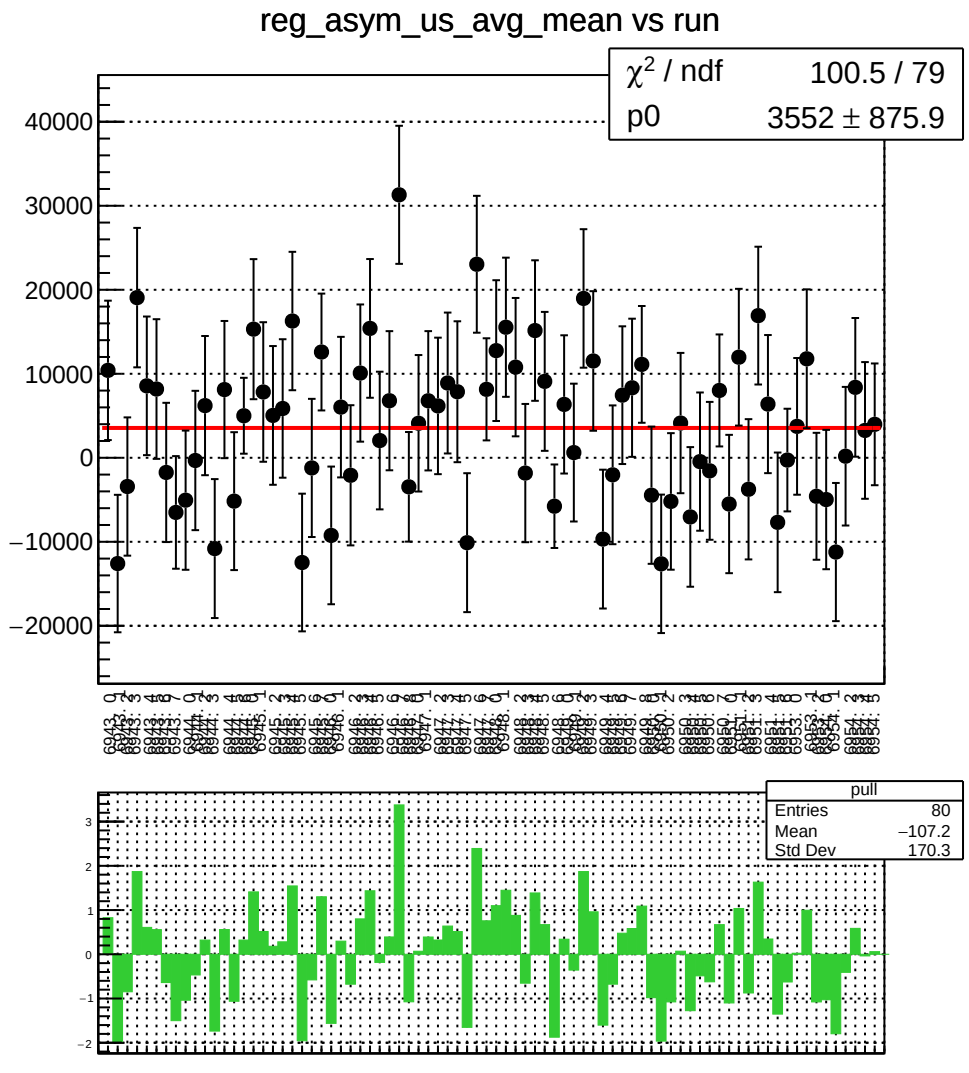
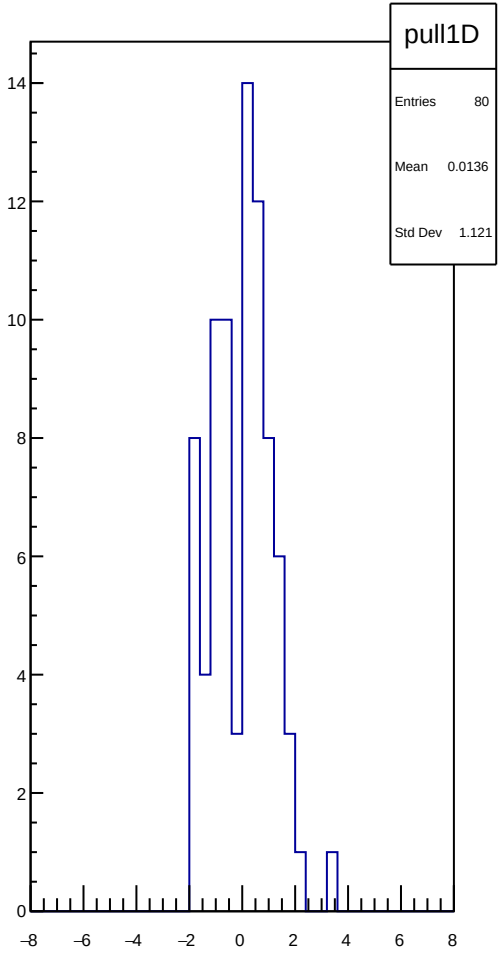
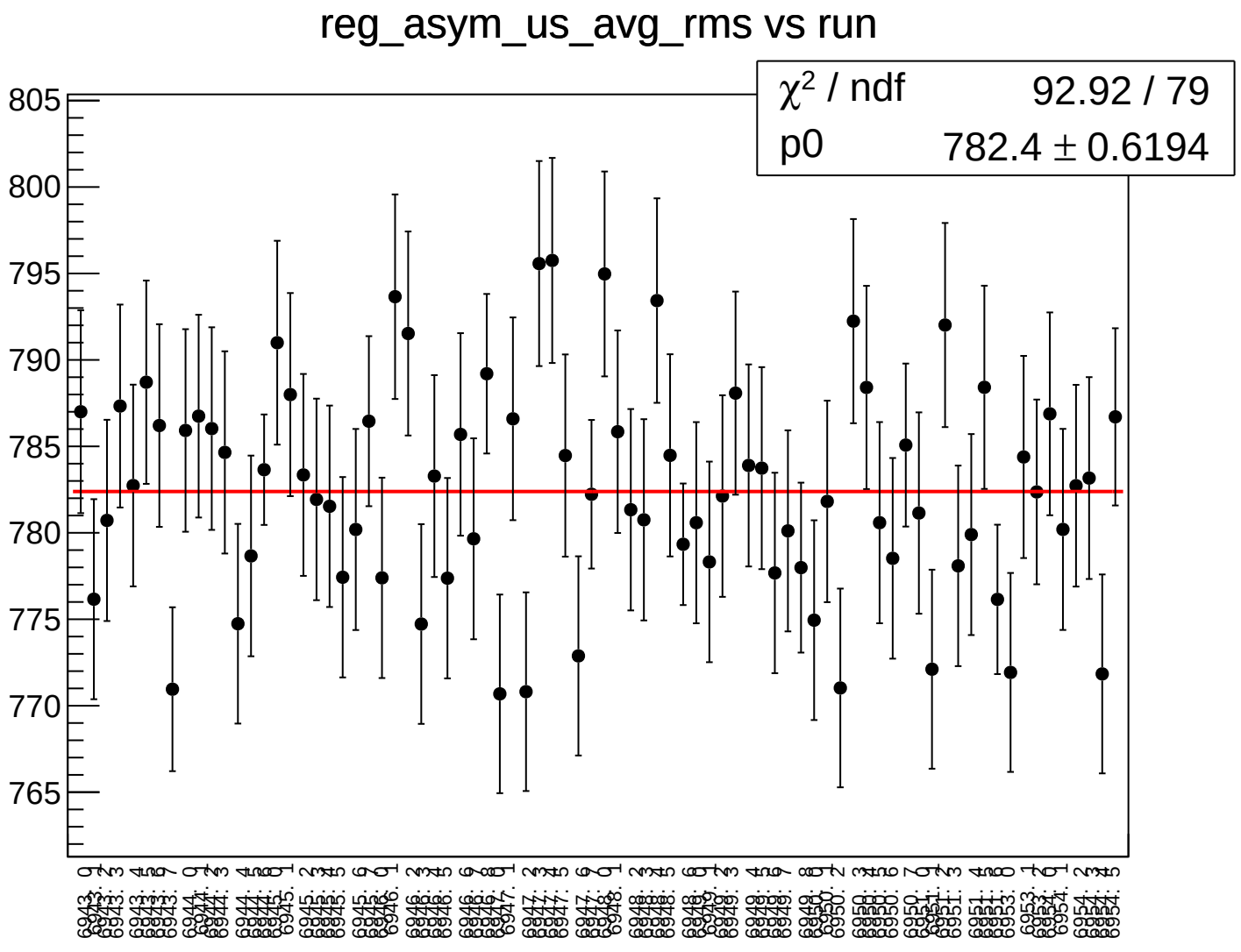
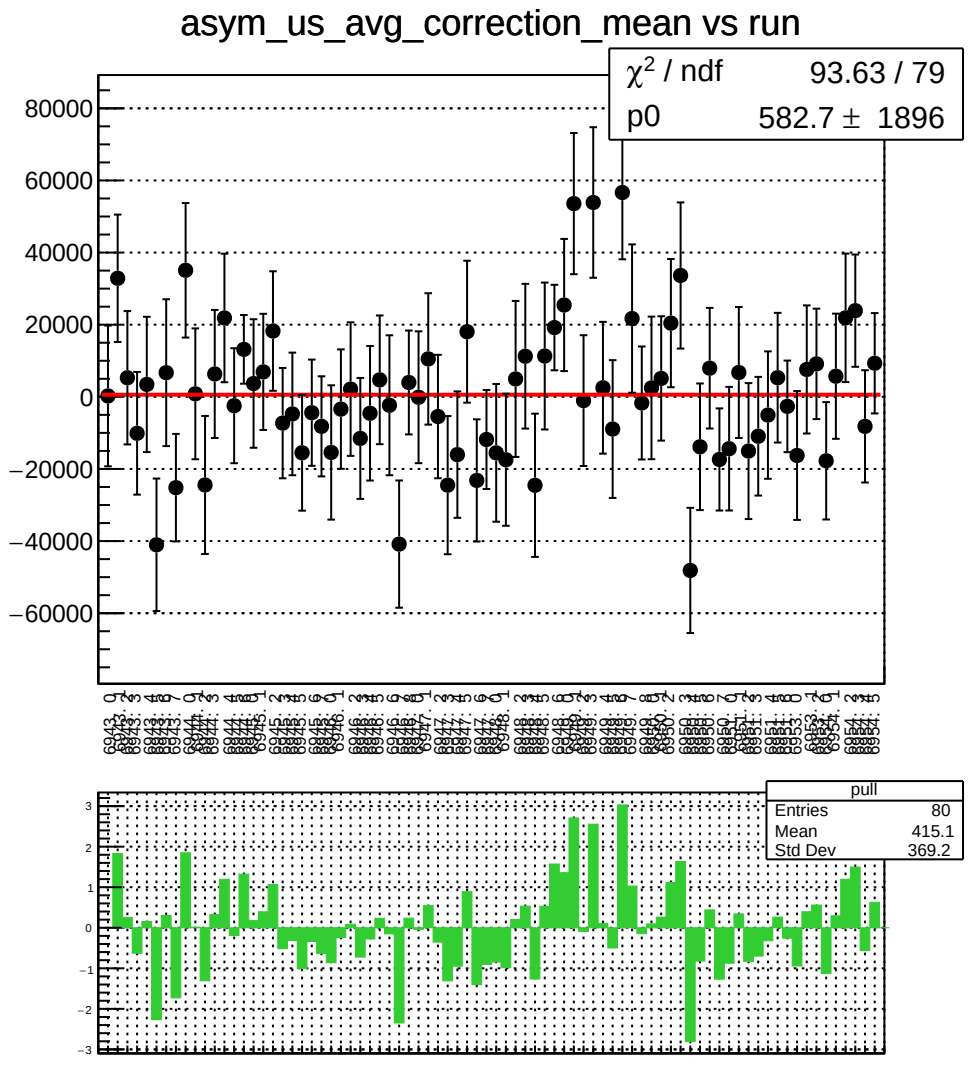
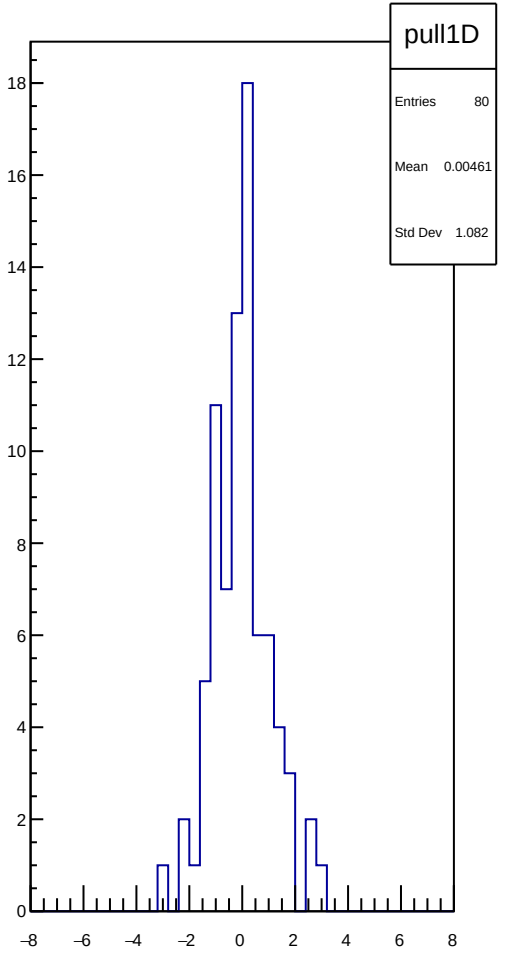
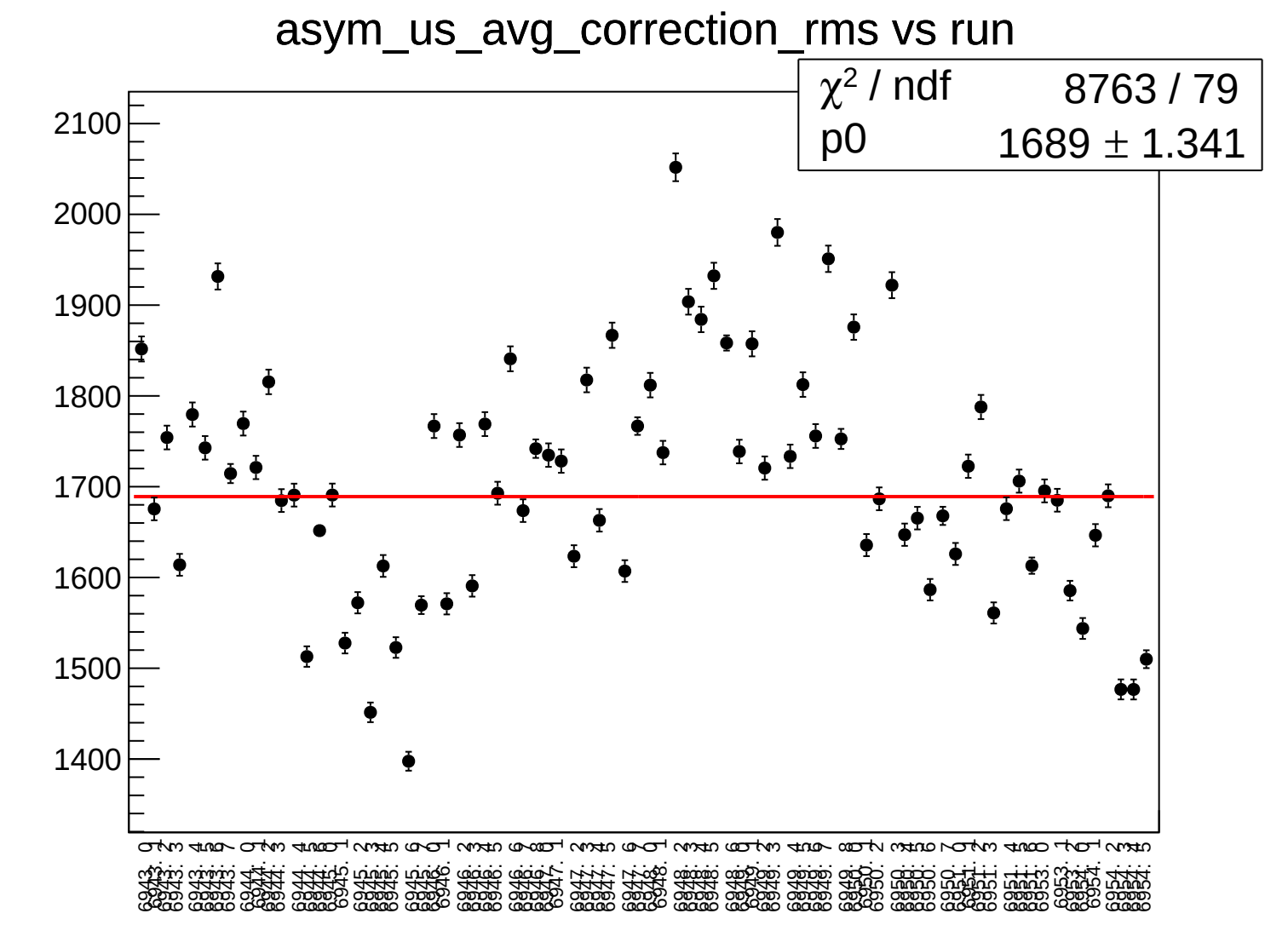

reg_asym_us_avg_mean vs run
χ² / ndf 100.5 / 79
p0 3552 ± 875.9
pull
Entries 80
Mean −107.2
Std Dev 170.3

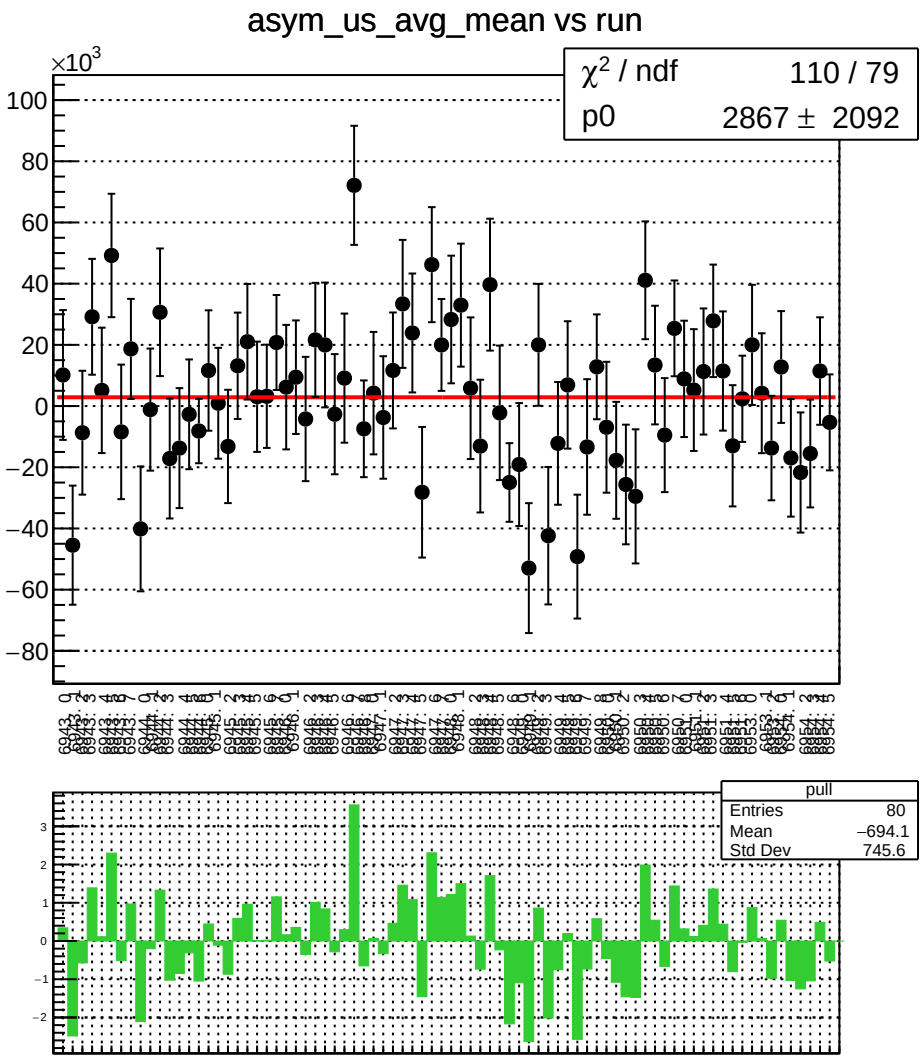

pull1D
Entries 80
Mean 0.0136
Std Dev 1.121

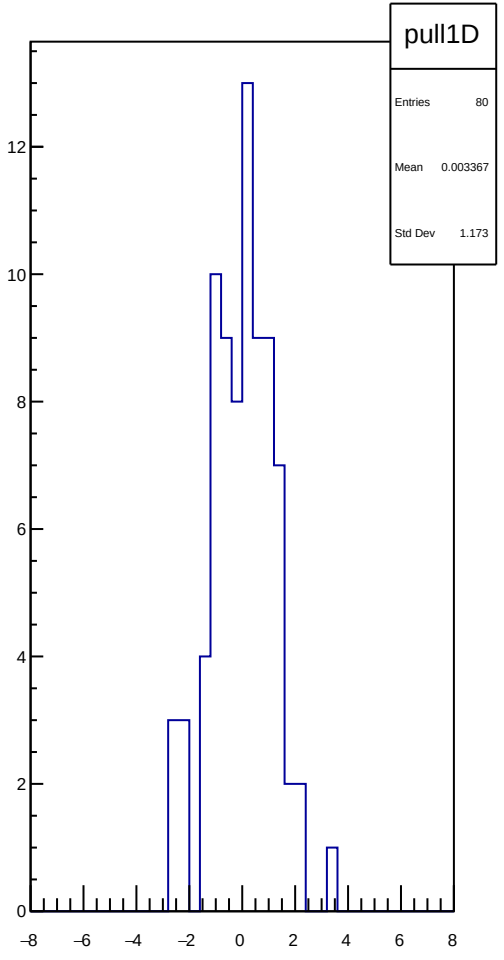

reg_asym_us_avg_rms vs run
χ² / ndf 92.92 / 79
p0 782.4 ± 0.6194
805
800
795
790
785
780
775
770
765

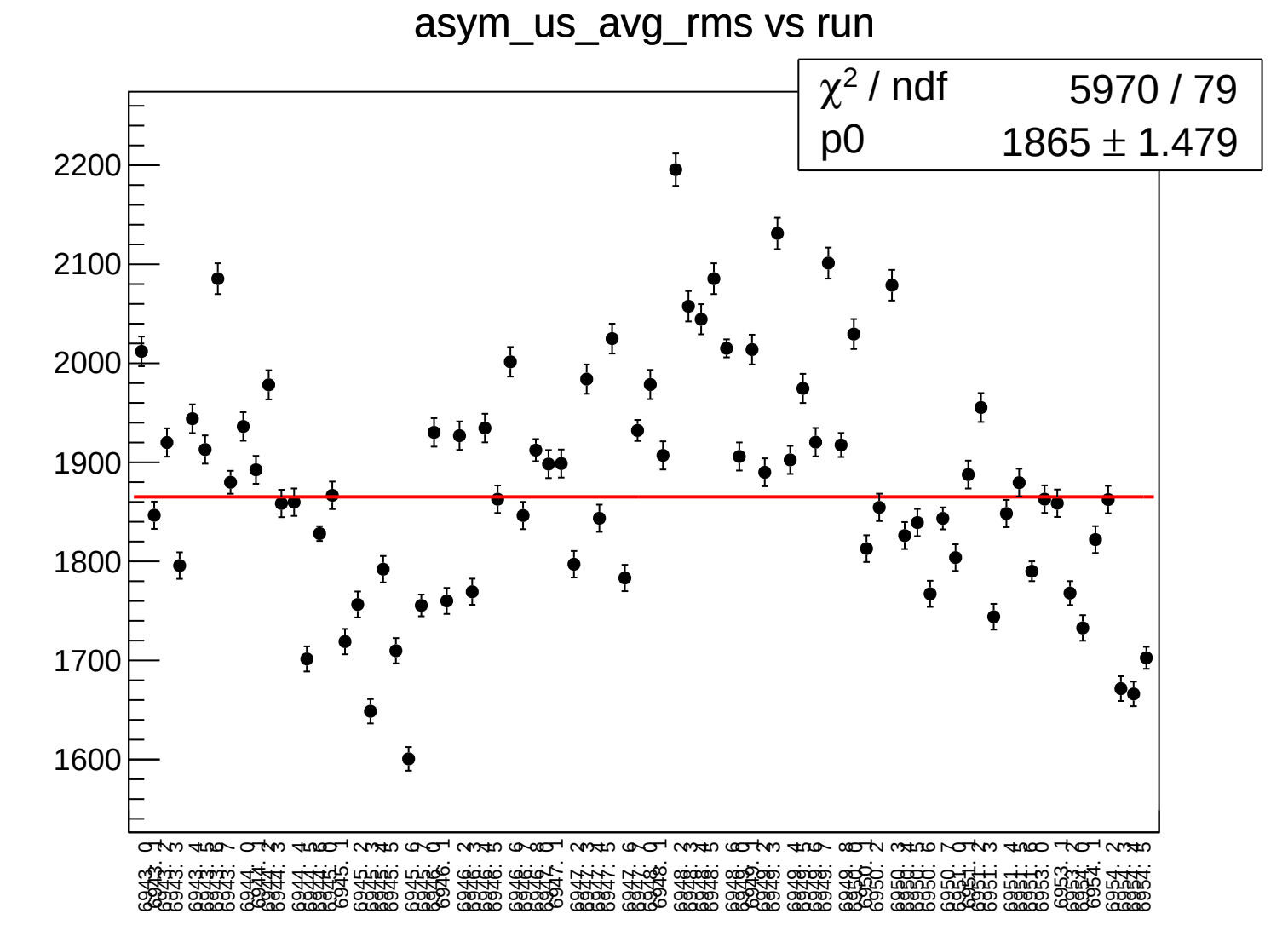

asym_us_avg_correction_mean vs run
χ² / ndf 93.63 / 79
p0 582.7 ± 1896
pull
Entries 80
Mean 415.1
Std Dev 369.2

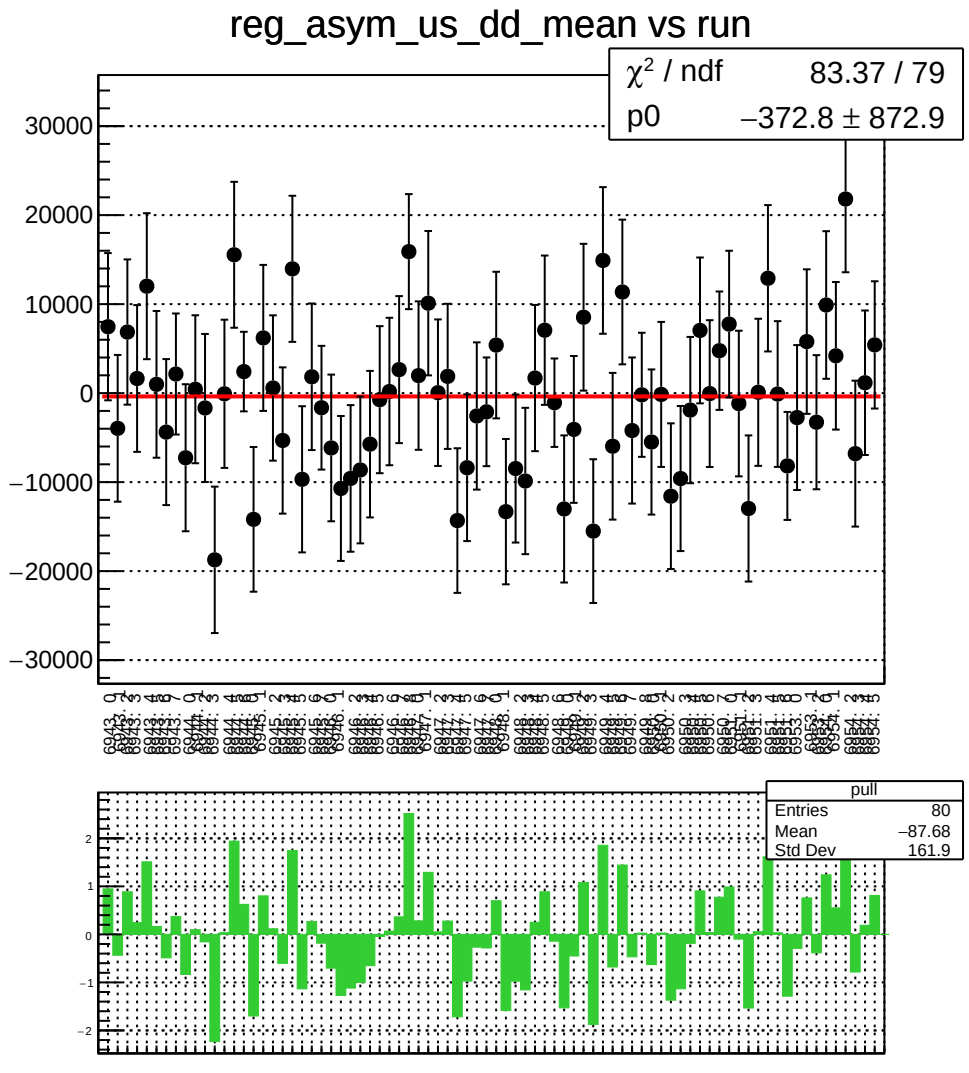

pull1D
Entries 80
Mean 0.00461
Std Dev 1.082

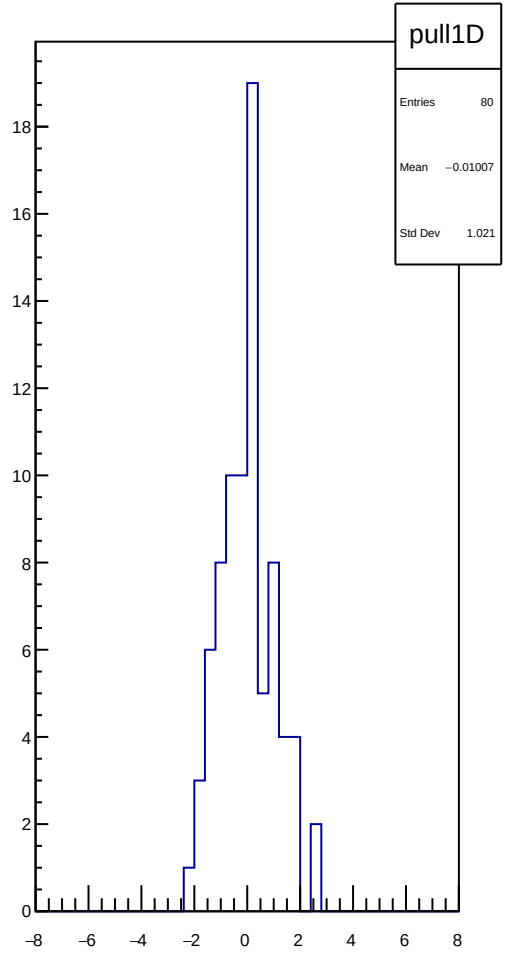

asym_us_avg_correction_rms vs run
χ² / ndf 8763 / 79
p0 1689 ± 1.341
2100
2000
1900
1800
1700
1600
1500
1400

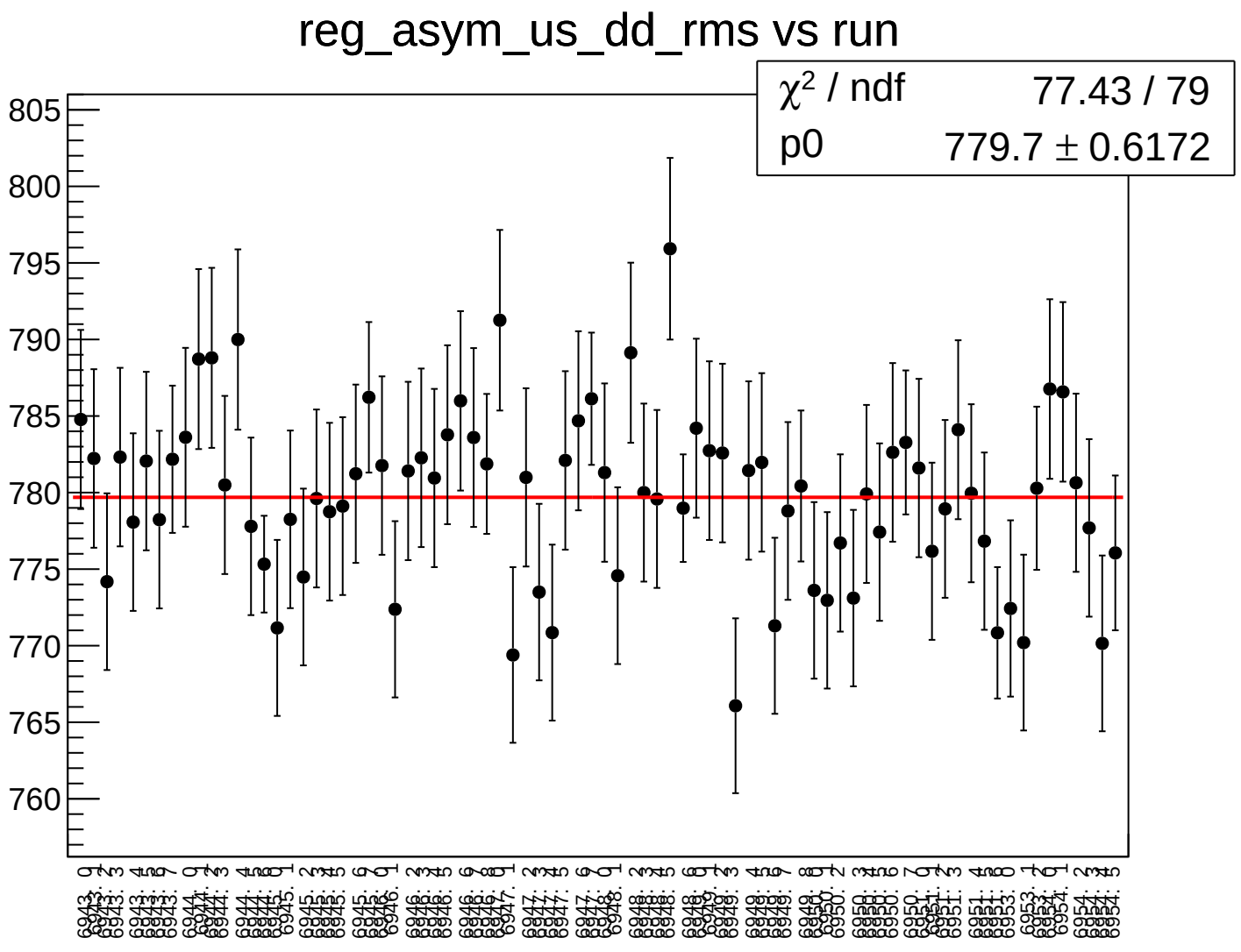

asym_us_avg_mean vs run
×10^3
χ² / ndf 110 / 79
p0 2867 ± 2092
pull
Entries 80
Mean −694.1
Std Dev 745.6

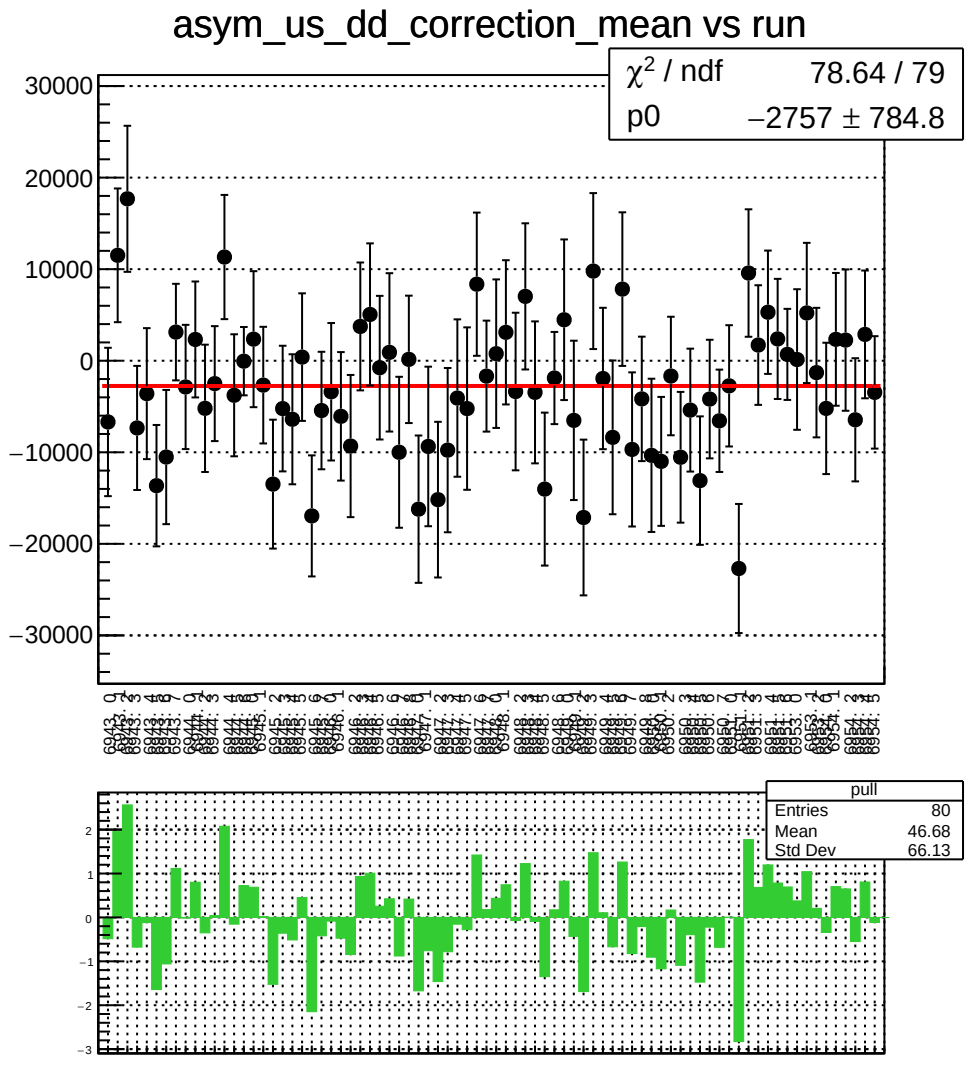

pull1D
Entries 80
Mean 0.003367
Std Dev 1.173

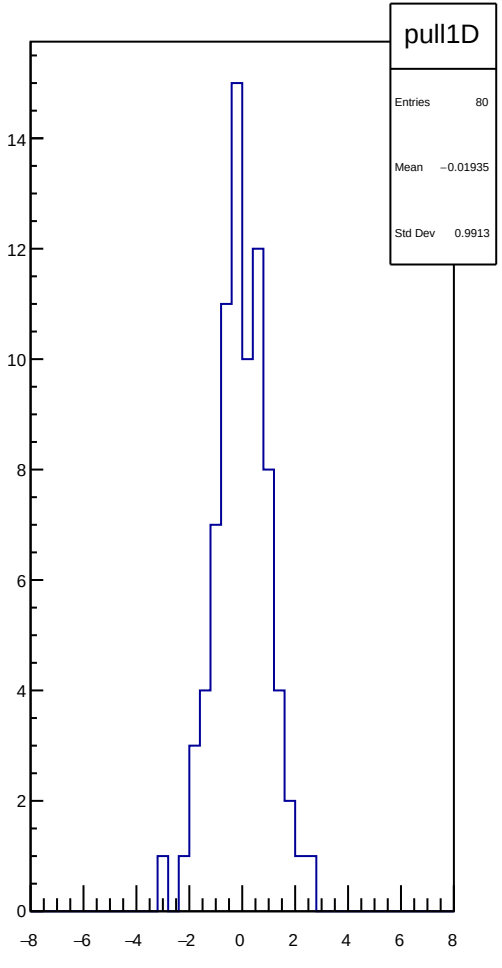

asym_us_avg_rms vs run
χ^2 / ndf 5970 / 79
p0 1865 ± 1.479
2200
2100
2000
1900
1800
1700
1600

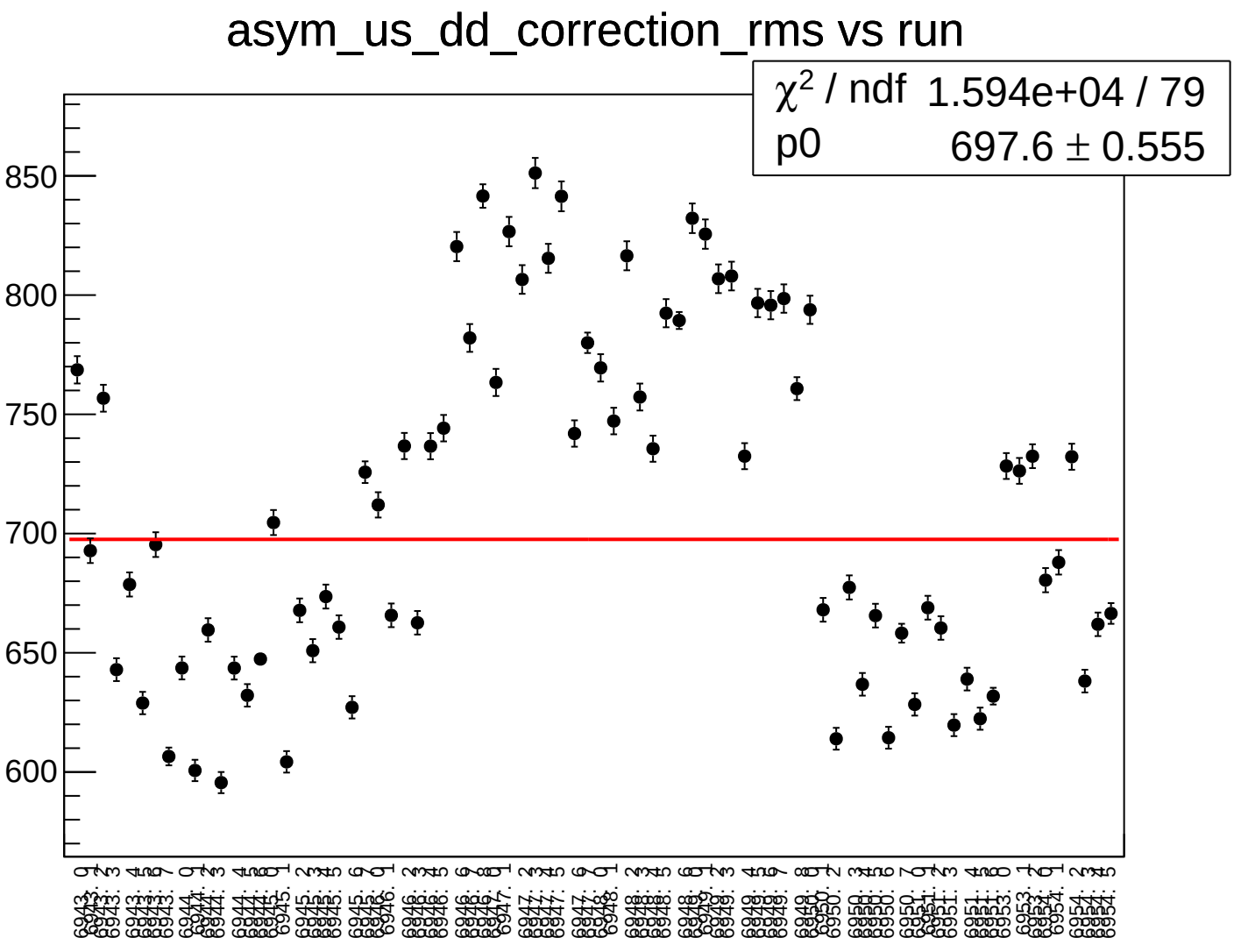

reg_asym_us_dd_mean vs run
χ² / ndf 83.37 / 79
p0 −372.8 ± 872.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean −87.68
Std Dev 161.9
2
1
0
−1
−2

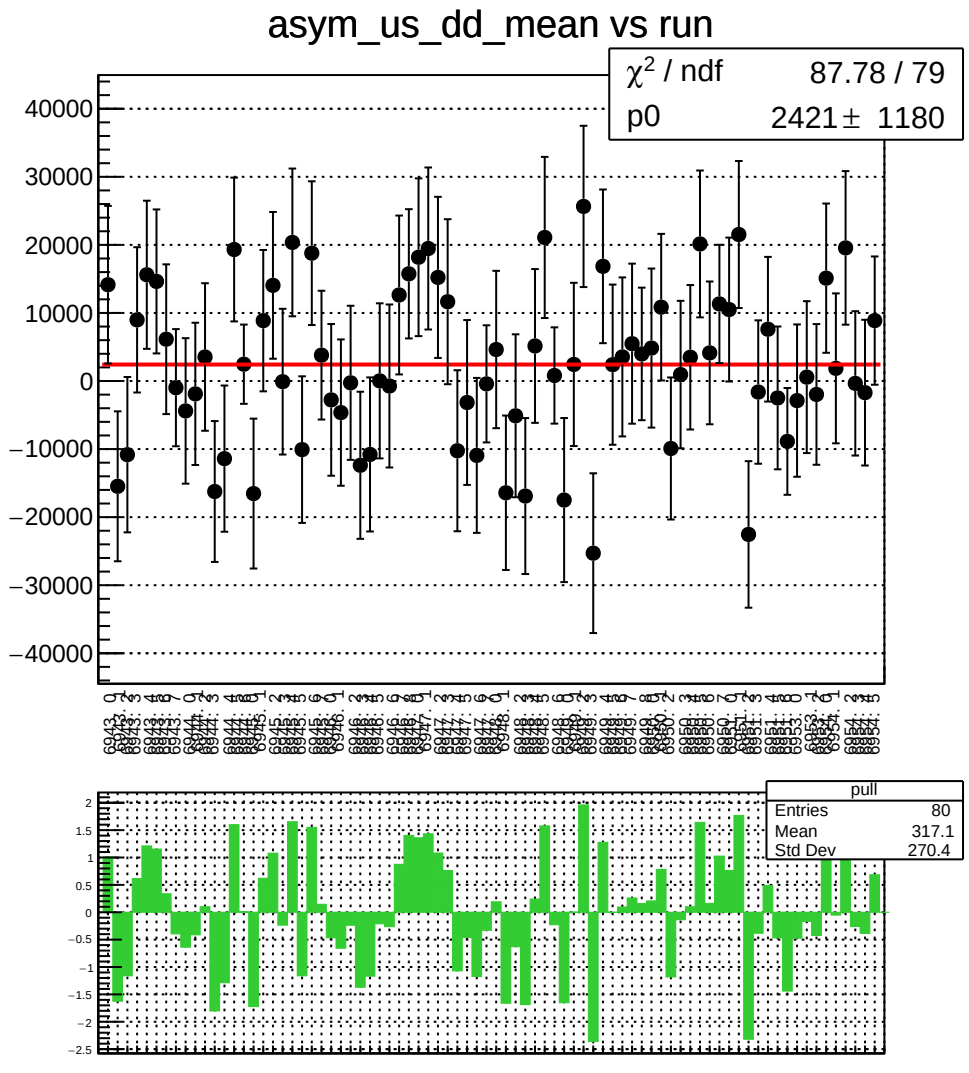

pull1D
Entries 80
Mean −0.01007
Std Dev 1.021
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

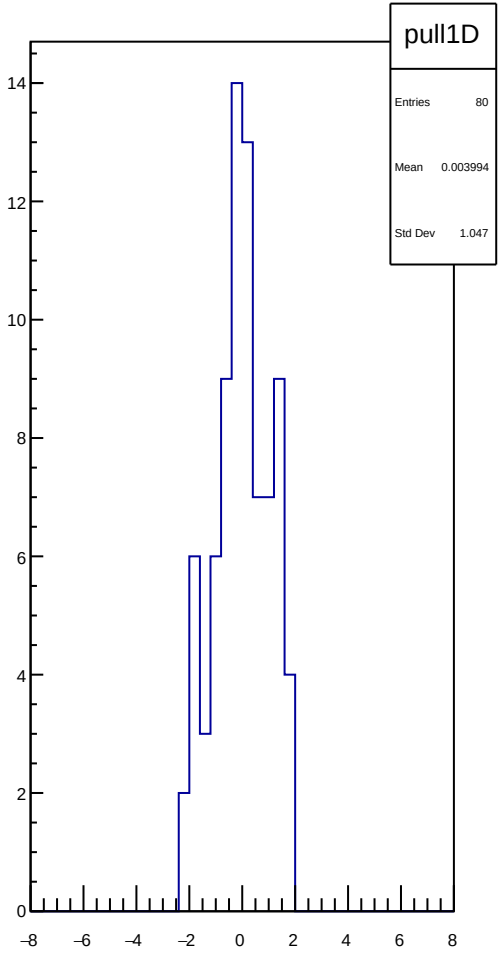

reg_asym_us_dd_rms vs run
χ² / ndf 77.43 / 79
p0 779.7 ± 0.6172
805
800
795
790
785
780
775
770
765
760

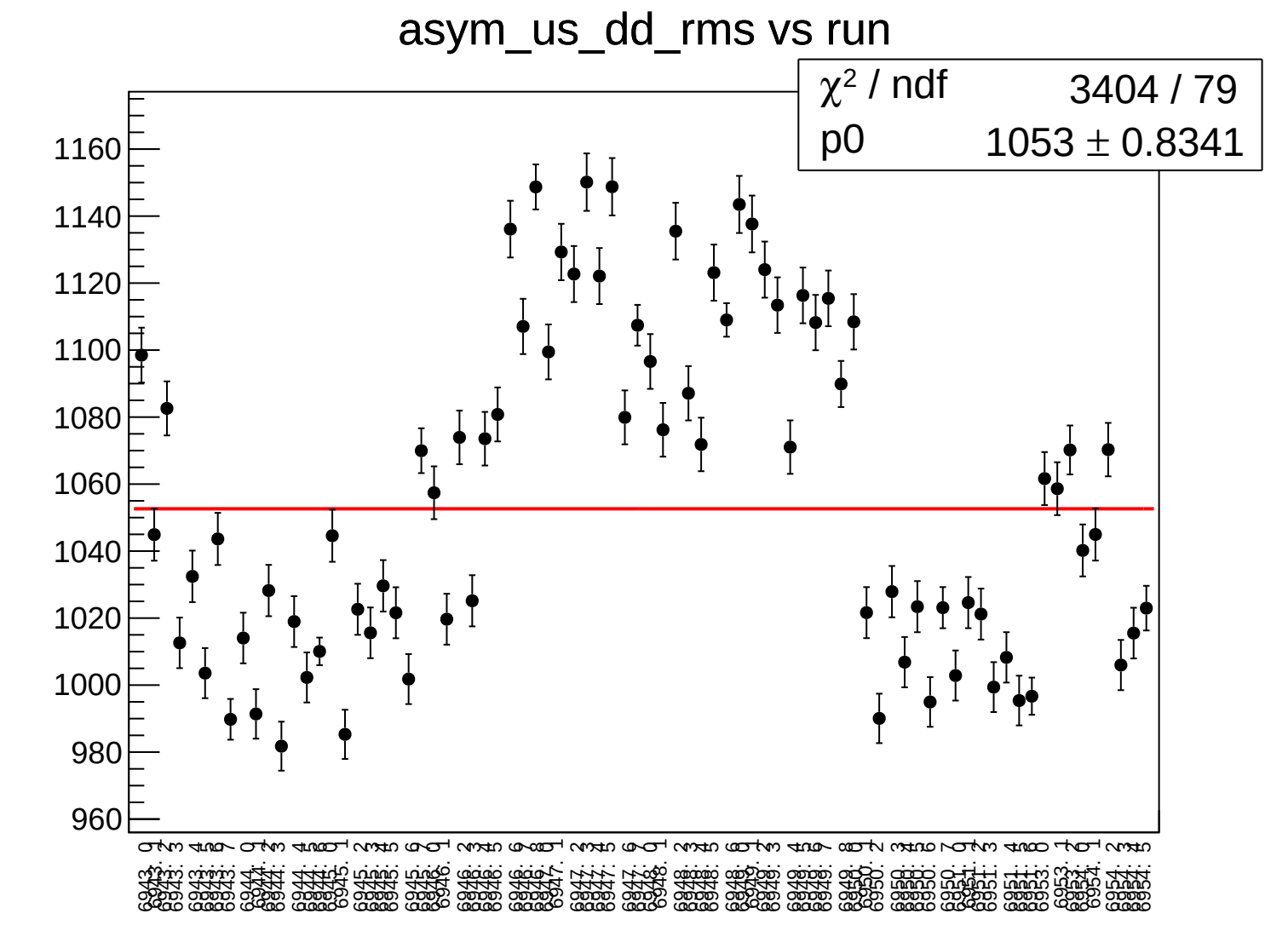

asym_us_dd_correction_mean vs run
χ² / ndf 78.64 / 79
p0 −2757 ± 784.8
pull
Entries 80
Mean 46.68
Std Dev 66.13

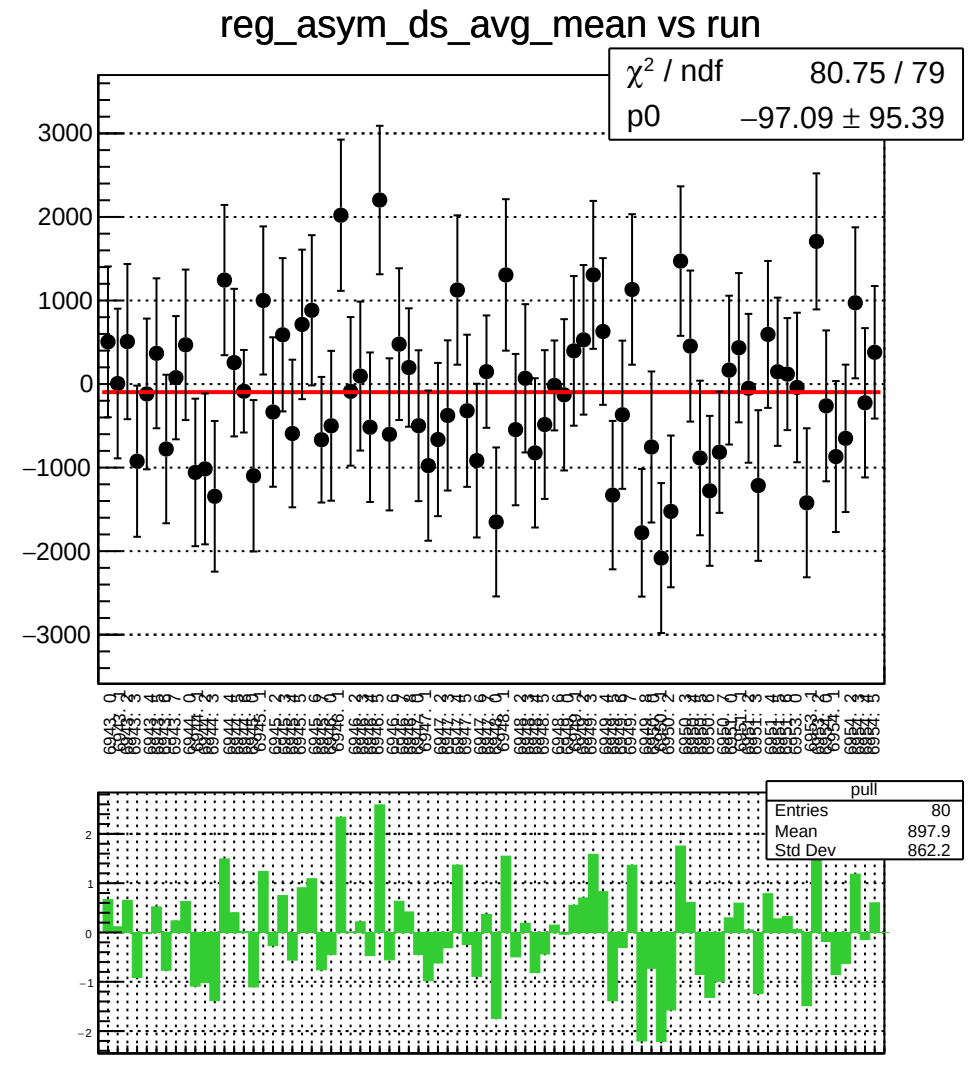

pull1D
Entries 80
Mean −0.01935
Std Dev 0.9913

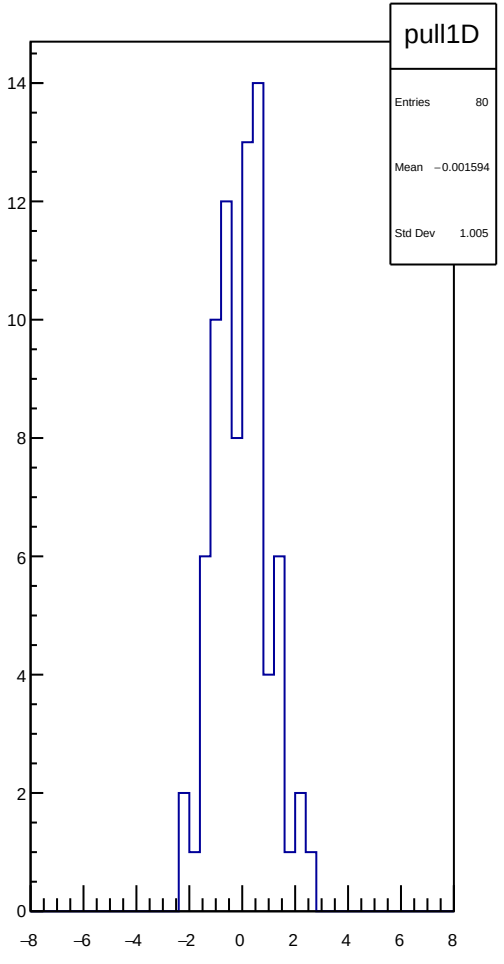

asym_us_dd_correction_rms vs run
χ² / ndf 1.594e+04 / 79
p0 697.6 ± 0.555
850
800
750
700
650
600

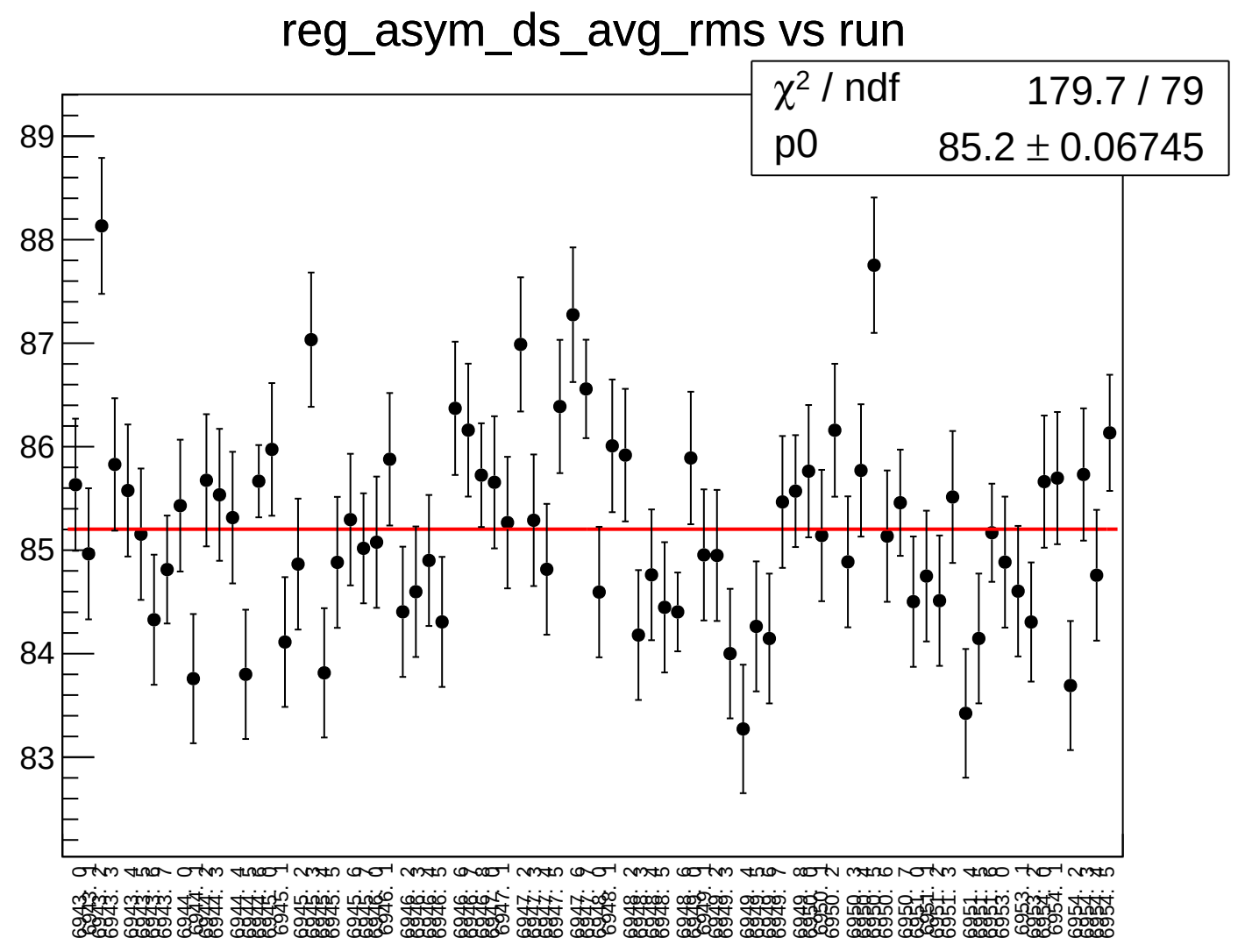

asym_us_dd_mean vs run
χ² / ndf 87.78 / 79
p0 2421 ± 1180
pull
Entries 80
Mean 317.1
Std Dev 270.4

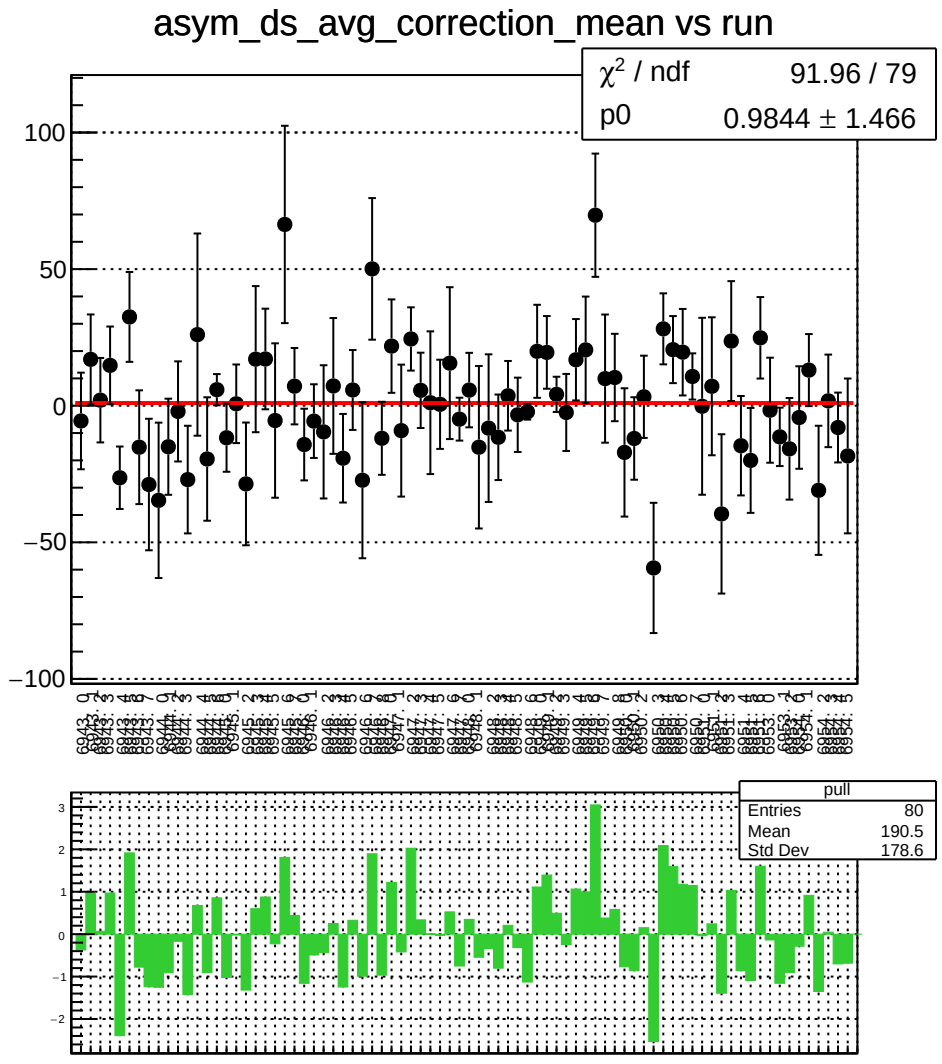

pull1D
Entries 80
Mean 0.003994
Std Dev 1.047

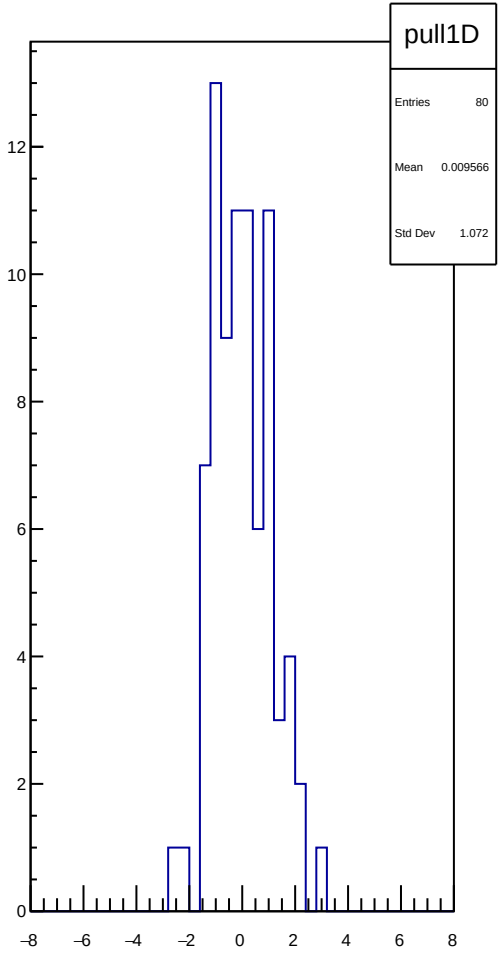

asym_us_dd_rms vs run
χ² / ndf 3404 / 79
p0 1053 ± 0.8341
1160
1140
1120
1100
1080
1060
1040
1020
1000
980
960

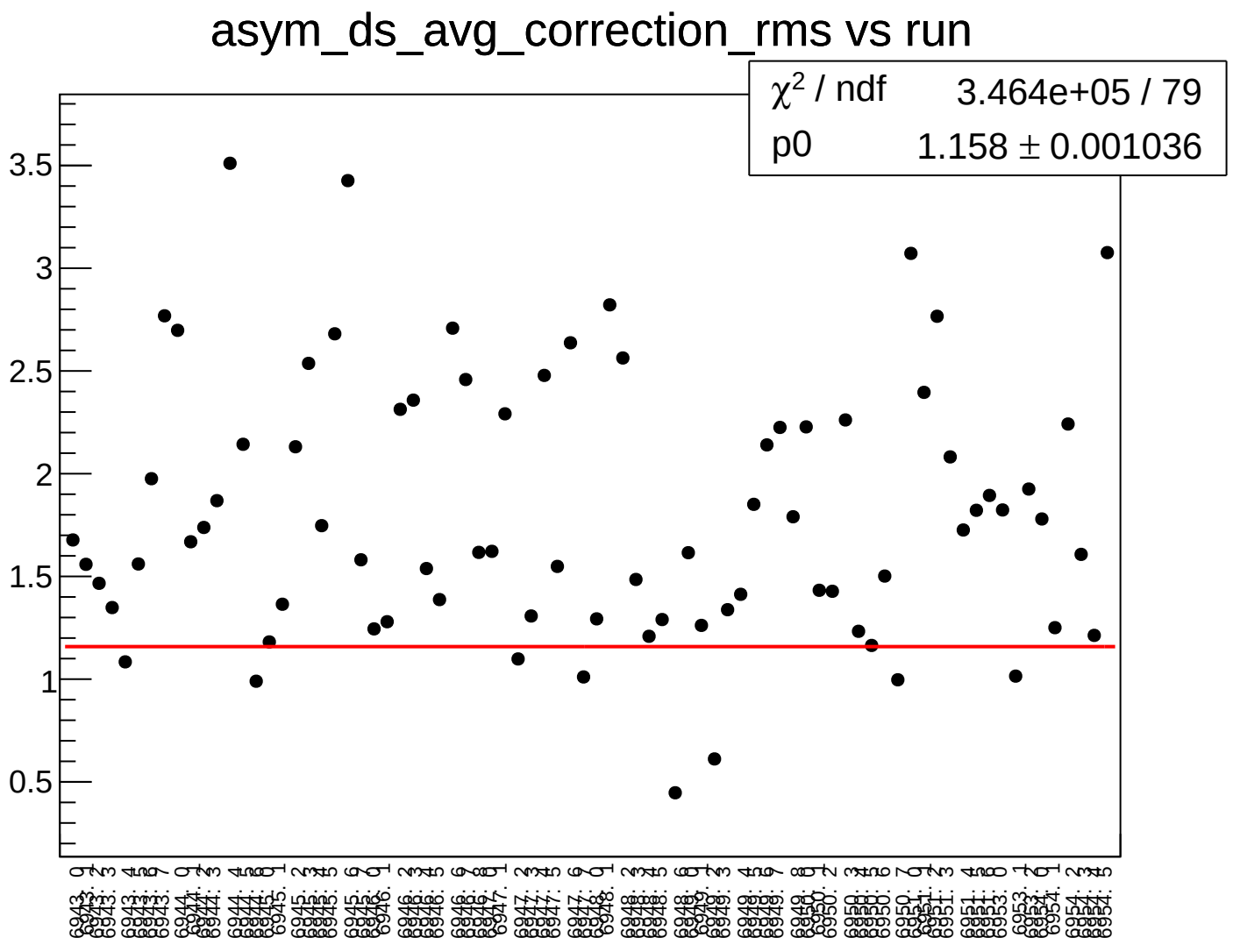

reg_asym_ds_avg_mean vs run
χ² / ndf 80.75 / 79
p0 −97.09 ± 95.39
pull
Entries 80
Mean 897.9
Std Dev 862.2

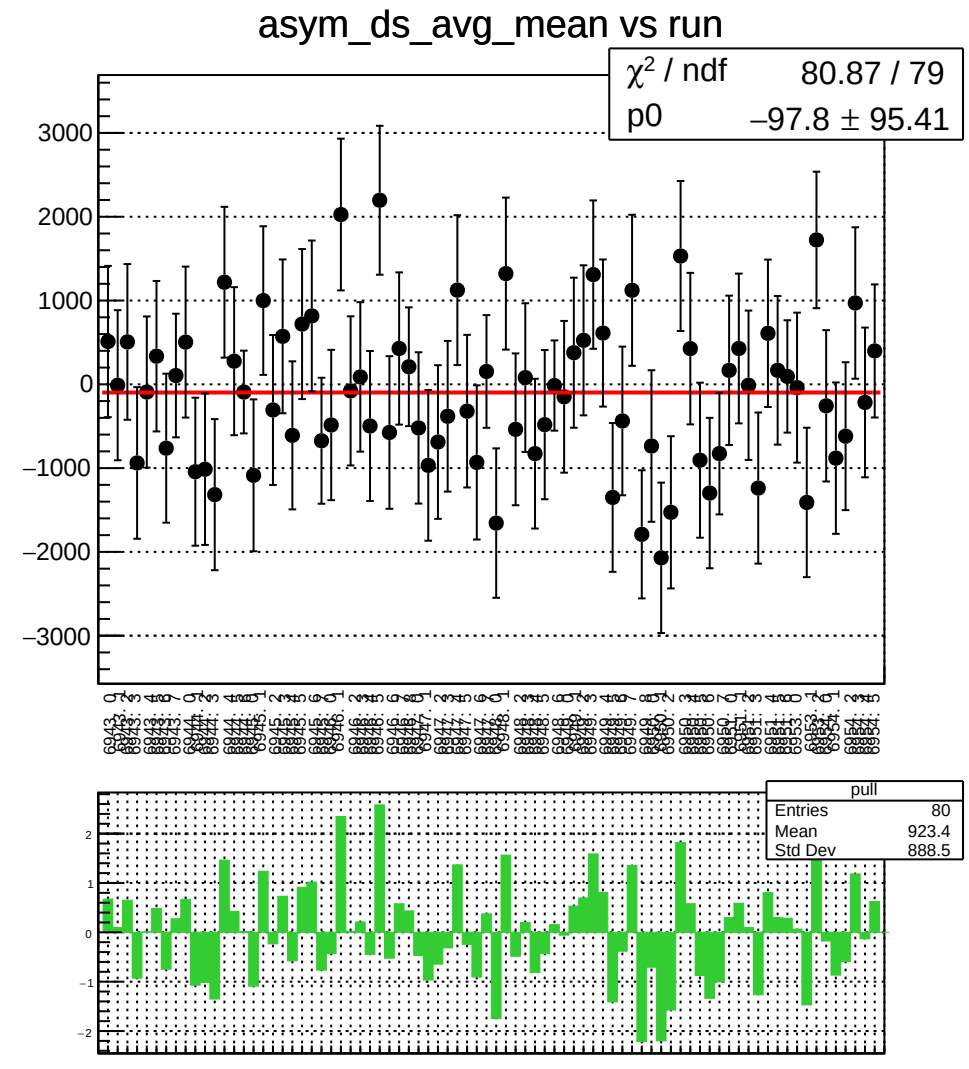

pull1D
Entries 80
Mean −0.001594
Std Dev 1.005

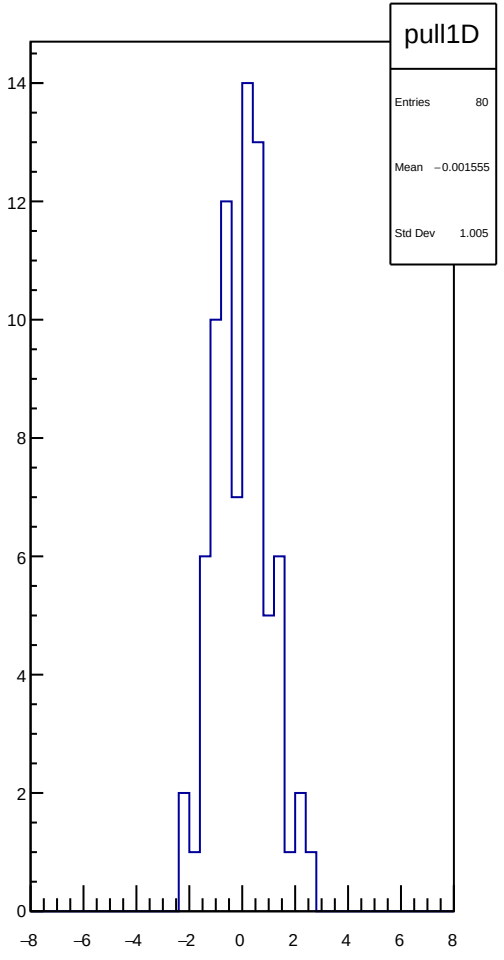

reg_asym_ds_avg_rms vs run
χ² / ndf 179.7 / 79
p0 85.2 ± 0.06745
89
88
87
86
85
84
83

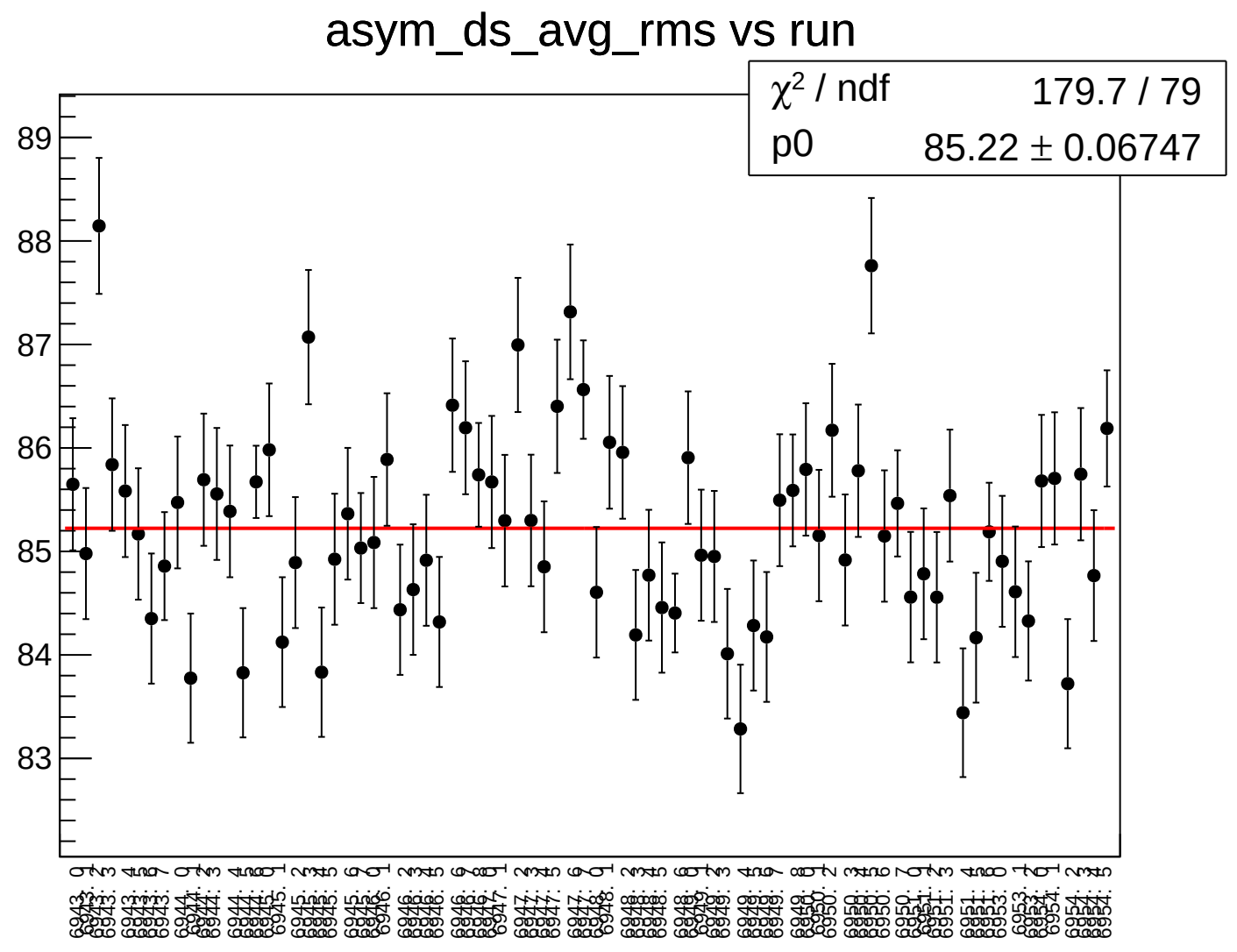

asym_ds_avg_correction_mean vs run
χ^2 / ndf 91.96 / 79
p0 0.9844 ± 1.466
100
50
0
−50
−100
pull
Entries 80
Mean 190.5
Std Dev 178.6
3
2
1
0
−1
−2

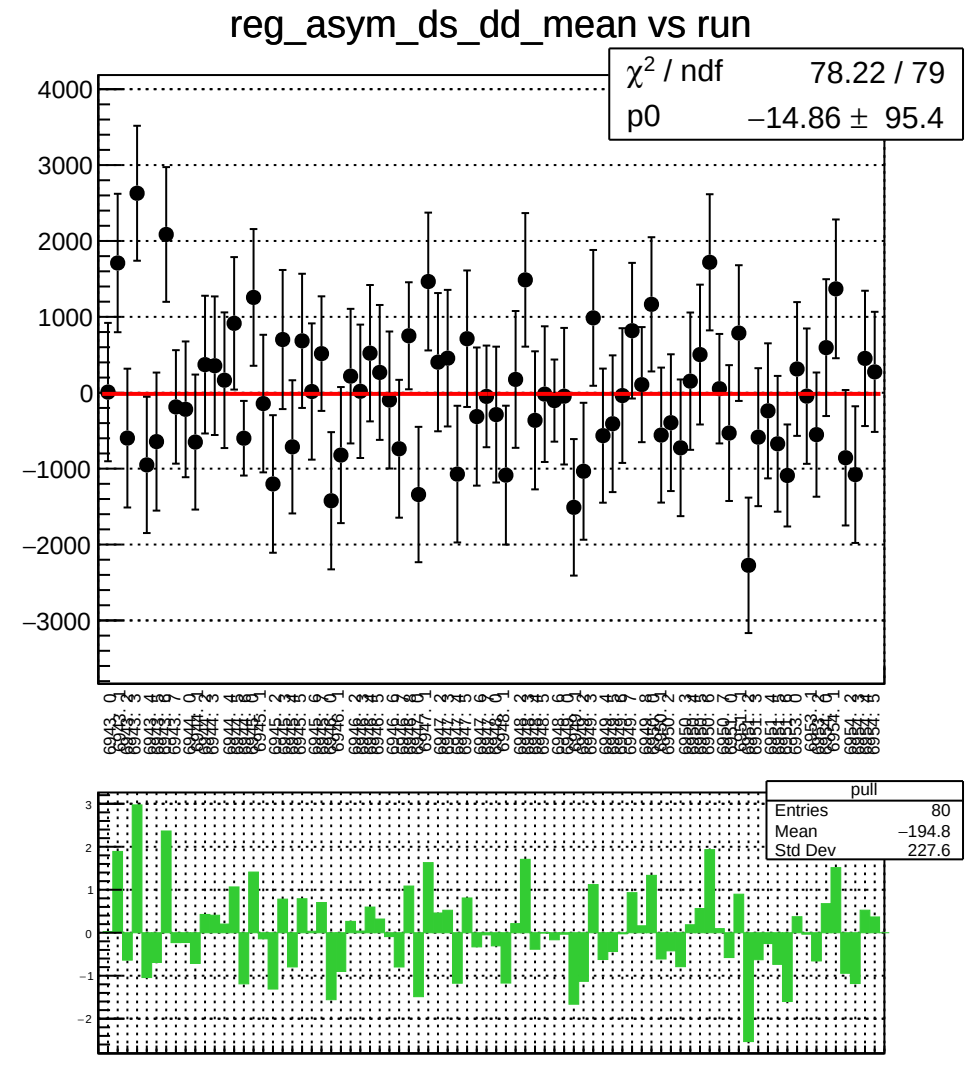

pull1D
Entries 80
Mean 0.009566
Std Dev 1.072
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

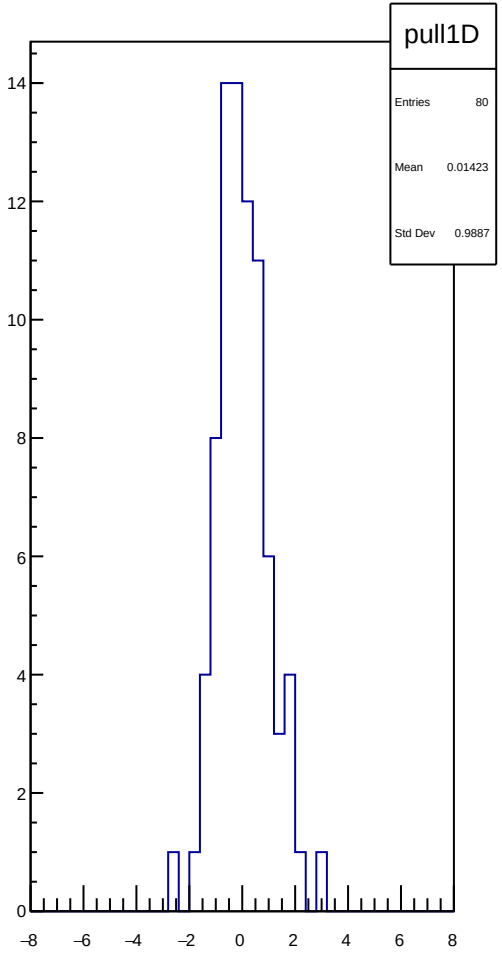

asym_ds_avg_correction_rms vs run
χ² / ndf 3.464e+05 / 79
p0 1.158 ± 0.001036
3.5
3
2.5
2
1.5
1
0.5

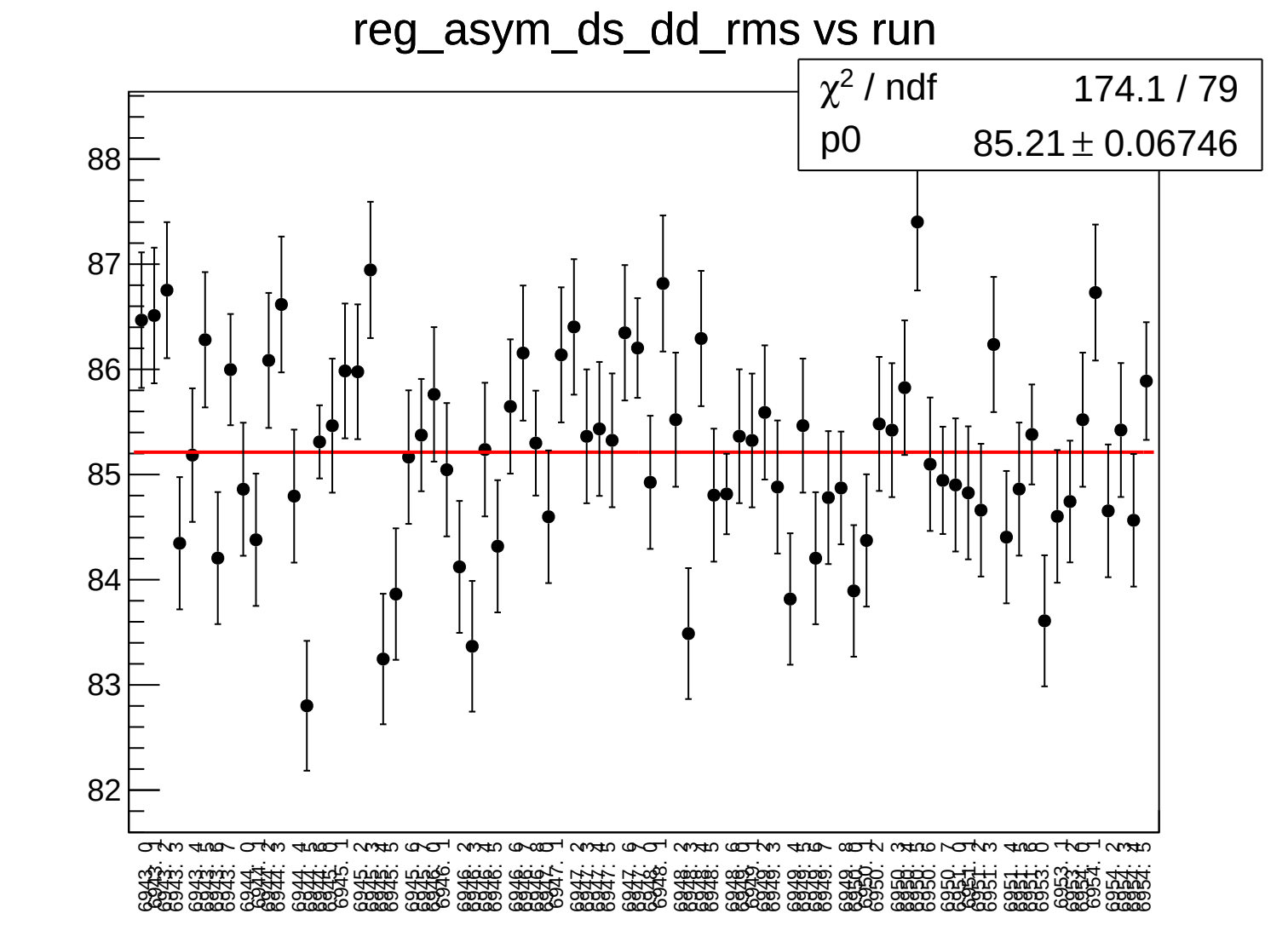

asym_ds_avg_mean vs run
χ² / ndf 80.87 / 79
p0 −97.8 ± 95.41
pull
Entries 80
Mean 923.4
Std Dev 888.5

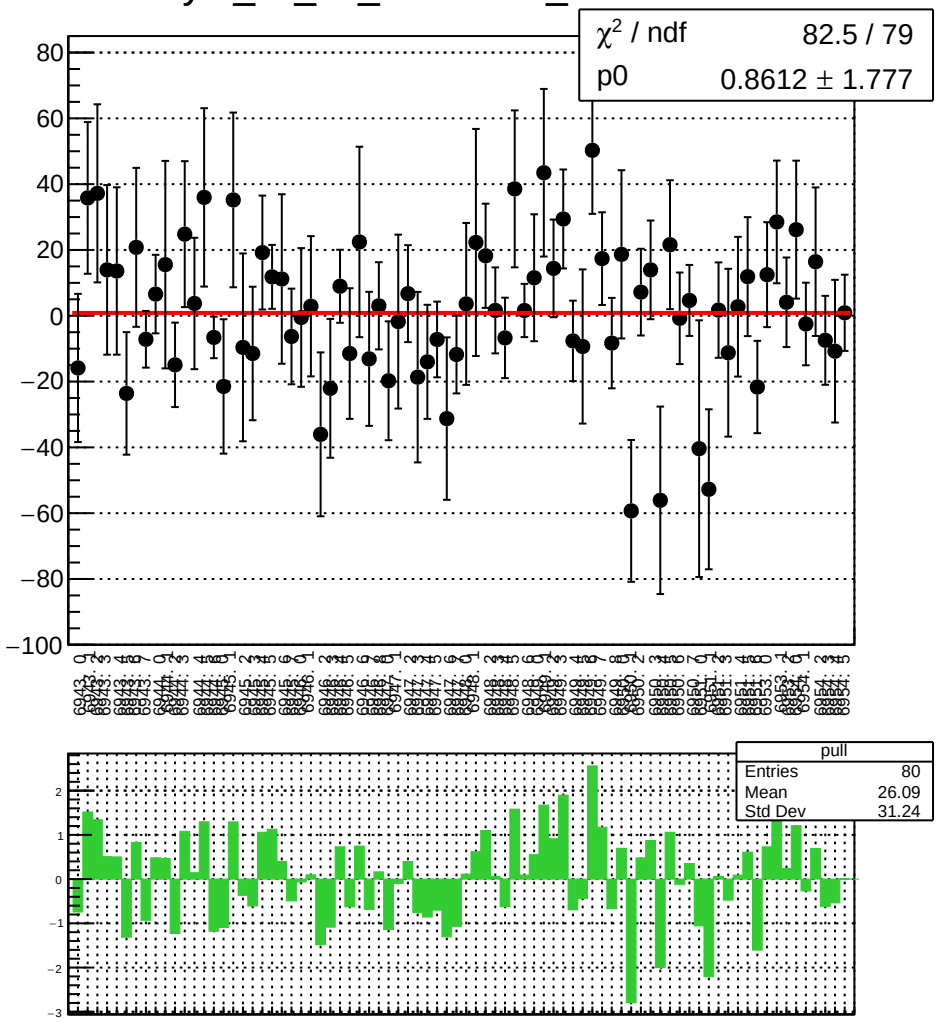

pull1D
Entries 80
Mean −0.001555
Std Dev 1.005

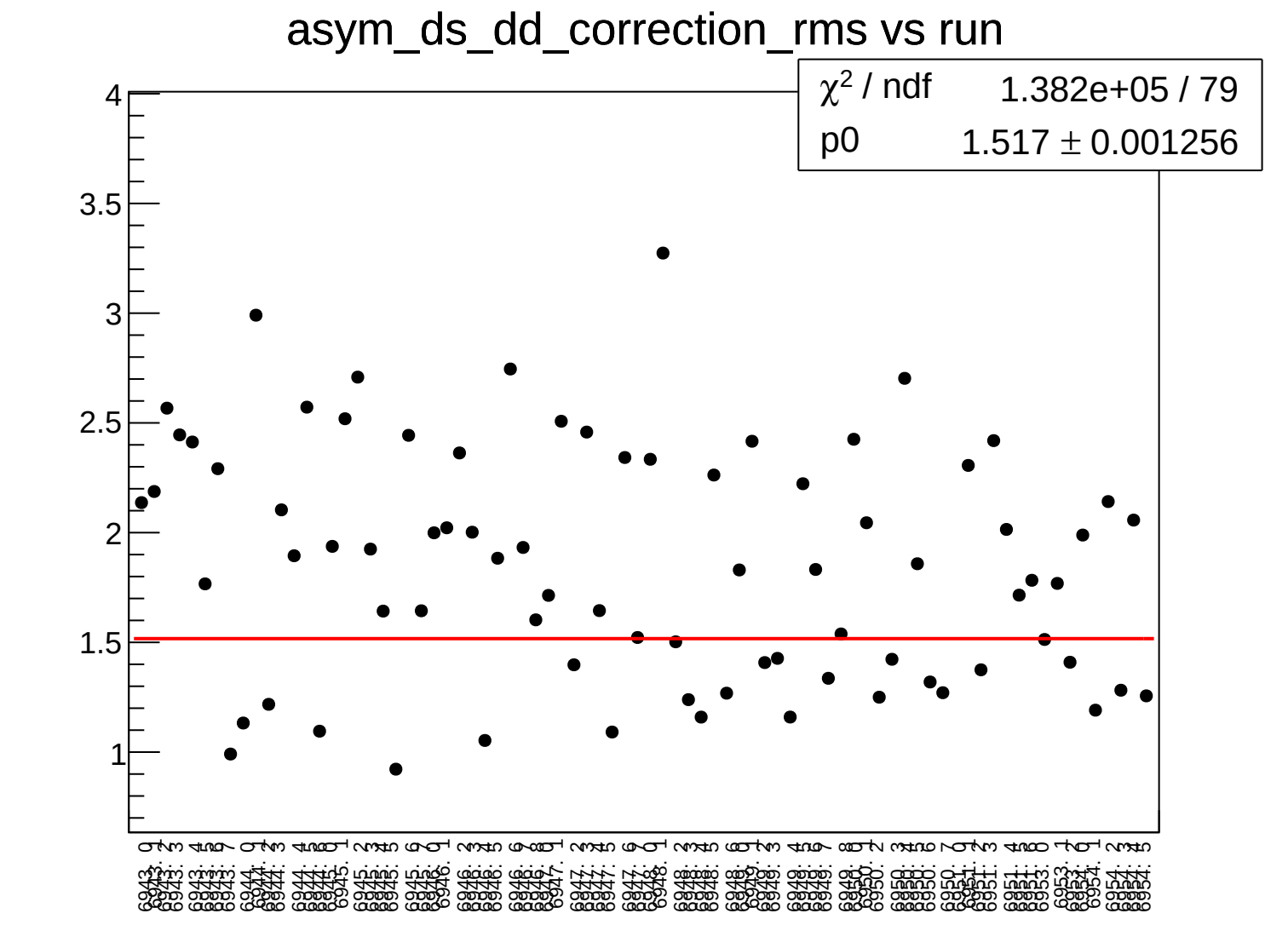

asym_ds_avg_rms vs run
χ^2 / ndf 179.7 / 79
p0 85.22 ± 0.06747
89
88
87
86
85
84
83

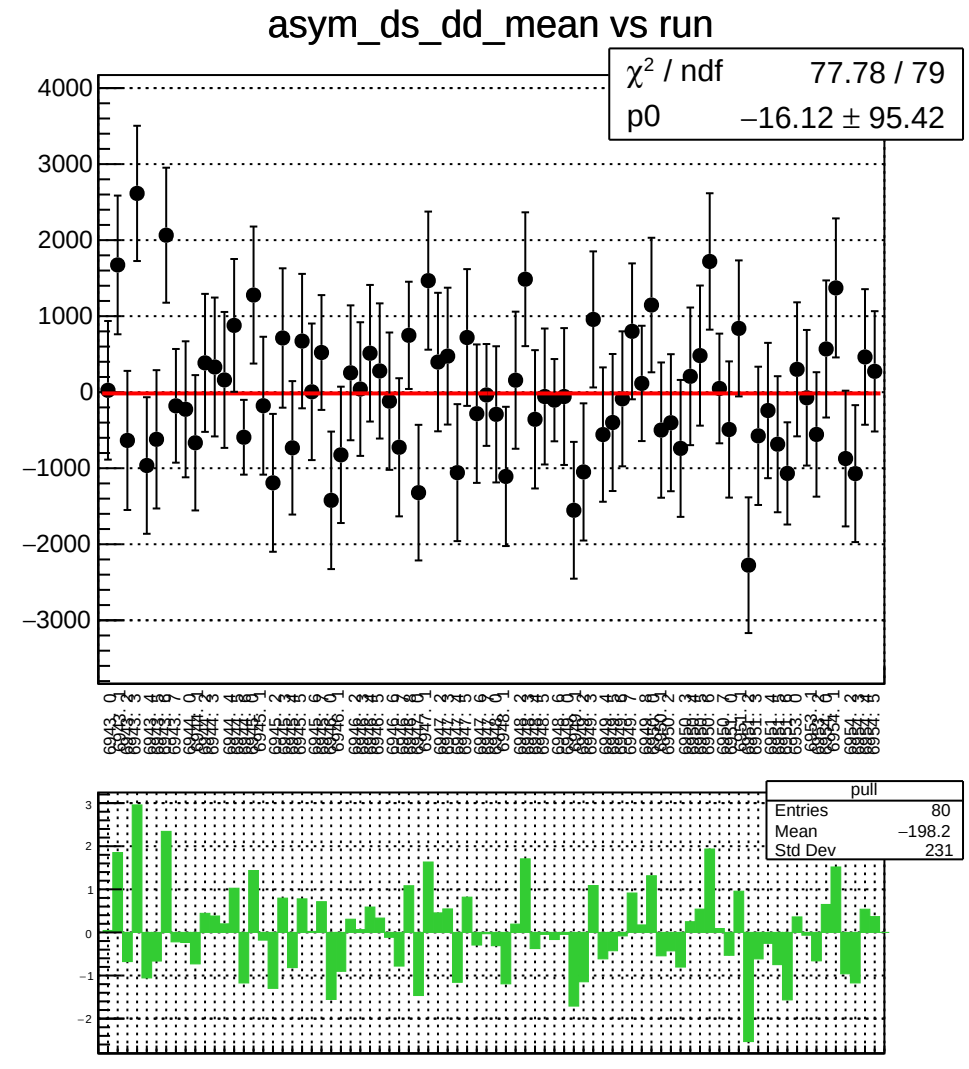

reg_asym_ds_dd_mean vs run
χ² / ndf 78.22 / 79
p0 −14.86 ± 95.4
pull
Entries 80
Mean −194.8
Std Dev 227.6

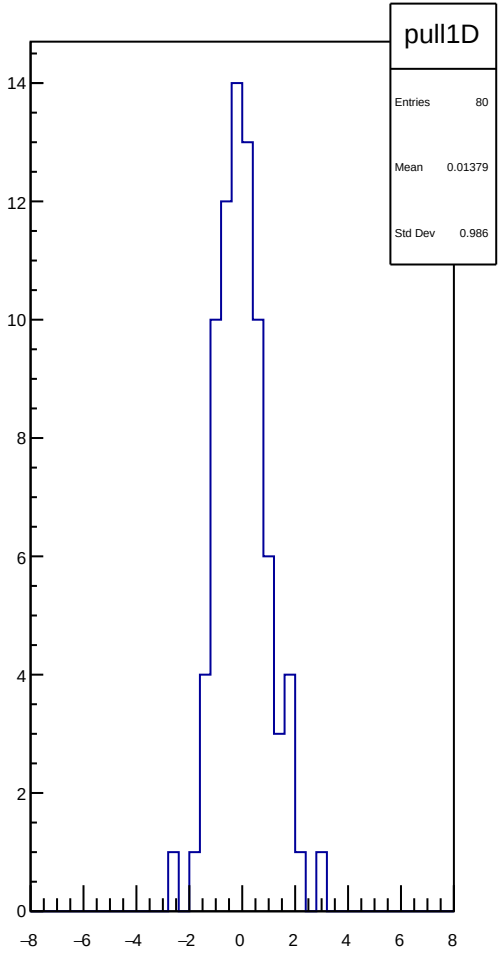

pull1D
Entries 80
Mean 0.01423
Std Dev 0.9887

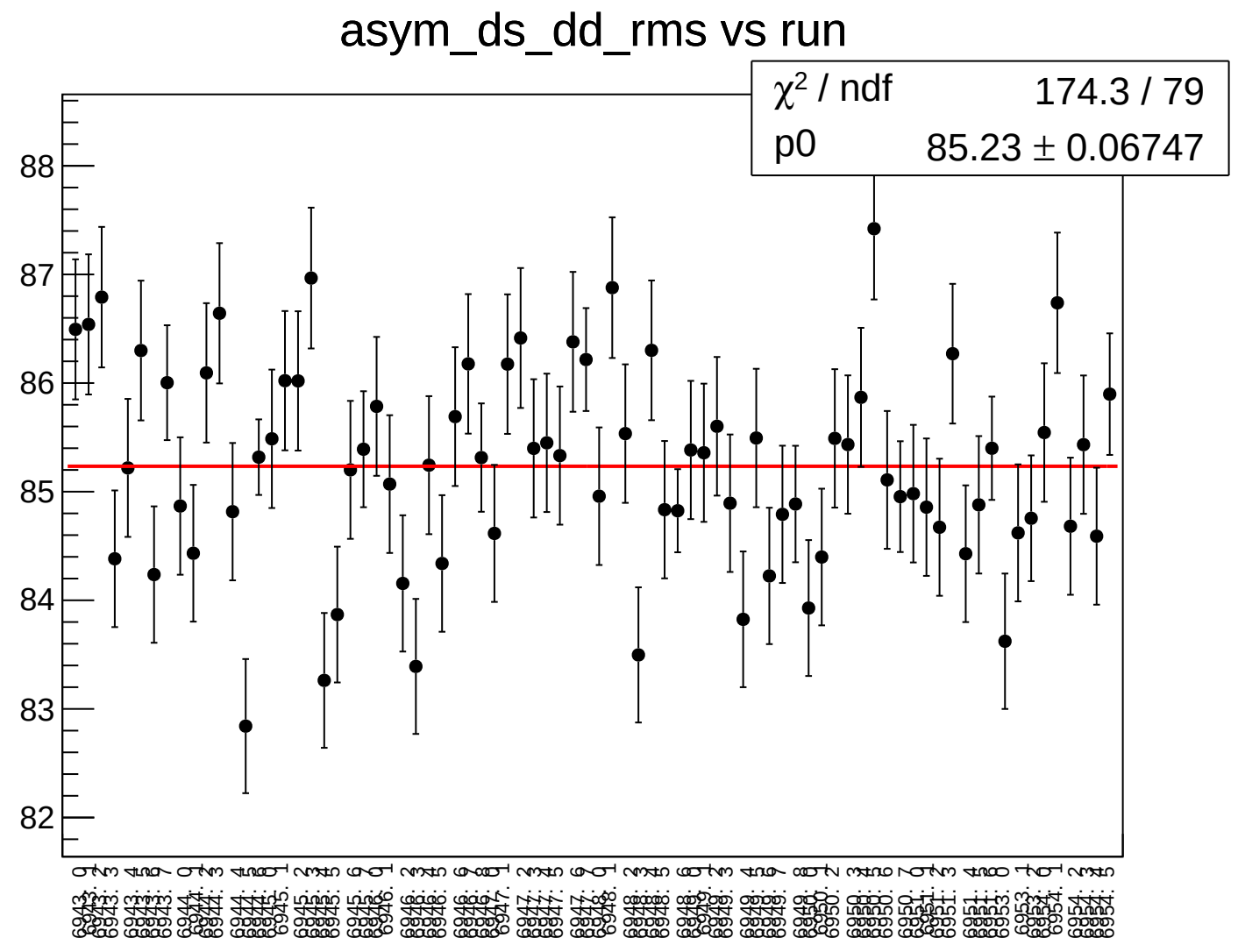

reg_asym_ds_dd_rms vs run
χ^2 / ndf 174.1 / 79
p0 85.21 ± 0.06746
88
87
86
85
84
83
82

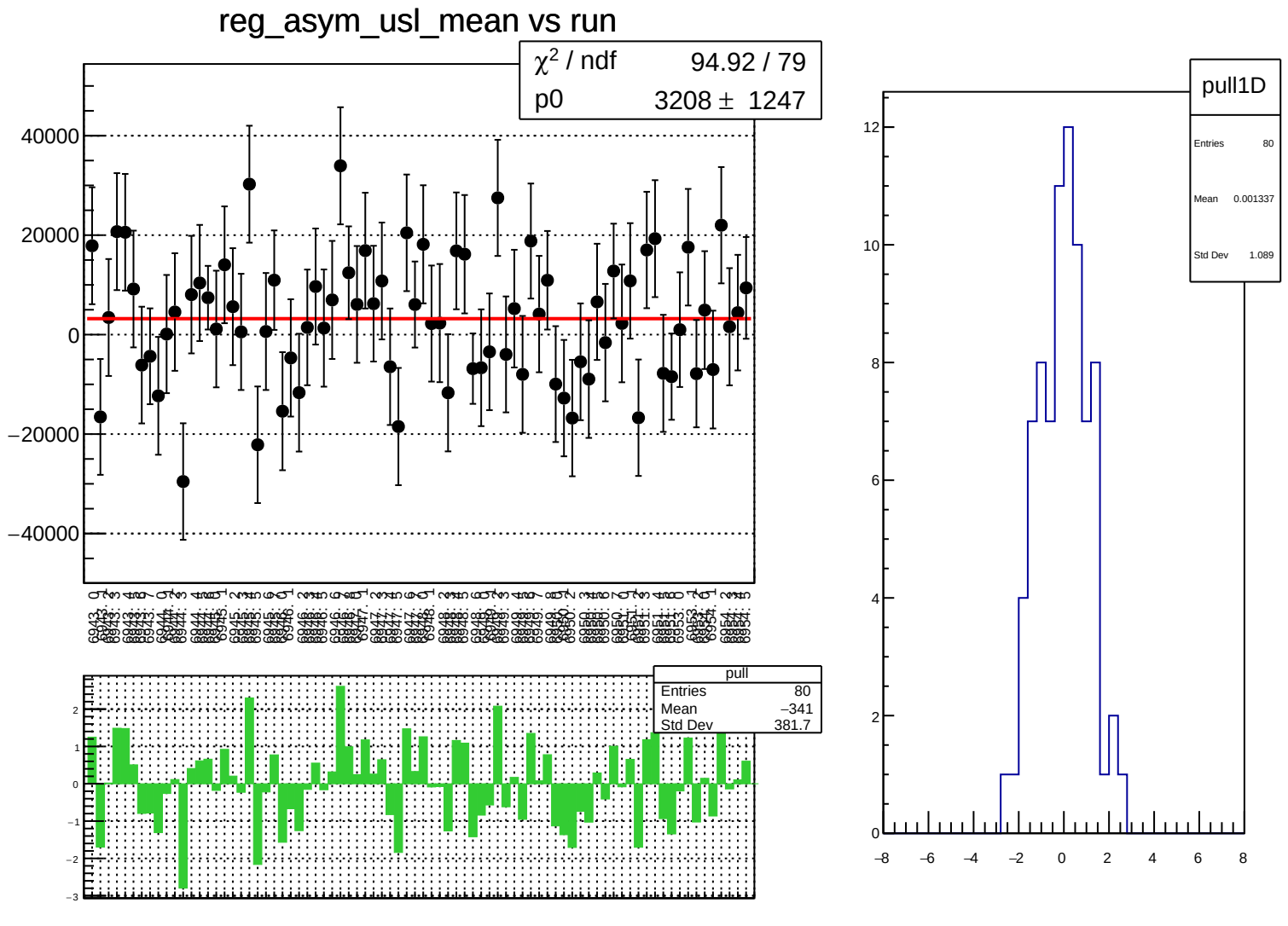

asym_ds_dd_correction_mean vs run
χ^2 / ndf 82.5 / 79
p0 0.8612 ± 1.777
pull
Entries 80
Mean 26.09
Std Dev 31.24
pull1D
Entries 80
Mean 0.03958
Std Dev 1.015

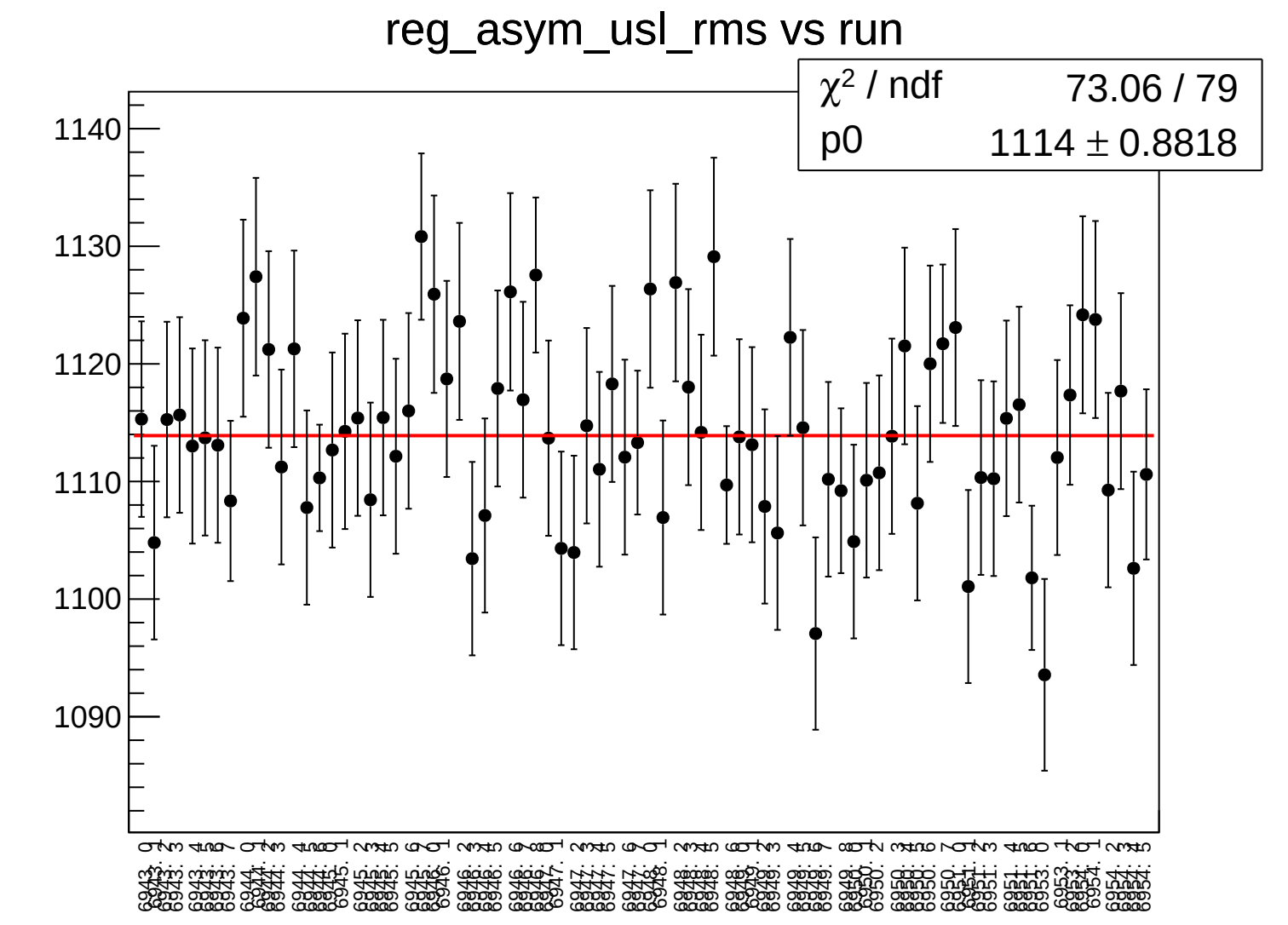

asym_ds_dd_correction_rms vs run
χ^2 / ndf 1.382e+05 / 79
p0 1.517 ± 0.001256
4
3.5
3
2.5
2
1.5
1

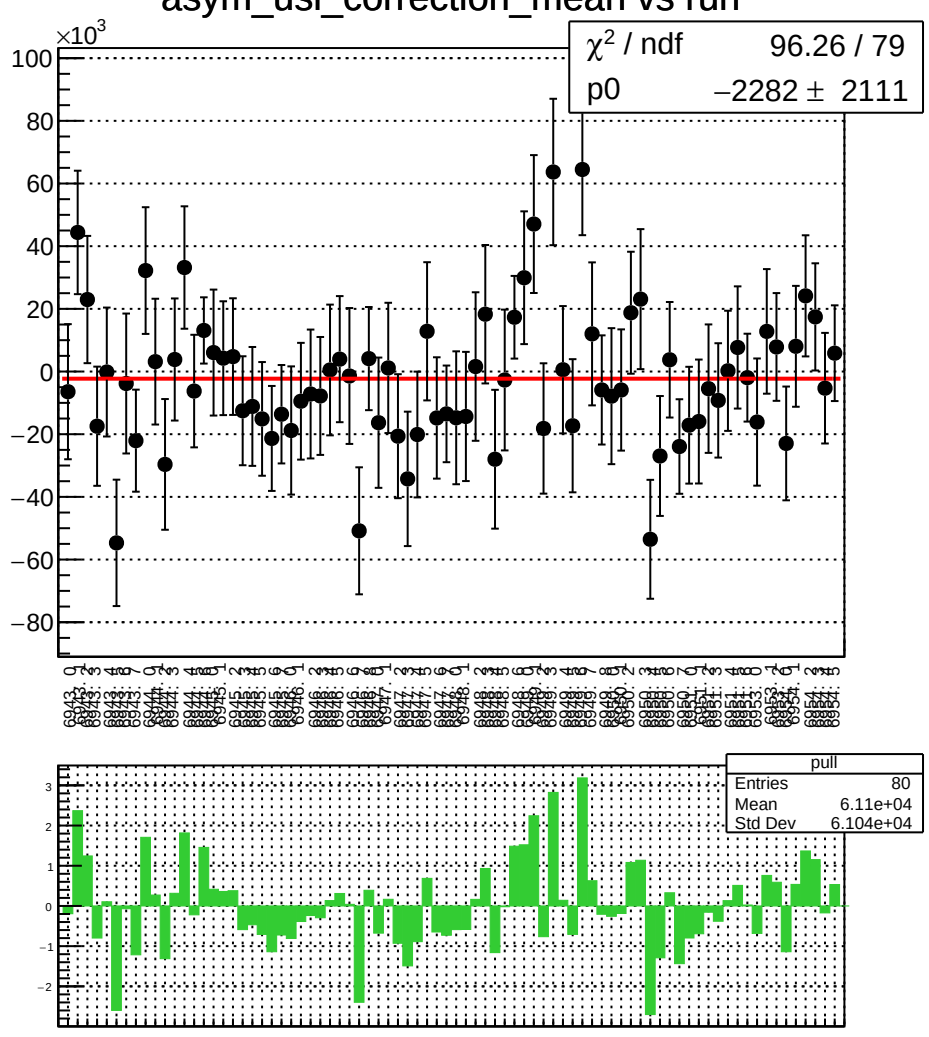

asym_ds_dd_mean vs run
χ^2 / ndf 77.78 / 79
p0 −16.12 ± 95.42
pull
Entries 80
Mean −198.2
Std Dev 231

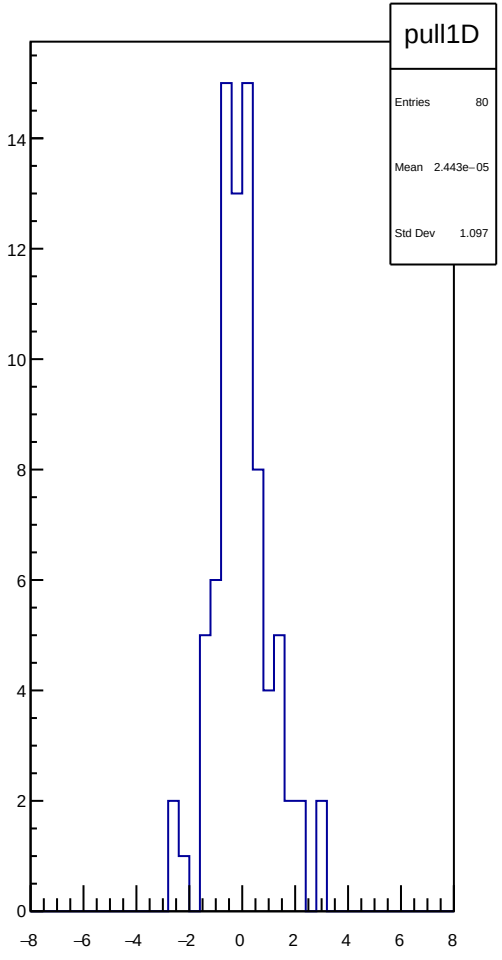

pull1D
Entries 80
Mean 0.01379
Std Dev 0.986

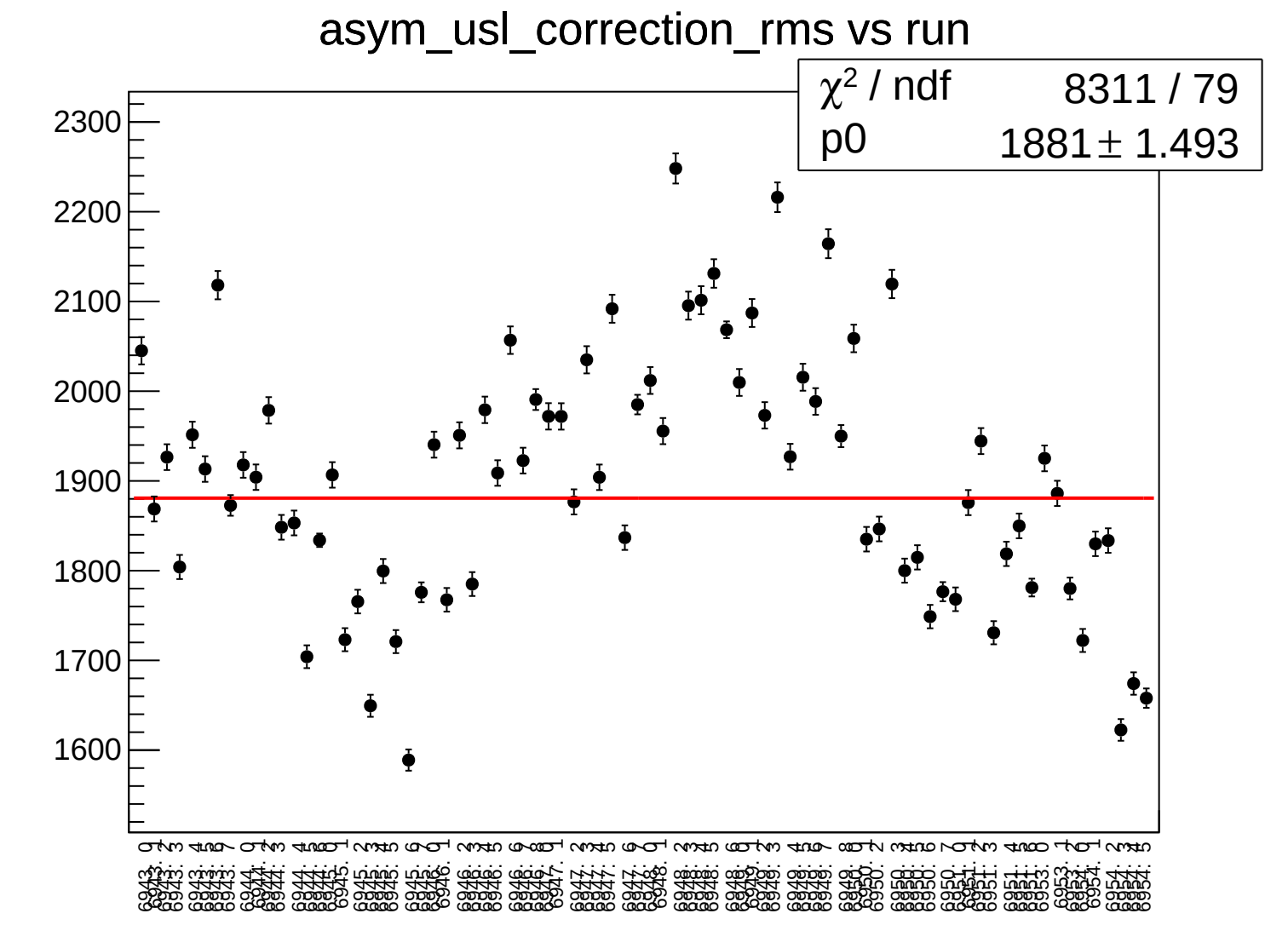

asym_ds_dd_rms vs run
χ² / ndf 174.3 / 79
p0 85.23 ± 0.06747
88
87
86
85
84
83
82

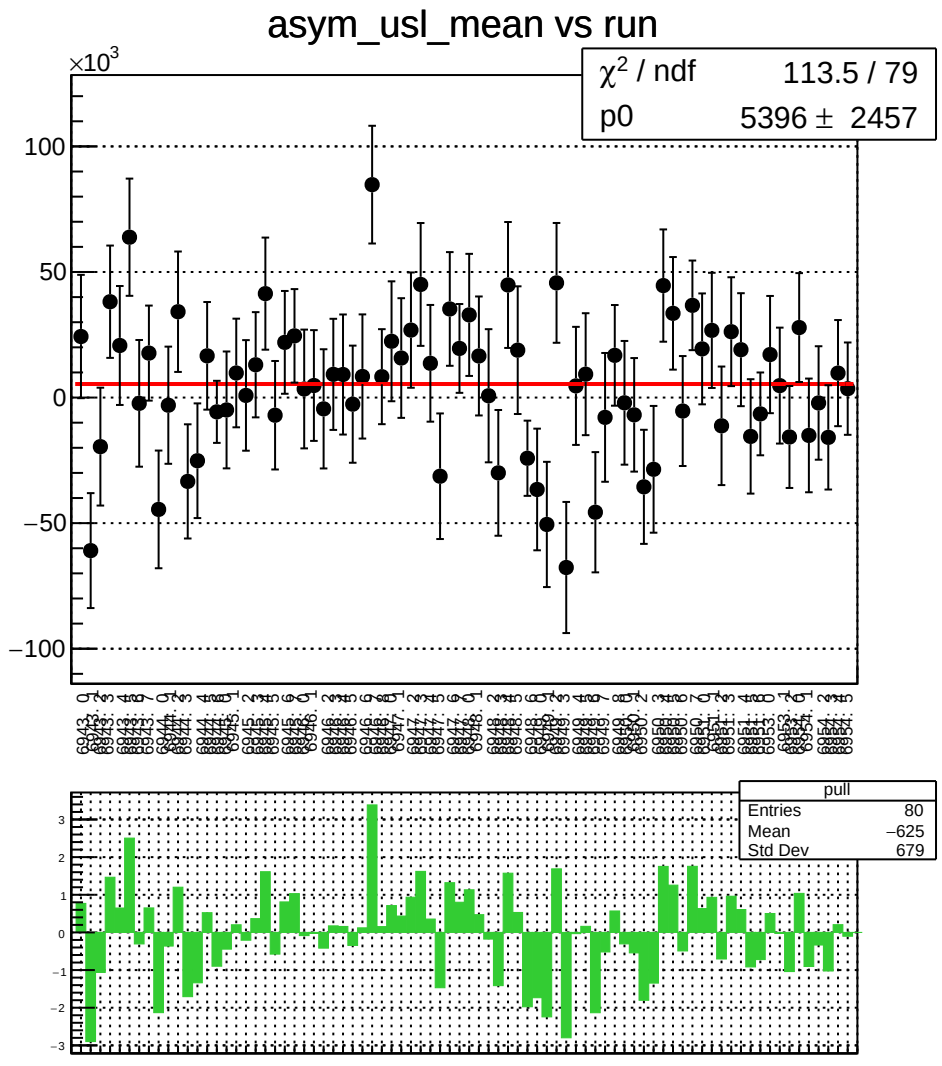

reg_asym_usl_mean vs run
χ² / ndf 94.92 / 79
p0 3208 ± 1247
40000
20000
0
−20000
−40000
pull
Entries 80
Mean −341
Std Dev 381.7
pull1D
Entries 80
Mean 0.001337
Std Dev 1.089

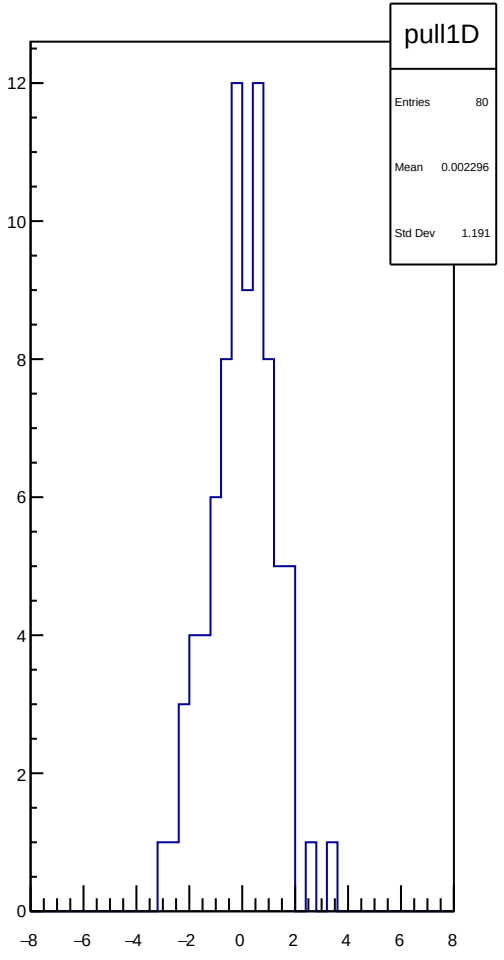

reg_asym_usl_rms vs run
χ² / ndf 73.06 / 79
p0 1114 ± 0.8818
1140
1130
1120
1110
1100
1090

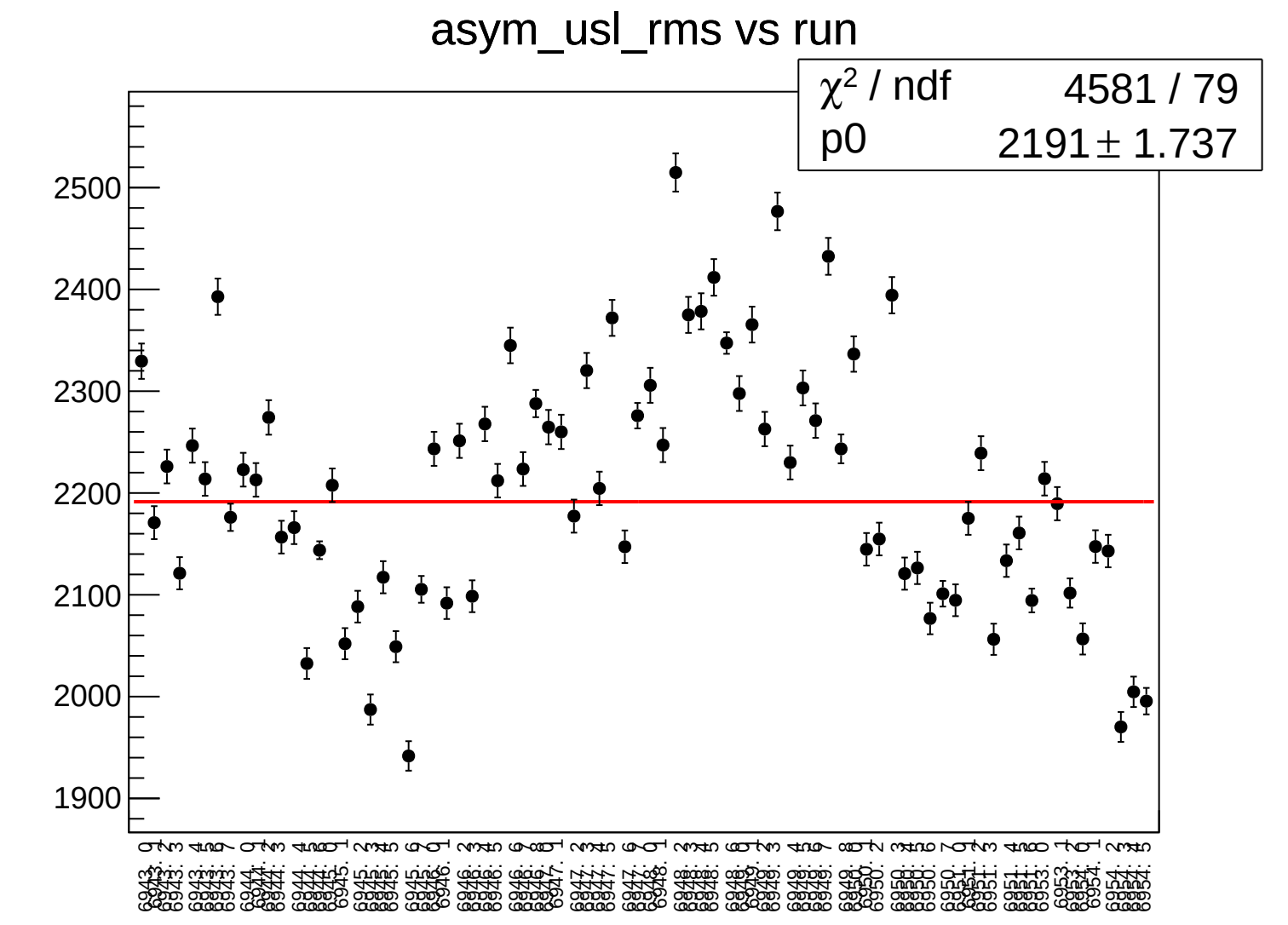

asym_usl_correction_mean vs run
×10^3
χ² / ndf 96.26 / 79
p0 −2282 ± 2111
pull
Entries 80
Mean 6.11e+04
Std Dev 6.104e+04

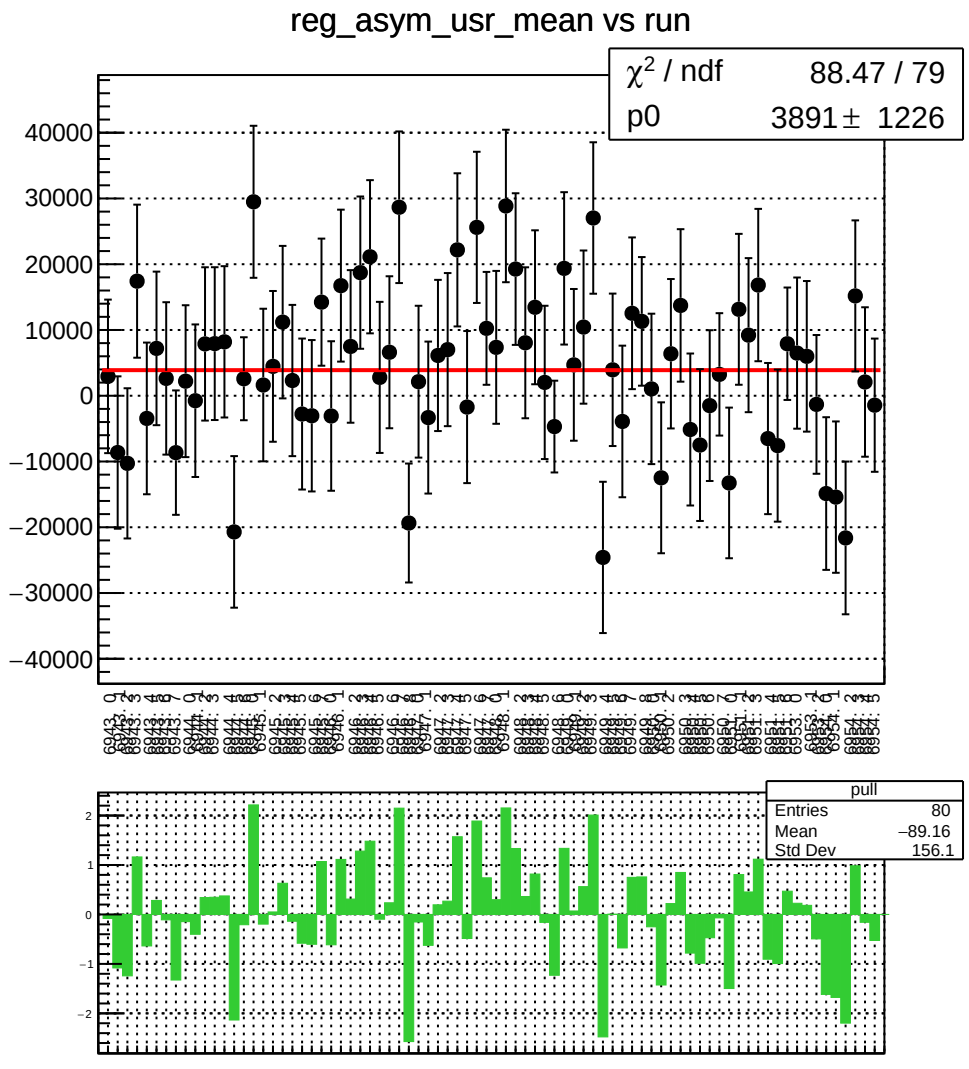

pull1D
Entries 80
Mean 2.443e−05
Std Dev 1.097

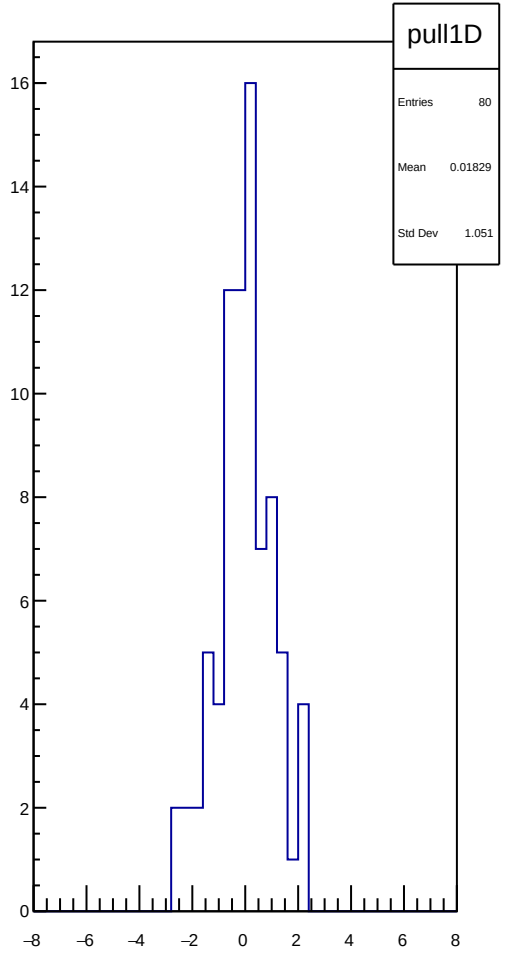

asym_usl_correction_rms vs run
χ² / ndf 8311 / 79
p0 1881 ± 1.493
2300
2200
2100
2000
1900
1800
1700
1600

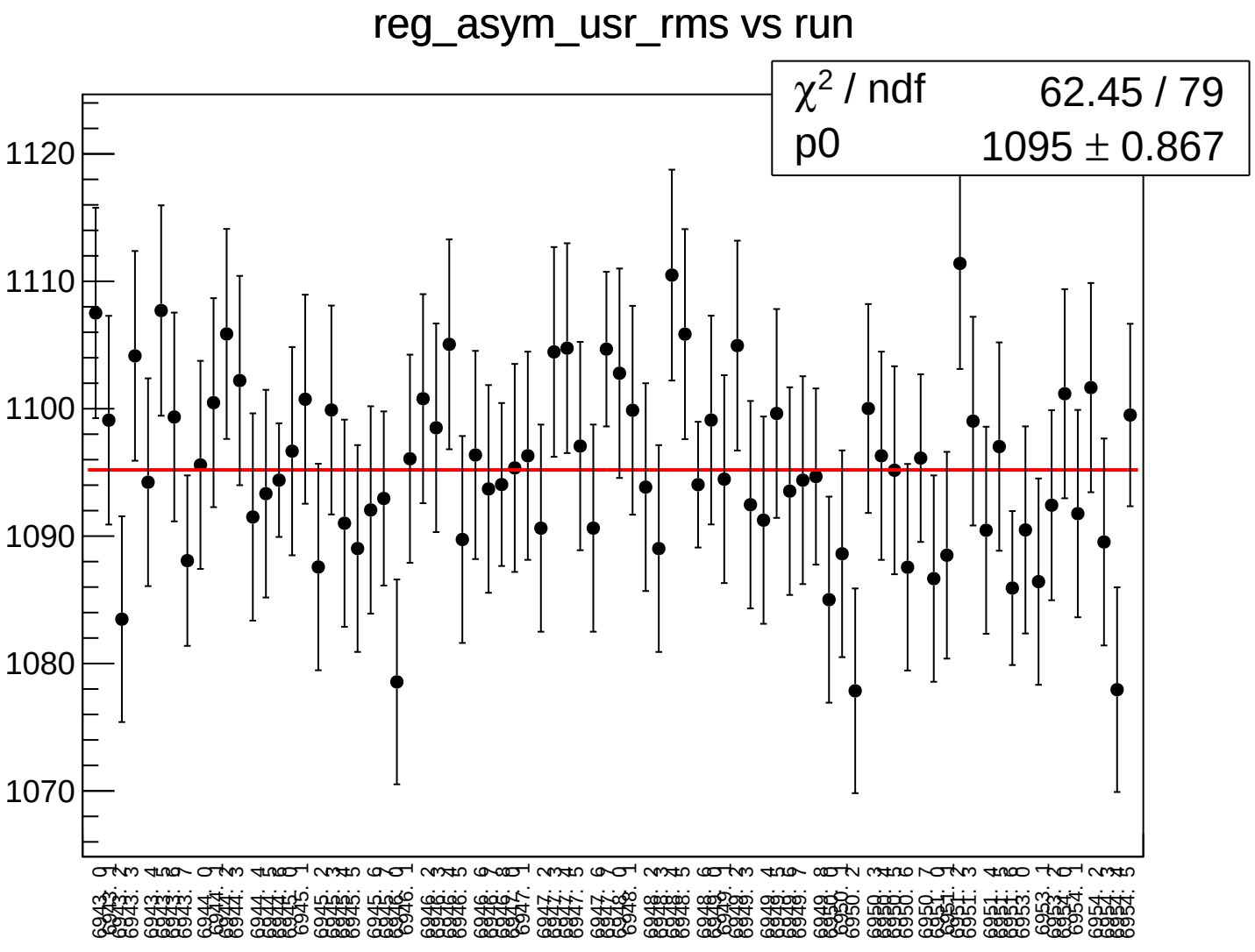

asym_usl_mean vs run
×10^3
χ² / ndf 113.5 / 79
p0 5396 ± 2457
100
50
0
−50
−100
pull
Entries 80
Mean −625
Std Dev 679
3
2
1
0
−1
−2
−3

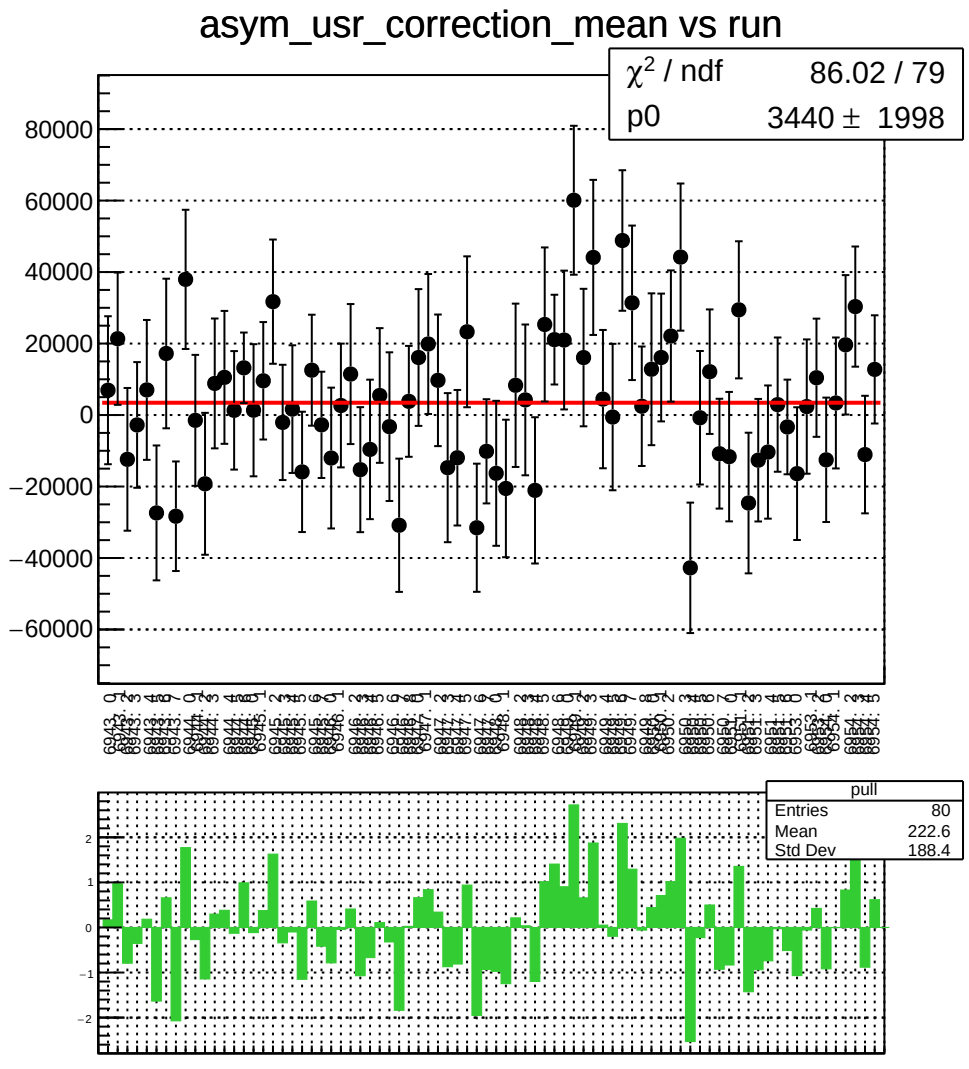

pull1D
Entries 80
Mean 0.002296
Std Dev 1.191
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

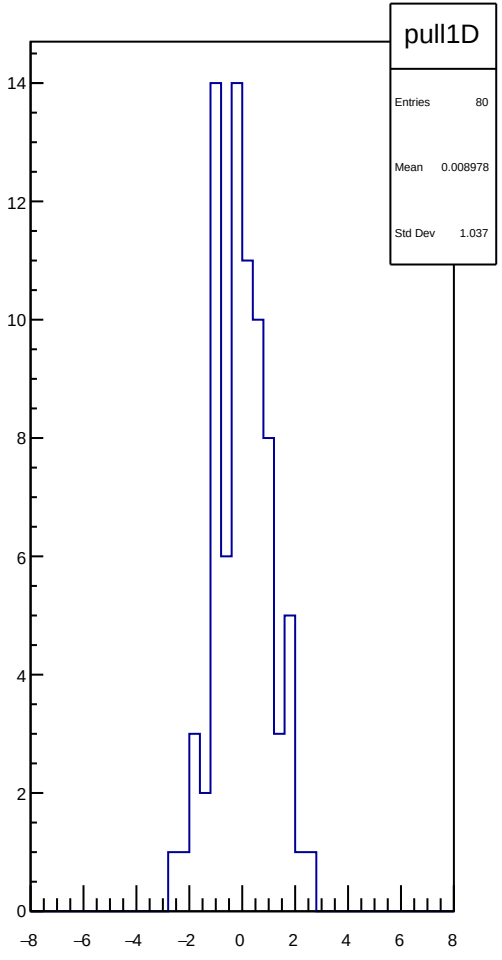

asym_usl_rms vs run
χ² / ndf 4581 / 79
p0 2191 ± 1.737
2500
2400
2300
2200
2100
2000
1900

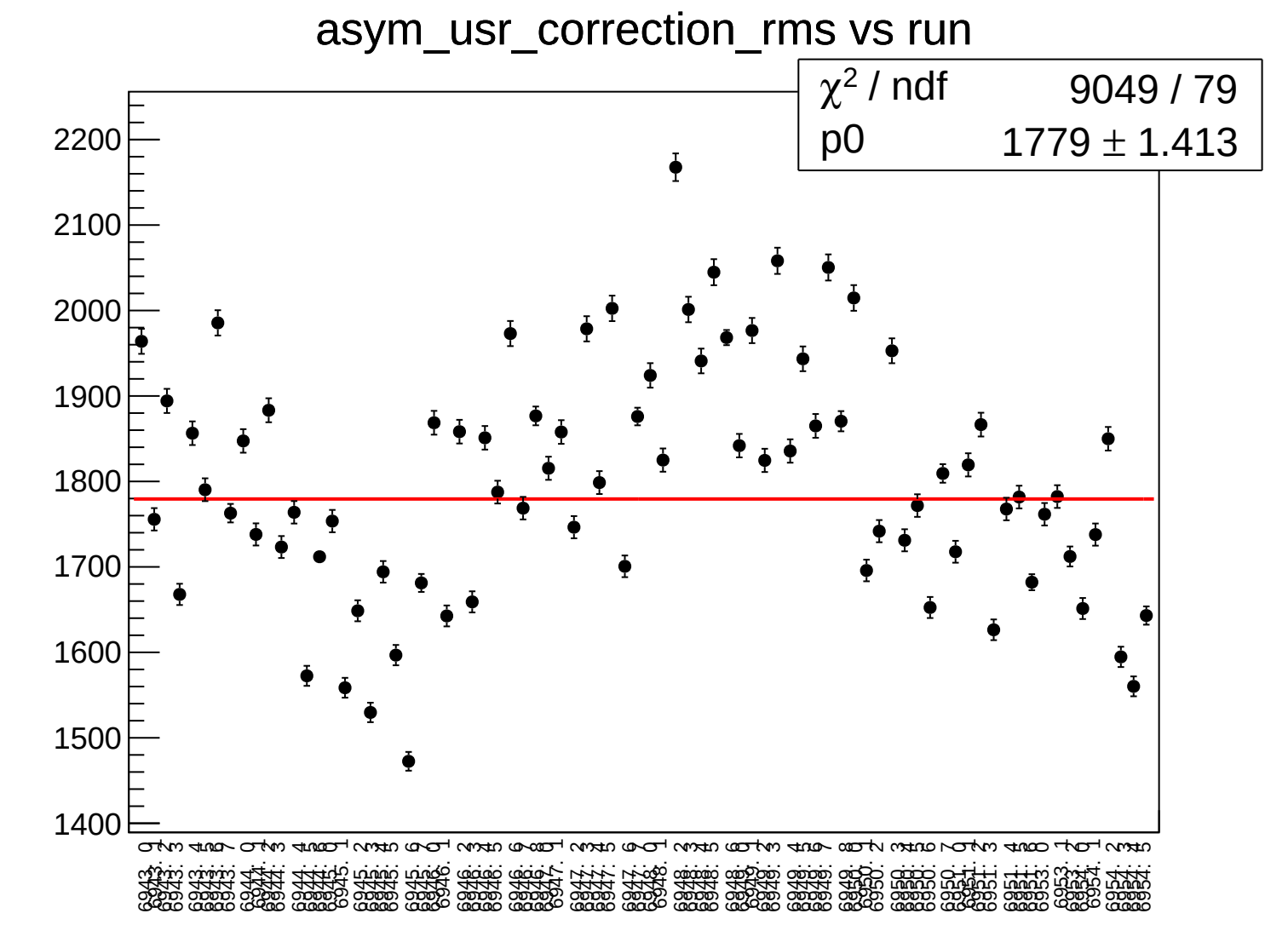

reg_asym_usr_mean vs run
χ² / ndf 88.47 / 79
p0 3891 ± 1226
pull
Entries 80
Mean −89.16
Std Dev 156.1

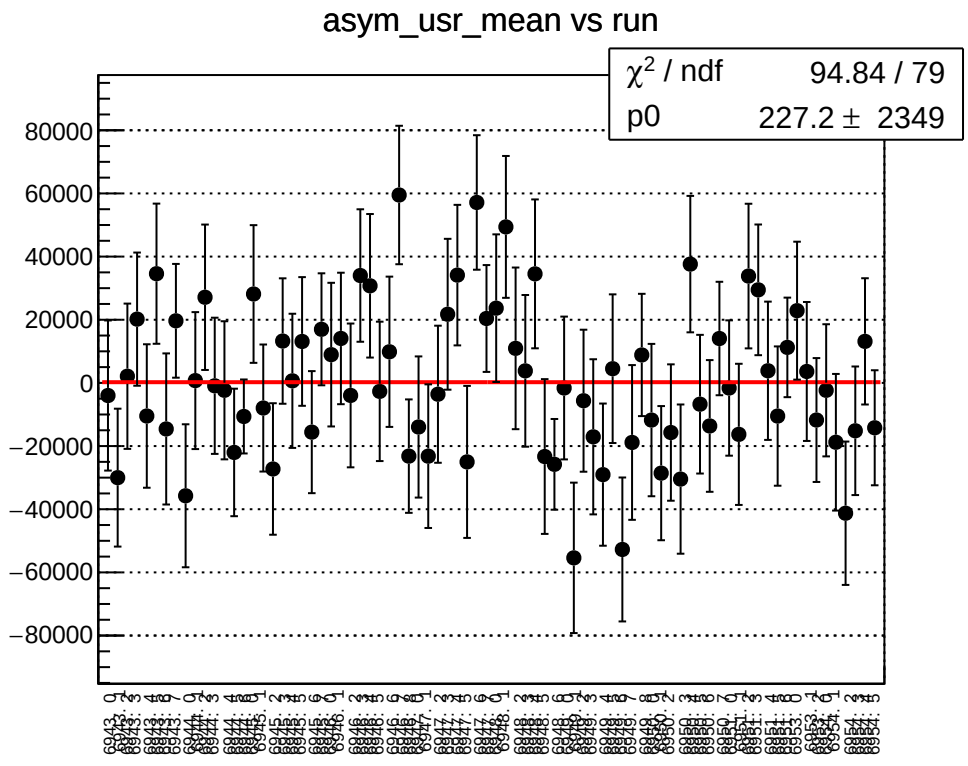

pull1D
Entries 80
Mean 0.01829
Std Dev 1.051

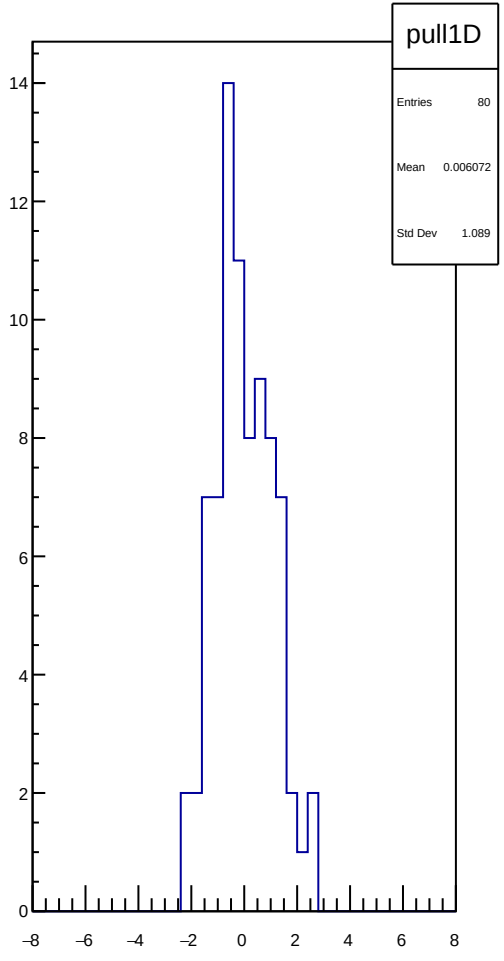

reg_asym_usr_rms vs run
χ^2 / ndf 62.45 / 79
p0 1095 ± 0.867
1120
1110
1100
1090
1080
1070

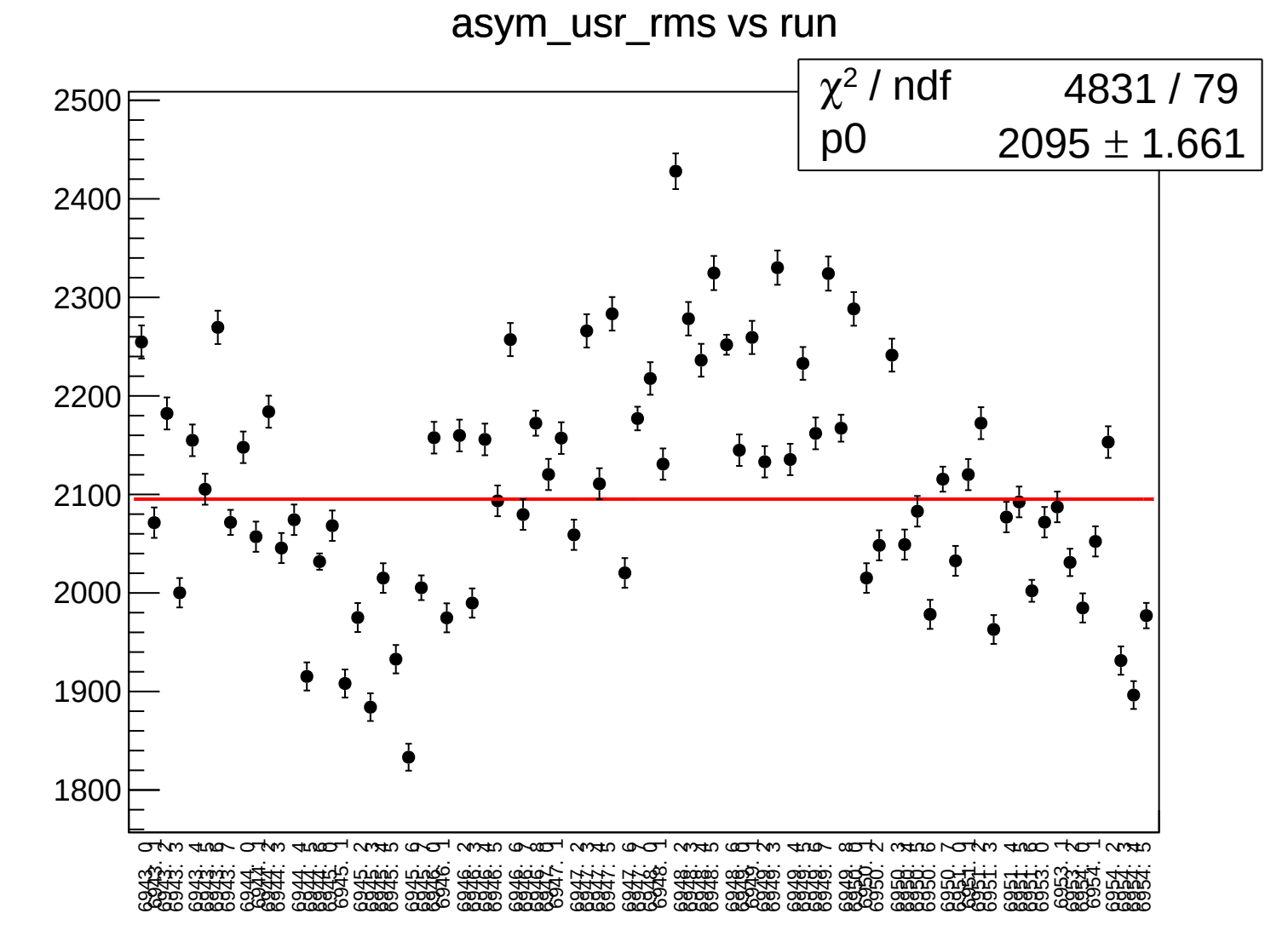

asym_usr_correction_mean vs run
χ² / ndf 86.02 / 79
p0 3440 ± 1998
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 80
Mean 222.6
Std Dev 188.4
2
1
0
−1
−2

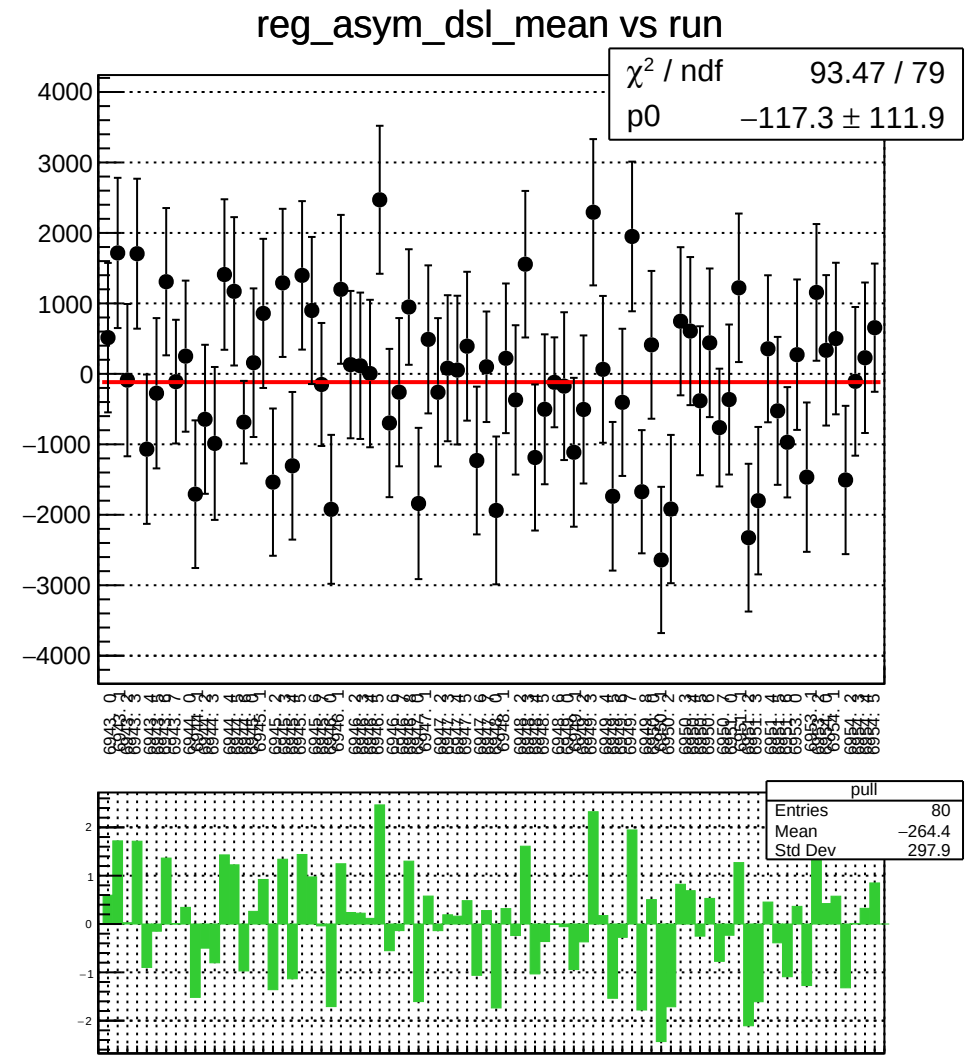

pull1D
Entries 80
Mean 0.008978
Std Dev 1.037
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

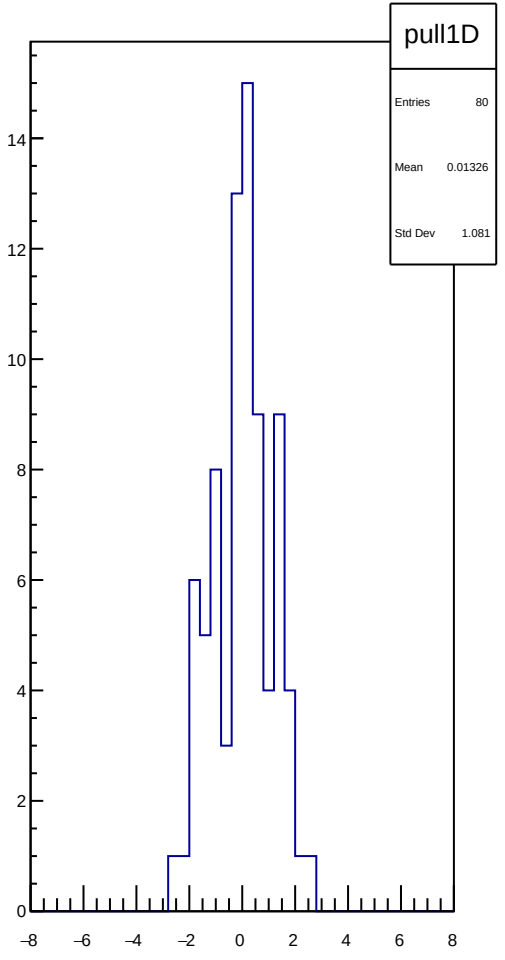

asym_usr_correction_rms vs run
χ² / ndf 9049 / 79
p0 1779 ± 1.413
2200
2100
2000
1900
1800
1700
1600
1500
1400

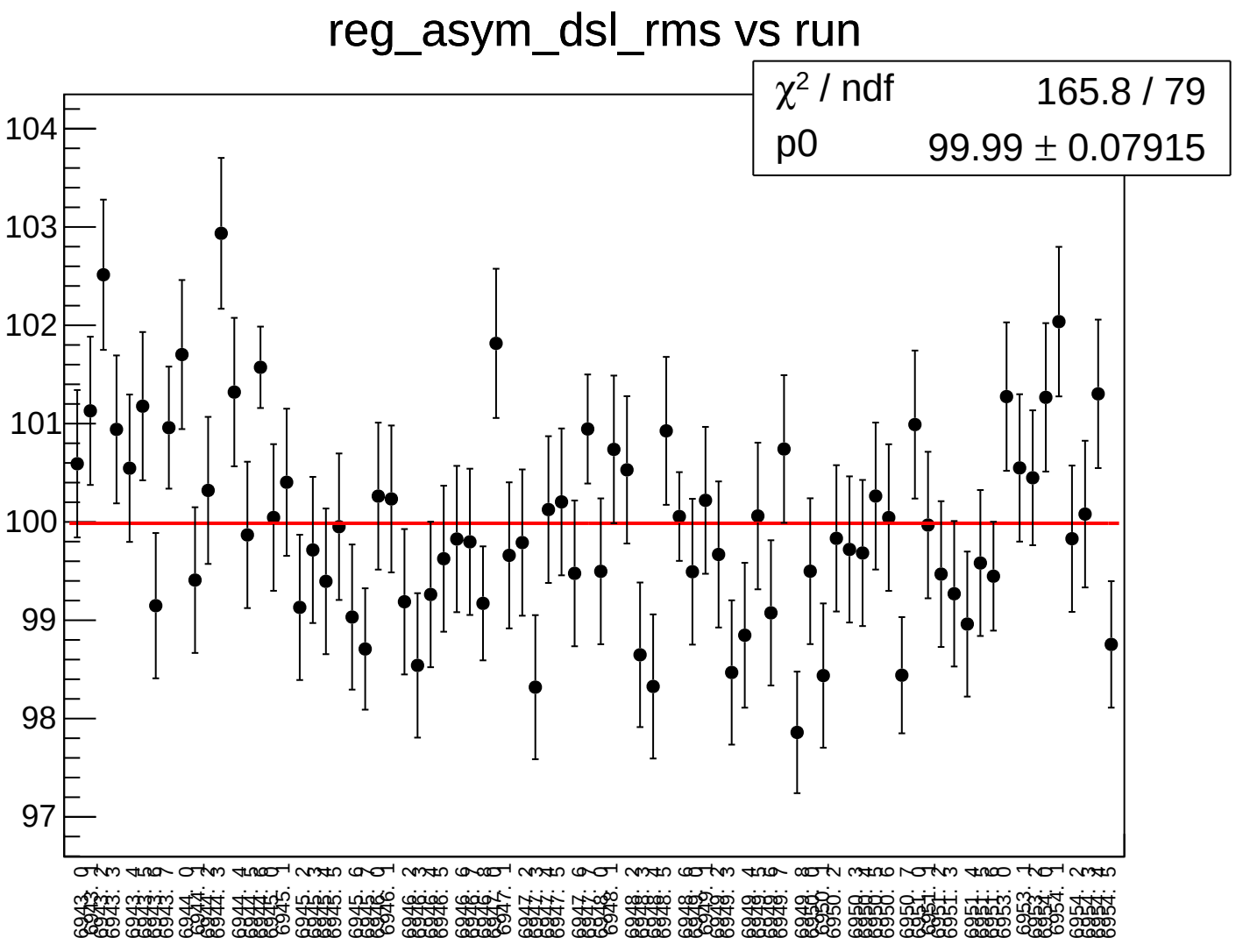

asym_usr_mean vs run
χ² / ndf 94.84 / 79
p0 227.2 ± 2349
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 80
Mean −411.5
Std Dev 461
2
1
0
−1
−2

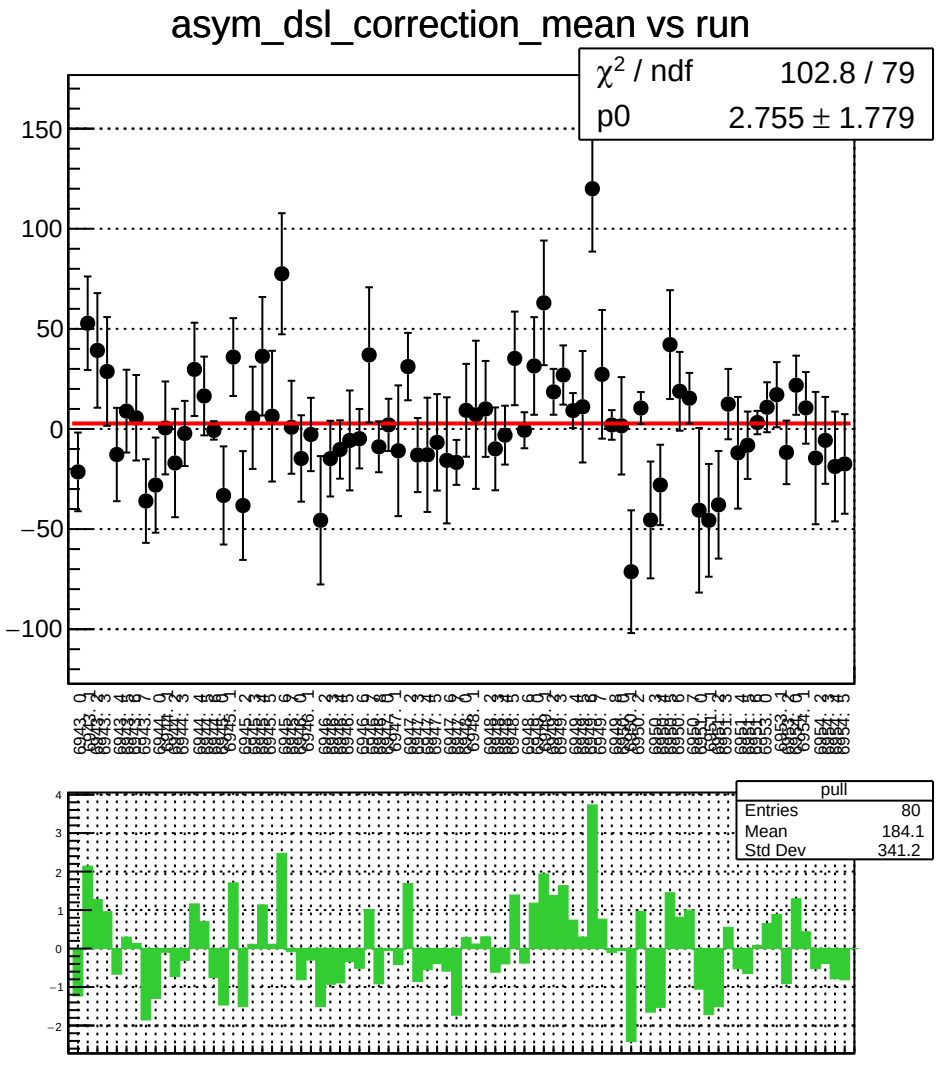

pull1D
Entries 80
Mean 0.006072
Std Dev 1.089
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

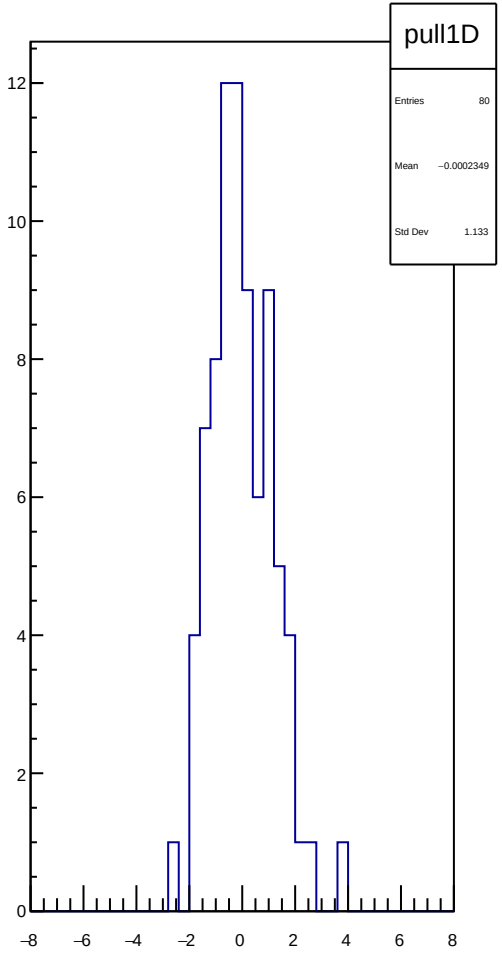

asym_usr_rms vs run
χ² / ndf 4831 / 79
p0 2095 ± 1.661
2500
2400
2300
2200
2100
2000
1900
1800

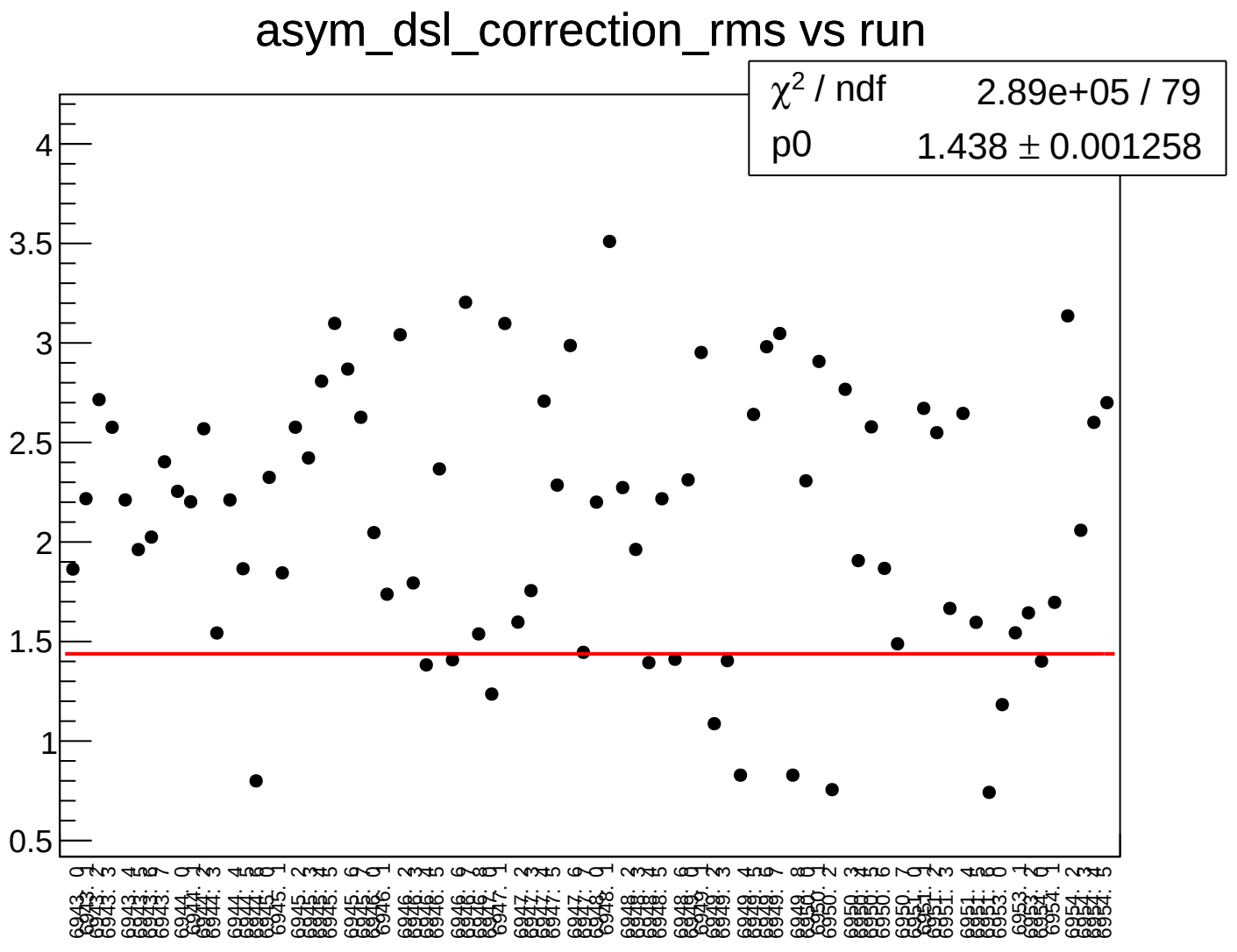

reg_asym_dsl_mean vs run
χ² / ndf 93.47 / 79
p0 −117.3 ± 111.9
pull
Entries 80
Mean −264.4
Std Dev 297.9

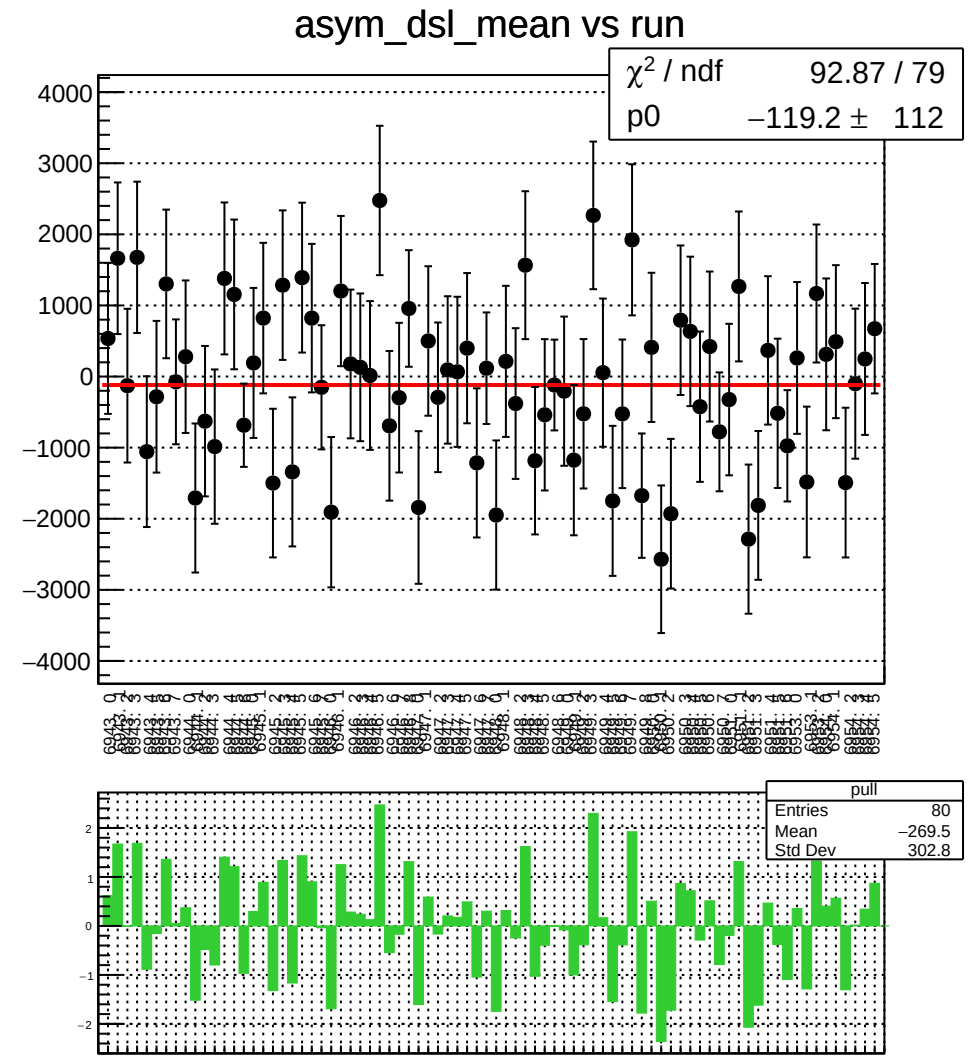

pull1D
Entries 80
Mean 0.01326
Std Dev 1.081

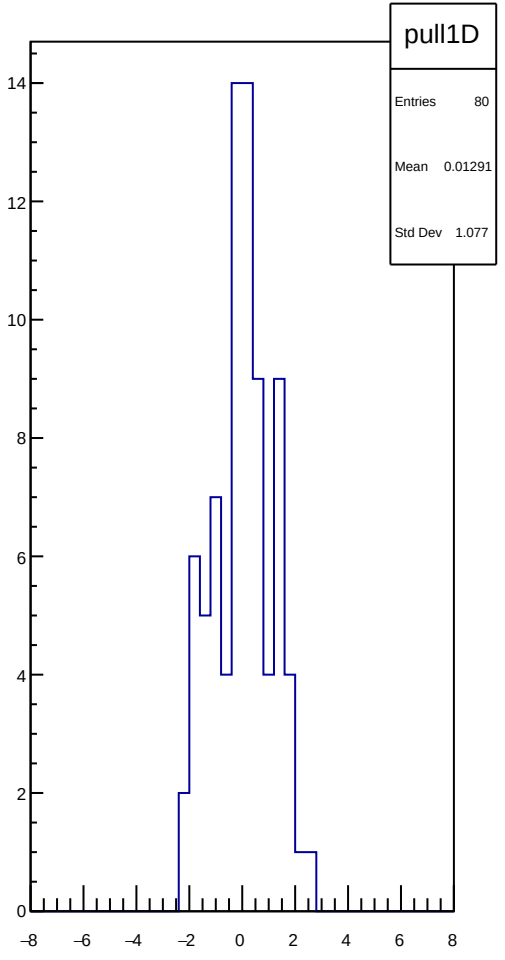

reg_asym_dsl_rms vs run
χ² / ndf 165.8 / 79
p0 99.99 ± 0.07915
104
103
102
101
100
99
98
97

