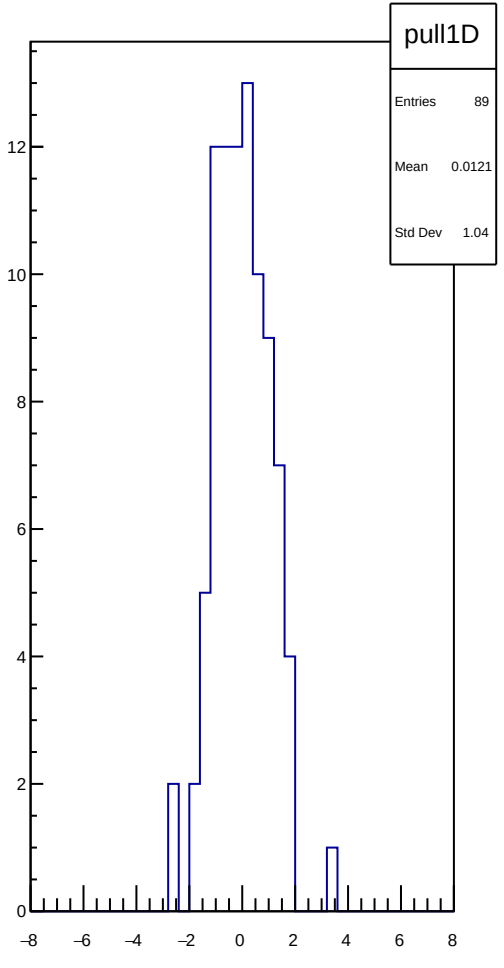

asym_sam_48_avg_correction_rms vs run
χ² / ndf 3.519e+04 / 88
p0 926.1 ± 0.714
1300
1200
1100
1000
900
800
700

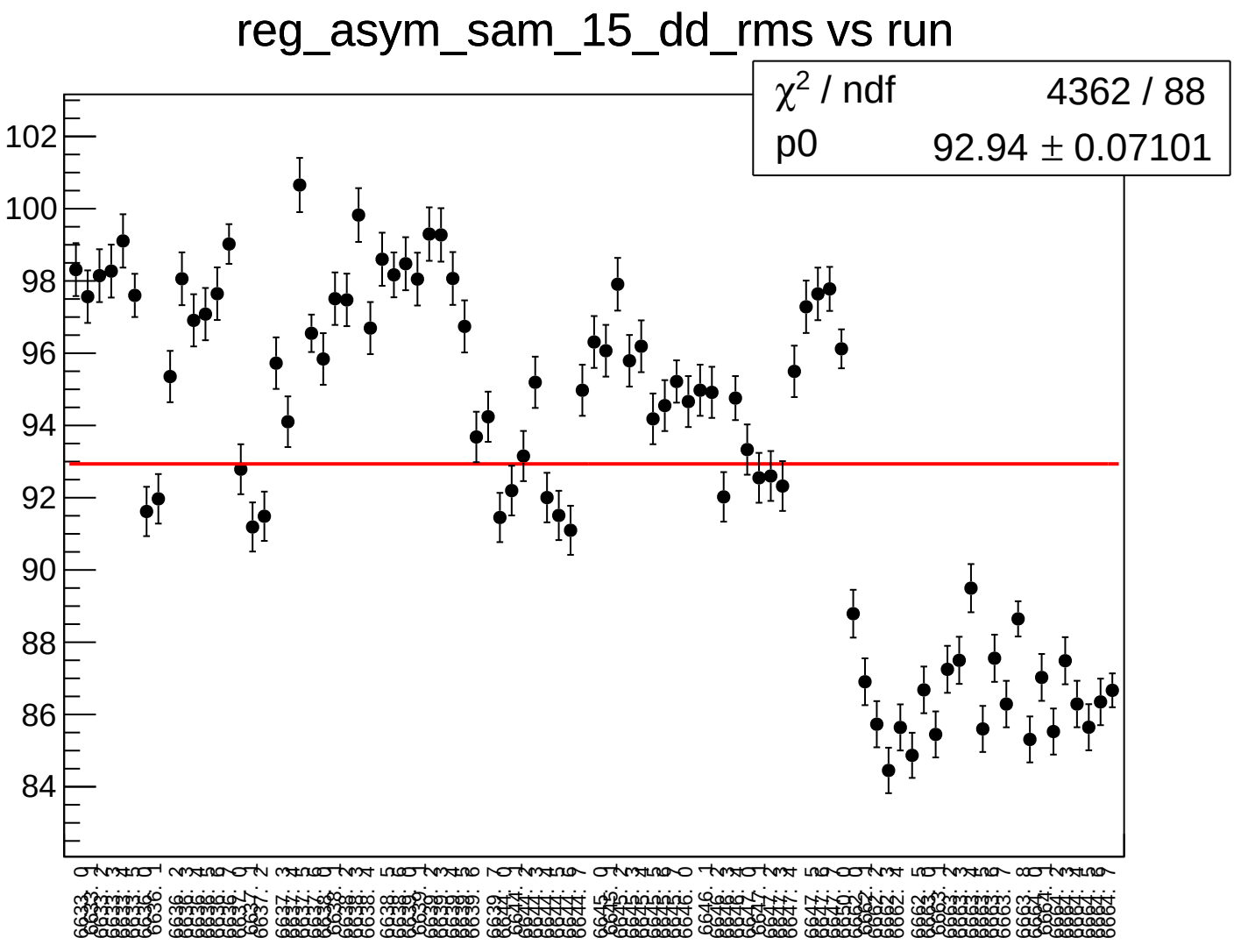

asym_sam_48_avg_mean vs run
χ² / ndf 86.16 / 88
p0 1275 ± 1018
pull
Entries 89
Mean −124.6
Std Dev 161.3

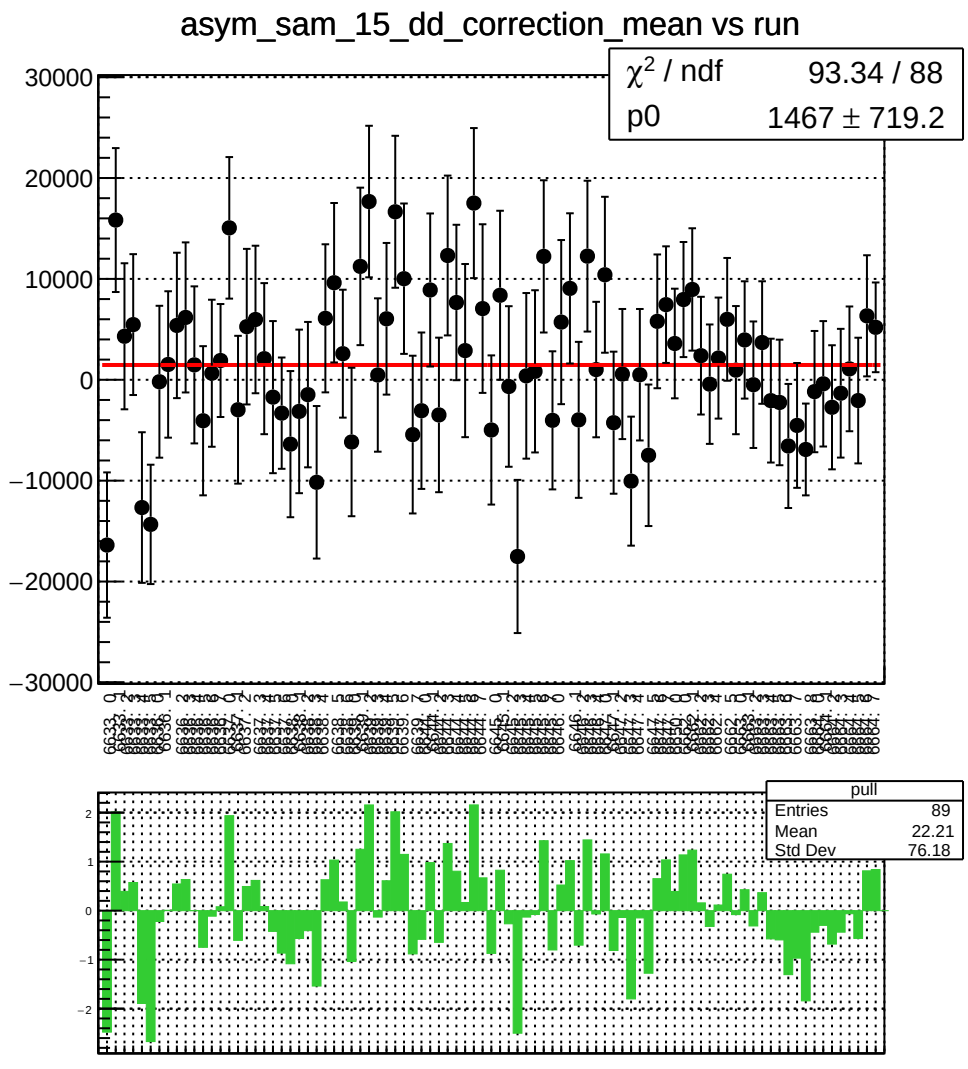

pull1D
Entries 89
Mean 0.01887
Std Dev 0.9838

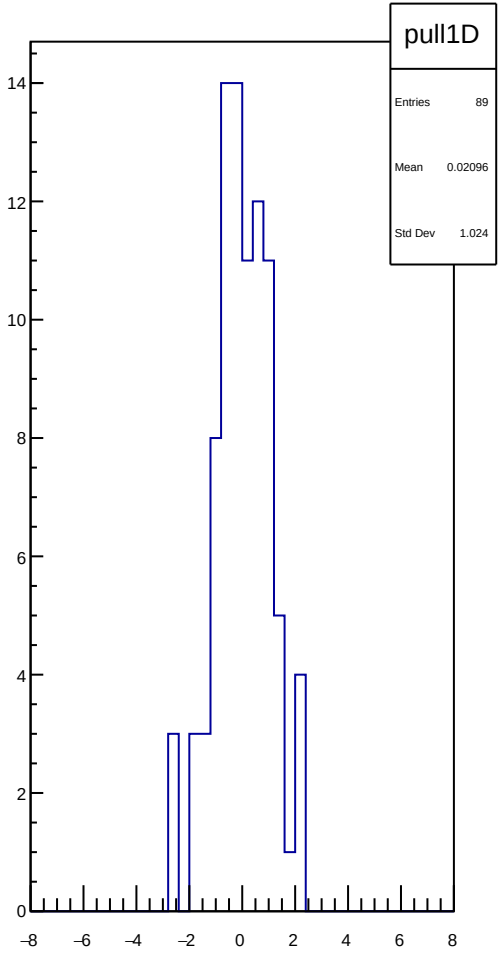

asym_sam_48_avg_rms vs run
χ² / ndf 3.506e+04 / 88
p0 933.5 ± 0.7198
1300
1200
1100
1000
900
800
700

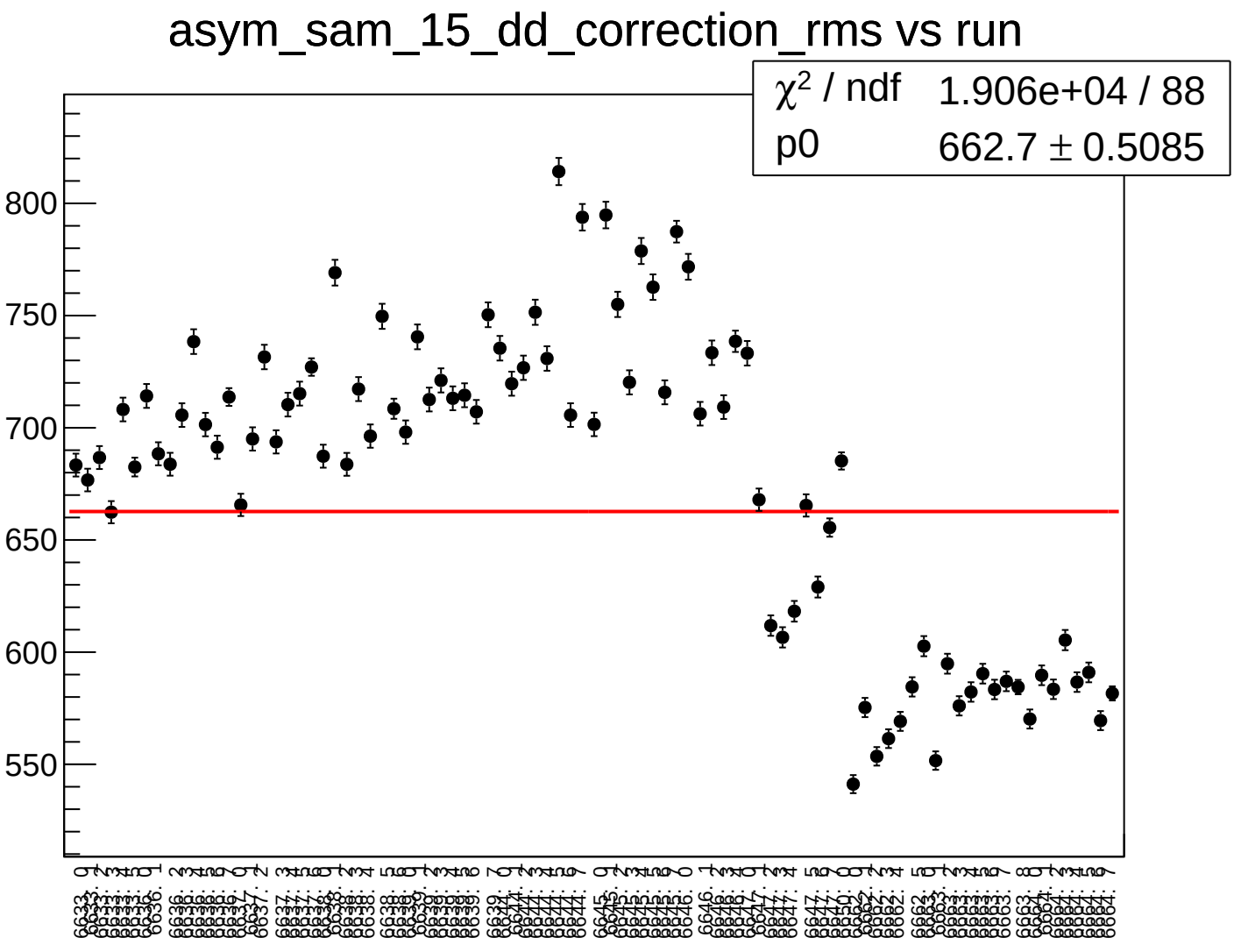

reg_asym_sam_15_dd_mean vs run
χ^2 / ndf 96.25 / 88
p0 129.6 ± 100.4
pull
Entries 89
Mean −162.4
Std Dev 197.9

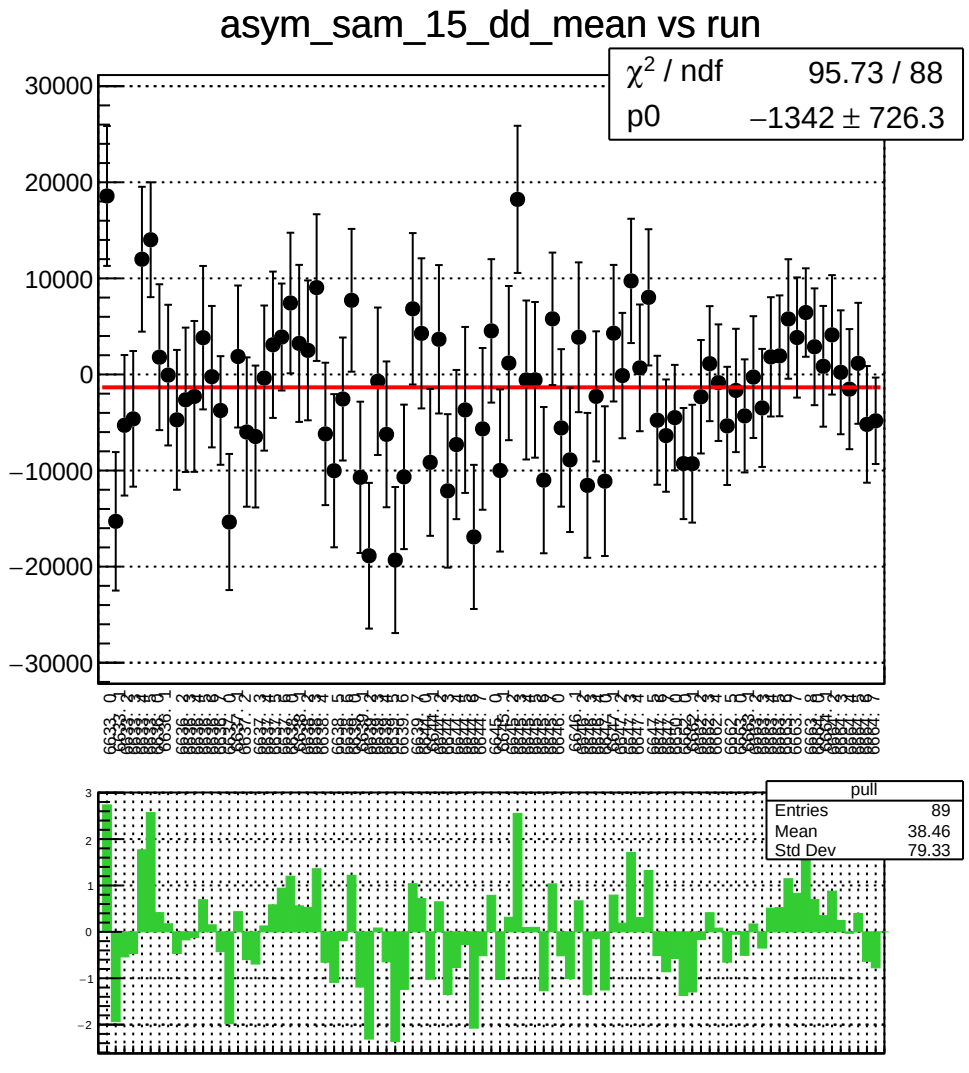

pull1D
Entries 89
Mean 0.0121
Std Dev 1.04

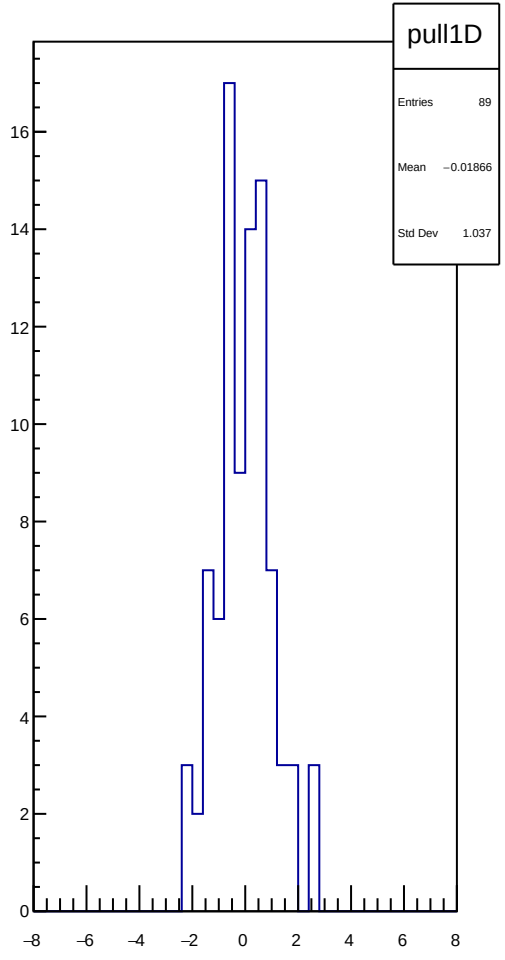

reg_asym_sam_15_dd_rms vs run
χ² / ndf 4362 / 88
p0 92.94 ± 0.07101
102
100
98
96
94
92
90
88
86
84

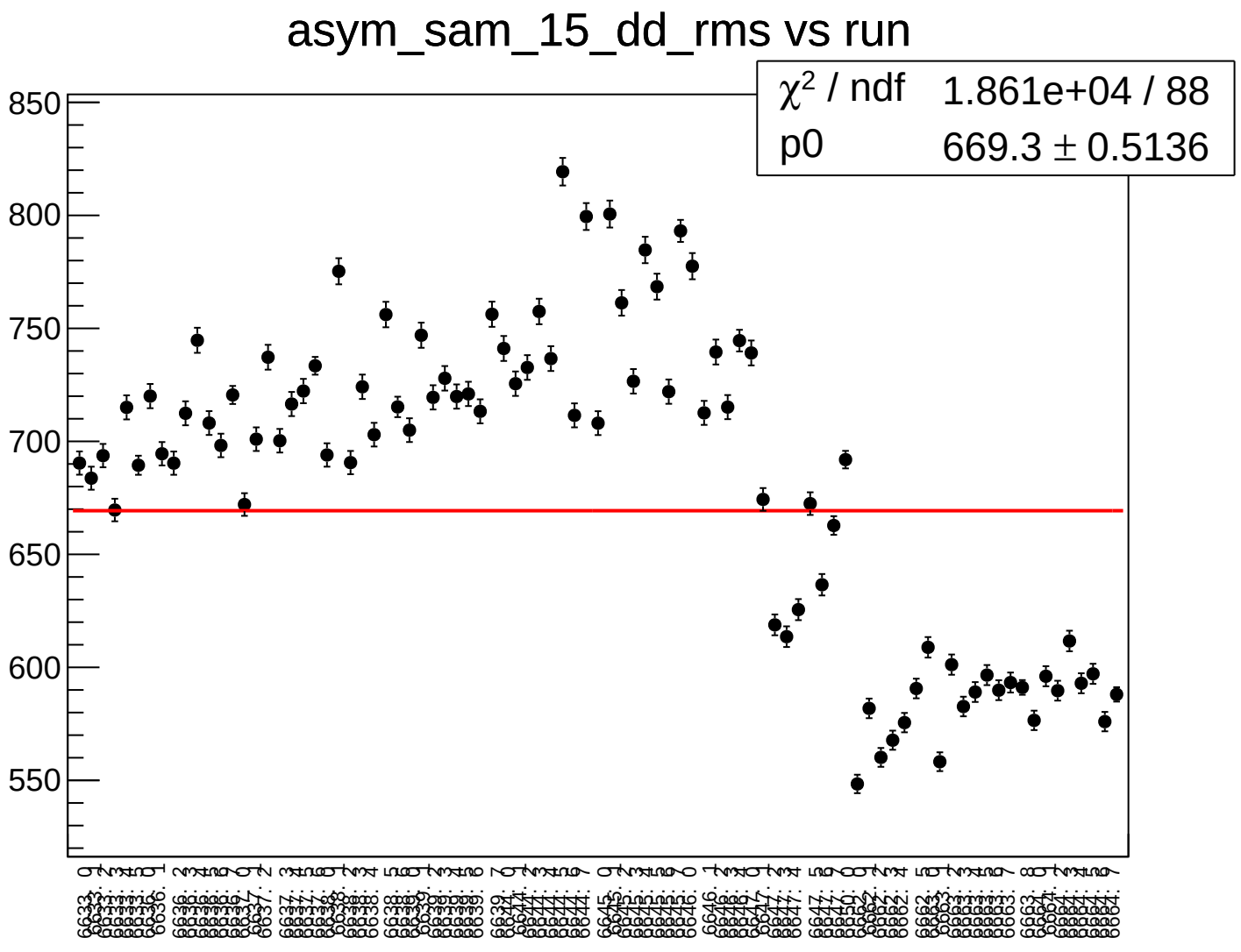

asym_sam_15_dd_correction_mean vs run
χ² / ndf 93.34 / 88
p0 1467 ± 719.2
pull
Entries 89
Mean 22.21
Std Dev 76.18

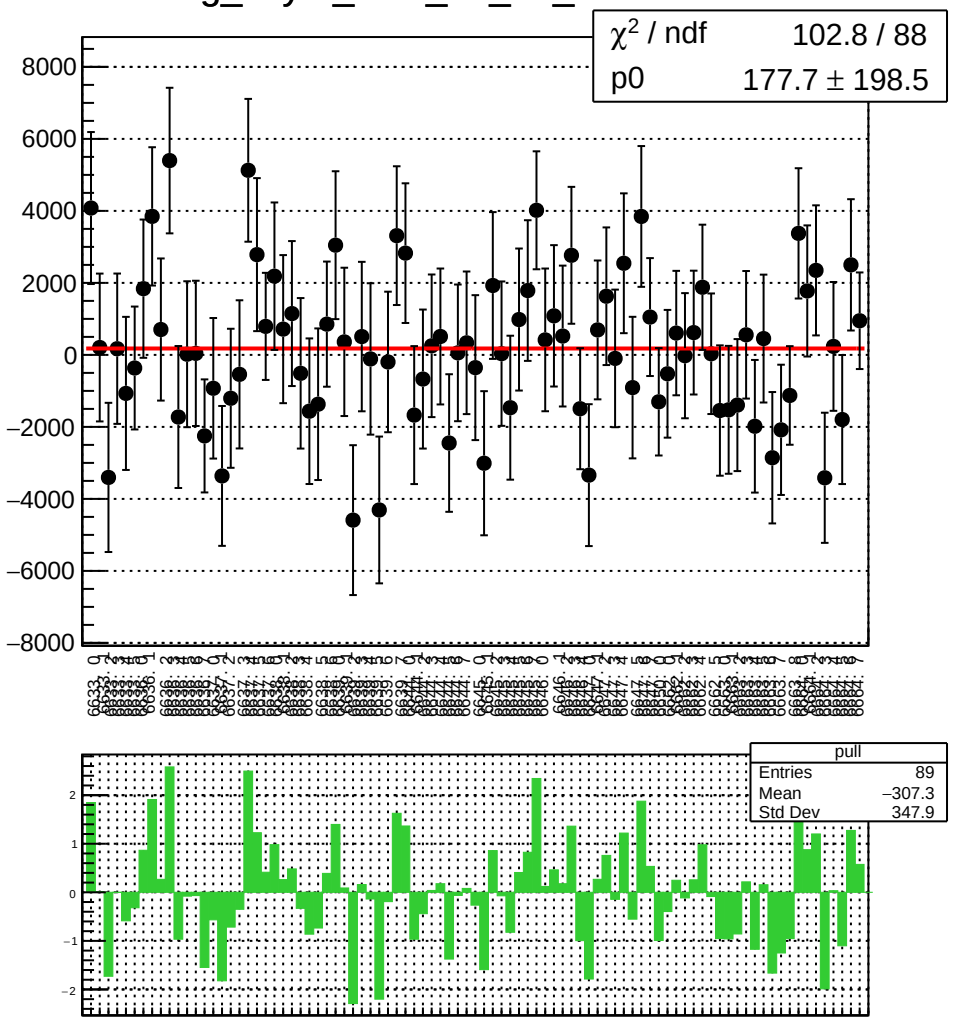

pull1D
Entries 89
Mean 0.02096
Std Dev 1.024

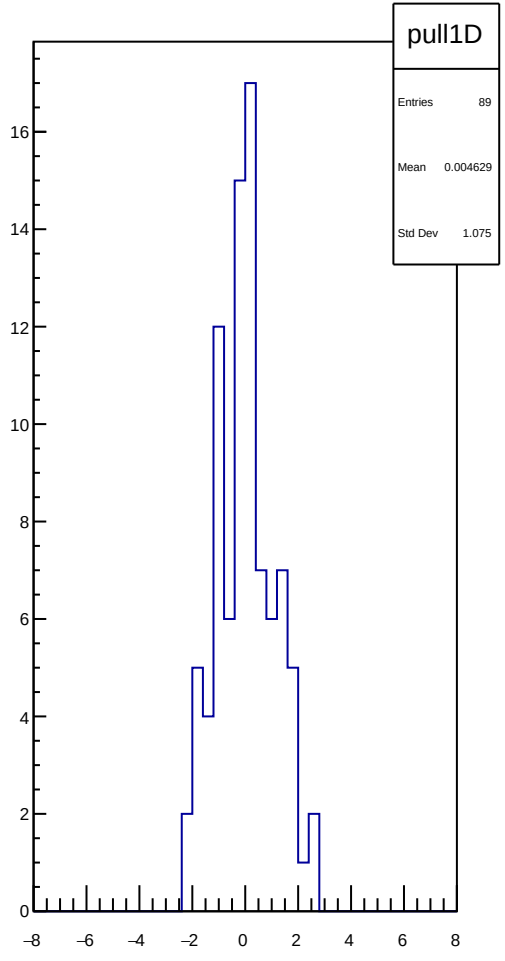

asym_sam_15_dd_correction_rms vs run
χ² / ndf 1.906e+04 / 88
p0 662.7 ± 0.5085
800
750
700
650
600
550

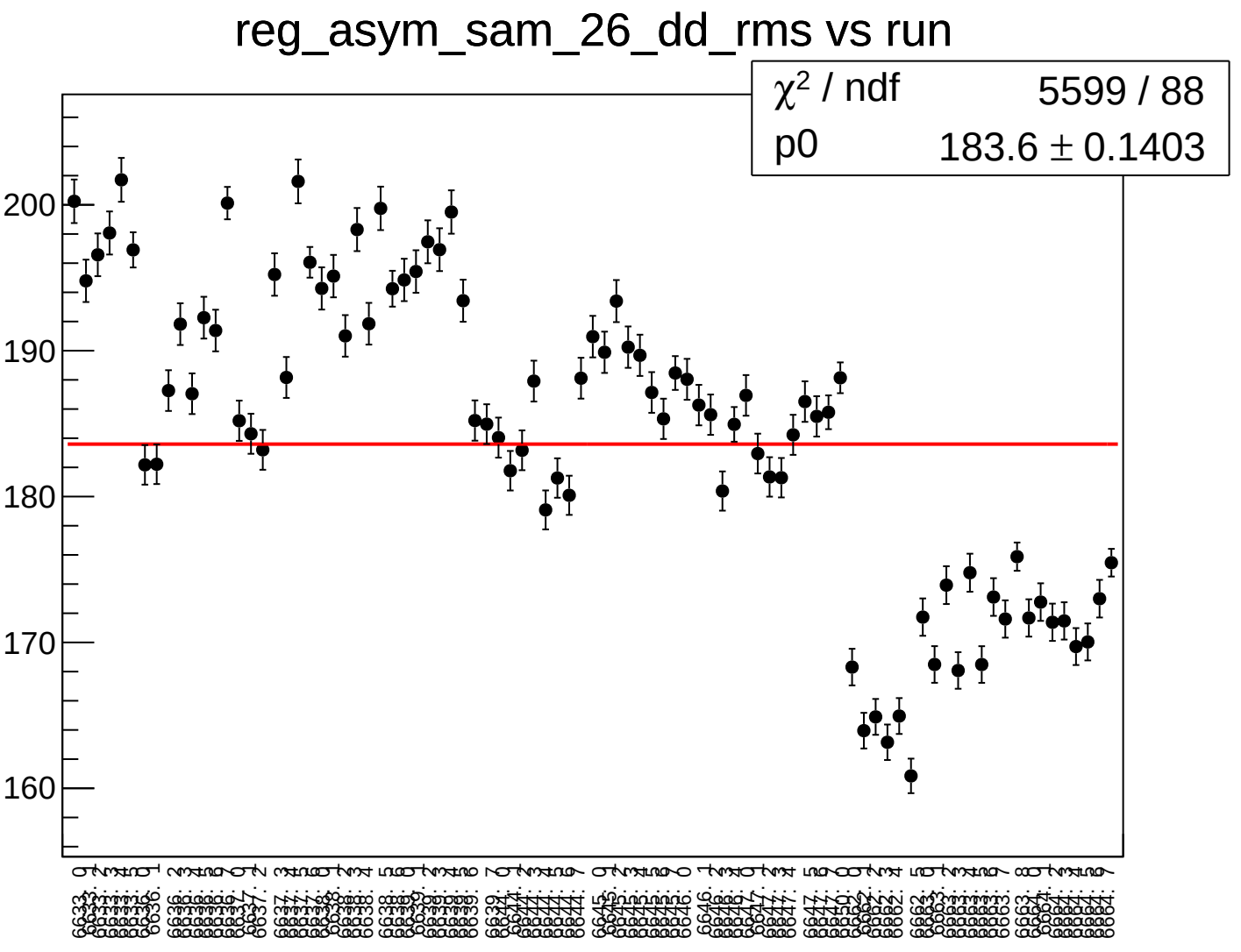

asym_sam_15_dd_mean vs run
χ² / ndf 95.73 / 88
p0 −1342 ± 726.3
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 38.46
Std Dev 79.33
3
2
1
0
−1
−2

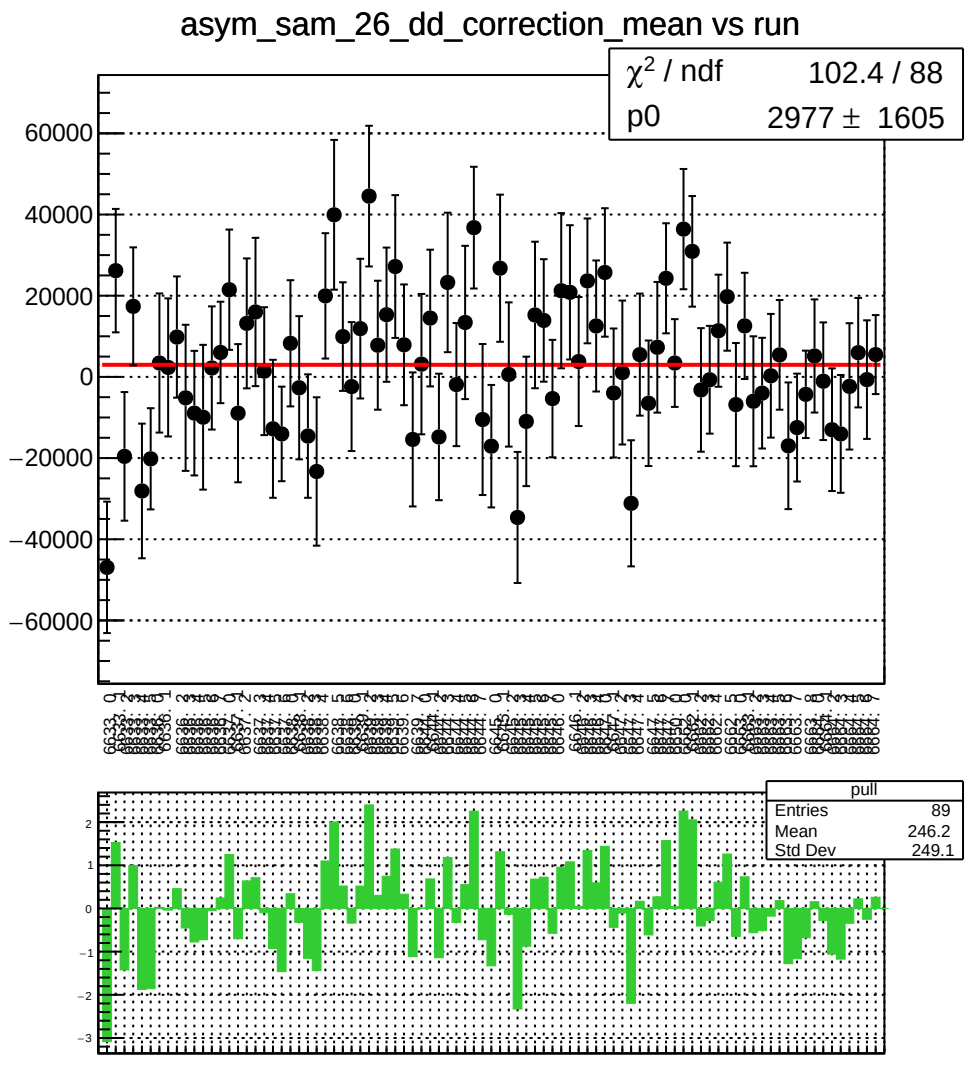

pull1D
Entries 89
Mean −0.01866
Std Dev 1.037
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

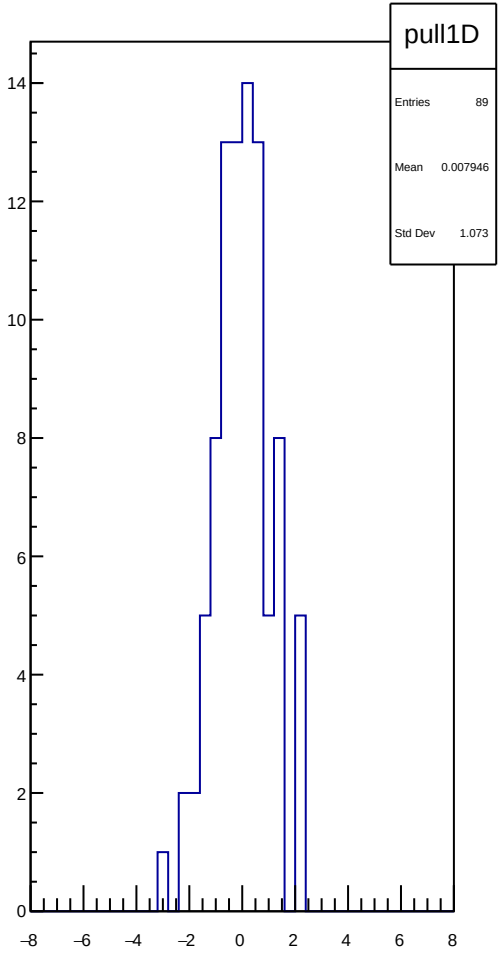

asym_sam_15_dd_rms vs run
χ² / ndf 1.861e+04 / 88
p0 669.3 ± 0.5136
850
800
750
700
650
600
550

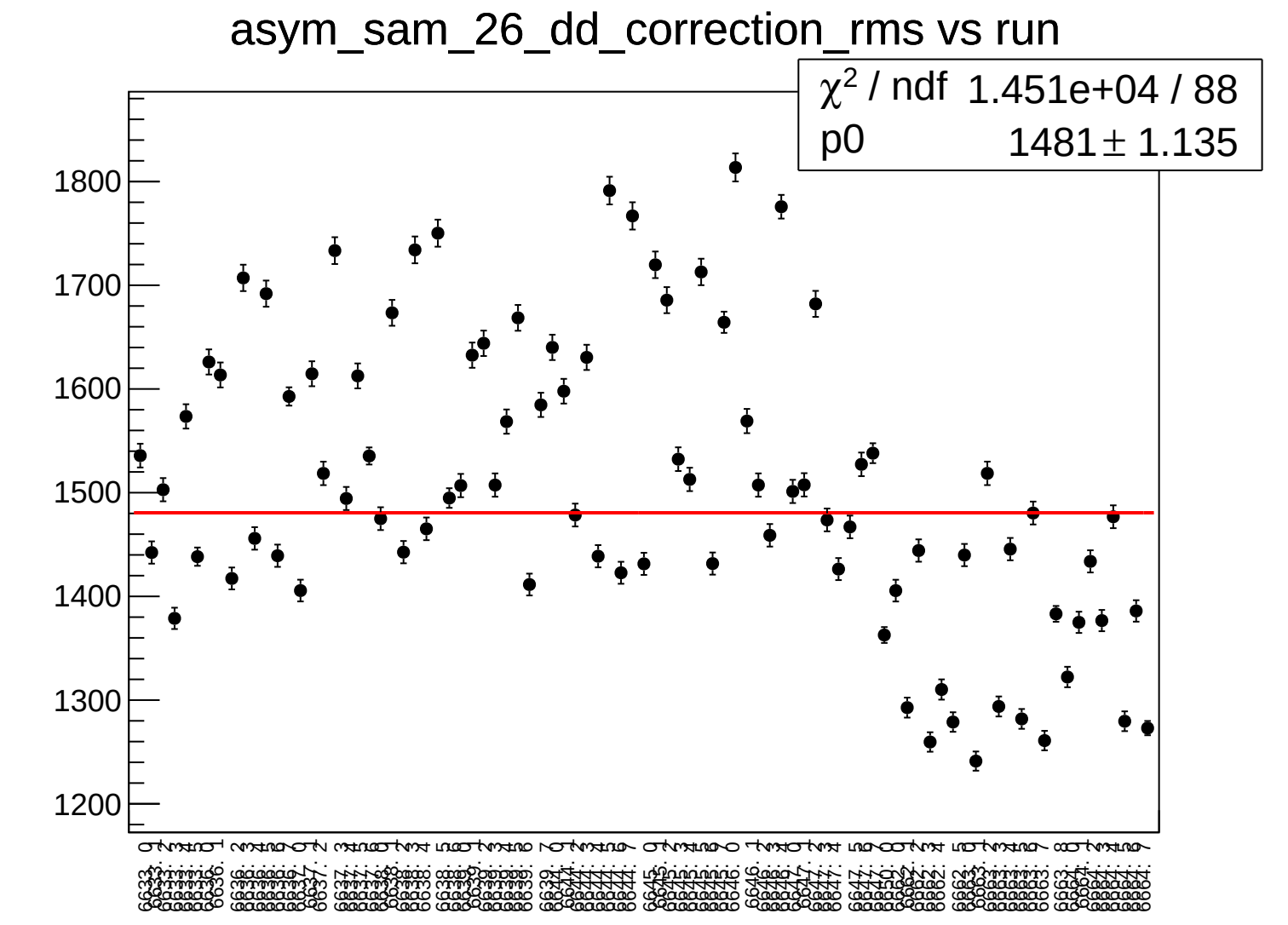

reg_asym_sam_26_dd_mean vs run
χ² / ndf 102.8 / 88
p0 177.7 ± 198.5
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 89
Mean −307.3
Std Dev 347.9
2
1
0
−1
−2

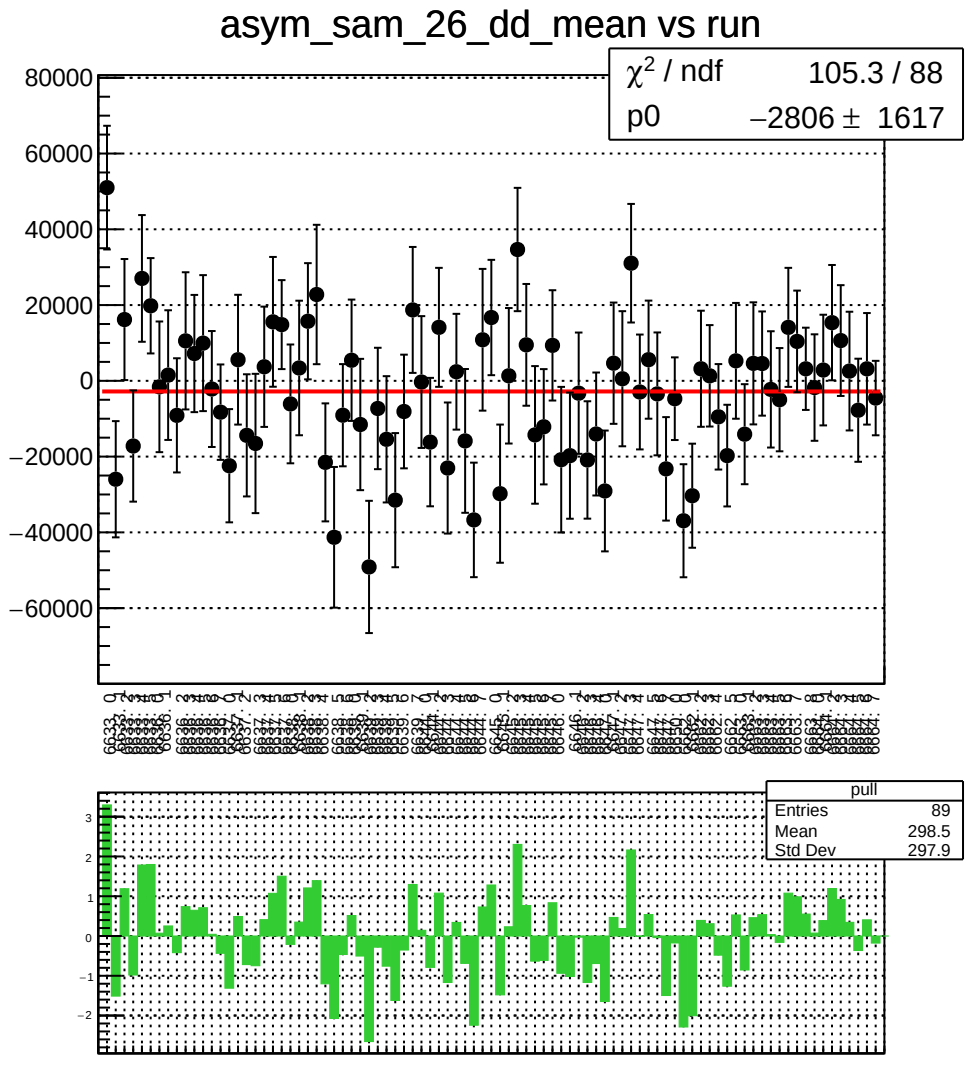

pull1D
Entries 89
Mean 0.004629
Std Dev 1.075
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

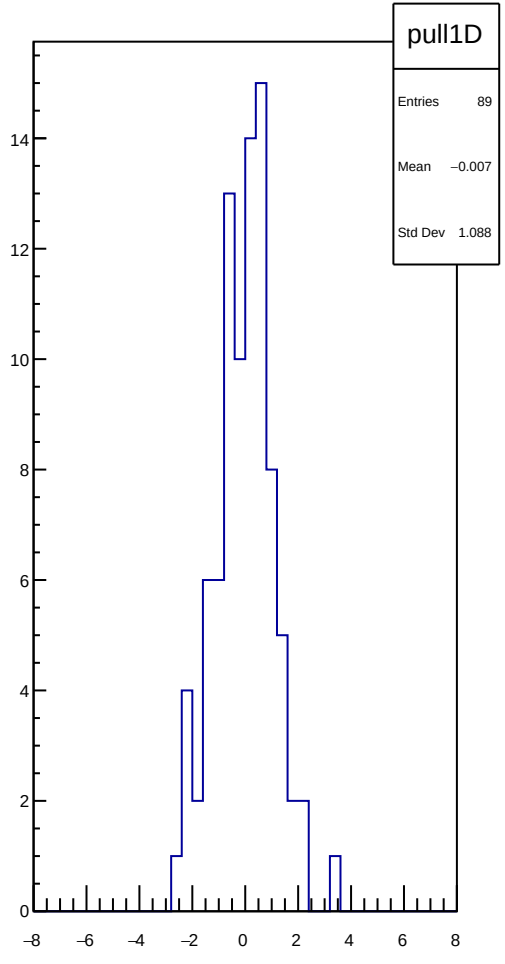

reg_asym_sam_26_dd_rms vs run
χ^2 / ndf 5599 / 88
p0 183.6 ± 0.1403
200
190
180
170
160

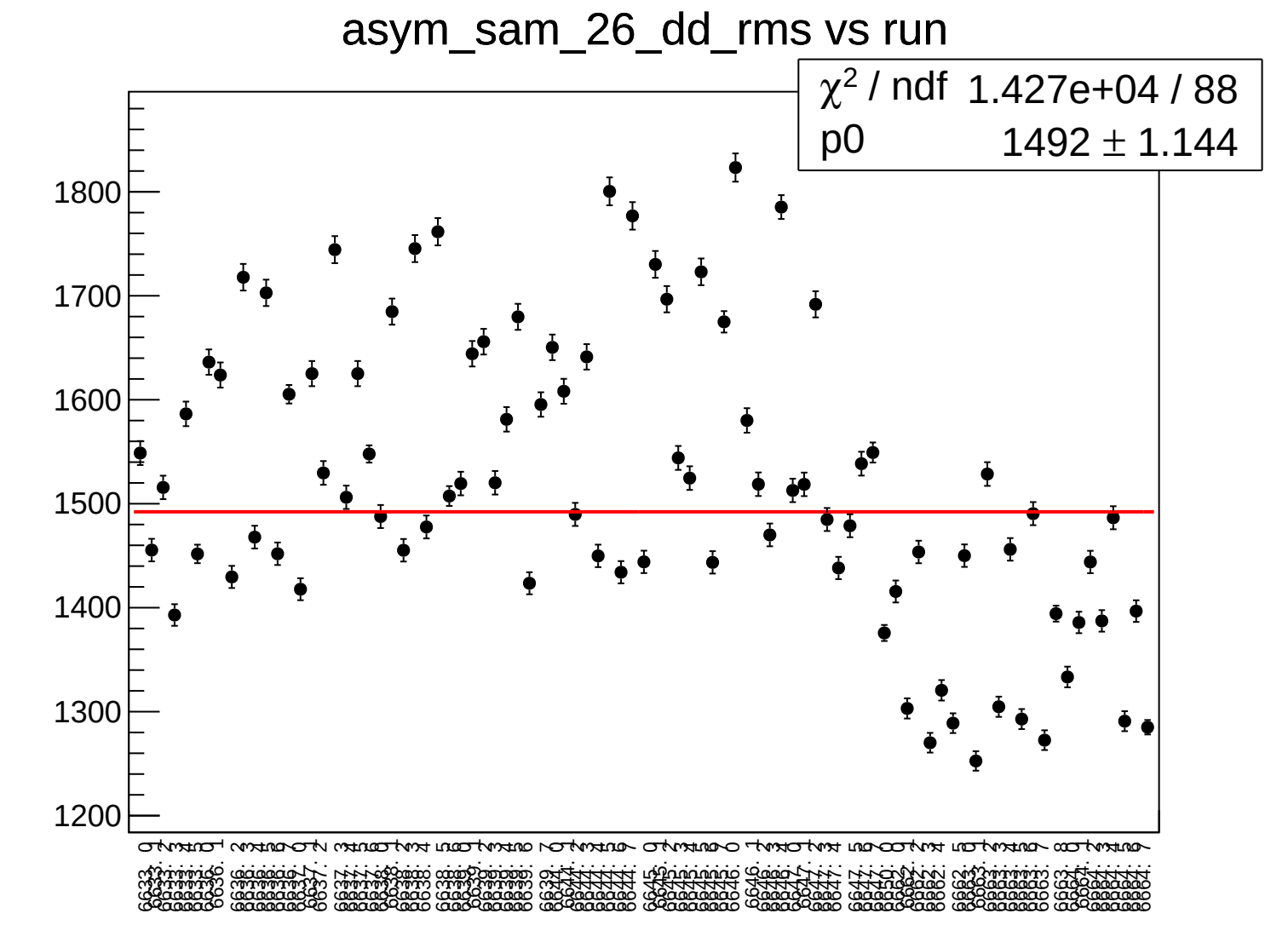

asym_sam_26_dd_correction_mean vs run
χ² / ndf 102.4 / 88
p0 2977 ± 1605
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 246.2
Std Dev 249.1
2
1
0
−1
−2
−3

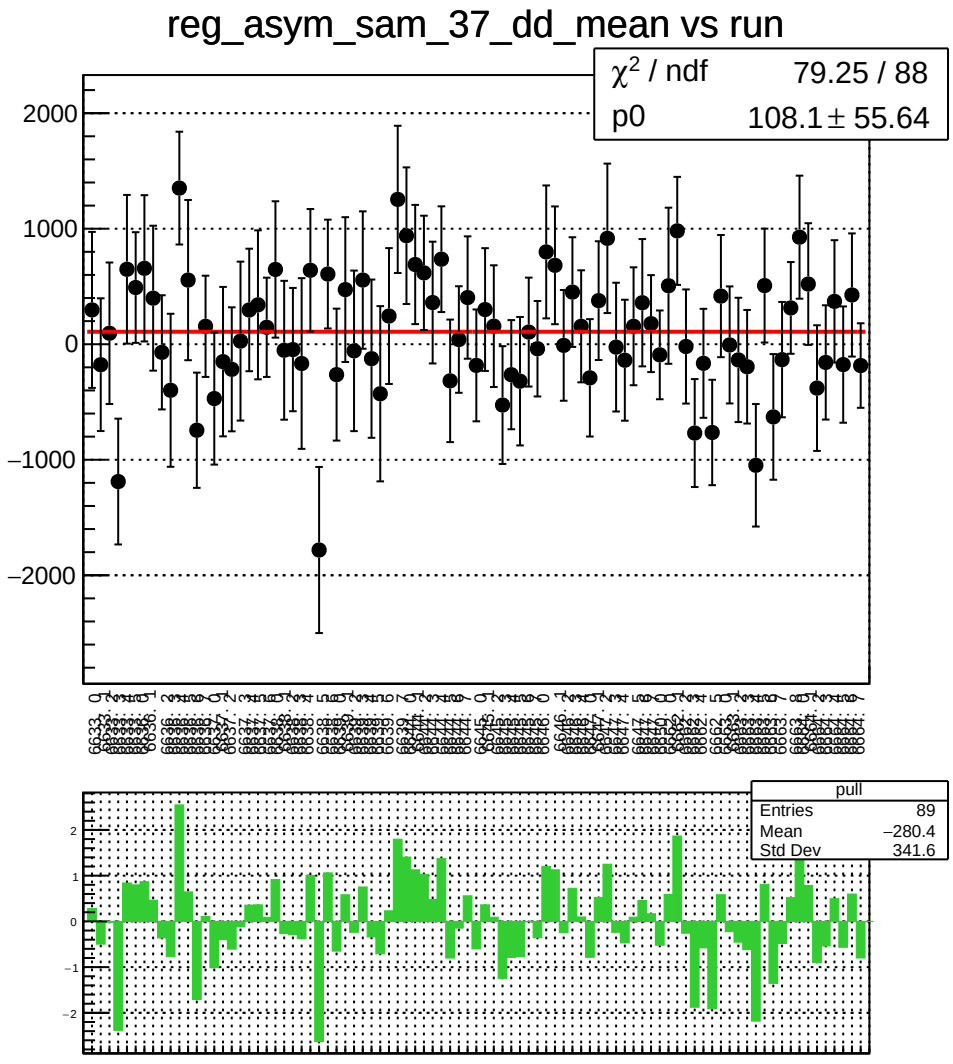

pull1D
Entries 89
Mean 0.007946
Std Dev 1.073
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

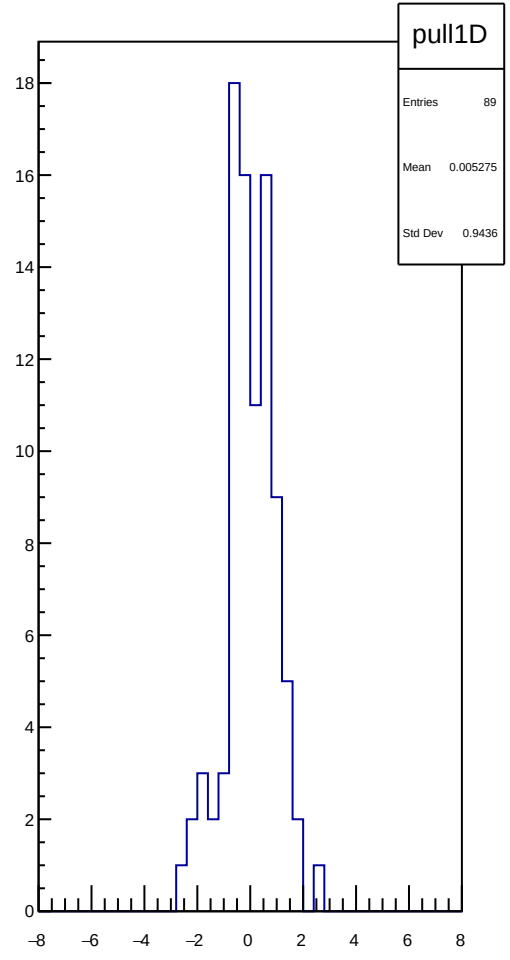

asym_sam_26_dd_correction_rms vs run
χ² / ndf 1.451e+04 / 88
p0 1481 ± 1.135
1800
1700
1600
1500
1400
1300
1200

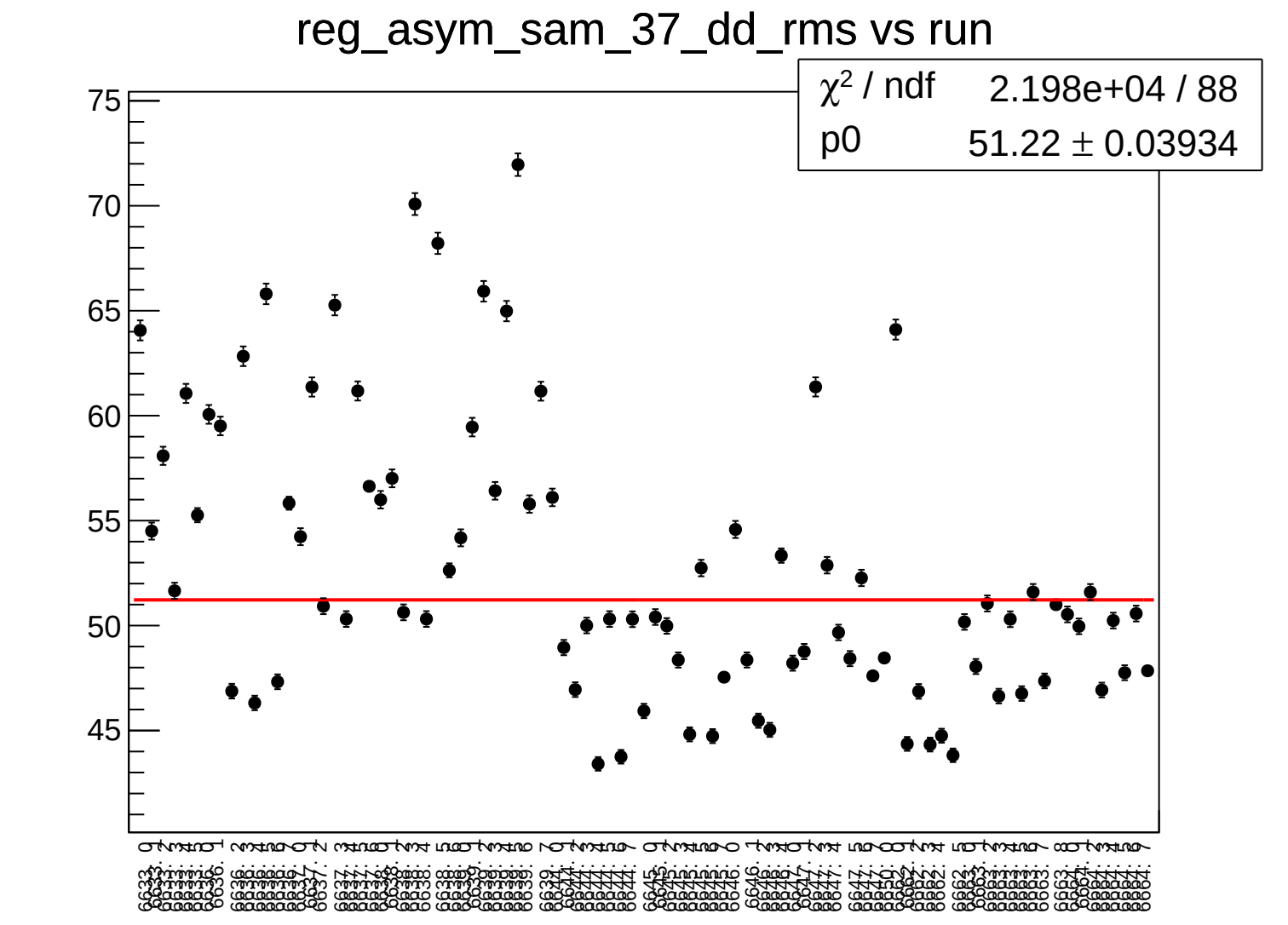

asym_sam_26_dd_mean vs run
χ² / ndf 105.3 / 88
p0 −2806 ± 1617
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 298.5
Std Dev 297.9
3
2
1
0
−1
−2

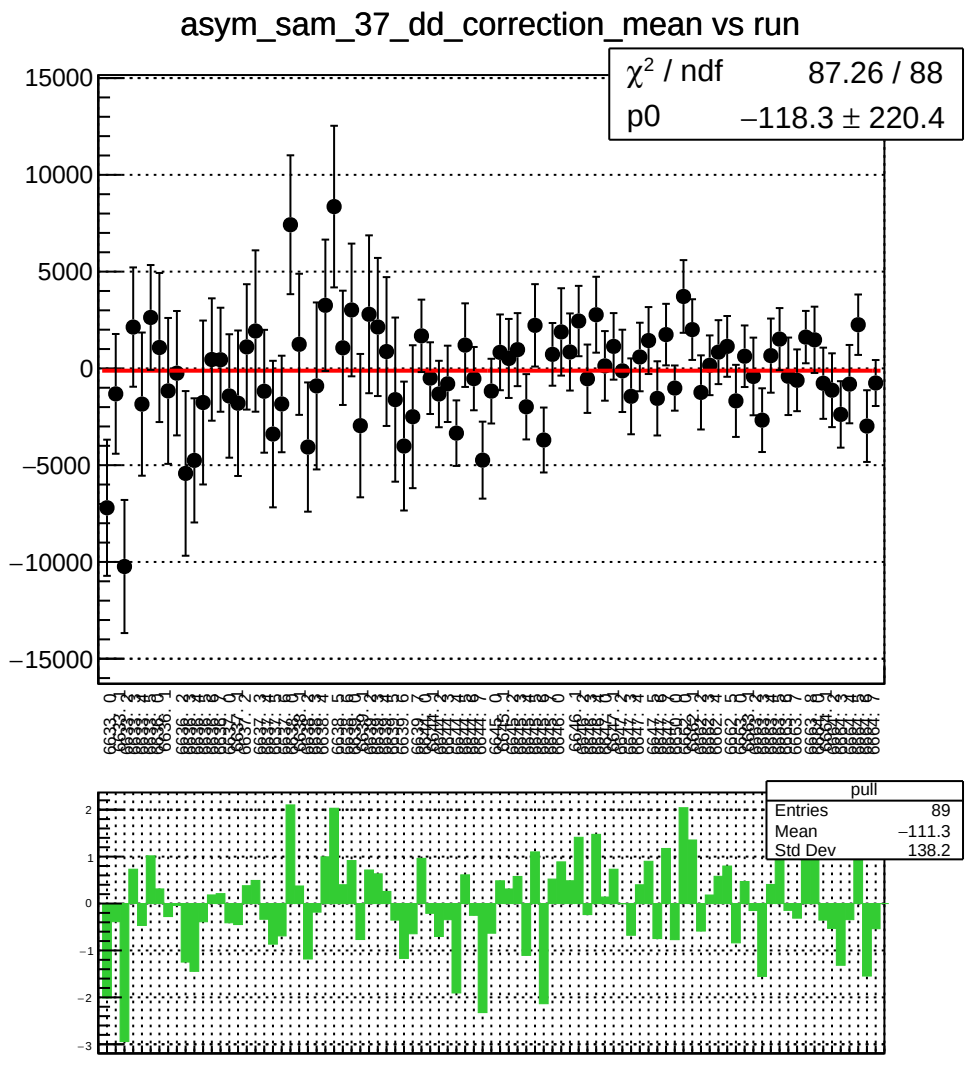

pull1D
Entries 89
Mean −0.007
Std Dev 1.088
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

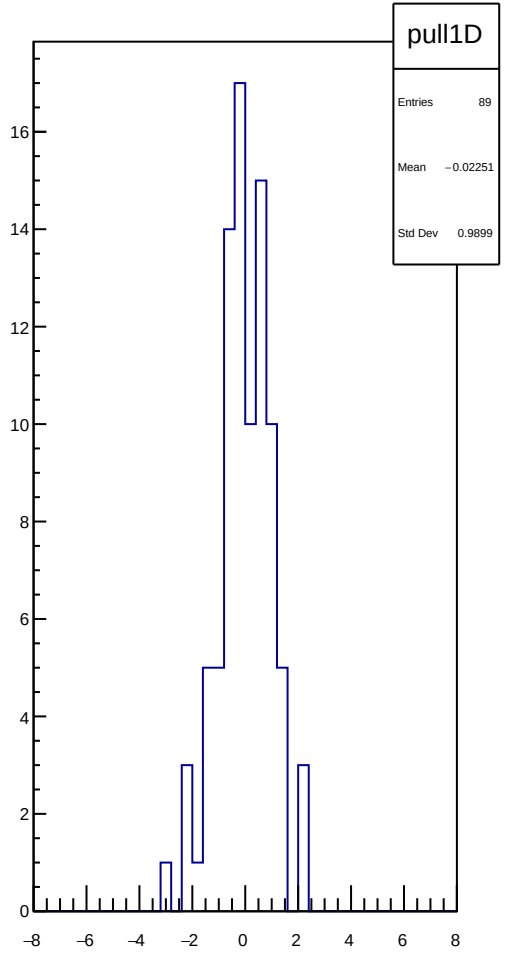

asym_sam_26_dd_rms vs run
χ² / ndf 1.427e+04 / 88
p0 1492 ± 1.144
1800
1700
1600
1500
1400
1300
1200

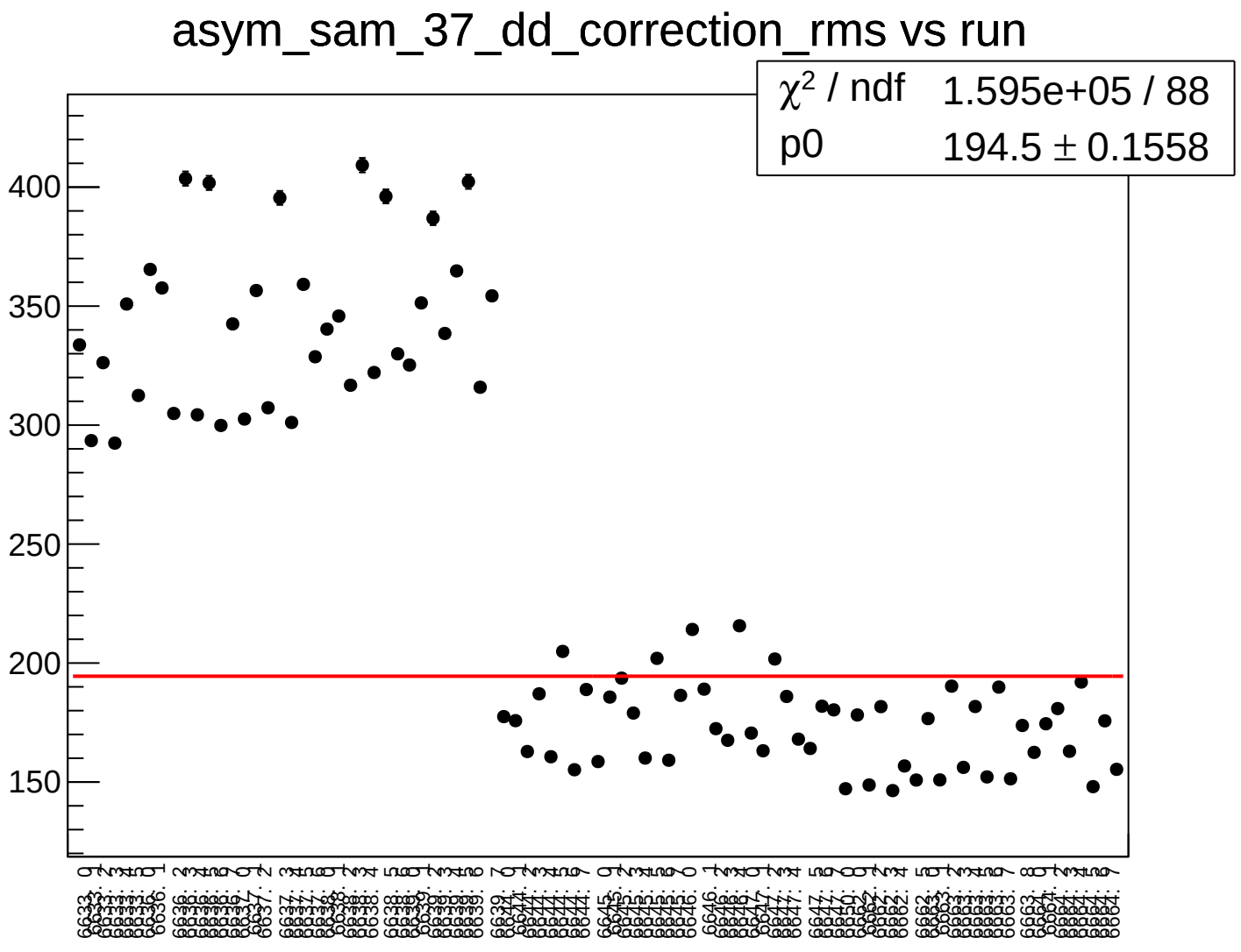

reg_asym_sam_37_dd_mean vs run
χ² / ndf 79.25 / 88
p0 108.1 ± 55.64
2000
1000
0
−1000
−2000
pull
Entries 89
Mean −280.4
Std Dev 341.6
2
1
0
−1
−2

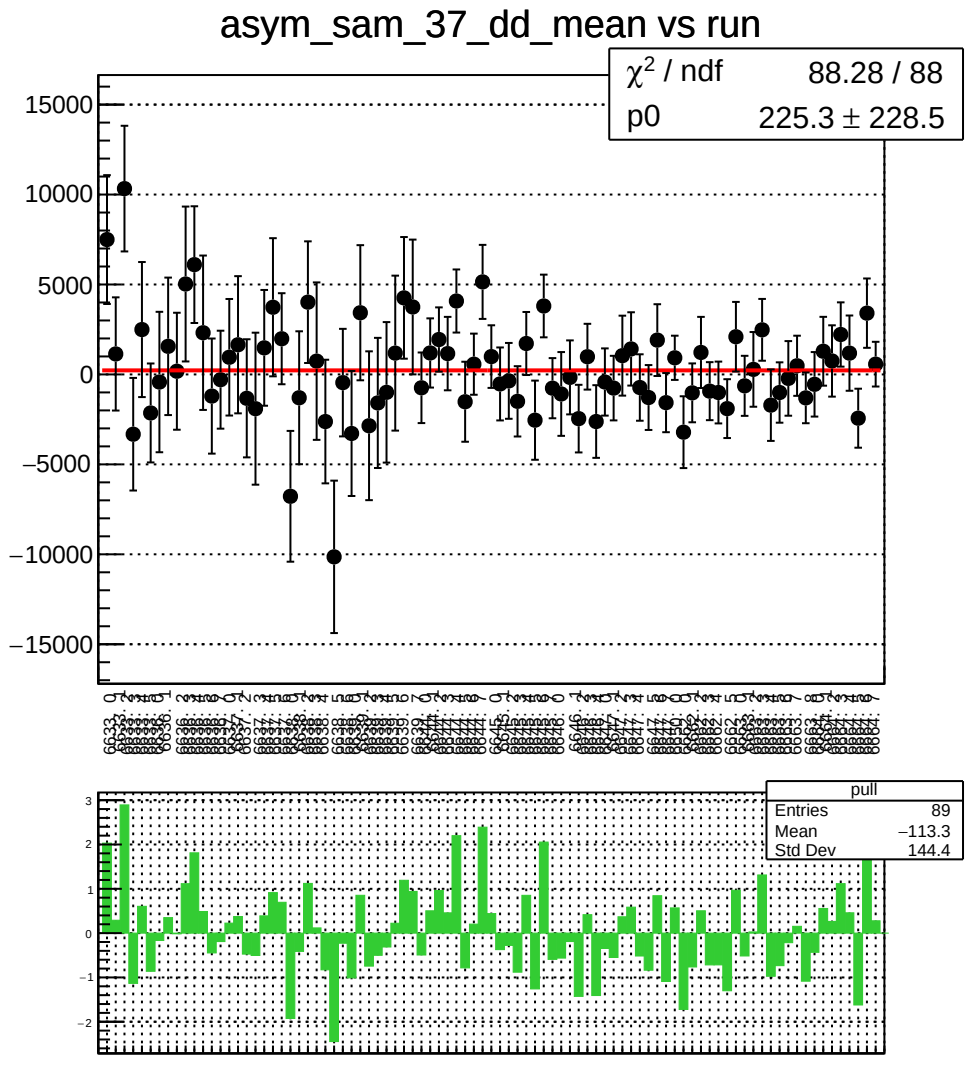

pull1D
Entries 89
Mean 0.005275
Std Dev 0.9436
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

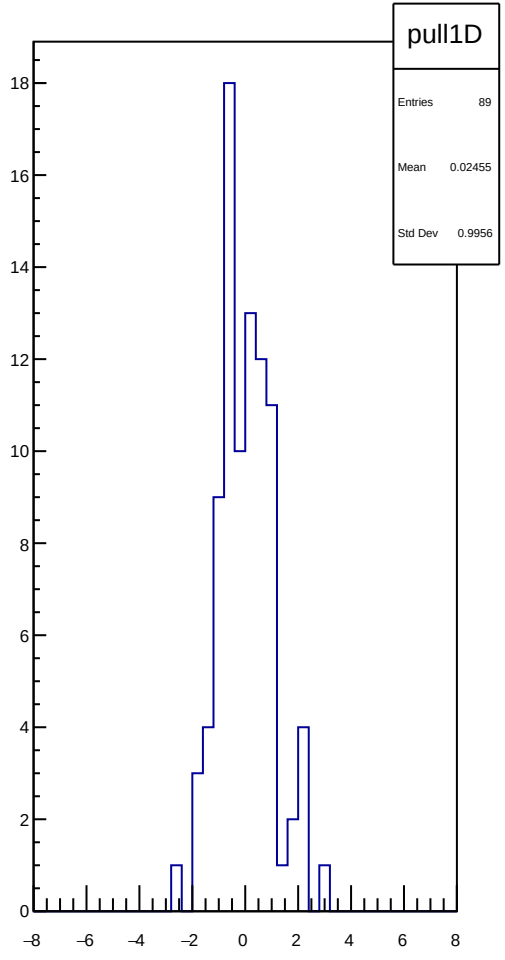

reg_asym_sam_37_dd_rms vs run
χ² / ndf 2.198e+04 / 88
p0 51.22 ± 0.03934
75
70
65
60
55
50
45

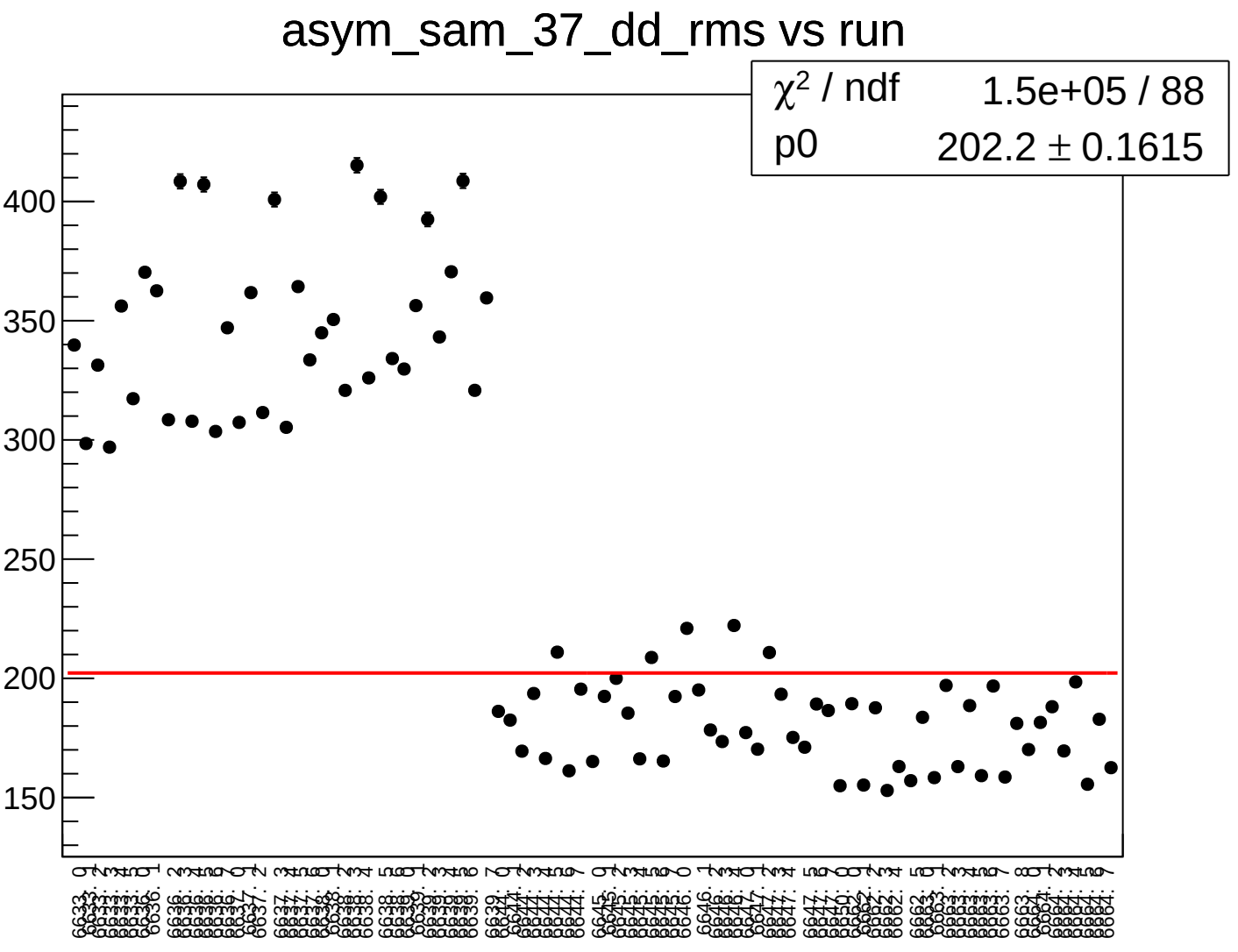

asym_sam_37_dd_correction_mean vs run
χ² / ndf 87.26 / 88
p0 −118.3 ± 220.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −111.3
Std Dev 138.2
2
1
0
−1
−2
−3

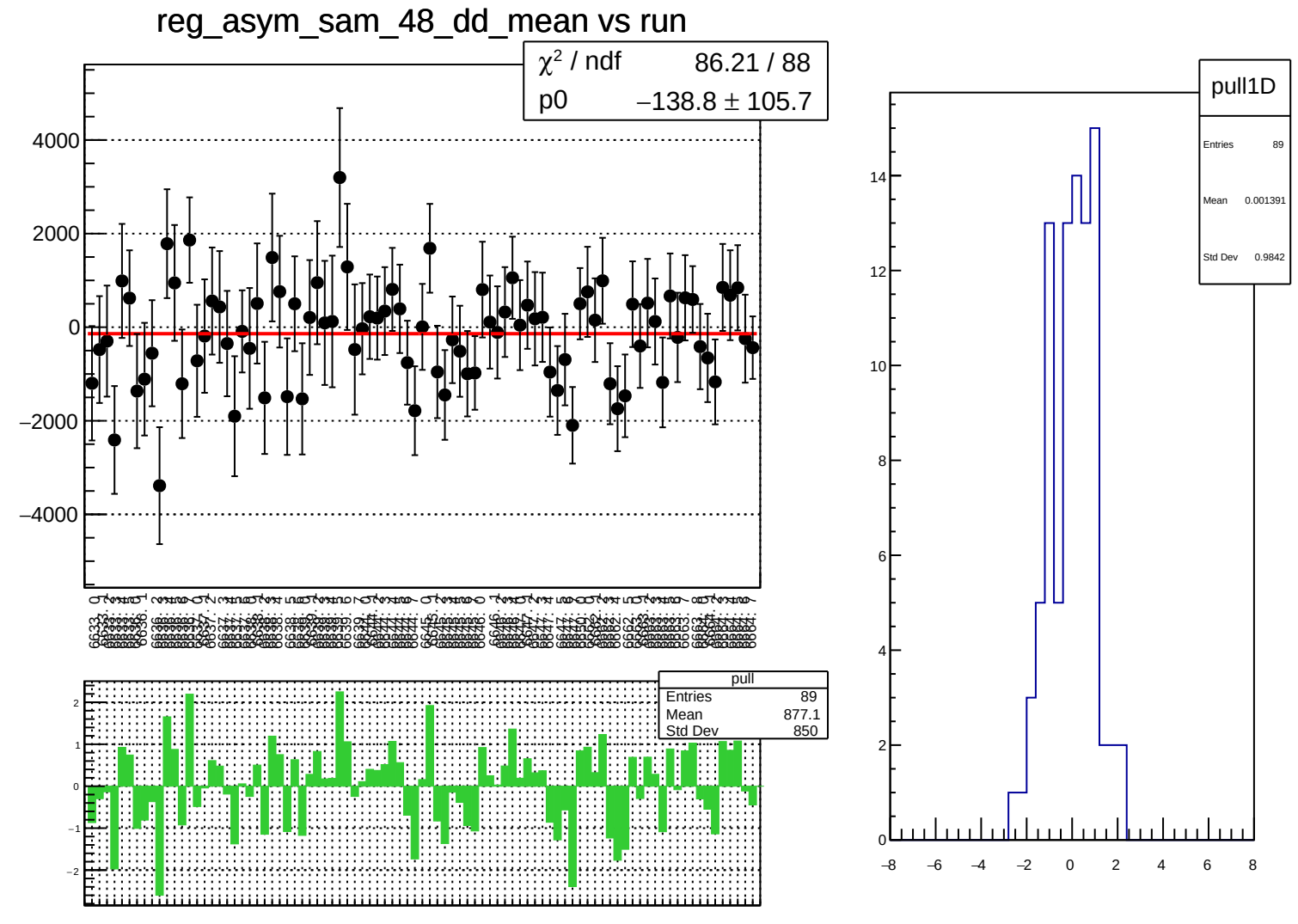

pull1D
Entries 89
Mean −0.02251
Std Dev 0.9899
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

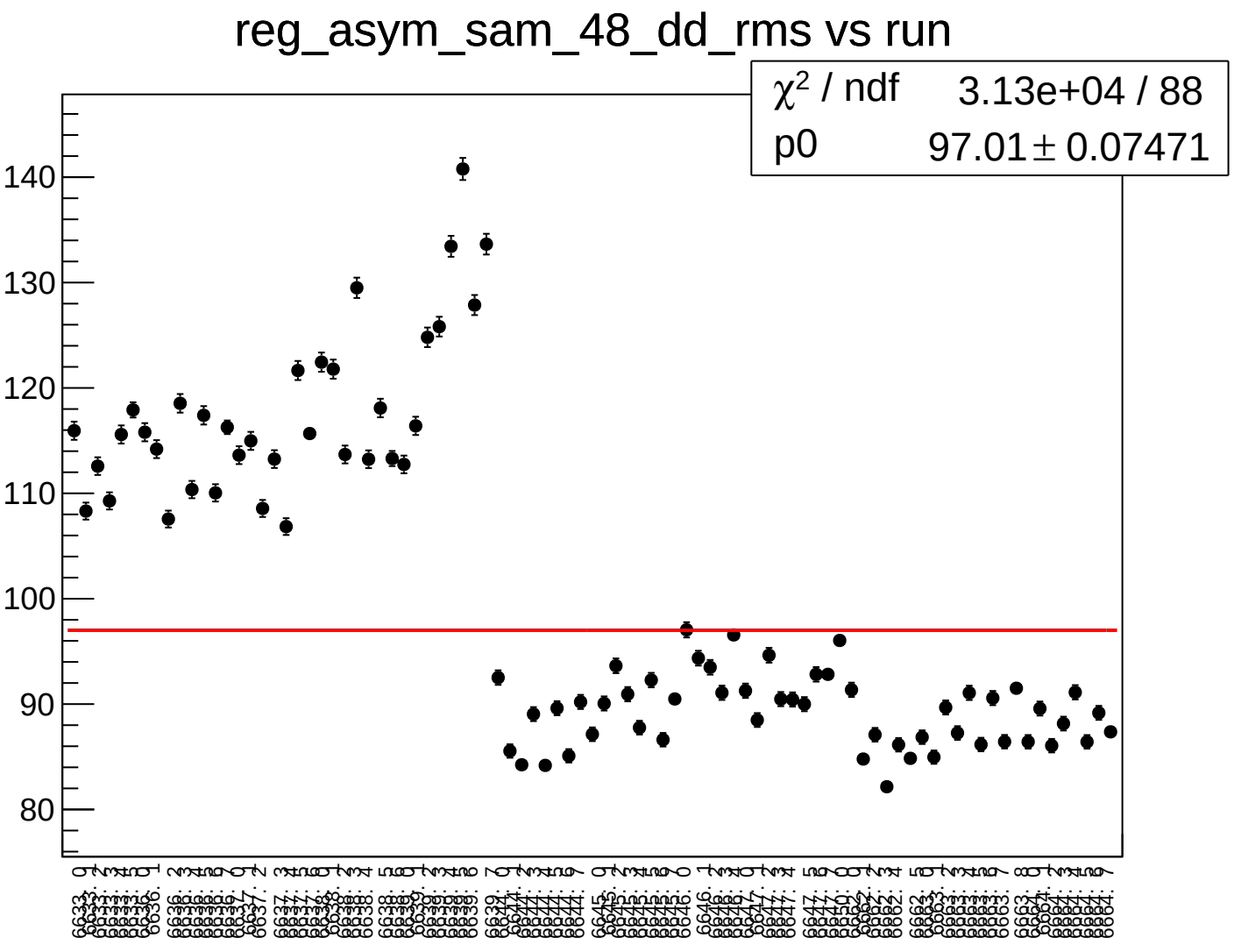

asym_sam_37_dd_correction_rms vs run
χ² / ndf 1.595e+05 / 88
p0 194.5 ± 0.1558
400
350
300
250
200
150

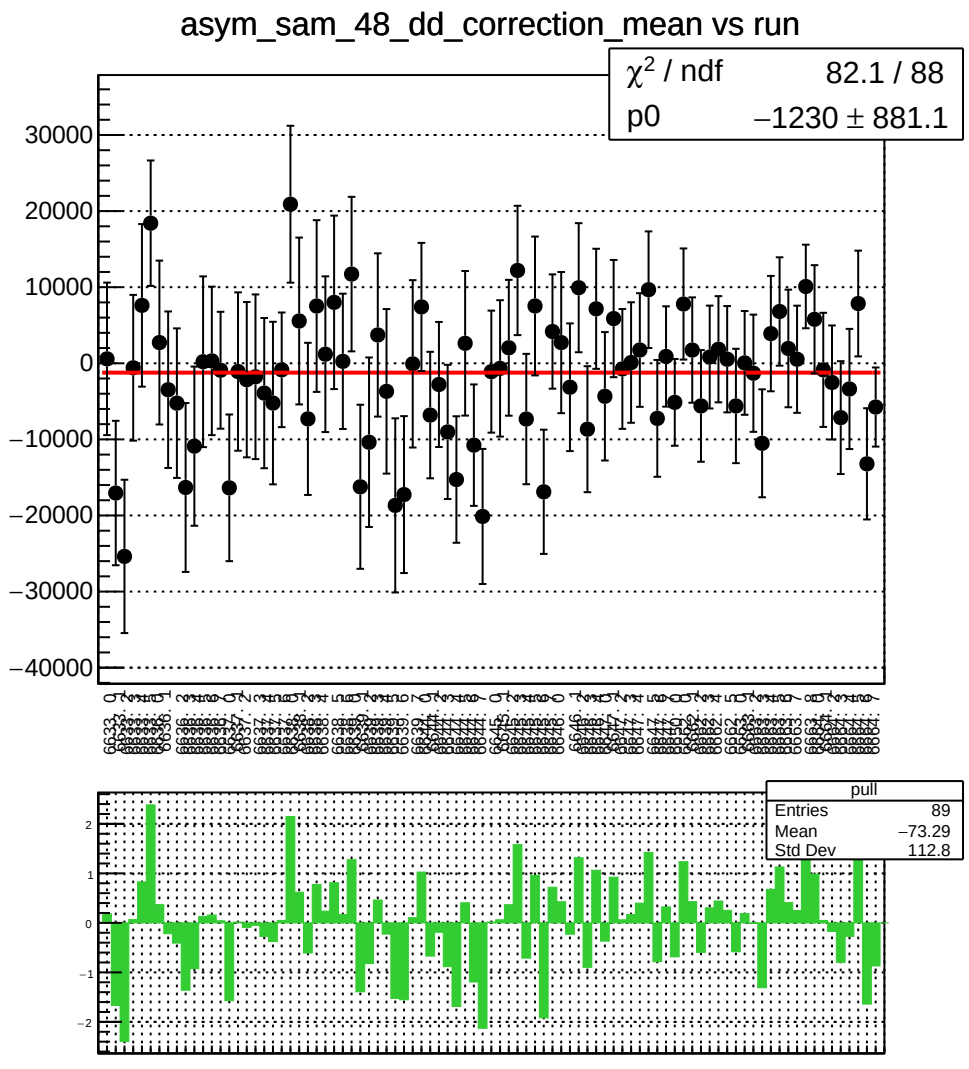

asym_sam_37_dd_mean vs run
χ² / ndf 88.28 / 88
p0 225.3 ± 228.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −113.3
Std Dev 144.4
3
2
1
0
−1
−2

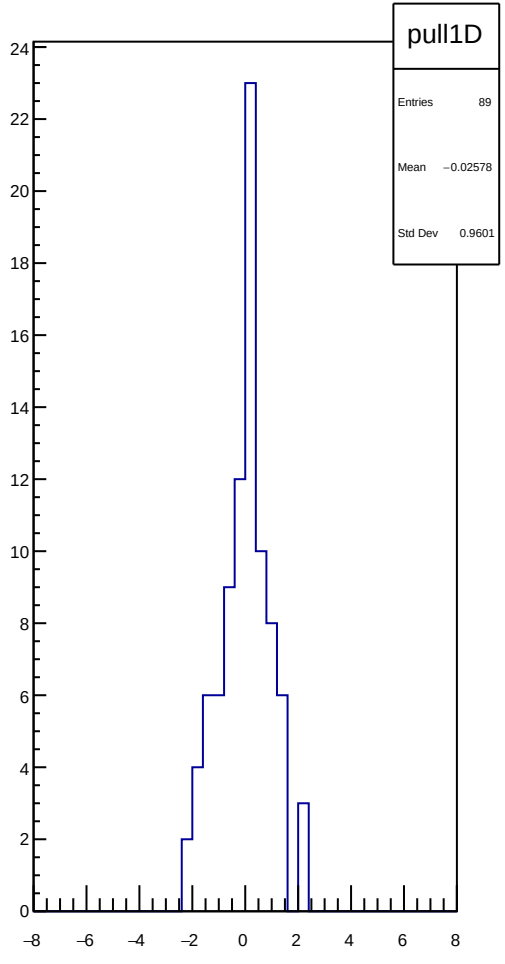

pull1D
Entries 89
Mean 0.02455
Std Dev 0.9956
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

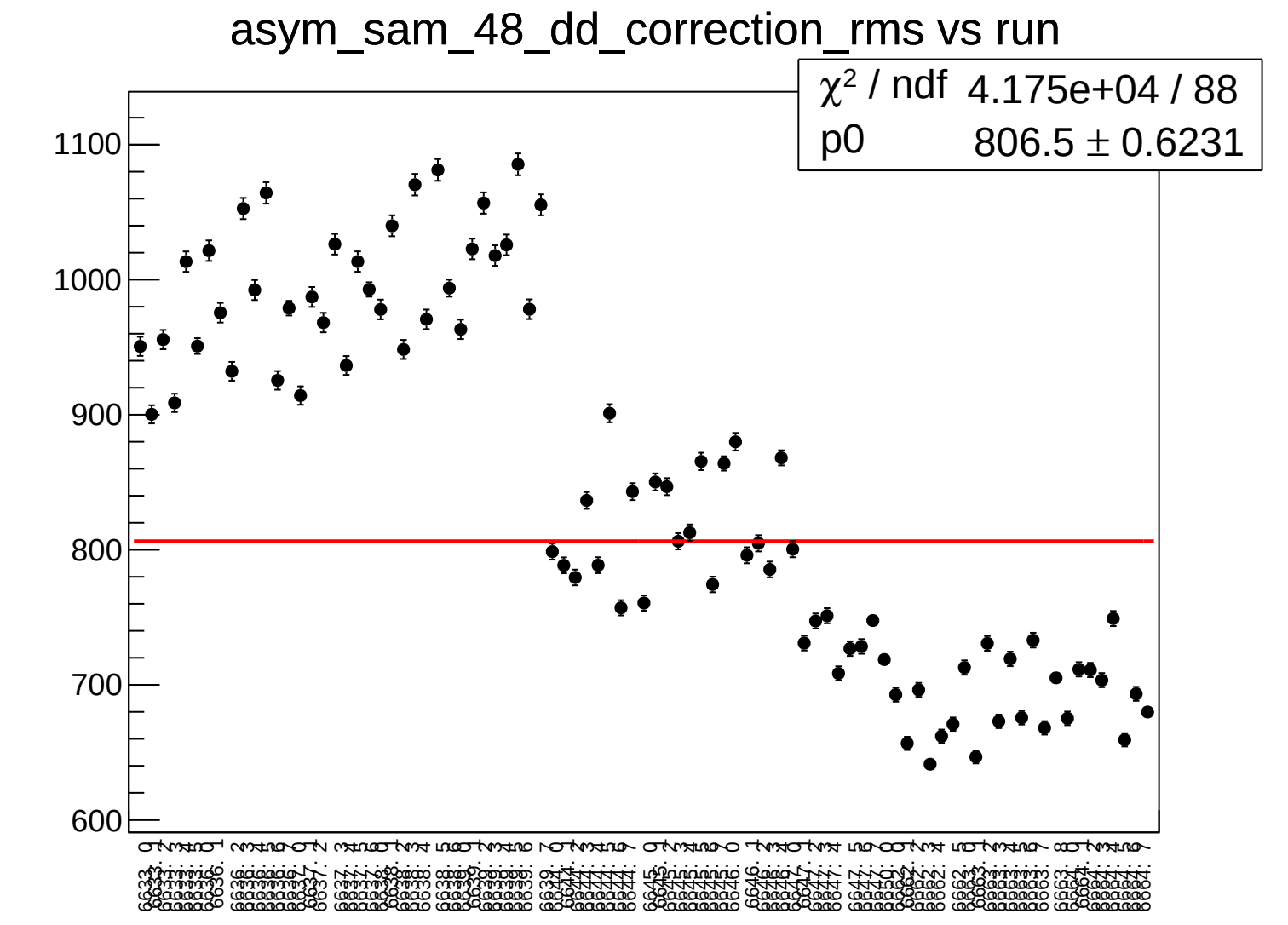

asym_sam_37_dd_rms vs run
χ² / ndf 1.5e+05 / 88
p0 202.2 ± 0.1615
400
350
300
250
200
150

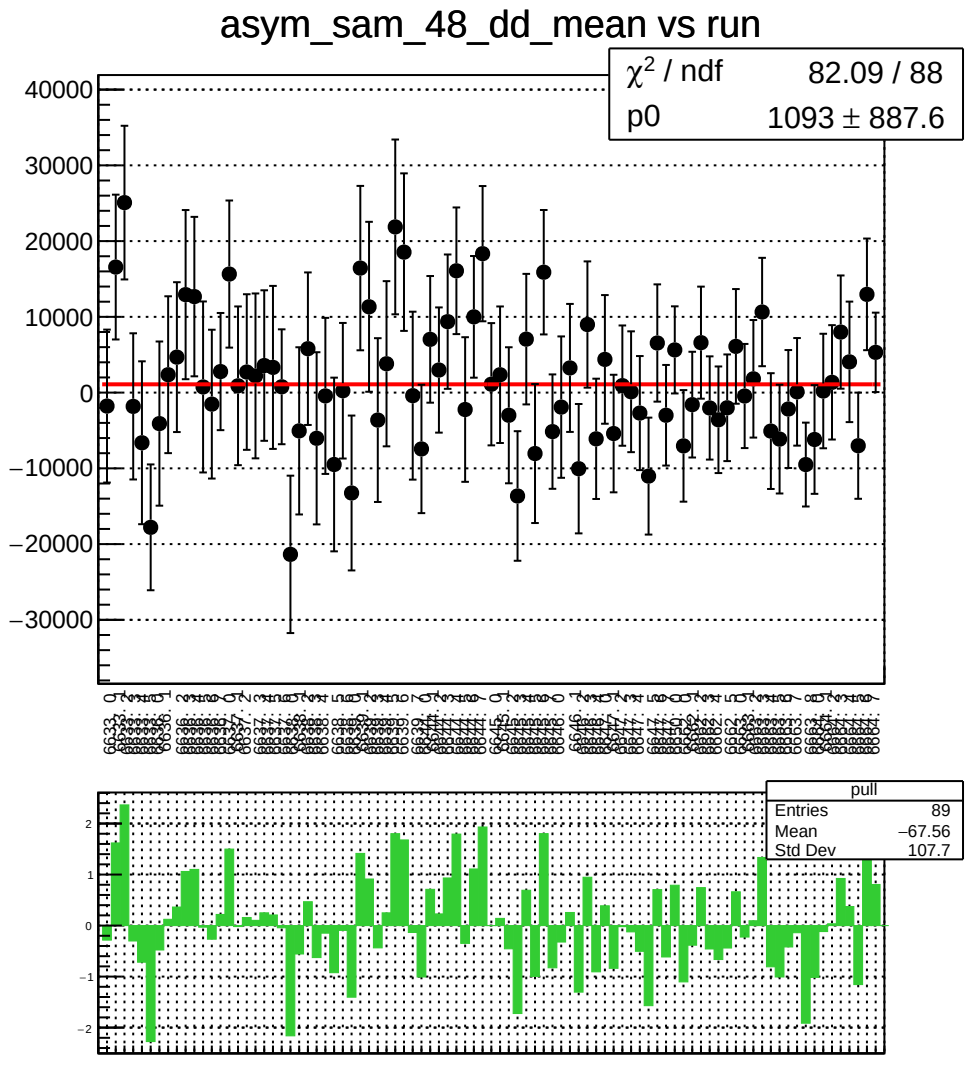

reg_asym_sam_48_dd_mean vs run
χ² / ndf 86.21 / 88
p0 −138.8 ± 105.7
4000
2000
0
−2000
−4000
pull
Entries 89
Mean 877.1
Std Dev 850
2
1
0
−1
−2
pull1D
Entries 89
Mean 0.001391
Std Dev 0.9842
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

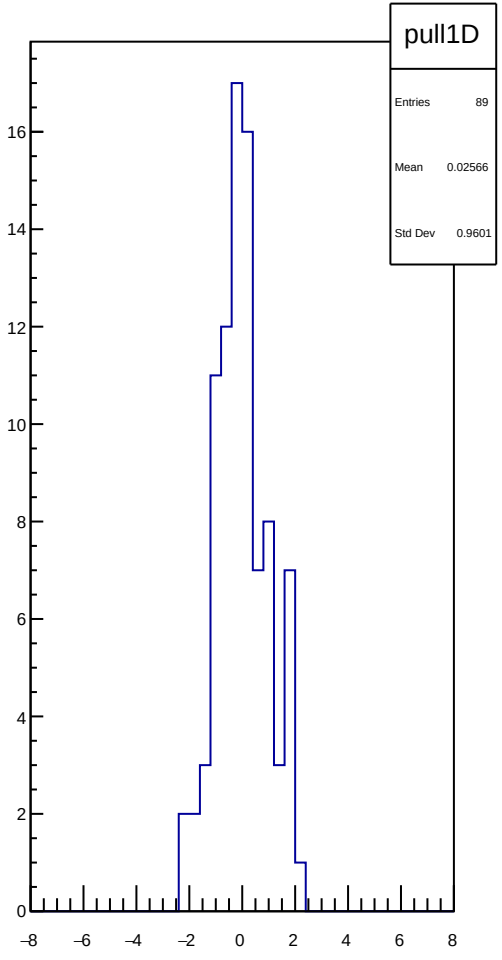

reg_asym_sam_48_dd_rms vs run
χ² / ndf 3.13e+04 / 88
p0 97.01 ± 0.07471
140
130
120
110
100
90
80

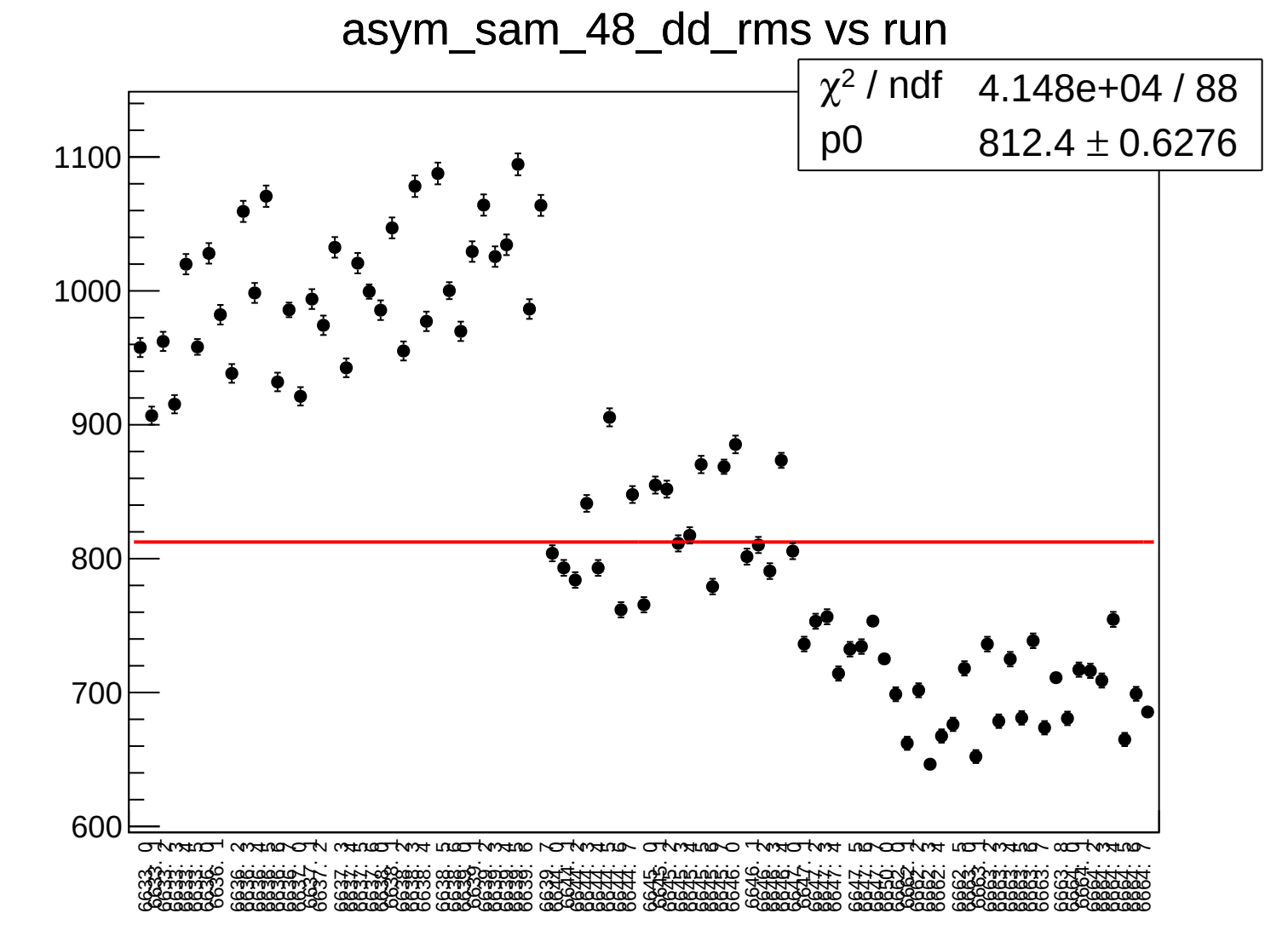

asym_sam_48_dd_correction_mean vs run
χ² / ndf 82.1 / 88
p0 −1230 ± 881.1
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −73.29
Std Dev 112.8
2
1
0
−1
−2

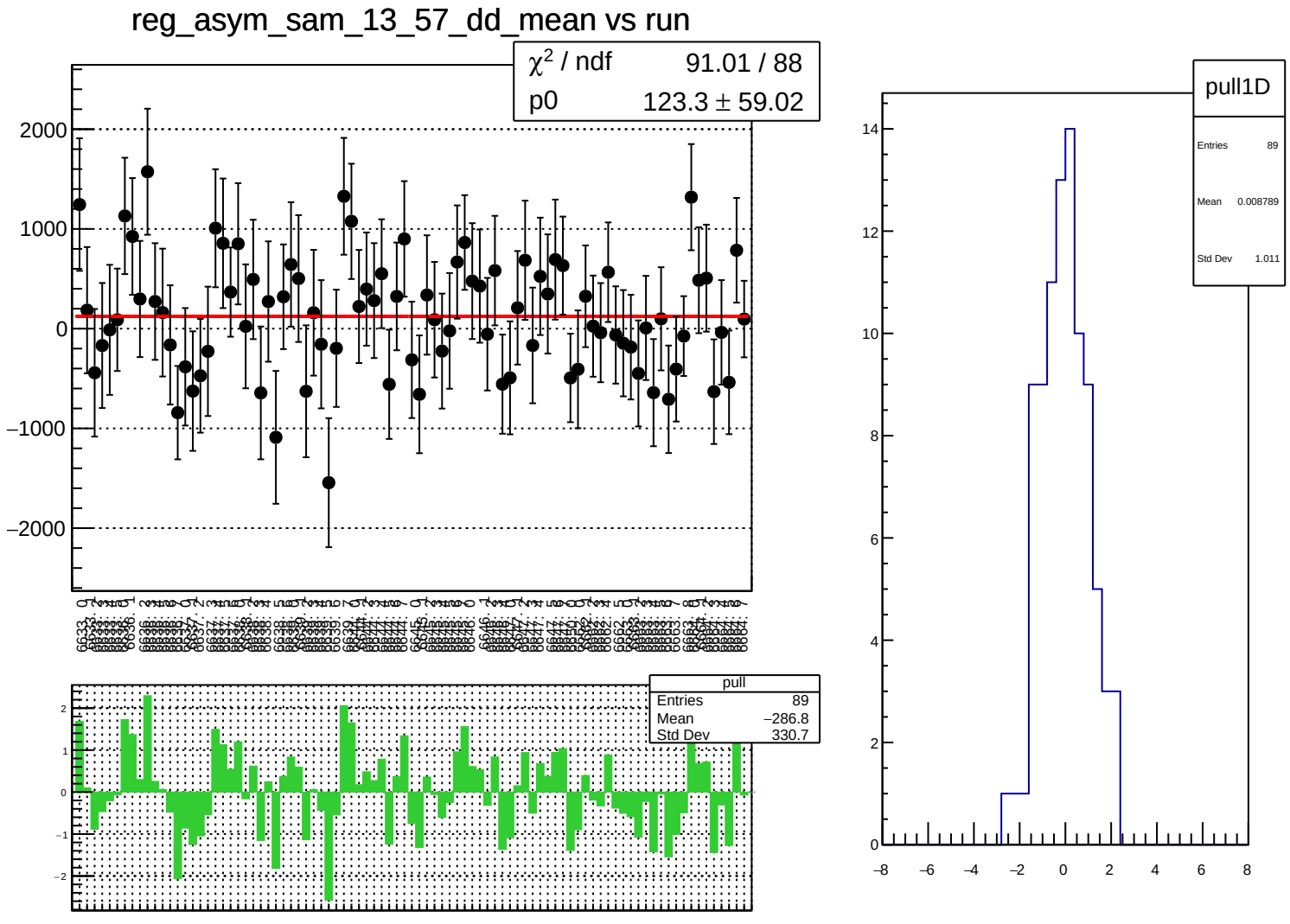

pull1D
Entries 89
Mean −0.02578
Std Dev 0.9601
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

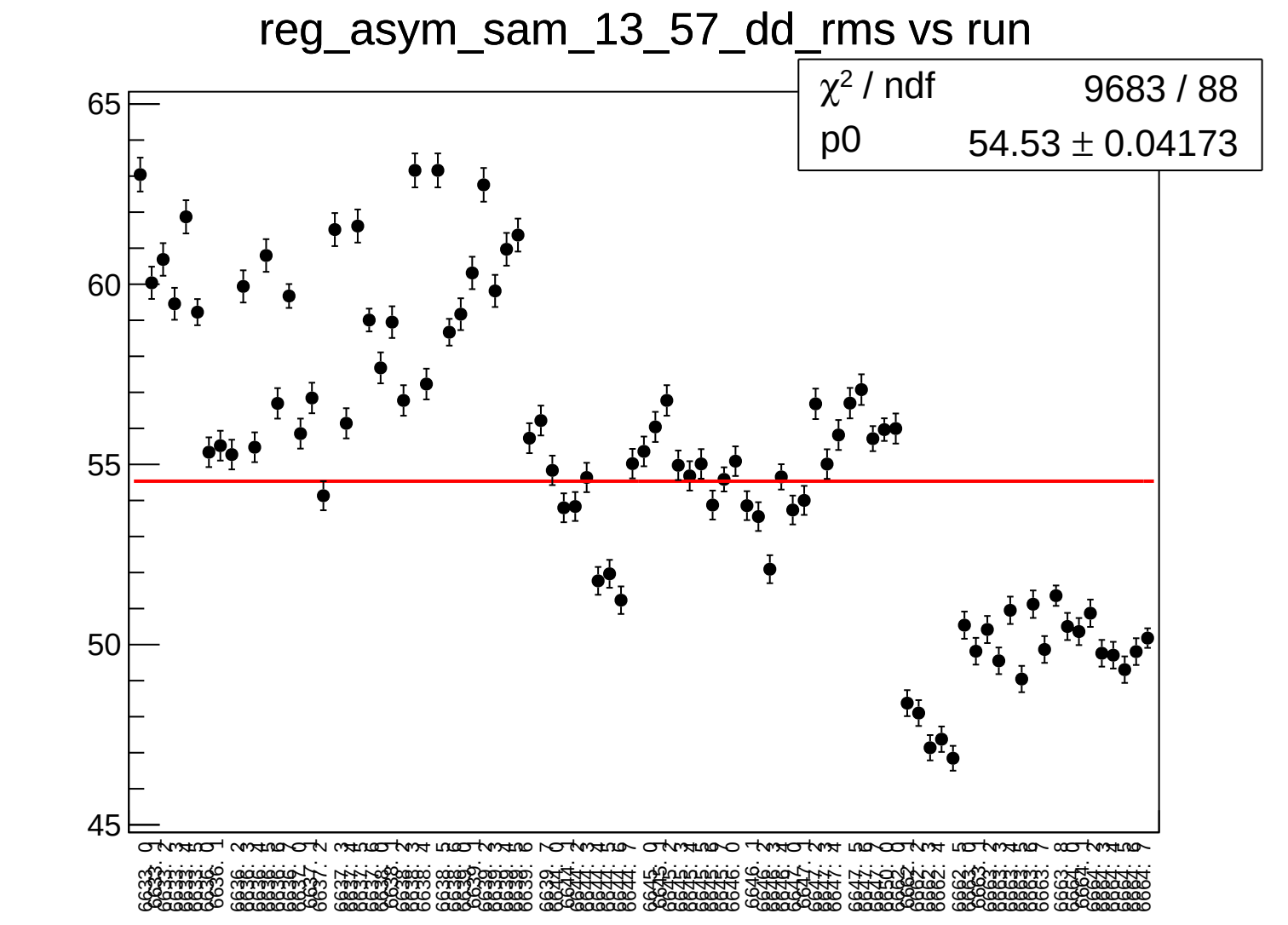

asym_sam_48_dd_correction_rms vs run
χ² / ndf 4.175e+04 / 88
p0 806.5 ± 0.6231
1100
1000
900
800
700
600

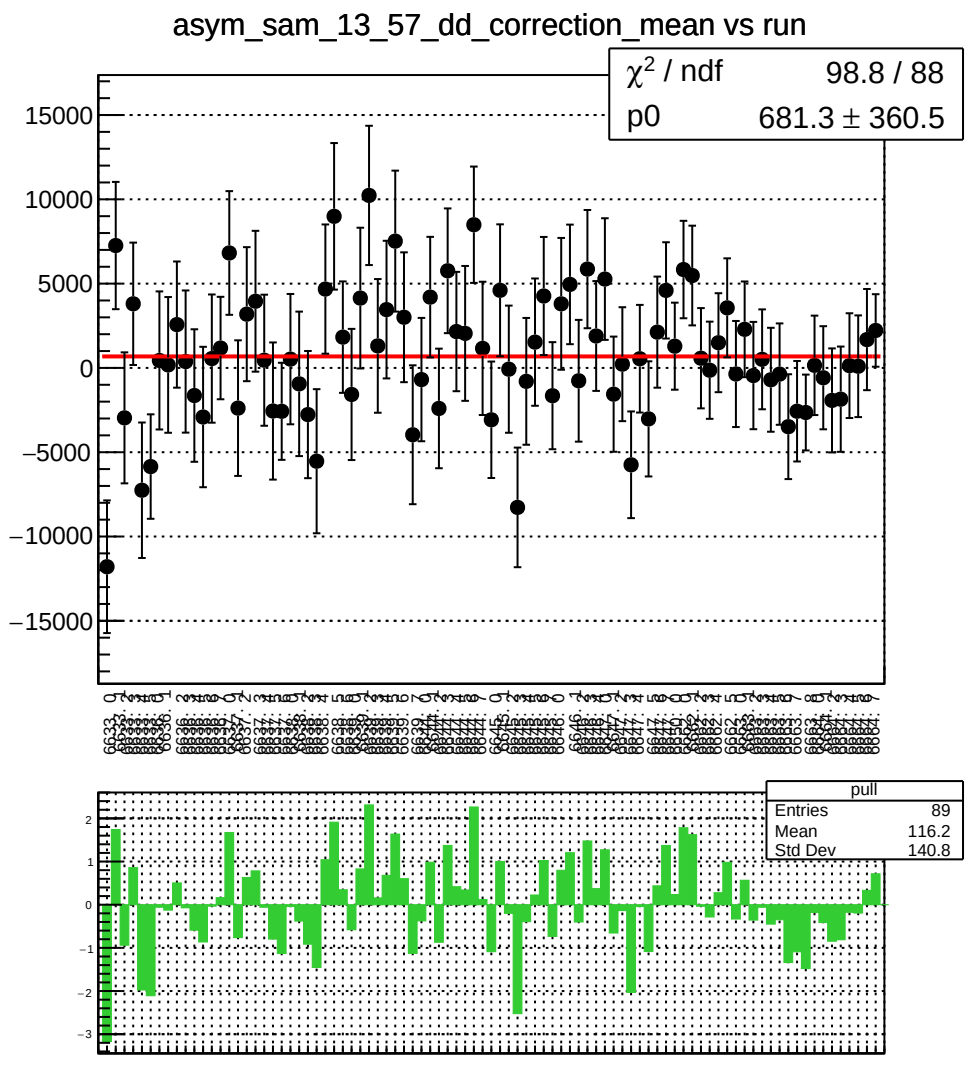

asym_sam_48_dd_mean vs run
χ² / ndf 82.09 / 88
p0 1093 ± 887.6
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −67.56
Std Dev 107.7
2
1
0
−1
−2

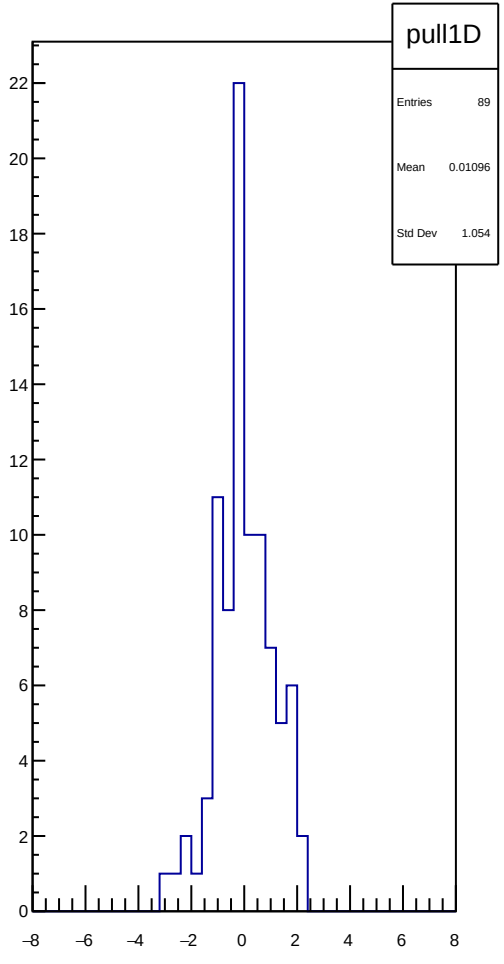

pull1D
Entries 89
Mean 0.02566
Std Dev 0.9601
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

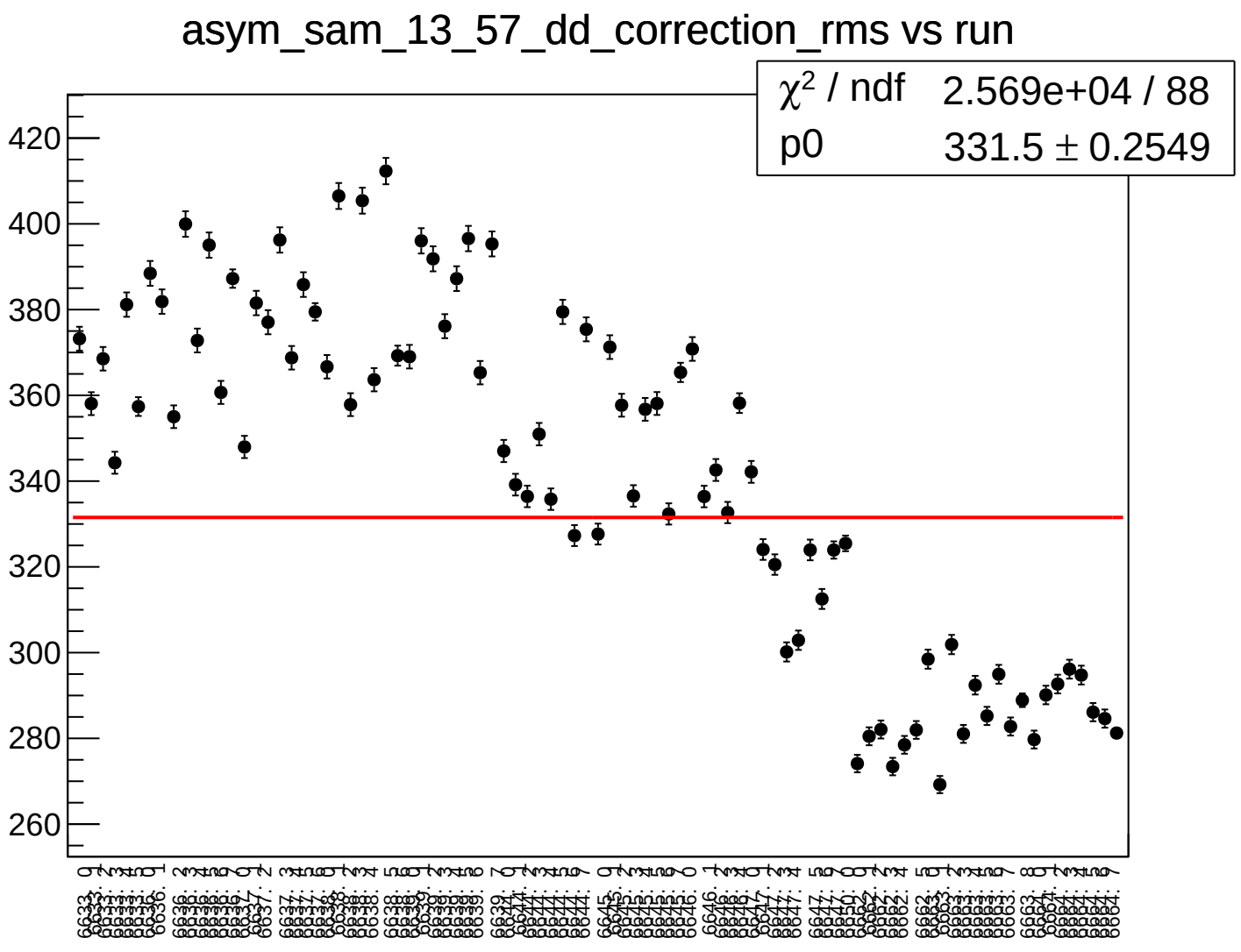

asym_sam_48_dd_rms vs run
χ² / ndf 4.148e+04 / 88
p0 812.4 ± 0.6276
1100
1000
900
800
700
600

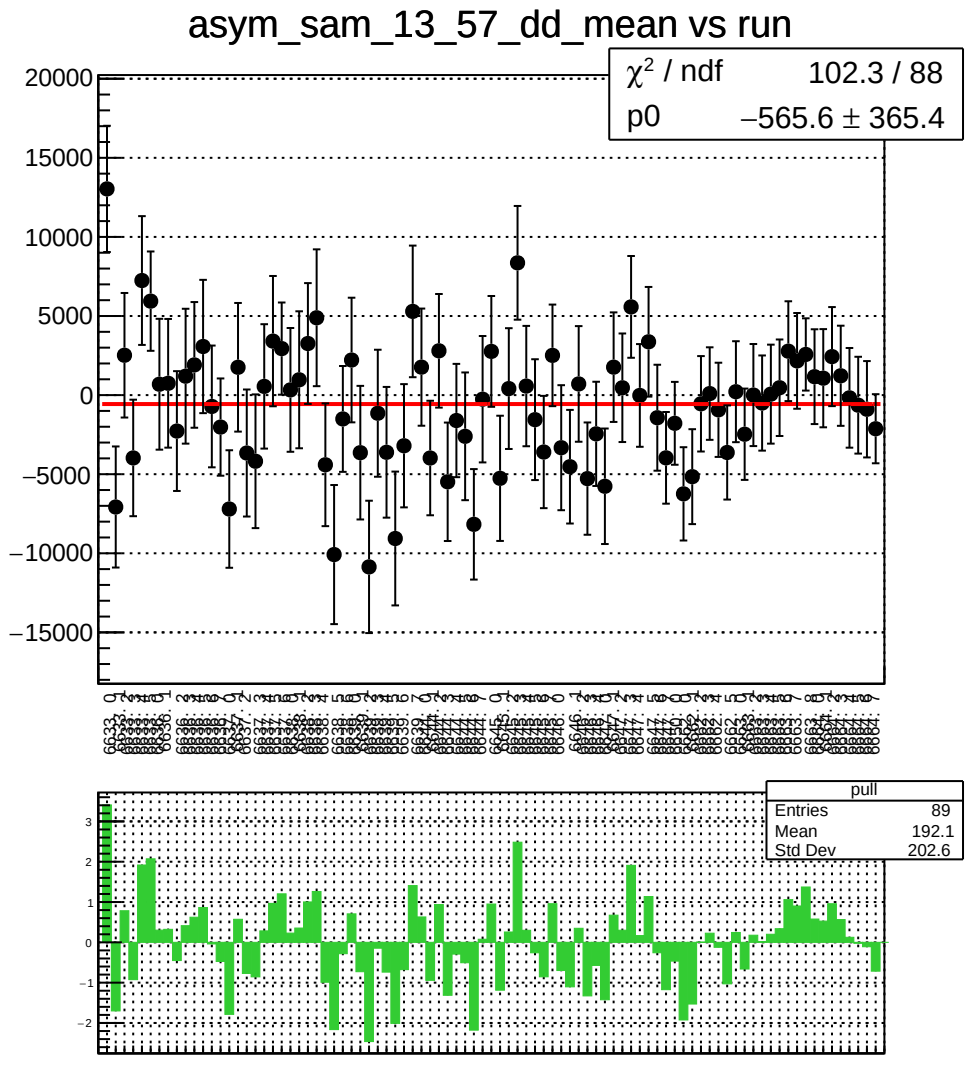

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 91.01 / 88
p0 123.3 ± 59.02
2000
1000
0
−1000
−2000
pull
Entries 89
Mean −286.8
Std Dev 330.7
2
1
0
−1
−2
pull1D
Entries 89
Mean 0.008789
Std Dev 1.011
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

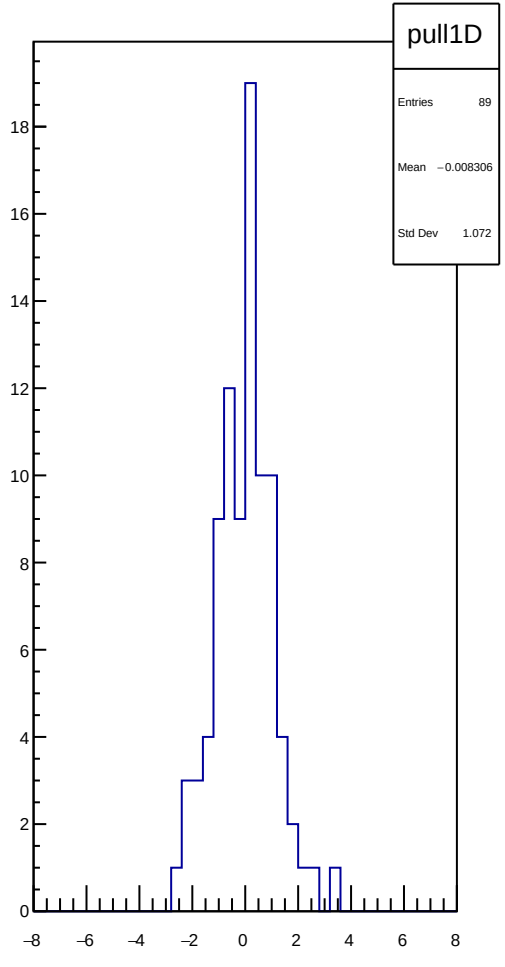

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 9683 / 88
p0 54.53 ± 0.04173
65
60
55
50
45

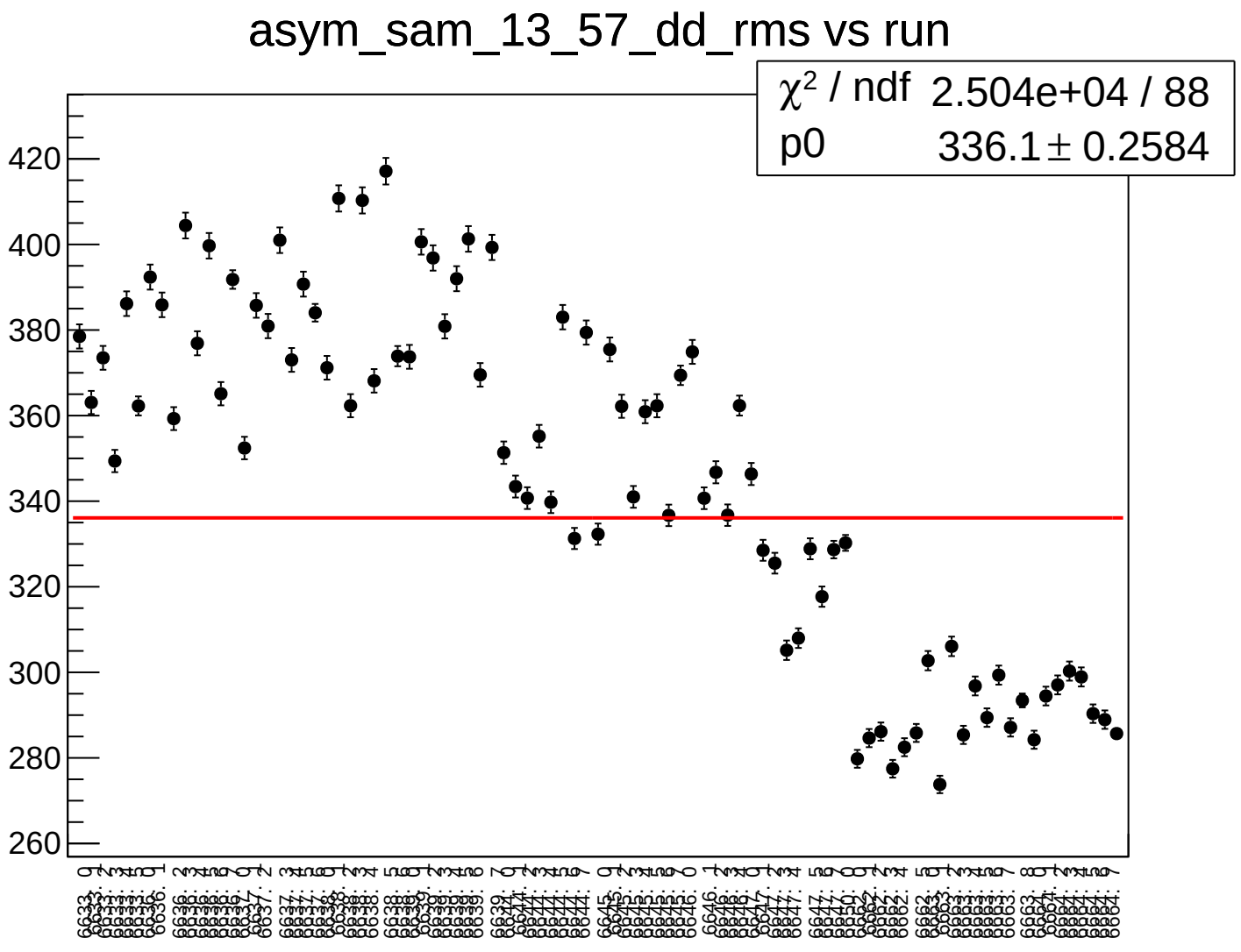

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 98.8 / 88
p0 681.3 ± 360.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 116.2
Std Dev 140.8
2
1
0
−1
−2
−3

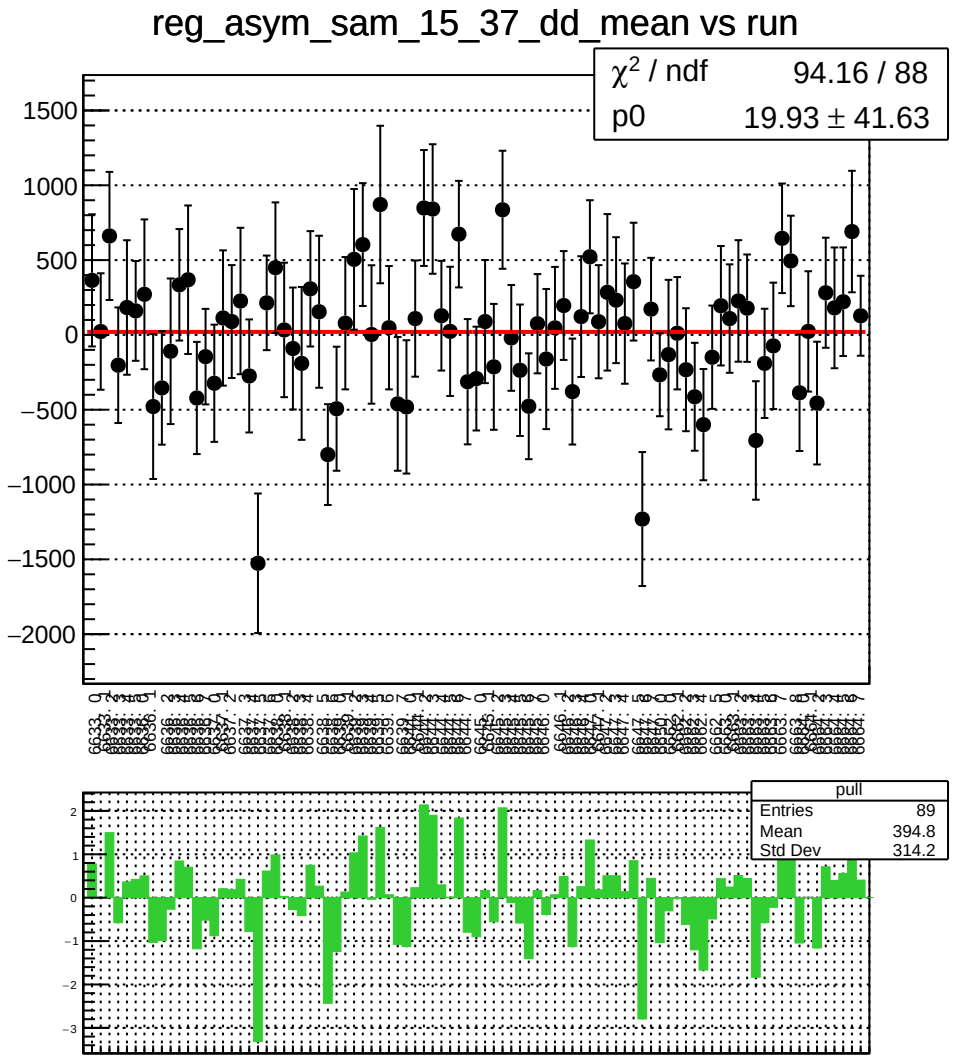

pull1D
Entries 89
Mean 0.01096
Std Dev 1.054
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

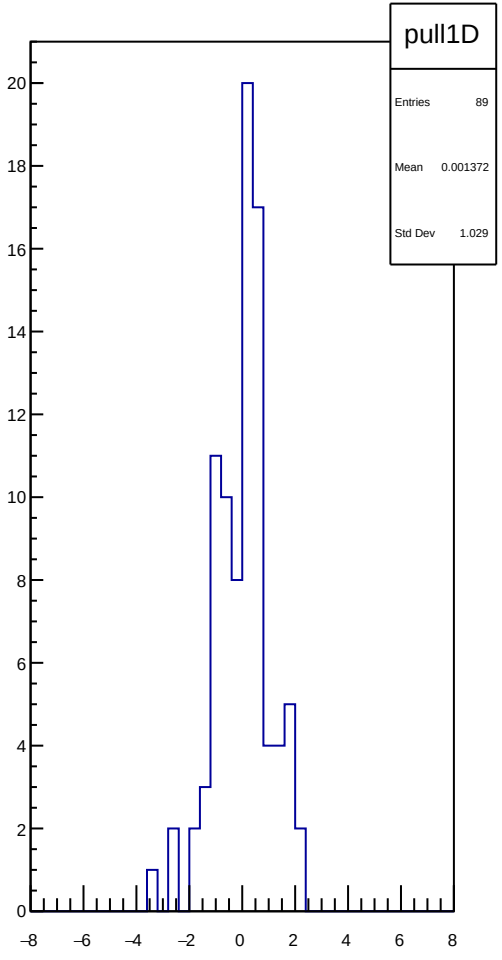

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 2.569e+04 / 88
p0 331.5 ± 0.2549
420
400
380
360
340
320
300
280
260

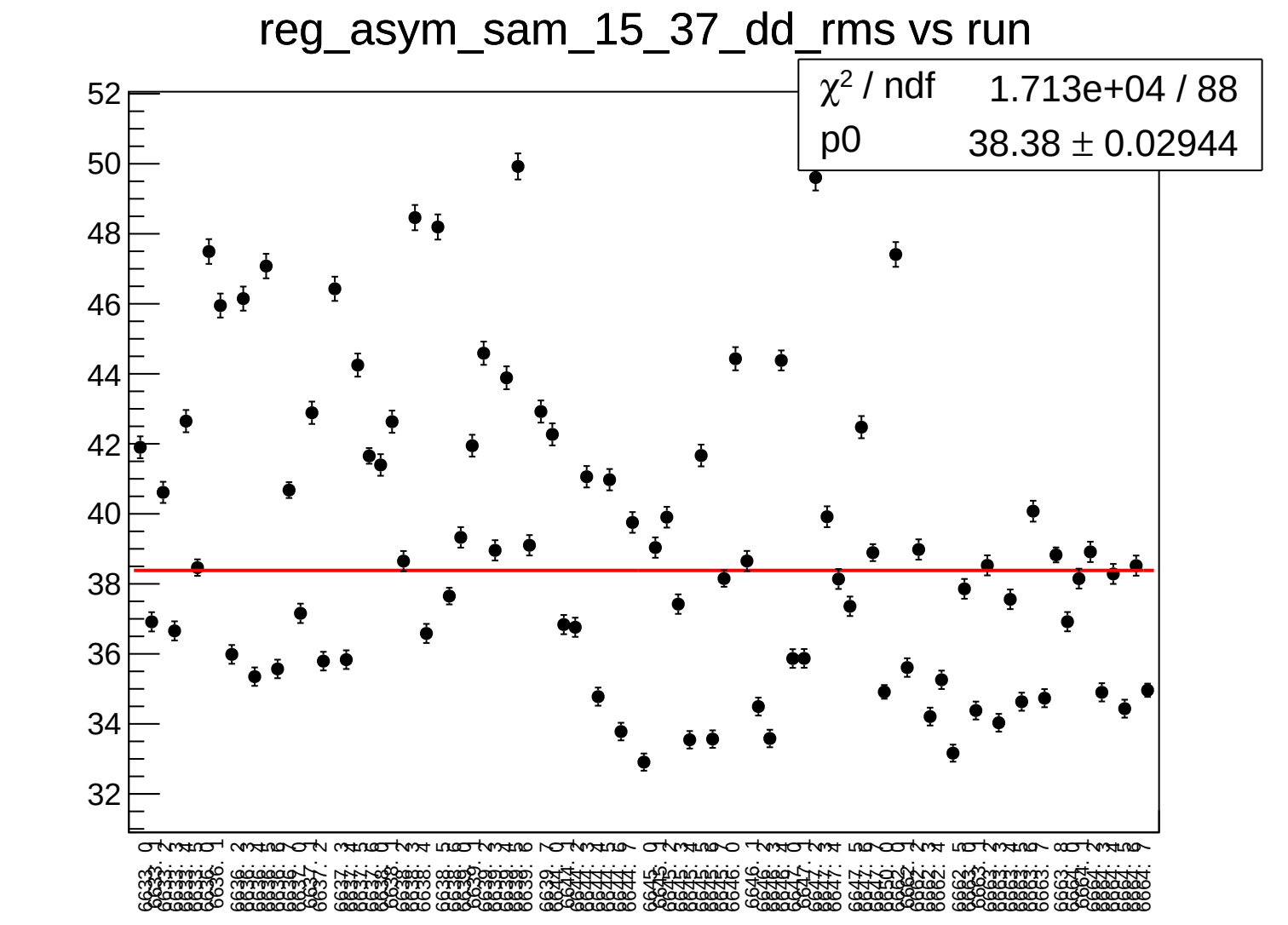

asym_sam_13_57_dd_mean vs run
χ² / ndf 102.3 / 88
p0 −565.6 ± 365.4
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 192.1
Std Dev 202.6
3
2
1
0
−1
−2

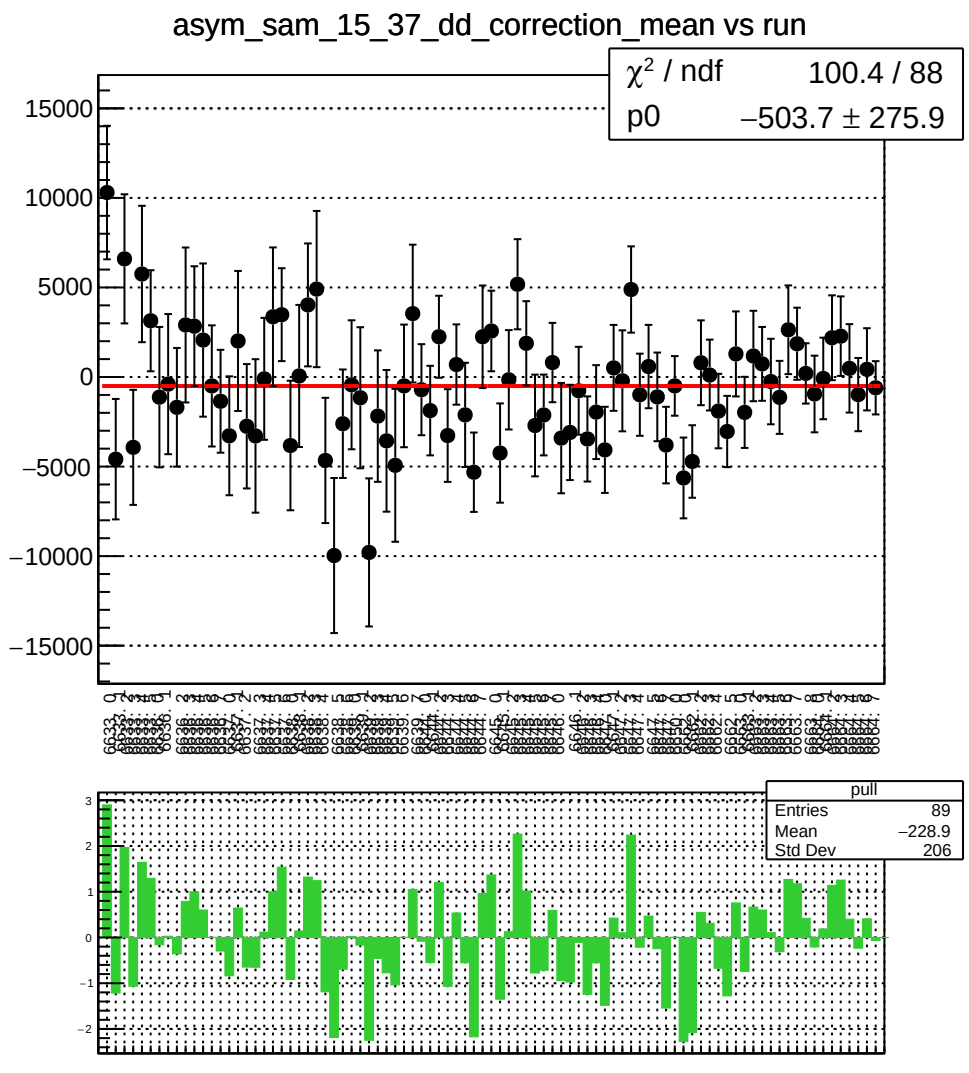

pull1D
Entries 89
Mean −0.008306
Std Dev 1.072
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

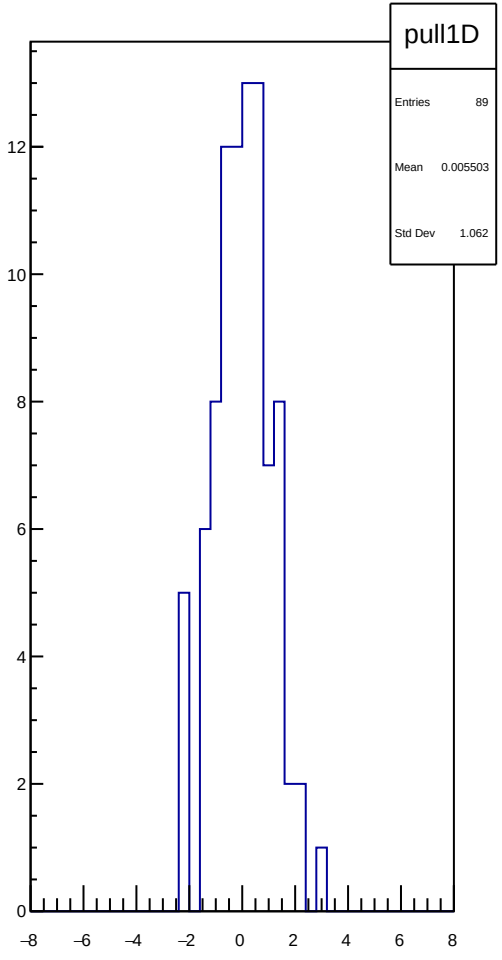

asym_sam_13_57_dd_rms vs run
χ² / ndf 2.504e+04 / 88
p0 336.1 ± 0.2584
420
400
380
360
340
320
300
280
260

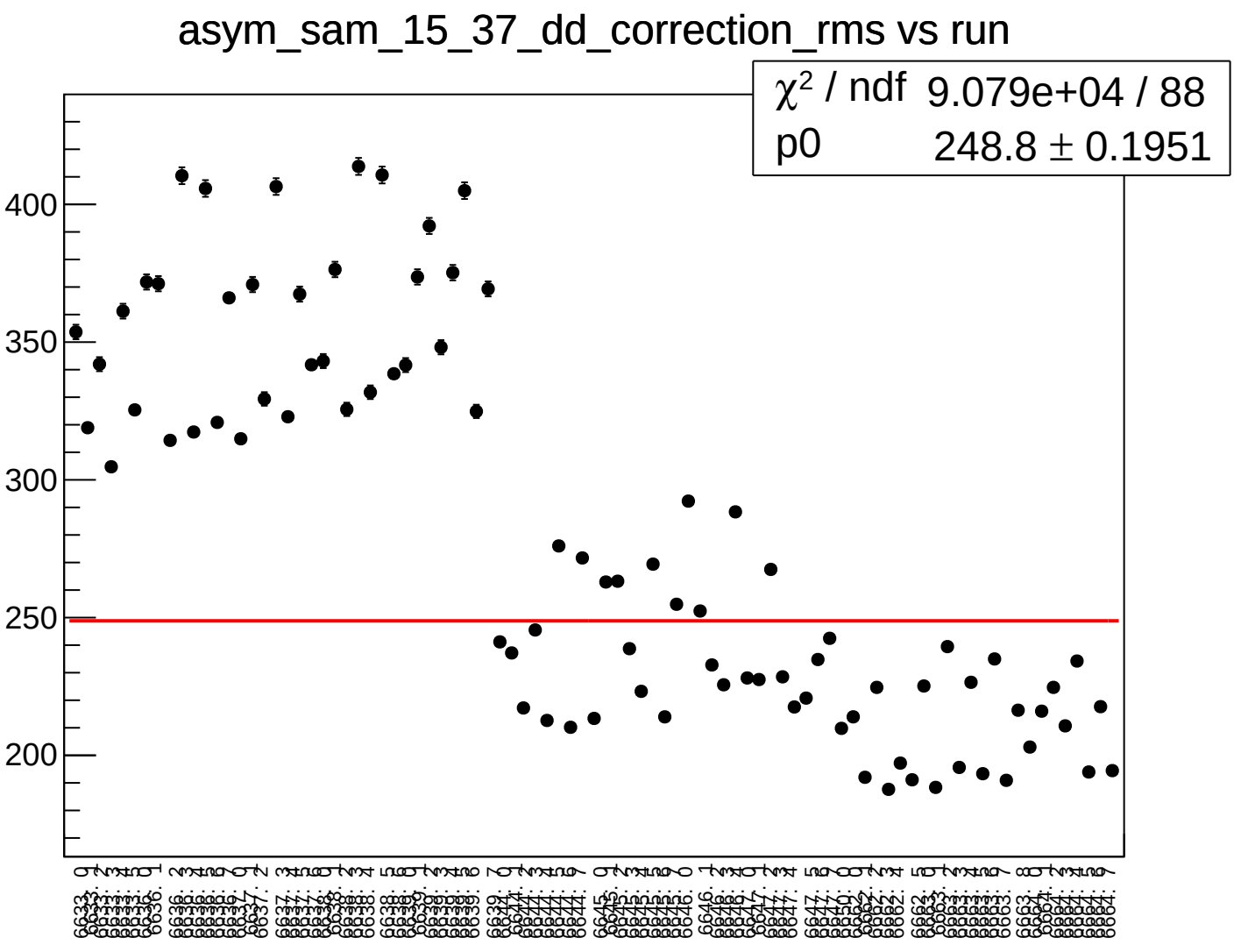

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 94.16 / 88
p0 19.93 ± 41.63
pull
Entries 89
Mean 394.8
Std Dev 314.2

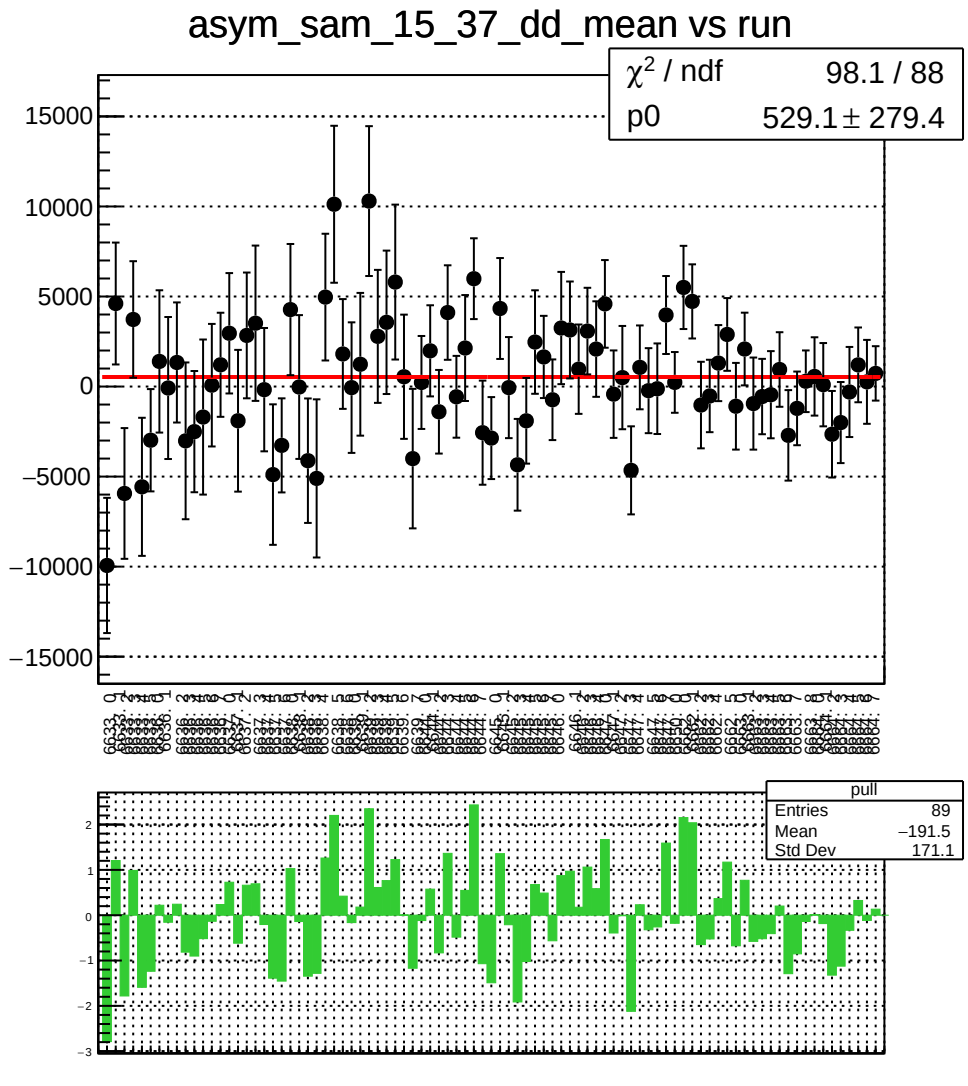

pull1D
Entries 89
Mean 0.001372
Std Dev 1.029

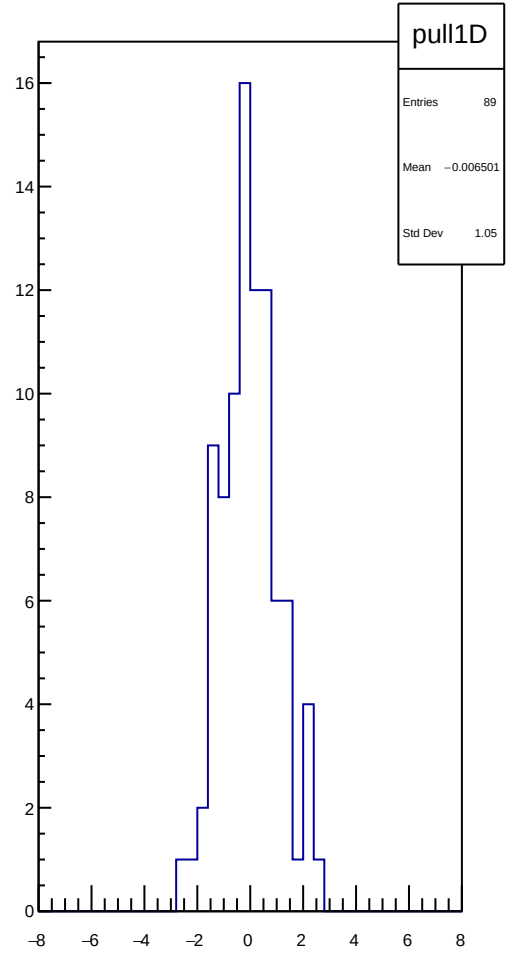

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 1.713e+04 / 88
p0 38.38 ± 0.02944
52
50
48
46
44
42
40
38
36
34
32

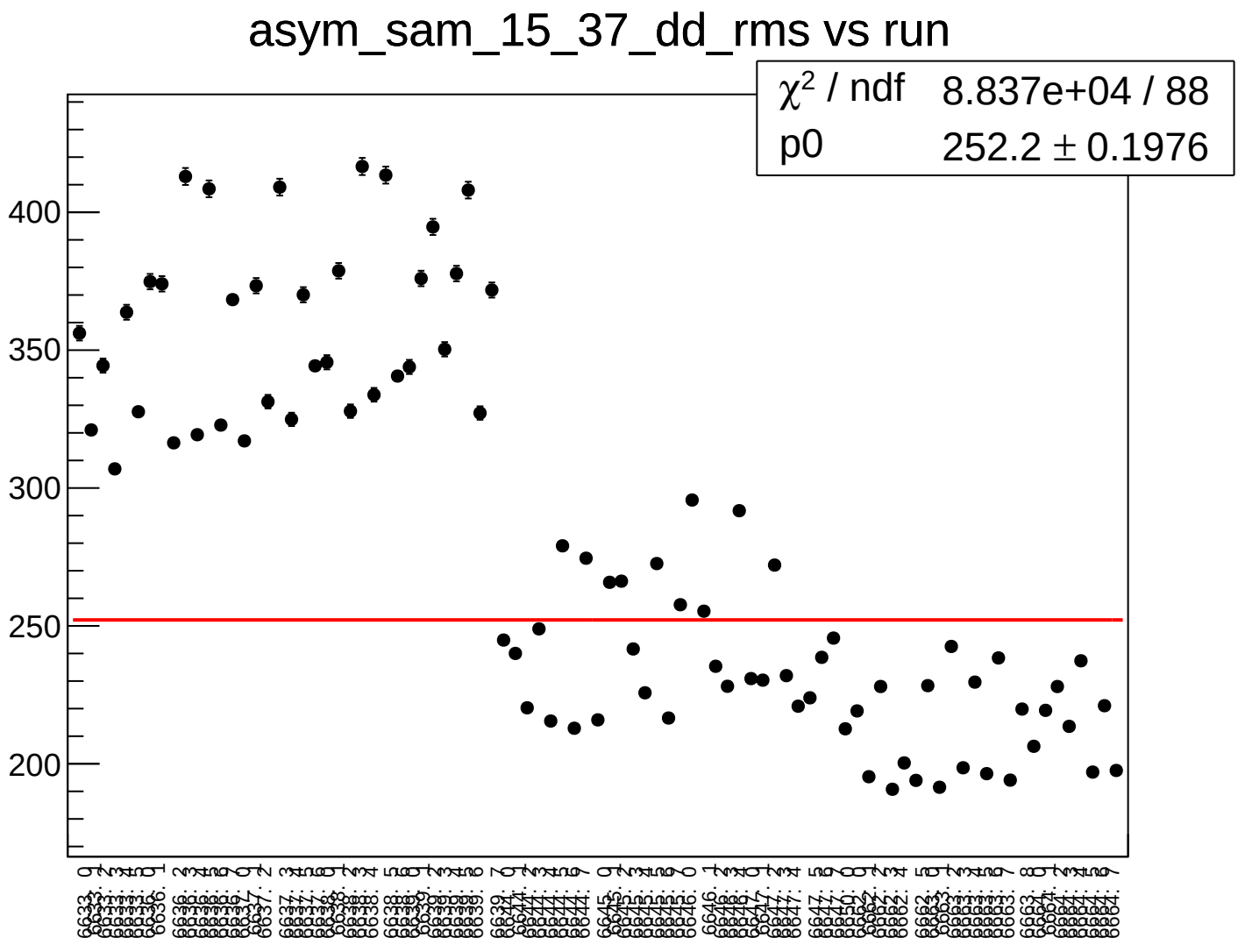

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 100.4 / 88
p0 −503.7 ± 275.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −228.9
Std Dev 206
3
2
1
0
−1
−2

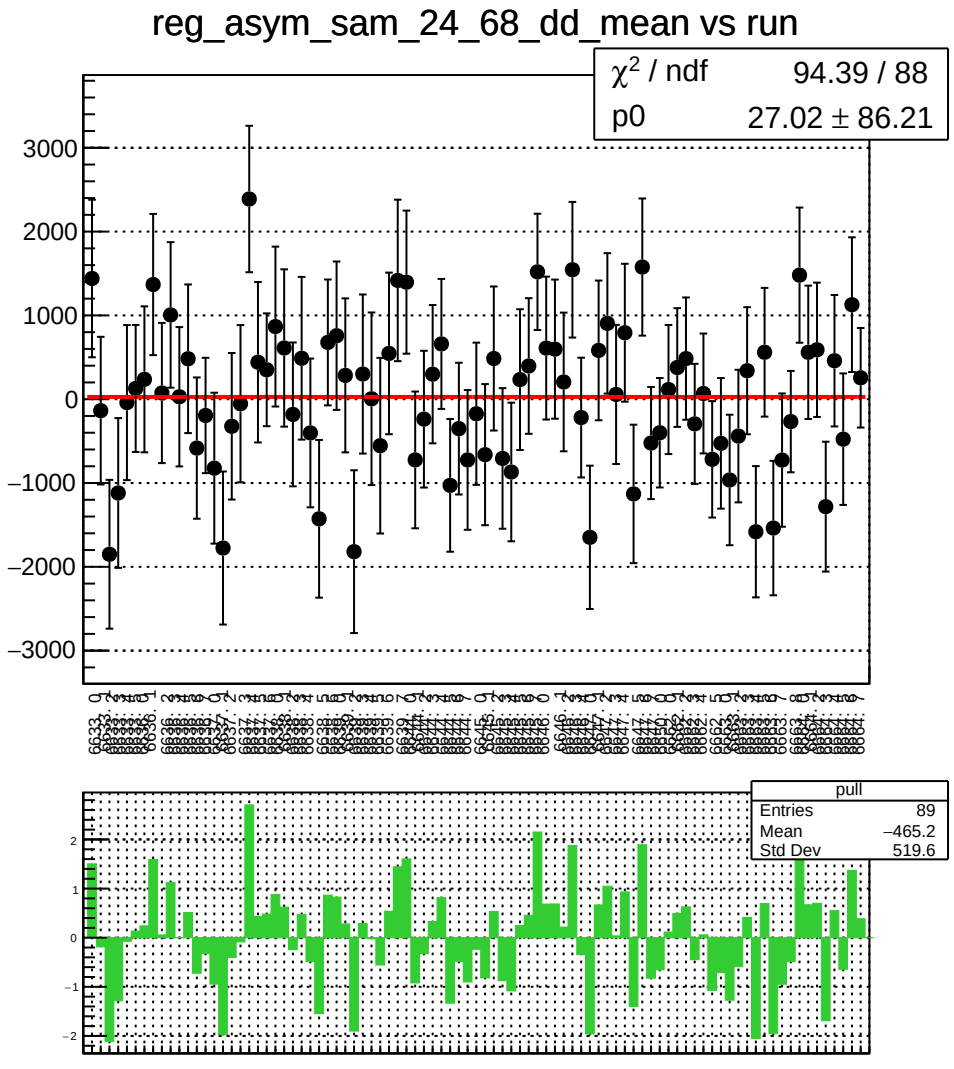

pull1D
Entries 89
Mean 0.005503
Std Dev 1.062
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

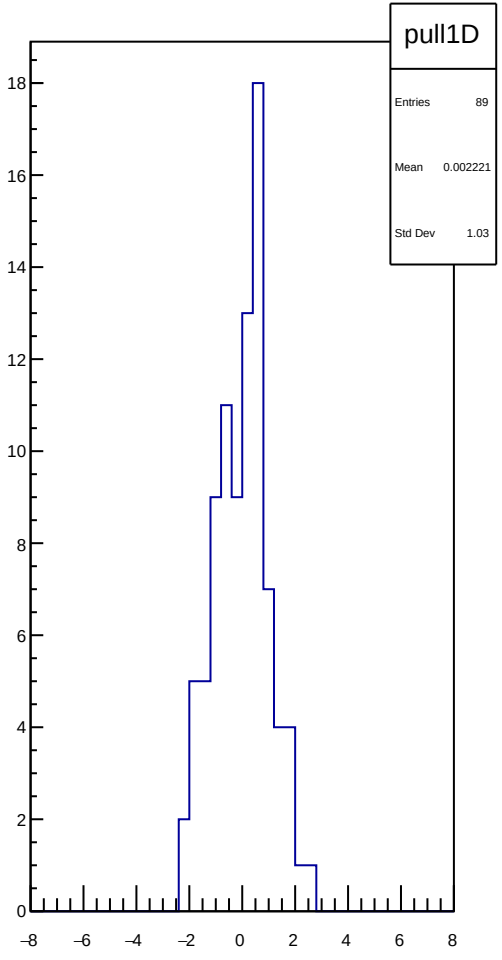

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 9.079e+04 / 88
p0 248.8 ± 0.1951
400
350
300
250
200

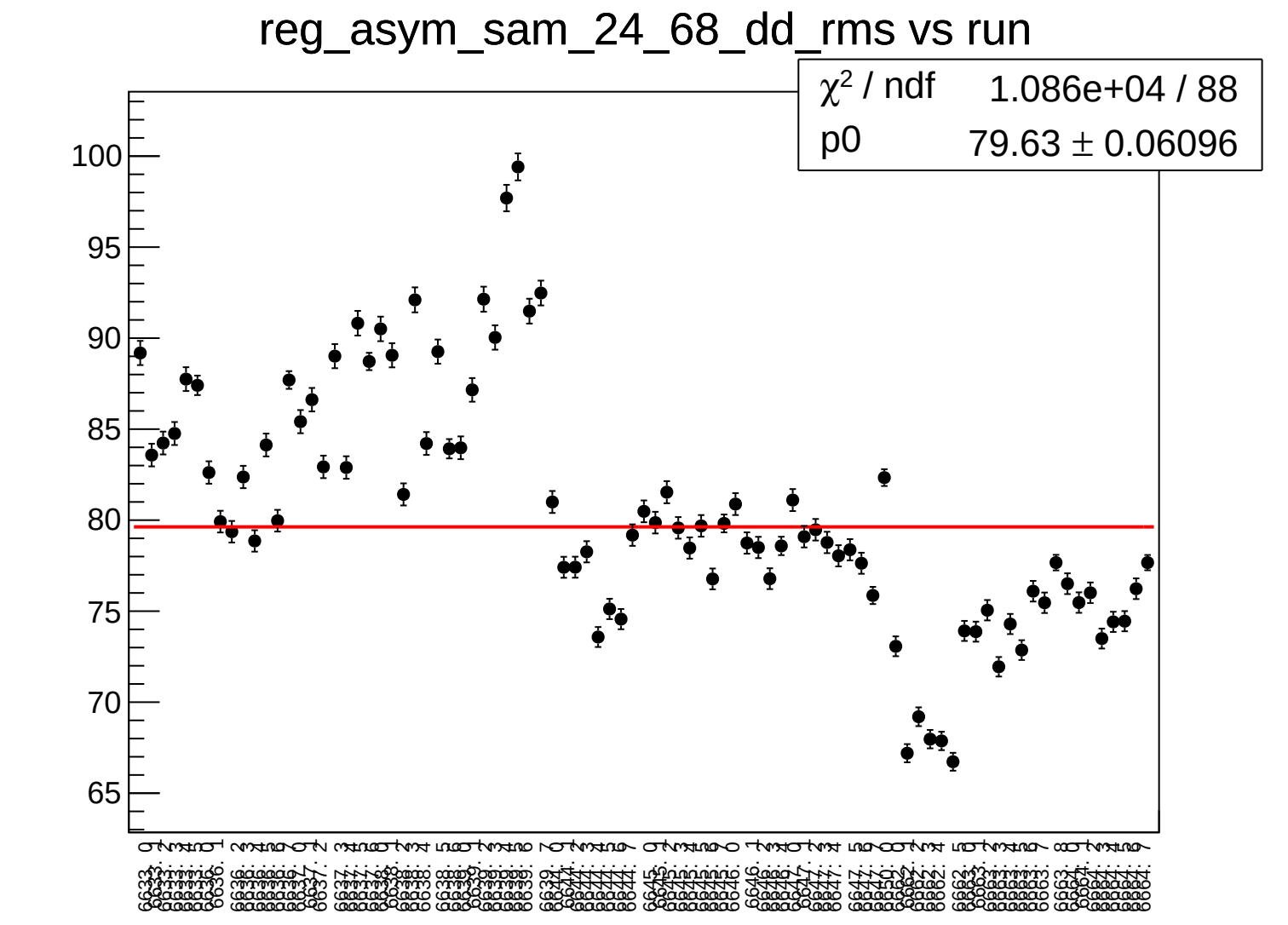

asym_sam_15_37_dd_mean vs run
χ² / ndf 98.1 / 88
p0 529.1 ± 279.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −191.5
Std Dev 171.1
2
1
0
−1
−2
−3

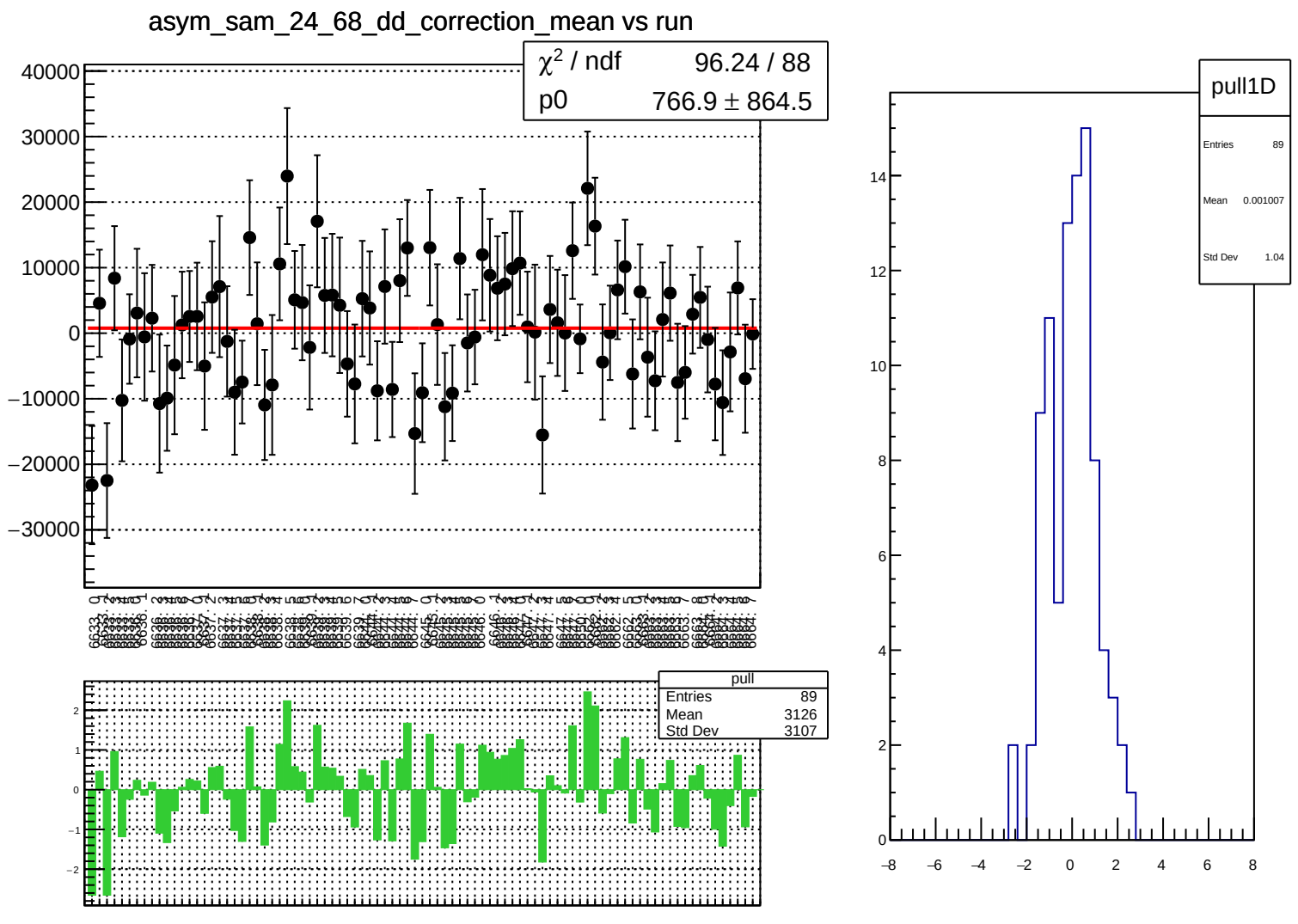

pull1D
Entries 89
Mean −0.006501
Std Dev 1.05
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

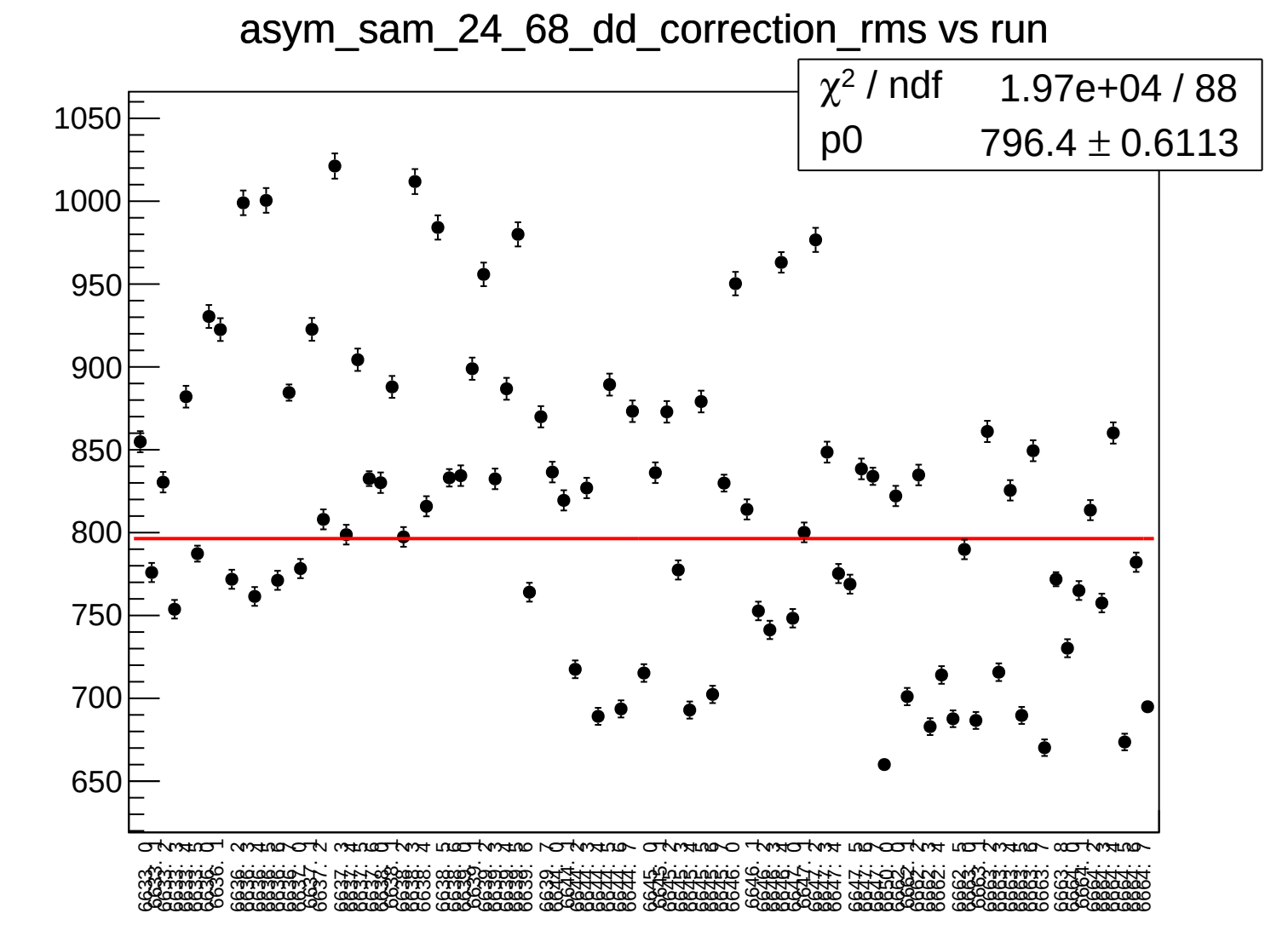

asym_sam_15_37_dd_rms vs run
χ^2 / ndf 8.837e+04 / 88
p0 252.2 ± 0.1976
400
350
300
250
200

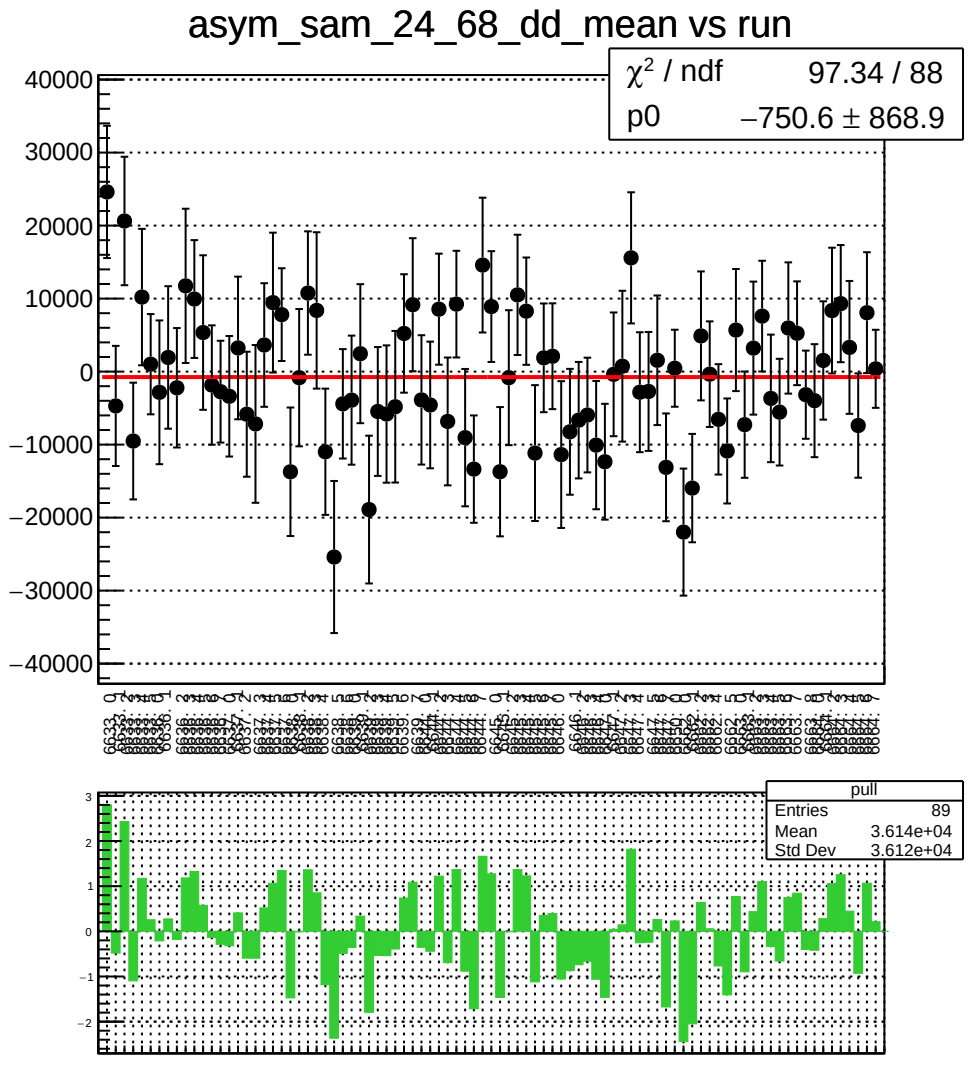

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 94.39 / 88
p0 27.02 ± 86.21
pull
Entries 89
Mean −465.2
Std Dev 519.6

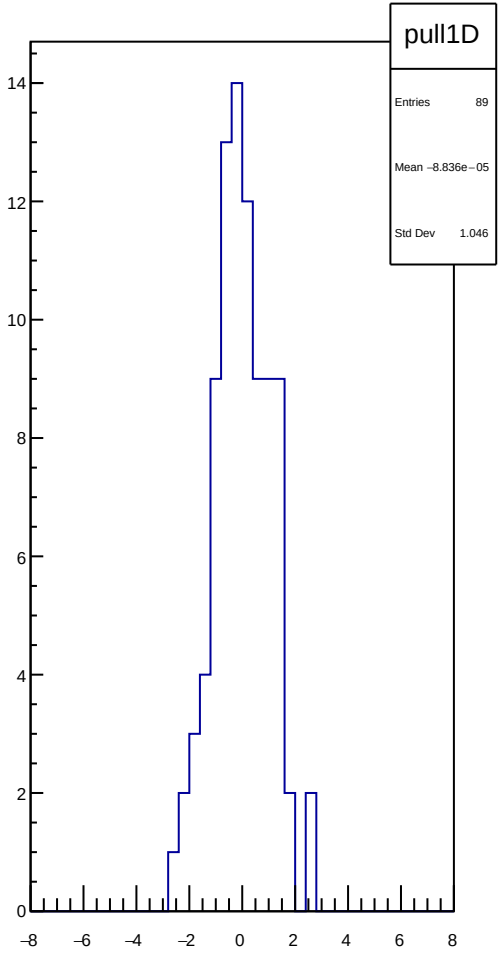

pull1D
Entries 89
Mean 0.002221
Std Dev 1.03

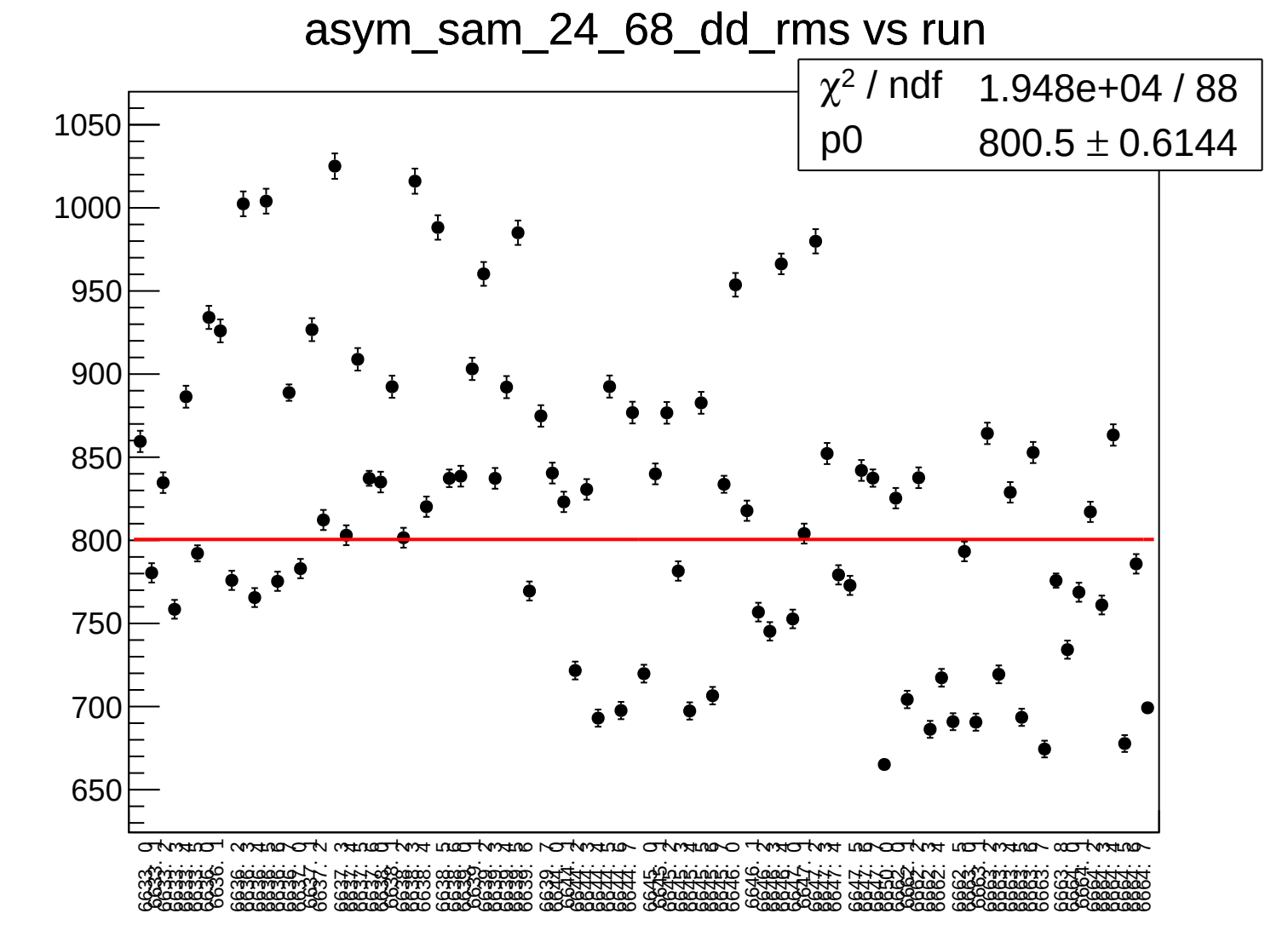

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 1.086e+04 / 88
p0 79.63 ± 0.06096
100
95
90
85
80
75
70
65

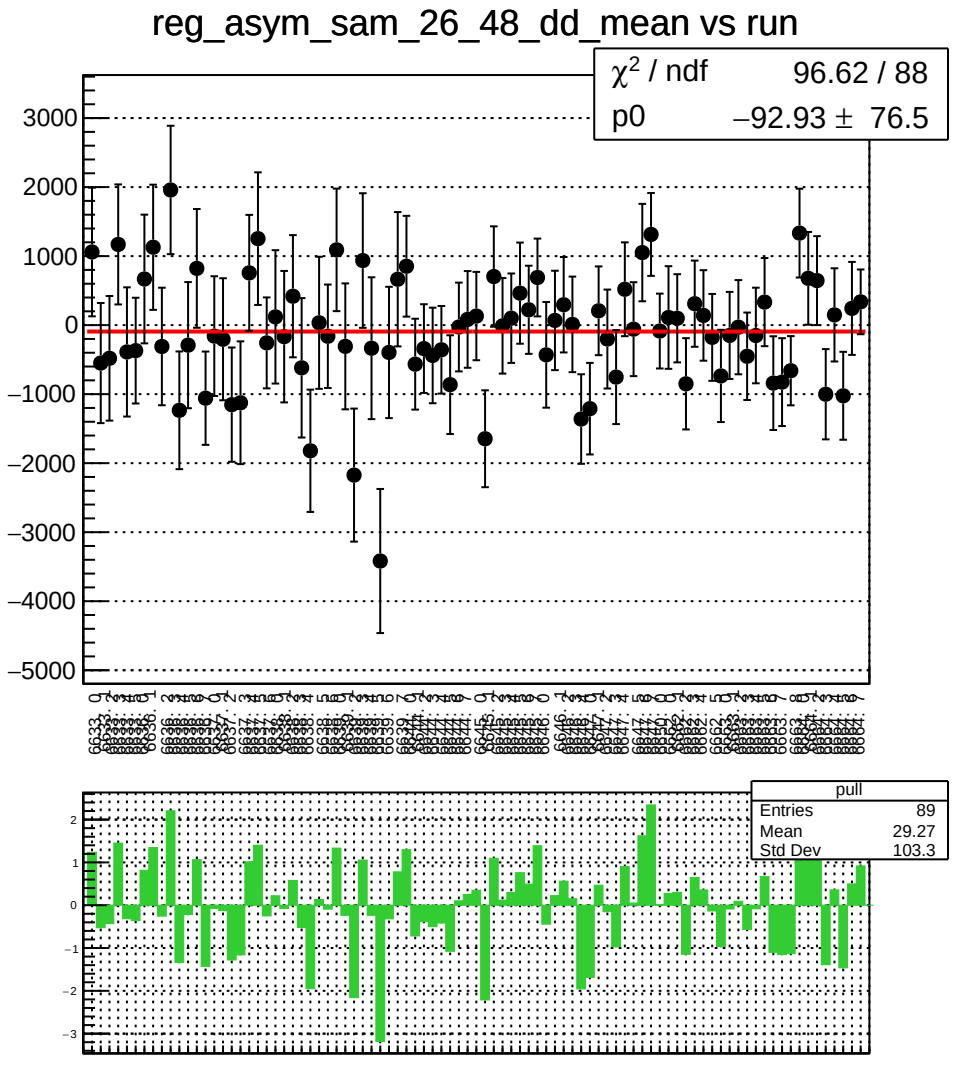

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 96.24 / 88
p0 766.9 ± 864.5
pull
Entries 89
Mean 3126
Std Dev 3107
pull1D
Entries 89
Mean 0.001007
Std Dev 1.04

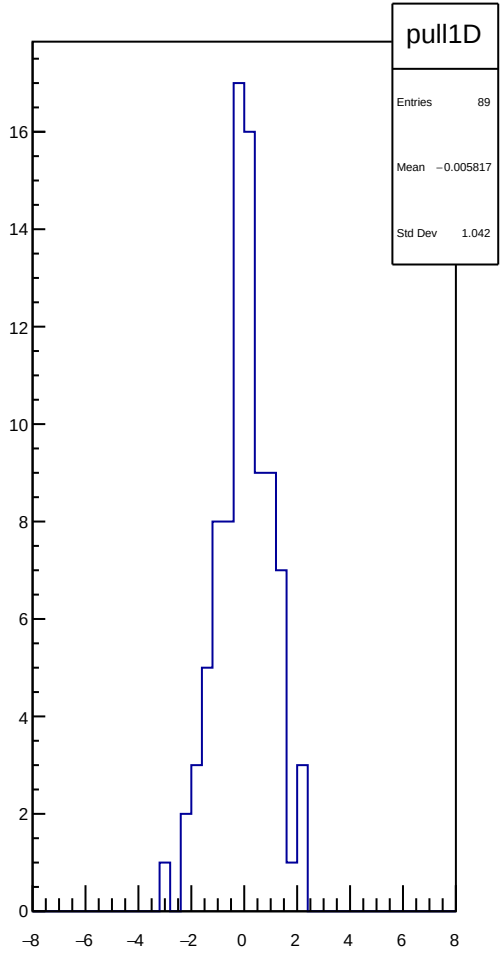

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 1.97e+04 / 88
p0 796.4 ± 0.6113
1050
1000
950
900
850
800
750
700
650

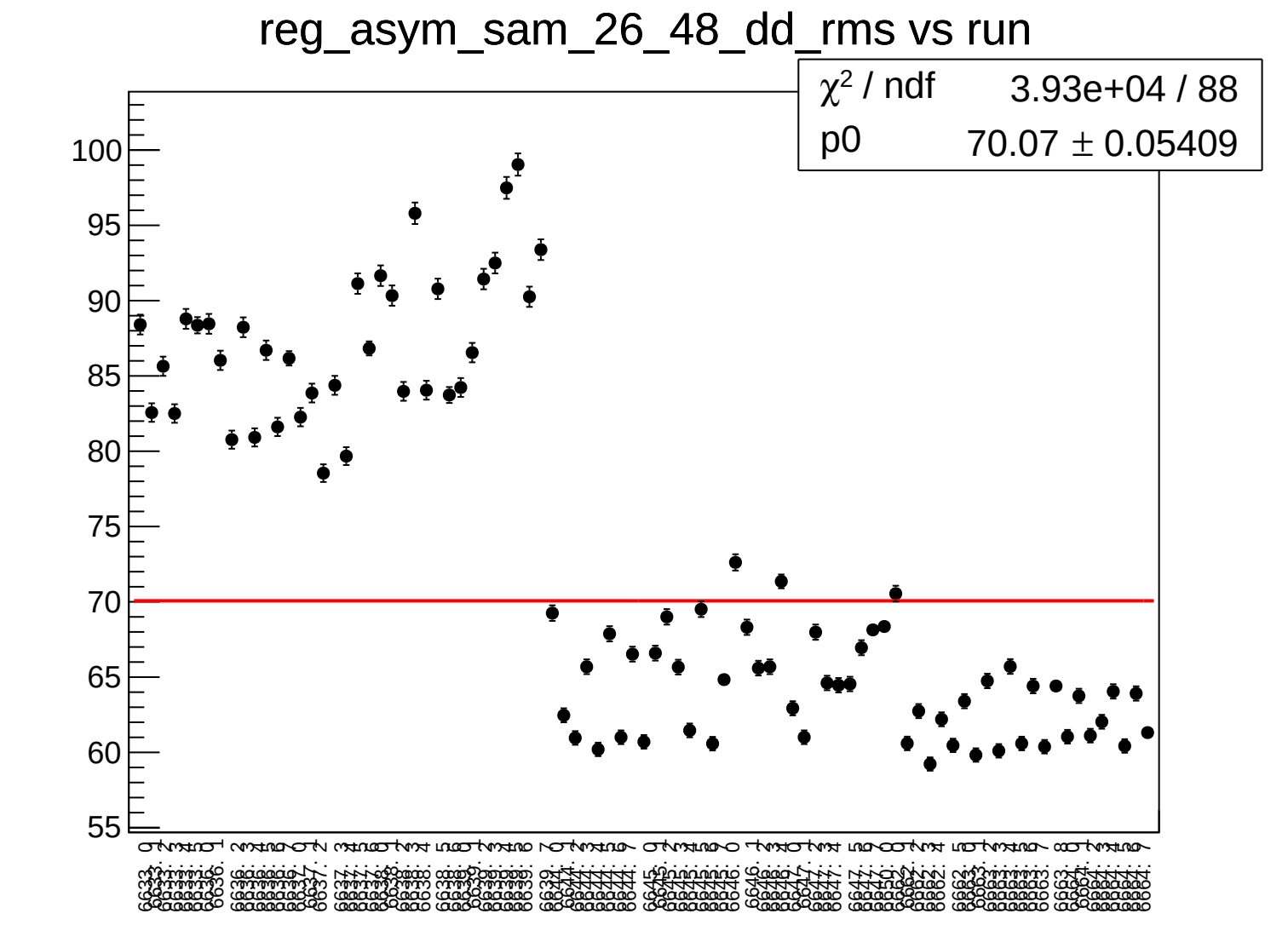

asym_sam_24_68_dd_mean vs run
χ² / ndf 97.34 / 88
p0 −750.6 ± 868.9
pull
Entries 89
Mean 3.614e+04
Std Dev 3.612e+04

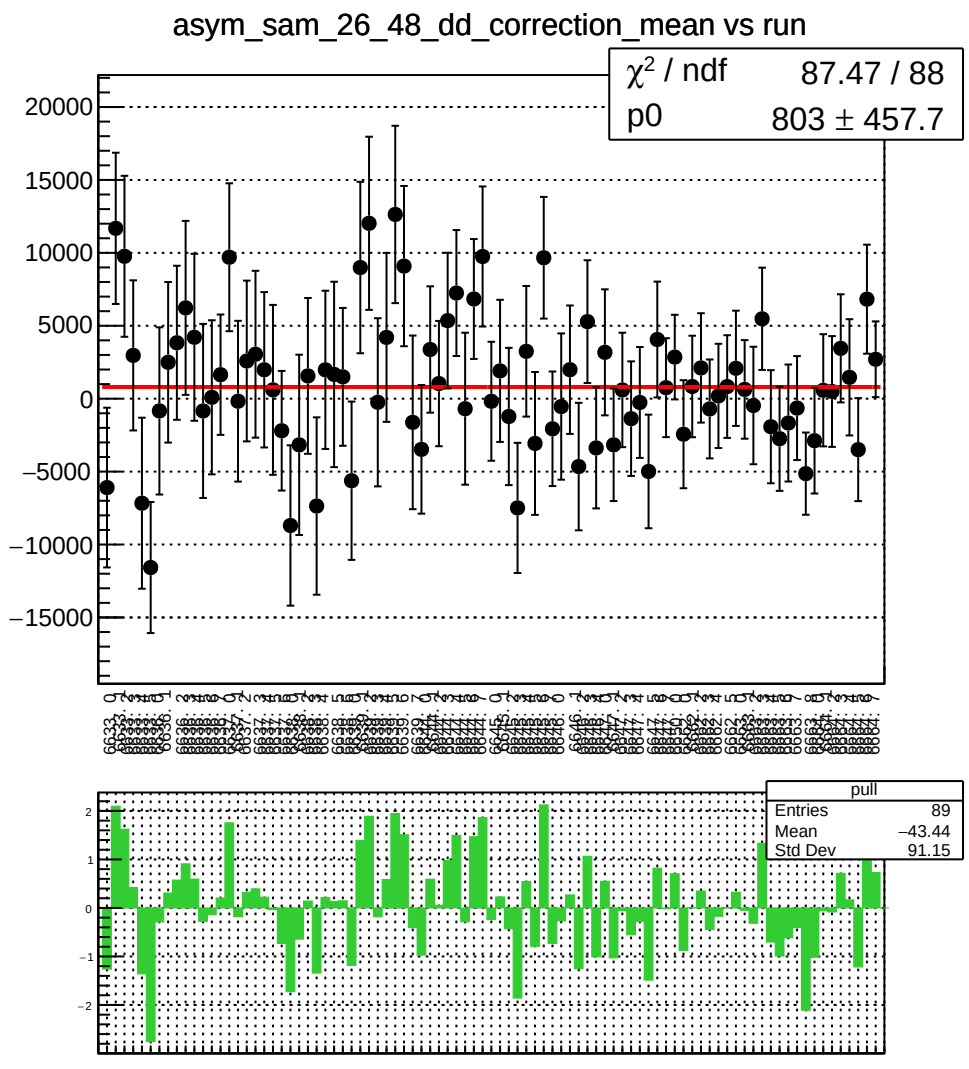

pull1D
Entries 89
Mean −8.836e−05
Std Dev 1.046

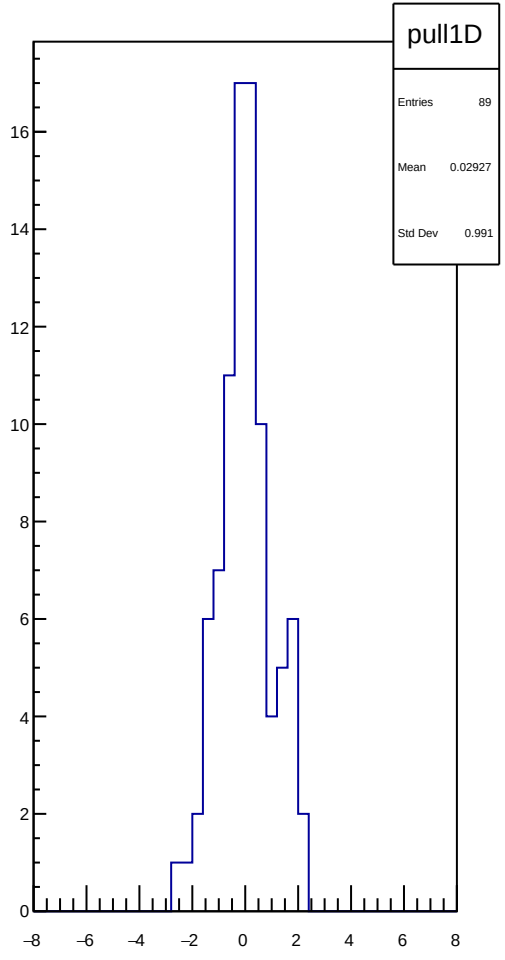

asym_sam_24_68_dd_rms vs run
χ² / ndf 1.948e+04 / 88
p0 800.5 ± 0.6144
1050
1000
950
900
850
800
750
700
650

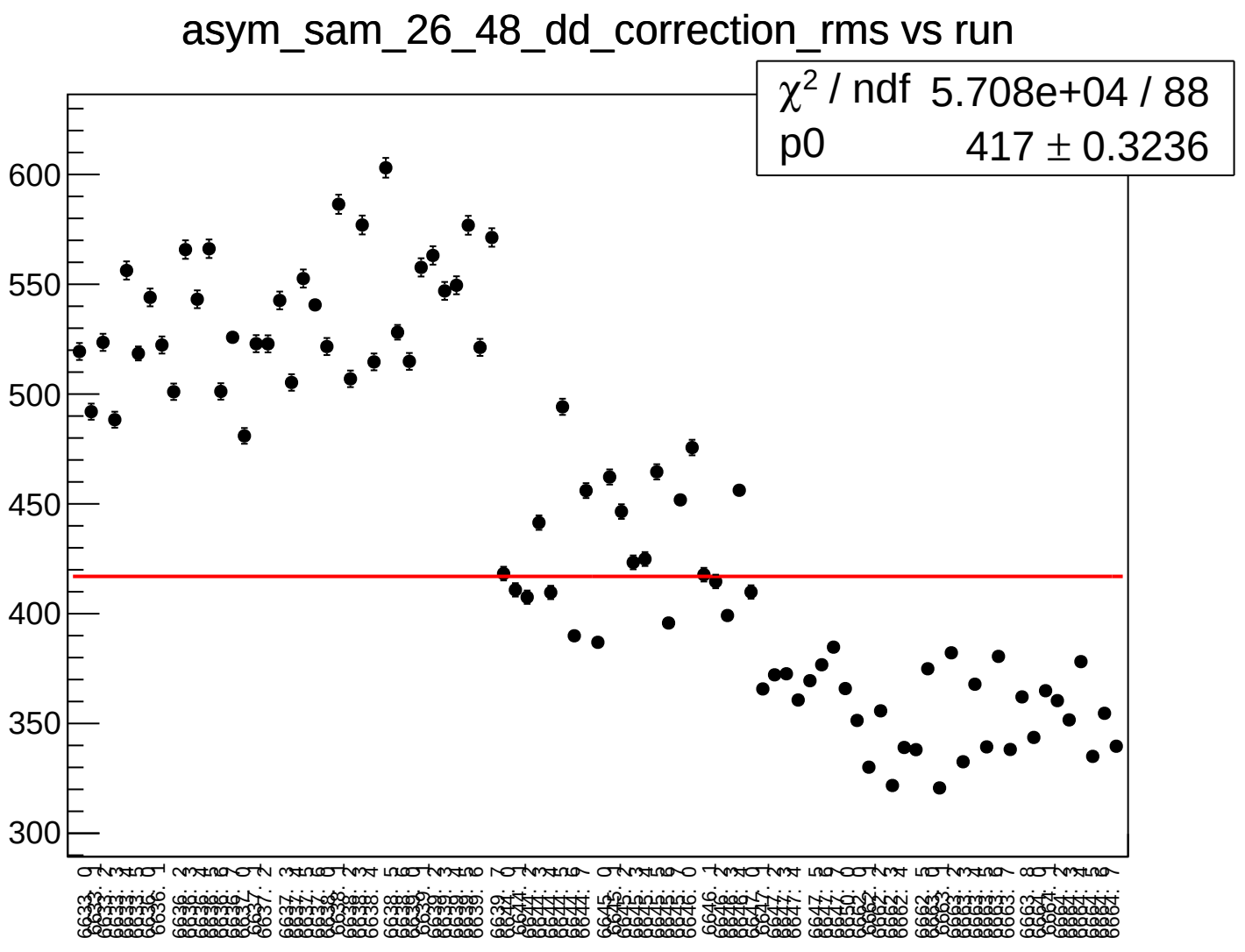

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 96.62 / 88
p0 −92.93 ± 76.5
pull
Entries 89
Mean 29.27
Std Dev 103.3

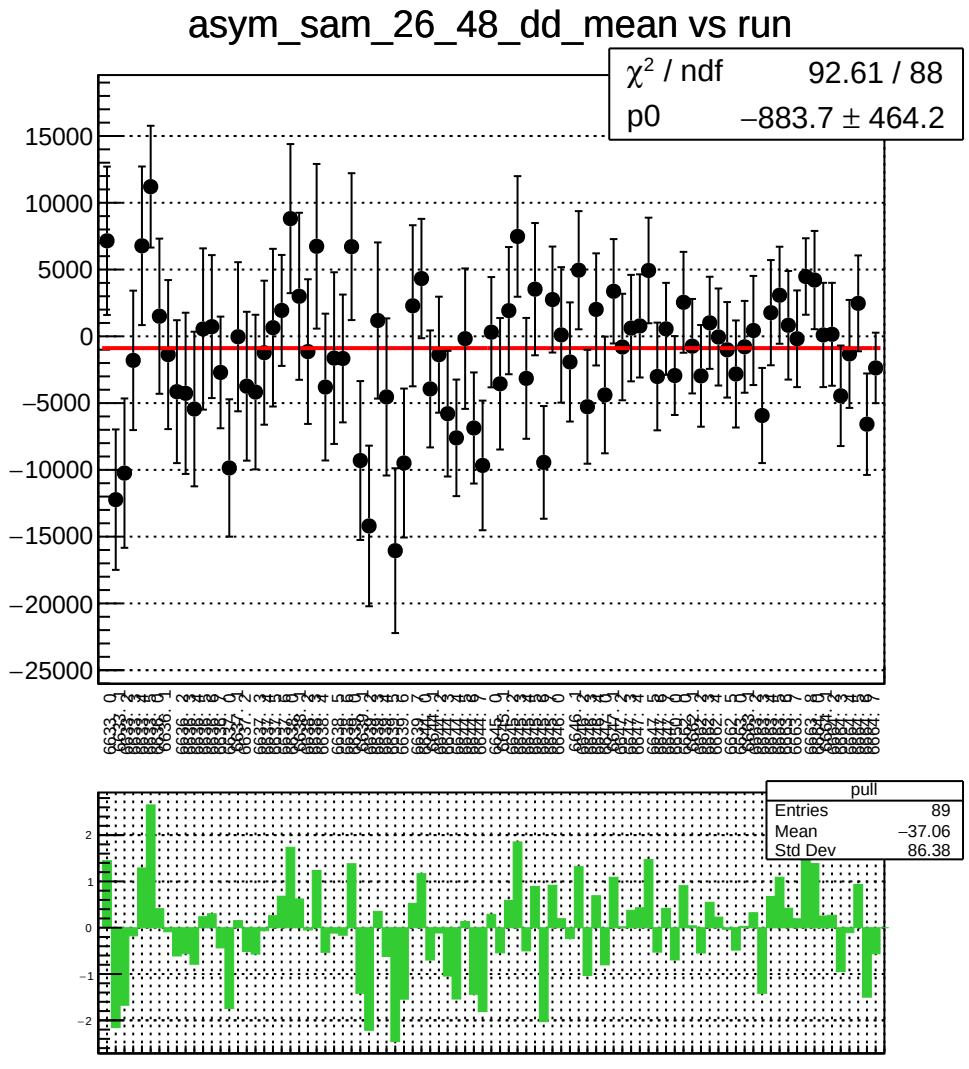

pull1D
Entries 89
Mean −0.005817
Std Dev 1.042

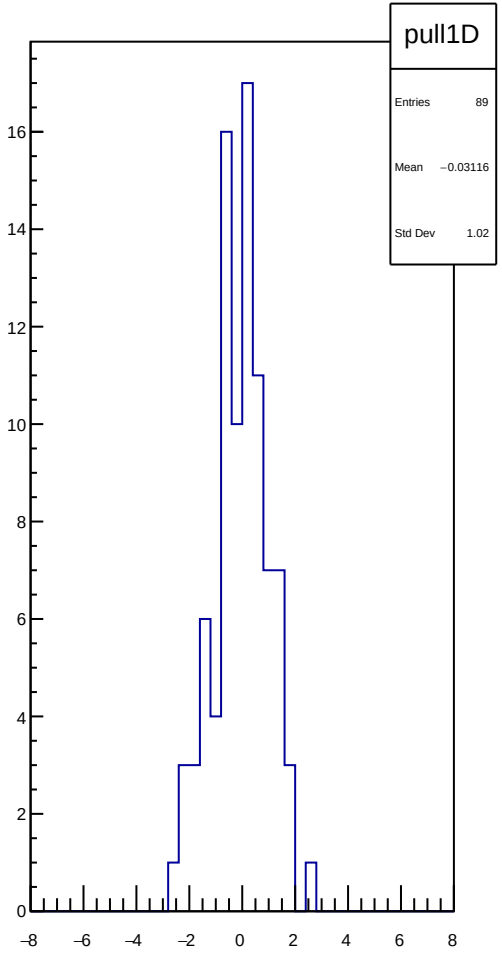

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 3.93e+04 / 88
p0 70.07 ± 0.05409
100
95
90
85
80
75
70
65
60
55

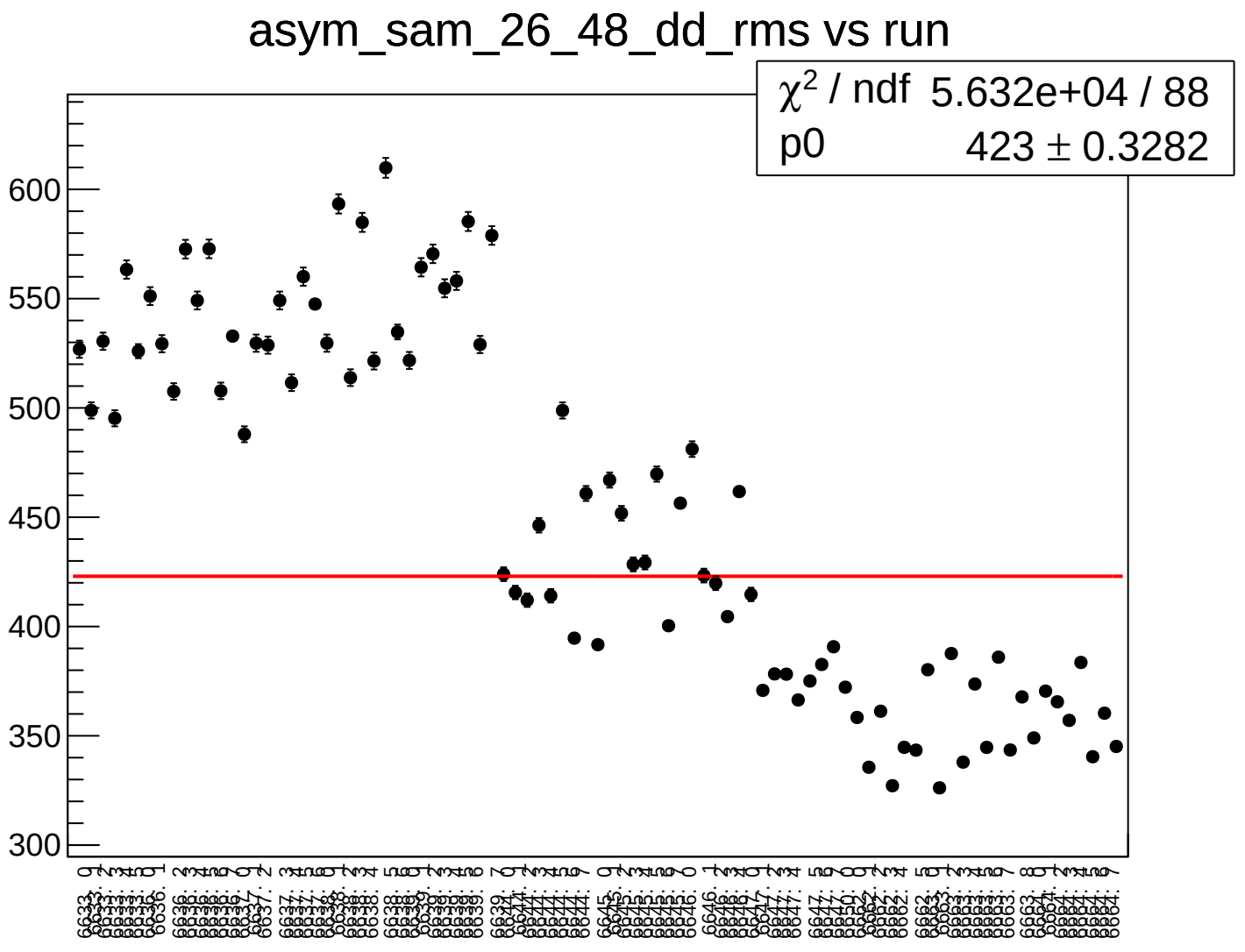

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 87.47 / 88
p0 803 ± 457.7
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −43.44
Std Dev 91.15
2
1
0
−1
−2

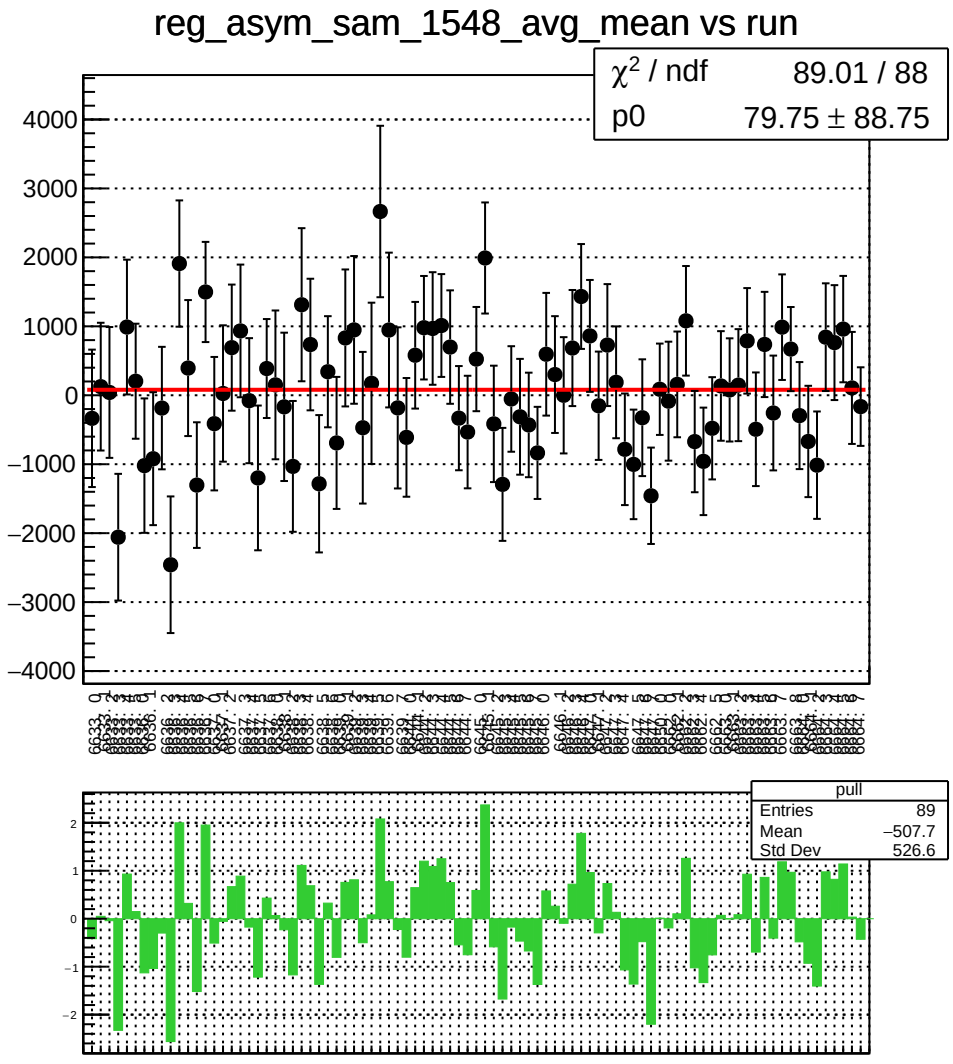

pull1D
Entries 89
Mean 0.02927
Std Dev 0.991
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

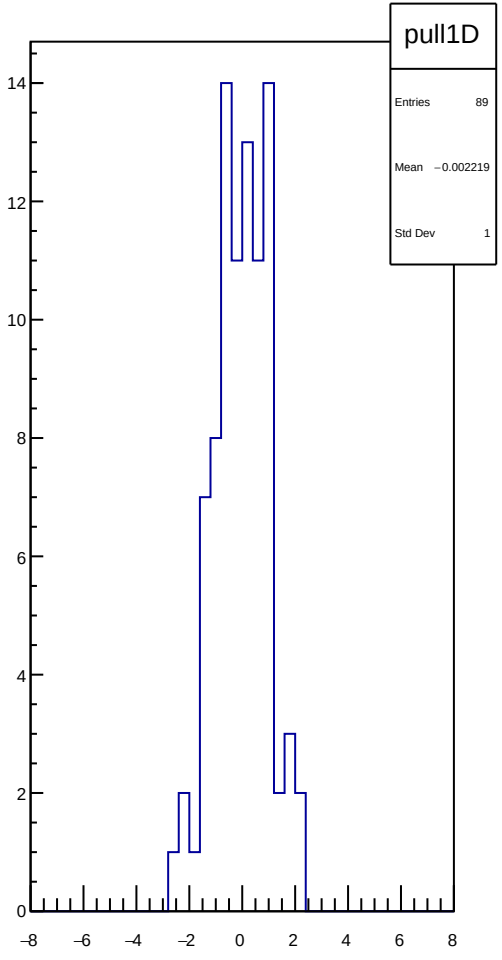

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 5.708e+04 / 88
p0 417 ± 0.3236
600
550
500
450
400
350
300

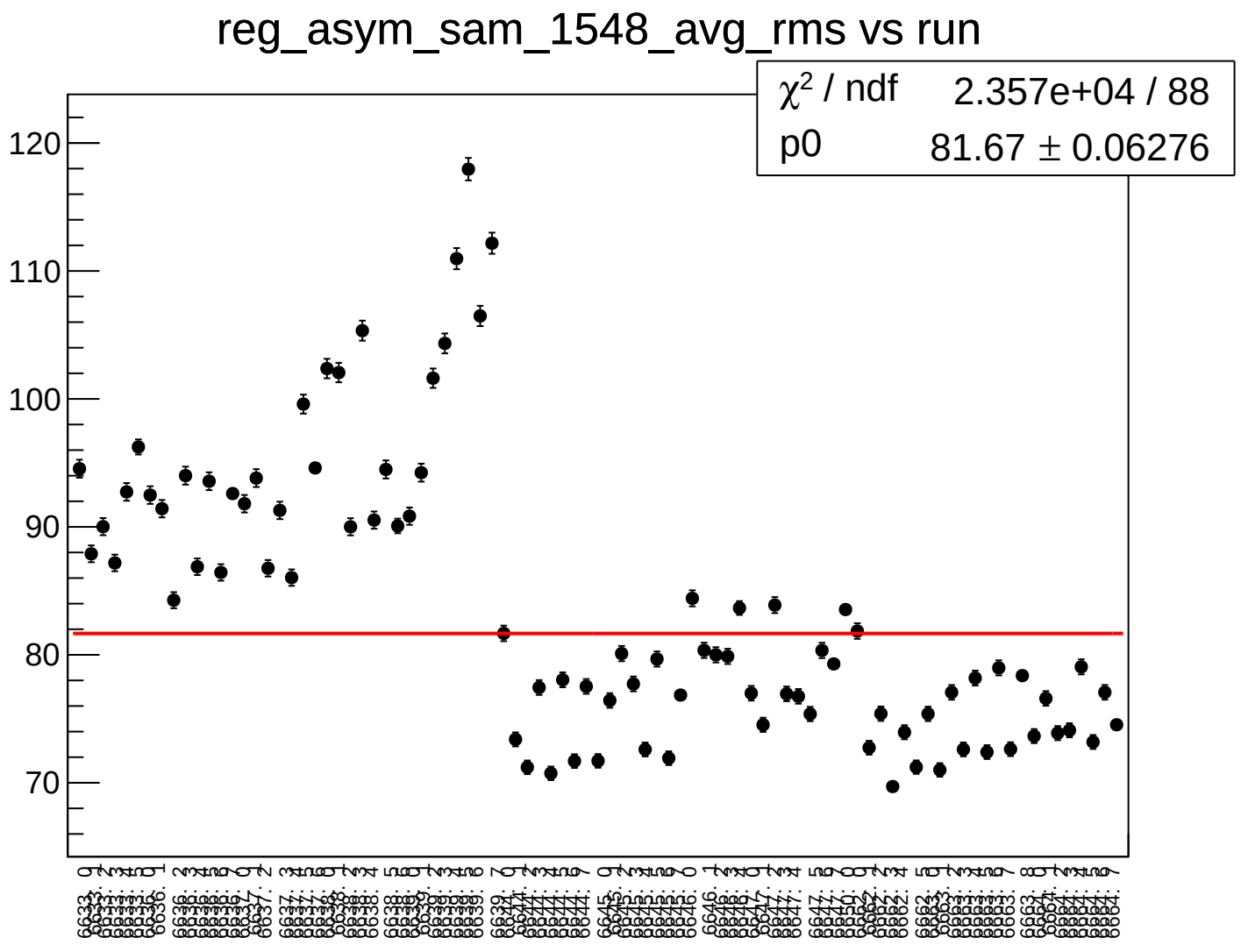

asym_sam_26_48_dd_mean vs run
χ² / ndf 92.61 / 88
p0 −883.7 ± 464.2
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 89
Mean −37.06
Std Dev 86.38
2
1
0
−1
−2

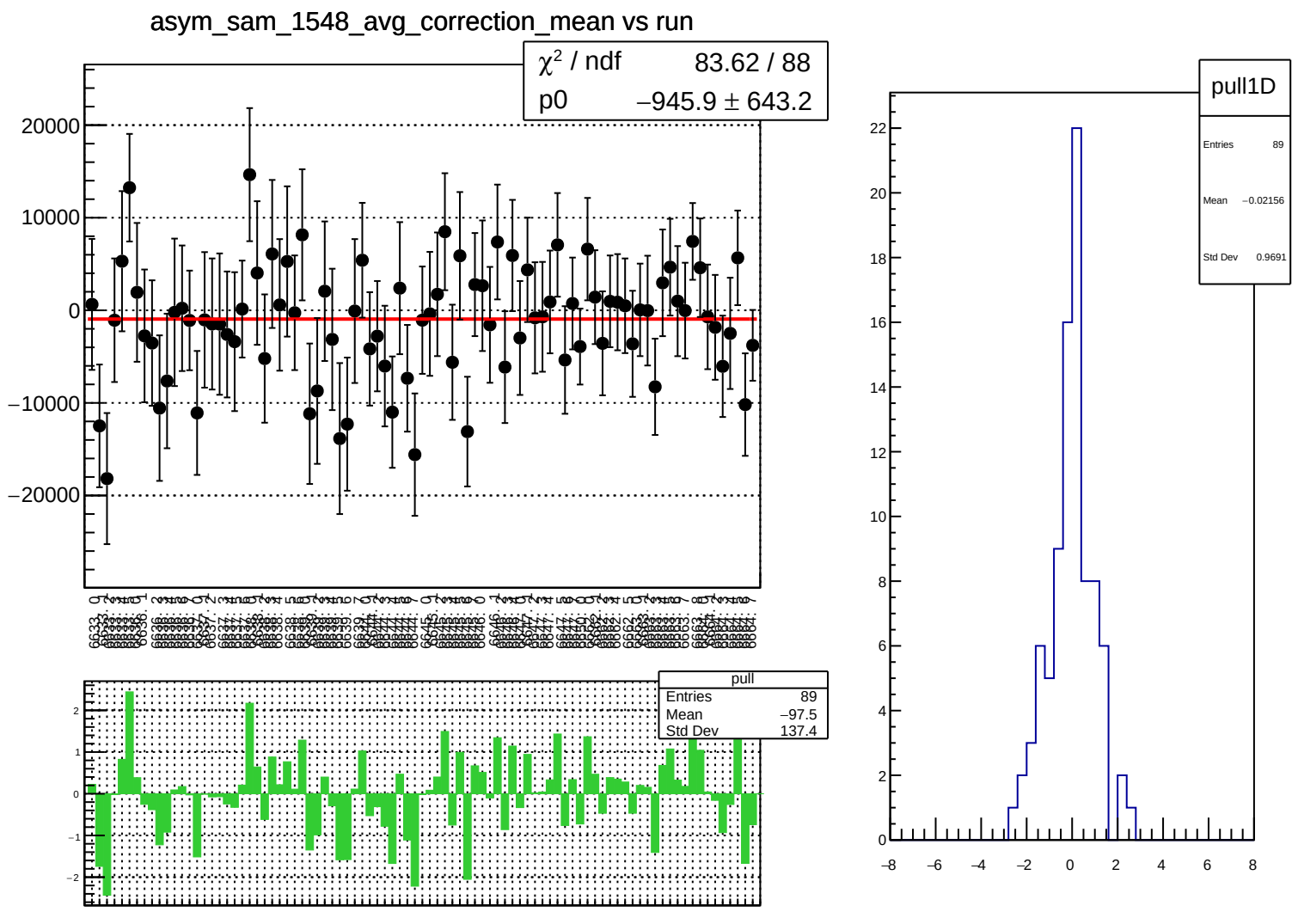

pull1D
Entries 89
Mean −0.03116
Std Dev 1.02
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

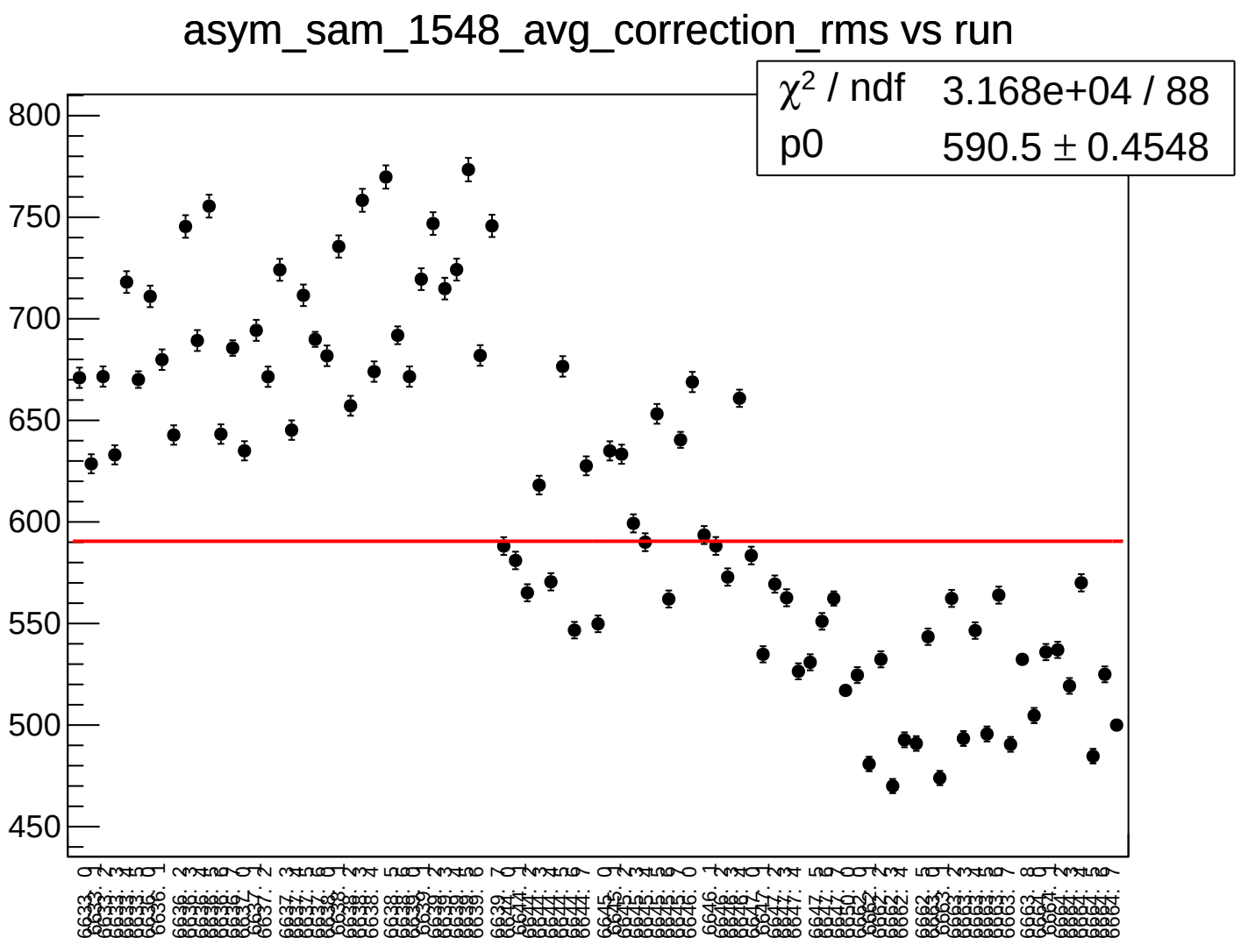

asym_sam_26_48_dd_rms vs run
χ^2 / ndf 5.632e+04 / 88
p0 423 ± 0.3282
600
550
500
450
400
350
300

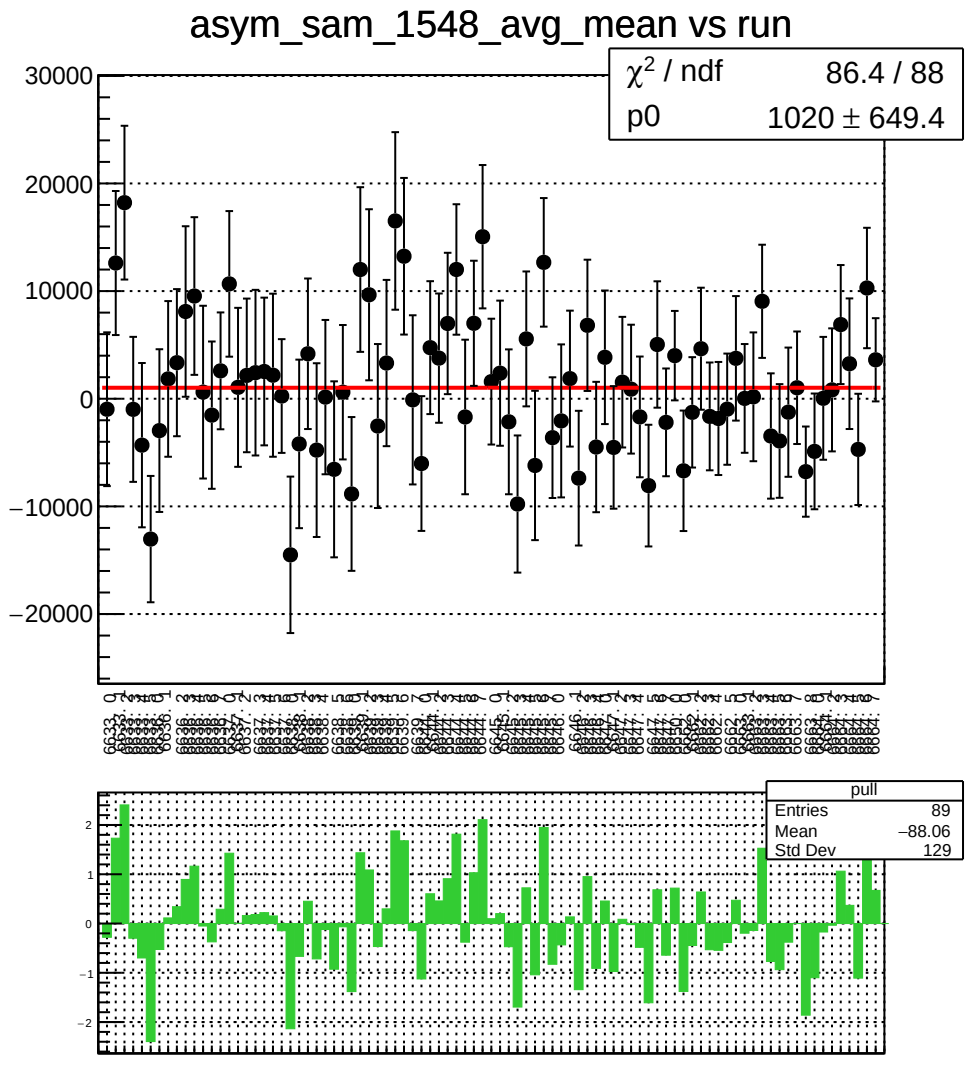

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 89.01 / 88
p0 79.75 ± 88.75
pull
Entries 89
Mean −507.7
Std Dev 526.6

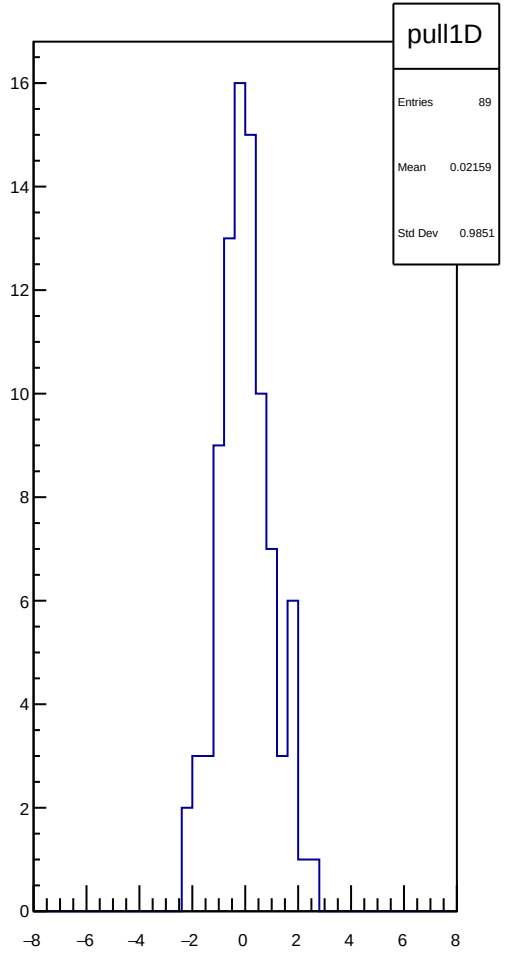

pull1D
Entries 89
Mean −0.002219
Std Dev 1

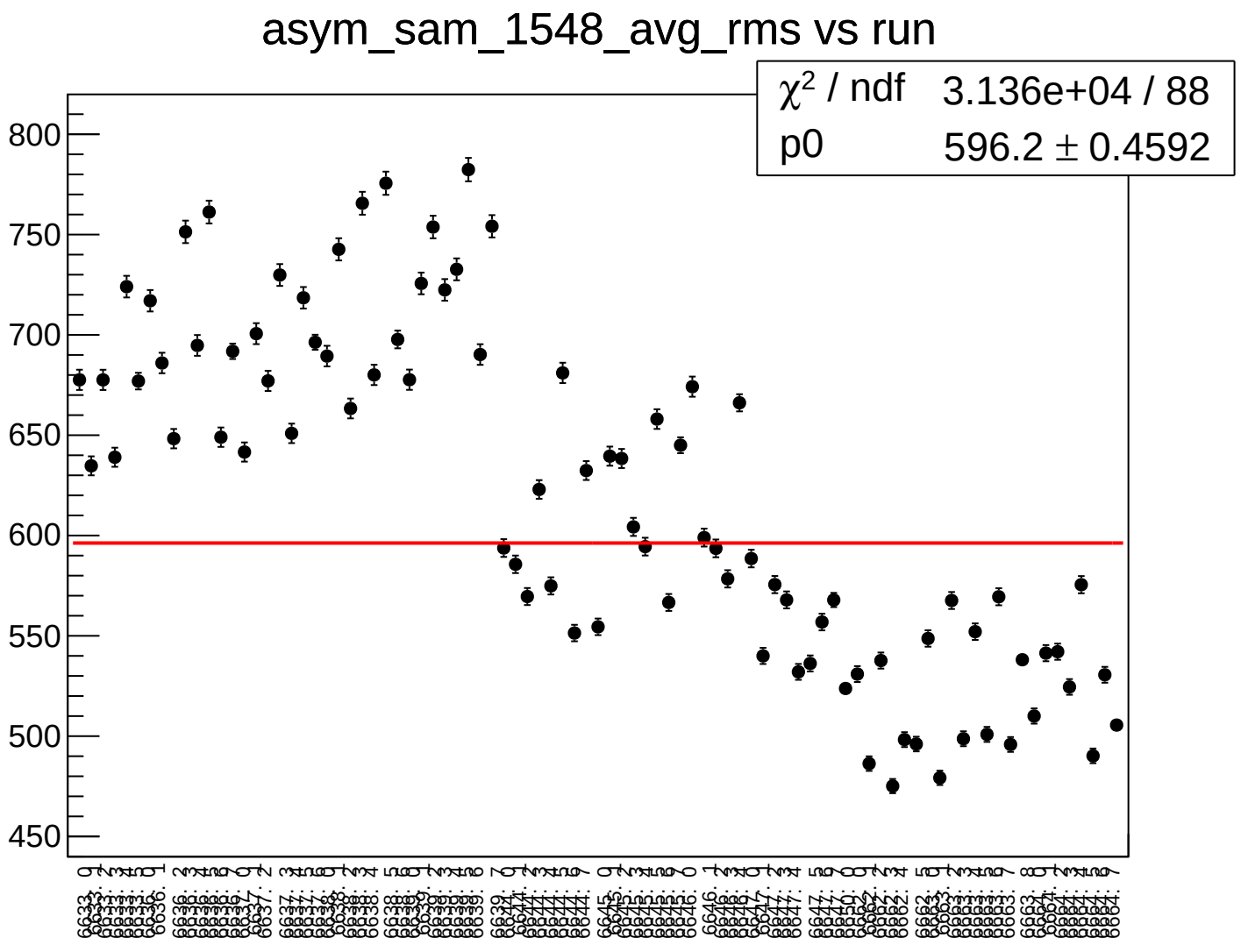

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 2.357e+04 / 88
p0 81.67 ± 0.06276
120
110
100
90
80
70

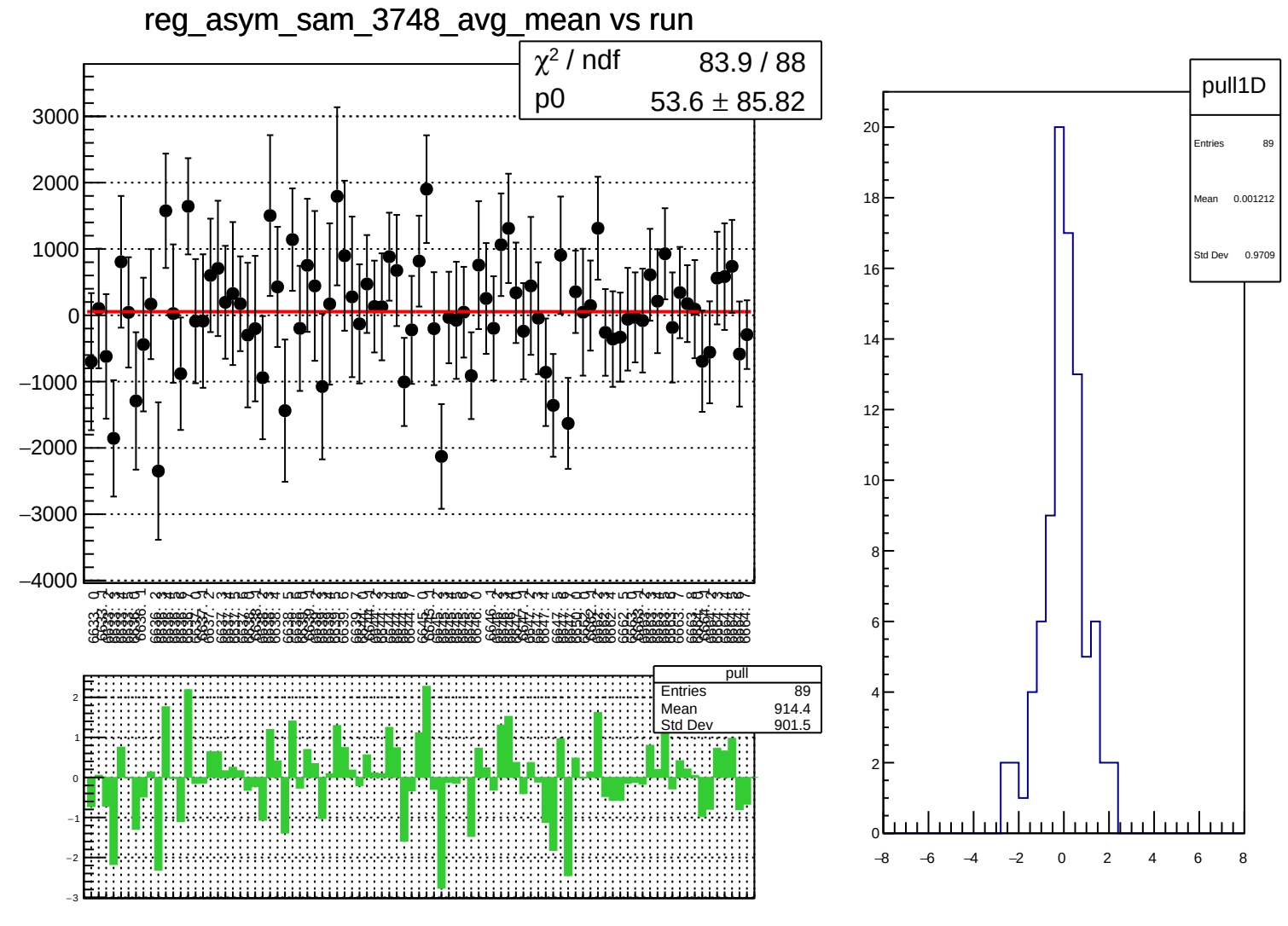

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 83.62 / 88
p0 −945.9 ± 643.2
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −97.5
Std Dev 137.4
2
1
0
−1
−2
pull1D
Entries 89
Mean −0.02156
Std Dev 0.9691
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

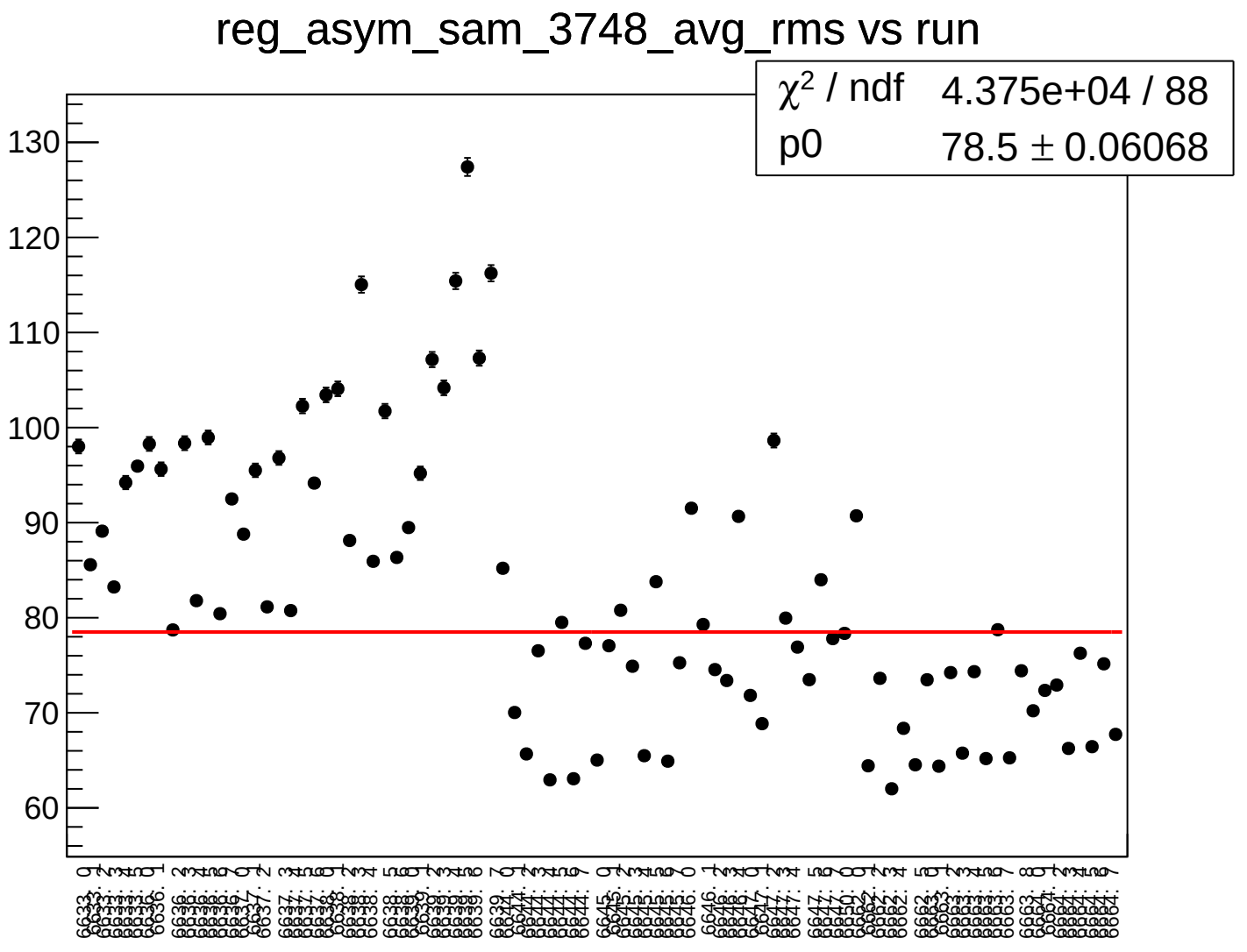

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 3.168e+04 / 88
p0 590.5 ± 0.4548
800
750
700
650
600
550
500
450

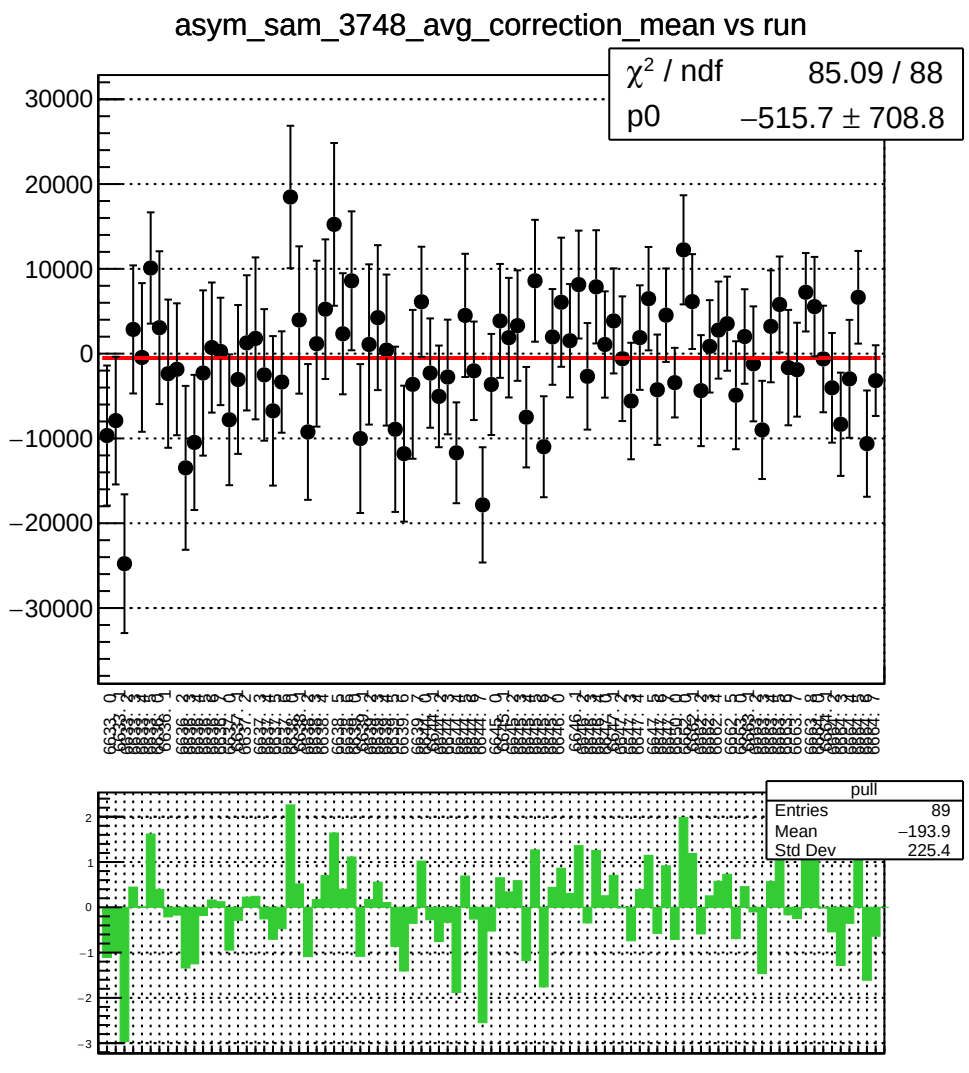

asym_sam_1548_avg_mean vs run
χ² / ndf 86.4 / 88
p0 1020 ± 649.4
30000
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −88.06
Std Dev 129
2
1
0
−1
−2

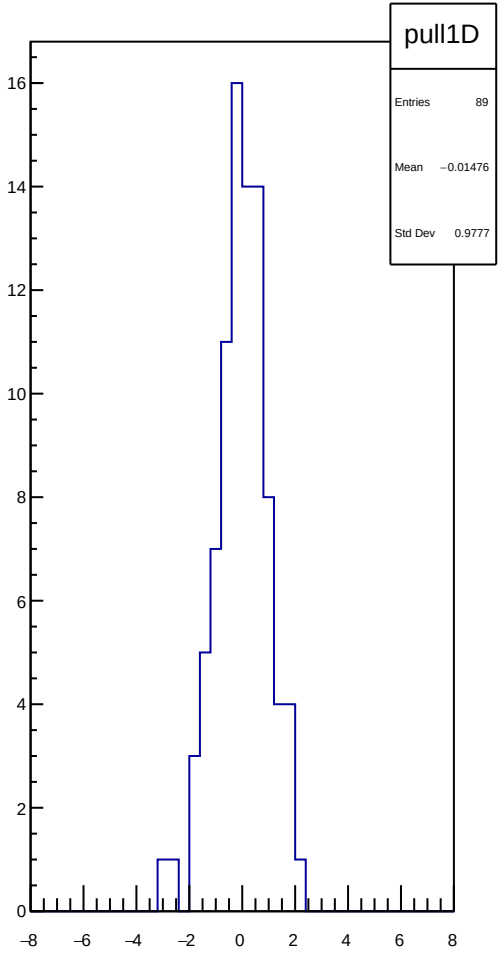

pull1D
Entries 89
Mean 0.02159
Std Dev 0.9851
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

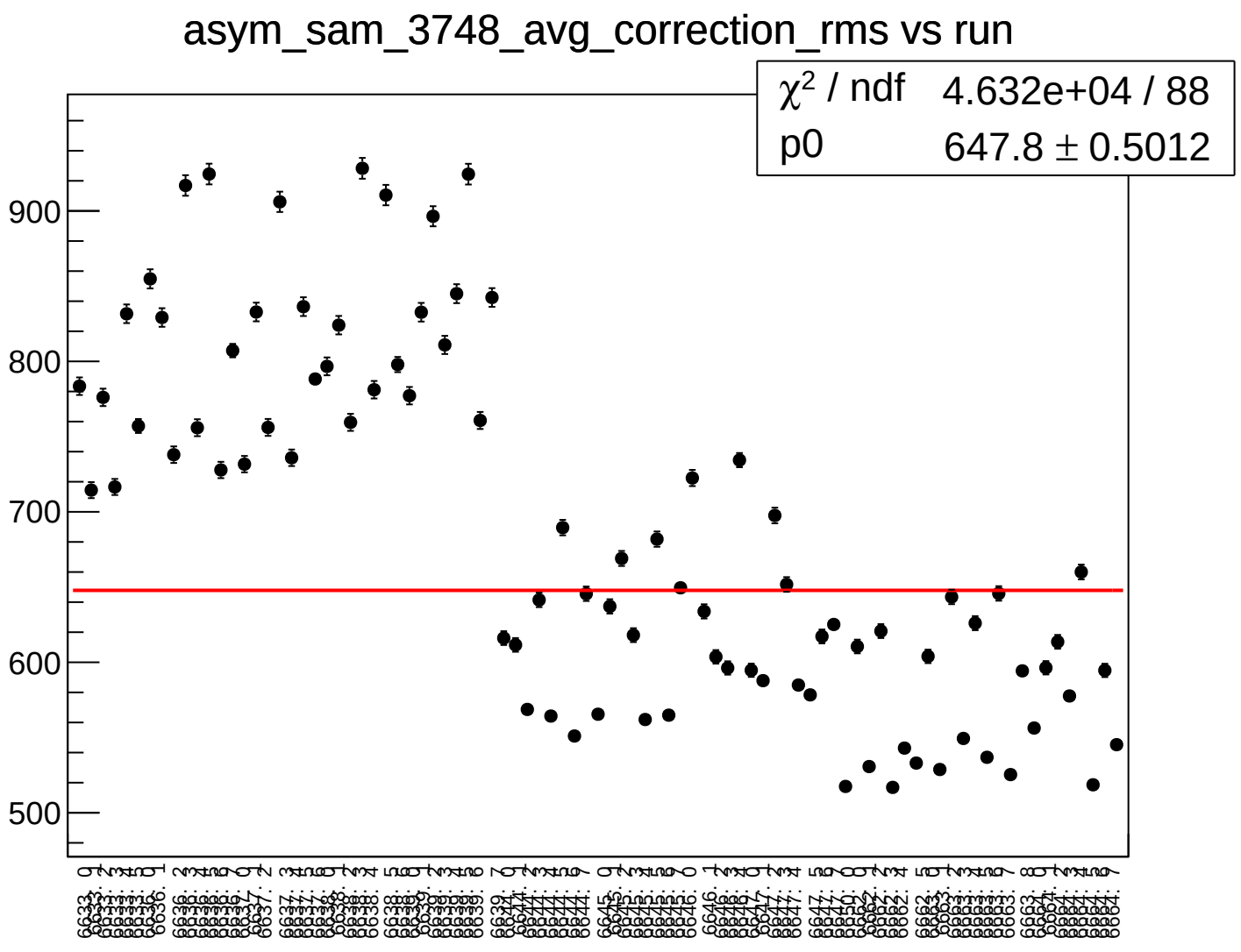

asym_sam_1548_avg_rms vs run
χ^2 / ndf 3.136e+04 / 88
p0 596.2 ± 0.4592
800
750
700
650
600
550
500
450

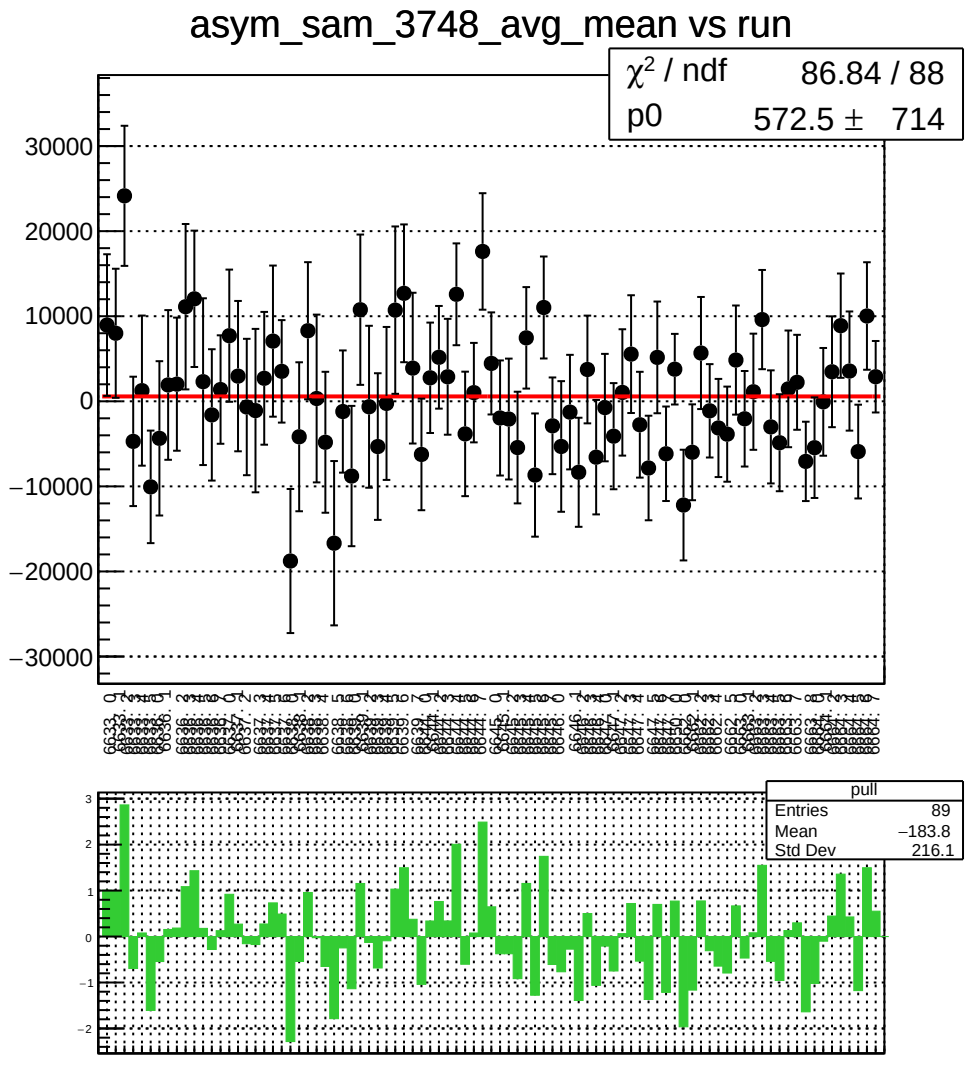

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 83.9 / 88
p0 53.6 ± 85.82
pull
Entries 89
Mean 914.4
Std Dev 901.5
pull1D
Entries 89
Mean 0.001212
Std Dev 0.9709

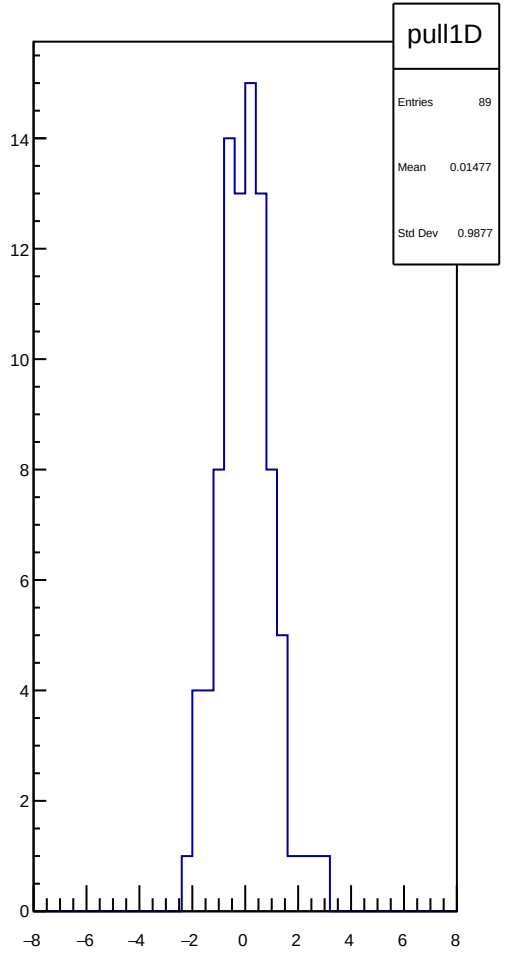

reg_asym_sam_3748_avg_rms vs run
χ^2 / ndf 4.375e+04 / 88
p0 78.5 ± 0.06068
130
120
110
100
90
80
70
60

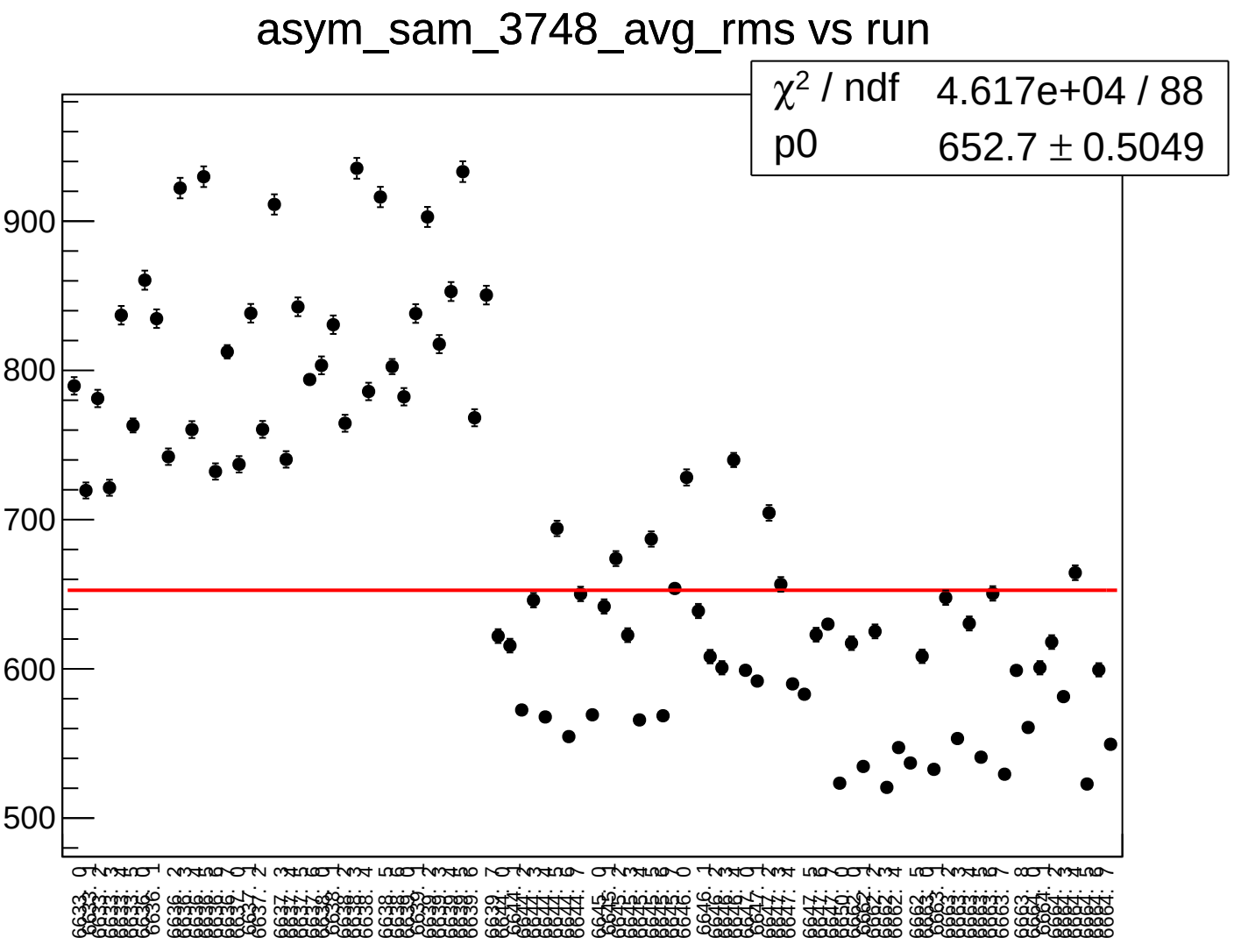

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 85.09 / 88
p0 −515.7 ± 708.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −193.9
Std Dev 225.4
2
1
0
−1
−2
−3

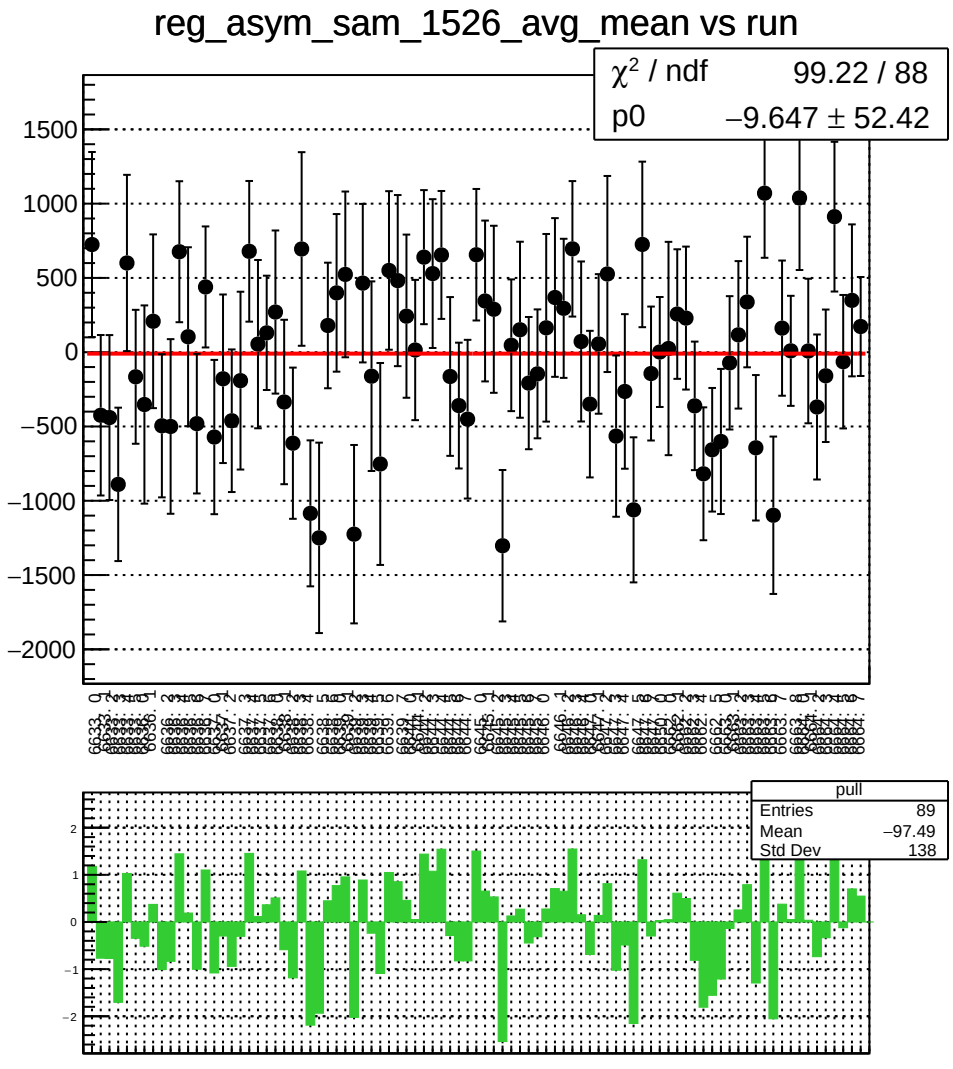

pull1D
Entries 89
Mean −0.01476
Std Dev 0.9777
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

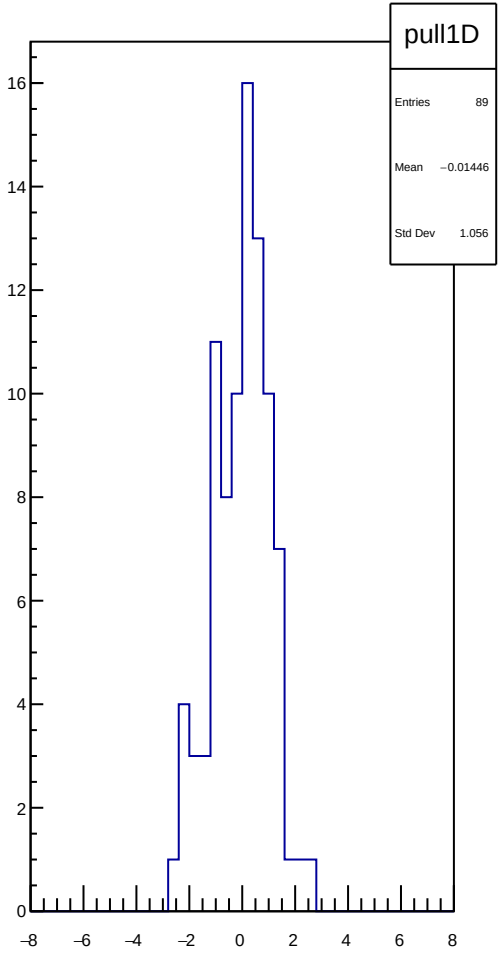

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 4.632e+04 / 88
p0 647.8 ± 0.5012
900
800
700
600
500


asym_sam_3748_avg_mean vs run
χ² / ndf 86.84 / 88
p0 572.5 ± 714
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −183.8
Std Dev 216.1
3
2
1
0
−1
−2

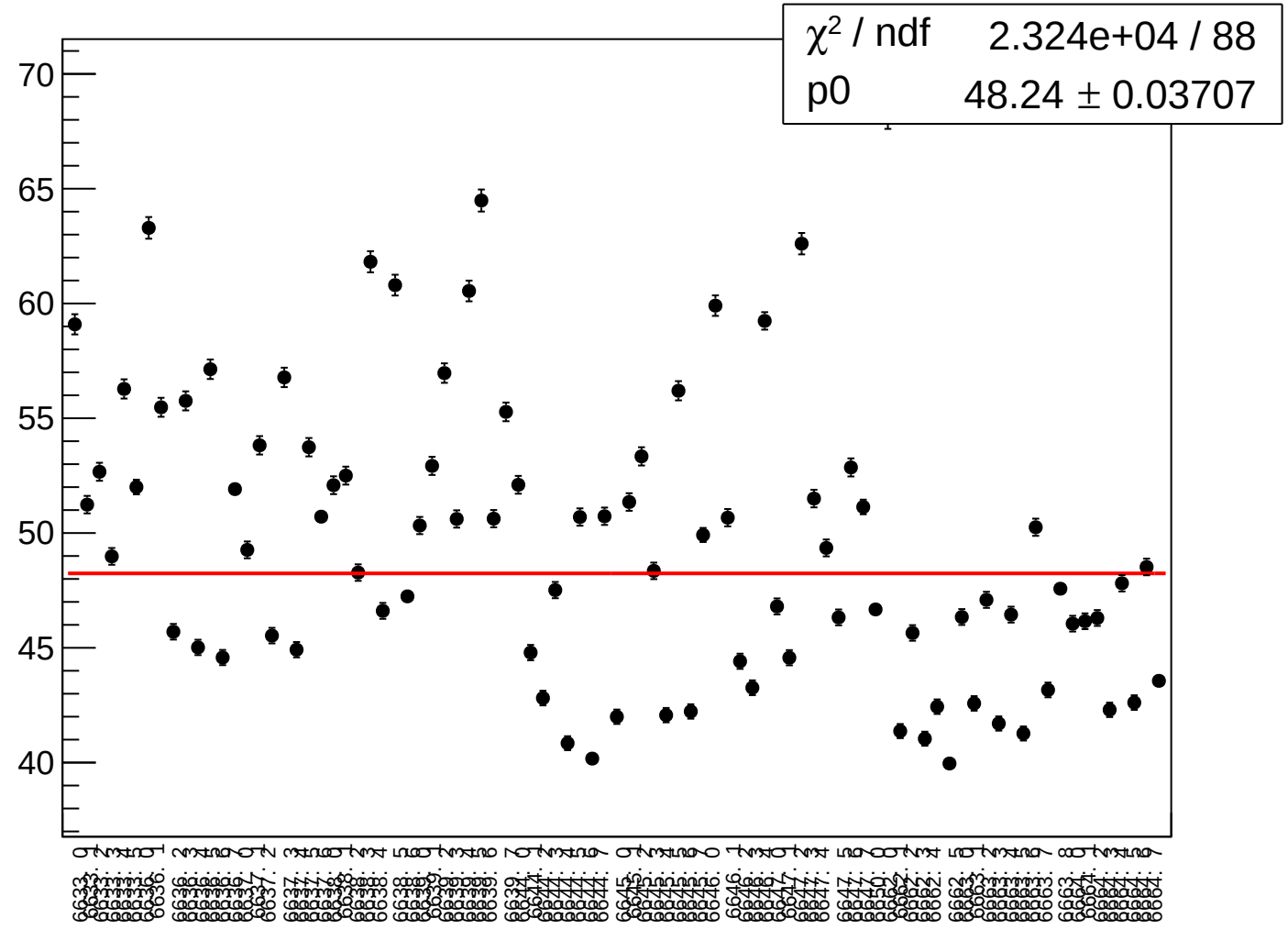

pull1D
Entries 89
Mean 0.01477
Std Dev 0.9877
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

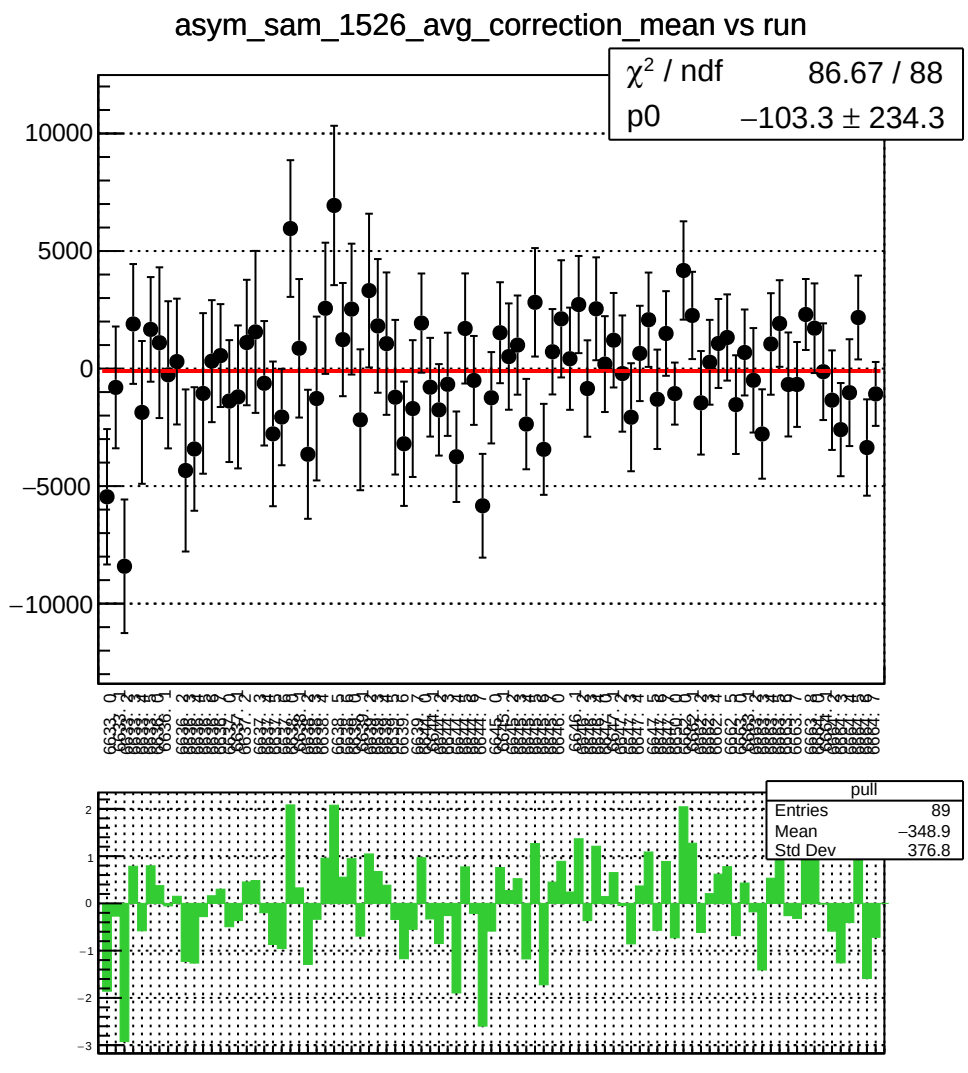

asym_sam_3748_avg_rms vs run
χ² / ndf 4.617e+04 / 88
p0 652.7 ± 0.5049
900
800
700
600
500

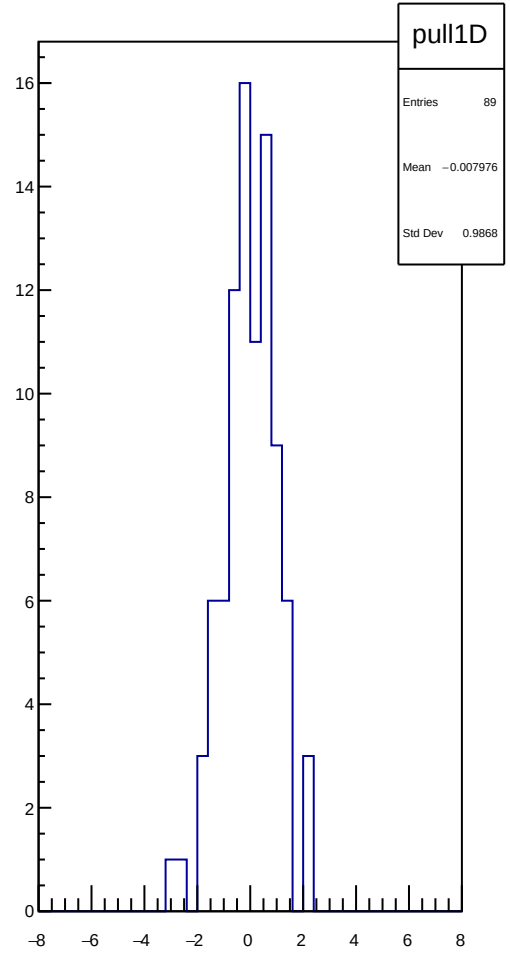

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 99.22 / 88
p0 −9.647 ± 52.42
pull
Entries 89
Mean −97.49
Std Dev 138

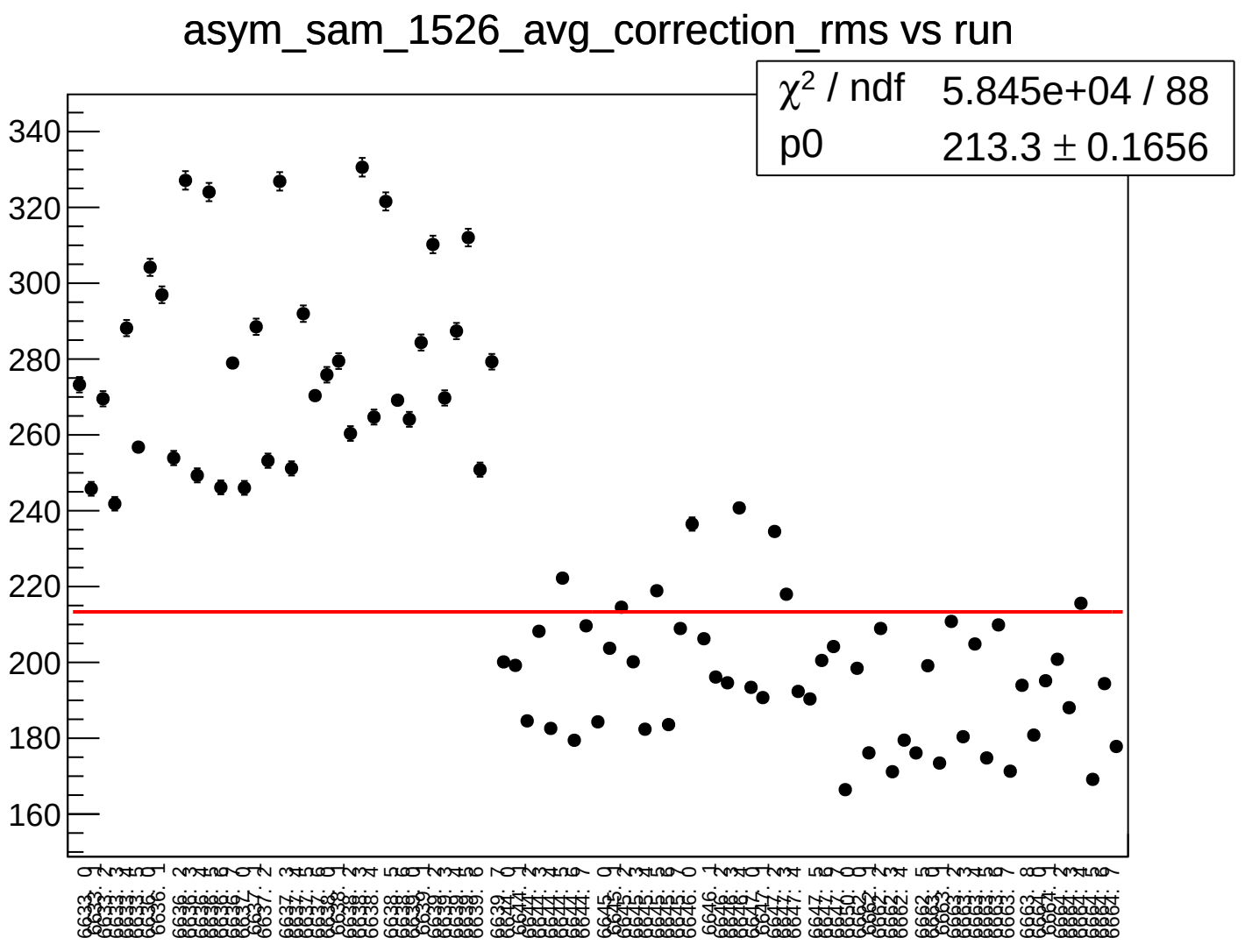

pull1D
Entries 89
Mean −0.01446
Std Dev 1.056

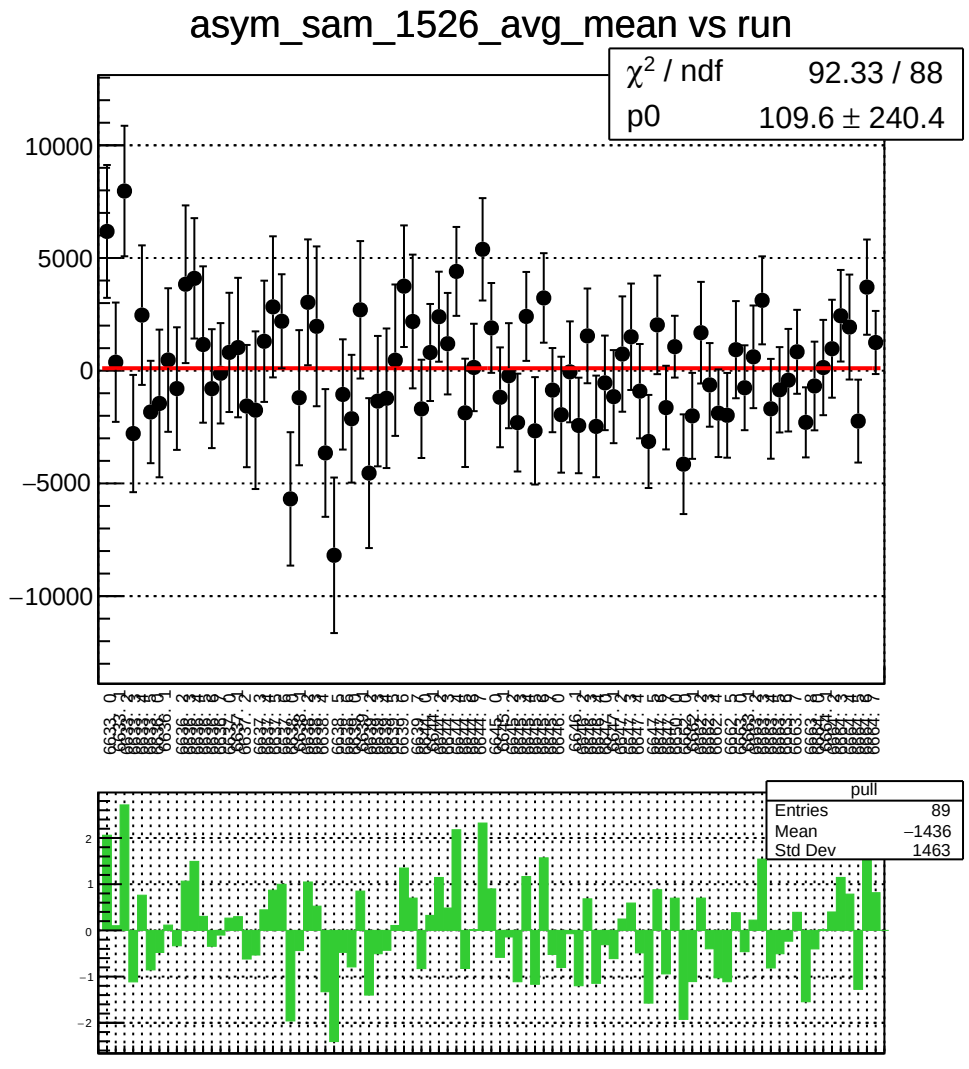
reg_asym_sam_1526_avg_rms vs run

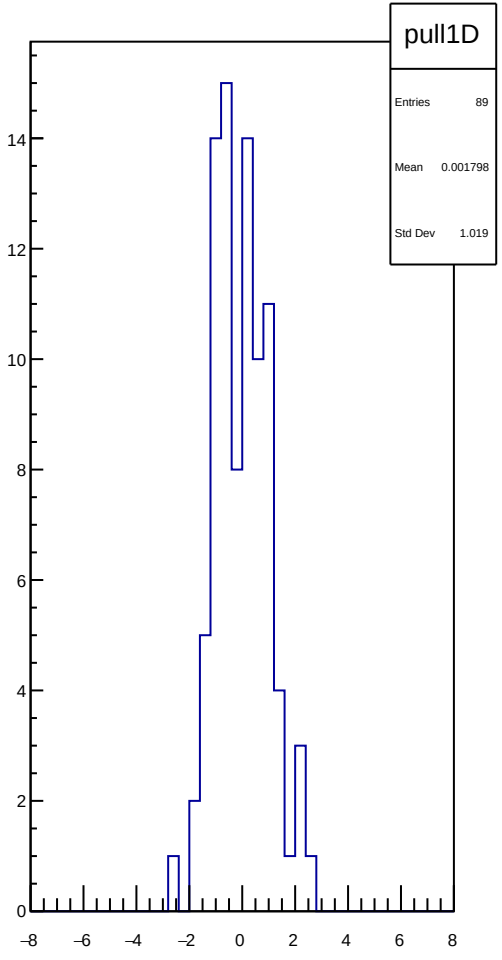


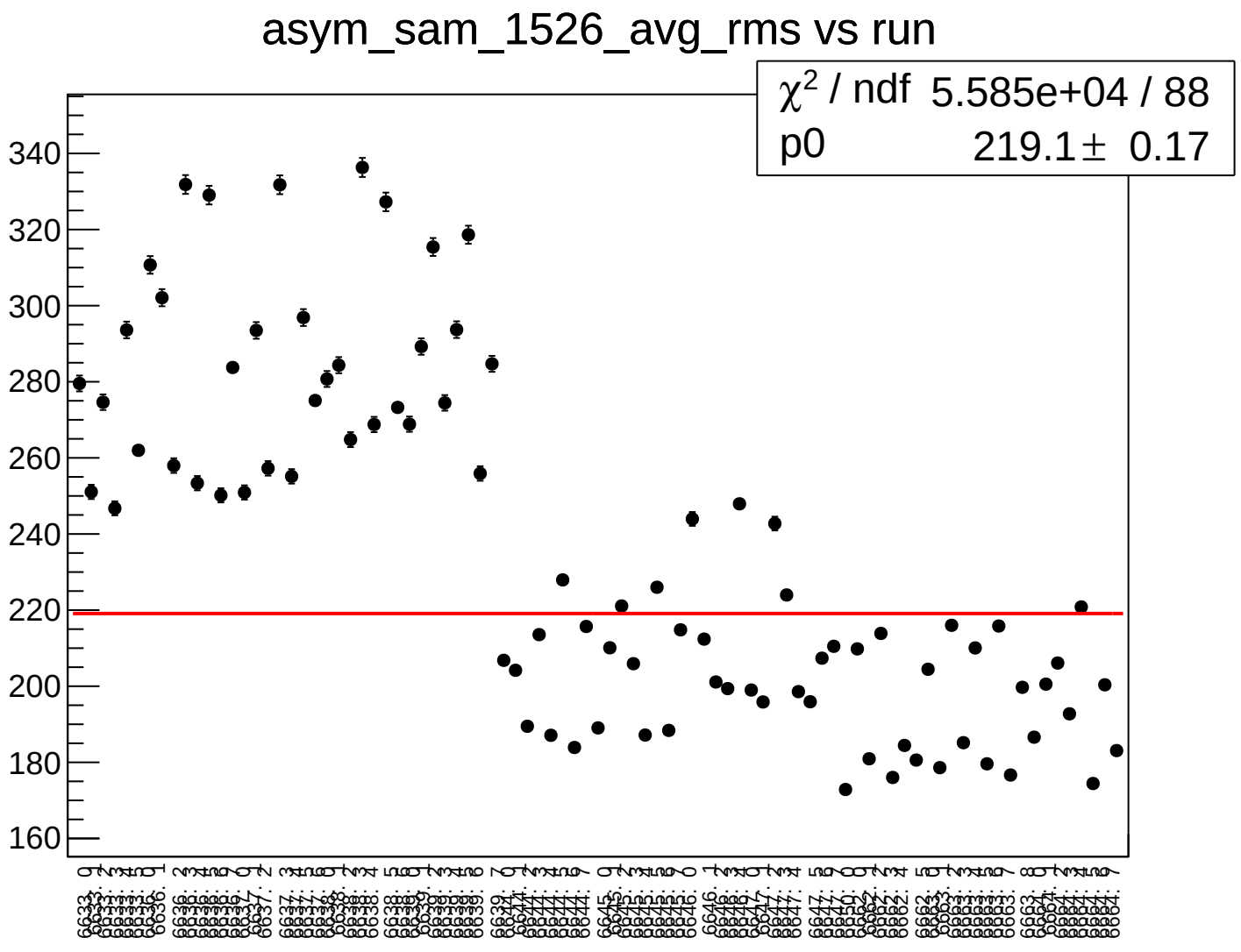

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 86.67 / 88
p0 −103.3 ± 234.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −348.9
Std Dev 376.8
2
1
0
−1
−2
−3

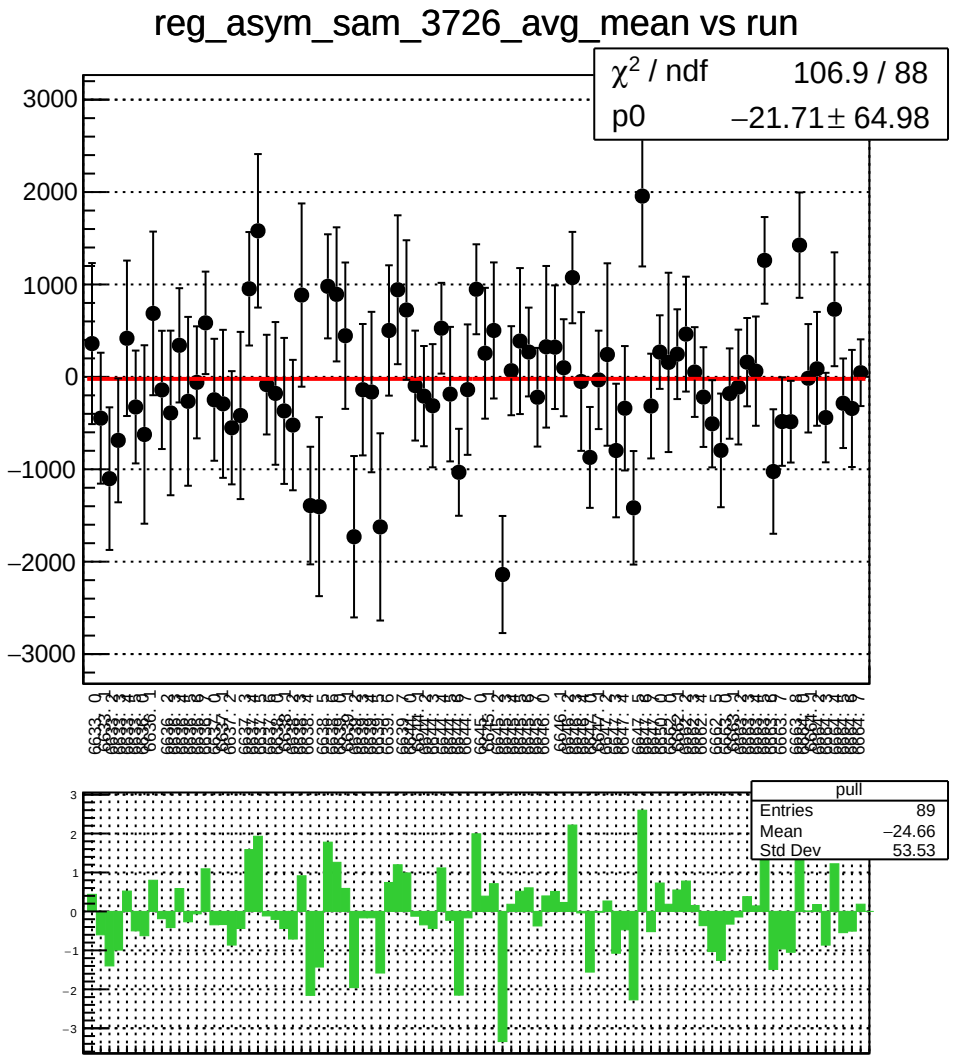

pull1D
Entries 89
Mean −0.007976
Std Dev 0.9868
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

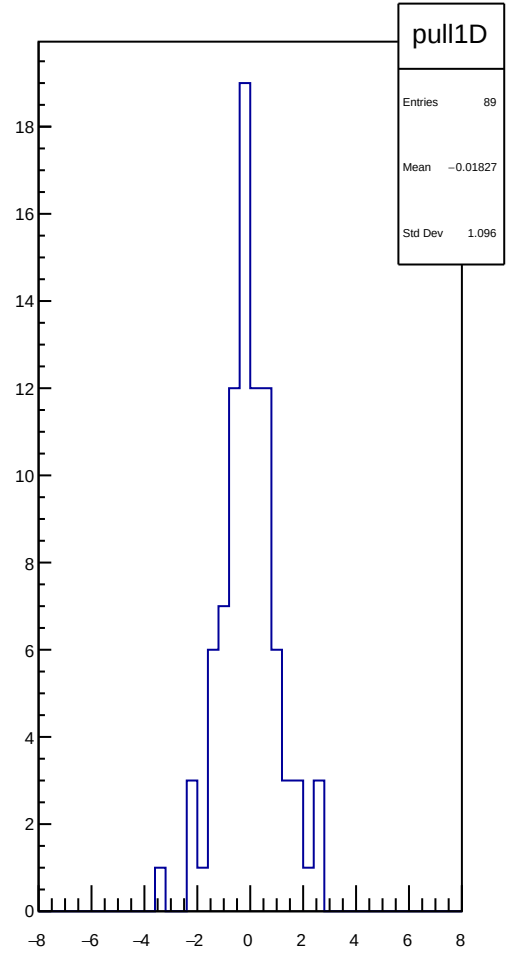

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 5.845e+04 / 88
p0 213.3 ± 0.1656
340
320
300
280
260
240
220
200
180
160

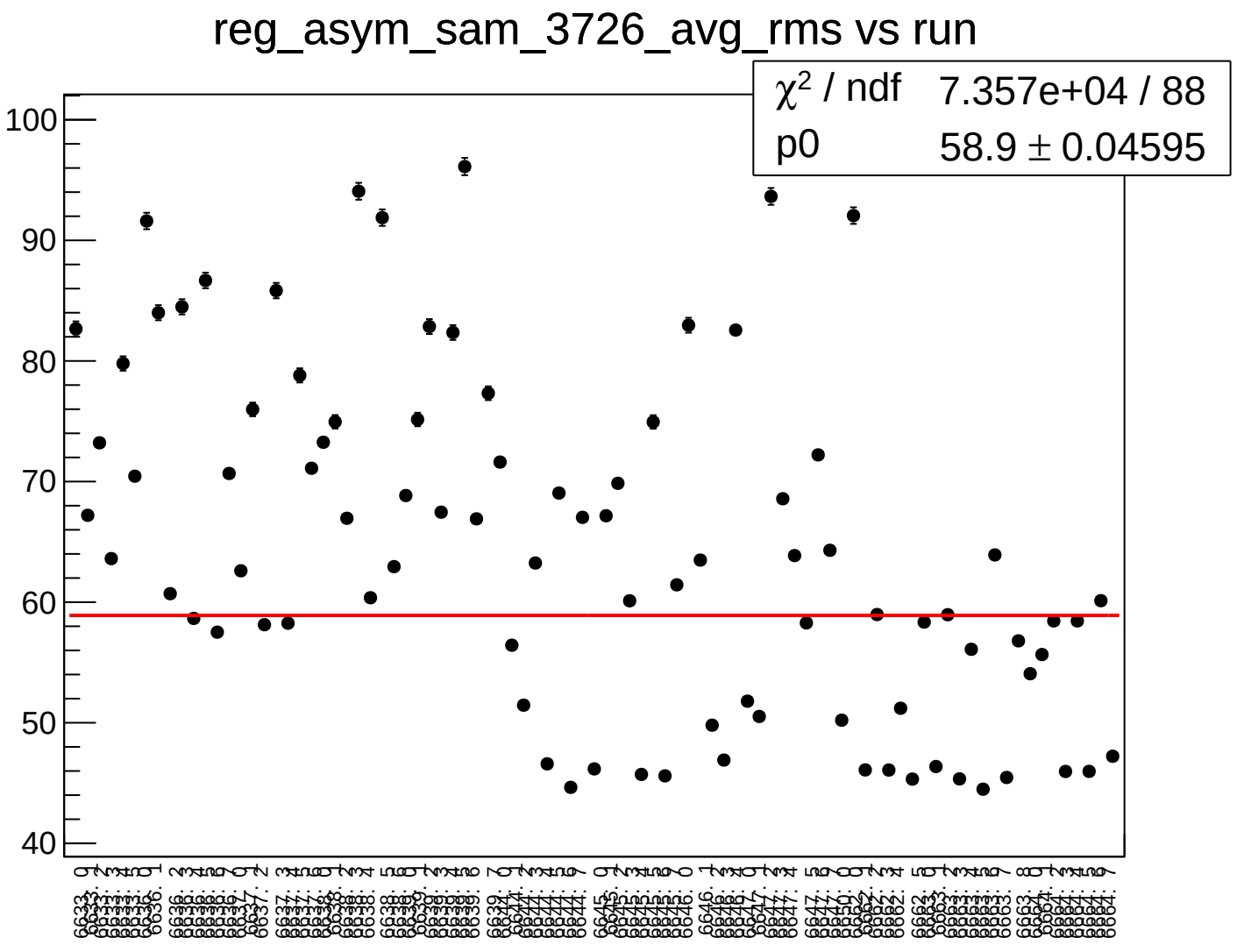

asym_sam_1526_avg_mean vs run
χ² / ndf 92.33 / 88
p0 109.6 ± 240.4
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −1436
Std Dev 1463
2
1
0
−1
−2

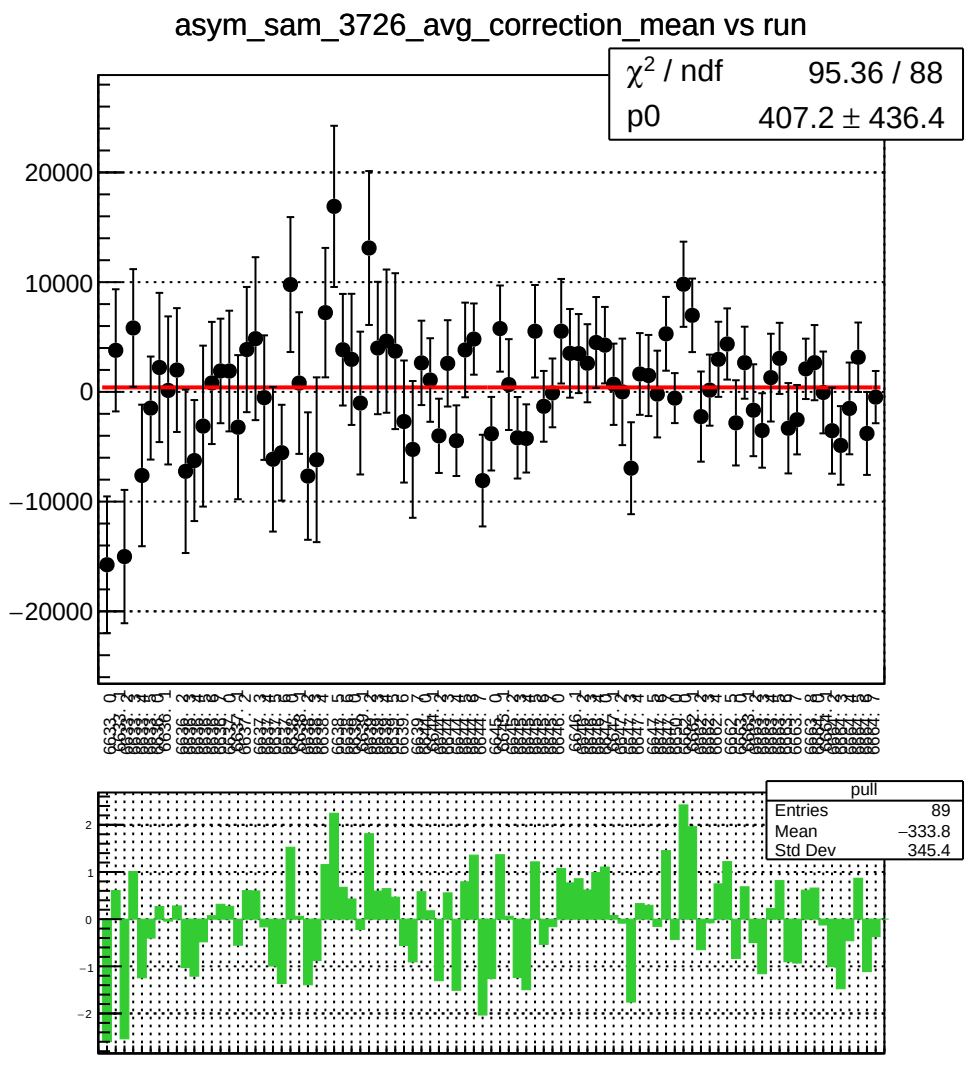

pull1D
Entries 89
Mean 0.001798
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

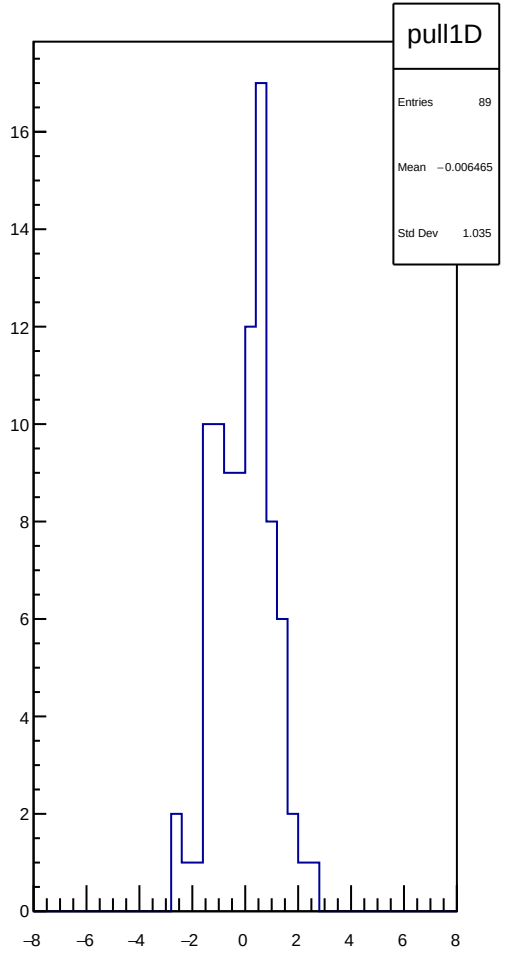

asym_sam_1526_avg_rms vs run
χ² / ndf 5.585e+04 / 88
p0 219.1 ± 0.17
340
320
300
280
260
240
220
200
180
160

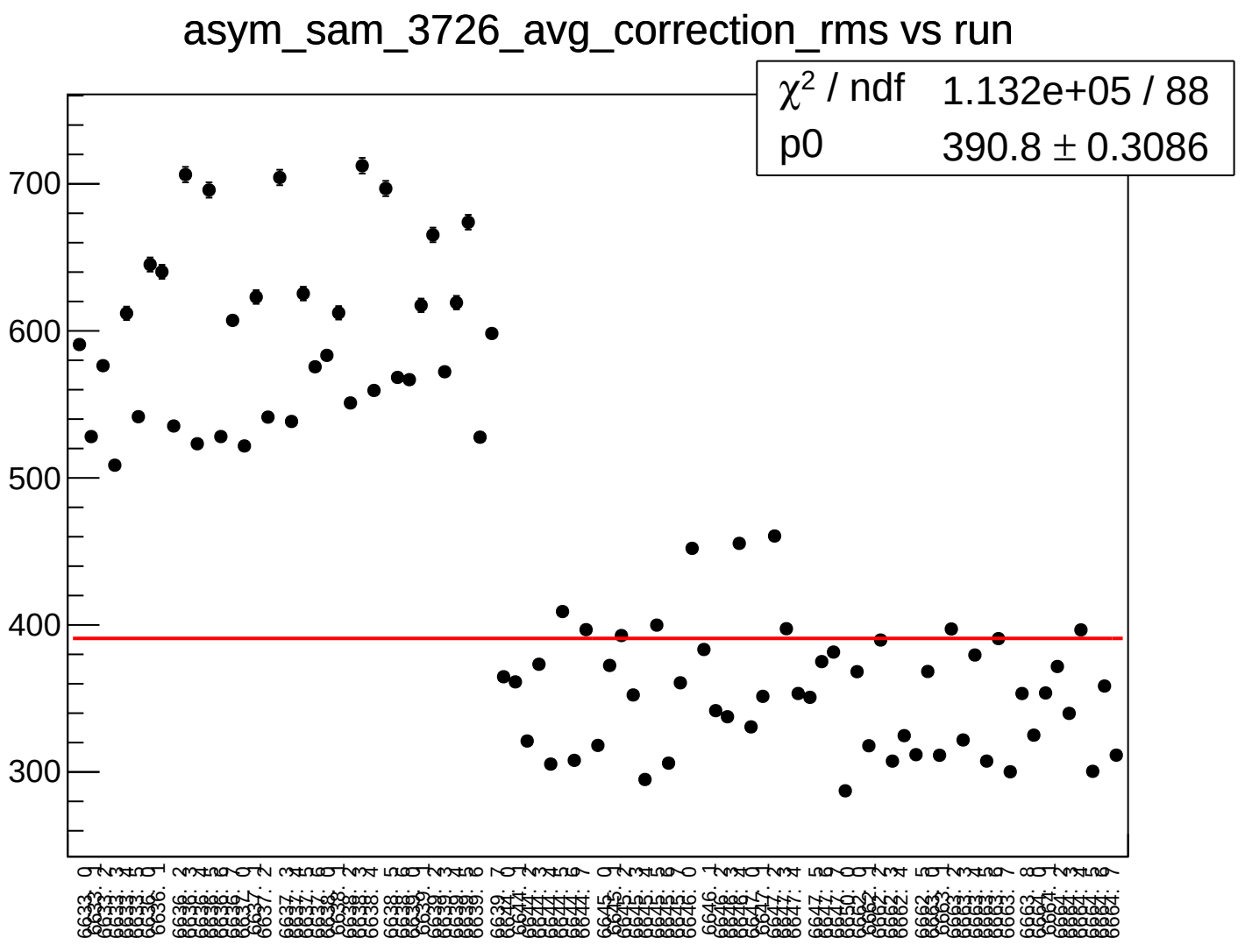

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 106.9 / 88
p0 −21.71 ± 64.98
pull
Entries 89
Mean −24.66
Std Dev 53.53

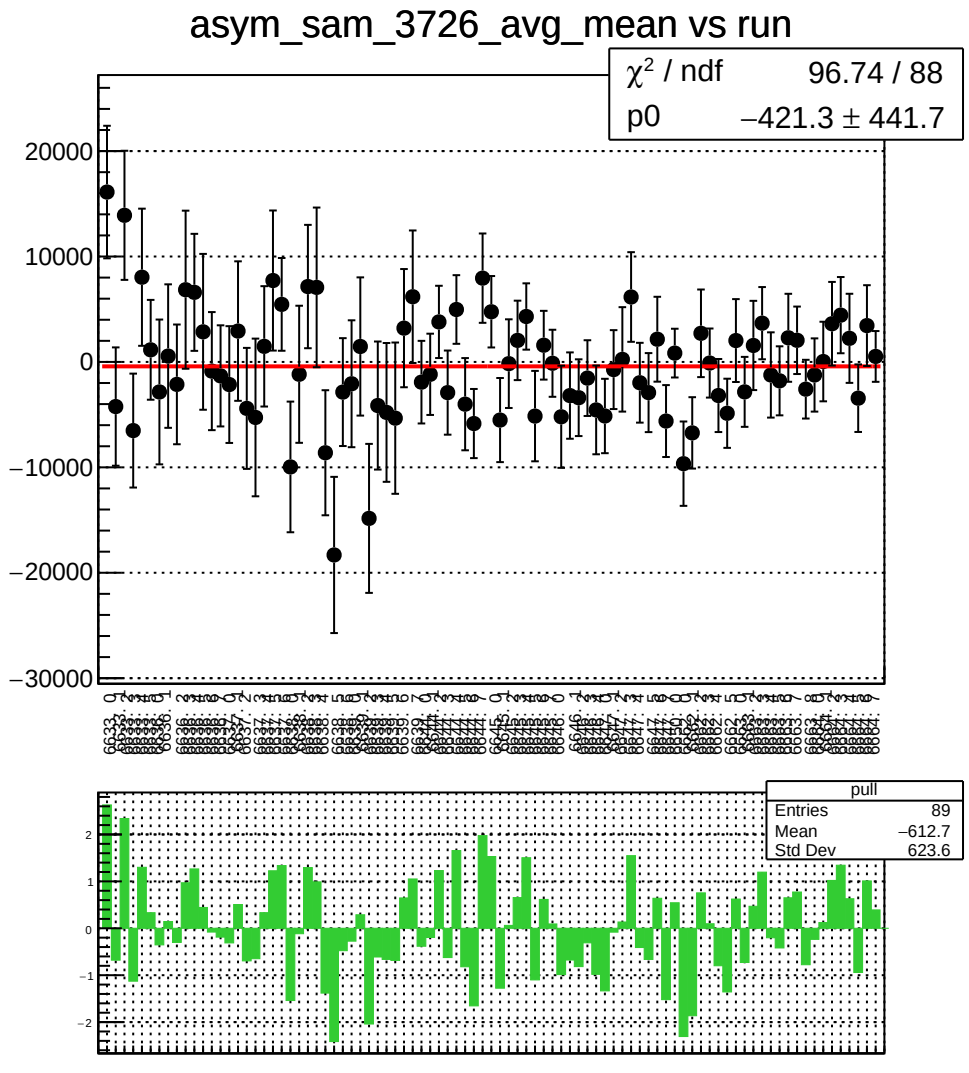

pull1D
Entries 89
Mean −0.01827
Std Dev 1.096

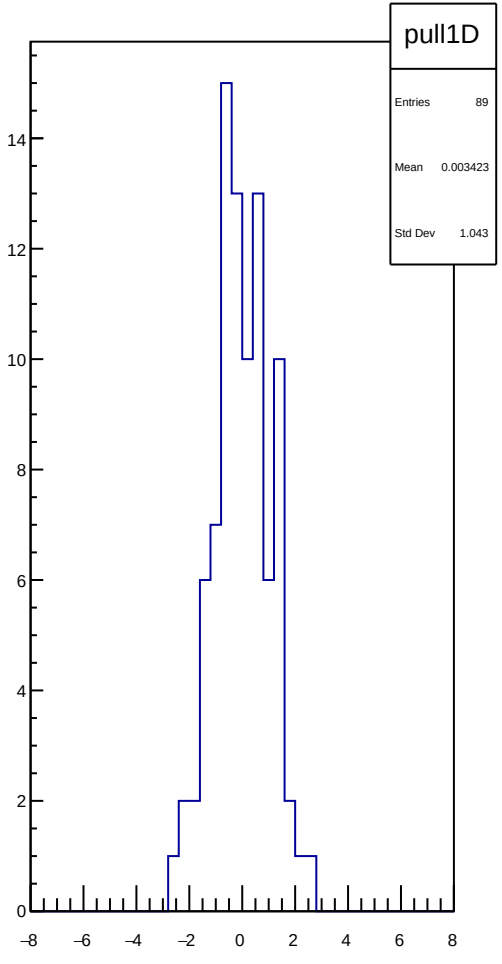

reg_asym_sam_3726_avg_rms vs run
χ^2 / ndf 7.357e+04 / 88
p0 58.9 ± 0.04595
100
90
80
70
60
50
40

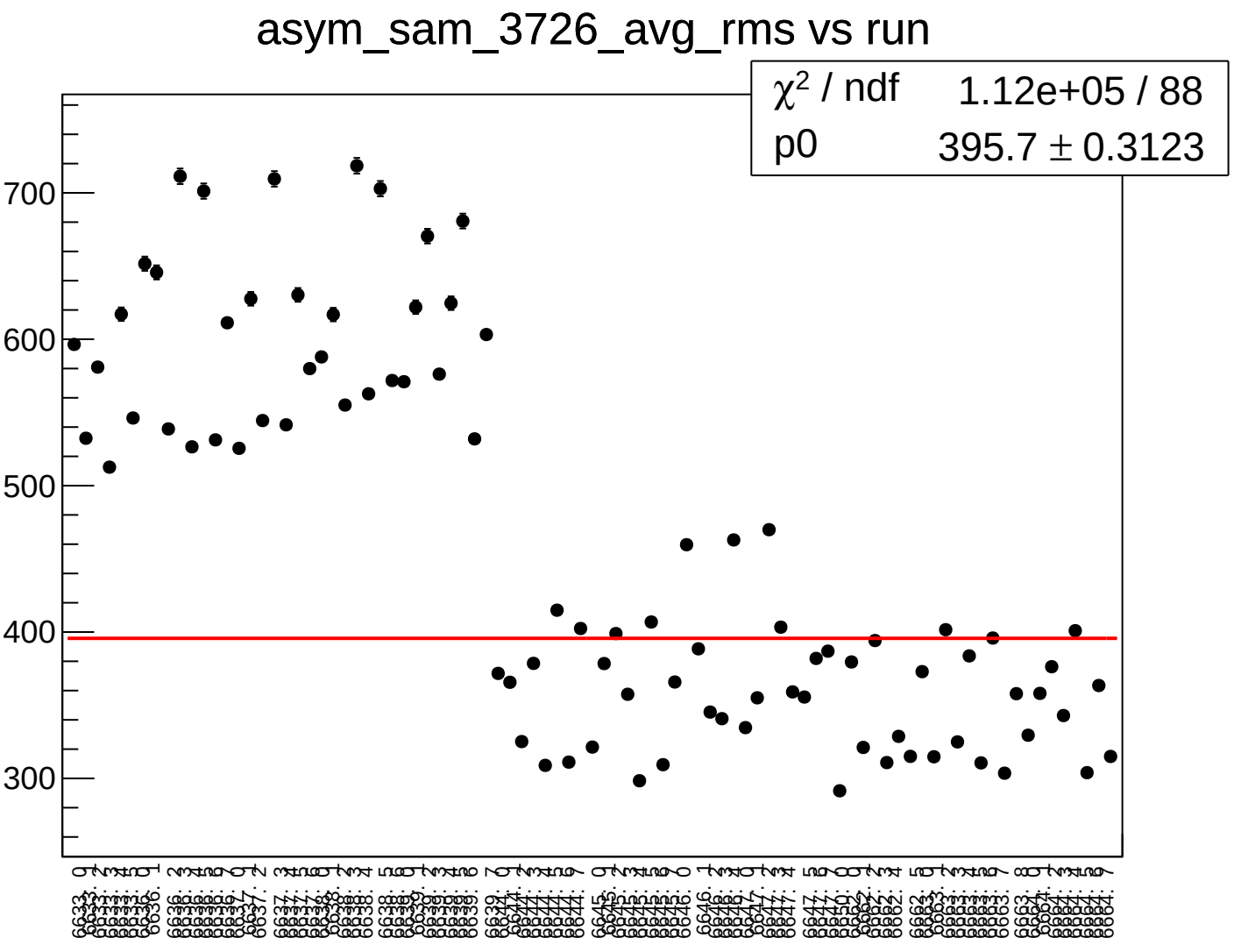

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 95.36 / 88
p0 407.2 ± 436.4
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −333.8
Std Dev 345.4
2
1
0
−1
−2

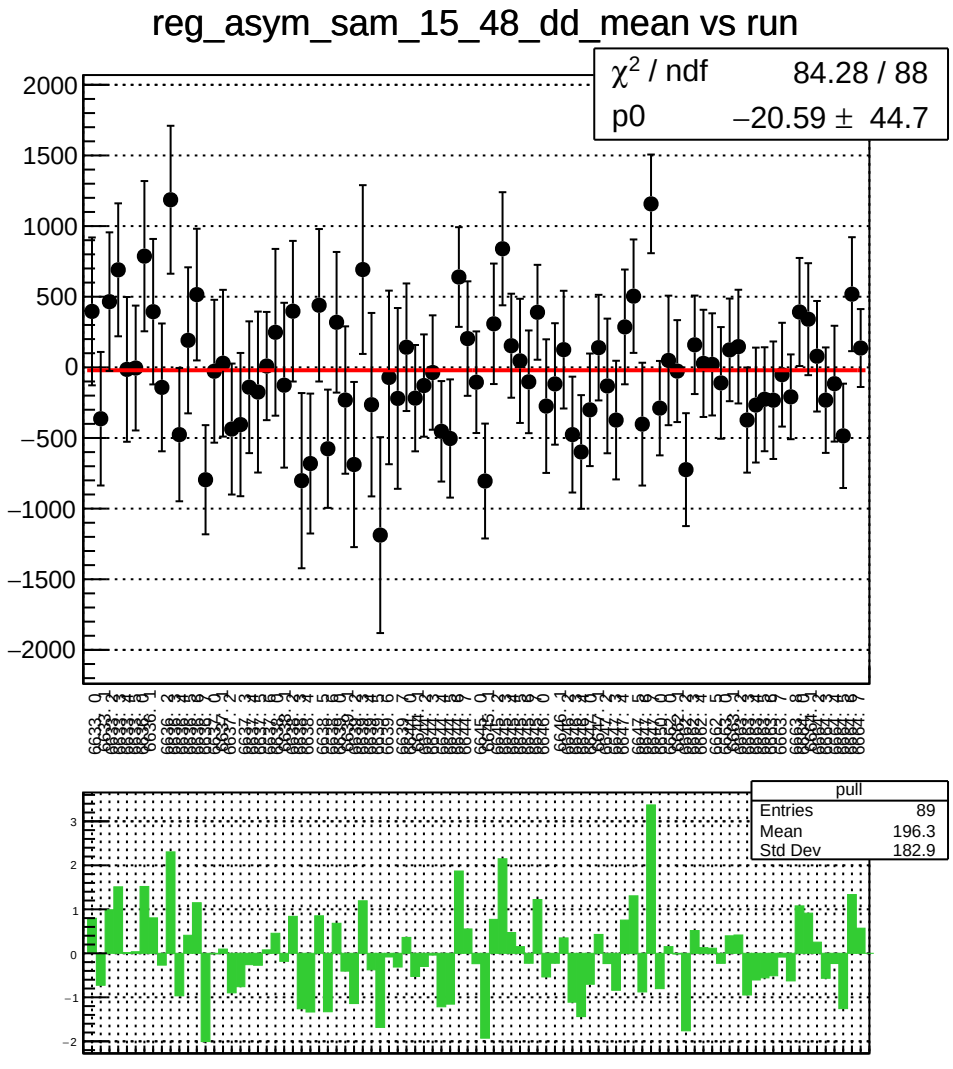

pull1D
Entries 89
Mean −0.006465
Std Dev 1.035
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

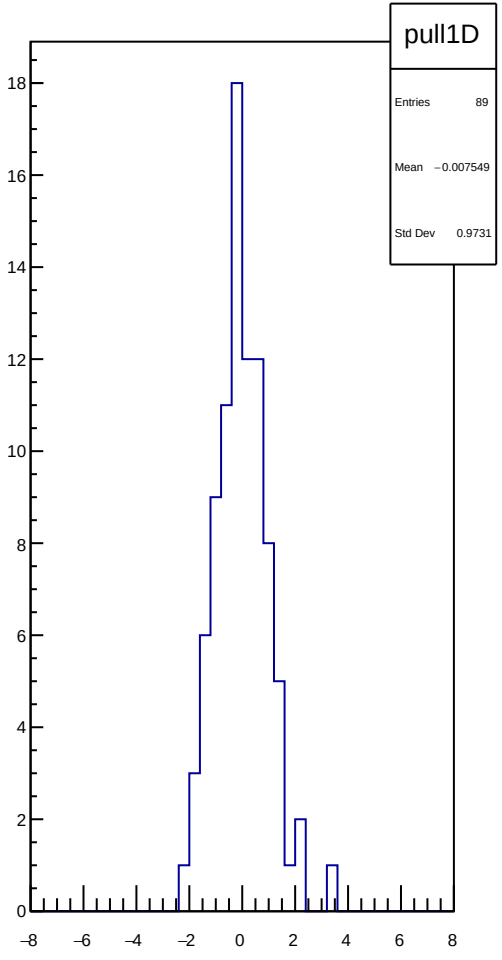

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 1.132e+05 / 88
p0 390.8 ± 0.3086
700
600
500
400
300

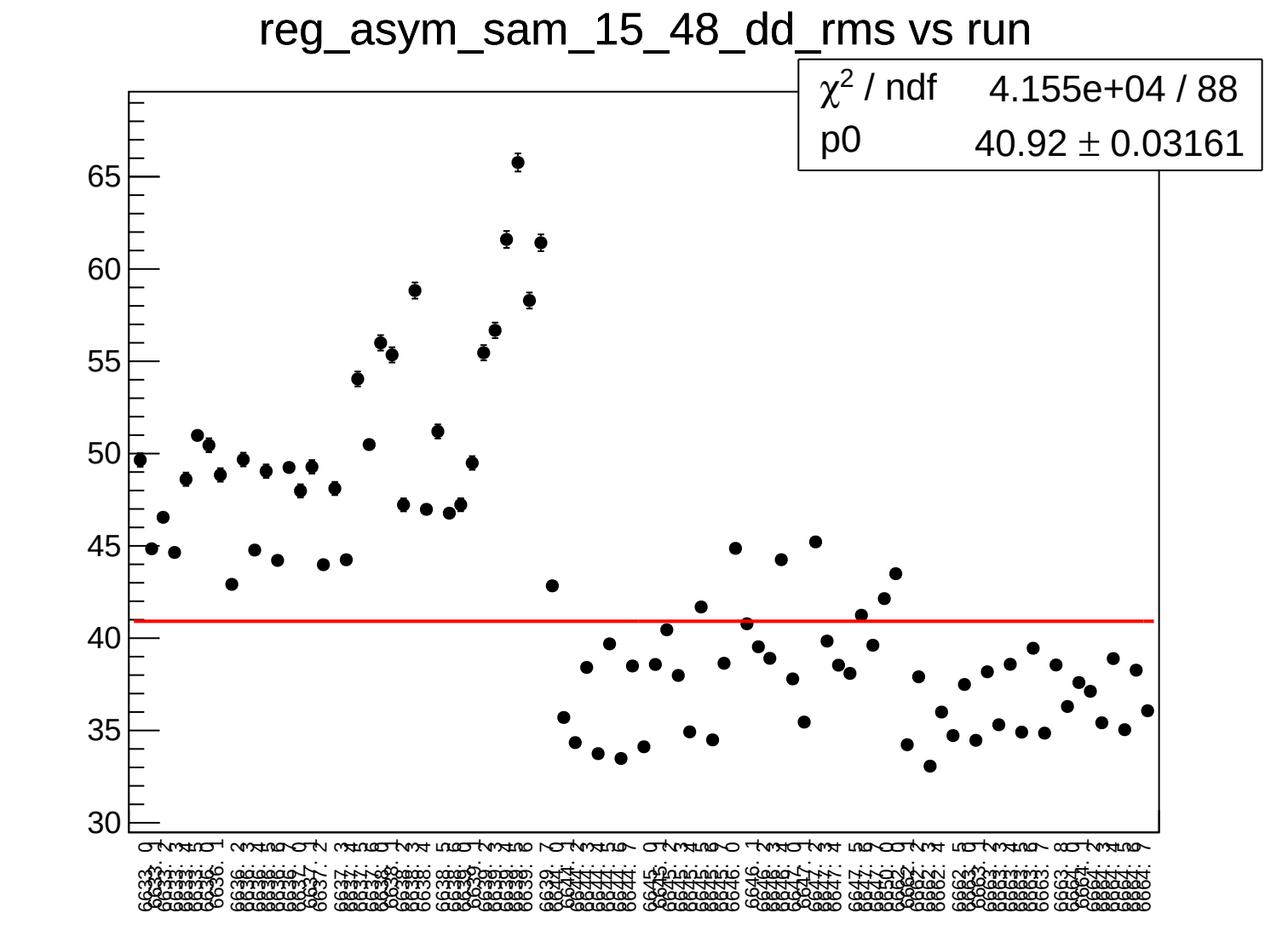

asym_sam_3726_avg_mean vs run
χ² / ndf 96.74 / 88
p0 −421.3 ± 441.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −612.7
Std Dev 623.6
2
1
0
−1
−2

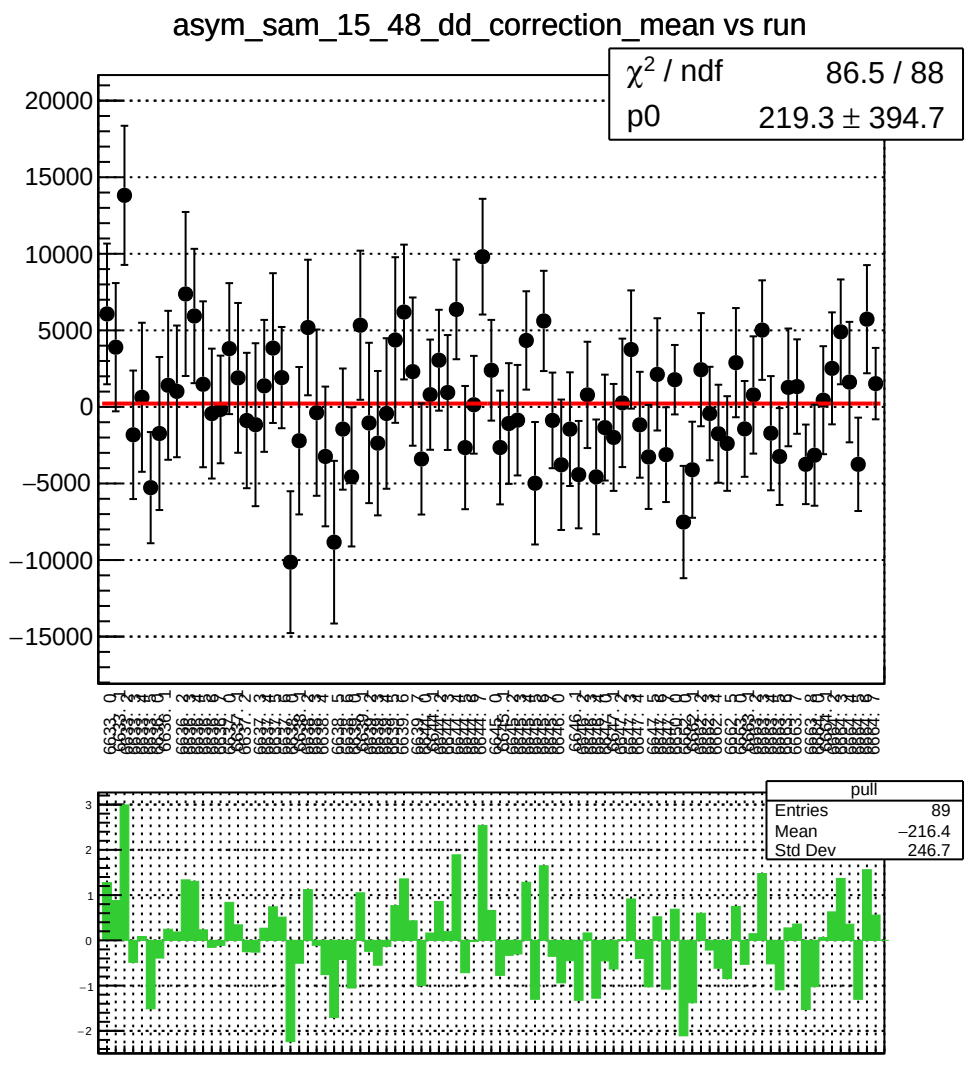

pull1D
Entries 89
Mean 0.003423
Std Dev 1.043
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

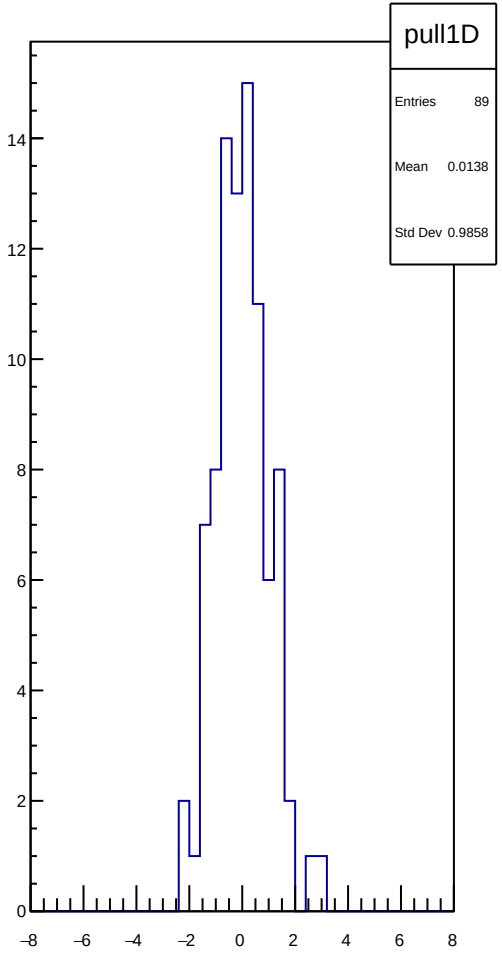

asym_sam_3726_avg_rms vs run
χ² / ndf 1.12e+05 / 88
p0 395.7 ± 0.3123
700
600
500
400
300

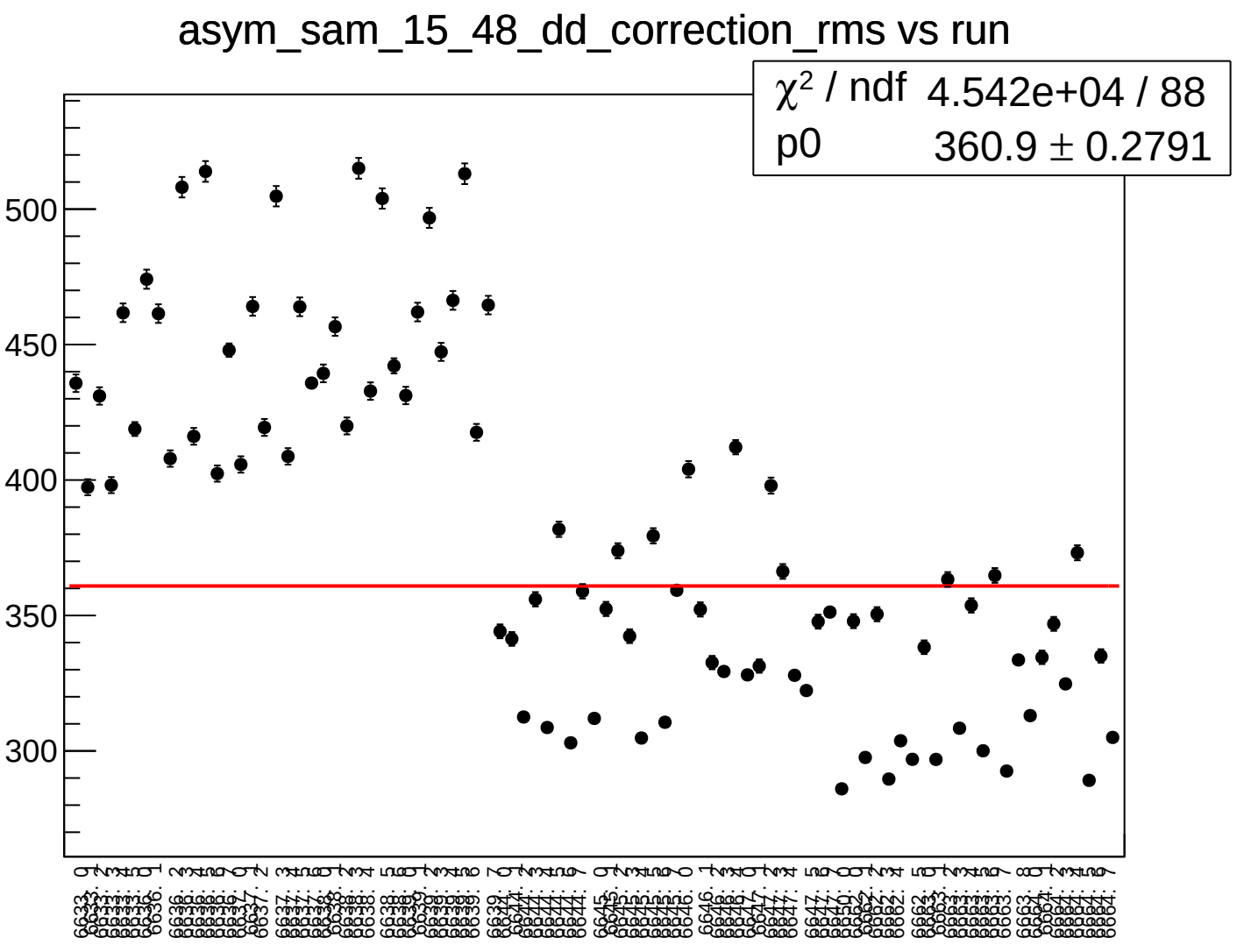

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 84.28 / 88
p0 −20.59 ± 44.7
pull
Entries 89
Mean 196.3
Std Dev 182.9

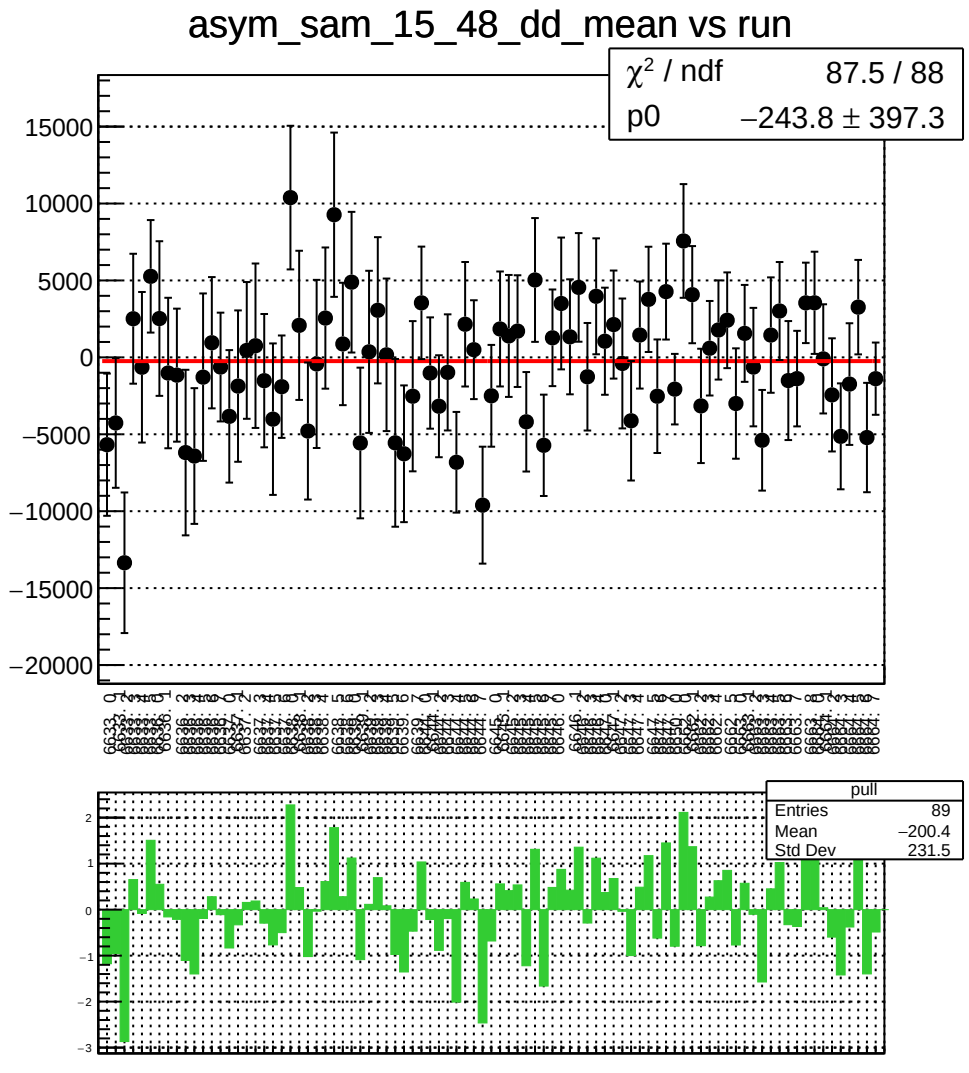

pull1D
Entries 89
Mean −0.007549
Std Dev 0.9731

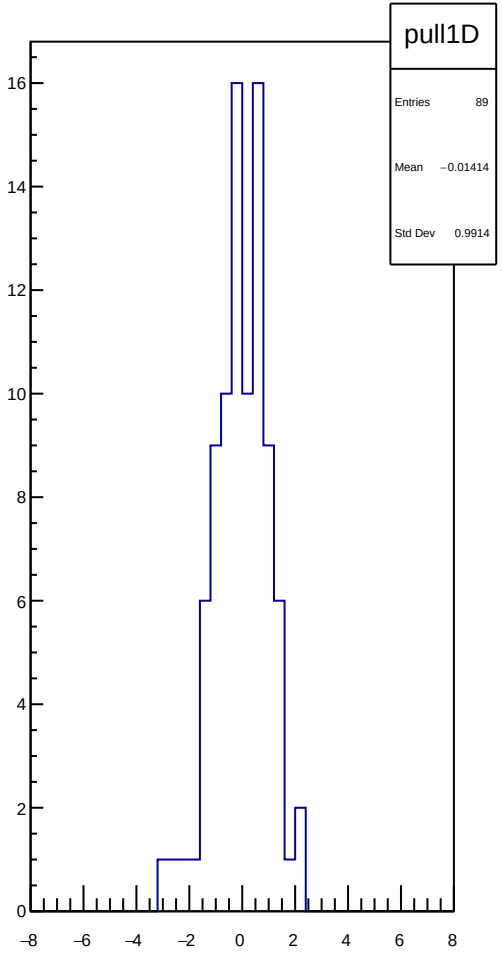

reg_asym_sam_15_48_dd_rms vs run
χ² / ndf 4.155e+04 / 88
p0 40.92 ± 0.03161
65
60
55
50
45
40
35
30

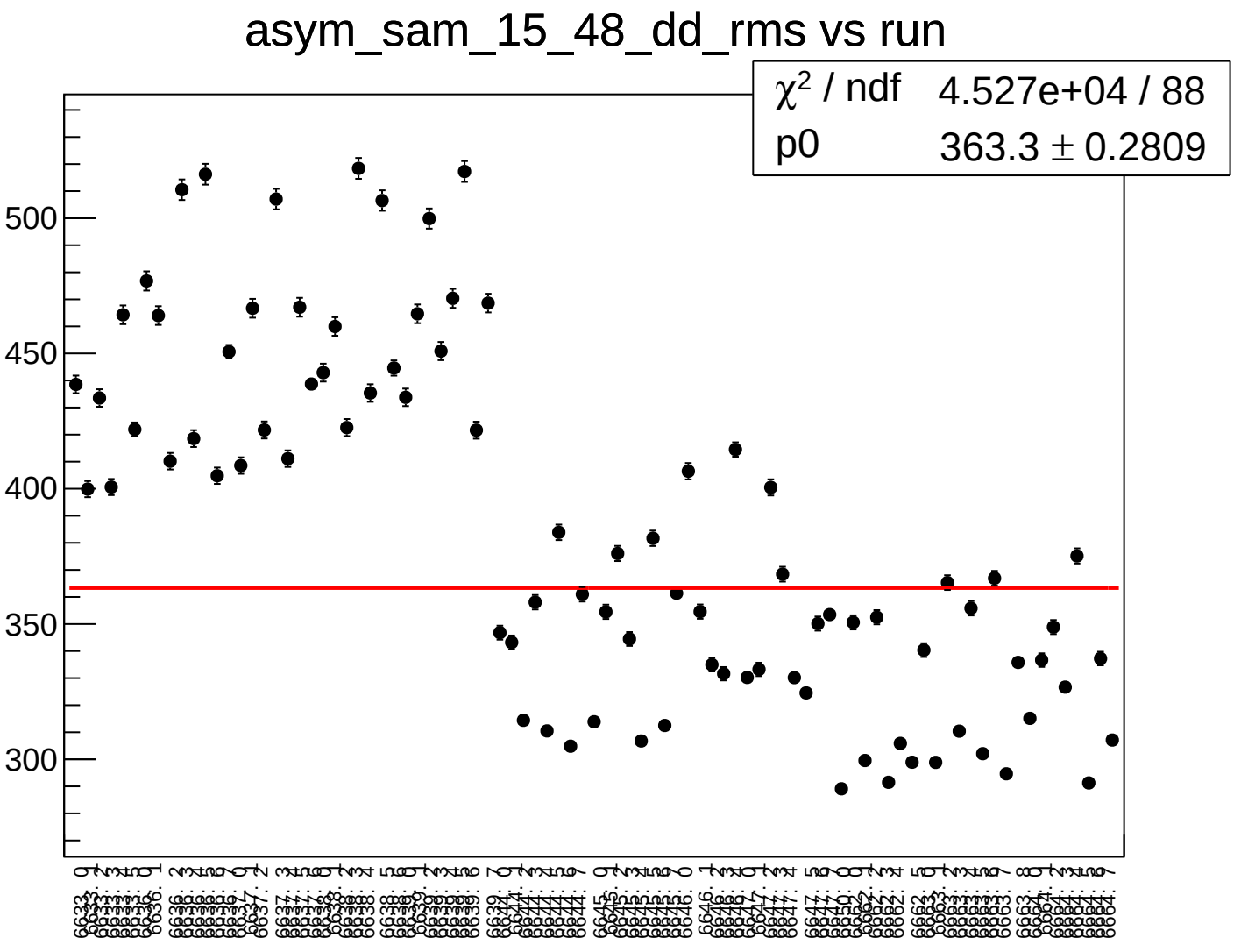

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 86.5 / 88
p0 219.3 ± 394.7
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −216.4
Std Dev 246.7
3
2
1
0
−1
−2

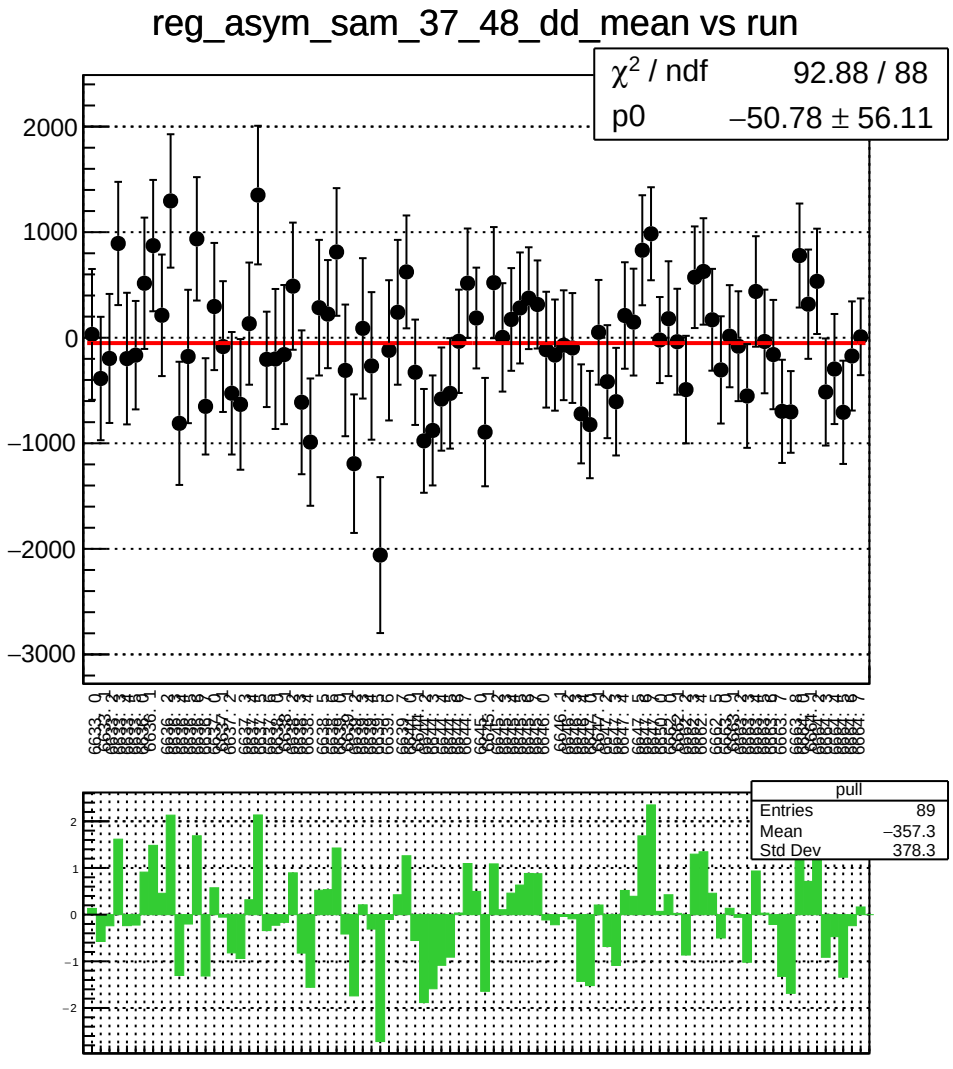

pull1D
Entries 89
Mean 0.0138
Std Dev 0.9858
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

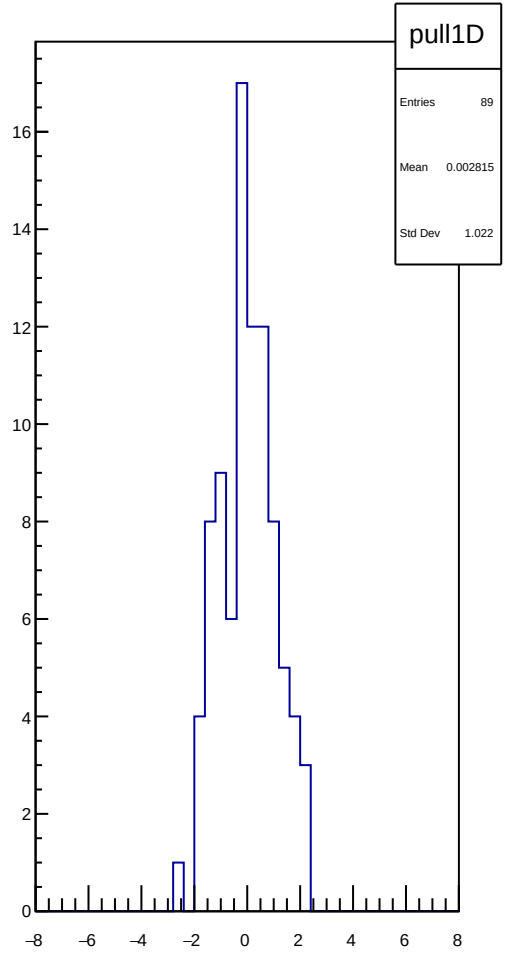

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 4.542e+04 / 88
p0 360.9 ± 0.2791
500
450
400
350
300

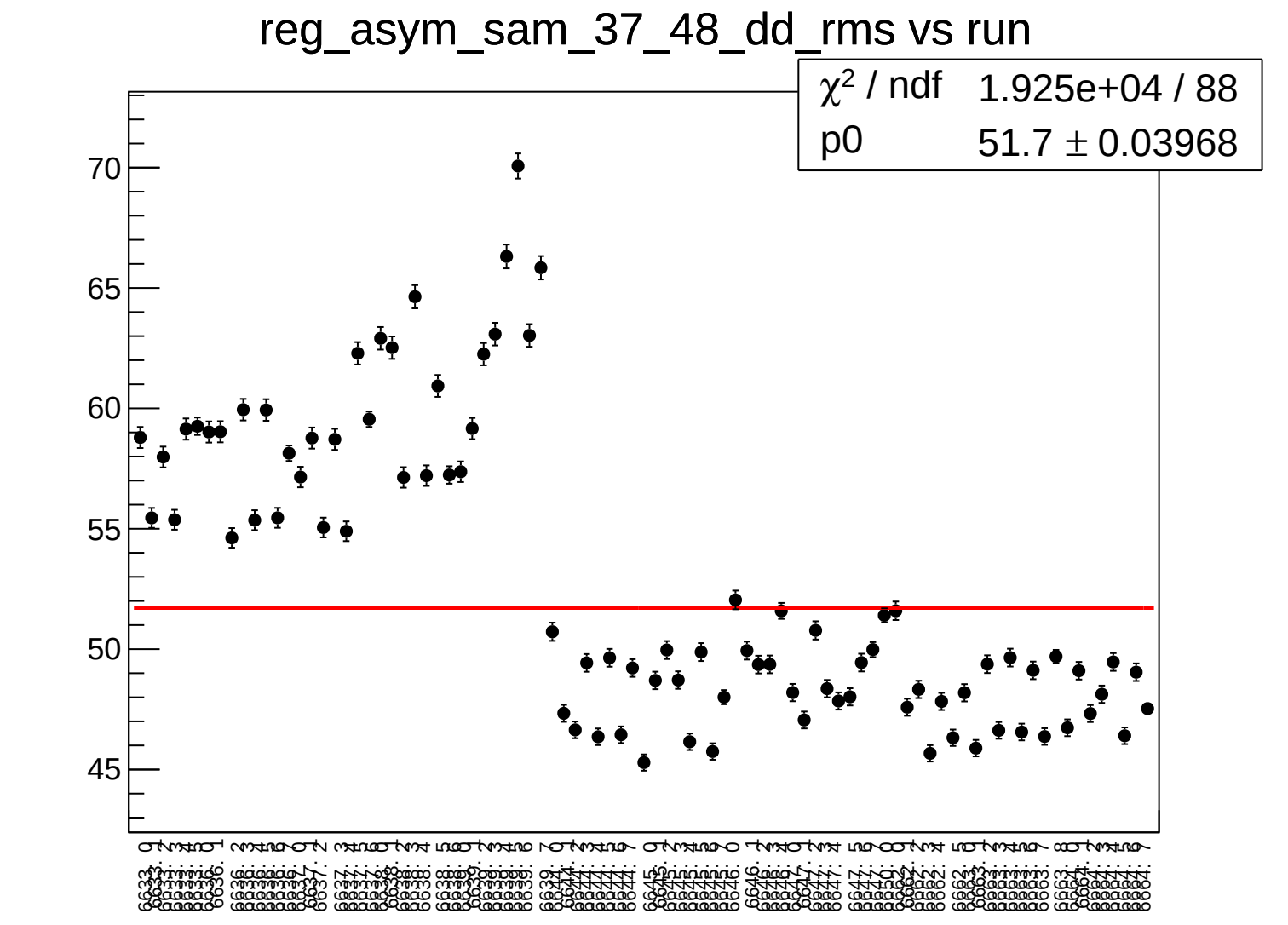

asym_sam_15_48_dd_mean vs run
χ² / ndf 87.5 / 88
p0 −243.8 ± 397.3
pull
Entries 89
Mean −200.4
Std Dev 231.5

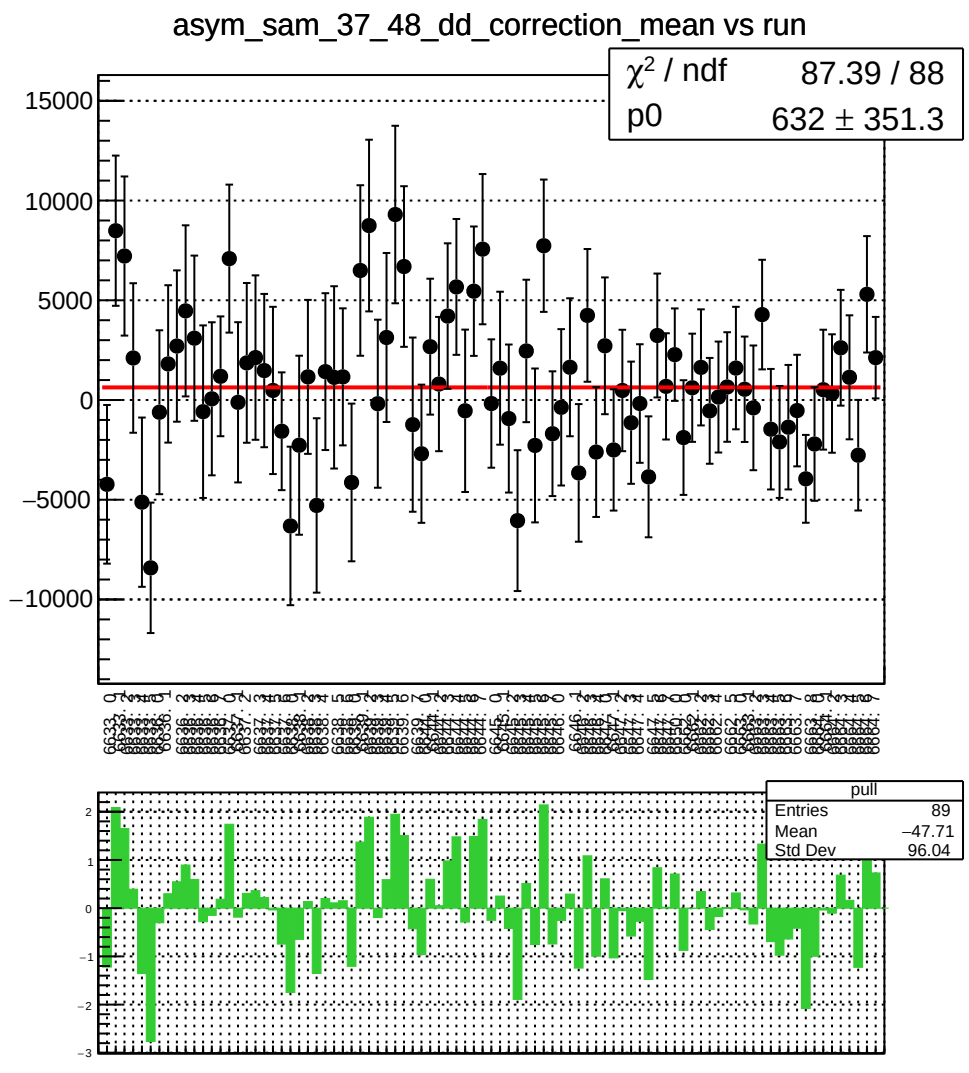

pull1D
Entries 89
Mean −0.01414
Std Dev 0.9914

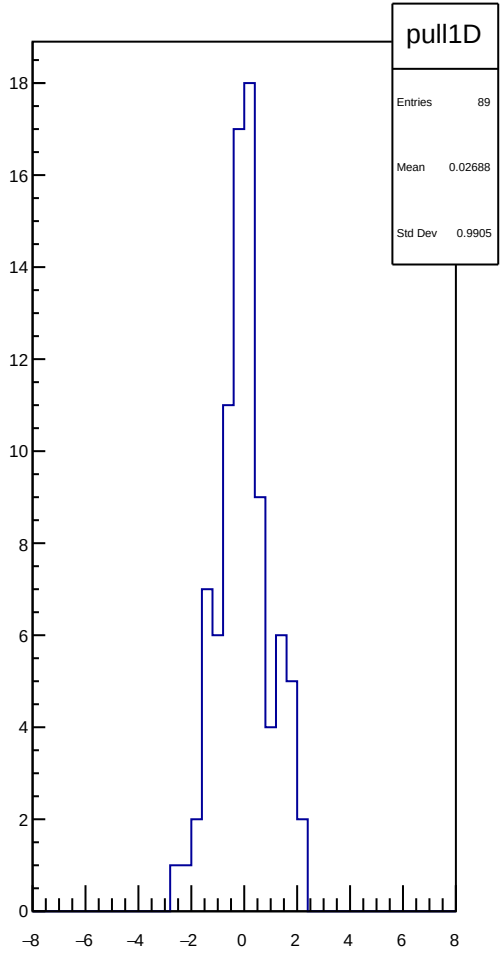

asym_sam_15_48_dd_rms vs run
χ² / ndf 4.527e+04 / 88
p0 363.3 ± 0.2809
500
450
400
350
300

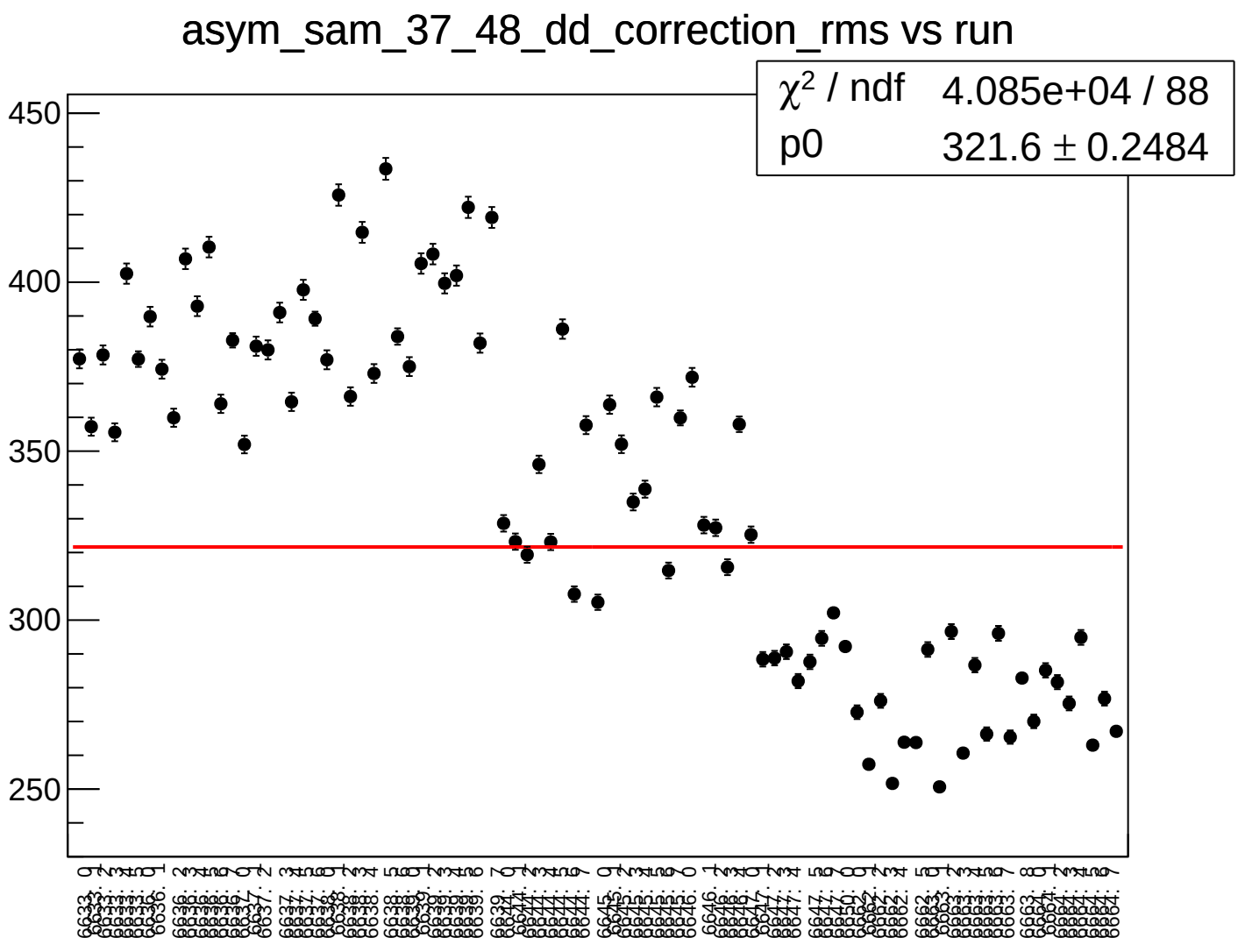

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 92.88 / 88
p0 −50.78 ± 56.11
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean −357.3
Std Dev 378.3
2
1
0
−1
−2

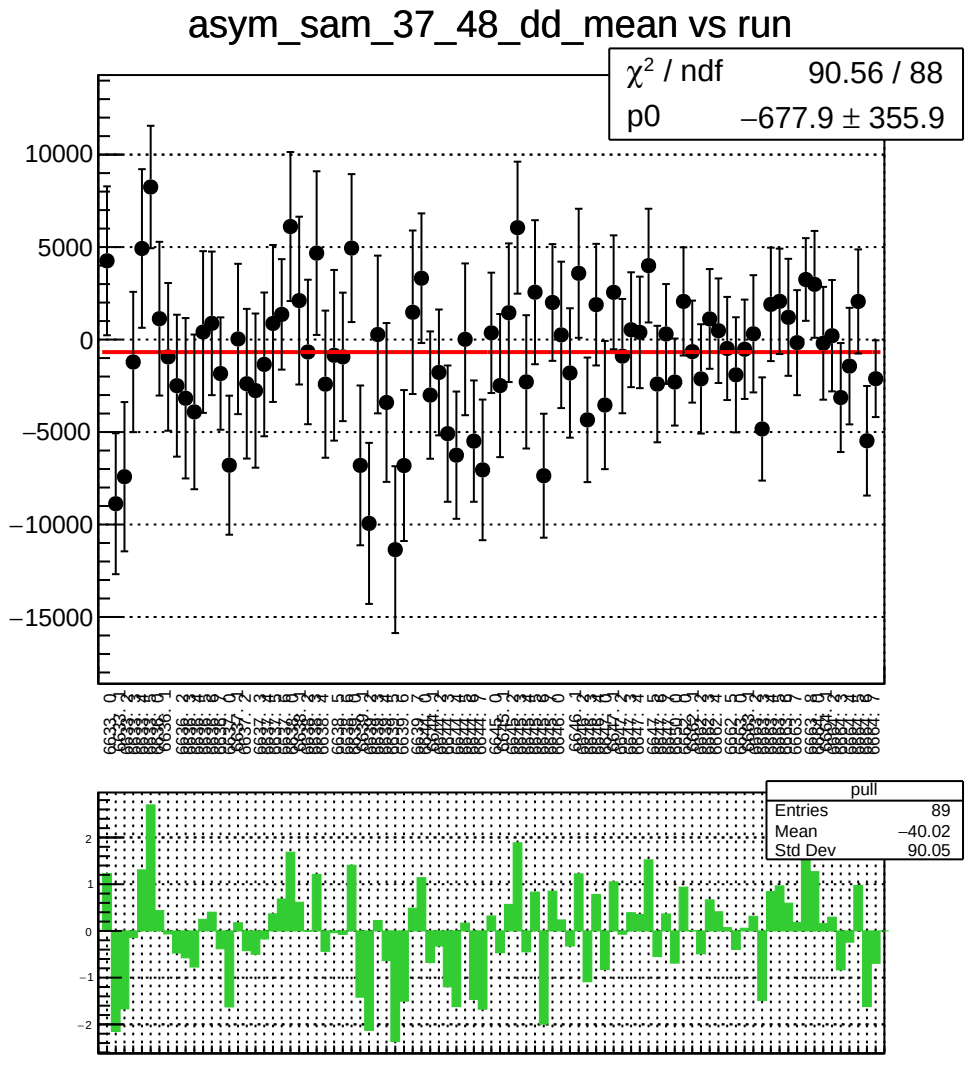

pull1D
Entries 89
Mean 0.002815
Std Dev 1.022
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

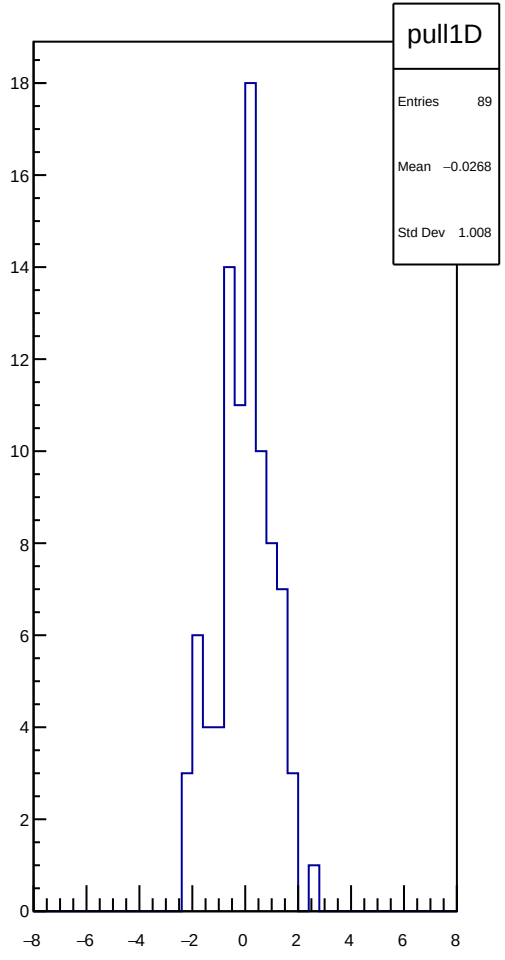

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 1.925e+04 / 88
p0 51.7 ± 0.03968
70
65
60
55
50
45

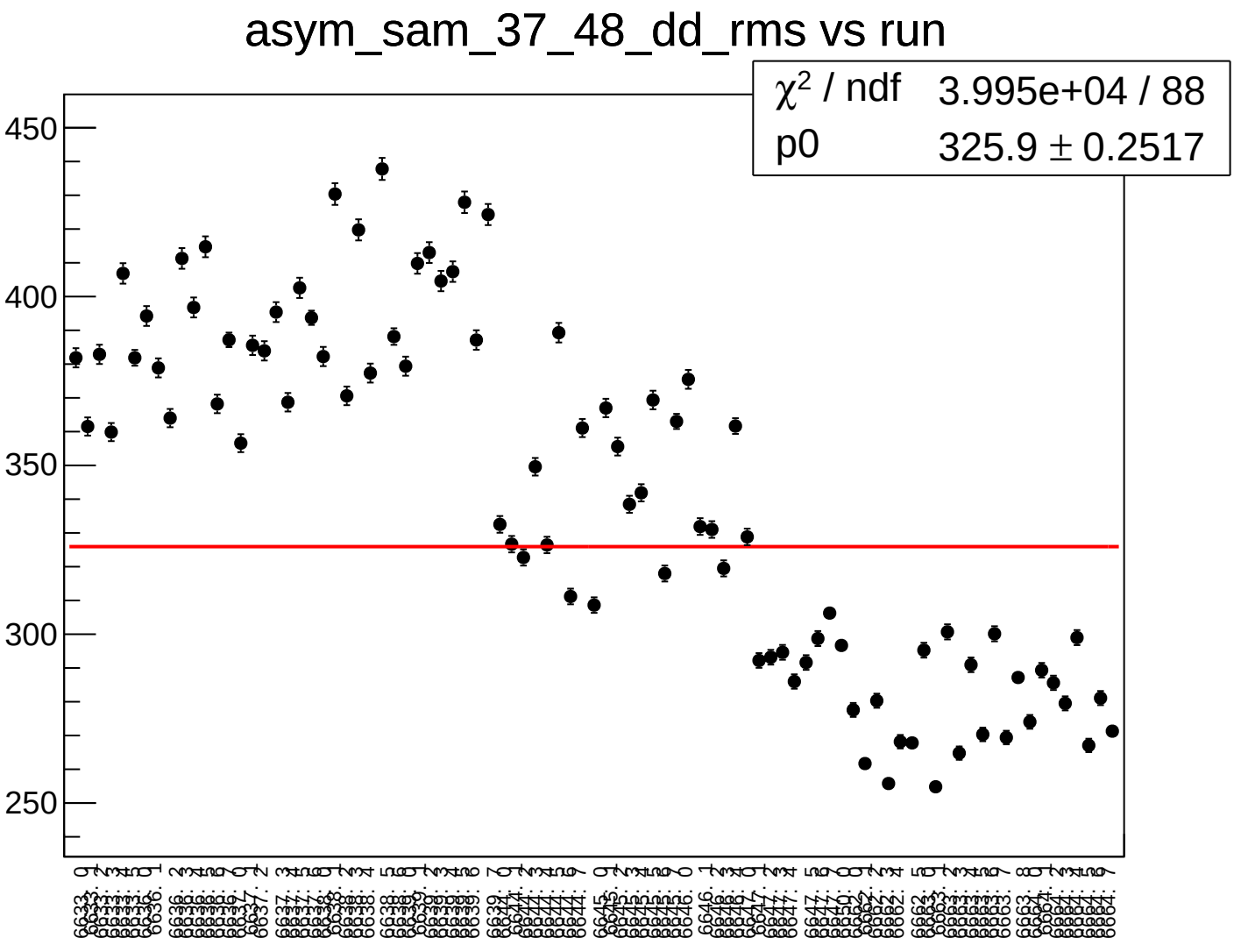

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 87.39 / 88
p0 632 ± 351.3
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −47.71
Std Dev 96.04
2
1
0
−1
−2
−3

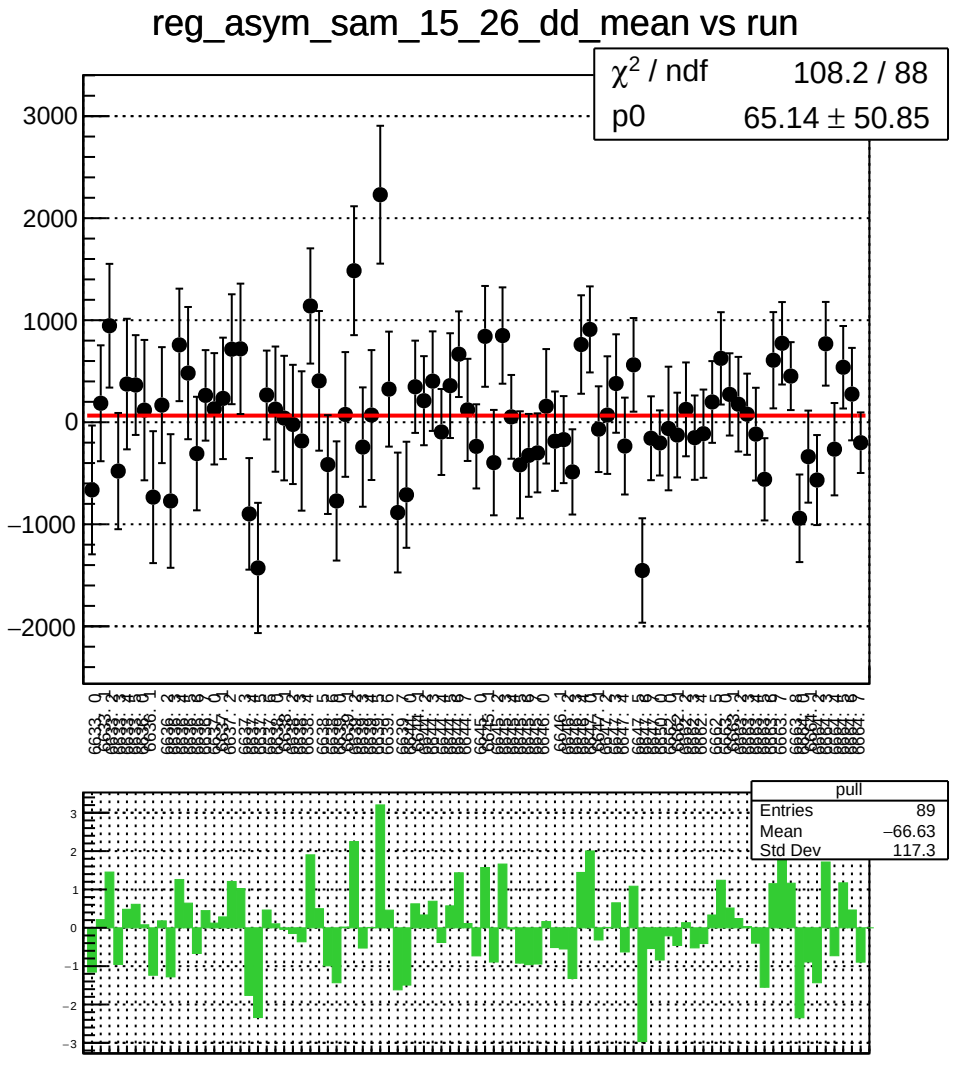

pull1D
Entries 89
Mean 0.02688
Std Dev 0.9905
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

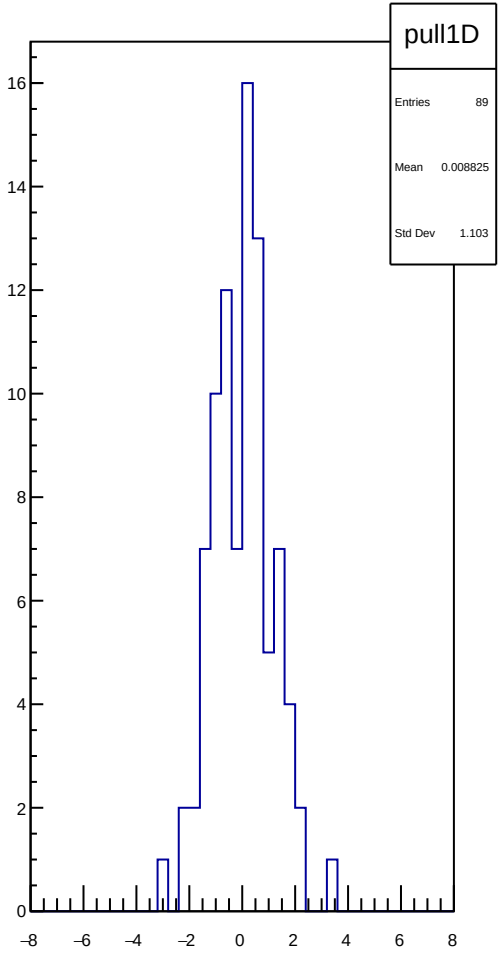

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 4.085e+04 / 88
p0 321.6 ± 0.2484
450
400
350
300
250

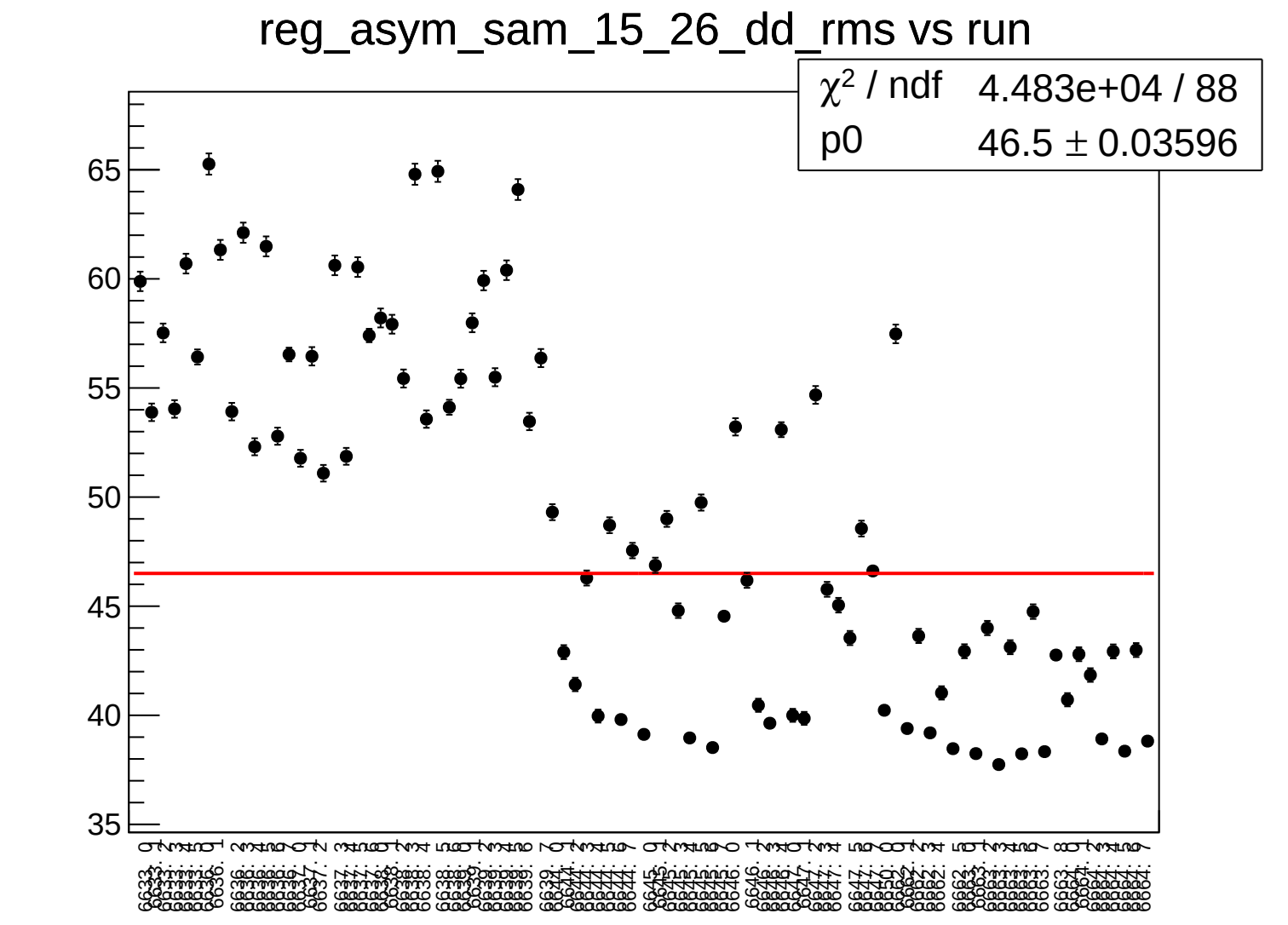

asym_sam_37_48_dd_mean vs run
χ² / ndf 90.56 / 88
p0 −677.9 ± 355.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −40.02
Std Dev 90.05
2
1
0
−1
−2

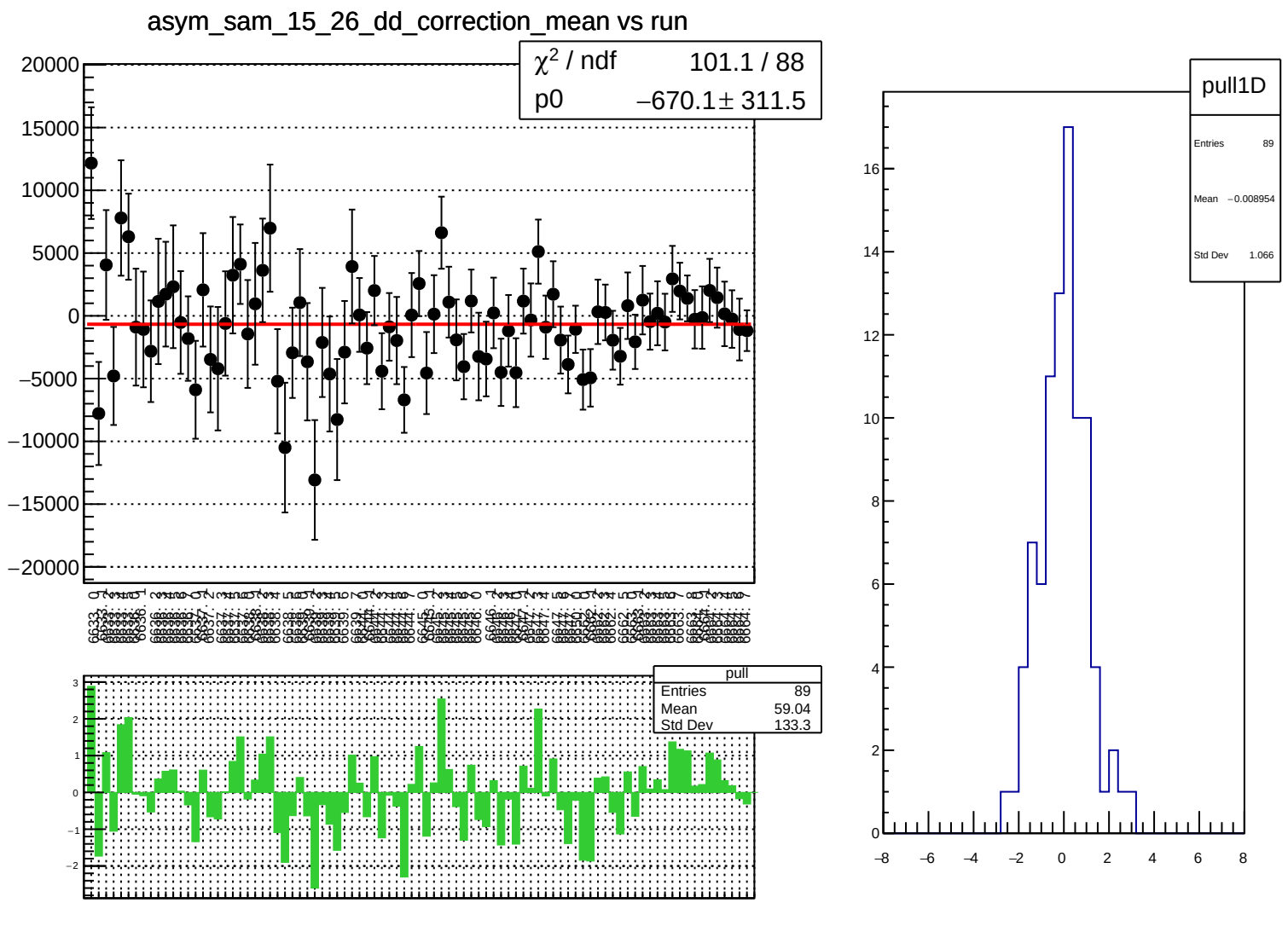

pull1D
Entries 89
Mean −0.0268
Std Dev 1.008
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

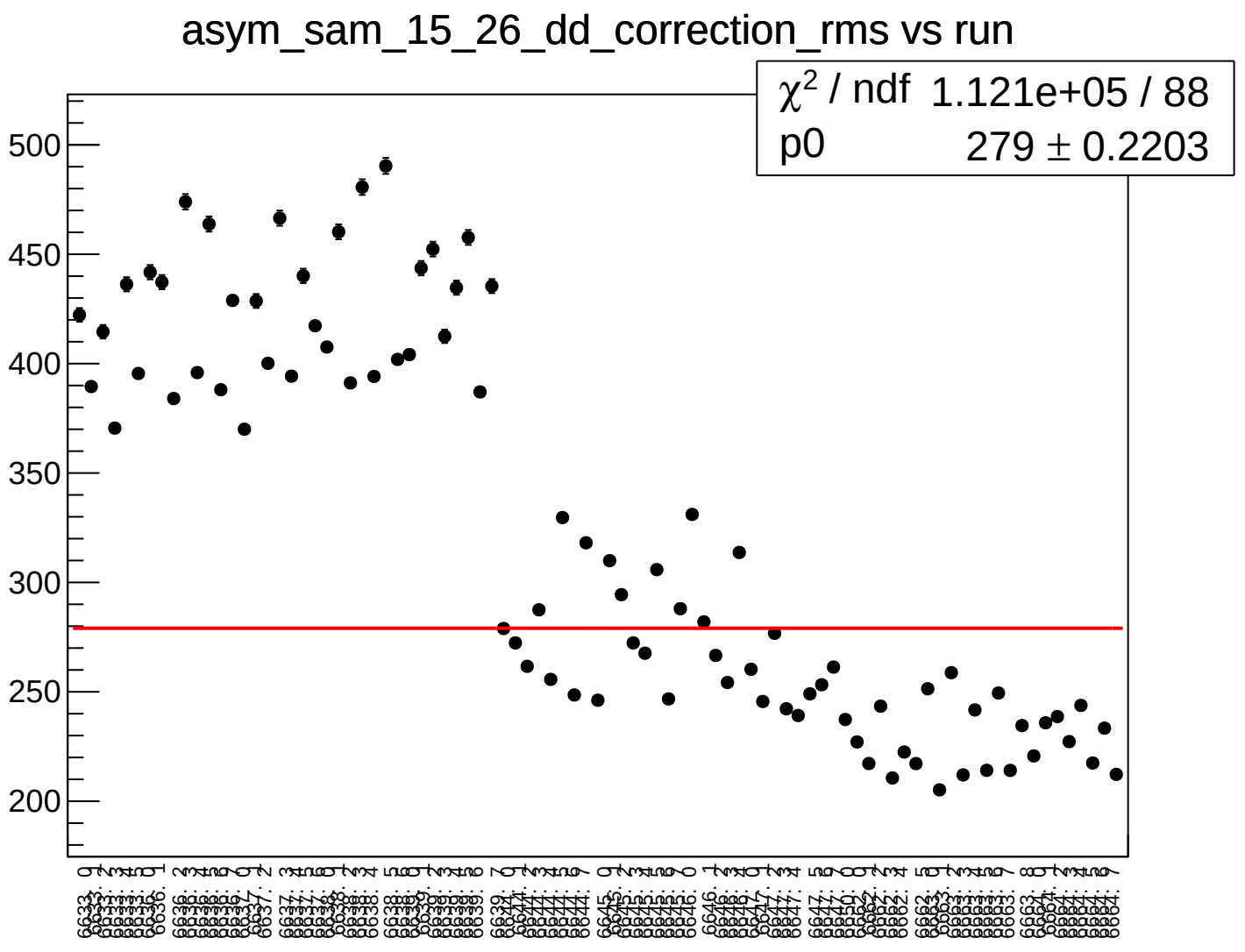

asym_sam_37_48_dd_rms vs run
χ² / ndf 3.995e+04 / 88
p0 325.9 ± 0.2517
450
400
350
300
250

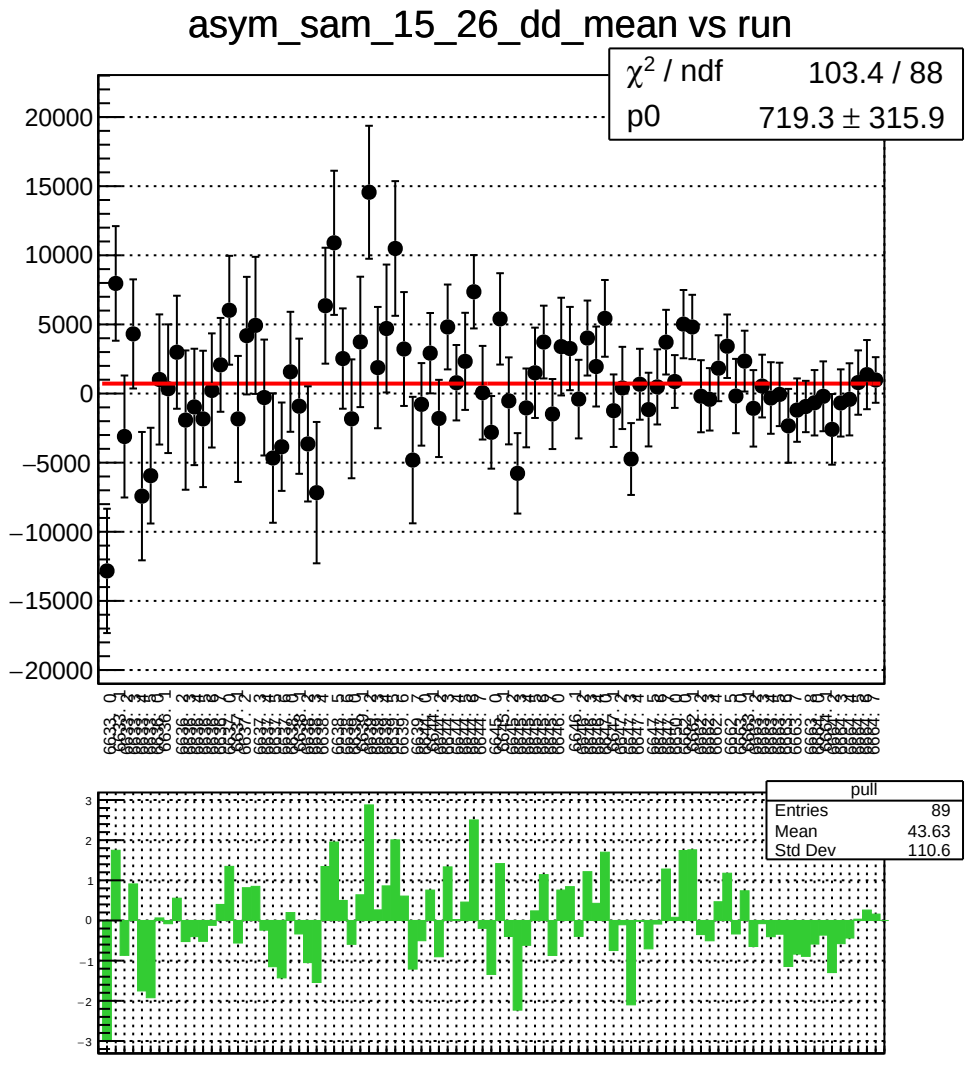

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 108.2 / 88
p0 65.14 ± 50.85
pull
Entries 89
Mean −66.63
Std Dev 117.3

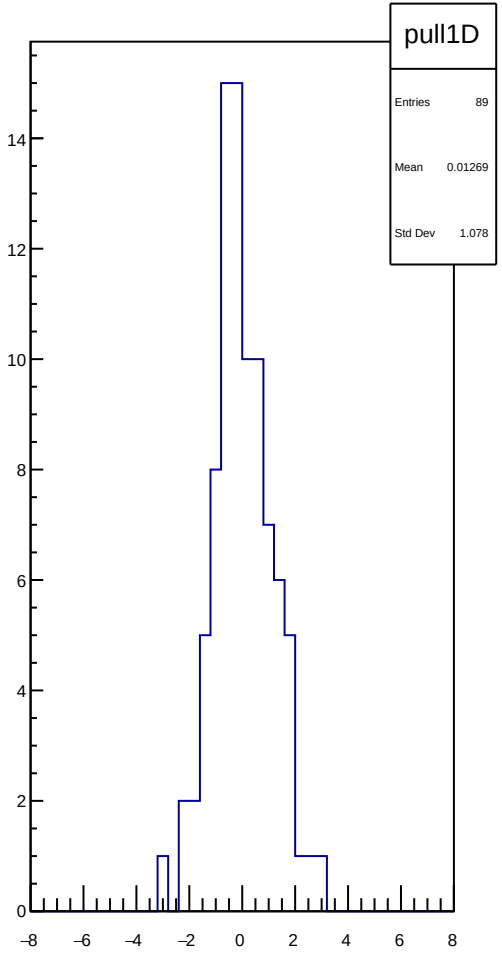

pull1D
Entries 89
Mean 0.008825
Std Dev 1.103

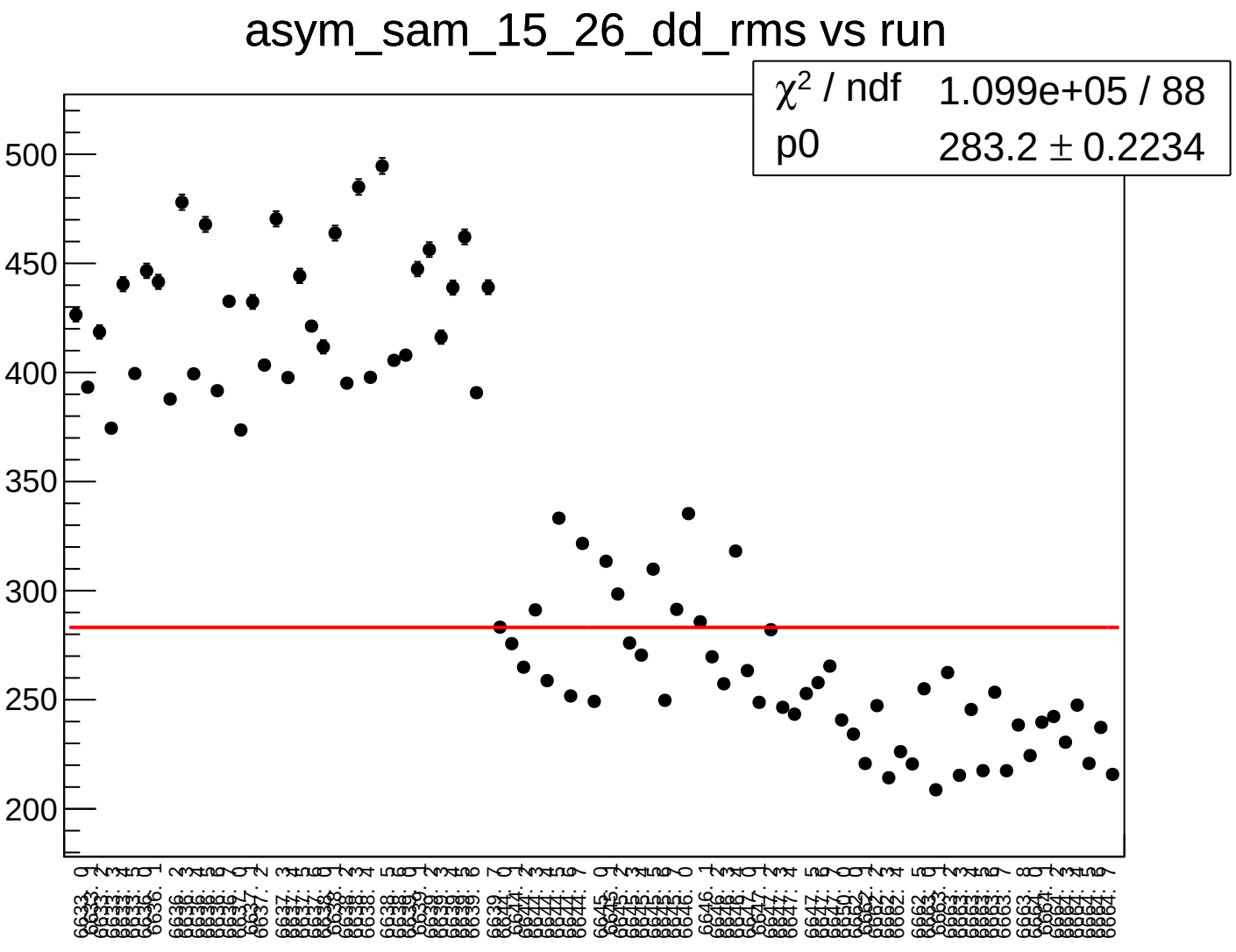

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 4.483e+04 / 88
p0 46.5 ± 0.03596
65
60
55
50
45
40
35

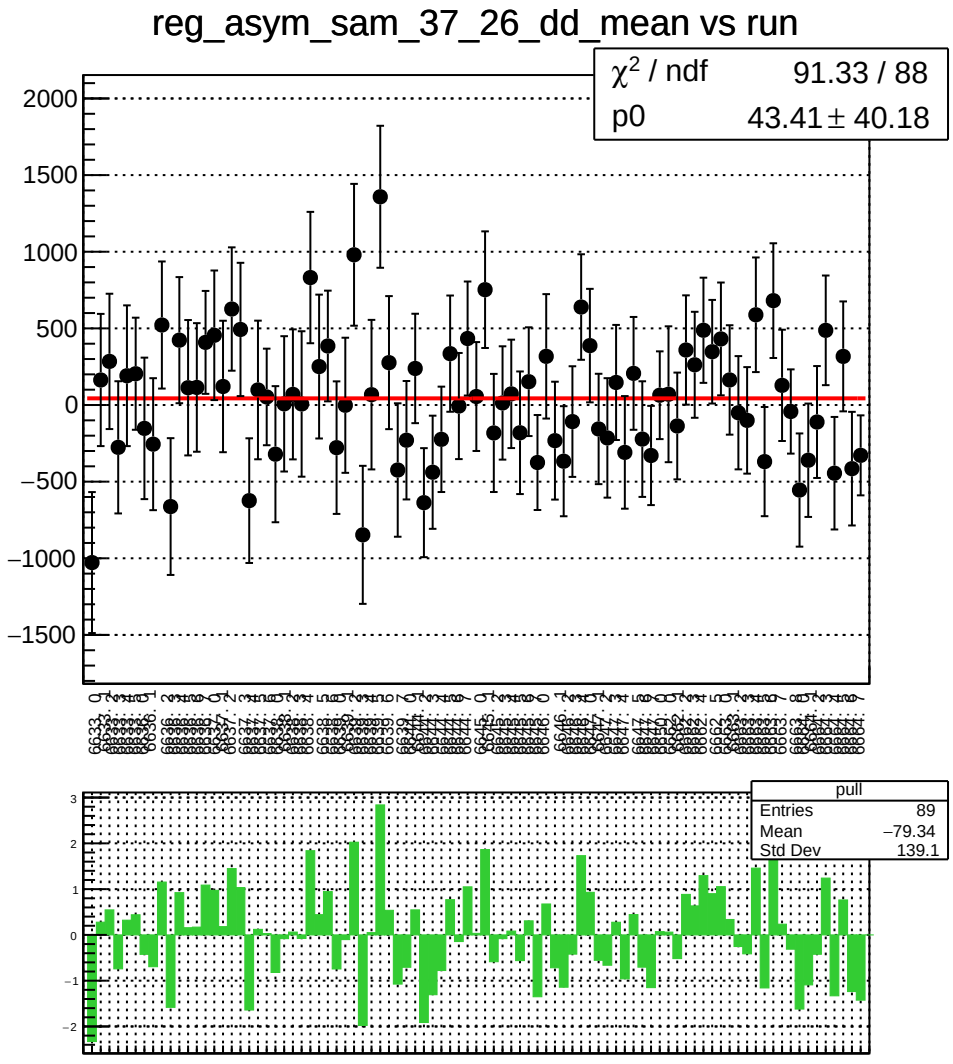

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 101.1 / 88
p0 −670.1 ± 311.5
pull
Entries 89
Mean 59.04
Std Dev 133.3
pull1D
Entries 89
Mean −0.008954
Std Dev 1.066

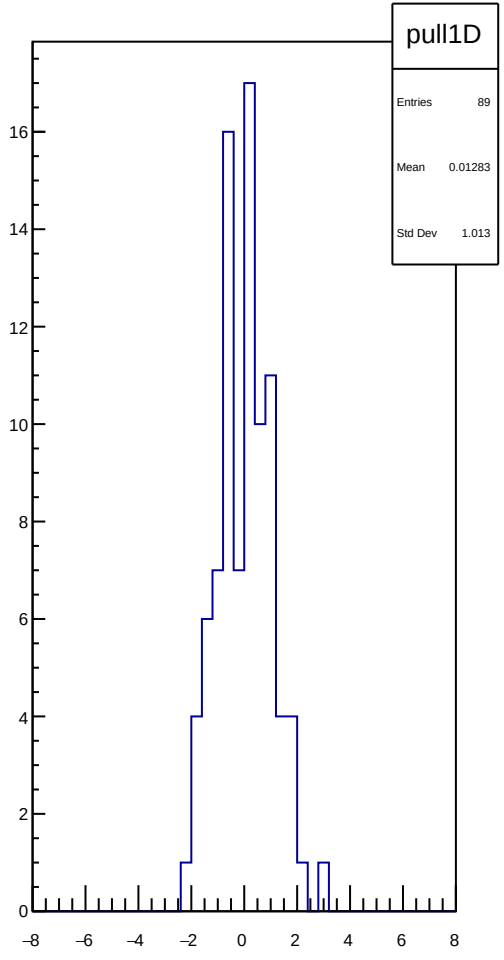

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 1.121e+05 / 88
p0 279 ± 0.2203
500
450
400
350
300
250
200

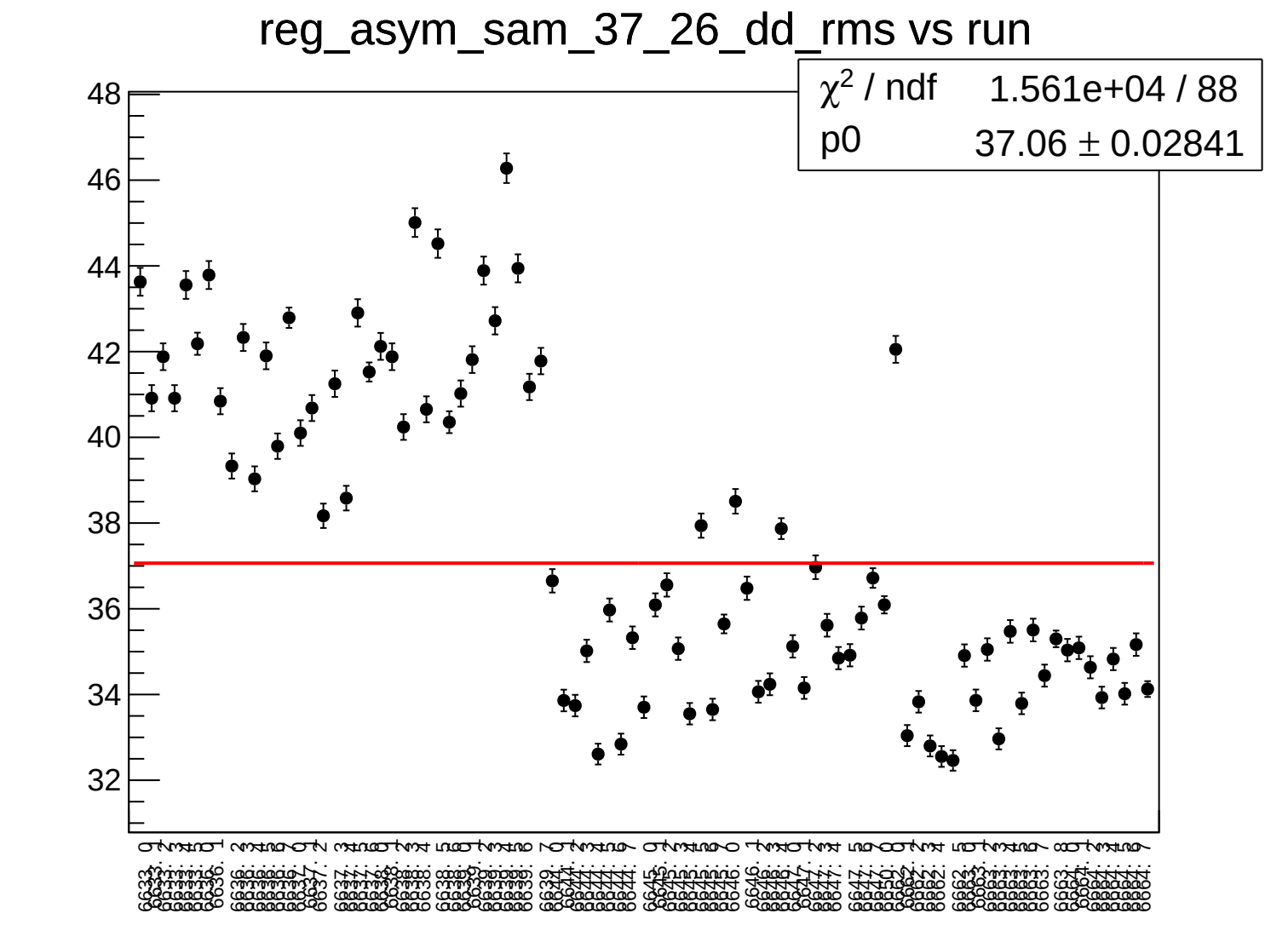

asym_sam_15_26_dd_mean vs run
χ² / ndf 103.4 / 88
p0 719.3 ± 315.9
pull
Entries 89
Mean 43.63
Std Dev 110.6

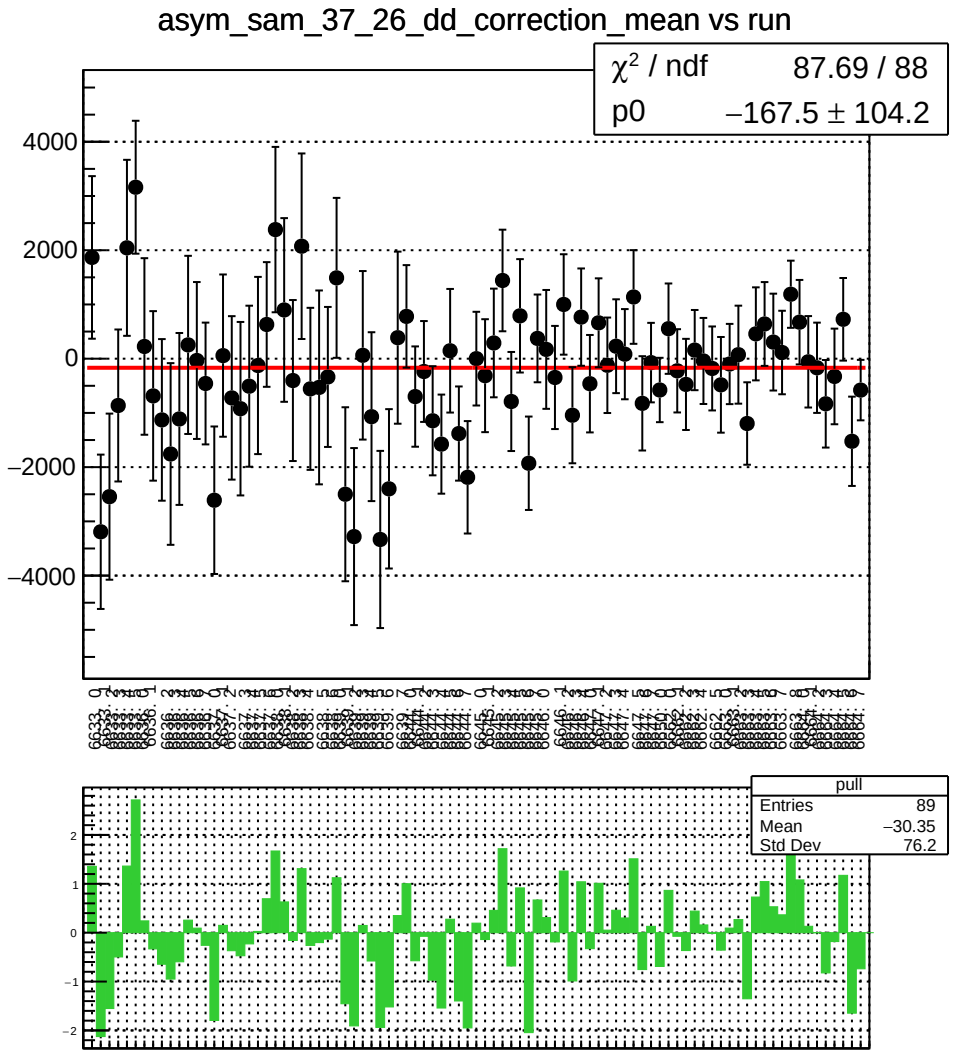

pull1D
Entries 89
Mean 0.01269
Std Dev 1.078

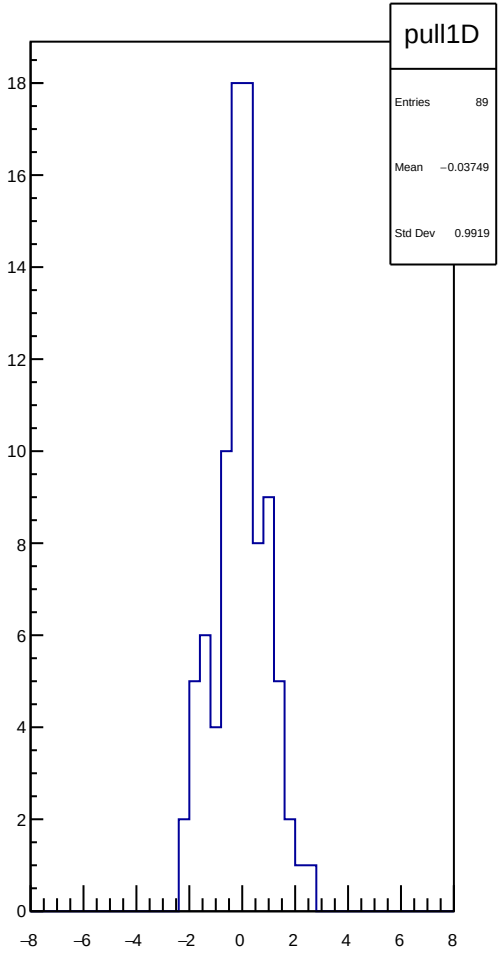

asym_sam_15_26_dd_rms vs run
χ² / ndf 1.099e+05 / 88
p0 283.2 ± 0.2234
500
450
400
350
300
250
200

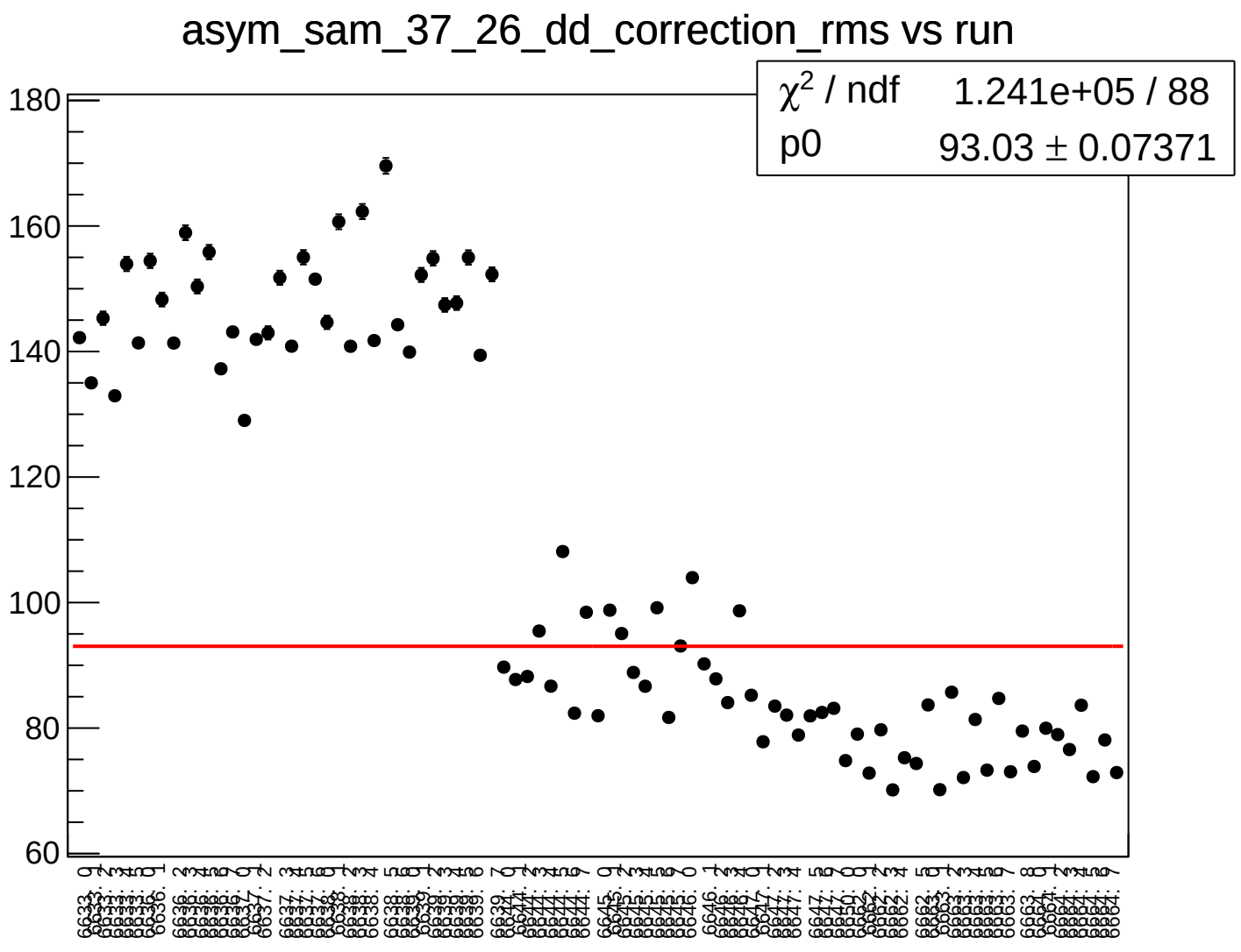

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 91.33 / 88
p0 43.41 ± 40.18
2000
1500
1000
500
0
−500
−1000
−1500
pull
Entries 89
Mean −79.34
Std Dev 139.1
3
2
1
0
−1
−2

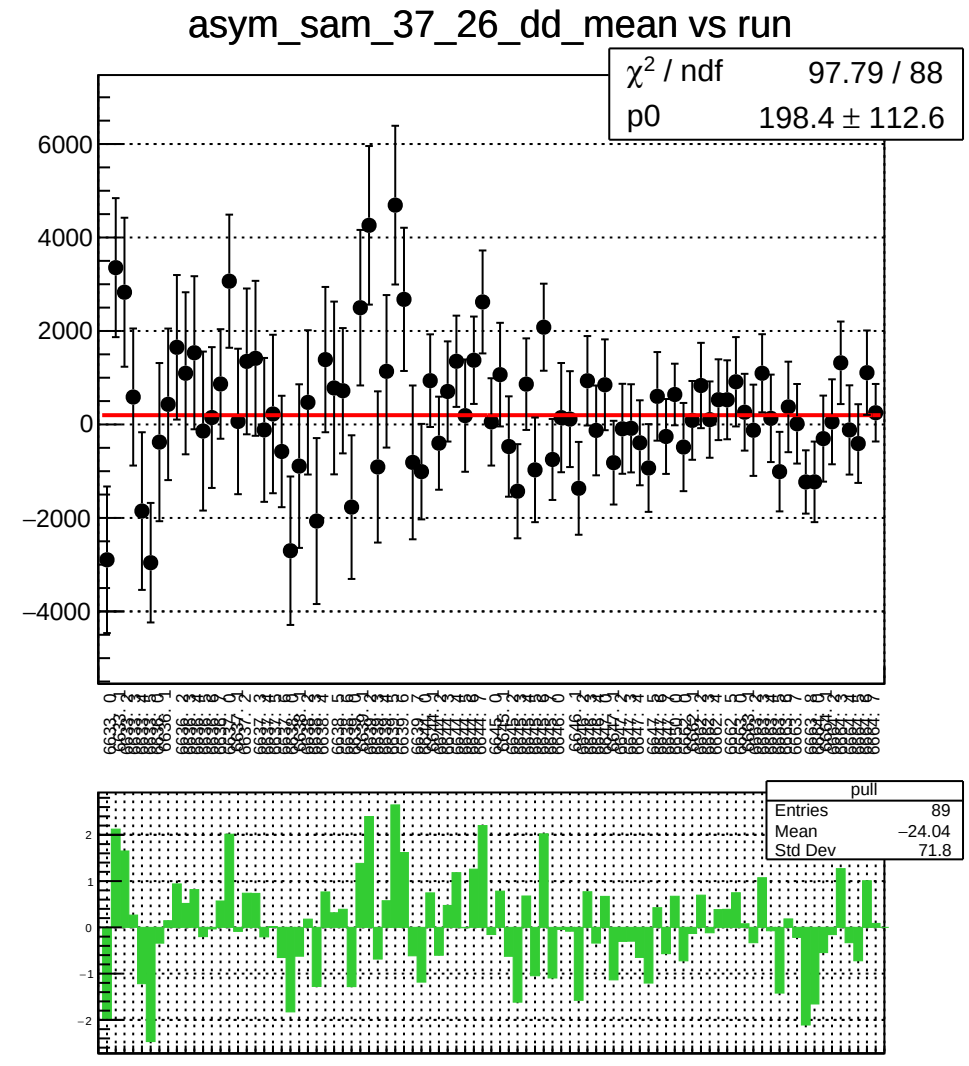

pull1D
Entries 89
Mean 0.01283
Std Dev 1.013
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

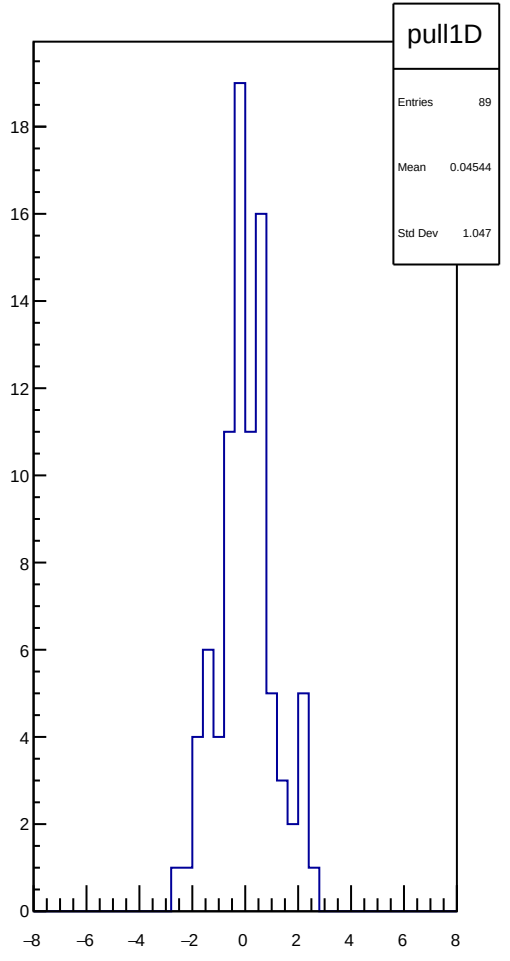

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 1.561e+04 / 88
p0 37.06 ± 0.02841
48
46
44
42
40
38
36
34
32

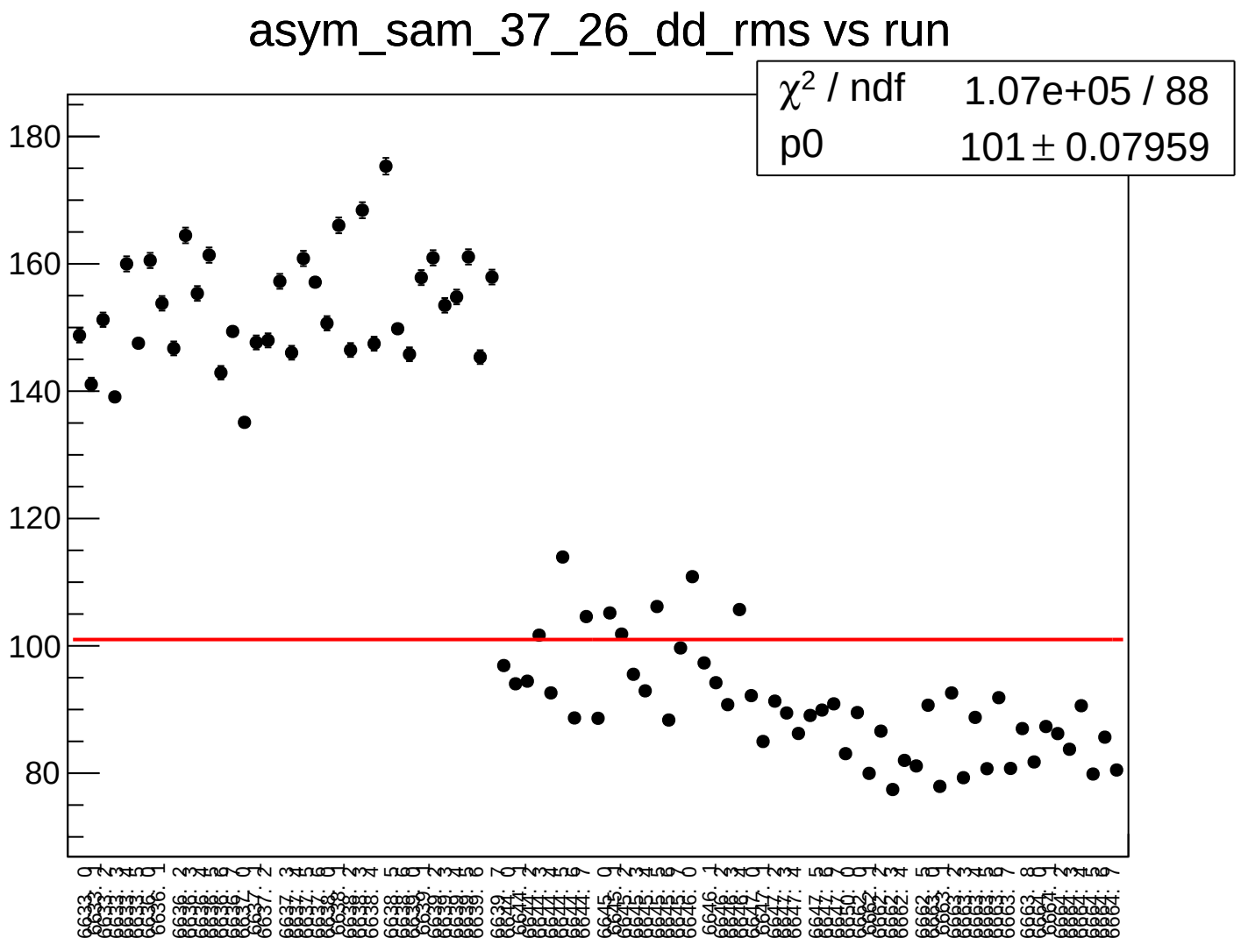

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 87.69 / 88
p0 −167.5 ± 104.2
4000
2000
0
−2000
−4000
pull
Entries 89
Mean −30.35
Std Dev 76.2
2
1
0
−1
−2

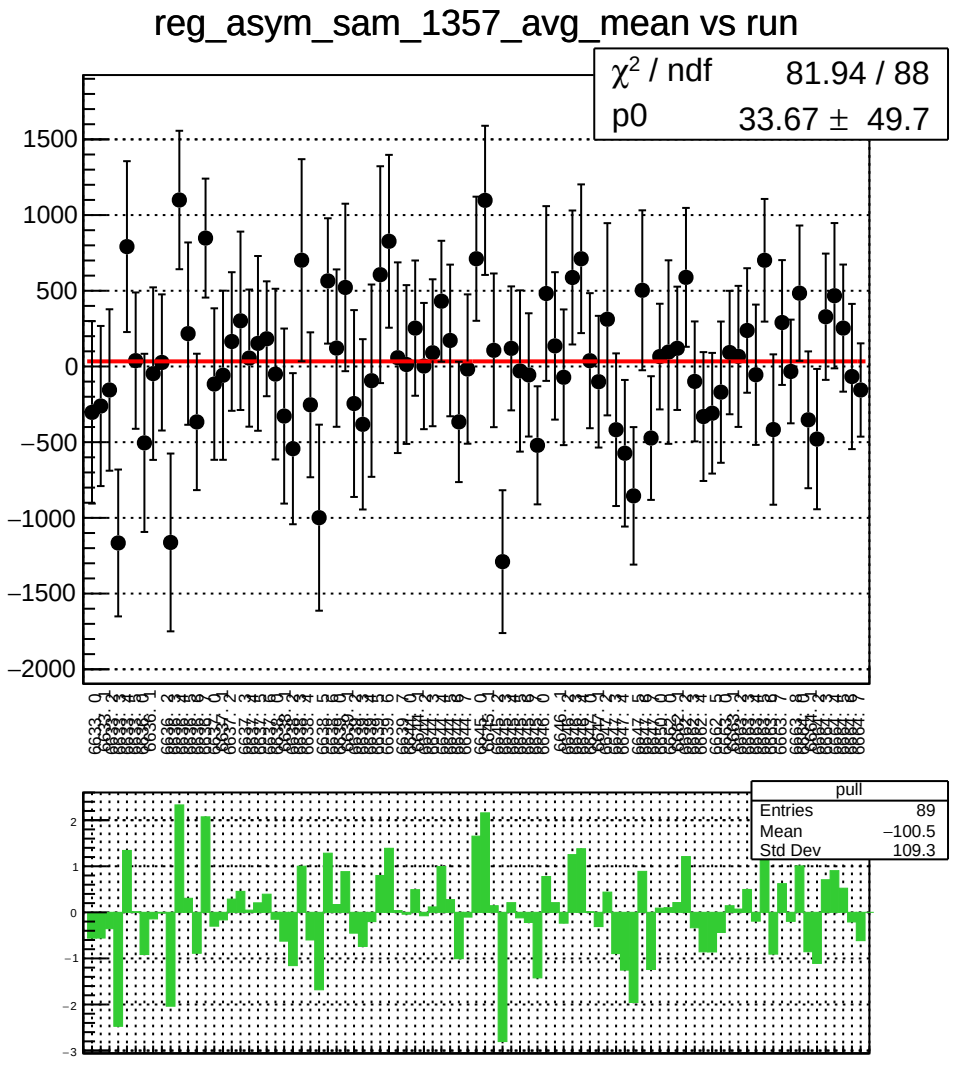

pull1D
Entries 89
Mean −0.03749
Std Dev 0.9919
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

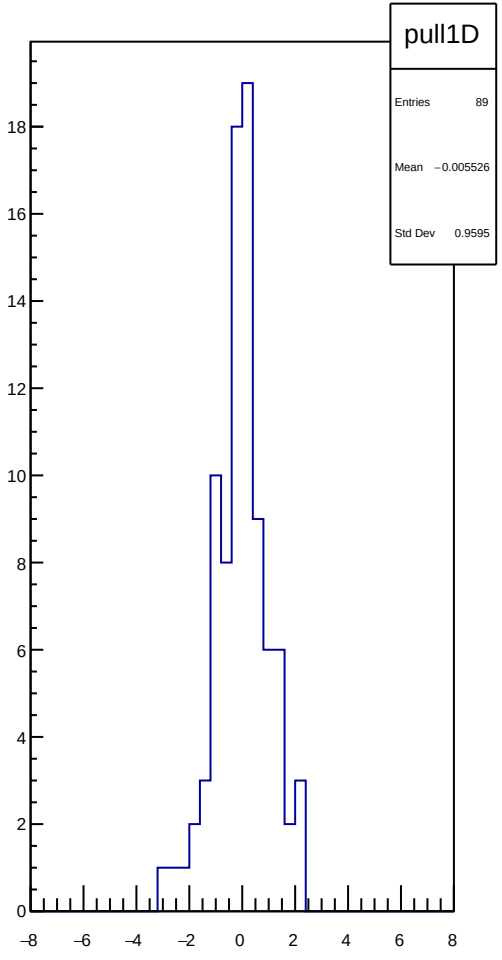

asym_sam_37_26_dd_correction_rms vs run
χ^2 / ndf 1.241e+05 / 88
p0 93.03 ± 0.07371
180
160
140
120
100
80
60

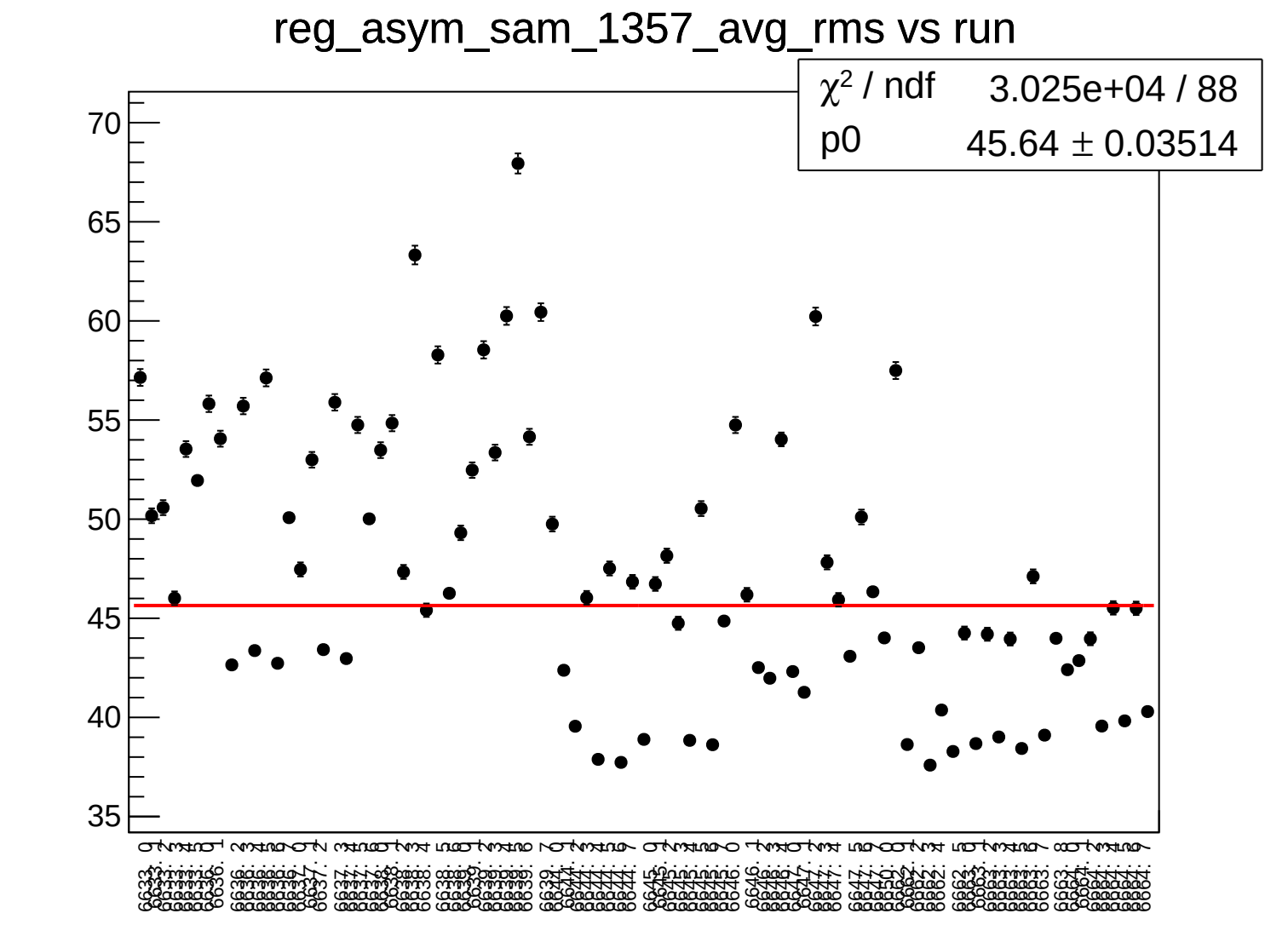

asym_sam_37_26_dd_mean vs run
χ² / ndf 97.79 / 88
p0 198.4 ± 112.6
6000
4000
2000
0
−2000
−4000
pull
Entries 89
Mean −24.04
Std Dev 71.8
2
1
0
−1
−2

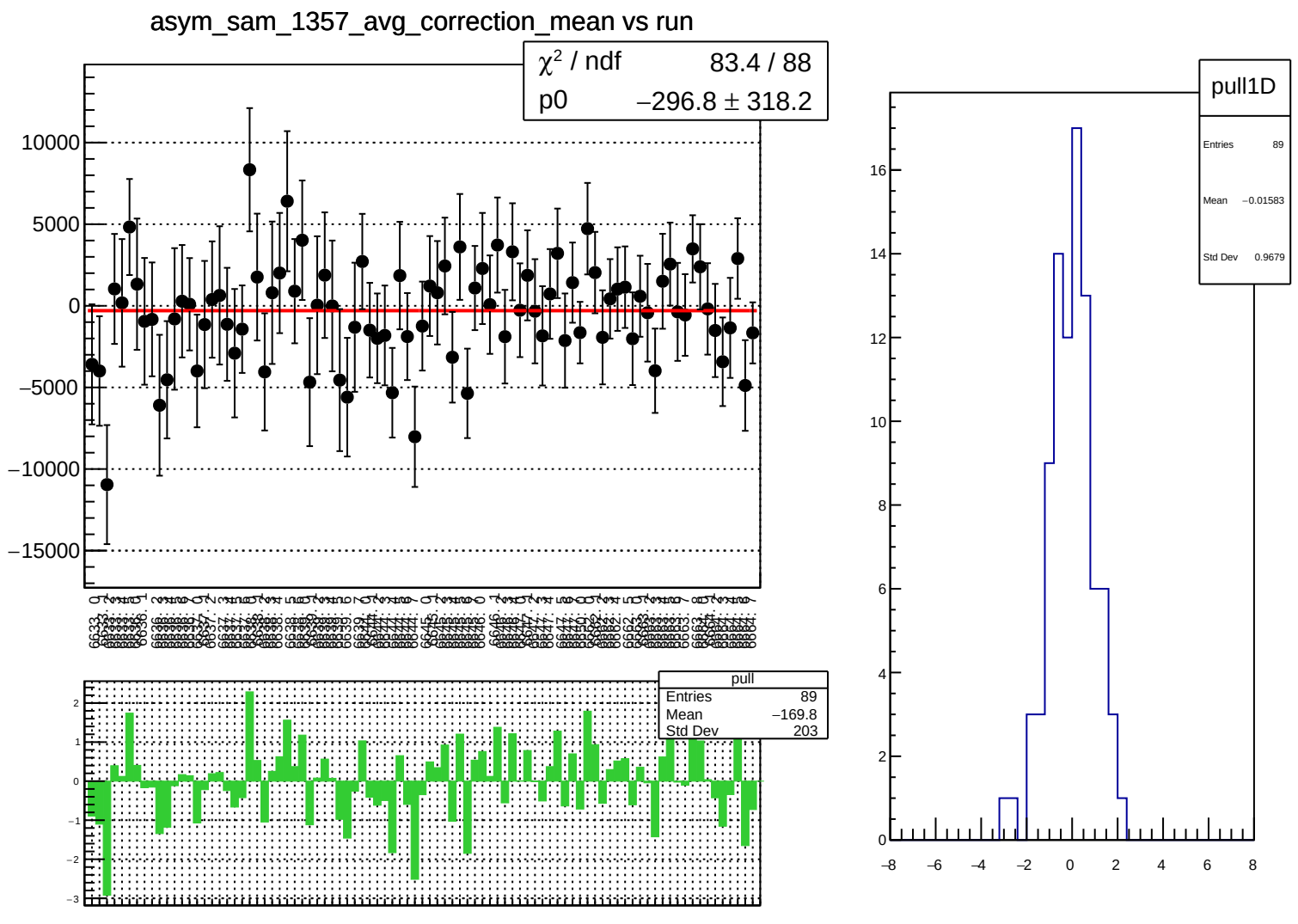

pull1D
Entries 89
Mean 0.04544
Std Dev 1.047
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

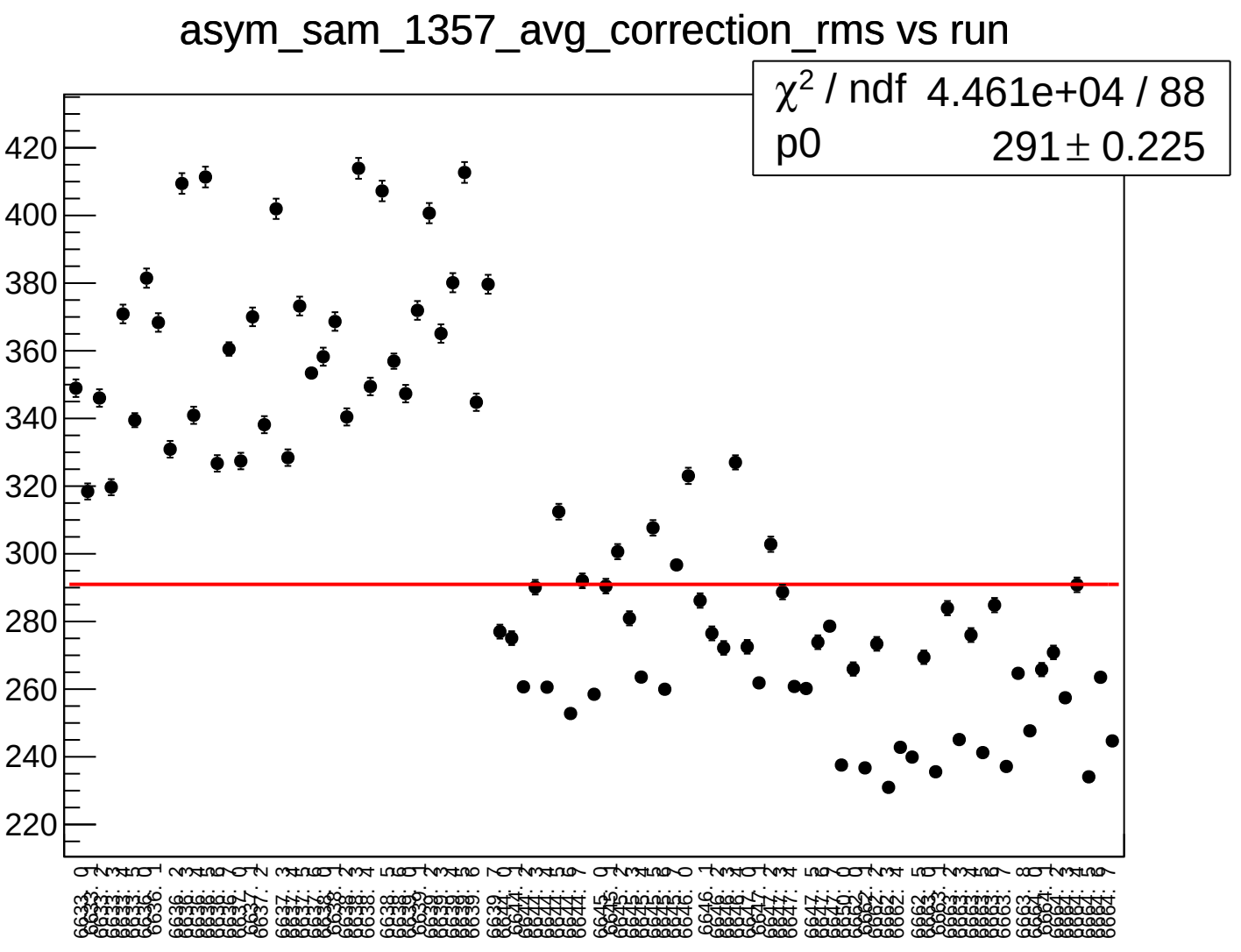

asym_sam_37_26_dd_rms vs run
χ² / ndf 1.07e+05 / 88
p0 101 ± 0.07959
180
160
140
120
100
80

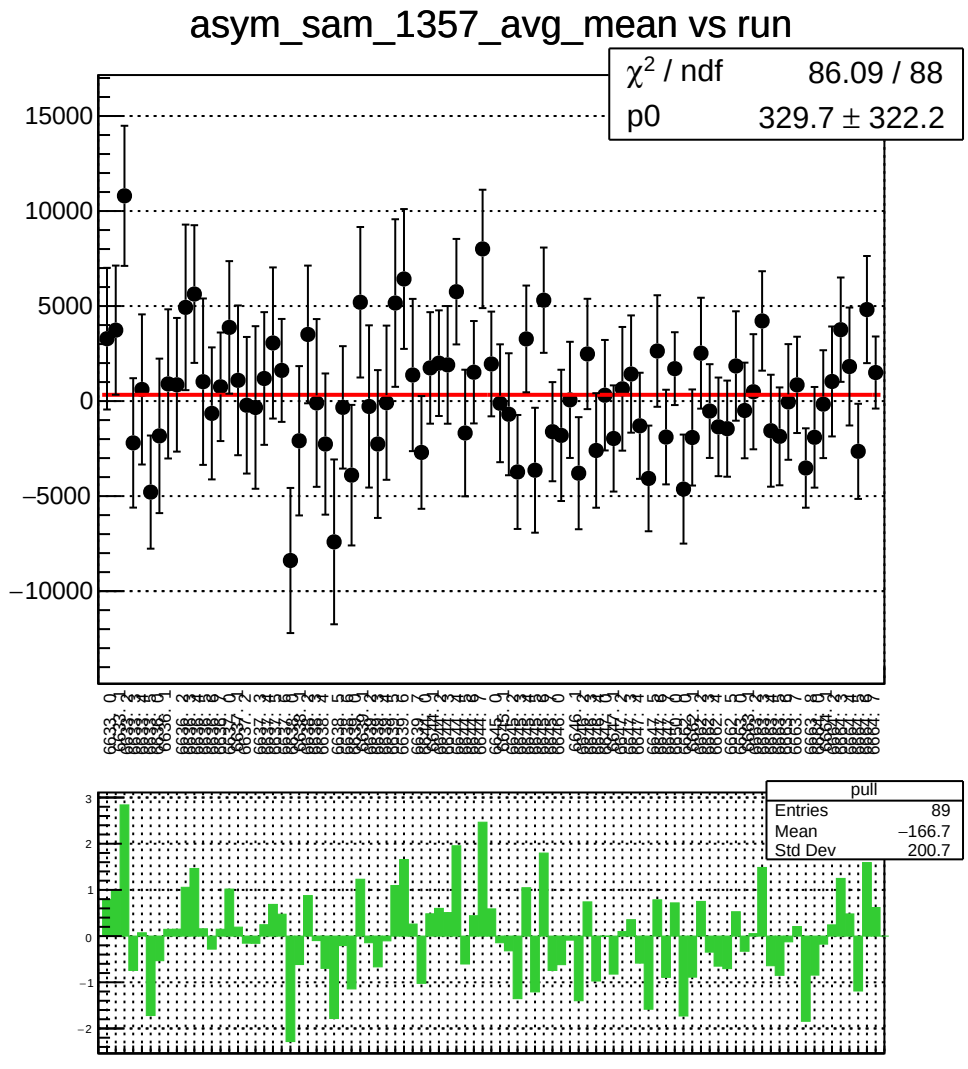

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 81.94 / 88
p0 33.67 ± 49.7
pull
Entries 89
Mean −100.5
Std Dev 109.3

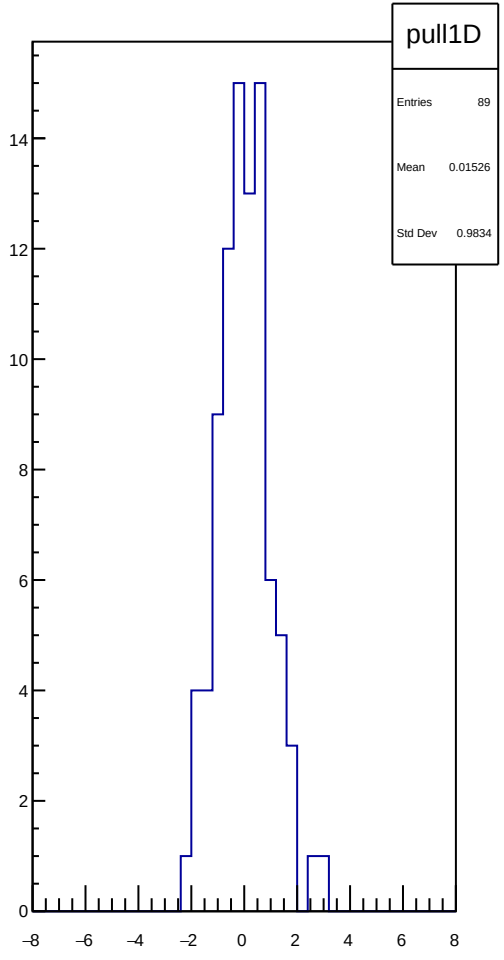

pull1D
Entries 89
Mean −0.005526
Std Dev 0.9595

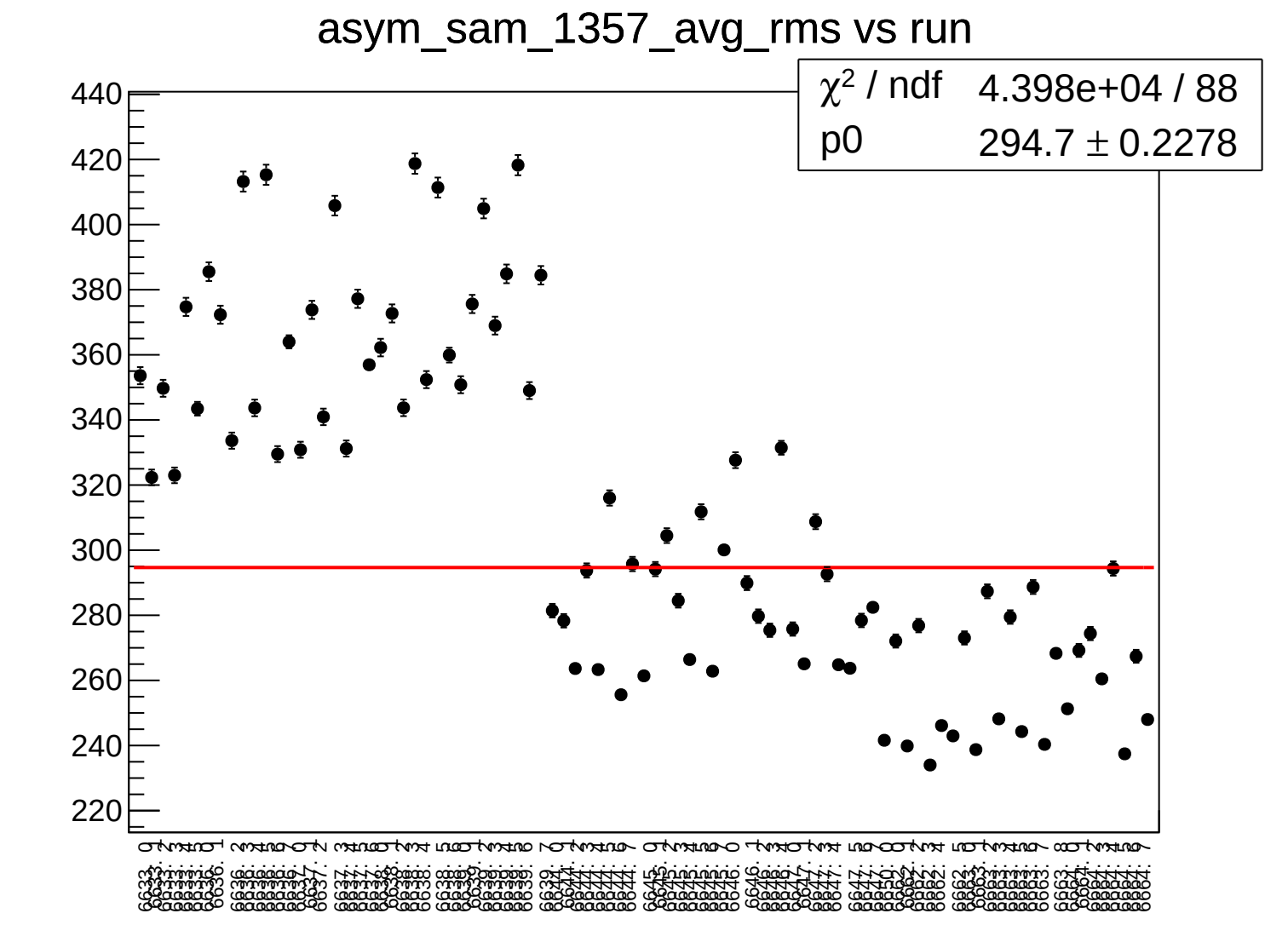

reg_asym_sam_1357_avg_rms vs run
χ^2 / ndf 3.025e+04 / 88
p0 45.64 ± 0.03514
70
65
60
55
50
45
40
35

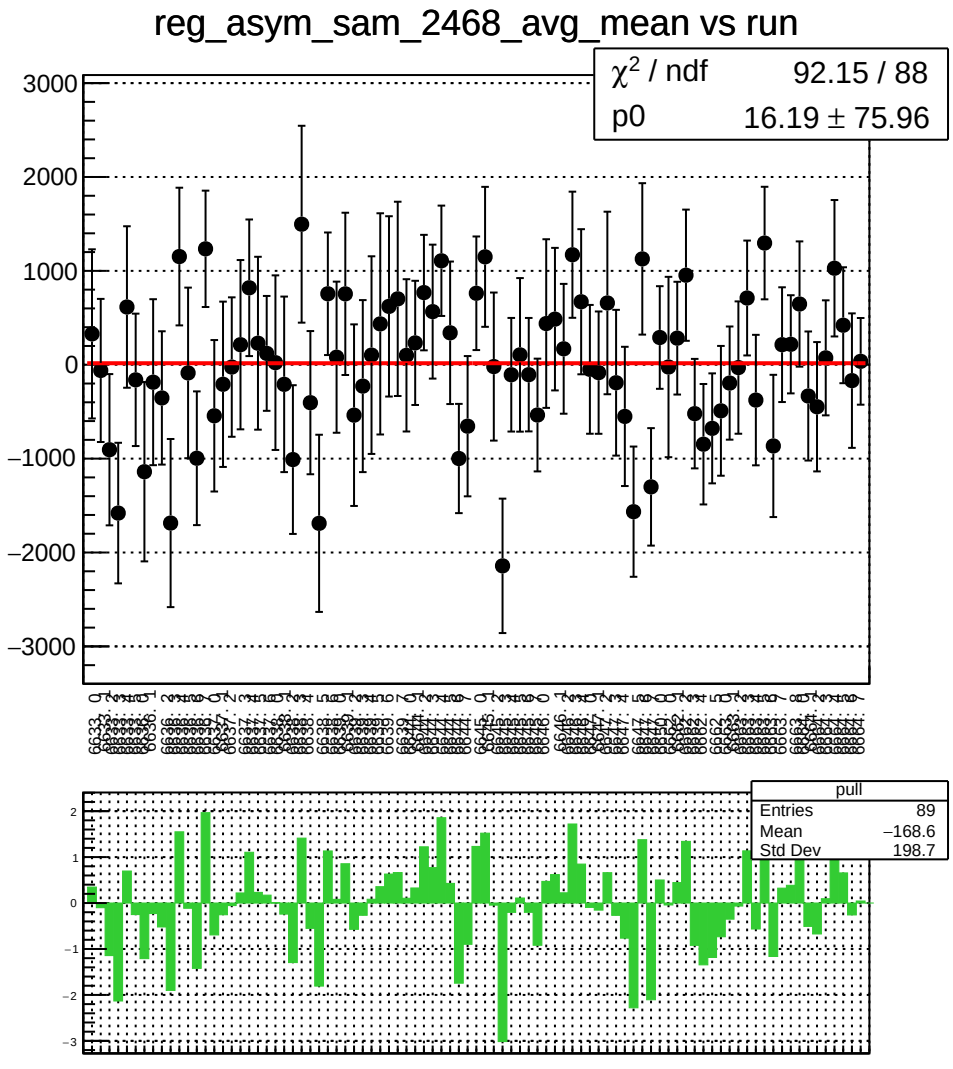

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 83.4 / 88
p0 −296.8 ± 318.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −169.8
Std Dev 203
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.01583
Std Dev 0.9679
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

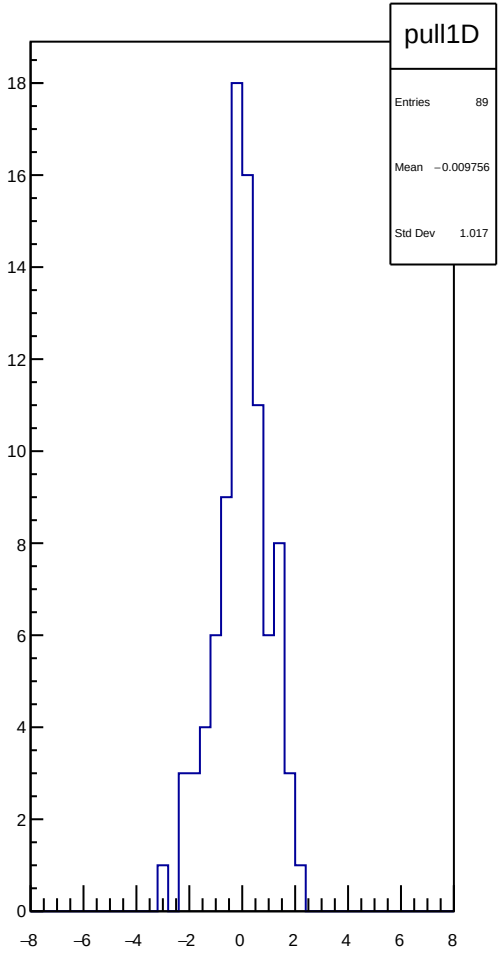

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 4.461e+04 / 88
p0 291 ± 0.225
420
400
380
360
340
320
300
280
260
240
220

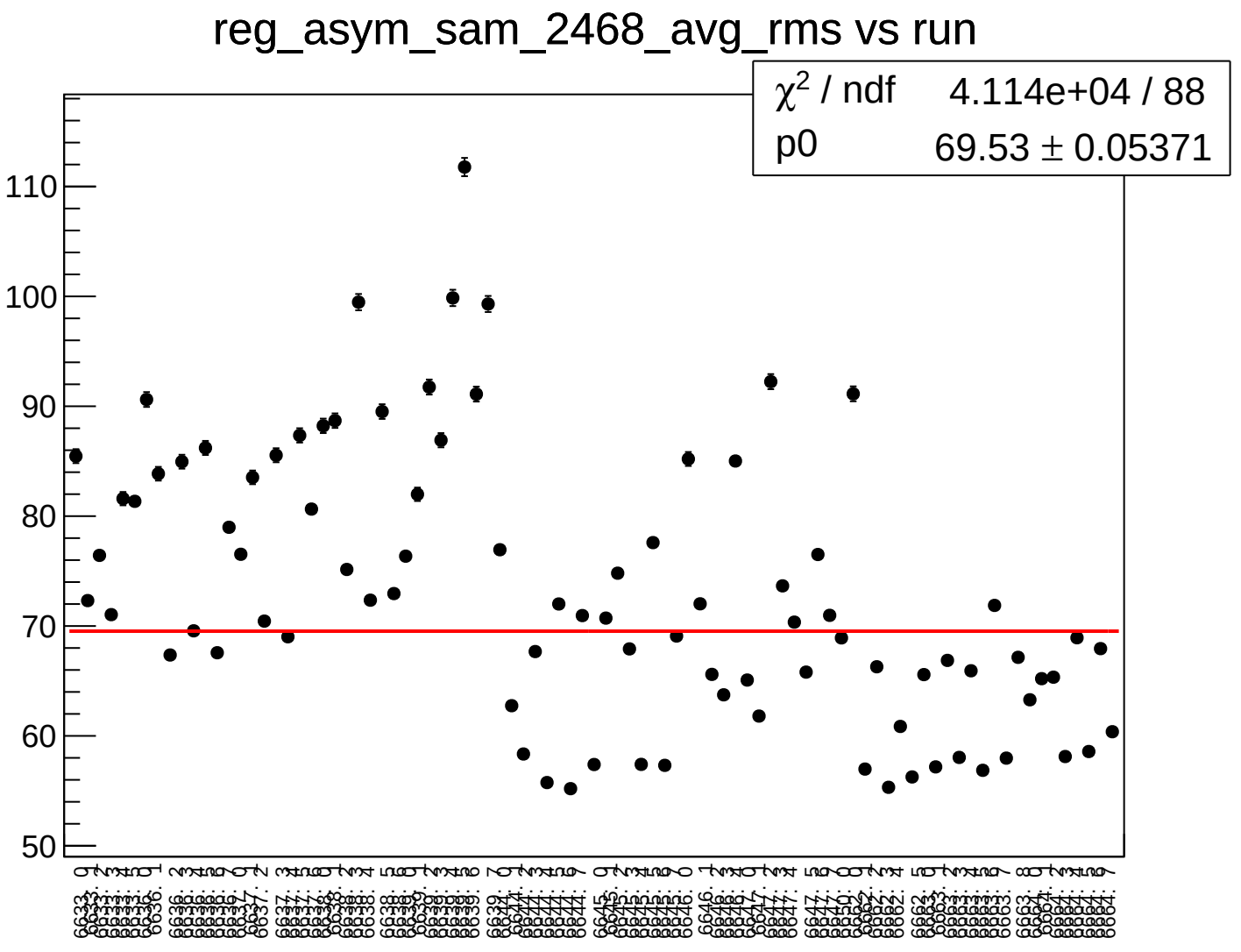

asym_sam_1357_avg_mean vs run
χ² / ndf 86.09 / 88
p0 329.7 ± 322.2
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −166.7
Std Dev 200.7
3
2
1
0
−1
−2

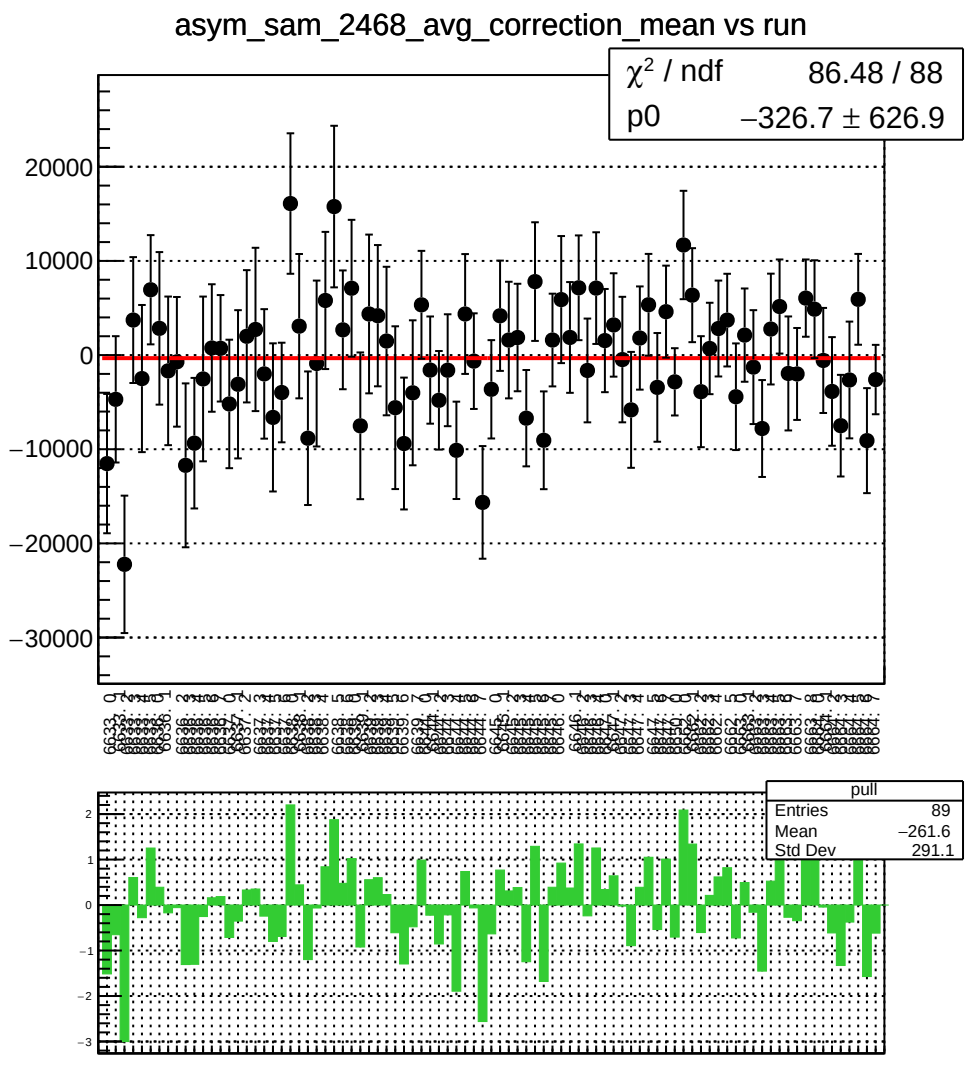

pull1D
Entries 89
Mean 0.01526
Std Dev 0.9834
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

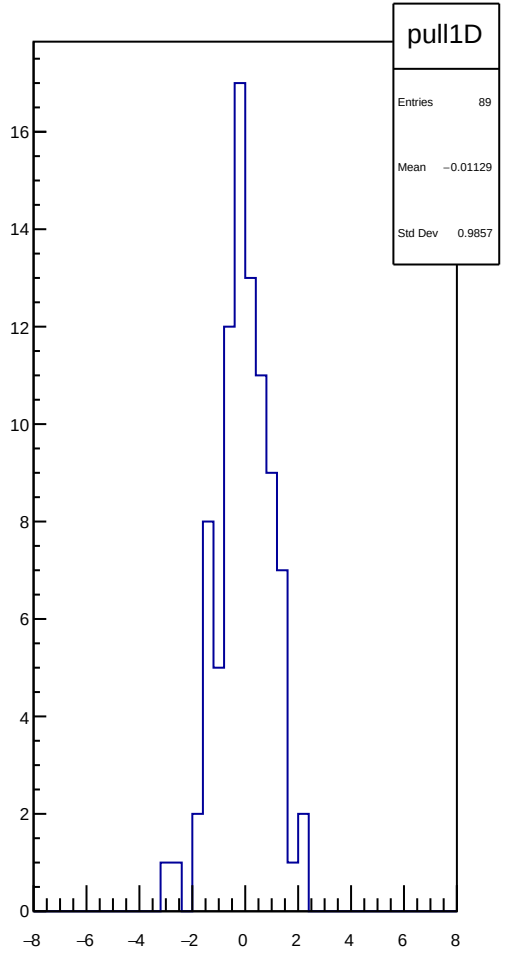

asym_sam_1357_avg_rms vs run
χ^2 / ndf 4.398e+04 / 88
p0 294.7 ± 0.2278
440
420
400
380
360
340
320
300
280
260
240
220

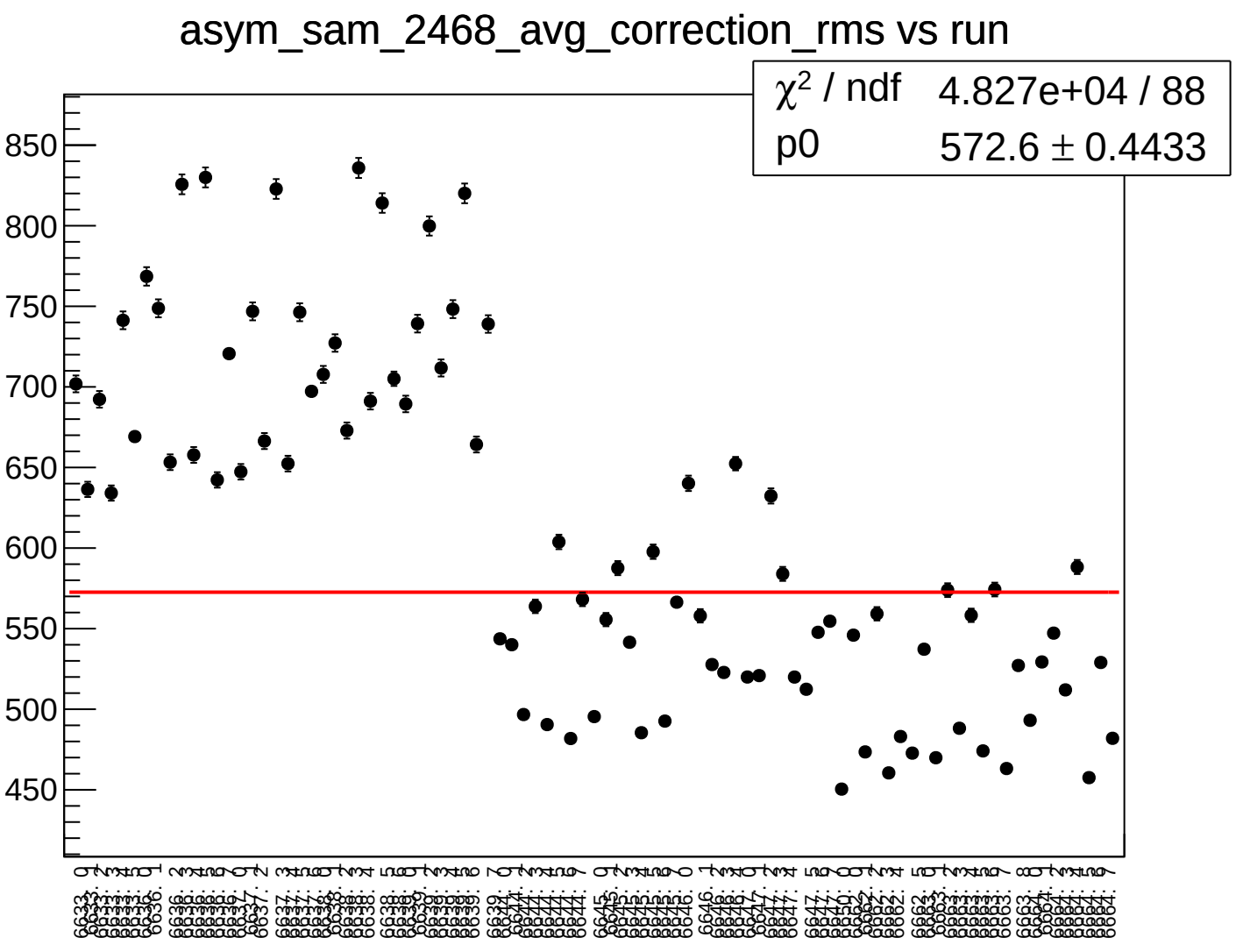

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 92.15 / 88
p0 16.19 ± 75.96
pull
Entries 89
Mean −168.6
Std Dev 198.7

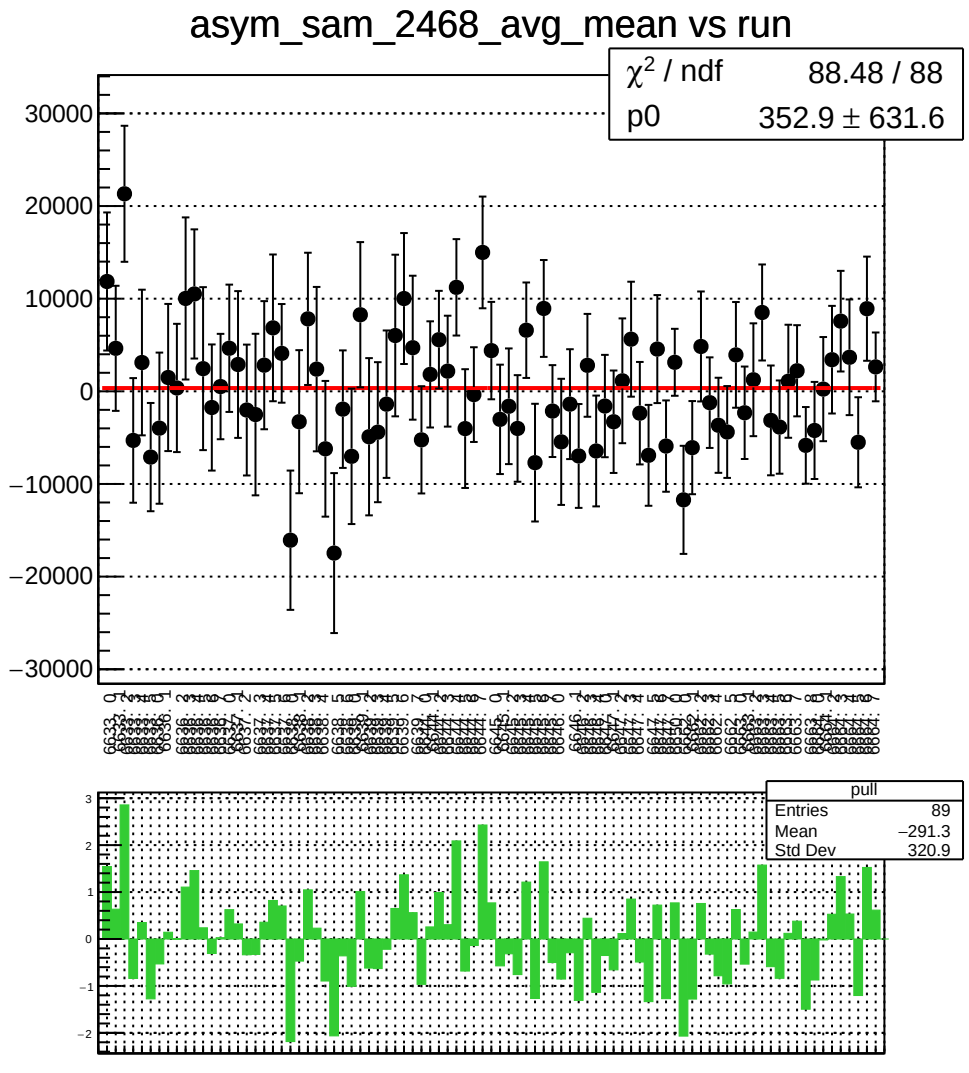

pull1D
Entries 89
Mean −0.009756
Std Dev 1.017

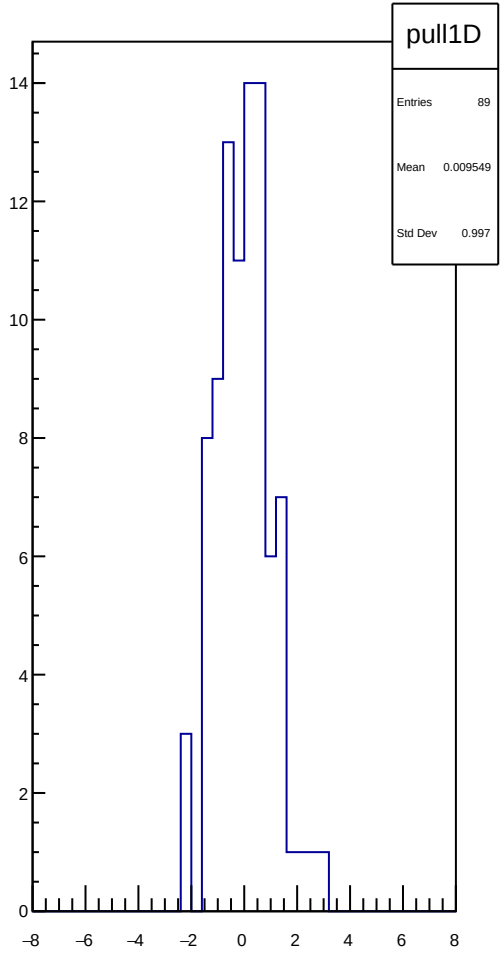

reg_asym_sam_2468_avg_rms vs run
χ^2 / ndf 4.114e+04 / 88
p0 69.53 ± 0.05371
110
100
90
80
70
60
50

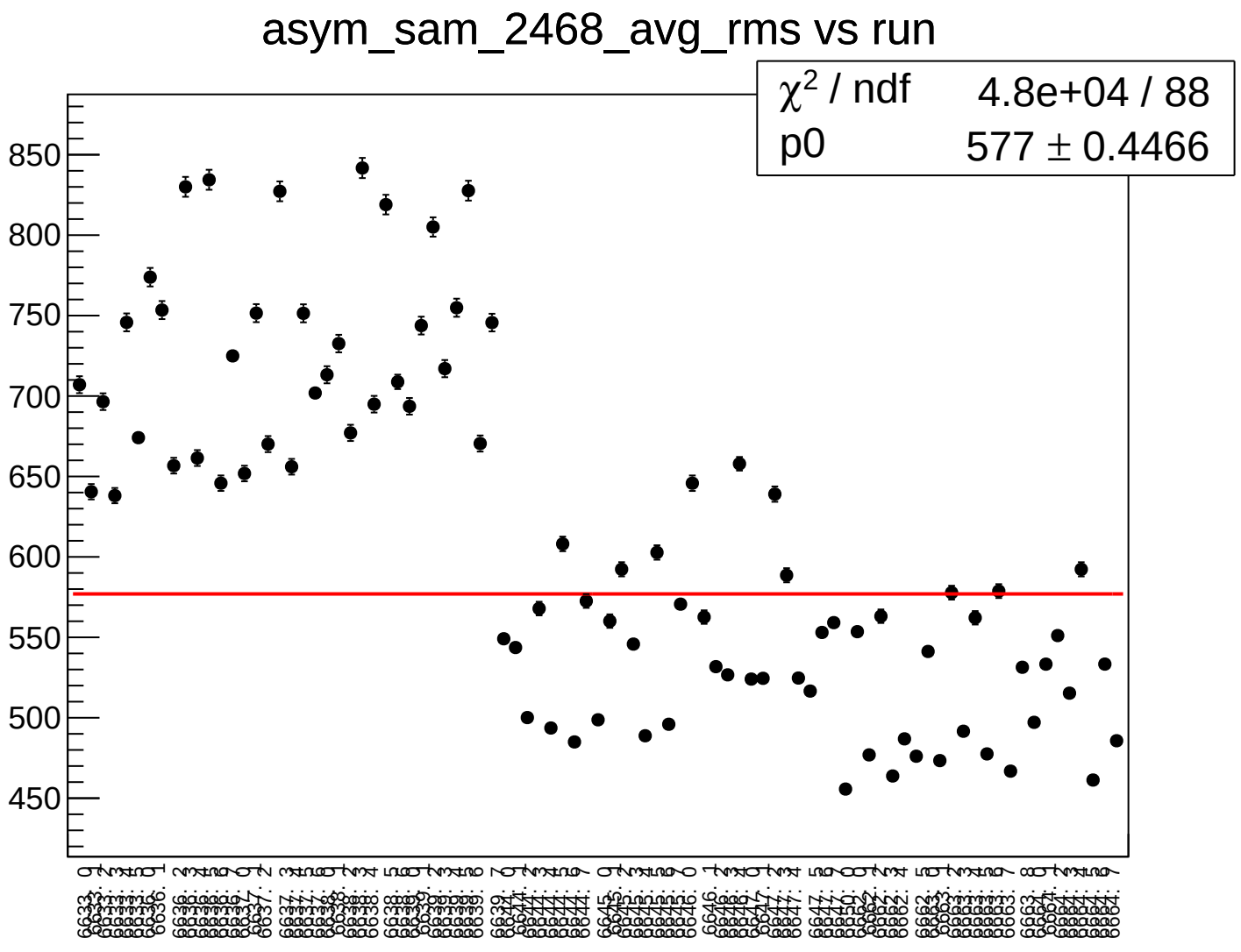

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 86.48 / 88
p0 −326.7 ± 626.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −261.6
Std Dev 291.1
2
1
0
−1
−2
−3

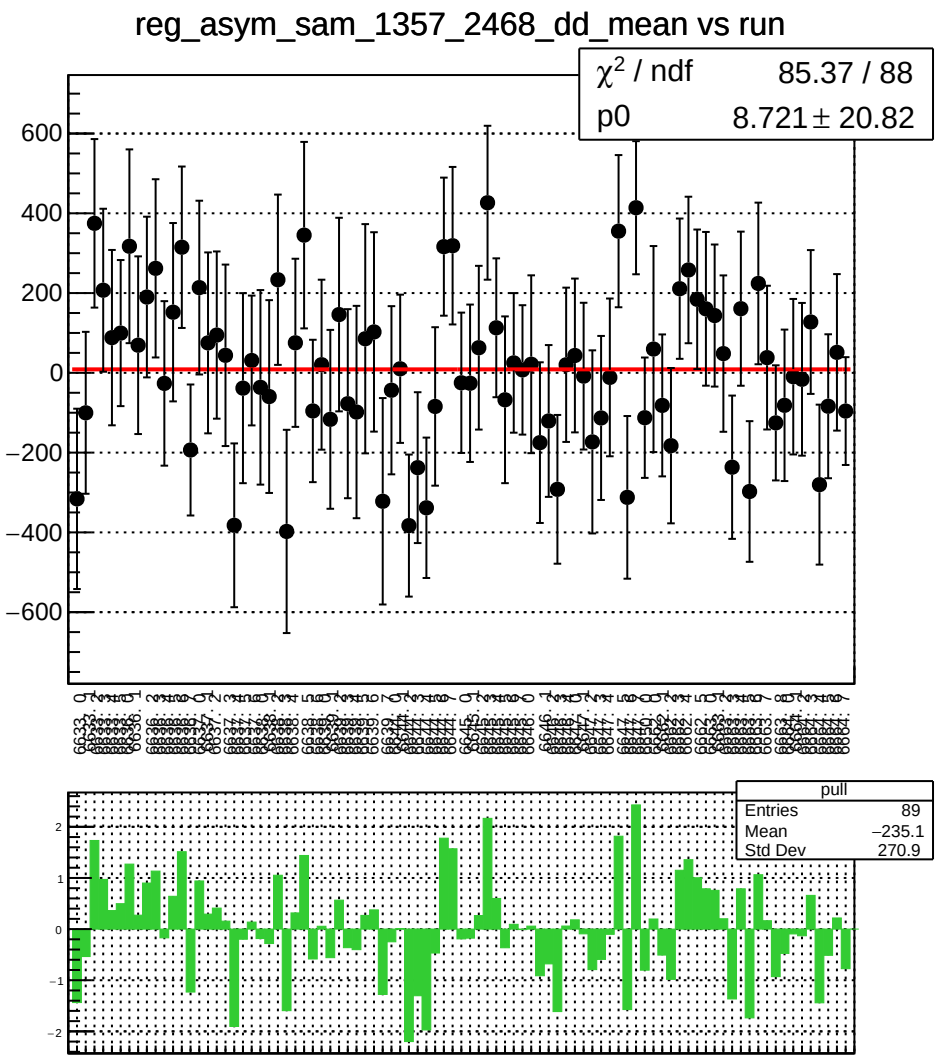

pull1D
Entries 89
Mean −0.01129
Std Dev 0.9857
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

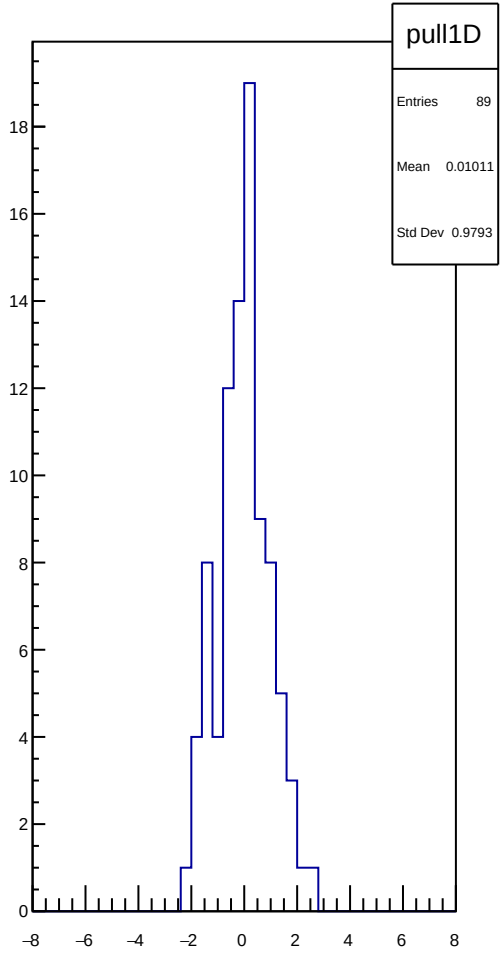

asym_sam_2468_avg_correction_rms vs run
χ^2 / ndf 4.827e+04 / 88
p0 572.6 ± 0.4433
850
800
750
700
650
600
550
500
450

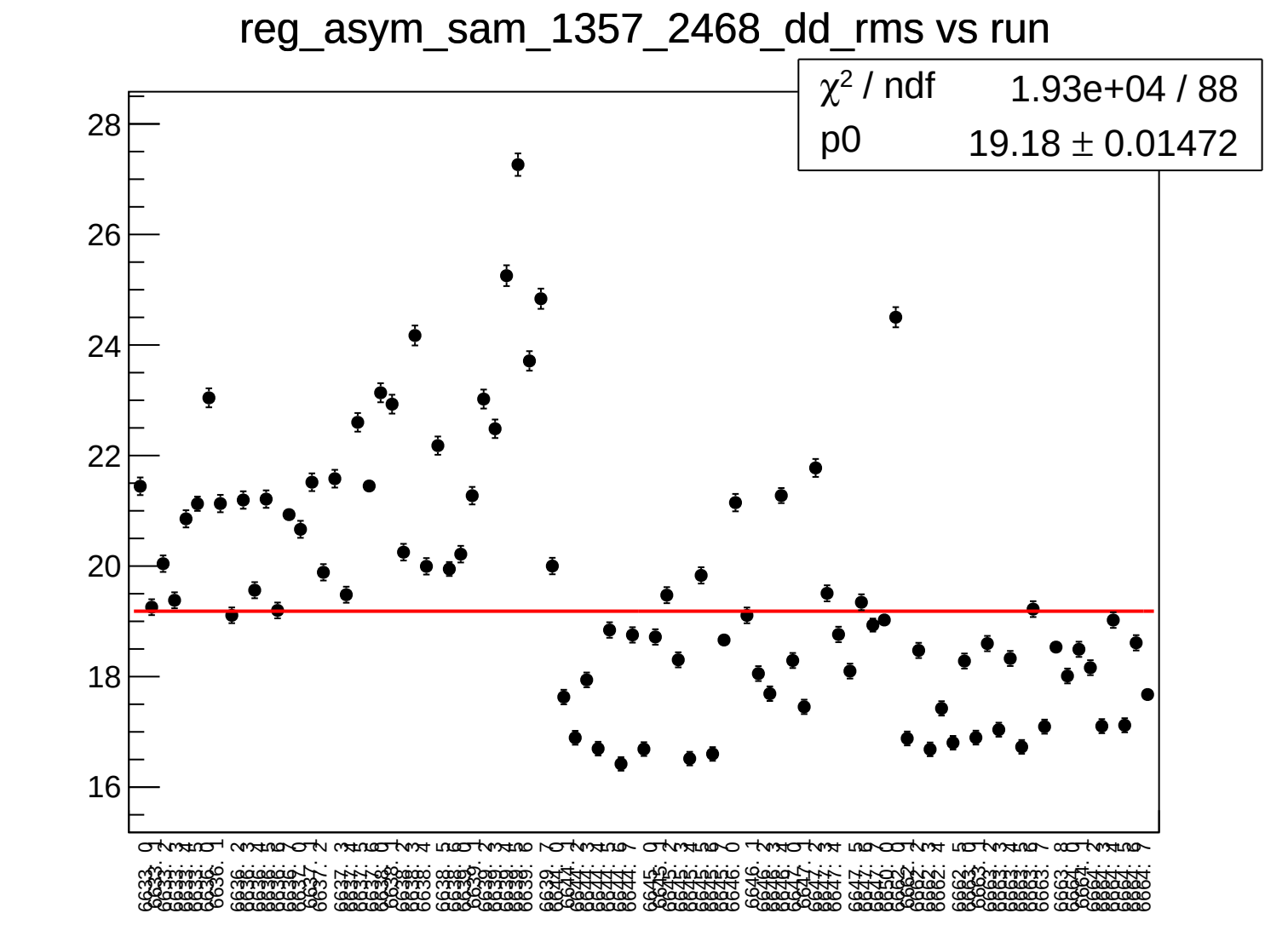

asym_sam_2468_avg_mean vs run
χ² / ndf 88.48 / 88
p0 352.9 ± 631.6
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −291.3
Std Dev 320.9
3
2
1
0
−1
−2

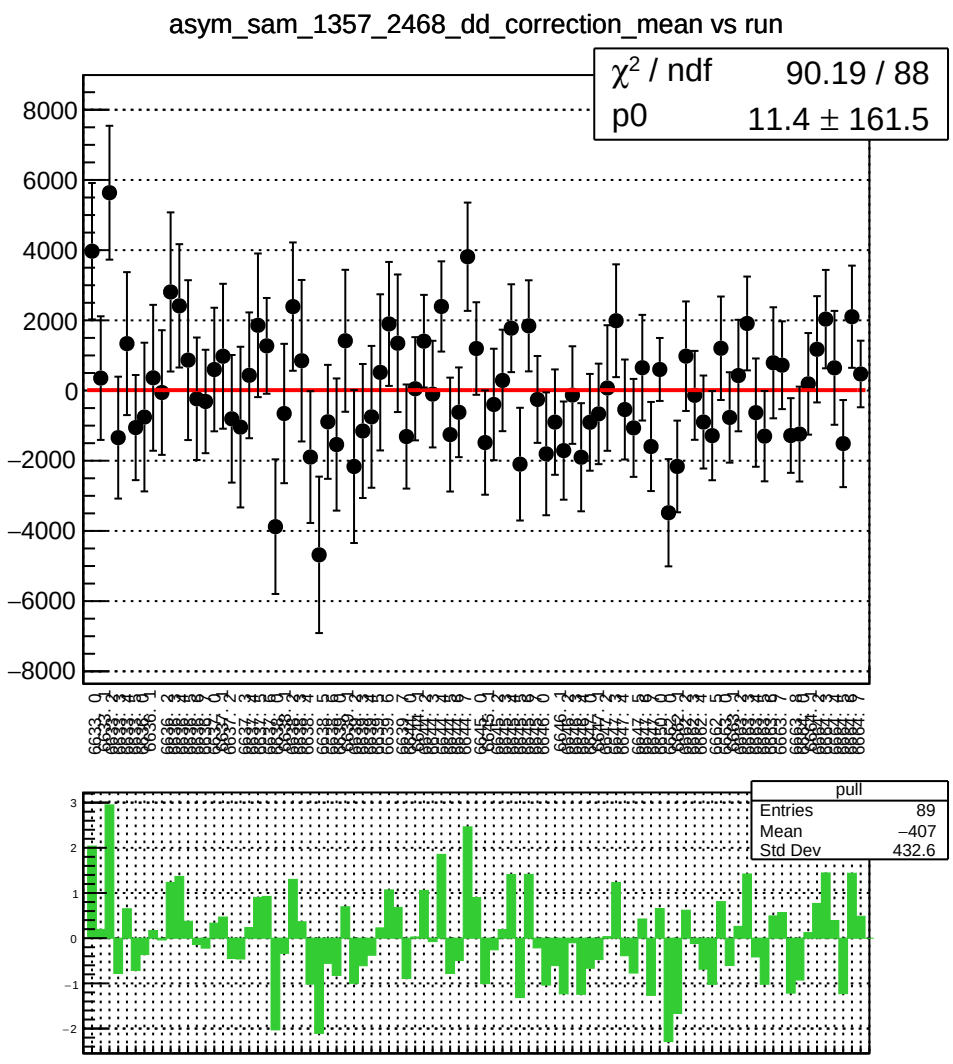

pull1D
Entries 89
Mean 0.009549
Std Dev 0.997
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

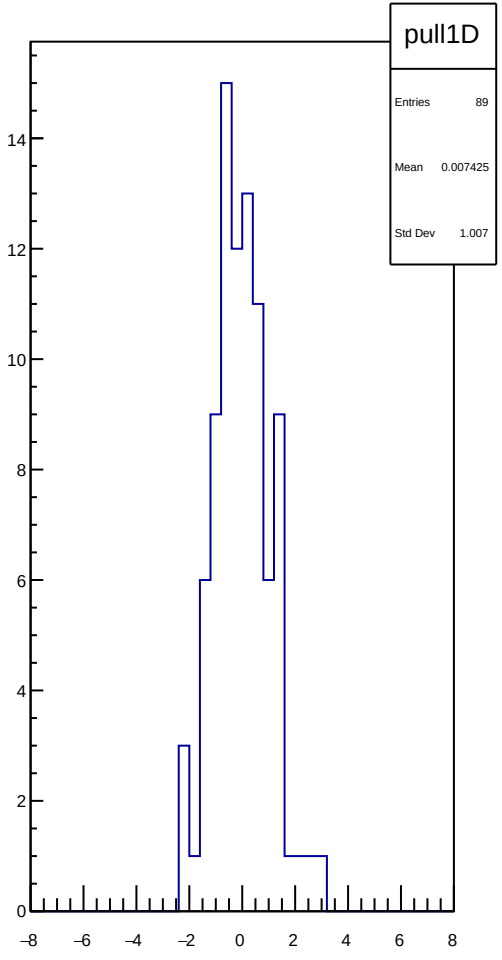

asym_sam_2468_avg_rms vs run
χ² / ndf 4.8e+04 / 88
p0 577 ± 0.4466
850
800
750
700
650
600
550
500
450

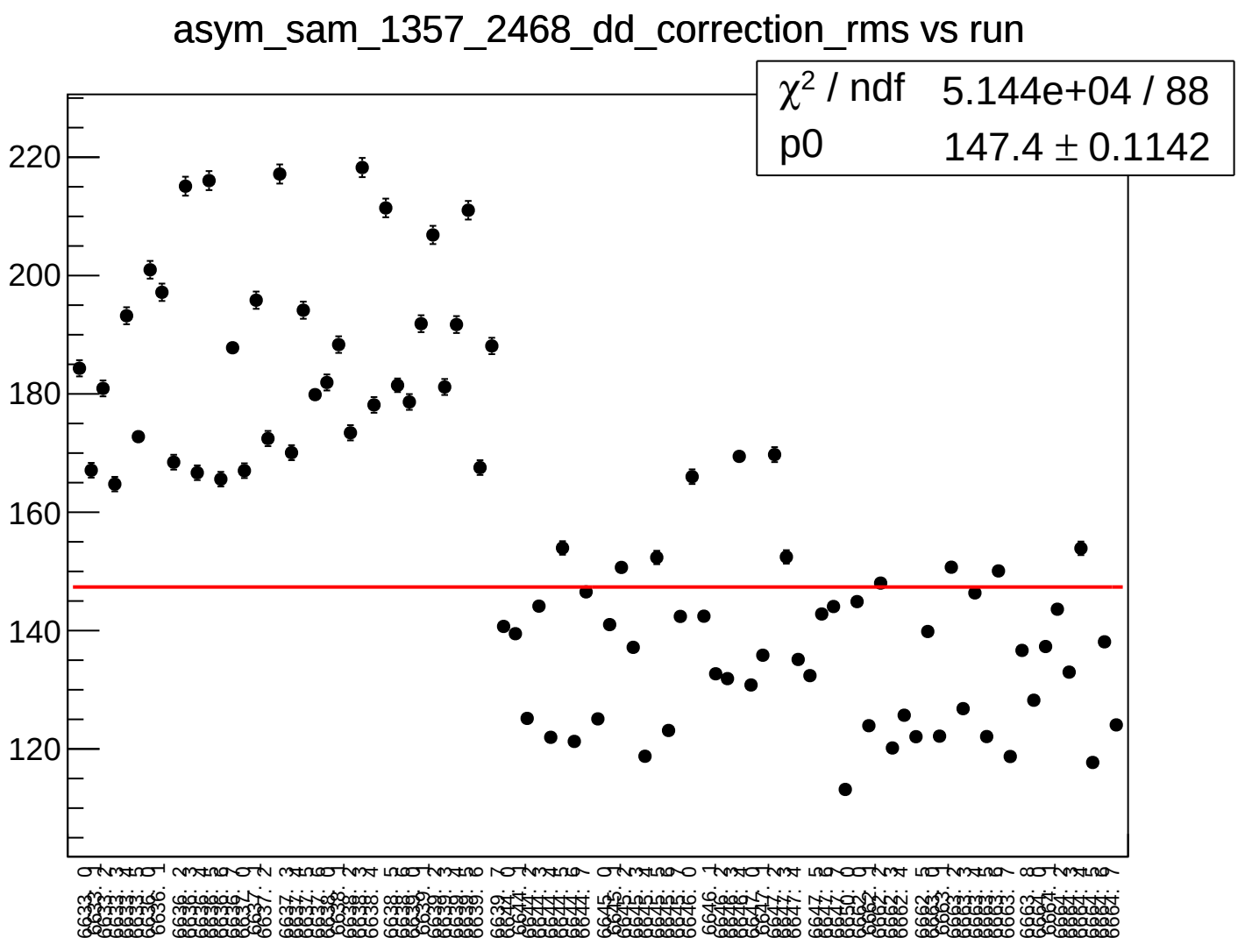

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 85.37 / 88
p0 8.721 ± 20.82
600
400
200
0
−200
−400
−600
pull
Entries 89
Mean −235.1
Std Dev 270.9
2
1
0
−1
−2

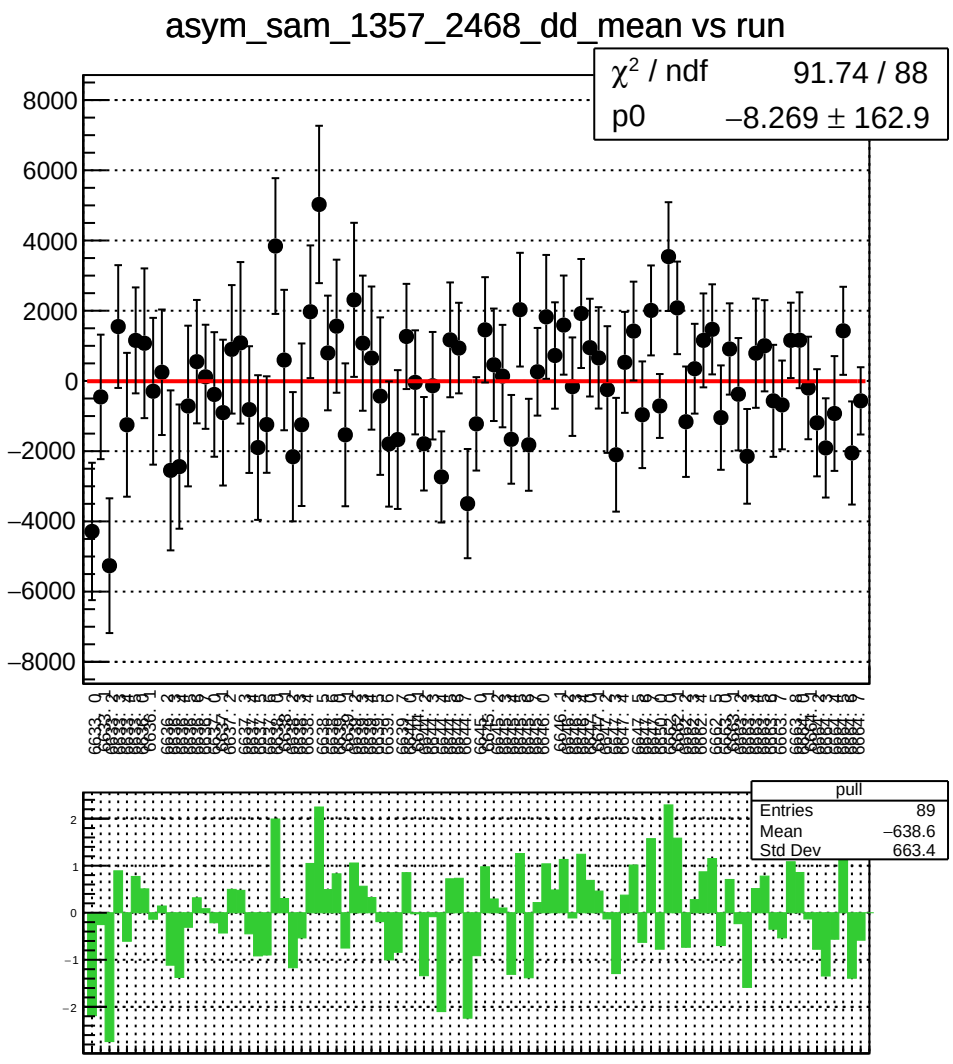

pull1D
Entries 89
Mean 0.01011
Std Dev 0.9793
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

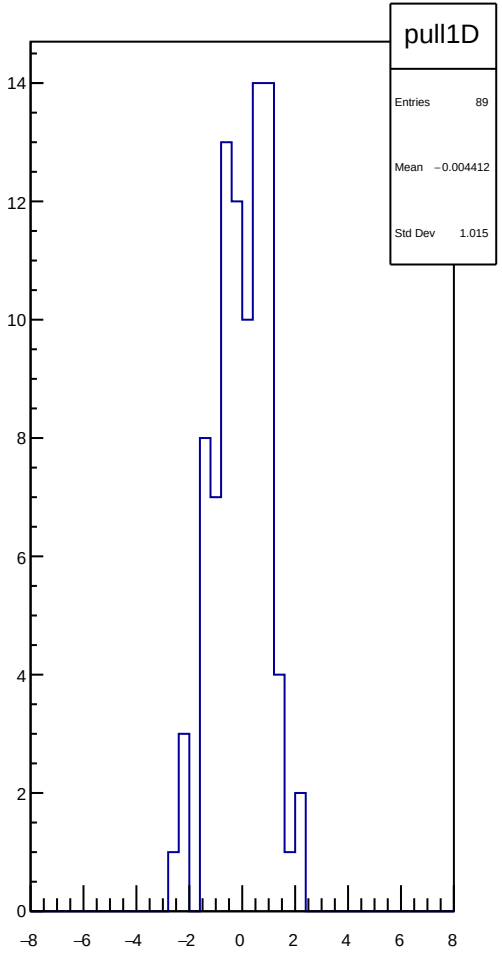

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.93e+04 / 88
p0 19.18 ± 0.01472
28
26
24
22
20
18
16

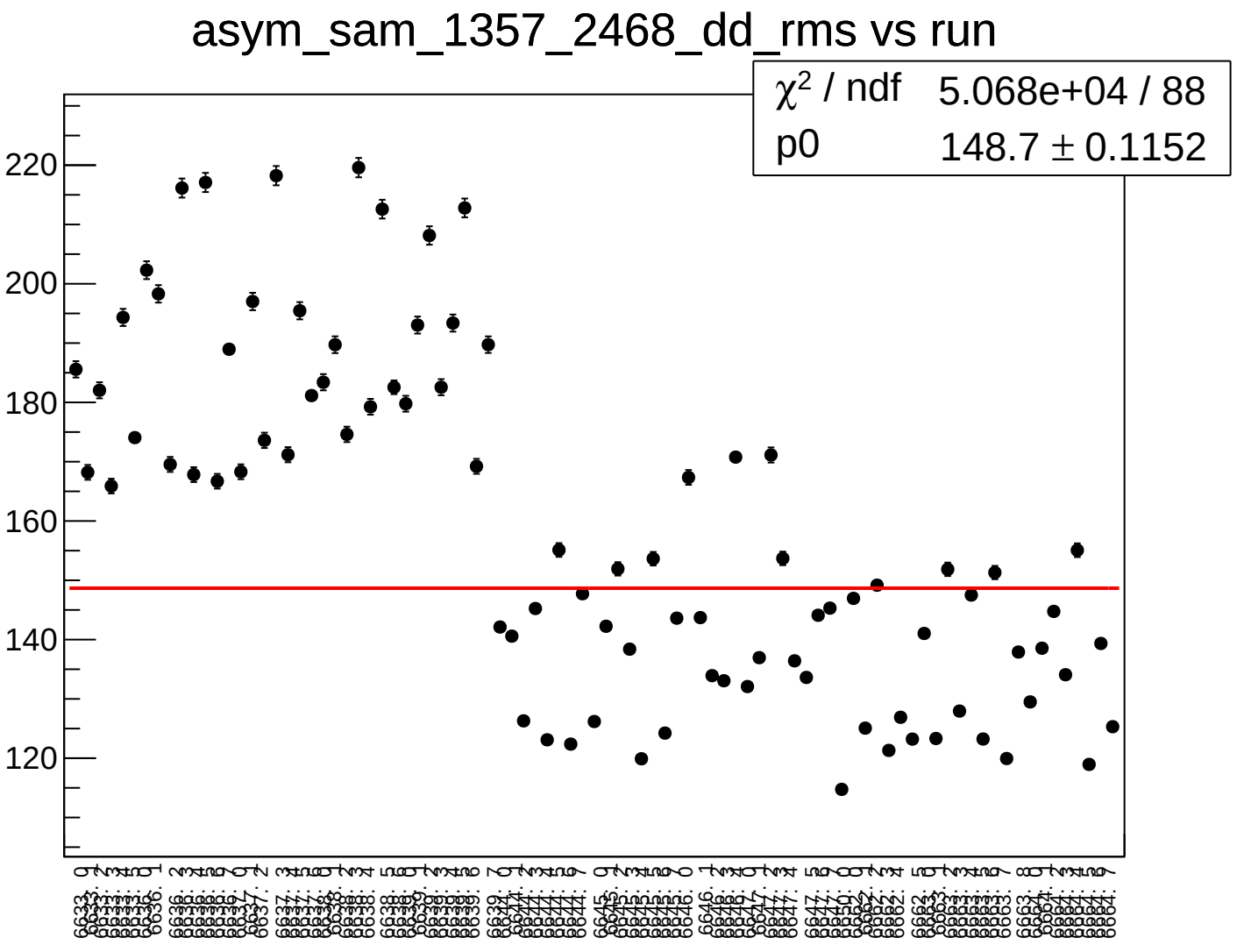

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 90.19 / 88
p0 11.4 ± 161.5
pull
Entries 89
Mean −407
Std Dev 432.6

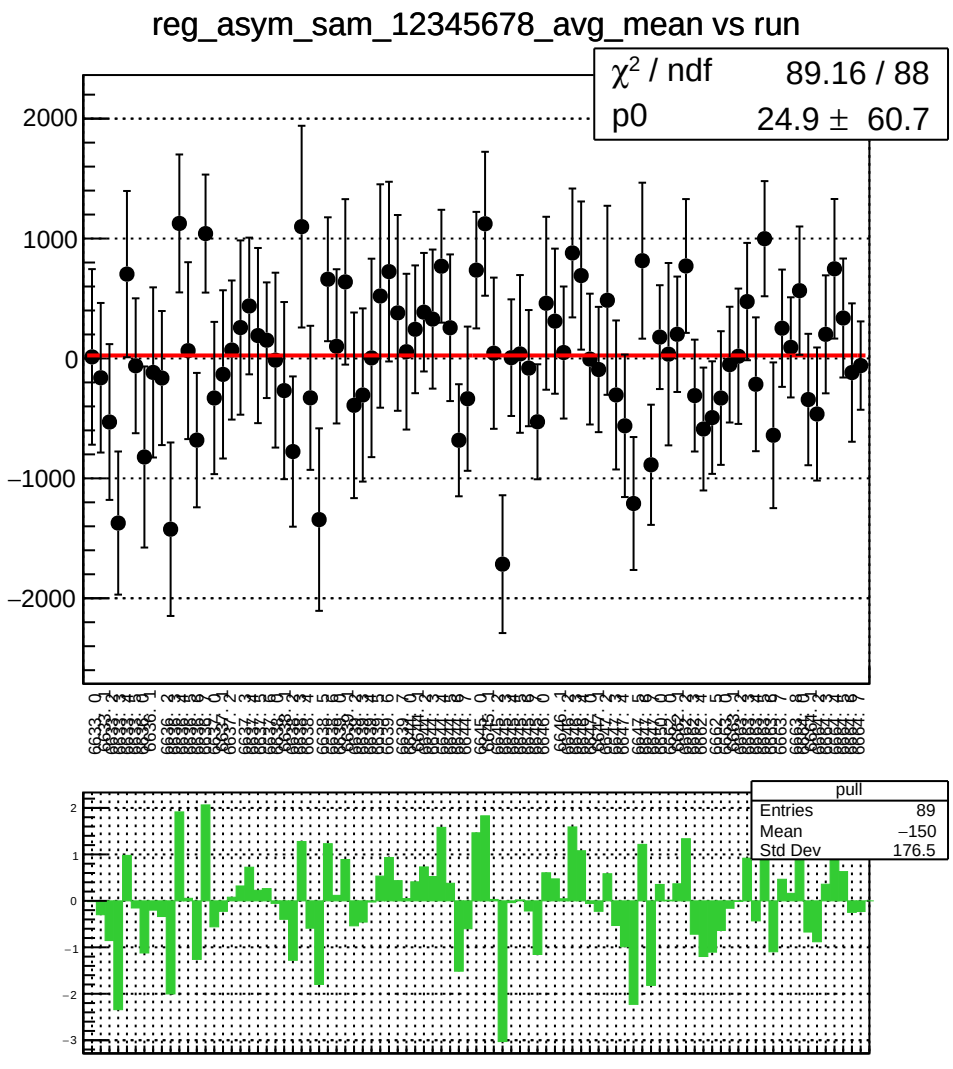

pull1D
Entries 89
Mean 0.007425
Std Dev 1.007

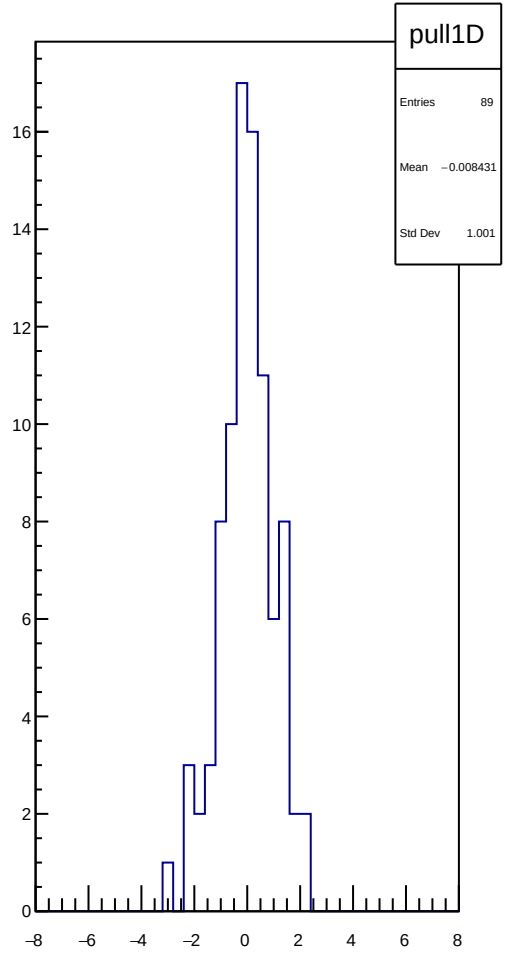

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 5.144e+04 / 88
p0 147.4 ± 0.1142
220
200
180
160
140
120

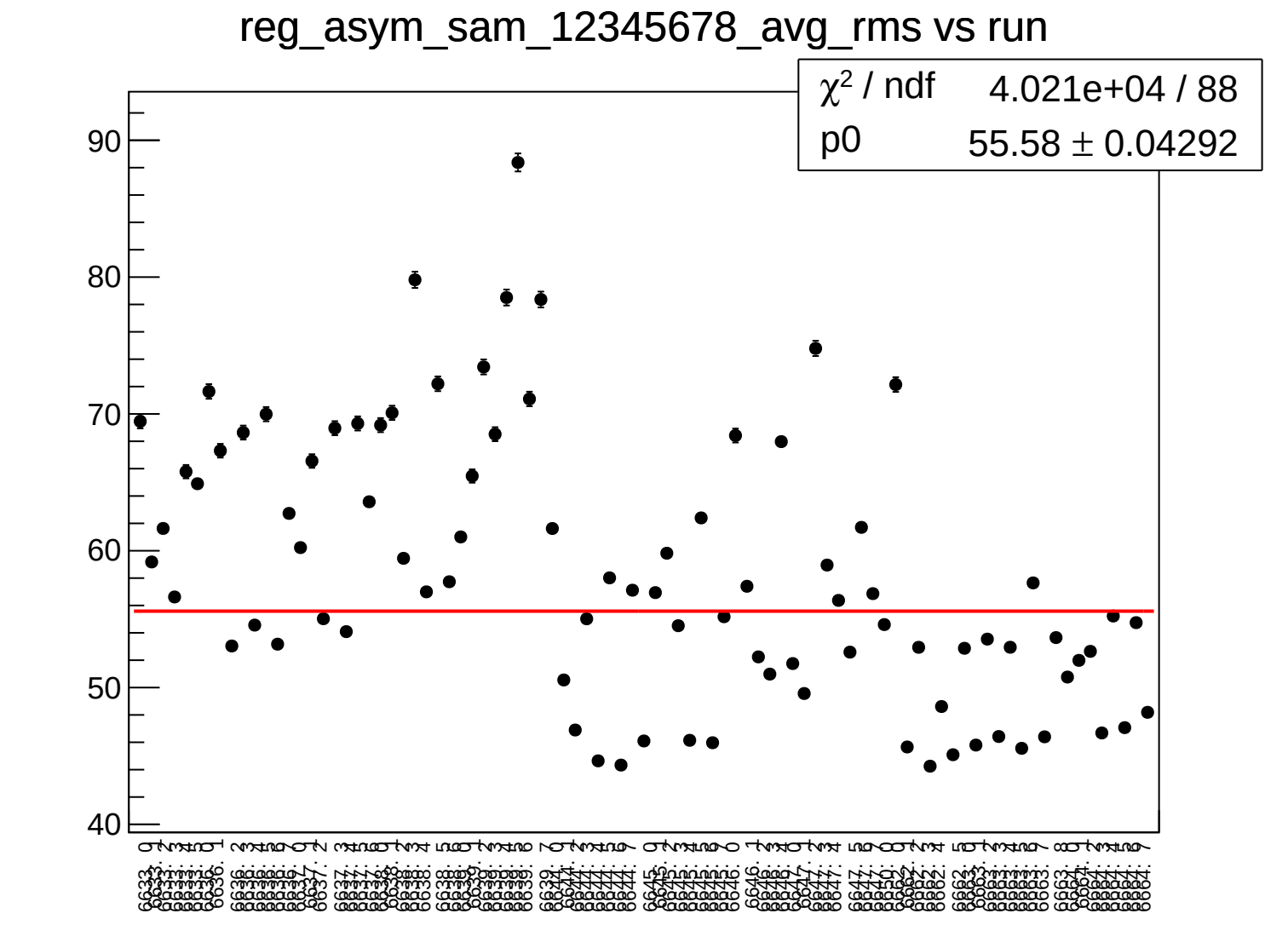

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 91.74 / 88
p0 −8.269 ± 162.9
pull
Entries 89
Mean −638.6
Std Dev 663.4

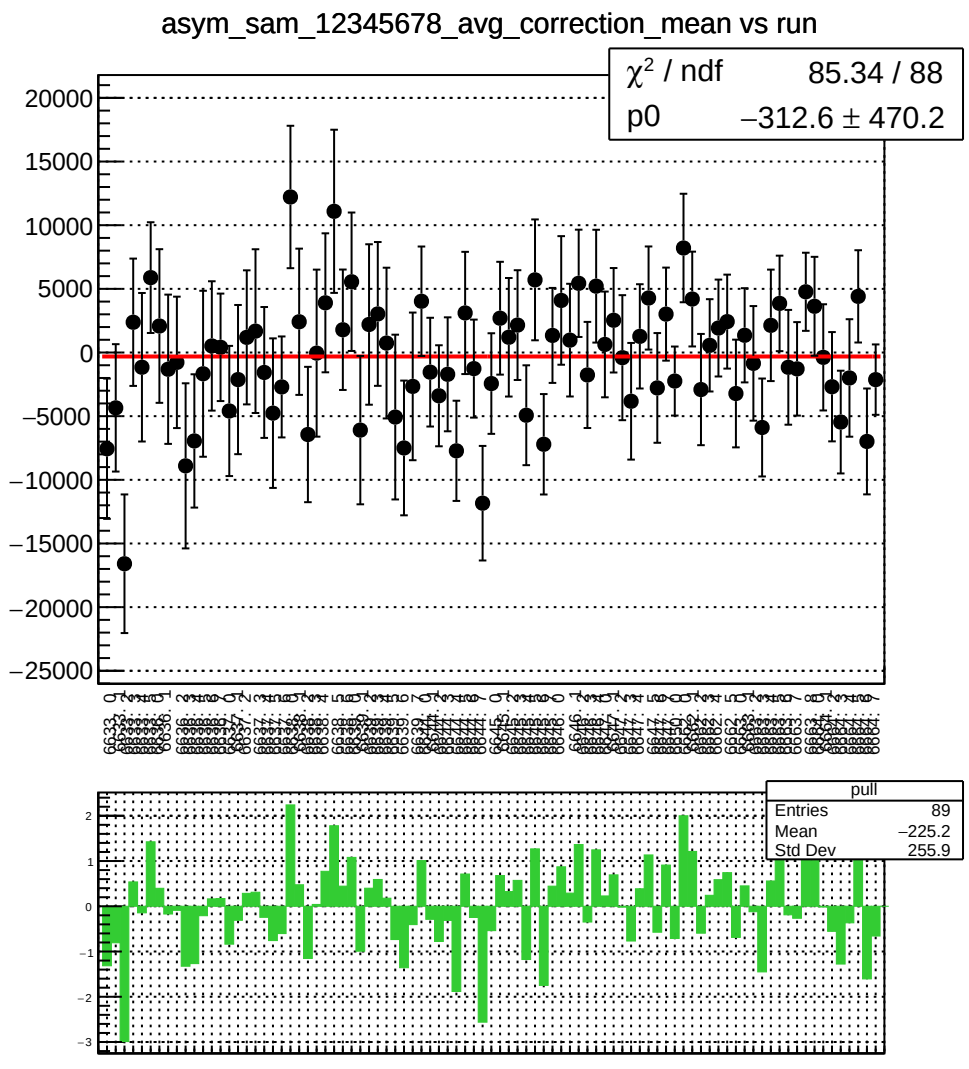

pull1D
Entries 89
Mean −0.004412
Std Dev 1.015

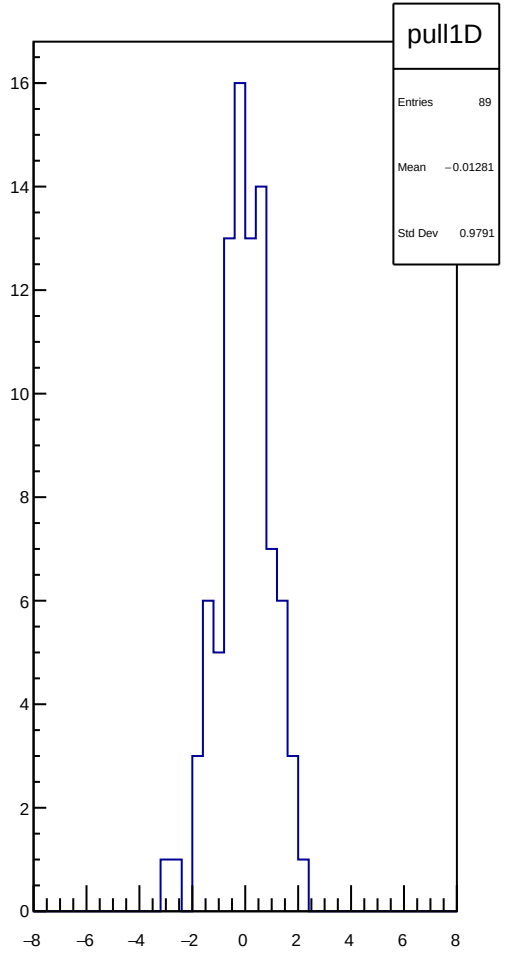

asym_sam_1357_2468_dd_rms vs run
χ^2 / ndf 5.068e+04 / 88
p0 148.7 ± 0.1152
220
200
180
160
140
120

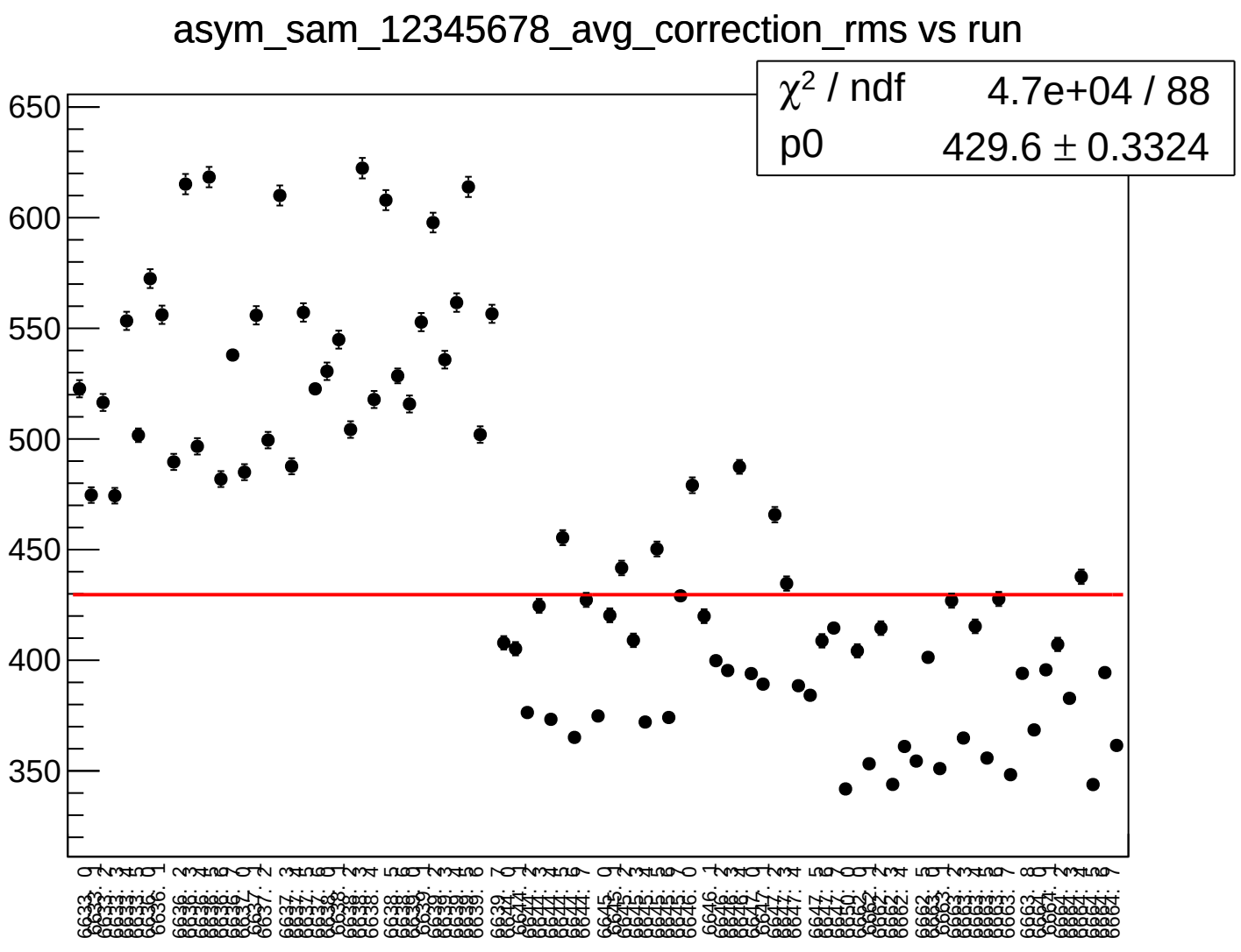

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 89.16 / 88
p0 24.9 ± 60.7
2000
1000
0
−1000
−2000
pull
Entries 89
Mean −150
Std Dev 176.5
2
1
0
−1
−2
−3

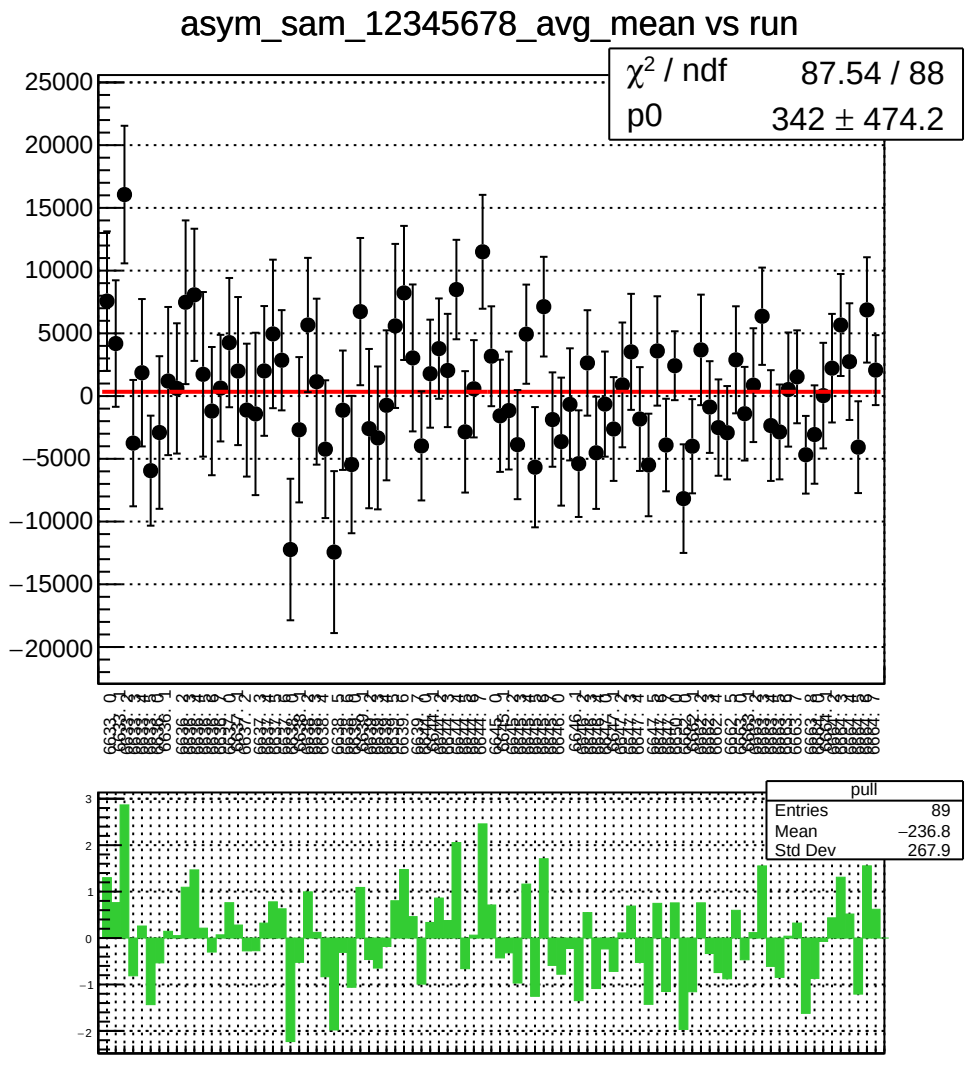

pull1D
Entries 89
Mean −0.008431
Std Dev 1.001
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

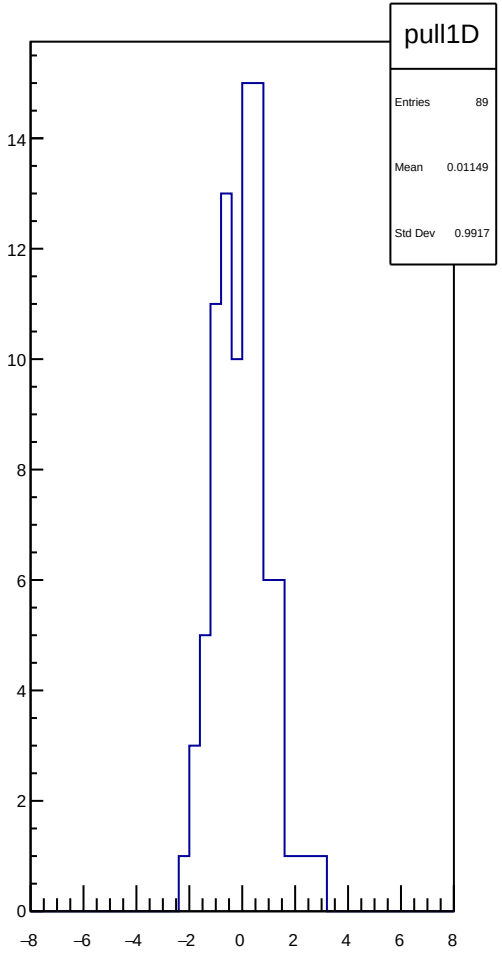

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 4.021e+04 / 88
p0 55.58 ± 0.04292
90
80
70
60
50
40

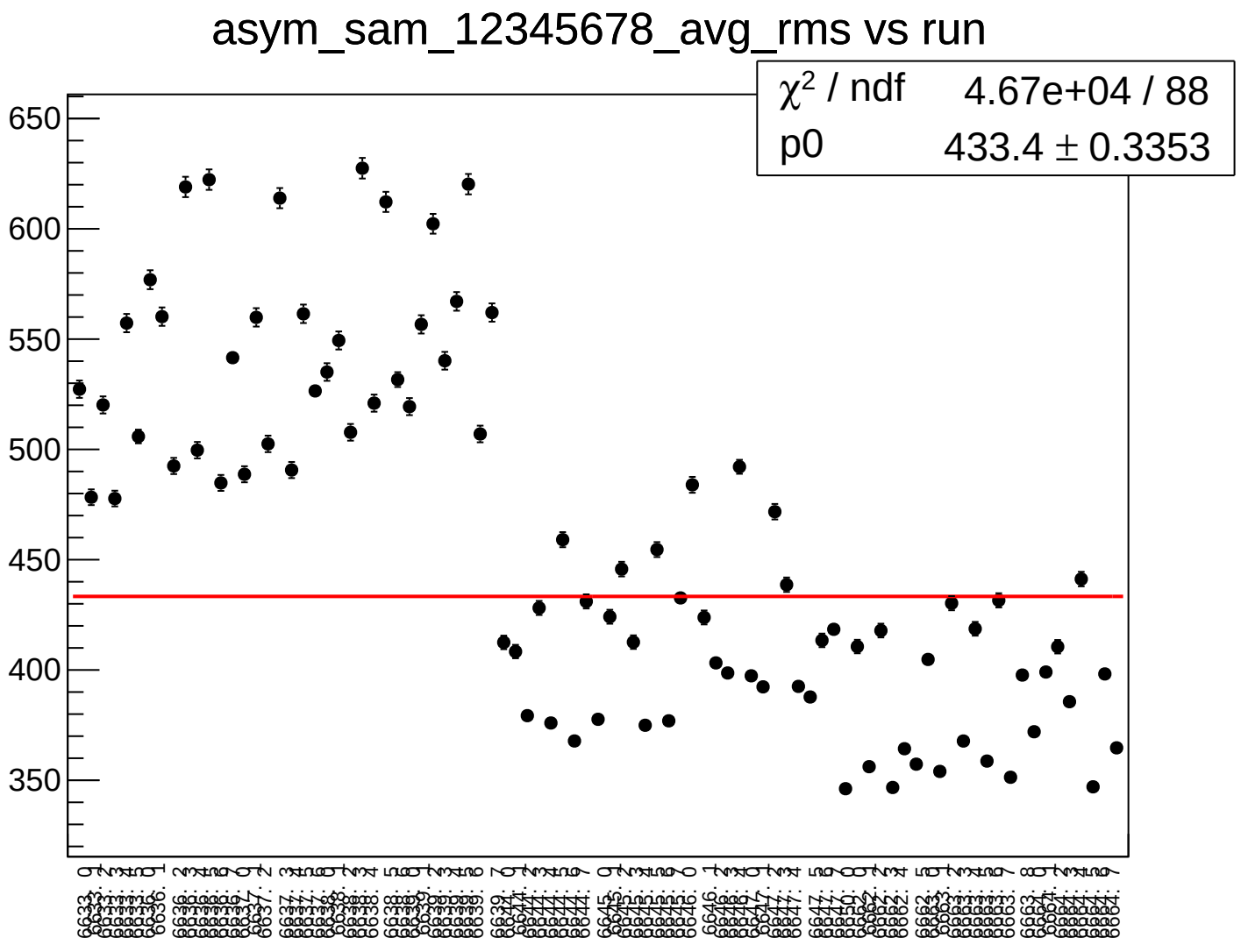

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 85.34 / 88
p0 −312.6 ± 470.2
pull
Entries 89
Mean −225.2
Std Dev 255.9

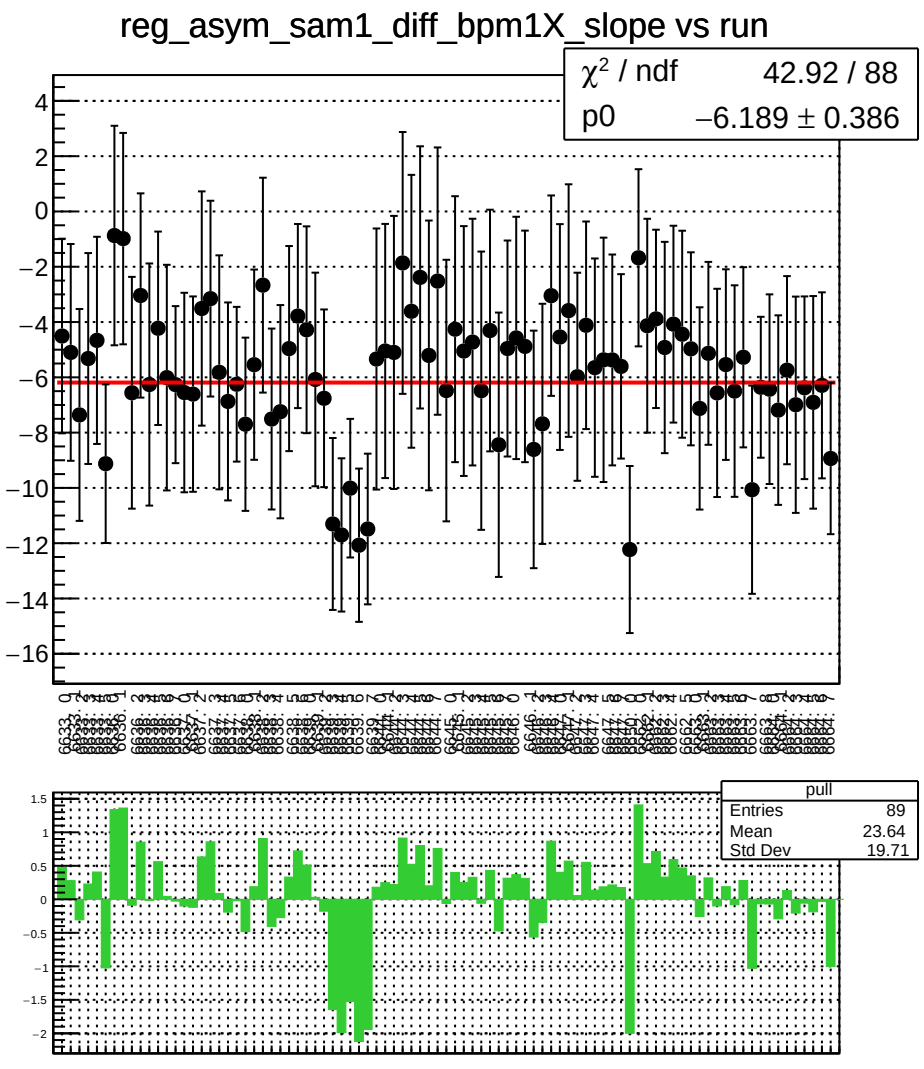

pull1D
Entries 89
Mean −0.01281
Std Dev 0.9791

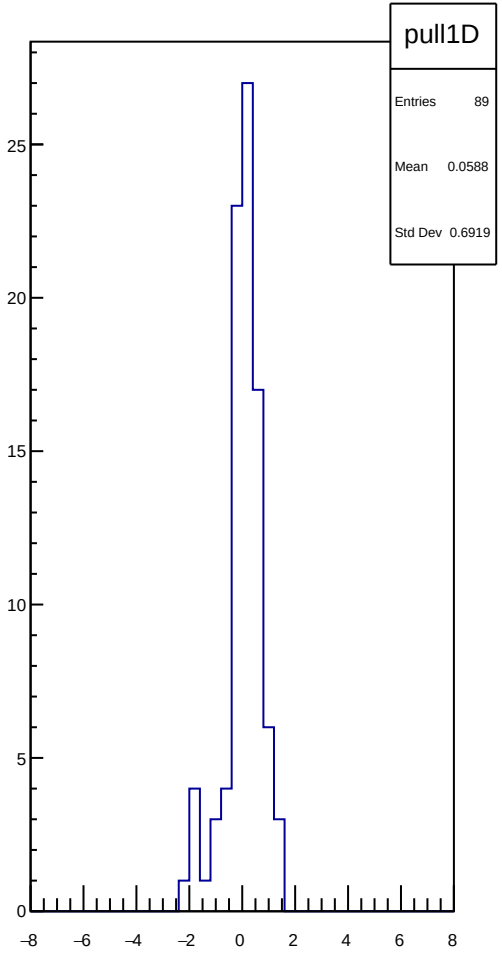

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 4.7e+04 / 88
p0 429.6 ± 0.3324
650
600
550
500
450
400
350

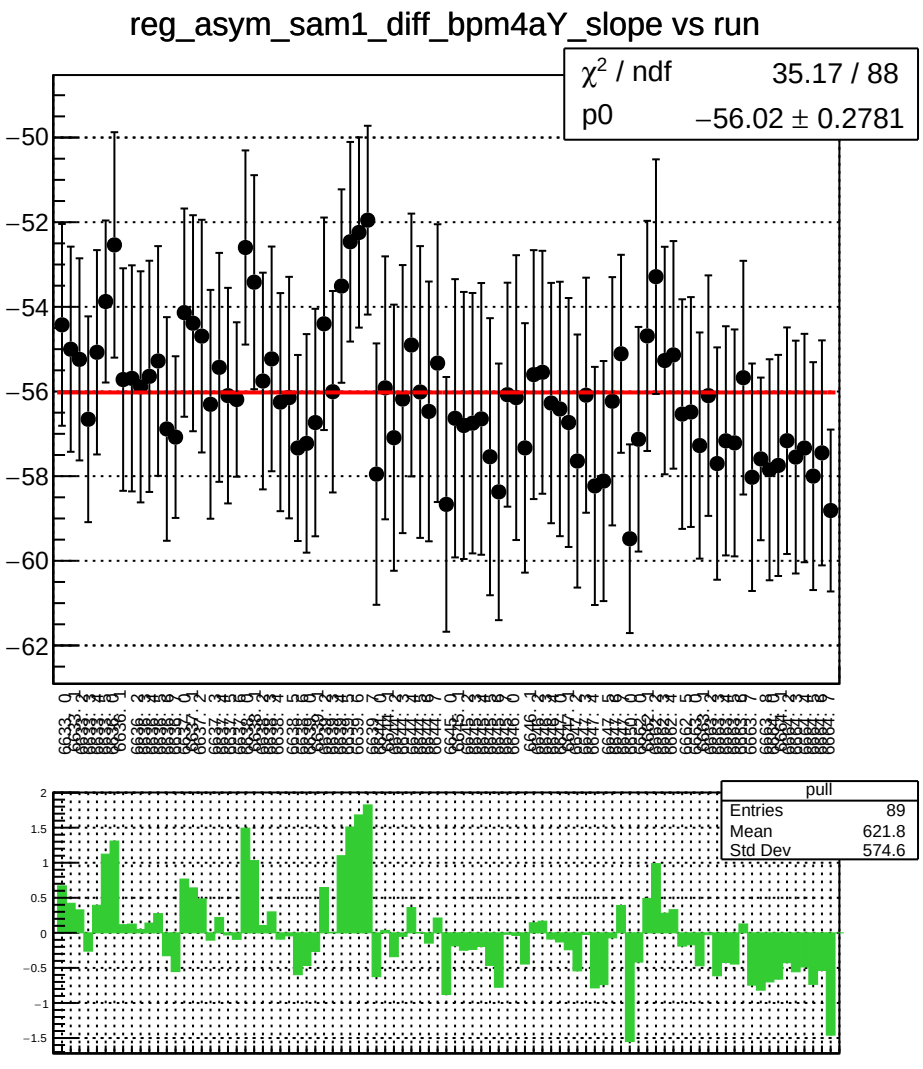

asym_sam_12345678_avg_mean vs run
χ² / ndf 87.54 / 88
p0 342 ± 474.2
pull
Entries 89
Mean −236.8
Std Dev 267.9

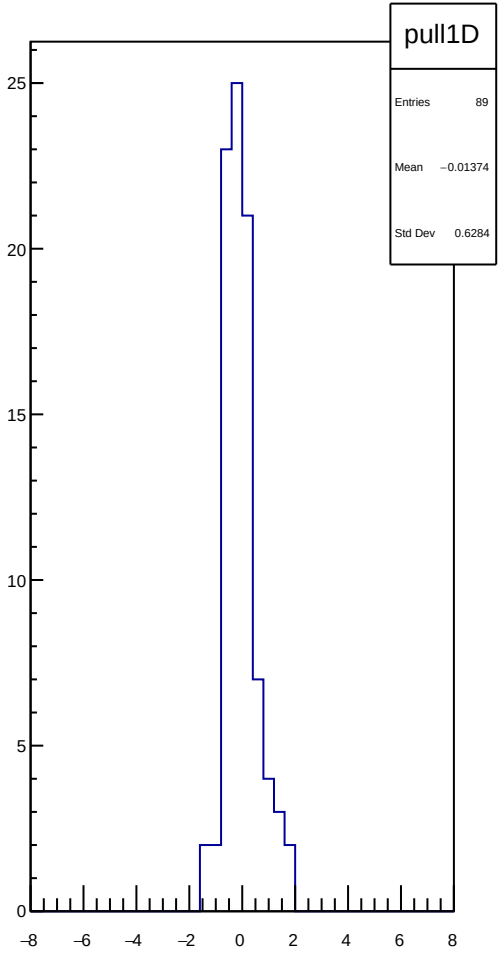

pull1D
Entries 89
Mean 0.01149
Std Dev 0.9917

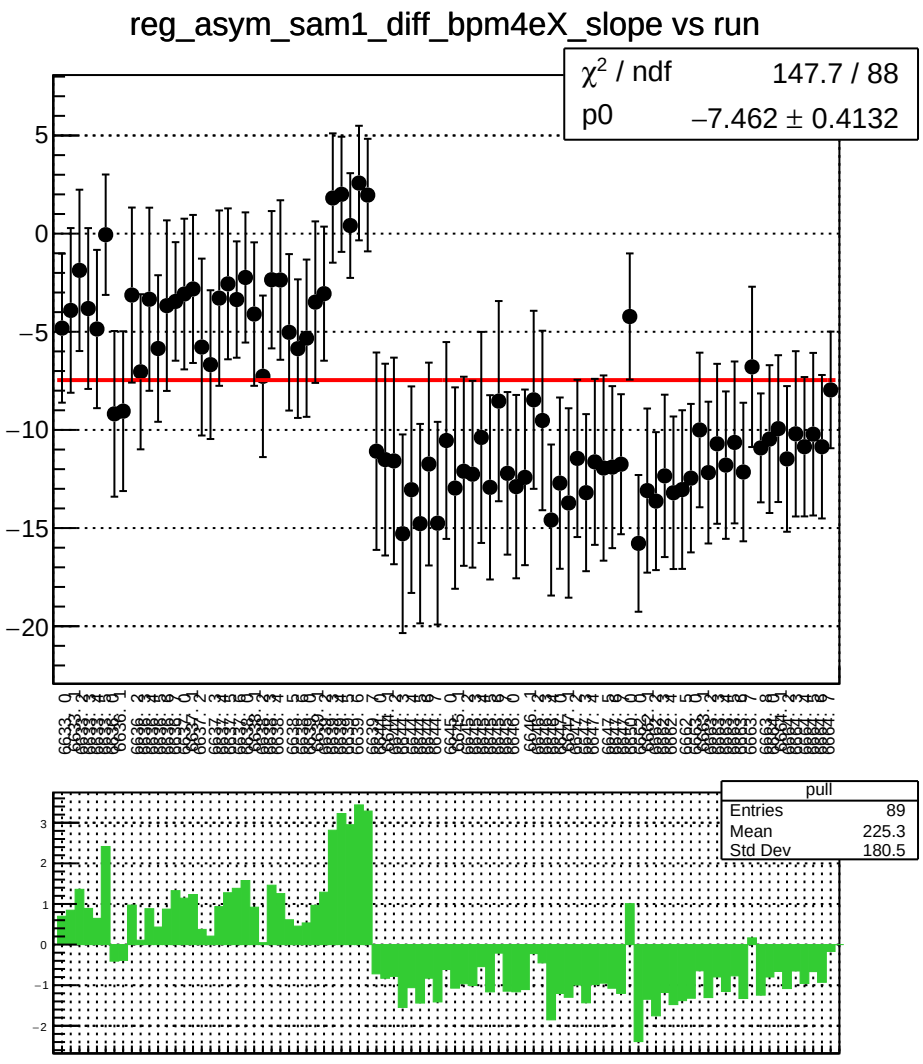

asym_sam_12345678_avg_rms vs run
χ² / ndf 4.67e+04 / 88
p0 433.4 ± 0.3353
650
600
550
500
450
400
350

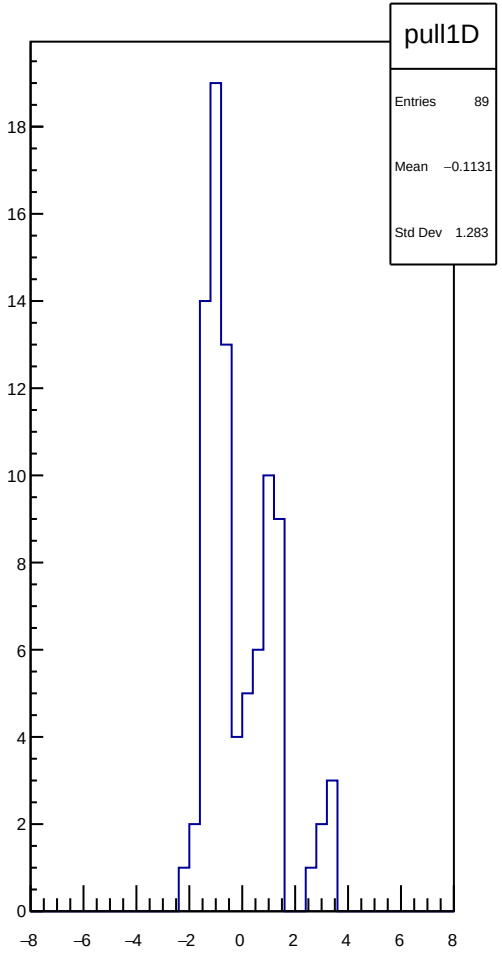

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 42.92 / 88
p0 −6.189 ± 0.386
pull
Entries 89
Mean 23.64
Std Dev 19.71

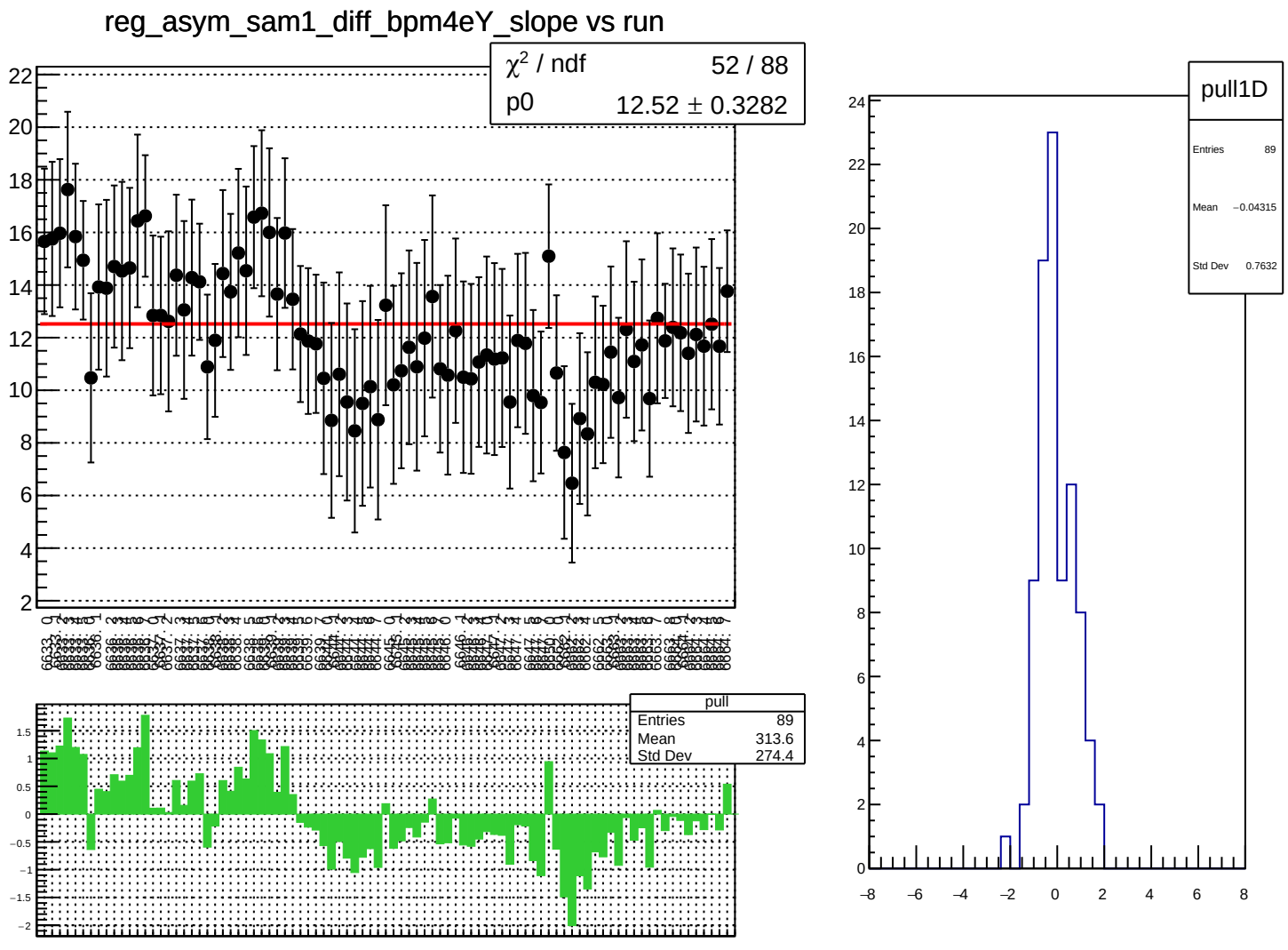

pull1D
Entries 89
Mean 0.0588
Std Dev 0.6919

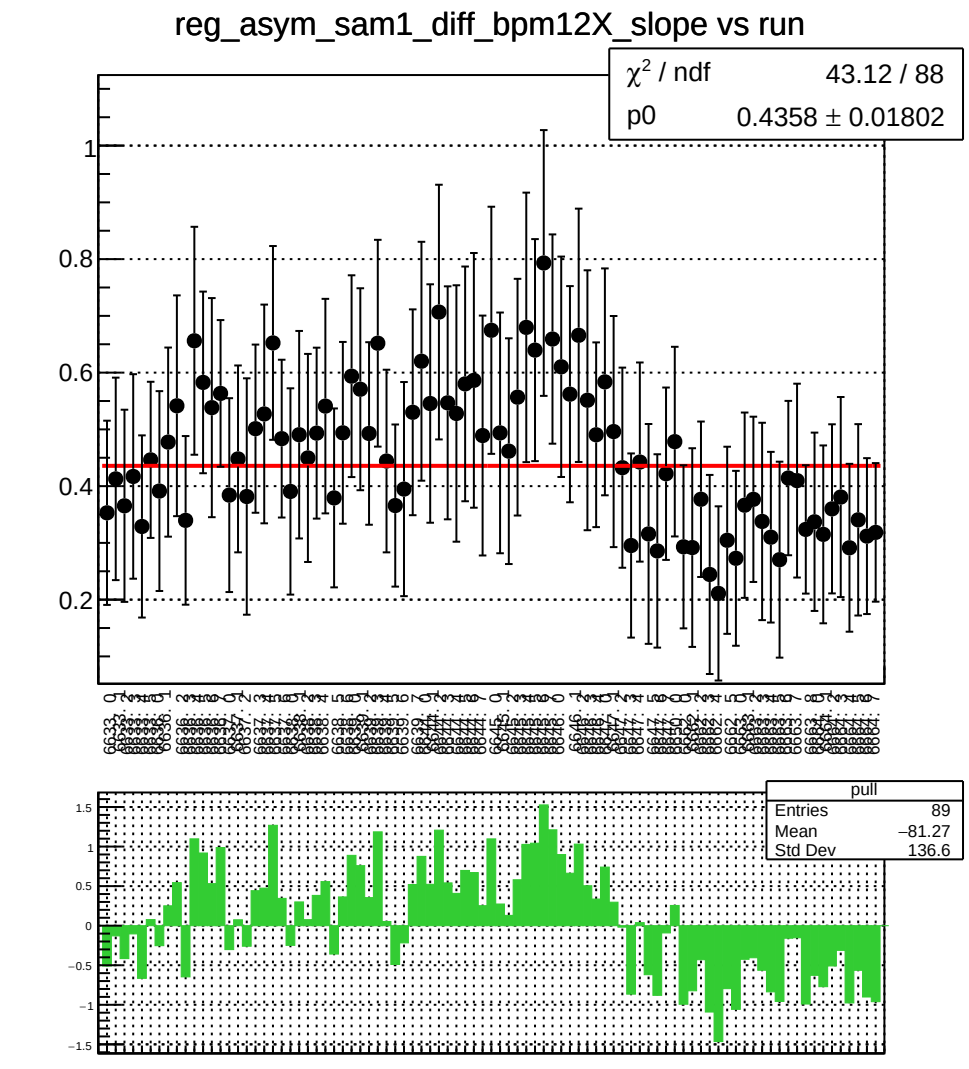

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 35.17 / 88
p0 −56.02 ± 0.2781
pull
Entries 89
Mean 621.8
Std Dev 574.6

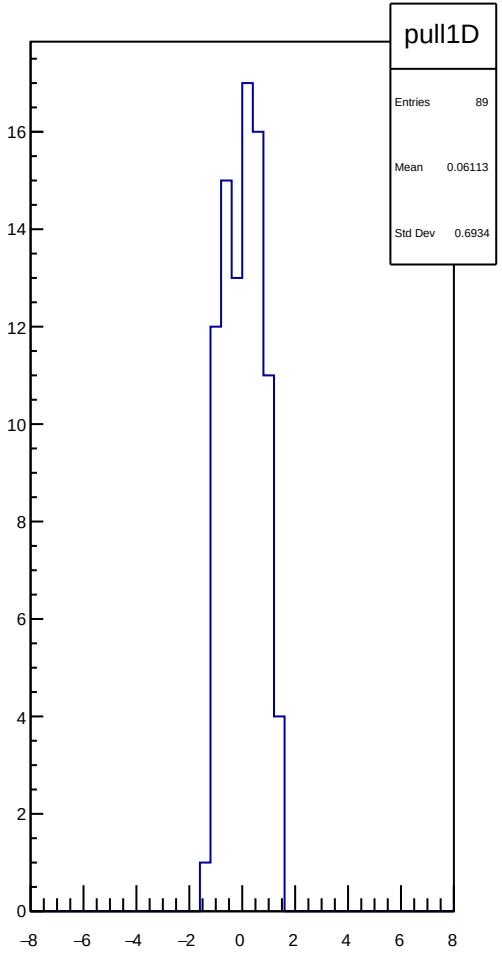

pull1D
Entries 89
Mean −0.01374
Std Dev 0.6284

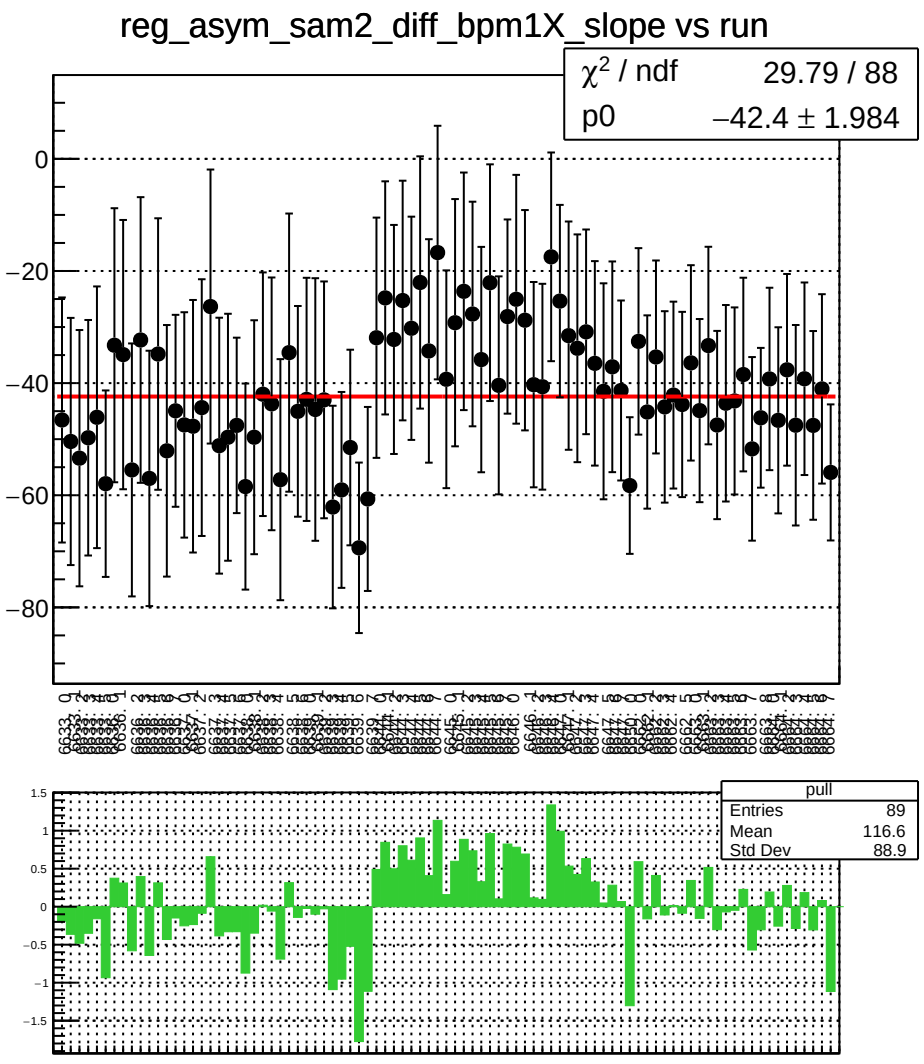

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 147.7 / 88
p0 −7.462 ± 0.4132
pull
Entries 89
Mean 225.3
Std Dev 180.5