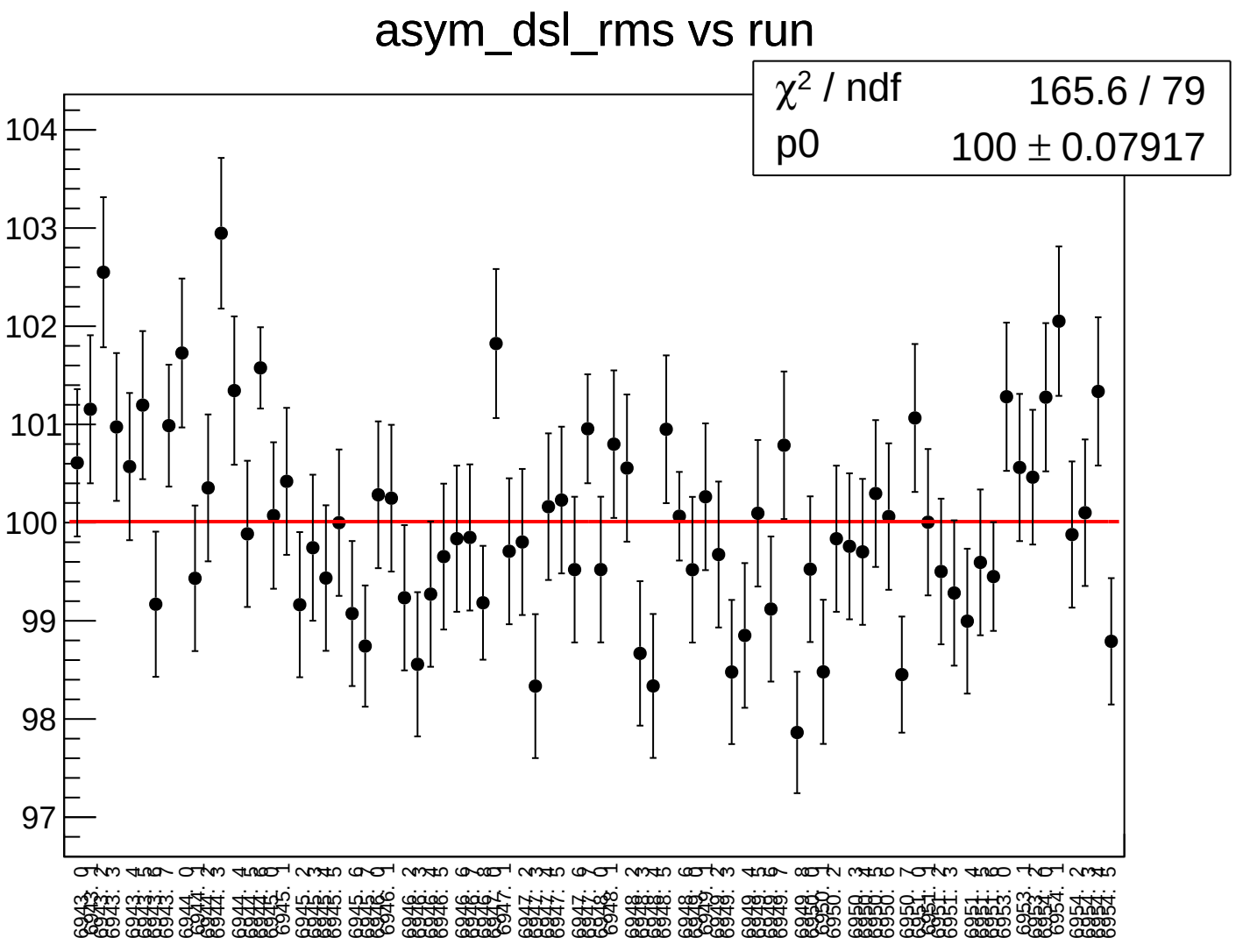

asym_dsl_correction_mean vs run
χ² / ndf 102.8 / 79
p0 2.755 ± 1.779
150
100
50
0
−50
−100
pull
Entries 80
Mean 184.1
Std Dev 341.2
4
3
2
1
0
−1
−2

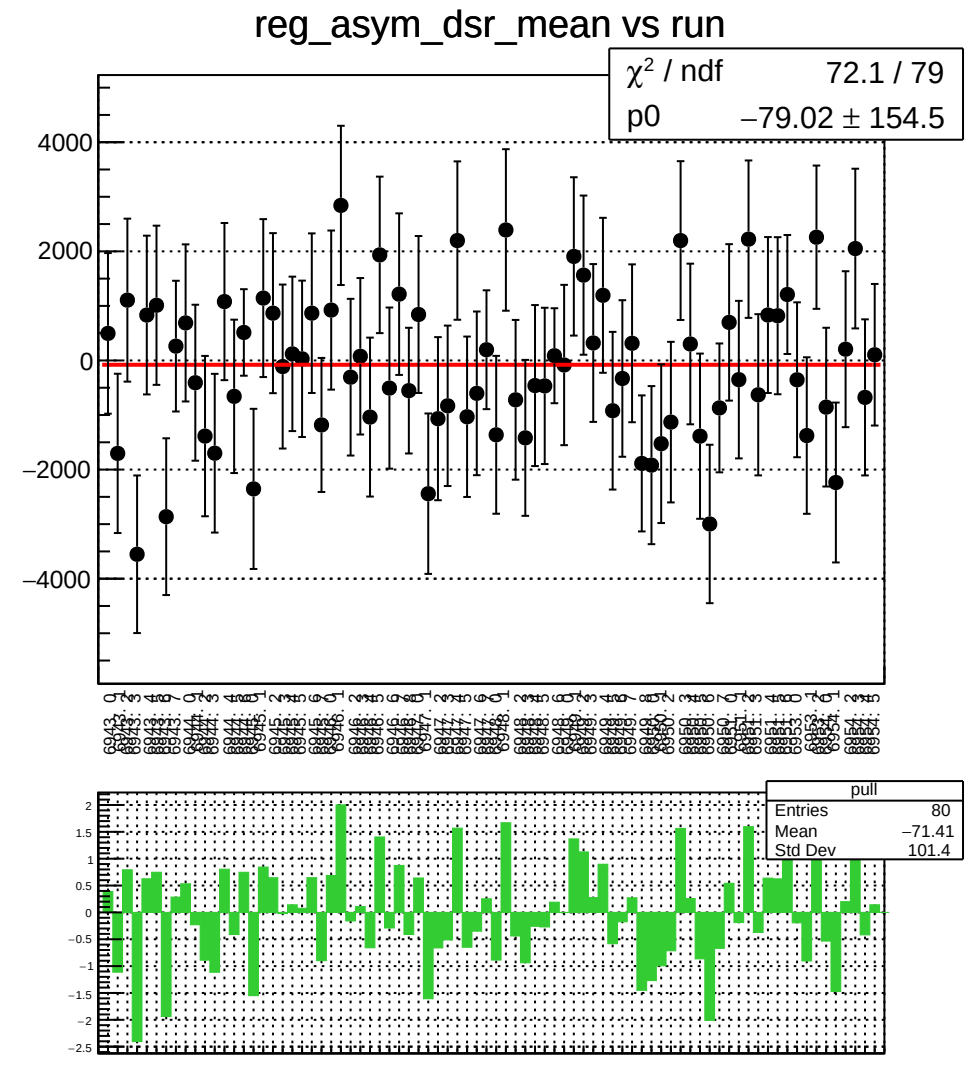

pull1D
Entries 80
Mean −0.0002349
Std Dev 1.133
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

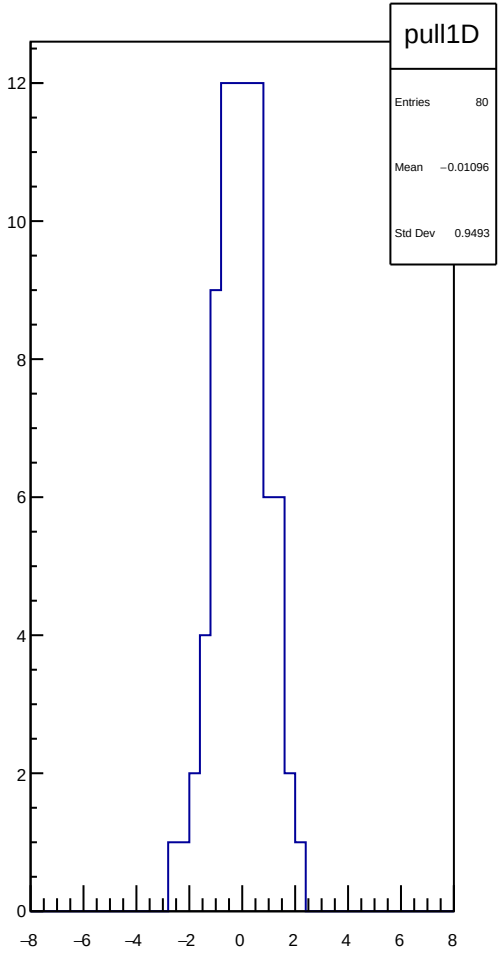

asym_dsl_correction_rms vs run
χ^2 / ndf 2.89e+05 / 79
p0 1.438 ± 0.001258
4
3.5
3
2.5
2
1.5
1
0.5

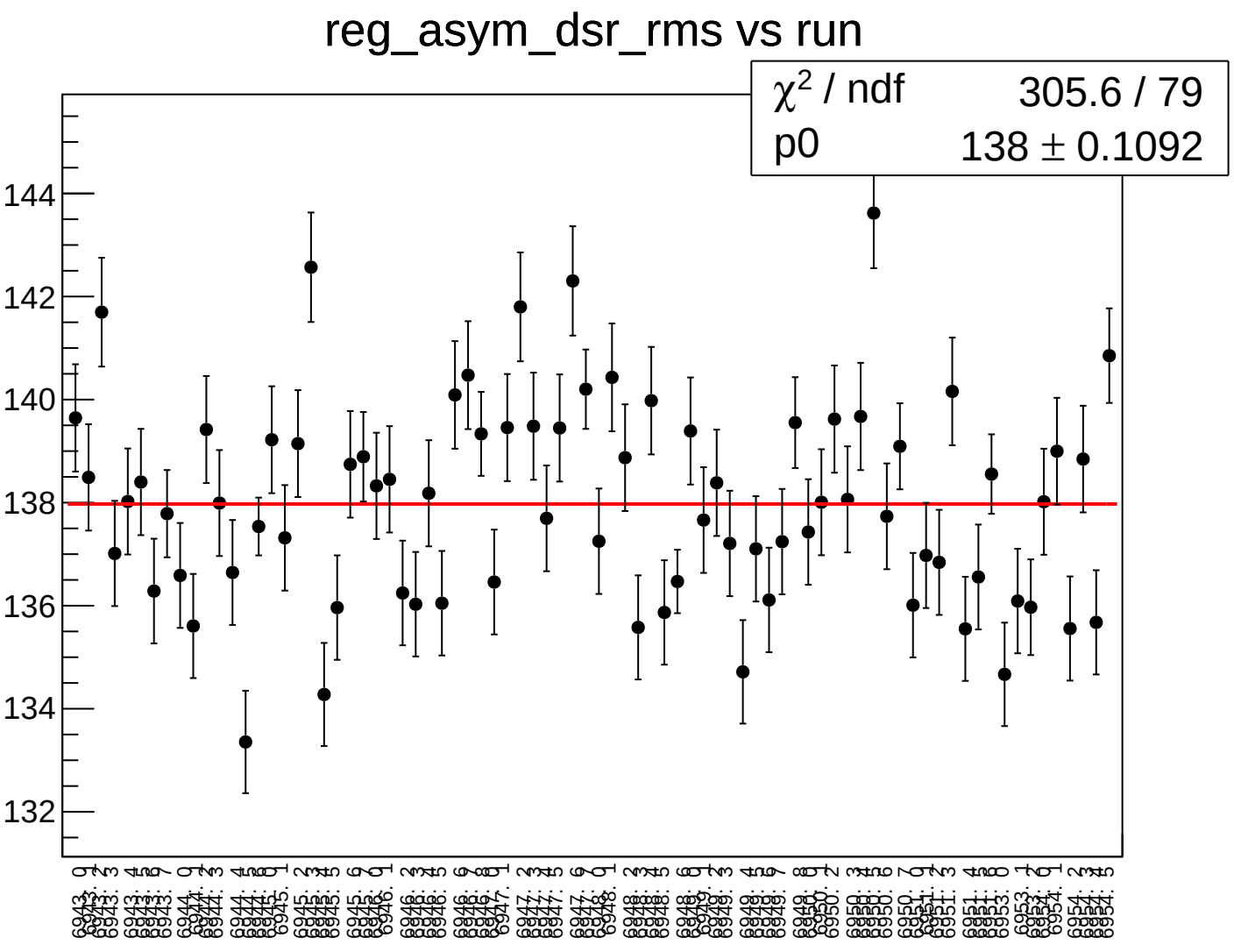

asym_dsl_mean vs run
χ² / ndf 92.87 / 79
p0 −119.2 ± 112
pull
Entries 80
Mean −269.5
Std Dev 302.8

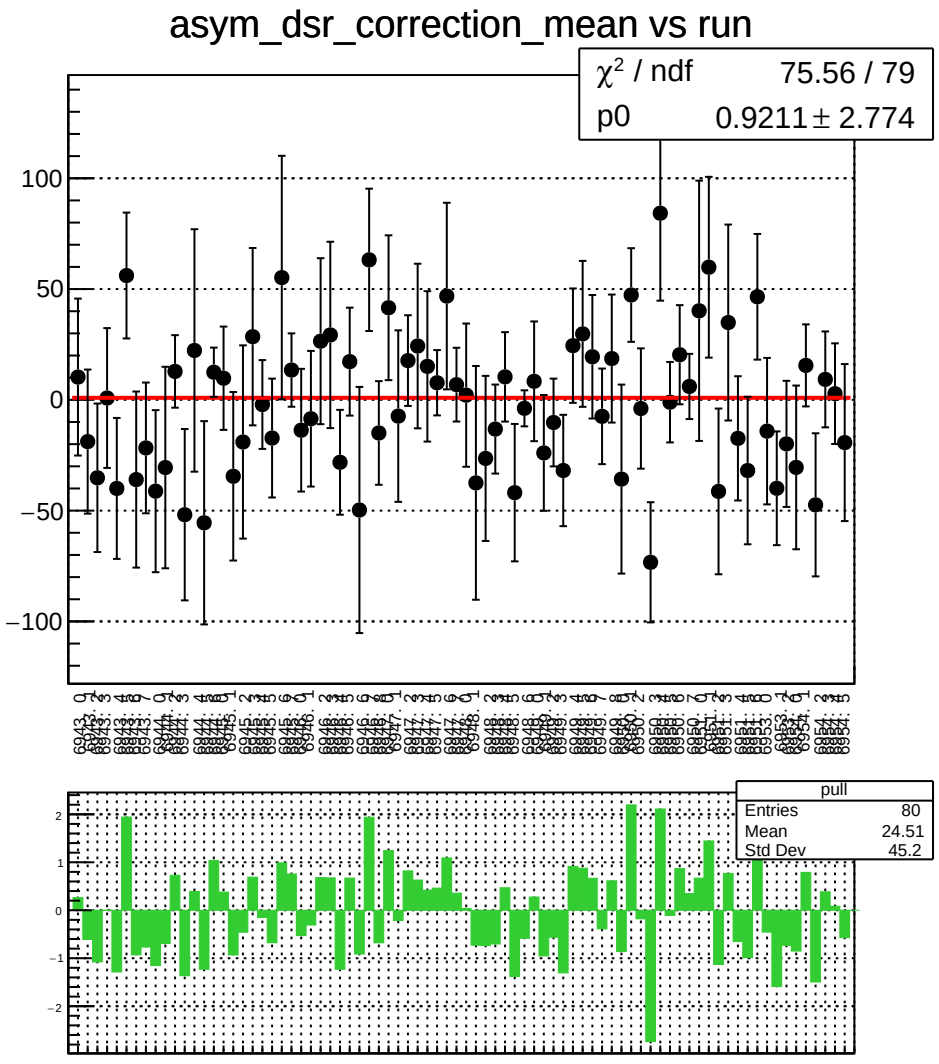

pull1D
Entries 80
Mean 0.01291
Std Dev 1.077

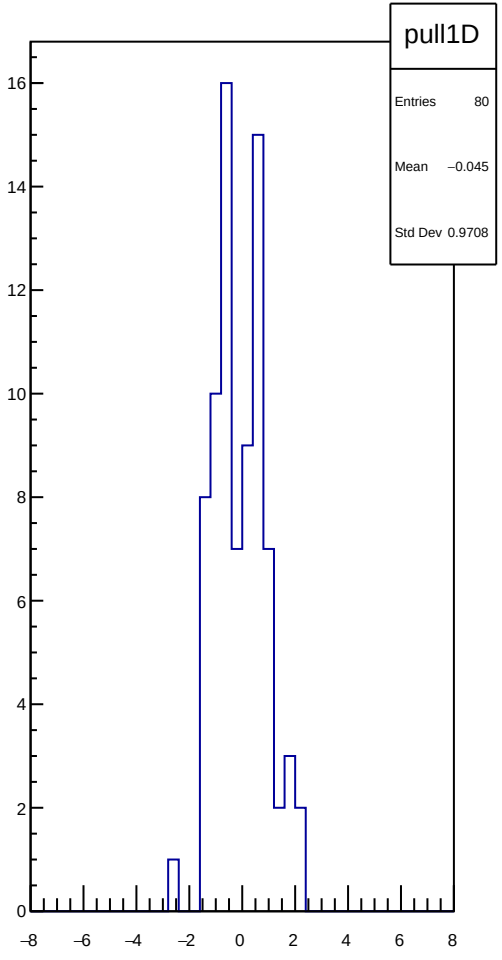

asym_dsl_rms vs run
χ² / ndf 165.6 / 79
p0 100 ± 0.07917
104
103
102
101
100
99
98
97

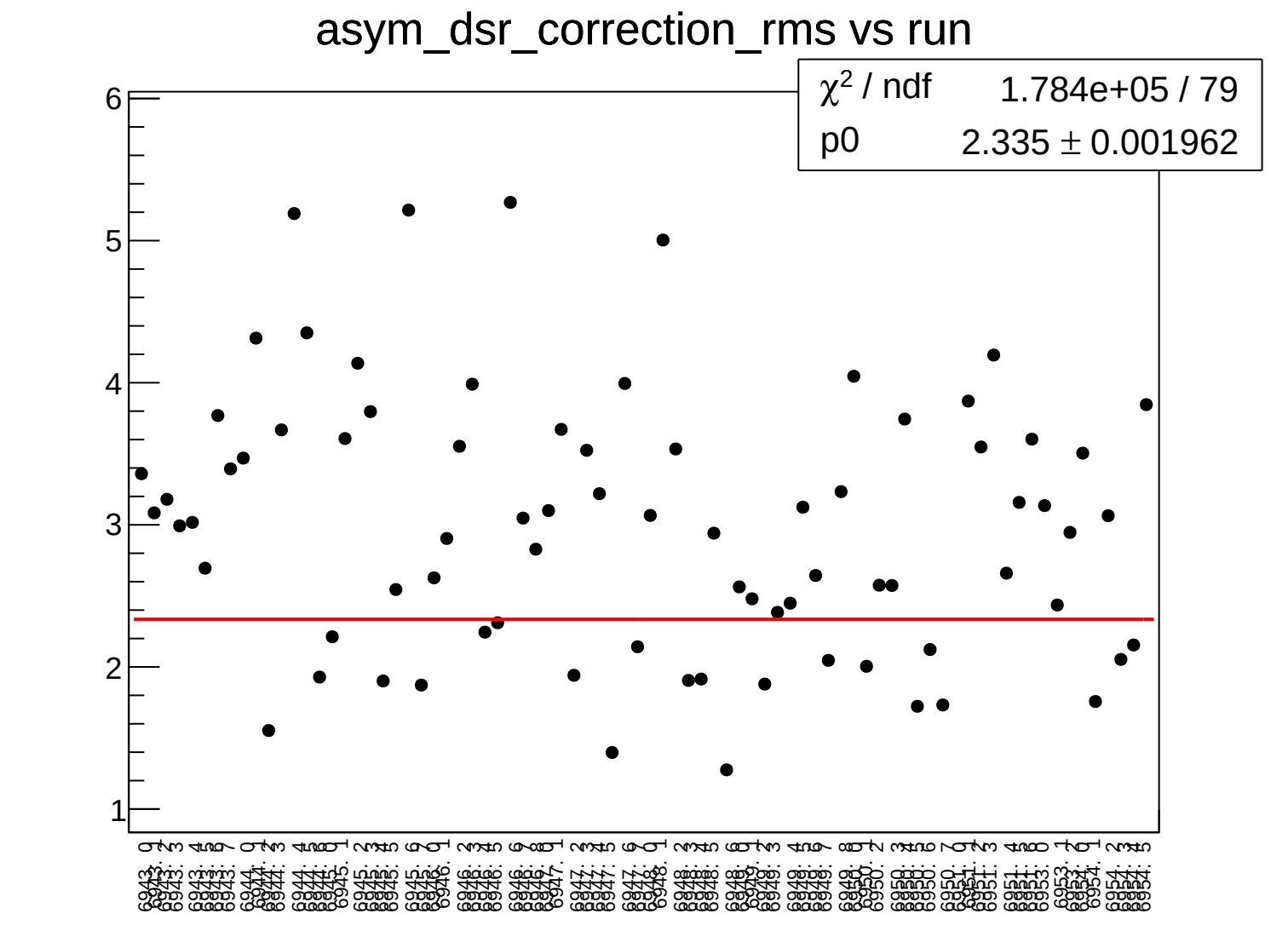

reg_asym_dsr_mean vs run
χ² / ndf 72.1 / 79
p0 −79.02 ± 154.5
4000
2000
0
−2000
−4000
pull
Entries 80
Mean −71.41
Std Dev 101.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

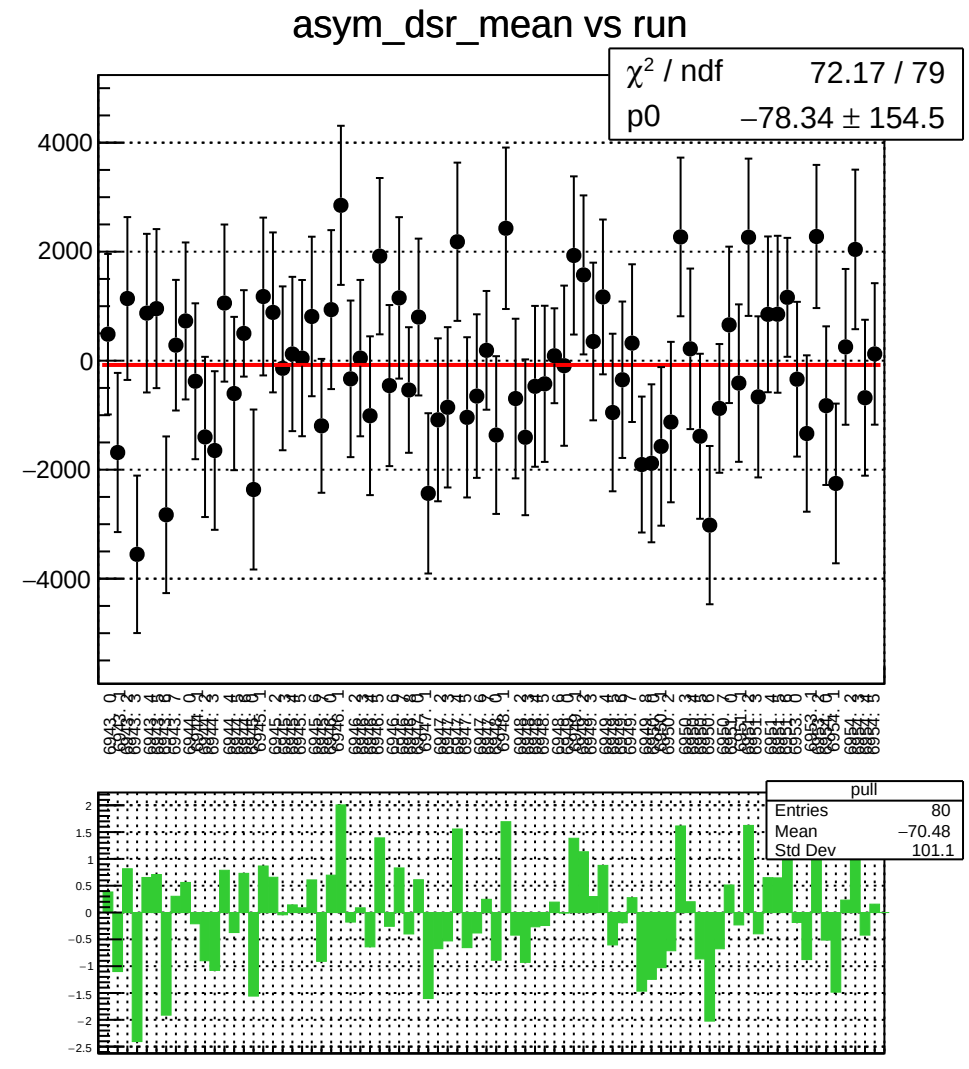

pull1D
Entries 80
Mean −0.01096
Std Dev 0.9493
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

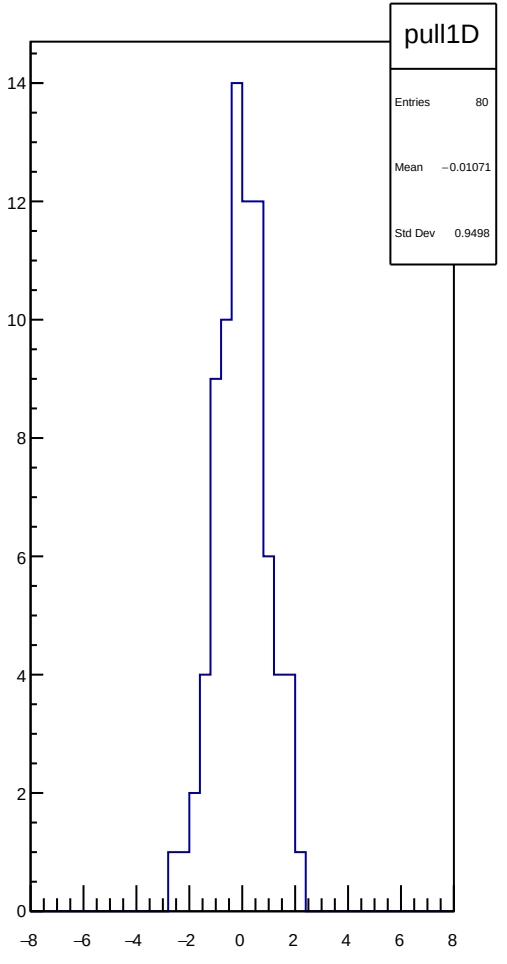

reg_asym_dsr_rms vs run
χ^2 / ndf 305.6 / 79
p0 138 ± 0.1092
144
142
140
138
136
134
132

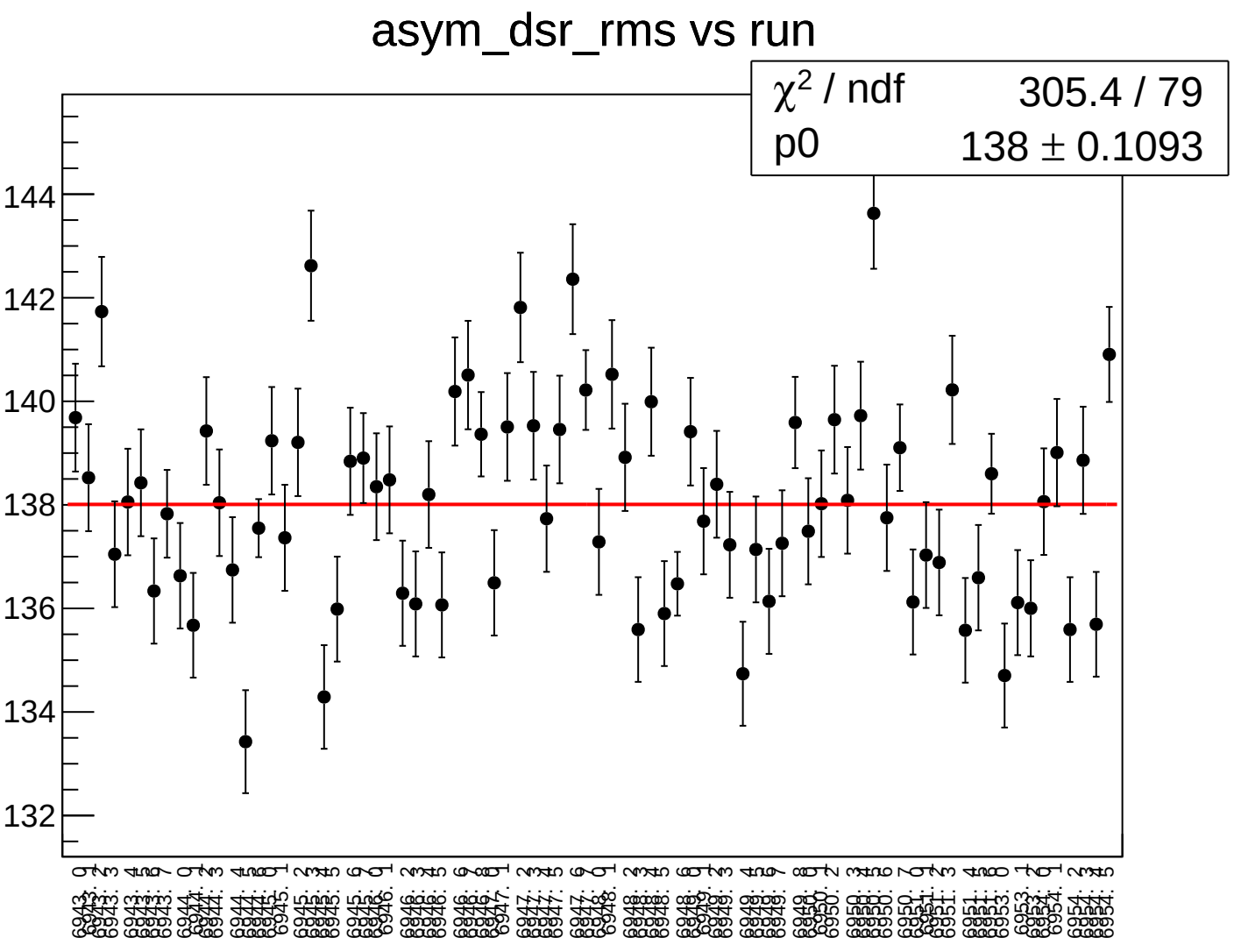

asym_dsr_correction_mean vs run
χ² / ndf 75.56 / 79
p0 0.9211 ± 2.774
pull
Entries 80
Mean 24.51
Std Dev 45.2

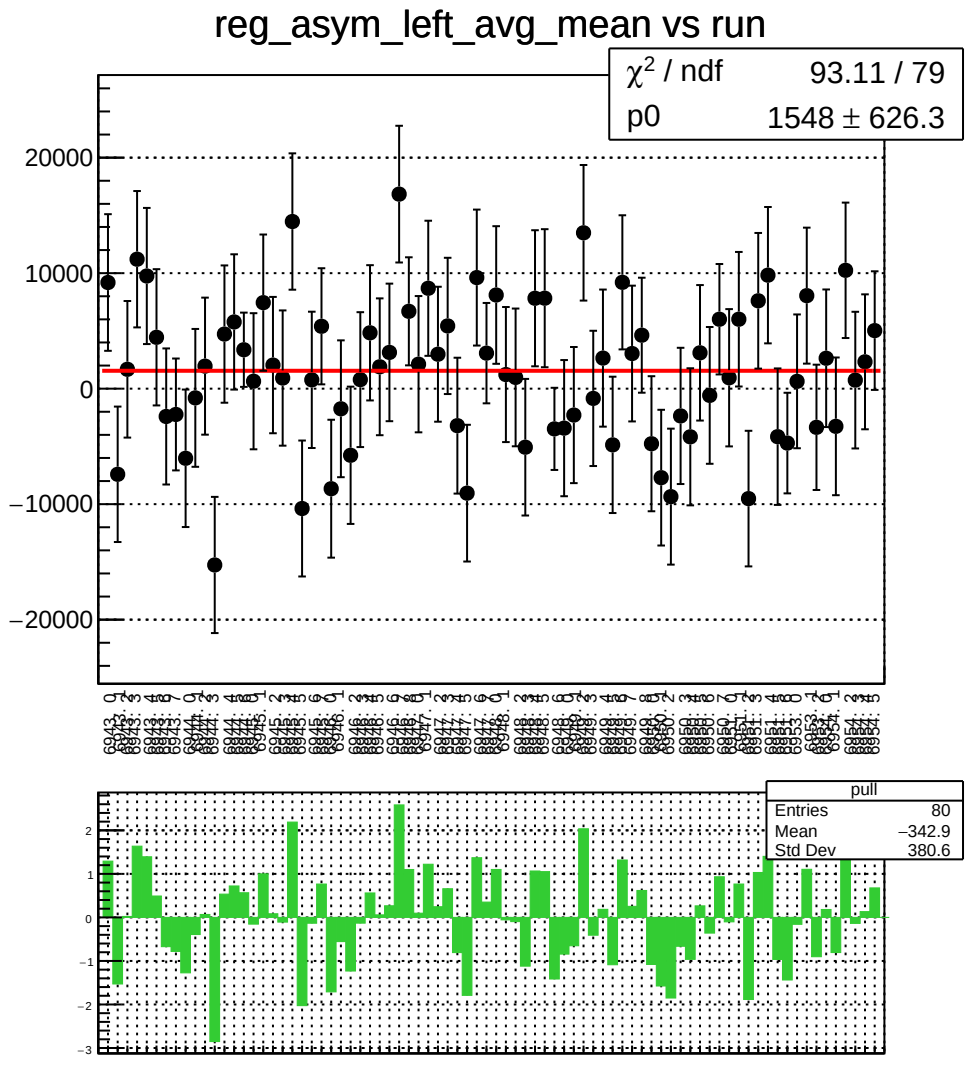

pull1D
Entries 80
Mean −0.045
Std Dev 0.9708

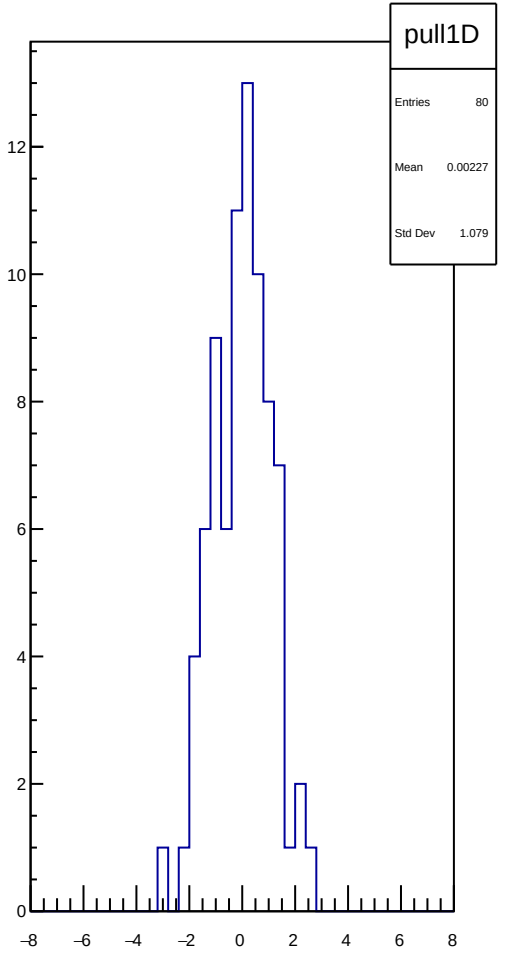

asym_dsr_correction_rms vs run
χ² / ndf 1.784e+05 / 79
p0 2.335 ± 0.001962
6
5
4
3
2
1

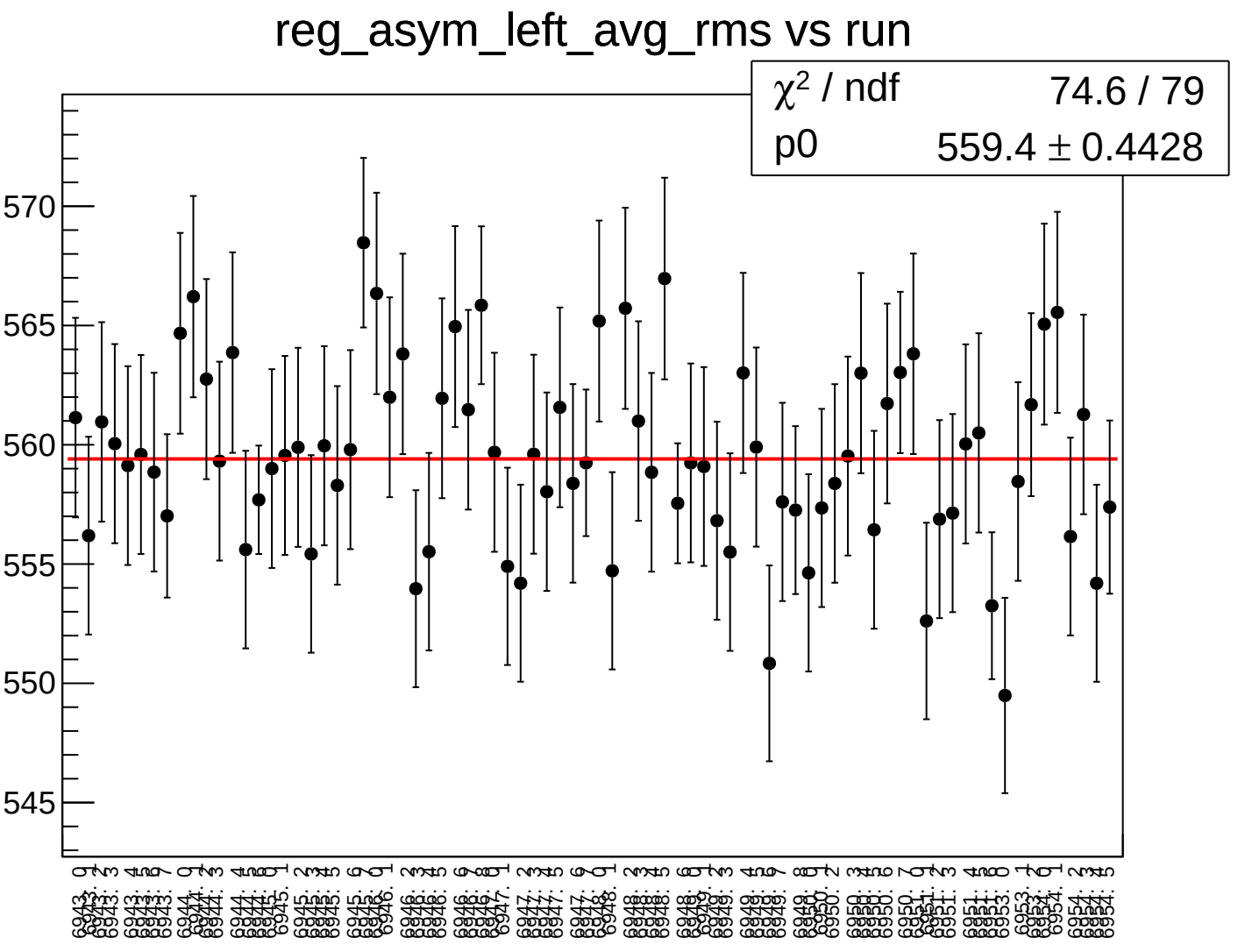

asym_dsr_mean vs run
χ² / ndf 72.17 / 79
p0 −78.34 ± 154.5
4000
2000
0
−2000
−4000
pull
Entries 80
Mean −70.48
Std Dev 101.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

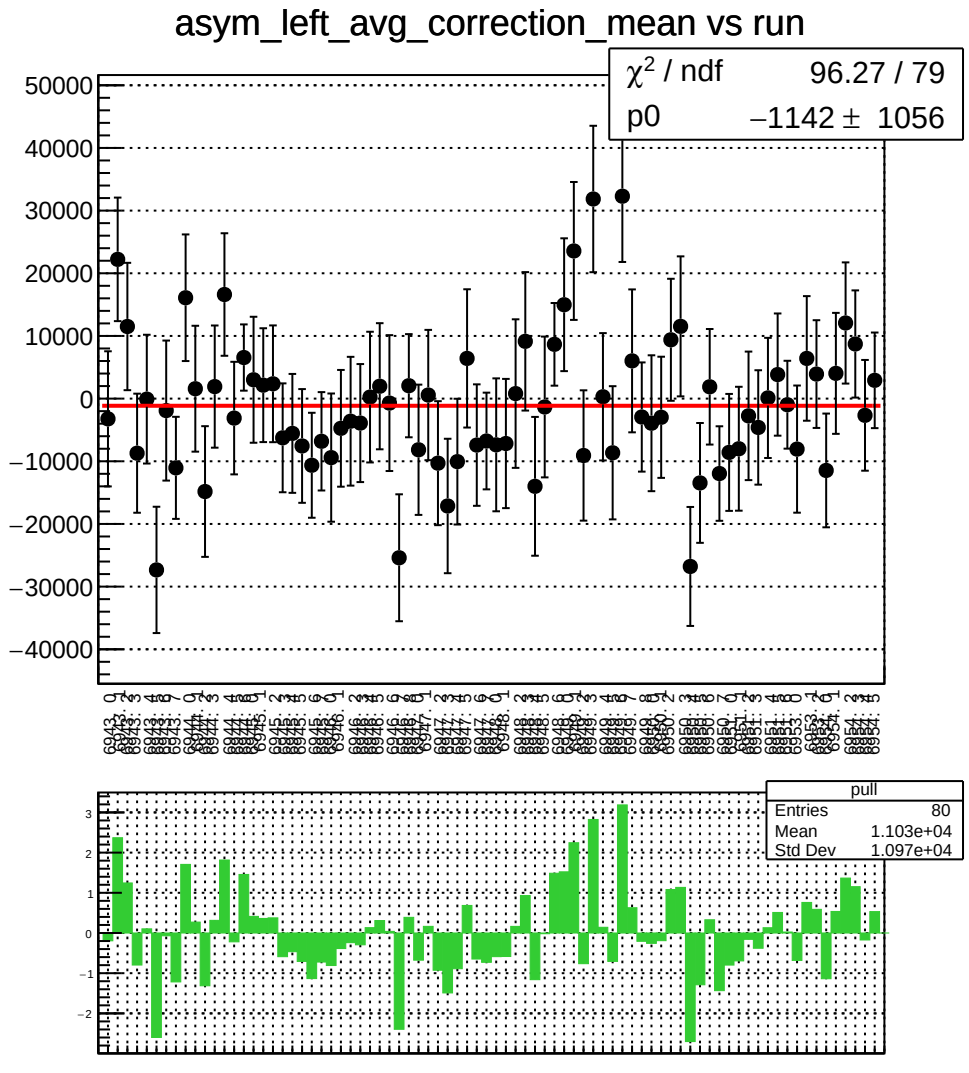

pull1D
Entries 80
Mean −0.01071
Std Dev 0.9498
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

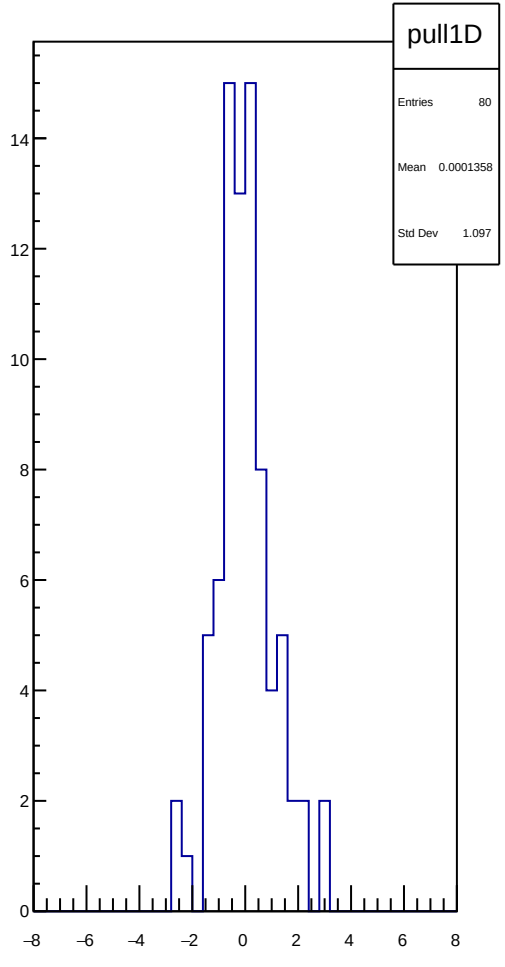

asym_dsr_rms vs run
χ^2 / ndf 305.4 / 79
p0 138 ± 0.1093
144
142
140
138
136
134
132


reg_asym_left_avg_mean vs run
χ² / ndf 93.11 / 79
p0 1548 ± 626.3
20000
10000
0
−10000
−20000
pull
Entries 80
Mean −342.9
Std Dev 380.6
2
1
0
−1
−2
−3

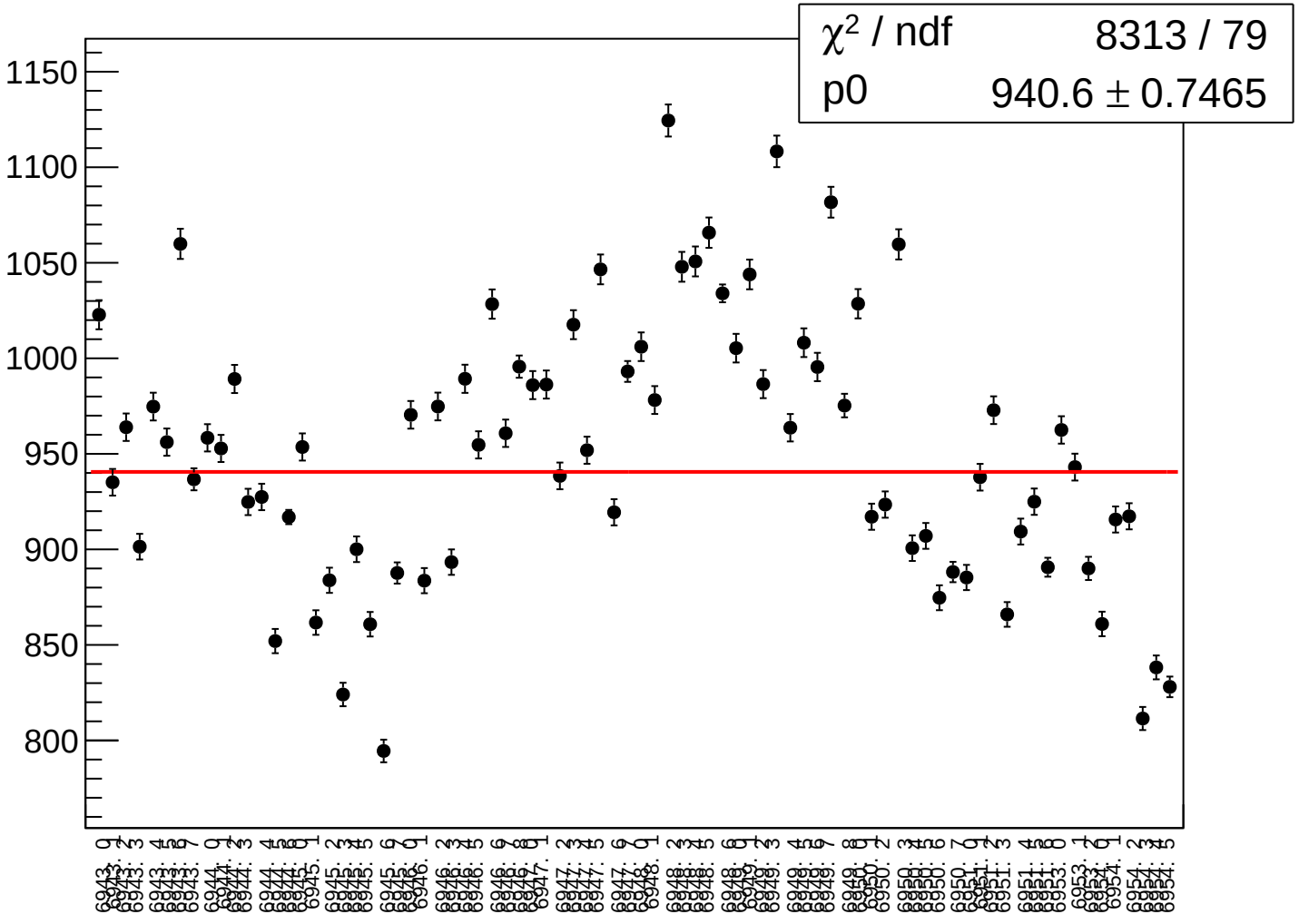

pull1D
Entries 80
Mean 0.00227
Std Dev 1.079
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

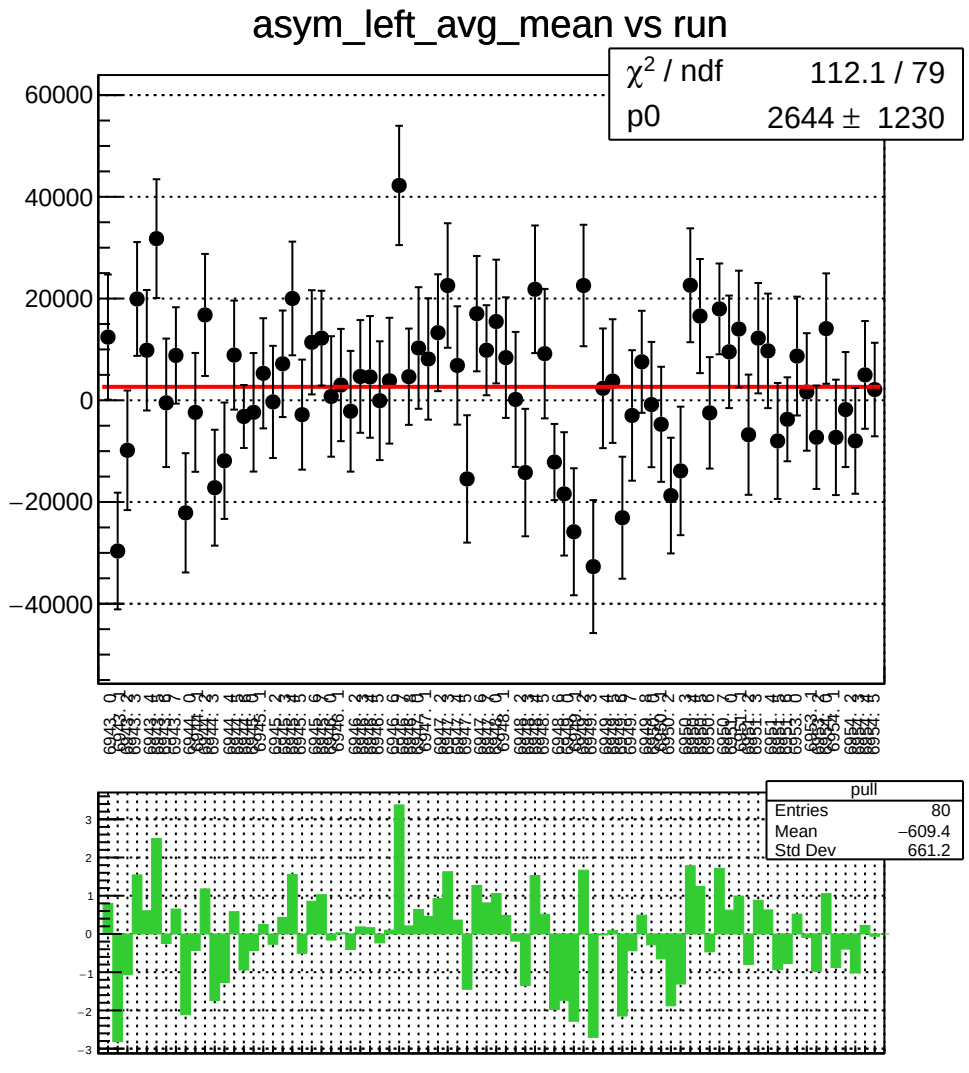

reg_asym_left_avg_rms vs run
χ² / ndf 74.6 / 79
p0 559.4 ± 0.4428
570
565
560
555
550
545

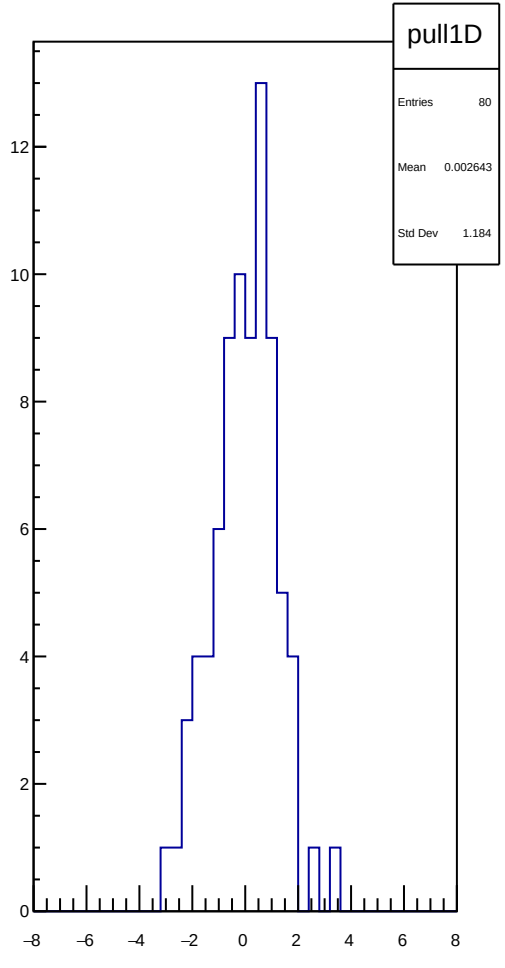

asym_left_avg_correction_mean vs run
χ² / ndf 96.27 / 79
p0 −1142 ± 1056
pull
Entries 80
Mean 1.103e+04
Std Dev 1.097e+04

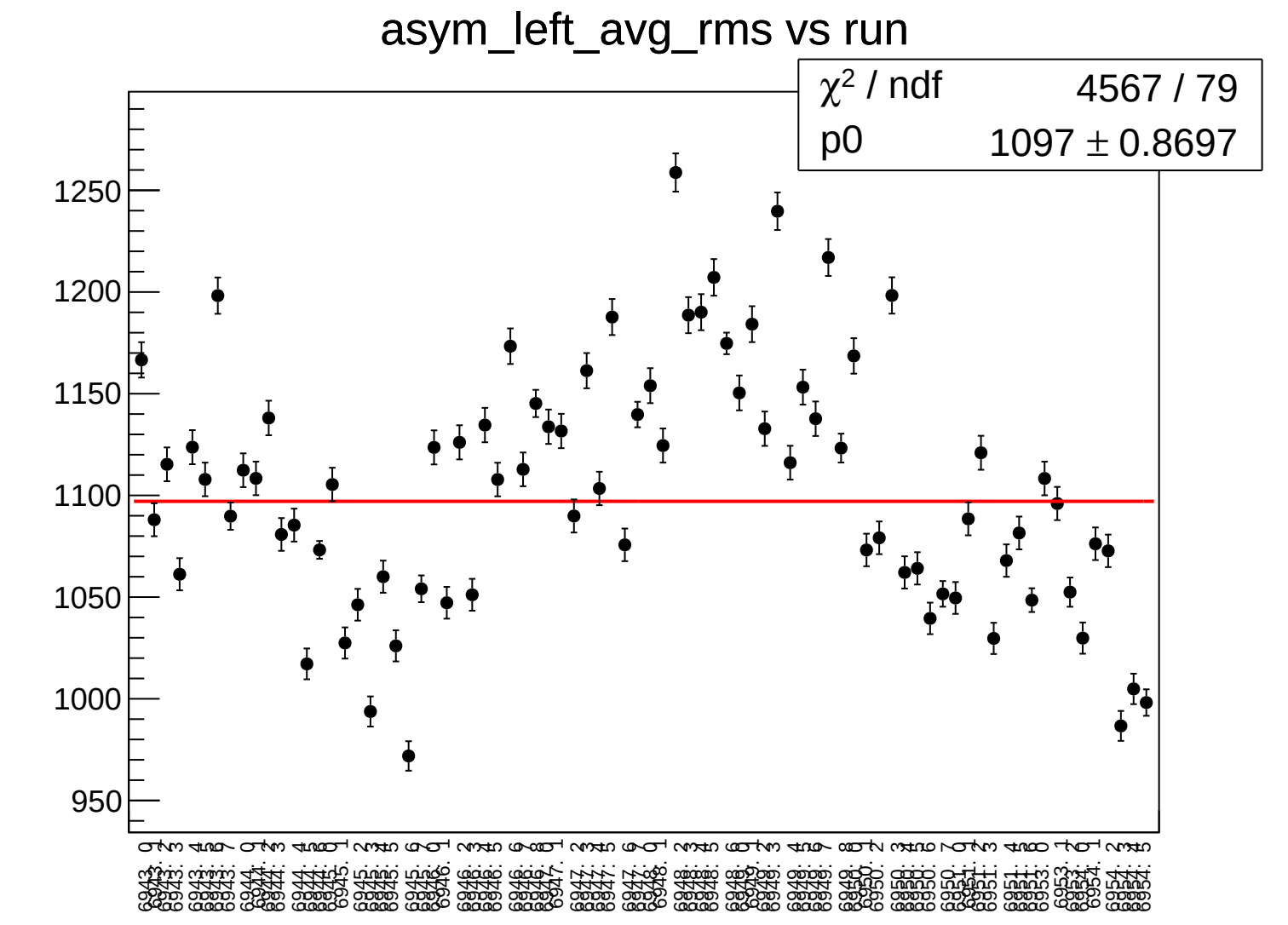

pull1D
Entries 80
Mean 0.0001358
Std Dev 1.097

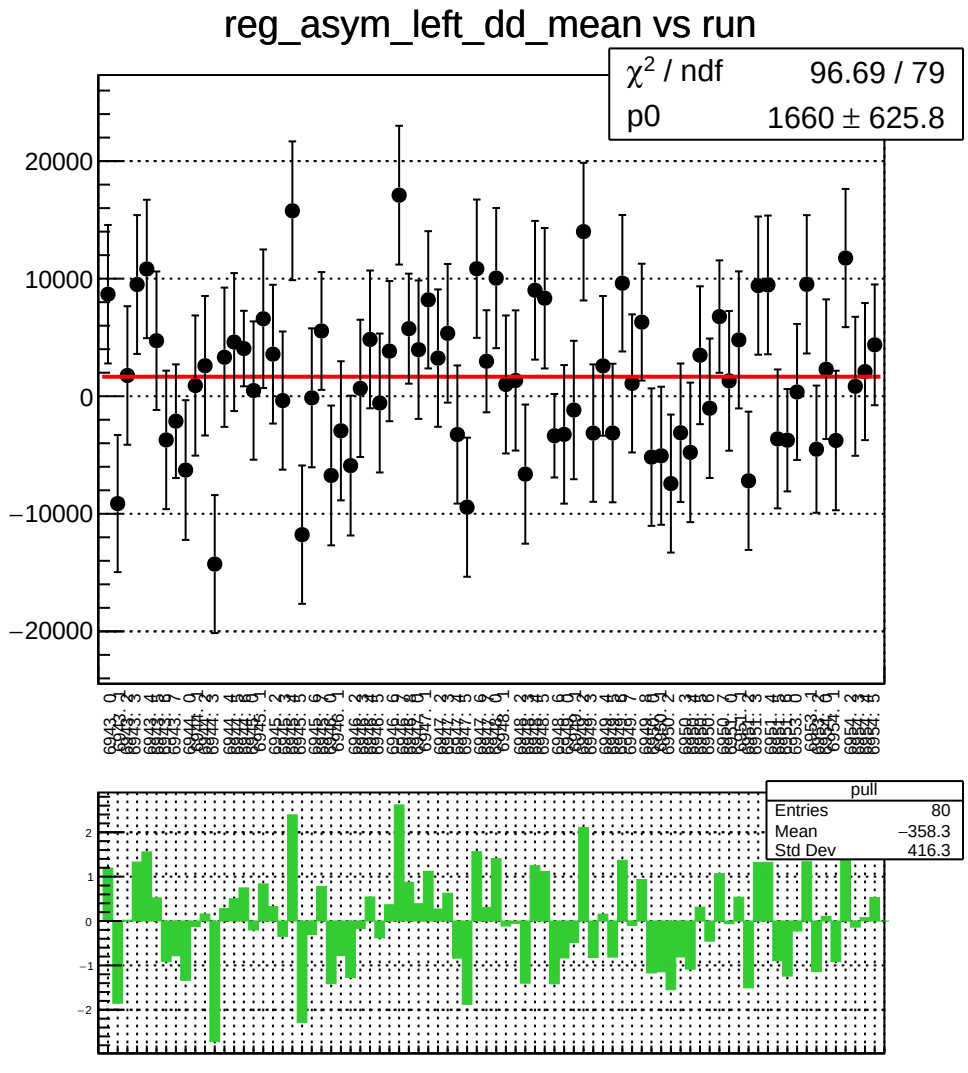
asym_left_avg_correction_rms vs run

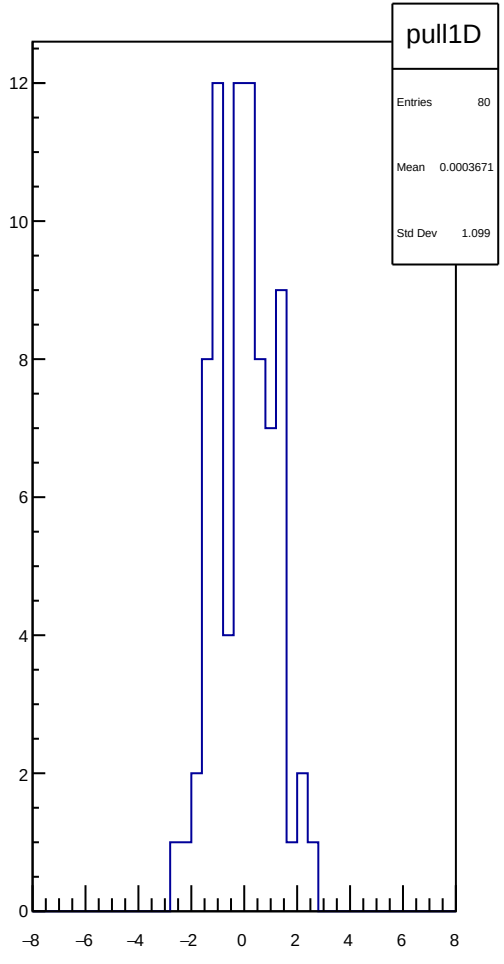


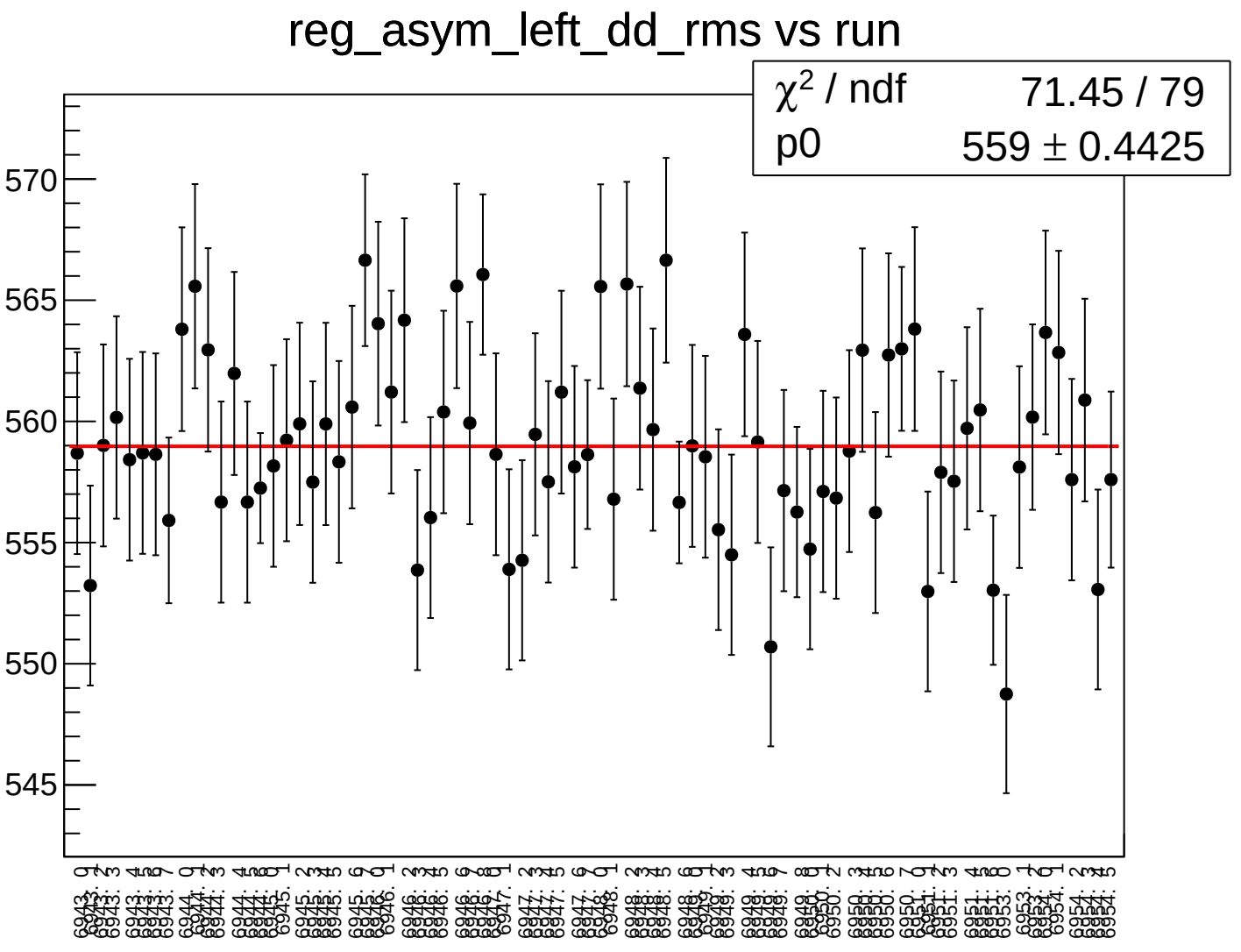

asym_left_avg_mean vs run
χ² / ndf 112.1 / 79
p0 2644 ± 1230
60000
40000
20000
0
−20000
−40000
pull
Entries 80
Mean −609.4
Std Dev 661.2
3
2
1
0
−1
−2
−3

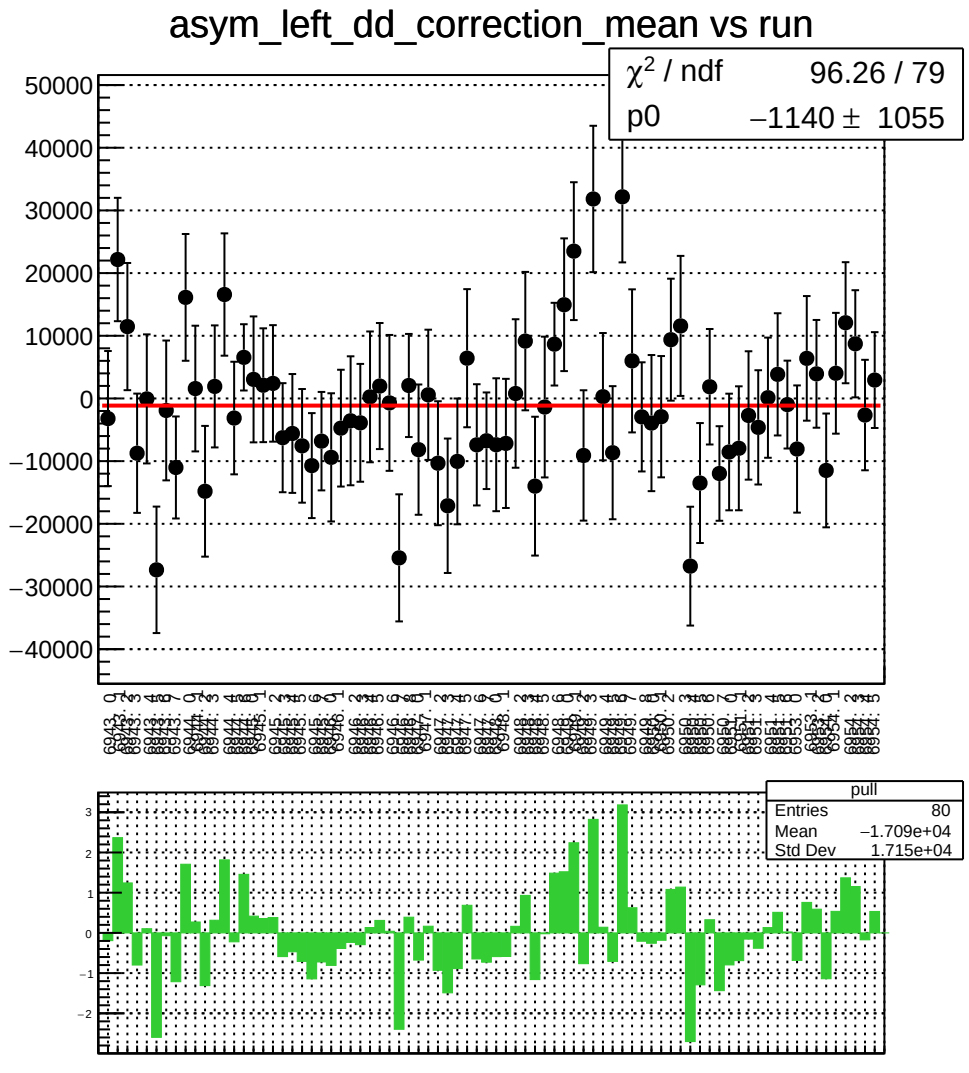

pull1D
Entries 80
Mean 0.002643
Std Dev 1.184
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

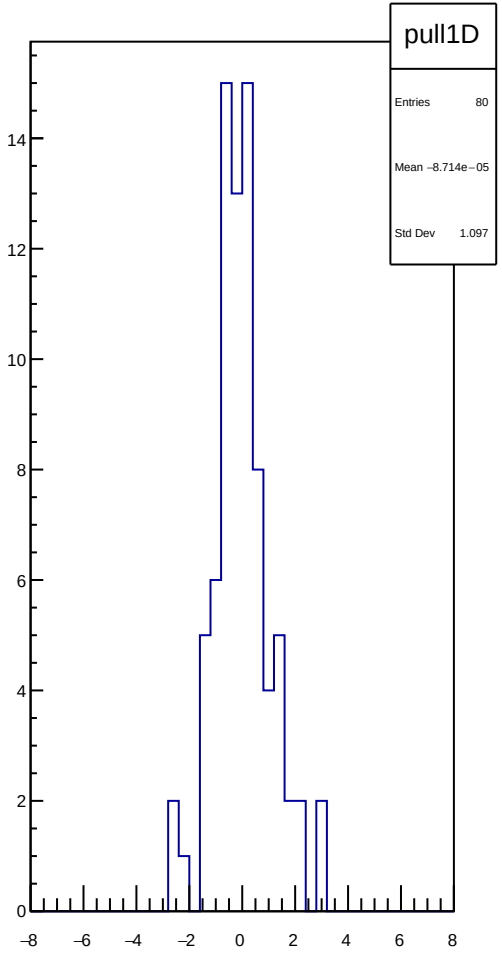

asym_left_avg_rms vs run
χ² / ndf 4567 / 79
p0 1097 ± 0.8697
1250
1200
1150
1100
1050
1000
950

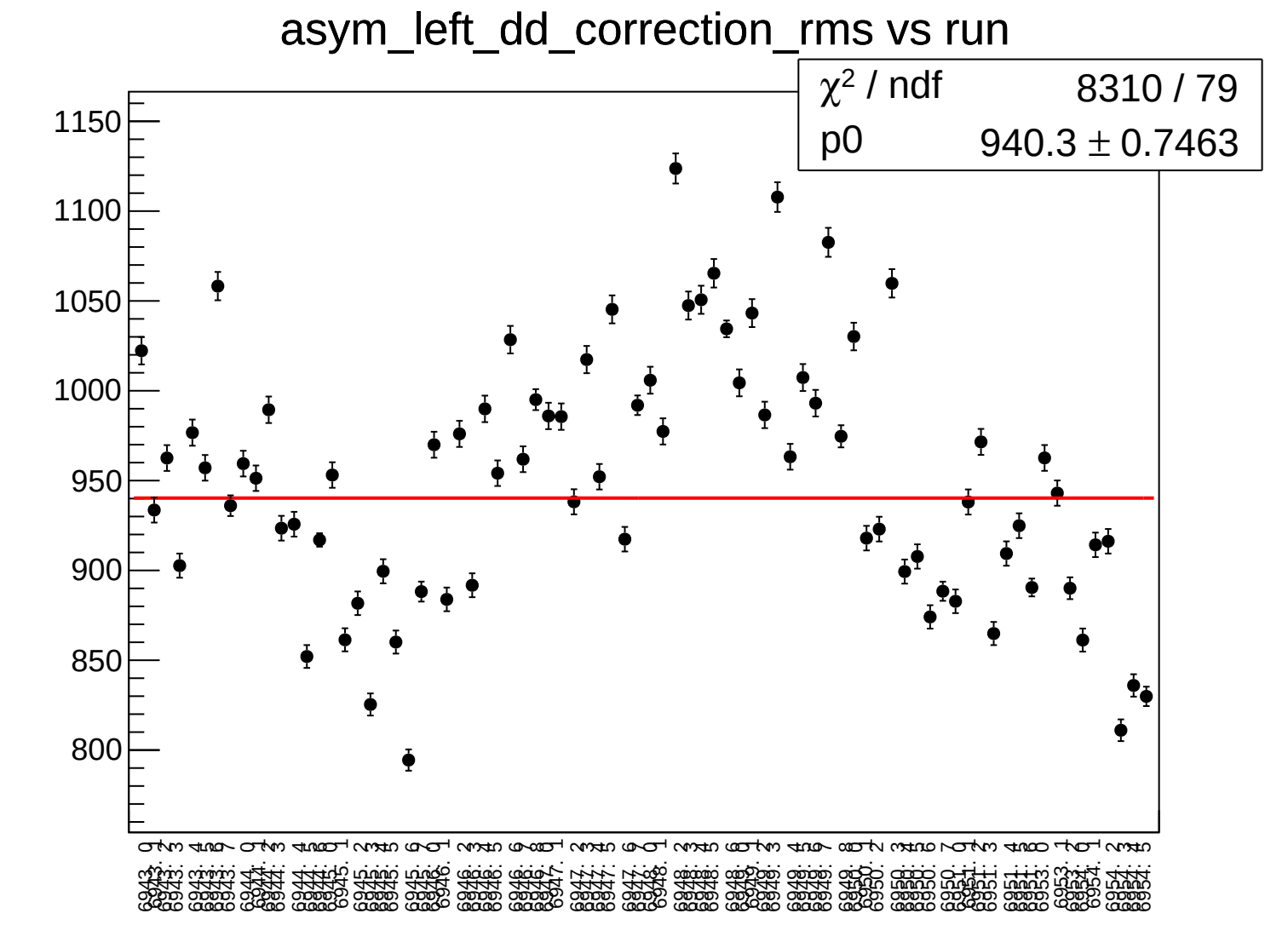

reg_asym_left_dd_mean vs run
χ² / ndf 96.69 / 79
p0 1660 ± 625.8
20000
10000
0
−10000
−20000
pull
Entries 80
Mean −358.3
Std Dev 416.3
2
1
0
−1
−2

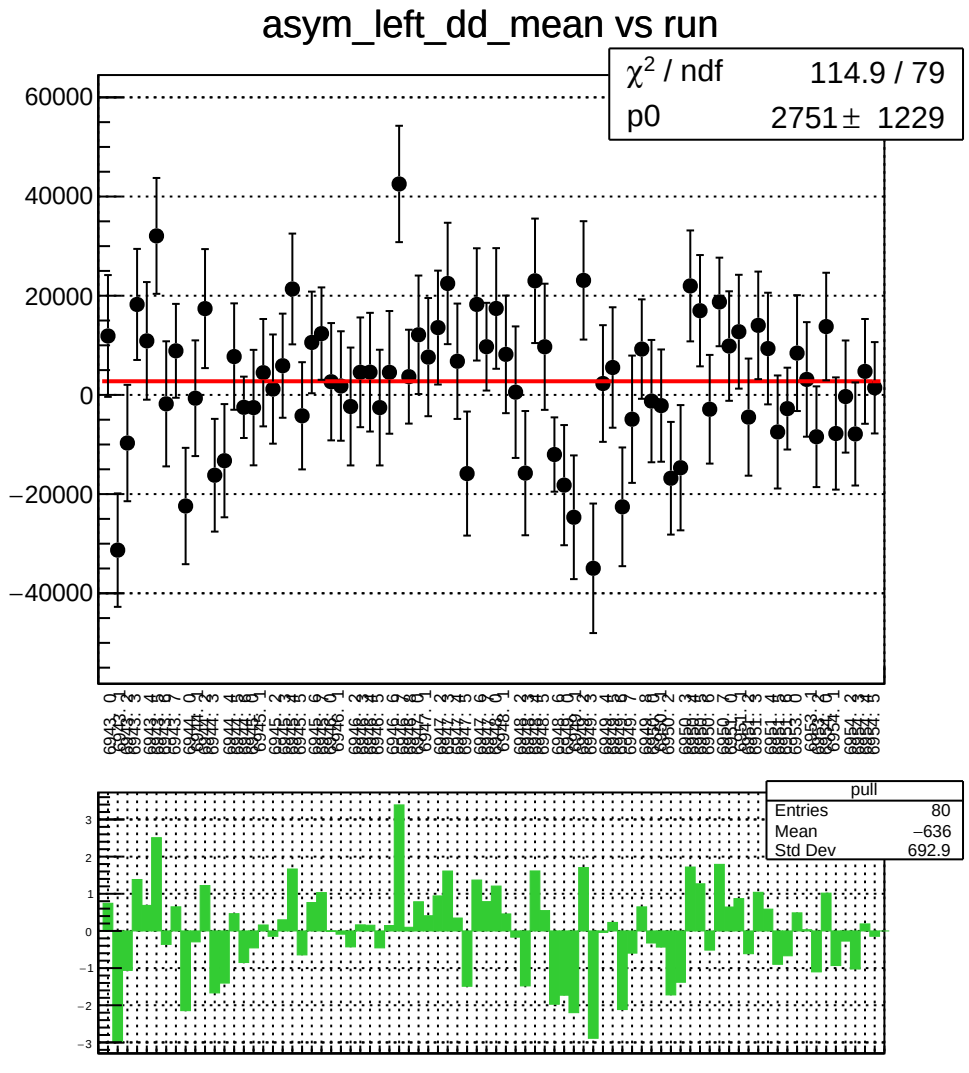

pull1D
Entries 80
Mean 0.0003671
Std Dev 1.099
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

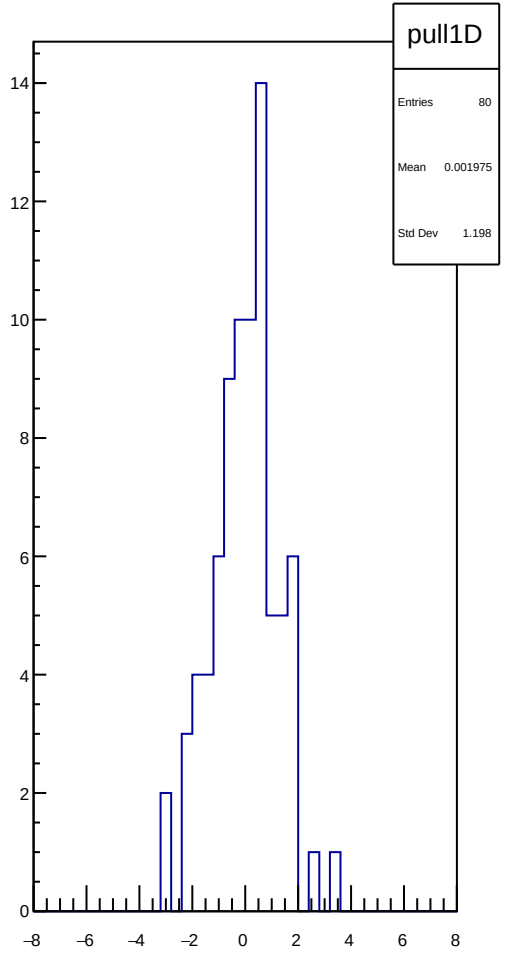

reg_asym_left_dd_rms vs run
χ^2 / ndf 71.45 / 79
p0 559 ± 0.4425
570
565
560
555
550
545

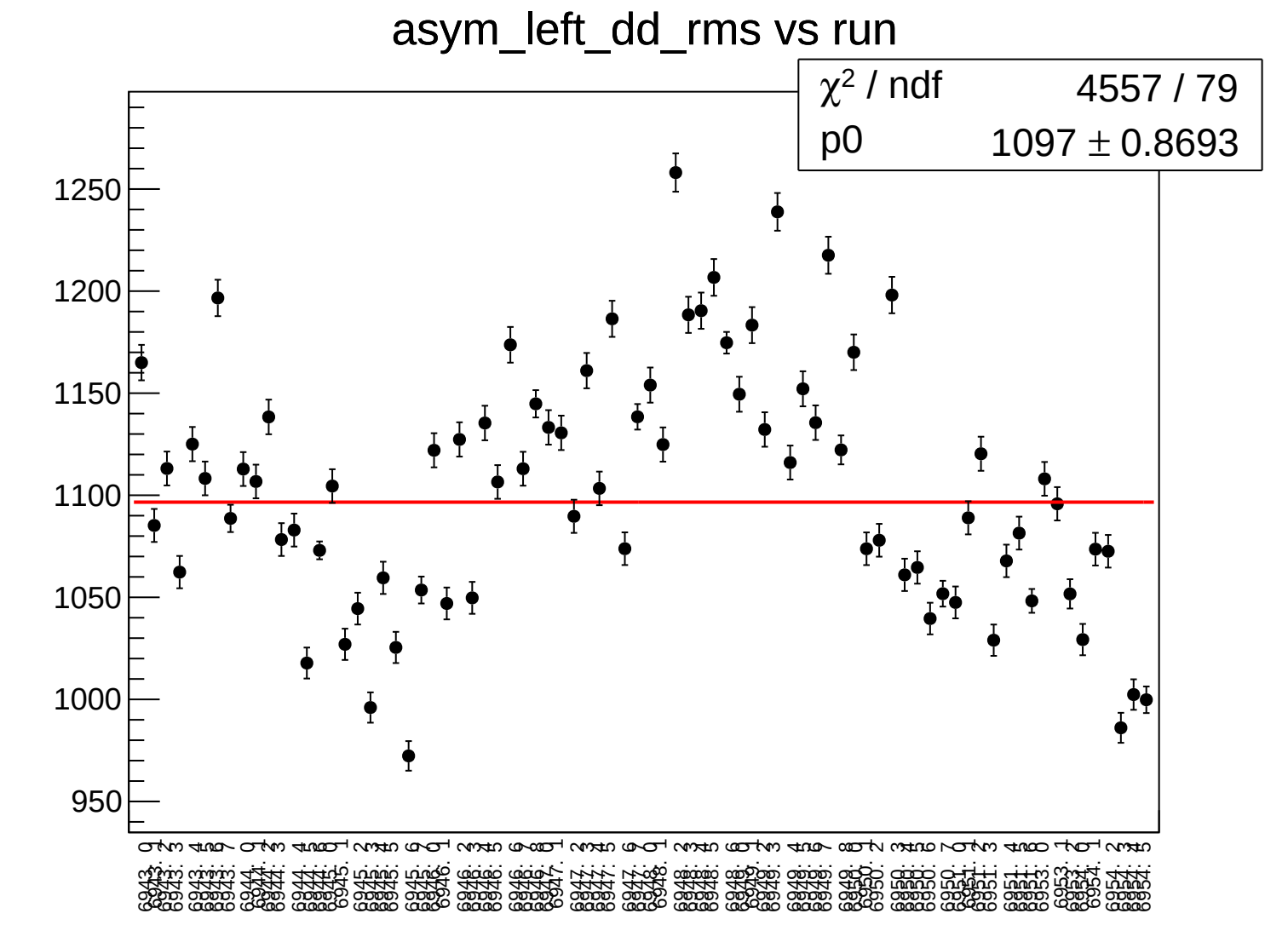

asym_left_dd_correction_mean vs run
χ² / ndf 96.26 / 79
p0 −1140 ± 1055
pull
Entries 80
Mean −1.709e+04
Std Dev 1.715e+04

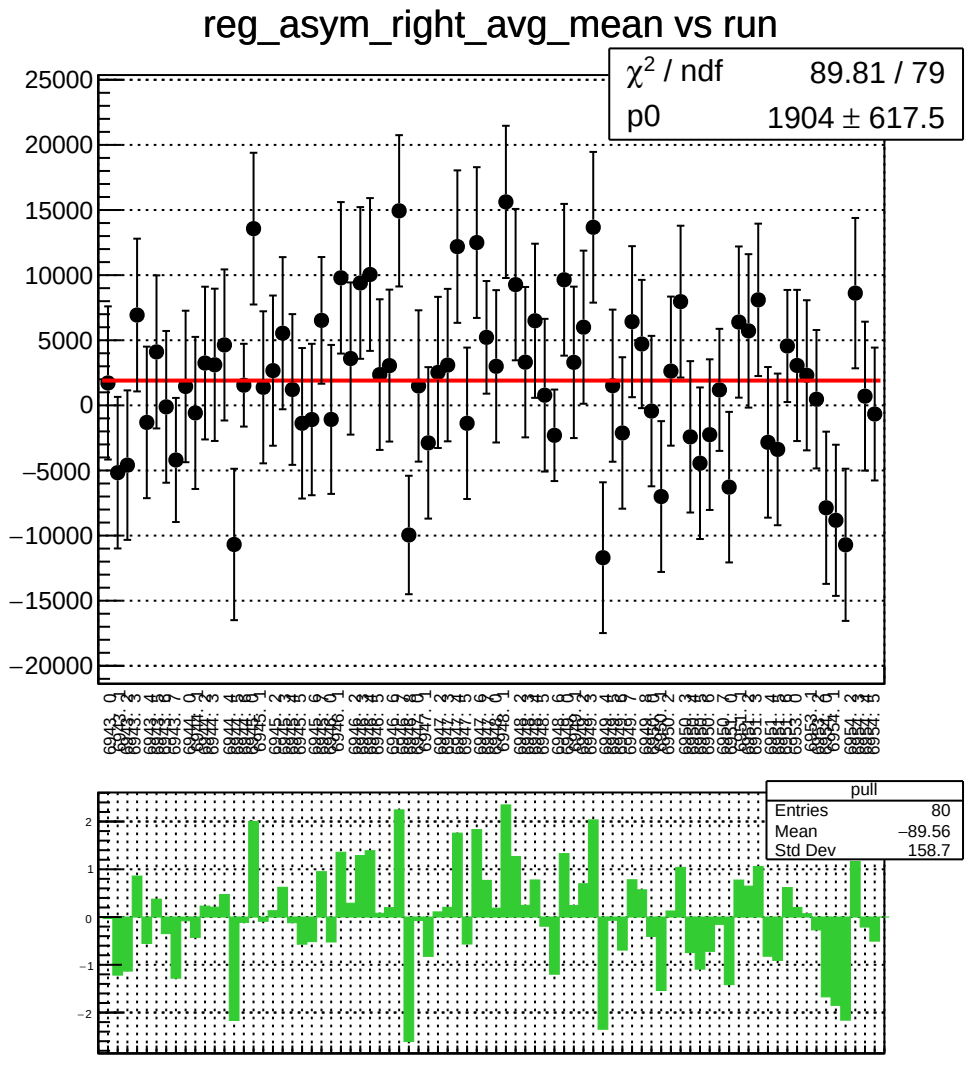

pull1D
Entries 80
Mean −8.714e−05
Std Dev 1.097

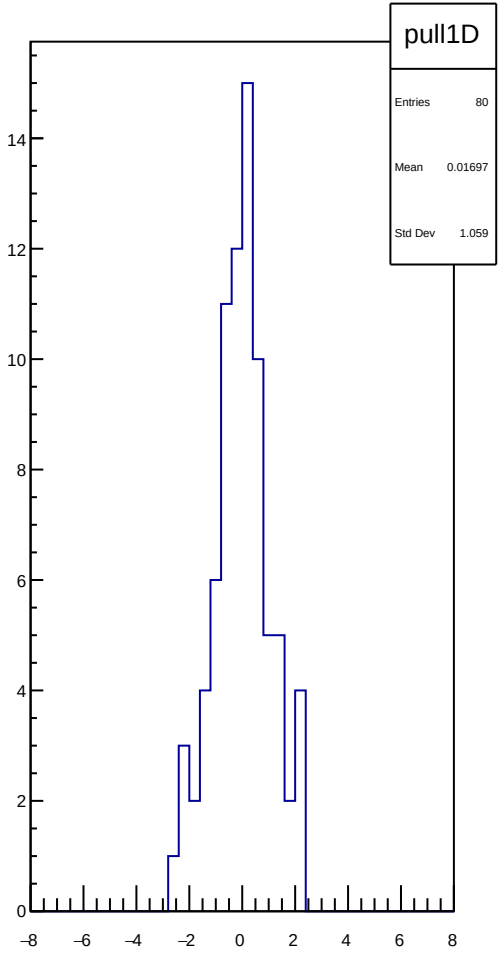

asym_left_dd_correction_rms vs run
χ² / ndf 8310 / 79
p0 940.3 ± 0.7463
1150
1100
1050
1000
950
900
850
800

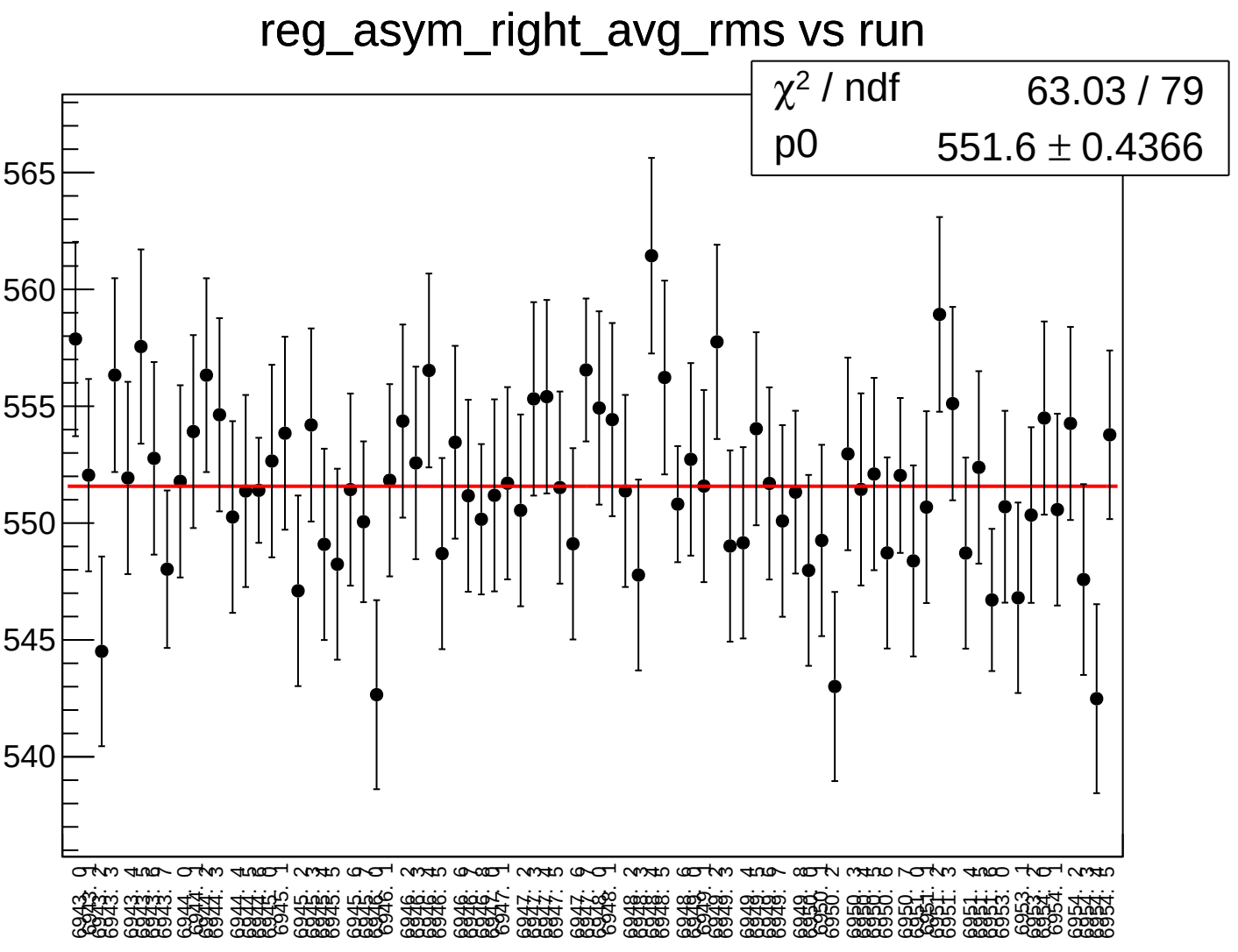

asym_left_dd_mean vs run
χ² / ndf 114.9 / 79
p0 2751 ± 1229
60000
40000
20000
0
−20000
−40000
pull
Entries 80
Mean −636
Std Dev 692.9
3
2
1
0
−1
−2
−3

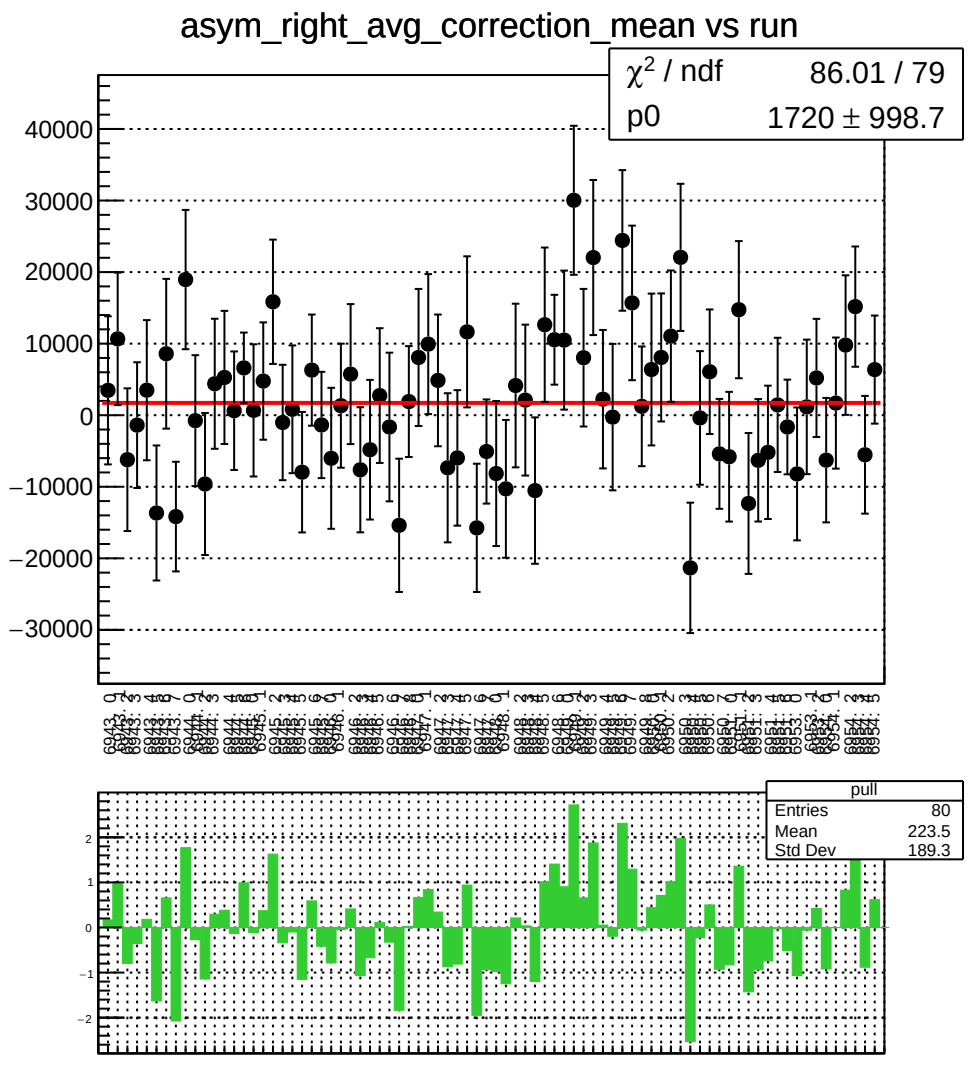

pull1D
Entries 80
Mean 0.001975
Std Dev 1.198
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

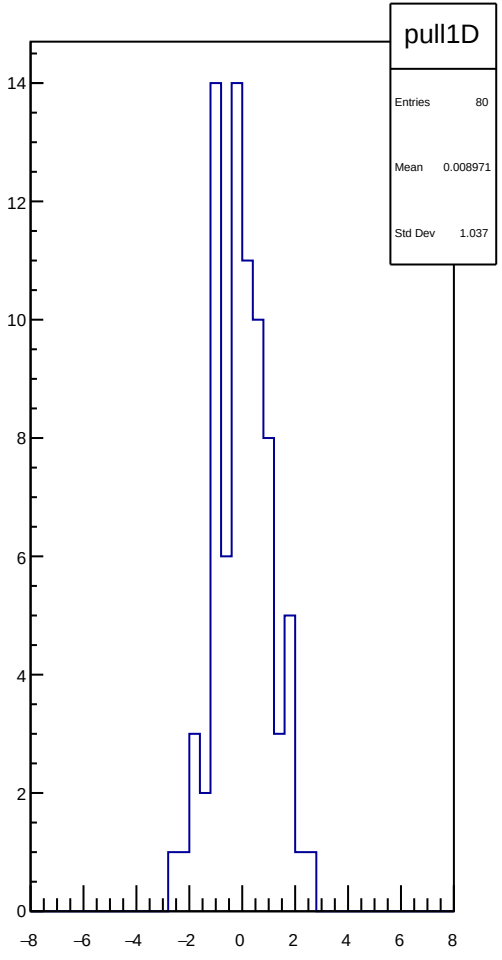

asym_left_dd_rms vs run
χ² / ndf 4557 / 79
p0 1097 ± 0.8693
1250
1200
1150
1100
1050
1000
950

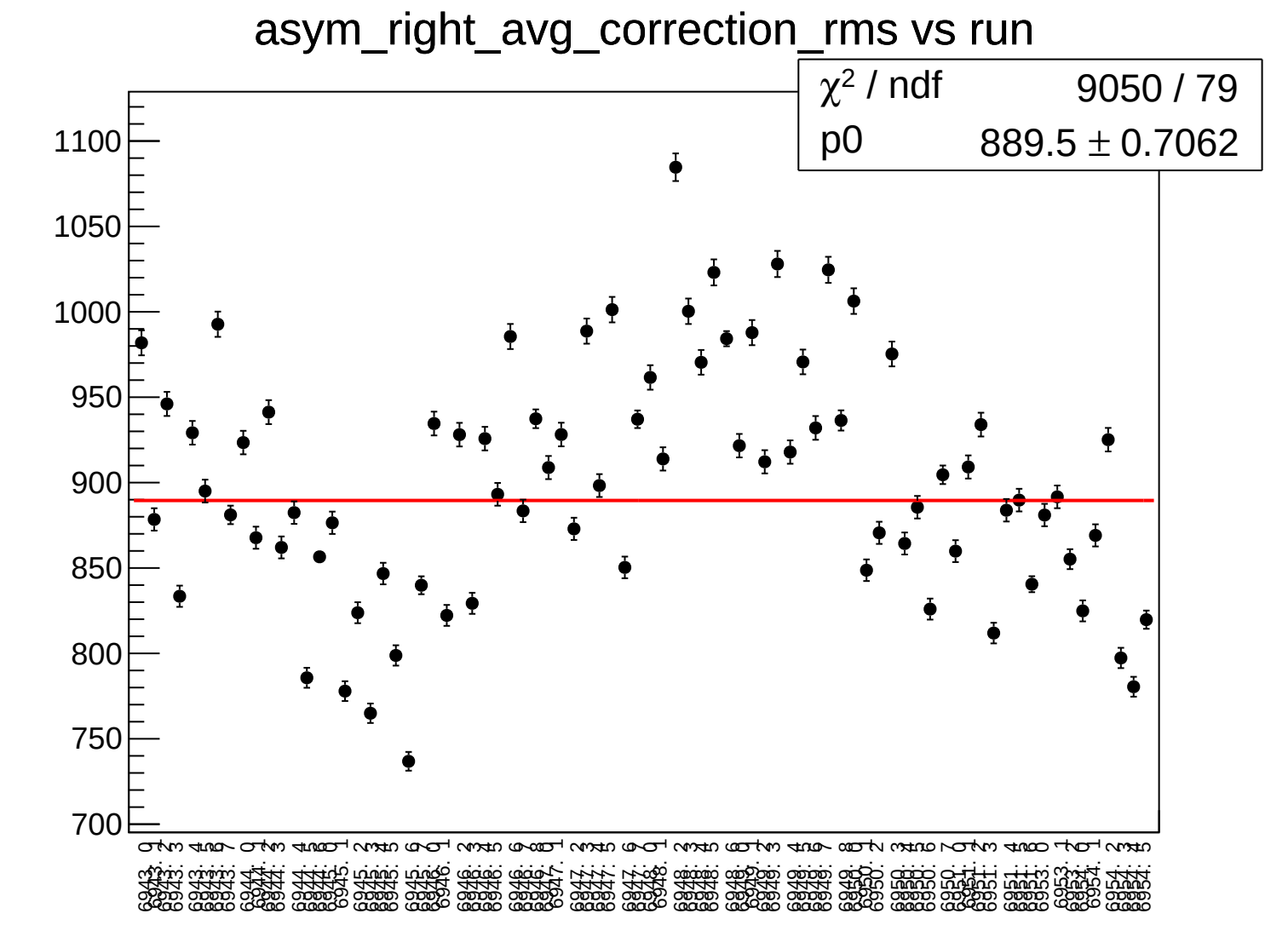

reg_asym_right_avg_mean vs run
χ^2 / ndf 89.81 / 79
p0 1904 ± 617.5
pull
Entries 80
Mean −89.56
Std Dev 158.7

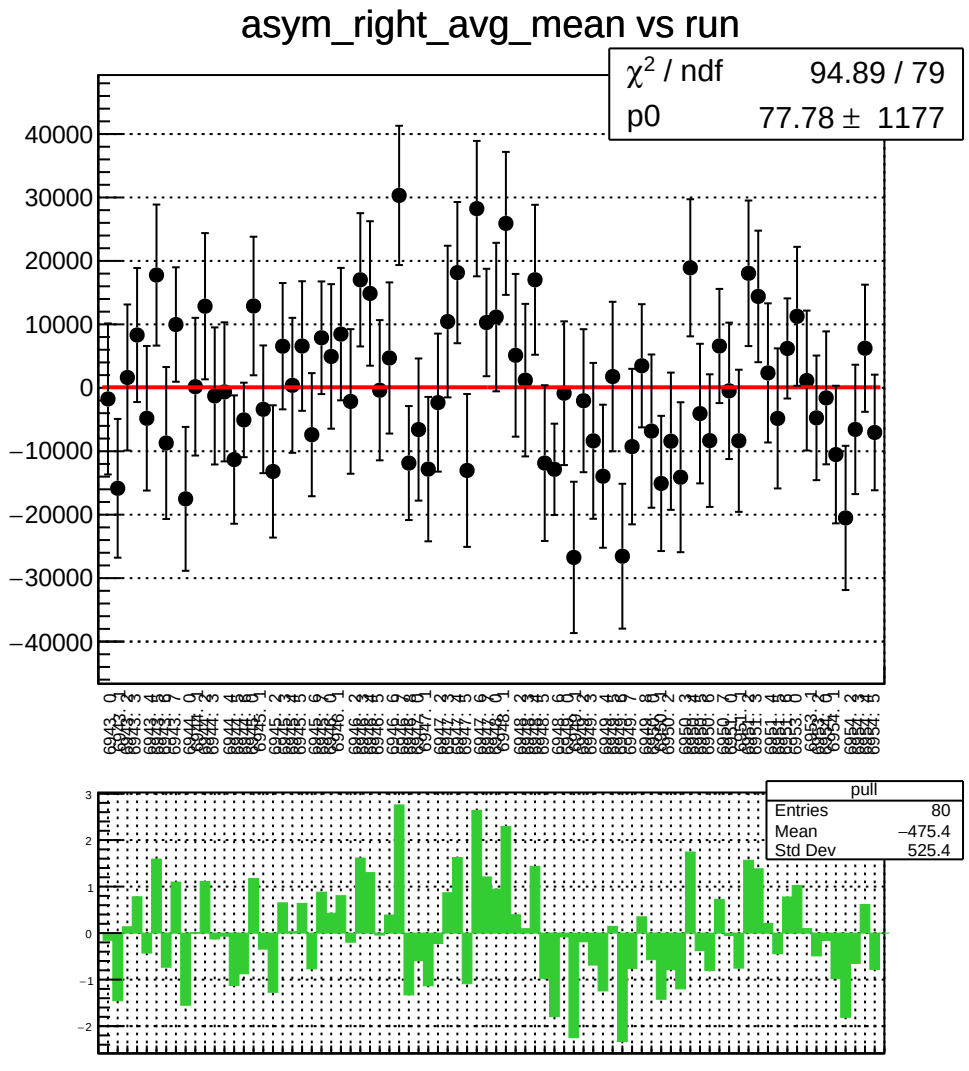

pull1D
Entries 80
Mean 0.01697
Std Dev 1.059

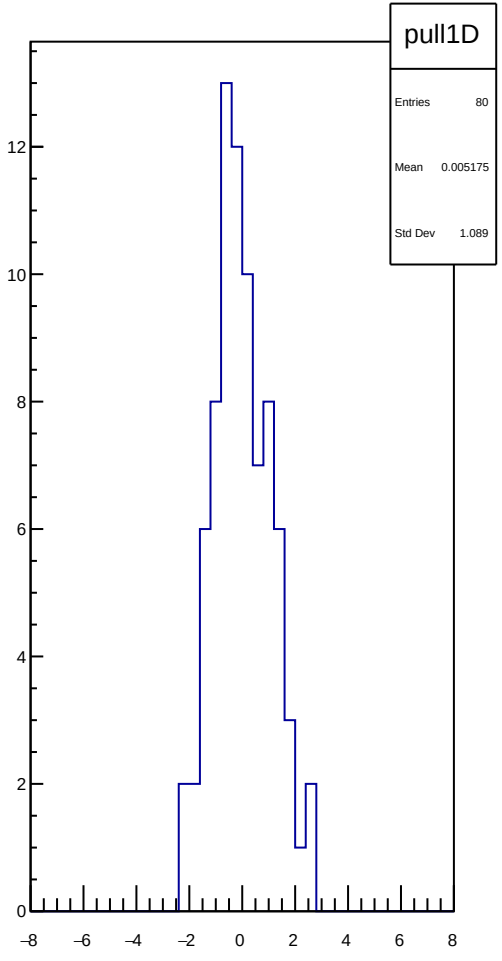

reg_asym_right_avg_rms vs run
χ² / ndf 63.03 / 79
p0 551.6 ± 0.4366
565
560
555
550
545
540

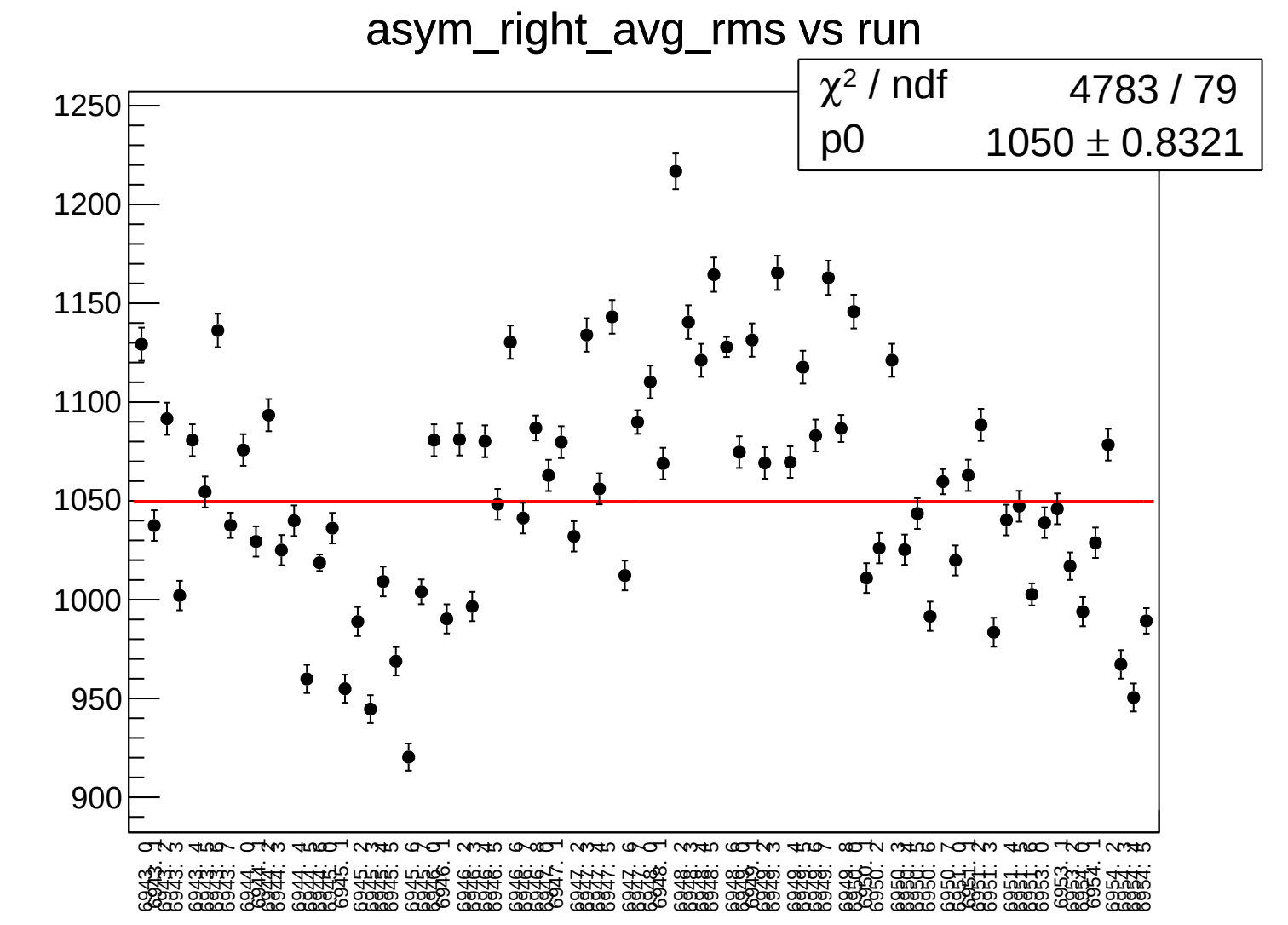

asym_right_avg_correction_mean vs run
χ² / ndf 86.01 / 79
p0 1720 ± 998.7
pull
Entries 80
Mean 223.5
Std Dev 189.3

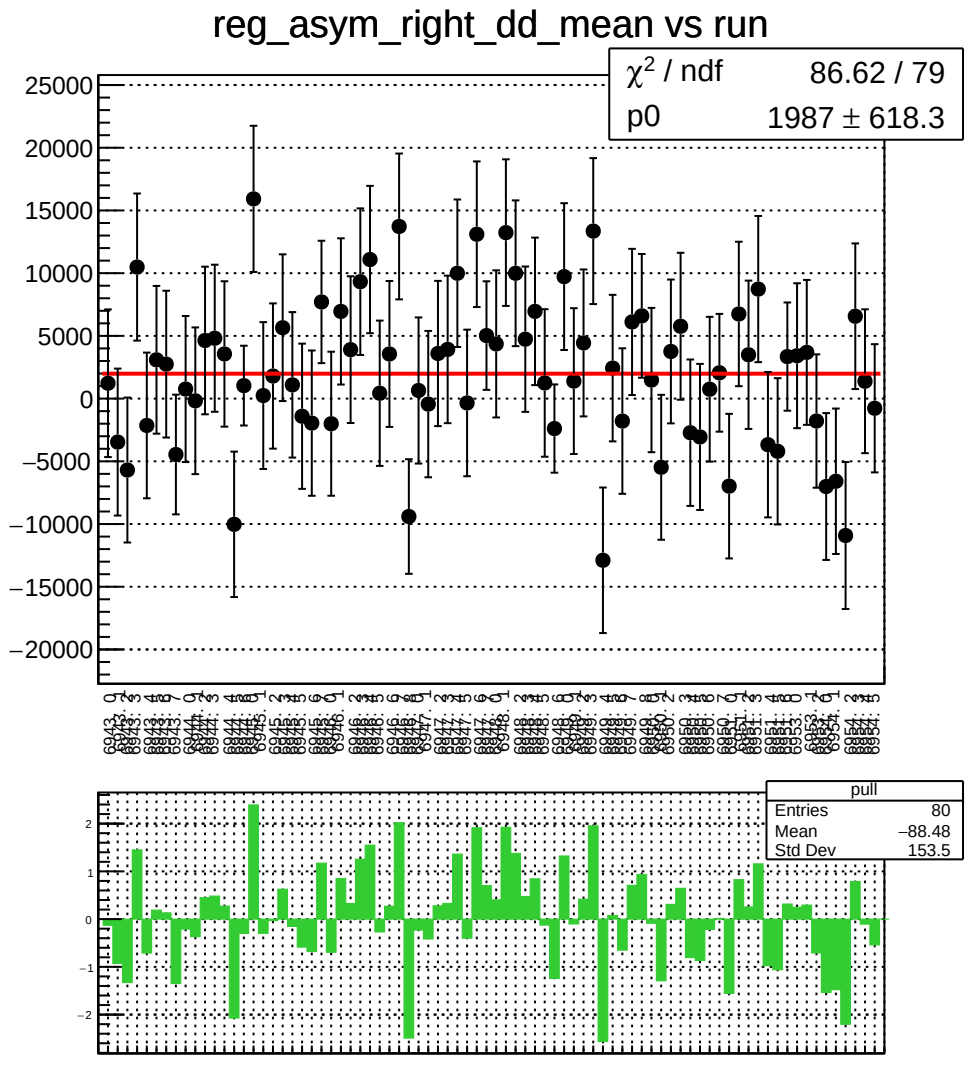

pull1D
Entries 80
Mean 0.008971
Std Dev 1.037

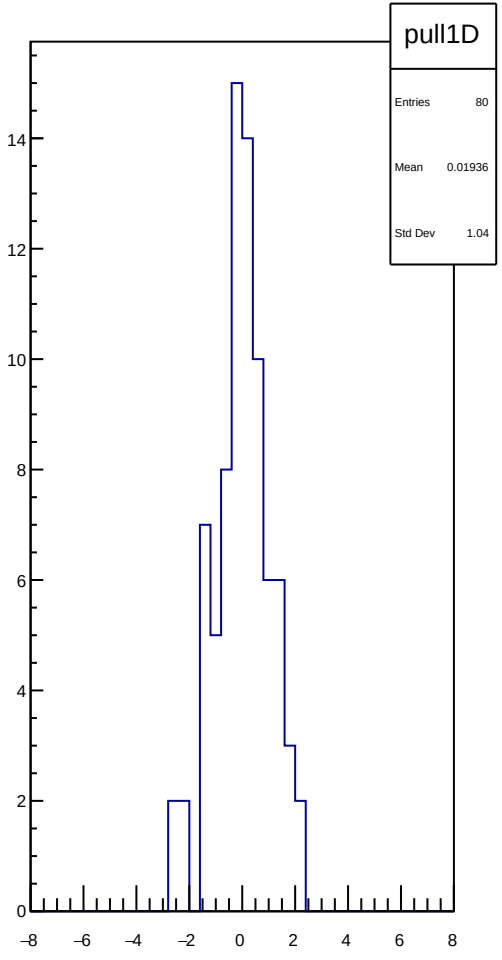

asym_right_avg_correction_rms vs run
χ² / ndf 9050 / 79
p0 889.5 ± 0.7062
1100
1050
1000
950
900
850
800
750
700

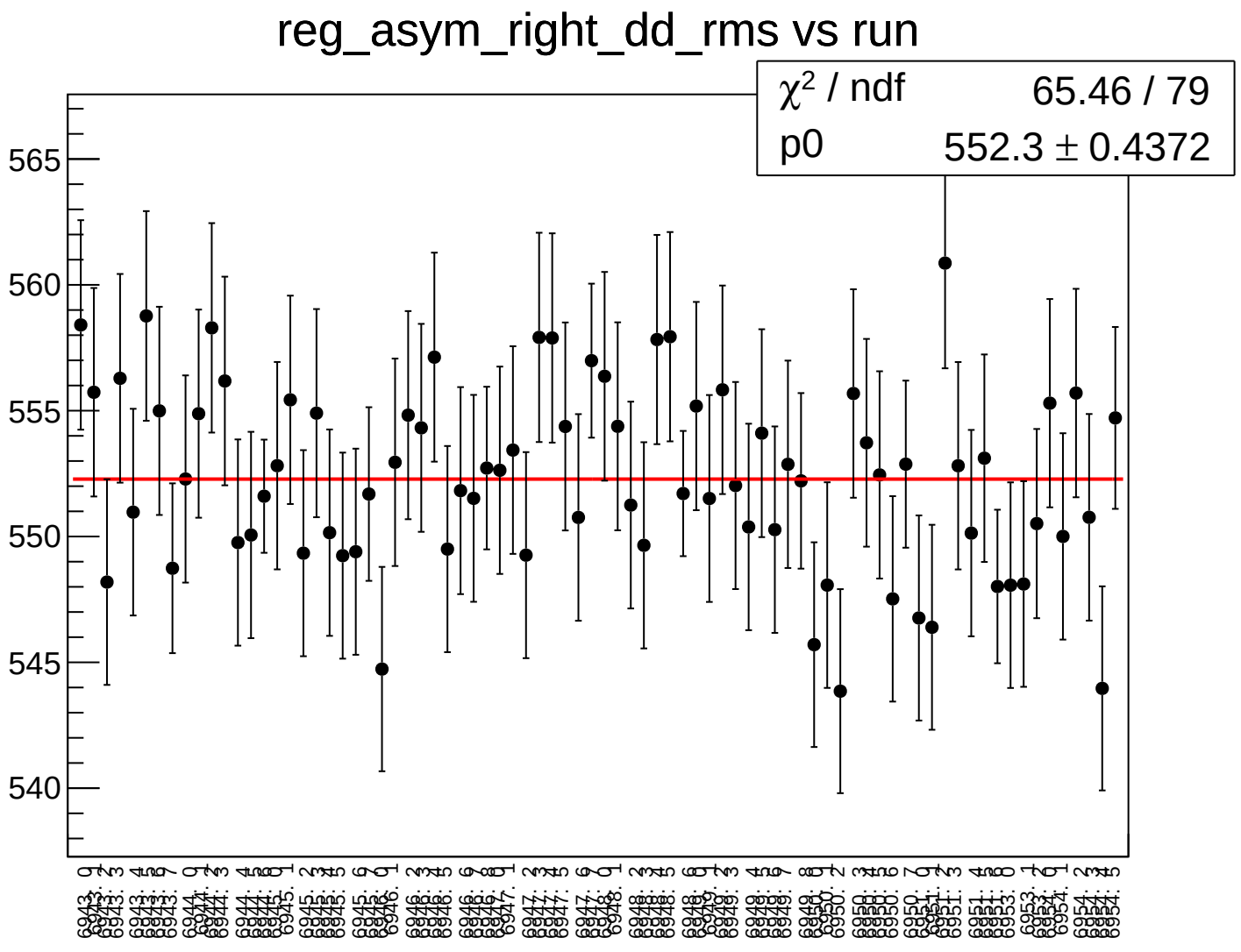

asym_right_avg_mean vs run
χ² / ndf 94.89 / 79
p0 77.78 ± 1177
pull
Entries 80
Mean −475.4
Std Dev 525.4

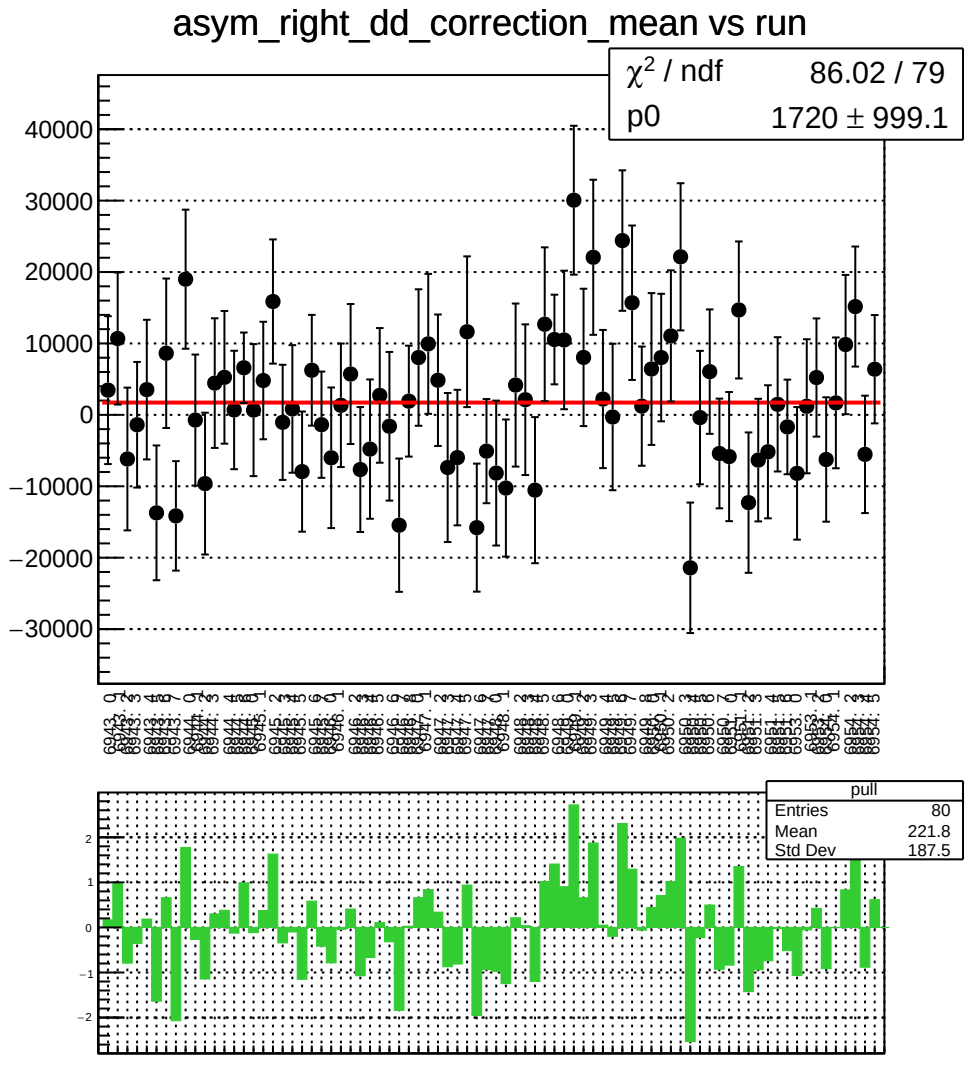

pull1D
Entries 80
Mean 0.005175
Std Dev 1.089

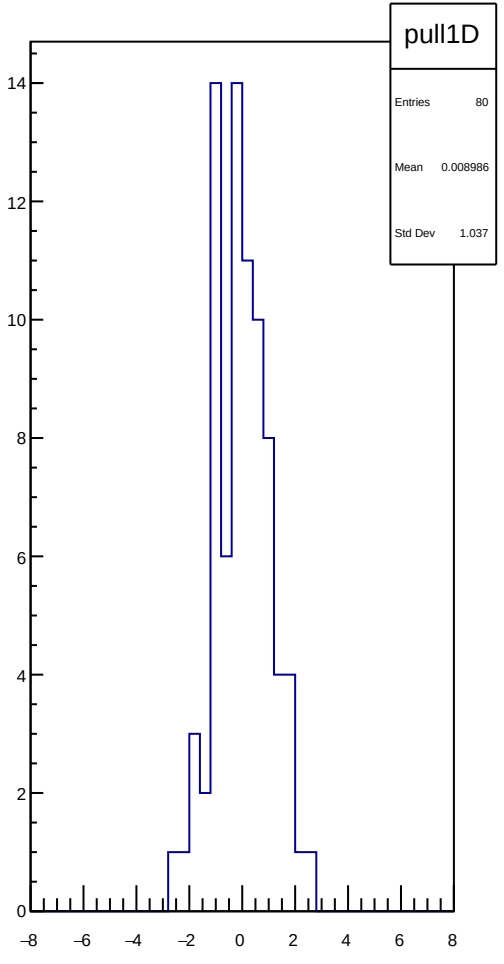

asym_right_avg_rms vs run
χ² / ndf 4783 / 79
p0 1050 ± 0.8321
1250
1200
1150
1100
1050
1000
950
900

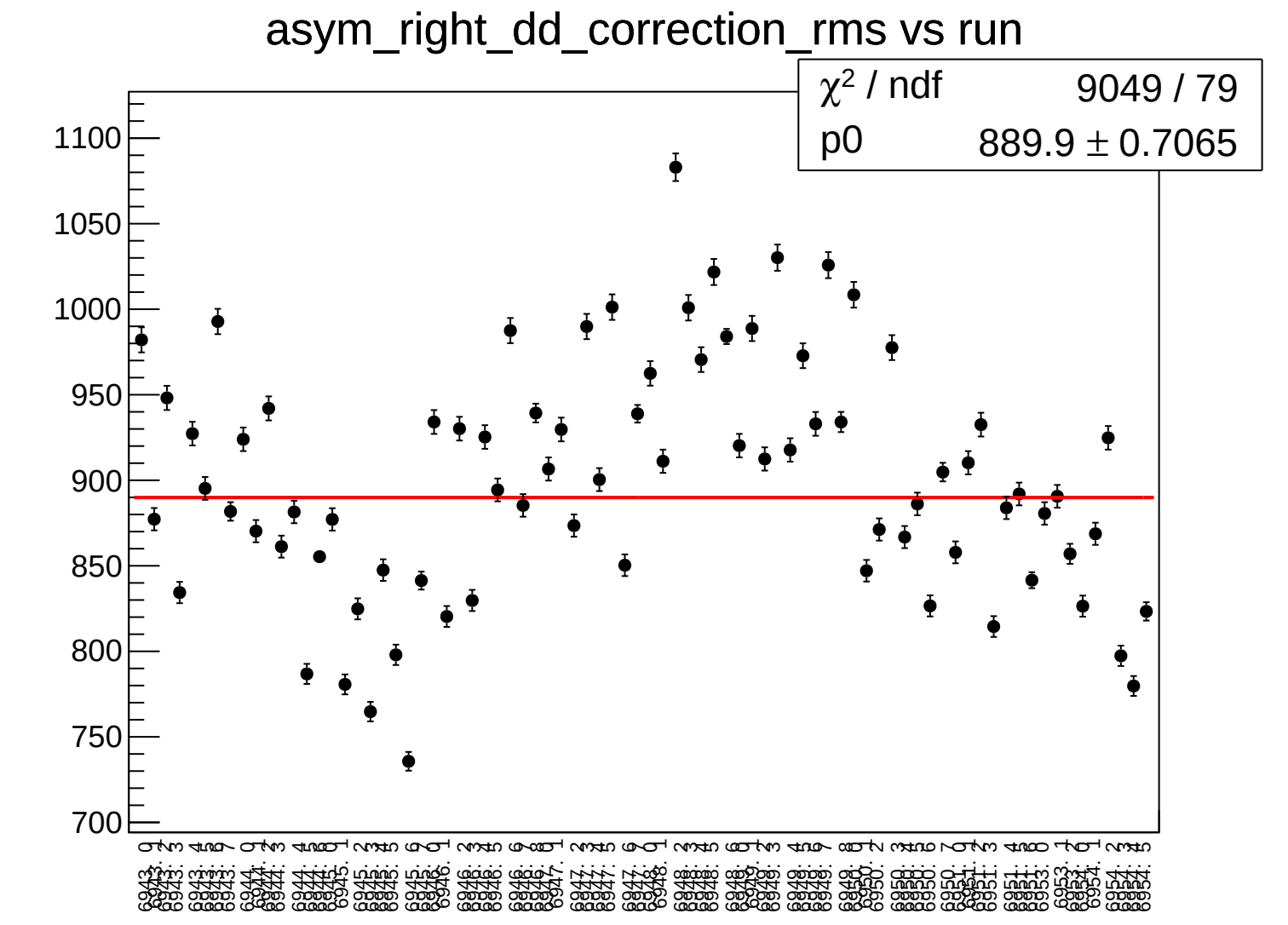

reg_asym_right_dd_mean vs run
χ² / ndf 86.62 / 79
p0 1987 ± 618.3
pull
Entries 80
Mean −88.48
Std Dev 153.5

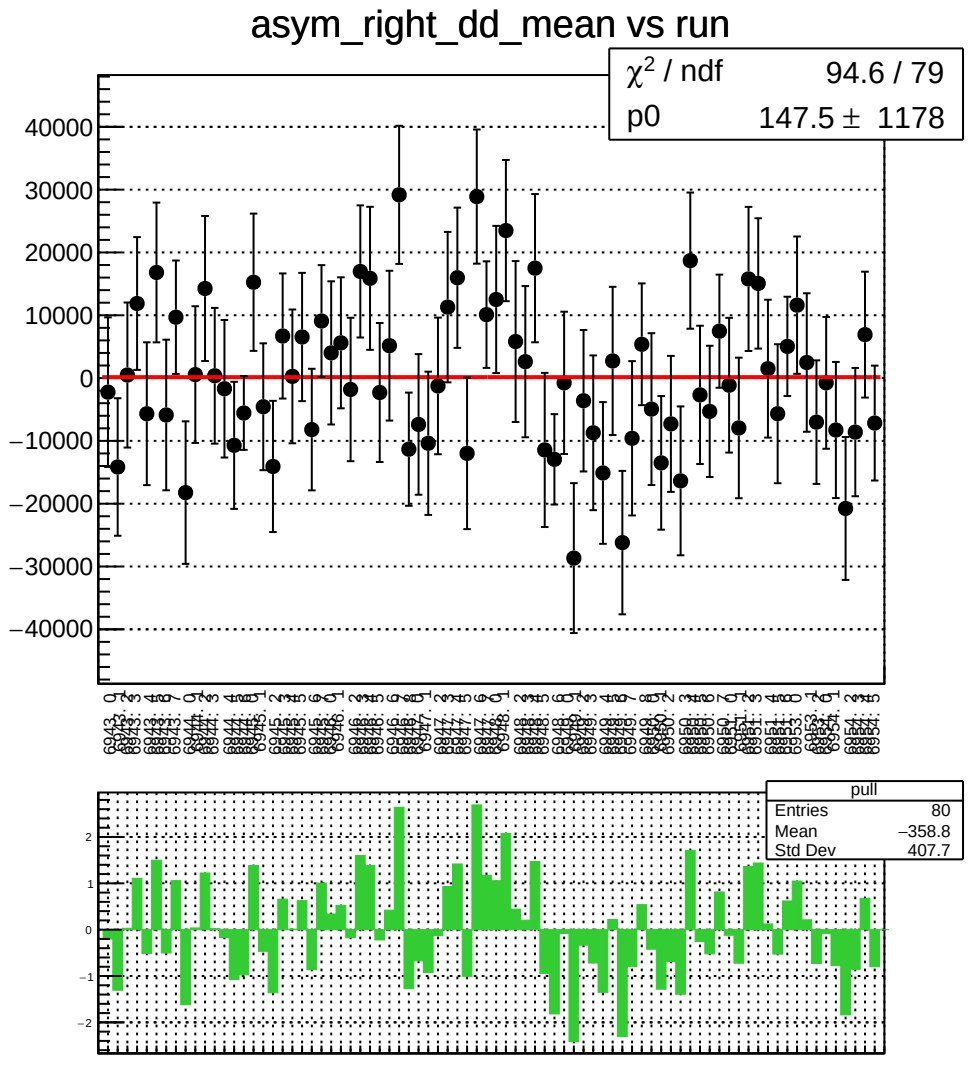

pull1D
Entries 80
Mean 0.01936
Std Dev 1.04

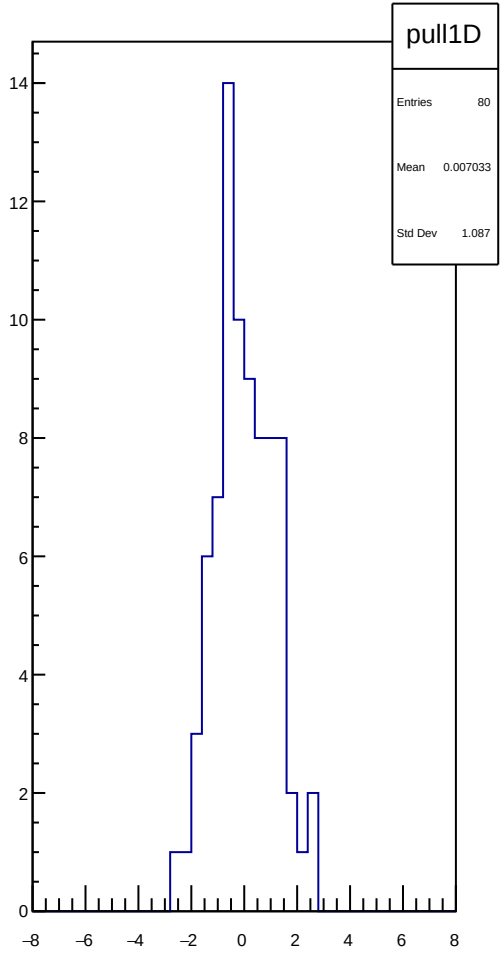

reg_asym_right_dd_rms vs run
χ² / ndf 65.46 / 79
p0 552.3 ± 0.4372
565
560
555
550
545
540


asym_right_dd_correction_mean vs run
χ² / ndf 86.02 / 79
p0 1720 ± 999.1
pull
Entries 80
Mean 221.8
Std Dev 187.5

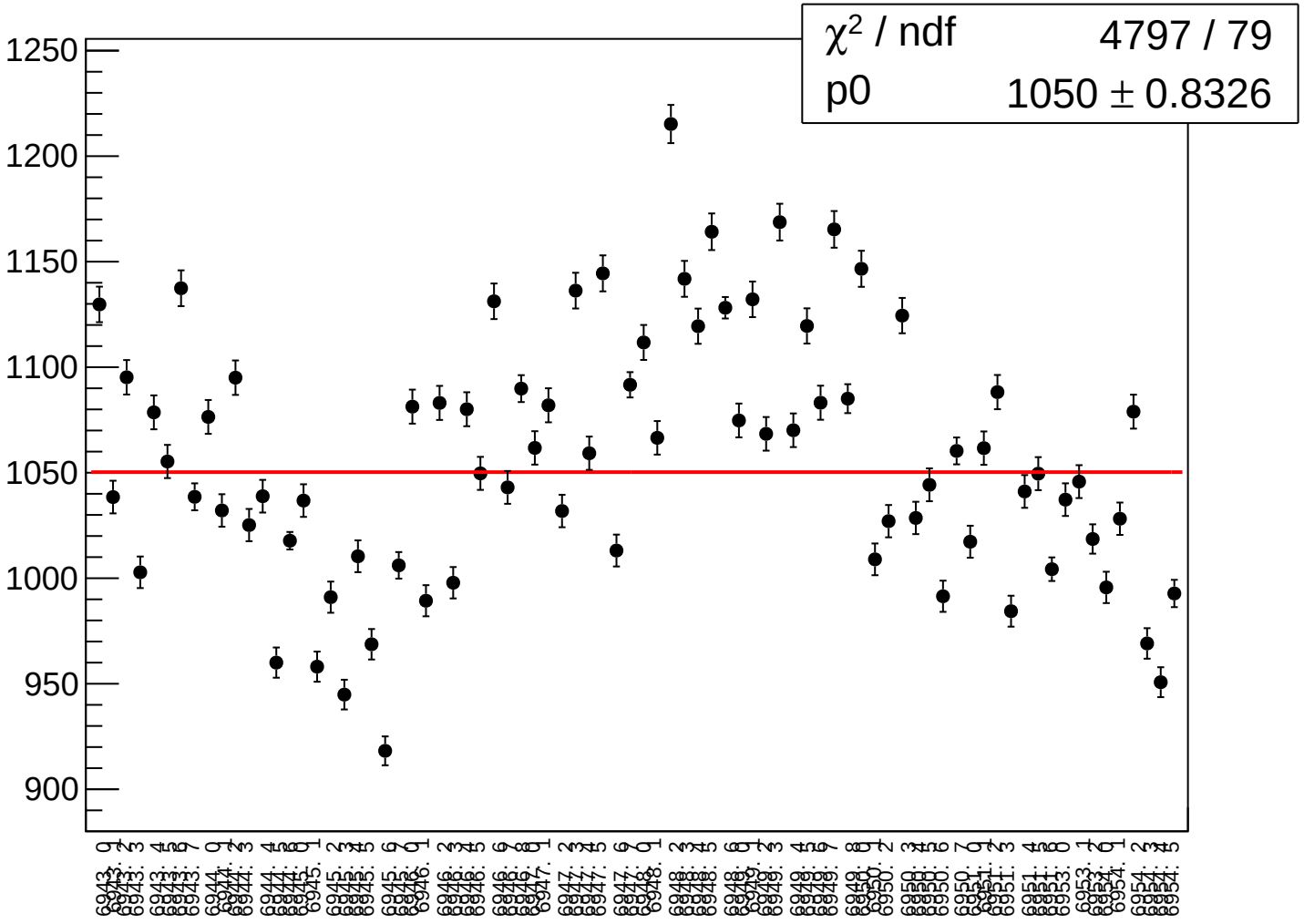

pull1D
Entries 80
Mean 0.008986
Std Dev 1.037

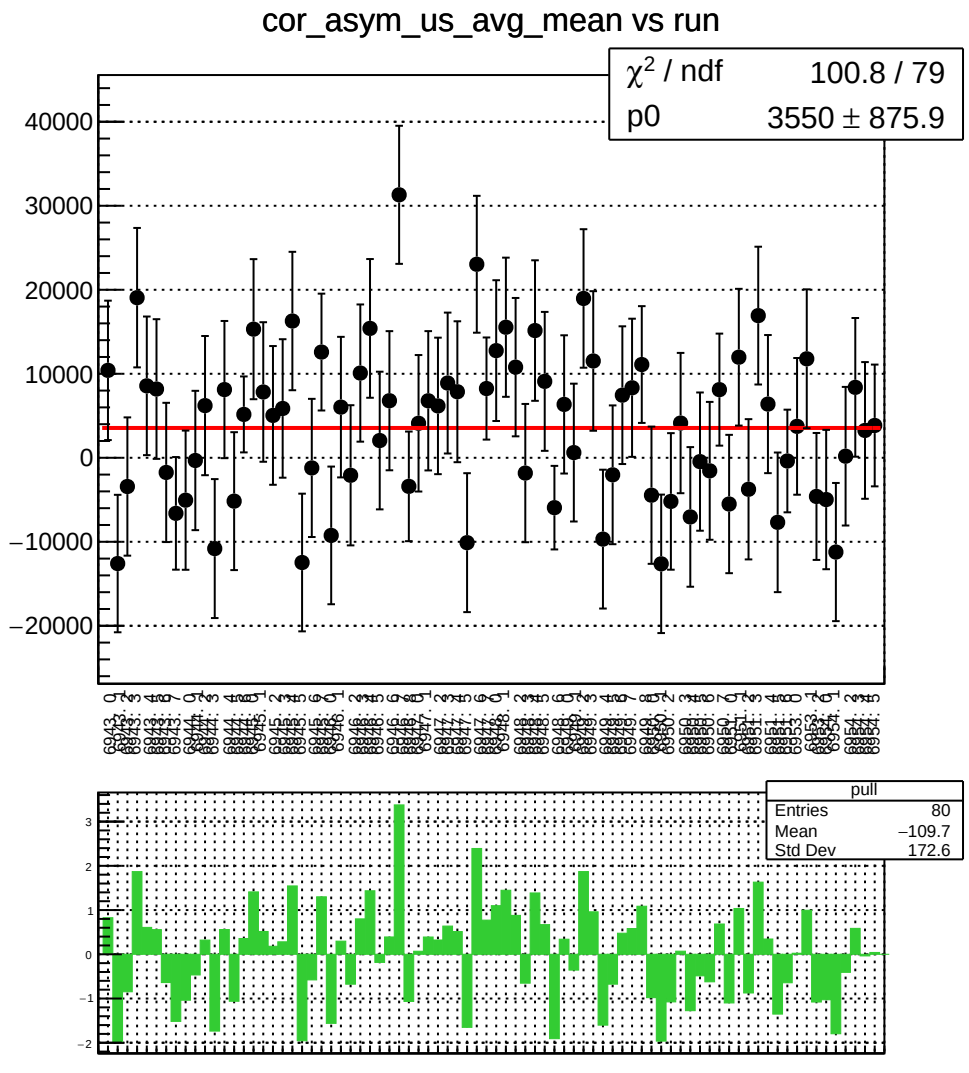

asym_right_dd_correction_rms vs run
χ² / ndf 9049 / 79
p0 889.9 ± 0.7065
1100
1050
1000
950
900
850
800
750
700

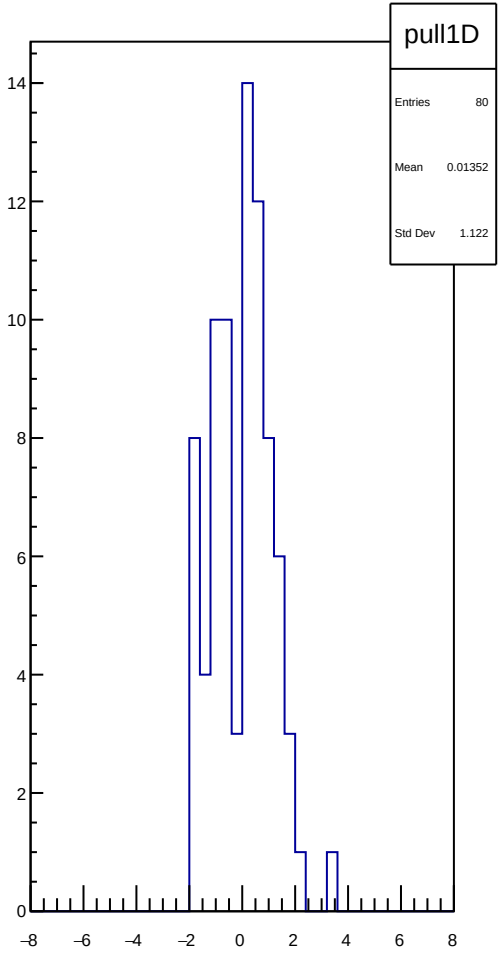

asym_right_dd_mean vs run
χ² / ndf 94.6 / 79
p0 147.5 ± 1178
pull
Entries 80
Mean −358.8
Std Dev 407.7

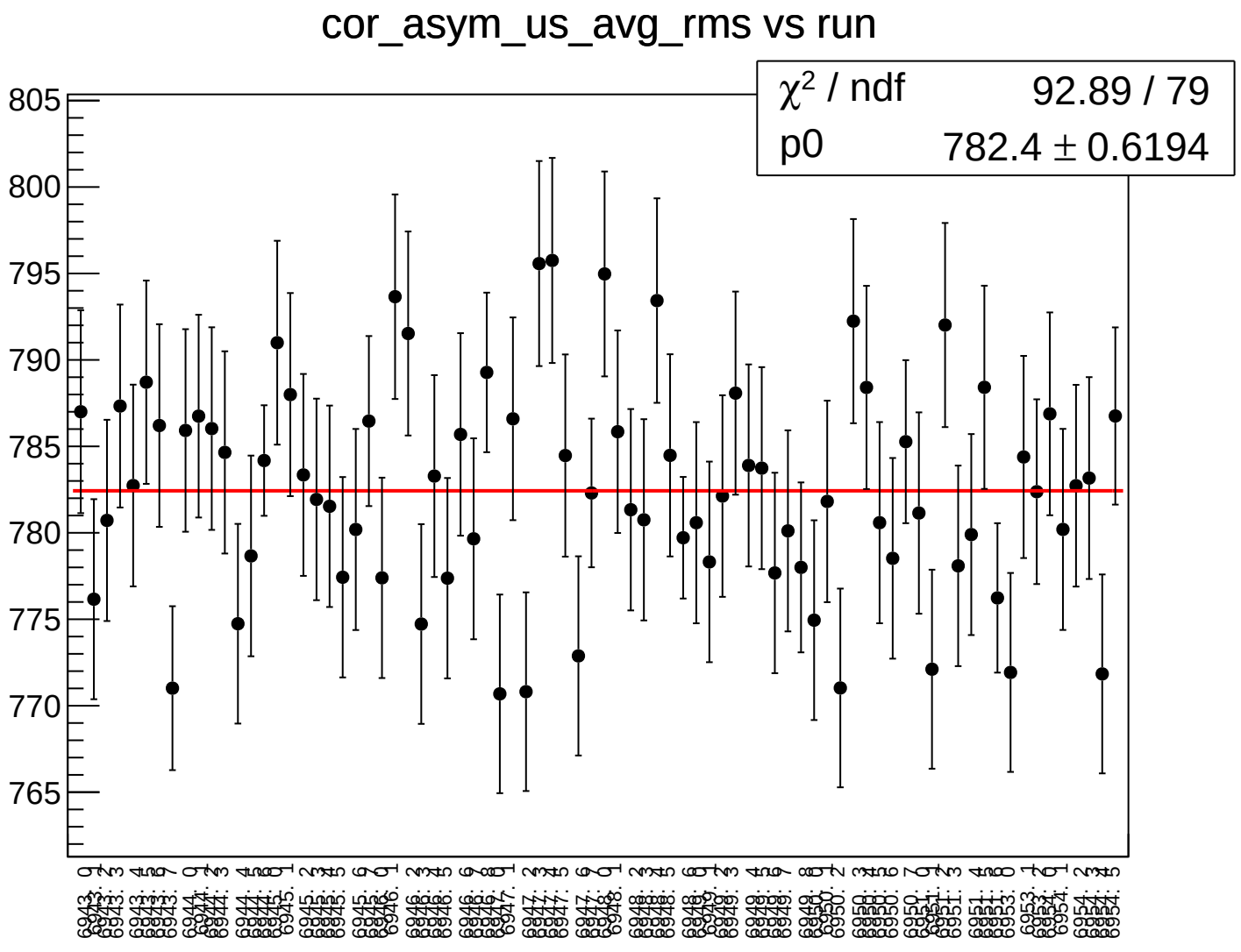

pull1D
Entries 80
Mean 0.007033
Std Dev 1.087

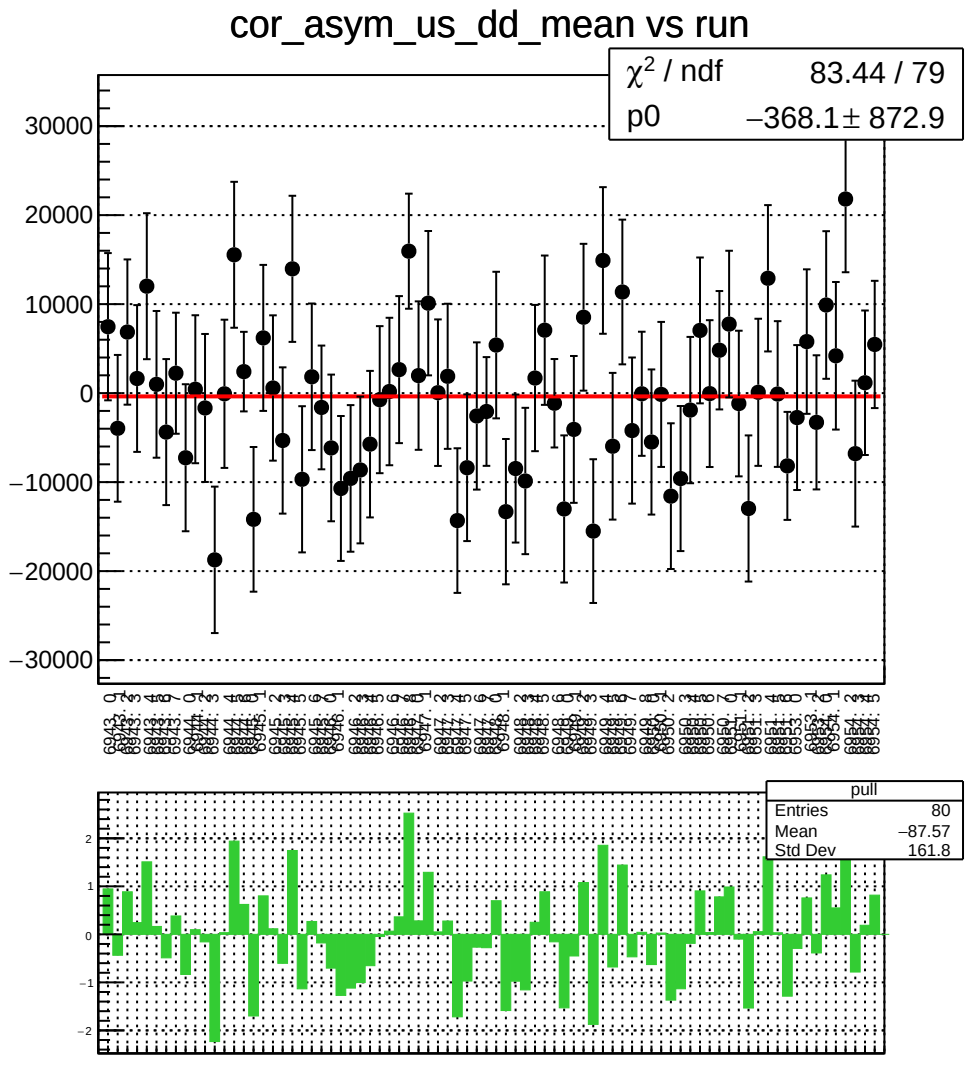
asym_right_dd_rms vs run

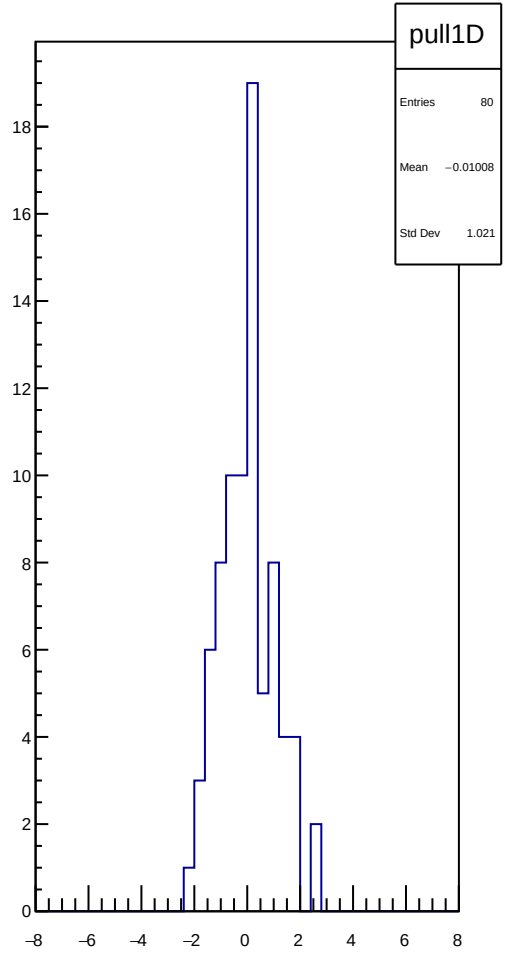


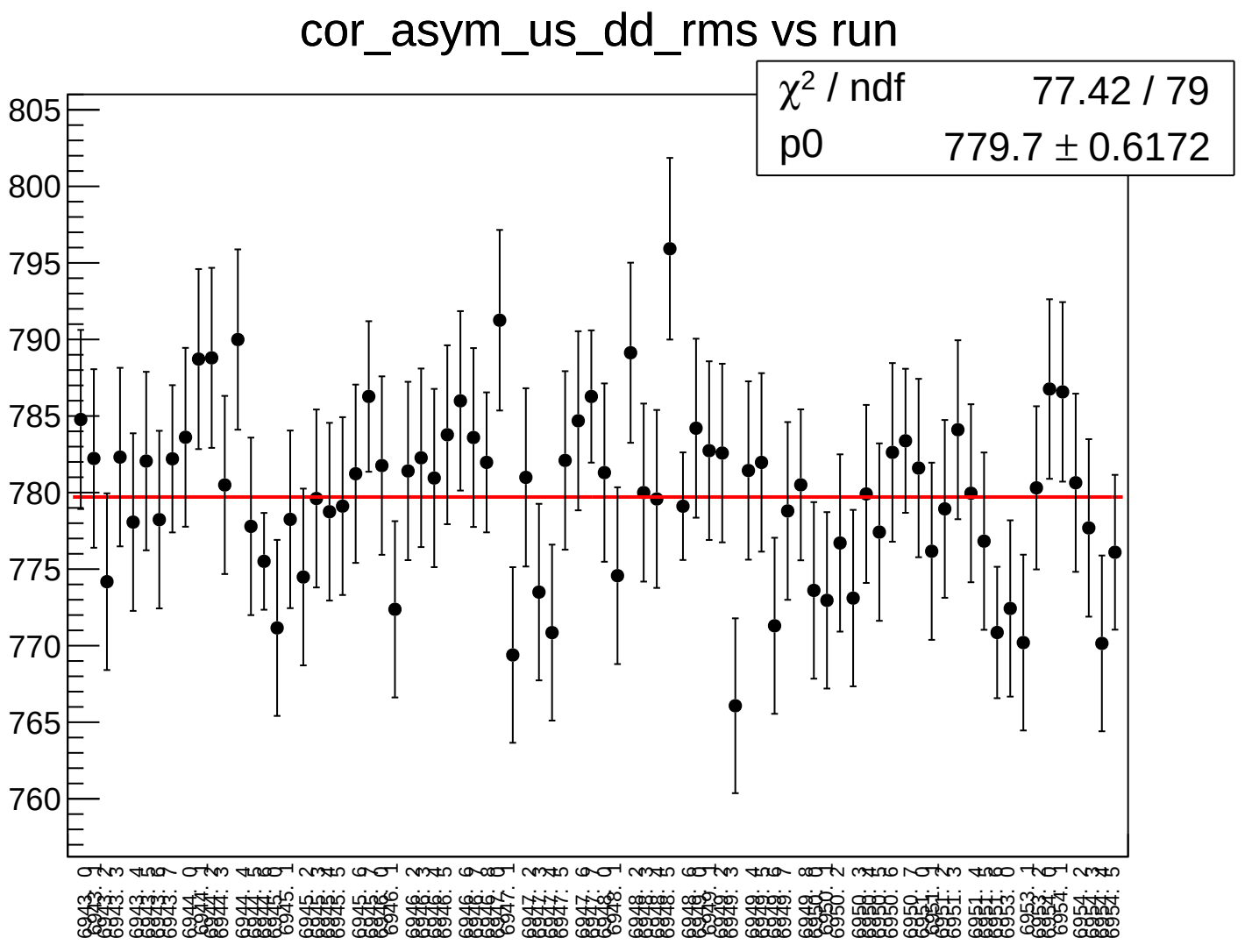

cor_asym_us_avg_mean vs run
χ² / ndf 100.8 / 79
p0 3550 ± 875.9
40000
30000
20000
10000
0
−10000
−20000
pull
Entries 80
Mean −109.7
Std Dev 172.6
3
2
1
0
−1
−2

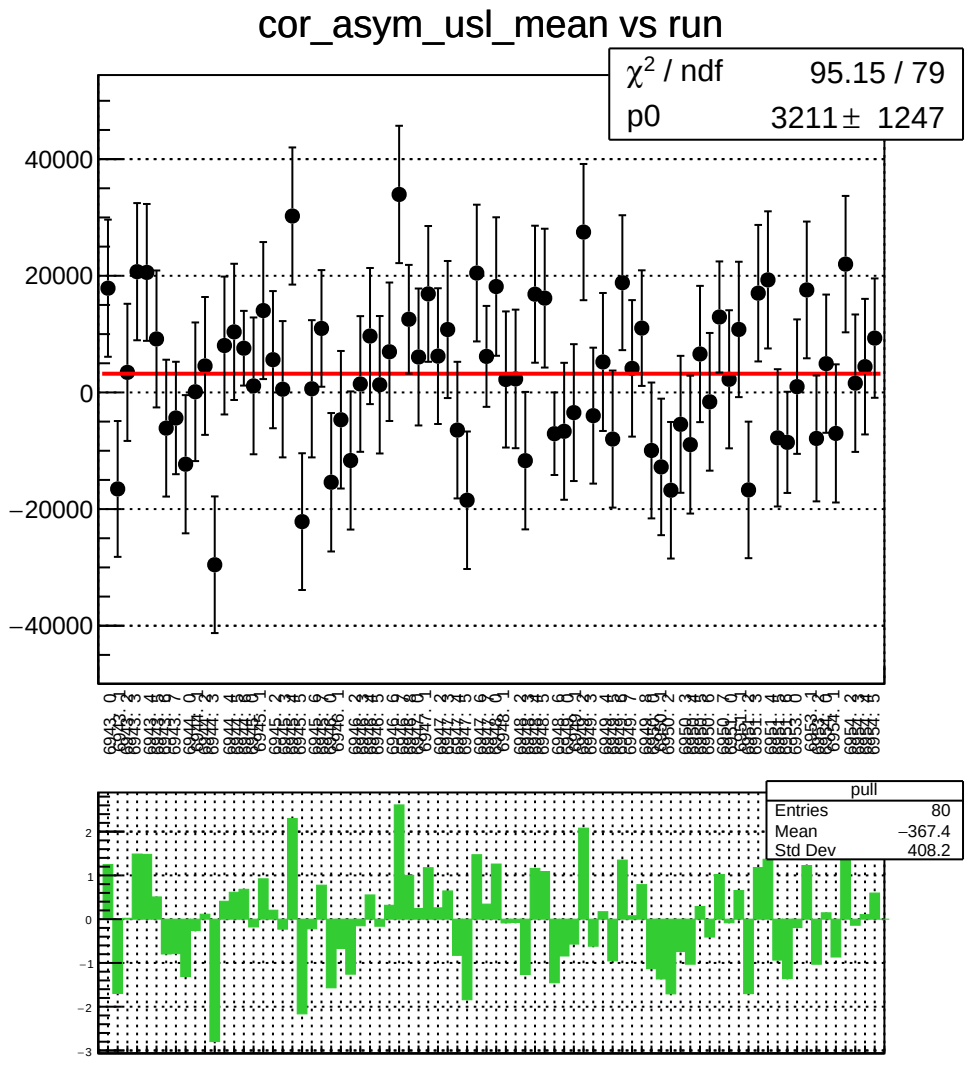

pull1D
Entries 80
Mean 0.01352
Std Dev 1.122
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

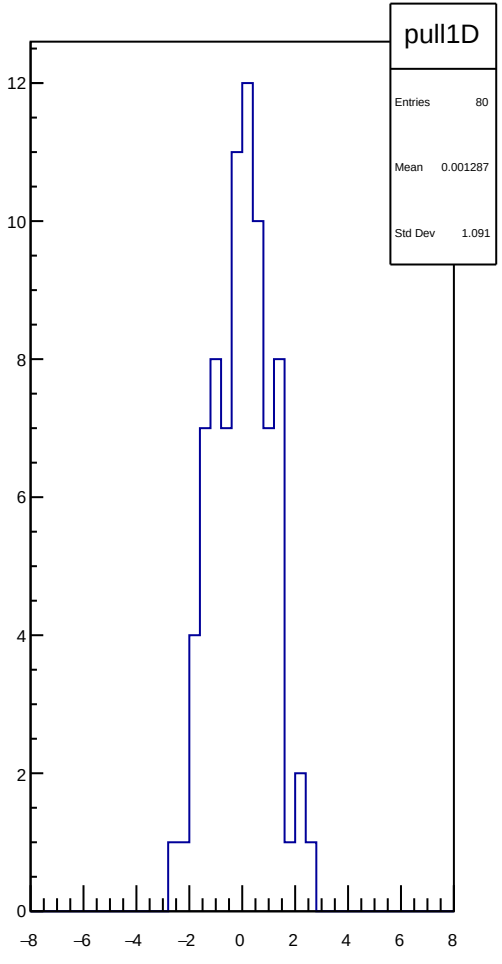

cor_asym_us_avg_rms vs run
χ² / ndf 92.89 / 79
p0 782.4 ± 0.6194
805
800
795
790
785
780
775
770
765

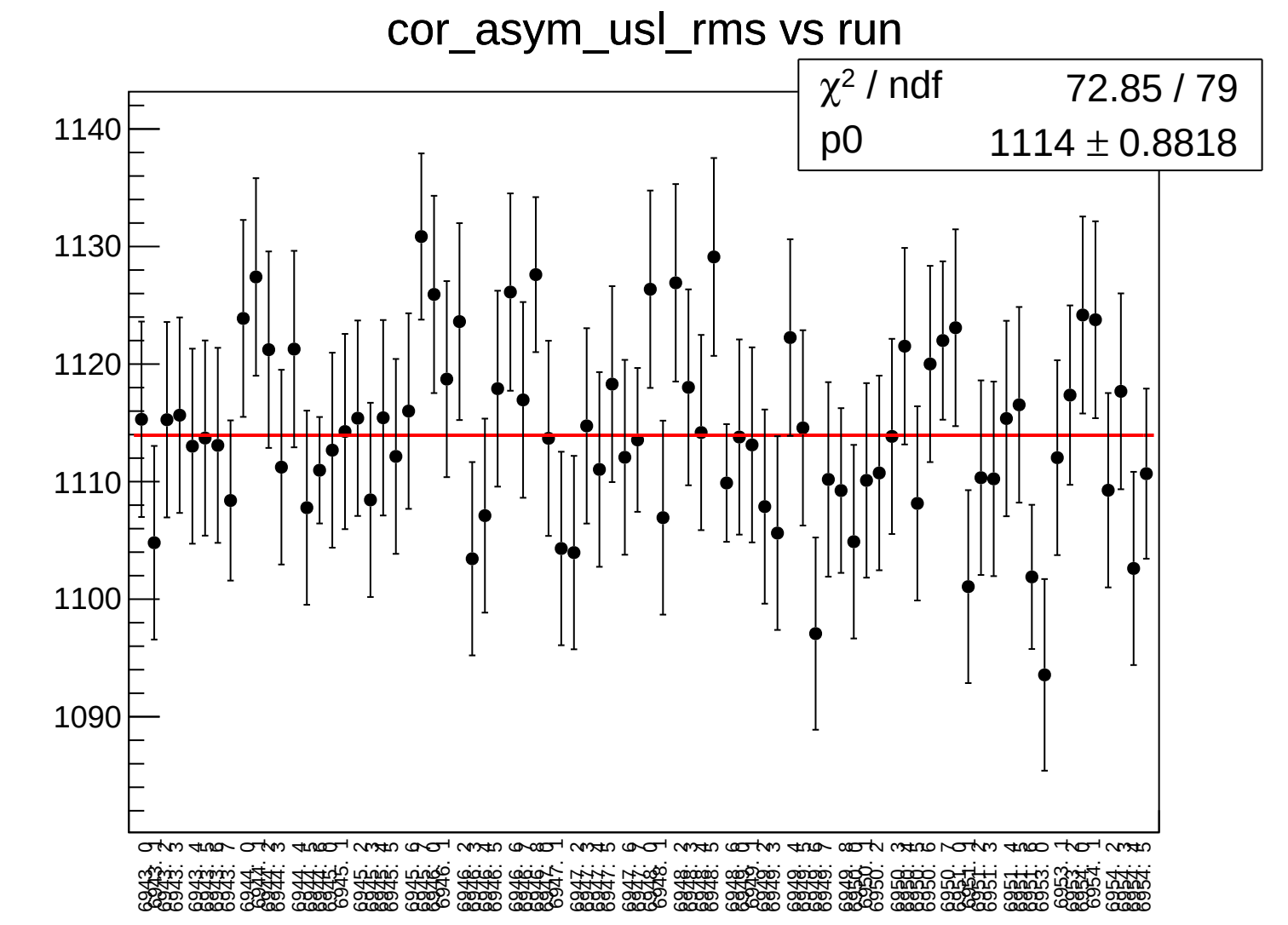

cor_asym_us_dd_mean vs run
χ² / ndf 83.44 / 79
p0 −368.1± 872.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean −87.57
Std Dev 161.8
2
1
0
−1
−2

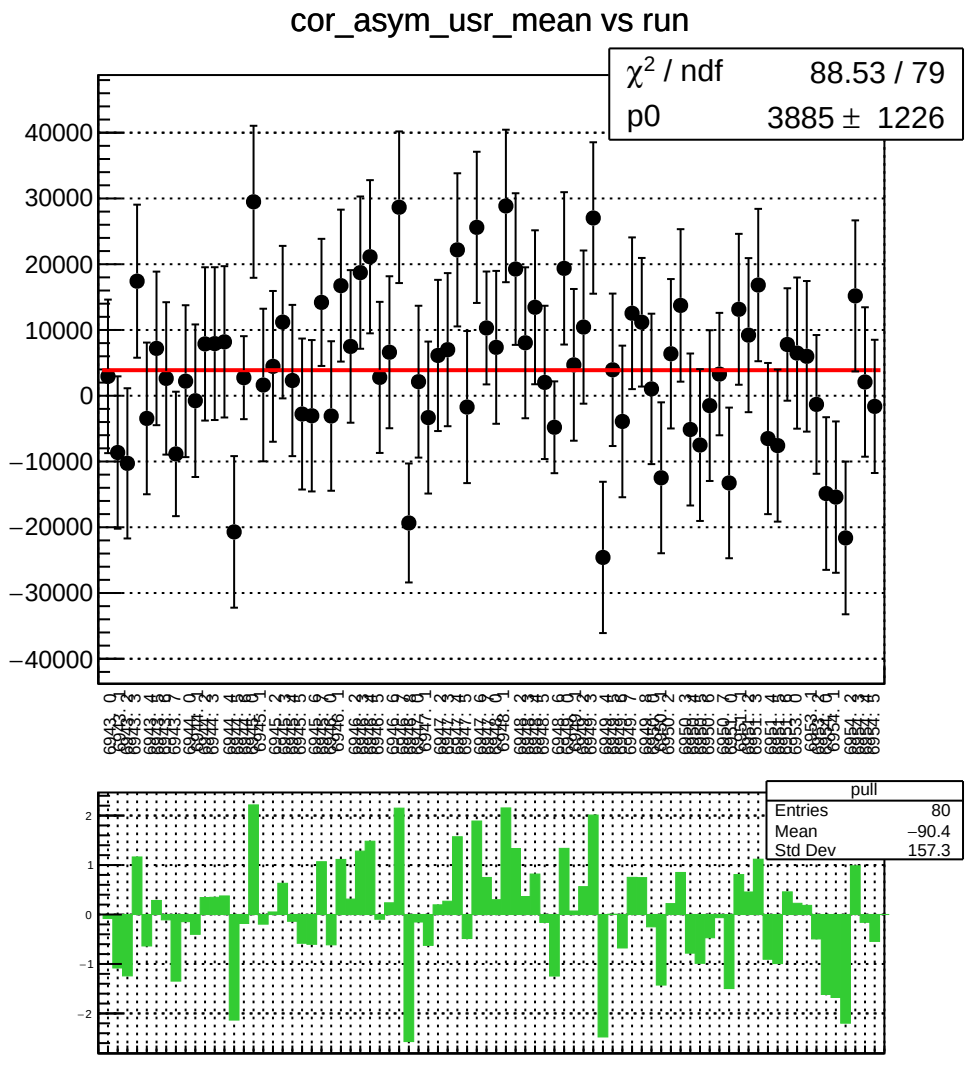

pull1D
Entries 80
Mean −0.01008
Std Dev 1.021
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

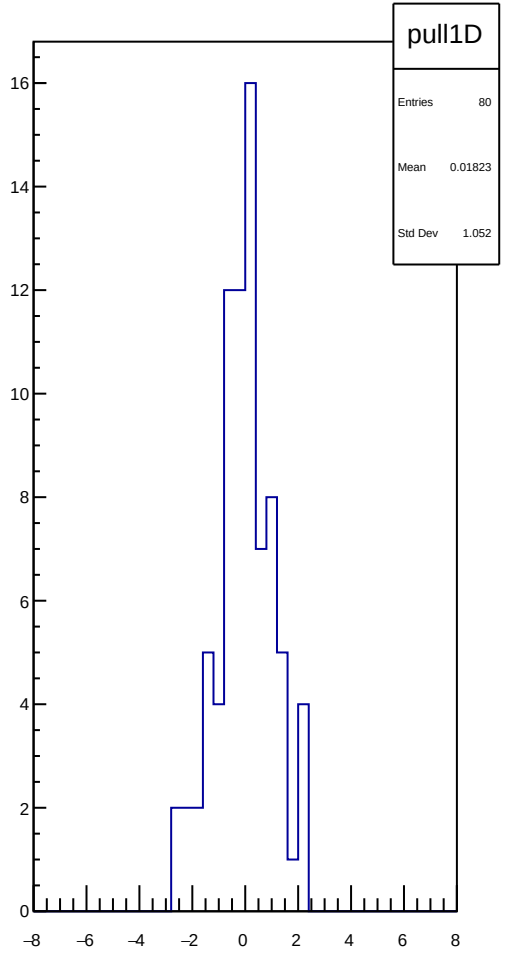

cor_asym_us_dd_rms vs run
χ² / ndf 77.42 / 79
p0 779.7 ± 0.6172
805
800
795
790
785
780
775
770
765
760

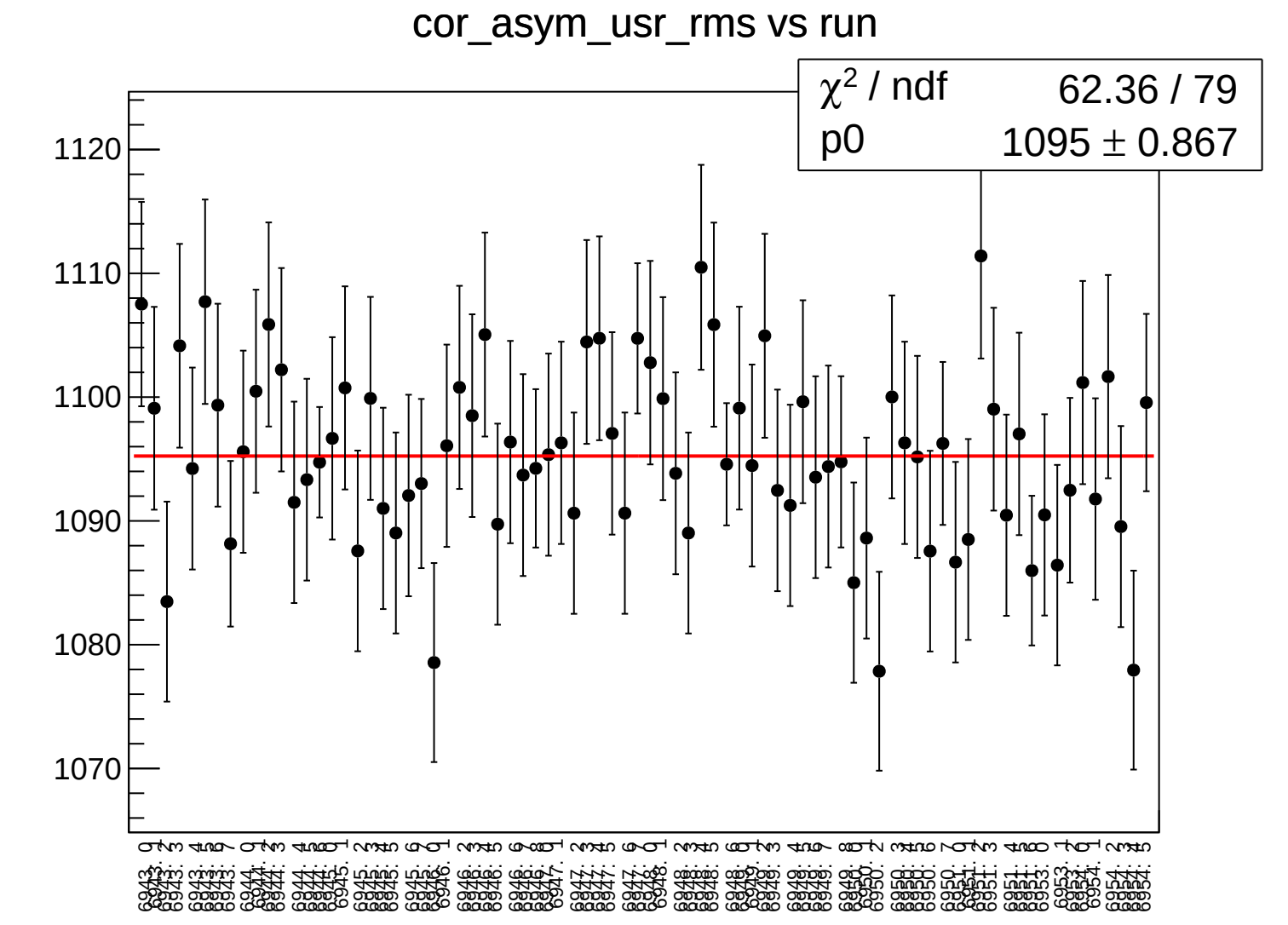

cor_asym_usl_mean vs run
χ² / ndf 95.15 / 79
p0 3211 ± 1247
40000
20000
0
−20000
−40000
pull
Entries 80
Mean −367.4
Std Dev 408.2
2
1
0
−1
−2
−3

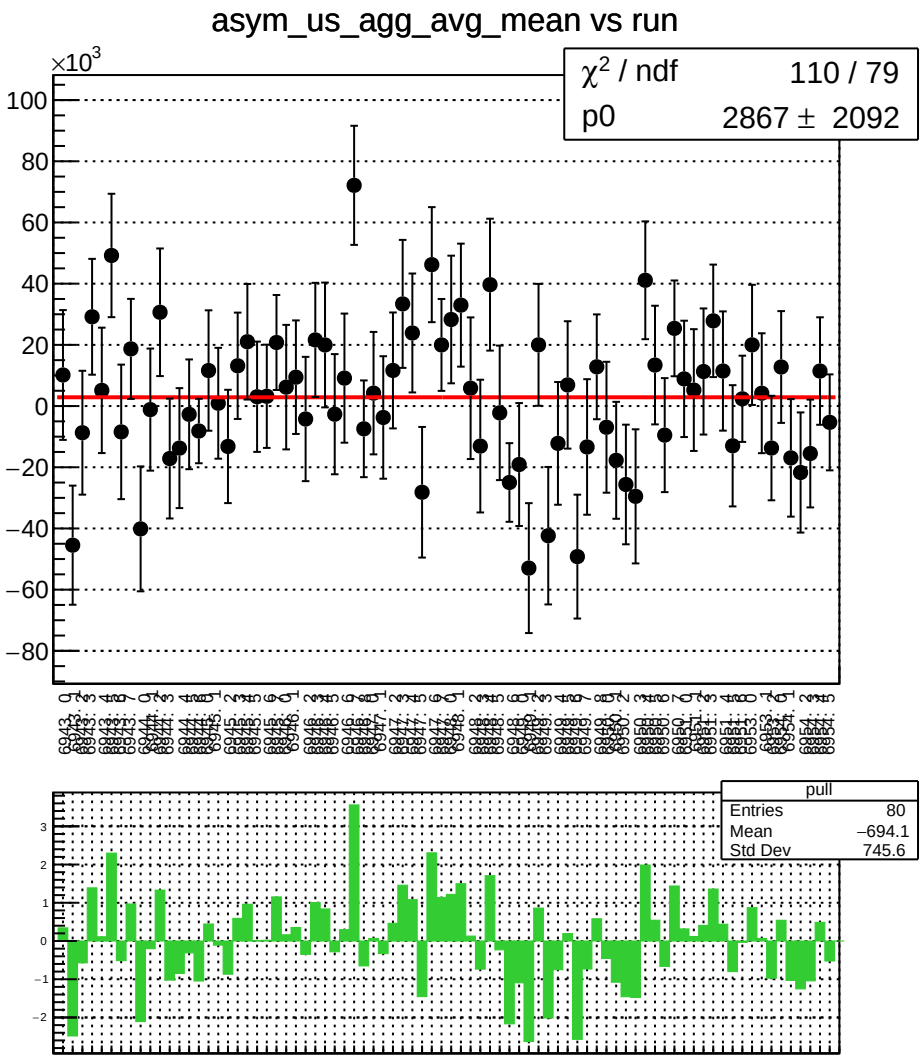

pull1D
Entries 80
Mean 0.001287
Std Dev 1.091
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

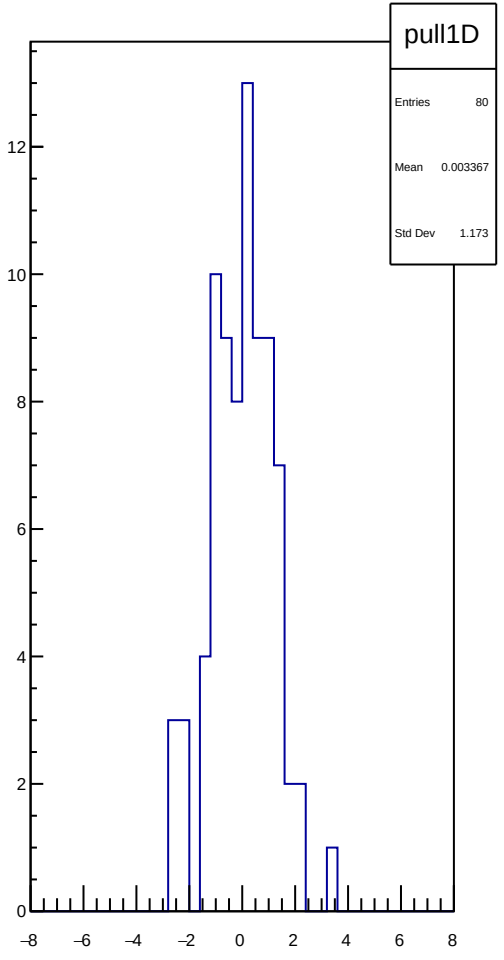

cor_asym_usl_rms vs run
χ^2 / ndf 72.85 / 79
p0 1114 ± 0.8818
1140
1130
1120
1110
1100
1090

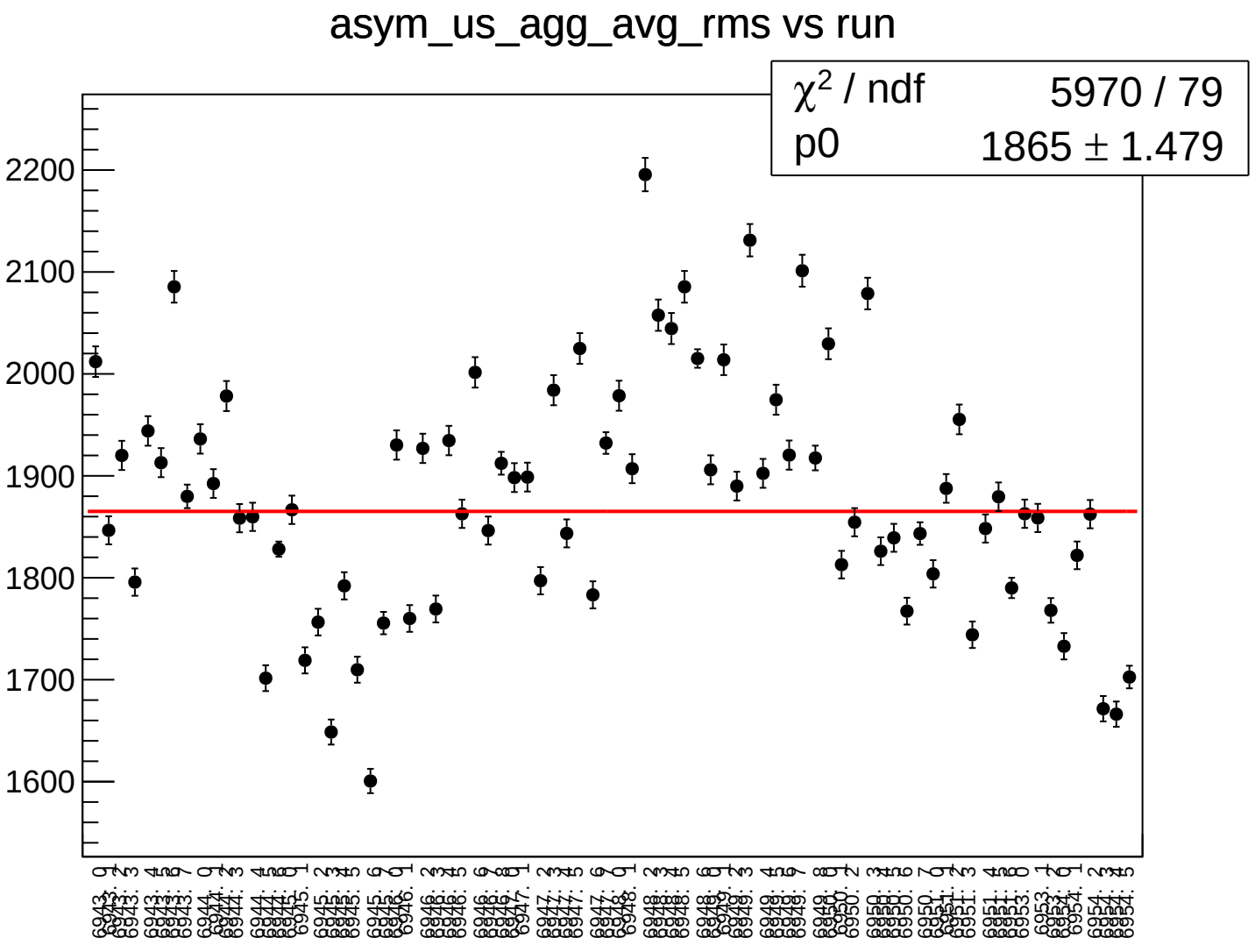

cor_asym_usr_mean vs run
χ² / ndf 88.53 / 79
p0 3885 ± 1226
pull
Entries 80
Mean −90.4
Std Dev 157.3

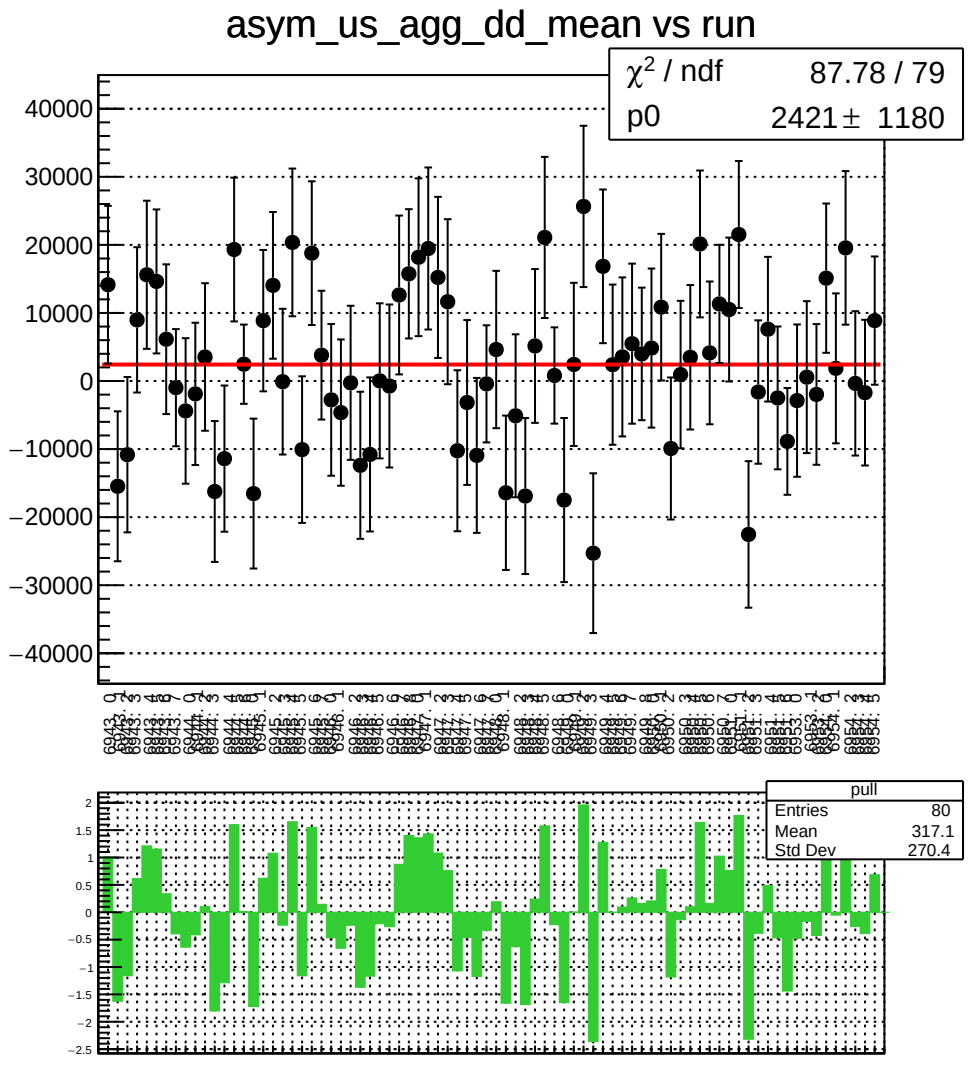

pull1D
Entries 80
Mean 0.01823
Std Dev 1.052

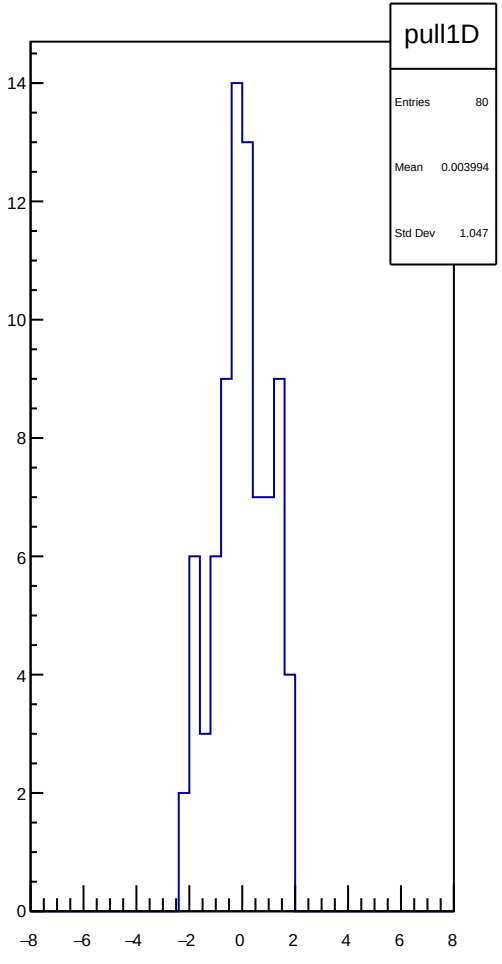

cor_asym_usr_rms vs run
χ² / ndf 62.36 / 79
p0 1095 ± 0.867
1120
1110
1100
1090
1080
1070

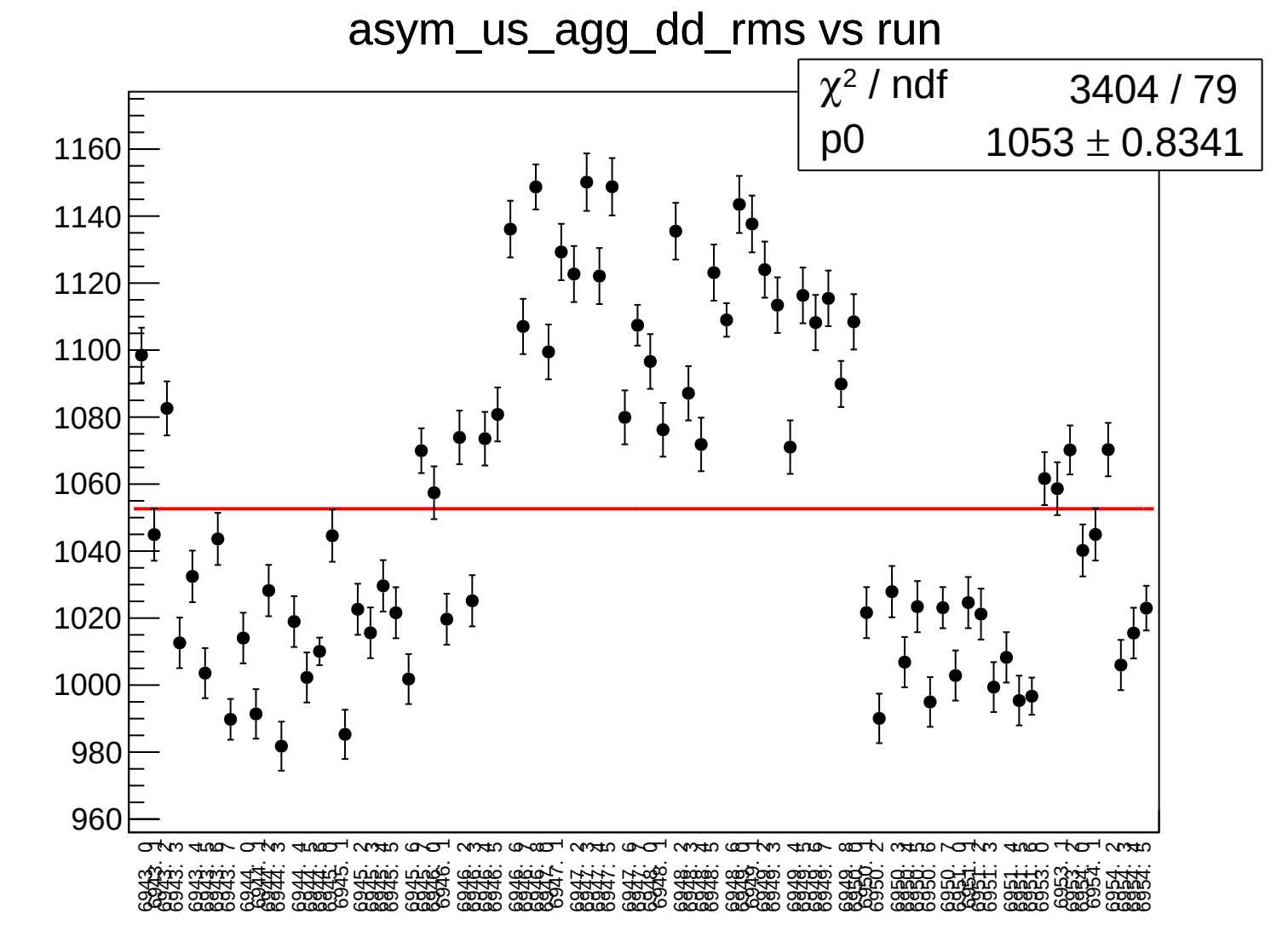

asym_us_agg_avg_mean vs run
×10^3
χ² / ndf 110 / 79
p0 2867 ± 2092
pull
Entries 80
Mean −694.1
Std Dev 745.6

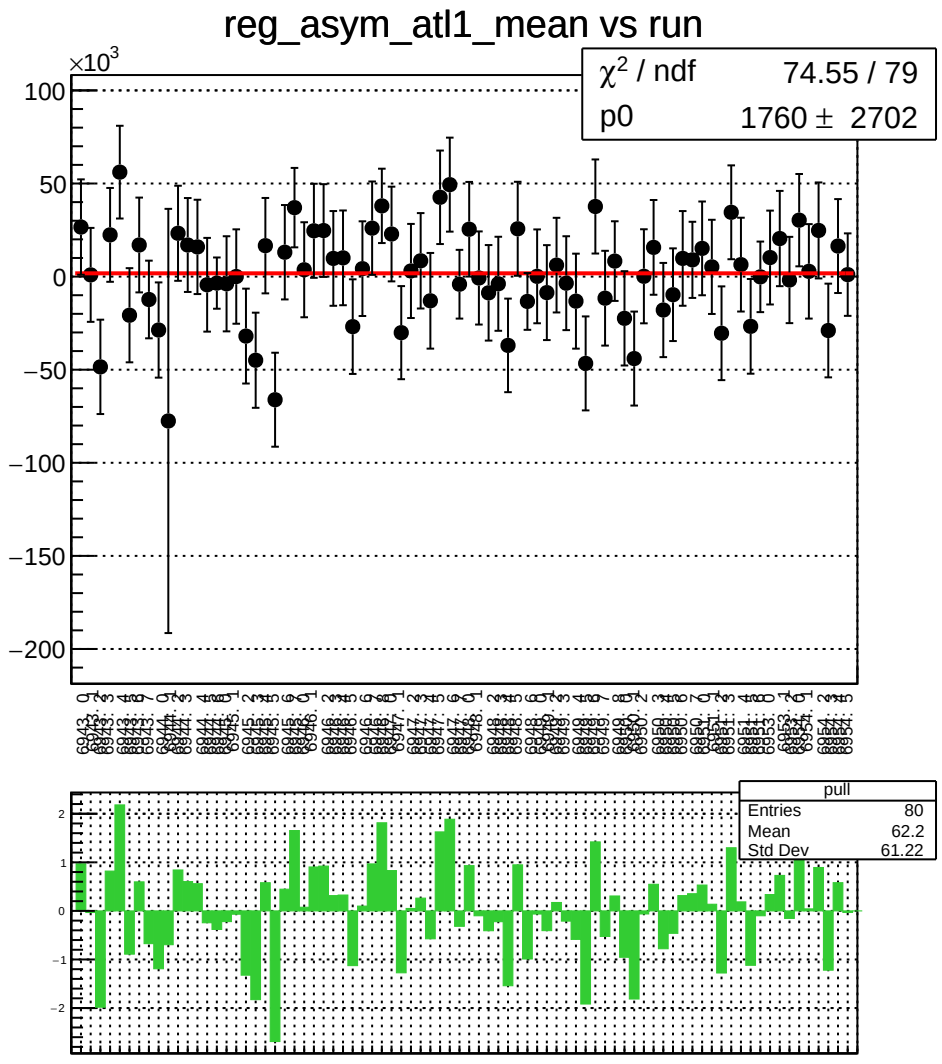

pull1D
Entries 80
Mean 0.003367
Std Dev 1.173

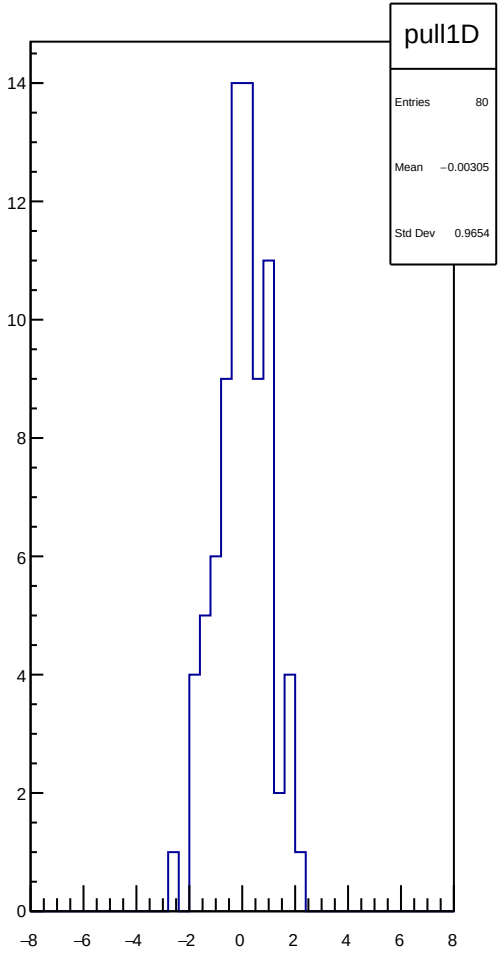

asym_us_agg_avg_rms vs run
χ² / ndf 5970 / 79
p0 1865 ± 1.479
2200
2100
2000
1900
1800
1700
1600

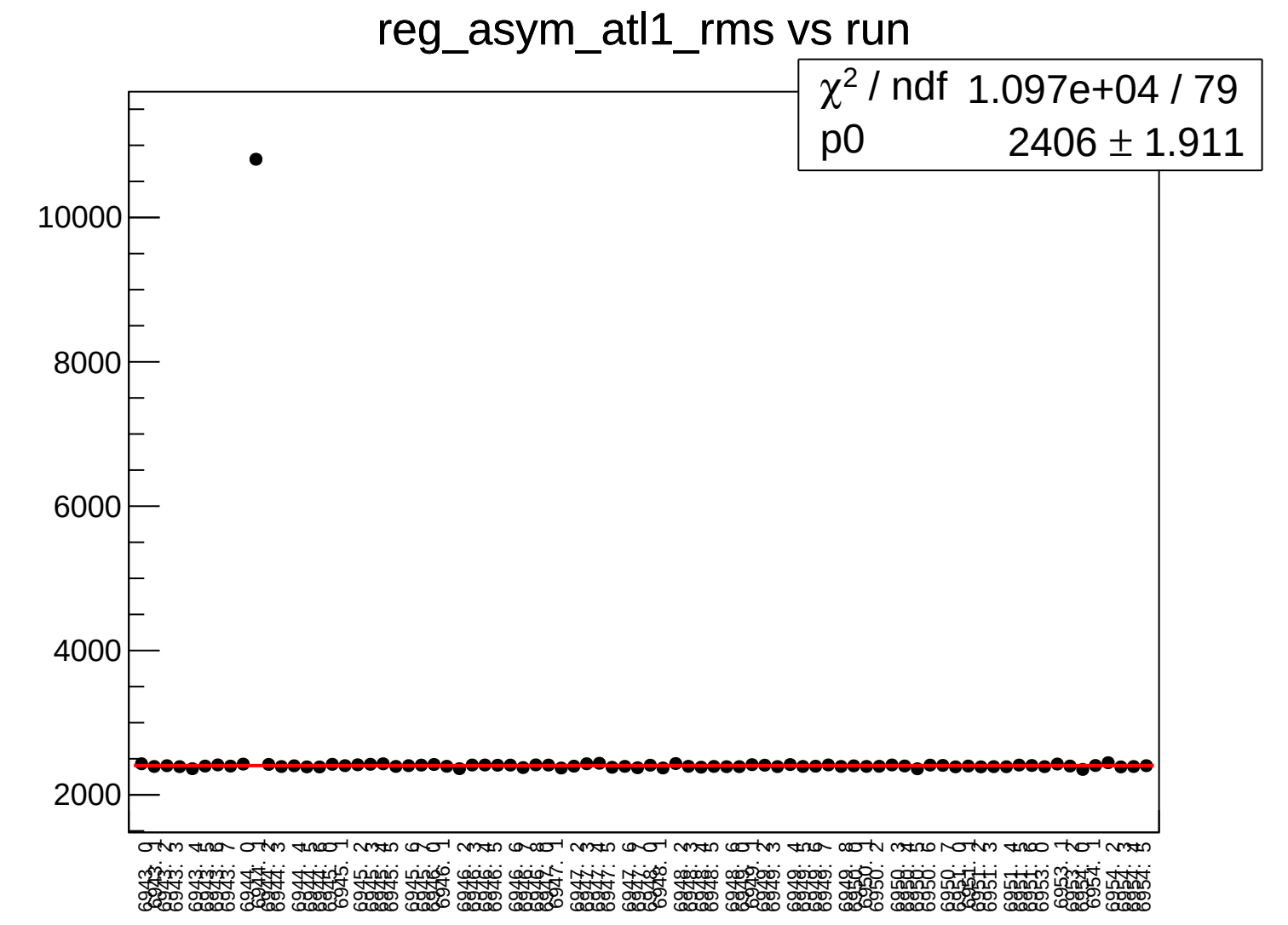

asym_us_agg_dd_mean vs run
χ² / ndf 87.78 / 79
p0 2421 ± 1180
pull
Entries 80
Mean 317.1
Std Dev 270.4

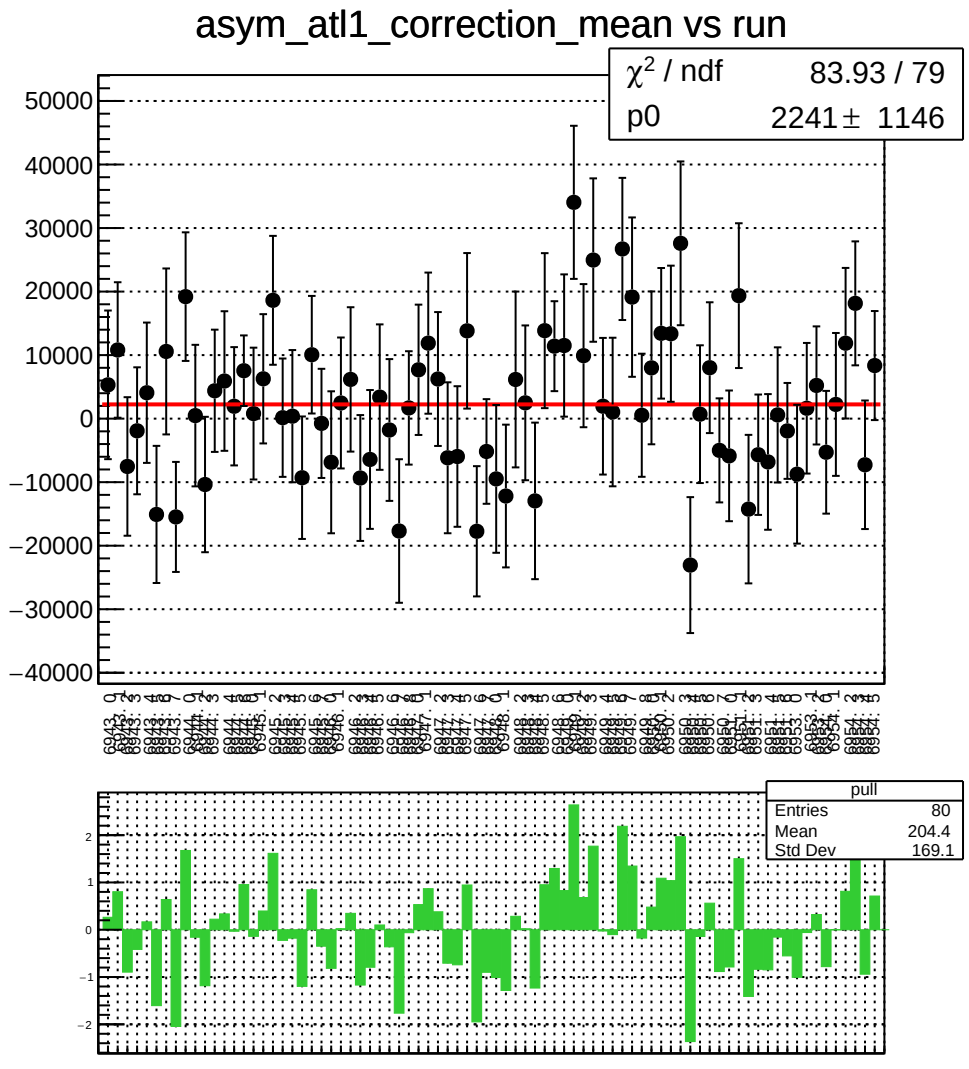

pull1D
Entries 80
Mean 0.003994
Std Dev 1.047

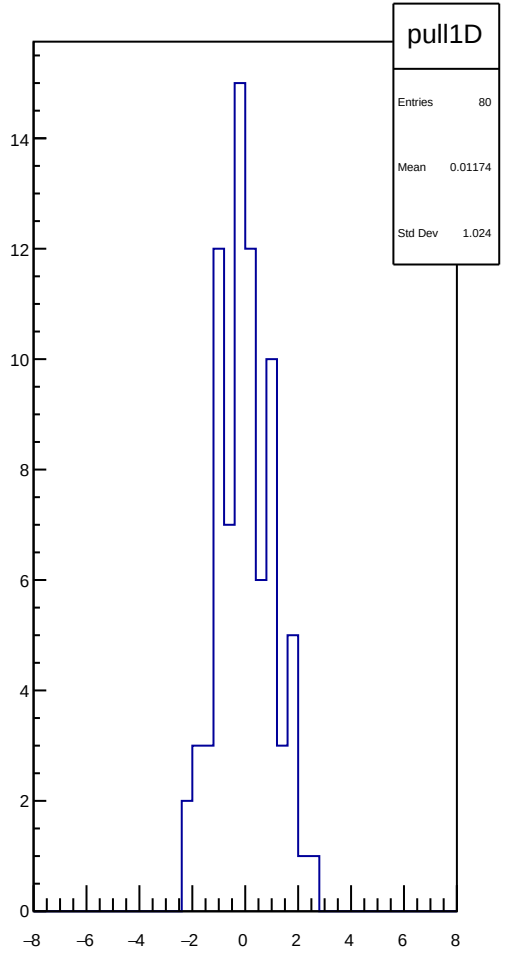

asym_us_agg_dd_rms vs run
χ² / ndf 3404 / 79
p0 1053 ± 0.8341
1160
1140
1120
1100
1080
1060
1040
1020
1000
980
960

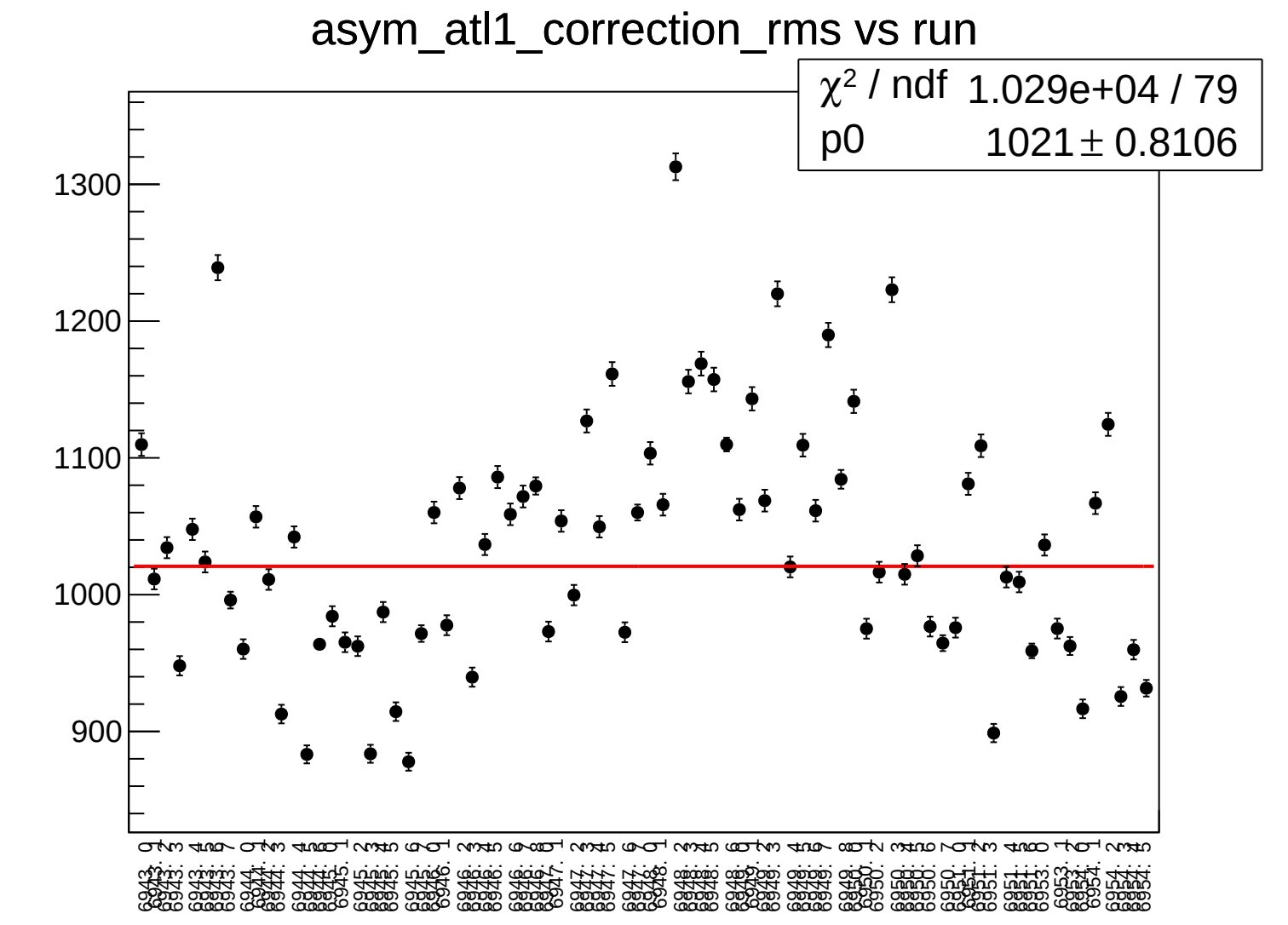

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 74.55 / 79
p0 1760 ± 2702
pull
Entries 80
Mean 62.2
Std Dev 61.22

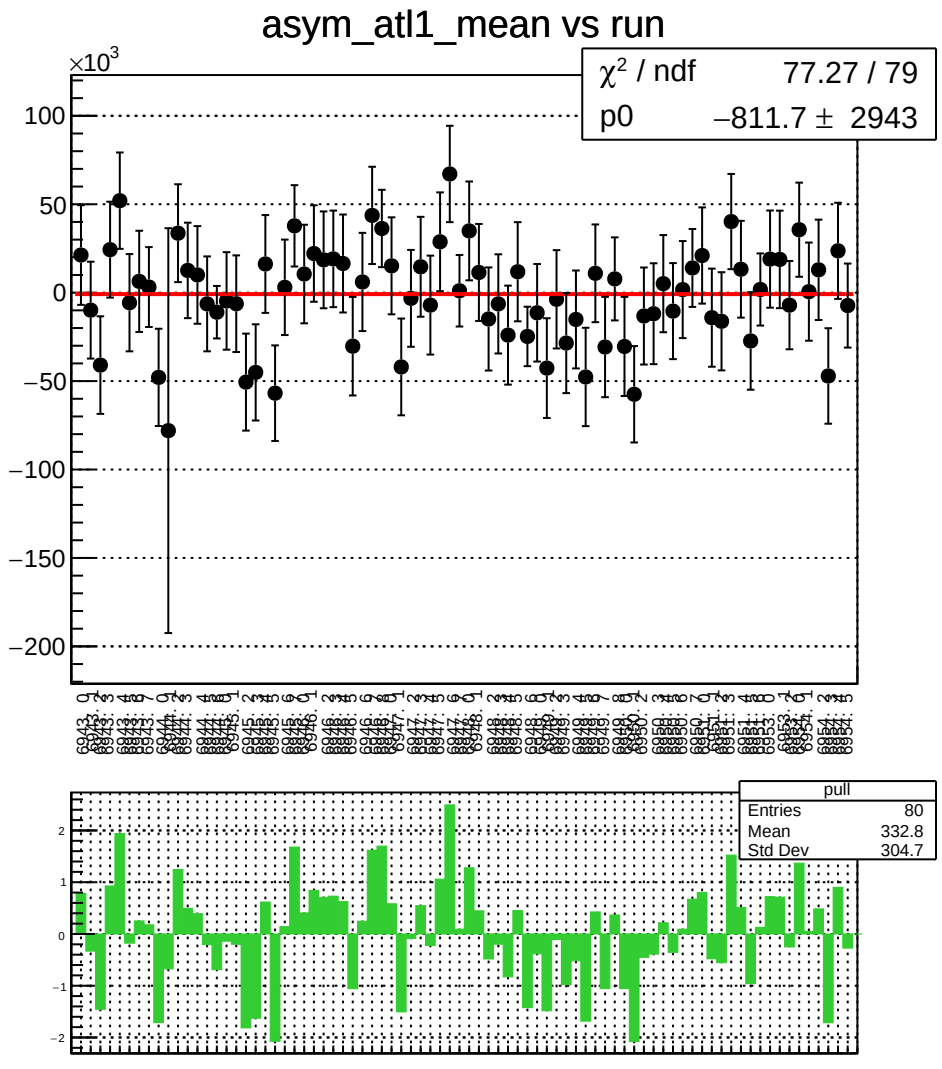

pull1D
Entries 80
Mean −0.00305
Std Dev 0.9654

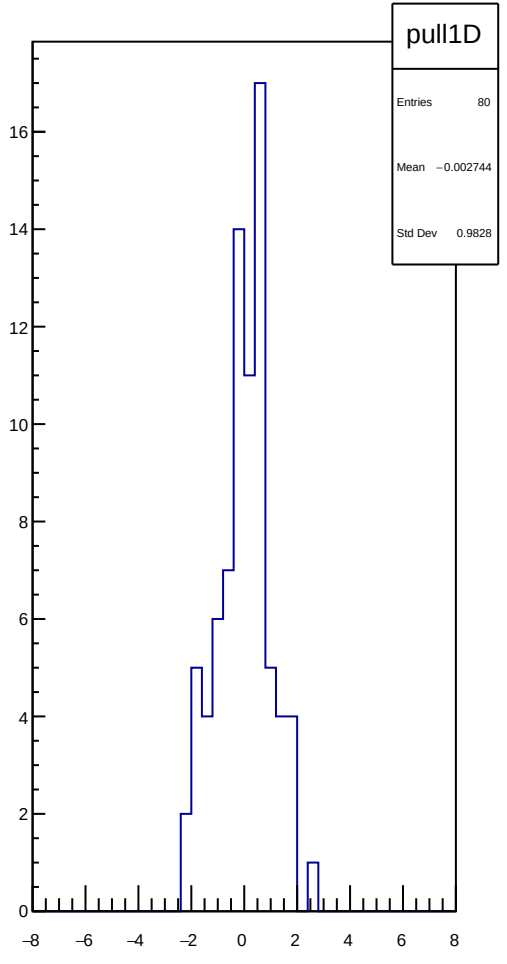

reg_asym_atl1_rms vs run
χ² / ndf 1.097e+04 / 79
p0 2406 ± 1.911
10000
8000
6000
4000
2000

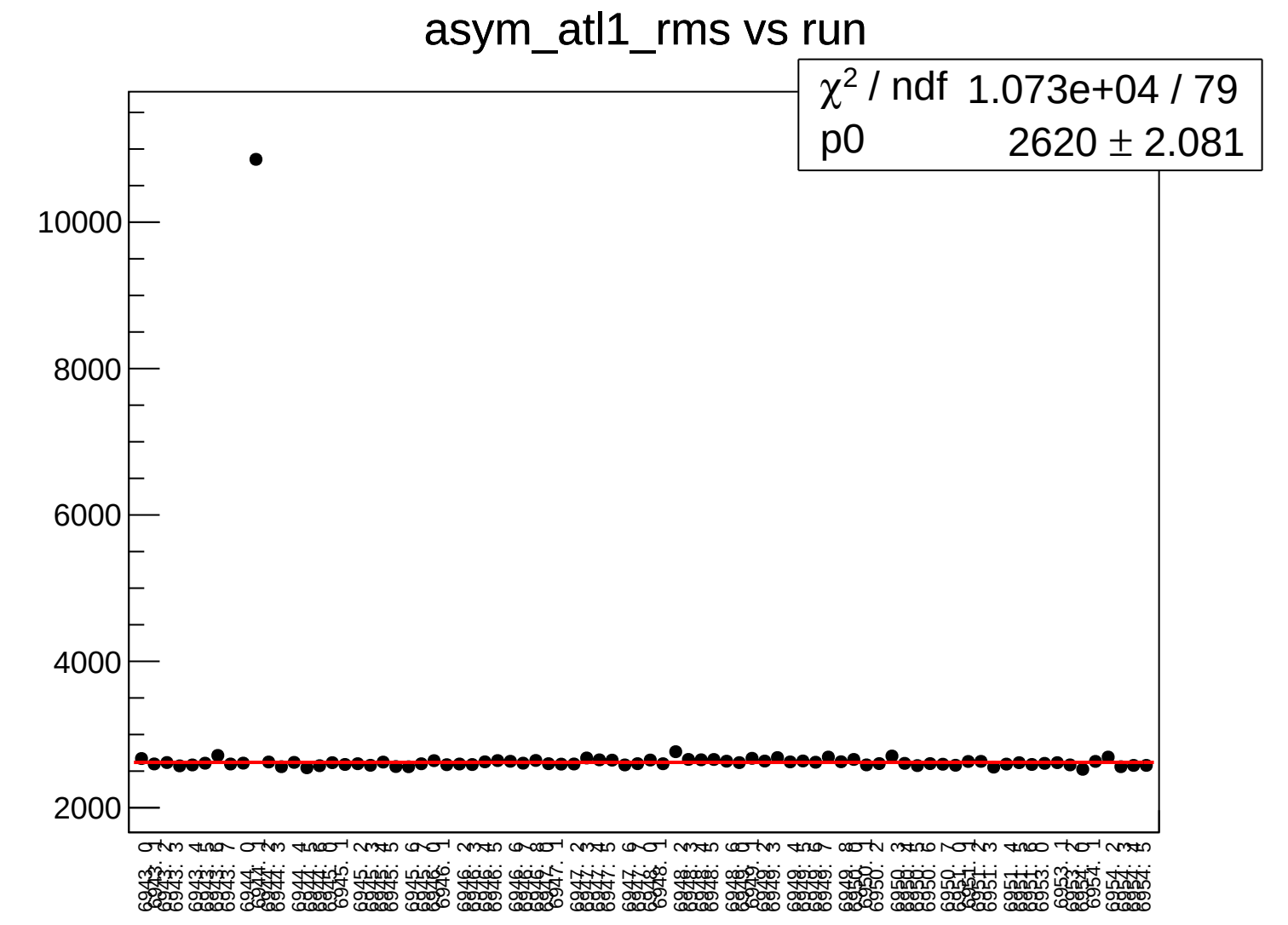

asym_atl1_correction_mean vs run
χ² / ndf 83.93 / 79
p0 2241 ± 1146
pull
Entries 80
Mean 204.4
Std Dev 169.1

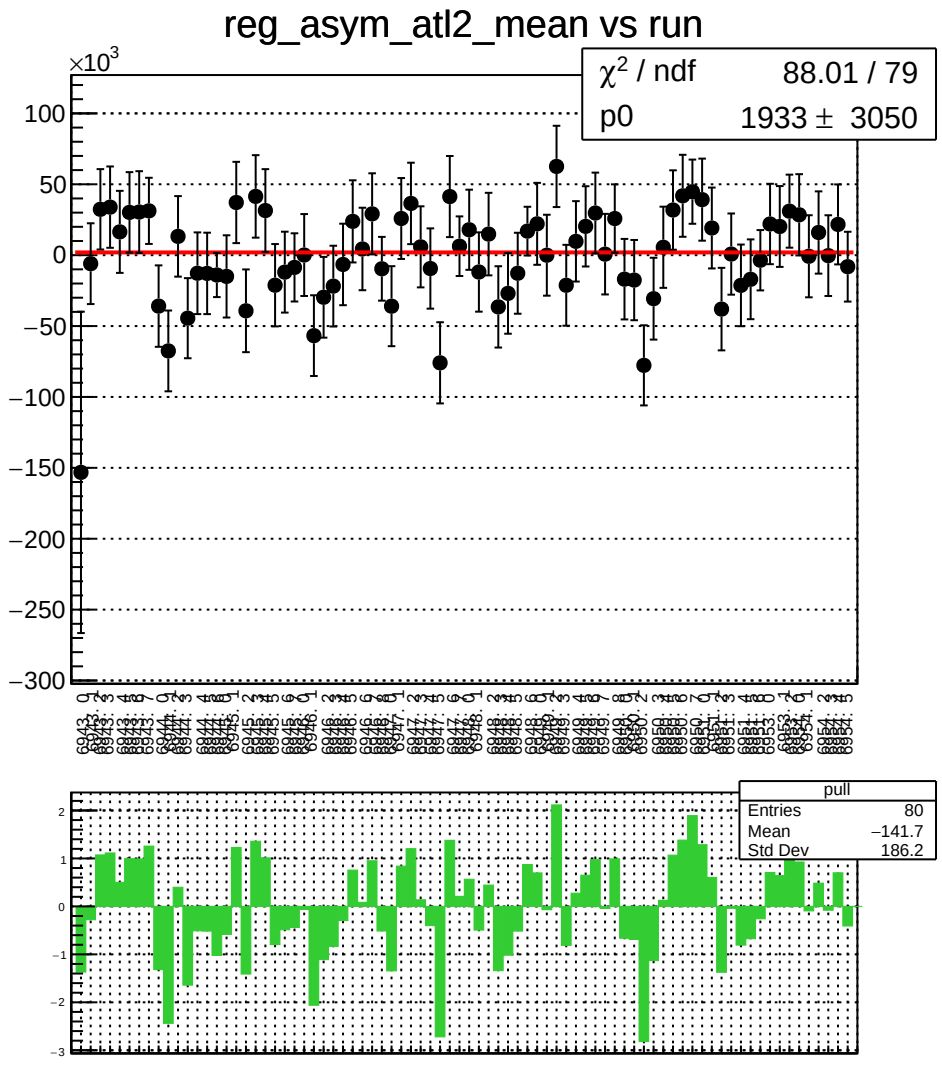

pull1D
Entries 80
Mean 0.01174
Std Dev 1.024

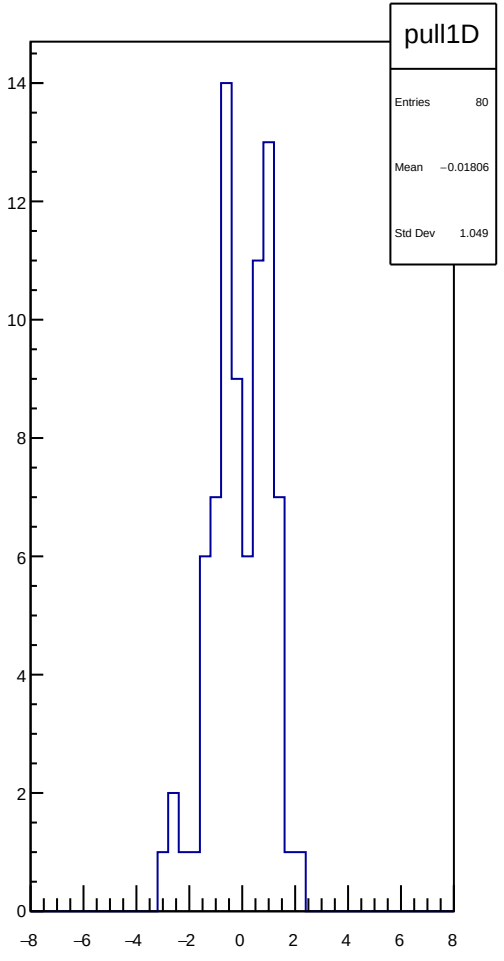

asym_atl1_correction_rms vs run
χ² / ndf 1.029e+04 / 79
p0 1021 ± 0.8106
1300
1200
1100
1000
900

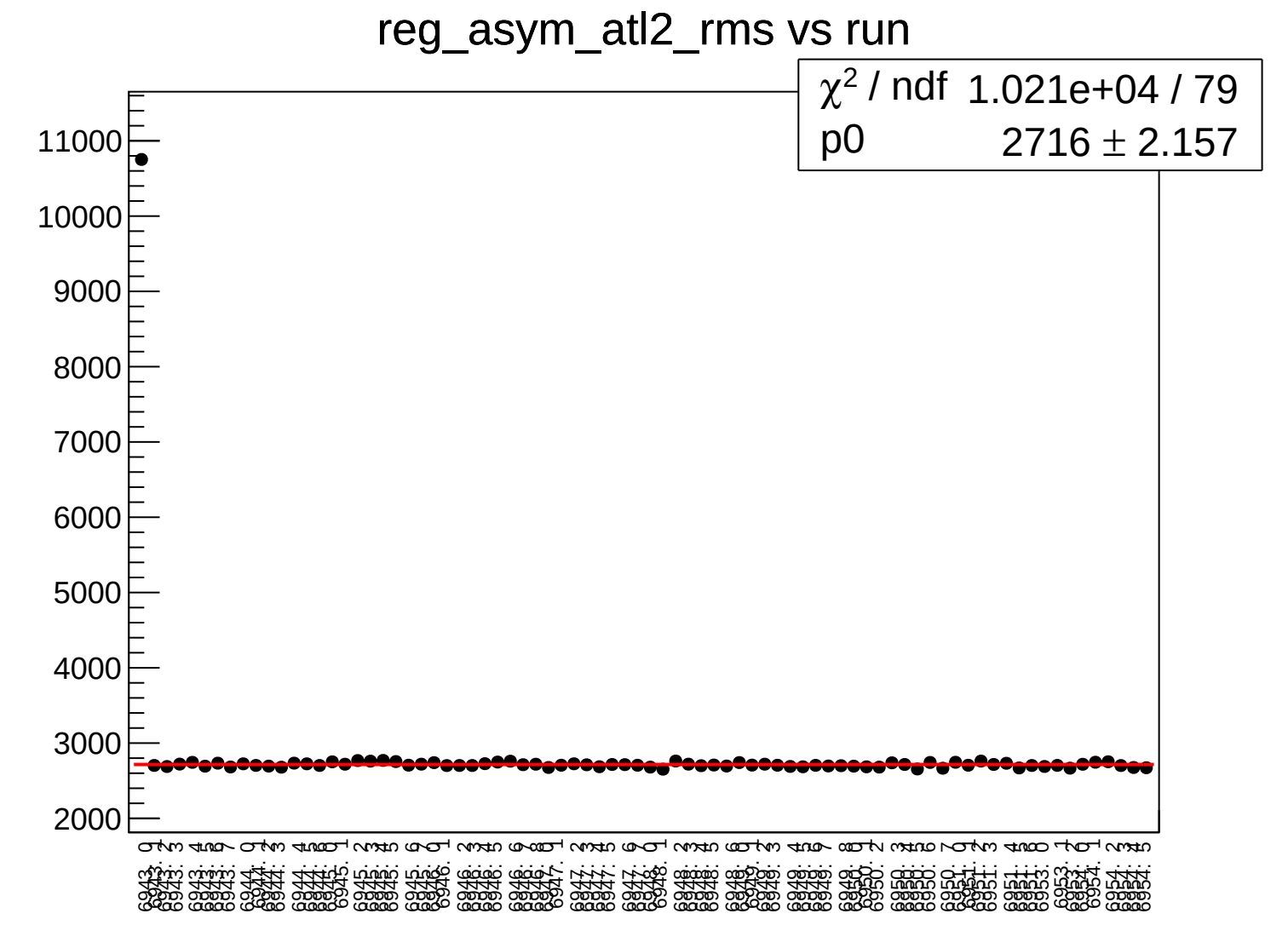

asym_atl1_mean vs run
×10^3
χ² / ndf 77.27 / 79
p0 −811.7 ± 2943
100
50
0
−50
−100
−150
−200
pull
Entries 80
Mean 332.8
Std Dev 304.7
2
1
0
−1
−2

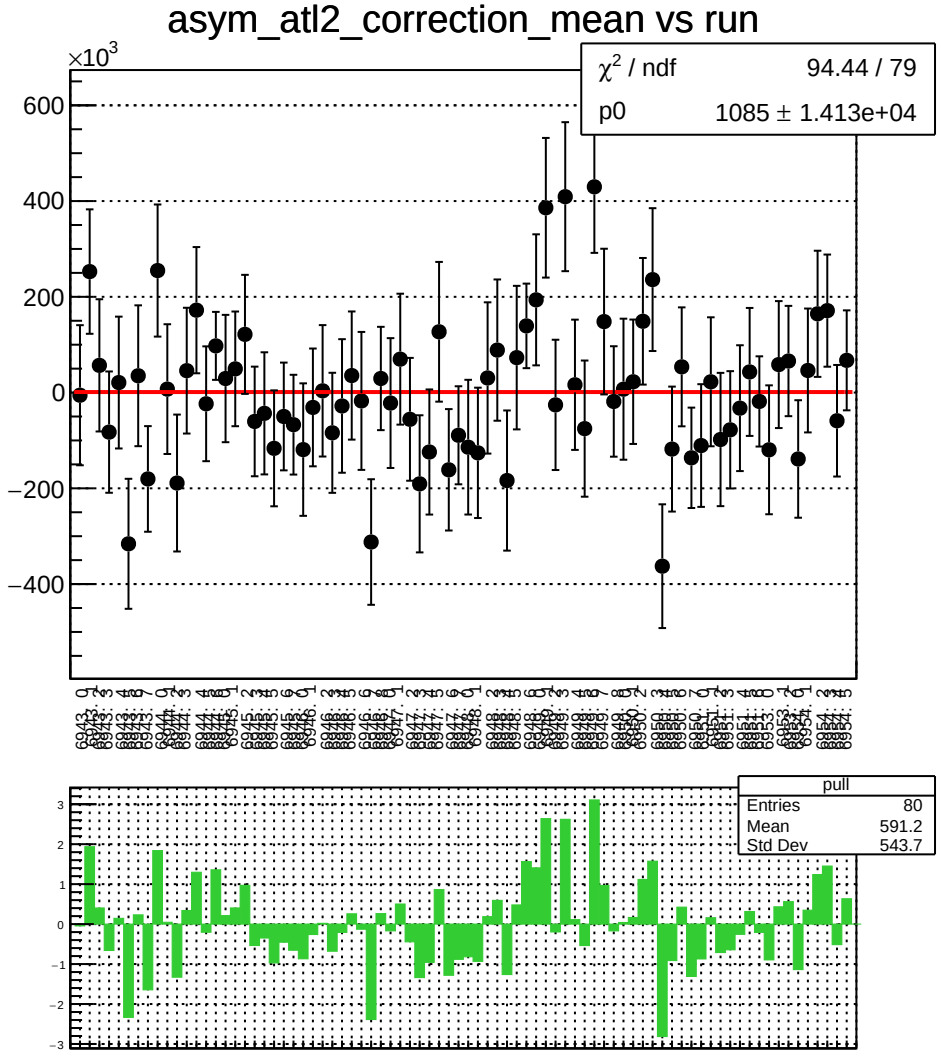

pull1D
Entries 80
Mean −0.002744
Std Dev 0.9828
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

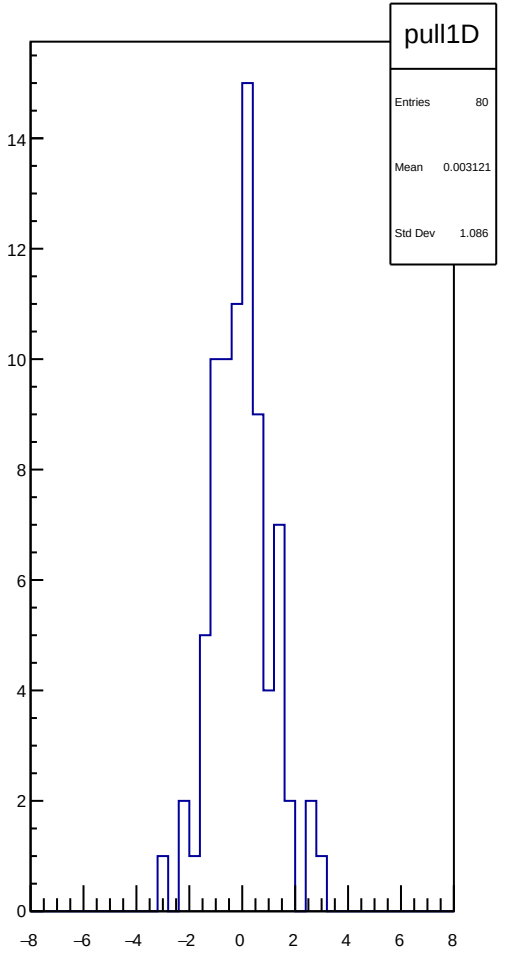

asym_atl1_rms vs run
χ² / ndf 1.073e+04 / 79
p0 2620 ± 2.081
10000
8000
6000
4000
2000

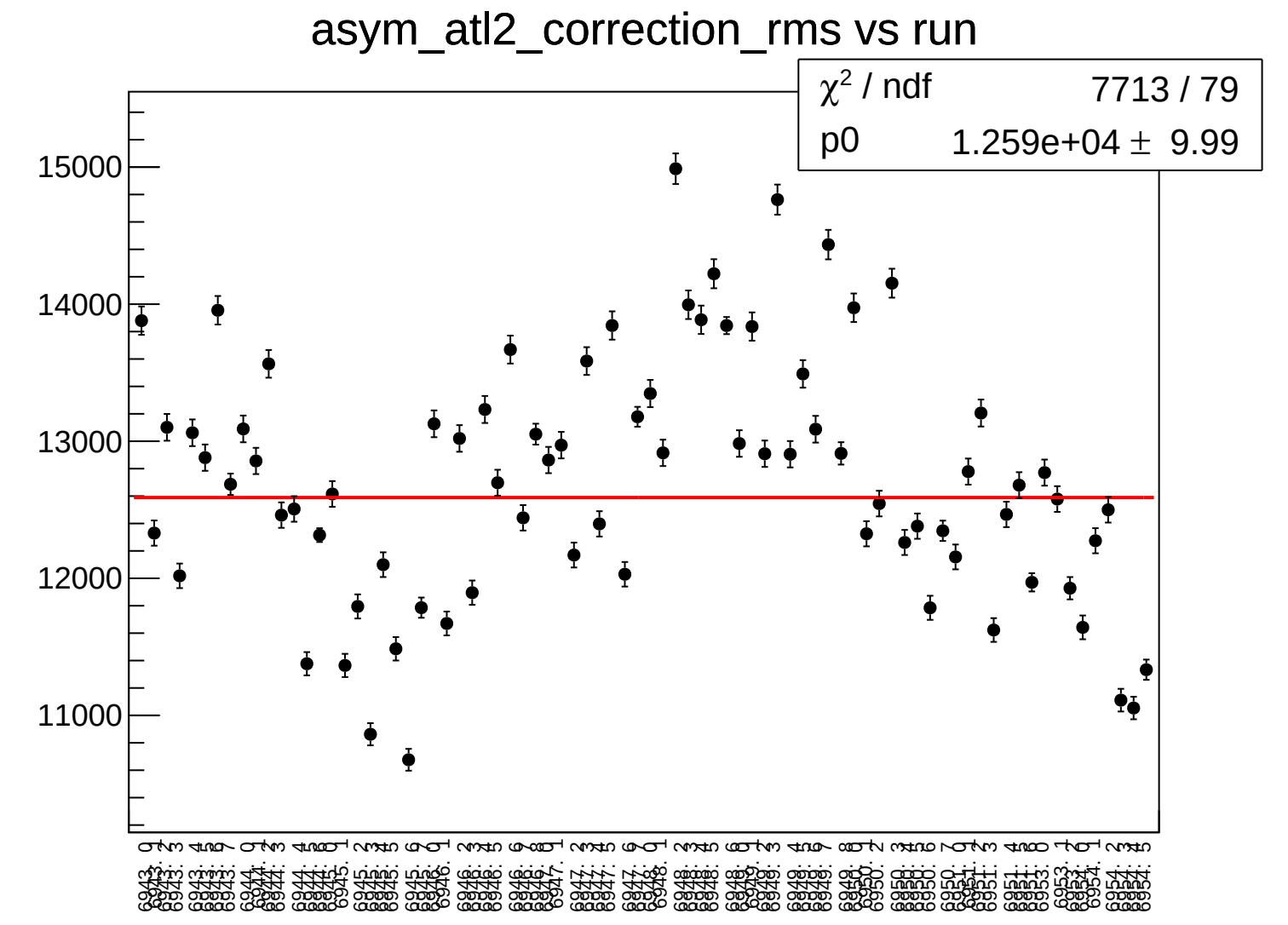

reg_asym_atl2_mean vs run
×10^3
χ^2 / ndf 88.01 / 79
p0 1933 ± 3050
pull
Entries 80
Mean −141.7
Std Dev 186.2

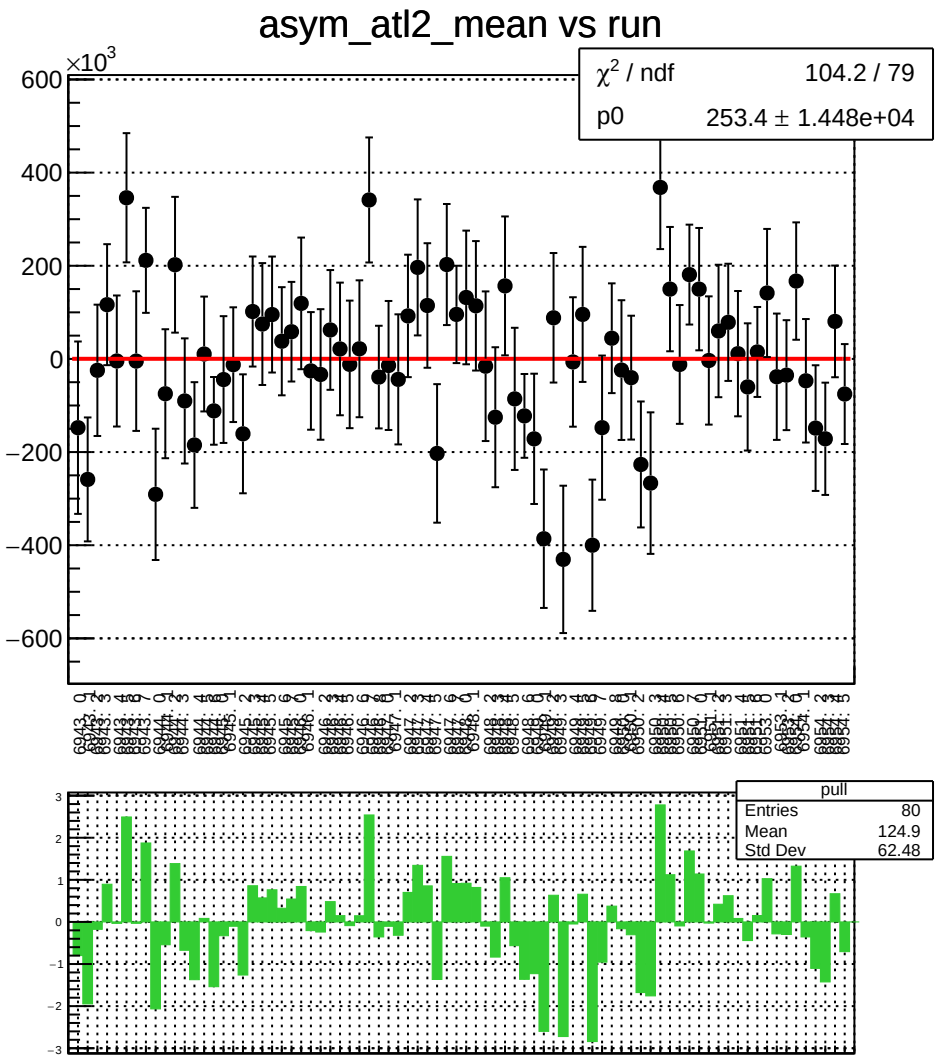

pull1D
Entries 80
Mean −0.01806
Std Dev 1.049

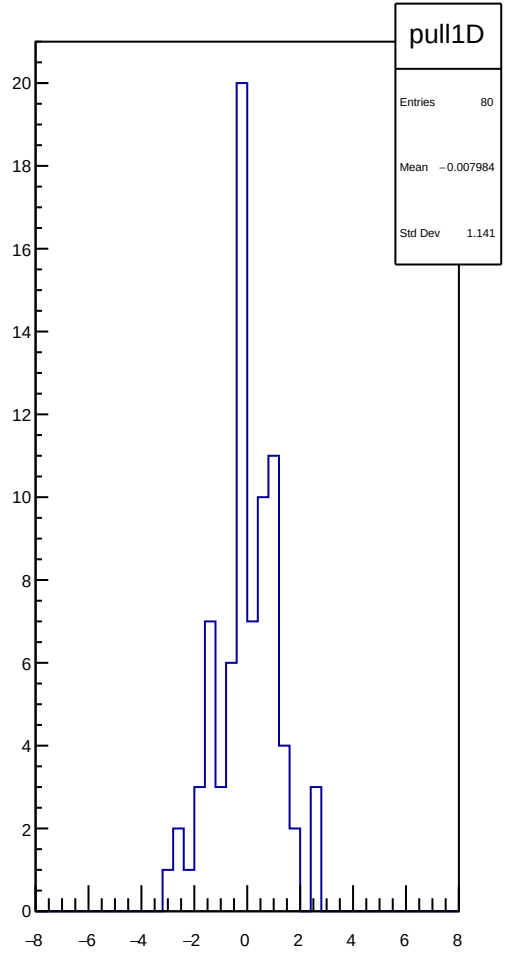

reg_asym_atl2_rms vs run
χ^2 / ndf 1.021e+04 / 79
p0 2716 ± 2.157
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

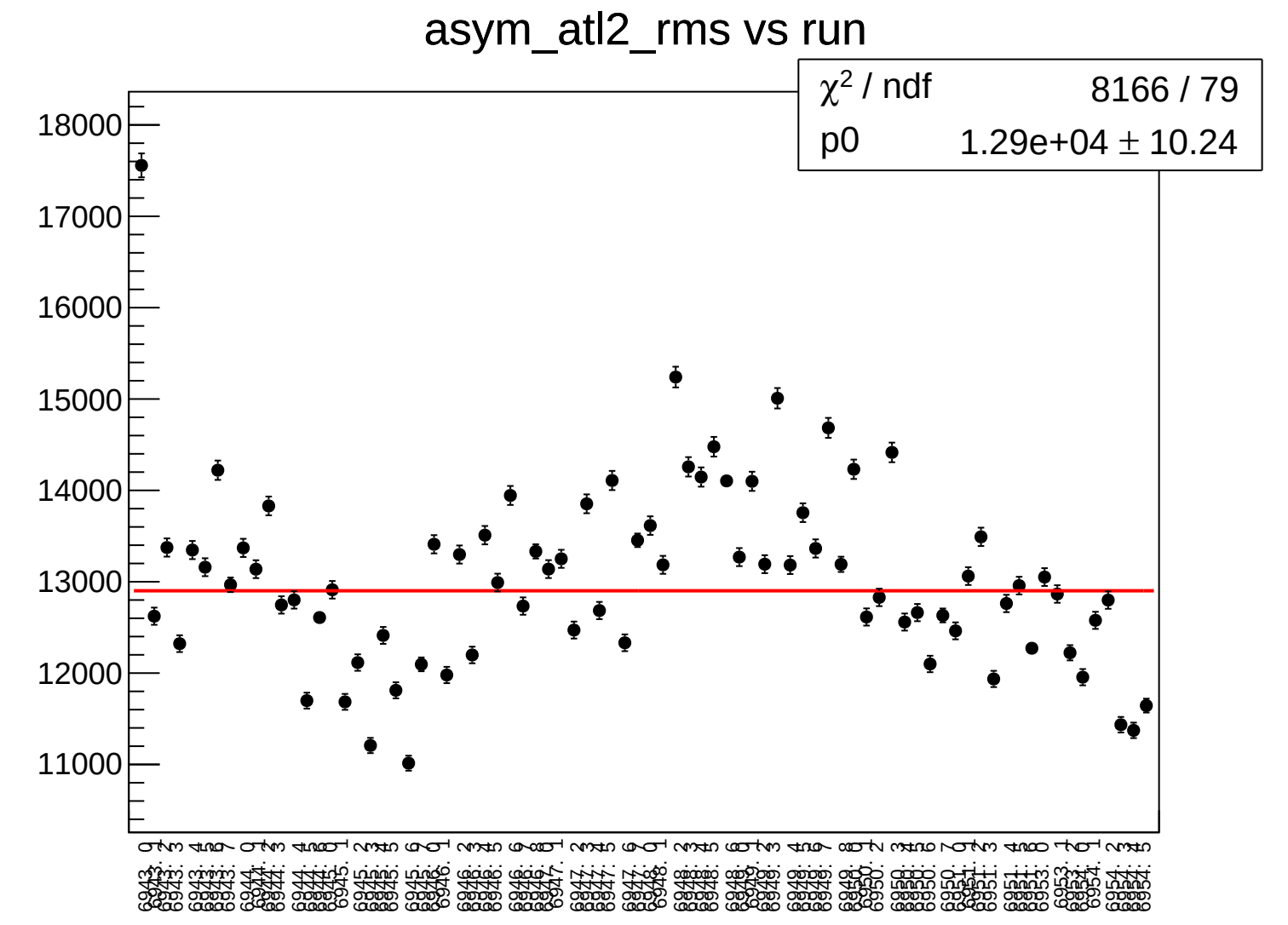

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 94.44 / 79
p0 1085 ± 1.413e+04
pull
Entries 80
Mean 591.2
Std Dev 543.7

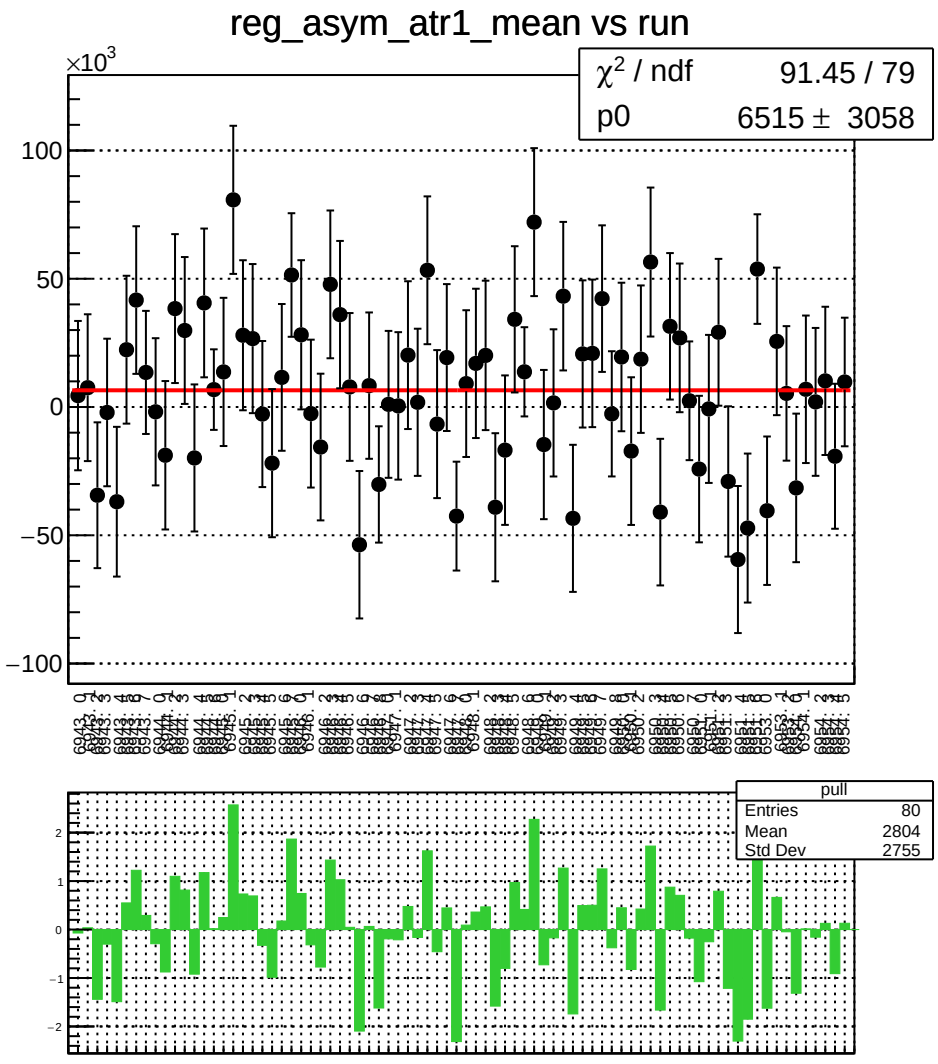

pull1D
Entries 80
Mean 0.003121
Std Dev 1.086

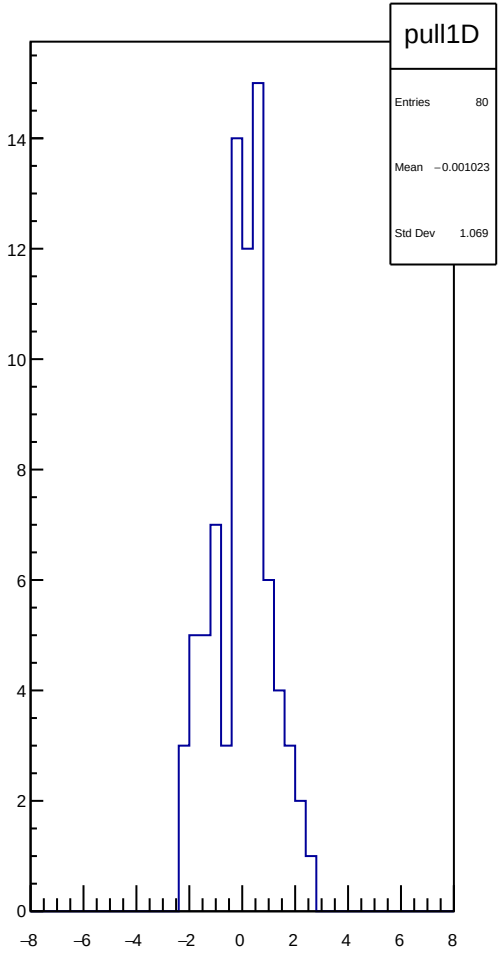

asym_atl2_correction_rms vs run
χ² / ndf 7713 / 79
p0 1.259e+04 ± 9.99
15000
14000
13000
12000
11000

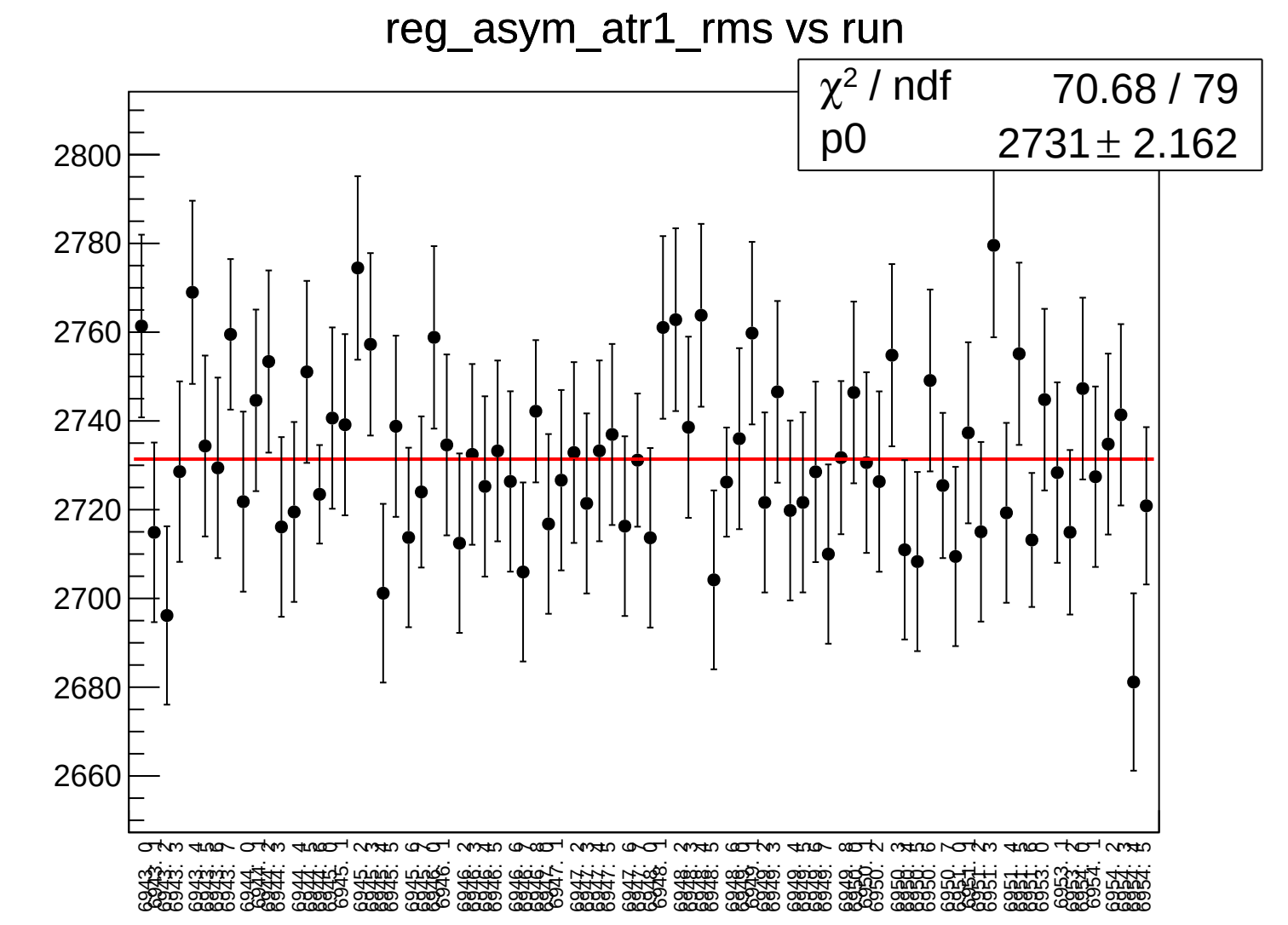

asym_atl2_mean vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 104.2 / 79
p0 253.4 ± 1.448e+04
pull
Entries 80
Mean 124.9
Std Dev 62.48
3
2
1
0
−1
−2
−3

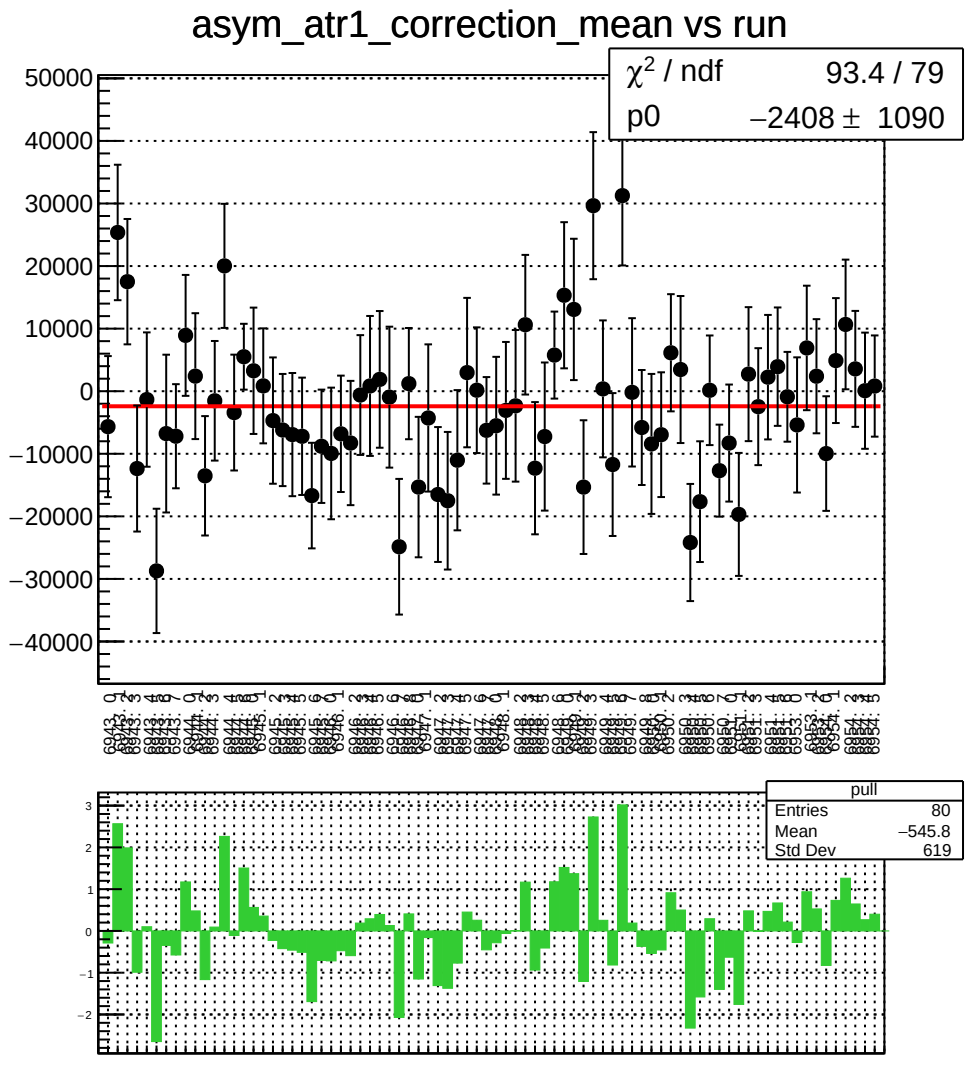

pull1D
Entries 80
Mean −0.007984
Std Dev 1.141
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

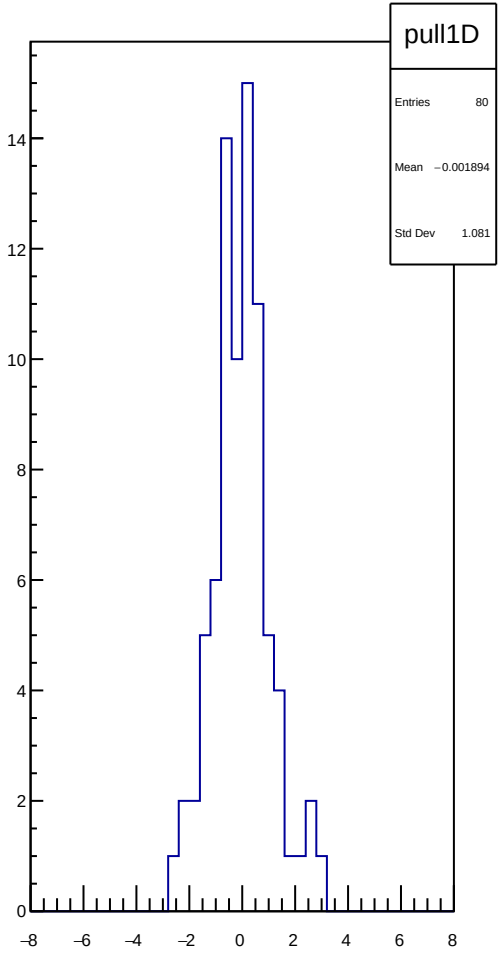

asym_atl2_rms vs run
χ² / ndf 8166 / 79
p0 1.29e+04 ± 10.24
18000
17000
16000
15000
14000
13000
12000
11000

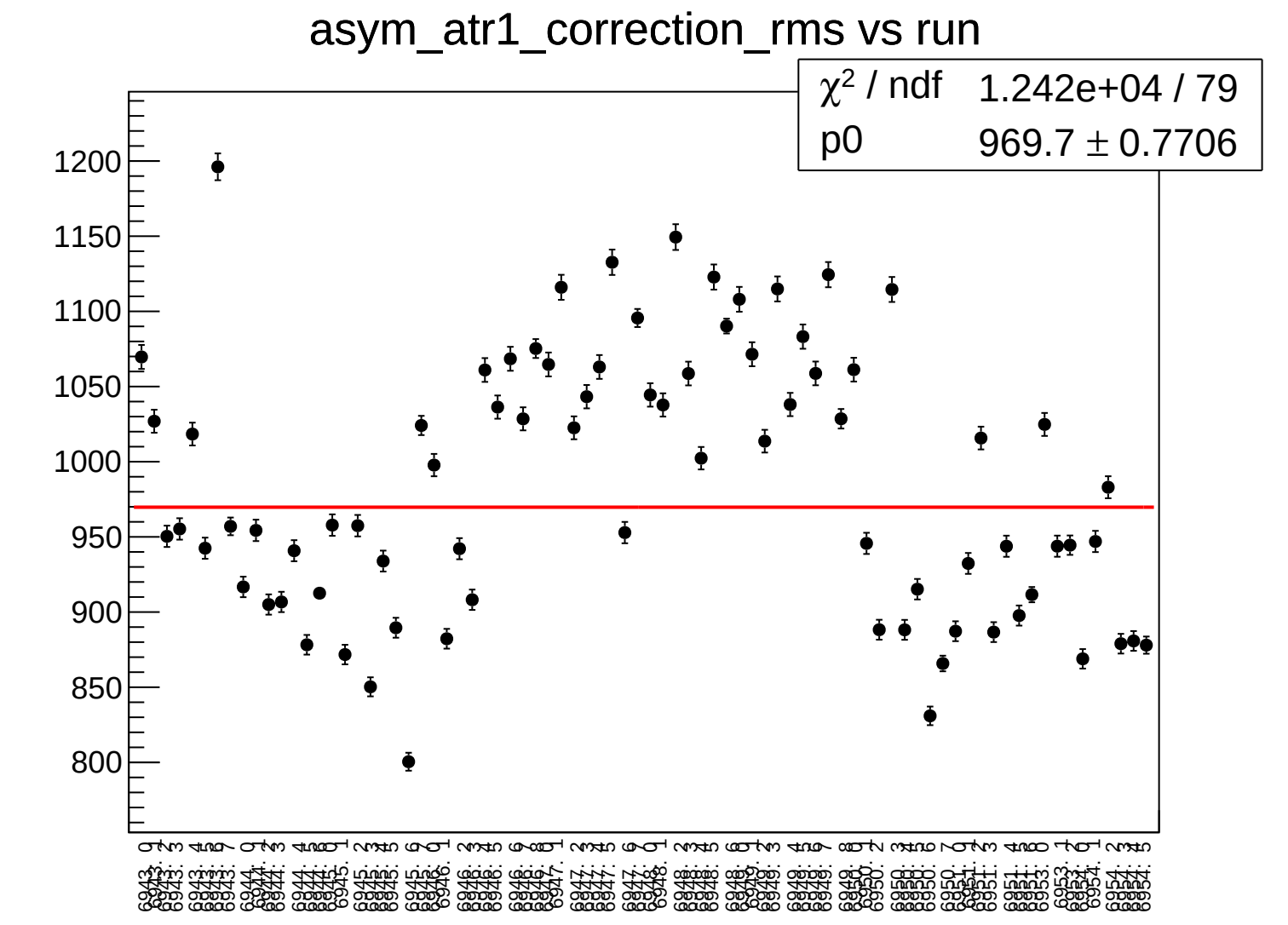

reg_asym_atr1_mean vs run
×10^3
χ^2 / ndf 91.45 / 79
p0 6515 ± 3058
100
50
0
−50
−100
pull
Entries 80
Mean 2804
Std Dev 2755
2
1
0
−1
−2

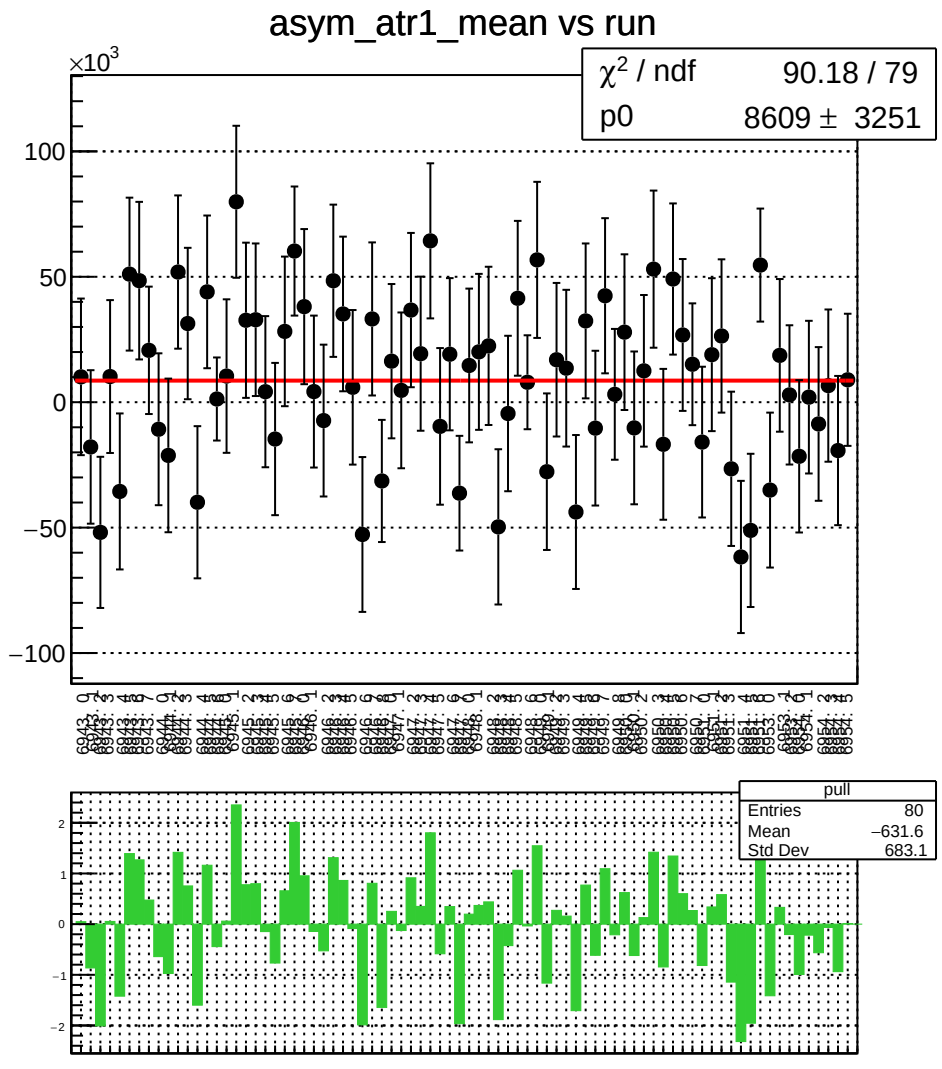

pull1D
Entries 80
Mean −0.001023
Std Dev 1.069
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

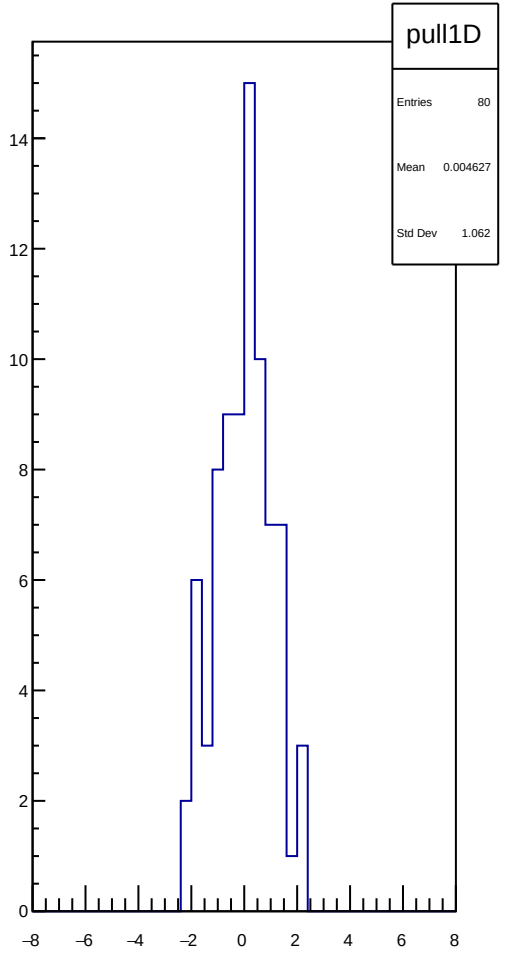

reg_asym_atr1_rms vs run
χ^2 / ndf 70.68 / 79
p0 2731 ± 2.162
2800
2780
2760
2740
2720
2700
2680
2660

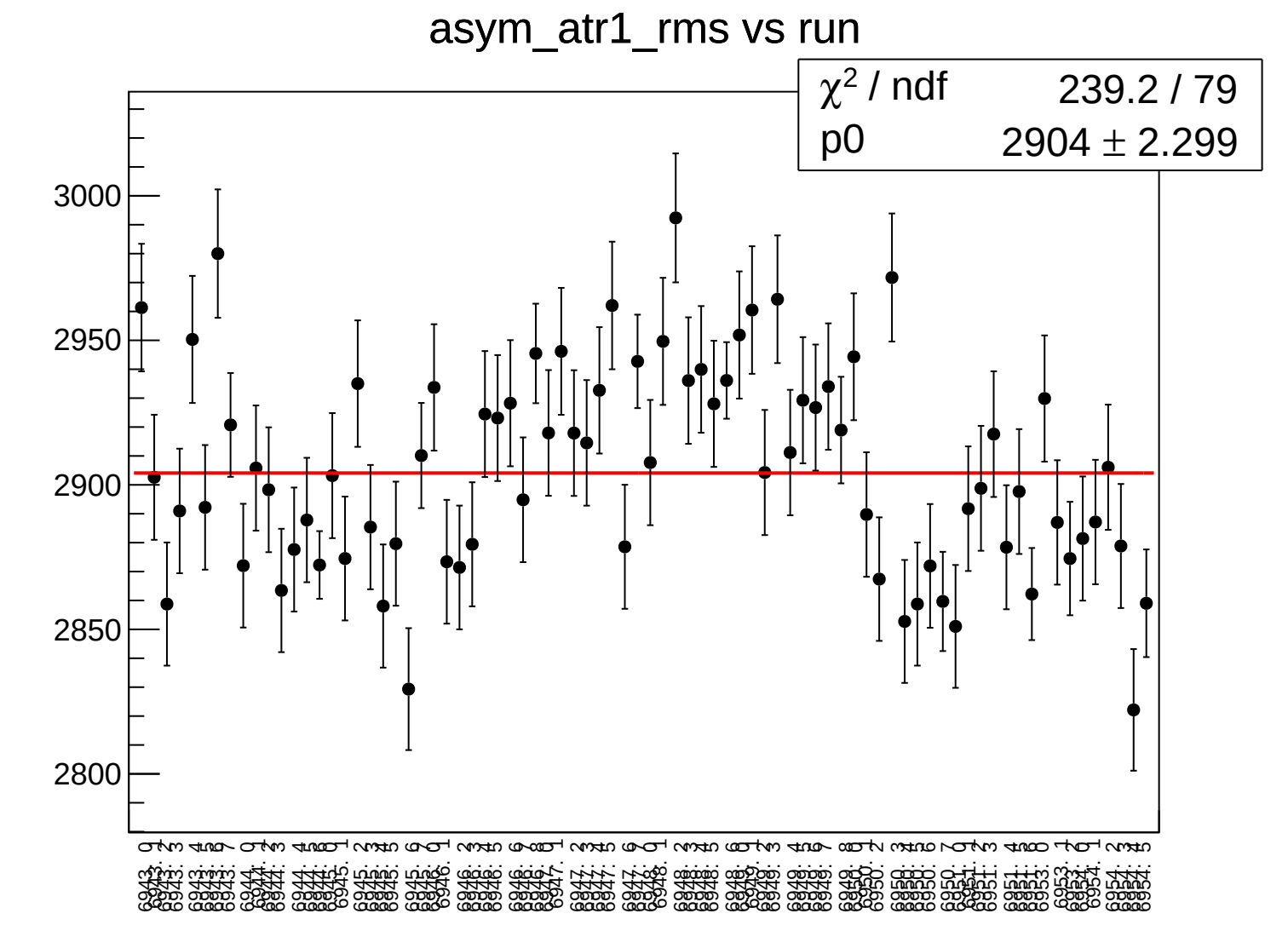

asym_atr1_correction_mean vs run
χ² / ndf 93.4 / 79
p0 −2408 ± 1090
pull
Entries 80
Mean −545.8
Std Dev 619

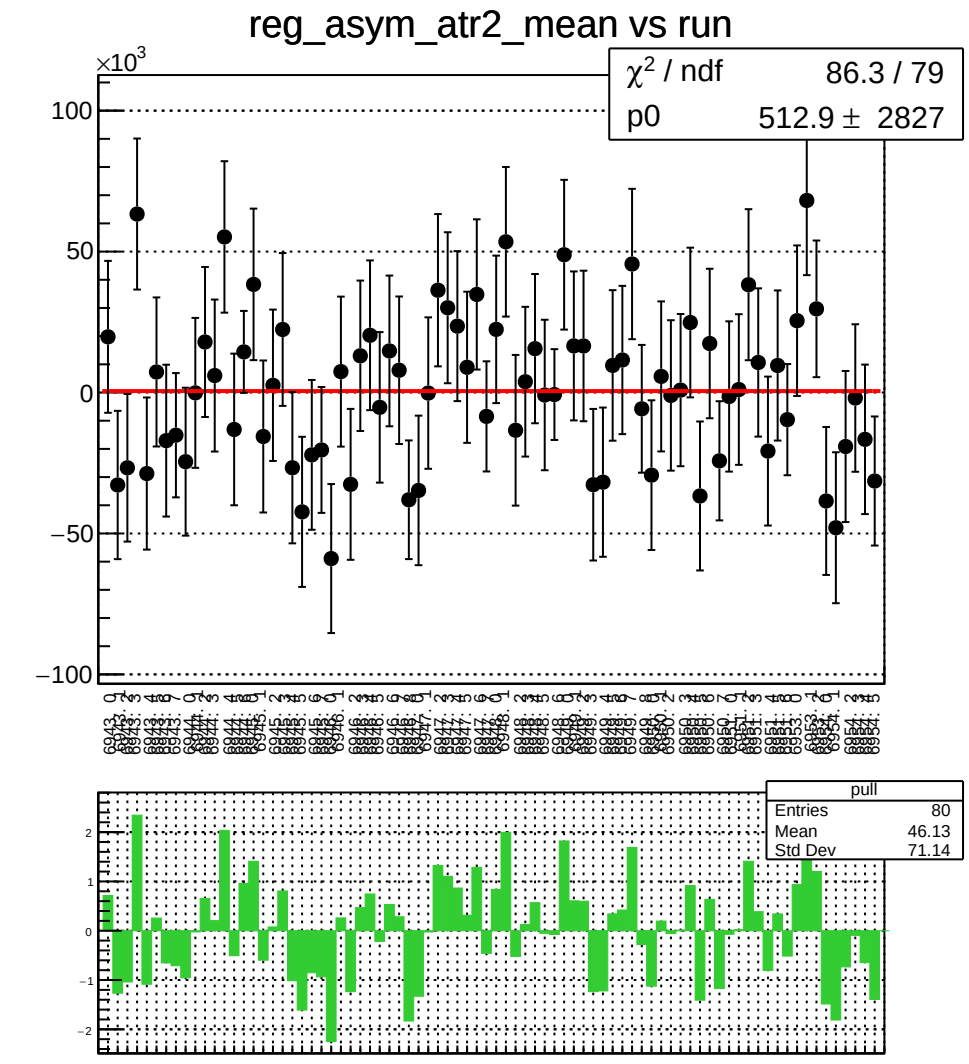

pull1D
Entries 80
Mean −0.001894
Std Dev 1.081

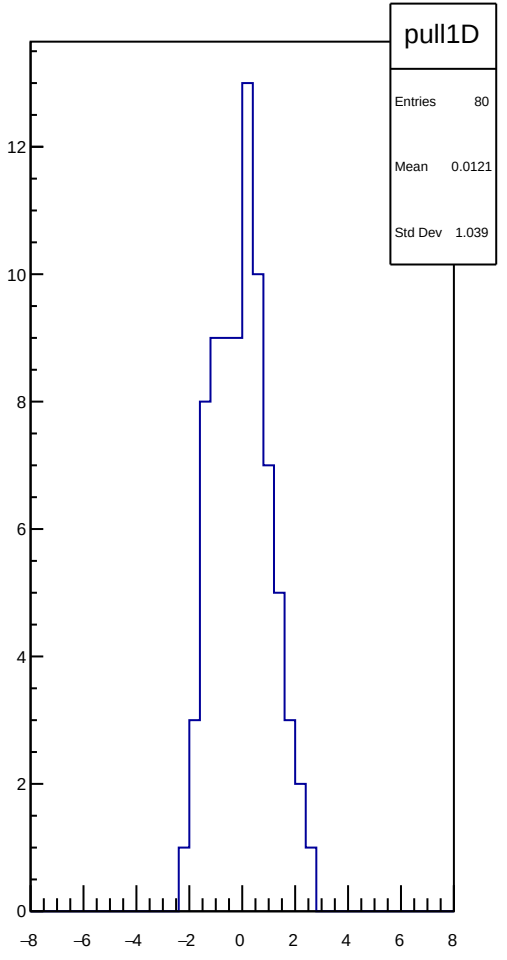

asym_atr1_correction_rms vs run
χ² / ndf 1.242e+04 / 79
p0 969.7 ± 0.7706
1200
1150
1100
1050
1000
950
900
850
800

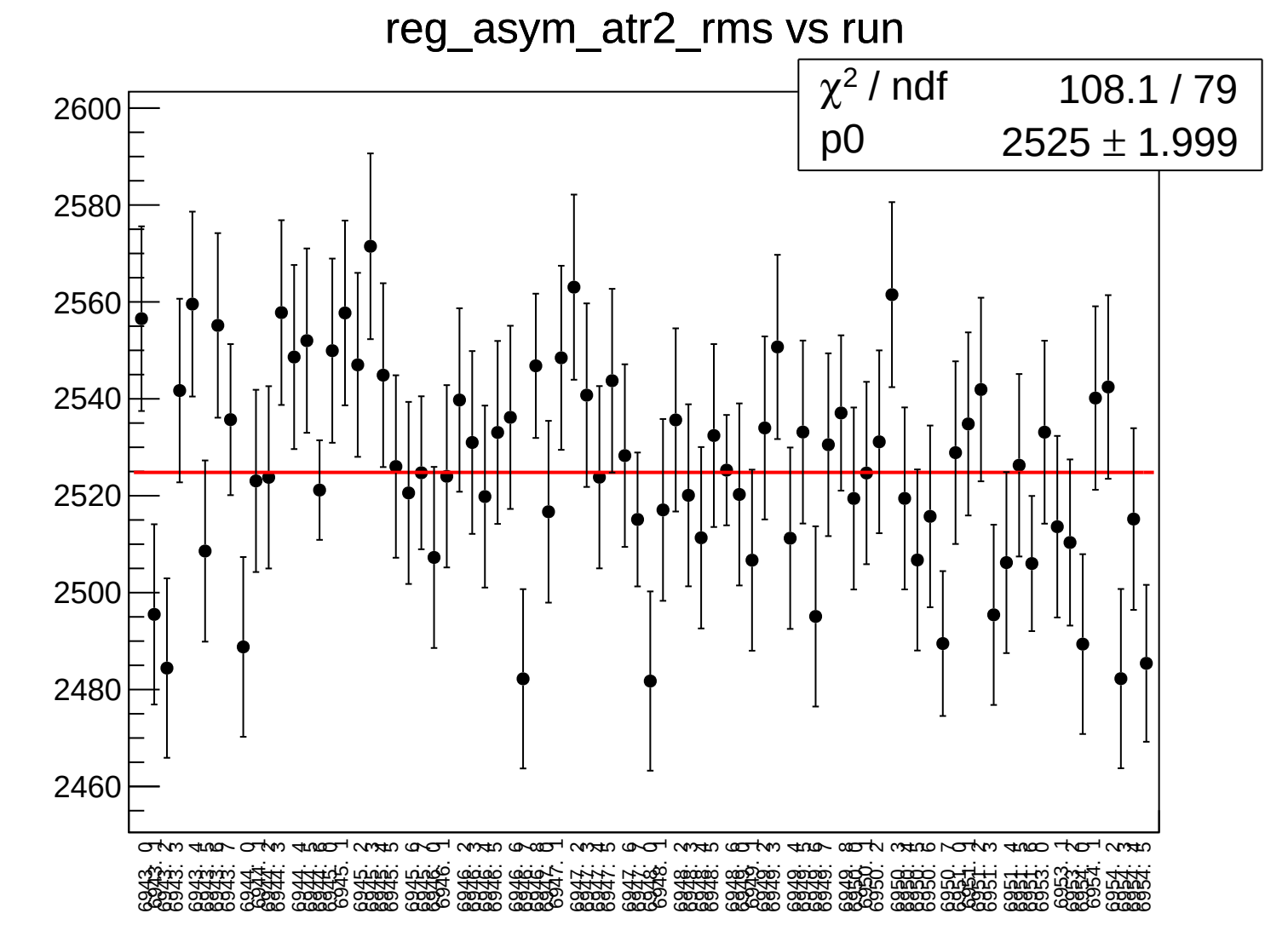

asym_atr1_mean vs run
×10^3
χ² / ndf 90.18 / 79
p0 8609 ± 3251
100
50
0
−50
−100
pull
Entries 80
Mean −631.6
Std Dev 683.1
2
1
0
−1
−2

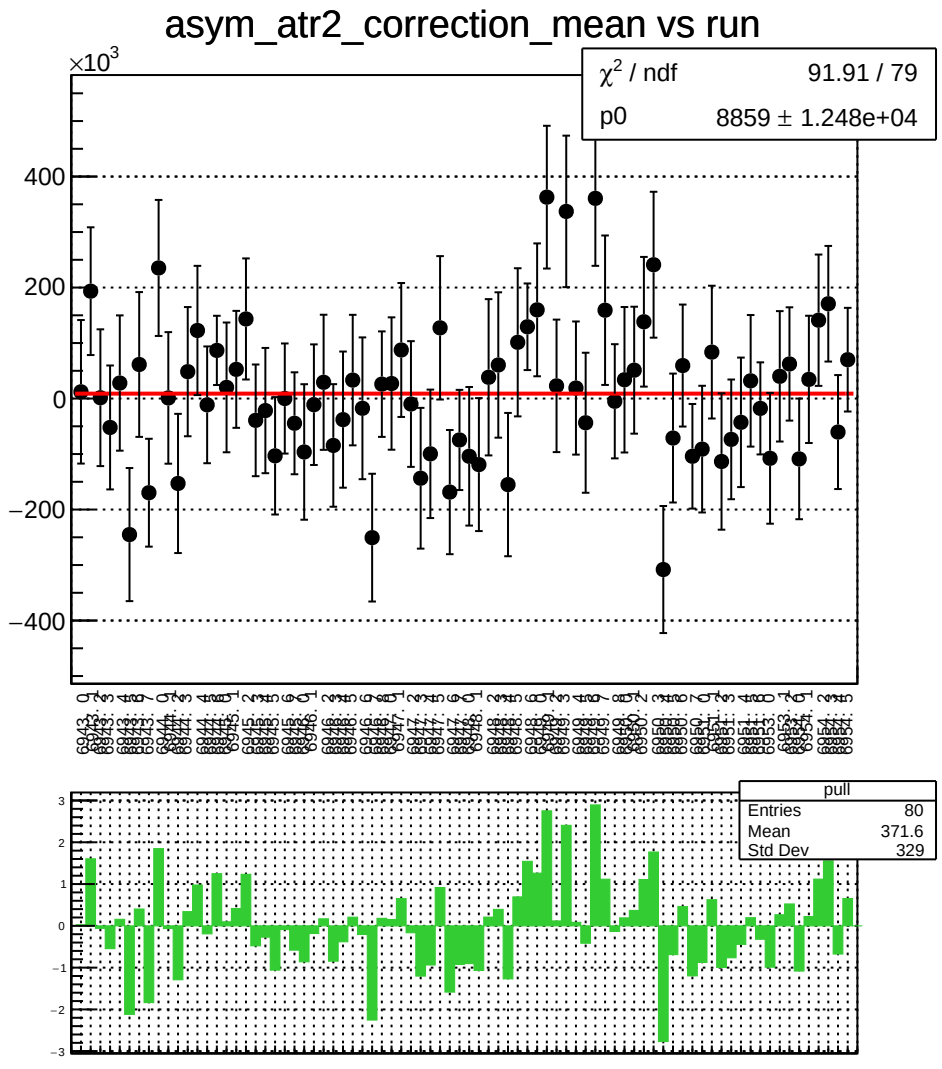

pull1D
Entries 80
Mean 0.004627
Std Dev 1.062
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

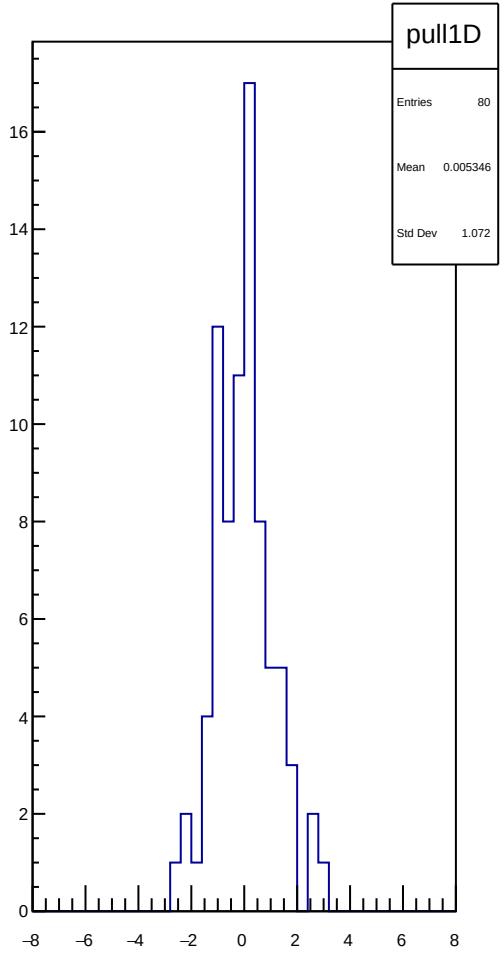

asym_atr1_rms vs run
χ^2 / ndf 239.2 / 79
p0 2904 ± 2.299
3000
2950
2900
2850
2800

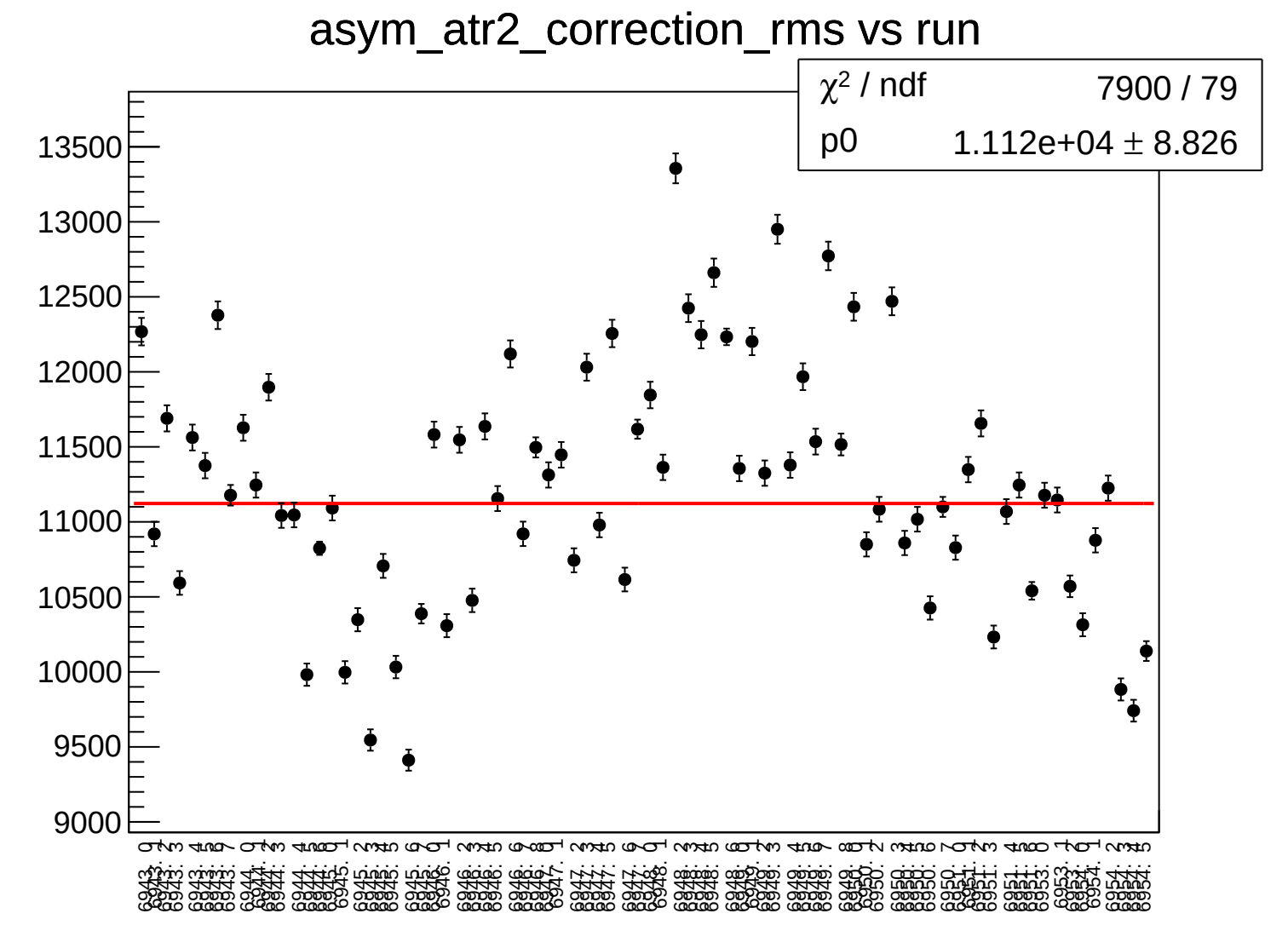

reg_asym_atr2_mean vs run
×10^3
χ² / ndf 86.3 / 79
p0 512.9 ± 2827
100
50
0
−50
−100
pull
Entries 80
Mean 46.13
Std Dev 71.14
2
1
0
−1
−2

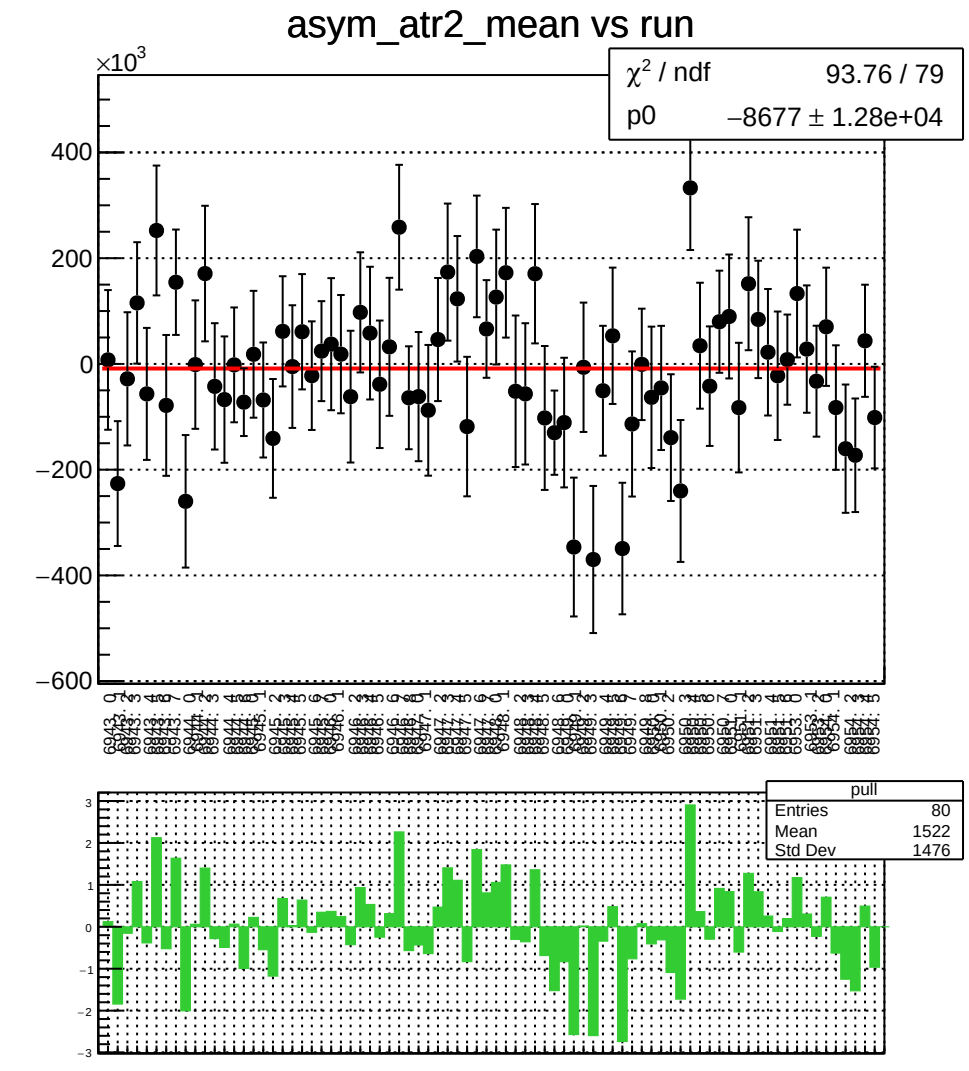

pull1D
Entries 80
Mean 0.0121
Std Dev 1.039
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

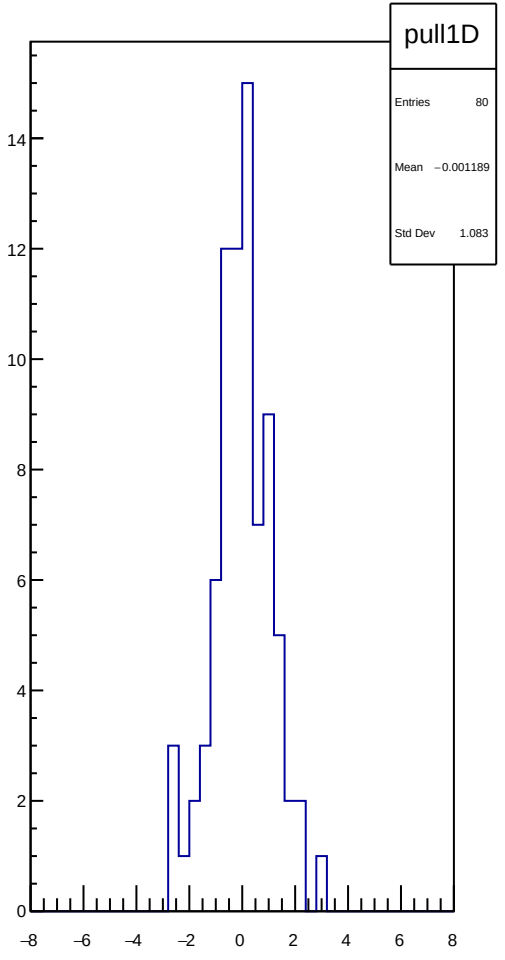

reg_asym_atr2_rms vs run
χ² / ndf 108.1 / 79
p0 2525 ± 1.999
2600
2580
2560
2540
2520
2500
2480
2460

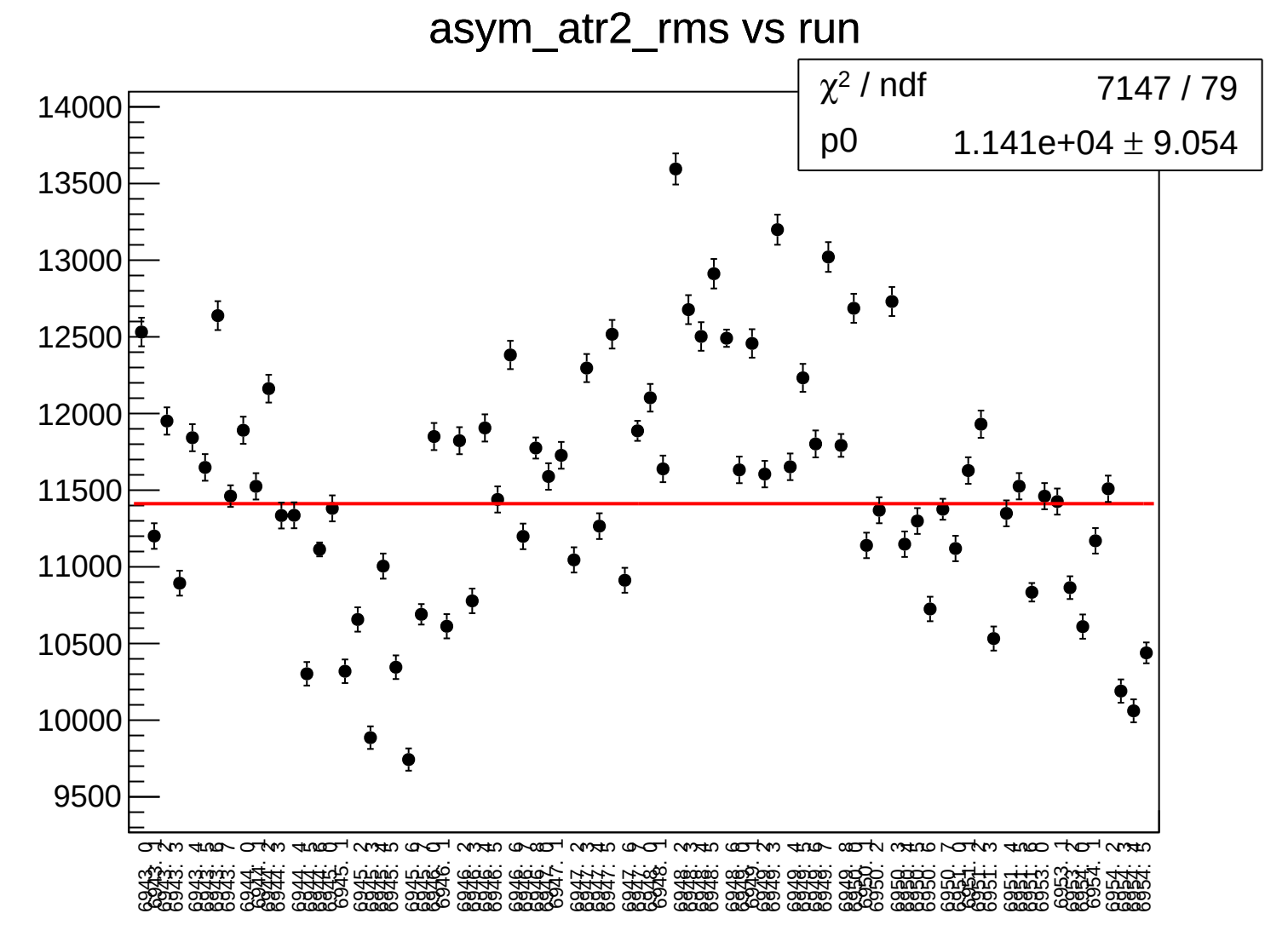

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 91.91 / 79
p0 8859 ± 1.248e+04
400
200
0
−200
−400
pull
Entries 80
Mean 371.6
Std Dev 329
3
2
1
0
−1
−2
−3

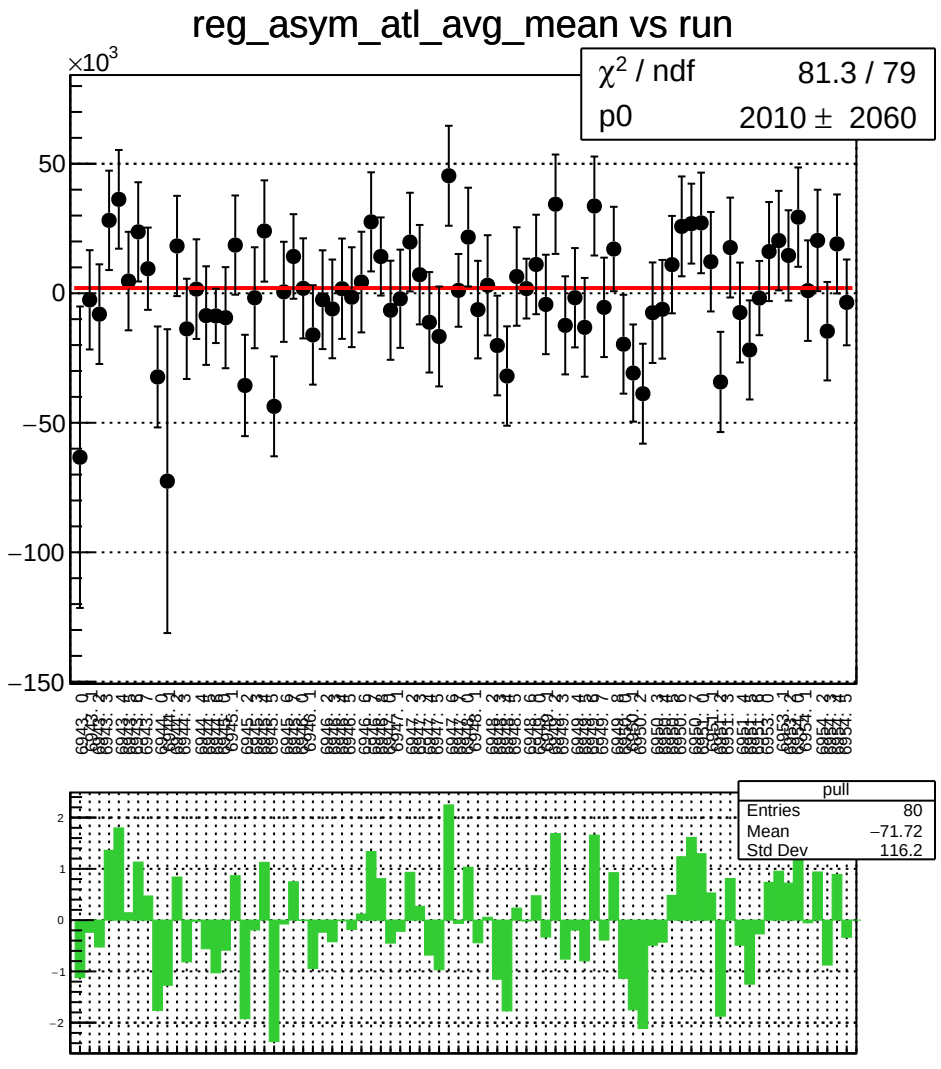

pull1D
Entries 80
Mean 0.005346
Std Dev 1.072
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

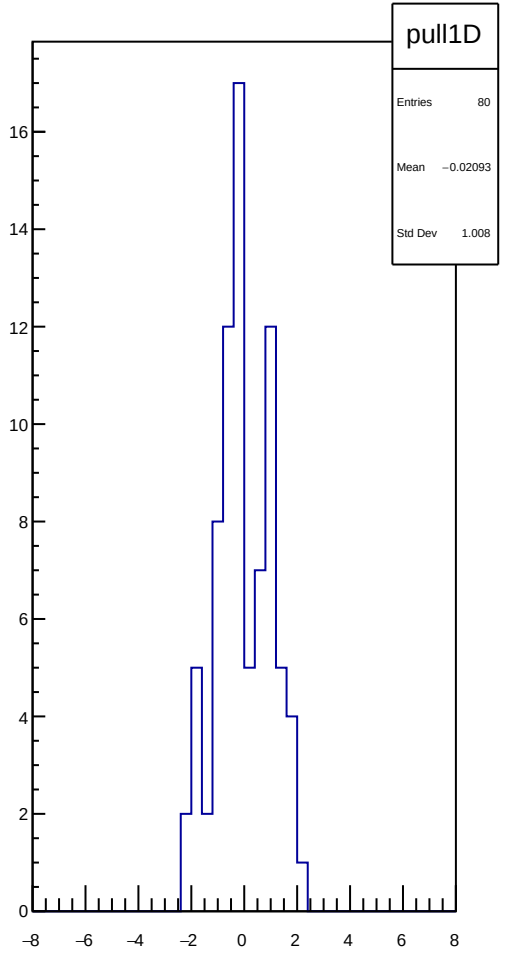

asym_atr2_correction_rms vs run
χ² / ndf 7900 / 79
p0 1.112e+04 ± 8.826
13500
13000
12500
12000
11500
11000
10500
10000
9500
9000

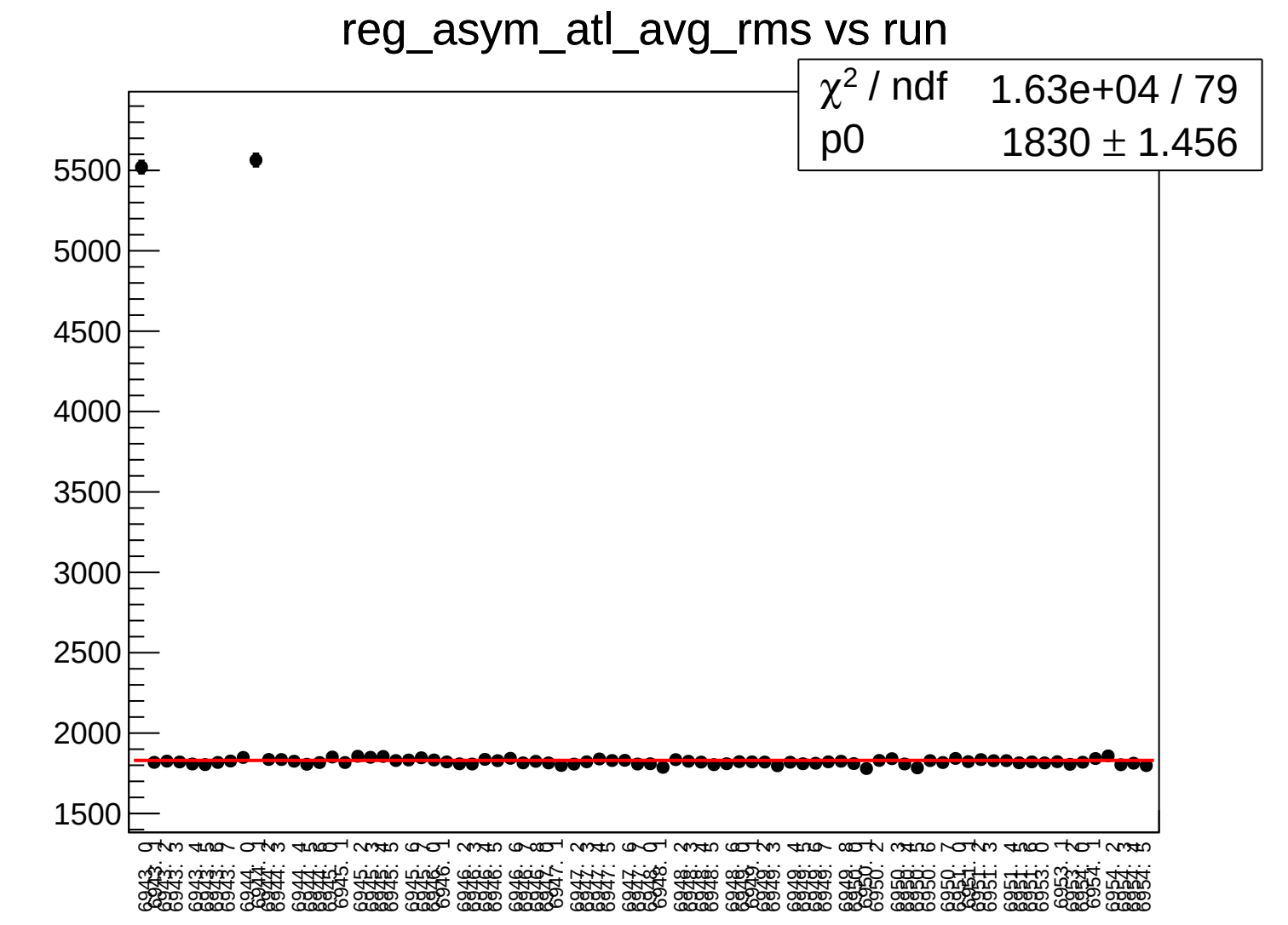

asym_atr2_mean vs run
×10^3
χ² / ndf 93.76 / 79
p0 −8677 ± 1.28e+04
pull
Entries 80
Mean 1522
Std Dev 1476

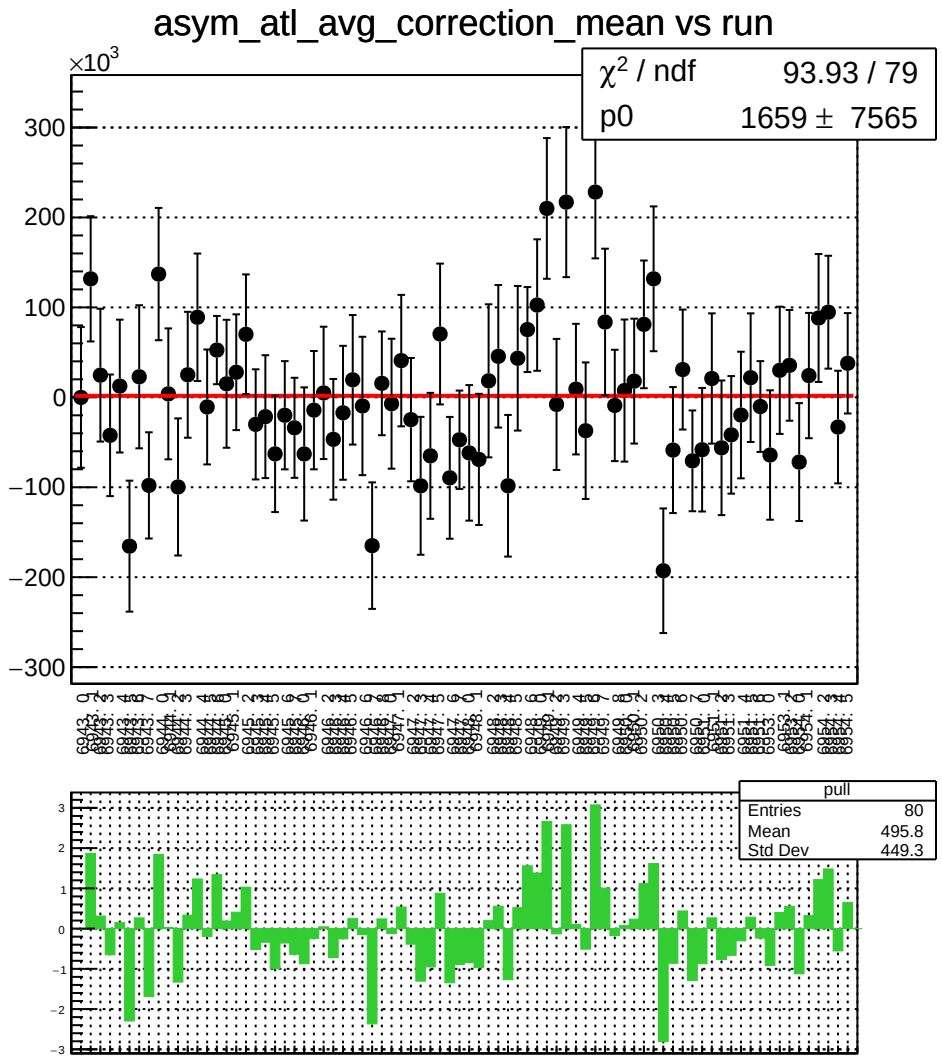

pull1D
Entries 80
Mean −0.001189
Std Dev 1.083

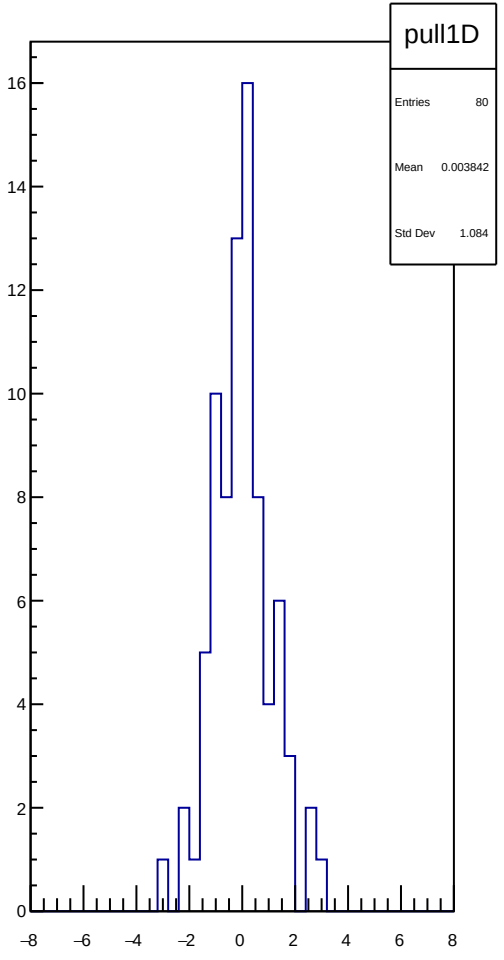

asym_atr2_rms vs run
χ² / ndf 7147 / 79
p0 1.141e+04 ± 9.054
14000
13500
13000
12500
12000
11500
11000
10500
10000
9500

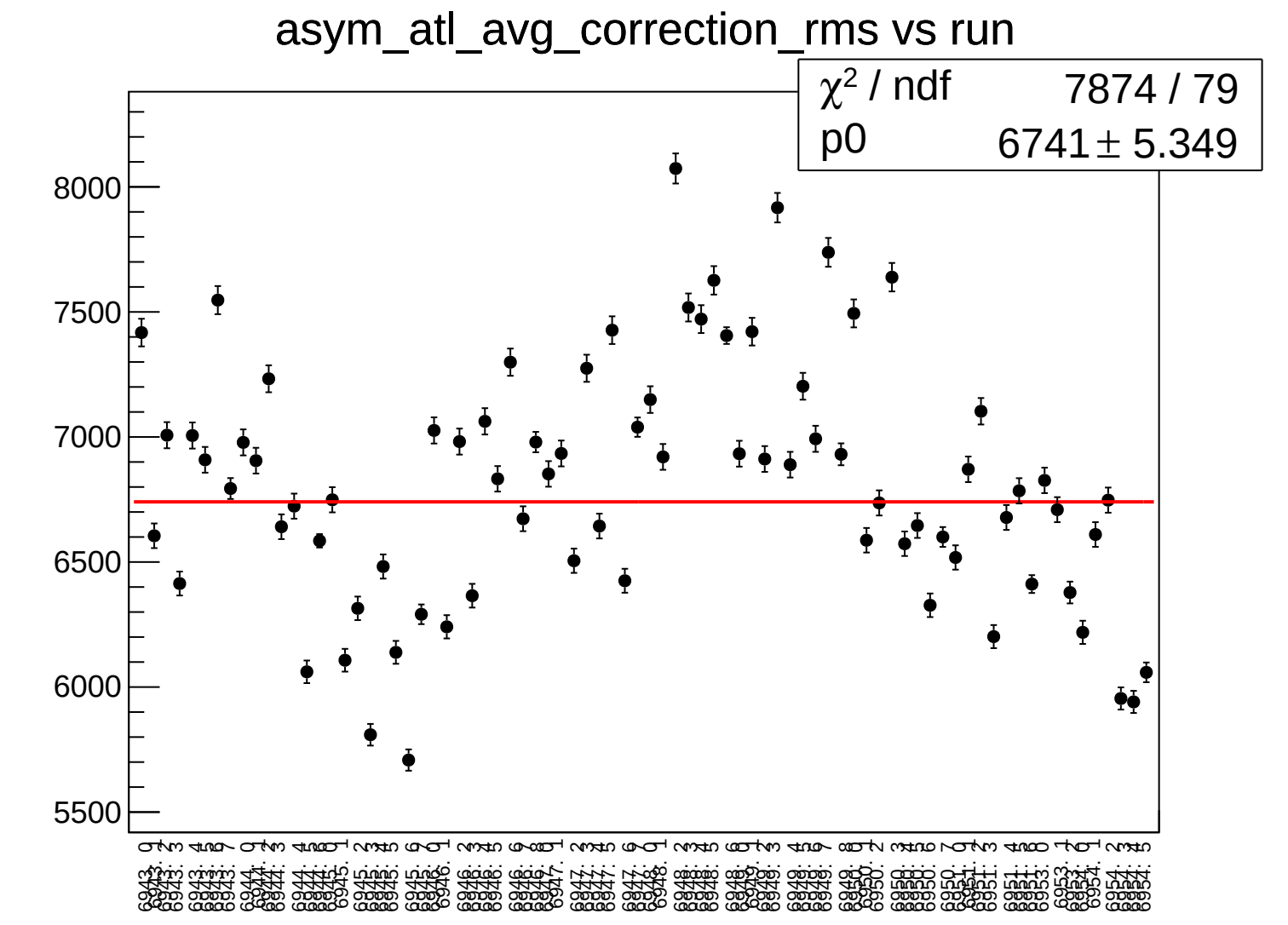

reg_asym_atl_avg_mean vs run
χ² / ndf 81.3 / 79
p0 2010 ± 2060
×10³
50
0
−50
−100
−150
pull
Entries 80
Mean −71.72
Std Dev 116.2
2
1
0
−1
−2

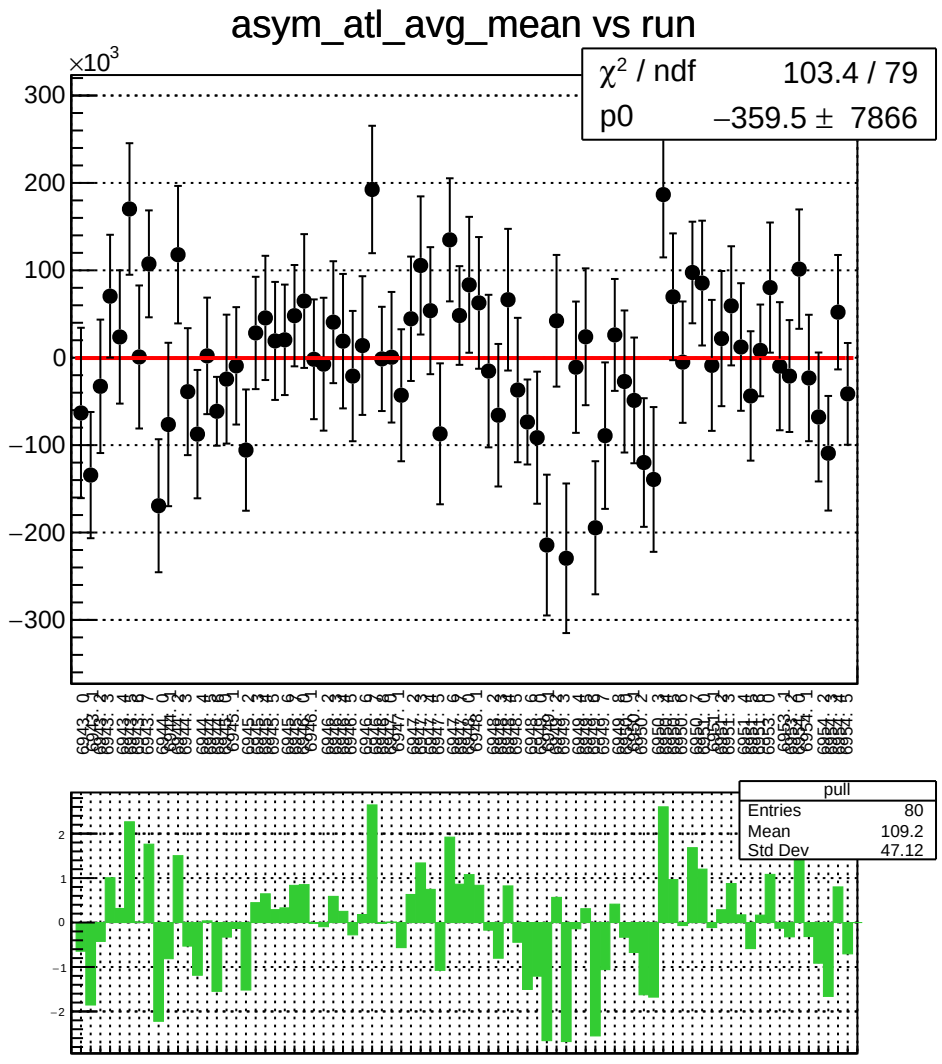

pull1D
Entries 80
Mean −0.02093
Std Dev 1.008
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

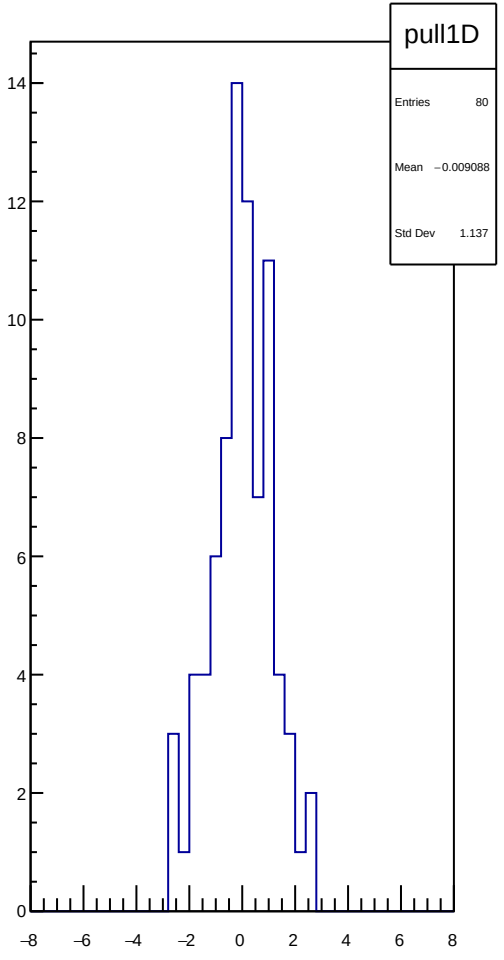

reg_asym_atl_avg_rms vs run
χ² / ndf 1.63e+04 / 79
p0 1830 ± 1.456
5500
5000
4500
4000
3500
3000
2500
2000
1500

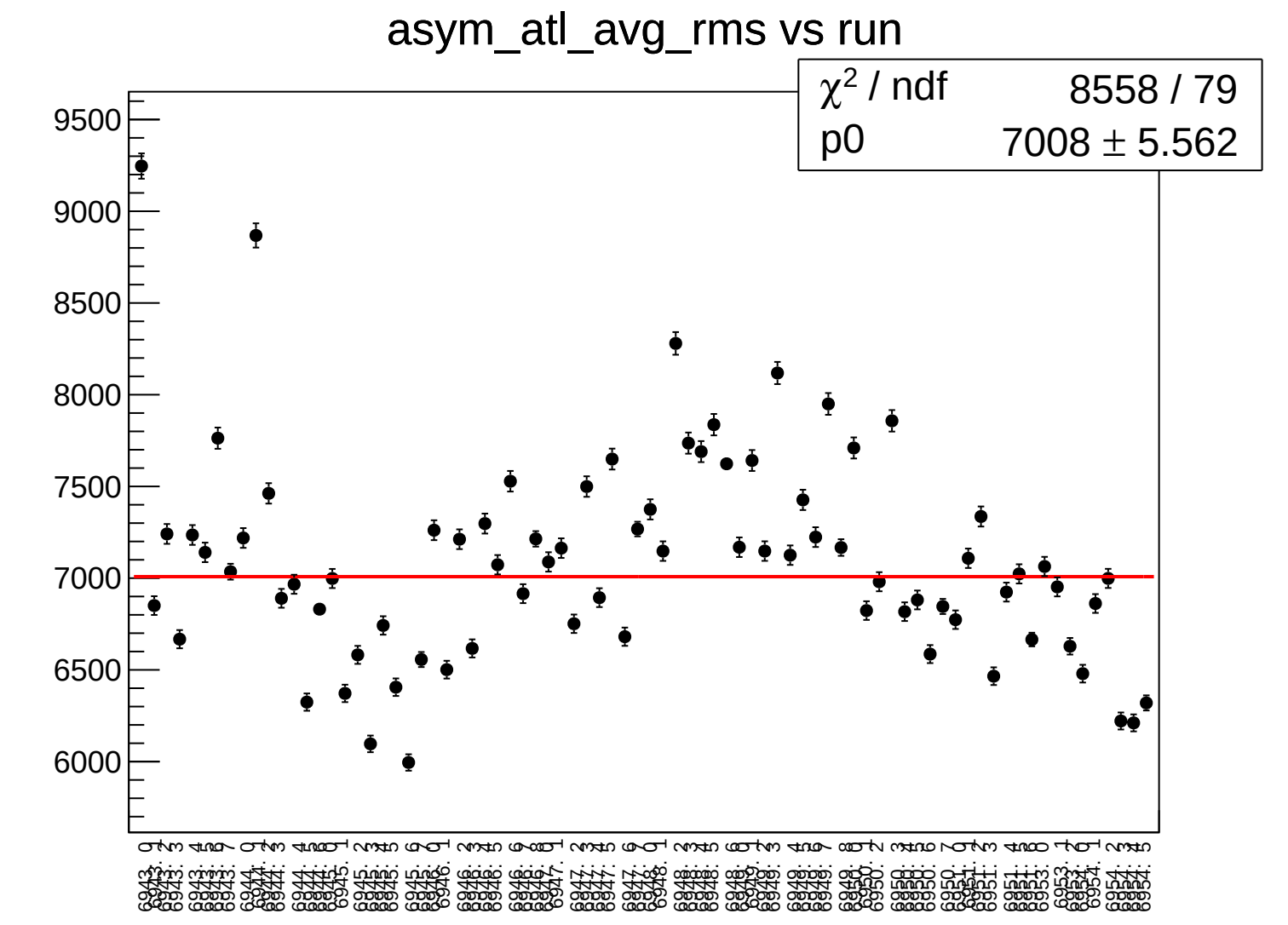

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 93.93 / 79
p0 1659 ± 7565
pull
Entries 80
Mean 495.8
Std Dev 449.3

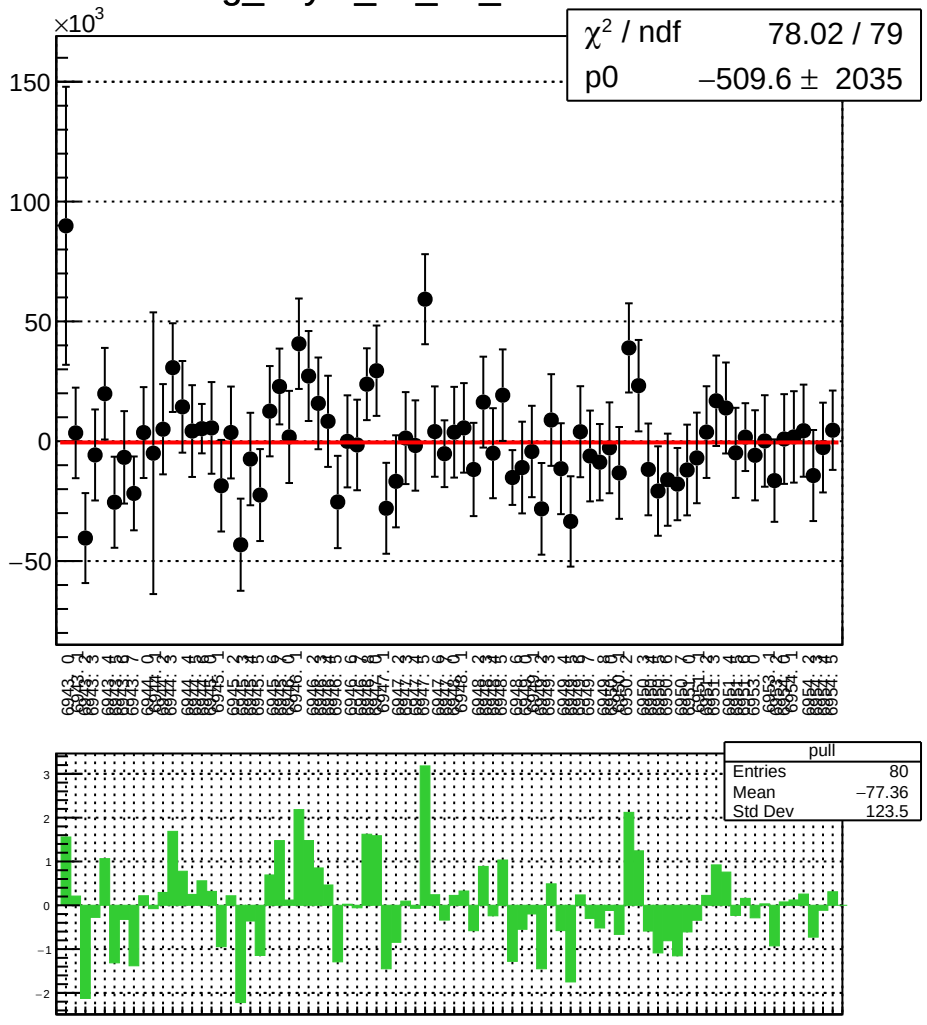

pull1D
Entries 80
Mean 0.003842
Std Dev 1.084

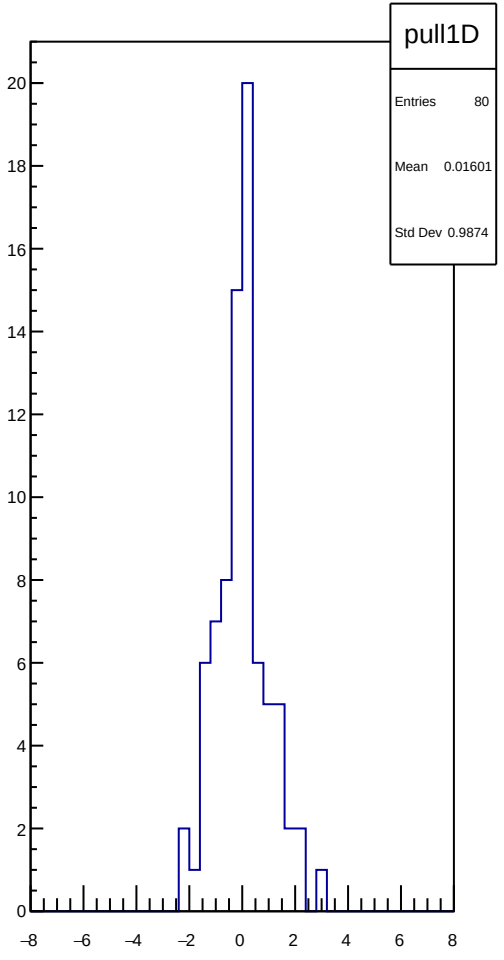

asym_atl_avg_correction_rms vs run
χ² / ndf 7874 / 79
p0 6741 ± 5.349
8000
7500
7000
6500
6000
5500

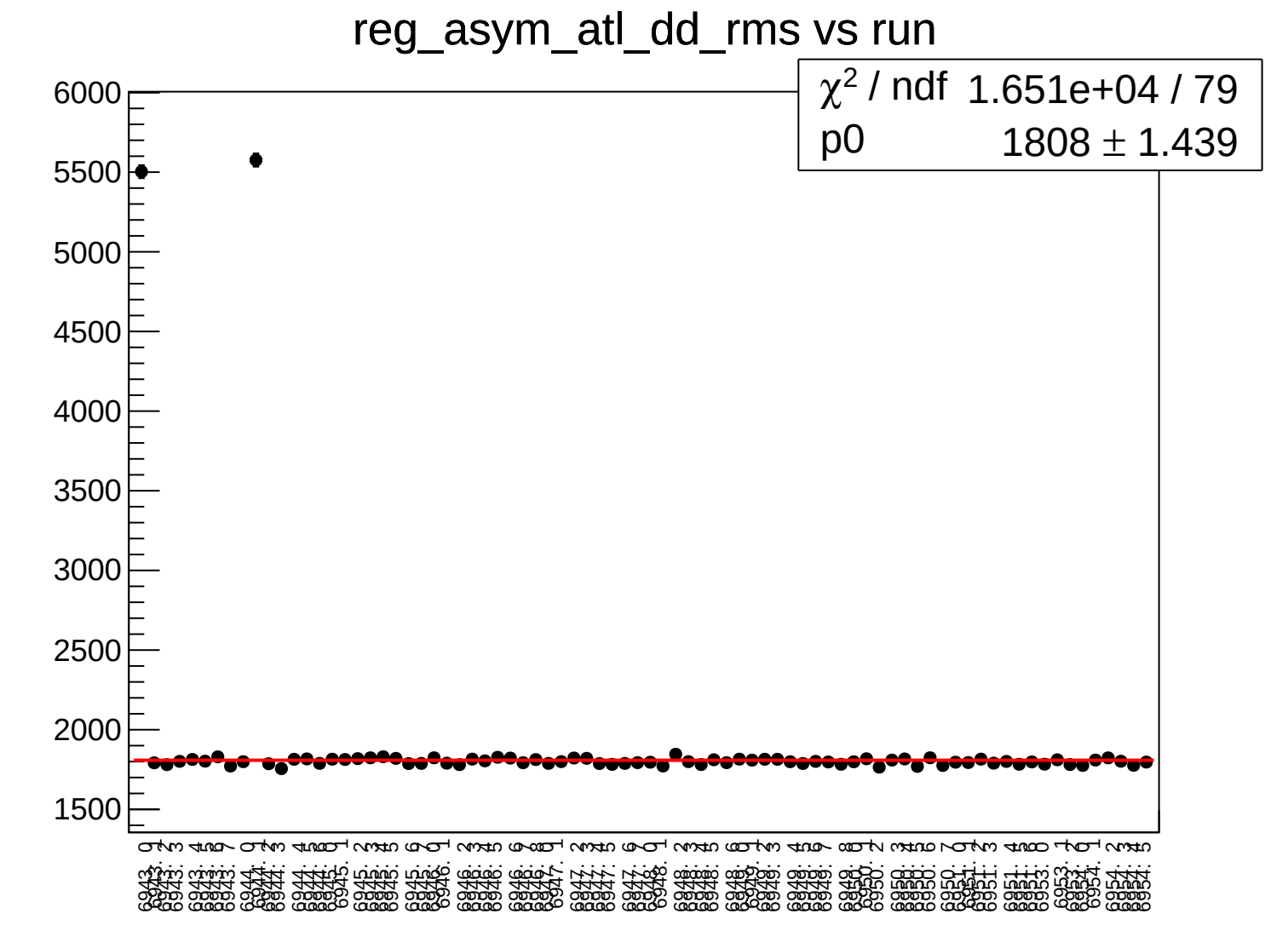

asym_atl_avg_mean vs run
×10^3
χ² / ndf 103.4 / 79
p0 −359.5 ± 7866
pull
Entries 80
Mean 109.2
Std Dev 47.12

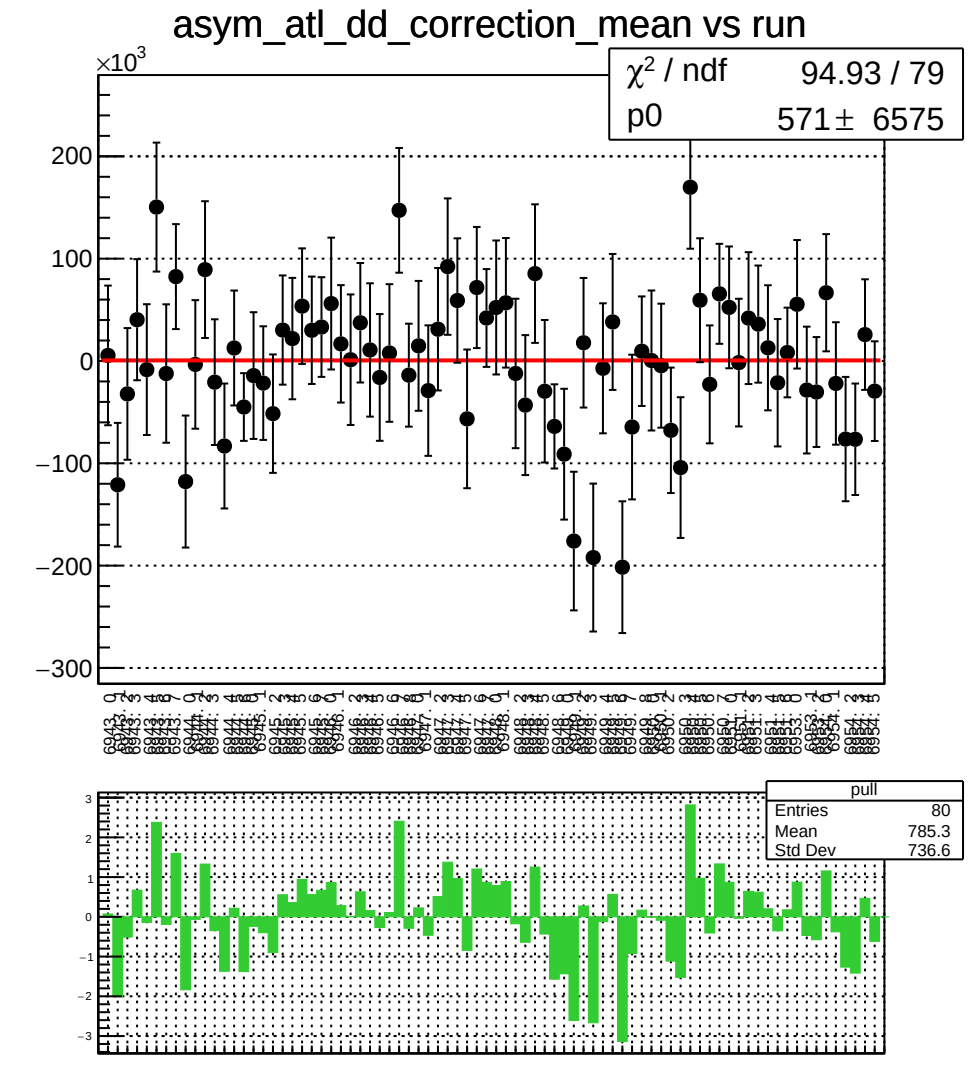

pull1D
Entries 80
Mean −0.009088
Std Dev 1.137

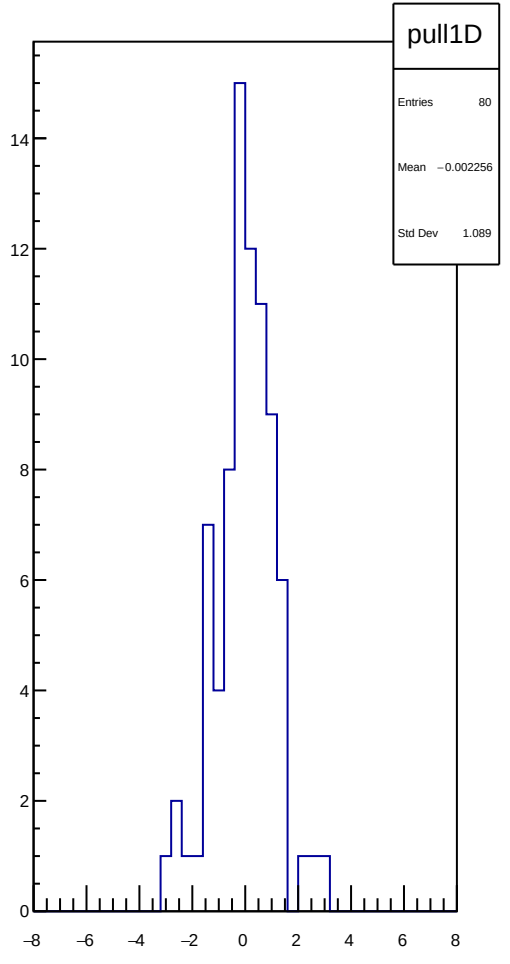

asym_atl_avg_rms vs run
χ² / ndf 8558 / 79
p0 7008 ± 5.562
9500
9000
8500
8000
7500
7000
6500
6000

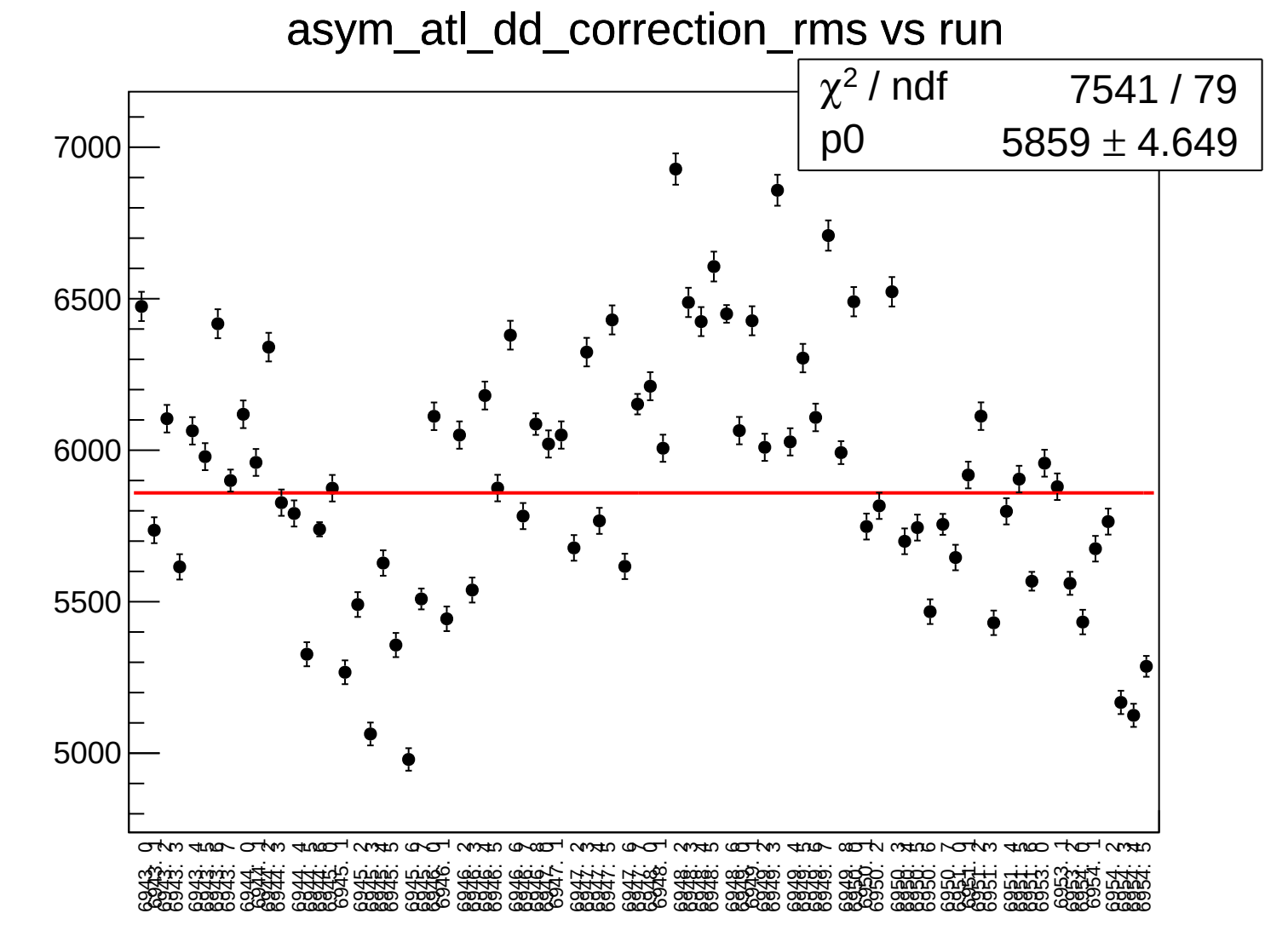

reg_asym_atl_dd_mean vs run
×10^3
χ² / ndf 78.02 / 79
p0 −509.6 ± 2035
150
100
50
0
−50
pull
Entries 80
Mean −77.36
Std Dev 123.5
3
2
1
0
−1
−2

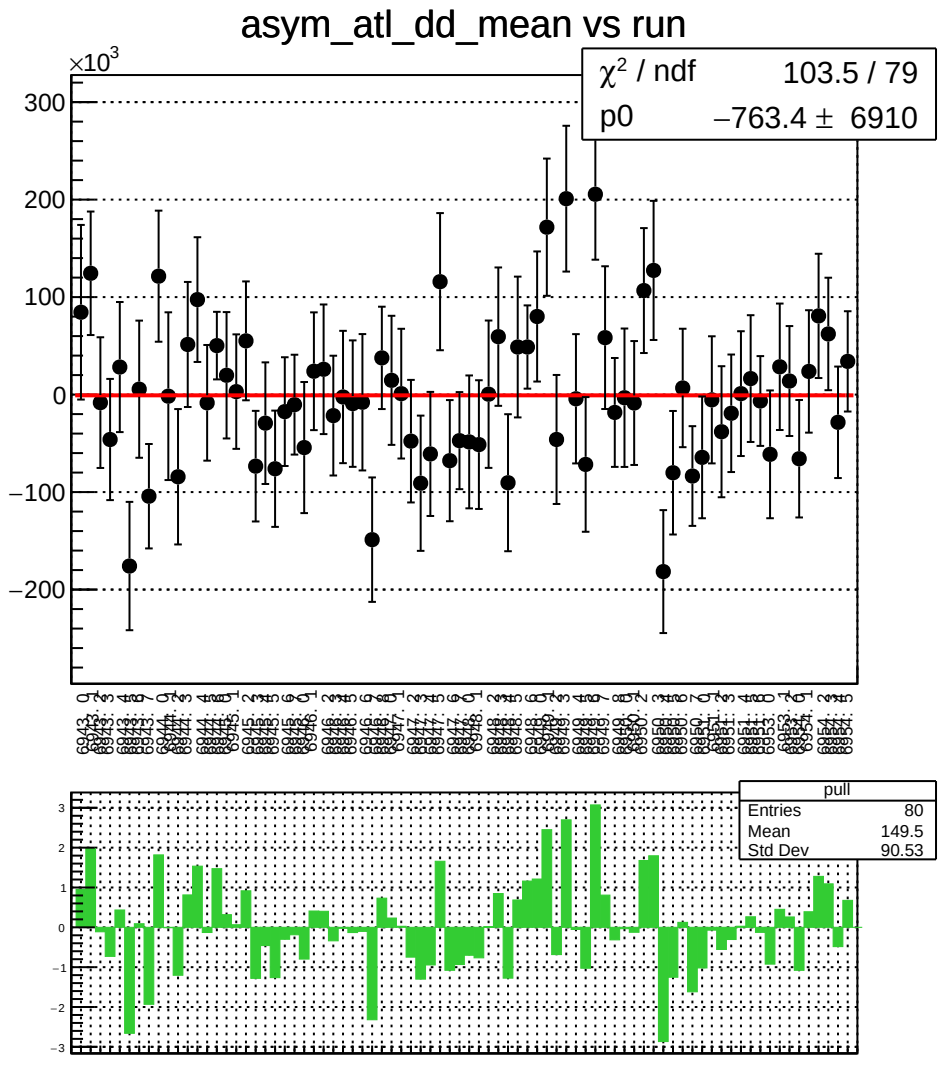

pull1D
Entries 80
Mean 0.01601
Std Dev 0.9874
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

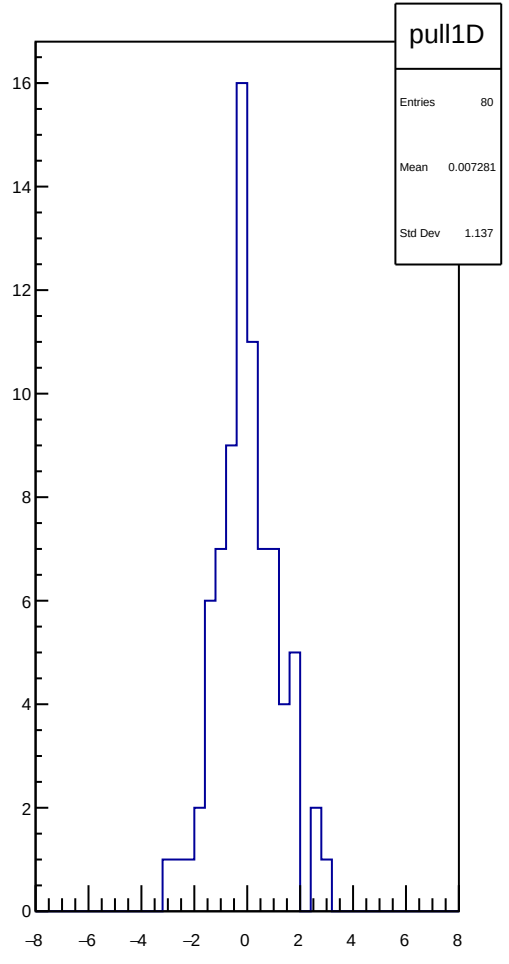

reg_asym_atl_dd_rms vs run
χ^2 / ndf 1.651e+04 / 79
p0 1808 ± 1.439
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

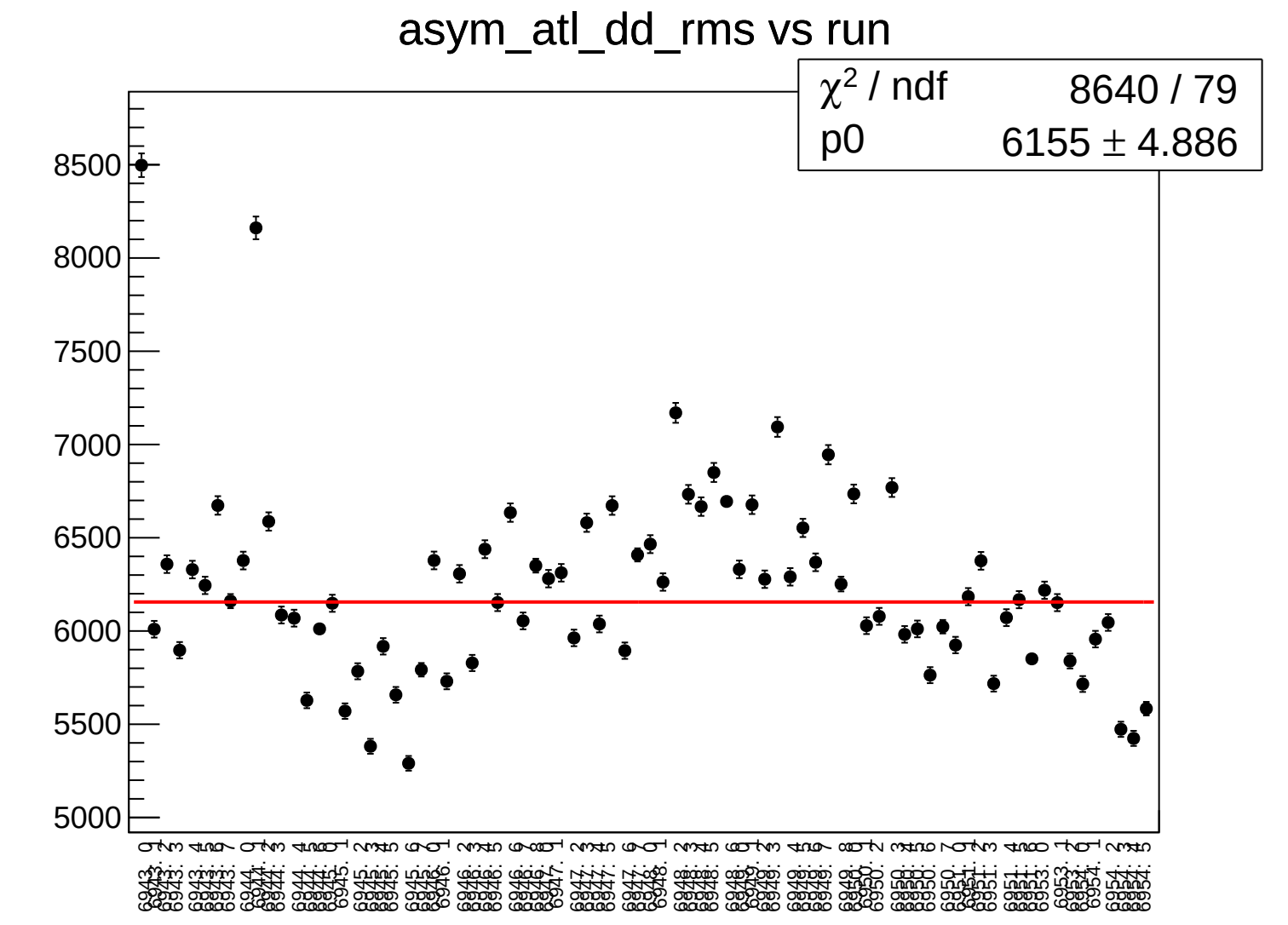

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 94.93 / 79
p0 571 ± 6575
200
100
0
−100
−200
−300
pull
Entries 80
Mean 785.3
Std Dev 736.6
3
2
1
0
−1
−2
−3

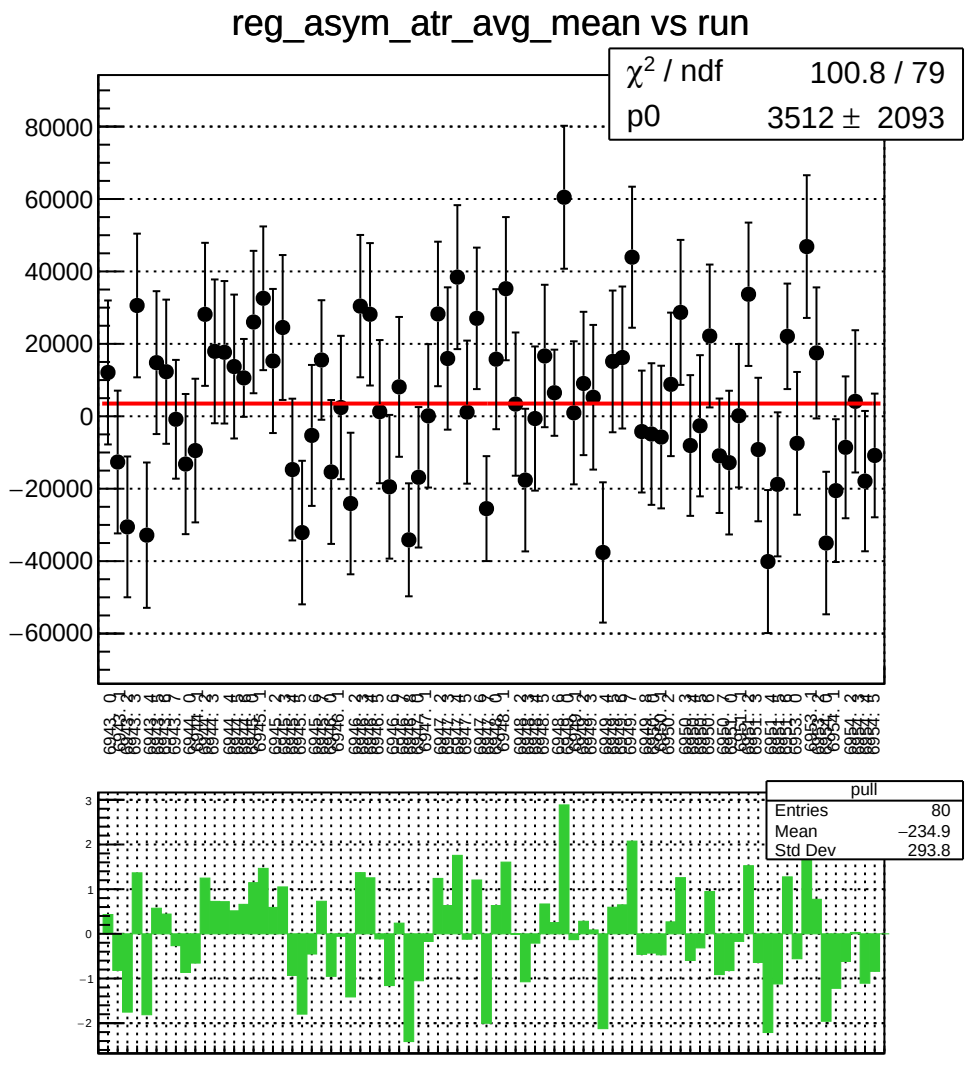

pull1D
Entries 80
Mean −0.002256
Std Dev 1.089
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

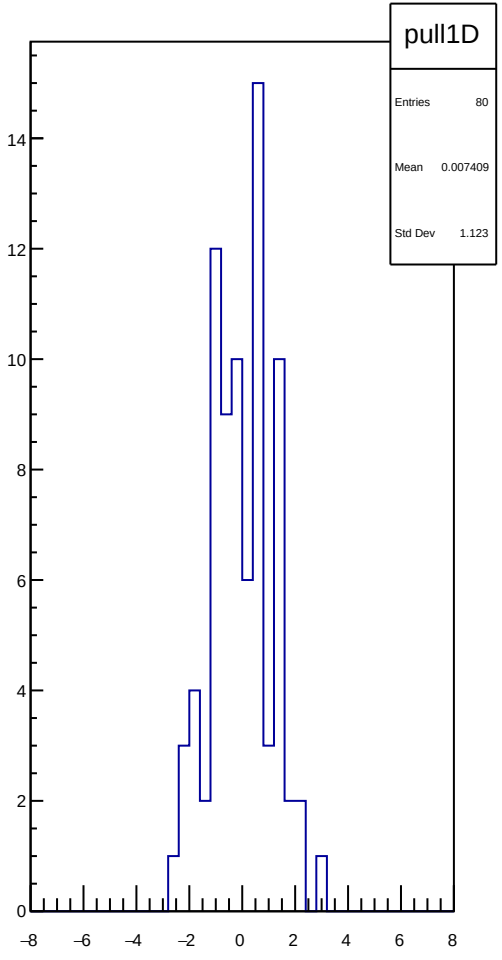

asym_atl_dd_correction_rms vs run
χ² / ndf 7541 / 79
p0 5859 ± 4.649
7000
6500
6000
5500
5000