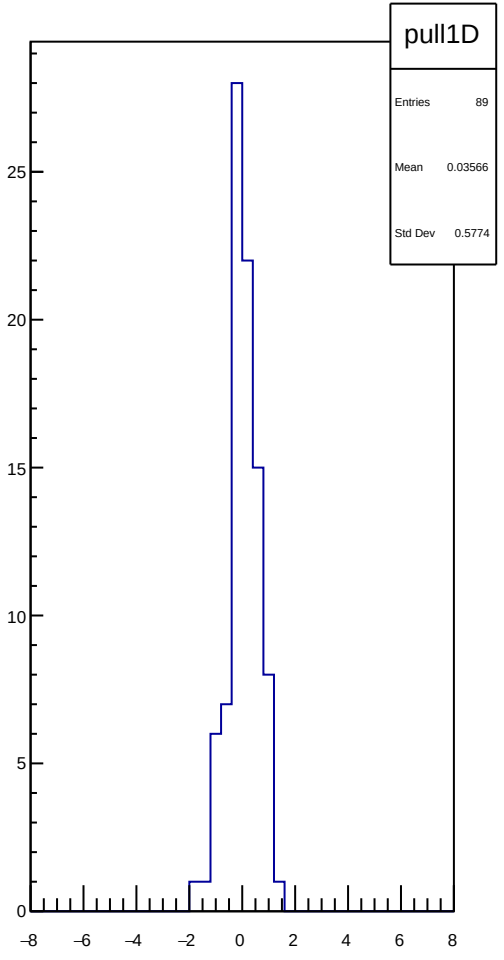

pull1D
Entries 89
Mean −0.1131
Std Dev 1.283

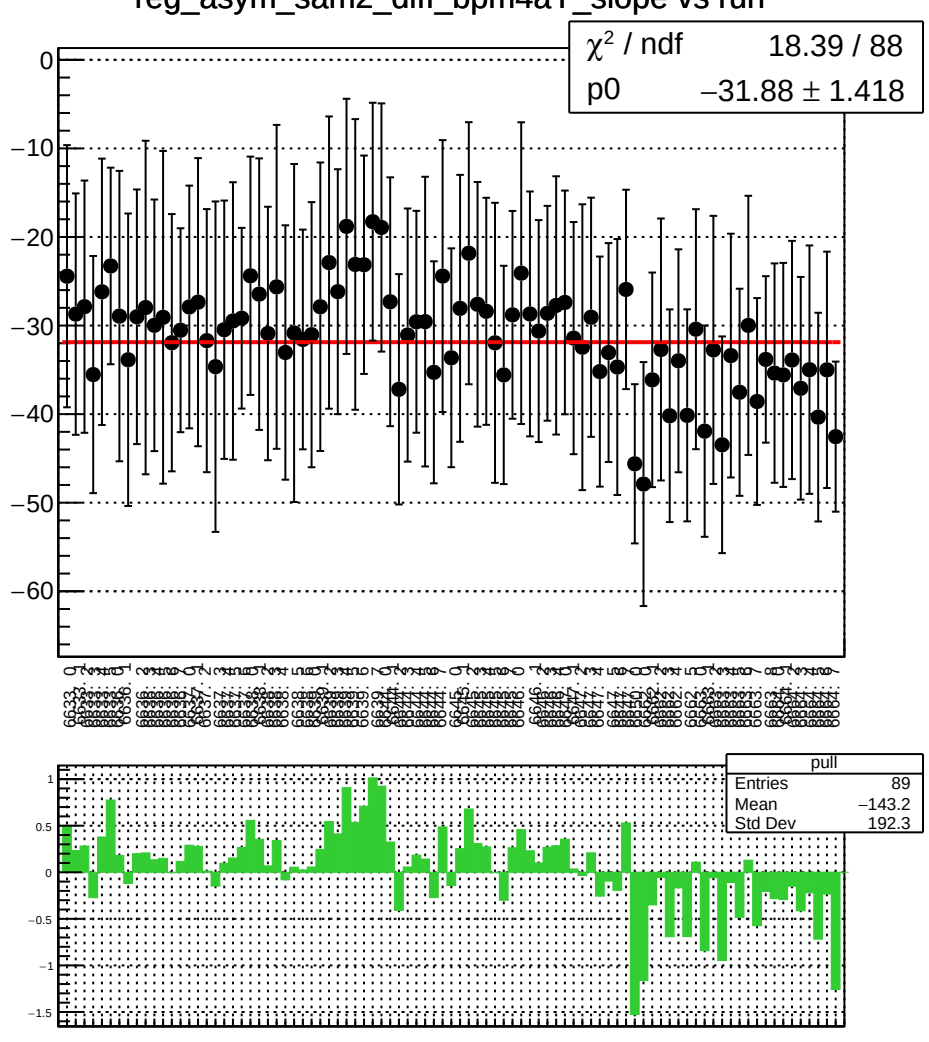

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 52 / 88
p0 12.52 ± 0.3282
pull
Entries 89
Mean 313.6
Std Dev 274.4
pull1D
Entries 89
Mean −0.04315
Std Dev 0.7632

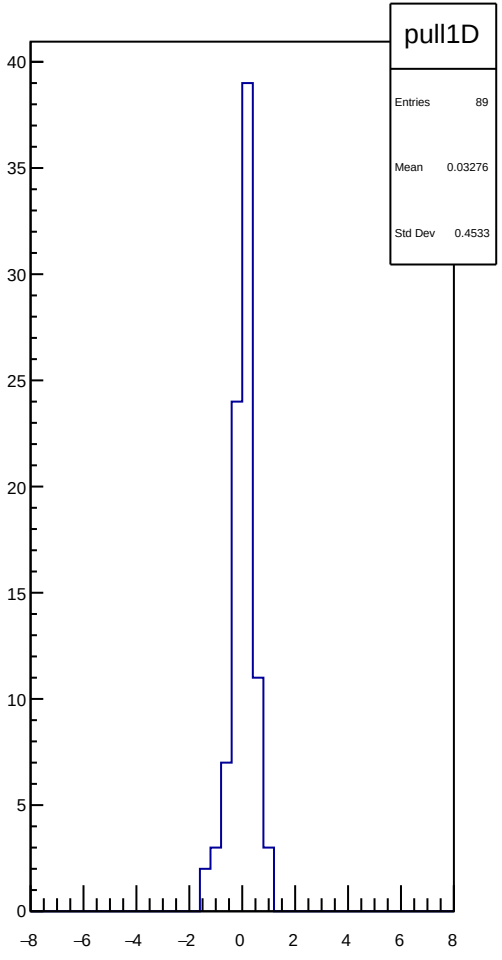

reg_asym_sam1_diff_bpm12X_slope vs run
χ^2 / ndf 43.12 / 88
p0 0.4358 ± 0.01802
pull
Entries 89
Mean −81.27
Std Dev 136.6

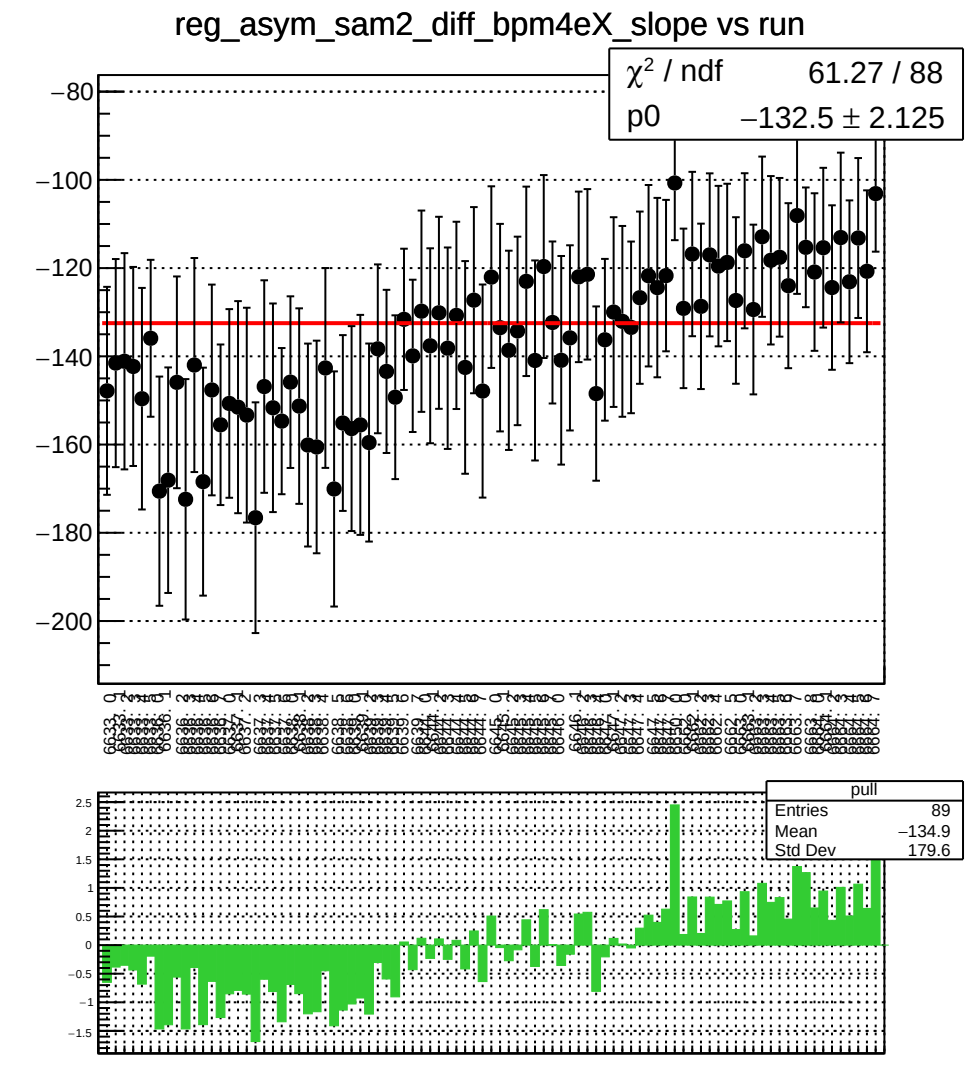

pull1D
Entries 89
Mean 0.06113
Std Dev 0.6934

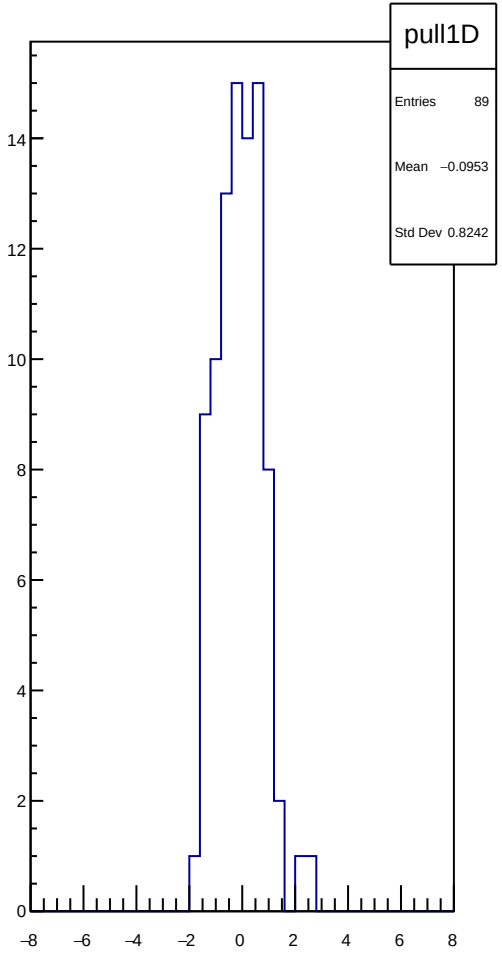

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 29.79 / 88
p0 −42.4 ± 1.984
pull
Entries 89
Mean 116.6
Std Dev 88.9

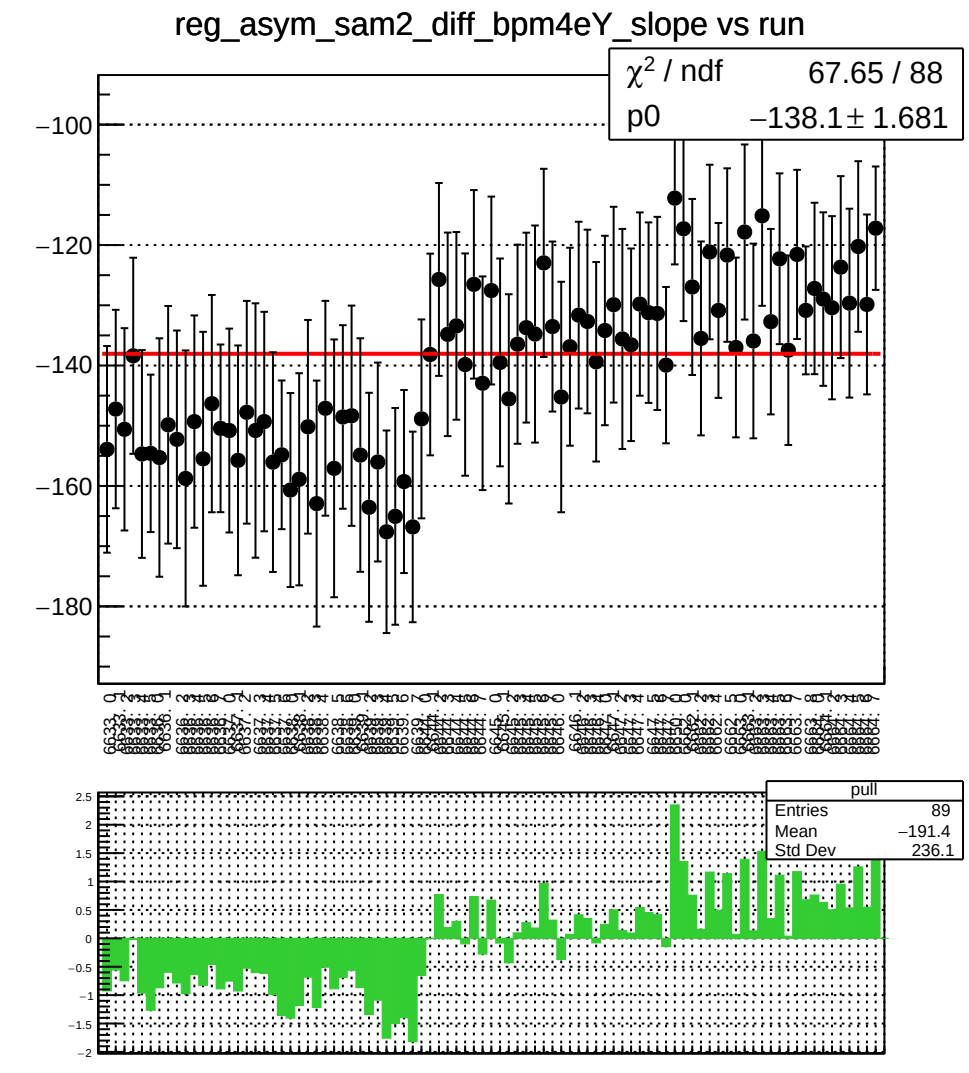

pull1D
Entries 89
Mean 0.03566
Std Dev 0.5774

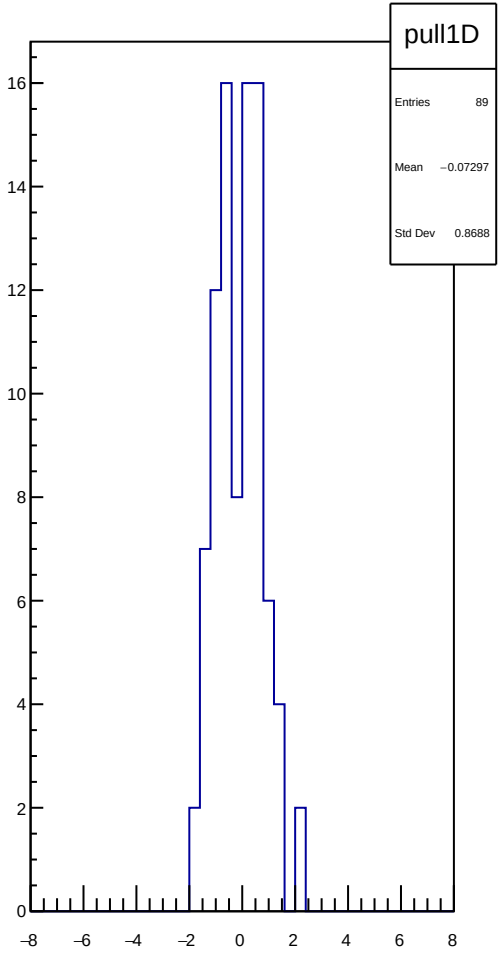

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 18.39 / 88
p0 −31.88 ± 1.418
pull
Entries 89
Mean −143.2
Std Dev 192.3

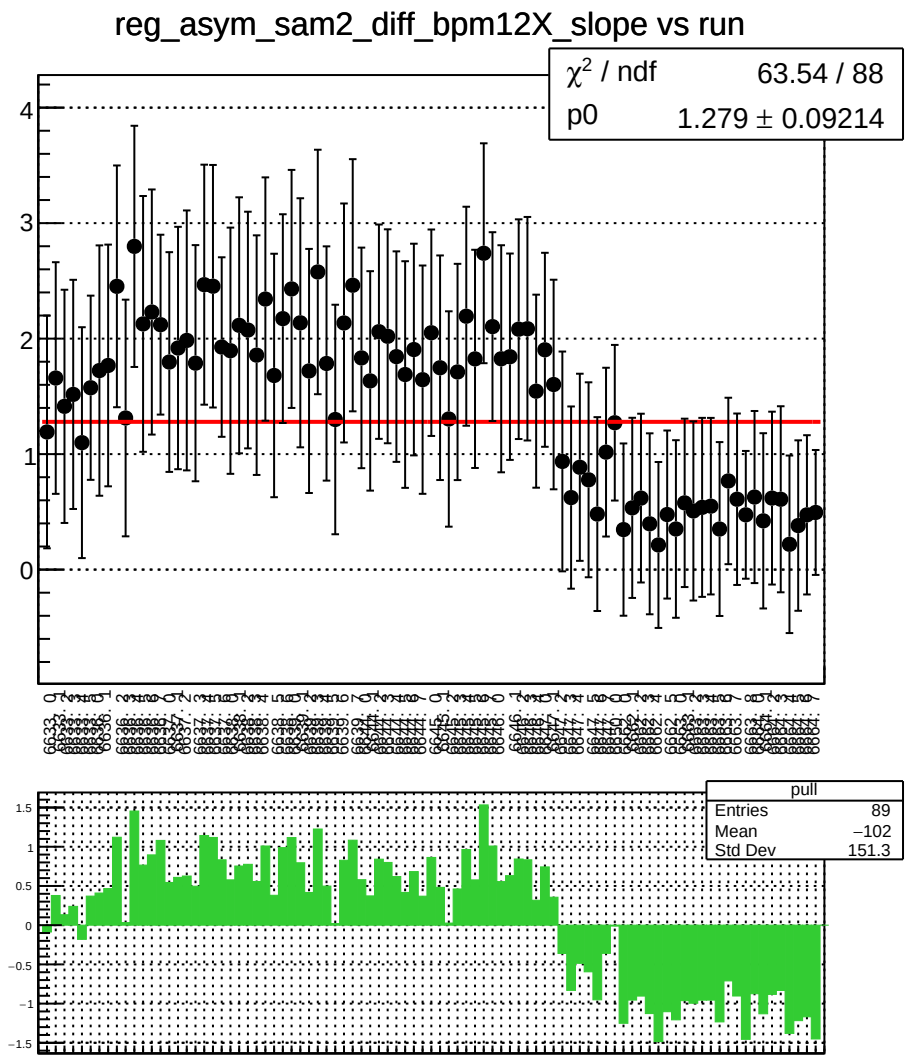

pull1D
Entries 89
Mean 0.03276
Std Dev 0.4533

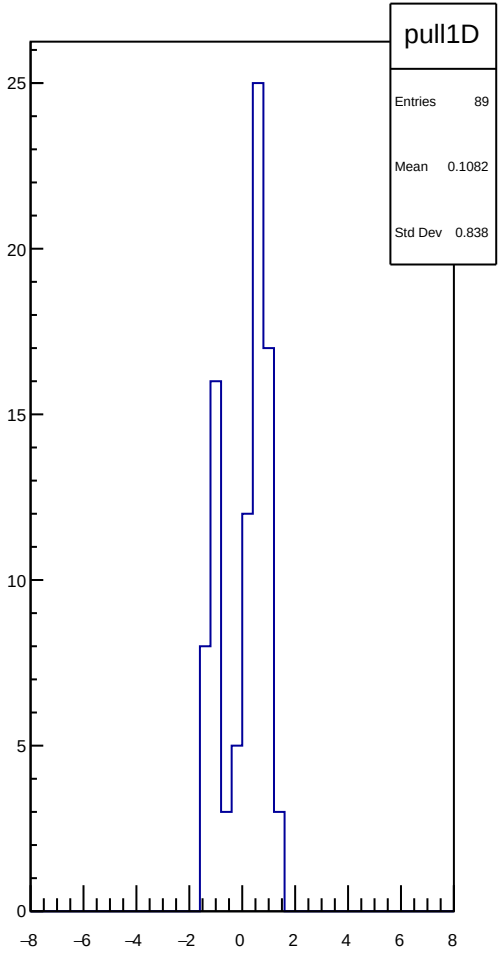

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 61.27 / 88
p0 −132.5 ± 2.125
pull
Entries 89
Mean −134.9
Std Dev 179.6

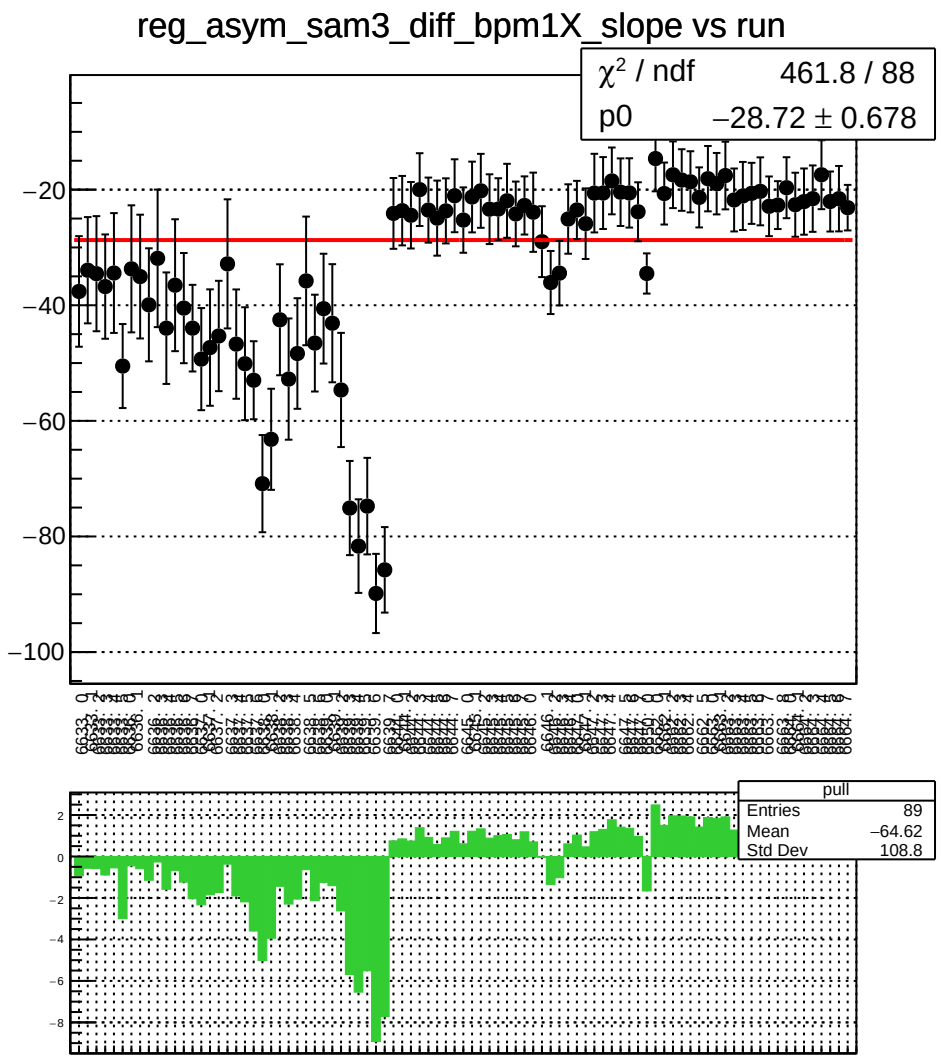

pull1D
Entries 89
Mean −0.0953
Std Dev 0.8242

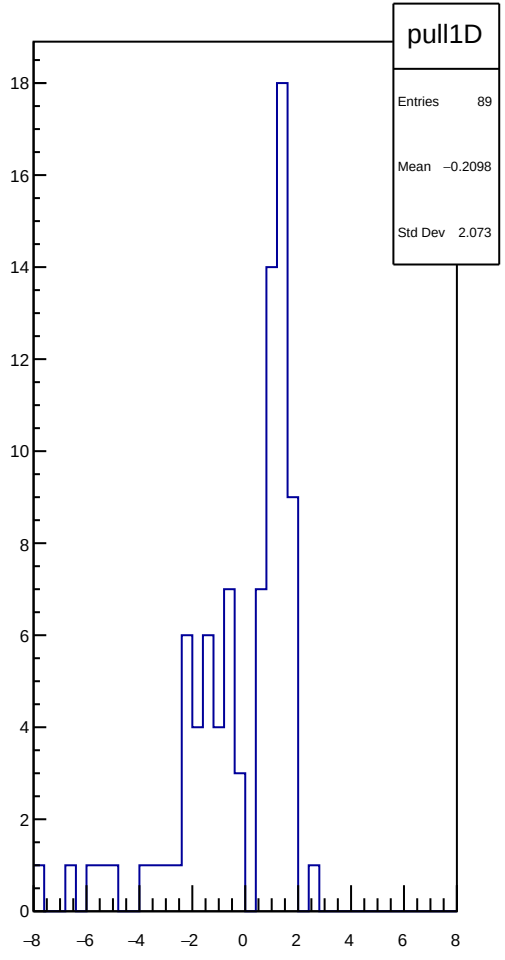

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 67.65 / 88
p0 −138.1 ± 1.681
−100
−120
−140
−160
−180
pull
Entries 89
Mean −191.4
Std Dev 236.1
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

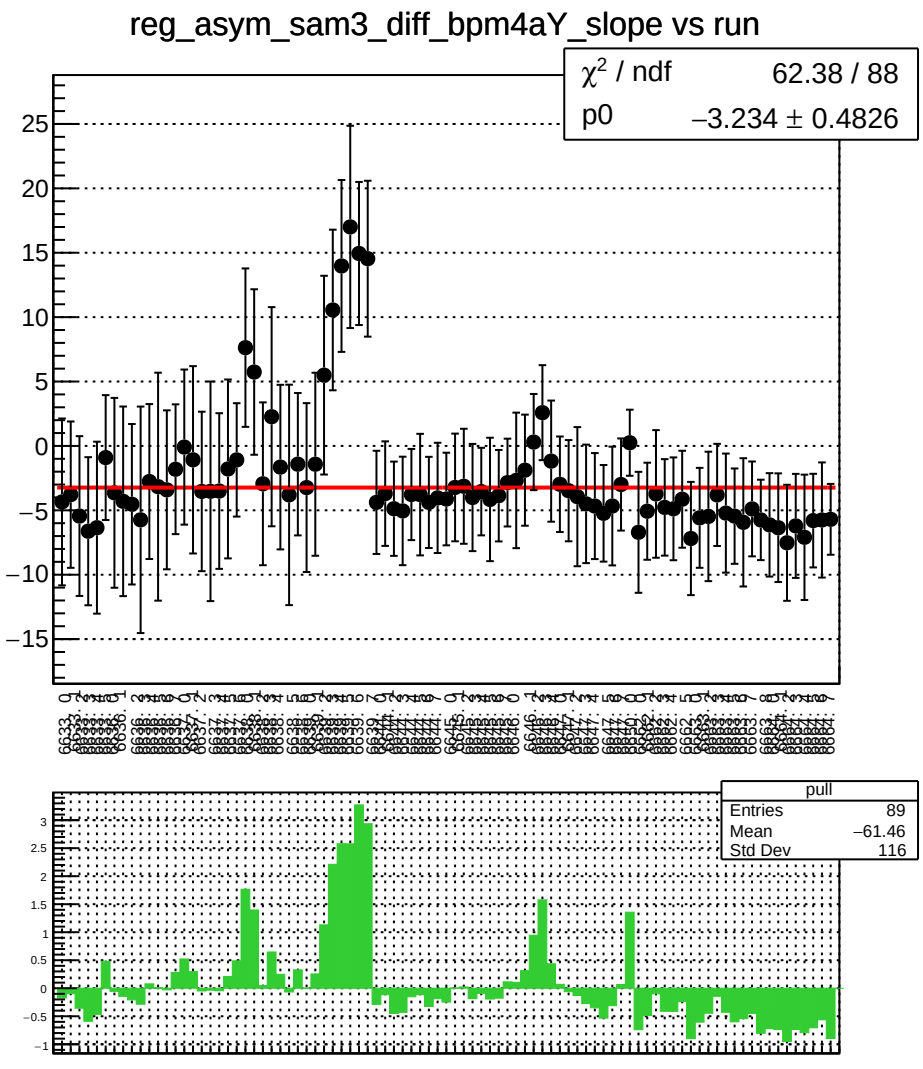

pull1D
Entries 89
Mean −0.07297
Std Dev 0.8688
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

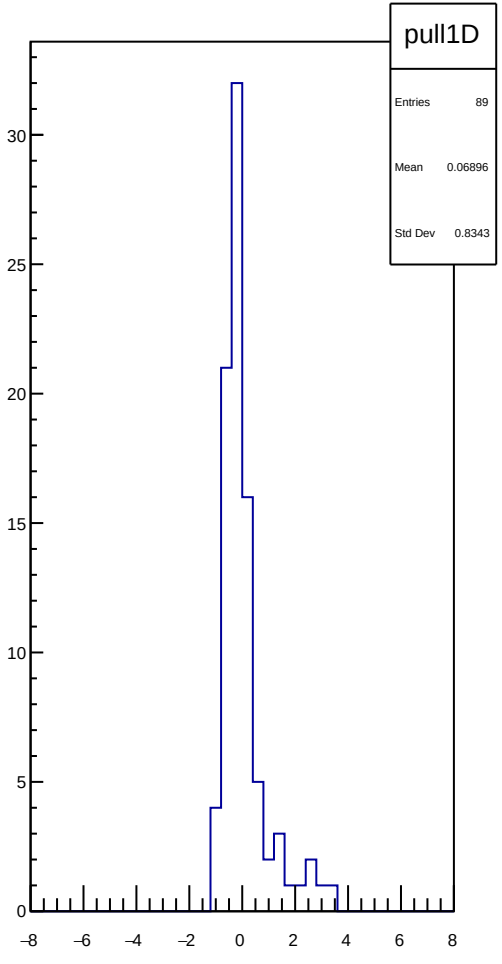

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 63.54 / 88
p0 1.279 ± 0.09214
pull
Entries 89
Mean −102
Std Dev 151.3

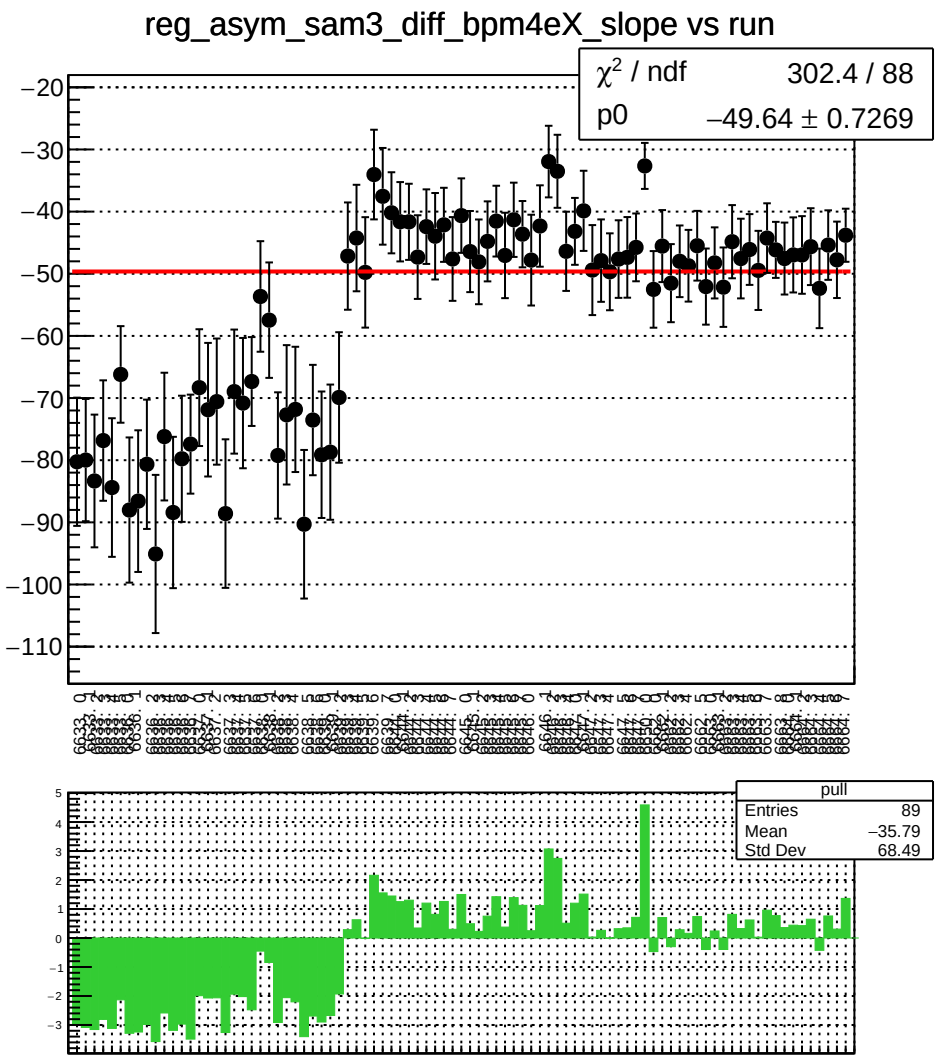

pull1D
Entries 89
Mean 0.1082
Std Dev 0.838

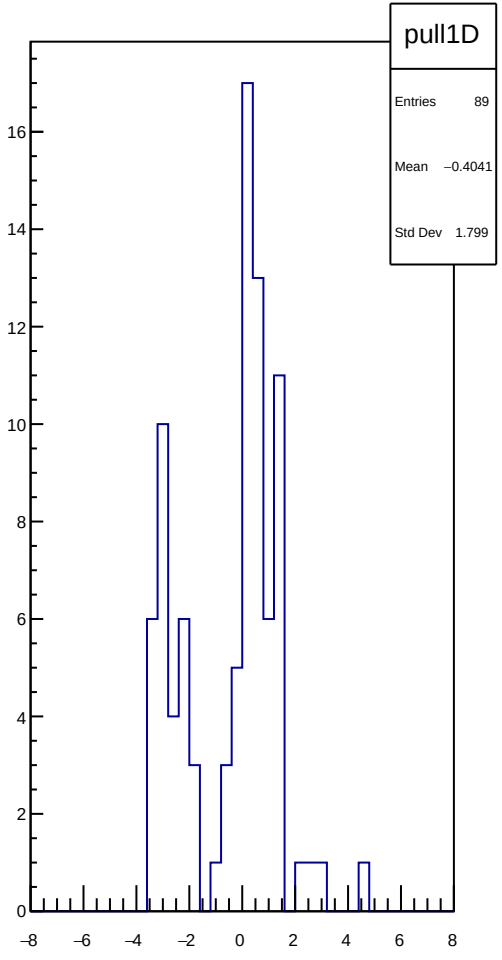

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 461.8 / 88
p0 −28.72 ± 0.678
−20
−40
−60
−80
−100
pull
Entries 89
Mean −64.62
Std Dev 108.8
2
0
−2
−4
−6
−8

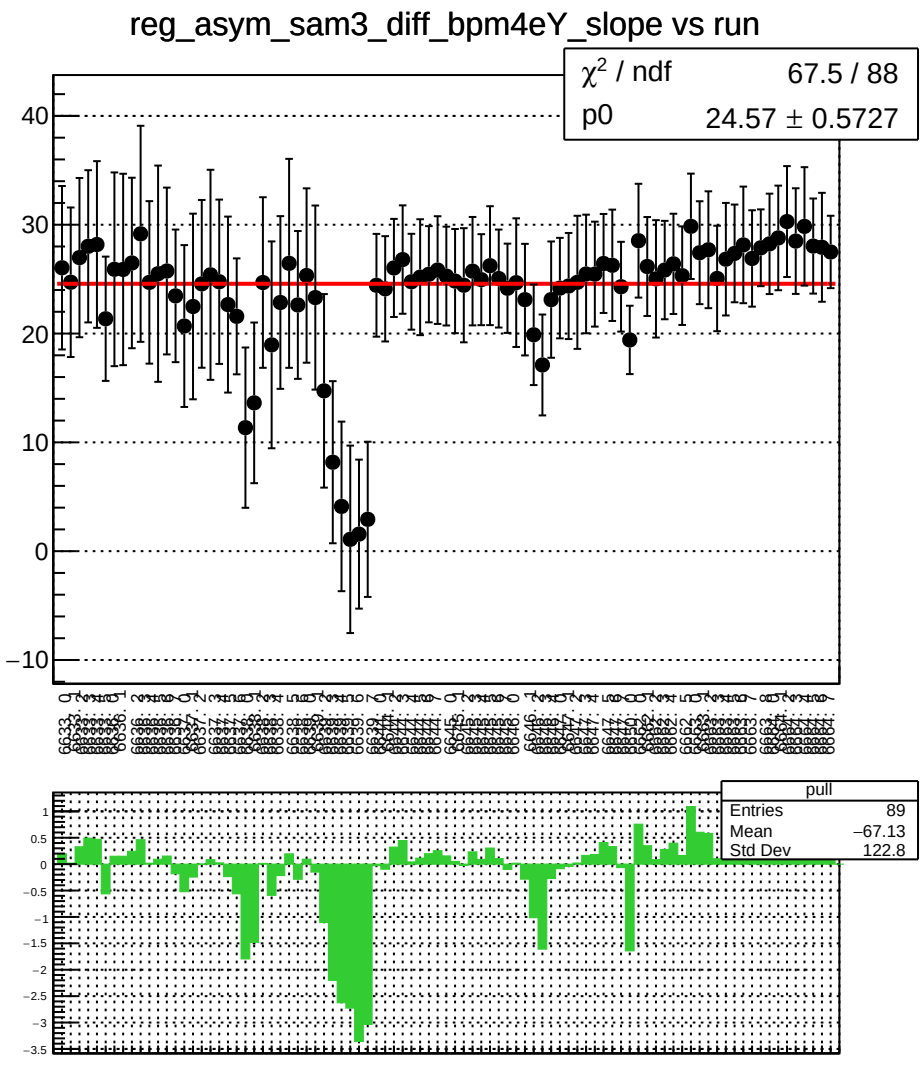

pull1D
Entries 89
Mean −0.2098
Std Dev 2.073
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

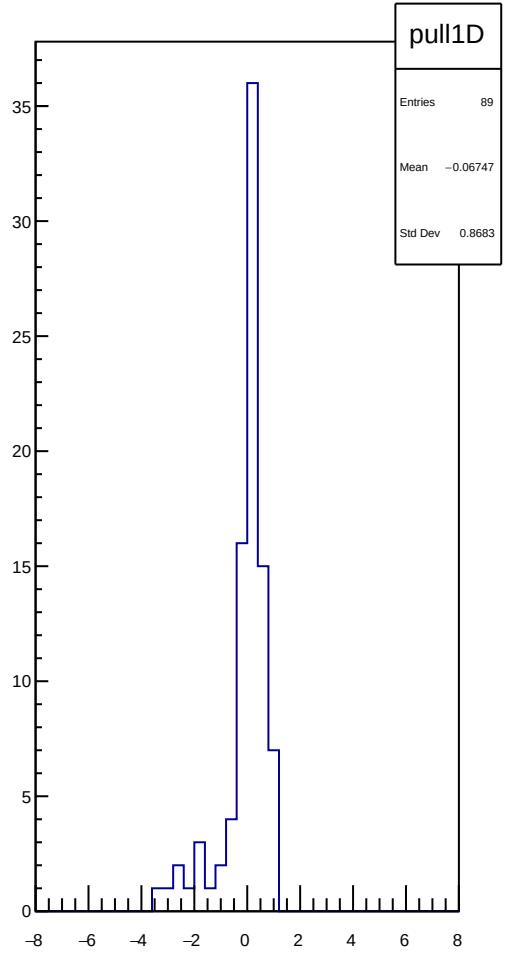

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 62.38 / 88
p0 −3.234 ± 0.4826
pull
Entries 89
Mean −61.46
Std Dev 116

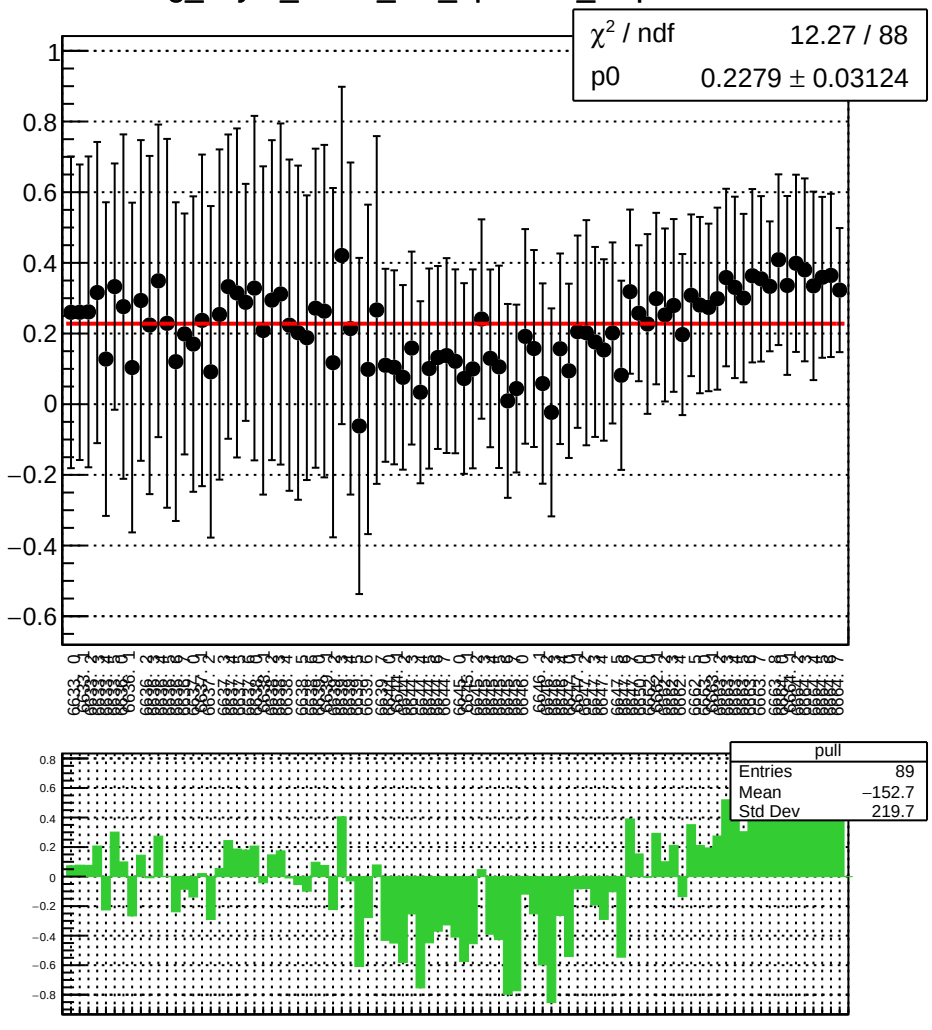

pull1D
Entries 89
Mean 0.06896
Std Dev 0.8343

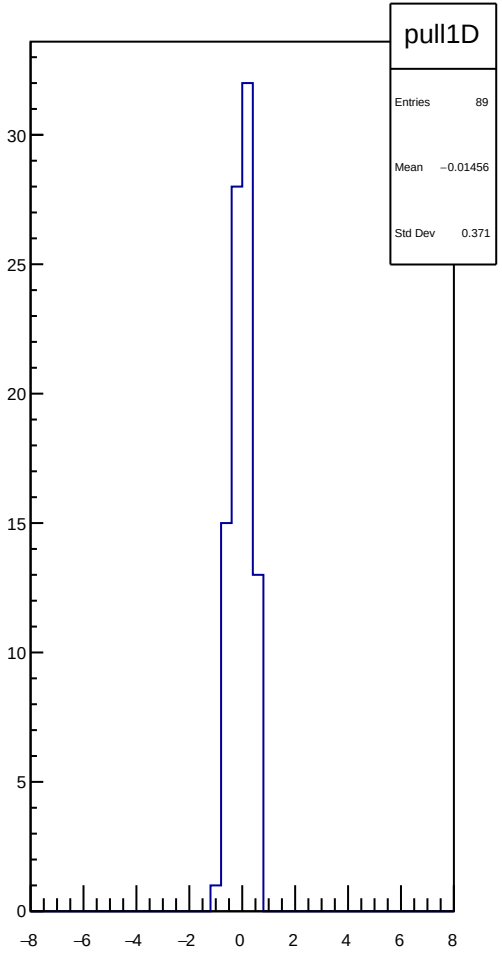

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 302.4 / 88
p0 −49.64 ± 0.7269
pull
Entries 89
Mean −35.79
Std Dev 68.49

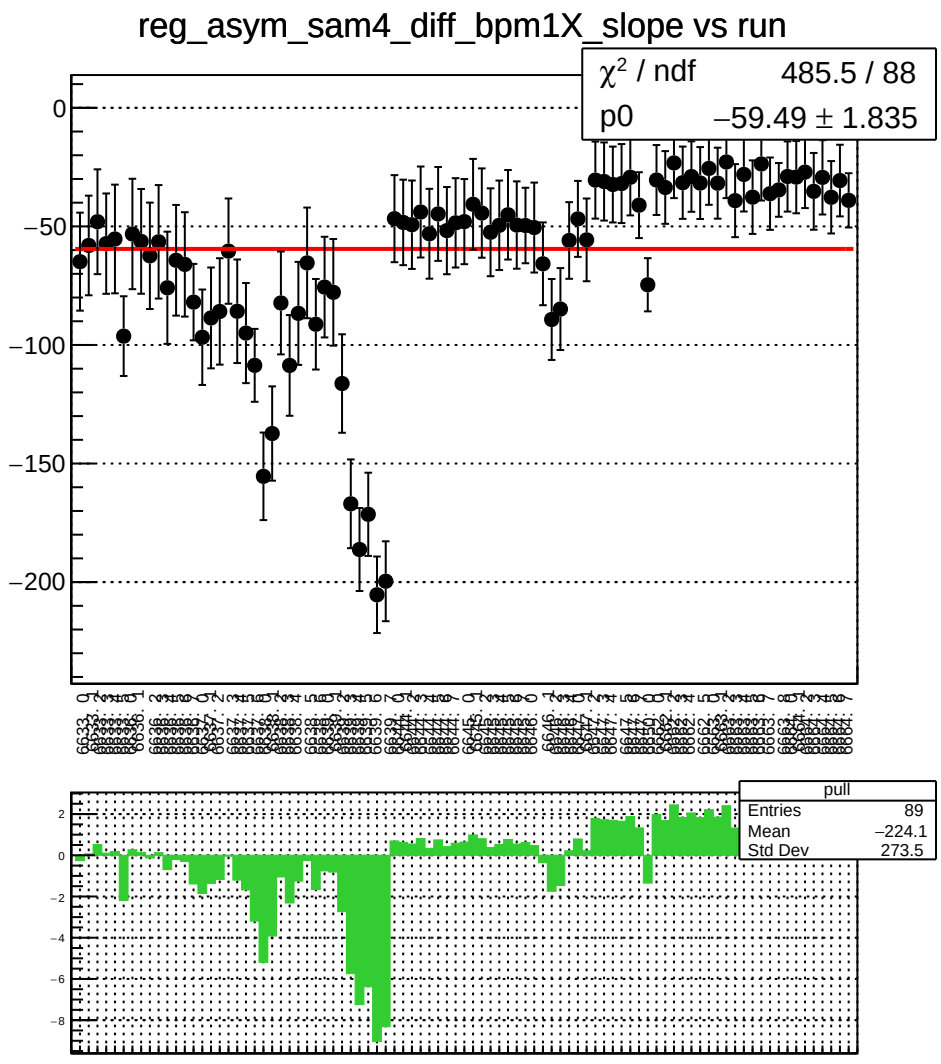

pull1D
Entries 89
Mean −0.4041
Std Dev 1.799

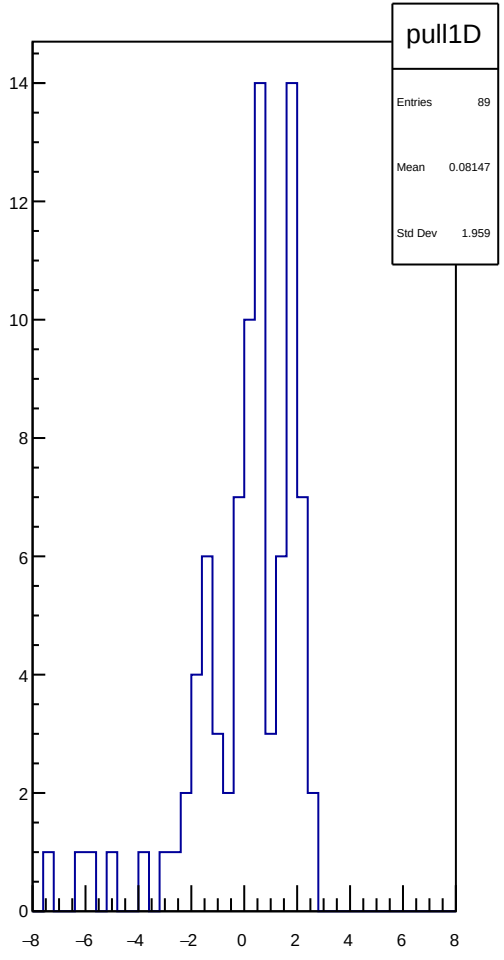

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 67.5 / 88
p0 24.57 ± 0.5727
pull
Entries 89
Mean −67.13
Std Dev 122.8

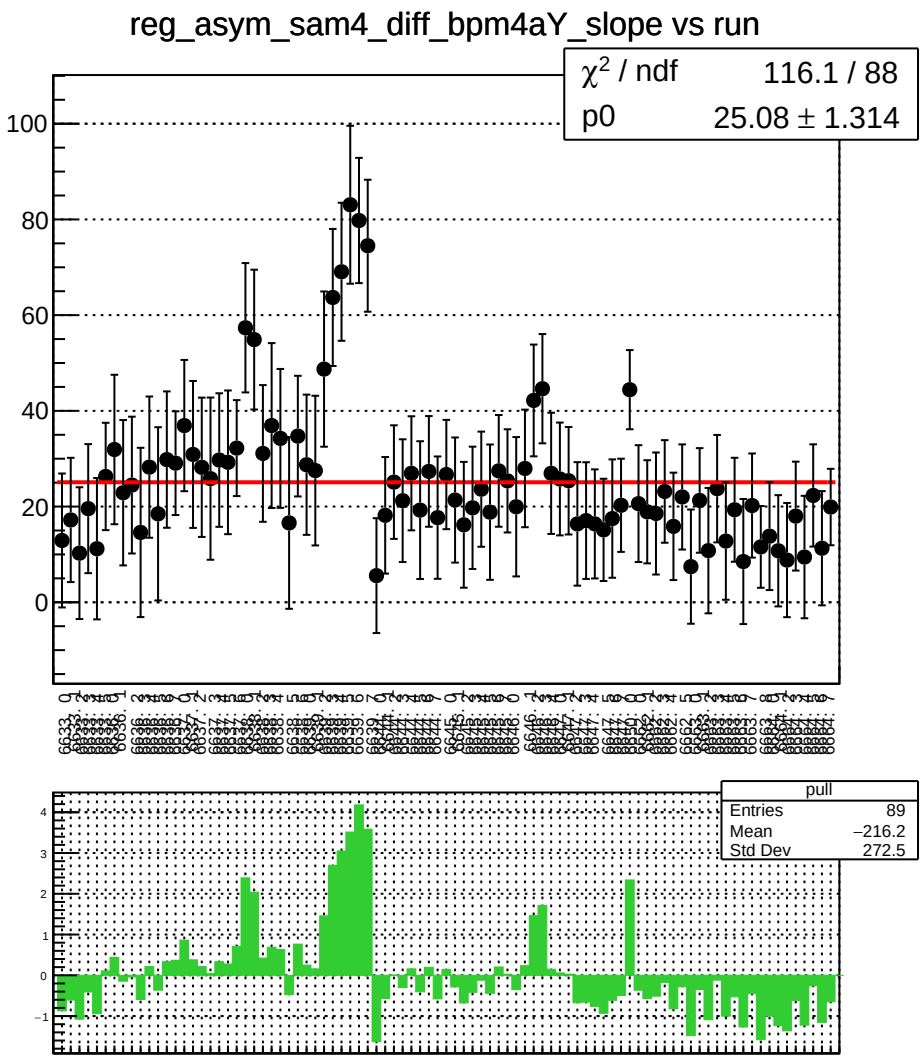

pull1D
Entries 89
Mean −0.06747
Std Dev 0.8683

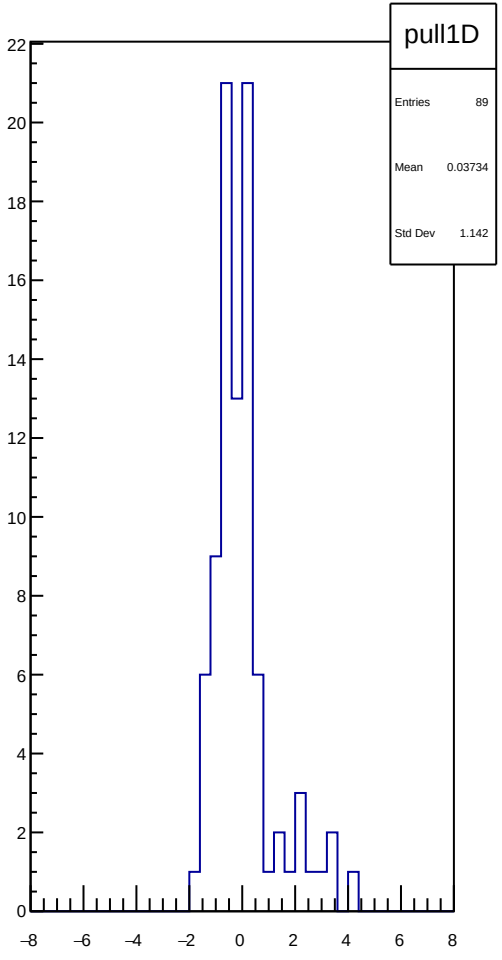

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 12.27 / 88
p0 0.2279 ± 0.03124
pull
Entries 89
Mean −152.7
Std Dev 219.7

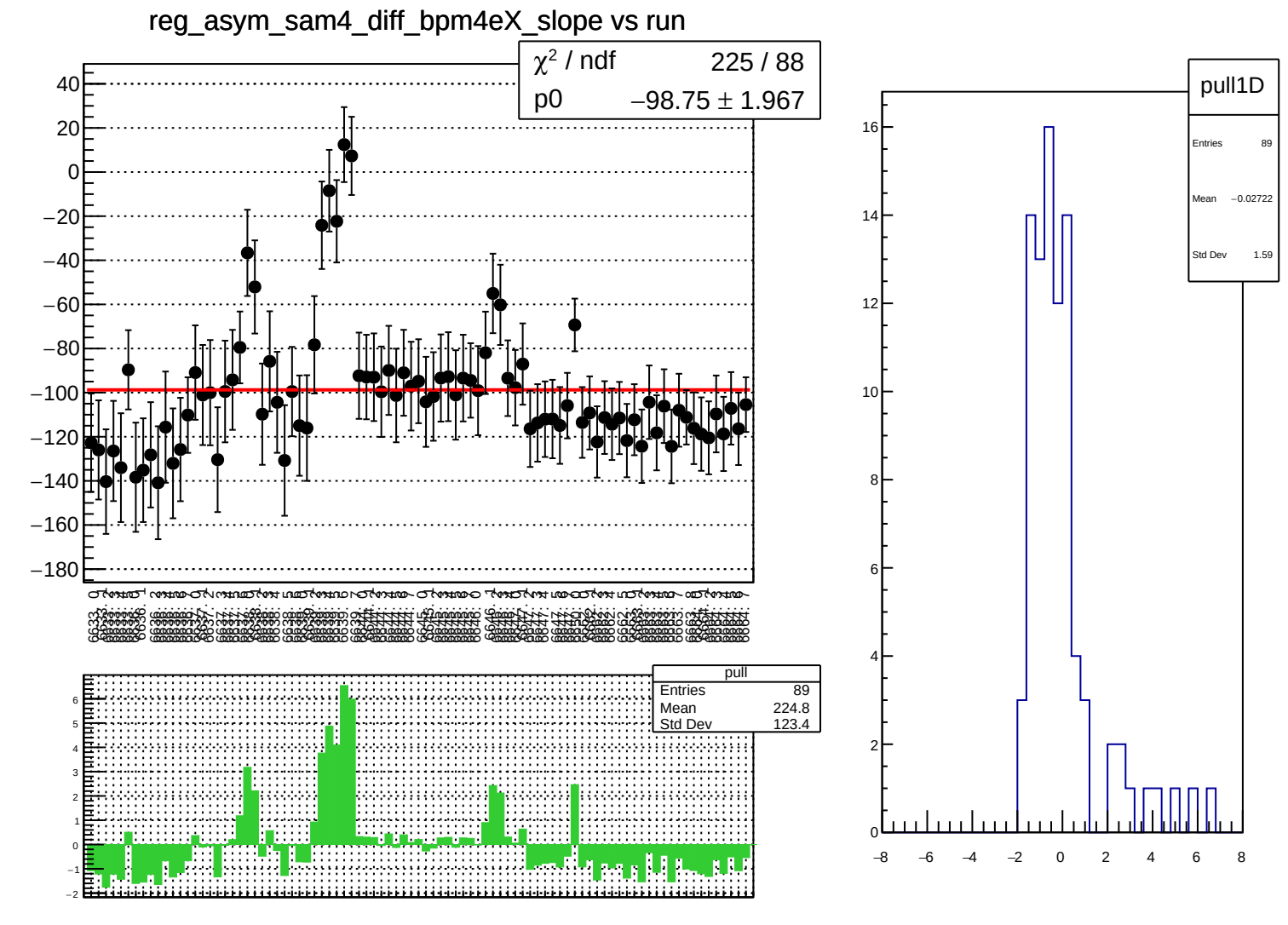

pull1D
Entries 89
Mean −0.01456
Std Dev 0.371

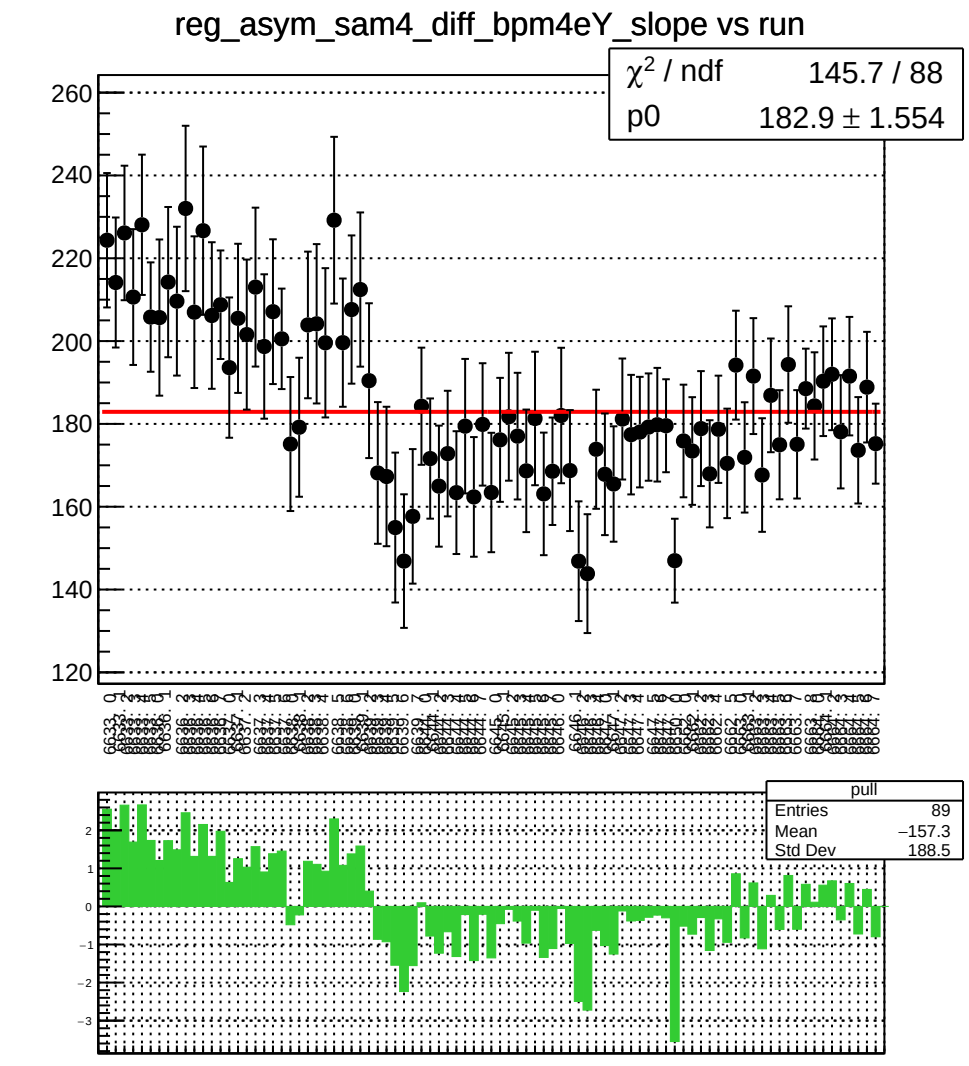

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 485.5 / 88
p0 −59.49 ± 1.835
0
−50
−100
−150
−200
pull
Entries 89
Mean −224.1
Std Dev 273.5
2
0
−2
−4
−6
−8

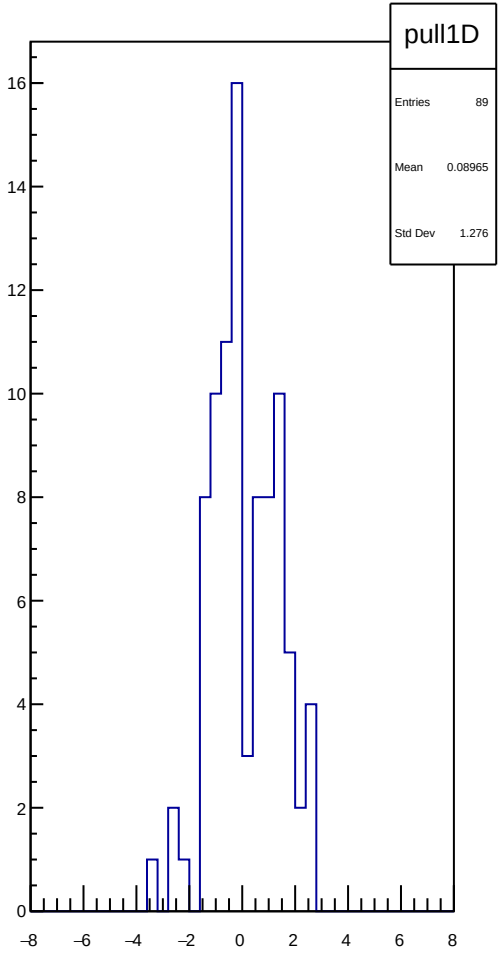

pull1D
Entries 89
Mean 0.08147
Std Dev 1.959
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

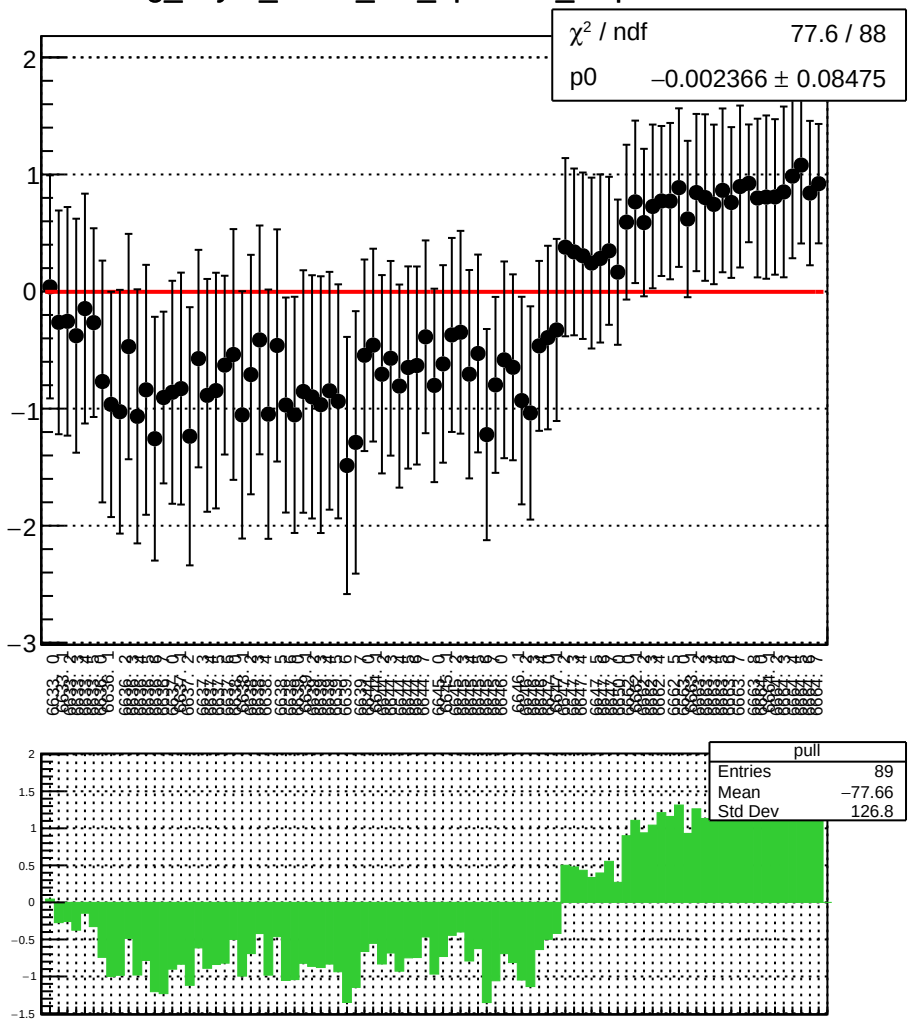

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 116.1 / 88
p0 25.08 ± 1.314
pull
Entries 89
Mean −216.2
Std Dev 272.5

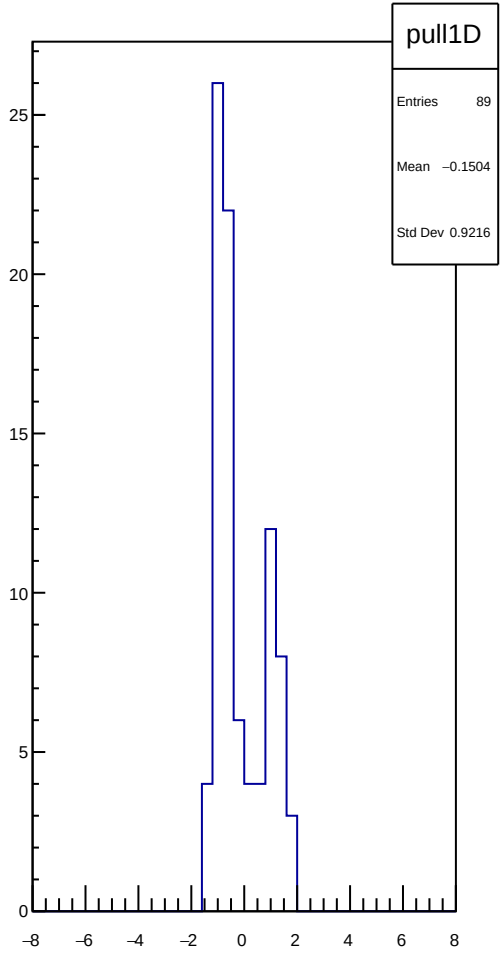

pull1D
Entries 89
Mean 0.03734
Std Dev 1.142

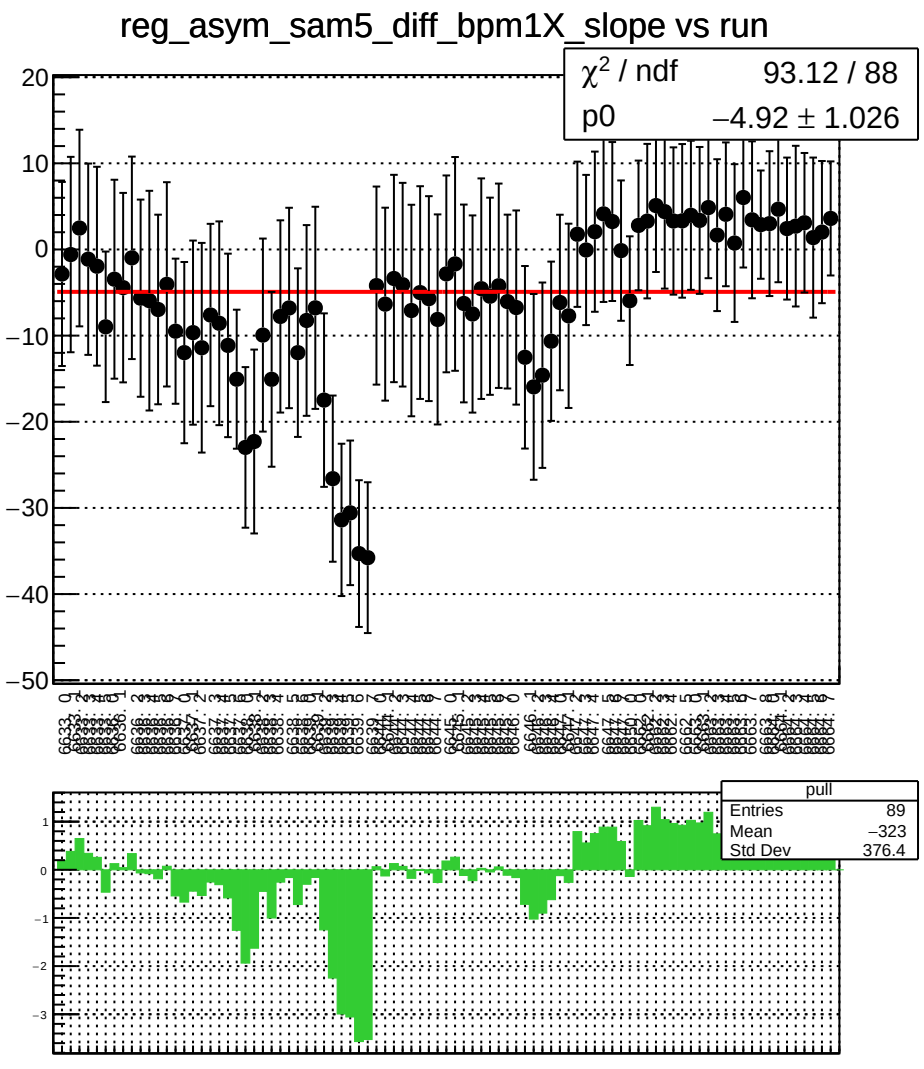

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 225 / 88
p0 −98.75 ± 1.967
pull
Entries 89
Mean 224.8
Std Dev 123.4
pull1D
Entries 89
Mean −0.02722
Std Dev 1.59

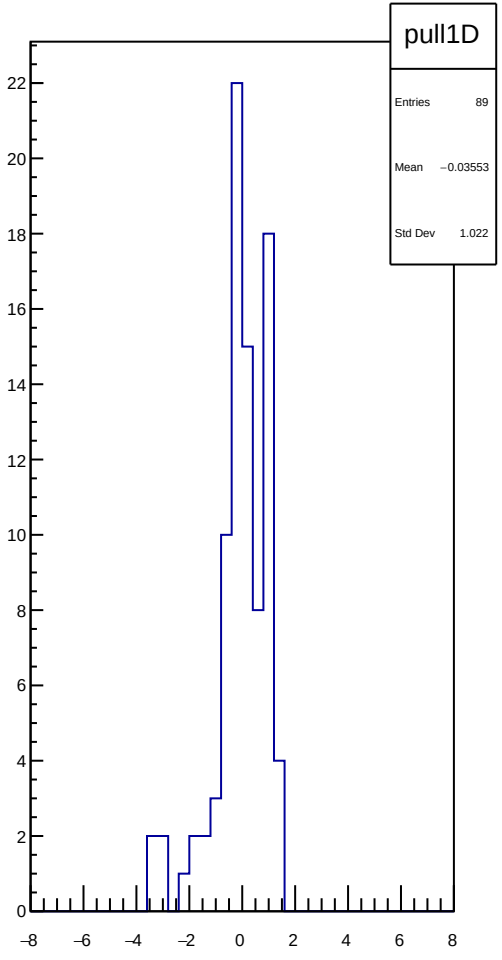

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 145.7 / 88
p0 182.9 ± 1.554
pull
Entries 89
Mean −157.3
Std Dev 188.5

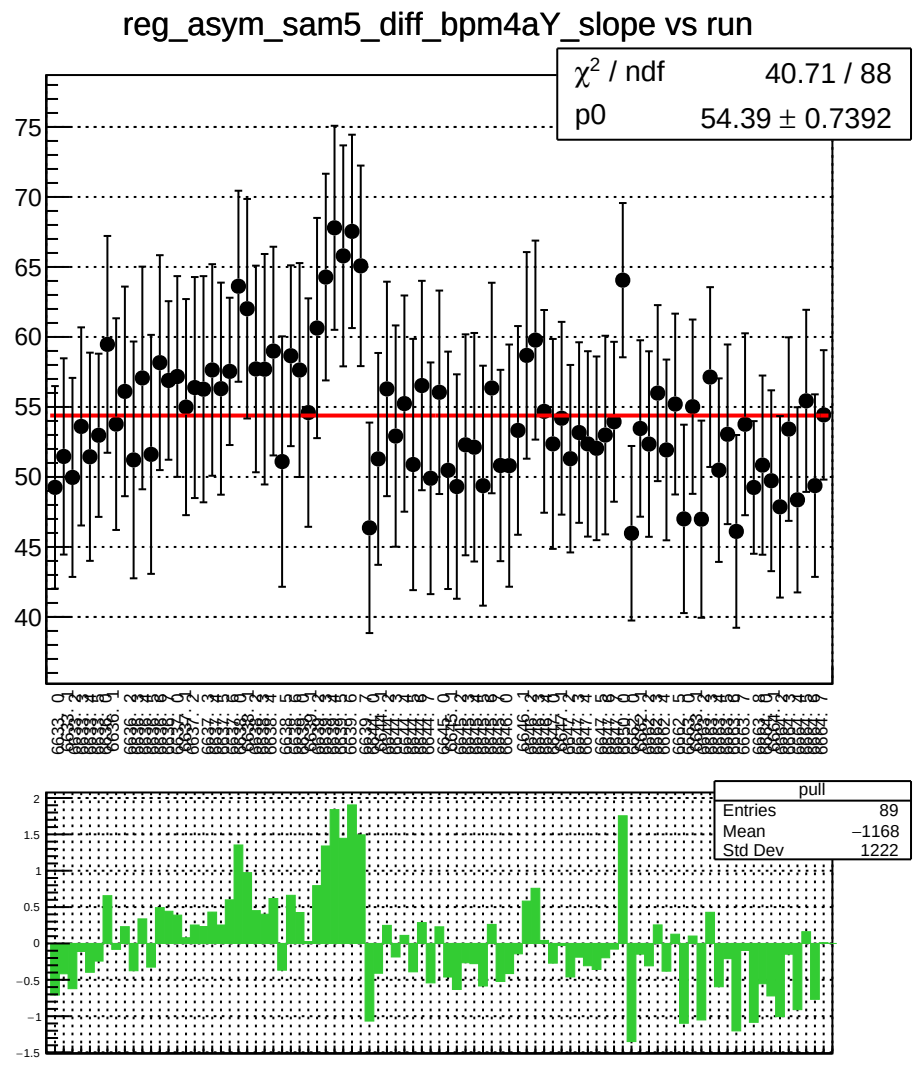

pull1D
Entries 89
Mean 0.08965
Std Dev 1.276

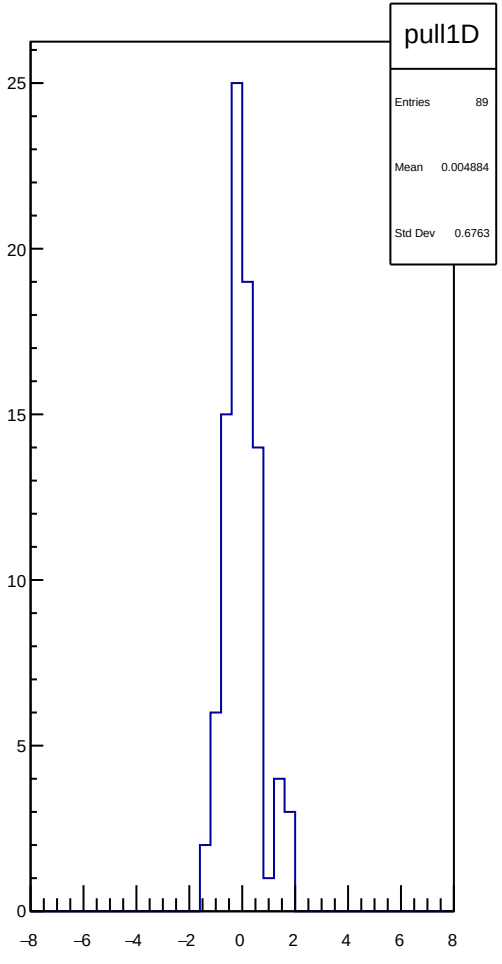

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 77.6 / 88
p0 −0.002366 ± 0.08475
pull
Entries 89
Mean −77.66
Std Dev 126.8

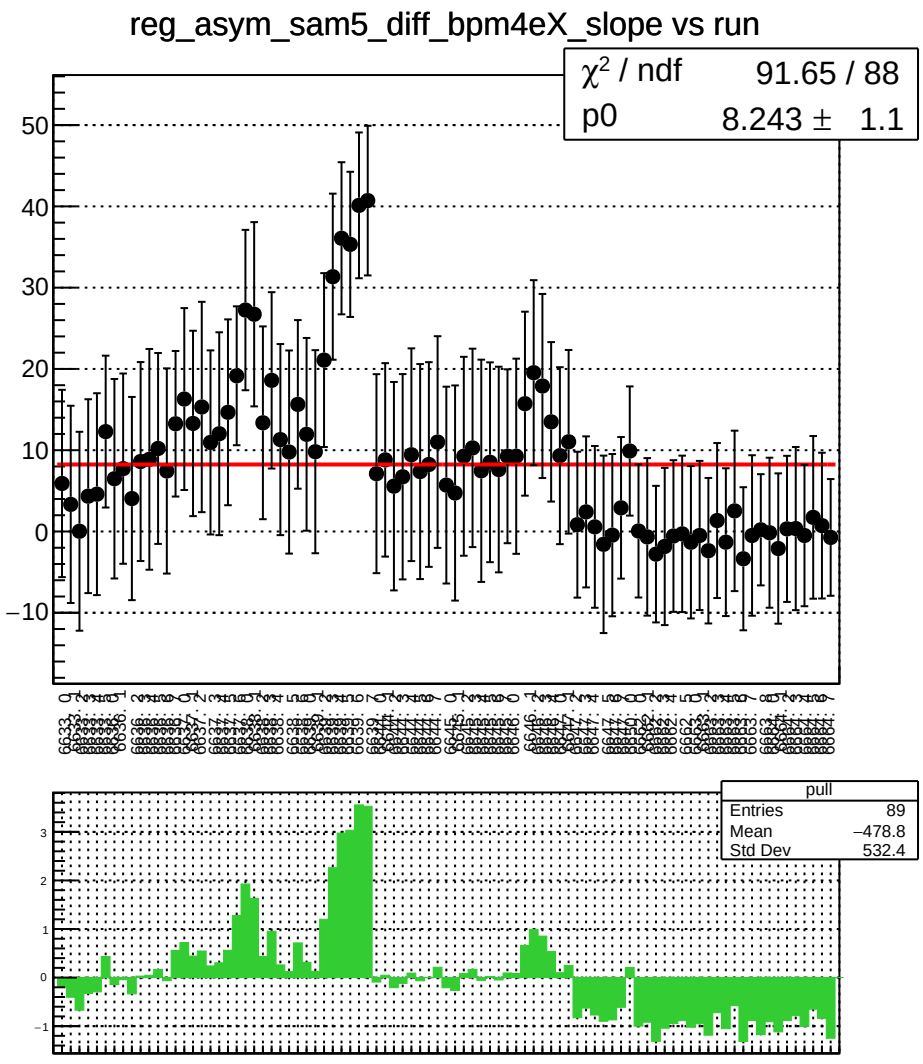

pull1D
Entries 89
Mean −0.1504
Std Dev 0.9216

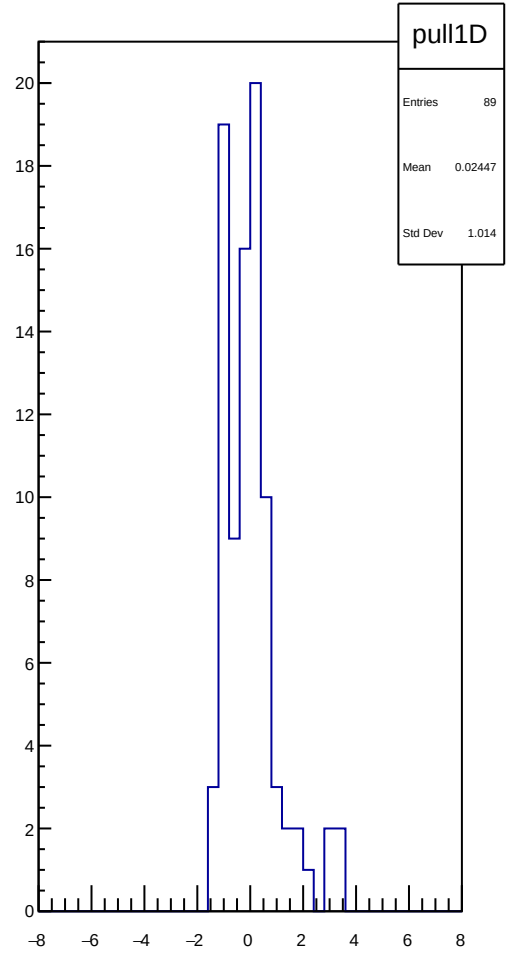

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 93.12 / 88
p0 −4.92 ± 1.026
pull
Entries 89
Mean −323
Std Dev 376.4

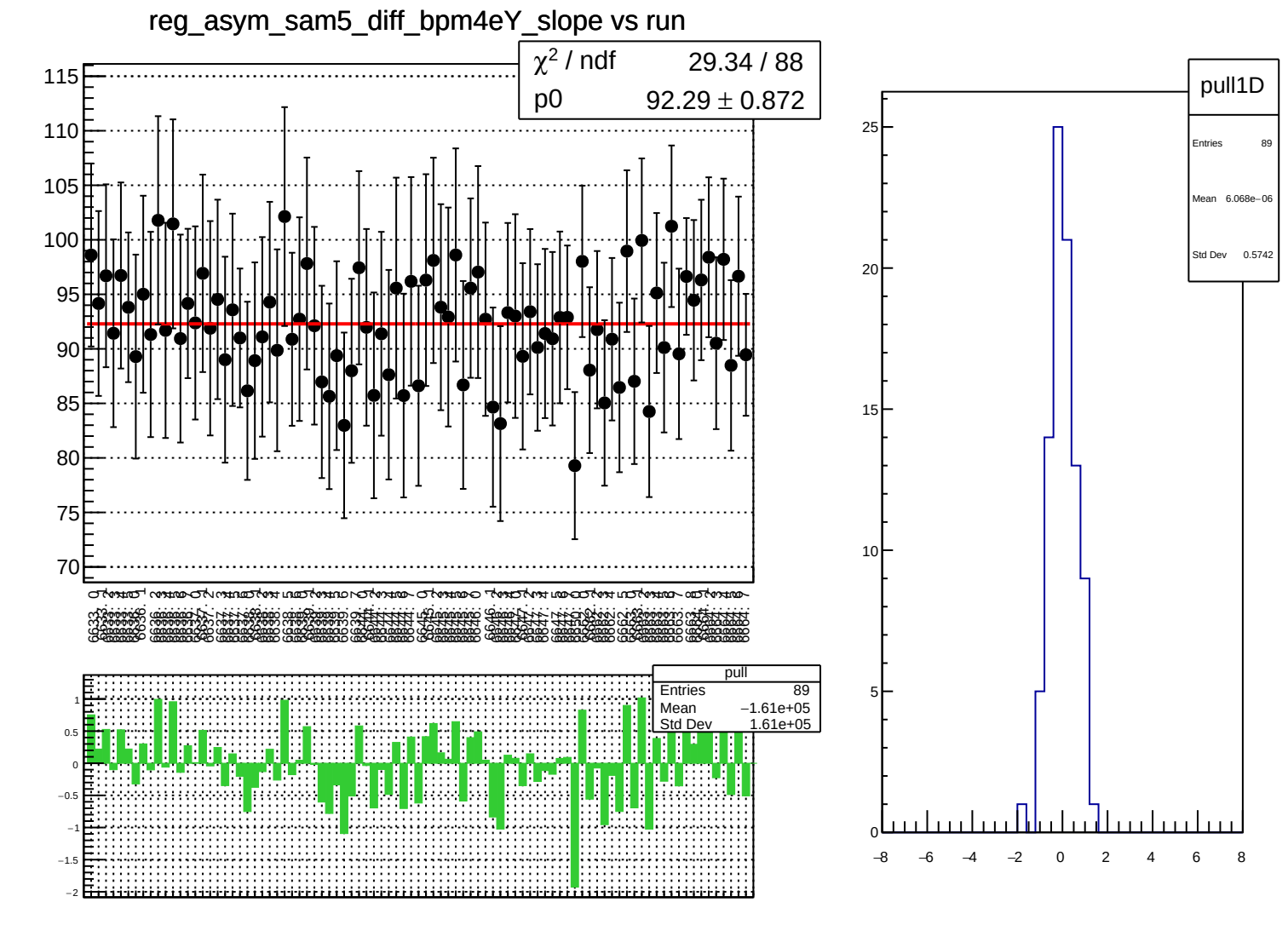

pull1D
Entries 89
Mean −0.03553
Std Dev 1.022

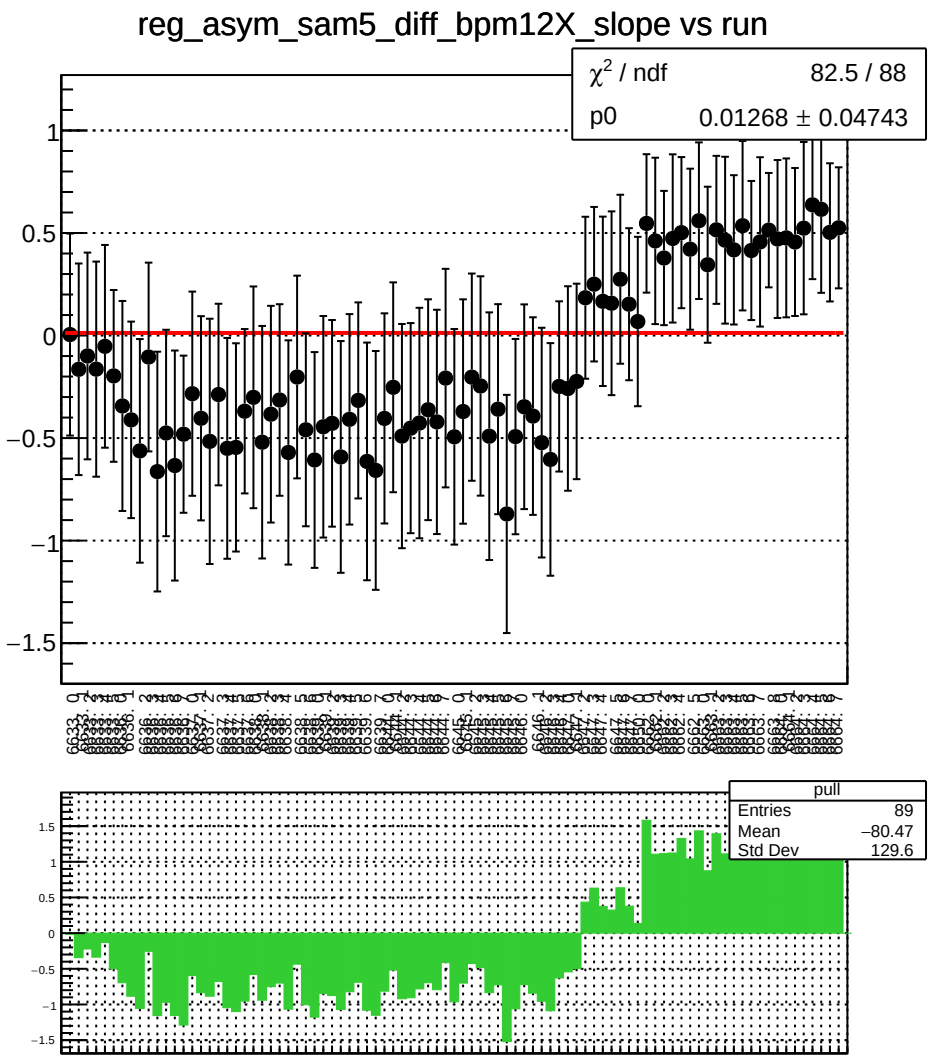

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 40.71 / 88
p0 54.39 ± 0.7392
pull
Entries 89
Mean −1168
Std Dev 1222

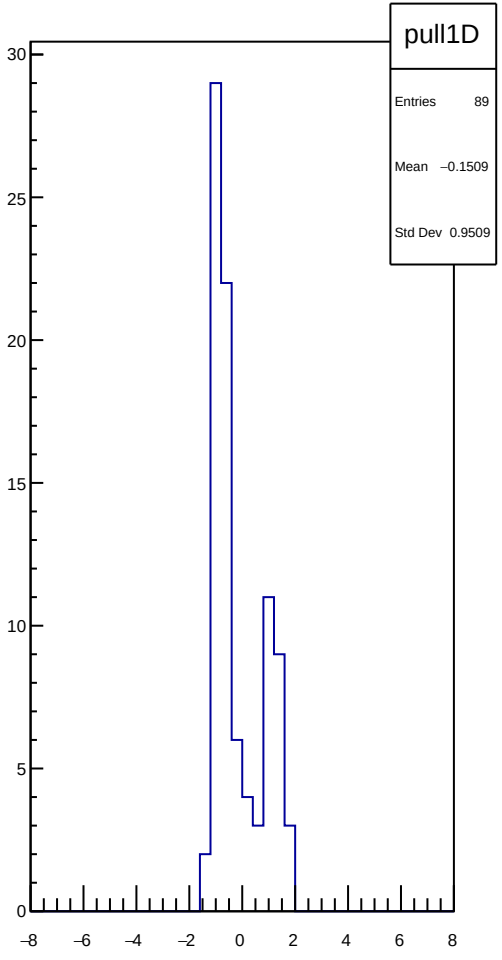

pull1D
Entries 89
Mean 0.004884
Std Dev 0.6763

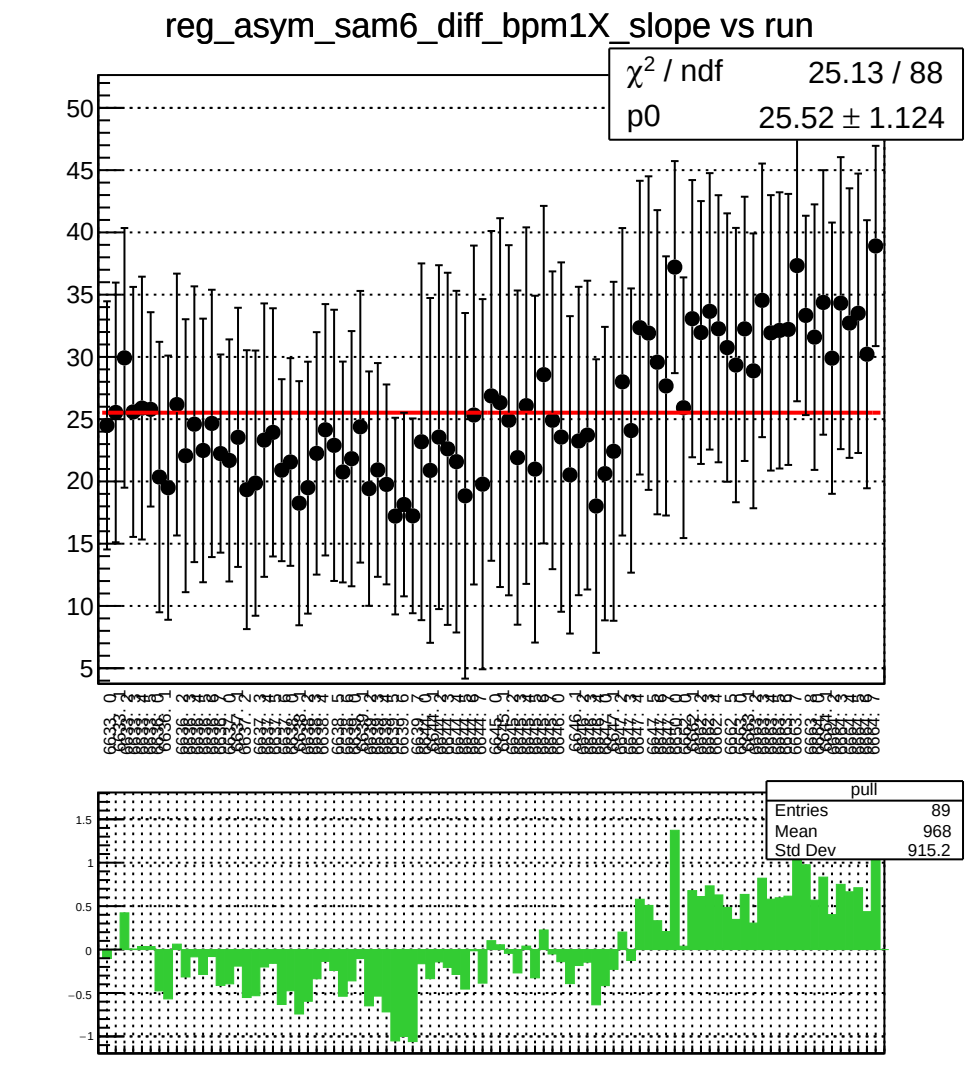

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 91.65 / 88
p0 8.243 ± 1.1
pull
Entries 89
Mean −478.8
Std Dev 532.4

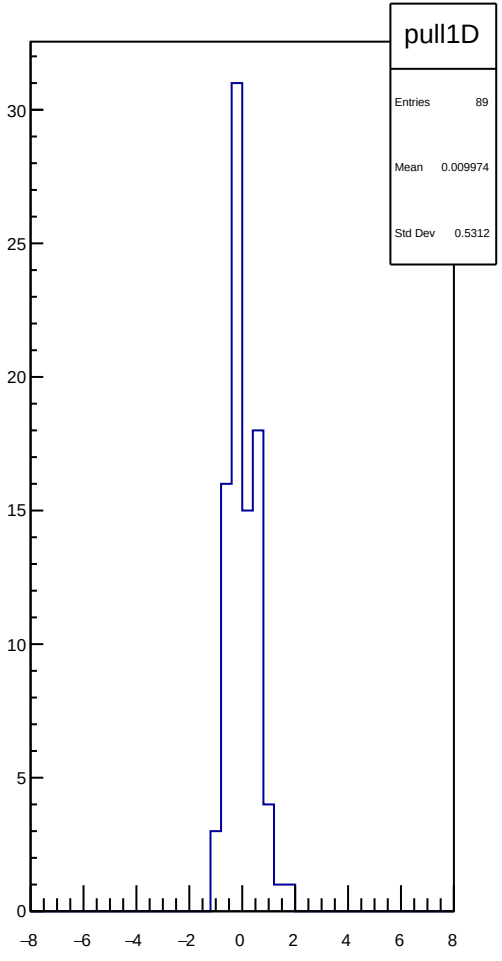

pull1D
Entries 89
Mean 0.02447
Std Dev 1.014

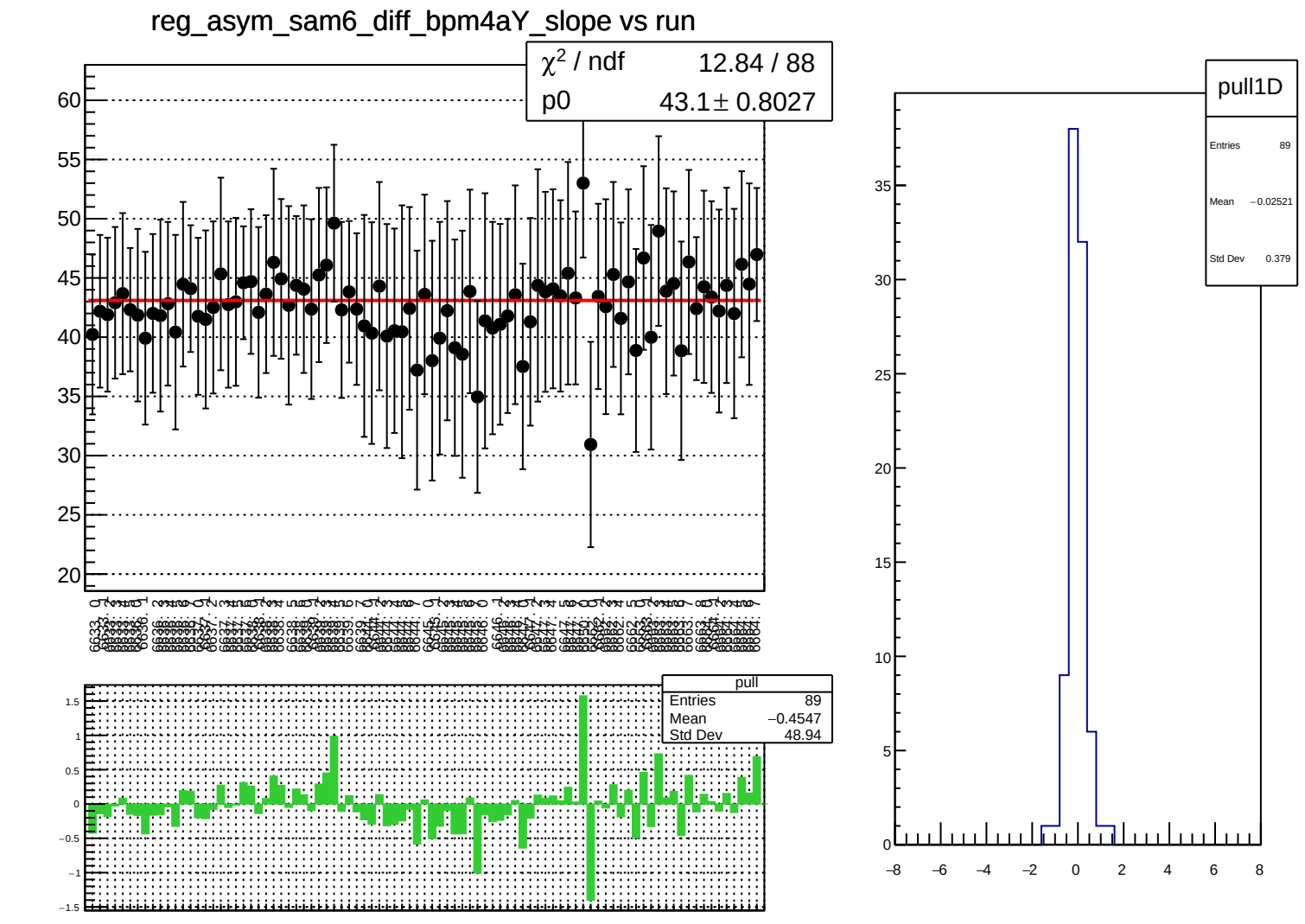

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 29.34 / 88
p0 92.29 ± 0.872
pull
Entries 89
Mean −1.61e+05
Std Dev 1.61e+05
pull1D
Entries 89
Mean 6.068e−06
Std Dev 0.5742

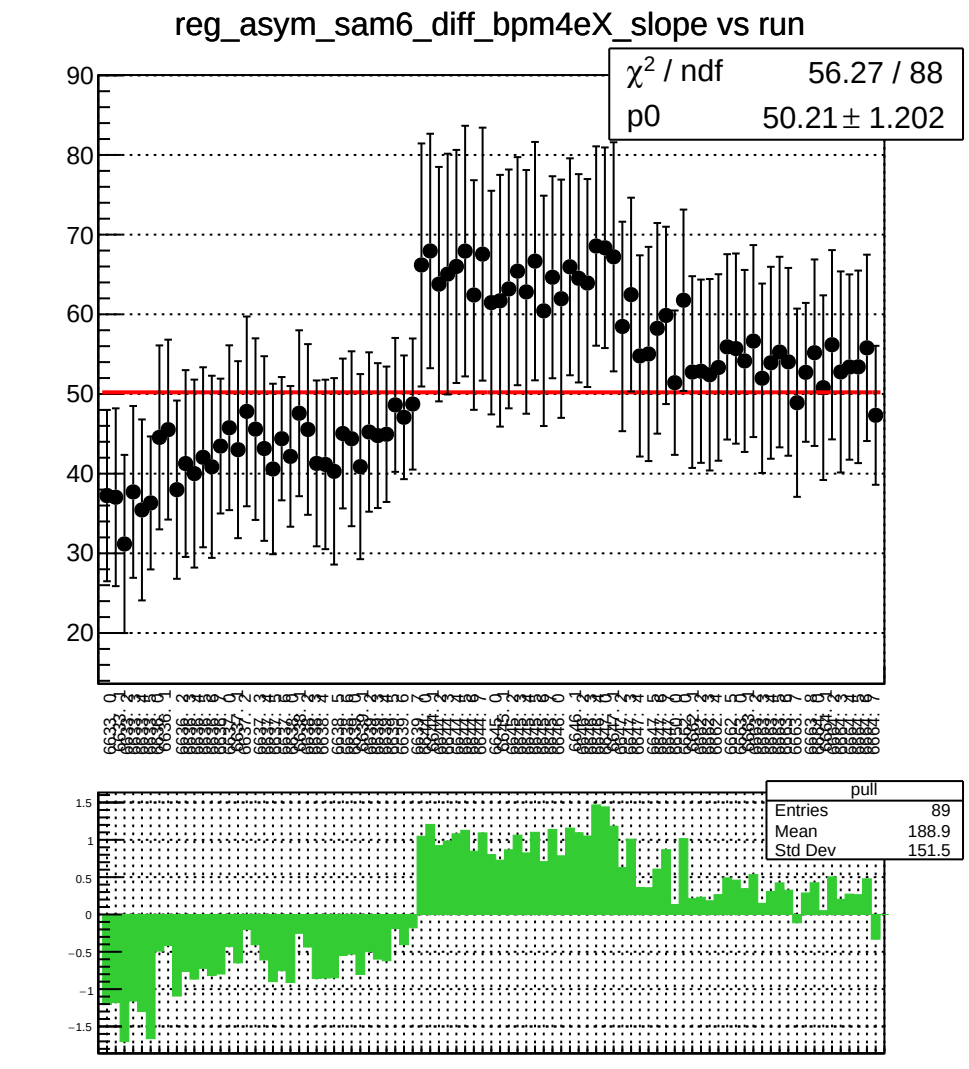

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 82.5 / 88
p0 0.01268 ± 0.04743
pull
Entries 89
Mean −80.47
Std Dev 129.6

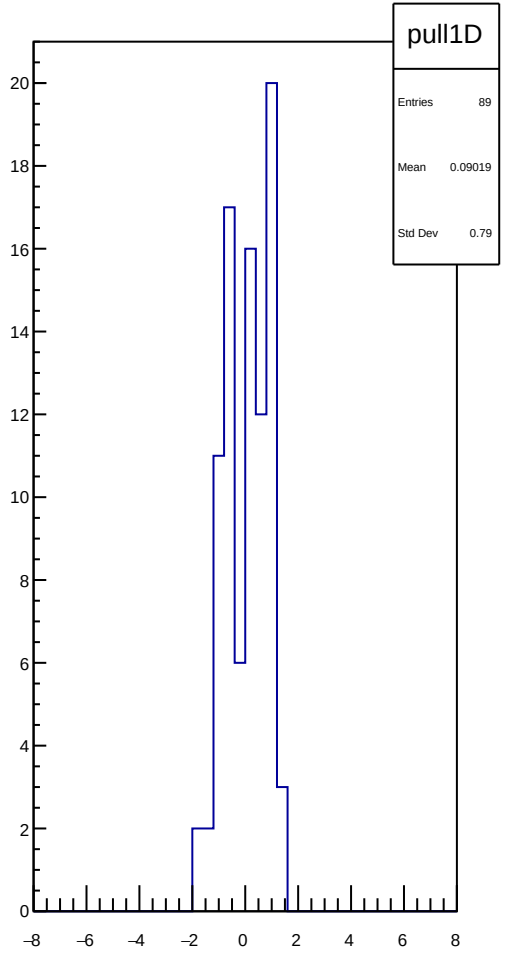

pull1D
Entries 89
Mean −0.1509
Std Dev 0.9509

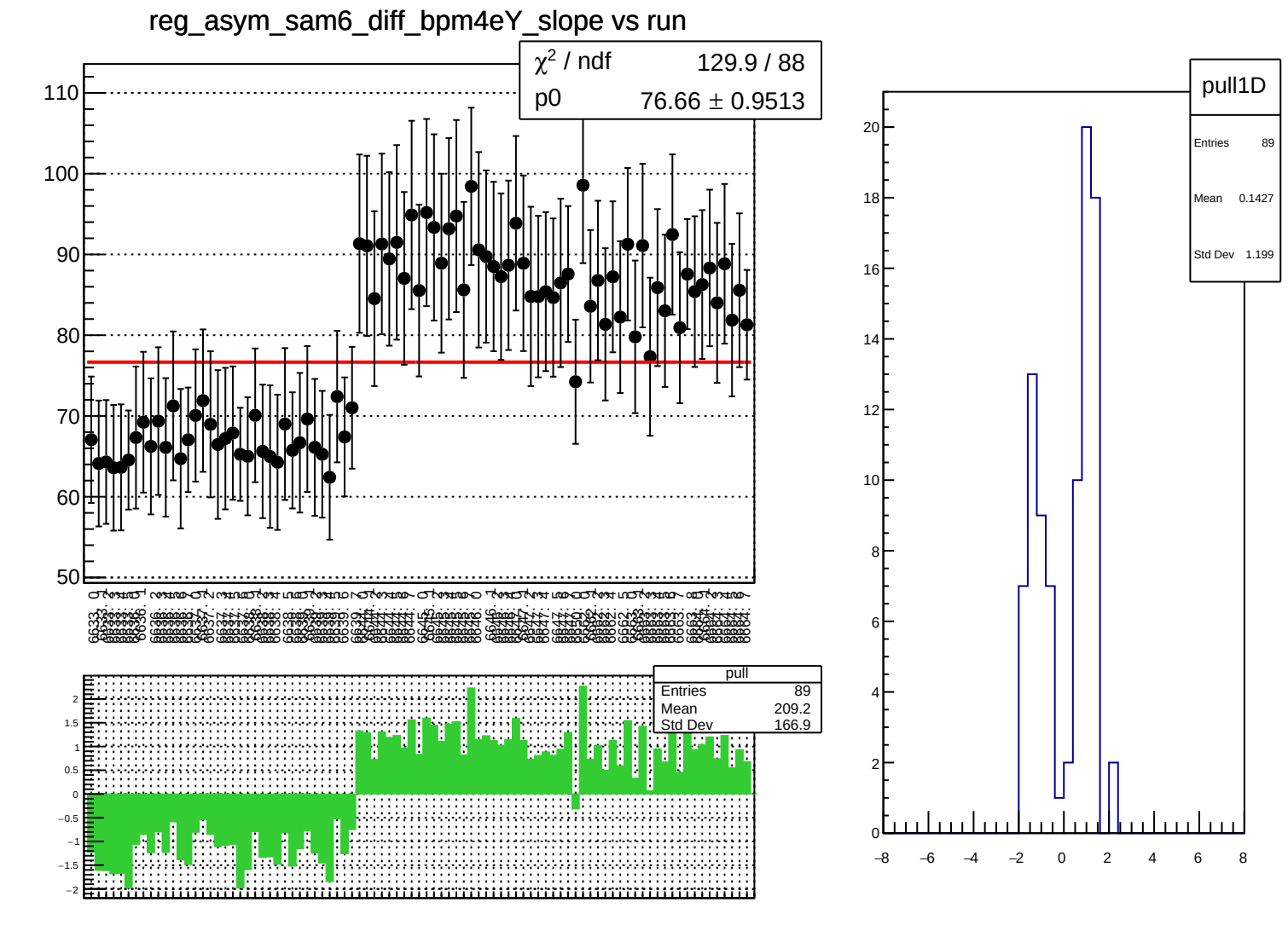

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 25.13 / 88
p0 25.52 ± 1.124
pull
Entries 89
Mean 968
Std Dev 915.2

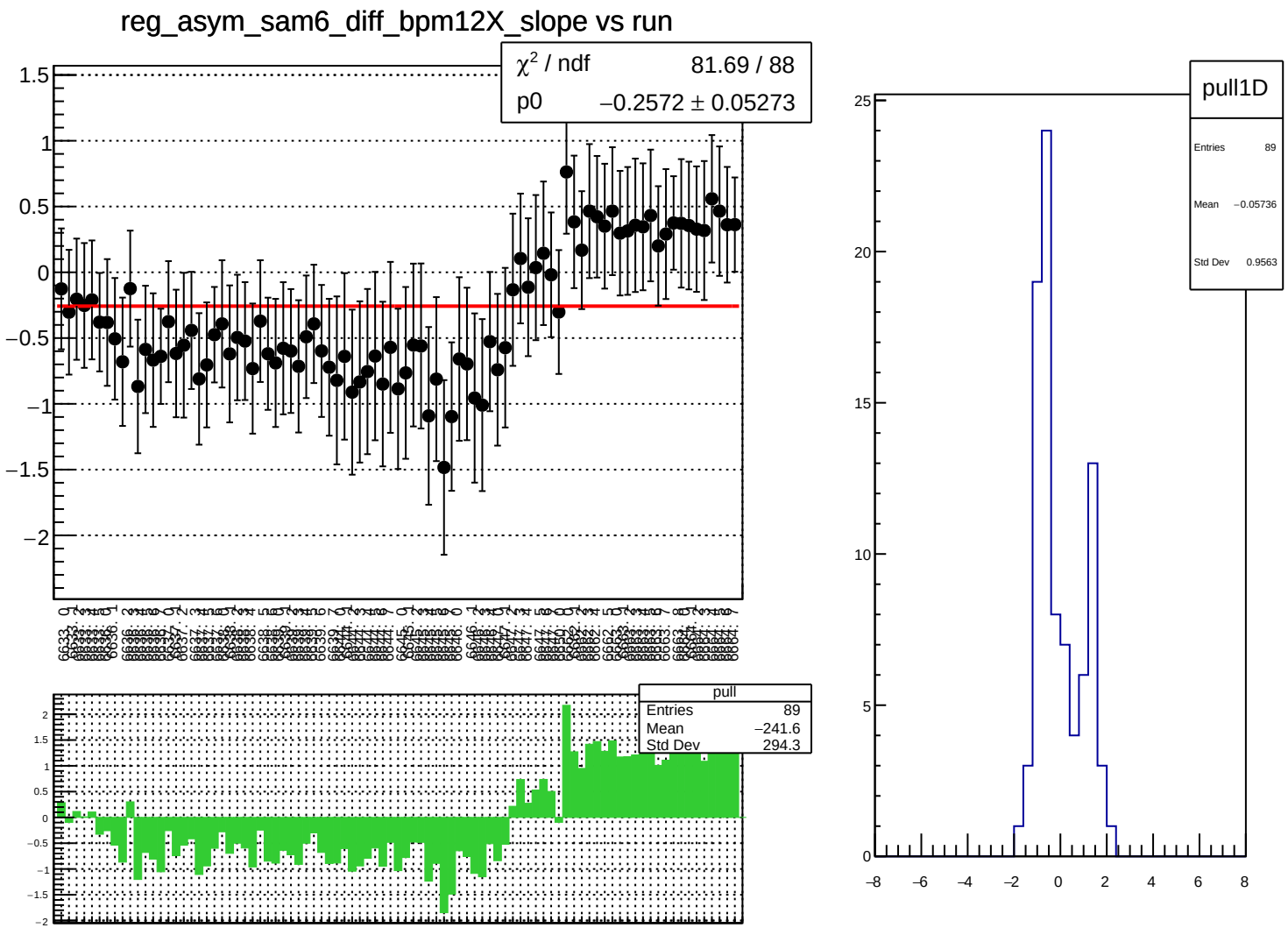

pull1D
Entries 89
Mean 0.009974
Std Dev 0.5312

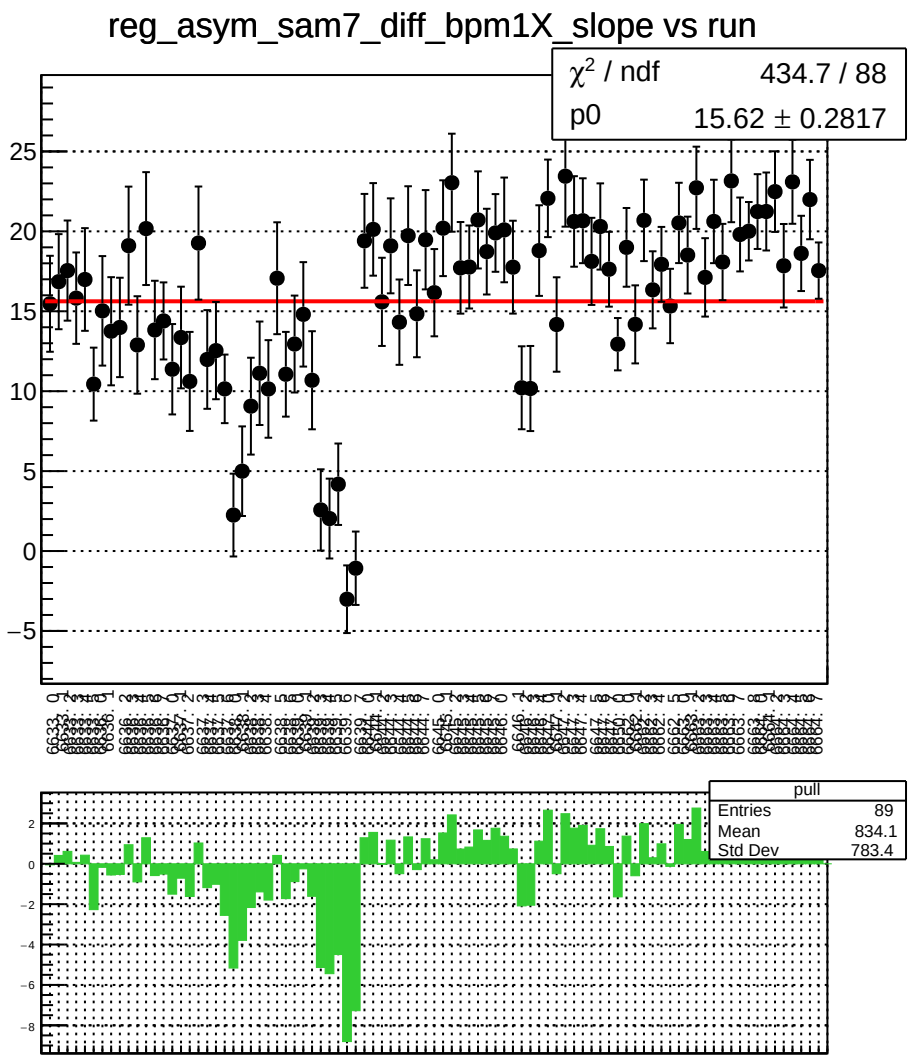

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 12.84 / 88
p0 43.1 ± 0.8027
pull
Entries 89
Mean −0.4547
Std Dev 48.94
pull1D
Entries 89
Mean −0.02521
Std Dev 0.379

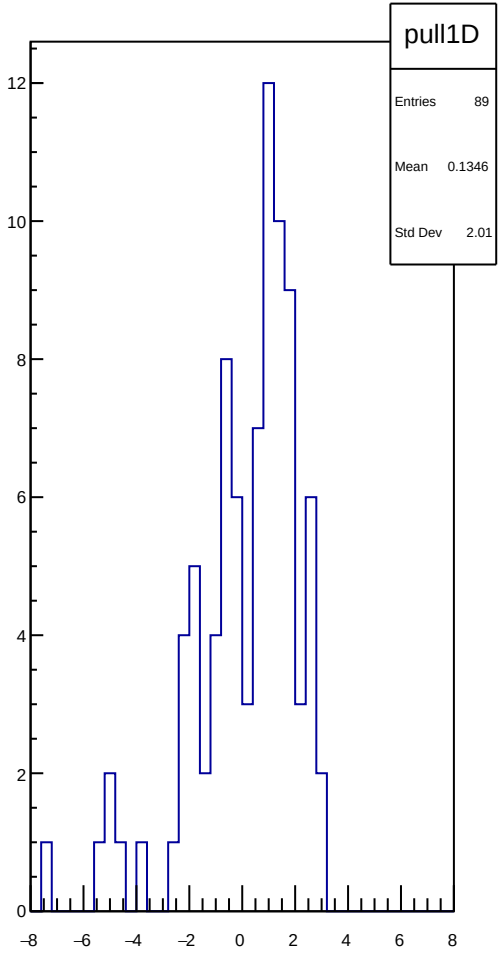

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 56.27 / 88
p0 50.21 ± 1.202
pull
Entries 89
Mean 188.9
Std Dev 151.5

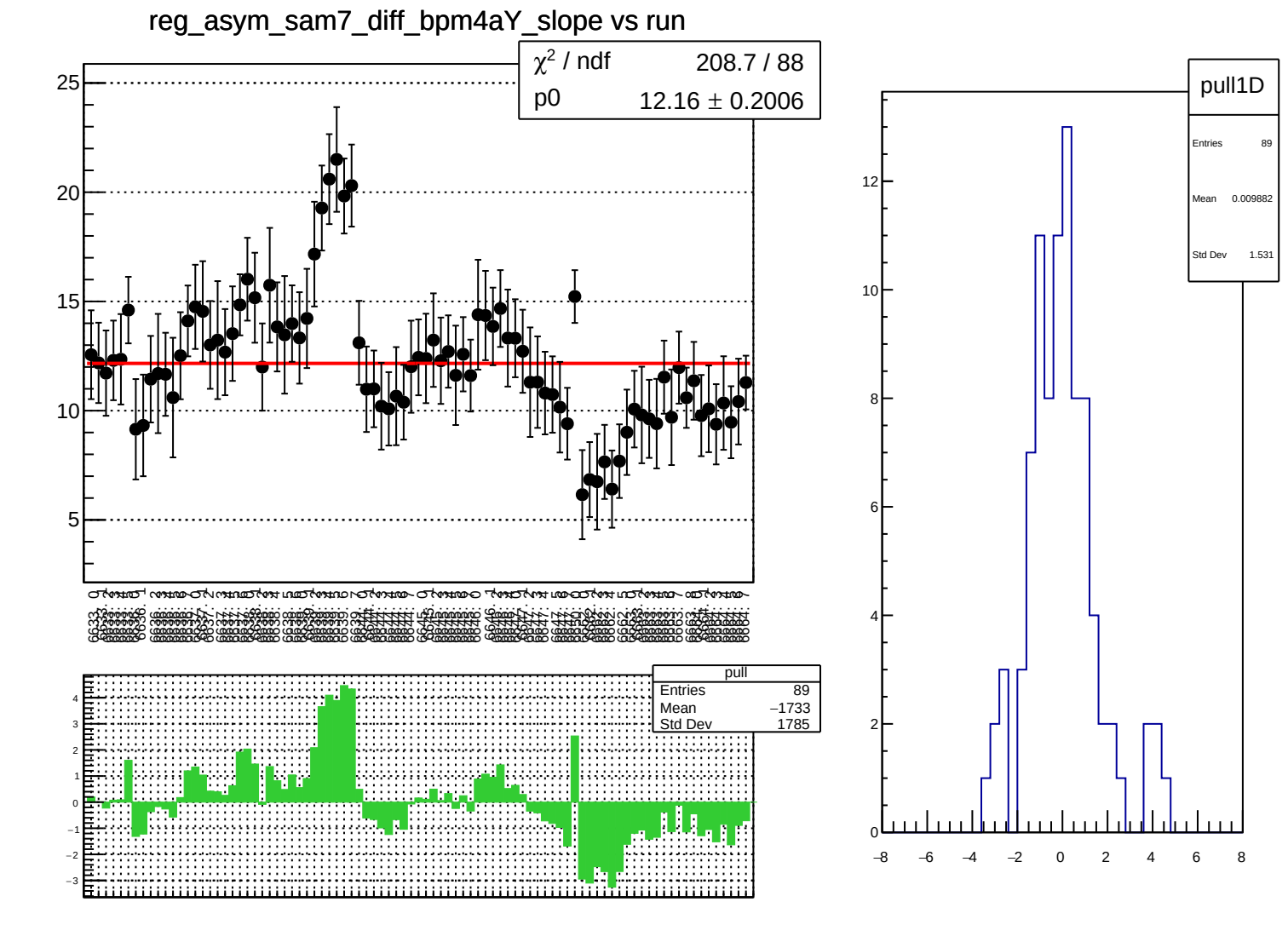

pull1D
Entries 89
Mean 0.09019
Std Dev 0.79

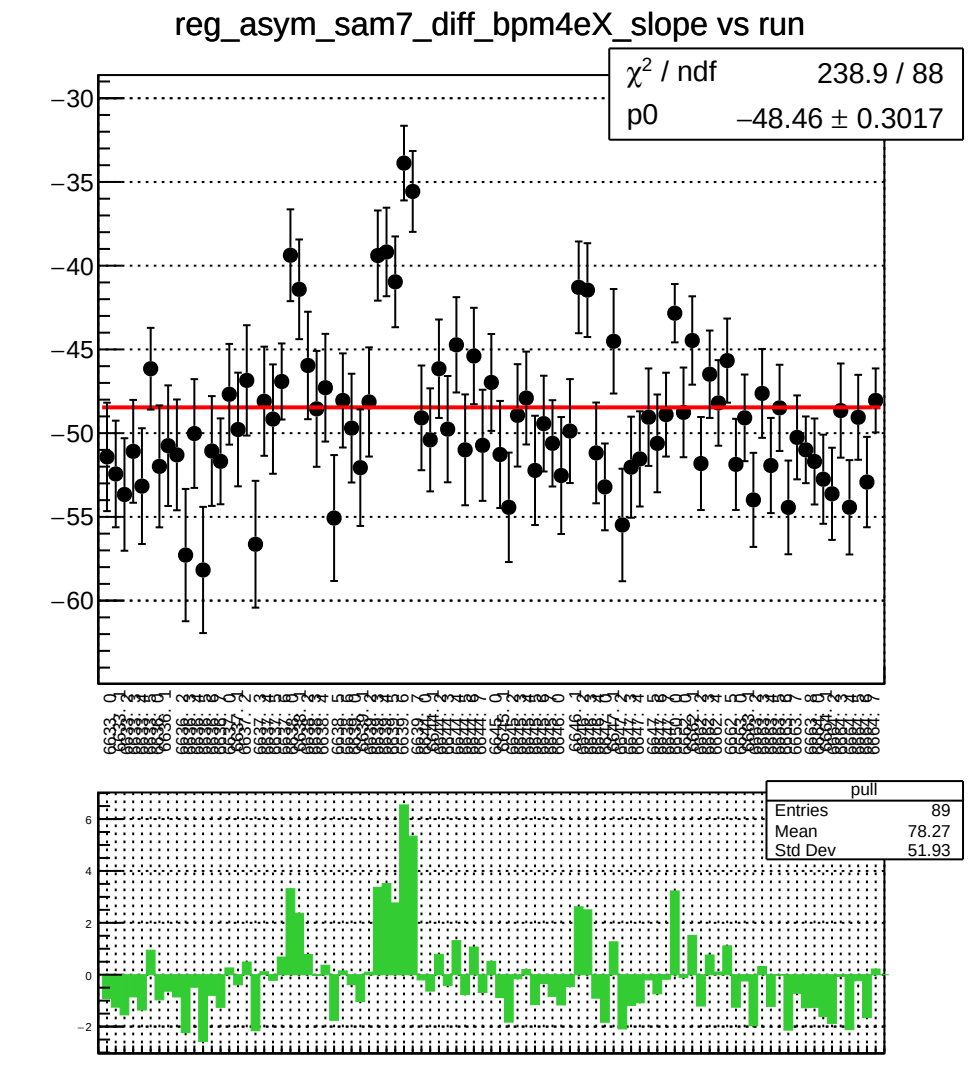

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 129.9 / 88
p0 76.66 ± 0.9513
pull
Entries 89
Mean 209.2
Std Dev 166.9
pull1D
Entries 89
Mean 0.1427
Std Dev 1.199

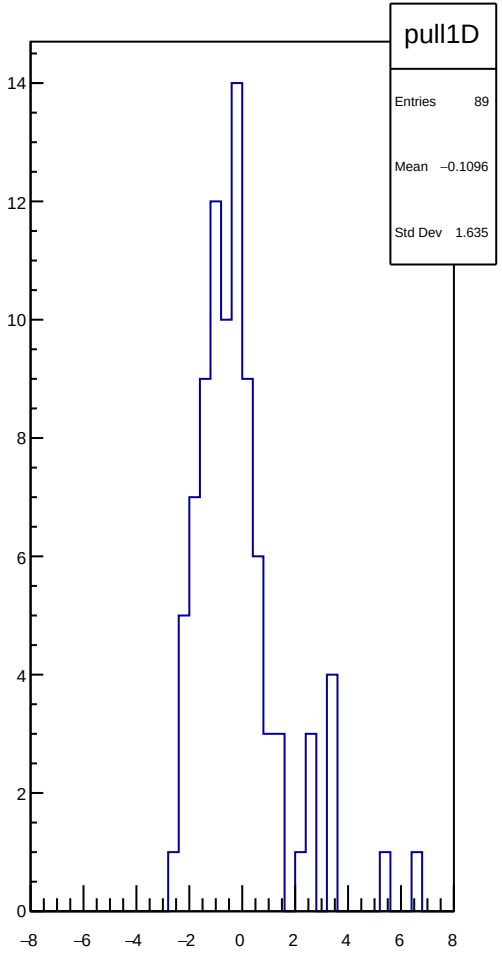

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 81.69 / 88
p0 −0.2572 ± 0.05273
pull
Entries 89
Mean −241.6
Std Dev 294.3
pull1D
Entries 89
Mean −0.05736
Std Dev 0.9563

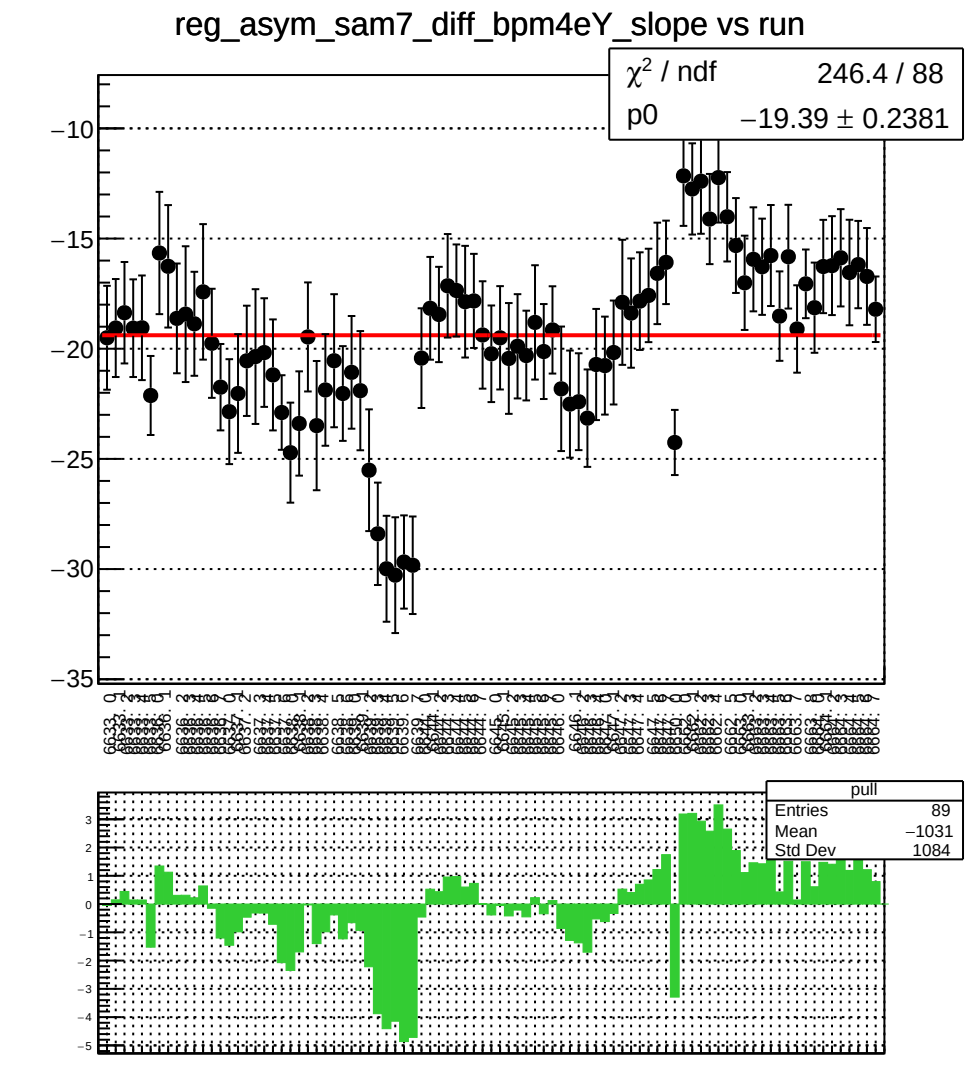

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 434.7 / 88
p0 15.62 ± 0.2817
pull
Entries 89
Mean 834.1
Std Dev 783.4

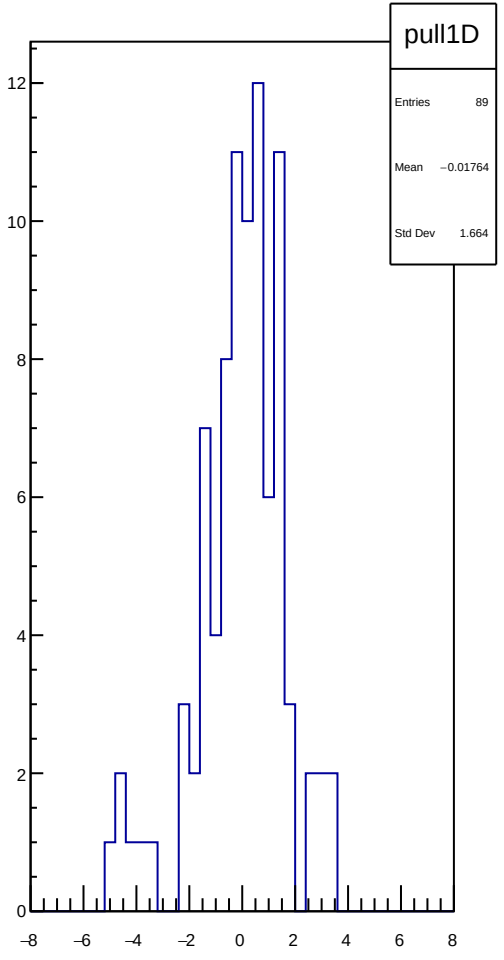

pull1D
Entries 89
Mean 0.1346
Std Dev 2.01

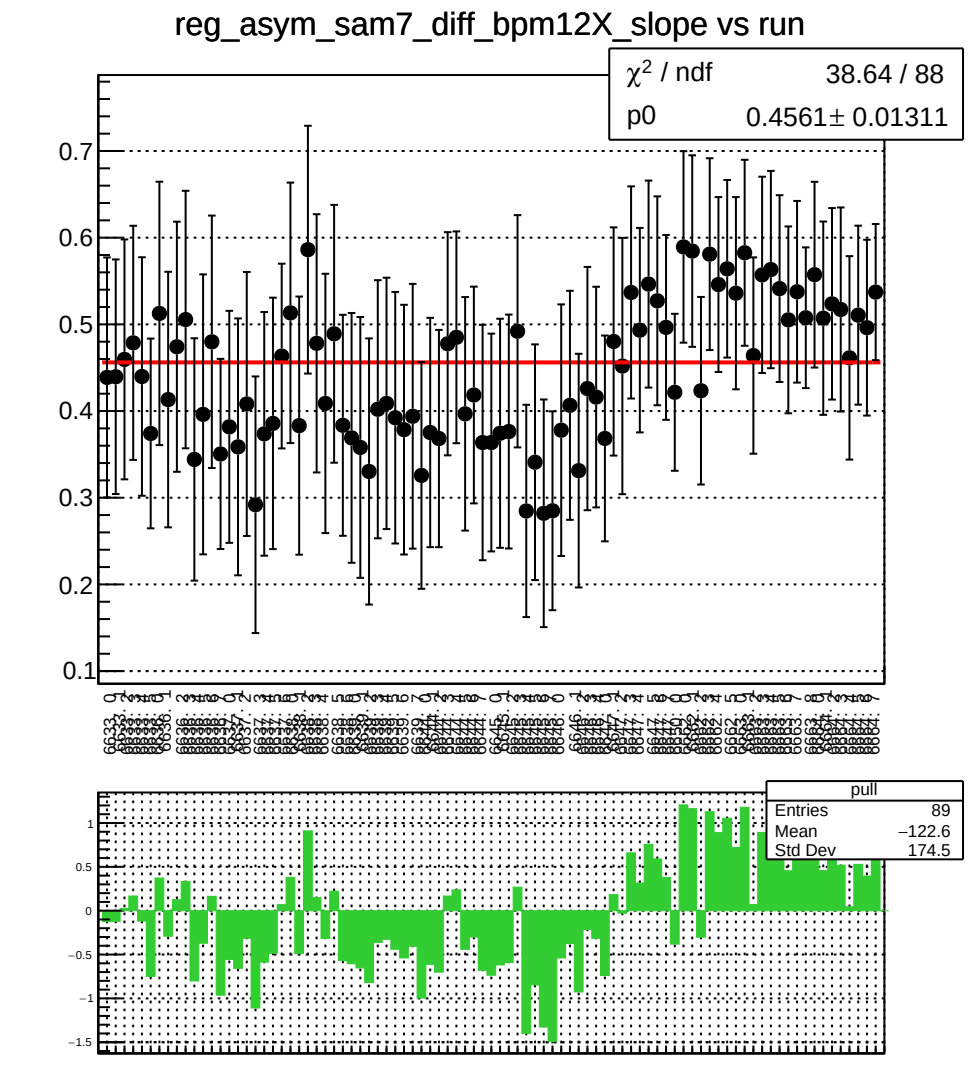

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 208.7 / 88
p0 12.16 ± 0.2006
pull
Entries 89
Mean −1733
Std Dev 1785
pull1D
Entries 89
Mean 0.009882
Std Dev 1.531

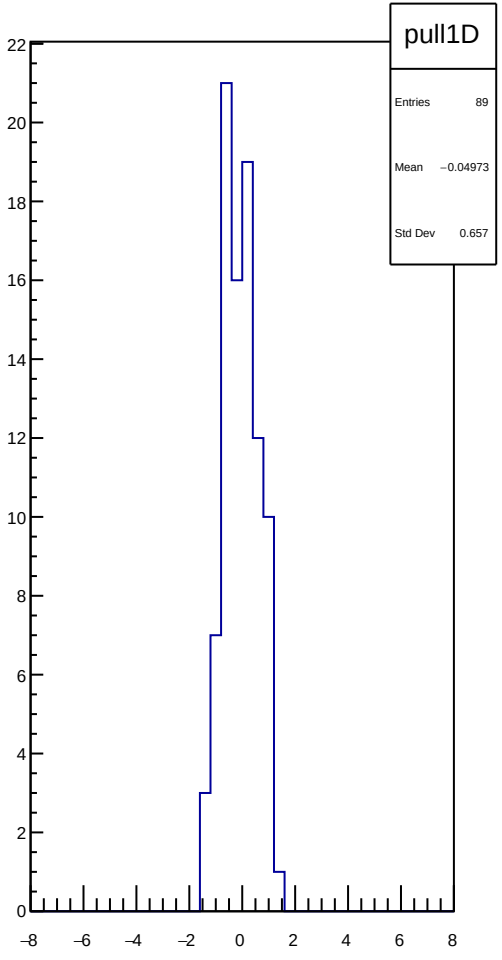

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 238.9 / 88
p0 −48.46 ± 0.3017
pull
Entries 89
Mean 78.27
Std Dev 51.93

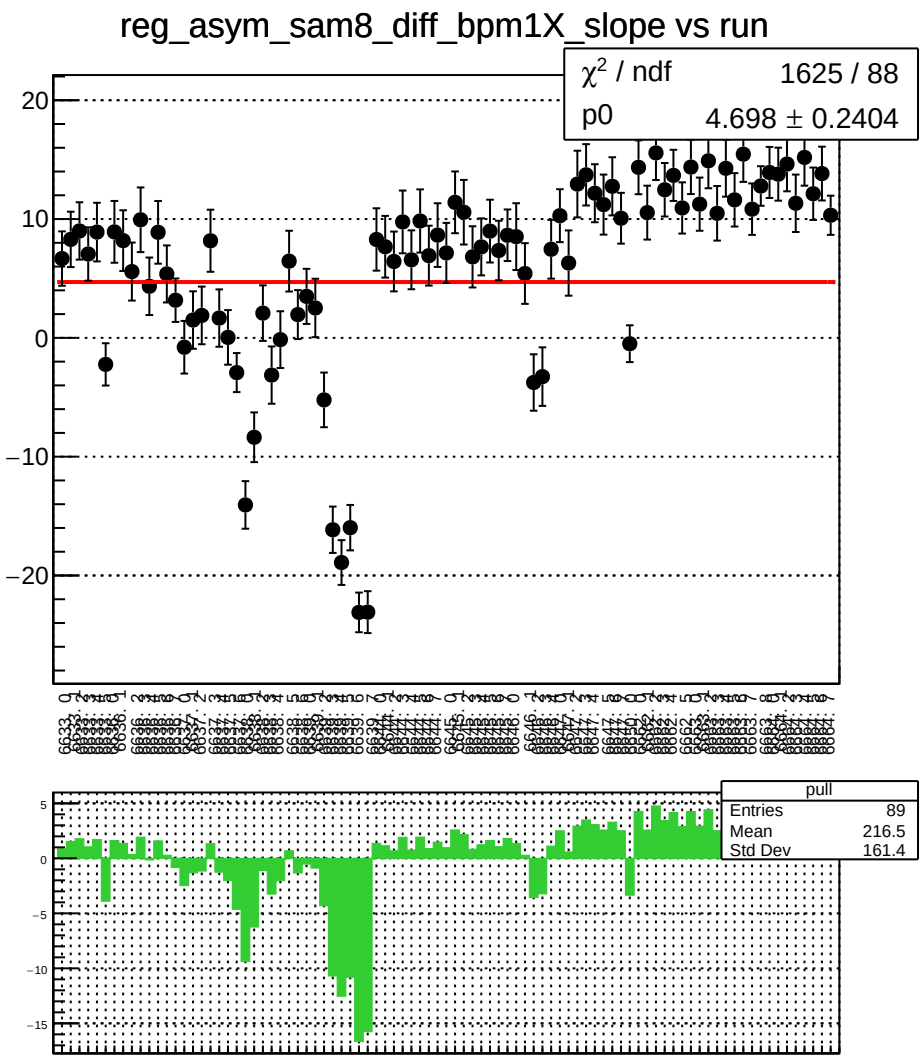

pull1D
Entries 89
Mean −0.1096
Std Dev 1.635

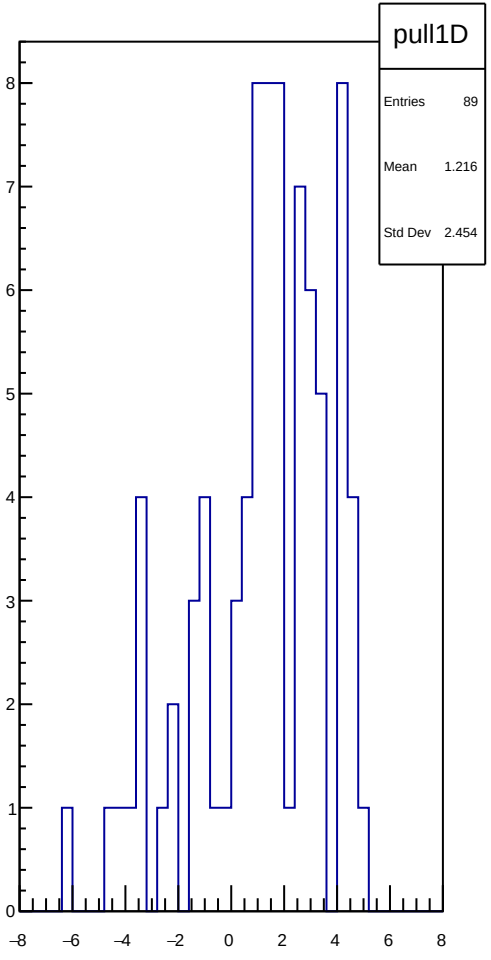

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 246.4 / 88
p0 −19.39 ± 0.2381
pull
Entries 89
Mean −1031
Std Dev 1084

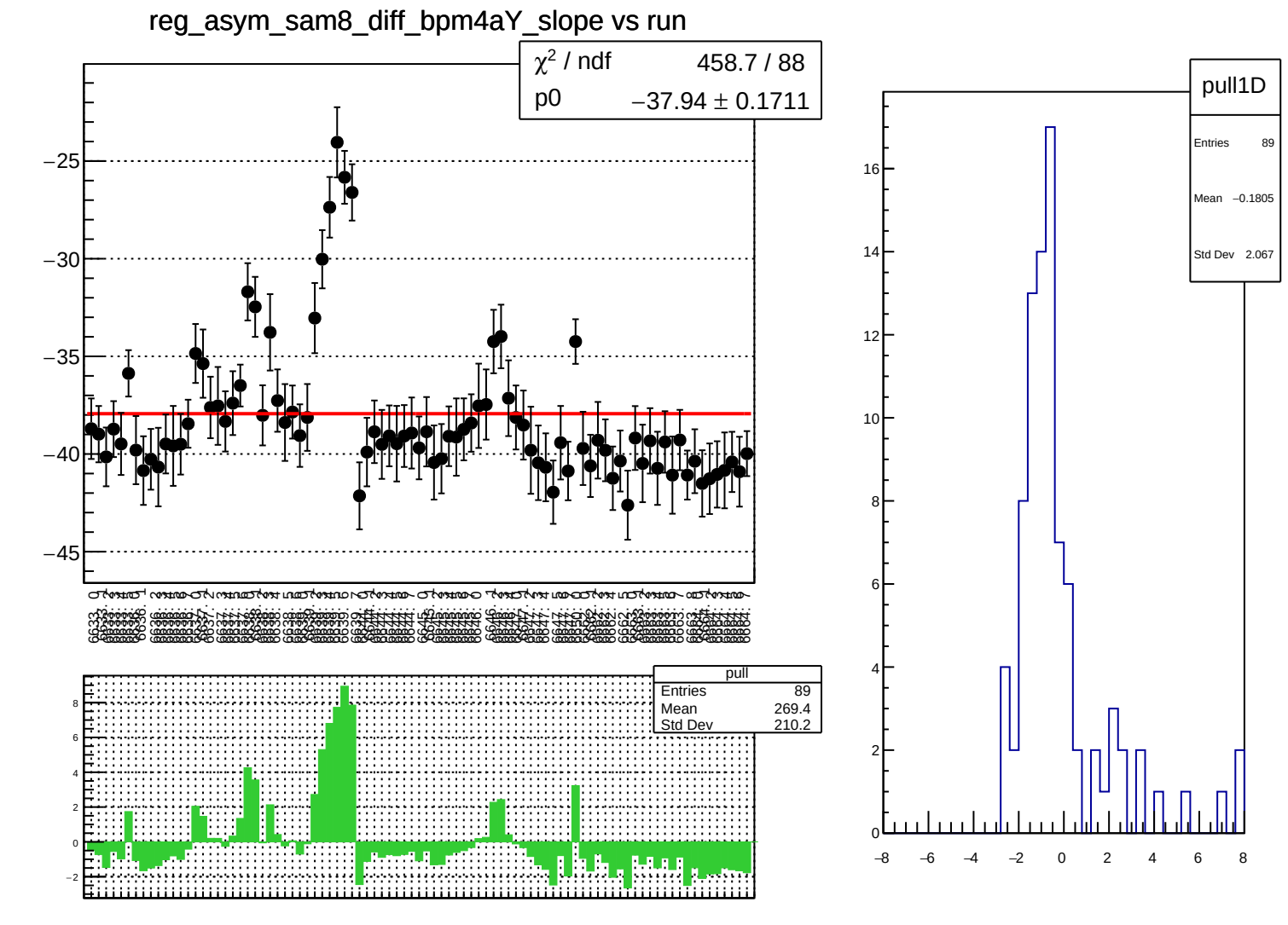

pull1D
Entries 89
Mean −0.01764
Std Dev 1.664

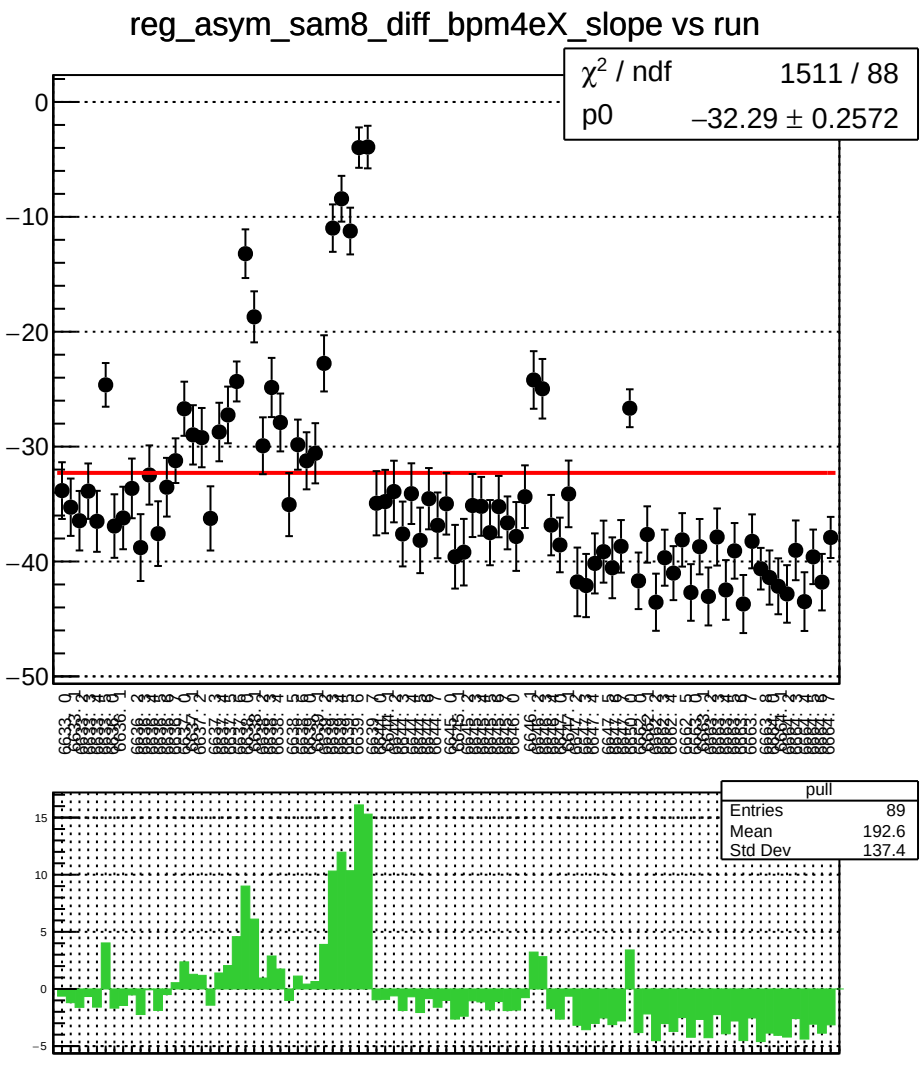

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 38.64 / 88
p0 0.4561± 0.01311
pull
Entries 89
Mean −122.6
Std Dev 174.5

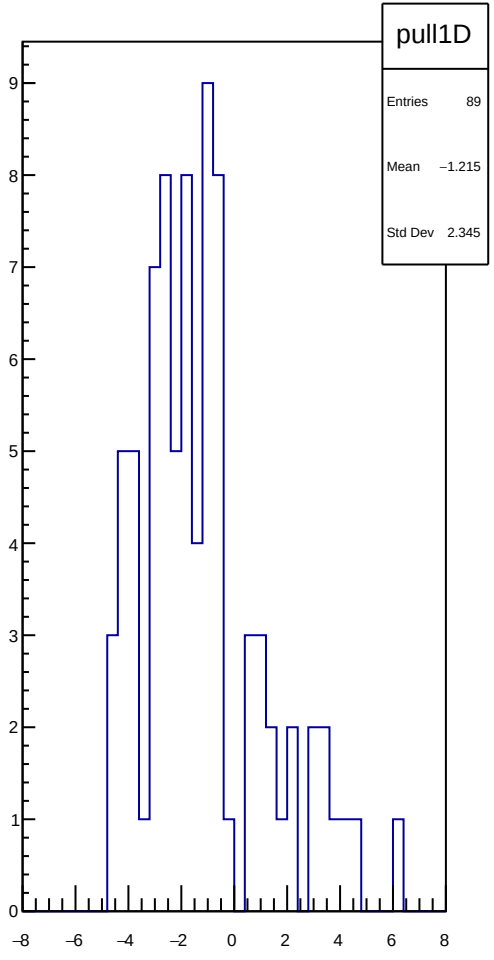

pull1D
Entries 89
Mean −0.04973
Std Dev 0.657

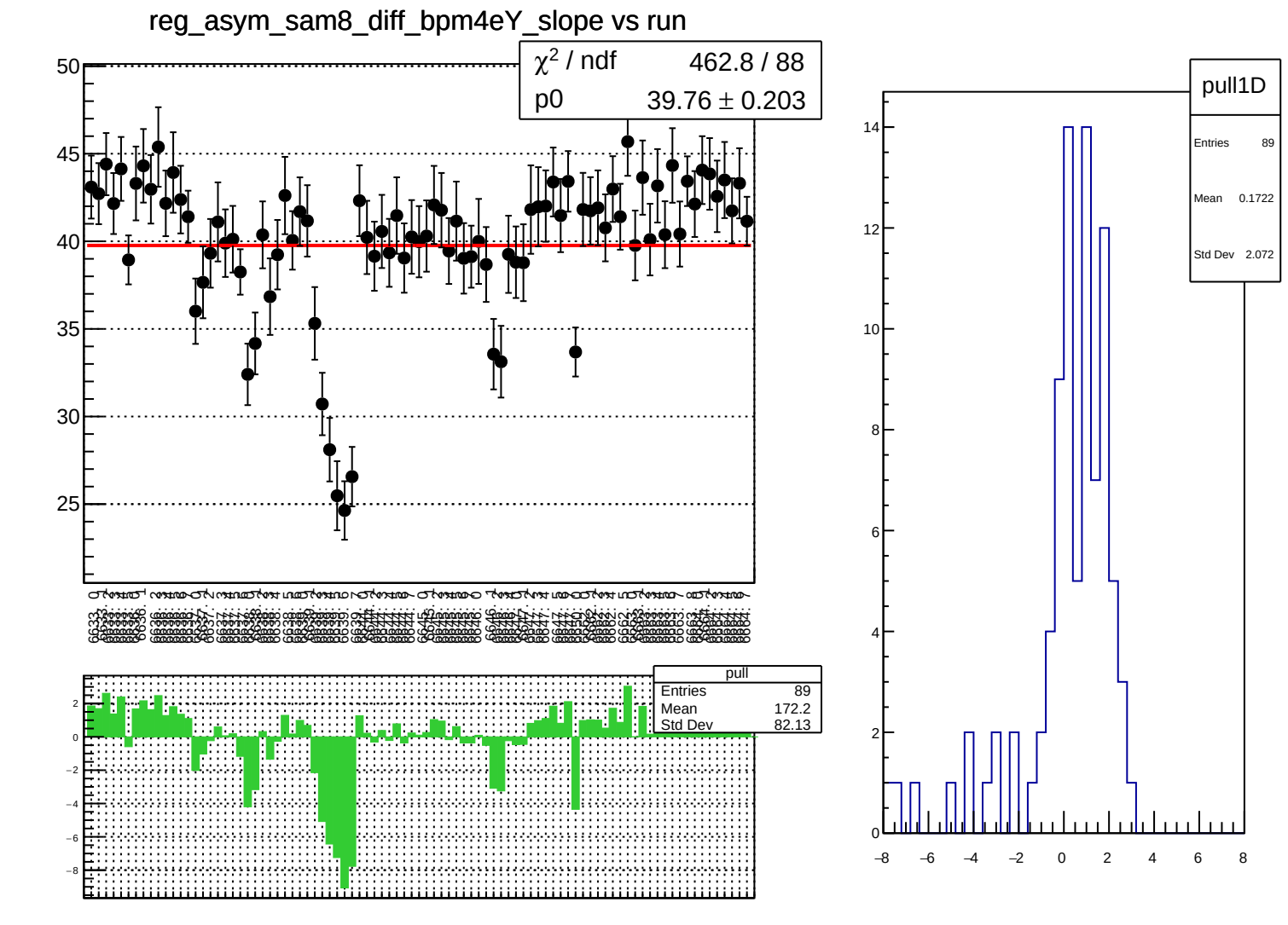

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 1625 / 88
p0 4.698 ± 0.2404
pull
Entries 89
Mean 216.5
Std Dev 161.4

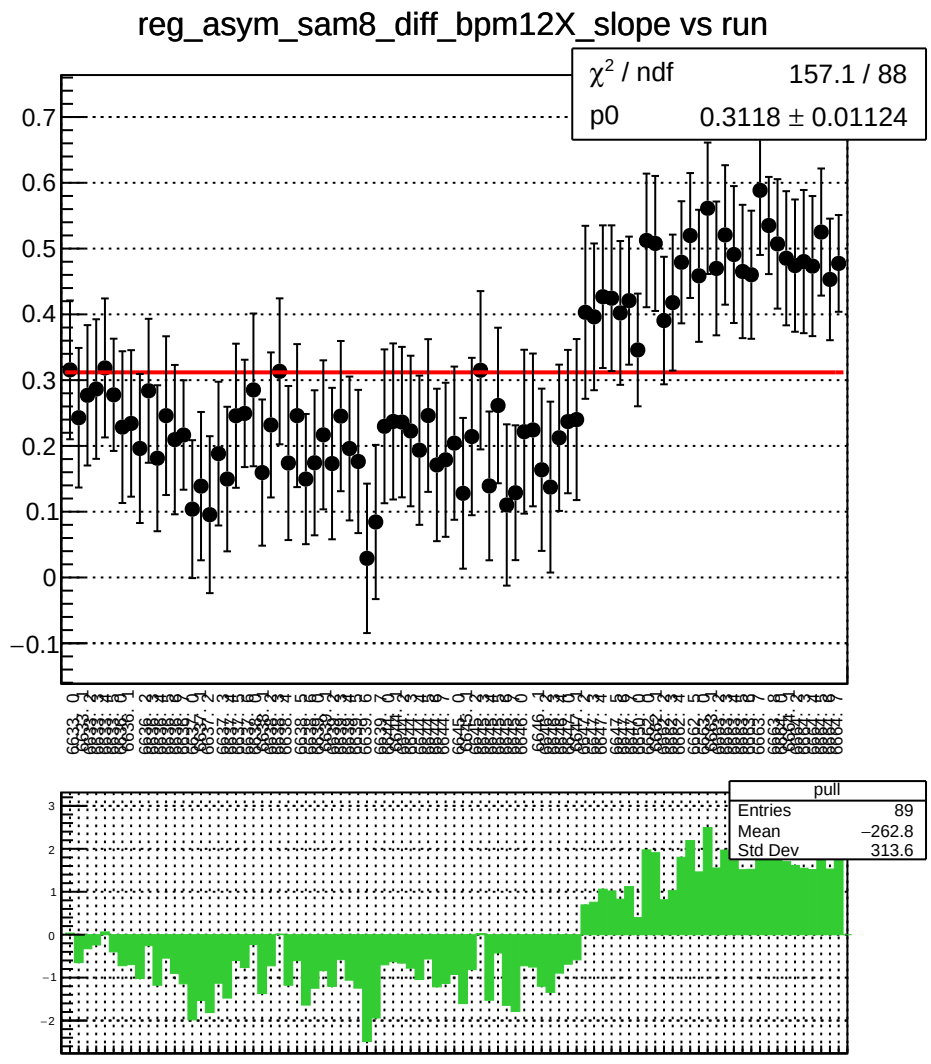

pull1D
Entries 89
Mean 1.216
Std Dev 2.454

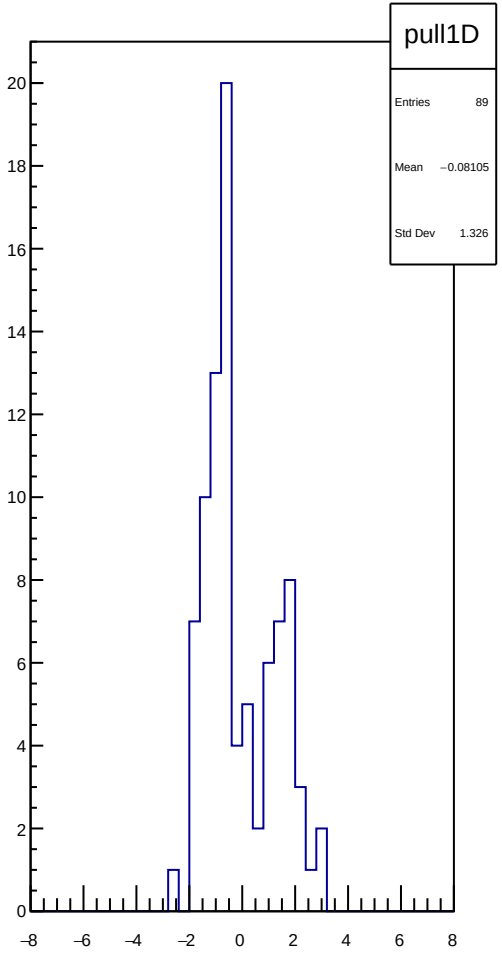

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 458.7 / 88
p0 −37.94 ± 0.1711
−25
−30
−35
−40
−45
pull
Entries 89
Mean 269.4
Std Dev 210.2
8
6
4
2
0
−2
pull1D
Entries 89
Mean −0.1805
Std Dev 2.067
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

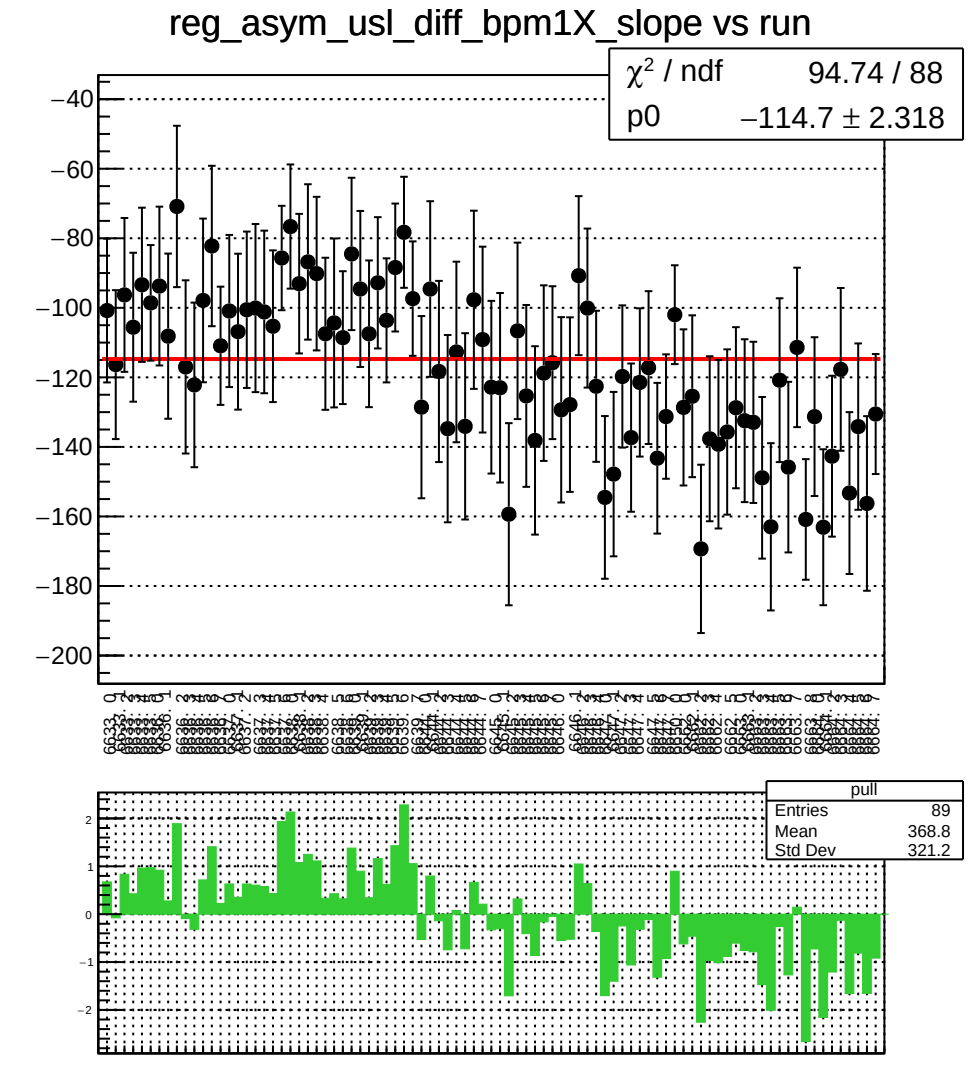

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 1511 / 88
p0 −32.29 ± 0.2572
pull
Entries 89
Mean 192.6
Std Dev 137.4

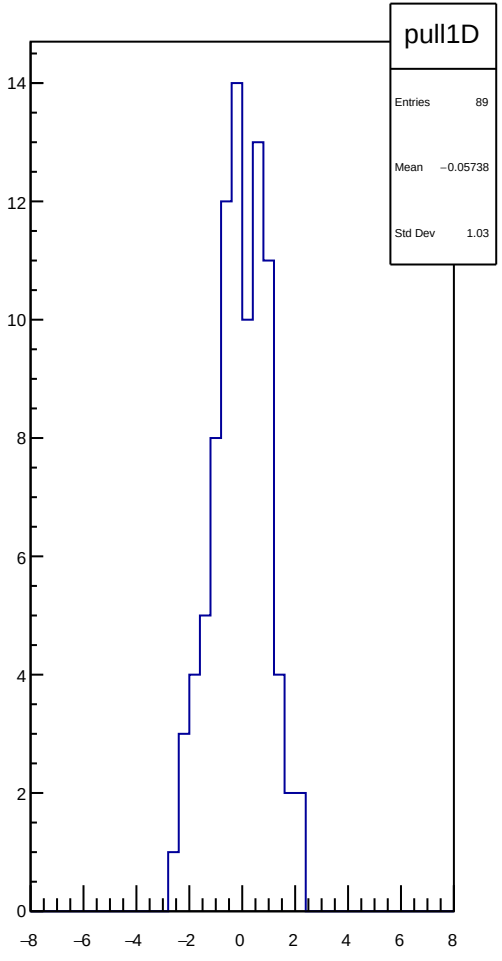

pull1D
Entries 89
Mean −1.215
Std Dev 2.345

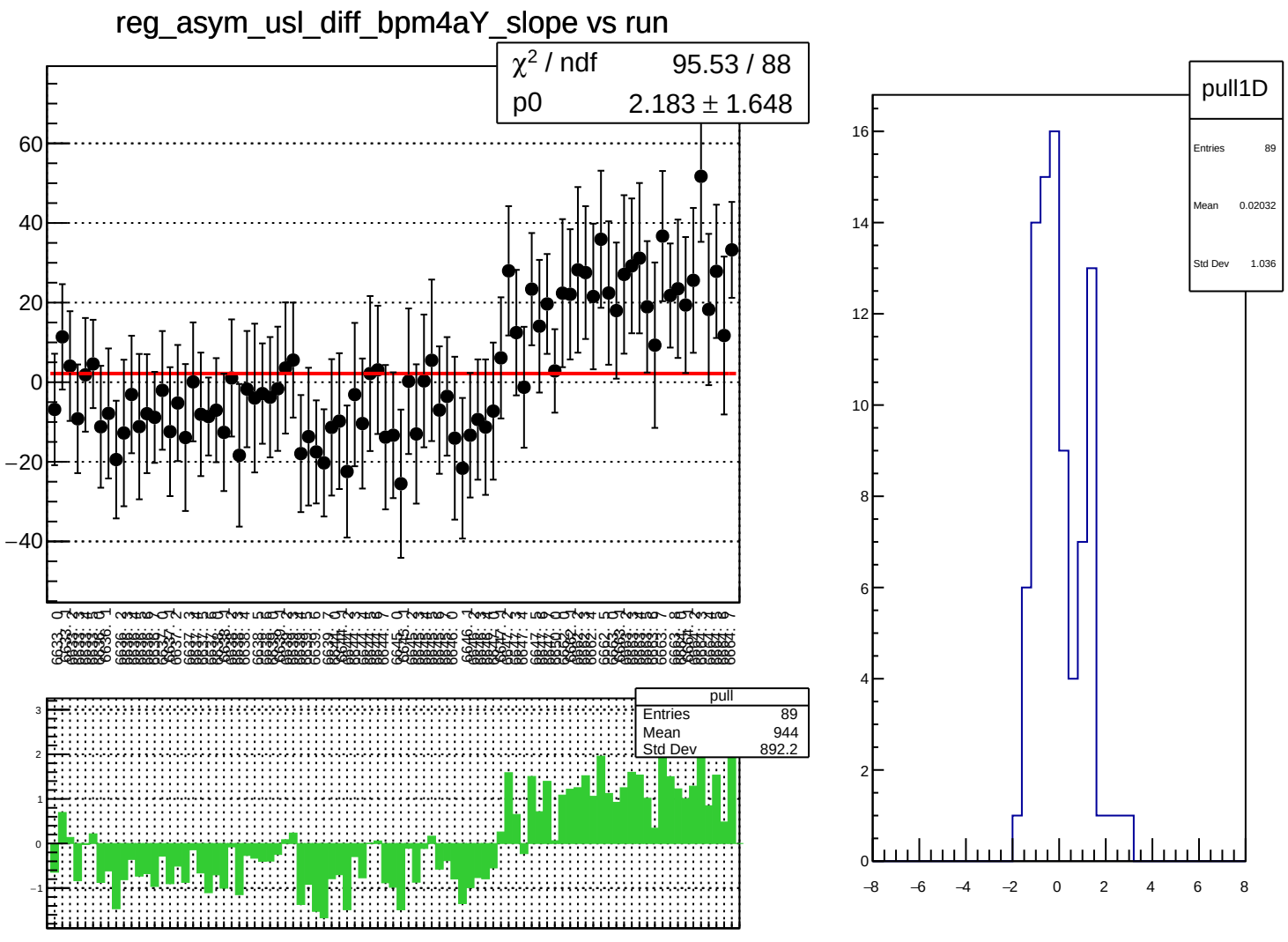

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 462.8 / 88
p0 39.76 ± 0.203
pull
Entries 89
Mean 172.2
Std Dev 82.13
pull1D
Entries 89
Mean 0.1722
Std Dev 2.072

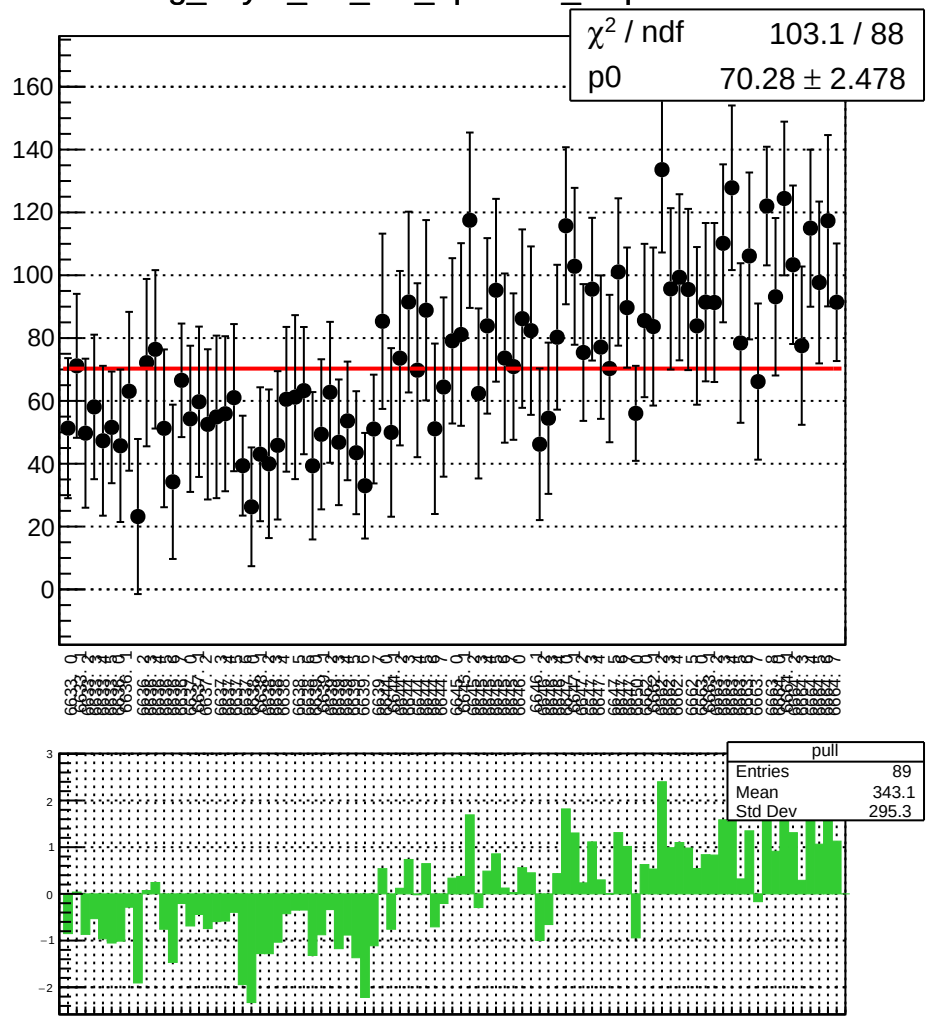

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 157.1 / 88
p0 0.3118 ± 0.01124
pull
Entries 89
Mean −262.8
Std Dev 313.6

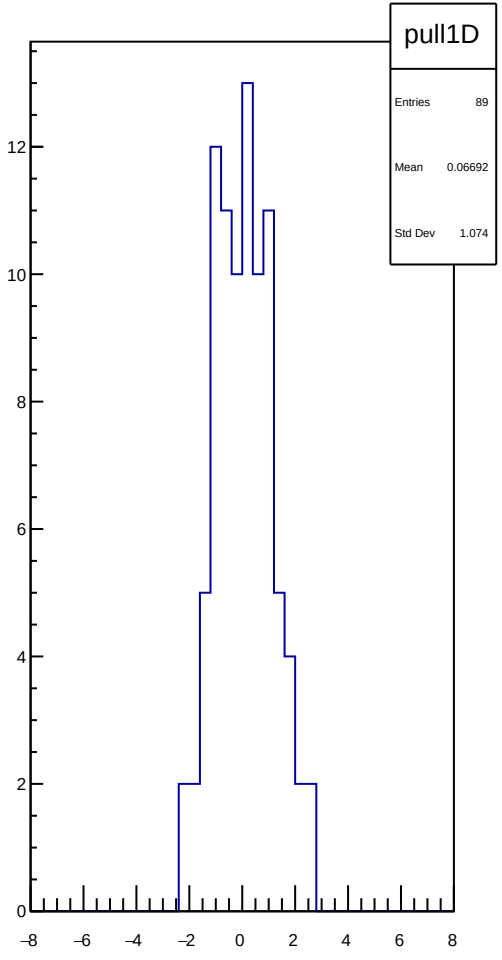

pull1D
Entries 89
Mean −0.08105
Std Dev 1.326

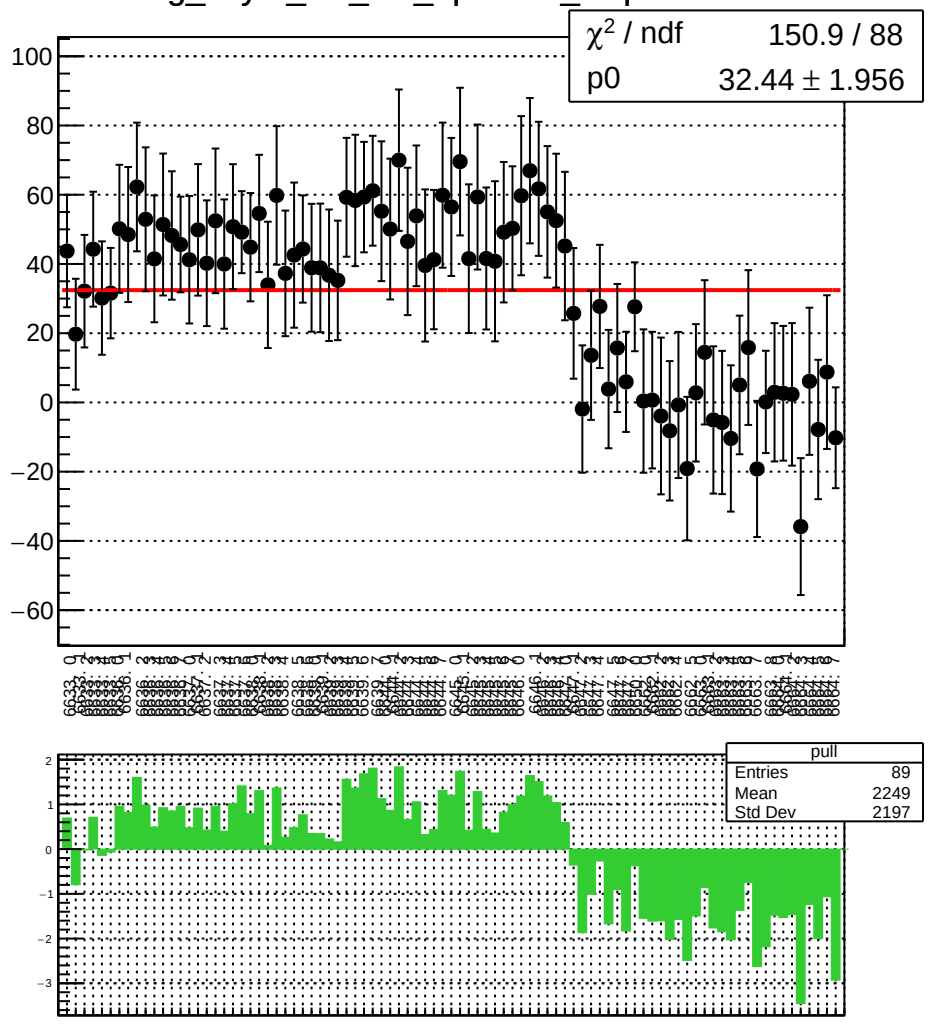

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 94.74 / 88
p0 −114.7 ± 2.318
pull
Entries 89
Mean 368.8
Std Dev 321.2

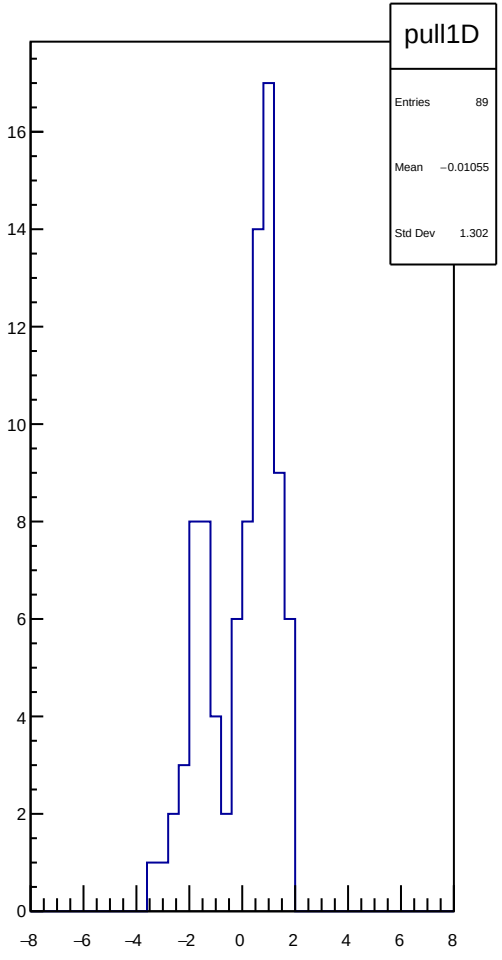

pull1D
Entries 89
Mean −0.05738
Std Dev 1.03

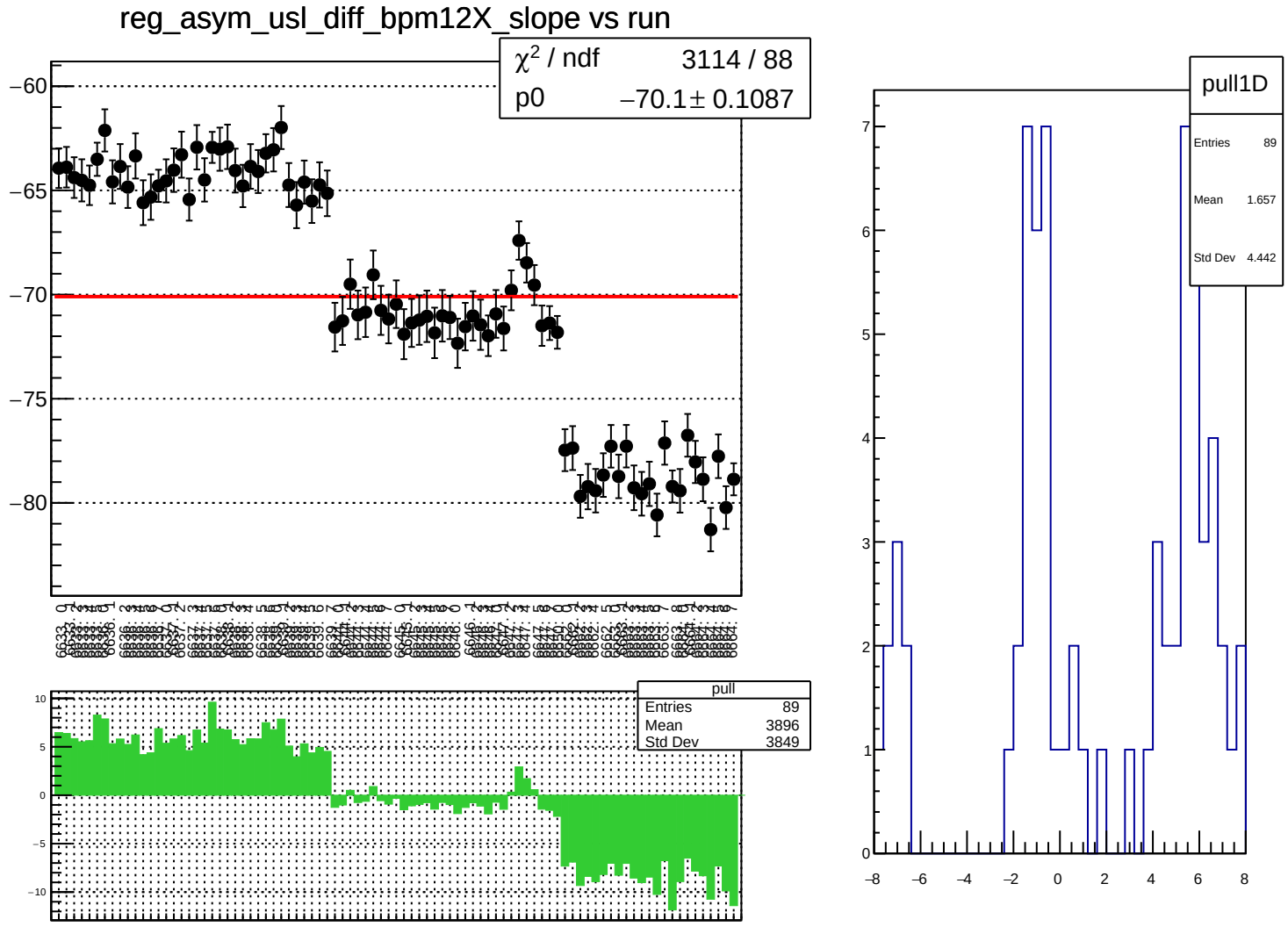

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 95.53 / 88
p0 2.183 ± 1.648
60
40
20
0
−20
−40
pull
Entries 89
Mean 944
Std Dev 892.2
3
2
1
0
−1
pull1D
Entries 89
Mean 0.02032
Std Dev 1.036
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

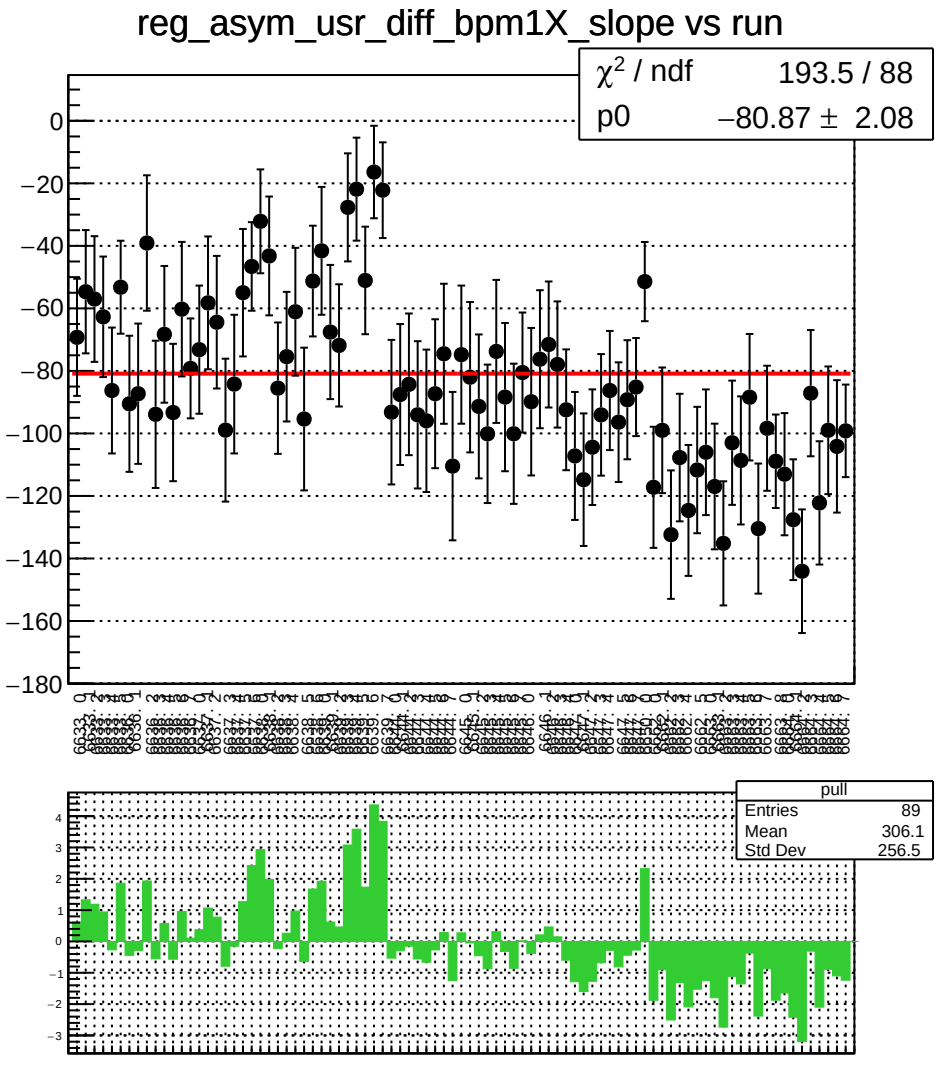

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 103.1 / 88
p0 70.28 ± 2.478
pull
Entries 89
Mean 343.1
Std Dev 295.3

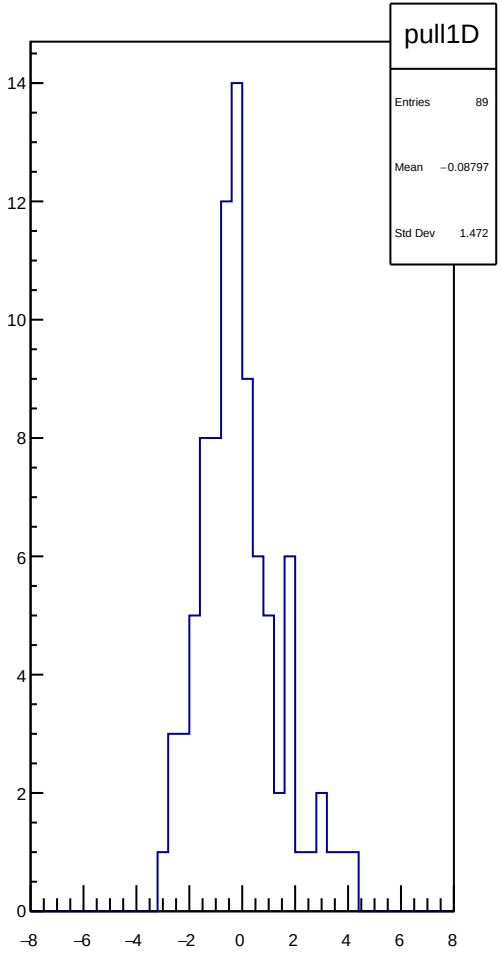

pull1D
Entries 89
Mean 0.06692
Std Dev 1.074

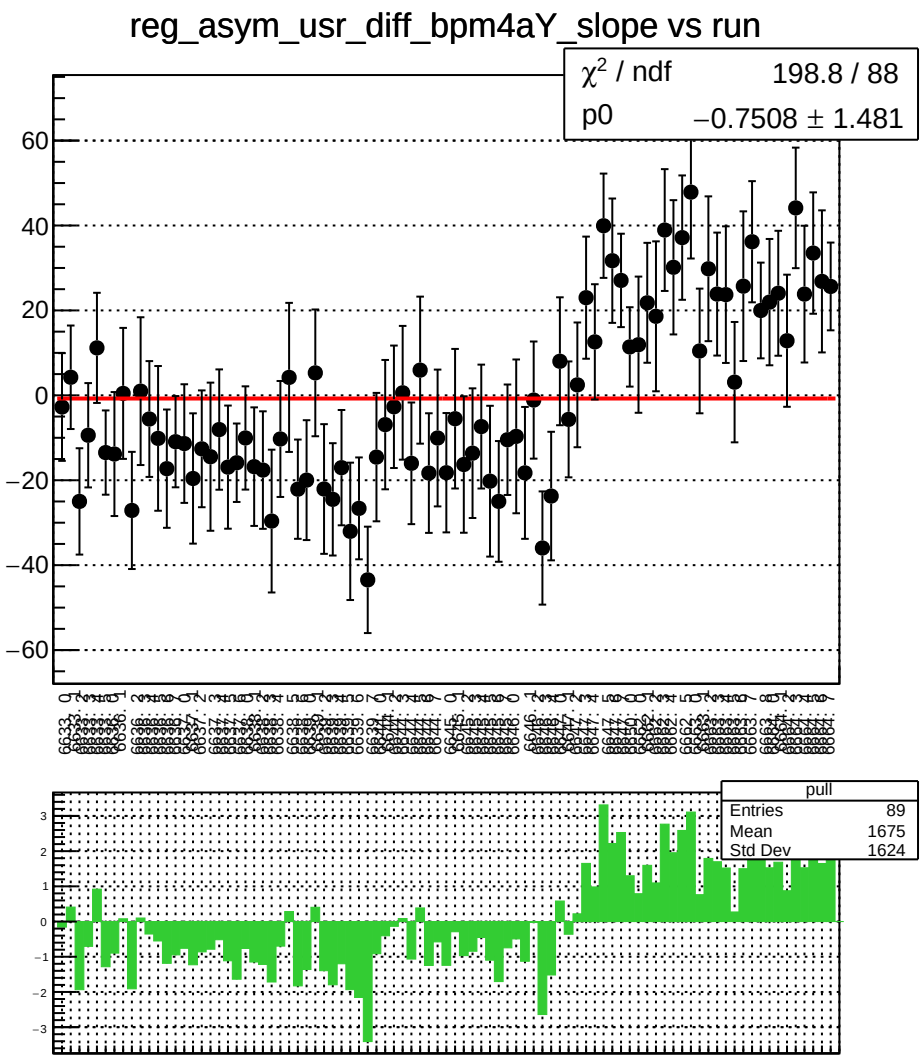

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 150.9 / 88
p0 32.44 ± 1.956
pull
Entries 89
Mean 2249
Std Dev 2197

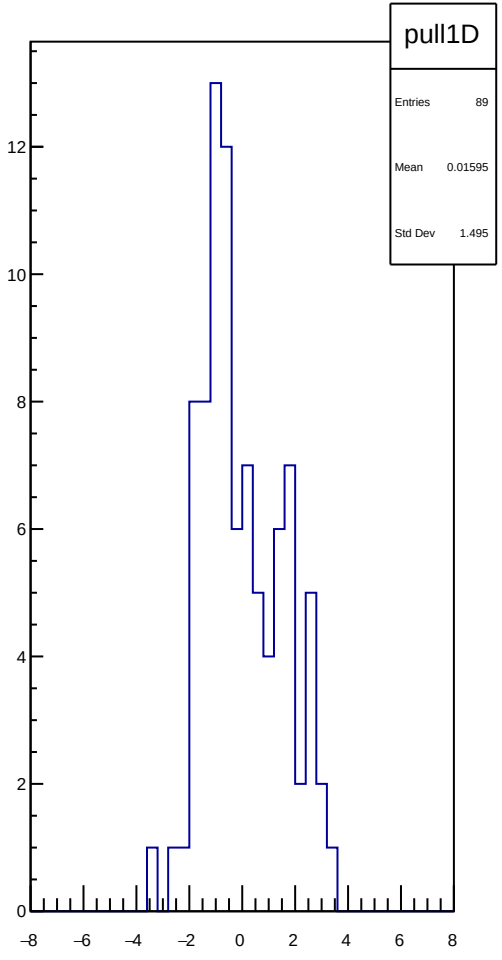

pull1D
Entries 89
Mean −0.01055
Std Dev 1.302

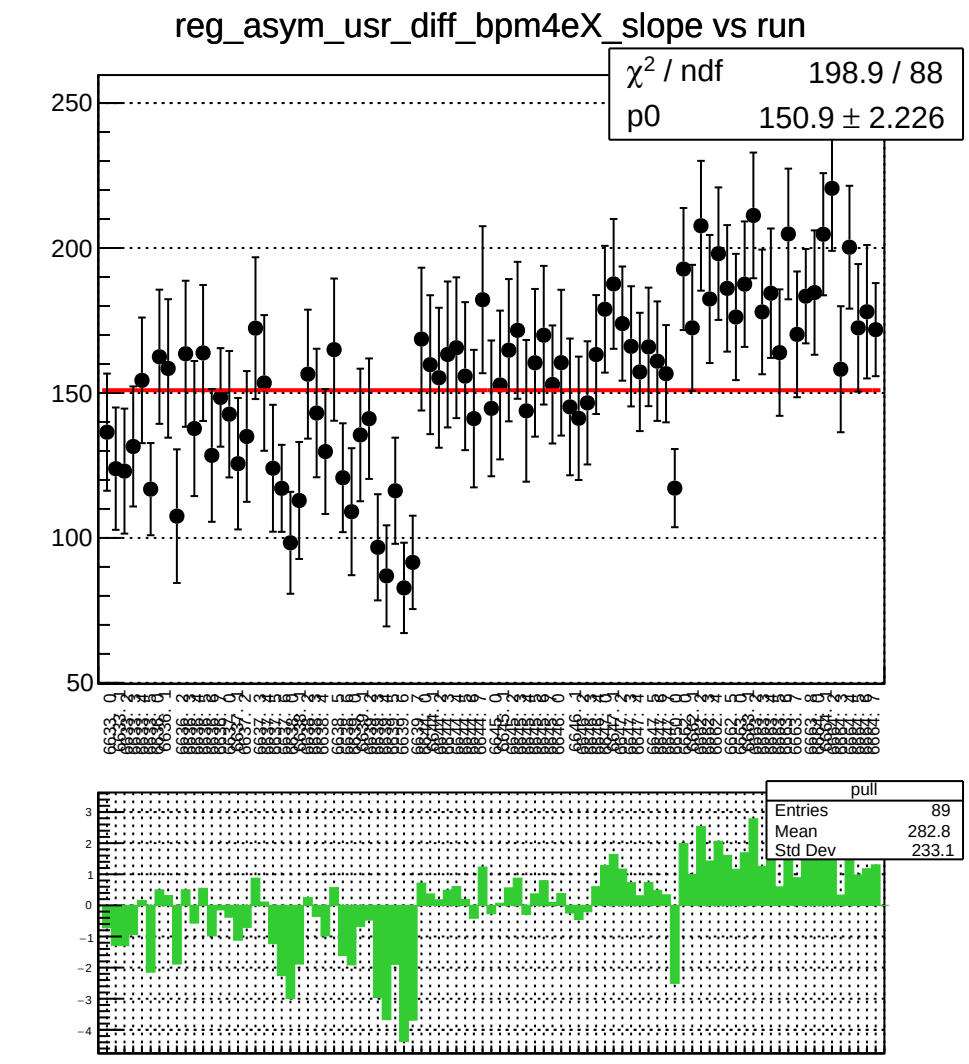

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 3114 / 88
p0 −70.1 ± 0.1087
−60
−65
−70
−75
−80
pull
Entries 89
Mean 3896
Std Dev 3849
10
5
0
−5
−10
pull1D
Entries 89
Mean 1.657
Std Dev 4.442
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

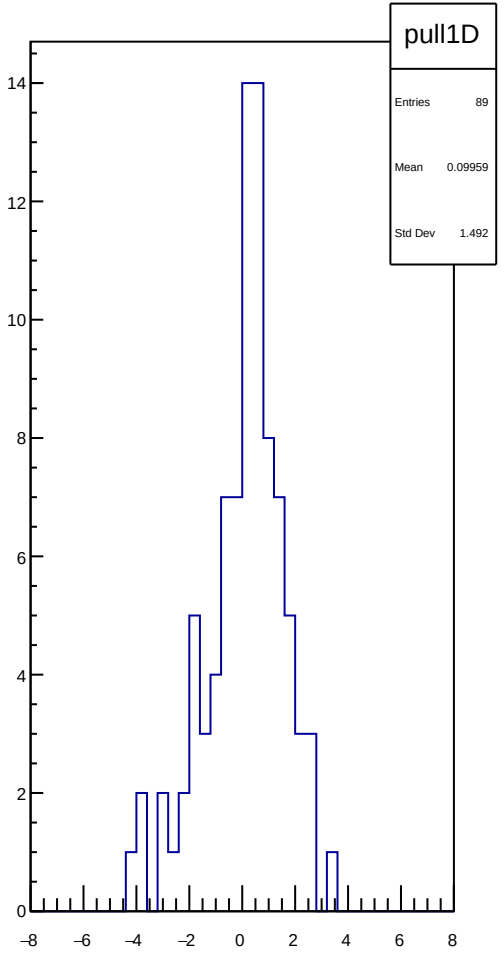

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 193.5 / 88
p0 −80.87 ± 2.08
pull
Entries 89
Mean 306.1
Std Dev 256.5

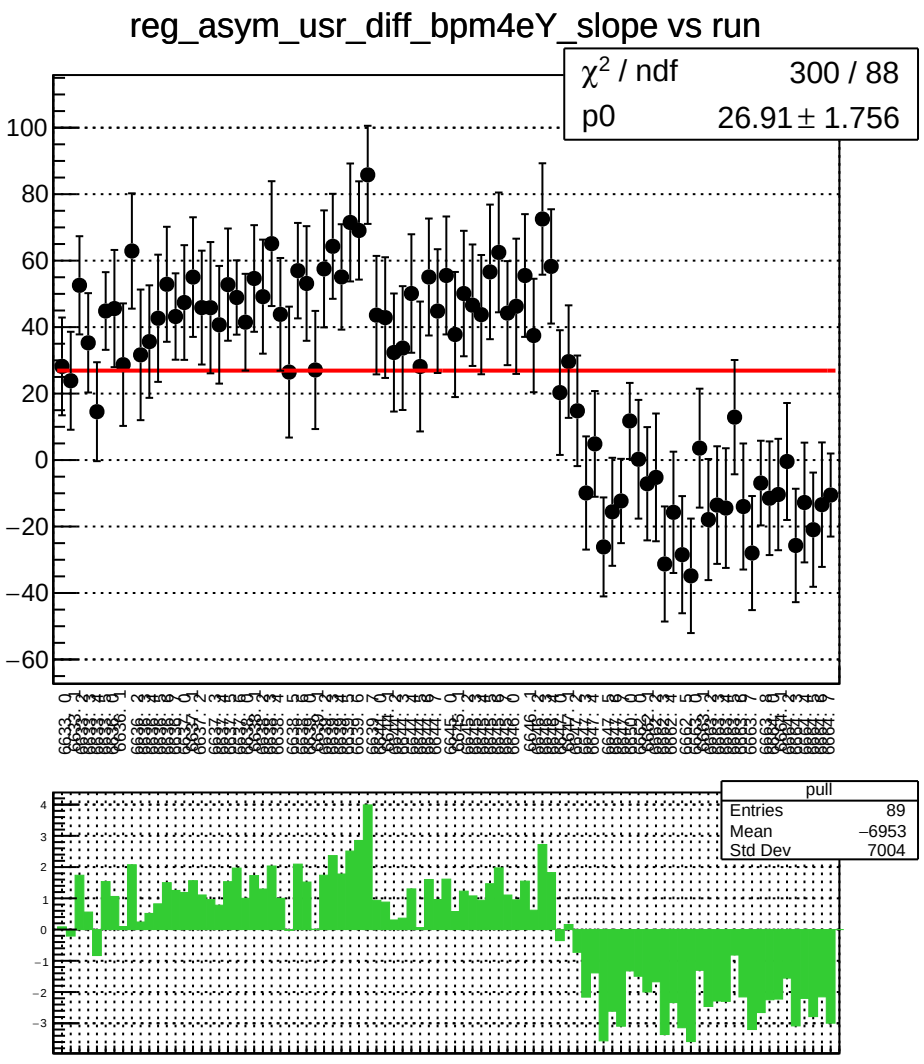

pull1D
Entries 89
Mean −0.08797
Std Dev 1.472

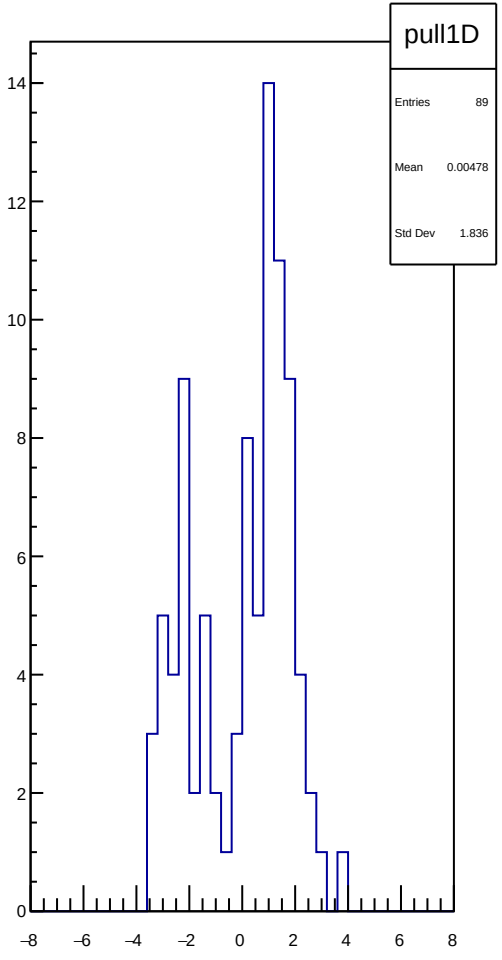

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 198.8 / 88
p0 −0.7508 ± 1.481
pull
Entries 89
Mean 1675
Std Dev 1624

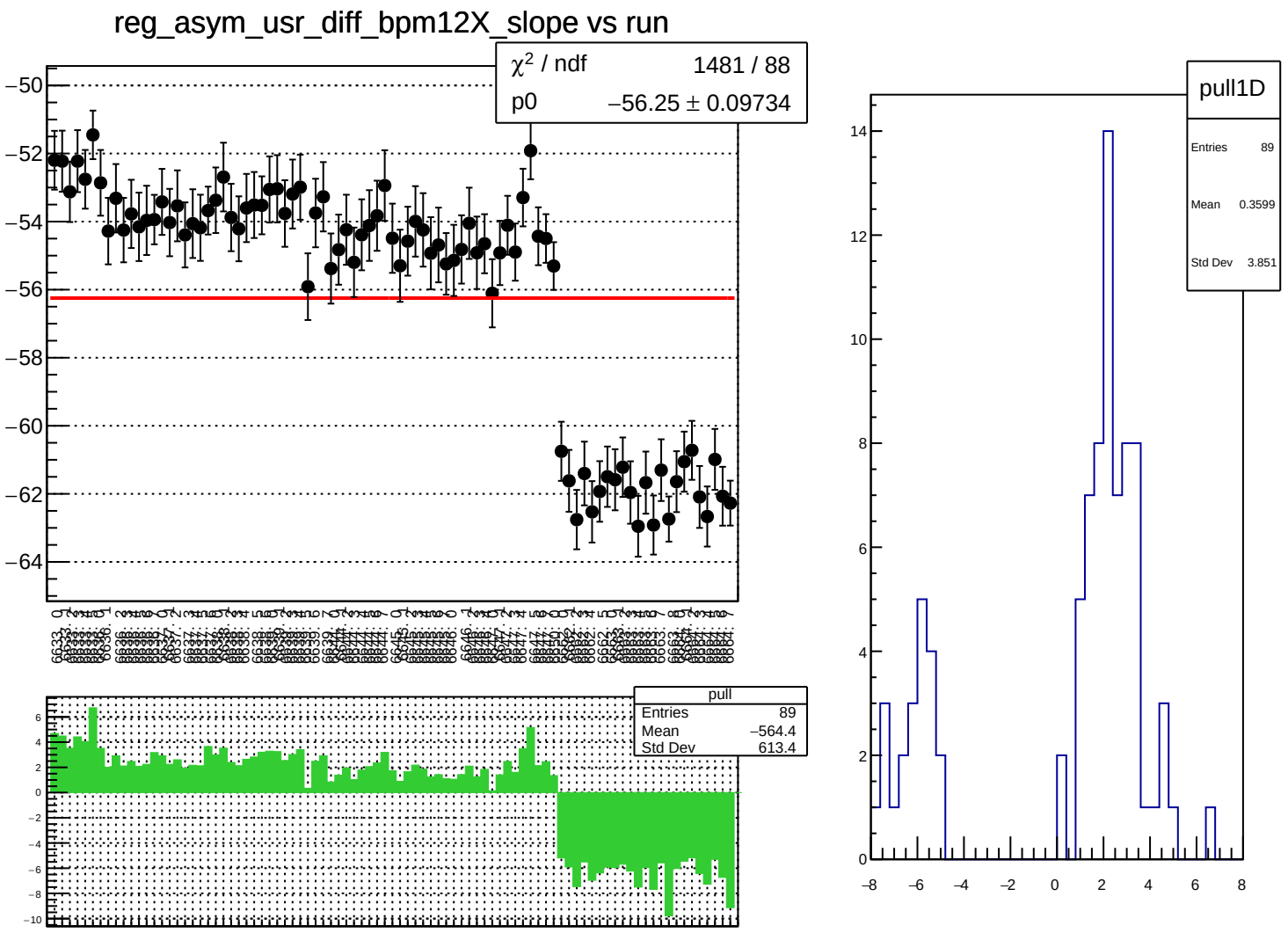

pull1D
Entries 89
Mean 0.01595
Std Dev 1.495

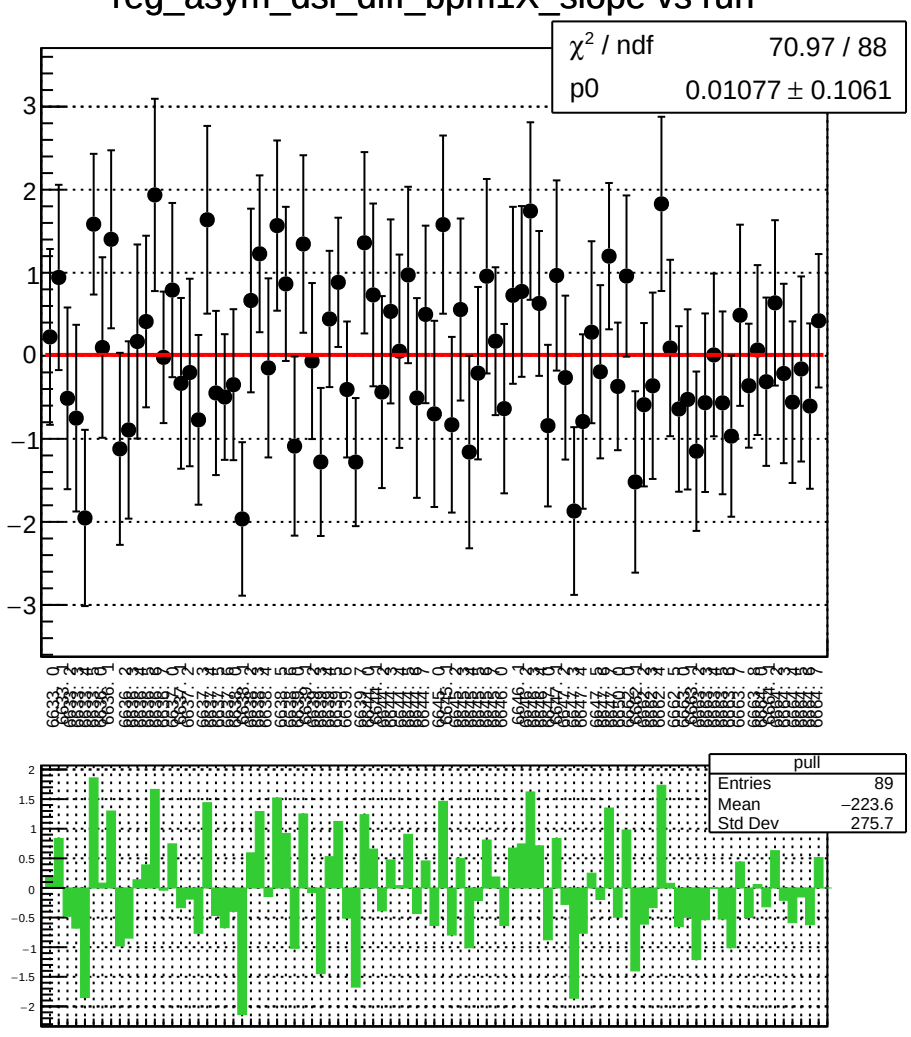

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 198.9 / 88
p0 150.9 ± 2.226
250
200
150
100
50
pull
Entries 89
Mean 282.8
Std Dev 233.1
3
2
1
0
−1
−2
−3
−4

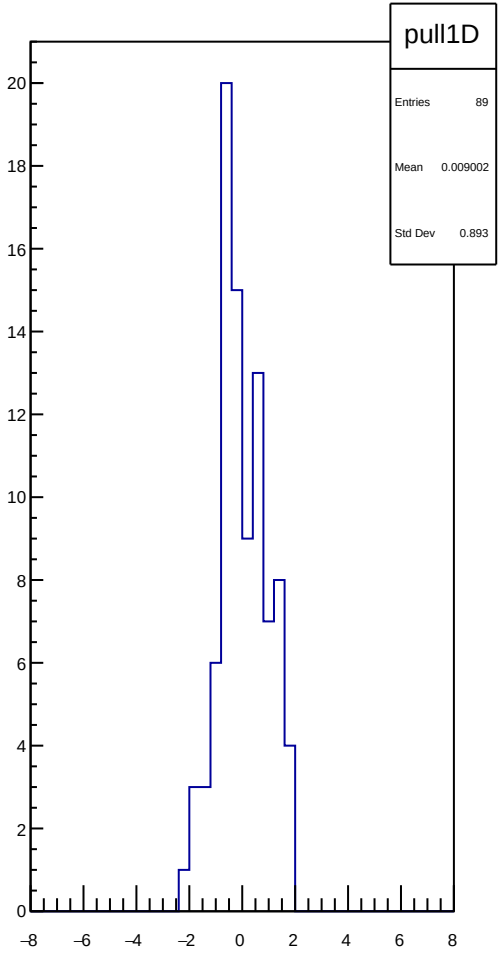

pull1D
Entries 89
Mean 0.09959
Std Dev 1.492
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

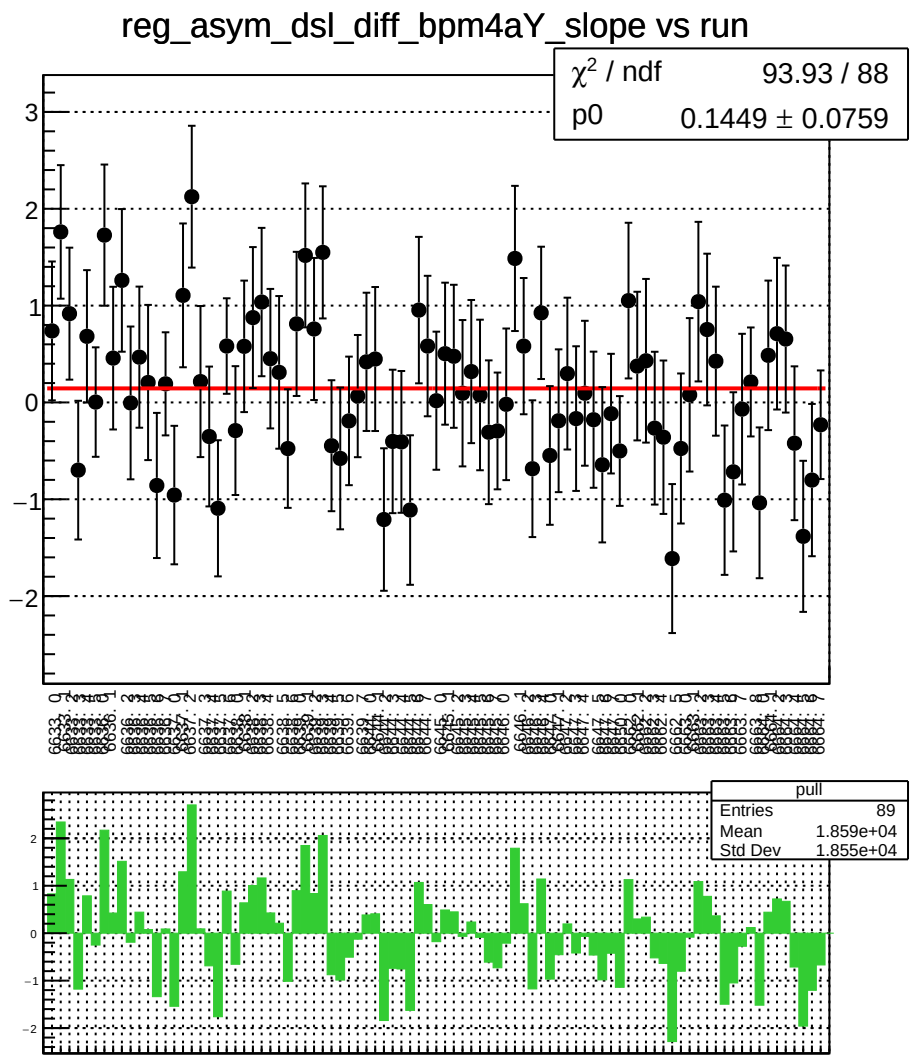

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 300 / 88
p0 26.91 ± 1.756
pull
Entries 89
Mean −6953
Std Dev 7004

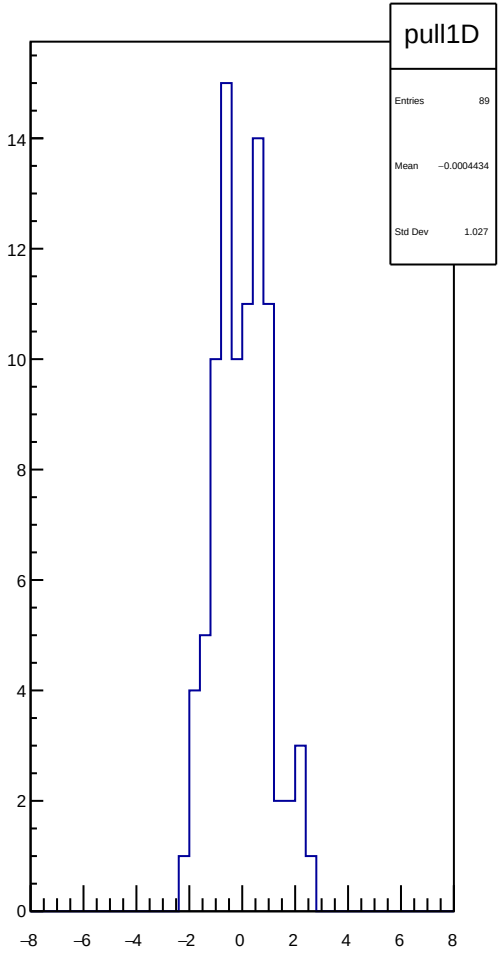

pull1D
Entries 89
Mean 0.00478
Std Dev 1.836

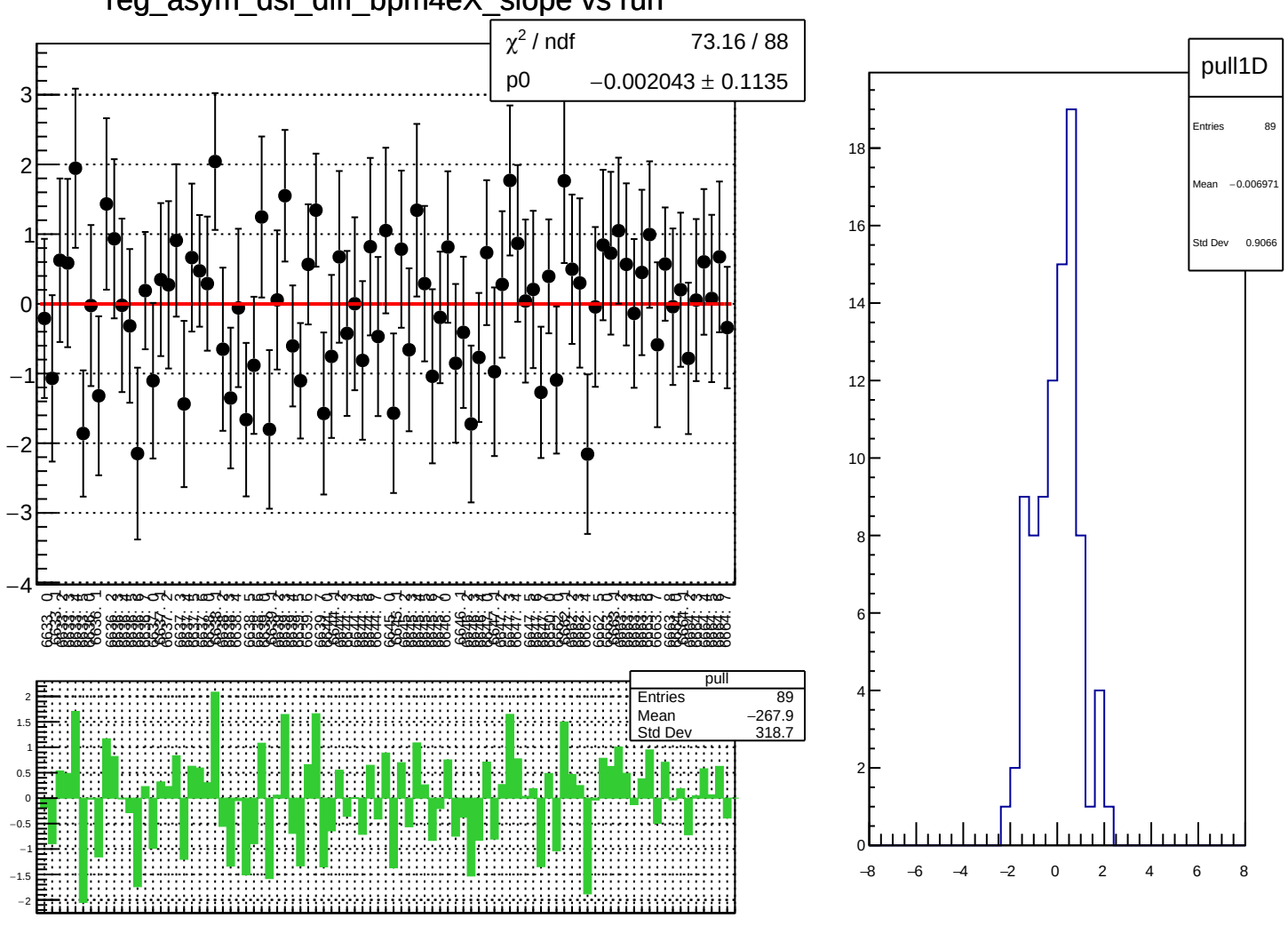

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 1481 / 88
p0 −56.25 ± 0.09734
pull
Entries 89
Mean −564.4
Std Dev 613.4
pull1D
Entries 89
Mean 0.3599
Std Dev 3.851

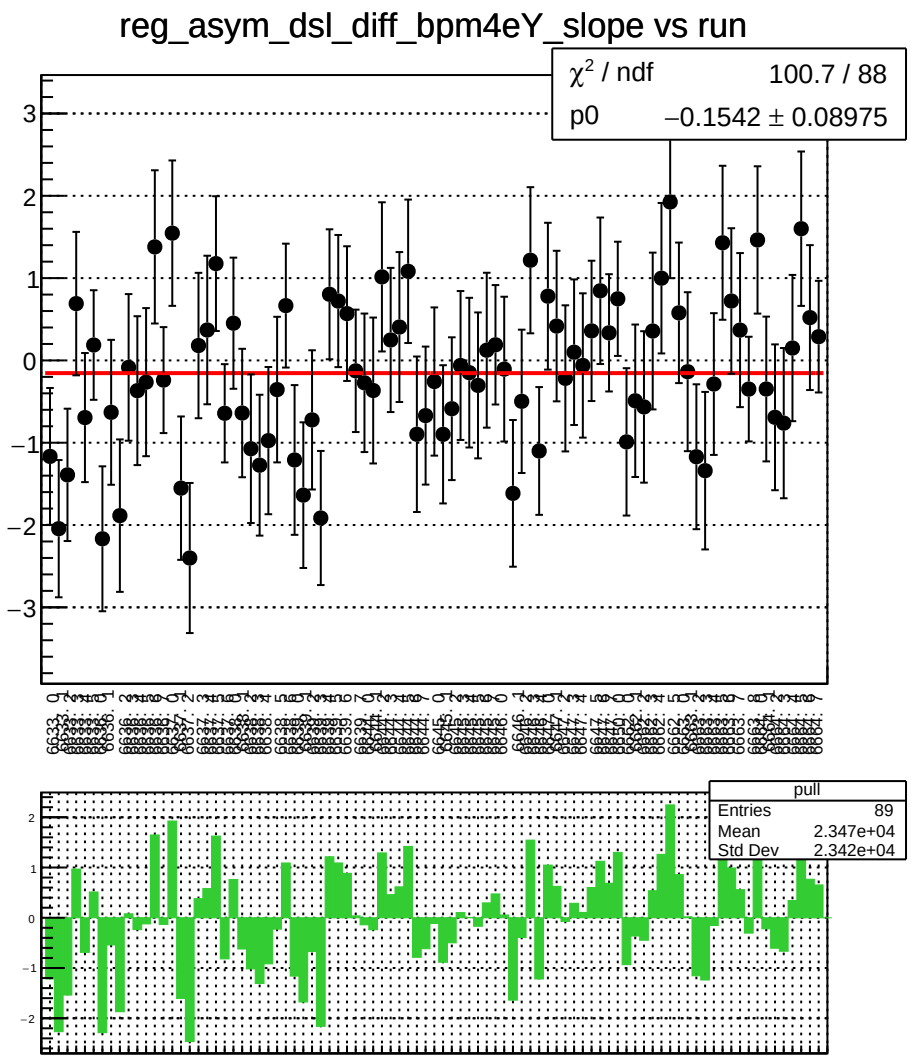

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 70.97 / 88
p0 0.01077 ± 0.1061
pull
Entries 89
Mean −223.6
Std Dev 275.7

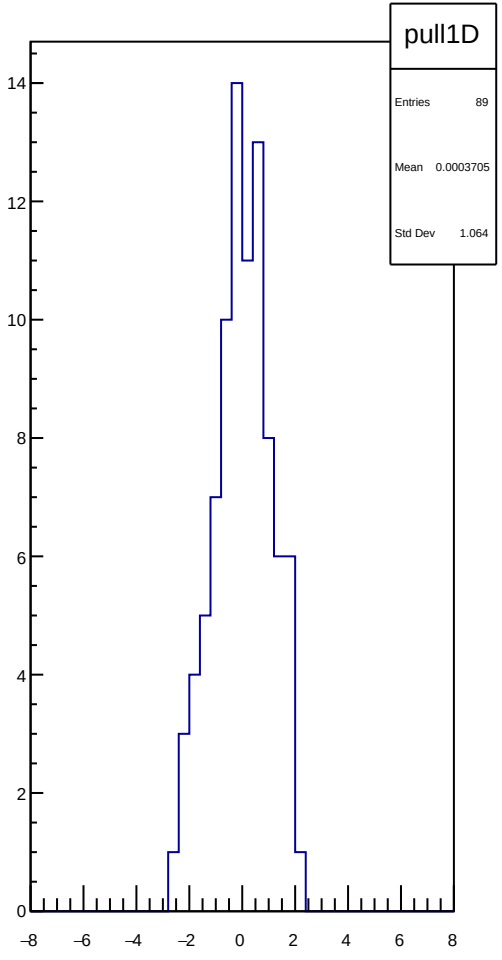

pull1D
Entries 89
Mean 0.009002
Std Dev 0.893

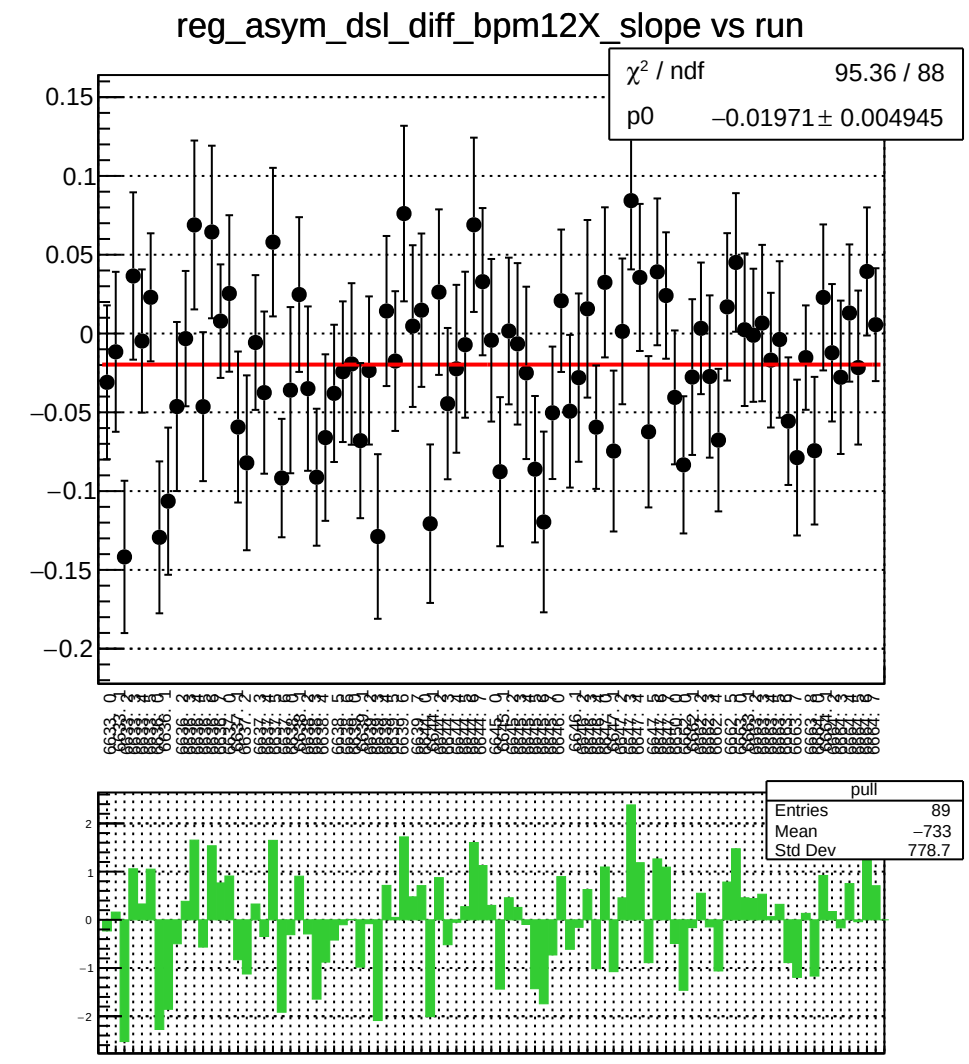

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 93.93 / 88
p0 0.1449 ± 0.0759
pull
Entries 89
Mean 1.859e+04
Std Dev 1.855e+04

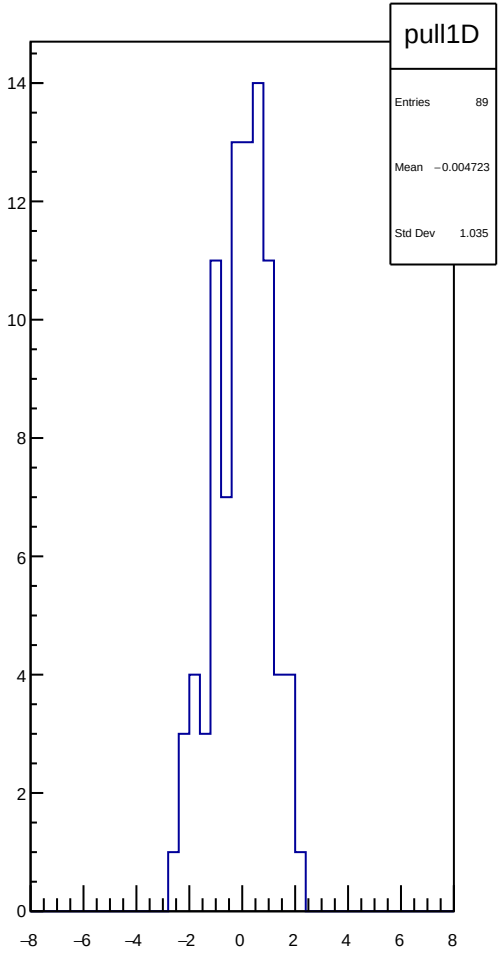

pull1D
Entries 89
Mean −0.0004434
Std Dev 1.027

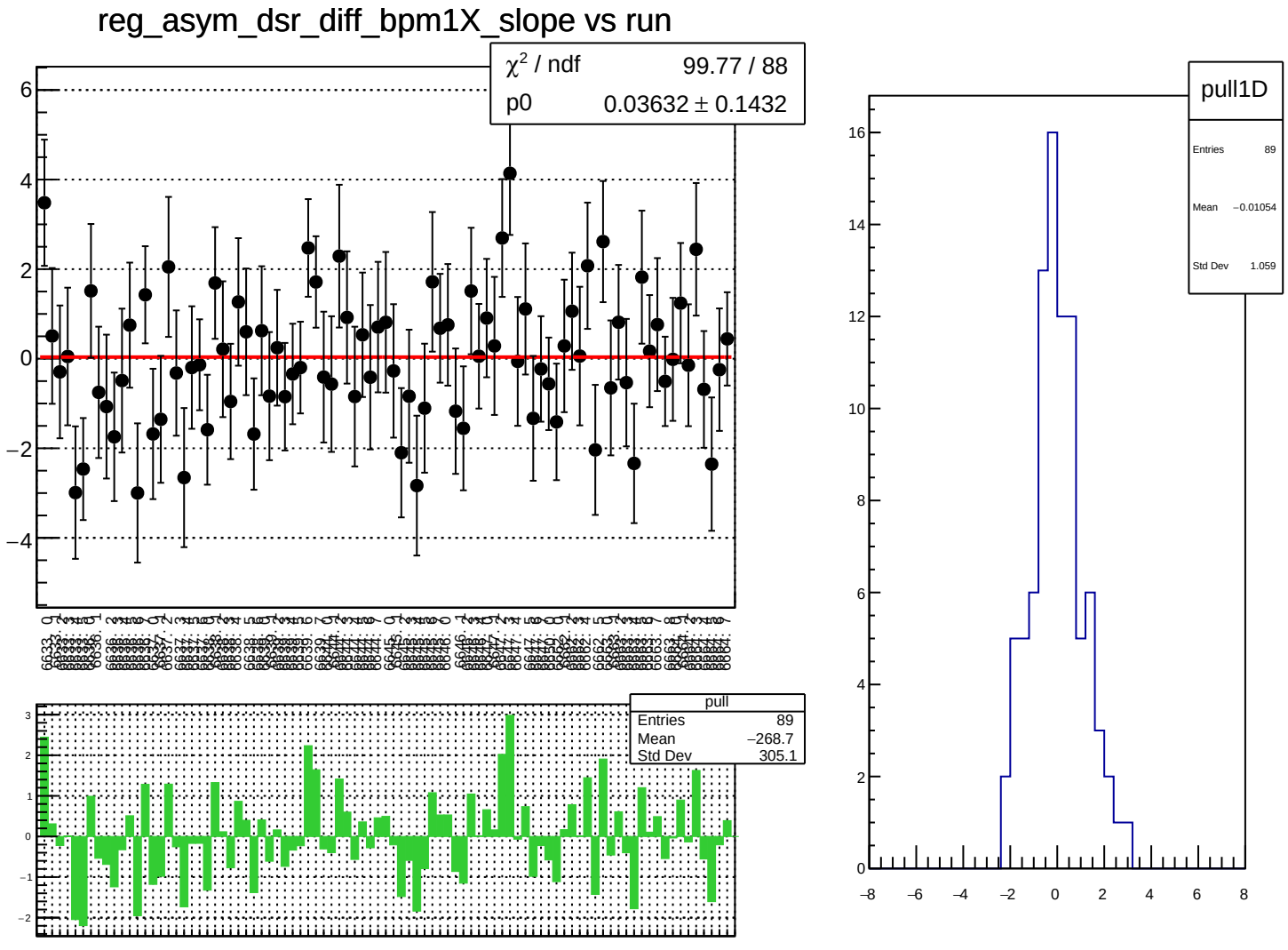

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 73.16 / 88
p0 −0.002043 ± 0.1135
pull
Entries 89
Mean −267.9
Std Dev 318.7
pull1D
Entries 89
Mean −0.006971
Std Dev 0.9066

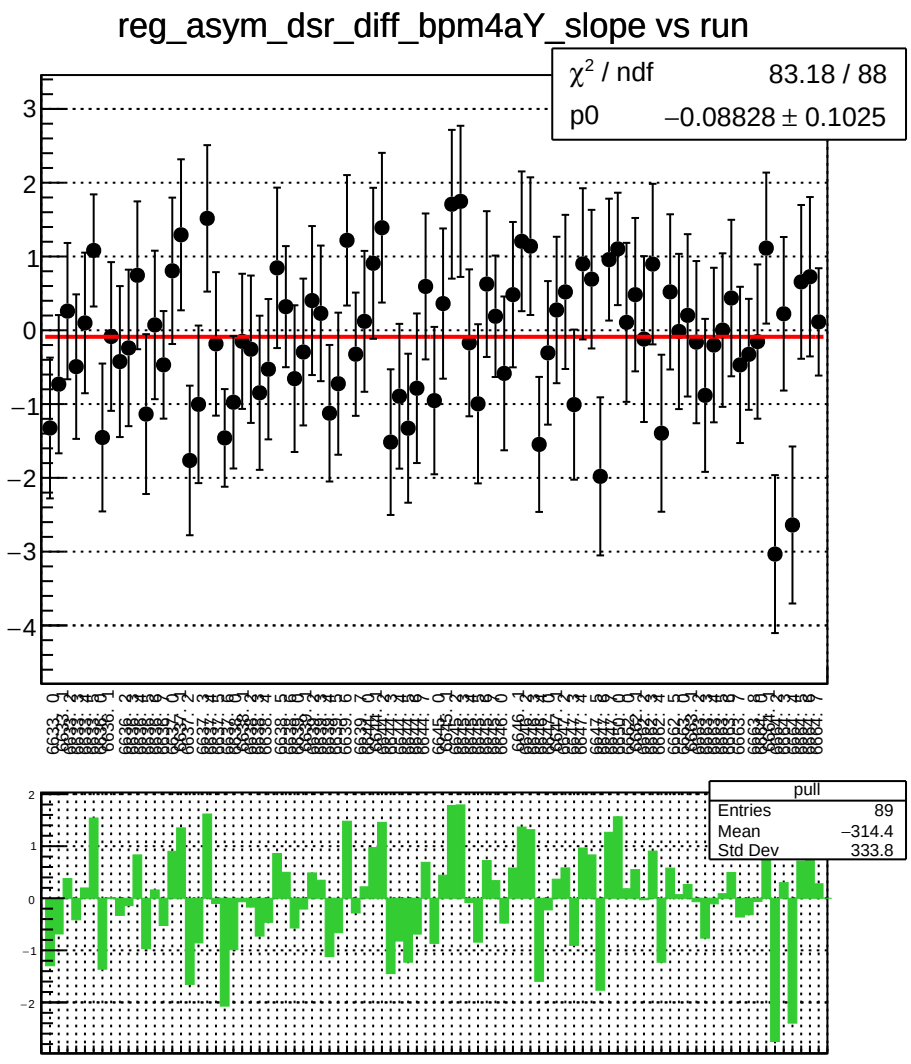

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 100.7 / 88
p0 −0.1542 ± 0.08975
pull
Entries 89
Mean 2.347e+04
Std Dev 2.342e+04

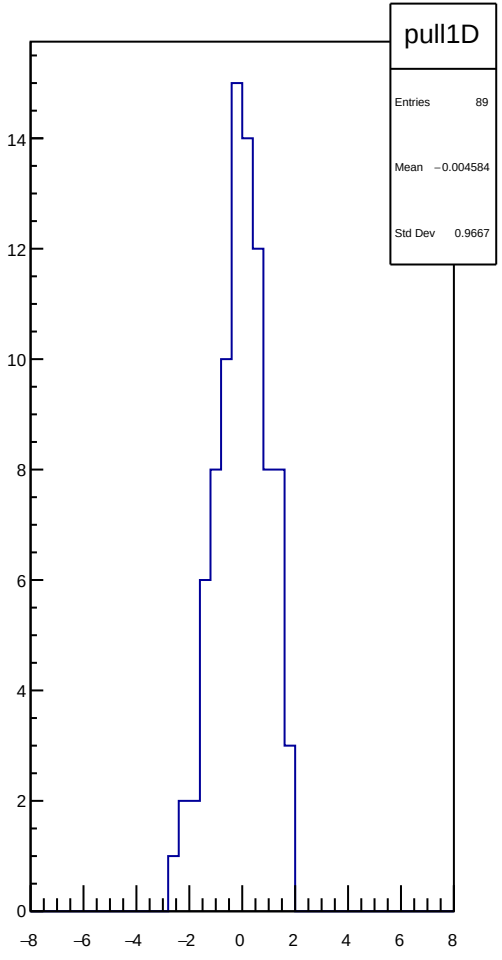

pull1D
Entries 89
Mean 0.0003705
Std Dev 1.064

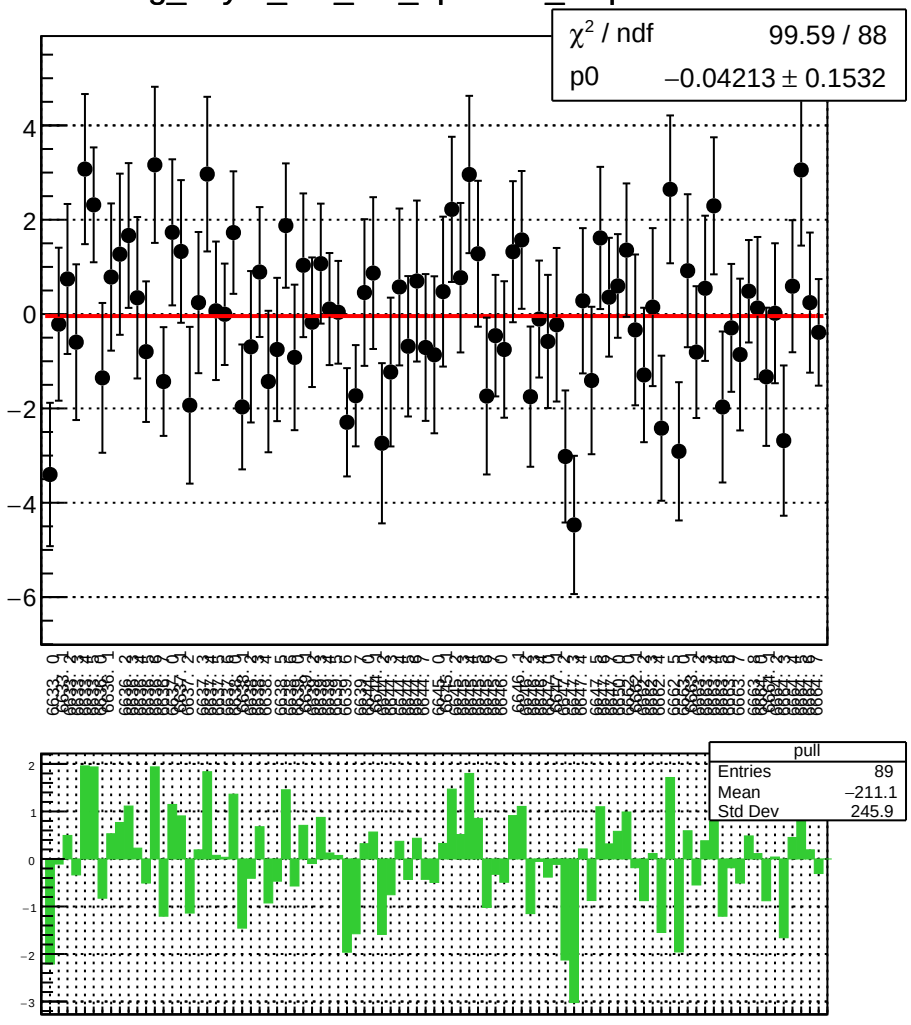

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 95.36 / 88
p0 −0.01971 ± 0.004945
pull
Entries 89
Mean −733
Std Dev 778.7

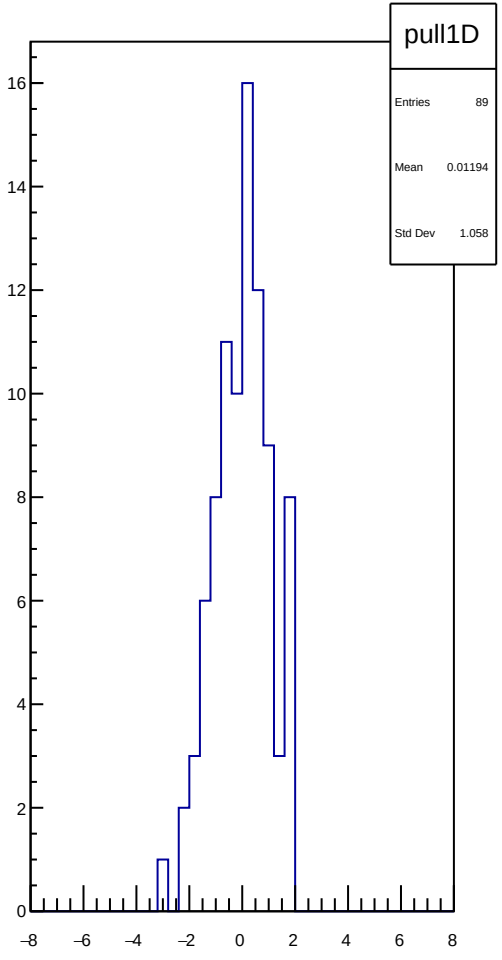

pull1D
Entries 89
Mean −0.004723
Std Dev 1.035

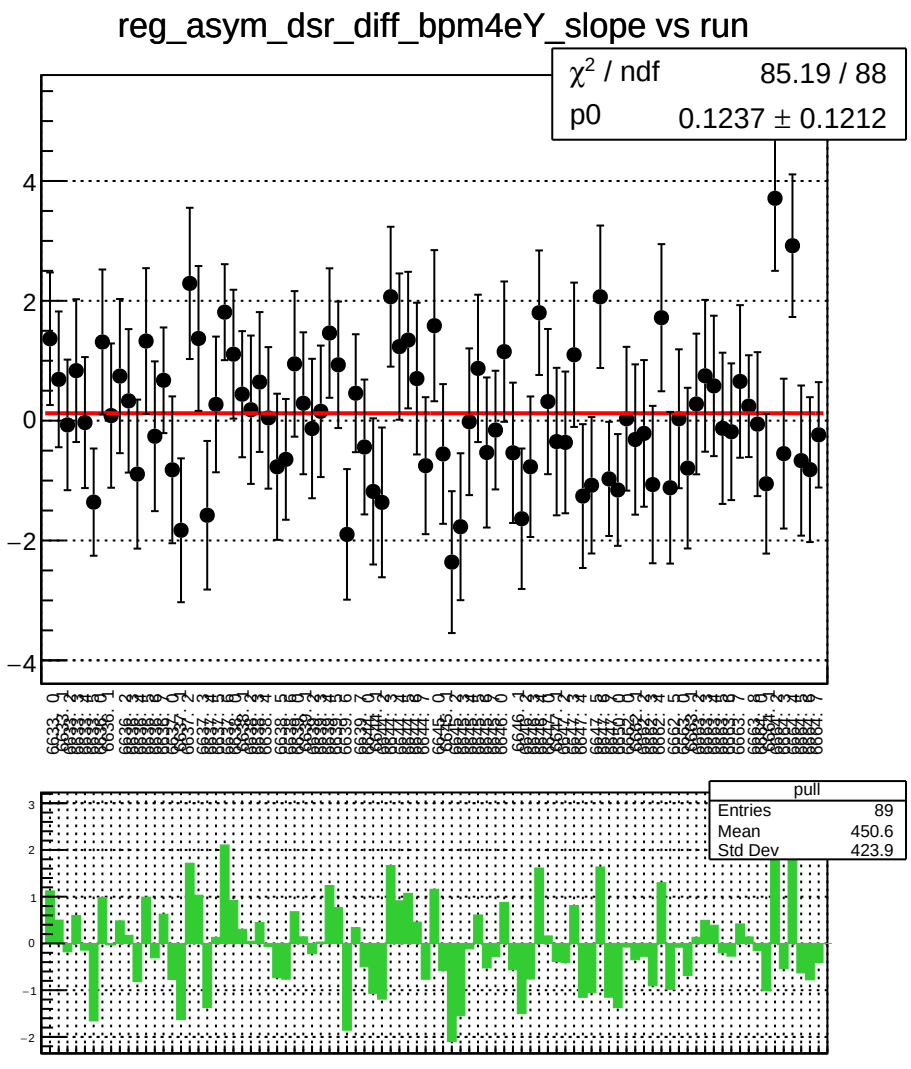

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 99.77 / 88
p0 0.03632 ± 0.1432
pull
Entries 89
Mean −268.7
Std Dev 305.1
pull1D
Entries 89
Mean −0.01054
Std Dev 1.059

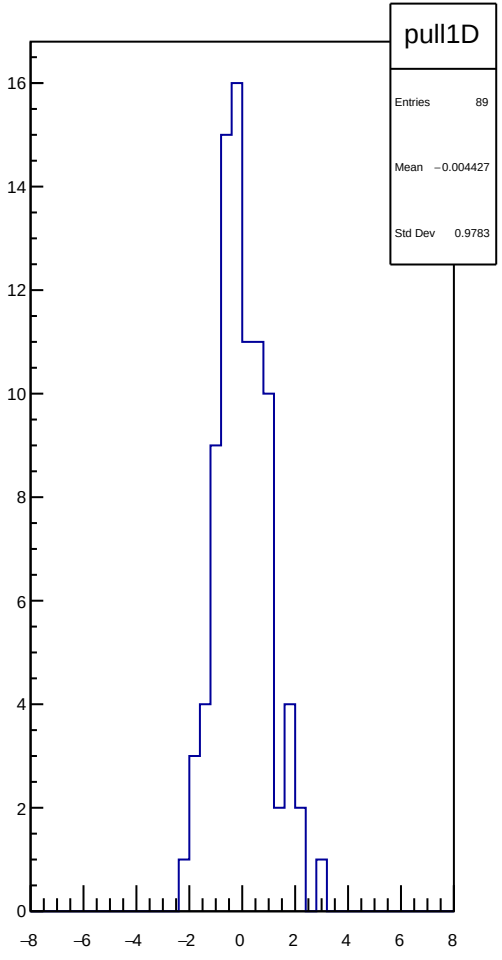

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 83.18 / 88
p0 −0.08828 ± 0.1025
pull
Entries 89
Mean −314.4
Std Dev 333.8

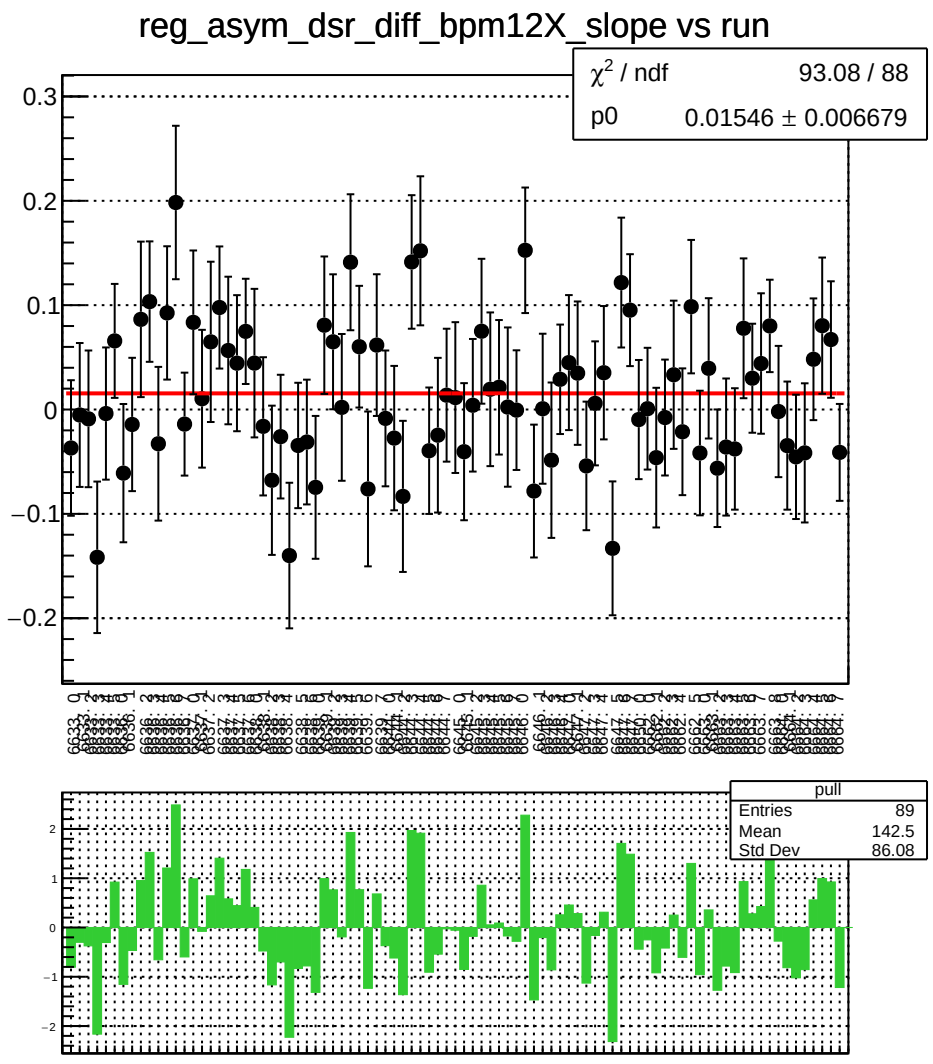

pull1D
Entries 89
Mean −0.004584
Std Dev 0.9667

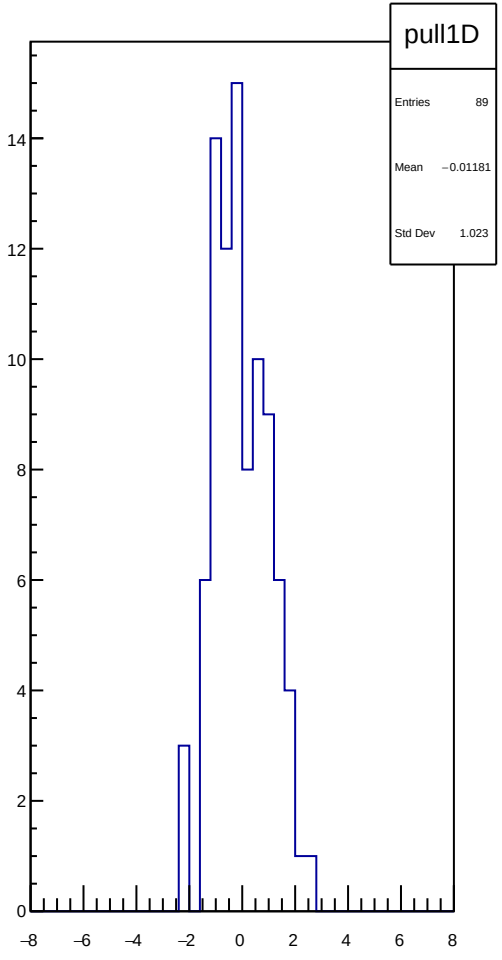

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 99.59 / 88
p0 −0.04213 ± 0.1532
pull
Entries 89
Mean −211.1
Std Dev 245.9

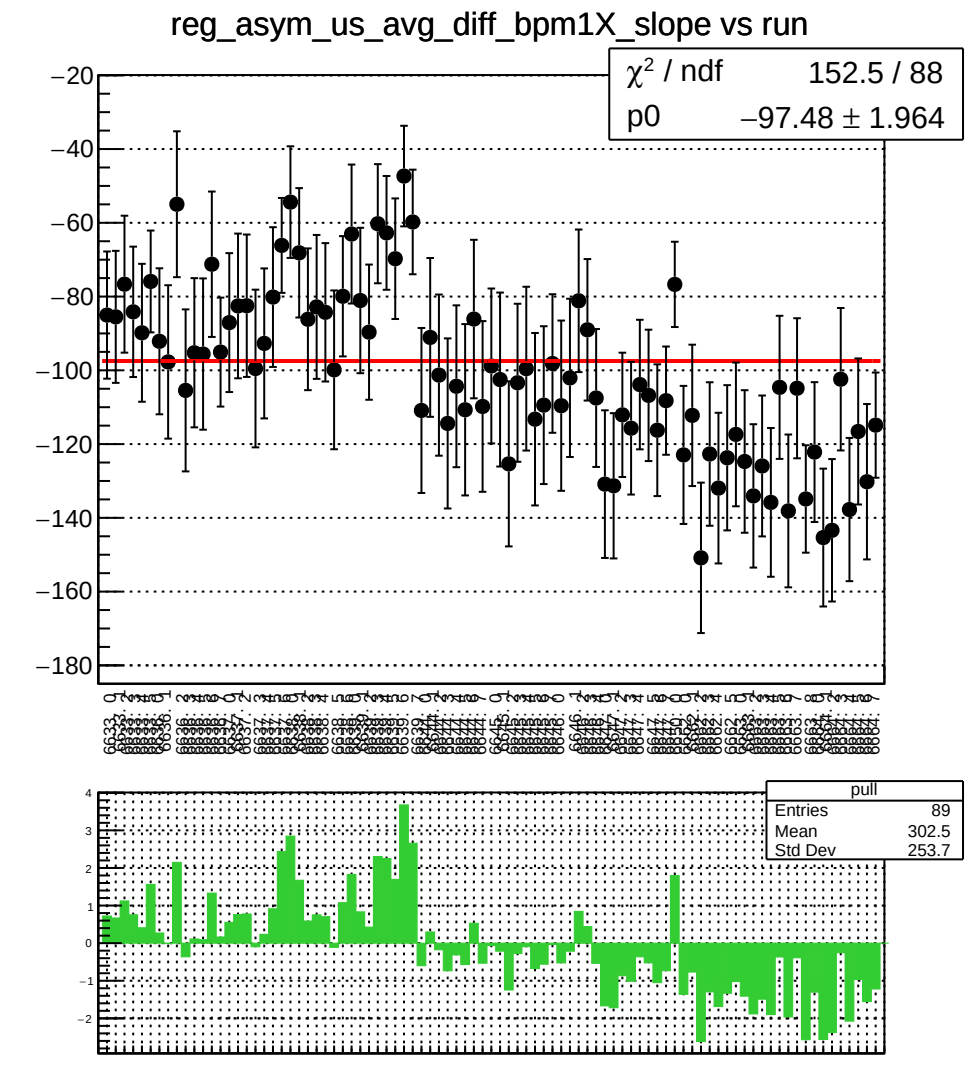

pull1D
Entries 89
Mean 0.01194
Std Dev 1.058

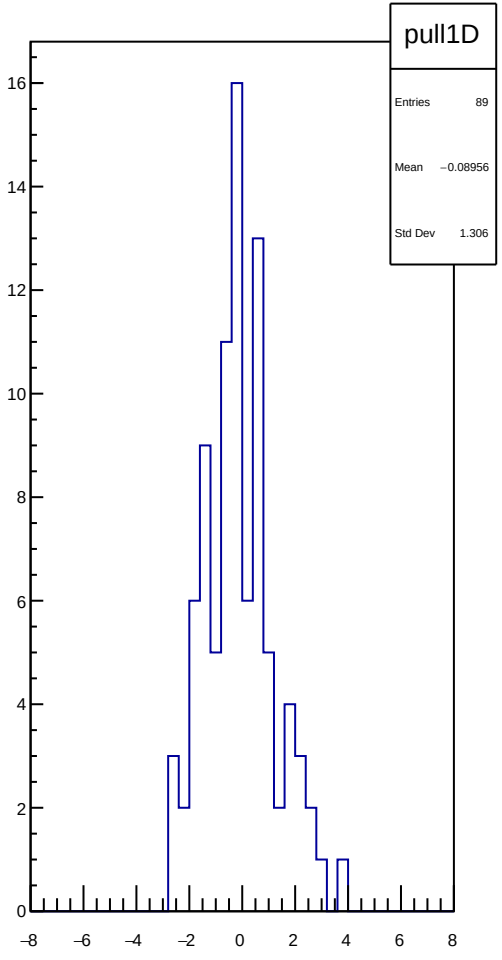

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 85.19 / 88
p0 0.1237 ± 0.1212
pull
Entries 89
Mean 450.6
Std Dev 423.9

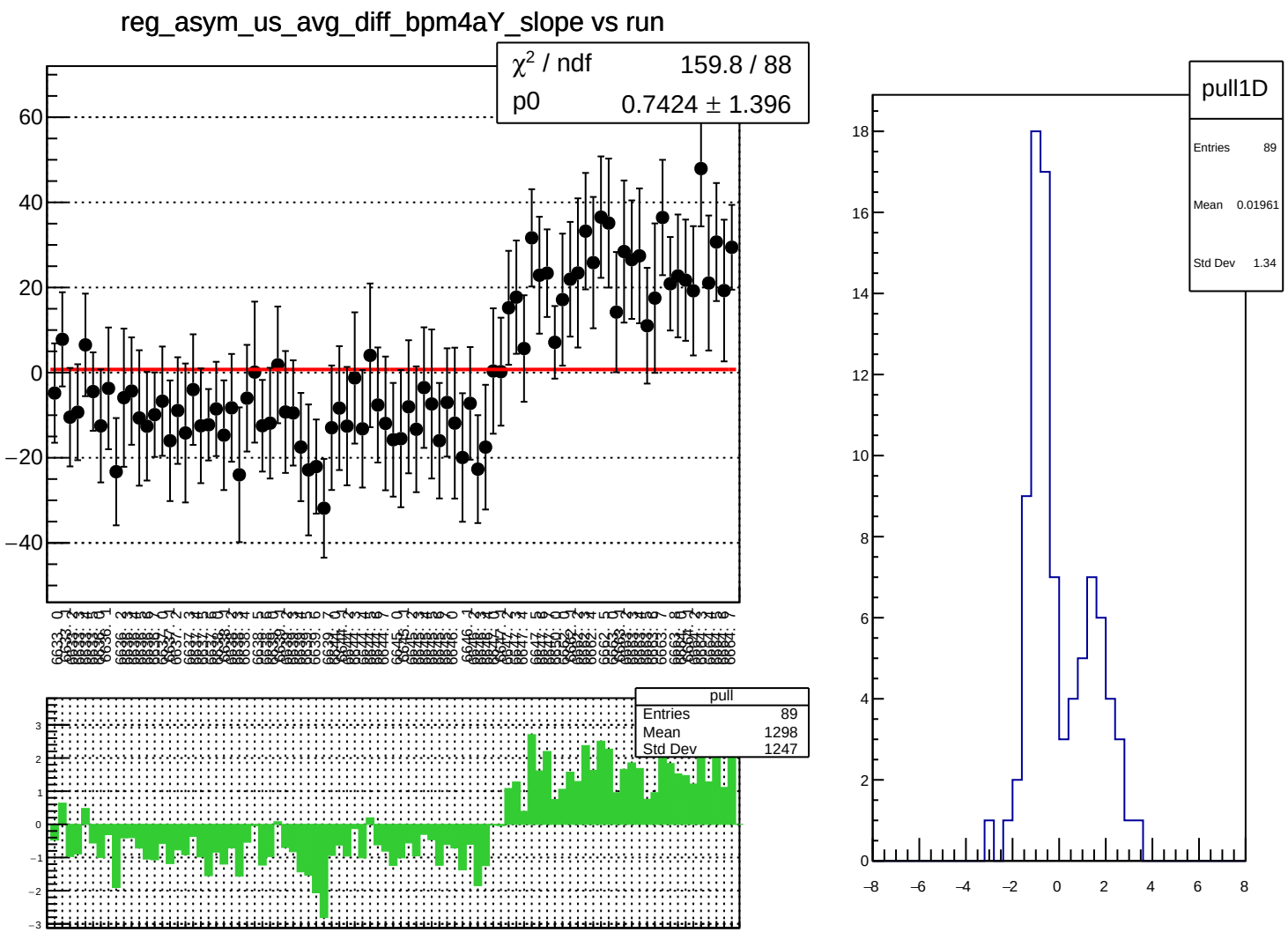

pull1D
Entries 89
Mean −0.004427
Std Dev 0.9783

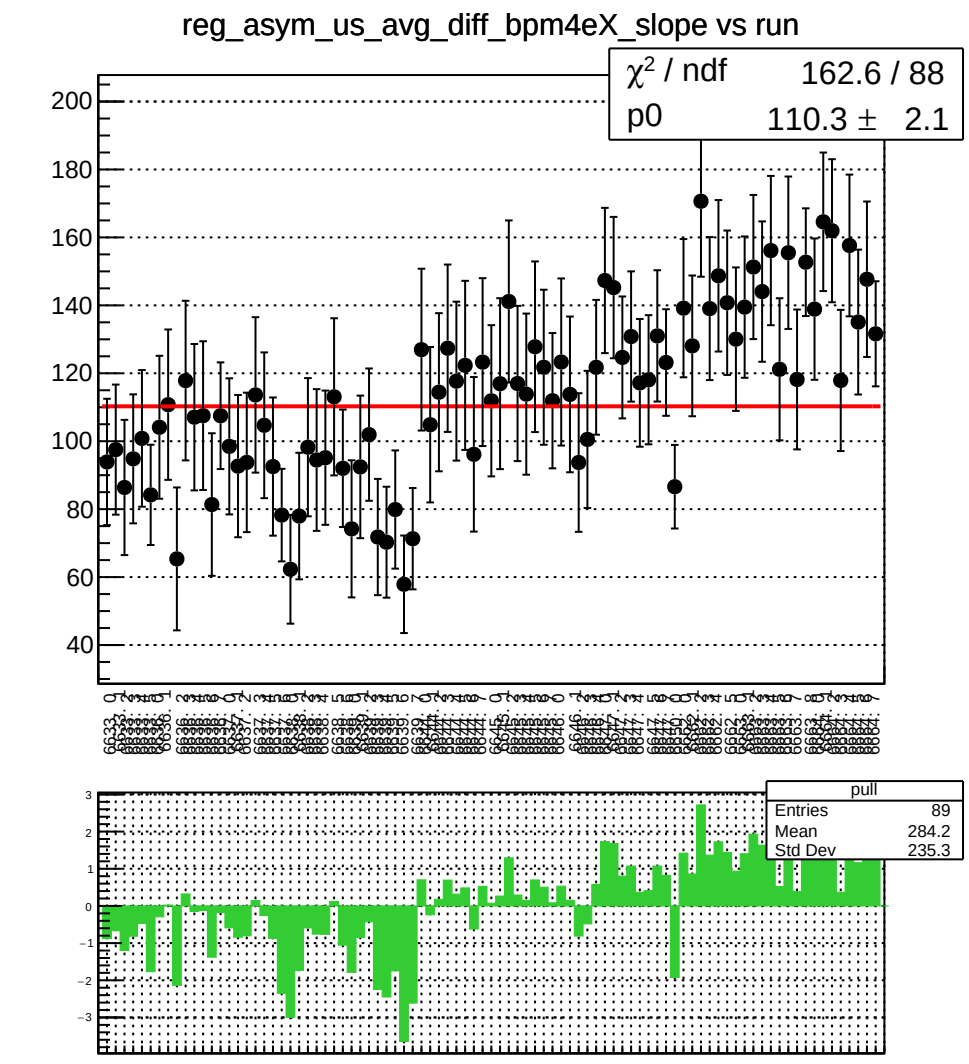

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 93.08 / 88
p0 0.01546 ± 0.006679
pull
Entries 89
Mean 142.5
Std Dev 86.08

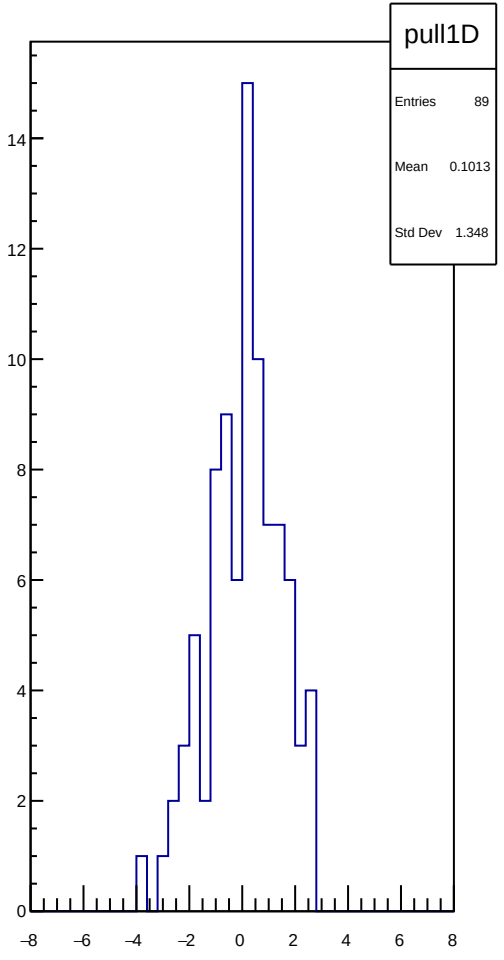

pull1D
Entries 89
Mean −0.01181
Std Dev 1.023

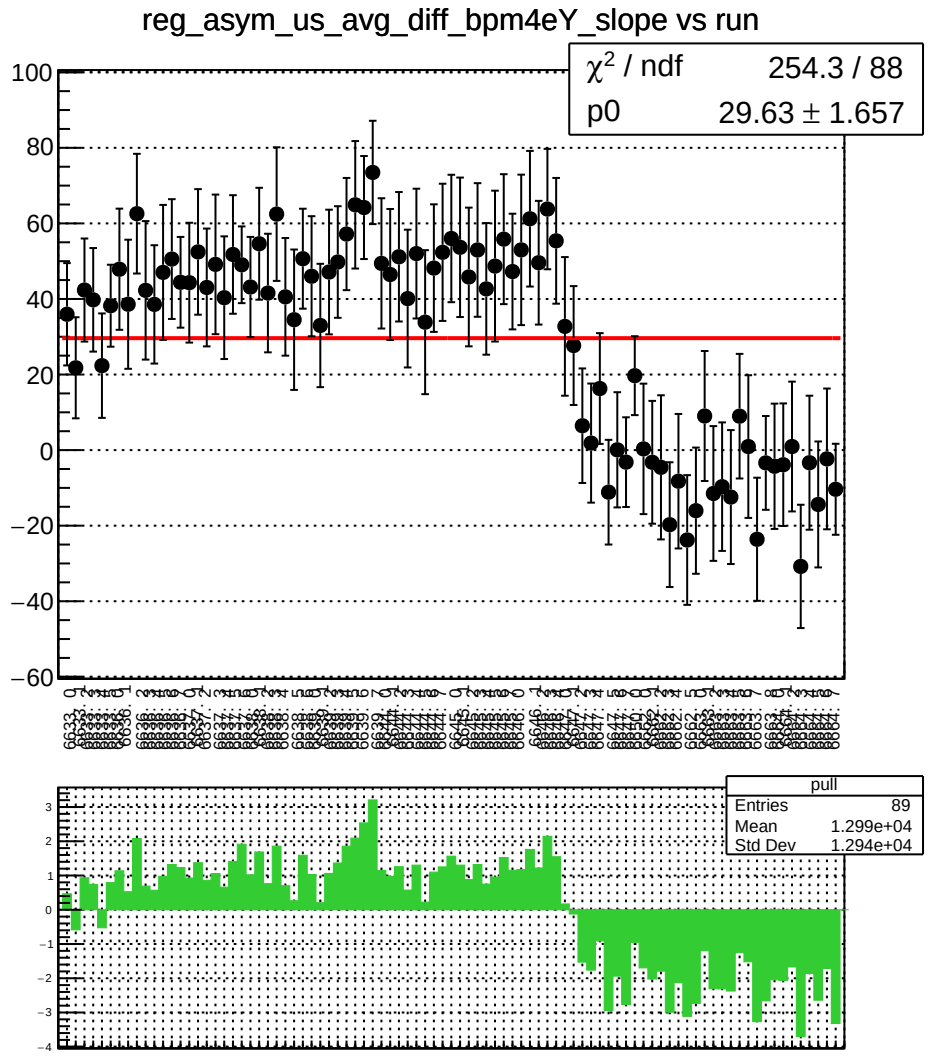

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 152.5 / 88
p0 −97.48 ± 1.964
pull
Entries 89
Mean 302.5
Std Dev 253.7

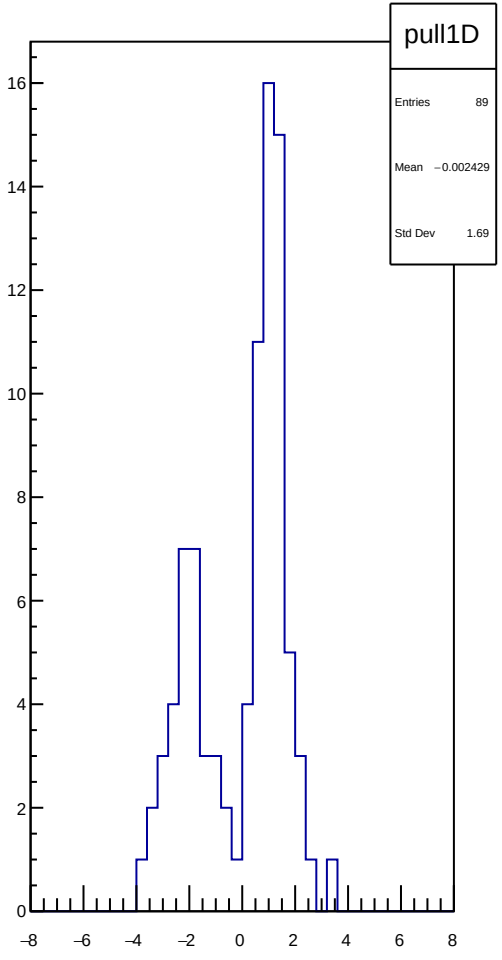

pull1D
Entries 89
Mean −0.08956
Std Dev 1.306

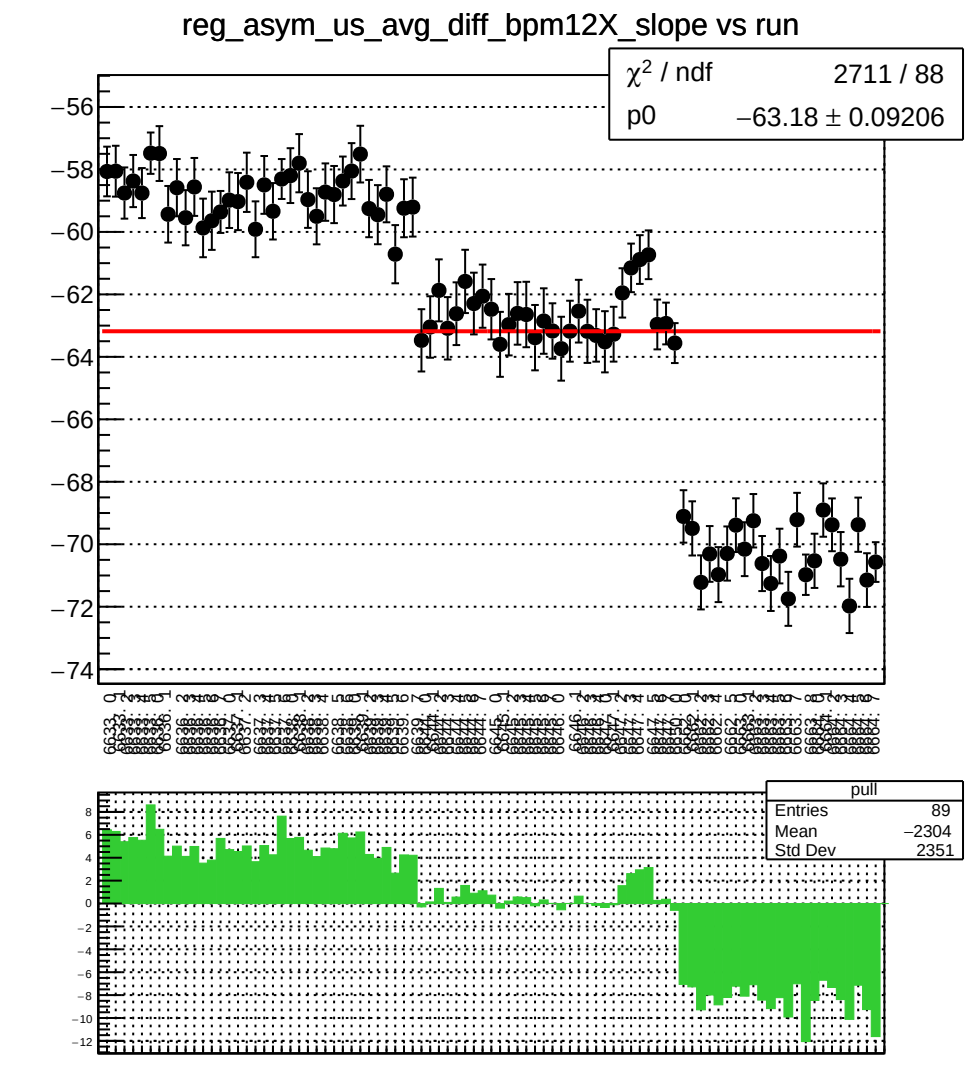

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 159.8 / 88
p0 0.7424 ± 1.396
pull
Entries 89
Mean 1298
Std Dev 1247
pull1D
Entries 89
Mean 0.01961
Std Dev 1.34

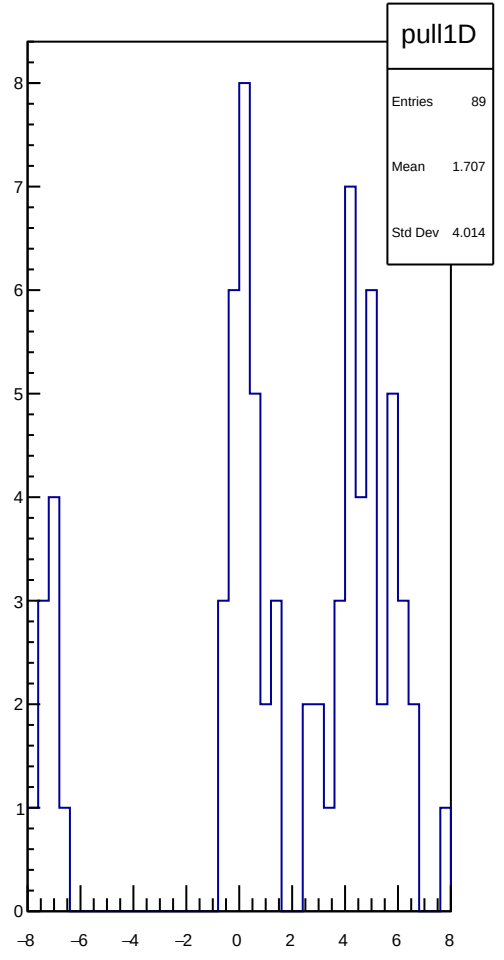

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 162.6 / 88
p0 110.3 ± 2.1
pull
Entries 89
Mean 284.2
Std Dev 235.3

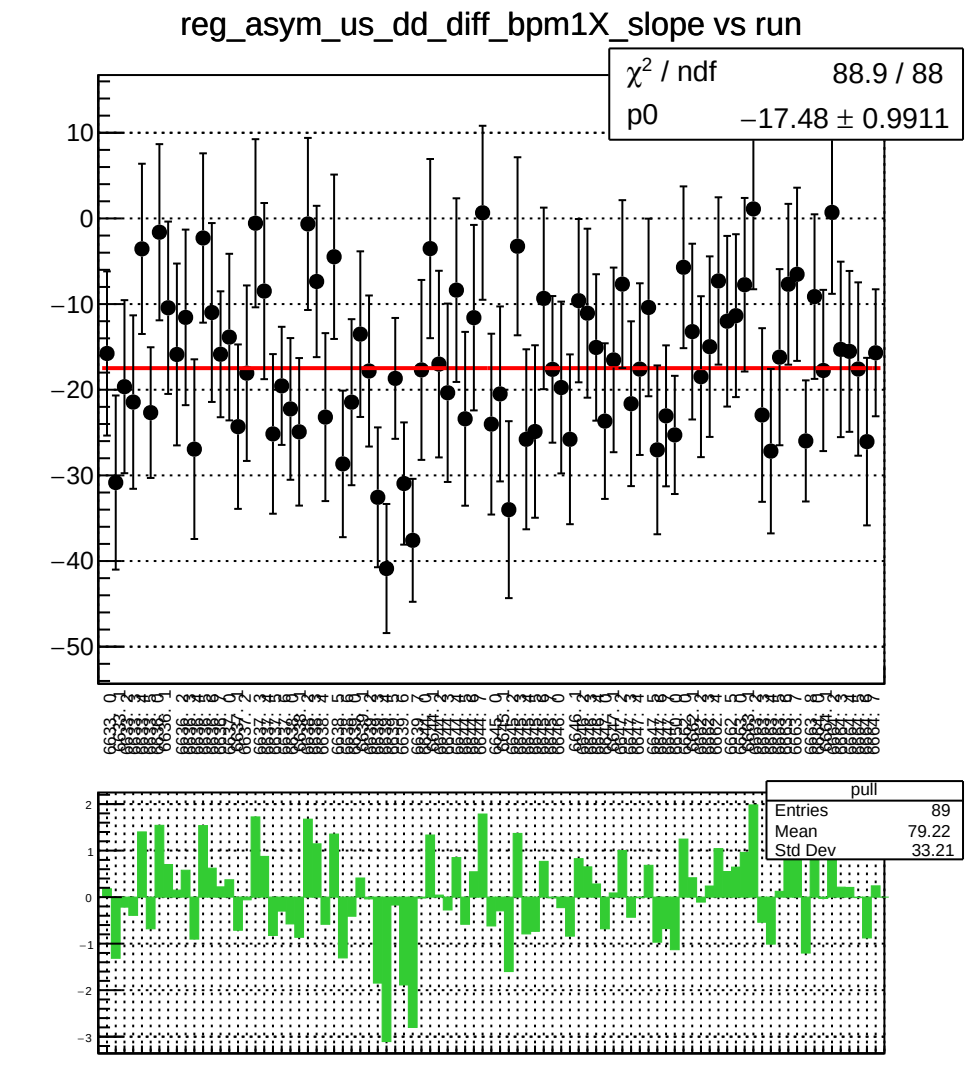

pull1D
Entries 89
Mean 0.1013
Std Dev 1.348

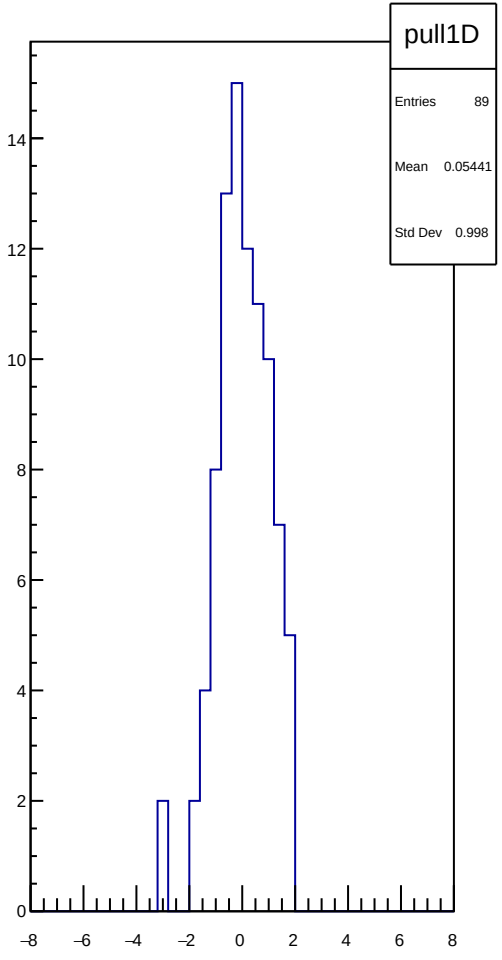

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 254.3 / 88
p0 29.63 ± 1.657
pull
Entries 89
Mean 1.299e+04
Std Dev 1.294e+04

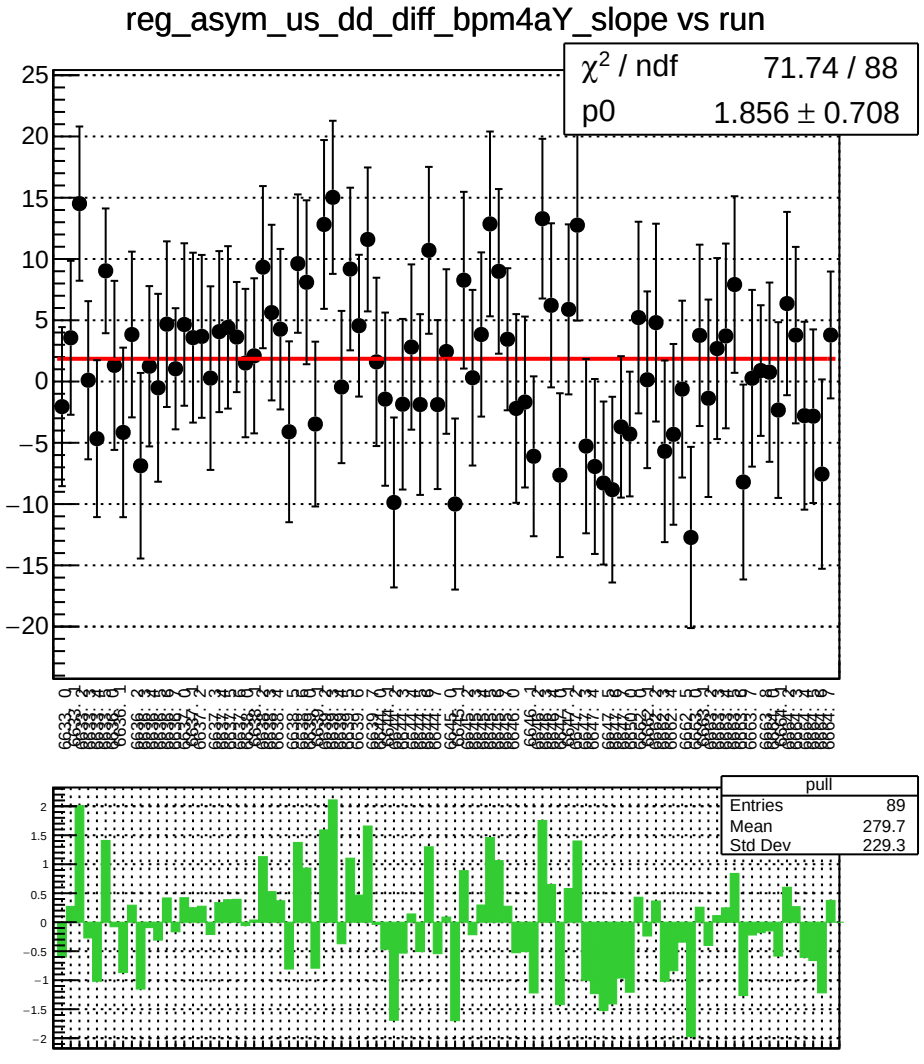

pull1D
Entries 89
Mean −0.002429
Std Dev 1.69

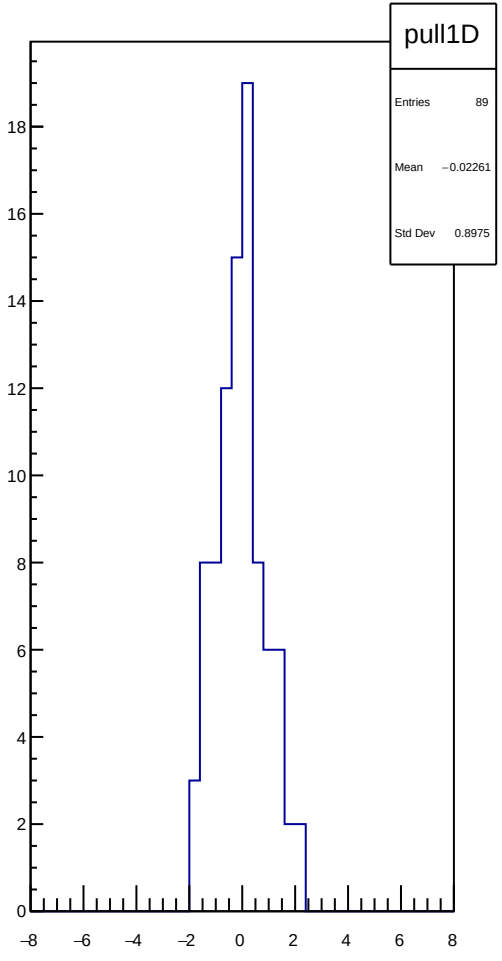

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 2711 / 88
p0 −63.18 ± 0.09206
pull
Entries 89
Mean −2304
Std Dev 2351

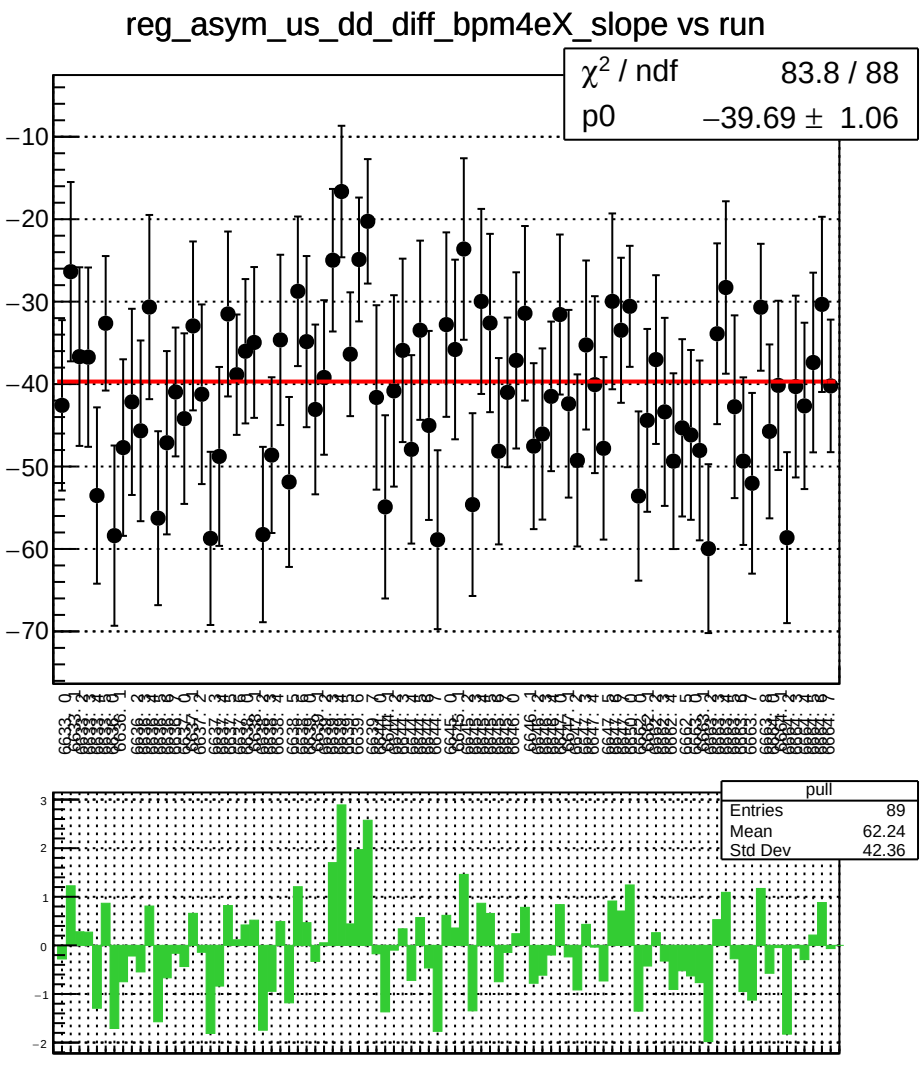

pull1D
Entries 89
Mean 1.707
Std Dev 4.014

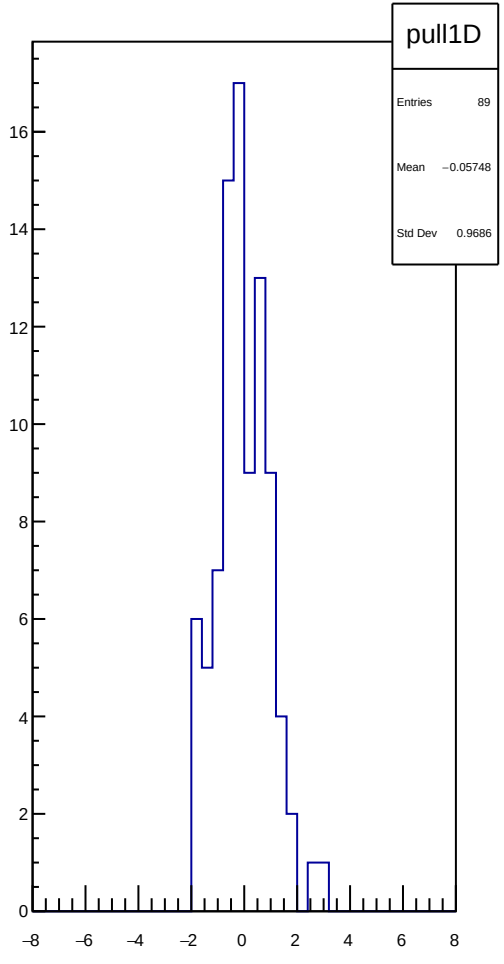

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 88.9 / 88
p0 −17.48 ± 0.9911
pull
Entries 89
Mean 79.22
Std Dev 33.21

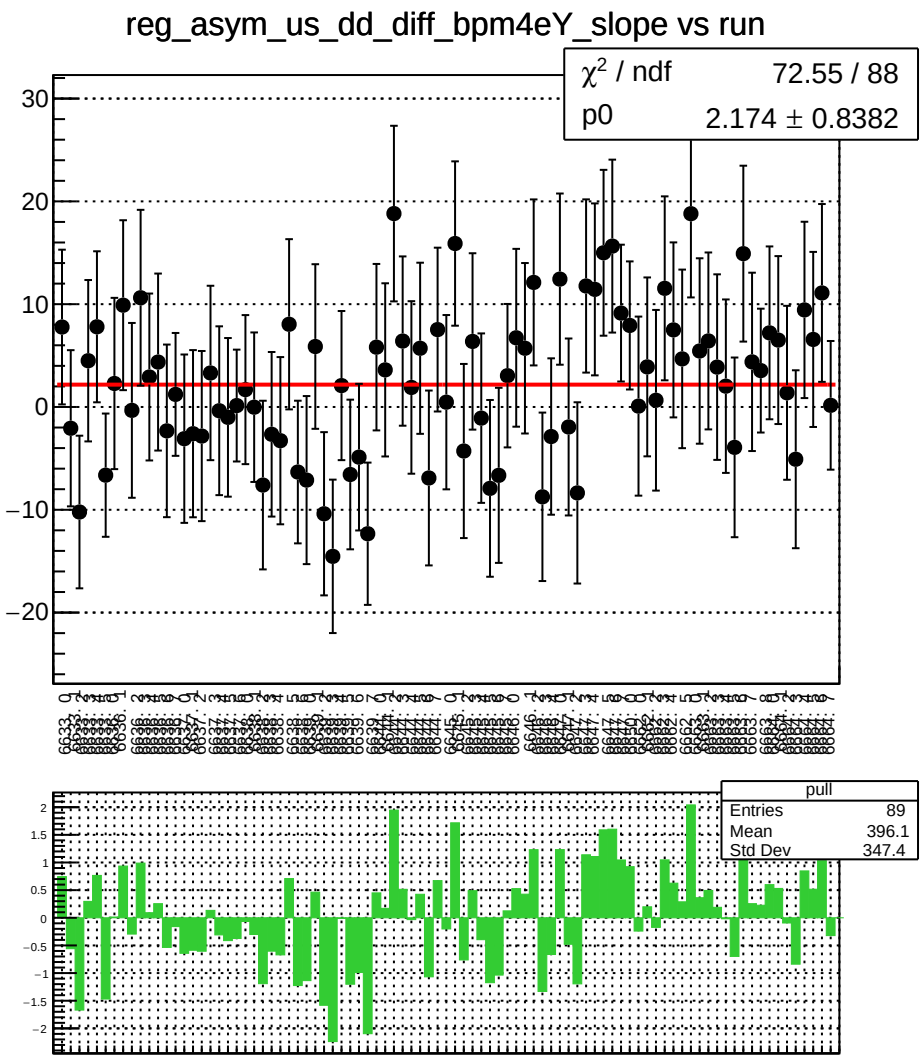

pull1D
Entries 89
Mean 0.05441
Std Dev 0.998

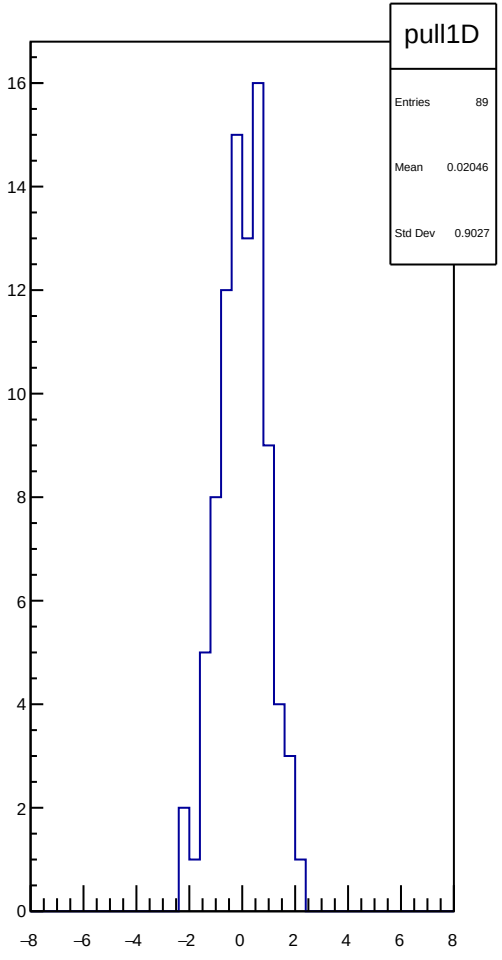

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 71.74 / 88
p0 1.856 ± 0.708
pull
Entries 89
Mean 279.7
Std Dev 229.3

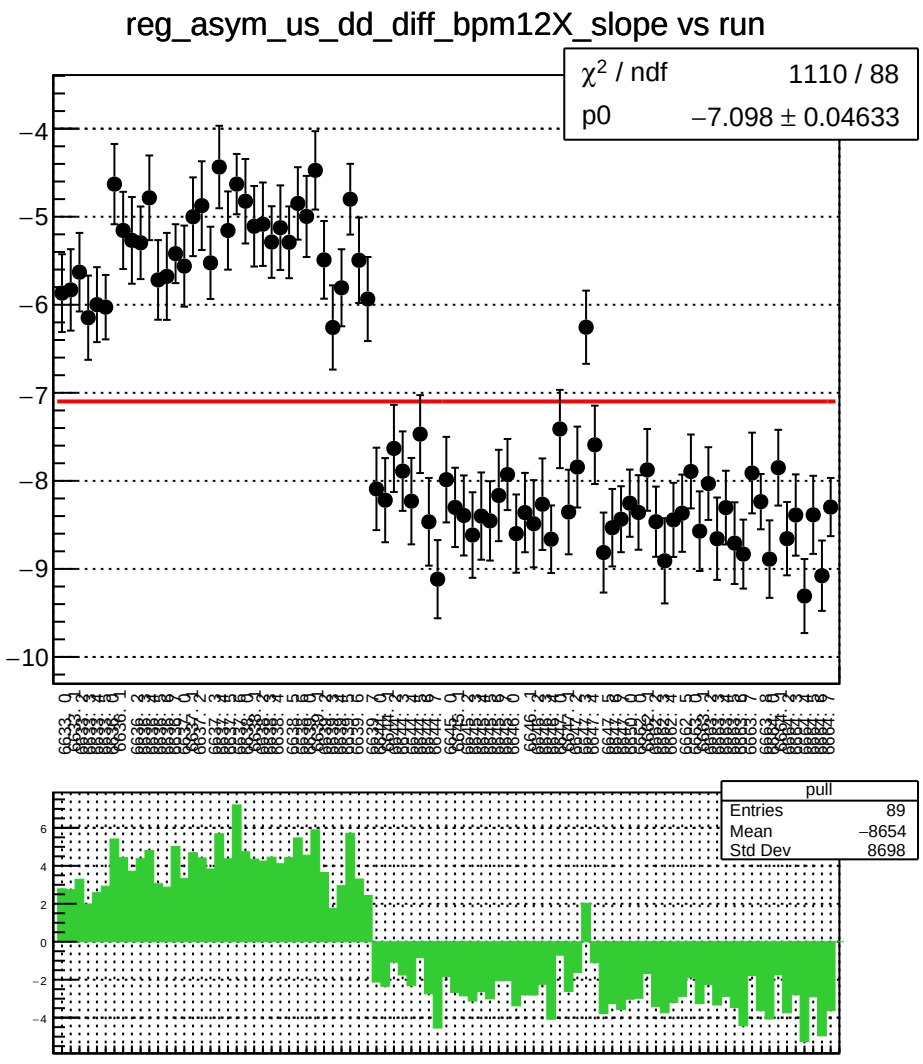

pull1D
Entries 89
Mean −0.02261
Std Dev 0.8975

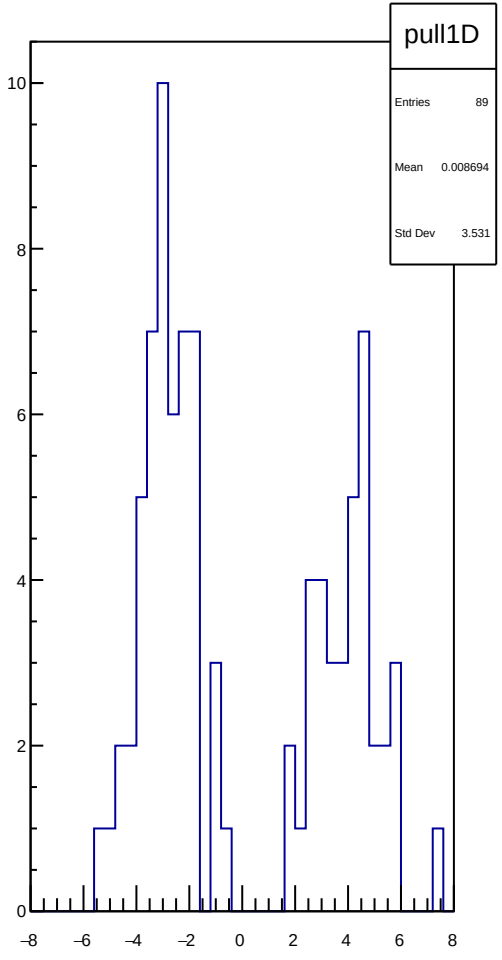

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ^2 / ndf 83.8 / 88
p0 −39.69 ± 1.06
−10
−20
−30
−40
−50
−60
−70
pull
Entries 89
Mean 62.24
Std Dev 42.36
3
2
1
0
−1
−2

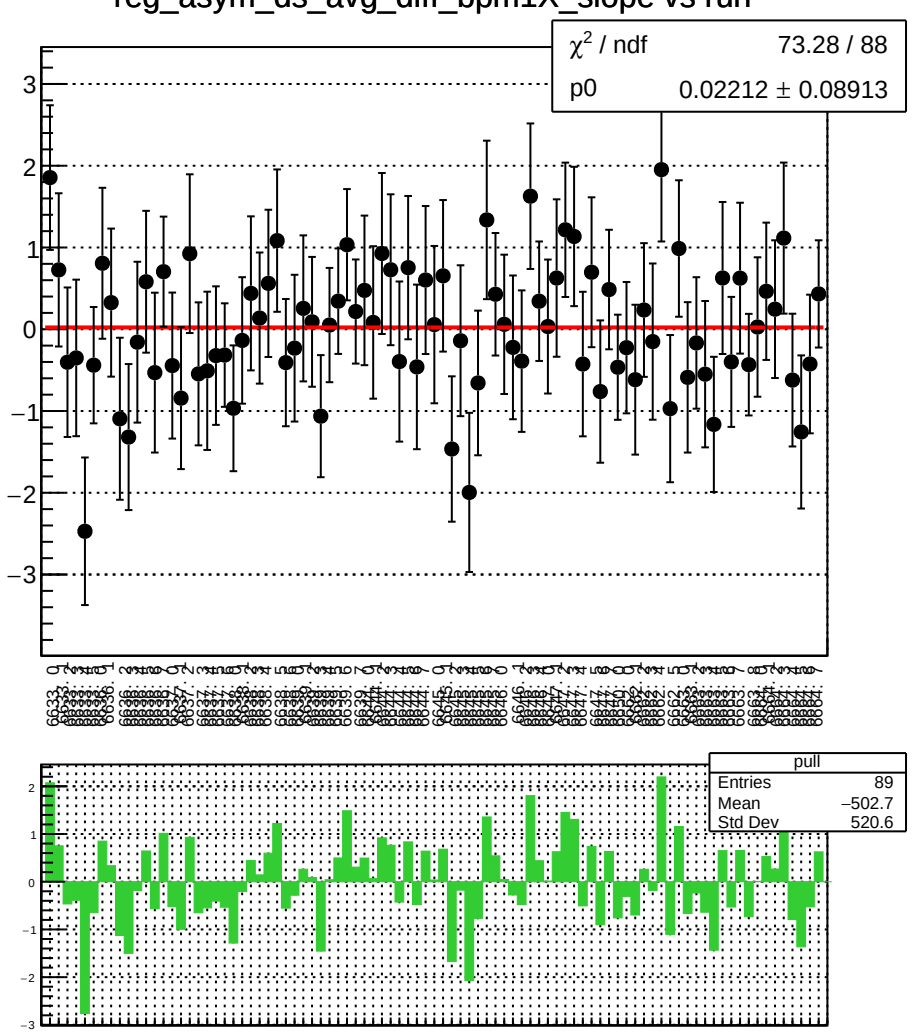

pull1D
Entries 89
Mean −0.05748
Std Dev 0.9686
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

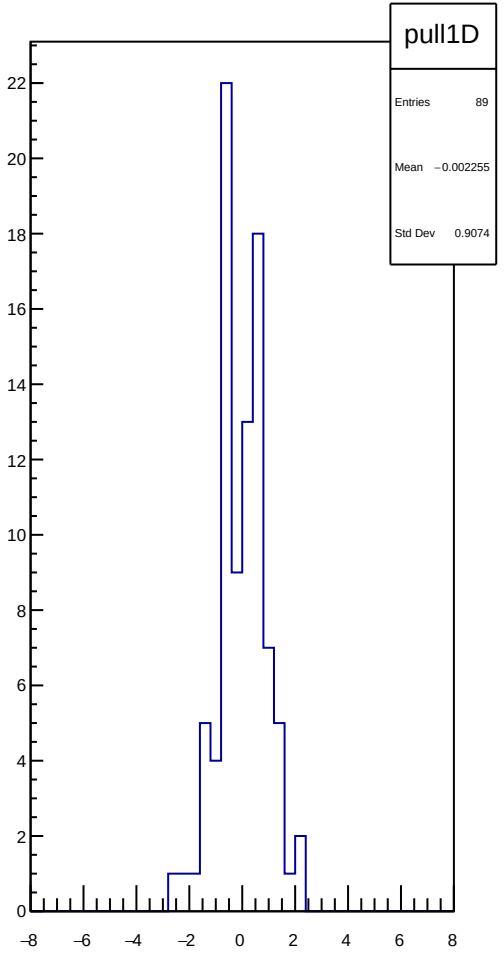

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 72.55 / 88
p0 2.174 ± 0.8382
pull
Entries 89
Mean 396.1
Std Dev 347.4

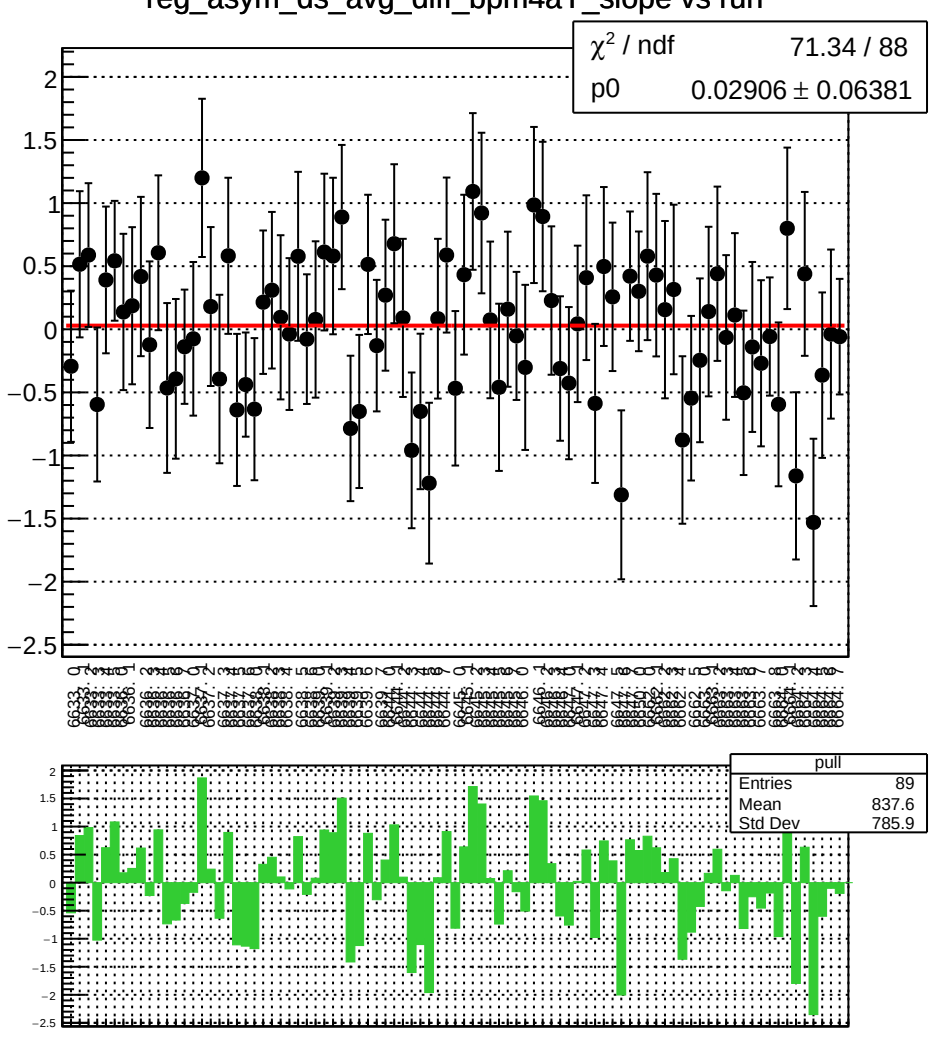

pull1D
Entries 89
Mean 0.02046
Std Dev 0.9027

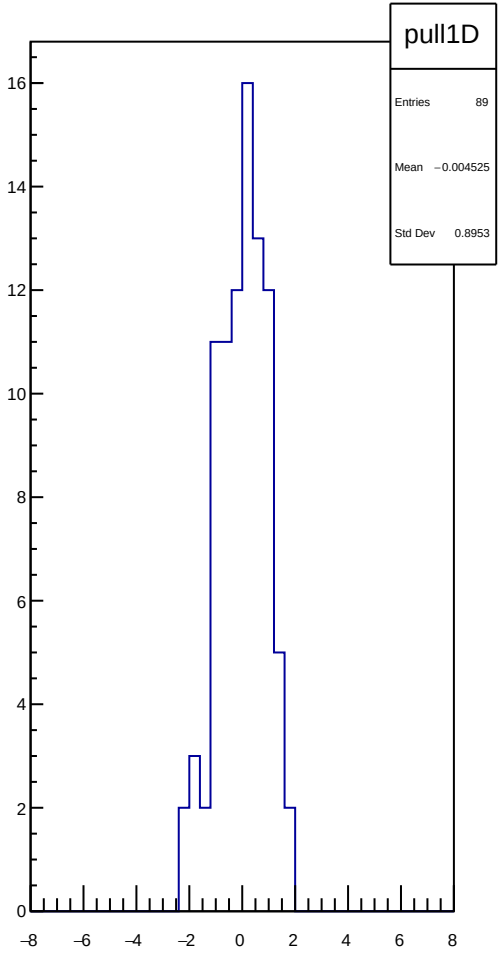

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 1110 / 88
p0 −7.098 ± 0.04633
pull
Entries 89
Mean −8654
Std Dev 8698

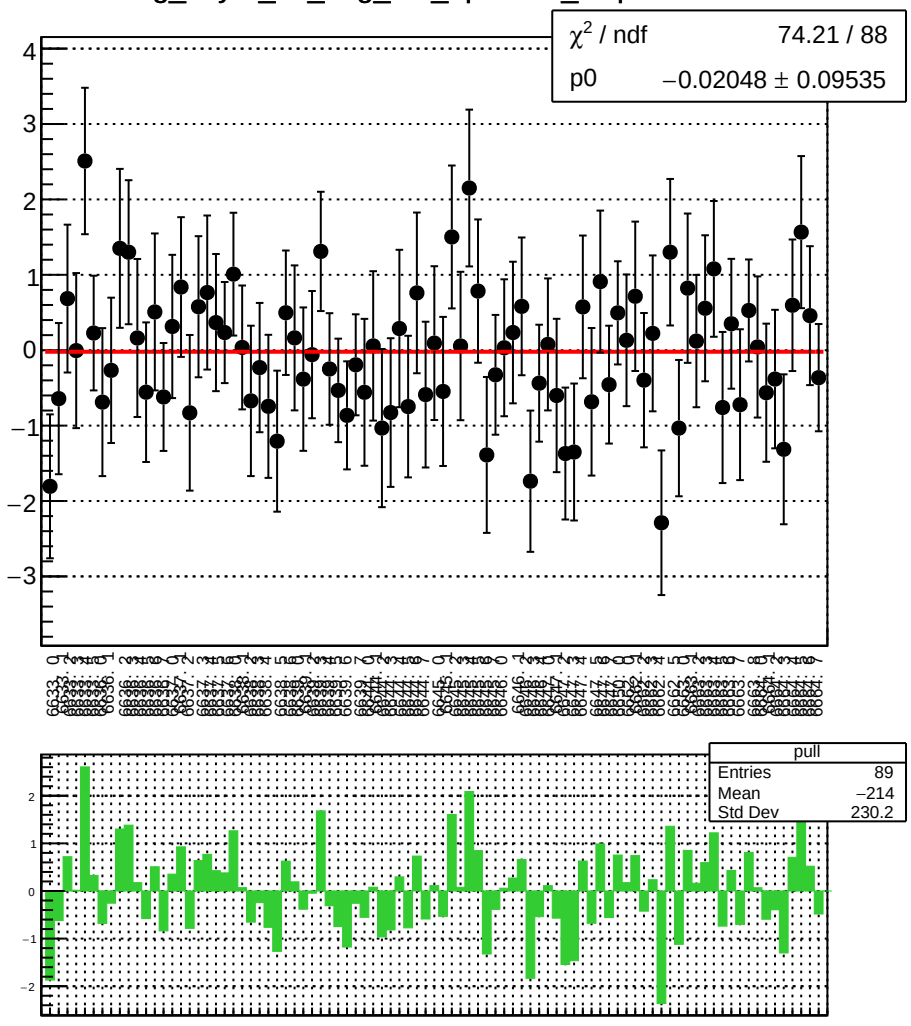

pull1D
Entries 89
Mean 0.008694
Std Dev 3.531

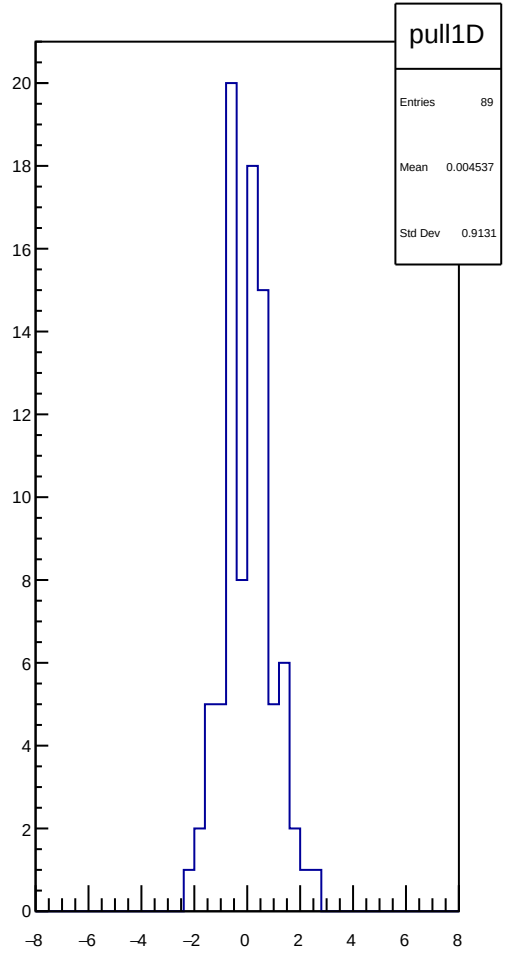

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 73.28 / 88
p0 0.02212 ± 0.08913
pull
Entries 89
Mean −502.7
Std Dev 520.6

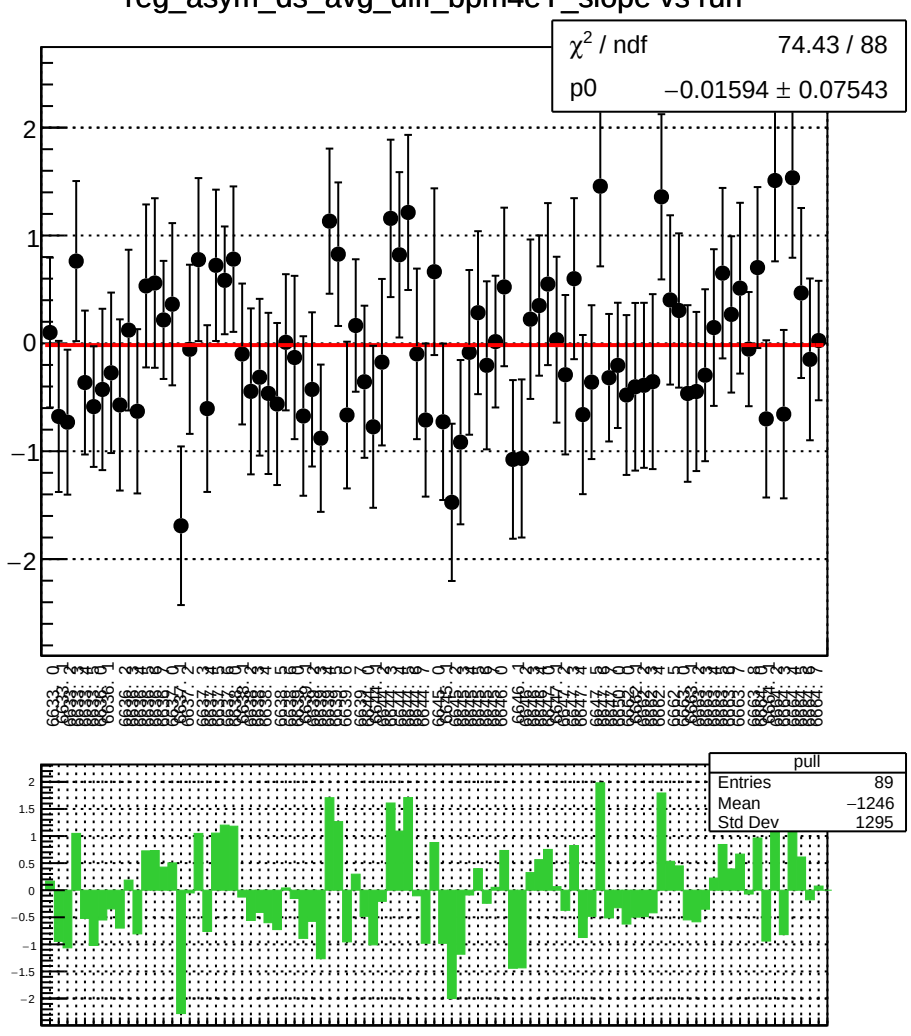

pull1D
Entries 89
Mean −0.002255
Std Dev 0.9074

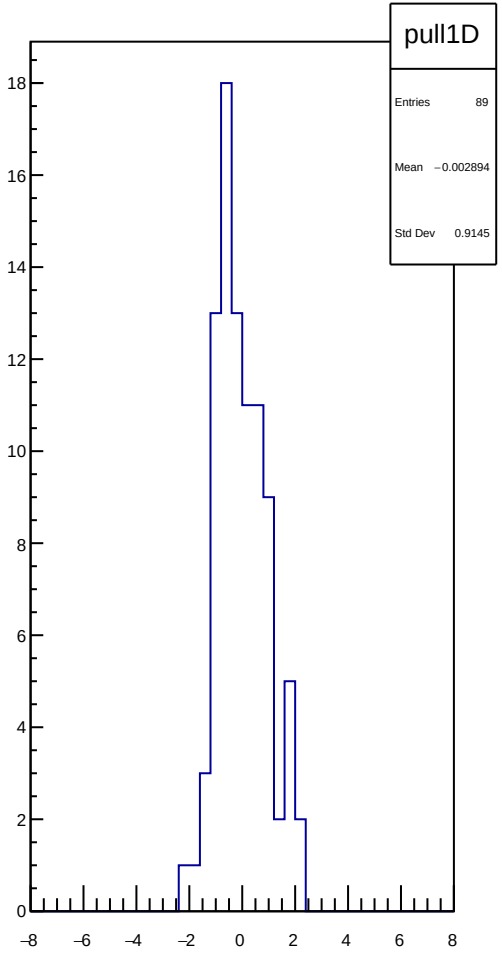

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 71.34 / 88
p0 0.02906 ± 0.06381
pull
Entries 89
Mean 837.6
Std Dev 785.9

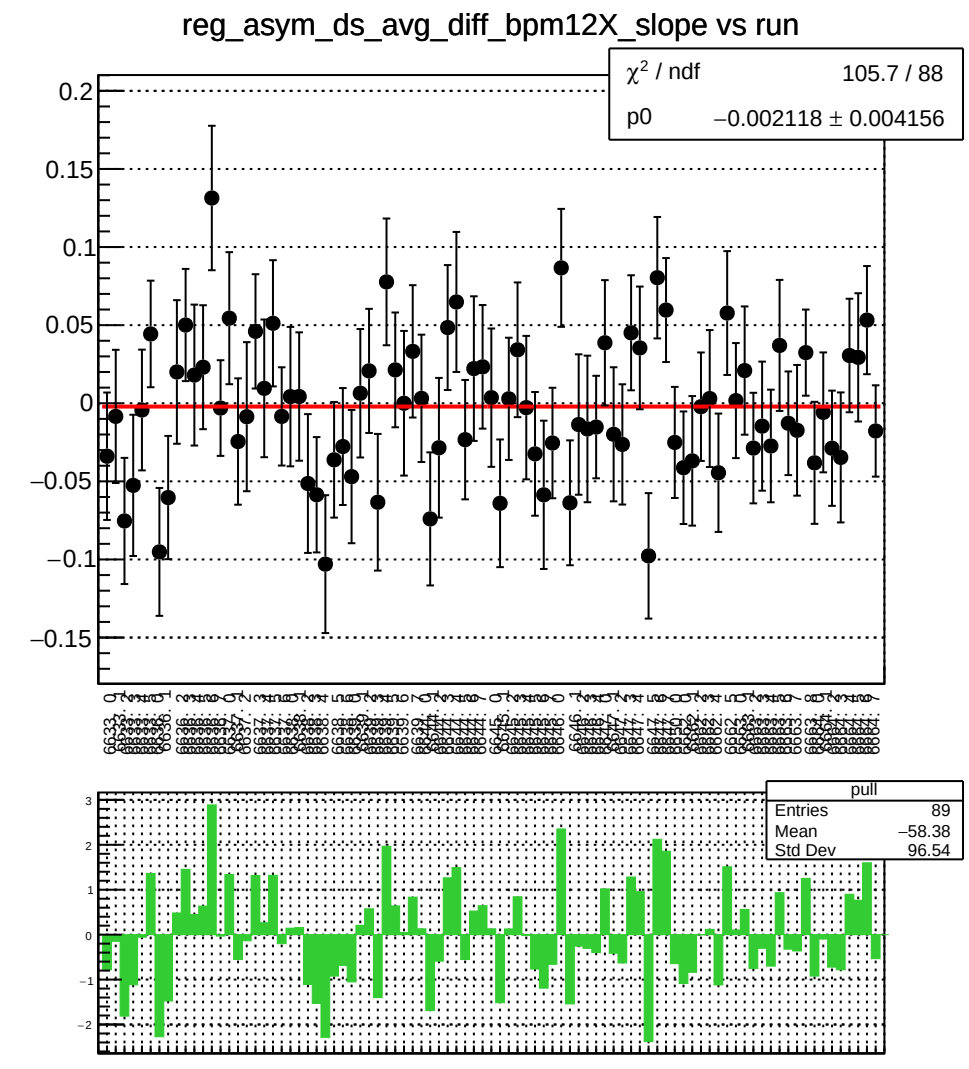

pull1D
Entries 89
Mean −0.004525
Std Dev 0.8953

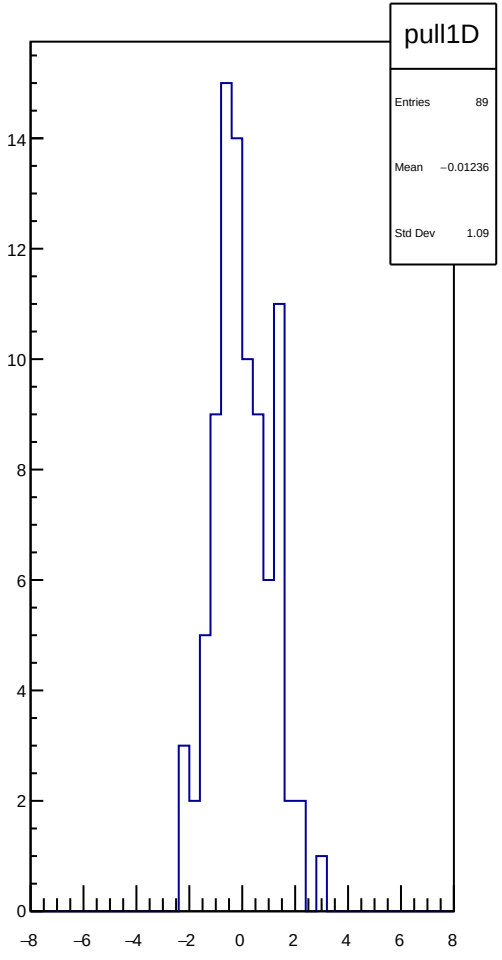

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 74.21 / 88
p0 −0.02048 ± 0.09535
pull
Entries 89
Mean −214
Std Dev 230.2

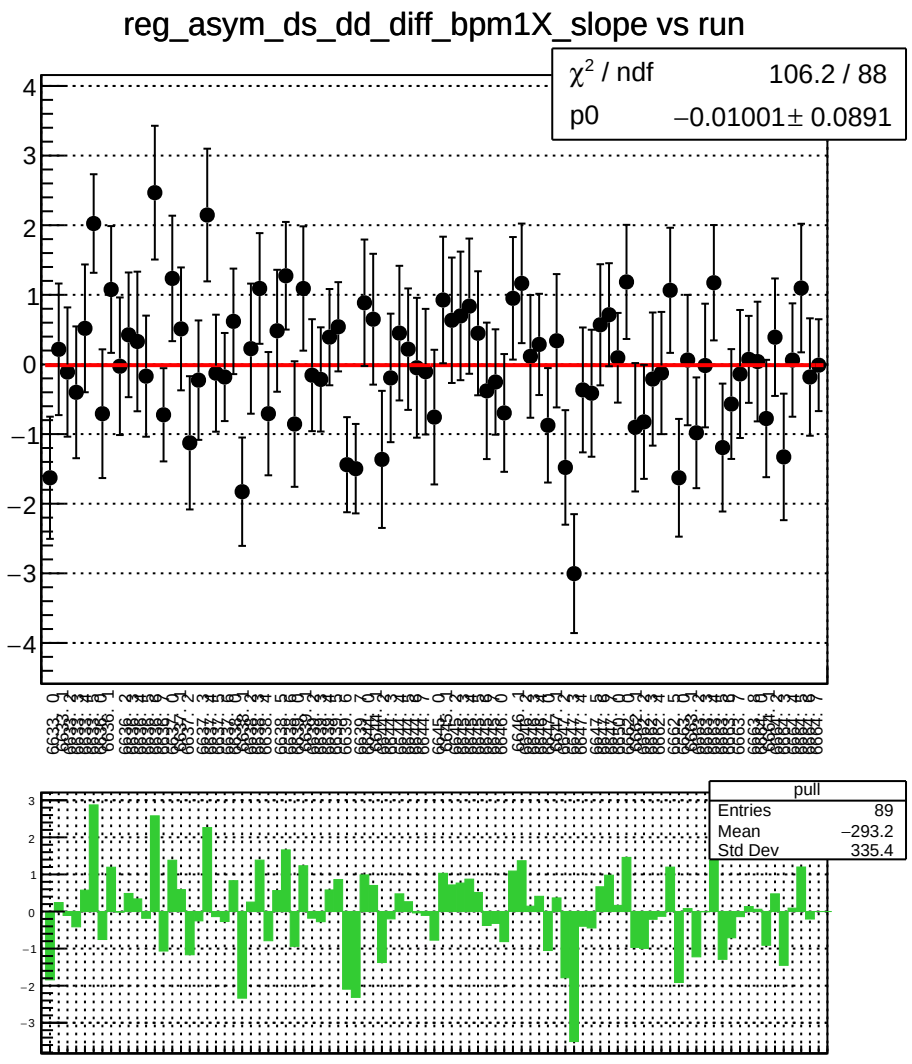

pull1D
Entries 89
Mean 0.004537
Std Dev 0.9131

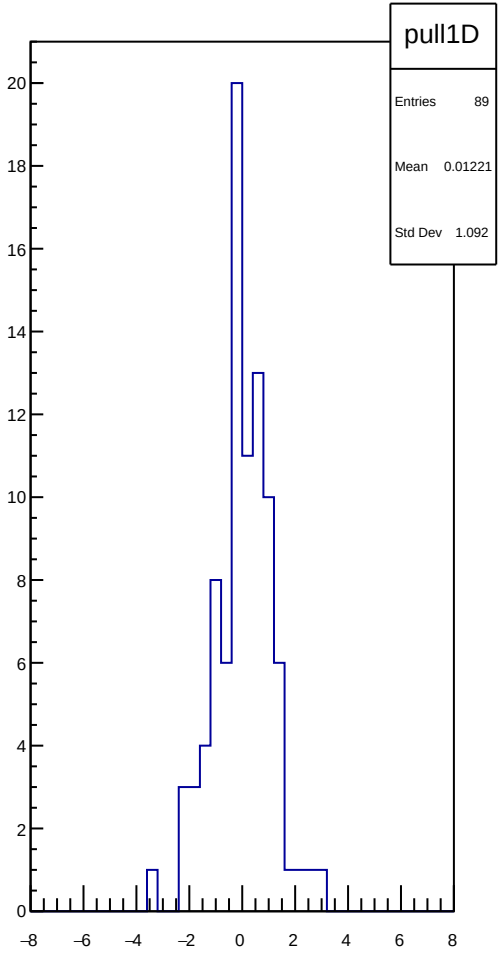

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 74.43 / 88
p0 −0.01594 ± 0.07543
pull
Entries 89
Mean −1246
Std Dev 1295

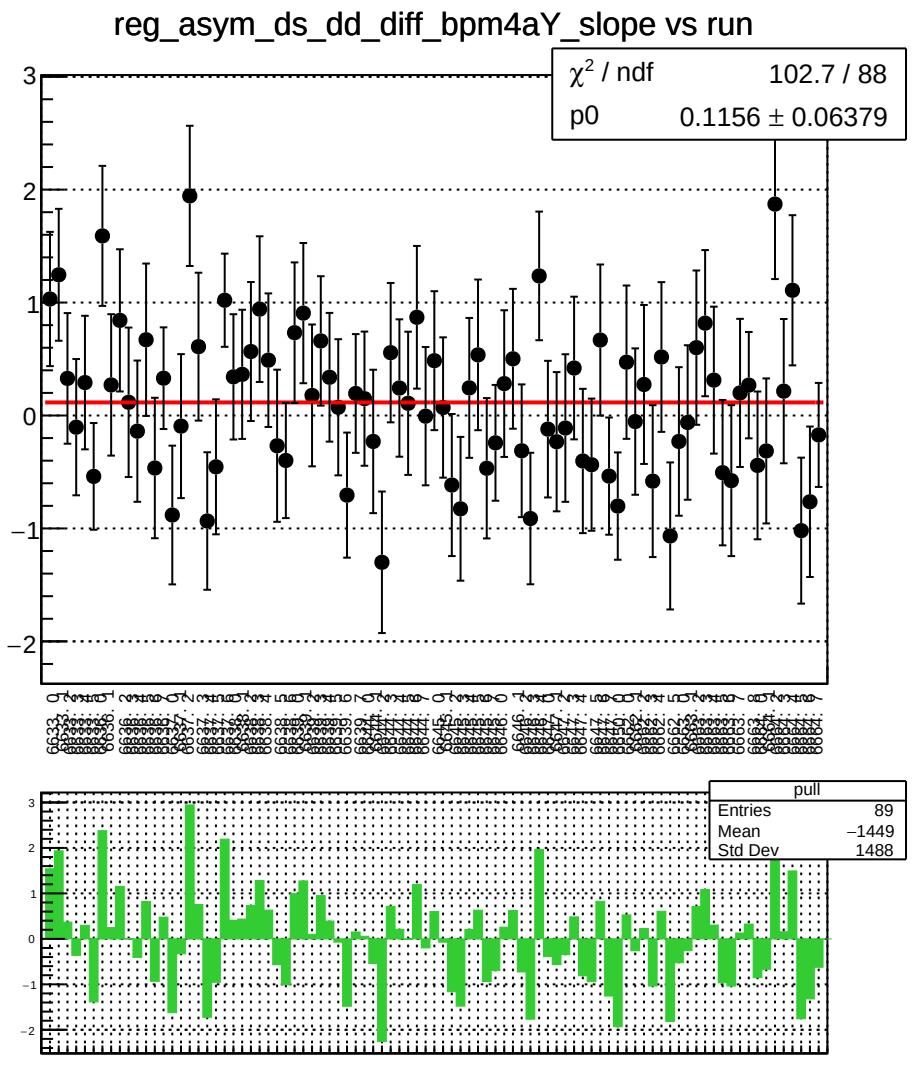

pull1D
Entries 89
Mean −0.002894
Std Dev 0.9145

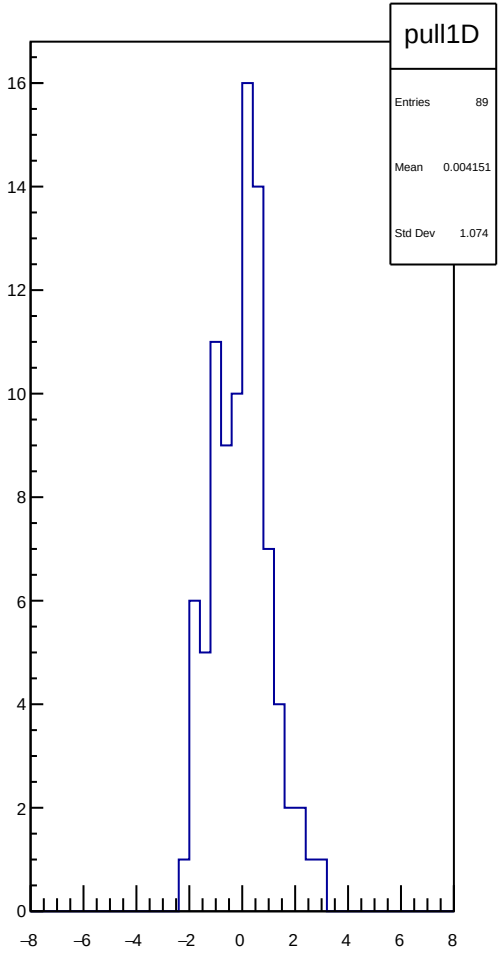

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 105.7 / 88
p0 −0.002118 ± 0.004156
pull
Entries 89
Mean −58.38
Std Dev 96.54

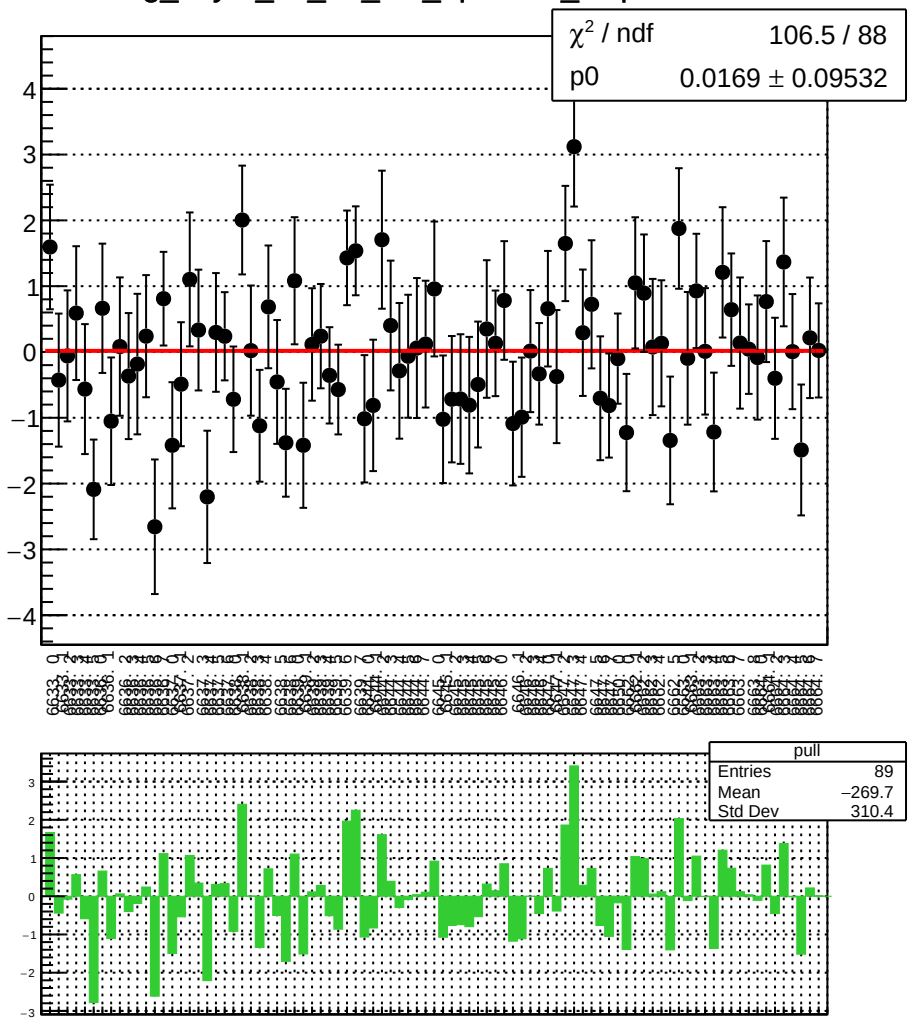

pull1D
Entries 89
Mean −0.01236
Std Dev 1.09

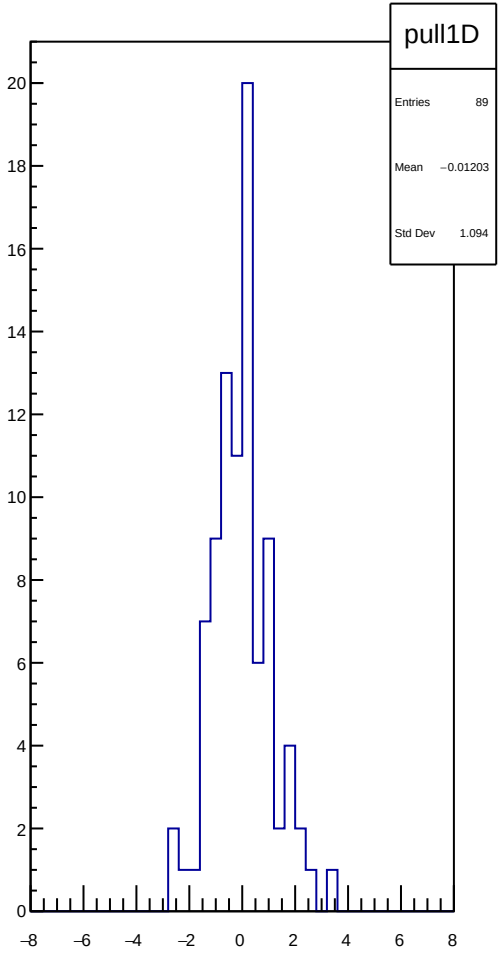

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 106.2 / 88
p0 −0.01001 ± 0.0891
pull
Entries 89
Mean −293.2
Std Dev 335.4

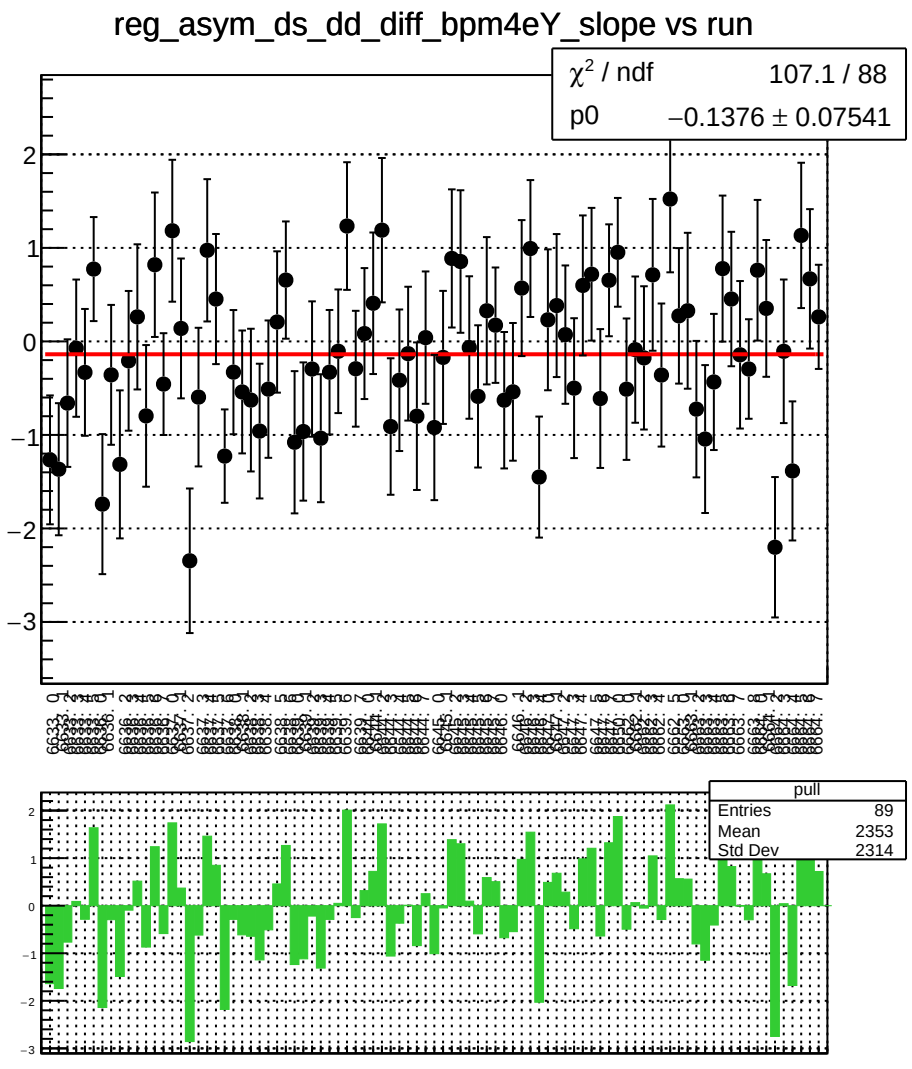

pull1D
Entries 89
Mean 0.01221
Std Dev 1.092

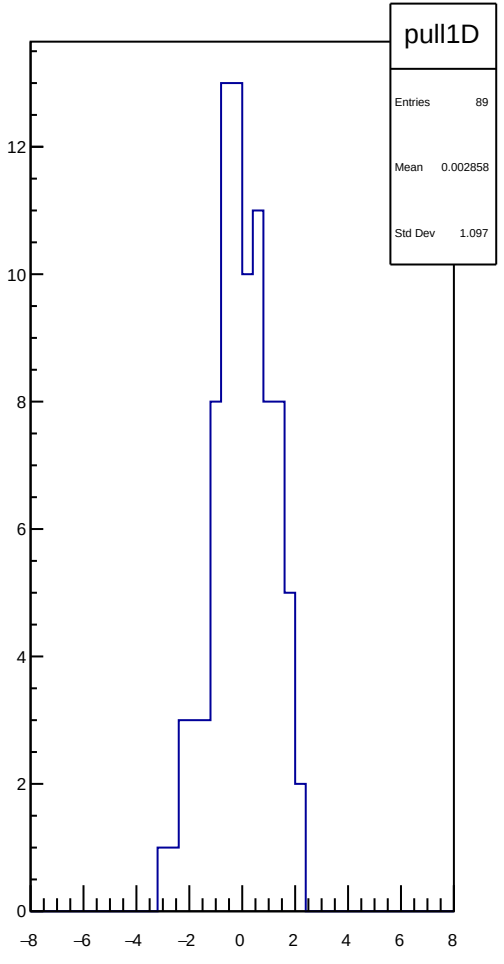

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 102.7 / 88
p0 0.1156 ± 0.06379
pull
Entries 89
Mean −1449
Std Dev 1488

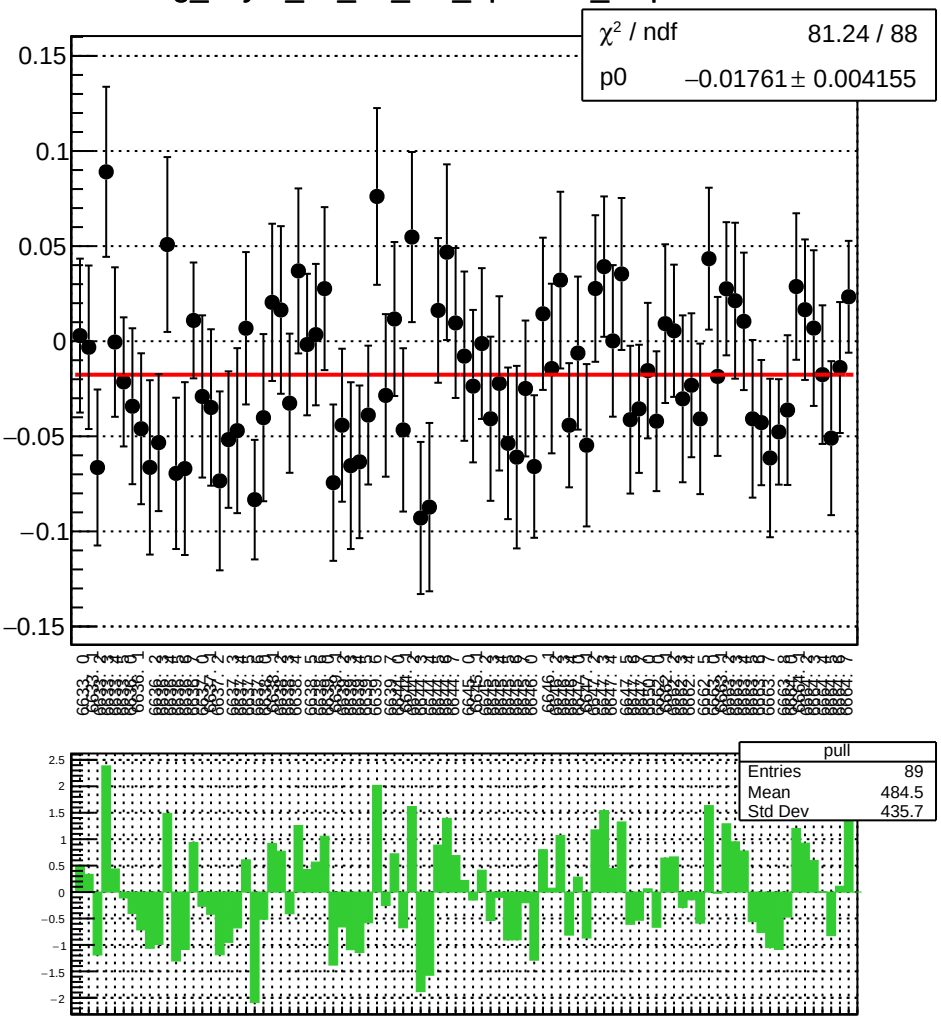

pull1D
Entries 89
Mean 0.004151
Std Dev 1.074

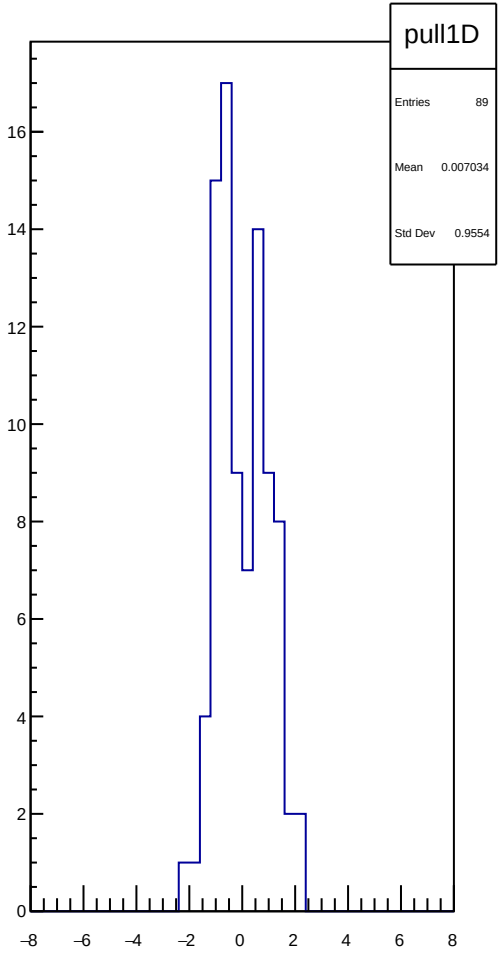

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 106.5 / 88
p0 0.0169 ± 0.09532
pull
Entries 89
Mean −269.7
Std Dev 310.4

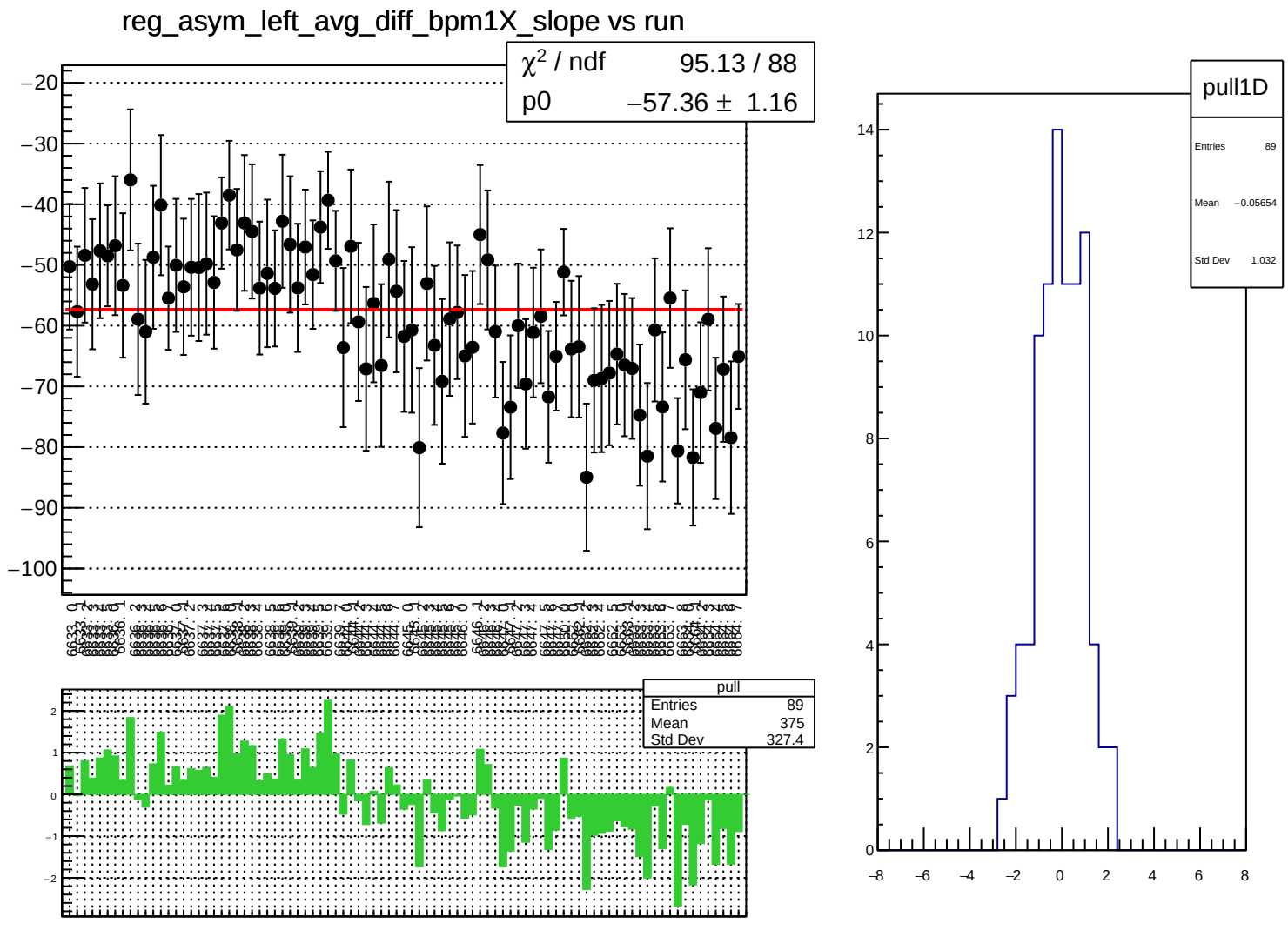

pull1D
Entries 89
Mean −0.01203
Std Dev 1.094

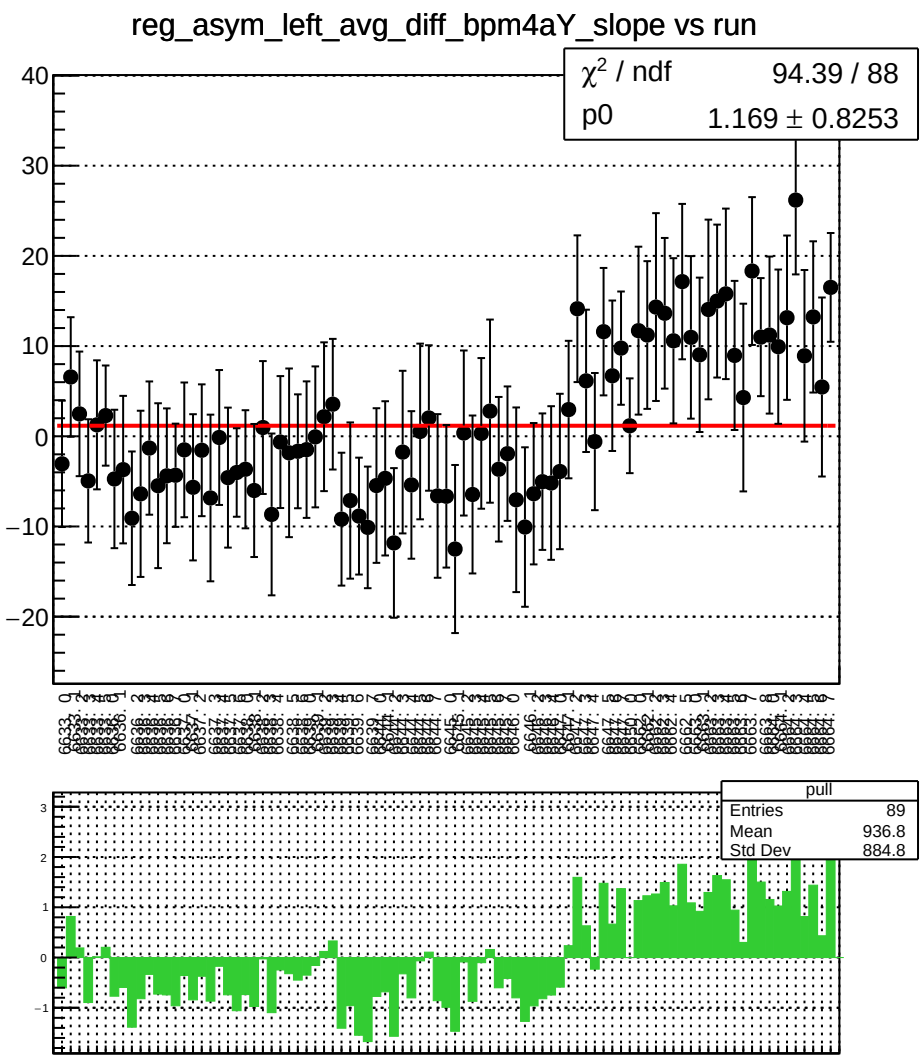

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 107.1 / 88
p0 −0.1376 ± 0.07541
pull
Entries 89
Mean 2353
Std Dev 2314

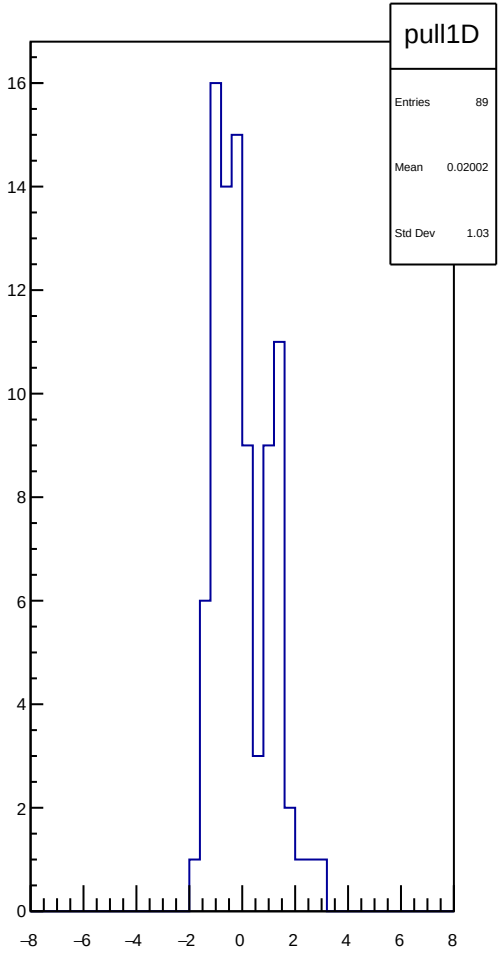

pull1D
Entries 89
Mean 0.002858
Std Dev 1.097

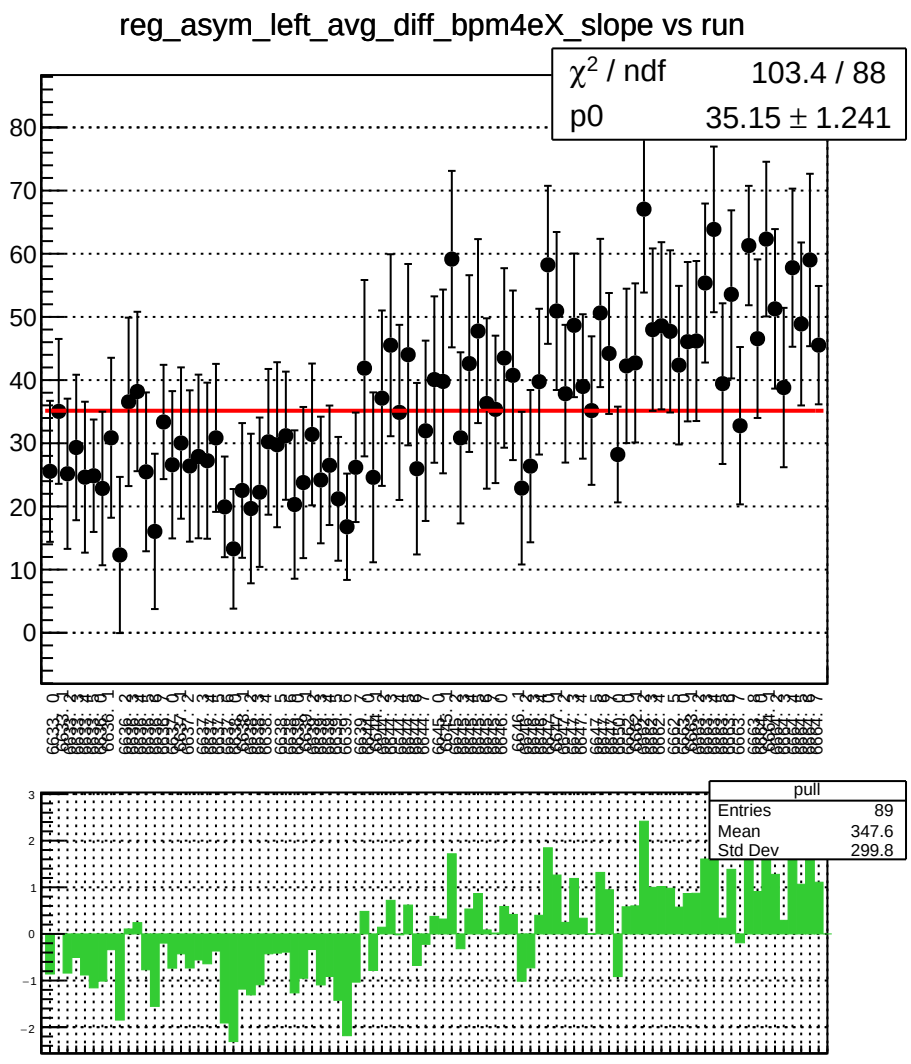

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 81.24 / 88
p0 −0.01761 ± 0.004155
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull
Entries 89
Mean 484.5
Std Dev 435.7
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

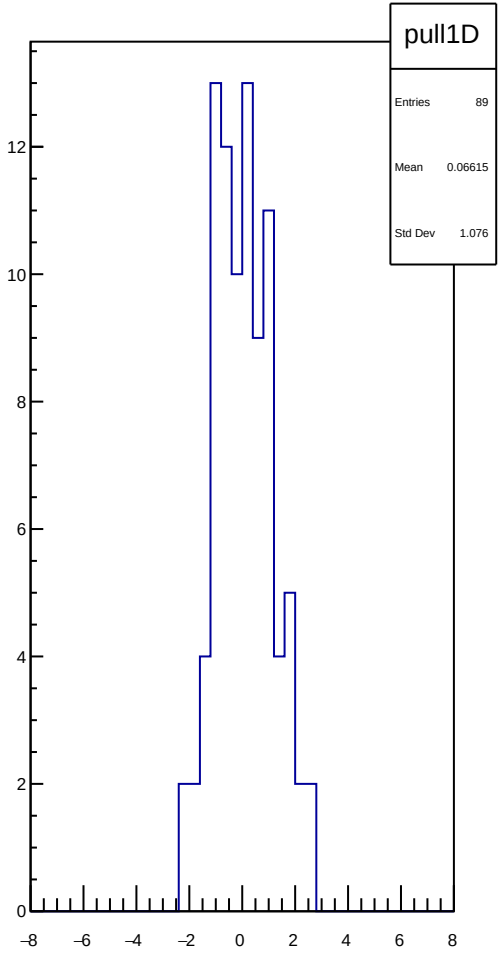

pull1D
Entries 89
Mean 0.007034
Std Dev 0.9554
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

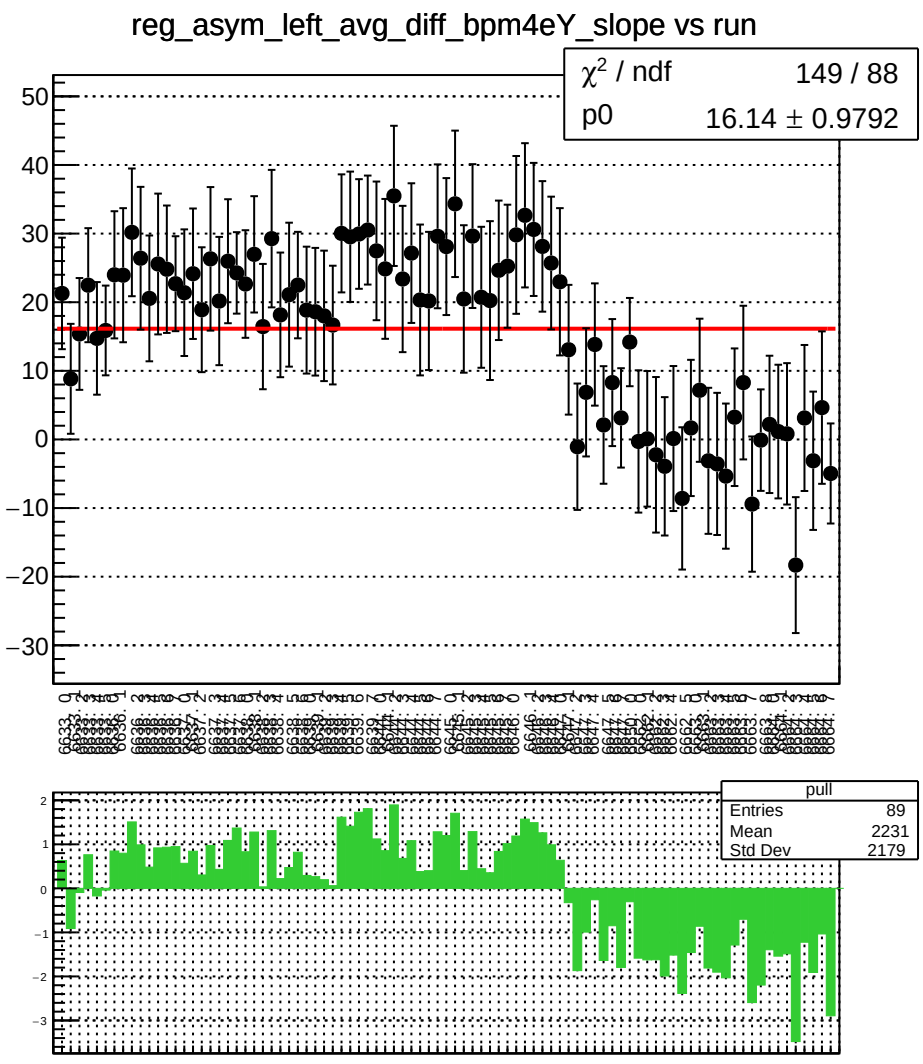

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 95.13 / 88
p0 −57.36 ± 1.16
pull
Entries 89
Mean 375
Std Dev 327.4
pull1D
Entries 89
Mean −0.05654
Std Dev 1.032

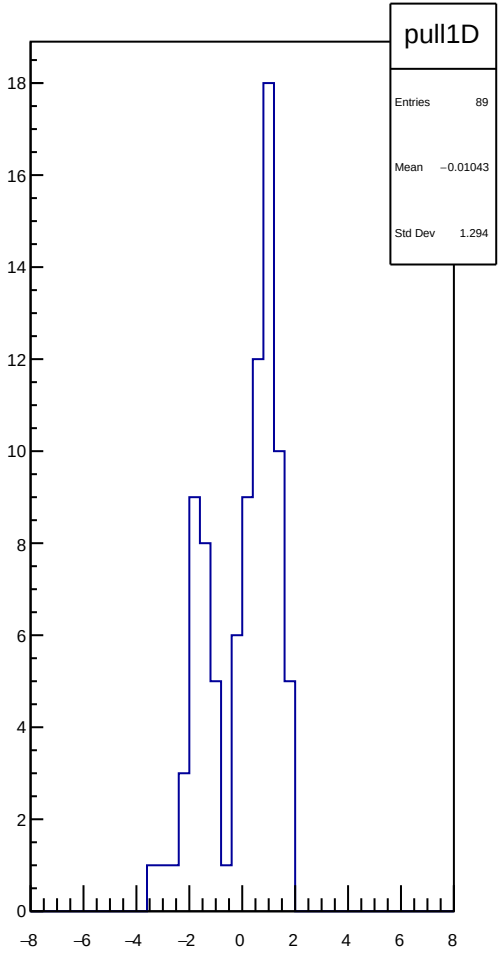

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 94.39 / 88
p0 1.169 ± 0.8253
pull
Entries 89
Mean 936.8
Std Dev 884.8

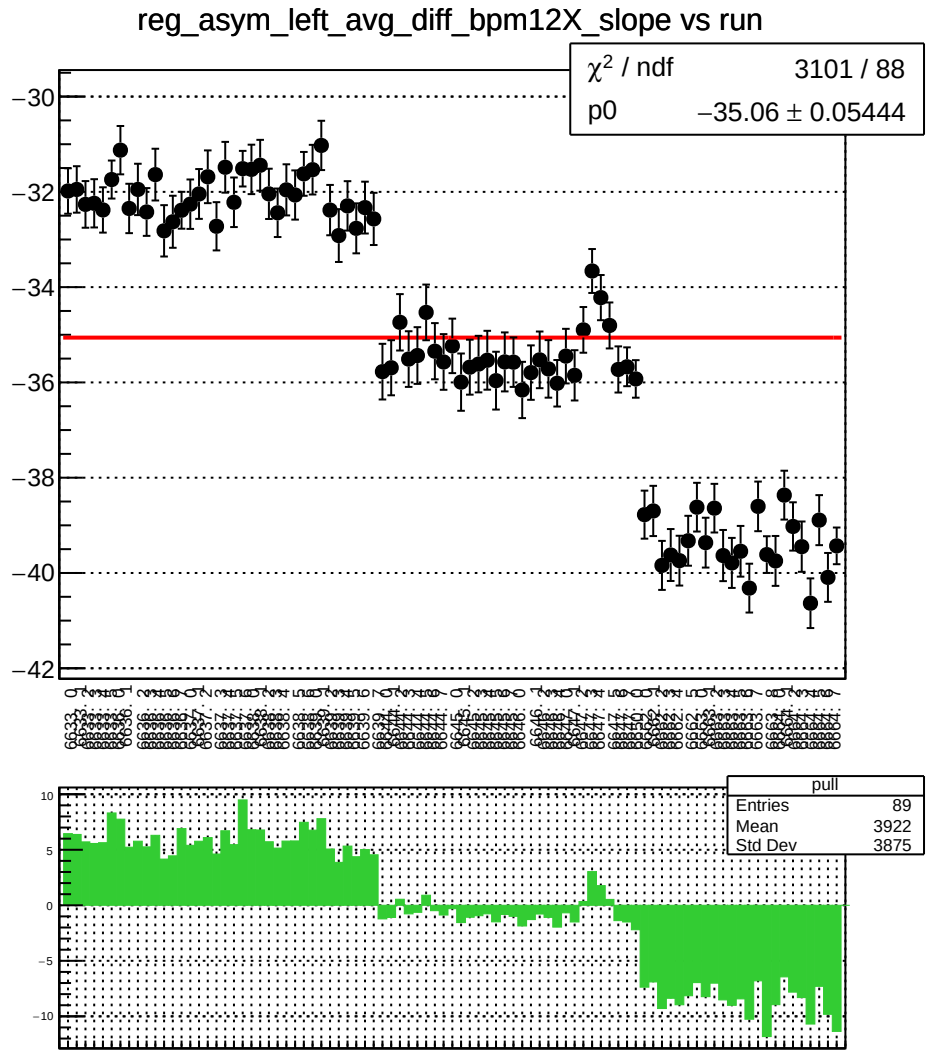

pull1D
Entries 89
Mean 0.02002
Std Dev 1.03

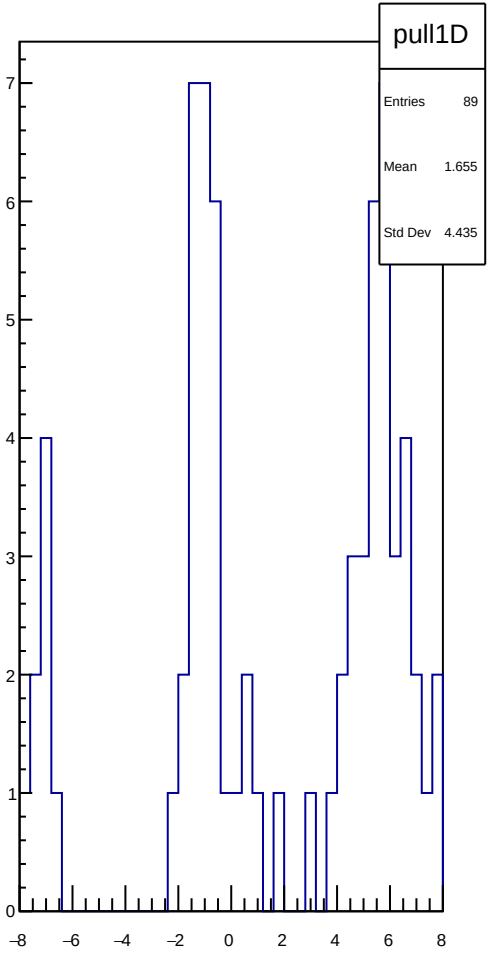

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ^2 / ndf 103.4 / 88
p0 35.15 ± 1.241
pull
Entries 89
Mean 347.6
Std Dev 299.8

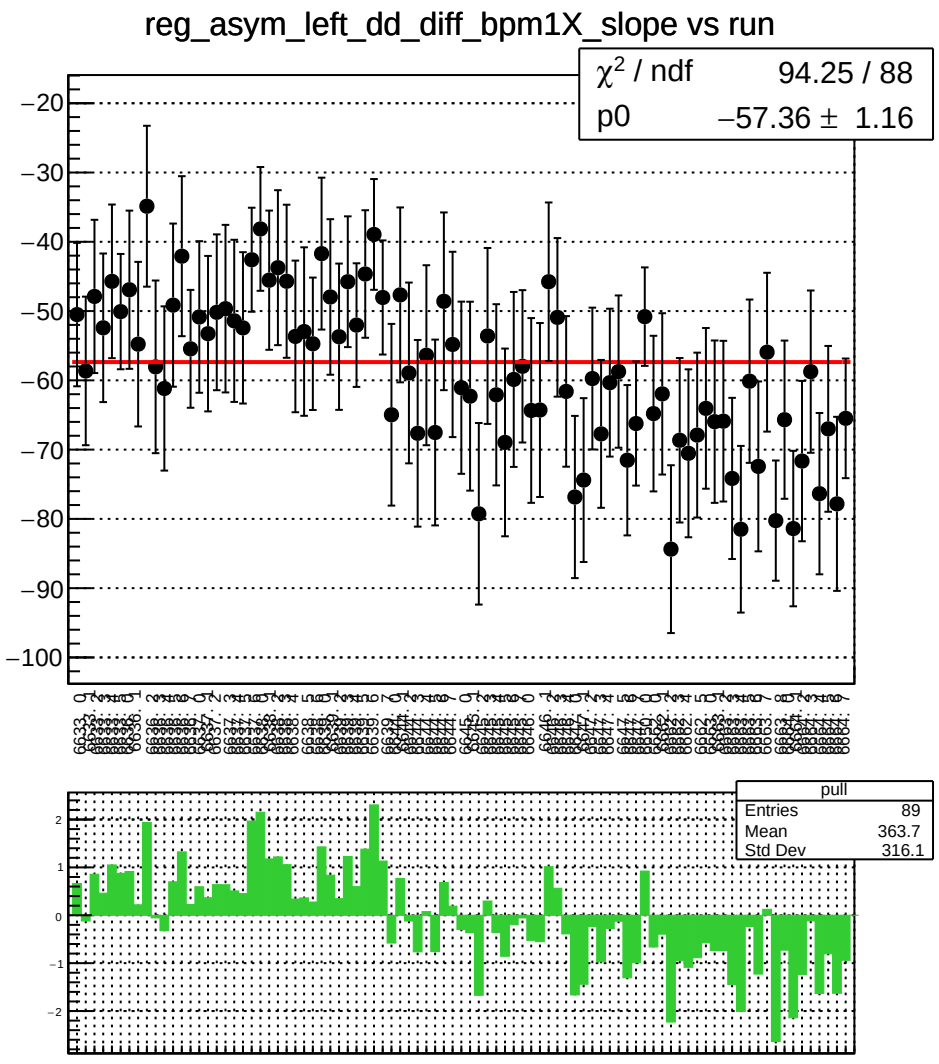

pull1D
Entries 89
Mean 0.06615
Std Dev 1.076

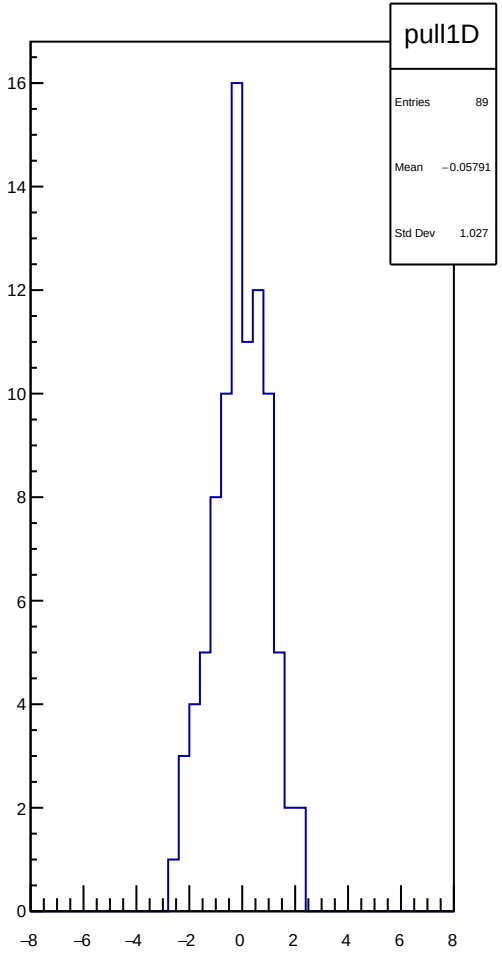

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 149 / 88
p0 16.14 ± 0.9792
pull
Entries 89
Mean 2231
Std Dev 2179

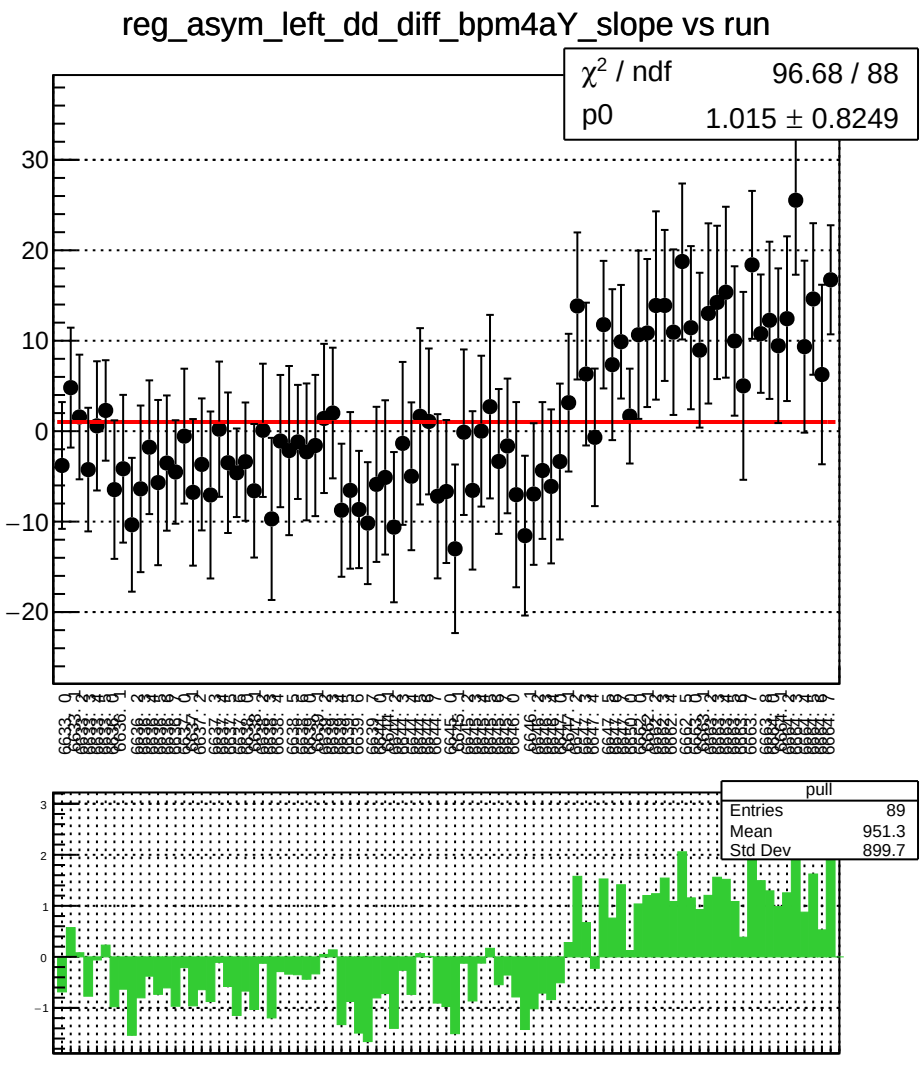

pull1D
Entries 89
Mean −0.01043
Std Dev 1.294

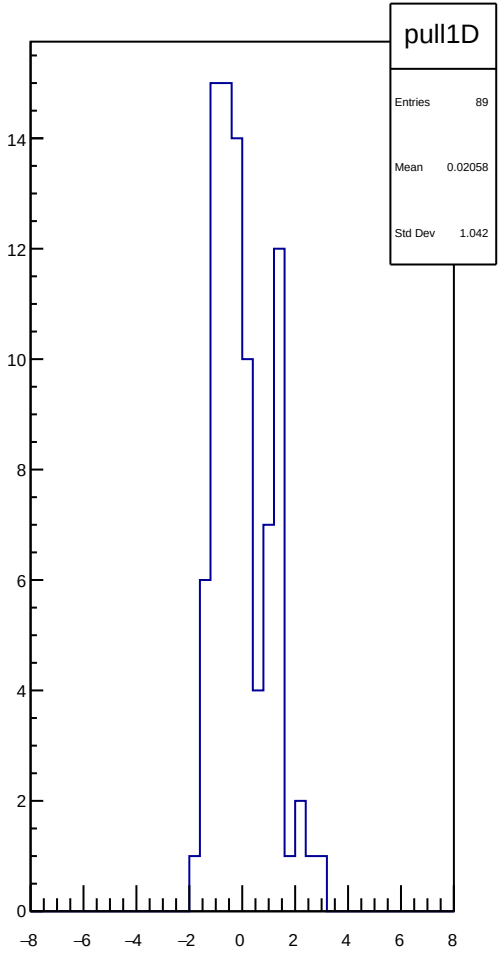

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 3101 / 88
p0 −35.06 ± 0.05444
pull
Entries 89
Mean 3922
Std Dev 3875

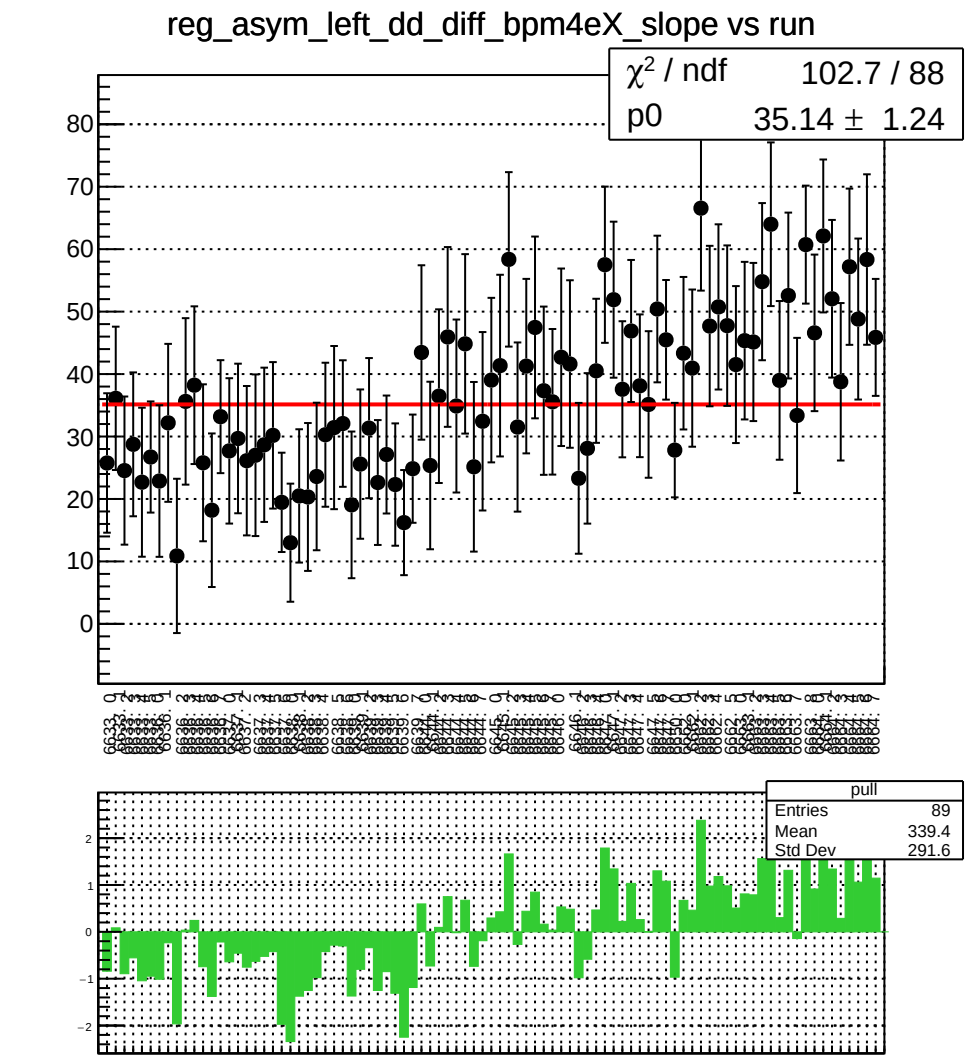

pull1D
Entries 89
Mean 1.655
Std Dev 4.435

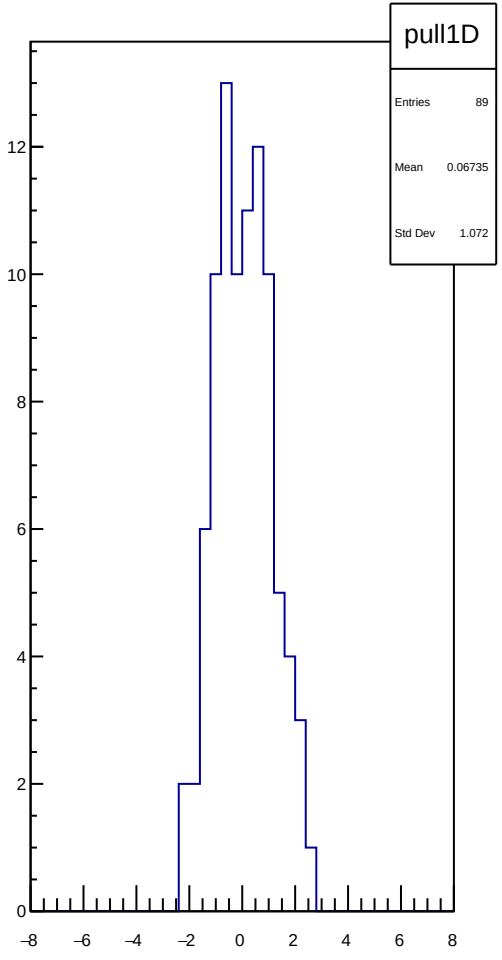

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 94.25 / 88
p0 −57.36 ± 1.16
pull
Entries 89
Mean 363.7
Std Dev 316.1

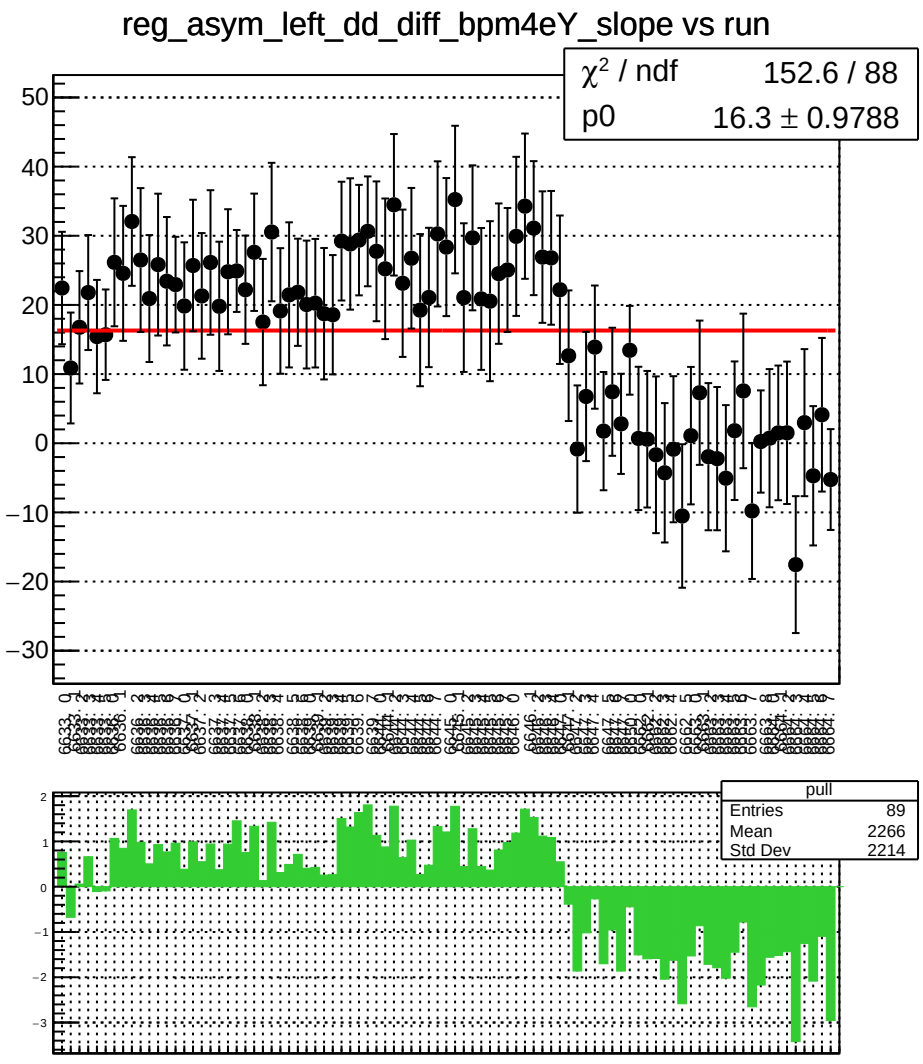

pull1D
Entries 89
Mean −0.05791
Std Dev 1.027

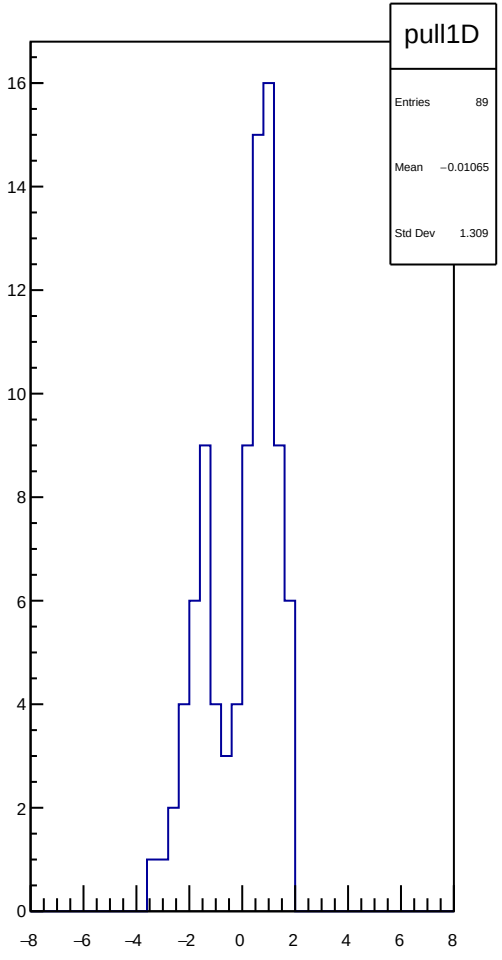

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 96.68 / 88
p0 1.015 ± 0.8249
pull
Entries 89
Mean 951.3
Std Dev 899.7

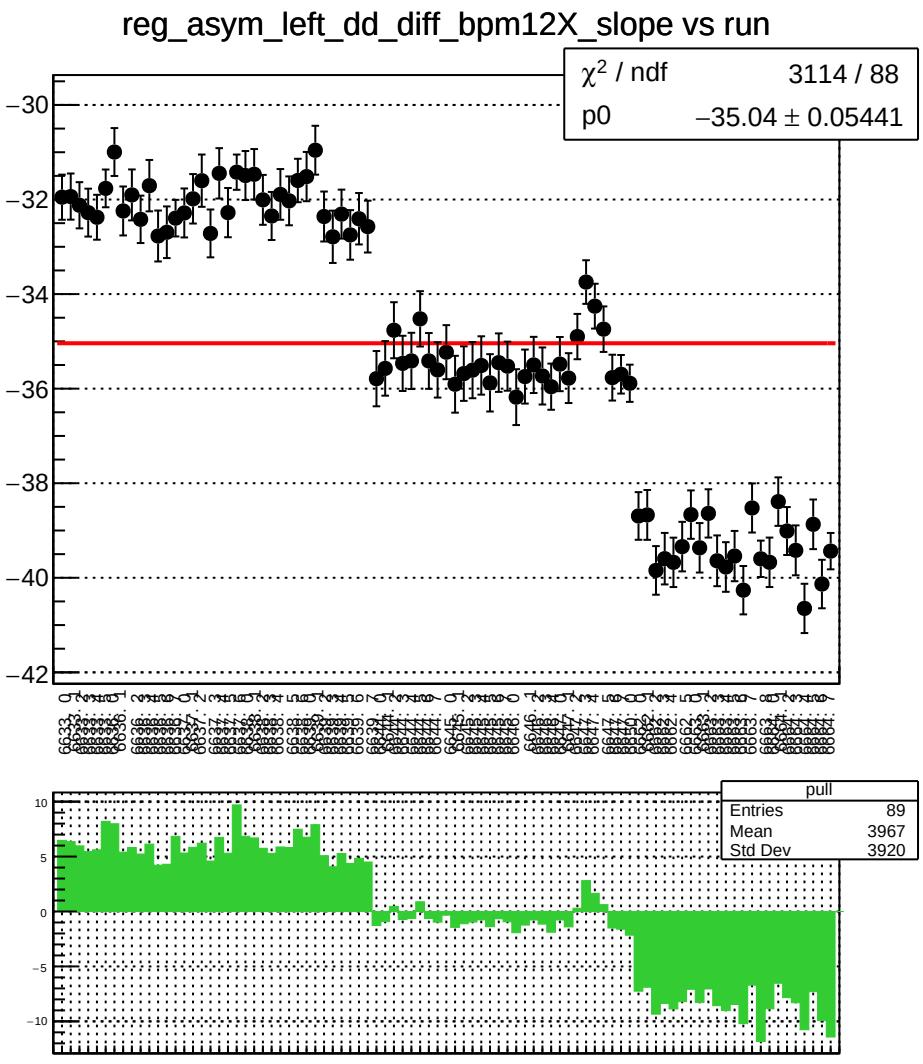

pull1D
Entries 89
Mean 0.02058
Std Dev 1.042

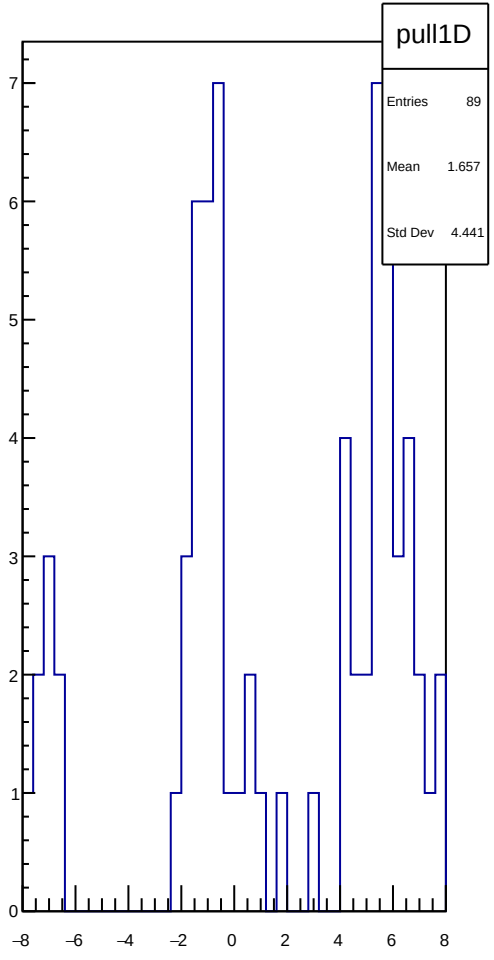

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 102.7 / 88
p0 35.14 ± 1.24
pull
Entries 89
Mean 339.4
Std Dev 291.6

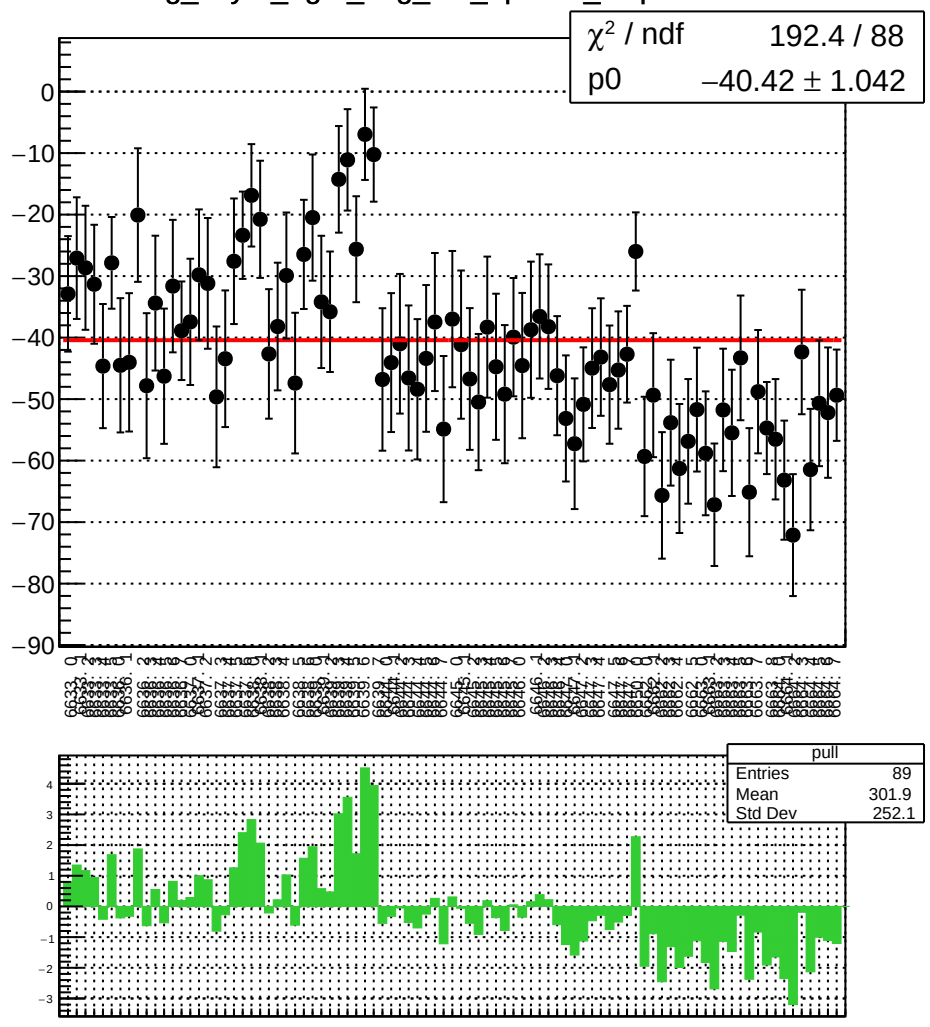

pull1D
Entries 89
Mean 0.06735
Std Dev 1.072

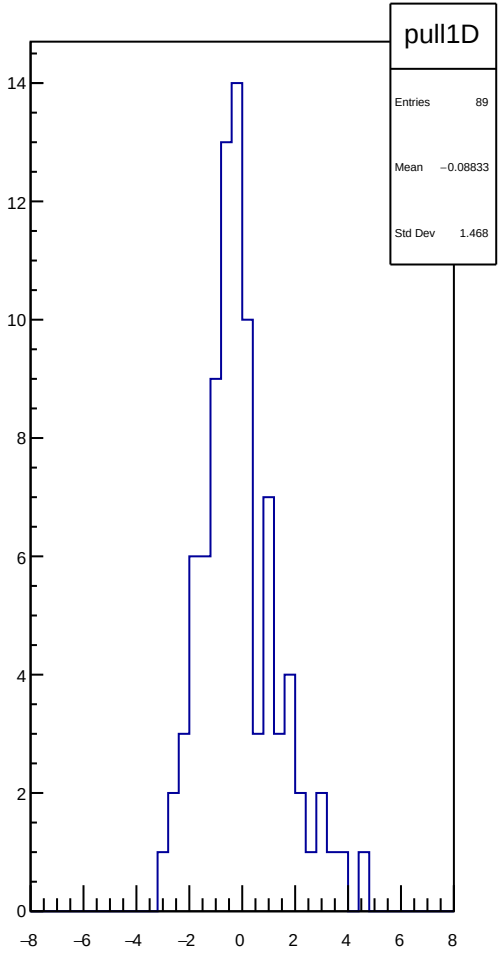

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 152.6 / 88
p0 16.3 ± 0.9788
pull
Entries 89
Mean 2266
Std Dev 2214

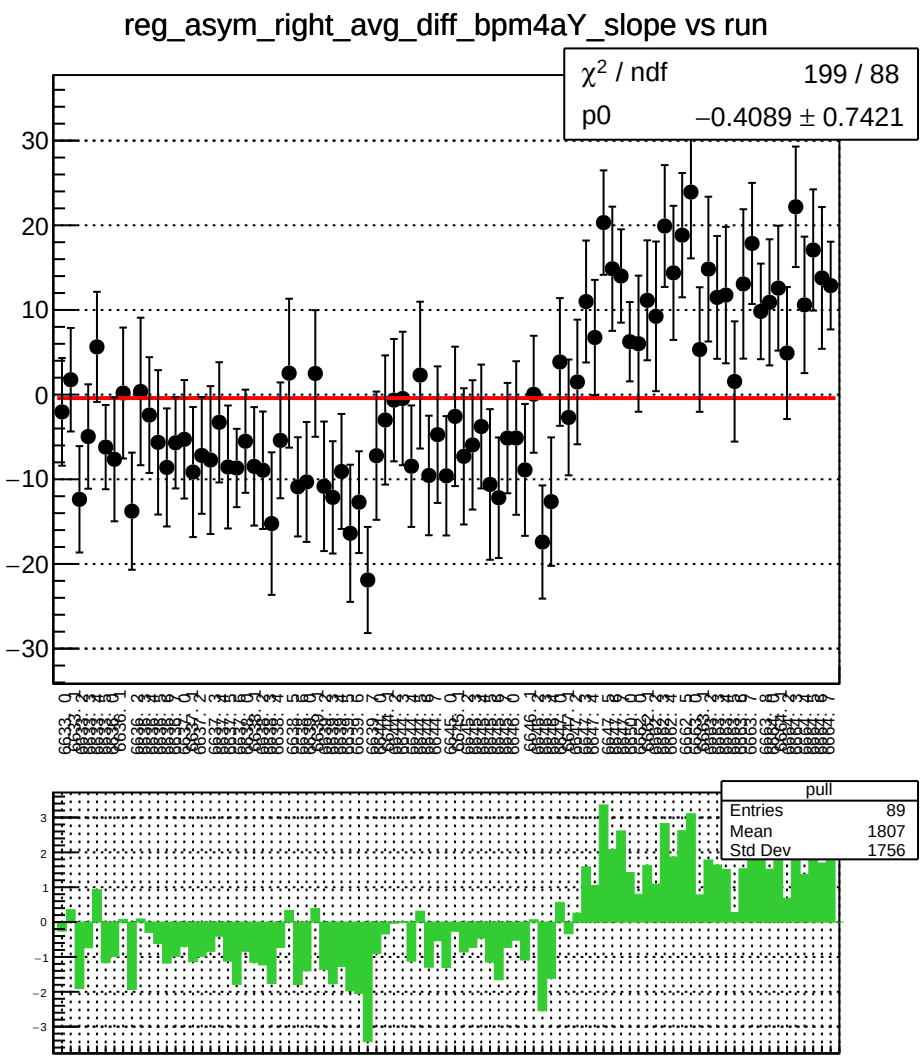

pull1D
Entries 89
Mean −0.01065
Std Dev 1.309

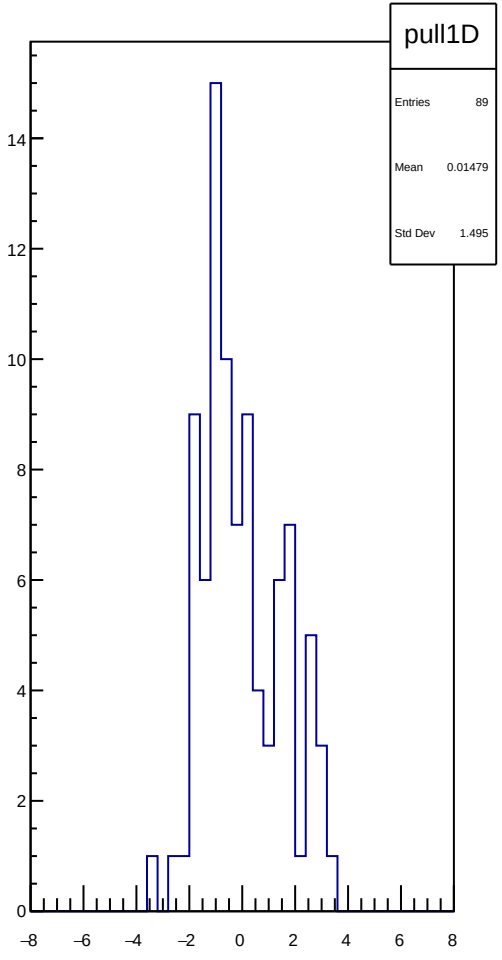

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 3114 / 88
p0 −35.04 ± 0.05441
pull
Entries 89
Mean 3967
Std Dev 3920

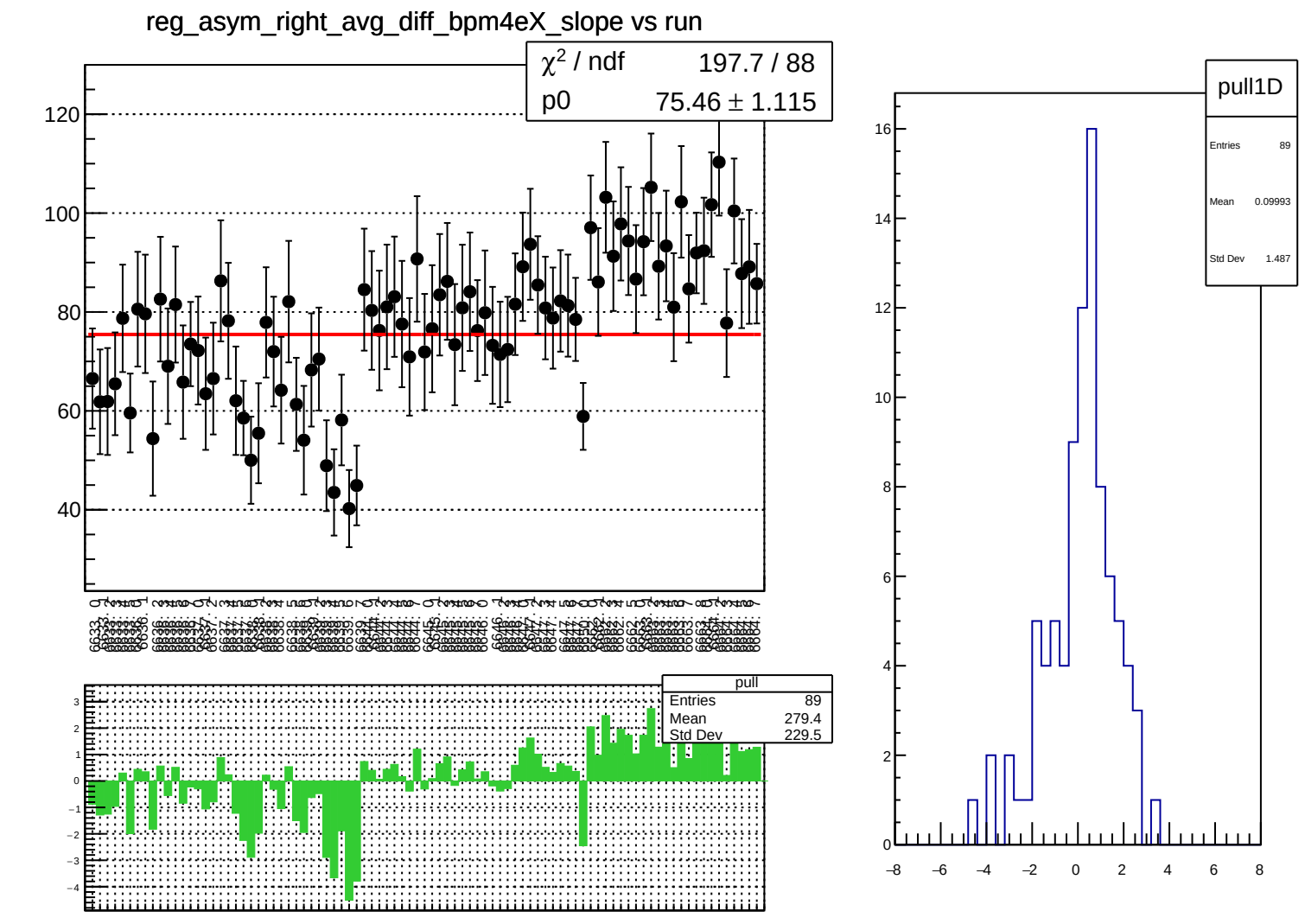

pull1D
Entries 89
Mean 1.657
Std Dev 4.441

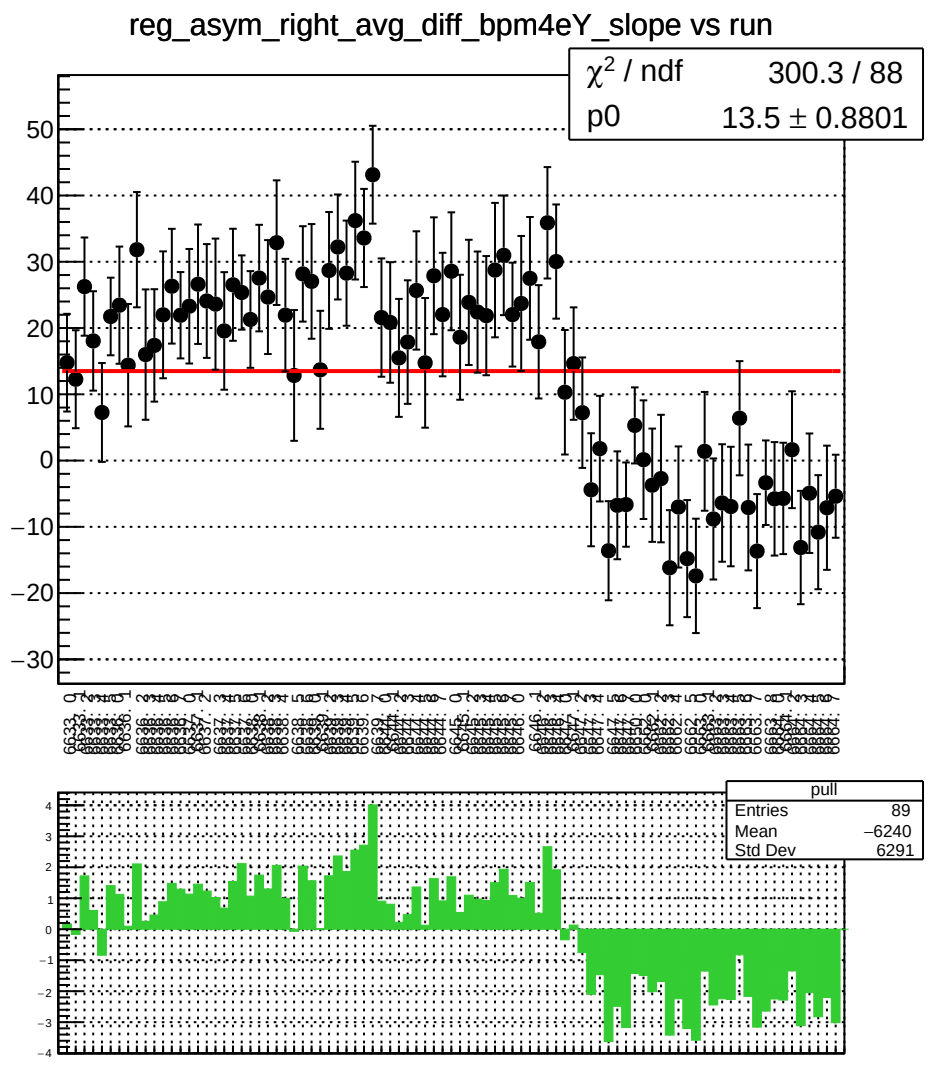

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 192.4 / 88
p0 −40.42 ± 1.042
pull
Entries 89
Mean 301.9
Std Dev 252.1

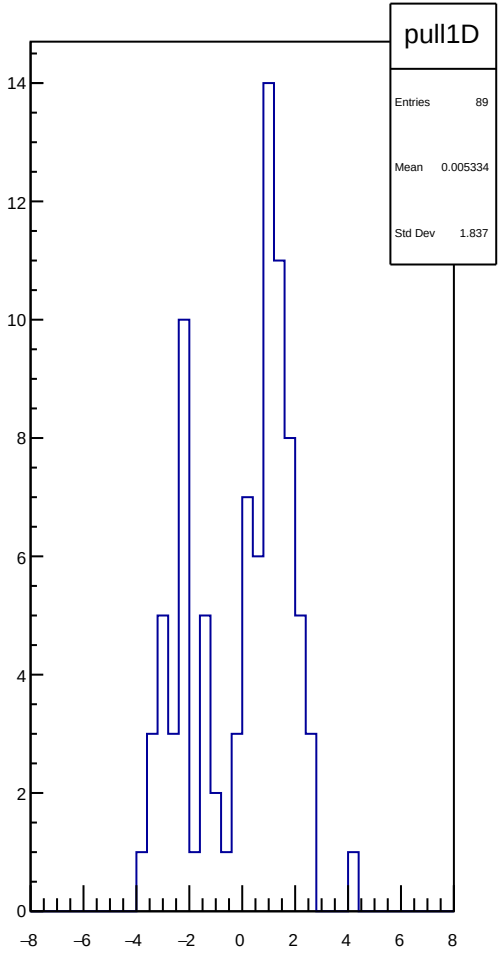

pull1D
Entries 89
Mean −0.08833
Std Dev 1.468

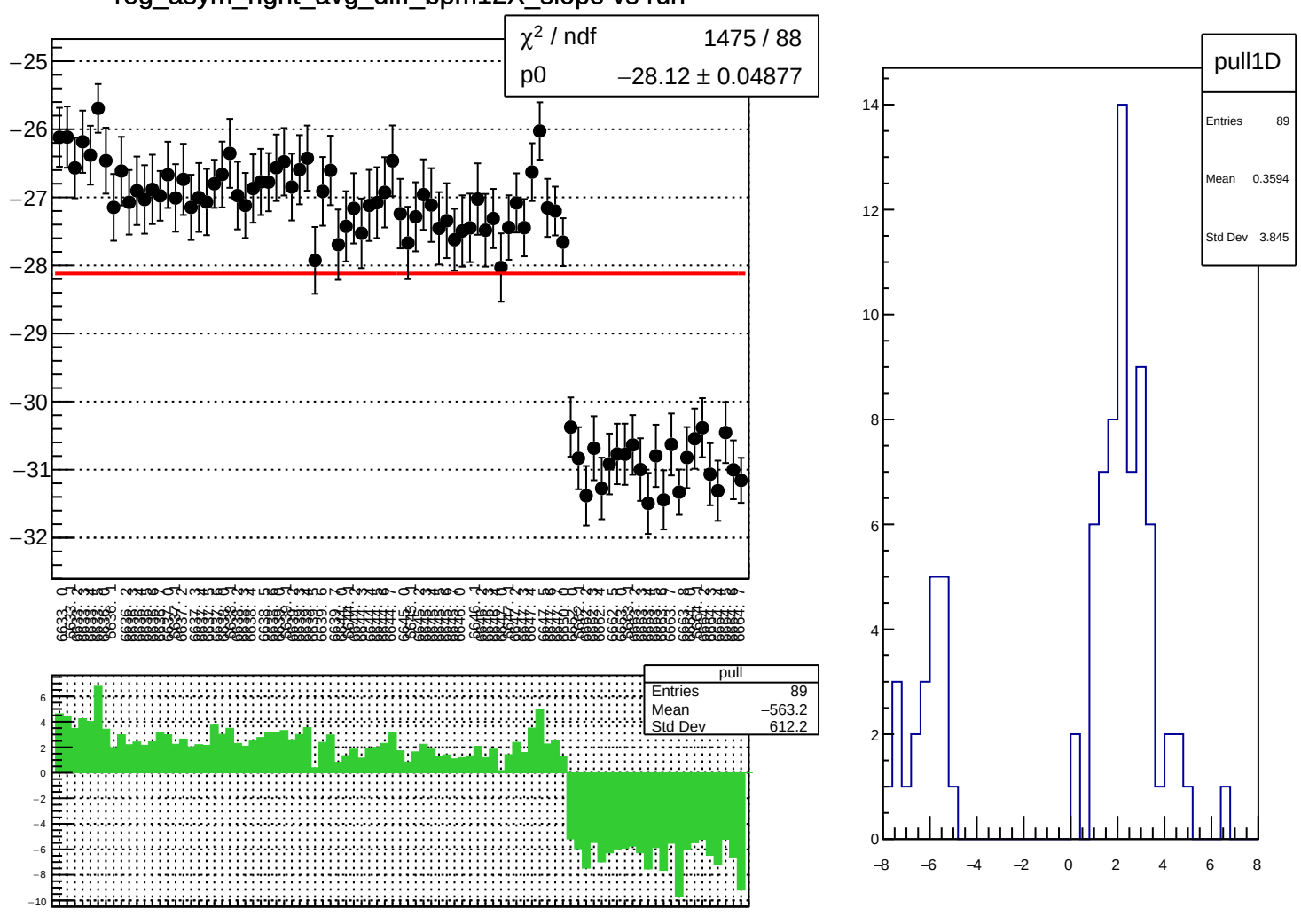

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 199 / 88
p0 −0.4089 ± 0.7421
pull
Entries 89
Mean 1807
Std Dev 1756

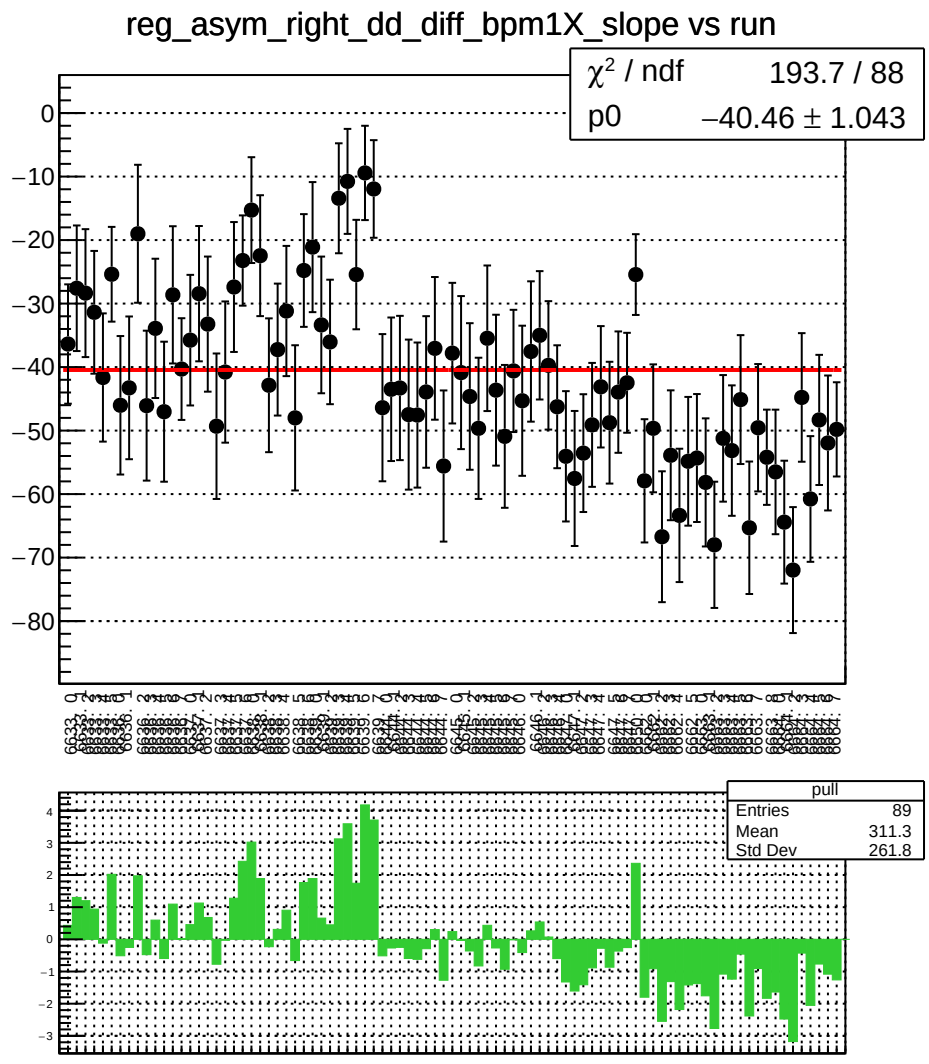

pull1D
Entries 89
Mean 0.01479
Std Dev 1.495

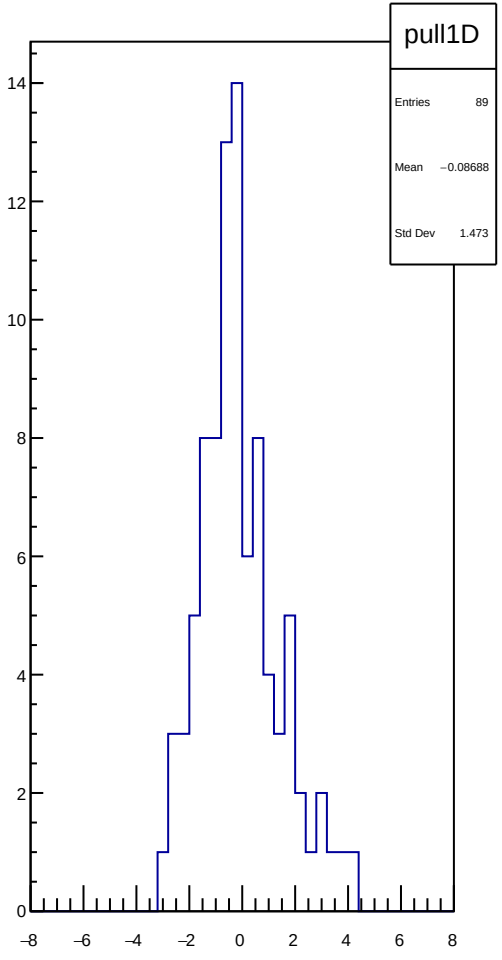

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 197.7 / 88
p0 75.46 ± 1.115
120
100
80
60
40
pull
Entries 89
Mean 279.4
Std Dev 229.5
3
2
1
0
−1
−2
−3
−4
pull1D
Entries 89
Mean 0.09993
Std Dev 1.487
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

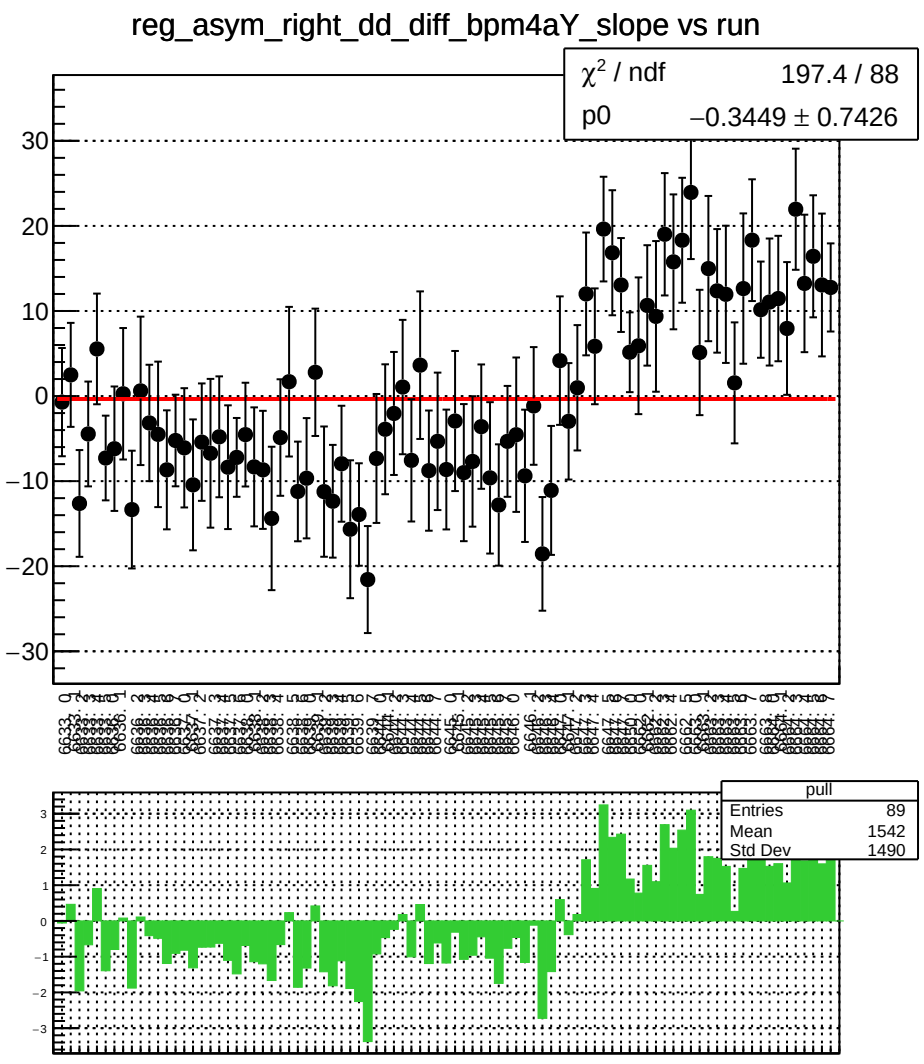

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 300.3 / 88
p0 13.5 ± 0.8801
pull
Entries 89
Mean −6240
Std Dev 6291

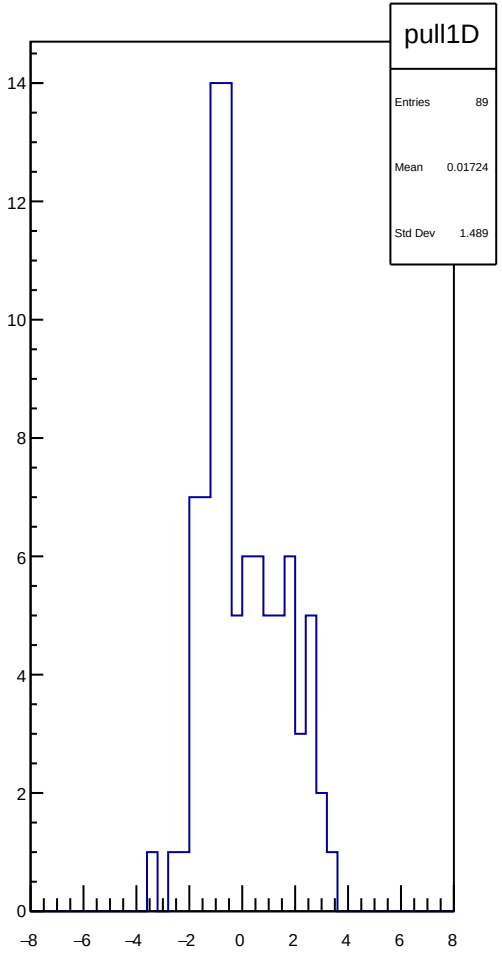

pull1D
Entries 89
Mean 0.005334
Std Dev 1.837

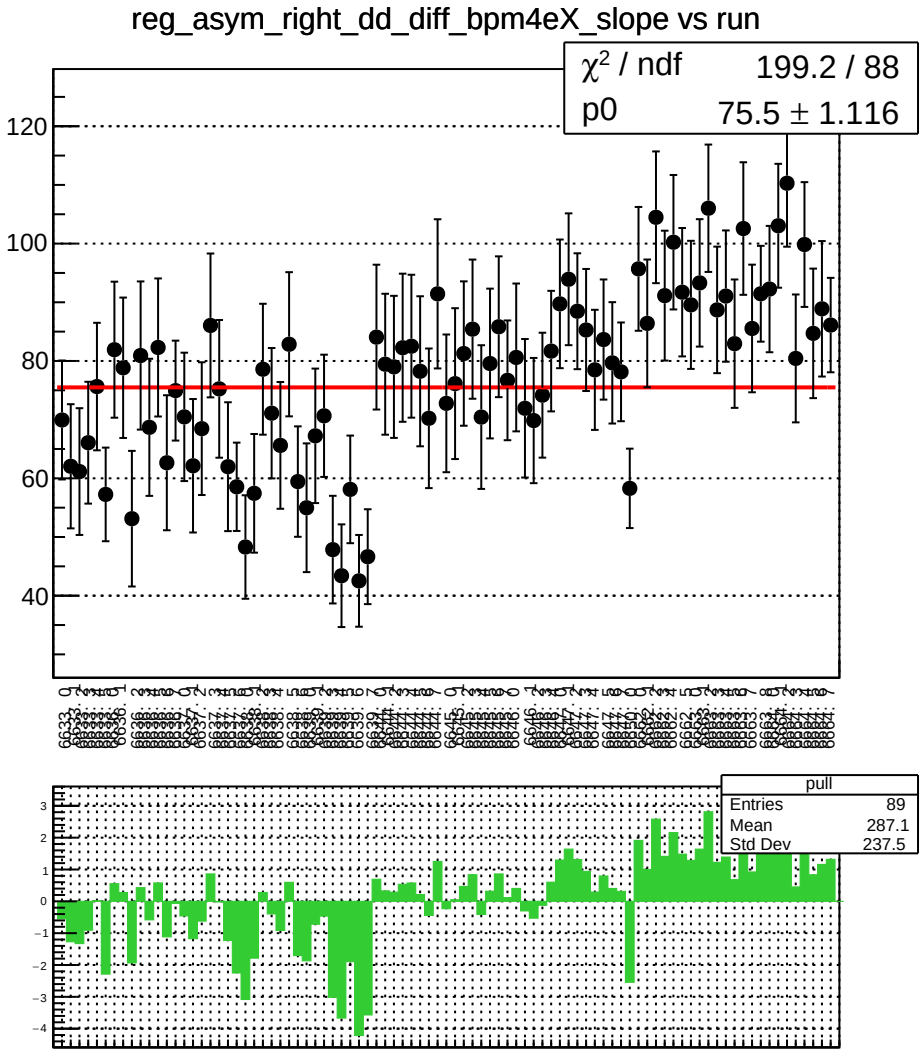

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 1475 / 88
p0 −28.12 ± 0.04877
pull
Entries 89
Mean −563.2
Std Dev 612.2
pull1D
Entries 89
Mean 0.3594
Std Dev 3.845

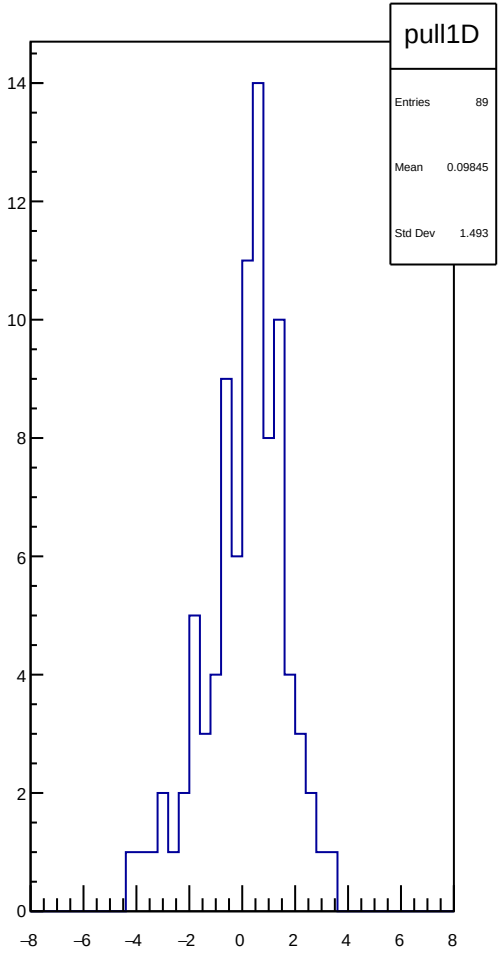

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 193.7 / 88
p0 −40.46 ± 1.043
pull
Entries 89
Mean 311.3
Std Dev 261.8

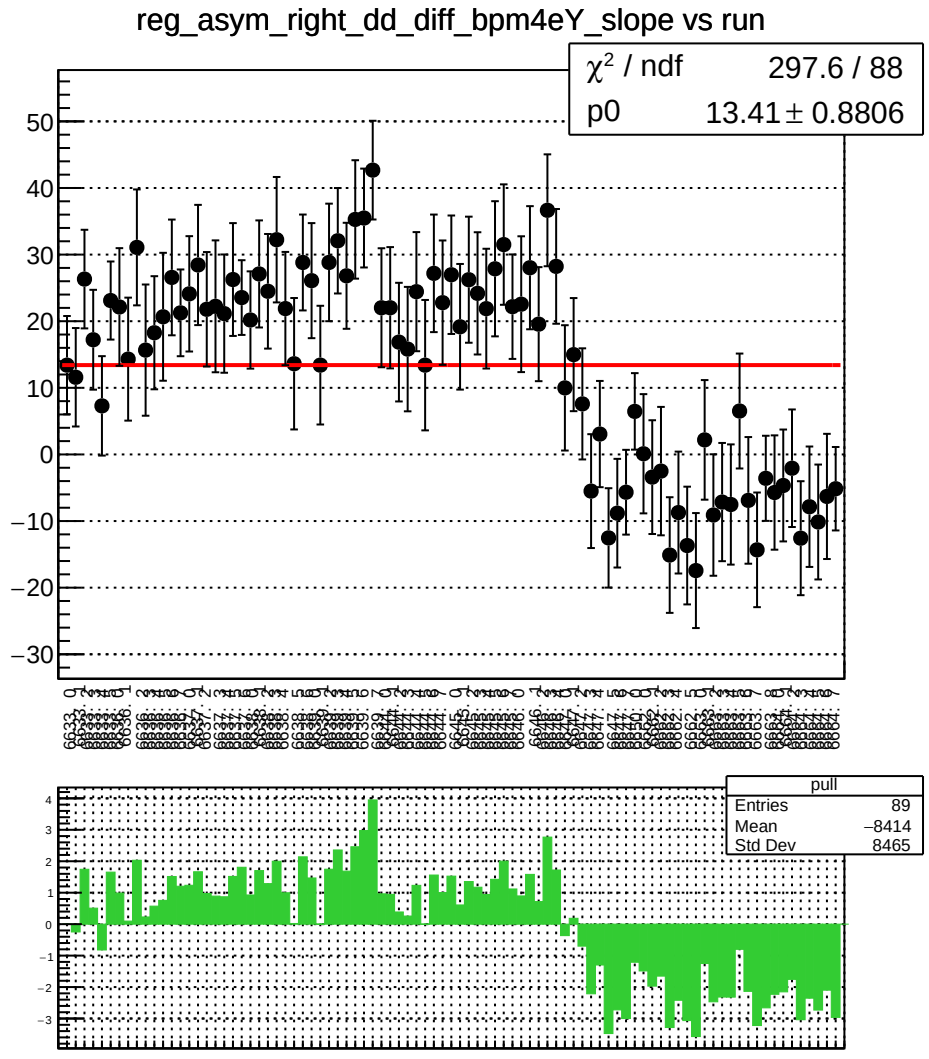

pull1D
Entries 89
Mean −0.08688
Std Dev 1.473

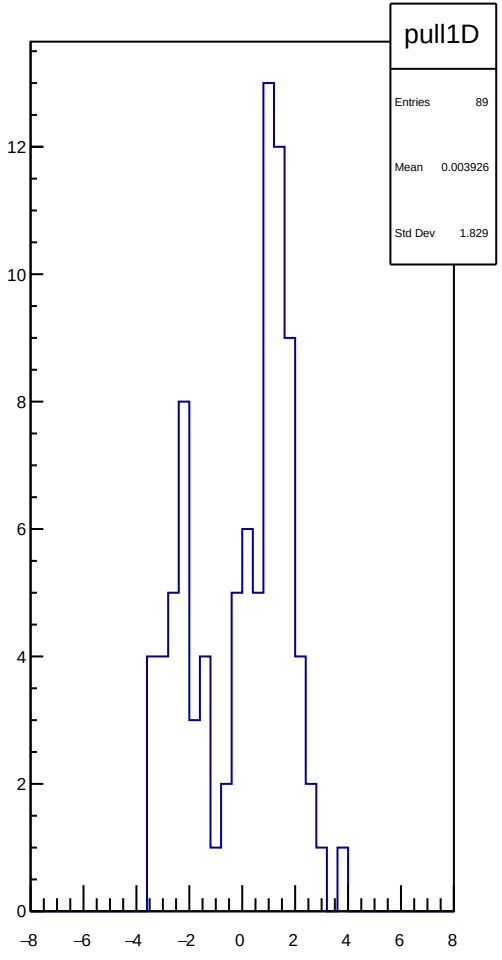

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 197.4 / 88
p0 −0.3449 ± 0.7426
pull
Entries 89
Mean 1542
Std Dev 1490

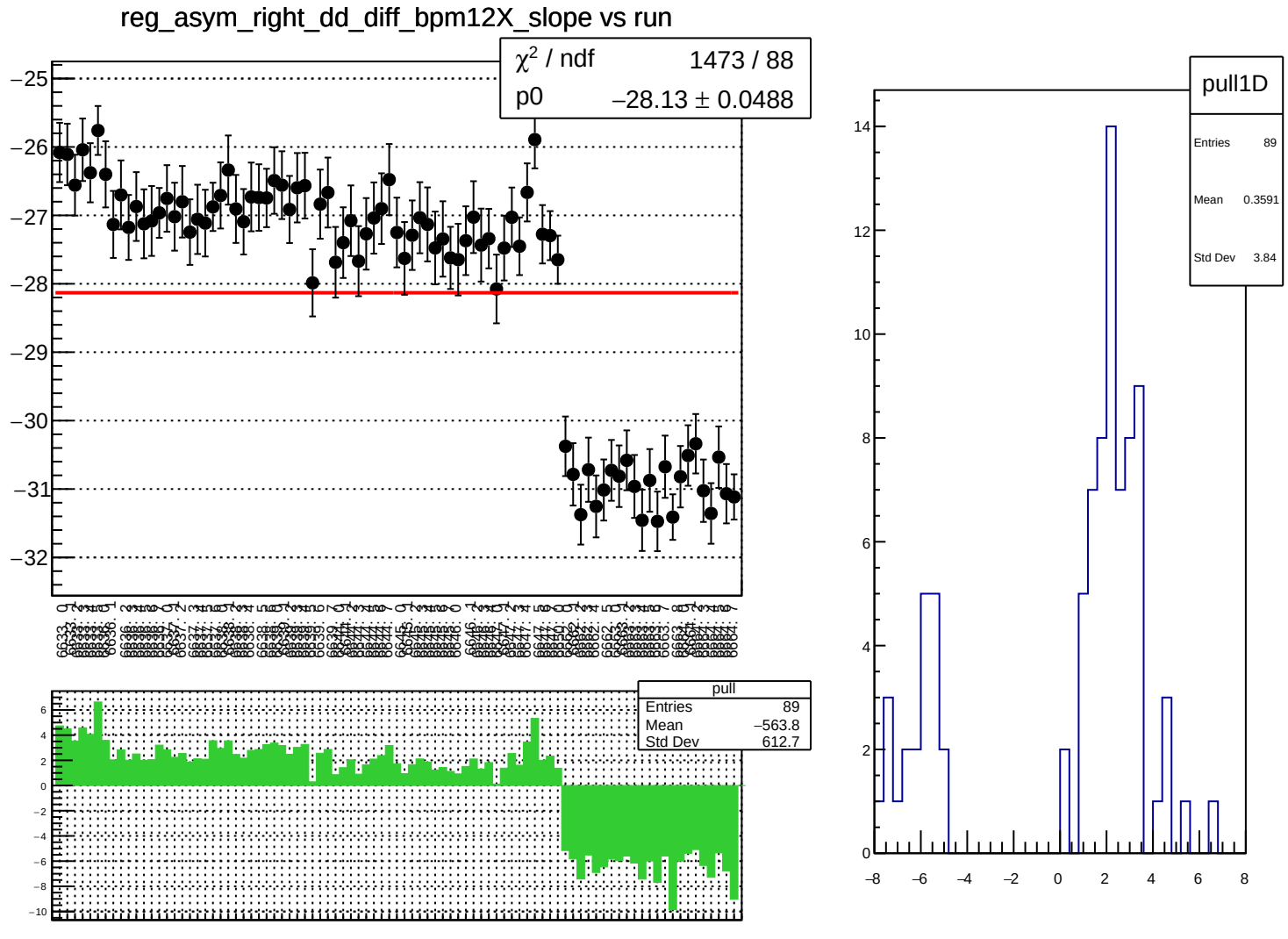

pull1D
Entries 89
Mean 0.01724
Std Dev 1.489

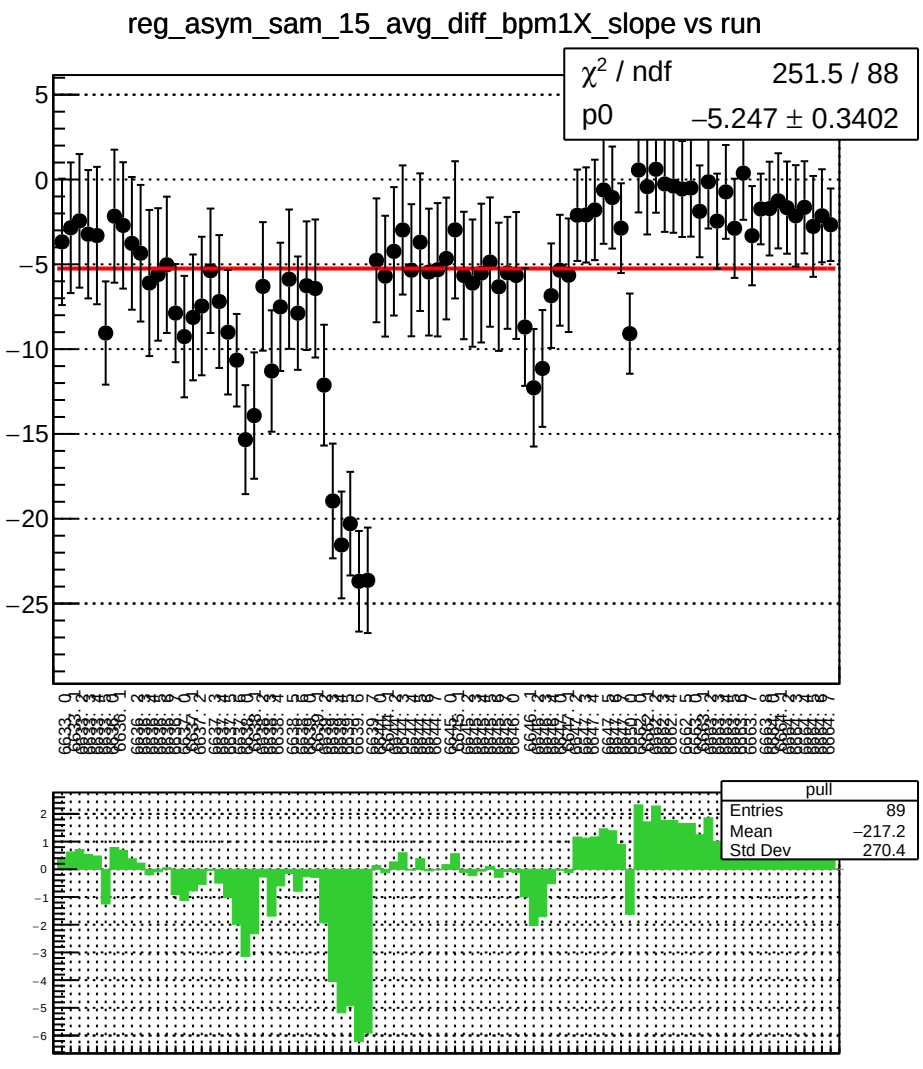

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 199.2 / 88
p0 75.5 ± 1.116
120
100
80
60
40
pull
Entries 89
Mean 287.1
Std Dev 237.5
3
2
1
0
−1
−2
−3
−4

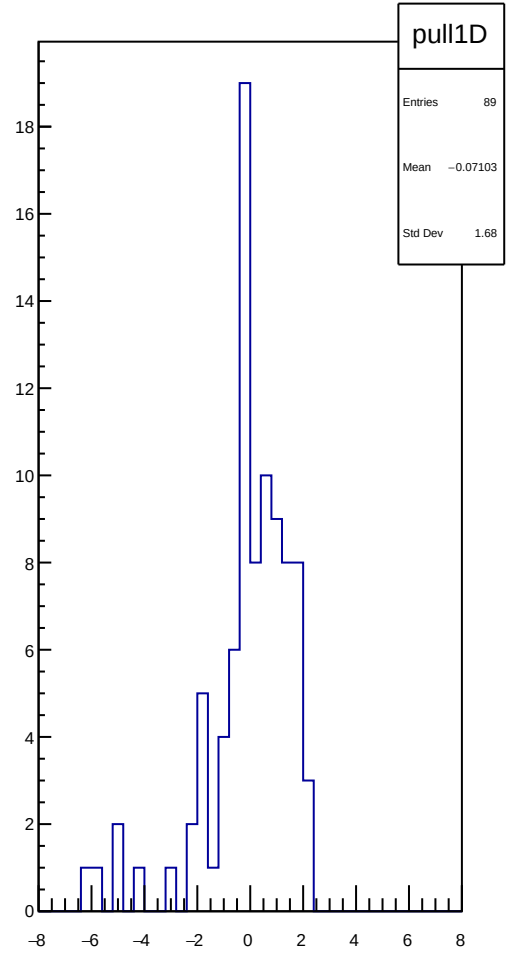

pull1D
Entries 89
Mean 0.09845
Std Dev 1.493
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

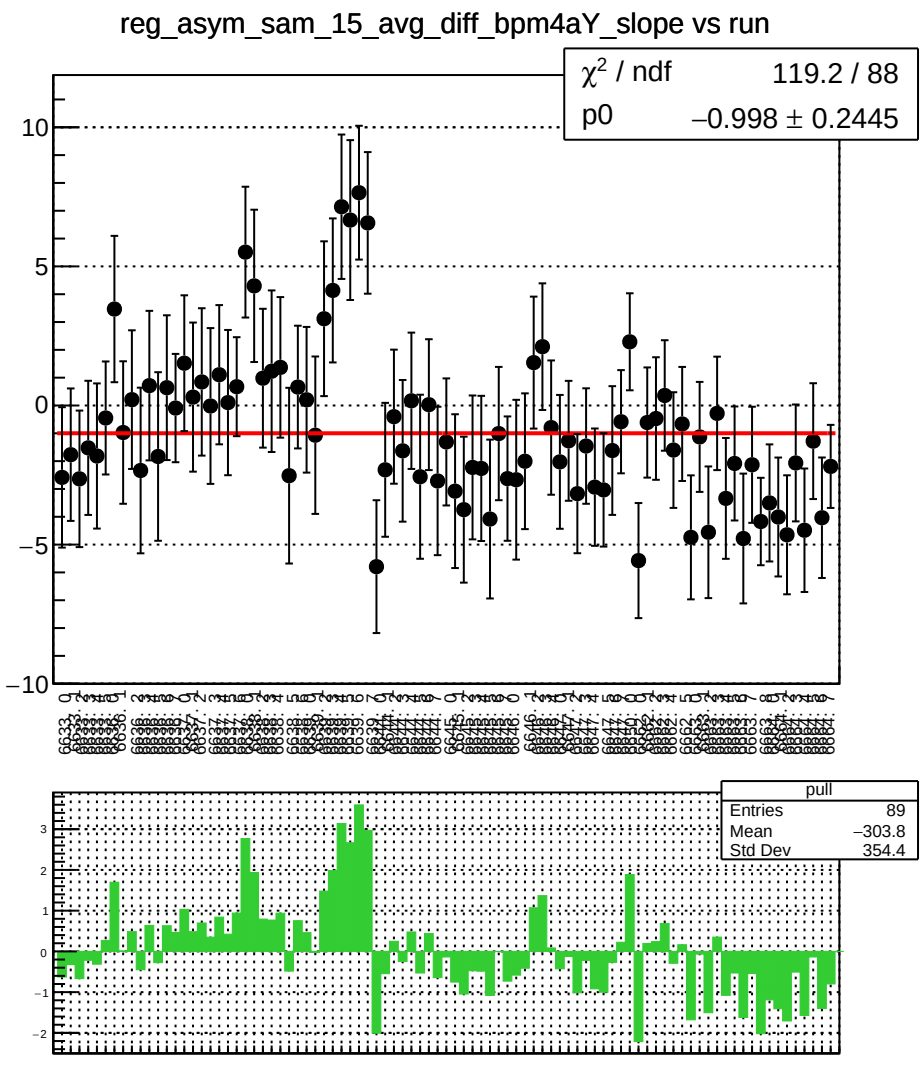

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 297.6 / 88
p0 13.41 ± 0.8806
pull
Entries 89
Mean −8414
Std Dev 8465

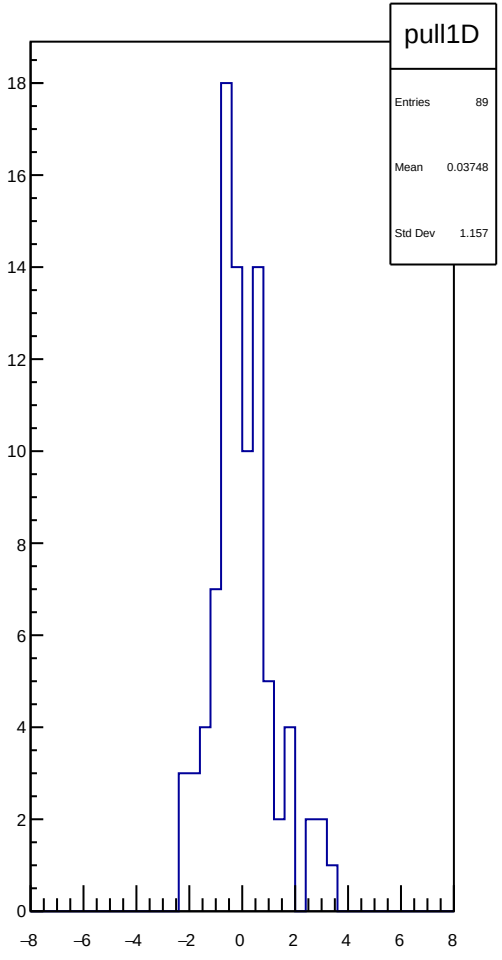

pull1D
Entries 89
Mean 0.003926
Std Dev 1.829

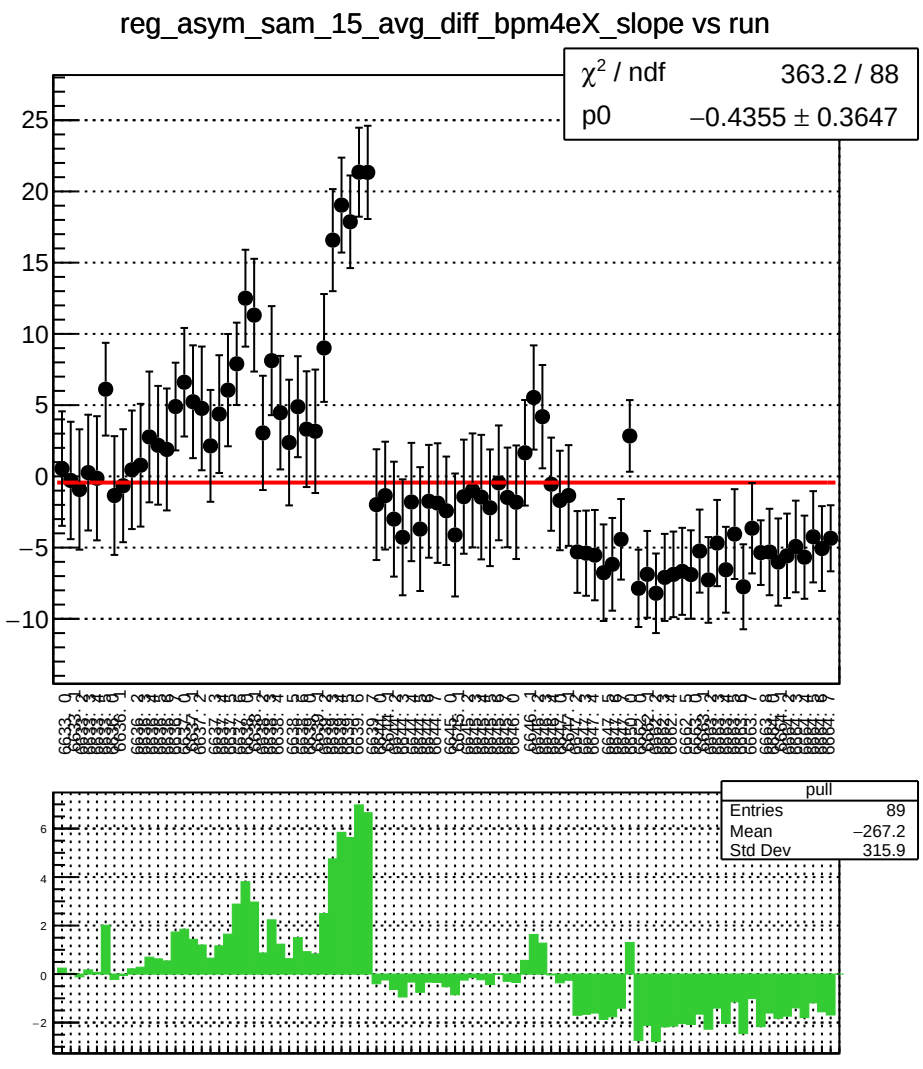

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 1473 / 88
p0 −28.13 ± 0.0488
pull
Entries 89
Mean −563.8
Std Dev 612.7
pull1D
Entries 89
Mean 0.3591
Std Dev 3.84

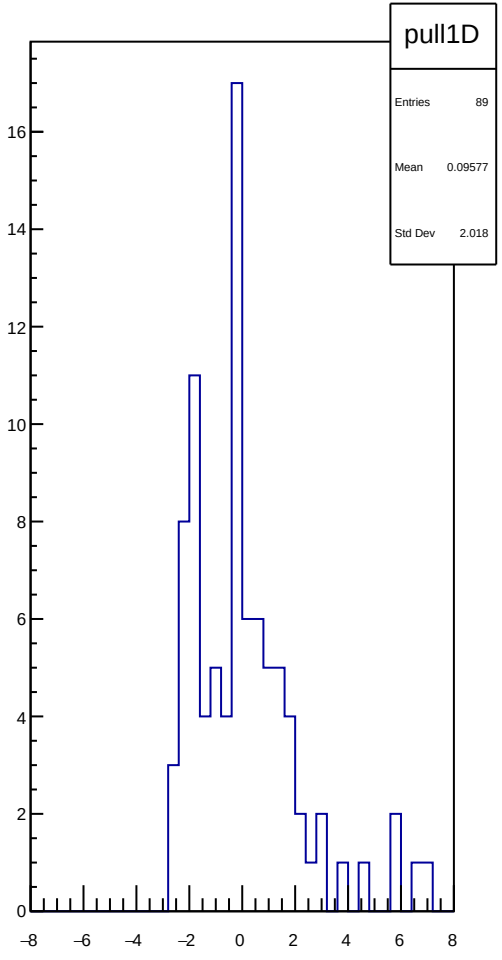

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 251.5 / 88
p0 −5.247 ± 0.3402
pull
Entries 89
Mean −217.2
Std Dev 270.4

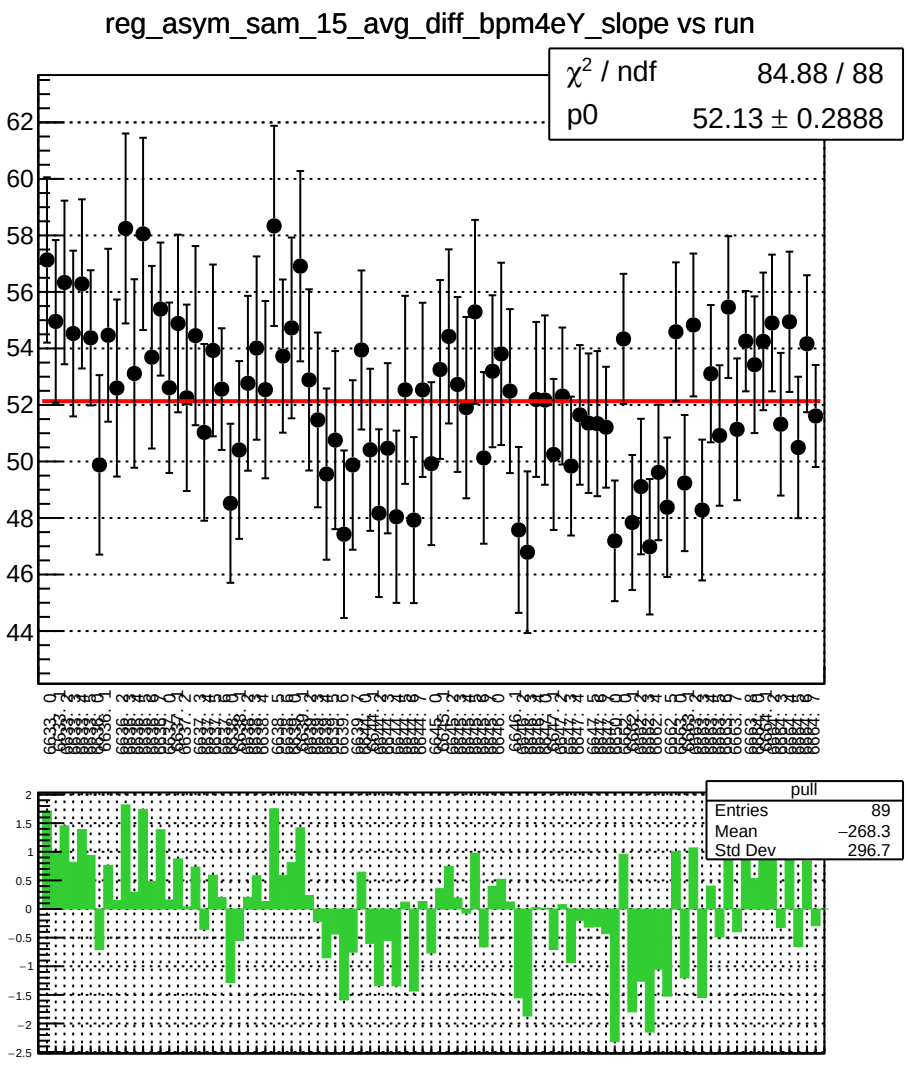

pull1D
Entries 89
Mean −0.07103
Std Dev 1.68

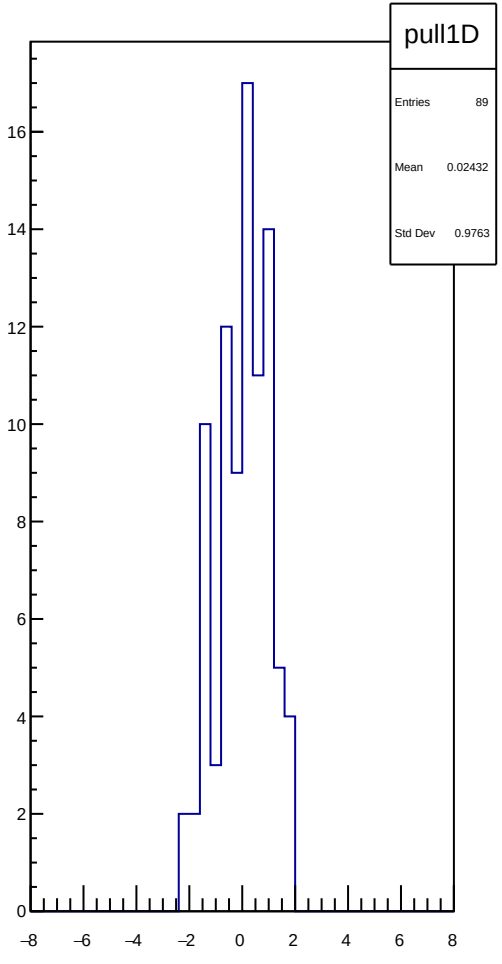

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 119.2 / 88
p0 −0.998 ± 0.2445
pull
Entries 89
Mean −303.8
Std Dev 354.4

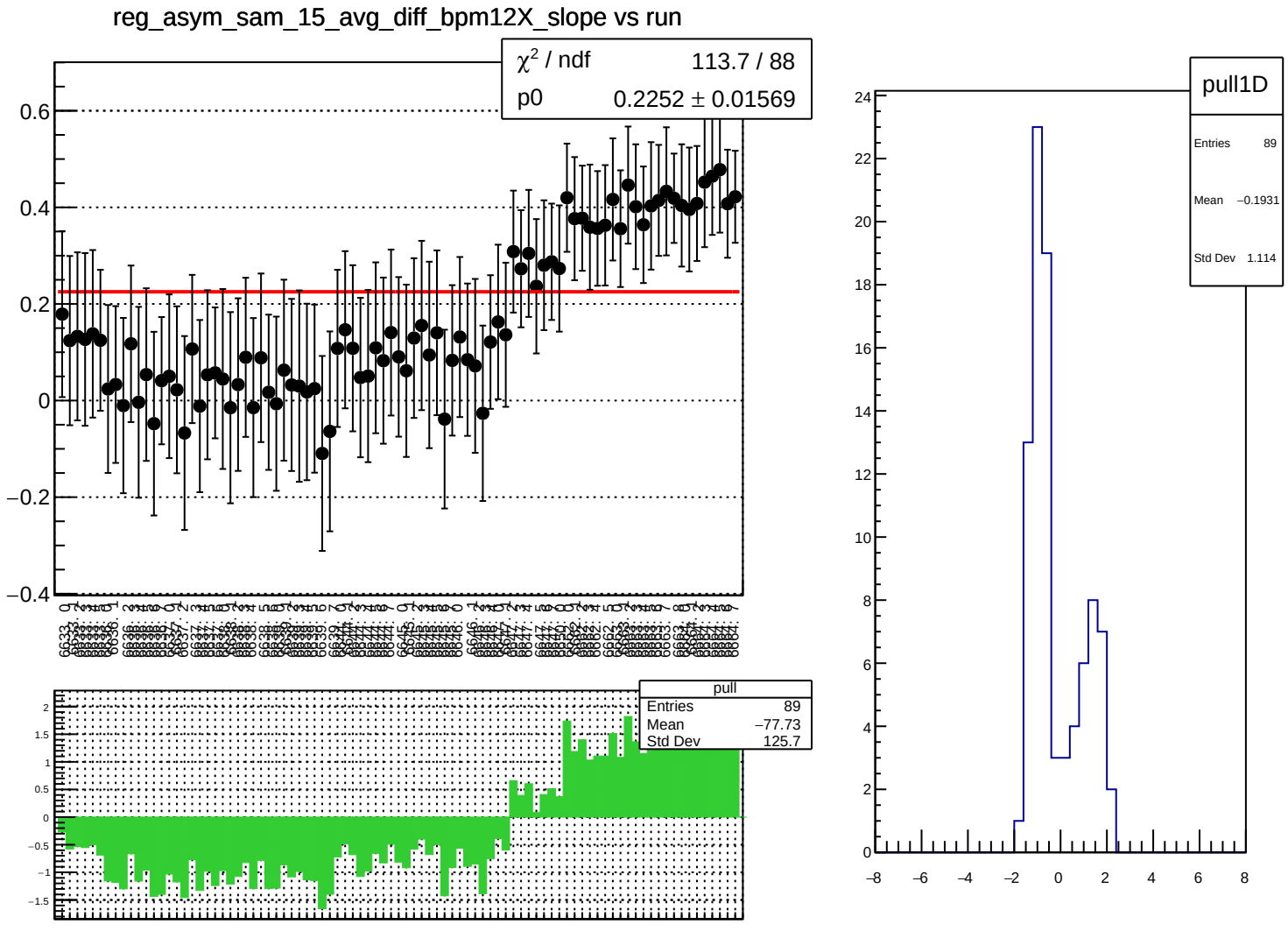

pull1D
Entries 89
Mean 0.03748
Std Dev 1.157

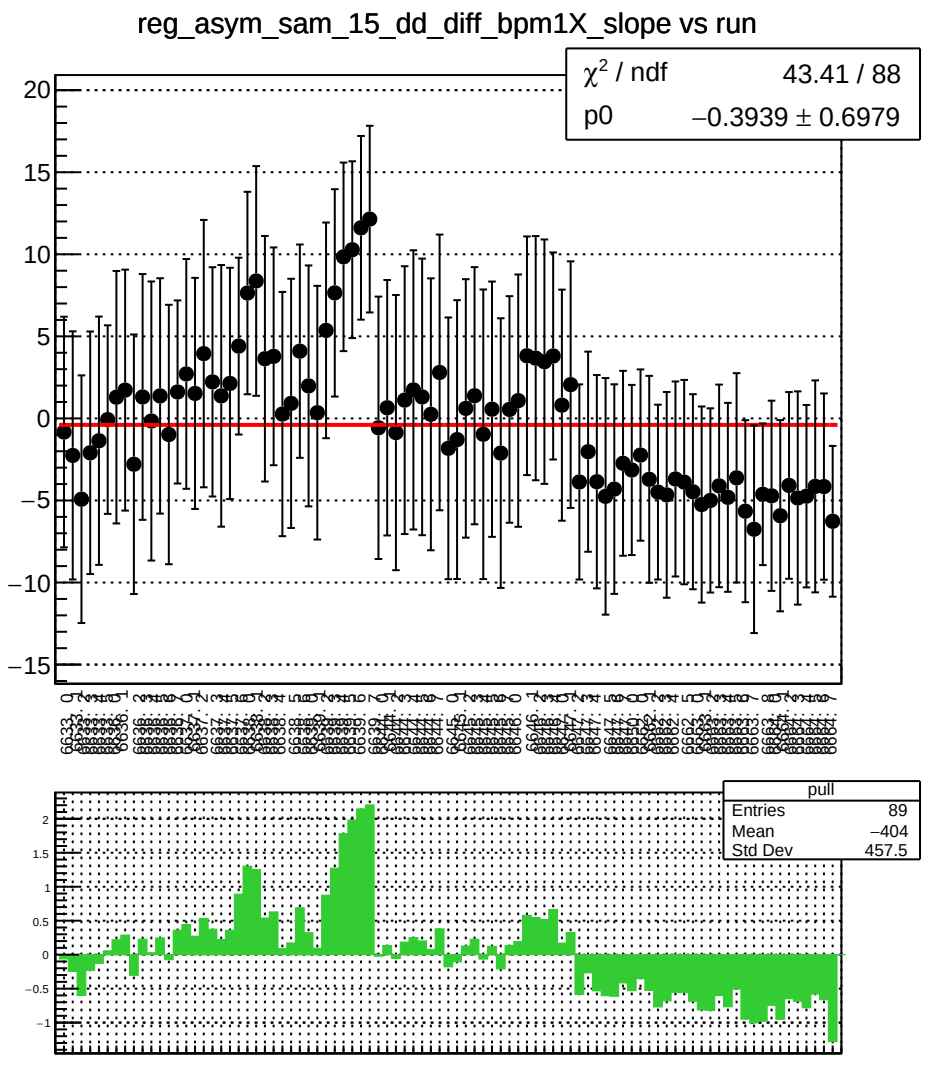

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 363.2 / 88
p0 −0.4355 ± 0.3647
pull
Entries 89
Mean −267.2
Std Dev 315.9

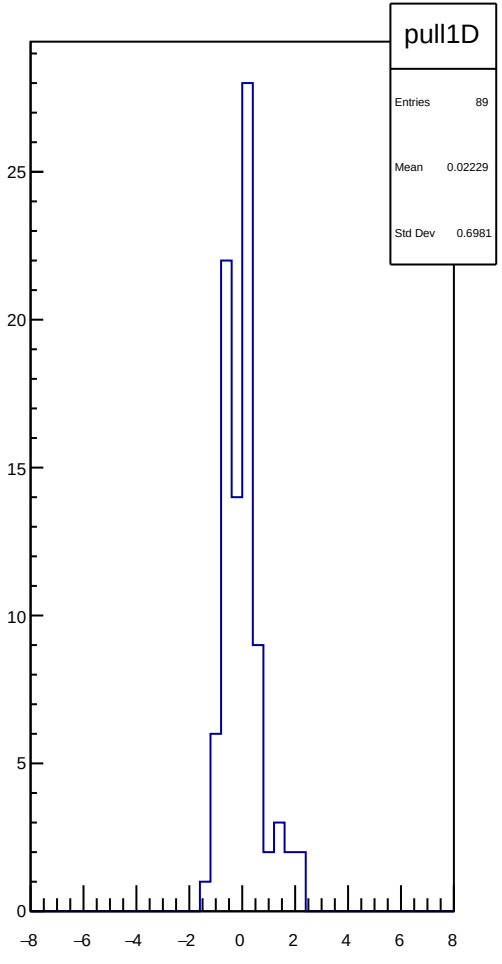

pull1D
Entries 89
Mean 0.09577
Std Dev 2.018

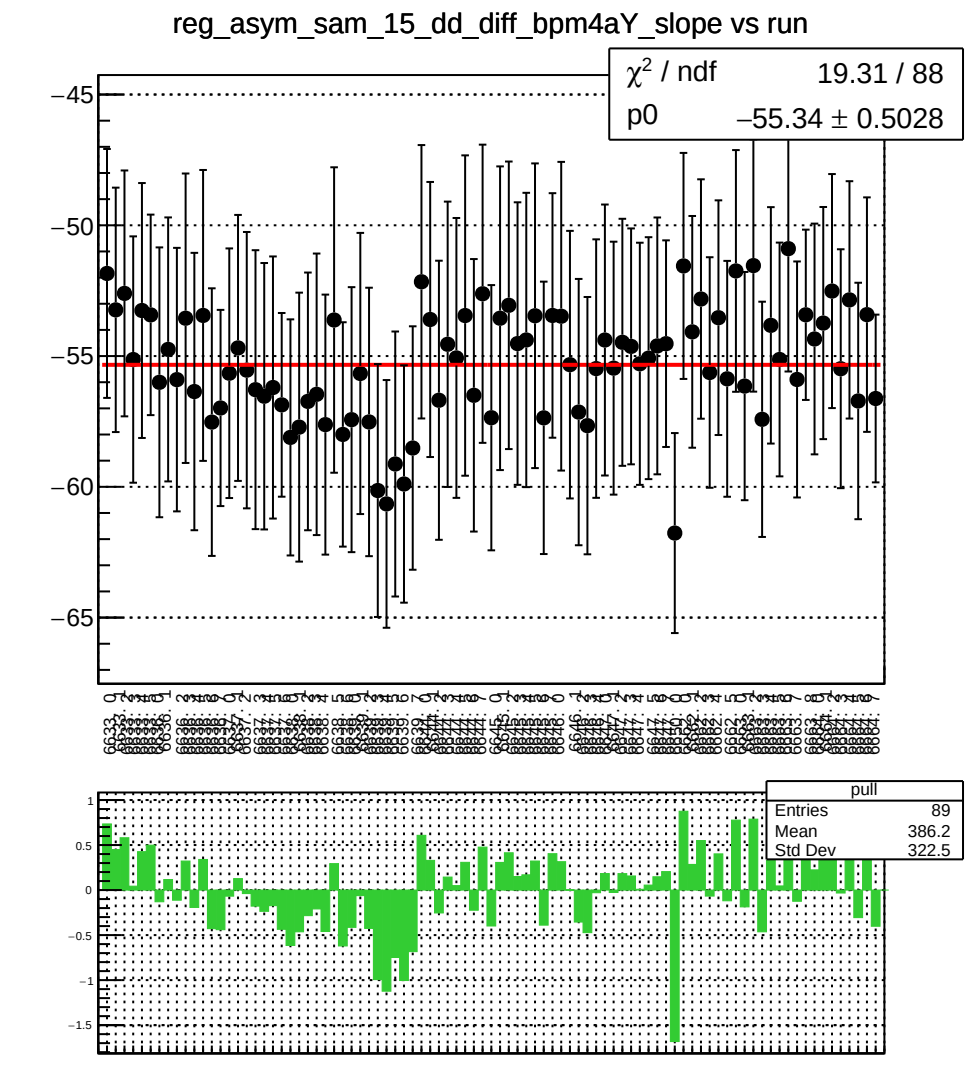

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 84.88 / 88
p0 52.13 ± 0.2888
pull
Entries 89
Mean −268.3
Std Dev 296.7

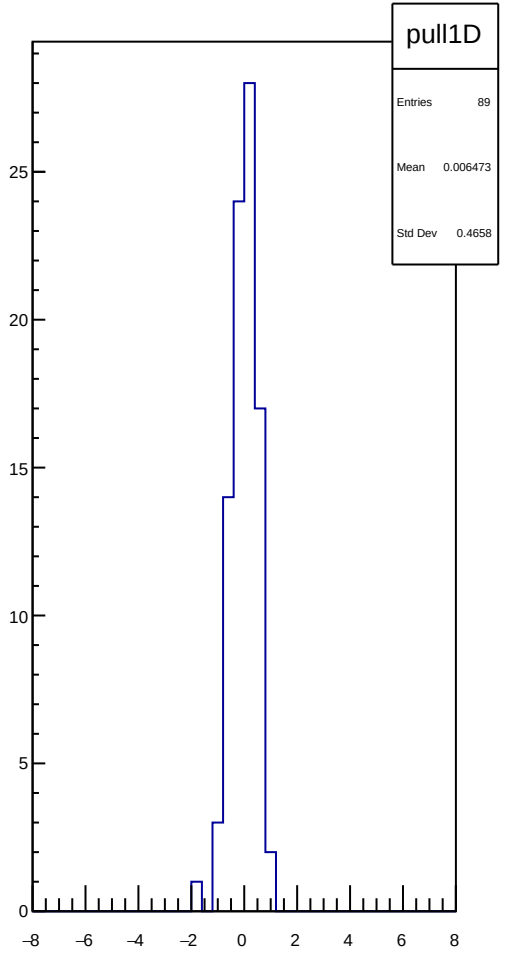

pull1D
Entries 89
Mean 0.02432
Std Dev 0.9763

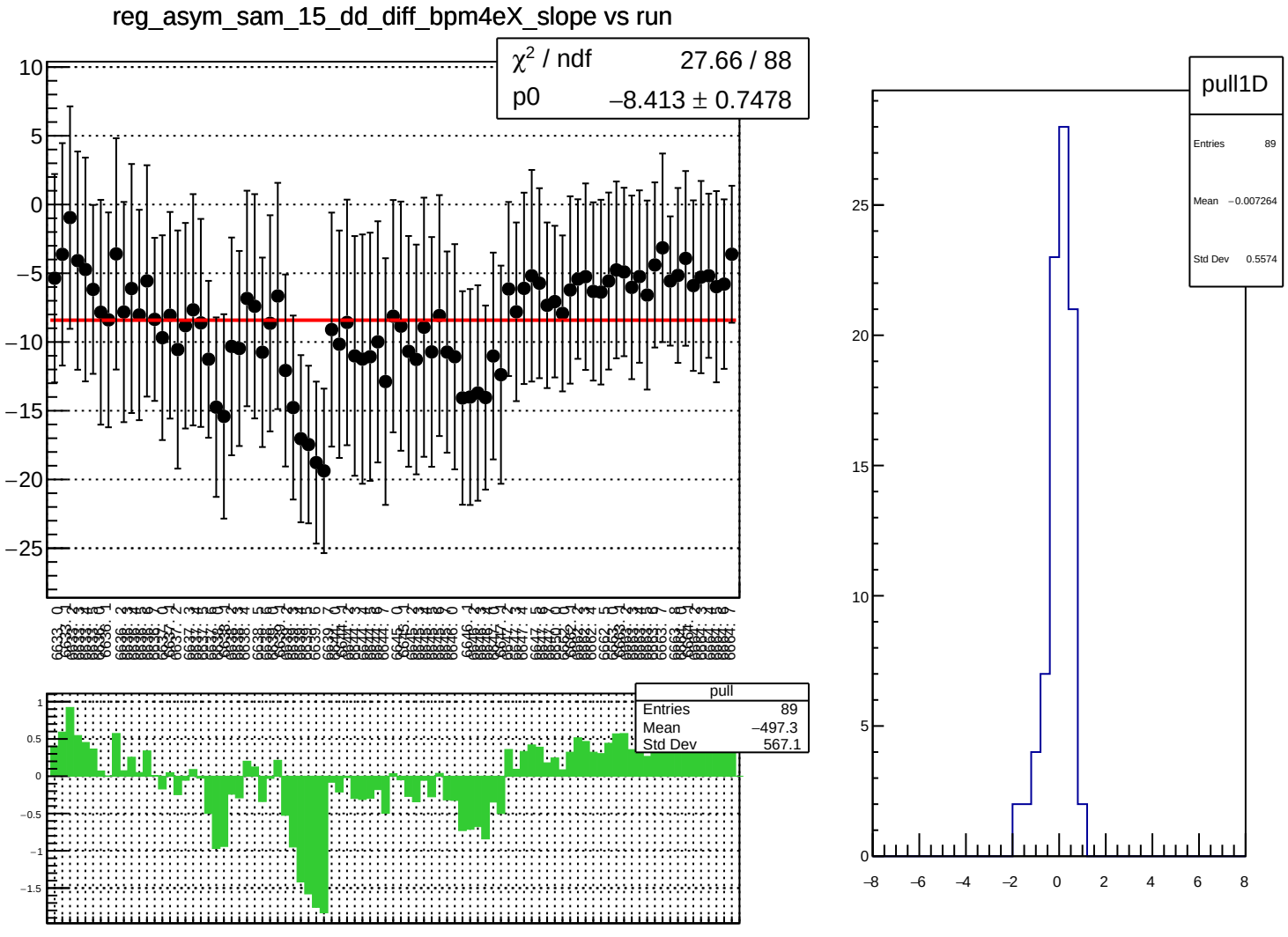

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 113.7 / 88
p0 0.2252 ± 0.01569
pull
Entries 89
Mean −77.73
Std Dev 125.7
pull1D
Entries 89
Mean −0.1931
Std Dev 1.114

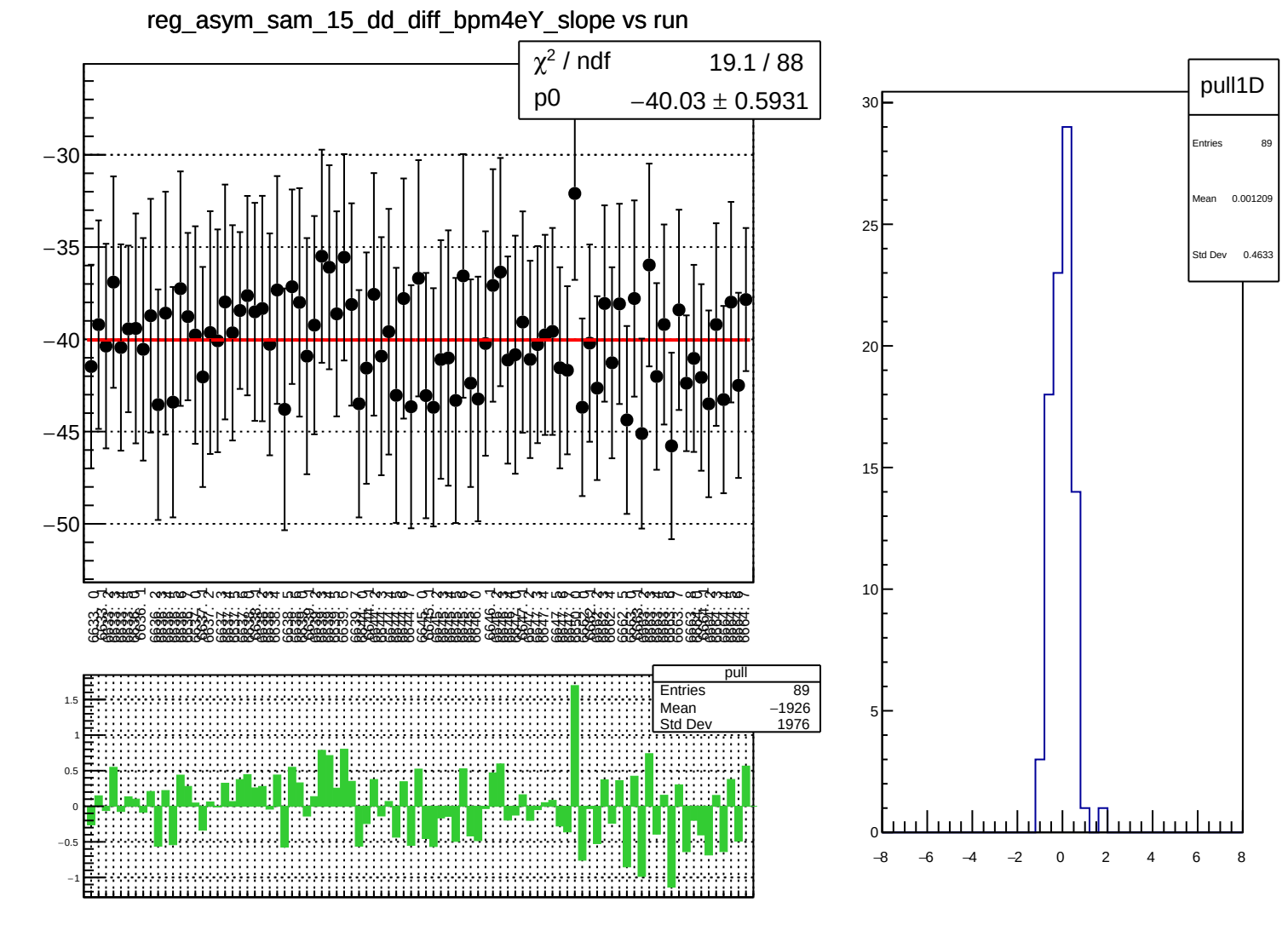

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 43.41 / 88
p0 −0.3939 ± 0.6979
pull
Entries 89
Mean −404
Std Dev 457.5

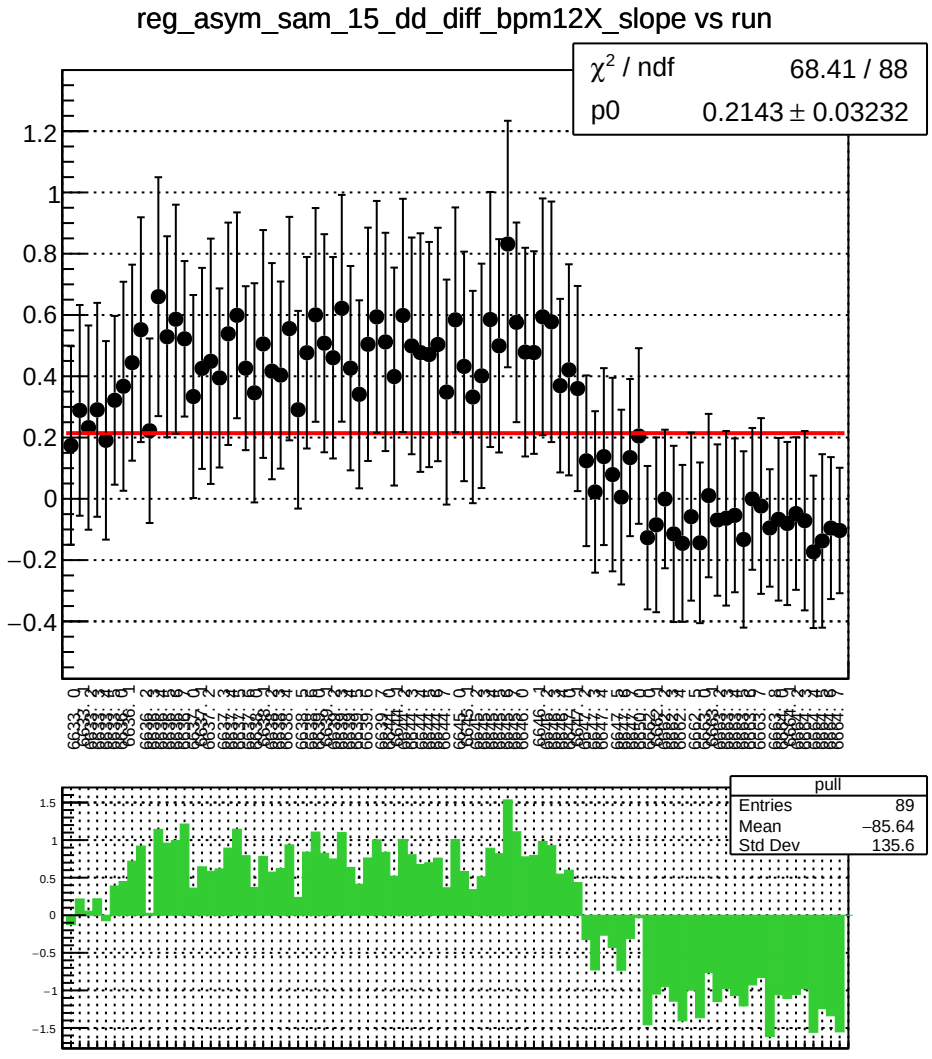

pull1D
Entries 89
Mean 0.02229
Std Dev 0.6981

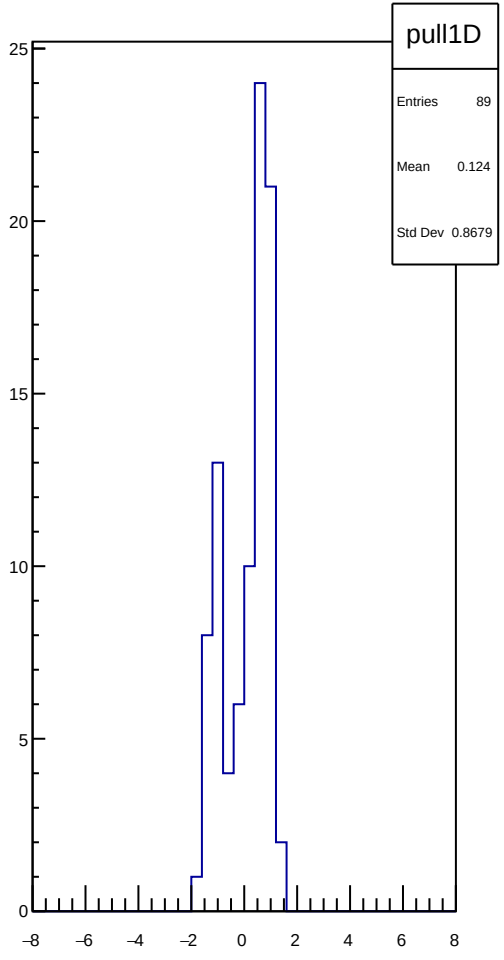

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 19.31 / 88
p0 −55.34 ± 0.5028
−45
−50
−55
−60
−65
pull
Entries 89
Mean 386.2
Std Dev 322.5
1
0.5
0
−0.5
−1
−1.5

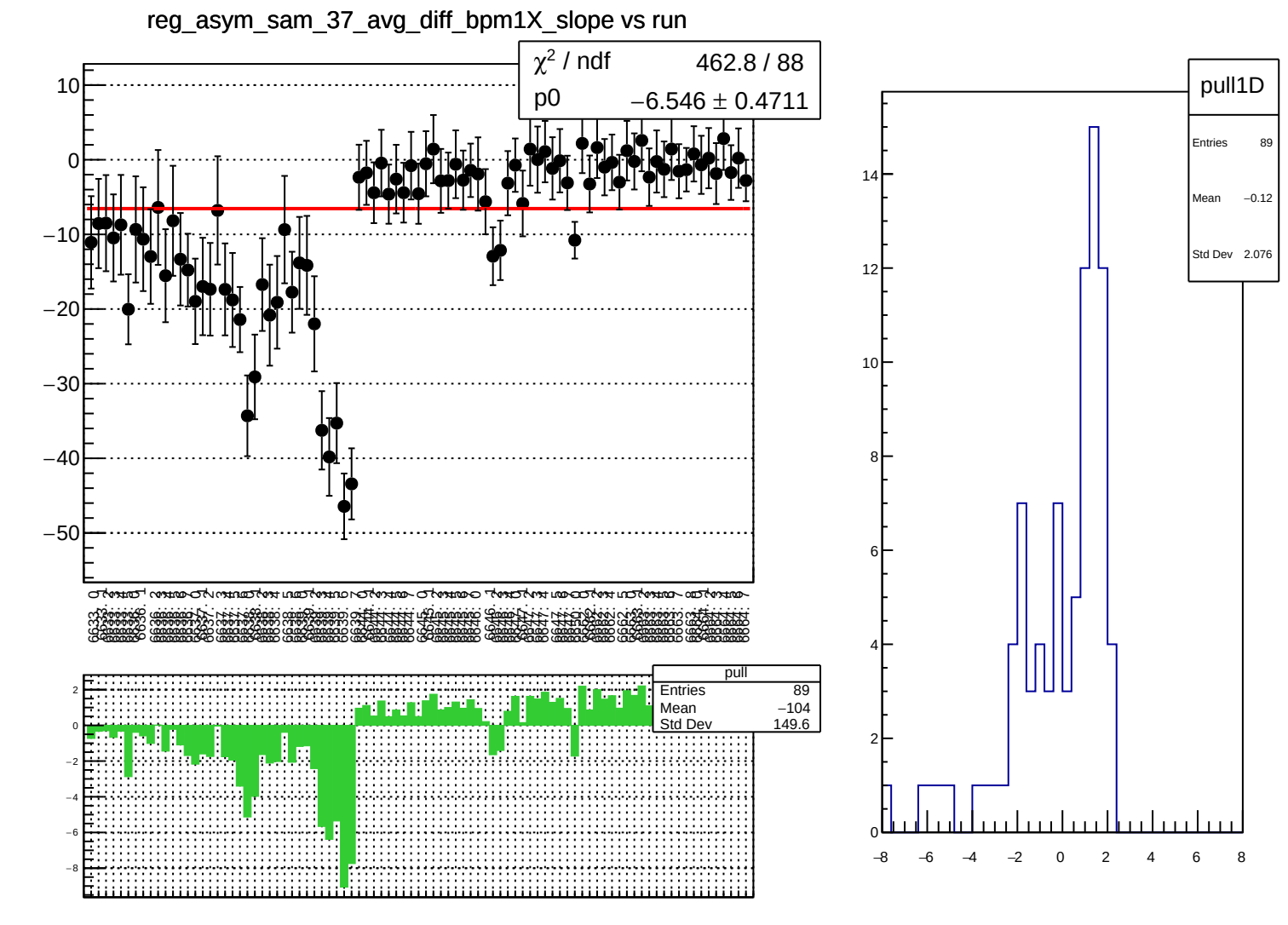

pull1D
Entries 89
Mean 0.006473
Std Dev 0.4658
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

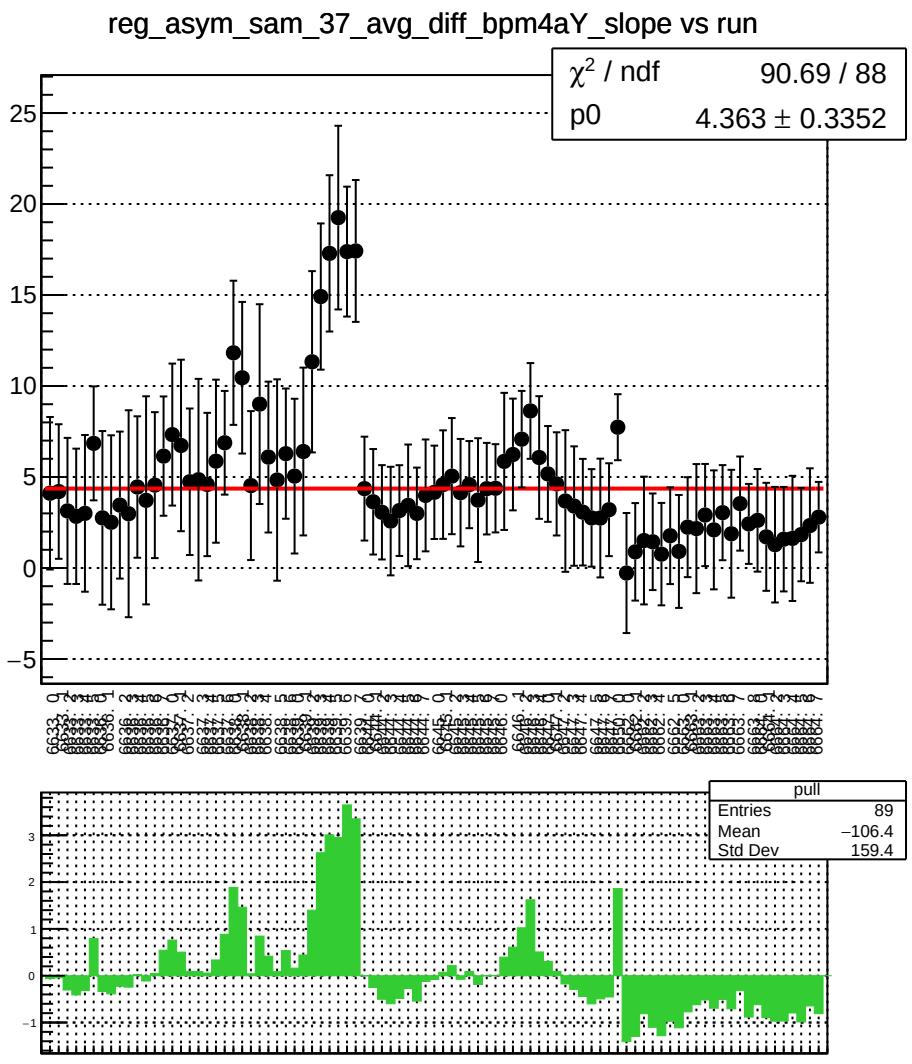

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 27.66 / 88
p0 −8.413 ± 0.7478
pull
Entries 89
Mean −497.3
Std Dev 567.1
pull1D
Entries 89
Mean −0.007264
Std Dev 0.5574

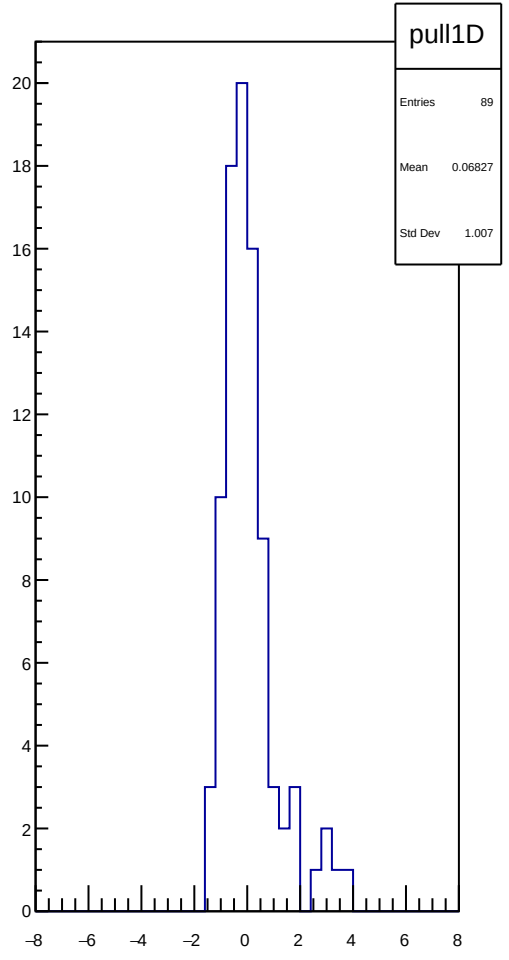

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 19.1 / 88
p0 −40.03 ± 0.5931
−30
−35
−40
−45
−50
pull
Entries 89
Mean −1926
Std Dev 1976
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.001209
Std Dev 0.4633
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

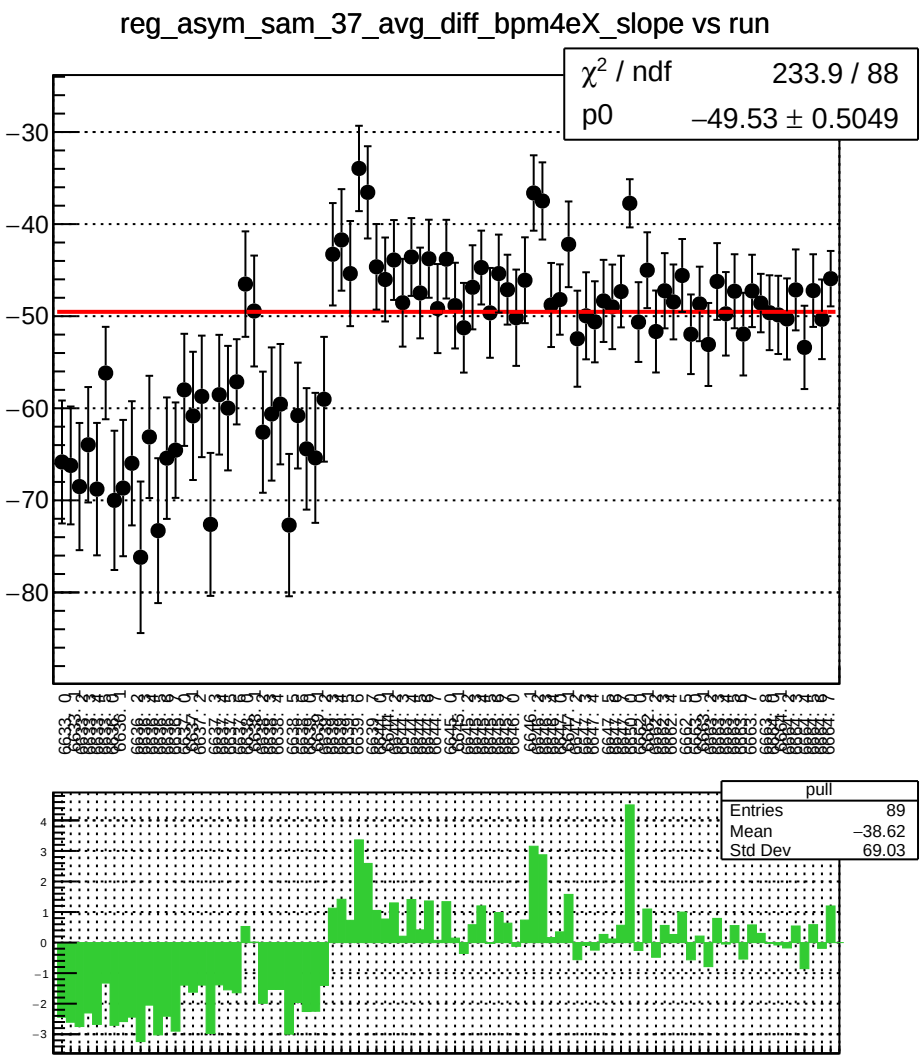

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 68.41 / 88
p0 0.2143 ± 0.03232
pull
Entries 89
Mean −85.64
Std Dev 135.6

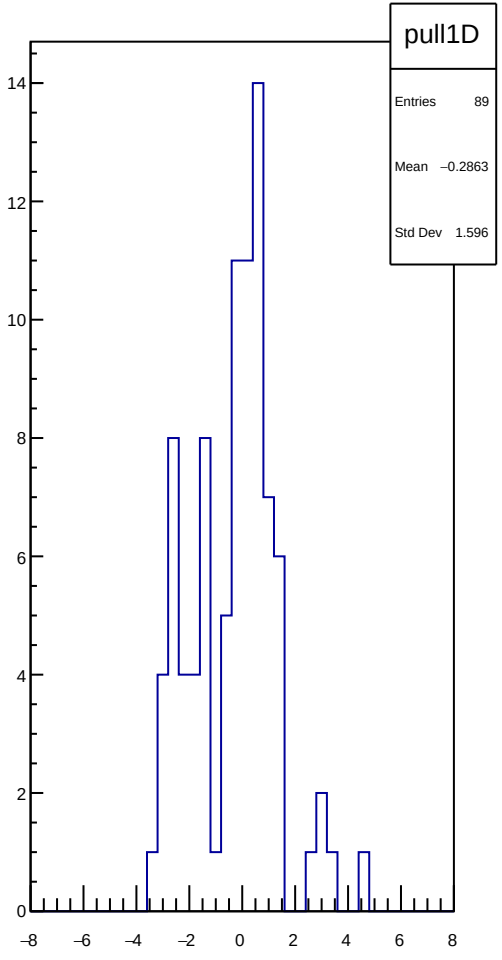

pull1D
Entries 89
Mean 0.124
Std Dev 0.8679

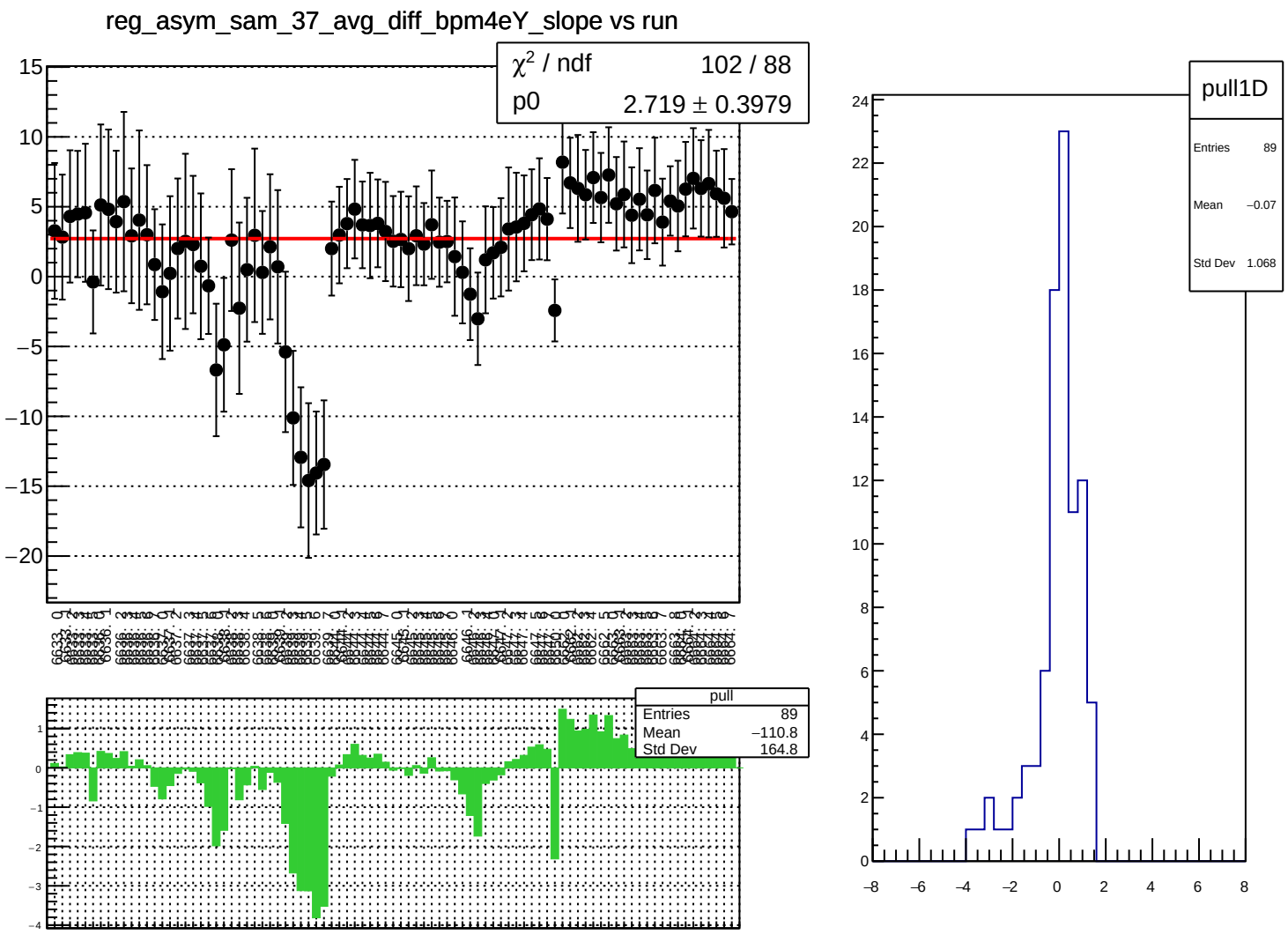

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 462.8 / 88
p0 −6.546 ± 0.4711
pull
Entries 89
Mean −104
Std Dev 149.6
pull1D
Entries 89
Mean −0.12
Std Dev 2.076

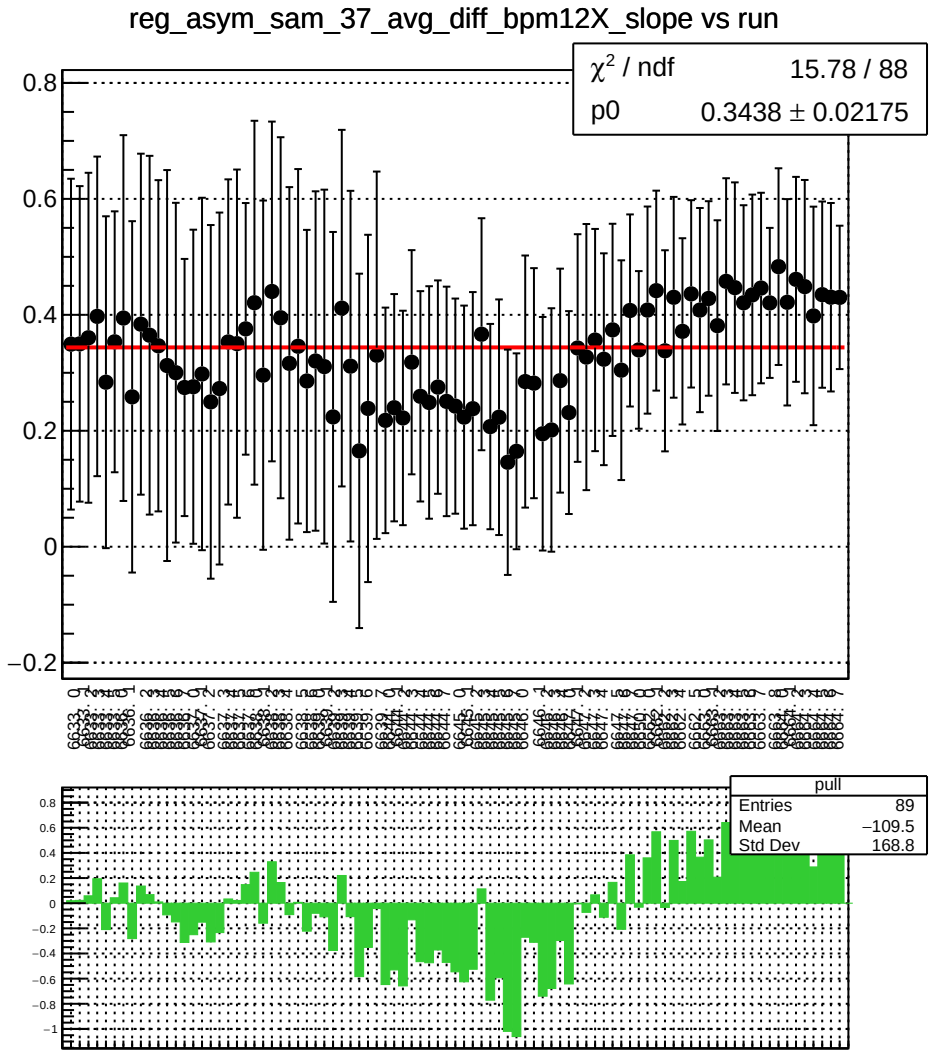

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 90.69 / 88
p0 4.363 ± 0.3352
pull
Entries 89
Mean −106.4
Std Dev 159.4

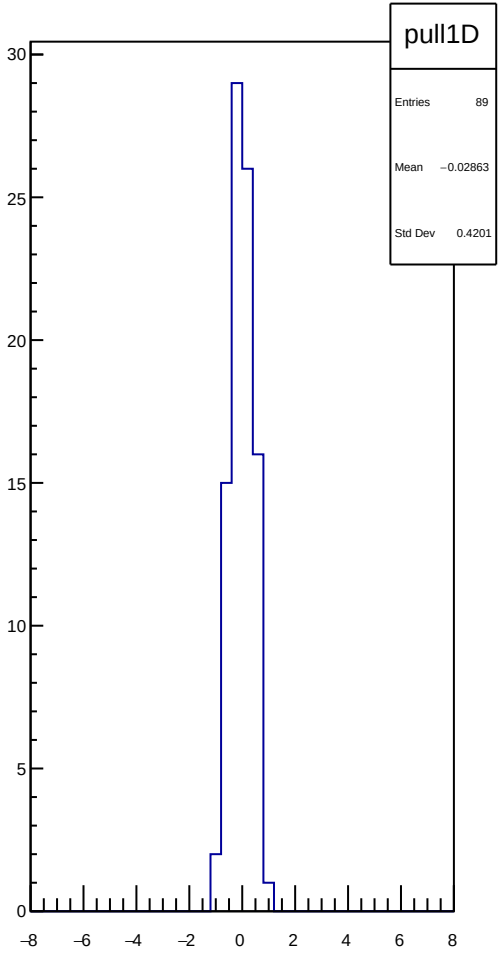

pull1D
Entries 89
Mean 0.06827
Std Dev 1.007

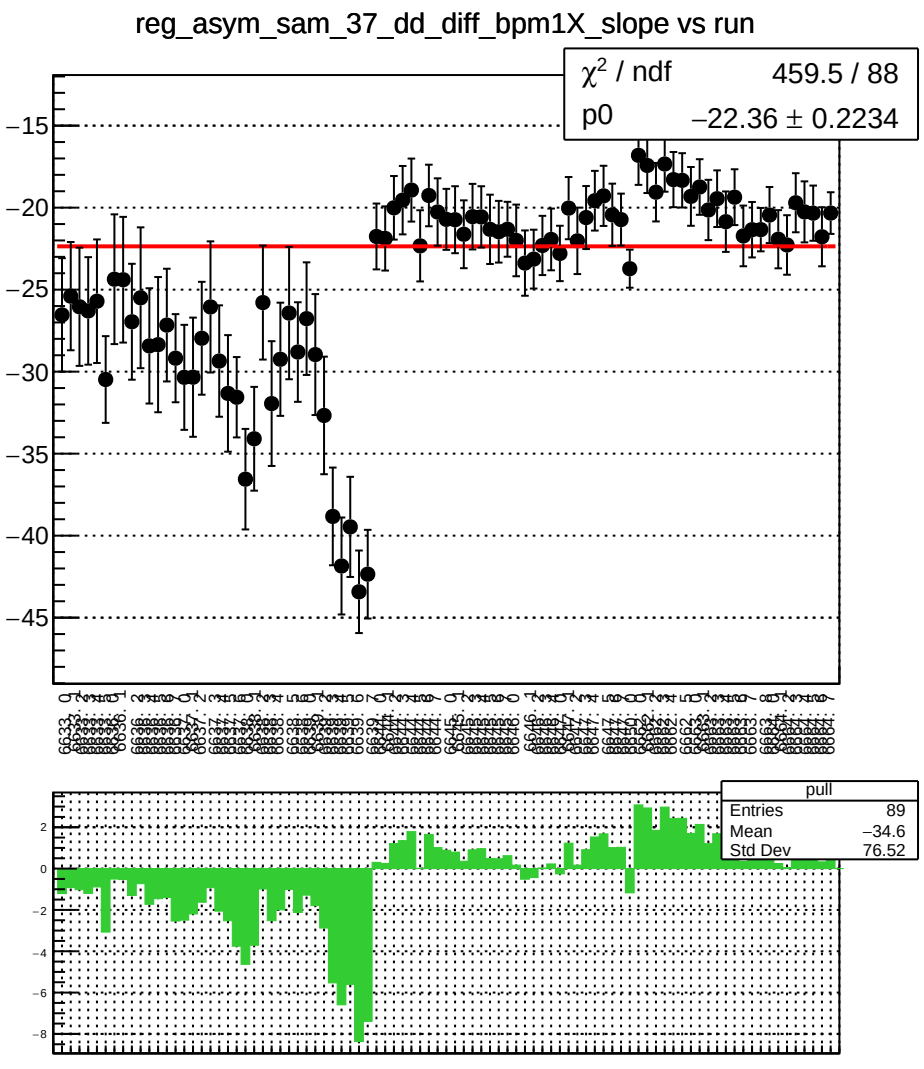

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 233.9 / 88
p0 −49.53 ± 0.5049
pull
Entries 89
Mean −38.62
Std Dev 69.03

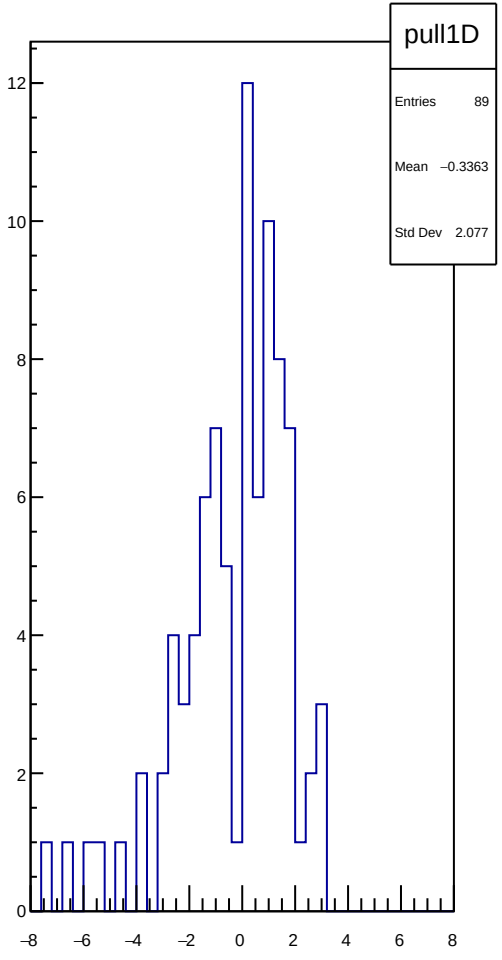

pull1D
Entries 89
Mean −0.2863
Std Dev 1.596

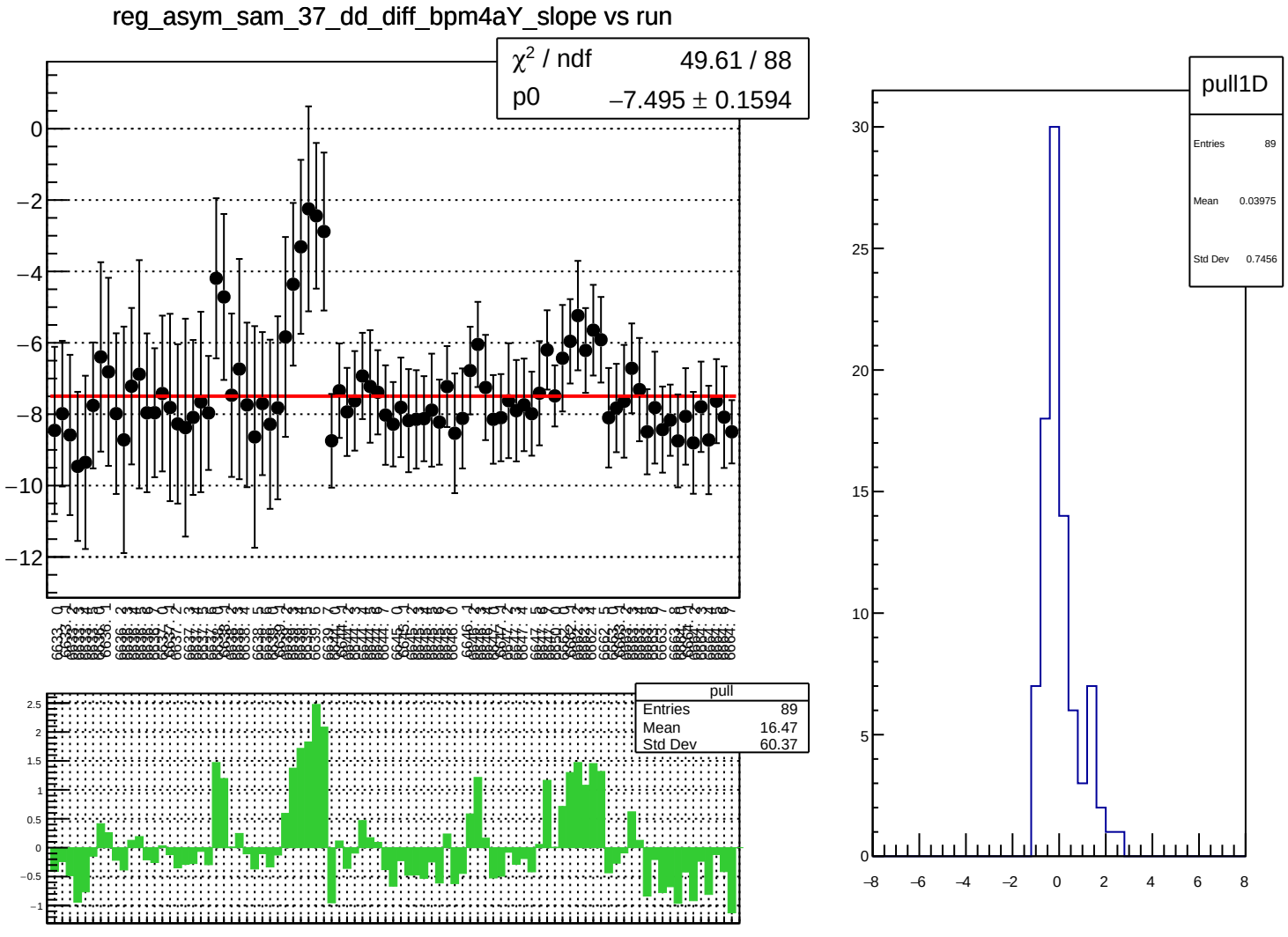

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 102 / 88
p0 2.719 ± 0.3979
pull
Entries 89
Mean −110.8
Std Dev 164.8
pull1D
Entries 89
Mean −0.07
Std Dev 1.068

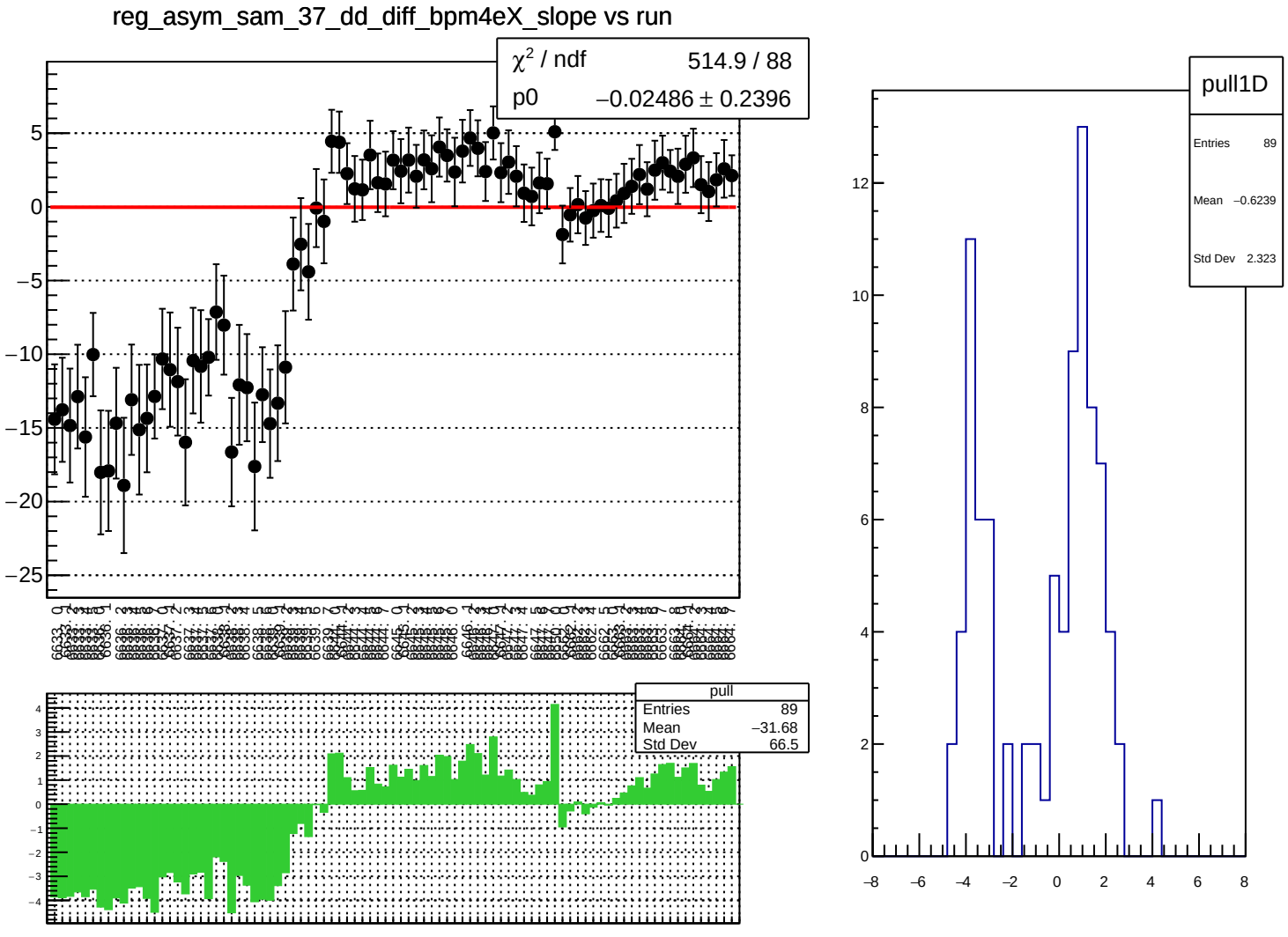

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 15.78 / 88
p0 0.3438 ± 0.02175
pull
Entries 89
Mean −109.5
Std Dev 168.8

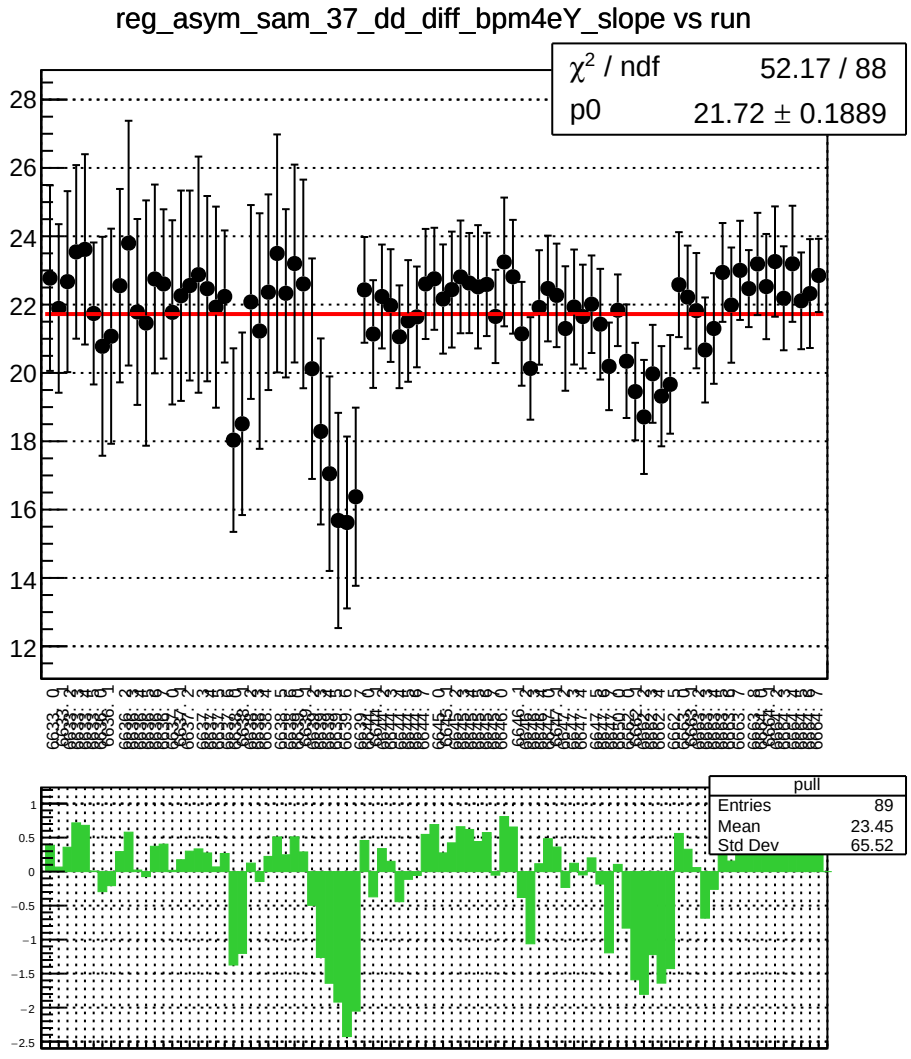

pull1D
Entries 89
Mean −0.02863
Std Dev 0.4201

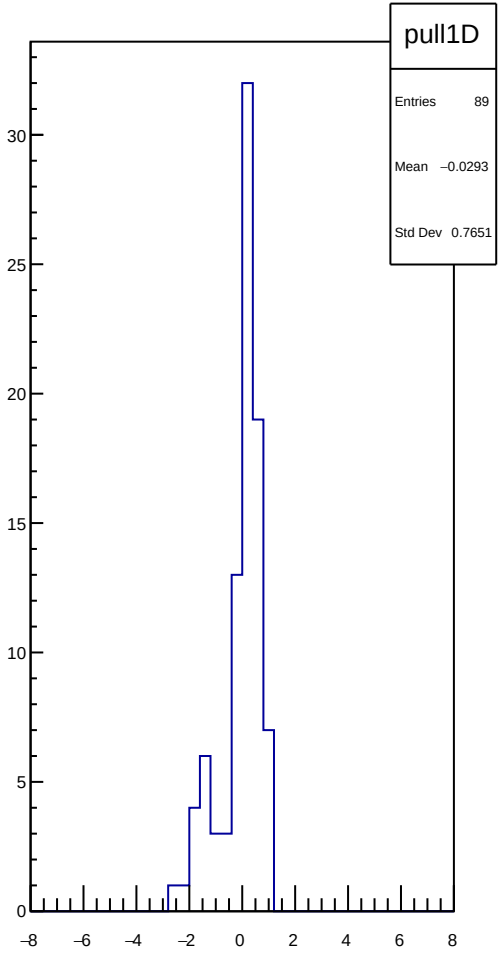

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 459.5 / 88
p0 −22.36 ± 0.2234
pull
Entries 89
Mean −34.6
Std Dev 76.52

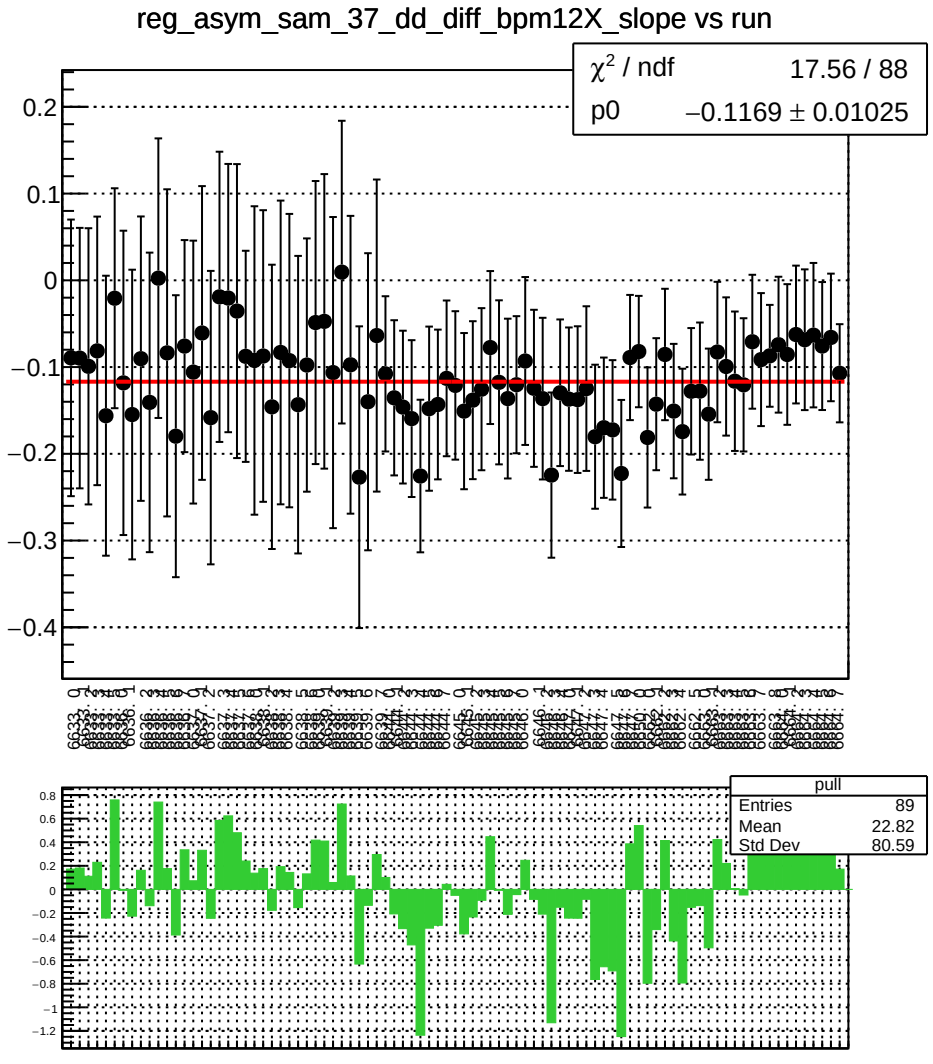

pull1D
Entries 89
Mean −0.3363
Std Dev 2.077

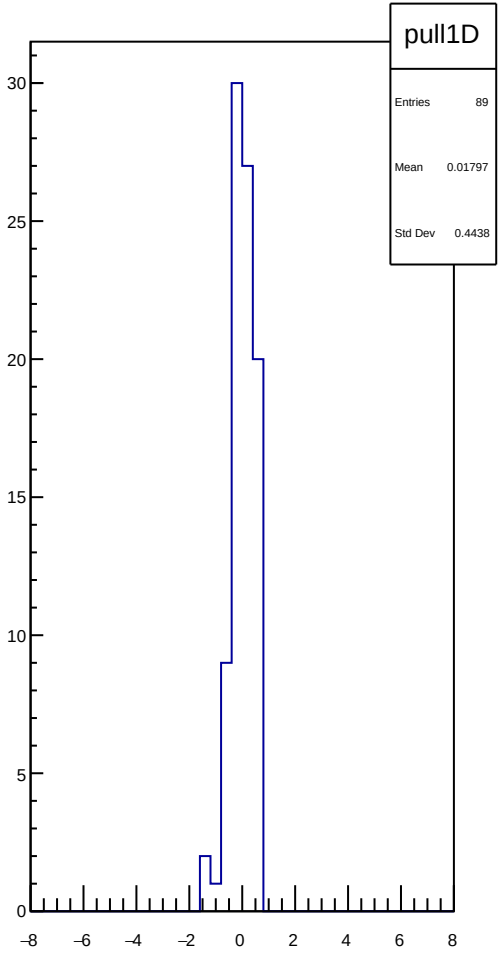

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 49.61 / 88
p0 −7.495 ± 0.1594
pull
Entries 89
Mean 16.47
Std Dev 60.37
pull1D
Entries 89
Mean 0.03975
Std Dev 0.7456

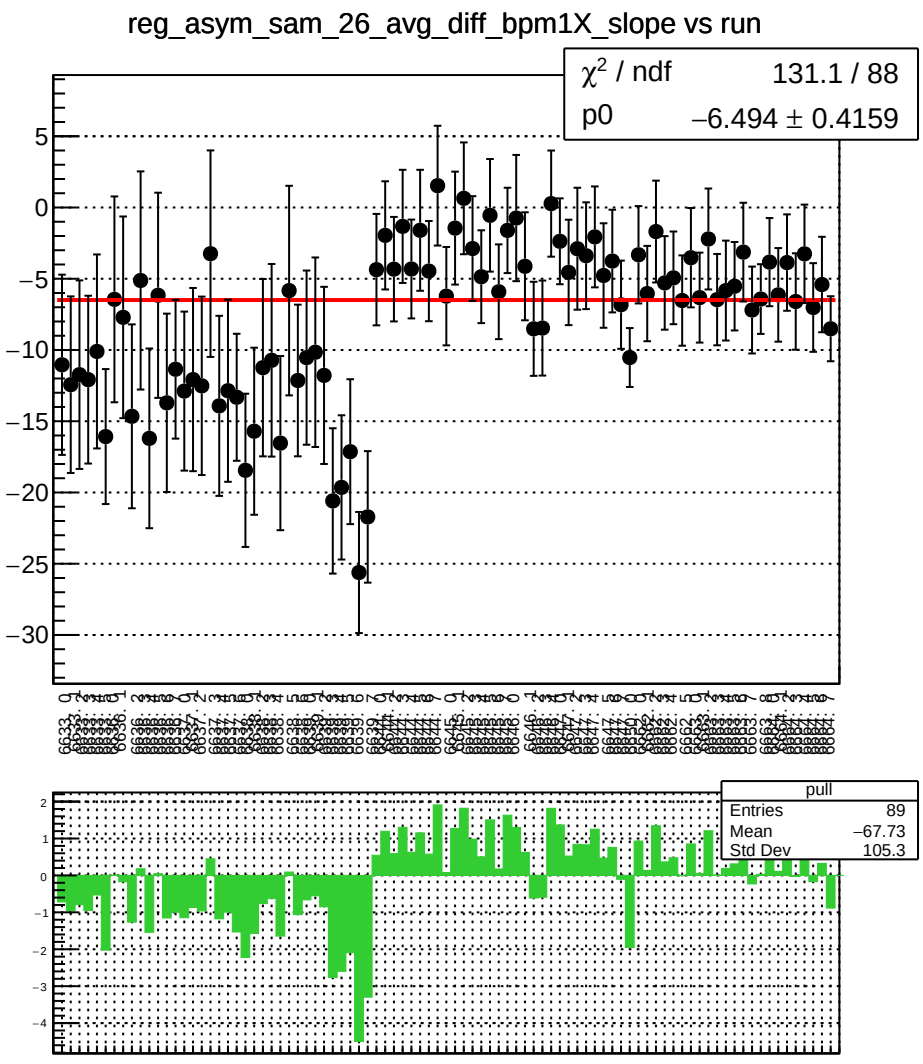

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 514.9 / 88
p0 −0.02486 ± 0.2396
pull
Entries 89
Mean −31.68
Std Dev 66.5
pull1D
Entries 89
Mean −0.6239
Std Dev 2.323

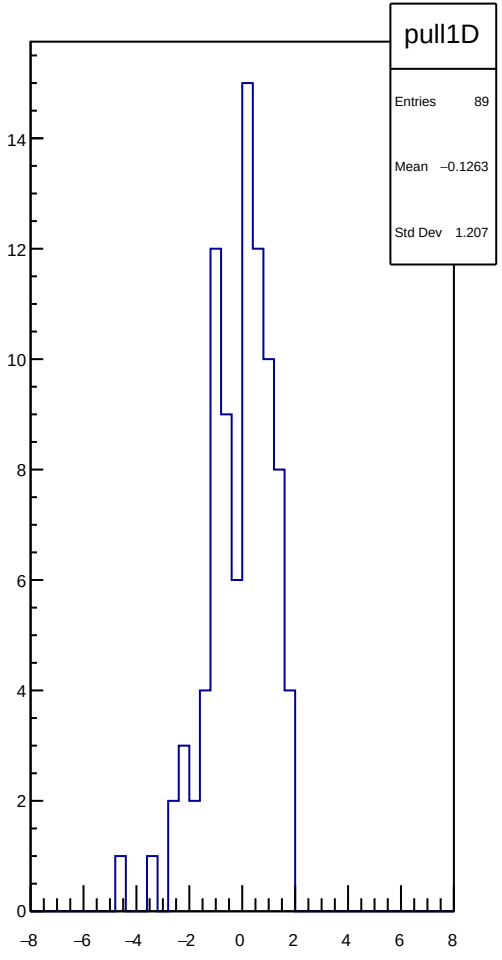

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 52.17 / 88
p0 21.72 ± 0.1889
pull
Entries 89
Mean 23.45
Std Dev 65.52

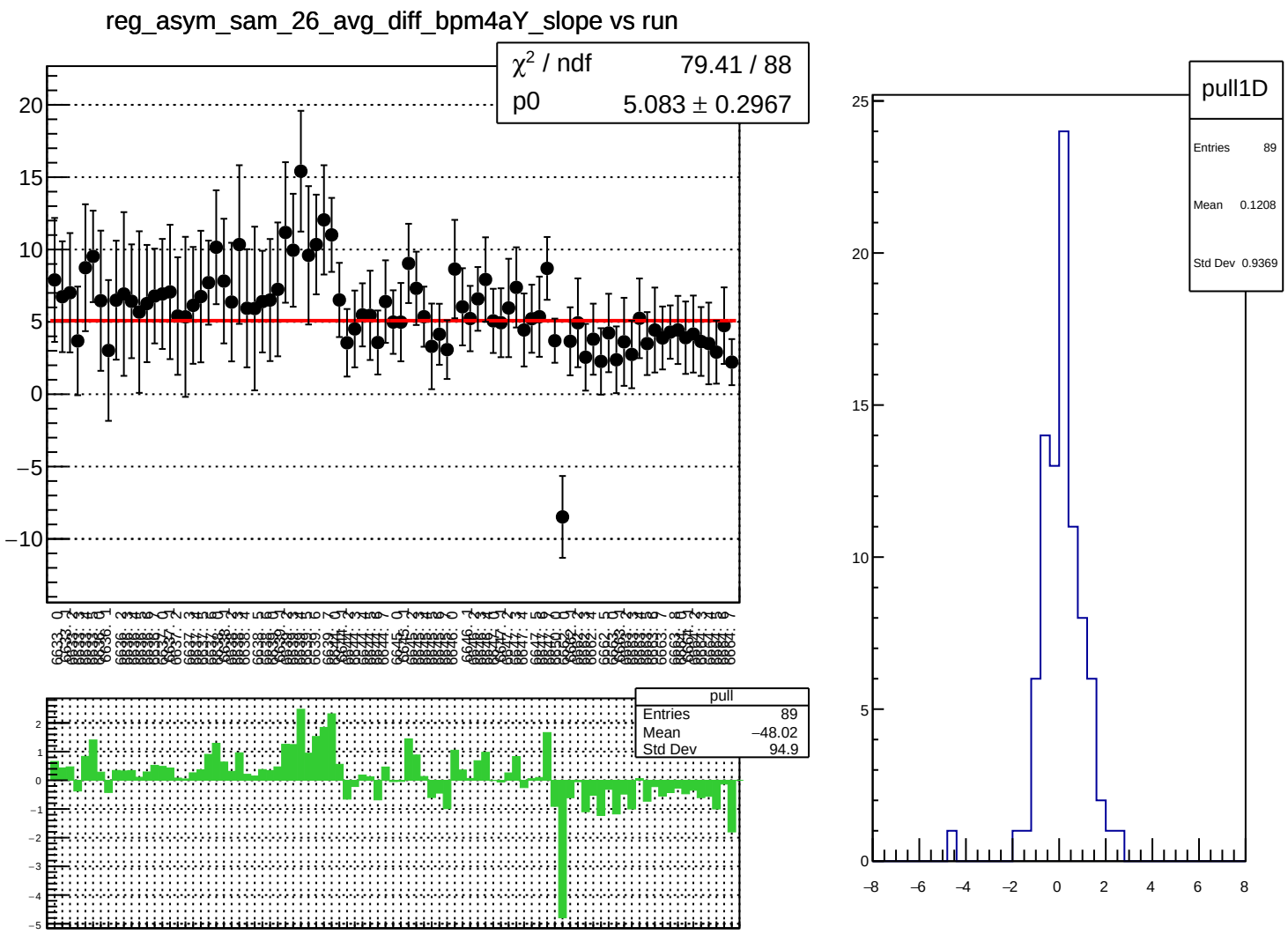

pull1D
Entries 89
Mean −0.0293
Std Dev 0.7651

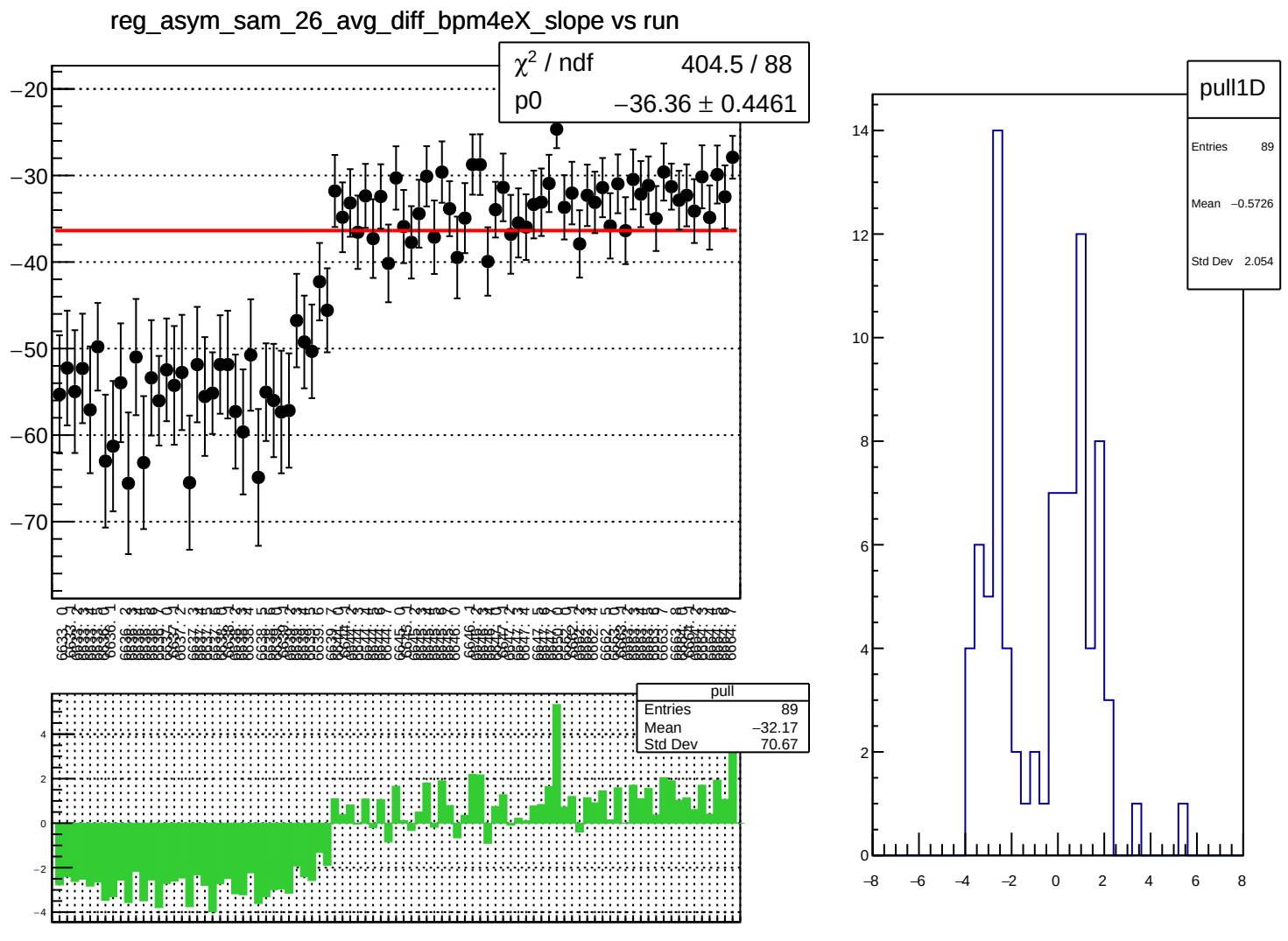

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 17.56 / 88
p0 −0.1169 ± 0.01025
pull
Entries 89
Mean 22.82
Std Dev 80.59

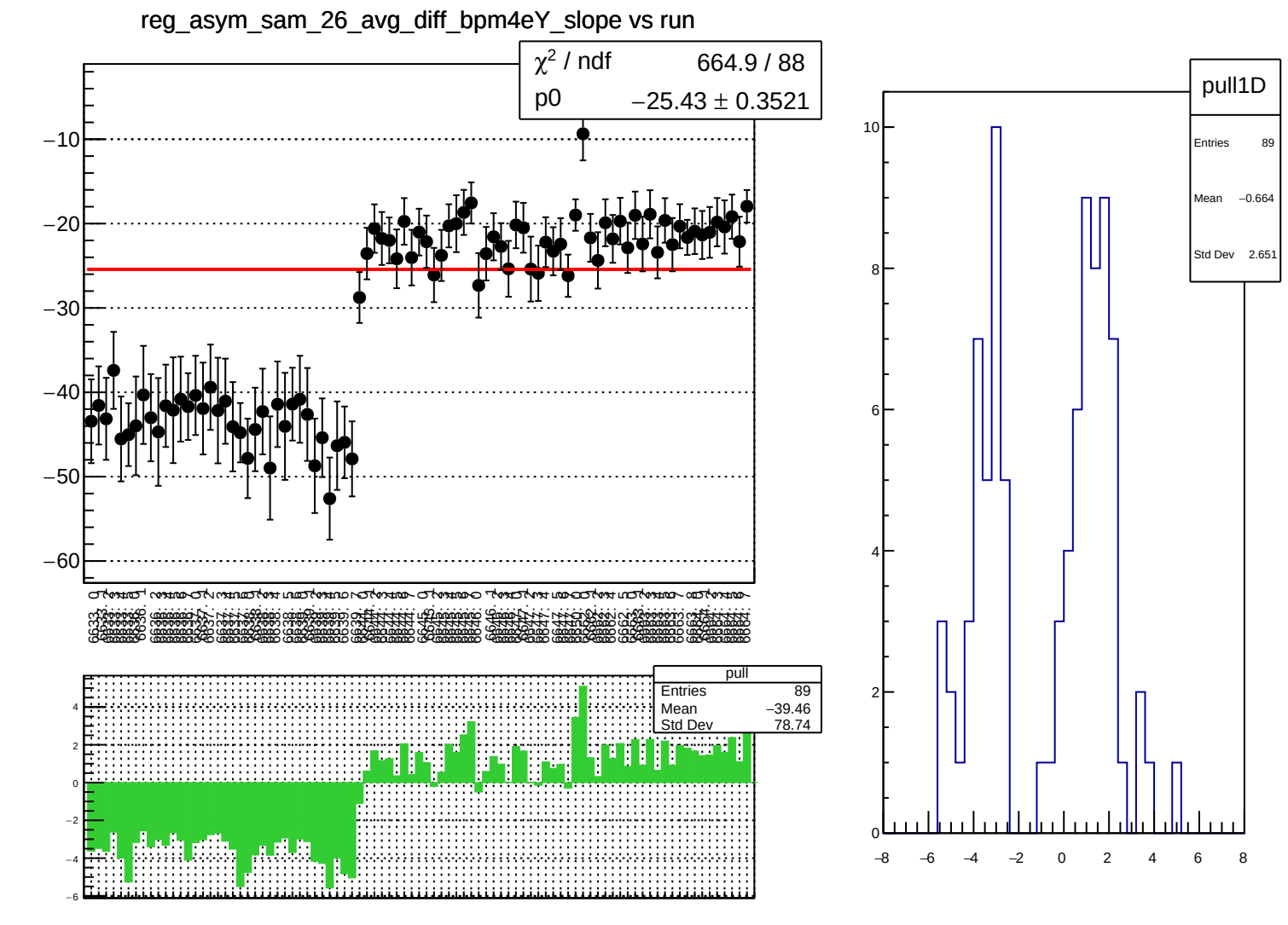

pull1D
Entries 89
Mean 0.01797
Std Dev 0.4438

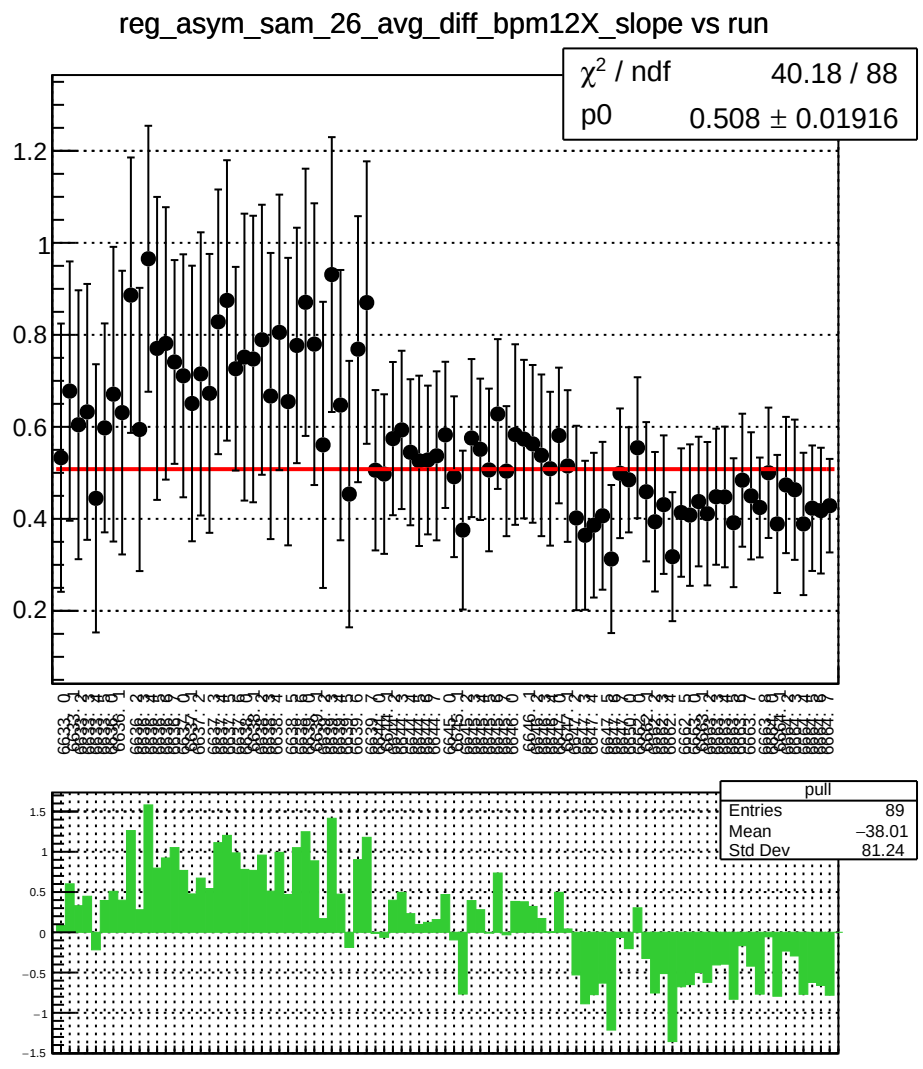

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 131.1 / 88
p0 −6.494 ± 0.4159
pull
Entries 89
Mean −67.73
Std Dev 105.3