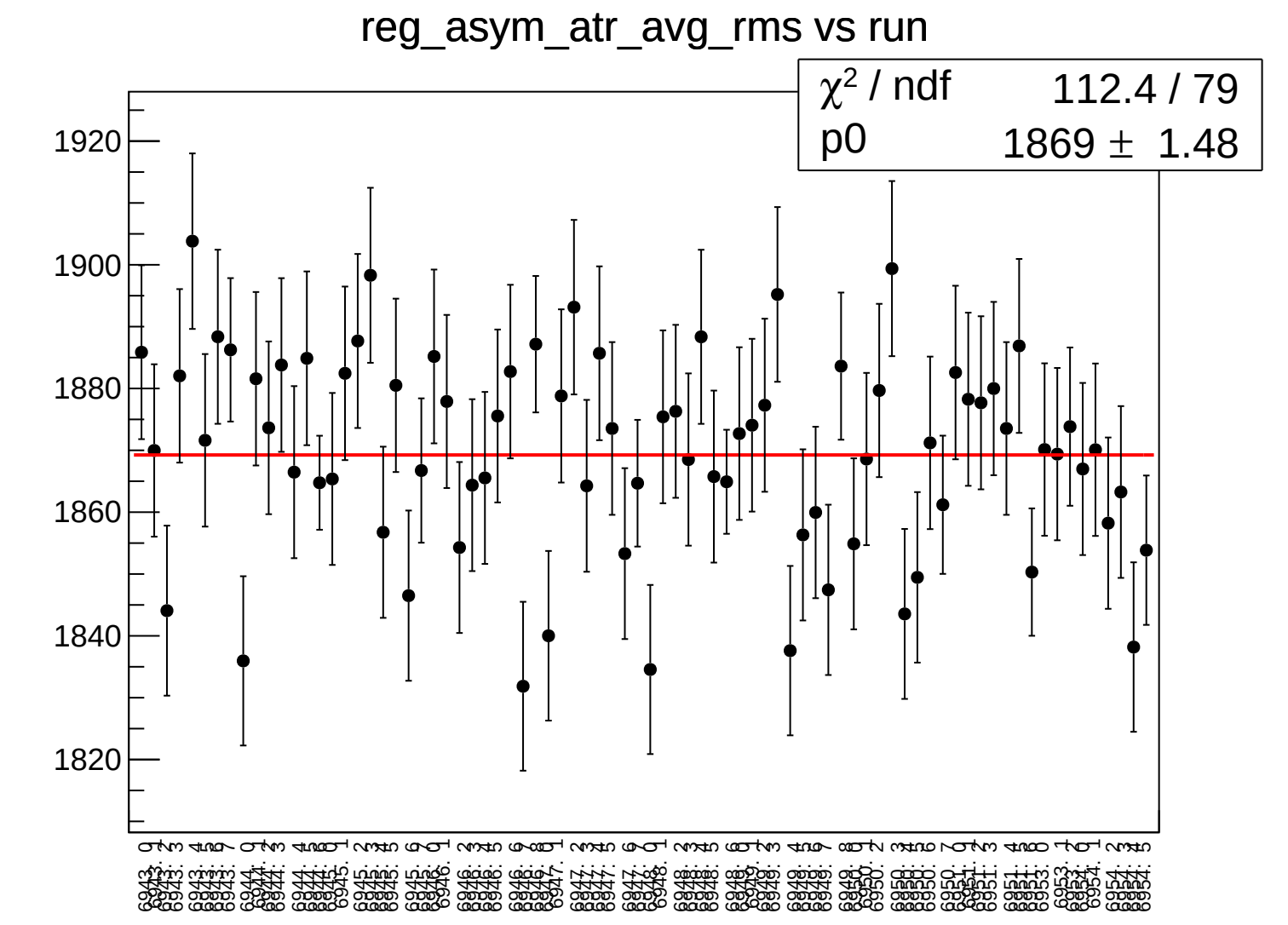

asym_atl_dd_mean vs run
×10^3
χ² / ndf 103.5 / 79
p0 −763.4 ± 6910
300
200
100
0
−100
−200
pull
Entries 80
Mean 149.5
Std Dev 90.53
3
2
1
0
−1
−2
−3

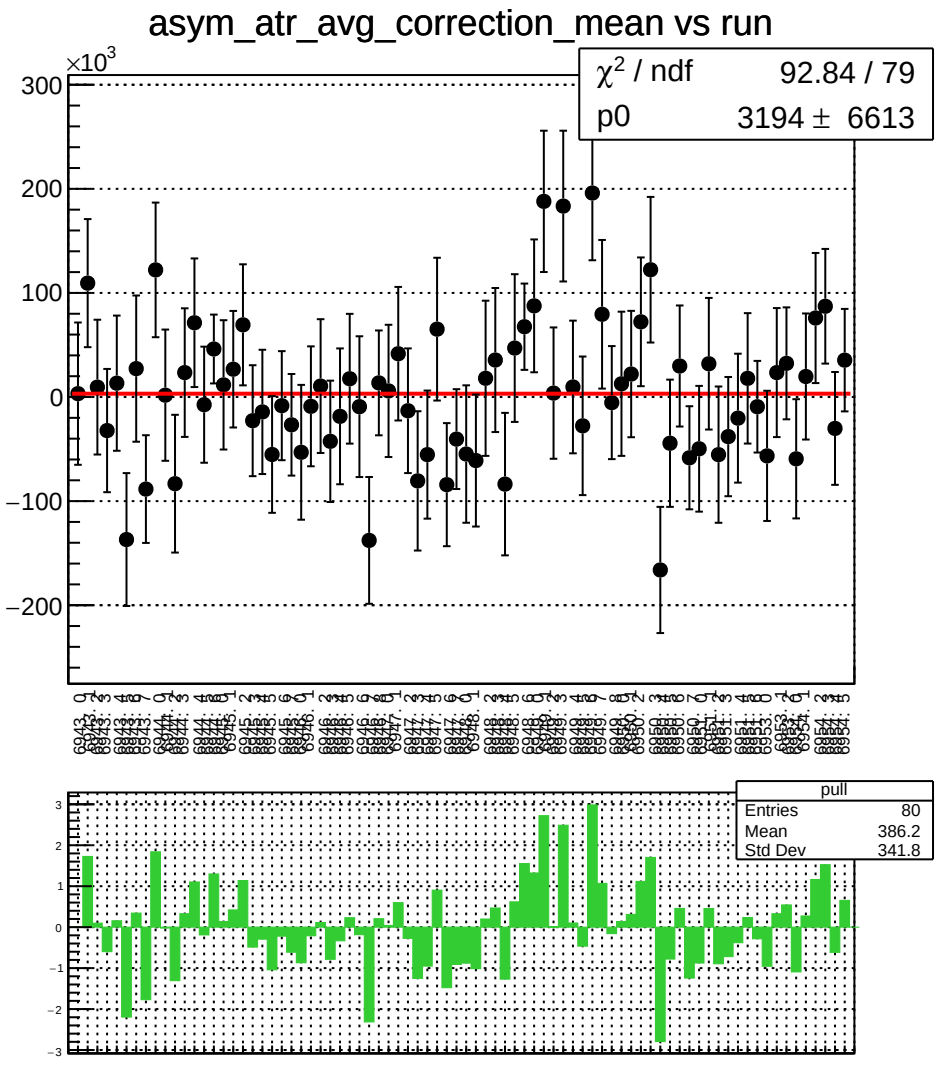

pull1D
Entries 80
Mean 0.007281
Std Dev 1.137
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

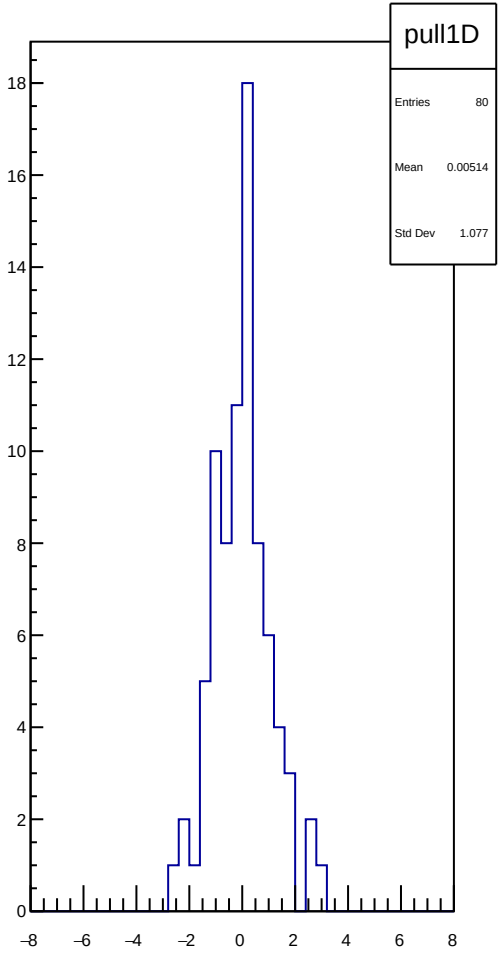

asym_atl_dd_rms vs run
χ^2 / ndf 8640 / 79
p0 6155 ± 4.886
8500
8000
7500
7000
6500
6000
5500
5000

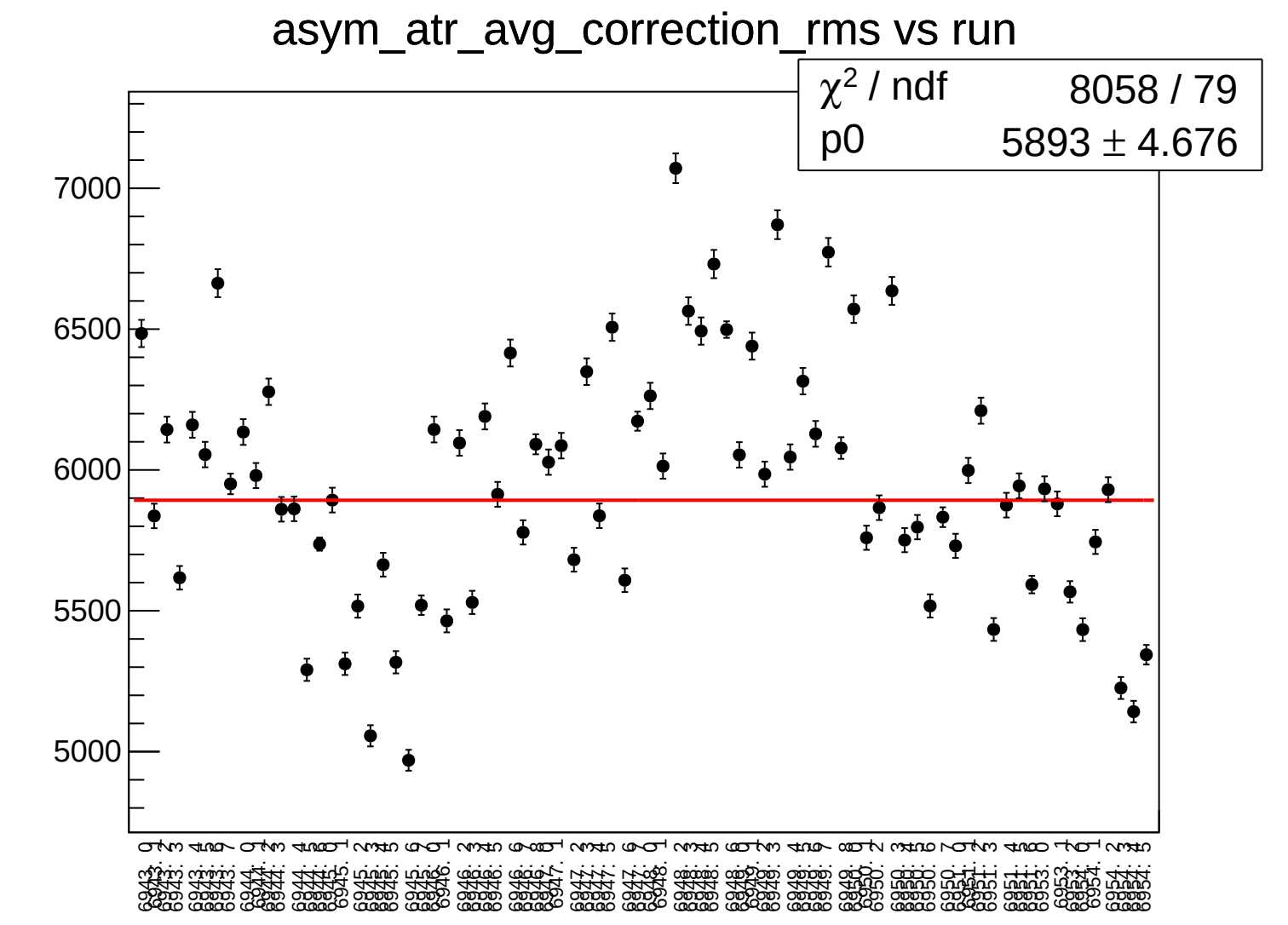

reg_asym_atr_avg_mean vs run
χ² / ndf 100.8 / 79
p0 3512 ± 2093
pull
Entries 80
Mean −234.9
Std Dev 293.8

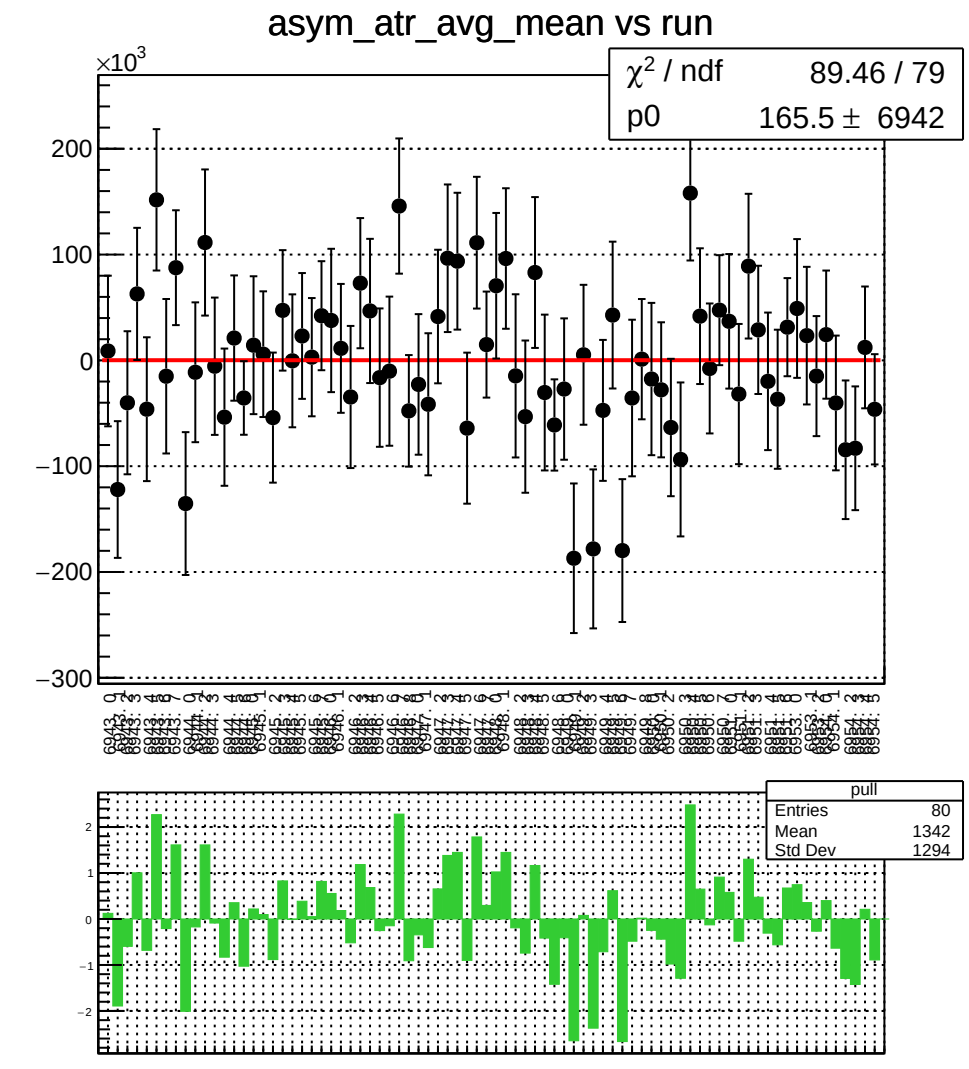

pull1D
Entries 80
Mean 0.007409
Std Dev 1.123

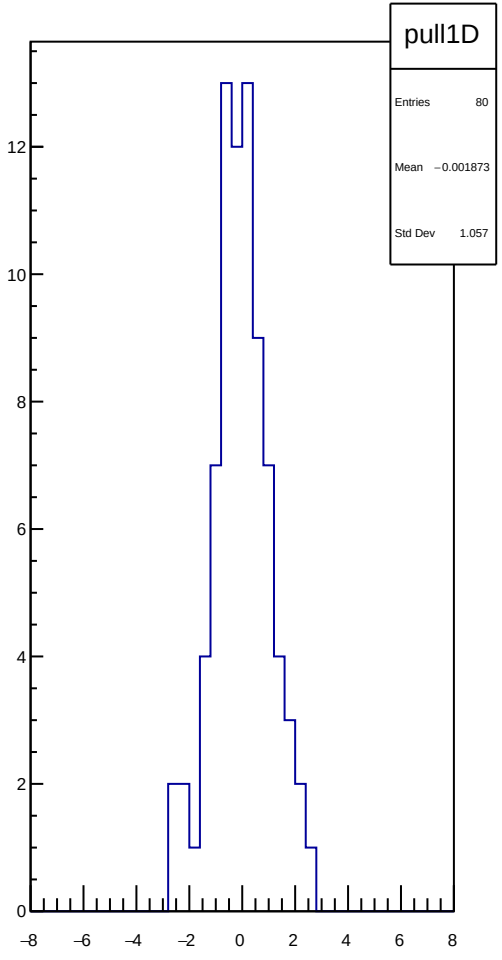

reg_asym_atr_avg_rms vs run
χ² / ndf 112.4 / 79
p0 1869 ± 1.48
1920
1900
1880
1860
1840
1820

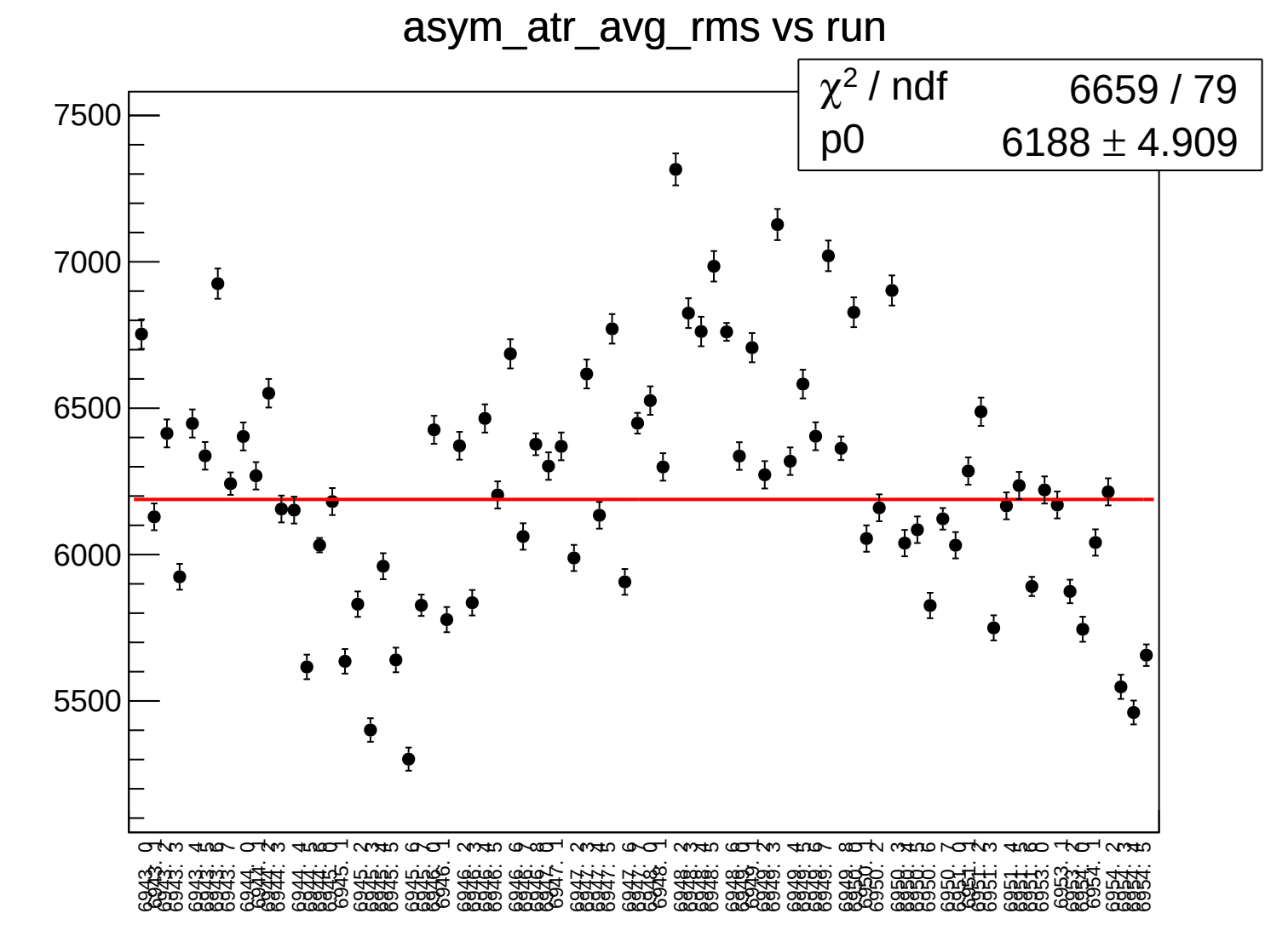

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 92.84 / 79
p0 3194 ± 6613
pull
Entries 80
Mean 386.2
Std Dev 341.8

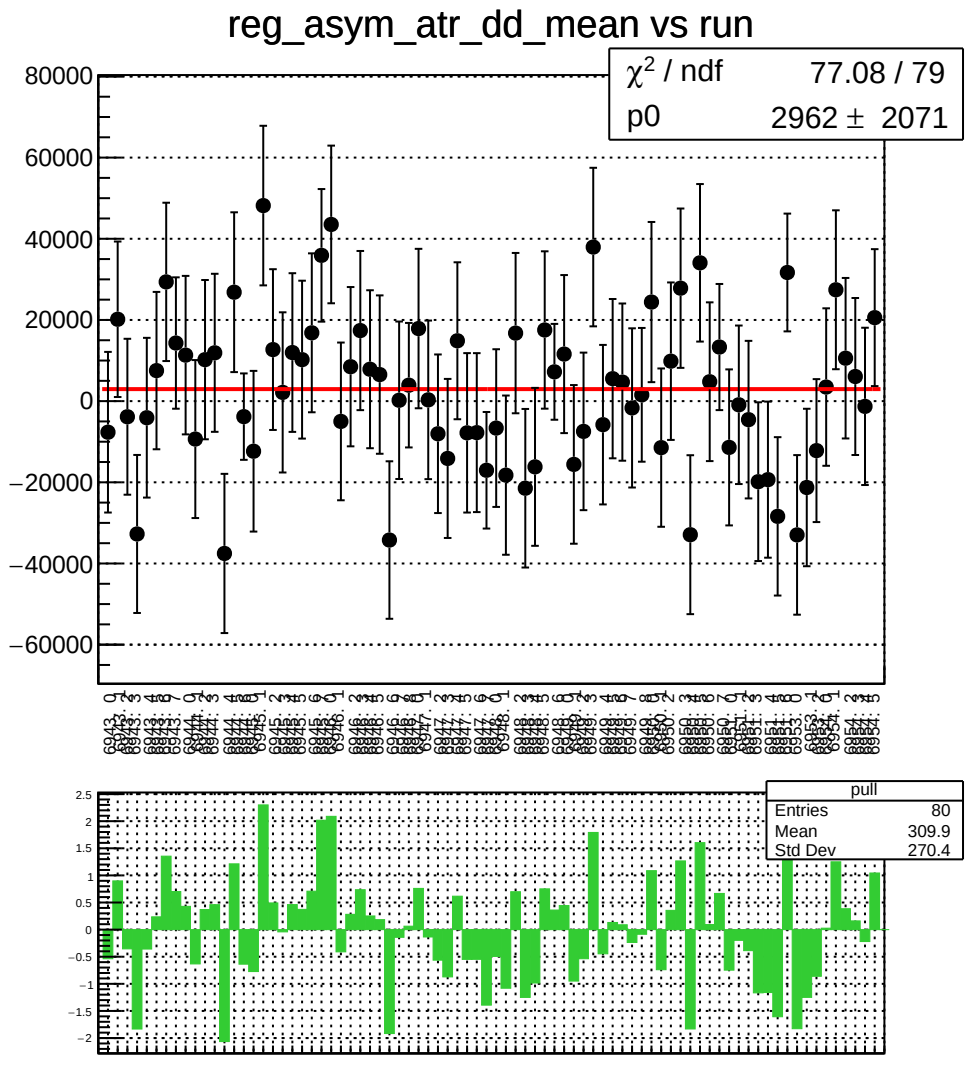

pull1D
Entries 80
Mean 0.00514
Std Dev 1.077

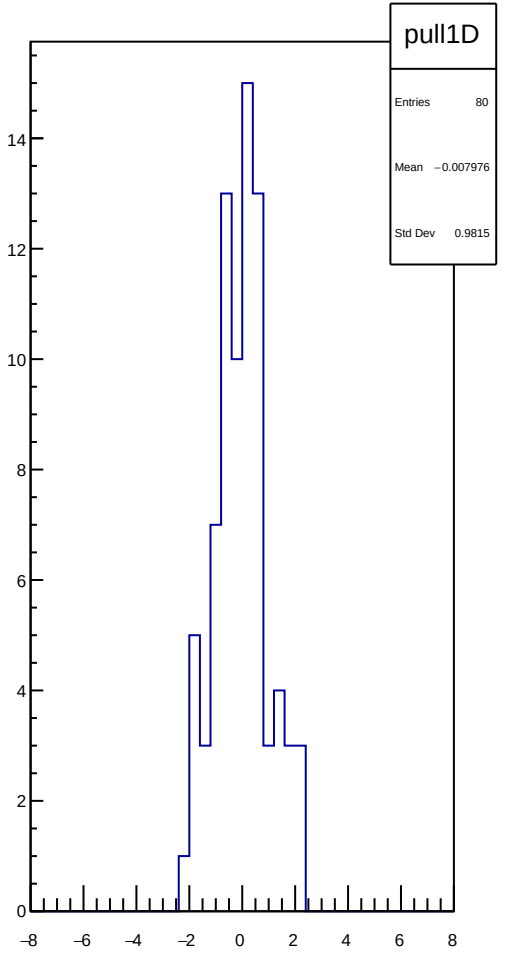

asym_atr_avg_correction_rms vs run
χ^2 / ndf 8058 / 79
p0 5893 ± 4.676
7000
6500
6000
5500
5000

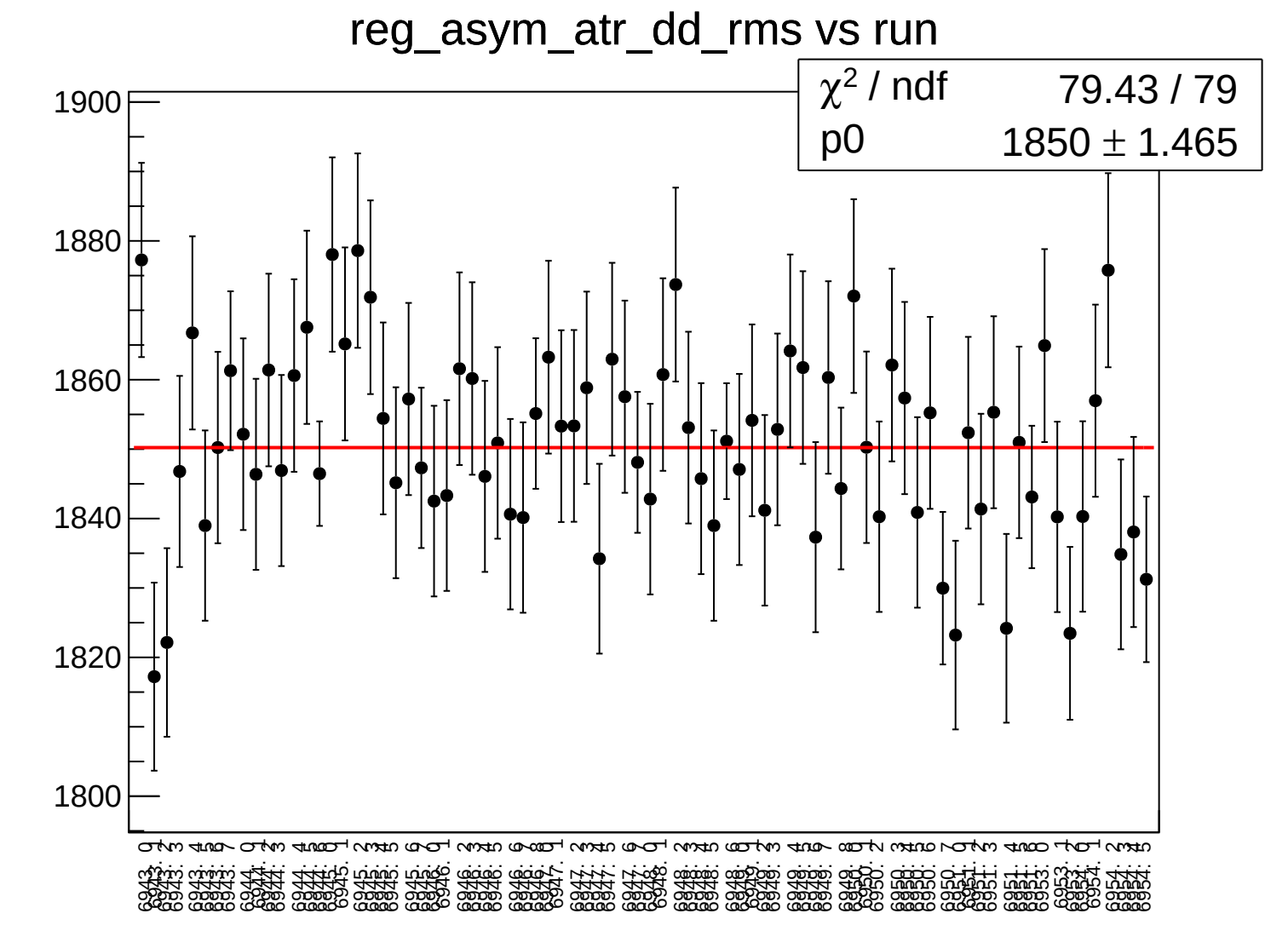

asym_atr_avg_mean vs run
×10^3
χ² / ndf 89.46 / 79
p0 165.5 ± 6942
200
100
0
−100
−200
−300
pull
Entries 80
Mean 1342
Std Dev 1294
2
1
0
−1
−2

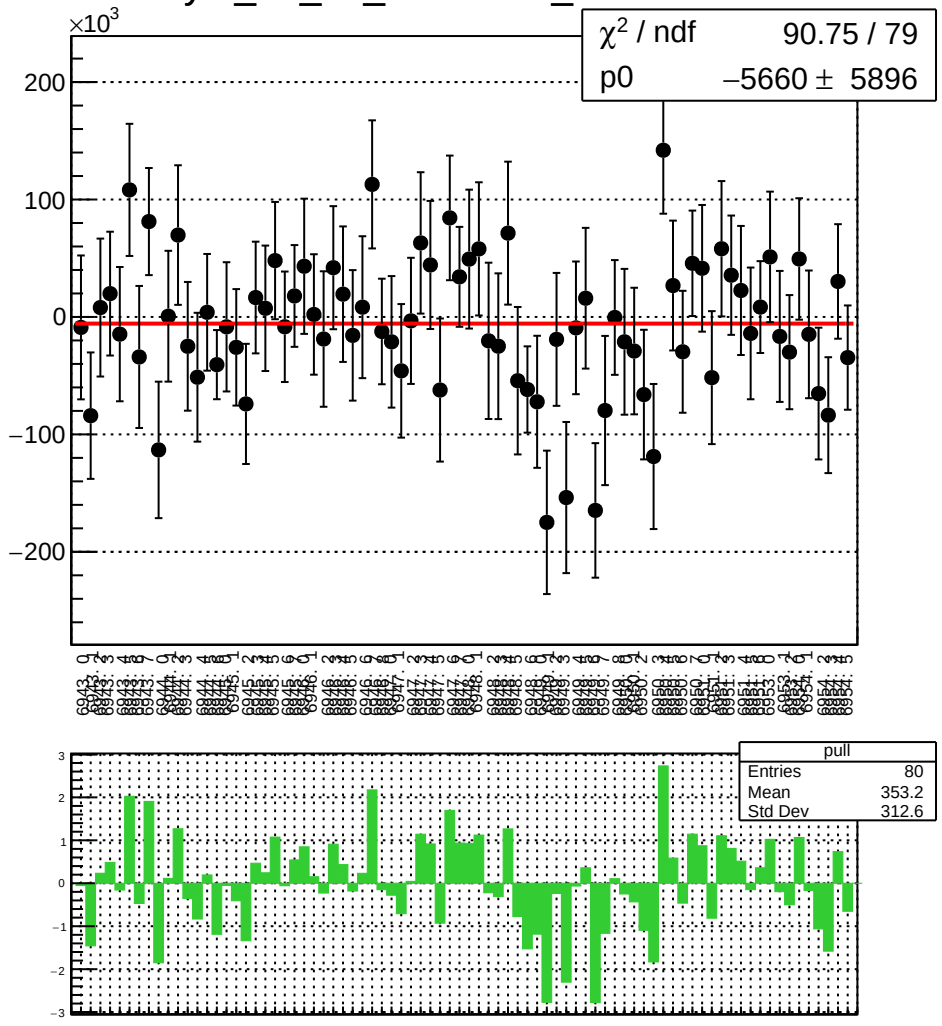

pull1D
Entries 80
Mean −0.001873
Std Dev 1.057
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

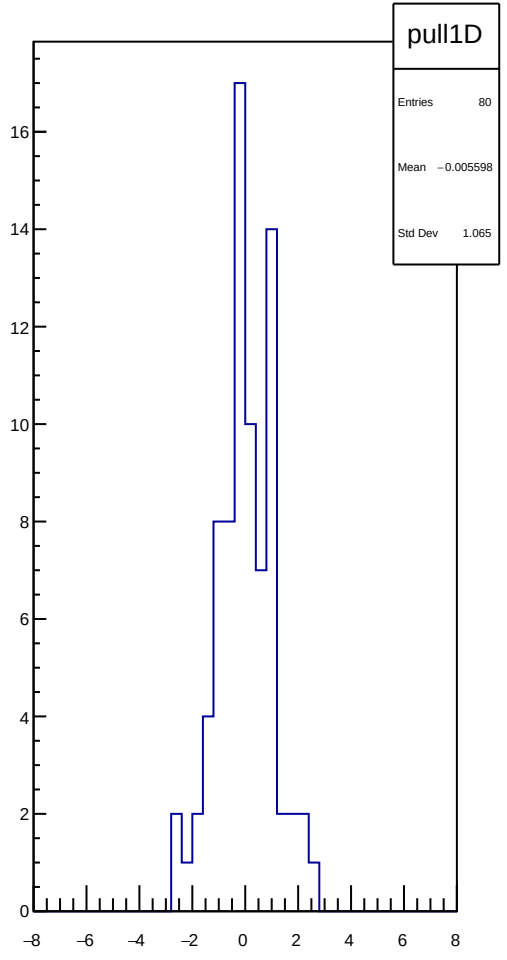

asym_atr_avg_rms vs run
χ^2 / ndf 6659 / 79
p0 6188 ± 4.909
7500
7000
6500
6000
5500


reg_asym_atr_dd_mean vs run
χ² / ndf 77.08 / 79
p0 2962 ± 2071
pull
Entries 80
Mean 309.9
Std Dev 270.4

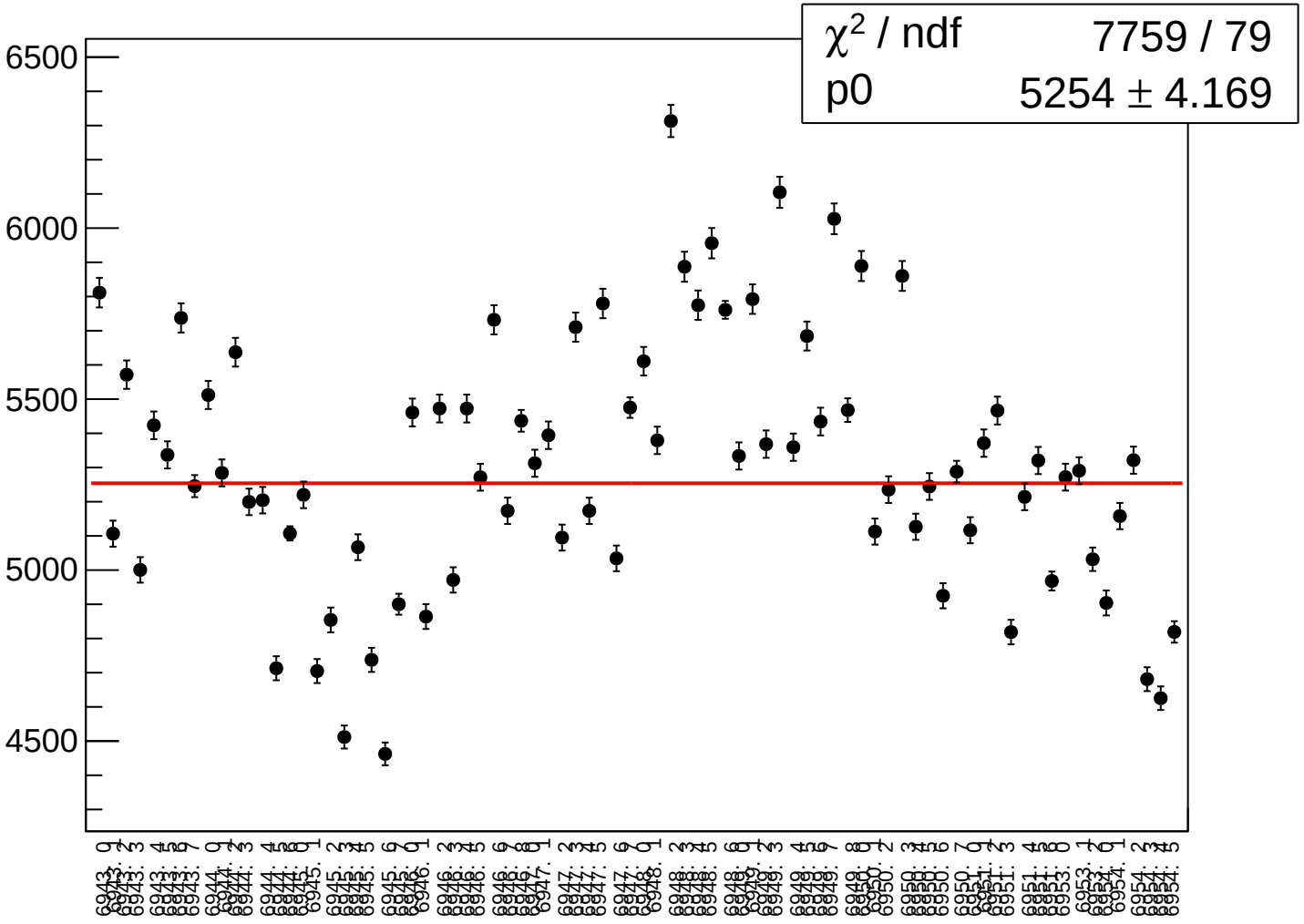

pull1D
Entries 80
Mean −0.007976
Std Dev 0.9815

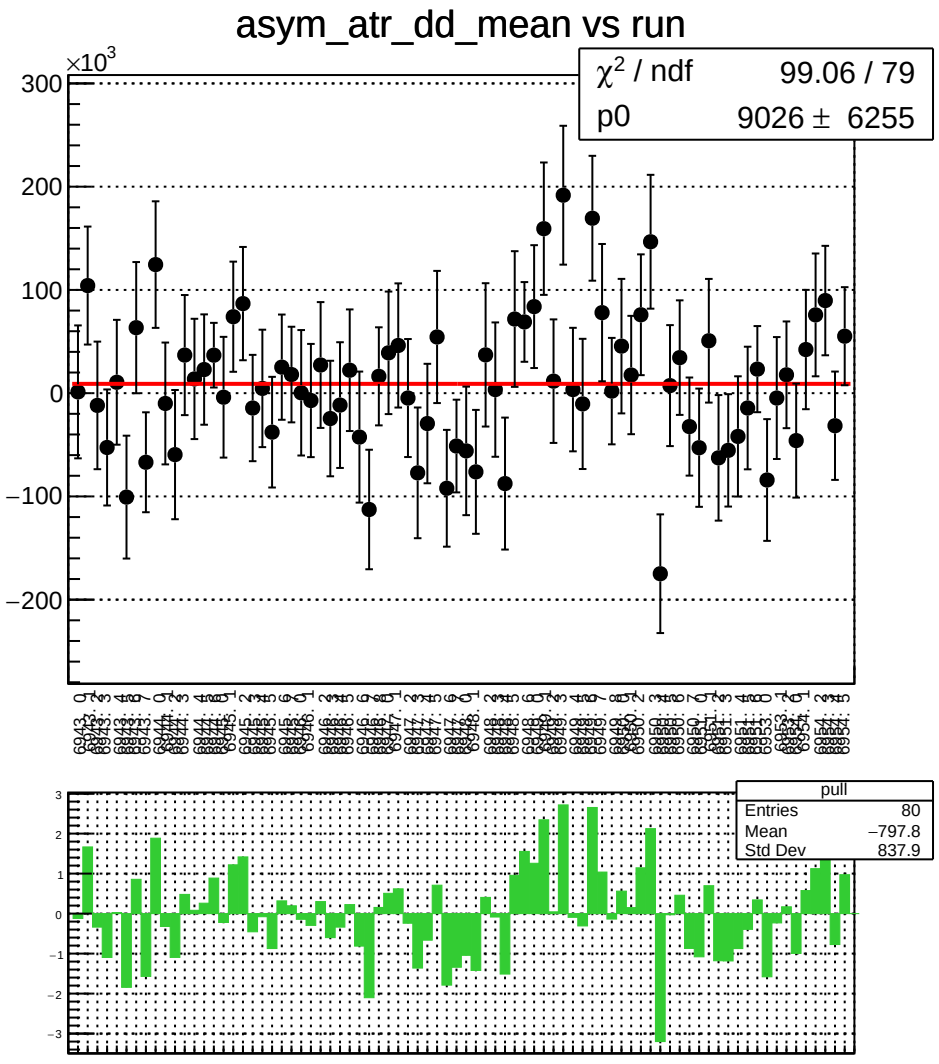

reg_asym_atr_dd_rms vs run
χ² / ndf 79.43 / 79
p0 1850 ± 1.465
1900
1880
1860
1840
1820
1800

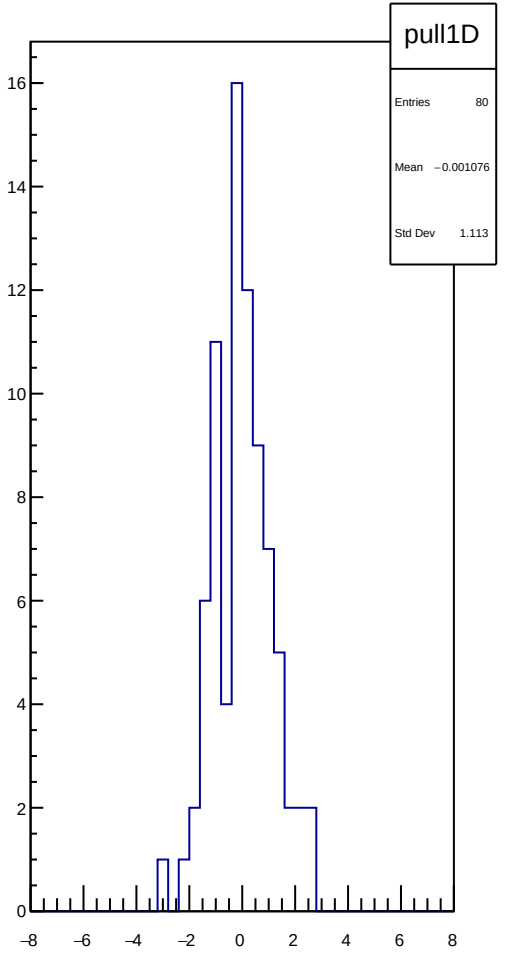

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 90.75 / 79
p0 −5660 ± 5896
200
100
0
−100
−200
pull
Entries 80
Mean 353.2
Std Dev 312.6
3
2
1
0
−1
−2
−3

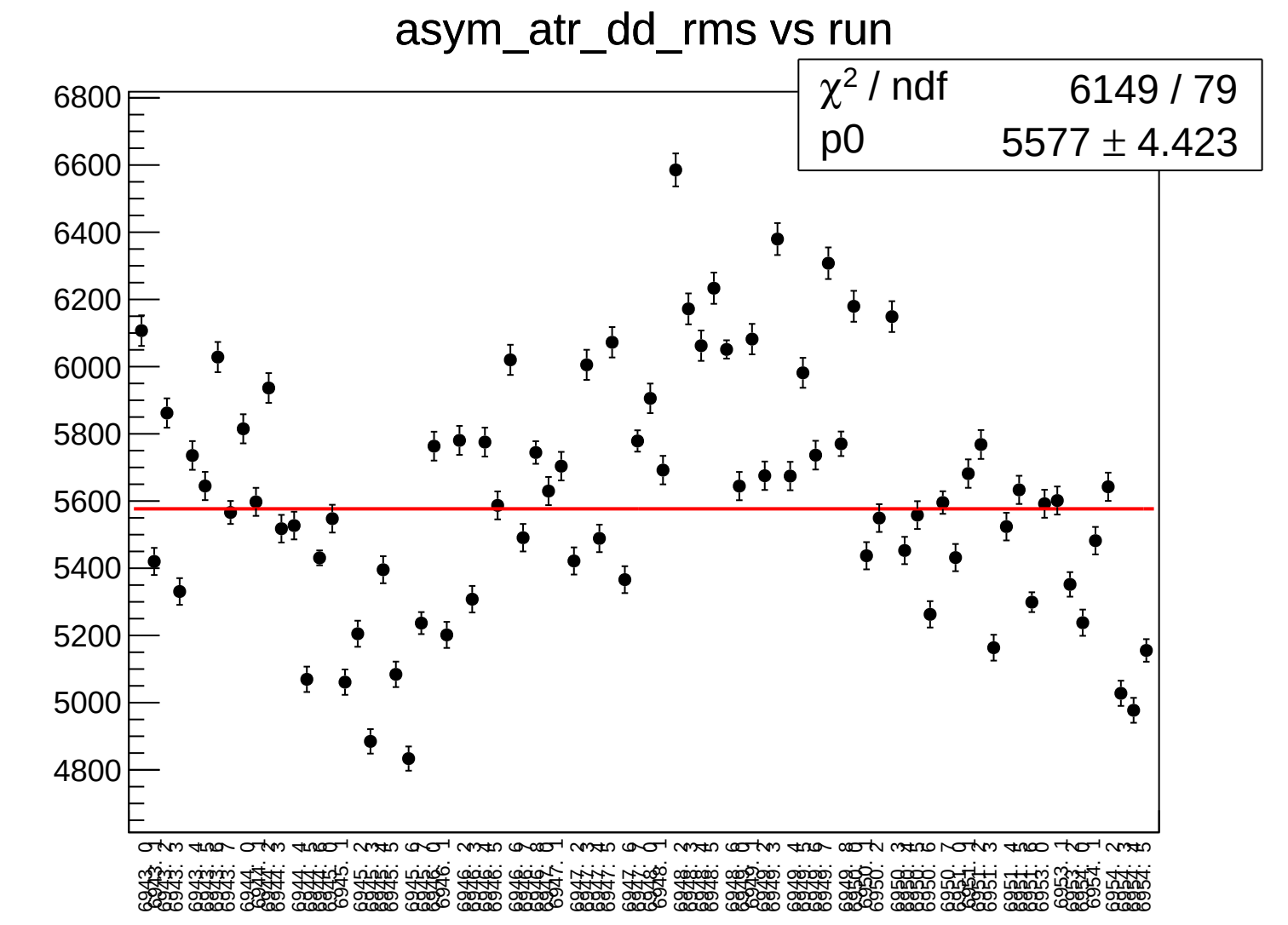

pull1D
Entries 80
Mean −0.005598
Std Dev 1.065
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

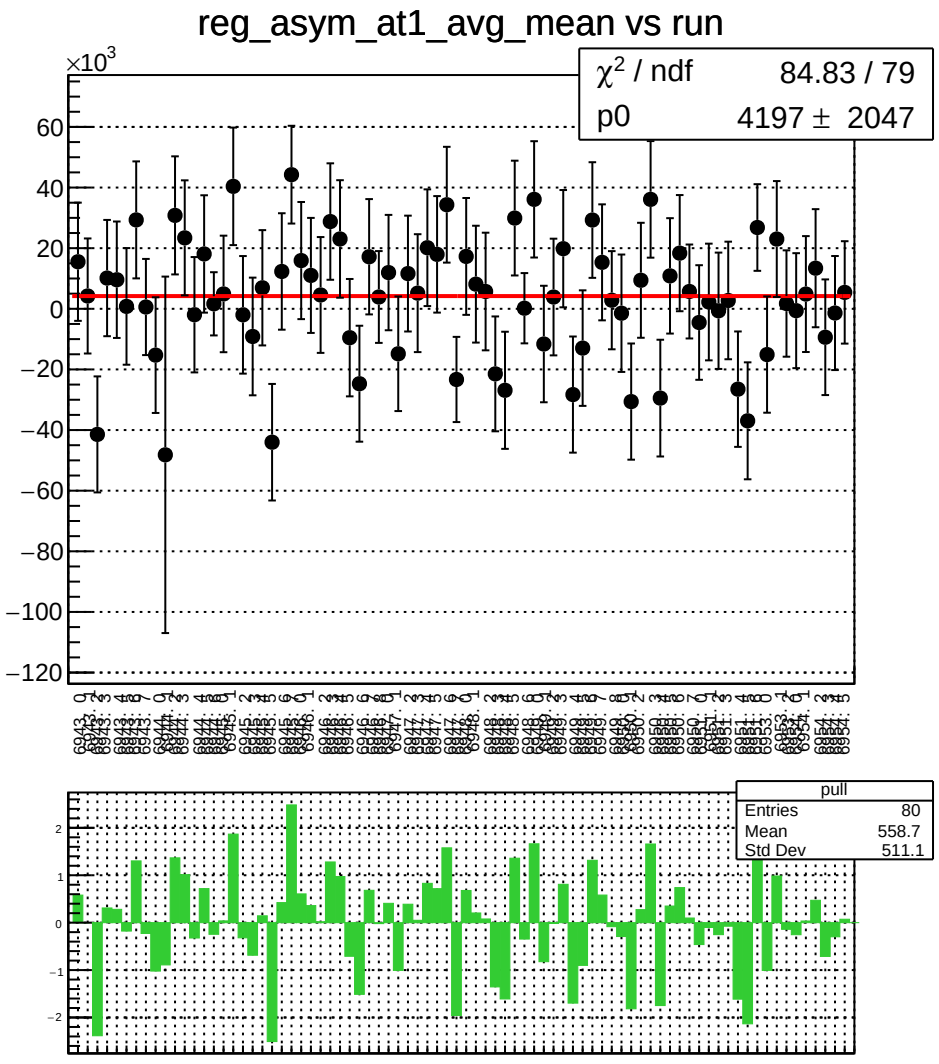
asym_atr_dd_correction_rms vs run

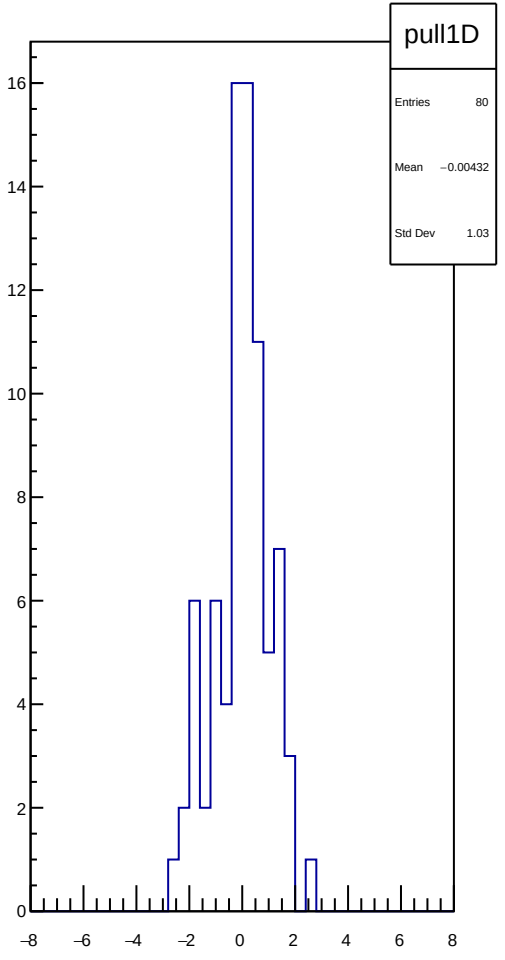


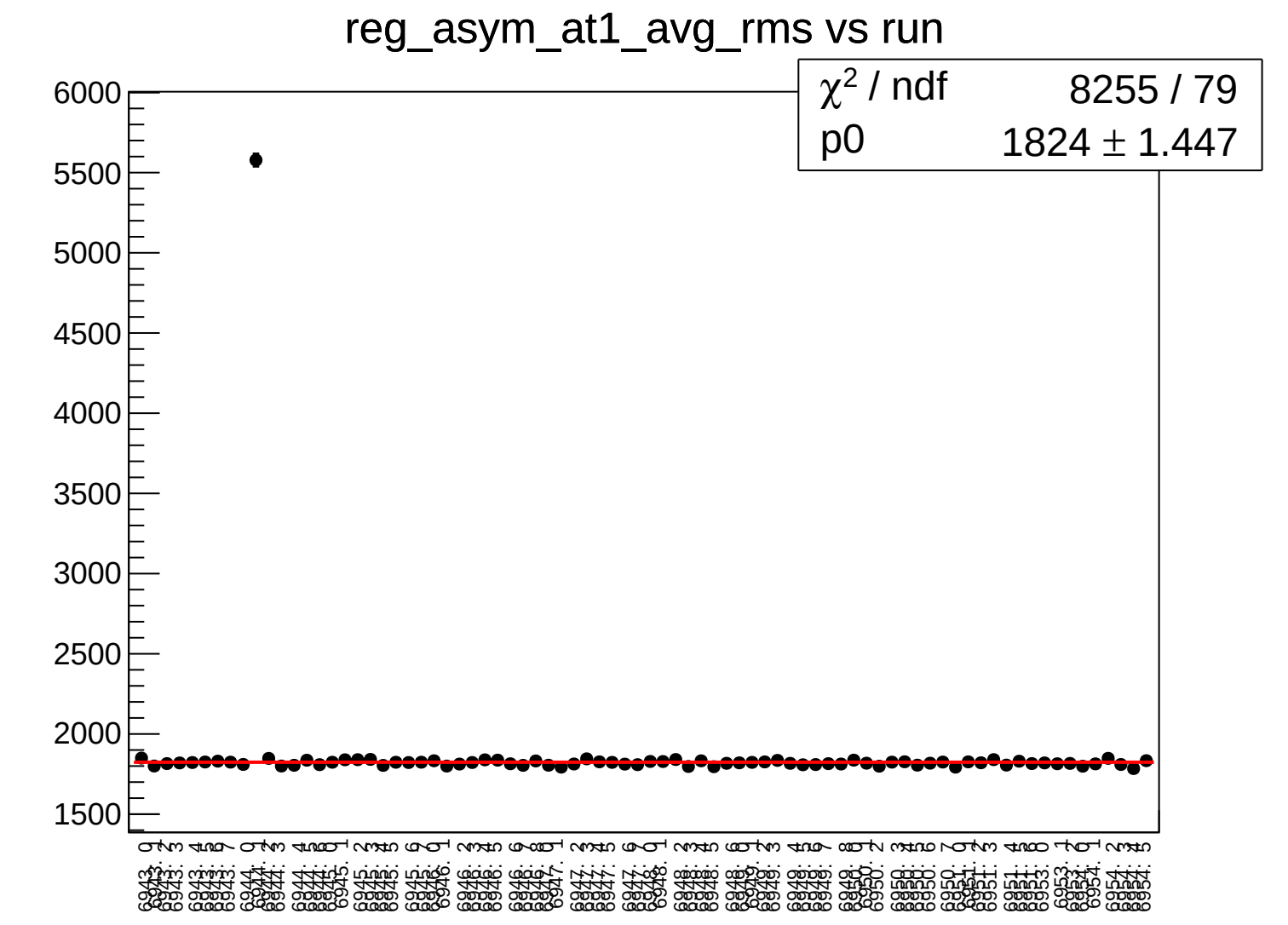

asym_atr_dd_mean vs run
×10^3
χ² / ndf 99.06 / 79
p0 9026 ± 6255
300
200
100
0
−100
−200
pull
Entries 80
Mean −797.8
Std Dev 837.9
3
2
1
0
−1
−2
−3

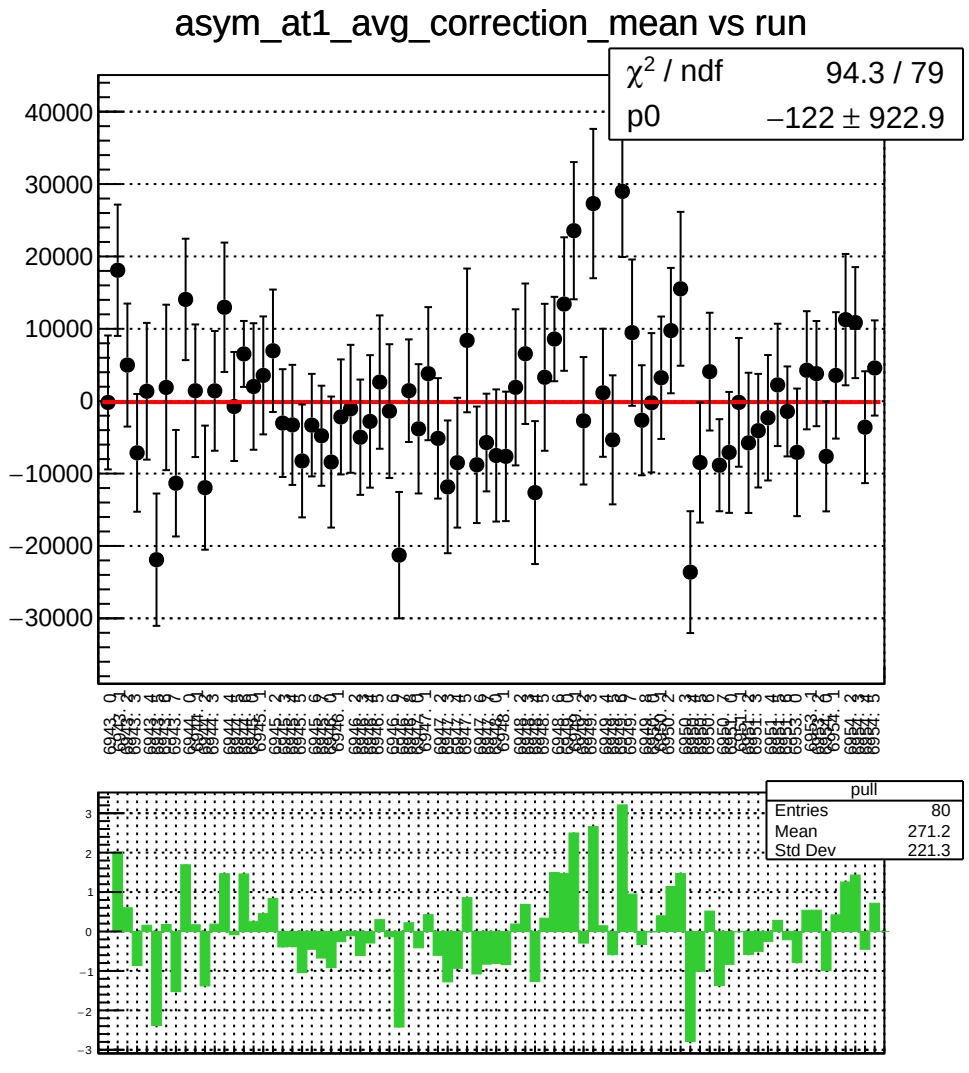

pull1D
Entries 80
Mean −0.001076
Std Dev 1.113
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

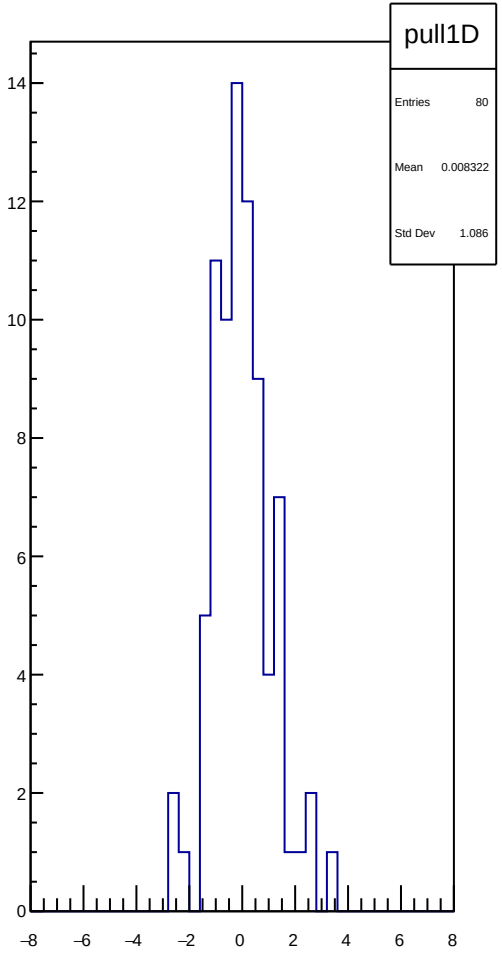

asym_atr_dd_rms vs run
χ^2 / ndf 6149 / 79
p0 5577 ± 4.423
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

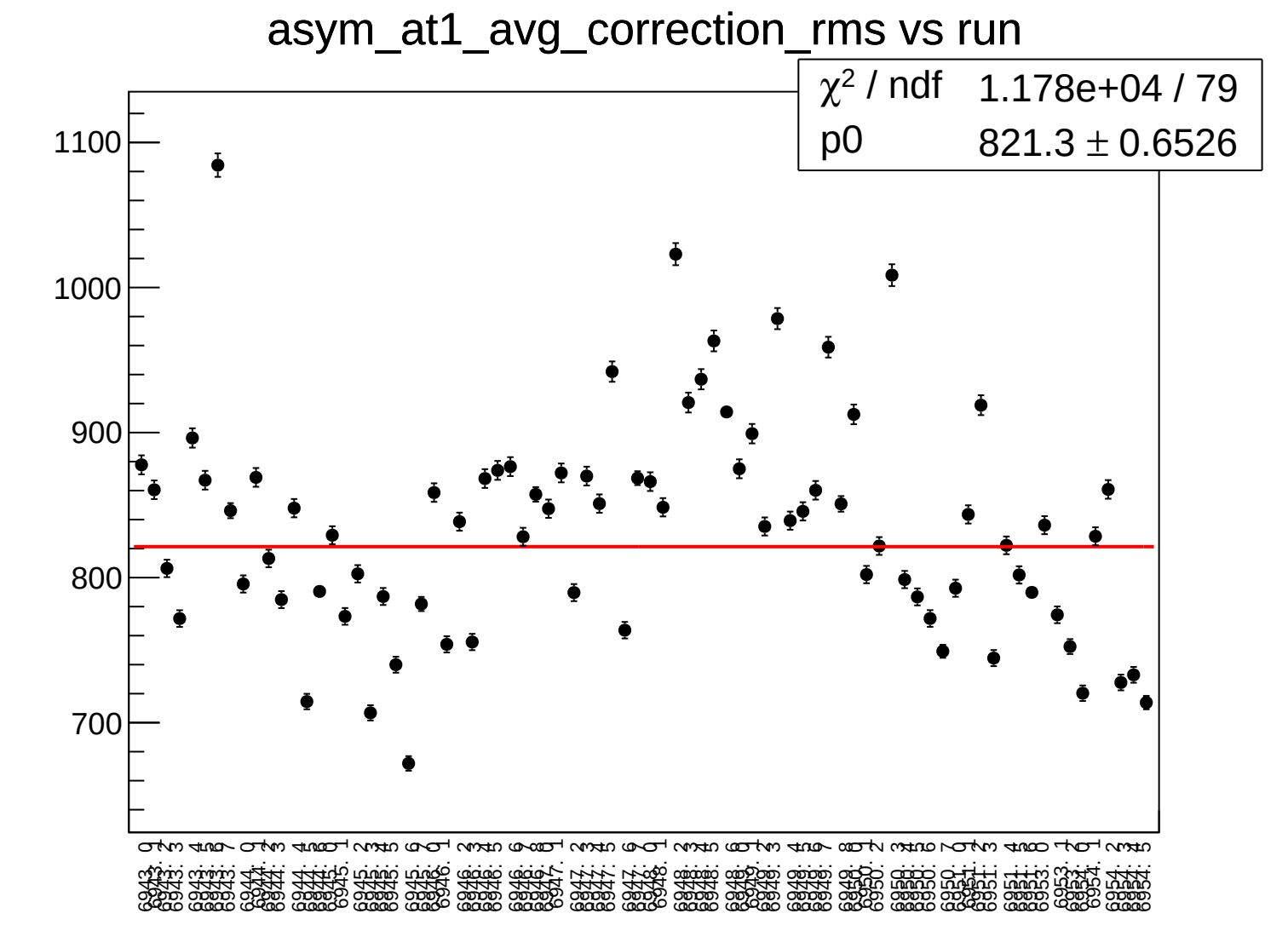

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 84.83 / 79
p0 4197 ± 2047
pull
Entries 80
Mean 558.7
Std Dev 511.1

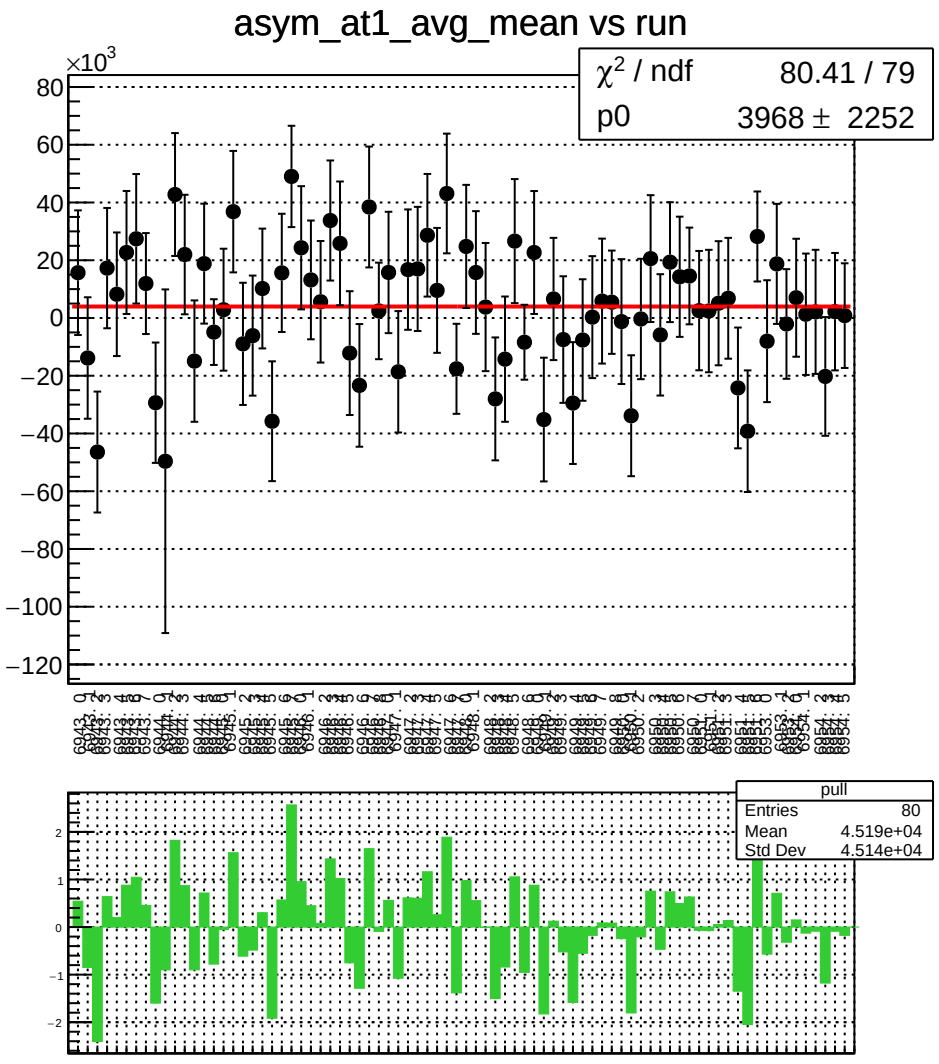

pull1D
Entries 80
Mean −0.00432
Std Dev 1.03

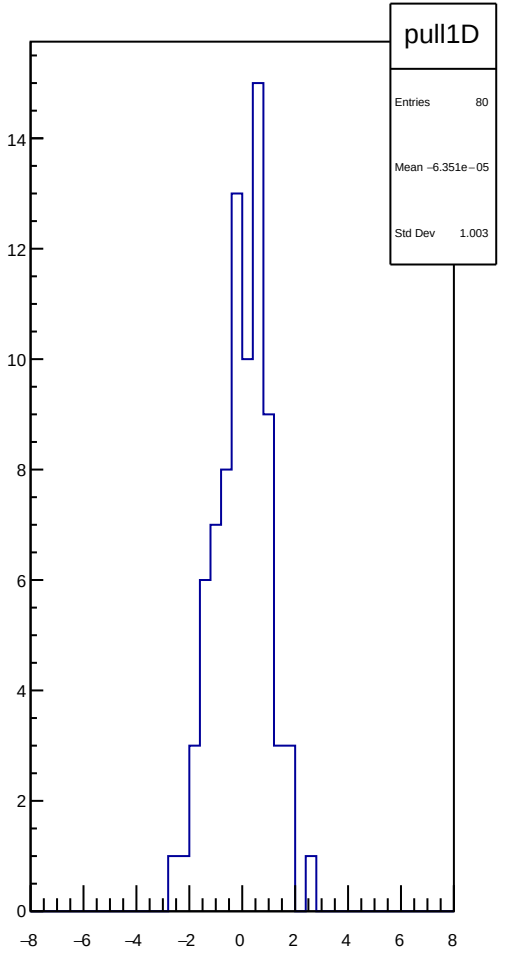

reg_asym_at1_avg_rms vs run
χ^2 / ndf 8255 / 79
p0 1824 ± 1.447
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

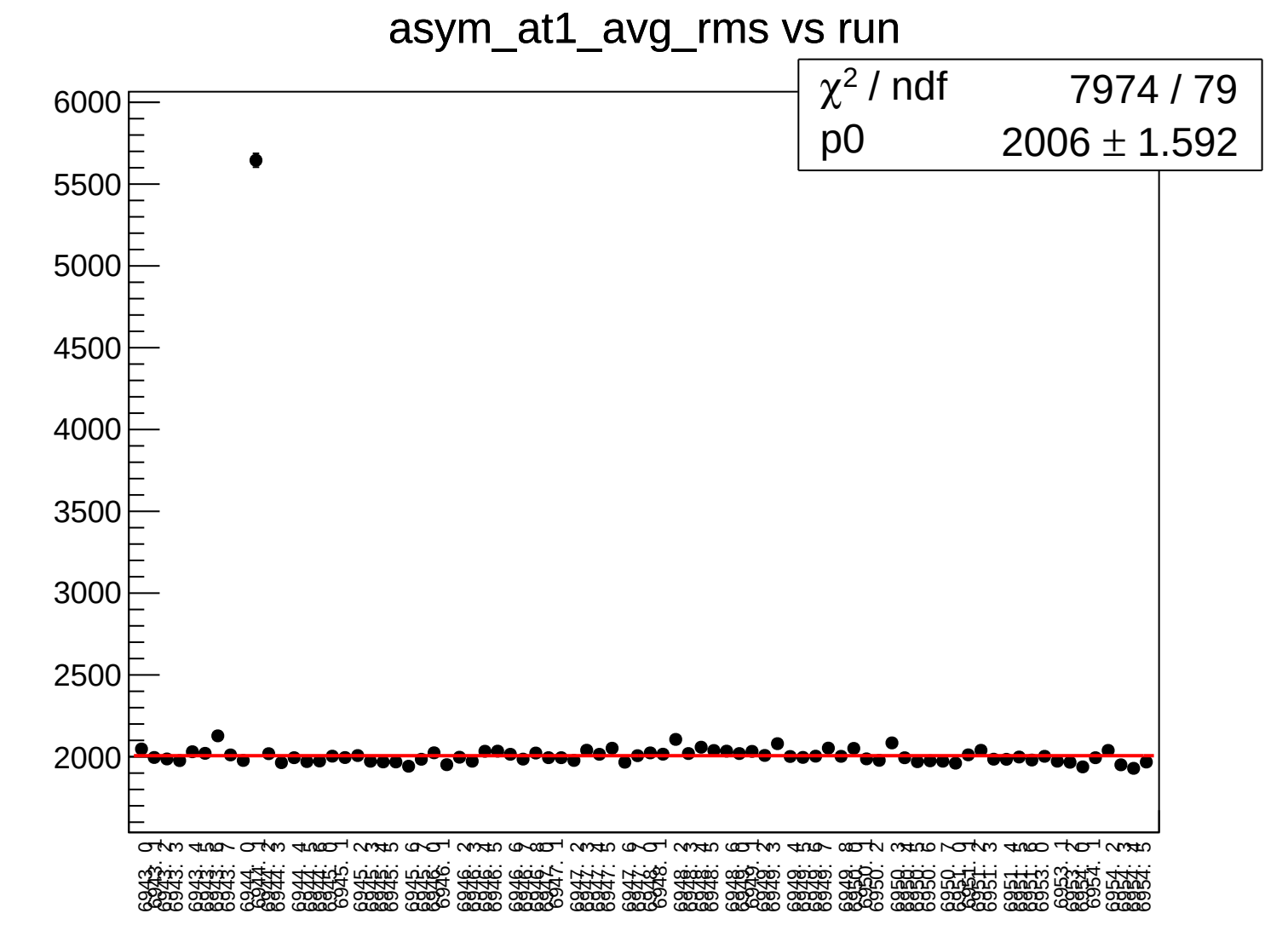

asym_at1_avg_correction_mean vs run
χ² / ndf 94.3 / 79
p0 −122 ± 922.9
pull
Entries 80
Mean 271.2
Std Dev 221.3

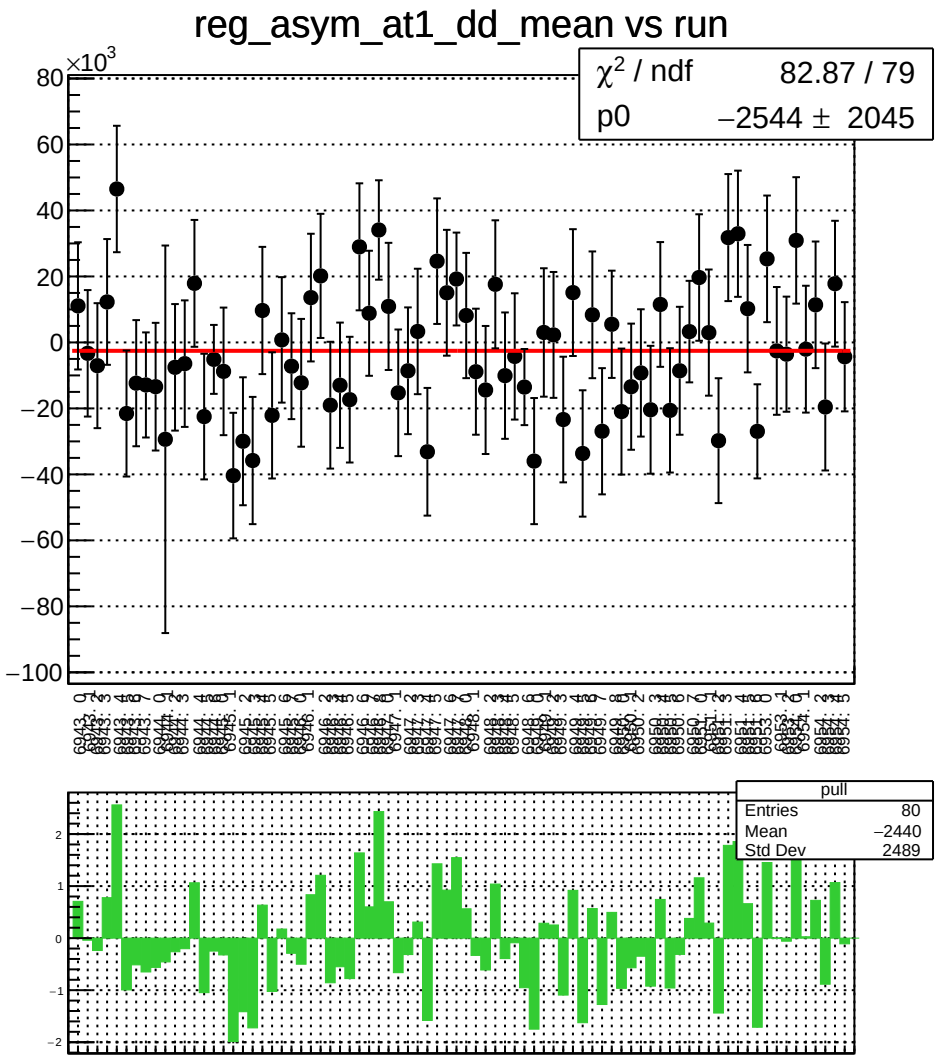

pull1D
Entries 80
Mean 0.008322
Std Dev 1.086

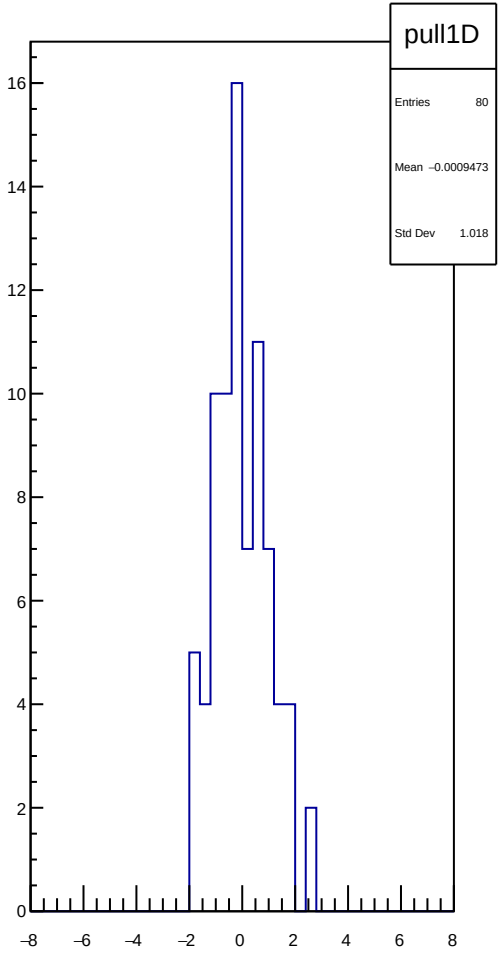

asym_at1_avg_correction_rms vs run
χ² / ndf 1.178e+04 / 79
p0 821.3 ± 0.6526
1100
1000
900
800
700

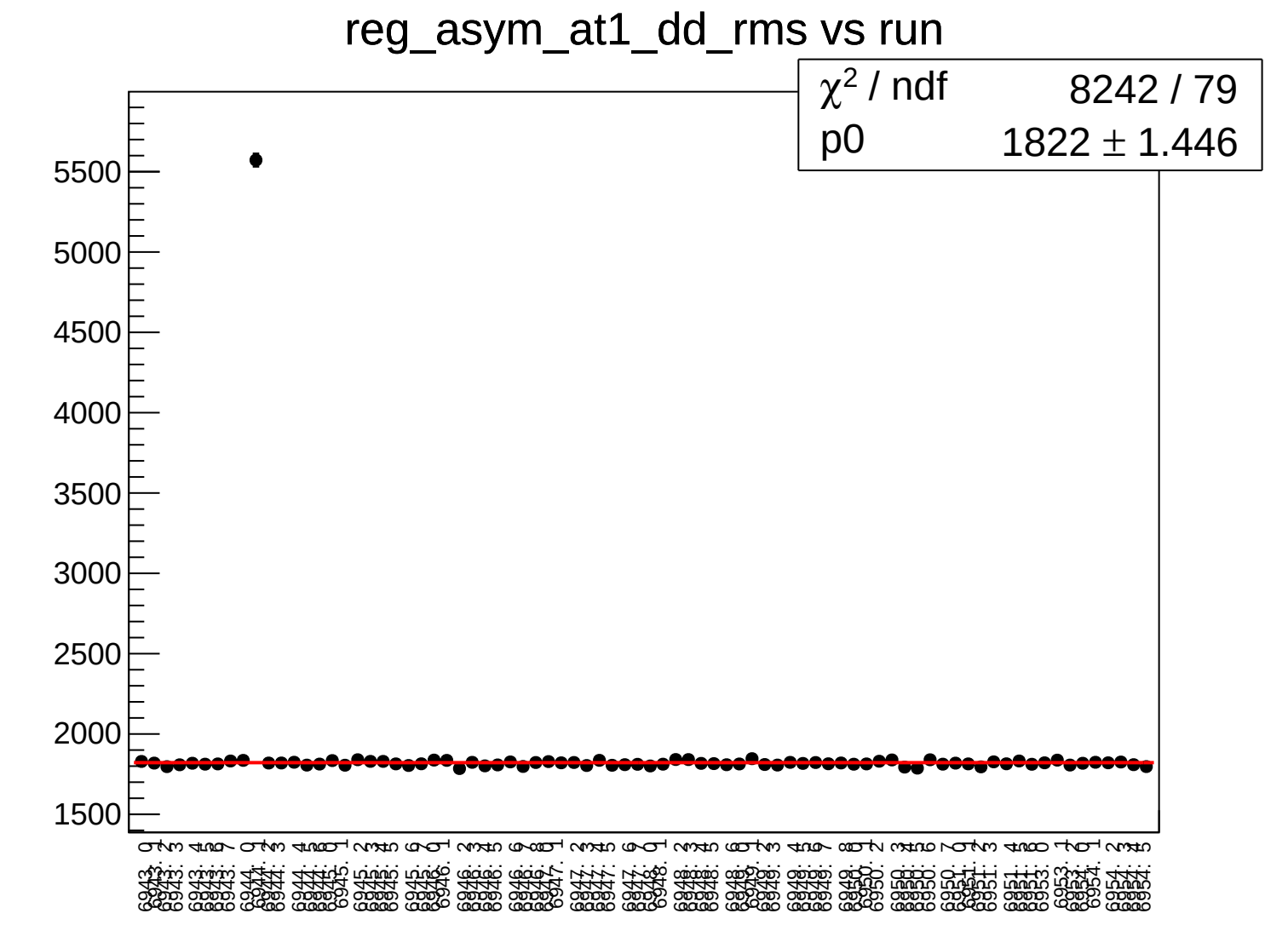

asym_at1_avg_mean vs run
×10^3
χ² / ndf 80.41 / 79
p0 3968 ± 2252
pull
Entries 80
Mean 4.519e+04
Std Dev 4.514e+04

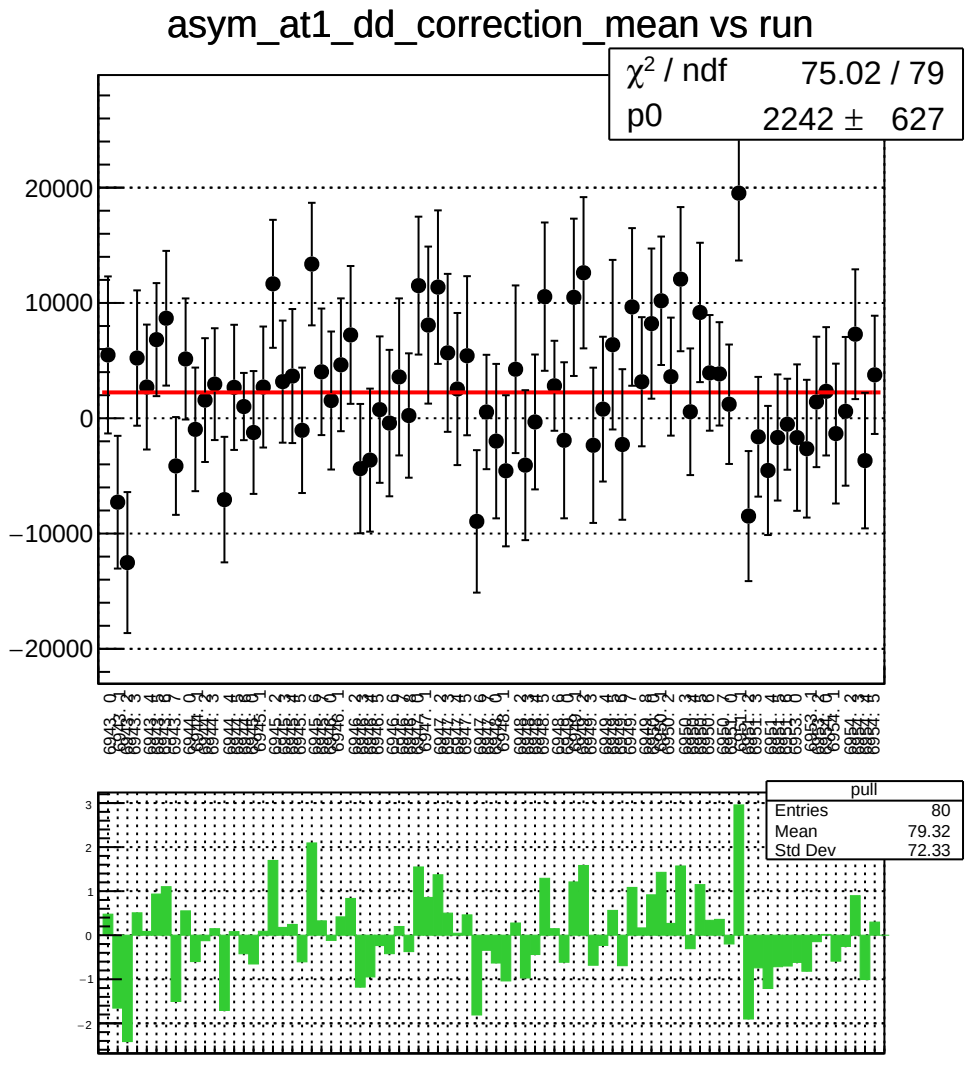

pull1D
Entries 80
Mean −6.351e−05
Std Dev 1.003

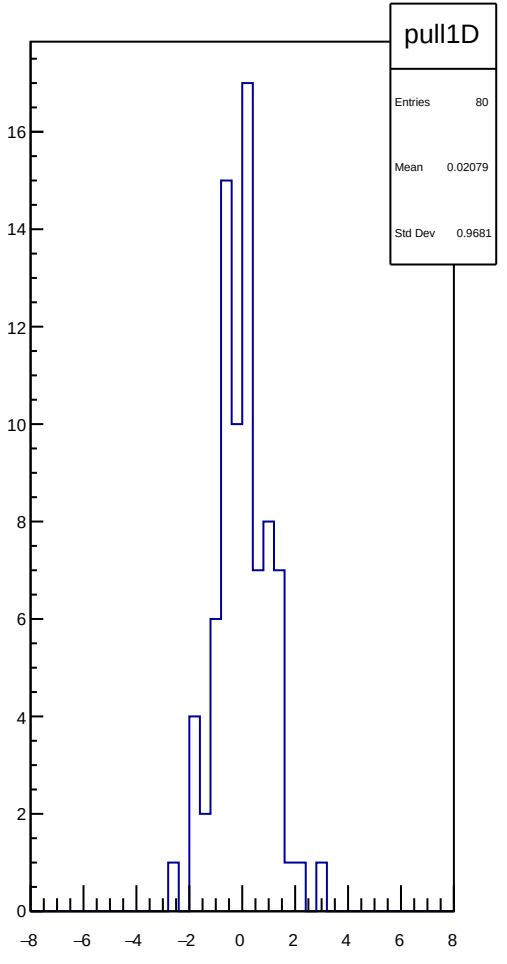

asym_at1_avg_rms vs run
χ^2 / ndf 7974 / 79
p0 2006 ± 1.592
6000
5500
5000
4500
4000
3500
3000
2500
2000

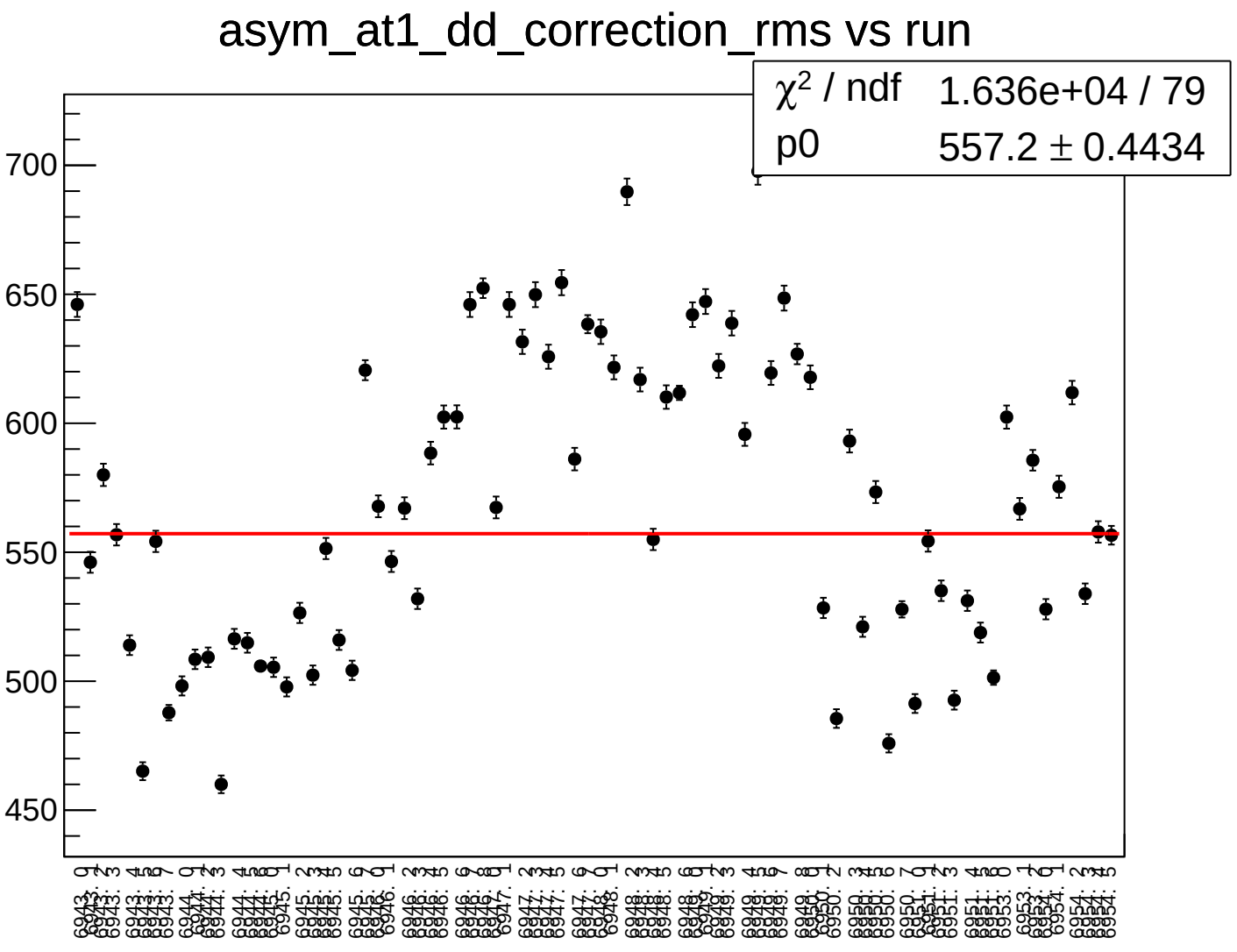

reg_asym_at1_dd_mean vs run
χ² / ndf 82.87 / 79
p0 −2544 ± 2045
×10³
pull
Entries 80
Mean −2440
Std Dev 2489

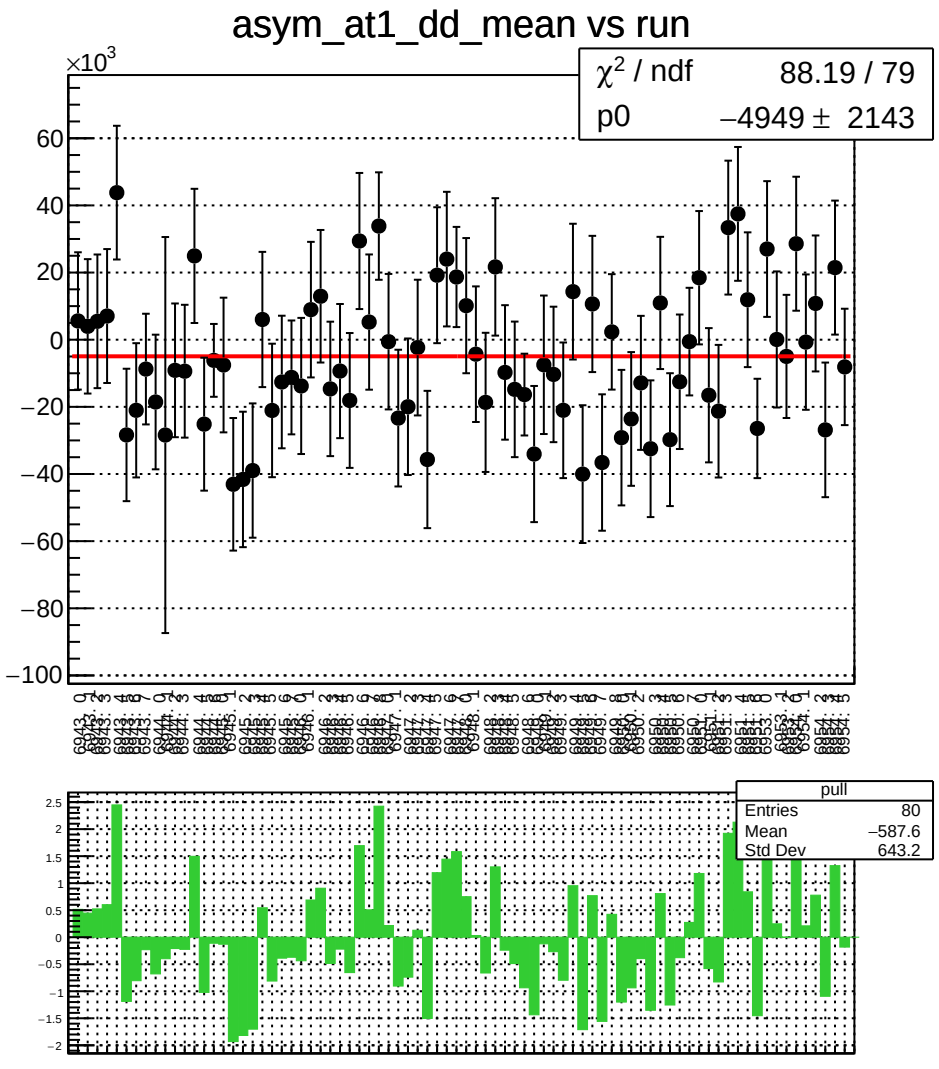

pull1D
Entries 80
Mean −0.0009473
Std Dev 1.018

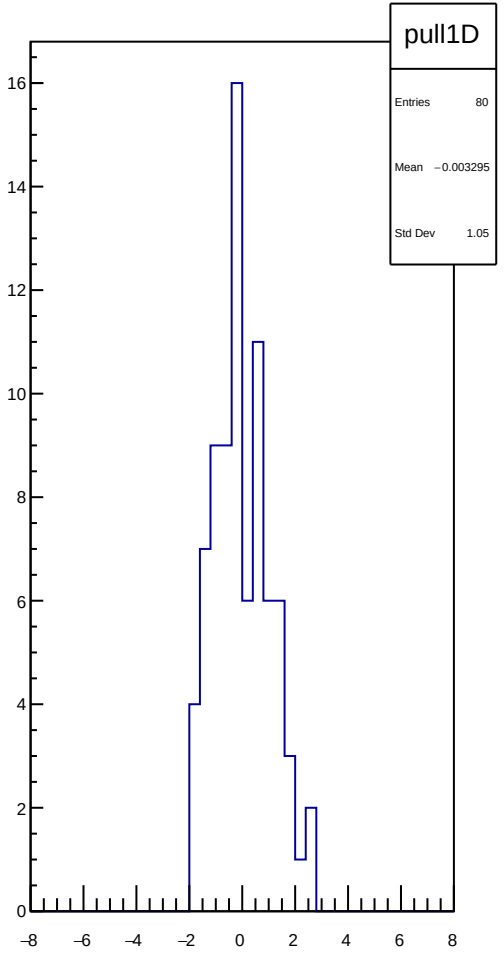

reg_asym_at1_dd_rms vs run
χ^2 / ndf 8242 / 79
p0 1822 ± 1.446
5500
5000
4500
4000
3500
3000
2500
2000
1500

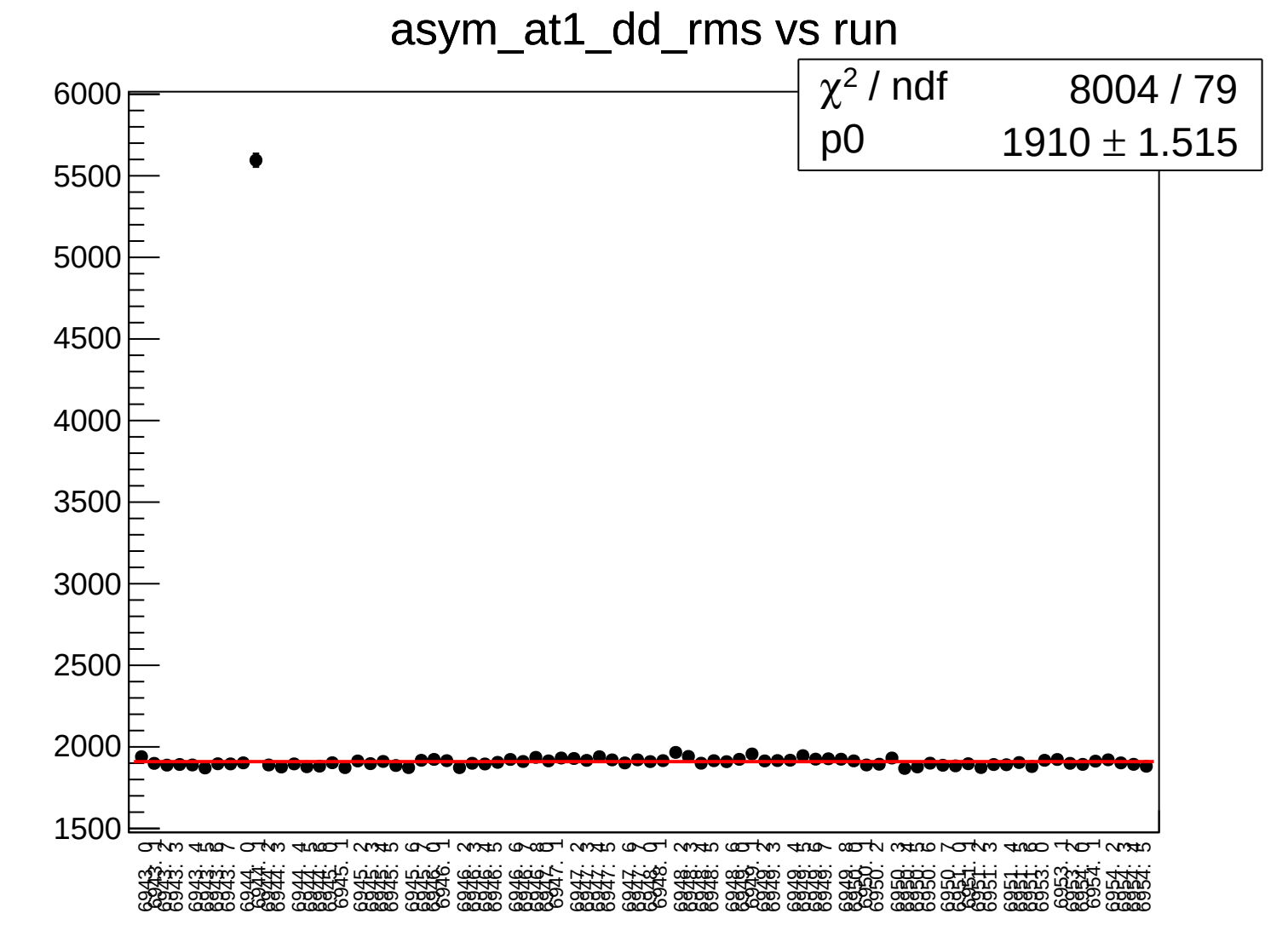

asym_at1_dd_correction_mean vs run
χ² / ndf 75.02 / 79
p0 2242 ± 627
20000
10000
0
−10000
−20000
pull
Entries 80
Mean 79.32
Std Dev 72.33
3
2
1
0
−1
−2

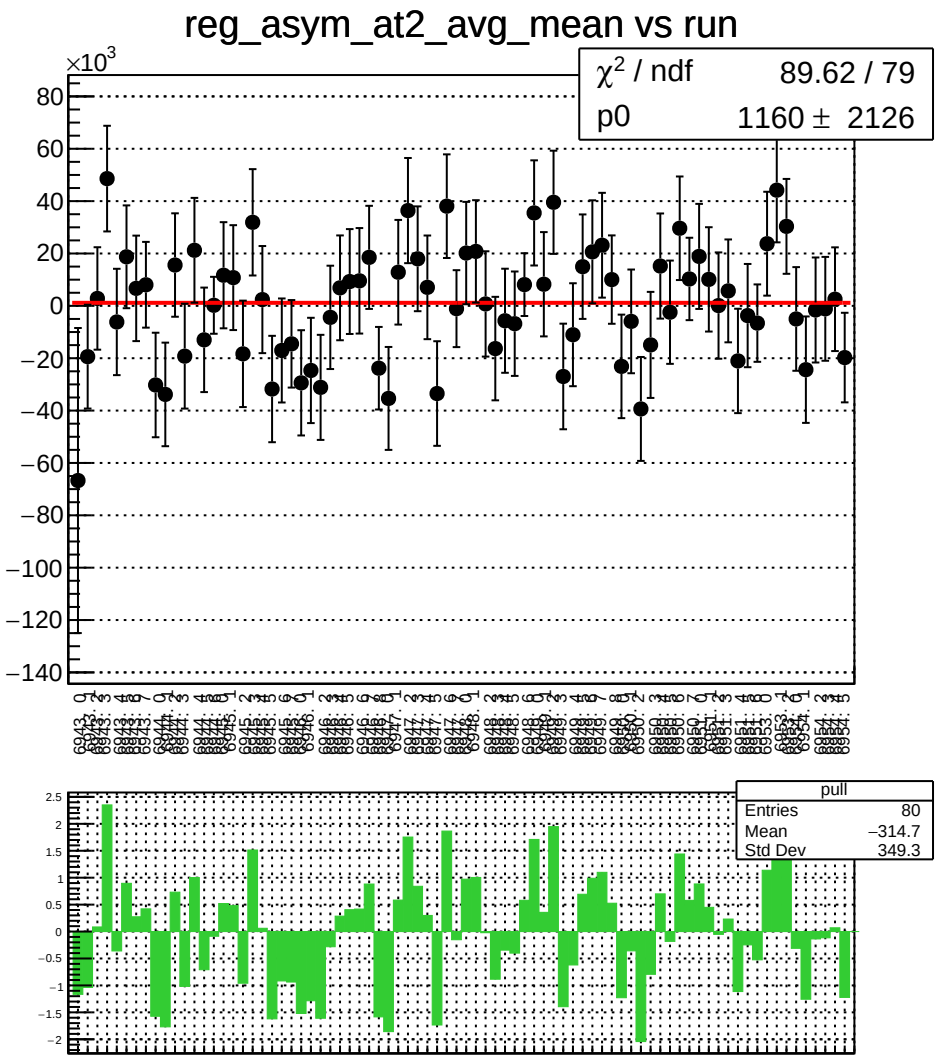

pull1D
Entries 80
Mean 0.02079
Std Dev 0.9681
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

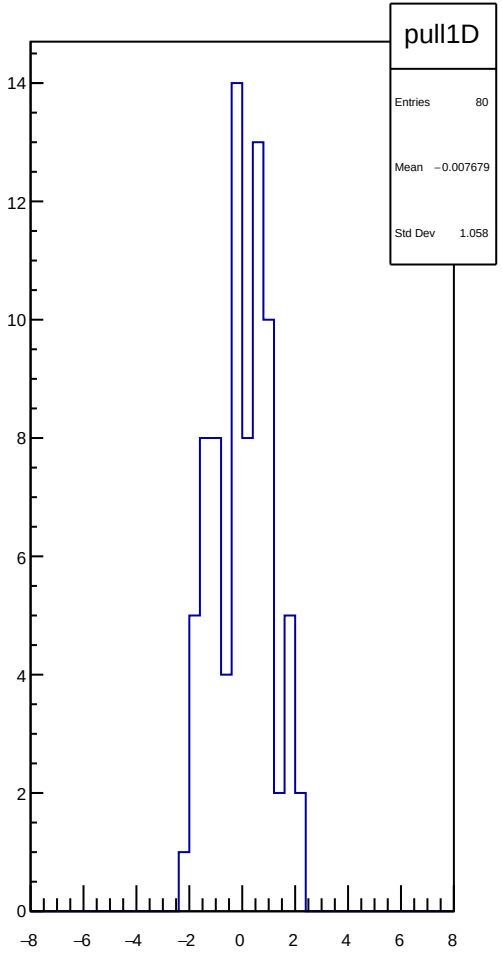

asym_at1_dd_correction_rms vs run
χ² / ndf 1.636e+04 / 79
p0 557.2 ± 0.4434
700
650
600
550
500
450

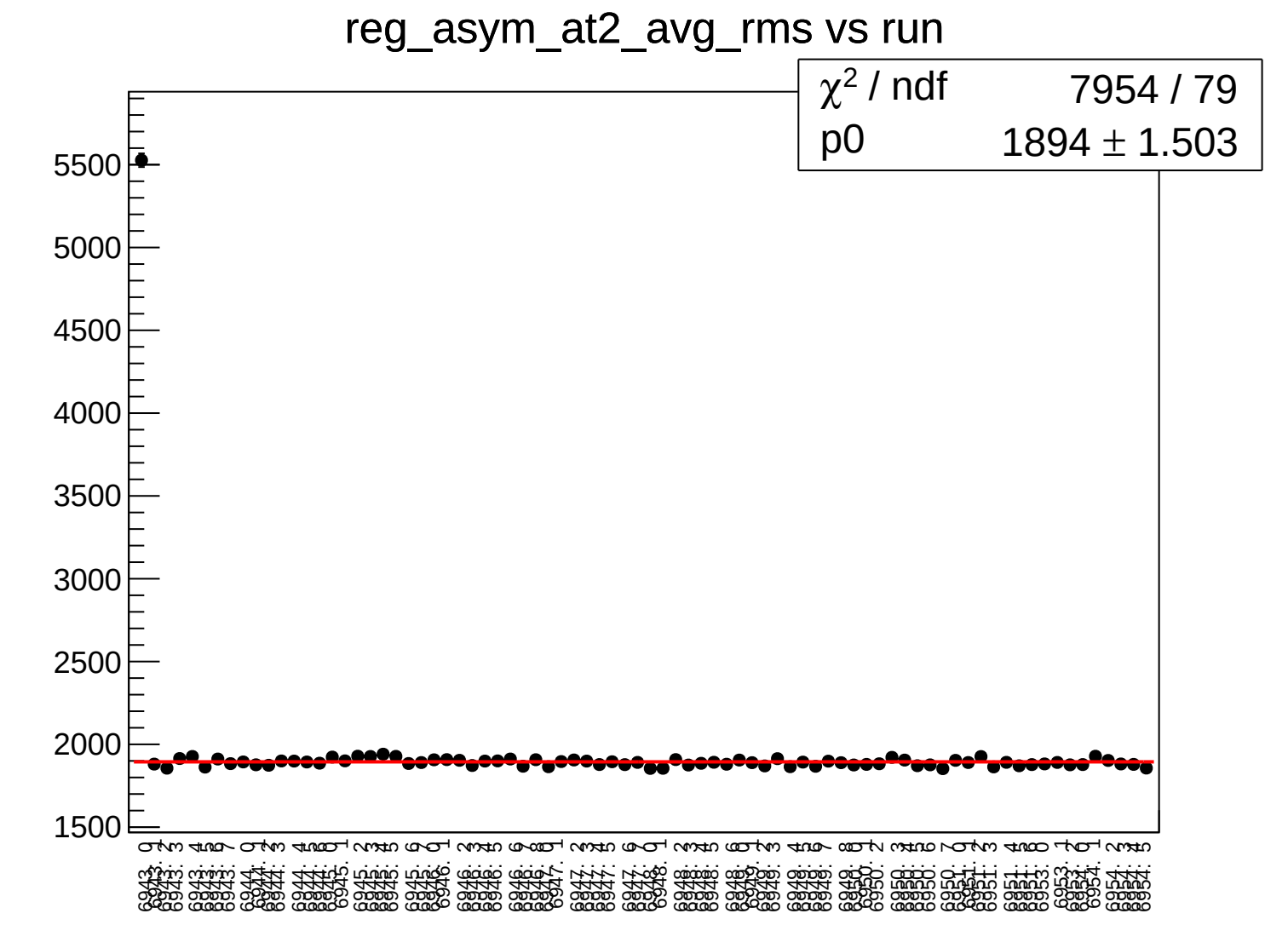

asym_at1_dd_mean vs run
χ^2 / ndf 88.19 / 79
p0 −4949 ± 2143
×10^3
pull
Entries 80
Mean −587.6
Std Dev 643.2

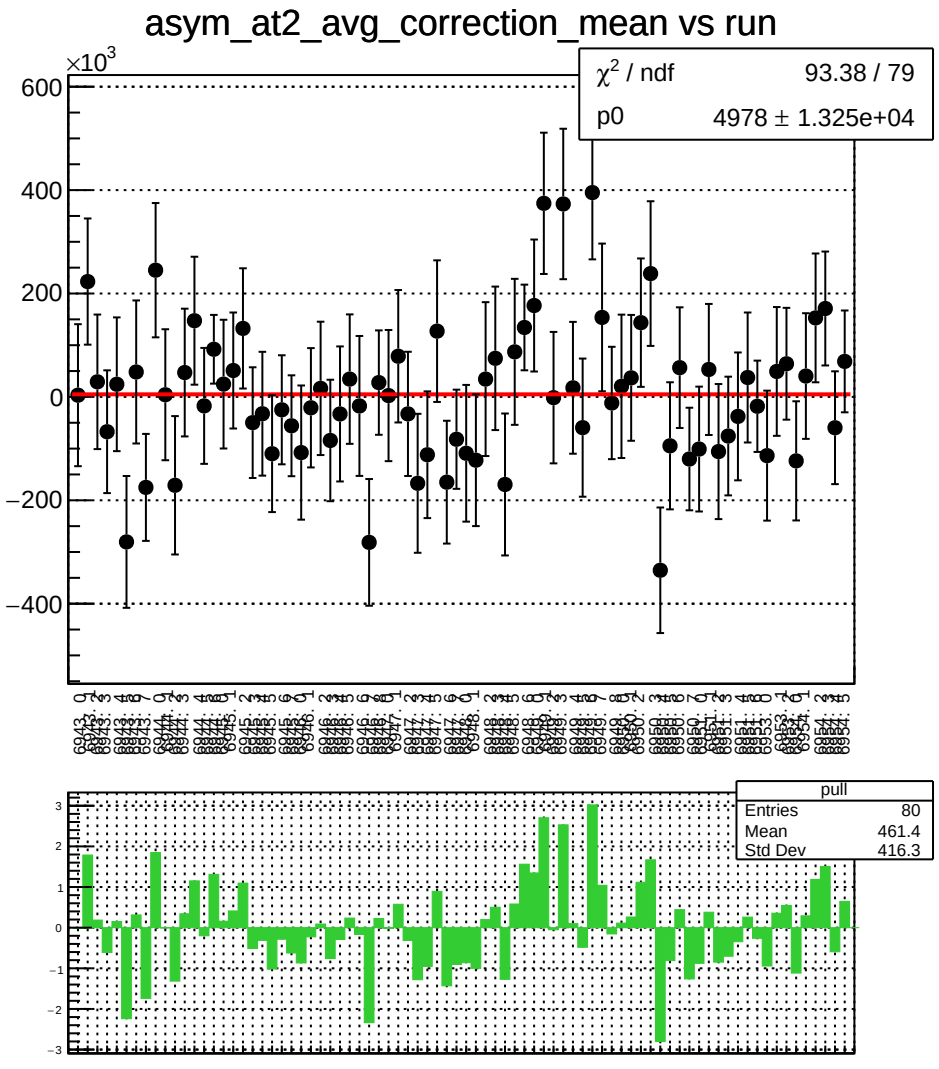

pull1D
Entries 80
Mean −0.003295
Std Dev 1.05

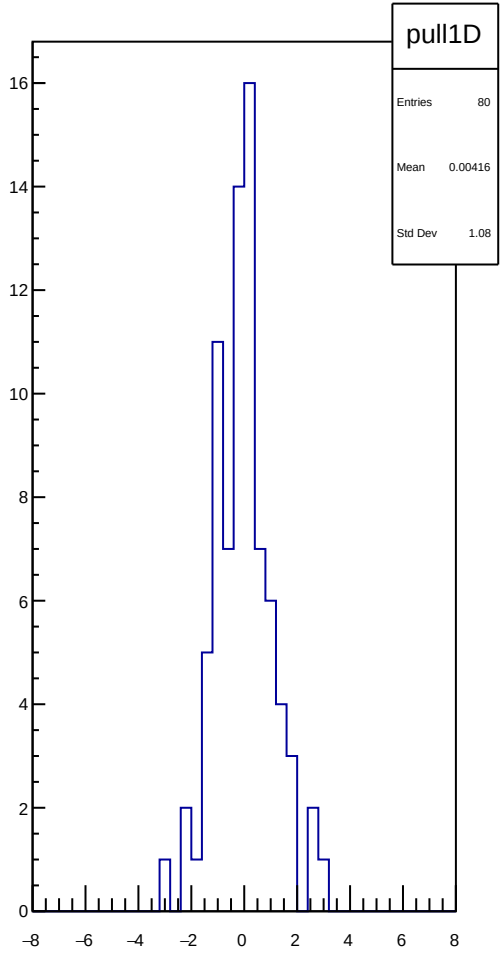

asym_at1_dd_rms vs run
χ^2 / ndf 8004 / 79
p0 1910 ± 1.515
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500


reg_asym_at2_avg_mean vs run
×10^3
χ² / ndf 89.62 / 79
p0 1160 ± 2126
pull
Entries 80
Mean −314.7
Std Dev 349.3

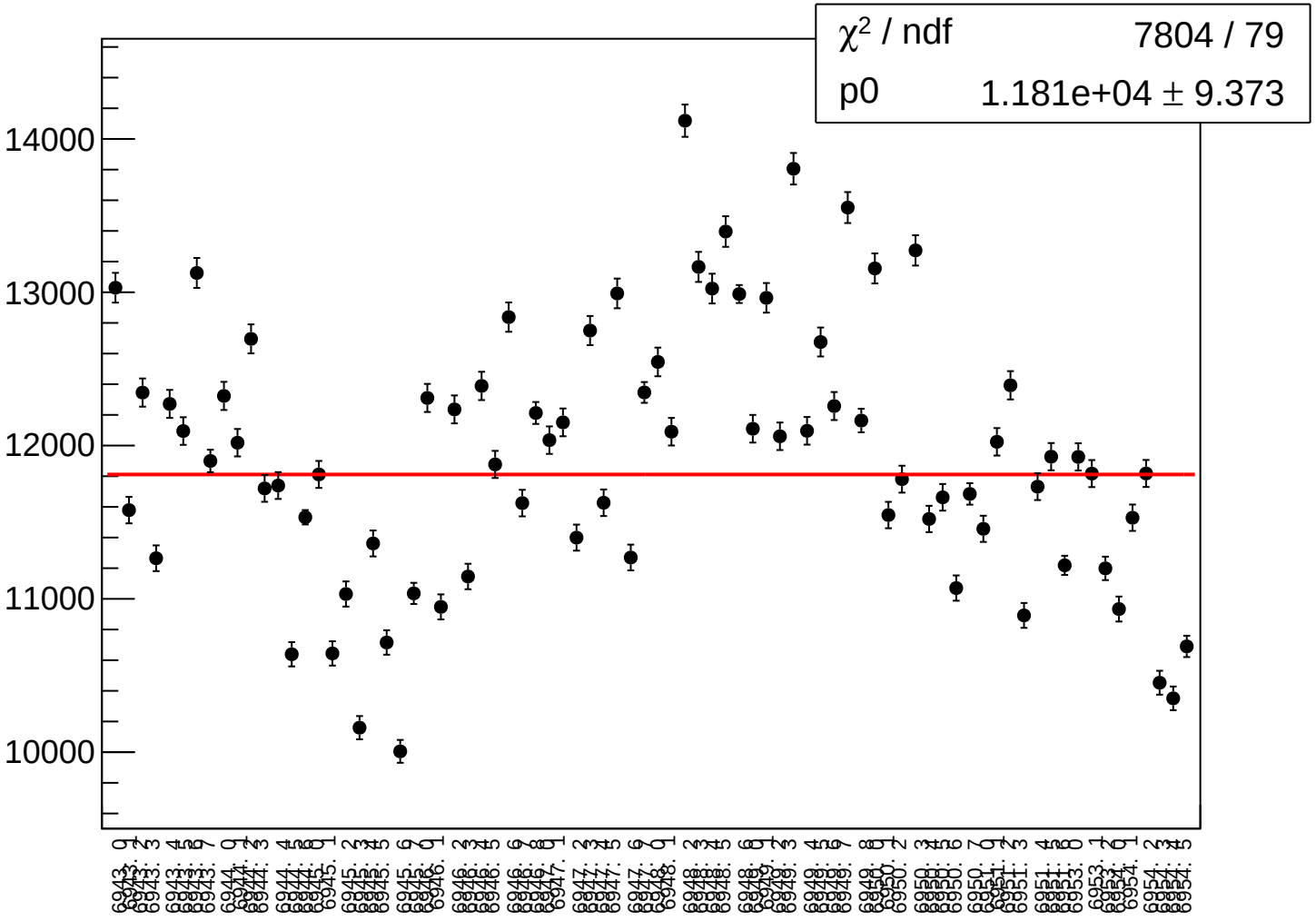

pull1D
Entries 80
Mean −0.007679
Std Dev 1.058

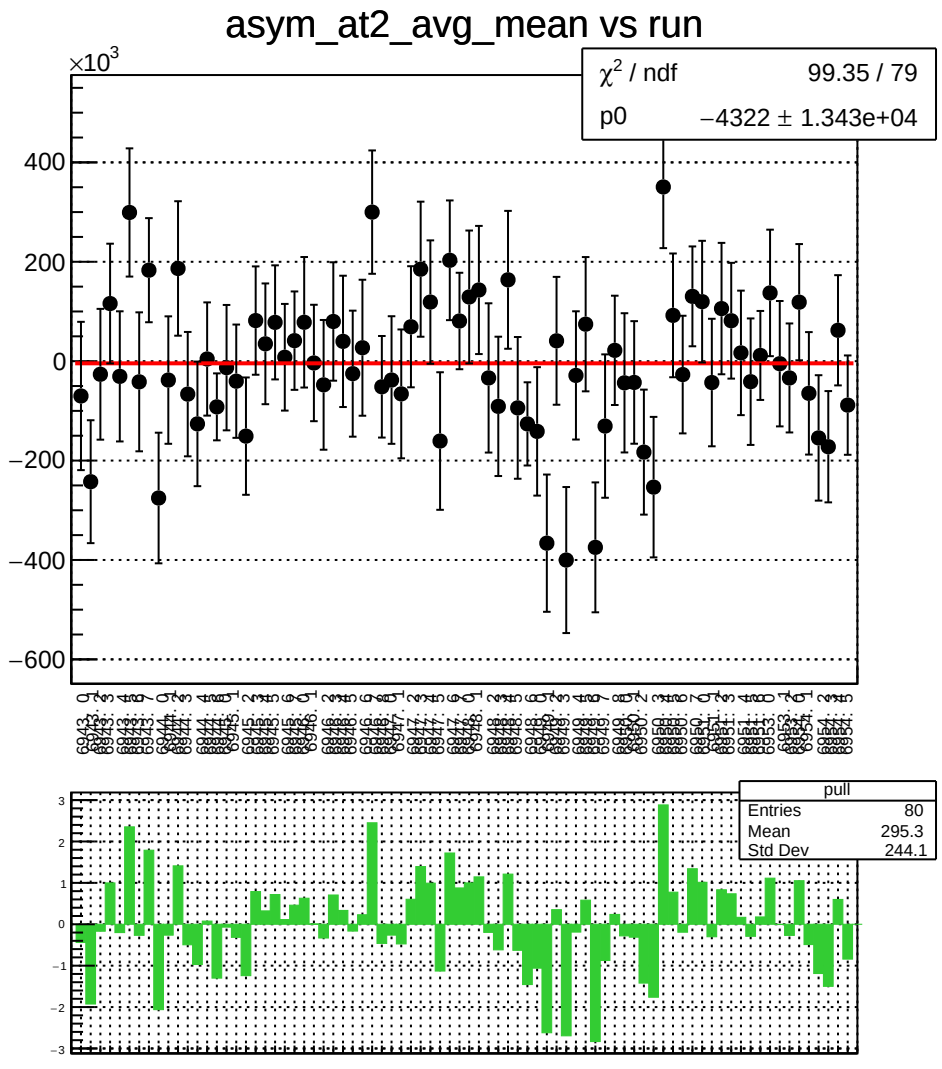

reg_asym_at2_avg_rms vs run
χ^2 / ndf 7954 / 79
p0 1894 ± 1.503
5500
5000
4500
4000
3500
3000
2500
2000
1500

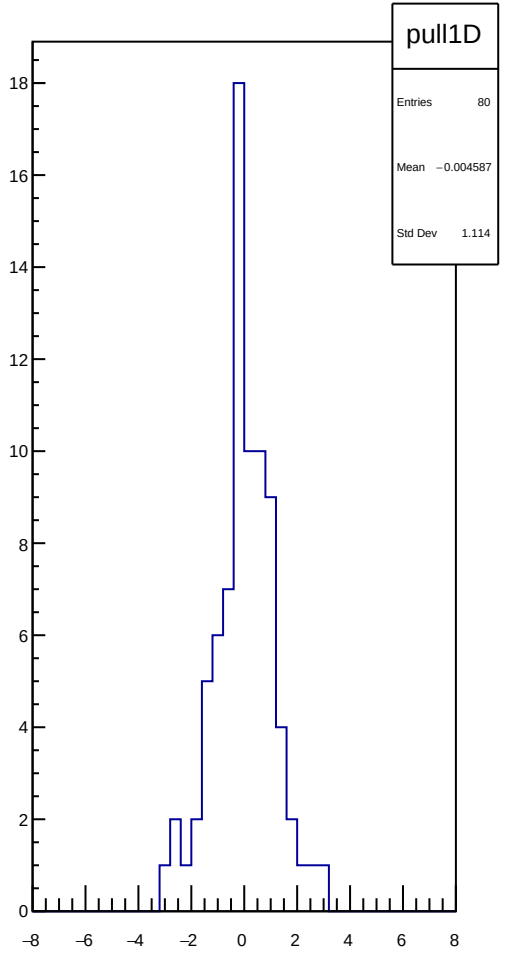

asym_at2_avg_correction_mean vs run
×10^3
600
400
200
0
−200
−400
χ² / ndf 93.38 / 79
p0 4978 ± 1.325e+04
pull
Entries 80
Mean 461.4
Std Dev 416.3
3
2
1
0
−1
−2
−3

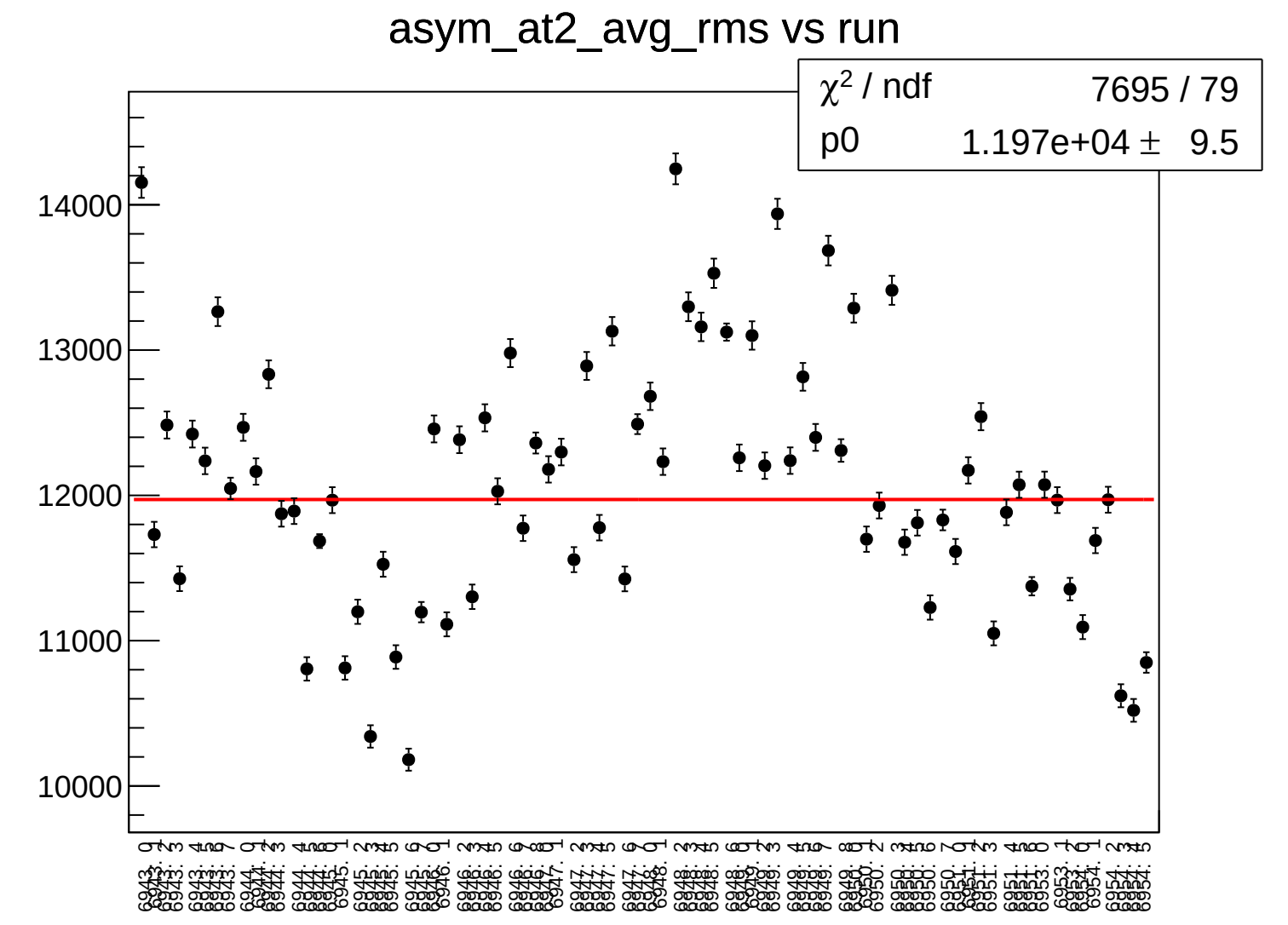

pull1D
Entries 80
Mean 0.00416
Std Dev 1.08
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

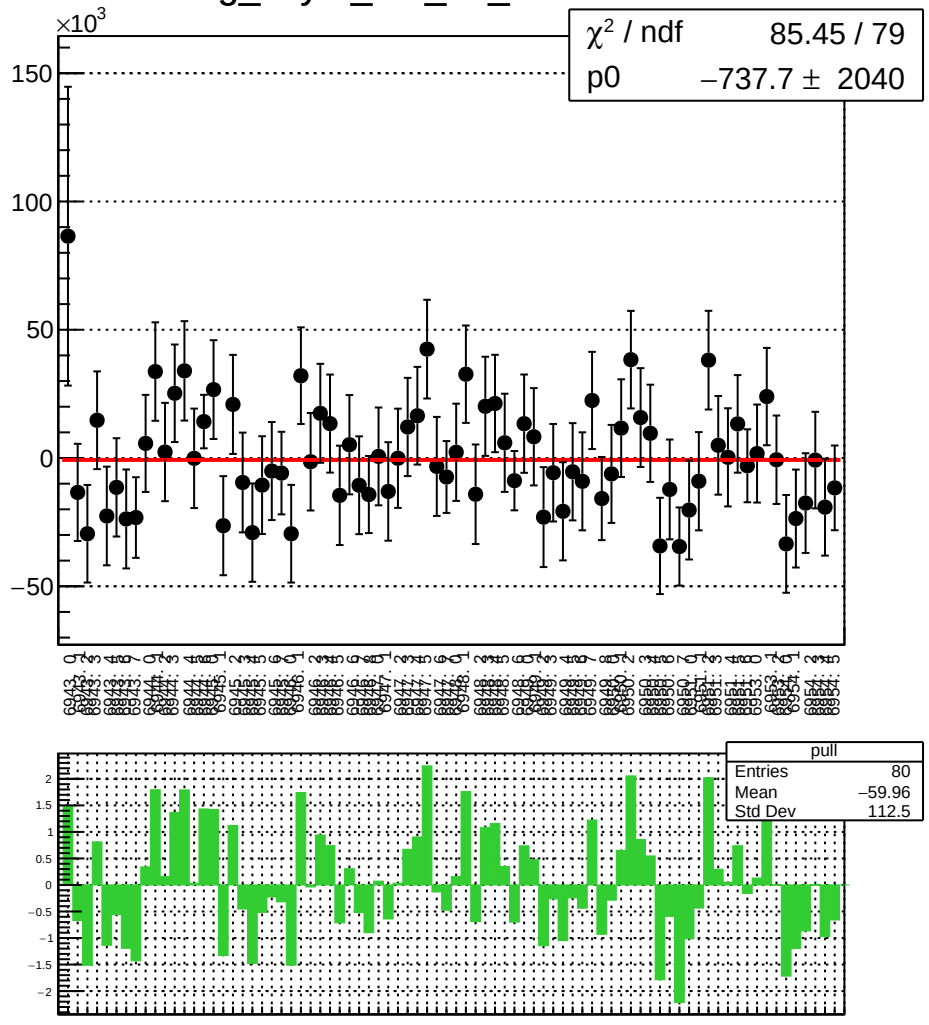
asym_at2_avg_correction_rms vs run

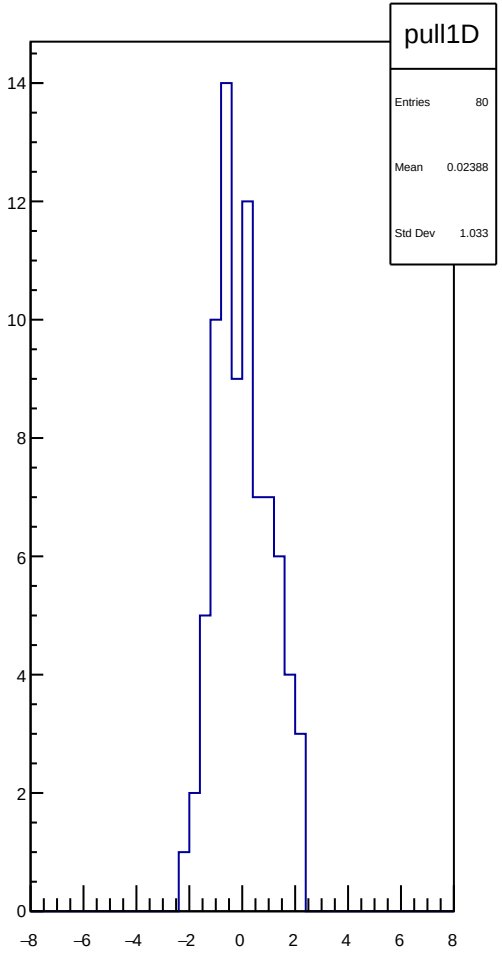


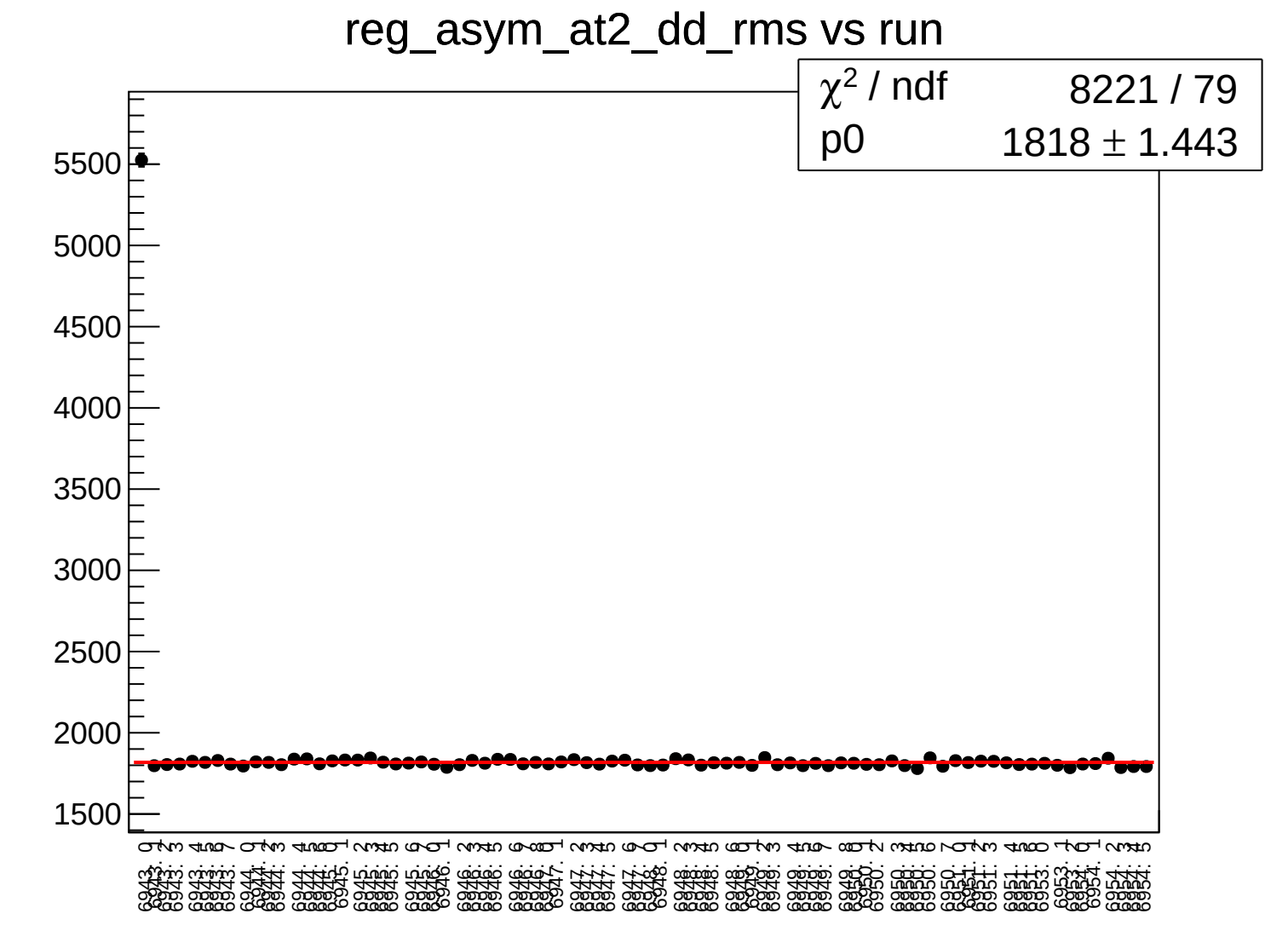

asym_at2_avg_mean vs run
×10^3
χ² / ndf 99.35 / 79
p0 −4322 ± 1.343e+04
400
200
0
−200
−400
−600
pull
Entries 80
Mean 295.3
Std Dev 244.1
3
2
1
0
−1
−2
−3

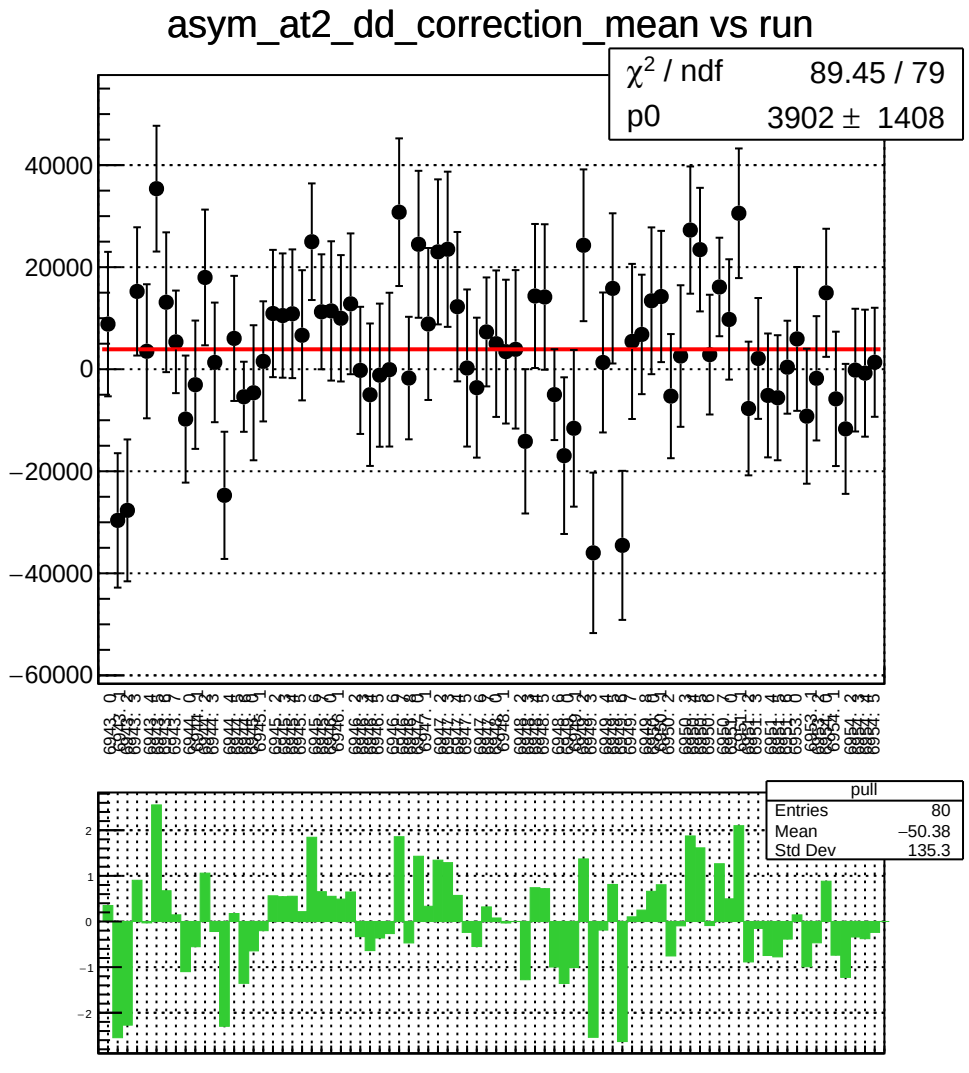

pull1D
Entries 80
Mean −0.004587
Std Dev 1.114
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

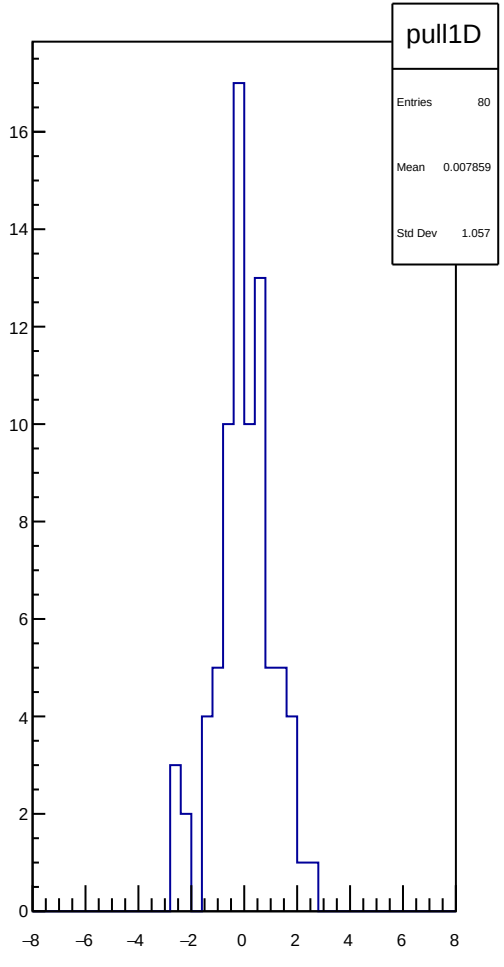

asym_at2_avg_rms vs run
χ^2 / ndf 7695 / 79
p0 1.197e+04 ± 9.5
14000
13000
12000
11000
10000

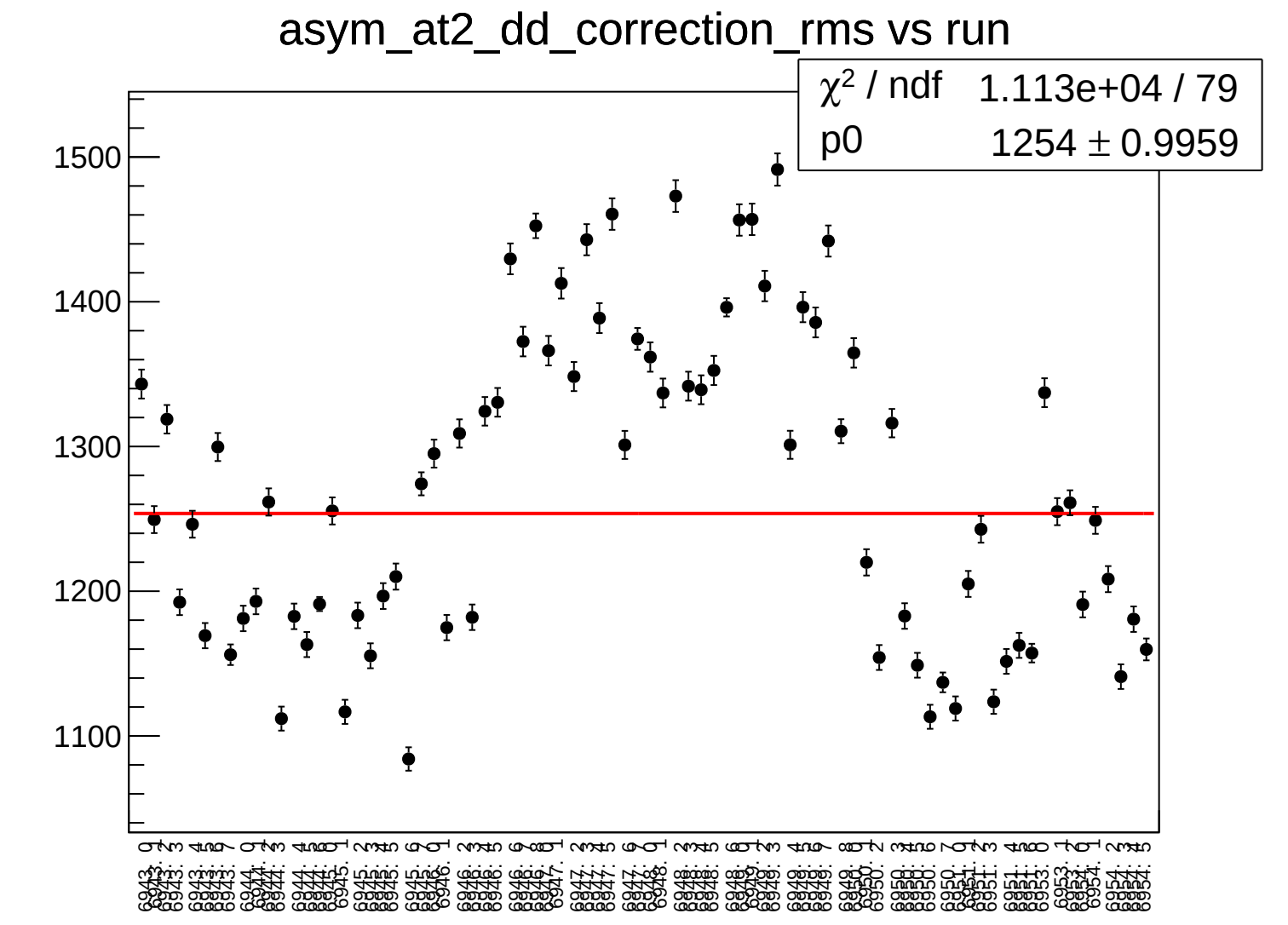

reg_asym_at2_dd_mean vs run
×10^3
χ² / ndf 85.45 / 79
p0 −737.7 ± 2040
150
100
50
0
−50
pull
Entries 80
Mean −59.96
Std Dev 112.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

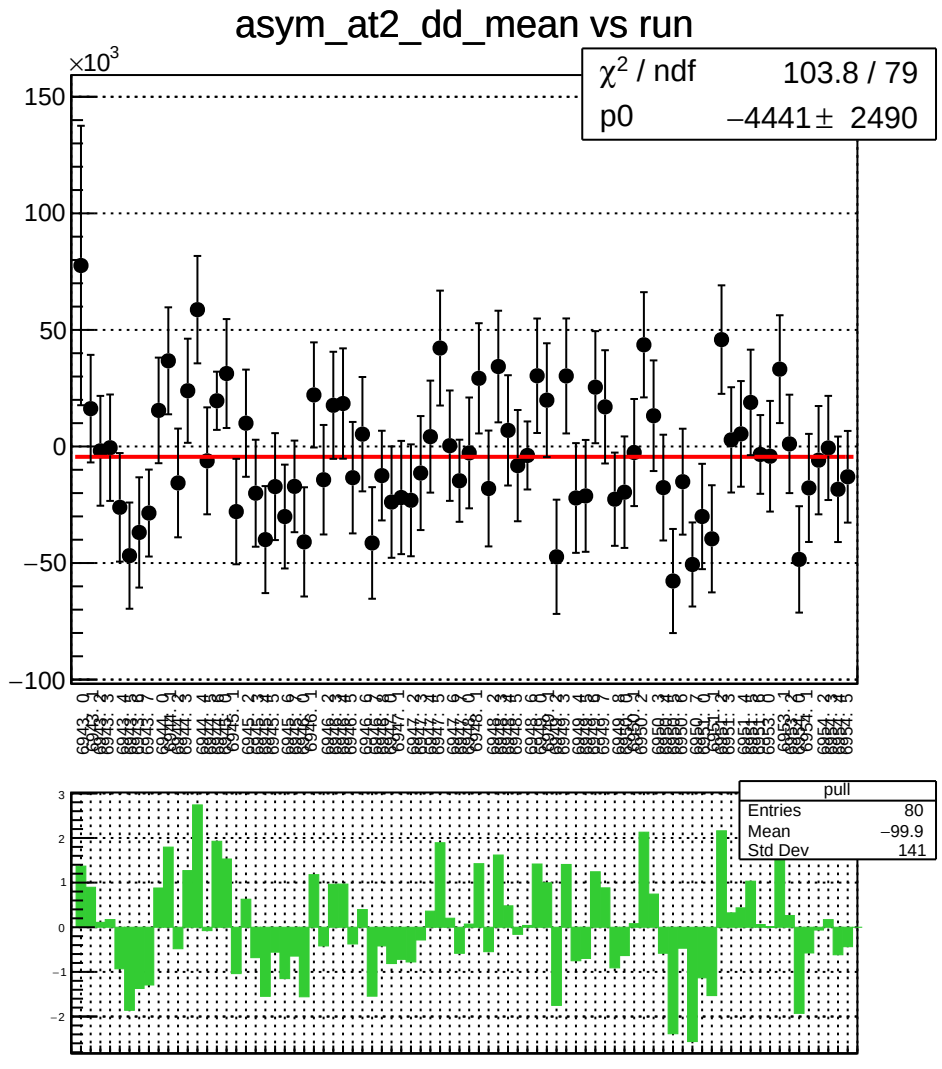

pull1D
Entries 80
Mean 0.02388
Std Dev 1.033
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

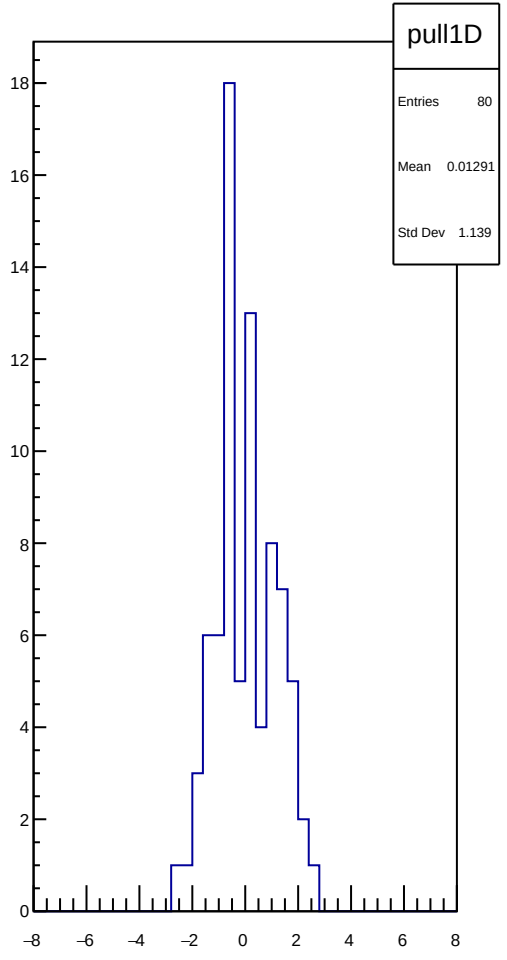

reg_asym_at2_dd_rms vs run
χ^2 / ndf 8221 / 79
p0 1818 ± 1.443
5500
5000
4500
4000
3500
3000
2500
2000
1500

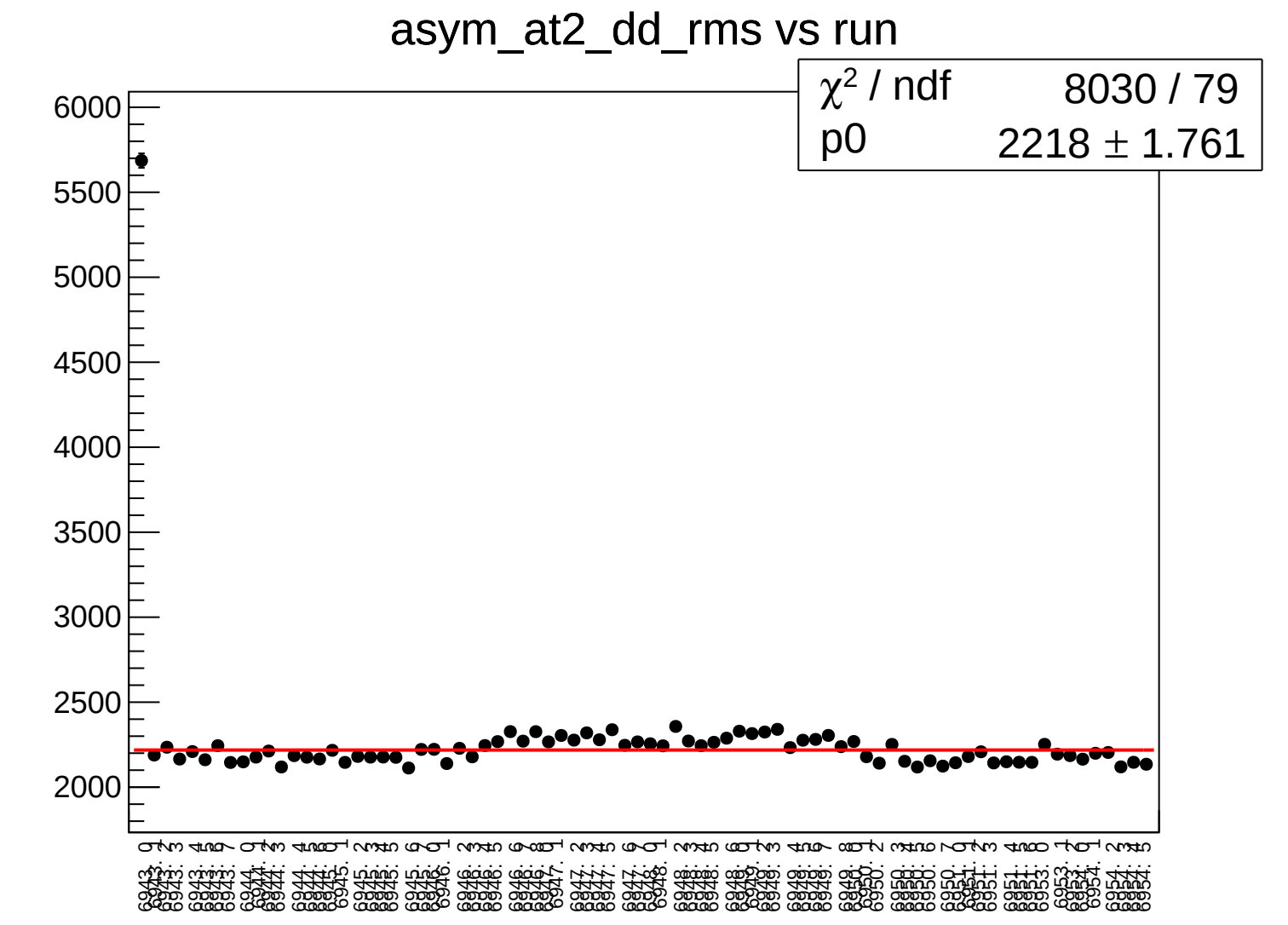

asym_at2_dd_correction_mean vs run
χ² / ndf 89.45 / 79
p0 3902 ± 1408
40000
20000
0
−20000
−40000
−60000
pull
Entries 80
Mean −50.38
Std Dev 135.3
2
1
0
−1
−2

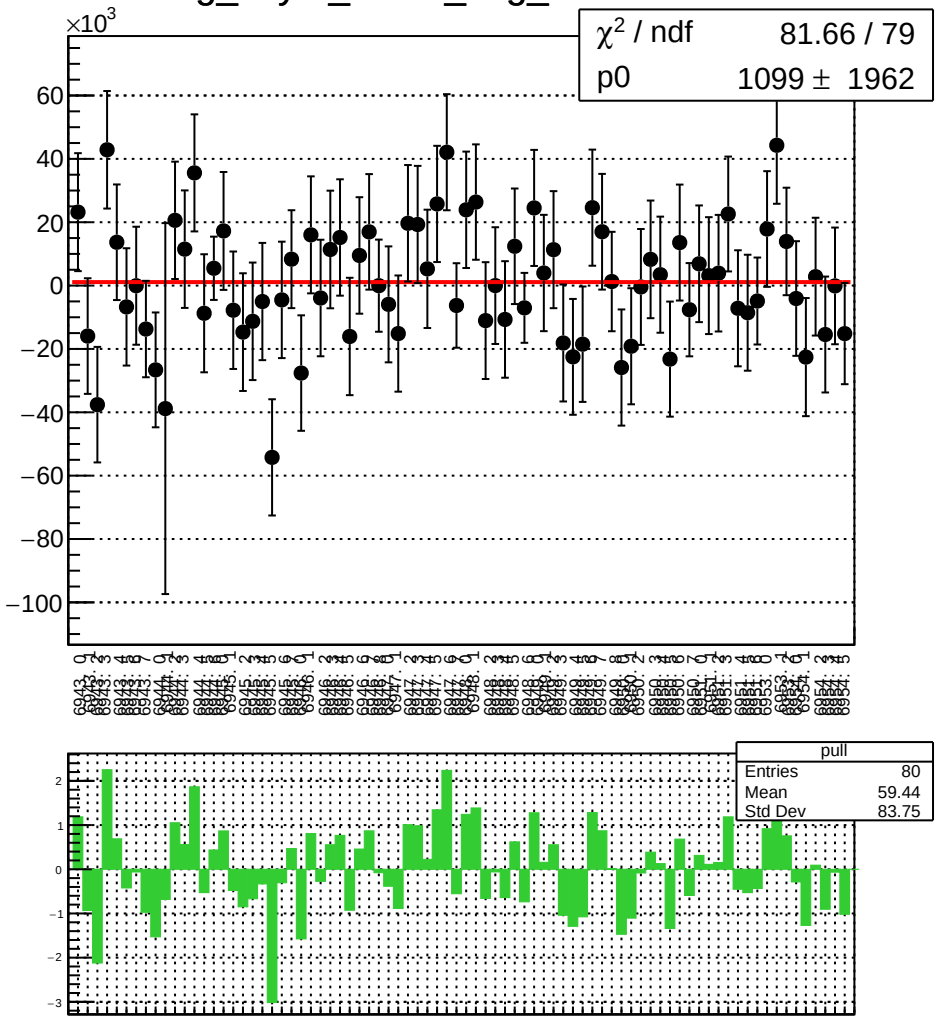

pull1D
Entries 80
Mean 0.007859
Std Dev 1.057
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

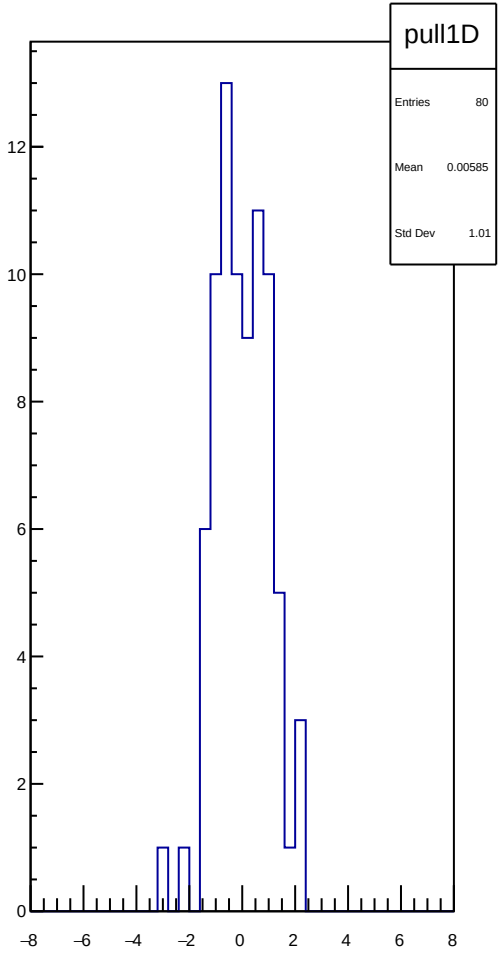

asym_at2_dd_correction_rms vs run
χ² / ndf 1.113e+04 / 79
p0 1254 ± 0.9959
1500
1400
1300
1200
1100

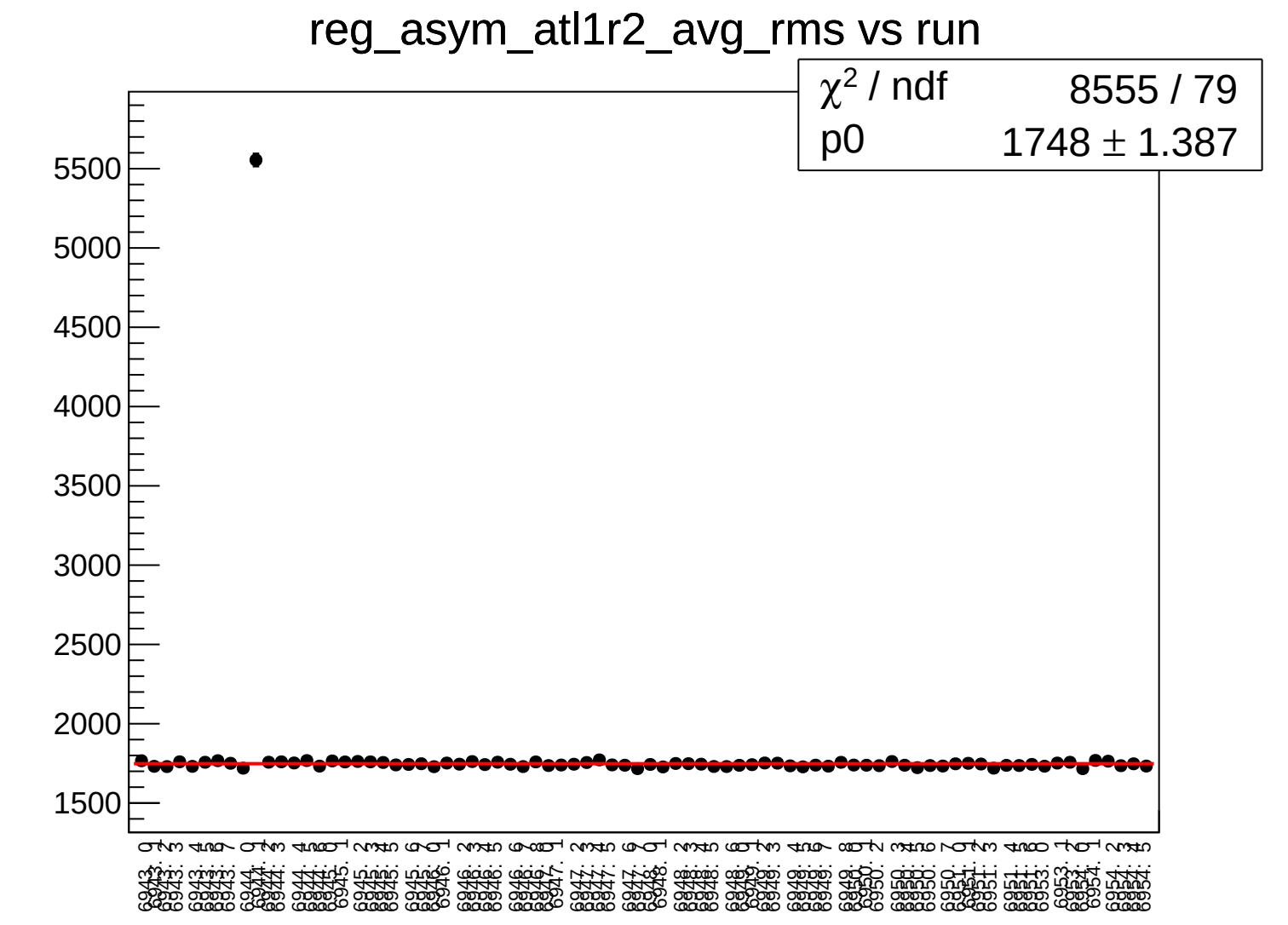

asym_at2_dd_mean vs run
×10^3
χ² / ndf 103.8 / 79
p0 −4441 ± 2490
150
100
50
0
−50
−100
pull
Entries 80
Mean −99.9
Std Dev 141
3
2
1
0
−1
−2

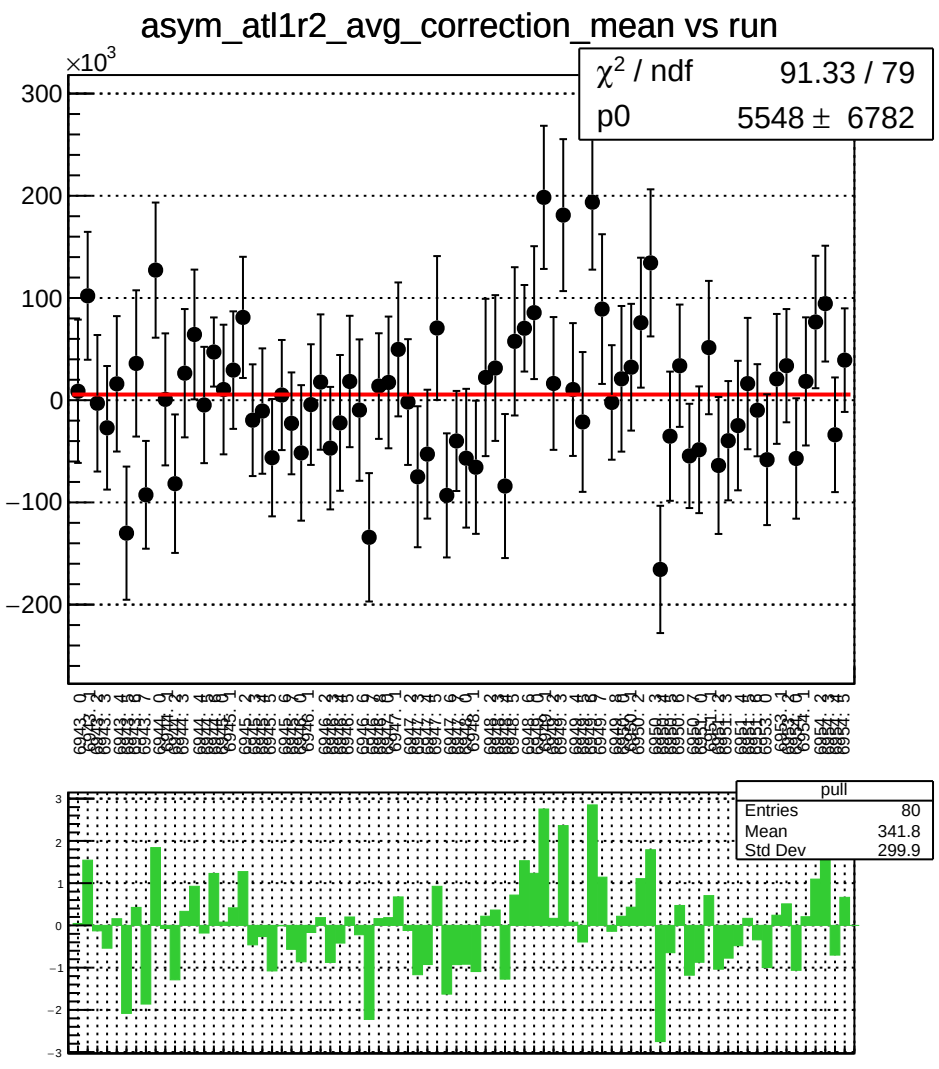

pull1D
Entries 80
Mean 0.01291
Std Dev 1.139
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

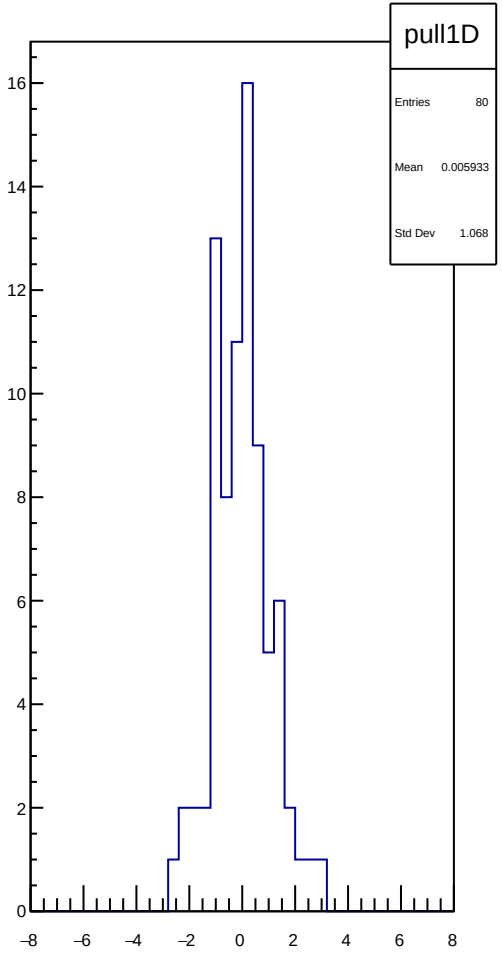

asym_at2_dd_rms vs run
χ^2 / ndf 8030 / 79
p0 2218 ± 1.761
6000
5500
5000
4500
4000
3500
3000
2500
2000

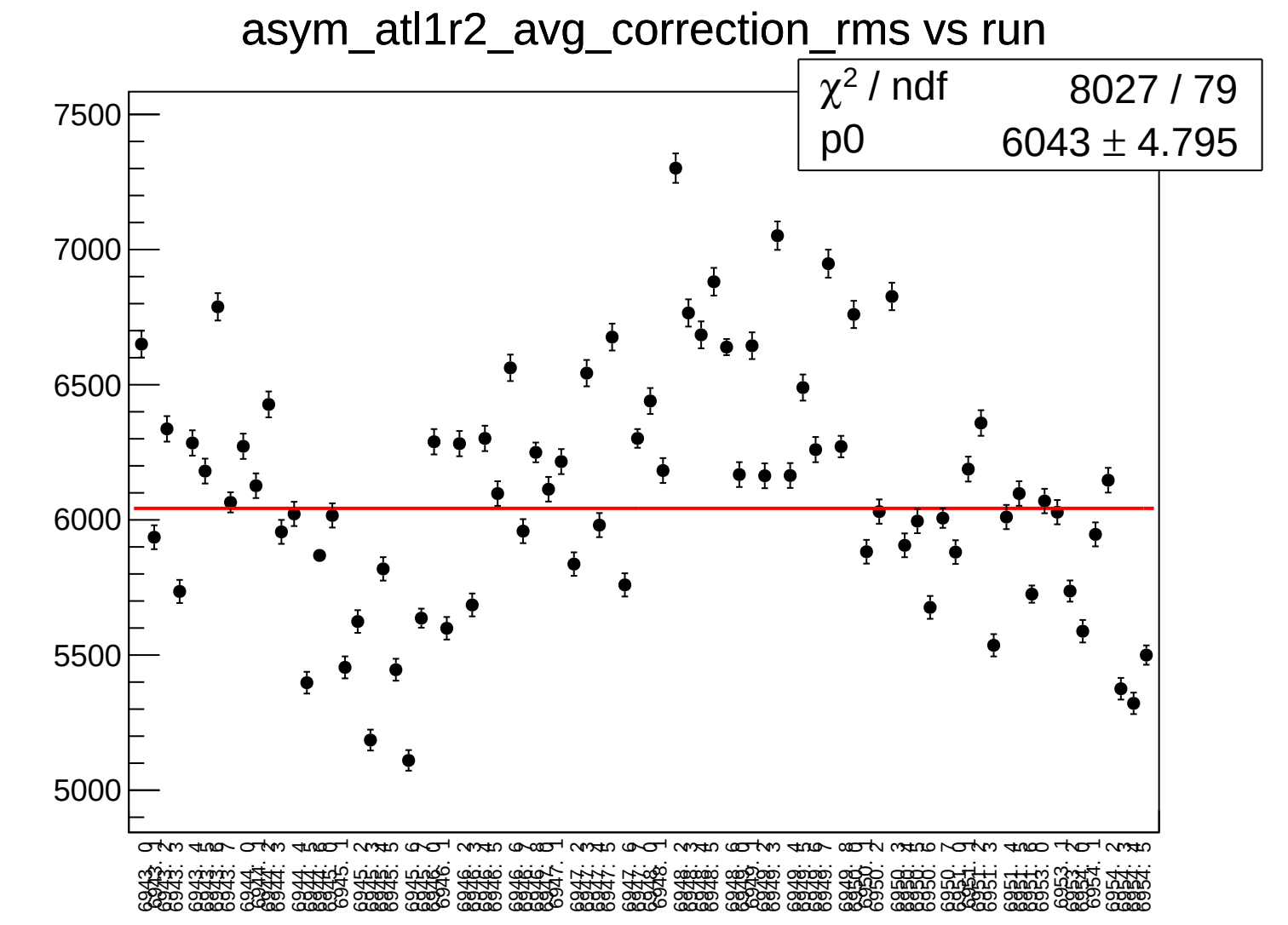

reg_asym_atl1r2_avg_mean vs run
×10^3
χ^2 / ndf 81.66 / 79
p0 1099 ± 1962
pull
Entries 80
Mean 59.44
Std Dev 83.75

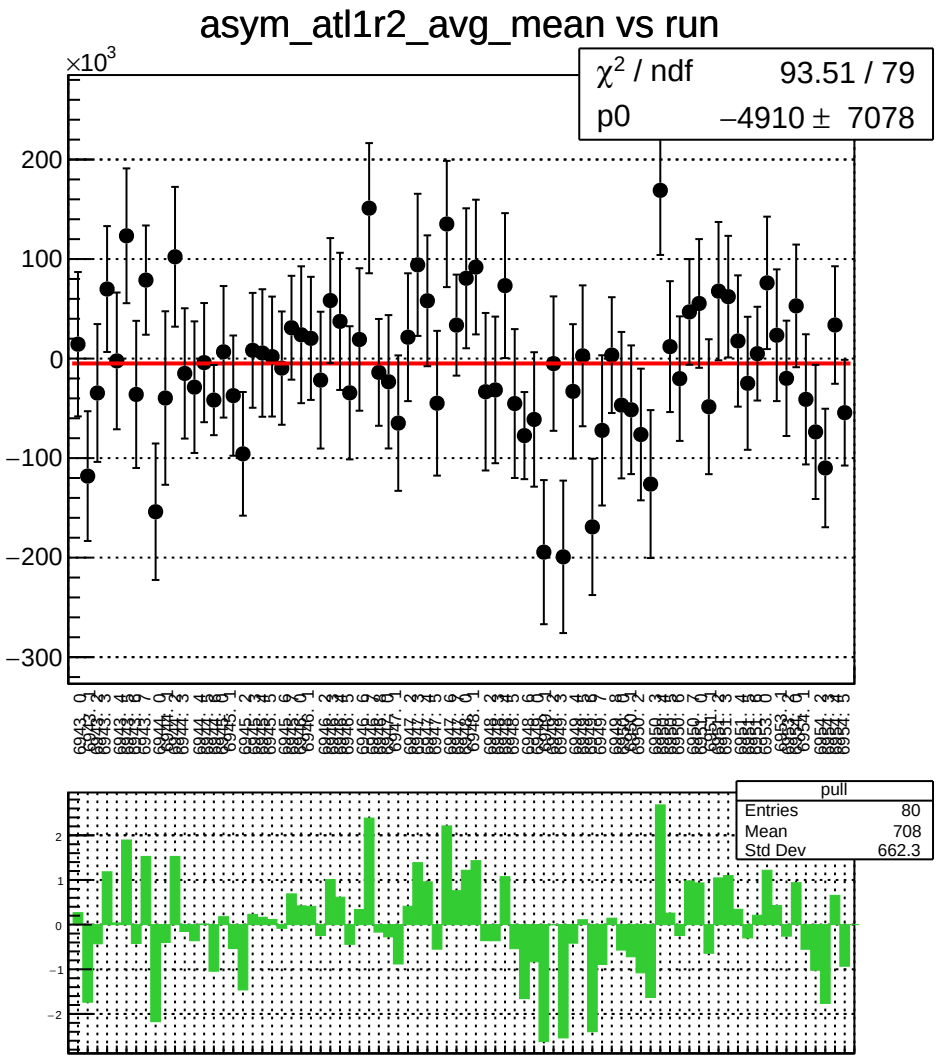

pull1D
Entries 80
Mean 0.00585
Std Dev 1.01

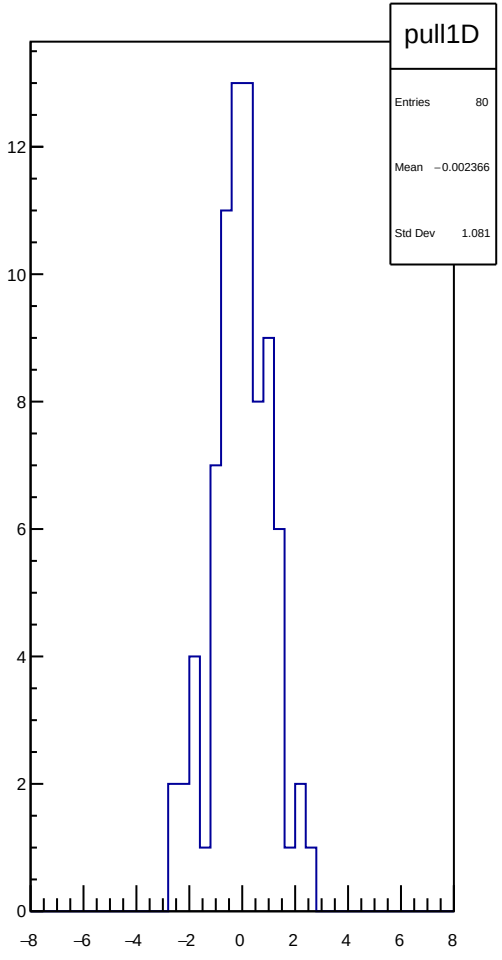

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 8555 / 79
p0 1748 ± 1.387
5500
5000
4500
4000
3500
3000
2500
2000
1500