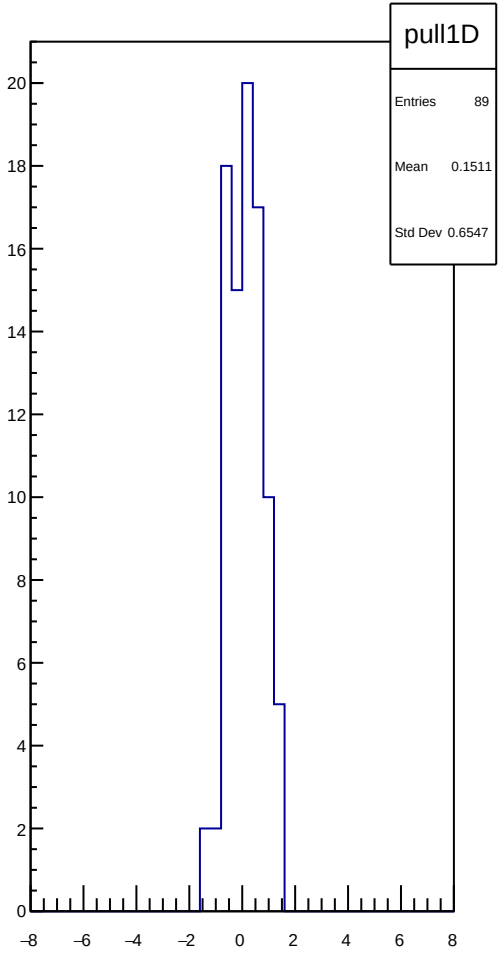

pull1D
Entries 89
Mean −0.1263
Std Dev 1.207

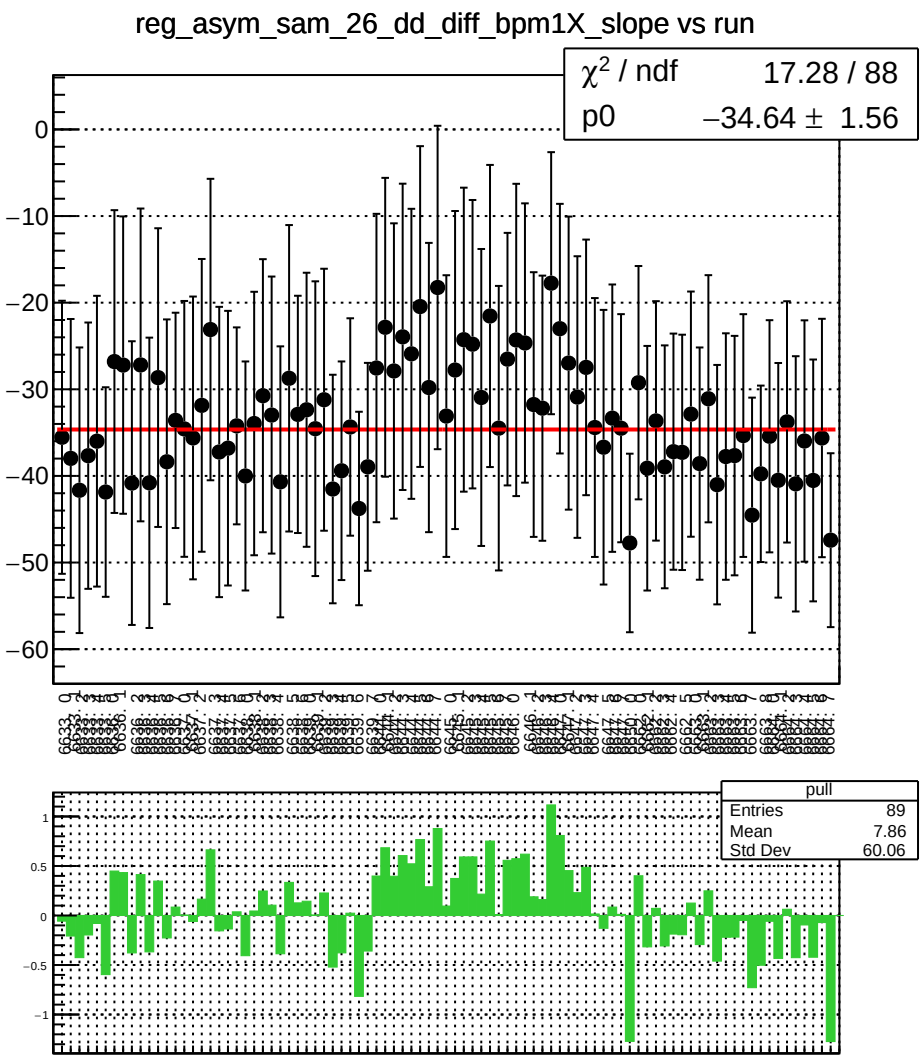

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 79.41 / 88
p0 5.083 ± 0.2967
pull
Entries 89
Mean −48.02
Std Dev 94.9
pull1D
Entries 89
Mean 0.1208
Std Dev 0.9369

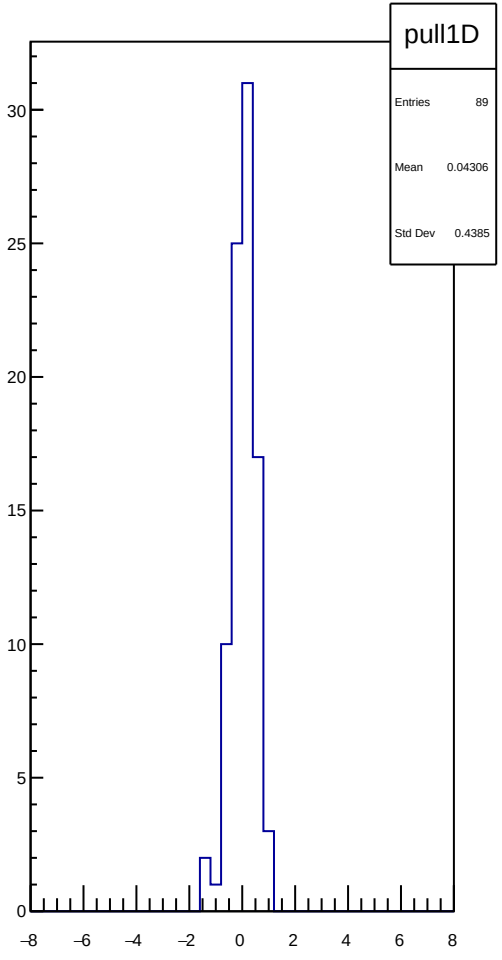

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 404.5 / 88
p0 −36.36 ± 0.4461
pull
Entries 89
Mean −32.17
Std Dev 70.67
pull1D
Entries 89
Mean −0.5726
Std Dev 2.054

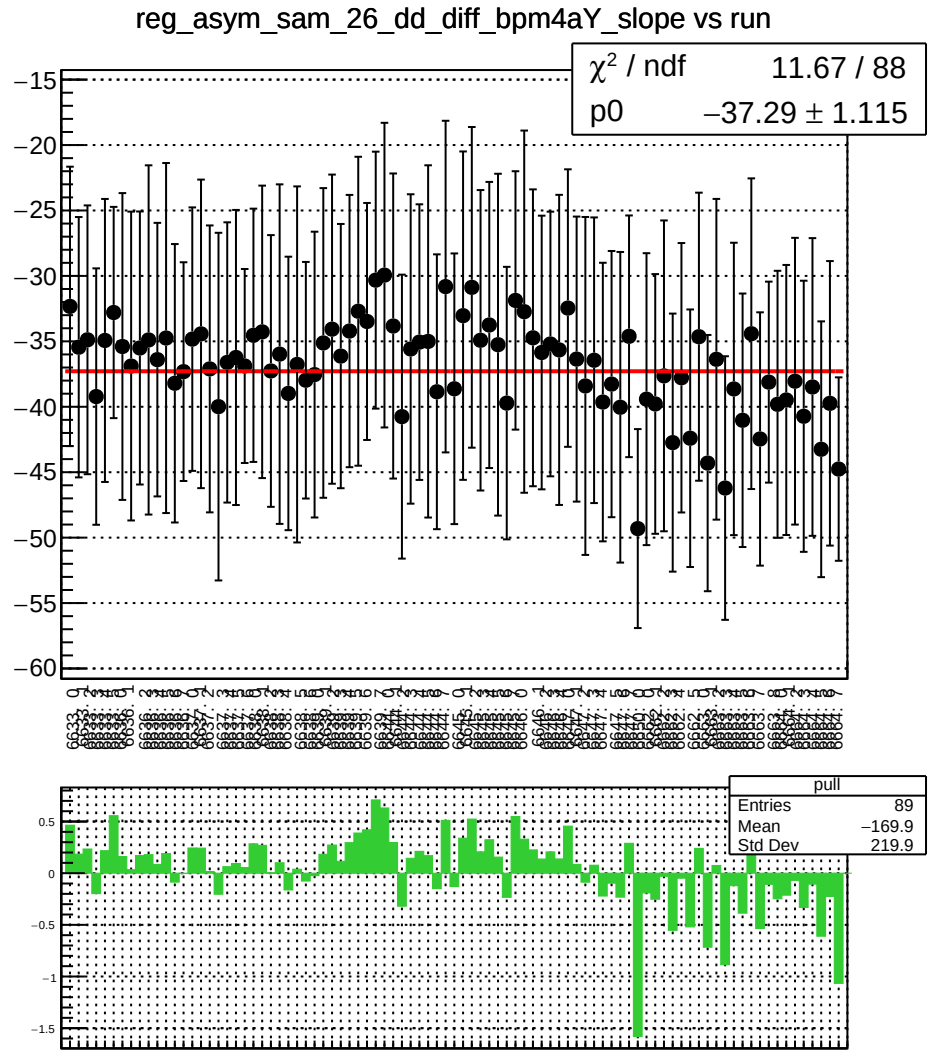

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 664.9 / 88
p0 −25.43 ± 0.3521
pull
Entries 89
Mean −39.46
Std Dev 78.74
pull1D
Entries 89
Mean −0.664
Std Dev 2.651

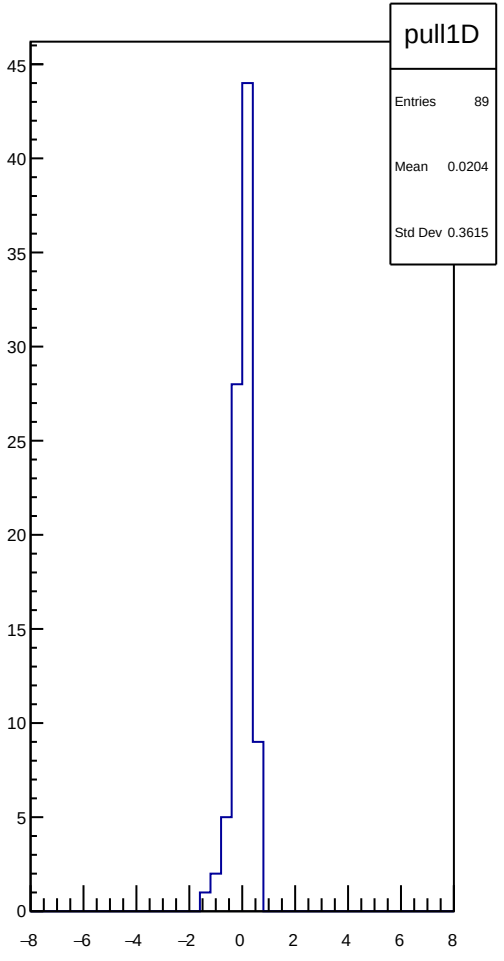

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 40.18 / 88
p0 0.508 ± 0.01916
pull
Entries 89
Mean −38.01
Std Dev 81.24

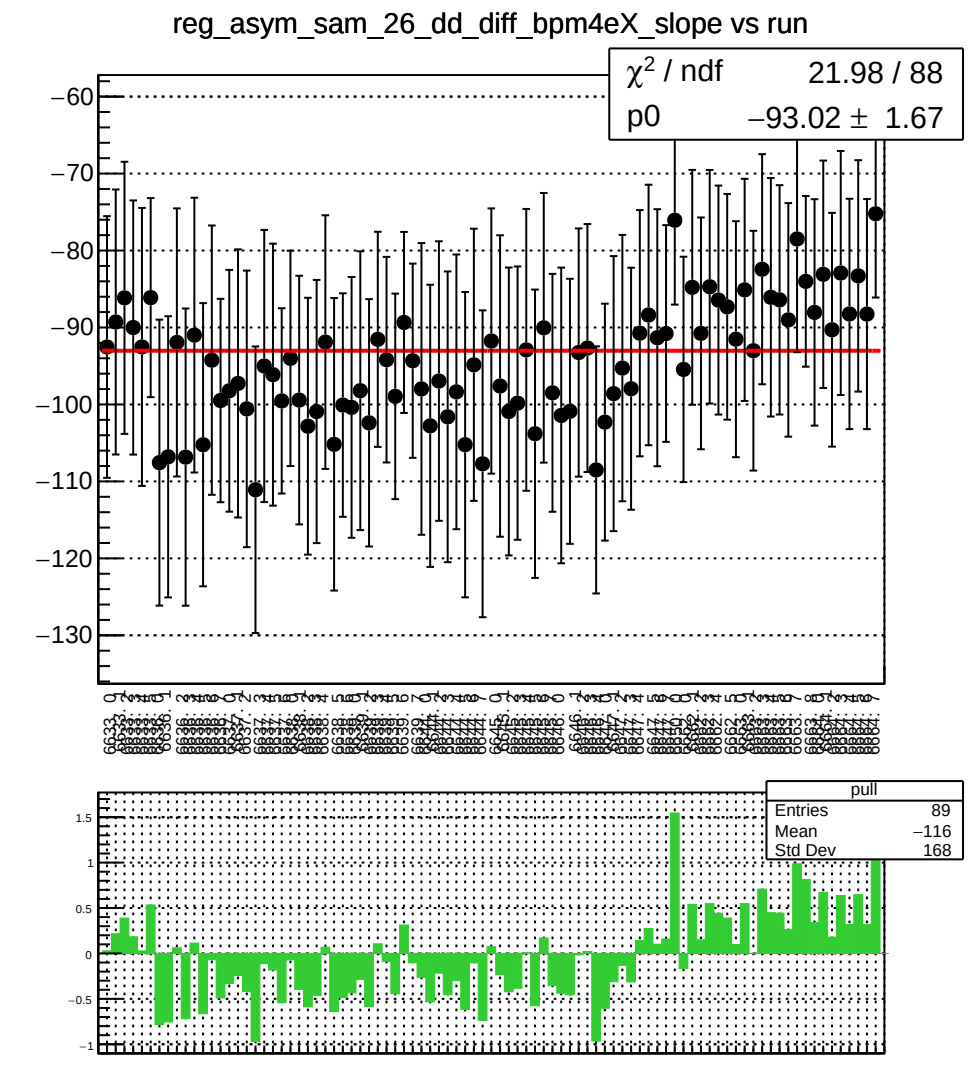

pull1D
Entries 89
Mean 0.1511
Std Dev 0.6547

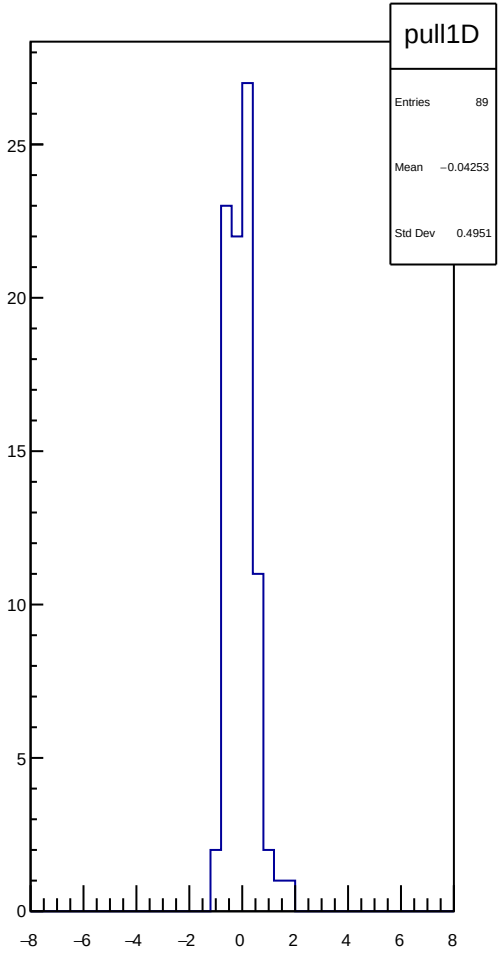

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 17.28 / 88
p0 −34.64 ± 1.56
pull
Entries 89
Mean 7.86
Std Dev 60.06

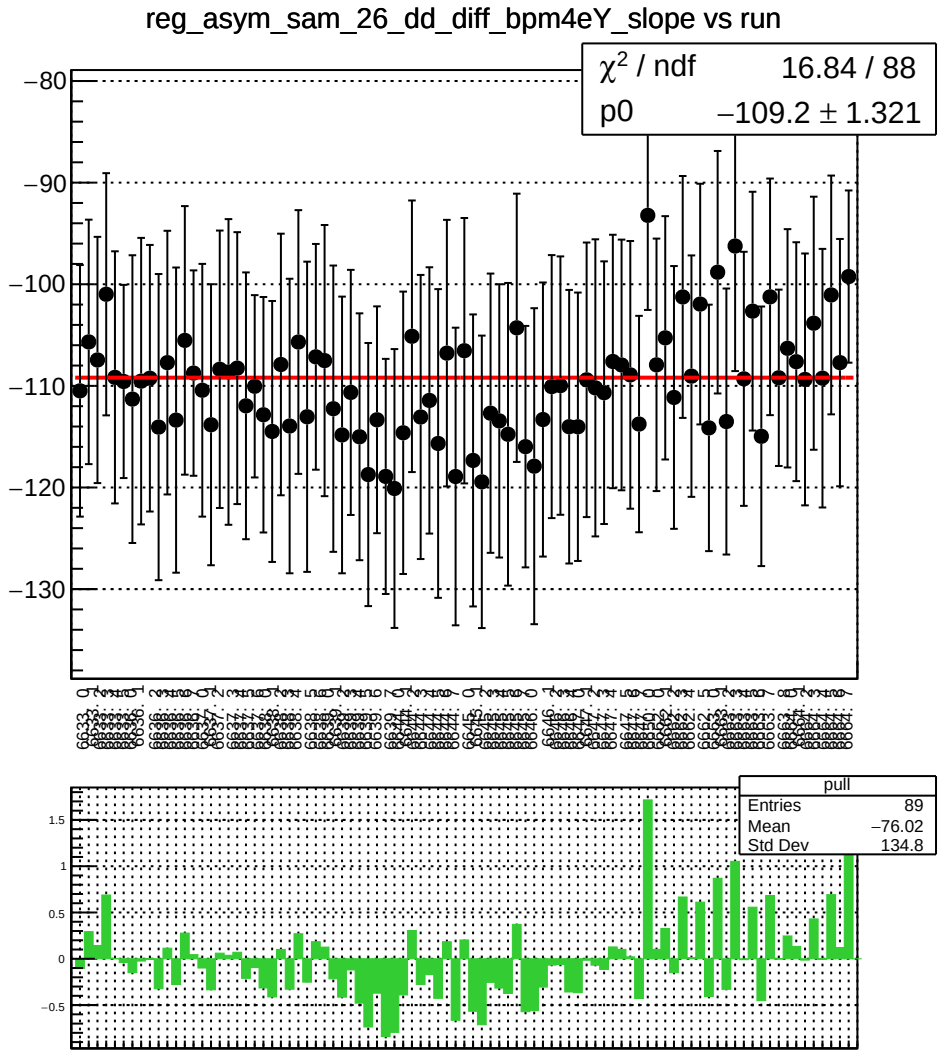

pull1D
Entries 89
Mean 0.04306
Std Dev 0.4385

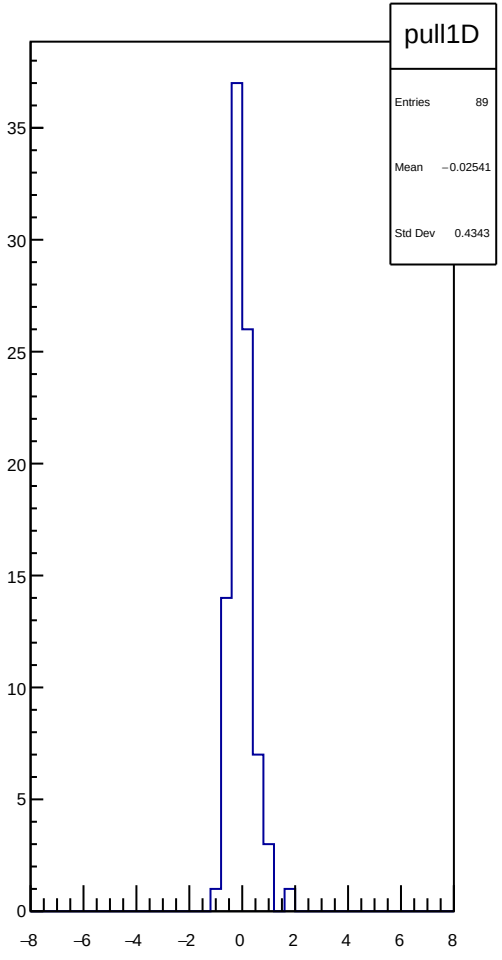

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.67 / 88
p0 −37.29 ± 1.115
pull
Entries 89
Mean −169.9
Std Dev 219.9

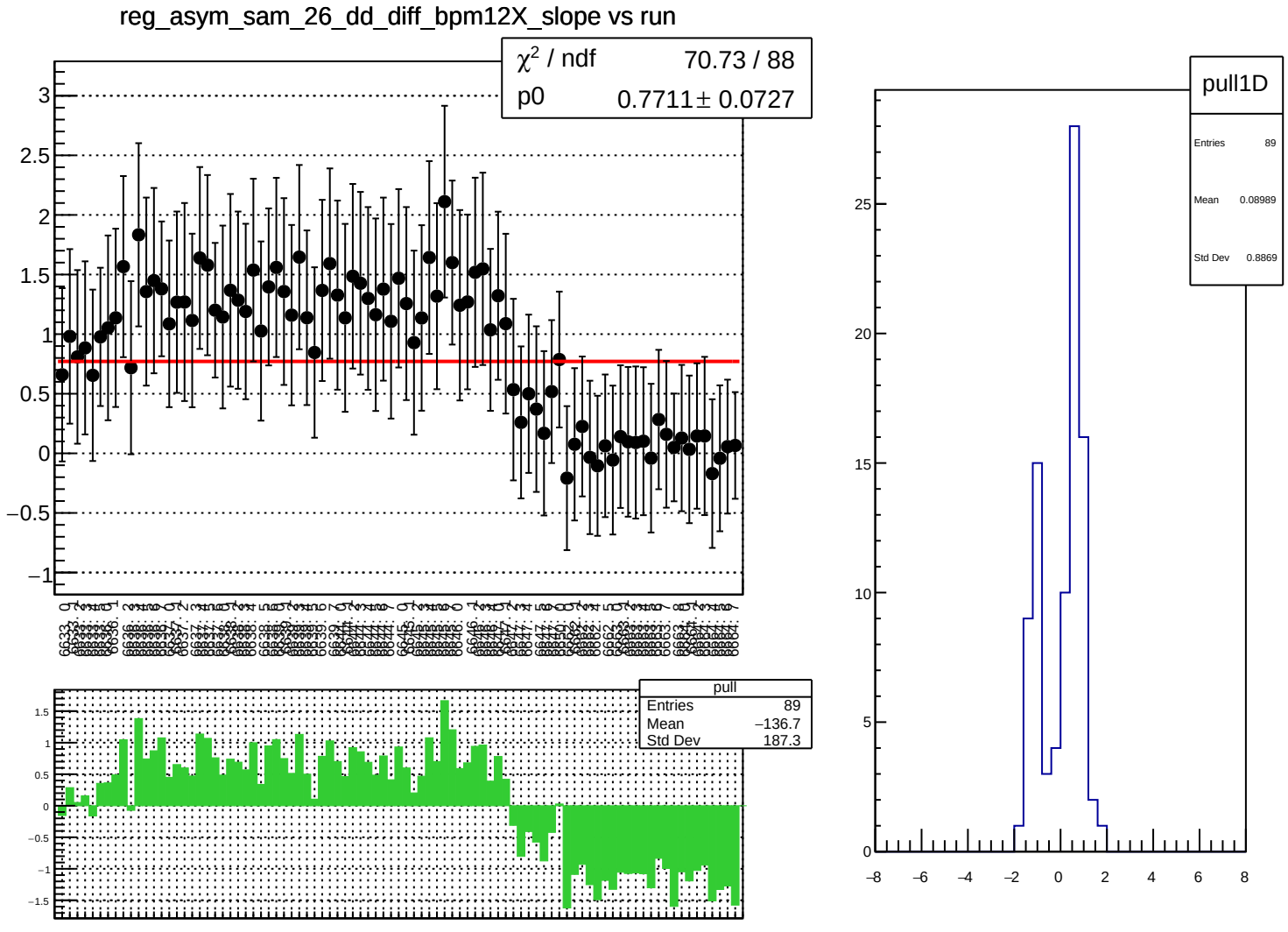

pull1D
Entries 89
Mean 0.0204
Std Dev 0.3615

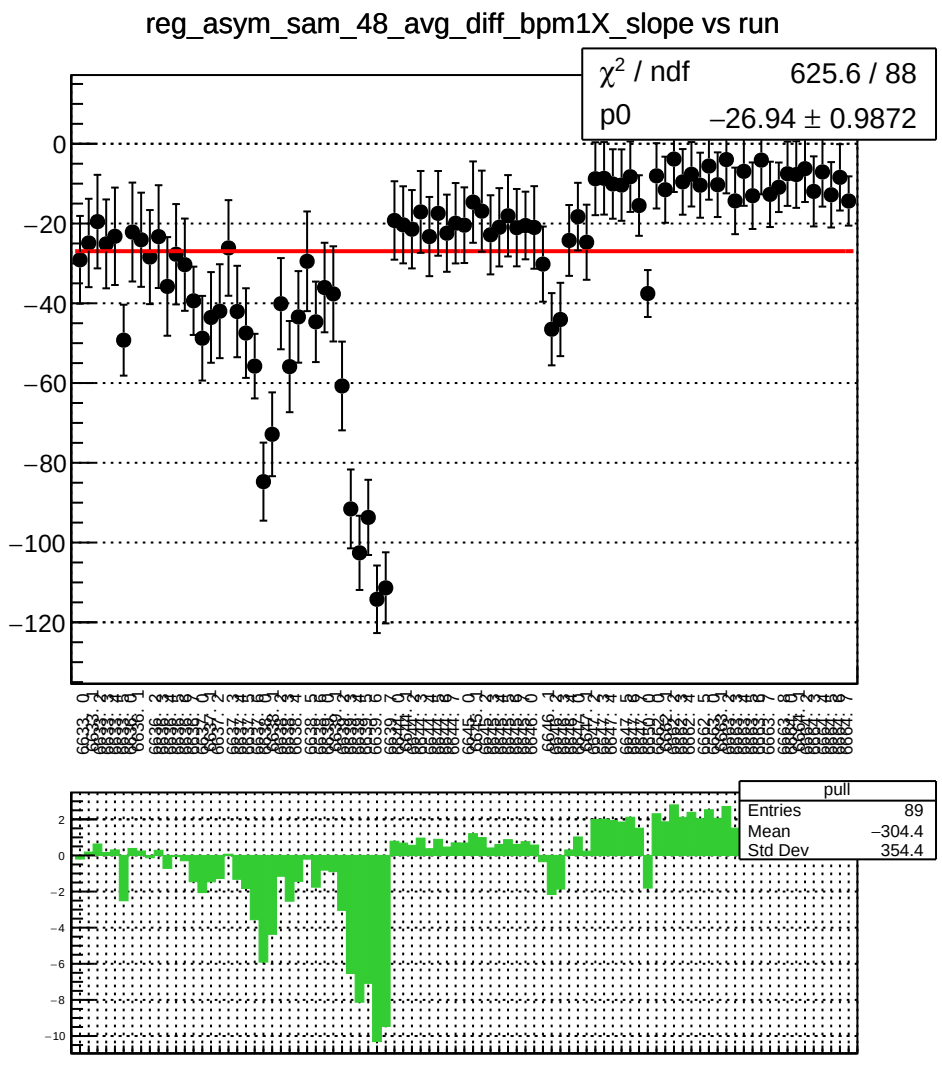

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 21.98 / 88
p0 −93.02 ± 1.67
pull
Entries 89
Mean −116
Std Dev 168

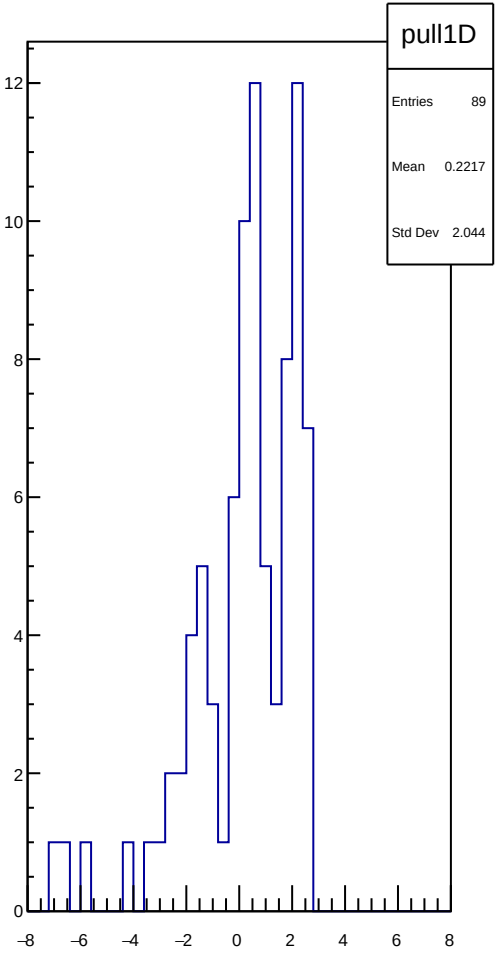

pull1D
Entries 89
Mean −0.04253
Std Dev 0.4951

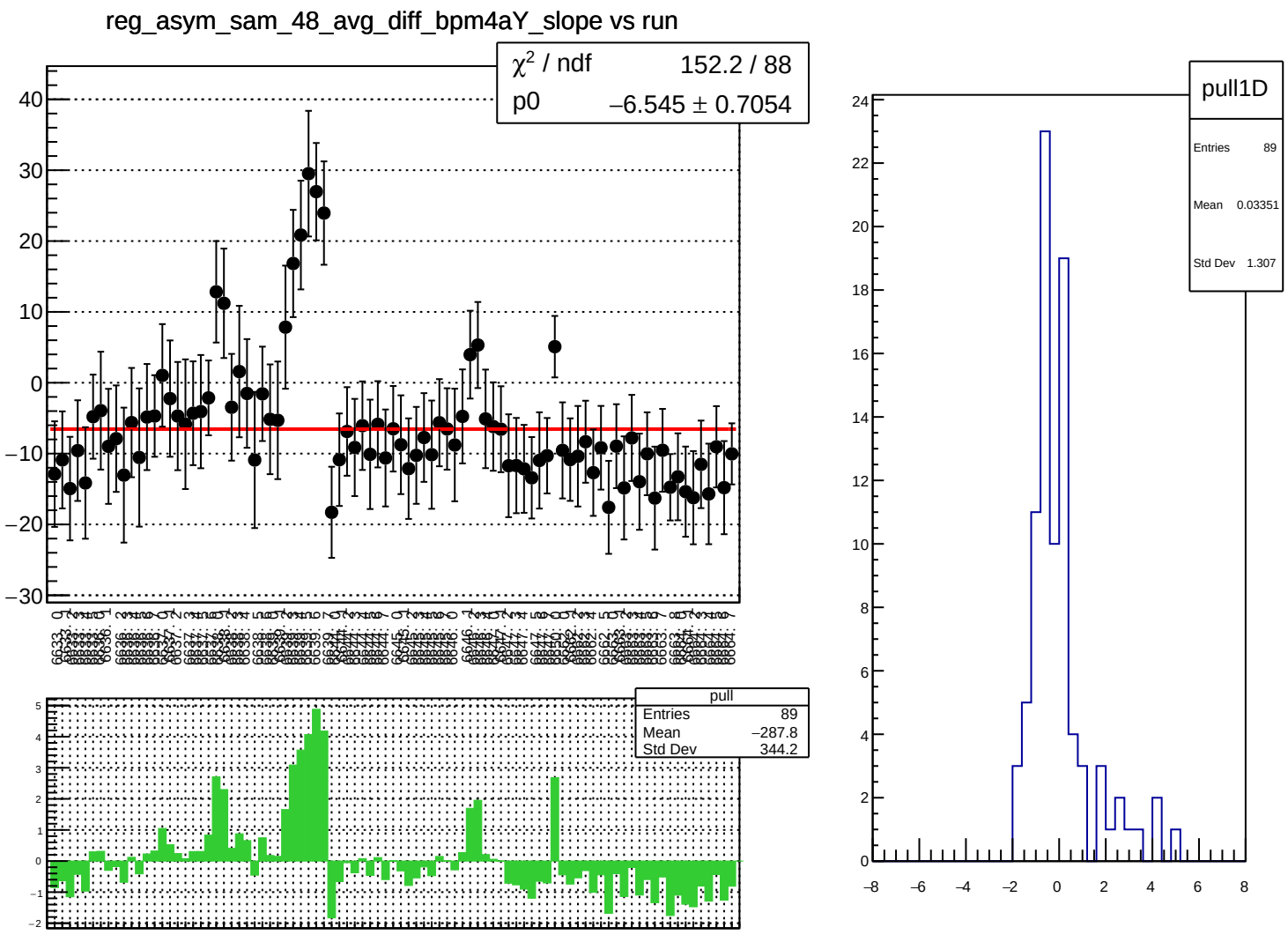

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 16.84 / 88
p0 −109.2 ± 1.321
pull
Entries 89
Mean −76.02
Std Dev 134.8

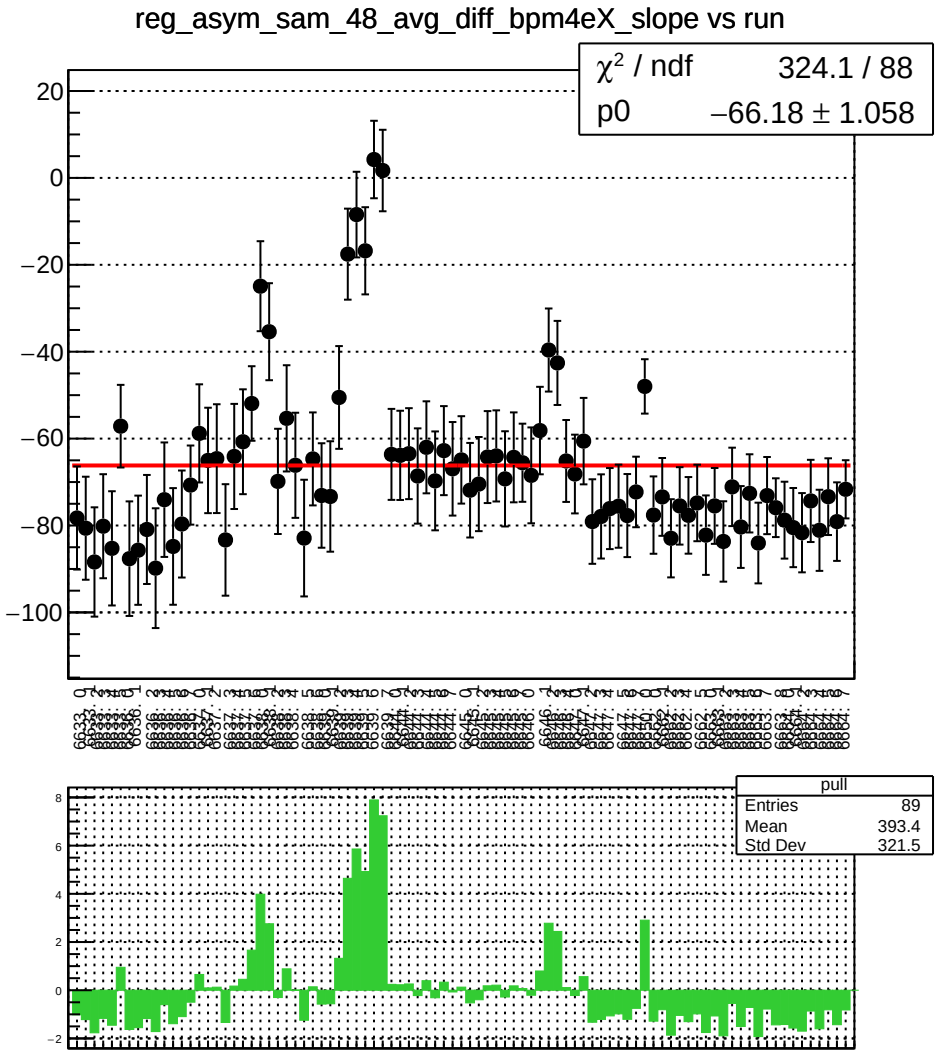

pull1D
Entries 89
Mean −0.02541
Std Dev 0.4343

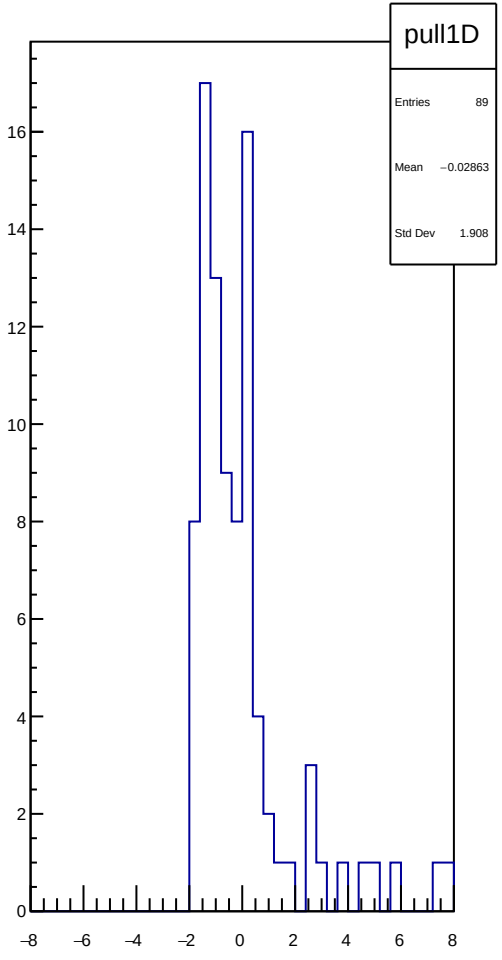

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 70.73 / 88
p0 0.7711 ± 0.0727
pull
Entries 89
Mean −136.7
Std Dev 187.3
pull1D
Entries 89
Mean 0.08989
Std Dev 0.8869

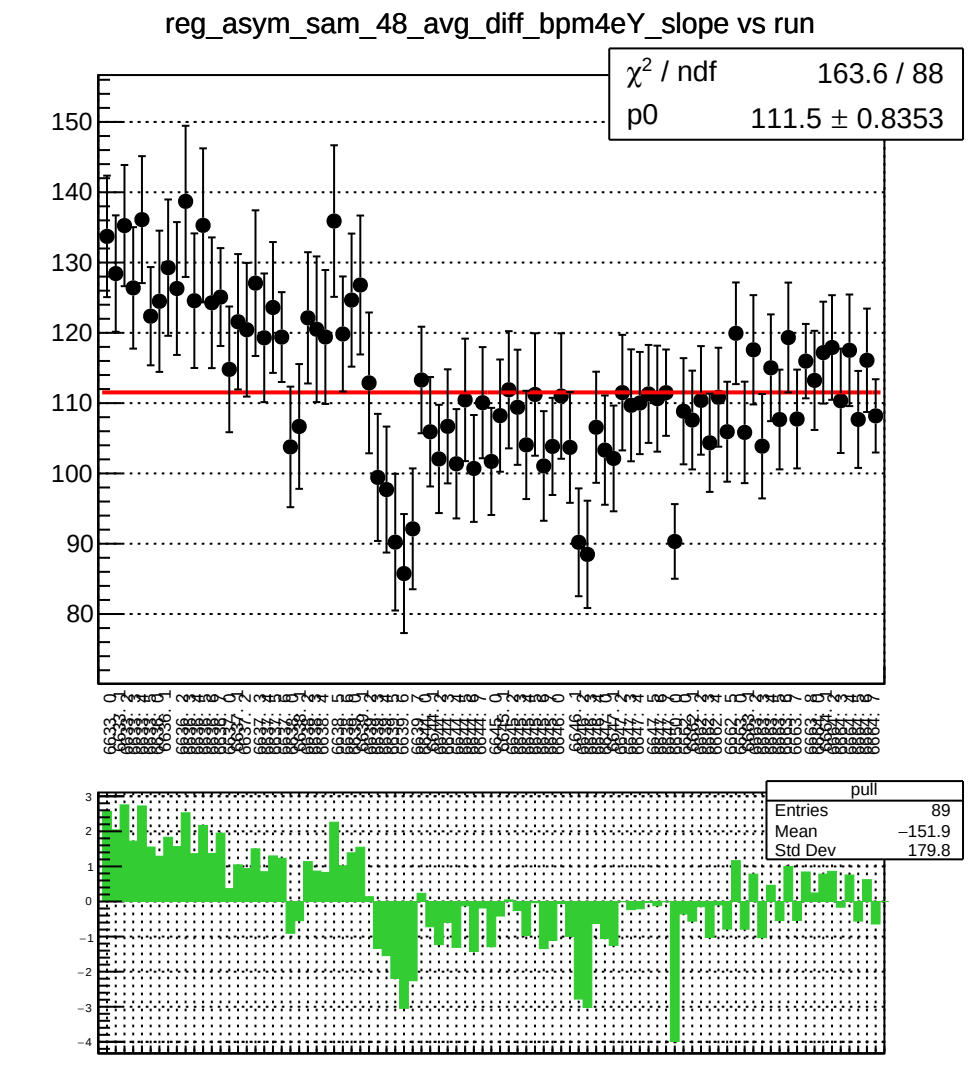

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 625.6 / 88
p0 −26.94 ± 0.9872
pull
Entries 89
Mean −304.4
Std Dev 354.4

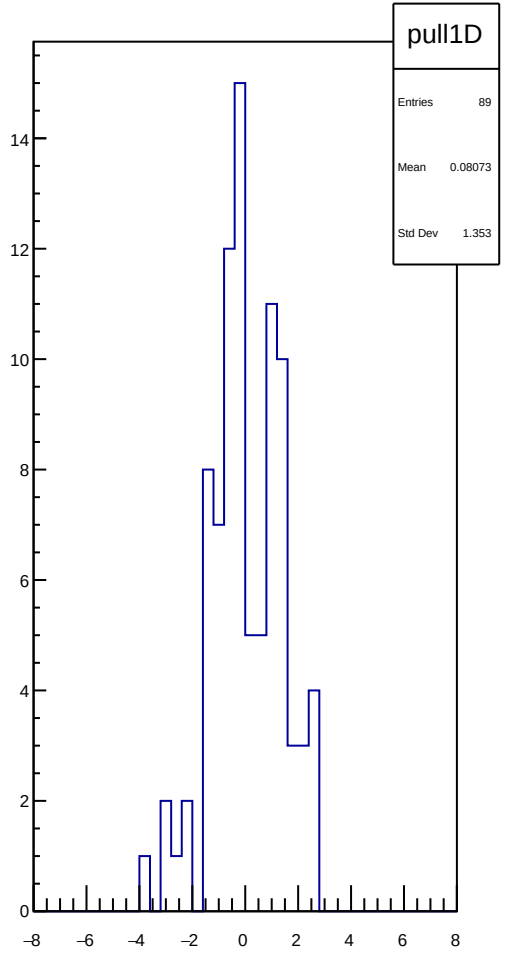

pull1D
Entries 89
Mean 0.2217
Std Dev 2.044

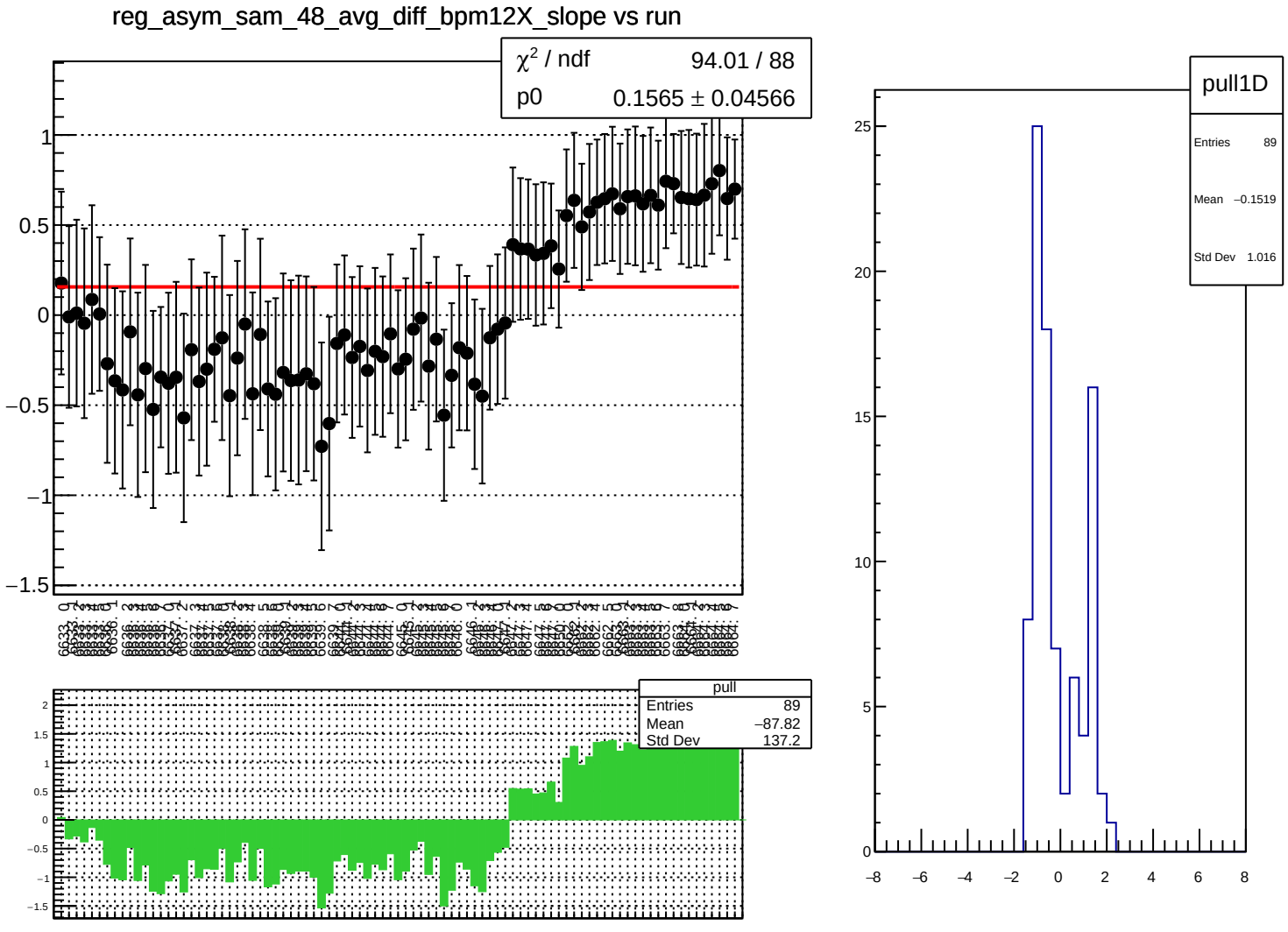

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 152.2 / 88
p0 −6.545 ± 0.7054
pull
Entries 89
Mean −287.8
Std Dev 344.2
pull1D
Entries 89
Mean 0.03351
Std Dev 1.307

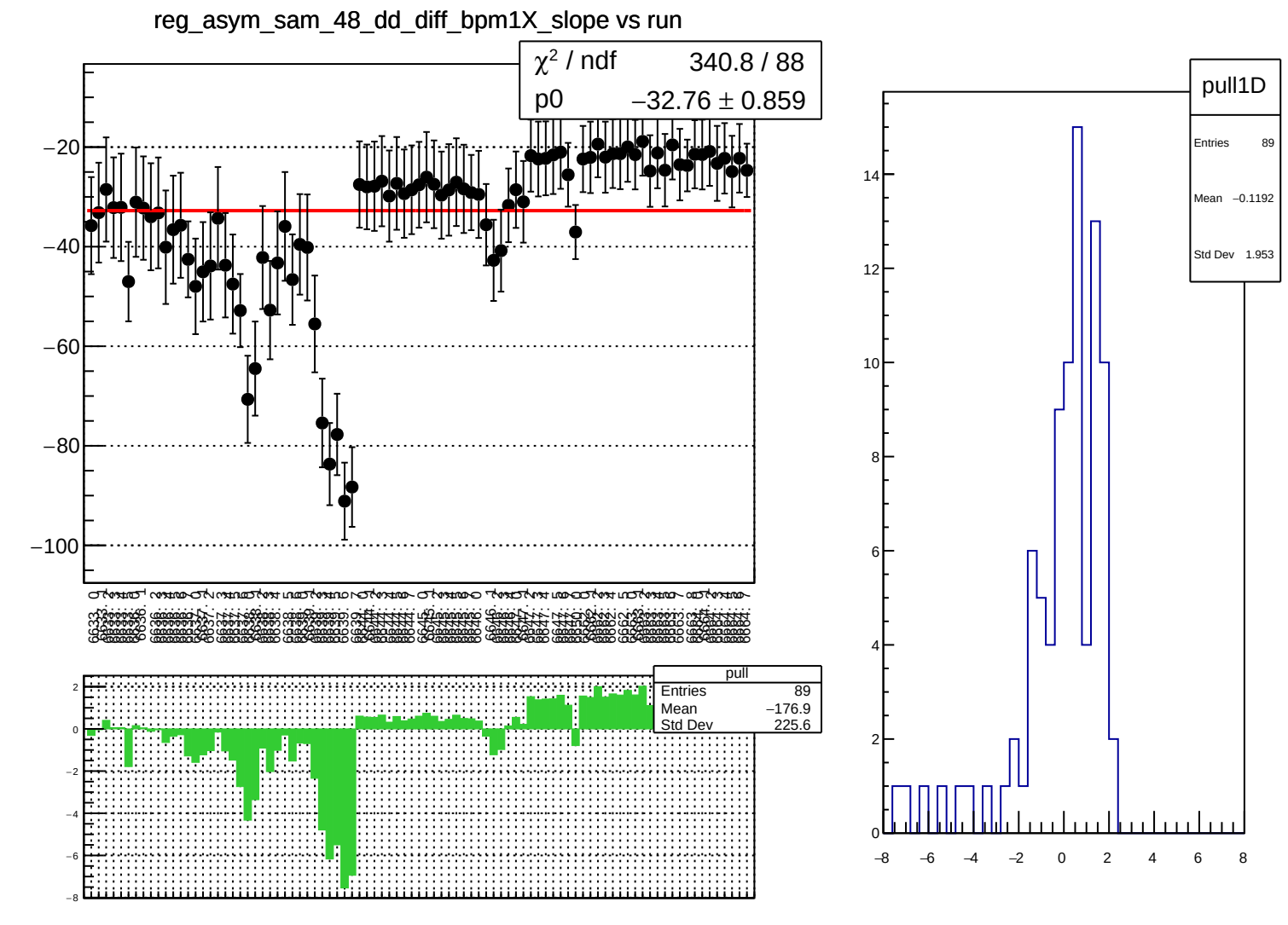

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 324.1 / 88
p0 −66.18 ± 1.058
pull
Entries 89
Mean 393.4
Std Dev 321.5

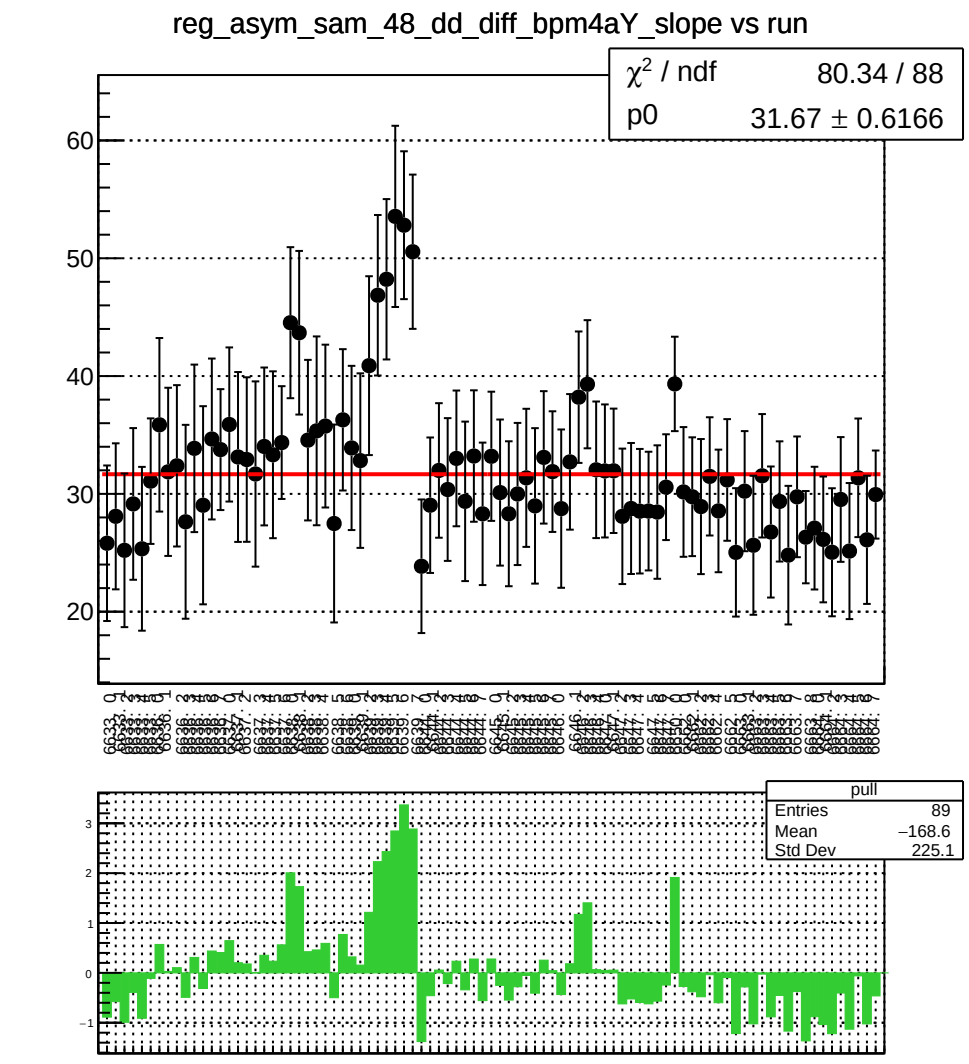

pull1D
Entries 89
Mean −0.02863
Std Dev 1.908

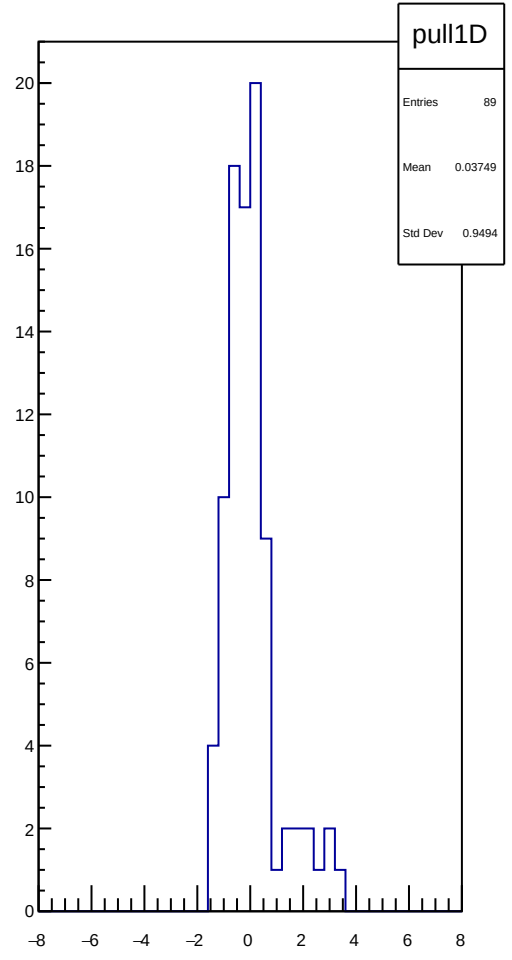

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 163.6 / 88
p0 111.5 ± 0.8353
150
140
130
120
110
100
90
80
pull
Entries 89
Mean −151.9
Std Dev 179.8
3
2
1
0
−1
−2
−3
−4

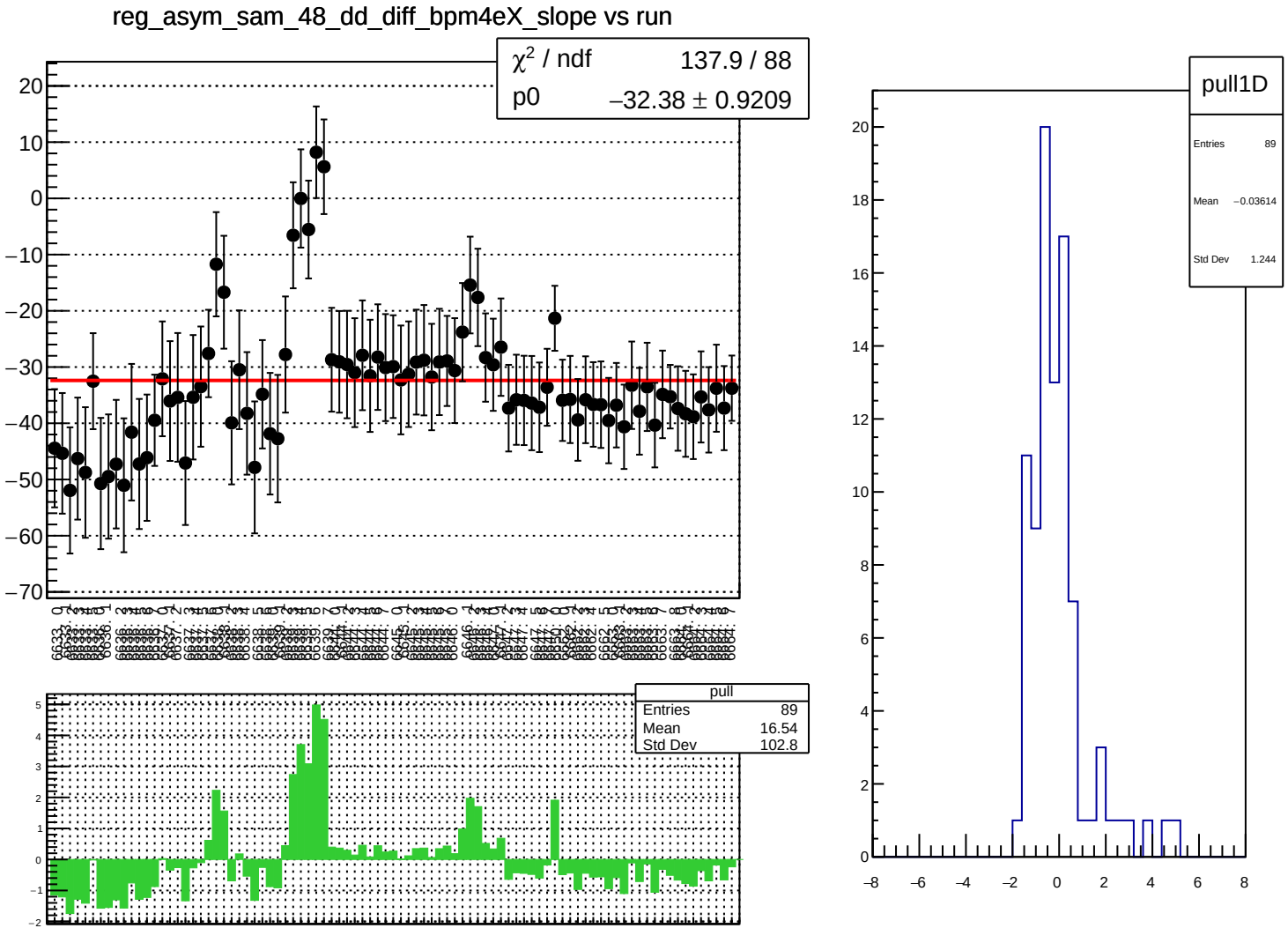

pull1D
Entries 89
Mean 0.08073
Std Dev 1.353
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

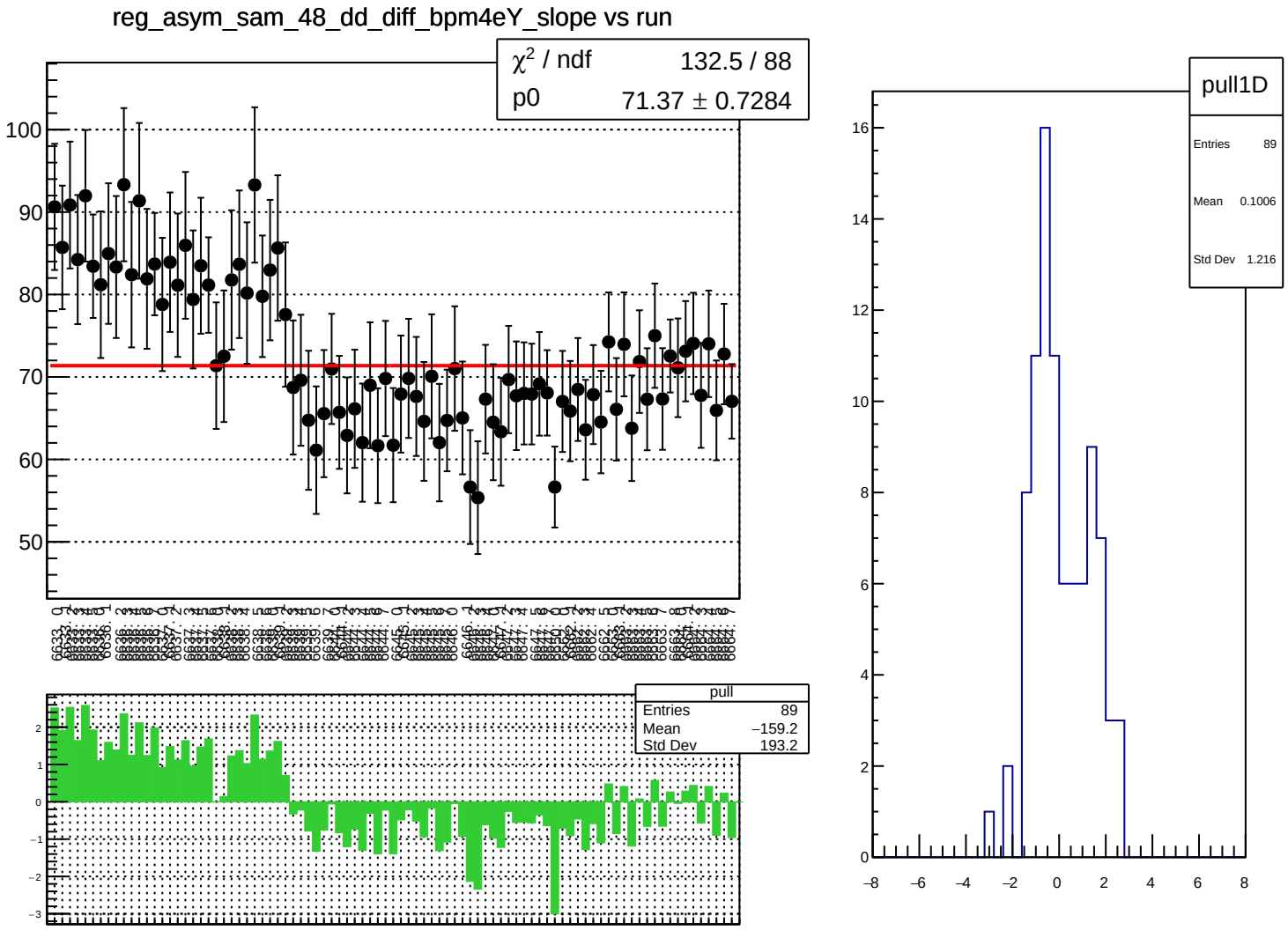

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 94.01 / 88
p0 0.1565 ± 0.04566
pull
Entries 89
Mean −87.82
Std Dev 137.2
pull1D
Entries 89
Mean −0.1519
Std Dev 1.016

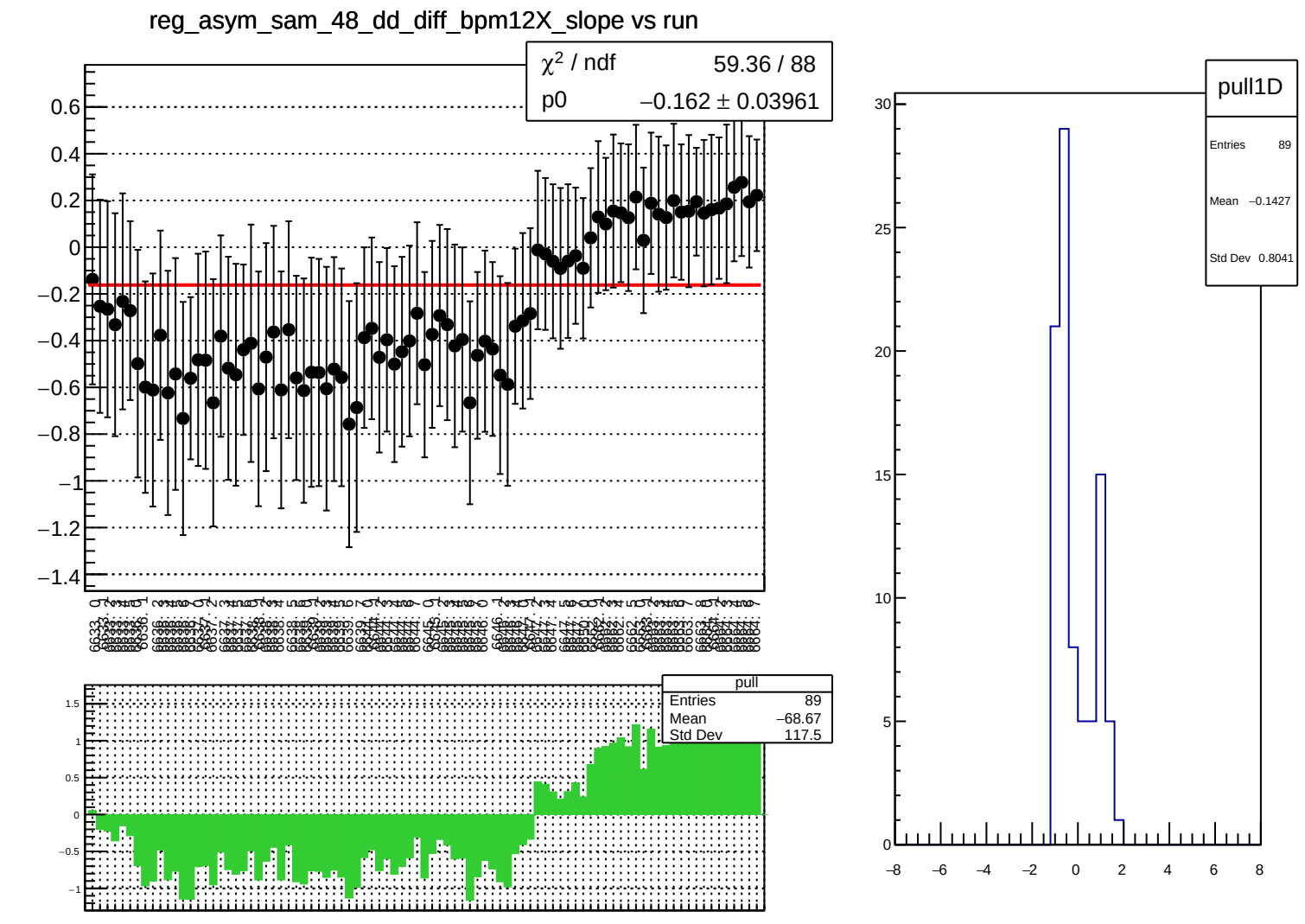

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 340.8 / 88
p0 −32.76 ± 0.859
−20
−40
−60
−80
−100
pull
Entries 89
Mean −176.9
Std Dev 225.6
2
0
−2
−4
−6
−8
pull1D
Entries 89
Mean −0.1192
Std Dev 1.953
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

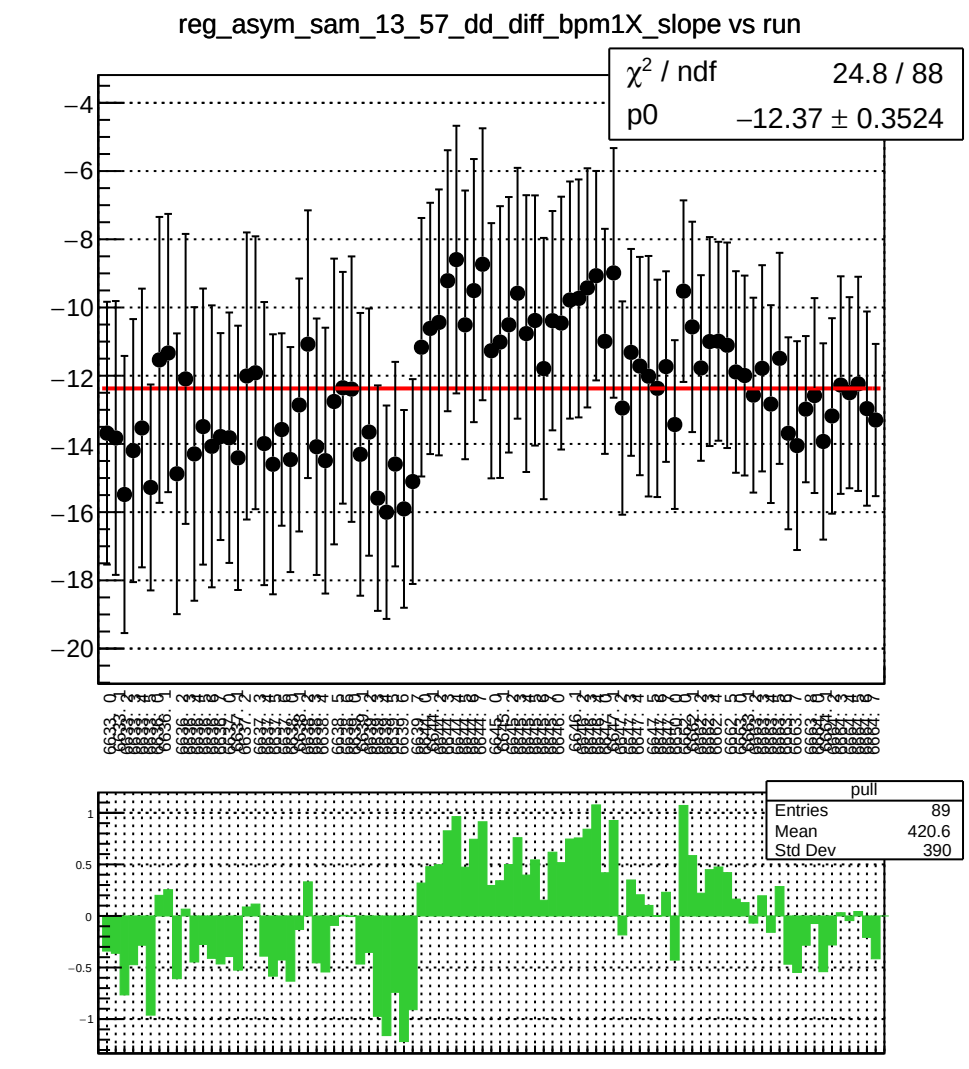

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 80.34 / 88
p0 31.67 ± 0.6166
pull
Entries 89
Mean −168.6
Std Dev 225.1

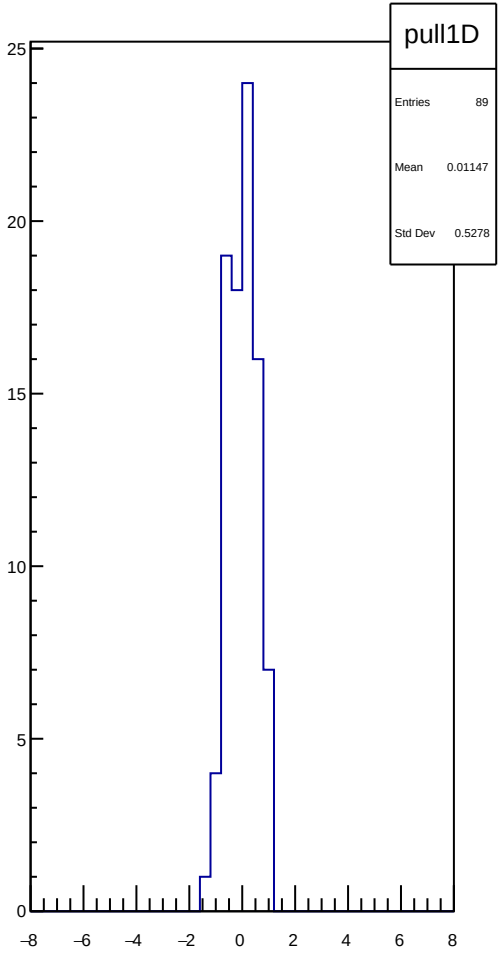

pull1D
Entries 89
Mean 0.03749
Std Dev 0.9494

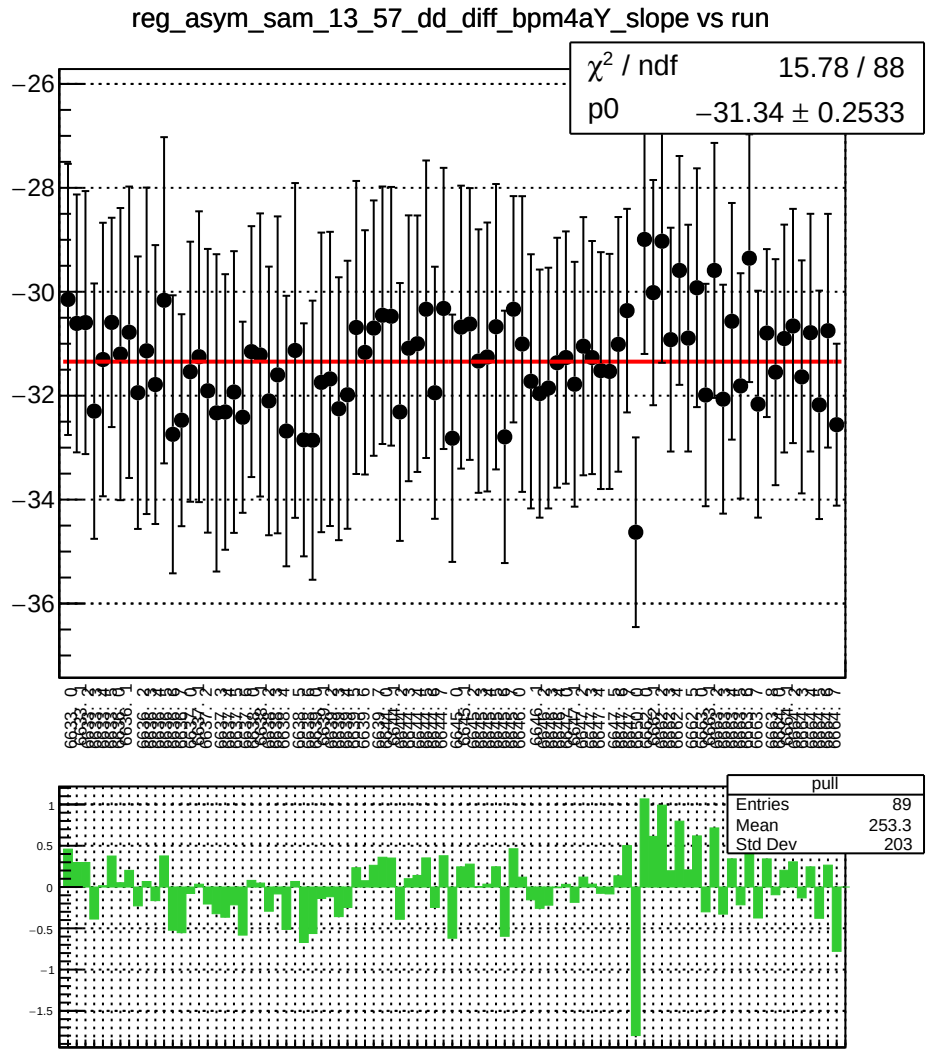

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 137.9 / 88
p0 −32.38 ± 0.9209
pull
Entries 89
Mean 16.54
Std Dev 102.8
pull1D
Entries 89
Mean −0.03614
Std Dev 1.244

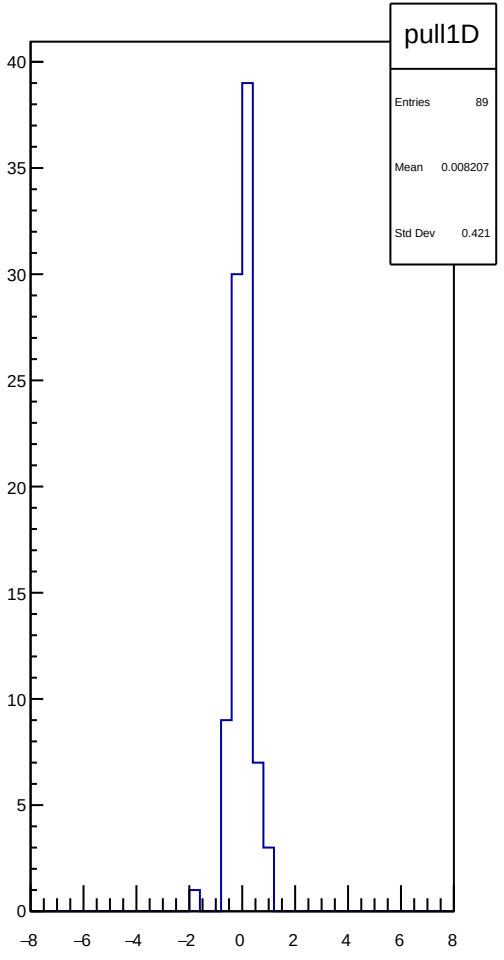

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 132.5 / 88
p0 71.37 ± 0.7284
pull
Entries 89
Mean −159.2
Std Dev 193.2
pull1D
Entries 89
Mean 0.1006
Std Dev 1.216

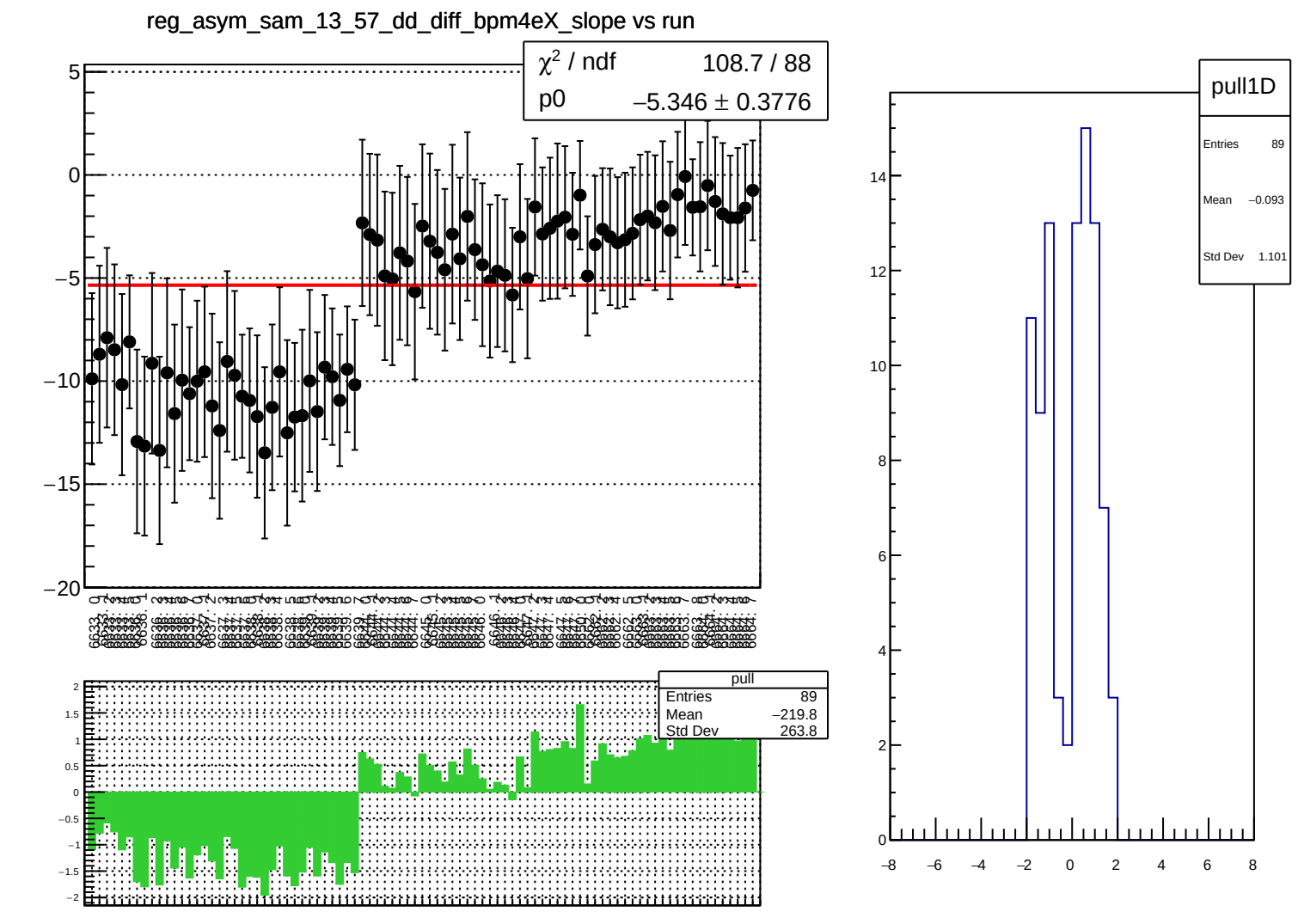

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 59.36 / 88
p0 −0.162 ± 0.03961
pull
Entries 89
Mean −68.67
Std Dev 117.5
pull1D
Entries 89
Mean −0.1427
Std Dev 0.8041

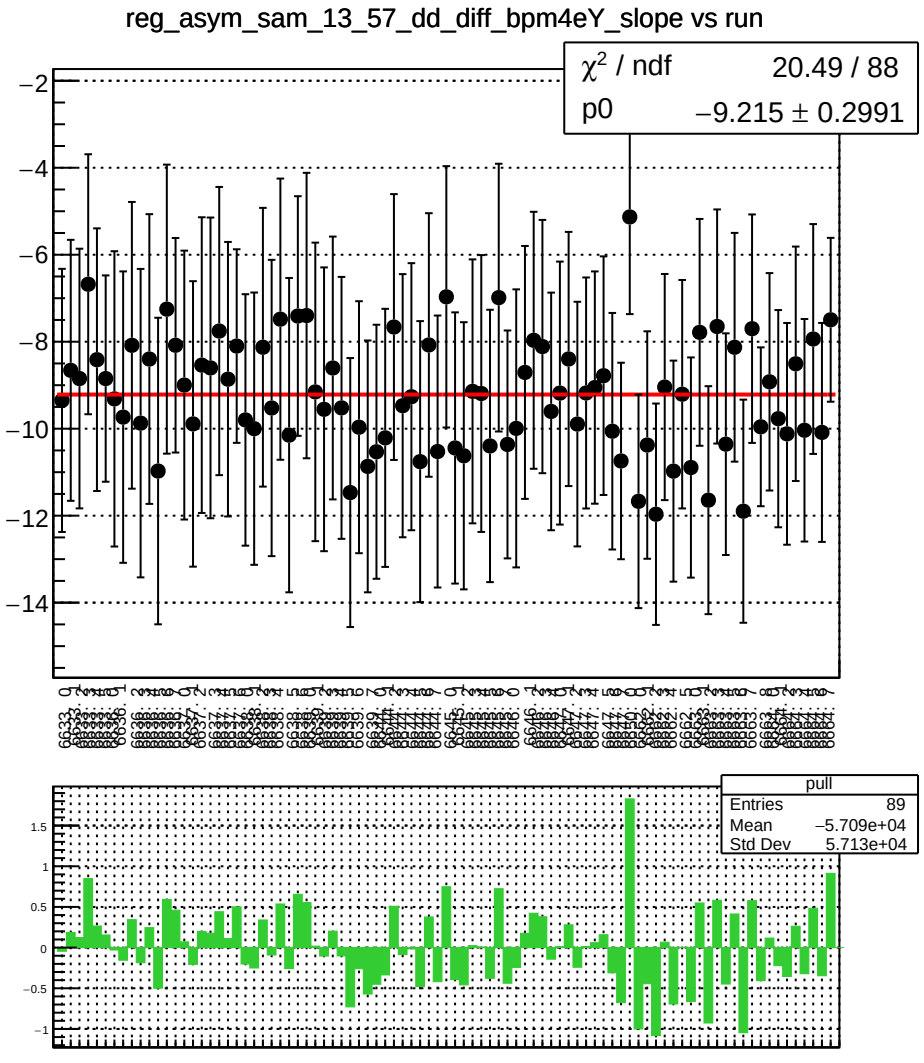

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 24.8 / 88
p0 −12.37 ± 0.3524
pull
Entries 89
Mean 420.6
Std Dev 390

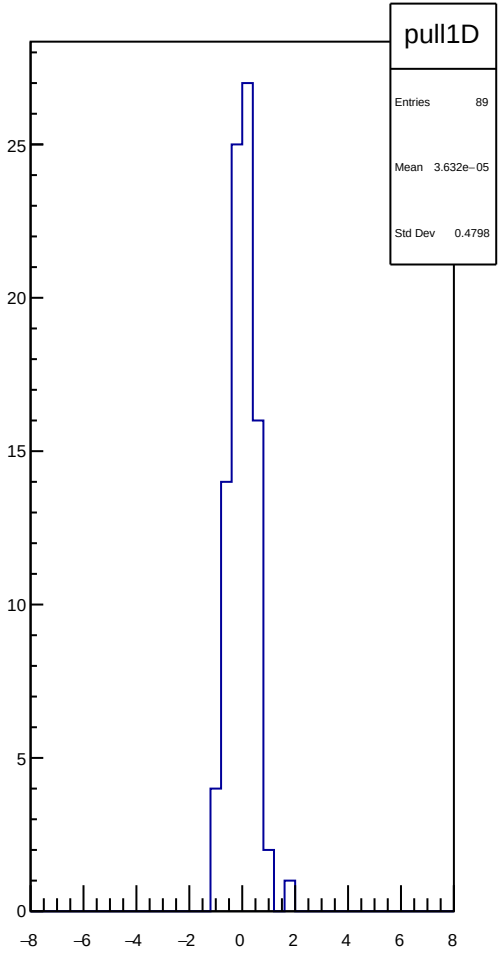

pull1D
Entries 89
Mean 0.01147
Std Dev 0.5278

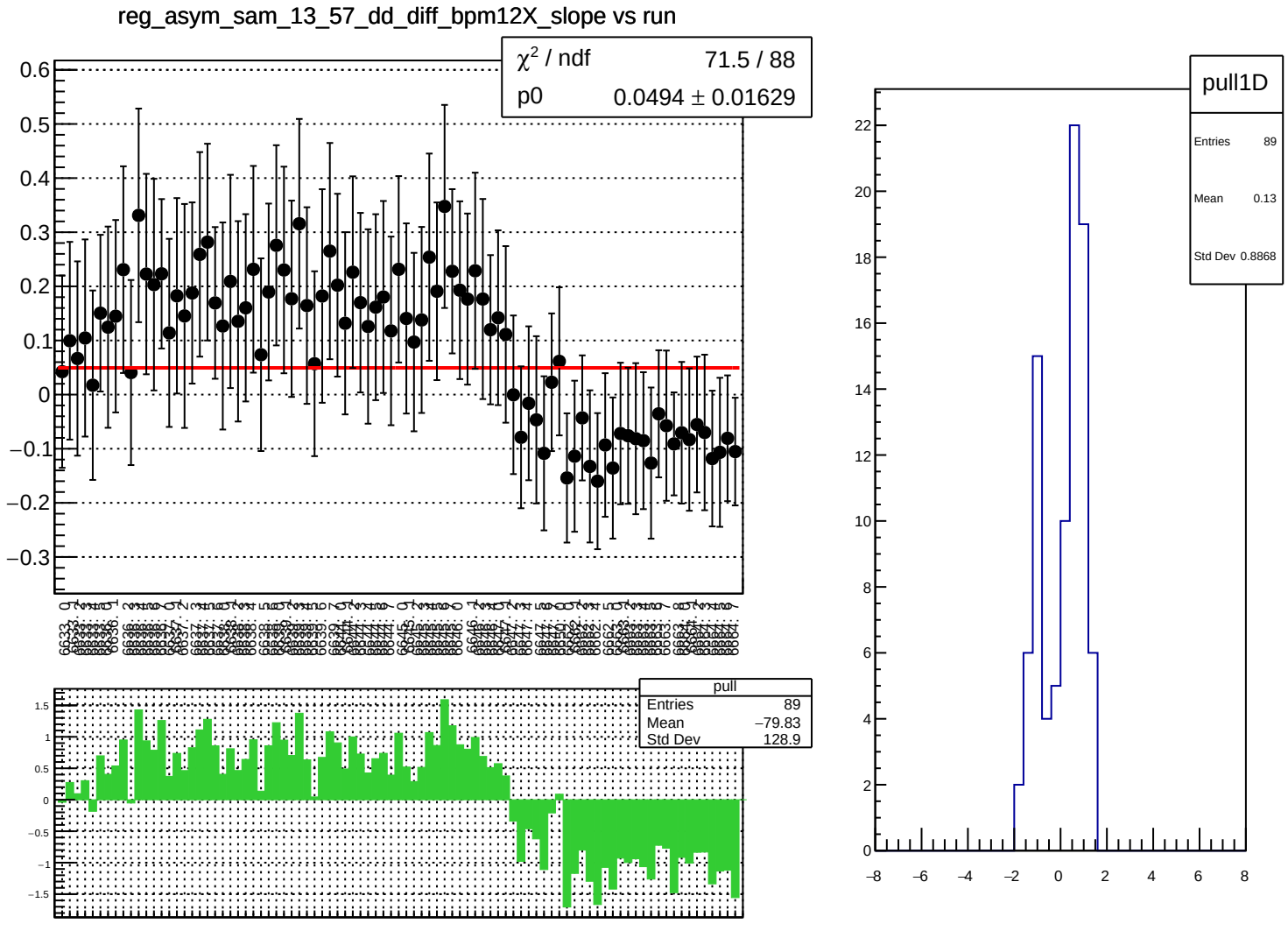

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 15.78 / 88
p0 −31.34 ± 0.2533
pull
Entries 89
Mean 253.3
Std Dev 203

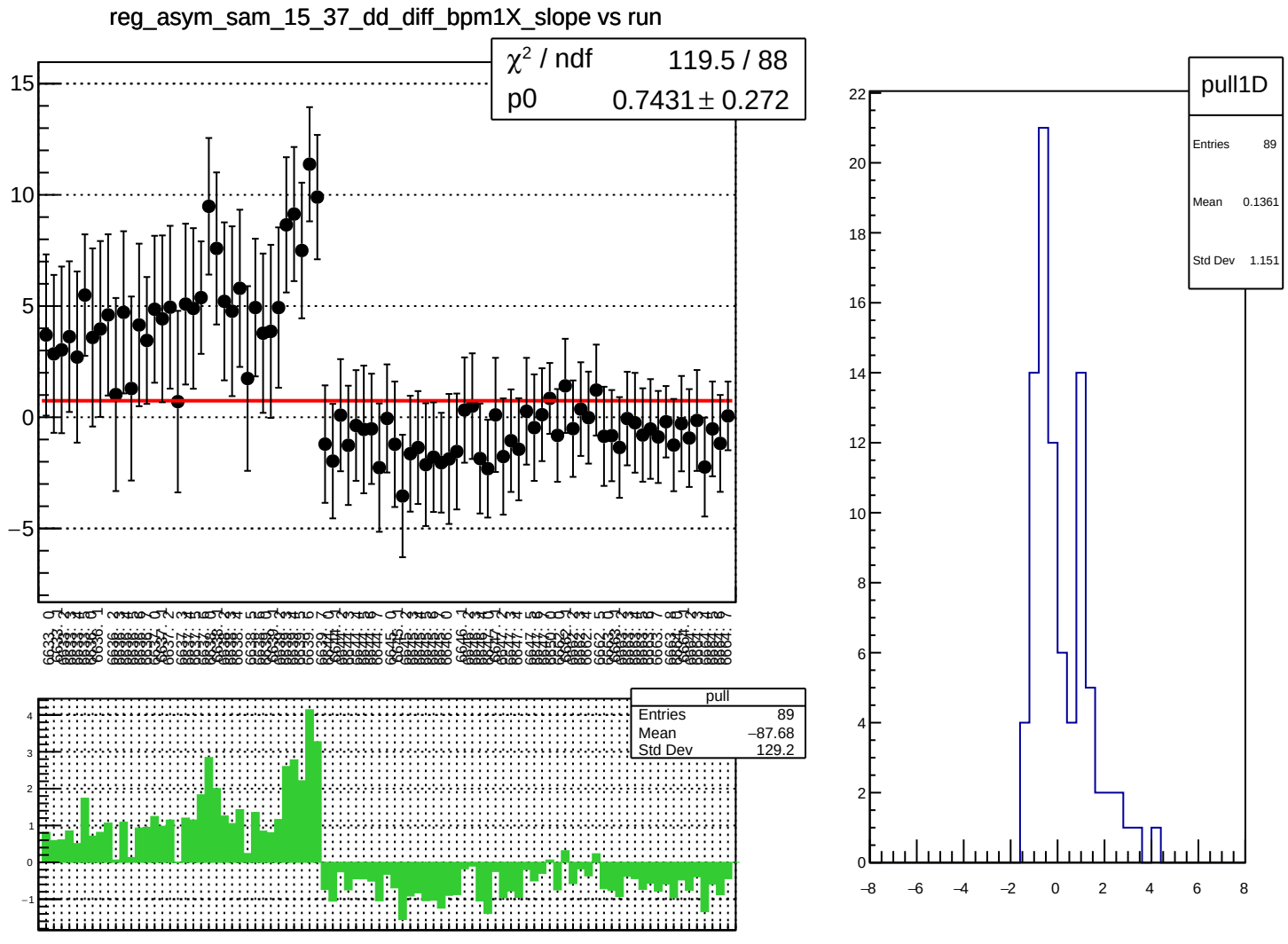

pull1D
Entries 89
Mean 0.008207
Std Dev 0.421

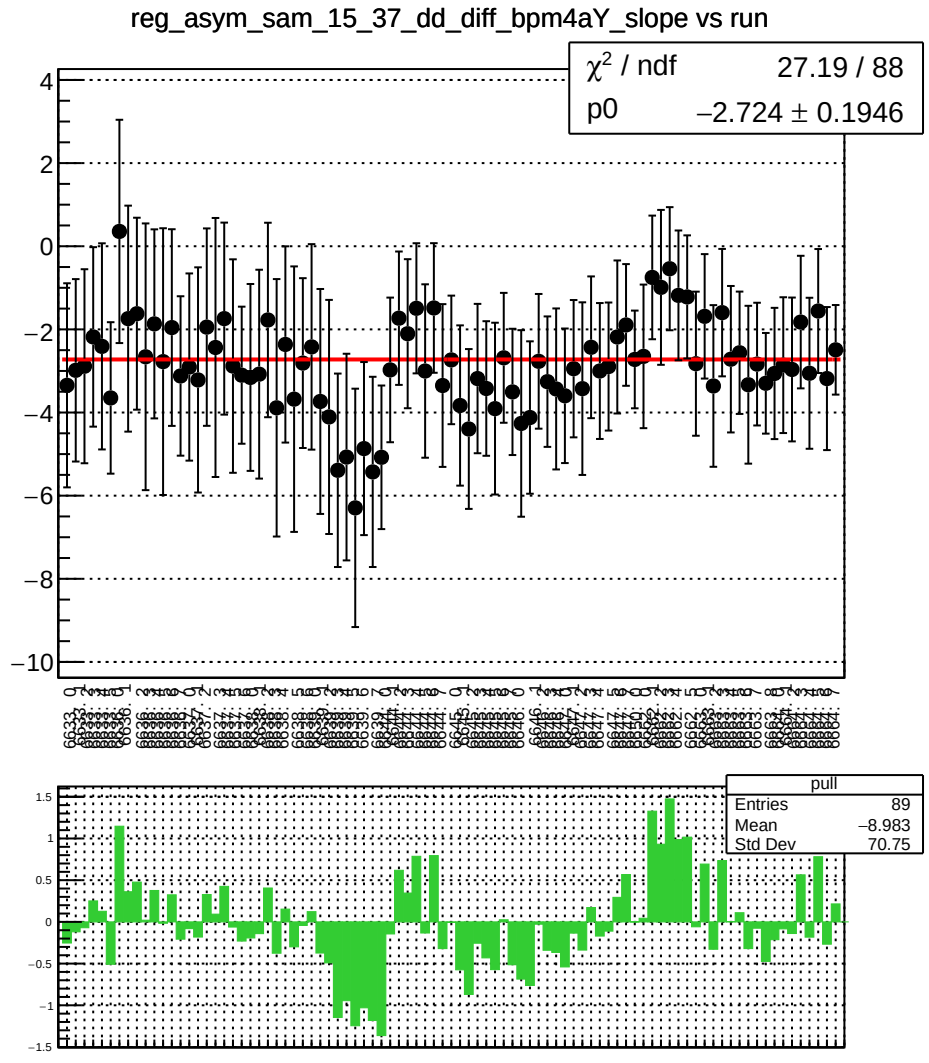

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 108.7 / 88
p0 −5.346 ± 0.3776
pull
Entries 89
Mean −219.8
Std Dev 263.8
pull1D
Entries 89
Mean −0.093
Std Dev 1.101

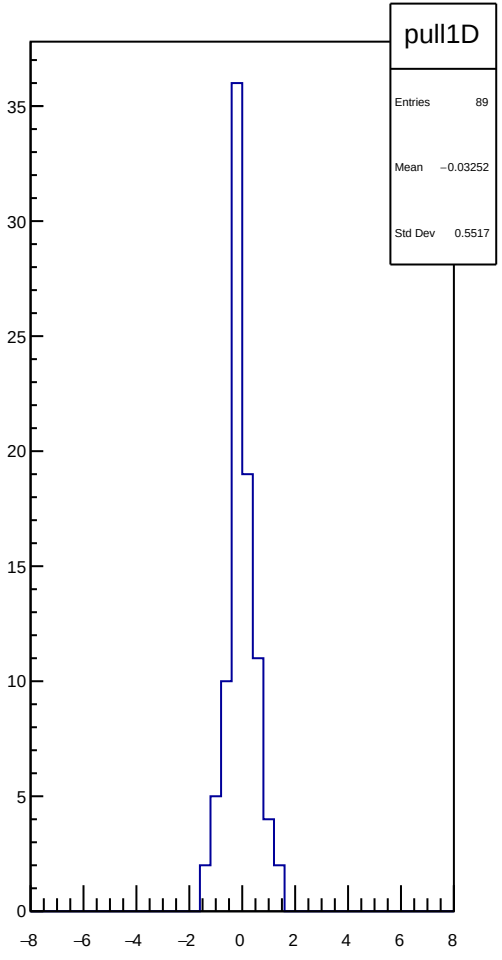

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 20.49 / 88
p0 −9.215 ± 0.2991
pull
Entries 89
Mean −5.709e+04
Std Dev 5.713e+04

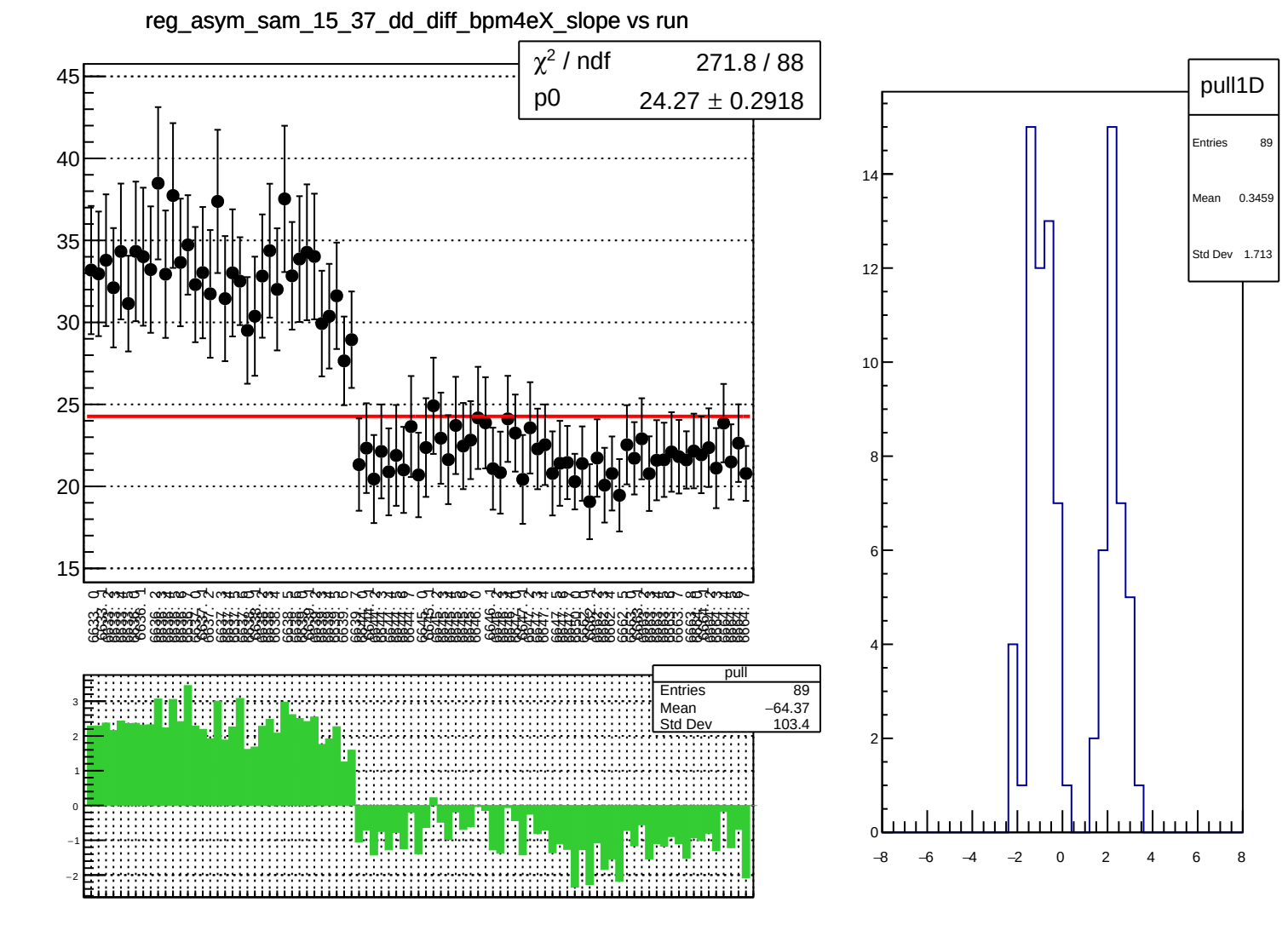

pull1D
Entries 89
Mean 3.632e−05
Std Dev 0.4798

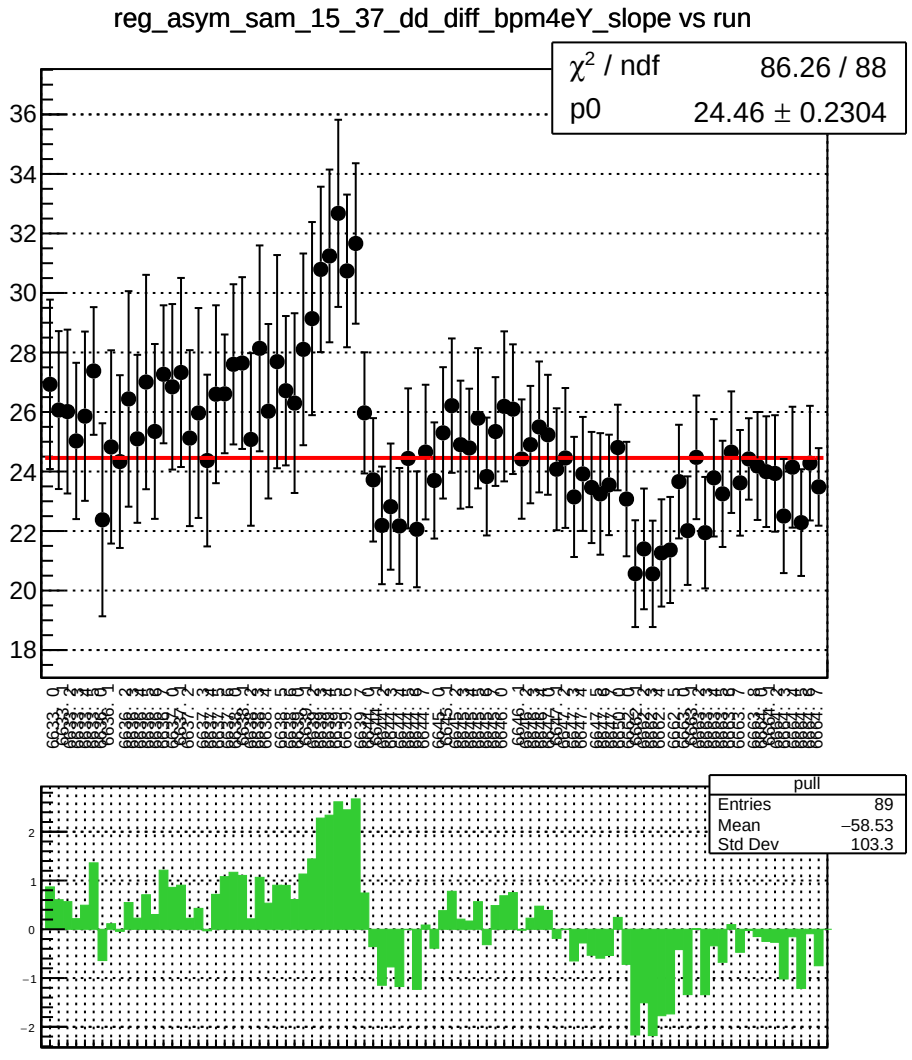

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 71.5 / 88
p0 0.0494 ± 0.01629
pull
Entries 89
Mean −79.83
Std Dev 128.9
pull1D
Entries 89
Mean 0.13
Std Dev 0.8868

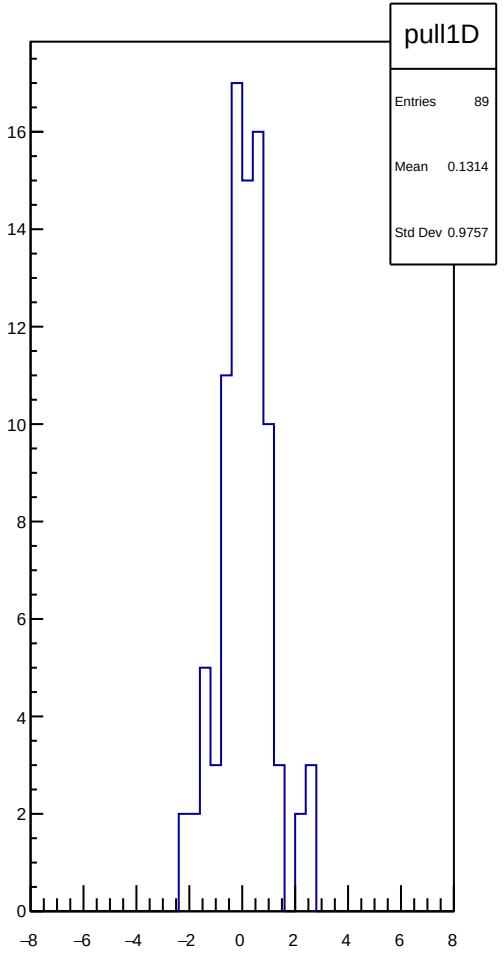

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 119.5 / 88
p0 0.7431 ± 0.272
pull
Entries 89
Mean −87.68
Std Dev 129.2
pull1D
Entries 89
Mean 0.1361
Std Dev 1.151

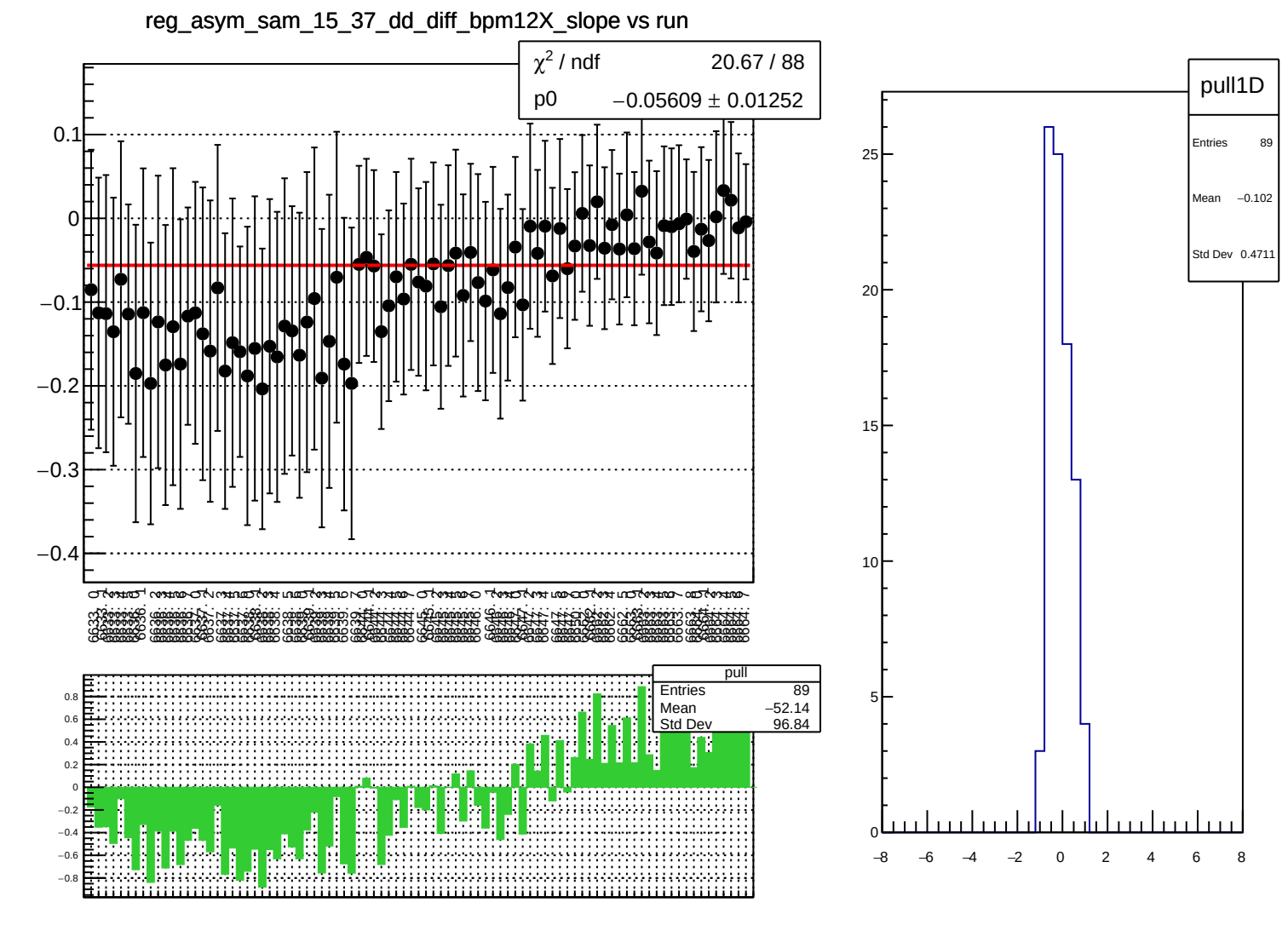

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 27.19 / 88
p0 −2.724 ± 0.1946
pull
Entries 89
Mean −8.983
Std Dev 70.75

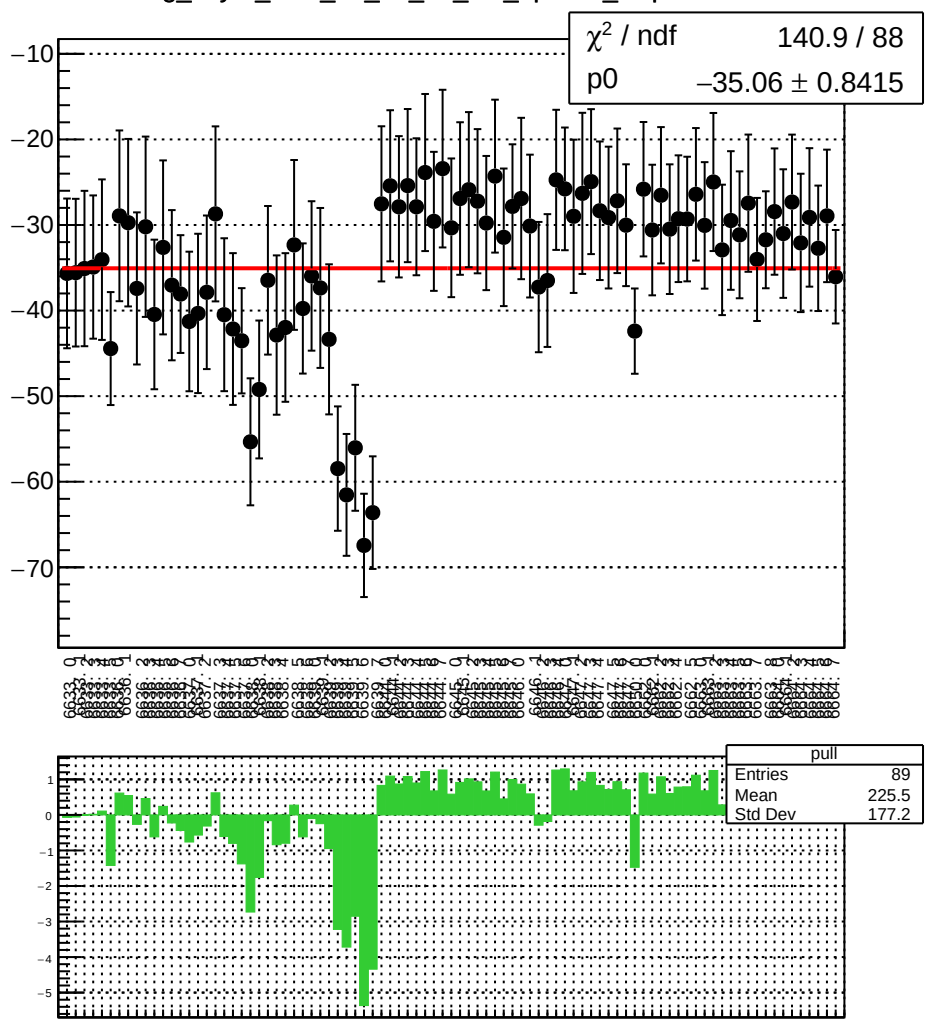

pull1D
Entries 89
Mean −0.03252
Std Dev 0.5517

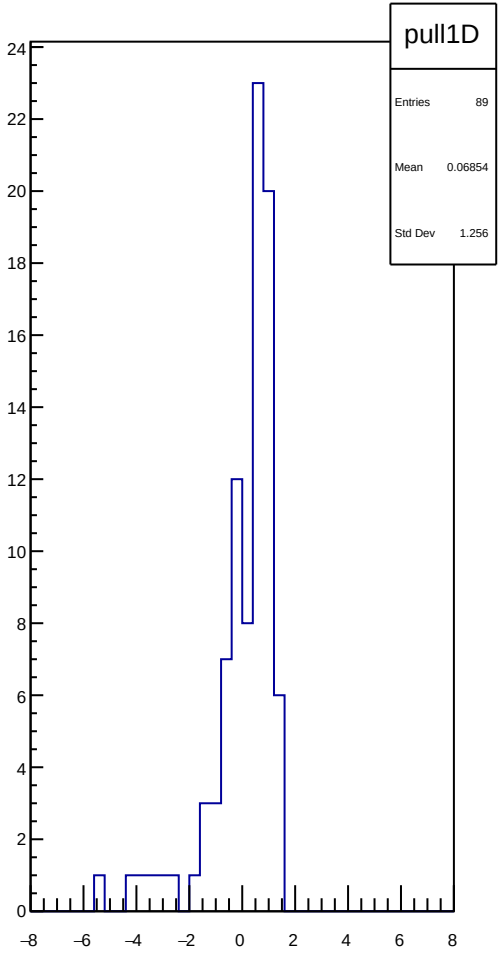

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 271.8 / 88
p0 24.27 ± 0.2918
pull
Entries 89
Mean −64.37
Std Dev 103.4
pull1D
Entries 89
Mean 0.3459
Std Dev 1.713

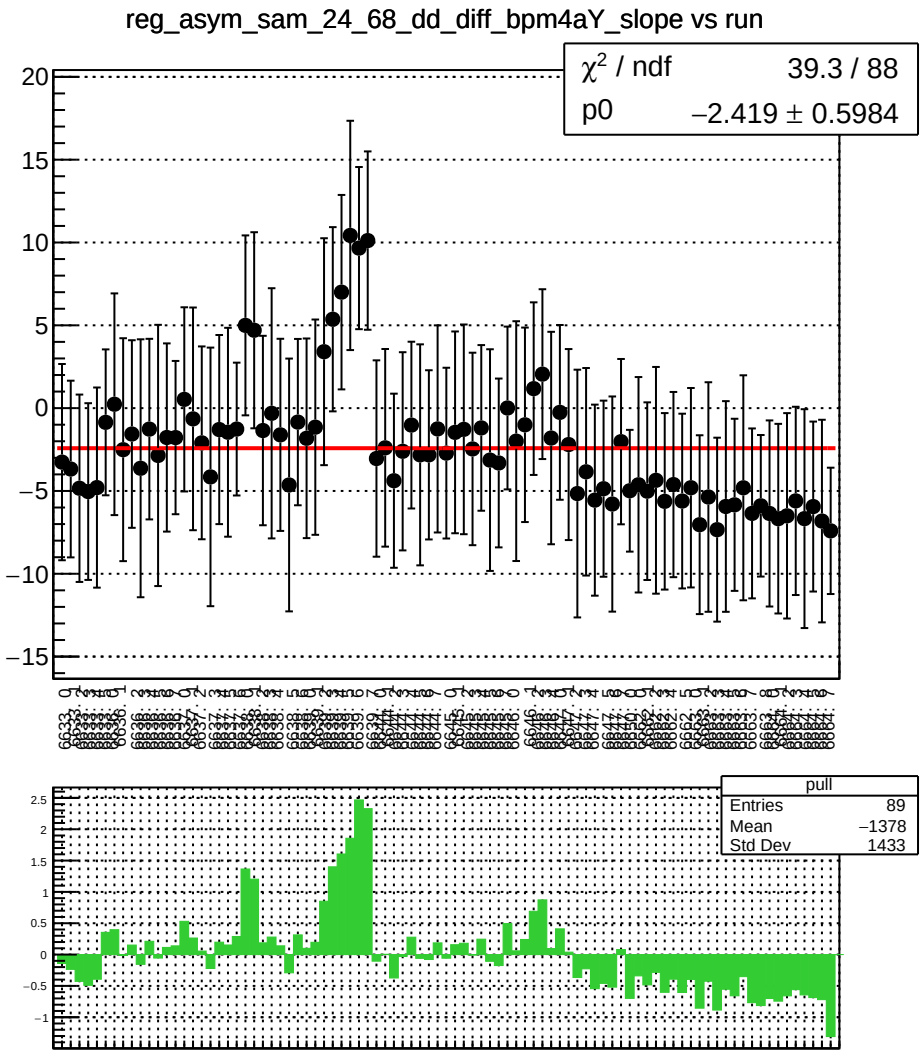

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 86.26 / 88
p0 24.46 ± 0.2304
pull
Entries 89
Mean −58.53
Std Dev 103.3

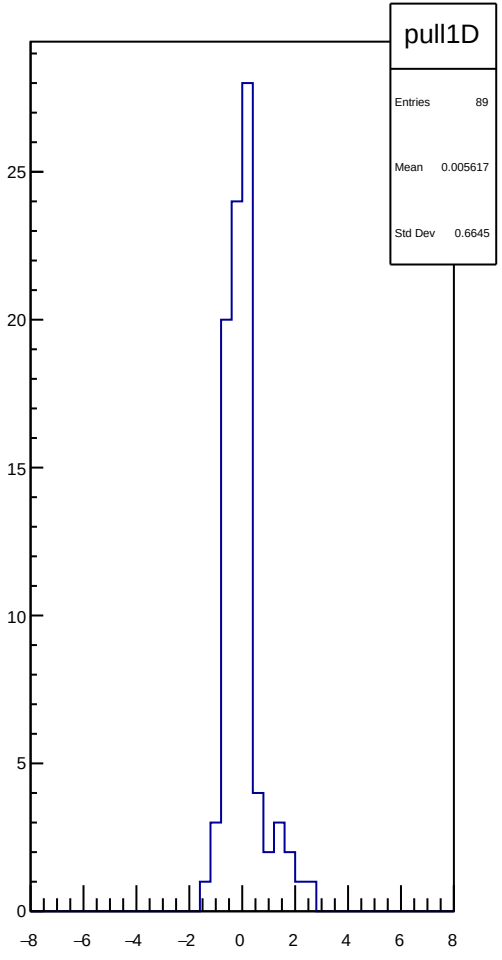

pull1D
Entries 89
Mean 0.1314
Std Dev 0.9757

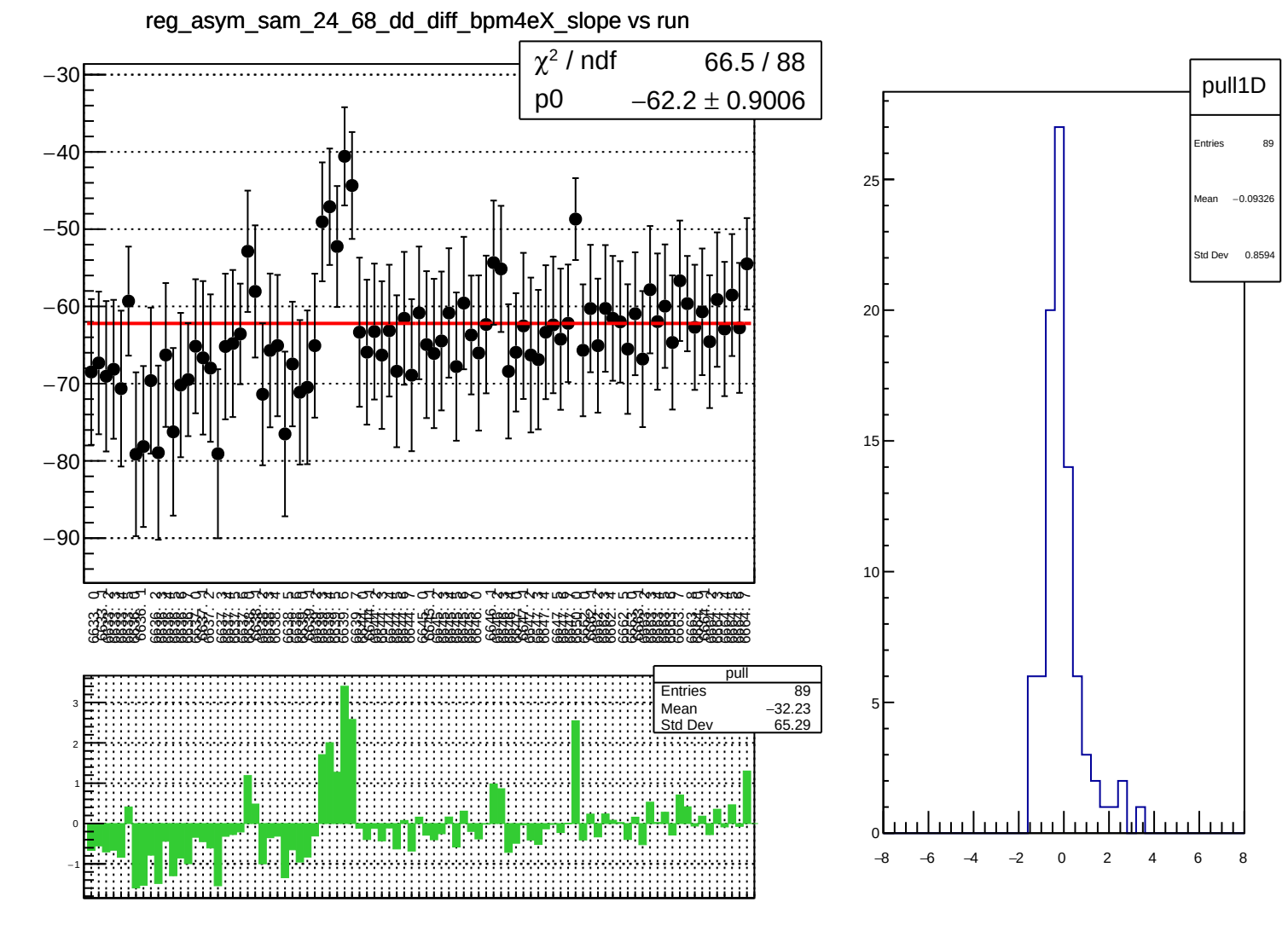

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 20.67 / 88
p0 −0.05609 ± 0.01252
pull
Entries 89
Mean −52.14
Std Dev 96.84
pull1D
Entries 89
Mean −0.102
Std Dev 0.4711

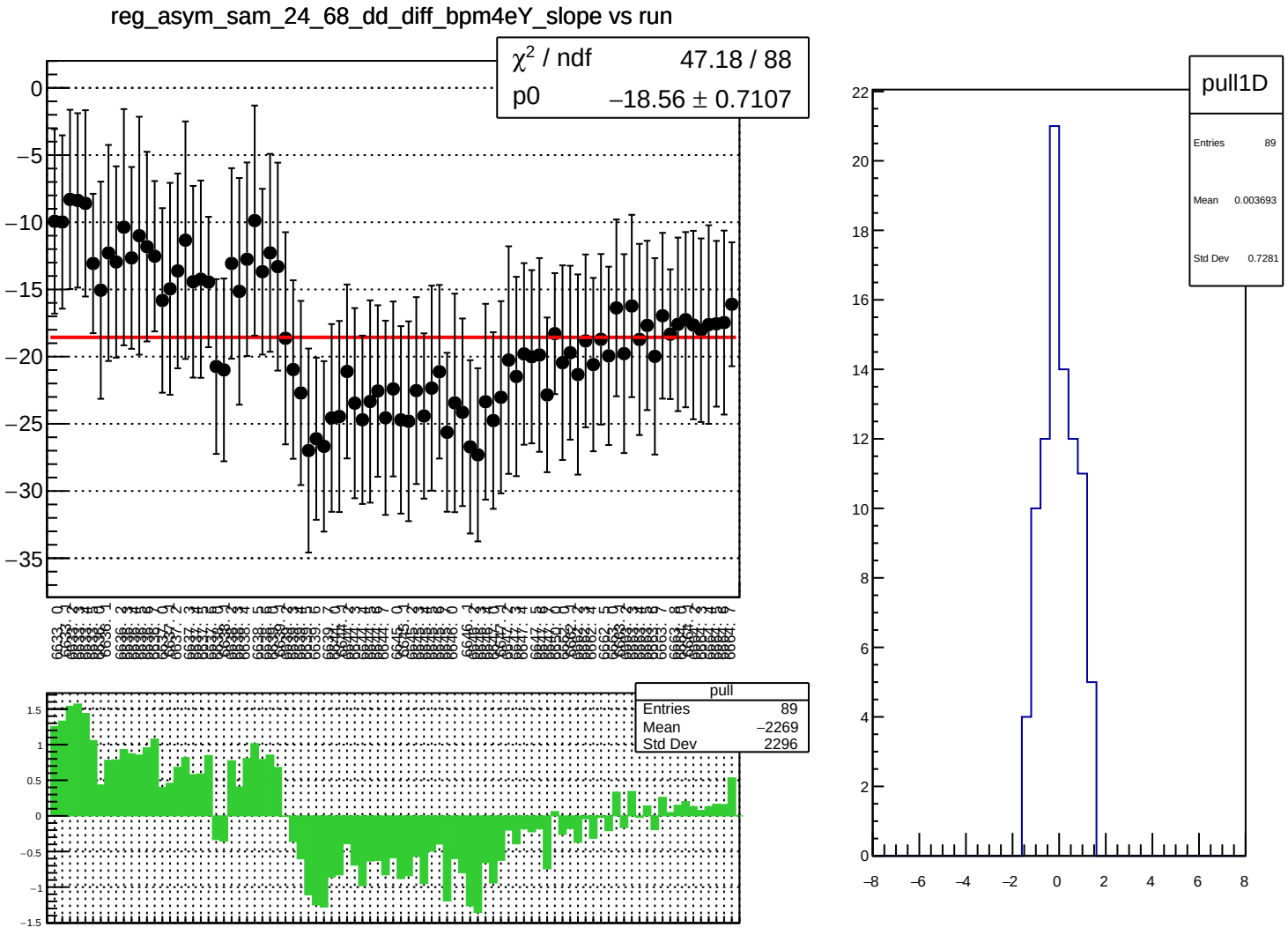

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 140.9 / 88
p0 −35.06 ± 0.8415
pull
Entries 89
Mean 225.5
Std Dev 177.2

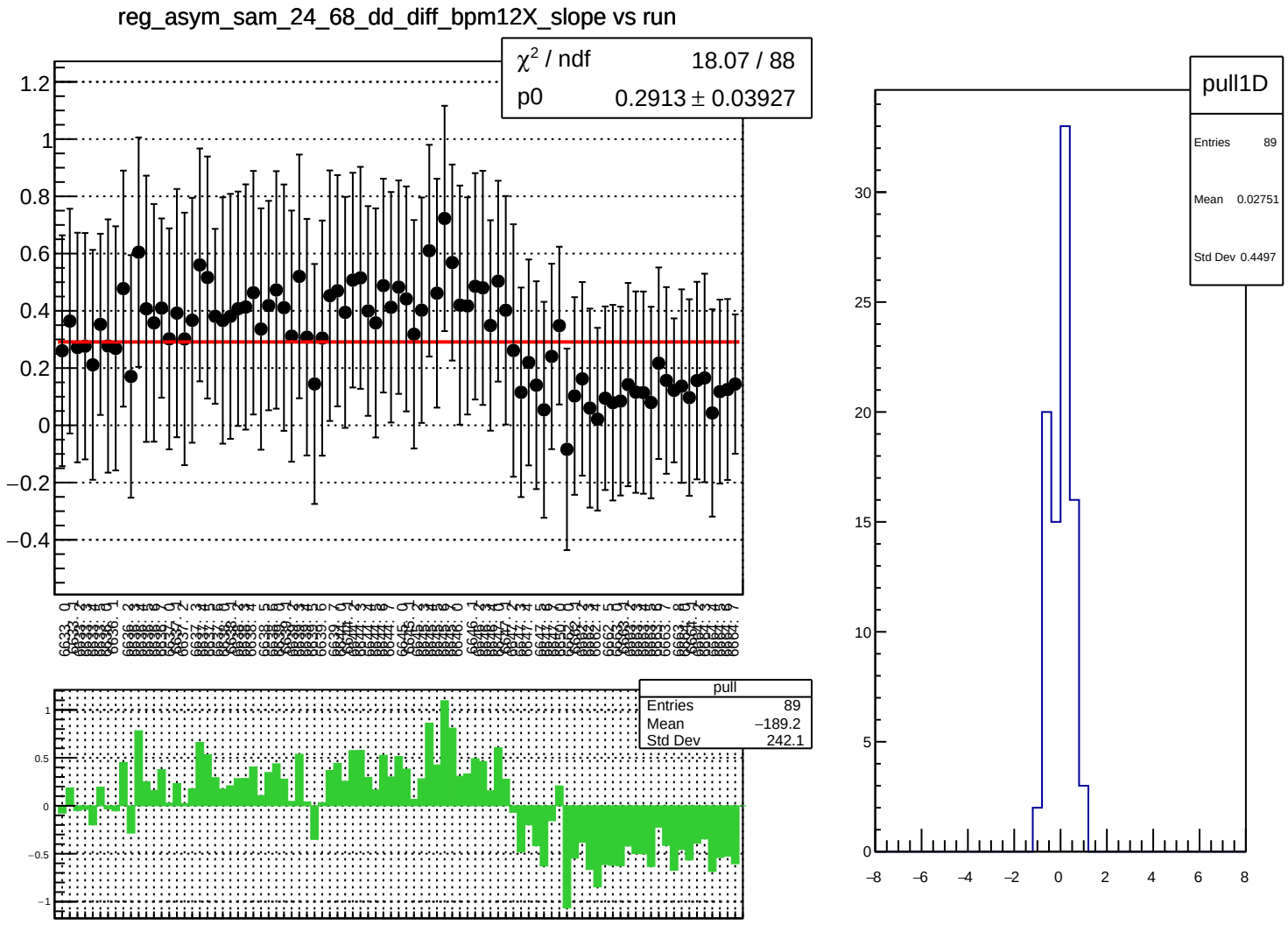

pull1D
Entries 89
Mean 0.06854
Std Dev 1.256

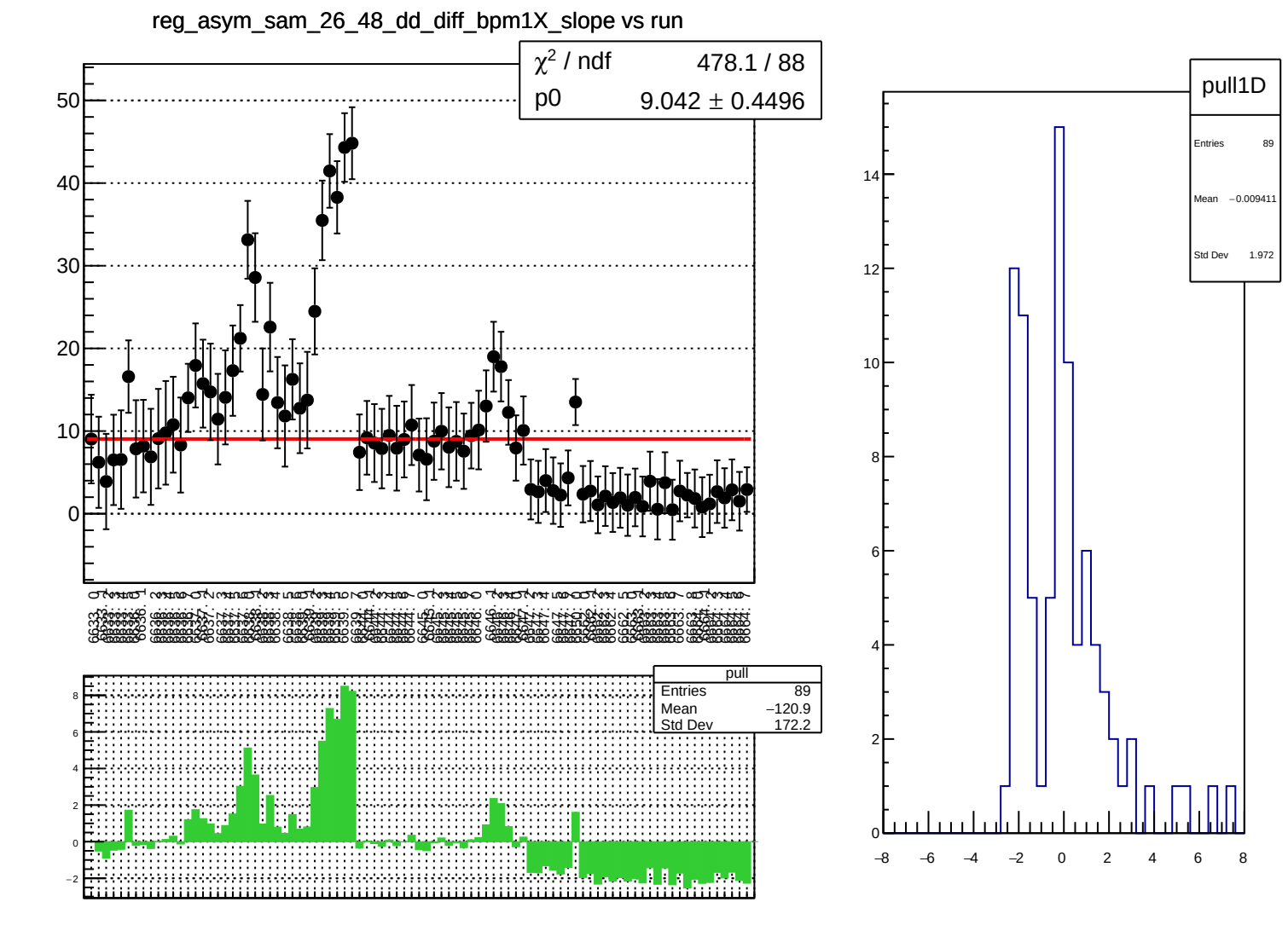

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 39.3 / 88
p0 −2.419 ± 0.5984
pull
Entries 89
Mean −1378
Std Dev 1433

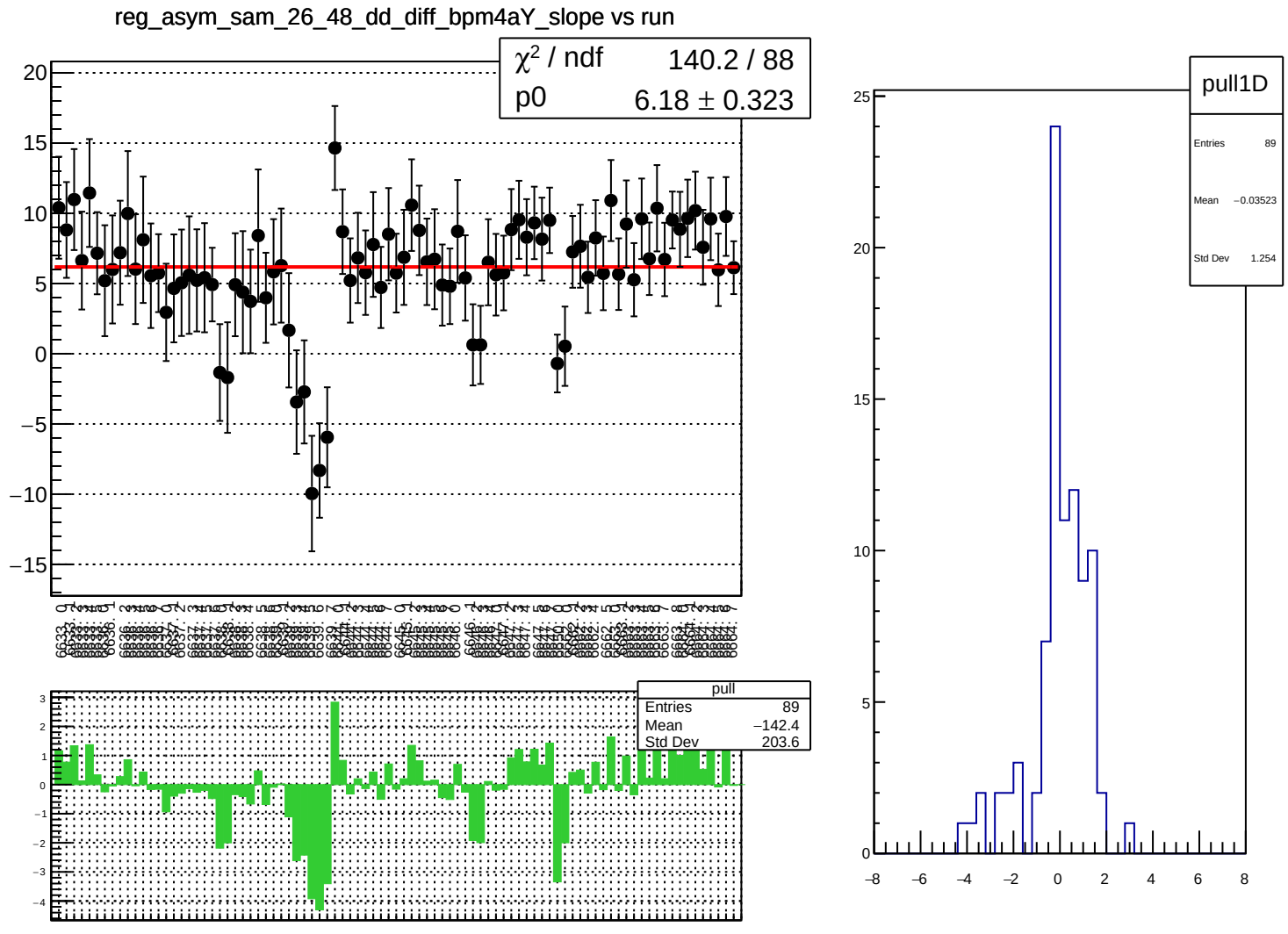

pull1D
Entries 89
Mean 0.005617
Std Dev 0.6645

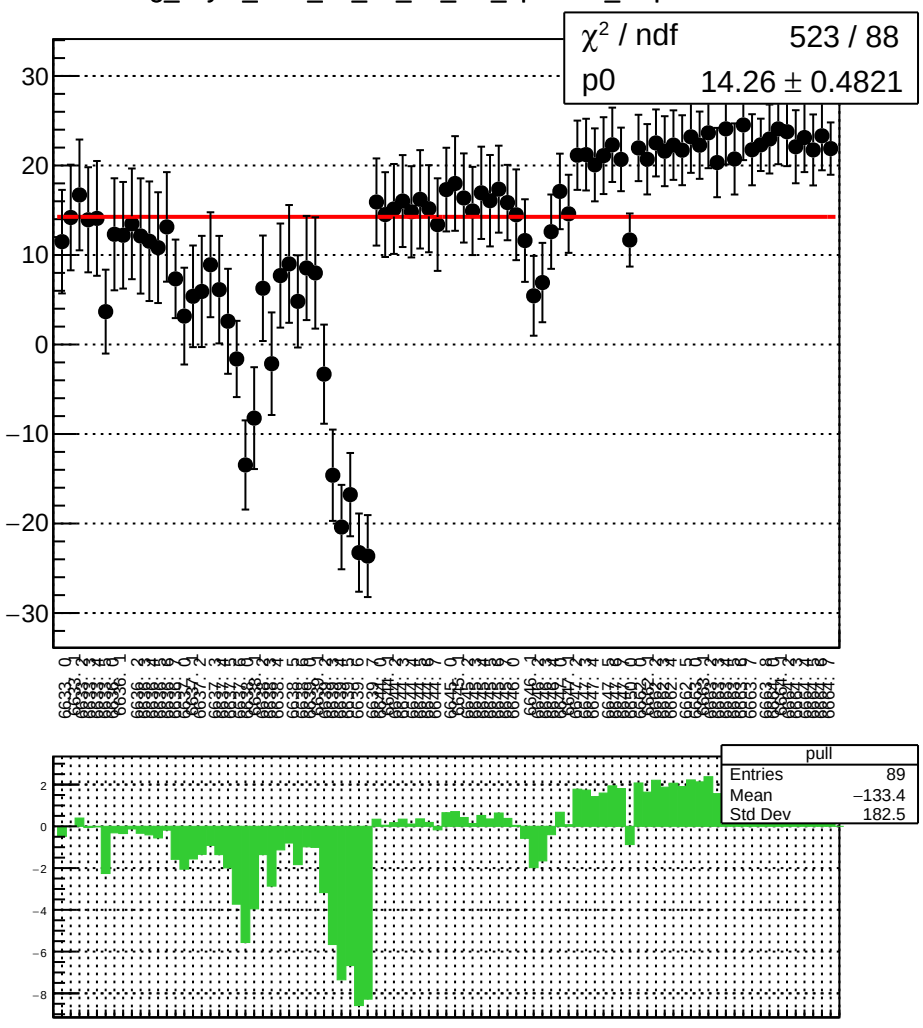

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 66.5 / 88
p0 −62.2 ± 0.9006
pull
Entries 89
Mean −32.23
Std Dev 65.29
pull1D
Entries 89
Mean −0.09326
Std Dev 0.8594

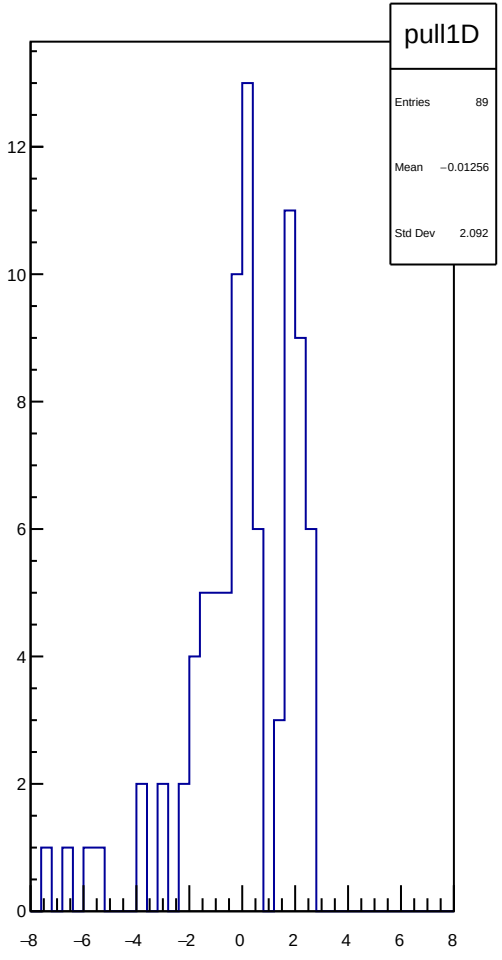

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 47.18 / 88
p0 −18.56 ± 0.7107
pull
Entries 89
Mean −2269
Std Dev 2296
pull1D
Entries 89
Mean 0.003693
Std Dev 0.7281

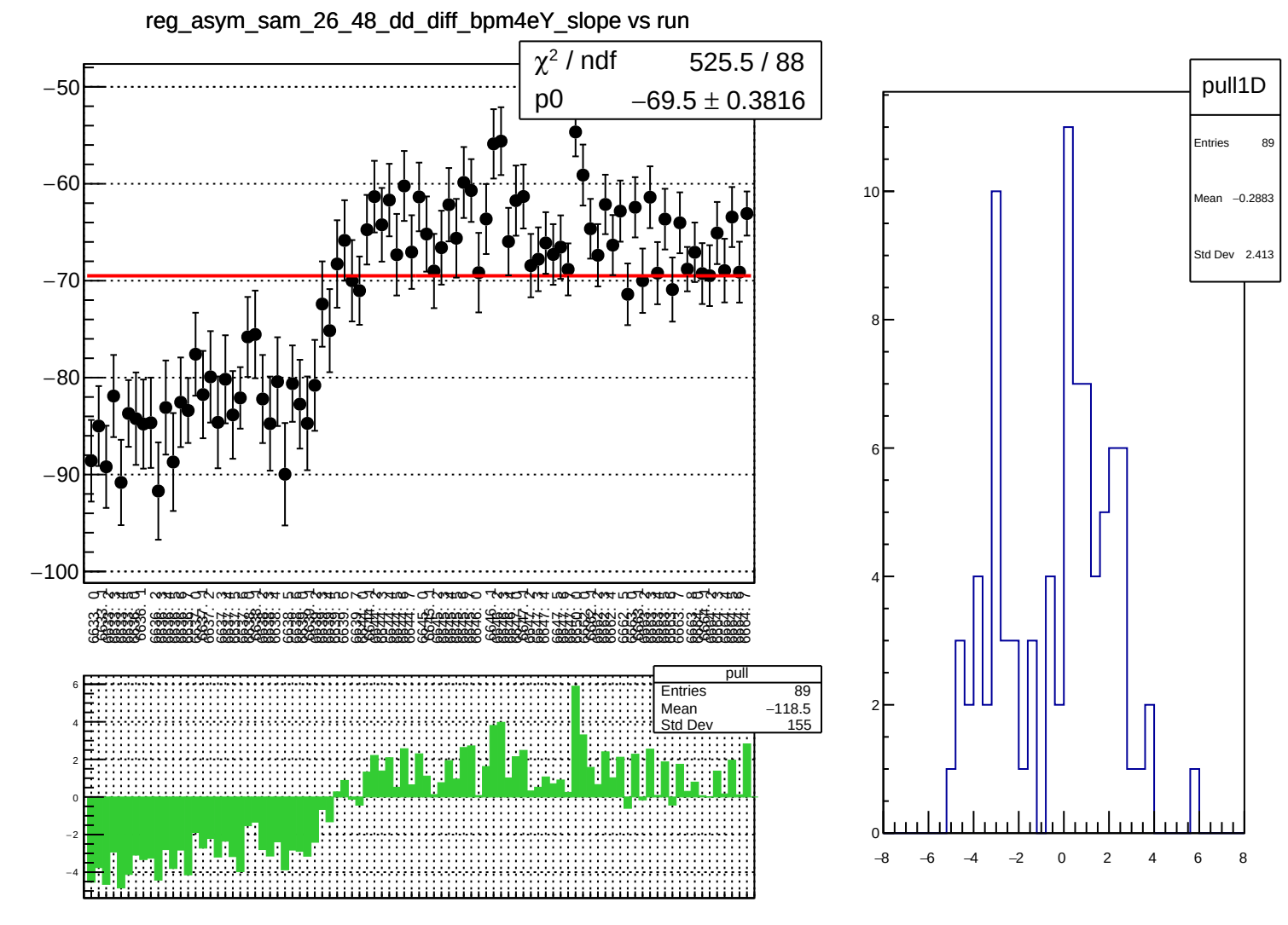

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 18.07 / 88
p0 0.2913 ± 0.03927
pull
Entries 89
Mean −189.2
Std Dev 242.1
pull1D
Entries 89
Mean 0.02751
Std Dev 0.4497

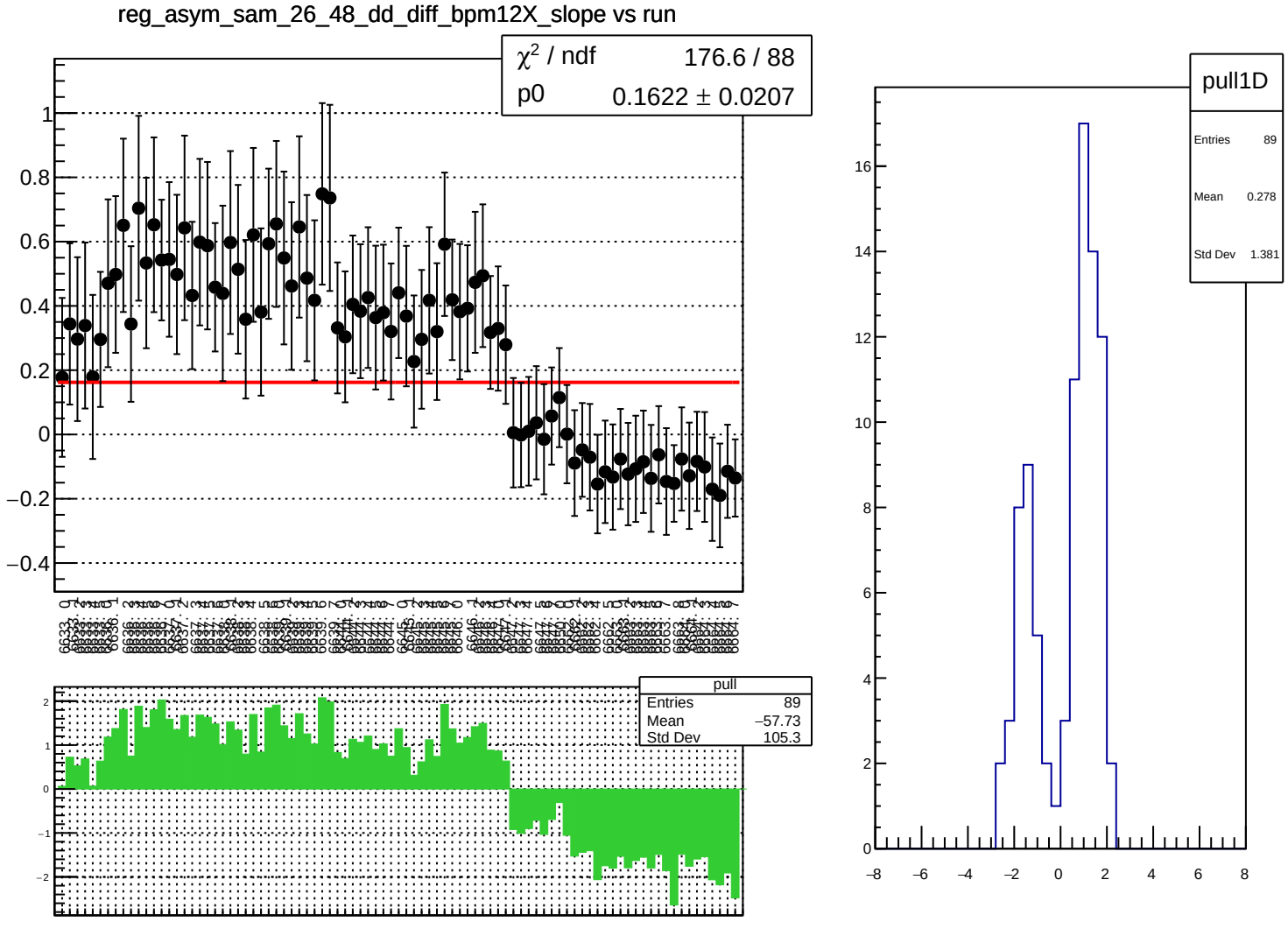

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 478.1 / 88
p0 9.042 ± 0.4496
pull
Entries 89
Mean −120.9
Std Dev 172.2
pull1D
Entries 89
Mean −0.009411
Std Dev 1.972

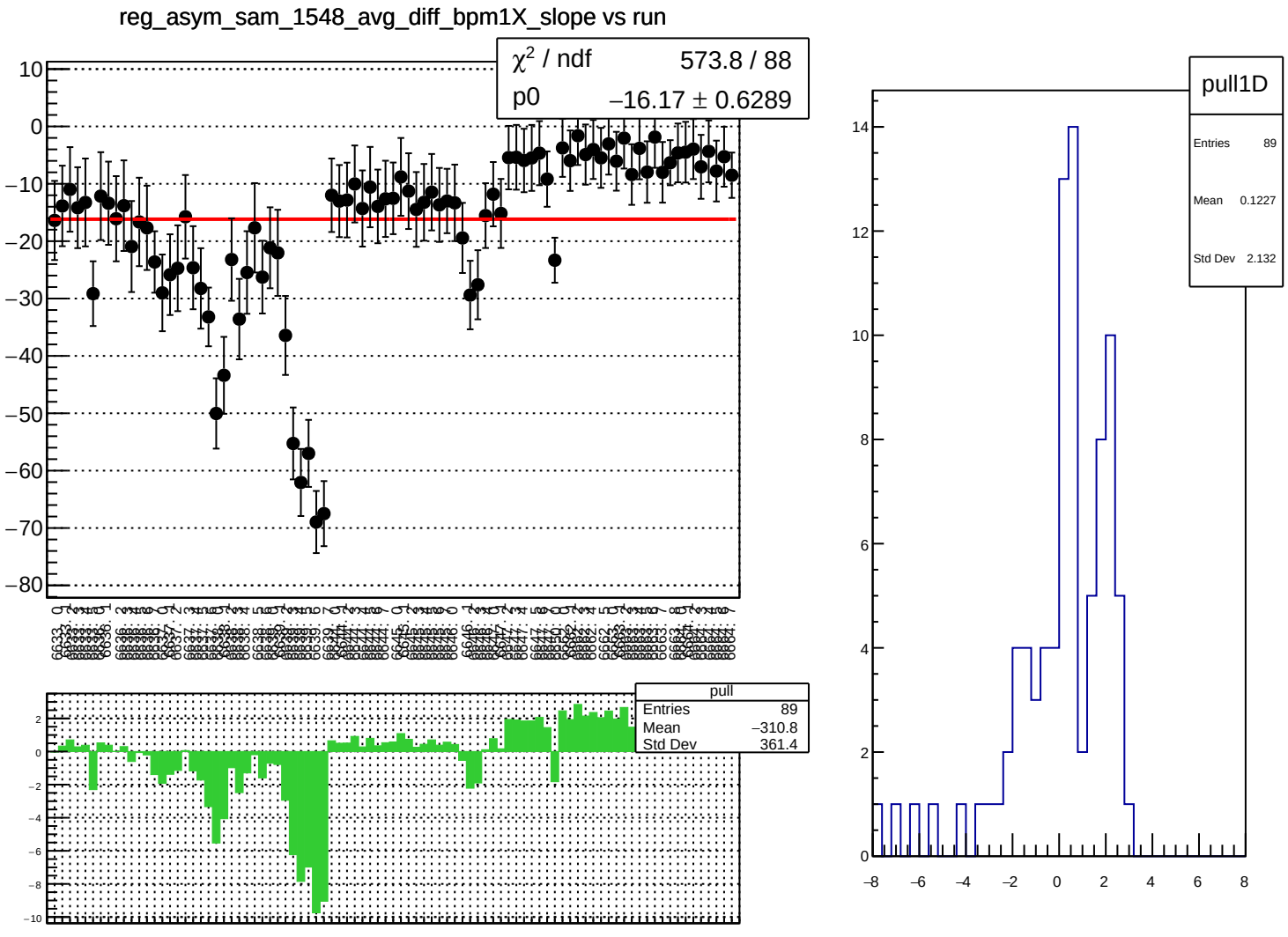

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 140.2 / 88
p0 6.18 ± 0.323
pull
Entries 89
Mean −142.4
Std Dev 203.6
pull1D
Entries 89
Mean −0.03523
Std Dev 1.254

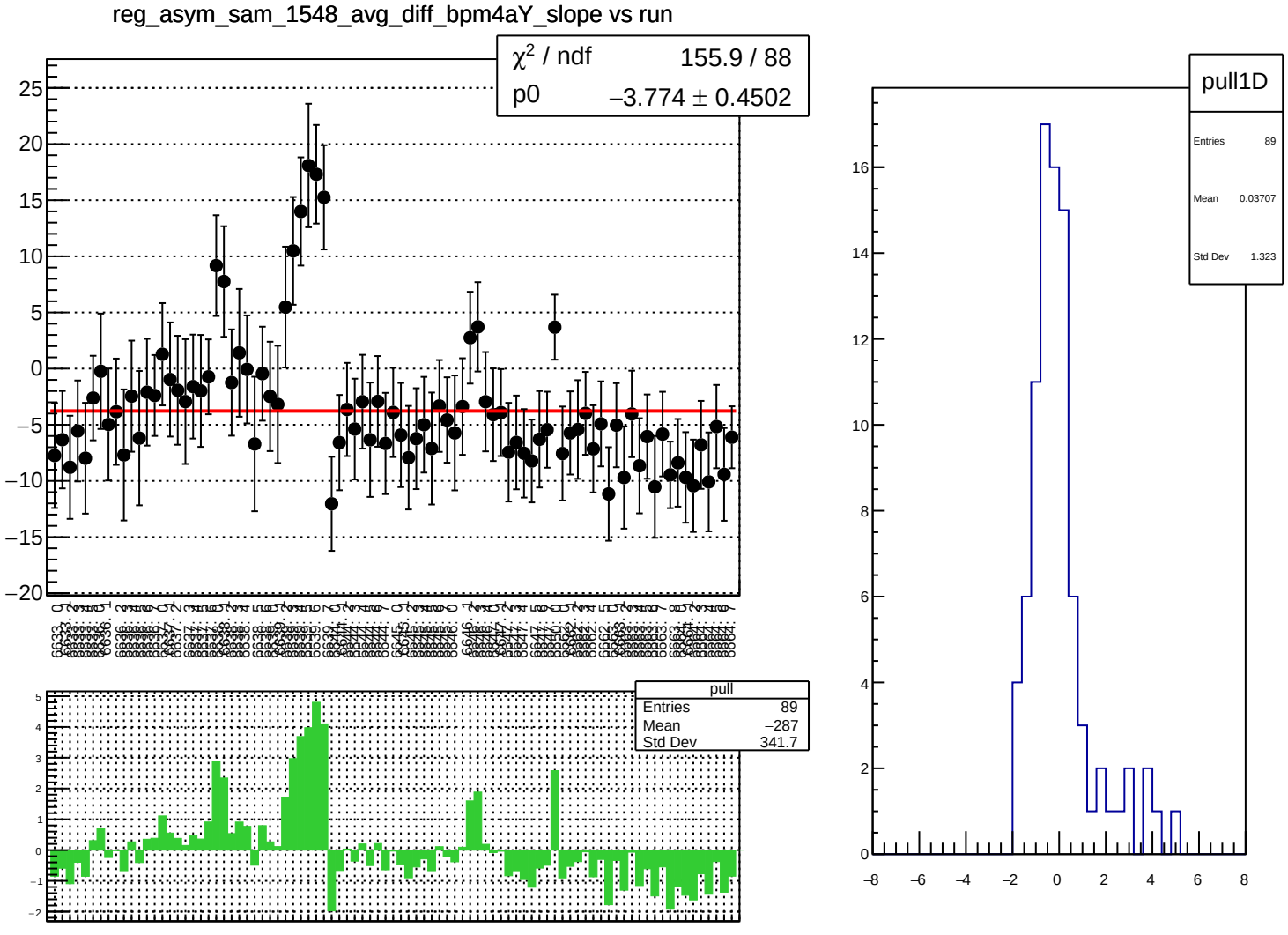

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 523 / 88
p0 14.26 ± 0.4821
pull
Entries 89
Mean −133.4
Std Dev 182.5

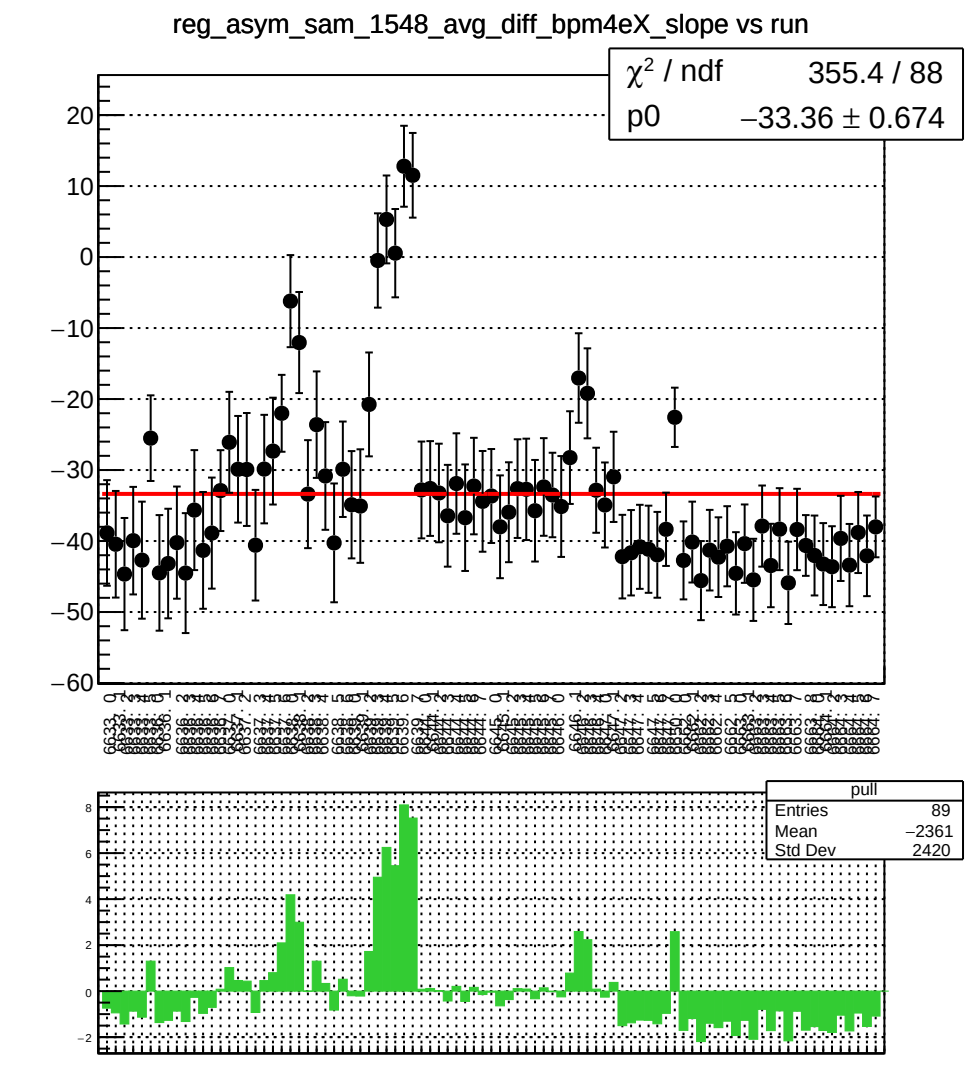

pull1D
Entries 89
Mean −0.01256
Std Dev 2.092

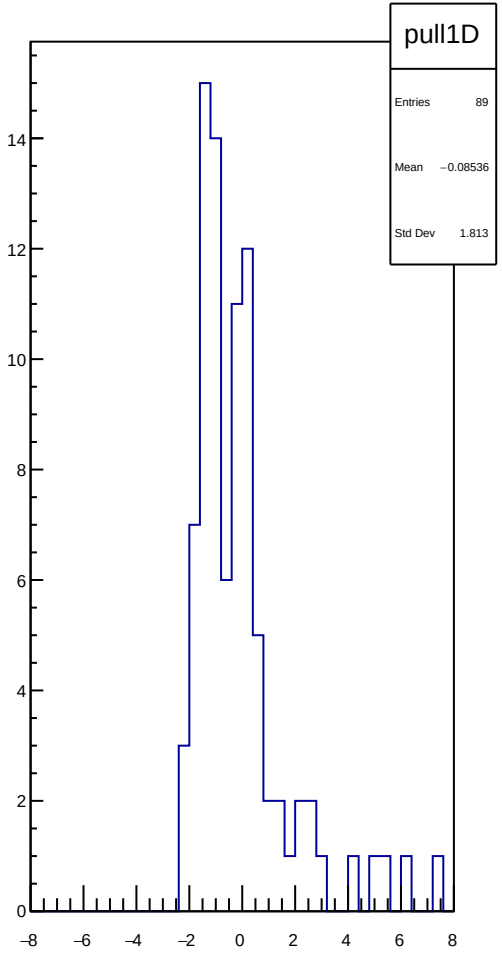

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 525.5 / 88
p0 −69.5 ± 0.3816
−50
−60
−70
−80
−90
−100
pull
Entries 89
Mean −118.5
Std Dev 155
6
4
2
0
−2
−4
pull1D
Entries 89
Mean −0.2883
Std Dev 2.413
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

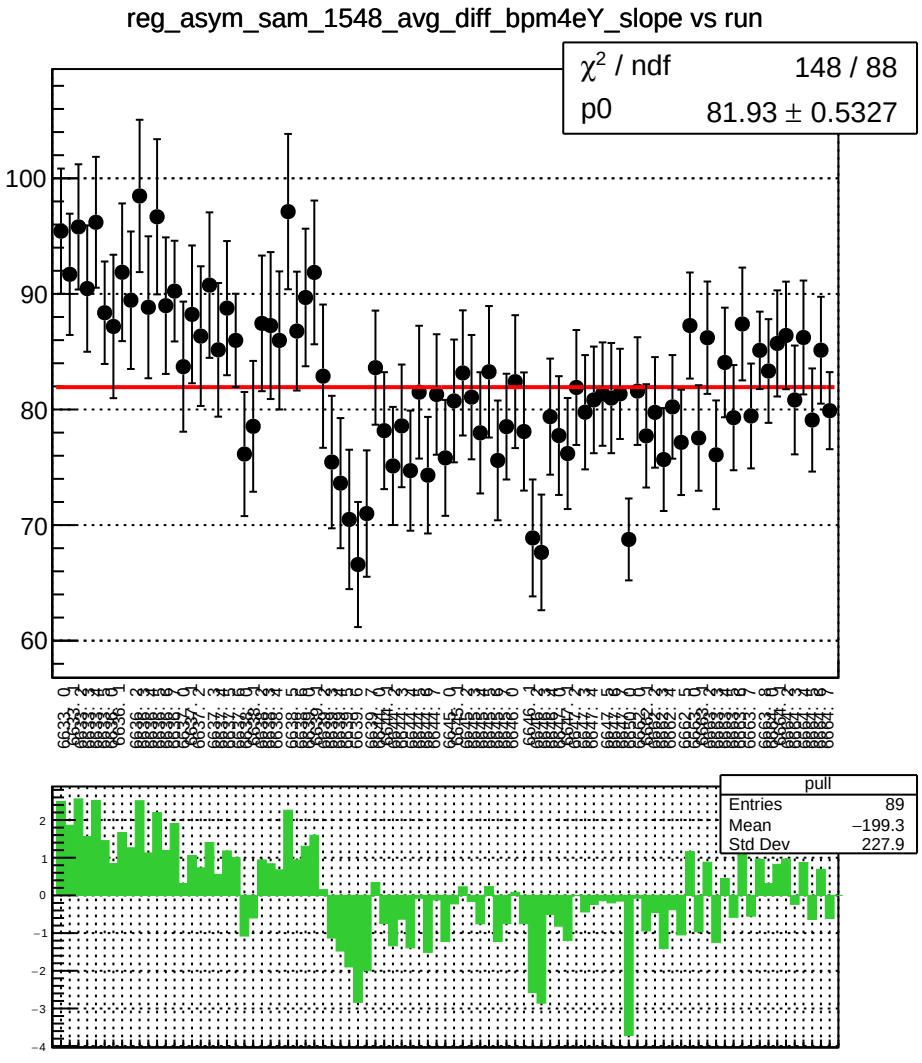

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 176.6 / 88
p0 0.1622 ± 0.0207
pull
Entries 89
Mean −57.73
Std Dev 105.3
pull1D
Entries 89
Mean 0.278
Std Dev 1.381

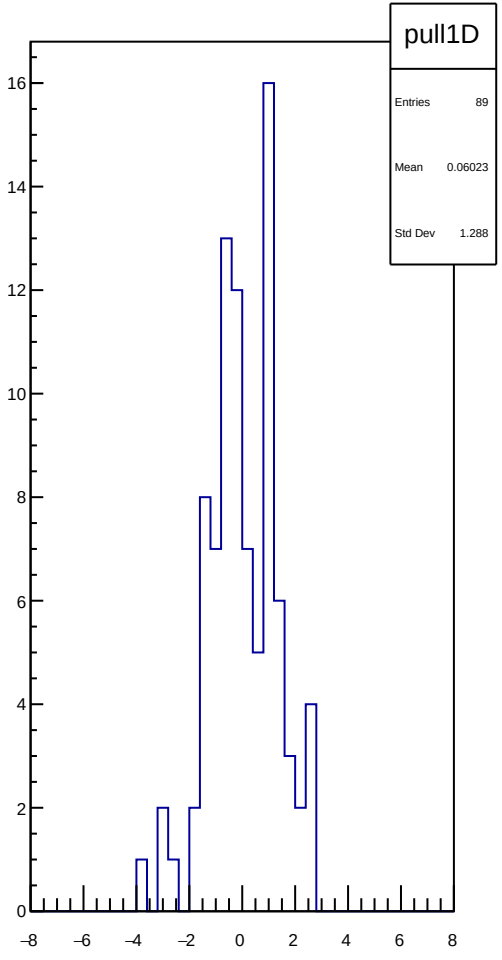

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 573.8 / 88
p0 −16.17 ± 0.6289
pull
Entries 89
Mean −310.8
Std Dev 361.4
pull1D
Entries 89
Mean 0.1227
Std Dev 2.132

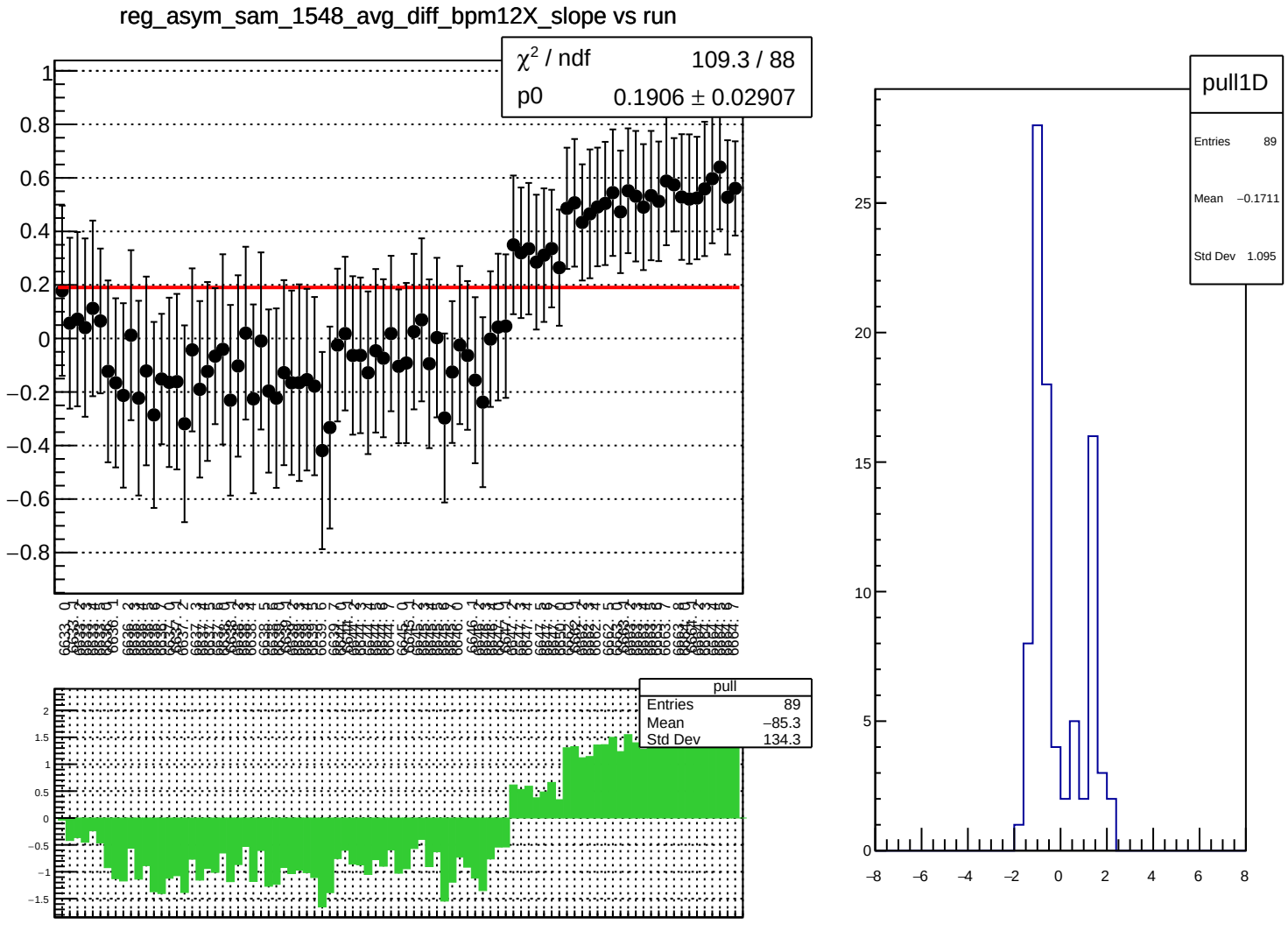

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 155.9 / 88
p0 −3.774 ± 0.4502
pull
Entries 89
Mean −287
Std Dev 341.7
pull1D
Entries 89
Mean 0.03707
Std Dev 1.323

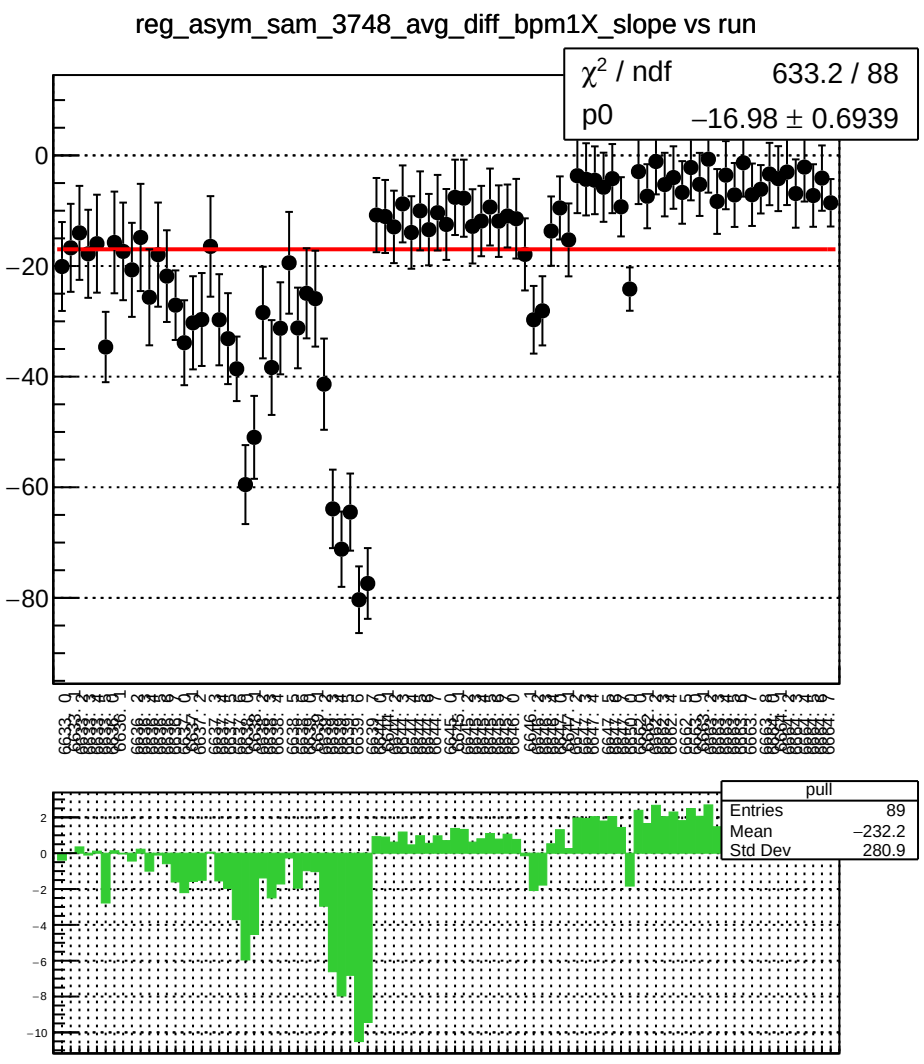

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 355.4 / 88
p0 −33.36 ± 0.674
pull
Entries 89
Mean −2361
Std Dev 2420

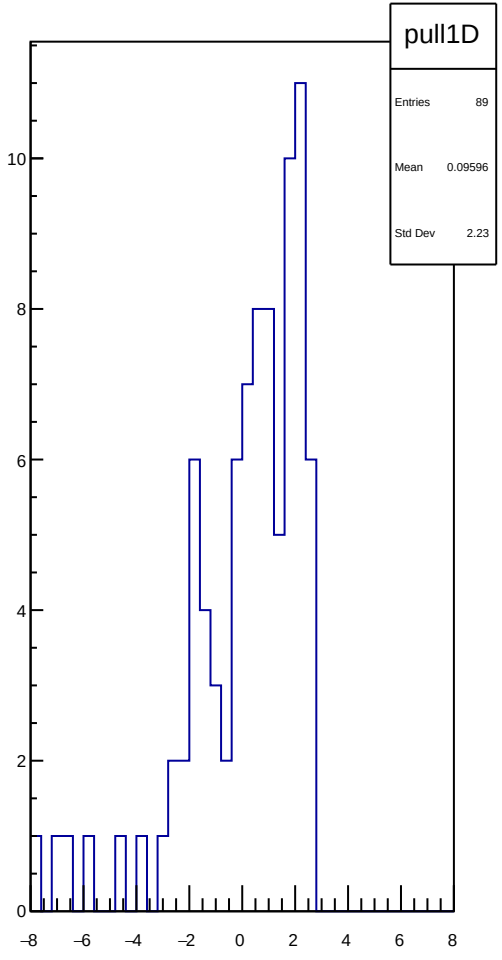

pull1D
Entries 89
Mean −0.08536
Std Dev 1.813

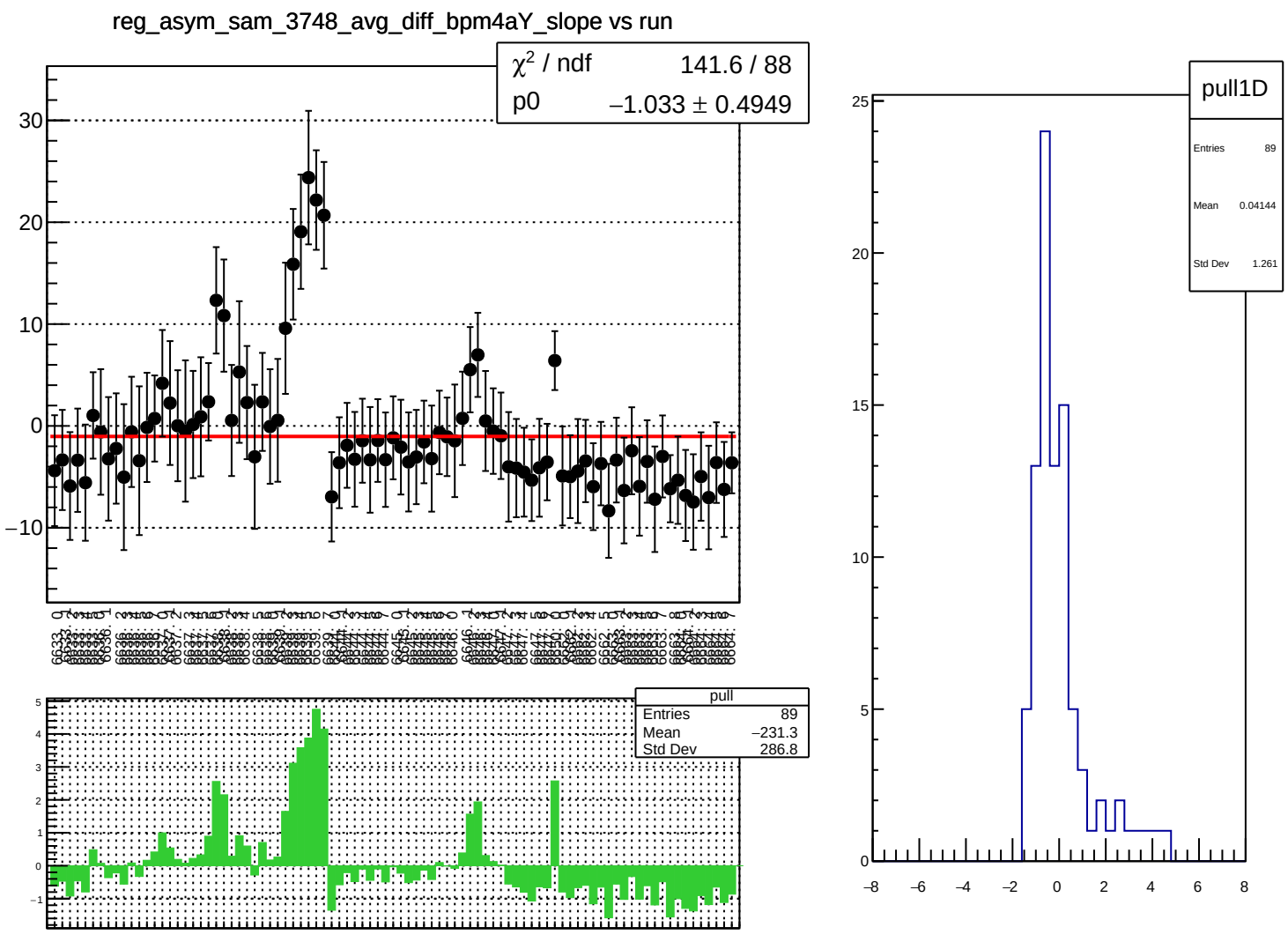

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 148 / 88
p0 81.93 ± 0.5327
pull
Entries 89
Mean −199.3
Std Dev 227.9

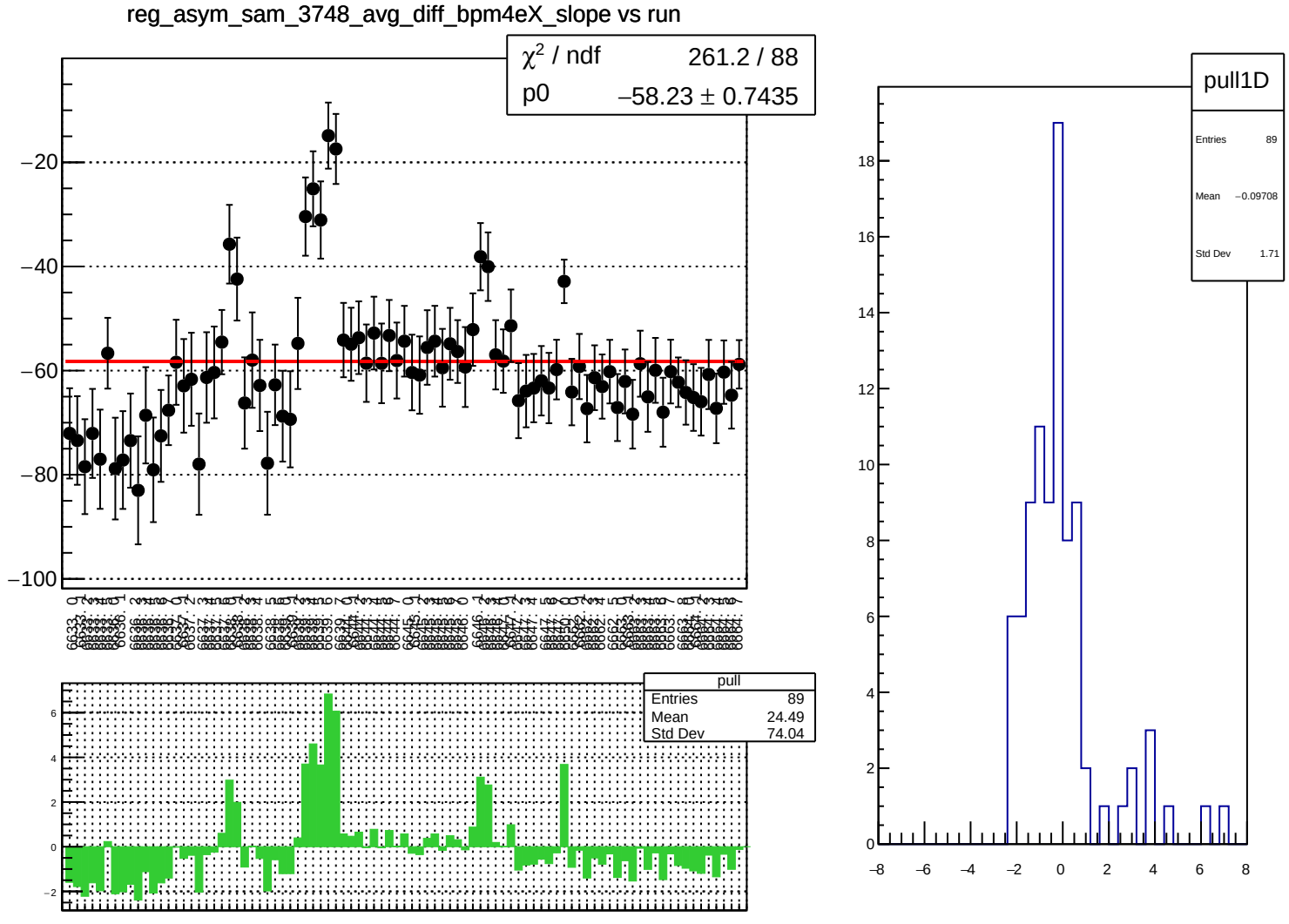

pull1D
Entries 89
Mean 0.06023
Std Dev 1.288

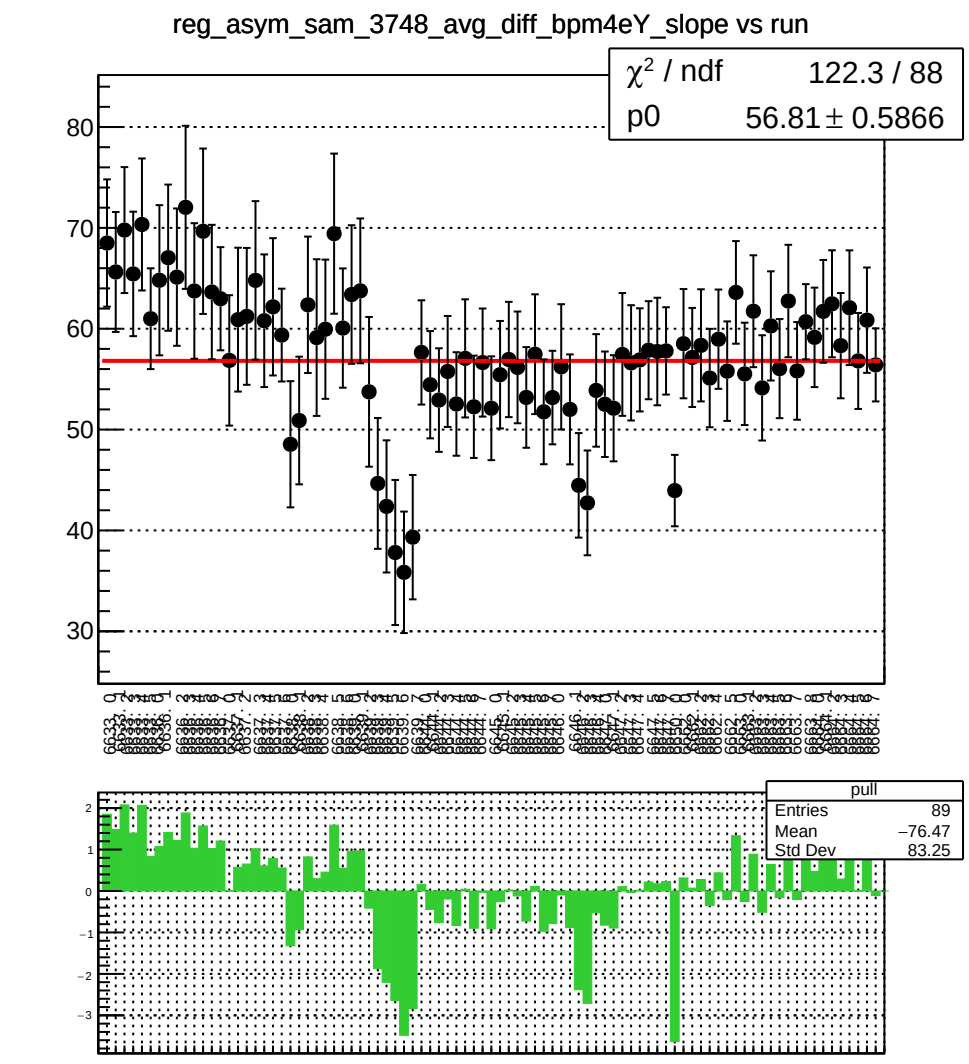

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 109.3 / 88
p0 0.1906 ± 0.02907
pull
Entries 89
Mean −85.3
Std Dev 134.3
pull1D
Entries 89
Mean −0.1711
Std Dev 1.095

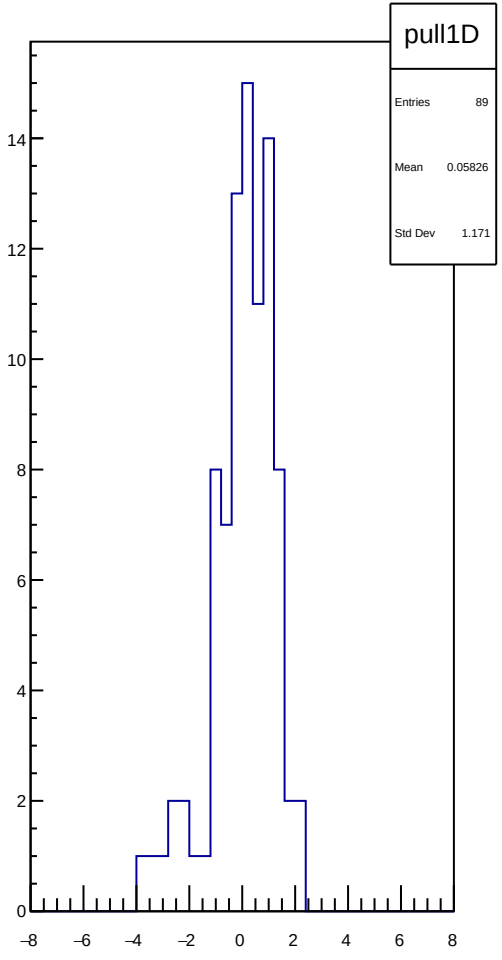

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 633.2 / 88
p0 −16.98 ± 0.6939
pull
Entries 89
Mean −232.2
Std Dev 280.9

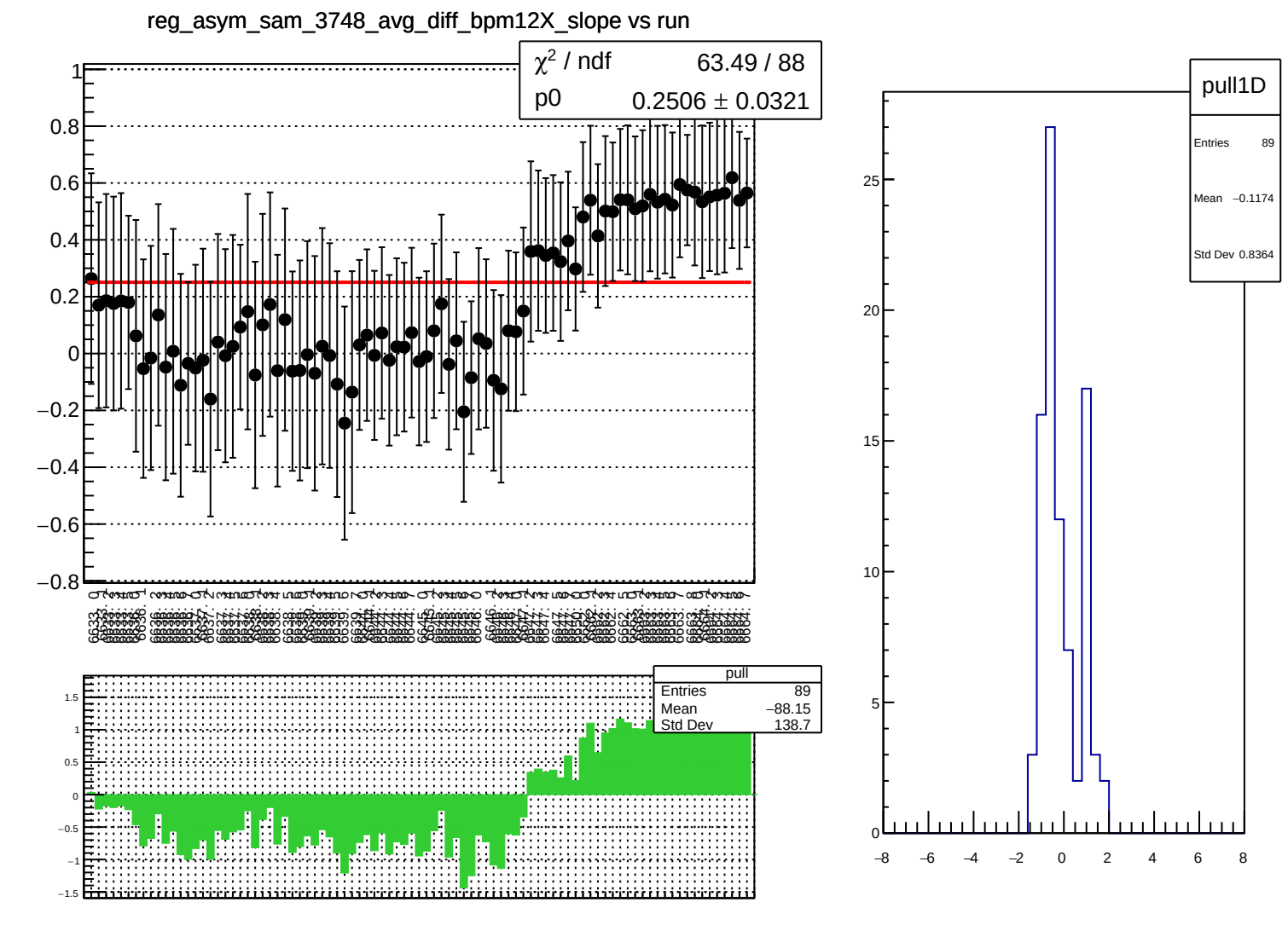

pull1D
Entries 89
Mean 0.09596
Std Dev 2.23

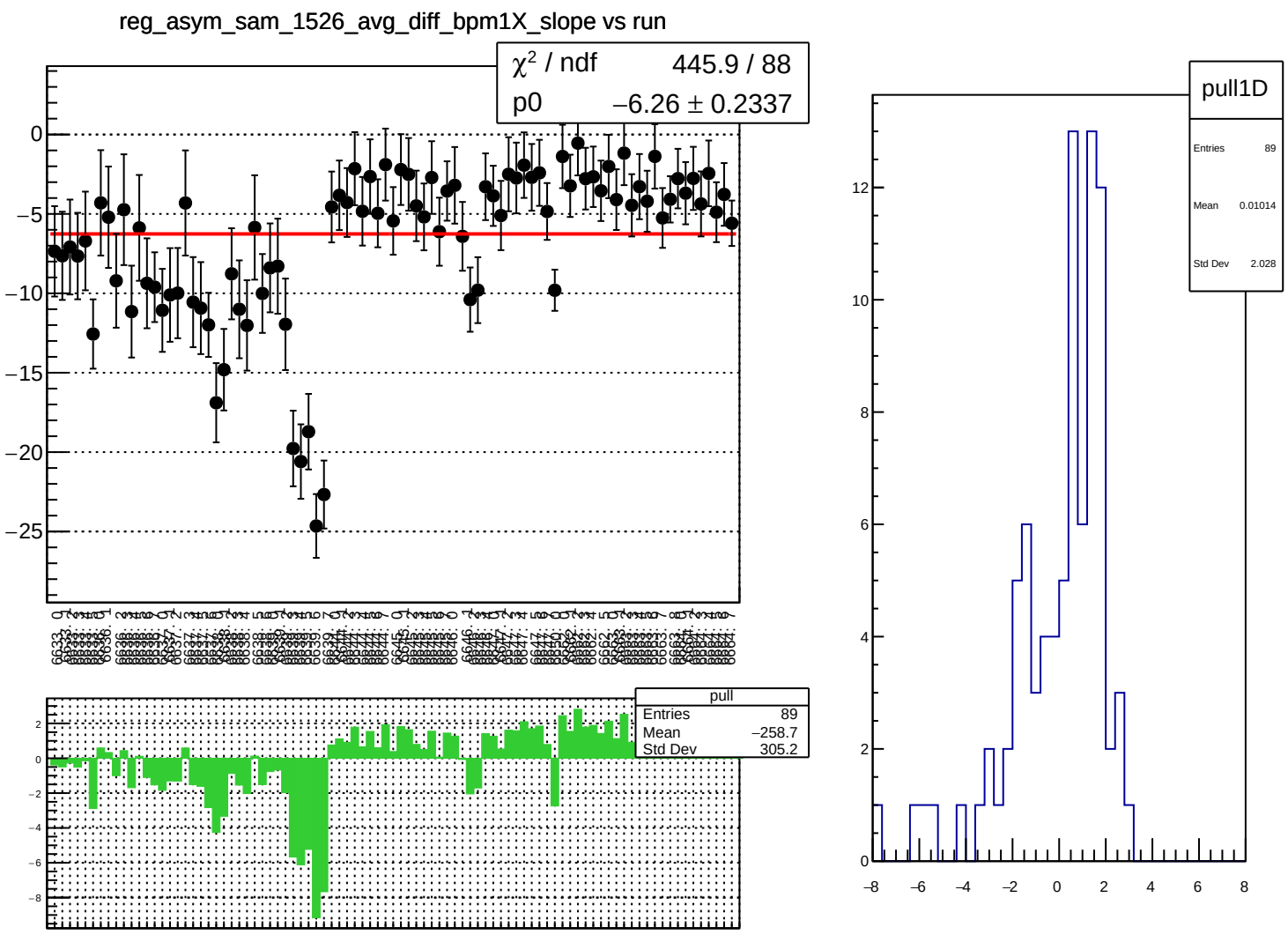

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 141.6 / 88
p0 −1.033 ± 0.4949
pull
Entries 89
Mean −231.3
Std Dev 286.8
pull1D
Entries 89
Mean 0.04144
Std Dev 1.261

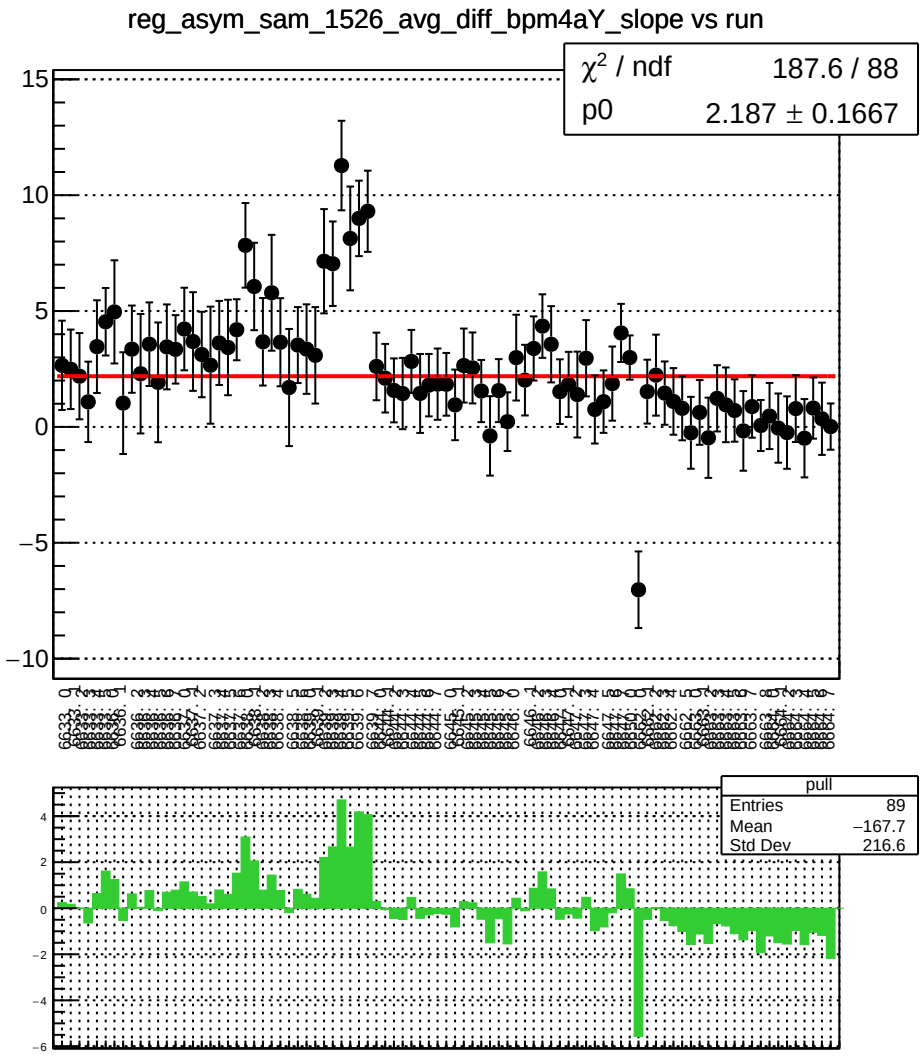

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 261.2 / 88
p0 −58.23 ± 0.7435
−20
−40
−60
−80
−100
pull
Entries 89
Mean 24.49
Std Dev 74.04
6
4
2
0
−2
pull1D
Entries 89
Mean −0.09708
Std Dev 1.71
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

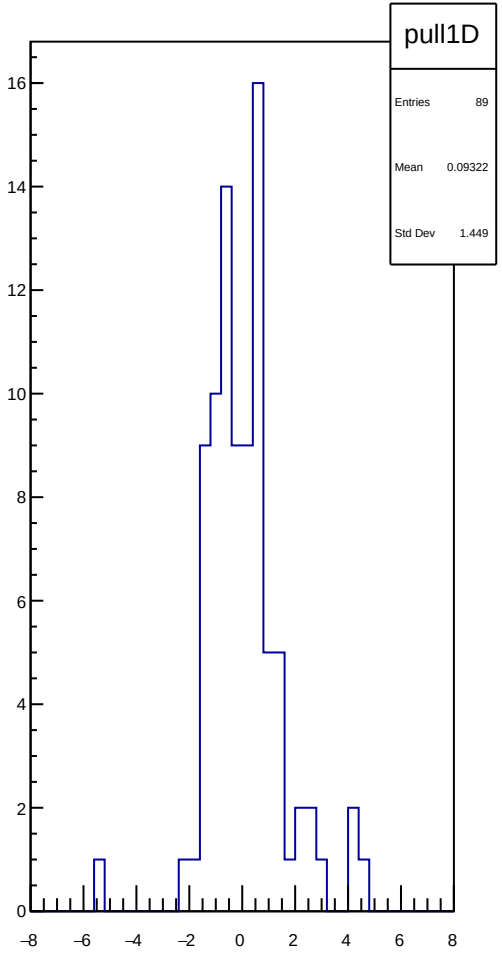

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 122.3 / 88
p0 56.81 ± 0.5866
pull
Entries 89
Mean −76.47
Std Dev 83.25

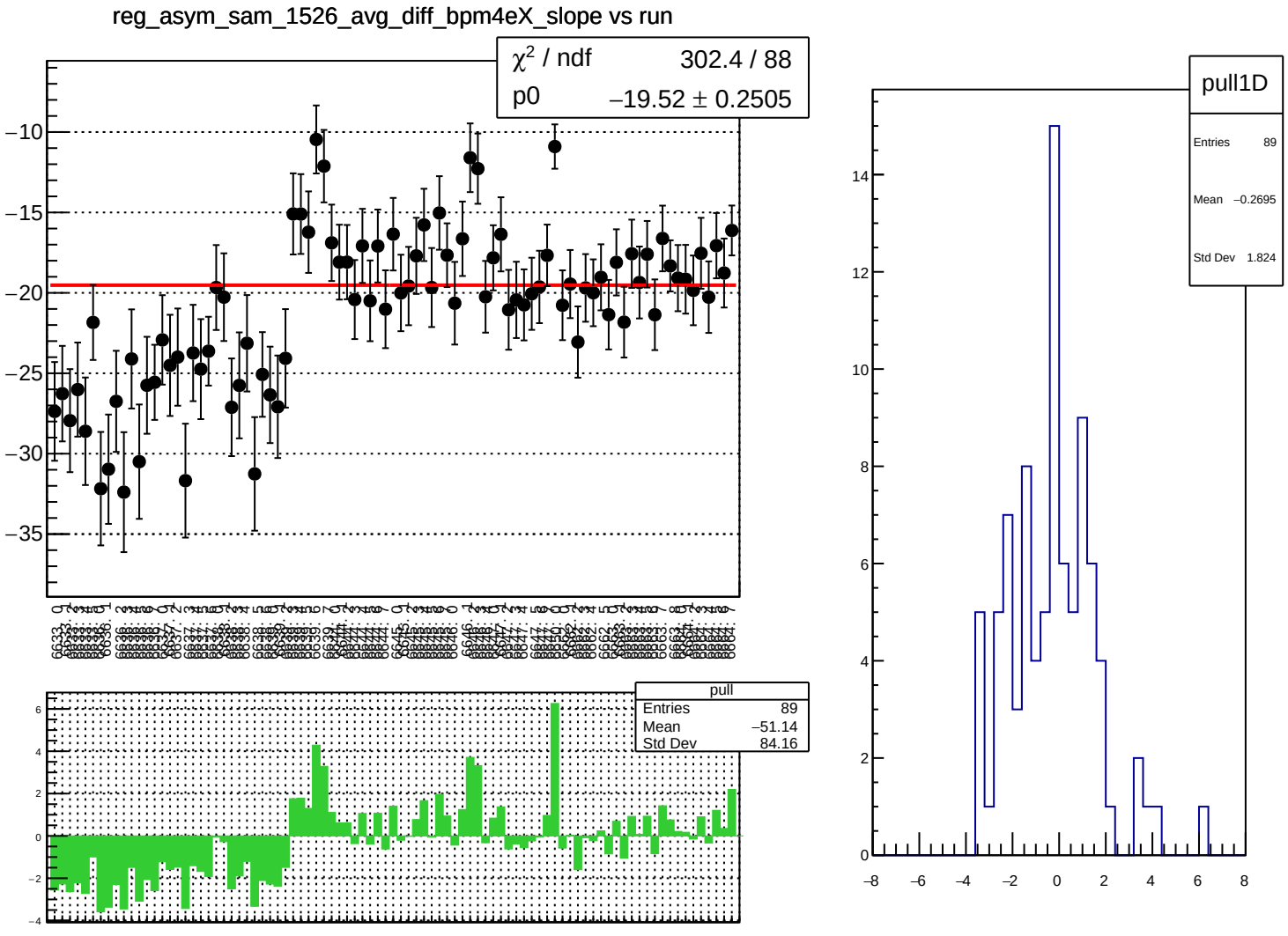

pull1D
Entries 89
Mean 0.05826
Std Dev 1.171

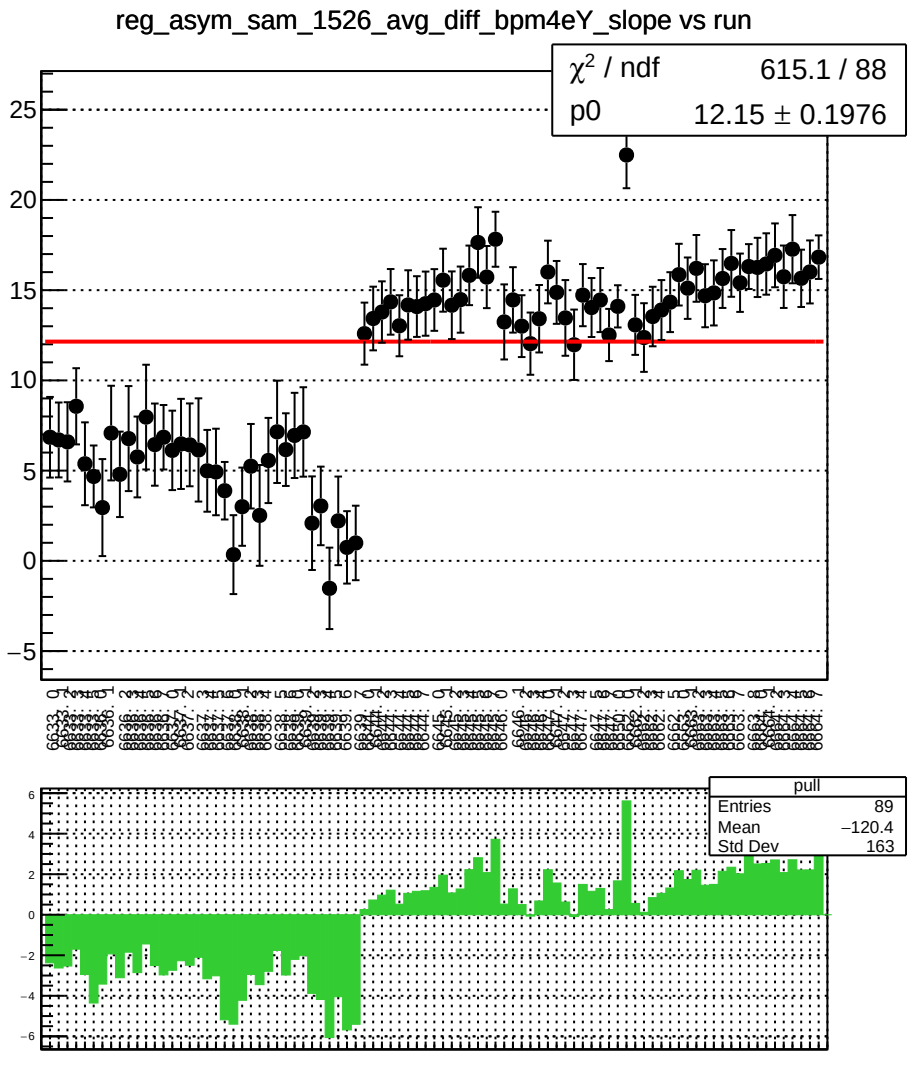

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 63.49 / 88
p0 0.2506 ± 0.0321
pull
Entries 89
Mean −88.15
Std Dev 138.7
pull1D
Entries 89
Mean −0.1174
Std Dev 0.8364

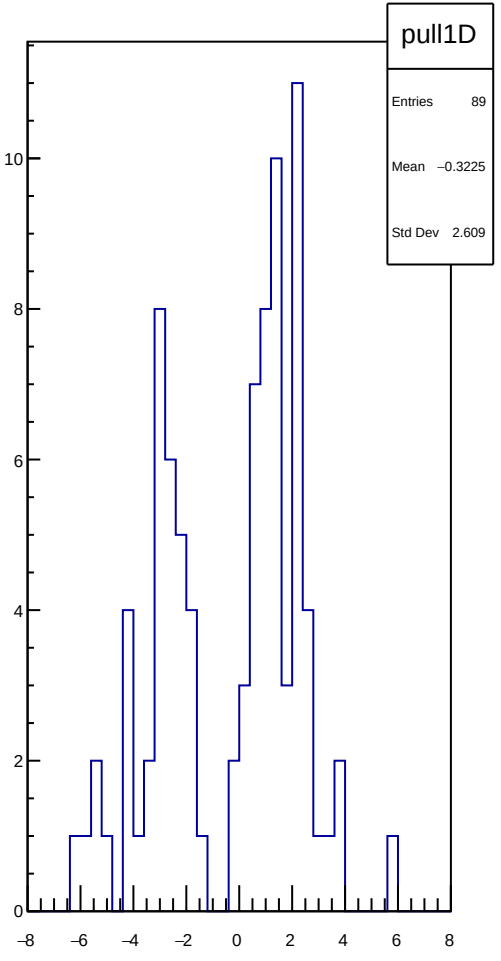

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 445.9 / 88
p0 −6.26 ± 0.2337
pull
Entries 89
Mean −258.7
Std Dev 305.2
pull1D
Entries 89
Mean 0.01014
Std Dev 2.028

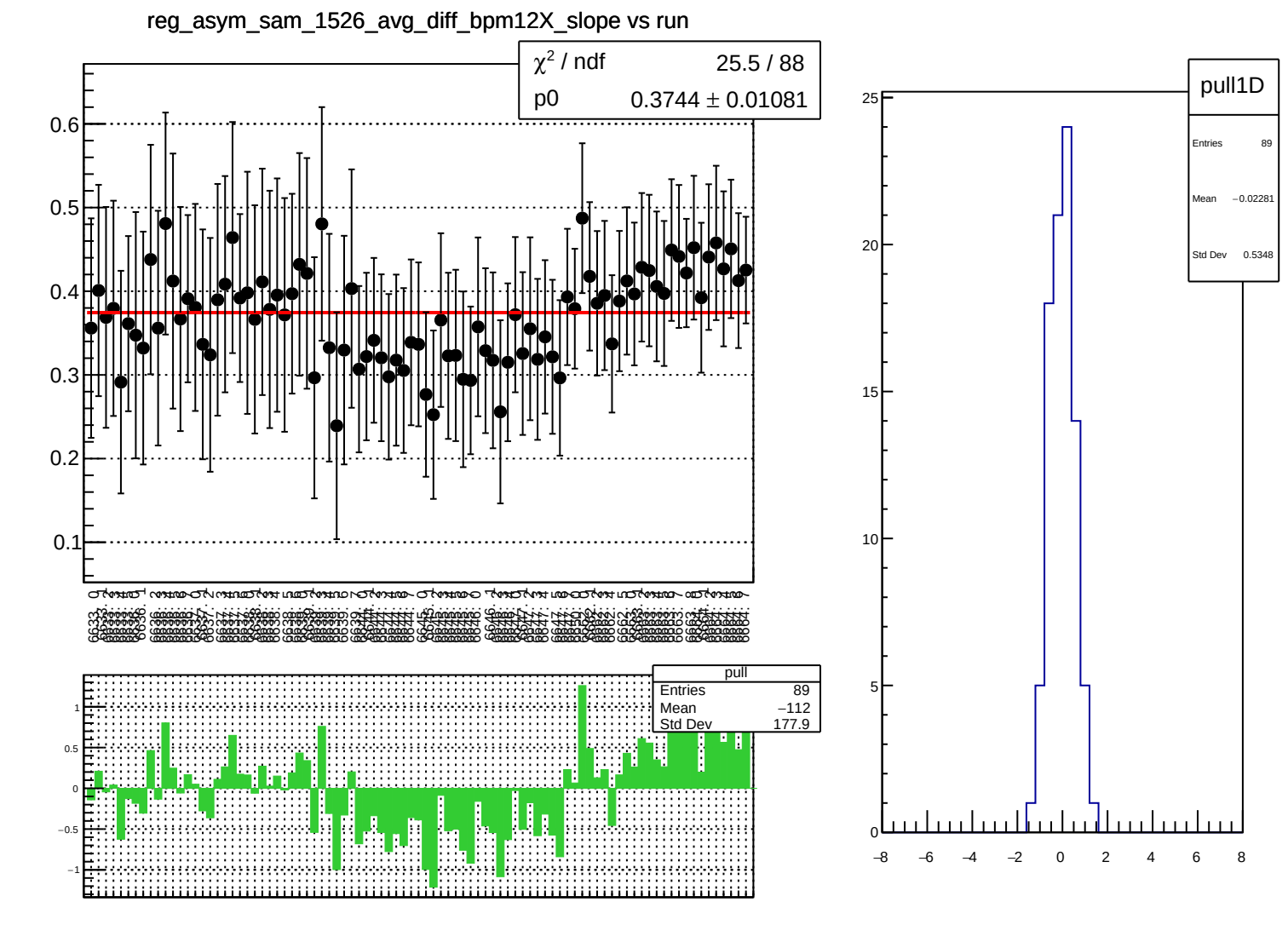

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 187.6 / 88
p0 2.187 ± 0.1667
pull
Entries 89
Mean −167.7
Std Dev 216.6

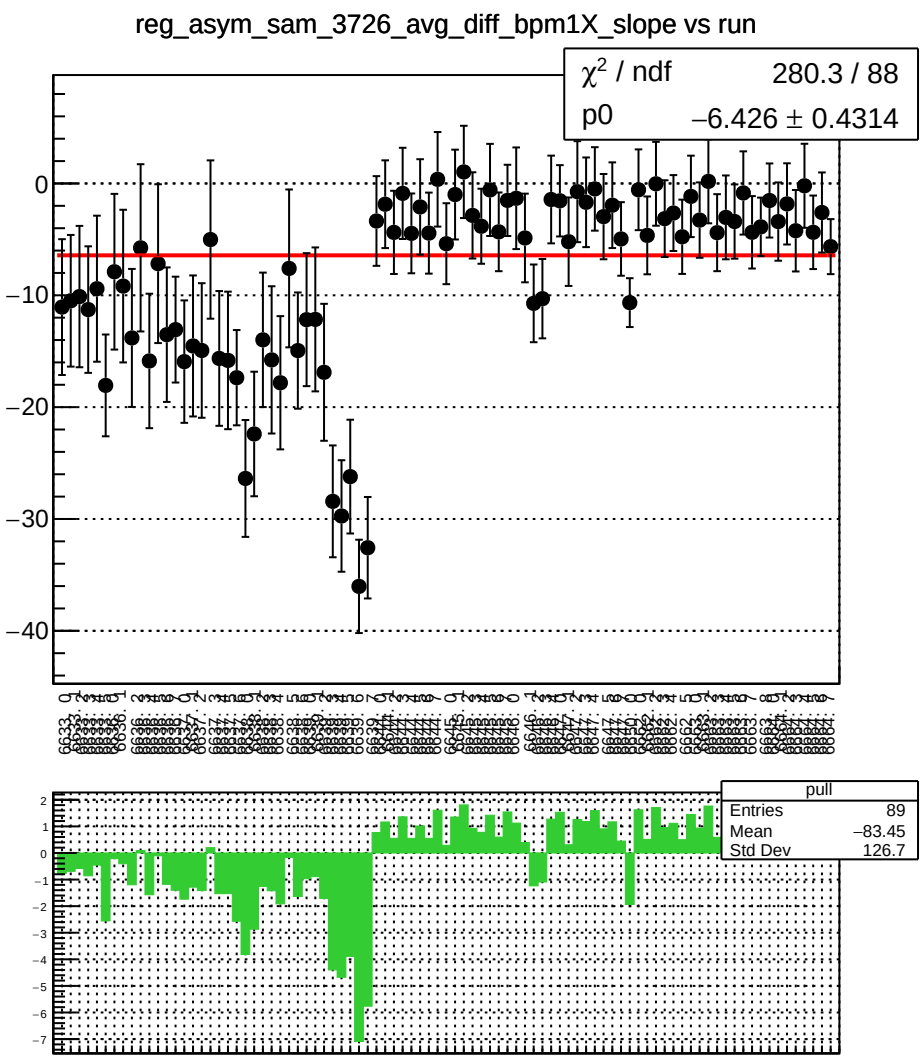

pull1D
Entries 89
Mean 0.09322
Std Dev 1.449

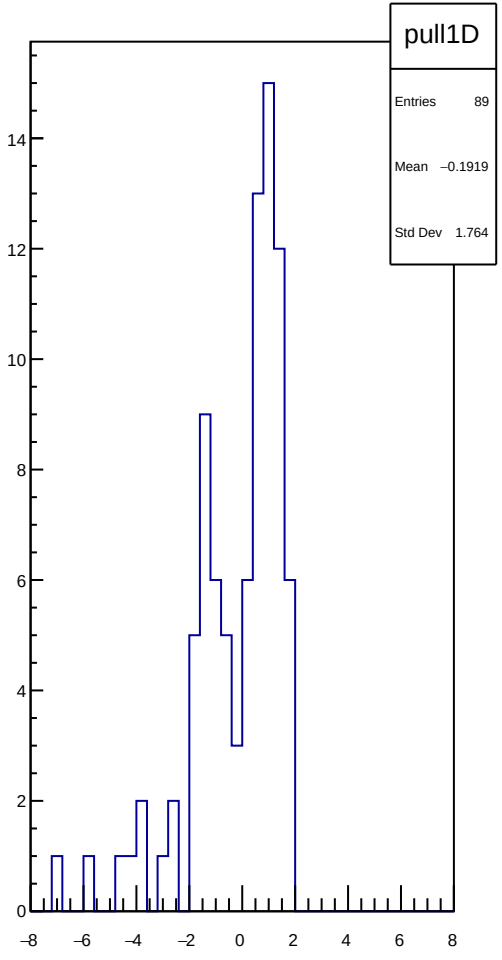

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 302.4 / 88
p0 −19.52 ± 0.2505
pull
Entries 89
Mean −51.14
Std Dev 84.16
pull1D
Entries 89
Mean −0.2695
Std Dev 1.824

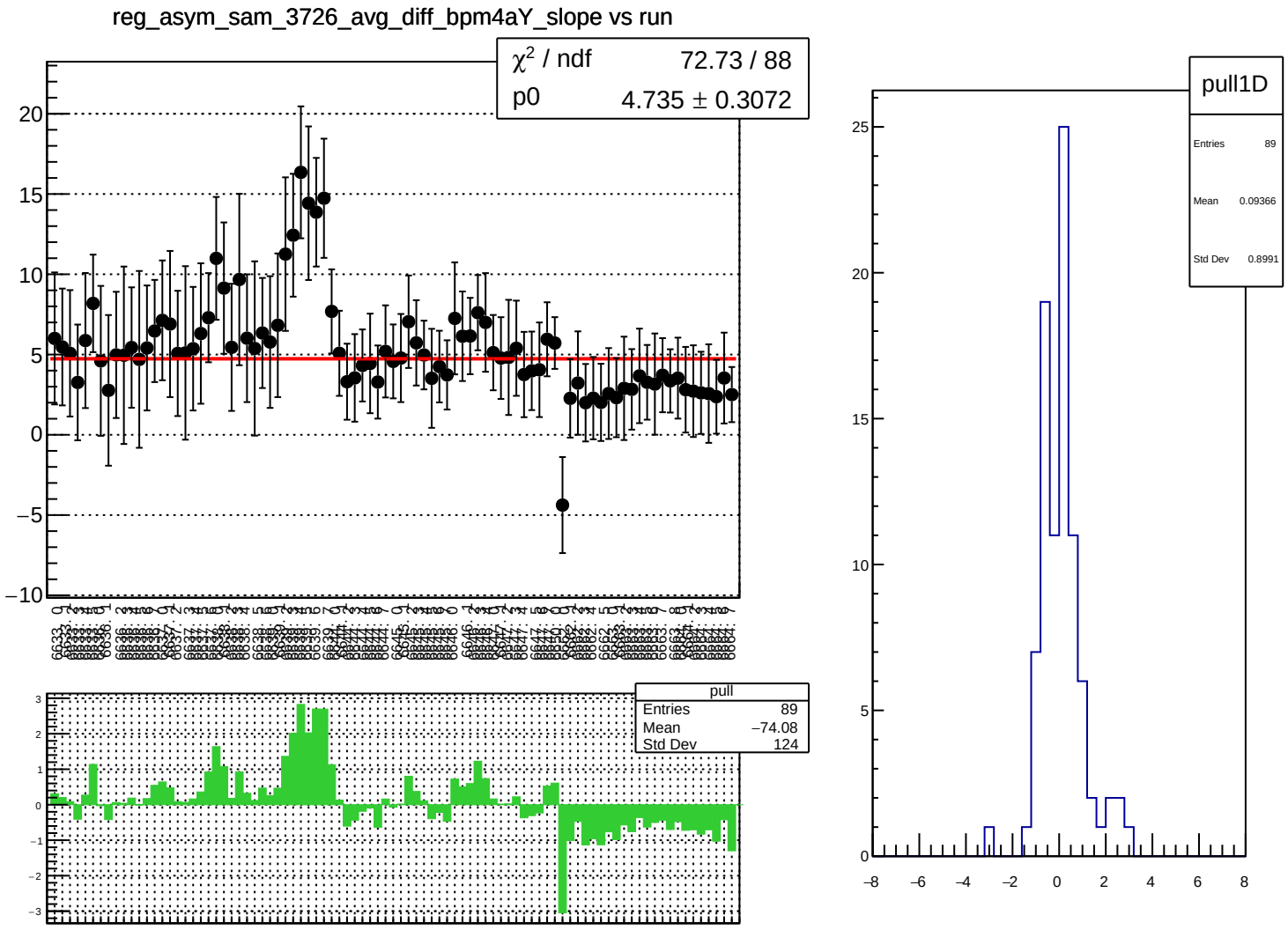

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 615.1 / 88
p0 12.15 ± 0.1976
pull
Entries 89
Mean −120.4
Std Dev 163

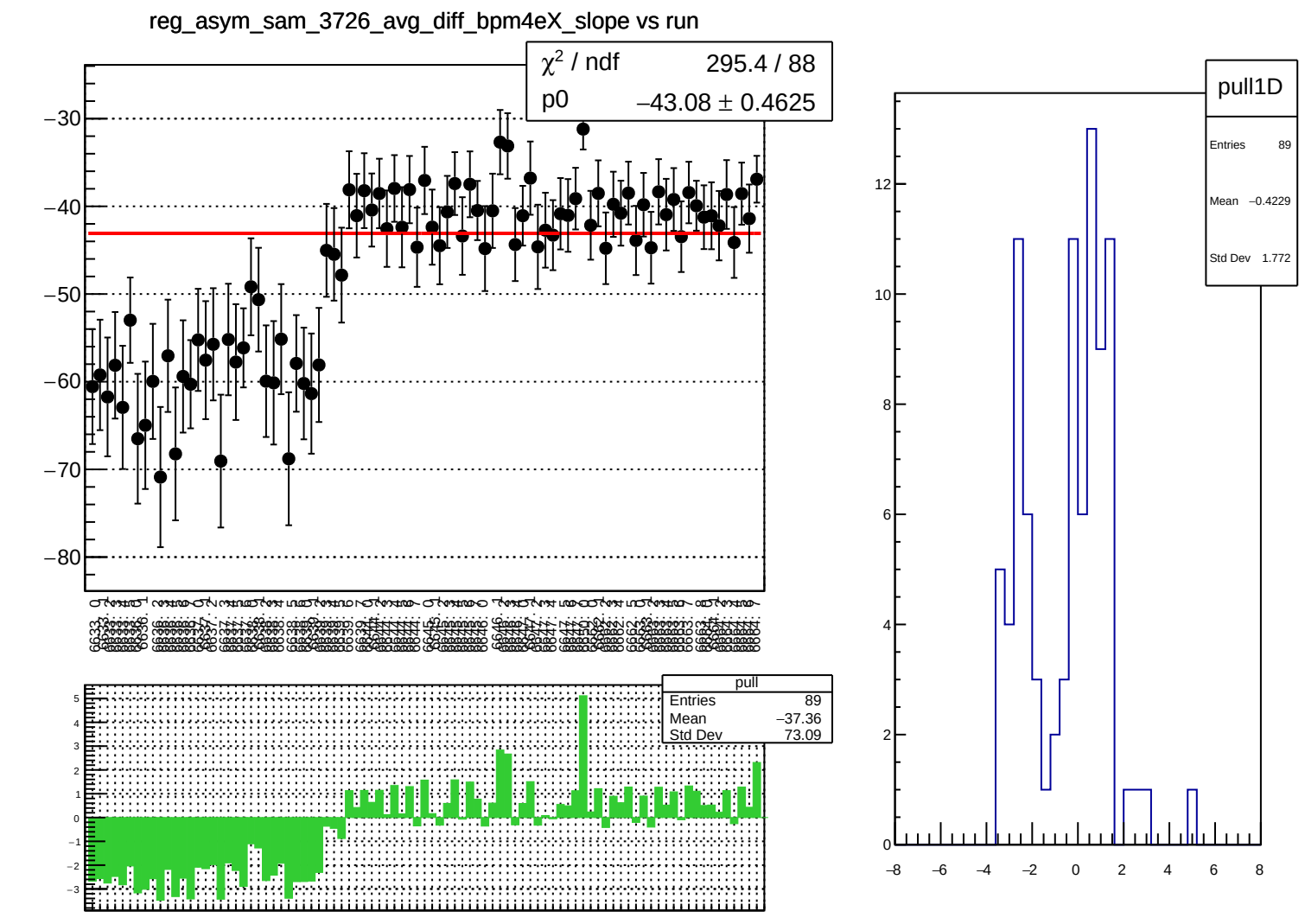

pull1D
Entries 89
Mean −0.3225
Std Dev 2.609

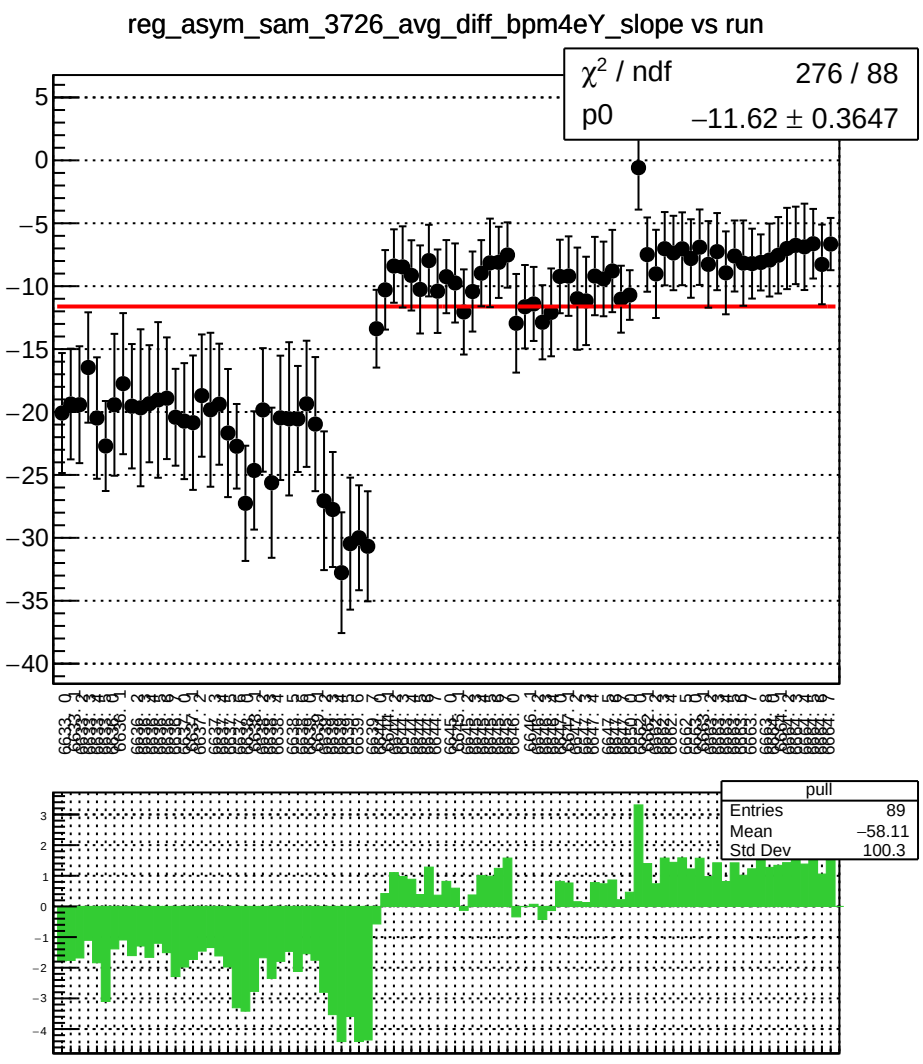

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 25.5 / 88
p0 0.3744 ± 0.01081
pull
Entries 89
Mean −112
Std Dev 177.9
pull1D
Entries 89
Mean −0.02281
Std Dev 0.5348

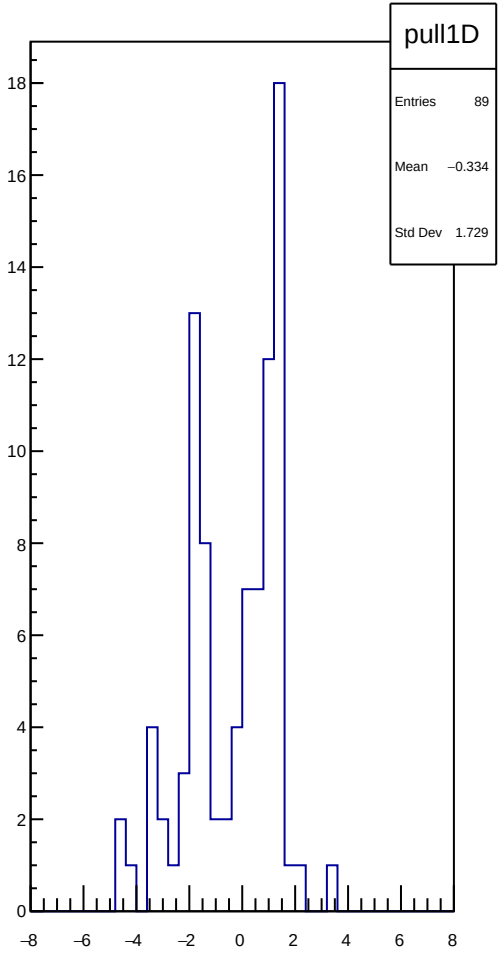

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 280.3 / 88
p0 −6.426 ± 0.4314
pull
Entries 89
Mean −83.45
Std Dev 126.7

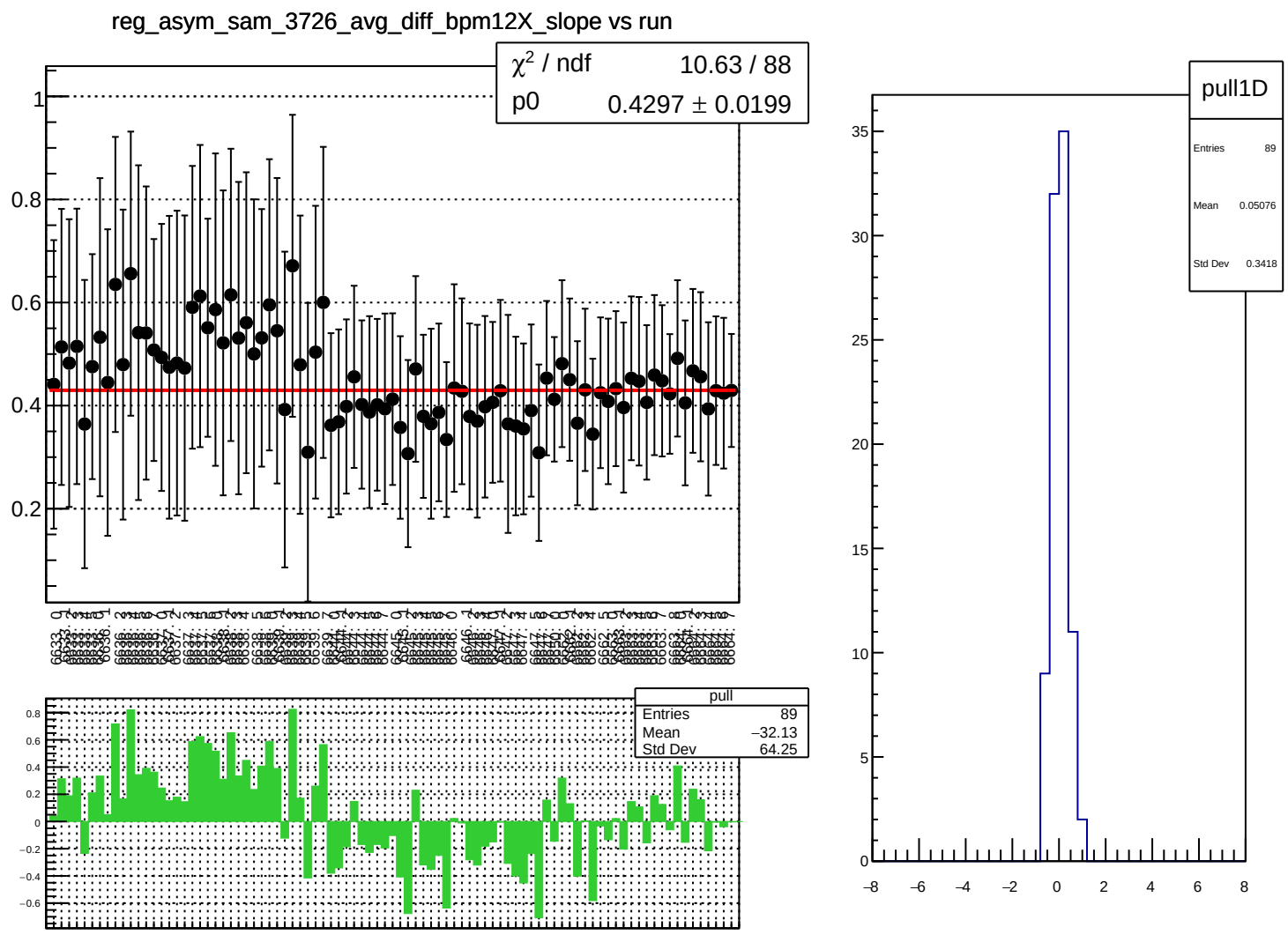

pull1D
Entries 89
Mean −0.1919
Std Dev 1.764

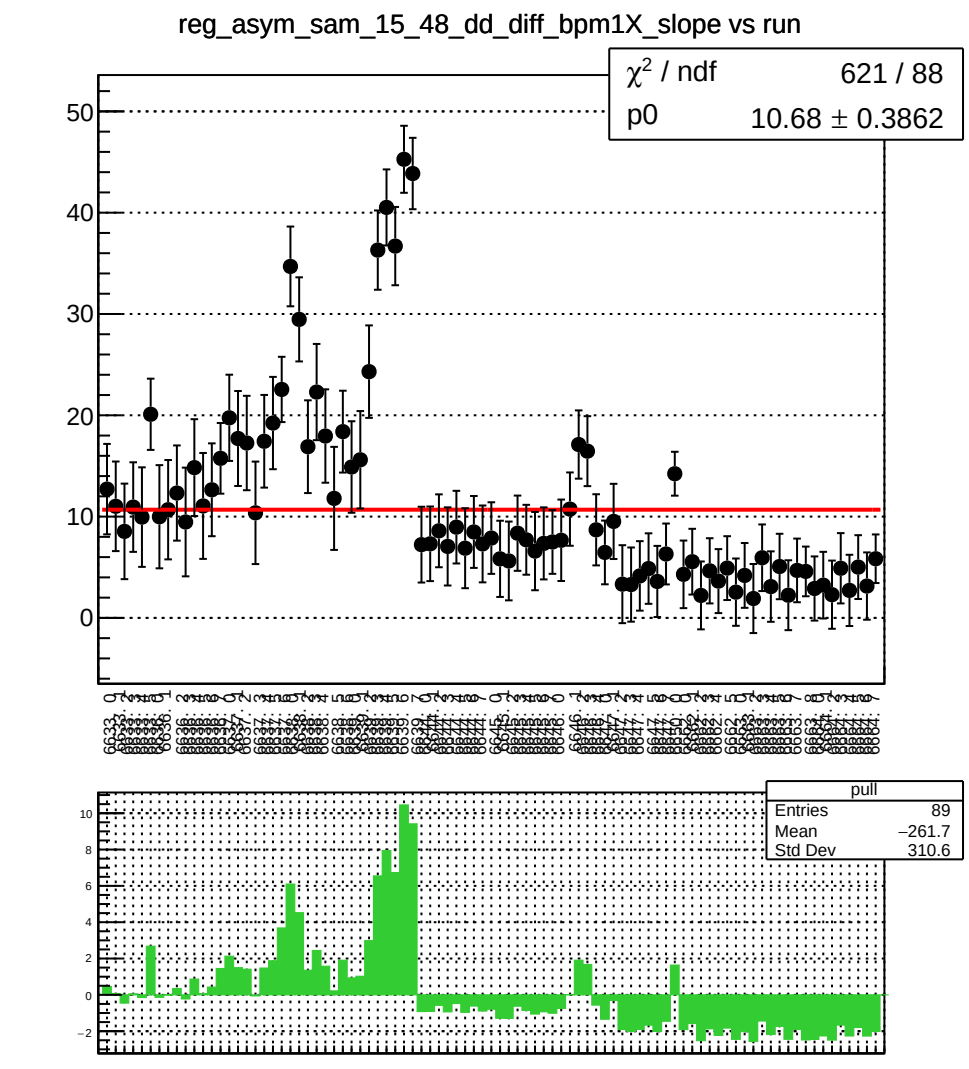

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 72.73 / 88
p0 4.735 ± 0.3072
pull
Entries 89
Mean −74.08
Std Dev 124
pull1D
Entries 89
Mean 0.09366
Std Dev 0.8991

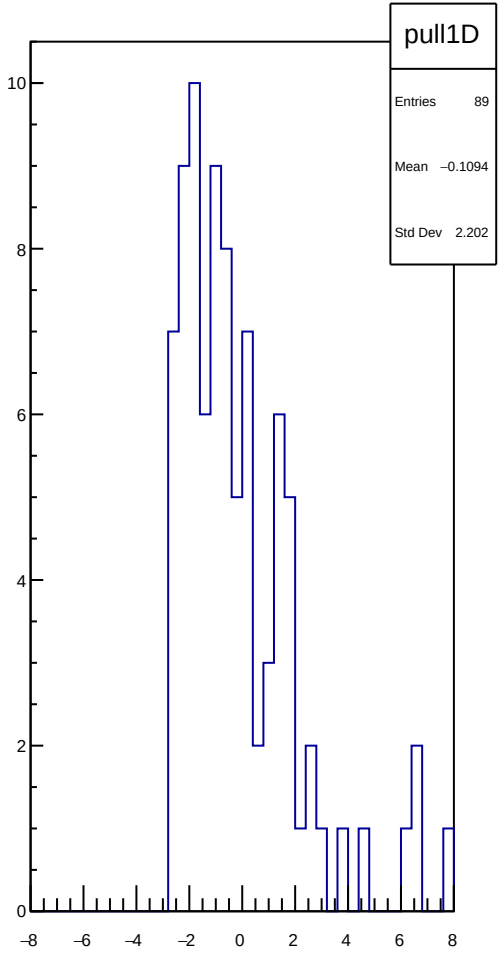

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 295.4 / 88
p0 −43.08 ± 0.4625
−30
−40
−50
−60
−70
−80
pull
Entries 89
Mean −37.36
Std Dev 73.09
5
4
3
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.4229
Std Dev 1.772
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

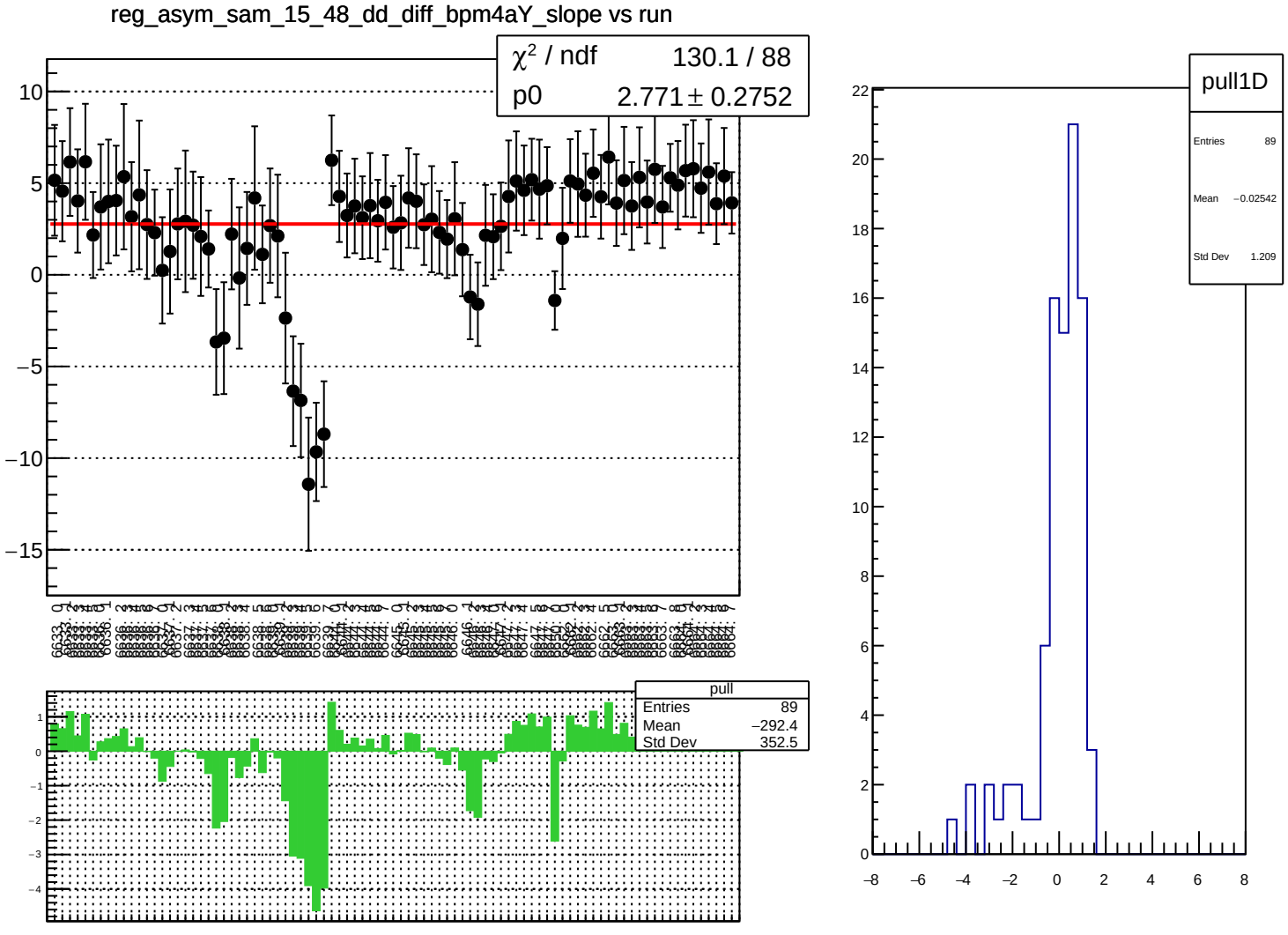

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 276 / 88
p0 −11.62 ± 0.3647
pull
Entries 89
Mean −58.11
Std Dev 100.3

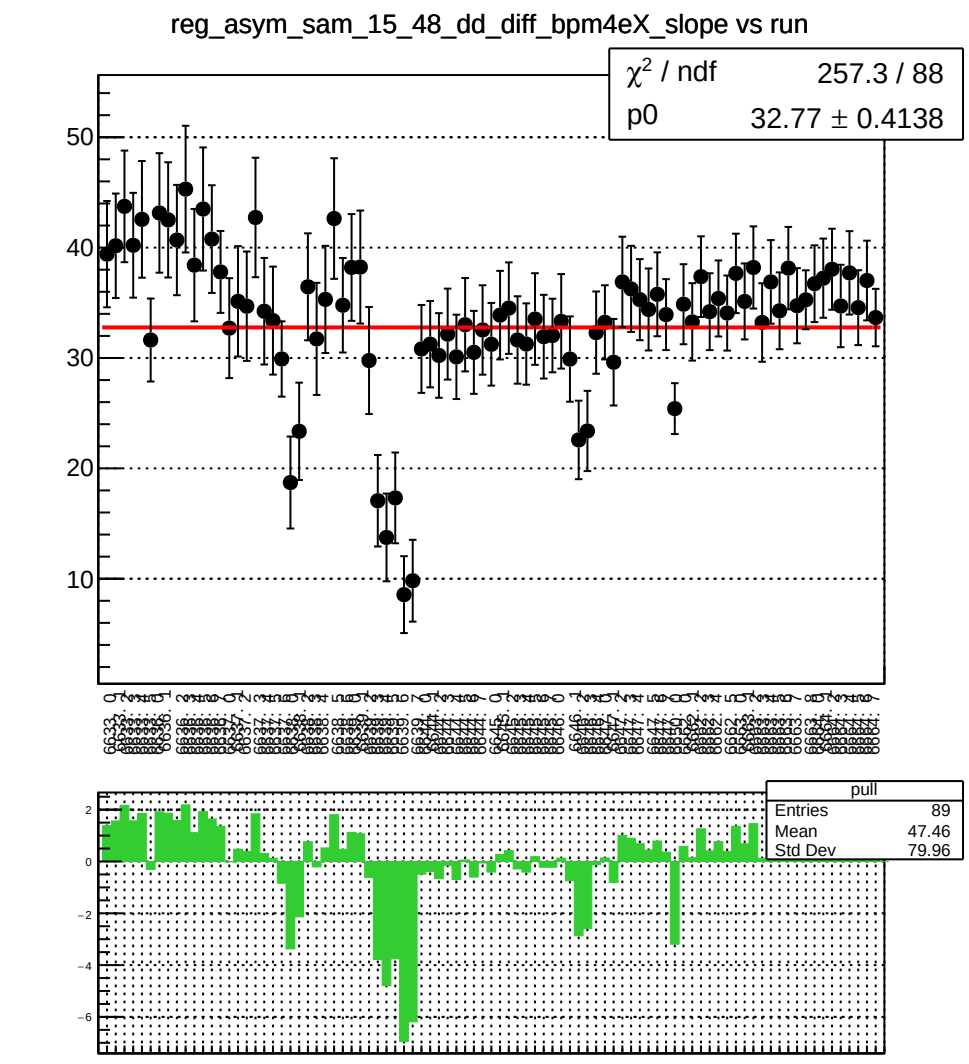

pull1D
Entries 89
Mean −0.334
Std Dev 1.729

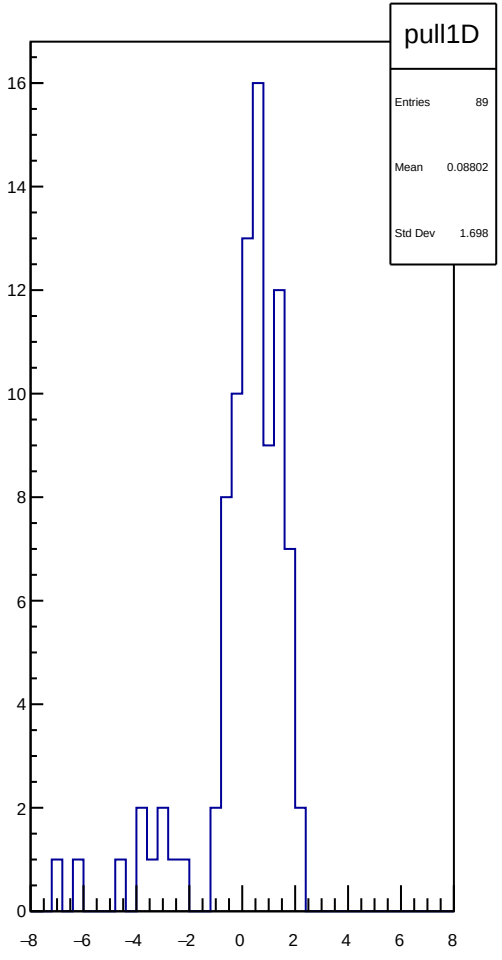

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 10.63 / 88
p0 0.4297 ± 0.0199
pull
Entries 89
Mean −32.13
Std Dev 64.25
pull1D
Entries 89
Mean 0.05076
Std Dev 0.3418

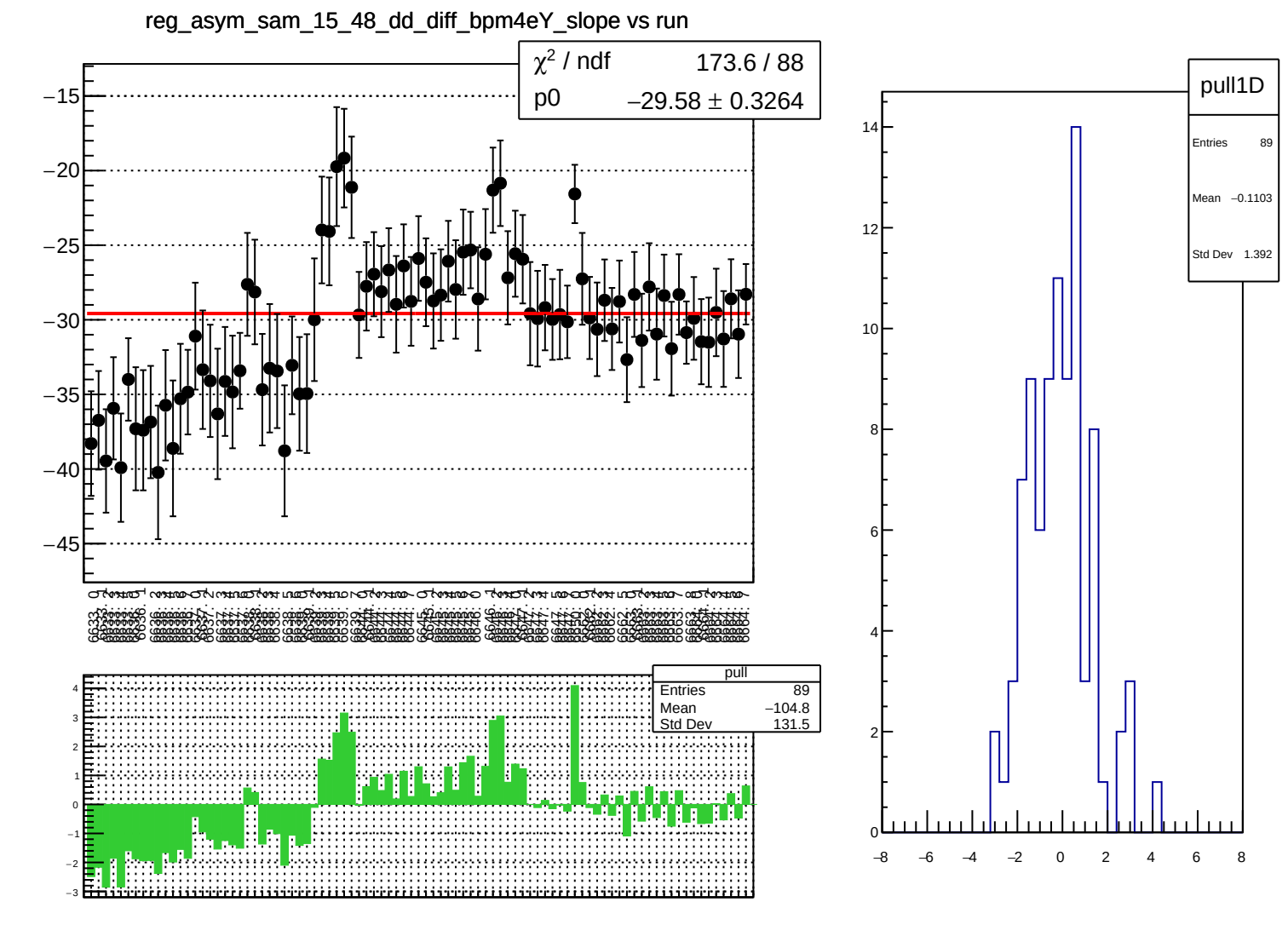

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 621 / 88
p0 10.68 ± 0.3862
pull
Entries 89
Mean −261.7
Std Dev 310.6

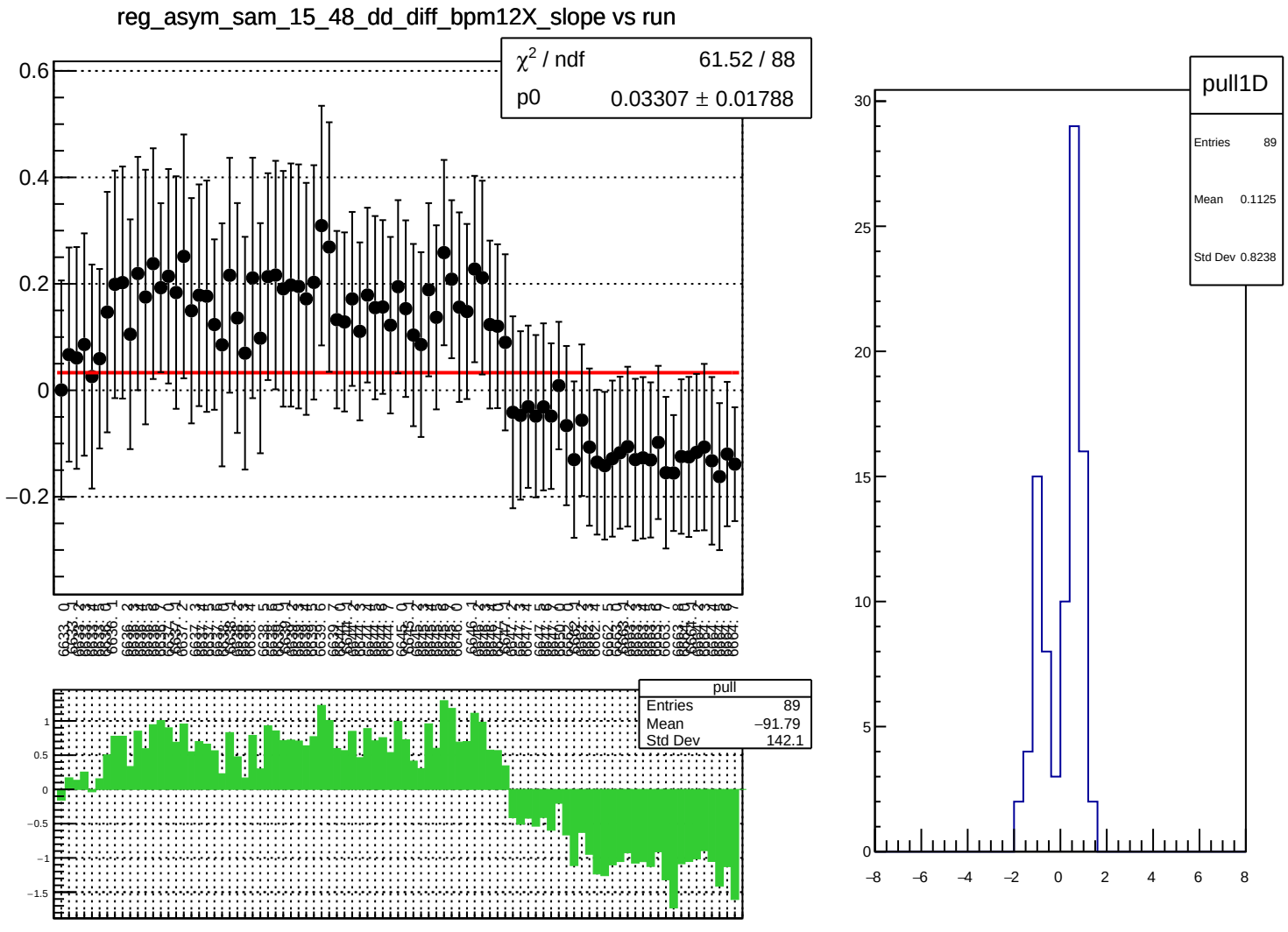

pull1D
Entries 89
Mean −0.1094
Std Dev 2.202

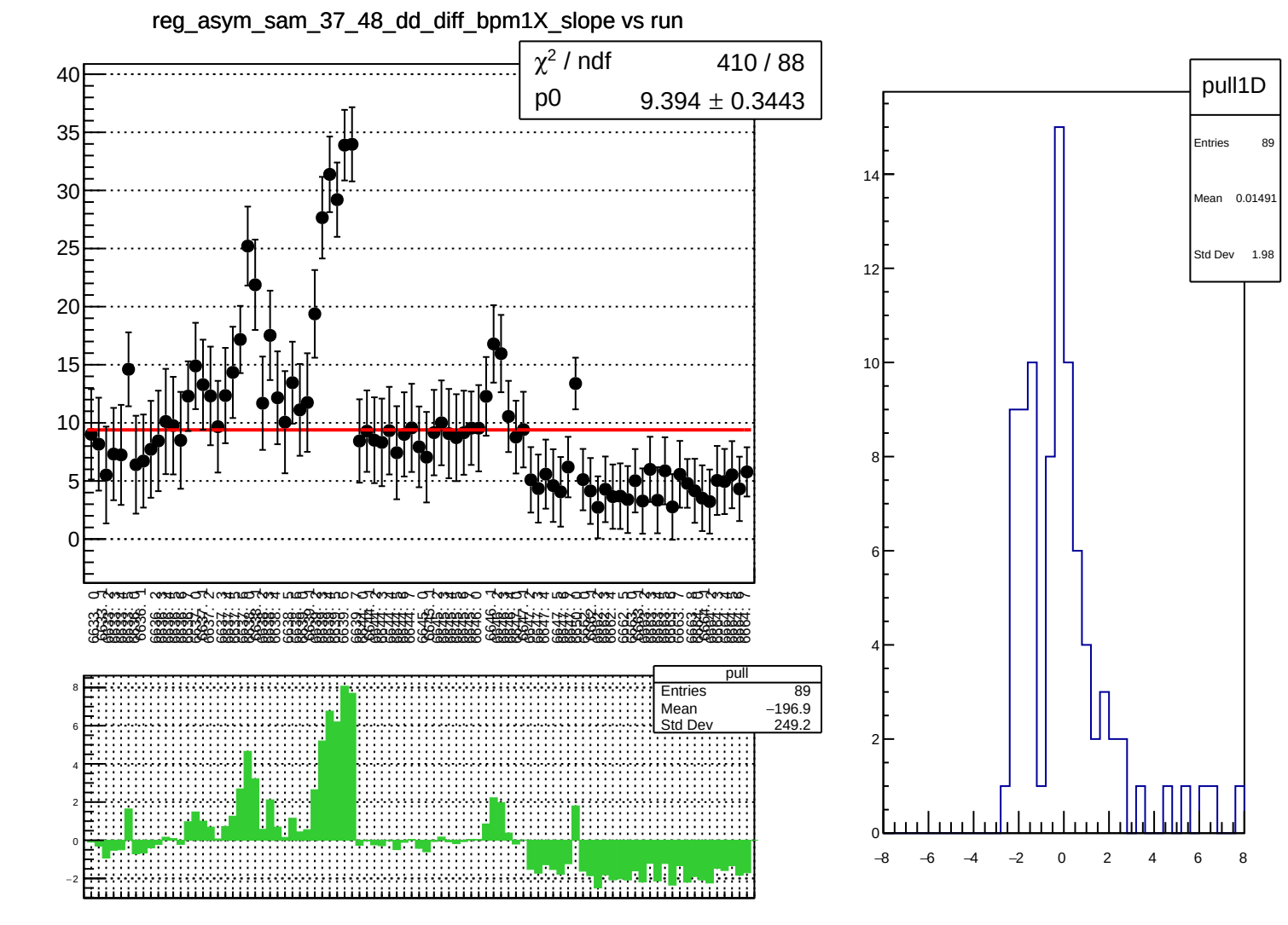

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 130.1 / 88
p0 2.771 ± 0.2752
pull
Entries 89
Mean −292.4
Std Dev 352.5
pull1D
Entries 89
Mean −0.02542
Std Dev 1.209

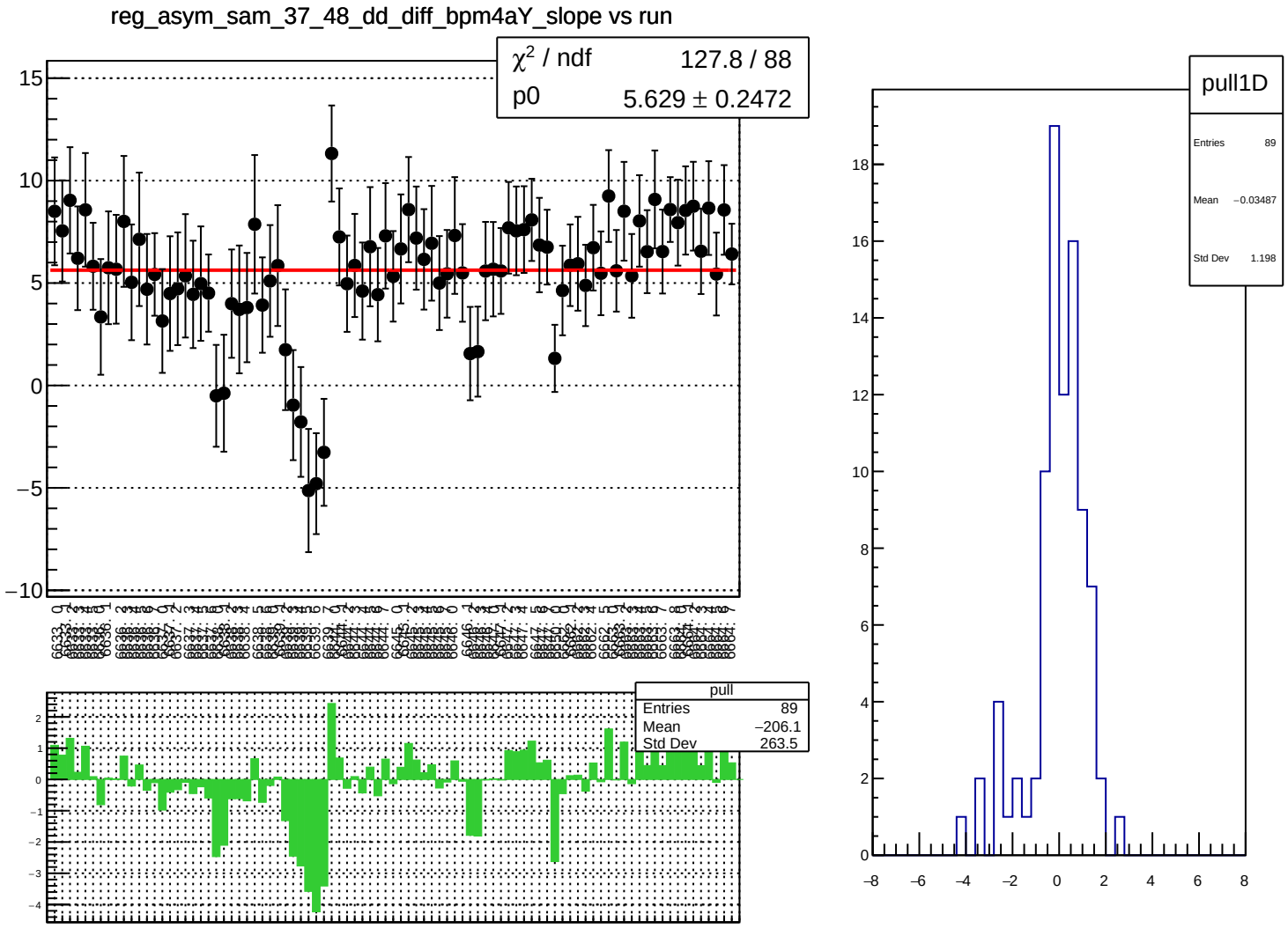

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 257.3 / 88
p0 32.77 ± 0.4138
pull
Entries 89
Mean 47.46
Std Dev 79.96

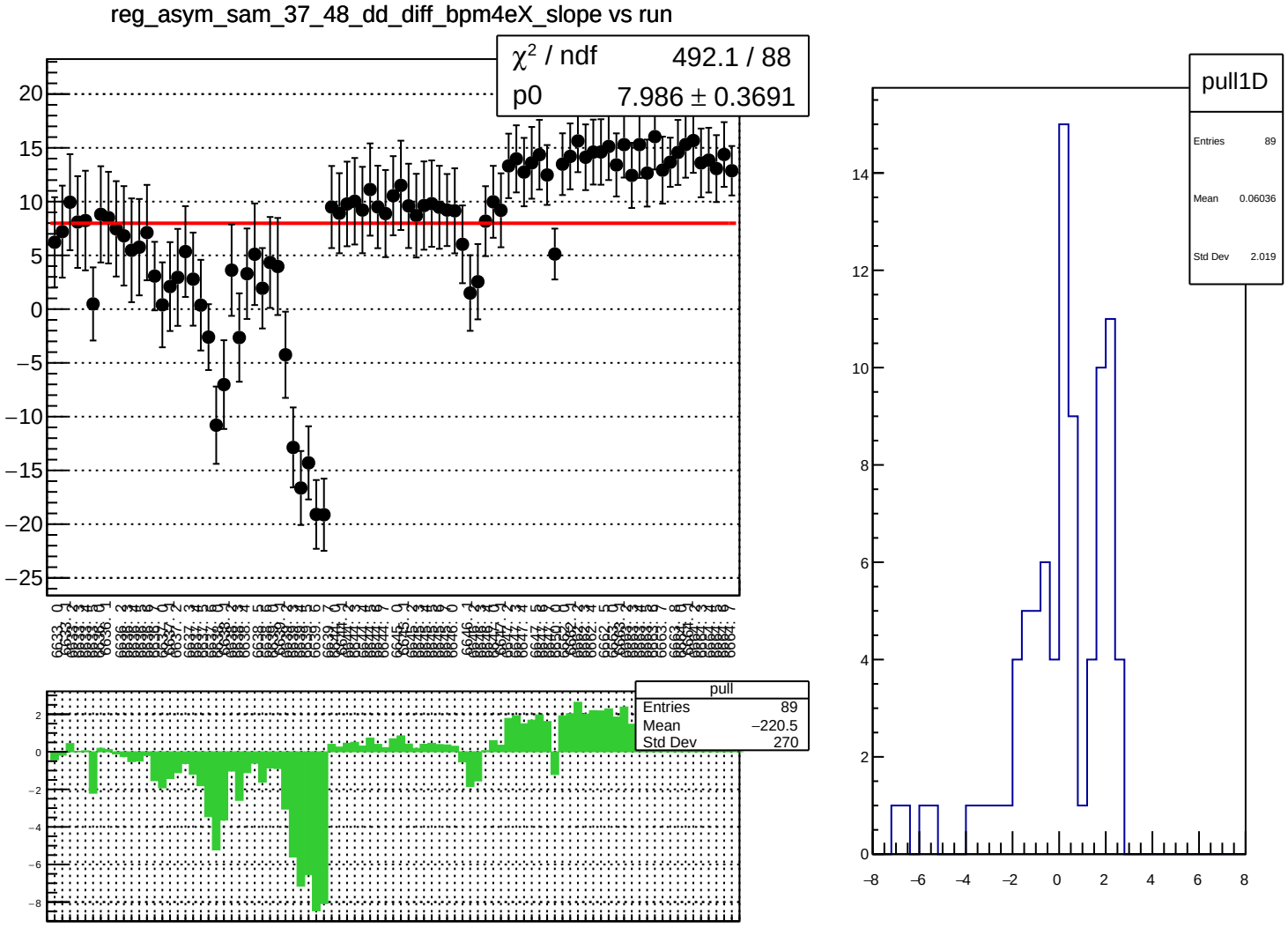

pull1D
Entries 89
Mean 0.08802
Std Dev 1.698

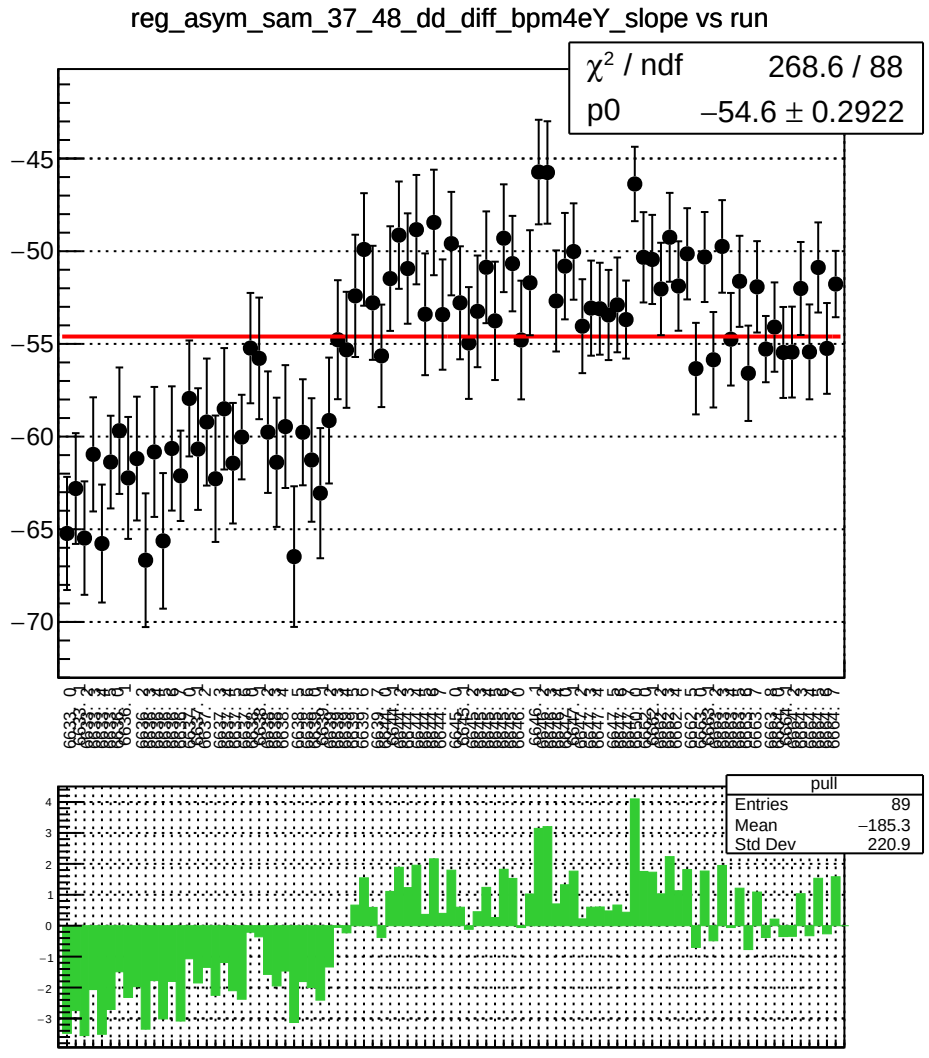

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 173.6 / 88
p0 −29.58 ± 0.3264
pull
Entries 89
Mean −104.8
Std Dev 131.5
pull1D
Entries 89
Mean −0.1103
Std Dev 1.392

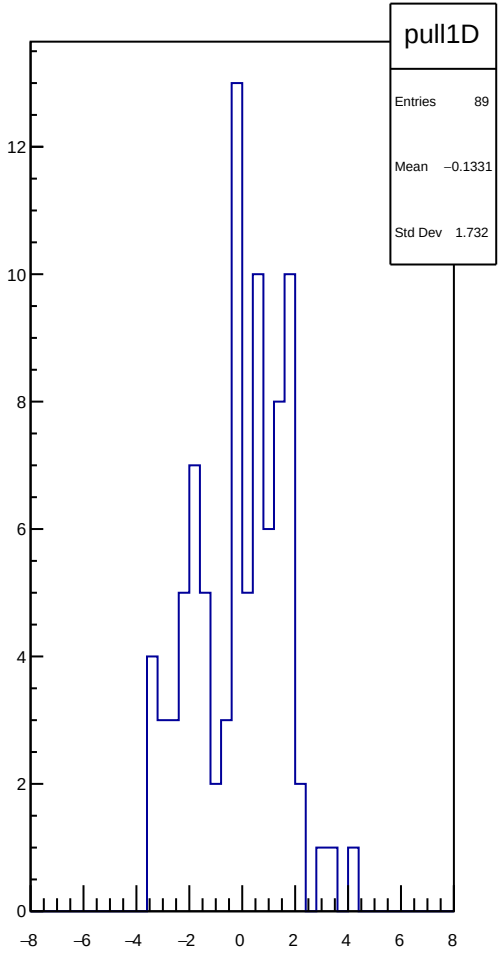

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 61.52 / 88
p0 0.03307 ± 0.01788
pull
Entries 89
Mean −91.79
Std Dev 142.1
pull1D
Entries 89
Mean 0.1125
Std Dev 0.8238

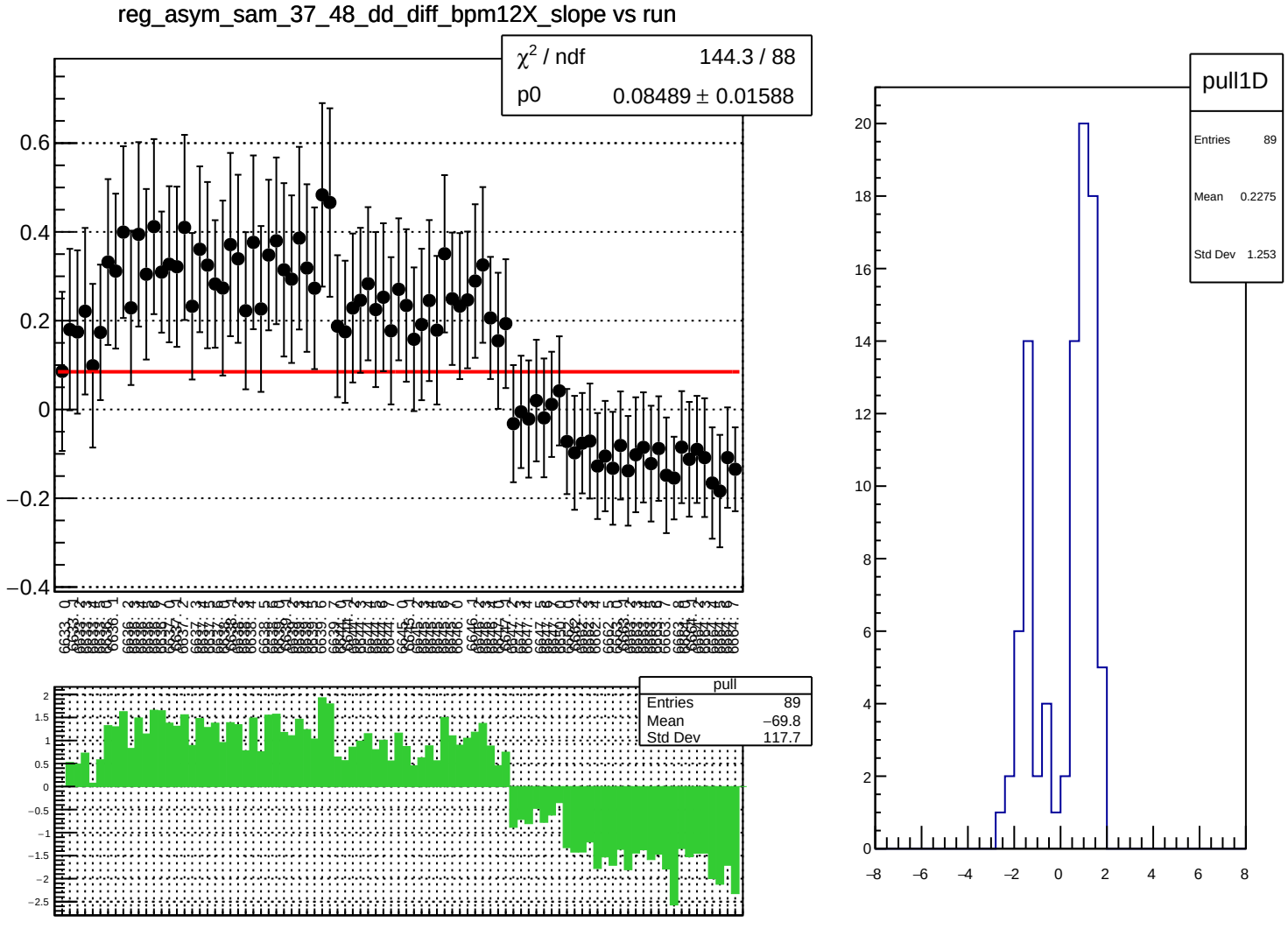

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 410 / 88
p0 9.394 ± 0.3443
pull
Entries 89
Mean −196.9
Std Dev 249.2
pull1D
Entries 89
Mean 0.01491
Std Dev 1.98

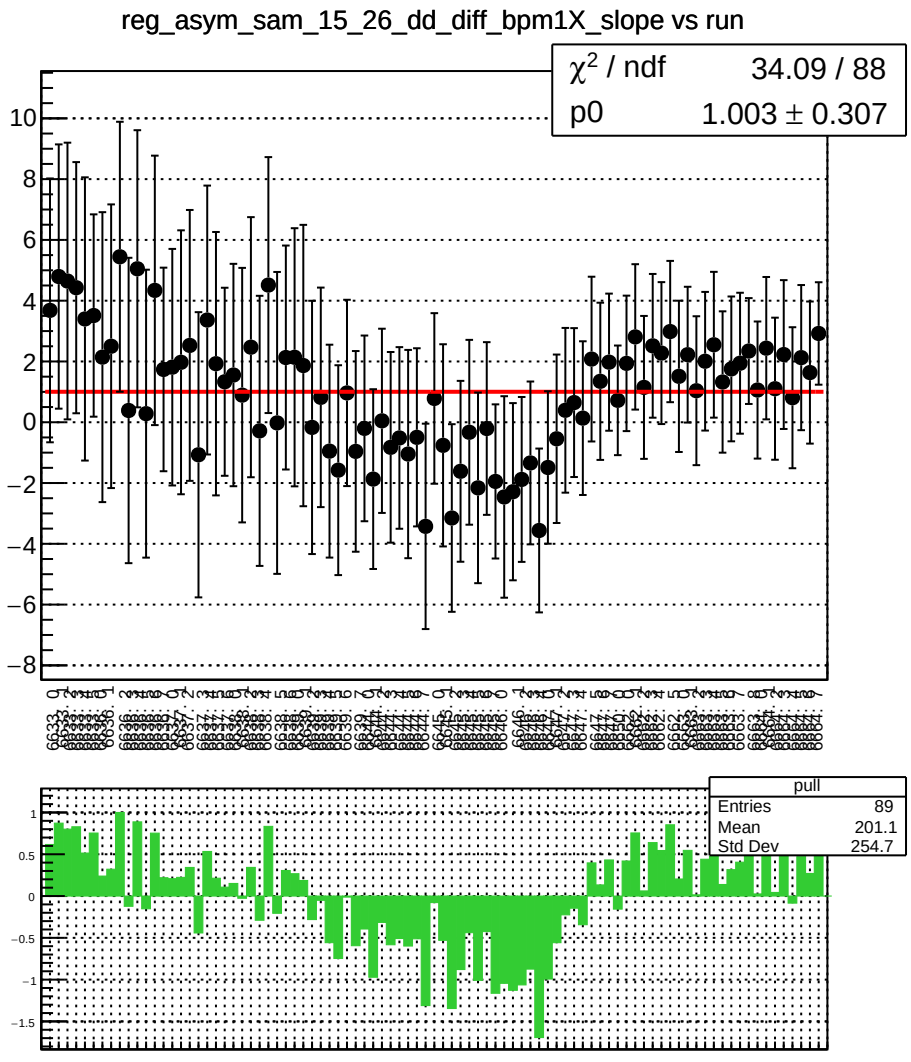

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 127.8 / 88
p0 5.629 ± 0.2472
pull
Entries 89
Mean −206.1
Std Dev 263.5
pull1D
Entries 89
Mean −0.03487
Std Dev 1.198

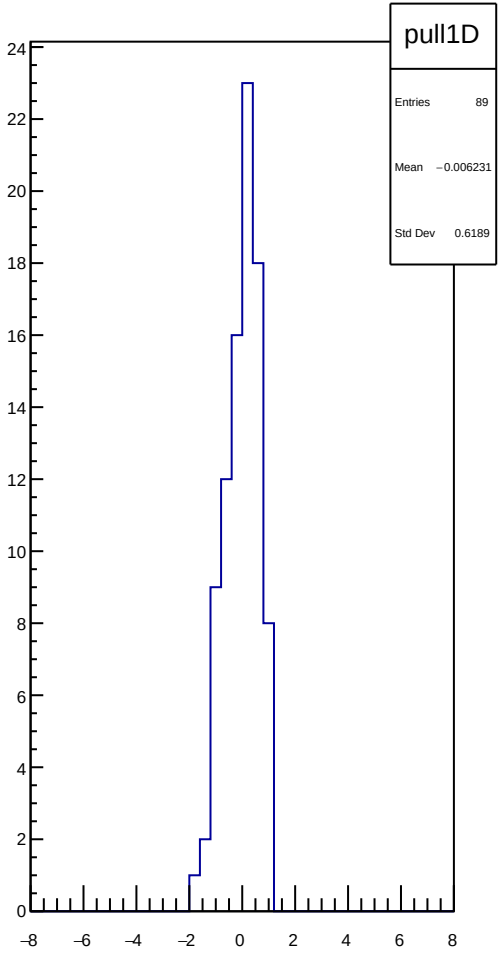

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 492.1 / 88
p0 7.986 ± 0.3691
pull
Entries 89
Mean −220.5
Std Dev 270
pull1D
Entries 89
Mean 0.06036
Std Dev 2.019

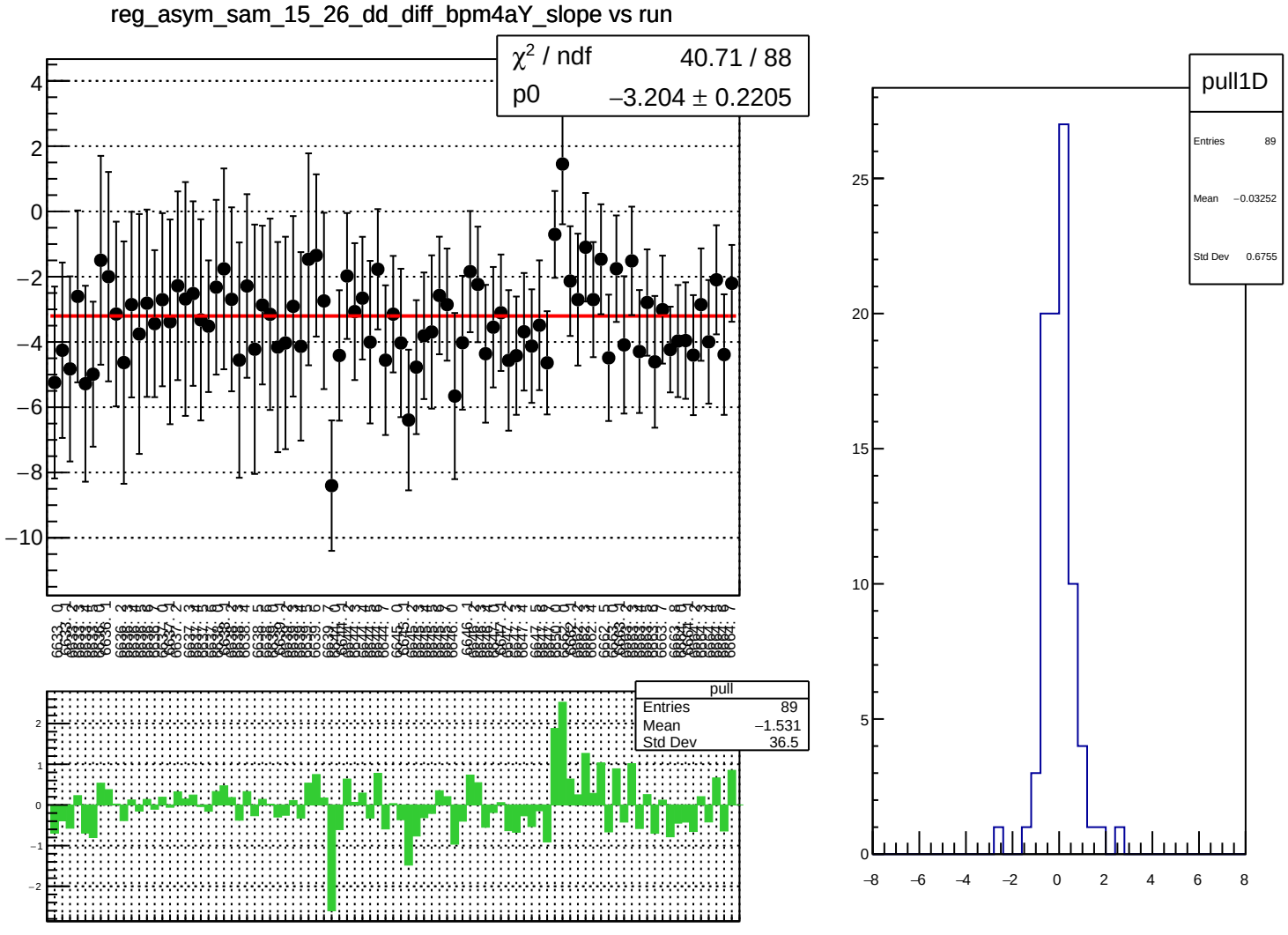

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 268.6 / 88
p0 −54.6 ± 0.2922
−45
−50
−55
−60
−65
−70
pull
Entries 89
Mean −185.3
Std Dev 220.9
4
3
2
1
0
−1
−2
−3

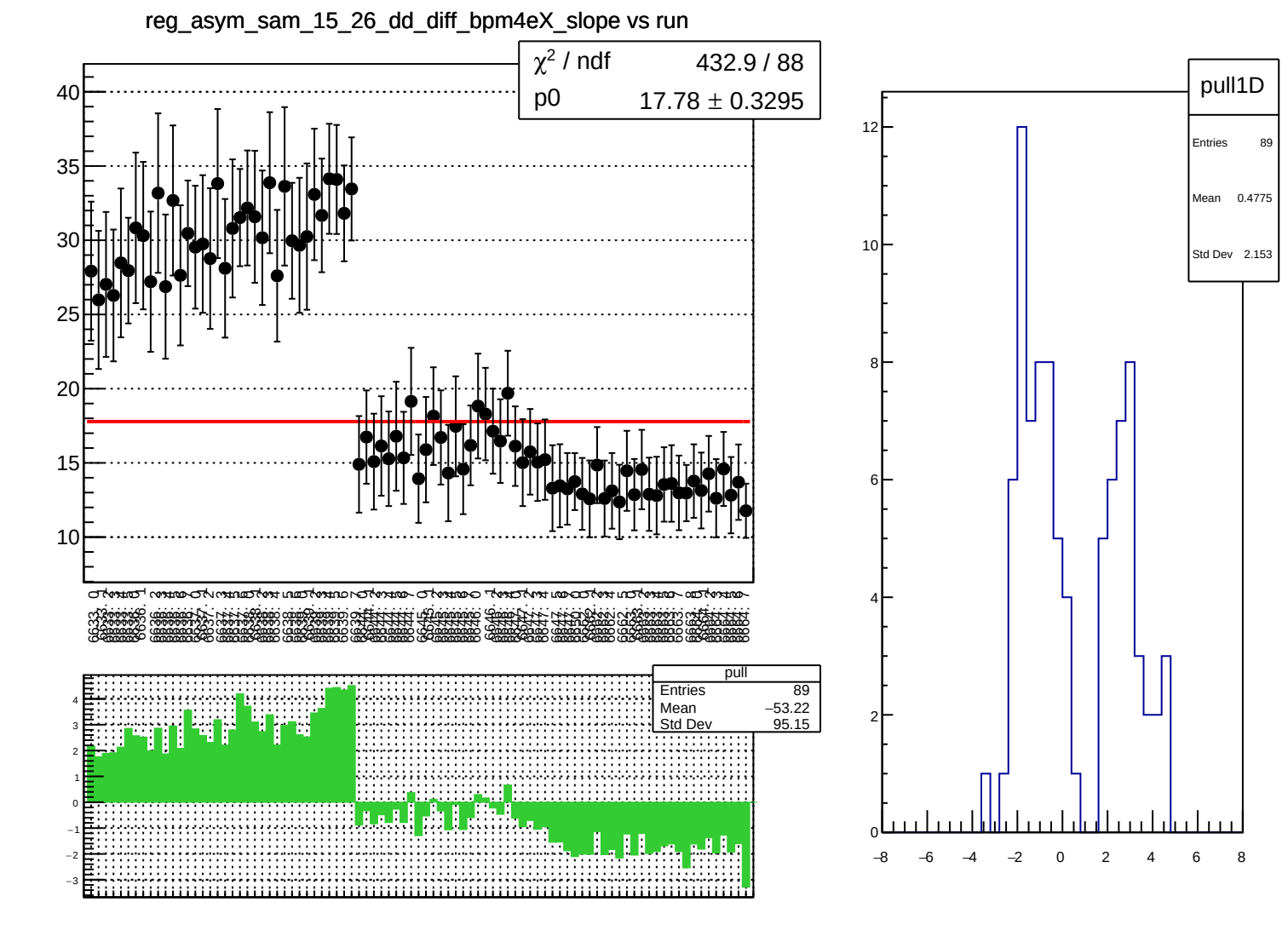

pull1D
Entries 89
Mean −0.1331
Std Dev 1.732
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

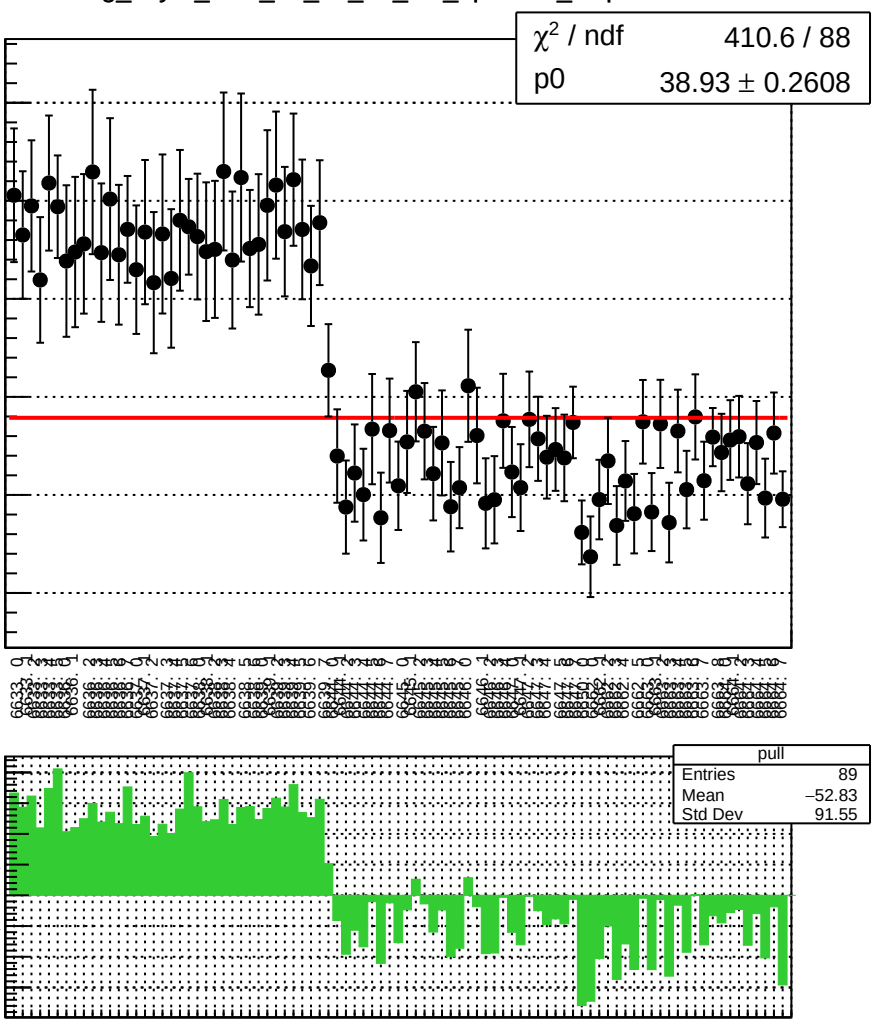

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 144.3 / 88
p0 0.08489 ± 0.01588
pull
Entries 89
Mean −69.8
Std Dev 117.7
pull1D
Entries 89
Mean 0.2275
Std Dev 1.253

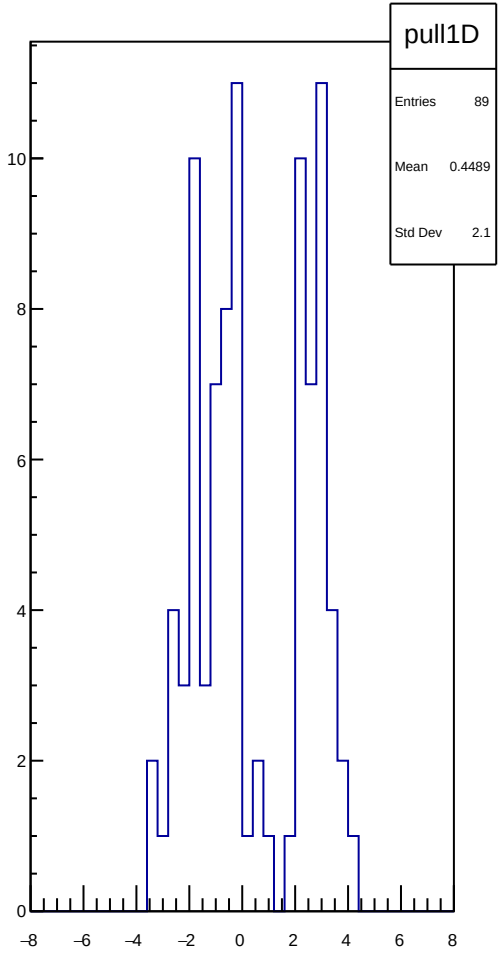

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 34.09 / 88
p0 1.003 ± 0.307
pull
Entries 89
Mean 201.1
Std Dev 254.7

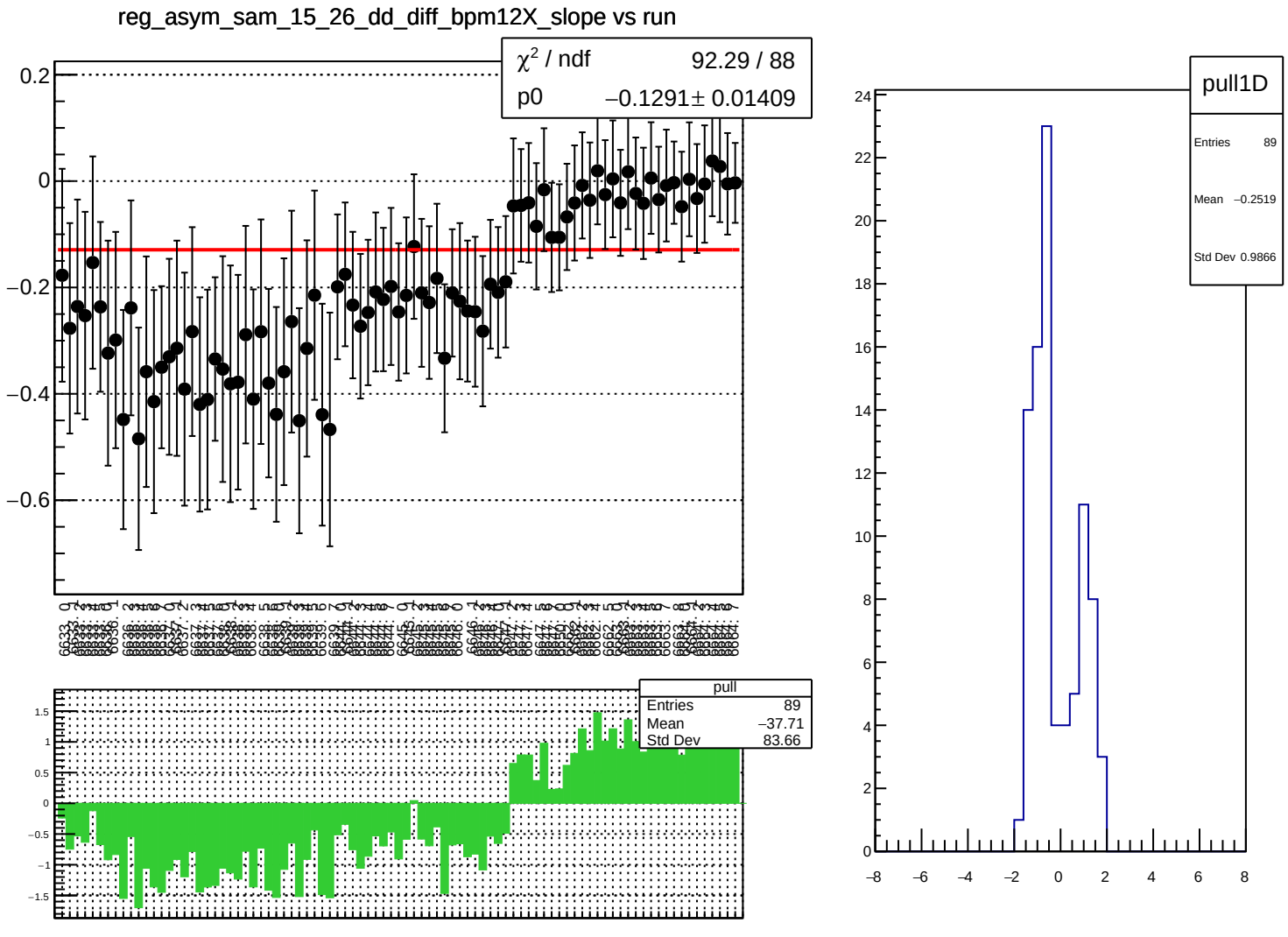

pull1D
Entries 89
Mean −0.006231
Std Dev 0.6189

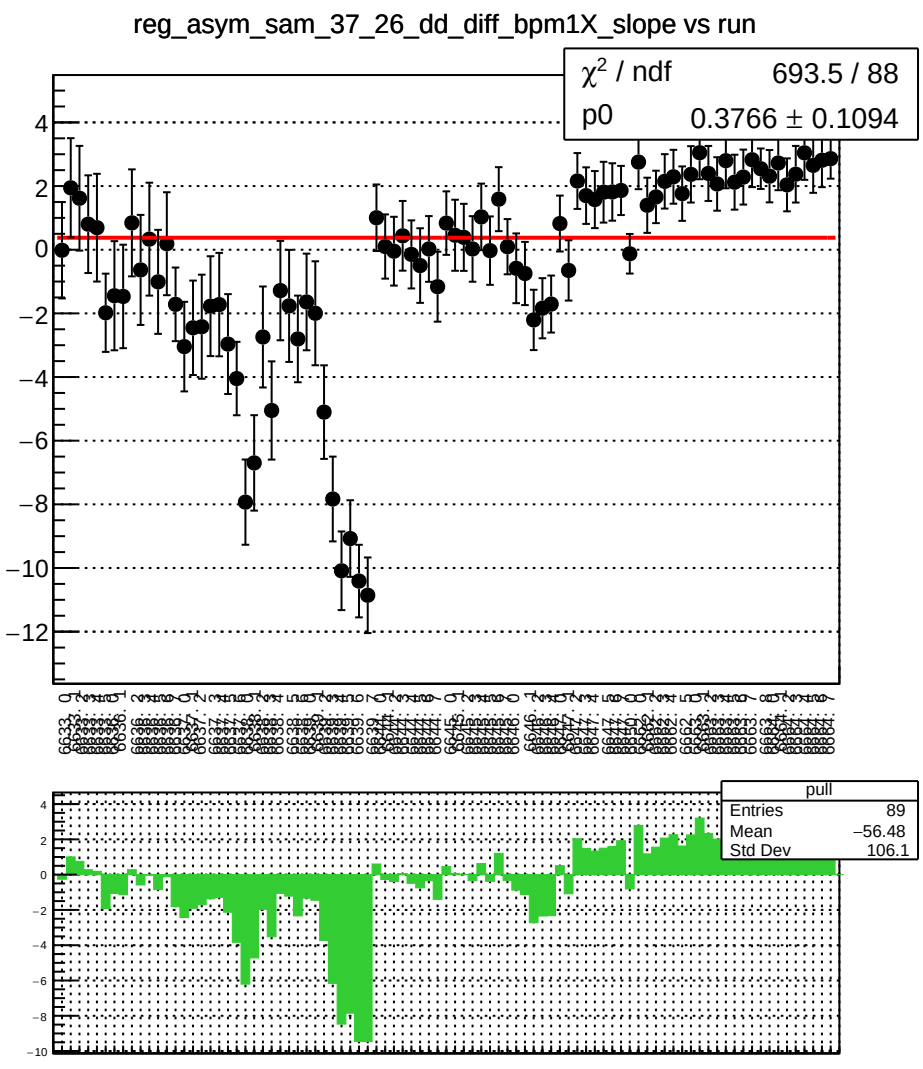

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 40.71 / 88
p0 −3.204 ± 0.2205
pull
Entries 89
Mean −1.531
Std Dev 36.5
pull1D
Entries 89
Mean −0.03252
Std Dev 0.6755

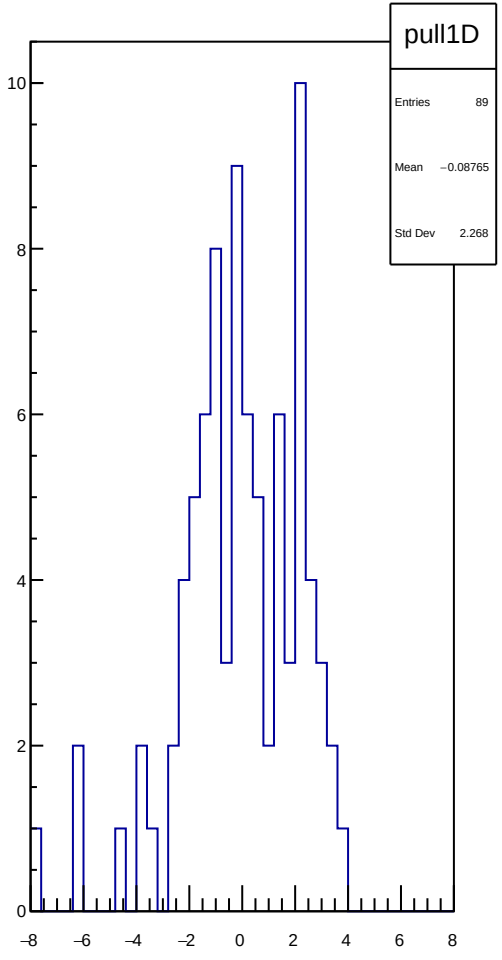

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 432.9 / 88
p0 17.78 ± 0.3295
pull
Entries 89
Mean −53.22
Std Dev 95.15
pull1D
Entries 89
Mean 0.4775
Std Dev 2.153

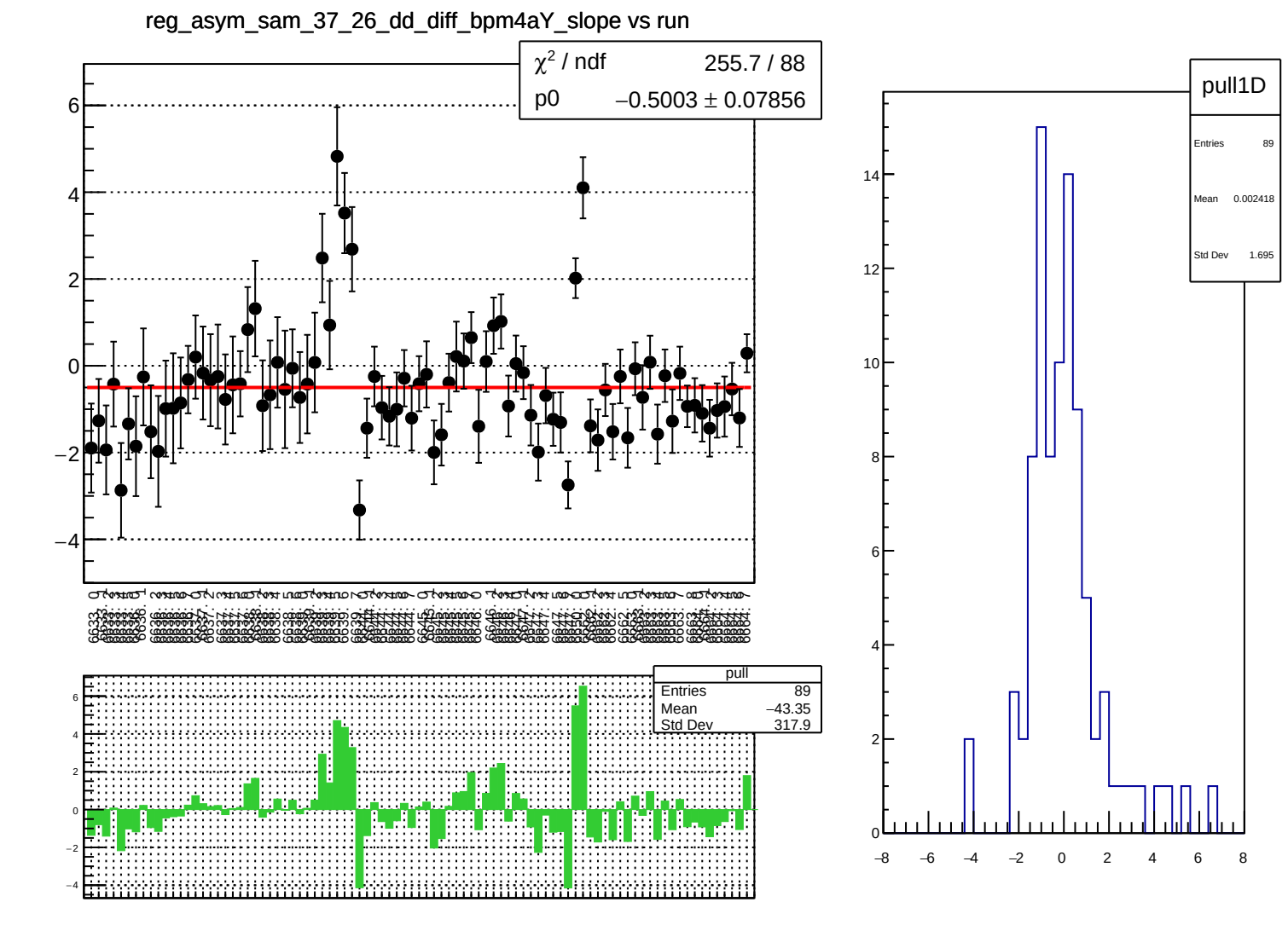

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 410.6 / 88
p0 38.93 ± 0.2608
55
50
45
40
35
30
pull
Entries 89
Mean −52.83
Std Dev 91.55
4
3
2
1
0
−1
−2
−3

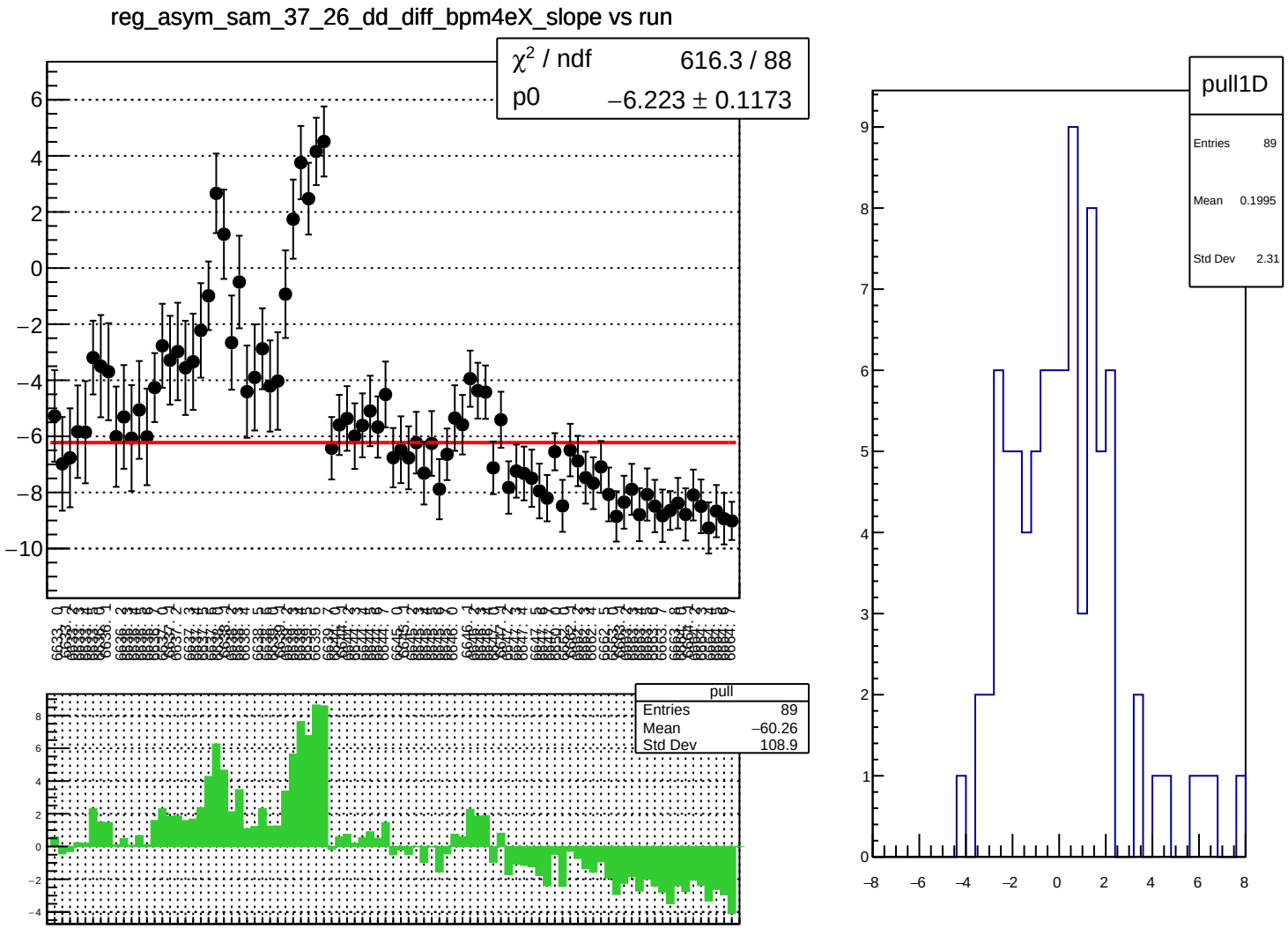

pull1D
Entries 89
Mean 0.4489
Std Dev 2.1
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

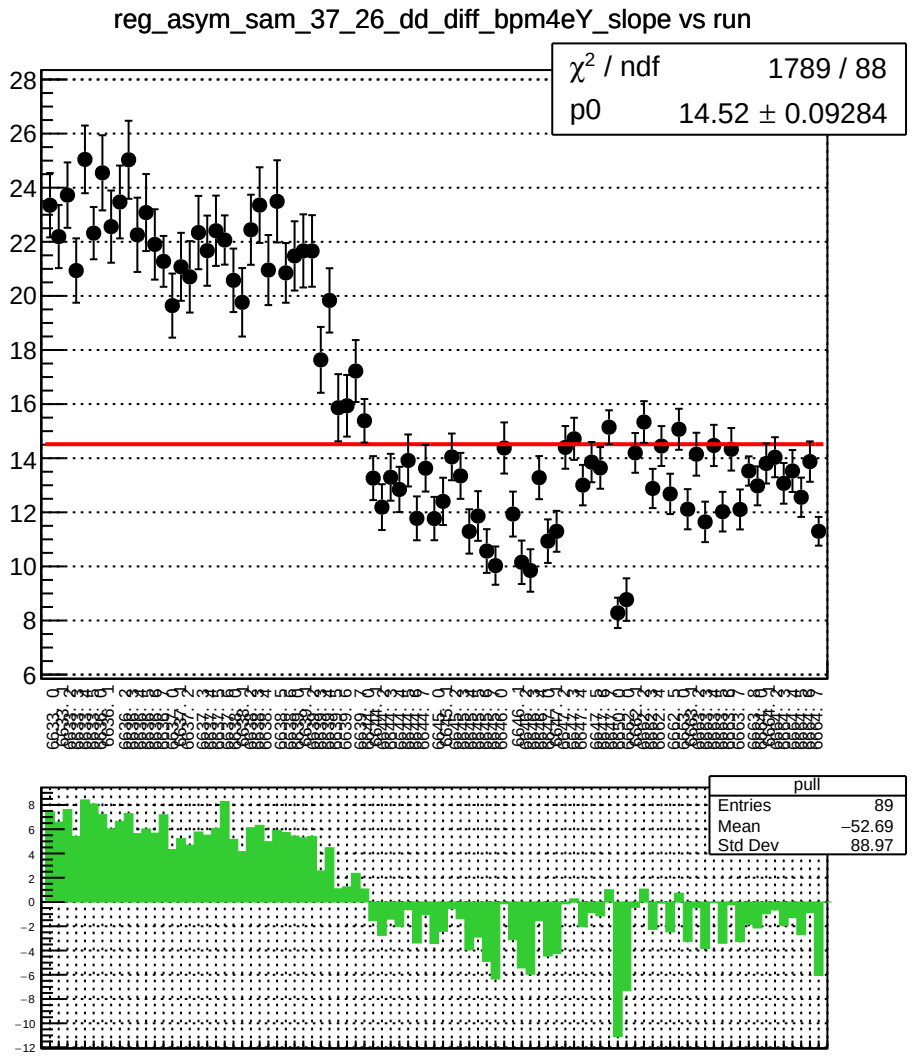

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 92.29 / 88
p0 −0.1291± 0.01409
pull
Entries 89
Mean −37.71
Std Dev 83.66
pull1D
Entries 89
Mean −0.2519
Std Dev 0.9866

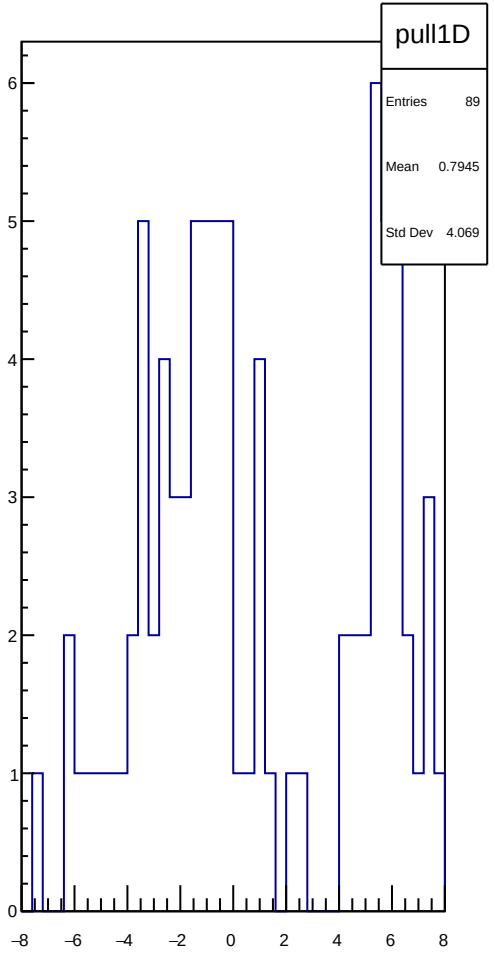

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 693.5 / 88
p0 0.3766 ± 0.1094
pull
Entries 89
Mean −56.48
Std Dev 106.1

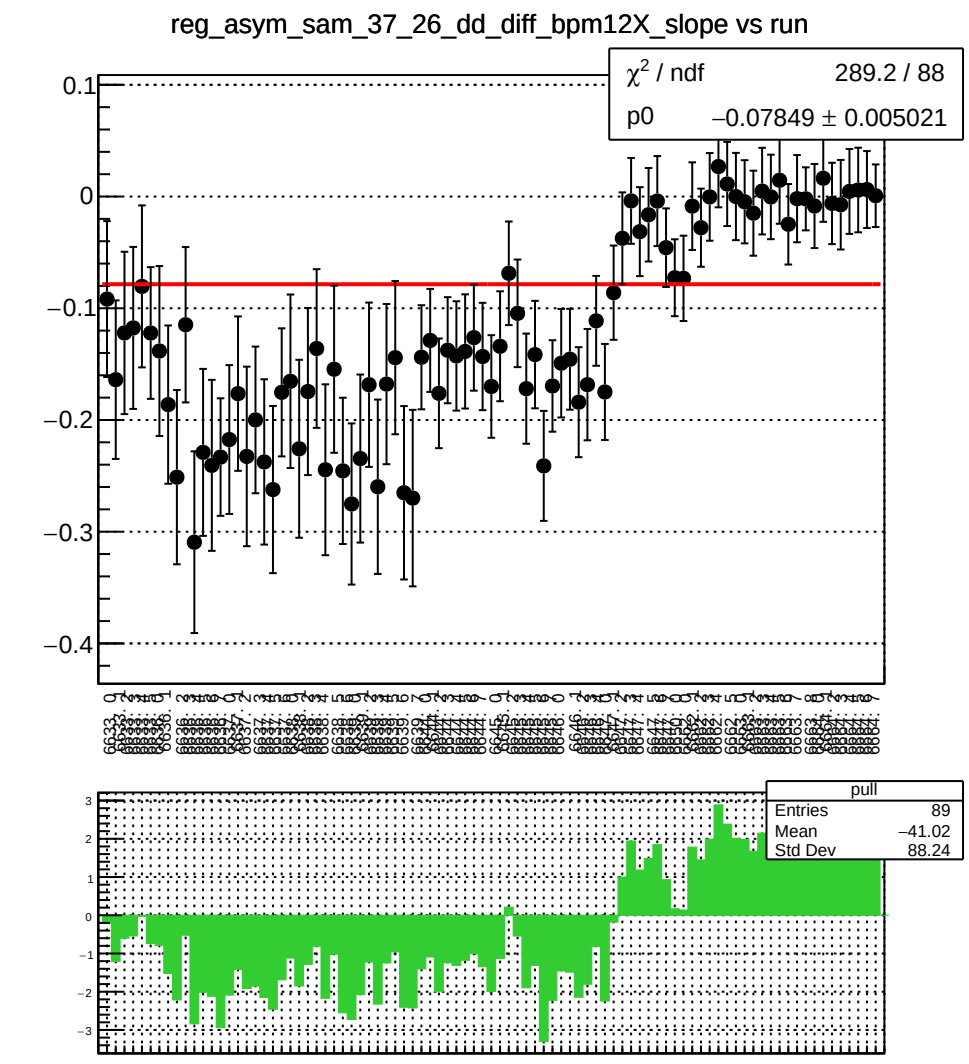

pull1D
Entries 89
Mean −0.08765
Std Dev 2.268

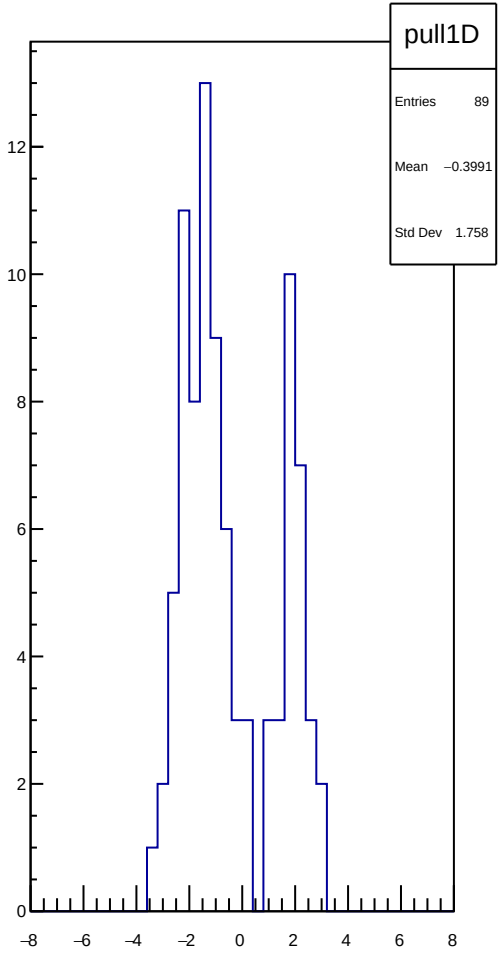

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 255.7 / 88
p0 −0.5003 ± 0.07856
pull
Entries 89
Mean −43.35
Std Dev 317.9
pull1D
Entries 89
Mean 0.002418
Std Dev 1.695

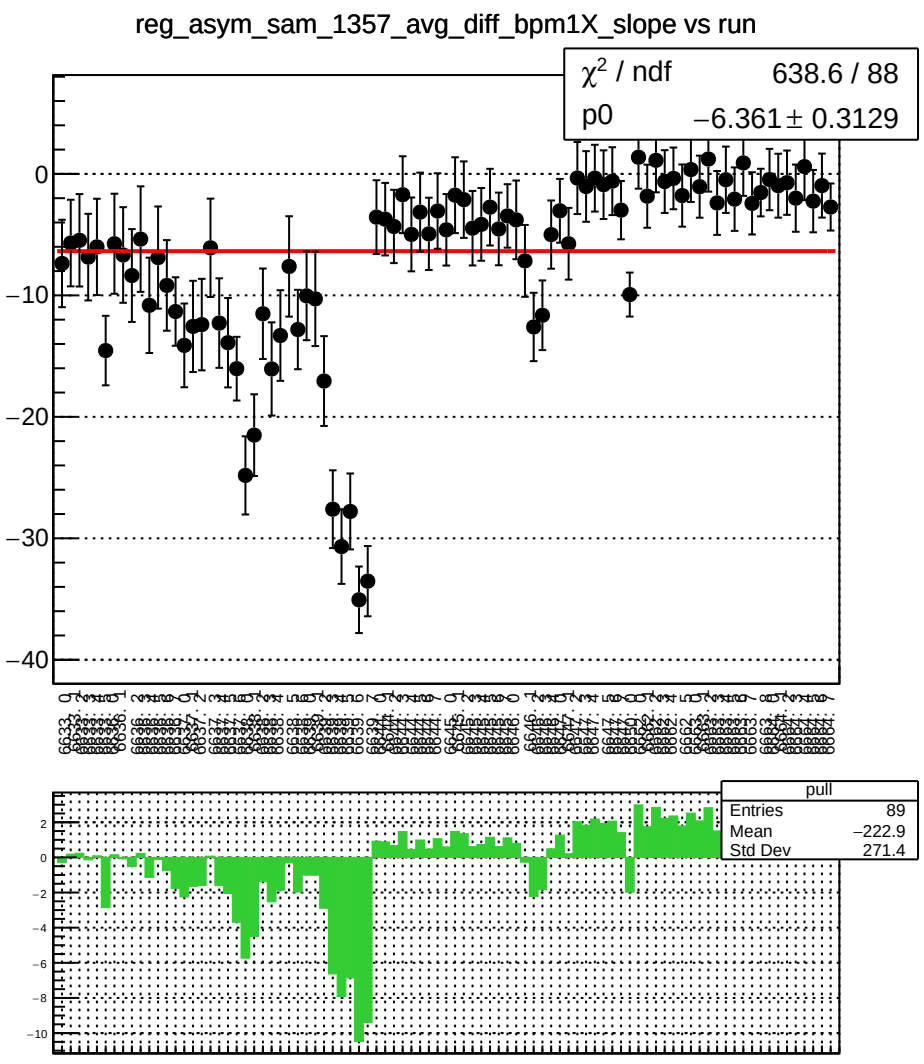

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 616.3 / 88
p0 −6.223 ± 0.1173
pull
Entries 89
Mean −60.26
Std Dev 108.9
pull1D
Entries 89
Mean 0.1995
Std Dev 2.31

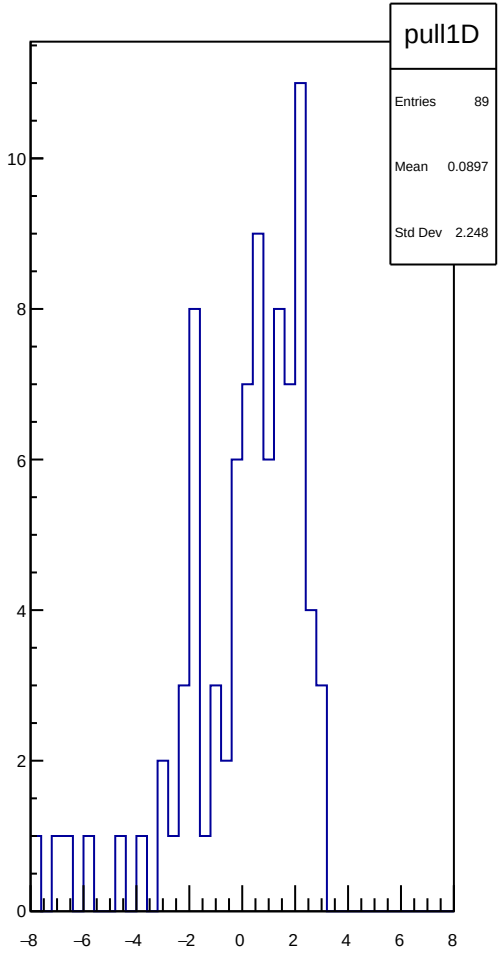

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 1789 / 88
p0 14.52 ± 0.09284
pull
Entries 89
Mean −52.69
Std Dev 88.97

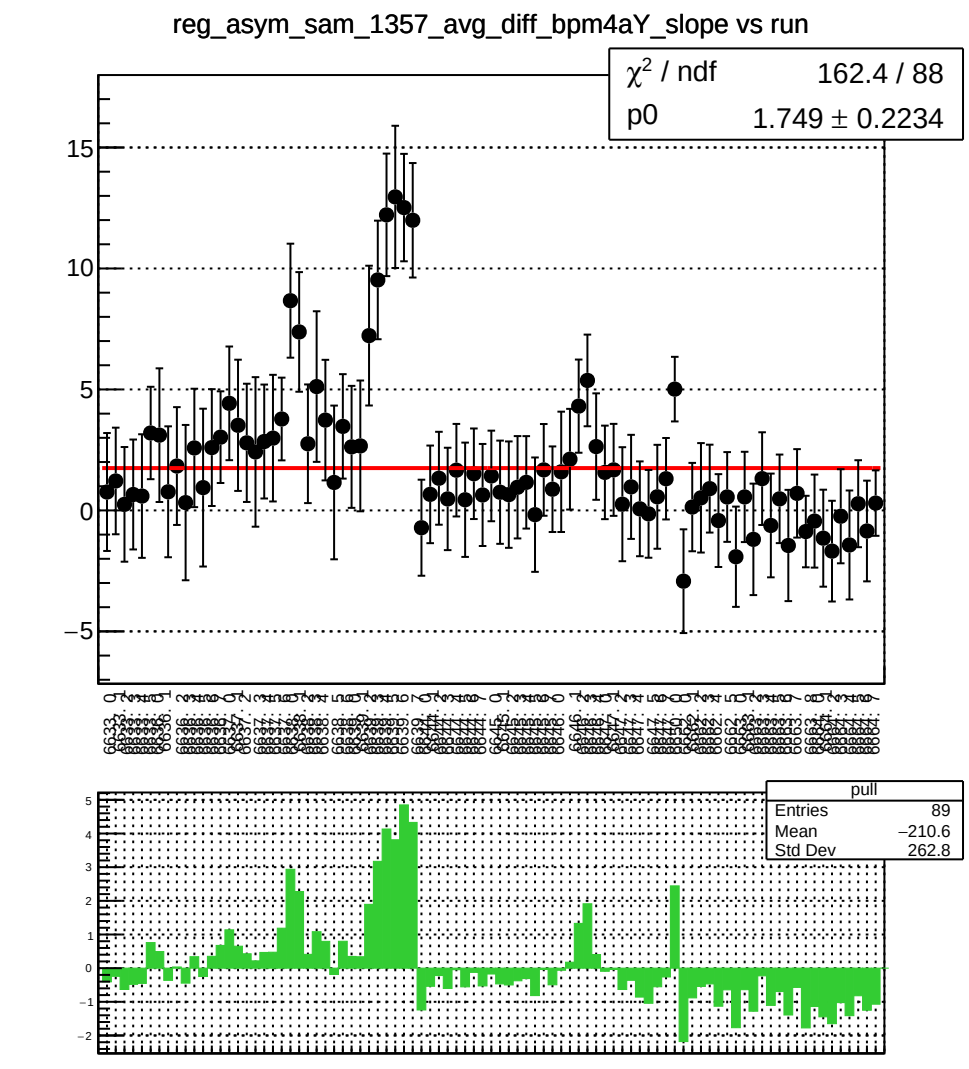

pull1D
Entries 89
Mean 0.7945
Std Dev 4.069

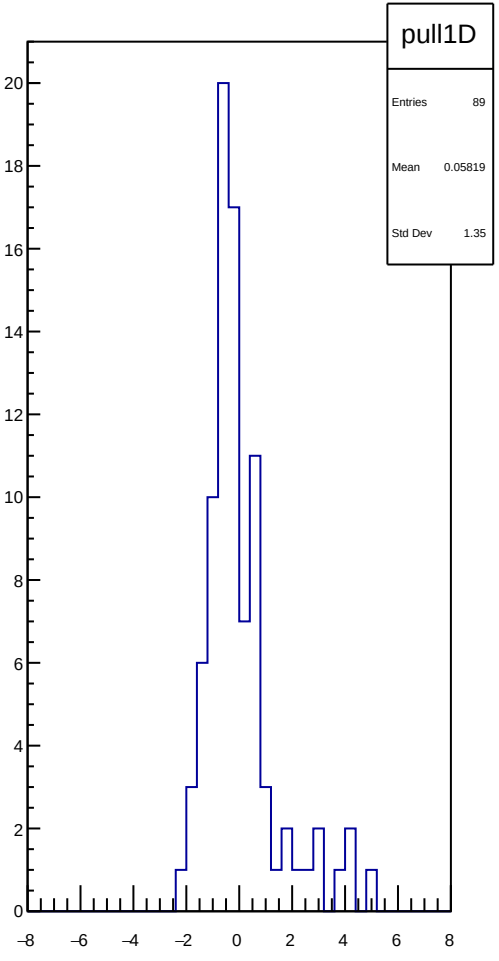

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 289.2 / 88
p0 −0.07849 ± 0.005021
pull
Entries 89
Mean −41.02
Std Dev 88.24

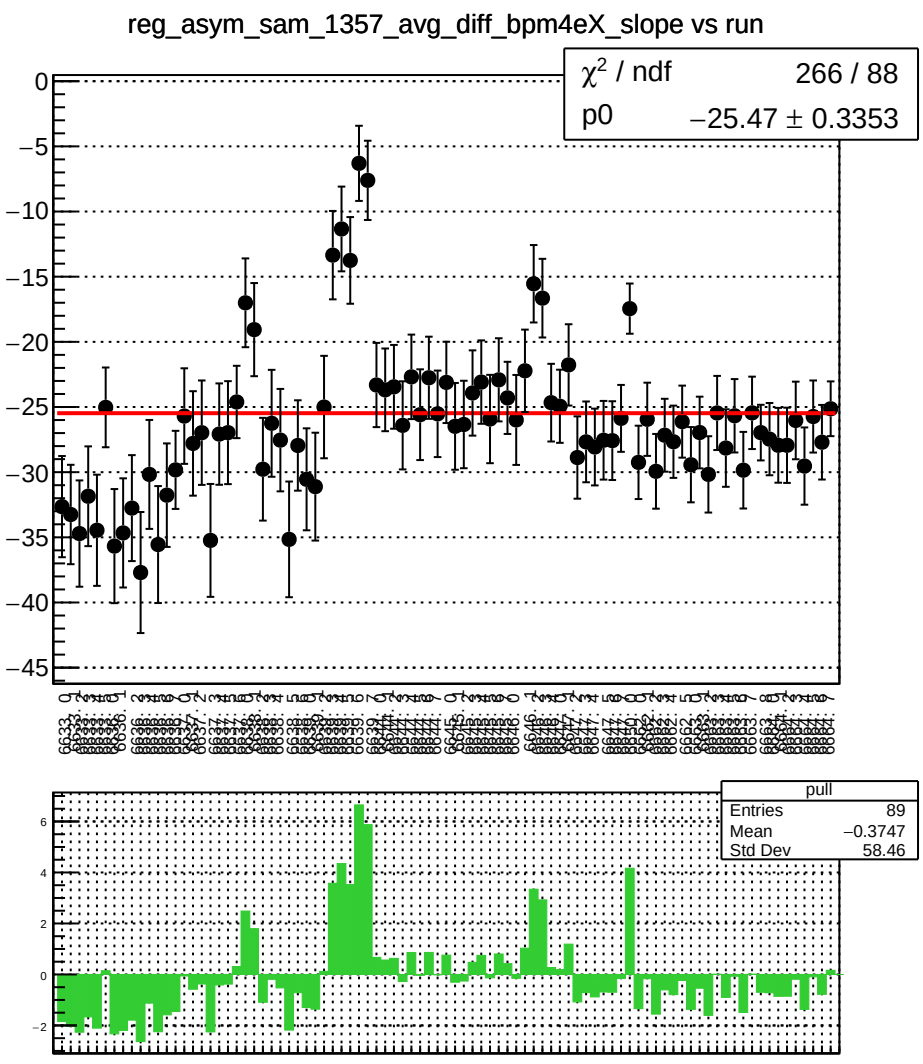

pull1D
Entries 89
Mean −0.3991
Std Dev 1.758

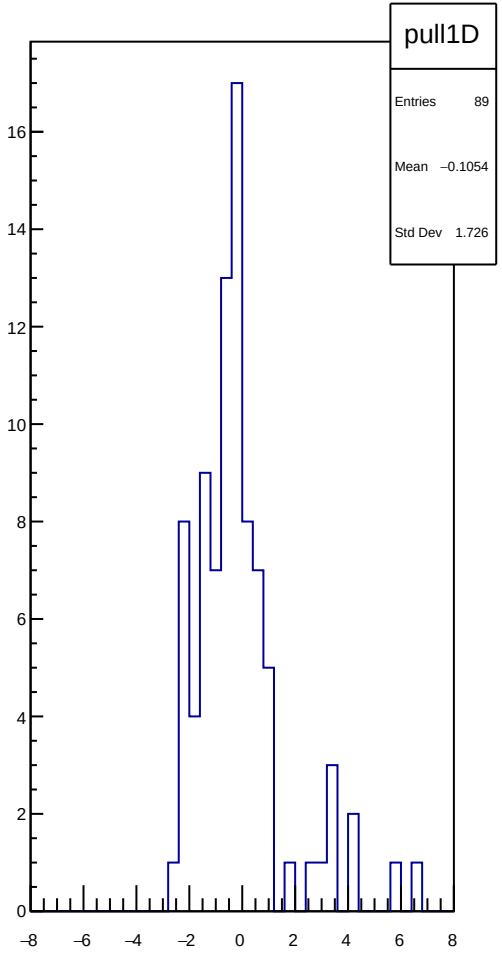

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 638.6 / 88
p0 −6.361 ± 0.3129
0
−10
−20
−30
−40
pull
Entries 89
Mean −222.9
Std Dev 271.4
2
0
−2
−4
−6
−8
−10

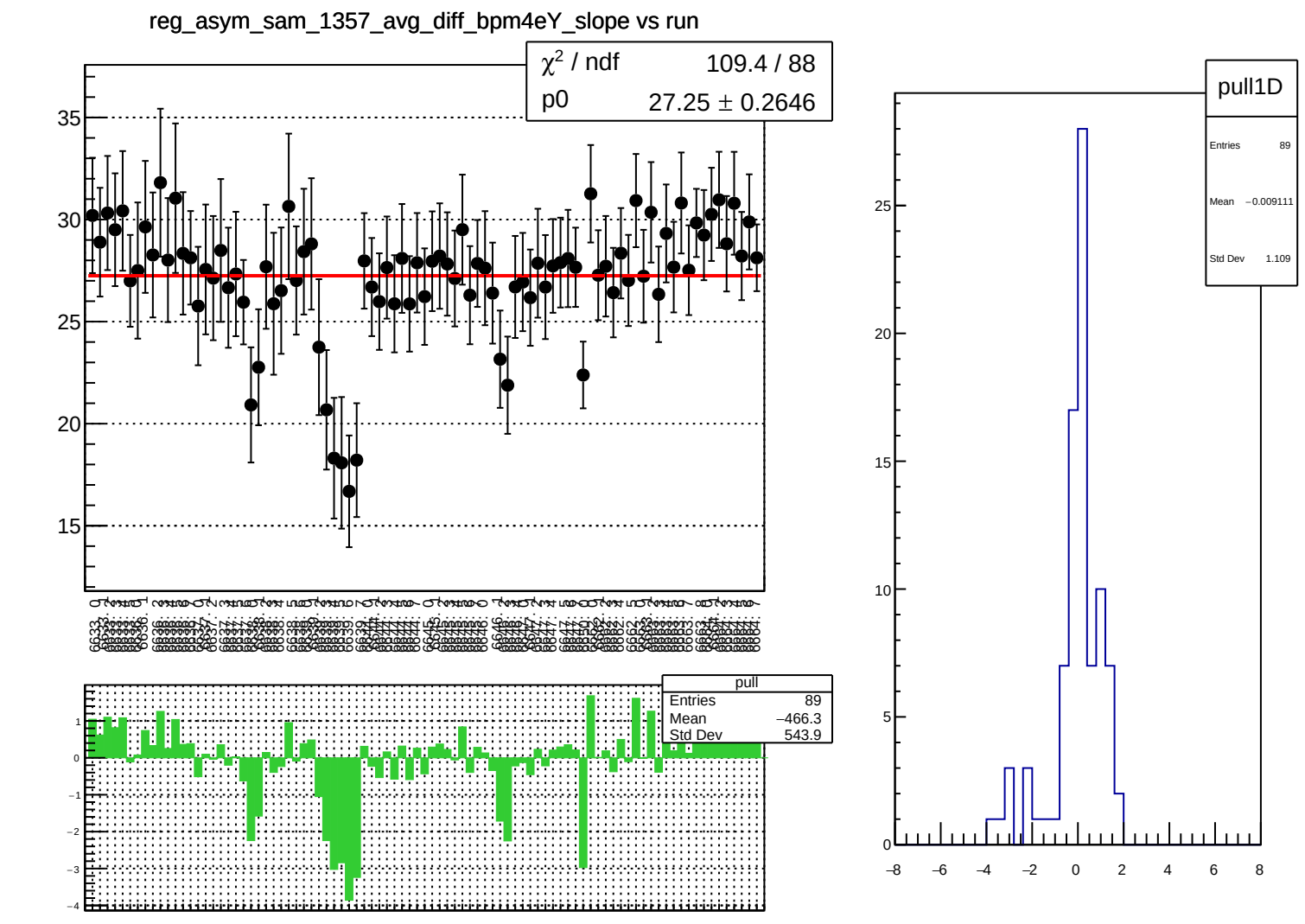

pull1D
Entries 89
Mean 0.0897
Std Dev 2.248
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

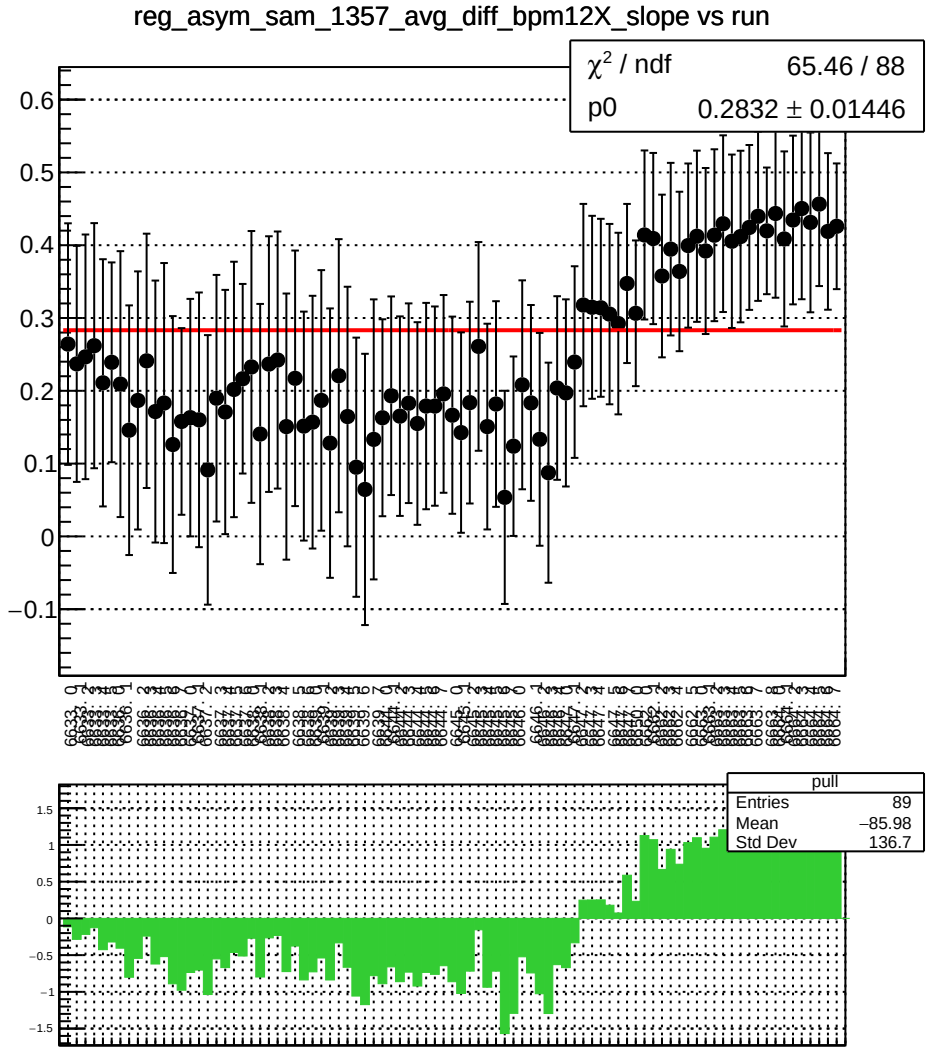

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 162.4 / 88
p0 1.749 ± 0.2234
pull
Entries 89
Mean −210.6
Std Dev 262.8

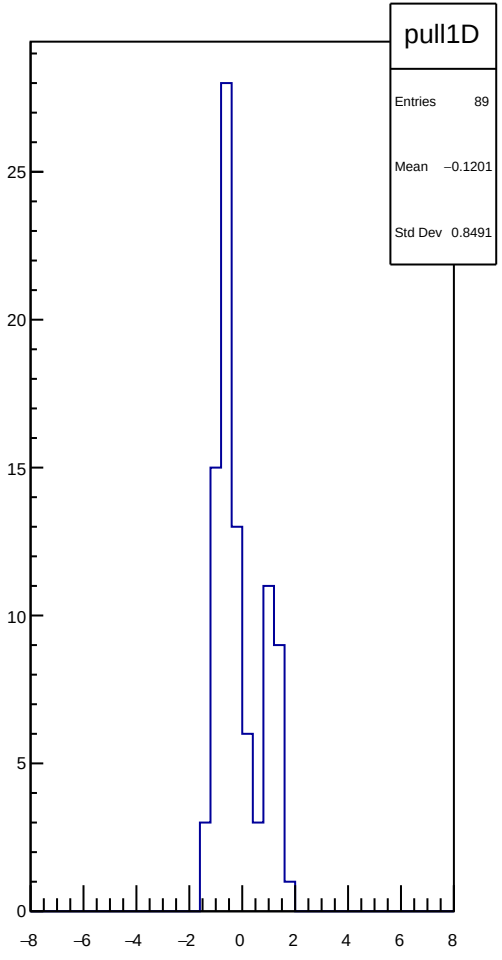

pull1D
Entries 89
Mean 0.05819
Std Dev 1.35

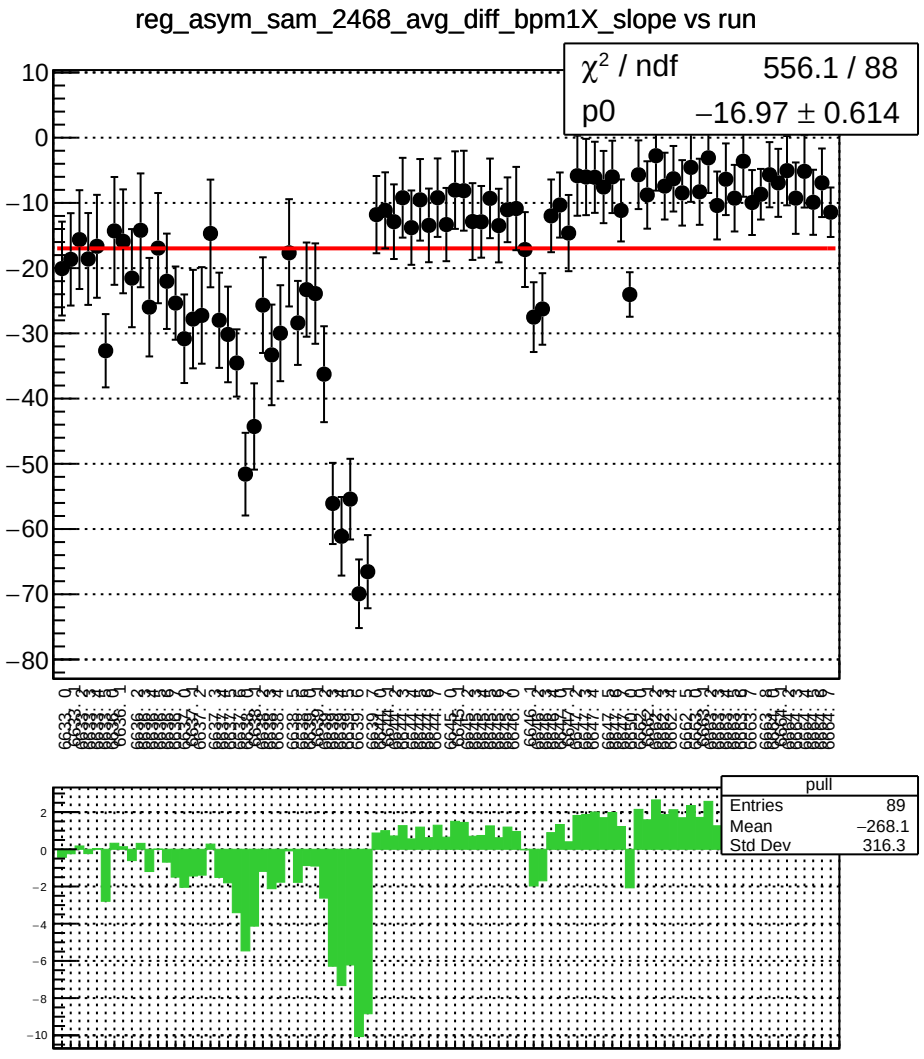

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 266 / 88
p0 −25.47 ± 0.3353
pull
Entries 89
Mean −0.3747
Std Dev 58.46

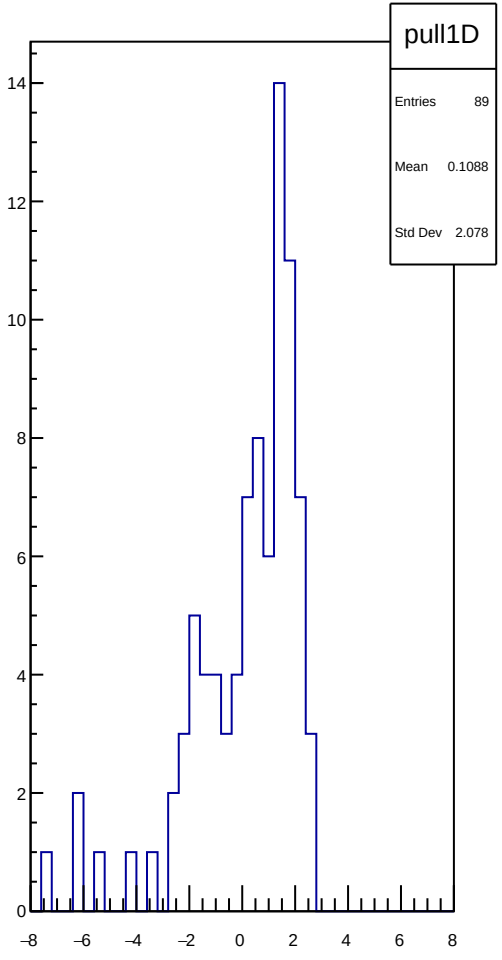

pull1D
Entries 89
Mean −0.1054
Std Dev 1.726

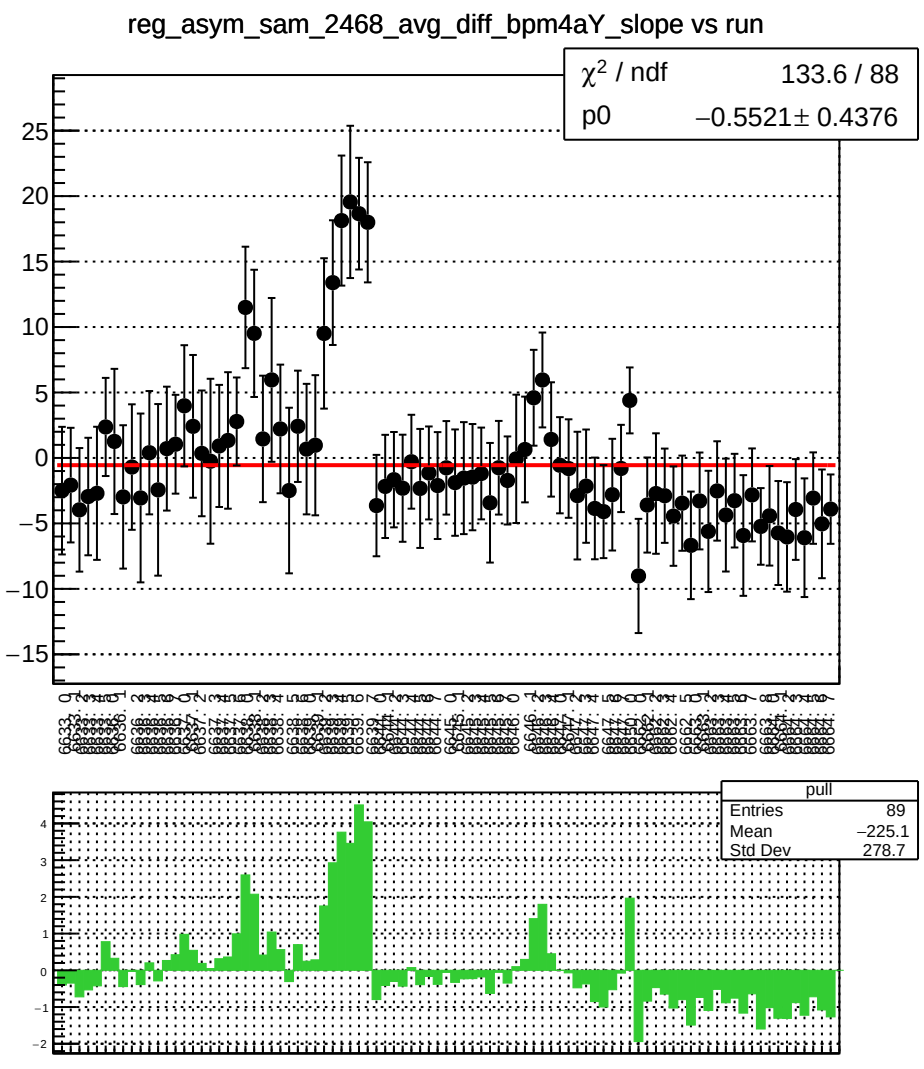

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 109.4 / 88
p0 27.25 ± 0.2646
pull
Entries 89
Mean −466.3
Std Dev 543.9
pull1D
Entries 89
Mean −0.009111
Std Dev 1.109

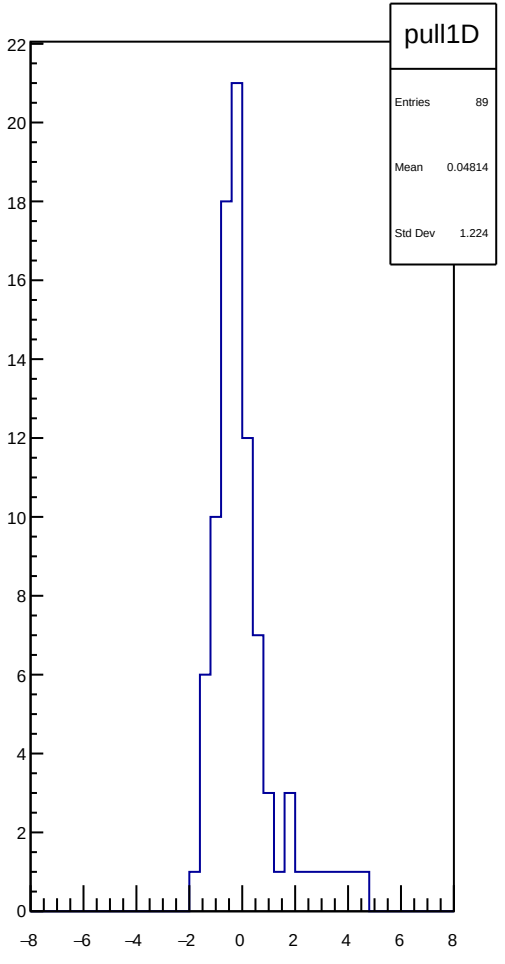

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 65.46 / 88
p0 0.2832 ± 0.01446
pull
Entries 89
Mean −85.98
Std Dev 136.7

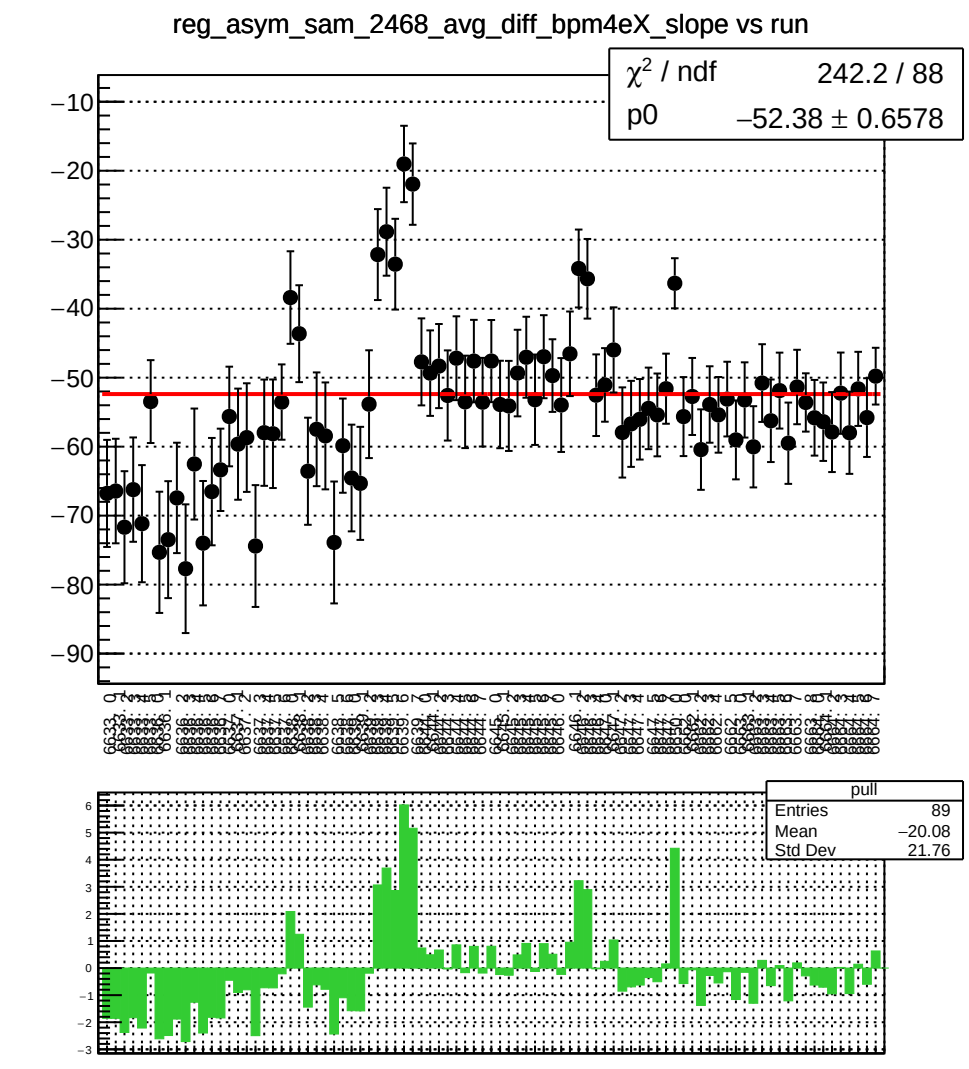

pull1D
Entries 89
Mean −0.1201
Std Dev 0.8491

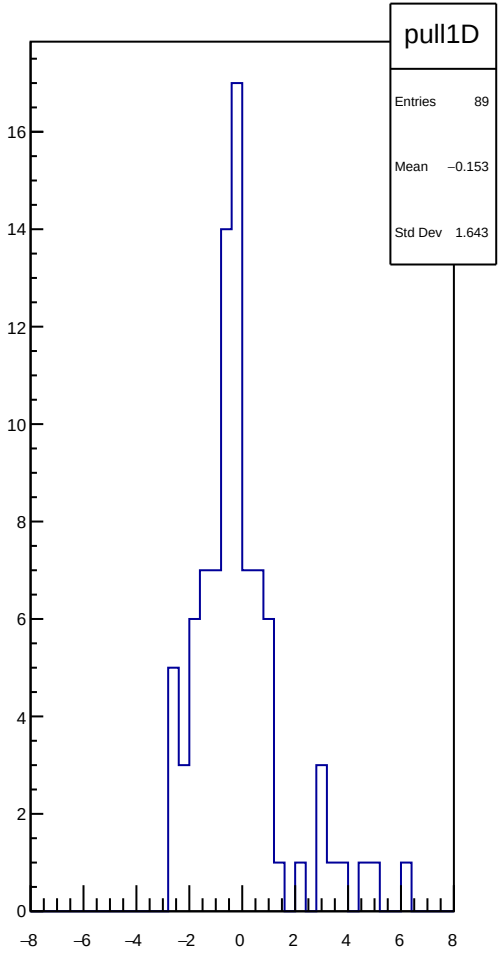

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 556.1 / 88
p0 −16.97 ± 0.614
pull
Entries 89
Mean −268.1
Std Dev 316.3

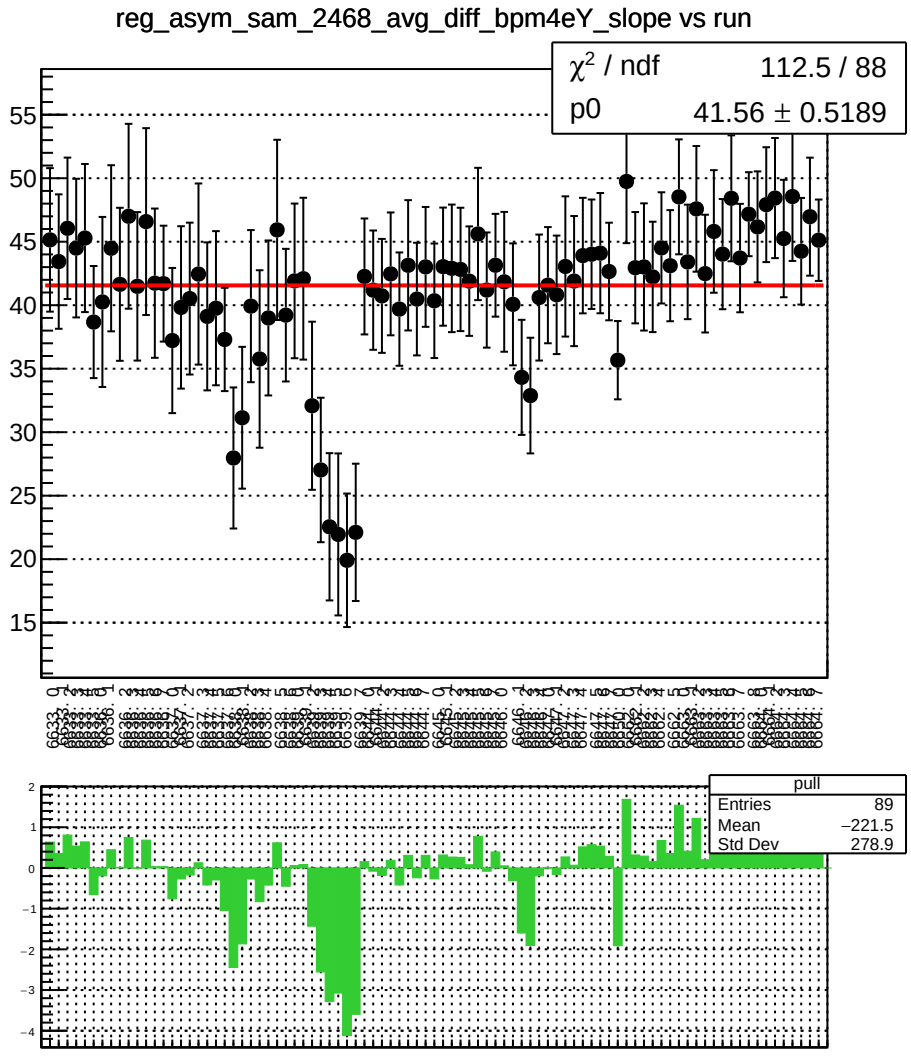

pull1D
Entries 89
Mean 0.1088
Std Dev 2.078

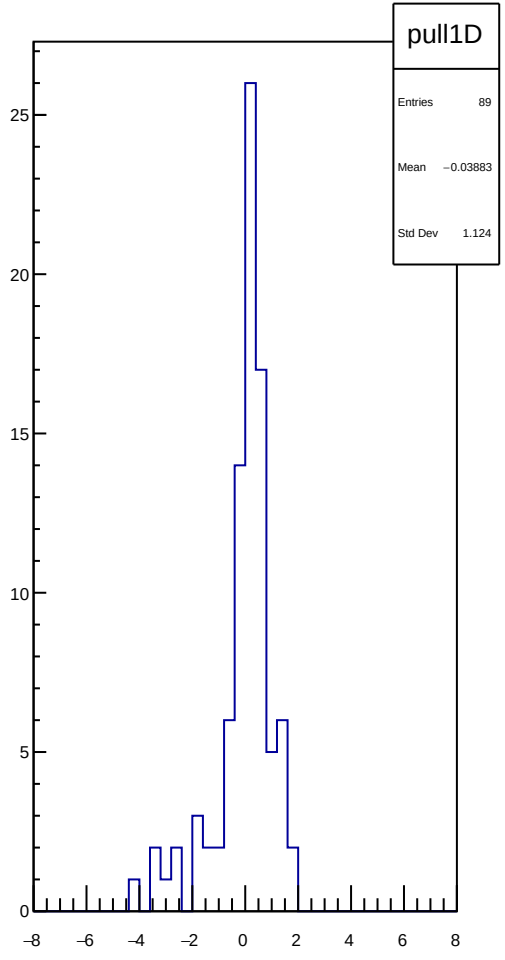

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 133.6 / 88
p0 −0.5521± 0.4376
pull
Entries 89
Mean −225.1
Std Dev 278.7

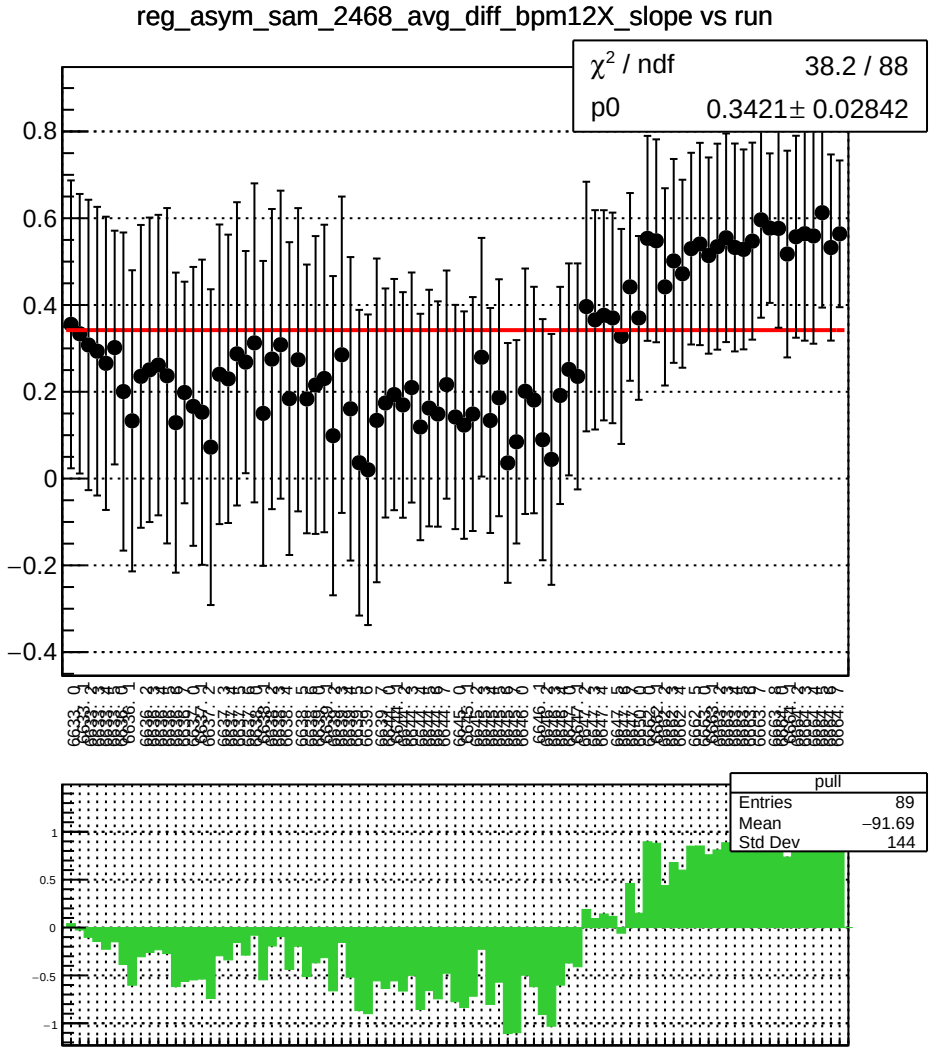

pull1D
Entries 89
Mean 0.04814
Std Dev 1.224

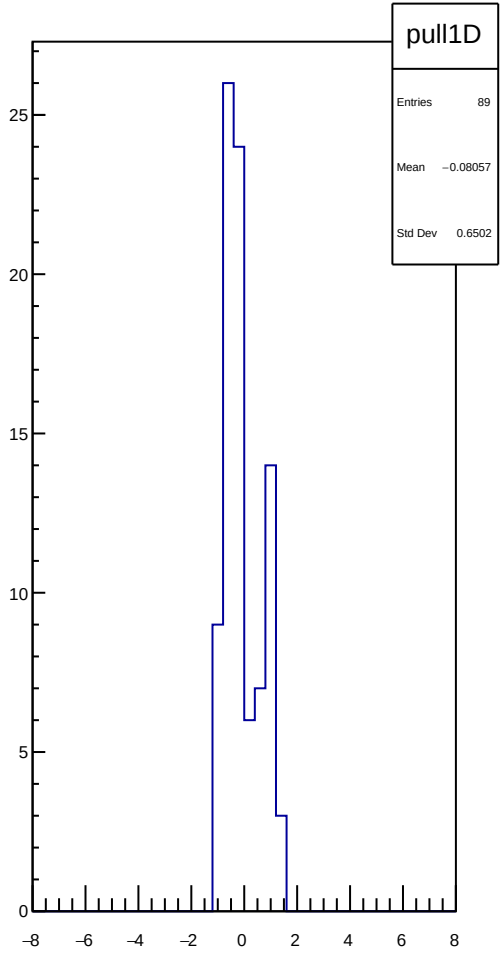

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 242.2 / 88
p0 −52.38 ± 0.6578
pull
Entries 89
Mean −20.08
Std Dev 21.76

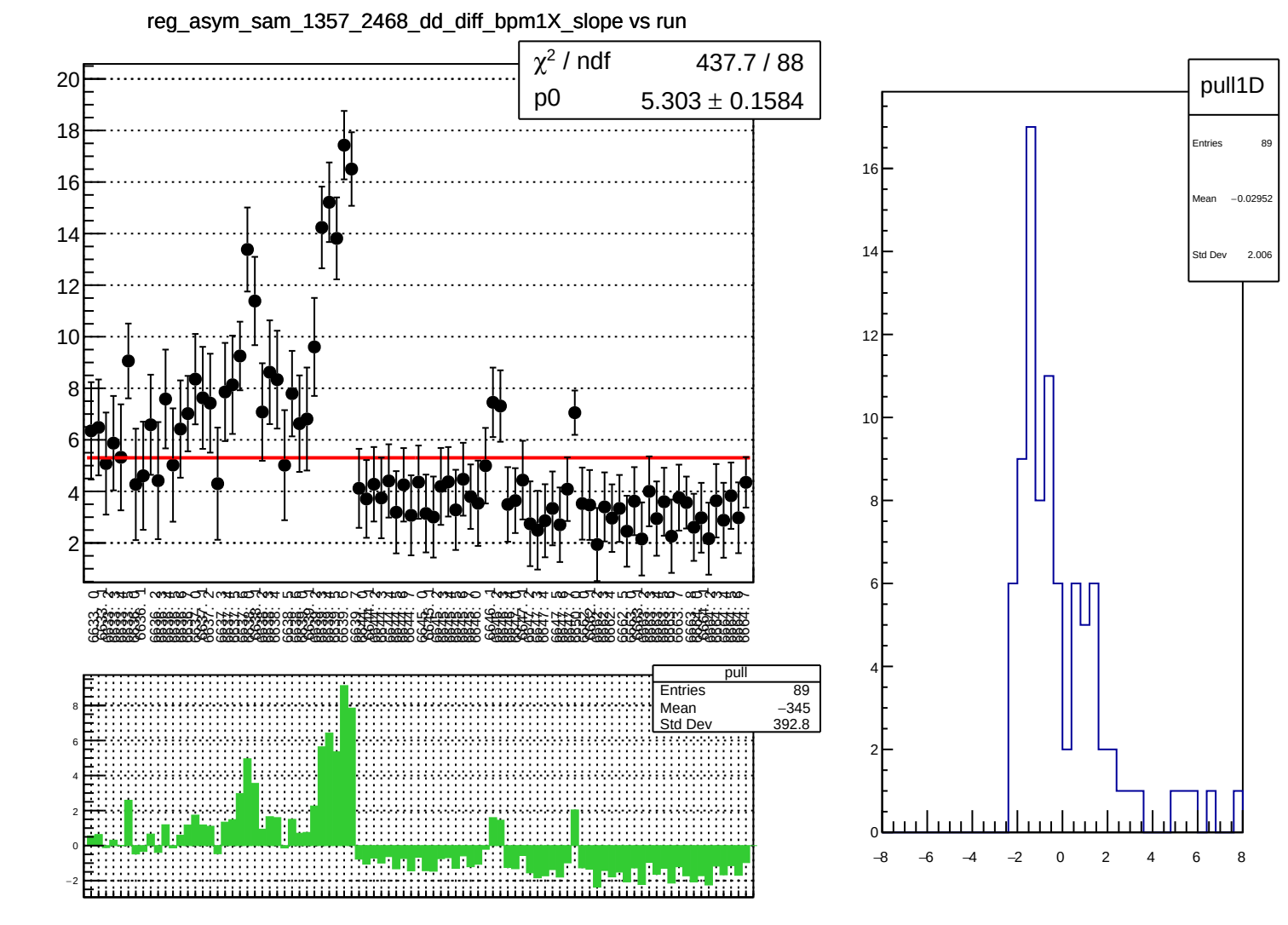

pull1D
Entries 89
Mean −0.153
Std Dev 1.643

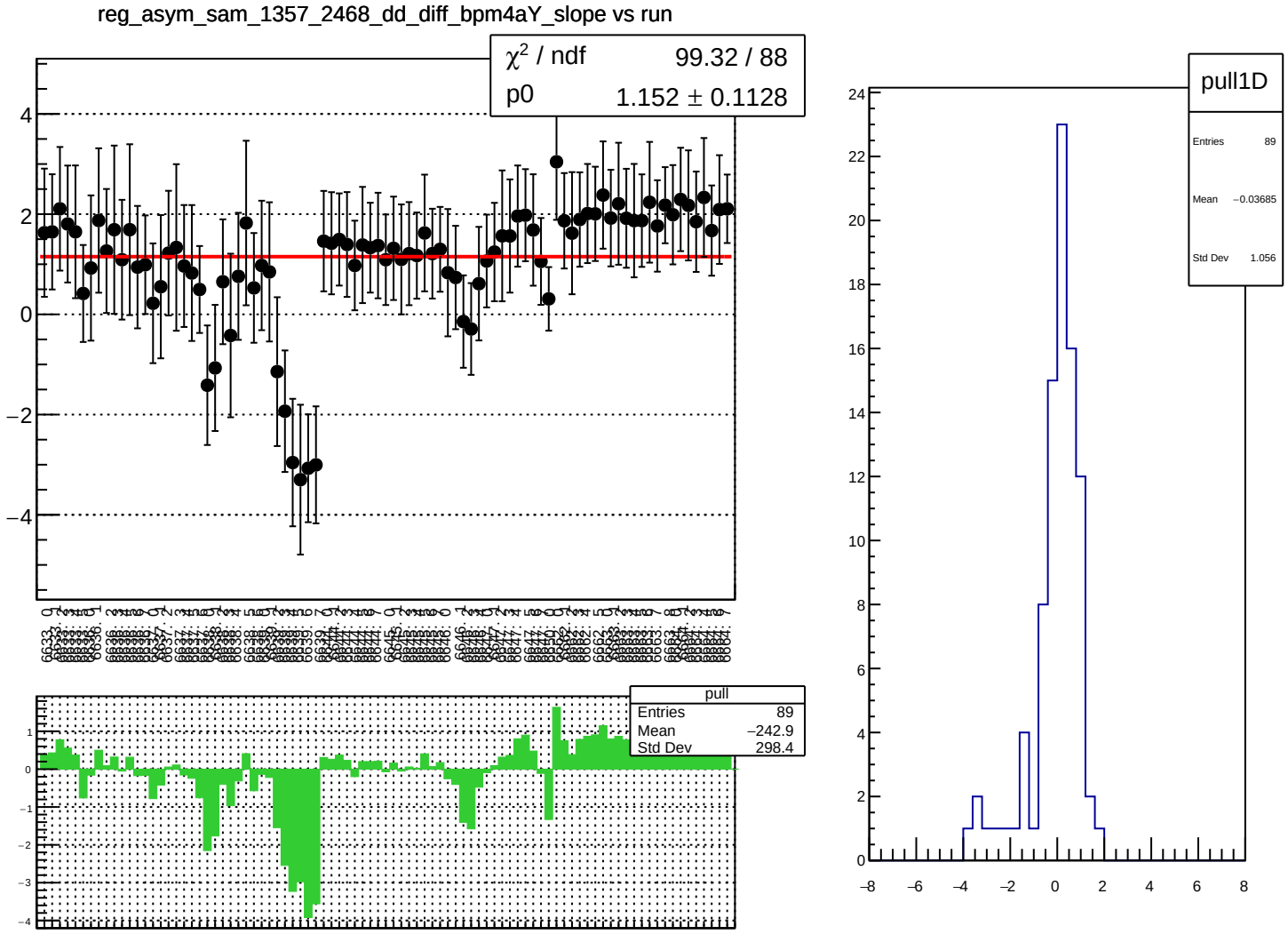

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 112.5 / 88
p0 41.56 ± 0.5189
pull
Entries 89
Mean −221.5
Std Dev 278.9

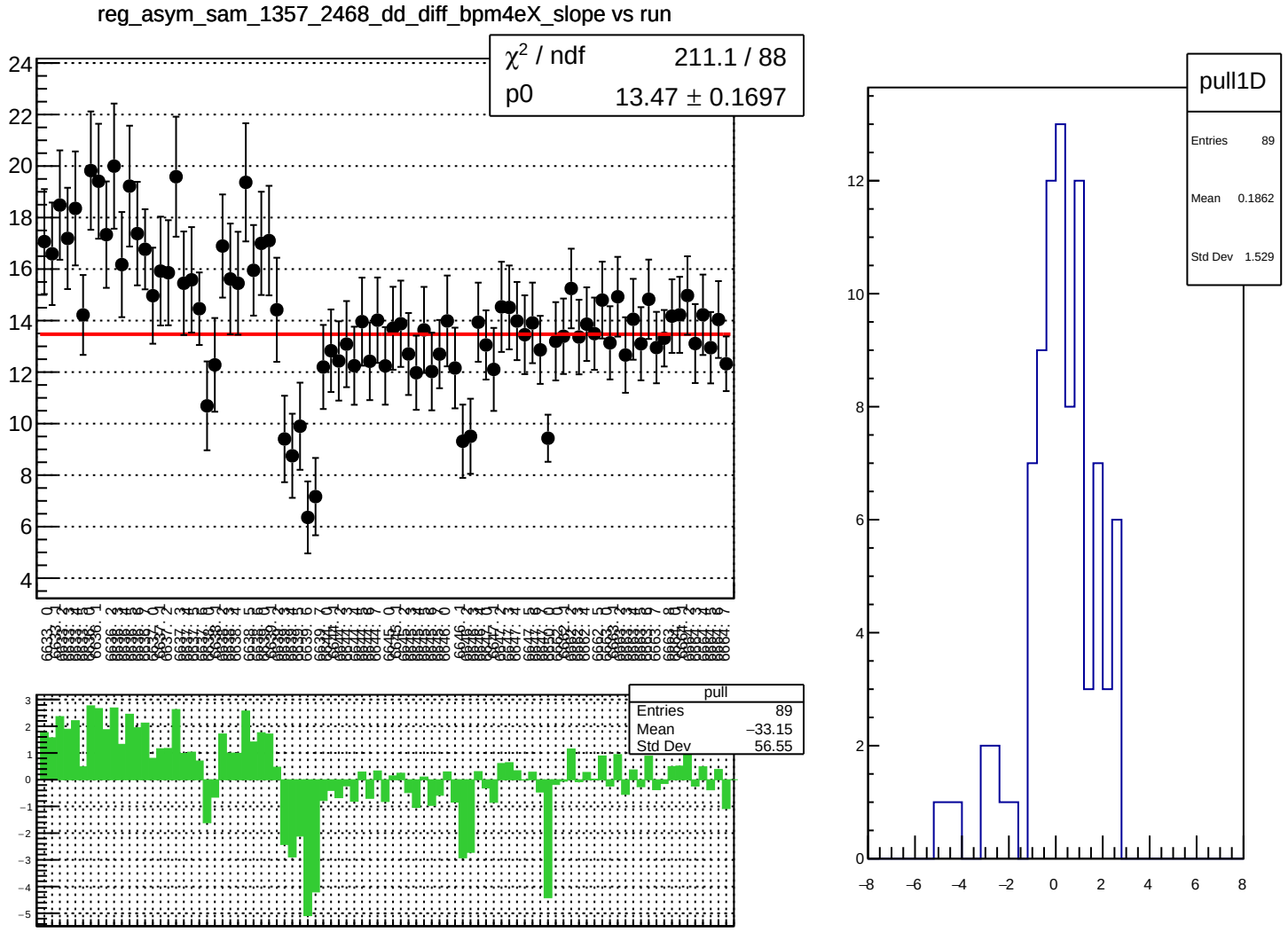

pull1D
Entries 89
Mean −0.03883
Std Dev 1.124

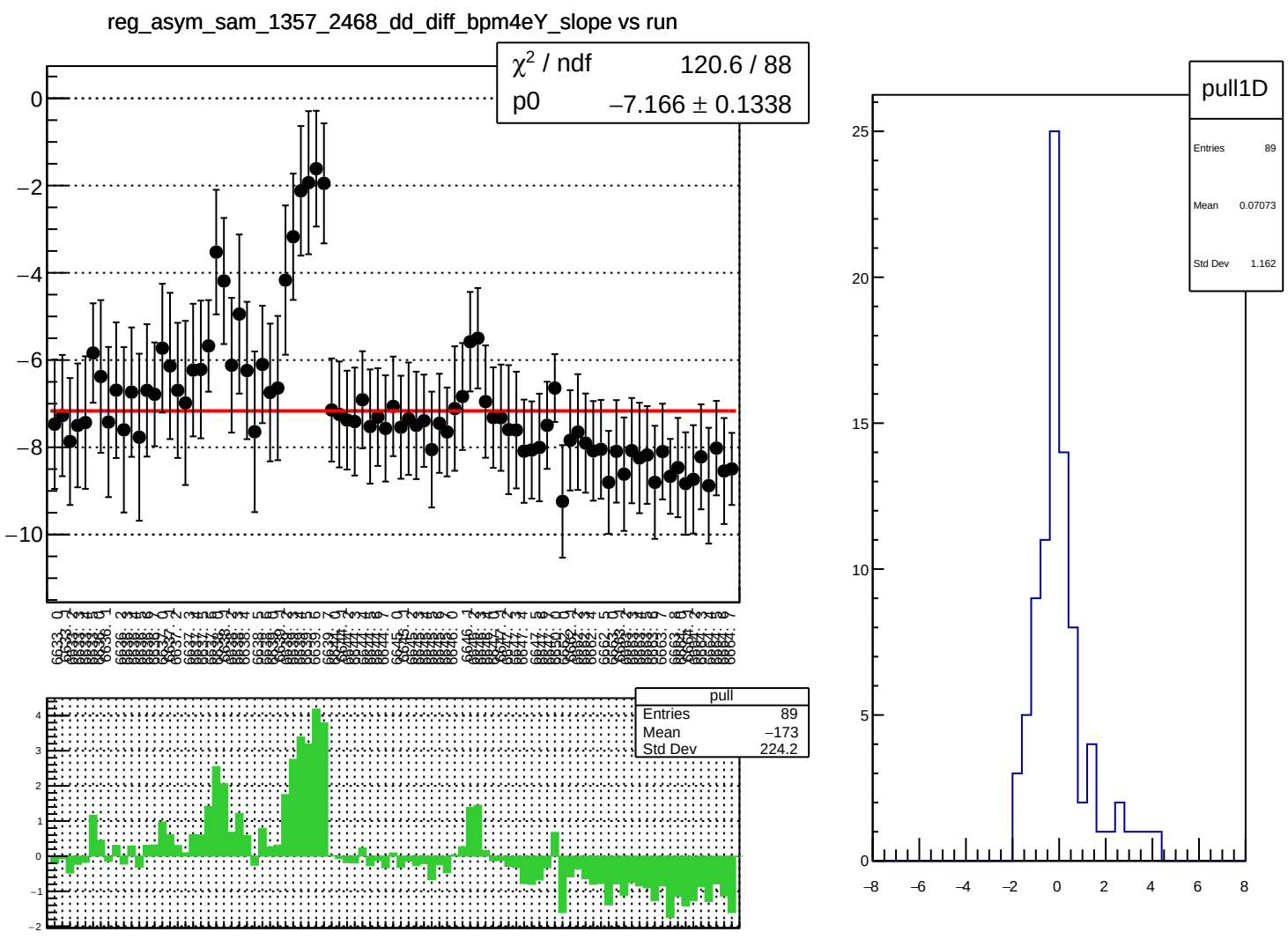

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 38.2 / 88
p0 0.3421± 0.02842
pull
Entries 89
Mean −91.69
Std Dev 144

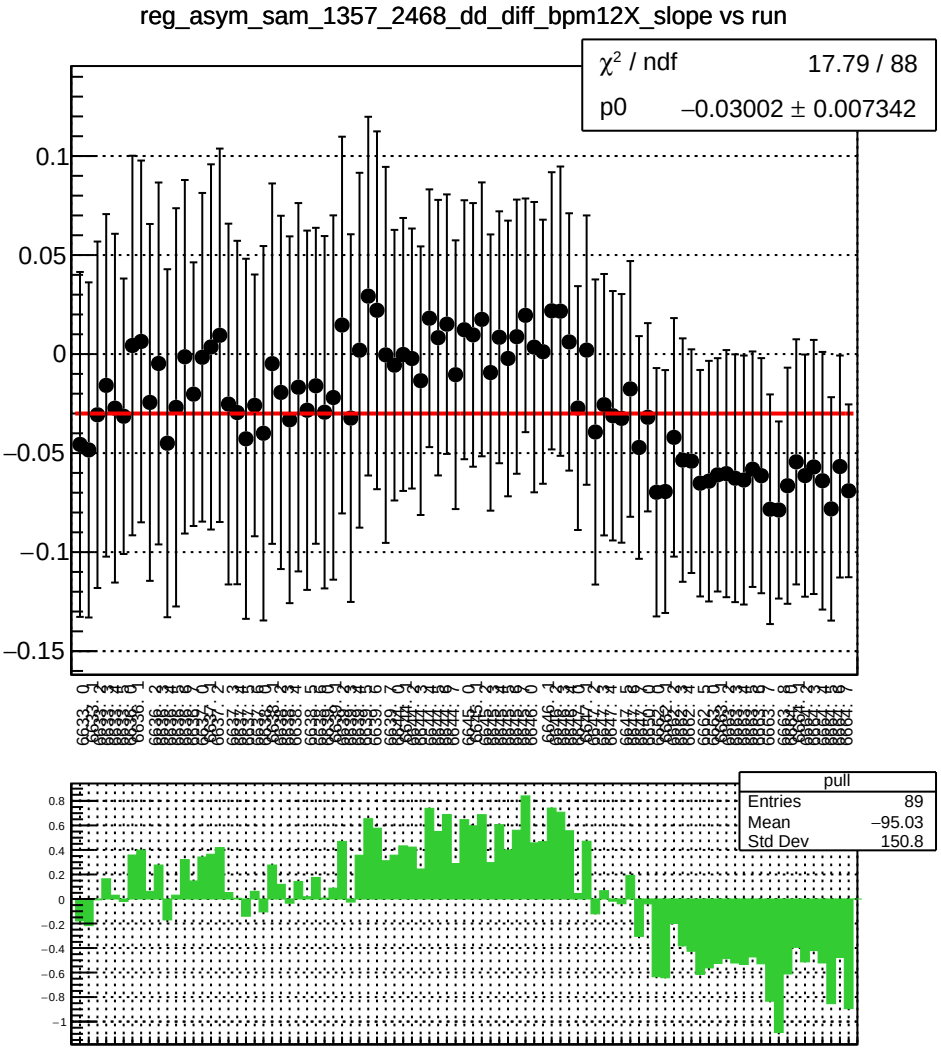

pull1D
Entries 89
Mean −0.08057
Std Dev 0.6502

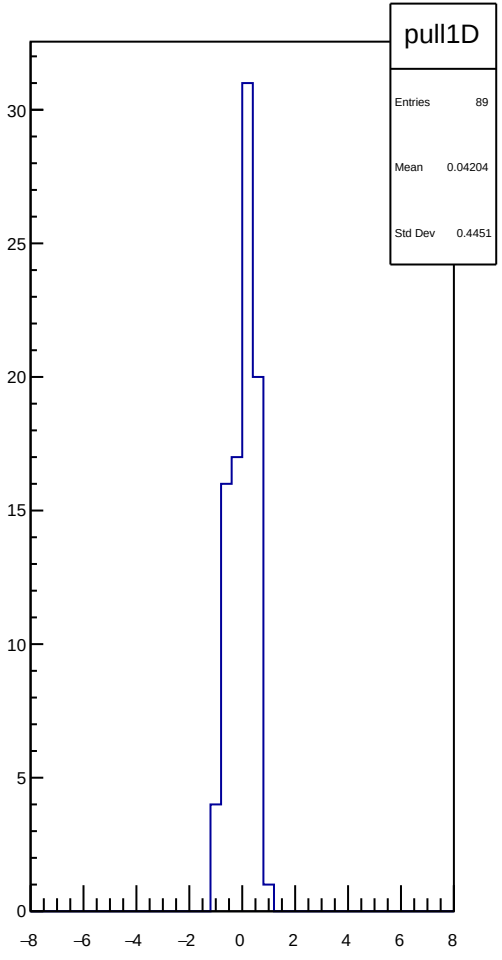

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 437.7 / 88
p0 5.303 ± 0.1584
pull
Entries 89
Mean −345
Std Dev 392.8
pull1D
Entries 89
Mean −0.02952
Std Dev 2.006

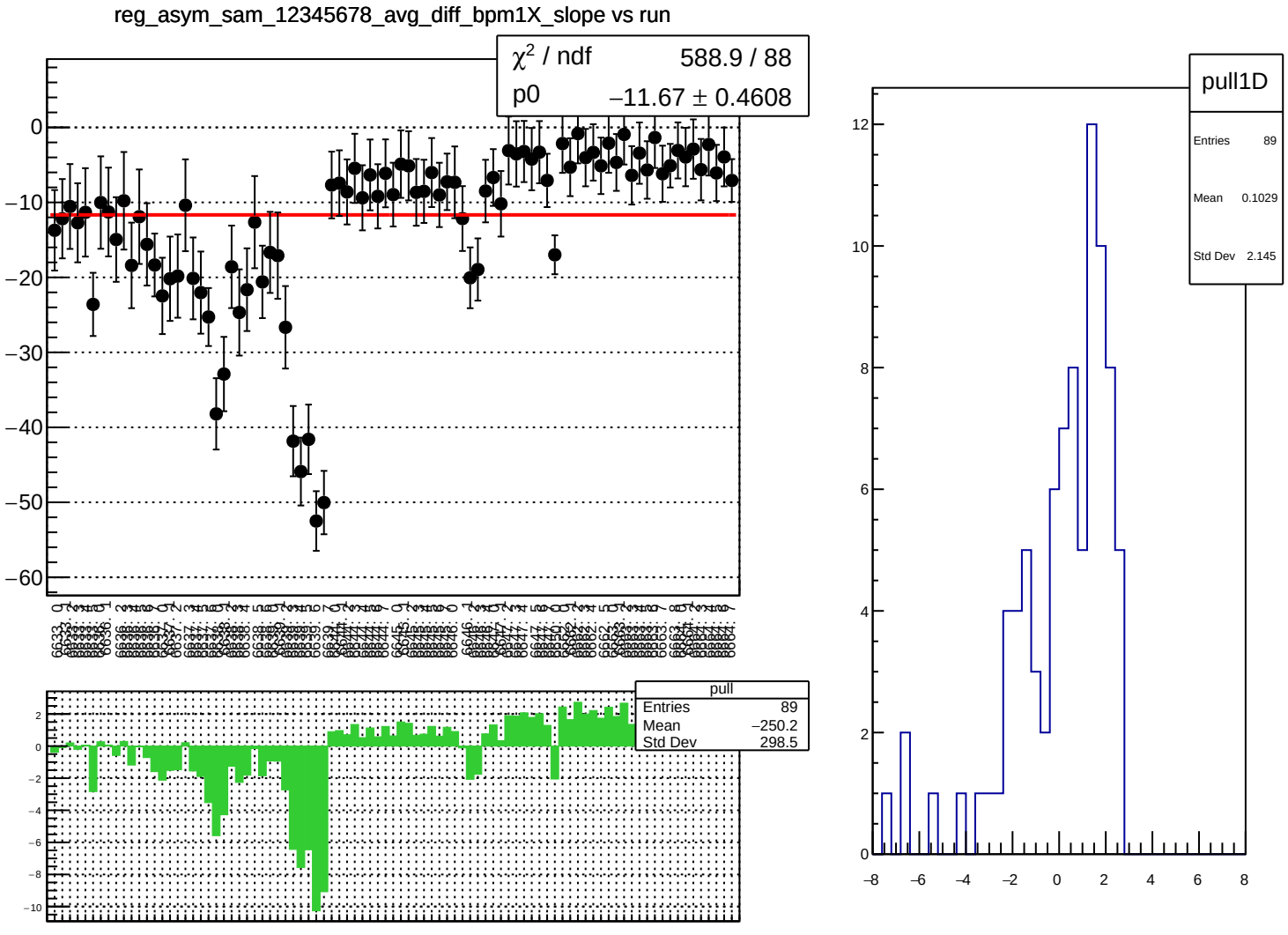

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 99.32 / 88
p0 1.152 ± 0.1128
pull
Entries 89
Mean −242.9
Std Dev 298.4
pull1D
Entries 89
Mean −0.03685
Std Dev 1.056

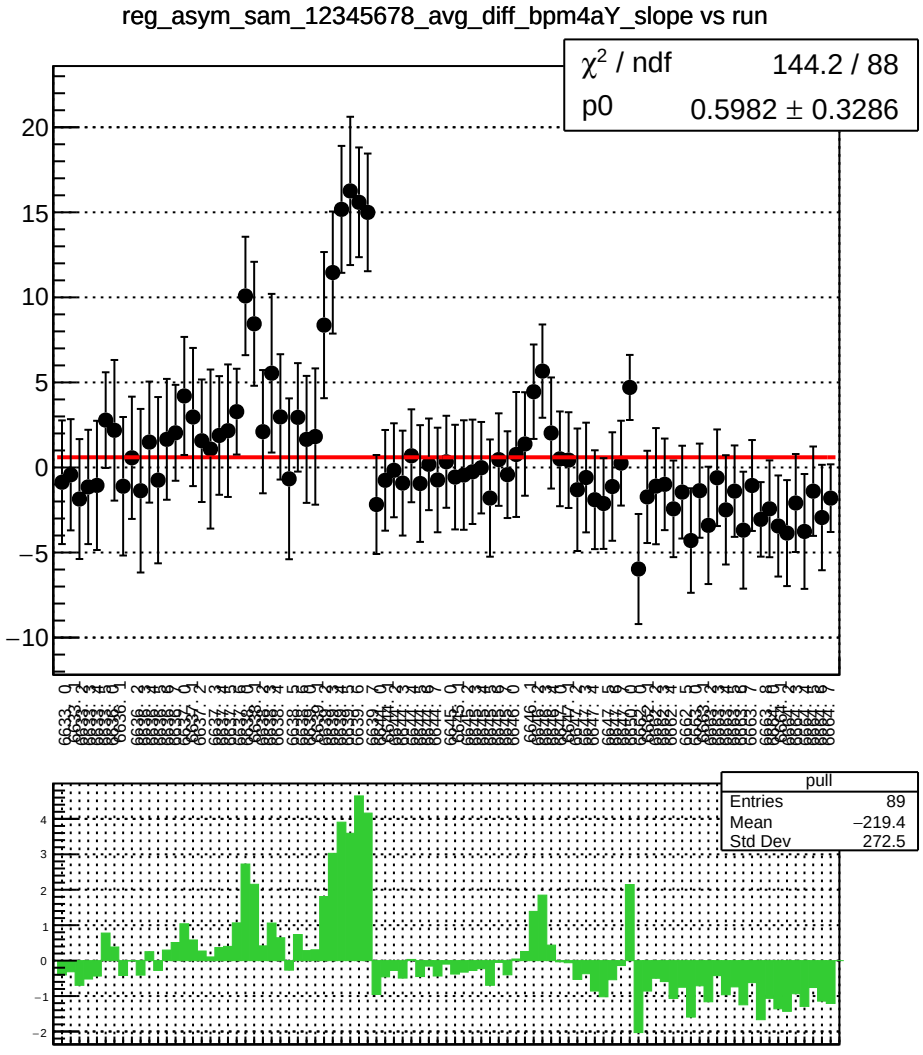

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 211.1 / 88
p0 13.47 ± 0.1697
pull
Entries 89
Mean −33.15
Std Dev 56.55
pull1D
Entries 89
Mean 0.1862
Std Dev 1.529

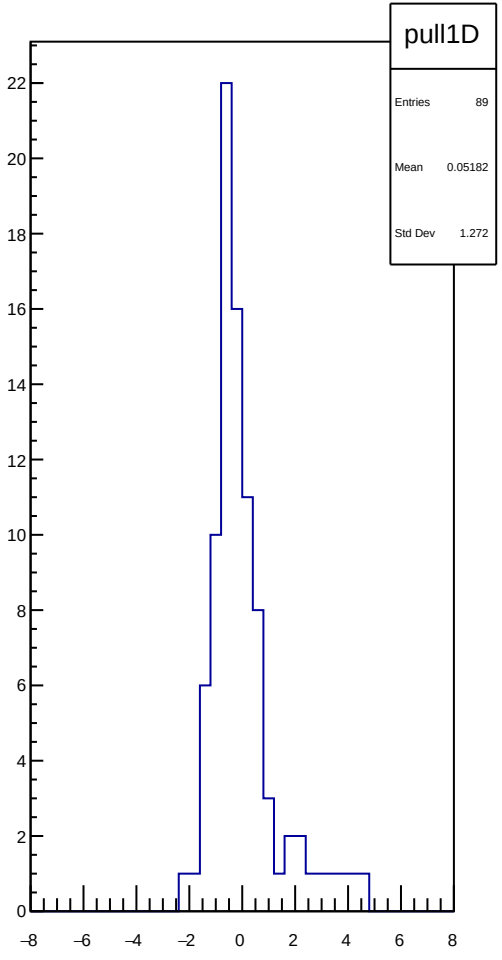

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 120.6 / 88
p0 −7.166 ± 0.1338
pull
Entries 89
Mean −173
Std Dev 224.2
pull1D
Entries 89
Mean 0.07073
Std Dev 1.162

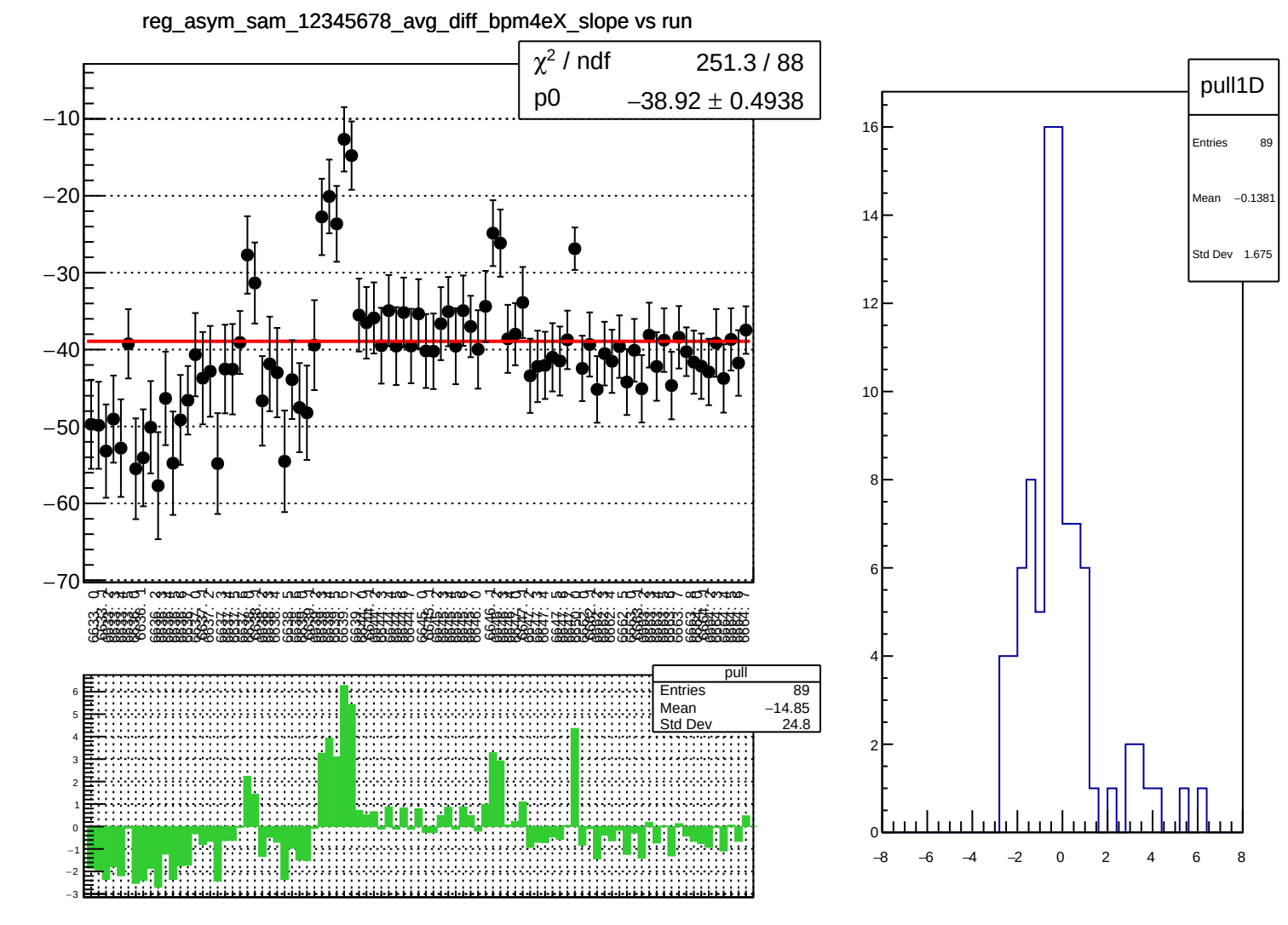

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 17.79 / 88
p0 −0.03002 ± 0.007342
pull
Entries 89
Mean −95.03
Std Dev 150.8

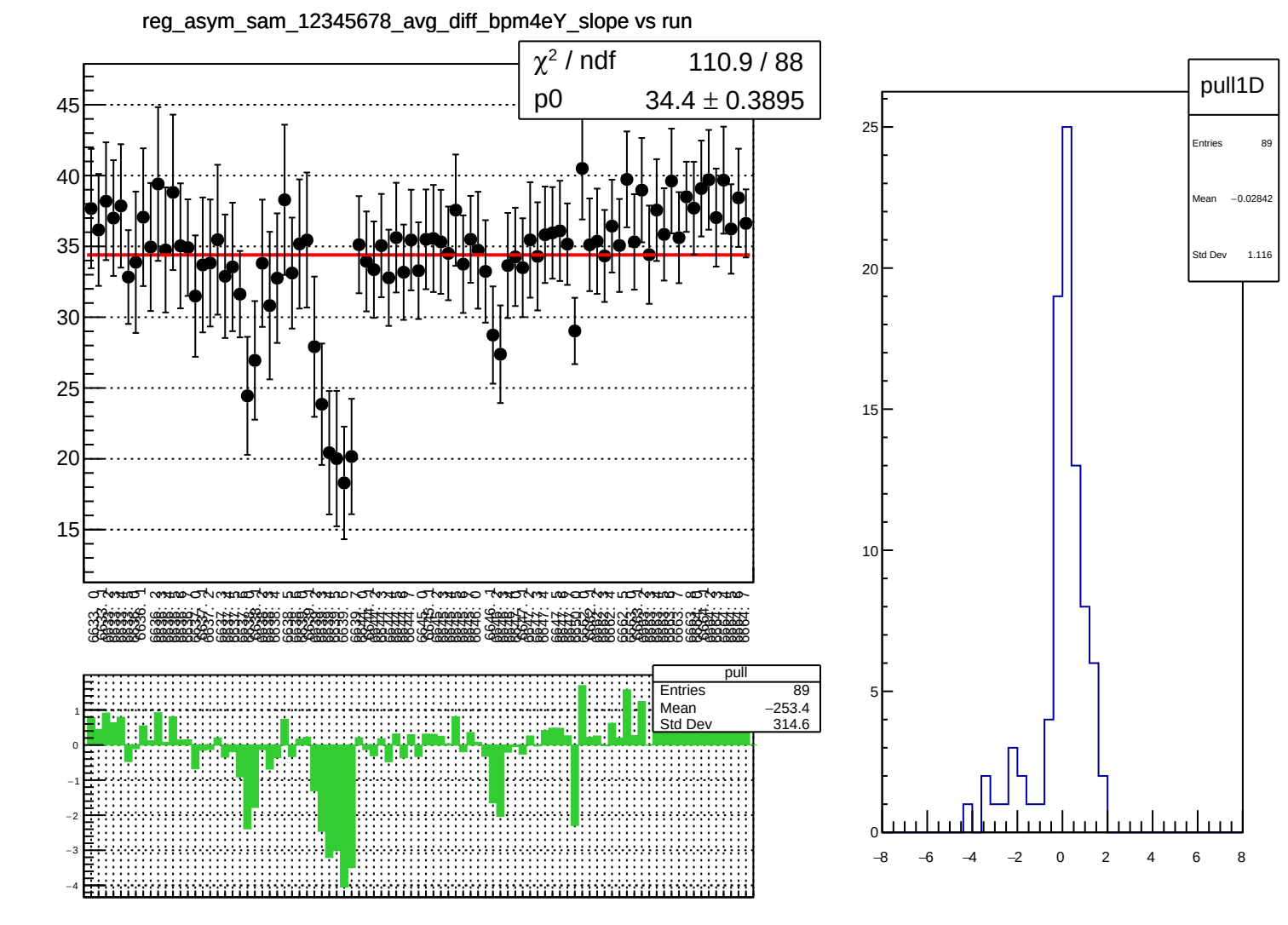

pull1D
Entries 89
Mean 0.04204
Std Dev 0.4451

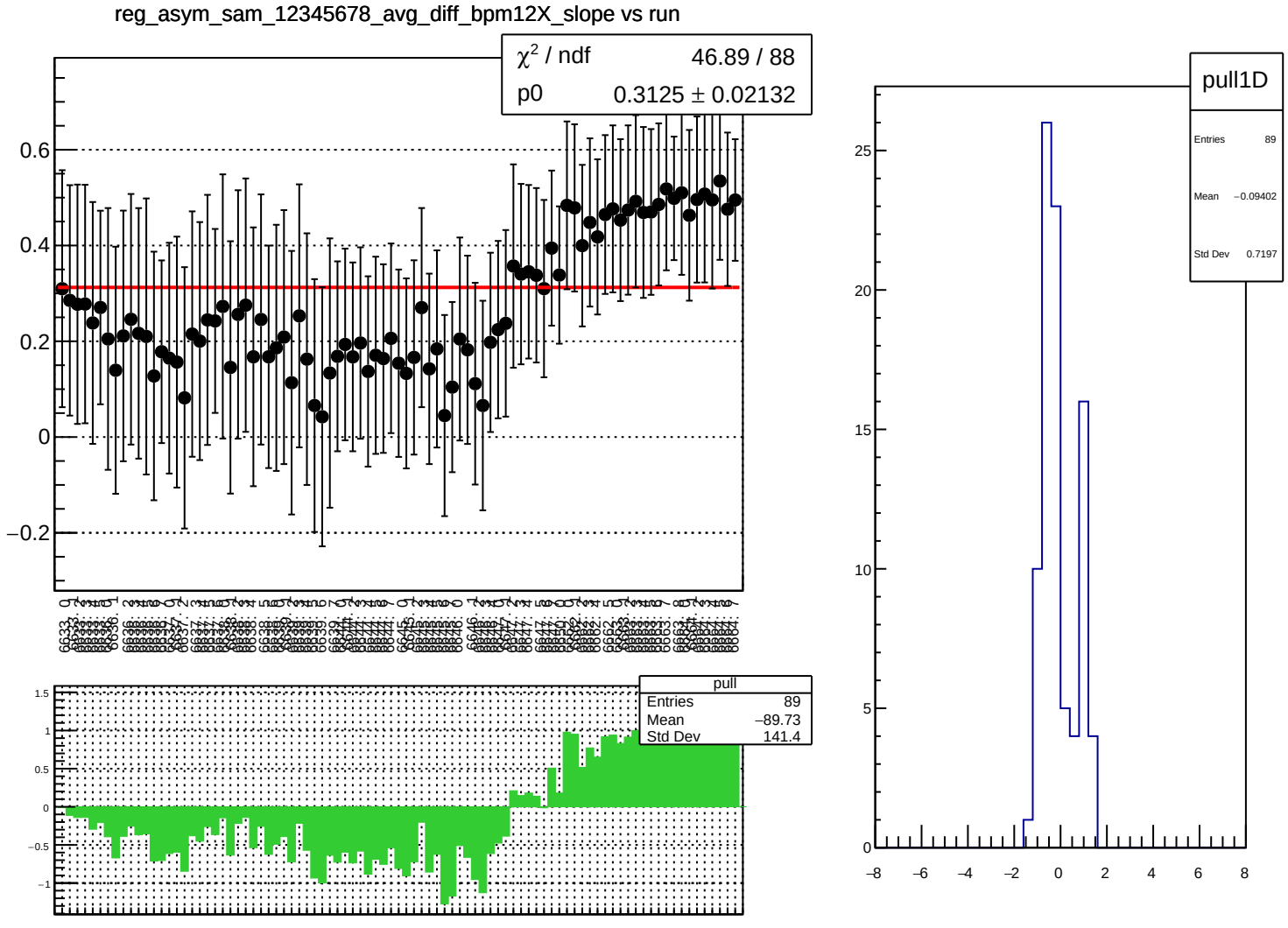

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 588.9 / 88
p0 −11.67 ± 0.4608
pull
Entries 89
Mean −250.2
Std Dev 298.5
pull1D
Entries 89
Mean 0.1029
Std Dev 2.145

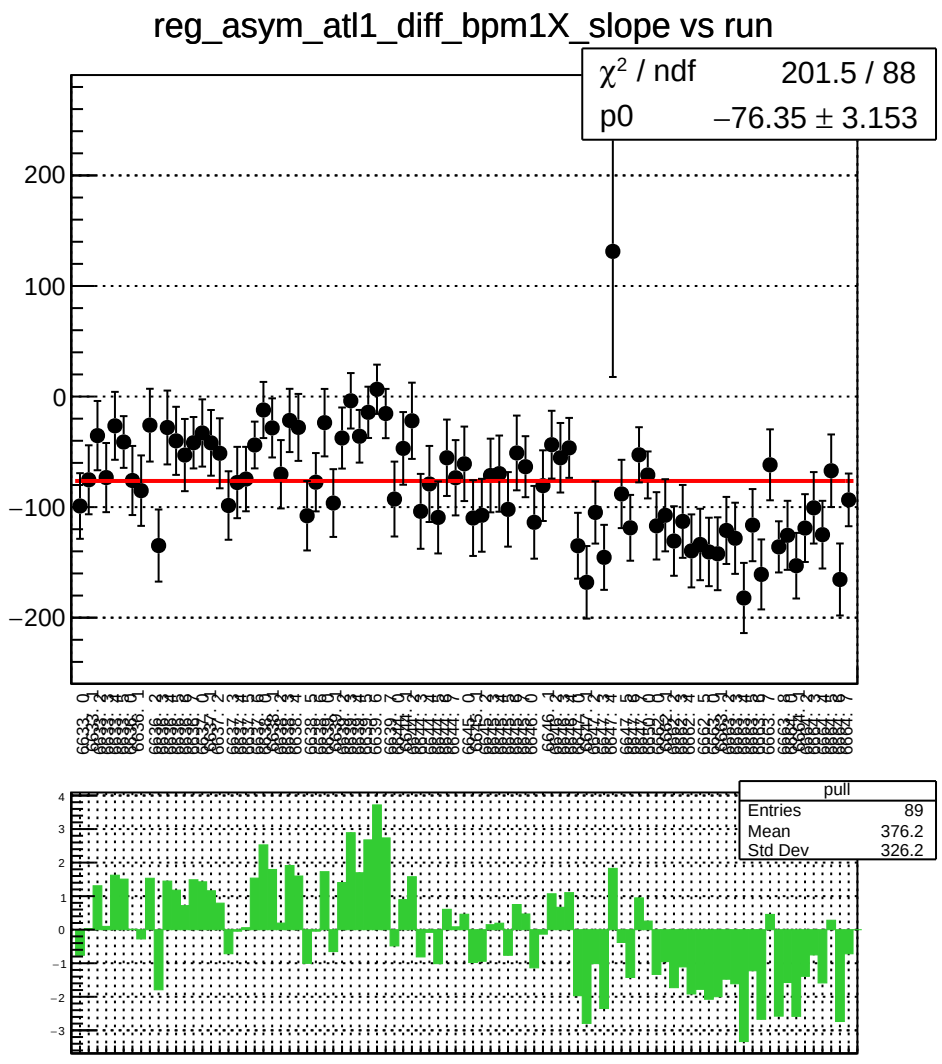

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 144.2 / 88
p0 0.5982 ± 0.3286
pull
Entries 89
Mean −219.4
Std Dev 272.5

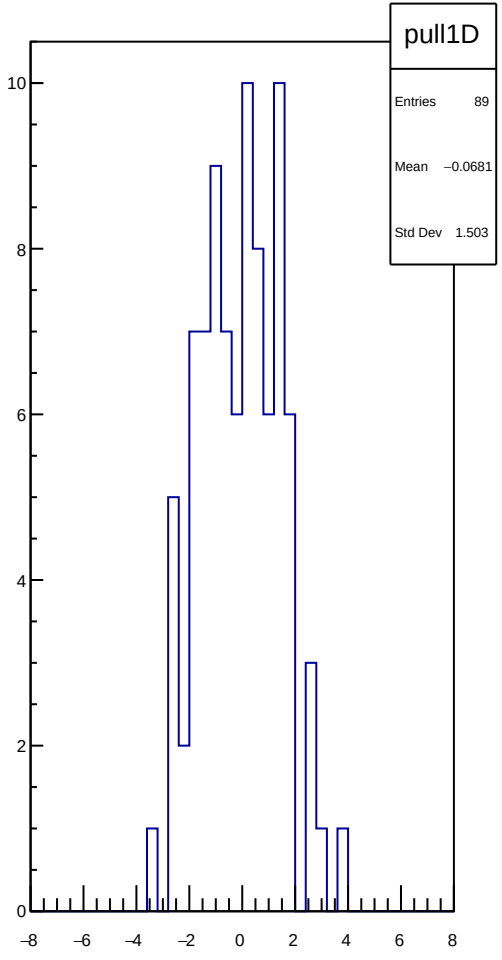

pull1D
Entries 89
Mean 0.05182
Std Dev 1.272

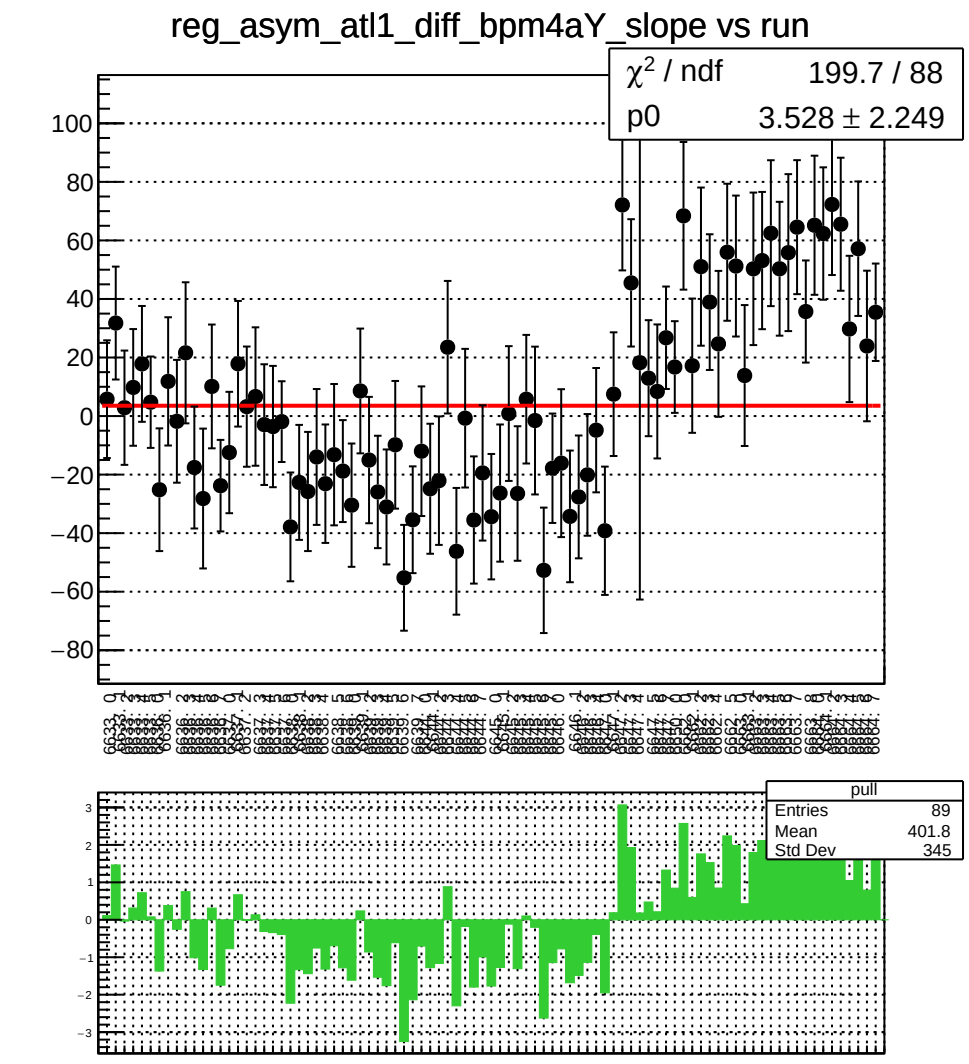

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 251.3 / 88
p0 −38.92 ± 0.4938
pull
Entries 89
Mean −14.85
Std Dev 24.8
pull1D
Entries 89
Mean −0.1381
Std Dev 1.675

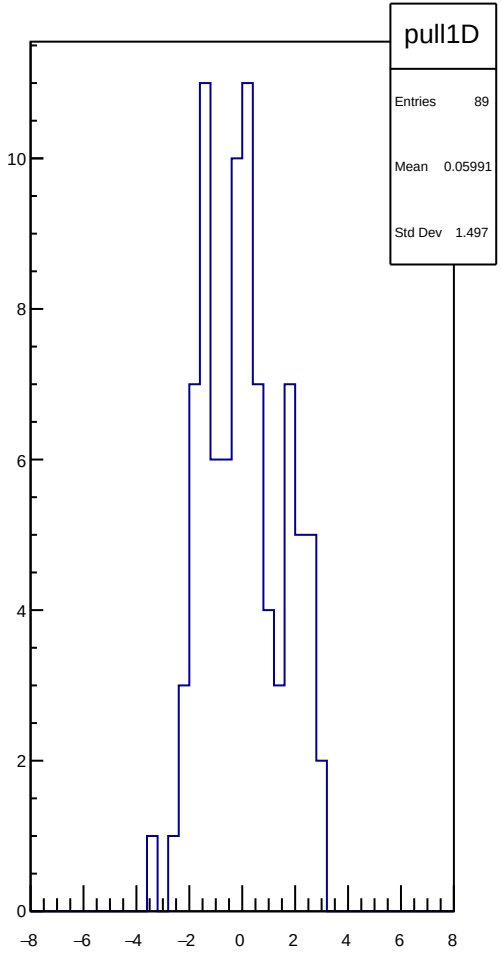

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 110.9 / 88
p0 34.4 ± 0.3895
pull
Entries 89
Mean −253.4
Std Dev 314.6
pull1D
Entries 89
Mean −0.02842
Std Dev 1.116

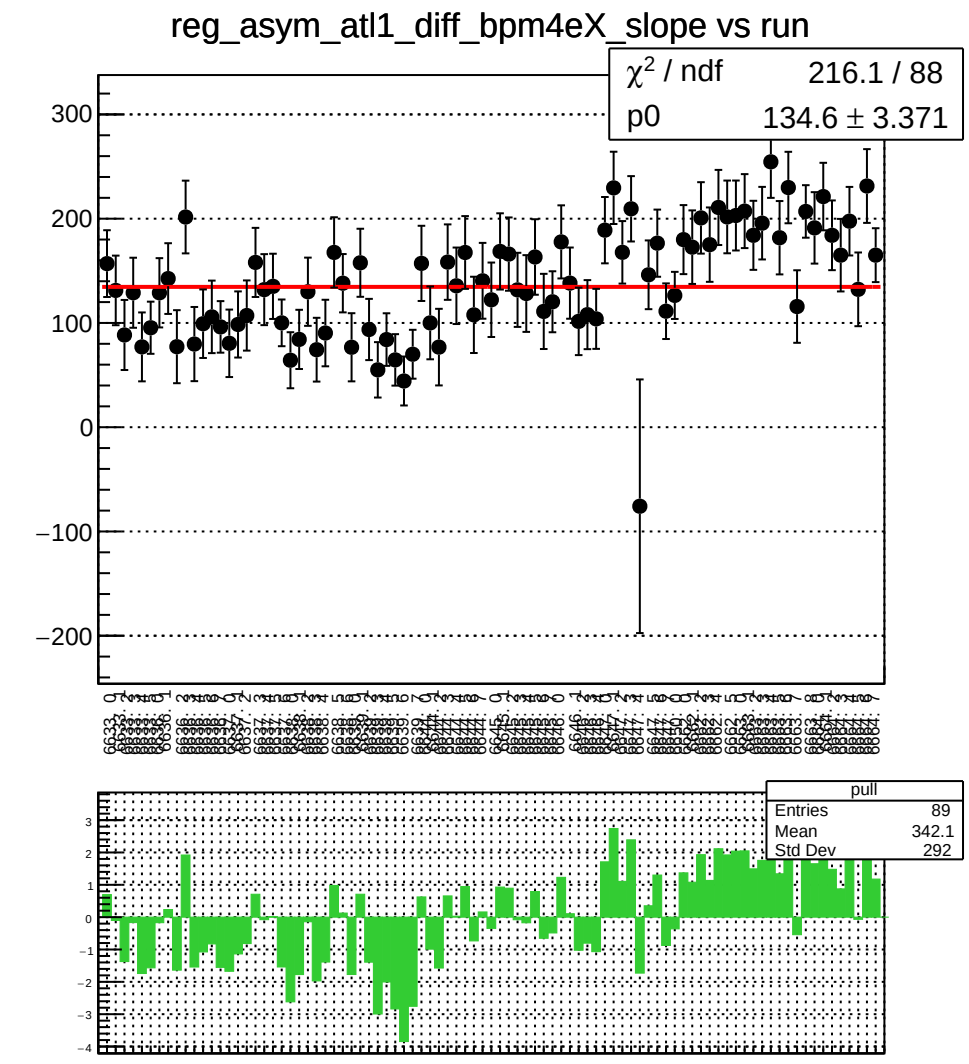

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 46.89 / 88
p0 0.3125 ± 0.02132
pull
Entries 89
Mean −89.73
Std Dev 141.4
pull1D
Entries 89
Mean −0.09402
Std Dev 0.7197

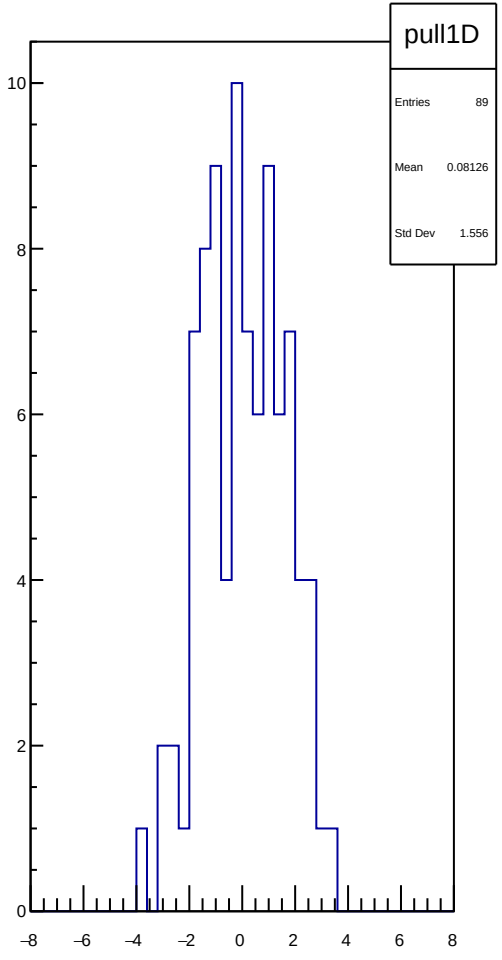

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 201.5 / 88
p0 −76.35 ± 3.153
200
100
0
−100
−200
pull
Entries 89
Mean 376.2
Std Dev 326.2
4
3
2
1
0
−1
−2
−3

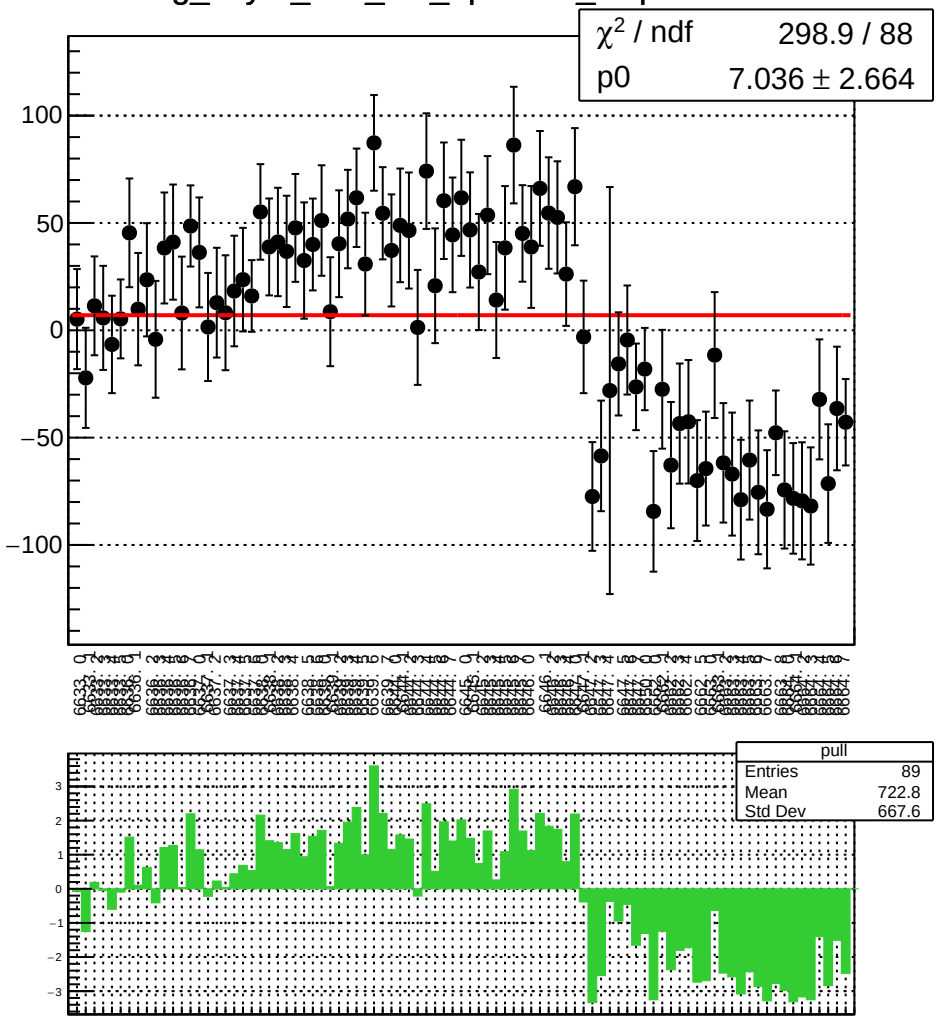

pull1D
Entries 89
Mean −0.0681
Std Dev 1.503
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

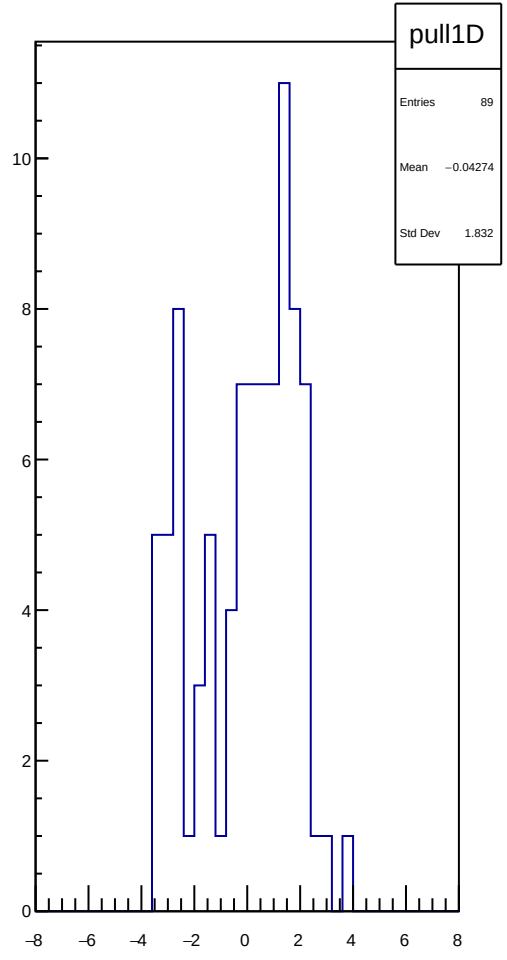

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 199.7 / 88
p0 3.528 ± 2.249
pull
Entries 89
Mean 401.8
Std Dev 345

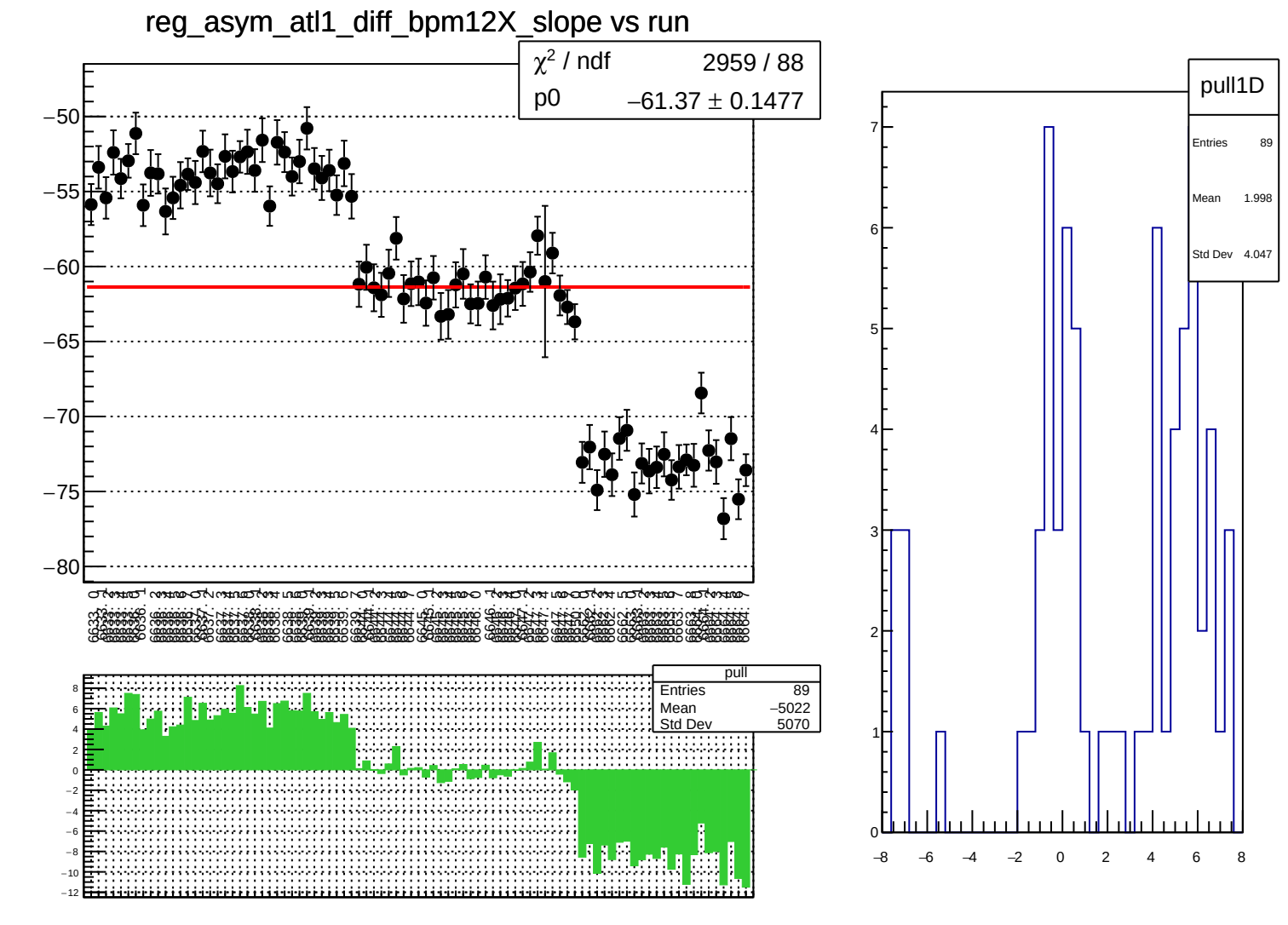

pull1D
Entries 89
Mean 0.05991
Std Dev 1.497

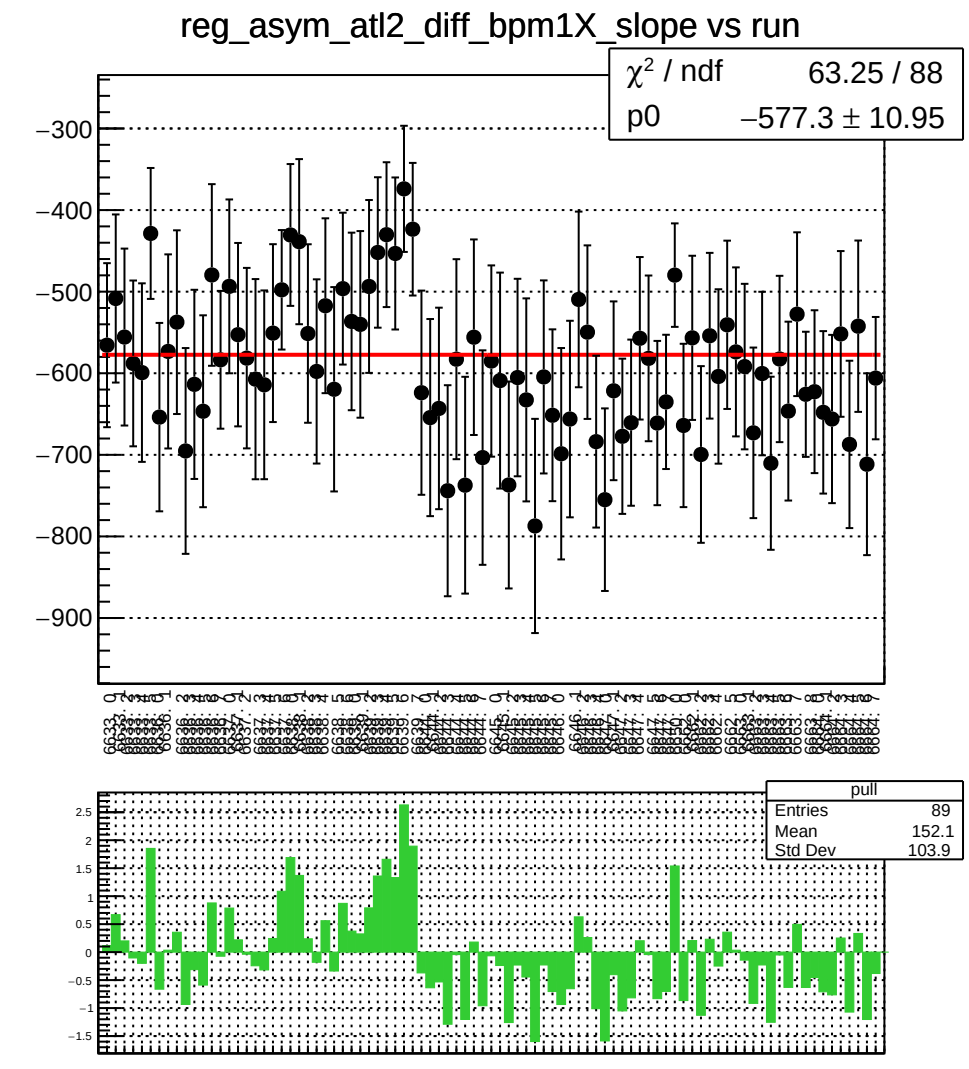

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 216.1 / 88
p0 134.6 ± 3.371
pull
Entries 89
Mean 342.1
Std Dev 292

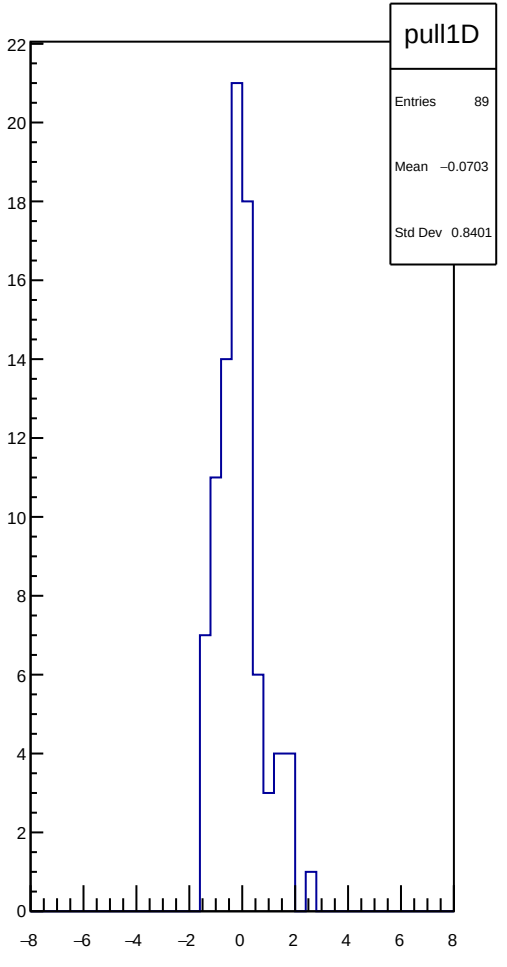

pull1D
Entries 89
Mean 0.08126
Std Dev 1.556

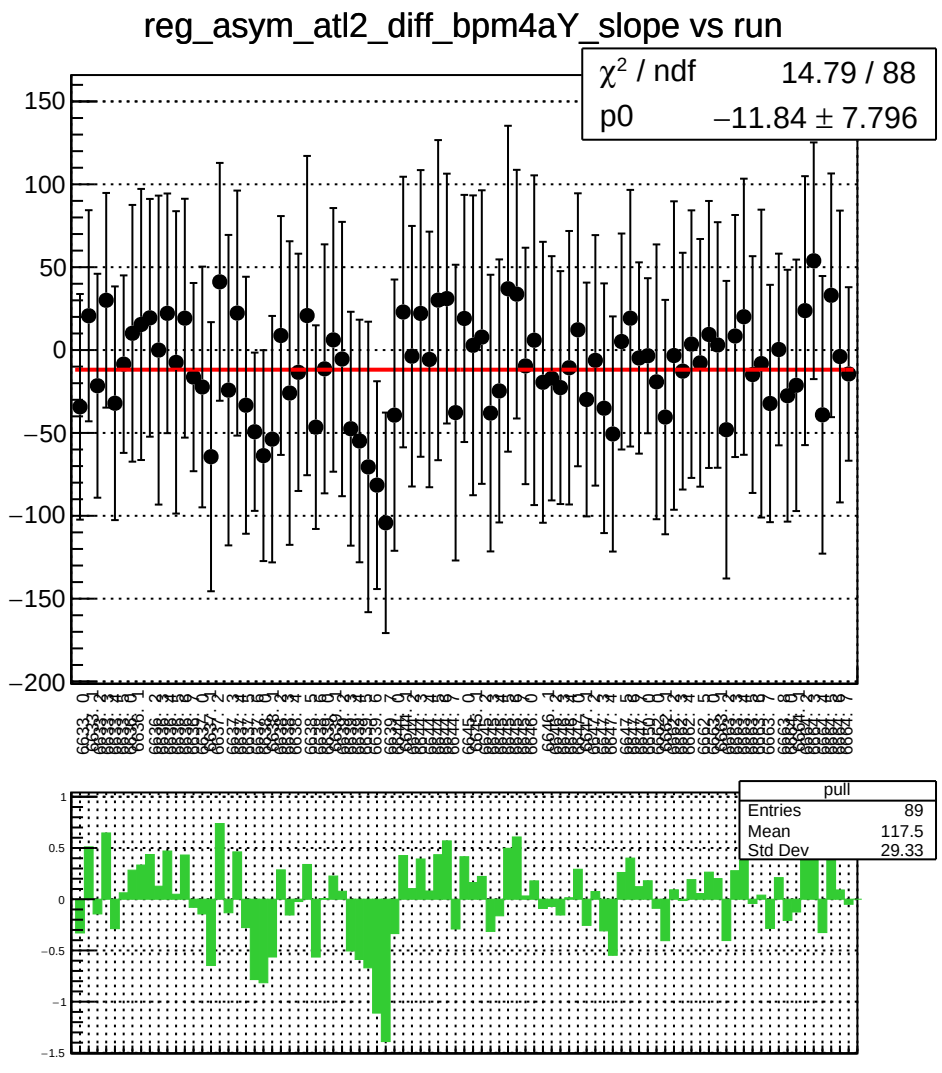

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 298.9 / 88
p0 7.036 ± 2.664
100
50
0
−50
−100
pull
Entries 89
Mean 722.8
Std Dev 667.6
3
2
1
0
−1
−2
−3

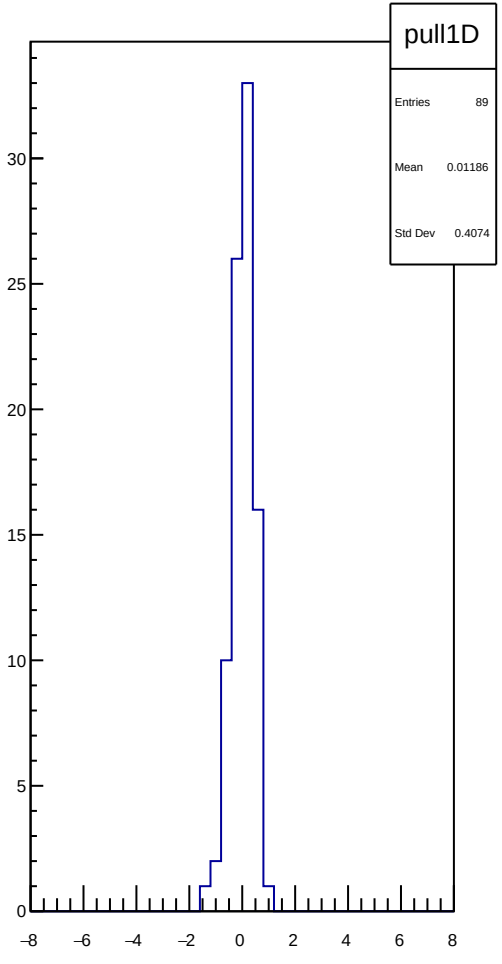

pull1D
Entries 89
Mean −0.04274
Std Dev 1.832
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

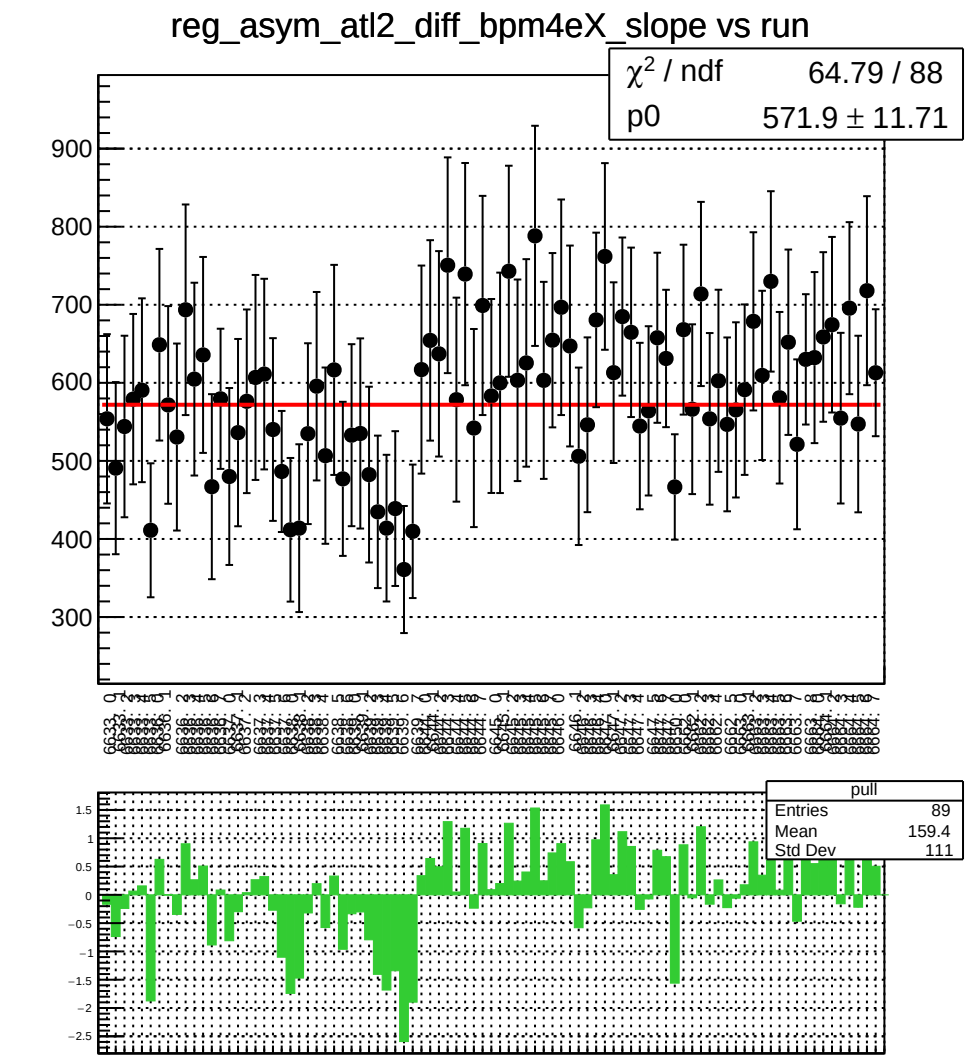

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 2959 / 88
p0 −61.37 ± 0.1477
pull
Entries 89
Mean −5022
Std Dev 5070
pull1D
Entries 89
Mean 1.998
Std Dev 4.047

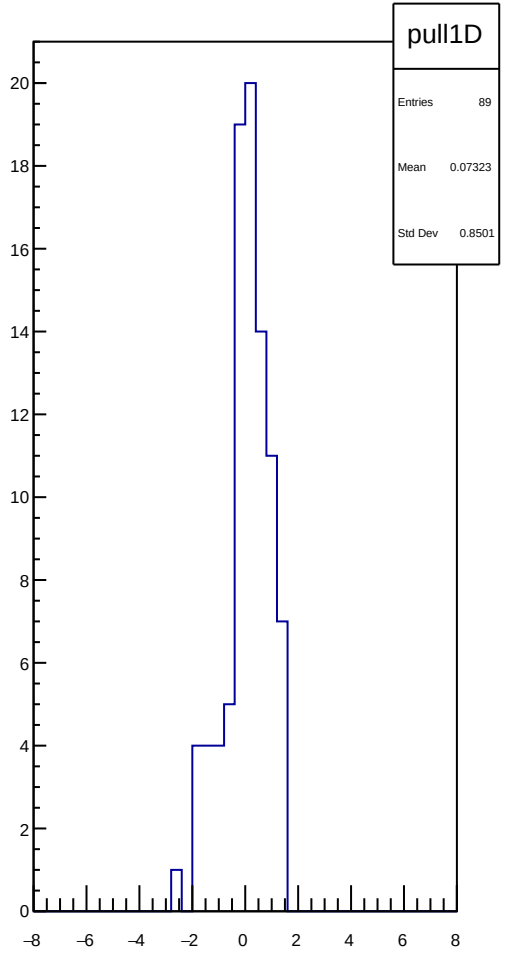

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 63.25 / 88
p0 −577.3 ± 10.95
−300
−400
−500
−600
−700
−800
−900
pull
Entries 89
Mean 152.1
Std Dev 103.9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

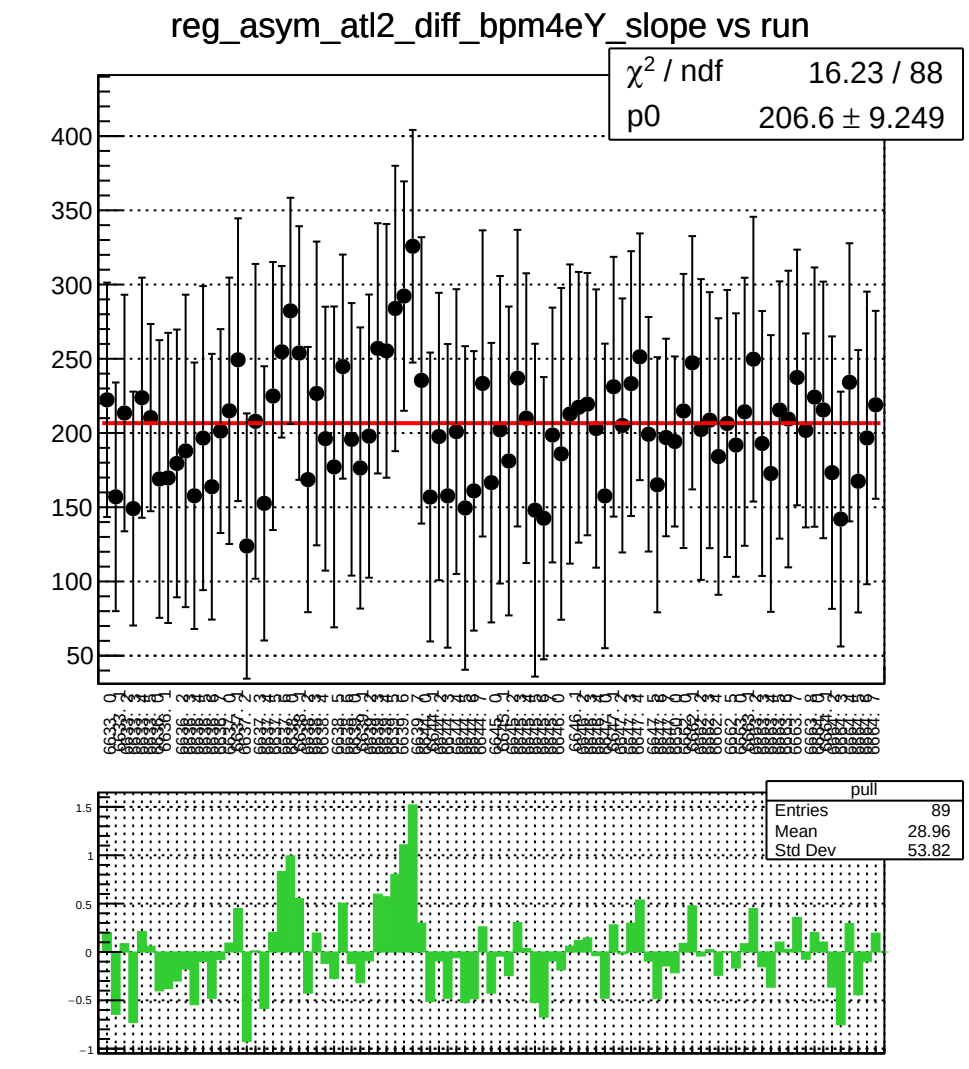

pull1D
Entries 89
Mean −0.0703
Std Dev 0.8401
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

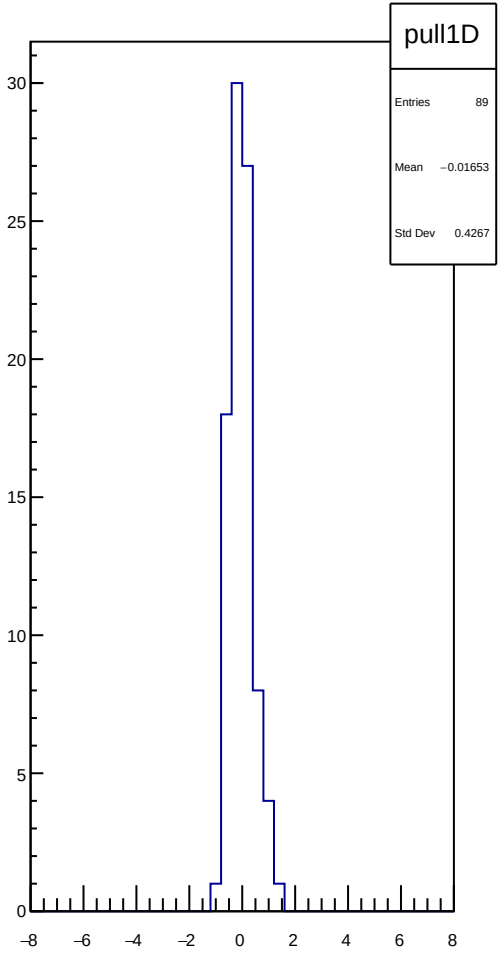

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 14.79 / 88
p0 −11.84 ± 7.796
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 117.5
Std Dev 29.33
1
0.5
0
−0.5
−1
−1.5

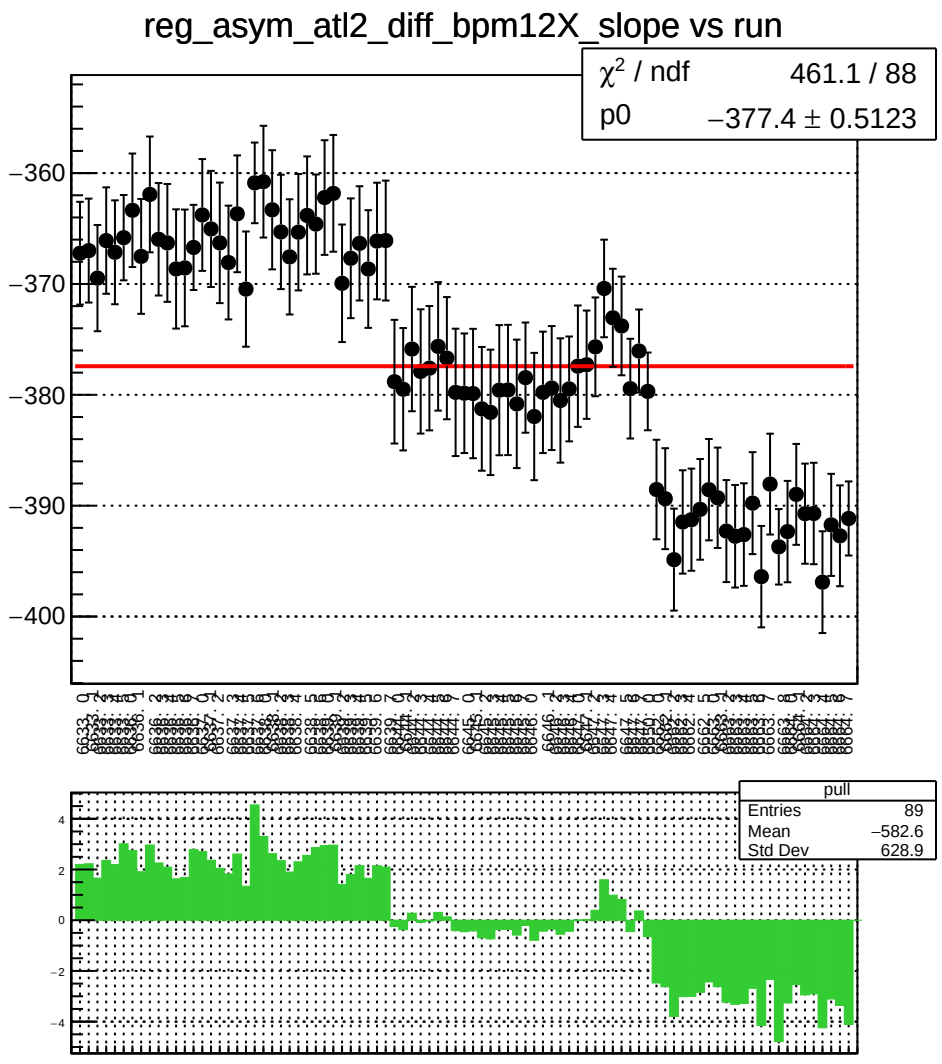

pull1D
Entries 89
Mean 0.01186
Std Dev 0.4074
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

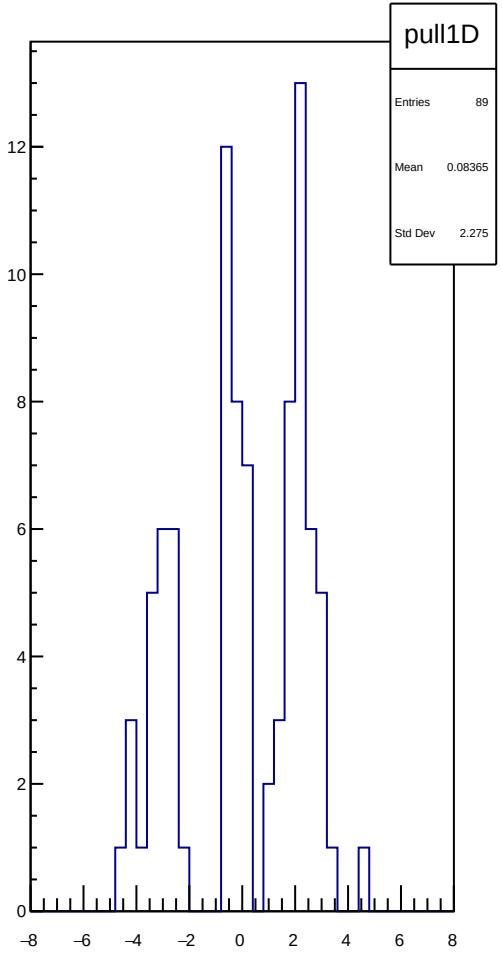

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 64.79 / 88
p0 571.9 ± 11.71
900
800
700
600
500
400
300
pull
Entries 89
Mean 159.4
Std Dev 111
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

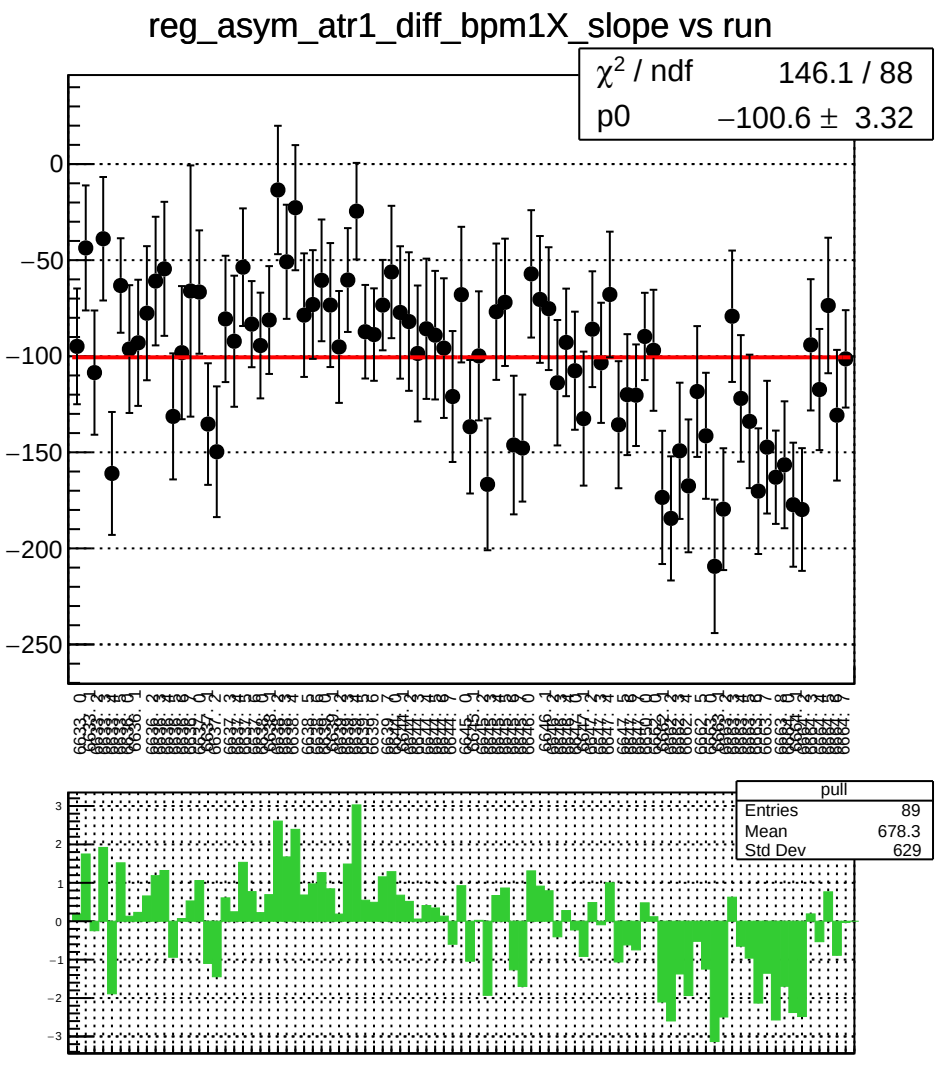

pull1D
Entries 89
Mean 0.07323
Std Dev 0.8501
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

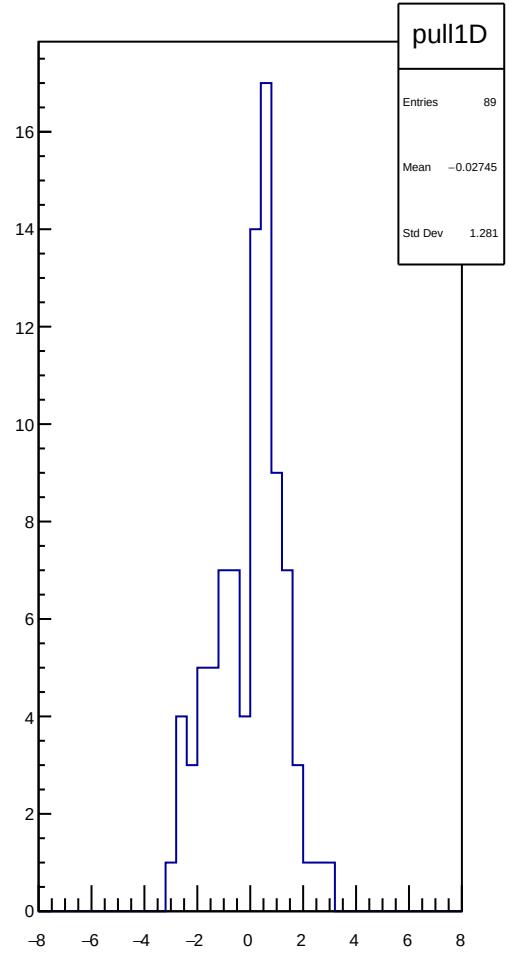

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 16.23 / 88
p0 206.6 ± 9.249
400
350
300
250
200
150
100
50
pull
Entries 89
Mean 28.96
Std Dev 53.82
1.5
1
0.5
0
−0.5
−1

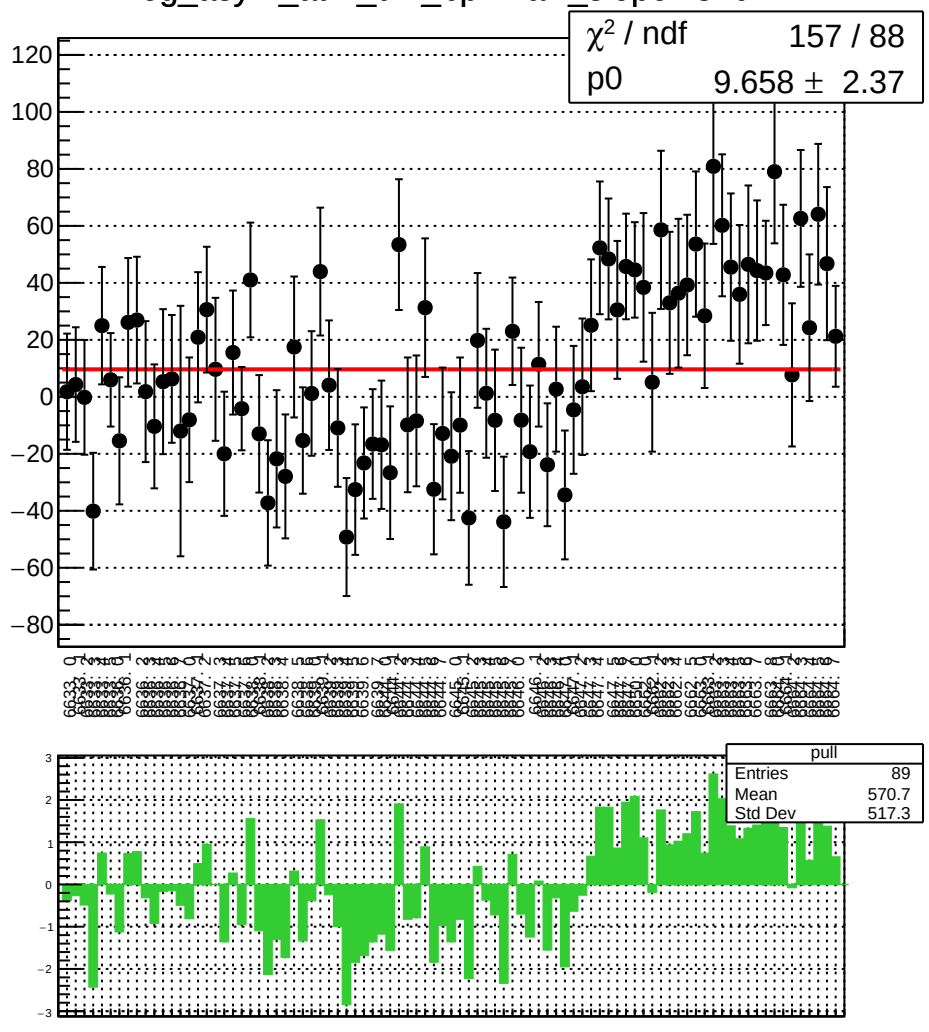

pull1D
Entries 89
Mean −0.01653
Std Dev 0.4267
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

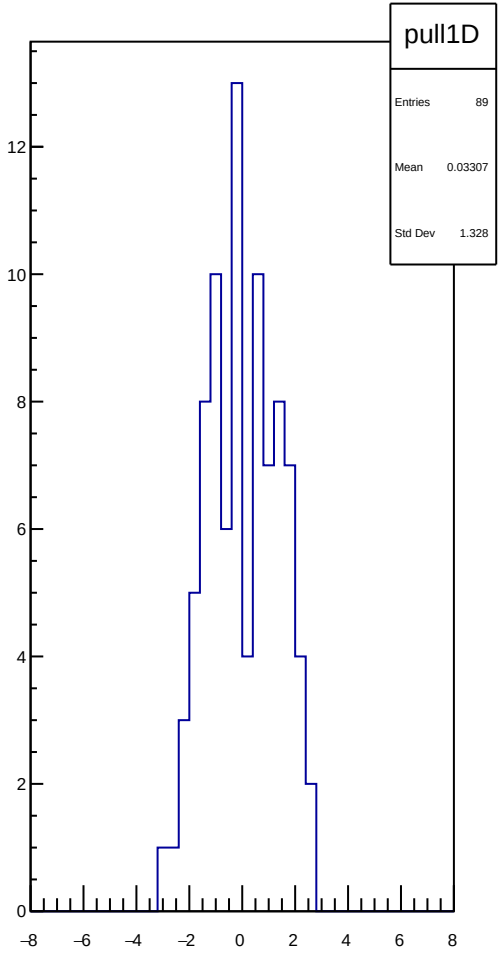

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 461.1 / 88
p0 −377.4 ± 0.5123
−360
−370
−380
−390
−400
pull
Entries 89
Mean −582.6
Std Dev 628.9
4
2
0
−2
−4

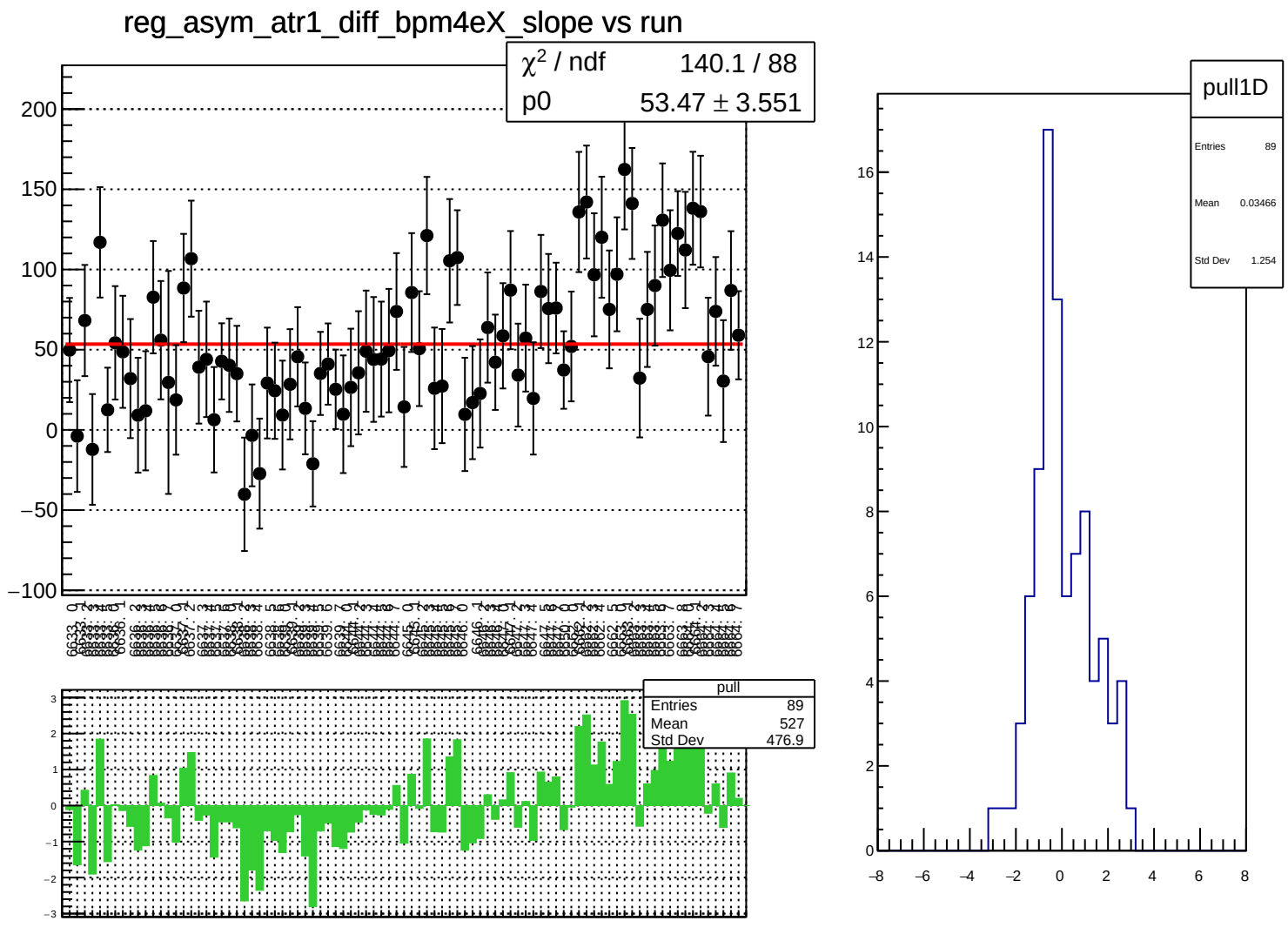

pull1D
Entries 89
Mean 0.08365
Std Dev 2.275
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

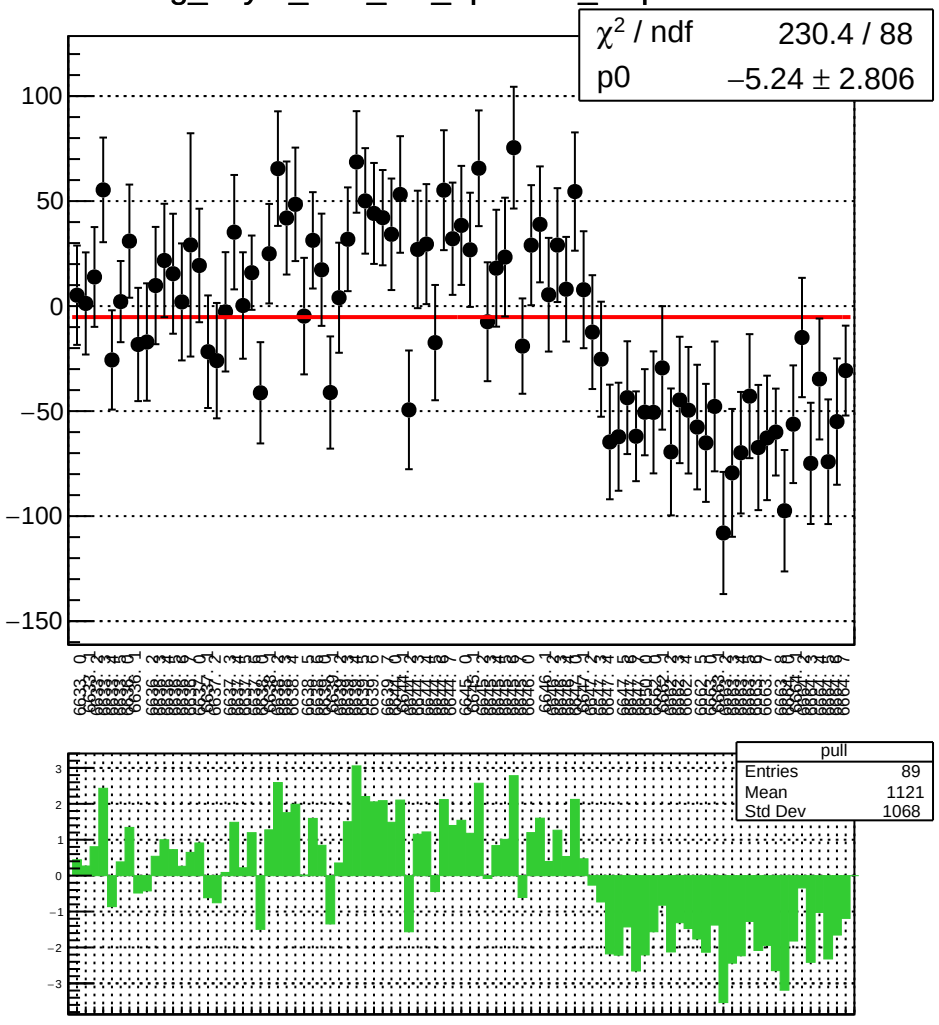

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 146.1 / 88
p0 −100.6 ± 3.32
pull
Entries 89
Mean 678.3
Std Dev 629

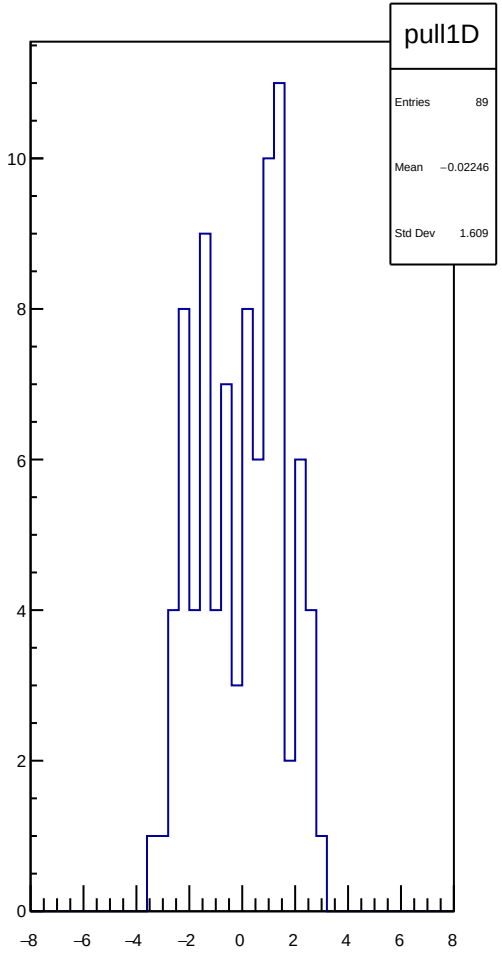

pull1D
Entries 89
Mean −0.02745
Std Dev 1.281

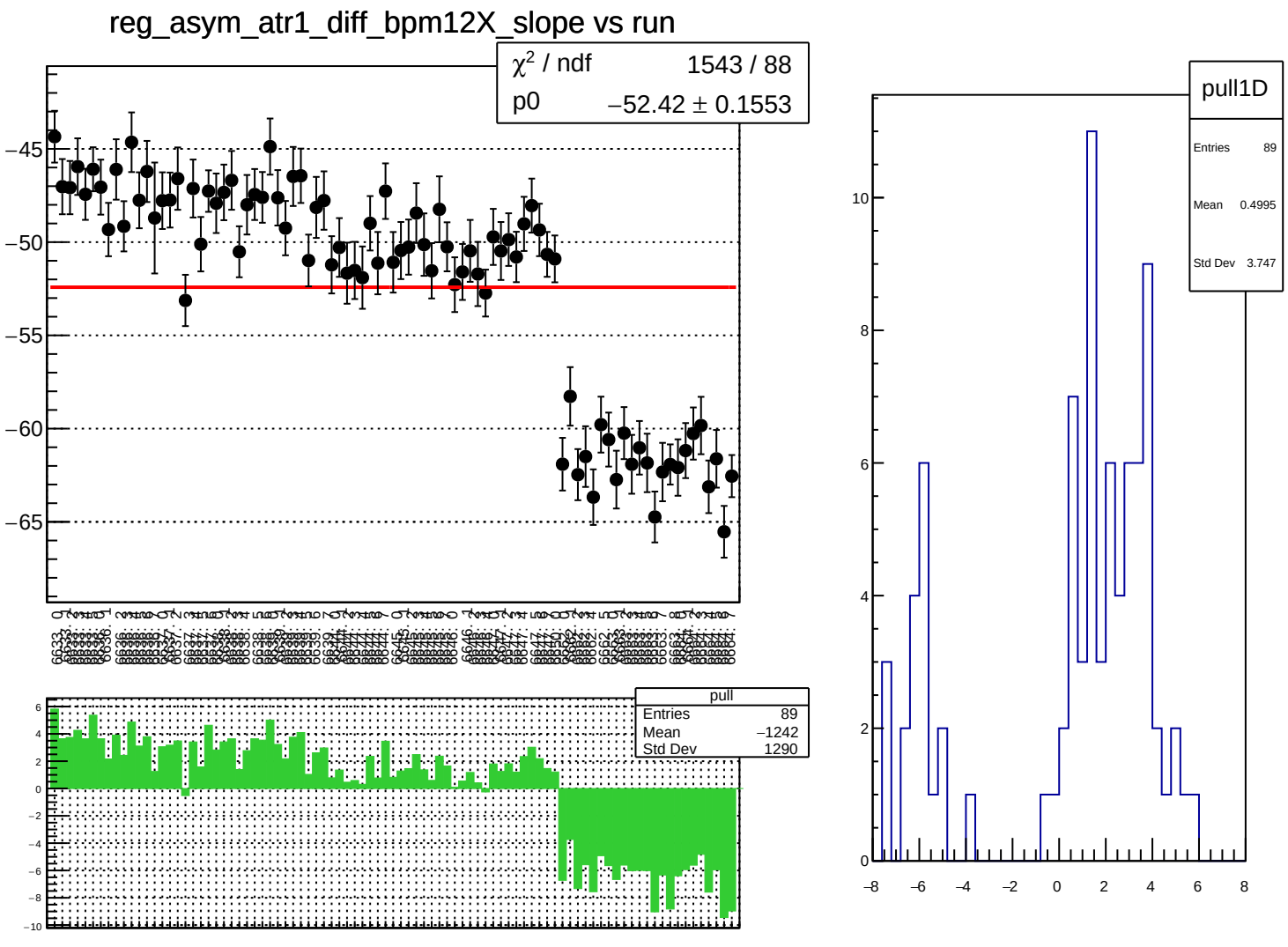

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 157 / 88
p0 9.658 ± 2.37
pull
Entries 89
Mean 570.7
Std Dev 517.3

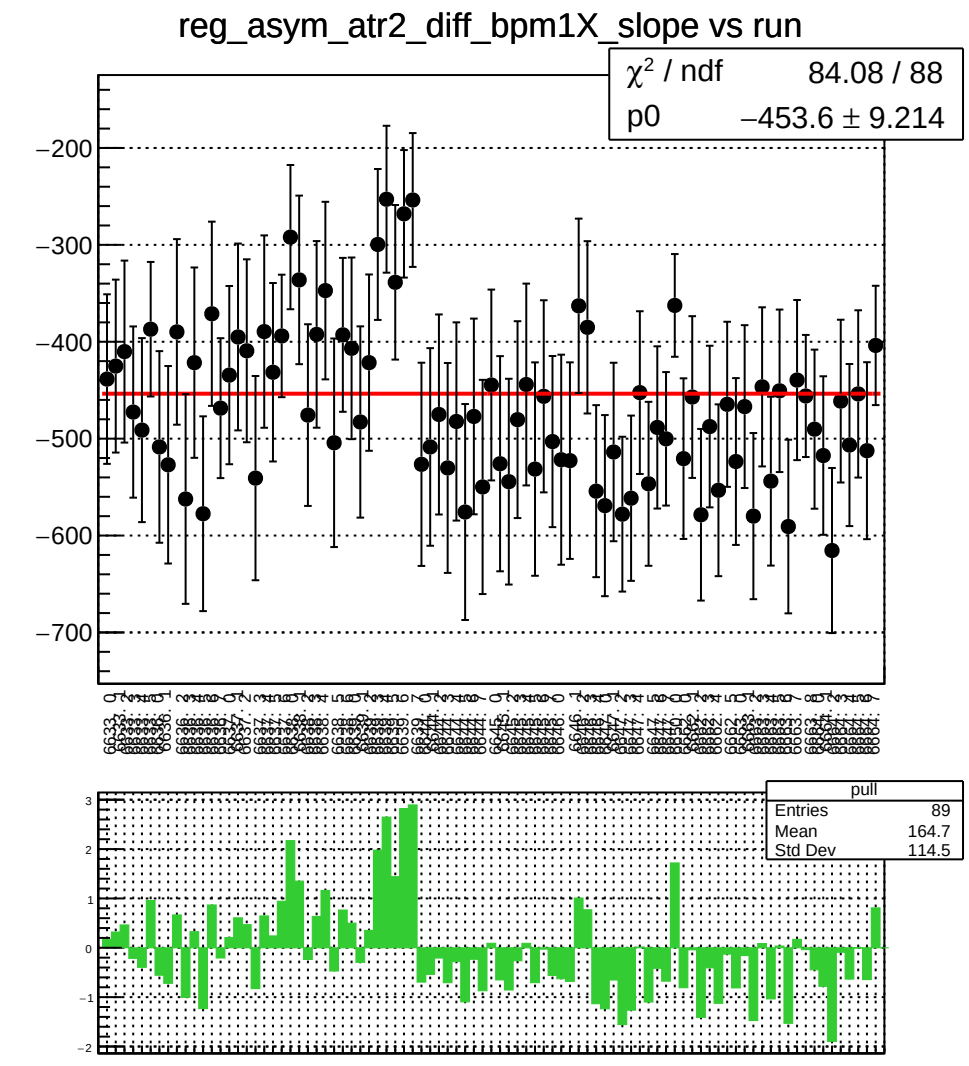

pull1D
Entries 89
Mean 0.03307
Std Dev 1.328

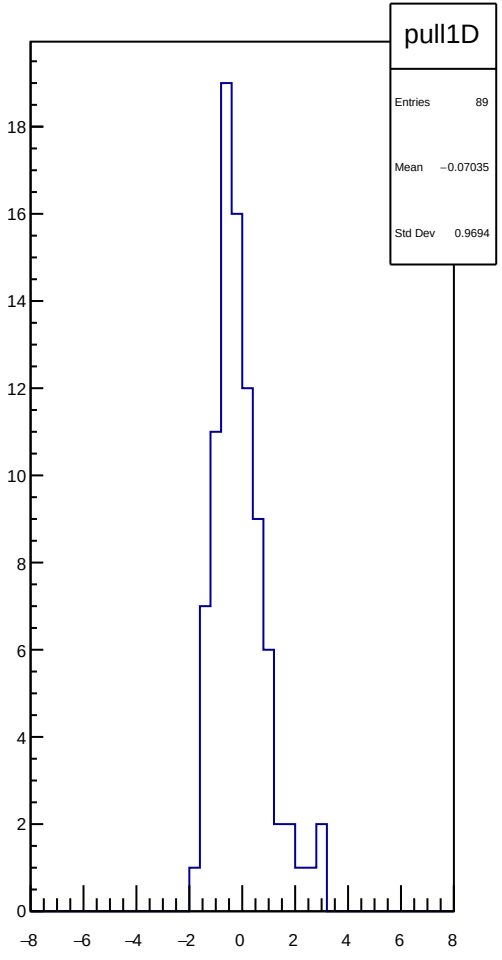

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 140.1 / 88
p0 53.47 ± 3.551
pull
Entries 89
Mean 527
Std Dev 476.9
pull1D
Entries 89
Mean 0.03466
Std Dev 1.254

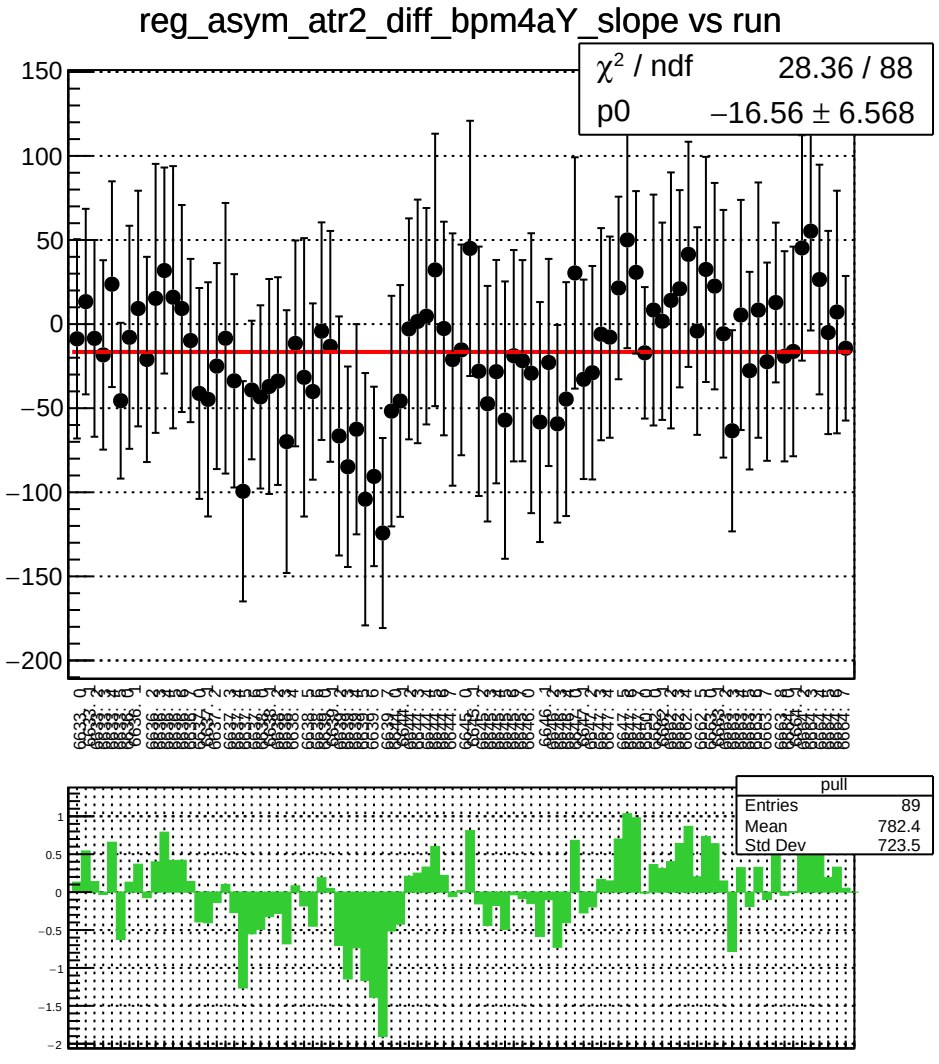

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 230.4 / 88
p0 −5.24 ± 2.806
100
50
0
−50
−100
−150
pull
Entries 89
Mean 1121
Std Dev 1068
3
2
1
0
−1
−2
−3

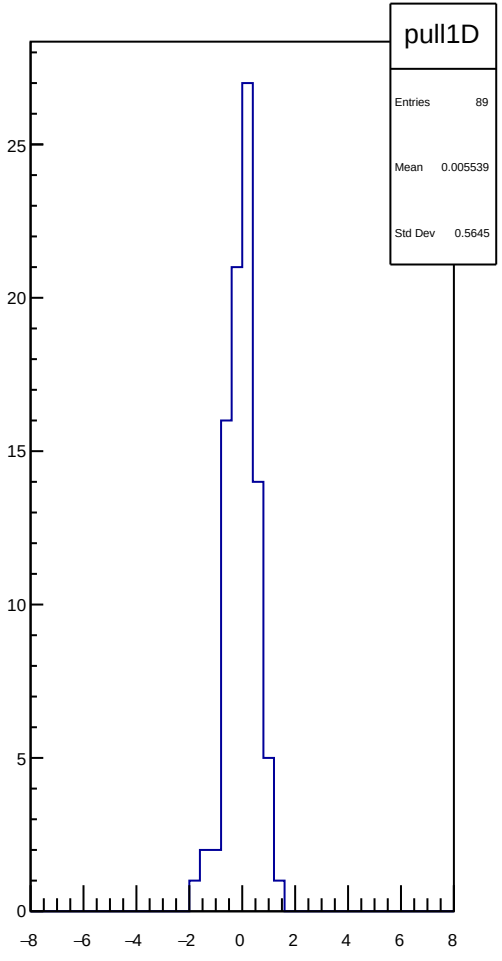

pull1D
Entries 89
Mean −0.02246
Std Dev 1.609
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

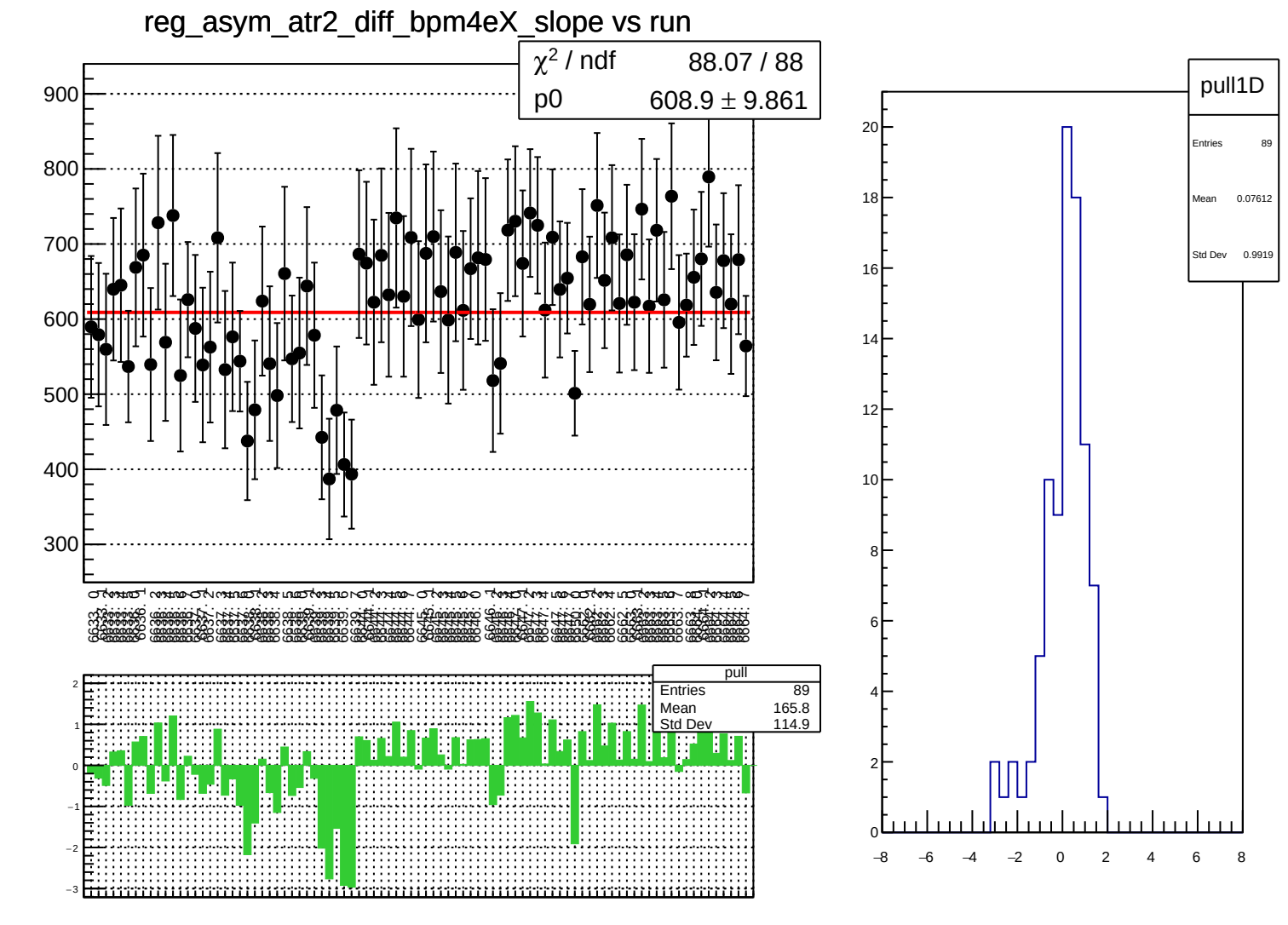

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 1543 / 88
p0 −52.42 ± 0.1553
−45
−50
−55
−60
−65
pull
Entries 89
Mean −1242
Std Dev 1290
6
4
2
0
−2
−4
−6
−8
−10
pull1D
Entries 89
Mean 0.4995
Std Dev 3.747
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

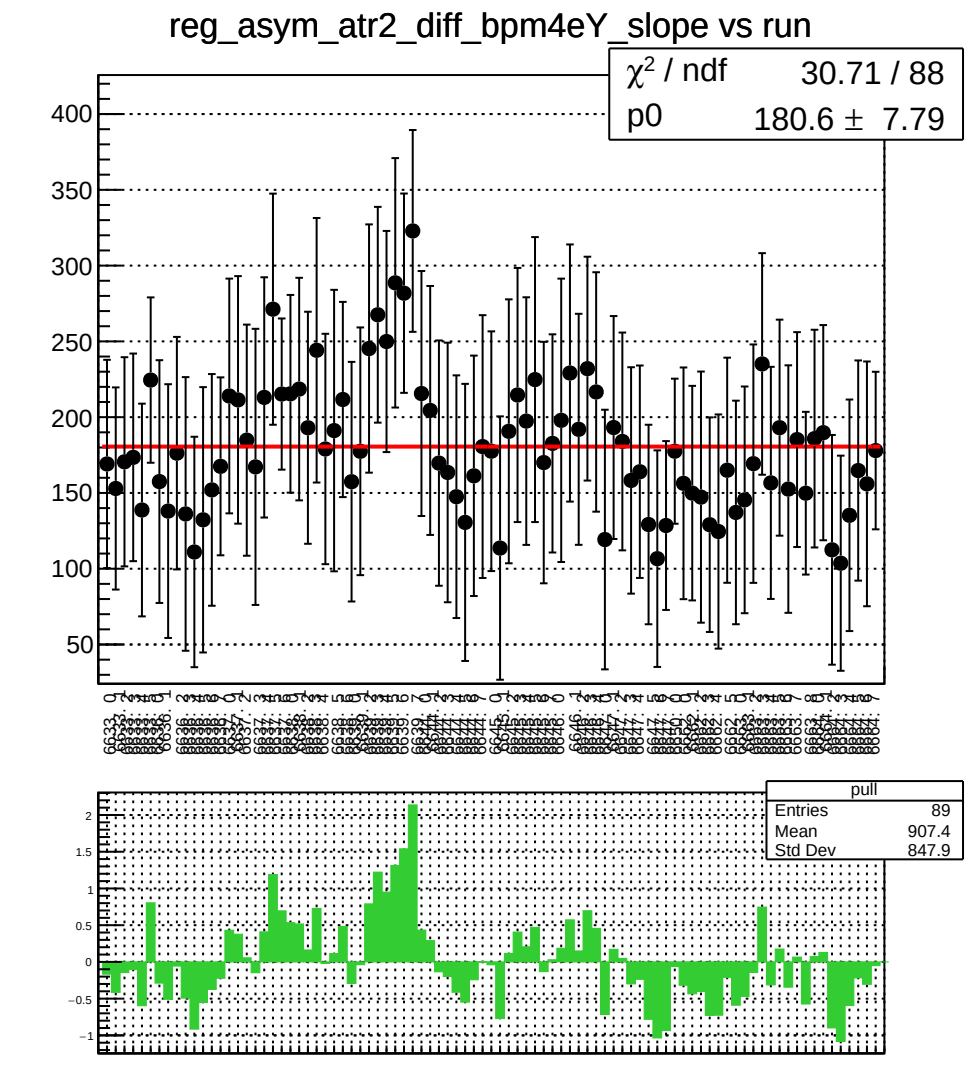

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 84.08 / 88
p0 −453.6 ± 9.214
−200
−300
−400
−500
−600
−700
pull
Entries 89
Mean 164.7
Std Dev 114.5
3
2
1
0
−1
−2

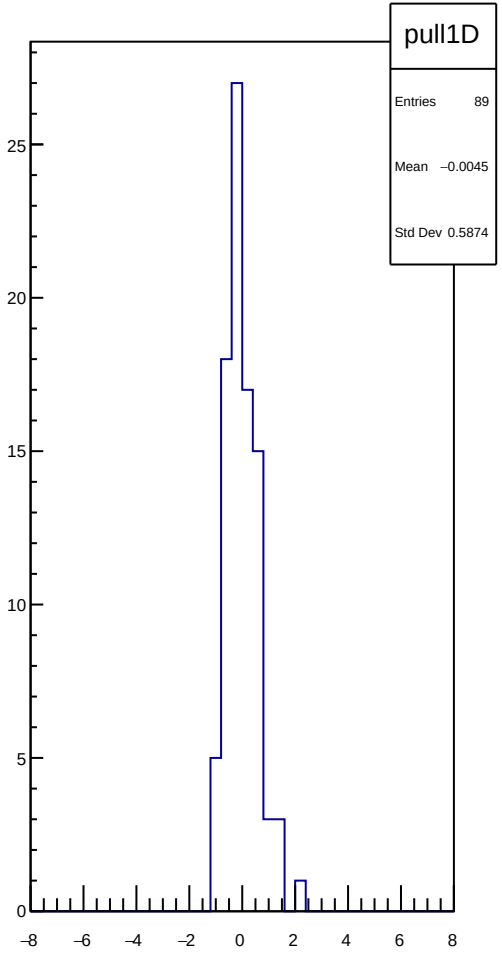

pull1D
Entries 89
Mean −0.07035
Std Dev 0.9694
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

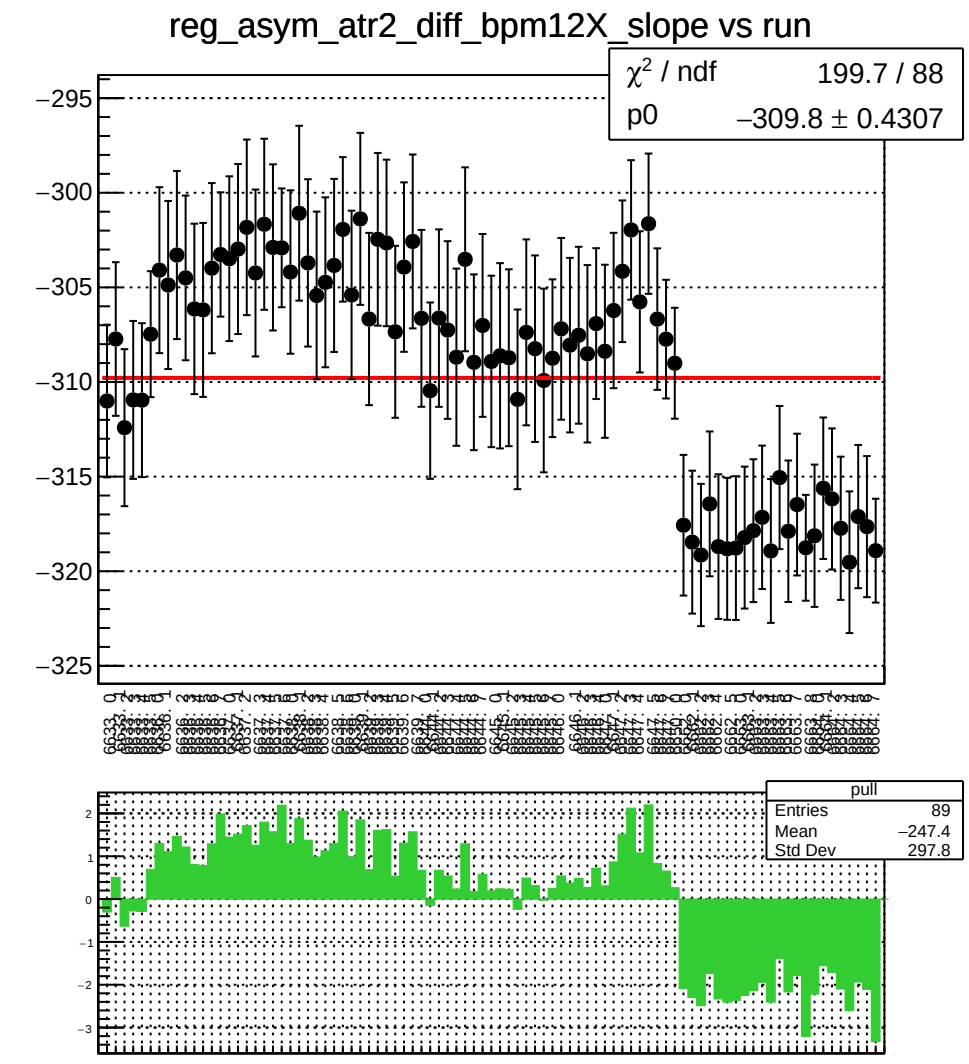

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 28.36 / 88
p0 −16.56 ± 6.568
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 782.4
Std Dev 723.5
1
0.5
0
−0.5
−1
−1.5
−2

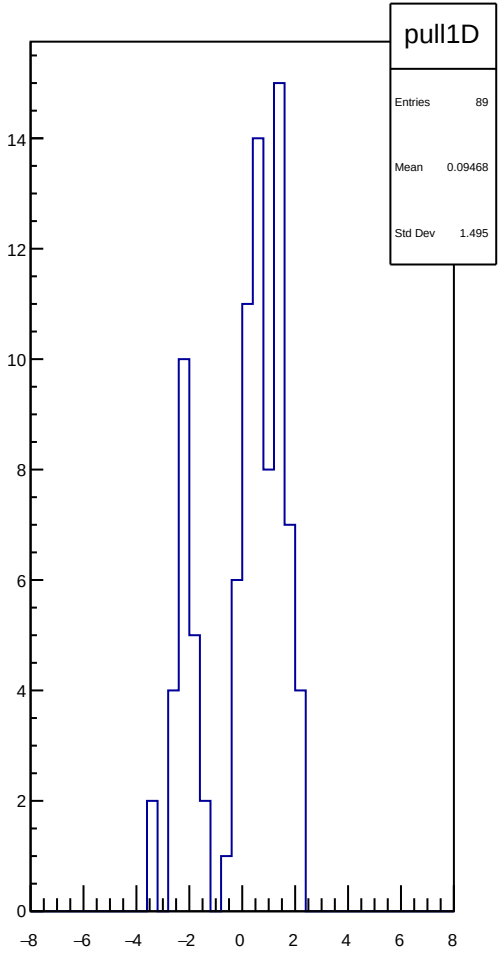

pull1D
Entries 89
Mean 0.005539
Std Dev 0.5645
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

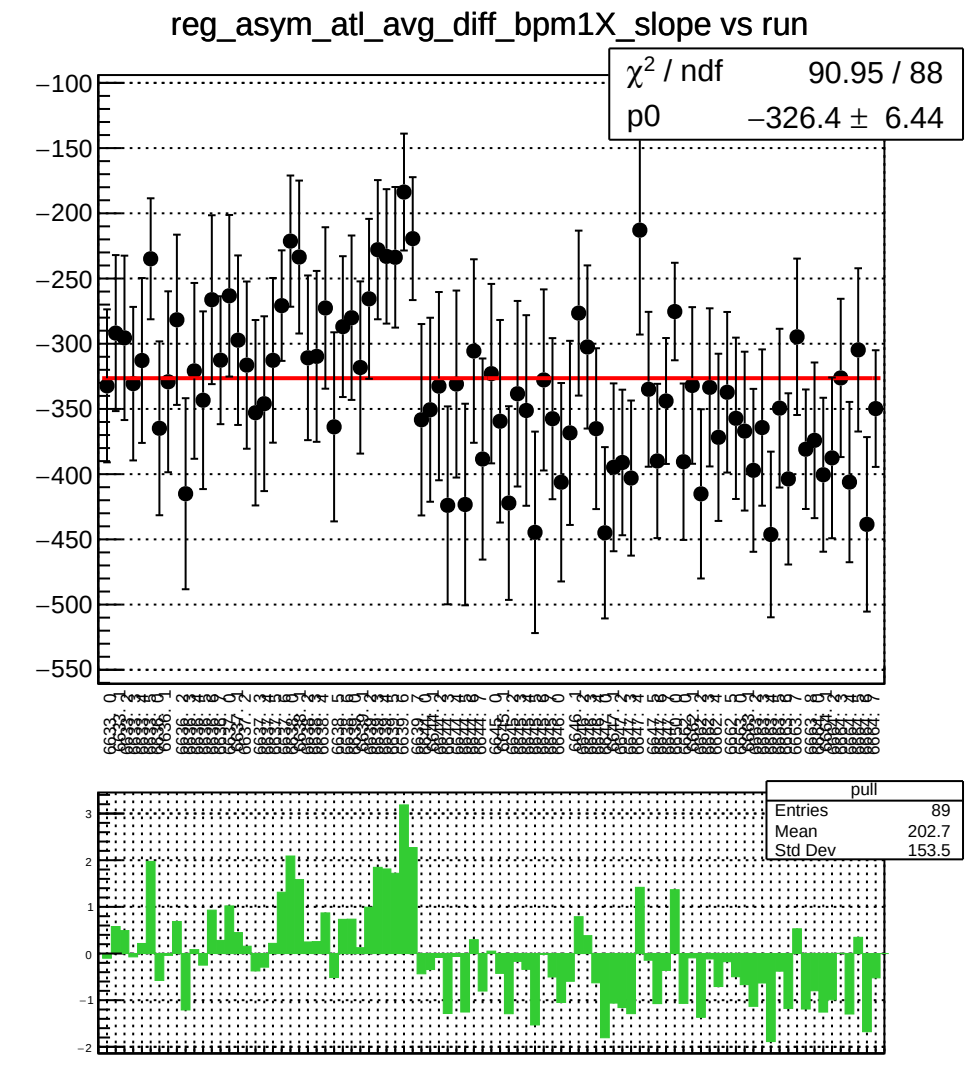

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 88.07 / 88
p0 608.9 ± 9.861
900
800
700
600
500
400
300
pull
Entries 89
Mean 165.8
Std Dev 114.9
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean 0.07612
Std Dev 0.9919
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

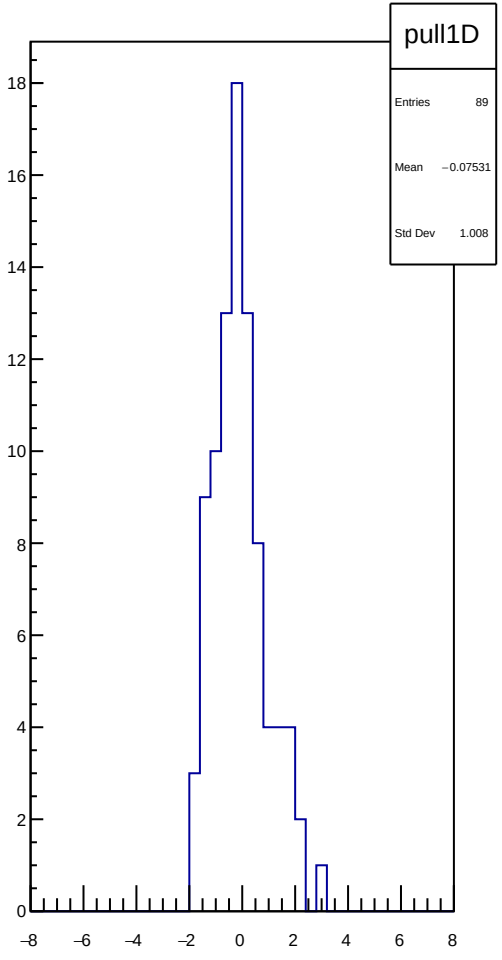

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 30.71 / 88
p0 180.6 ± 7.79
pull
Entries 89
Mean 907.4
Std Dev 847.9

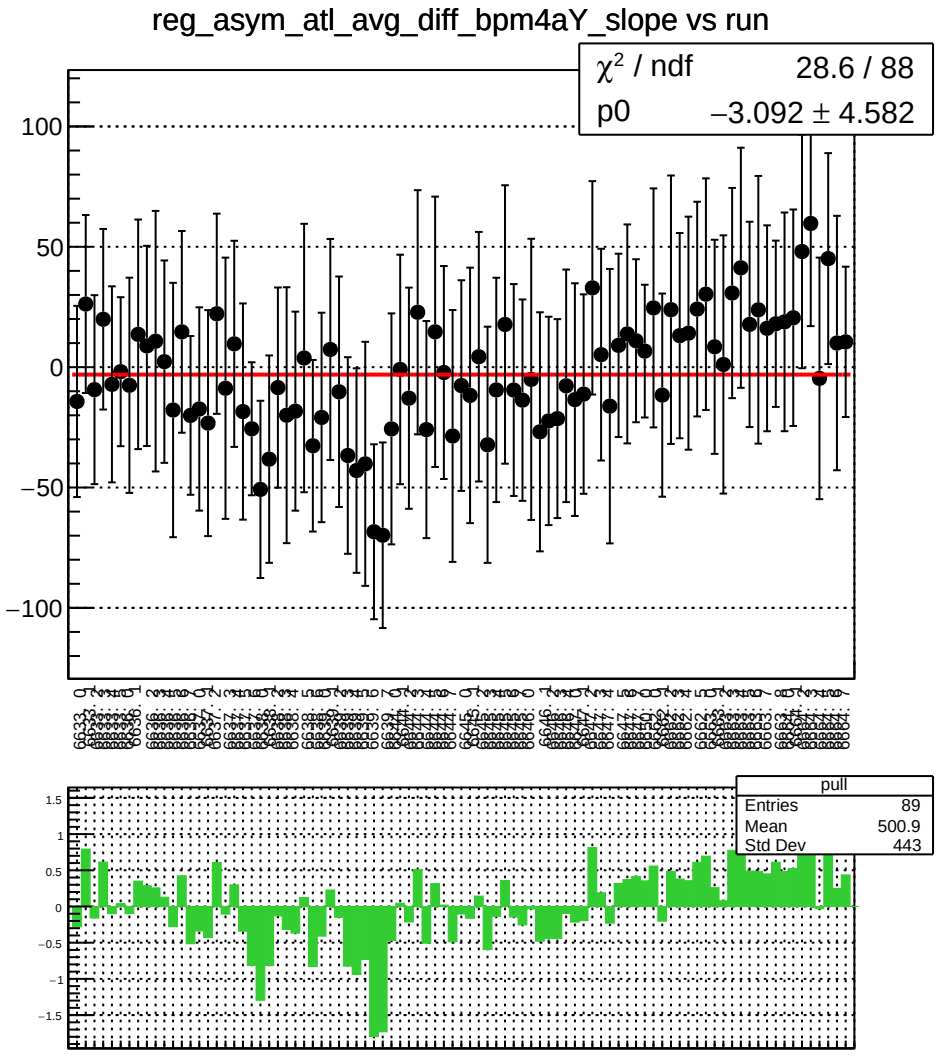

pull1D
Entries 89
Mean −0.0045
Std Dev 0.5874

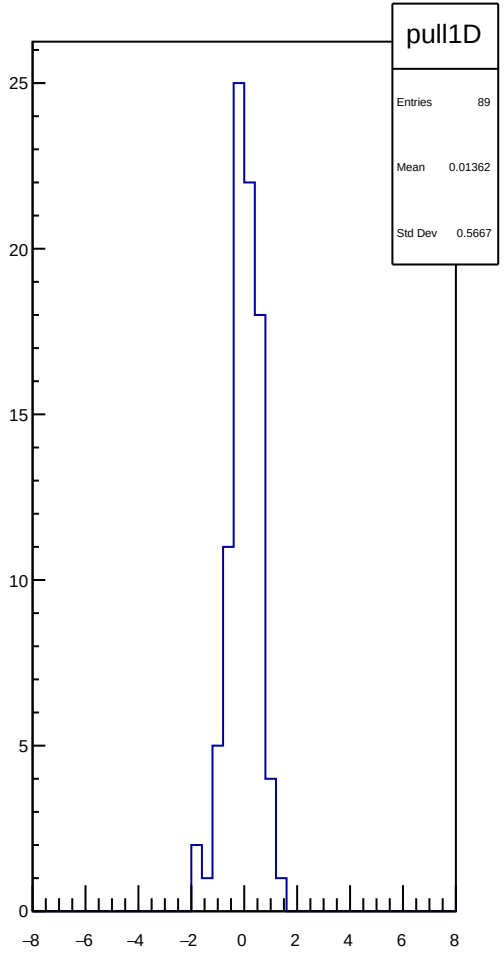

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 199.7 / 88
p0 −309.8 ± 0.4307
pull
Entries 89
Mean −247.4
Std Dev 297.8

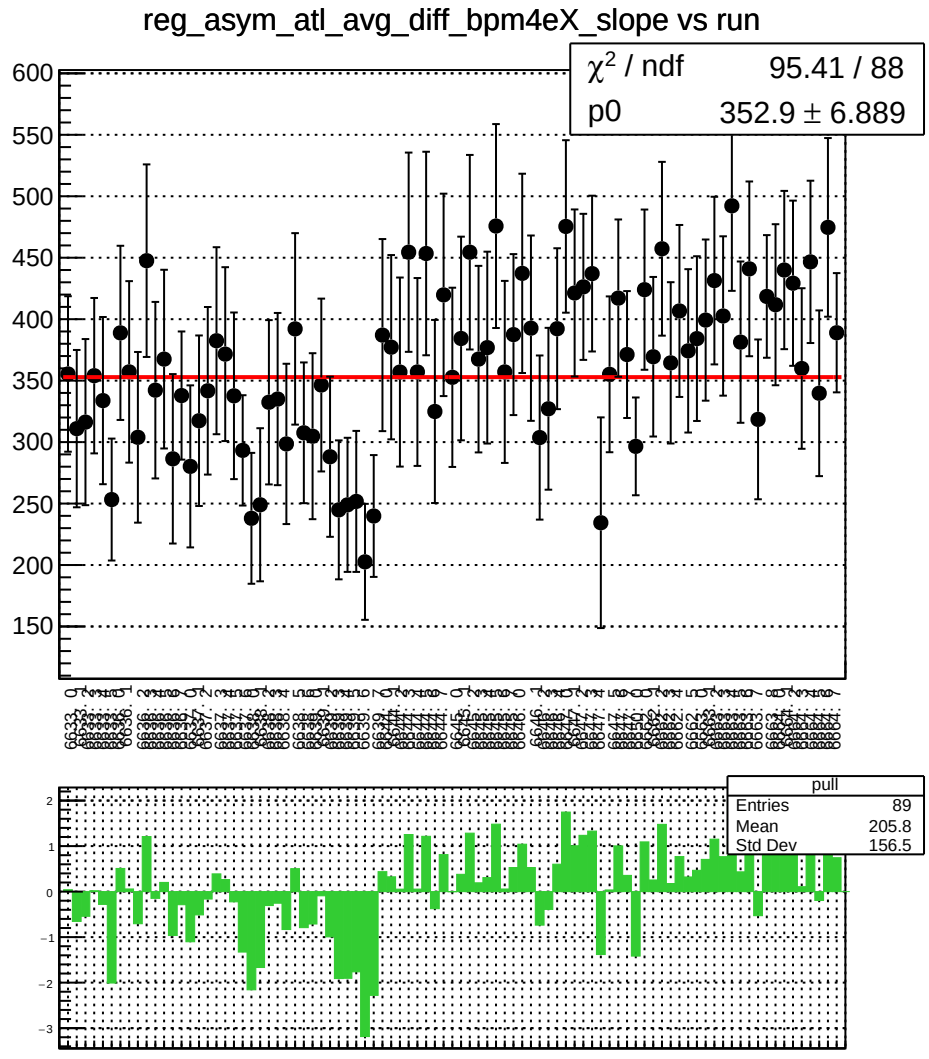

pull1D
Entries 89
Mean 0.09468
Std Dev 1.495

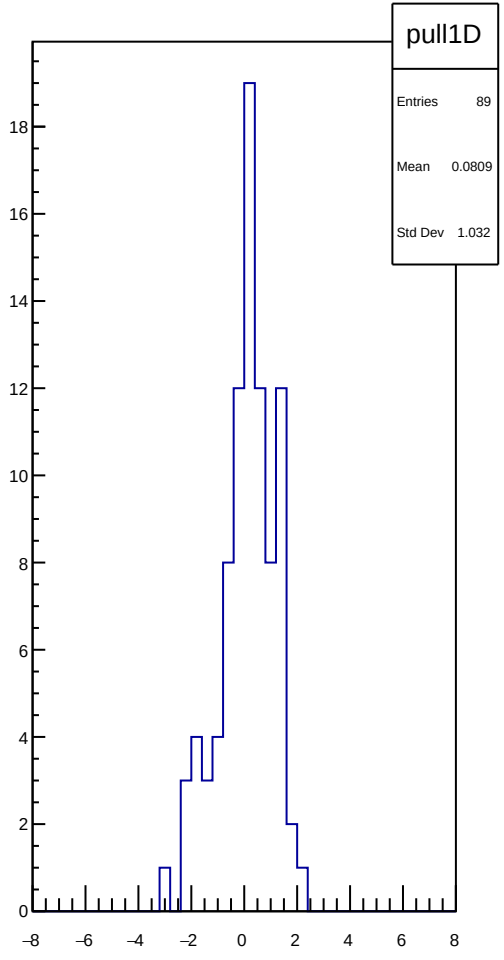

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 90.95 / 88
p0 −326.4 ± 6.44
pull
Entries 89
Mean 202.7
Std Dev 153.5

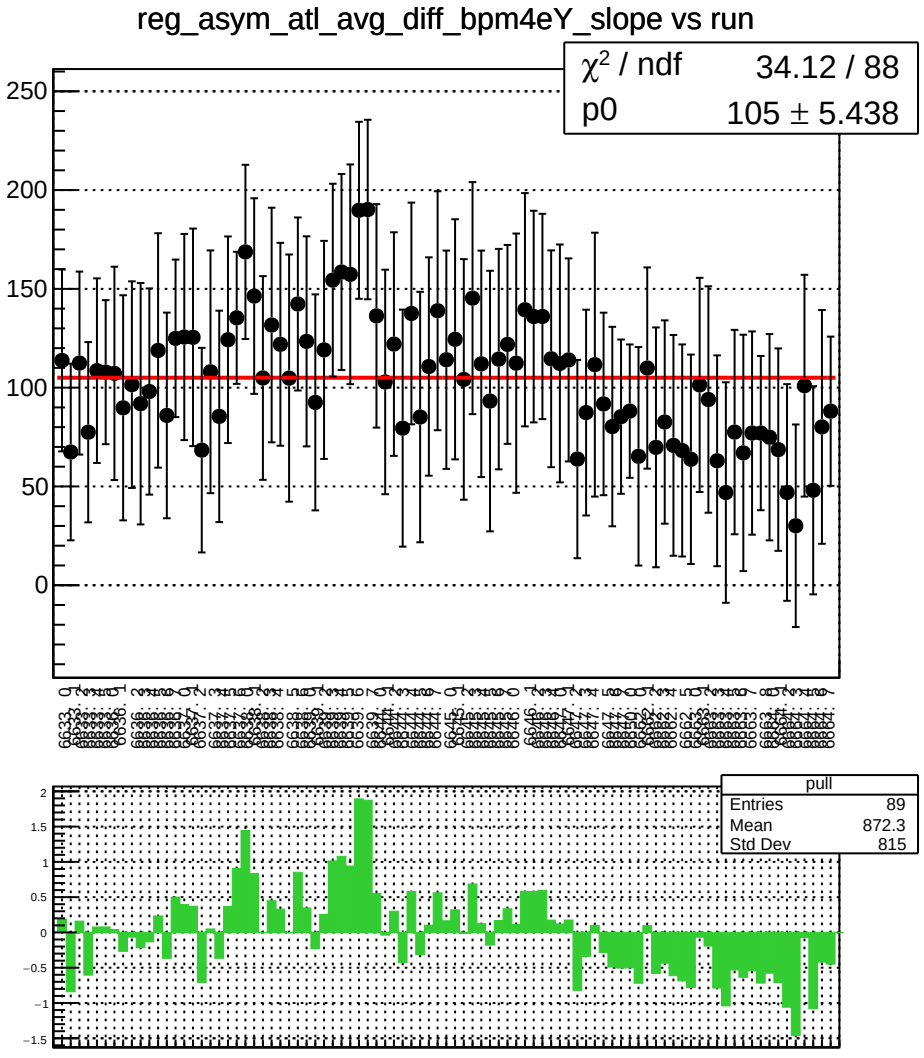

pull1D
Entries 89
Mean −0.07531
Std Dev 1.008

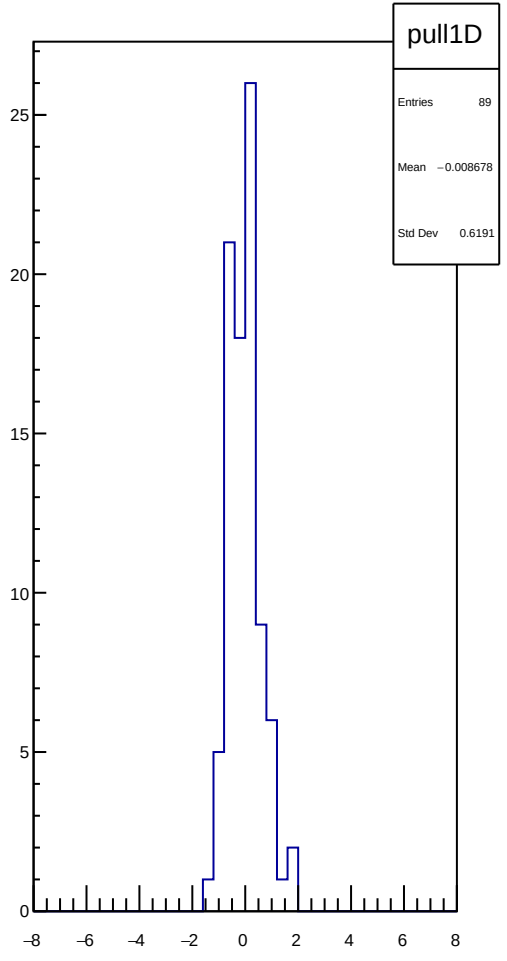

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 28.6 / 88
p0 −3.092 ± 4.582
100
50
0
−50
−100
pull
Entries 89
Mean 500.9
Std Dev 443
1.5
1
0.5
0
−0.5
−1
−1.5

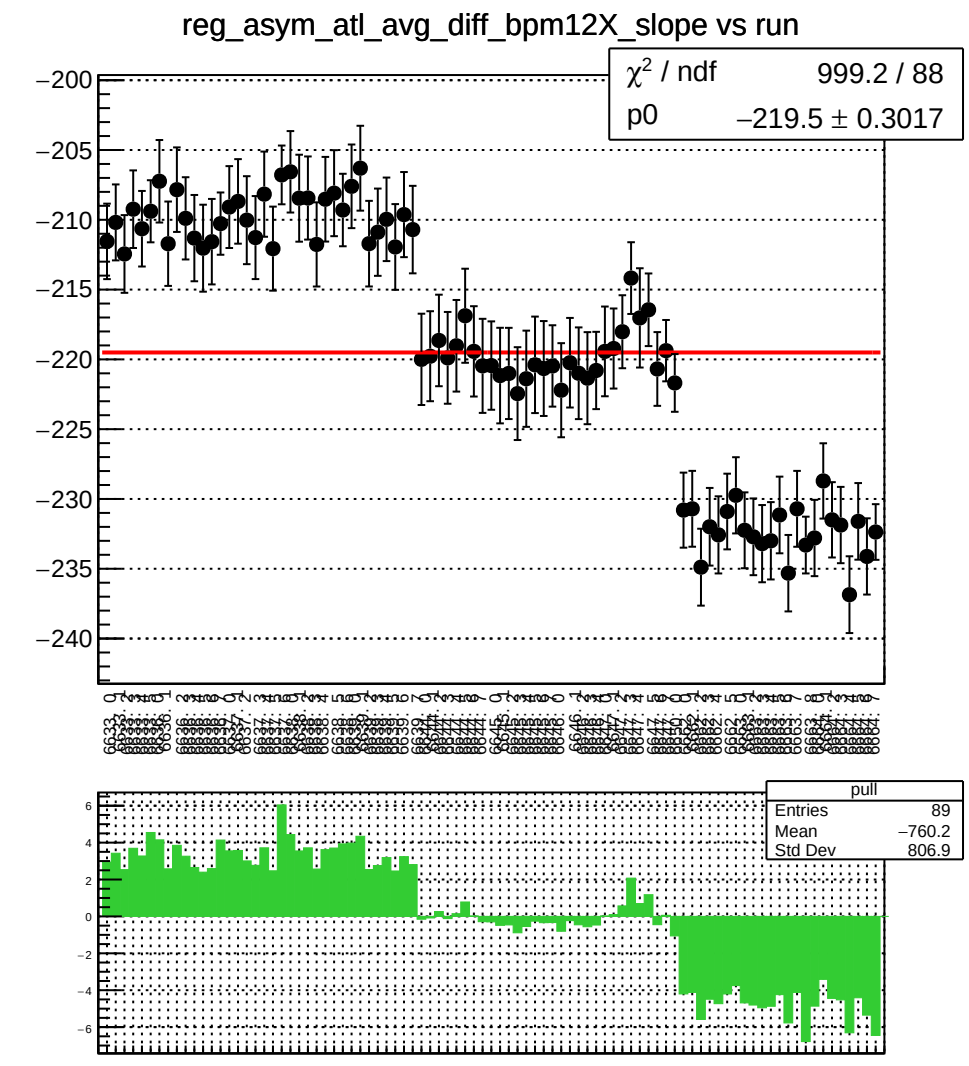

pull1D
Entries 89
Mean 0.01362
Std Dev 0.5667
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

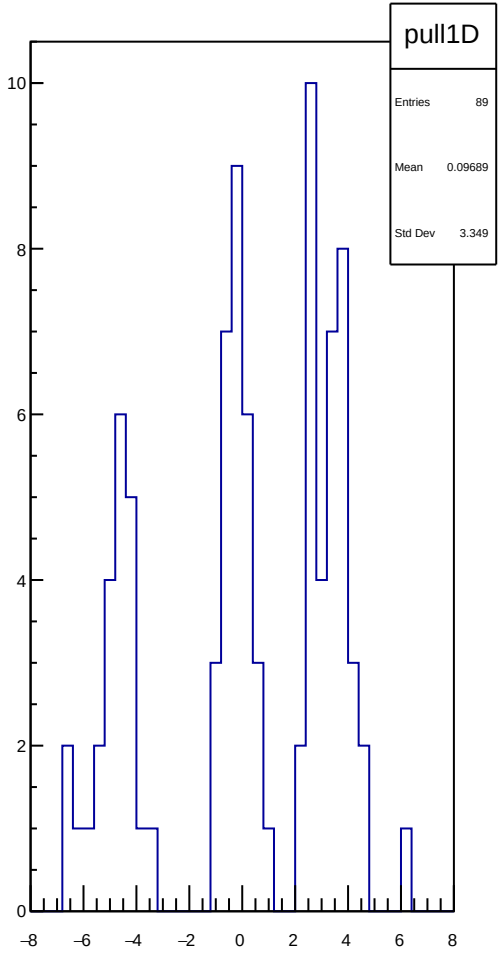

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 95.41 / 88
p0 352.9 ± 6.889
pull
Entries 89
Mean 205.8
Std Dev 156.5

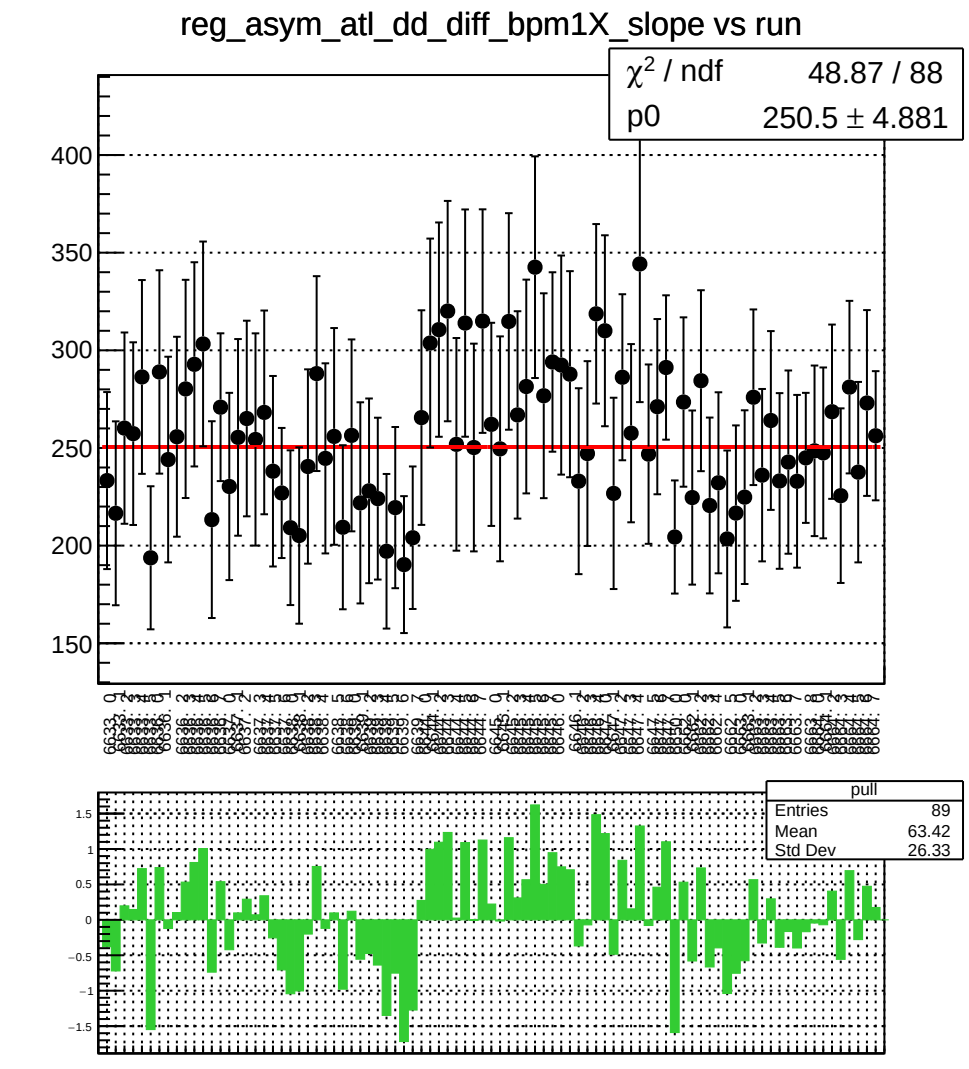

pull1D
Entries 89
Mean 0.0809
Std Dev 1.032

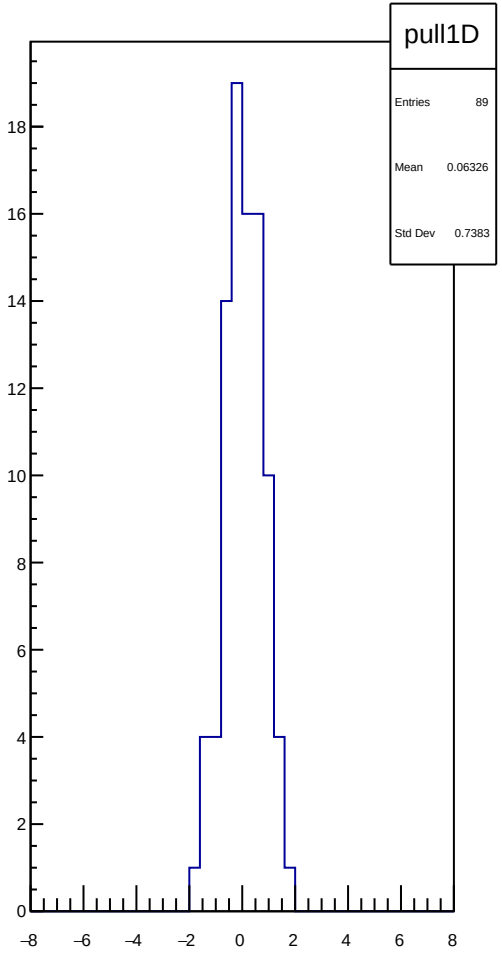

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 34.12 / 88
p0 105 ± 5.438
250
200
150
100
50
0
pull
Entries 89
Mean 872.3
Std Dev 815
2
1.5
1
0.5
0
−0.5
−1
−1.5

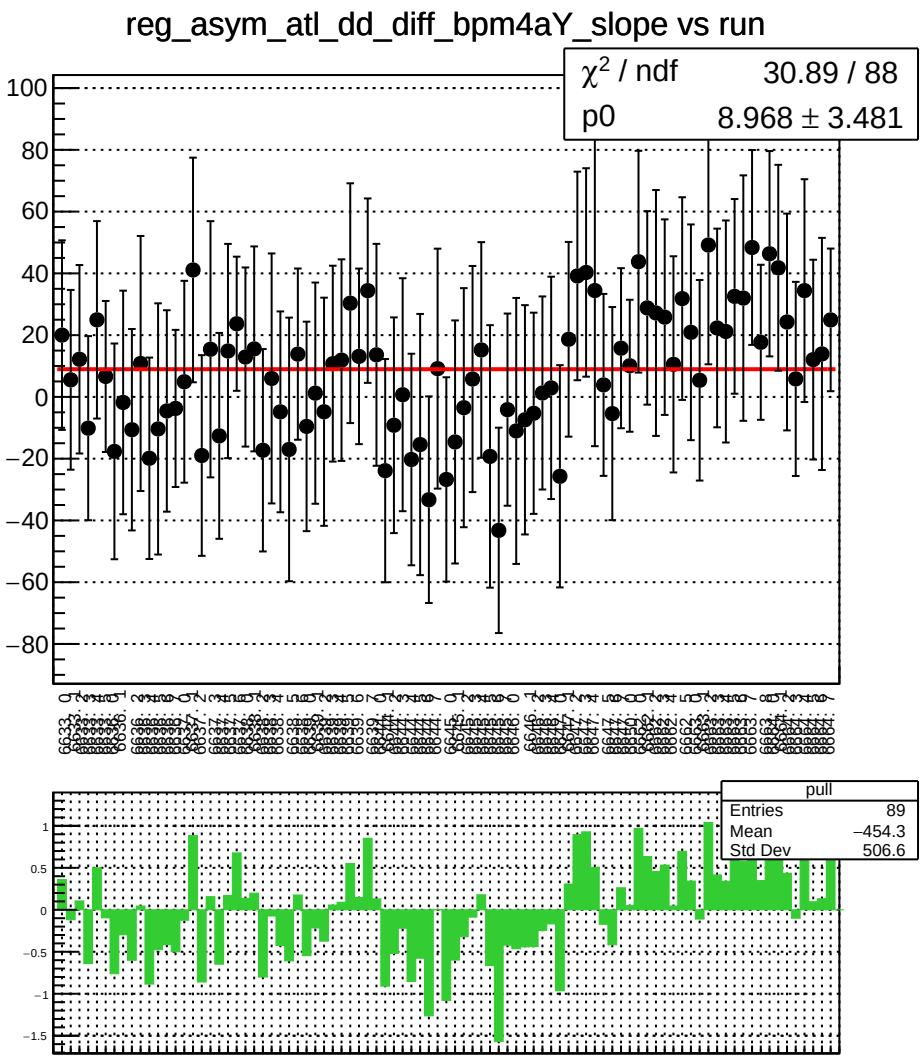

pull1D
Entries 89
Mean −0.008678
Std Dev 0.6191
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

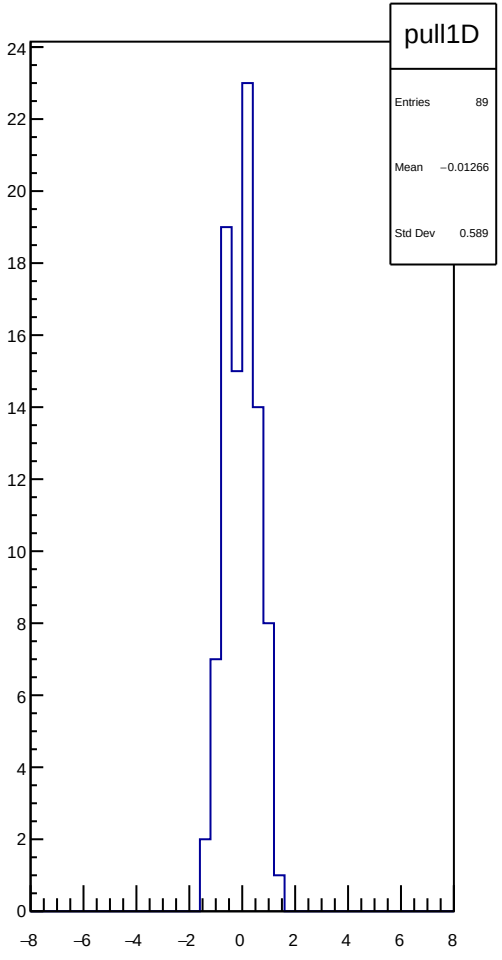

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 999.2 / 88
p0 −219.5 ± 0.3017
pull
Entries 89
Mean −760.2
Std Dev 806.9