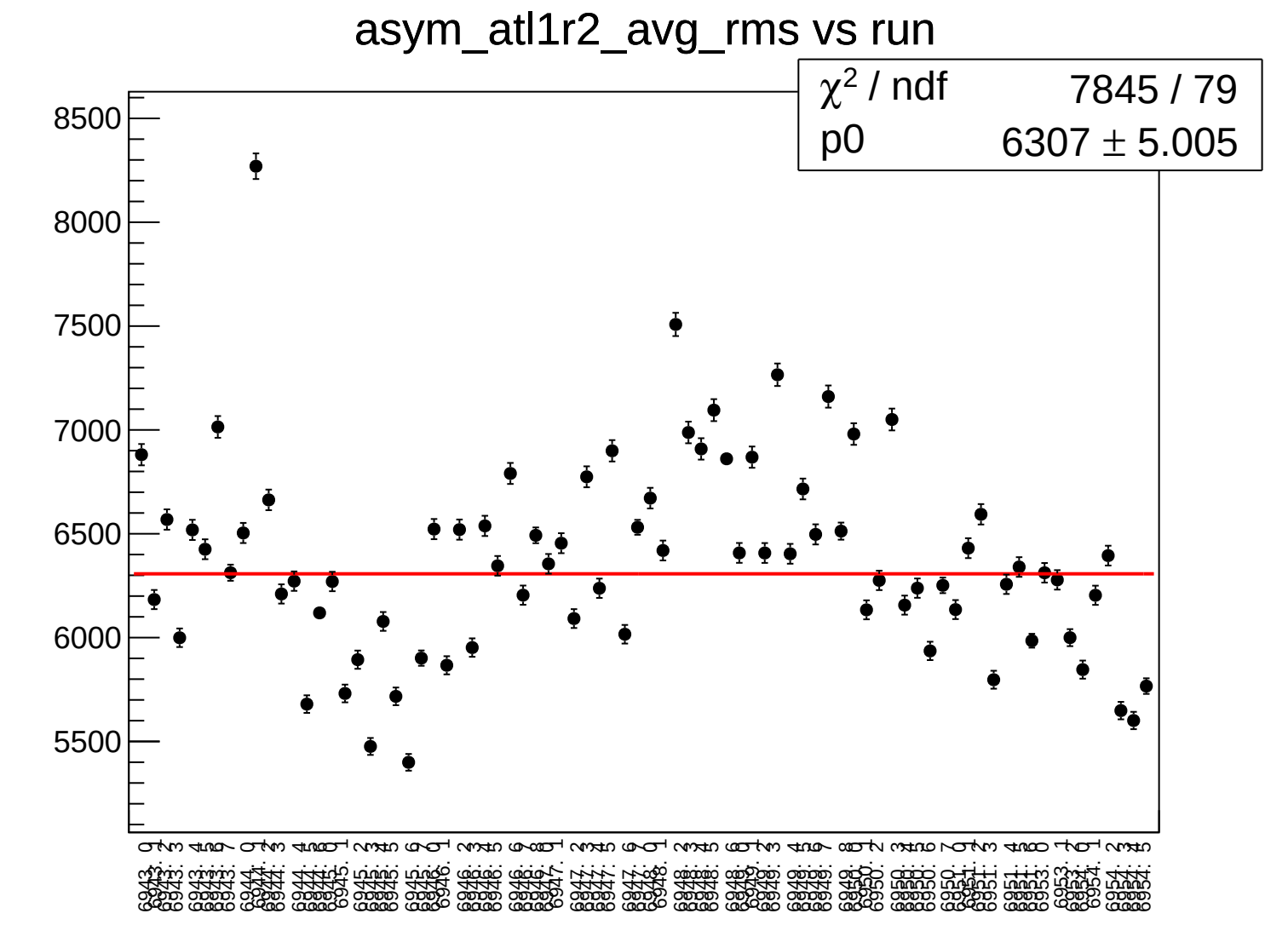

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 91.33 / 79
p0 5548 ± 6782
pull
Entries 80
Mean 341.8
Std Dev 299.9

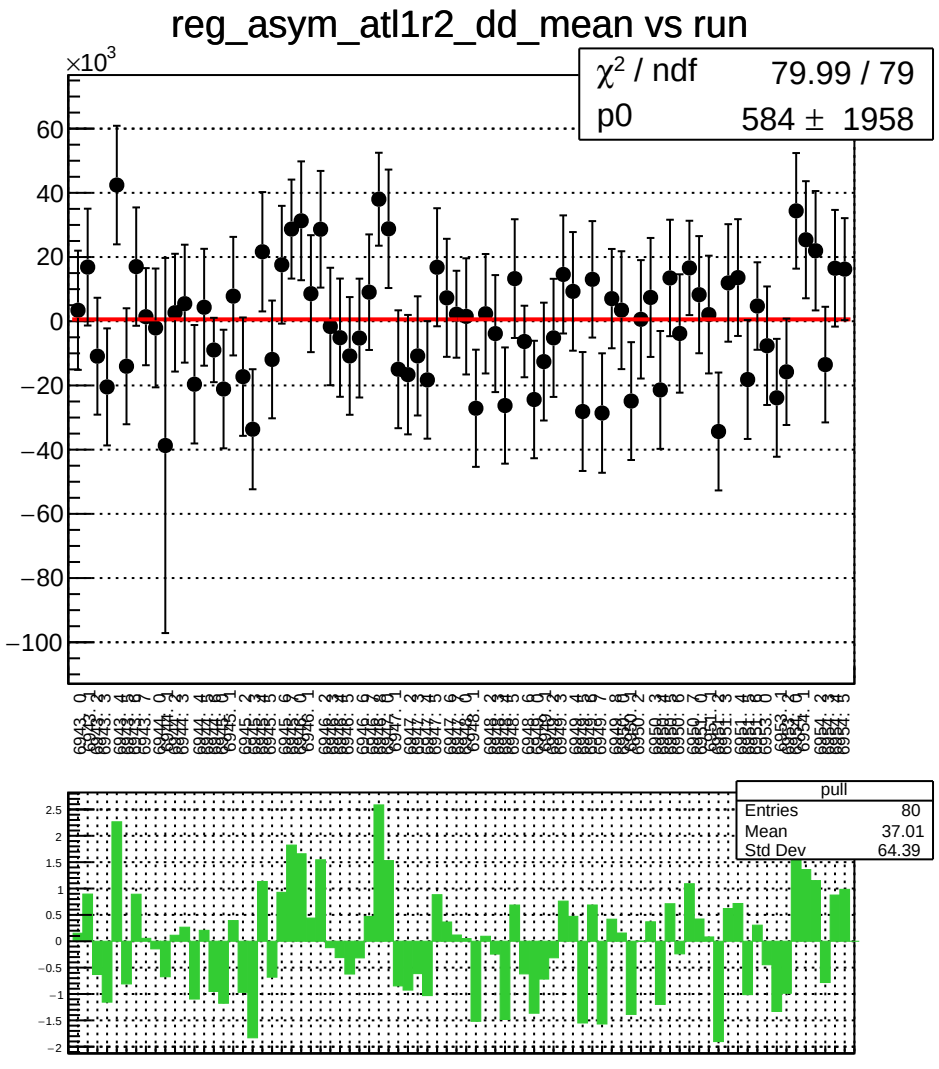

pull1D
Entries 80
Mean 0.005933
Std Dev 1.068

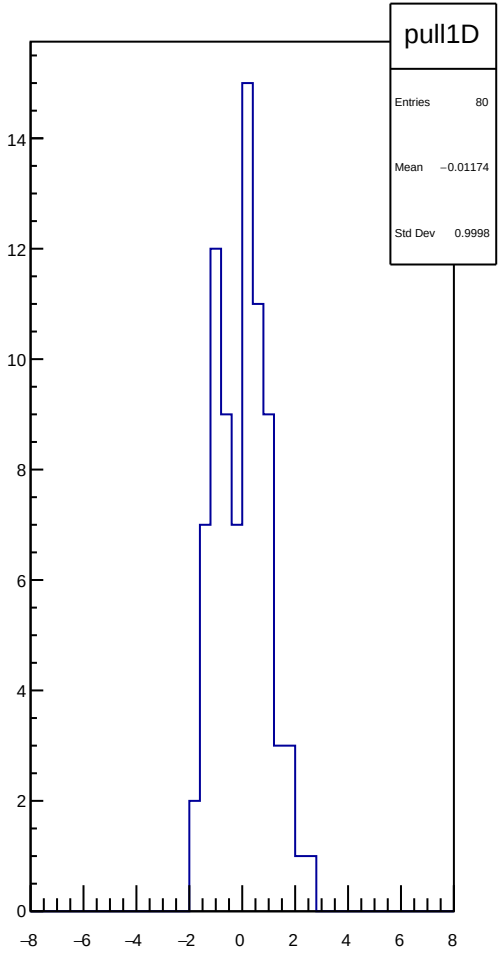

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 8027 / 79
p0 6043 ± 4.795
7500
7000
6500
6000
5500
5000

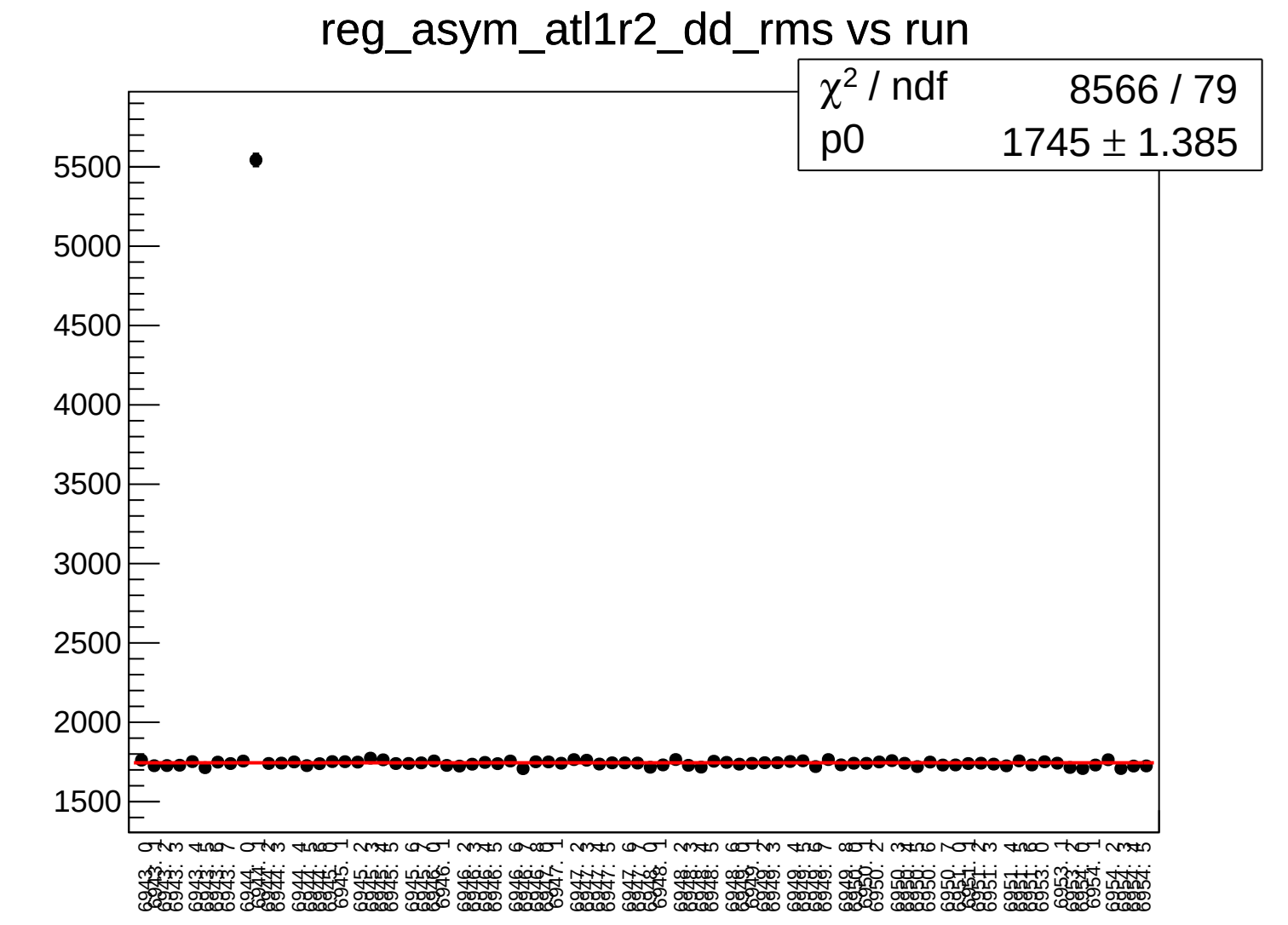

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 93.51 / 79
p0 −4910 ± 7078
200
100
0
−100
−200
−300
pull
Entries 80
Mean 708
Std Dev 662.3
2
1
0
−1
−2

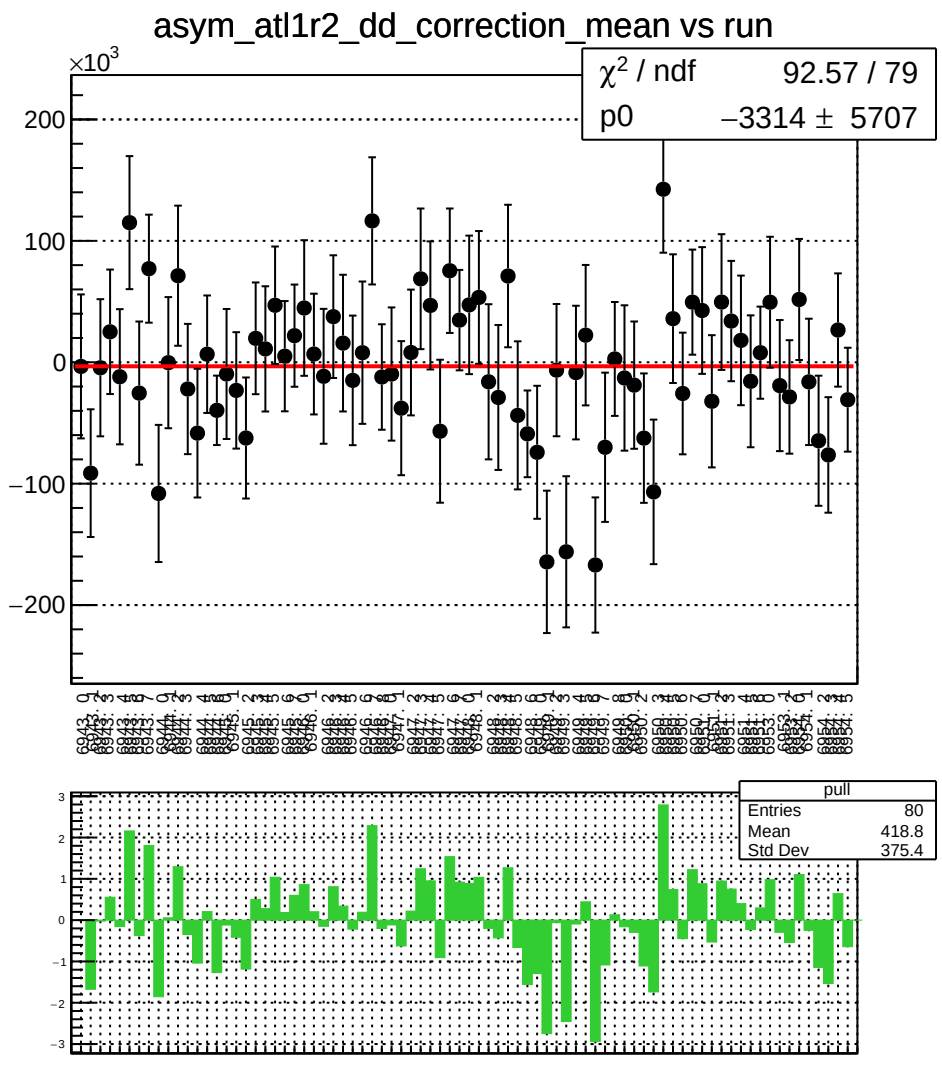

pull1D
Entries 80
Mean −0.002366
Std Dev 1.081
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

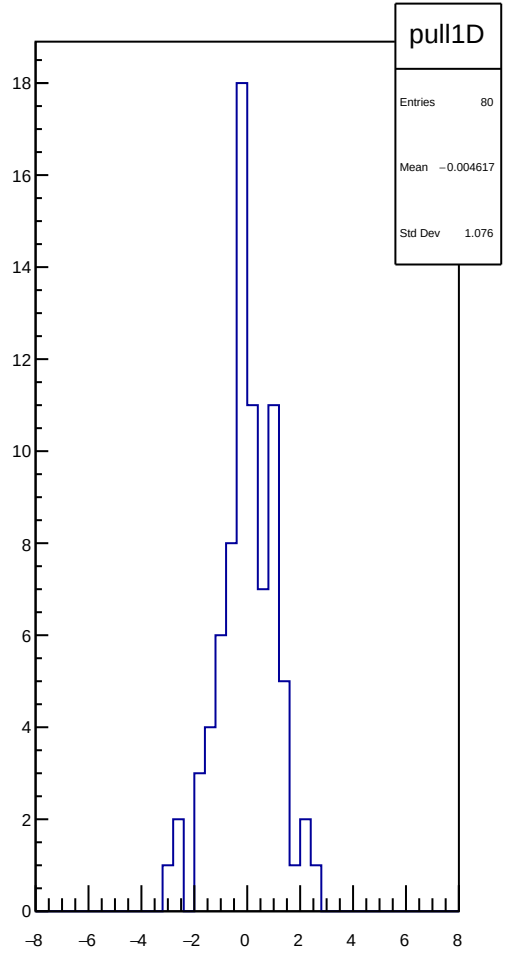

asym_atl1r2_avg_rms vs run
χ² / ndf 7845 / 79
p0 6307 ± 5.005
8500
8000
7500
7000
6500
6000
5500

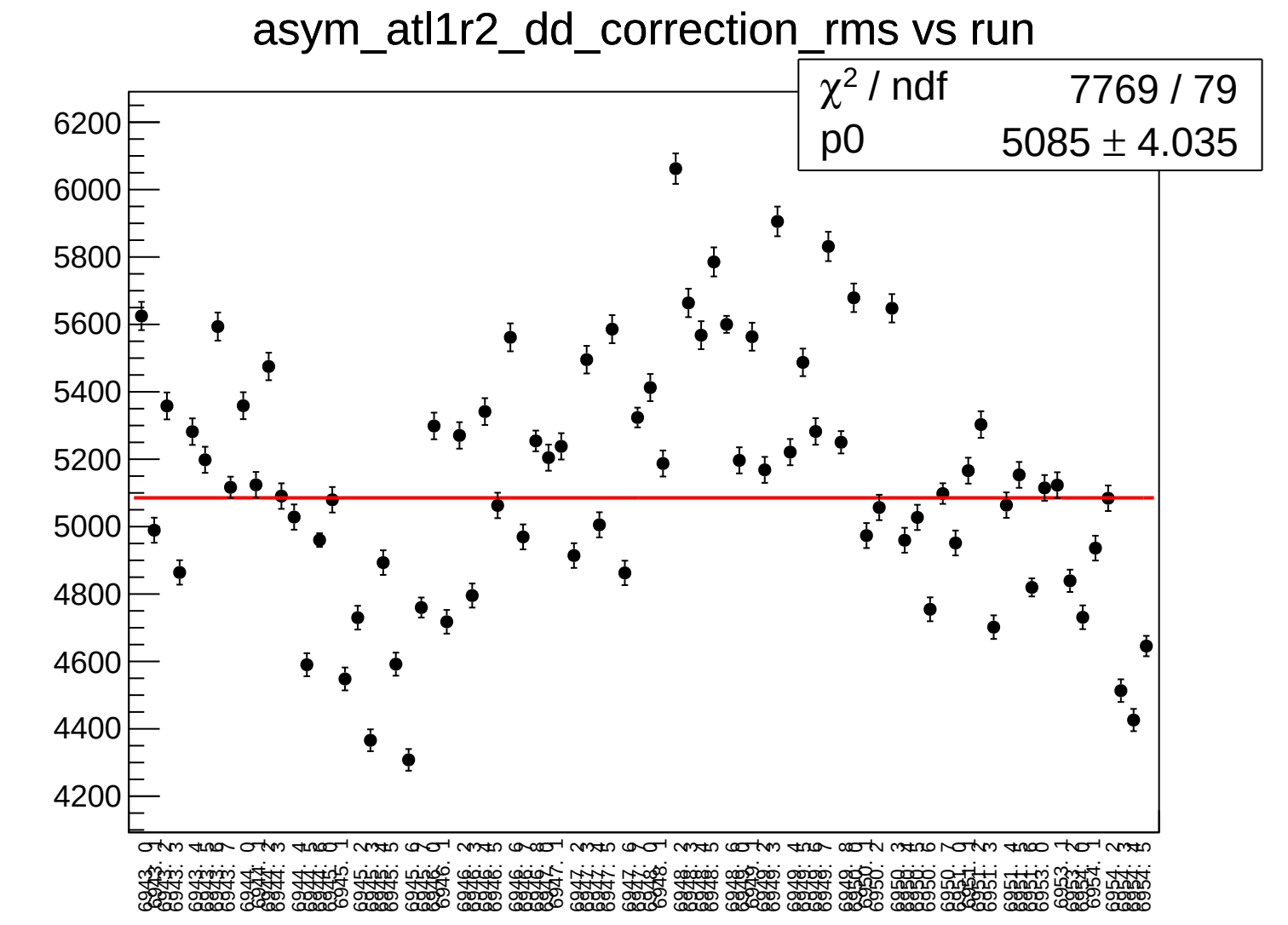

reg_asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 79.99 / 79
p0 584 ± 1958
pull
Entries 80
Mean 37.01
Std Dev 64.39

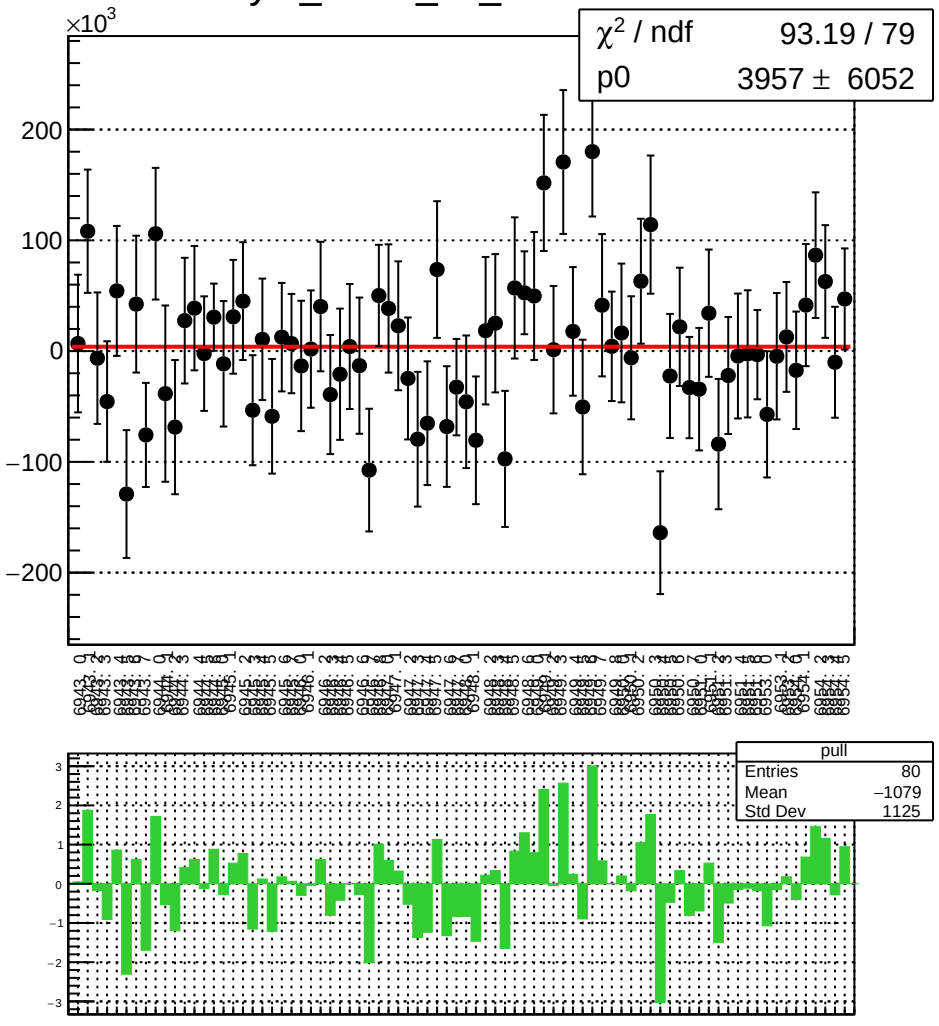

pull1D
Entries 80
Mean −0.01174
Std Dev 0.9998

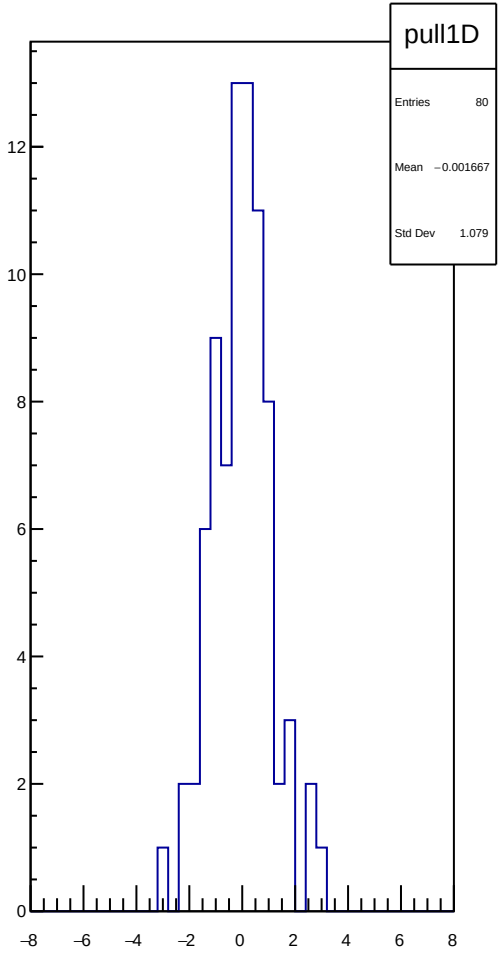

reg_asym_atl1r2_dd_rms vs run
χ^2 / ndf 8566 / 79
p0 1745 ± 1.385
5500
5000
4500
4000
3500
3000
2500
2000
1500

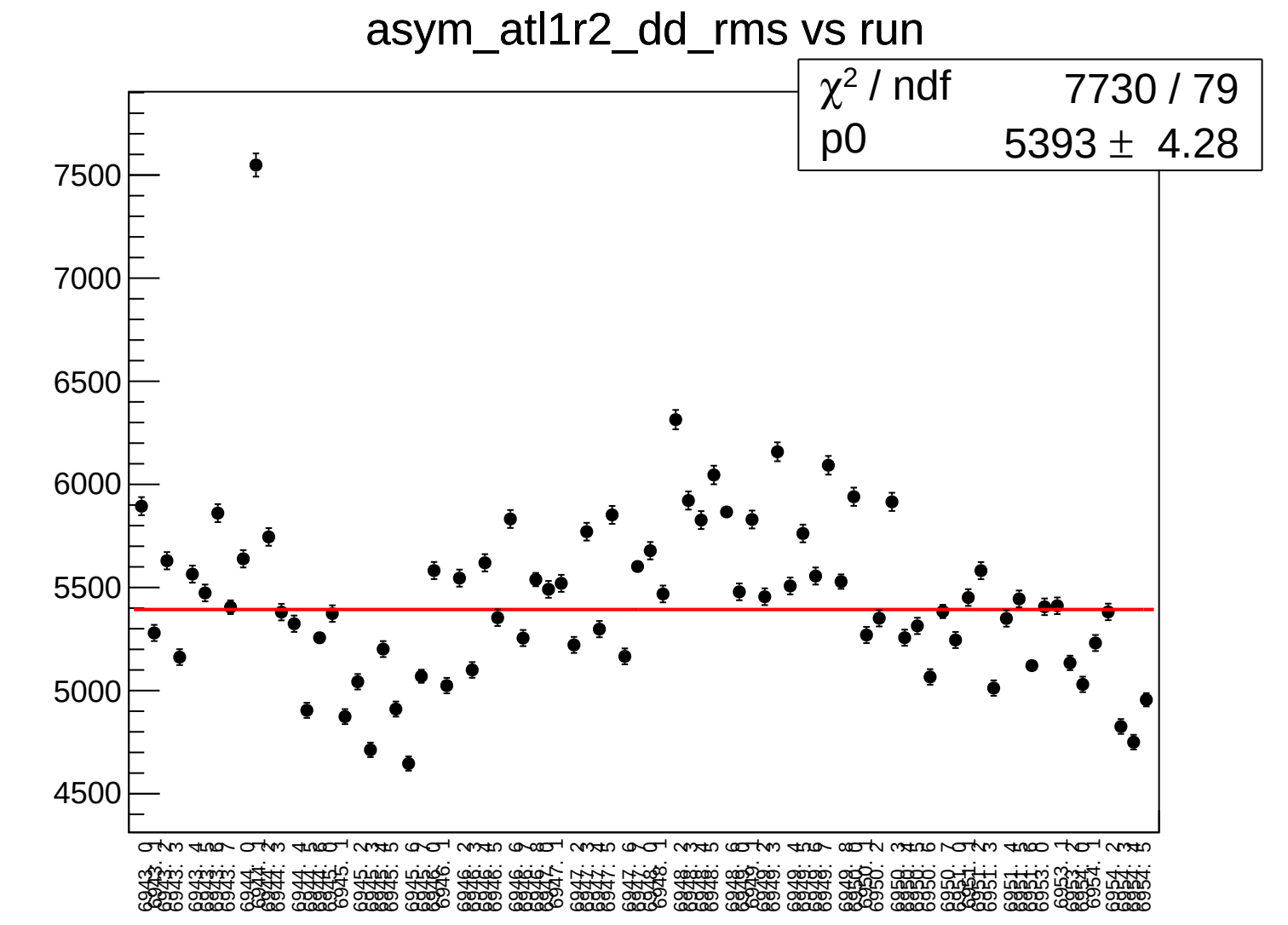

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 92.57 / 79
p0 −3314 ± 5707
pull
Entries 80
Mean 418.8
Std Dev 375.4

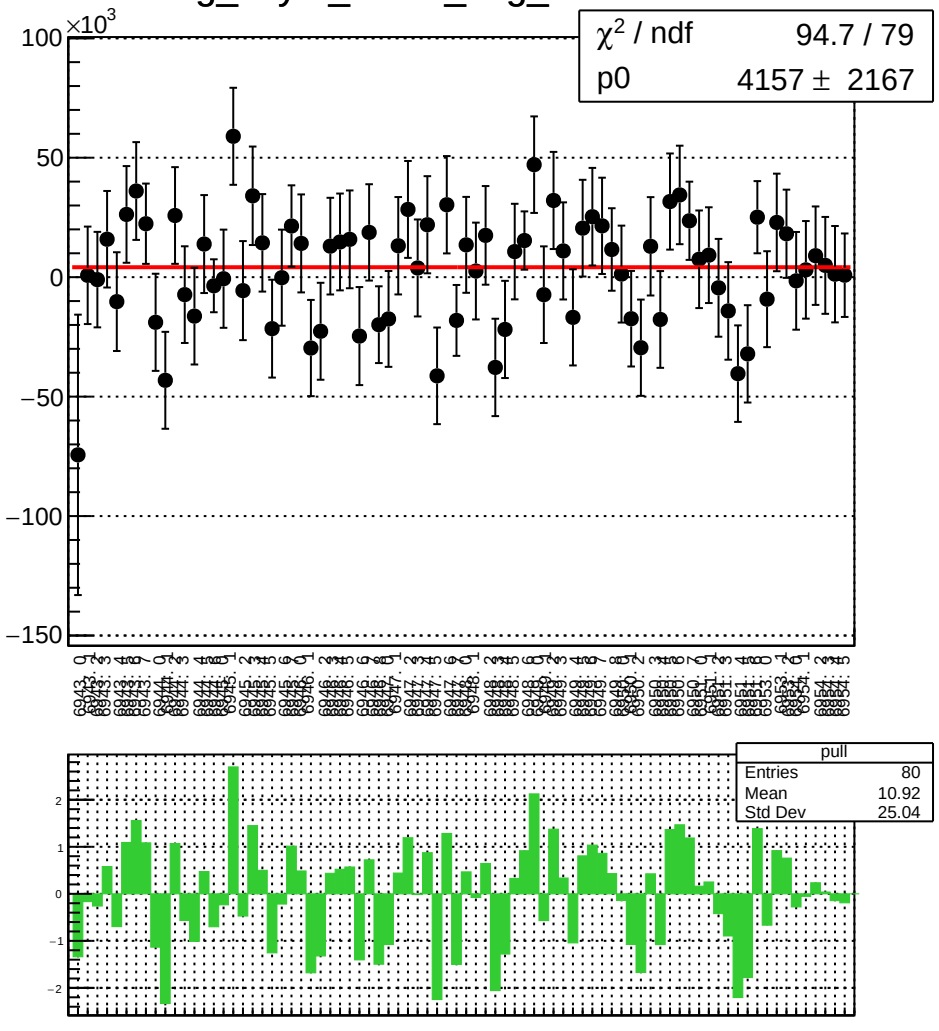

pull1D
Entries 80
Mean −0.004617
Std Dev 1.076

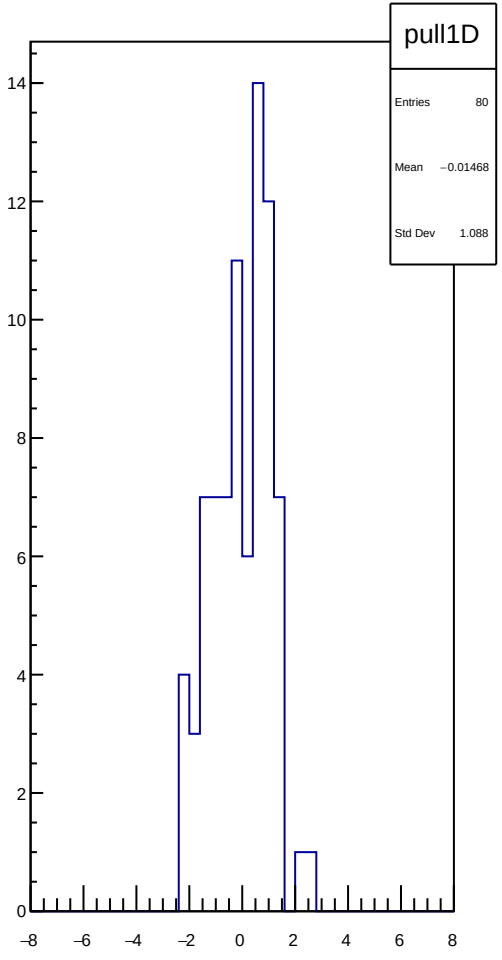

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 7769 / 79
p0 5085 ± 4.035
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400
4200

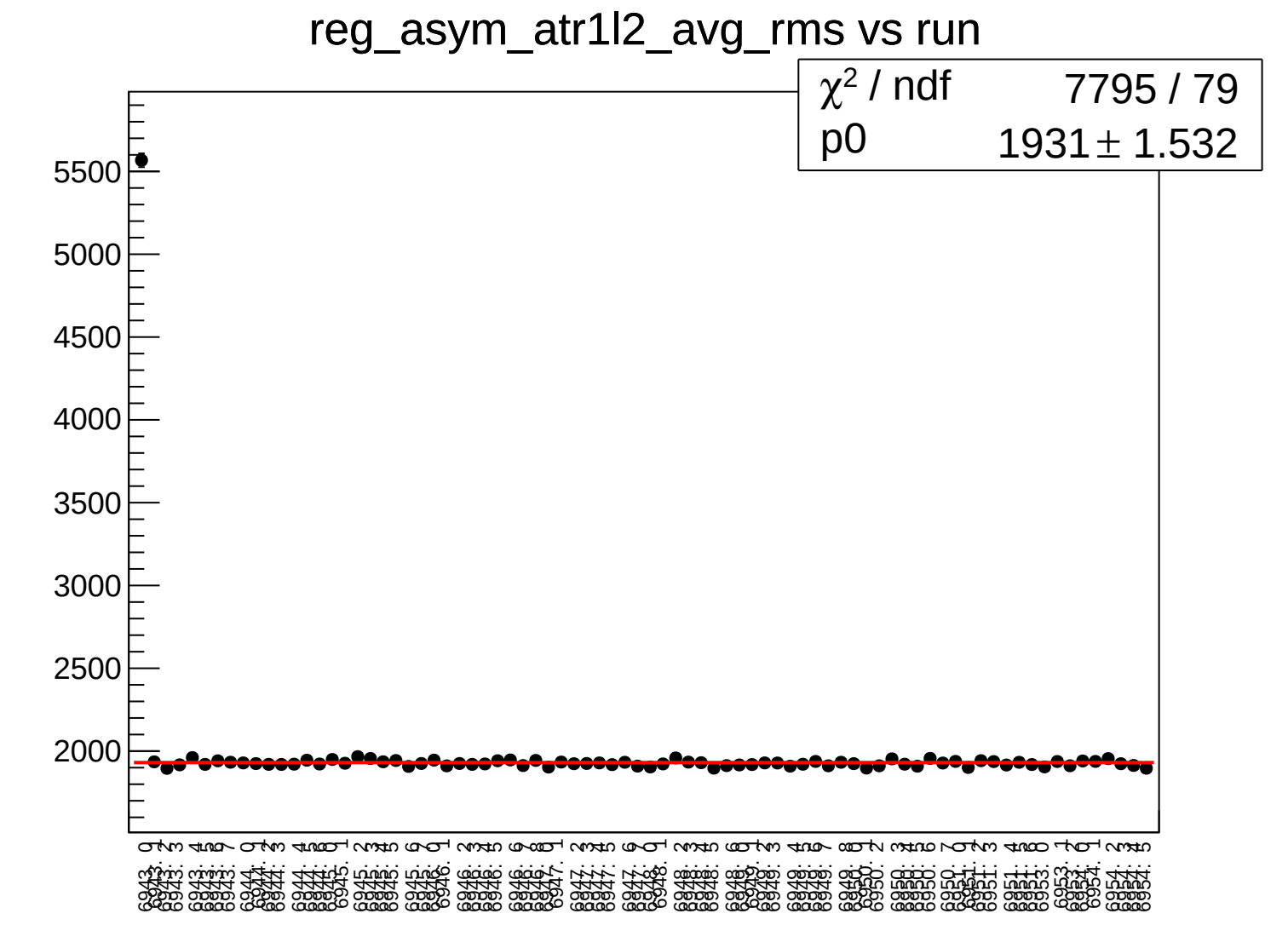

asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 93.19 / 79
p0 3957 ± 6052
200
100
0
−100
−200
pull
Entries 80
Mean −1079
Std Dev 1125
3
2
1
0
−1
−2
−3

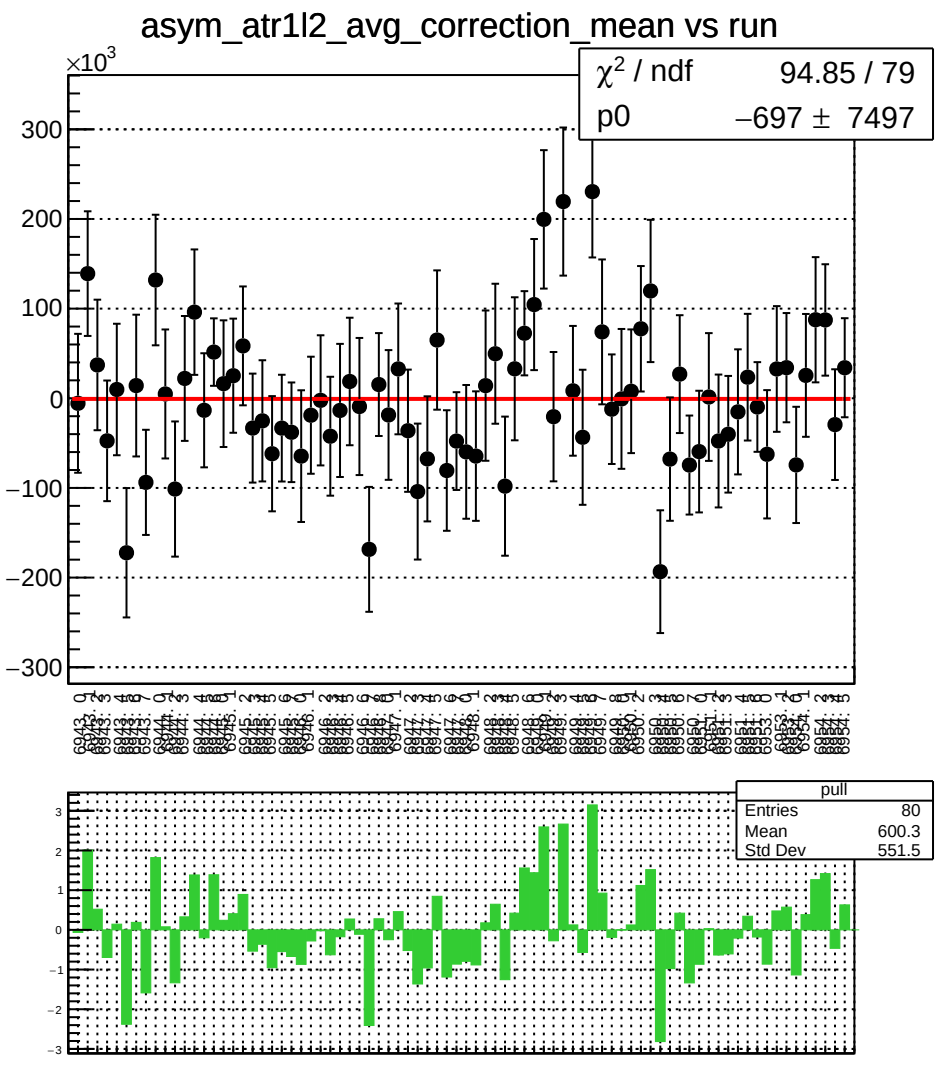

pull1D
Entries 80
Mean −0.001667
Std Dev 1.079
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

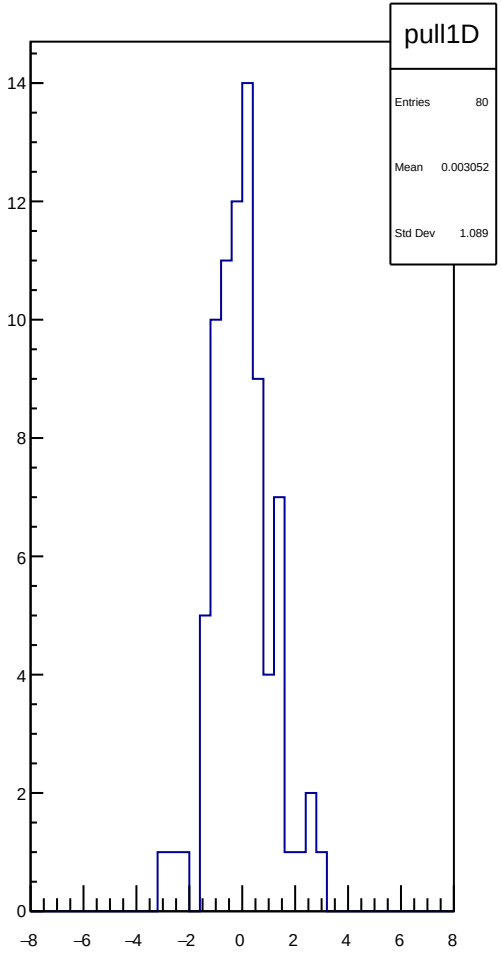

asym_atl1r2_dd_rms vs run
χ² / ndf 7730 / 79
p0 5393 ± 4.28
7500
7000
6500
6000
5500
5000
4500

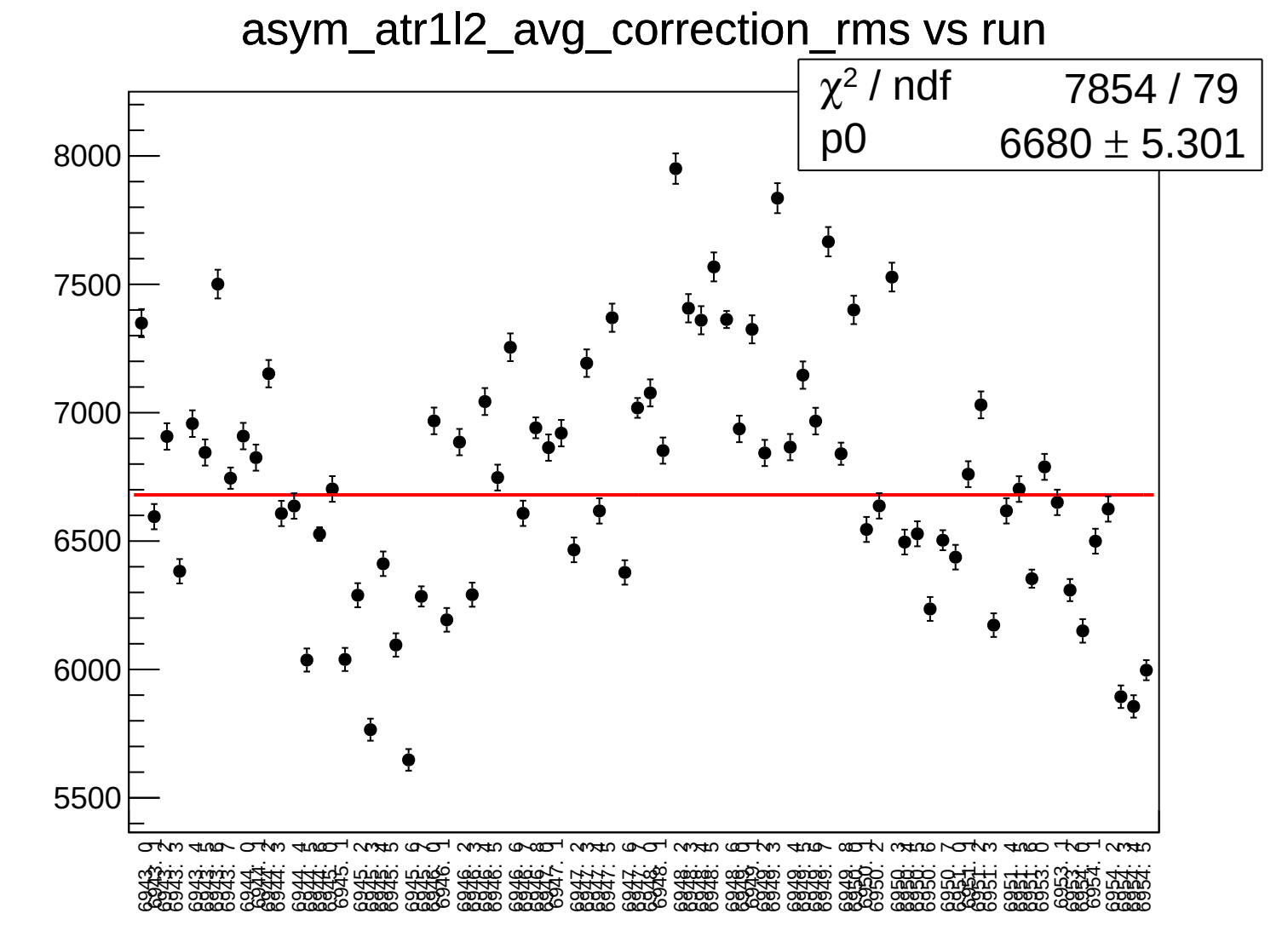

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 94.7 / 79
p0 4157 ± 2167
×10³
pull
Entries 80
Mean 10.92
Std Dev 25.04

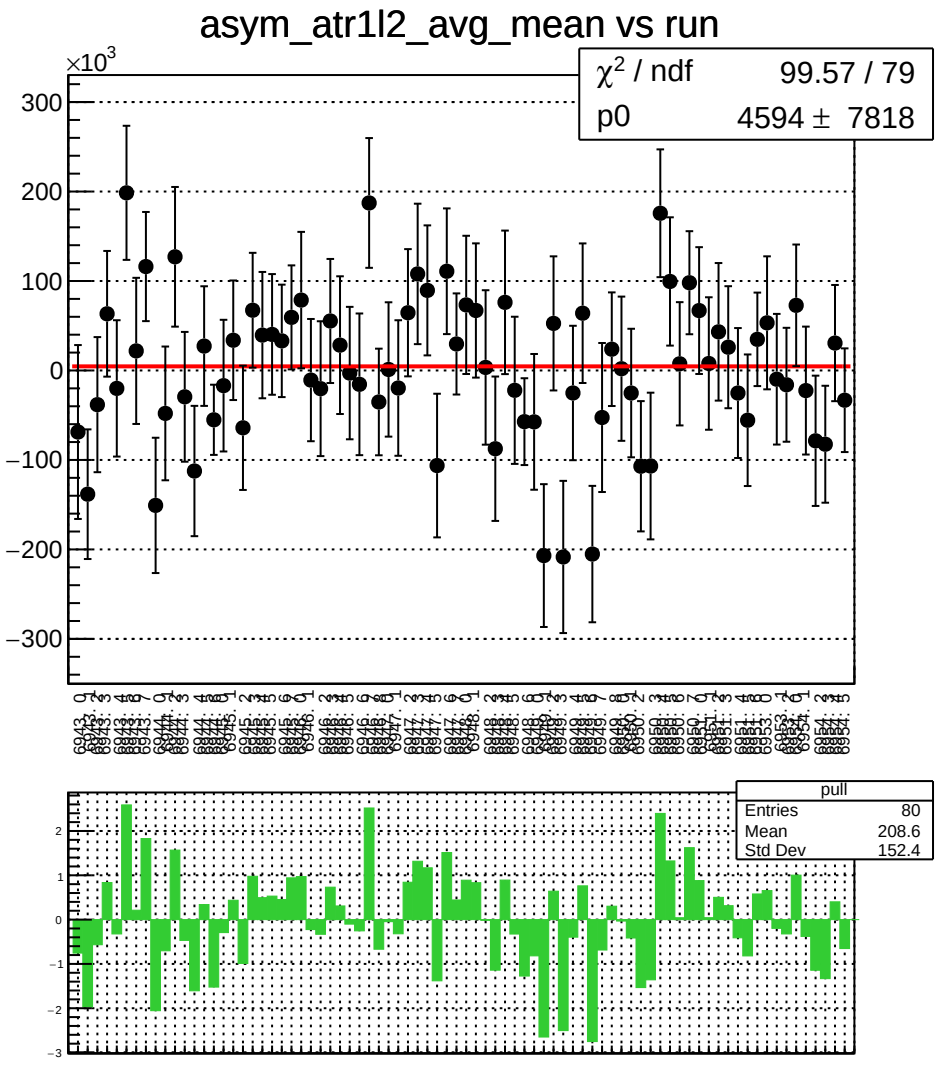

pull1D
Entries 80
Mean −0.01468
Std Dev 1.088

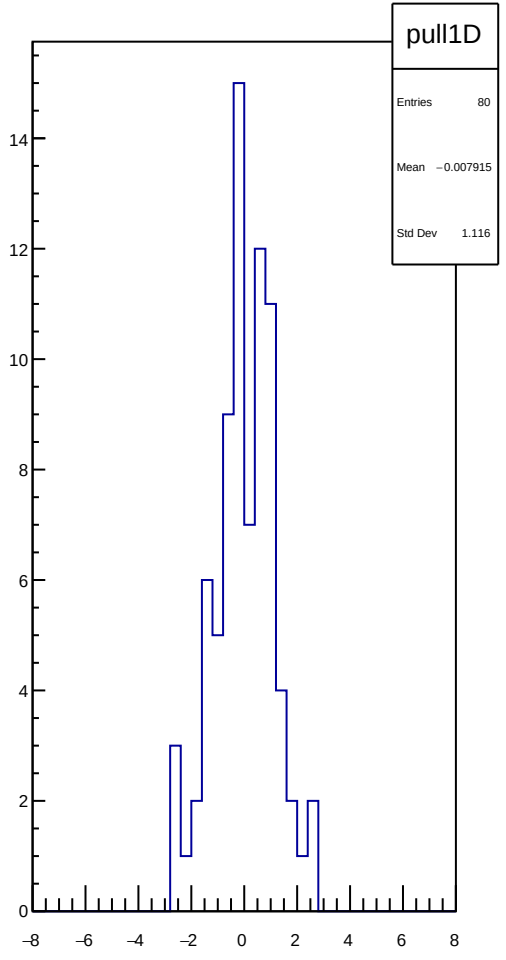

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 7795 / 79
p0 1931 ± 1.532
5500
5000
4500
4000
3500
3000
2500
2000

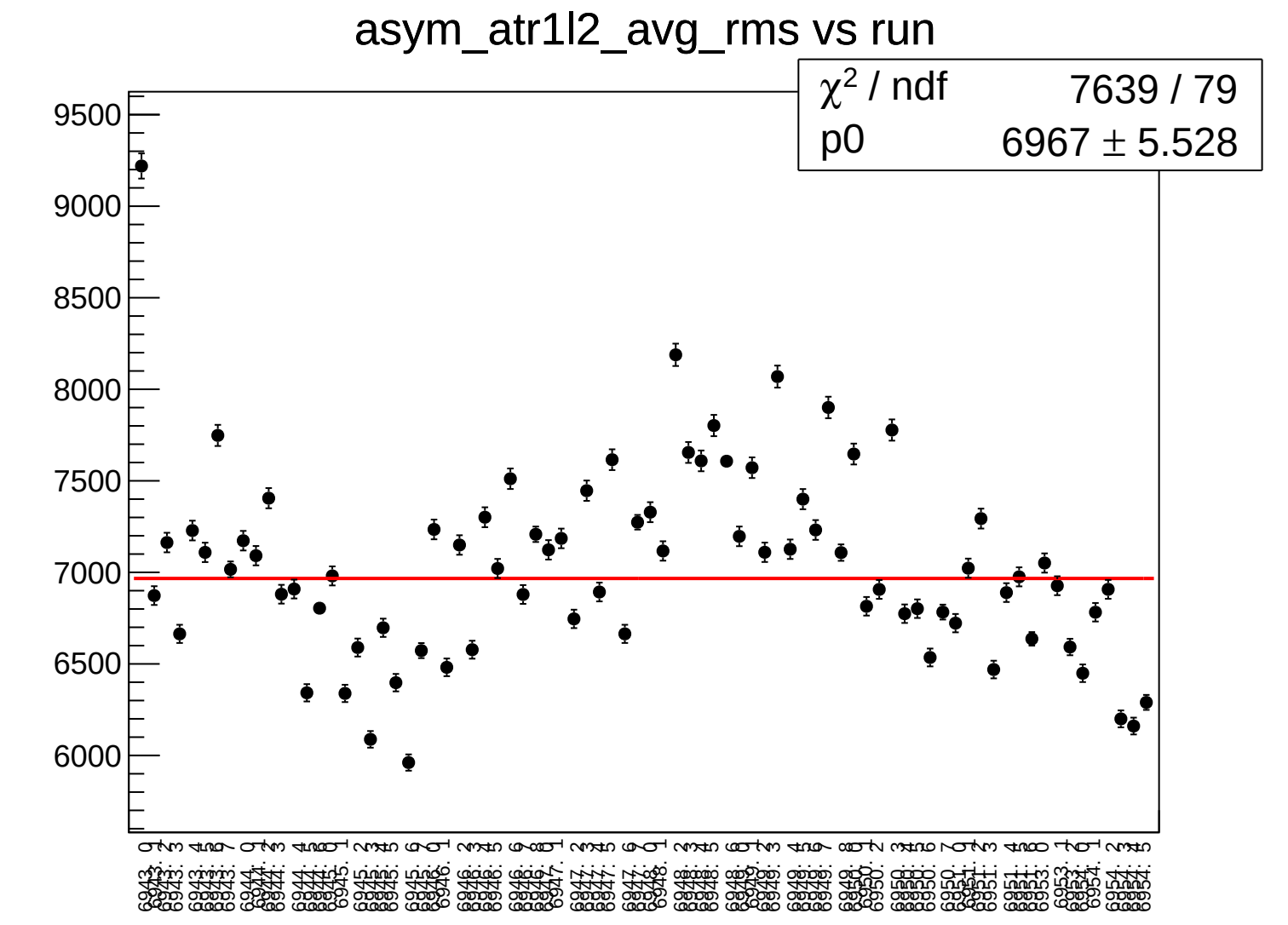

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 94.85 / 79
p0 −697 ± 7497
pull
Entries 80
Mean 600.3
Std Dev 551.5

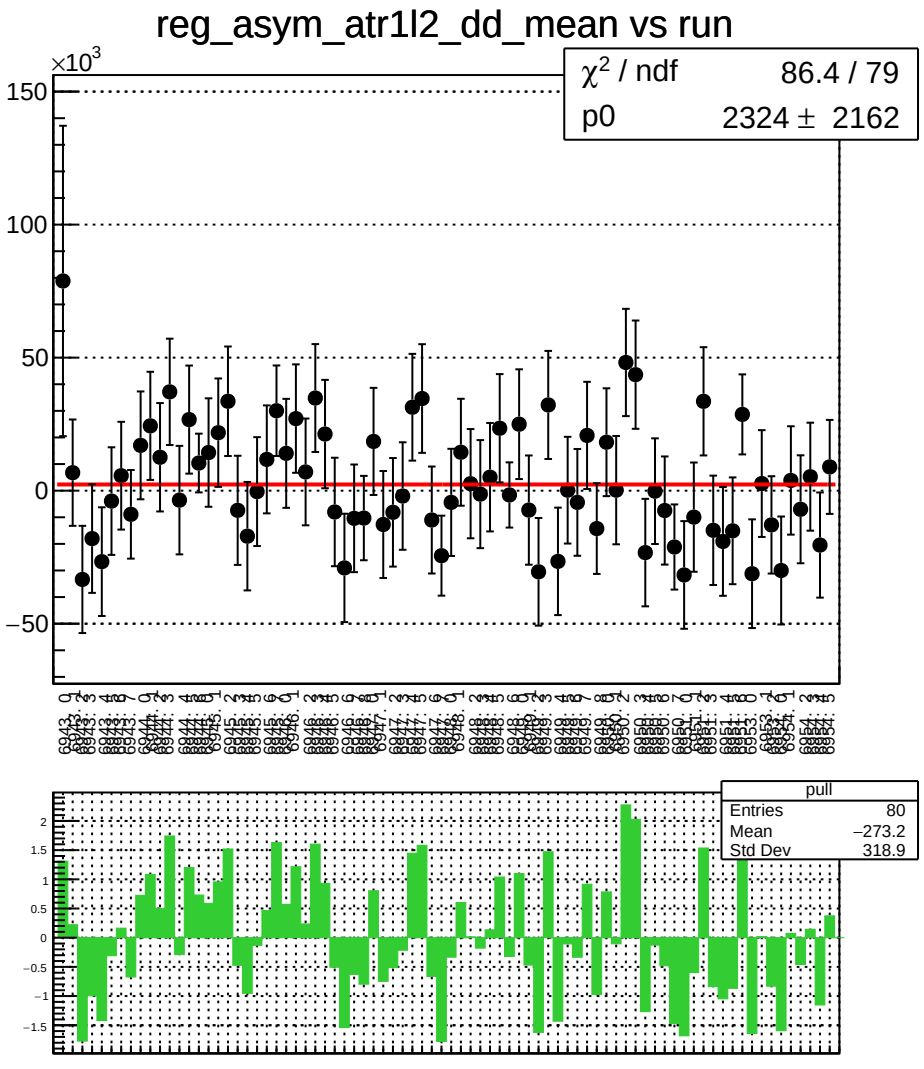

pull1D
Entries 80
Mean 0.003052
Std Dev 1.089

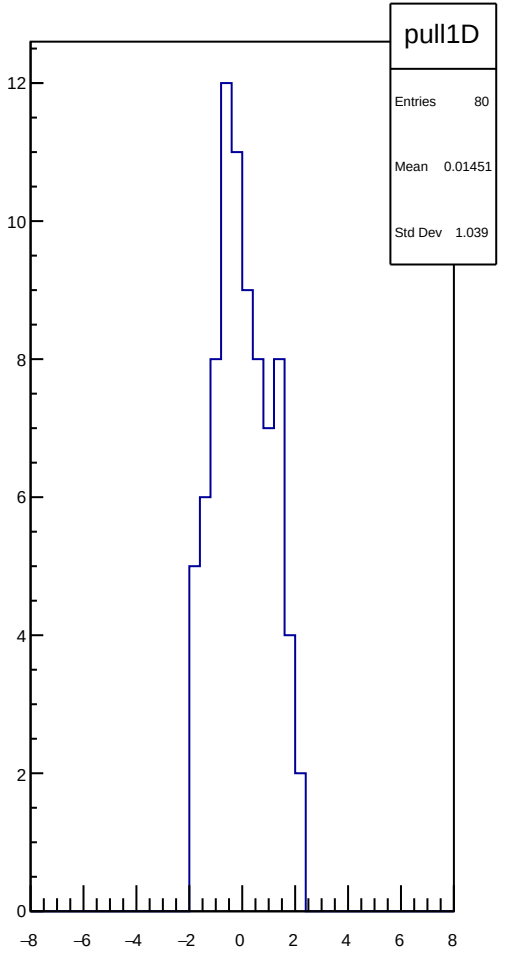

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 7854 / 79
p0 6680 ± 5.301
8000
7500
7000
6500
6000
5500

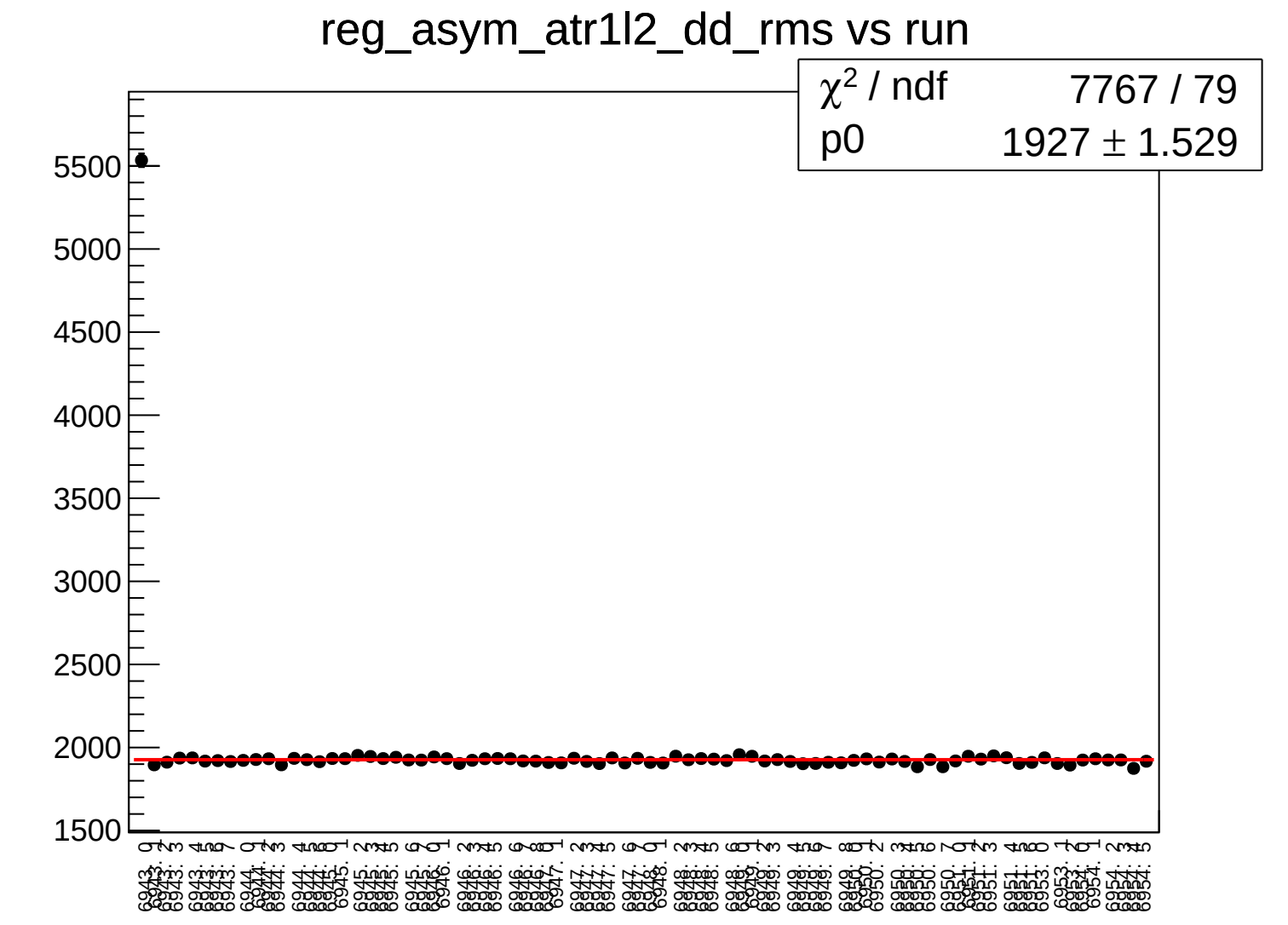

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 99.57 / 79
p0 4594 ± 7818
300
200
100
0
−100
−200
−300
pull
Entries 80
Mean 208.6
Std Dev 152.4
2
1
0
−1
−2
−3

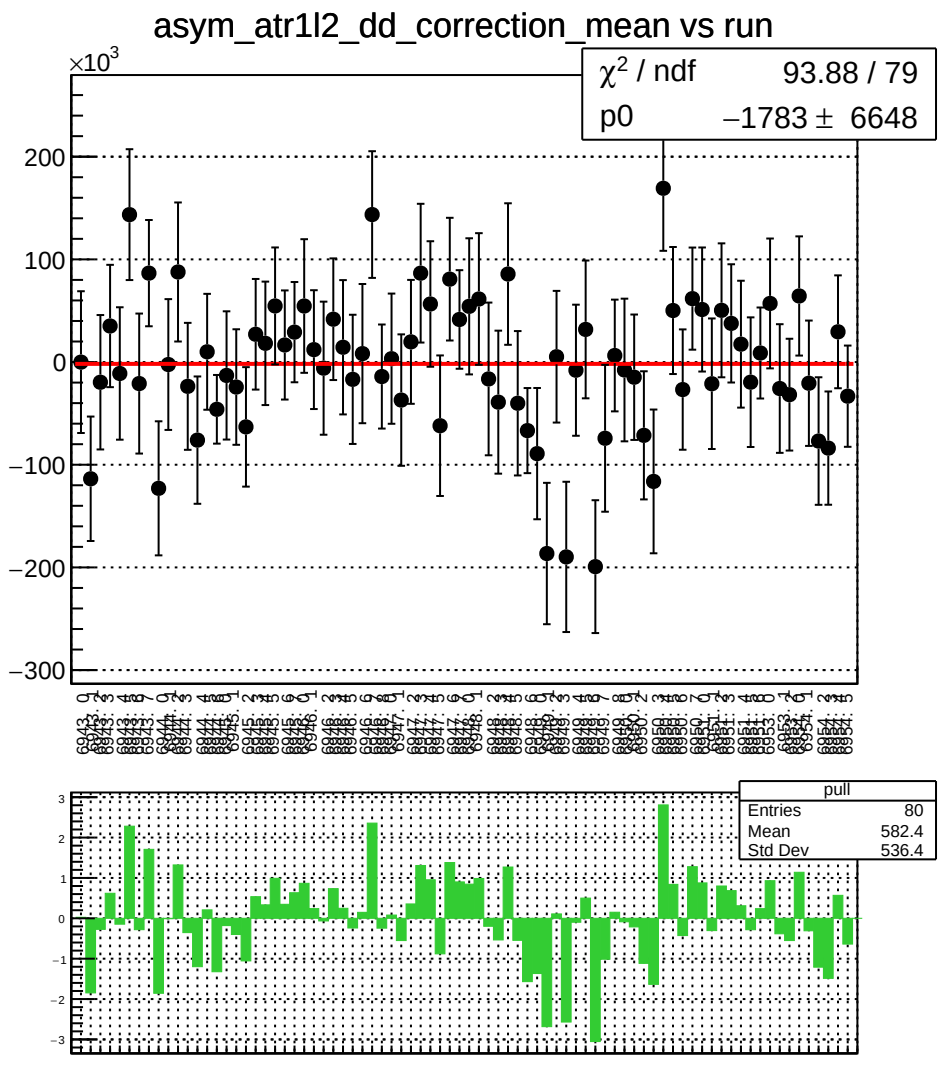

pull1D
Entries 80
Mean −0.007915
Std Dev 1.116
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

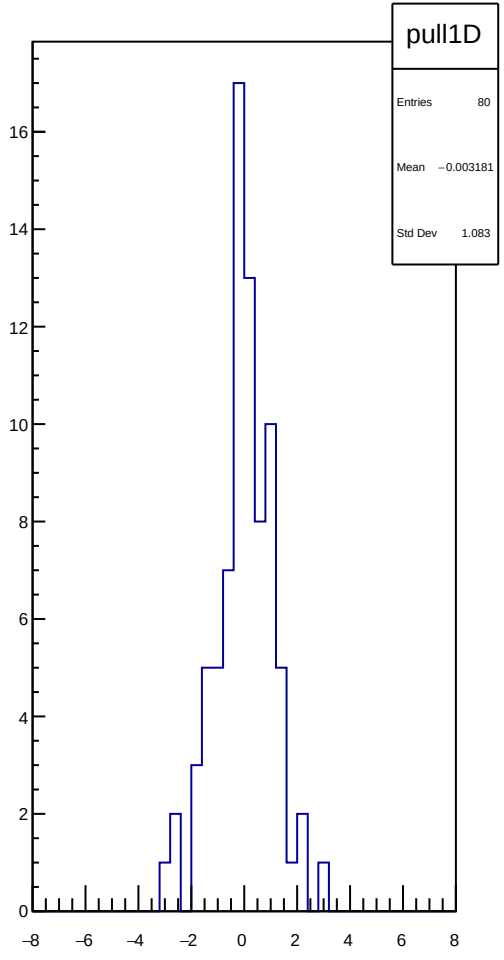

asym_atr1l2_avg_rms vs run
χ^2 / ndf 7639 / 79
p0 6967 ± 5.528
9500
9000
8500
8000
7500
7000
6500
6000

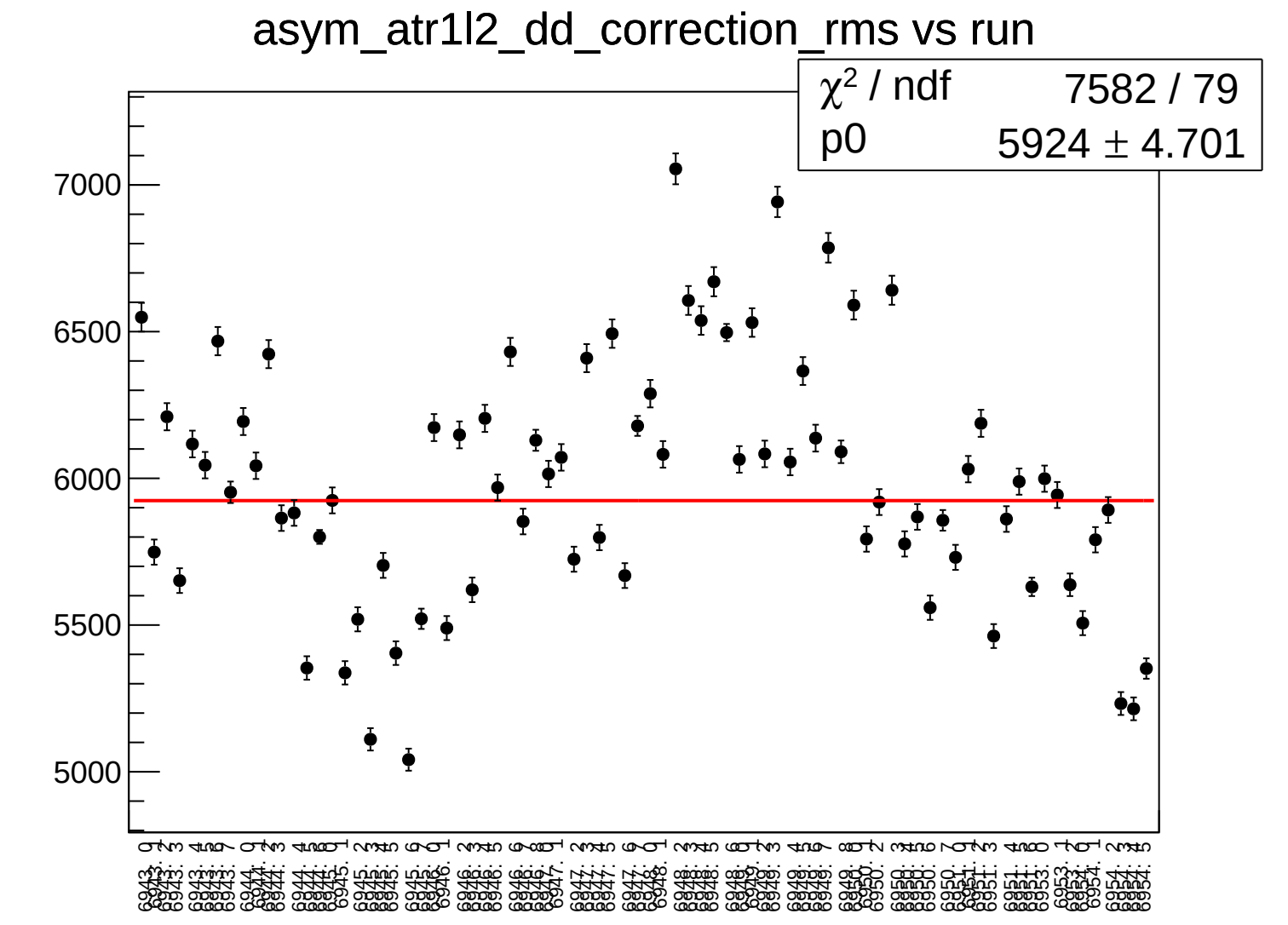

reg_asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 86.4 / 79
p0 2324 ± 2162
150
100
50
0
−50
pull
Entries 80
Mean −273.2
Std Dev 318.9
2
1.5
1
0.5
0
−0.5
−1
−1.5

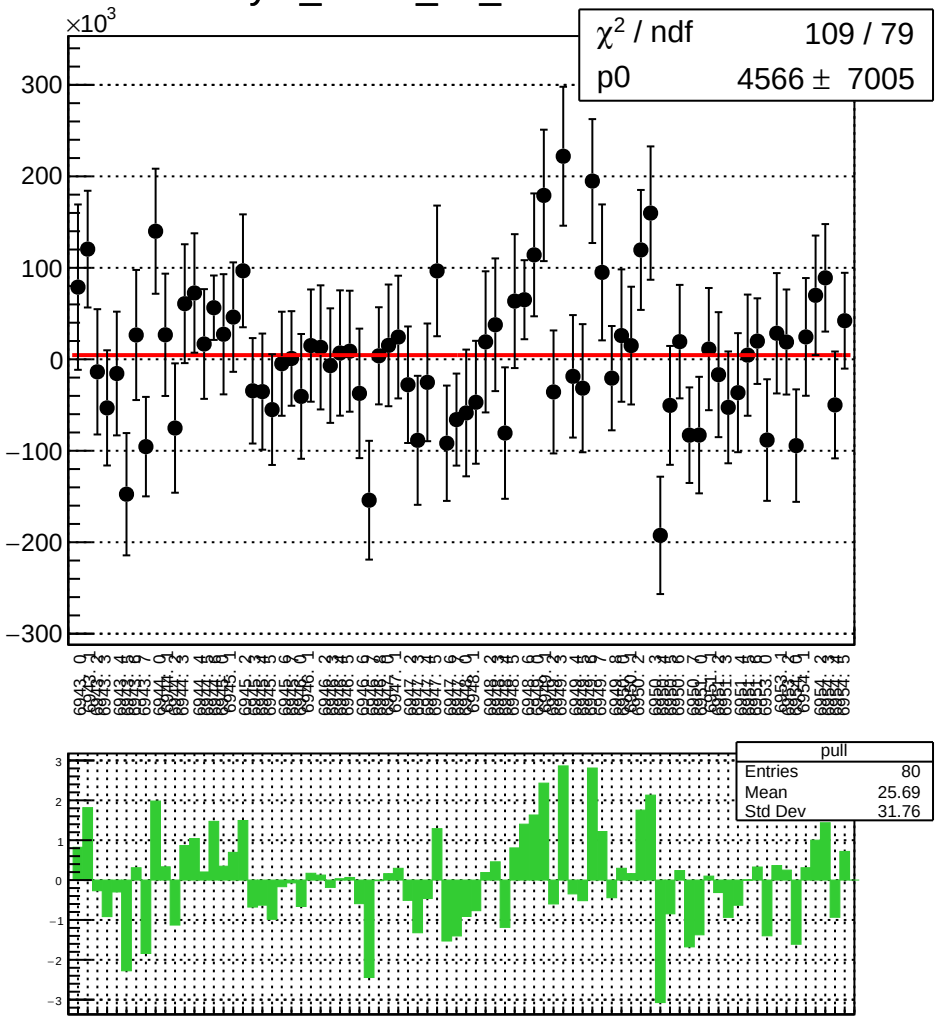

pull1D
Entries 80
Mean 0.01451
Std Dev 1.039
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

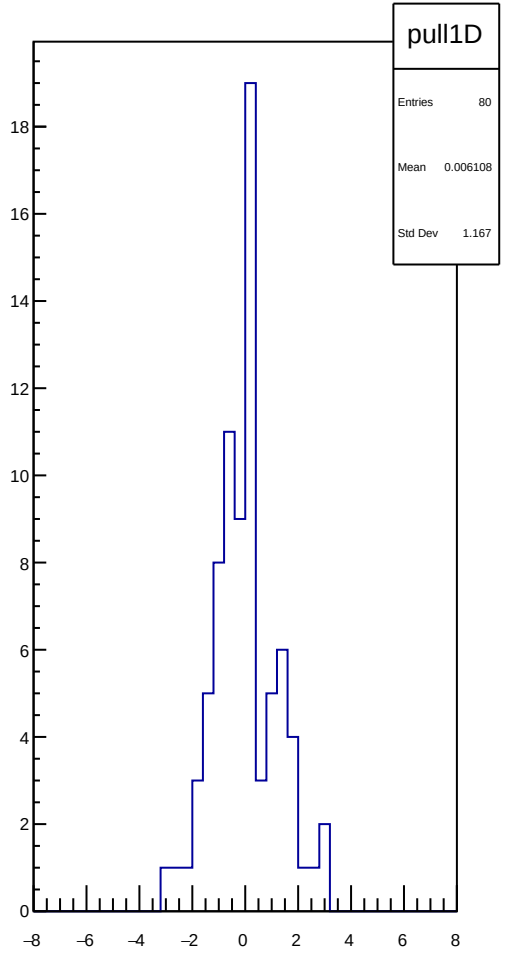

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 7767 / 79
p0 1927 ± 1.529
5500
5000
4500
4000
3500
3000
2500
2000
1500

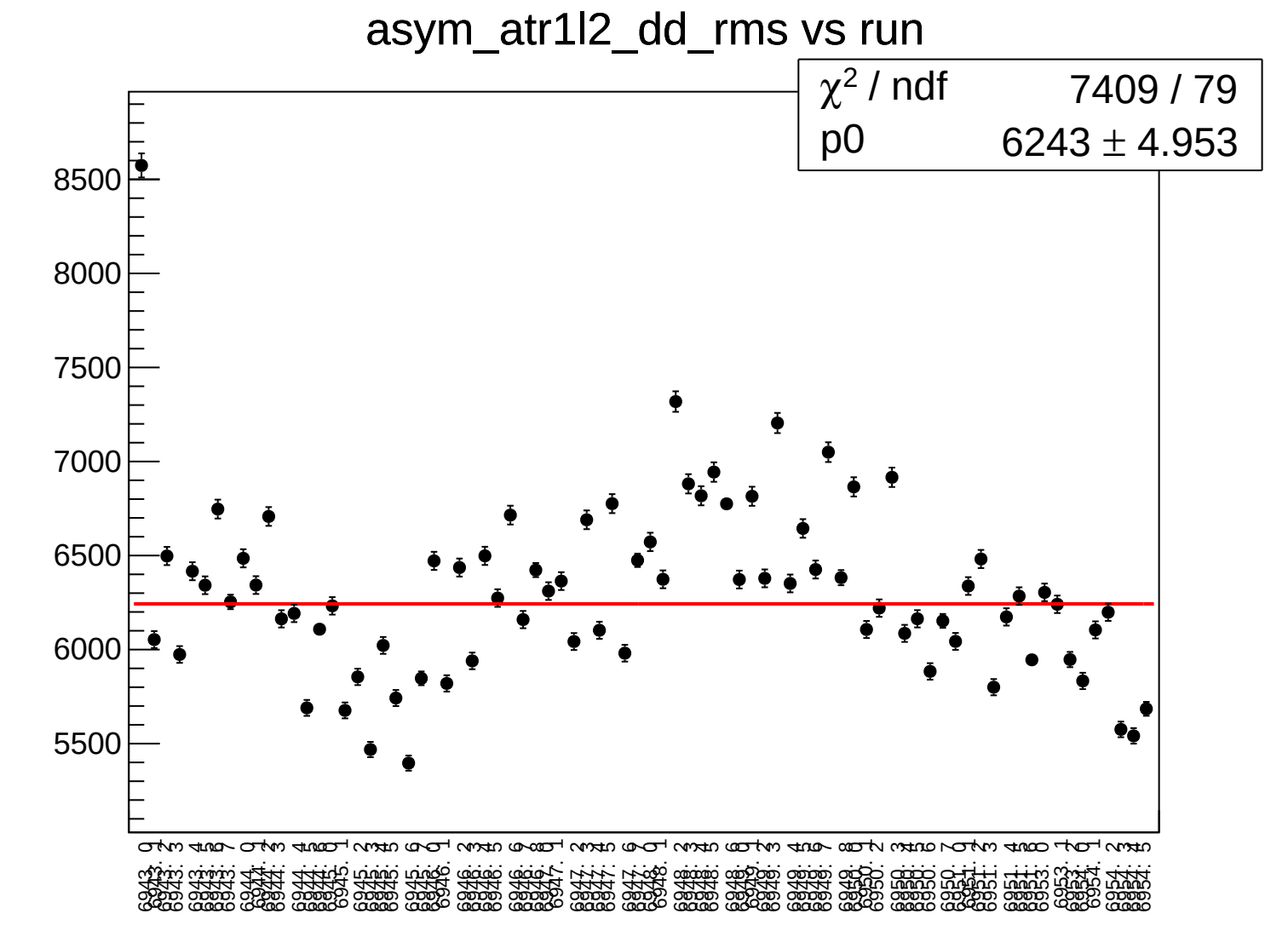

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 93.88 / 79
p0 −1783 ± 6648
200
100
0
−100
−200
−300
pull
Entries 80
Mean 582.4
Std Dev 536.4
3
2
1
0
−1
−2
−3

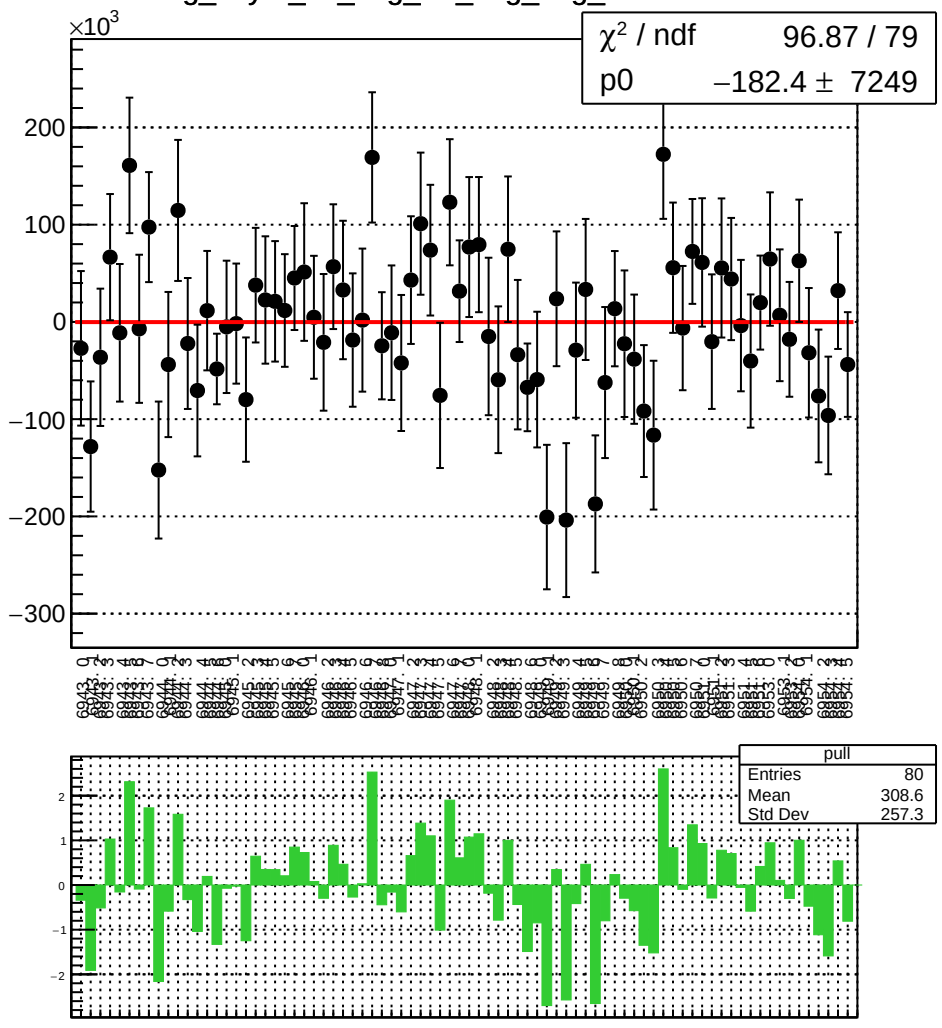

pull1D
Entries 80
Mean −0.003181
Std Dev 1.083
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

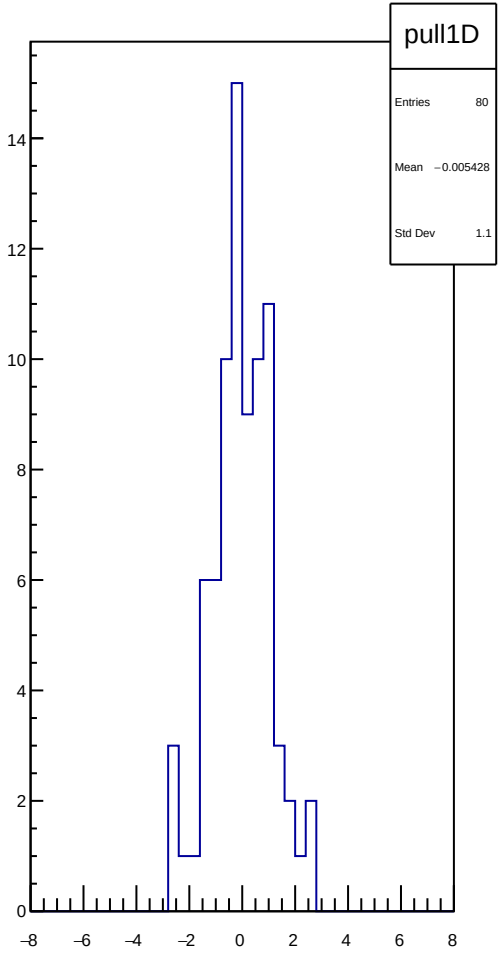

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 7582 / 79
p0 5924 ± 4.701
7000
6500
6000
5500
5000

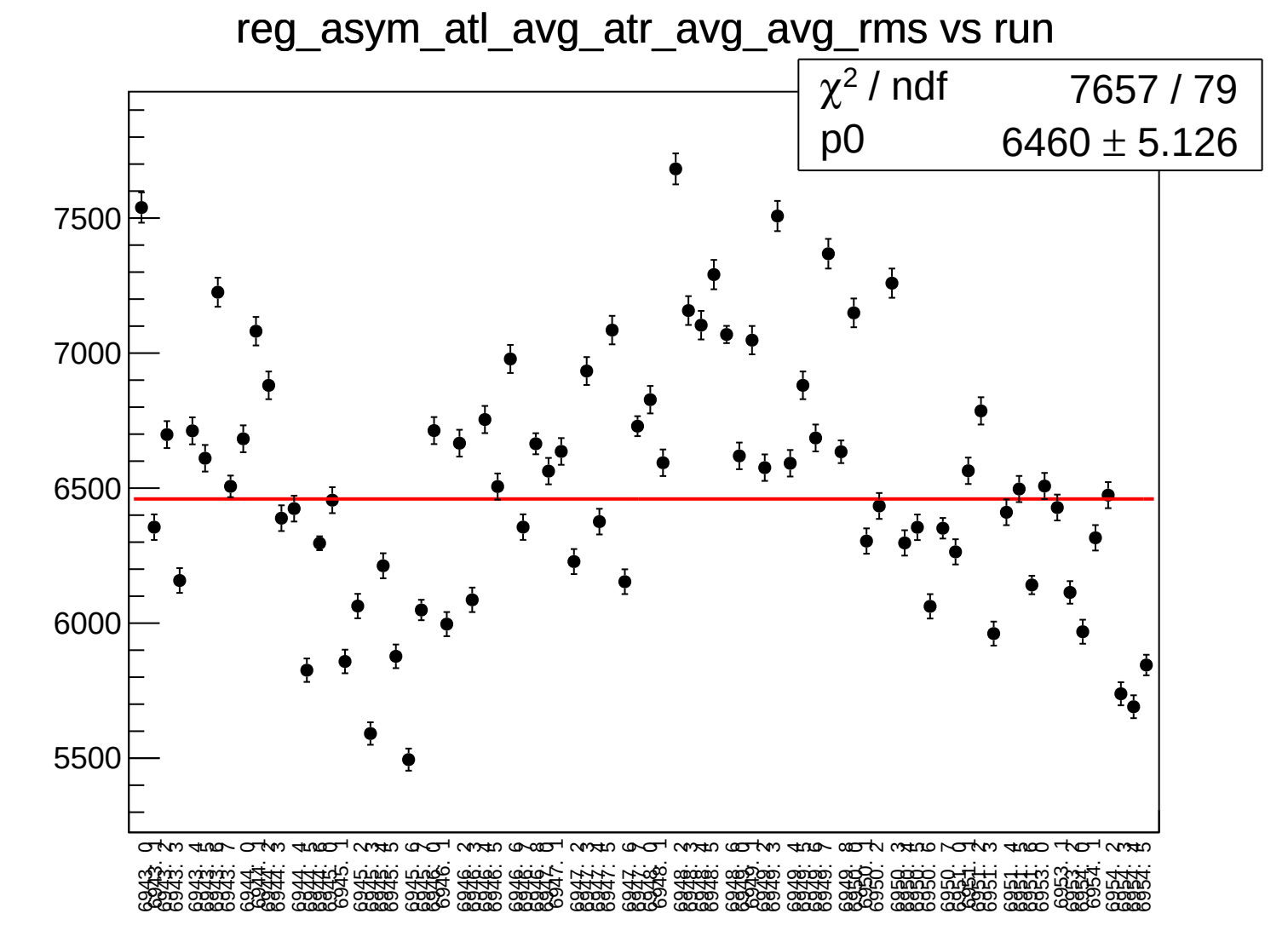

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 109 / 79
p0 4566 ± 7005
300
200
100
0
−100
−200
−300
pull
Entries 80
Mean 25.69
Std Dev 31.76
3
2
1
0
−1
−2
−3

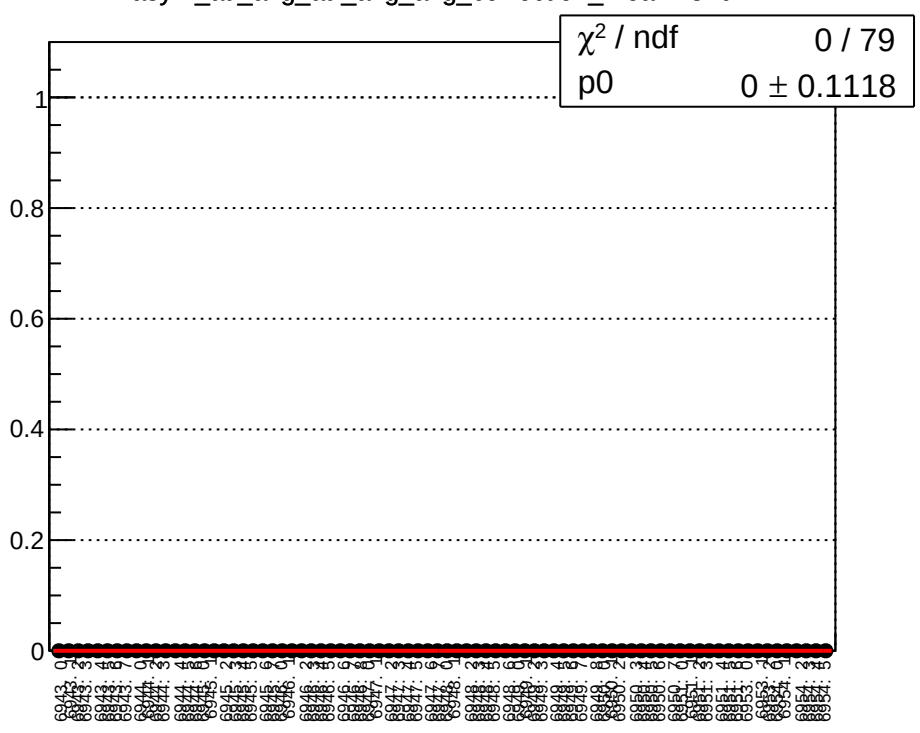

pull1D
Entries 80
Mean 0.006108
Std Dev 1.167
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

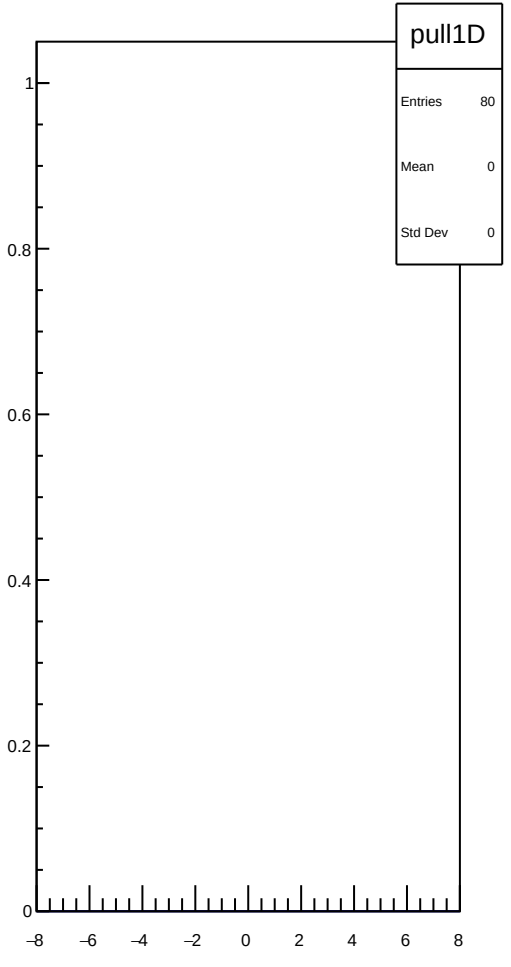

asym_atr1l2_dd_rms vs run
χ² / ndf 7409 / 79
p0 6243 ± 4.953
8500
8000
7500
7000
6500
6000
5500

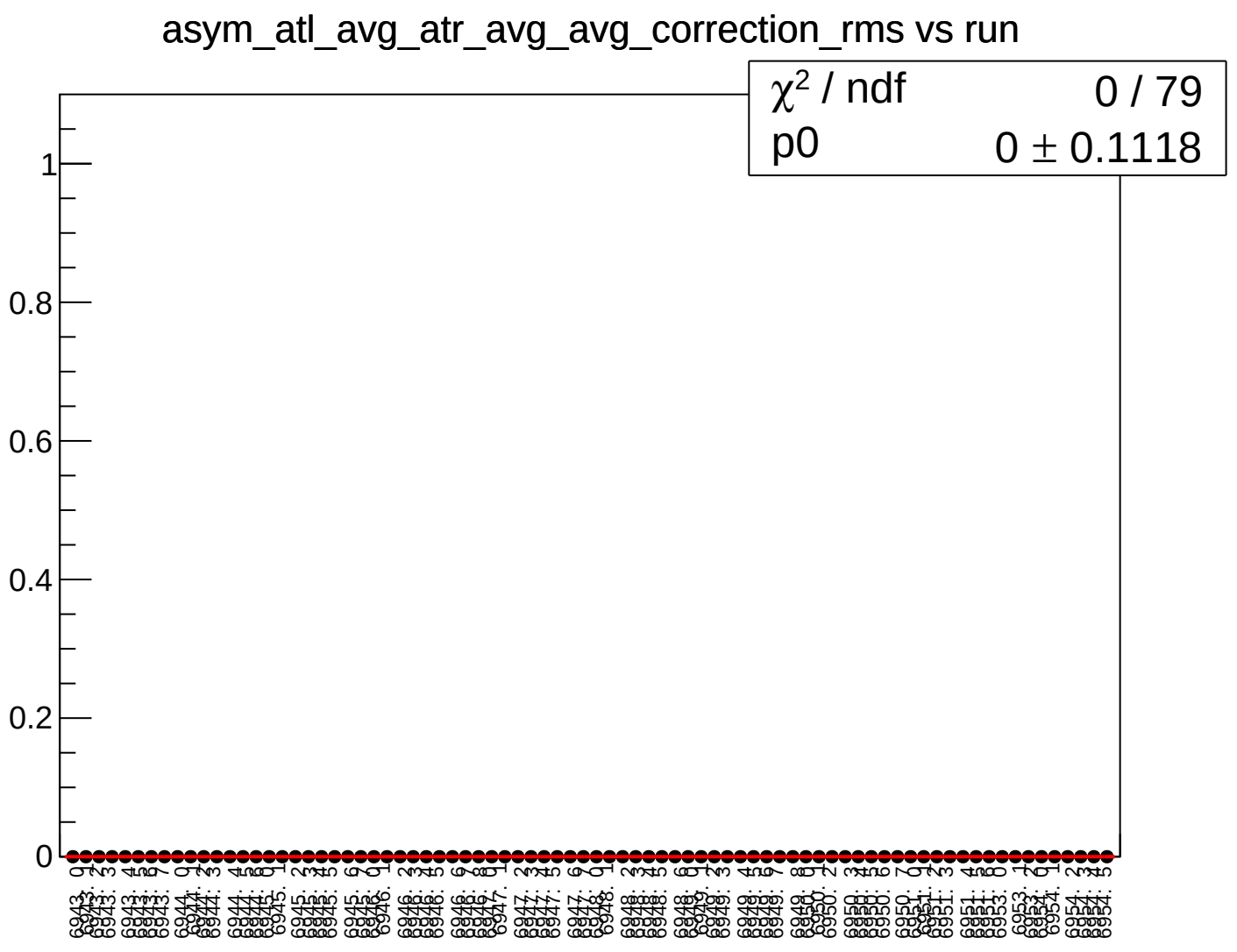

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 96.87 / 79
p0 −182.4 ± 7249
200
100
0
−100
−200
−300
pull
Entries 80
Mean 308.6
Std Dev 257.3
2
1
0
−1
−2

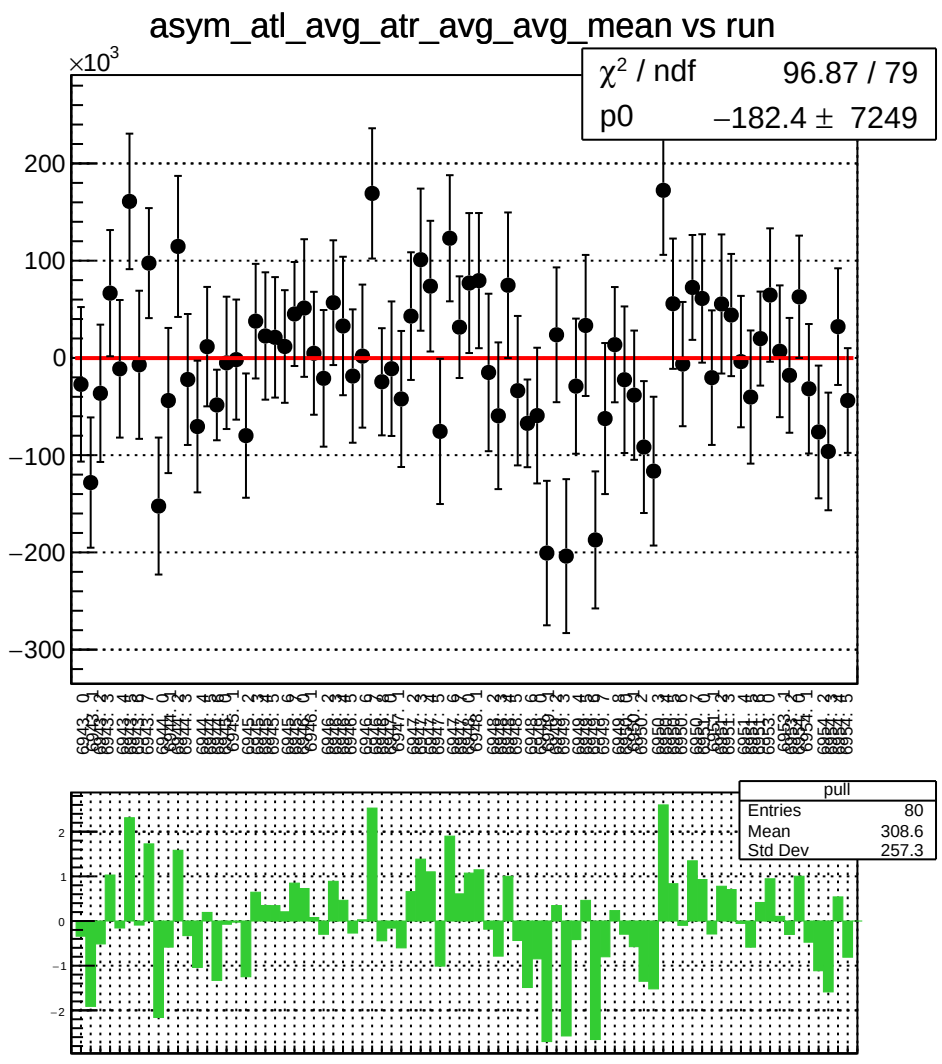

pull1D
Entries 80
Mean −0.005428
Std Dev 1.1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

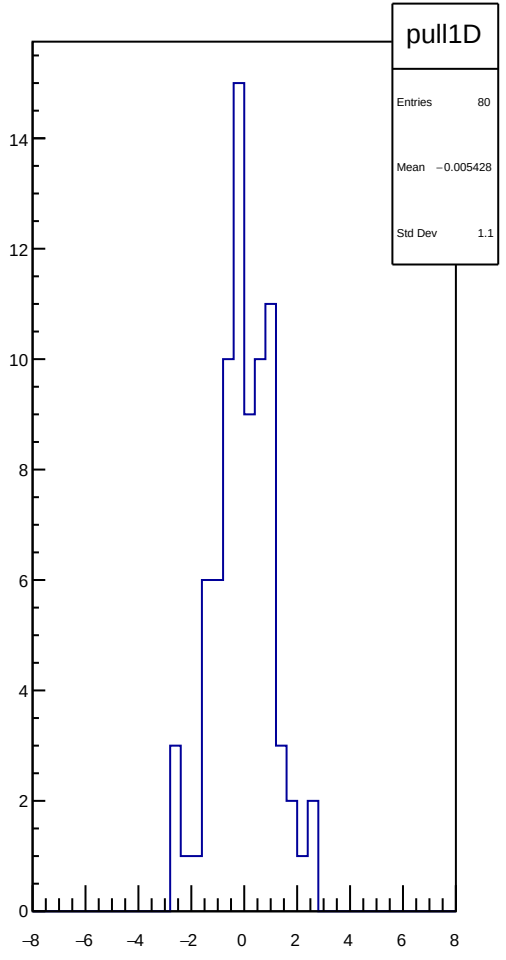

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ^2 / ndf 7657 / 79
p0 6460 ± 5.126
7500
7000
6500
6000
5500

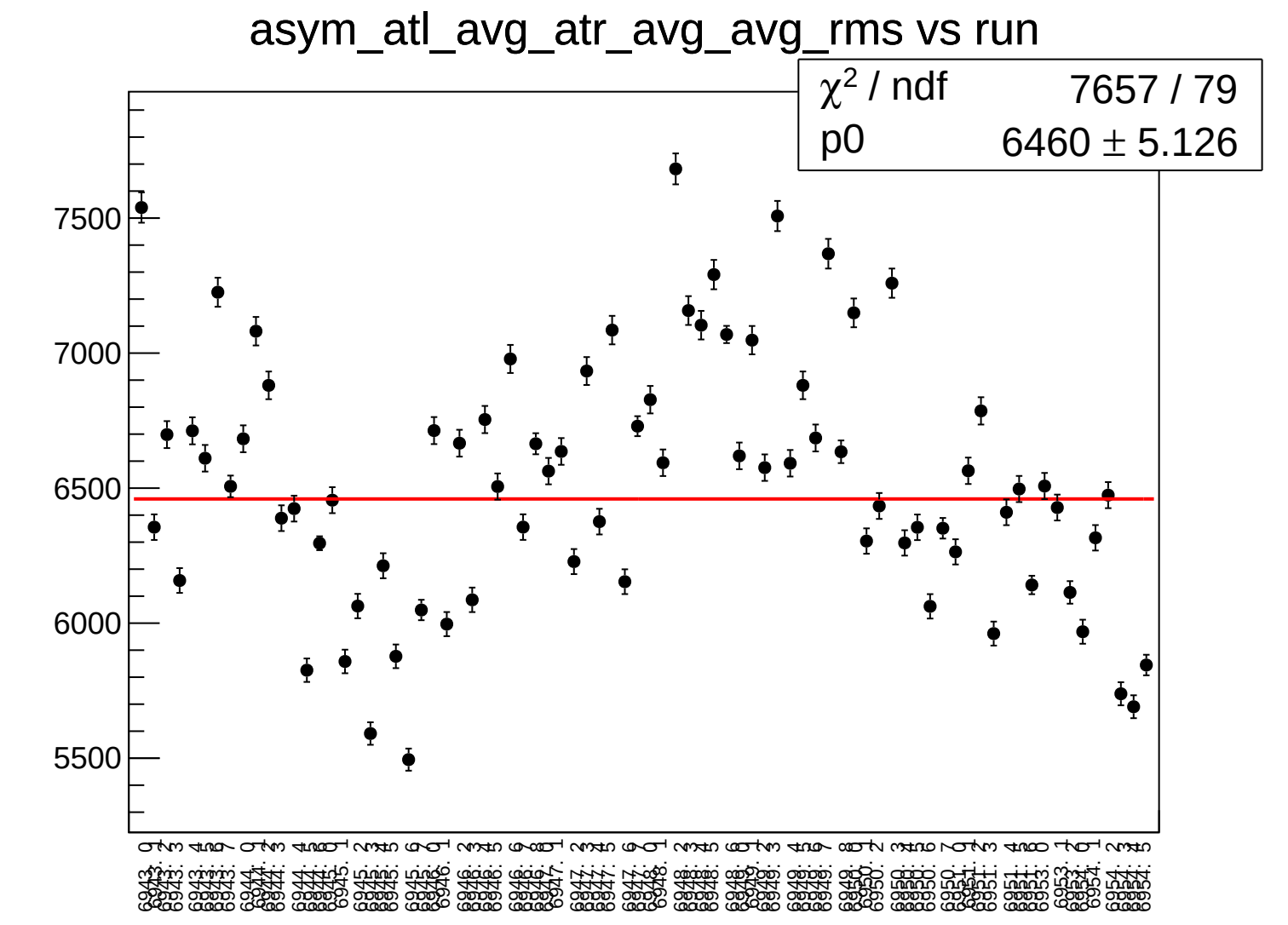

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

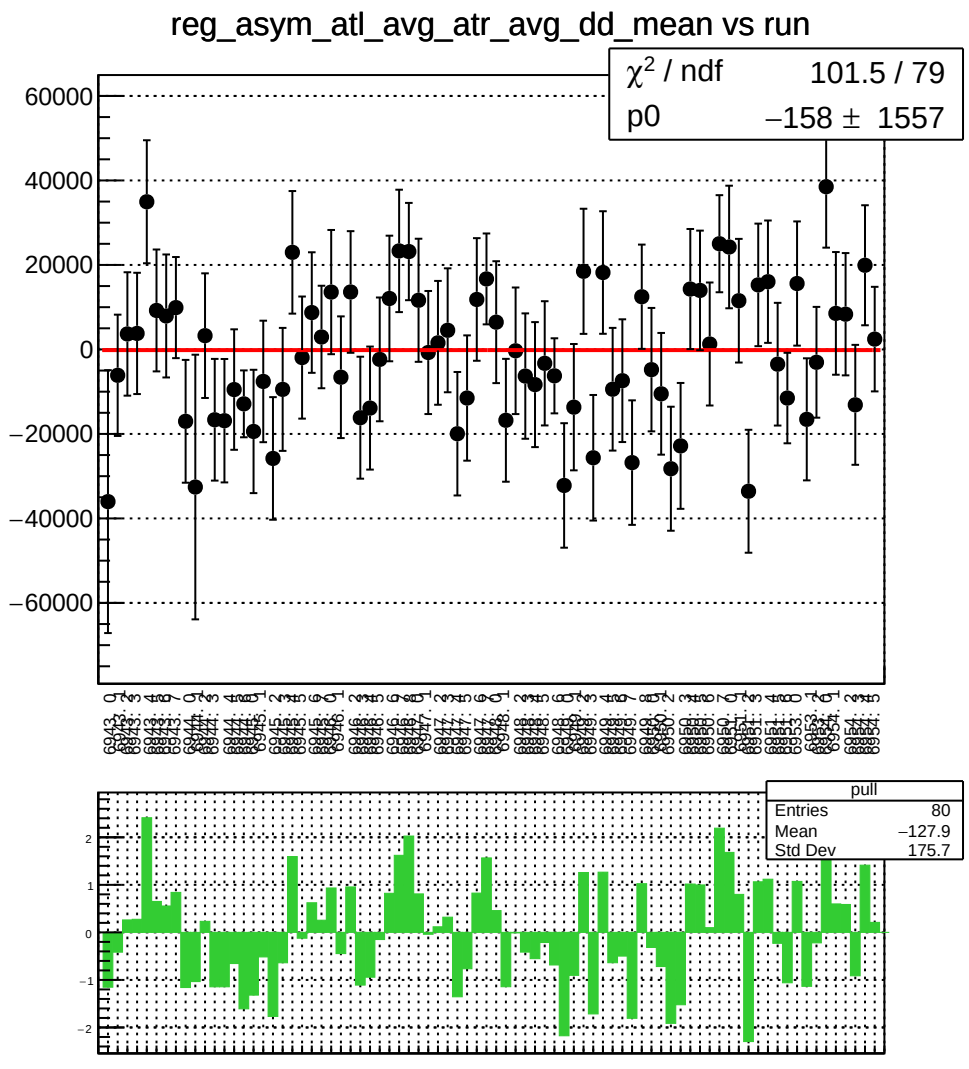

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

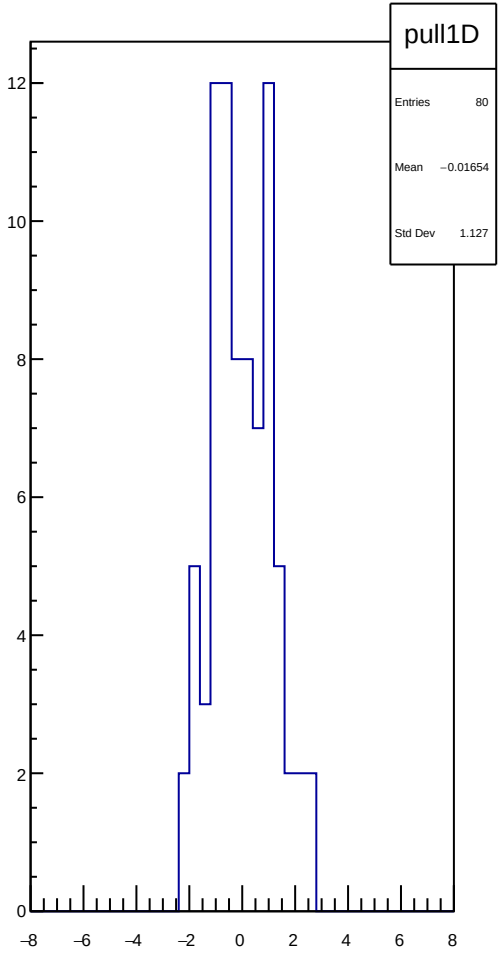

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

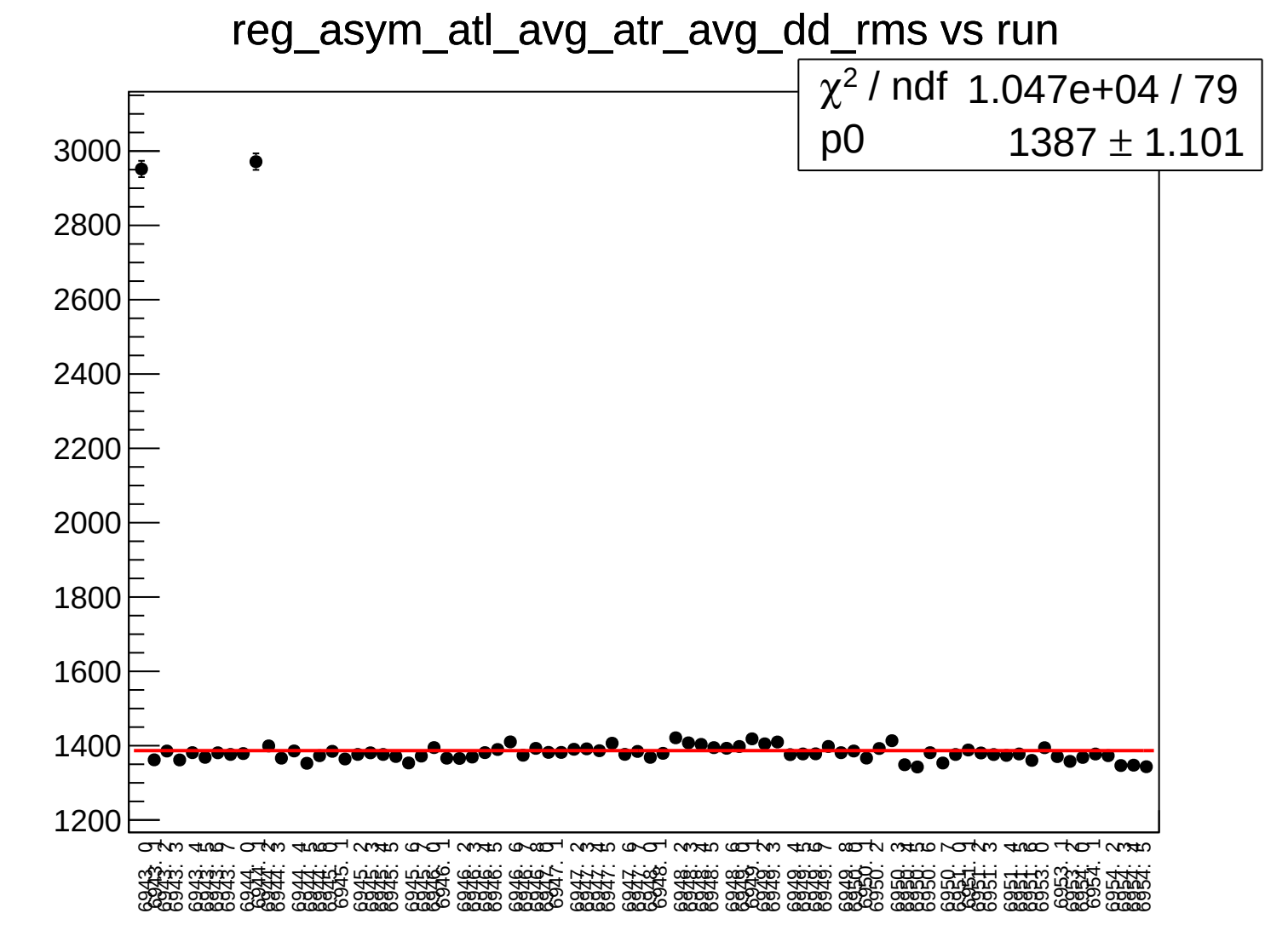

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 96.87 / 79
p0 −182.4 ± 7249
200
100
0
−100
−200
−300
pull
Entries 80
Mean 308.6
Std Dev 257.3
2
1
0
−1
−2

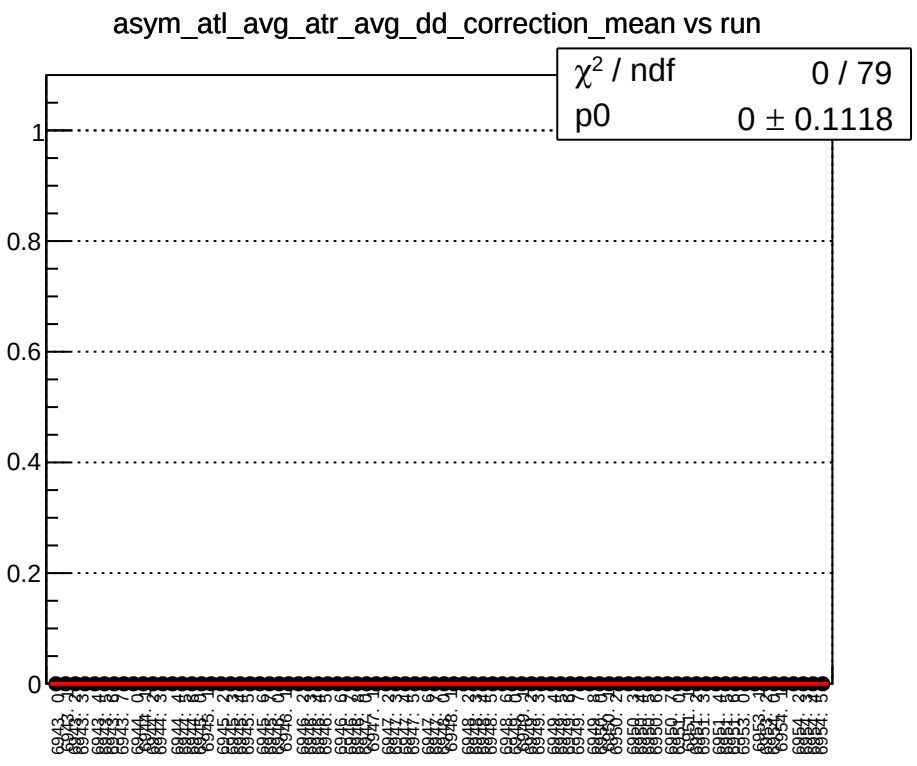

pull1D
Entries 80
Mean −0.005428
Std Dev 1.1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

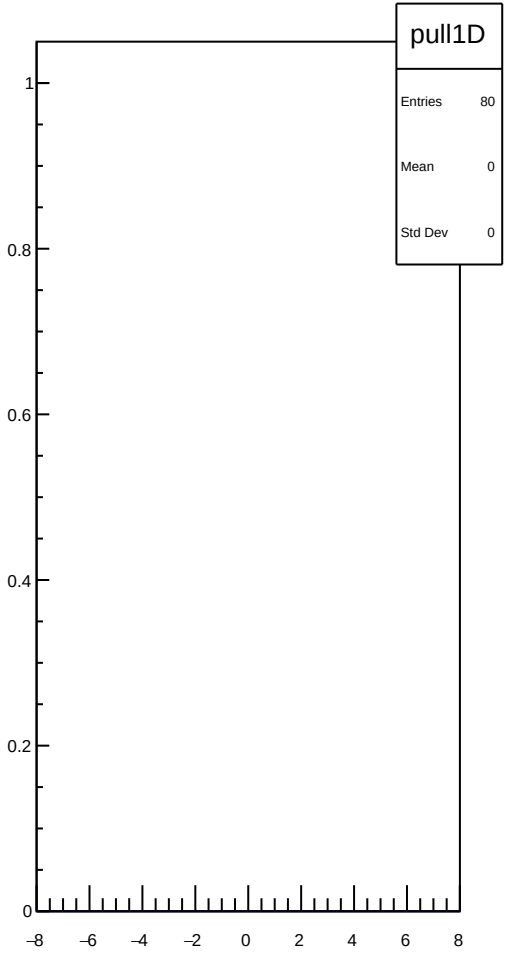

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 7657 / 79
p0 6460 ± 5.126
7500
7000
6500
6000
5500

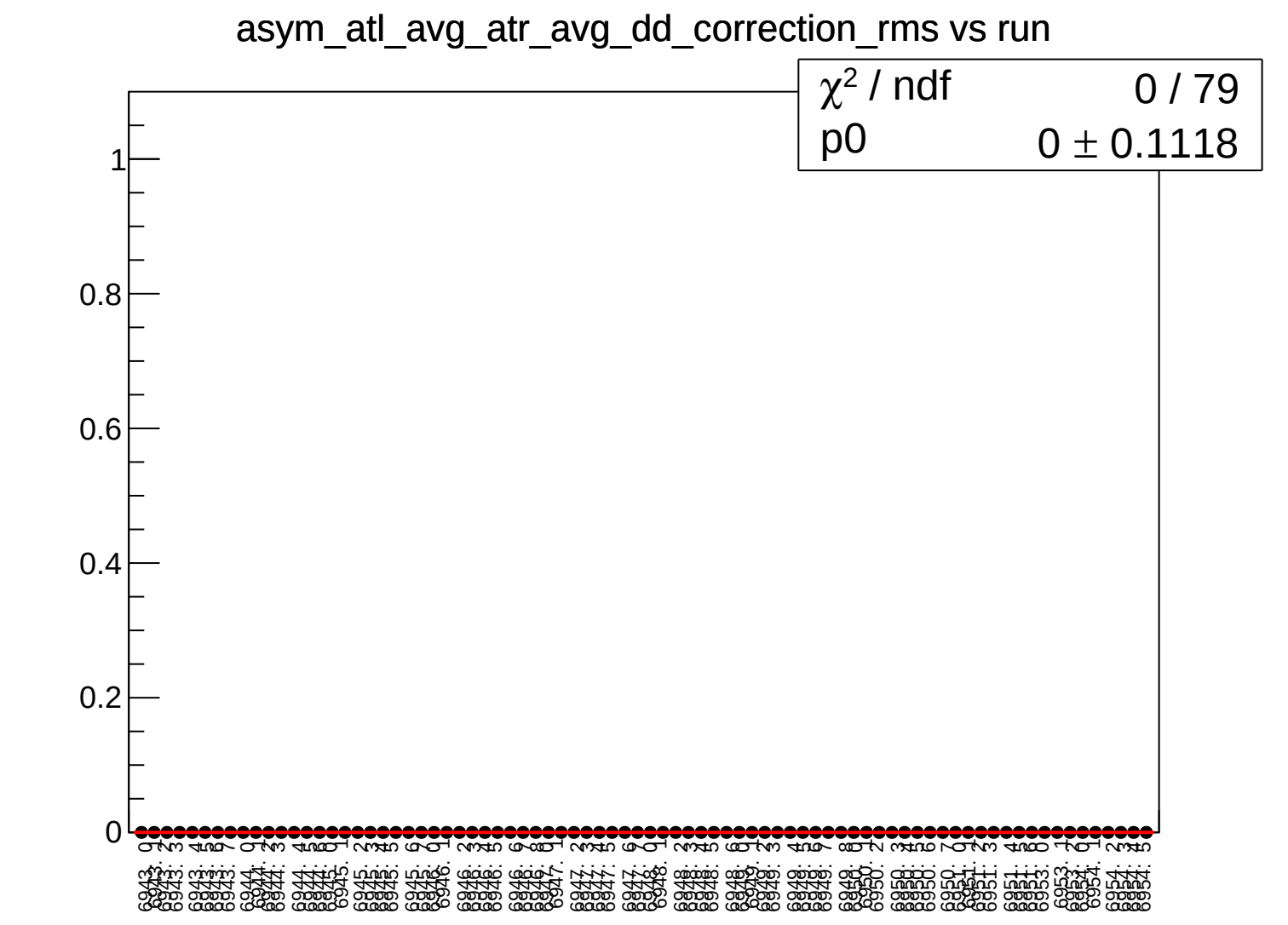

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 101.5 / 79
p0 −158 ± 1557
pull
Entries 80
Mean −127.9
Std Dev 175.7

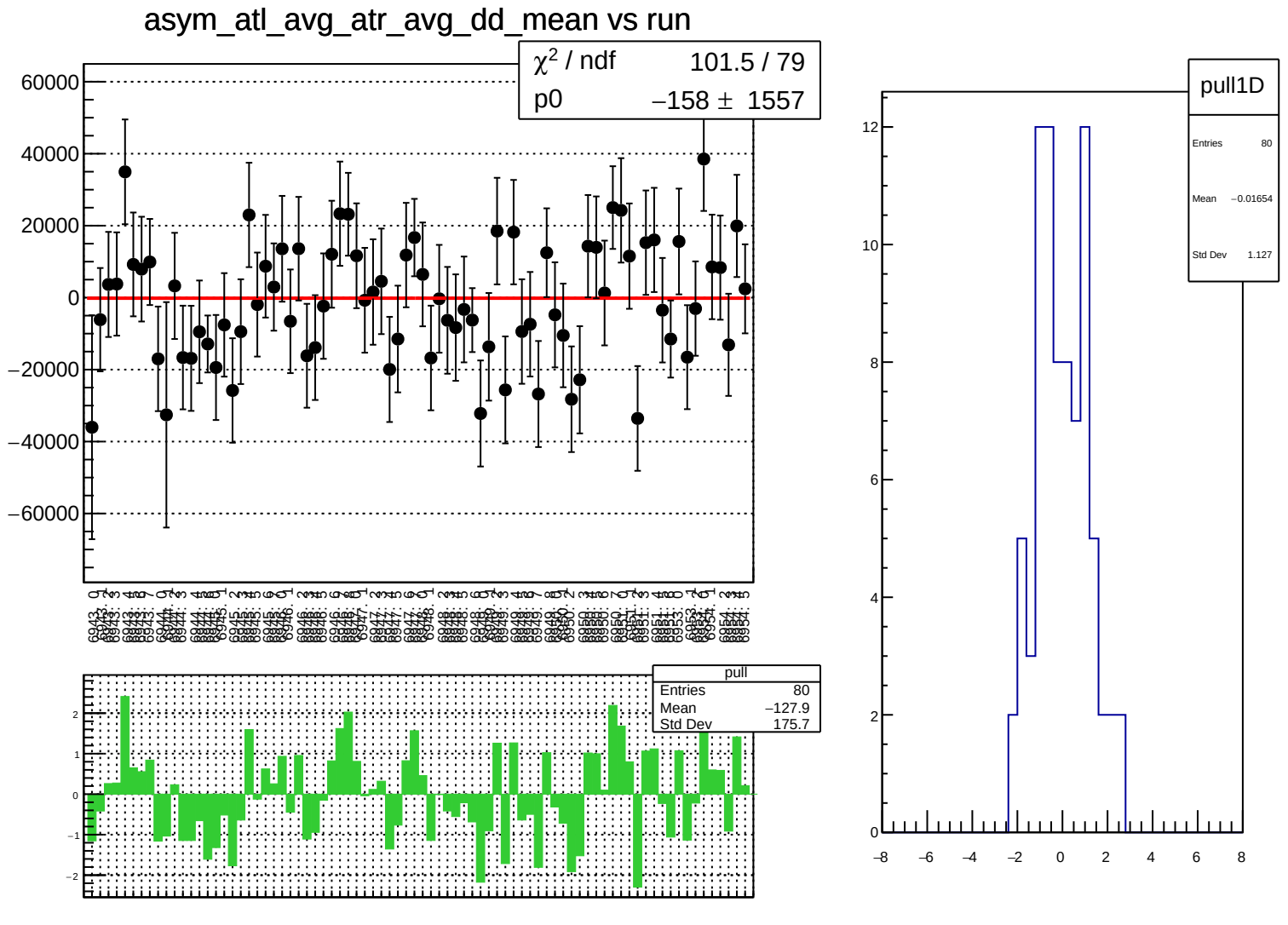

pull1D
Entries 80
Mean −0.01654
Std Dev 1.127

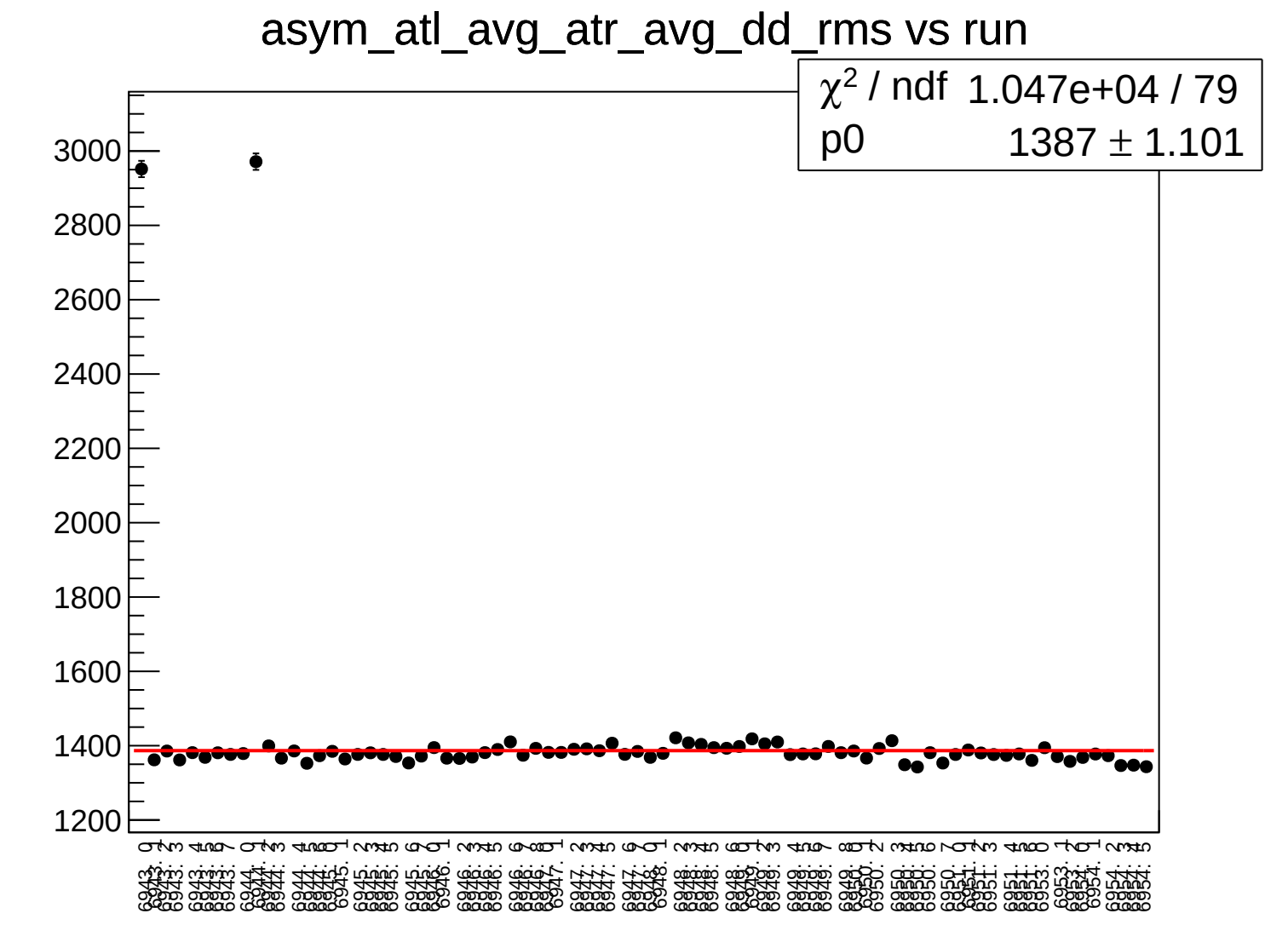

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ^2 / ndf 1.047e+04 / 79
p0 1387 ± 1.101
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

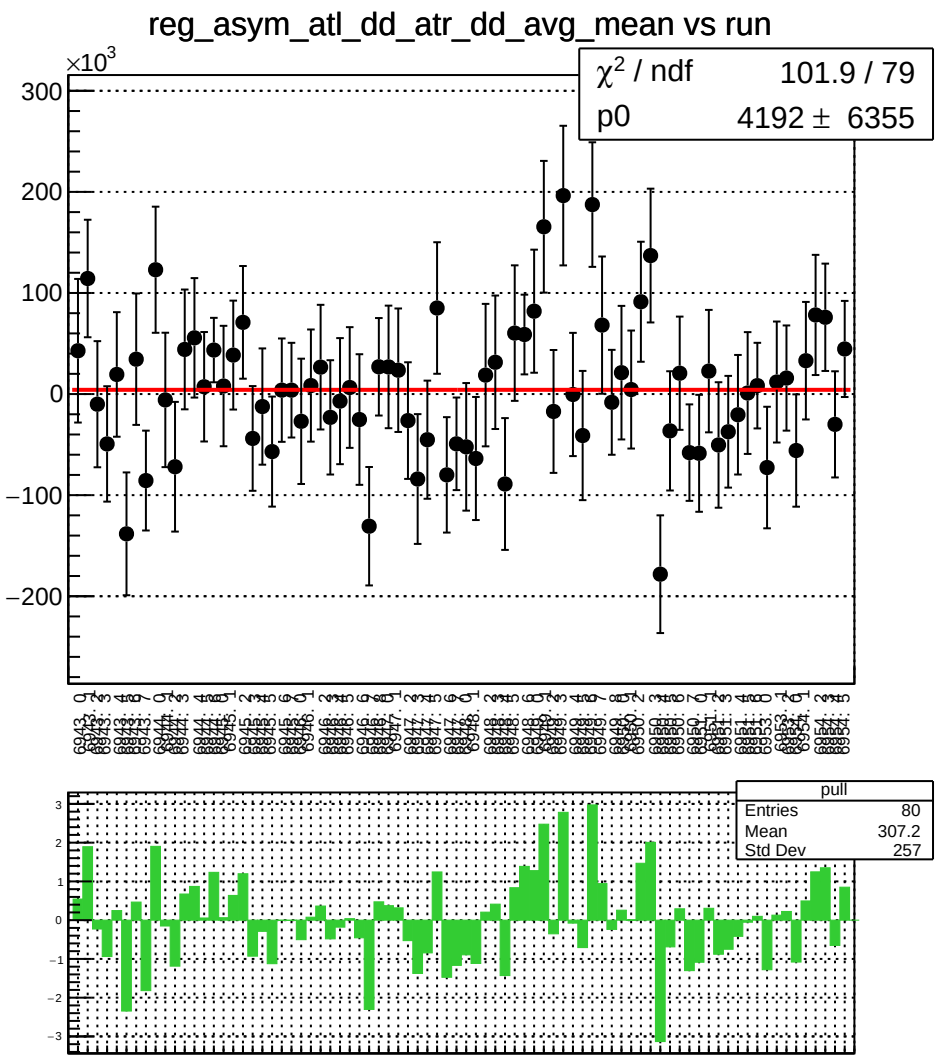

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

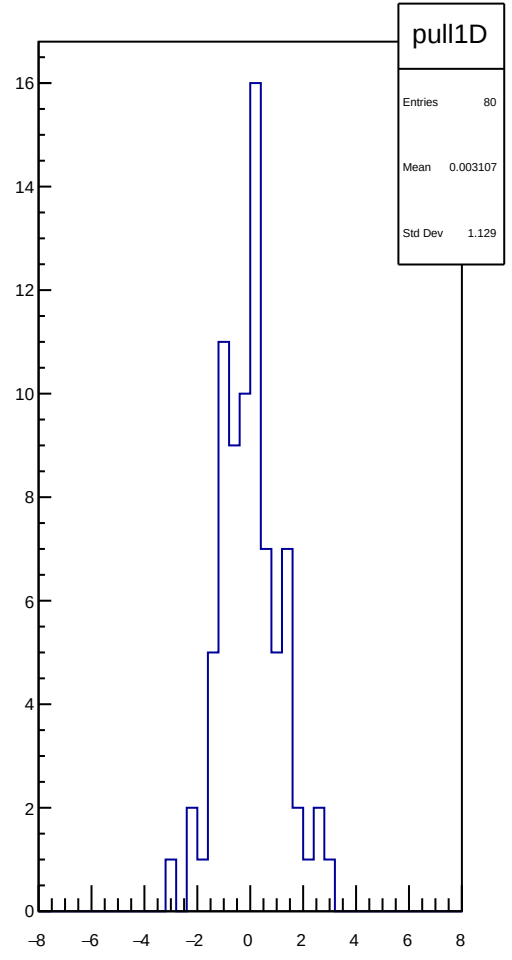

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

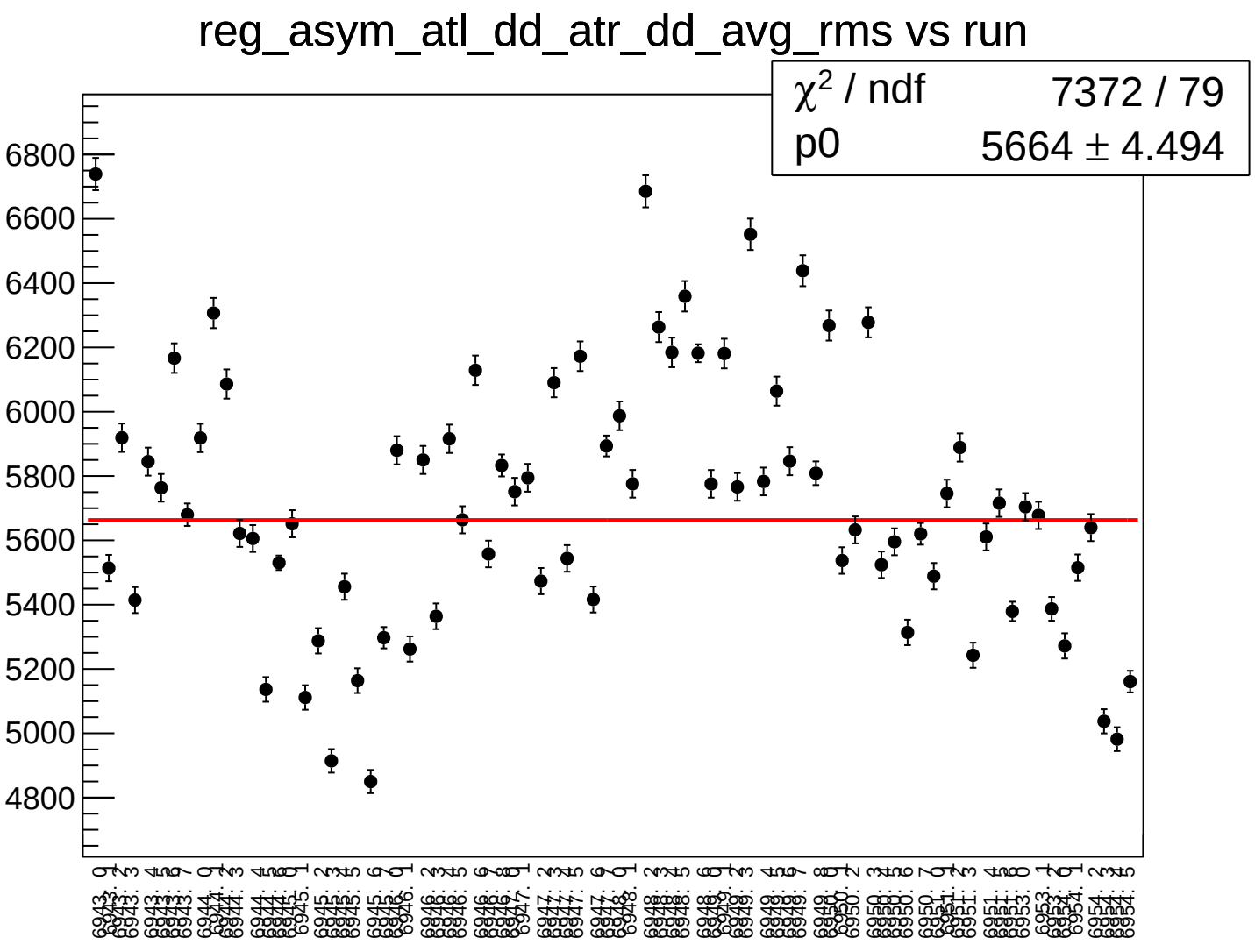

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

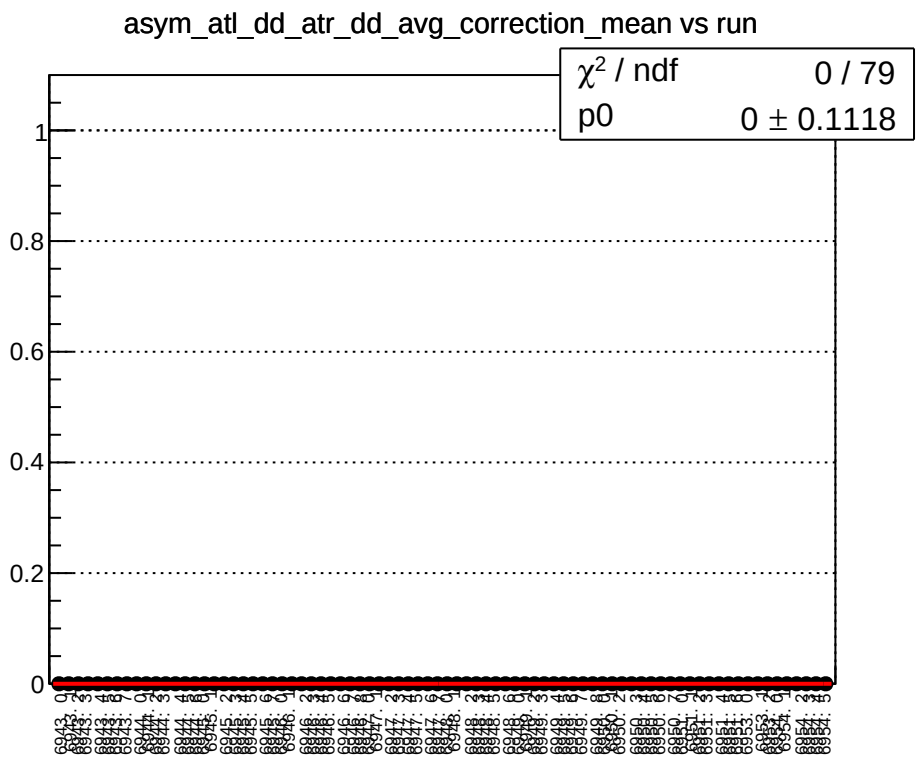

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 101.5 / 79
p0 −158 ± 1557
pull
Entries 80
Mean −127.9
Std Dev 175.7
pull1D
Entries 80
Mean −0.01654
Std Dev 1.127

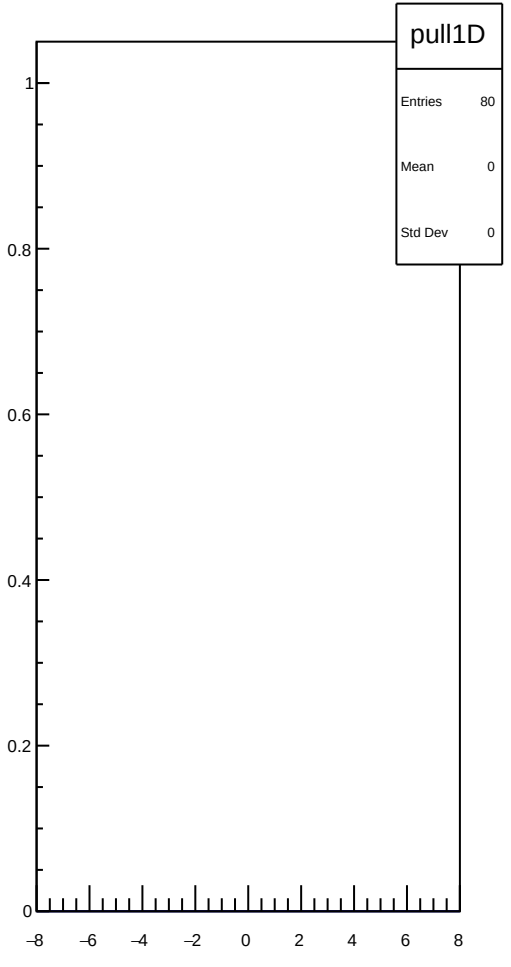

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.047e+04 / 79
p0 1387 ± 1.101
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

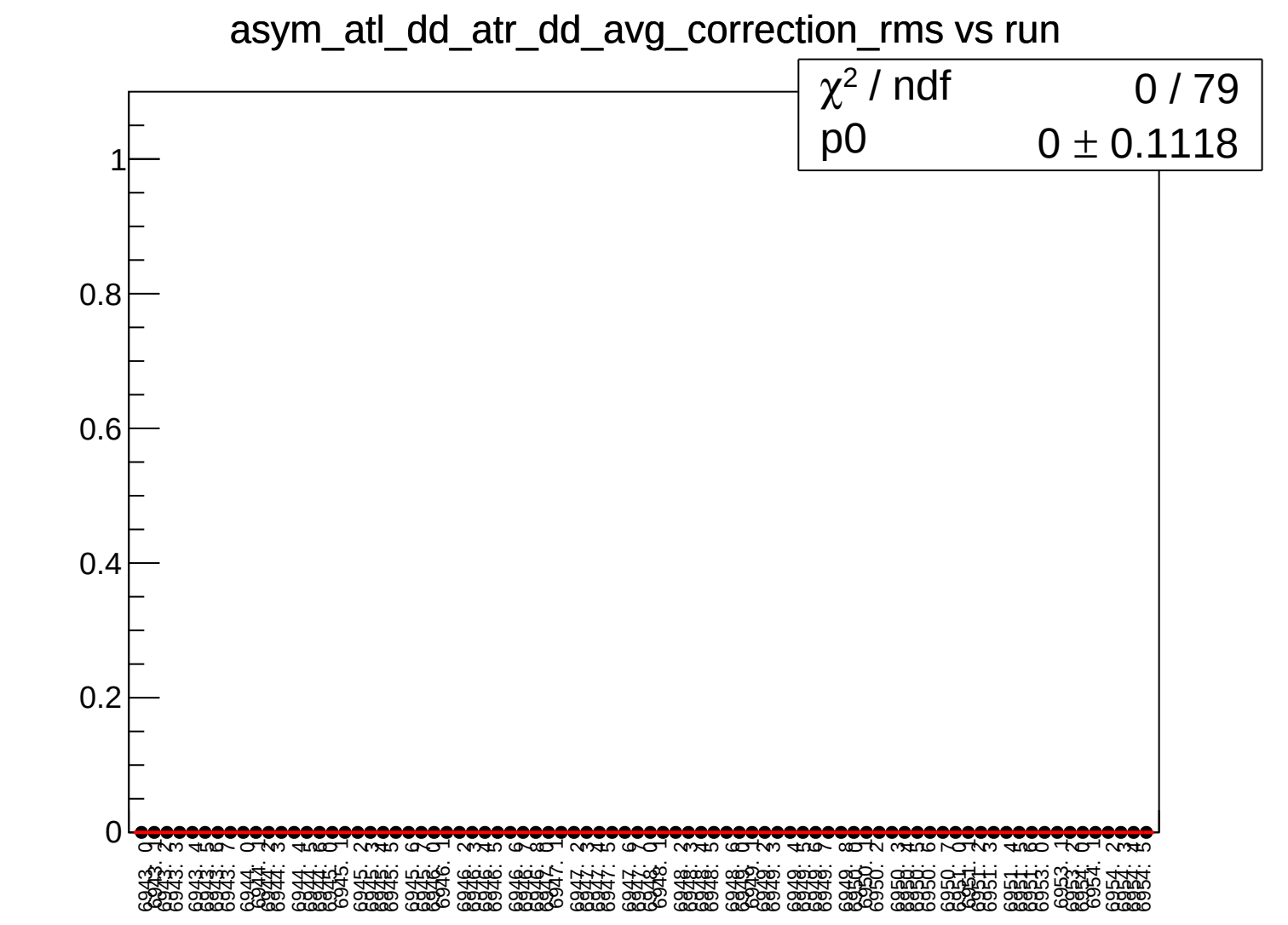

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 101.9 / 79
p0 4192 ± 6355
pull
Entries 80
Mean 307.2
Std Dev 257

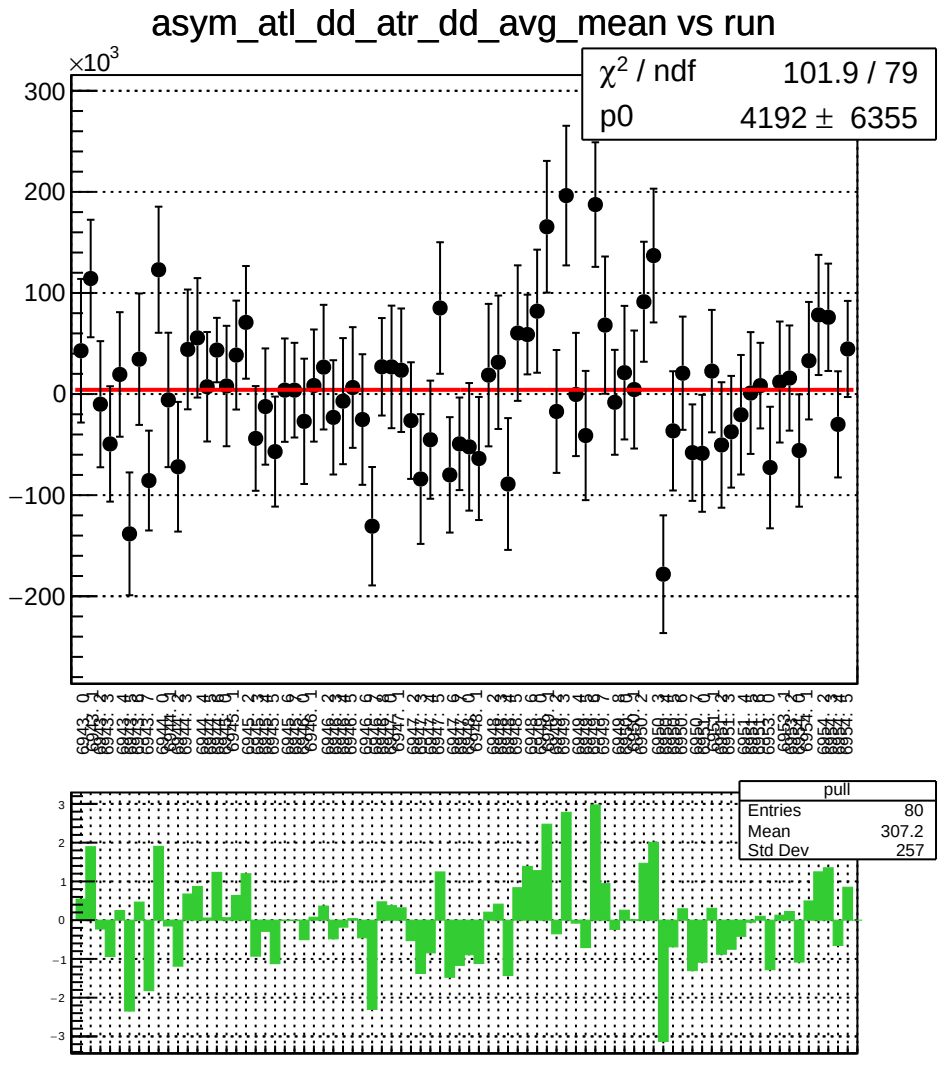

pull1D
Entries 80
Mean 0.003107
Std Dev 1.129

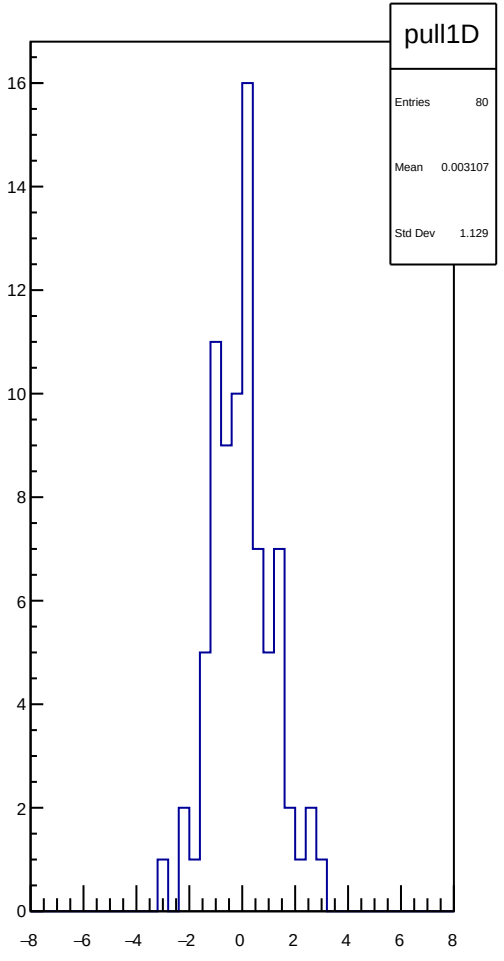

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 7372 / 79
p0 5664 ± 4.494
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

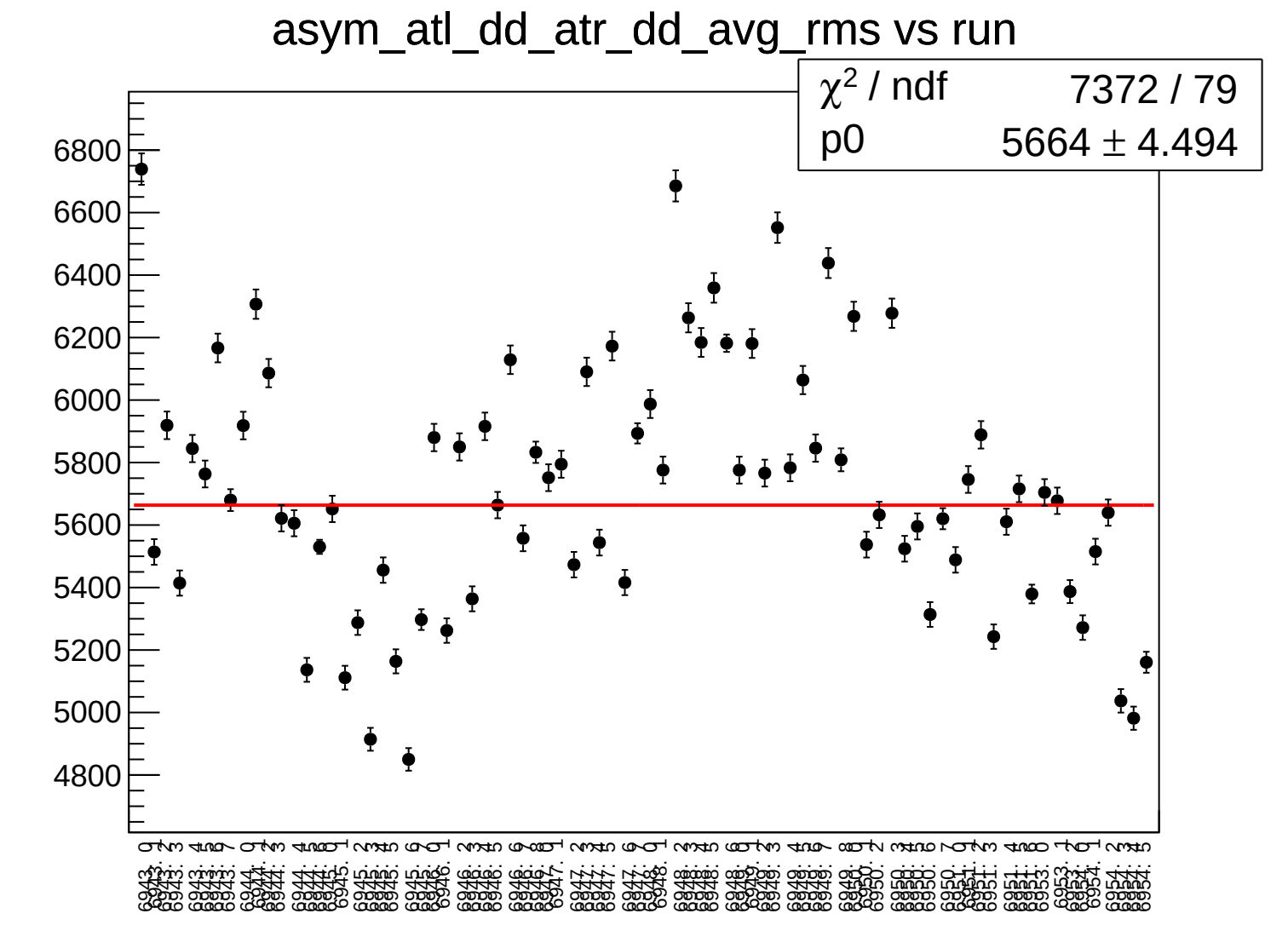

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

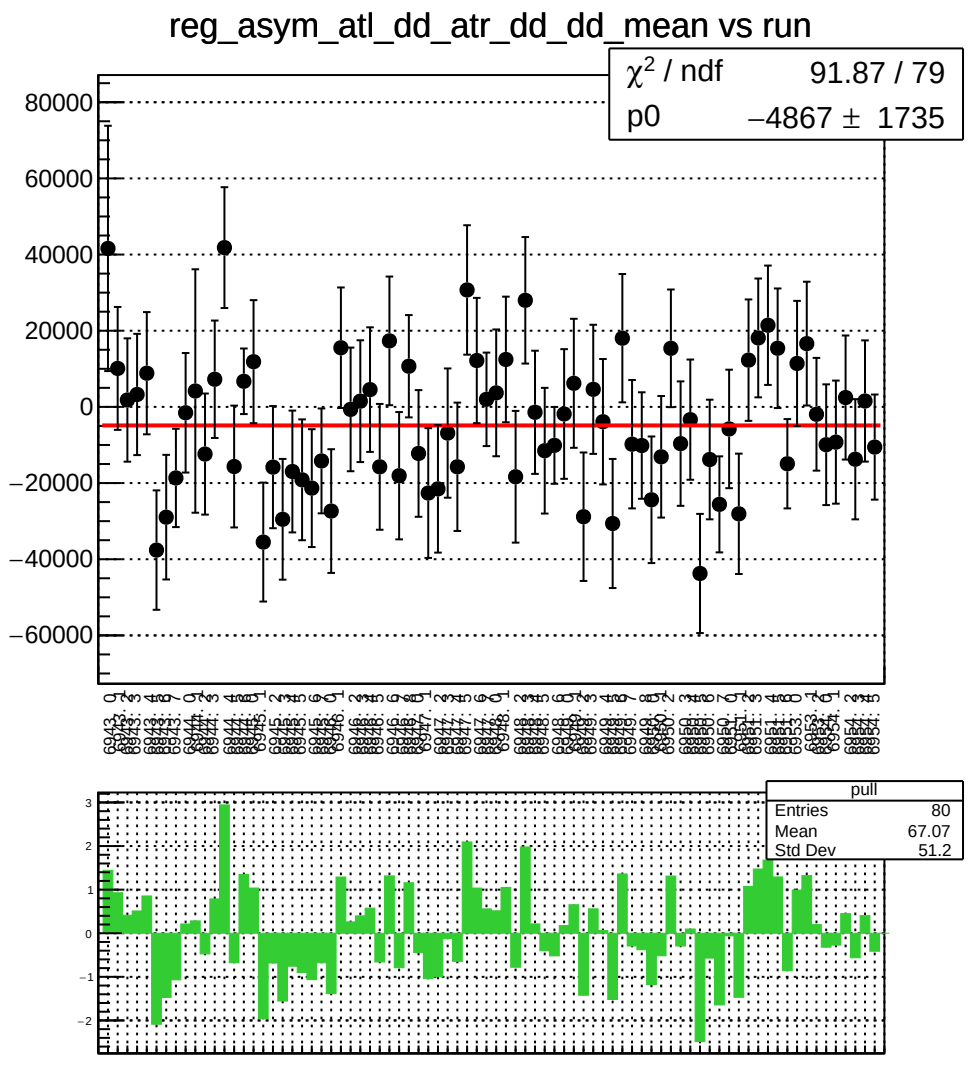

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

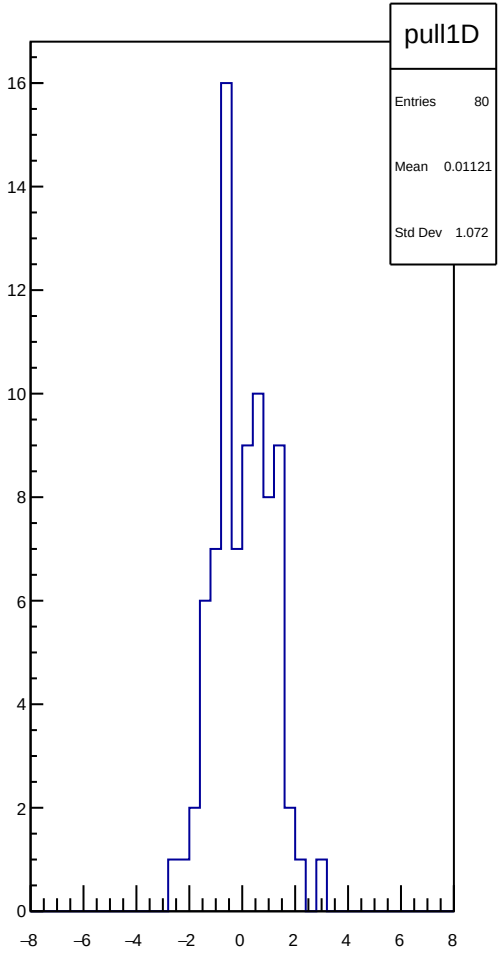

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

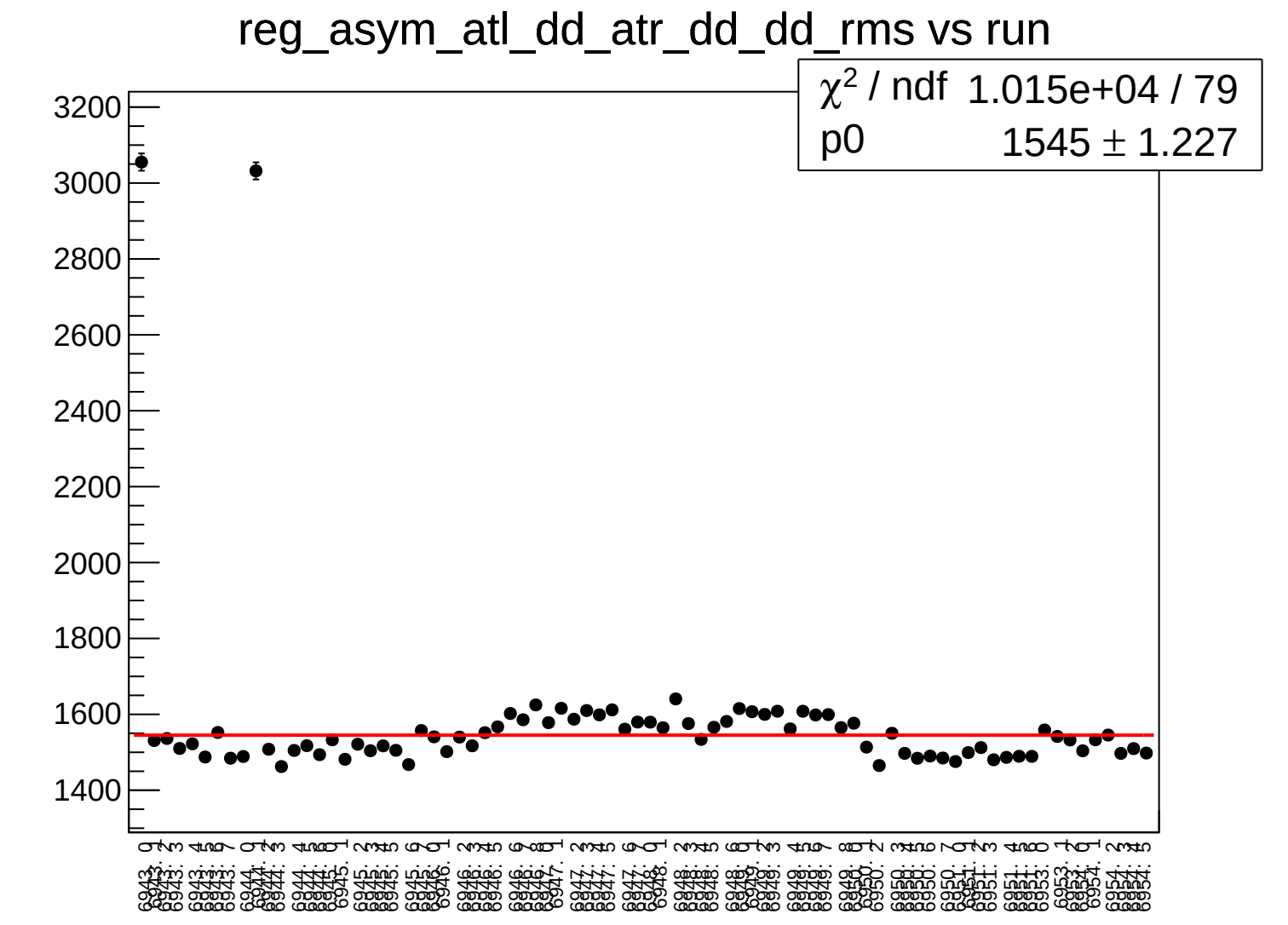

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 101.9 / 79
p0 4192 ± 6355
pull
Entries 80
Mean 307.2
Std Dev 257

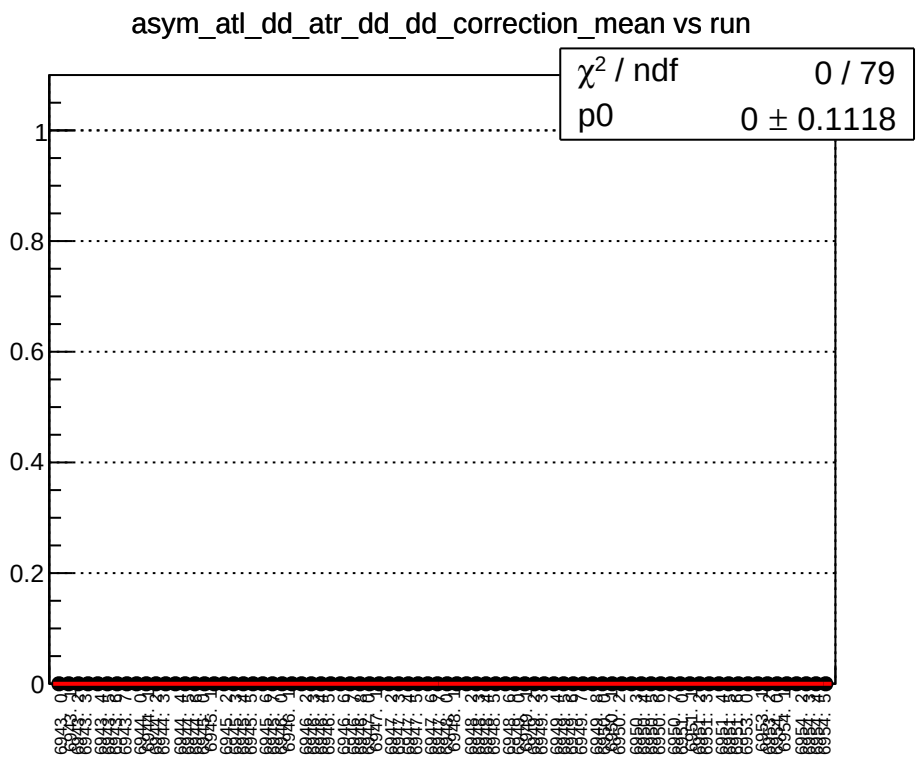

pull1D
Entries 80
Mean 0.003107
Std Dev 1.129

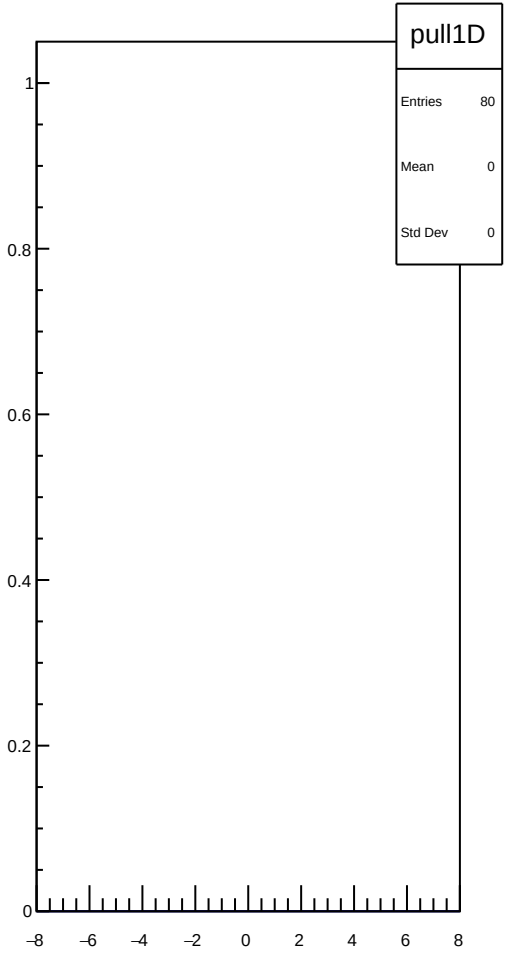

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 7372 / 79
p0 5664 ± 4.494
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

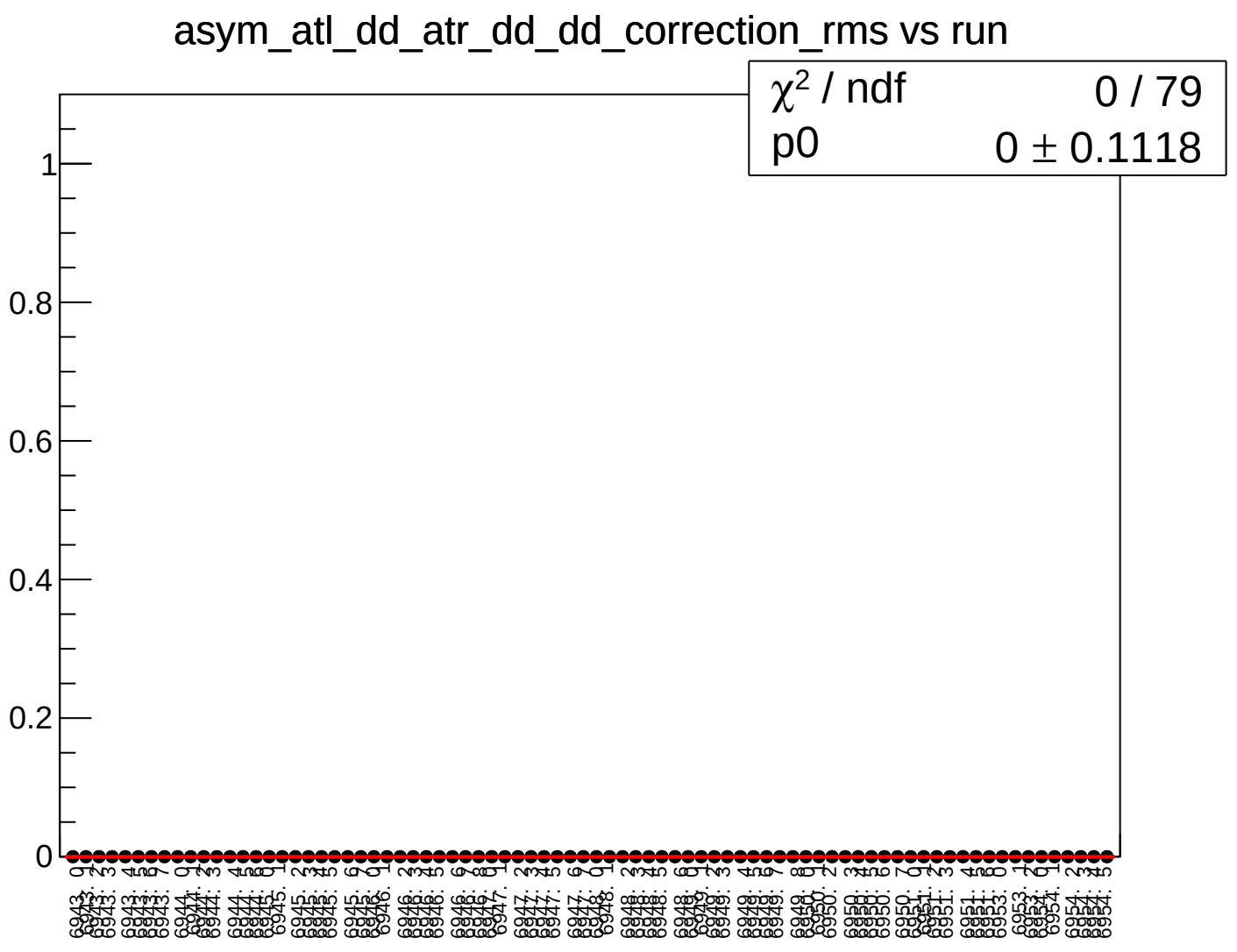

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 91.87 / 79
p0 −4867 ± 1735
pull
Entries 80
Mean 67.07
Std Dev 51.2

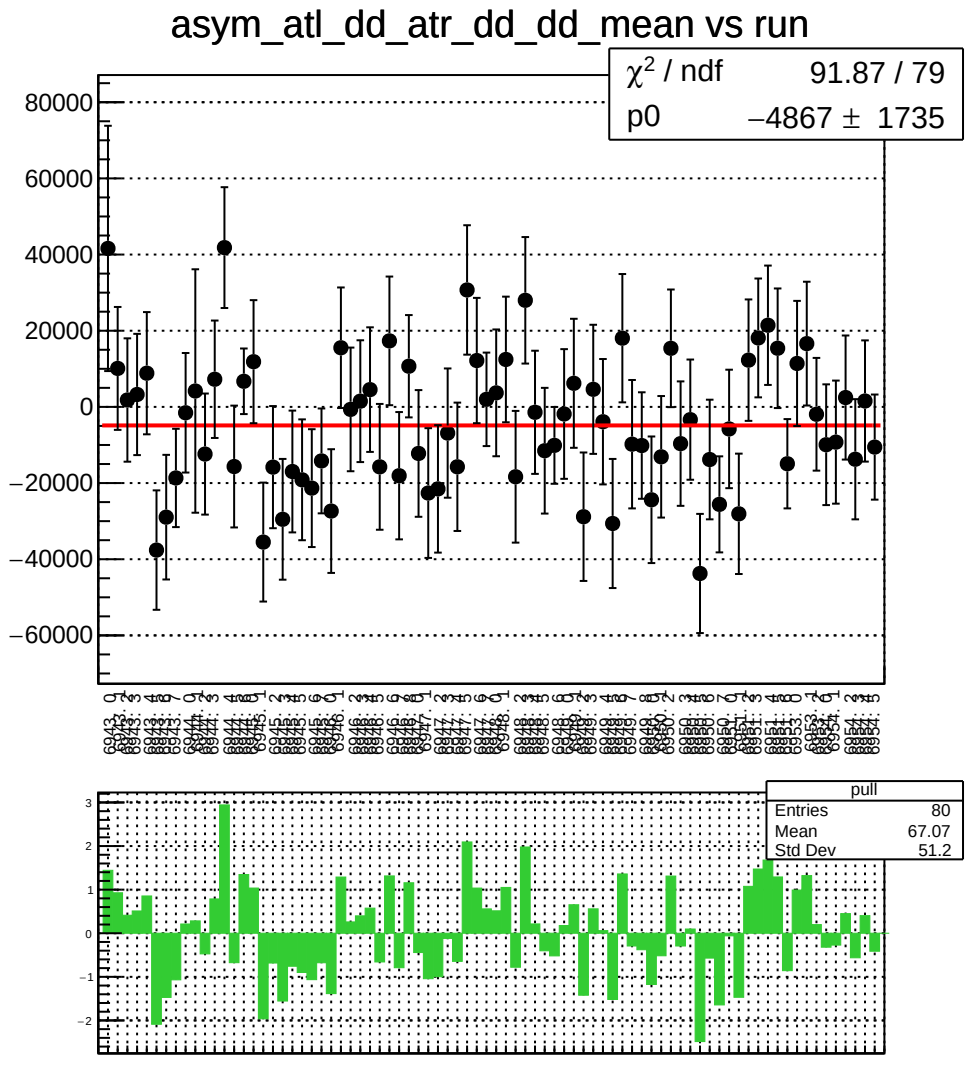

pull1D
Entries 80
Mean 0.01121
Std Dev 1.072

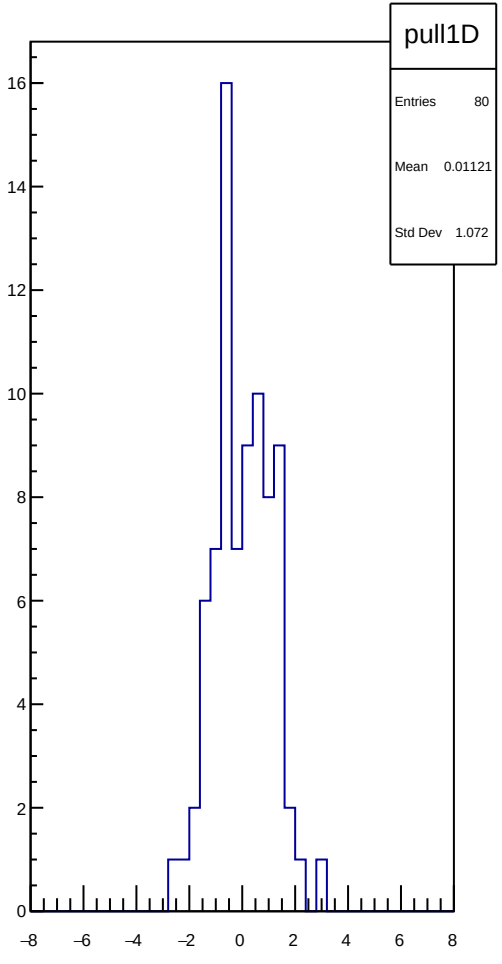

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.015e+04 / 79
p0 1545 ± 1.227
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