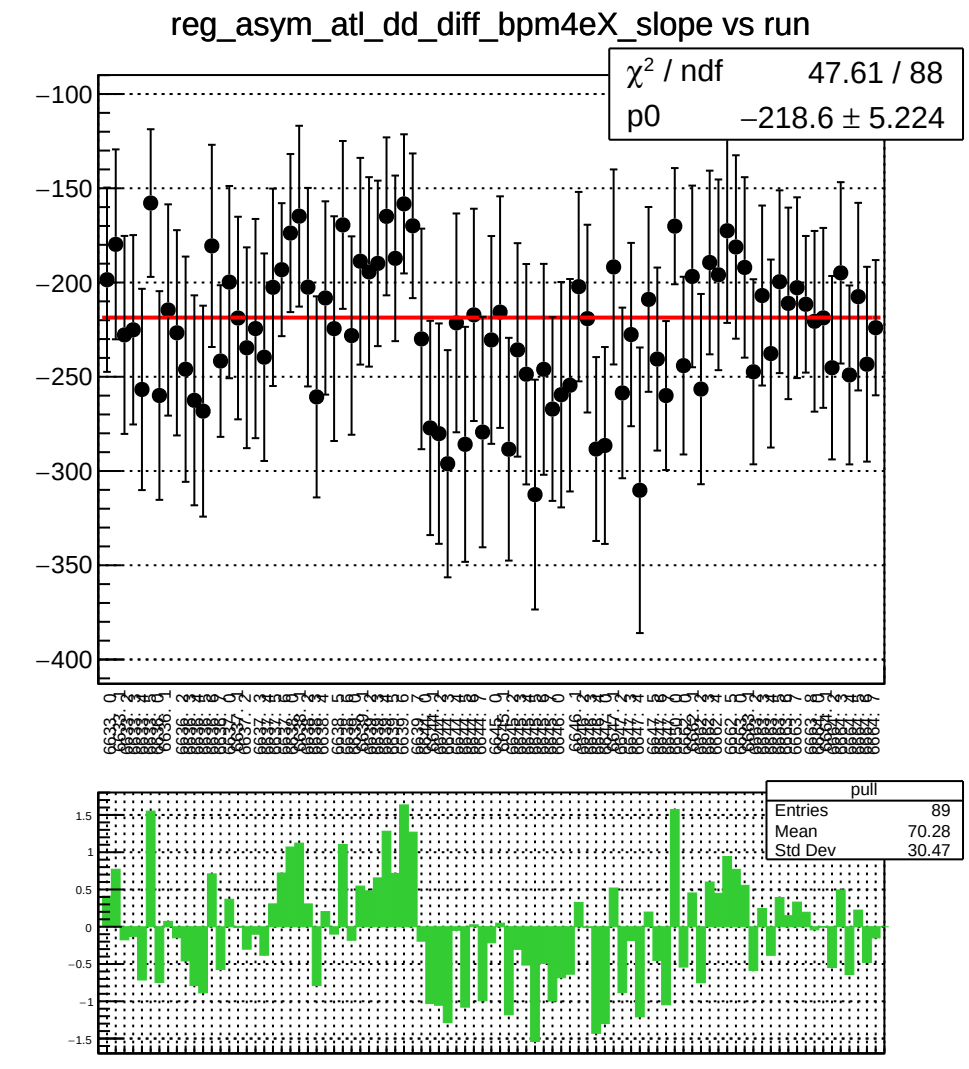

pull1D
Entries 89
Mean 0.09689
Std Dev 3.349

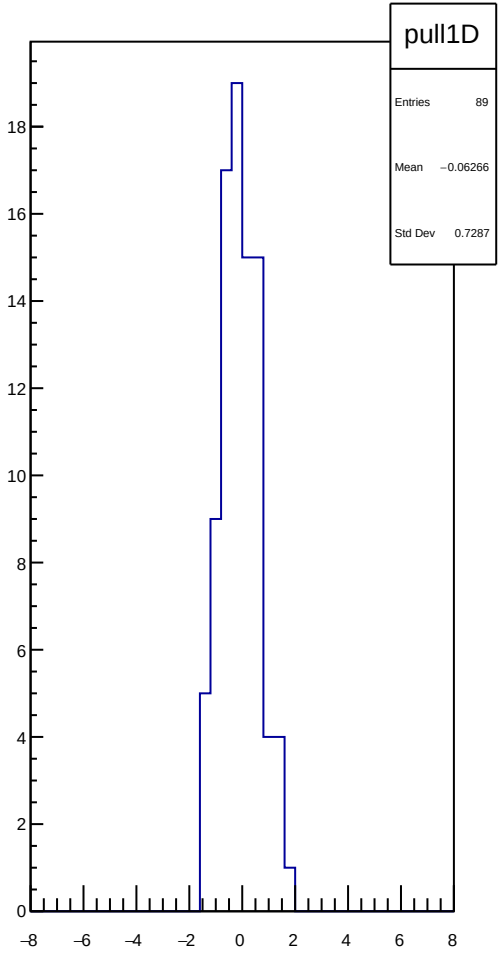

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 48.87 / 88
p0 250.5 ± 4.881
400
350
300
250
200
150
pull
Entries 89
Mean 63.42
Std Dev 26.33
1.5
1
0.5
0
−0.5
−1
−1.5

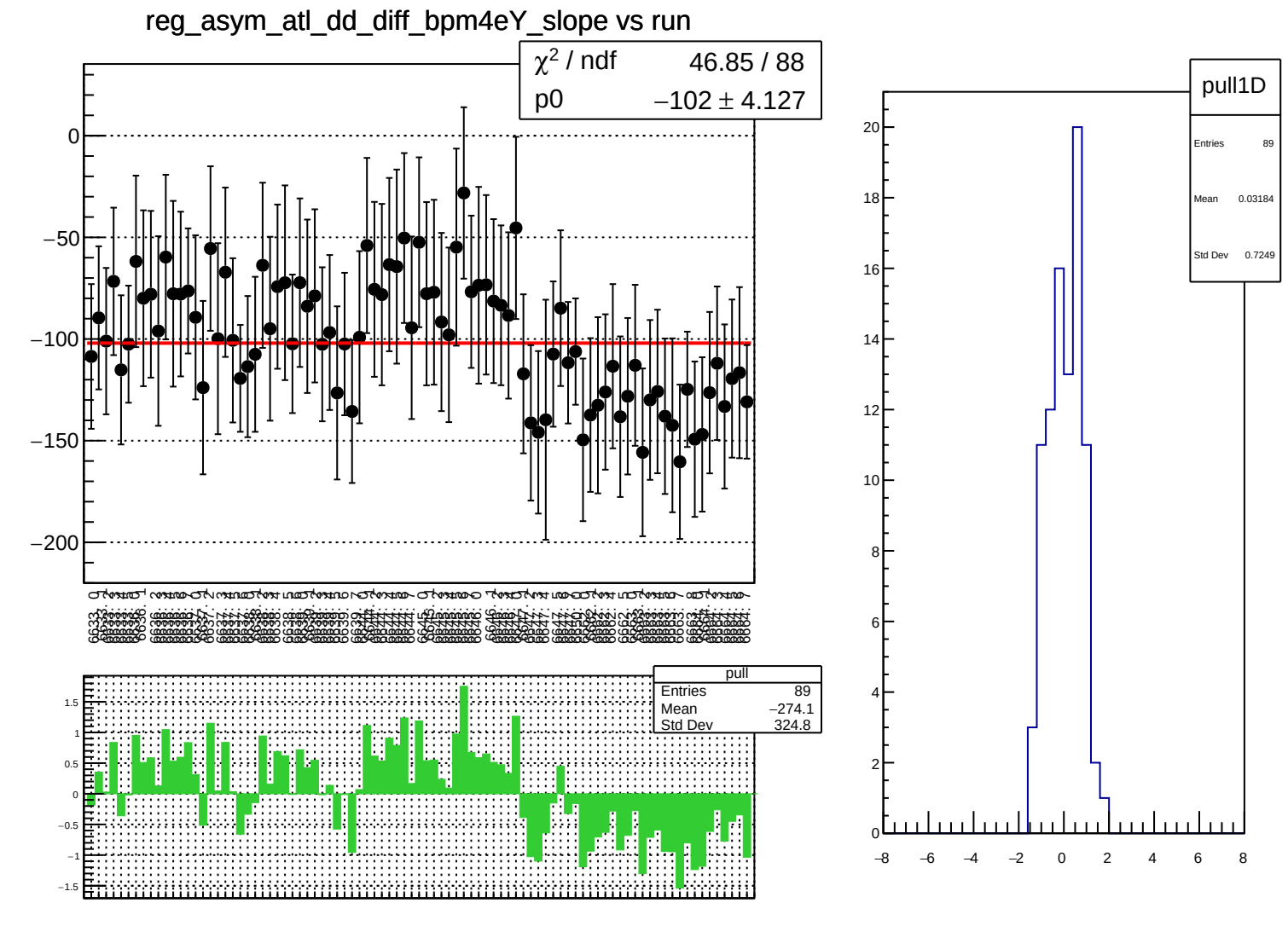

pull1D
Entries 89
Mean 0.06326
Std Dev 0.7383
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

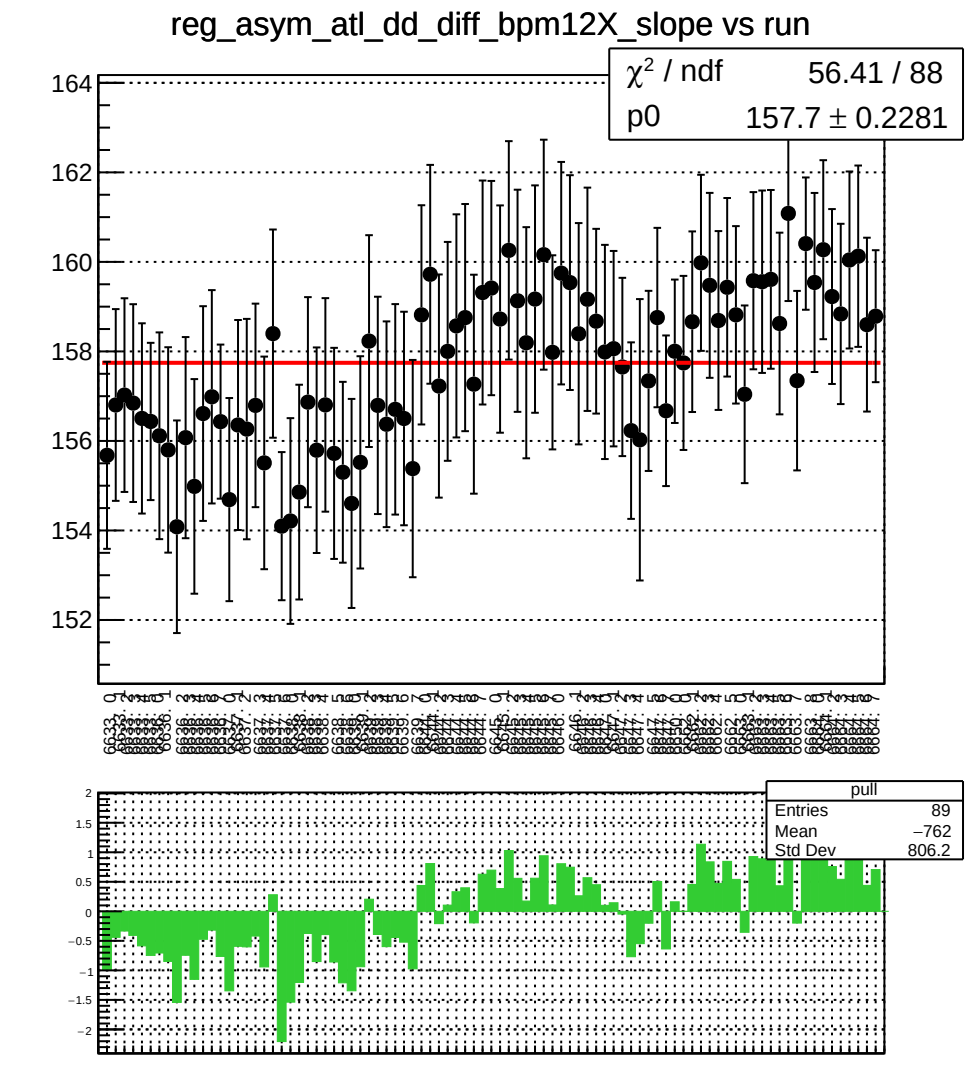

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ^2 / ndf 30.89 / 88
p0 8.968 ± 3.481
pull
Entries 89
Mean −454.3
Std Dev 506.6

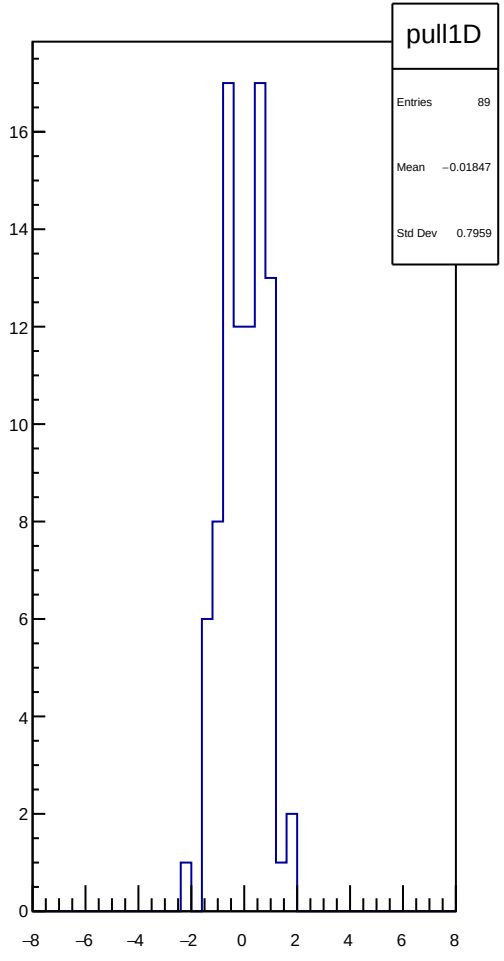

pull1D
Entries 89
Mean −0.01266
Std Dev 0.589

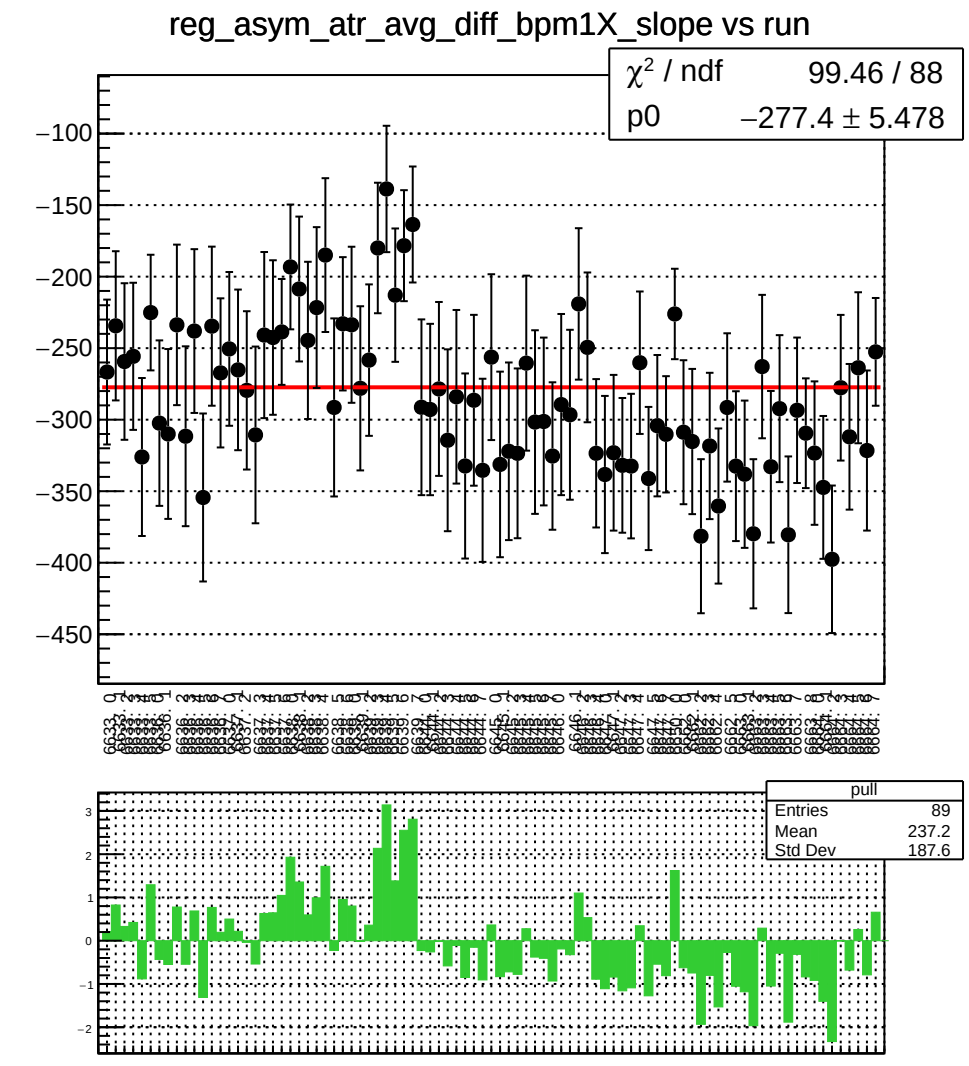

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 47.61 / 88
p0 −218.6 ± 5.224
pull
Entries 89
Mean 70.28
Std Dev 30.47

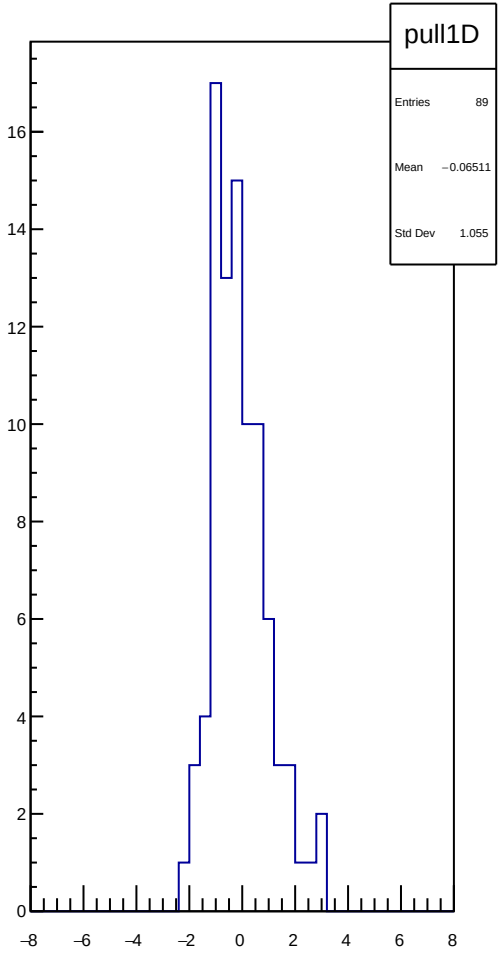

pull1D
Entries 89
Mean −0.06266
Std Dev 0.7287

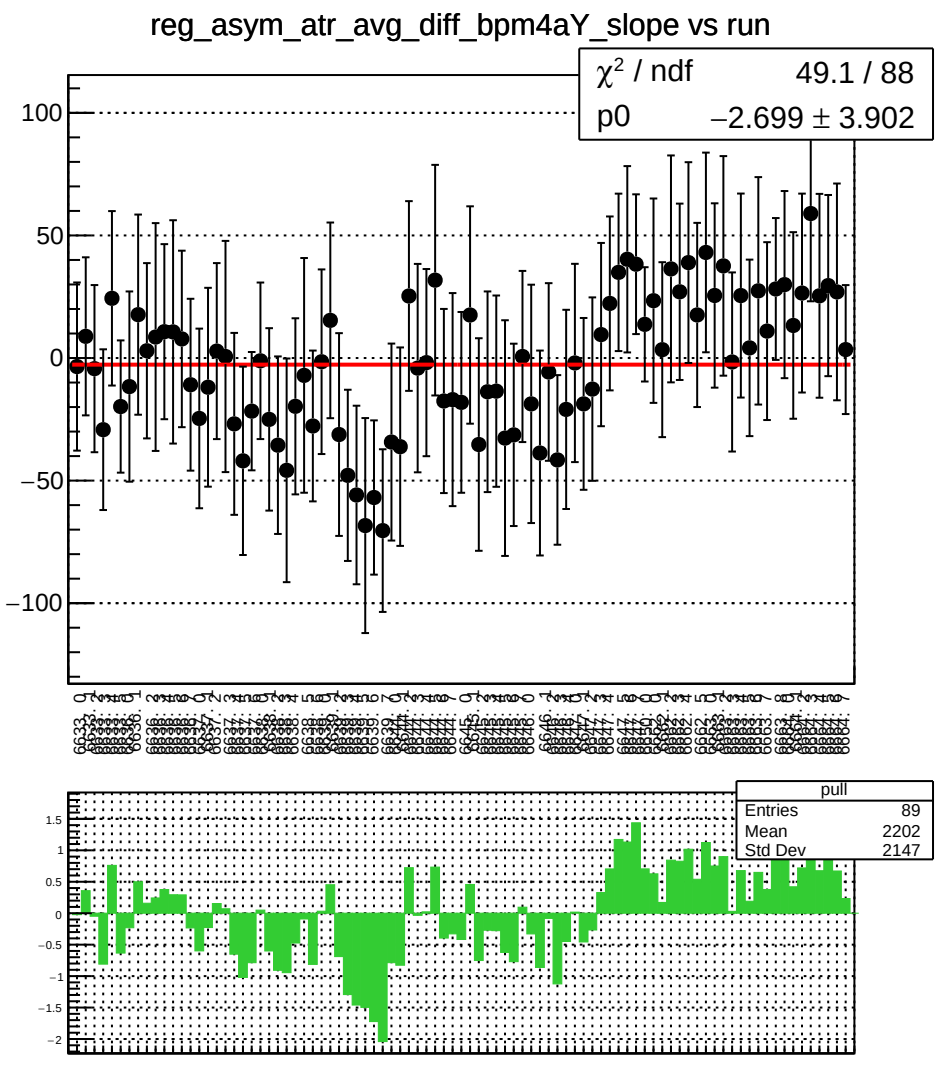

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 46.85 / 88
p0 −102 ± 4.127
0
−50
−100
−150
−200
pull
Entries 89
Mean −274.1
Std Dev 324.8
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean 0.03184
Std Dev 0.7249
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

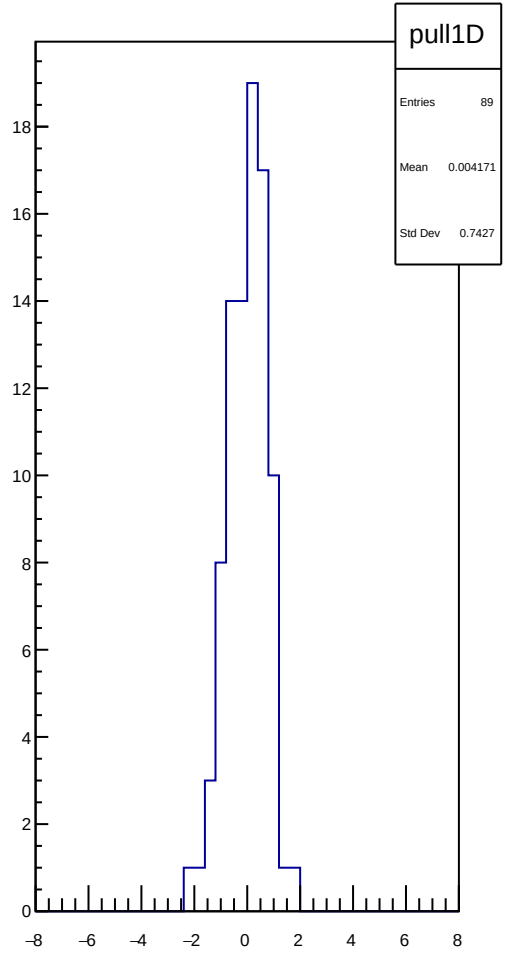

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 56.41 / 88
p0 157.7 ± 0.2281
164
162
160
158
156
154
152
pull
Entries 89
Mean −762
Std Dev 806.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

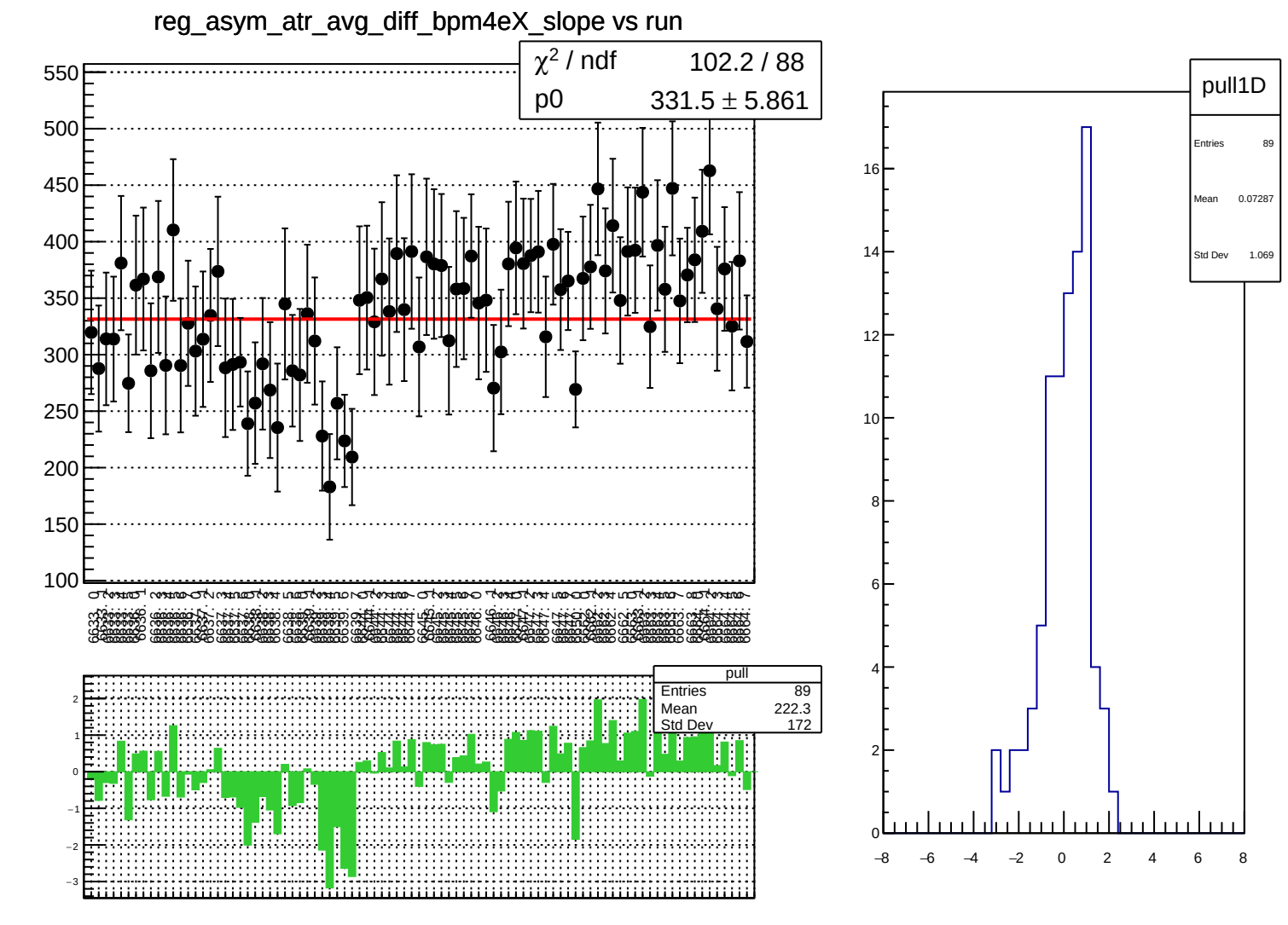

pull1D
Entries 89
Mean −0.01847
Std Dev 0.7959
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

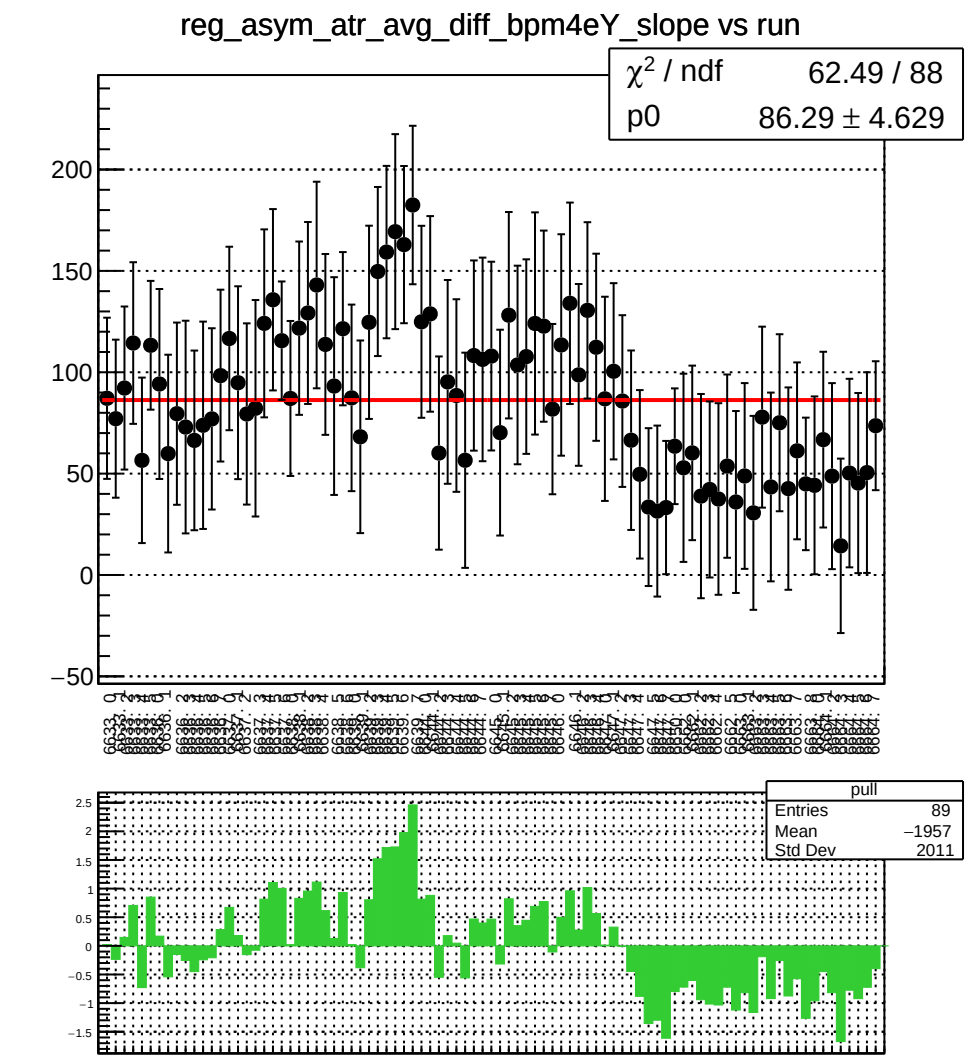

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 99.46 / 88
p0 −277.4 ± 5.478
pull
Entries 89
Mean 237.2
Std Dev 187.6

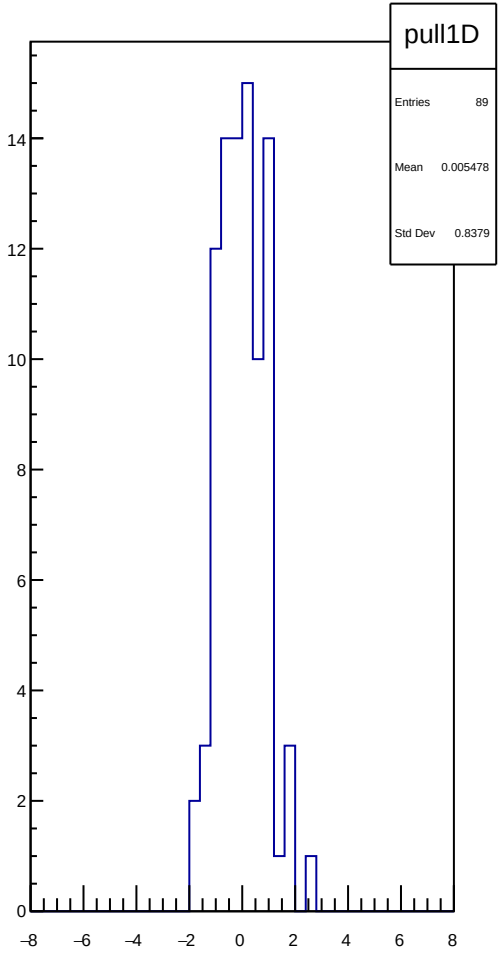

pull1D
Entries 89
Mean −0.06511
Std Dev 1.055

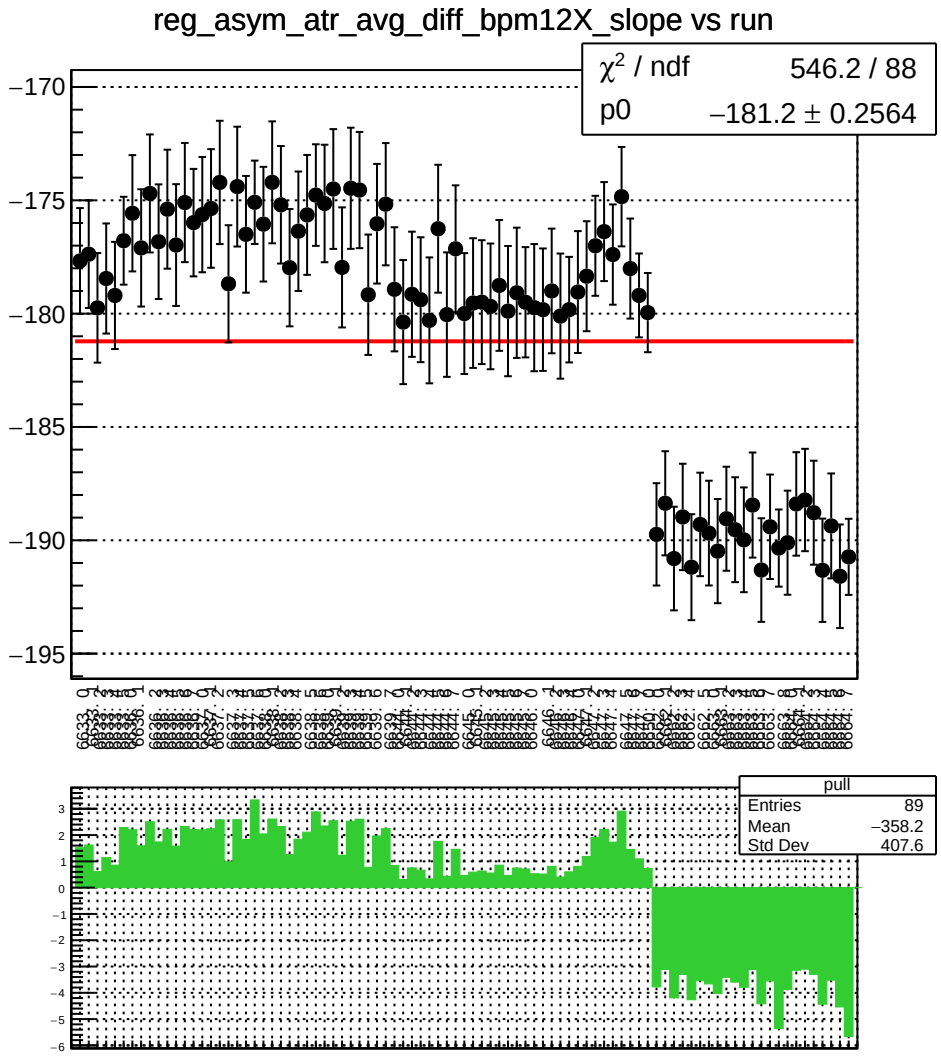

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 49.1 / 88
p0 −2.699 ± 3.902
100
50
0
−50
−100
pull
Entries 89
Mean 2202
Std Dev 2147
1.5
1
0.5
0
−0.5
−1
−1.5
−2

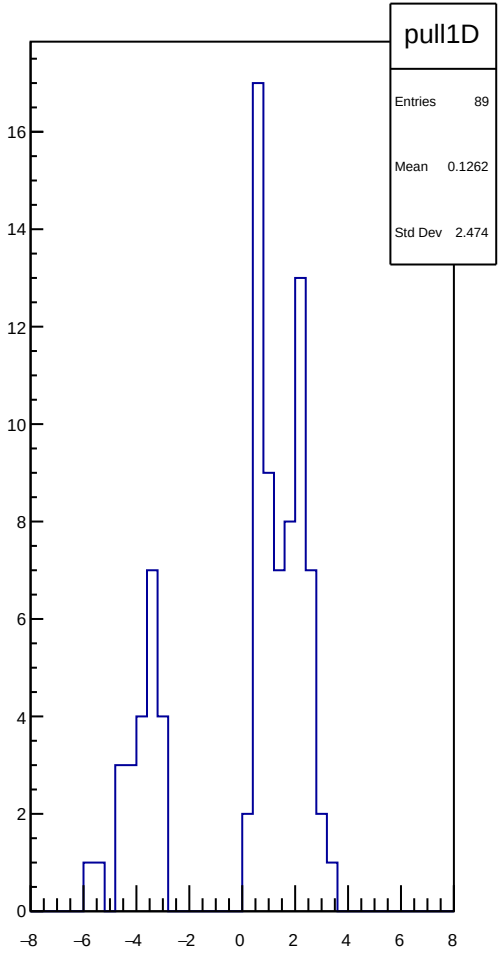

pull1D
Entries 89
Mean 0.004171
Std Dev 0.7427
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

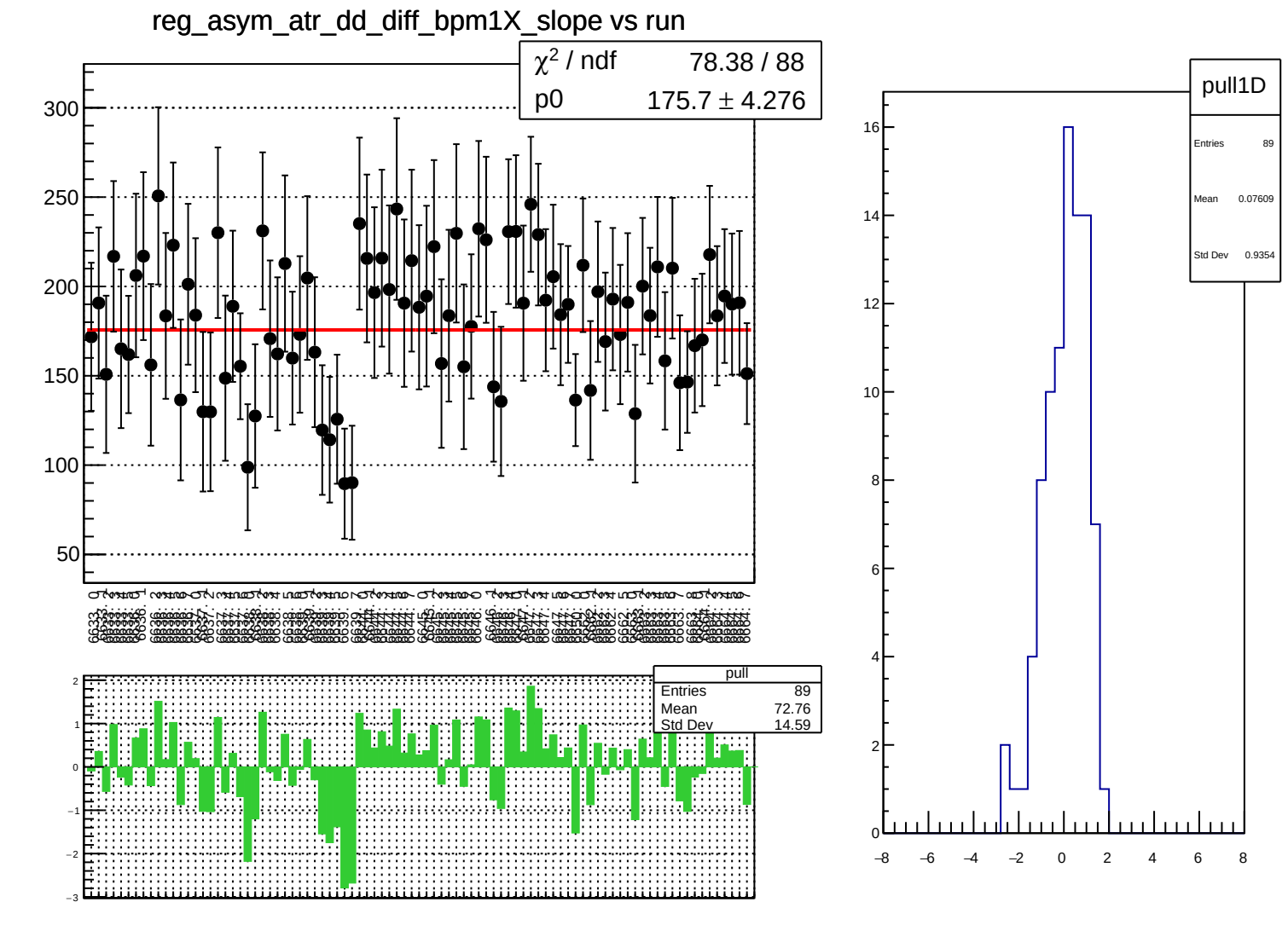

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 102.2 / 88
p0 331.5 ± 5.861
pull
Entries 89
Mean 222.3
Std Dev 172
pull1D
Entries 89
Mean 0.07287
Std Dev 1.069

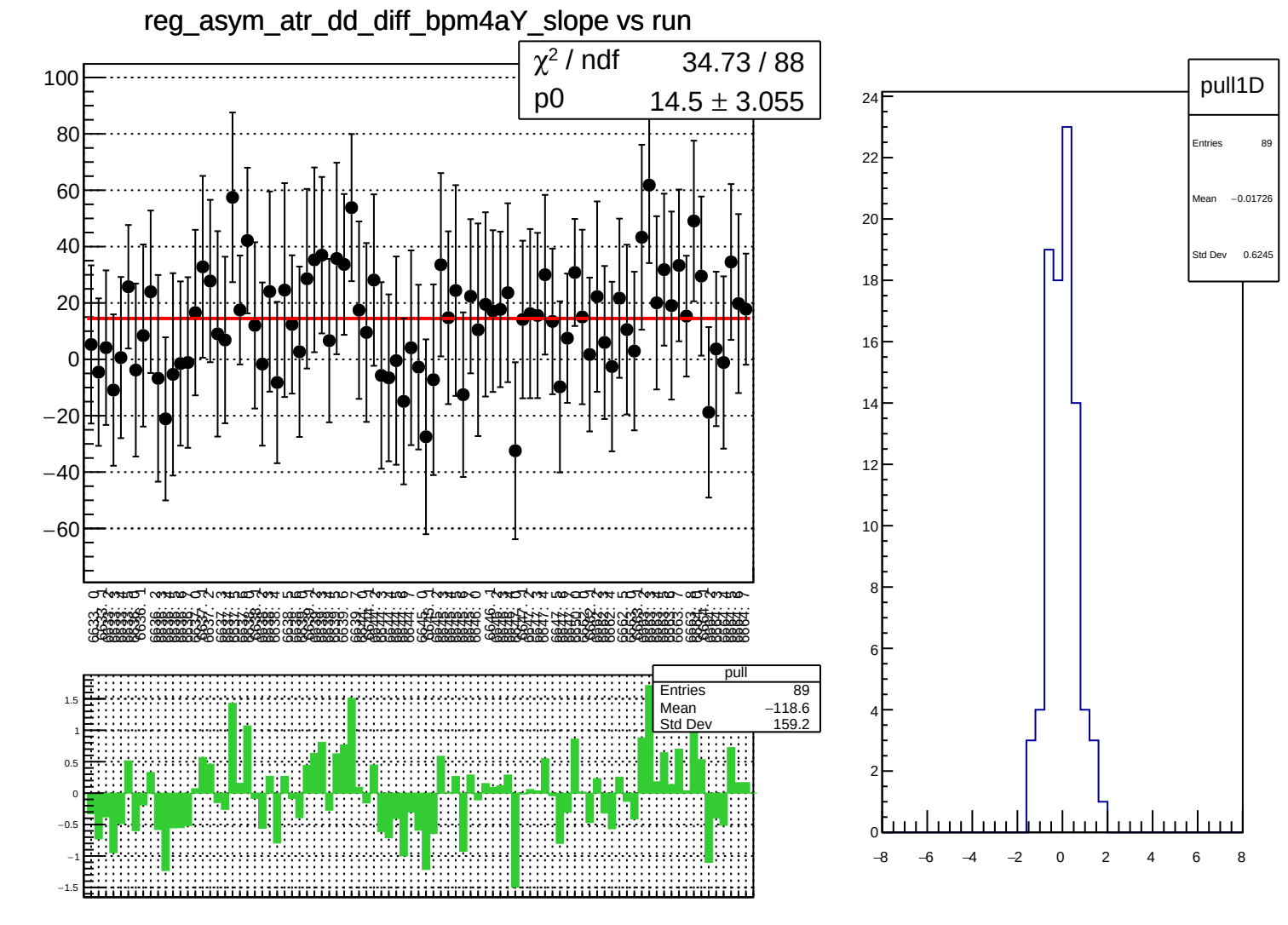

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 62.49 / 88
p0 86.29 ± 4.629
pull
Entries 89
Mean −1957
Std Dev 2011

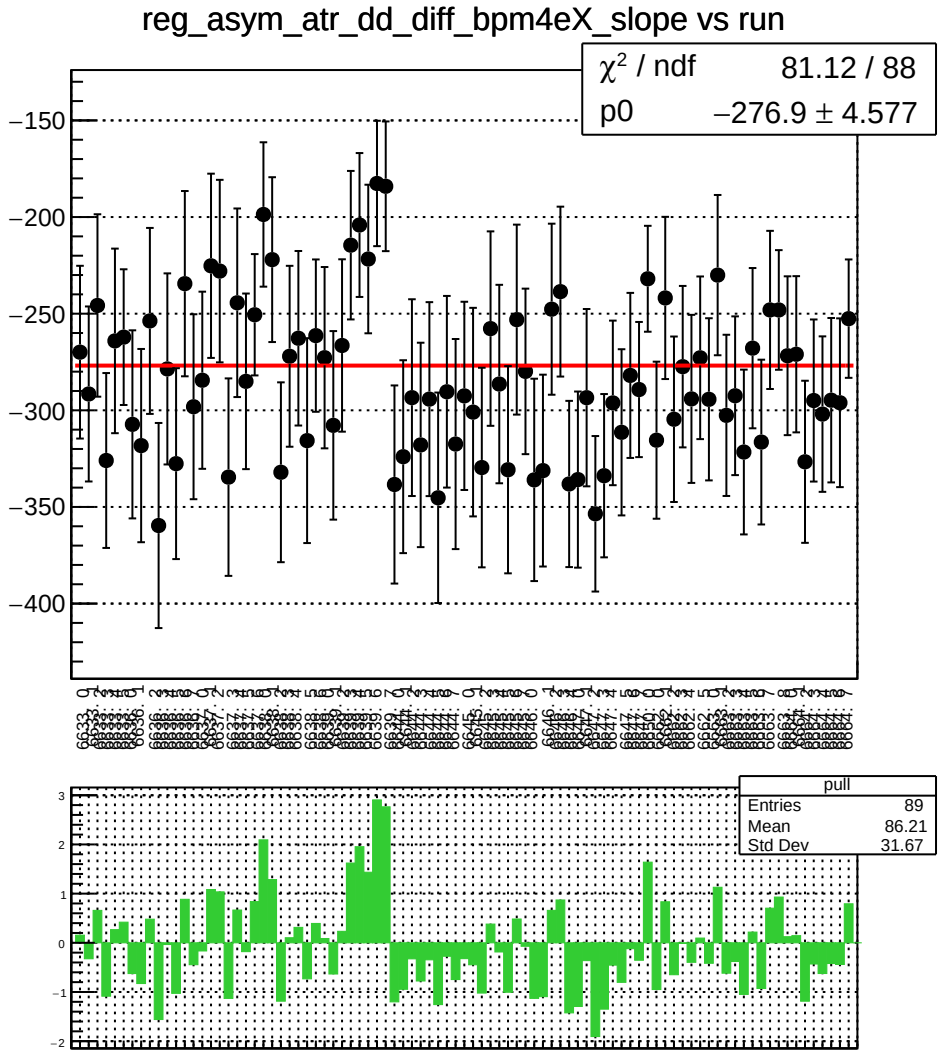

pull1D
Entries 89
Mean 0.005478
Std Dev 0.8379

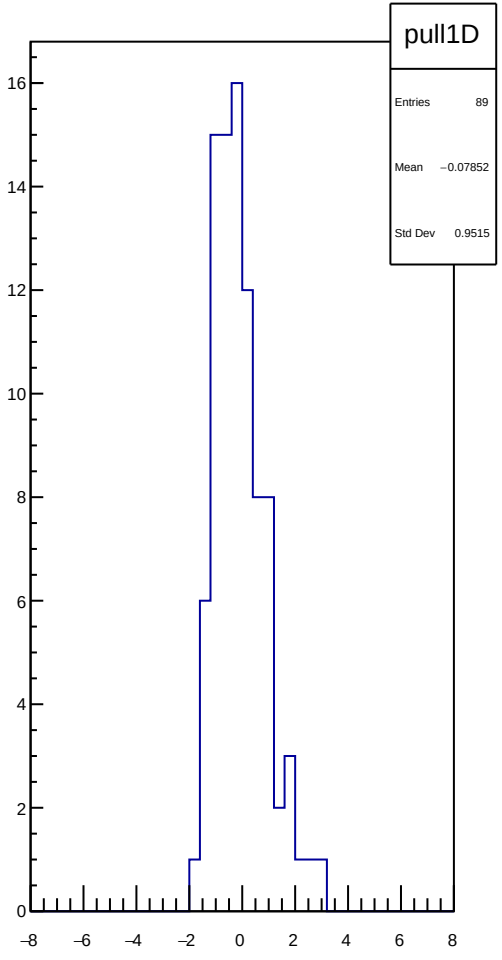

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 546.2 / 88
p0 −181.2 ± 0.2564
pull
Entries 89
Mean −358.2
Std Dev 407.6

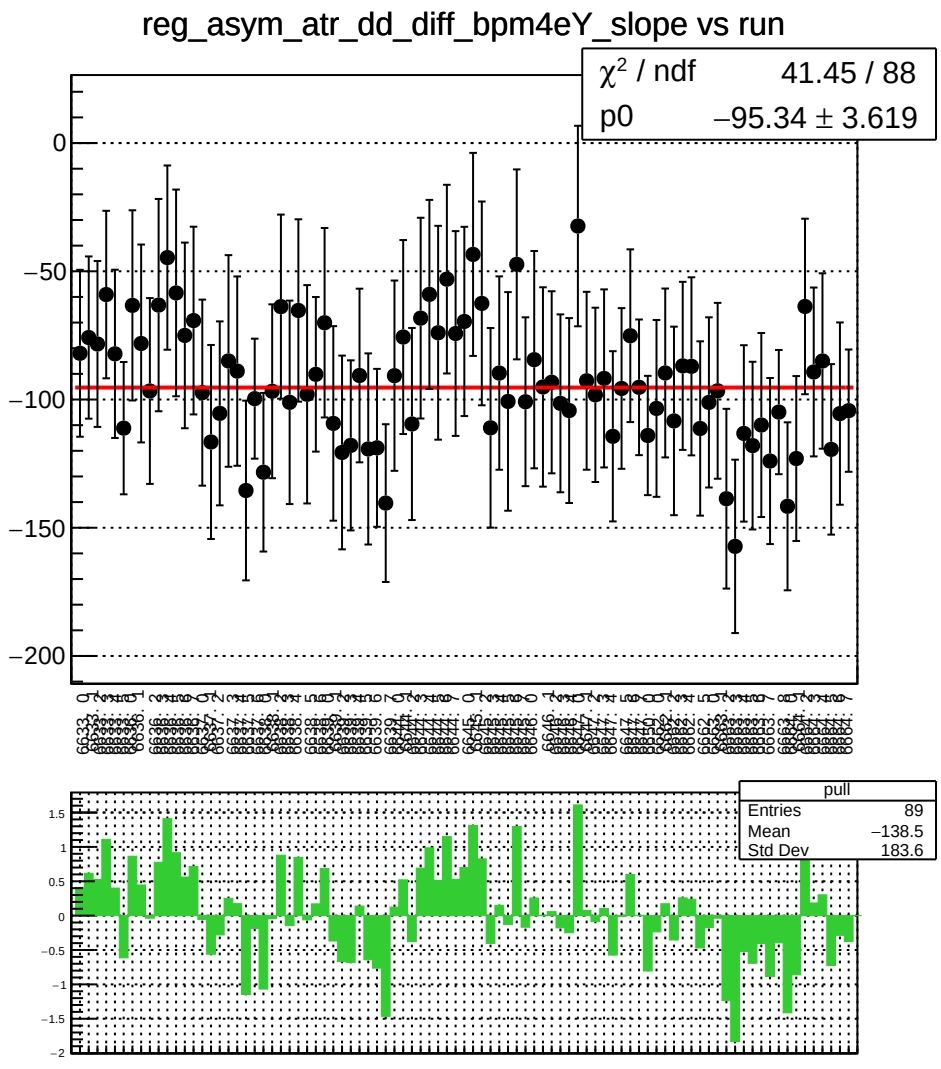

pull1D
Entries 89
Mean 0.1262
Std Dev 2.474

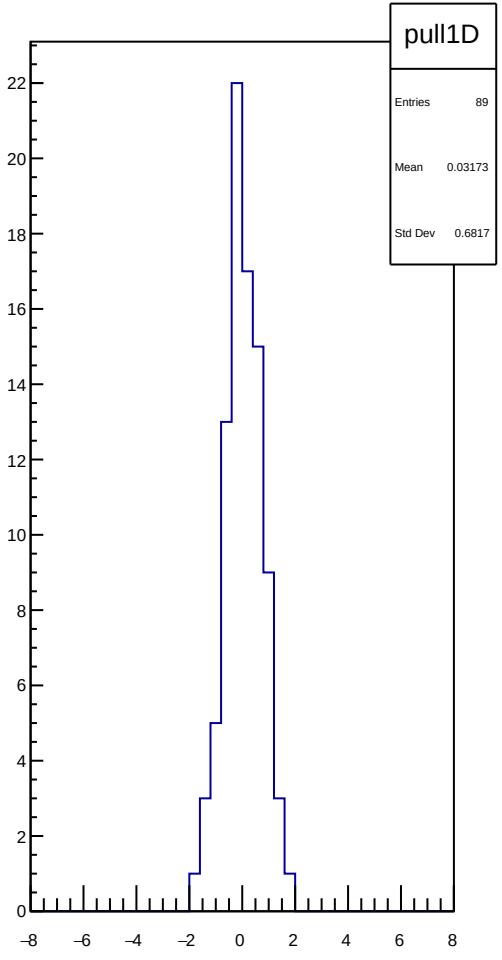

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 78.38 / 88
p0 175.7 ± 4.276
pull
Entries 89
Mean 72.76
Std Dev 14.59
pull1D
Entries 89
Mean 0.07609
Std Dev 0.9354

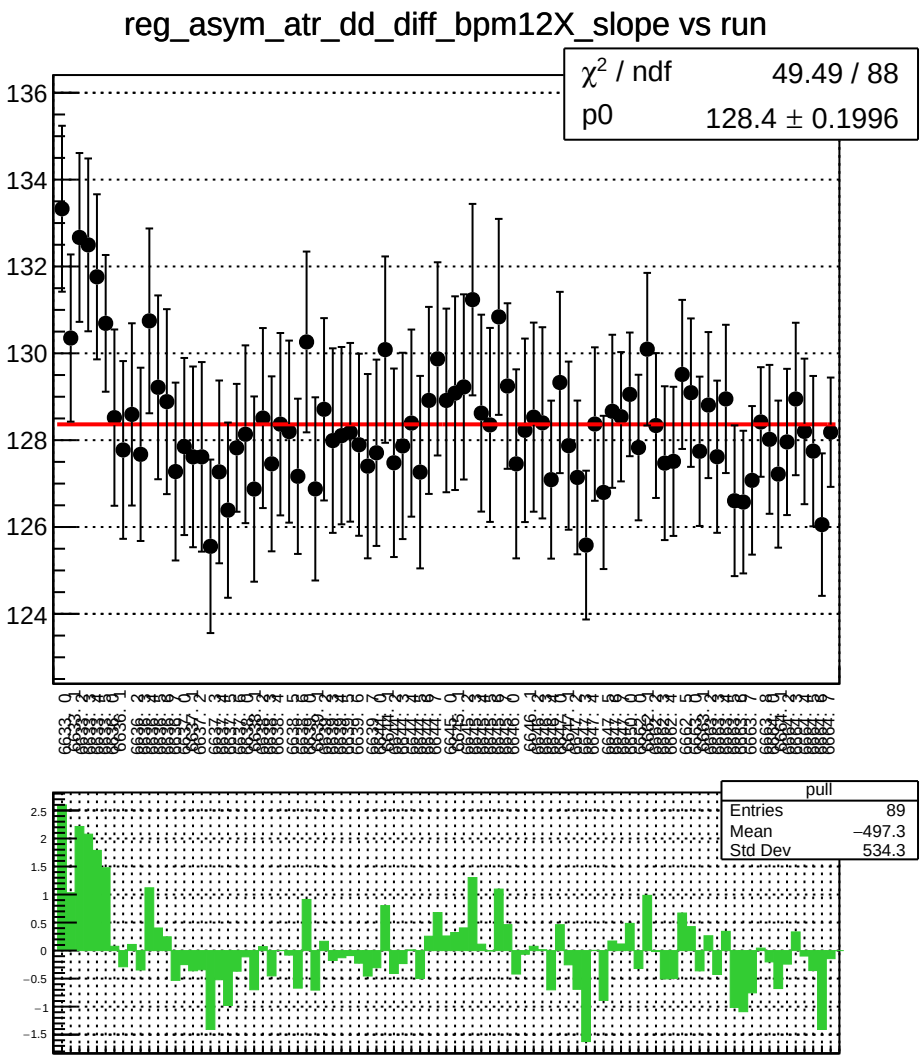

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 34.73 / 88
p0 14.5 ± 3.055
pull
Entries 89
Mean −118.6
Std Dev 159.2
pull1D
Entries 89
Mean −0.01726
Std Dev 0.6245

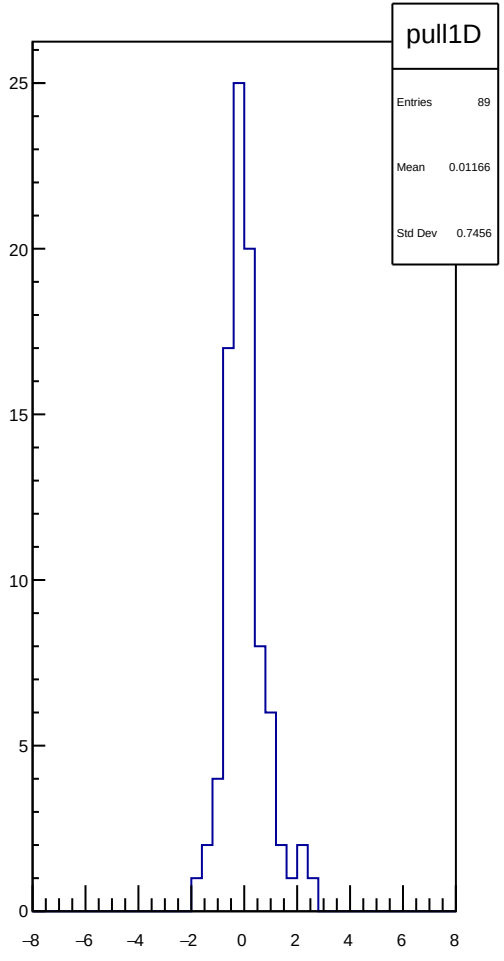

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 81.12 / 88
p0 −276.9 ± 4.577
−150
−200
−250
−300
−350
−400
pull
Entries 89
Mean 86.21
Std Dev 31.67
3
2
1
0
−1
−2

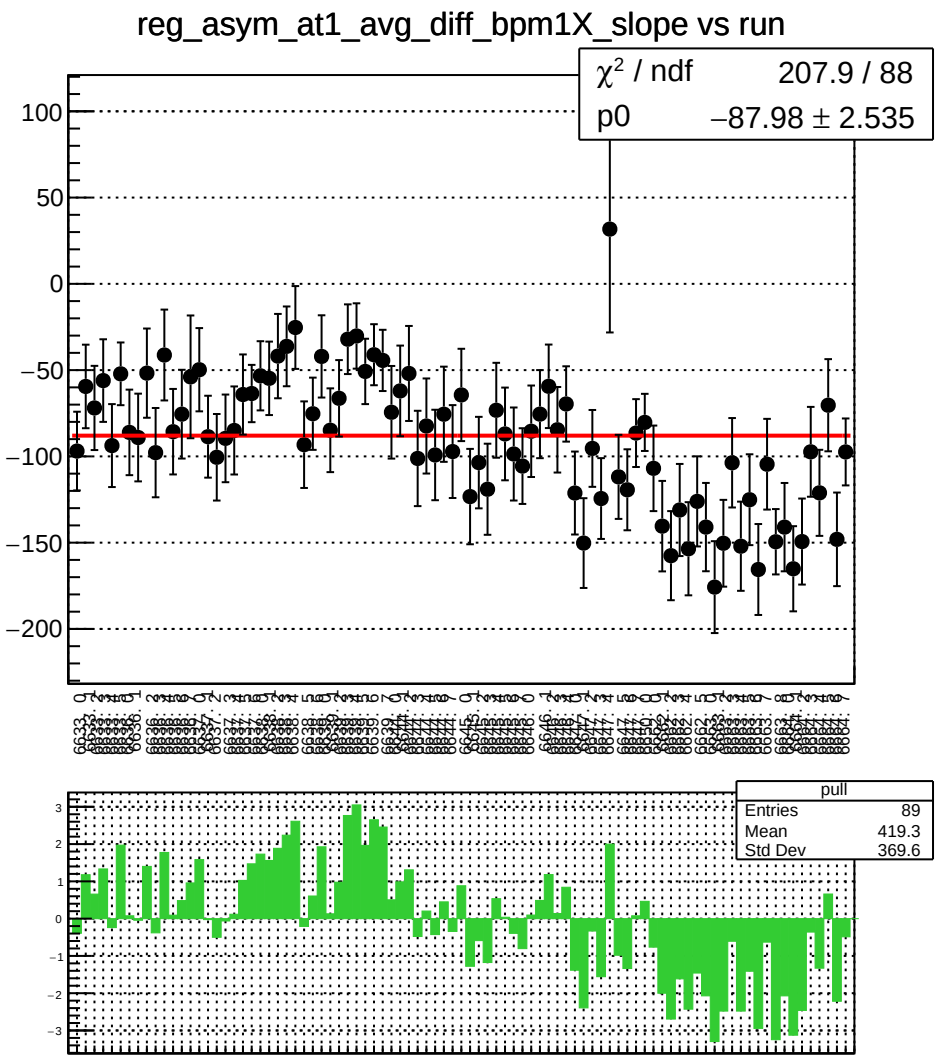

pull1D
Entries 89
Mean −0.07852
Std Dev 0.9515
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

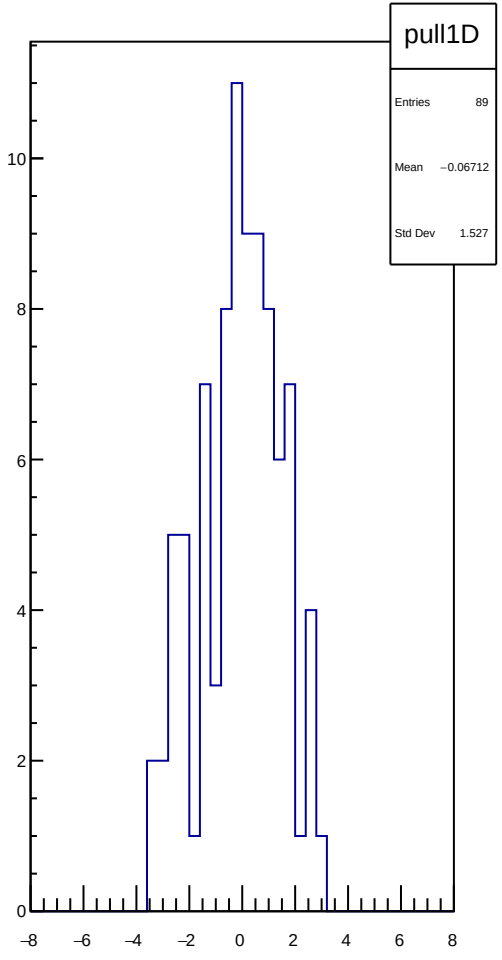

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 41.45 / 88
p0 −95.34 ± 3.619
pull
Entries 89
Mean −138.5
Std Dev 183.6

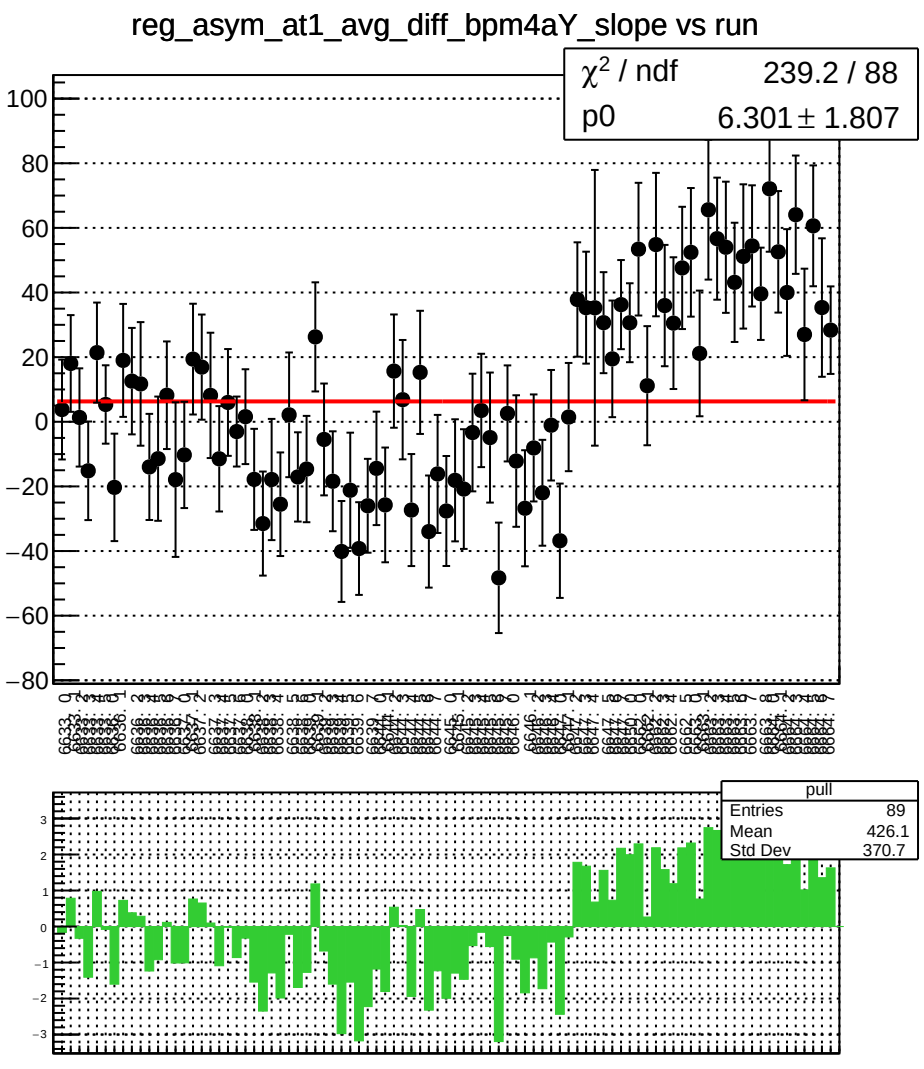

pull1D
Entries 89
Mean 0.03173
Std Dev 0.6817

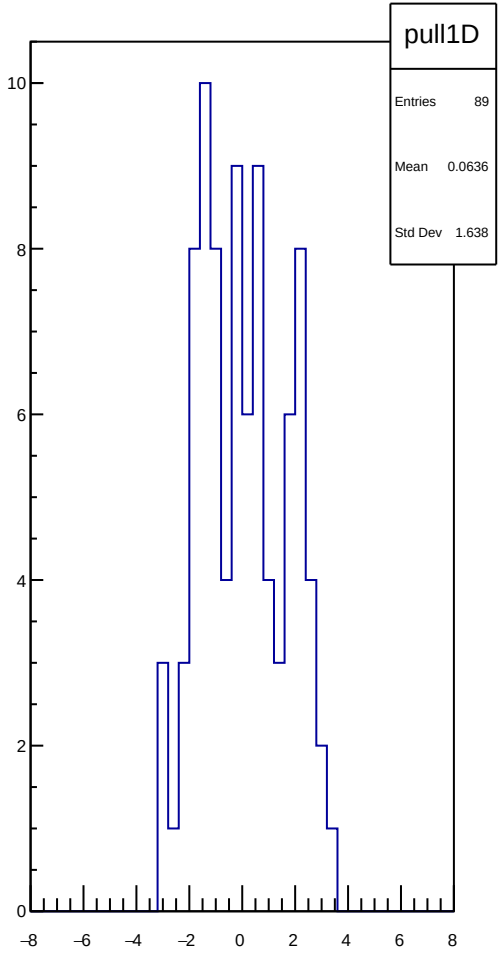

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 49.49 / 88
p0 128.4 ± 0.1996
136
134
132
130
128
126
124
pull
Entries 89
Mean −497.3
Std Dev 534.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

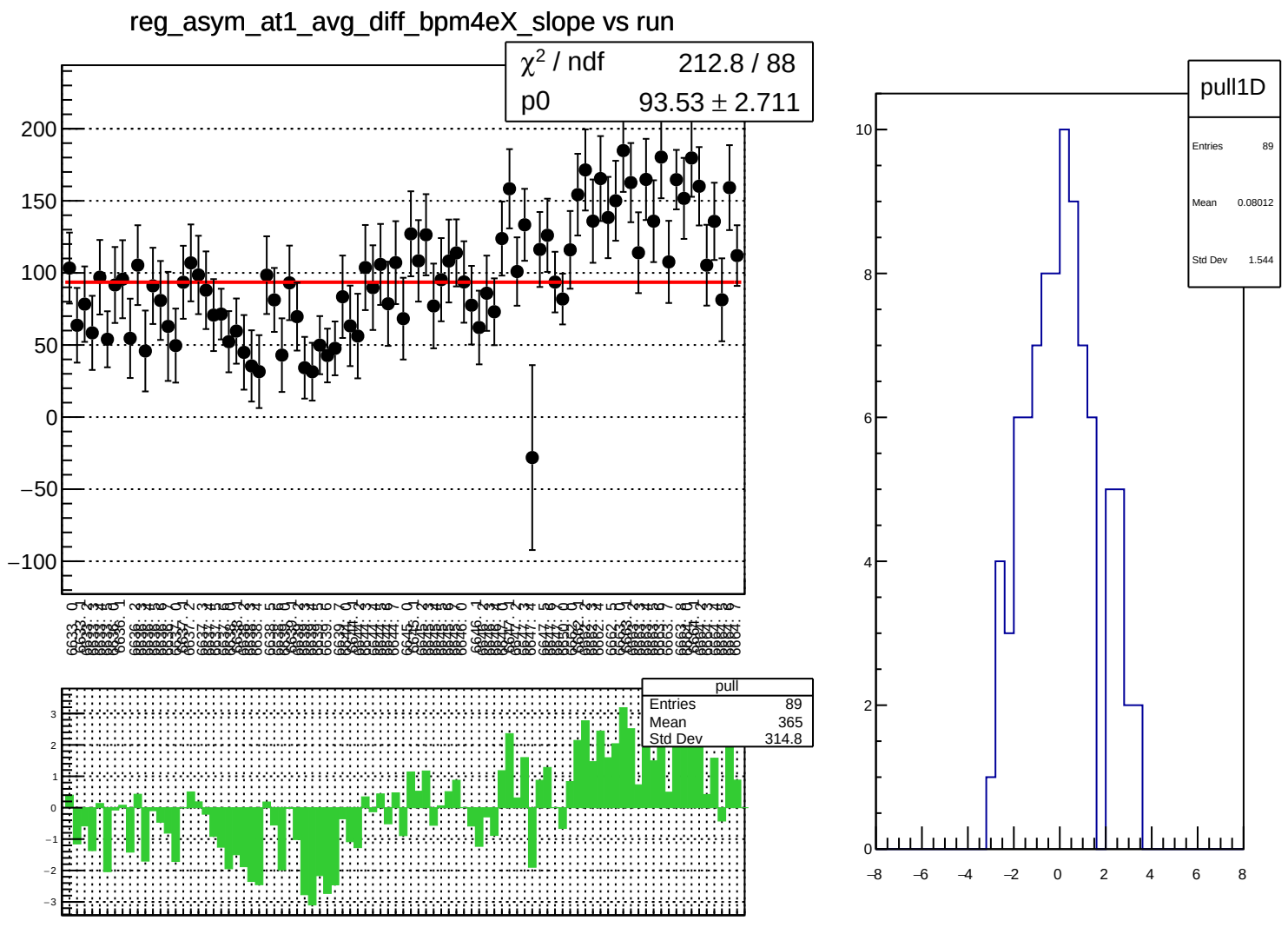

pull1D
Entries 89
Mean 0.01166
Std Dev 0.7456
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

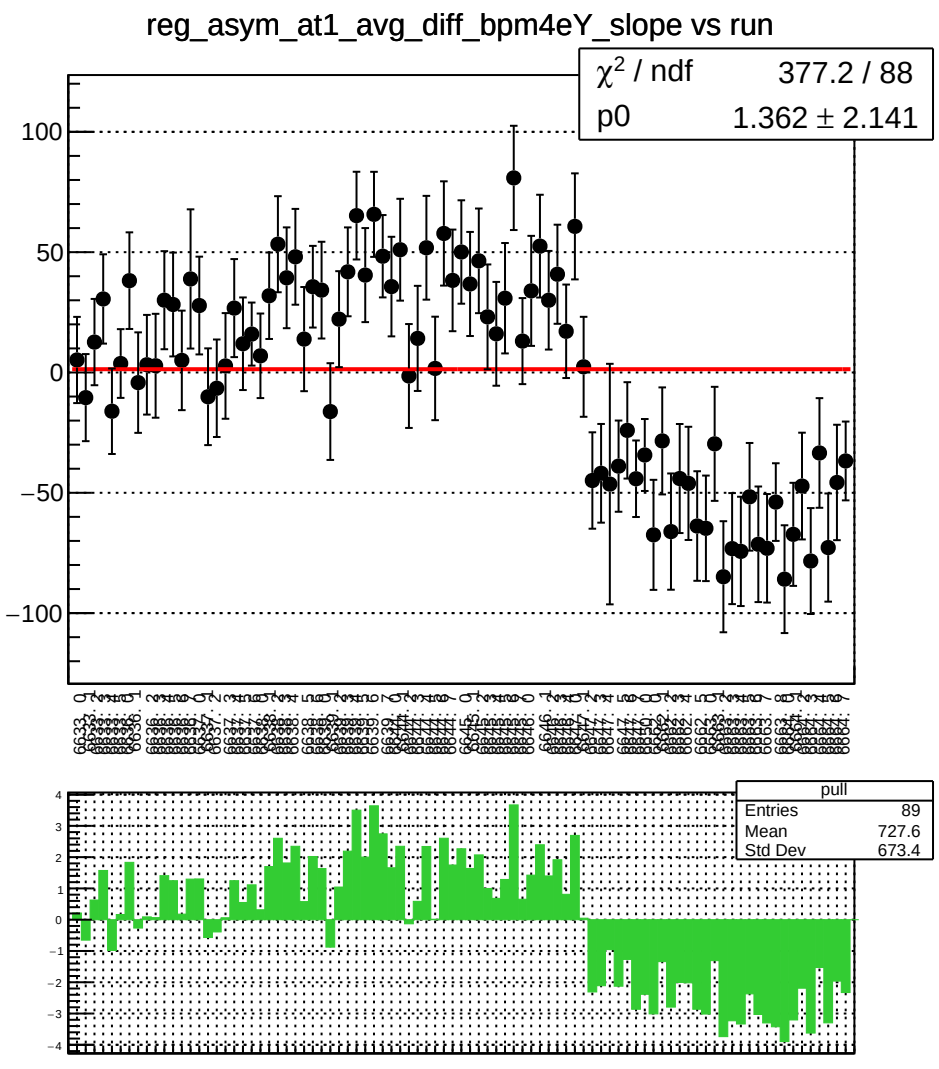

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 207.9 / 88
p0 −87.98 ± 2.535
pull
Entries 89
Mean 419.3
Std Dev 369.6

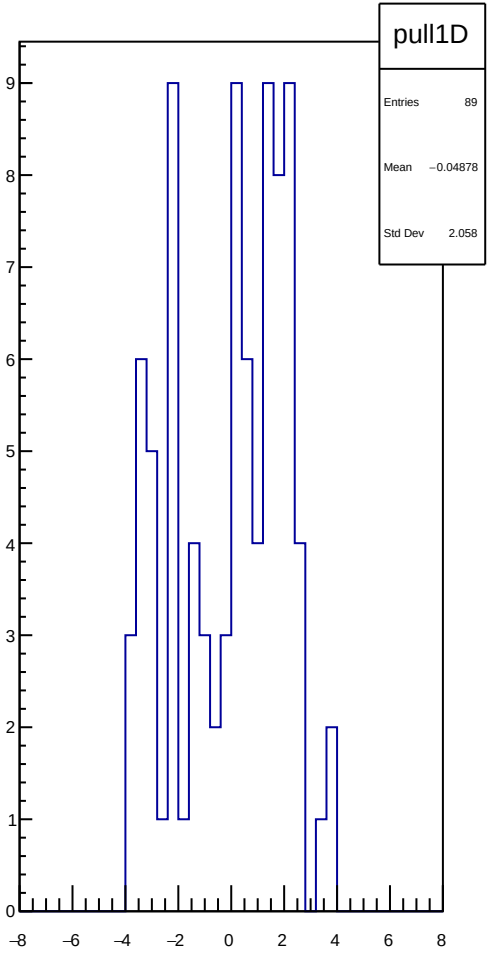

pull1D
Entries 89
Mean −0.06712
Std Dev 1.527

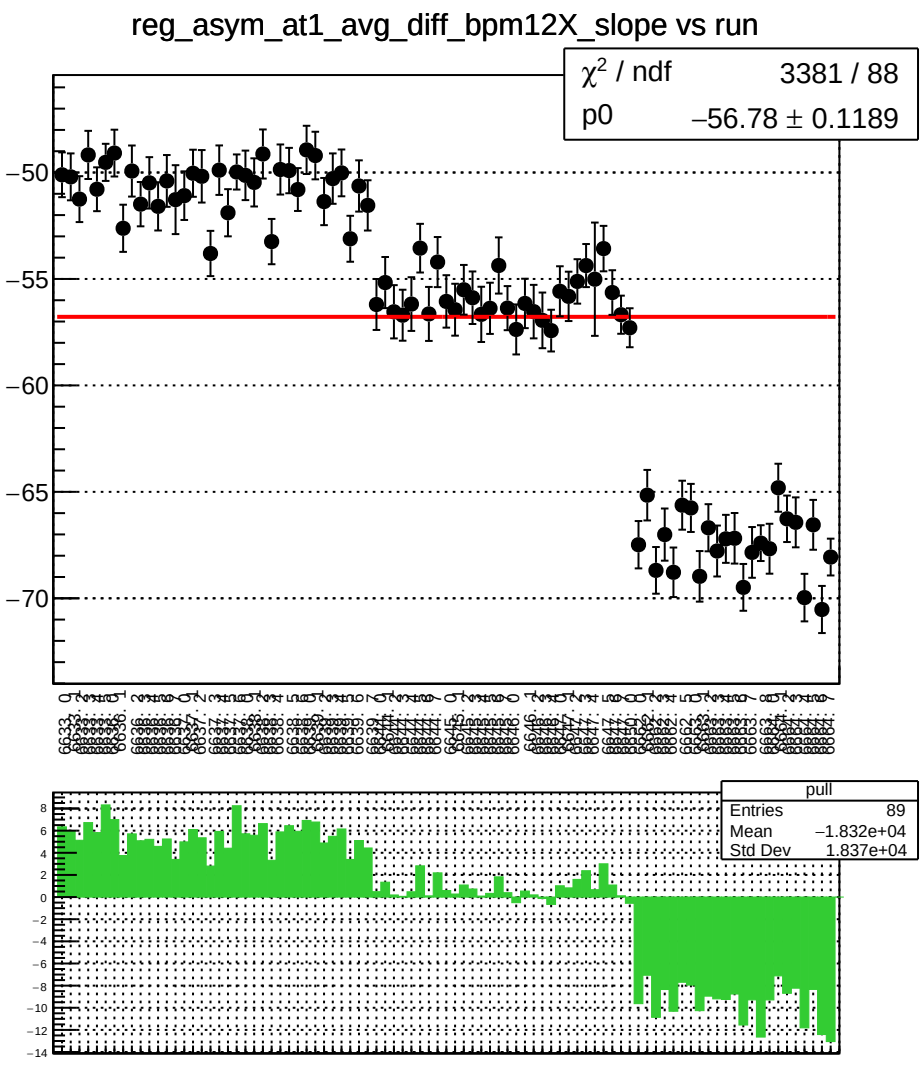

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 239.2 / 88
p0 6.301 ± 1.807
pull
Entries 89
Mean 426.1
Std Dev 370.7

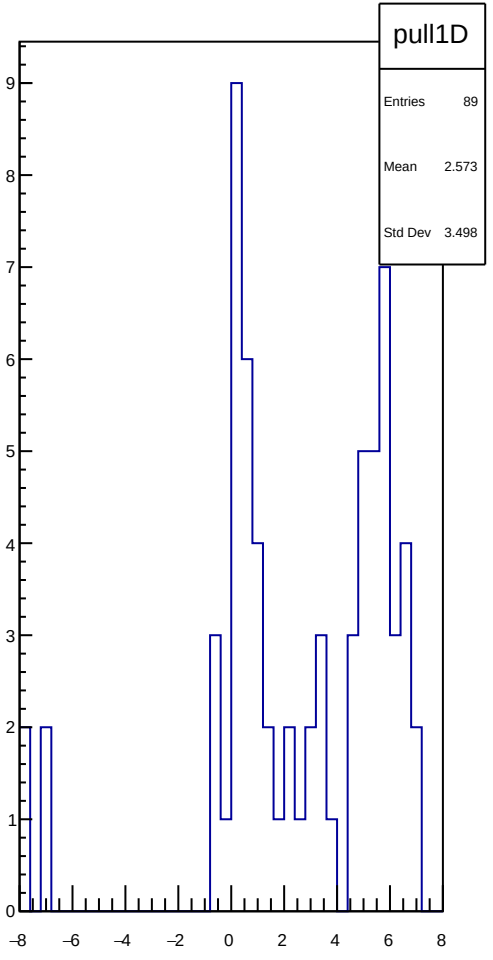

pull1D
Entries 89
Mean 0.0636
Std Dev 1.638

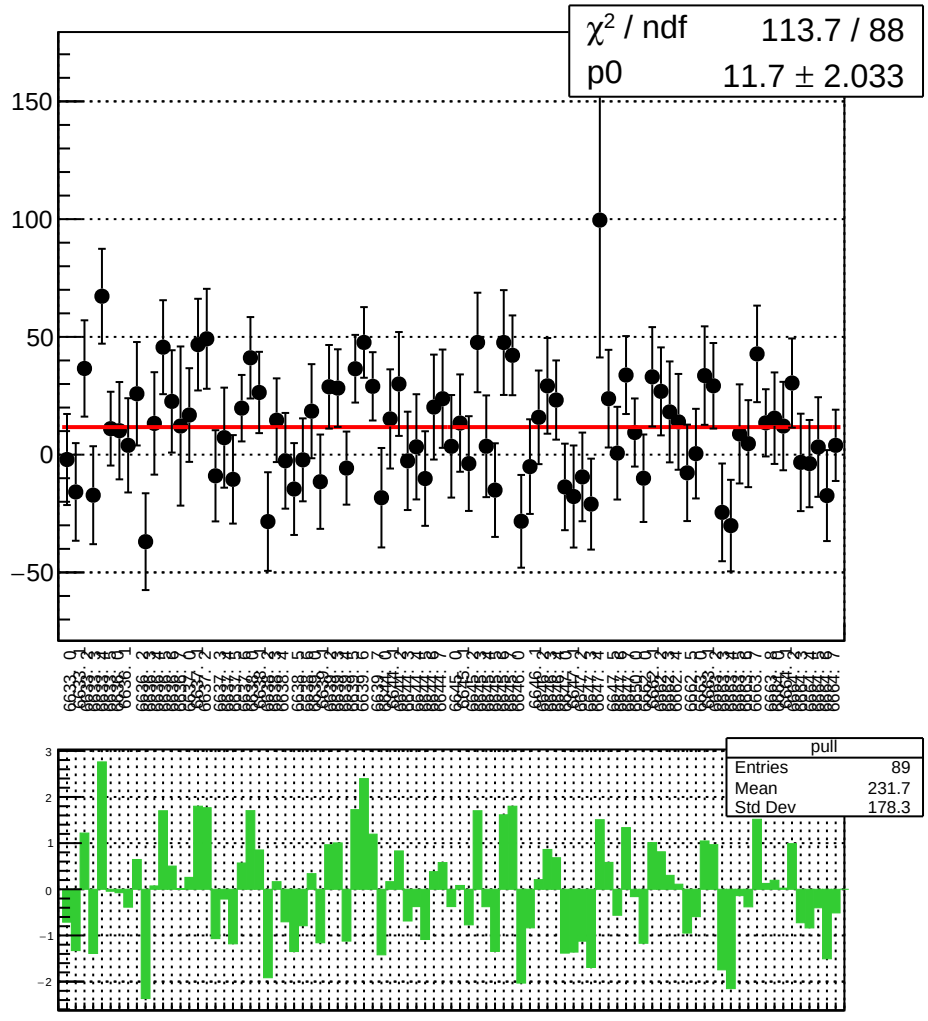

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 212.8 / 88
p0 93.53 ± 2.711
200
150
100
50
0
−50
−100
pull
Entries 89
Mean 365
Std Dev 314.8
3
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean 0.08012
Std Dev 1.544
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

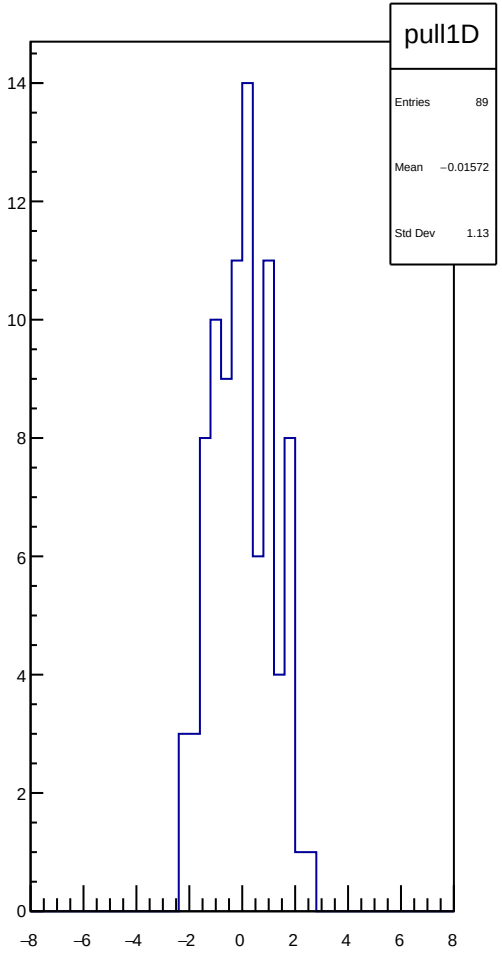

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 377.2 / 88
p0 1.362 ± 2.141
100
50
0
−50
−100
pull
Entries 89
Mean 727.6
Std Dev 673.4
4
3
2
1
0
−1
−2
−3
−4

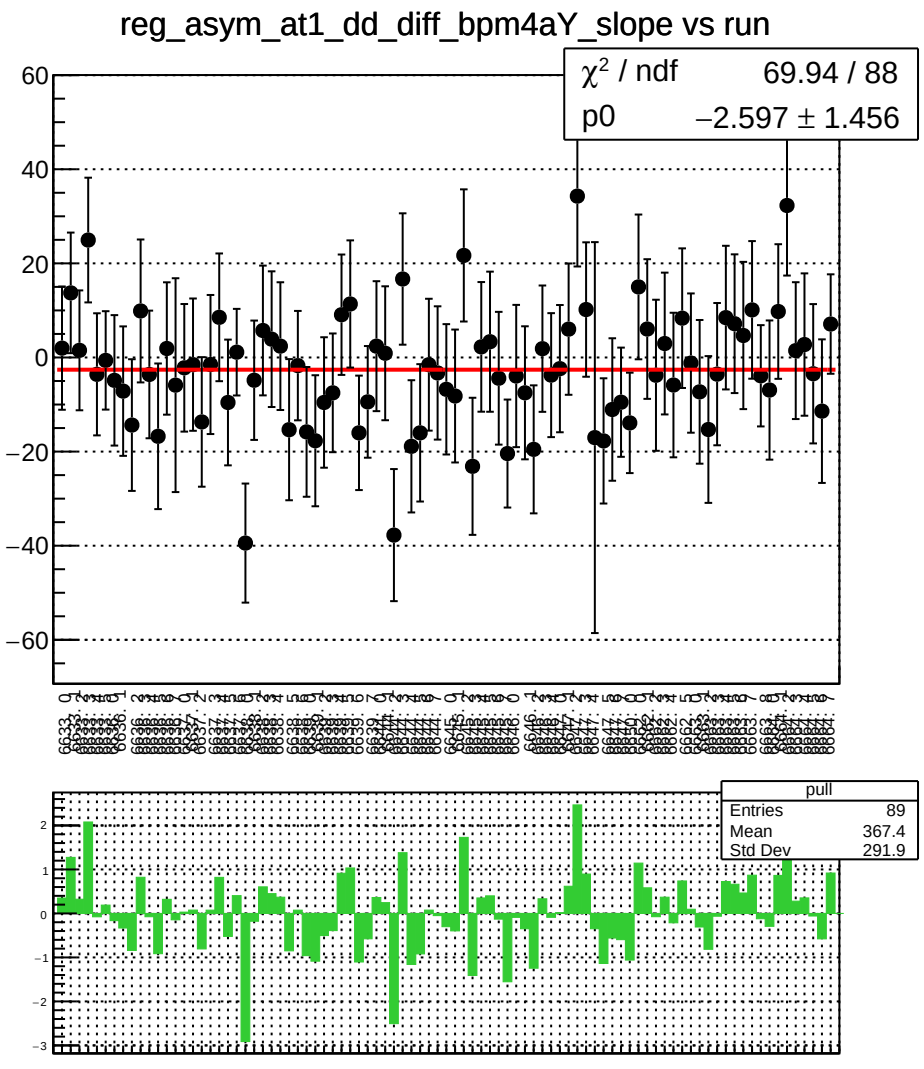

pull1D
Entries 89
Mean −0.04878
Std Dev 2.058
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

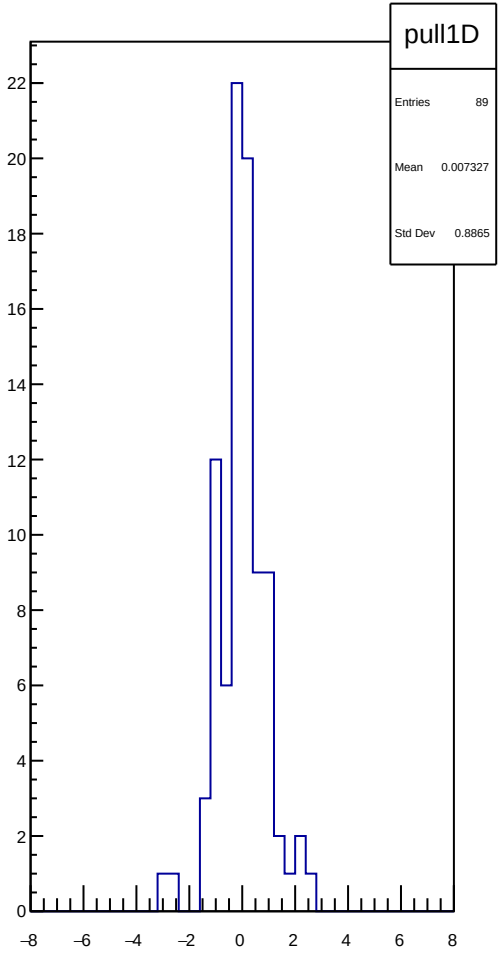

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 3381 / 88
p0 −56.78 ± 0.1189
−50
−55
−60
−65
−70
pull
Entries 89
Mean −1.832e+04
Std Dev 1.837e+04
8
6
4
2
0
−2
−4
−6
−8
−10
−12
−14

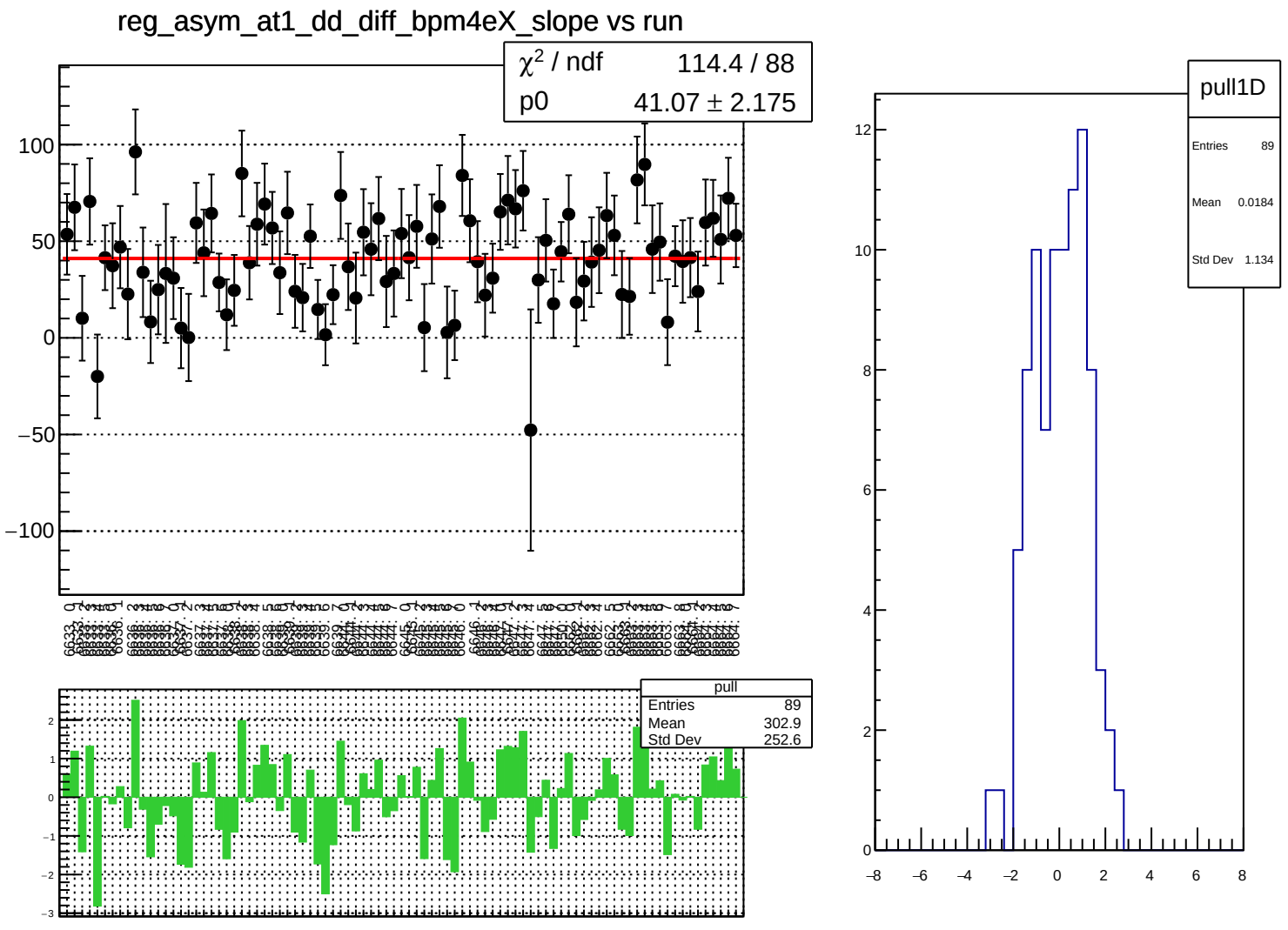

pull1D
Entries 89
Mean 2.573
Std Dev 3.498
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

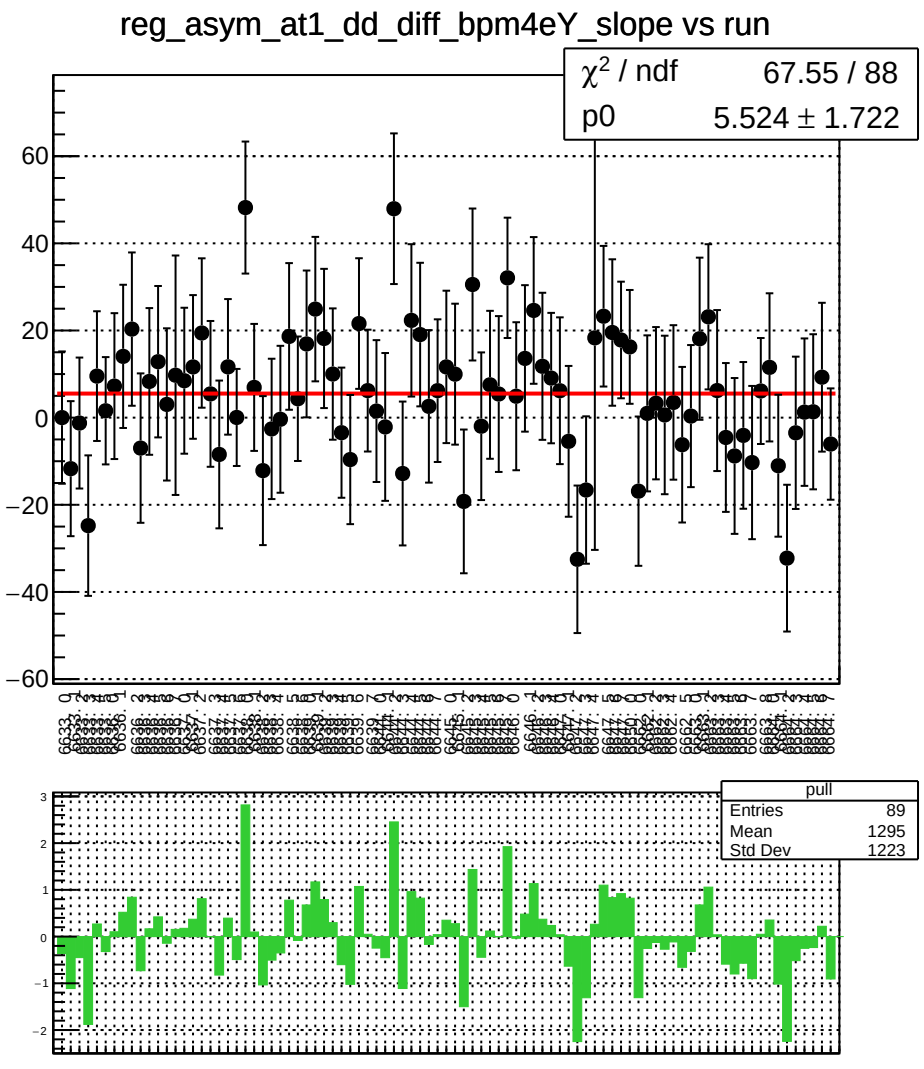

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 113.7 / 88
p0 11.7 ± 2.033
150
100
50
0
−50
pull
Entries 89
Mean 231.7
Std Dev 178.3
3
2
1
0
−1
−2

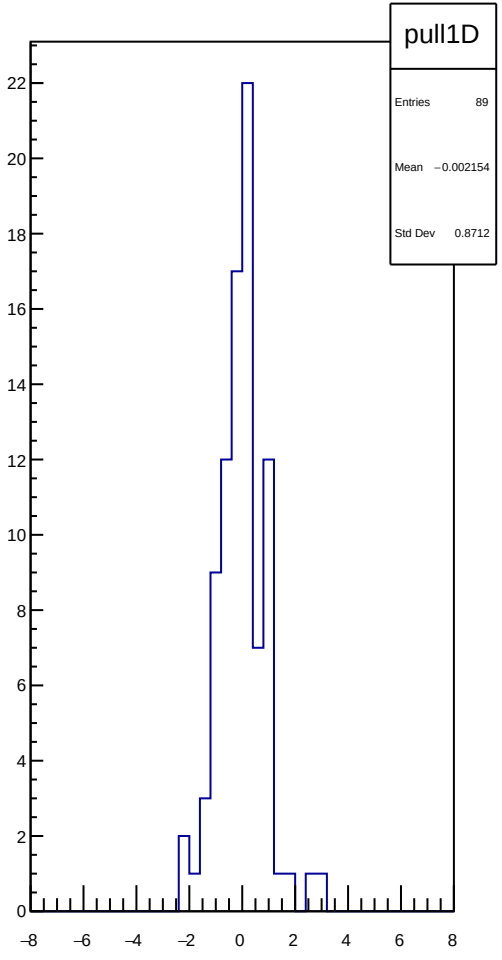

pull1D
Entries 89
Mean −0.01572
Std Dev 1.13
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

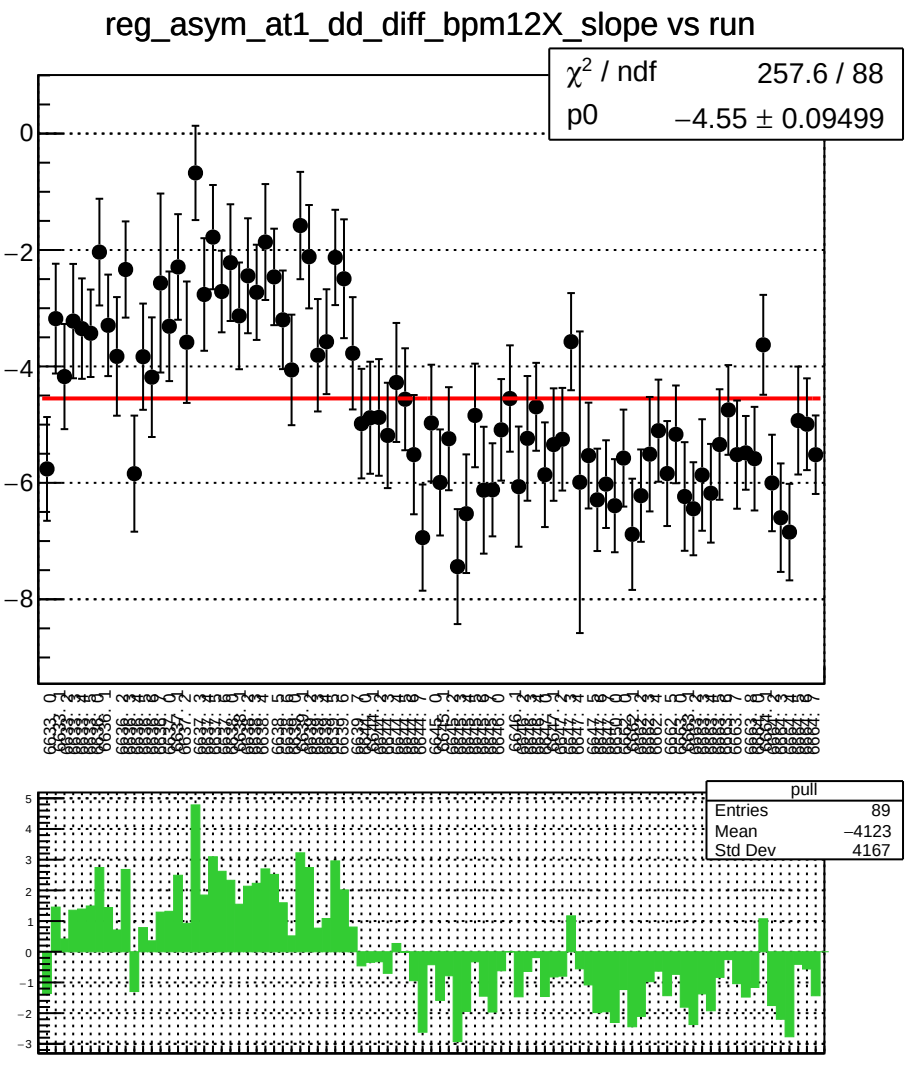

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 69.94 / 88
p0 −2.597 ± 1.456
pull
Entries 89
Mean 367.4
Std Dev 291.9

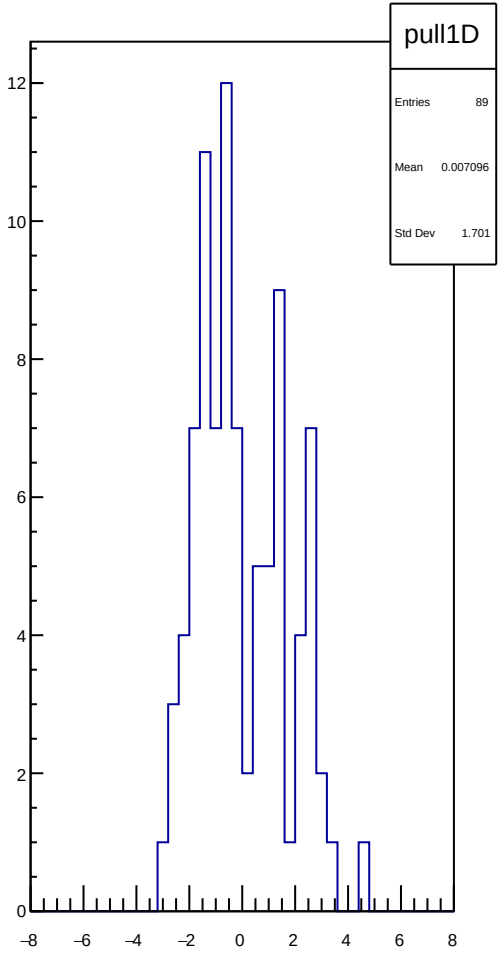

pull1D
Entries 89
Mean 0.007327
Std Dev 0.8865

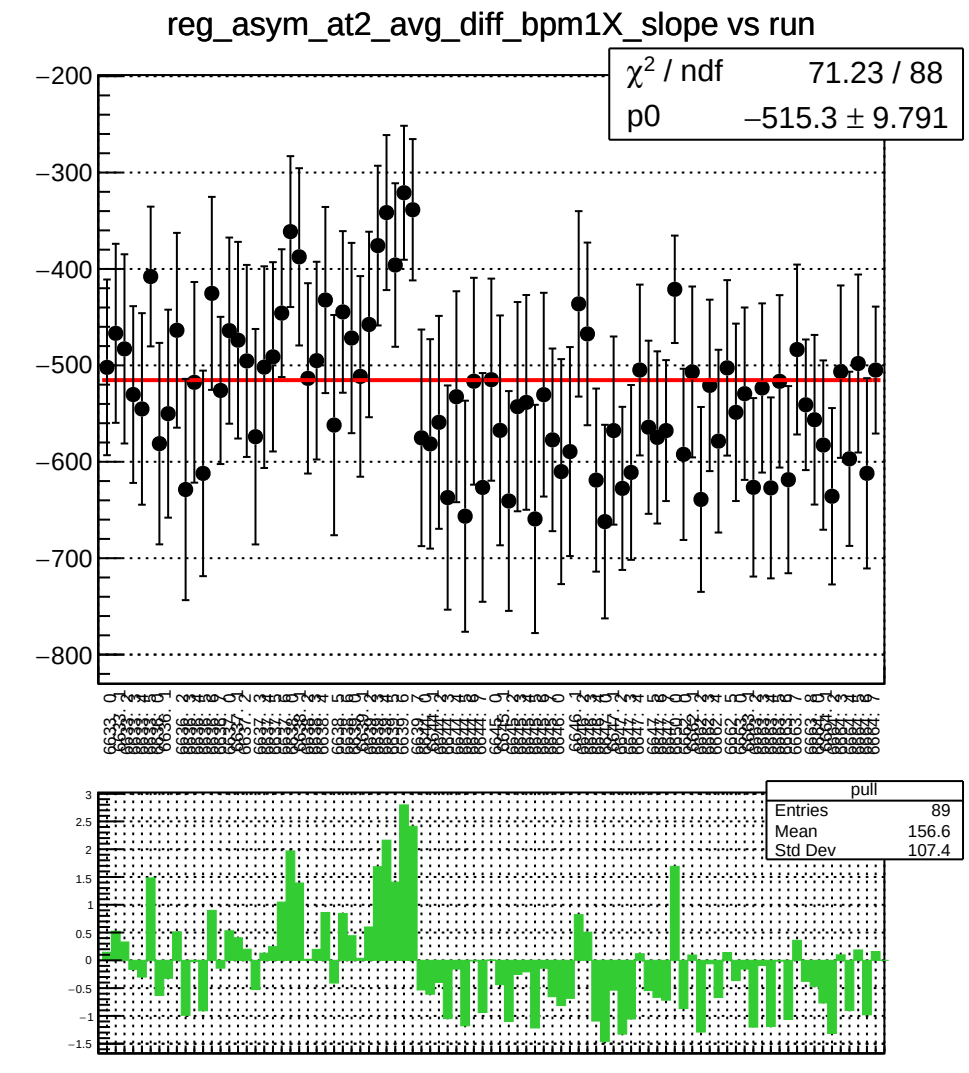

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 114.4 / 88
p0 41.07 ± 2.175
100
50
0
−50
−100
pull
Entries 89
Mean 302.9
Std Dev 252.6
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean 0.0184
Std Dev 1.134
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

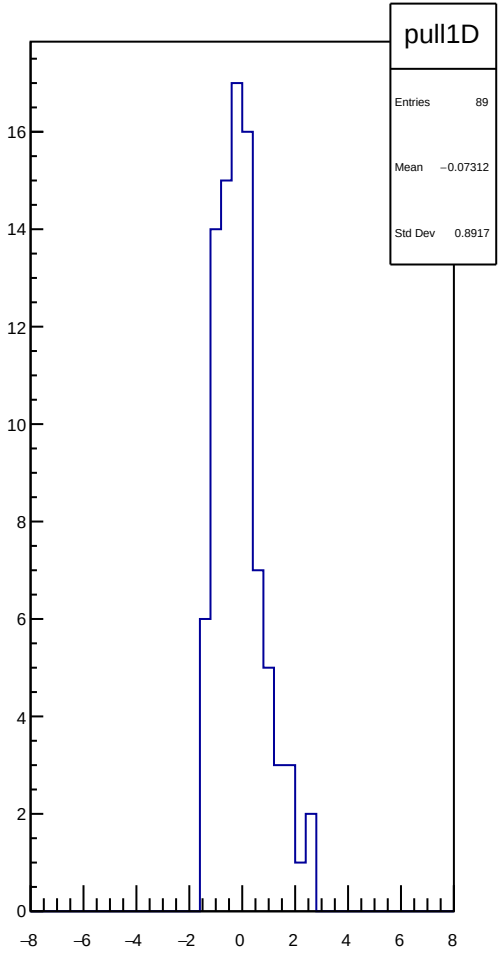

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 67.55 / 88
p0 5.524 ± 1.722
pull
Entries 89
Mean 1295
Std Dev 1223

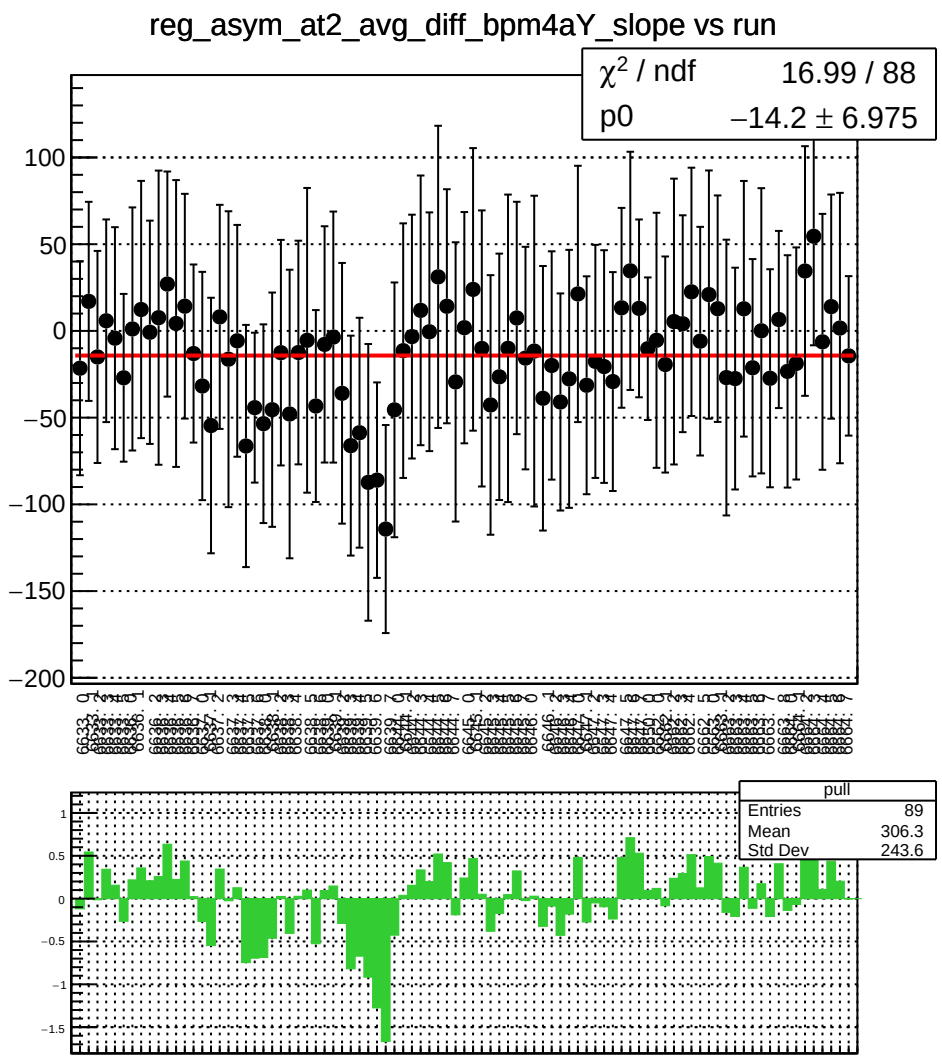

pull1D
Entries 89
Mean −0.002154
Std Dev 0.8712

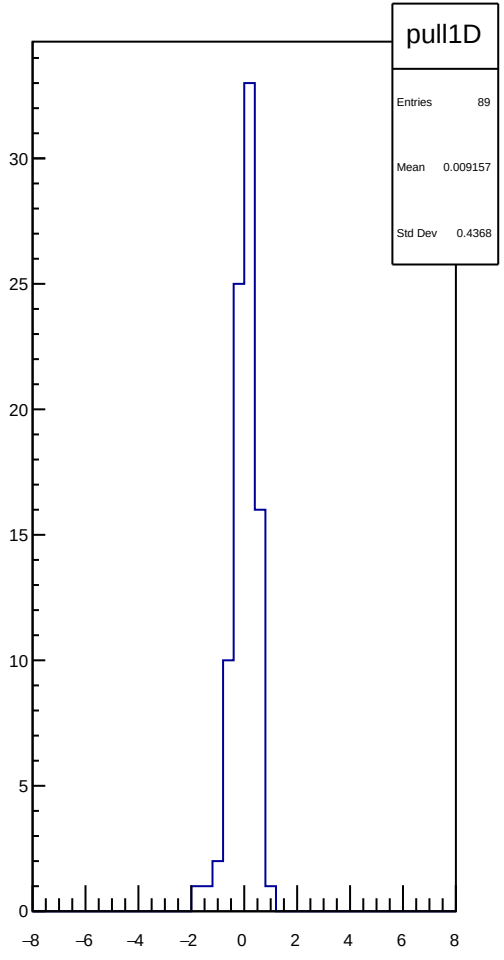

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 257.6 / 88
p0 −4.55 ± 0.09499
pull
Entries 89
Mean −4123
Std Dev 4167

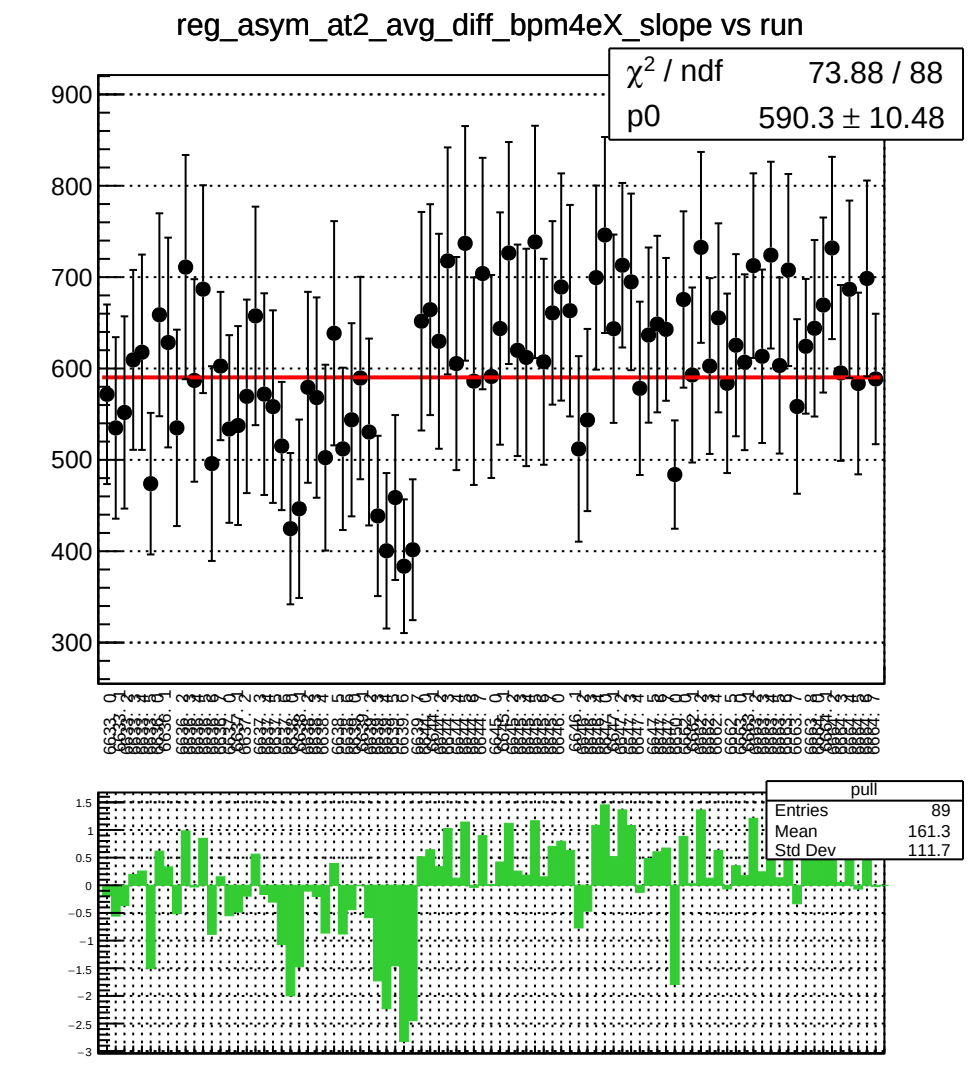

pull1D
Entries 89
Mean 0.007096
Std Dev 1.701

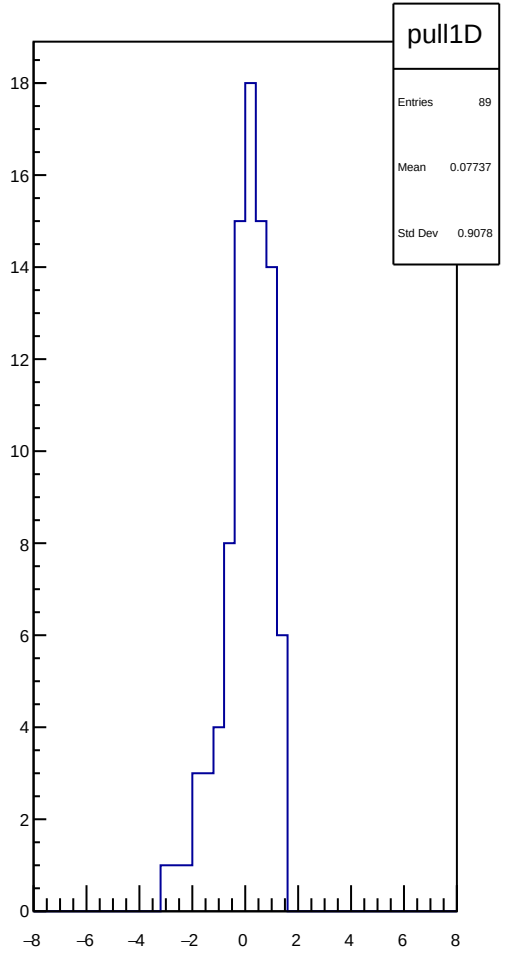

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 71.23 / 88
p0 −515.3 ± 9.791
pull
Entries 89
Mean 156.6
Std Dev 107.4

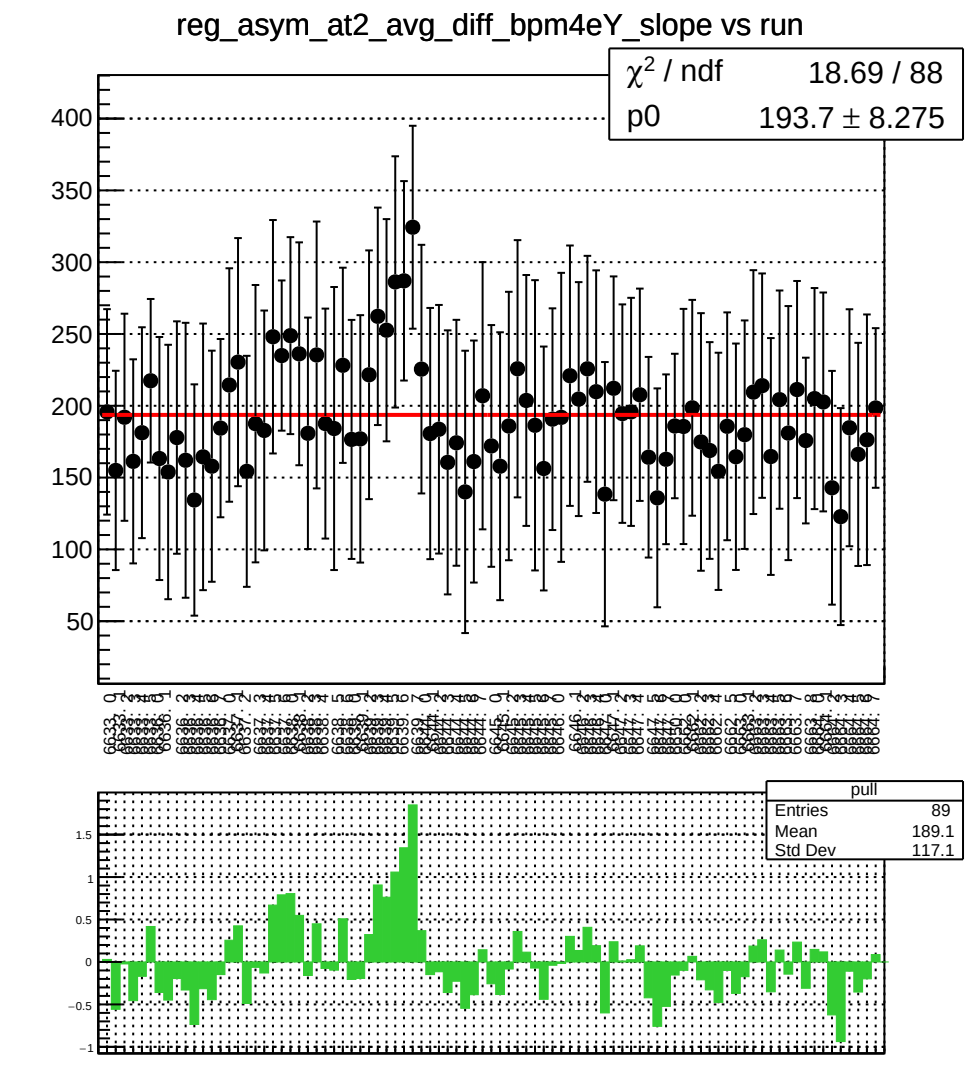

pull1D
Entries 89
Mean −0.07312
Std Dev 0.8917

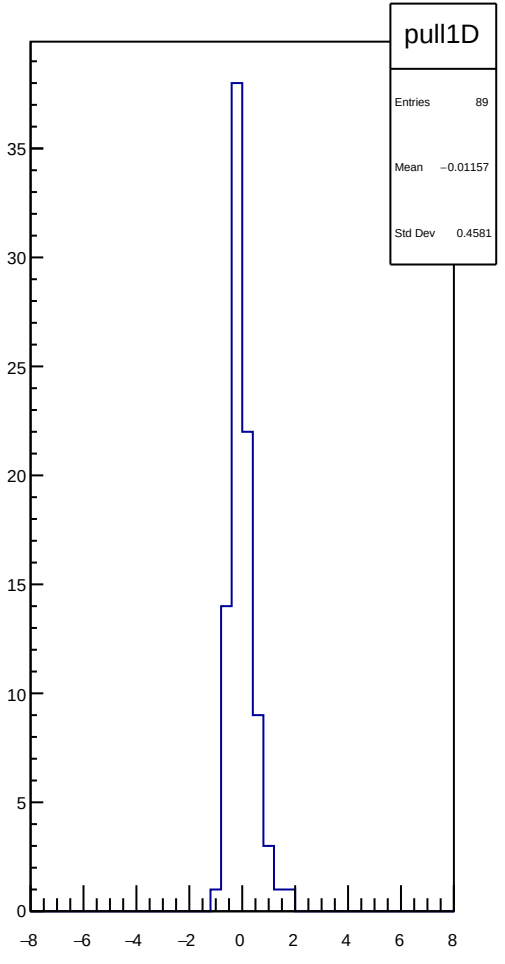

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 16.99 / 88
p0 −14.2 ± 6.975
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 306.3
Std Dev 243.6
1
0.5
0
−0.5
−1
−1.5

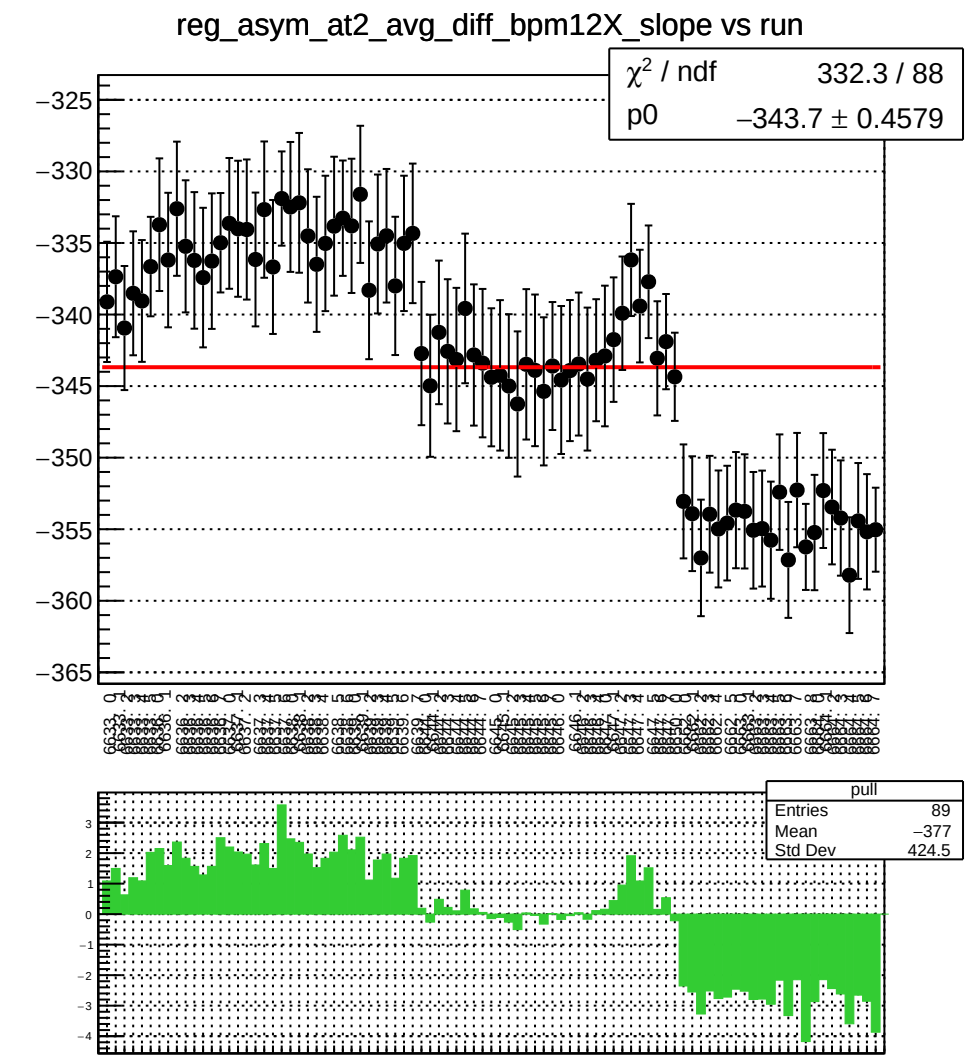

pull1D
Entries 89
Mean 0.009157
Std Dev 0.4368
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

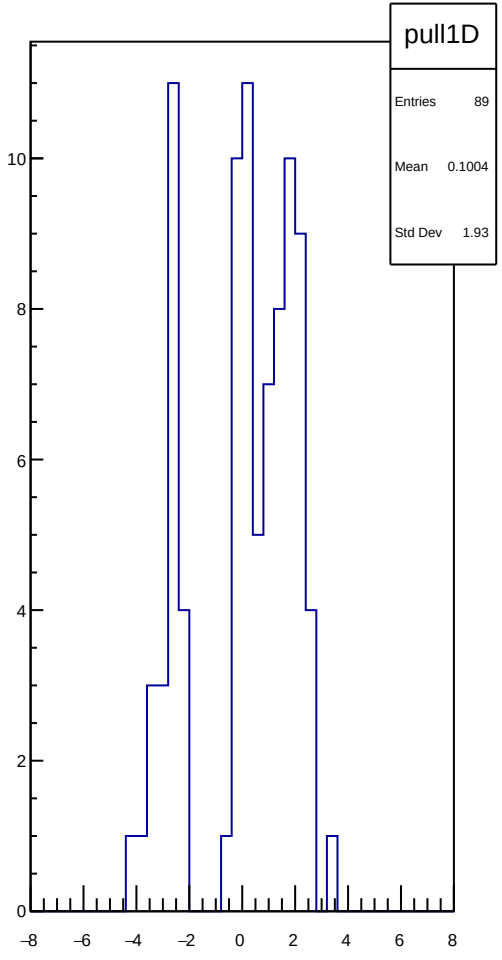

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 73.88 / 88
p0 590.3 ± 10.48
900
800
700
600
500
400
300
pull
Entries 89
Mean 161.3
Std Dev 111.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3

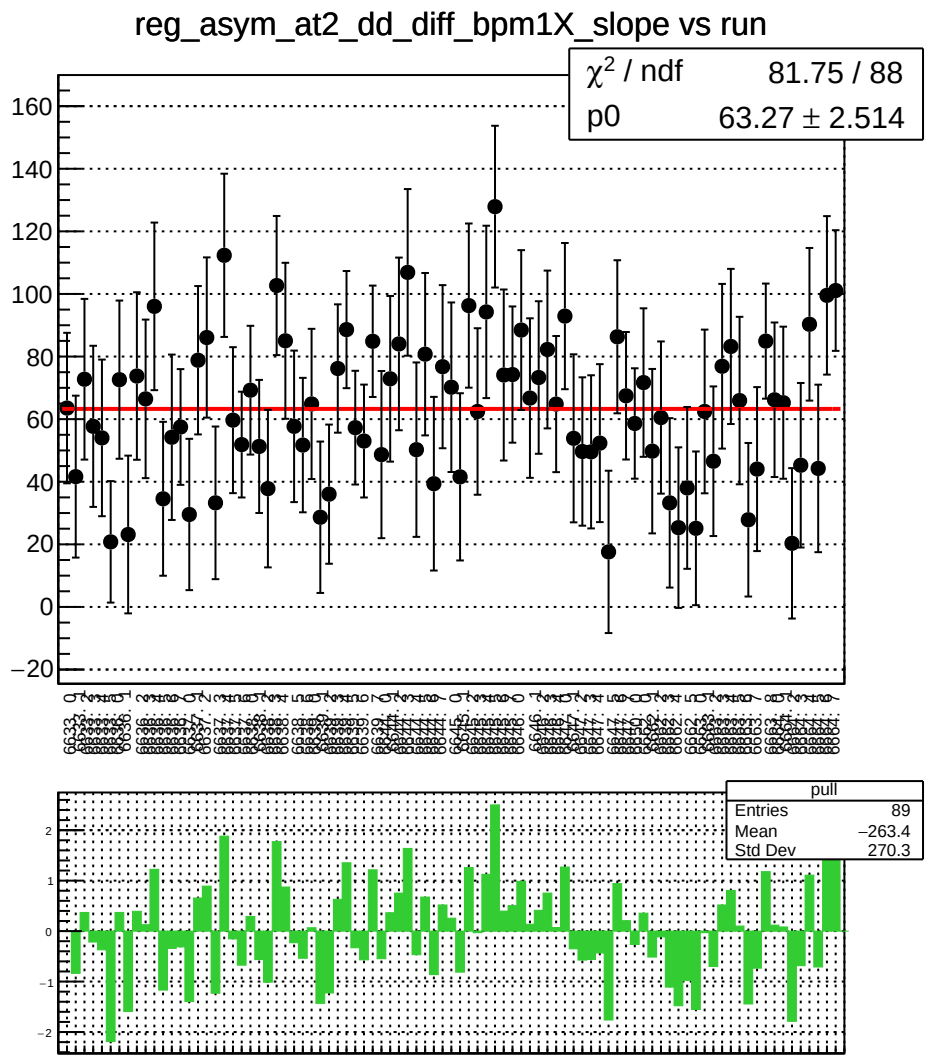

pull1D
Entries 89
Mean 0.07737
Std Dev 0.9078
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

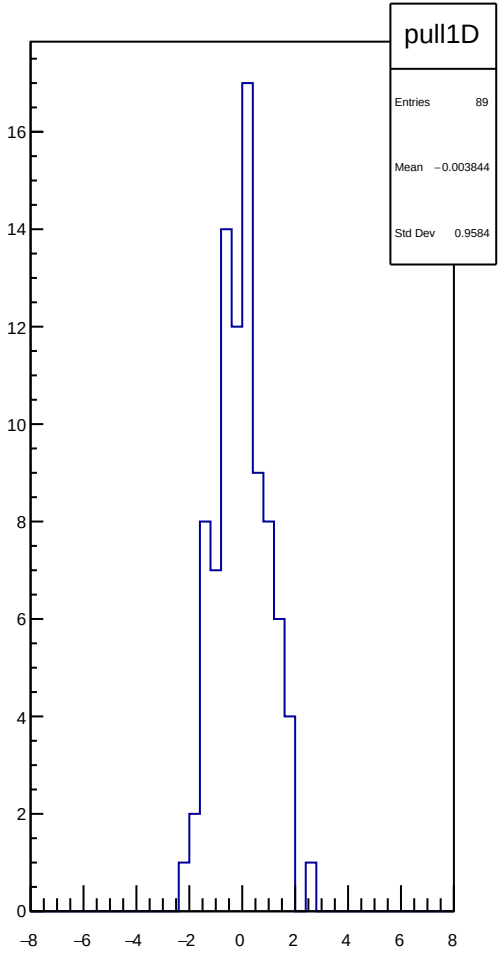

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 18.69 / 88
p0 193.7 ± 8.275
pull
Entries 89
Mean 189.1
Std Dev 117.1

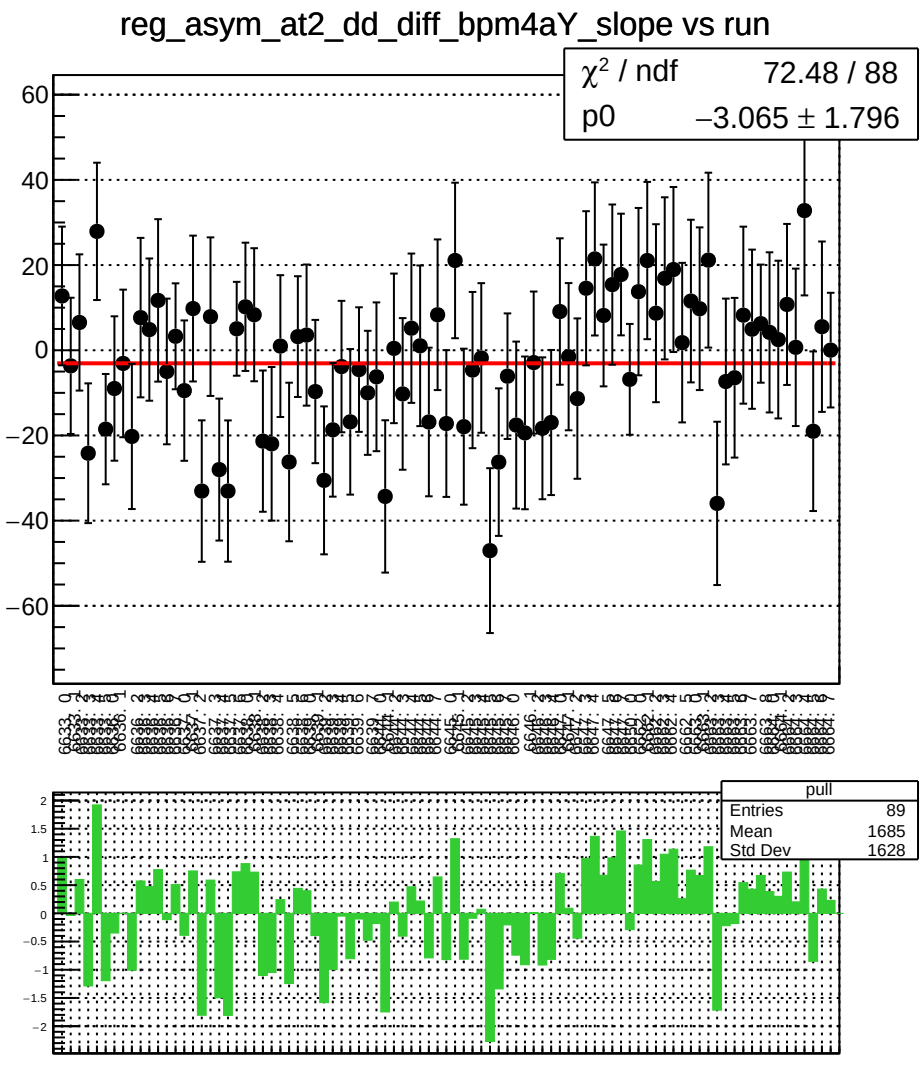

pull1D
Entries 89
Mean −0.01157
Std Dev 0.4581

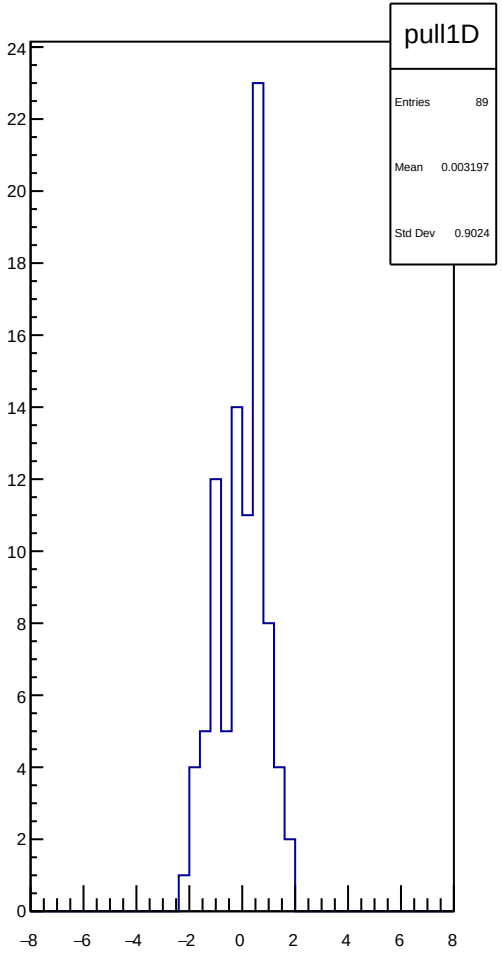

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 332.3 / 88
p0 −343.7 ± 0.4579
pull
Entries 89
Mean −377
Std Dev 424.5

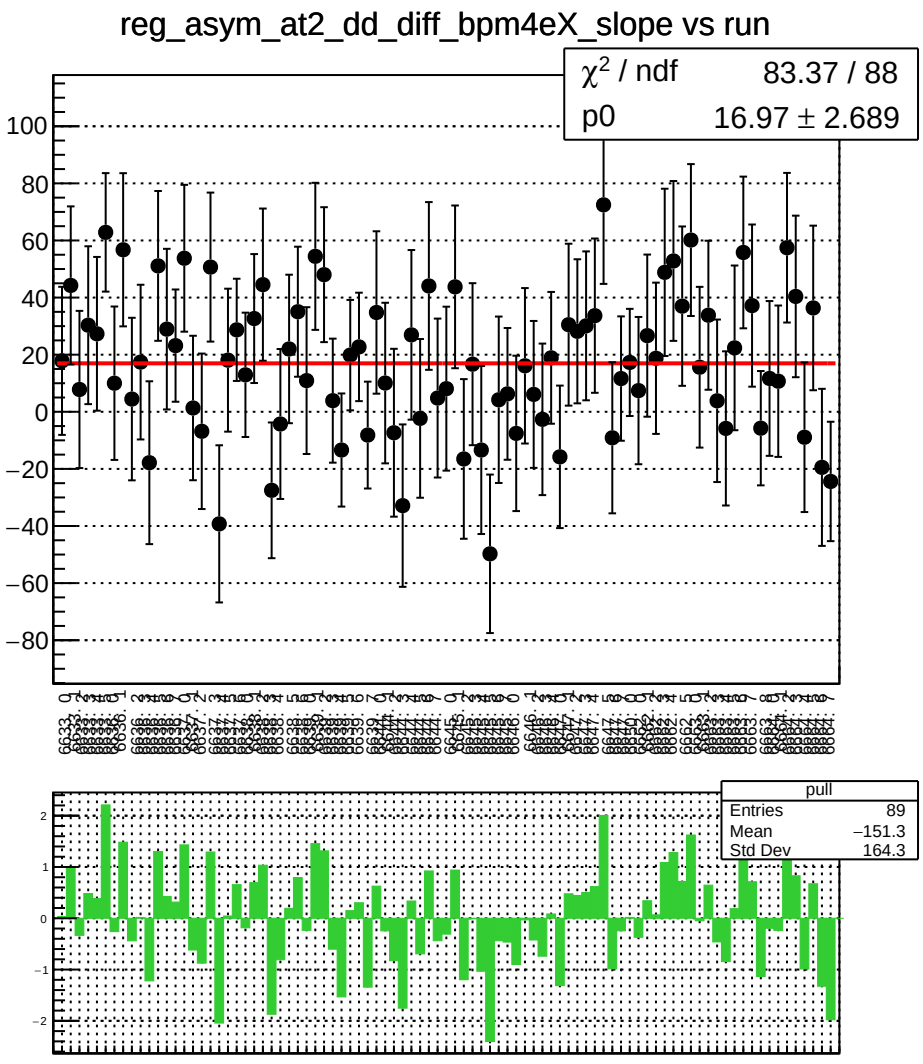

pull1D
Entries 89
Mean 0.1004
Std Dev 1.93

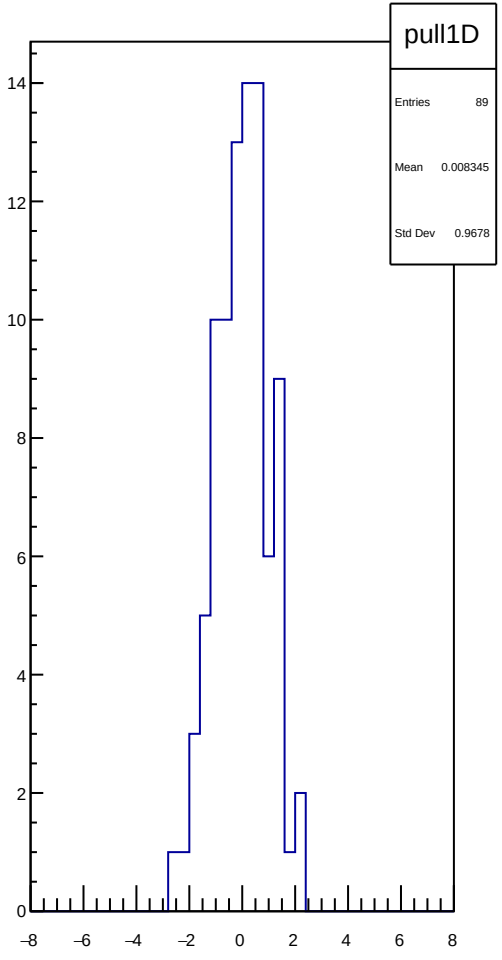

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 81.75 / 88
p0 63.27 ± 2.514
pull
Entries 89
Mean −263.4
Std Dev 270.3

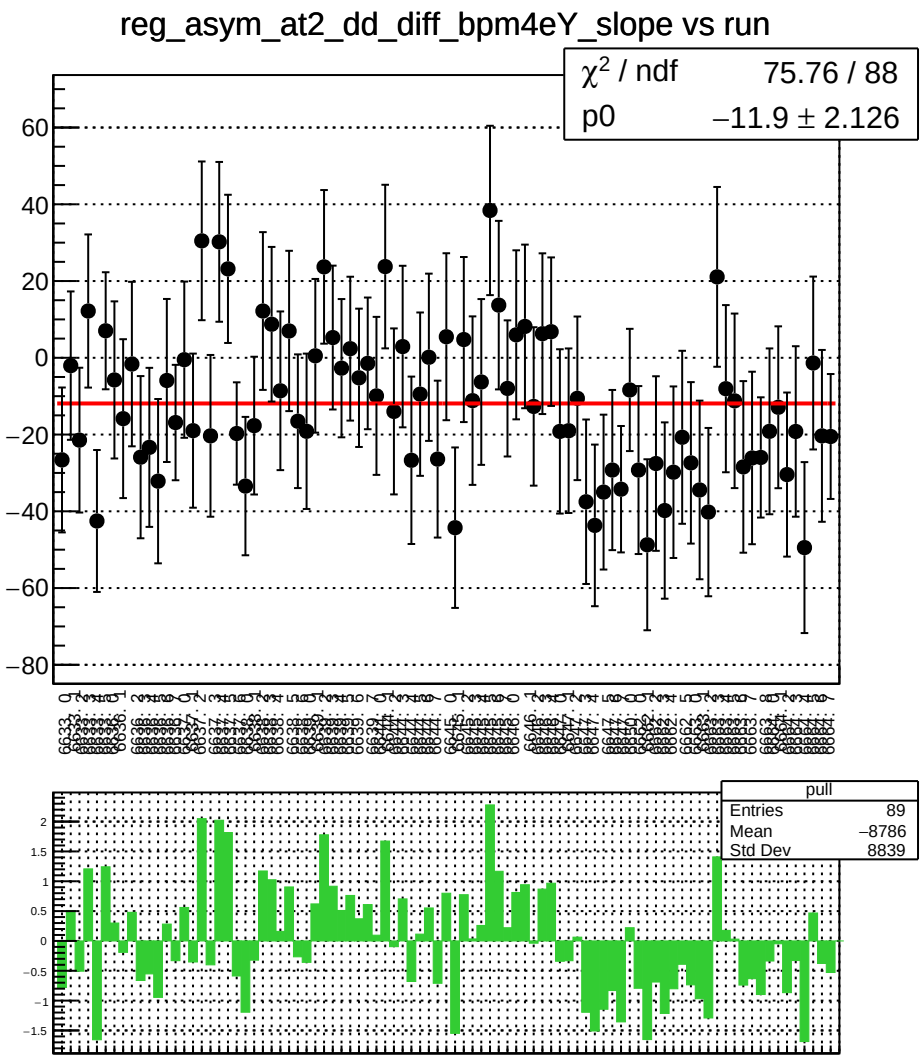

pull1D
Entries 89
Mean −0.003844
Std Dev 0.9584

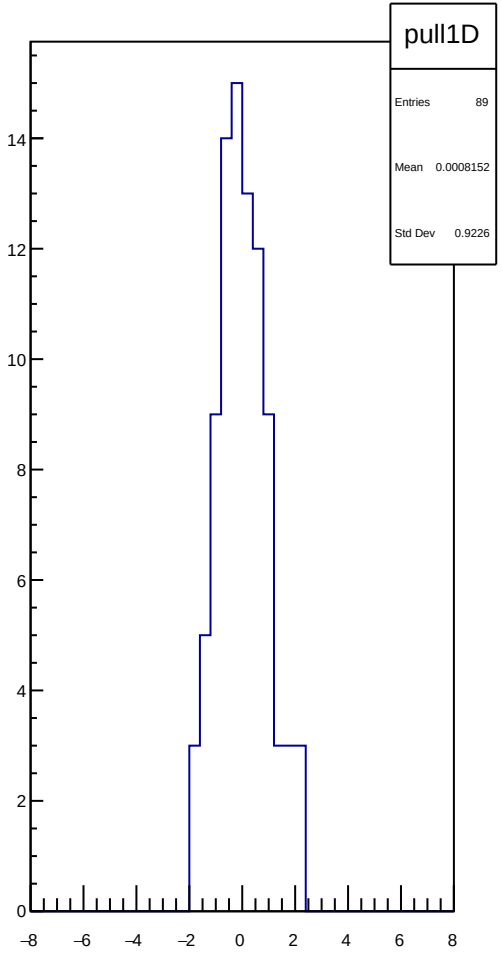

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 72.48 / 88
p0 −3.065 ± 1.796
pull
Entries 89
Mean 1685
Std Dev 1628

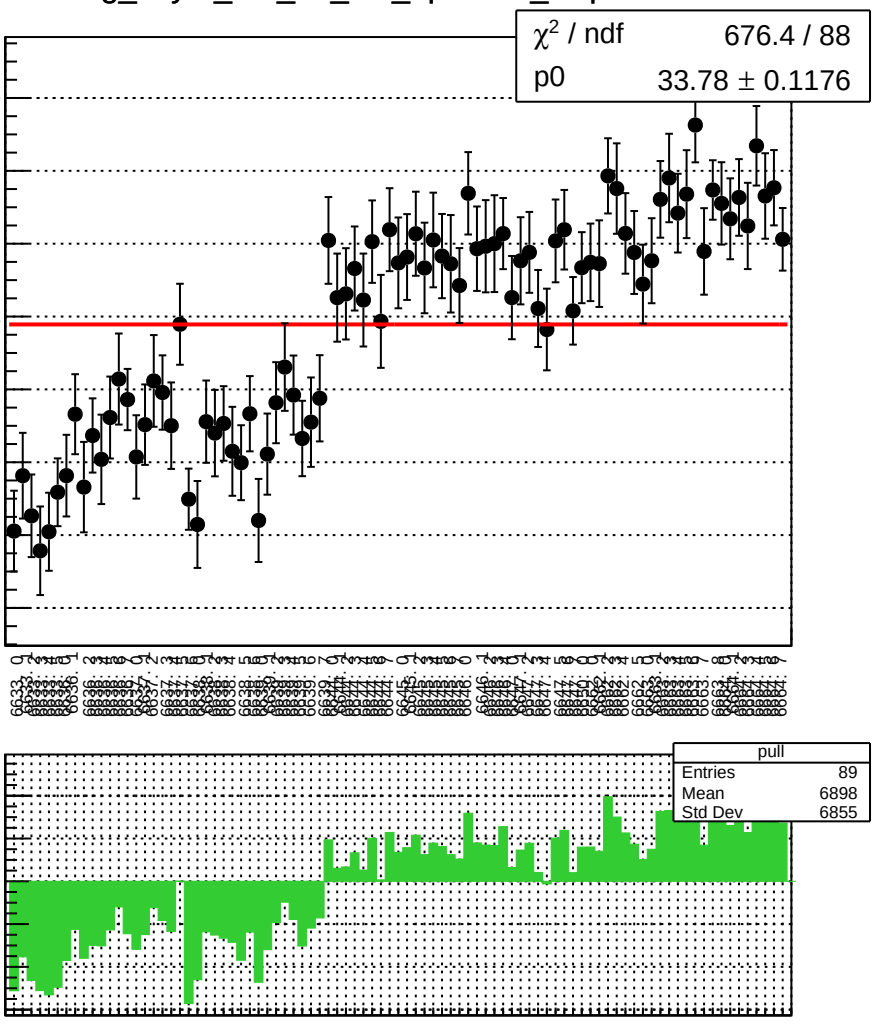

pull1D
Entries 89
Mean 0.003197
Std Dev 0.9024

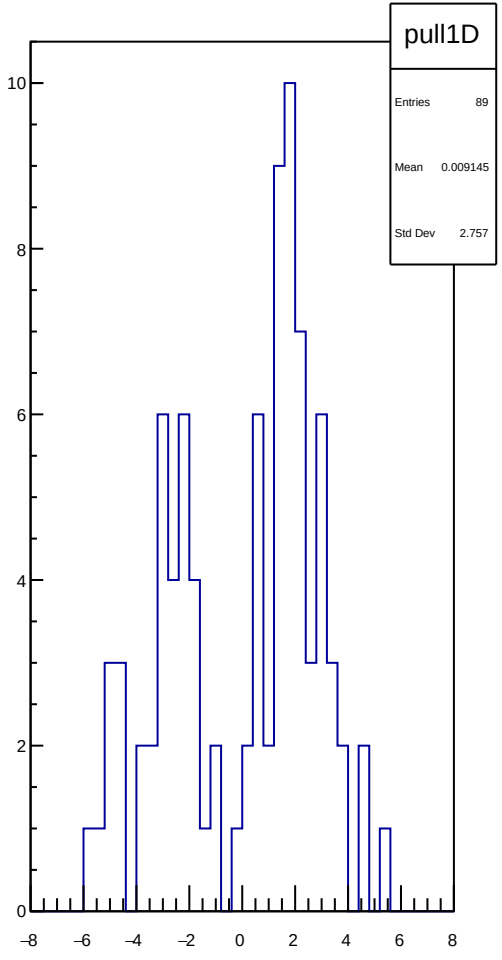

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 83.37 / 88
p0 16.97 ± 2.689
pull
Entries 89
Mean −151.3
Std Dev 164.3

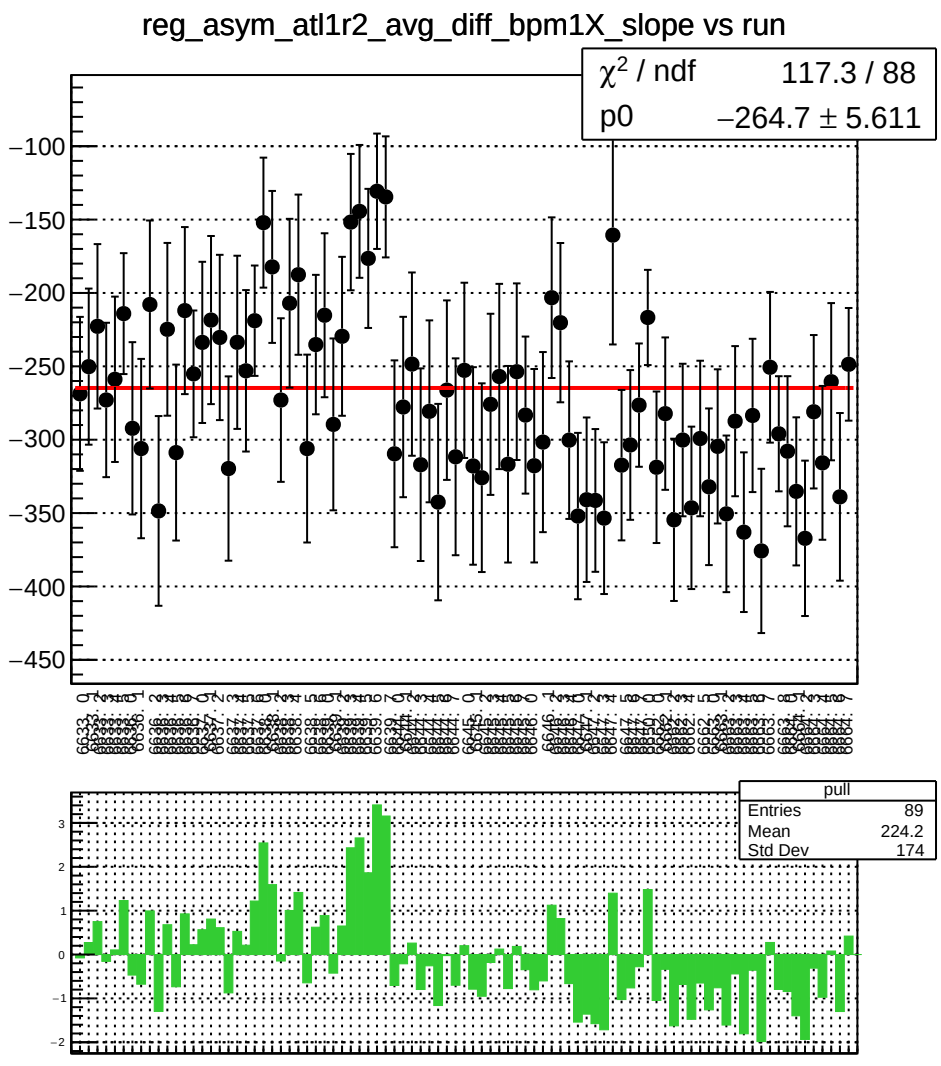

pull1D
Entries 89
Mean 0.008345
Std Dev 0.9678

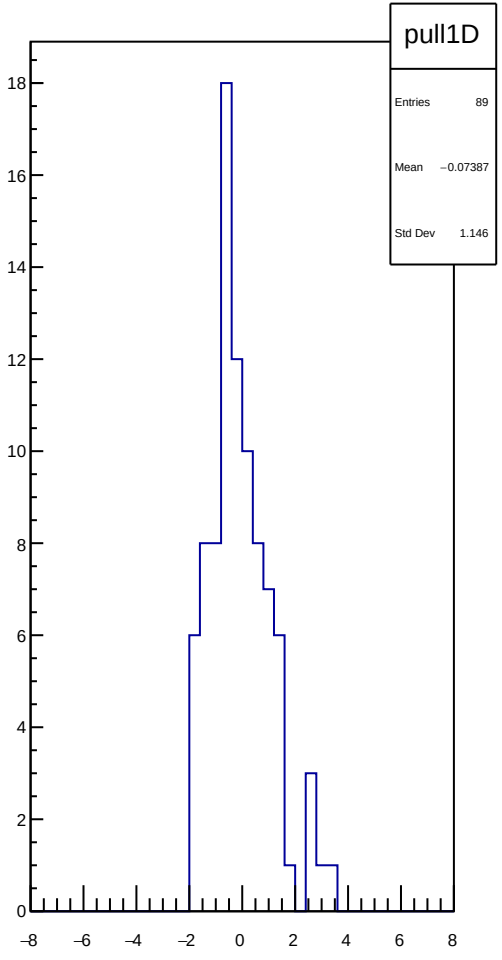

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 75.76 / 88
p0 −11.9 ± 2.126
pull
Entries 89
Mean −8786
Std Dev 8839

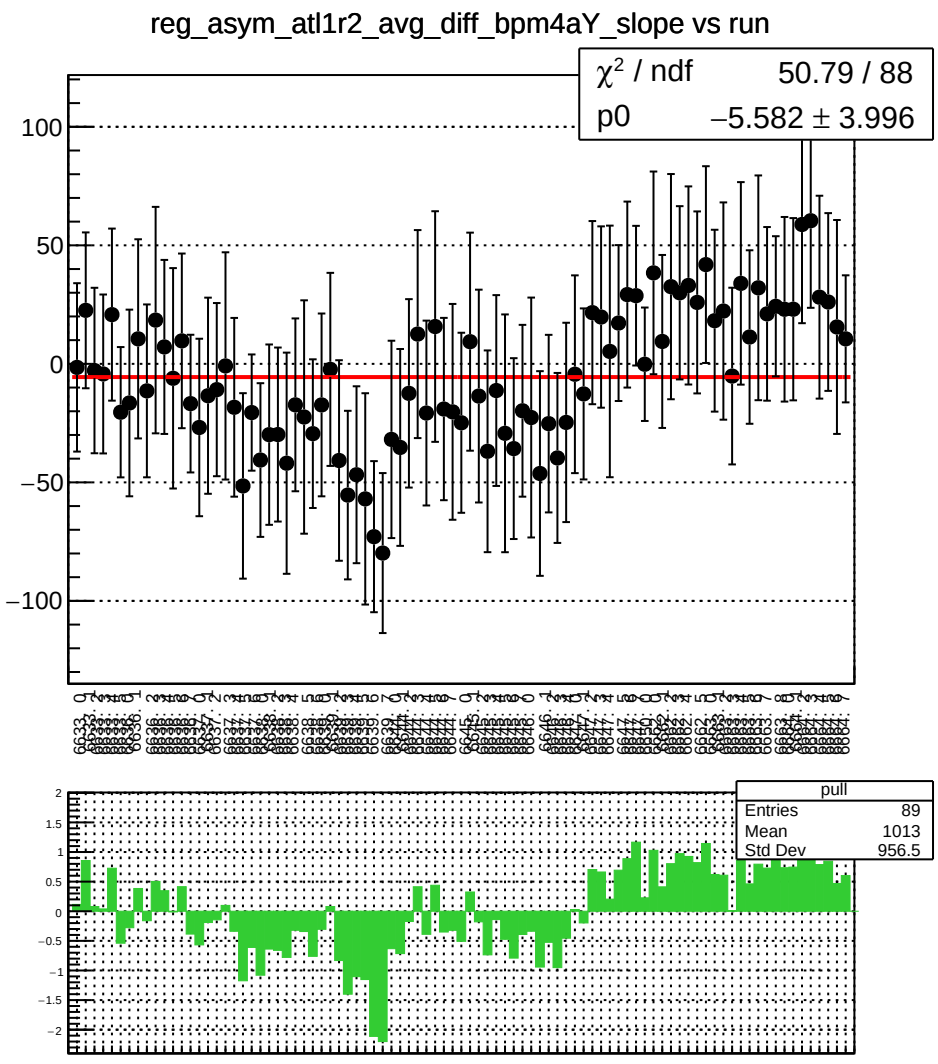

pull1D
Entries 89
Mean 0.0008152
Std Dev 0.9226

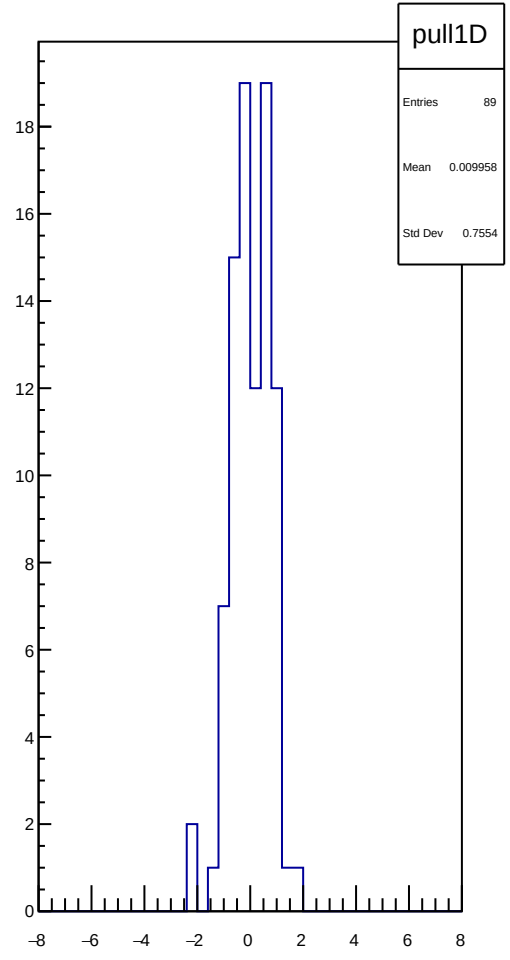

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 676.4 / 88
p0 33.78 ± 0.1176
pull
Entries 89
Mean 6898
Std Dev 6855

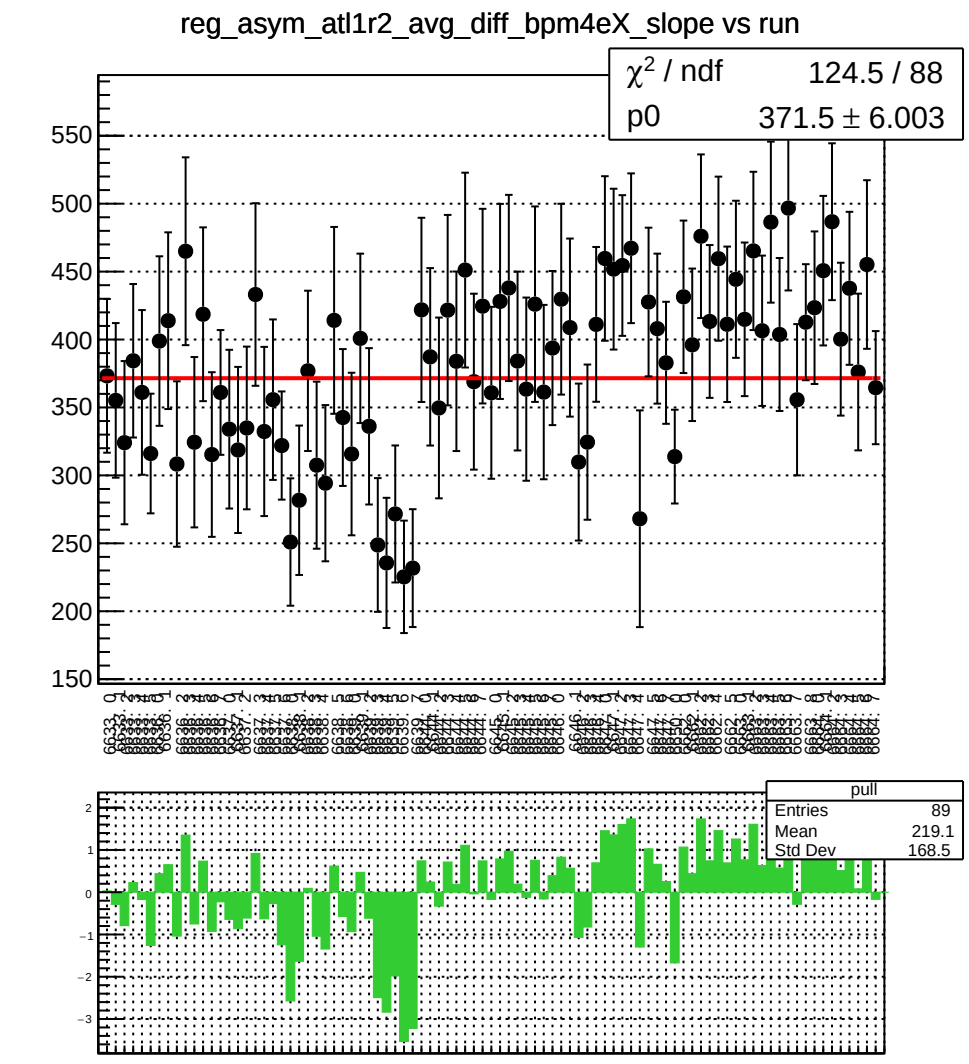

pull1D
Entries 89
Mean 0.009145
Std Dev 2.757

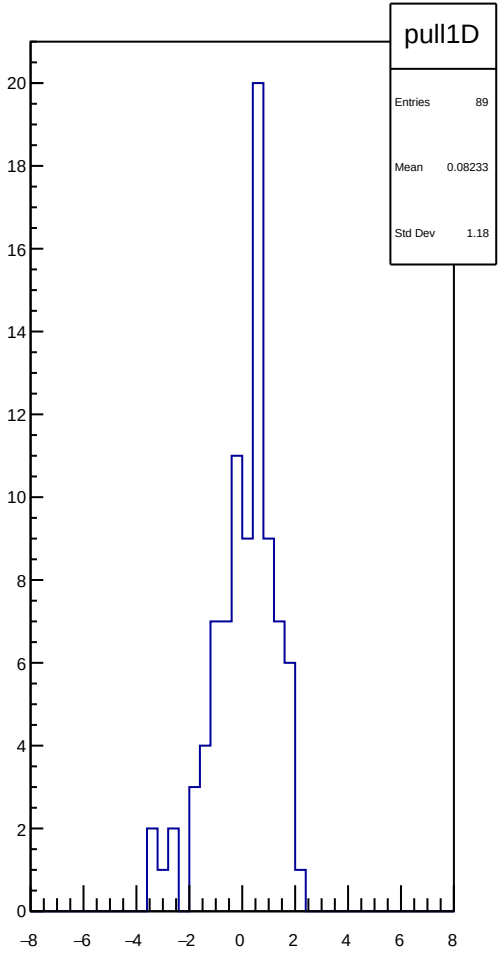

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 117.3 / 88
p0 −264.7 ± 5.611
pull
Entries 89
Mean 224.2
Std Dev 174

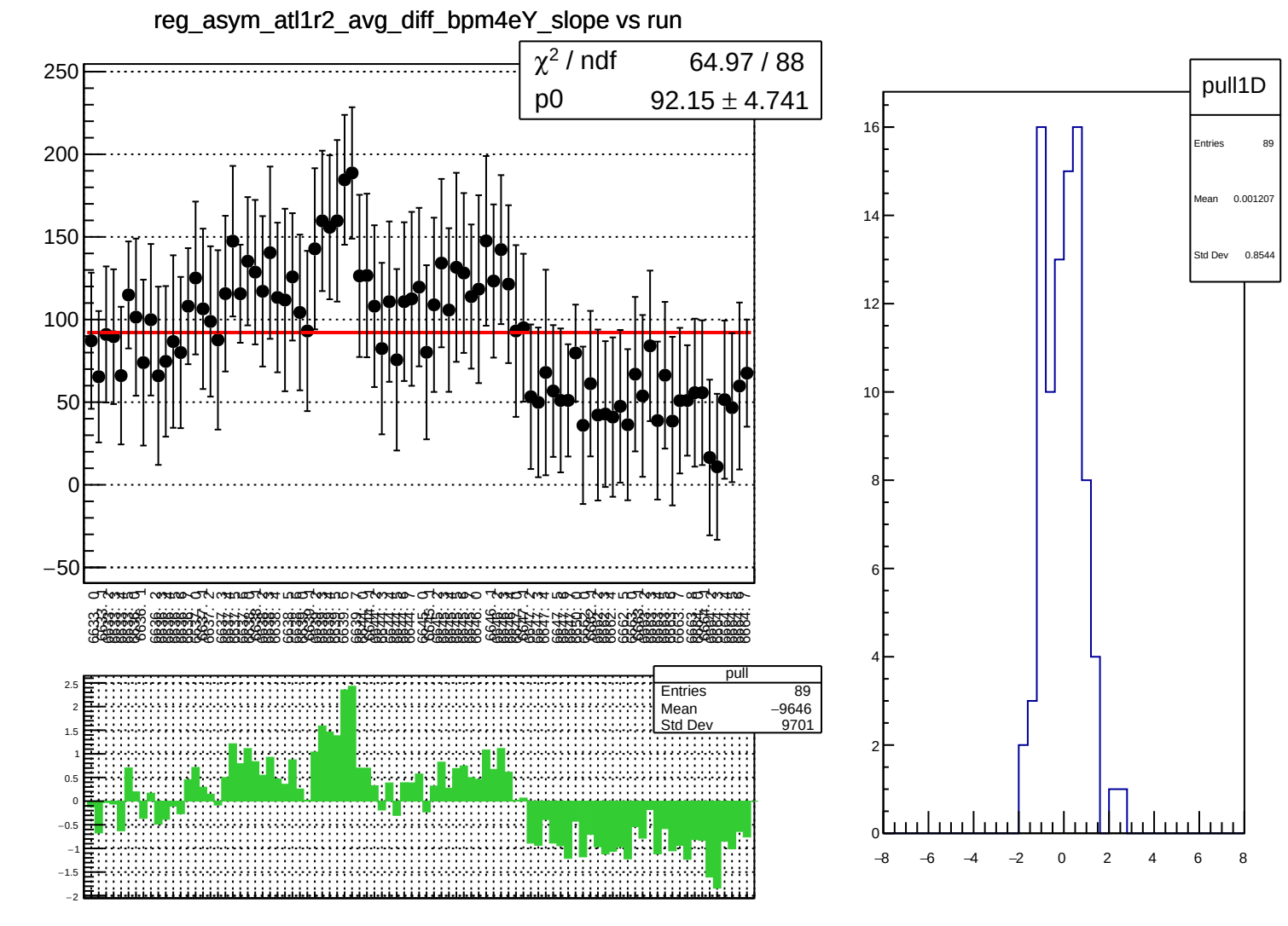

pull1D
Entries 89
Mean −0.07387
Std Dev 1.146

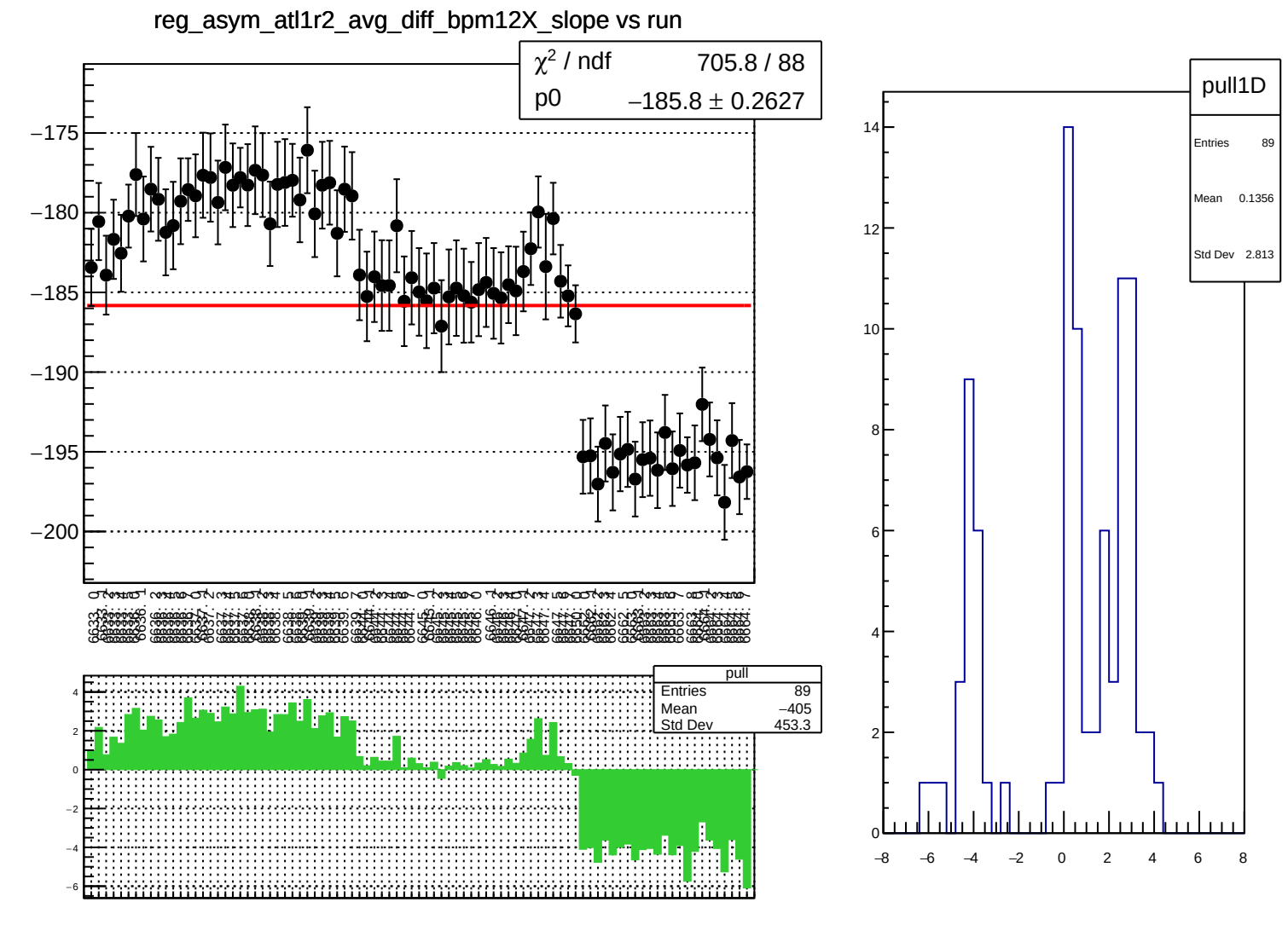

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 50.79 / 88
p0 −5.582 ± 3.996
100
50
0
−50
−100
pull
Entries 89
Mean 1013
Std Dev 956.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

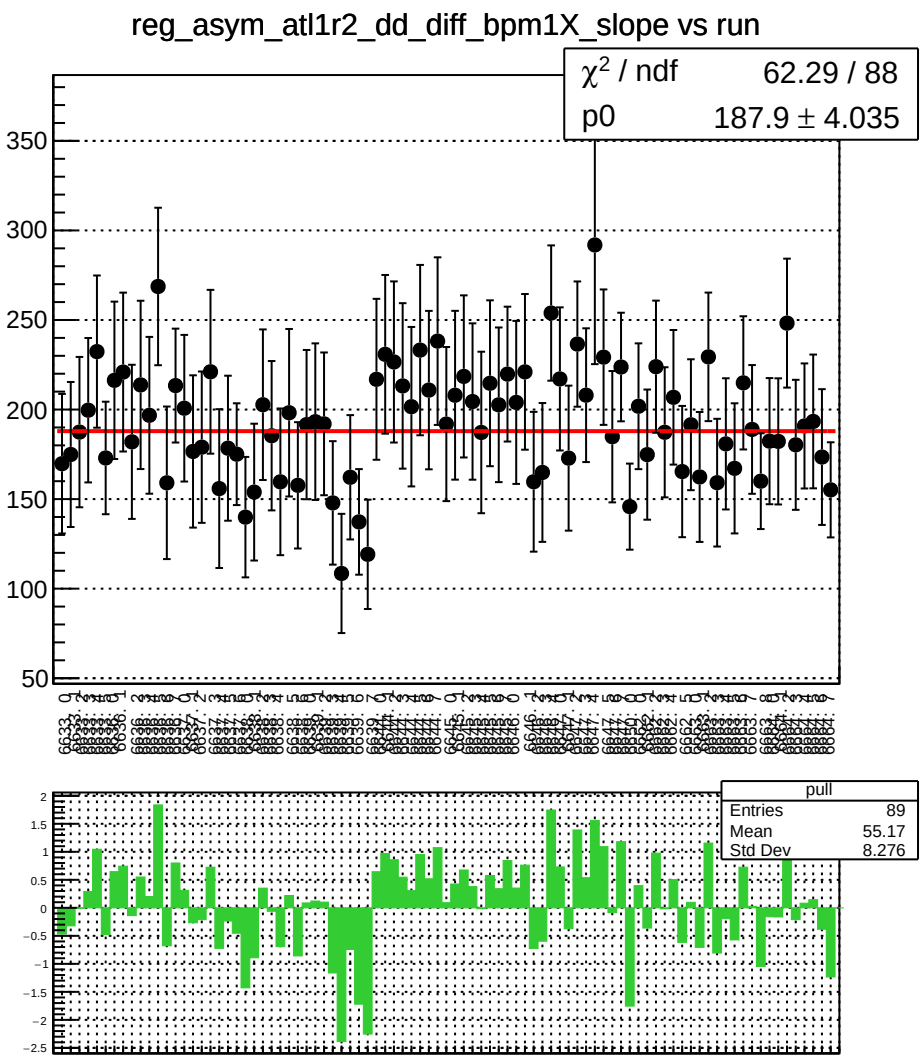

pull1D
Entries 89
Mean 0.009958
Std Dev 0.7554
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

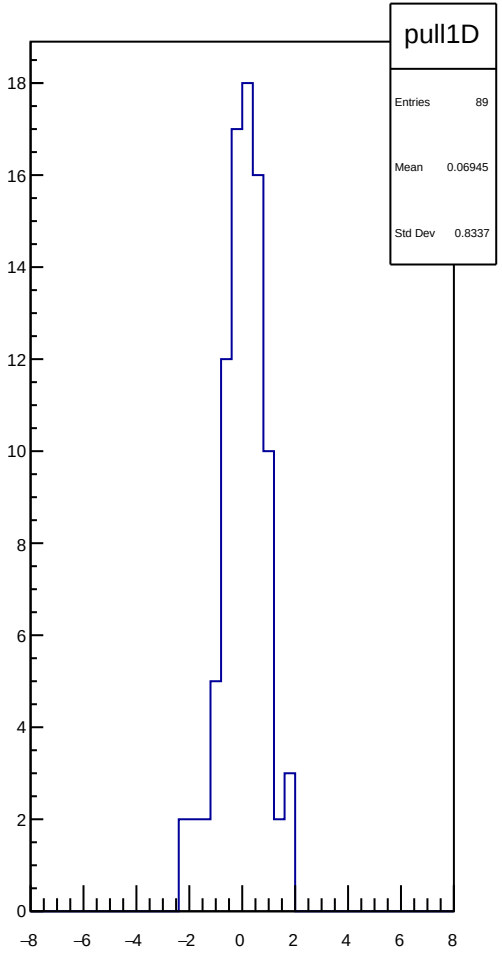

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 124.5 / 88
p0 371.5 ± 6.003
pull
Entries 89
Mean 219.1
Std Dev 168.5

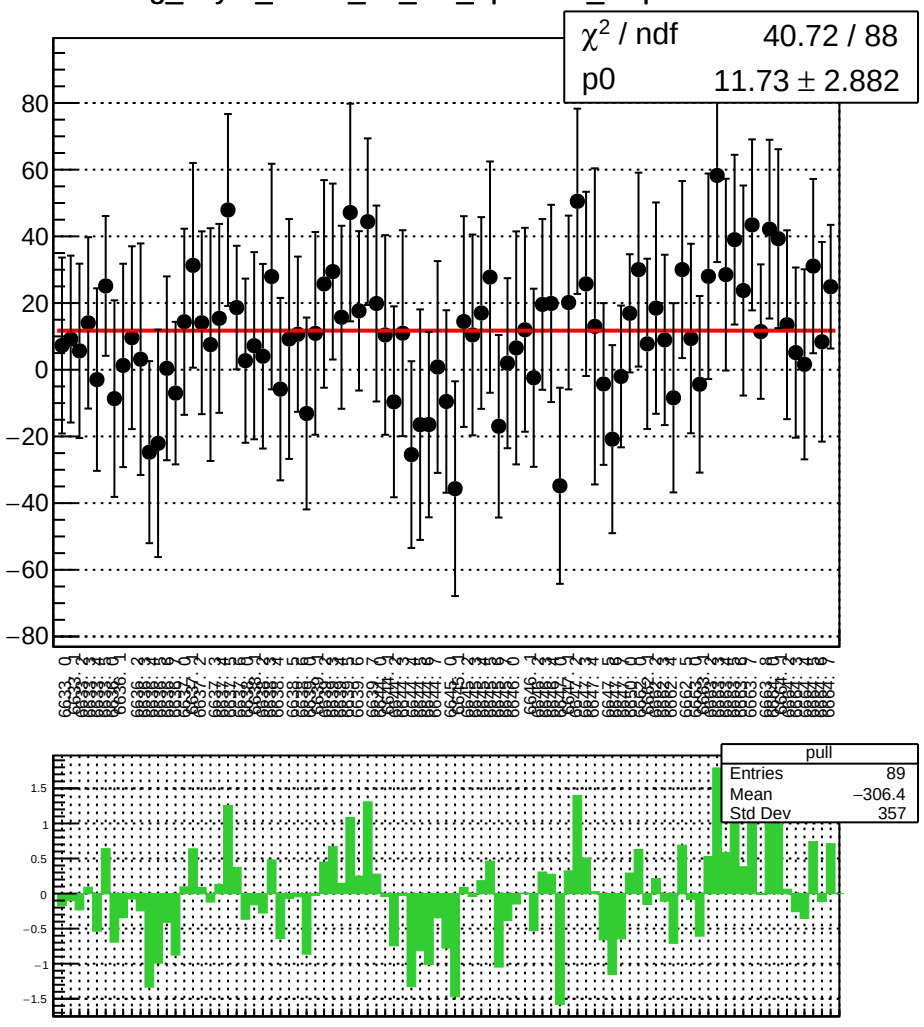

pull1D
Entries 89
Mean 0.08233
Std Dev 1.18

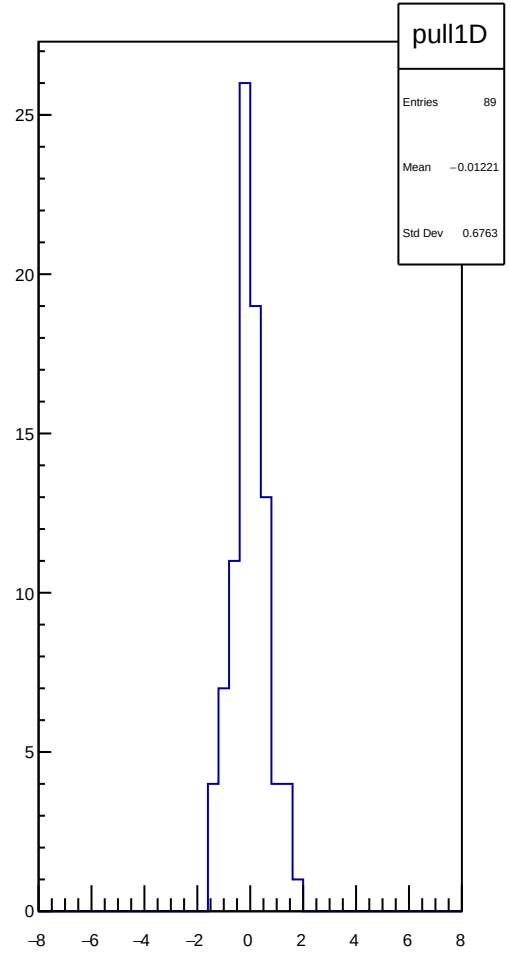

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 64.97 / 88
p0 92.15 ± 4.741
pull
Entries 89
Mean −9646
Std Dev 9701
pull1D
Entries 89
Mean 0.001207
Std Dev 0.8544

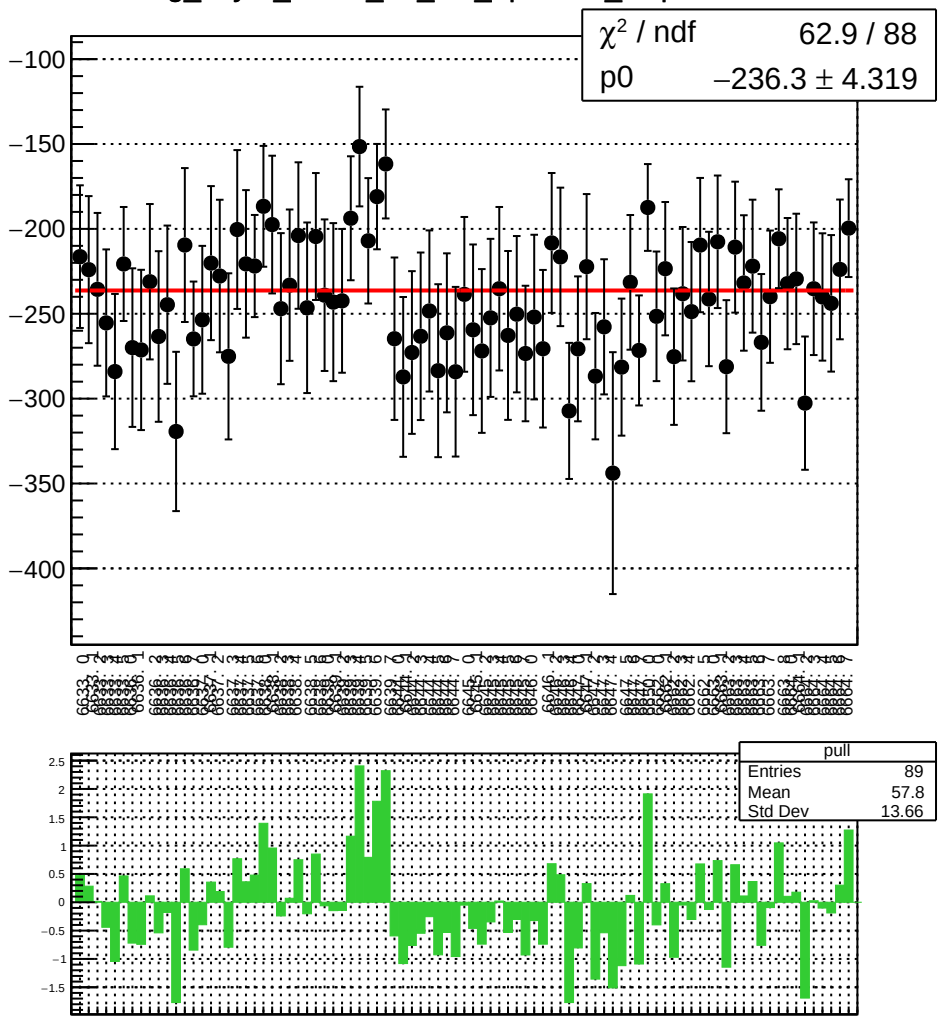

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 705.8 / 88
p0 −185.8 ± 0.2627
−175
−180
−185
−190
−195
−200
pull
Entries 89
Mean −405
Std Dev 453.3
4
2
0
−2
−4
−6
pull1D
Entries 89
Mean 0.1356
Std Dev 2.813
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

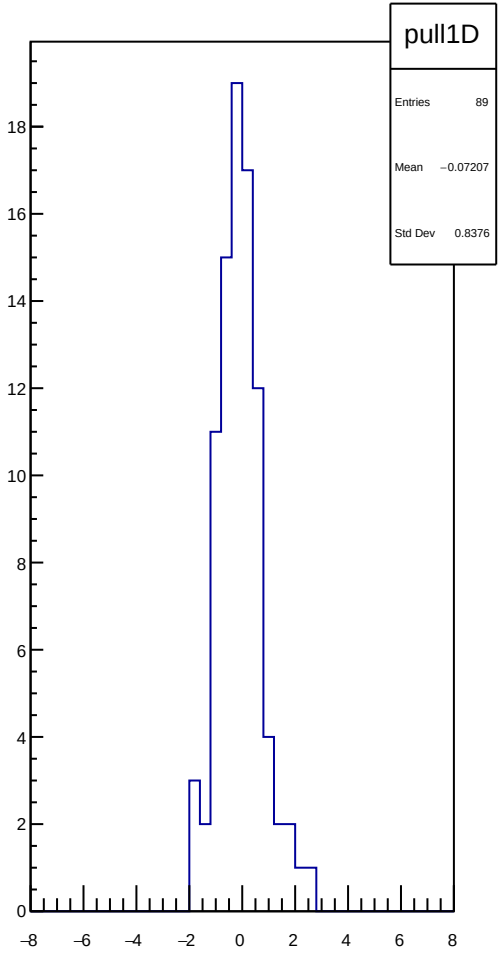

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 62.29 / 88
p0 187.9 ± 4.035
pull
Entries 89
Mean 55.17
Std Dev 8.276

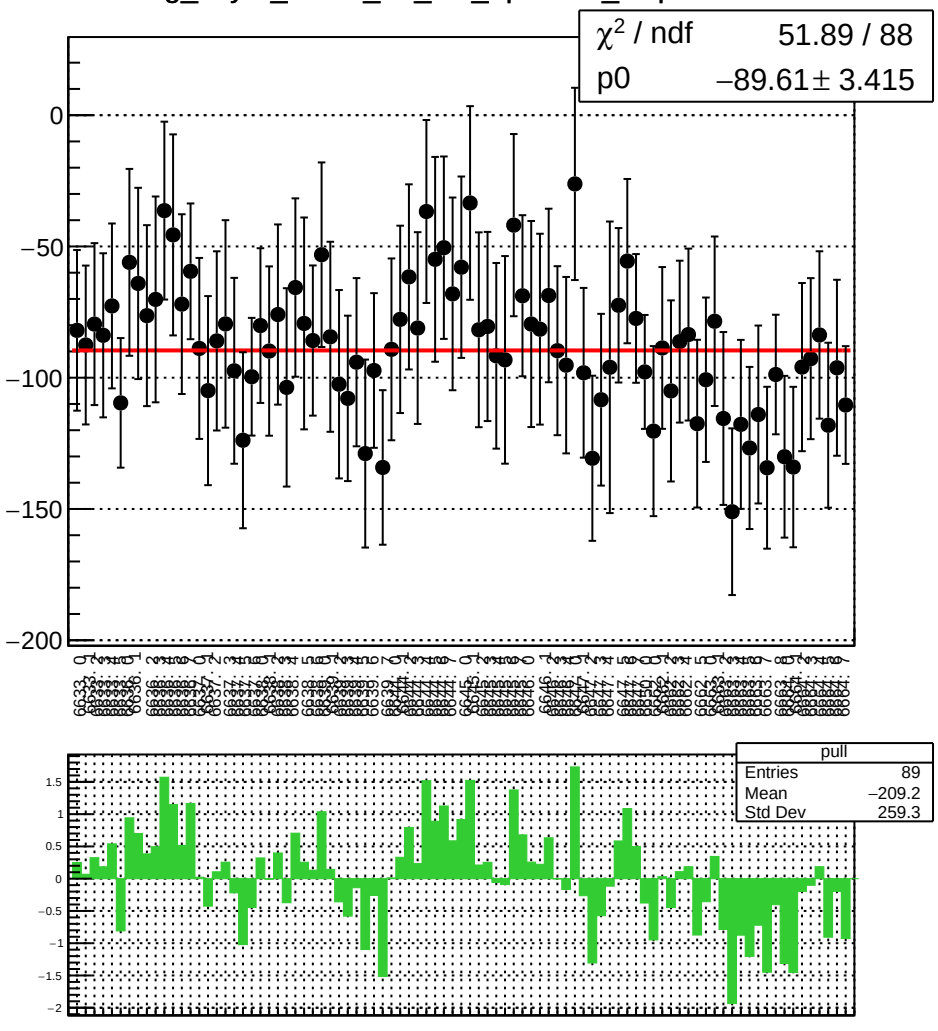

pull1D
Entries 89
Mean 0.06945
Std Dev 0.8337

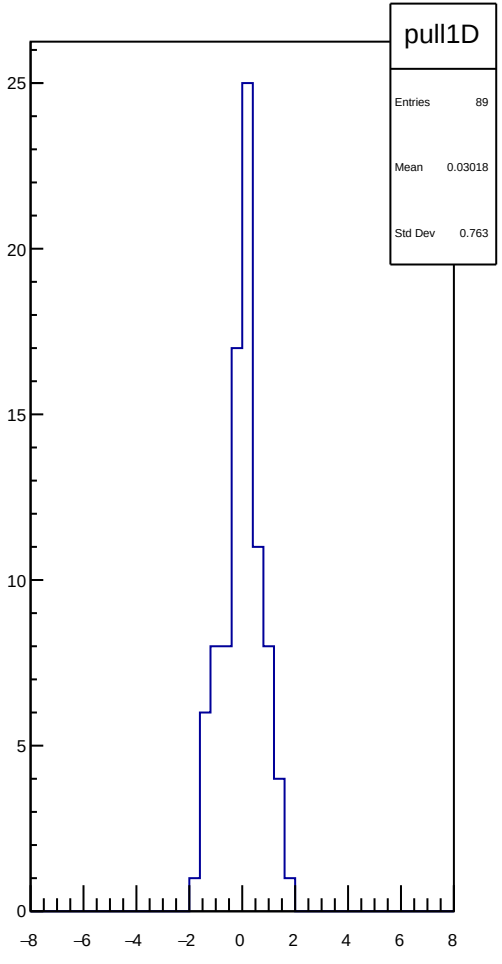

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 40.72 / 88
p0 11.73 ± 2.882
pull
Entries 89
Mean −306.4
Std Dev 357

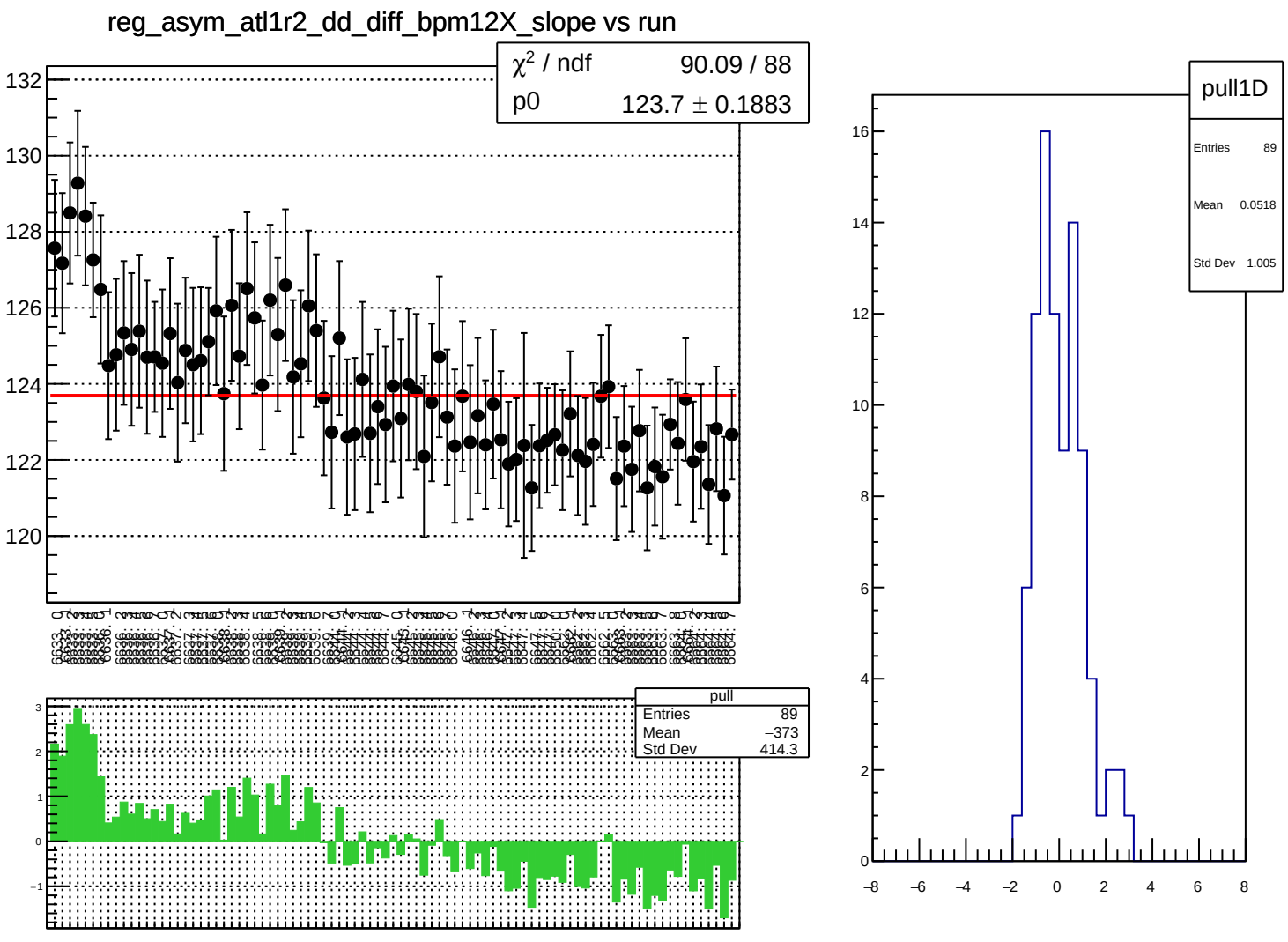

pull1D
Entries 89
Mean −0.01221
Std Dev 0.6763

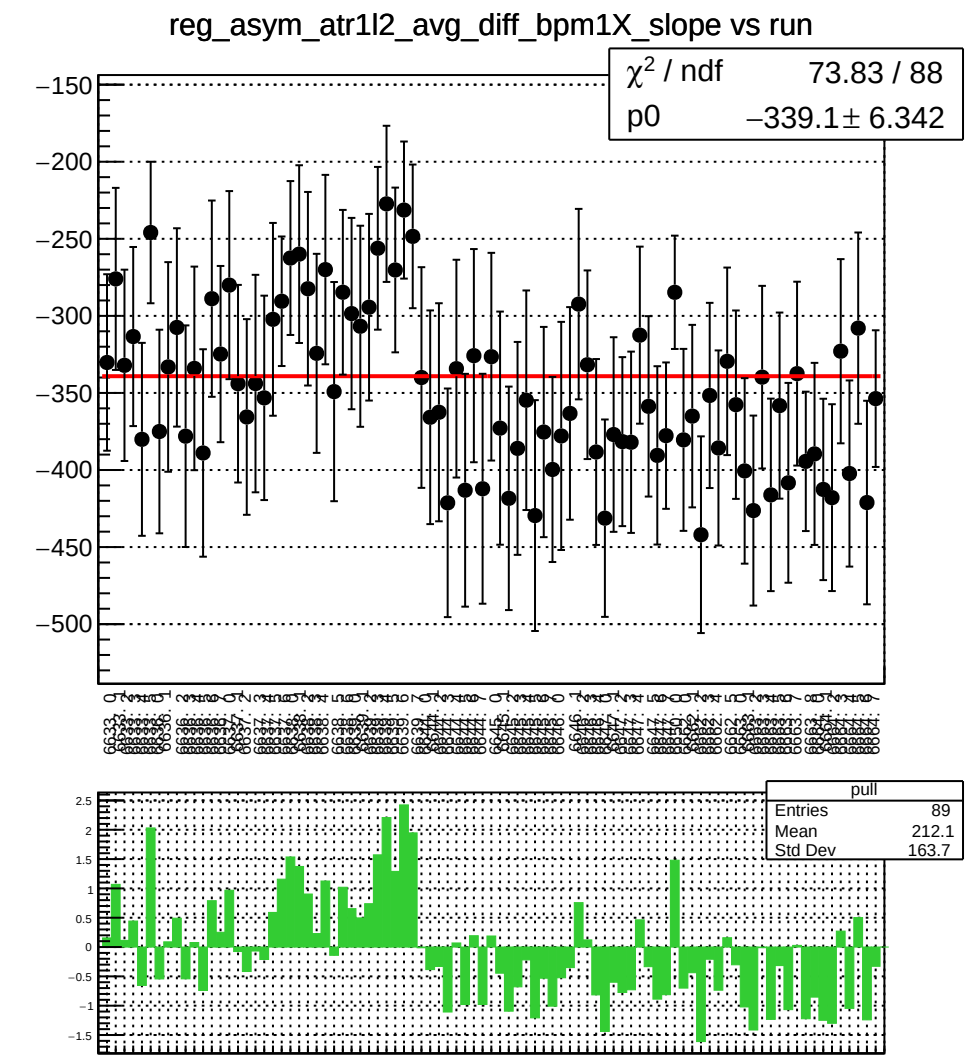

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 62.9 / 88
p0 −236.3 ± 4.319
pull
Entries 89
Mean 57.8
Std Dev 13.66

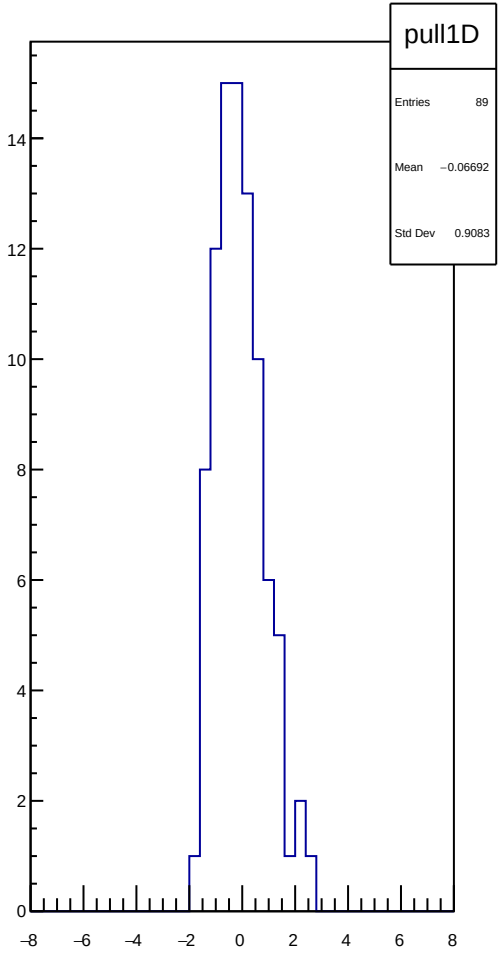

pull1D
Entries 89
Mean −0.07207
Std Dev 0.8376

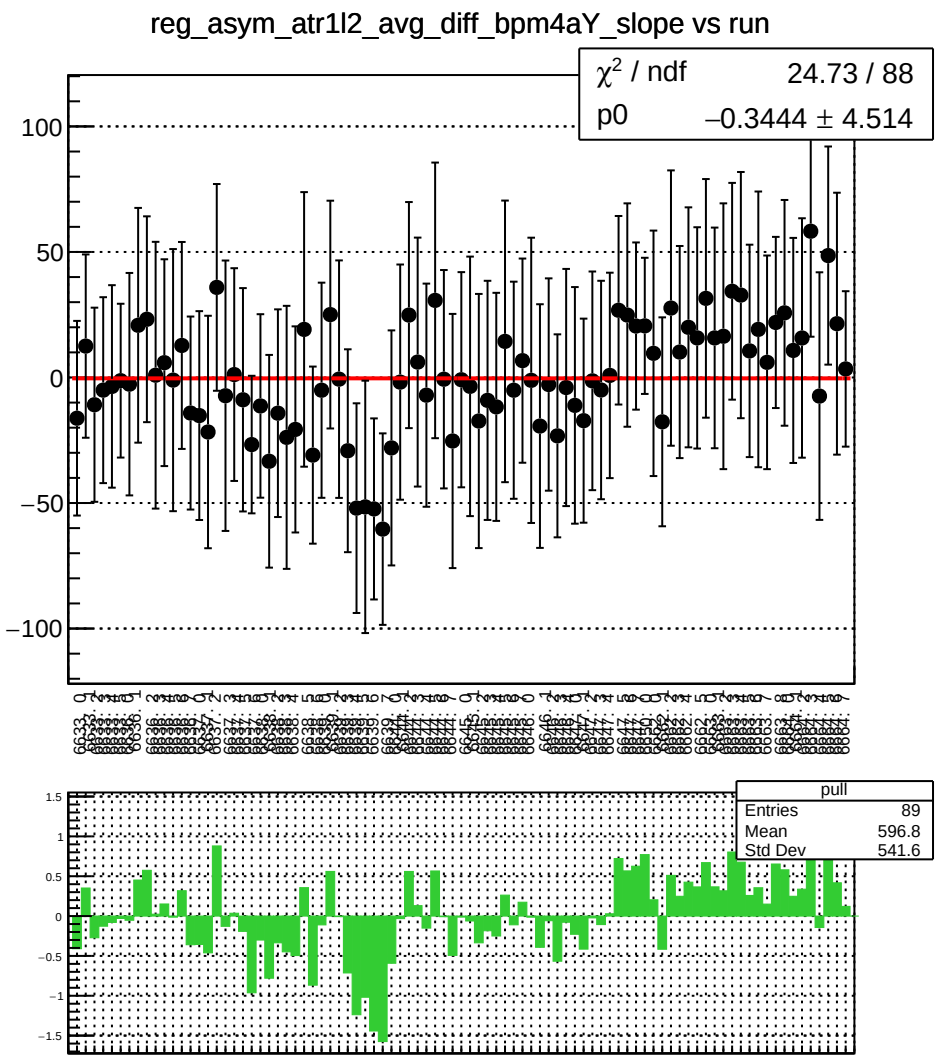

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 51.89 / 88
p0 −89.61 ± 3.415
pull
Entries 89
Mean −209.2
Std Dev 259.3

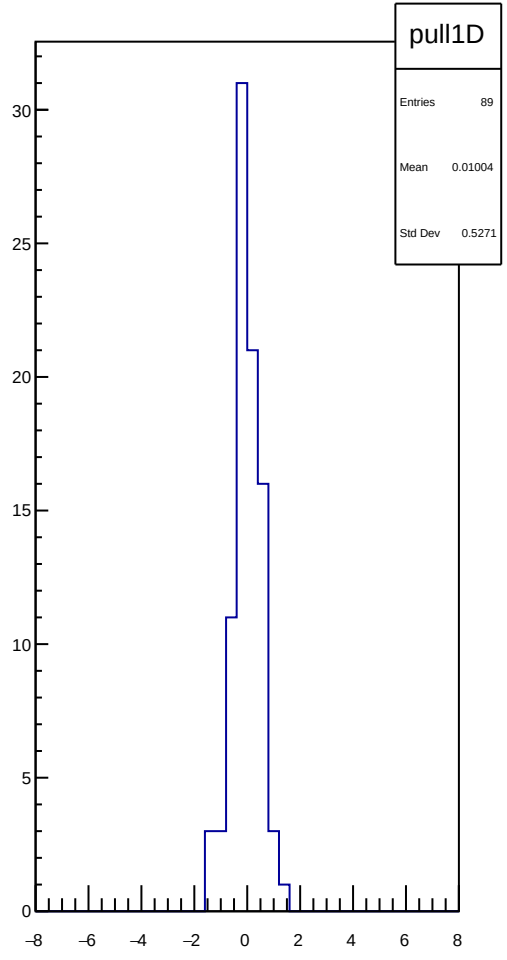

pull1D
Entries 89
Mean 0.03018
Std Dev 0.763

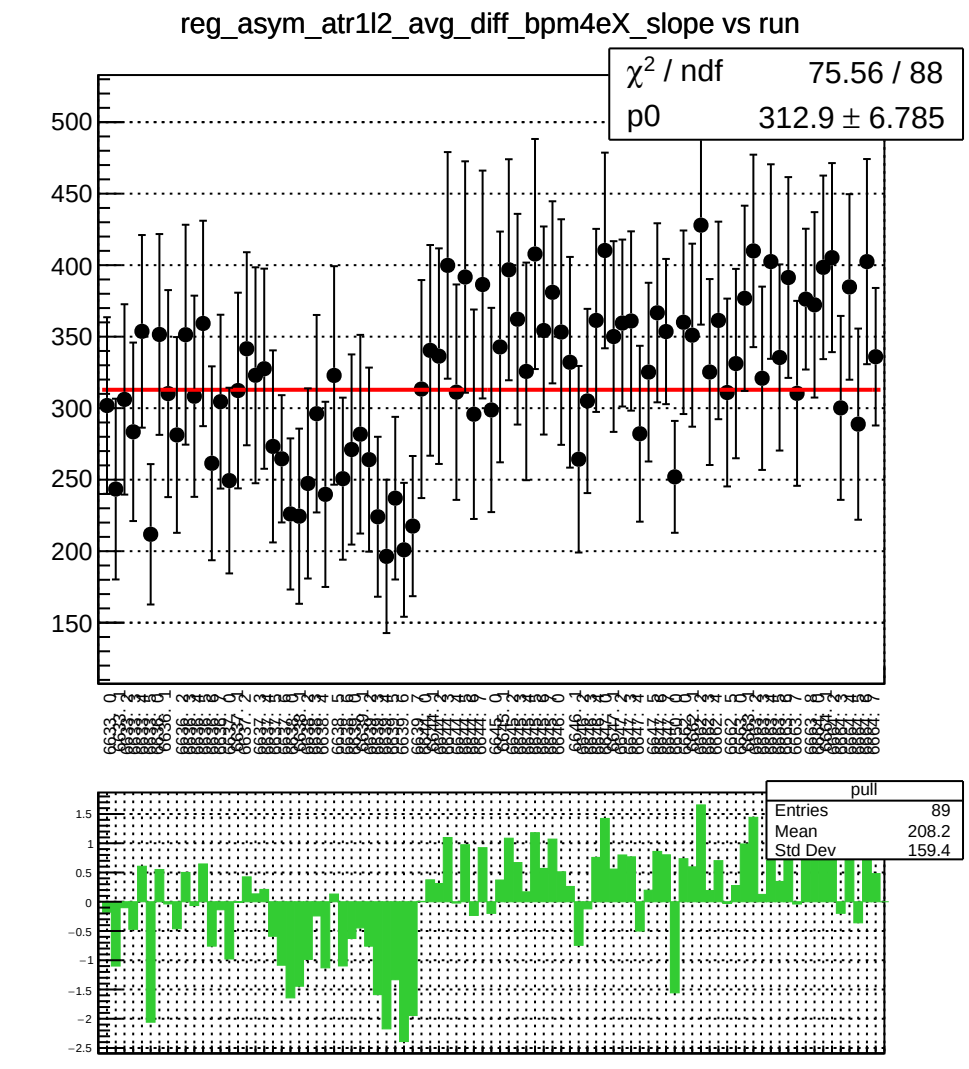

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 90.09 / 88
p0 123.7 ± 0.1883
132
130
128
126
124
122
120
pull
Entries 89
Mean −373
Std Dev 414.3
3
2
1
0
−1
pull1D
Entries 89
Mean 0.0518
Std Dev 1.005
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

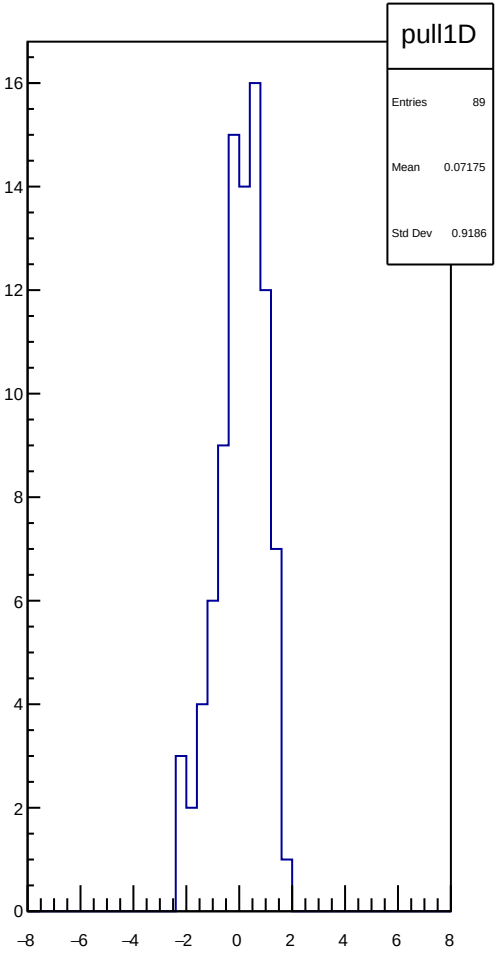

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 73.83 / 88
p0 −339.1 ± 6.342
pull
Entries 89
Mean 212.1
Std Dev 163.7

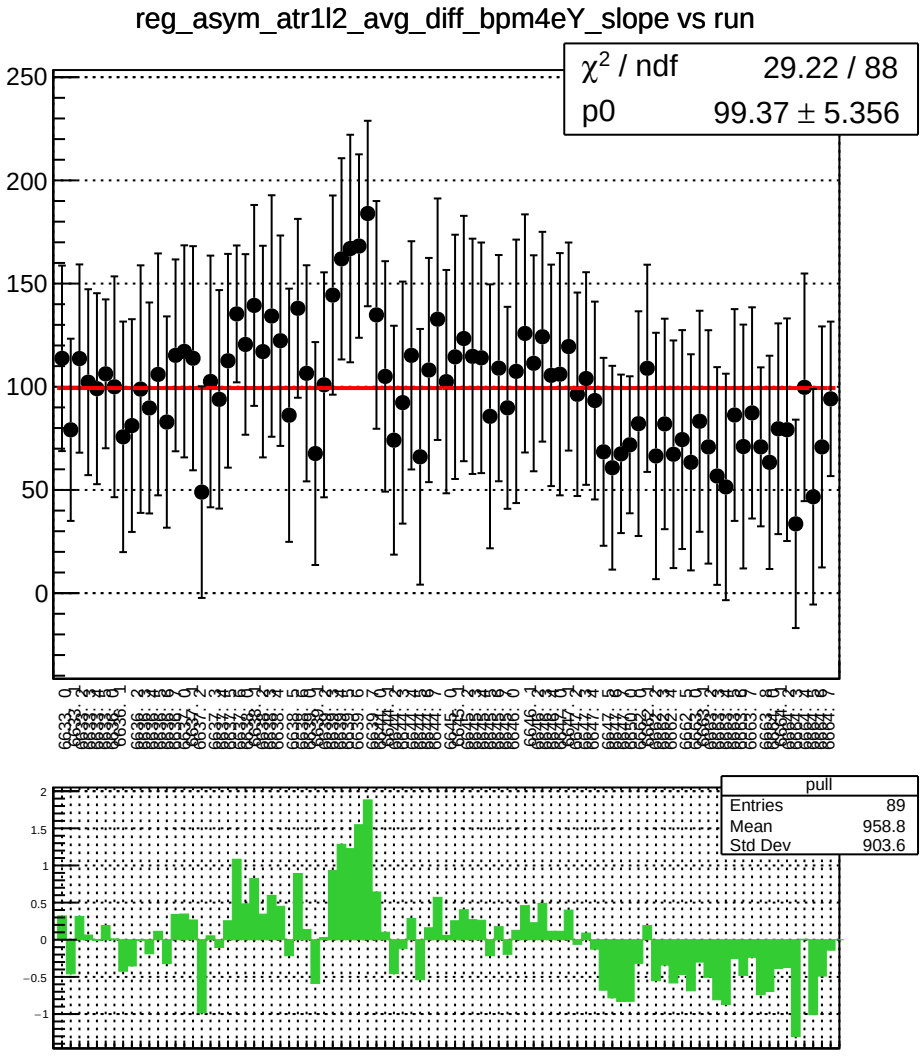

pull1D
Entries 89
Mean −0.06692
Std Dev 0.9083

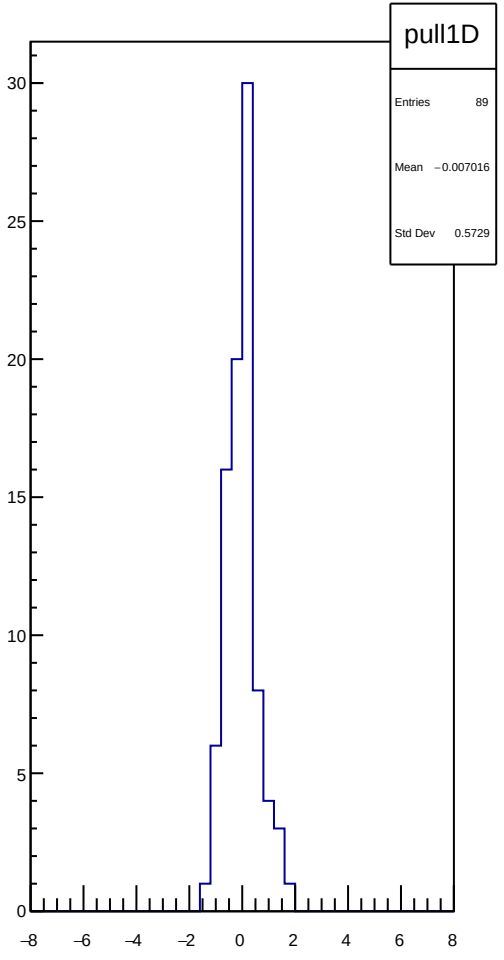

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 24.73 / 88
p0 −0.3444 ± 4.514
100
50
0
−50
−100
pull
Entries 89
Mean 596.8
Std Dev 541.6
1.5
1
0.5
0
−0.5
−1
−1.5

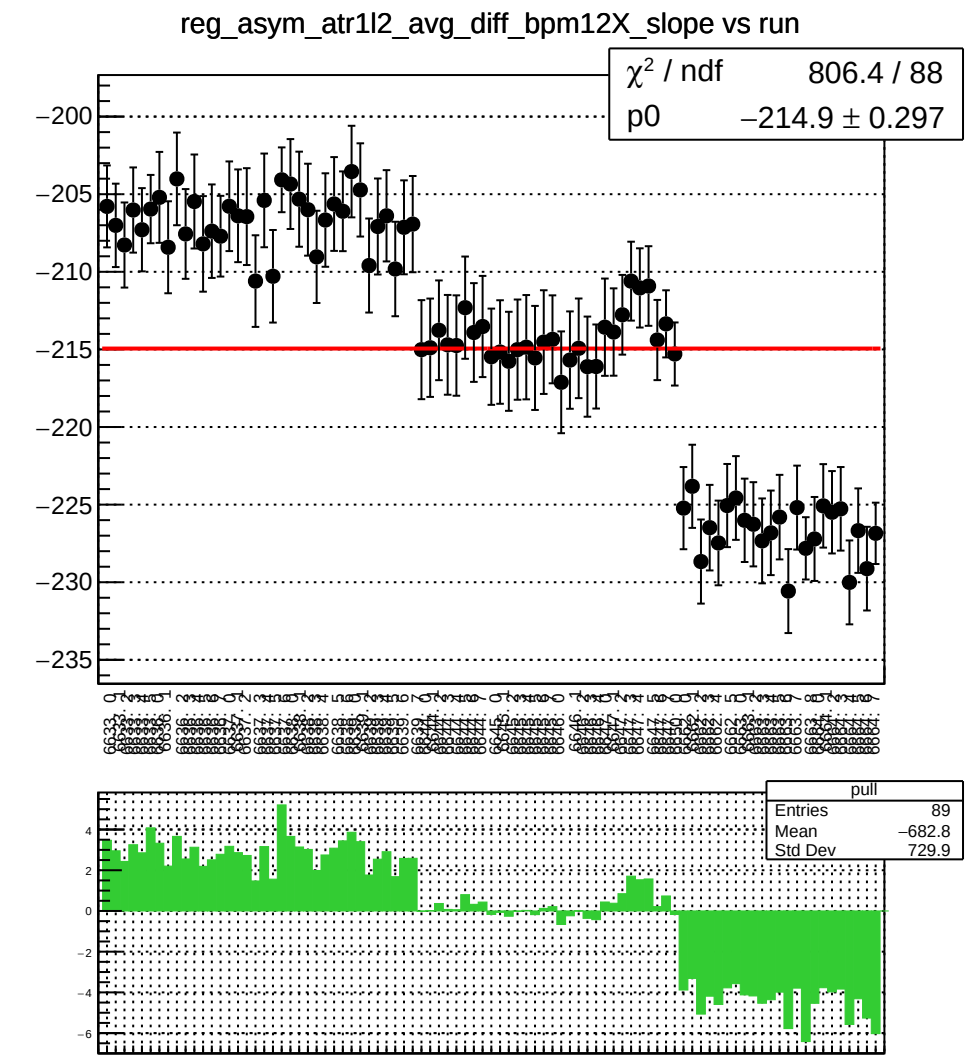

pull1D
Entries 89
Mean 0.01004
Std Dev 0.5271
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

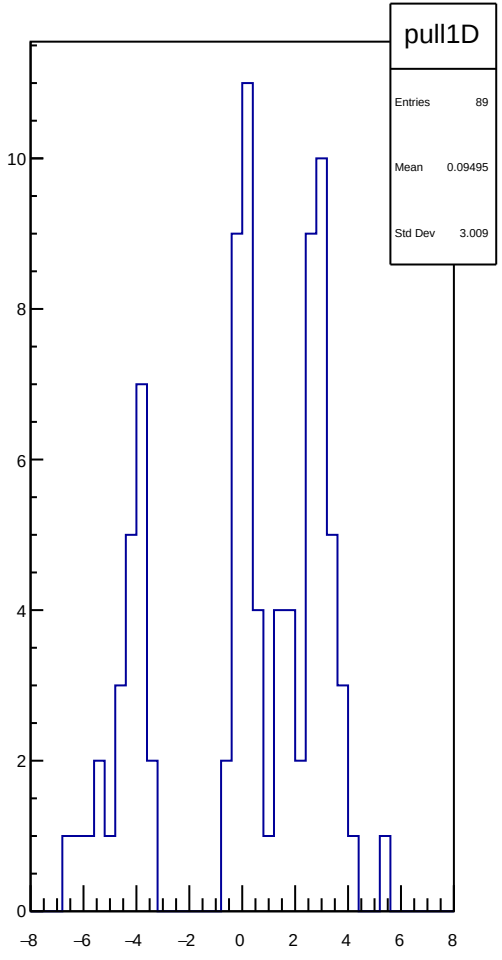

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 75.56 / 88
p0 312.9 ± 6.785
pull
Entries 89
Mean 208.2
Std Dev 159.4

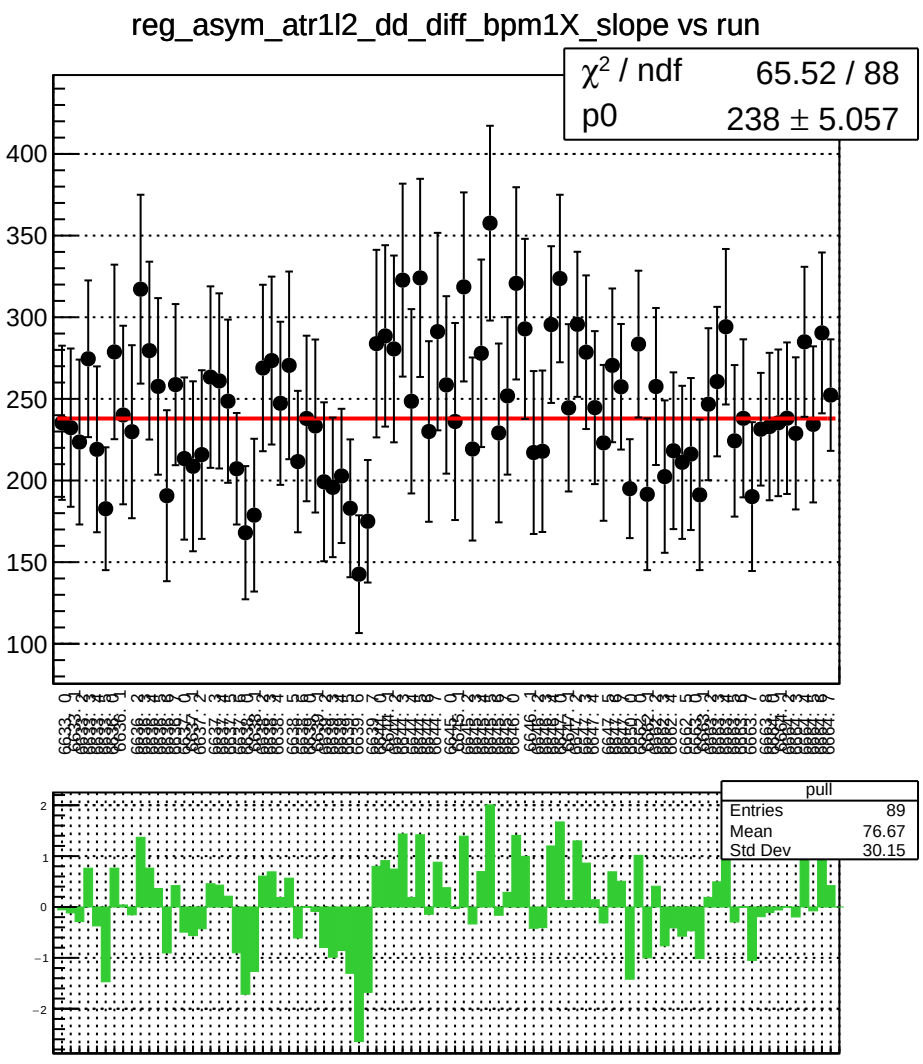

pull1D
Entries 89
Mean 0.07175
Std Dev 0.9186

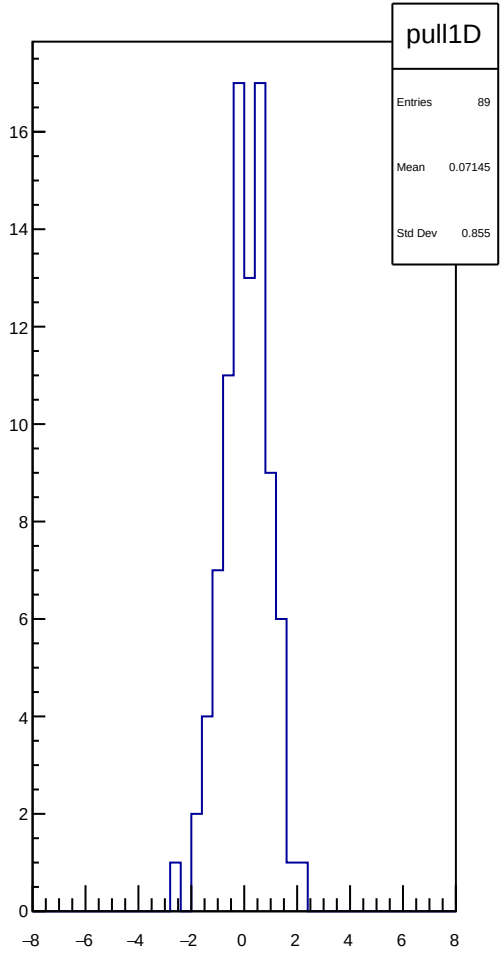

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 29.22 / 88
p0 99.37 ± 5.356
250
200
150
100
50
0
pull
Entries 89
Mean 958.8
Std Dev 903.6
2
1.5
1
0.5
0
−0.5
−1

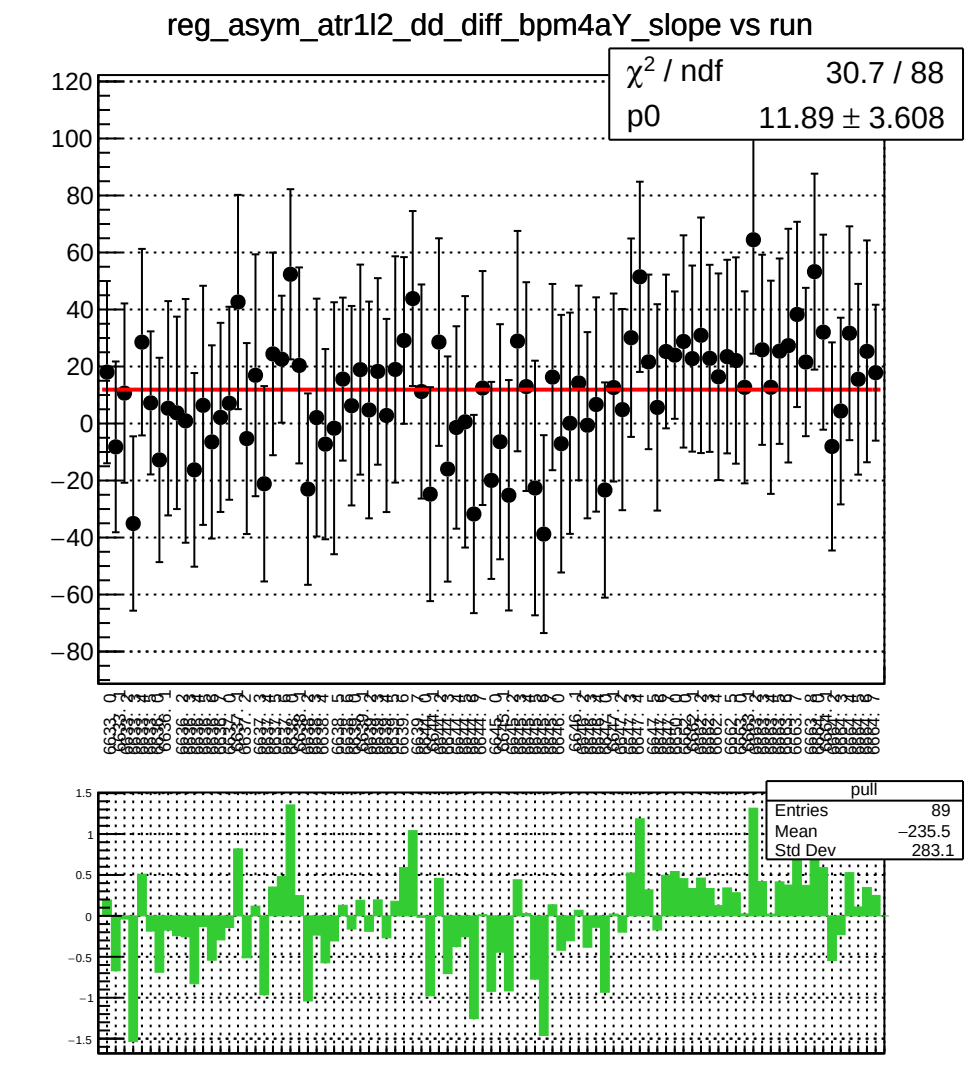

pull1D
Entries 89
Mean −0.007016
Std Dev 0.5729
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

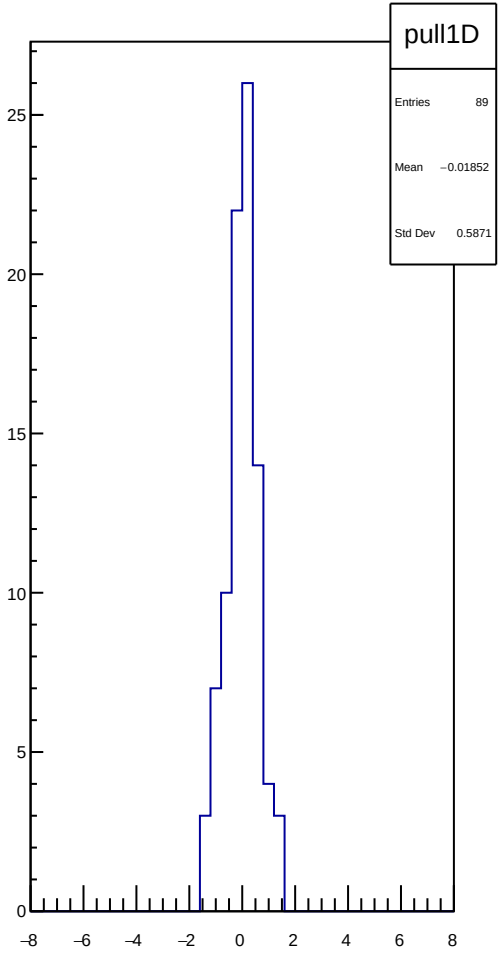

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 806.4 / 88
p0 −214.9 ± 0.297
pull
Entries 89
Mean −682.8
Std Dev 729.9

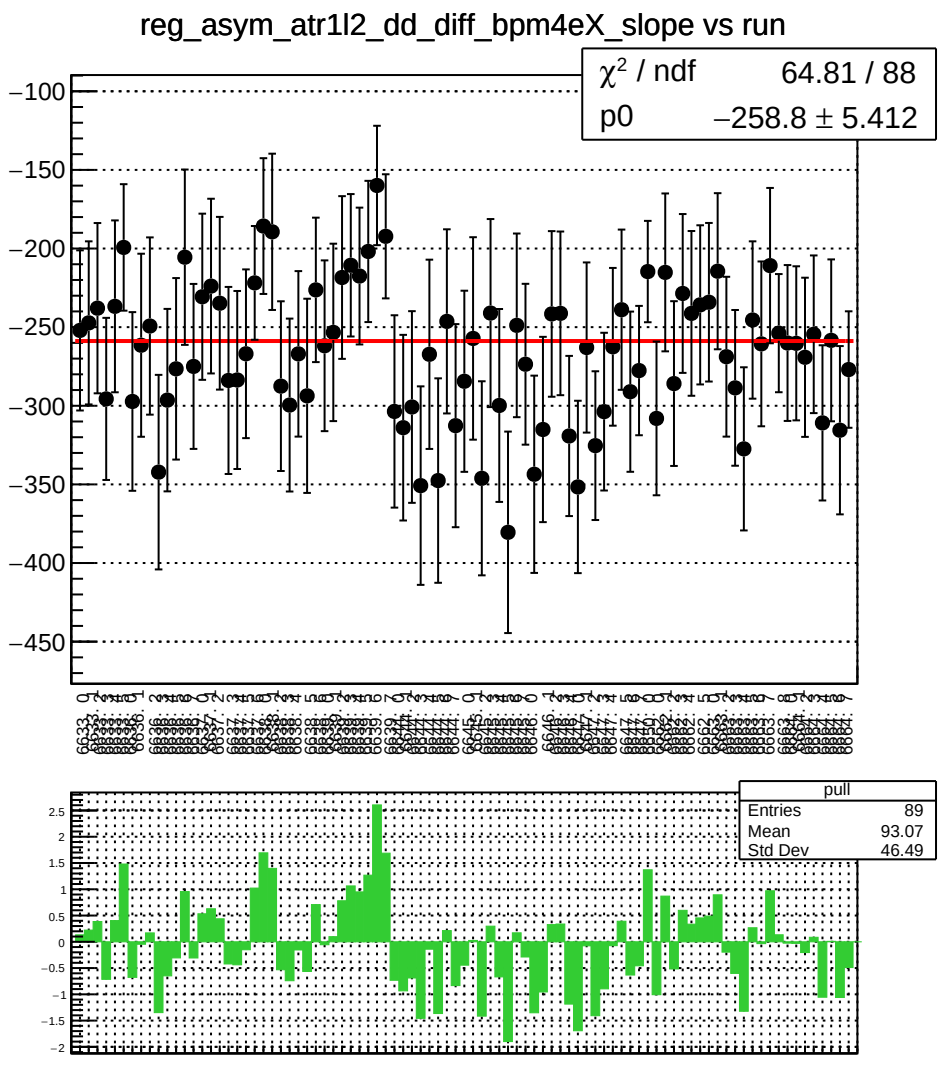

pull1D
Entries 89
Mean 0.09495
Std Dev 3.009

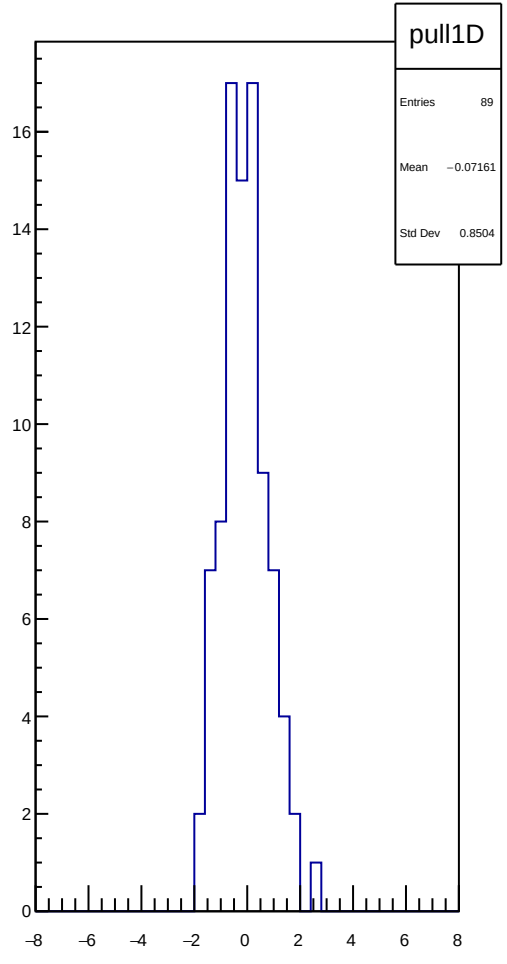

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 65.52 / 88
p0 238 ± 5.057
400
350
300
250
200
150
100
pull
Entries 89
Mean 76.67
Std Dev 30.15
2
1
0
−1
−2

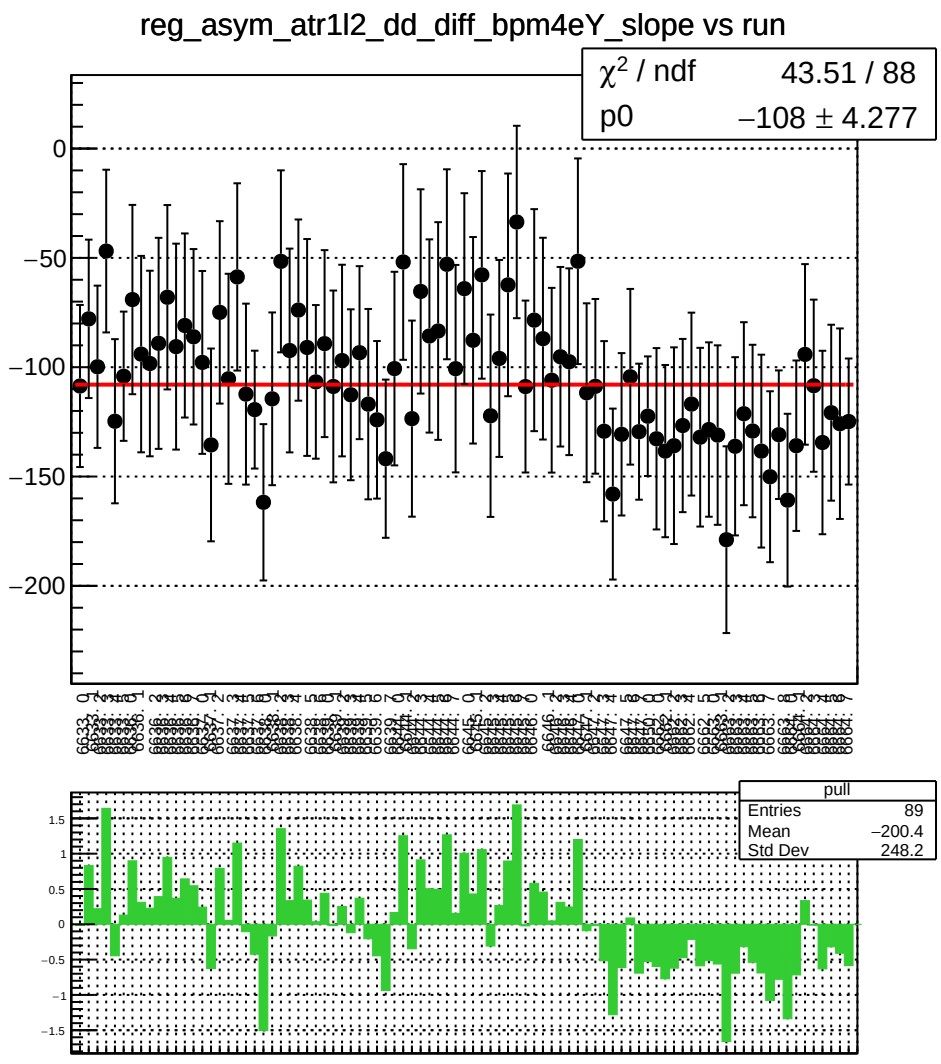

pull1D
Entries 89
Mean 0.07145
Std Dev 0.855
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

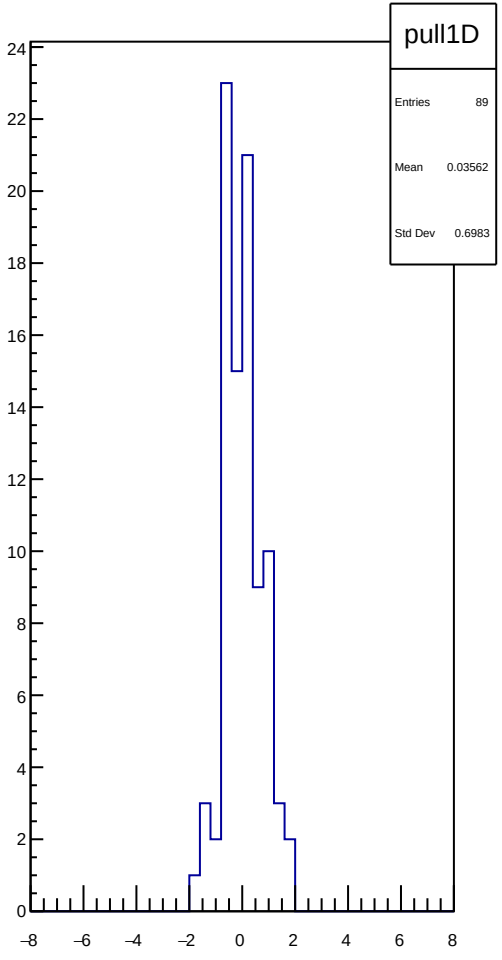

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 30.7 / 88
p0 11.89 ± 3.608
pull
Entries 89
Mean −235.5
Std Dev 283.1

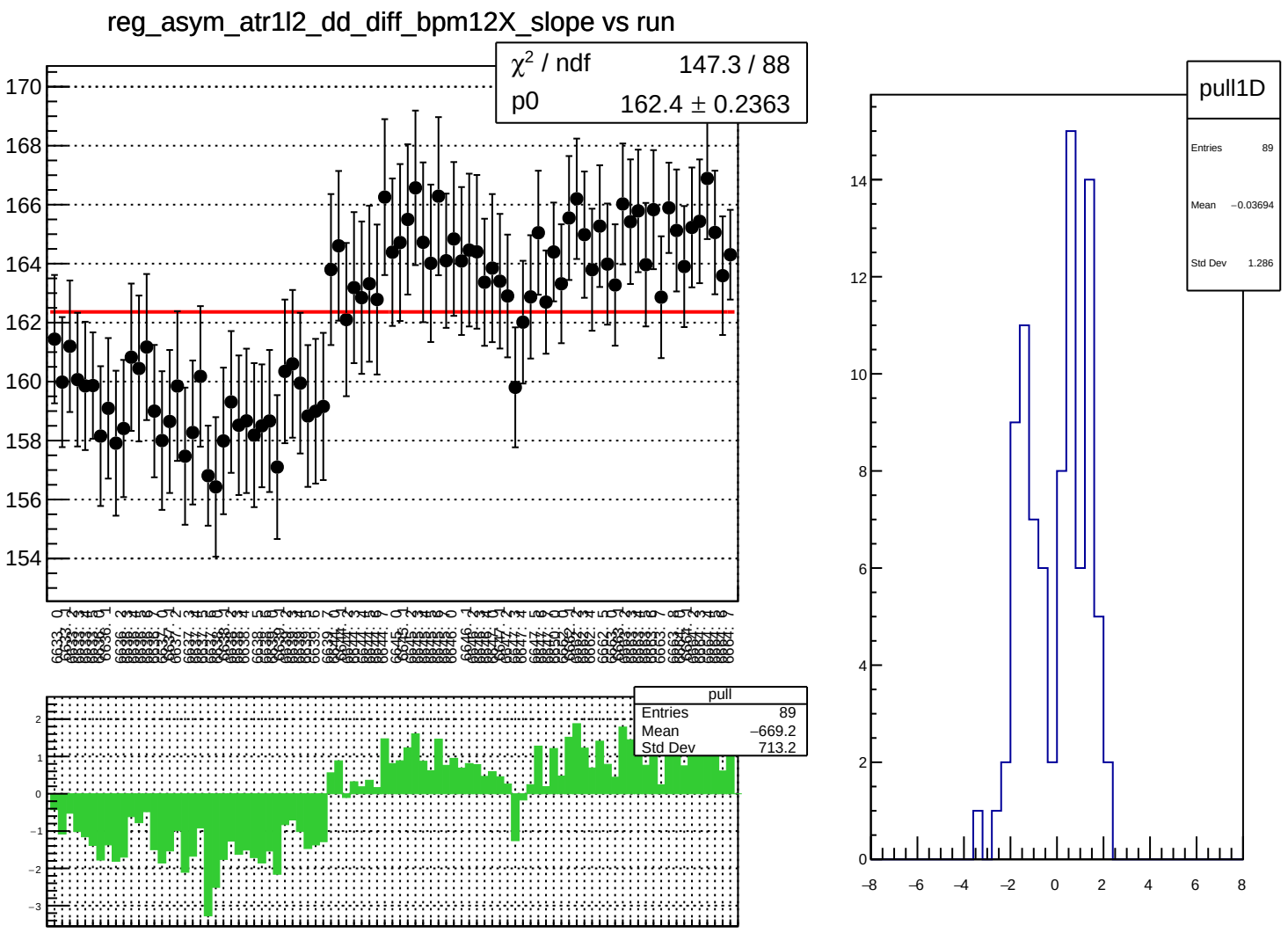

pull1D
Entries 89
Mean −0.01852
Std Dev 0.5871

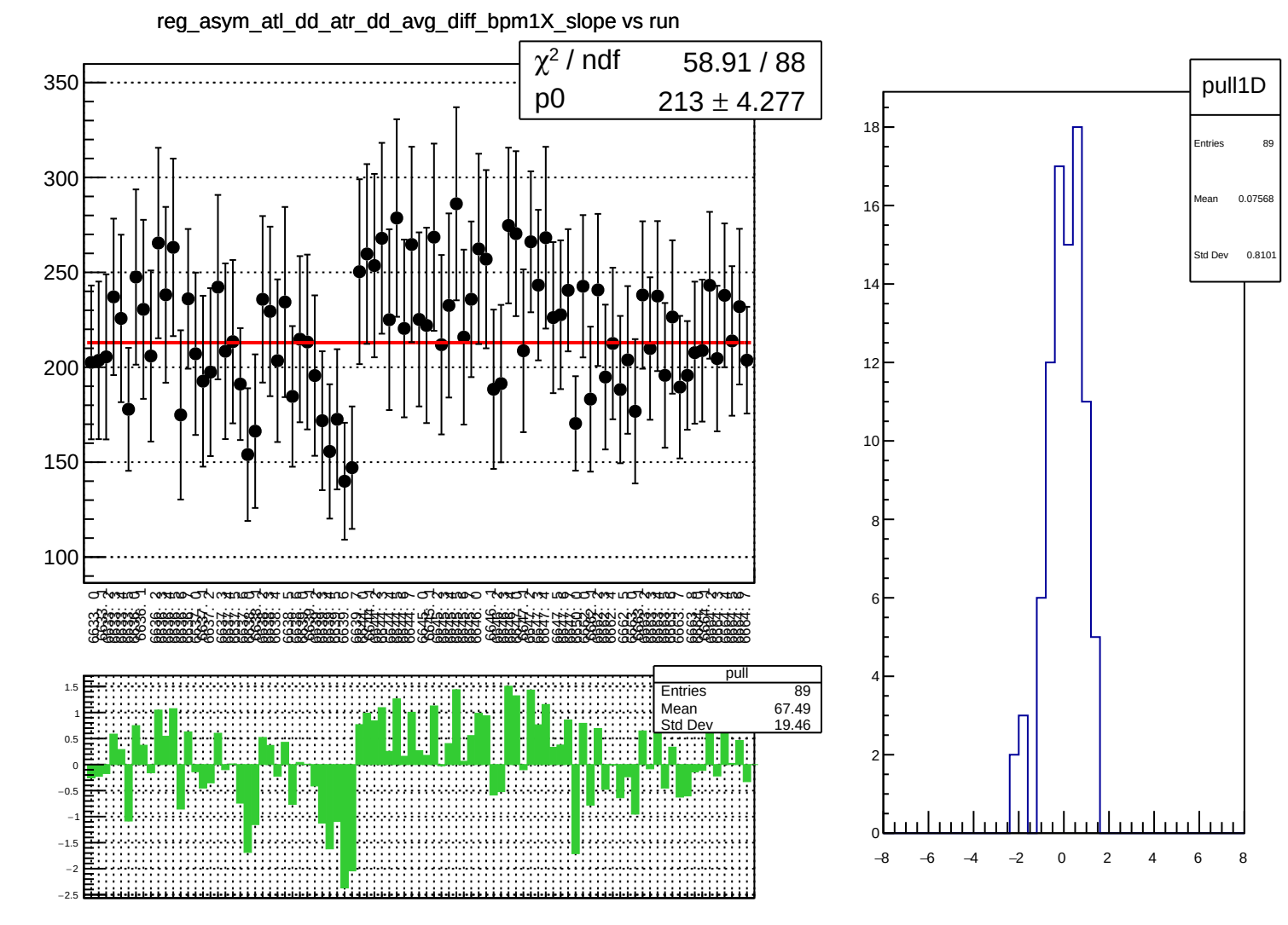

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 64.81 / 88
p0 −258.8 ± 5.412
pull
Entries 89
Mean 93.07
Std Dev 46.49

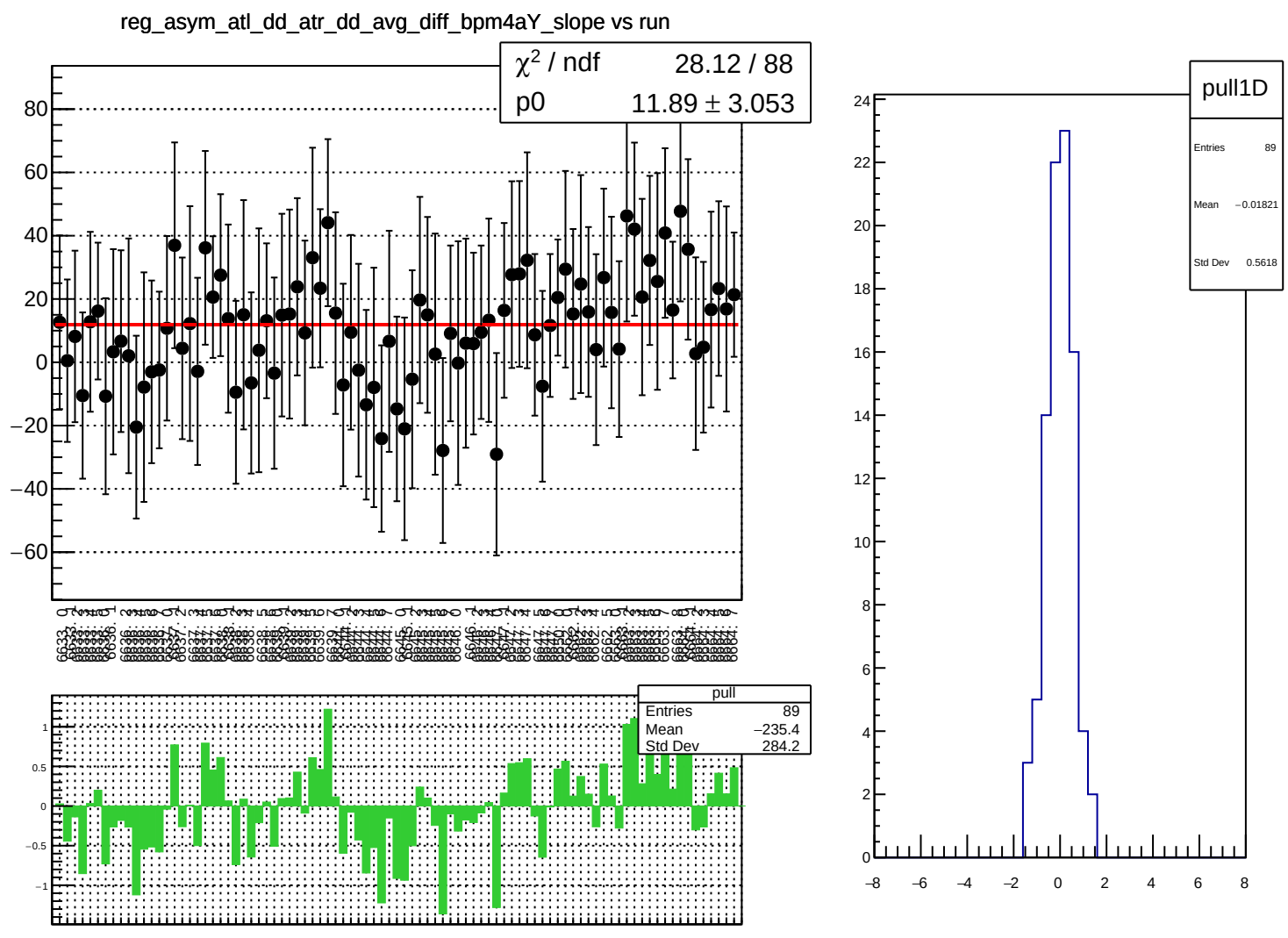

pull1D
Entries 89
Mean −0.07161
Std Dev 0.8504

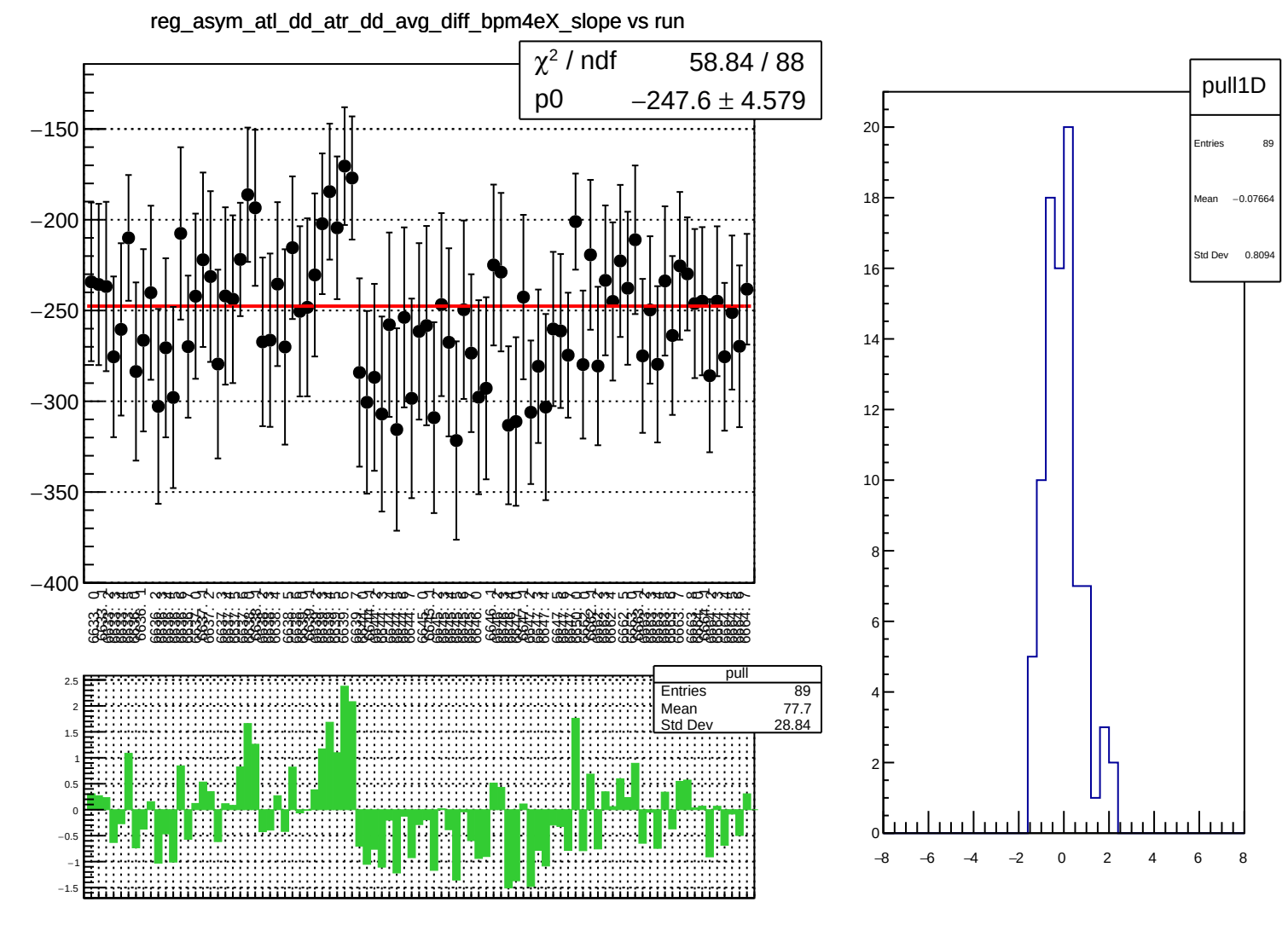

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 43.51 / 88
p0 −108 ± 4.277
0
−50
−100
−150
−200
pull
Entries 89
Mean −200.4
Std Dev 248.2
1.5
1
0.5
0
−0.5
−1
−1.5

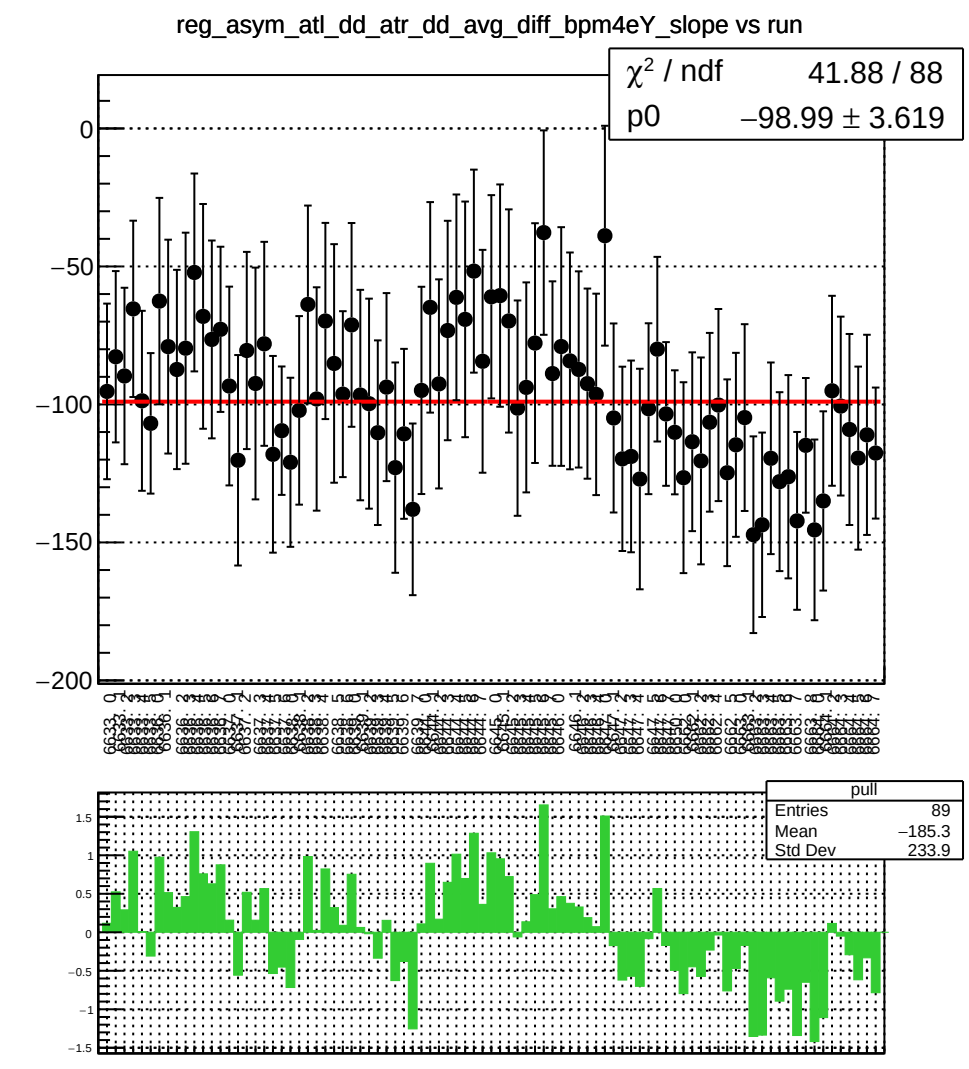

pull1D
Entries 89
Mean 0.03562
Std Dev 0.6983
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

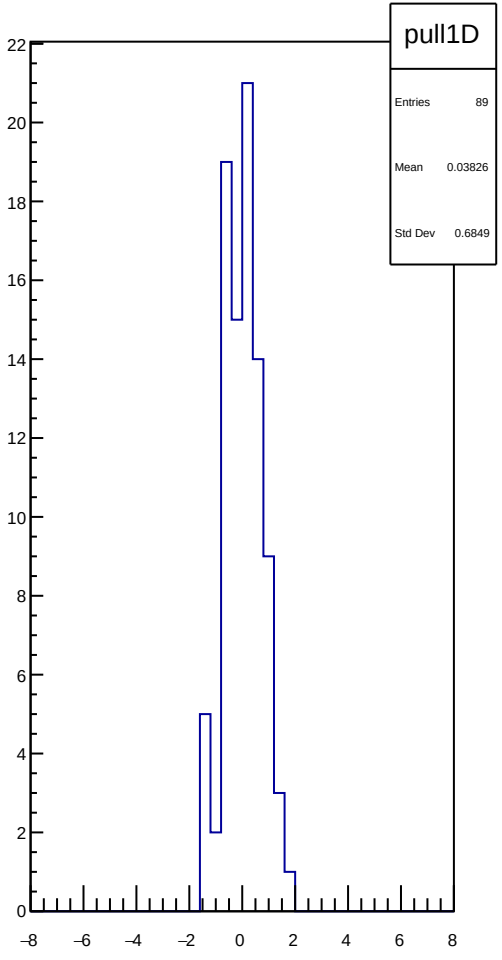

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 147.3 / 88
p0 162.4 ± 0.2363
170
168
166
164
162
160
158
156
154
pull
Entries 89
Mean −669.2
Std Dev 713.2
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.03694
Std Dev 1.286
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

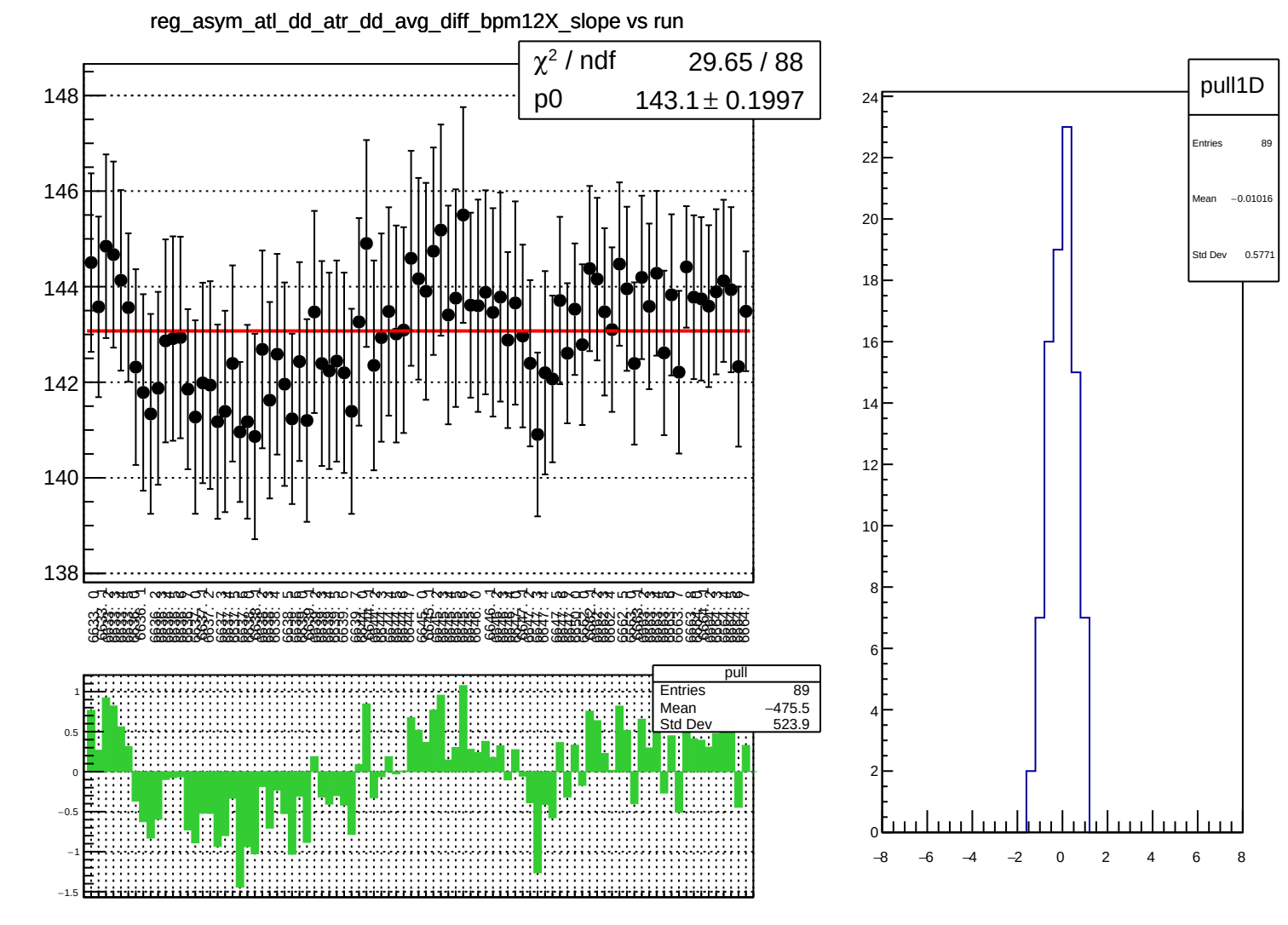

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 58.91 / 88
p0 213 ± 4.277
pull
Entries 89
Mean 67.49
Std Dev 19.46
pull1D
Entries 89
Mean 0.07568
Std Dev 0.8101

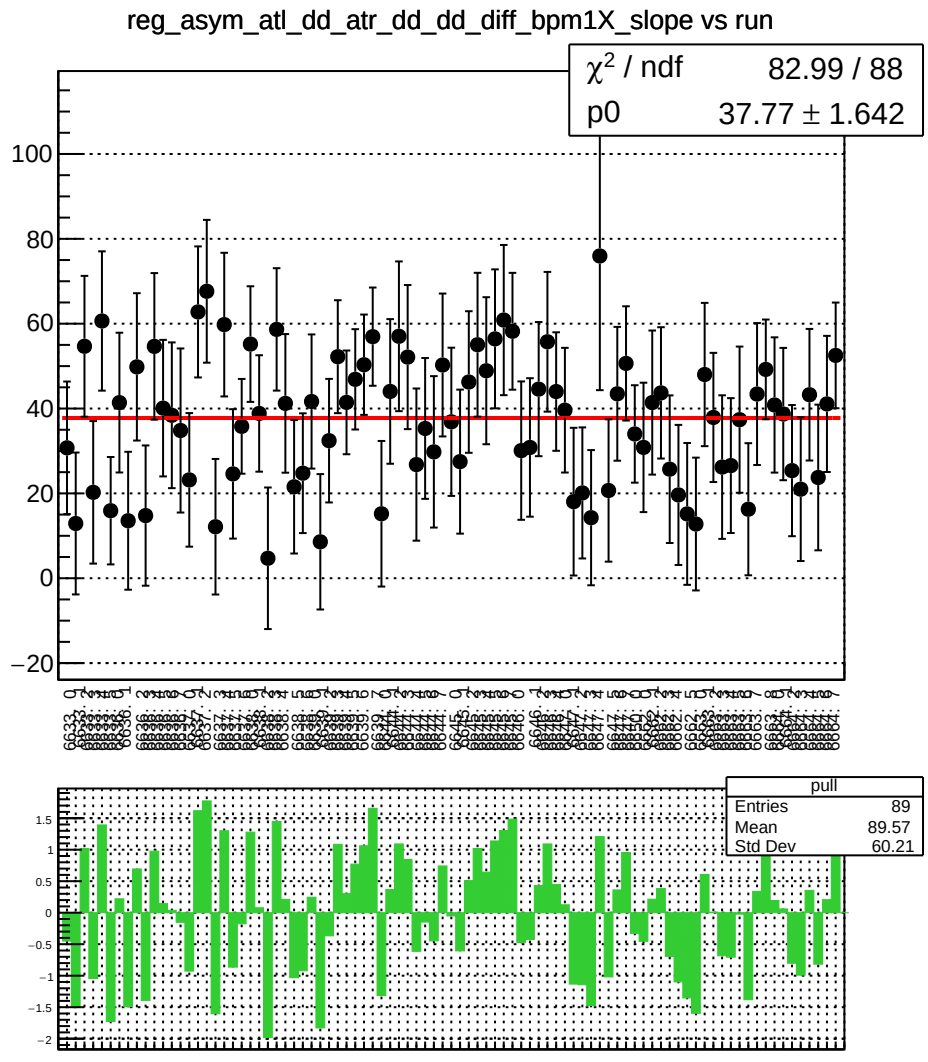

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 28.12 / 88
p0 11.89 ± 3.053
pull
Entries 89
Mean −235.4
Std Dev 284.2
pull1D
Entries 89
Mean −0.01821
Std Dev 0.5618

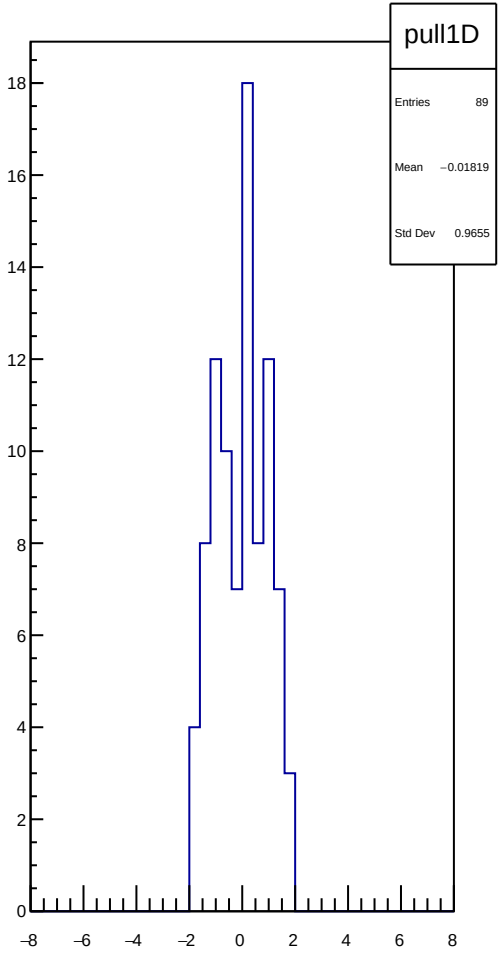

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 58.84 / 88
p0 −247.6 ± 4.579
−150
−200
−250
−300
−350
−400
pull
Entries 89
Mean 77.7
Std Dev 28.84
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean −0.07664
Std Dev 0.8094
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

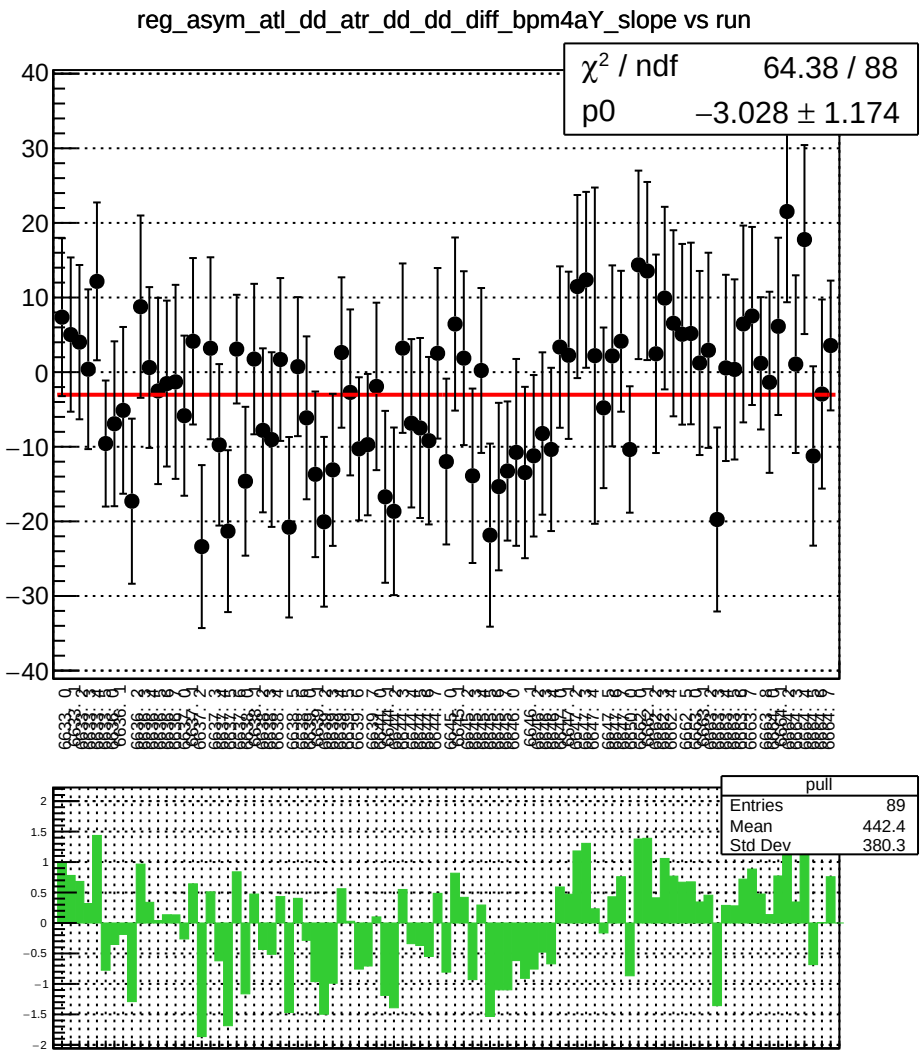

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 41.88 / 88
p0 −98.99 ± 3.619
pull
Entries 89
Mean −185.3
Std Dev 233.9

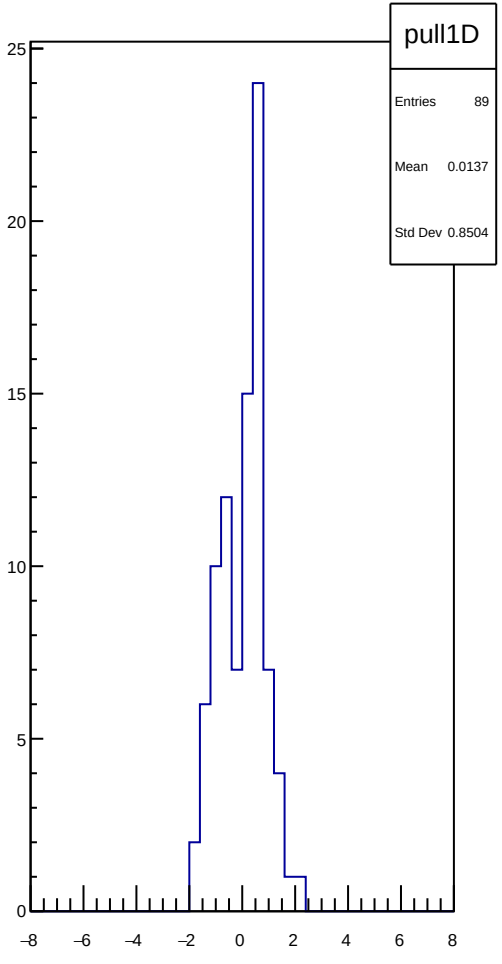

pull1D
Entries 89
Mean 0.03826
Std Dev 0.6849

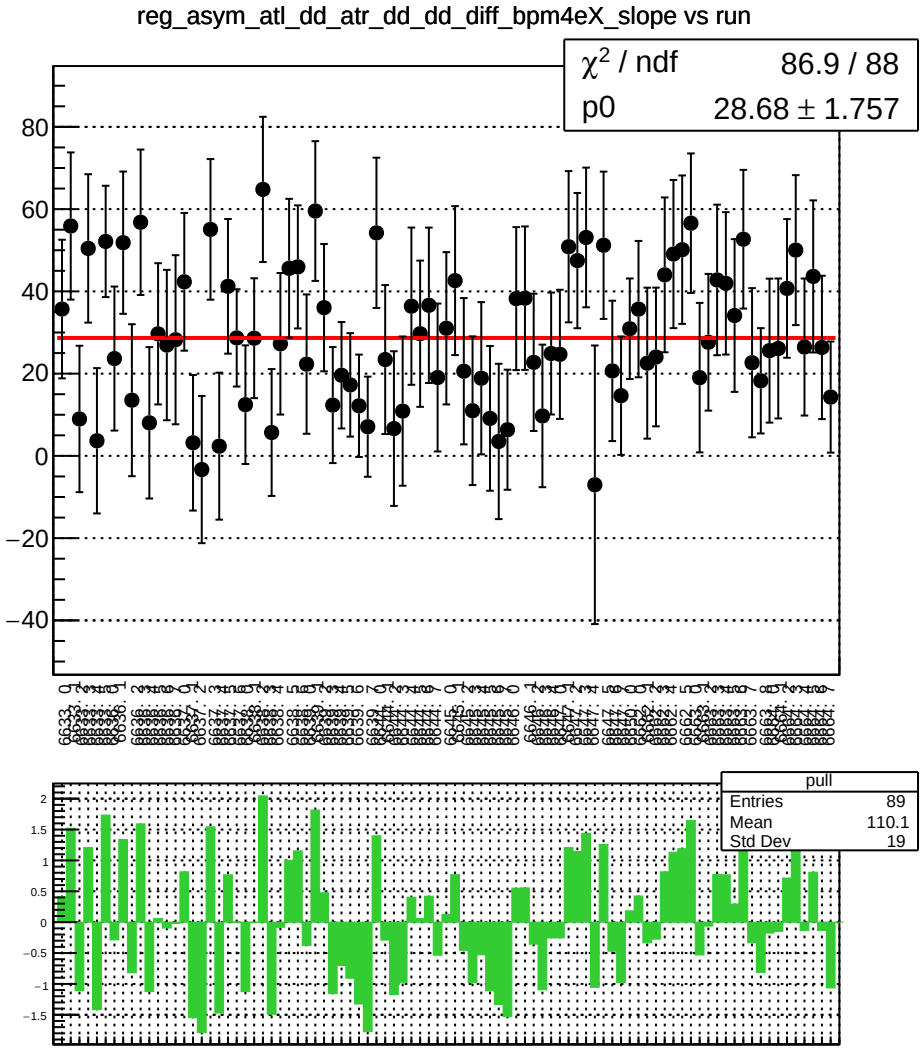

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 29.65 / 88
p0 143.1 ± 0.1997
148
146
144
142
140
138
pull
Entries 89
Mean −475.5
Std Dev 523.9
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean −0.01016
Std Dev 0.5771
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

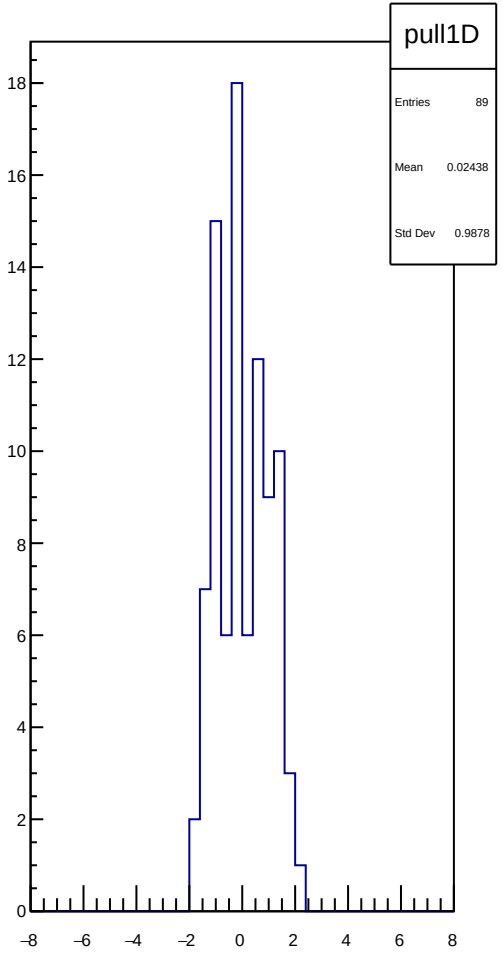

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 82.99 / 88
p0 37.77 ± 1.642
pull
Entries 89
Mean 89.57
Std Dev 60.21

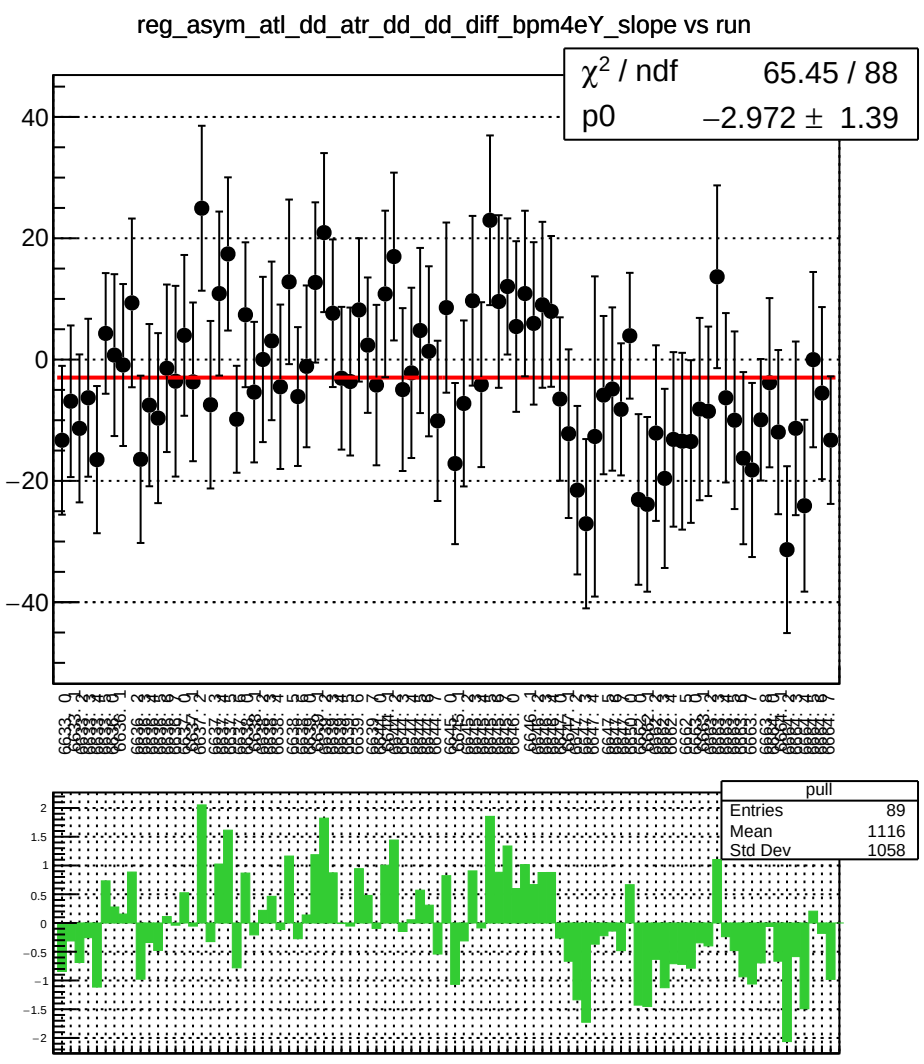

pull1D
Entries 89
Mean −0.01819
Std Dev 0.9655

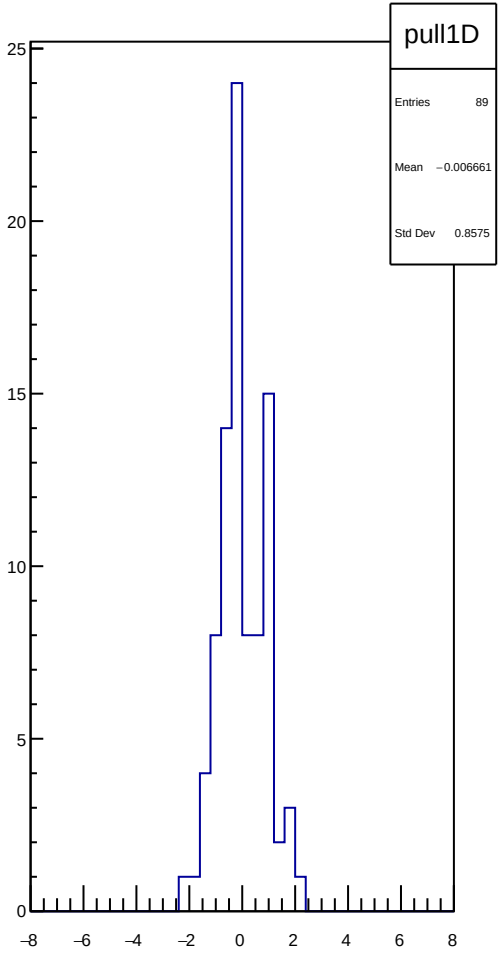

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 64.38 / 88
p0 −3.028 ± 1.174
pull
Entries 89
Mean 442.4
Std Dev 380.3

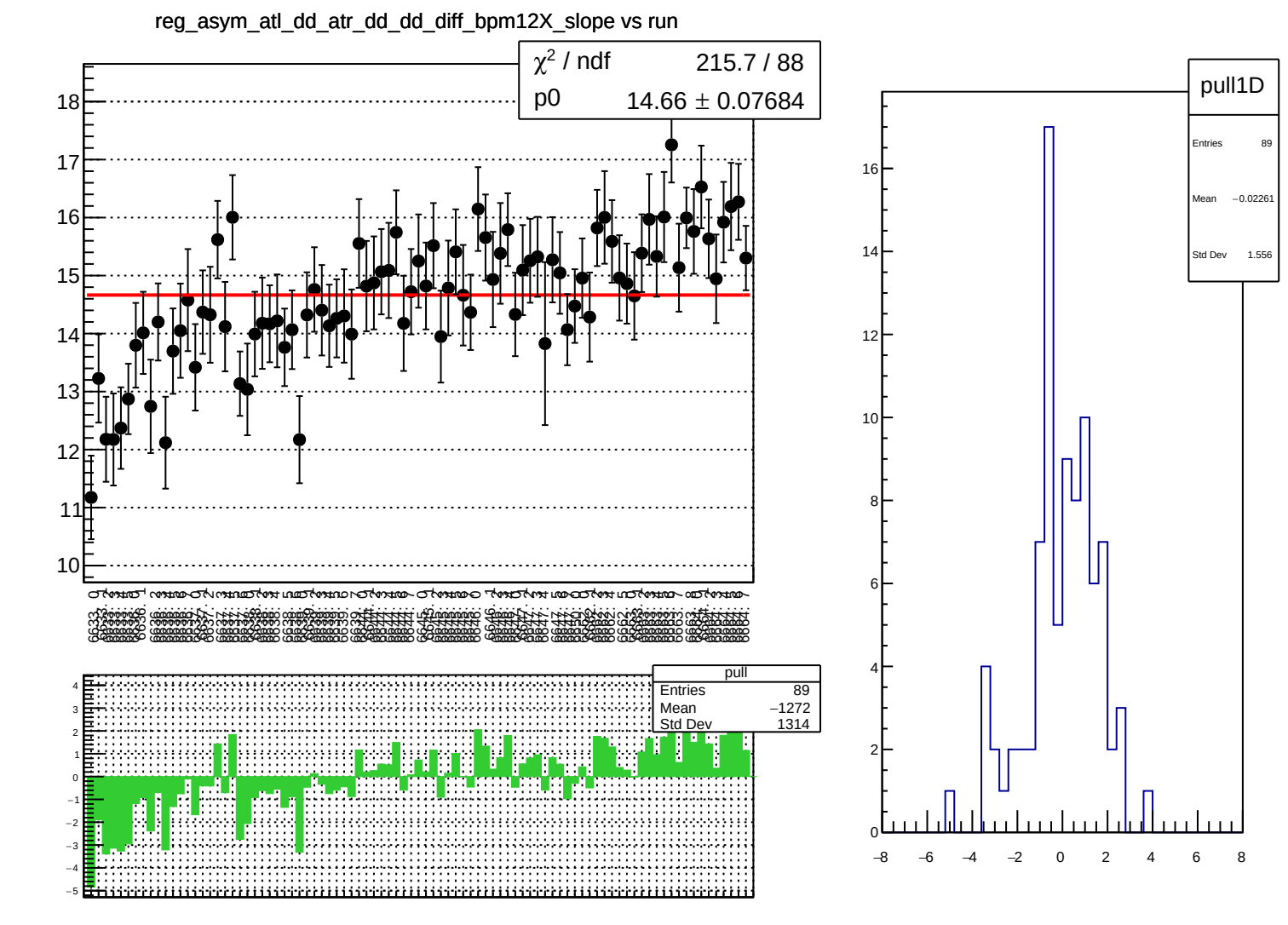

pull1D
Entries 89
Mean 0.0137
Std Dev 0.8504

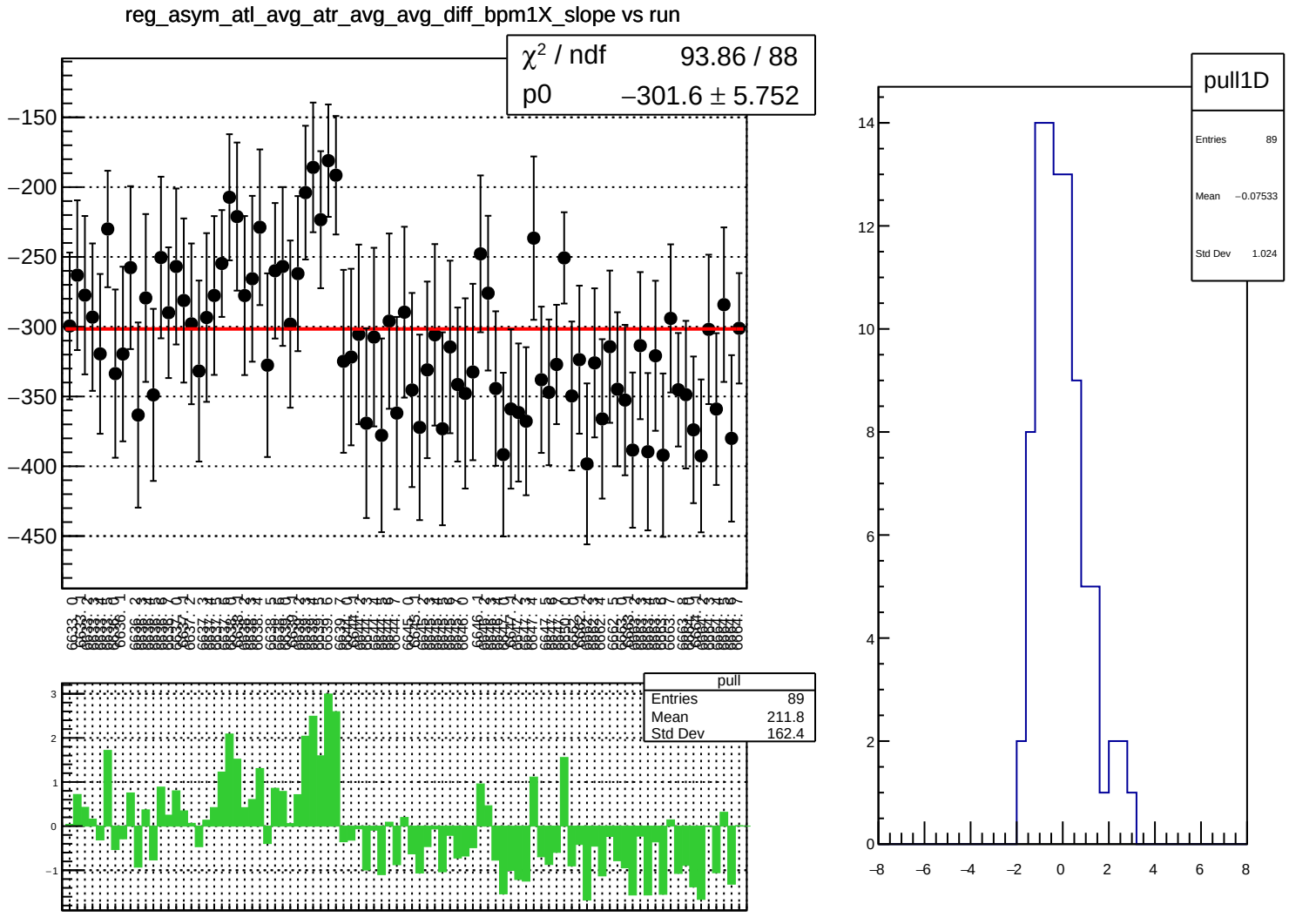

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ^2 / ndf 86.9 / 88
p0 28.68 ± 1.757
pull
Entries 89
Mean 110.1
Std Dev 19

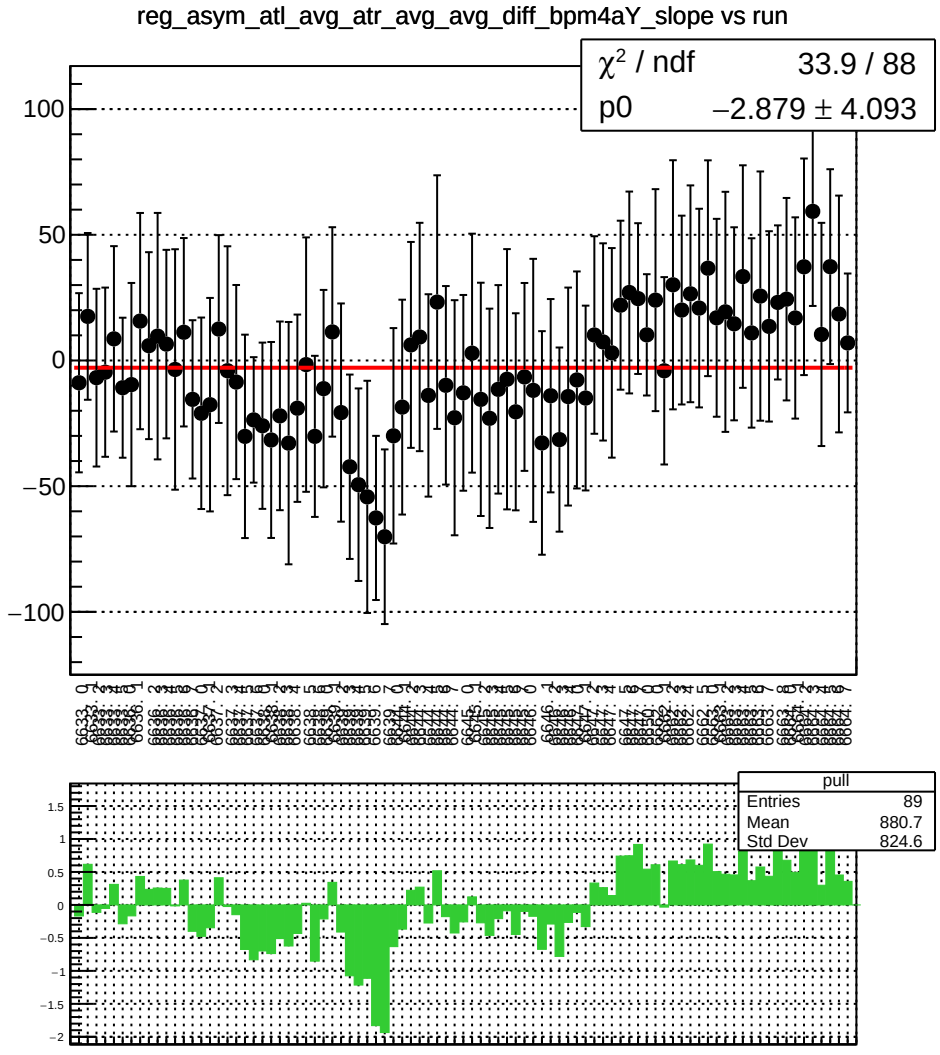

pull1D
Entries 89
Mean 0.02438
Std Dev 0.9878

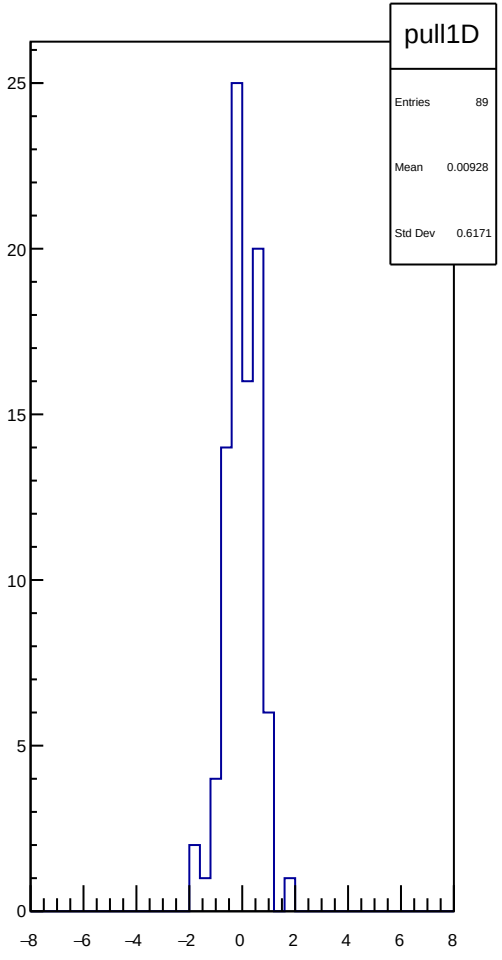

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 65.45 / 88
p0 −2.972 ± 1.39
pull
Entries 89
Mean 1116
Std Dev 1058

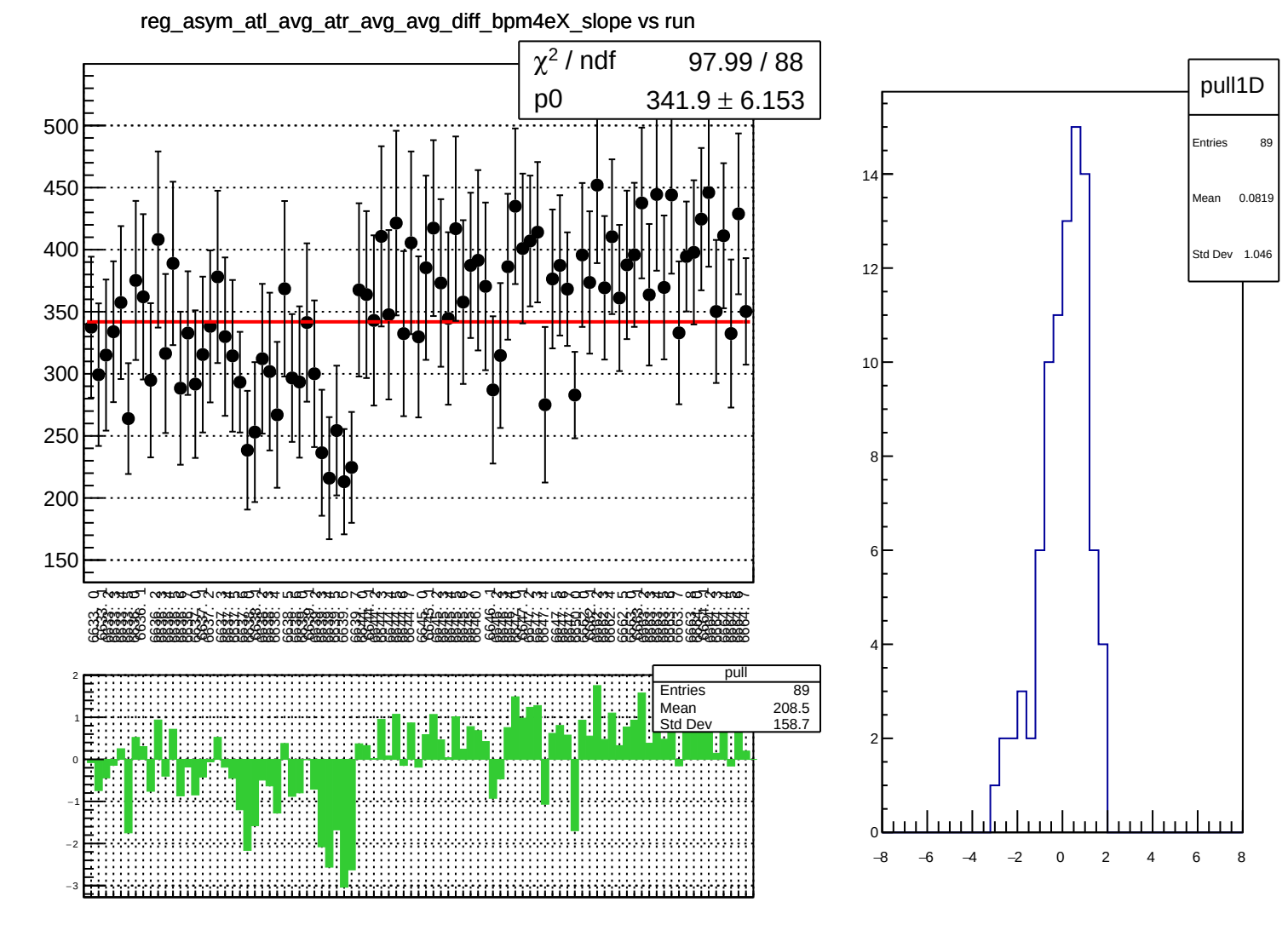

pull1D
Entries 89
Mean −0.006661
Std Dev 0.8575

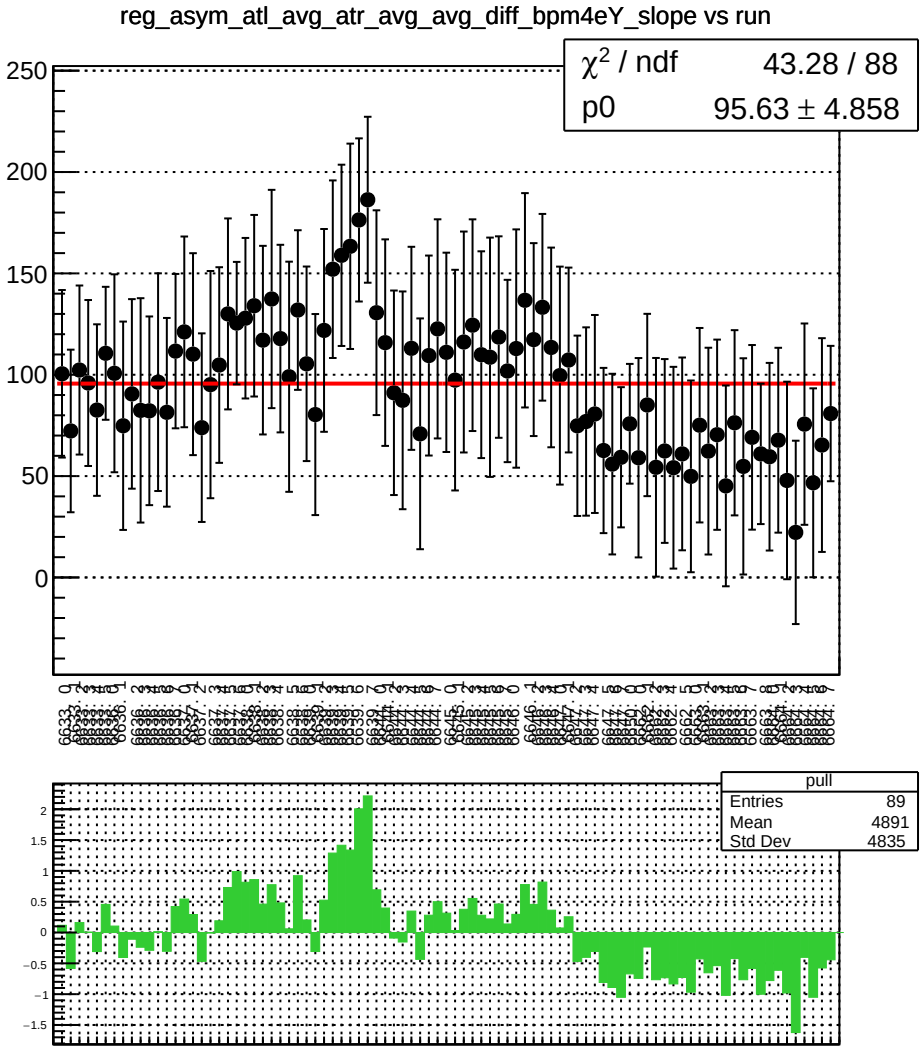

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 215.7 / 88
p0 14.66 ± 0.07684
pull
Entries 89
Mean −1272
Std Dev 1314
pull1D
Entries 89
Mean −0.02261
Std Dev 1.556

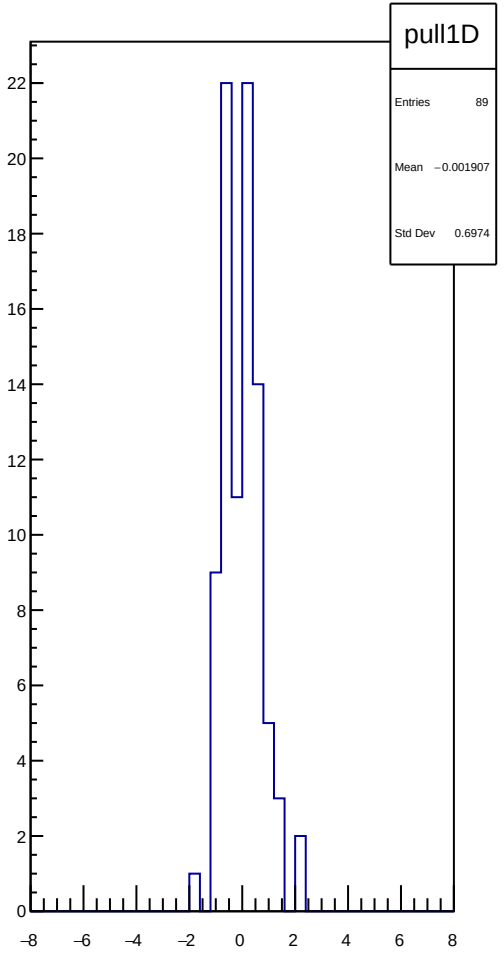

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 93.86 / 88
p0 −301.6 ± 5.752
pull
Entries 89
Mean 211.8
Std Dev 162.4
pull1D
Entries 89
Mean −0.07533
Std Dev 1.024

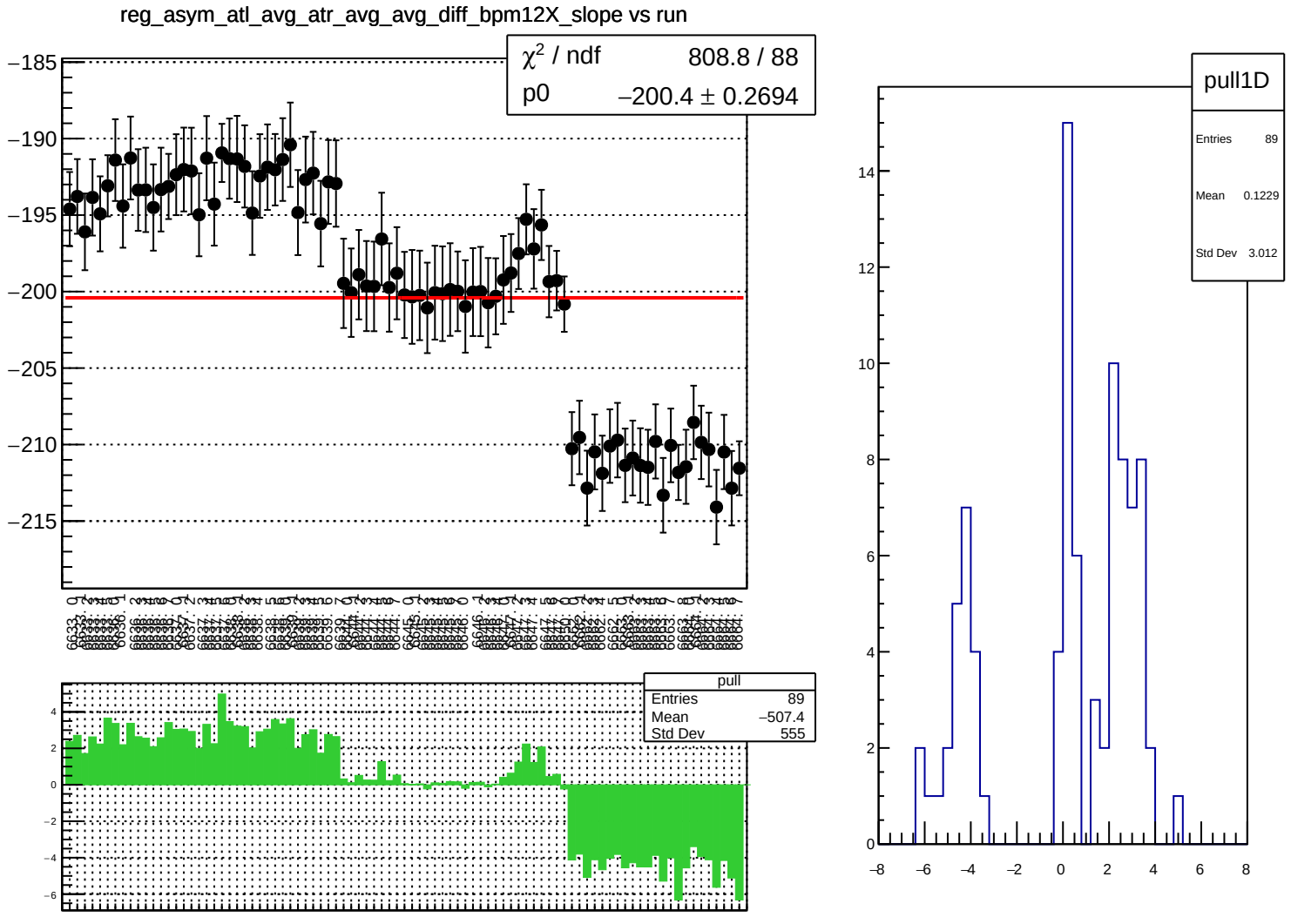

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 33.9 / 88
p0 −2.879 ± 4.093
100
50
0
−50
−100
pull
Entries 89
Mean 880.7
Std Dev 824.6
1.5
1
0.5
0
−0.5
−1
−1.5
−2

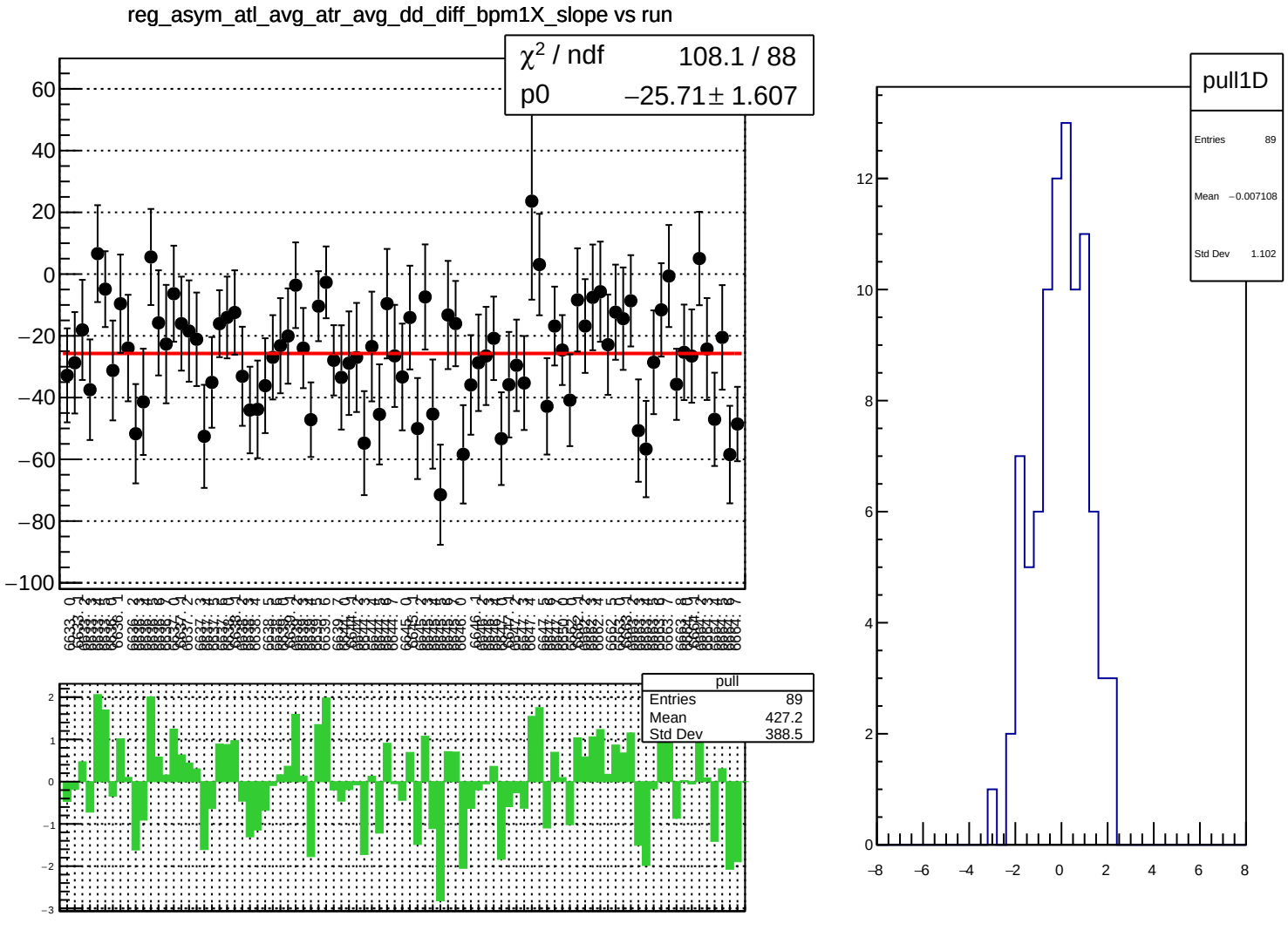

pull1D
Entries 89
Mean 0.00928
Std Dev 0.6171
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

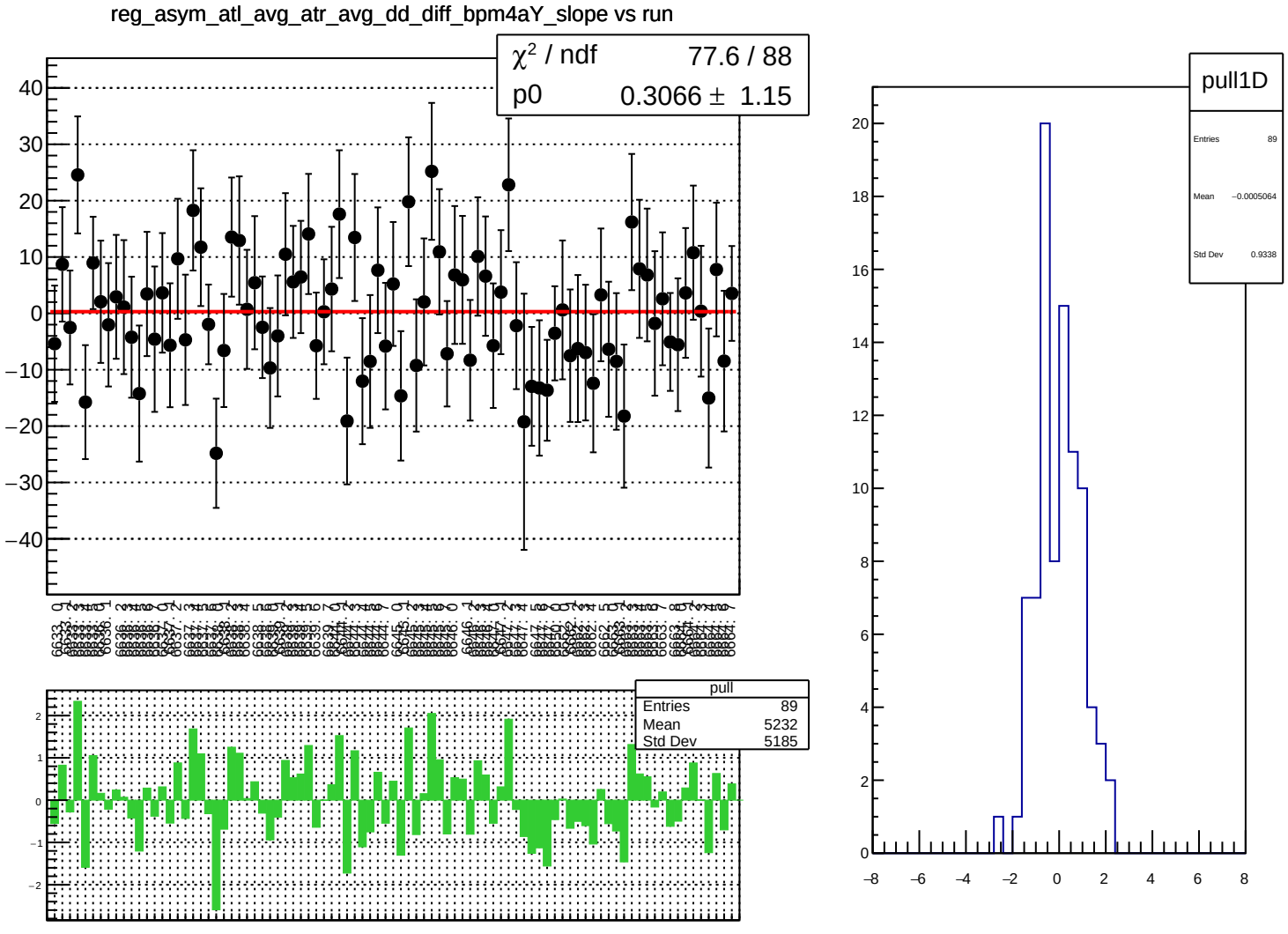

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 97.99 / 88
p0 341.9 ± 6.153
pull
Entries 89
Mean 208.5
Std Dev 158.7
pull1D
Entries 89
Mean 0.0819
Std Dev 1.046

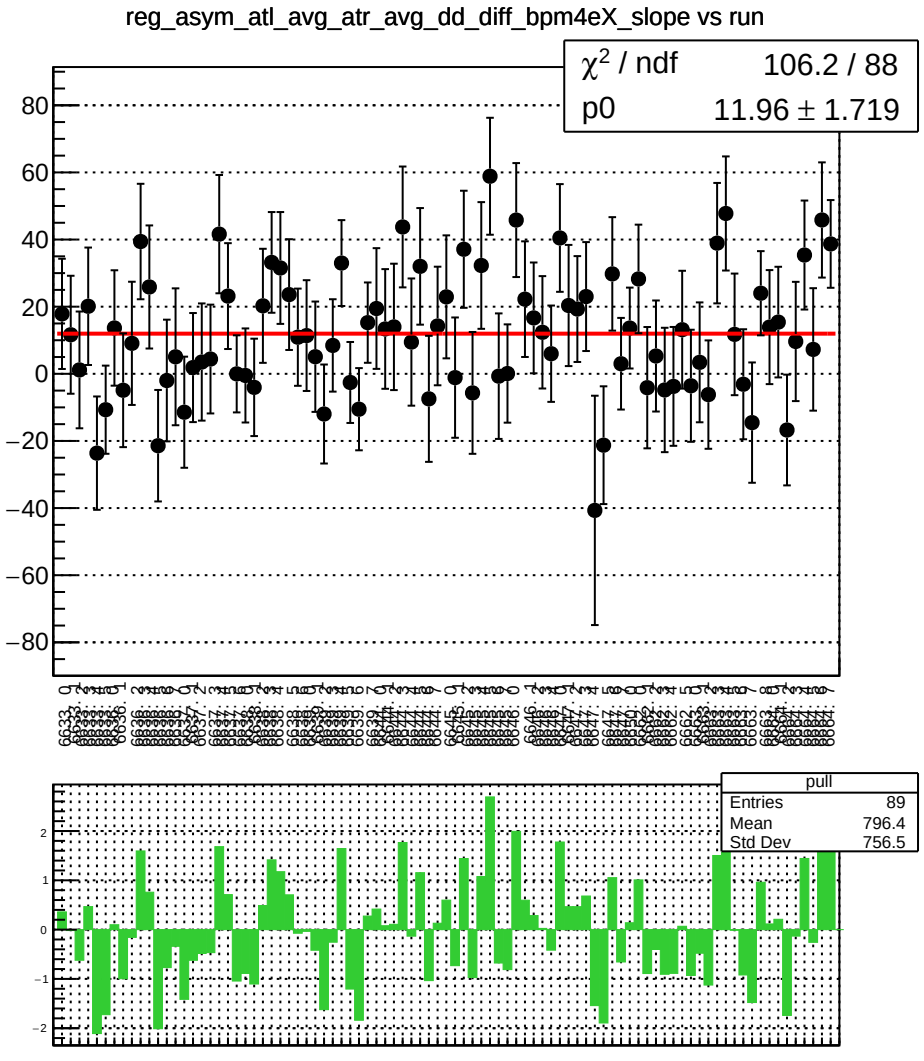

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 43.28 / 88
p0 95.63 ± 4.858
250
200
150
100
50
0
pull
Entries 89
Mean 4891
Std Dev 4835
2
1.5
1
0.5
0
−0.5
−1
−1.5

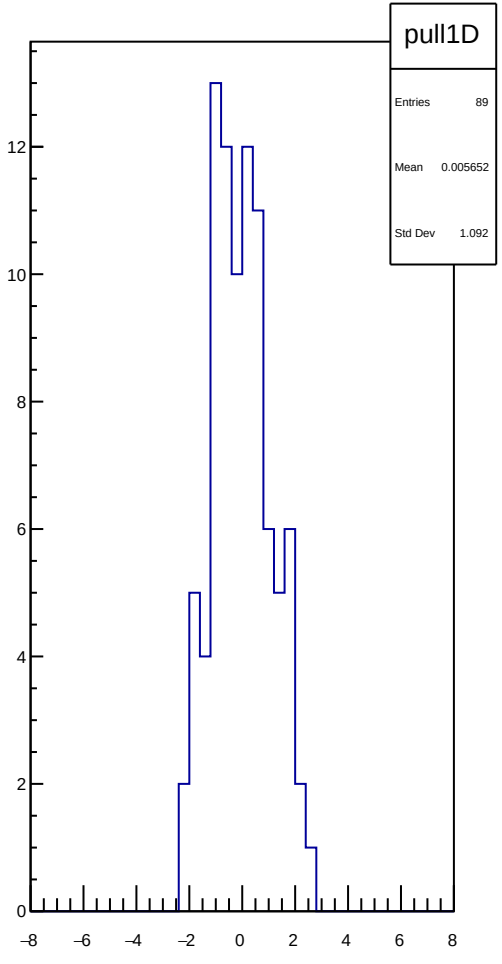

pull1D
Entries 89
Mean −0.001907
Std Dev 0.6974
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

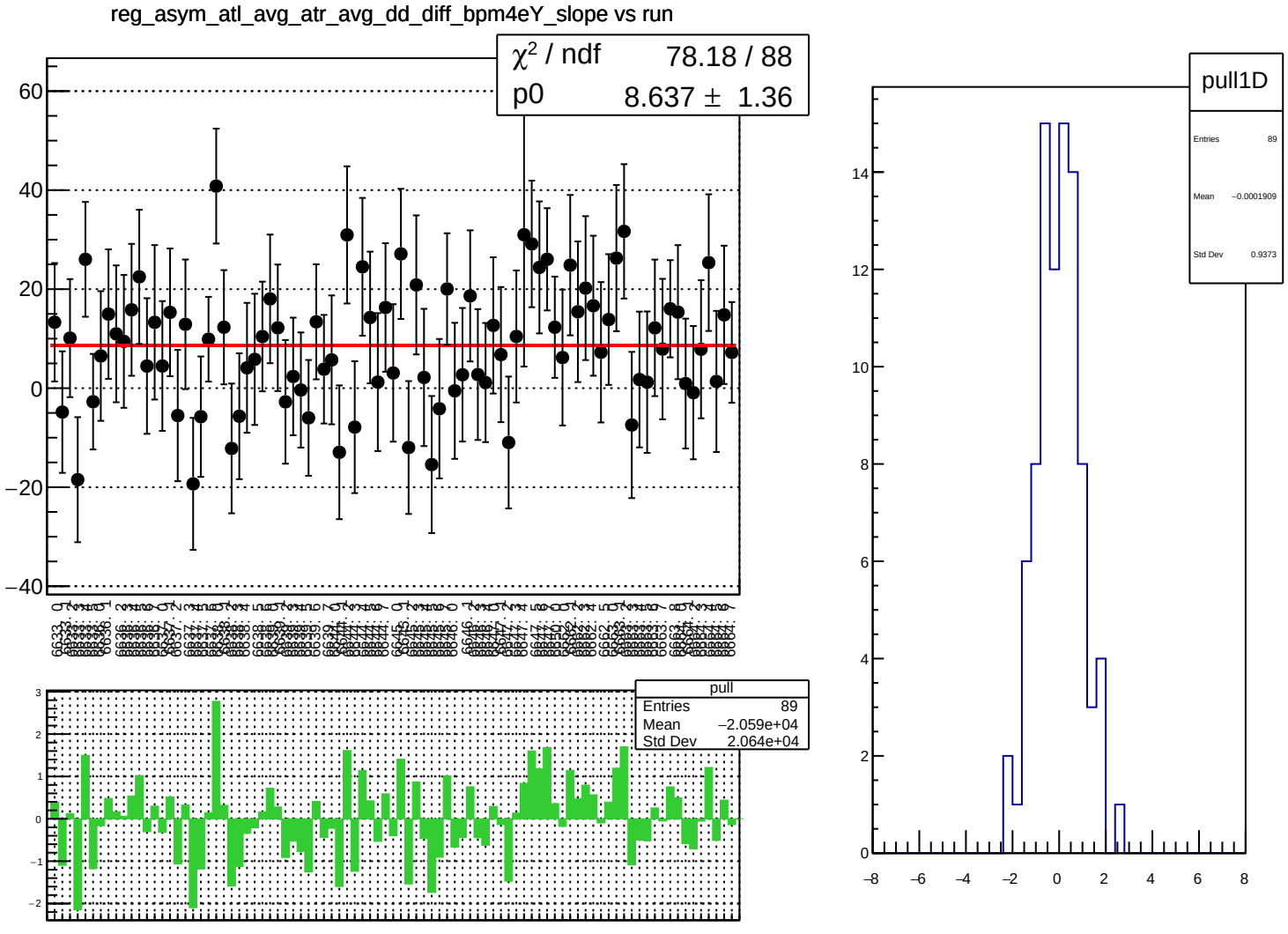

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 808.8 / 88
p0 −200.4 ± 0.2694
−185
−190
−195
−200
−205
−210
−215
pull
Entries 89
Mean −507.4
Std Dev 555
4
2
0
−2
−4
−6
pull1D
Entries 89
Mean 0.1229
Std Dev 3.012
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

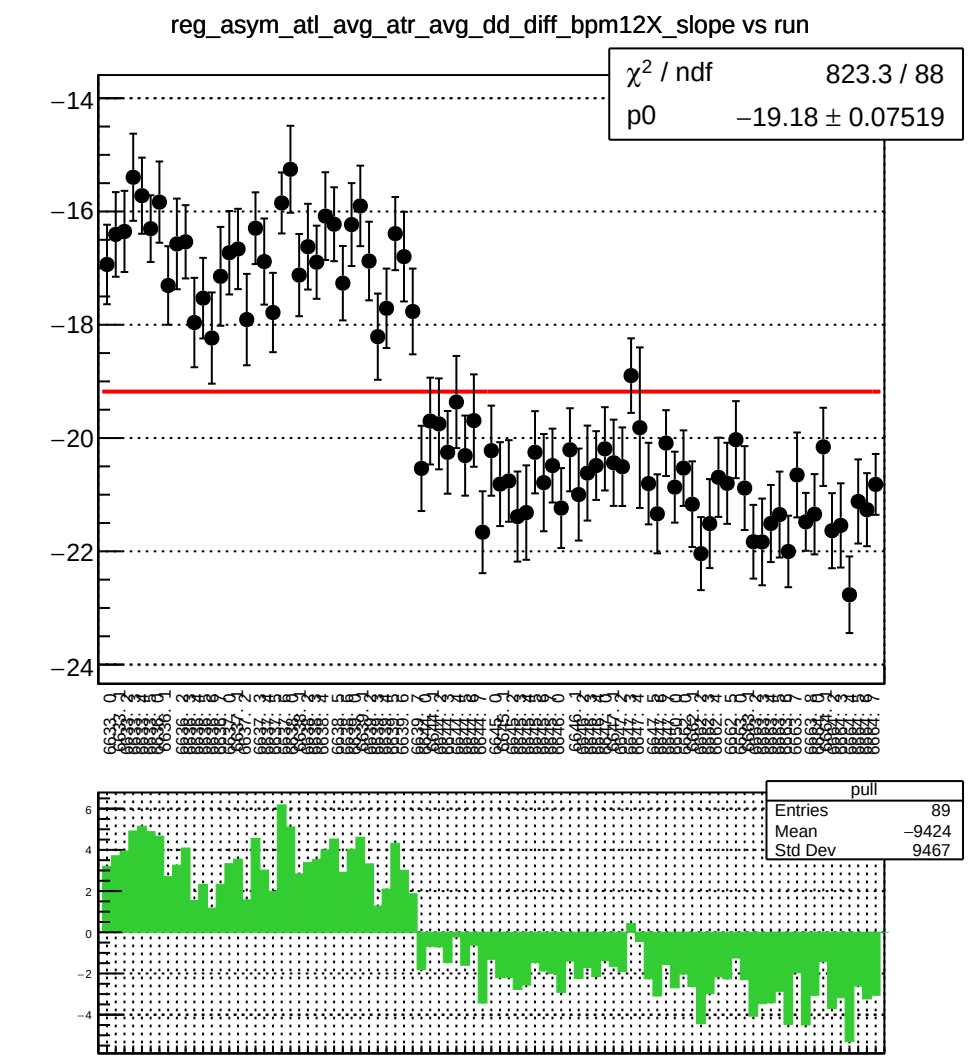

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 108.1 / 88
p0 −25.71± 1.607
pull
Entries 89
Mean 427.2
Std Dev 388.5
pull1D
Entries 89
Mean −0.007108
Std Dev 1.102

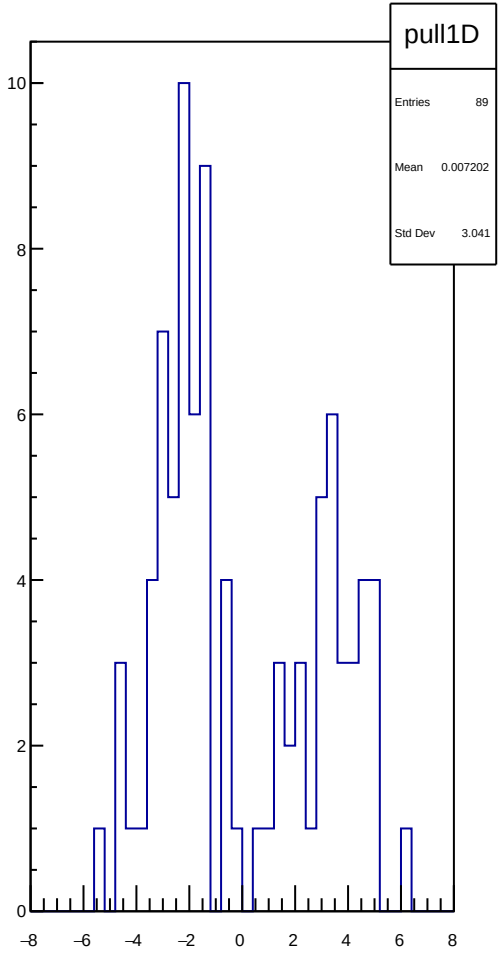

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 77.6 / 88
p0 0.3066 ± 1.15
pull
Entries 89
Mean 5232
Std Dev 5185
pull1D
Entries 89
Mean −0.0005064
Std Dev 0.9338

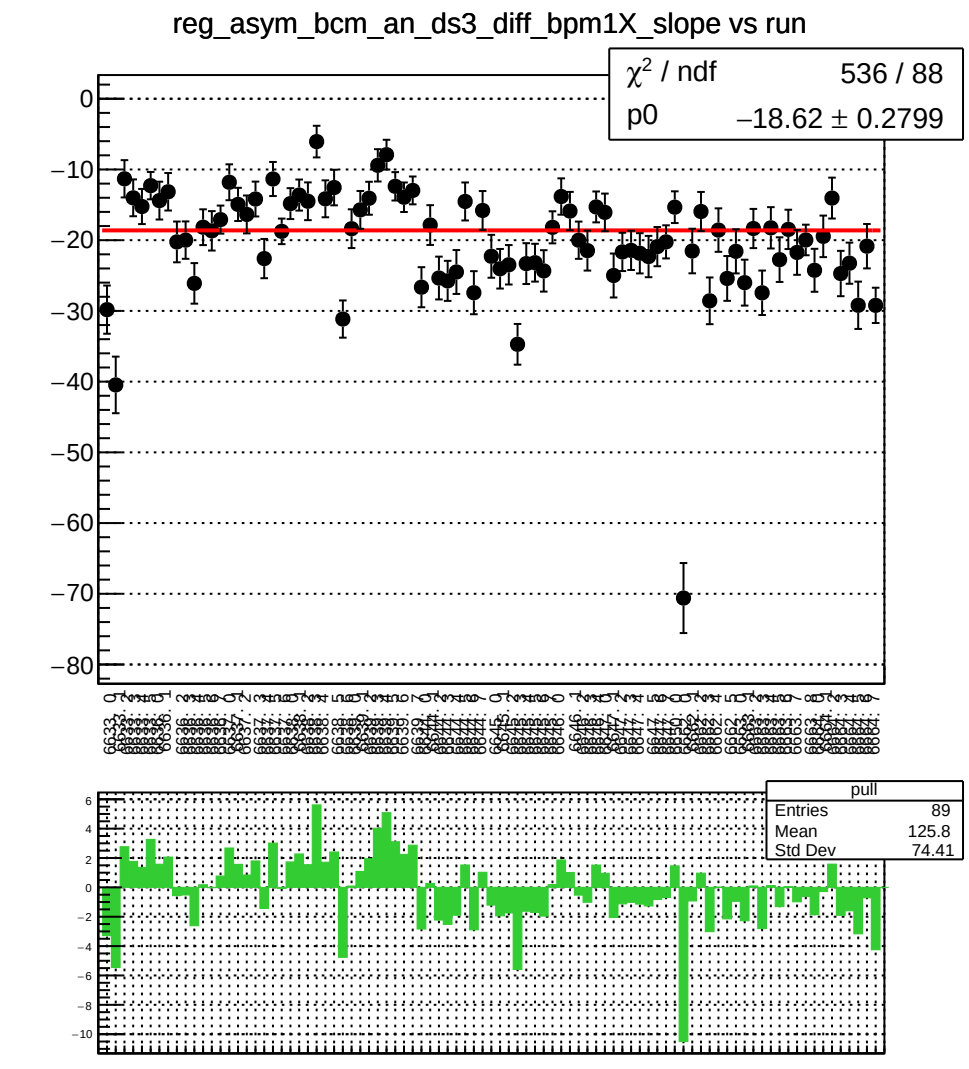

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 106.2 / 88
p0 11.96 ± 1.719
pull
Entries 89
Mean 796.4
Std Dev 756.5

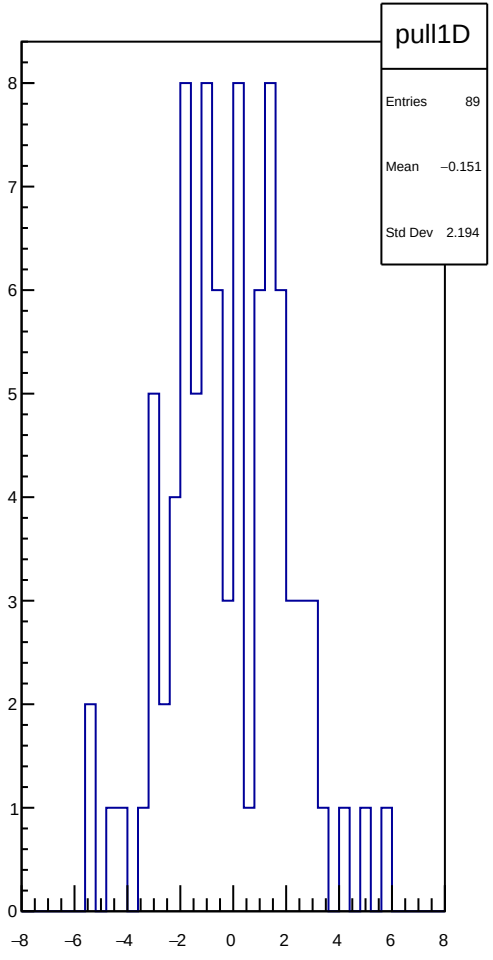

pull1D
Entries 89
Mean 0.005652
Std Dev 1.092

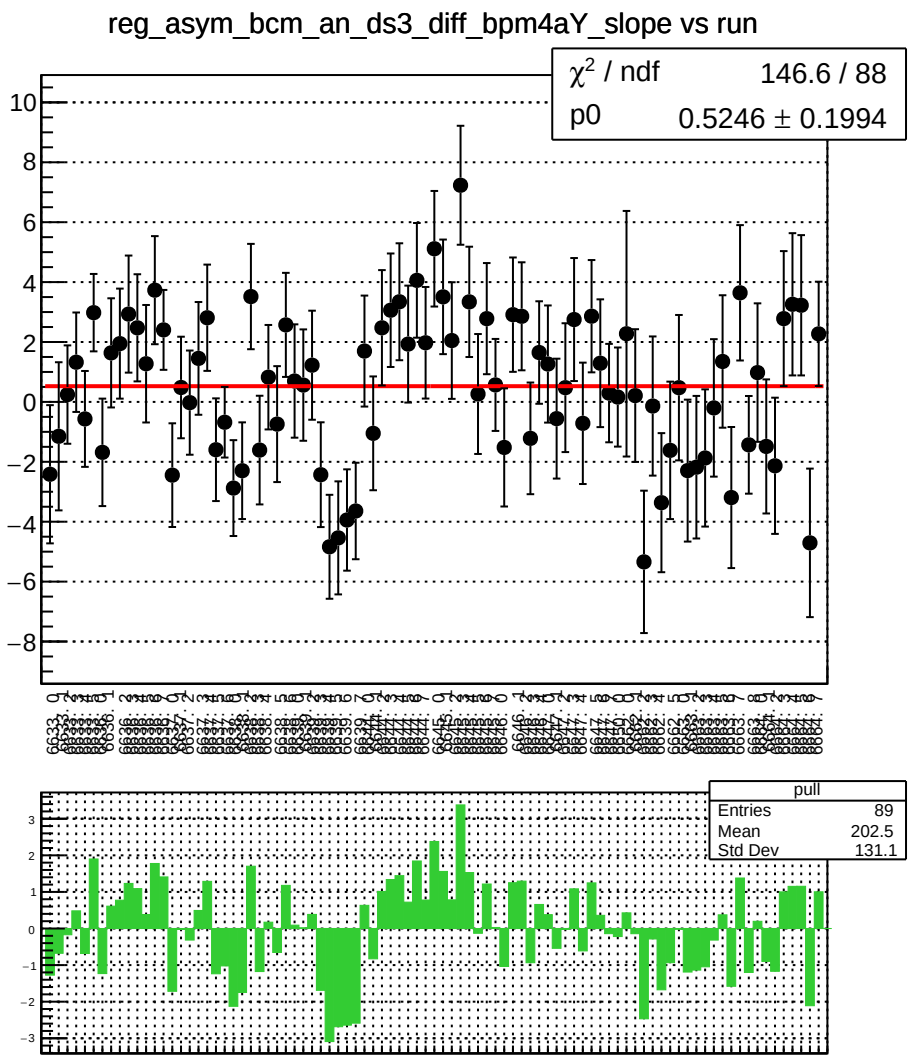

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 78.18 / 88
p0 8.637 ± 1.36
pull
Entries 89
Mean −2.059e+04
Std Dev 2.064e+04
pull1D
Entries 89
Mean −0.0001909
Std Dev 0.9373

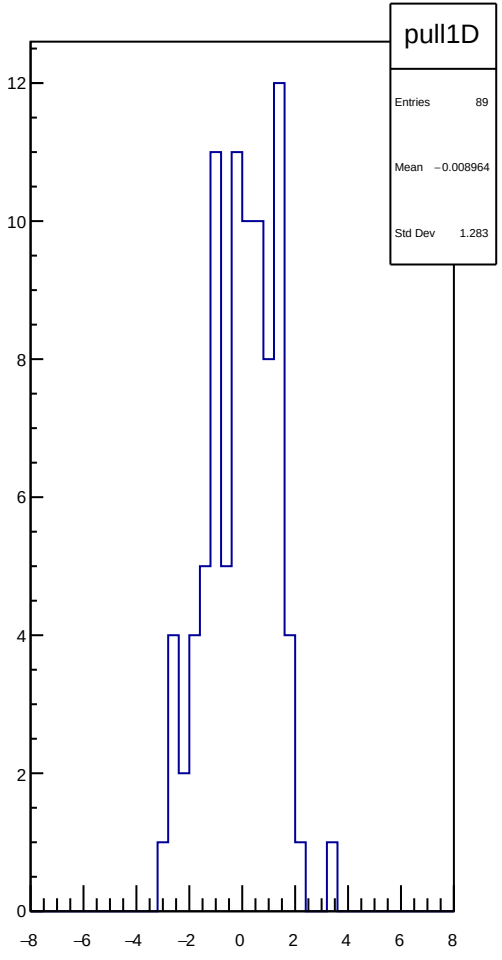

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 823.3 / 88
p0 −19.18 ± 0.07519
pull
Entries 89
Mean −9424
Std Dev 9467

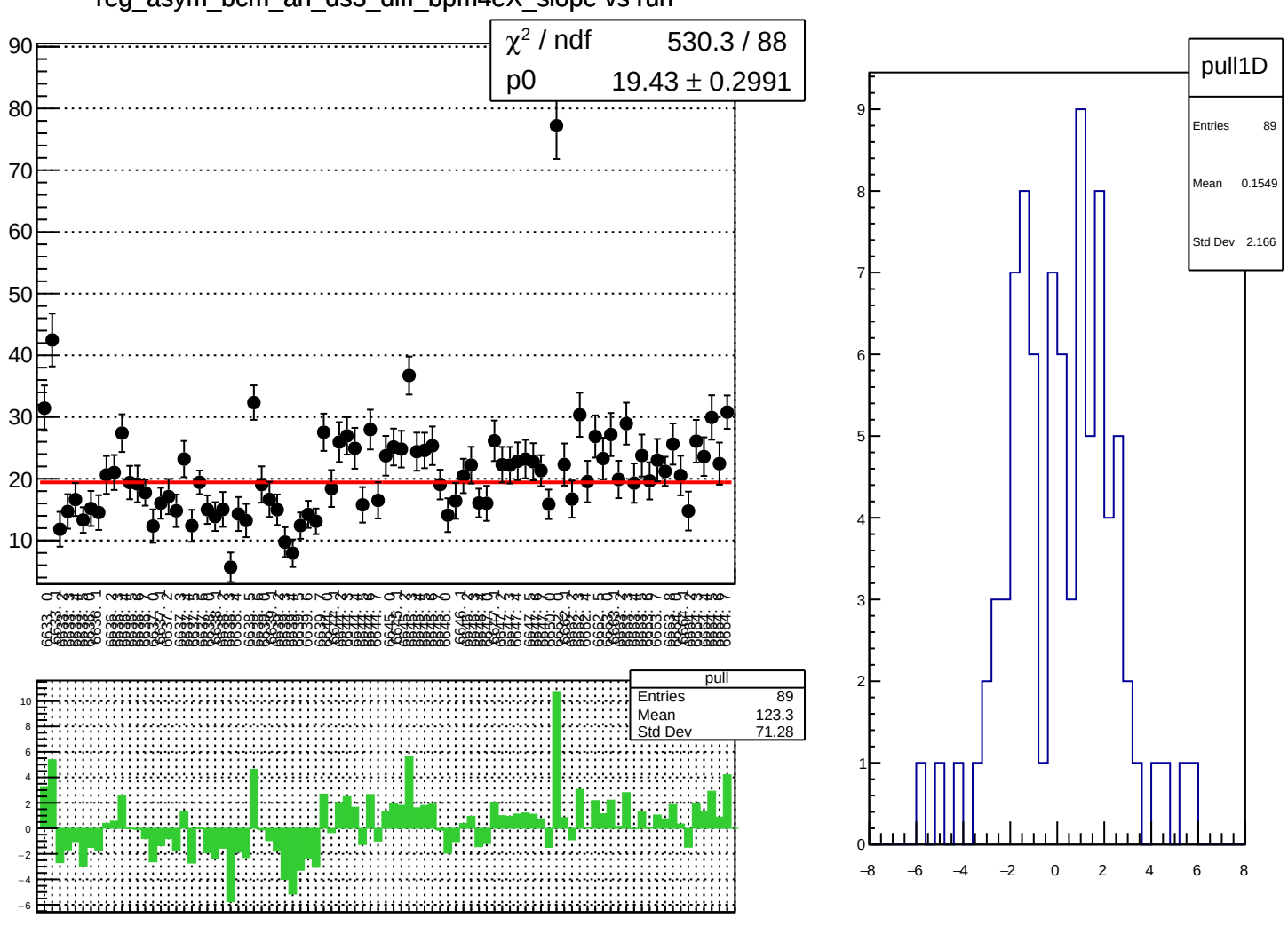

pull1D
Entries 89
Mean 0.007202
Std Dev 3.041

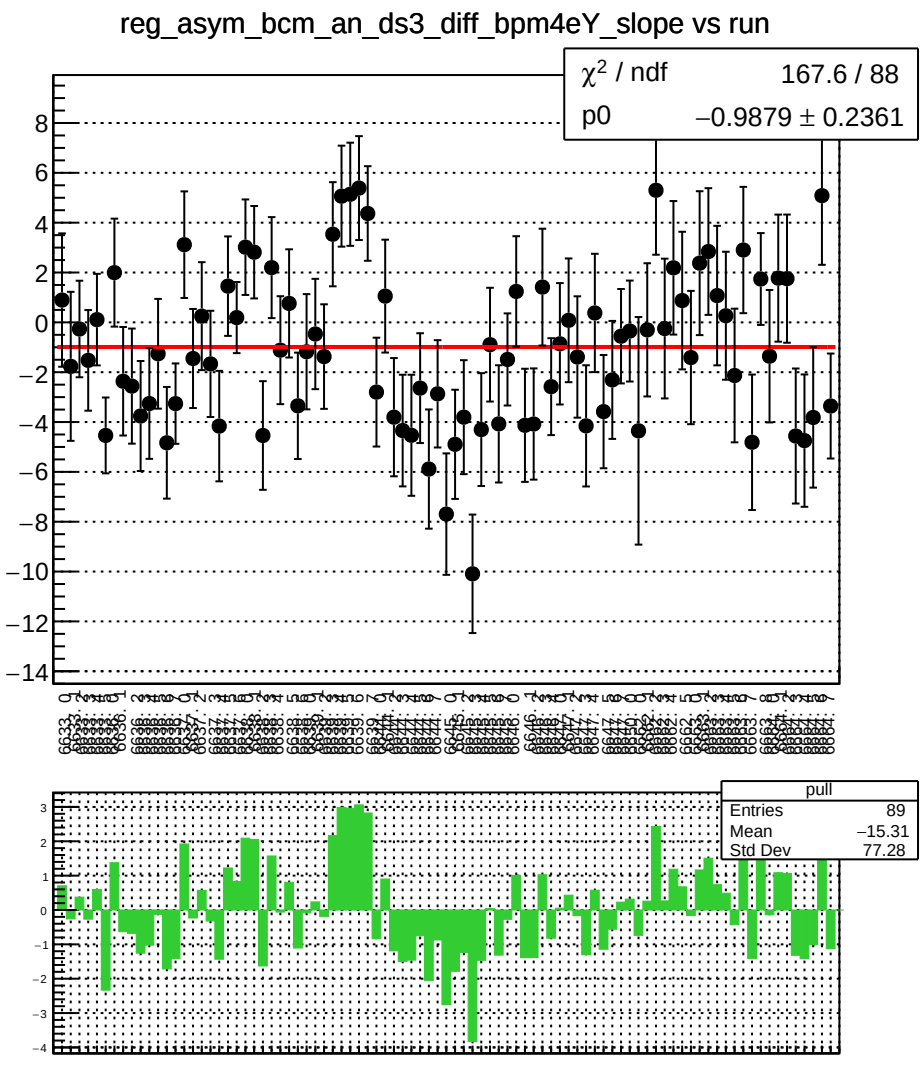

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 536 / 88
p0 −18.62 ± 0.2799
pull
Entries 89
Mean 125.8
Std Dev 74.41

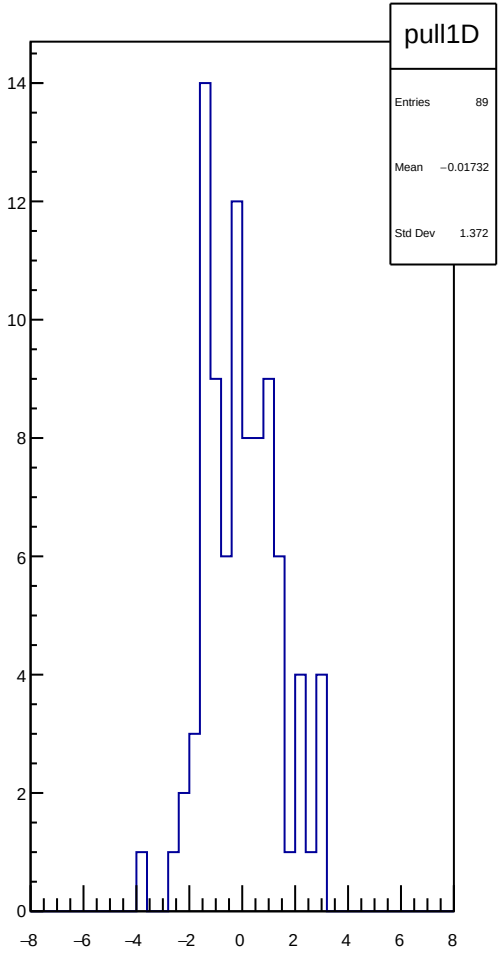

pull1D
Entries 89
Mean −0.151
Std Dev 2.194

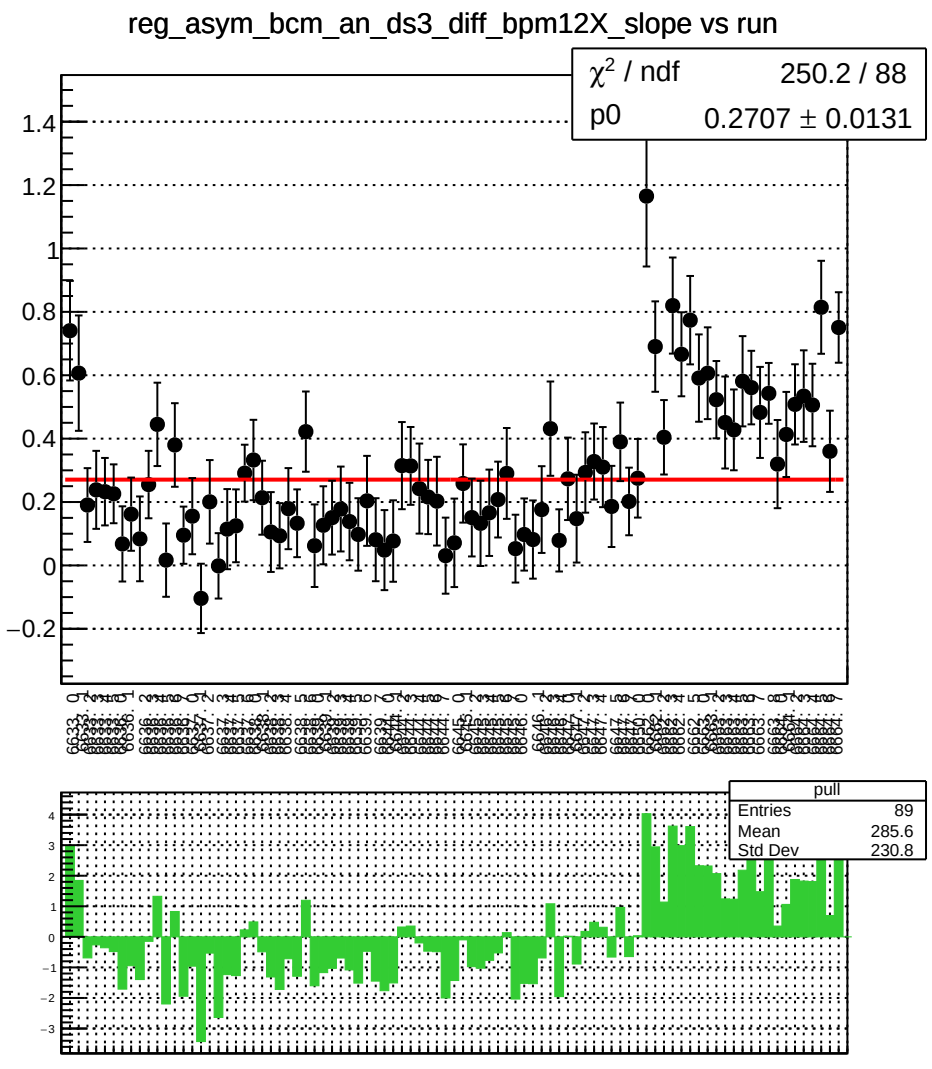

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 146.6 / 88
p0 0.5246 ± 0.1994
pull
Entries 89
Mean 202.5
Std Dev 131.1

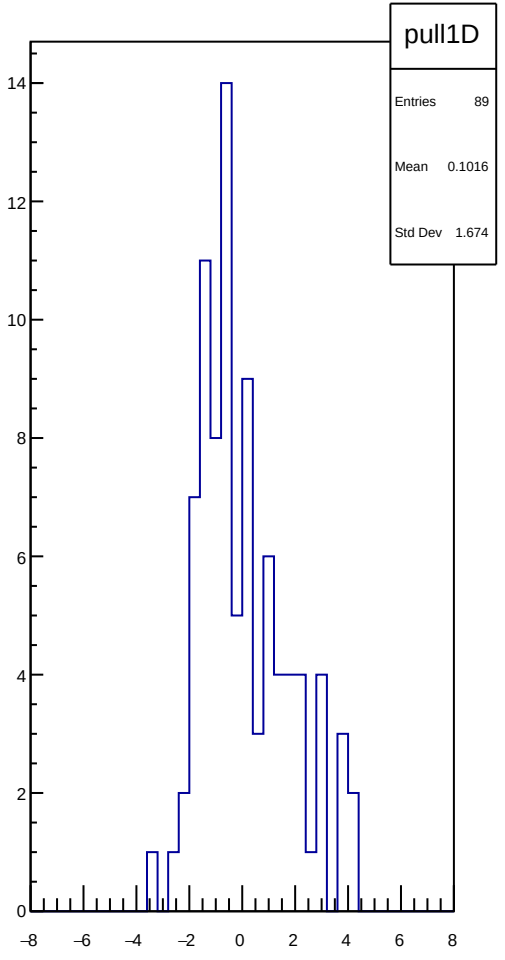

pull1D
Entries 89
Mean −0.008964
Std Dev 1.283

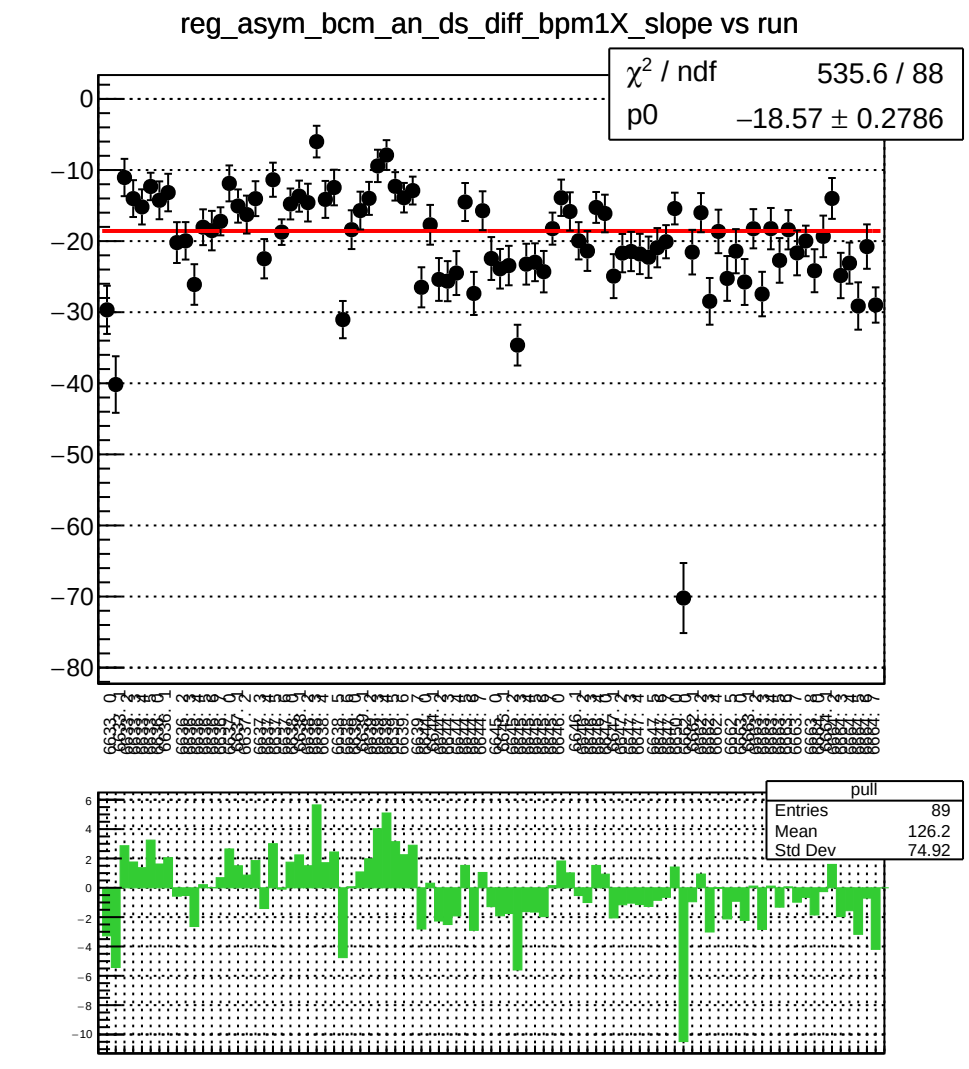

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 530.3 / 88
p0 19.43 ± 0.2991
pull
Entries 89
Mean 123.3
Std Dev 71.28
pull1D
Entries 89
Mean 0.1549
Std Dev 2.166

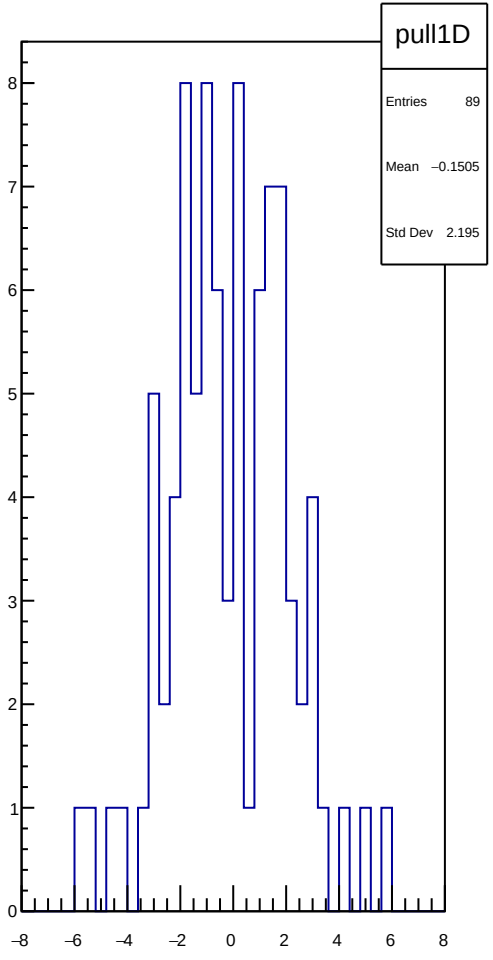

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 167.6 / 88
p0 −0.9879 ± 0.2361
pull
Entries 89
Mean −15.31
Std Dev 77.28

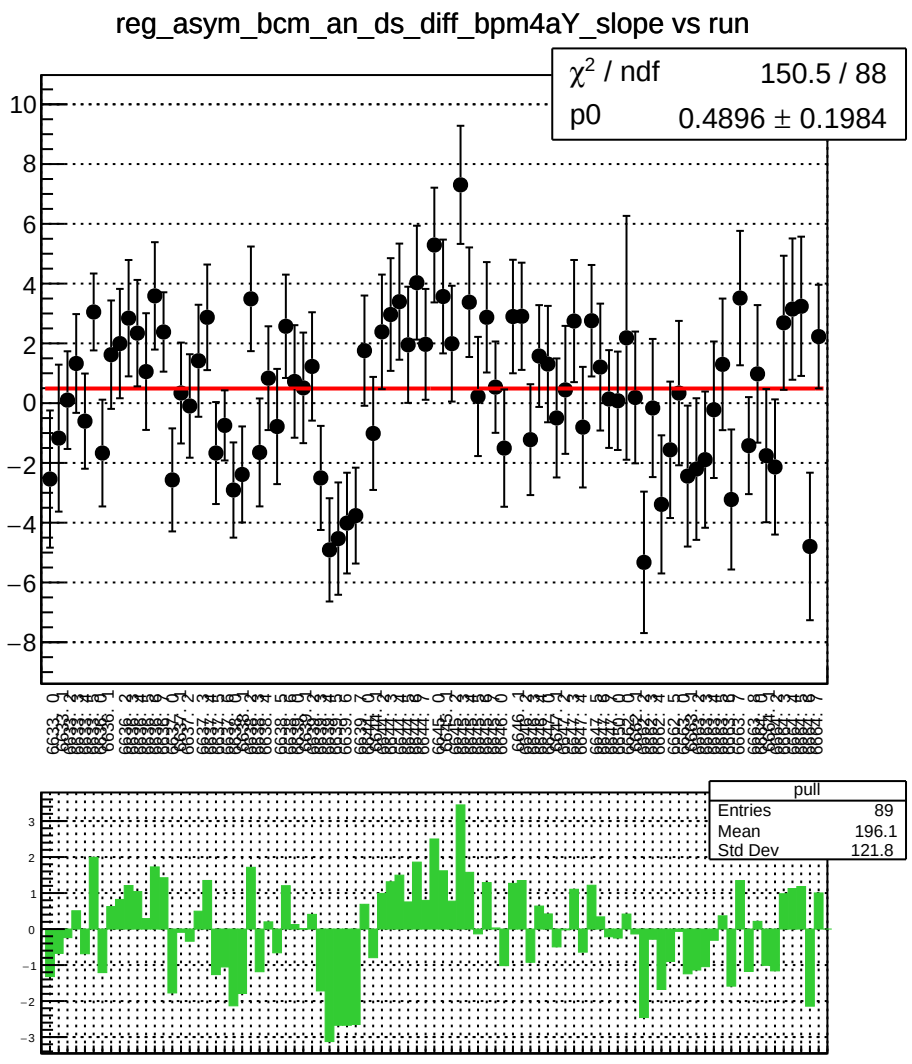

pull1D
Entries 89
Mean −0.01732
Std Dev 1.372

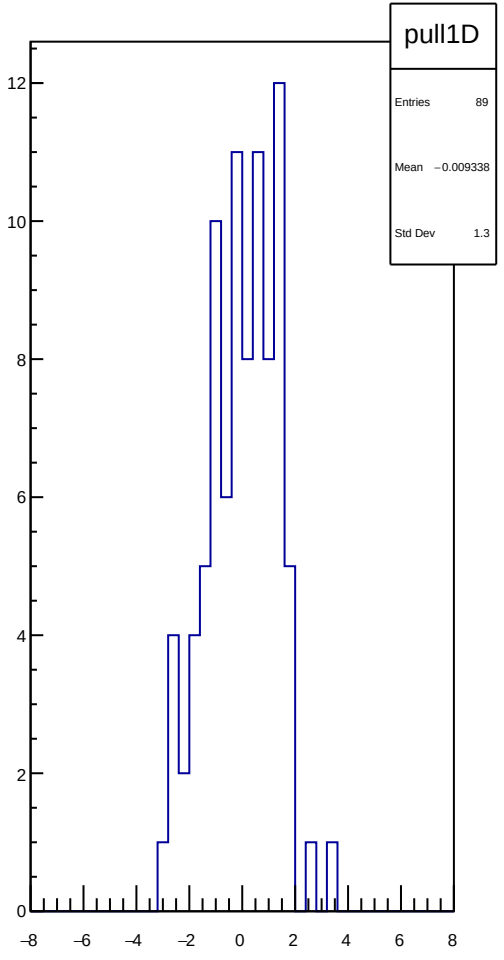

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 250.2 / 88
p0 0.2707 ± 0.0131
pull
Entries 89
Mean 285.6
Std Dev 230.8

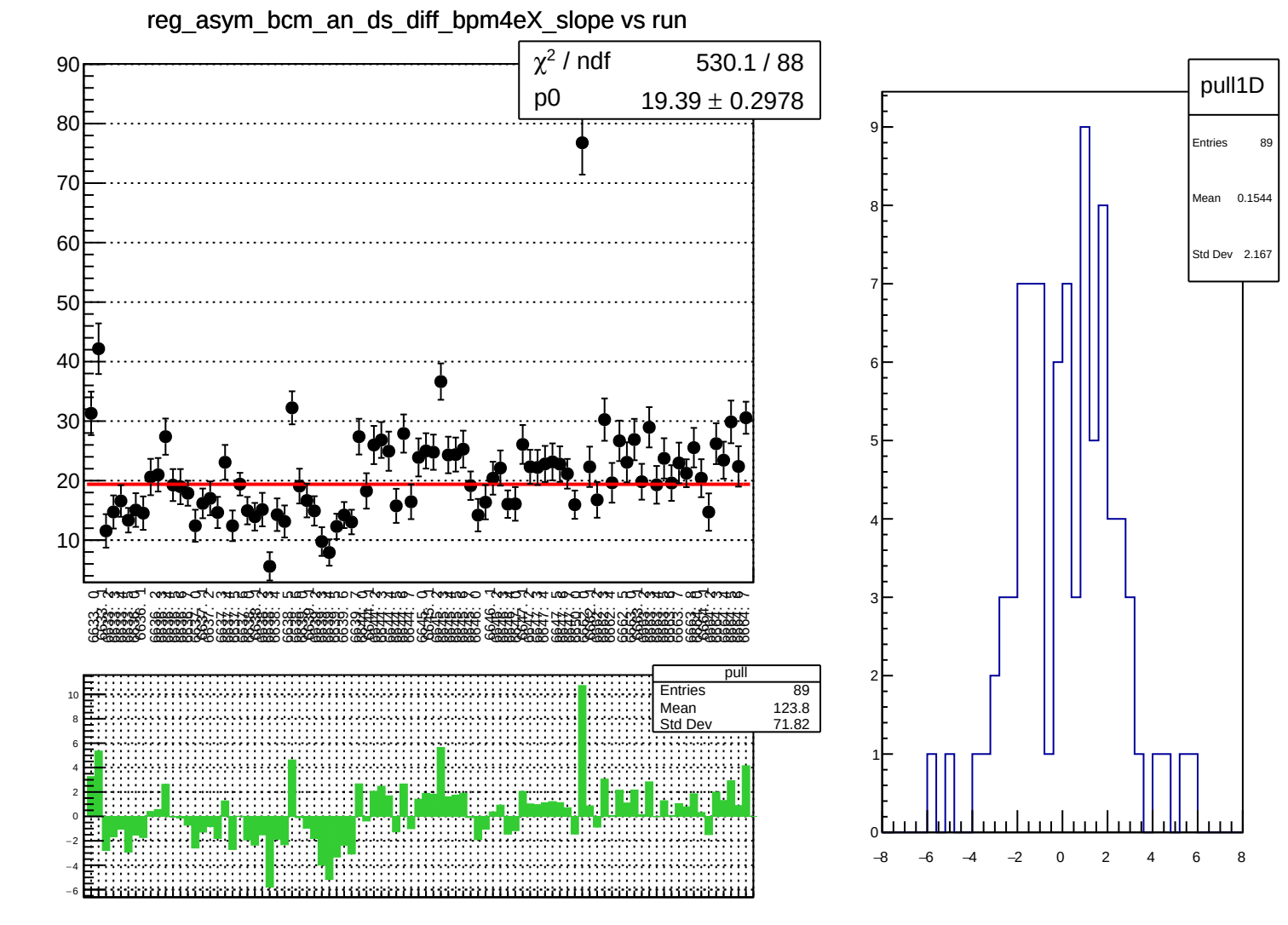

pull1D
Entries 89
Mean 0.1016
Std Dev 1.674

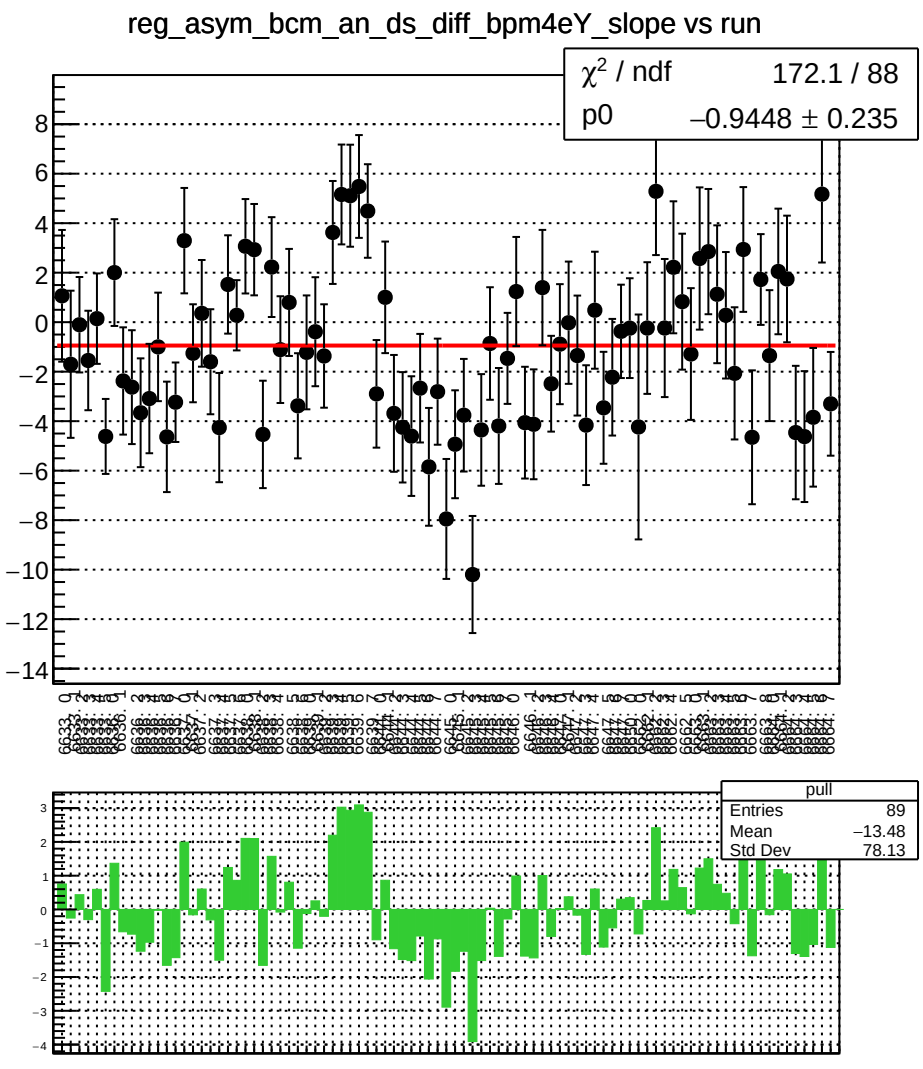

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 535.6 / 88
p0 −18.57 ± 0.2786
pull
Entries 89
Mean 126.2
Std Dev 74.92

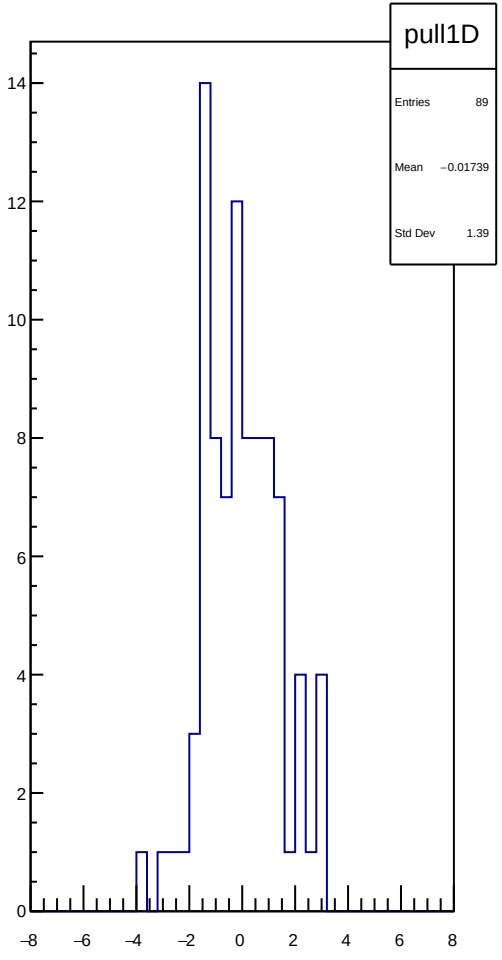

pull1D
Entries 89
Mean −0.1505
Std Dev 2.195

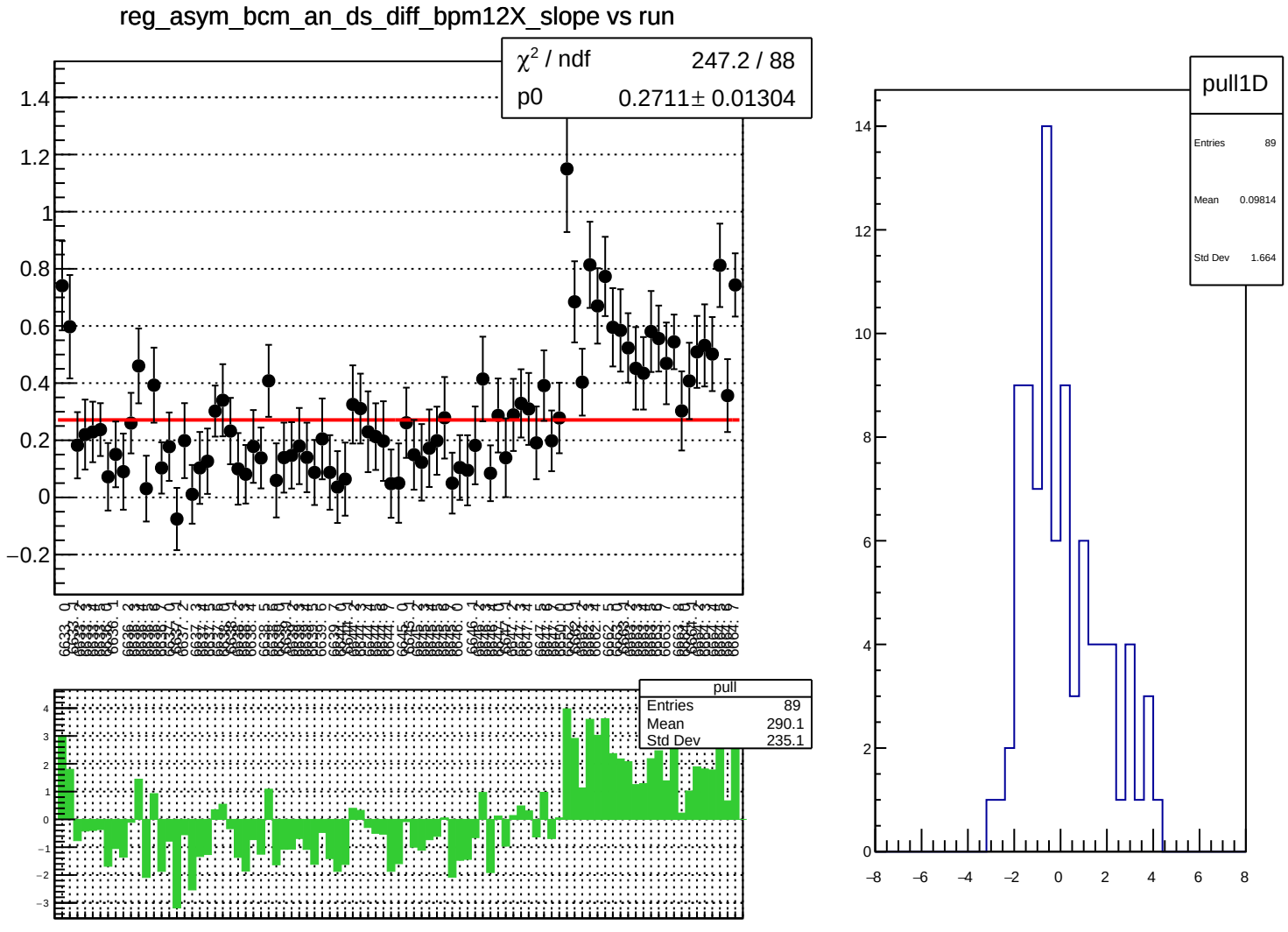

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 150.5 / 88
p0 0.4896 ± 0.1984
pull
Entries 89
Mean 196.1
Std Dev 121.8

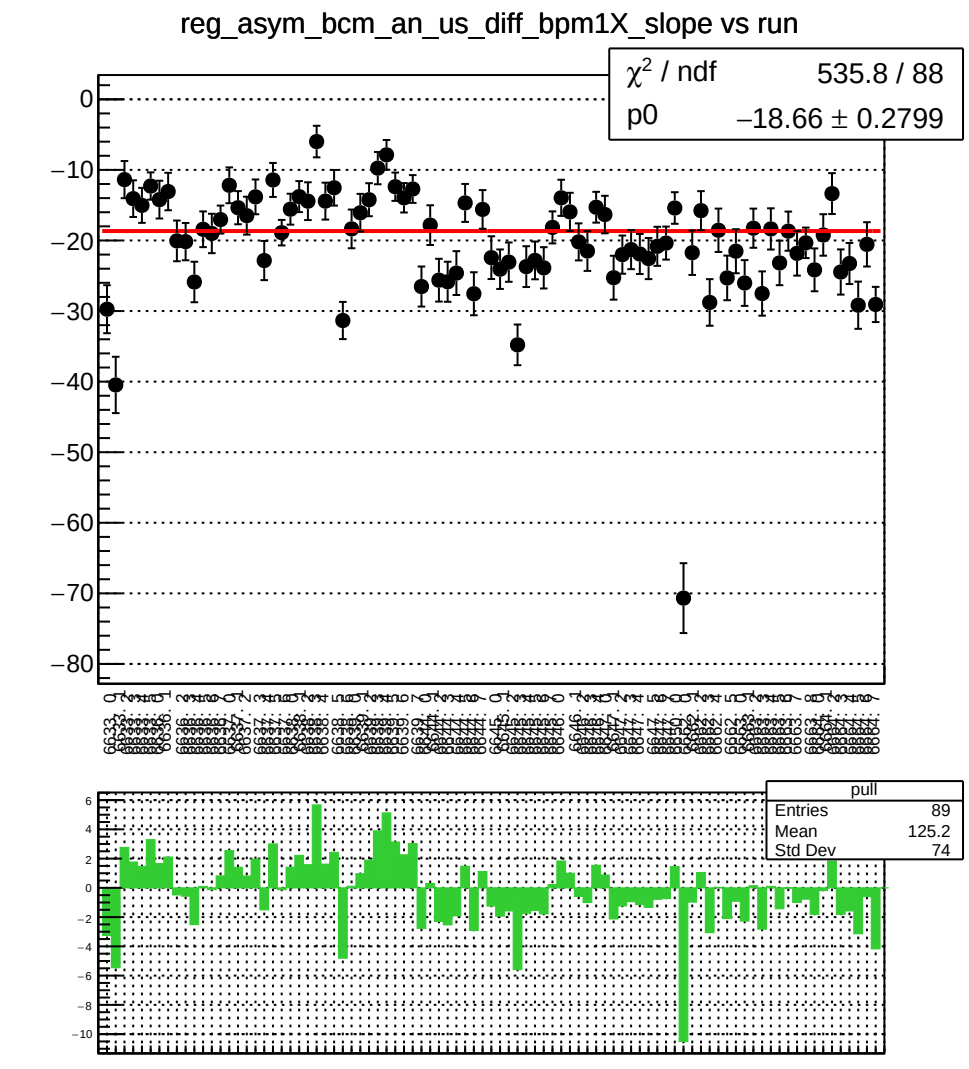

pull1D
Entries 89
Mean −0.009338
Std Dev 1.3

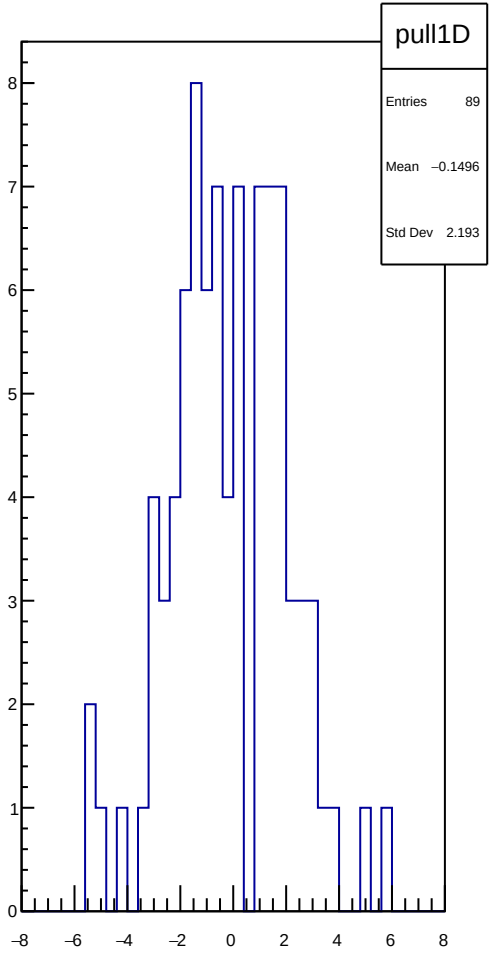

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 530.1 / 88
p0 19.39 ± 0.2978
pull
Entries 89
Mean 123.8
Std Dev 71.82
pull1D
Entries 89
Mean 0.1544
Std Dev 2.167

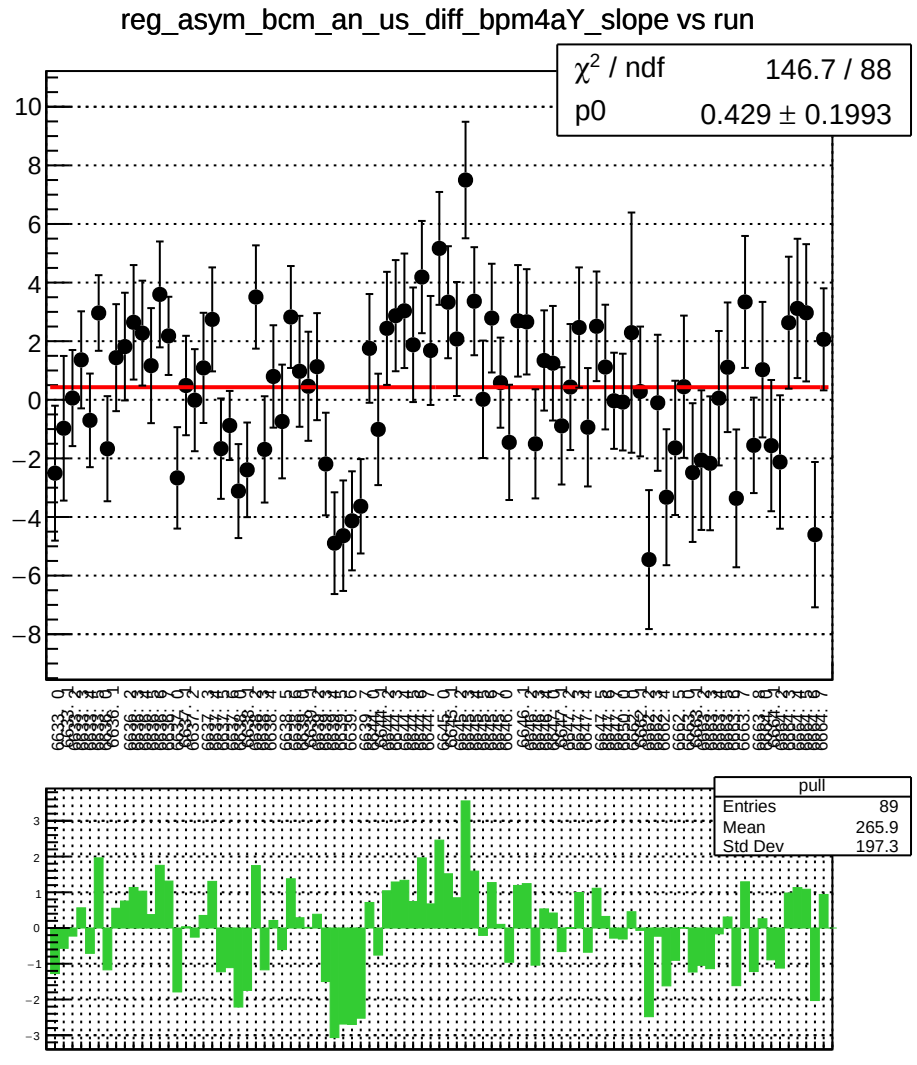

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 172.1 / 88
p0 −0.9448 ± 0.235
pull
Entries 89
Mean −13.48
Std Dev 78.13

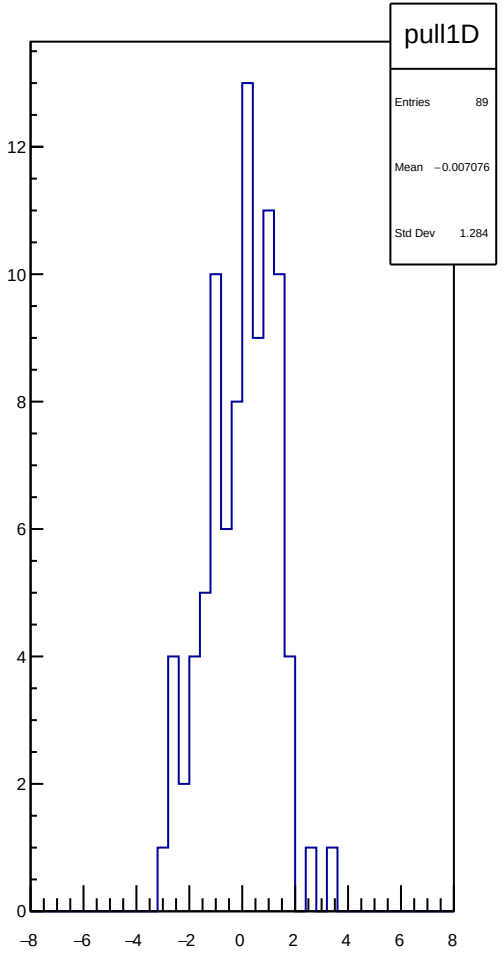

pull1D
Entries 89
Mean −0.01739
Std Dev 1.39

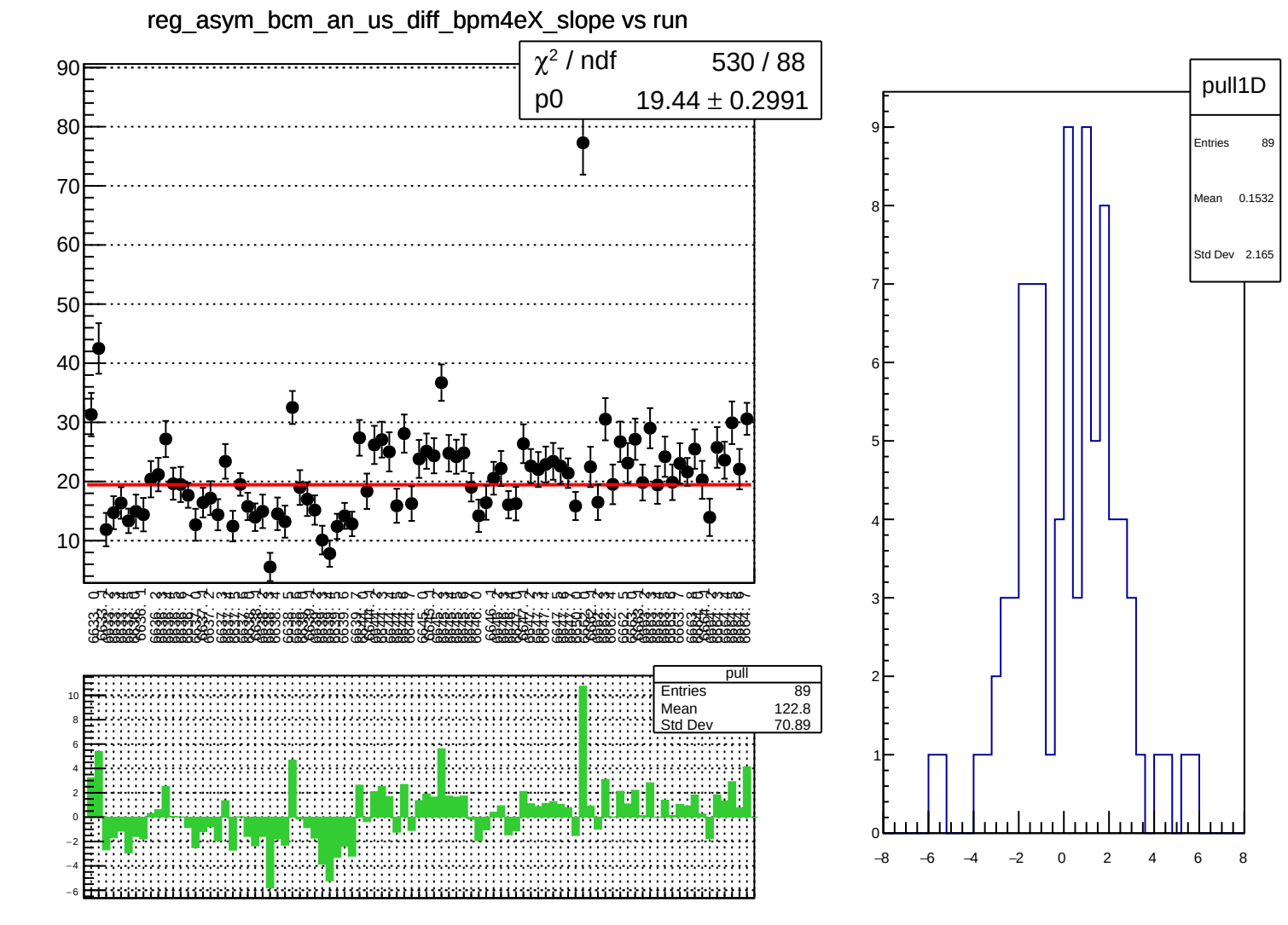

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 247.2 / 88
p0 0.2711± 0.01304
pull
Entries 89
Mean 290.1
Std Dev 235.1
pull1D
Entries 89
Mean 0.09814
Std Dev 1.664

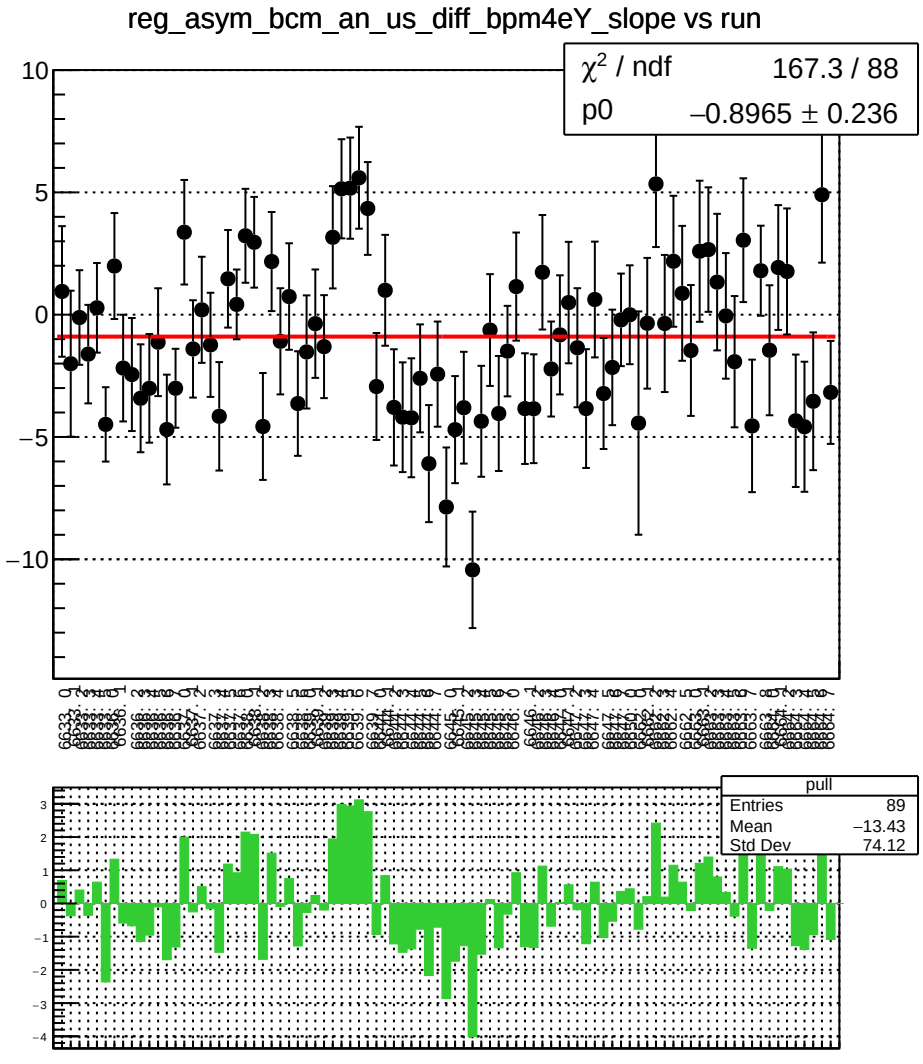

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 535.8 / 88
p0 −18.66 ± 0.2799
pull
Entries 89
Mean 125.2
Std Dev 74

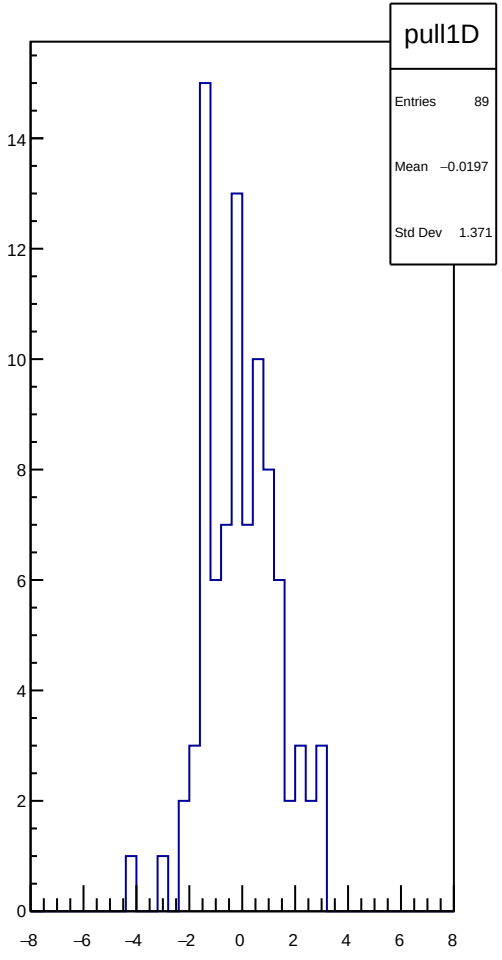

pull1D
Entries 89
Mean −0.1496
Std Dev 2.193

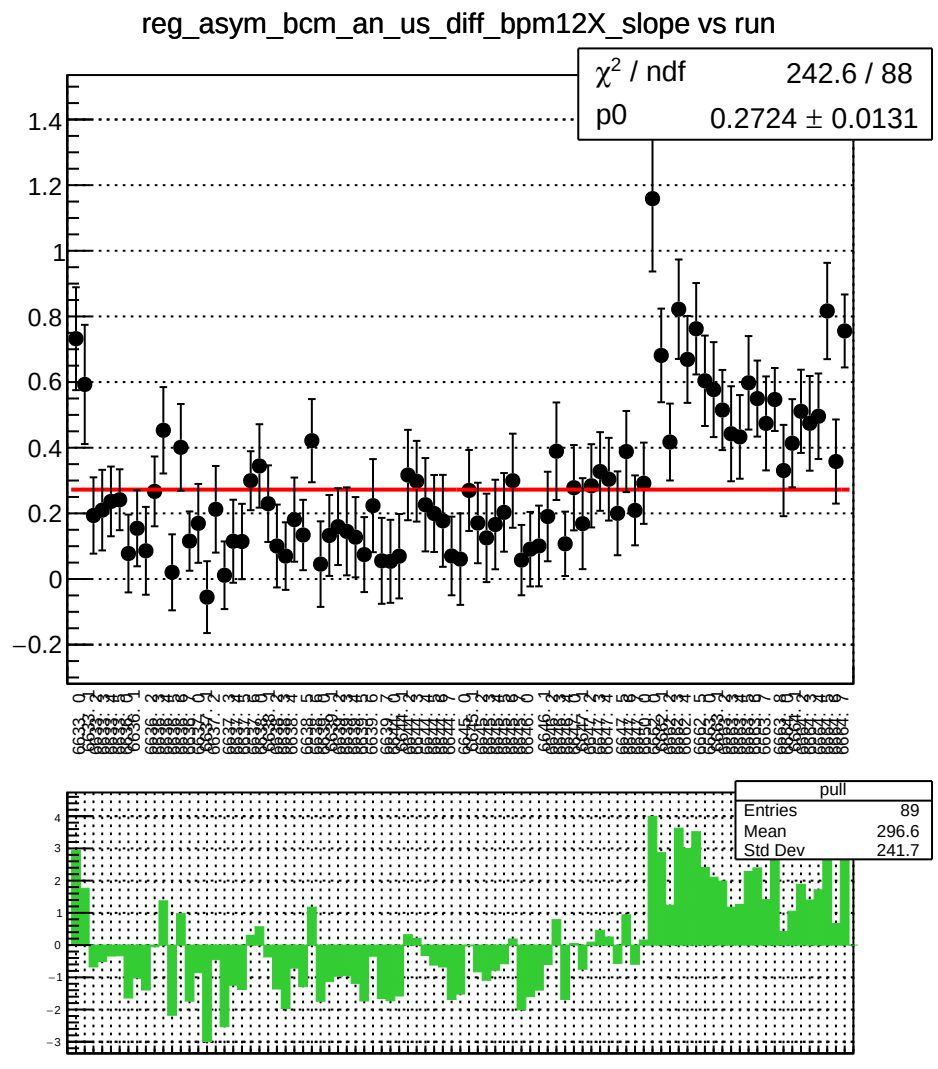

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 146.7 / 88
p0 0.429 ± 0.1993
pull
Entries 89
Mean 265.9
Std Dev 197.3

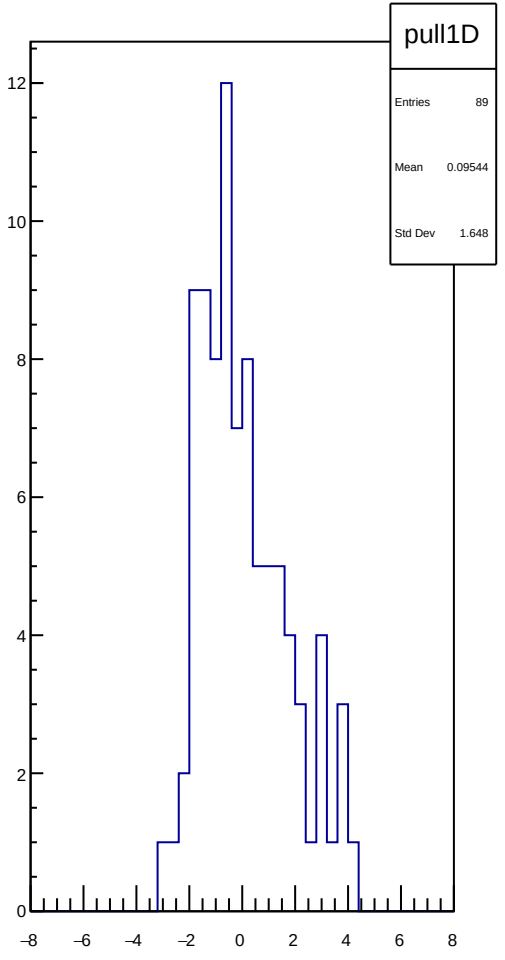

pull1D
Entries 89
Mean −0.007076
Std Dev 1.284

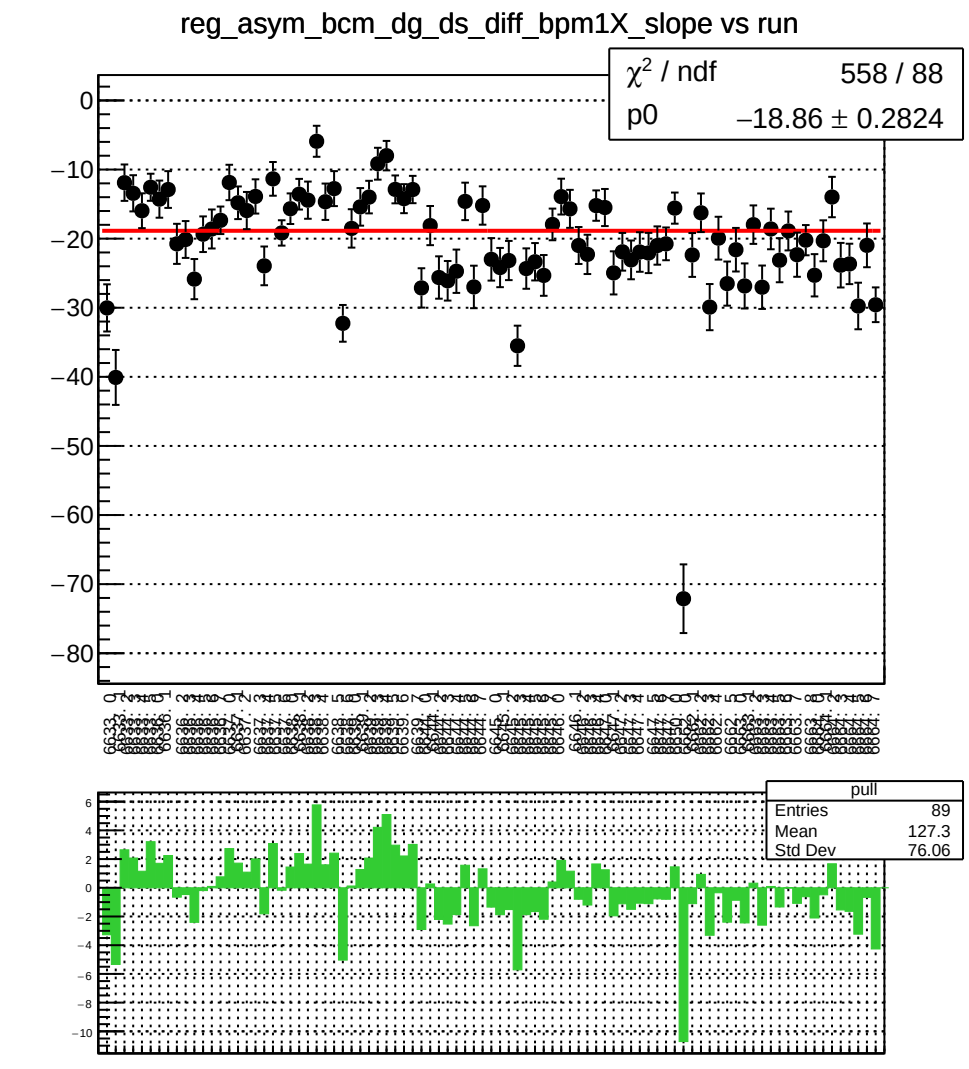

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 530 / 88
p0 19.44 ± 0.2991
pull
Entries 89
Mean 122.8
Std Dev 70.89
pull1D
Entries 89
Mean 0.1532
Std Dev 2.165

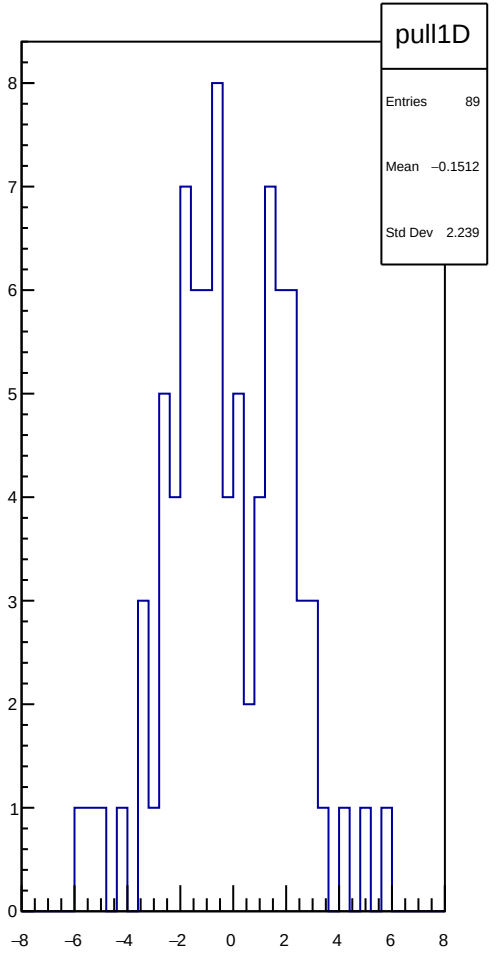

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 167.3 / 88
p0 −0.8965 ± 0.236
pull
Entries 89
Mean −13.43
Std Dev 74.12

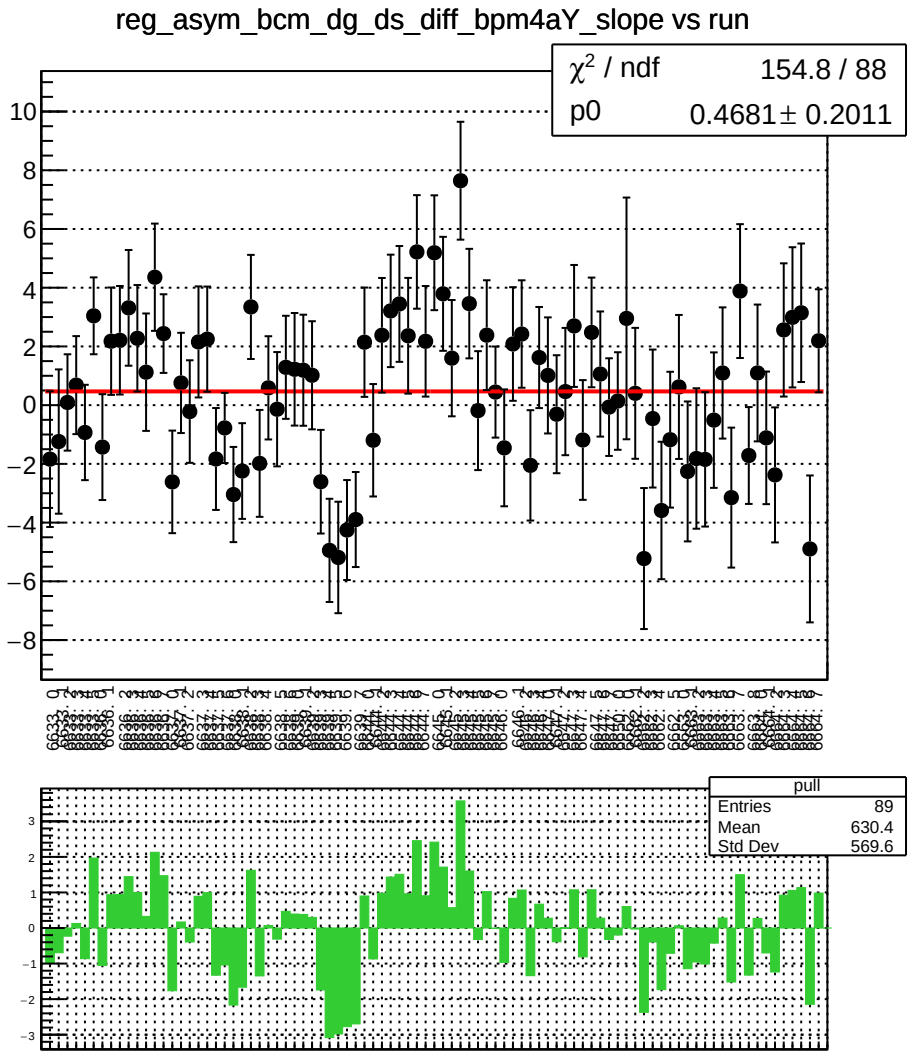

pull1D
Entries 89
Mean −0.0197
Std Dev 1.371

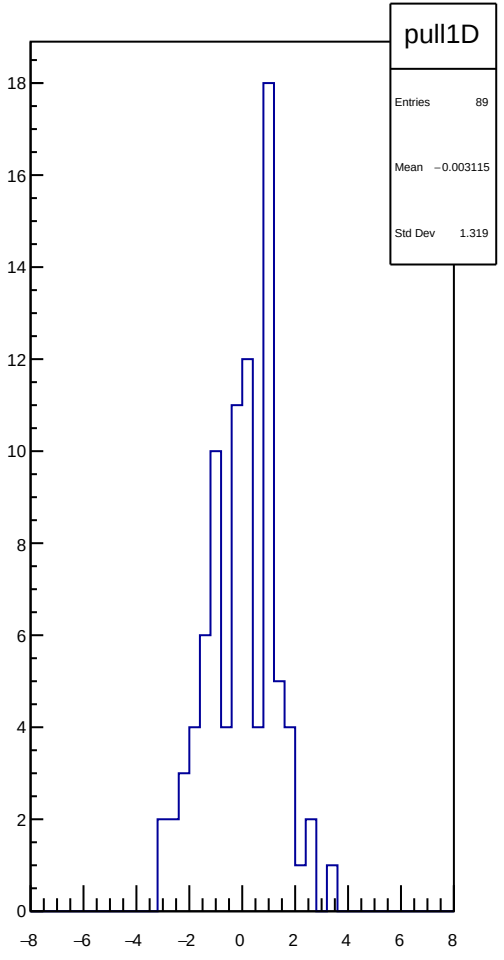

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 242.6 / 88
p0 0.2724 ± 0.0131
pull
Entries 89
Mean 296.6
Std Dev 241.7

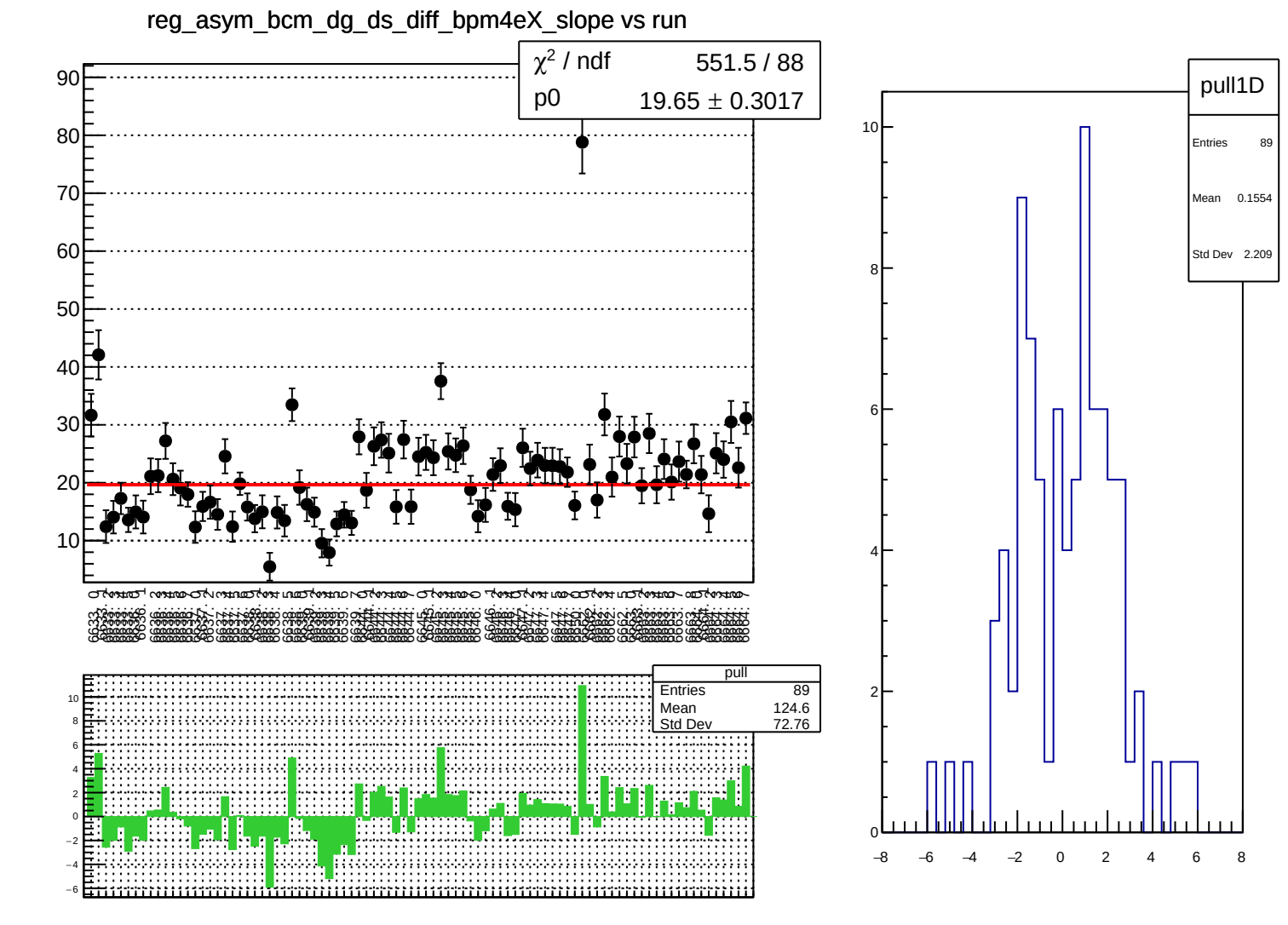

pull1D
Entries 89
Mean 0.09544
Std Dev 1.648

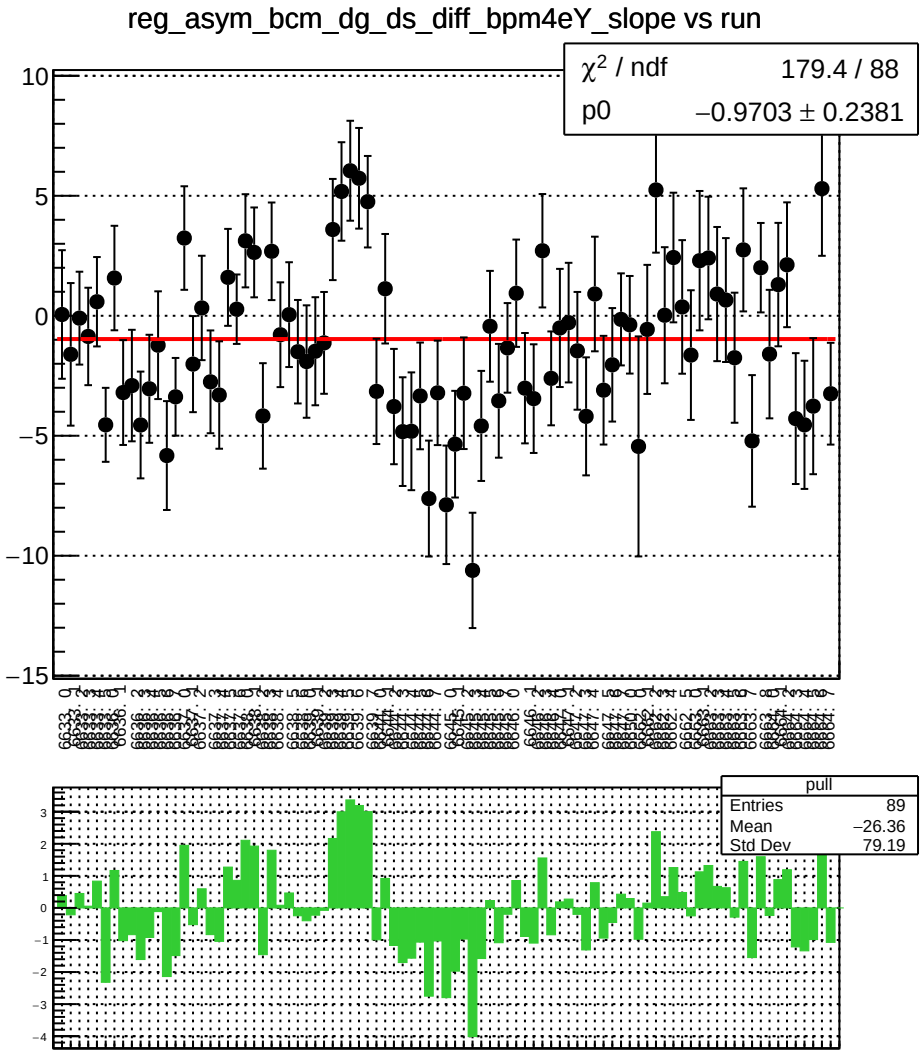

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 558 / 88
p0 −18.86 ± 0.2824
pull
Entries 89
Mean 127.3
Std Dev 76.06

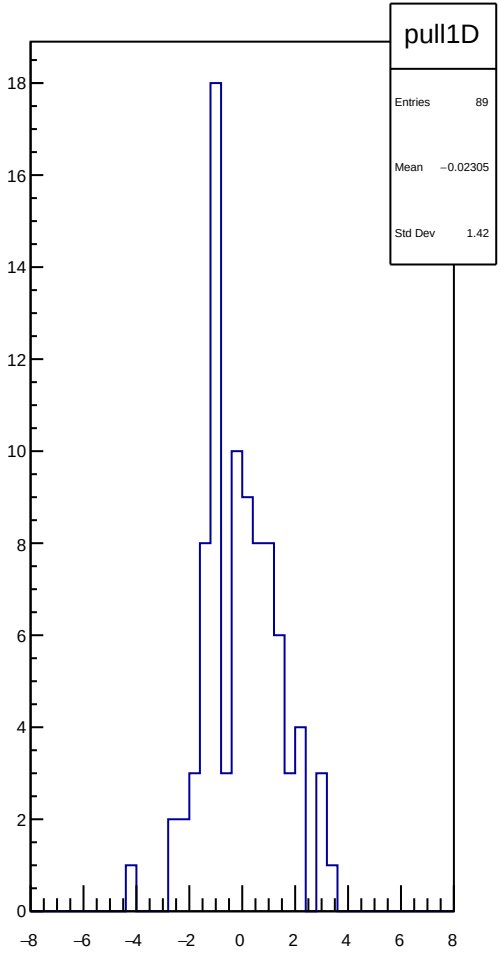

pull1D
Entries 89
Mean −0.1512
Std Dev 2.239

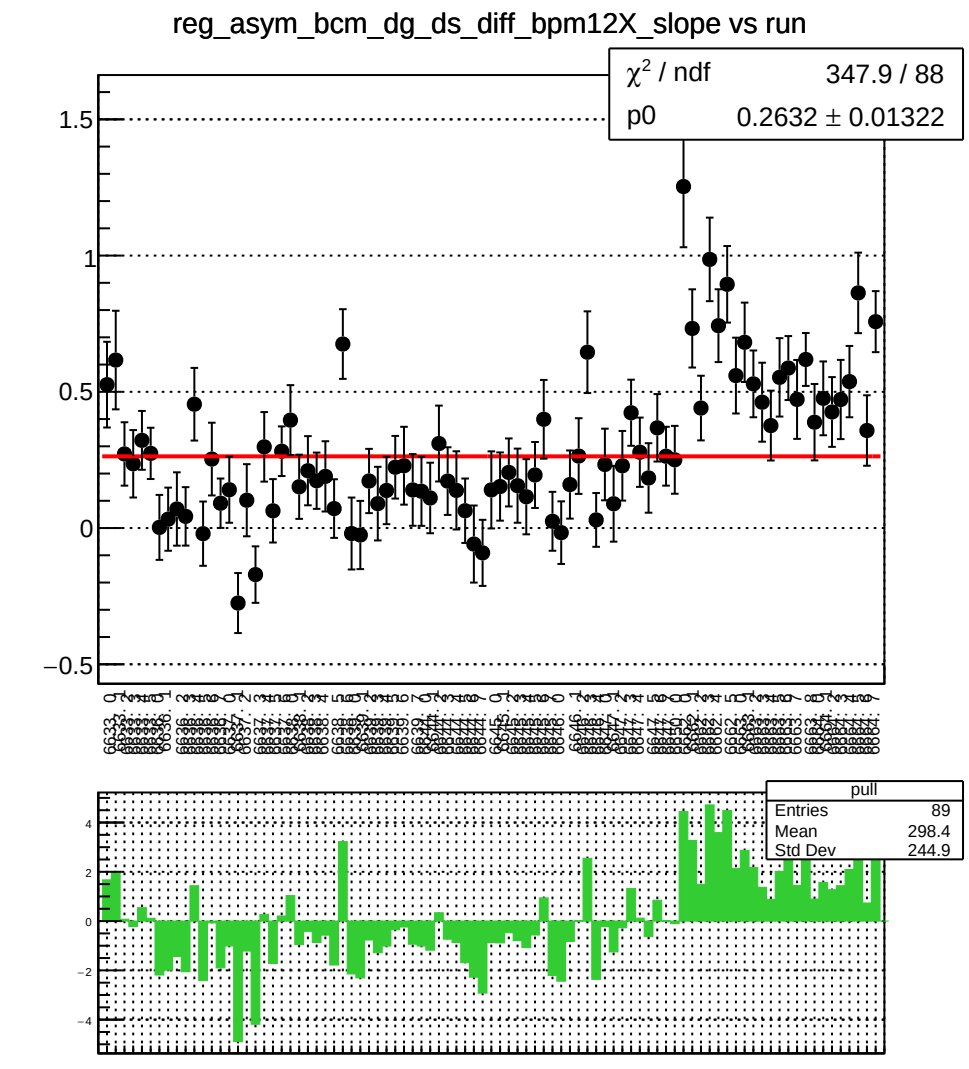

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 154.8 / 88
p0 0.4681 ± 0.2011
pull
Entries 89
Mean 630.4
Std Dev 569.6

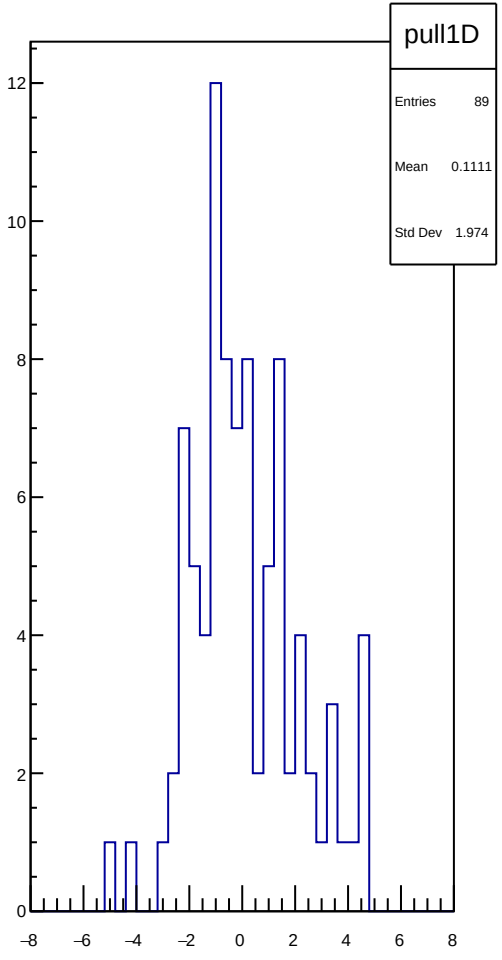

pull1D
Entries 89
Mean −0.003115
Std Dev 1.319

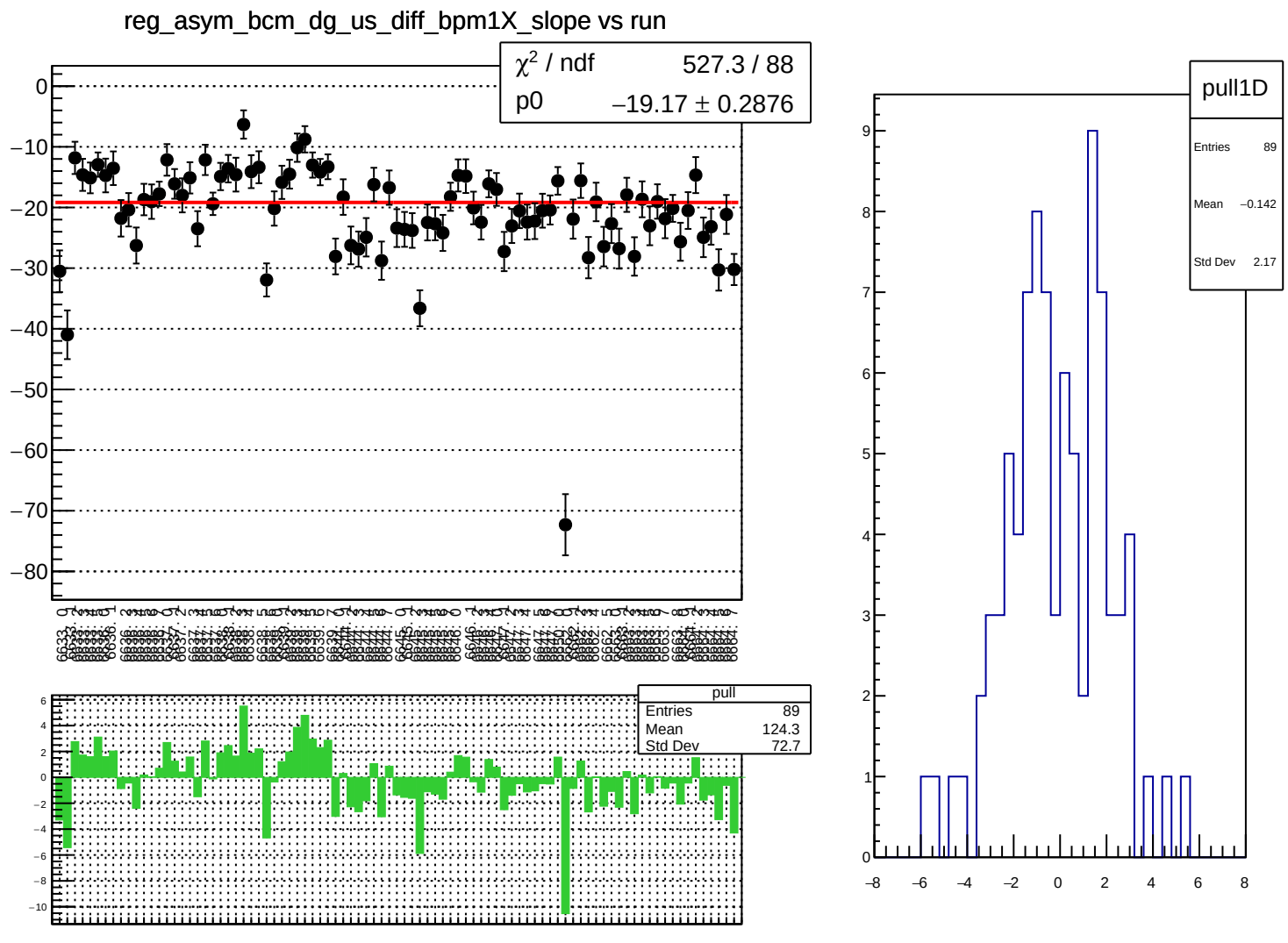

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 551.5 / 88
p0 19.65 ± 0.3017
pull
Entries 89
Mean 124.6
Std Dev 72.76
pull1D
Entries 89
Mean 0.1554
Std Dev 2.209

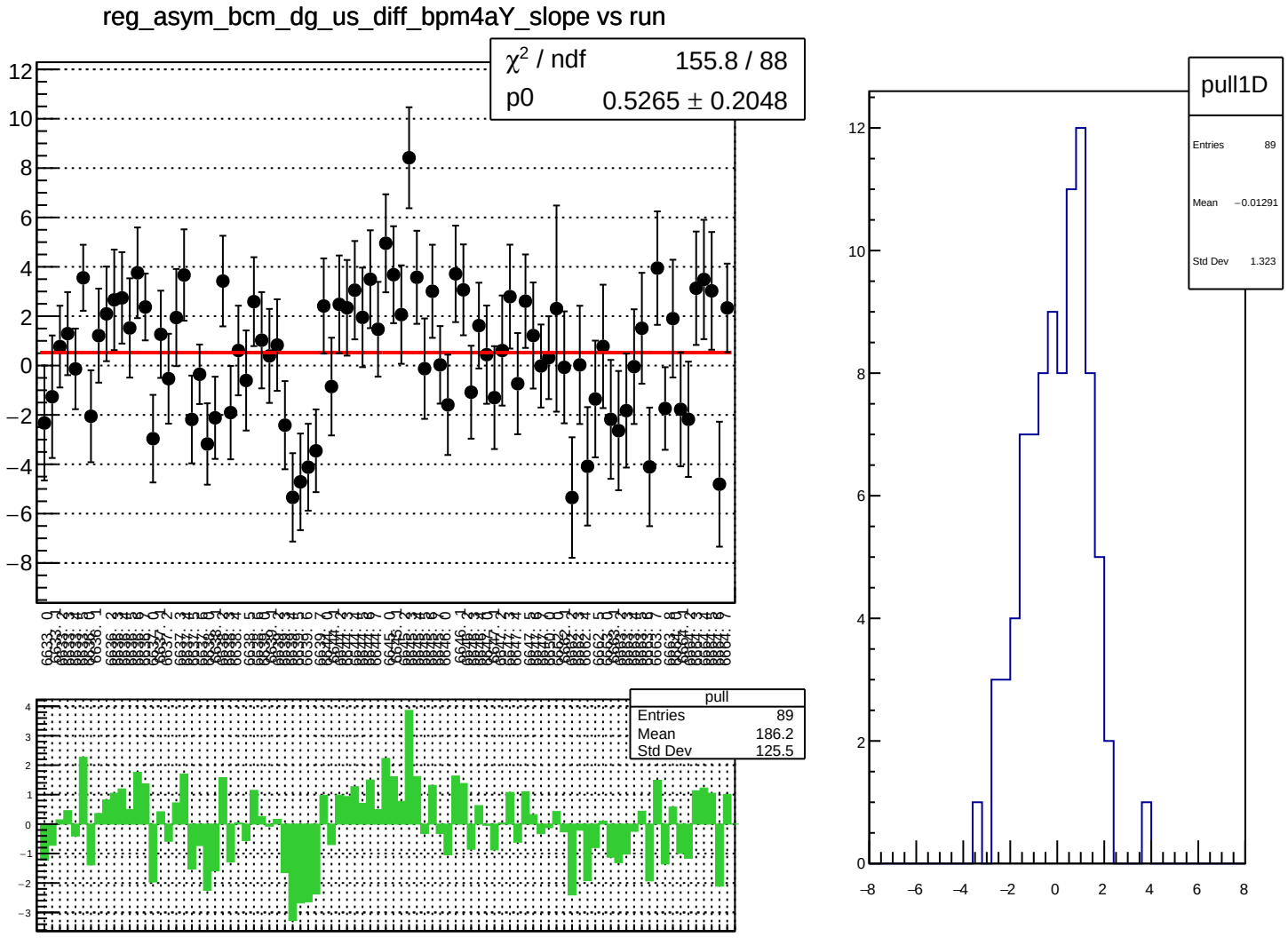

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 179.4 / 88
p0 −0.9703 ± 0.2381
pull
Entries 89
Mean −26.36
Std Dev 79.19

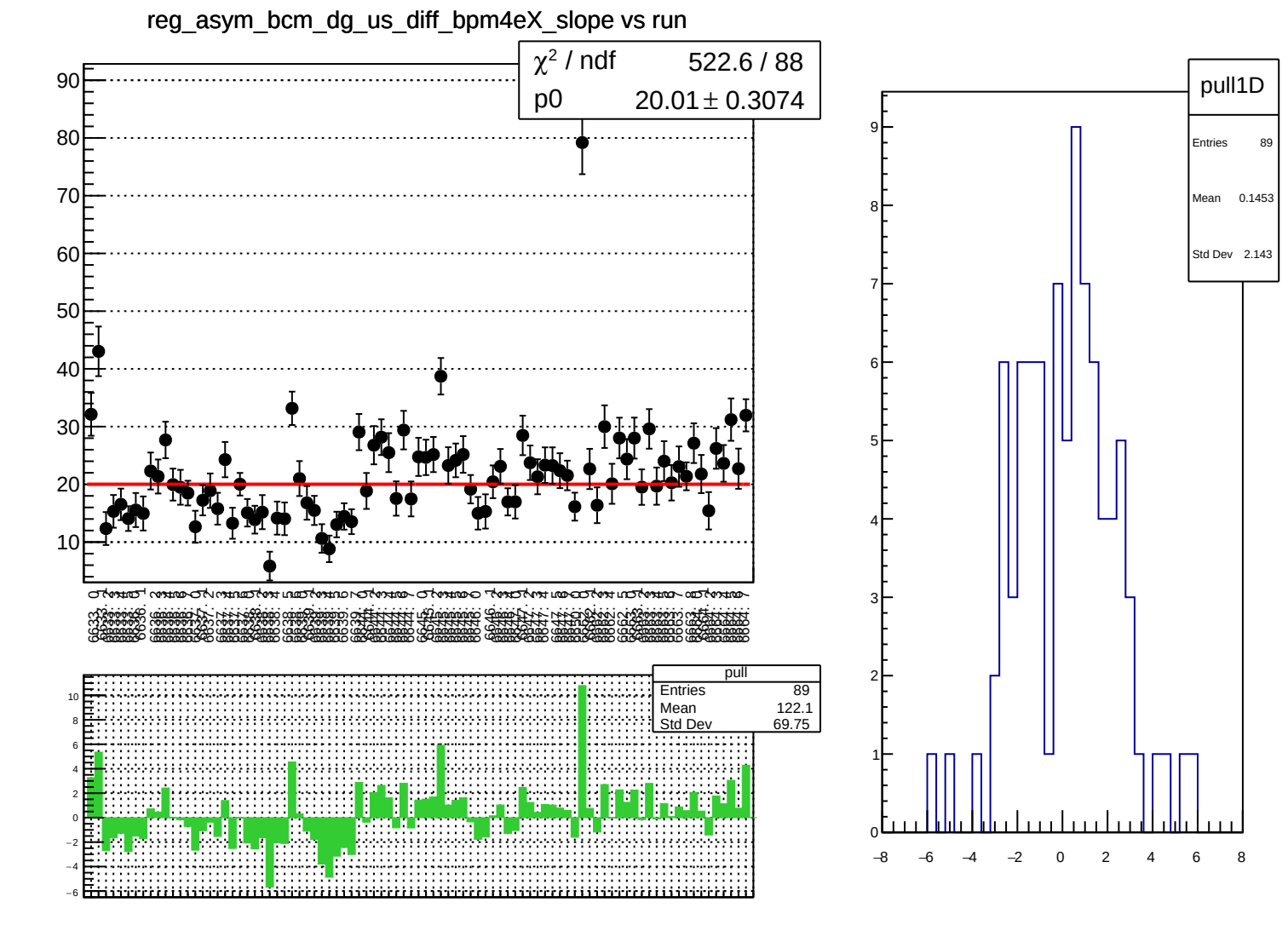

pull1D
Entries 89
Mean −0.02305
Std Dev 1.42

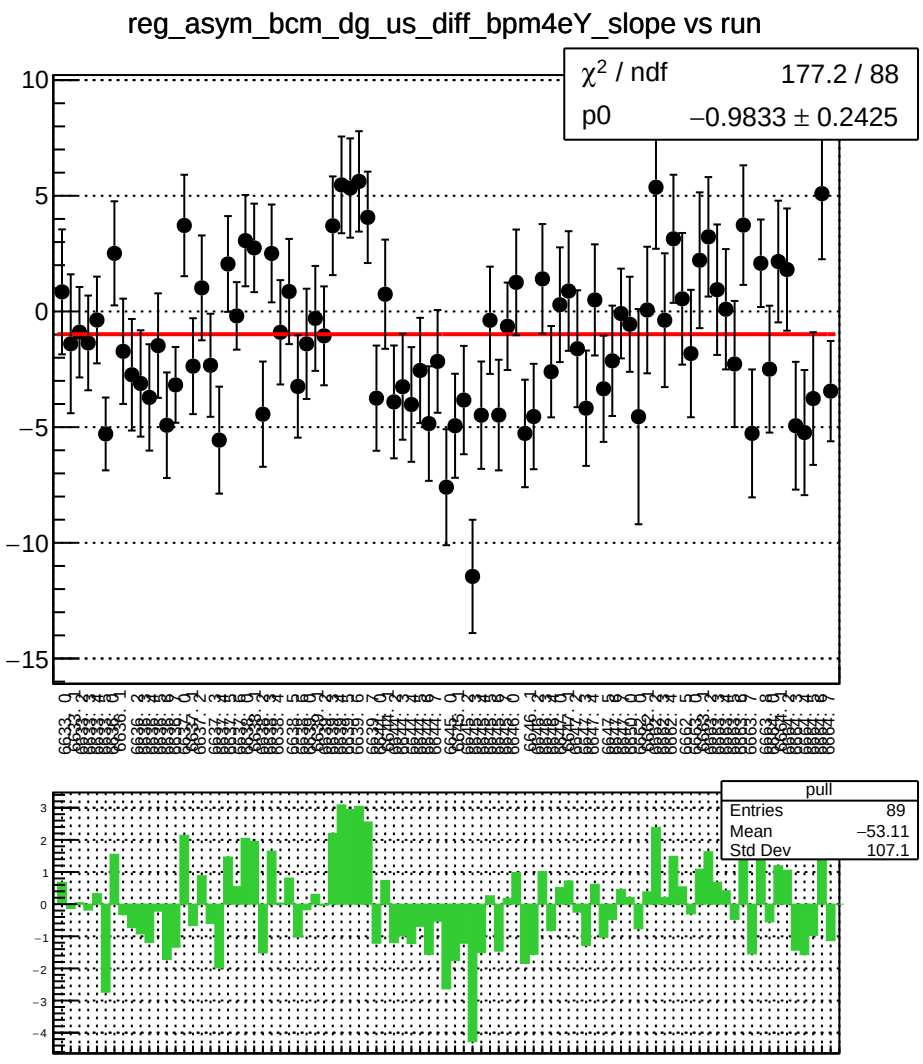

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 347.9 / 88
p0 0.2632 ± 0.01322
1.5
1
0.5
0
−0.5
pull
Entries 89
Mean 298.4
Std Dev 244.9
4
2
0
−2
−4

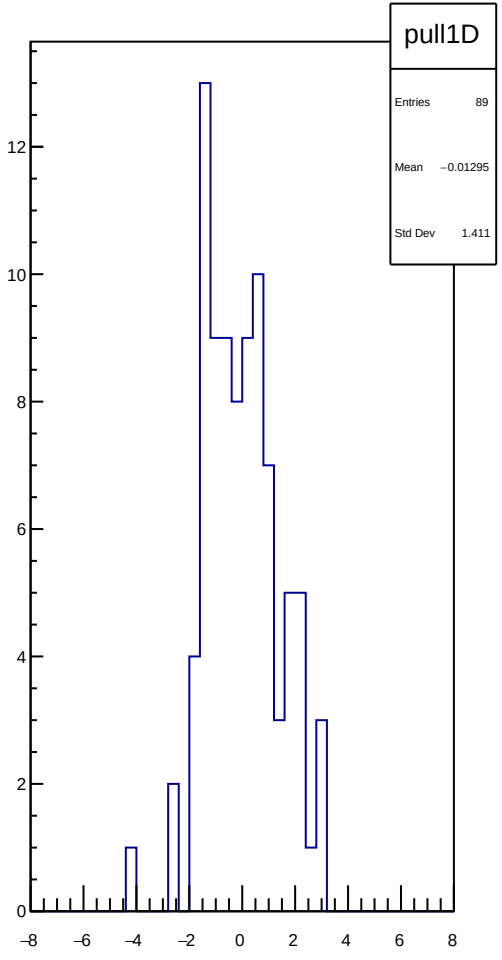

pull1D
Entries 89
Mean 0.1111
Std Dev 1.974
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

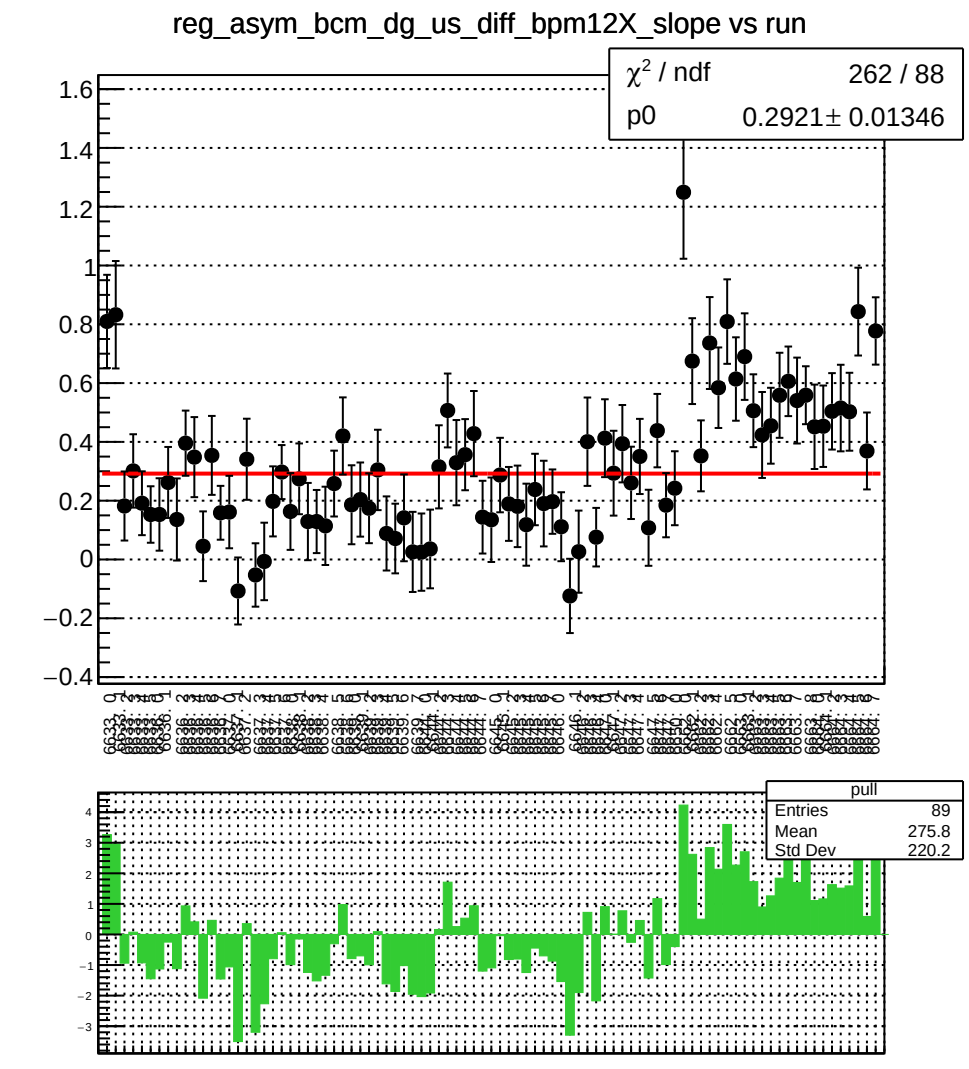

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 527.3 / 88
p0 −19.17 ± 0.2876
pull
Entries 89
Mean 124.3
Std Dev 72.7
pull1D
Entries 89
Mean −0.142
Std Dev 2.17

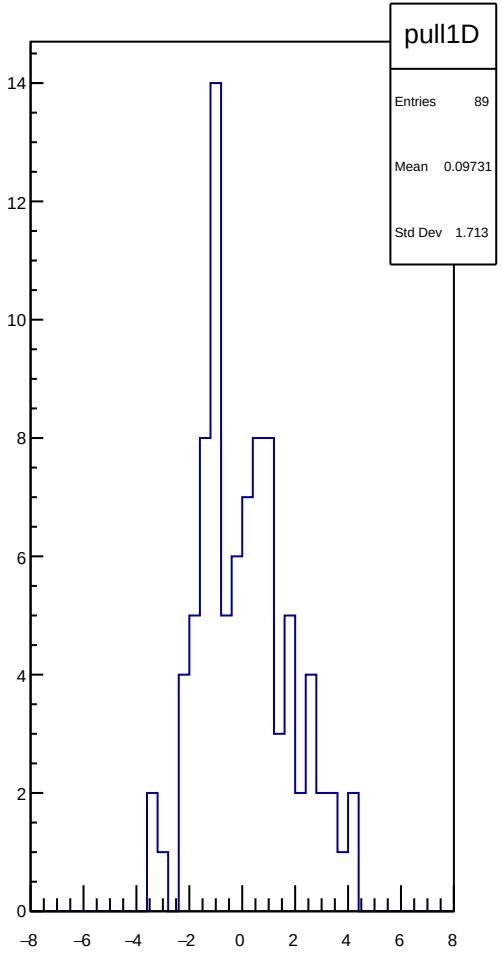

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 155.8 / 88
p0 0.5265 ± 0.2048
pull
Entries 89
Mean 186.2
Std Dev 125.5
pull1D
Entries 89
Mean −0.01291
Std Dev 1.323

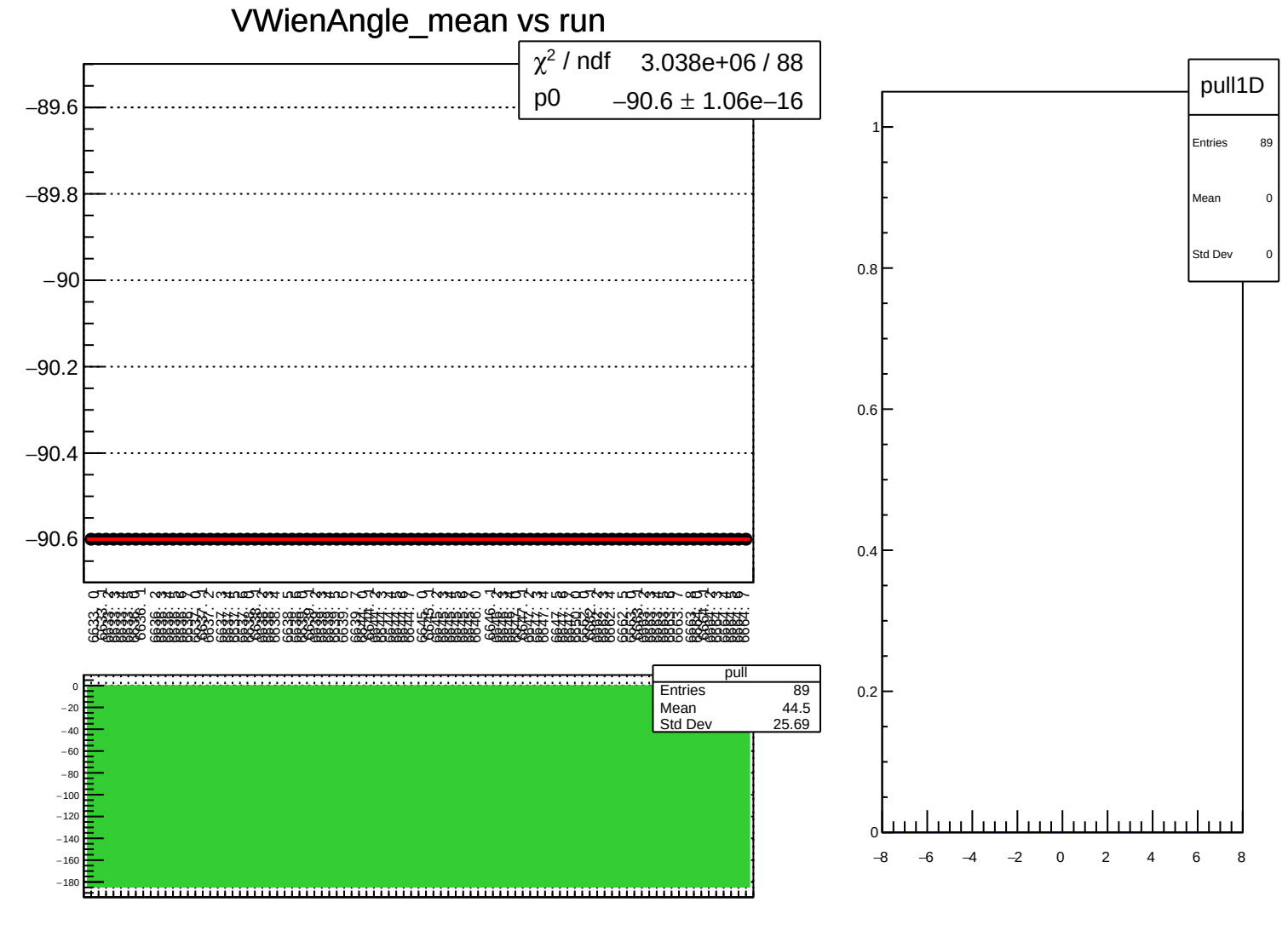

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 522.6 / 88
p0 20.01 ± 0.3074
pull
Entries 89
Mean 122.1
Std Dev 69.75
pull1D
Entries 89
Mean 0.1453
Std Dev 2.143

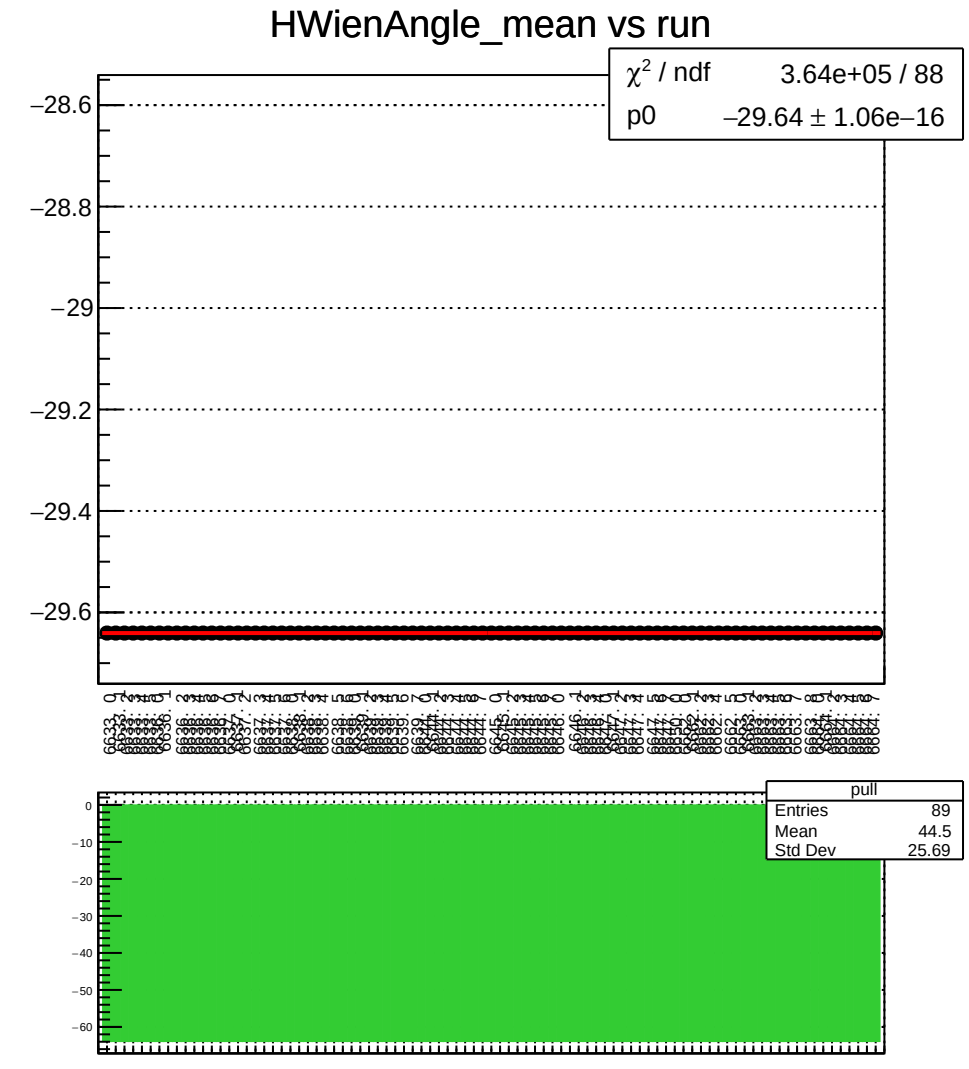

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 177.2 / 88
p0 −0.9833 ± 0.2425
pull
Entries 89
Mean −53.11
Std Dev 107.1

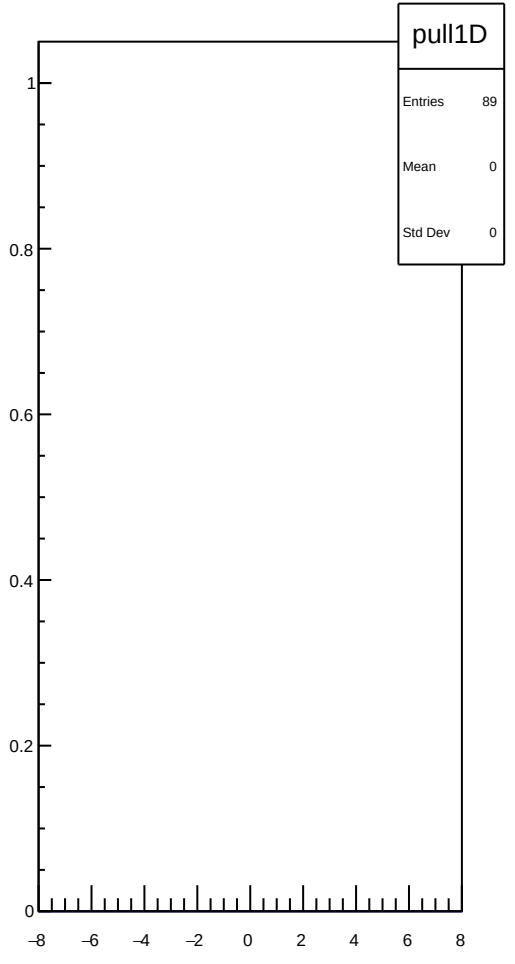

pull1D
Entries 89
Mean −0.01295
Std Dev 1.411

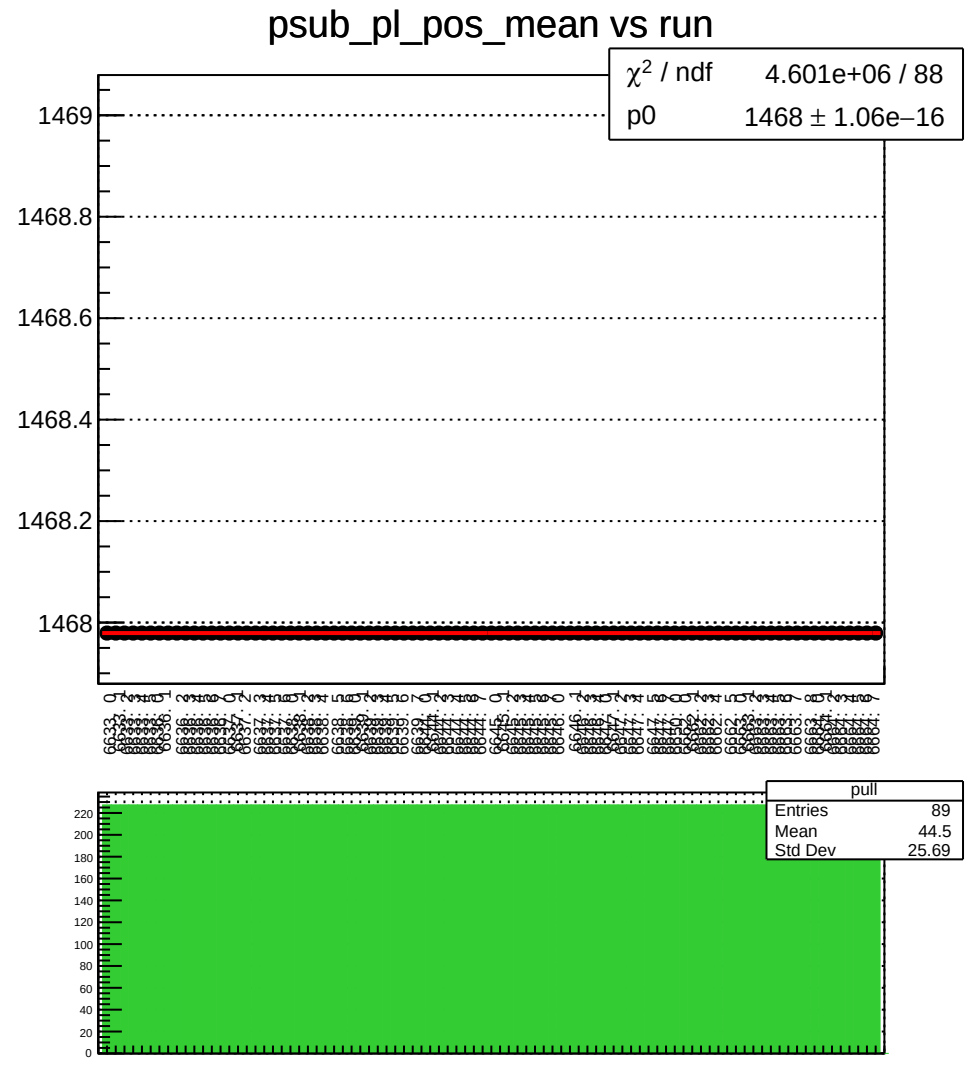

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 262 / 88
p0 0.2921± 0.01346
pull
Entries 89
Mean 275.8
Std Dev 220.2

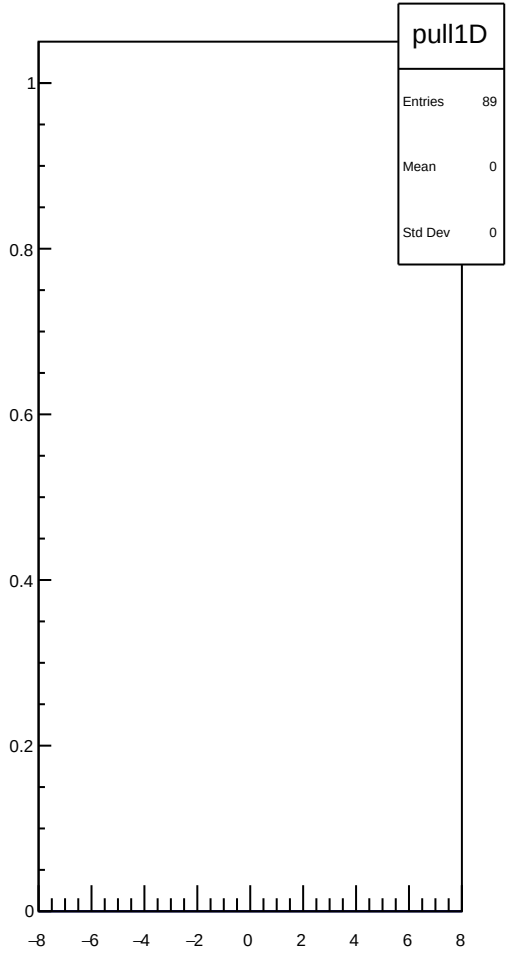

pull1D
Entries 89
Mean 0.09731
Std Dev 1.713

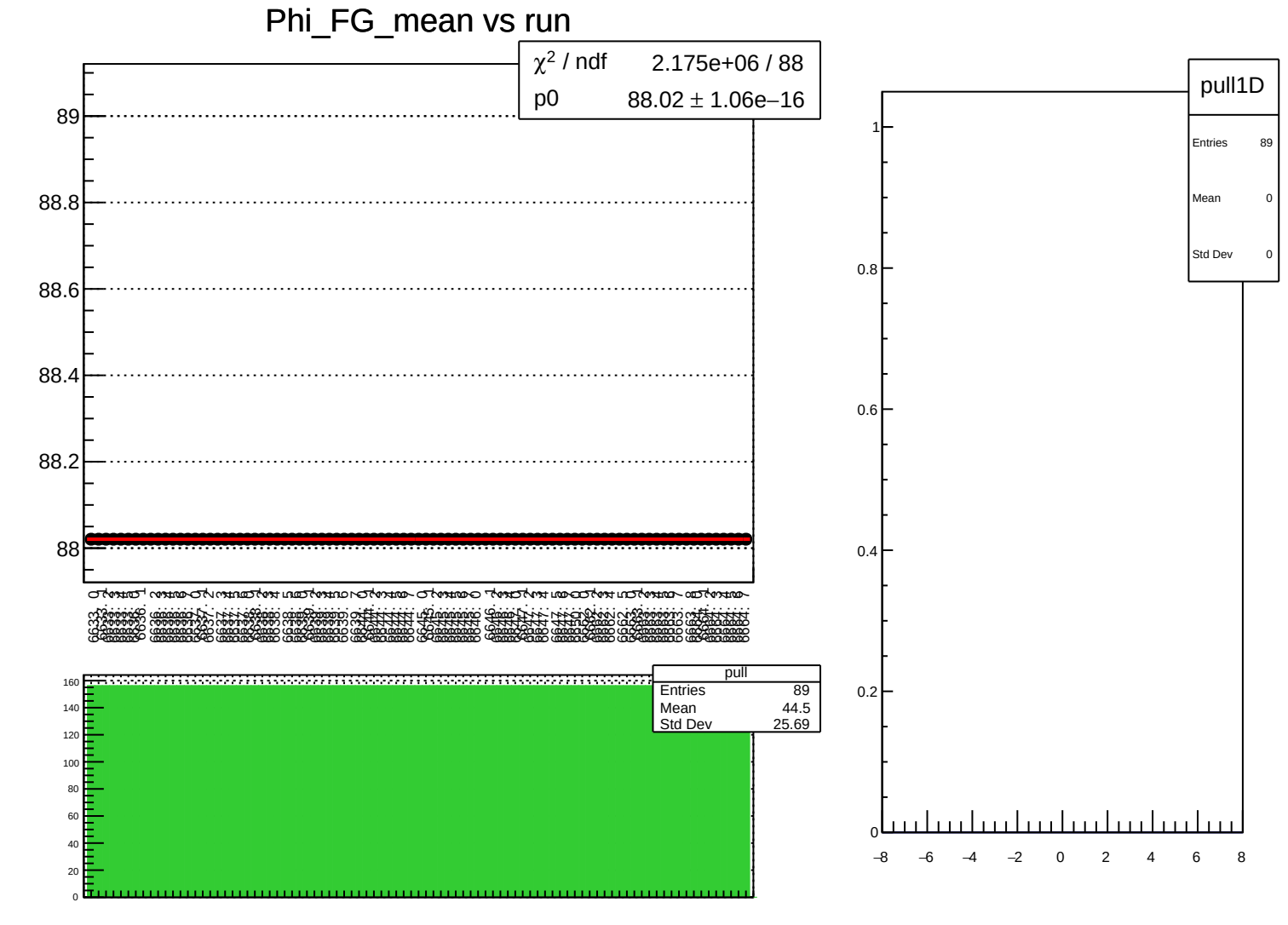

VWienAngle_mean vs run
χ² / ndf 3.038e+06 / 88
p0 −90.6 ± 1.06e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 89
Mean 44.5
Std Dev 25.69
0
−20
−40
−60
−80
−100
−120
−140
−160
−180
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

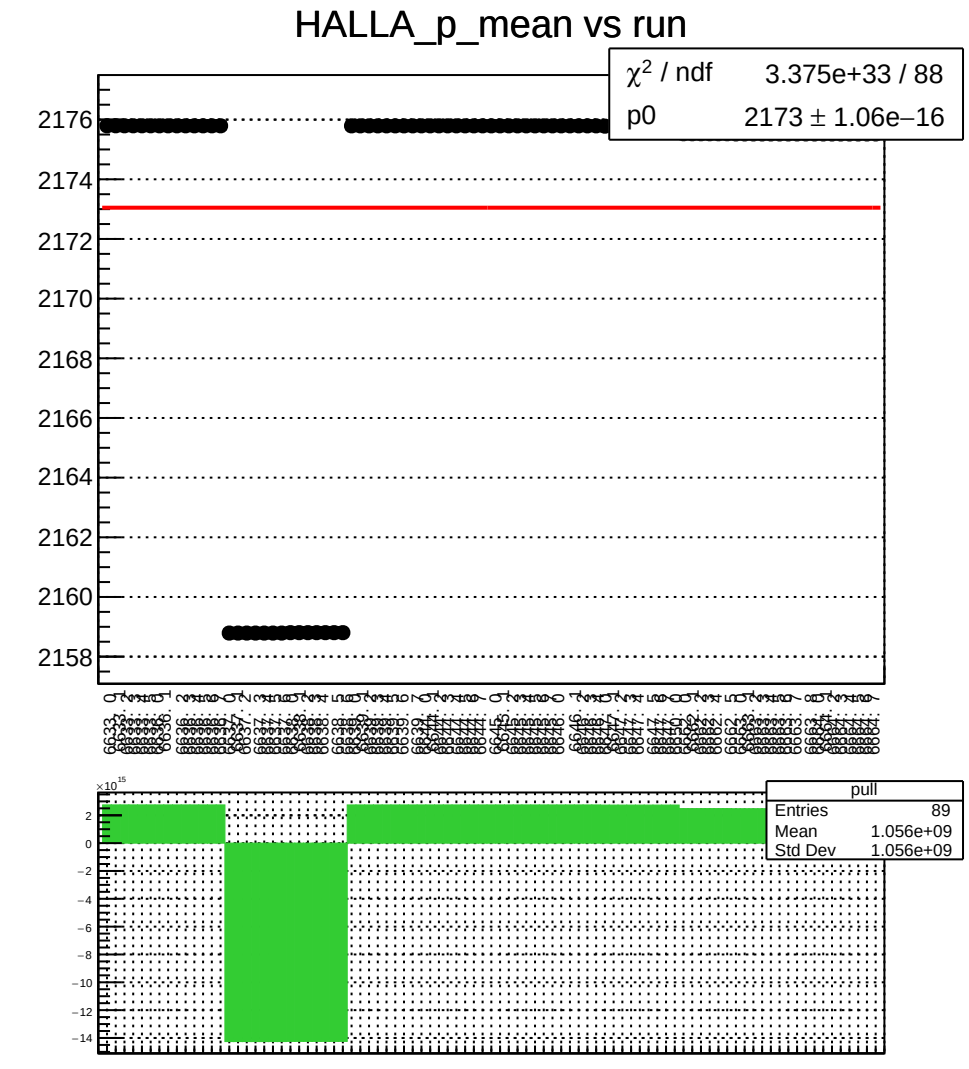

HWienAngle_mean vs run
χ² / ndf 3.64e+05 / 88
p0 −29.64 ± 1.06e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 89
Mean 44.5
Std Dev 25.69
0
−10
−20
−30
−40
−50
−60

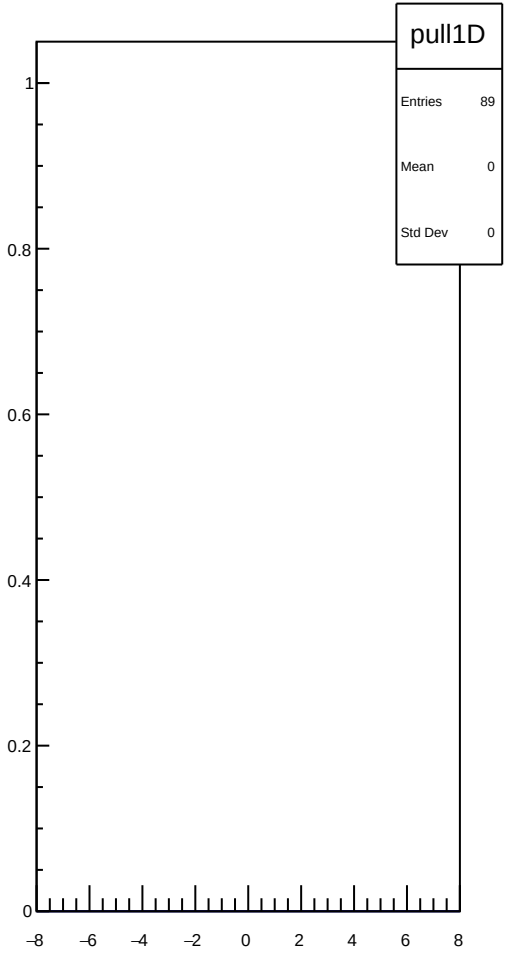

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

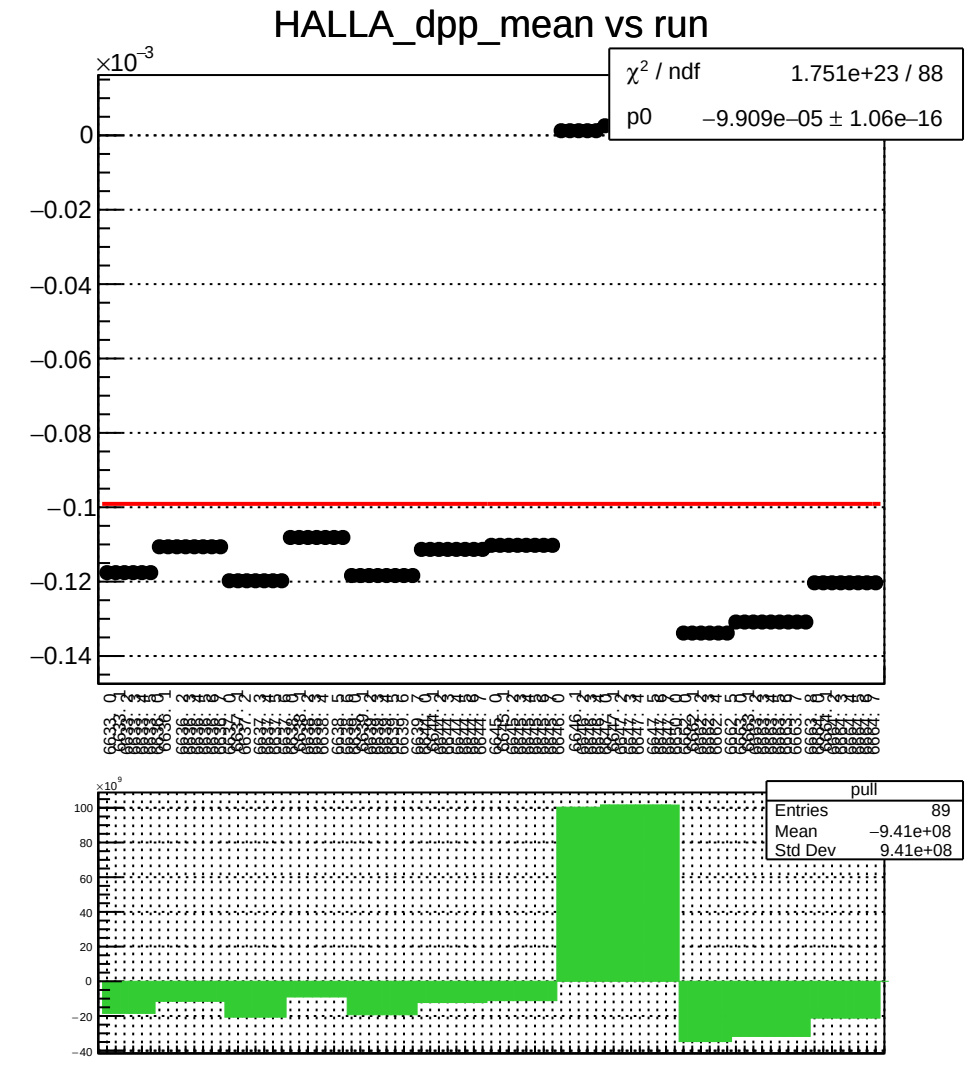

psub_pl_pos_mean vs run
χ² / ndf 4.601e+06 / 88
p0 1468 ± 1.06e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 89
Mean 44.5
Std Dev 25.69
220
200
180
160
140
120
100
80
60
40
20
0

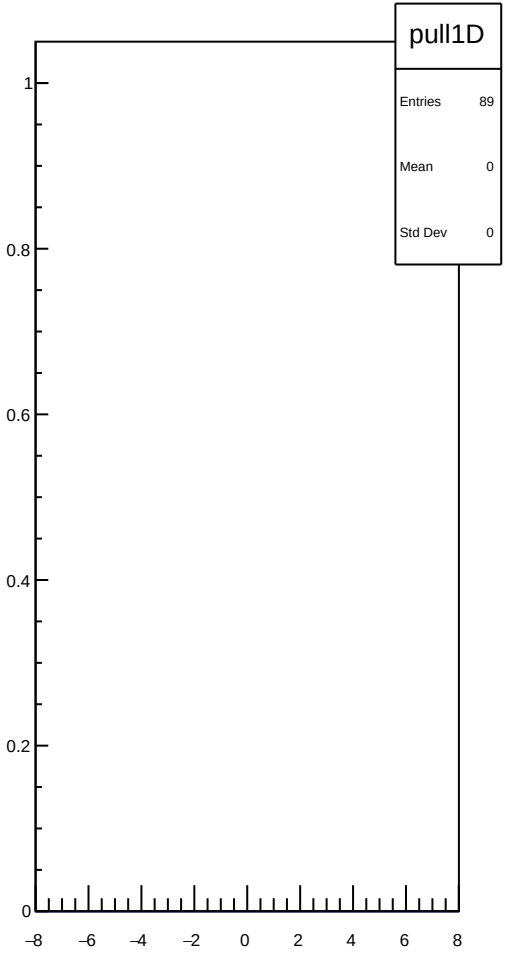

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

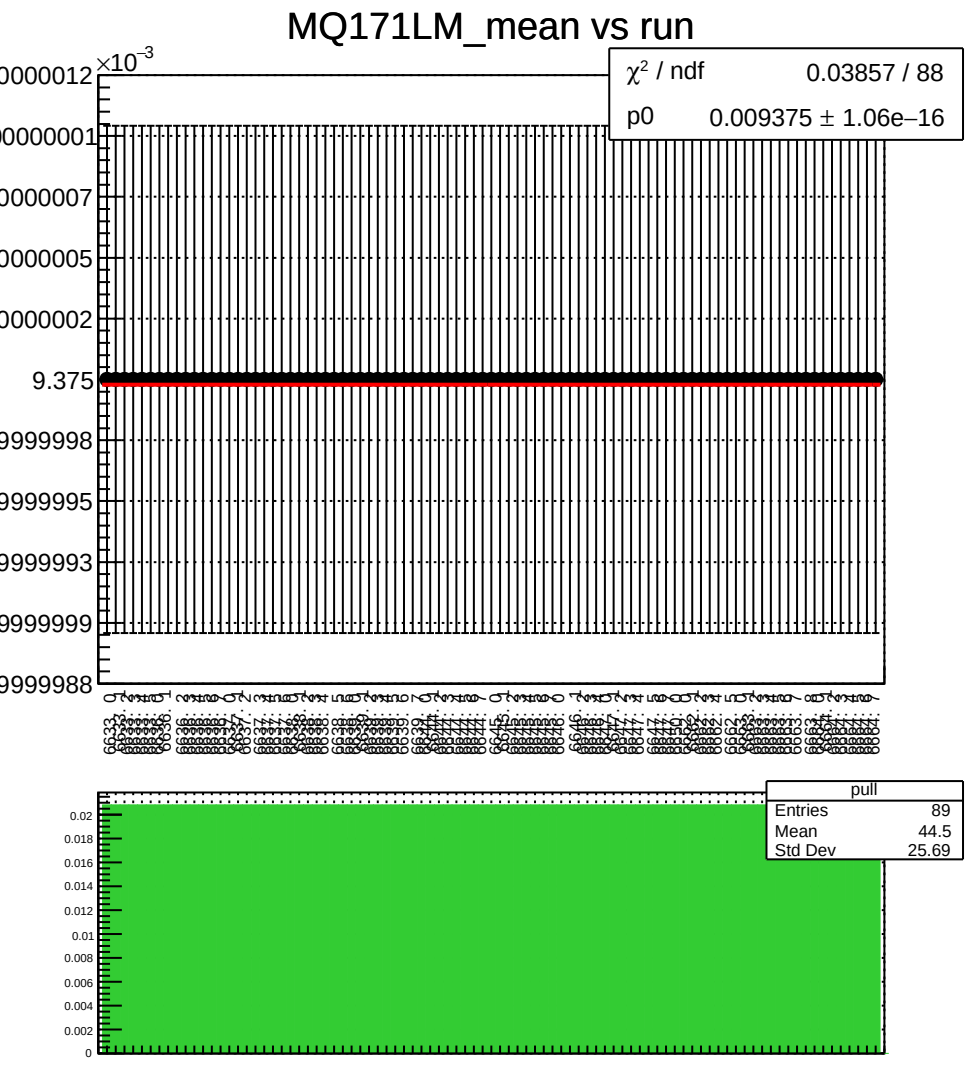

Phi_FG_mean vs run
χ² / ndf 2.175e+06 / 88
p0 88.02 ± 1.06e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 89
Mean 44.5
Std Dev 25.69
160
140
120
100
80
60
40
20
0
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

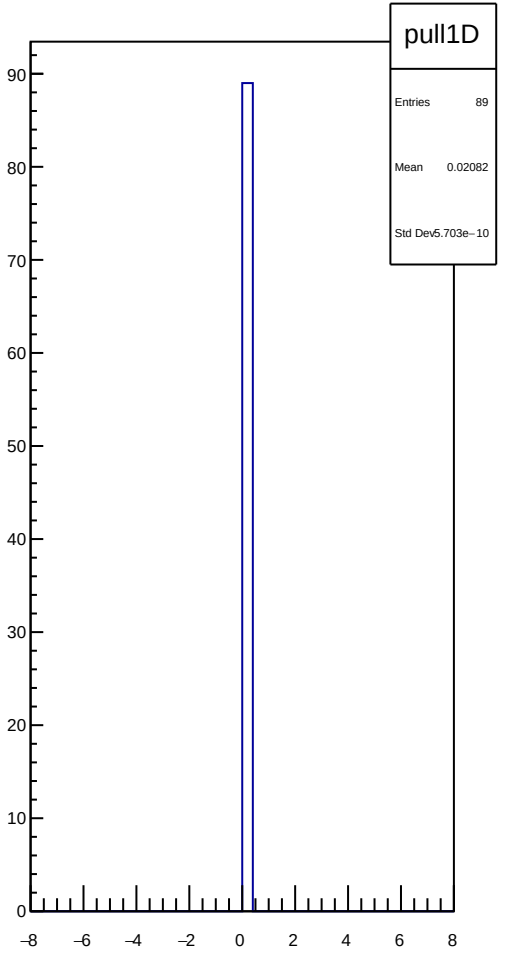

HALLA_p_mean vs run
χ² / ndf 3.375e+33 / 88
p0 2173 ± 1.06e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14
pull
Entries 89
Mean 1.056e+09
Std Dev 1.056e+09

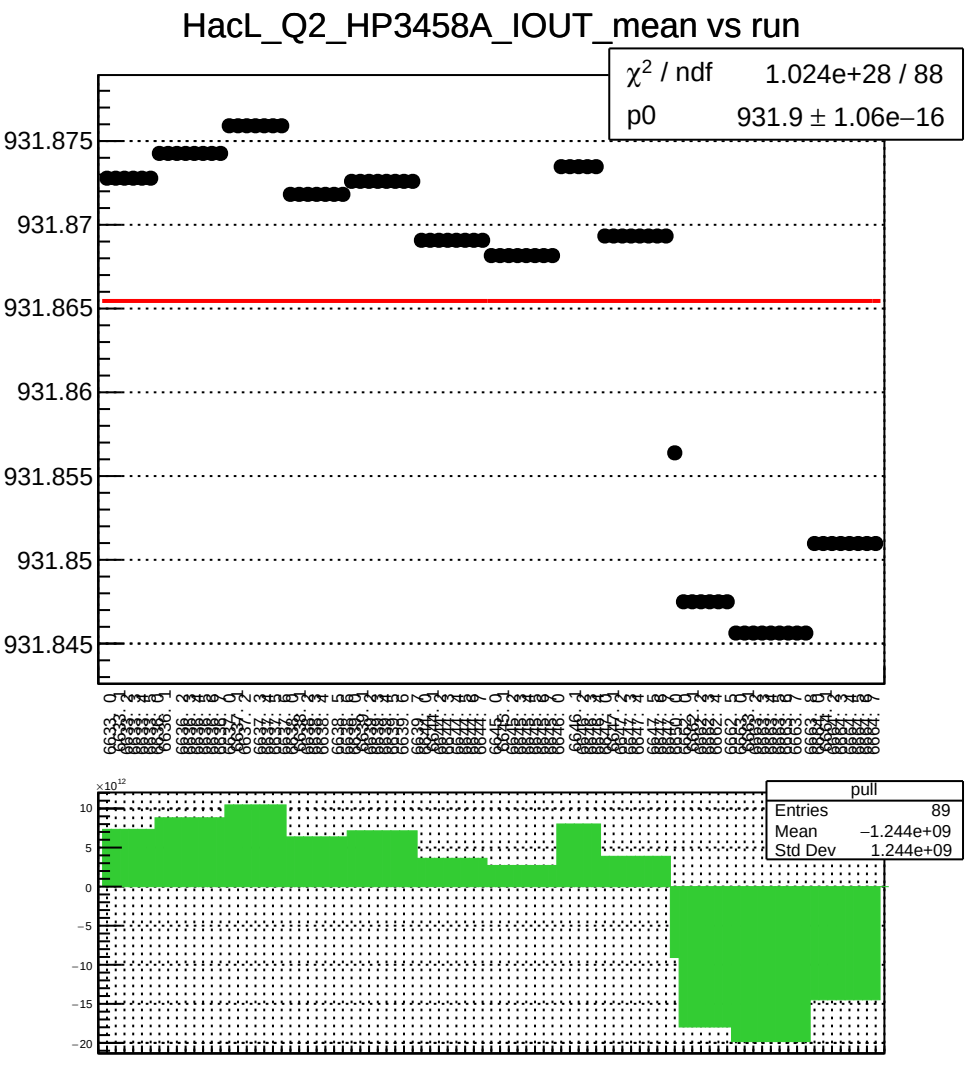

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

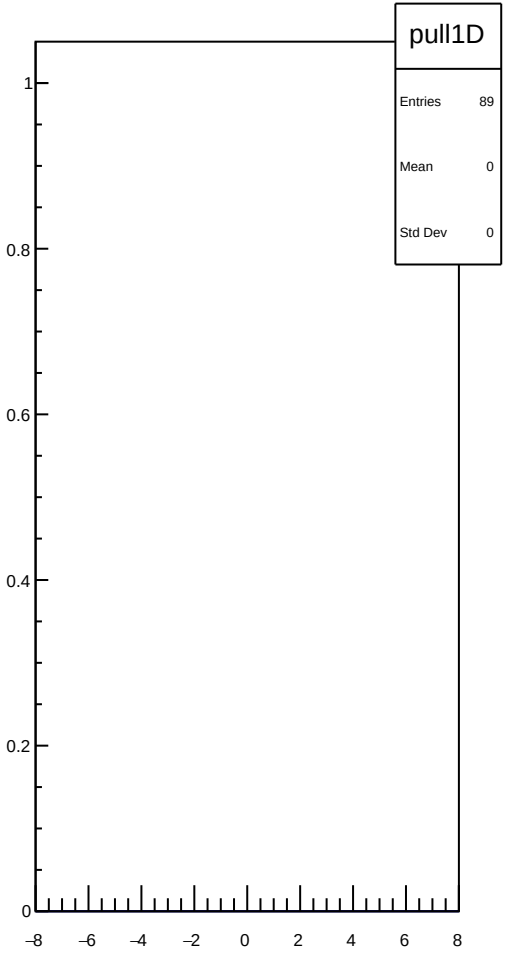

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 1.751e+23 / 88
p0 −9.909e−05 ± 1.06e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
−0.14
×10⁹
100
80
60
40
20
0
−20
−40
pull
Entries 89
Mean −9.41e+08
Std Dev 9.41e+08

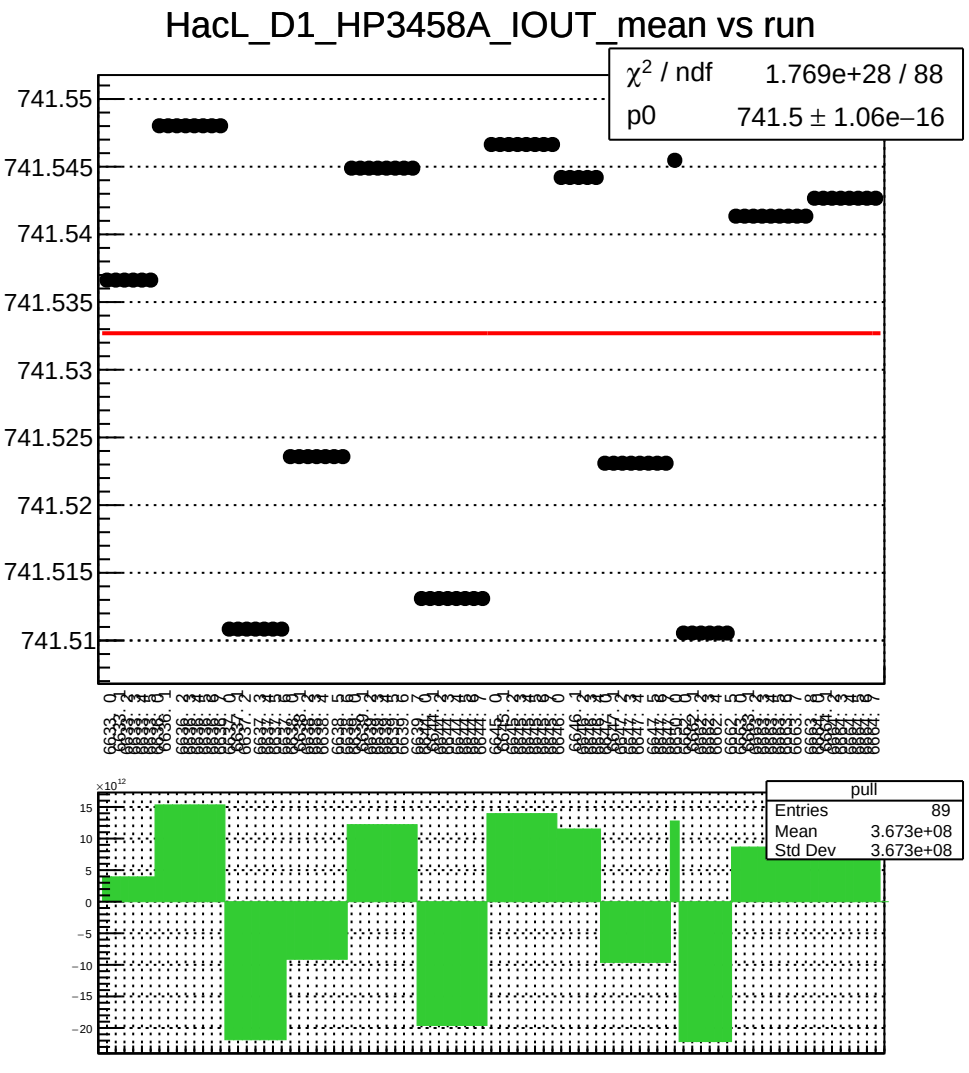

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

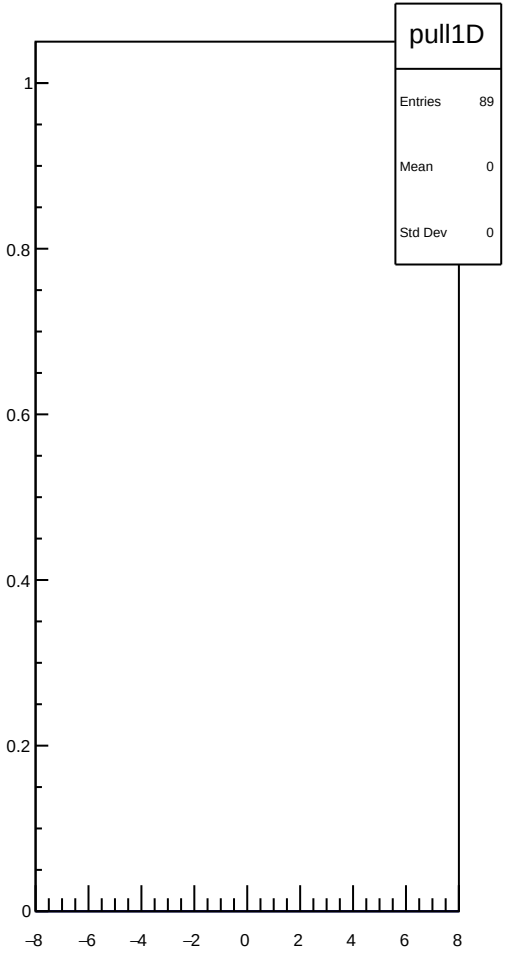

MQ171LM_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
pull
Entries 89
Mean 44.5
Std Dev 25.69

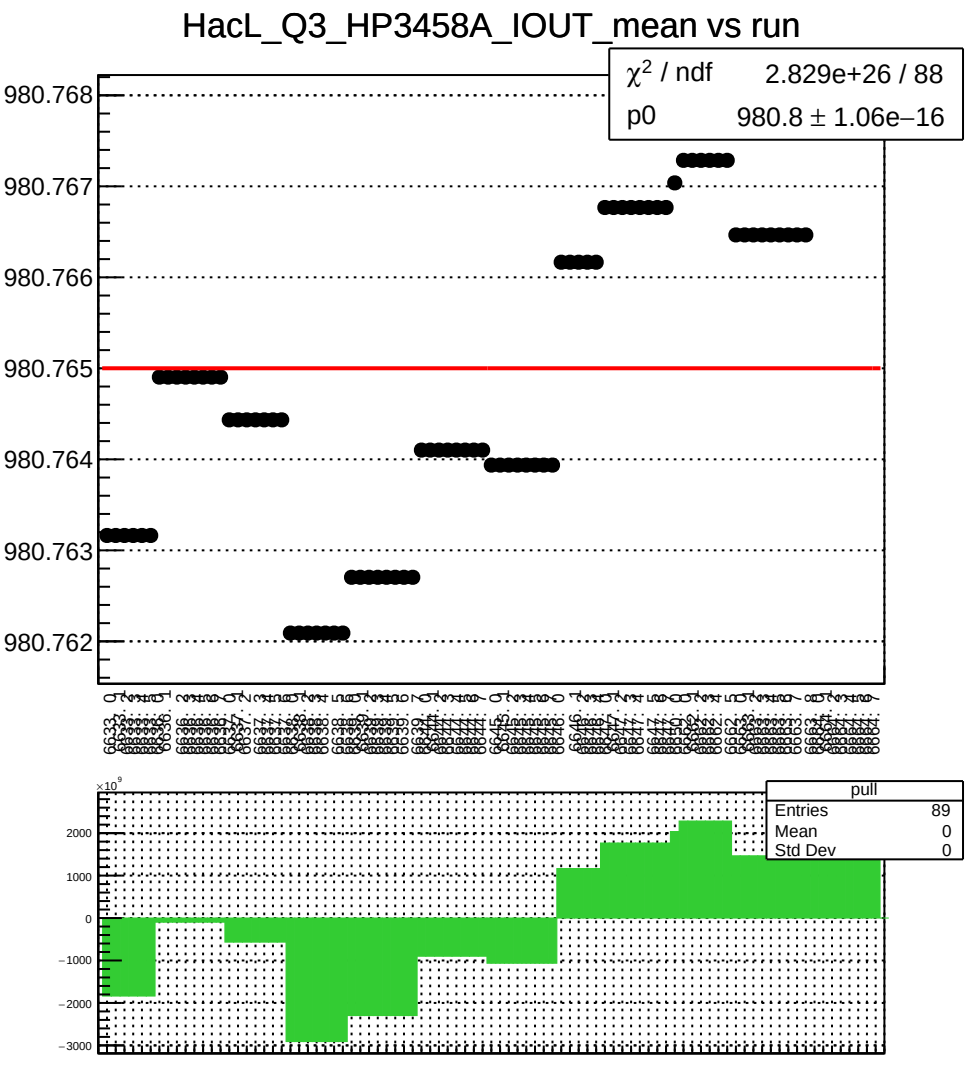

pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

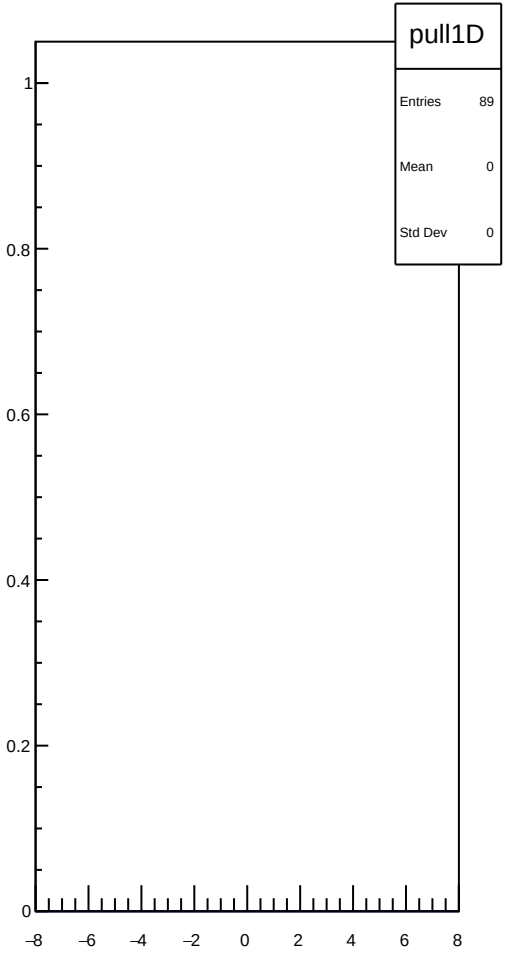

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.024e+28 / 88
p0 931.9 ± 1.06e−16
931.875
931.87
931.865
931.86
931.855
931.85
931.845
pull
Entries 89
Mean −1.244e+09
Std Dev 1.244e+09
×10¹²
10
5
0
−5
−10
−15
−20

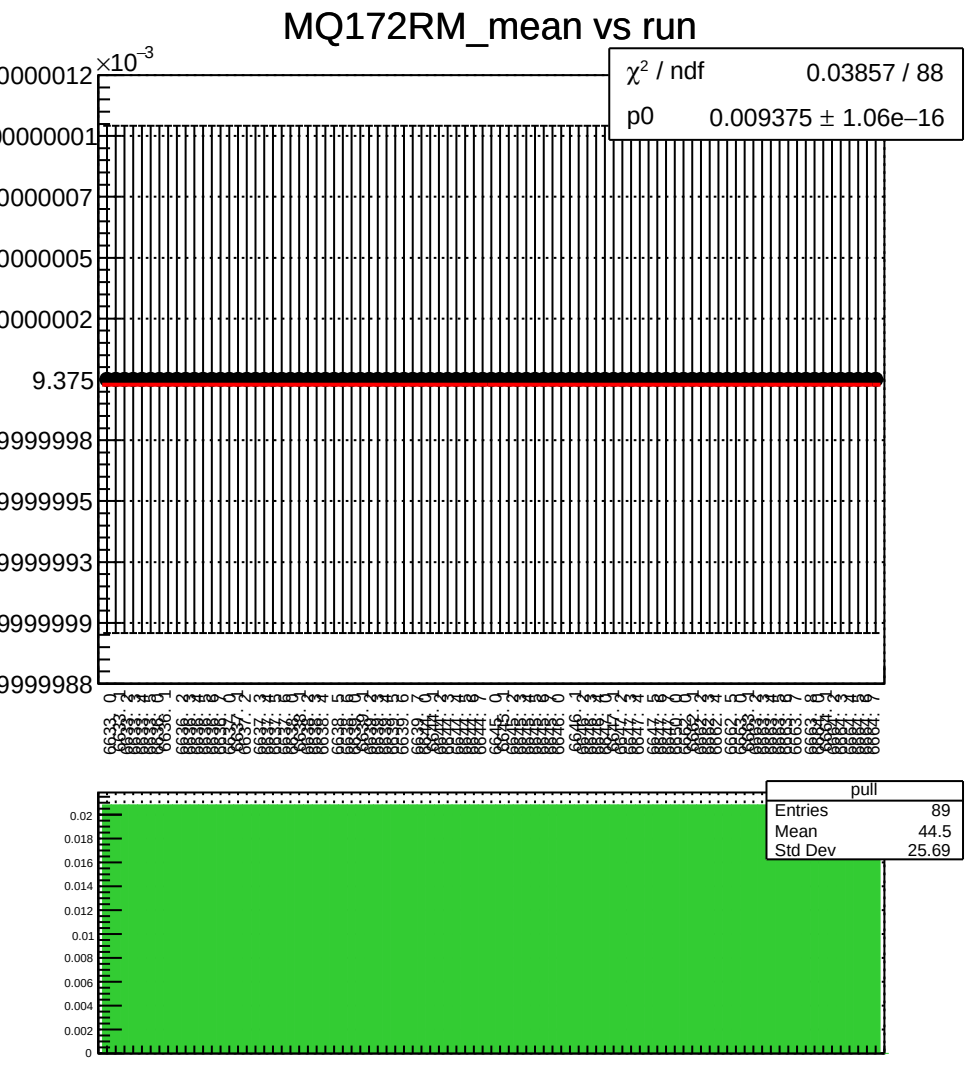

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

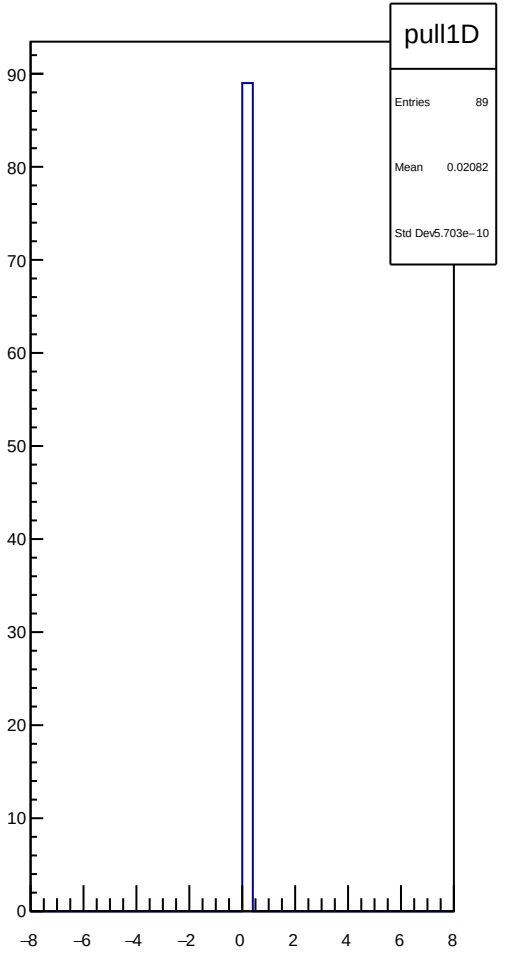

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.769e+28 / 88
p0 741.5 ± 1.06e−16
741.55
741.545
741.54
741.535
741.53
741.525
741.52
741.515
741.51
pull
Entries 89
Mean 3.673e+08
Std Dev 3.673e+08
×10¹²
15
10
5
0
−5
−10
−15
−20

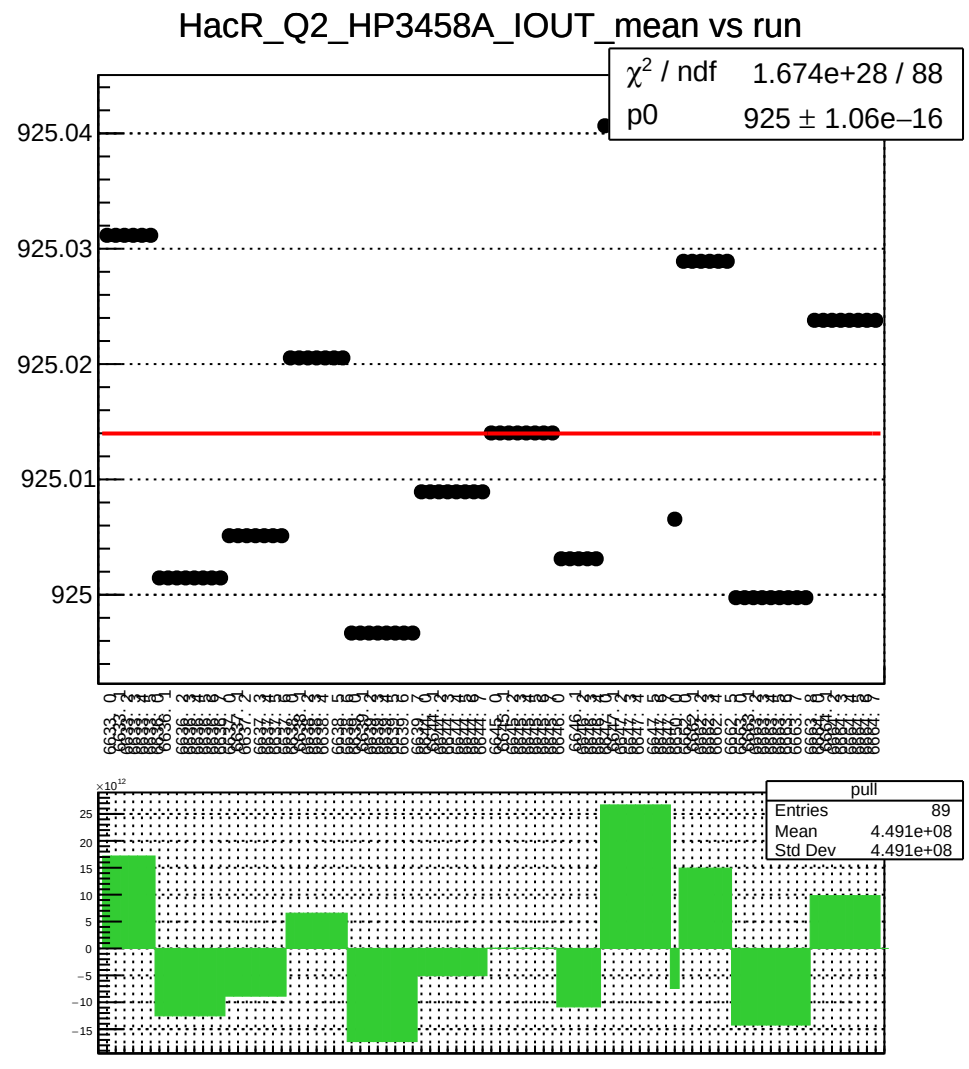

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

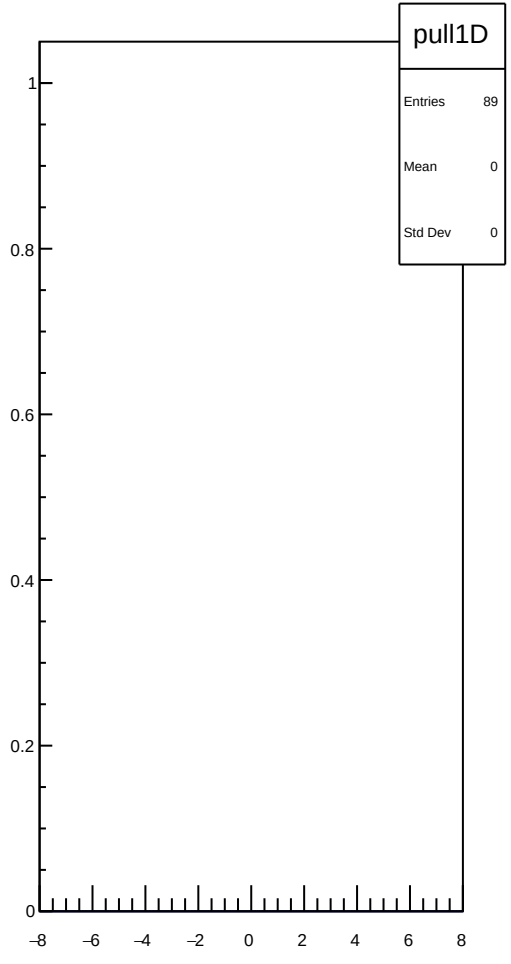

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.829e+26 / 88
p0 980.8 ± 1.06e−16
980.768
980.767
980.766
980.765
980.764
980.763
980.762
pull
Entries 89
Mean 0
Std Dev 0
×10⁹
2000
1000
0
−1000
−2000
−3000

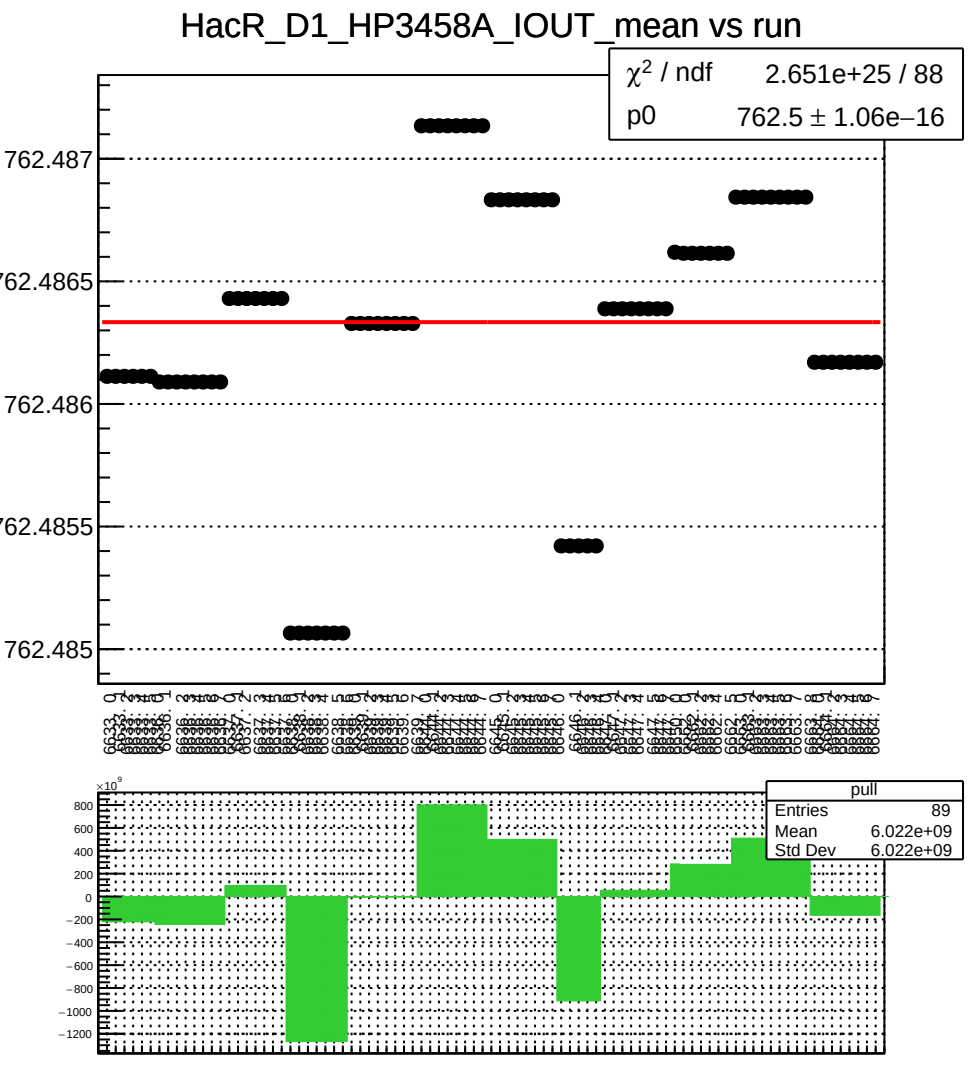

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

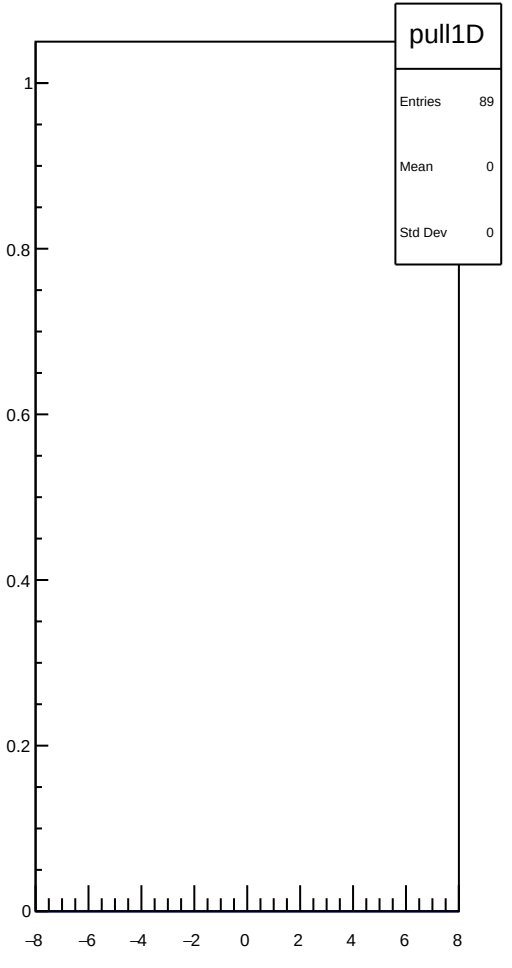

MQ172RM_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
9.375
pull
Entries 89
Mean 44.5
Std Dev 25.69

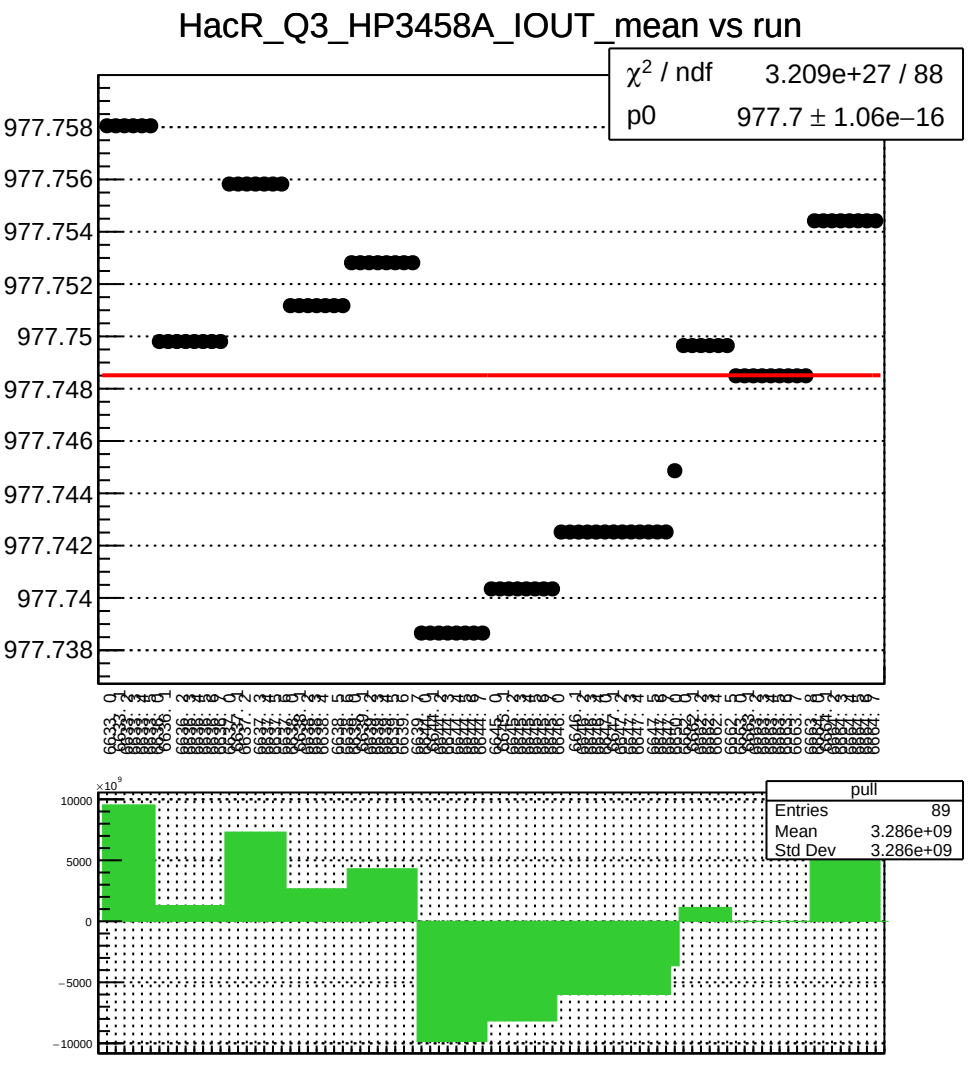

pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

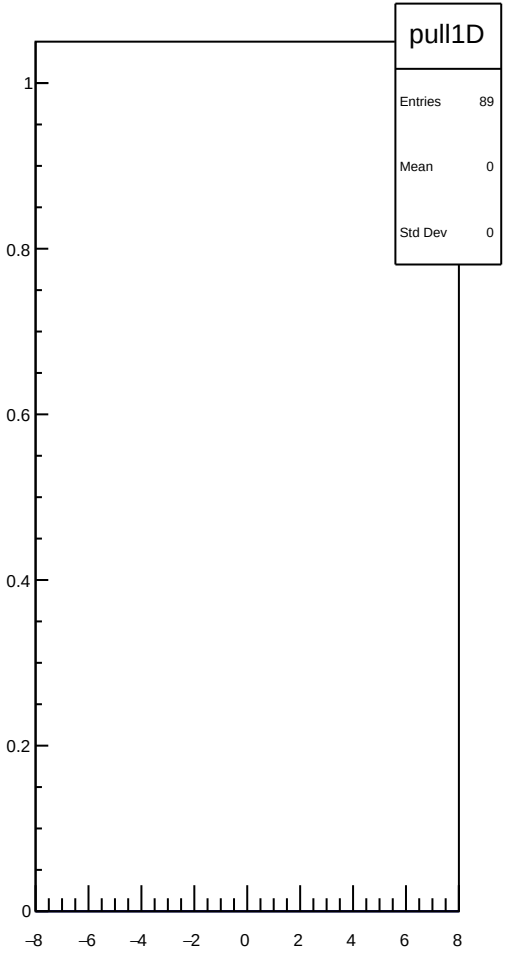

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.674e+28 / 88
p0 925 ± 1.06e−16
925.04
925.03
925.02
925.01
925
pull
Entries 89
Mean 4.491e+08
Std Dev 4.491e+08
×10¹²
25
20
15
10
5
0
−5
−10
−15

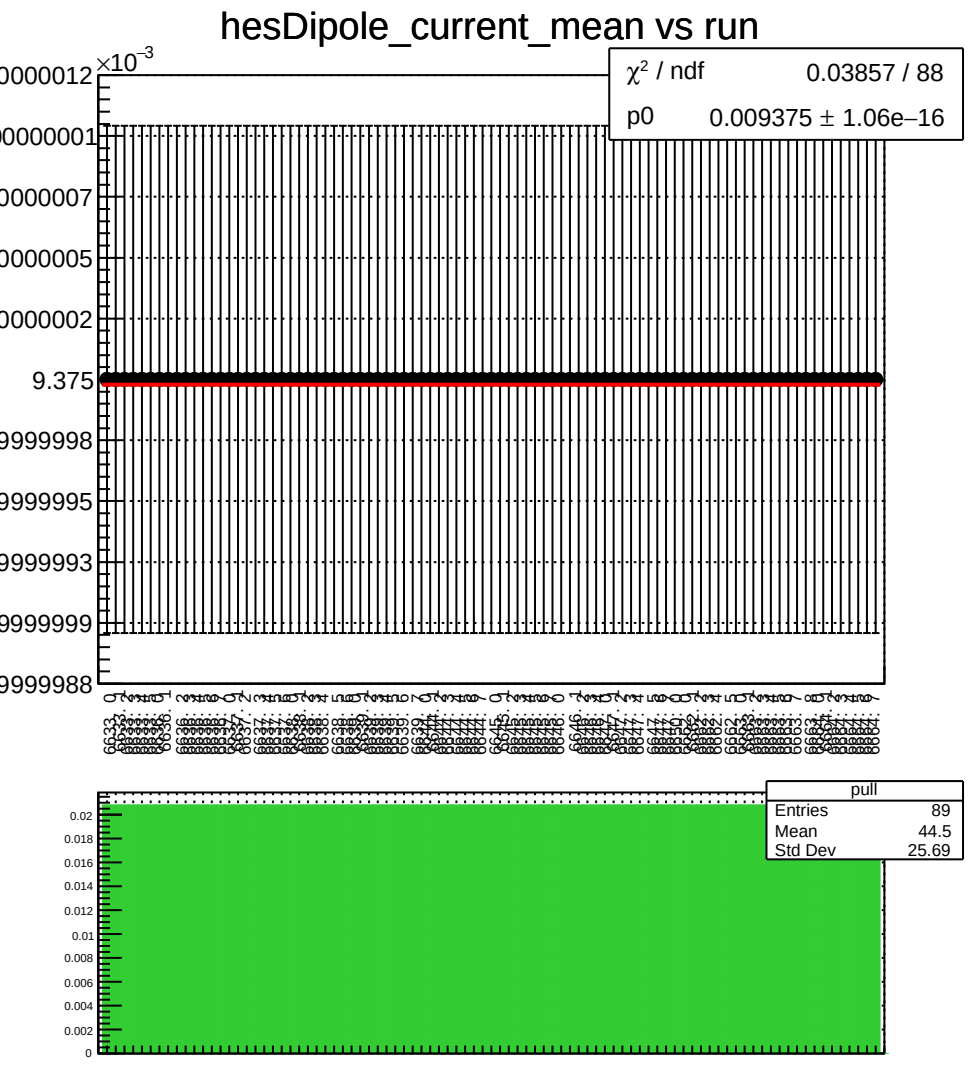

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

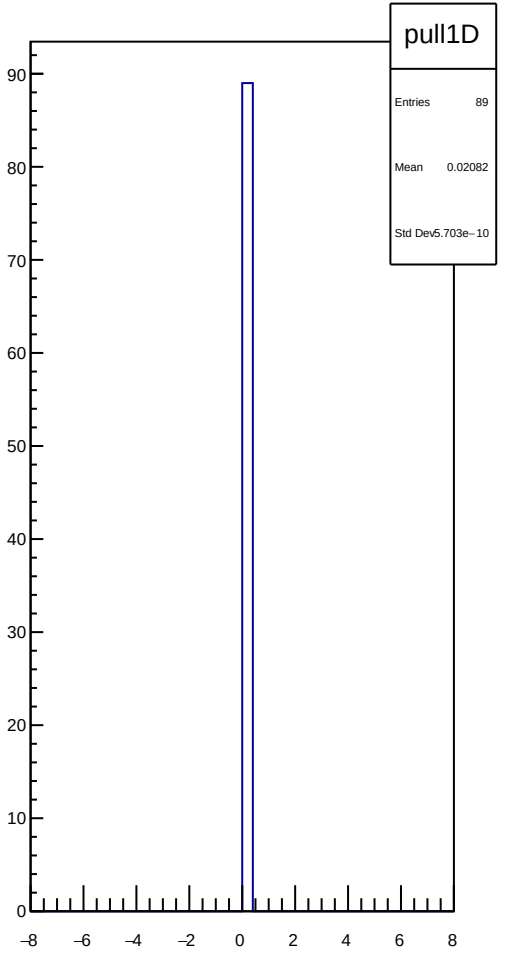

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 2.651e+25 / 88
p0 762.5 ± 1.06e−16
762.487
762.4865
762.486
762.4855
762.485
×10⁹
pull
Entries 89
Mean 6.022e+09
Std Dev 6.022e+09

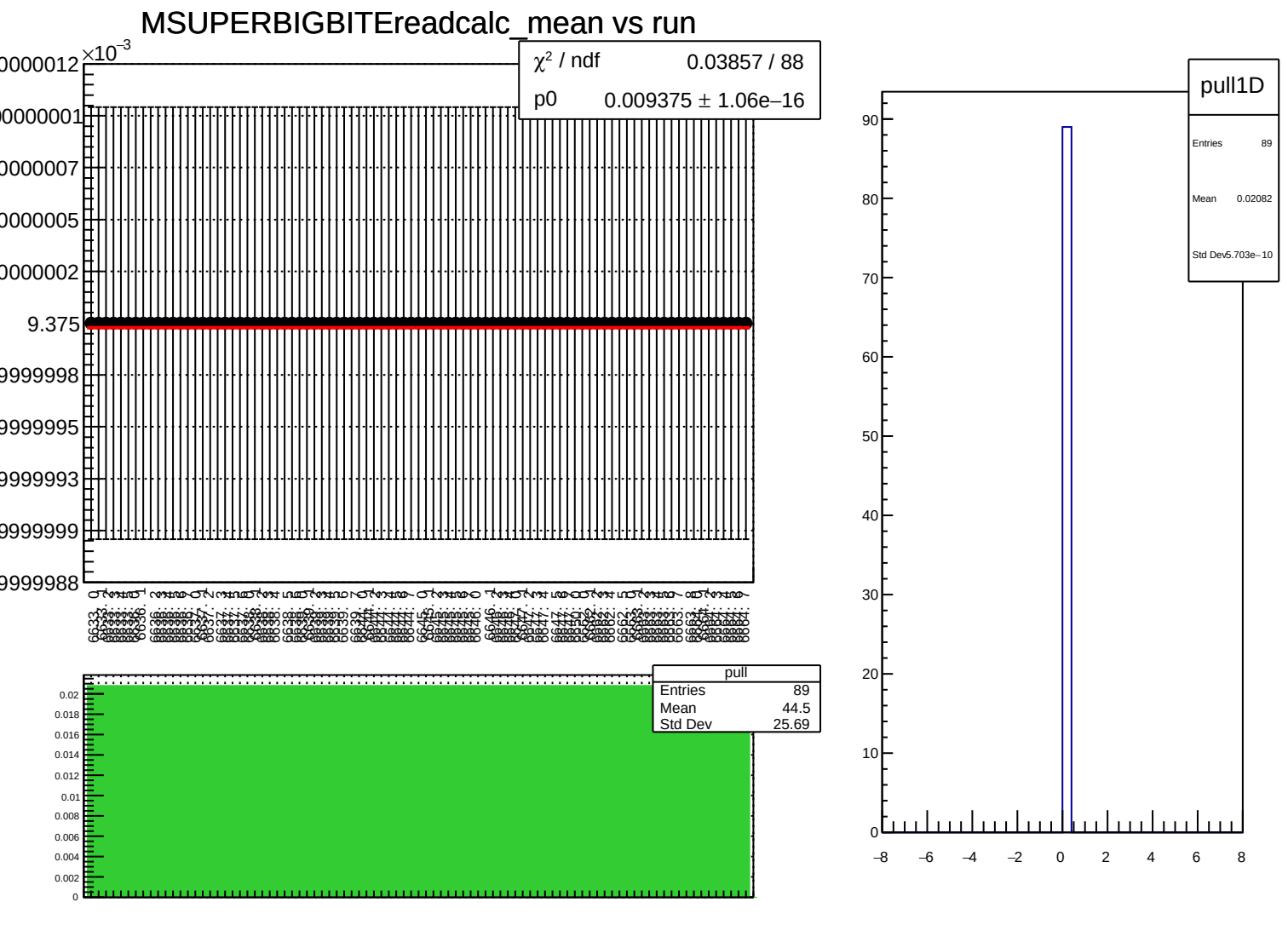

pull1D
Entries 89
Mean 0
Std Dev 0

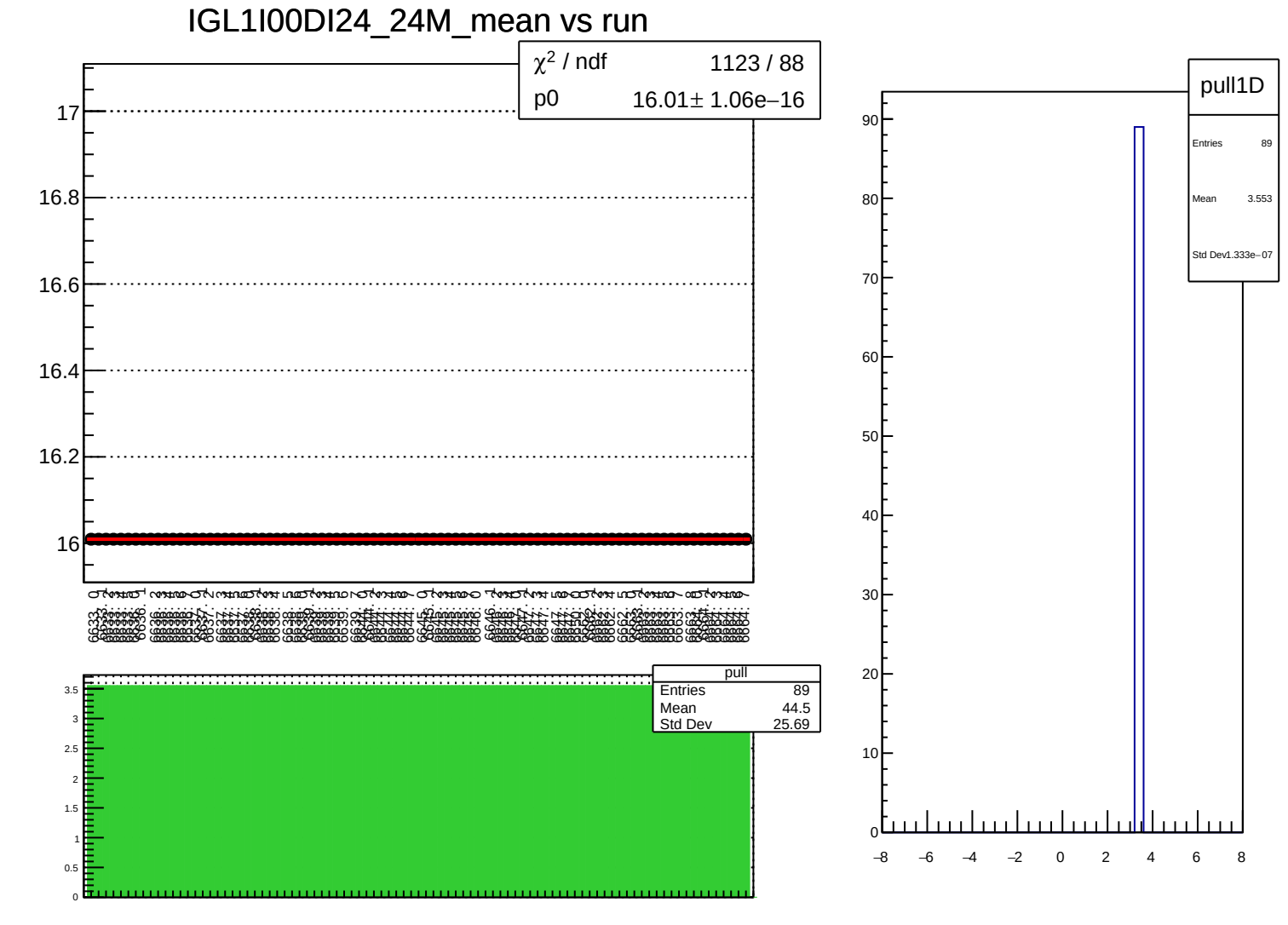

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 3.209e+27 / 88
p0 977.7 ± 1.06e−16
977.758
977.756
977.754
977.752
977.75
977.748
977.746
977.744
977.742
977.74
977.738
pull
Entries 89
Mean 3.286e+09
Std Dev 3.286e+09
×10⁹
10000
5000
0
−5000
−10000

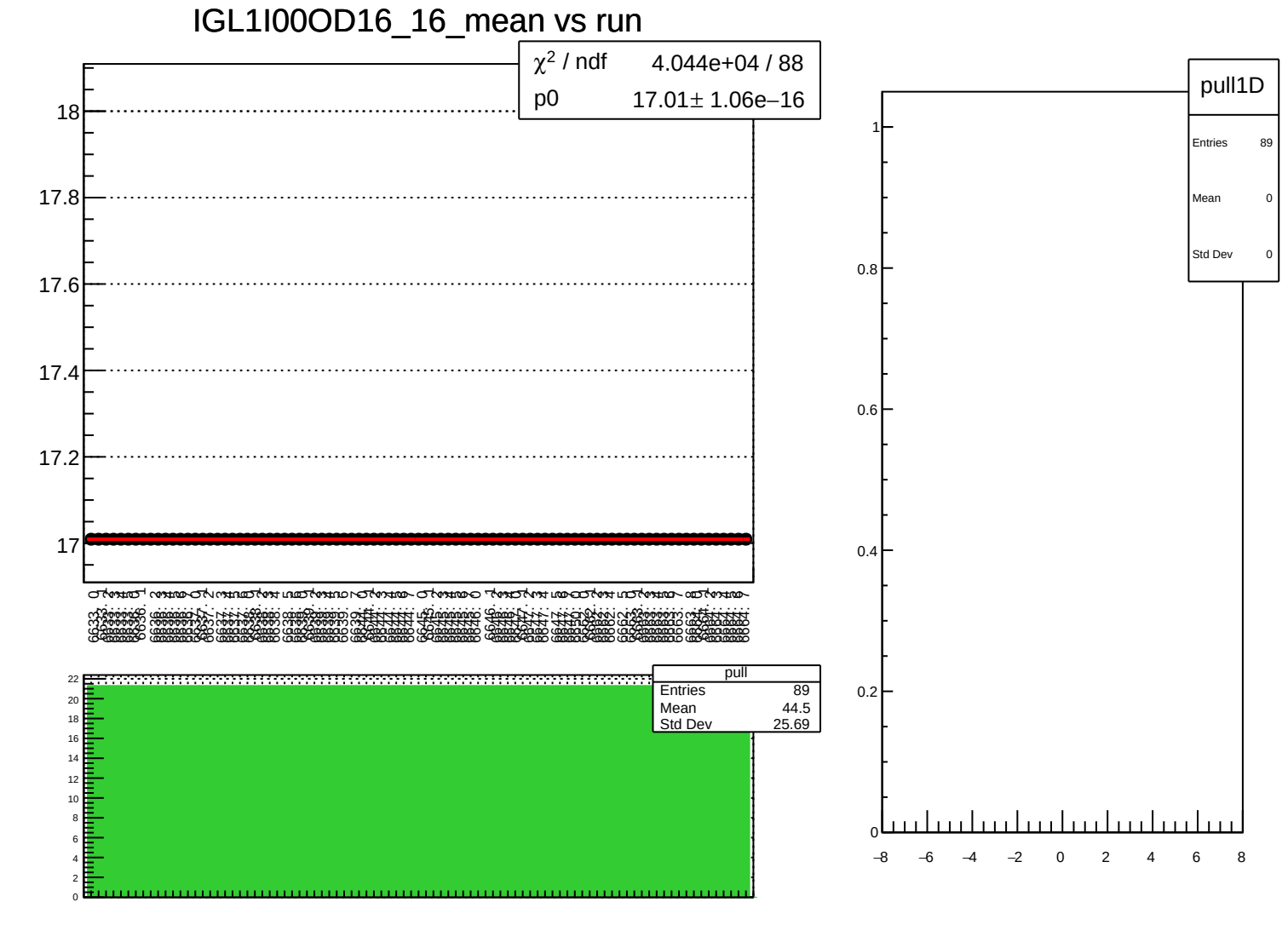

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

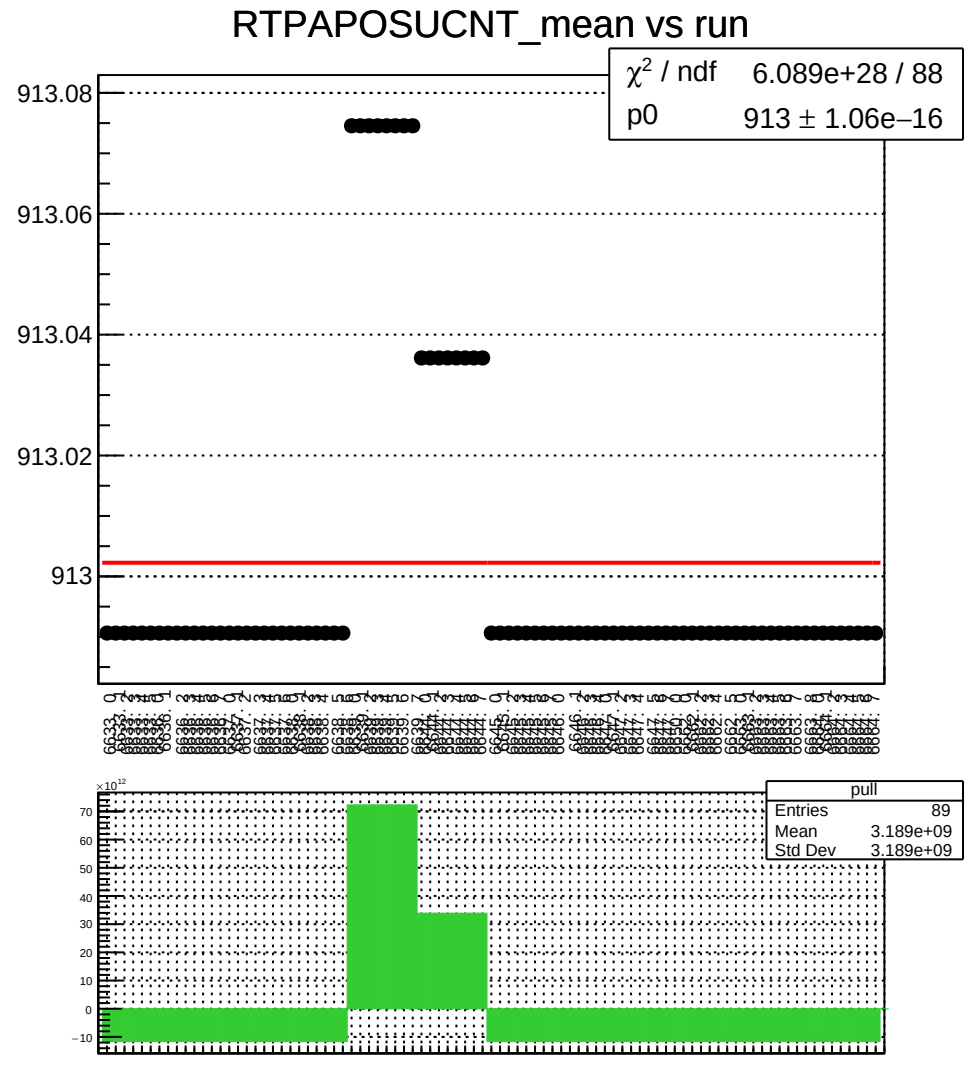

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
9.375
pull
Entries 89
Mean 44.5
Std Dev 25.69

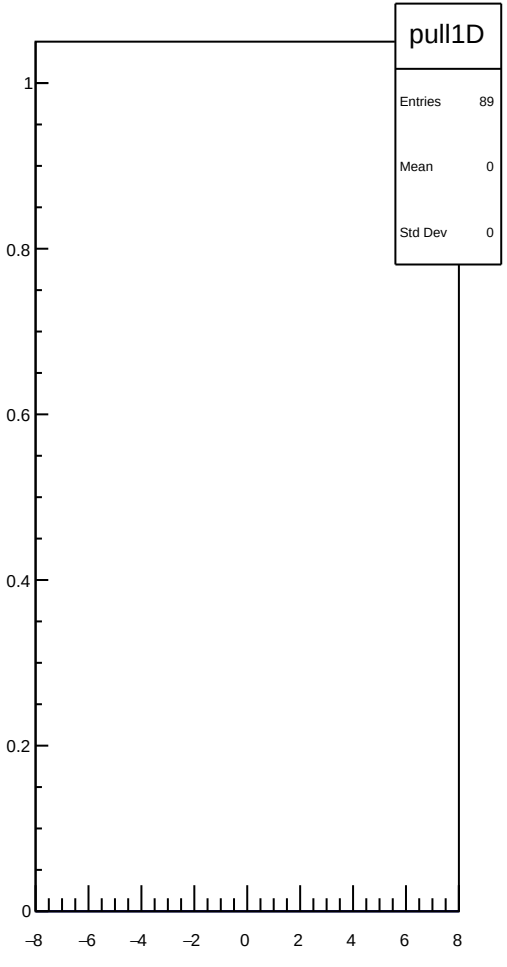

pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

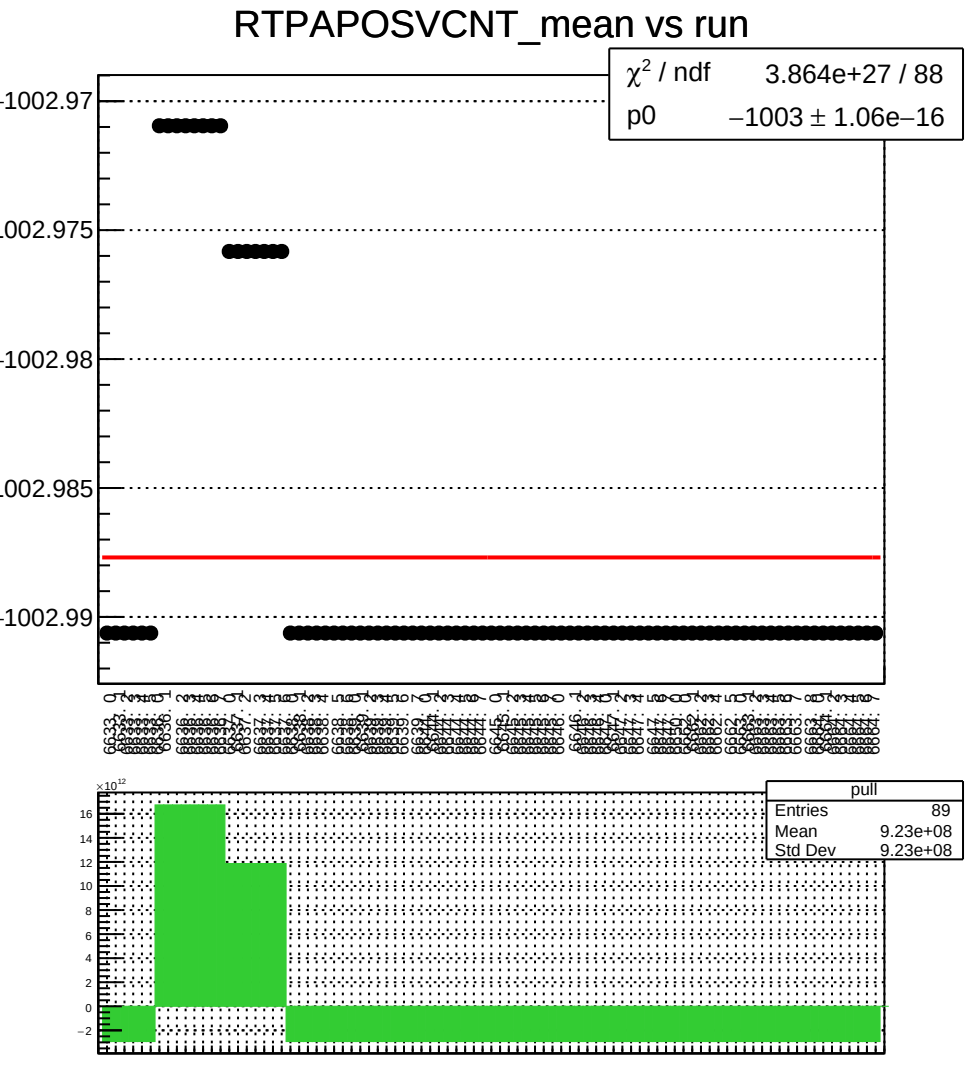

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
pull
Entries 89
Mean 44.5
Std Dev 25.69
pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

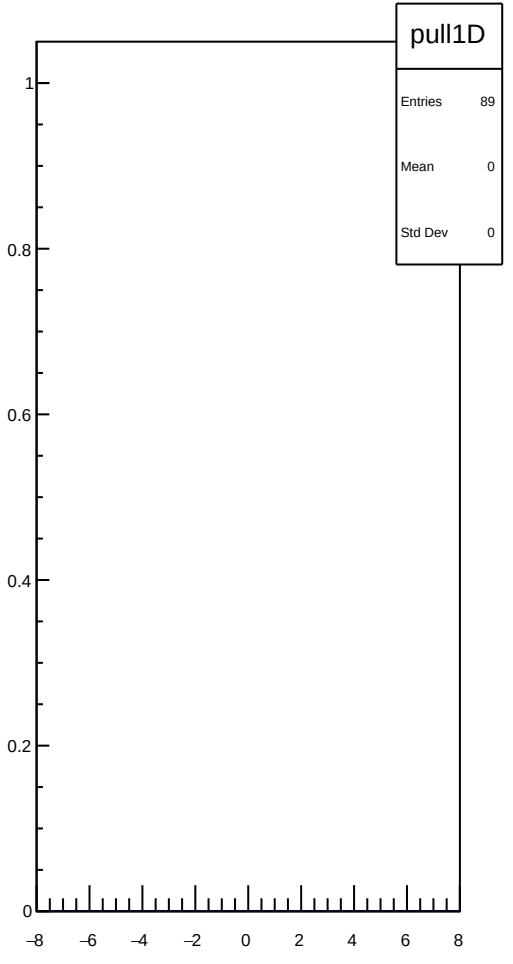

IGL1I00DI24_24M_mean vs run
χ² / ndf 1123 / 88
p0 16.01± 1.06e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 89
Mean 44.5
Std Dev 25.69
3.5
3
2.5
2
1.5
1
0.5
0
pull1D
Entries 89
Mean 3.553
Std Dev1.333e−07
90
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 4.044e+04 / 88
p0 17.01± 1.06e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 89
Mean 44.5
Std Dev 25.69
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 89
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 6.089e+28 / 88
p0 913 ± 1.06e−16
913.08
913.06
913.04
913.02
913
pull
Entries 89
Mean 3.189e+09
Std Dev 3.189e+09
×10¹²
70
60
50
40
30
20
10
0
−10


pull1D
Entries 89
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 3.864e+27 / 88
p0 −1003 ± 1.06e−16
−1002.97
−1002.975
−1002.98
−1002.985
−1002.99
pull
Entries 89
Mean 9.23e+08
Std Dev 9.23e+08
×10¹²
16
14
12
10
8
6
4
2
0
−2


pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8