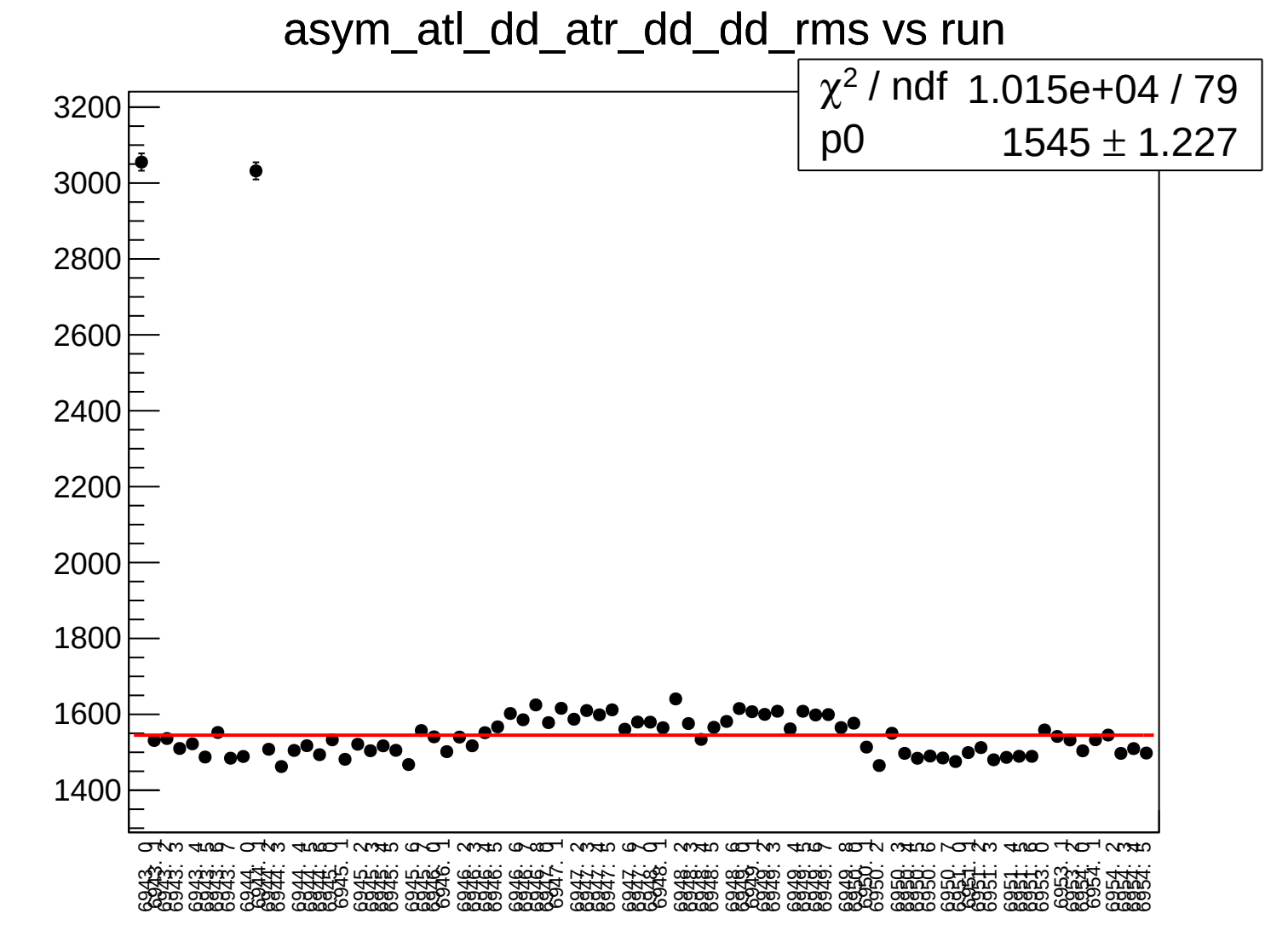

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

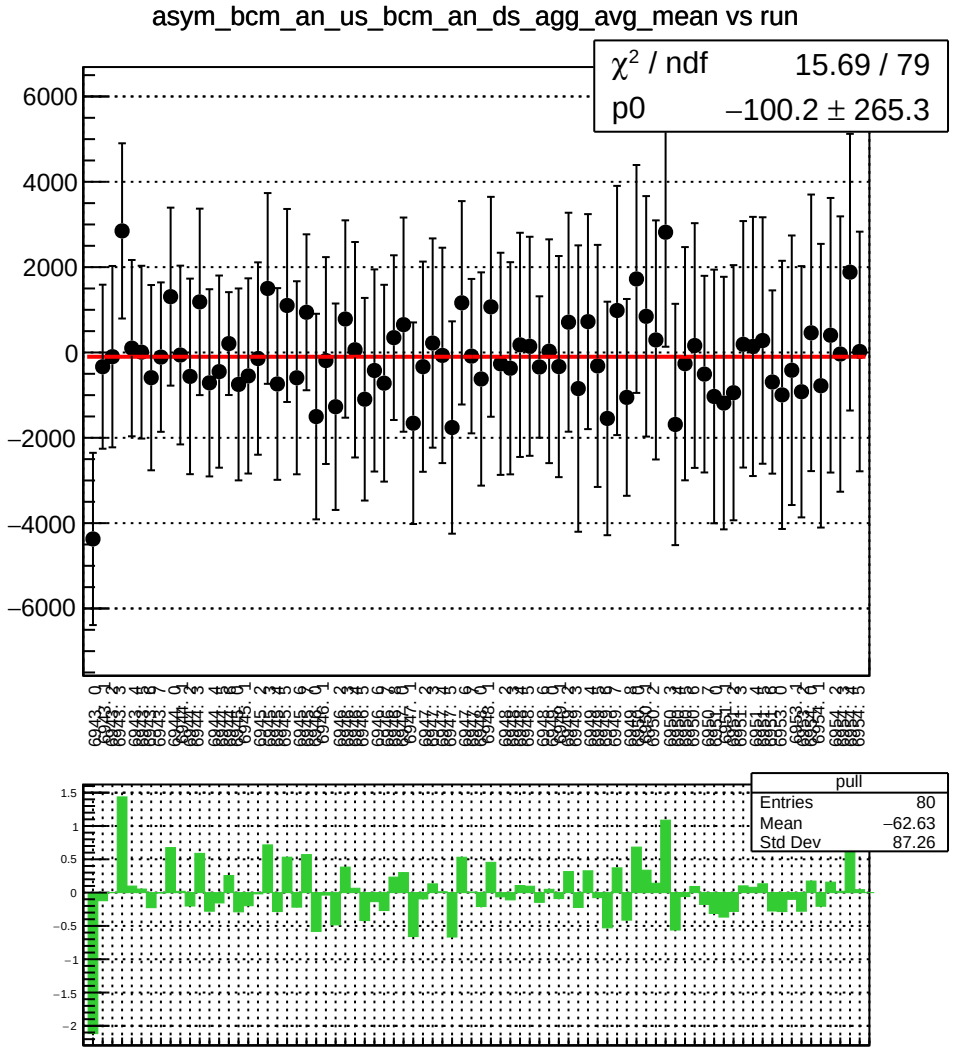

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

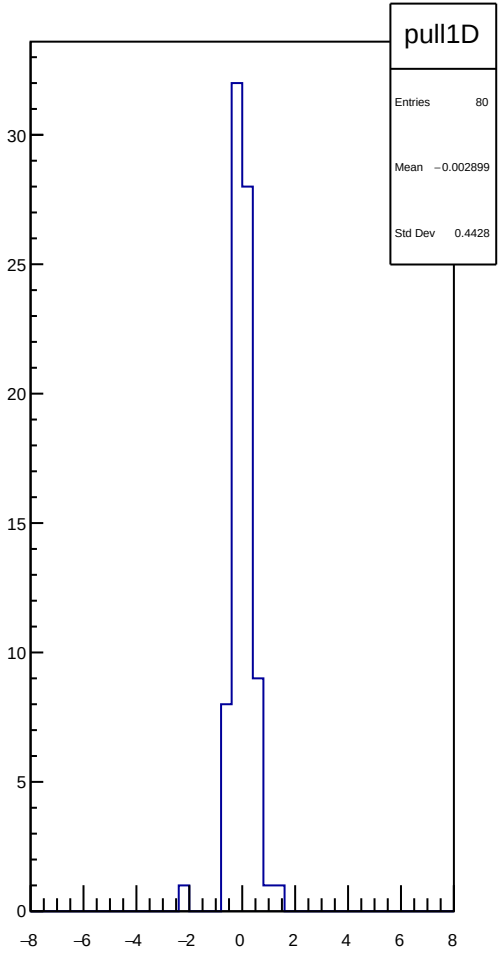

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 79
p0 0 ± 0.1118
1
0.8
0.6
0.4
0.2
0

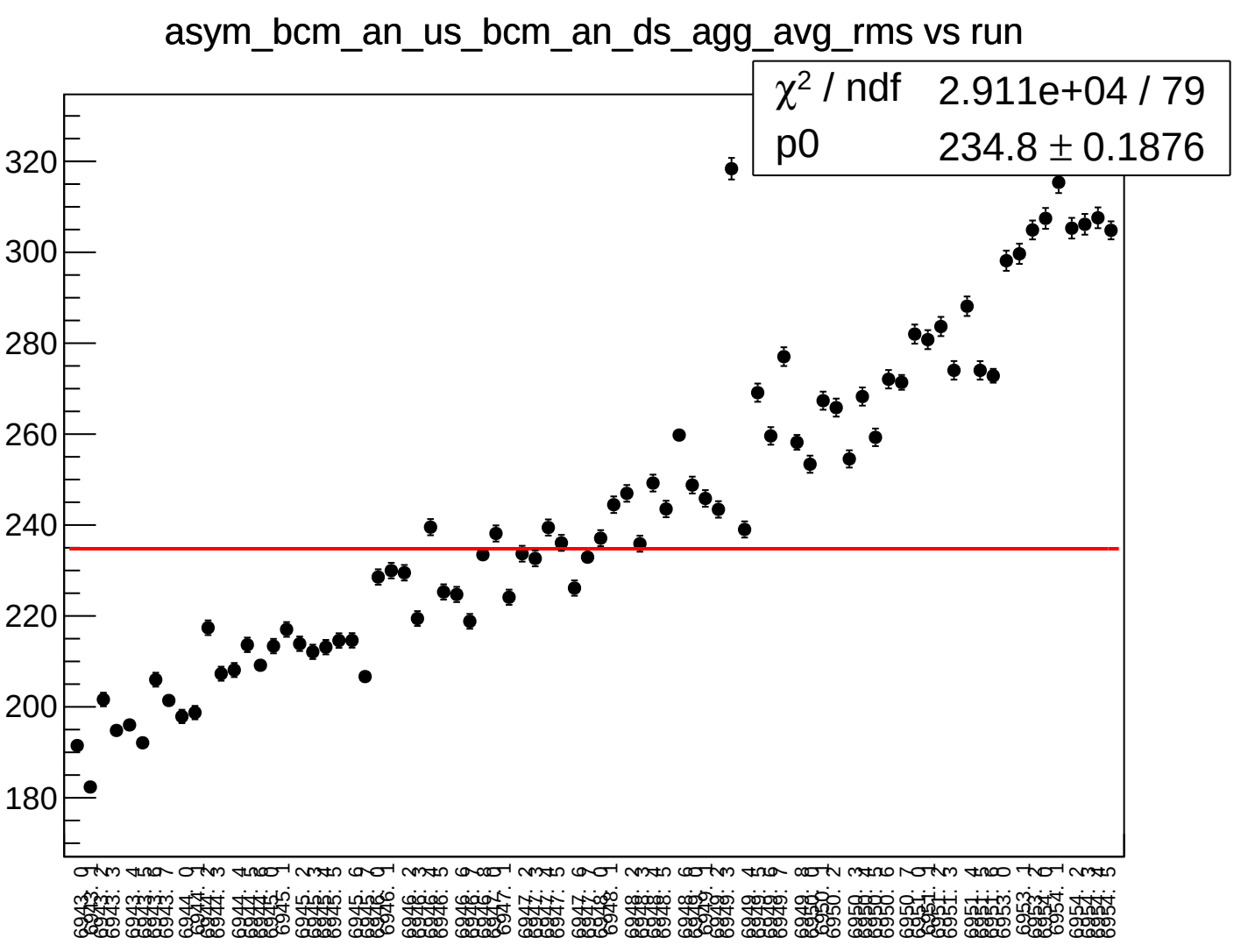

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 91.87 / 79
p0 −4867 ± 1735
pull
Entries 80
Mean 67.07
Std Dev 51.2

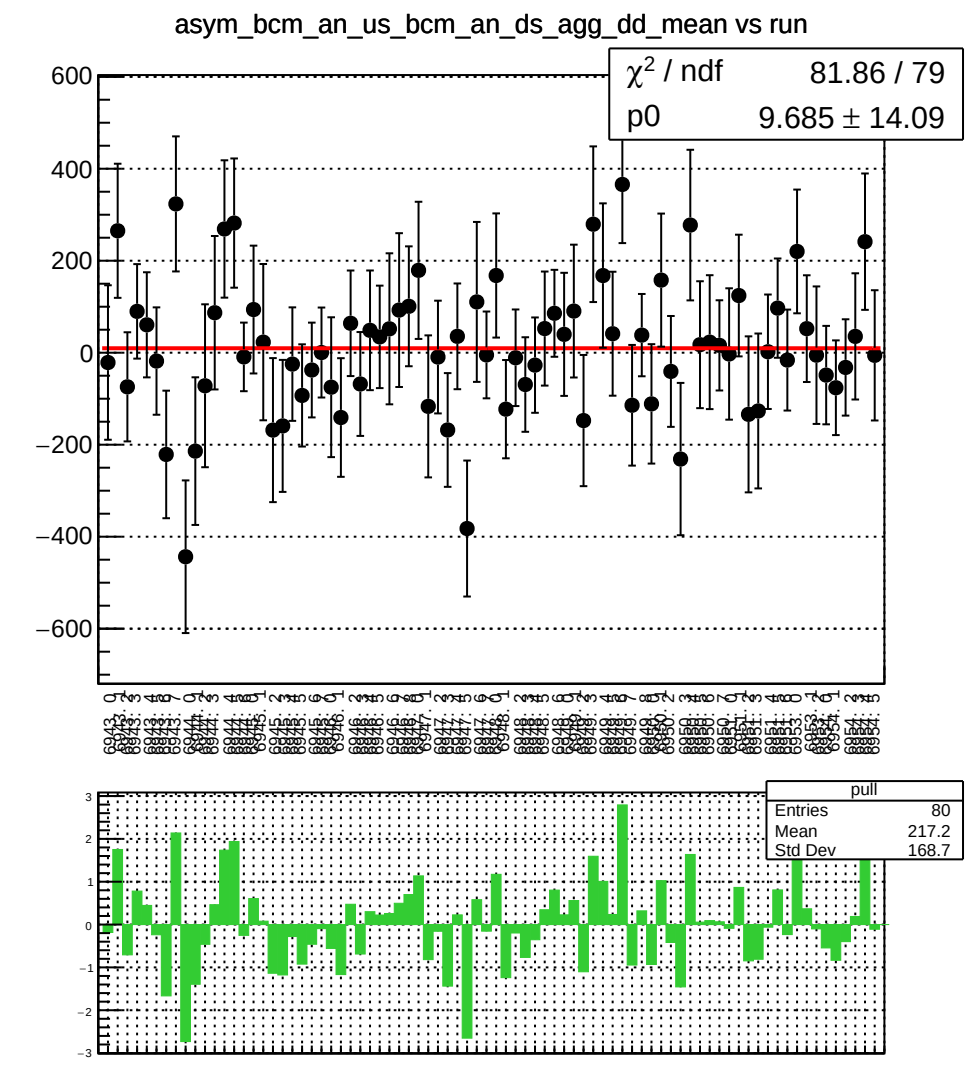

pull1D
Entries 80
Mean 0.01121
Std Dev 1.072

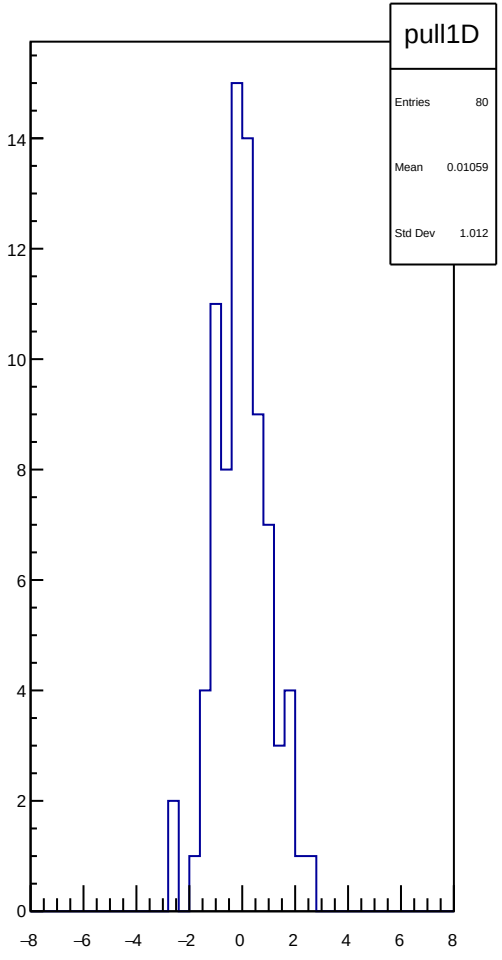

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.015e+04 / 79
p0 1545 ± 1.227
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

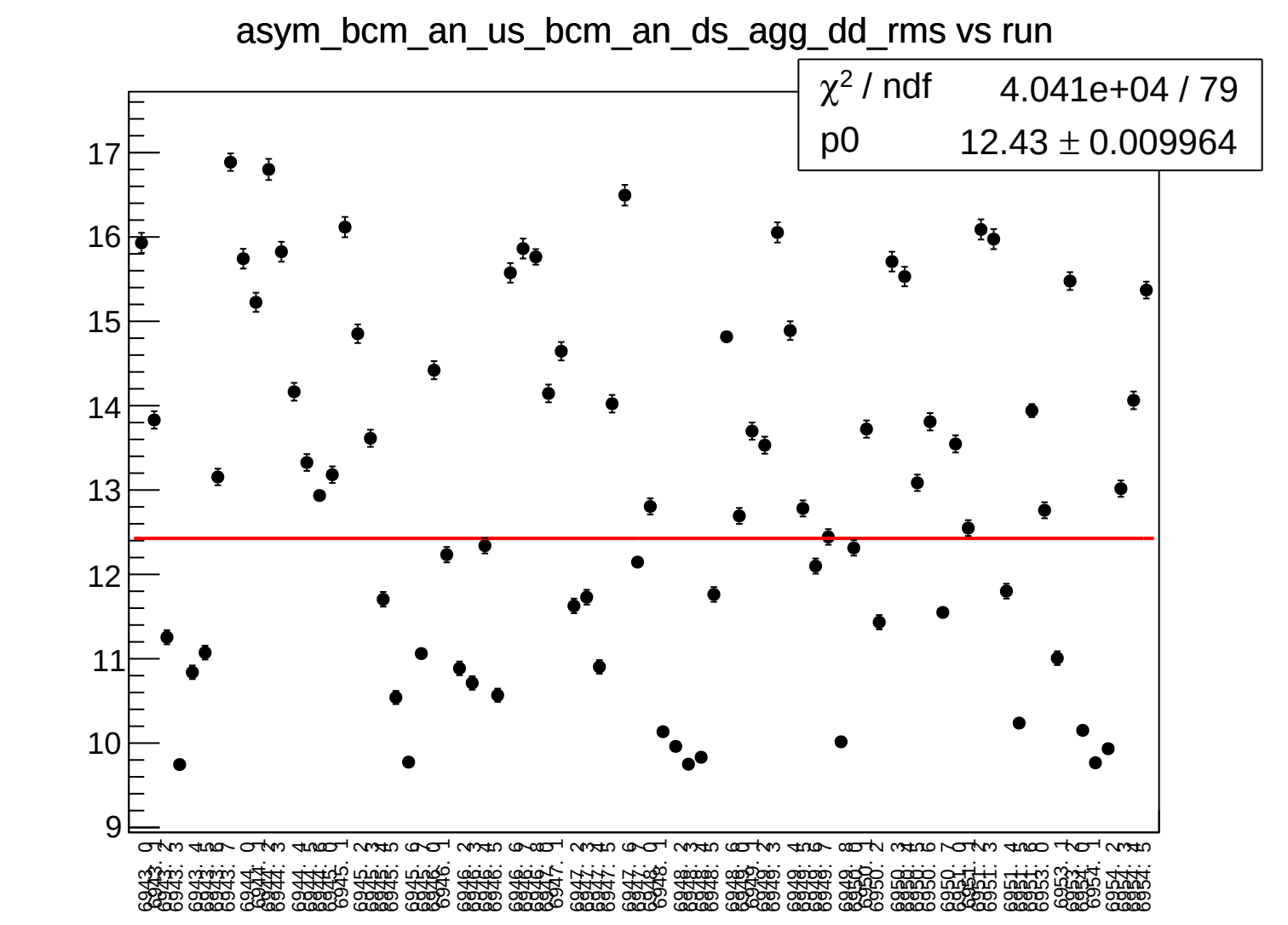

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.69 / 79
p0 −100.2 ± 265.3
pull
Entries 80
Mean −62.63
Std Dev 87.26

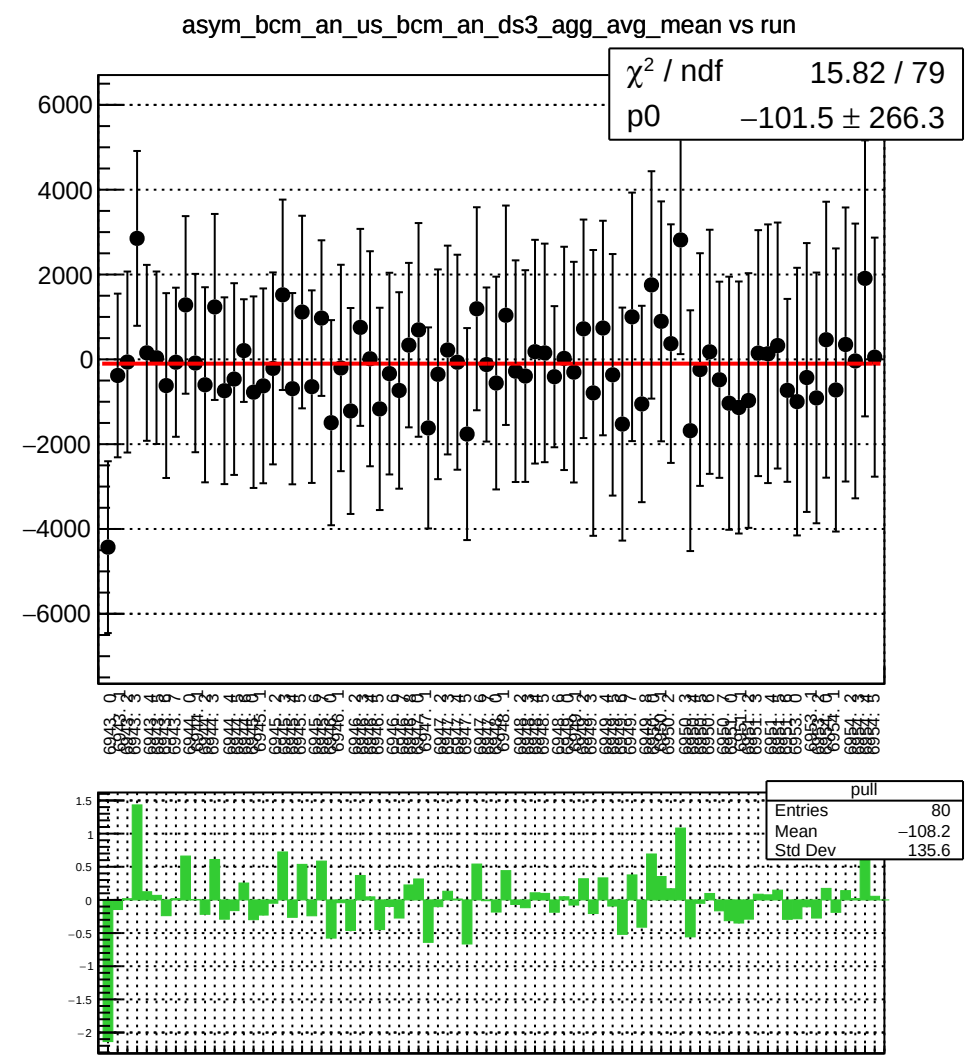

pull1D
Entries 80
Mean −0.002899
Std Dev 0.4428

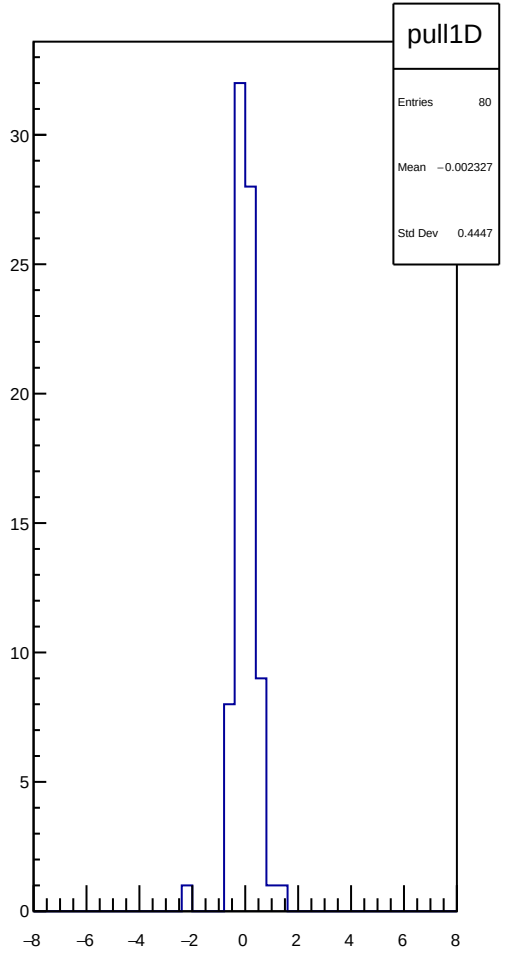

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.911e+04 / 79
p0 234.8 ± 0.1876
320
300
280
260
240
220
200
180

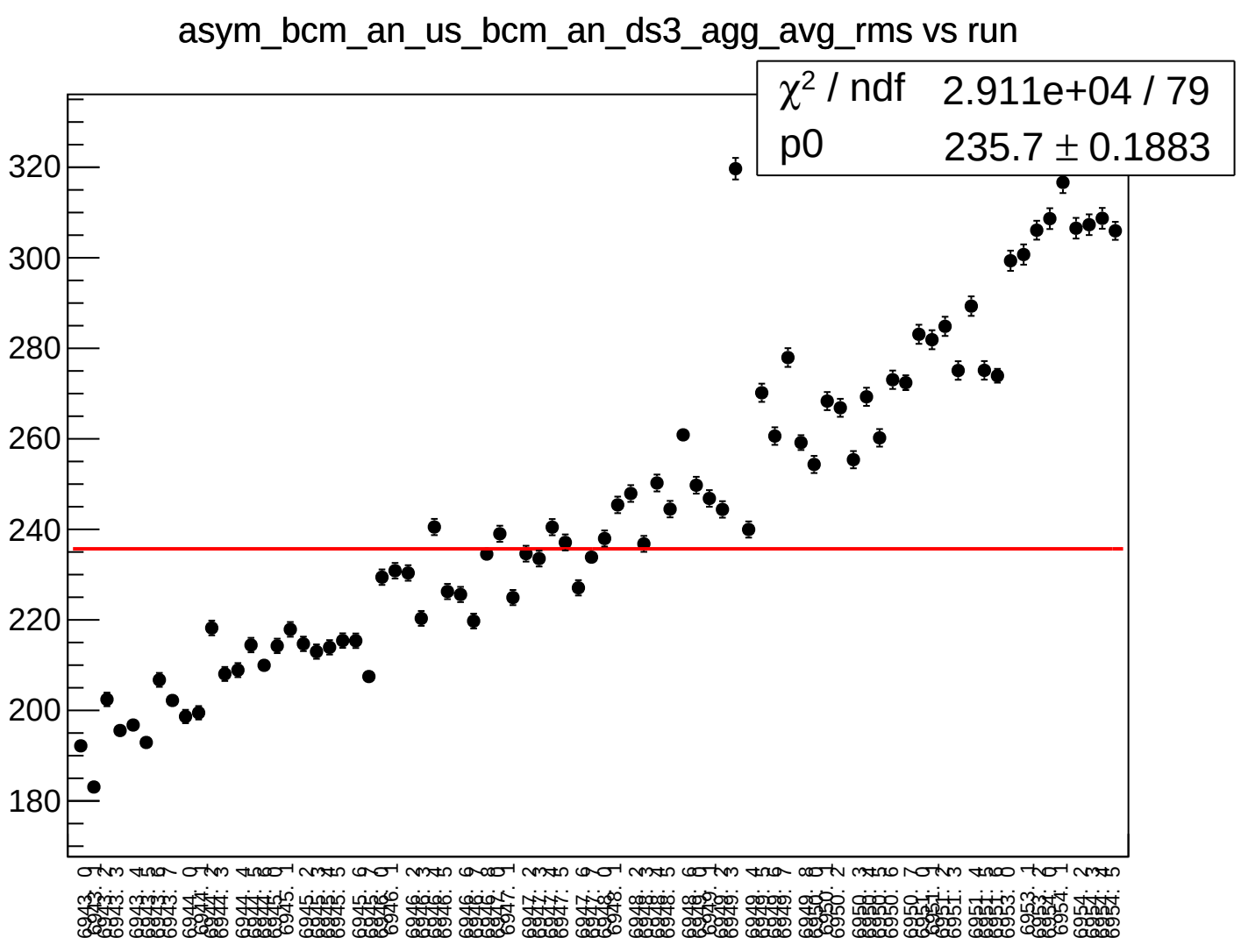

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.86 / 79
p0 9.685 ± 14.09
pull
Entries 80
Mean 217.2
Std Dev 168.7

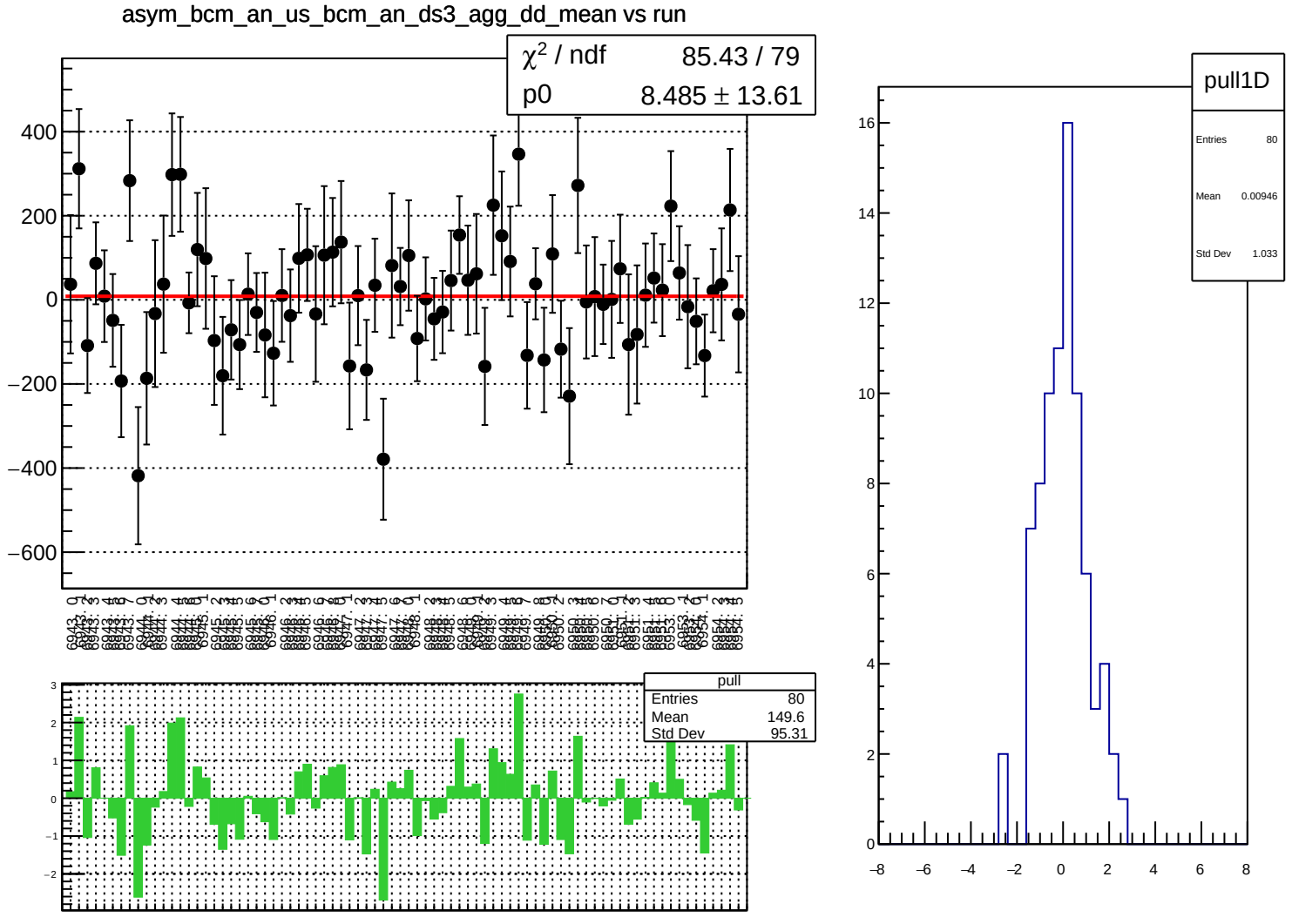

pull1D
Entries 80
Mean 0.01059
Std Dev 1.012

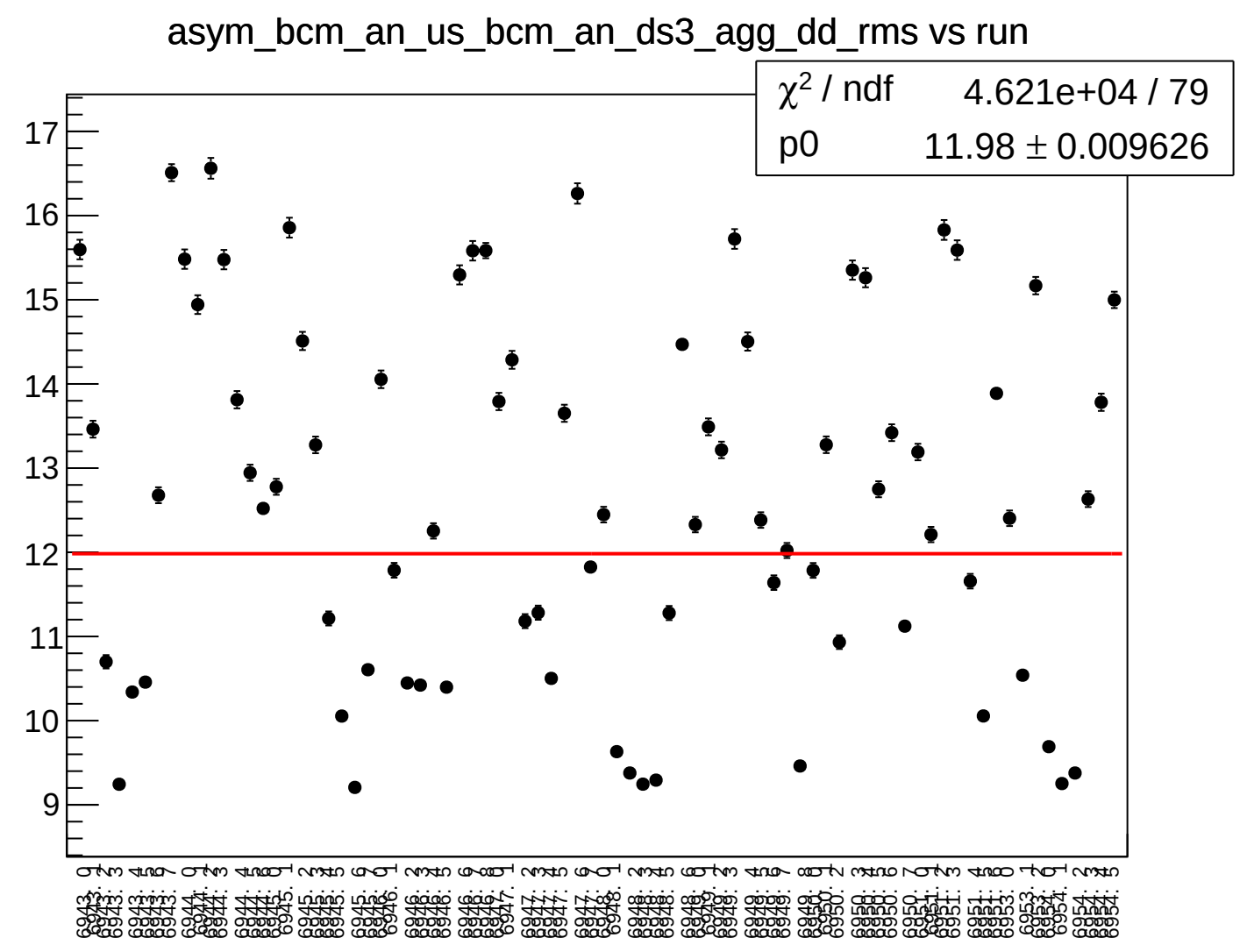

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4.041e+04 / 79
p0 12.43 ± 0.009964
17
16
15
14
13
12
11
10
9

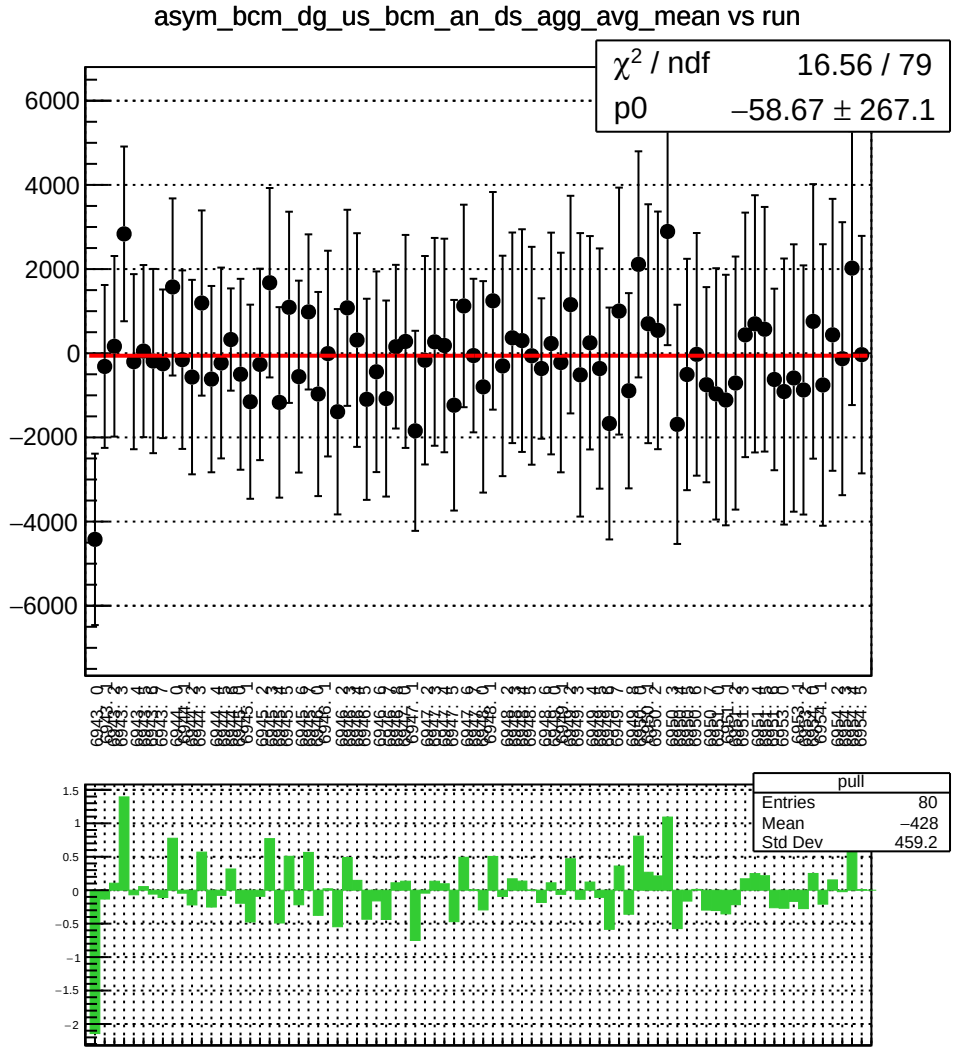

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 15.82 / 79
p0 −101.5 ± 266.3
pull
Entries 80
Mean −108.2
Std Dev 135.6

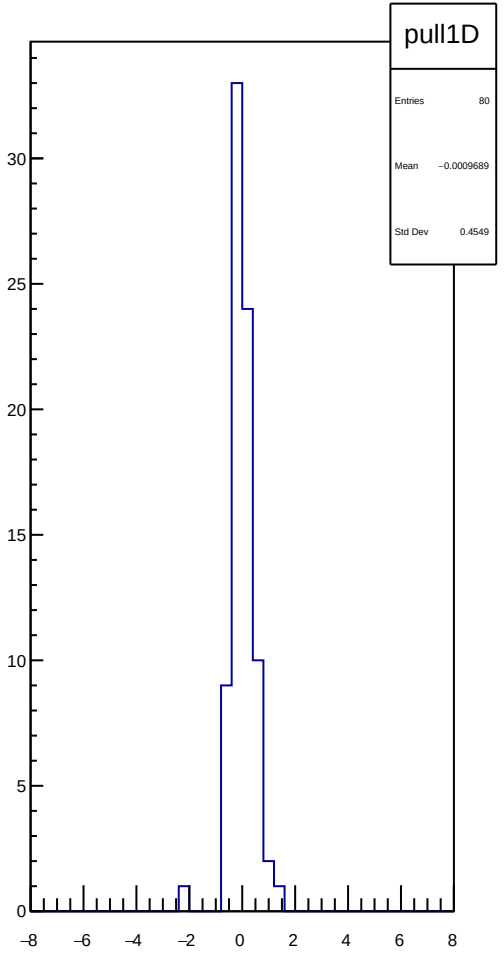

pull1D
Entries 80
Mean −0.002327
Std Dev 0.4447

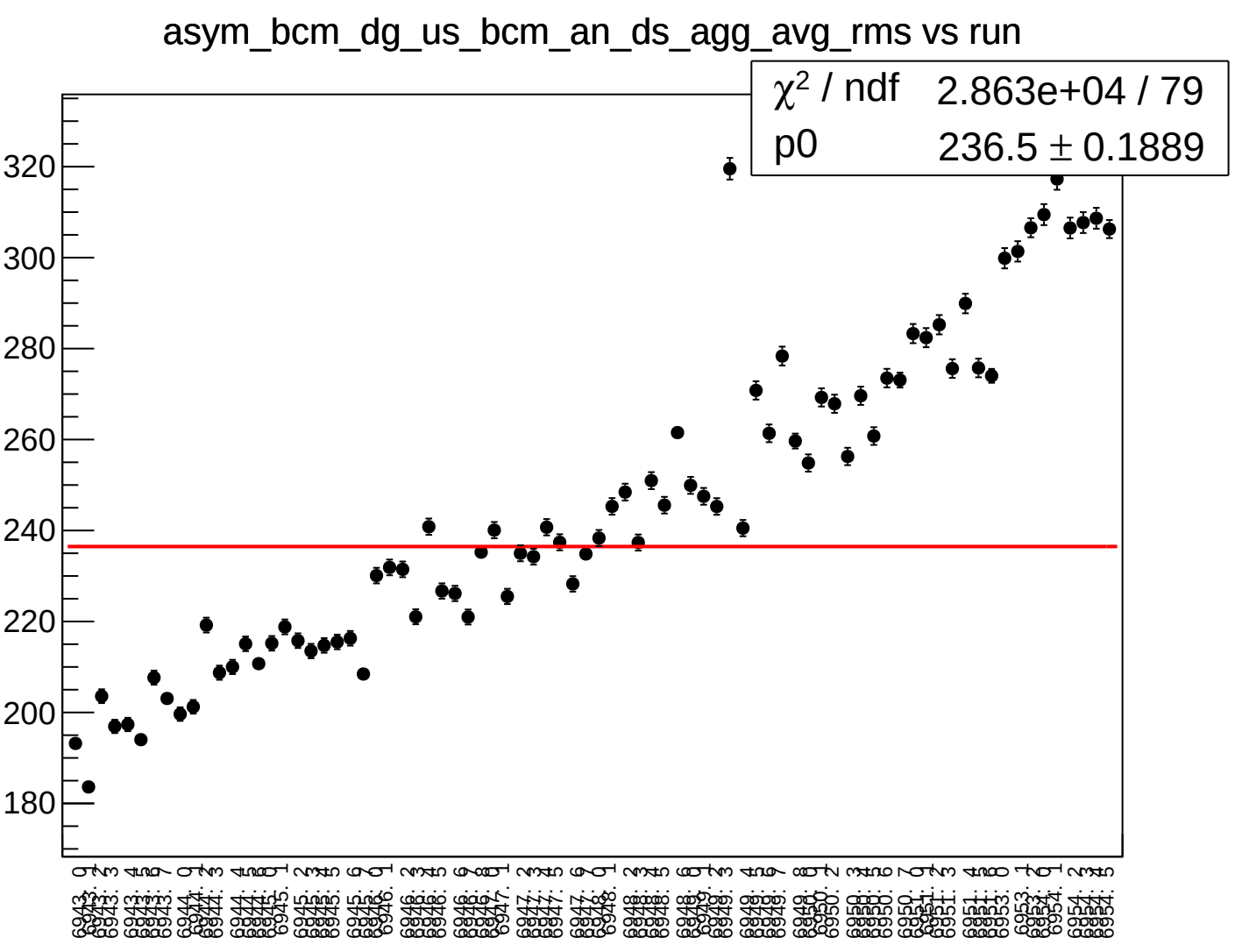

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2.911e+04 / 79
p0 235.7 ± 0.1883
320
300
280
260
240
220
200
180

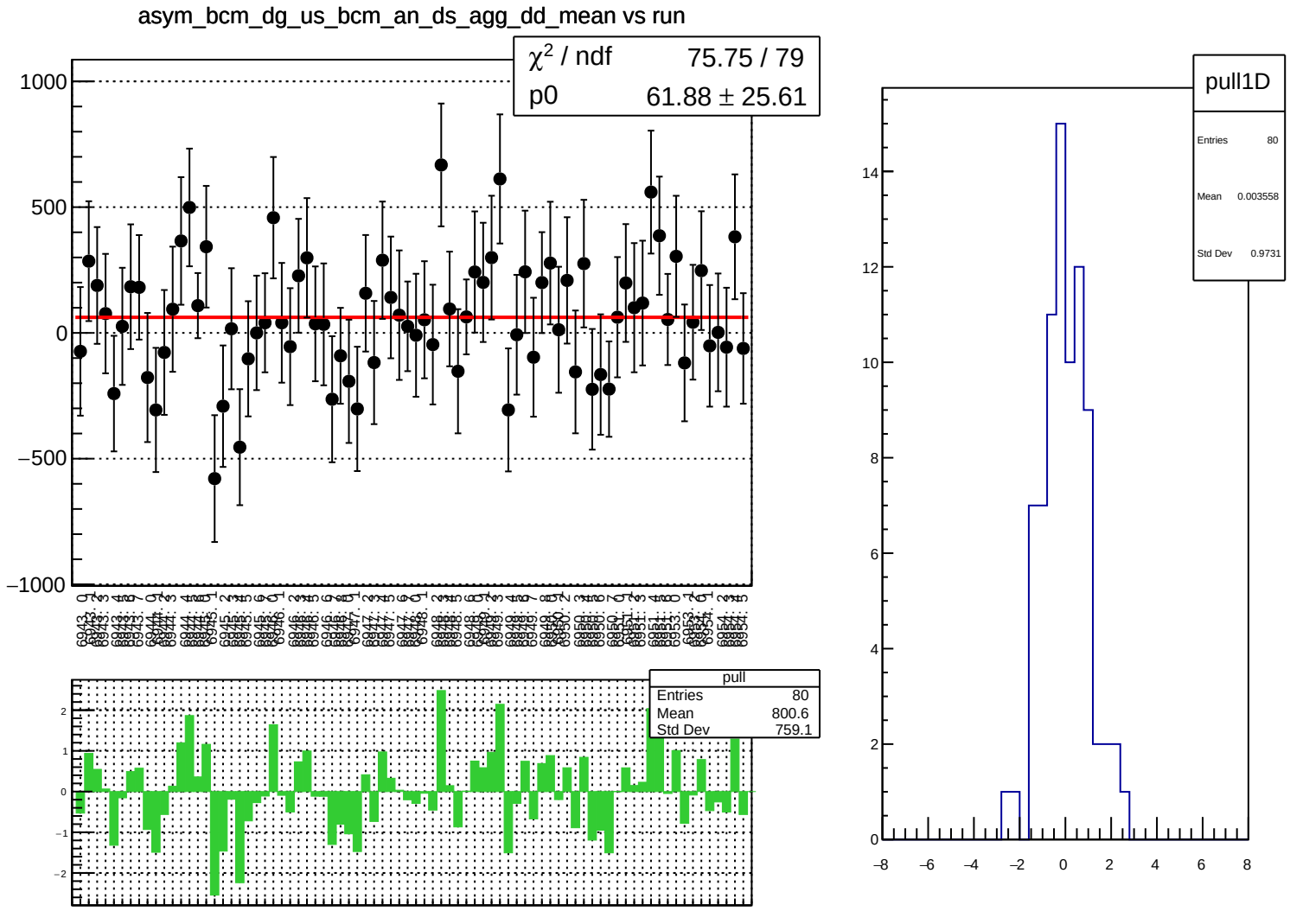

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 85.43 / 79
p0 8.485 ± 13.61
pull
Entries 80
Mean 149.6
Std Dev 95.31
pull1D
Entries 80
Mean 0.00946
Std Dev 1.033

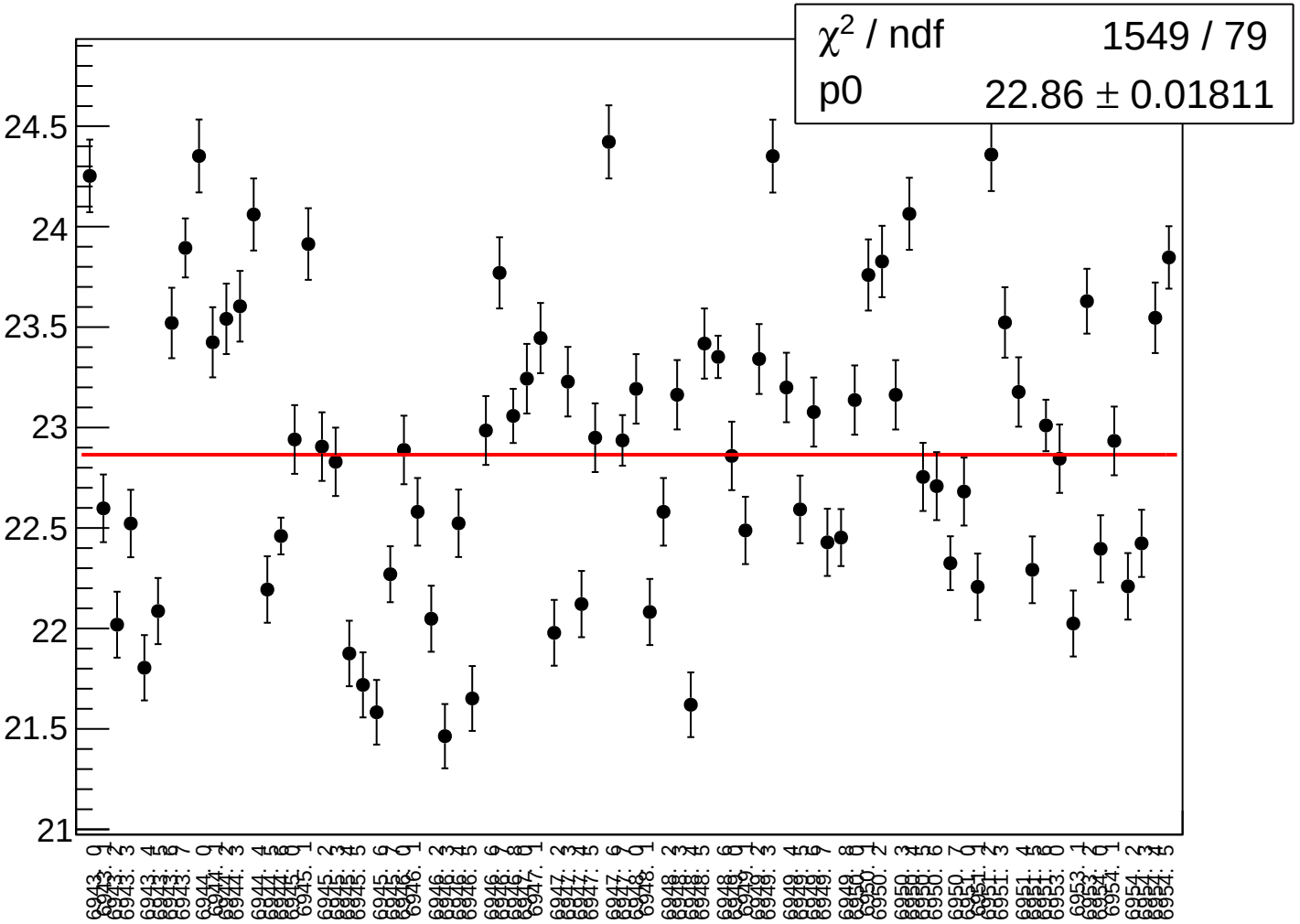

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 4.621e+04 / 79
p0 11.98 ± 0.009626
17
16
15
14
13
12
11
10
9

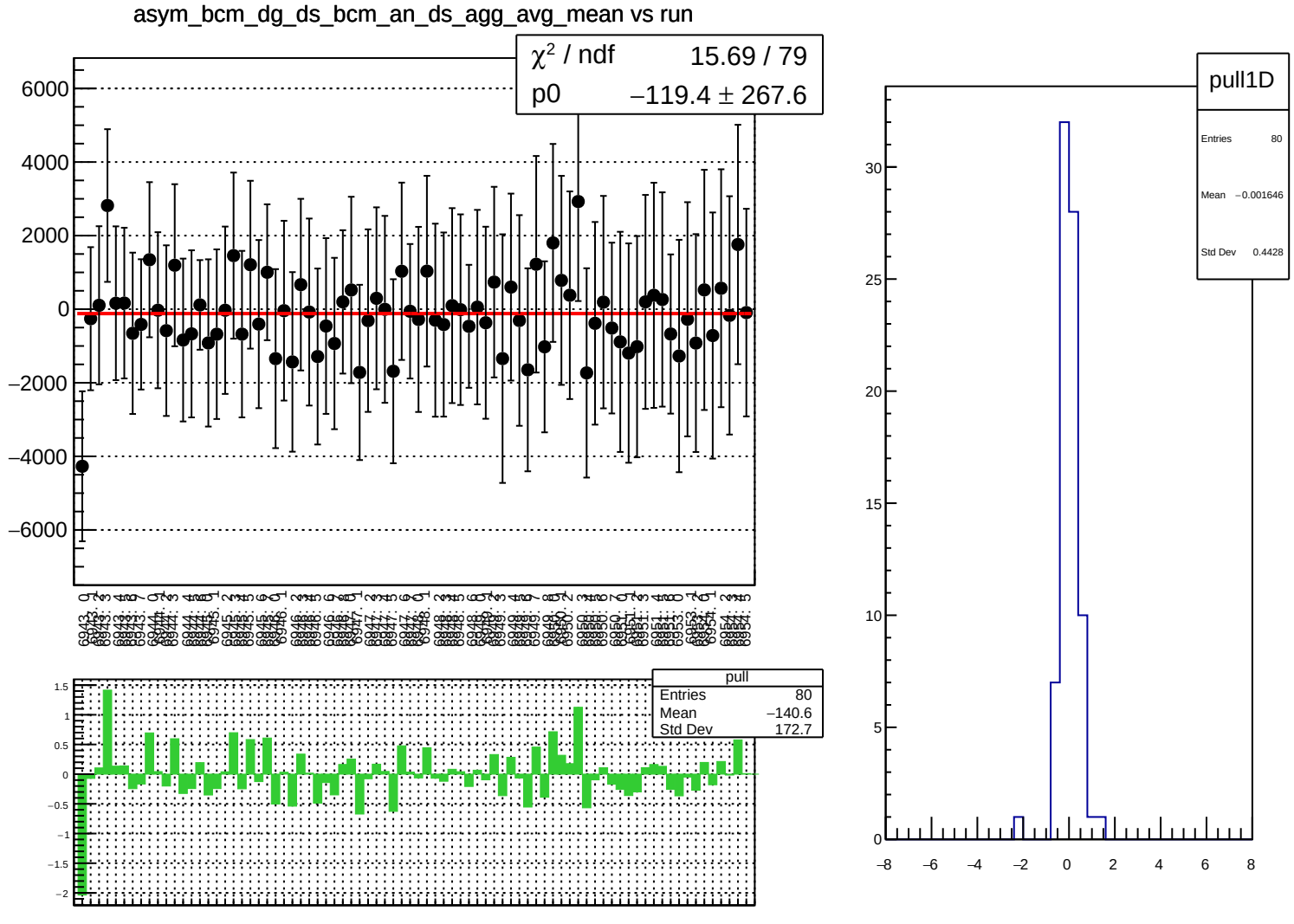

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.56 / 79
p0 −58.67 ± 267.1
pull
Entries 80
Mean −428
Std Dev 459.2

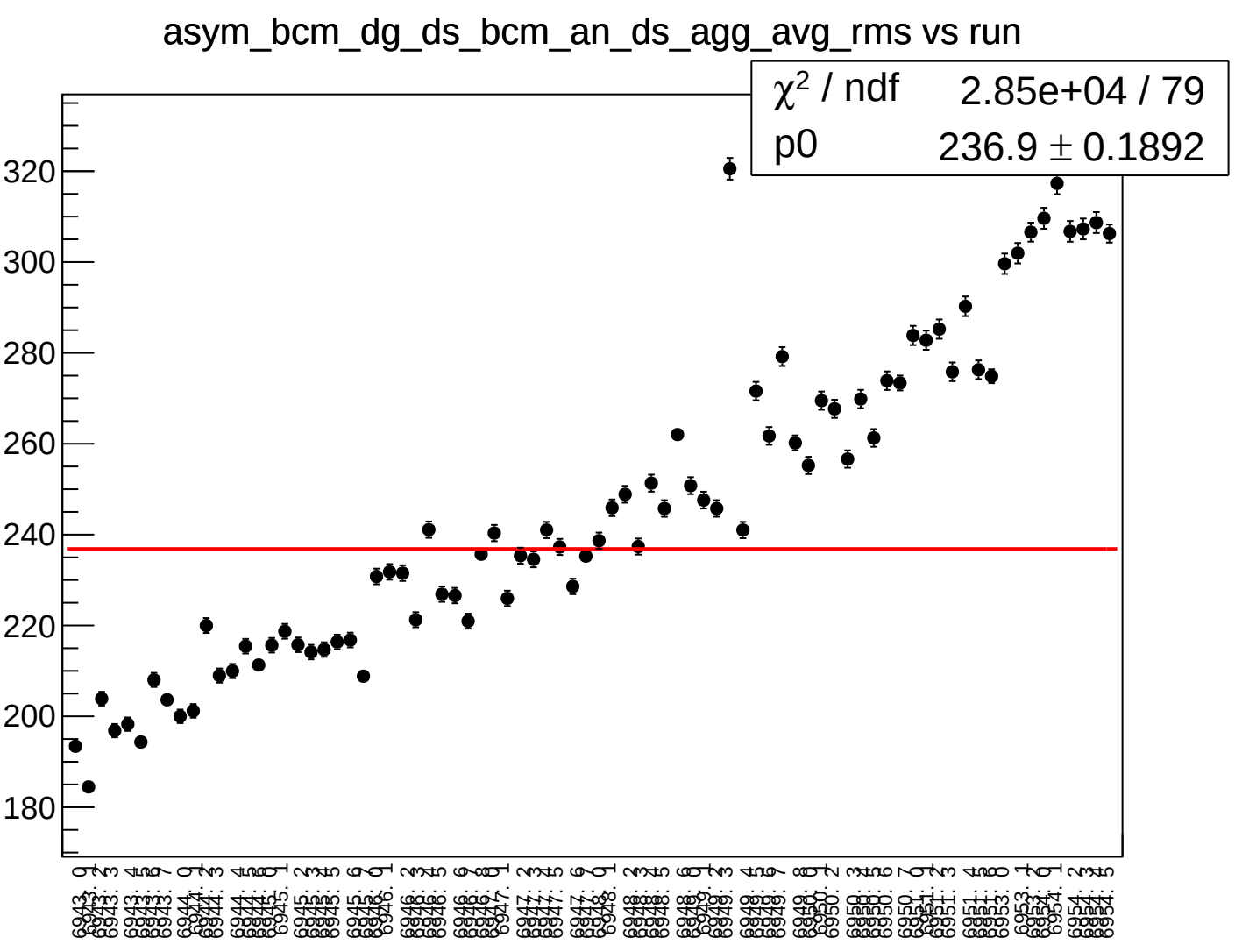

pull1D
Entries 80
Mean −0.0009689
Std Dev 0.4549

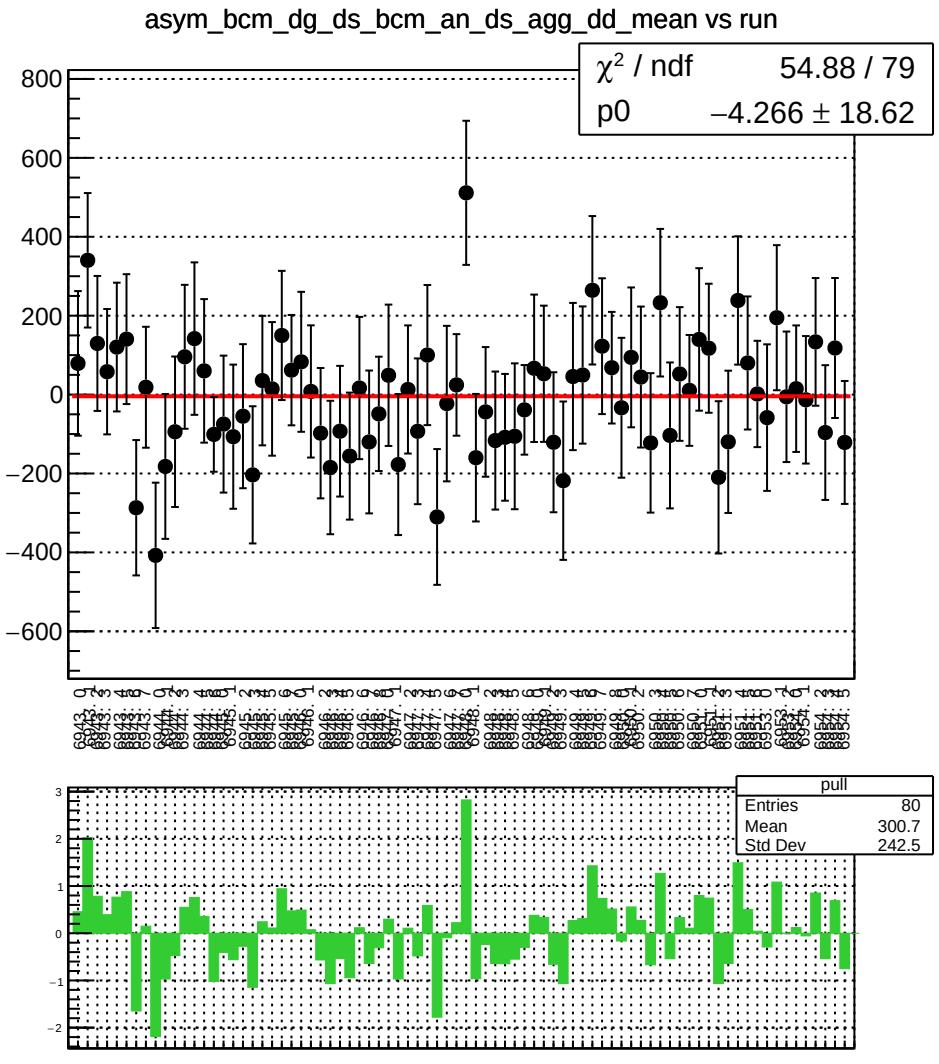

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.863e+04 / 79
p0 236.5 ± 0.1889
320
300
280
260
240
220
200
180

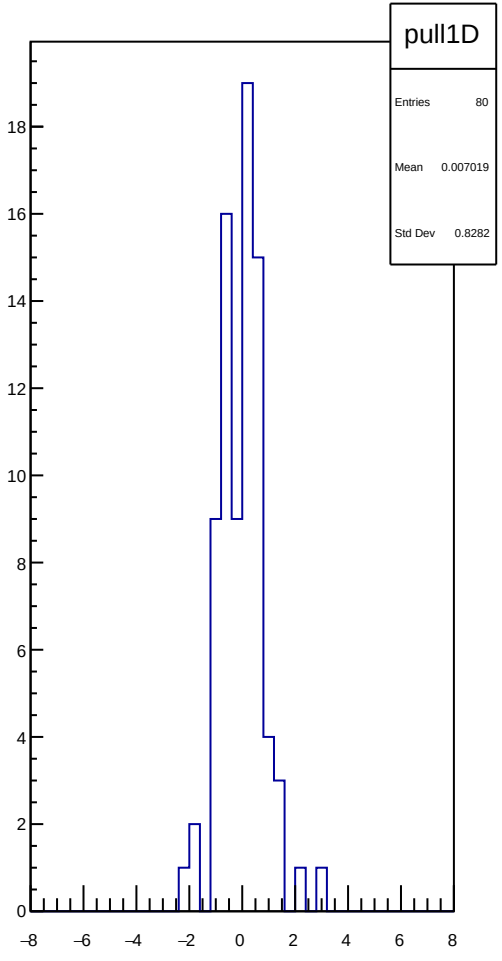

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.75 / 79
p0 61.88 ± 25.61
1000
500
0
−500
−1000
pull
Entries 80
Mean 800.6
Std Dev 759.1
2
1
0
−1
−2
pull1D
Entries 80
Mean 0.003558
Std Dev 0.9731
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

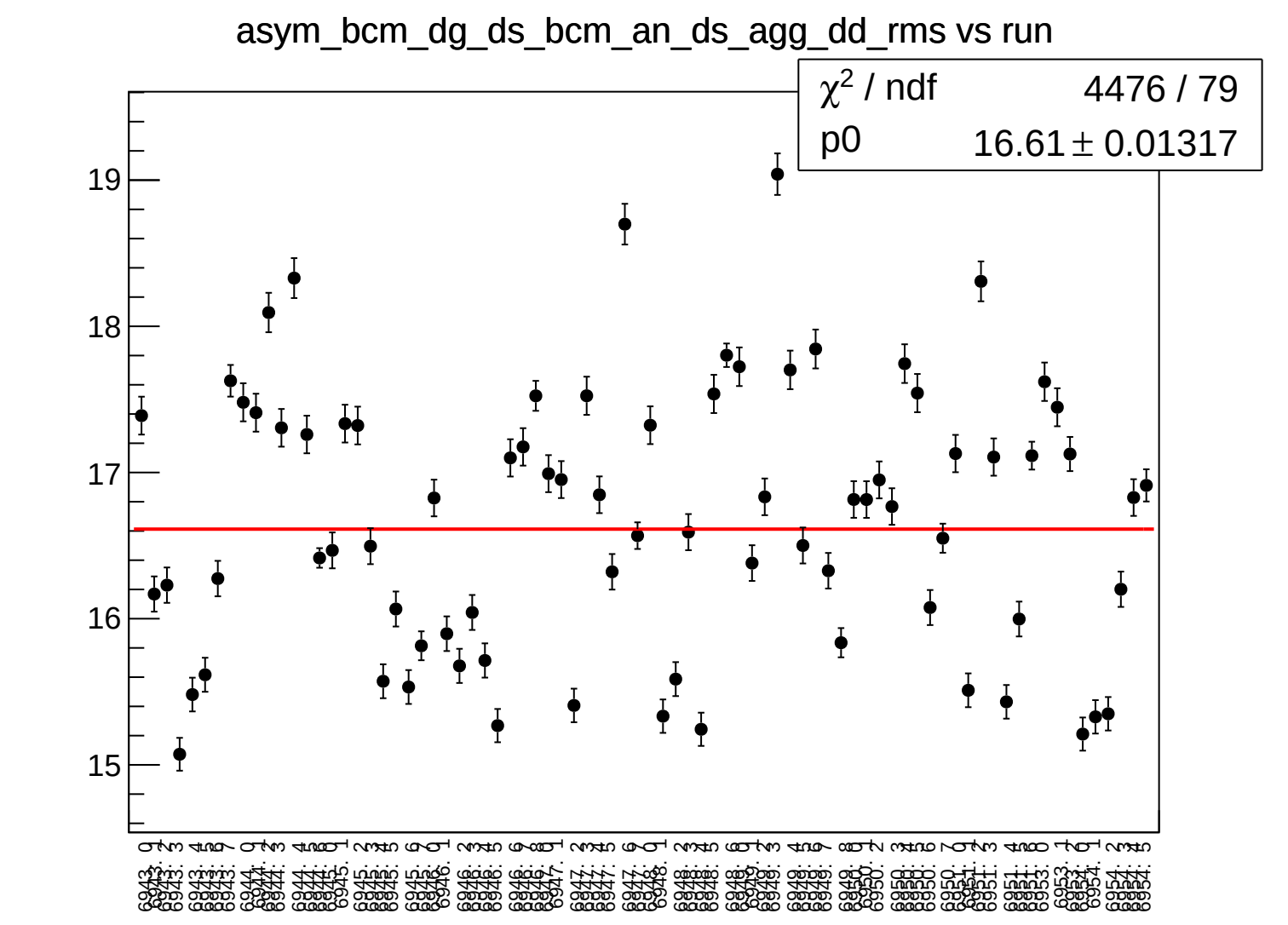

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1549 / 79
p0 22.86 ± 0.01811
24.5
24
23.5
23
22.5
22
21.5
21

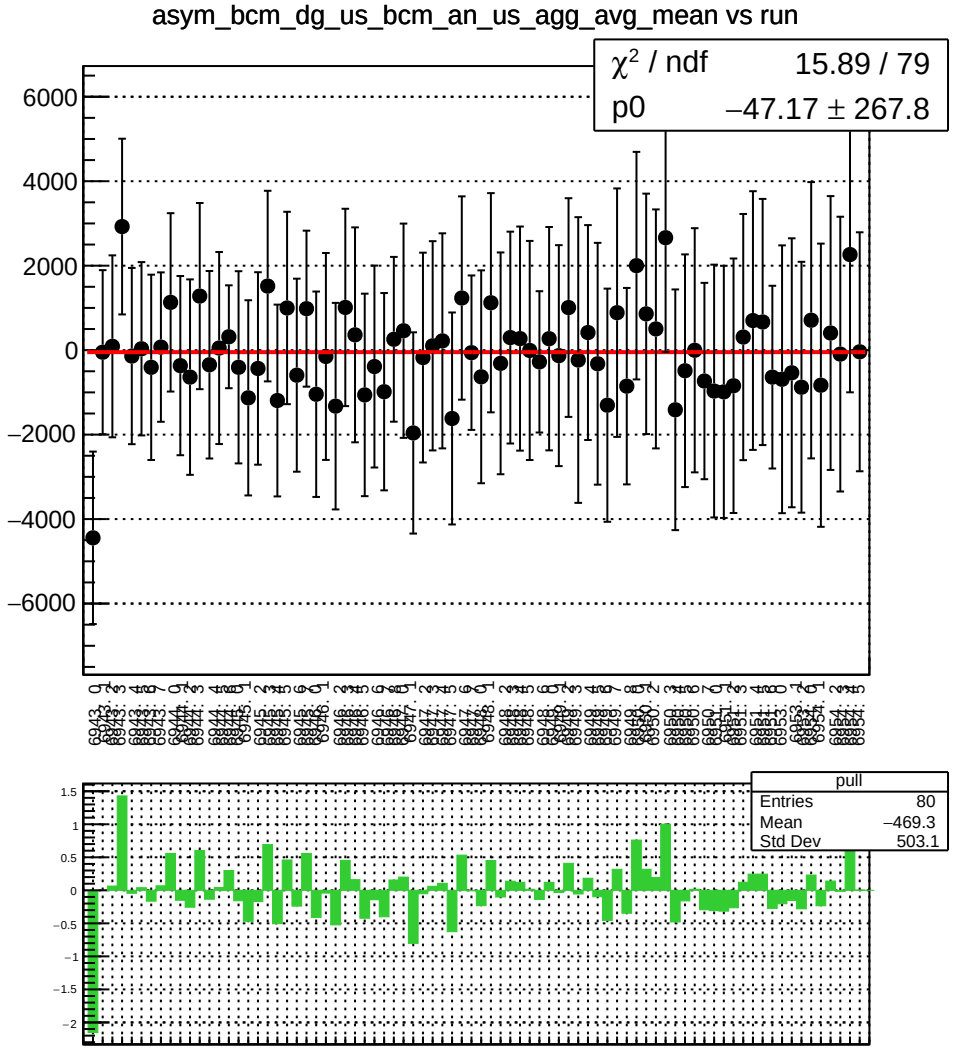

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.69 / 79
p0 −119.4 ± 267.6
pull
Entries 80
Mean −140.6
Std Dev 172.7
pull1D
Entries 80
Mean −0.001646
Std Dev 0.4428

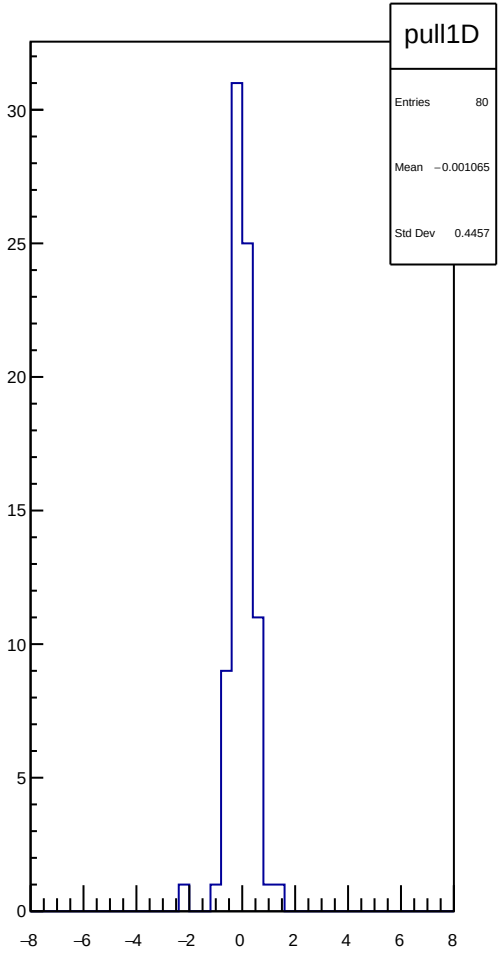

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.85e+04 / 79
p0 236.9 ± 0.1892
320
300
280
260
240
220
200
180

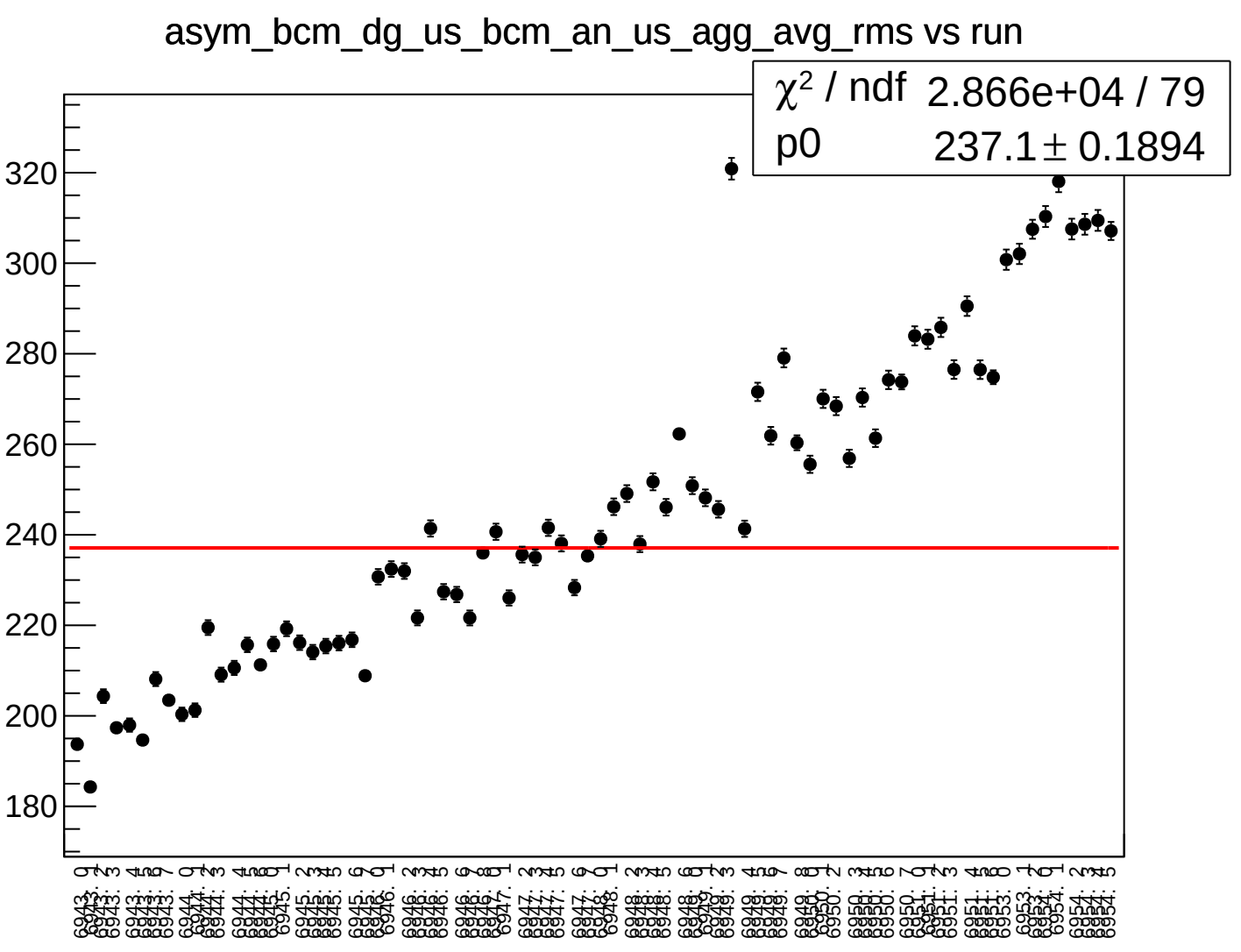

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 54.88 / 79
p0 −4.266 ± 18.62
pull
Entries 80
Mean 300.7
Std Dev 242.5

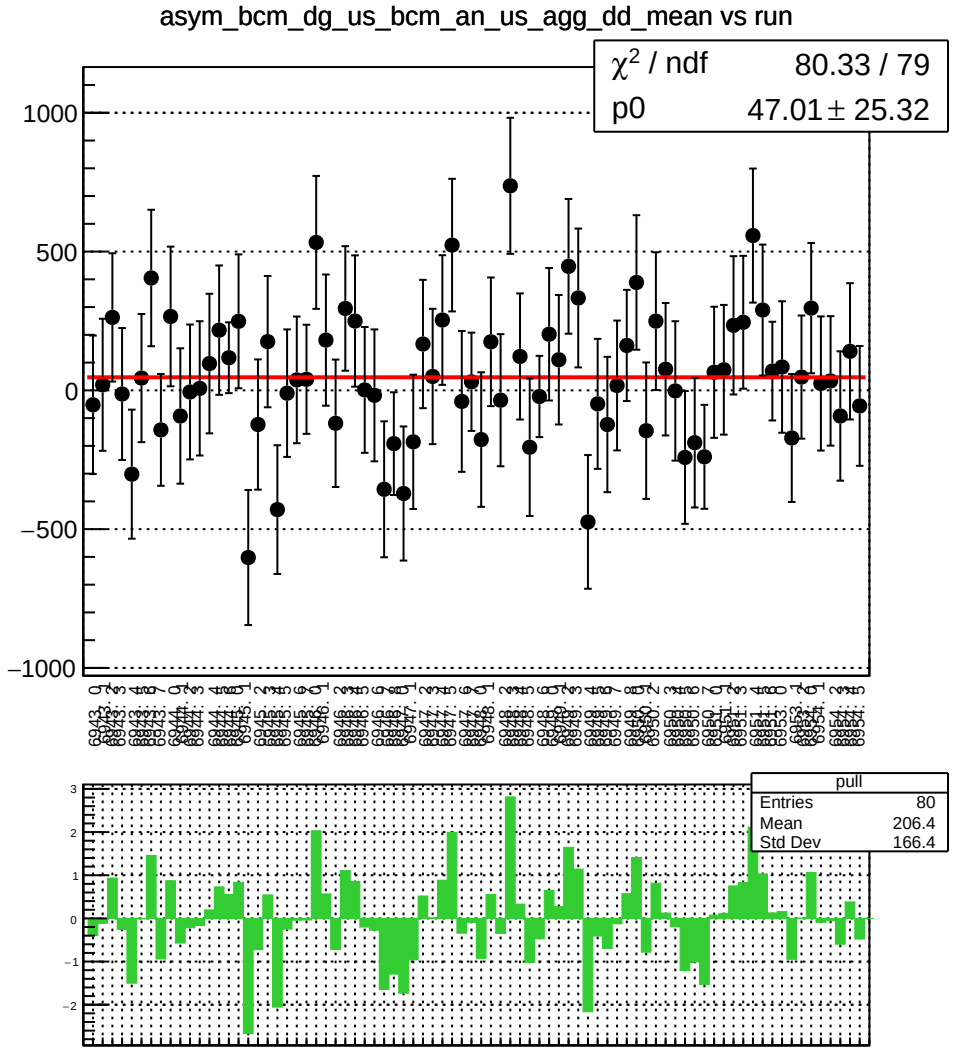

pull1D
Entries 80
Mean 0.007019
Std Dev 0.8282

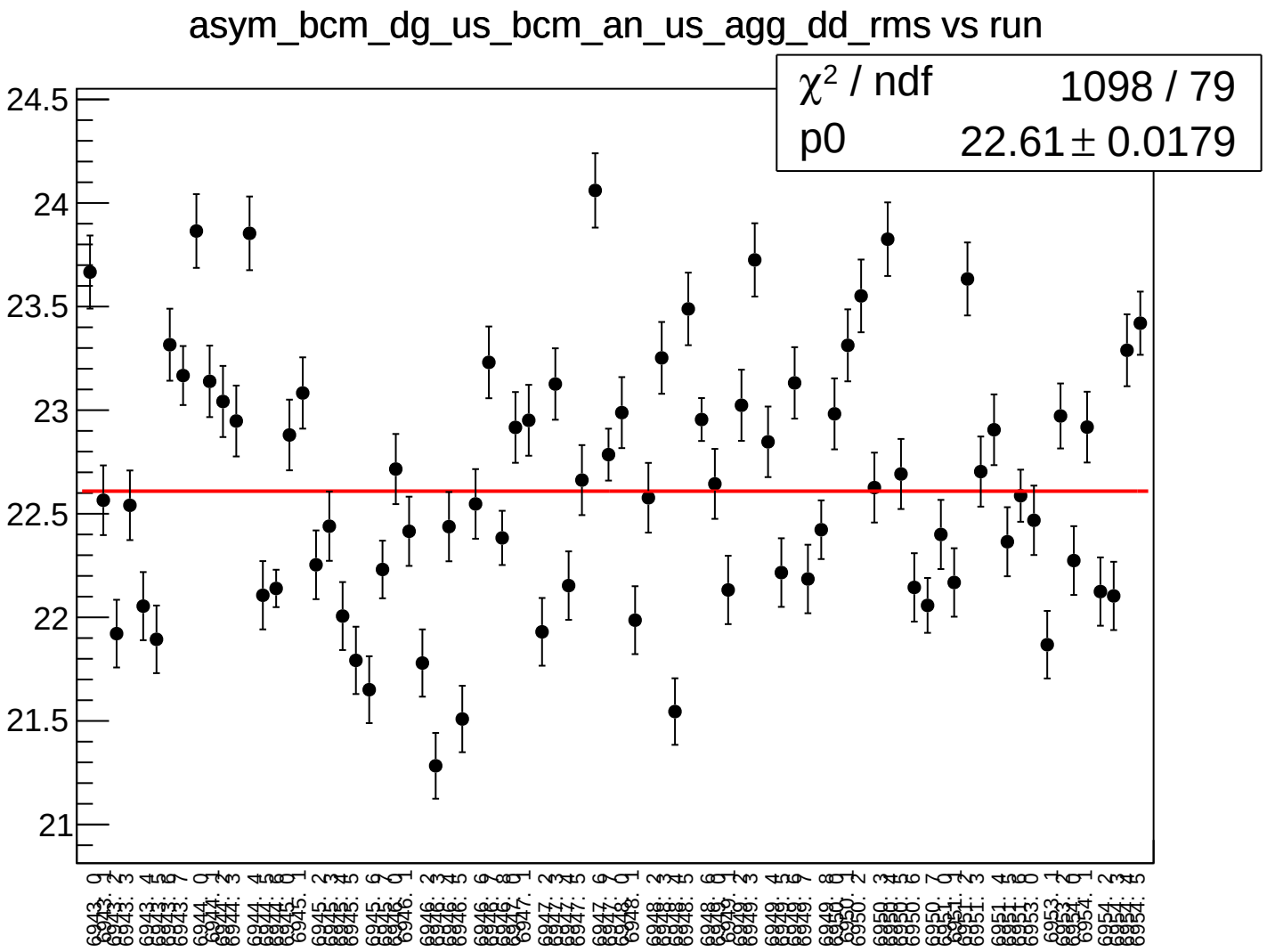

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ^2 / ndf 4476 / 79
p0 16.61 ± 0.01317
19
18
17
16
15

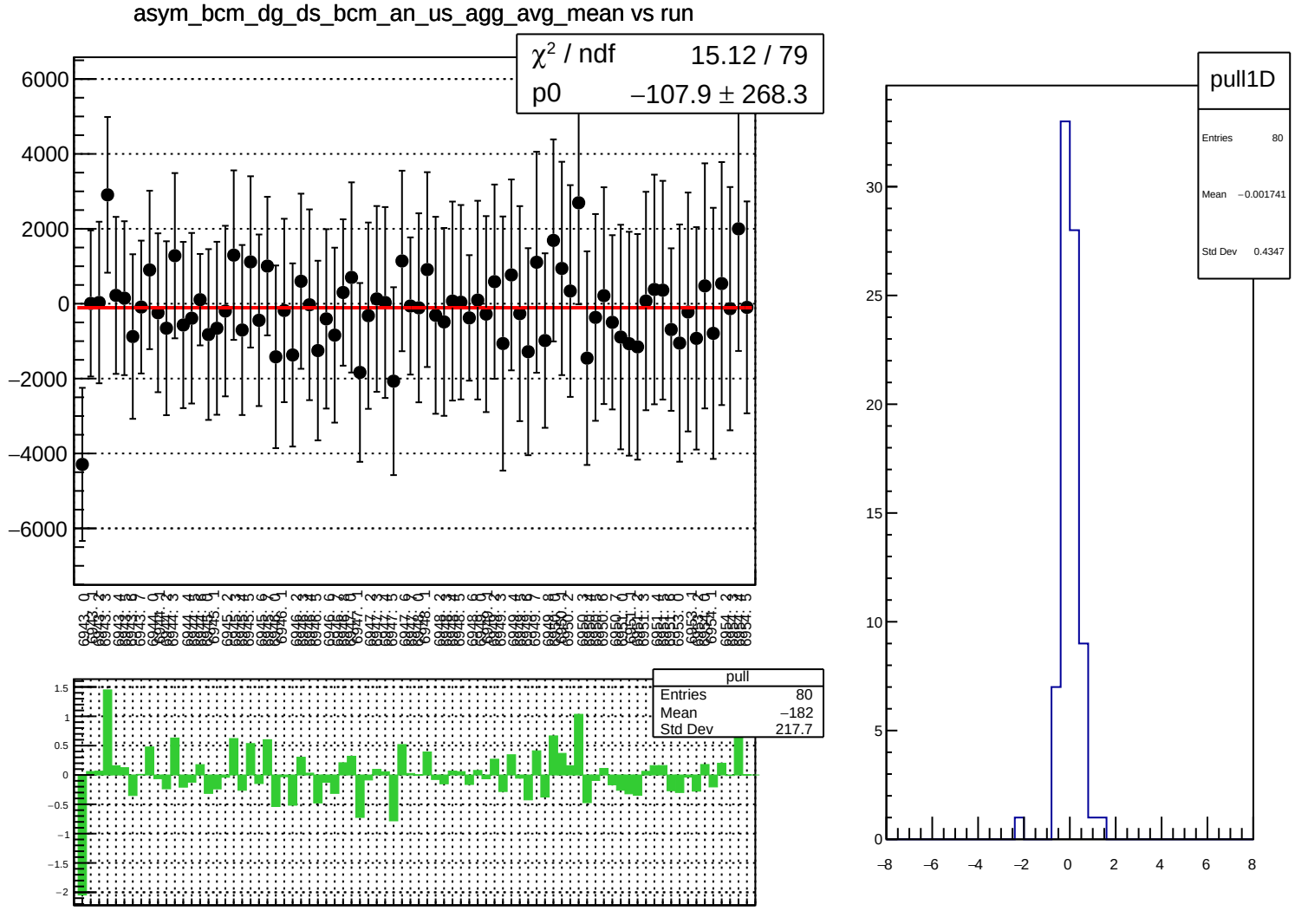

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.89 / 79
p0 −47.17 ± 267.8
pull
Entries 80
Mean −469.3
Std Dev 503.1

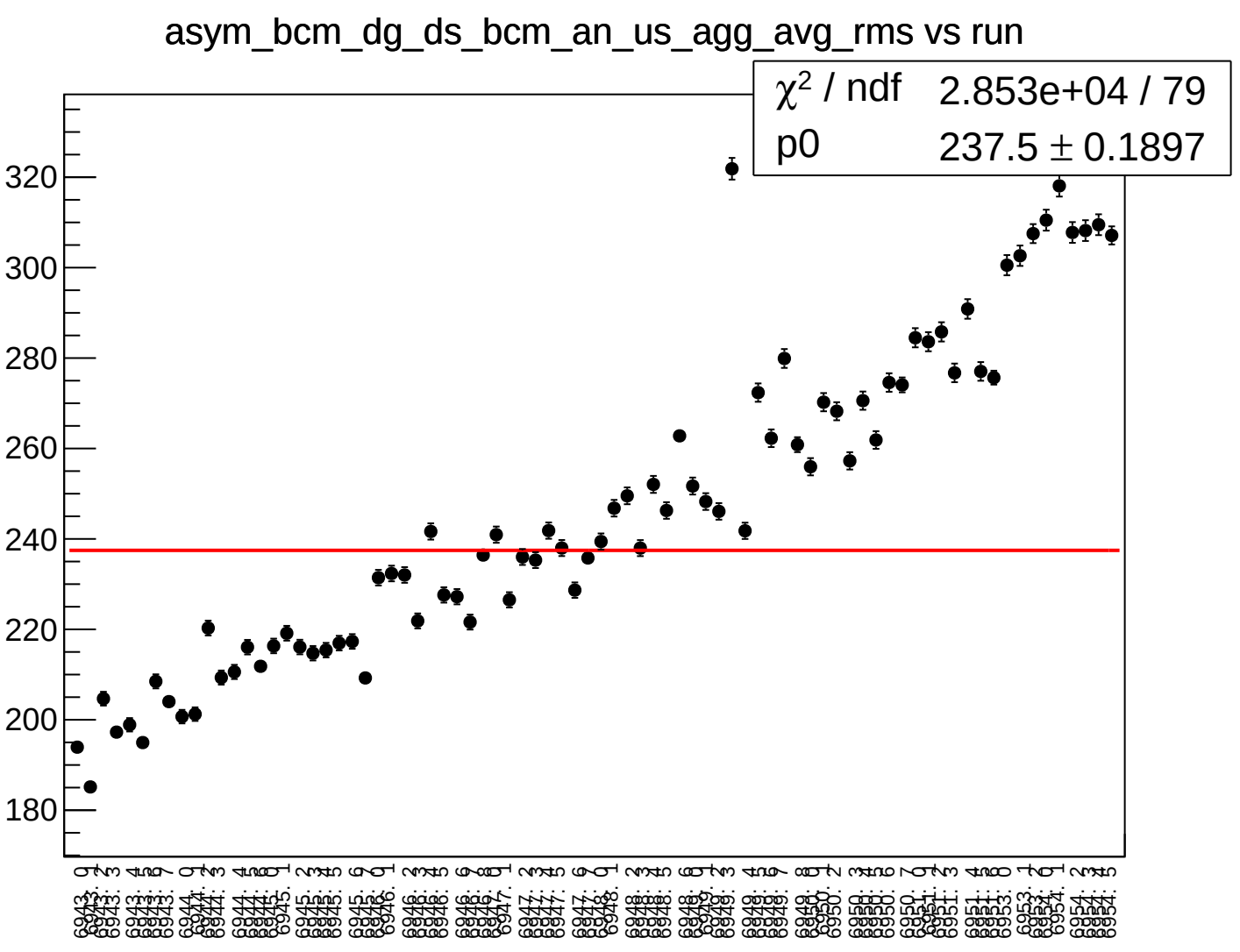

pull1D
Entries 80
Mean −0.001065
Std Dev 0.4457

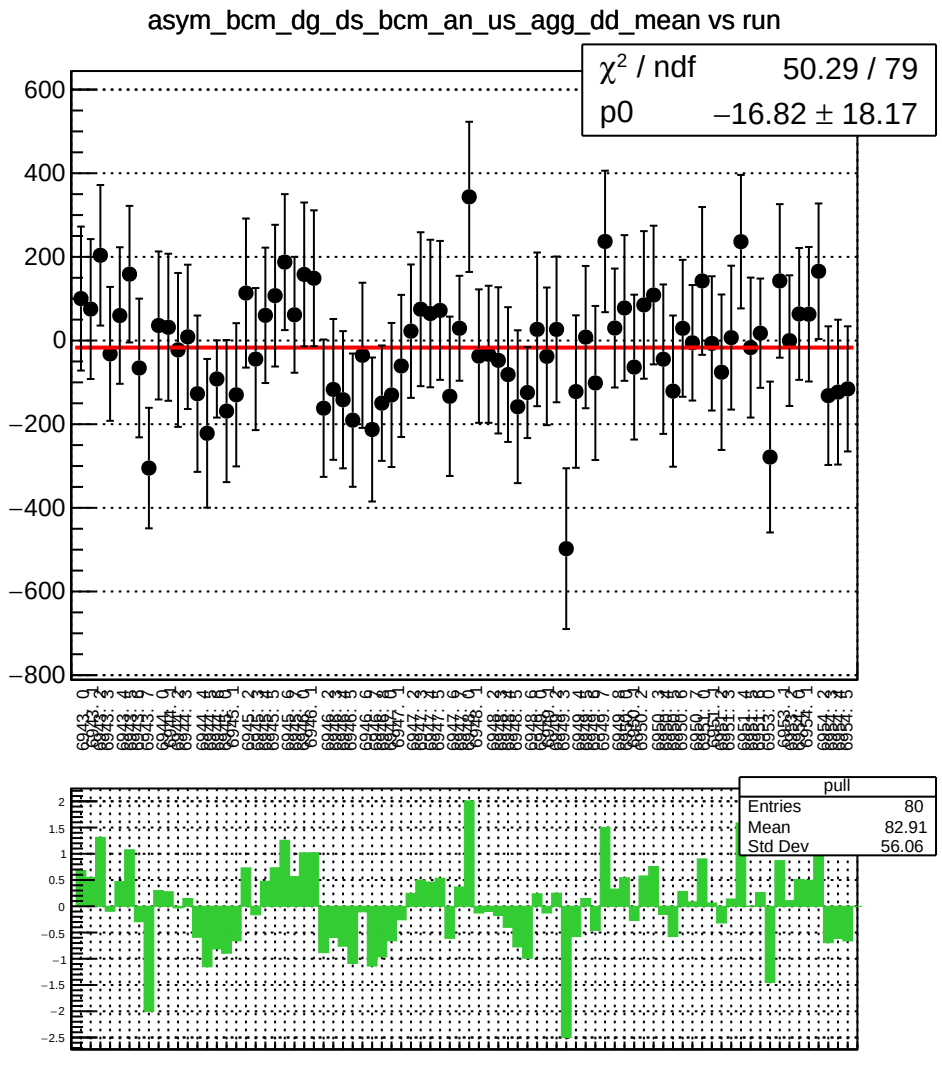

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.866e+04 / 79
p0 237.1 ± 0.1894
320
300
280
260
240
220
200
180

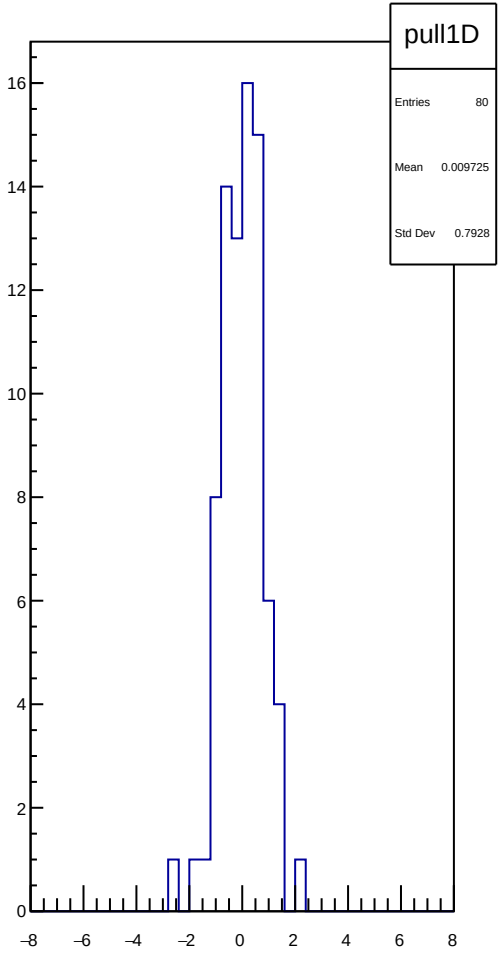

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 80.33 / 79
p0 47.01 ± 25.32
1000
500
0
−500
−1000
pull
Entries 80
Mean 206.4
Std Dev 166.4
3
2
1
0
−1
−2
pull1D
Entries 80
Mean 0.0101
Std Dev 1.002
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

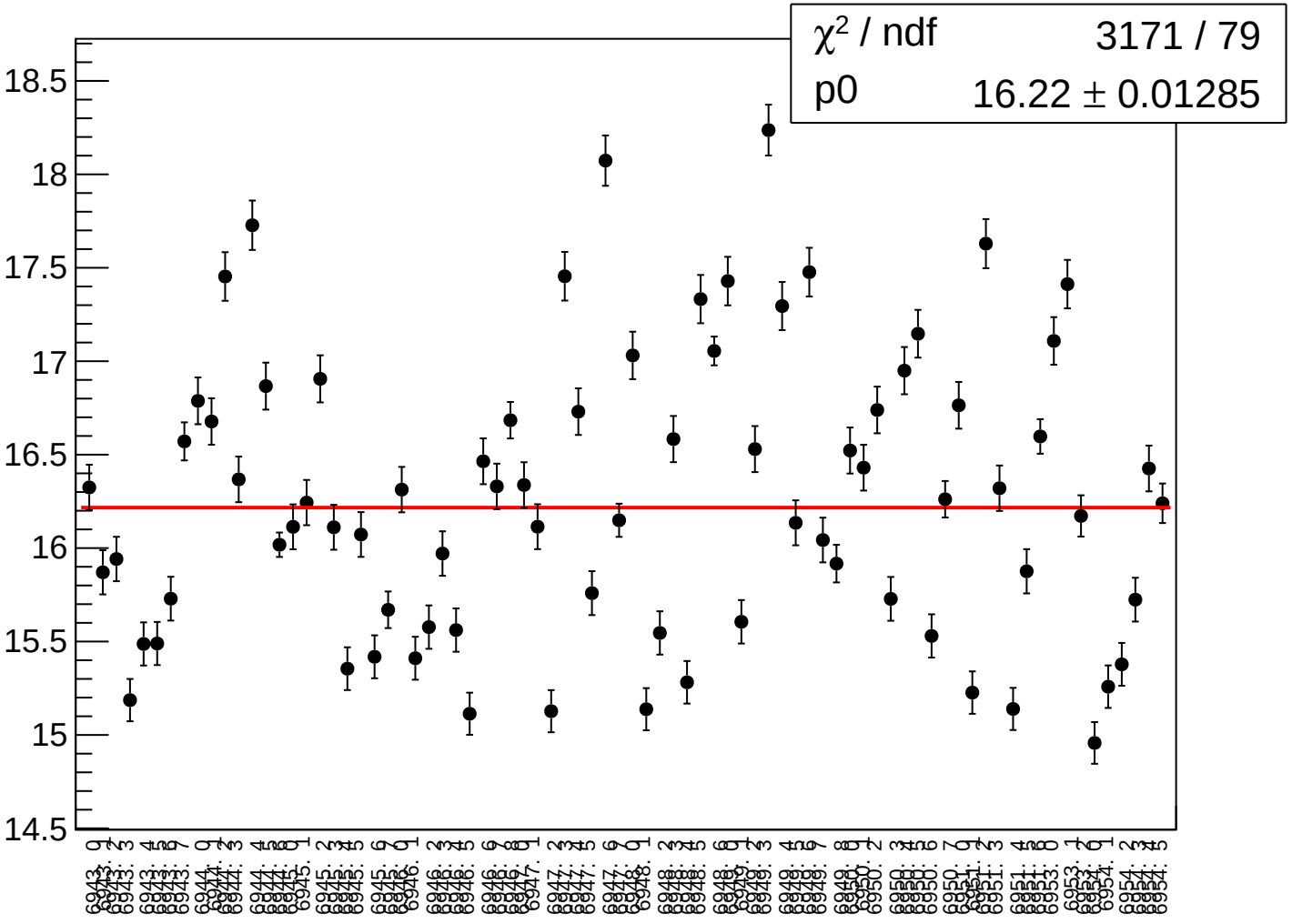

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1098 / 79
p0 22.61 ± 0.0179
24.5
24
23.5
23
22.5
22
21.5
21

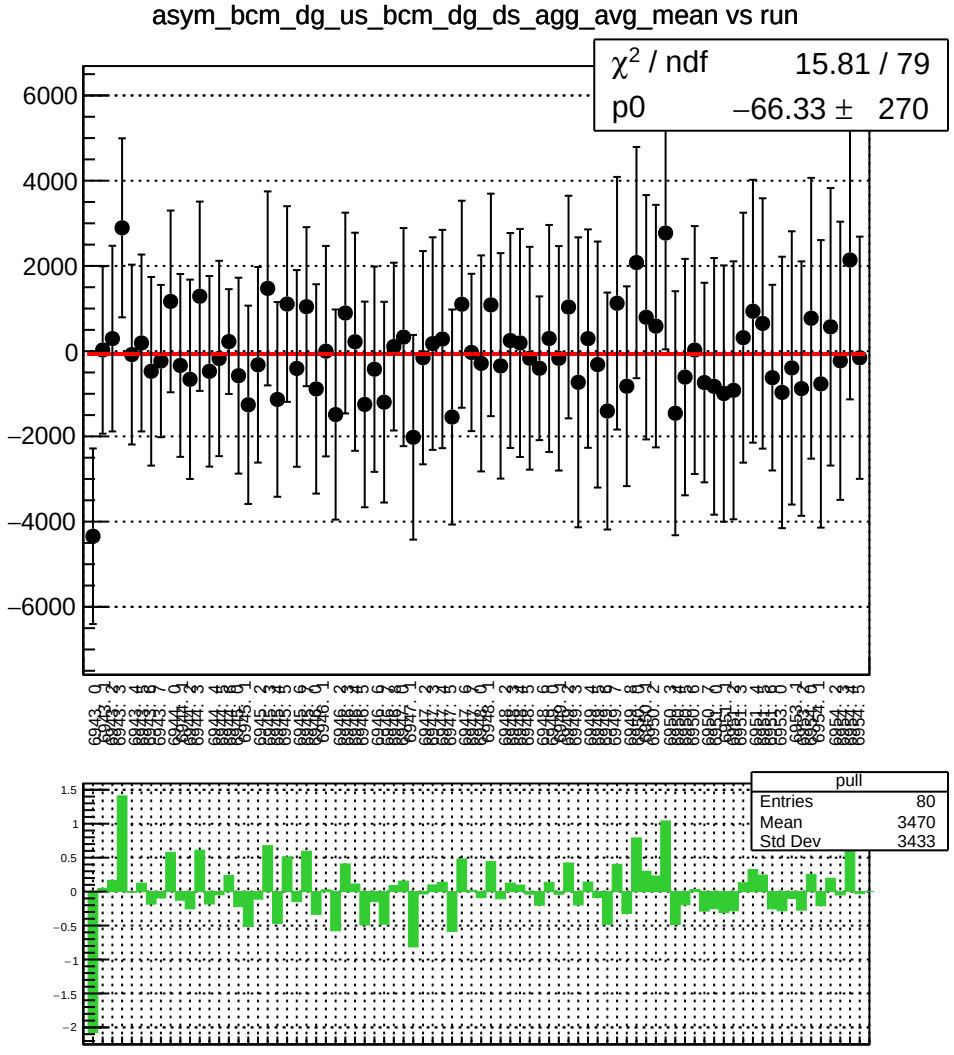

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.12 / 79
p0 −107.9 ± 268.3
pull
Entries 80
Mean −182
Std Dev 217.7
pull1D
Entries 80
Mean −0.001741
Std Dev 0.4347

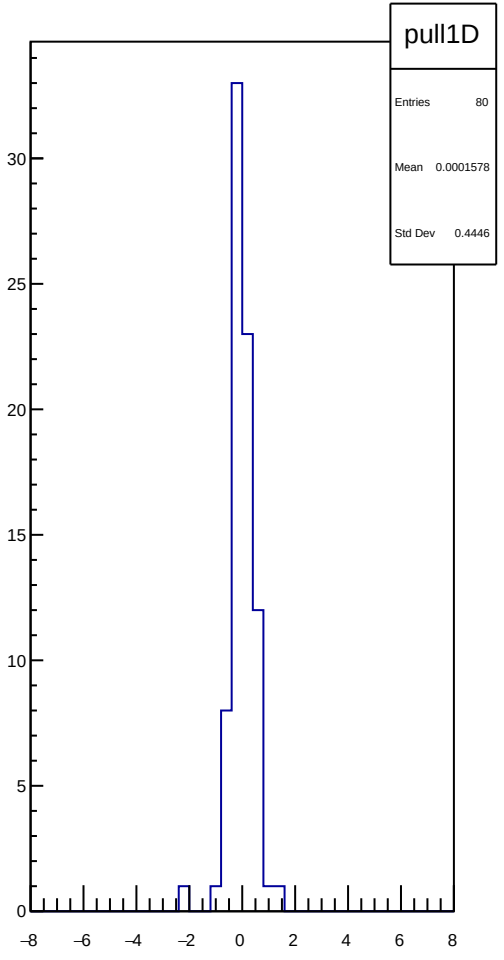

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.853e+04 / 79
p0 237.5 ± 0.1897
320
300
280
260
240
220
200
180

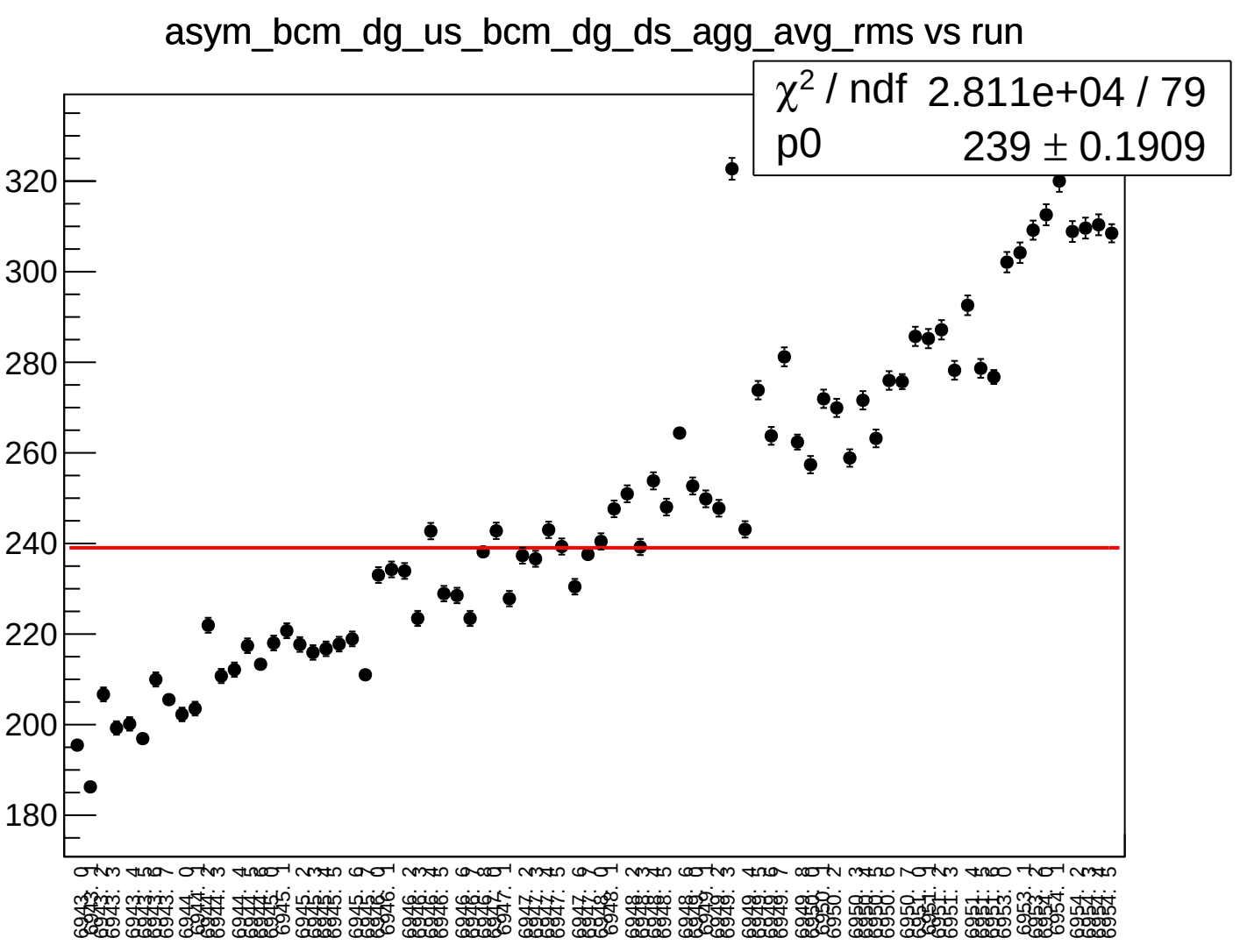

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 50.29 / 79
p0 −16.82 ± 18.17
pull
Entries 80
Mean 82.91
Std Dev 56.06

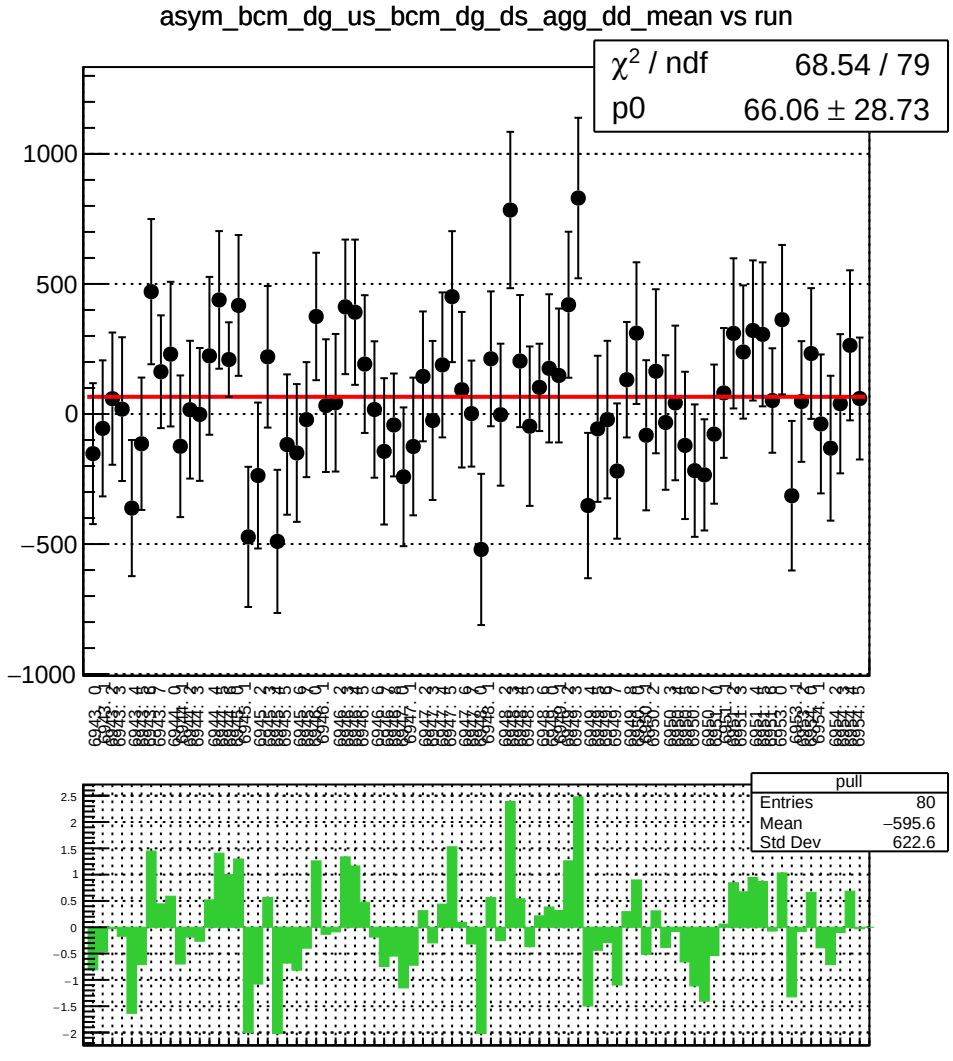

pull1D
Entries 80
Mean 0.009725
Std Dev 0.7928

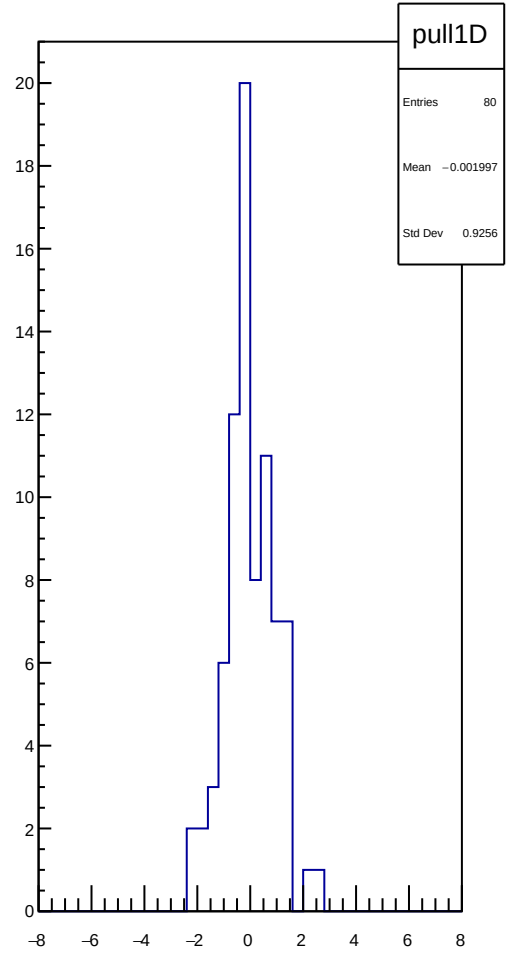

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3171 / 79
p0 16.22 ± 0.01285
18.5
18
17.5
17
16.5
16
15.5
15
14.5

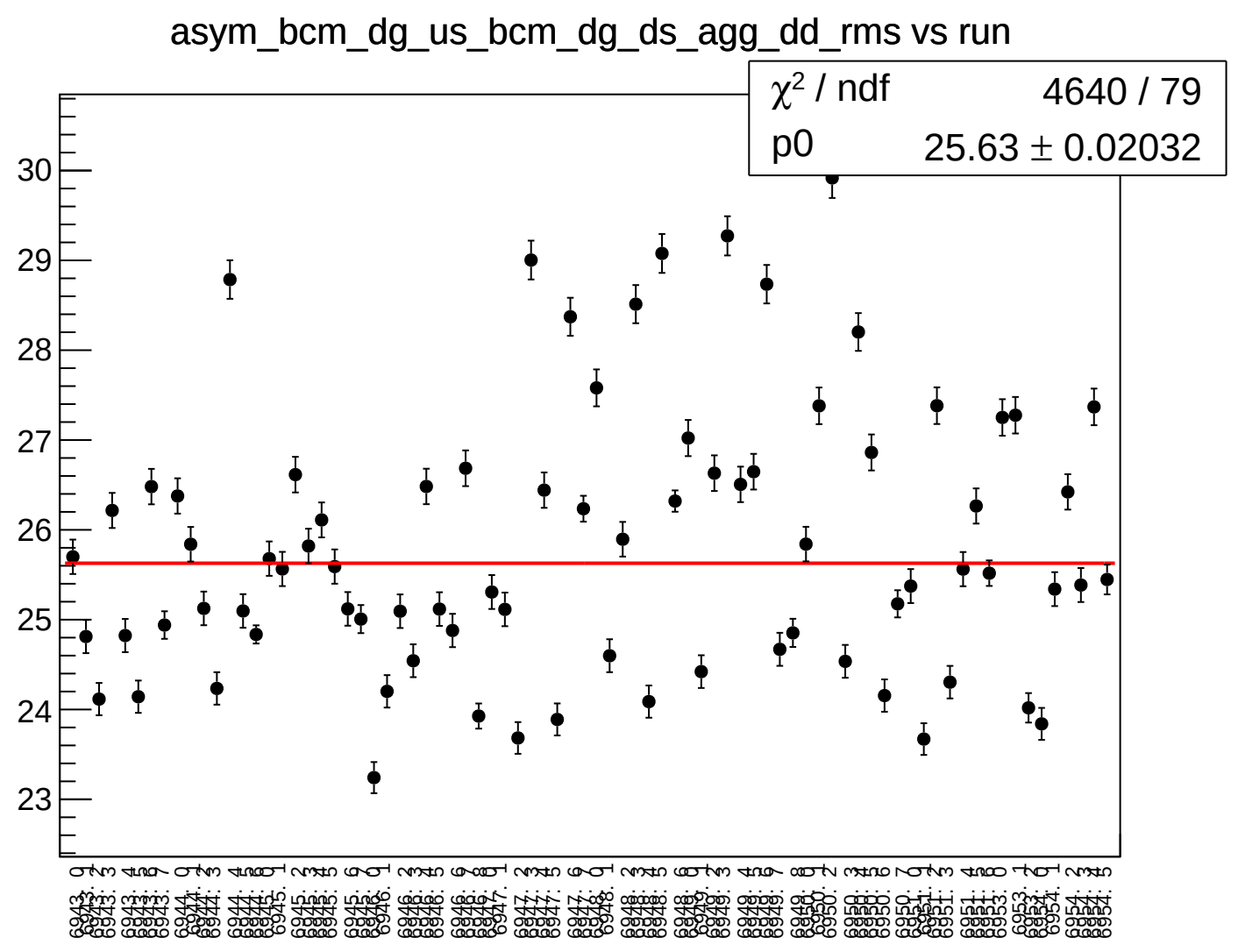

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.81 / 79
p0 −66.33 ± 270
pull
Entries 80
Mean 3470
Std Dev 3433

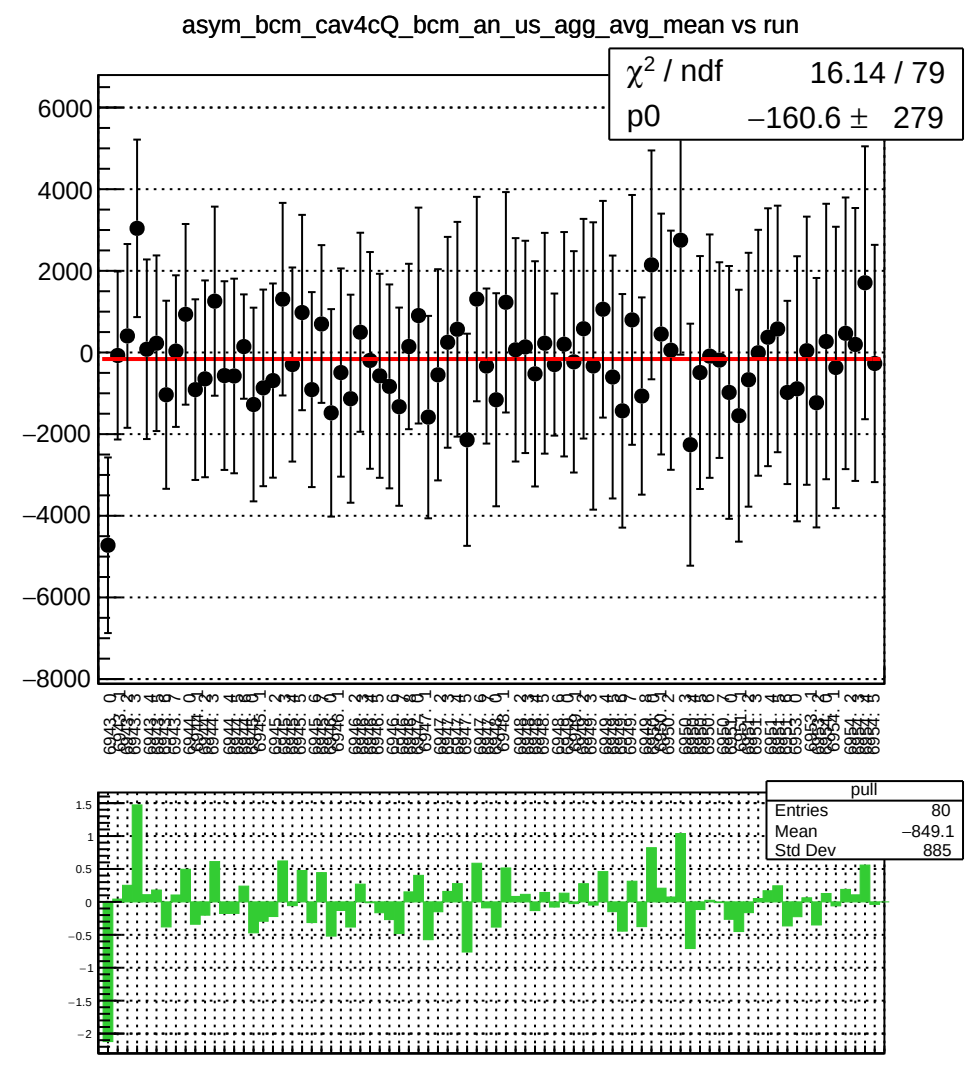

pull1D
Entries 80
Mean 0.0001578
Std Dev 0.4446

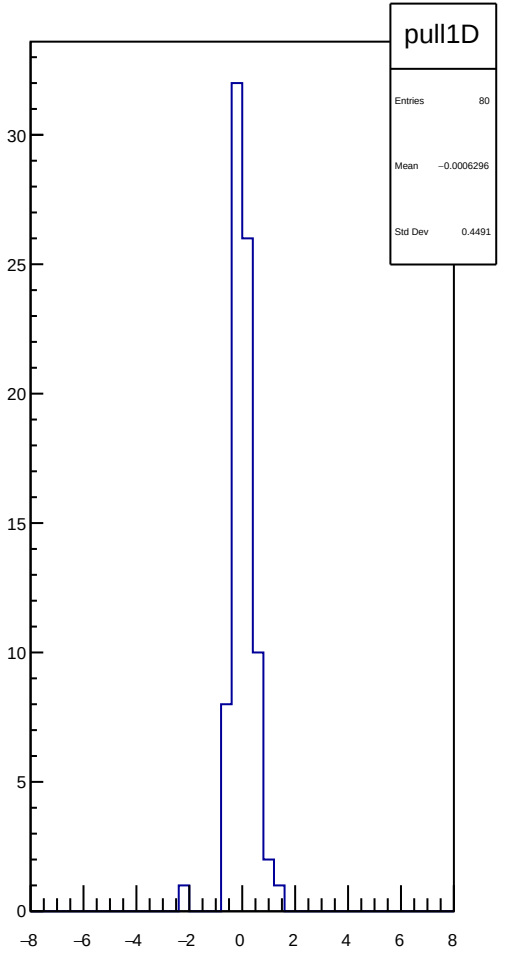

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.811e+04 / 79
p0 239 ± 0.1909
320
300
280
260
240
220
200
180

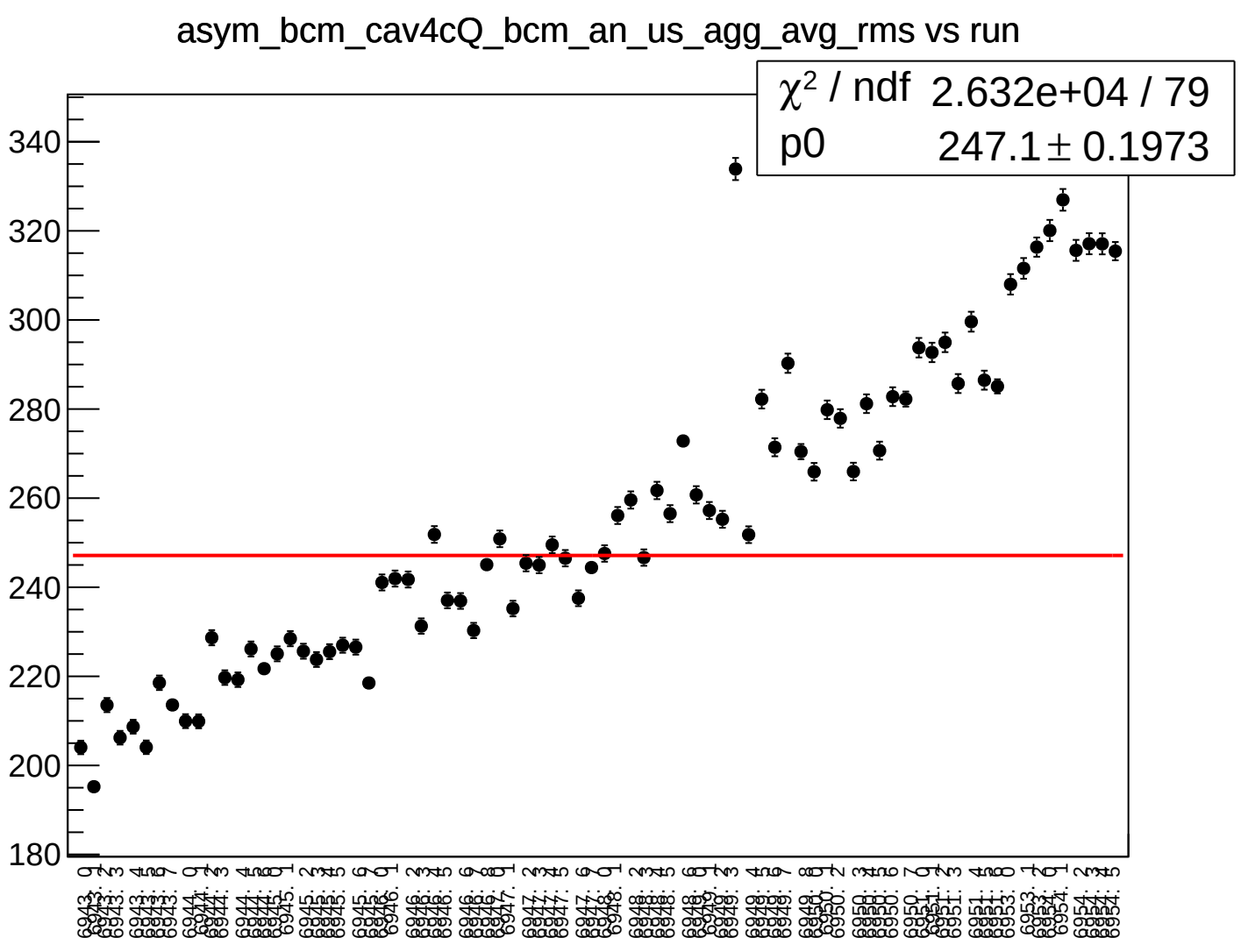

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 68.54 / 79
p0 66.06 ± 28.73
1000
500
0
−500
−1000
pull
Entries 80
Mean −595.6
Std Dev 622.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

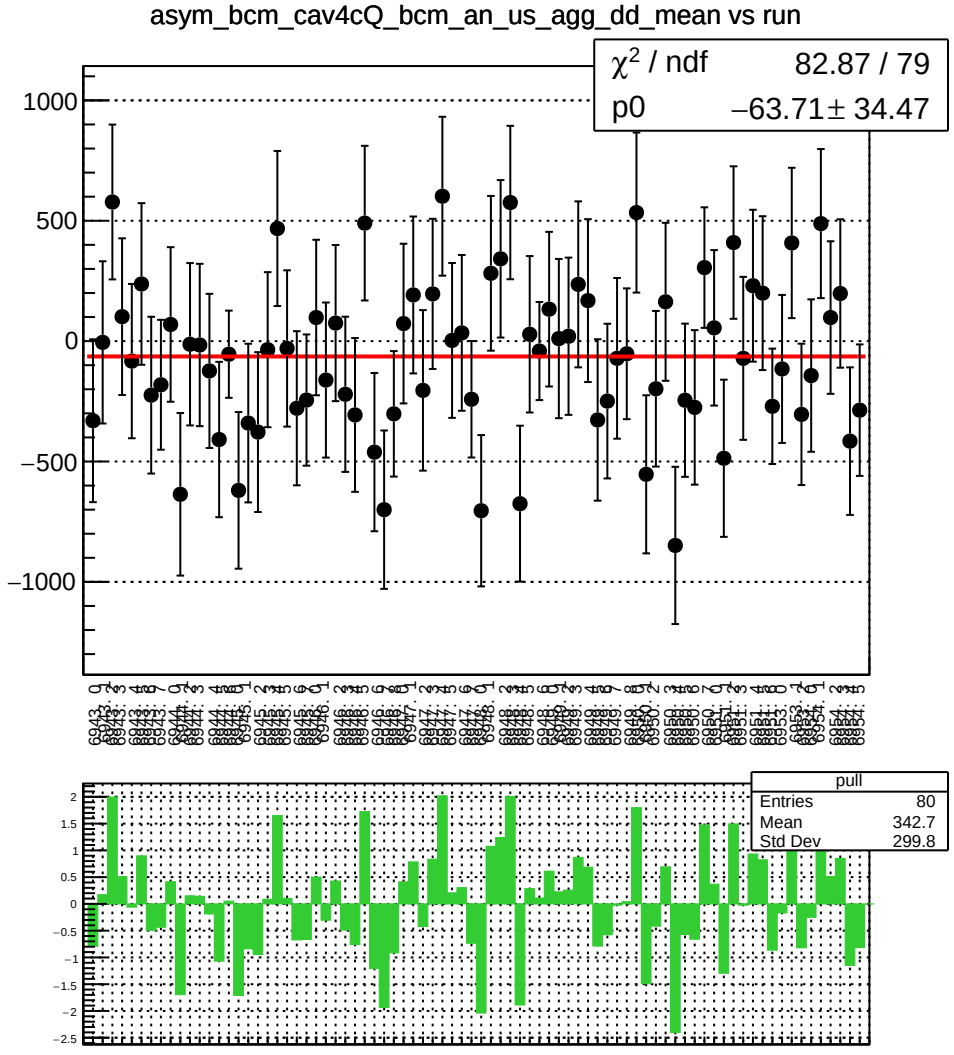

pull1D
Entries 80
Mean −0.001997
Std Dev 0.9256
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

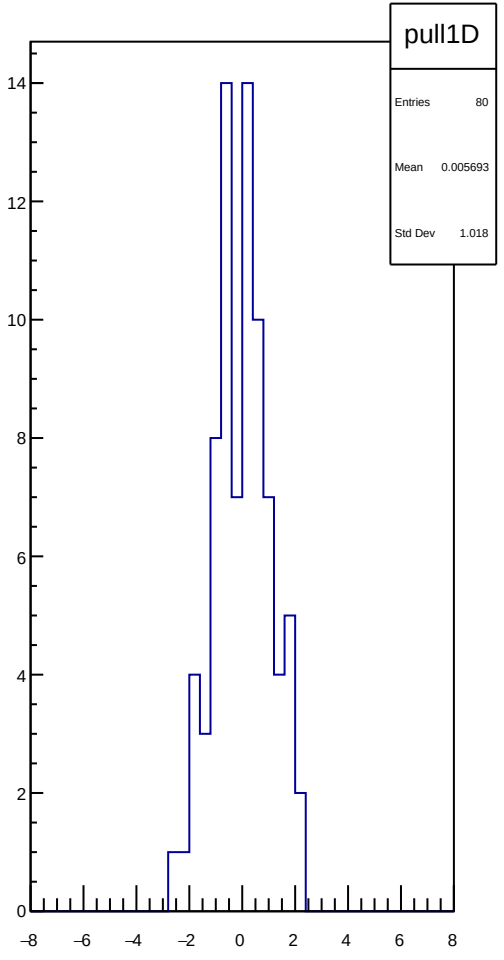

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4640 / 79
p0 25.63 ± 0.02032
30
29
28
27
26
25
24
23

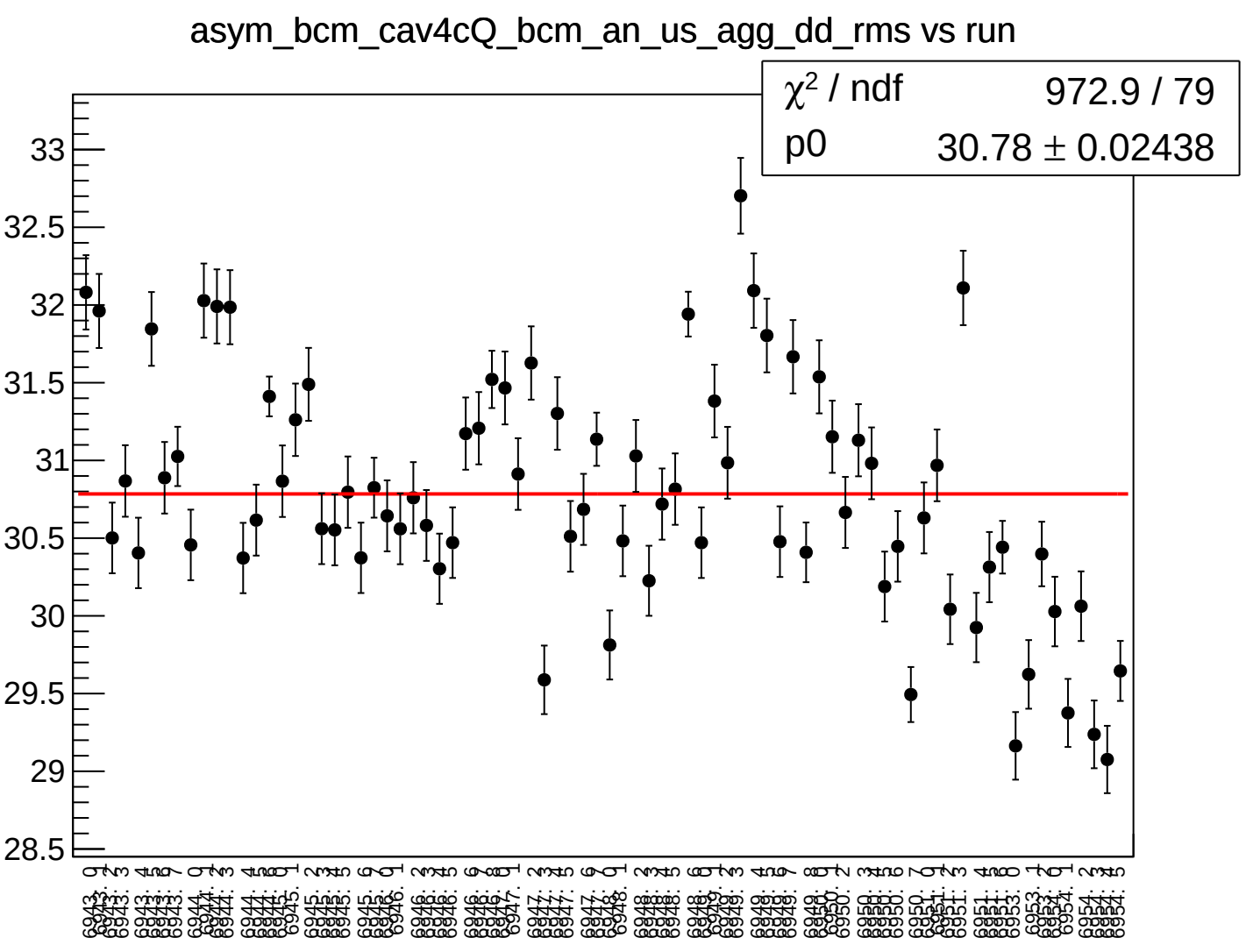

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.14 / 79
p0 −160.6 ± 279
pull
Entries 80
Mean −849.1
Std Dev 885

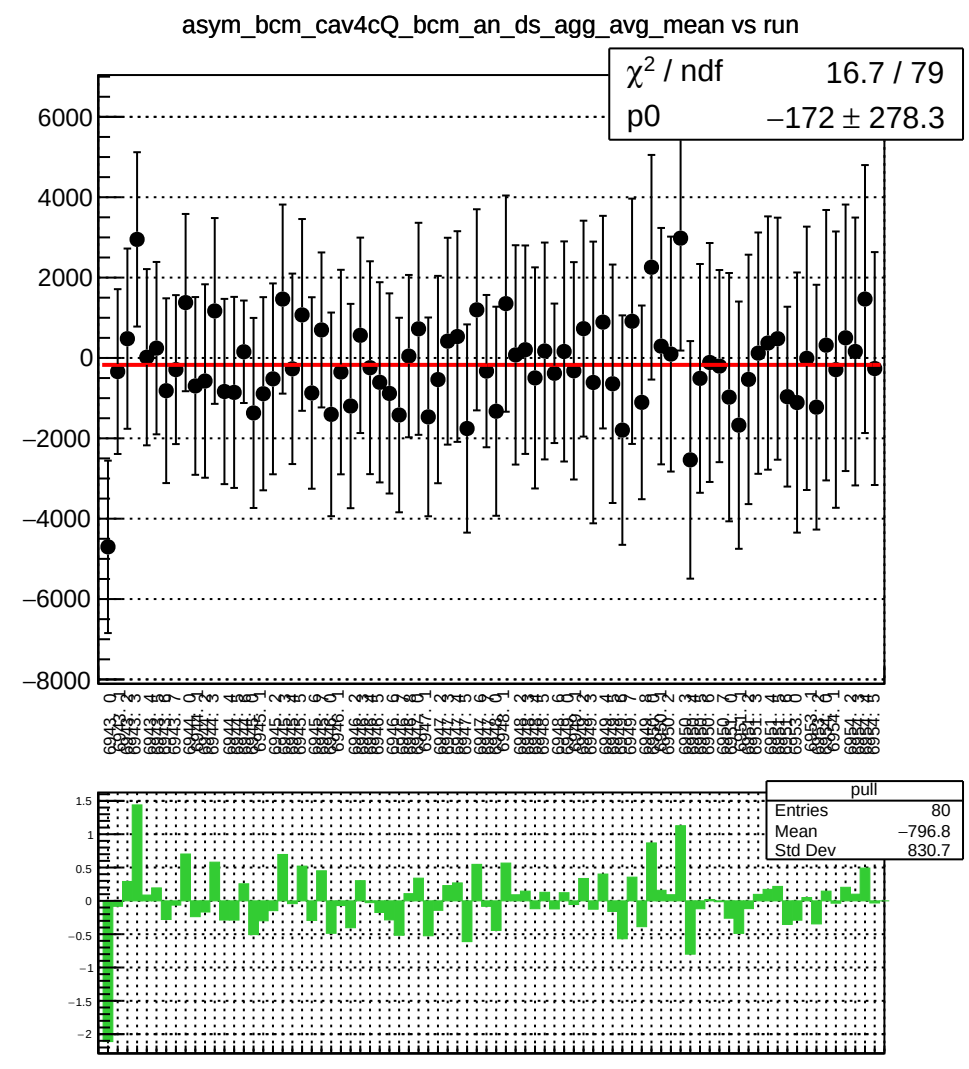

pull1D
Entries 80
Mean −0.0006296
Std Dev 0.4491

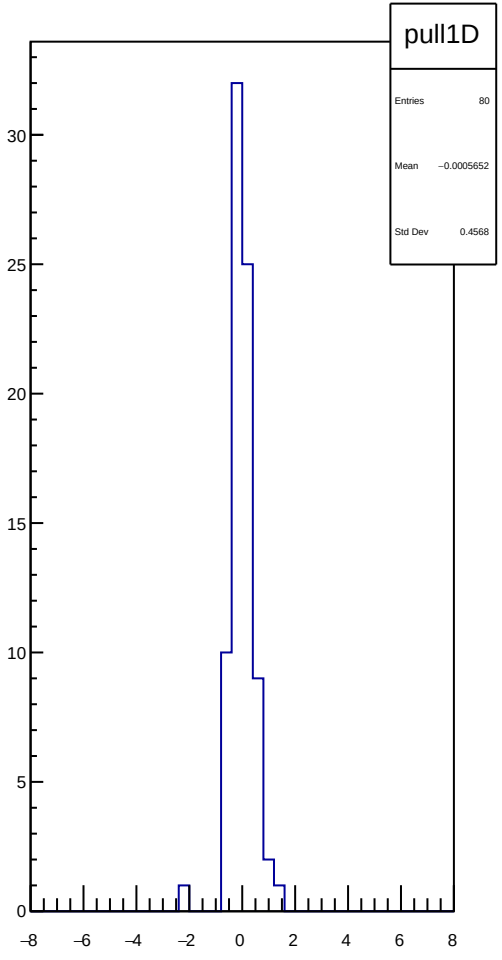

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.632e+04 / 79
p0 247.1 ± 0.1973
340
320
300
280
260
240
220
200
180

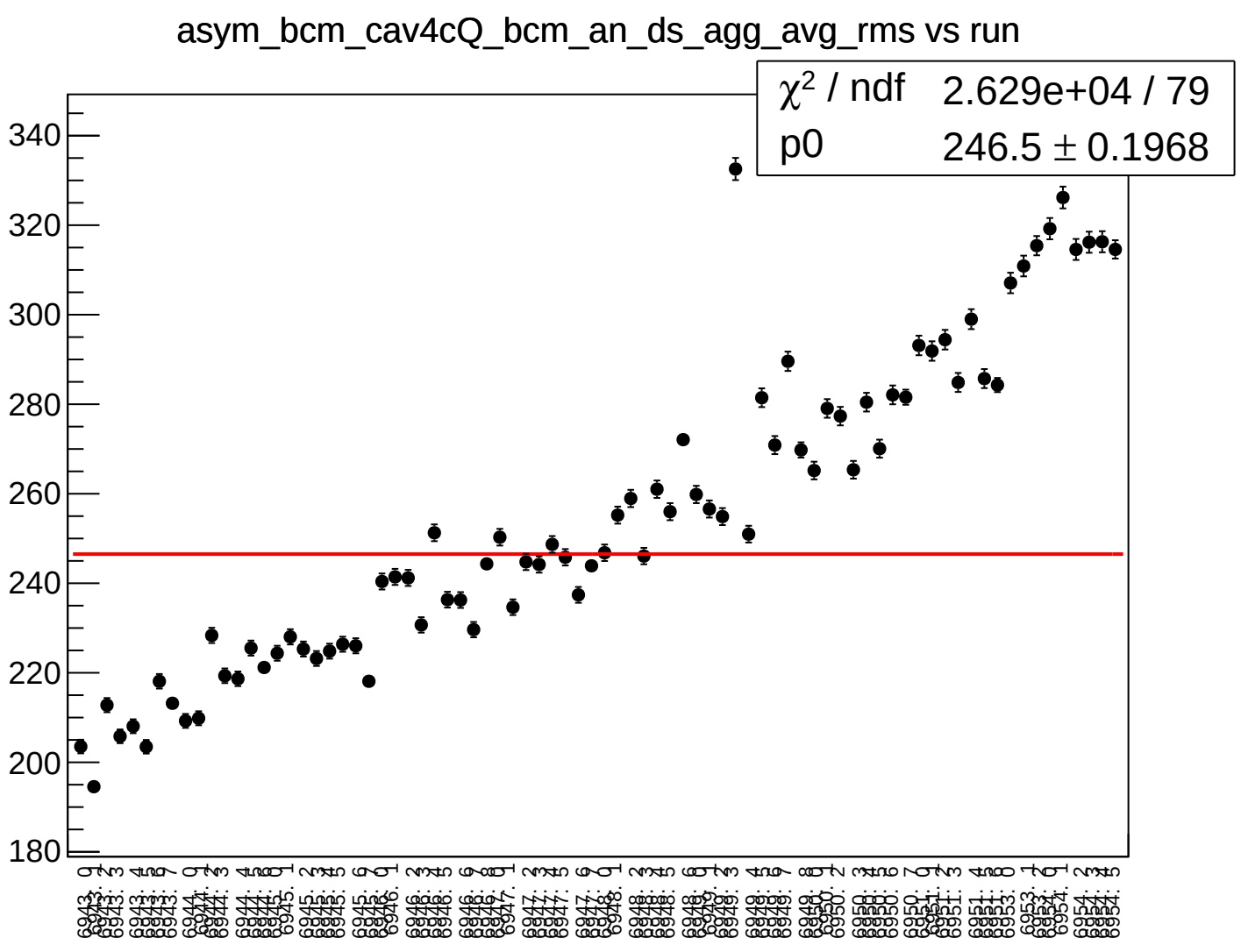

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.87 / 79
p0 −63.71 ± 34.47
1000
500
0
−500
−1000
pull
Entries 80
Mean 342.7
Std Dev 299.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

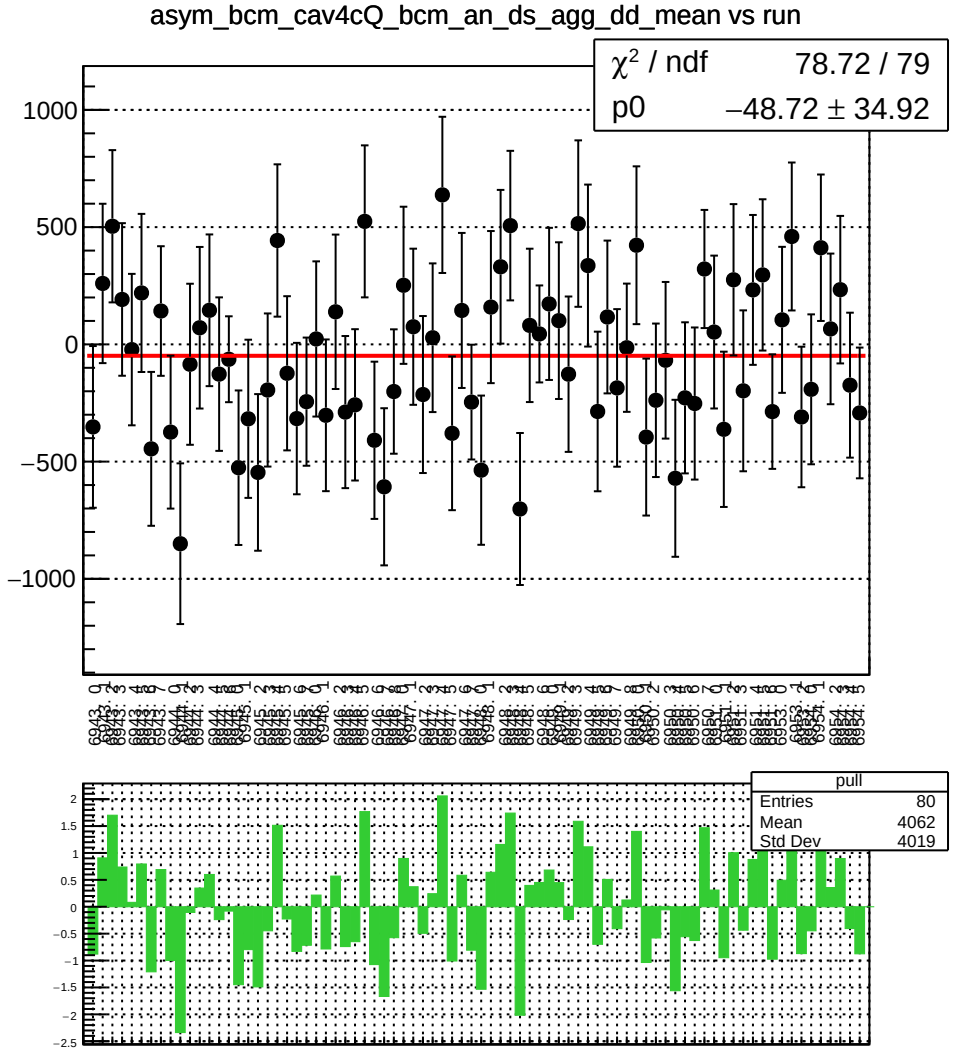

pull1D
Entries 80
Mean 0.005693
Std Dev 1.018
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

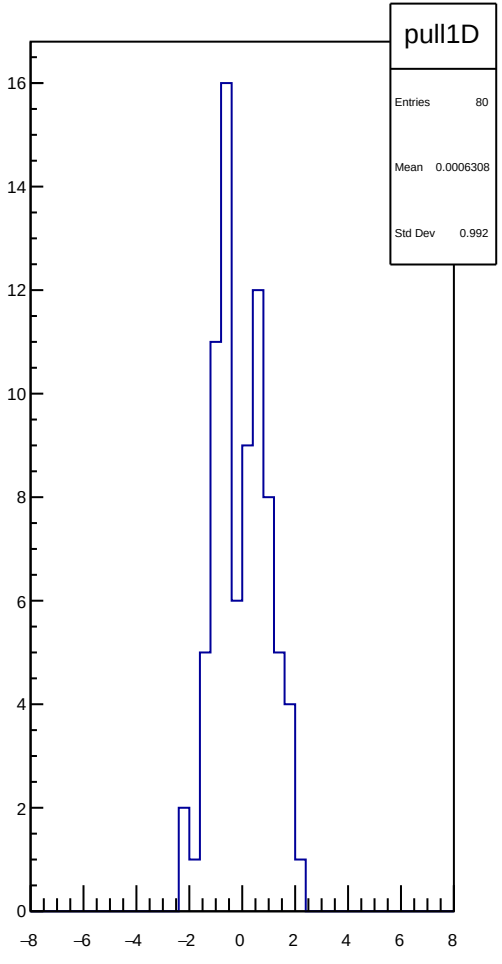

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 972.9 / 79
p0 30.78 ± 0.02438
33
32.5
32
31.5
31
30.5
30
29.5
29
28.5

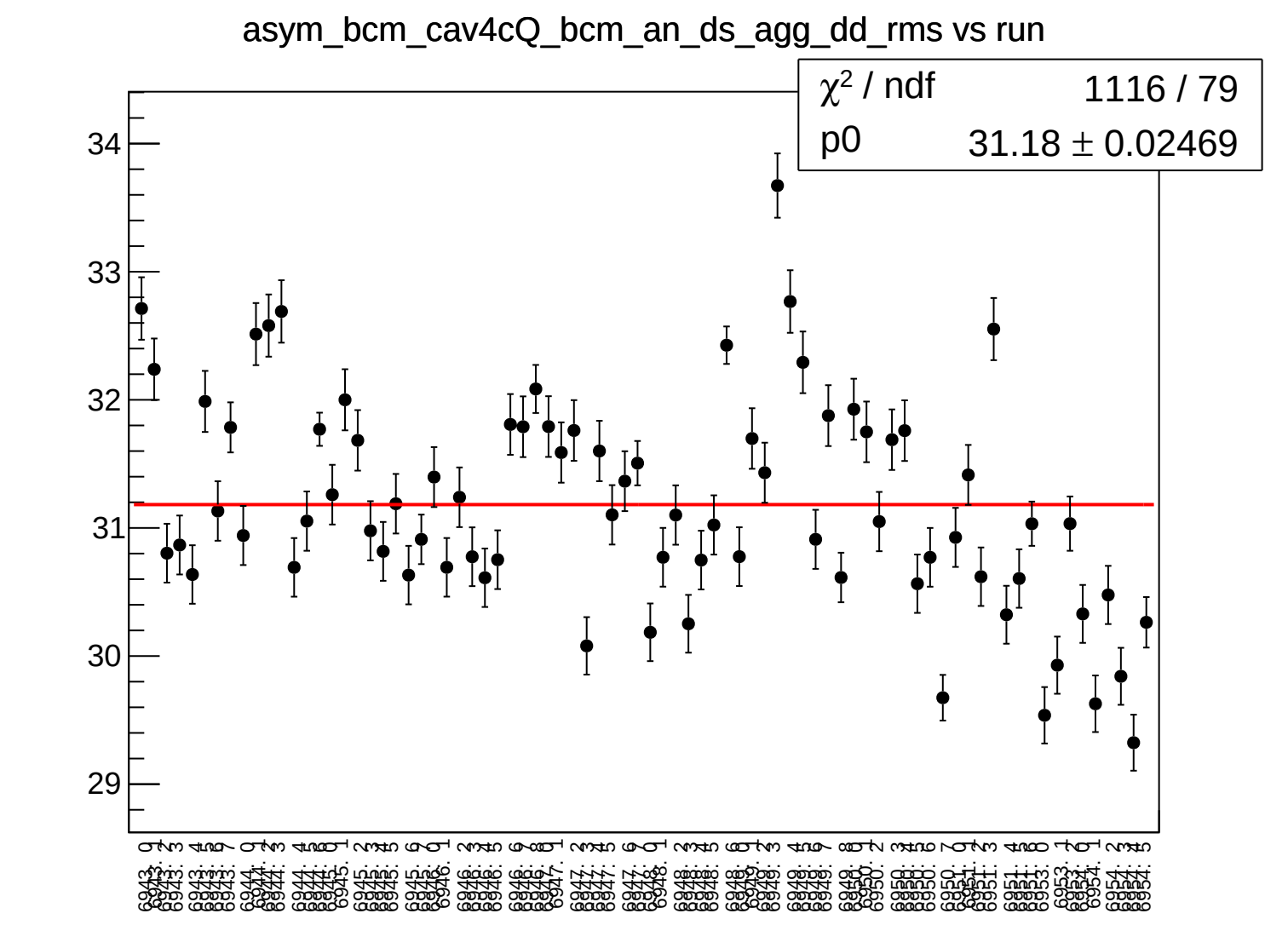

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.7 / 79
p0 −172 ± 278.3
pull
Entries 80
Mean −796.8
Std Dev 830.7

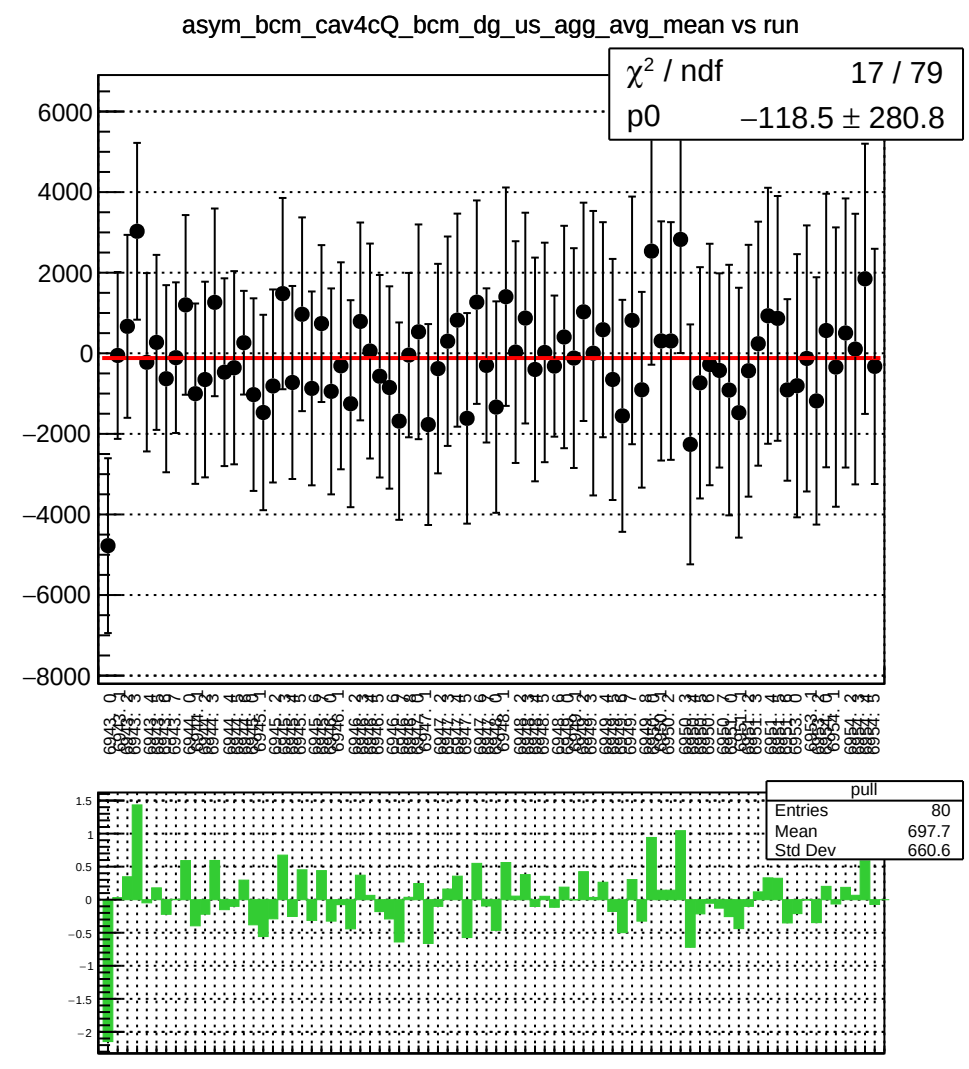

pull1D
Entries 80
Mean −0.0005652
Std Dev 0.4568

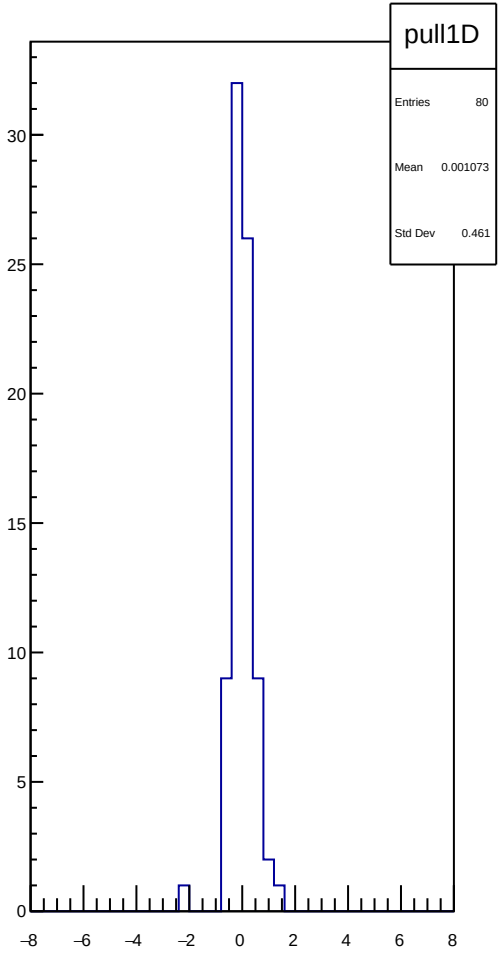

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.629e+04 / 79
p0 246.5 ± 0.1968
340
320
300
280
260
240
220
200
180

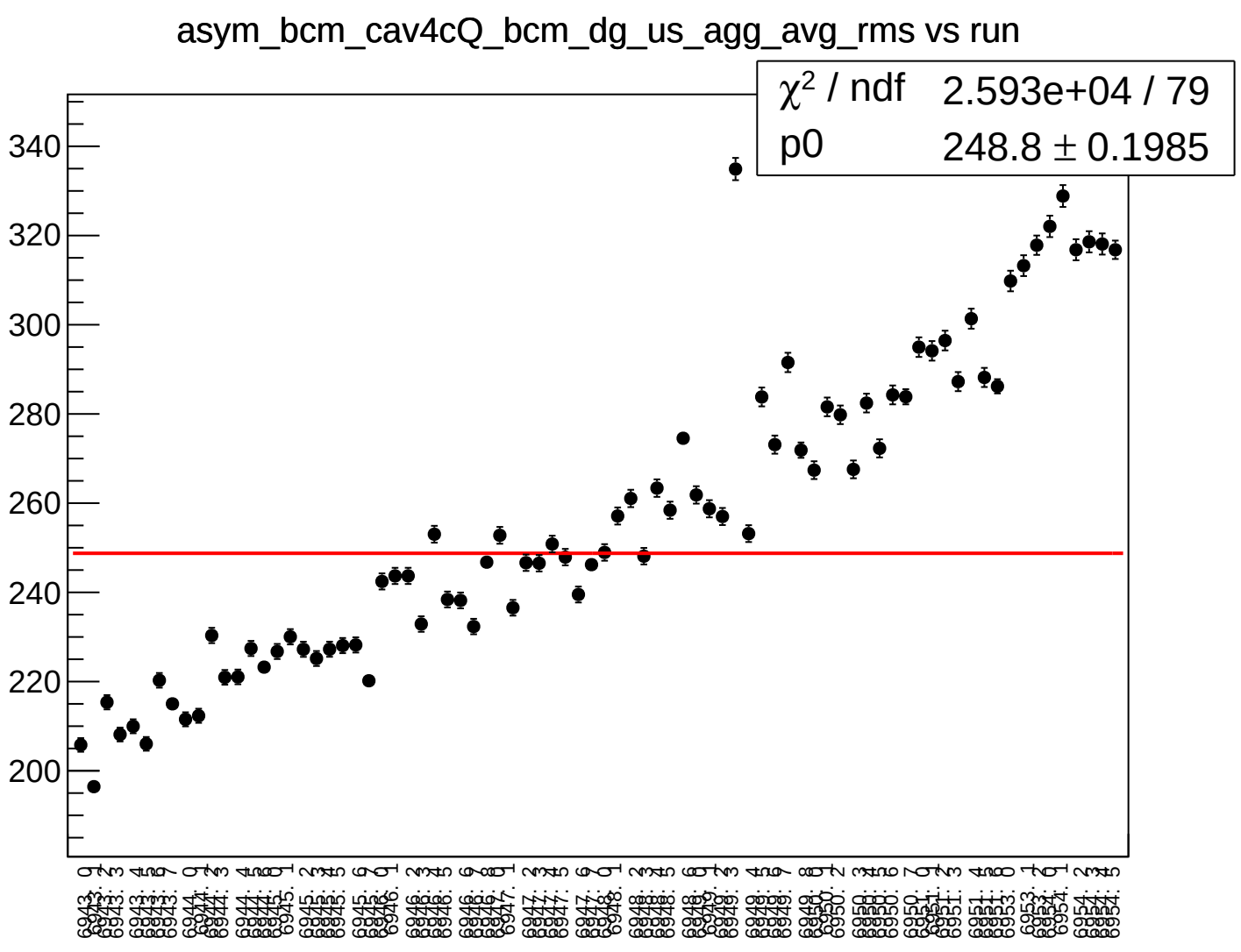

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 78.72 / 79
p0 −48.72 ± 34.92
1000
500
0
−500
−1000
pull
Entries 80
Mean 4062
Std Dev 4019
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

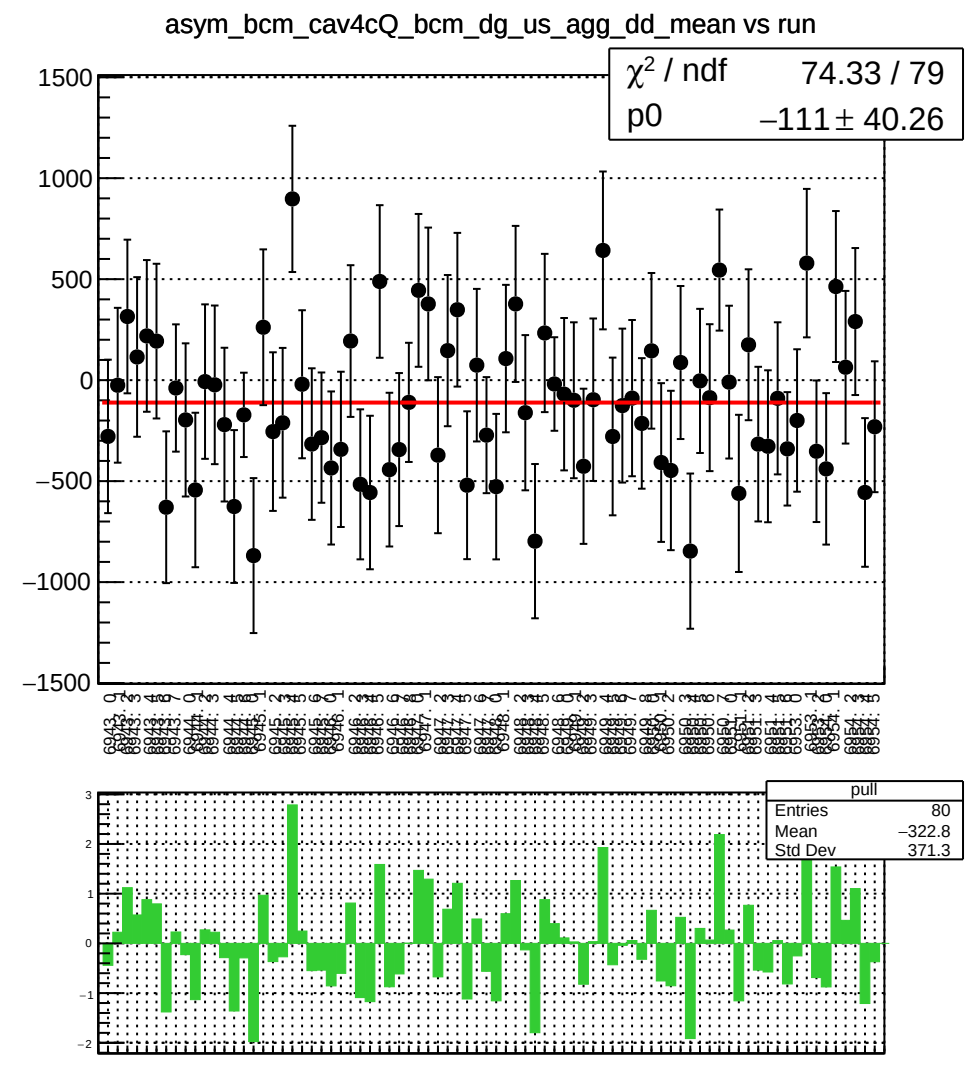

pull1D
Entries 80
Mean 0.0006308
Std Dev 0.992
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

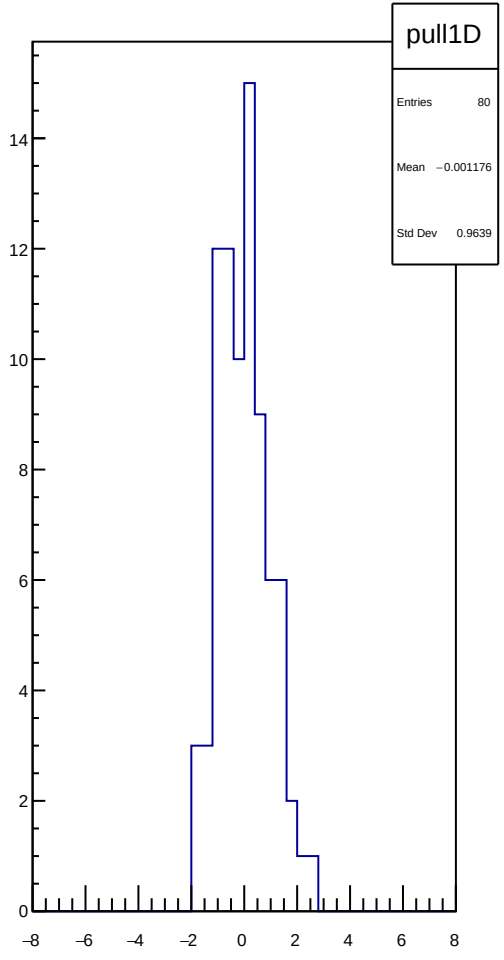

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1116 / 79
p0 31.18 ± 0.02469
34
33
32
31
30
29

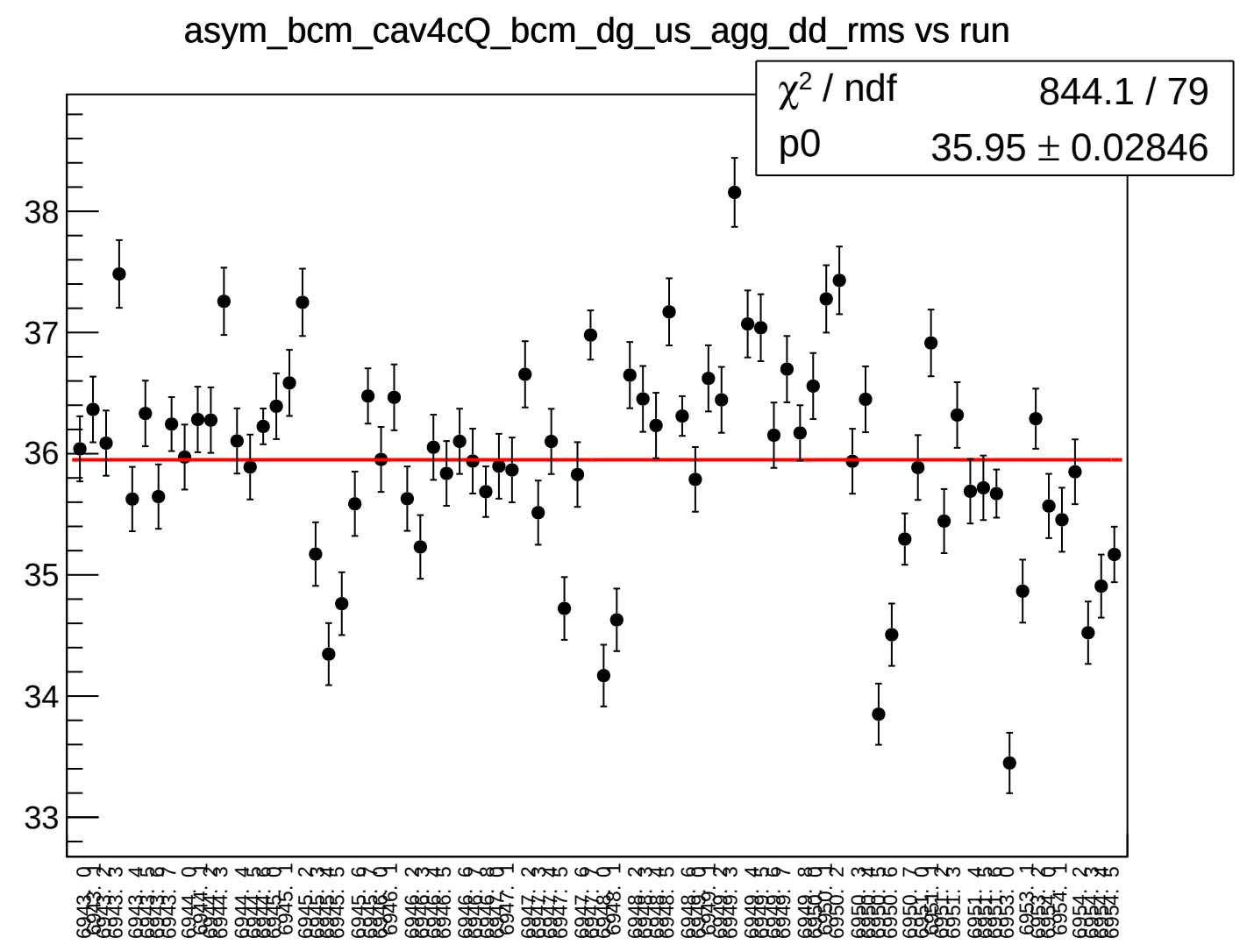

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 17 / 79
p0 −118.5 ± 280.8
pull
Entries 80
Mean 697.7
Std Dev 660.6

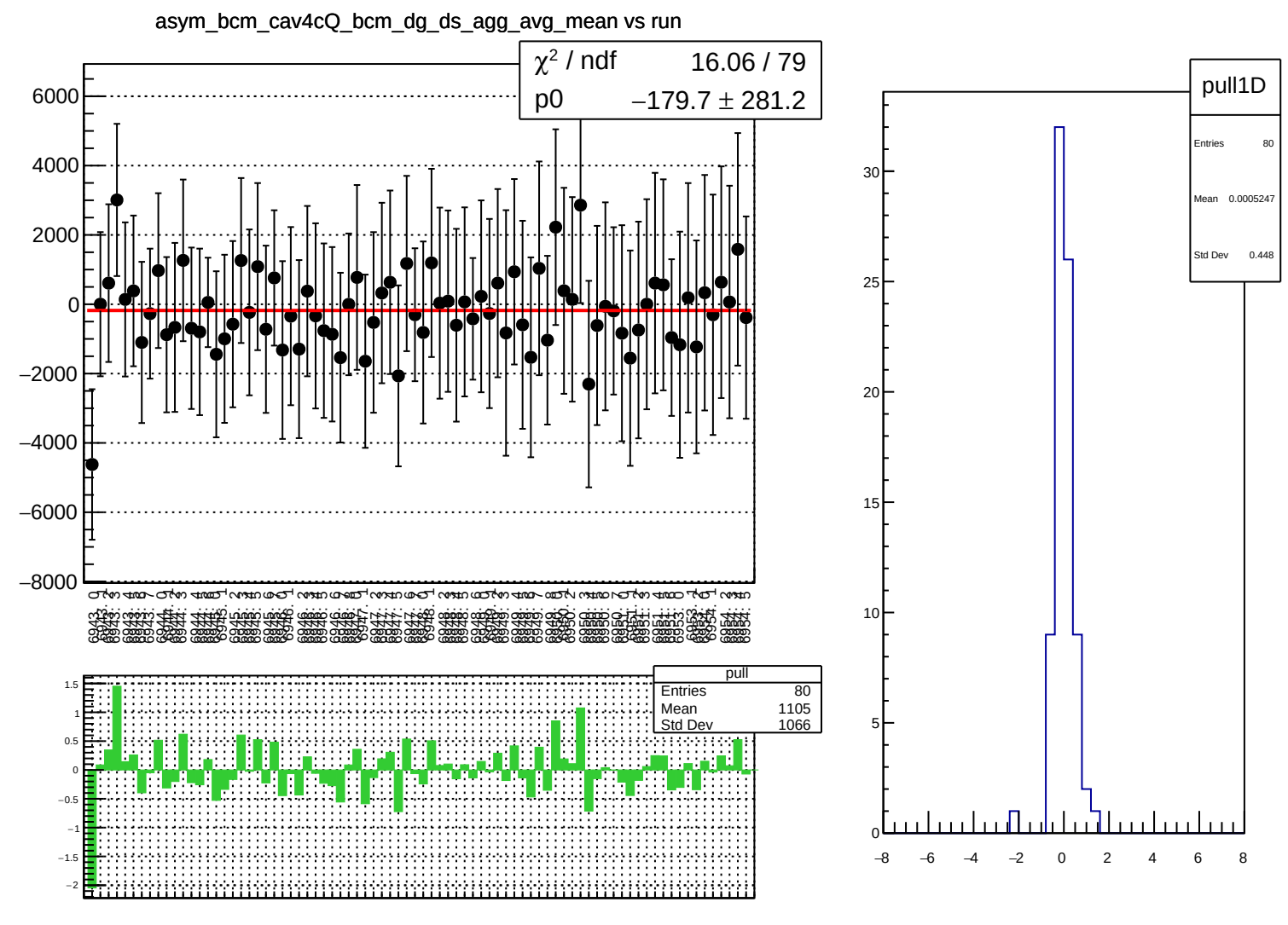

pull1D
Entries 80
Mean 0.001073
Std Dev 0.461

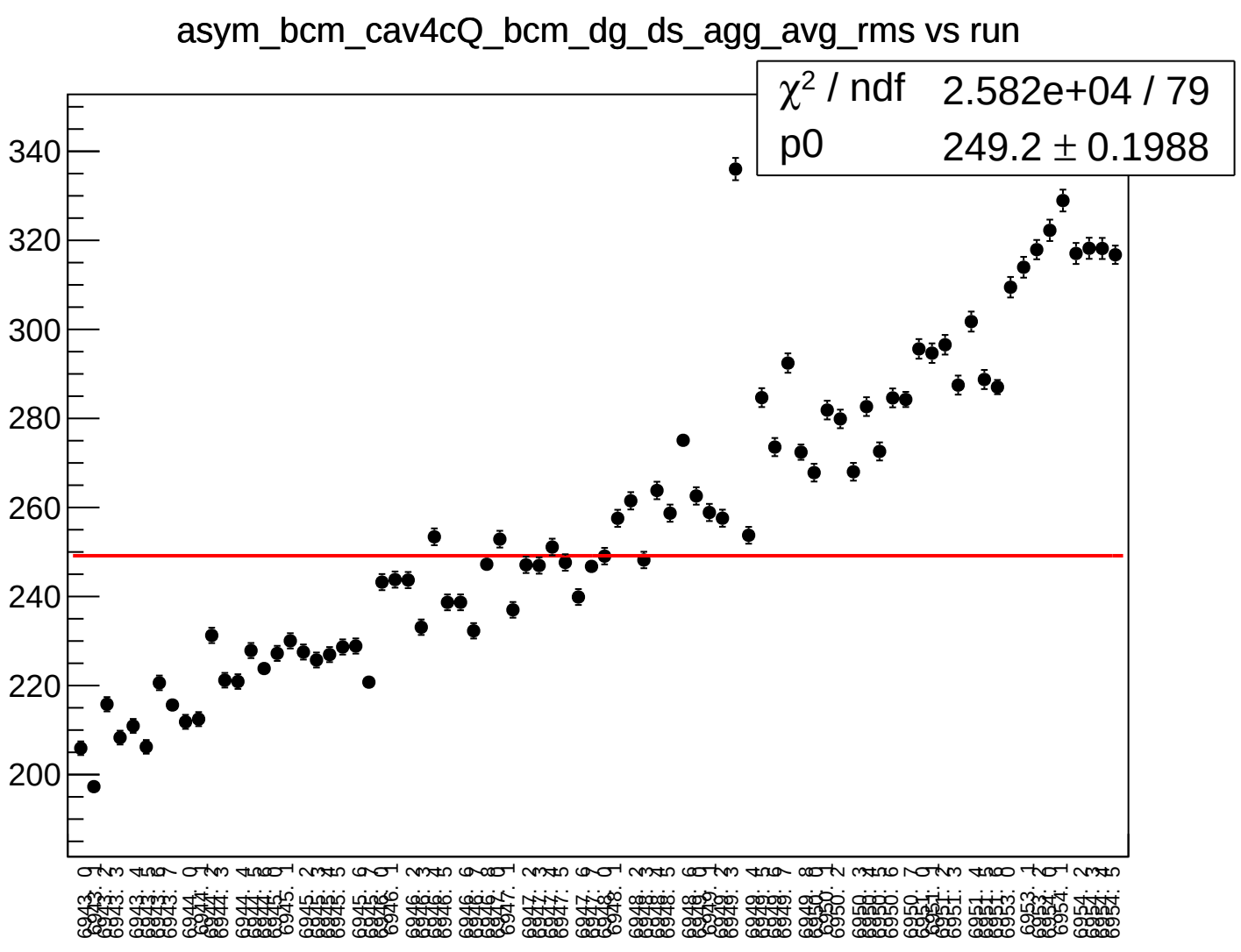

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2.593e+04 / 79
p0 248.8 ± 0.1985
340
320
300
280
260
240
220
200

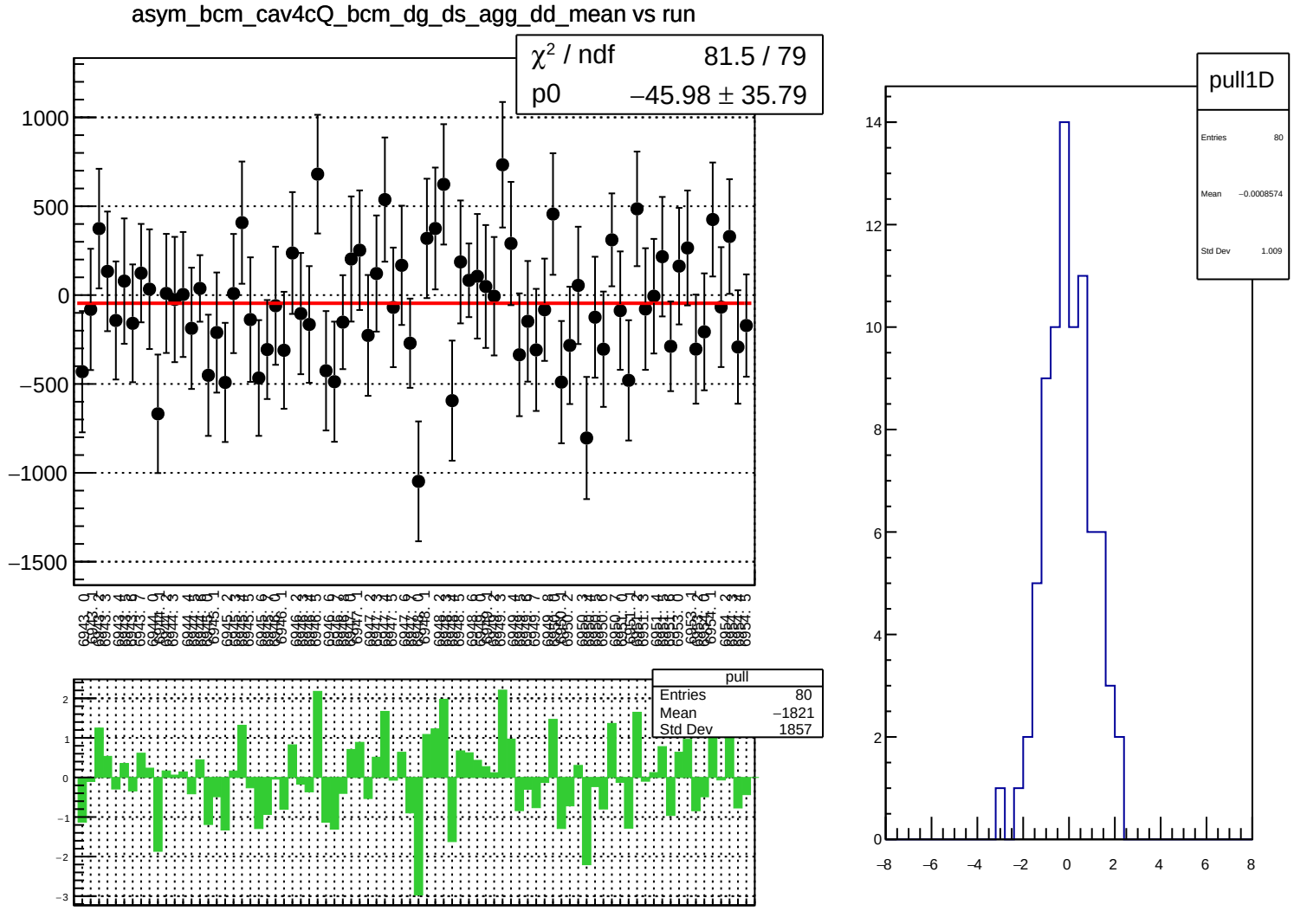

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 74.33 / 79
p0 −111 ± 40.26
pull
Entries 80
Mean −322.8
Std Dev 371.3

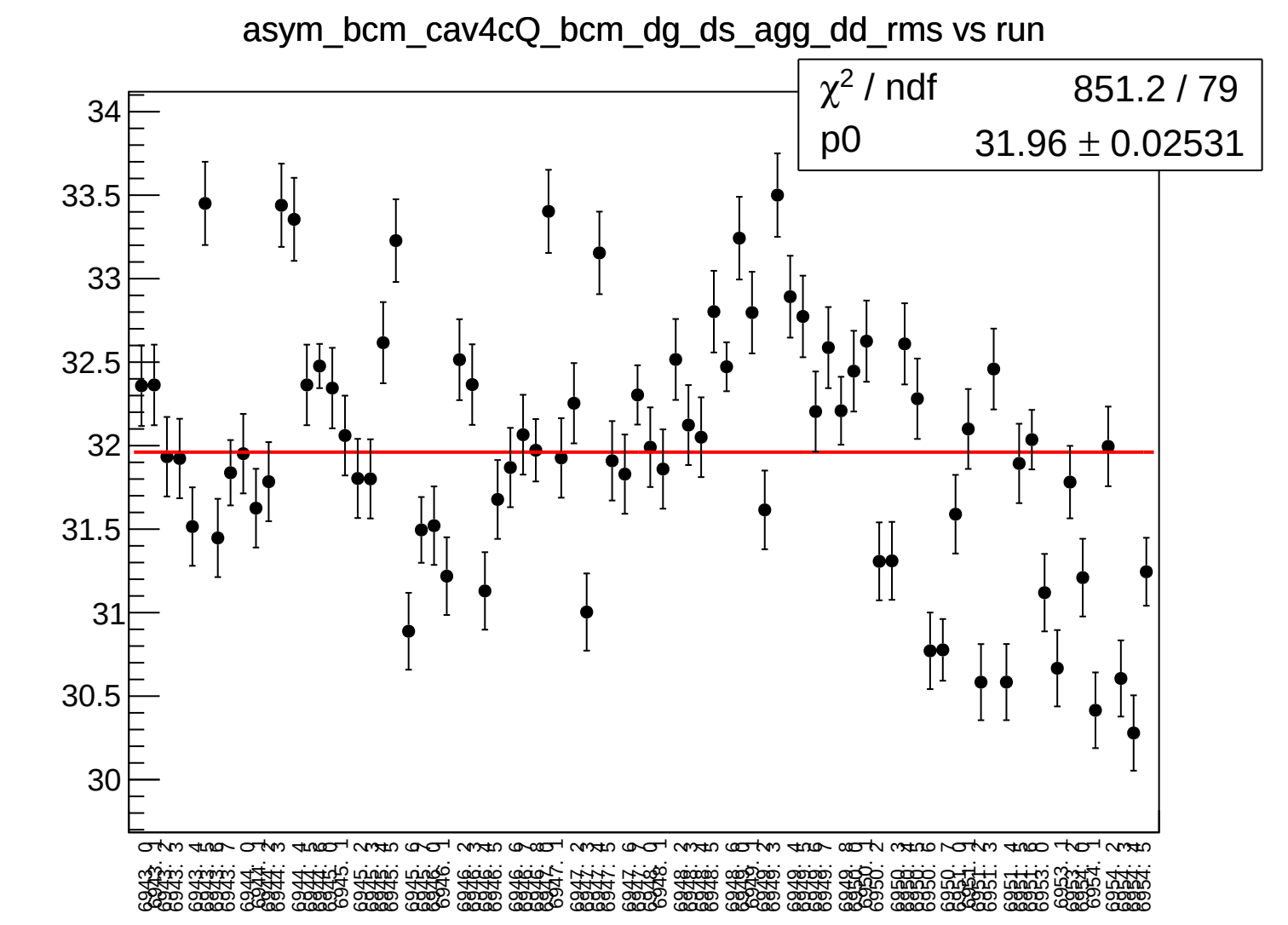

pull1D
Entries 80
Mean −0.001176
Std Dev 0.9639

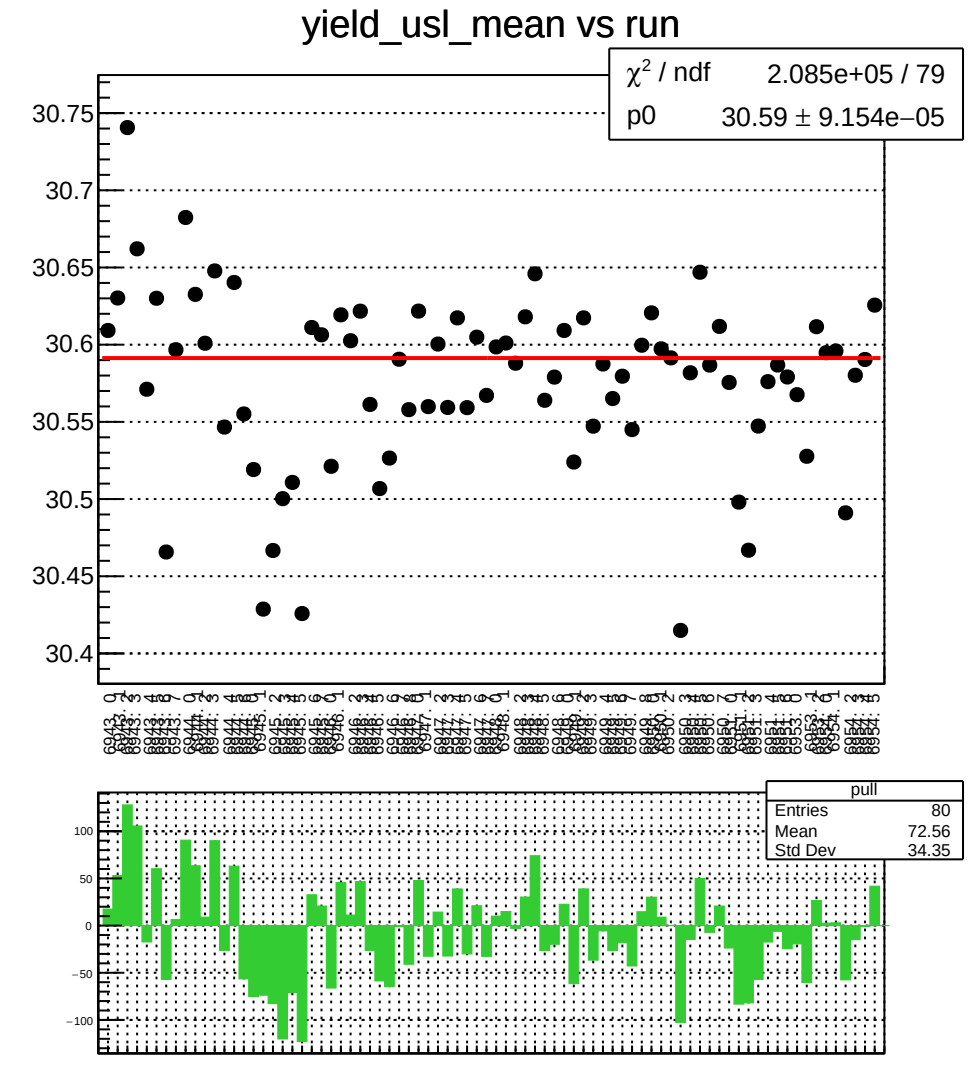

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 844.1 / 79
p0 35.95 ± 0.02846
38
37
36
35
34
33

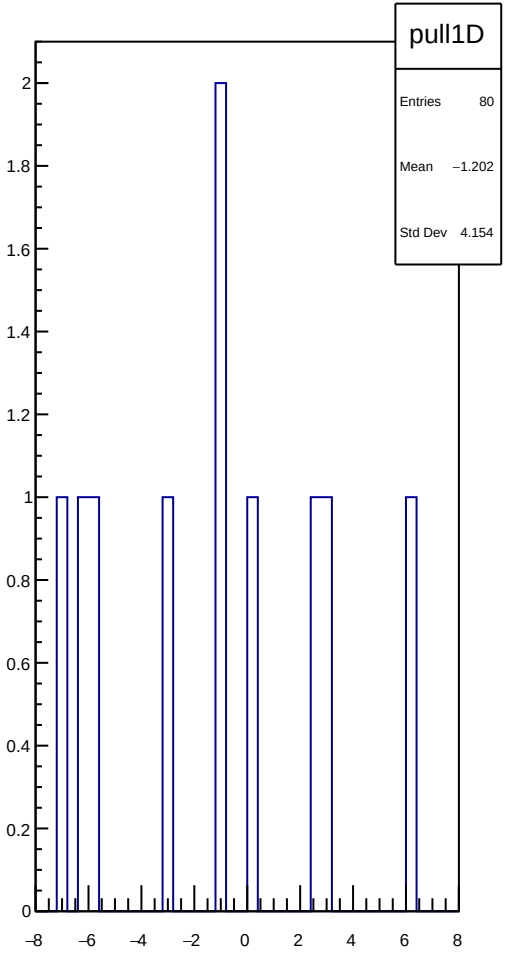

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 16.06 / 79
p0 −179.7 ± 281.2
pull
Entries 80
Mean 1105
Std Dev 1066
pull1D
Entries 80
Mean 0.0005247
Std Dev 0.448

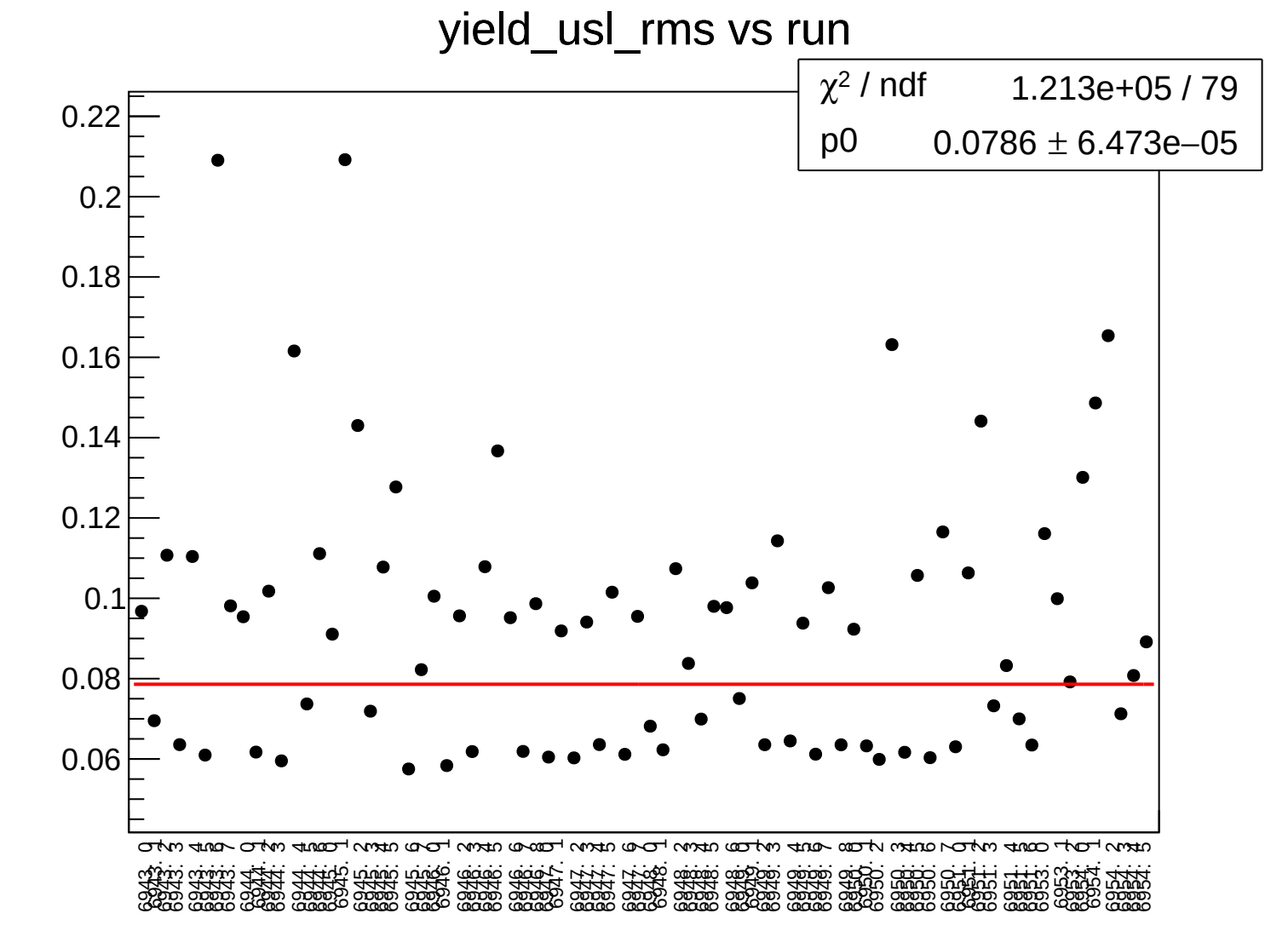

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.582e+04 / 79
p0 249.2 ± 0.1988
340
320
300
280
260
240
220
200

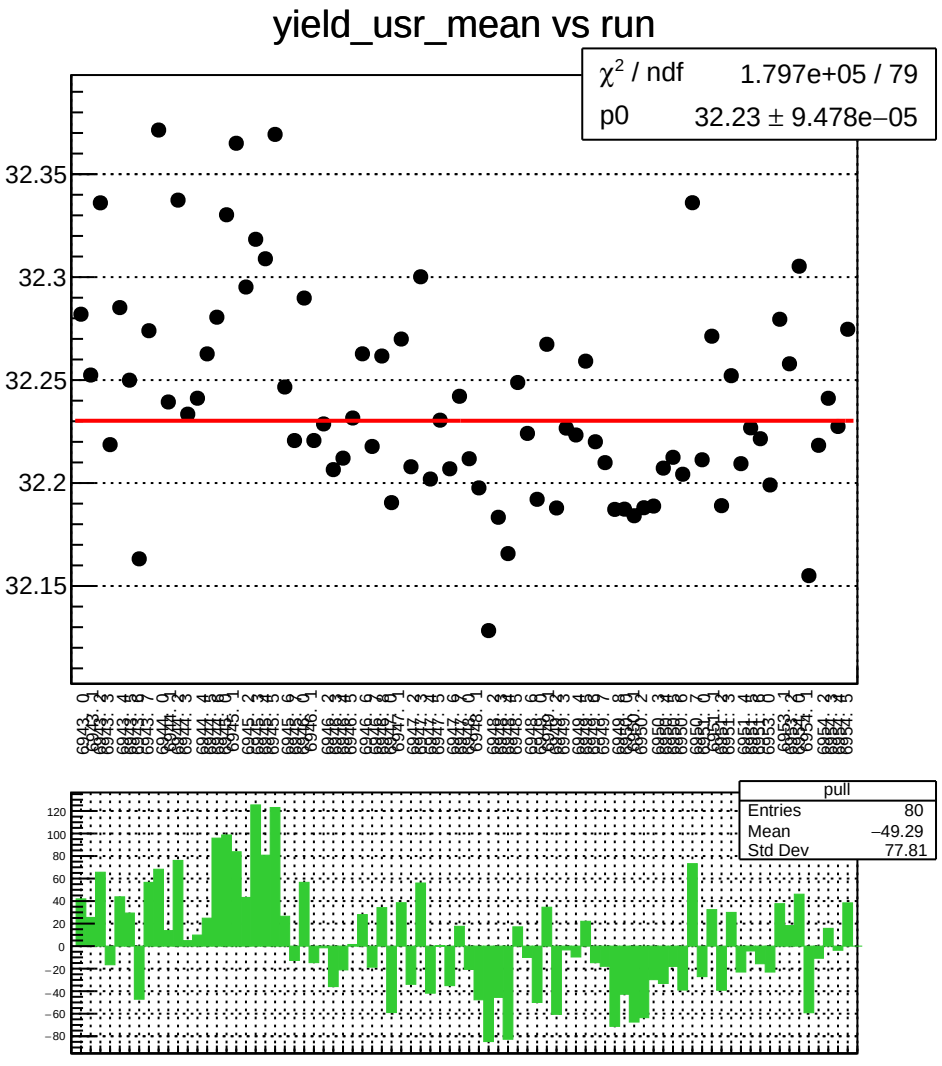

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 81.5 / 79
p0 −45.98 ± 35.79
1000
500
0
−500
−1000
−1500
pull
Entries 80
Mean −1821
Std Dev 1857
2
1
0
−1
−2
−3
pull1D
Entries 80
Mean −0.0008574
Std Dev 1.009
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

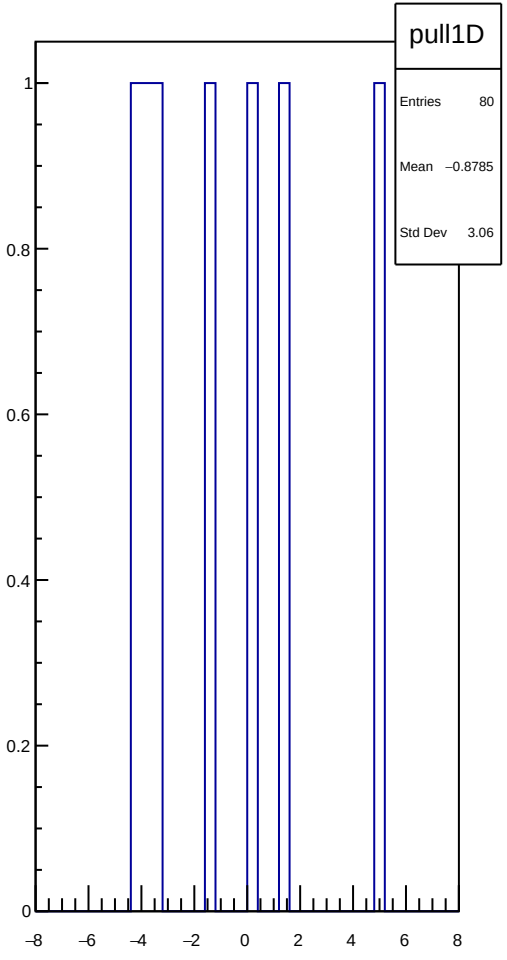

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 851.2 / 79
p0 31.96 ± 0.02531
34
33.5
33
32.5
32
31.5
31
30.5
30

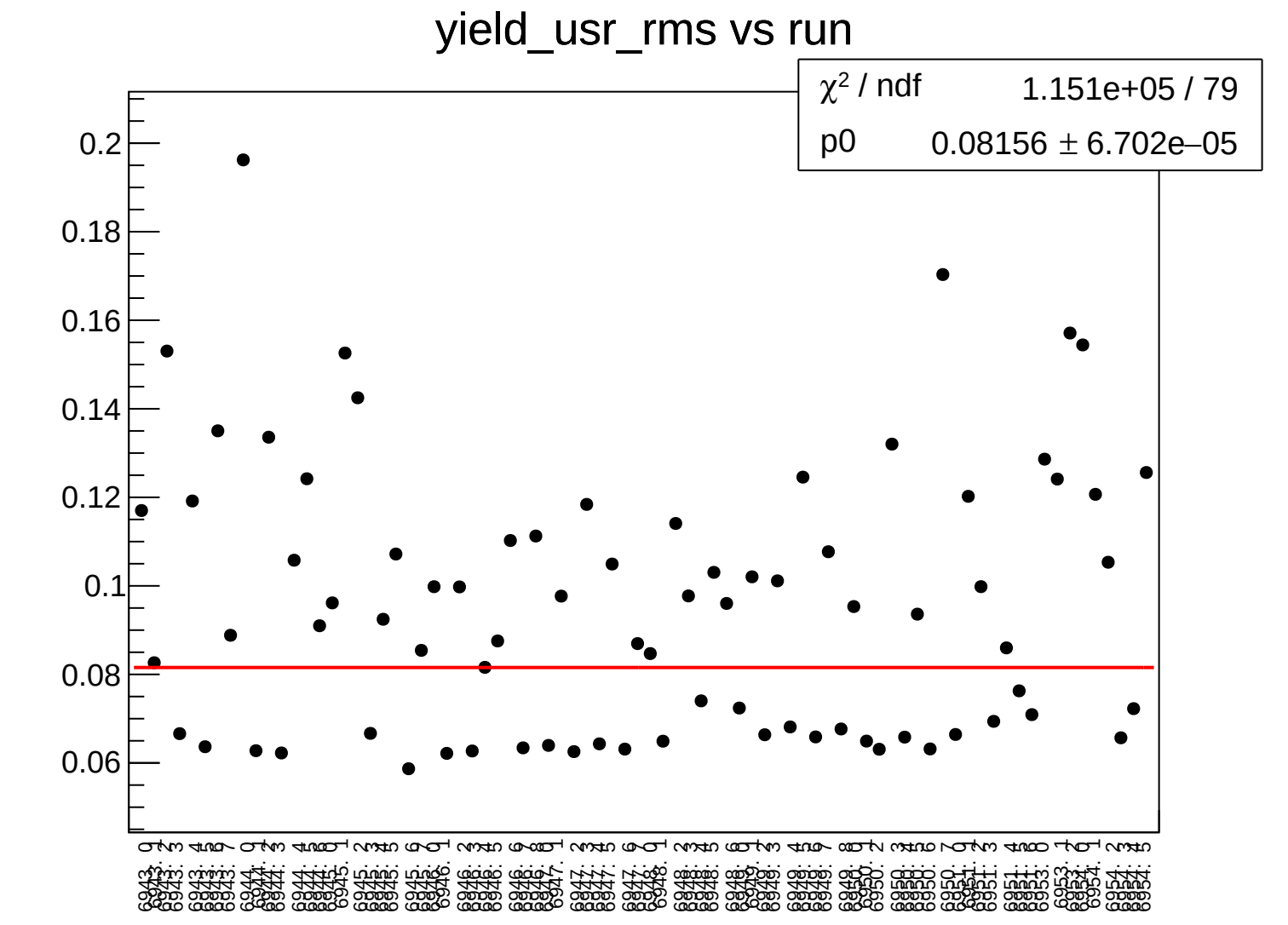

yield_usl_mean vs run
χ² / ndf 2.085e+05 / 79
p0 30.59 ± 9.154e−05
30.75
30.7
30.65
30.6
30.55
30.5
30.45
30.4
pull
Entries 80
Mean 72.56
Std Dev 34.35
100
50
0
−50
−100

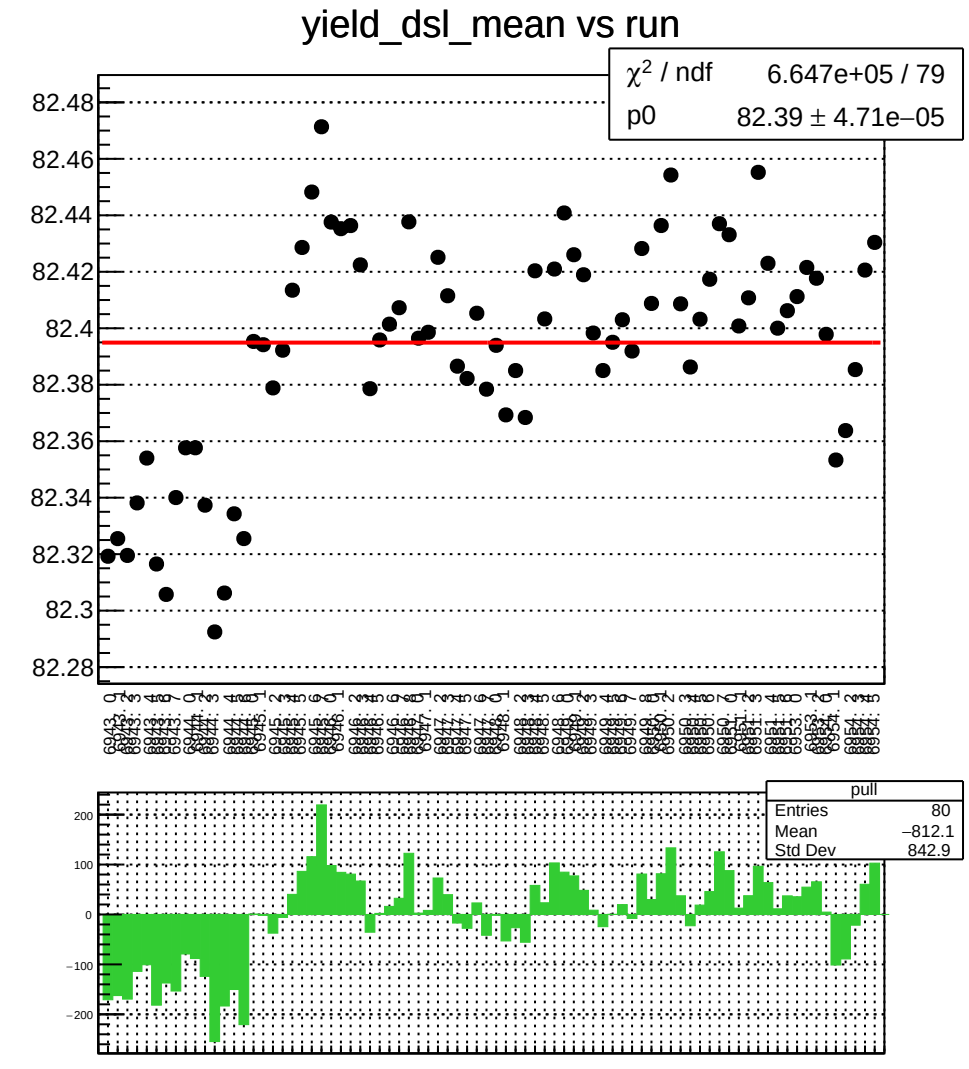

pull1D
Entries 80
Mean −1.202
Std Dev 4.154
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

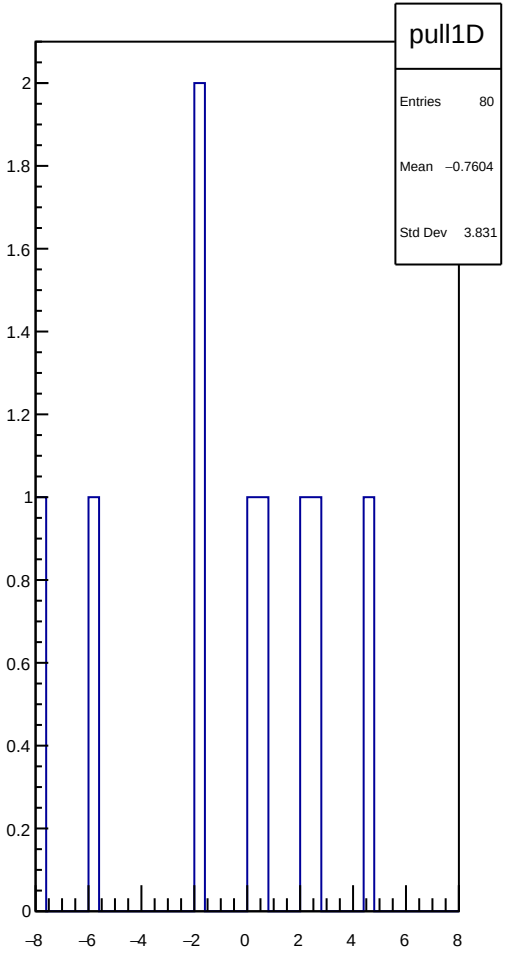

yield_usl_rms vs run
χ² / ndf 1.213e+05 / 79
p0 0.0786 ± 6.473e−05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

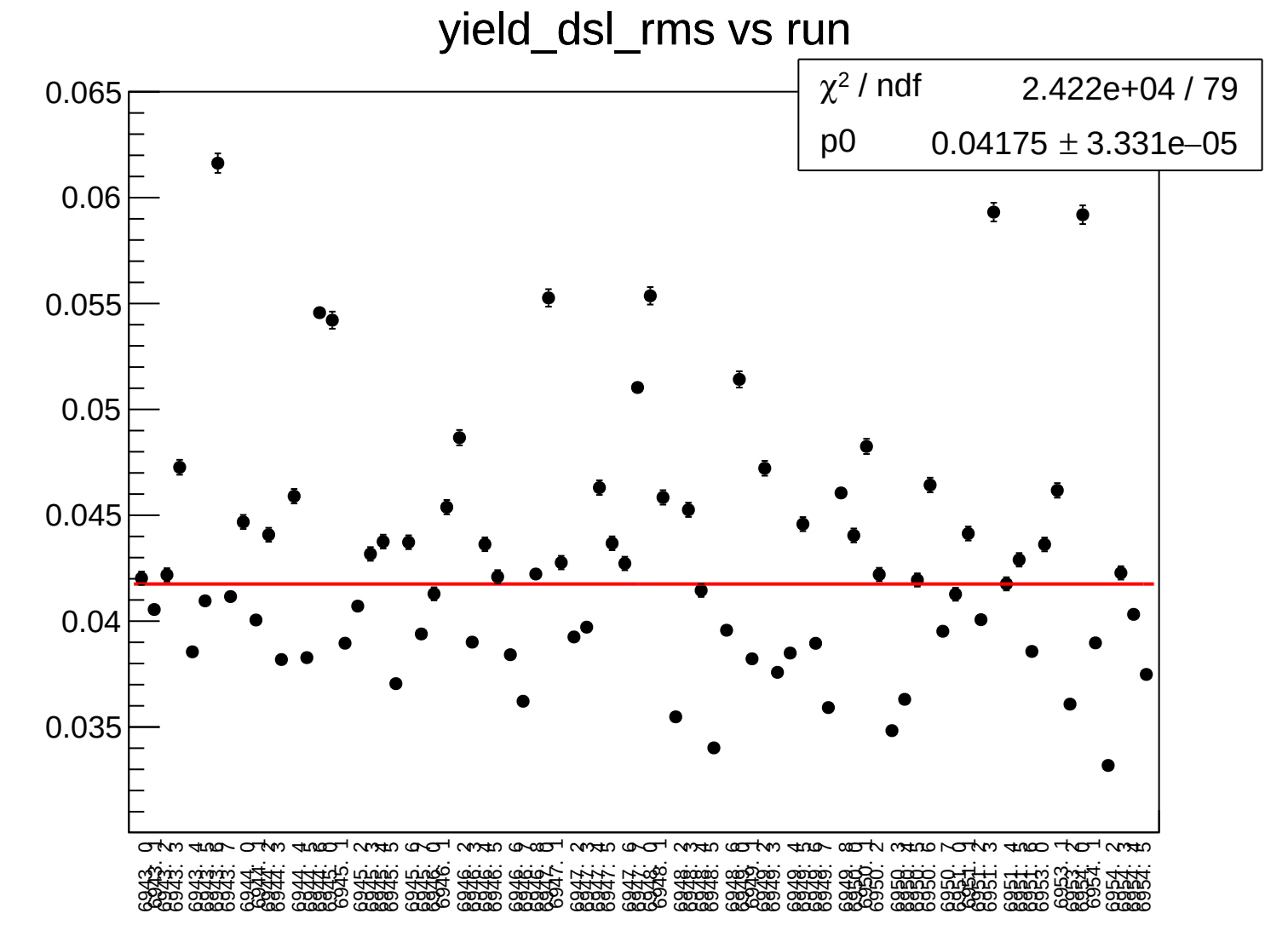

yield_usr_mean vs run
χ² / ndf 1.797e+05 / 79
p0 32.23 ± 9.478e−05
32.35
32.3
32.25
32.2
32.15
pull
Entries 80
Mean −49.29
Std Dev 77.81
120
100
80
60
40
20
0
−20
−40
−60
−80

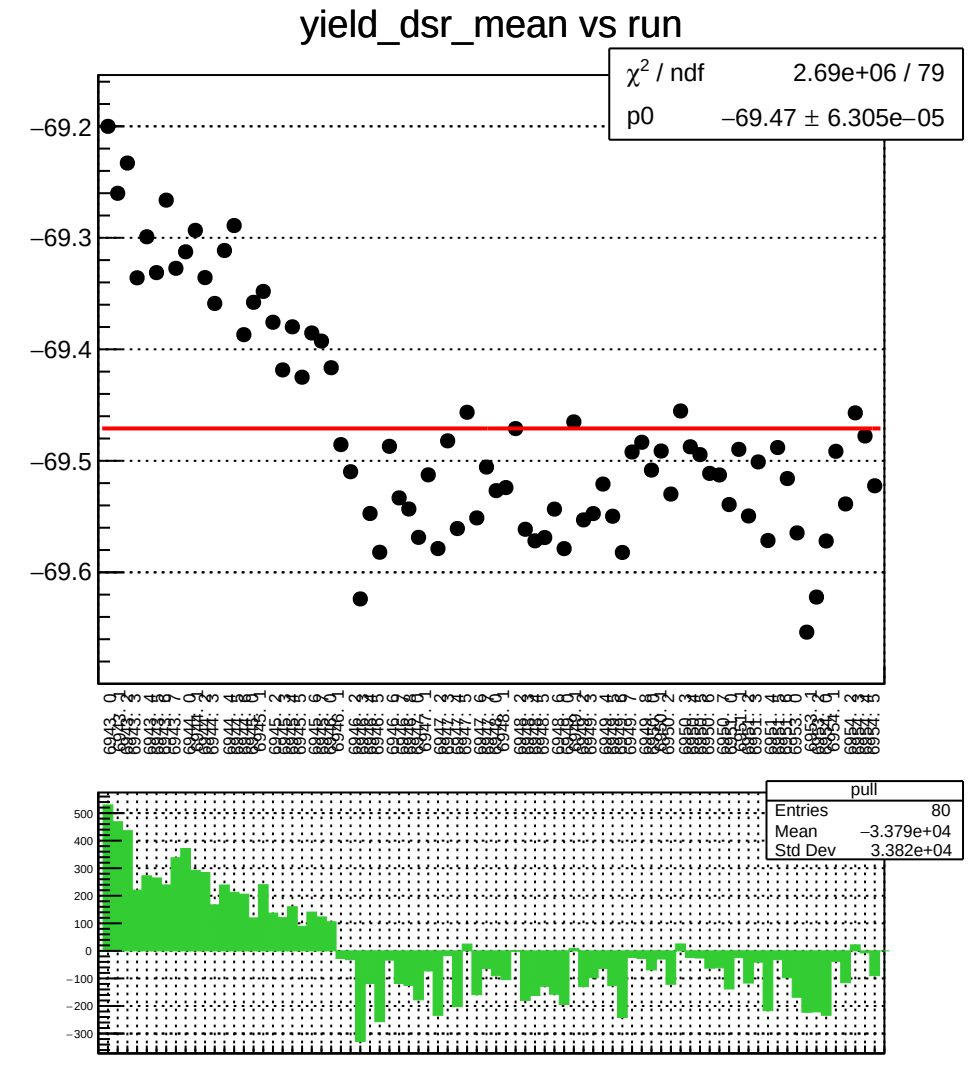

pull1D
Entries 80
Mean −0.8785
Std Dev 3.06
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

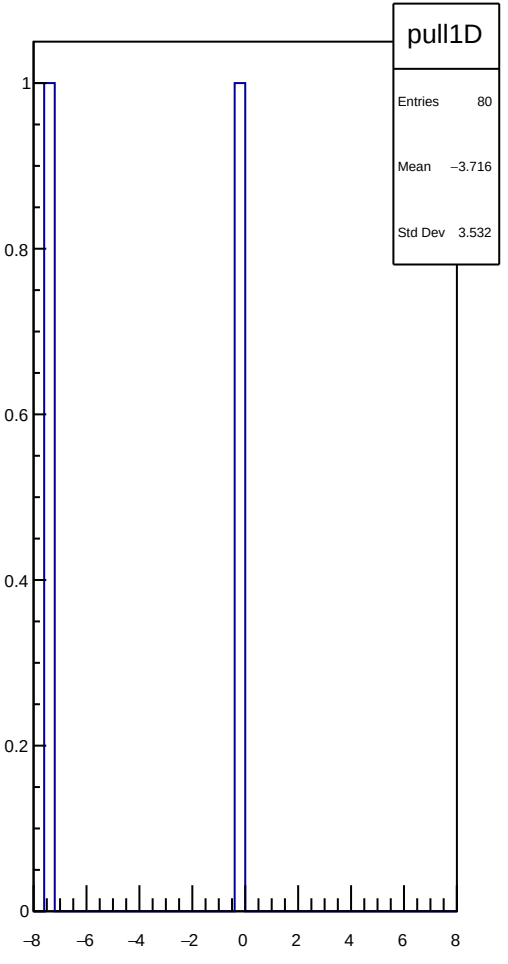

yield_usr_rms vs run
χ² / ndf 1.151e+05 / 79
p0 0.08156 ± 6.702e–05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

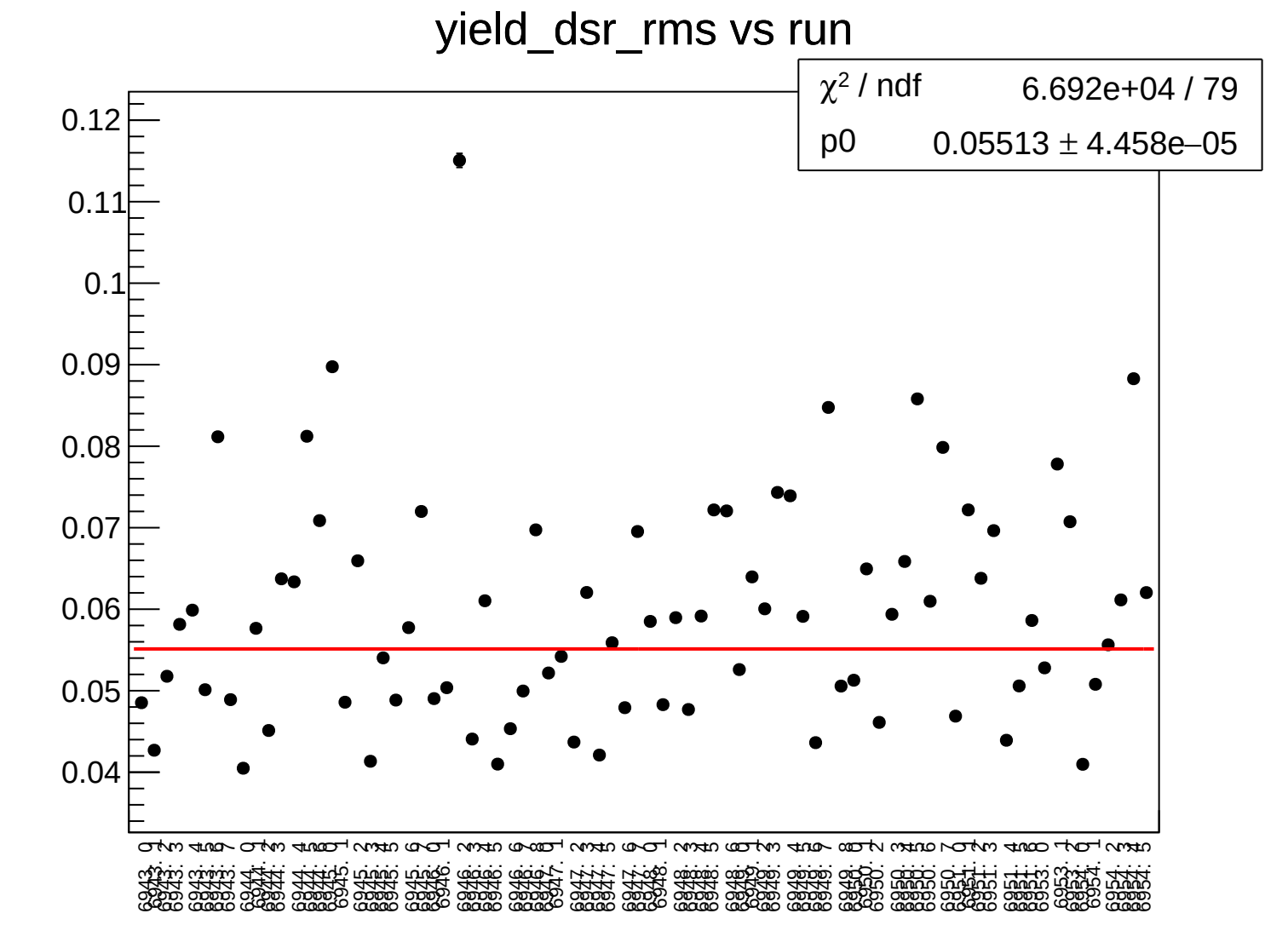

yield_dsl_mean vs run
χ² / ndf 6.647e+05 / 79
p0 82.39 ± 4.71e−05
82.48
82.46
82.44
82.42
82.4
82.38
82.36
82.34
82.32
82.3
82.28
pull
Entries 80
Mean −812.1
Std Dev 842.9
200
100
0
−100
−200

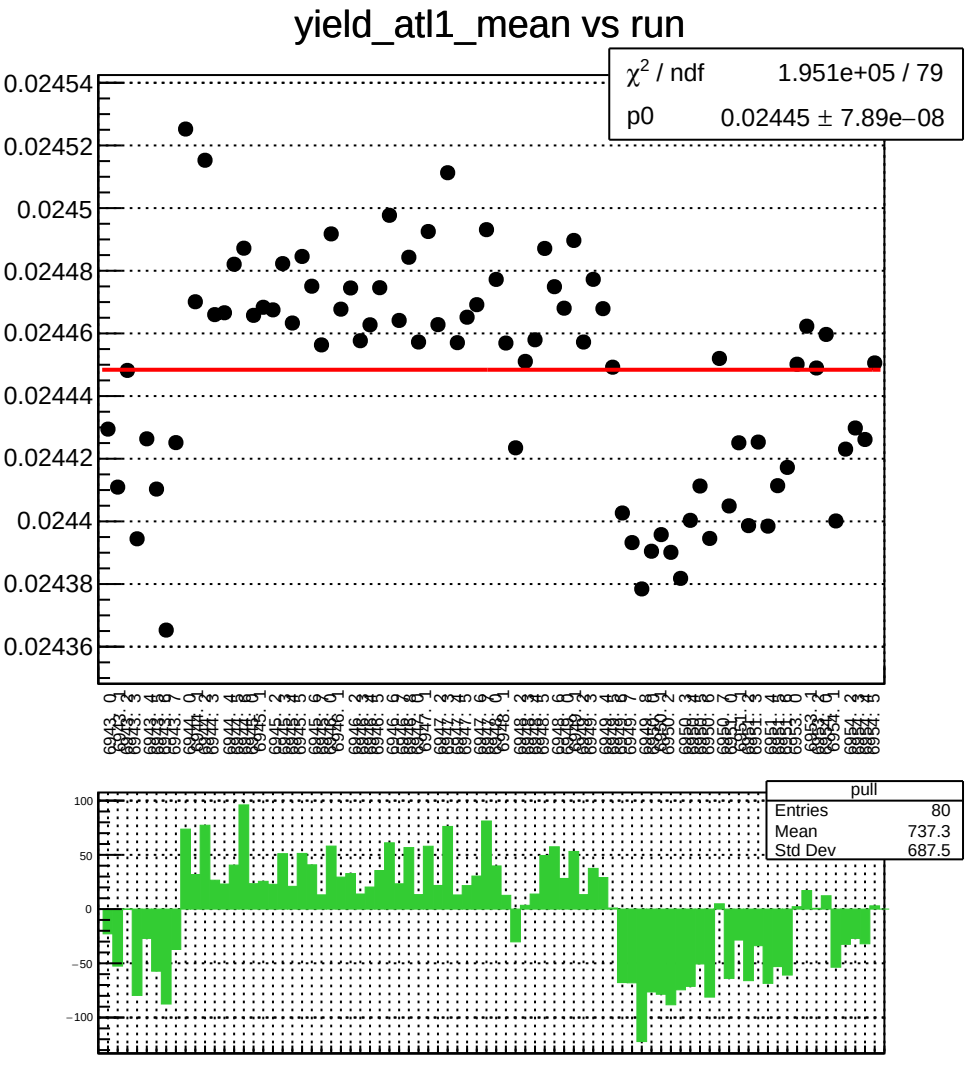

pull1D
Entries 80
Mean −0.7604
Std Dev 3.831
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

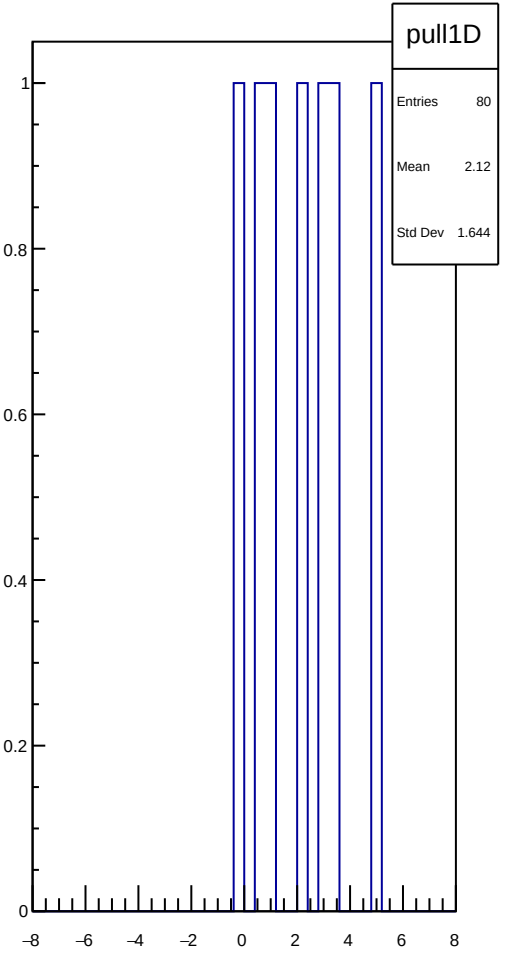

yield_dsl_rms vs run
χ² / ndf 2.422e+04 / 79
p0 0.04175 ± 3.331e−05
0.065
0.06
0.055
0.05
0.045
0.04
0.035

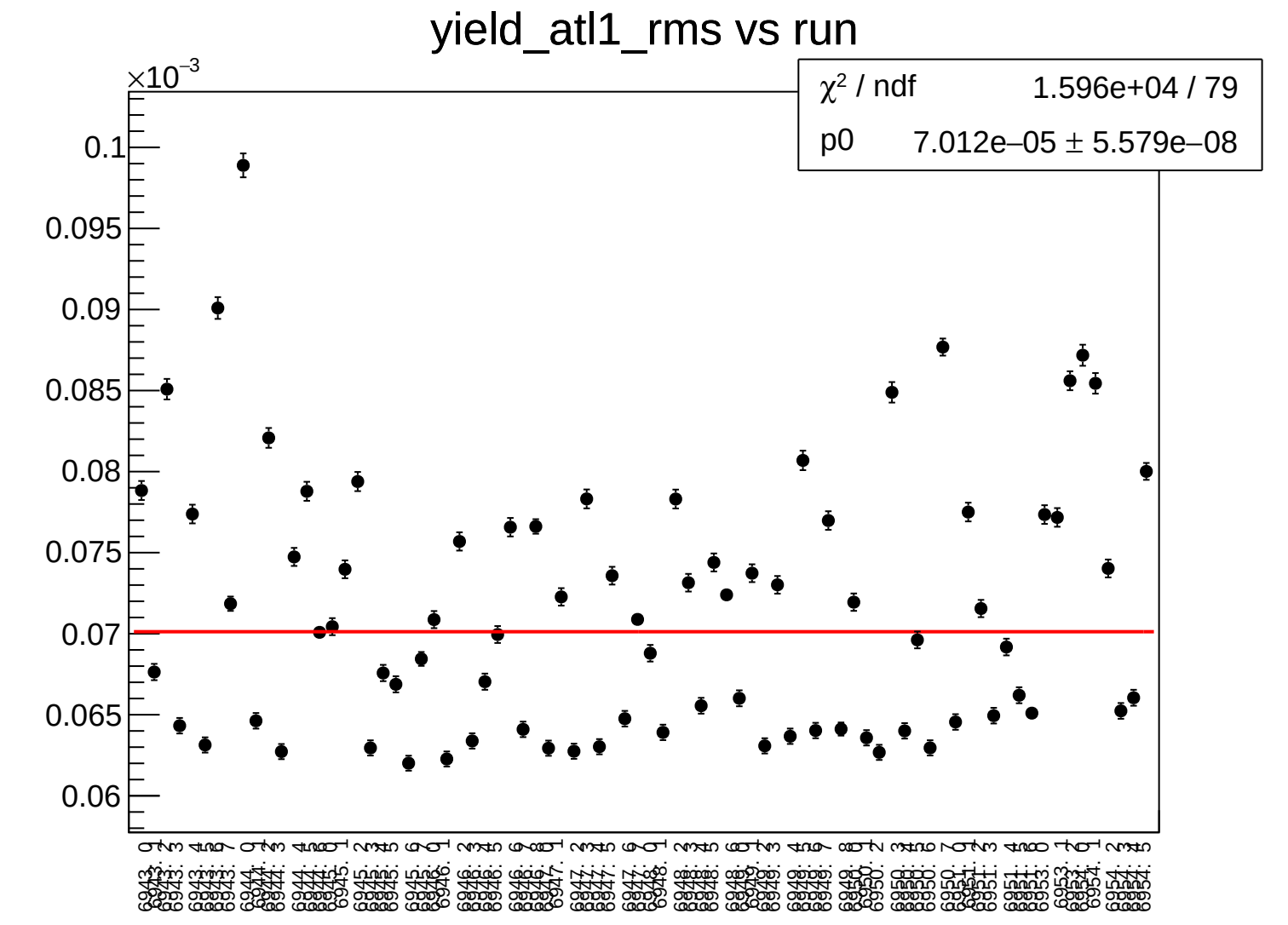

yield_dsr_mean vs run
χ² / ndf 2.69e+06 / 79
p0 −69.47 ± 6.305e−05
−69.2
−69.3
−69.4
−69.5
−69.6
pull
Entries 80
Mean −3.379e+04
Std Dev 3.382e+04
500
400
300
200
100
0
−100
−200
−300

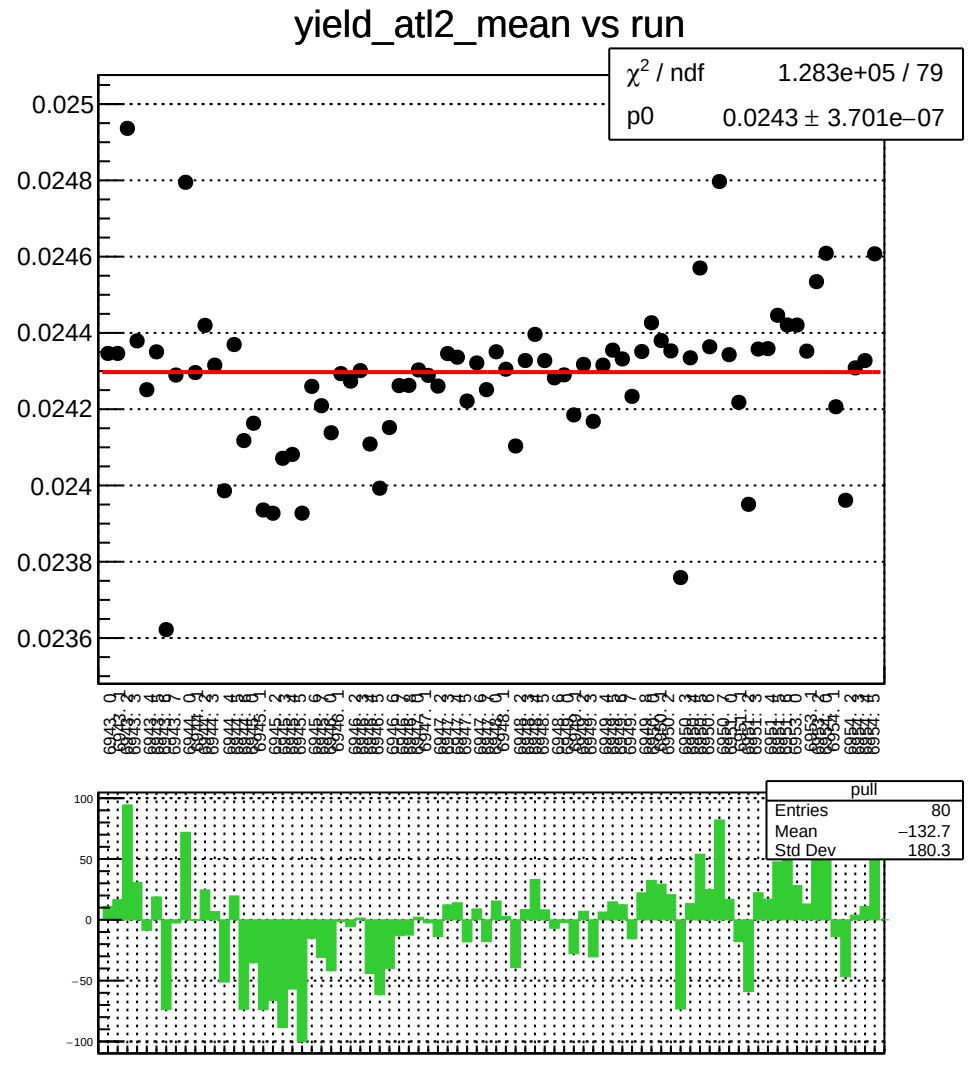

pull1D
Entries 80
Mean −3.716
Std Dev 3.532
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

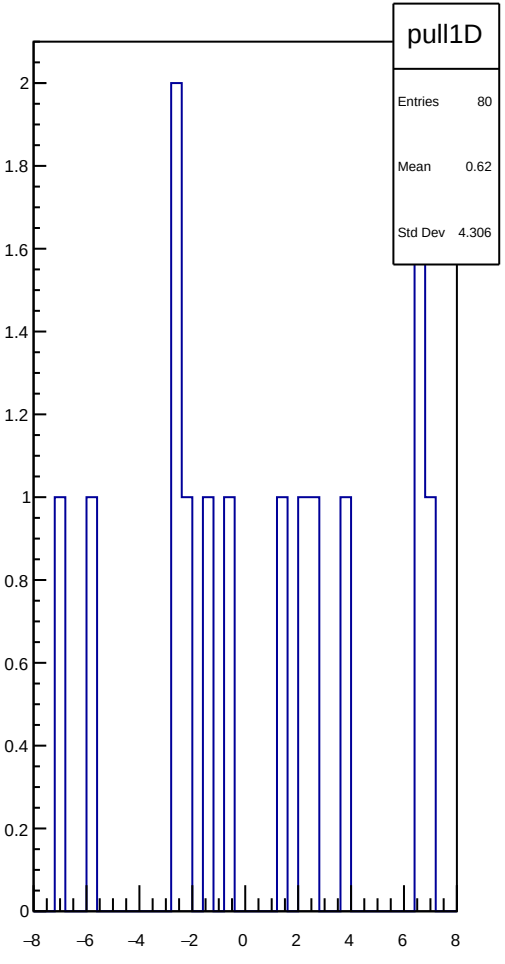

yield_dsr_rms vs run
χ² / ndf 6.692e+04 / 79
p0 0.05513 ± 4.458e−05
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

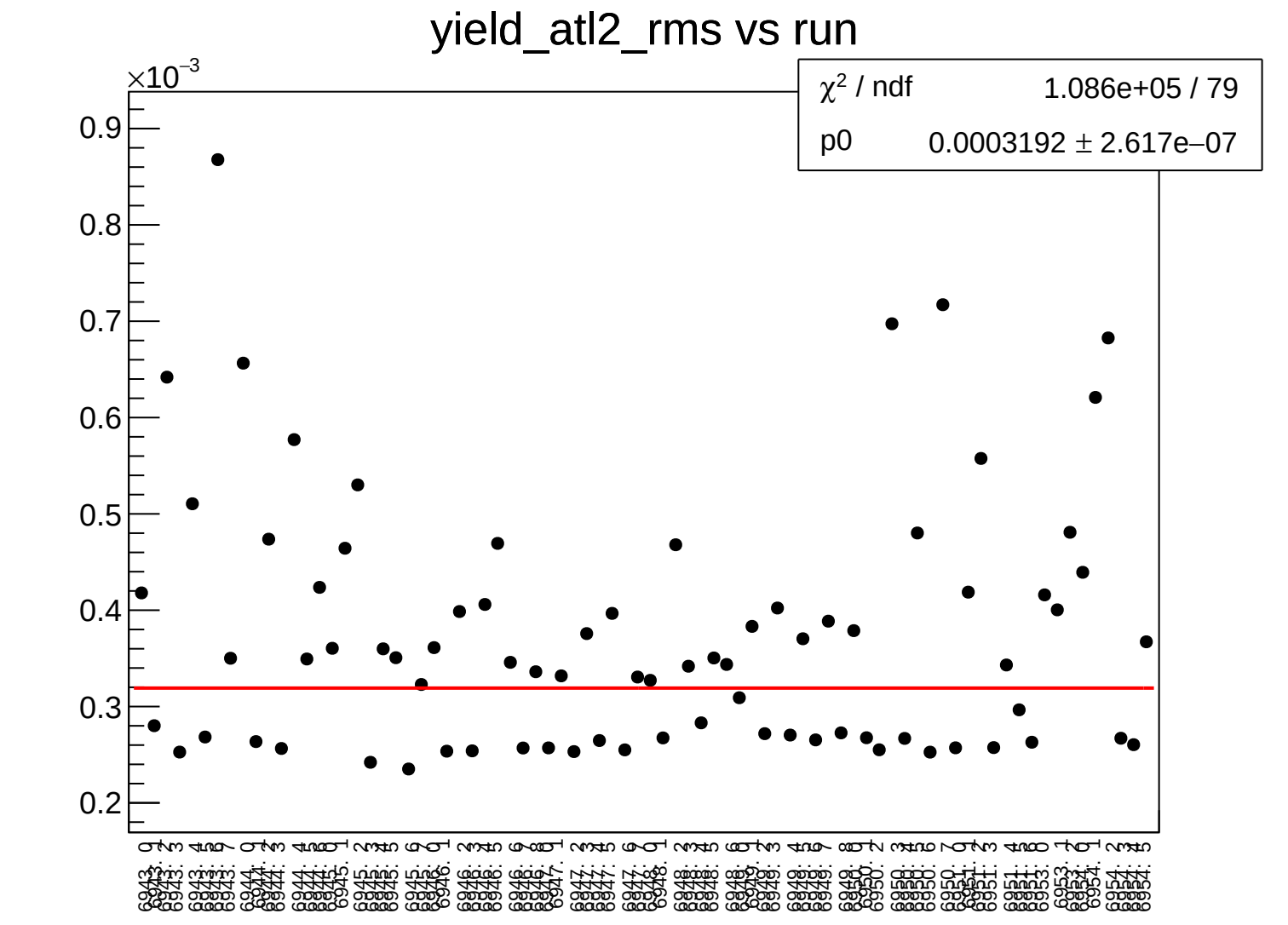

yield_atl1_mean vs run
χ² / ndf 1.951e+05 / 79
p0 0.02445 ± 7.89e−08
0.02454
0.02452
0.0245
0.02448
0.02446
0.02444
0.02442
0.0244
0.02438
0.02436
pull
Entries 80
Mean 737.3
Std Dev 687.5
100
50
0
−50
−100

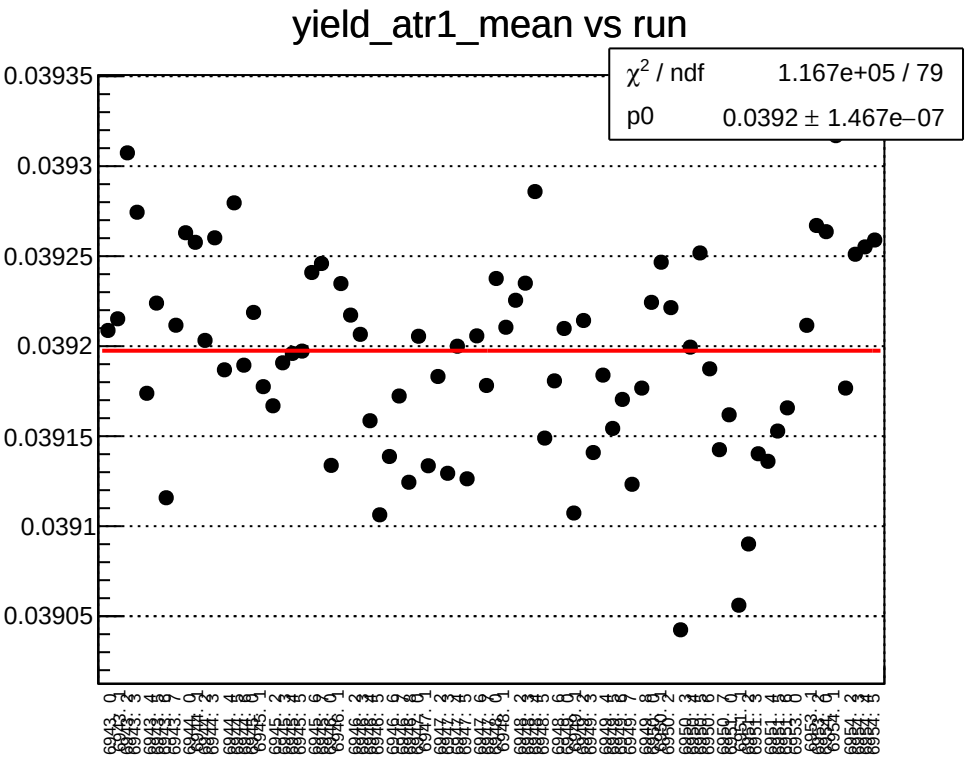

pull1D
Entries 80
Mean 2.12
Std Dev 1.644
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

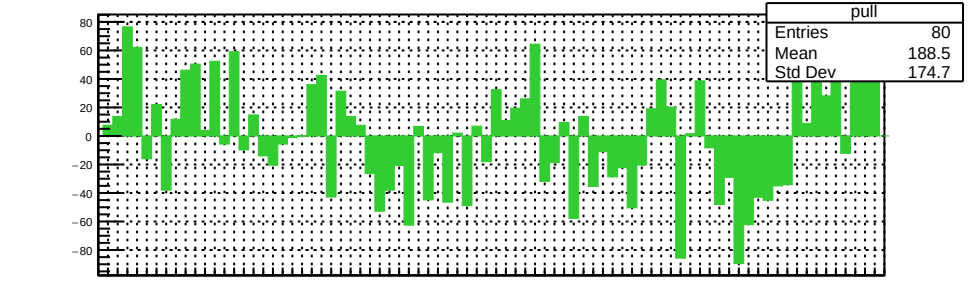

yield_atl1_rms vs run
×10⁻³
χ² / ndf 1.596e+04 / 79
p0 7.012e−05 ± 5.579e−08
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065
0.06

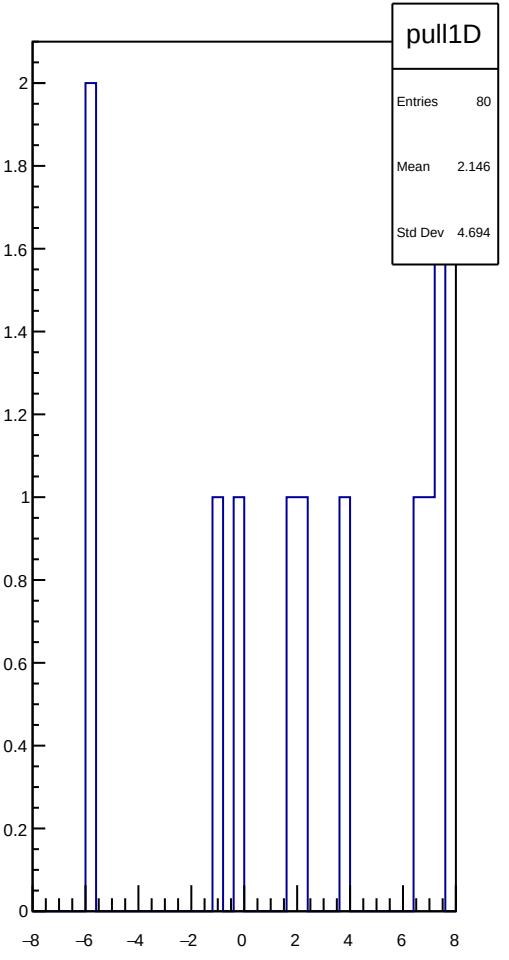

yield_atl2_mean vs run
χ² / ndf 1.283e+05 / 79
p0 0.0243 ± 3.701e−07
0.025
0.0248
0.0246
0.0244
0.0242
0.024
0.0238
0.0236
pull
Entries 80
Mean −132.7
Std Dev 180.3
100
50
0
−50
−100

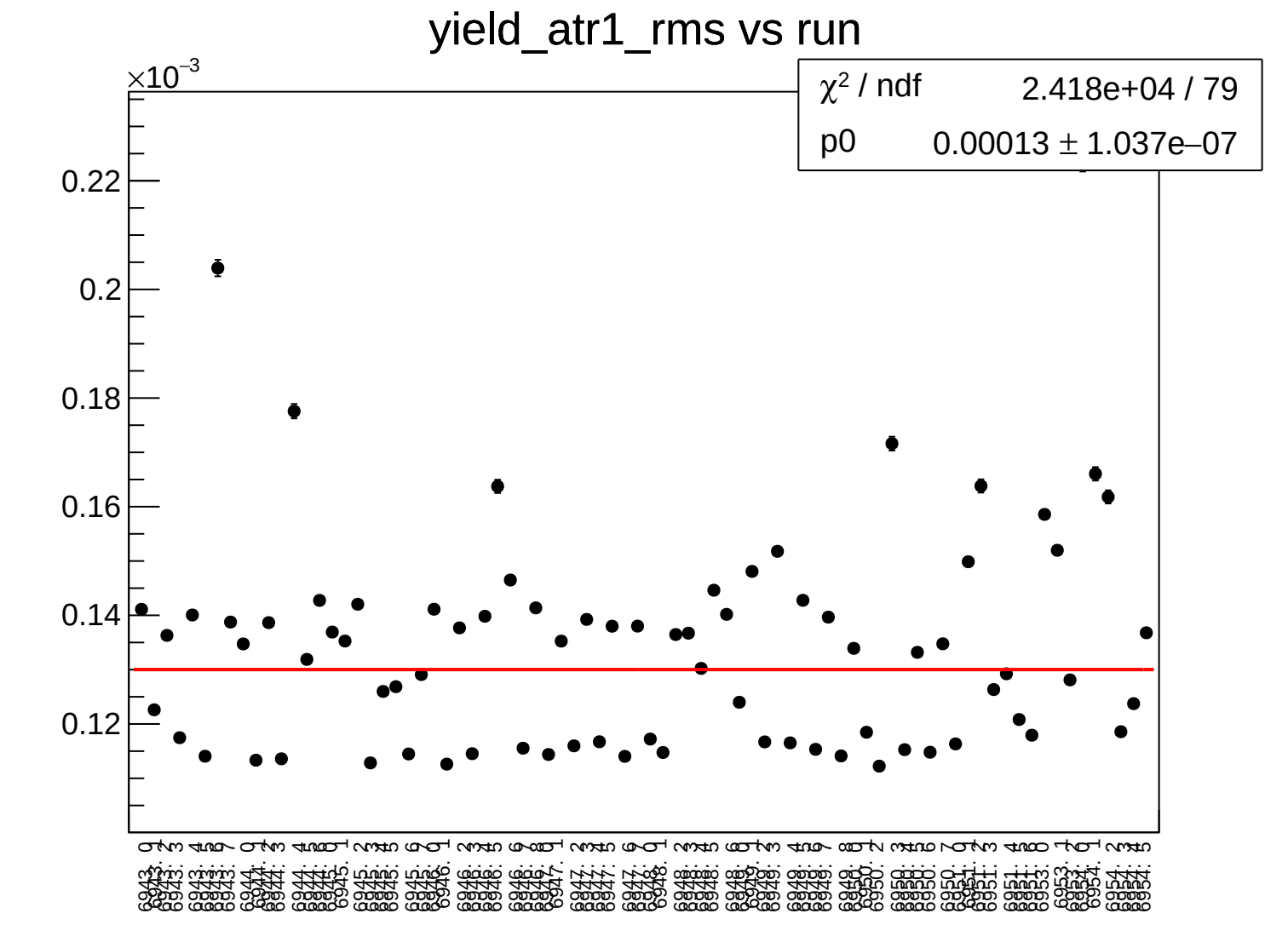

pull1D
Entries 80
Mean 0.62
Std Dev 4.306
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

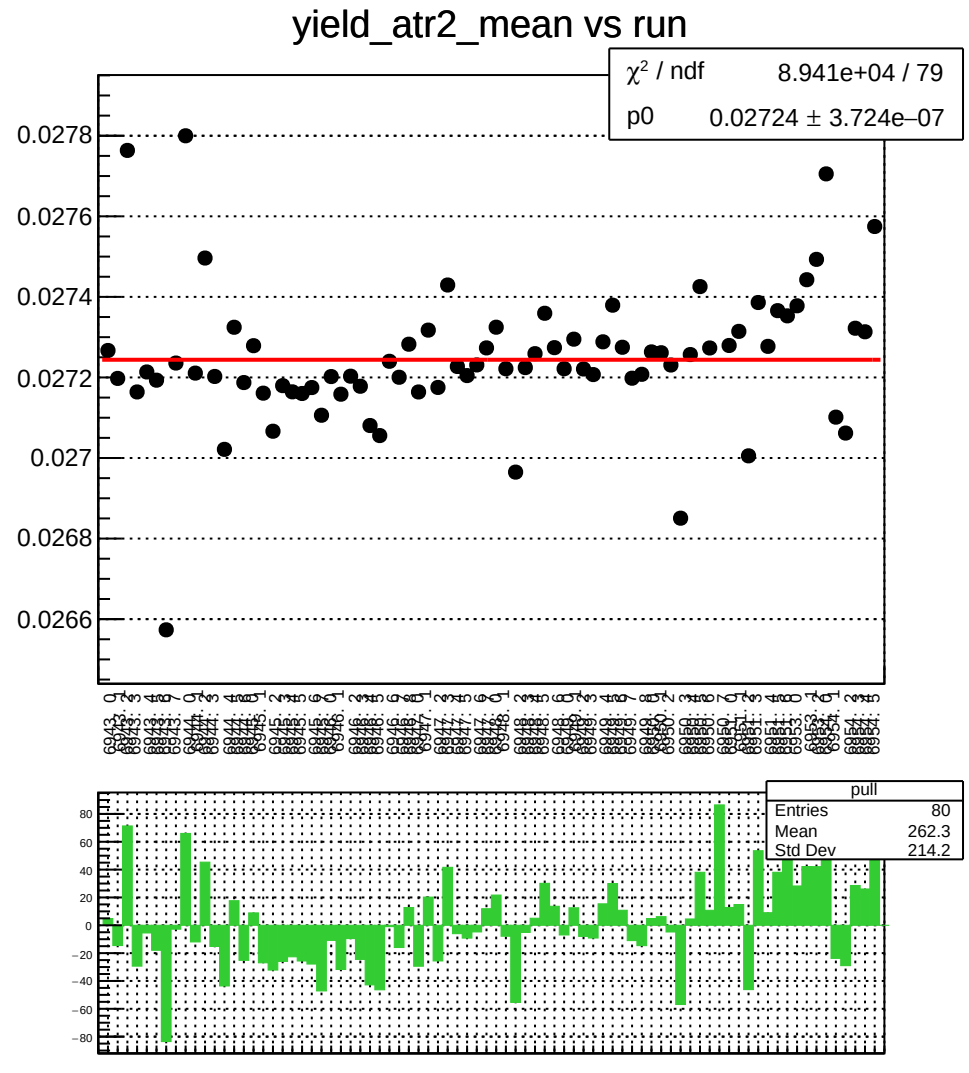

yield_atl2_rms vs run
×10⁻³
χ² / ndf 1.086e+05 / 79
p0 0.0003192 ± 2.617e−07
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2

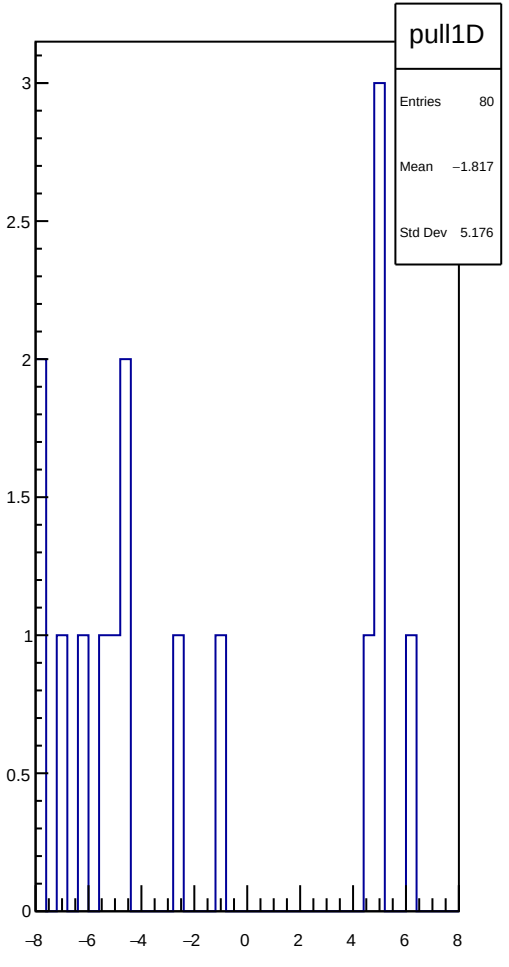

yield_atr1_mean vs run
χ² / ndf 1.167e+05 / 79
p0 0.0392 ± 1.467e−07
0.03935
0.0393
0.03925
0.0392
0.03915
0.0391
0.03905

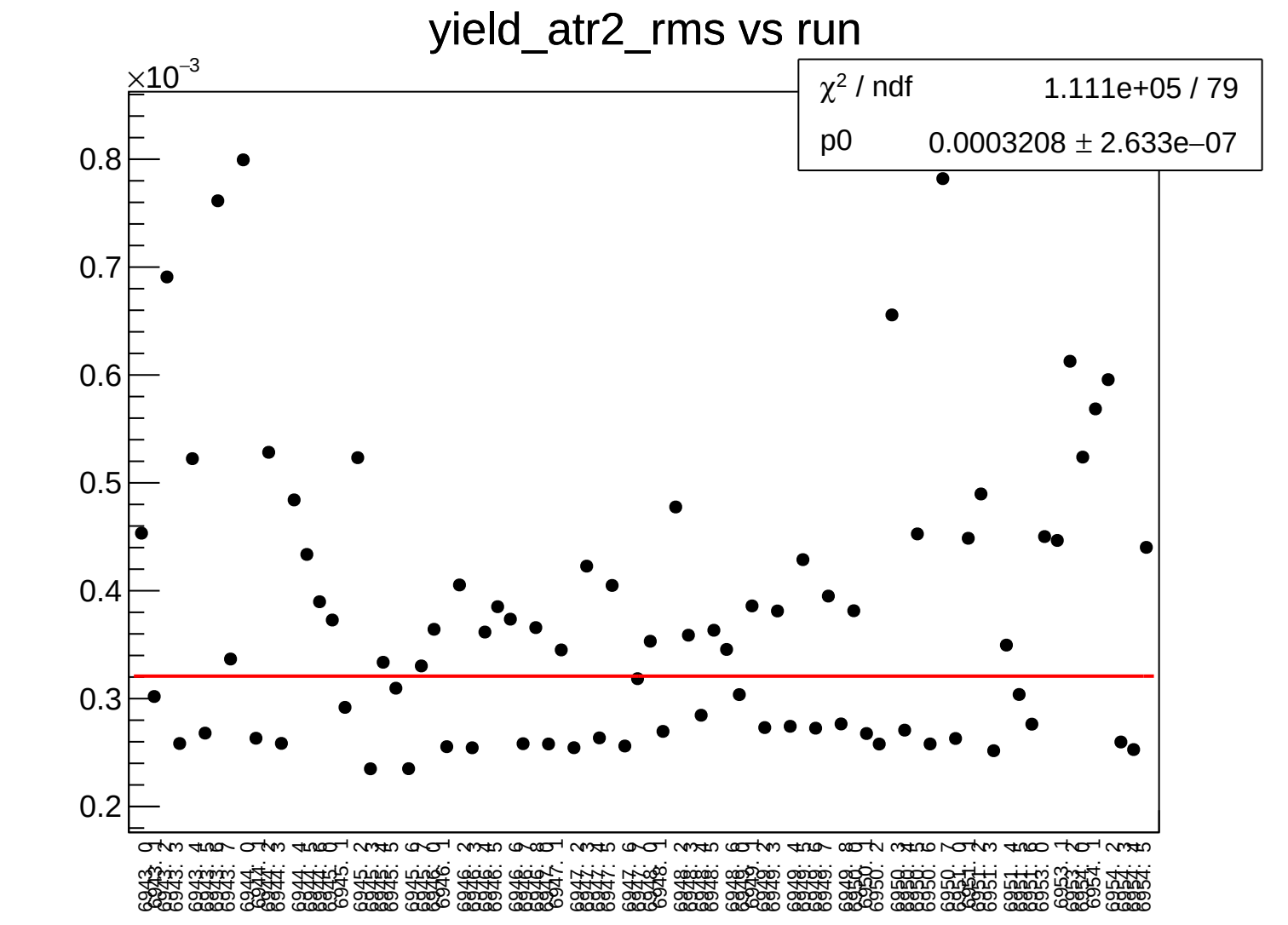

pull
Entries 80
Mean 188.5
Std Dev 174.7
80
60
40
20
0
−20
−40
−60
−80

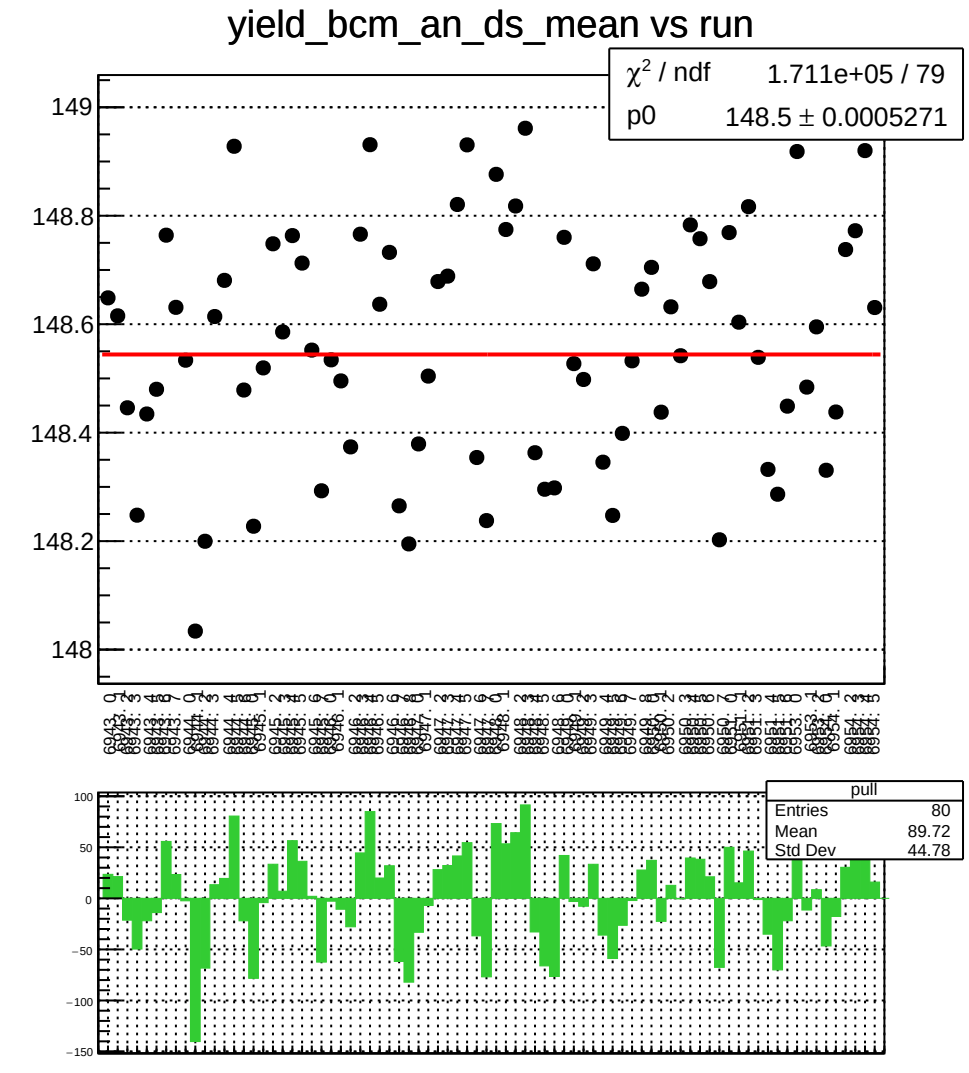

pull1D
Entries 80
Mean 2.146
Std Dev 4.694
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

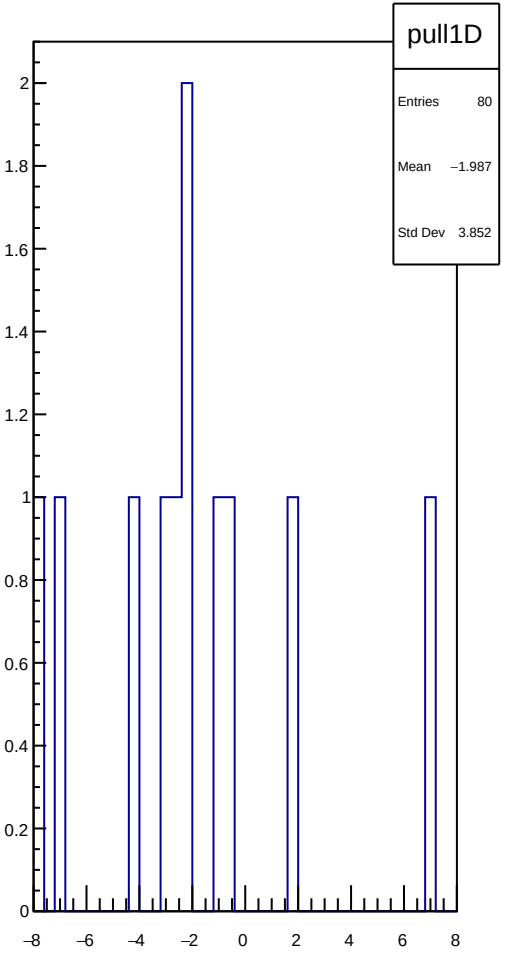

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.418e+04 / 79
p0 0.00013 ± 1.037e–07
0.22
0.2
0.18
0.16
0.14
0.12

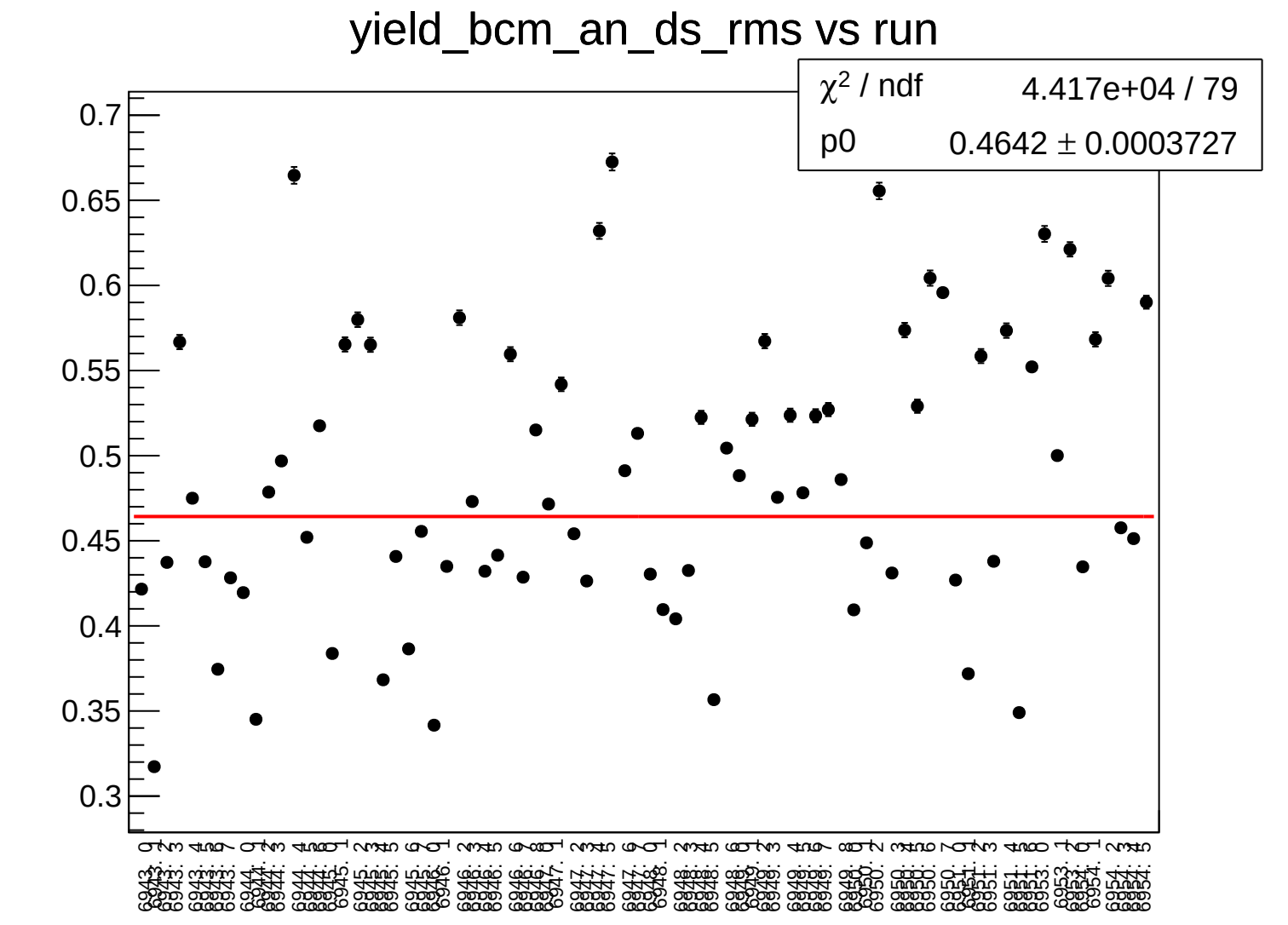

yield_atr2_mean vs run
χ² / ndf 8.941e+04 / 79
p0 0.02724 ± 3.724e−07
0.0278
0.0276
0.0274
0.0272
0.027
0.0268
0.0266
pull
Entries 80
Mean 262.3
Std Dev 214.2
80
60
40
20
0
−20
−40
−60
−80

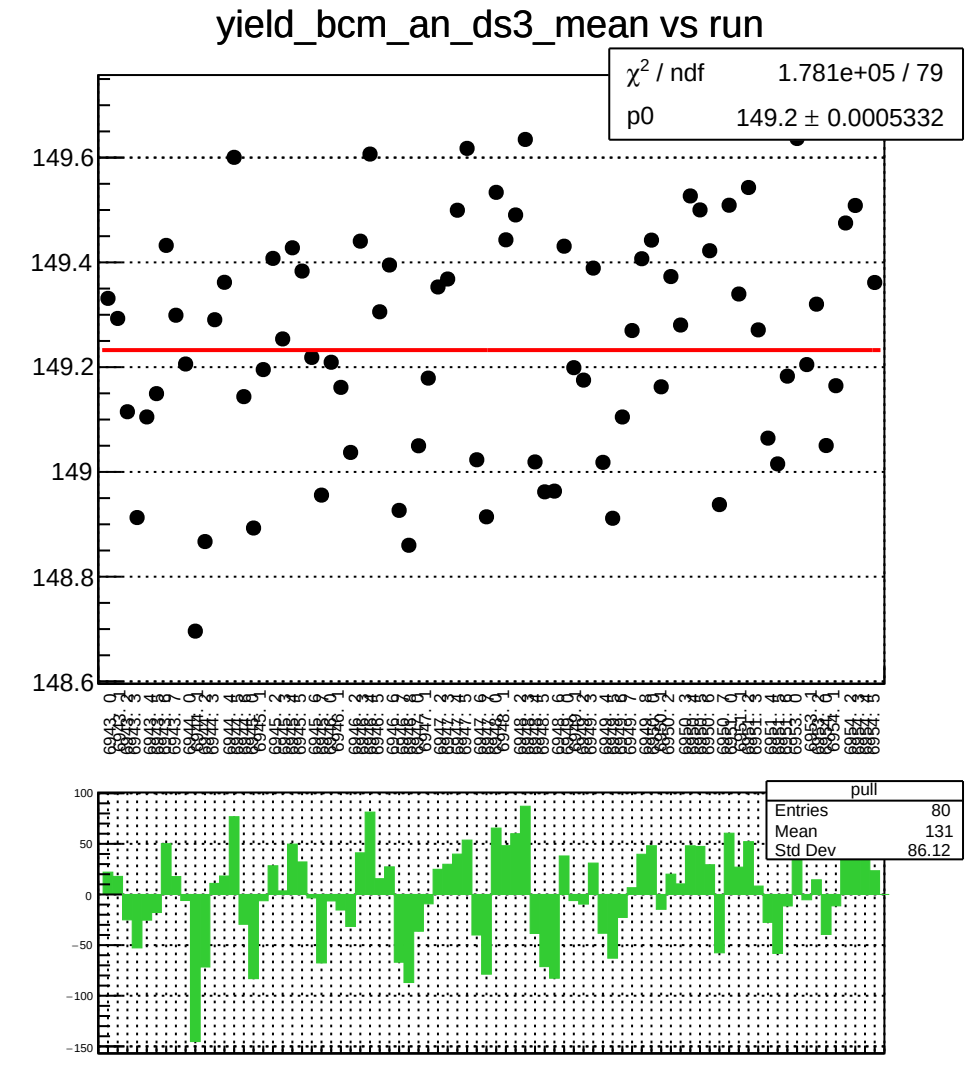

pull1D
Entries 80
Mean −1.817
Std Dev 5.176
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

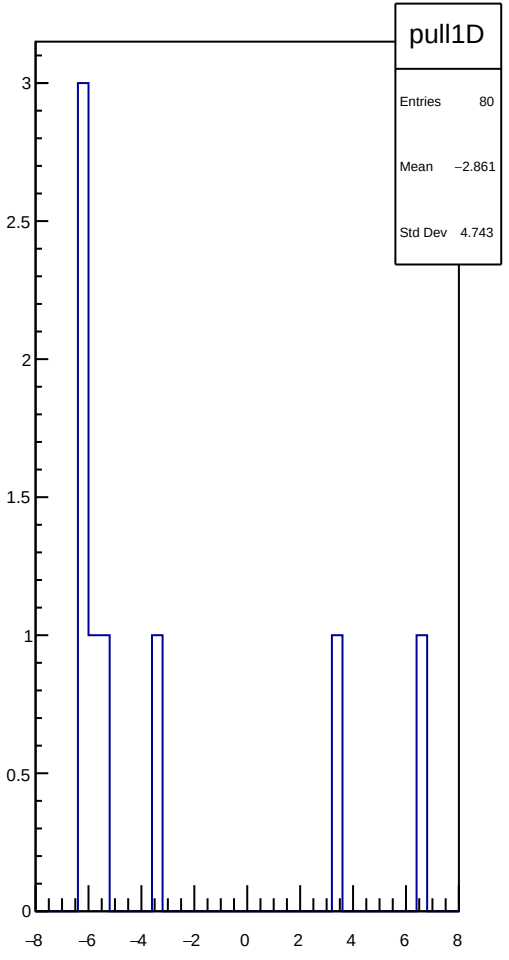

yield_atr2_rms vs run
×10⁻³
χ² / ndf 1.111e+05 / 79
p0 0.0003208 ± 2.633e−07
0.8
0.7
0.6
0.5
0.4
0.3
0.2

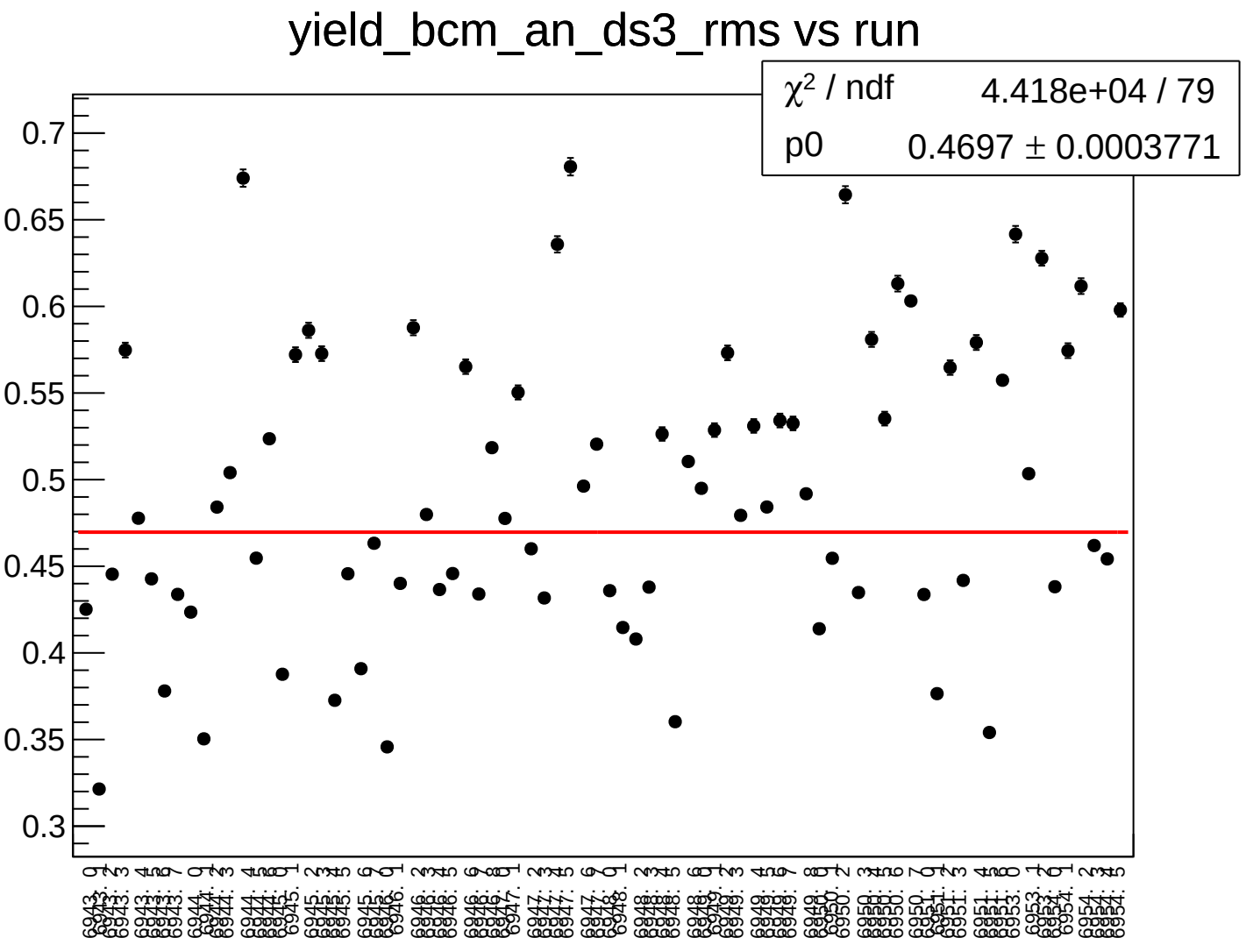

yield_bcm_an_ds_mean vs run
χ² / ndf 1.711e+05 / 79
p0 148.5 ± 0.0005271
149
148.8
148.6
148.4
148.2
148
pull
Entries 80
Mean 89.72
Std Dev 44.78
100
50
0
−50
−100
−150

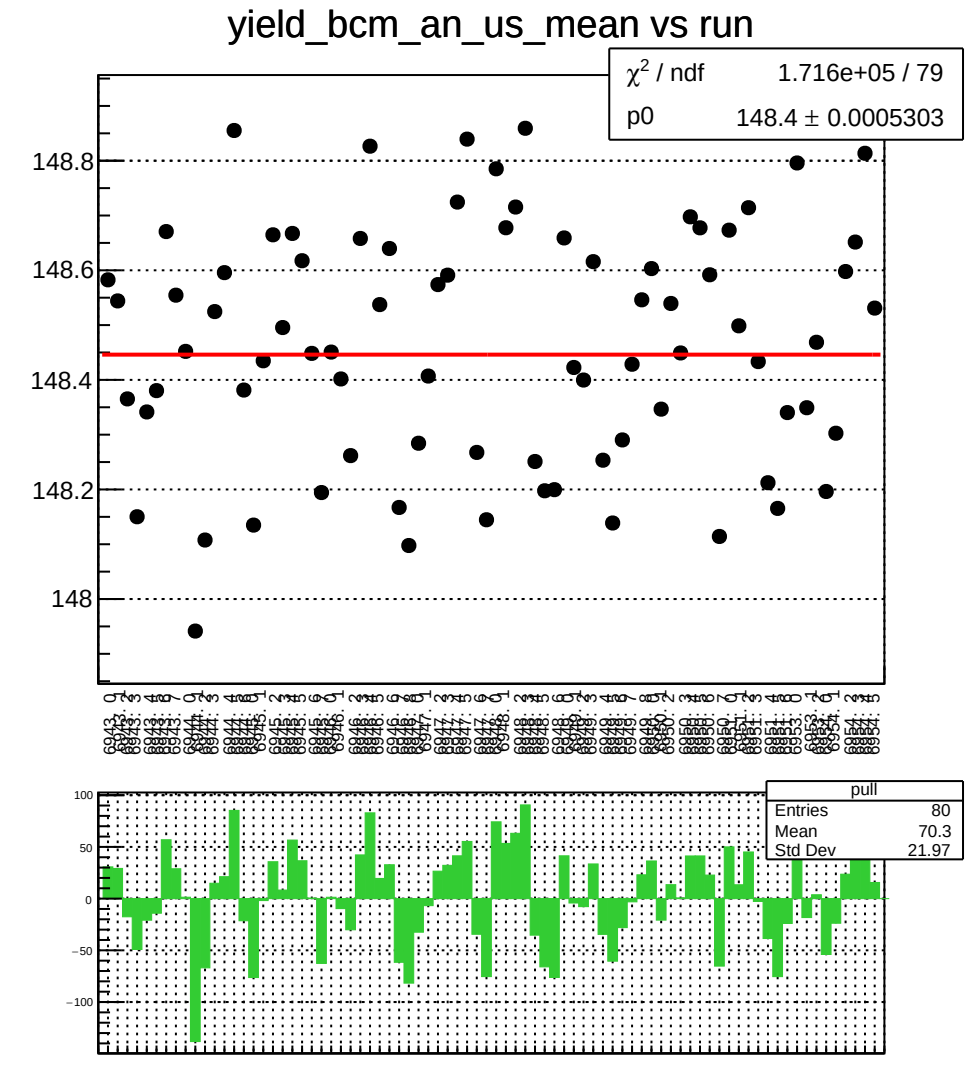

pull1D
Entries 80
Mean −1.987
Std Dev 3.852
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

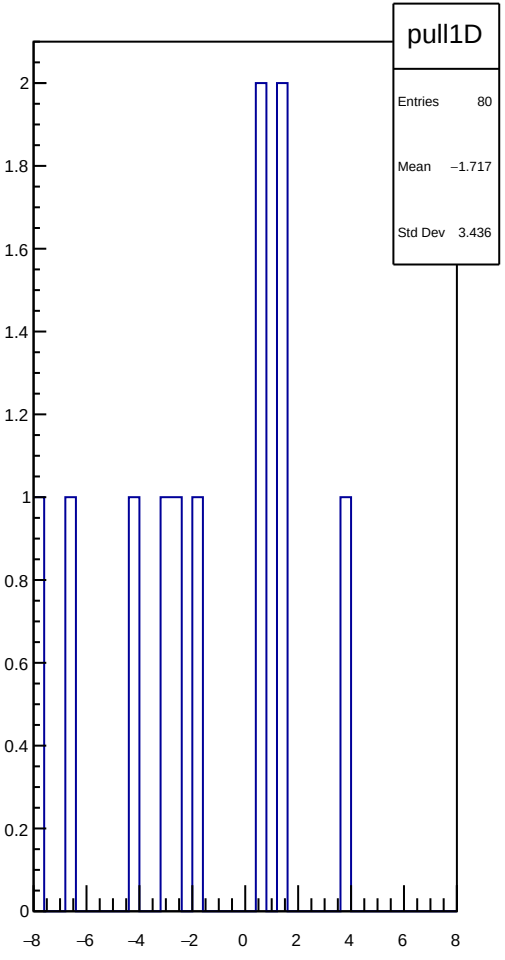

yield_bcm_an_ds_rms vs run
χ² / ndf 4.417e+04 / 79
p0 0.4642 ± 0.0003727
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

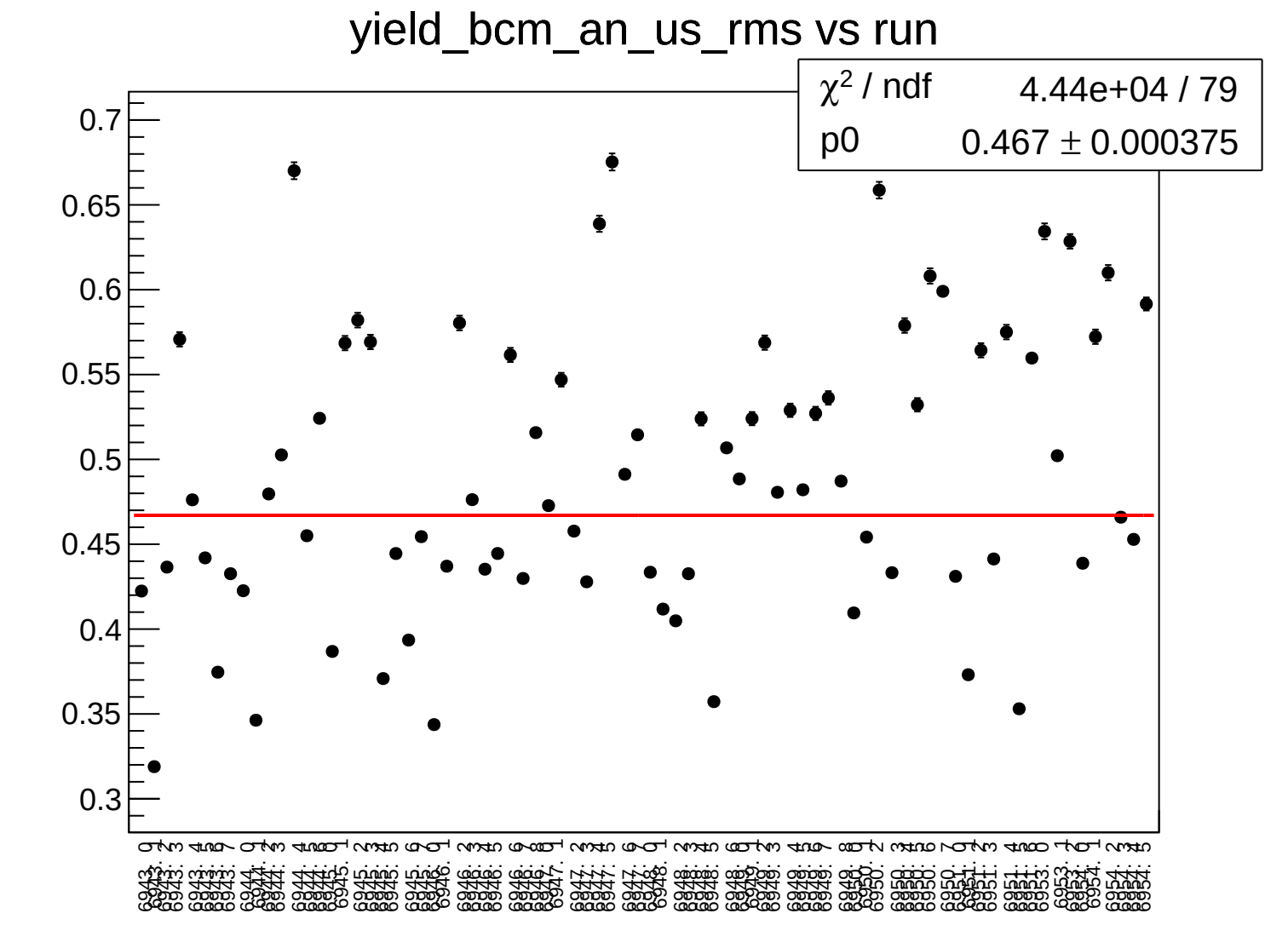

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.781e+05 / 79
p0 149.2 ± 0.0005332
149.6
149.4
149.2
149
148.8
148.6
pull
Entries 80
Mean 131
Std Dev 86.12
100
50
0
−50
−100
−150

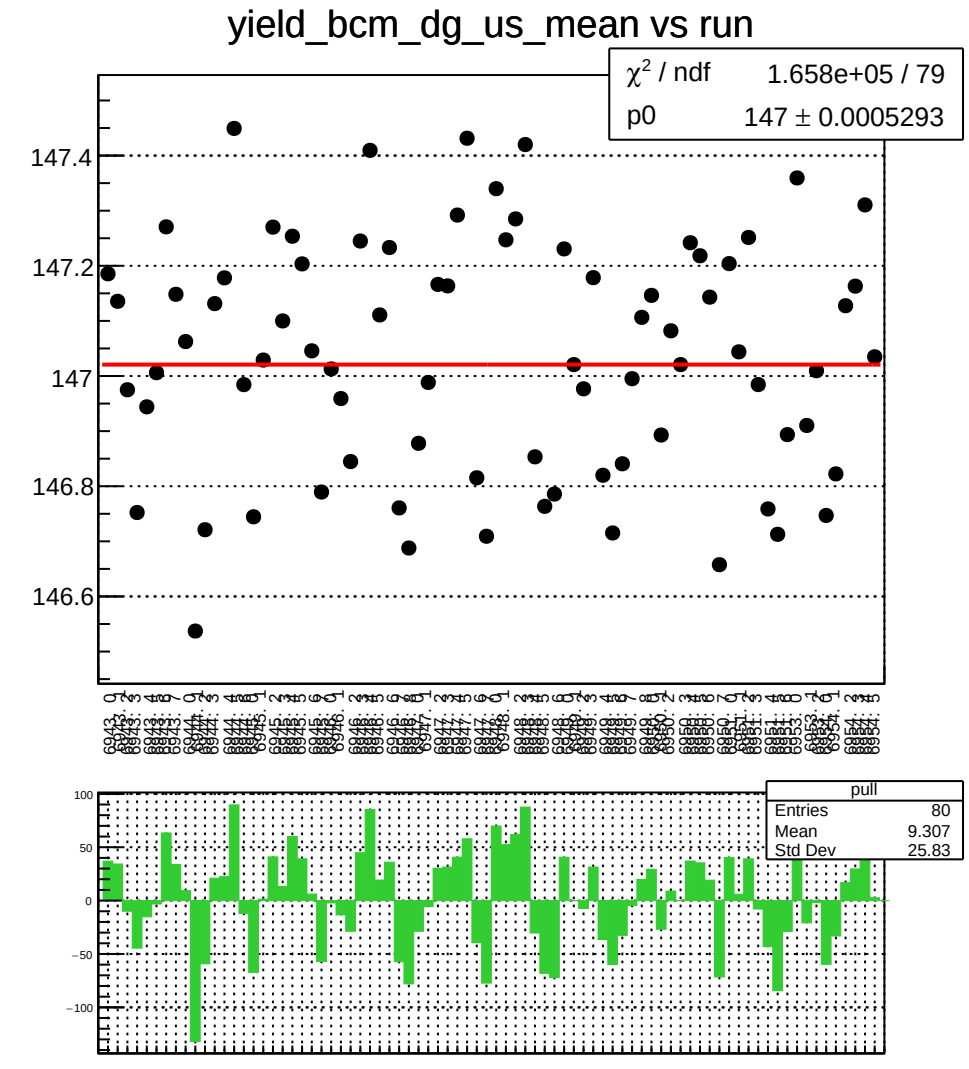

pull1D
Entries 80
Mean −2.861
Std Dev 4.743
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

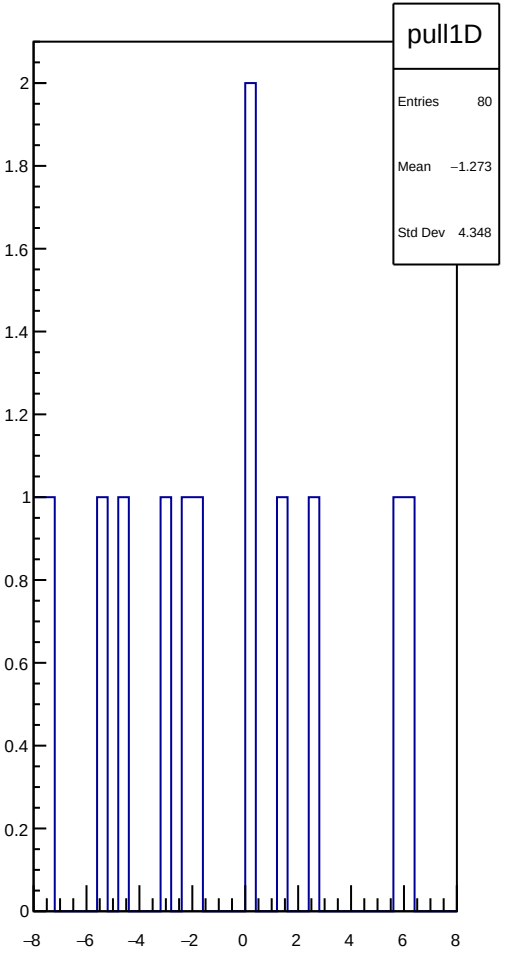

yield_bcm_an_ds3_rms vs run
χ² / ndf 4.418e+04 / 79
p0 0.4697 ± 0.0003771
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

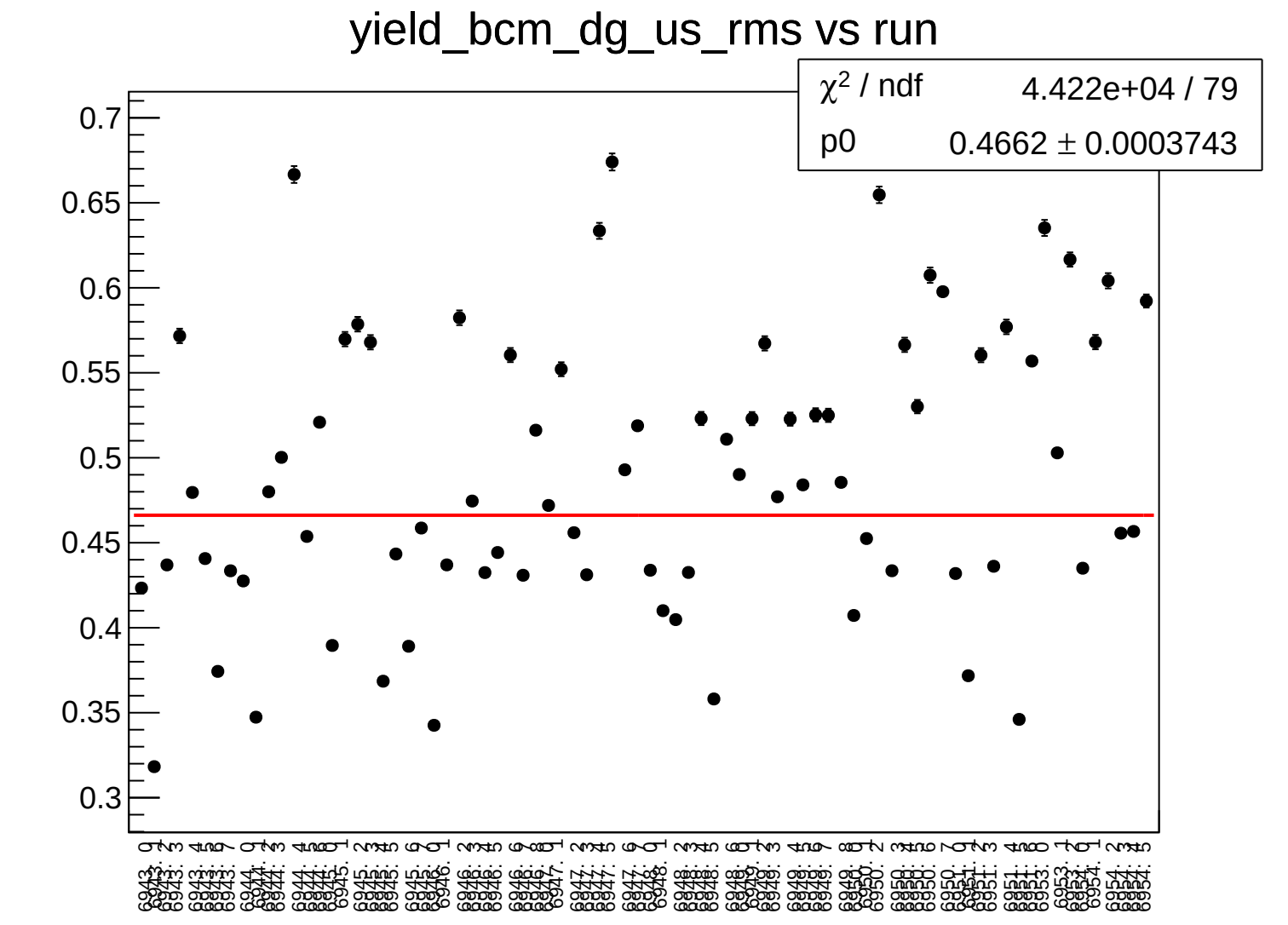

yield_bcm_an_us_mean vs run
χ² / ndf 1.716e+05 / 79
p0 148.4 ± 0.0005303
148.8
148.6
148.4
148.2
148
pull
Entries 80
Mean 70.3
Std Dev 21.97
100
50
0
−50
−100

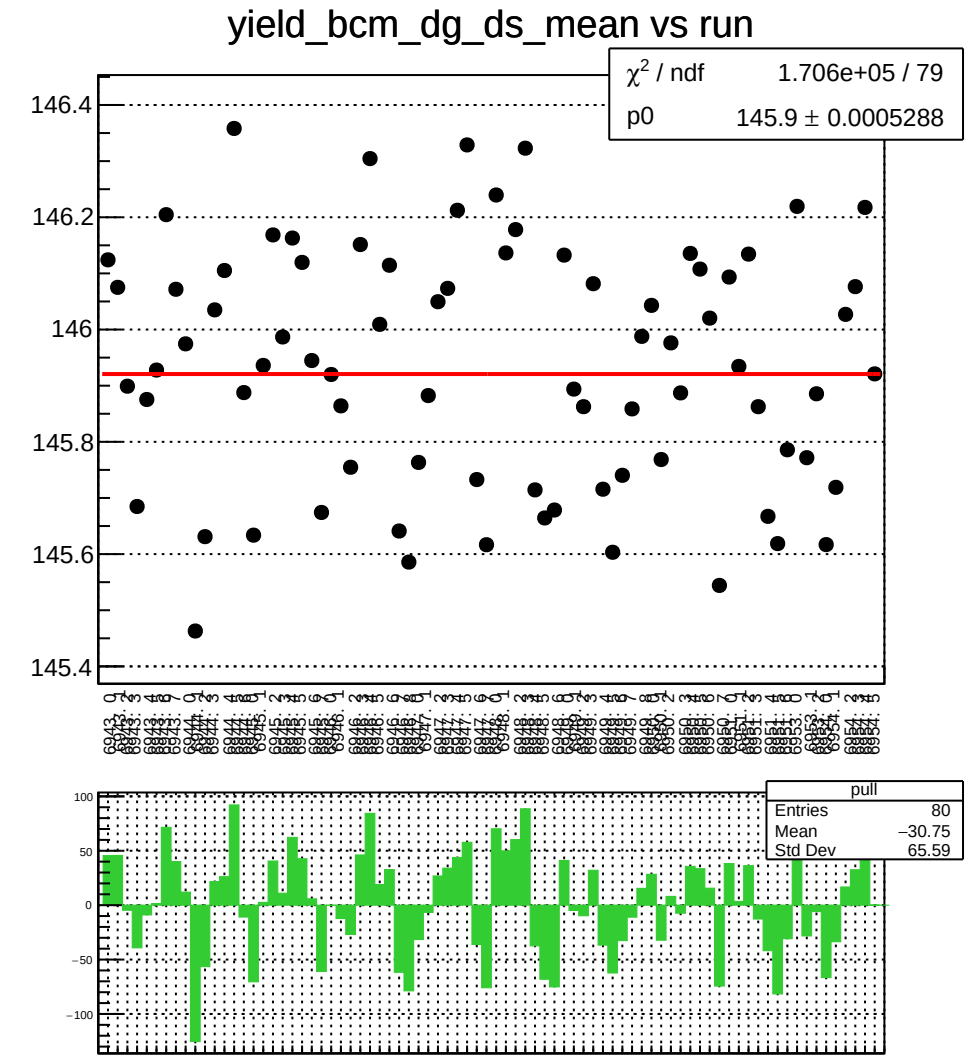

pull1D
Entries 80
Mean −1.717
Std Dev 3.436
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

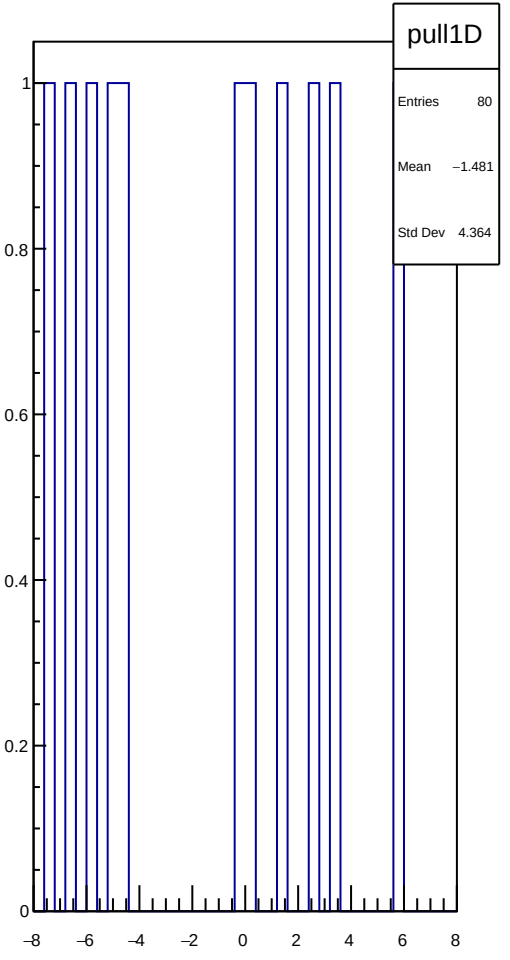

yield_bcm_an_us_rms vs run
χ² / ndf 4.44e+04 / 79
p0 0.467 ± 0.000375
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

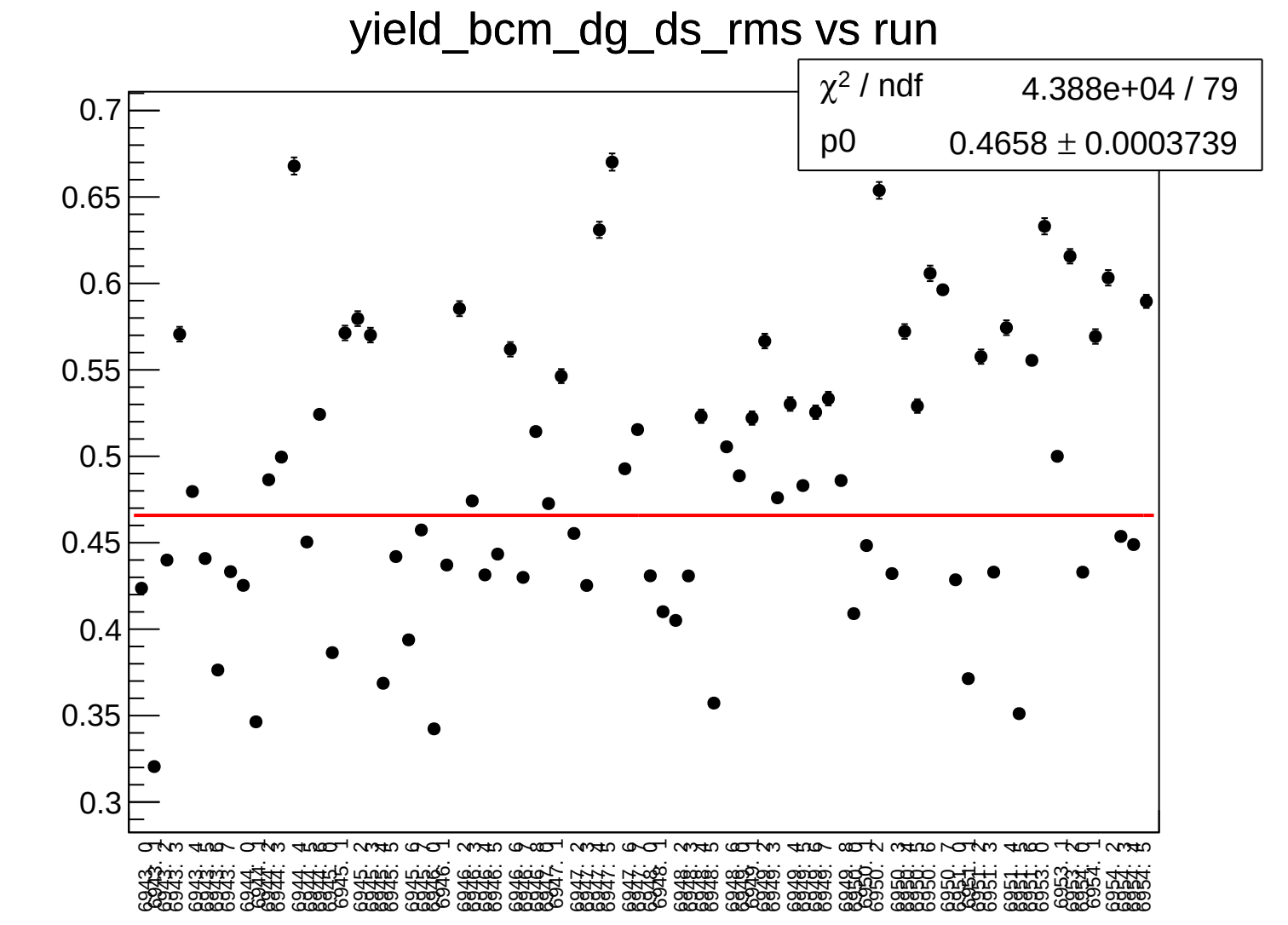

yield_bcm_dg_us_mean vs run
χ² / ndf 1.658e+05 / 79
p0 147 ± 0.0005293
147.4
147.2
147
146.8
146.6
pull
Entries 80
Mean 9.307
Std Dev 25.83
100
50
0
−50
−100

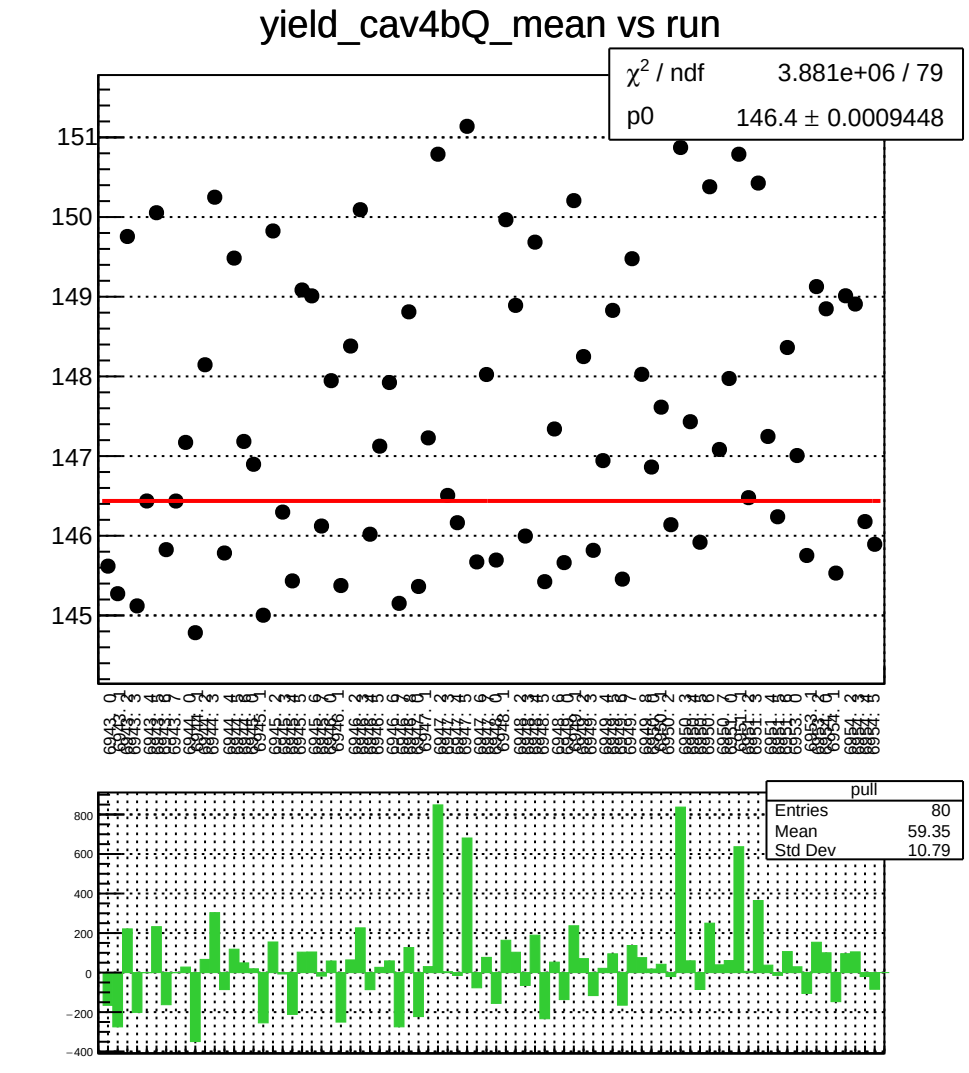

pull1D
Entries 80
Mean −1.273
Std Dev 4.348
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

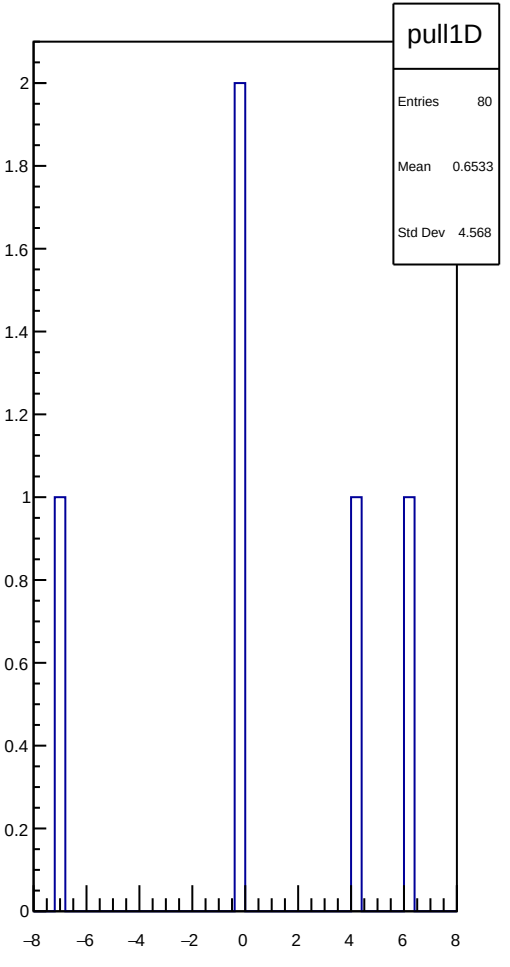

yield_bcm_dg_us_rms vs run
χ² / ndf 4.422e+04 / 79
p0 0.4662 ± 0.0003743
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

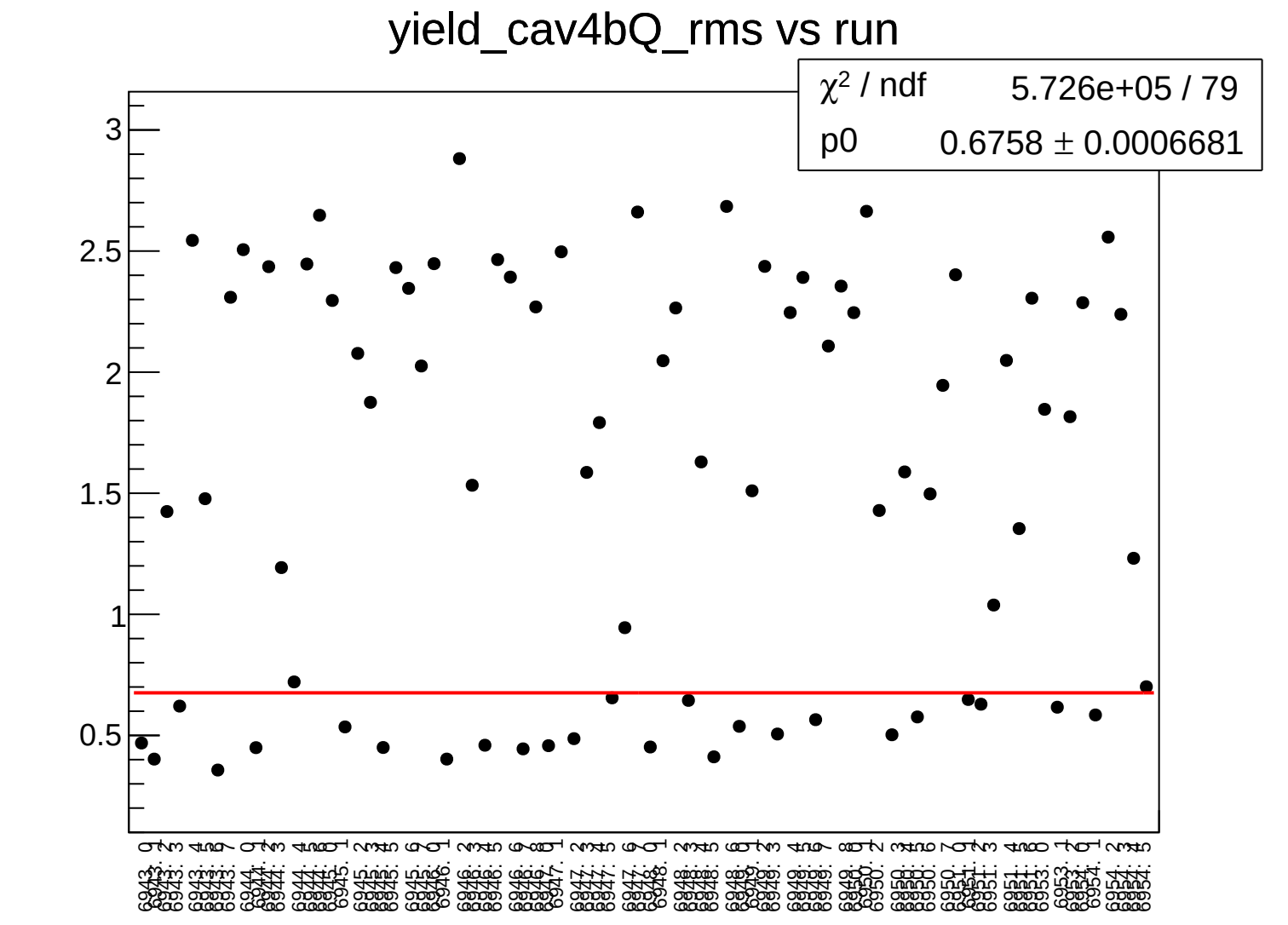

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.706e+05 / 79
p0 145.9 ± 0.0005288
146.4
146.2
146
145.8
145.6
145.4
pull
Entries 80
Mean −30.75
Std Dev 65.59
100
50
0
−50
−100

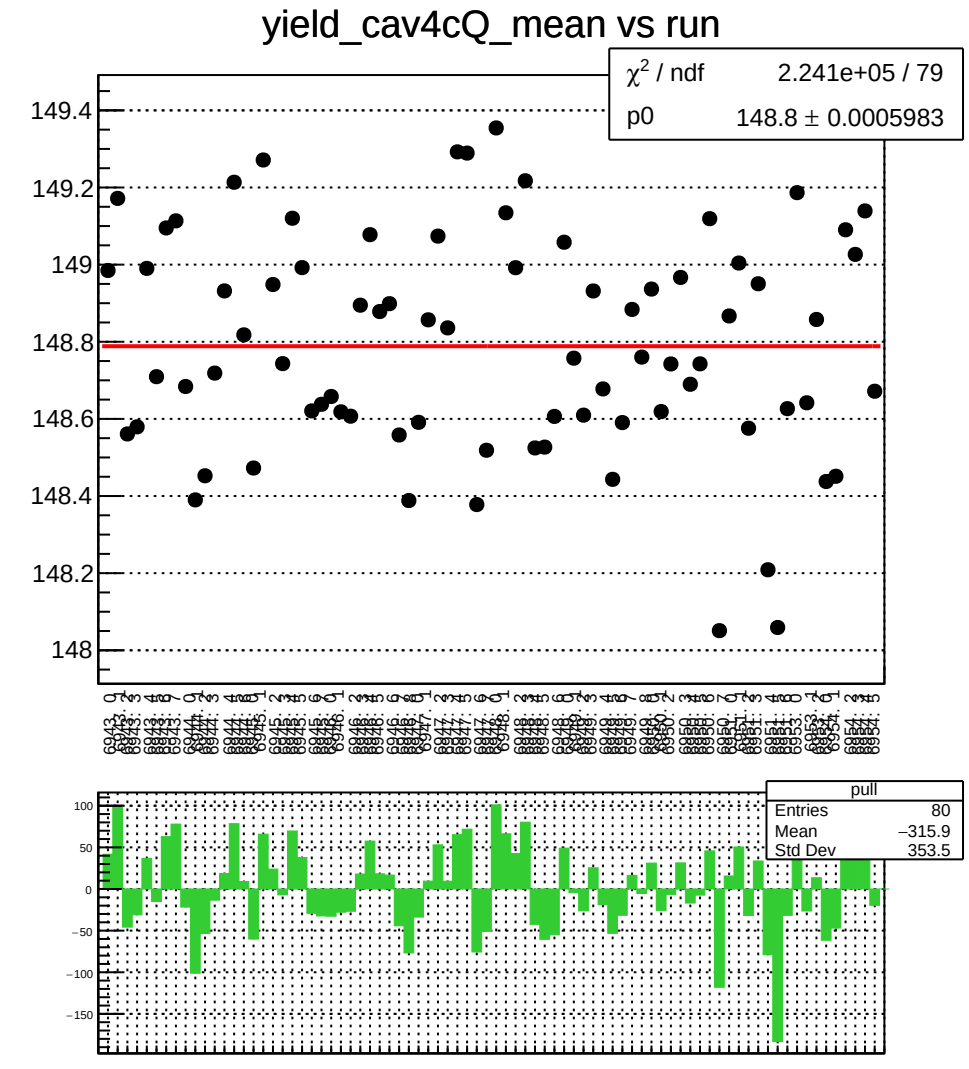

pull1D
Entries 80
Mean −1.481
Std Dev 4.364
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

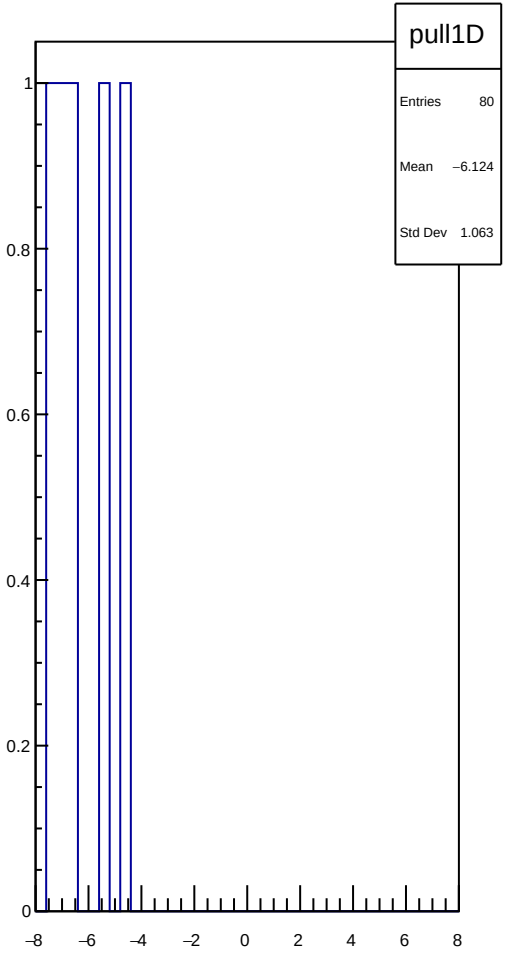

yield_bcm_dg_ds_rms vs run
χ² / ndf 4.388e+04 / 79
p0 0.4658 ± 0.0003739
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

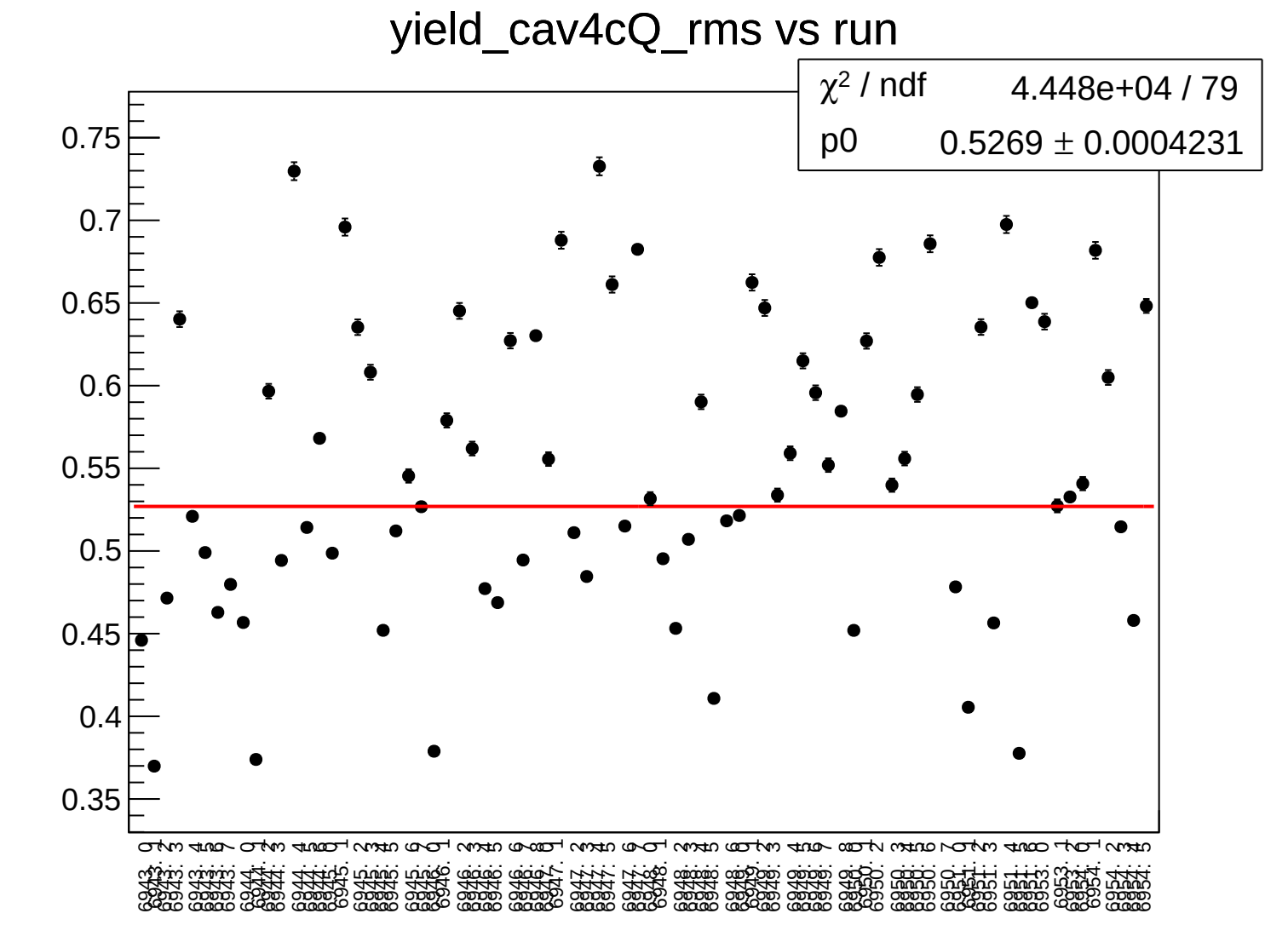

yield_cav4bQ_mean vs run
χ² / ndf 3.881e+06 / 79
p0 146.4 ± 0.0009448
151
150
149
148
147
146
145
pull
Entries 80
Mean 59.35
Std Dev 10.79
800
600
400
200
0
−200
−400

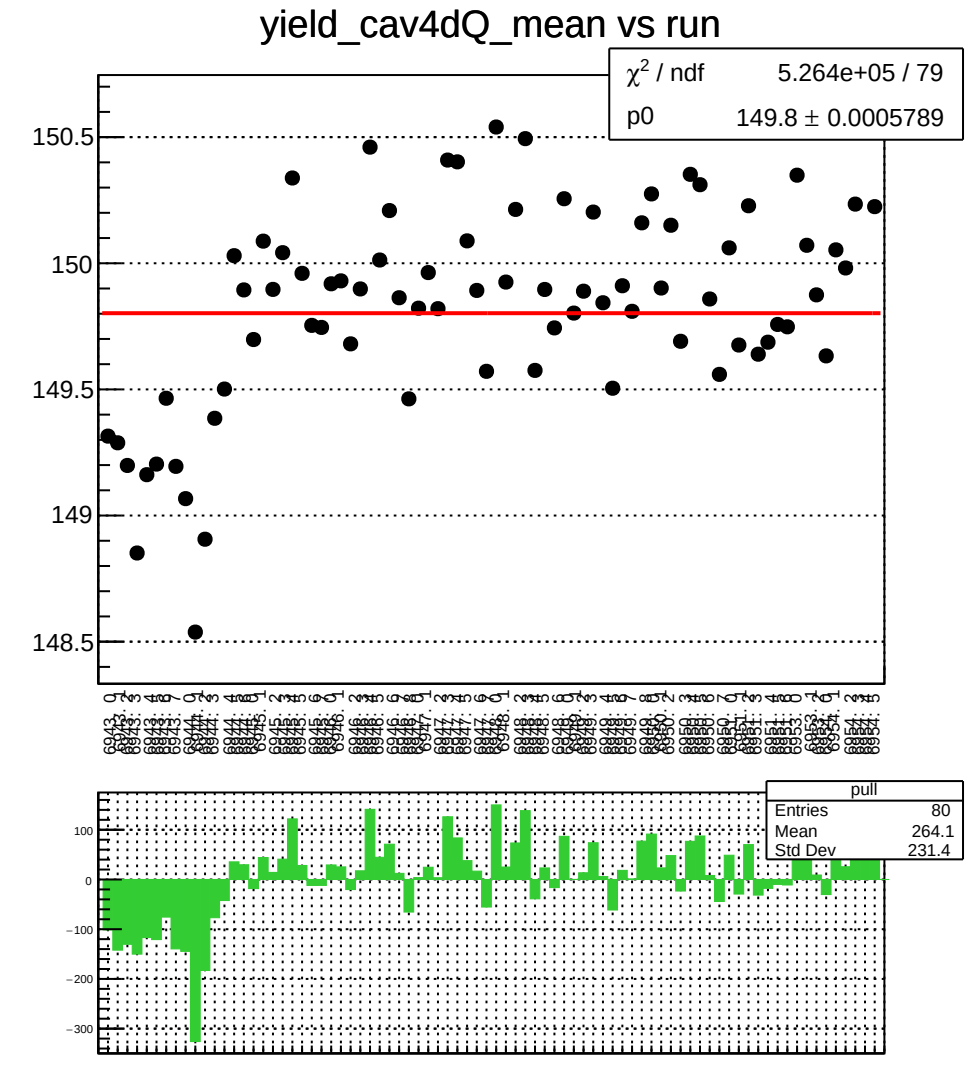

pull1D
Entries 80
Mean 0.6533
Std Dev 4.568
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

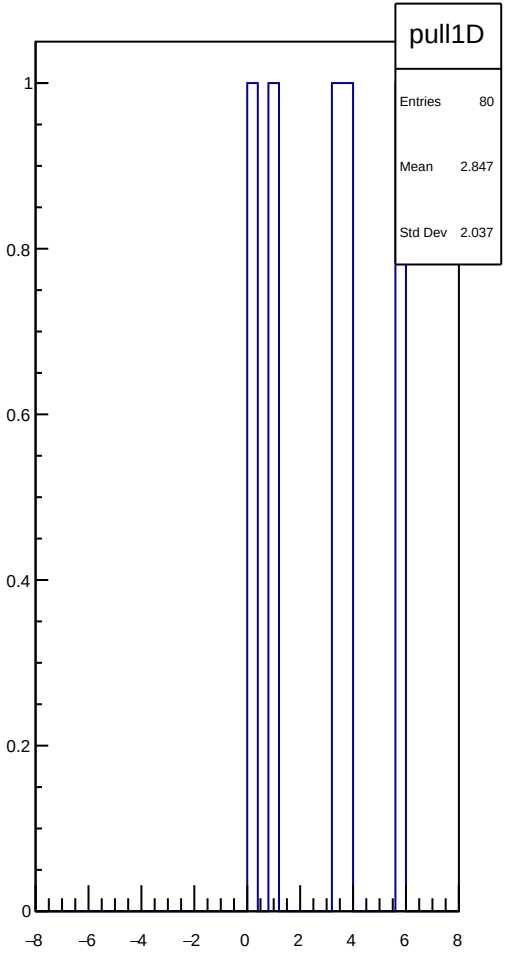

yield_cav4bQ_rms vs run
χ² / ndf 5.726e+05 / 79
p0 0.6758 ± 0.0006681
3
2.5
2
1.5
1
0.5

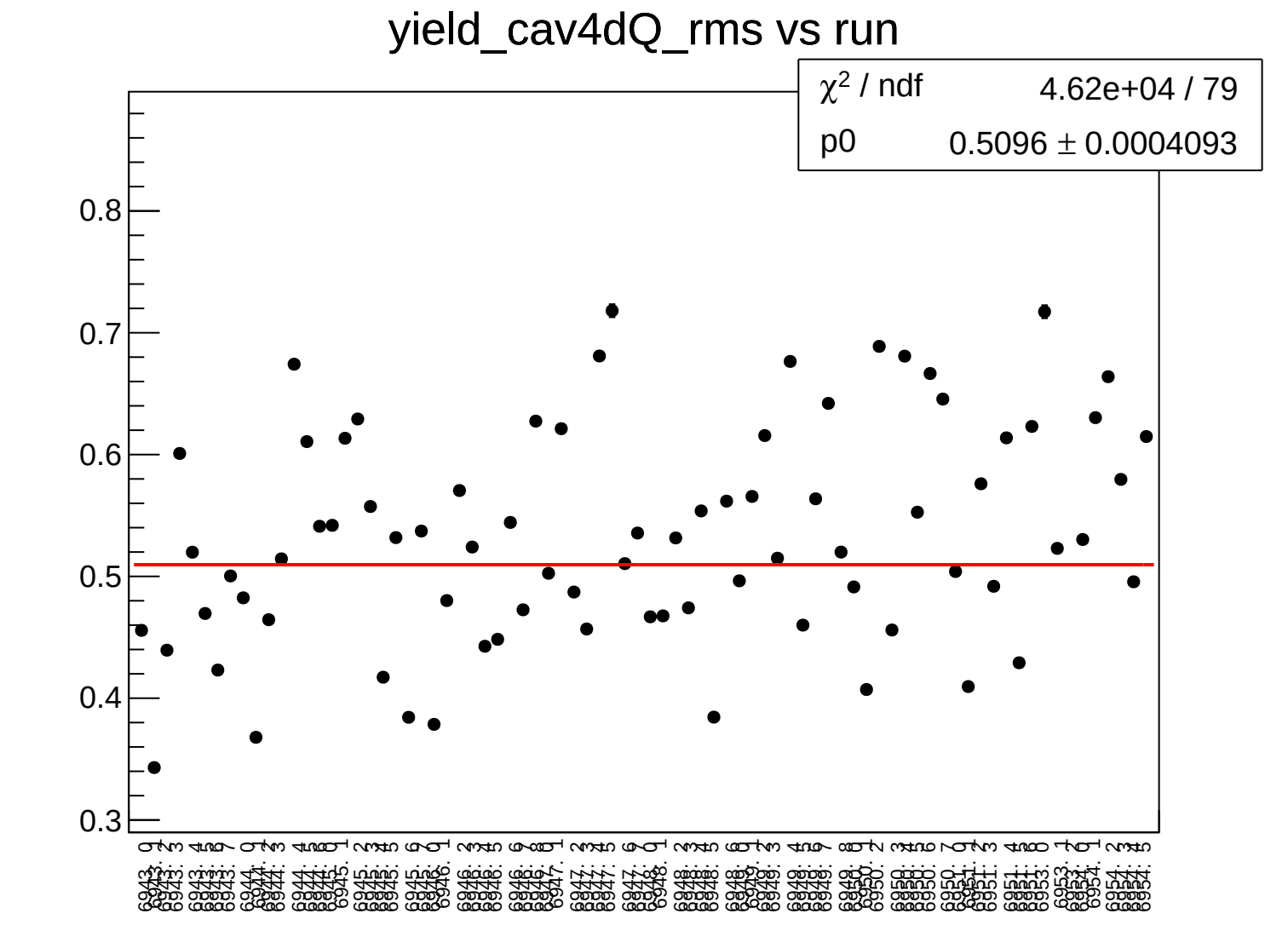

yield_cav4cQ_mean vs run
χ² / ndf 2.241e+05 / 79
p0 148.8 ± 0.0005983
149.4
149.2
149
148.8
148.6
148.4
148.2
148
pull
Entries 80
Mean −315.9
Std Dev 353.5
100
50
0
−50
−100
−150

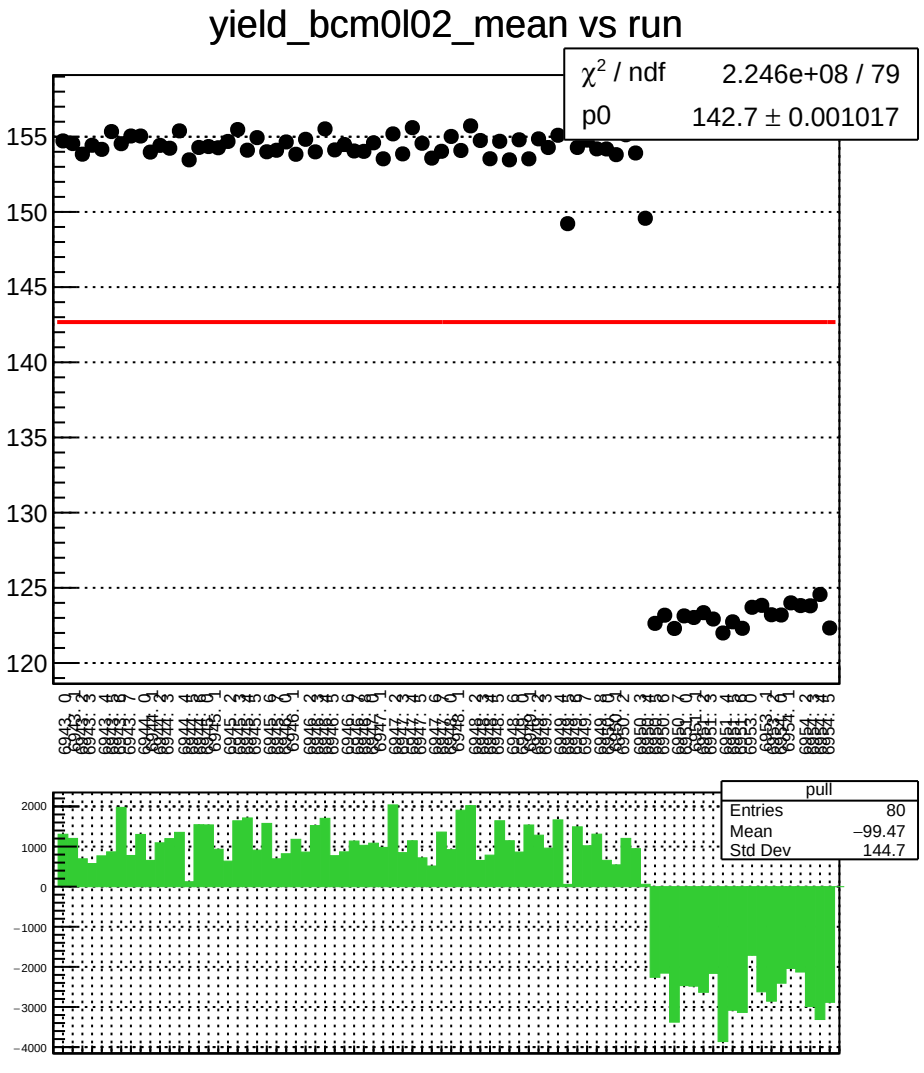

pull1D
Entries 80
Mean −6.124
Std Dev 1.063
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

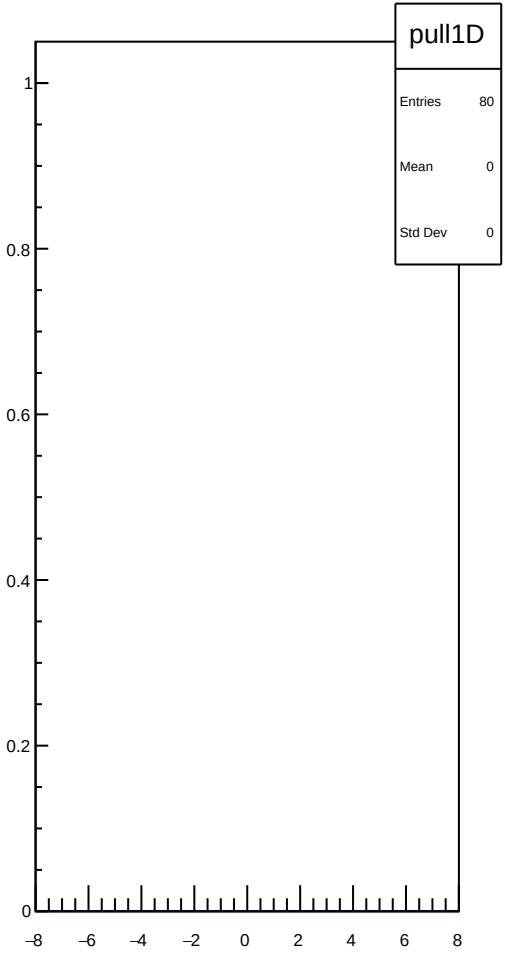

yield_cav4cQ_rms vs run
χ² / ndf 4.448e+04 / 79
p0 0.5269 ± 0.0004231
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

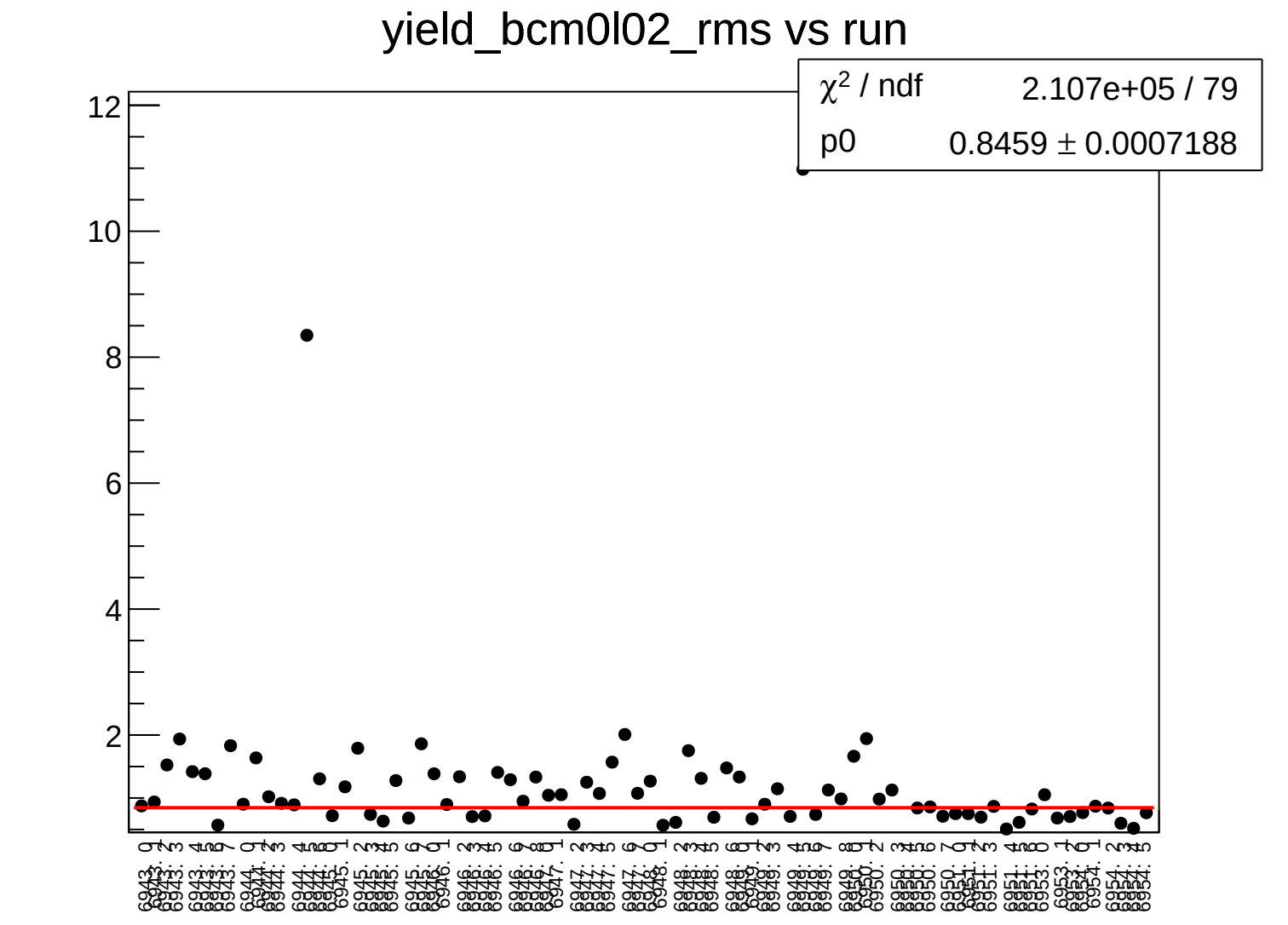

yield_cav4dQ_mean vs run
χ² / ndf 5.264e+05 / 79
p0 149.8 ± 0.0005789
150.5
150
149.5
149
148.5
pull
Entries 80
Mean 264.1
Std Dev 231.4
100
0
−100
−200
−300

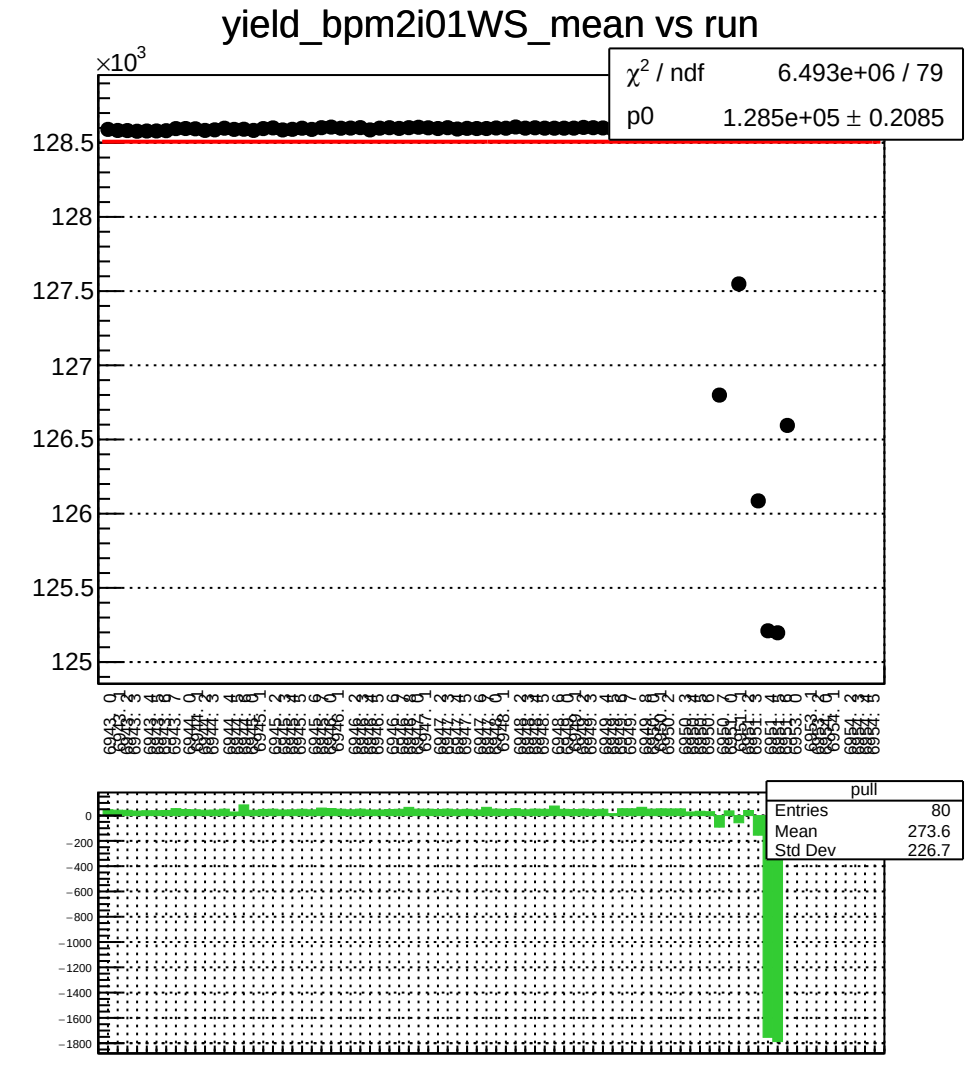

pull1D
Entries 80
Mean 2.847
Std Dev 2.037
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

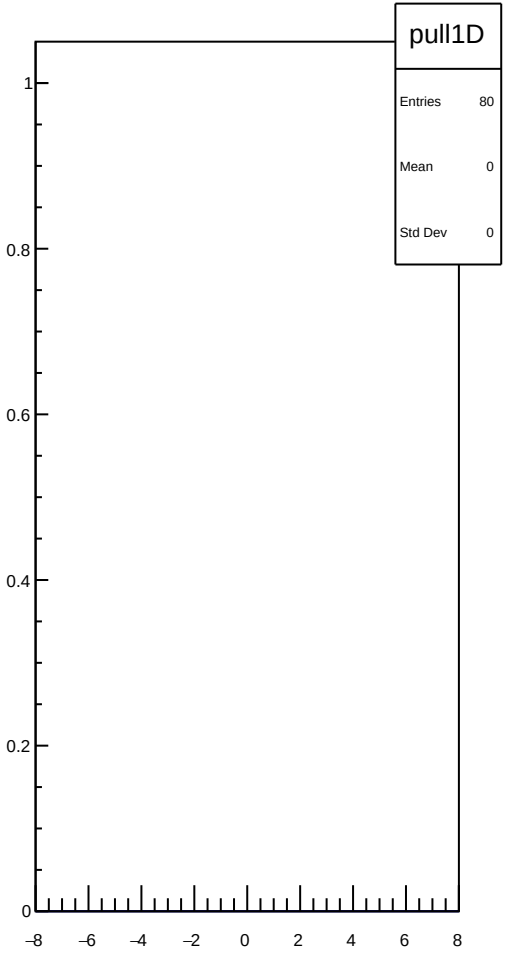

yield_cav4dQ_rms vs run
χ² / ndf 4.62e+04 / 79
p0 0.5096 ± 0.0004093
0.8
0.7
0.6
0.5
0.4
0.3

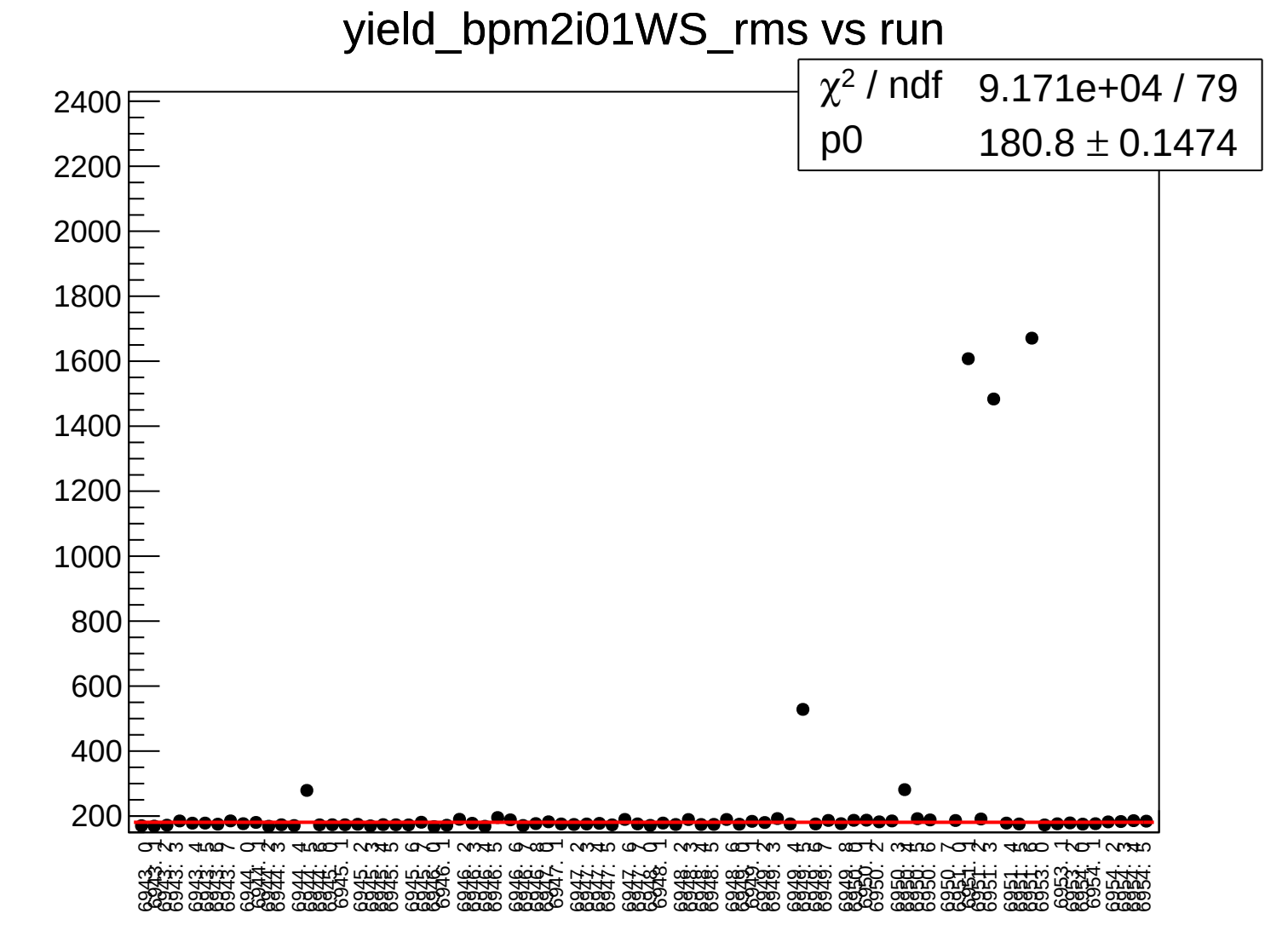

yield_bcm0l02_mean vs run
χ² / ndf 2.246e+08 / 79
p0 142.7 ± 0.001017
155
150
145
140
135
130
125
120
pull
Entries 80
Mean −99.47
Std Dev 144.7
2000
1000
0
−1000
−2000
−3000
−4000

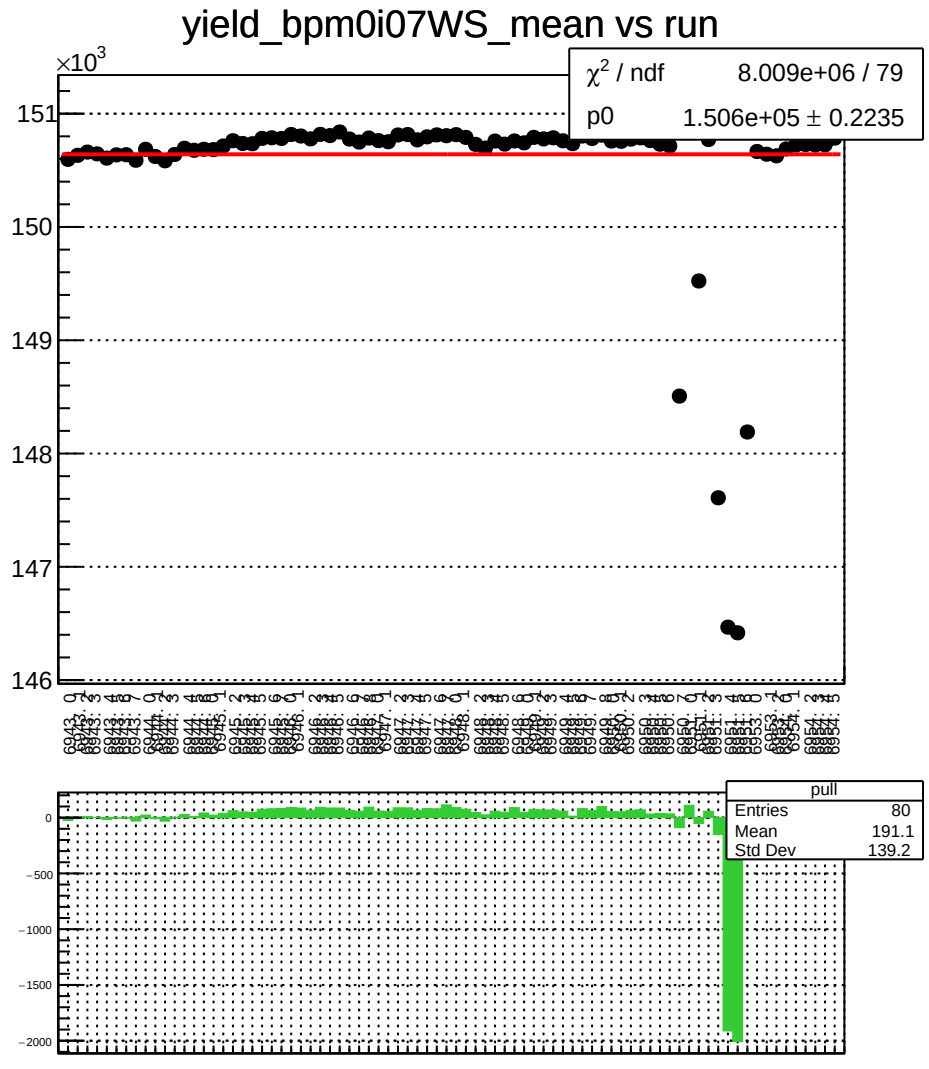

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

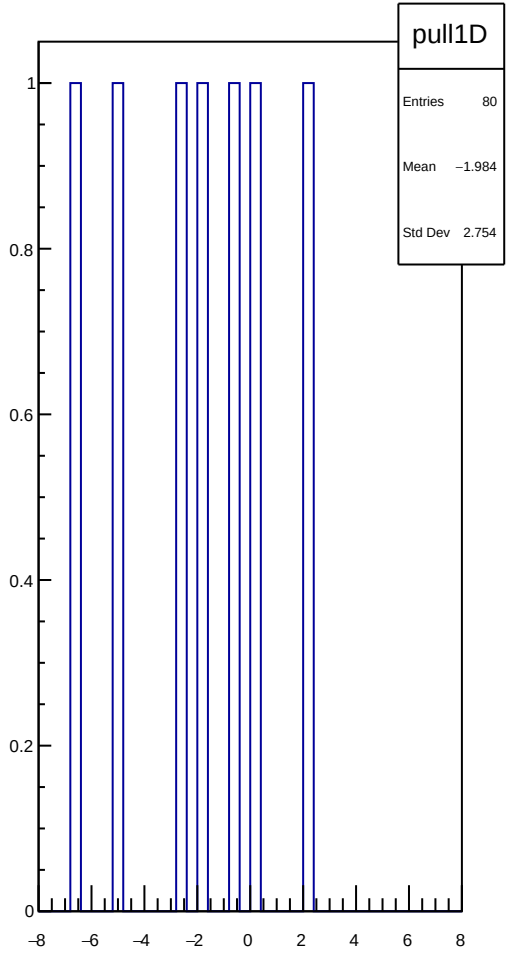

yield_bcm0l02_rms vs run
χ² / ndf 2.107e+05 / 79
p0 0.8459 ± 0.0007188
12
10
8
6
4
2

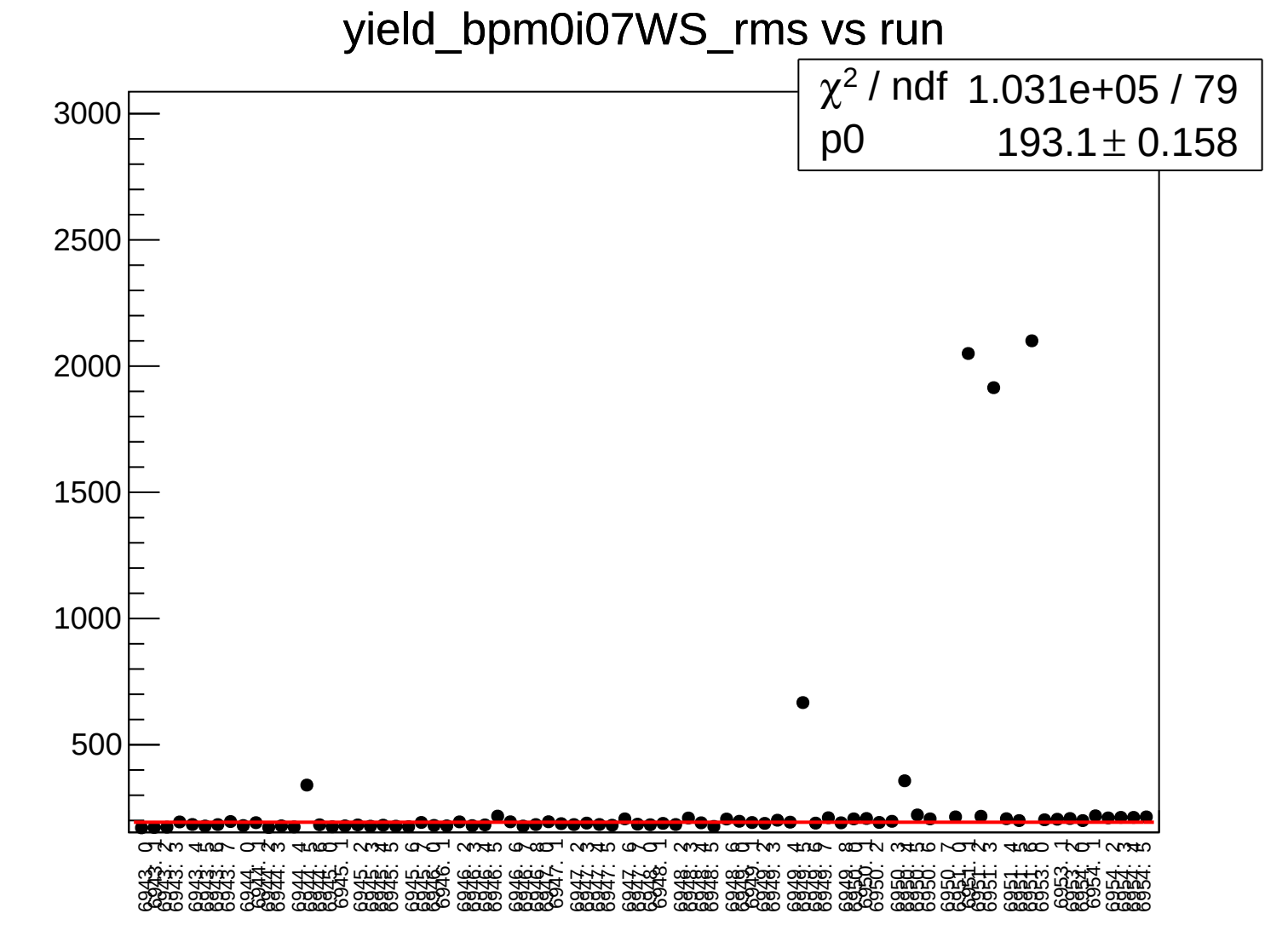

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 6.493e+06 / 79
p0 1.285e+05 ± 0.2085
128.5
128
127.5
127
126.5
126
125.5
125
pull
Entries 80
Mean 273.6
Std Dev 226.7
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

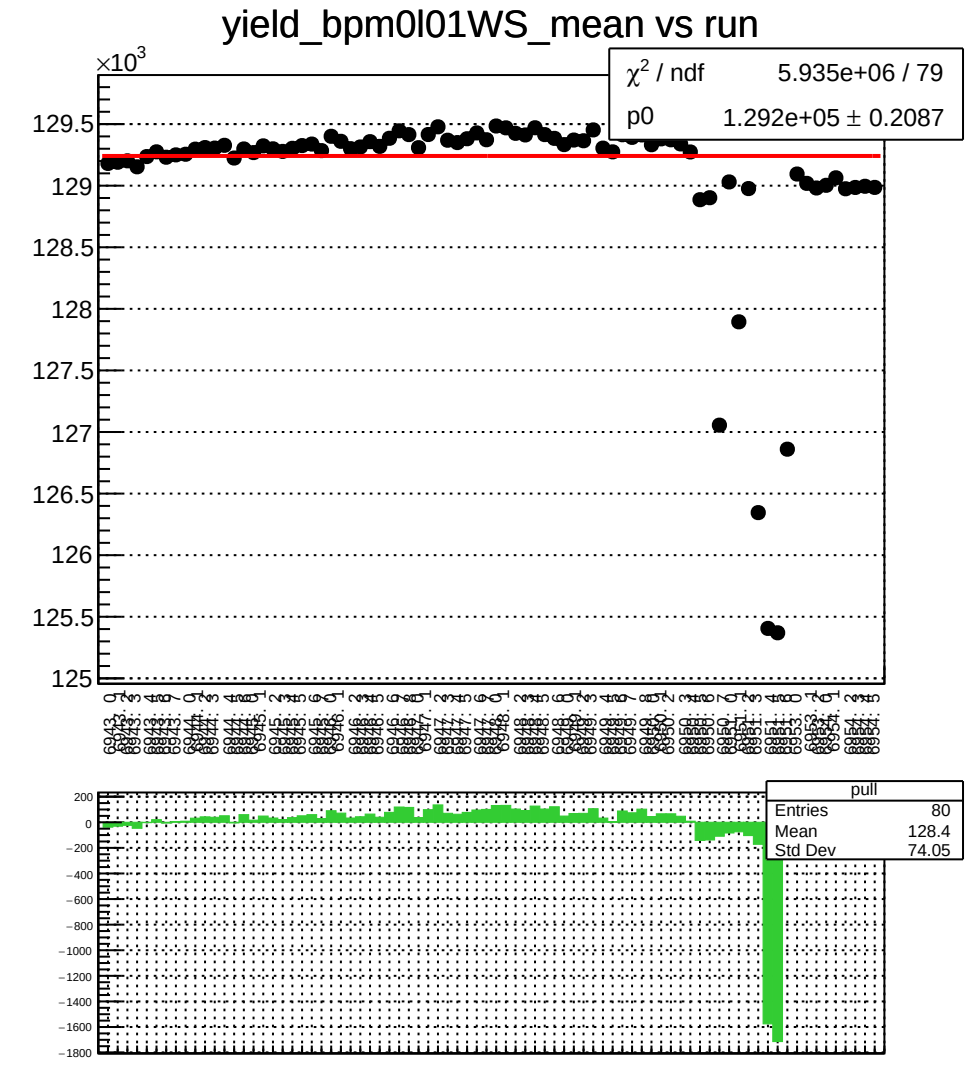

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

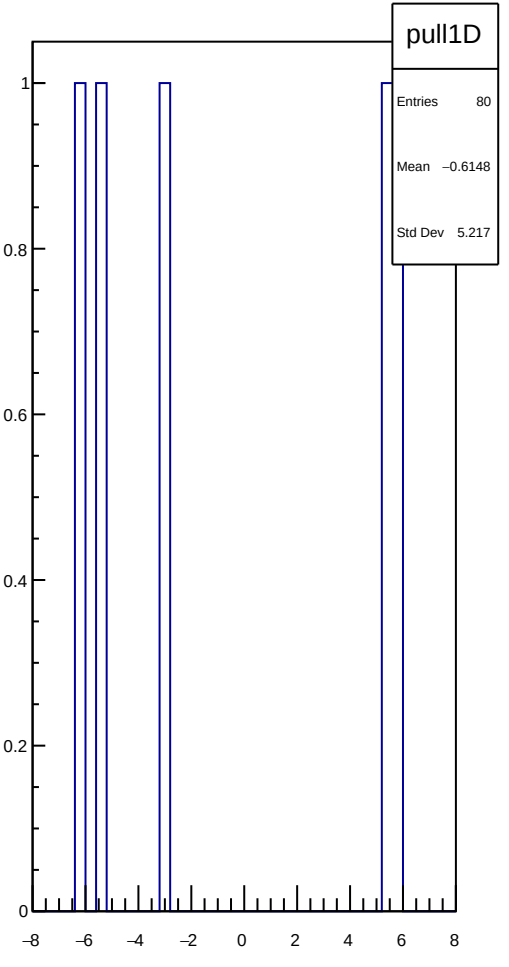

yield_bpm2i01WS_rms vs run
χ² / ndf 9.171e+04 / 79
p0 180.8 ± 0.1474
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

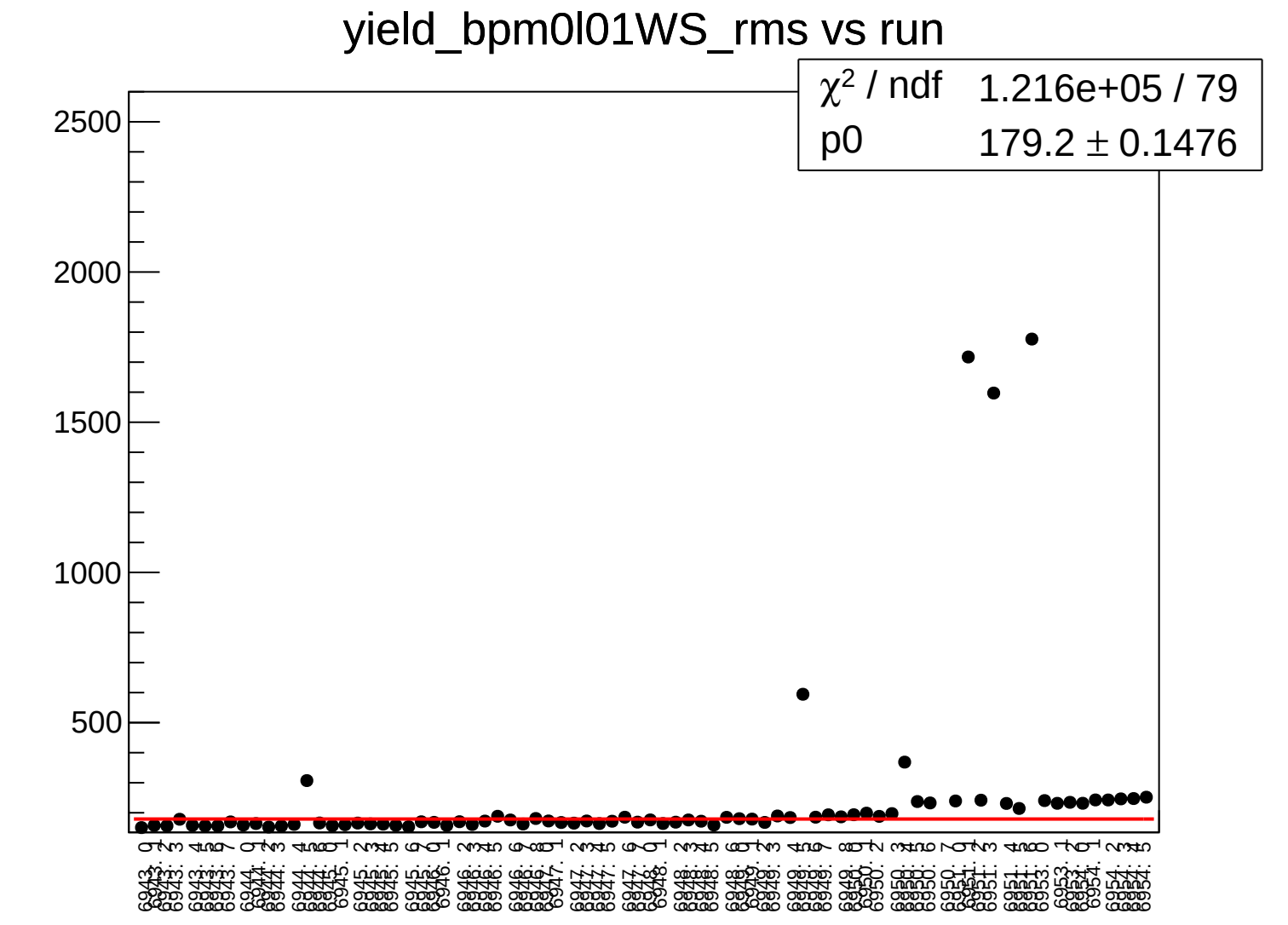

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 8.009e+06 / 79
p0 1.506e+05 ± 0.2235
151
150
149
148
147
146
pull
Entries 80
Mean 191.1
Std Dev 139.2
0
−500
−1000
−1500
−2000

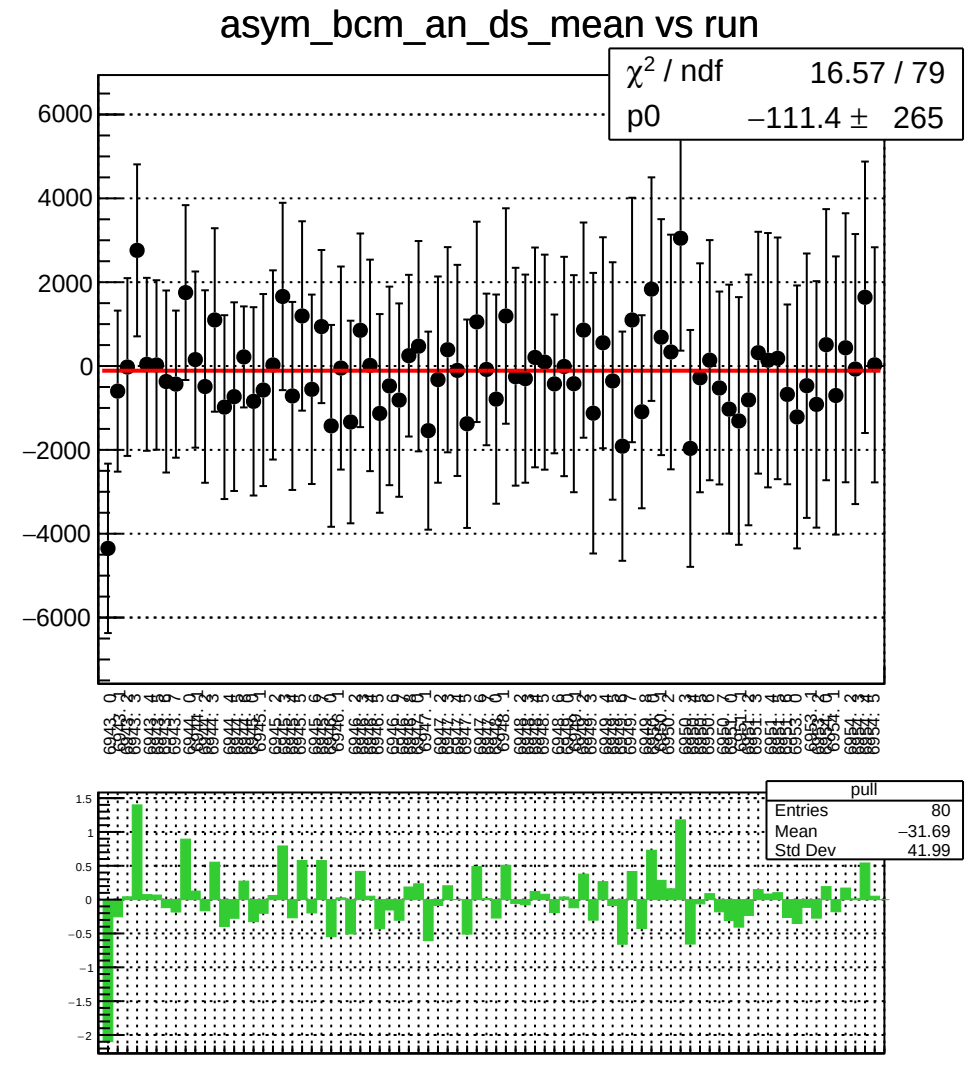

pull1D
Entries 80
Mean −1.984
Std Dev 2.754
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

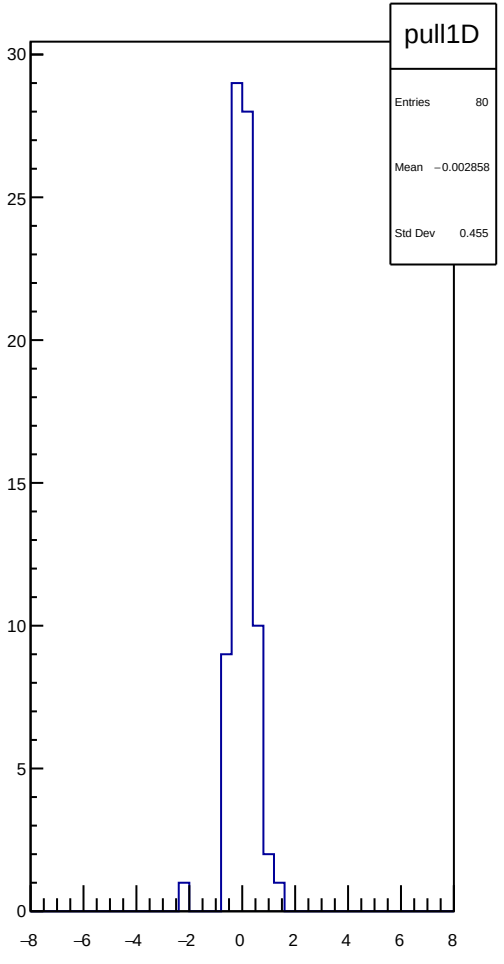

yield_bpm0i07WS_rms vs run
χ² / ndf 1.031e+05 / 79
p0 193.1 ± 0.158
3000
2500
2000
1500
1000
500

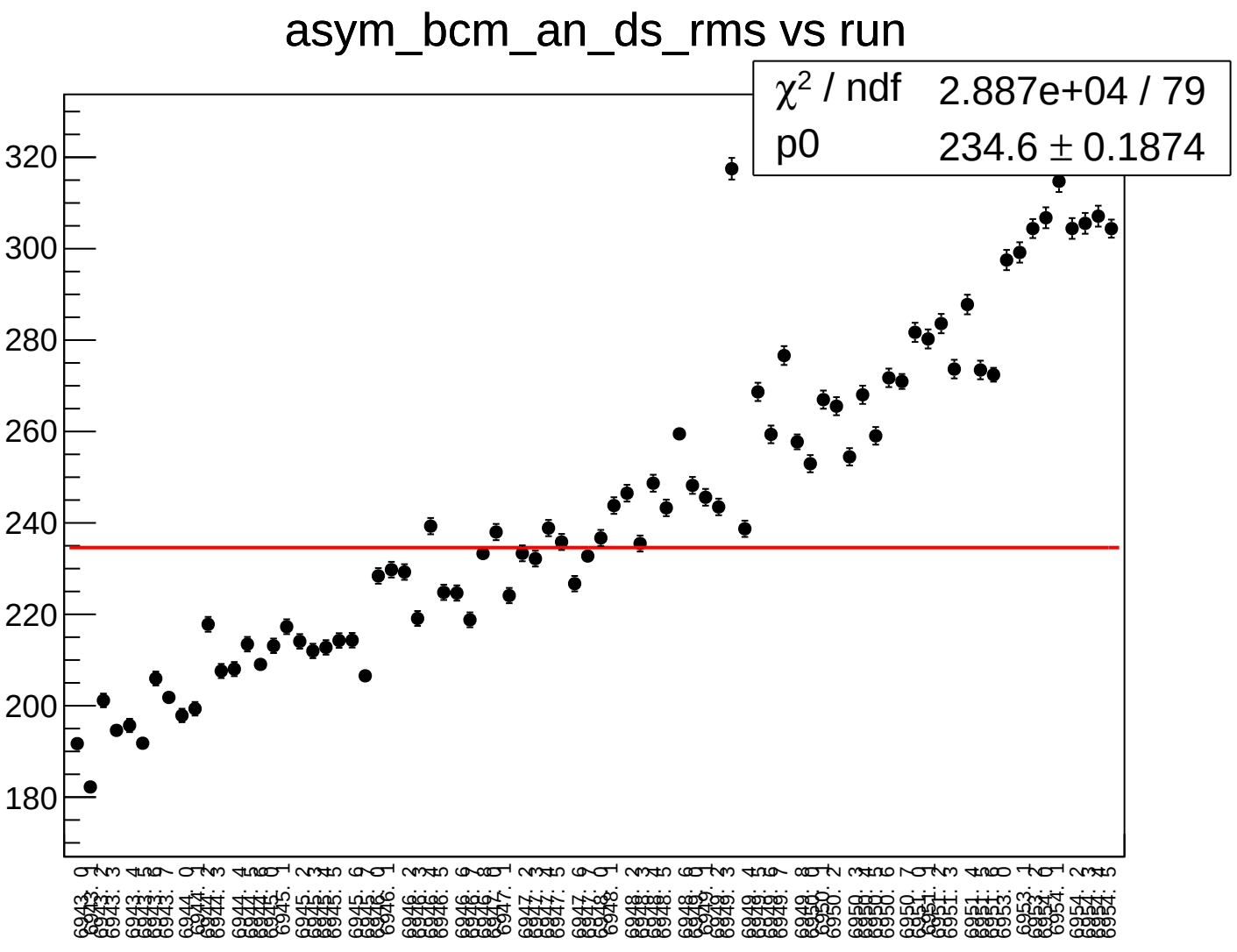

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 5.935e+06 / 79
p0 1.292e+05 ± 0.2087
129.5
129
128.5
128
127.5
127
126.5
126
125.5
125
pull
Entries 80
Mean 128.4
Std Dev 74.05
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

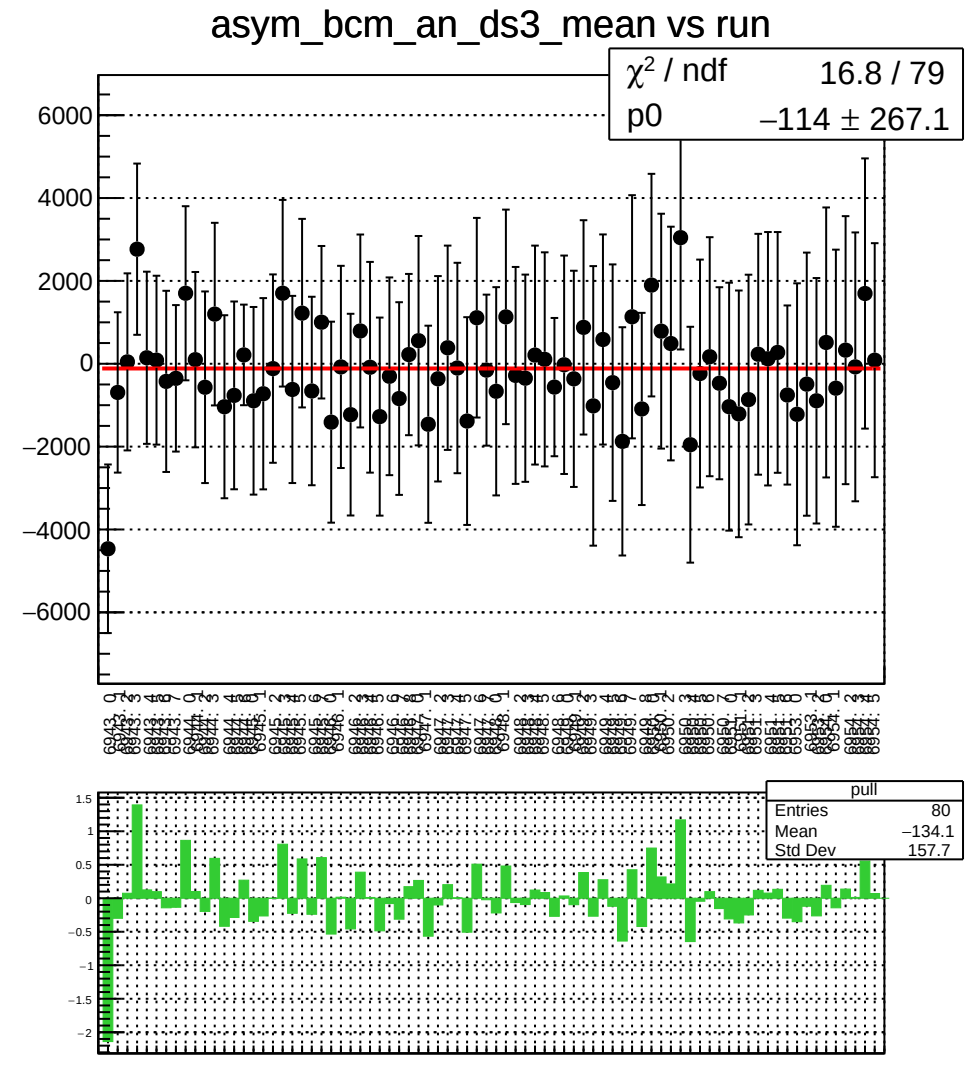

pull1D
Entries 80
Mean −0.6148
Std Dev 5.217
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

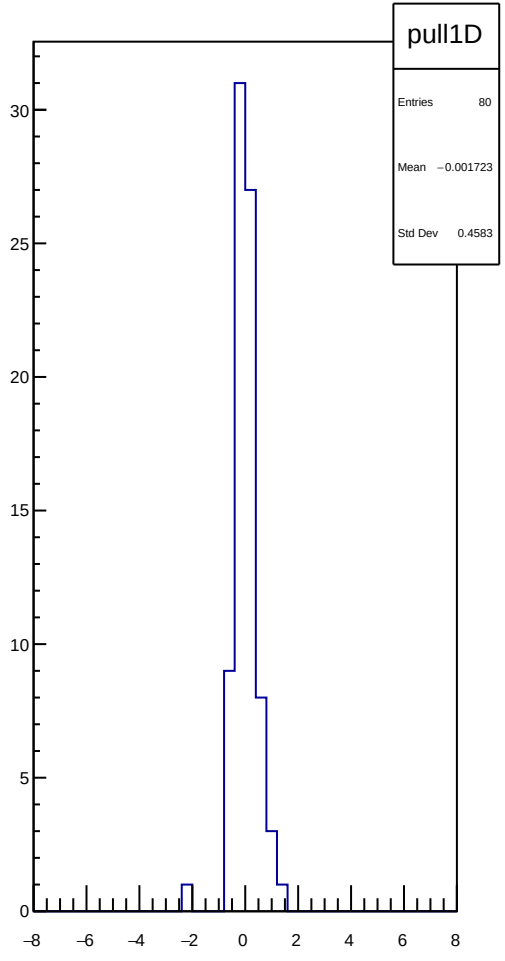

yield_bpm0l01WS_rms vs run
χ² / ndf 1.216e+05 / 79
p0 179.2 ± 0.1476
2500
2000
1500
1000
500

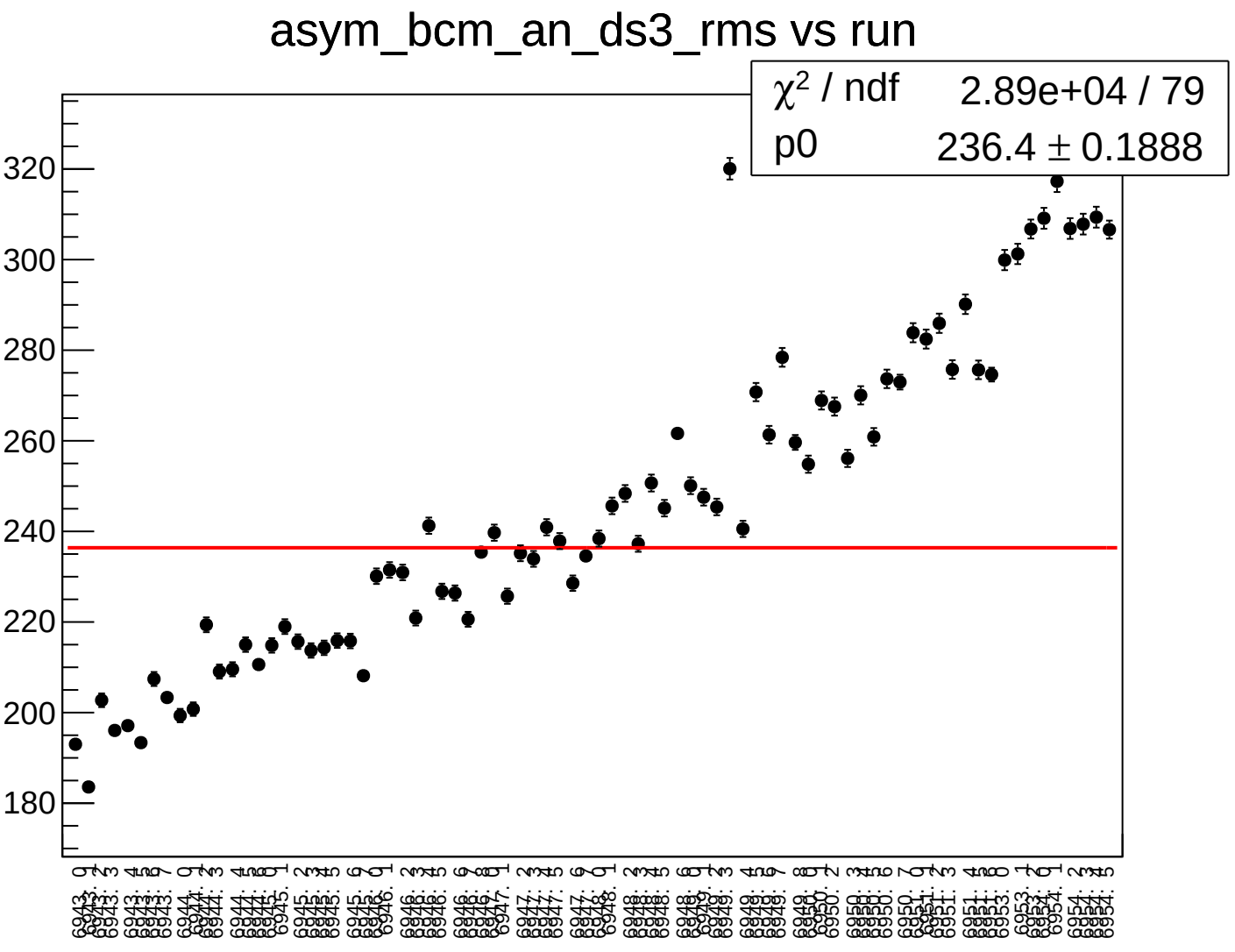

asym_bcm_an_ds_mean vs run
χ² / ndf 16.57 / 79
p0 −111.4 ± 265
pull
Entries 80
Mean −31.69
Std Dev 41.99

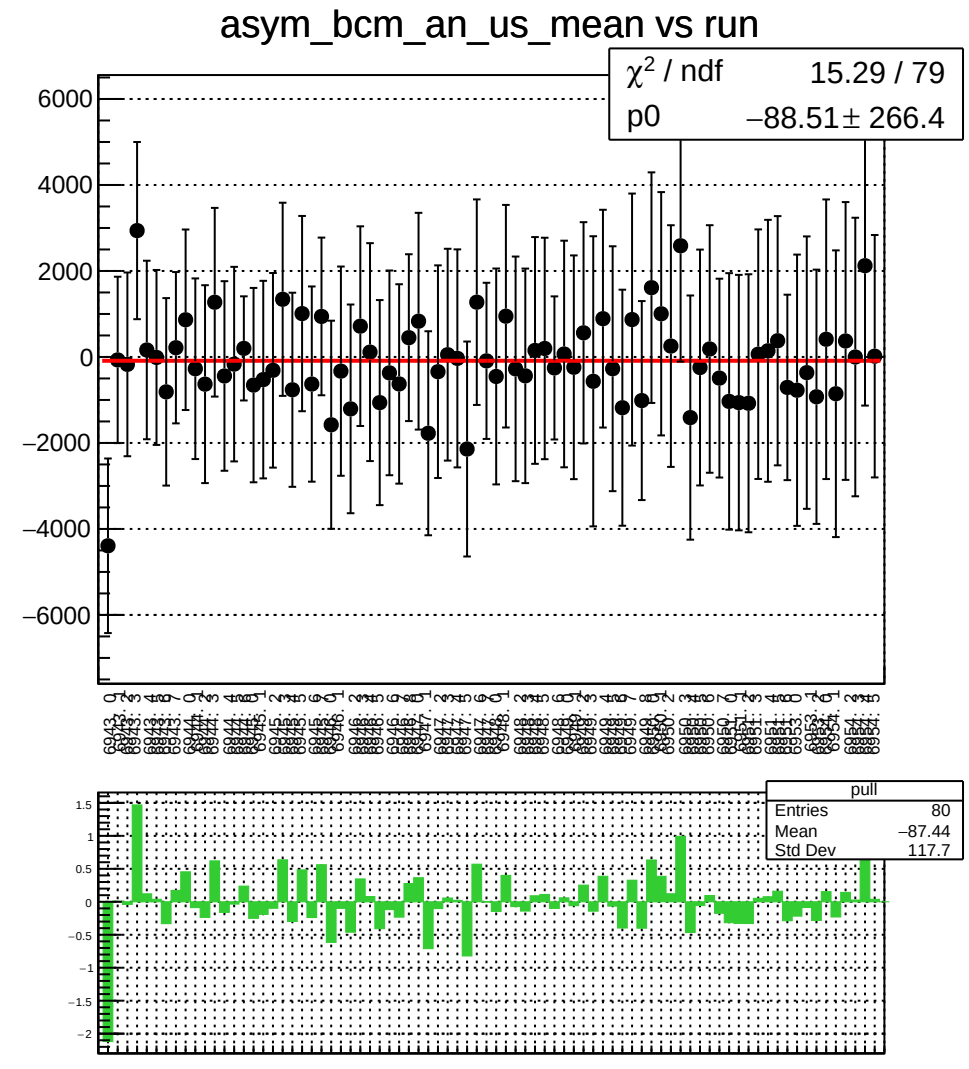

pull1D
Entries 80
Mean −0.002858
Std Dev 0.455

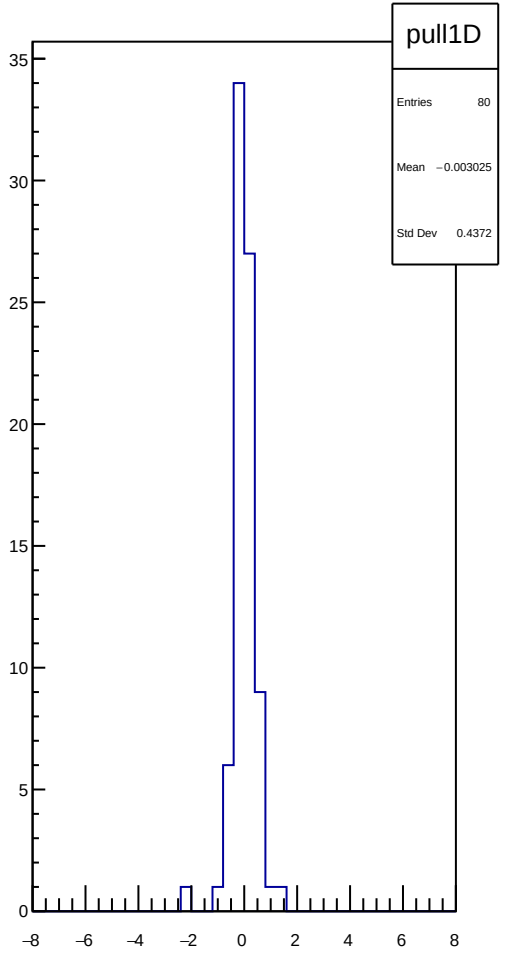

asym_bcm_an_ds_rms vs run
χ² / ndf 2.887e+04 / 79
p0 234.6 ± 0.1874
320
300
280
260
240
220
200
180

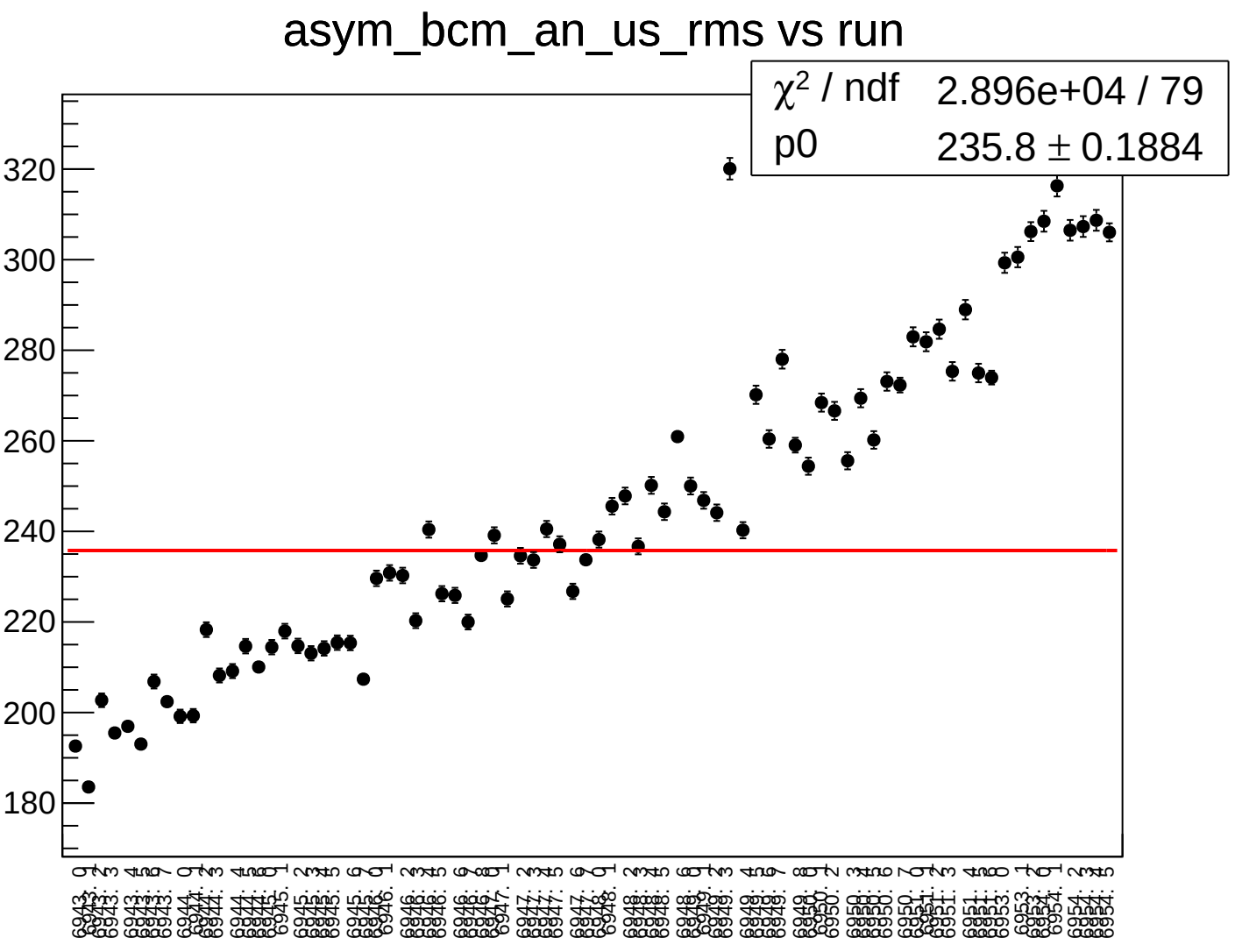

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.8 / 79
p0 −114 ± 267.1
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 80
Mean −134.1
Std Dev 157.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2

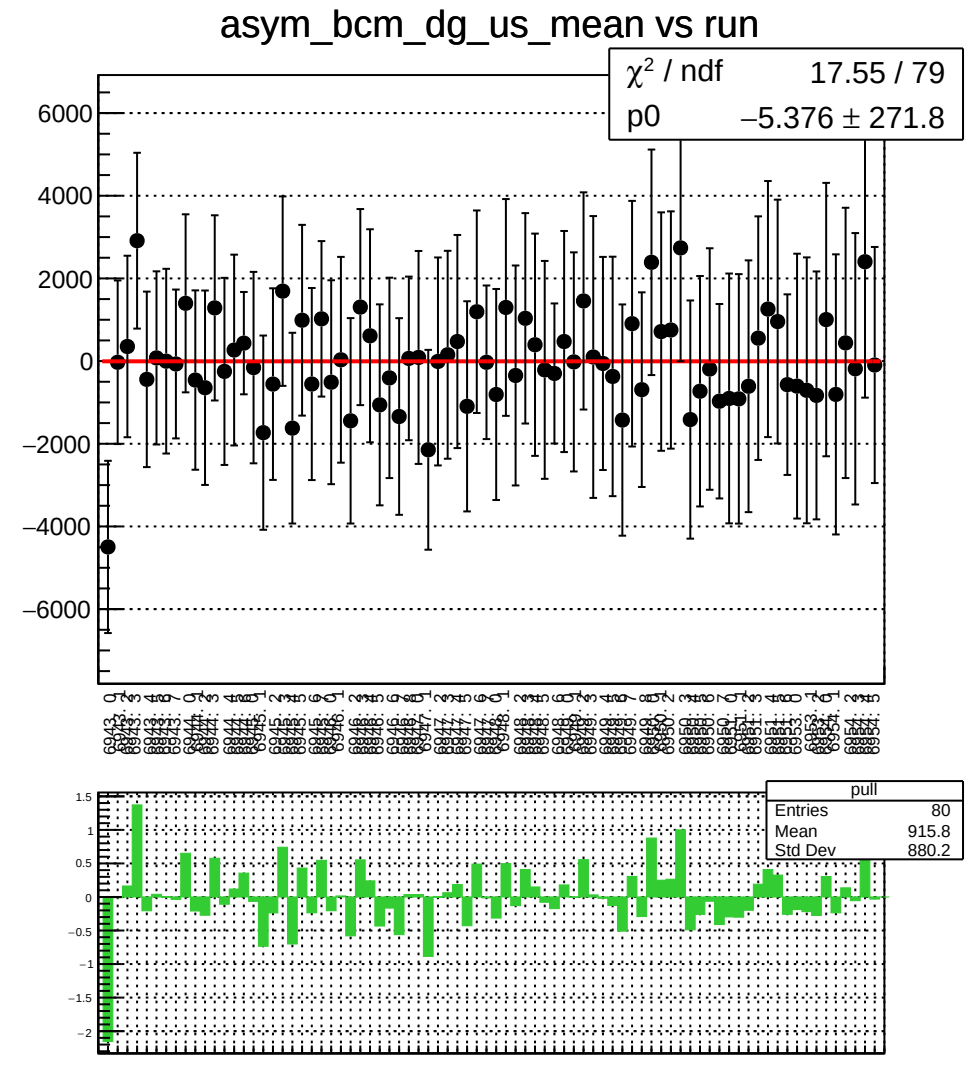

pull1D
Entries 80
Mean −0.001723
Std Dev 0.4583
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

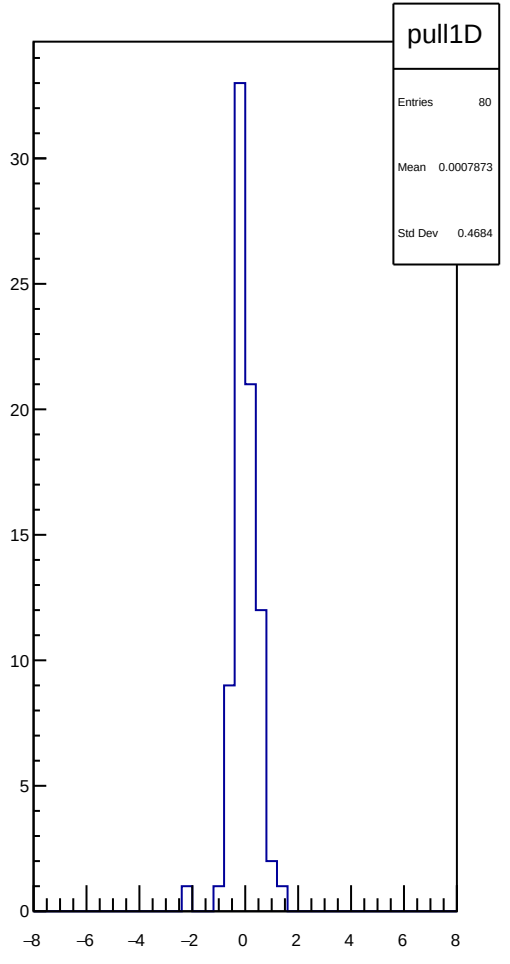

asym_bcm_an_ds3_rms vs run
χ² / ndf 2.89e+04 / 79
p0 236.4 ± 0.1888
320
300
280
260
240
220
200
180

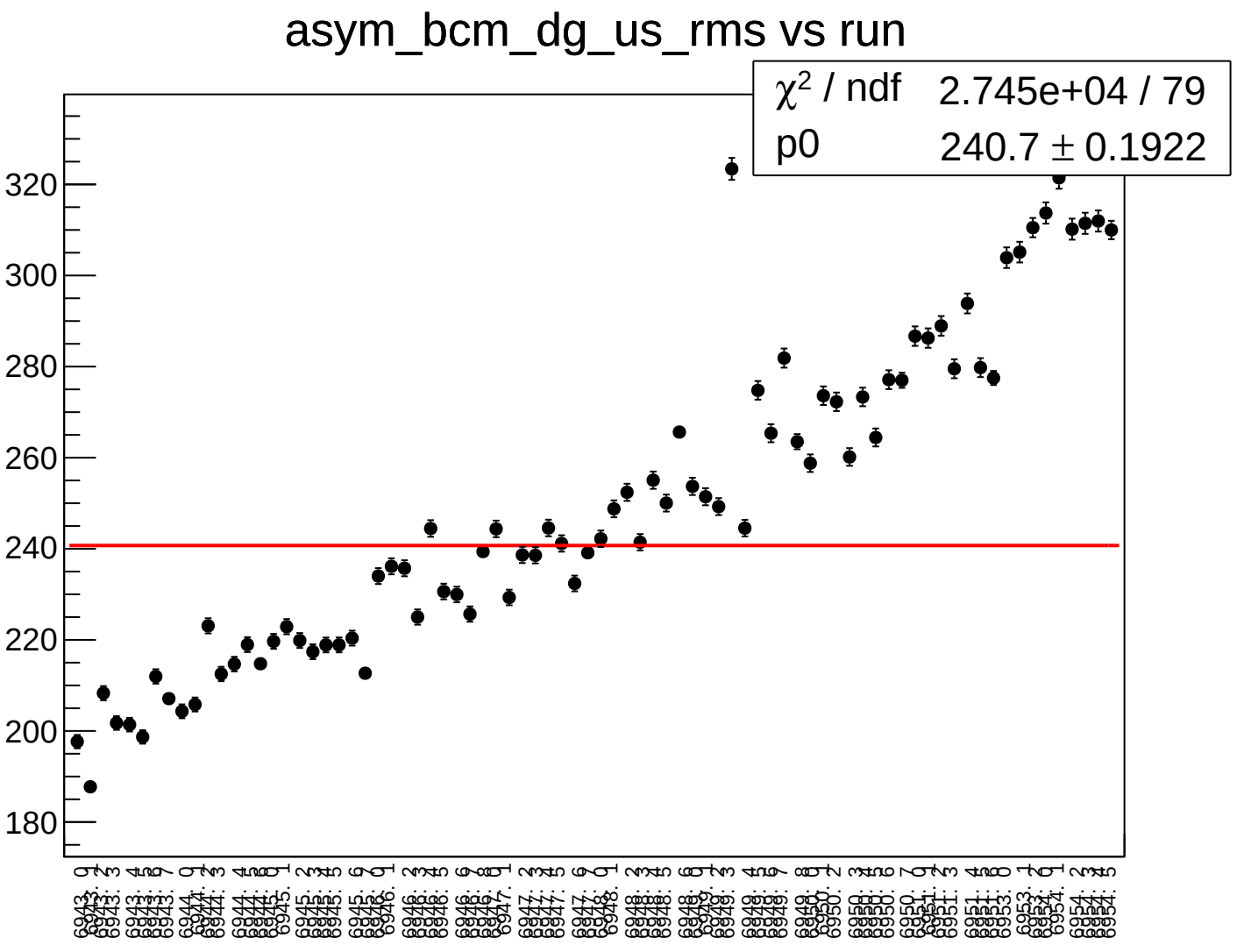

asym_bcm_an_us_mean vs run
χ² / ndf 15.29 / 79
p0 −88.51 ± 266.4
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 80
Mean −87.44
Std Dev 117.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2

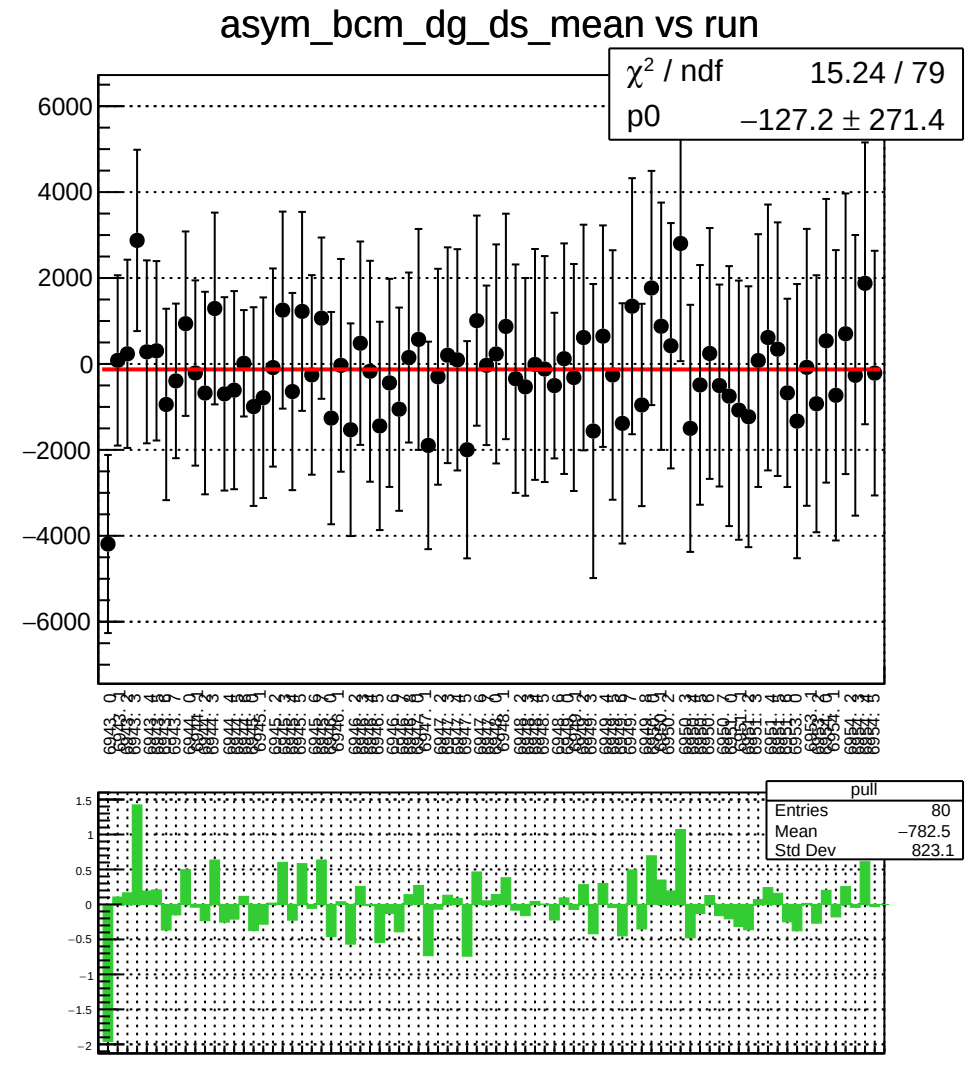

pull1D
Entries 80
Mean −0.003025
Std Dev 0.4372
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

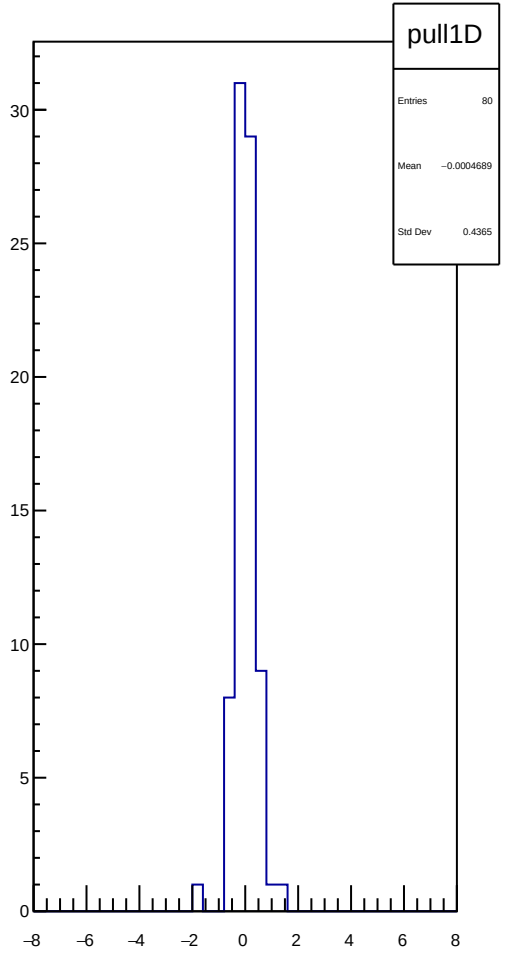

asym_bcm_an_us_rms vs run
χ² / ndf 2.896e+04 / 79
p0 235.8 ± 0.1884
320
300
280
260
240
220
200
180

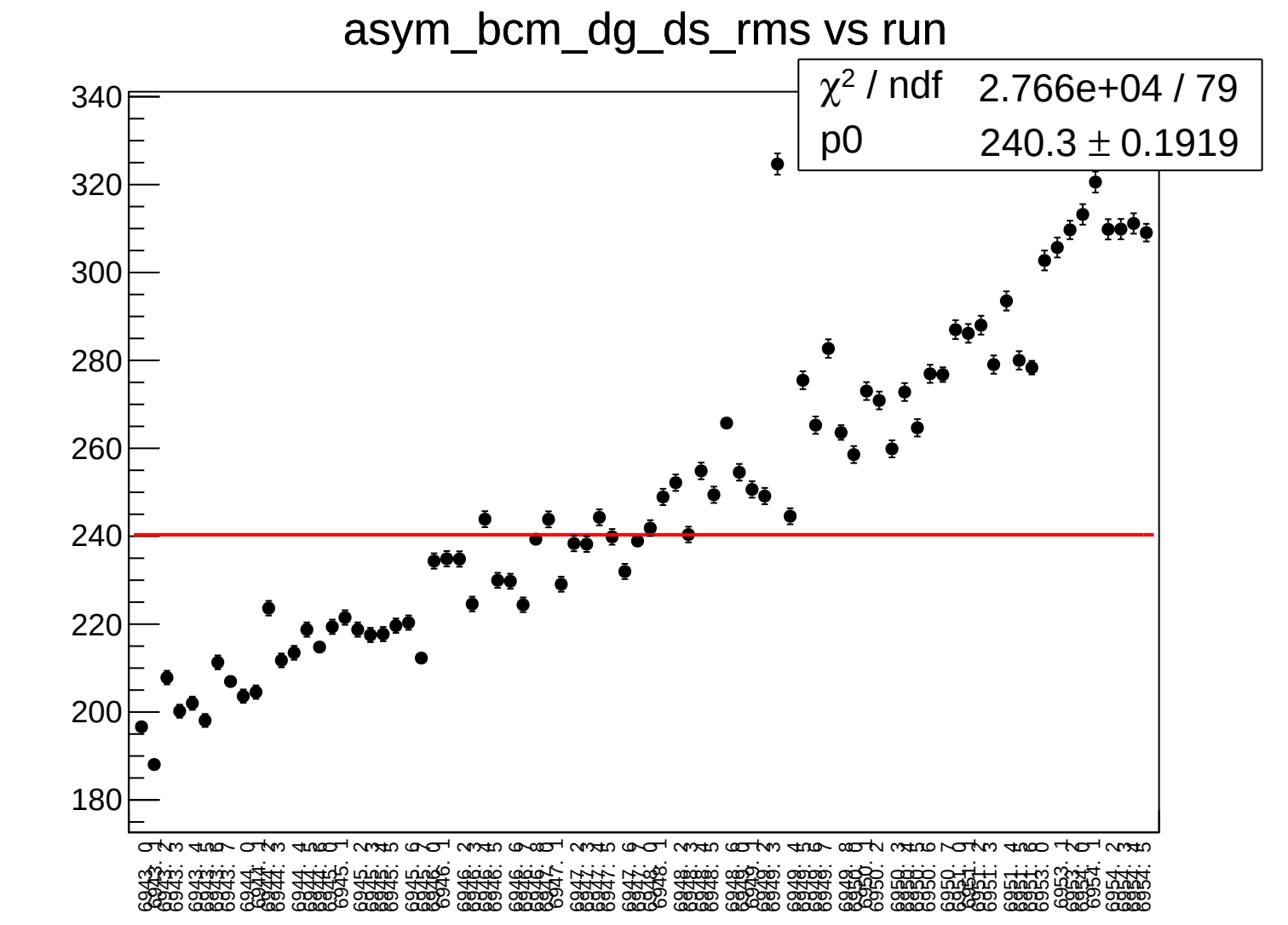

asym_bcm_dg_us_mean vs run
χ² / ndf 17.55 / 79
p0 −5.376 ± 271.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 80
Mean 915.8
Std Dev 880.2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

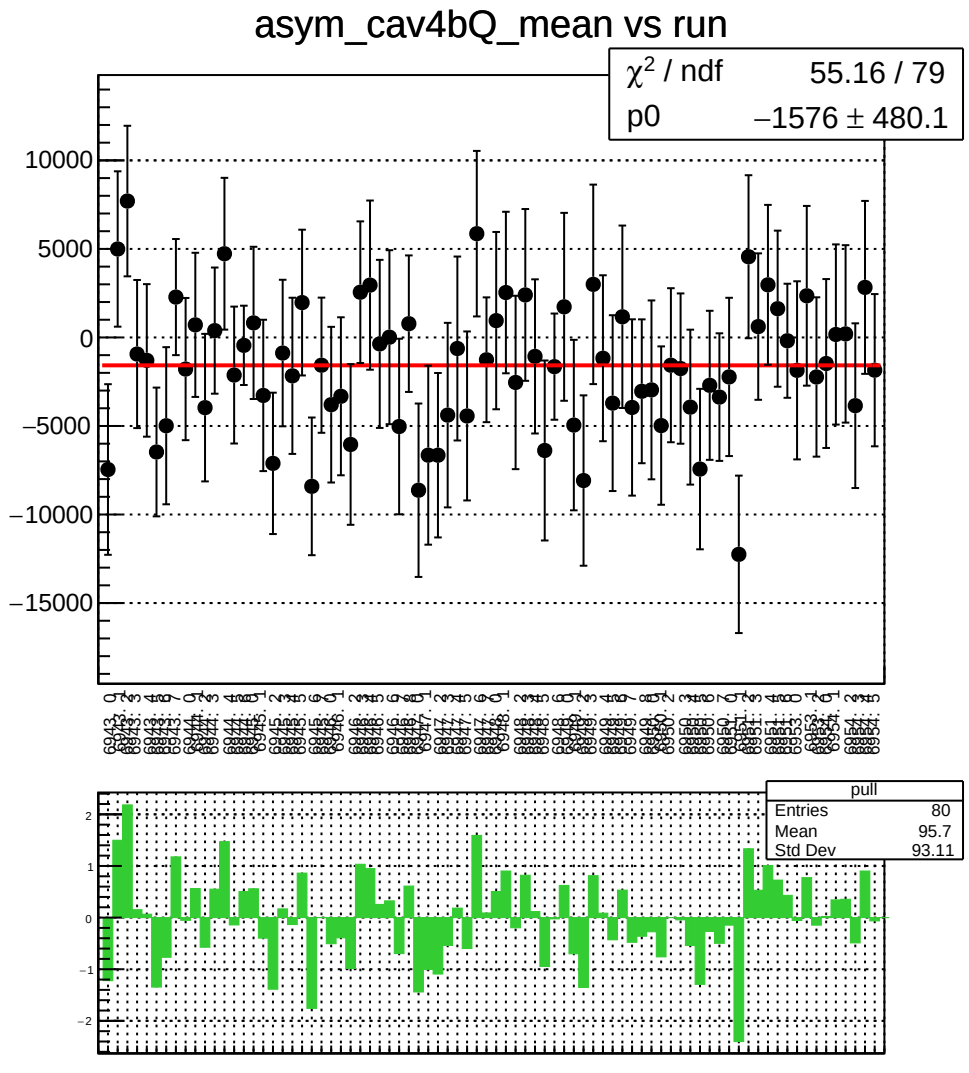

pull1D
Entries 80
Mean 0.0007873
Std Dev 0.4684
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

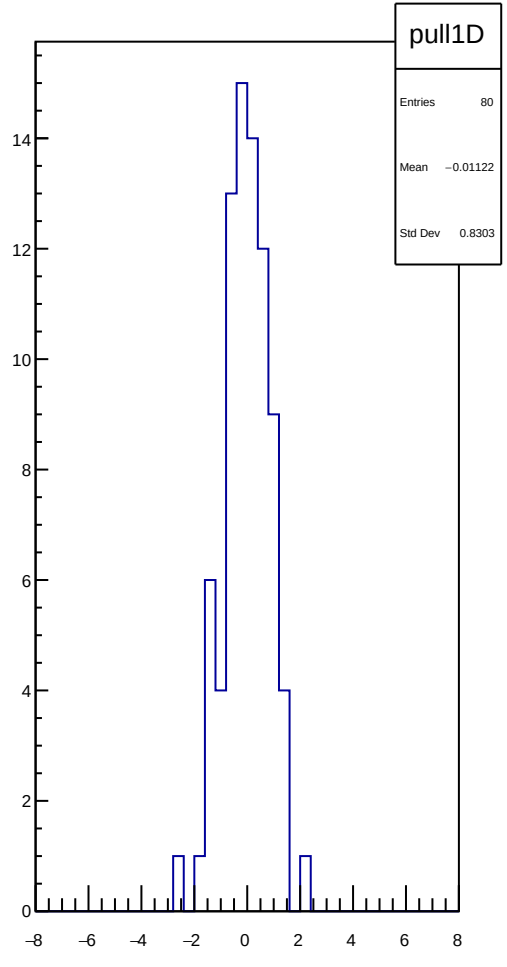

asym_bcm_dg_us_rms vs run
χ² / ndf 2.745e+04 / 79
p0 240.7 ± 0.1922
320
300
280
260
240
220
200
180

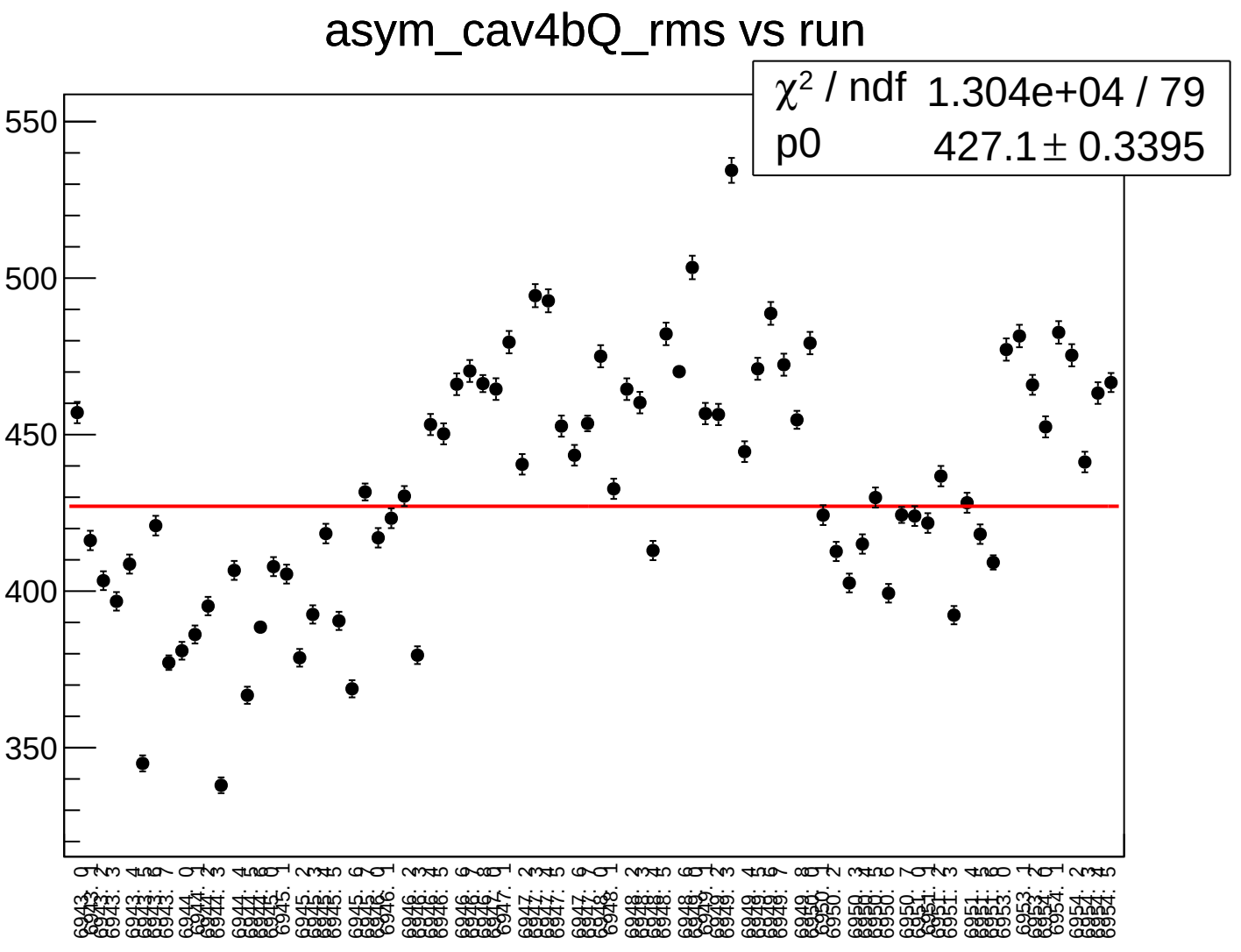

asym_bcm_dg_ds_mean vs run
χ² / ndf 15.24 / 79
p0 −127.2 ± 271.4
pull
Entries 80
Mean −782.5
Std Dev 823.1

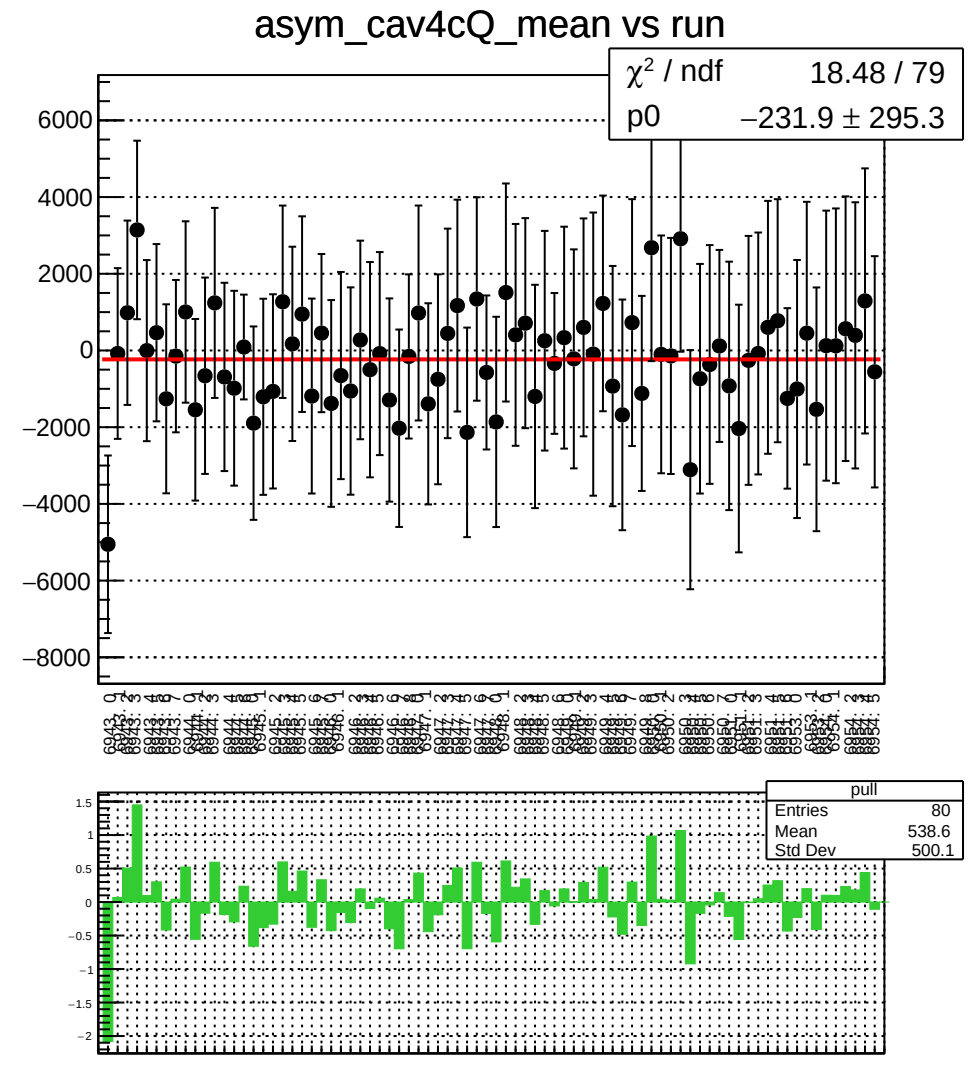

pull1D
Entries 80
Mean −0.0004689
Std Dev 0.4365

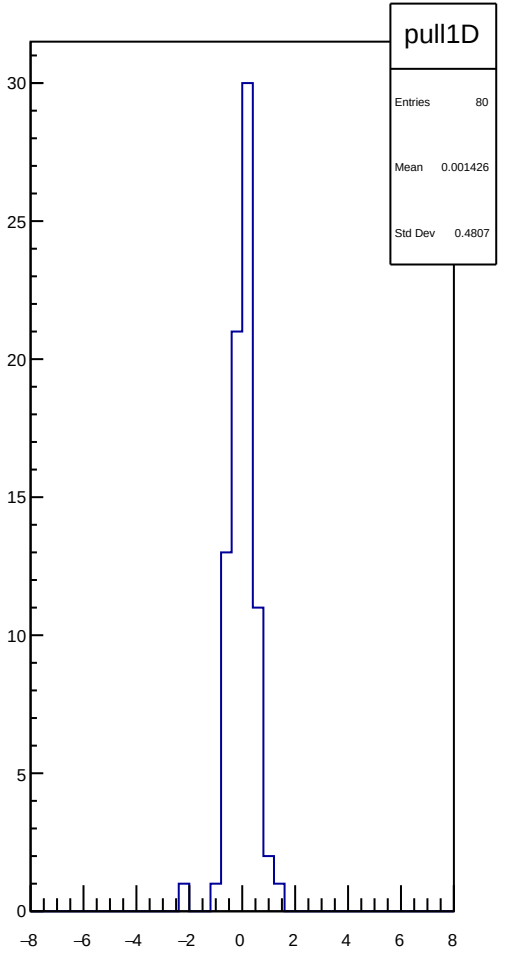

asym_bcm_dg_ds_rms vs run
χ² / ndf 2.766e+04 / 79
p0 240.3 ± 0.1919
340
320
300
280
260
240
220
200
180

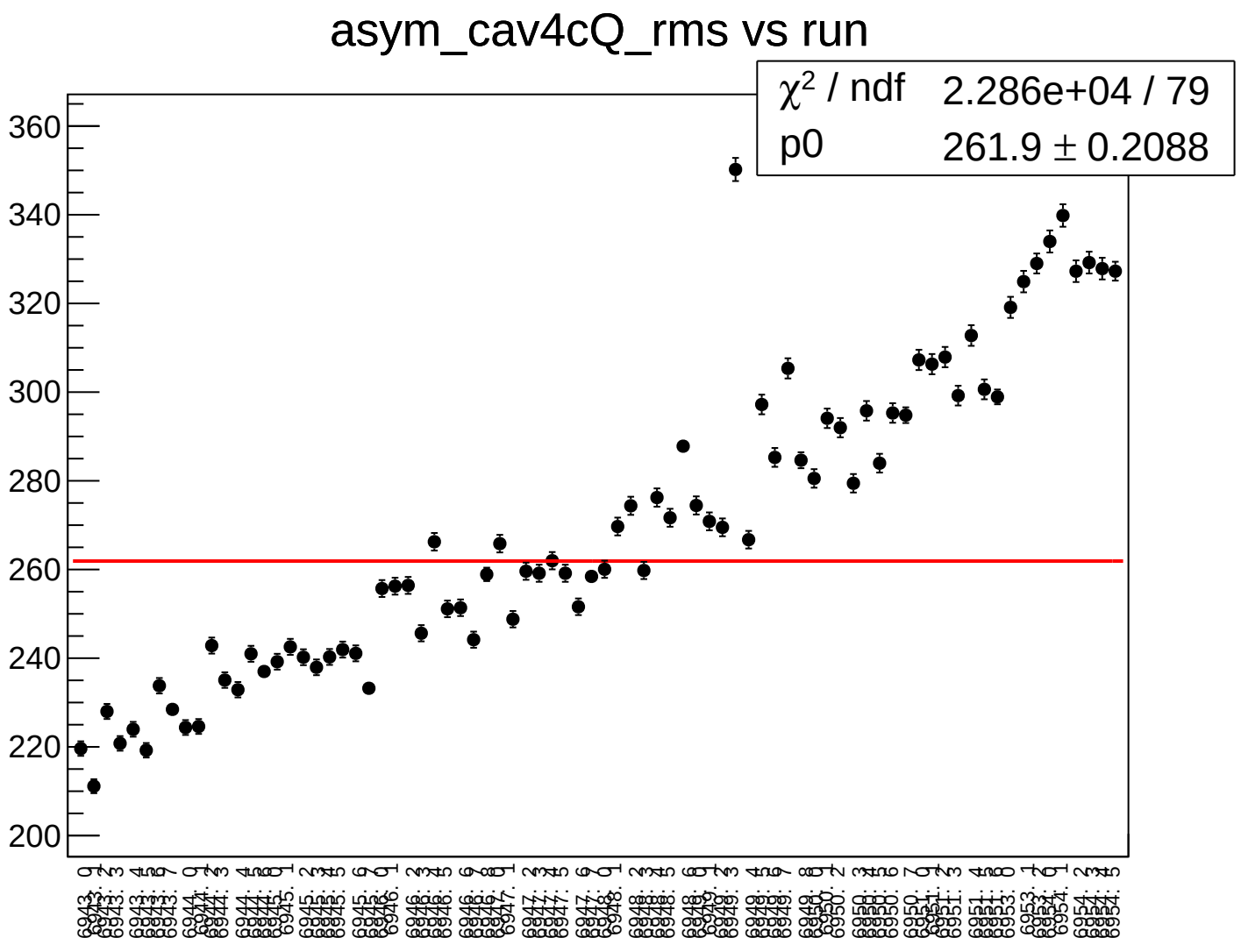

asym_cav4bQ_mean vs run
χ² / ndf 55.16 / 79
p0 −1576 ± 480.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 95.7
Std Dev 93.11
2
1
0
−1
−2

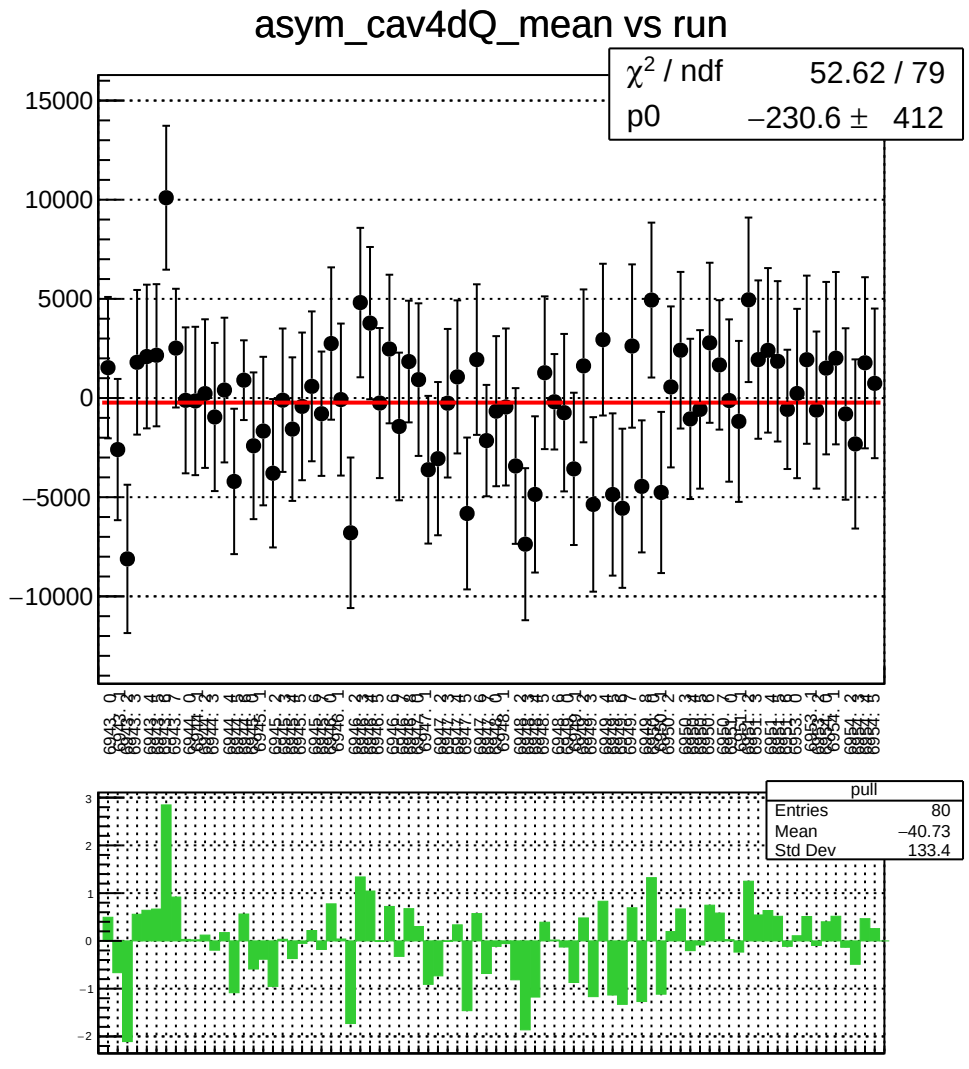

pull1D
Entries 80
Mean −0.01122
Std Dev 0.8303
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

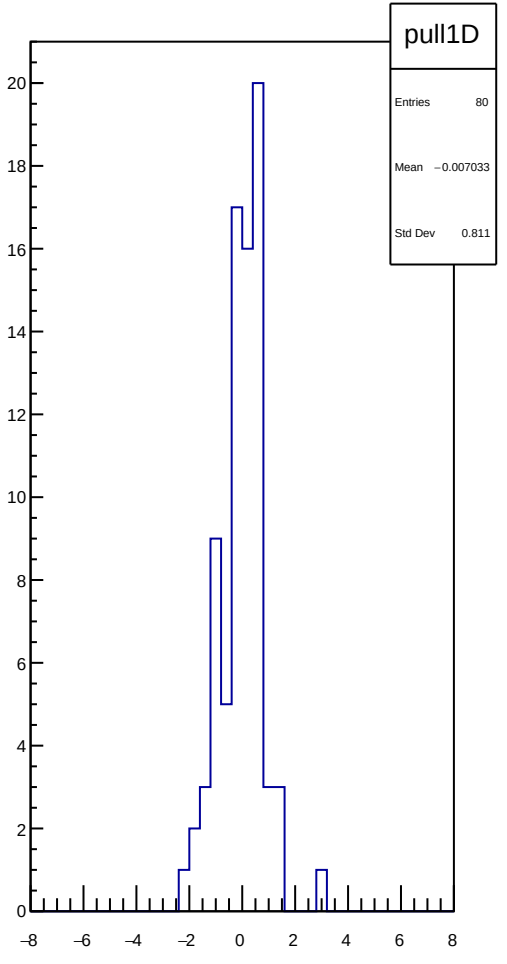

asym_cav4bQ_rms vs run
χ² / ndf 1.304e+04 / 79
p0 427.1 ± 0.3395
550
500
450
400
350

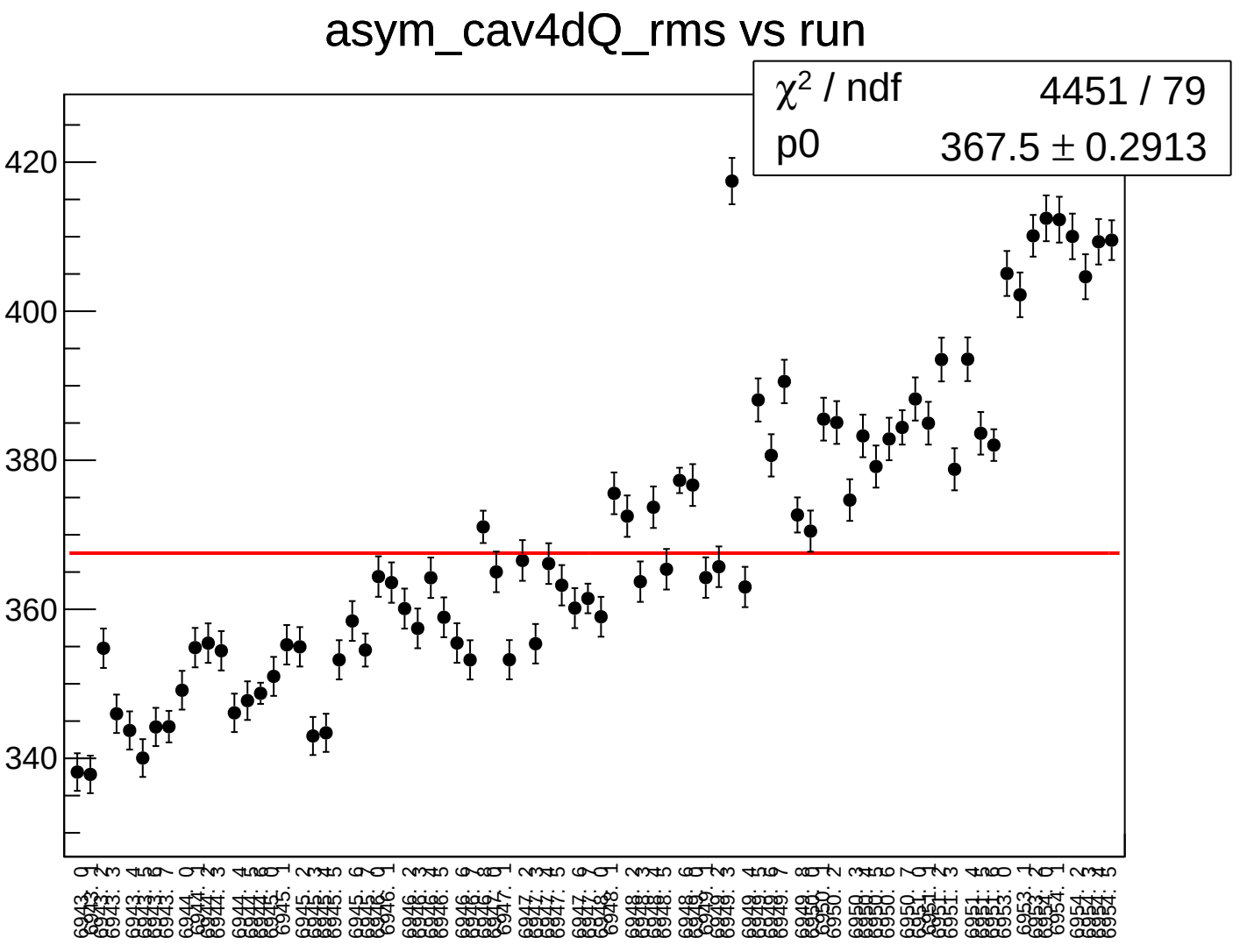

asym_cav4cQ_mean vs run
χ² / ndf 18.48 / 79
p0 −231.9 ± 295.3
pull
Entries 80
Mean 538.6
Std Dev 500.1

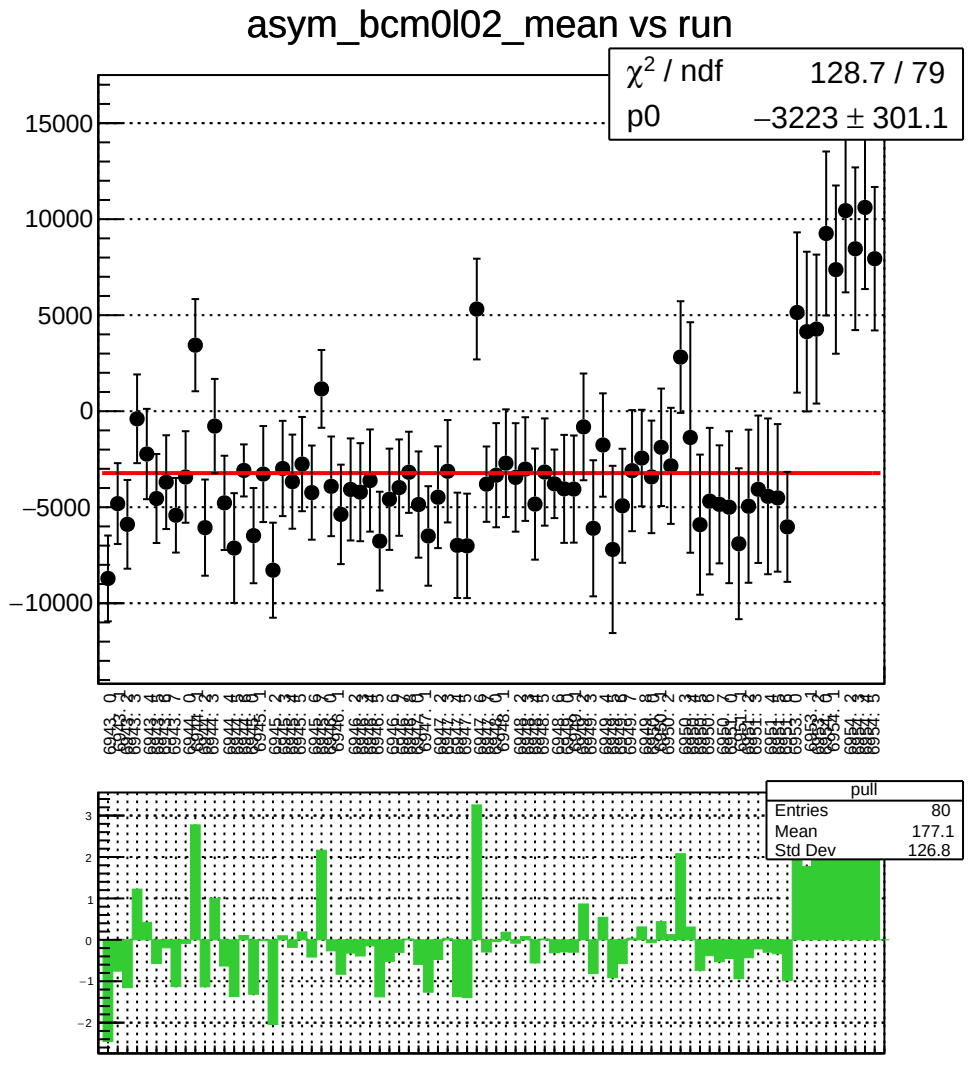

pull1D
Entries 80
Mean 0.001426
Std Dev 0.4807

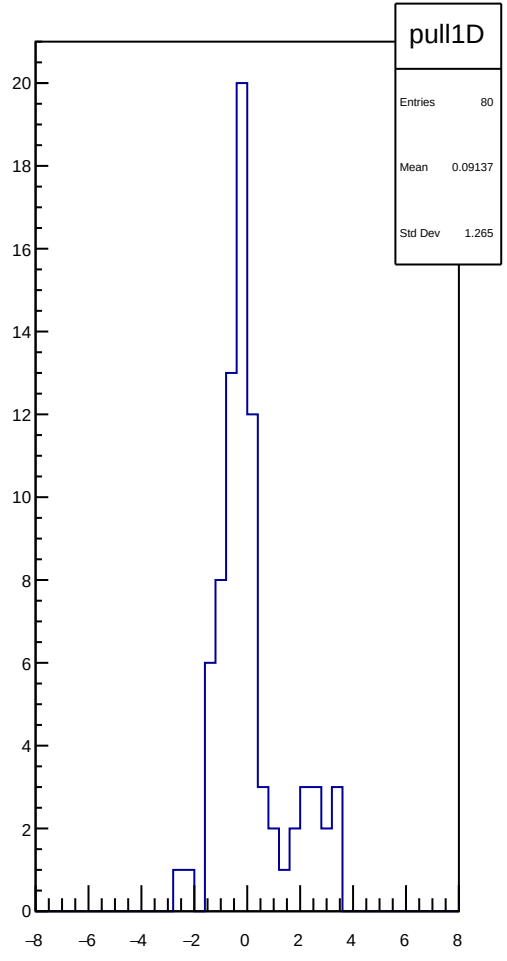

asym_cav4cQ_rms vs run
χ² / ndf 2.286e+04 / 79
p0 261.9 ± 0.2088
360
340
320
300
280
260
240
220
200

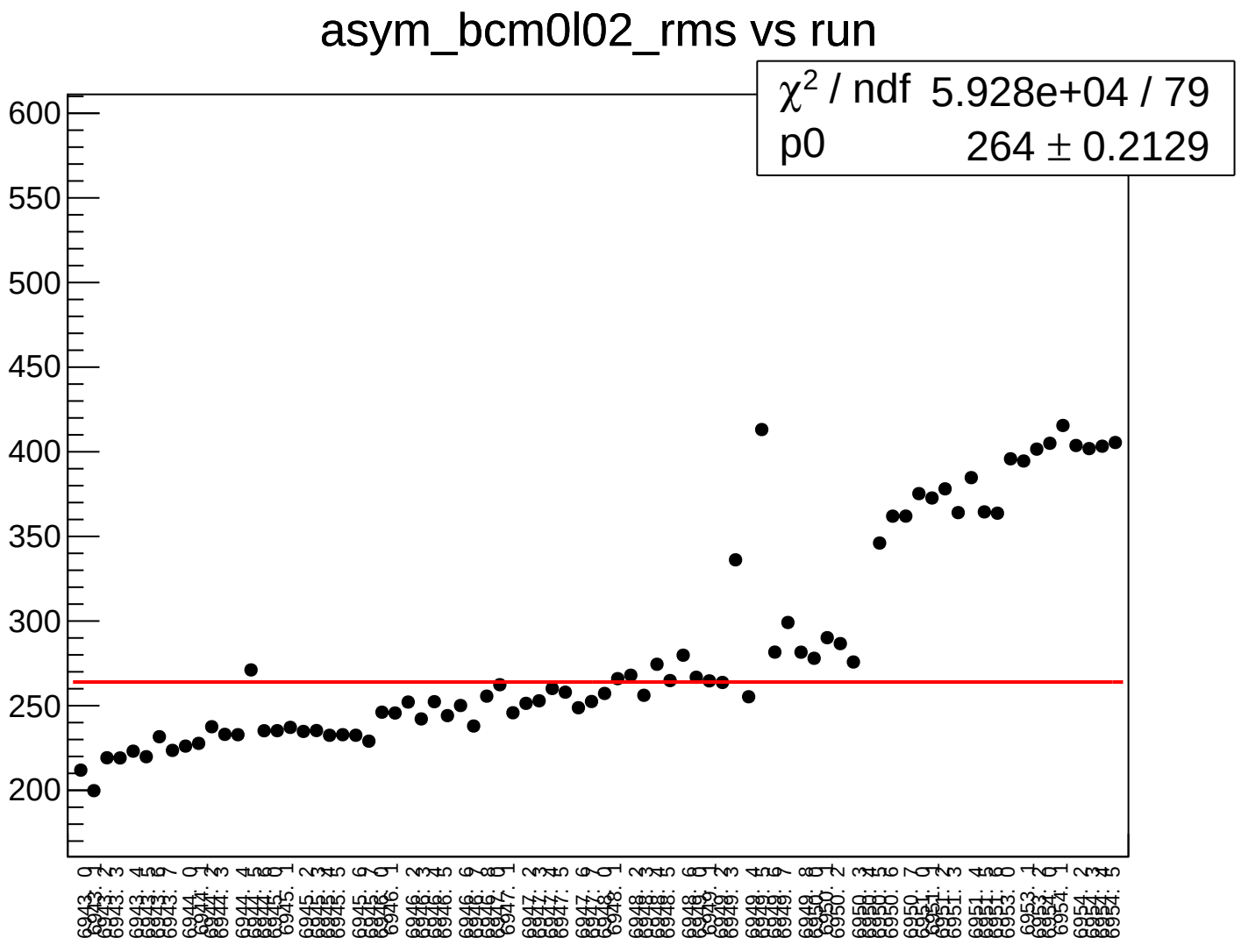

asym_cav4dQ_mean vs run
χ² / ndf 52.62 / 79
p0 −230.6 ± 412
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean −40.73
Std Dev 133.4
3
2
1
0
−1
−2

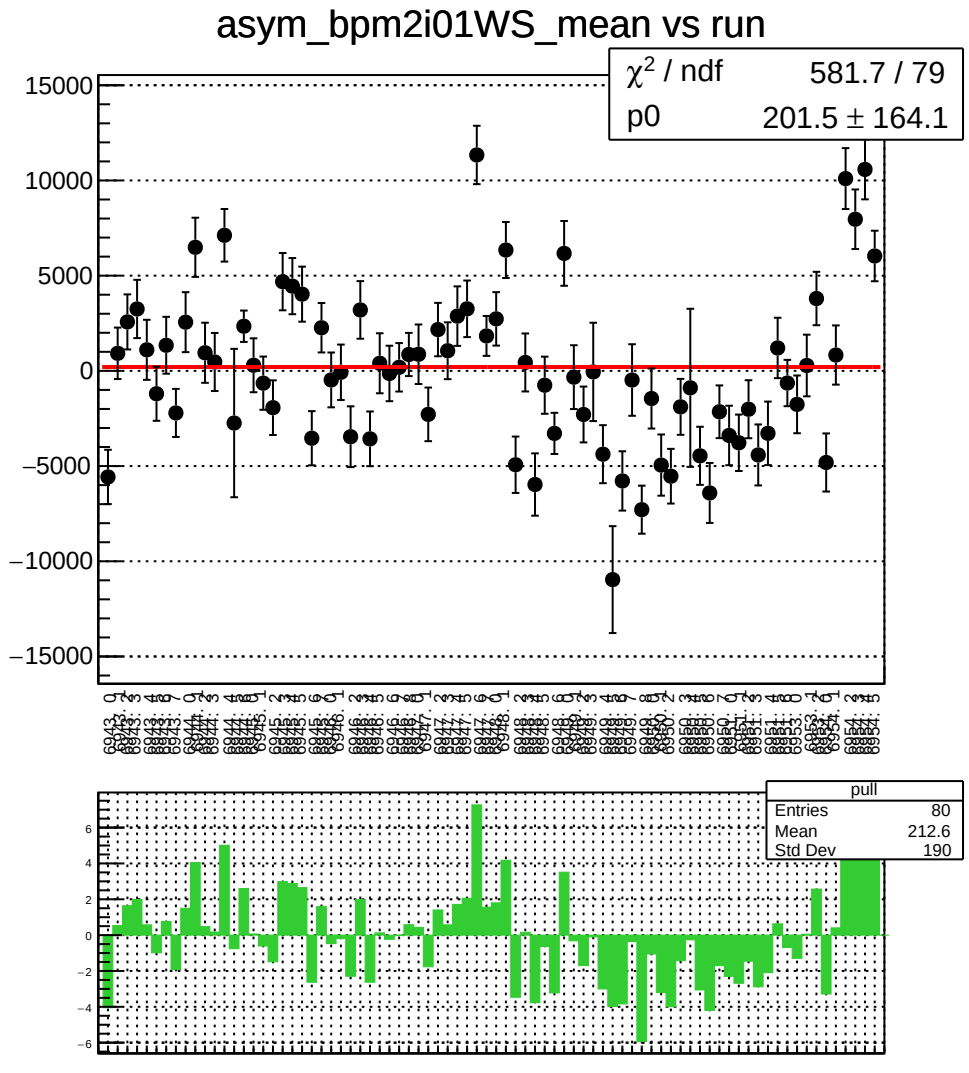

pull1D
Entries 80
Mean −0.007033
Std Dev 0.811
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

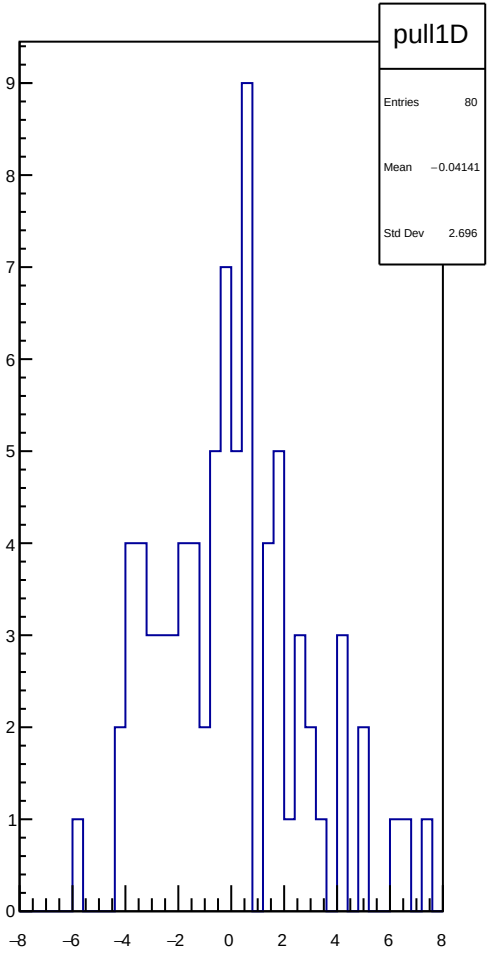

asym_cav4dQ_rms vs run
χ² / ndf 4451 / 79
p0 367.5 ± 0.2913
420
400
380
360
340

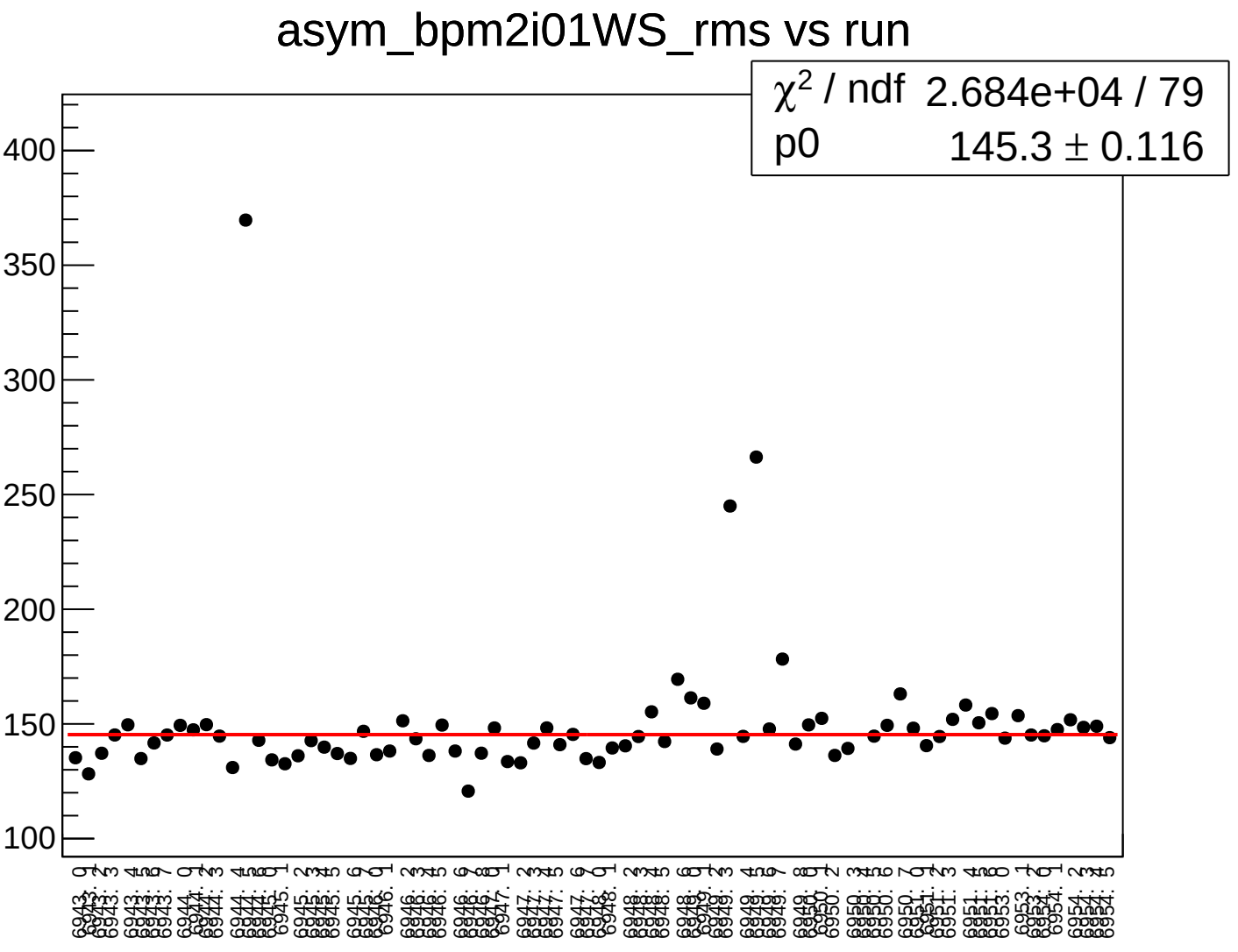

asym_bcm0l02_mean vs run
χ² / ndf 128.7 / 79
p0 −3223 ± 301.1
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 177.1
Std Dev 126.8
3
2
1
0
−1
−2

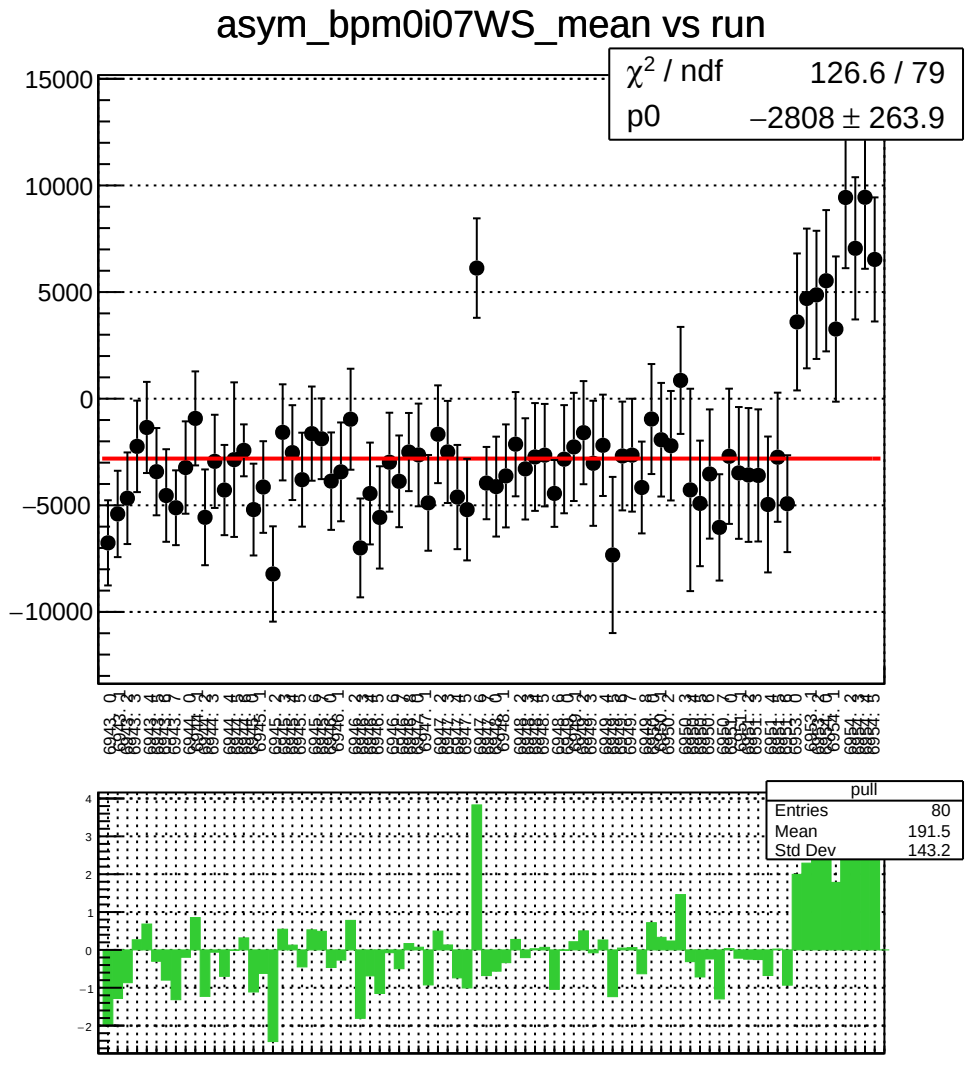

pull1D
Entries 80
Mean 0.09137
Std Dev 1.265
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

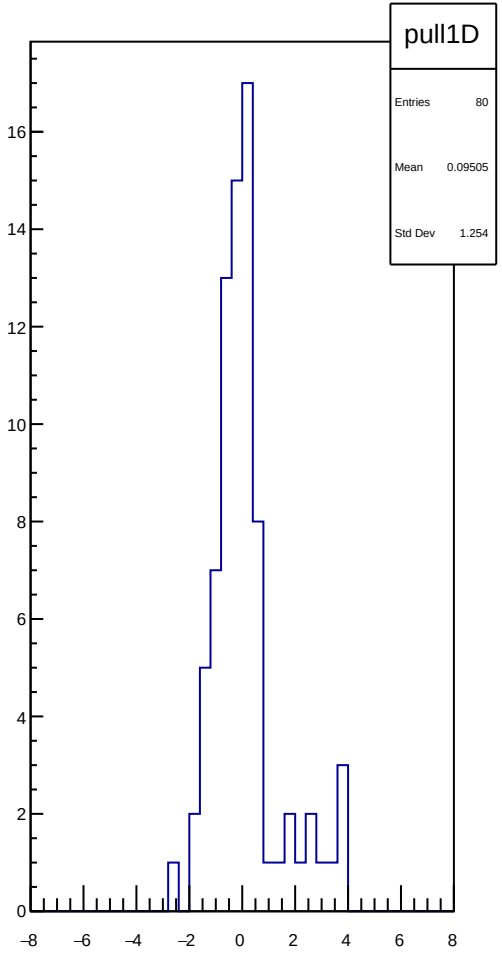

asym_bcm0l02_rms vs run
χ^2 / ndf 5.928e+04 / 79
p0 264 ± 0.2129
600
550
500
450
400
350
300
250
200

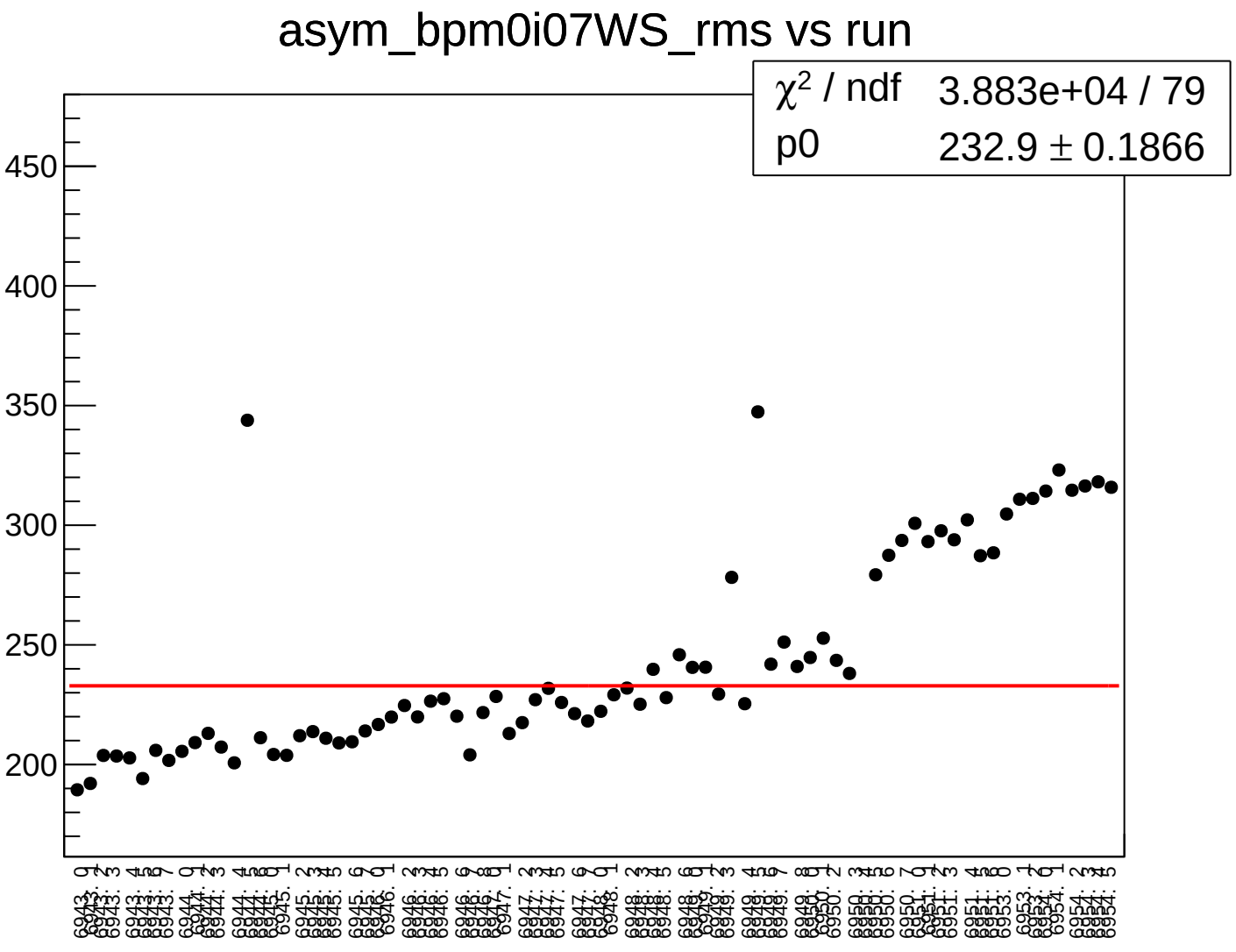

asym_bpm2i01WS_mean vs run
χ² / ndf 581.7 / 79
p0 201.5 ± 164.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 212.6
Std Dev 190
6
4
2
0
−2
−4
−6

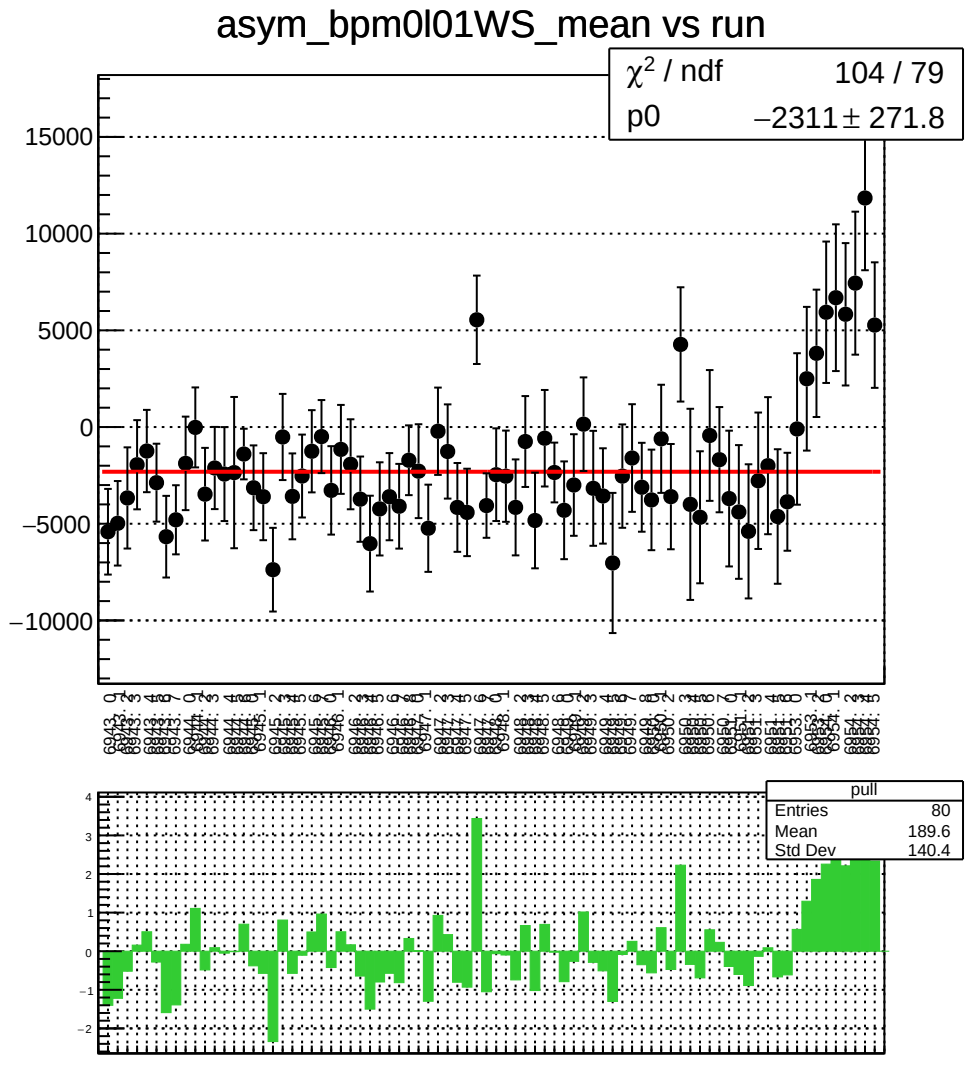

pull1D
Entries 80
Mean −0.04141
Std Dev 2.696
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

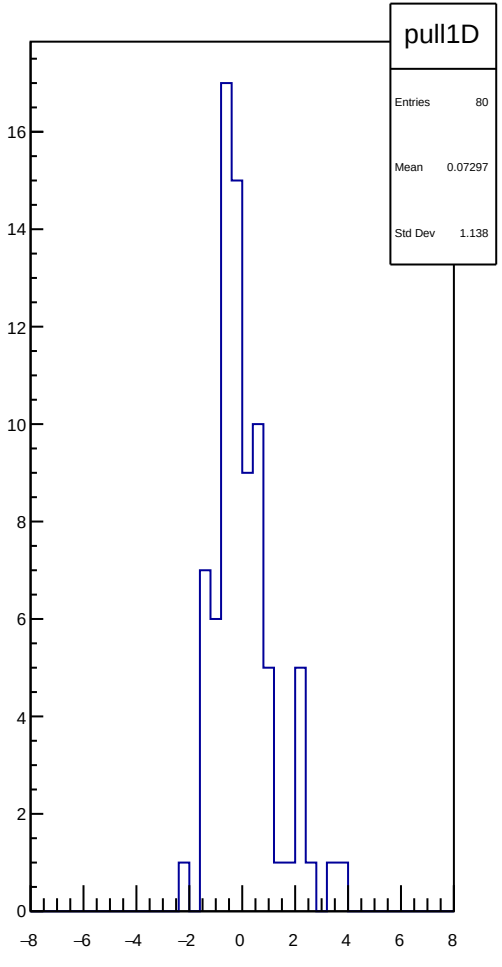

asym_bpm2i01WS_rms vs run
χ² / ndf 2.684e+04 / 79
p0 145.3 ± 0.116
400
350
300
250
200
150
100

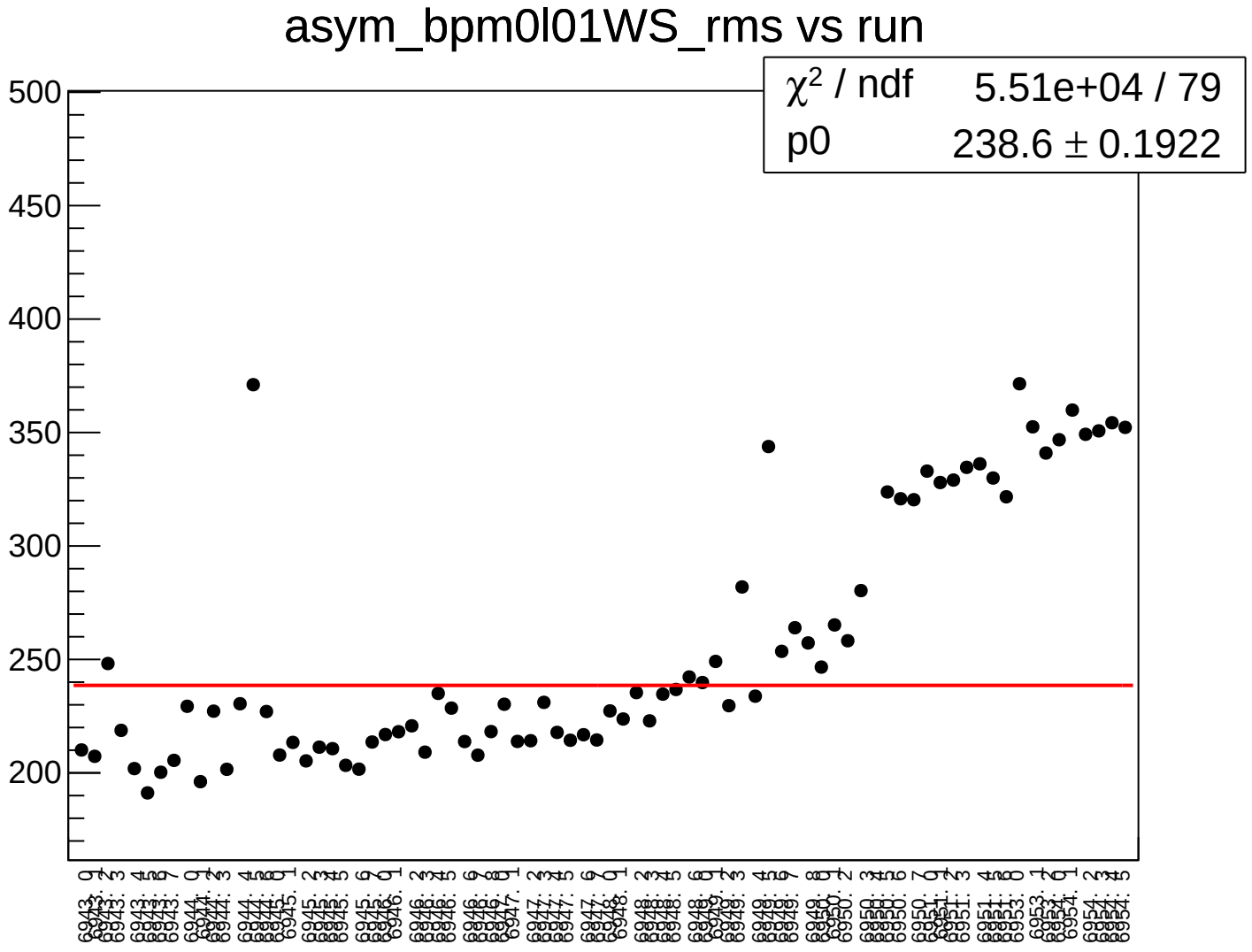

asym_bpm0i07WS_mean vs run
χ² / ndf 126.6 / 79
p0 −2808 ± 263.9
pull
Entries 80
Mean 191.5
Std Dev 143.2

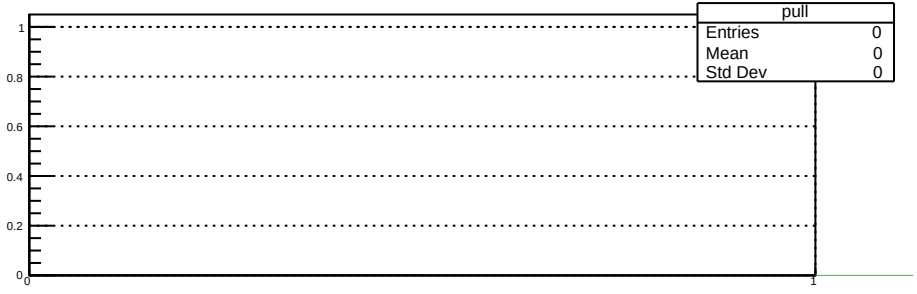

pull1D
Entries 80
Mean 0.09505
Std Dev 1.254

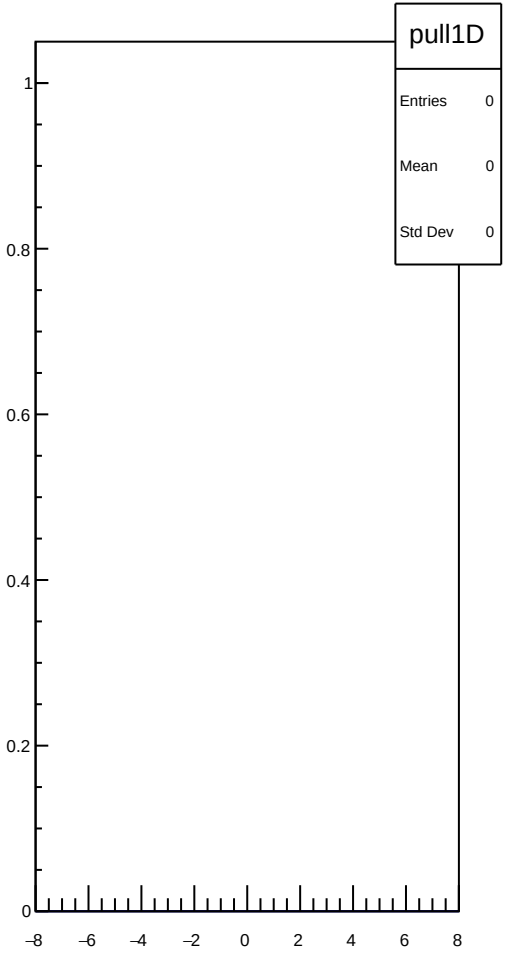

asym_bpm0i07WS_rms vs run
χ^2 / ndf 3.883e+04 / 79
p0 232.9 ± 0.1866
450
400
350
300
250
200

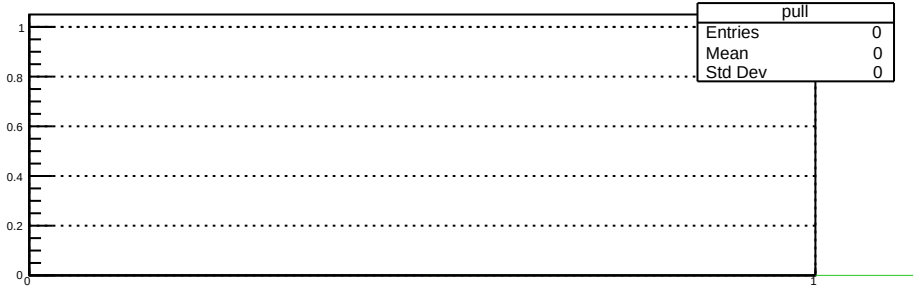

asym_bpm0l01WS_mean vs run
χ² / ndf 104 / 79
p0 −2311 ± 271.8
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 189.6
Std Dev 140.4
4
3
2
1
0
−1
−2

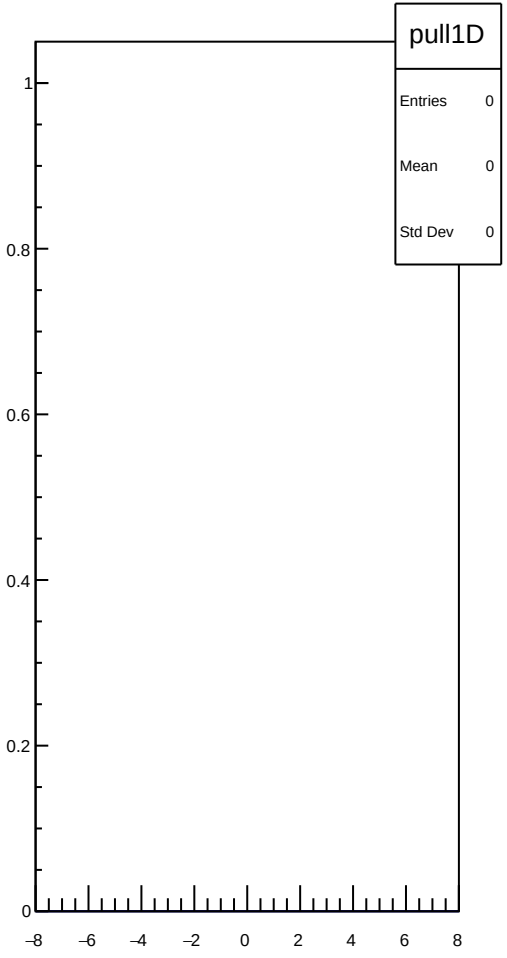

pull1D
Entries 80
Mean 0.07297
Std Dev 1.138
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

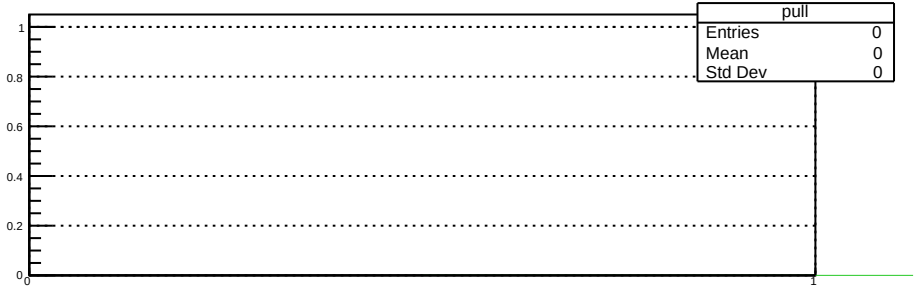

asym_bpm0l01WS_rms vs run
χ² / ndf 5.51e+04 / 79
p0 238.6 ± 0.1922
500
450
400
350
300
250
200

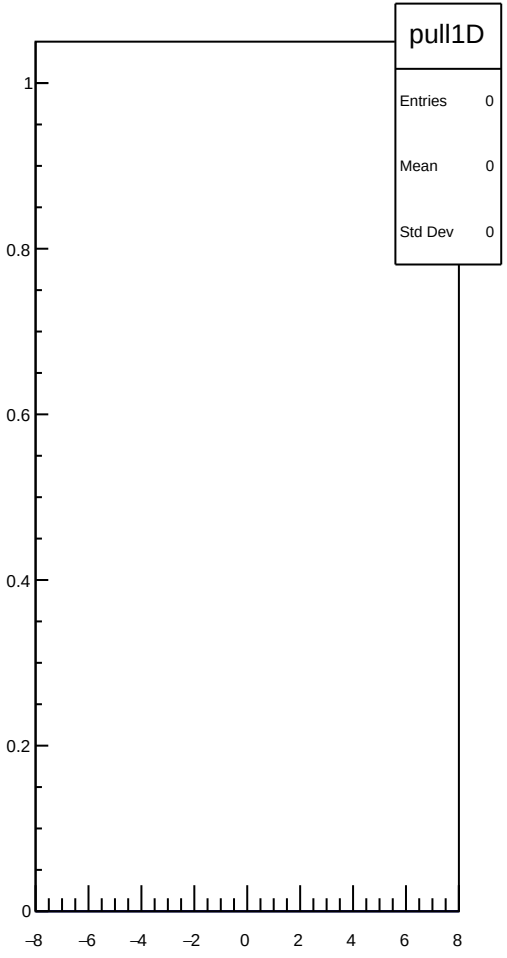

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

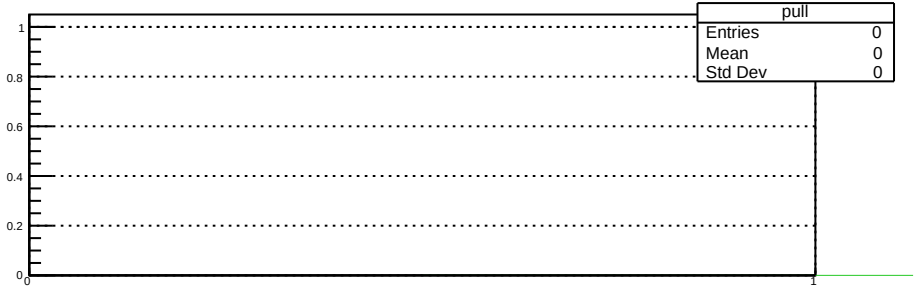

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

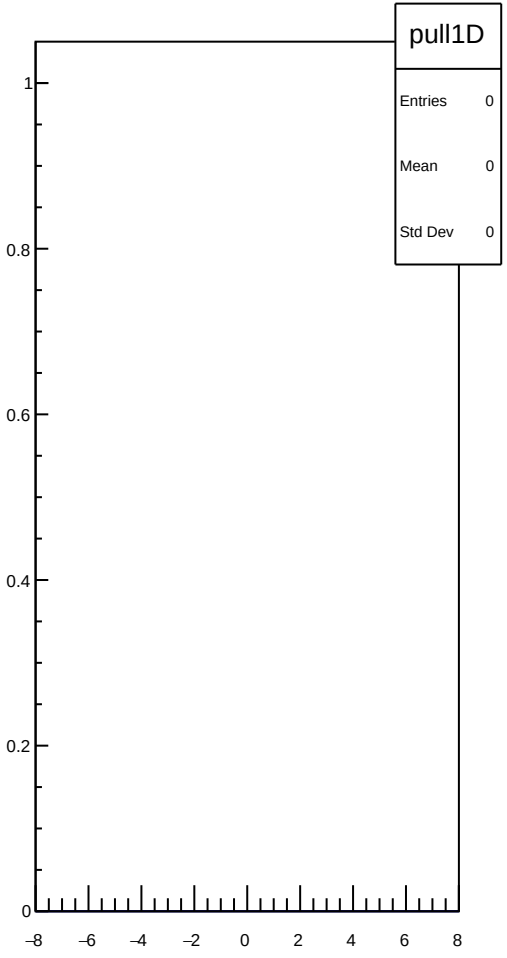

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

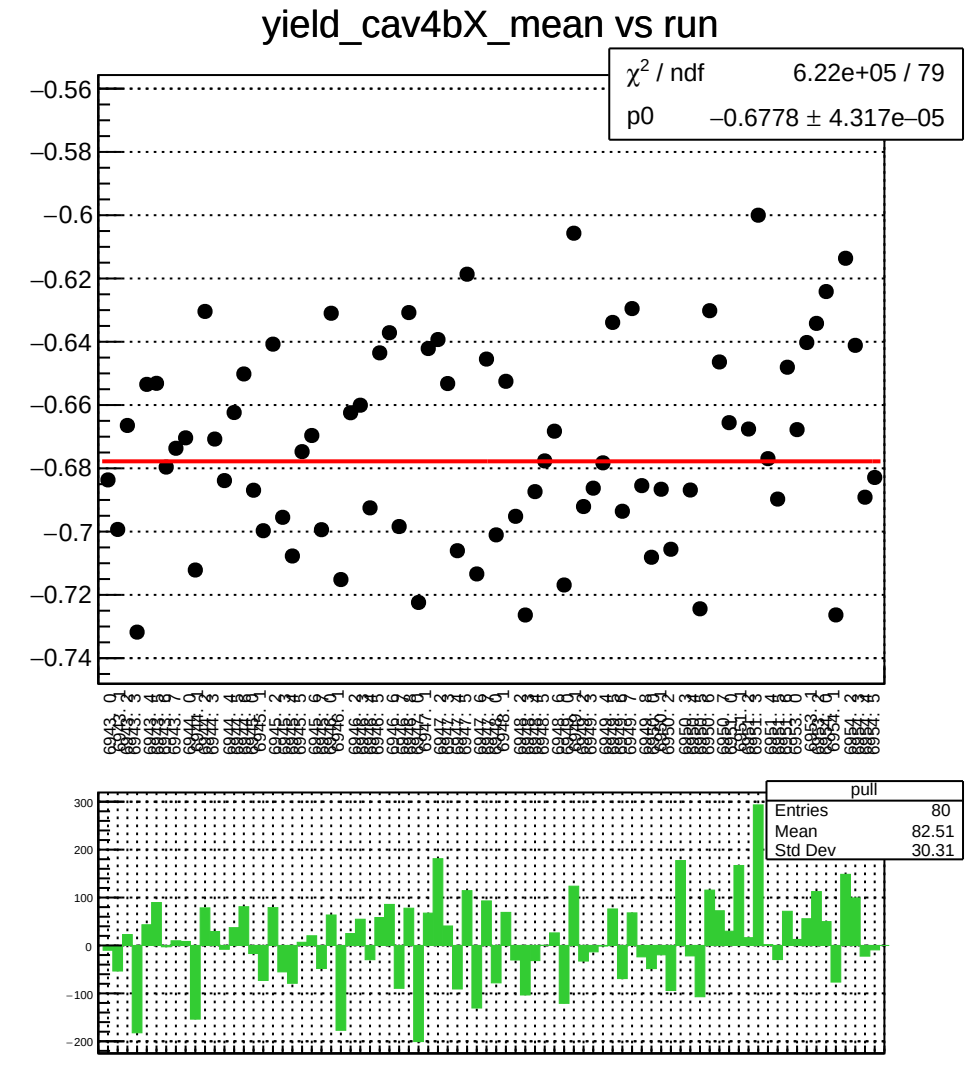

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

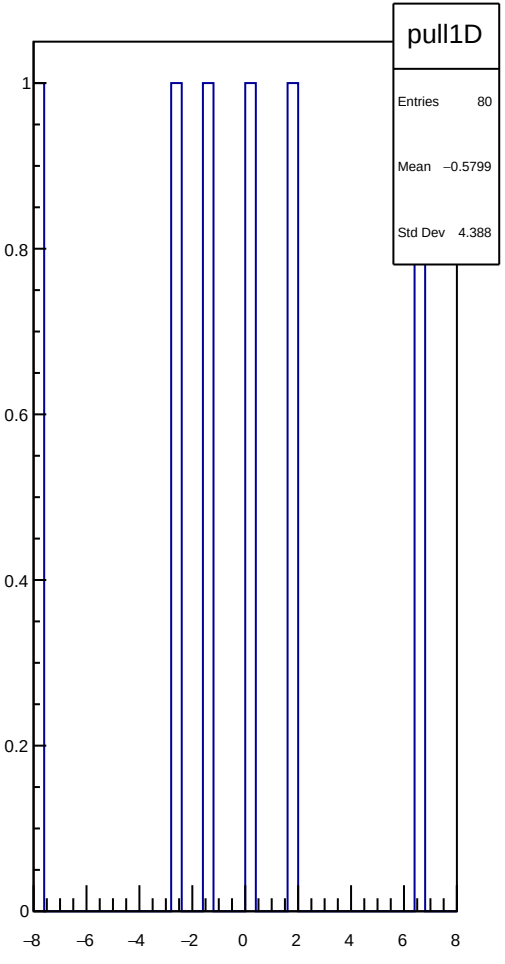

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

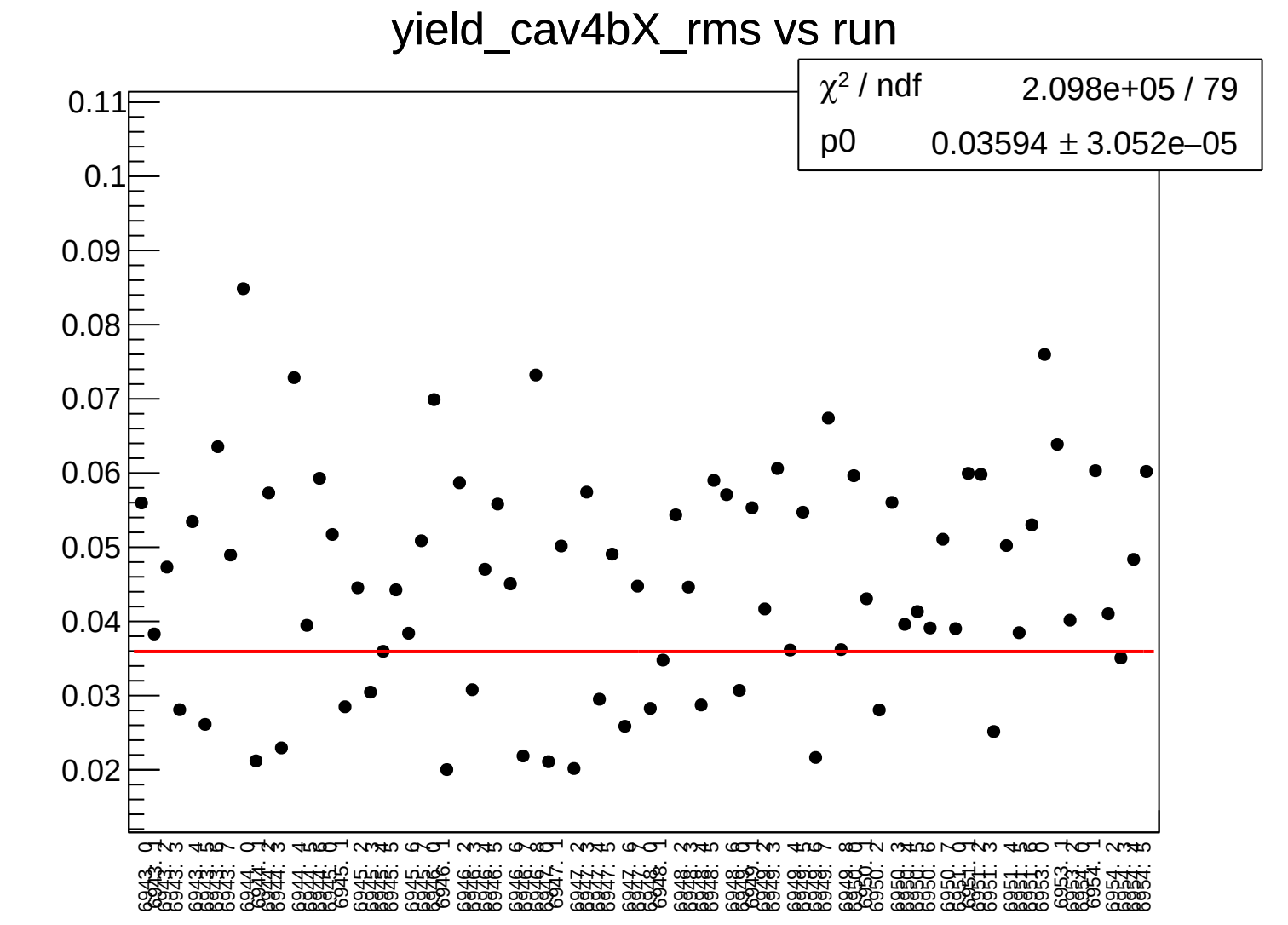

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

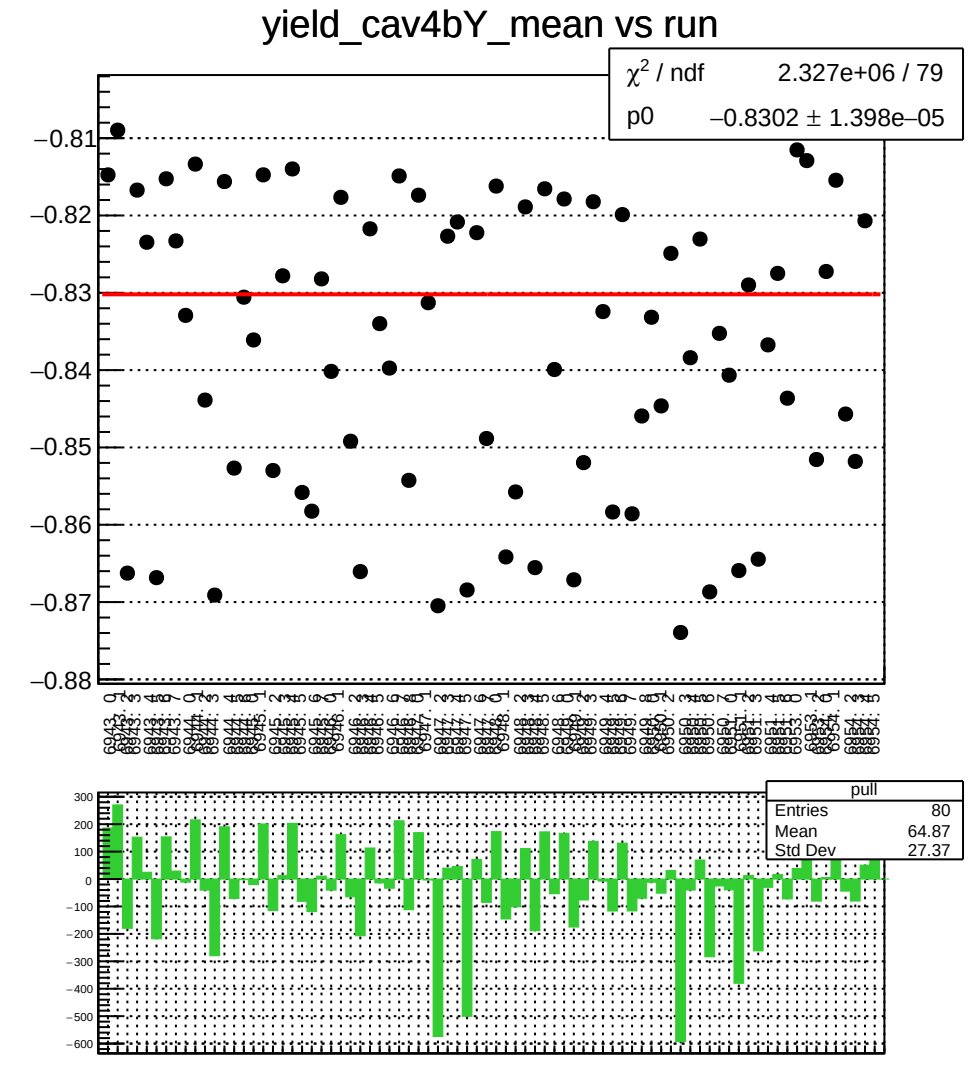

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

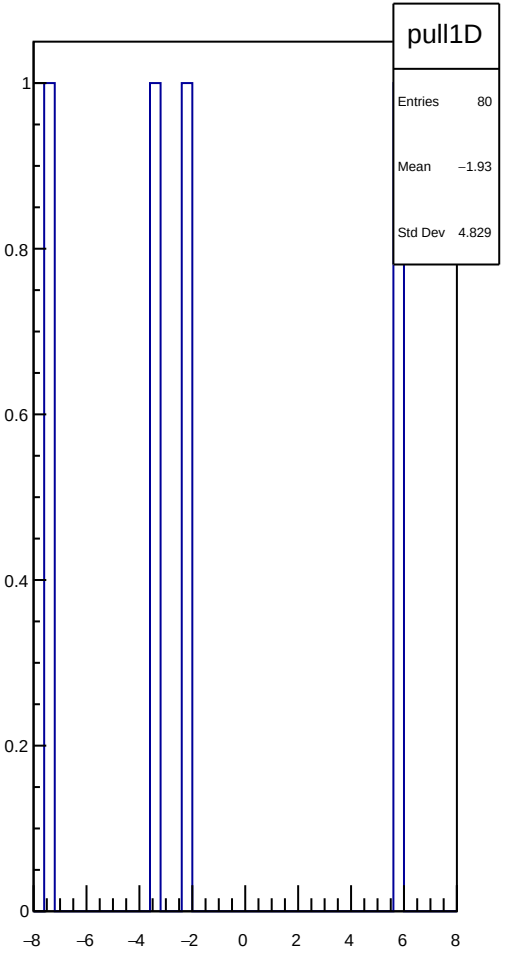

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

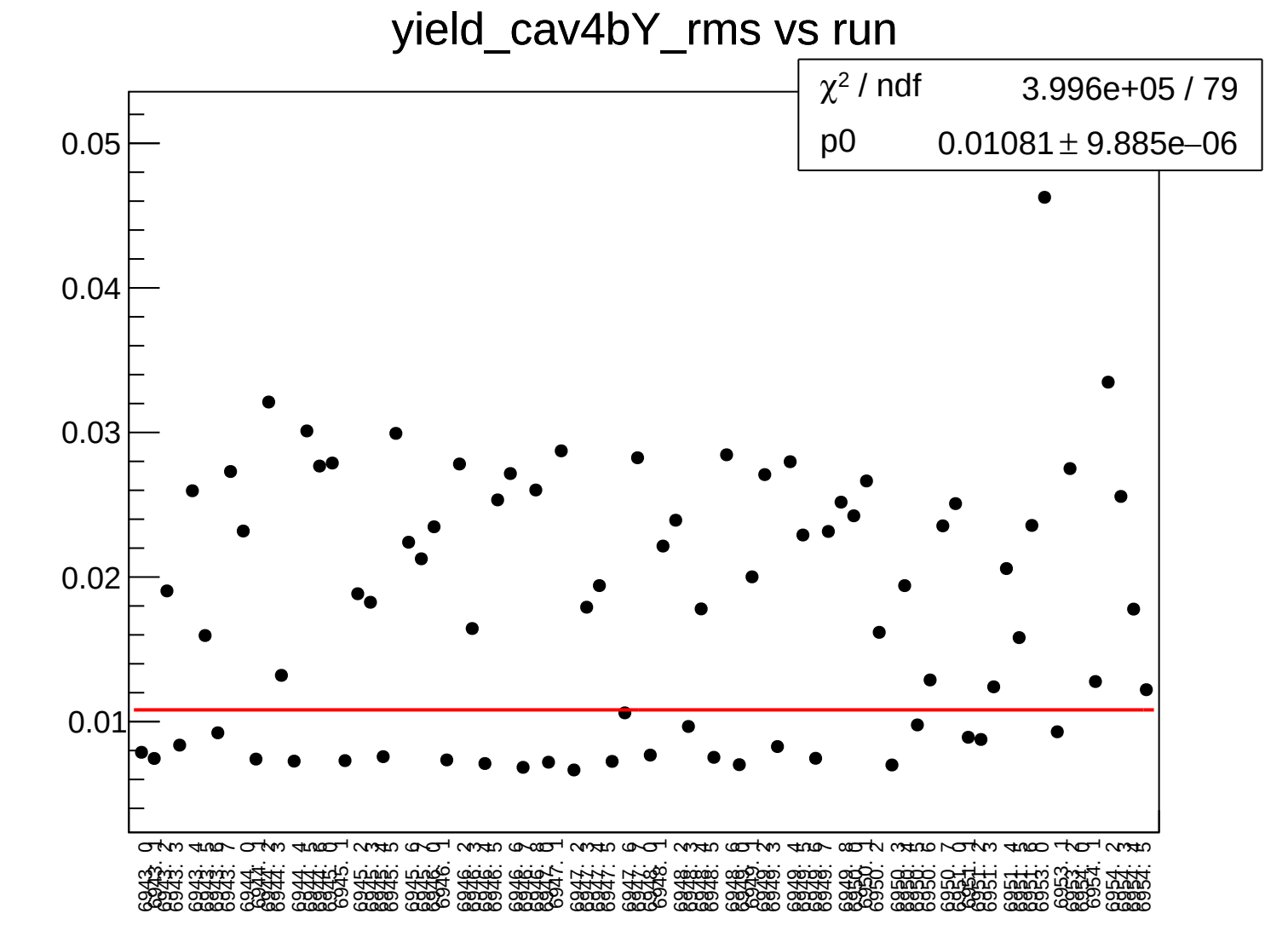

yield_cav4bX_mean vs run
χ² / ndf 6.22e+05 / 79
p0 −0.6778 ± 4.317e−05
pull
Entries 80
Mean 82.51
Std Dev 30.31

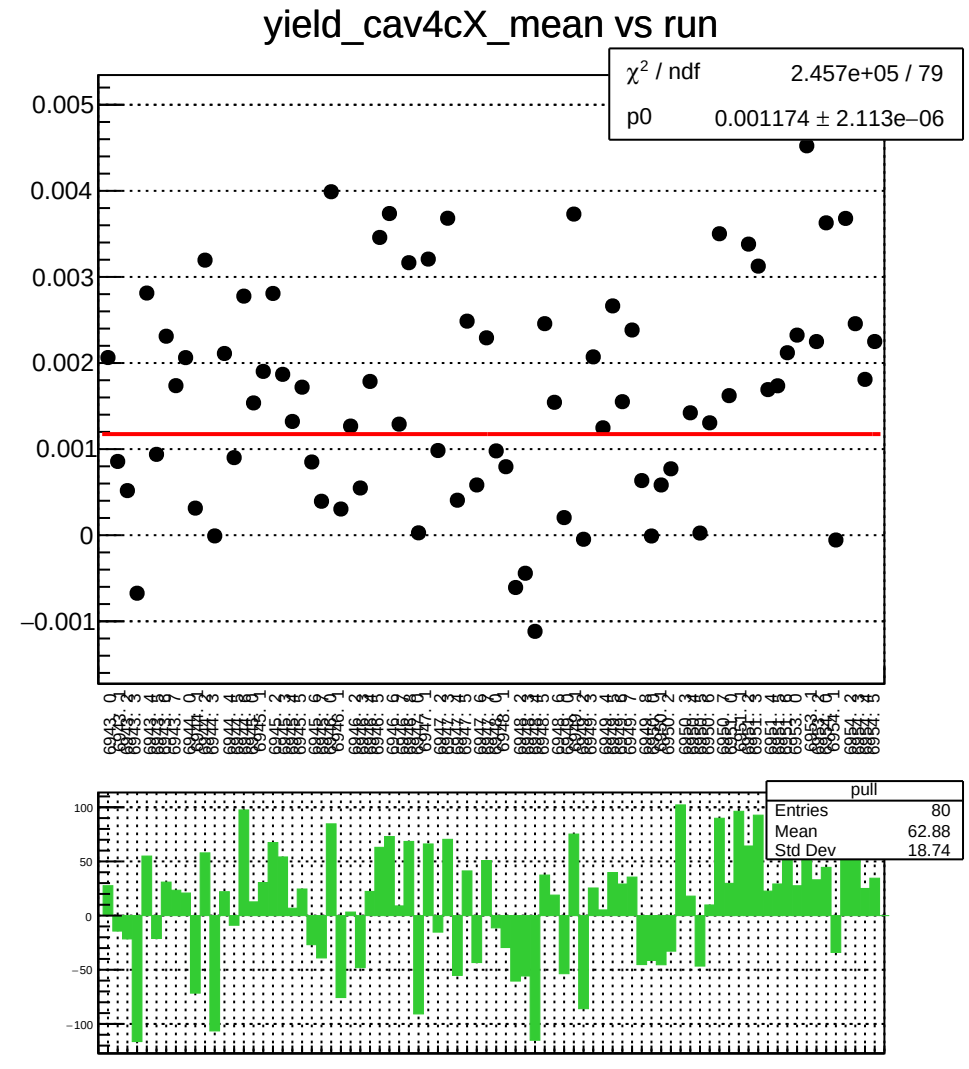

pull1D
Entries 80
Mean −0.5799
Std Dev 4.388

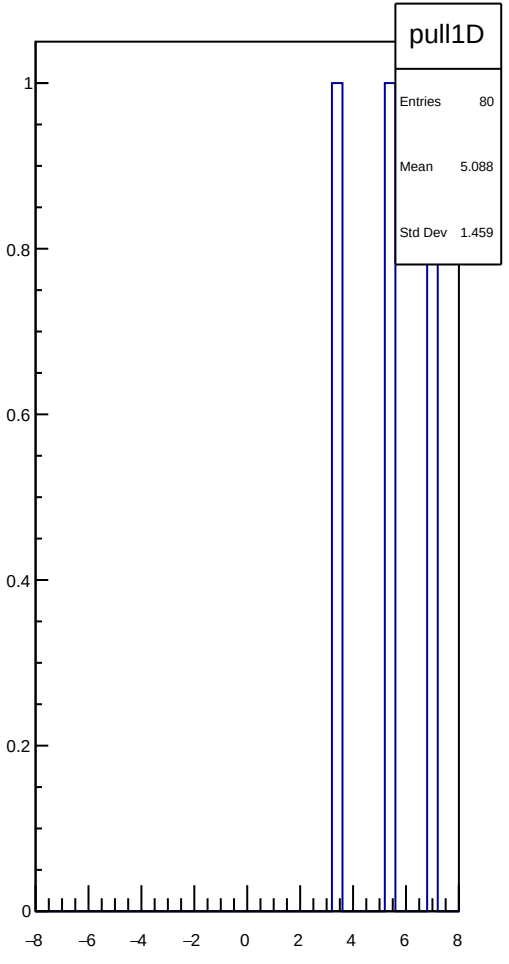

yield_cav4bX_rms vs run
χ² / ndf 2.098e+05 / 79
p0 0.03594 ± 3.052e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

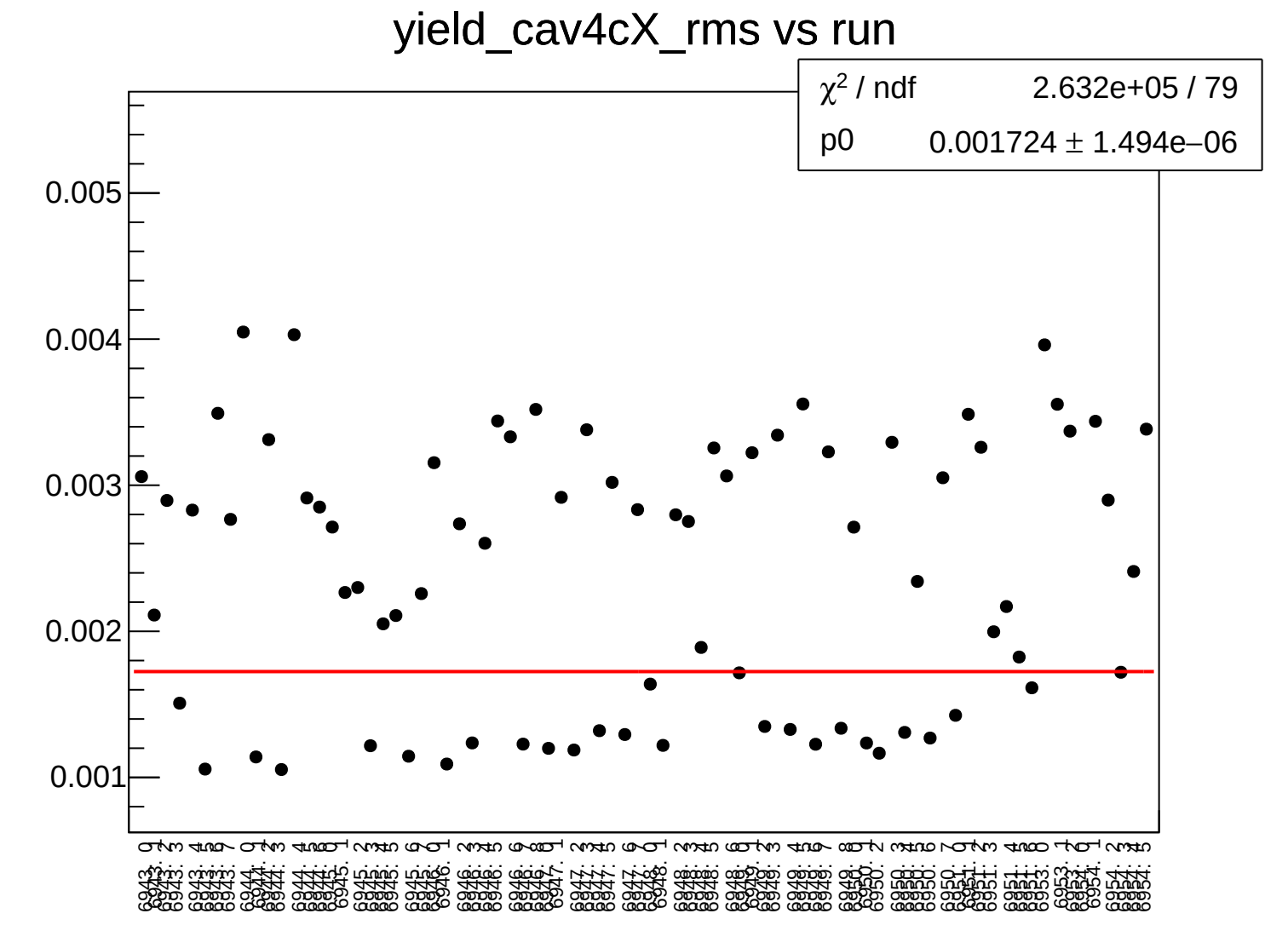

yield_cav4bY_mean vs run
χ² / ndf 2.327e+06 / 79
p0 −0.8302 ± 1.398e−05
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 80
Mean 64.87
Std Dev 27.37
300
200
100
0
−100
−200
−300
−400
−500
−600

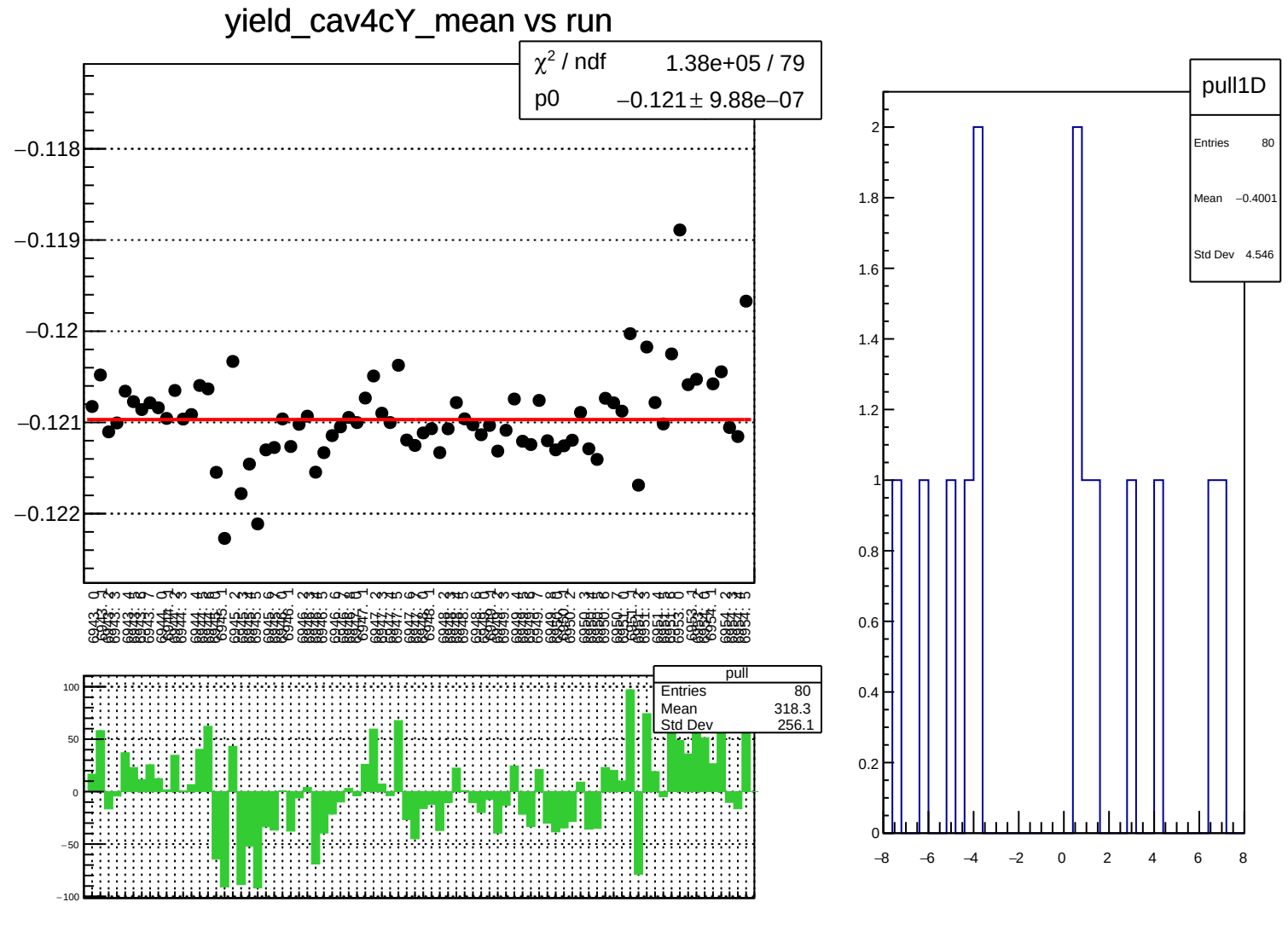

pull1D
Entries 80
Mean −1.93
Std Dev 4.829
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

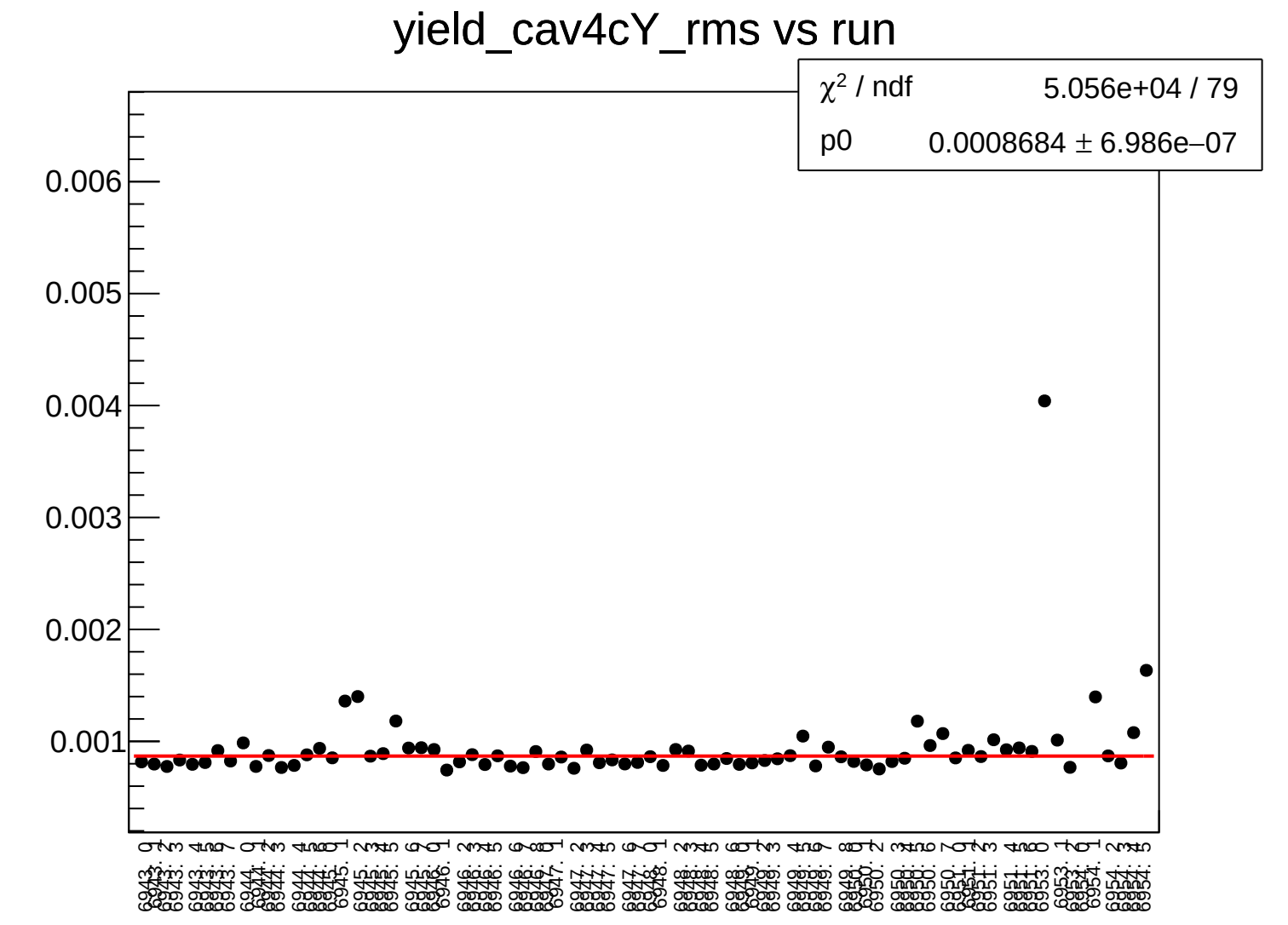

yield_cav4bY_rms vs run
χ² / ndf 3.996e+05 / 79
p0 0.01081 ± 9.885e–06
0.05
0.04
0.03
0.02
0.01

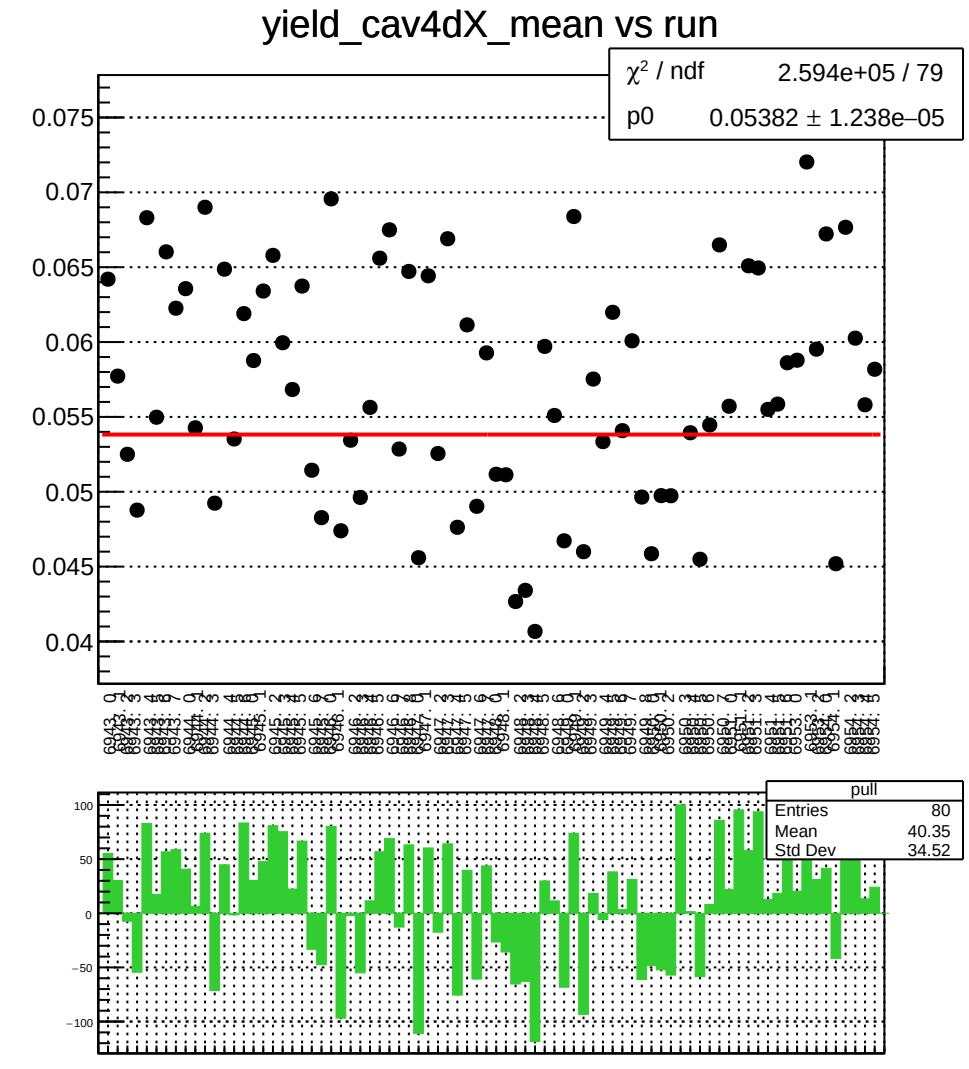

yield_cav4cX_mean vs run
χ² / ndf 2.457e+05 / 79
p0 0.001174 ± 2.113e−06
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 80
Mean 62.88
Std Dev 18.74
100
50
0
−50
−100

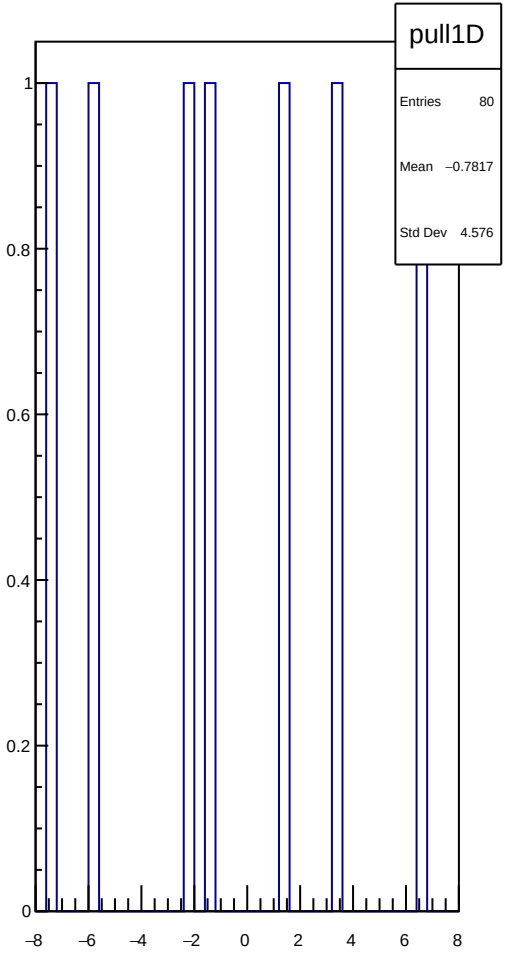

pull1D
Entries 80
Mean 5.088
Std Dev 1.459
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

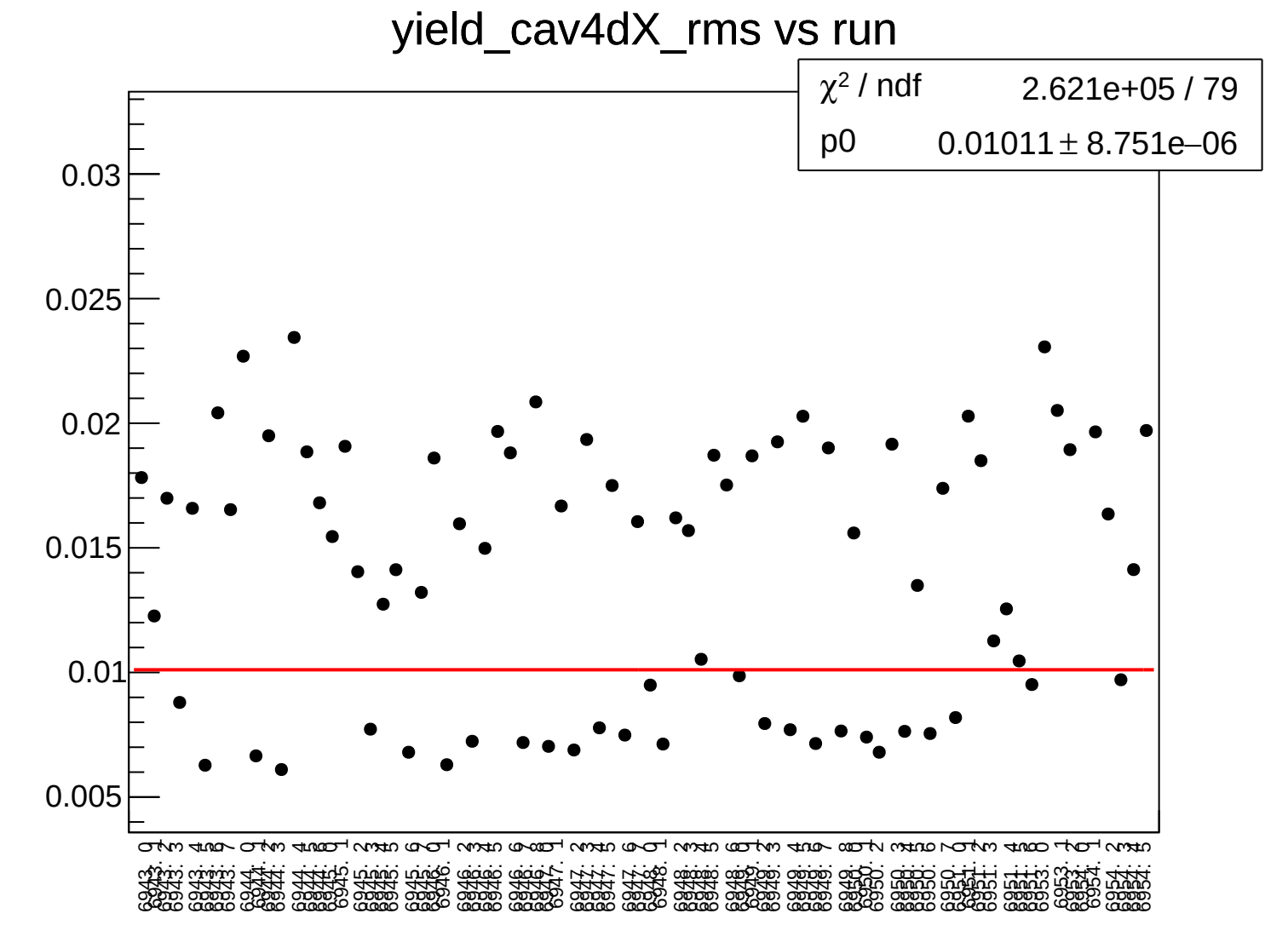

yield_cav4cX_rms vs run
χ² / ndf 2.632e+05 / 79
p0 0.001724 ± 1.494e−06
0.005
0.004
0.003
0.002
0.001

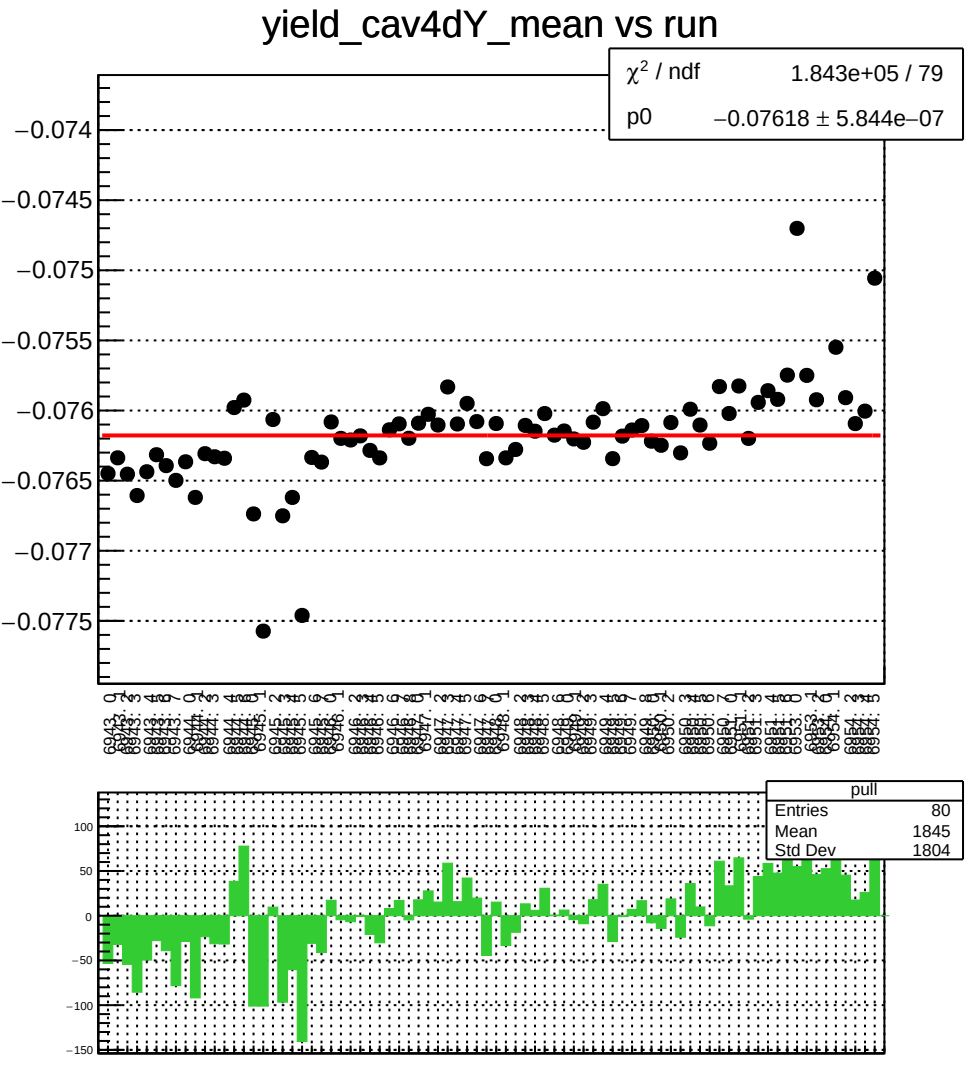

yield_cav4cY_mean vs run
χ² / ndf 1.38e+05 / 79
p0 −0.121 ± 9.88e−07
−0.118
−0.119
−0.12
−0.121
−0.122
pull
Entries 80
Mean 318.3
Std Dev 256.1
100
50
0
−50
−100
pull1D
Entries 80
Mean −0.4001
Std Dev 4.546
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

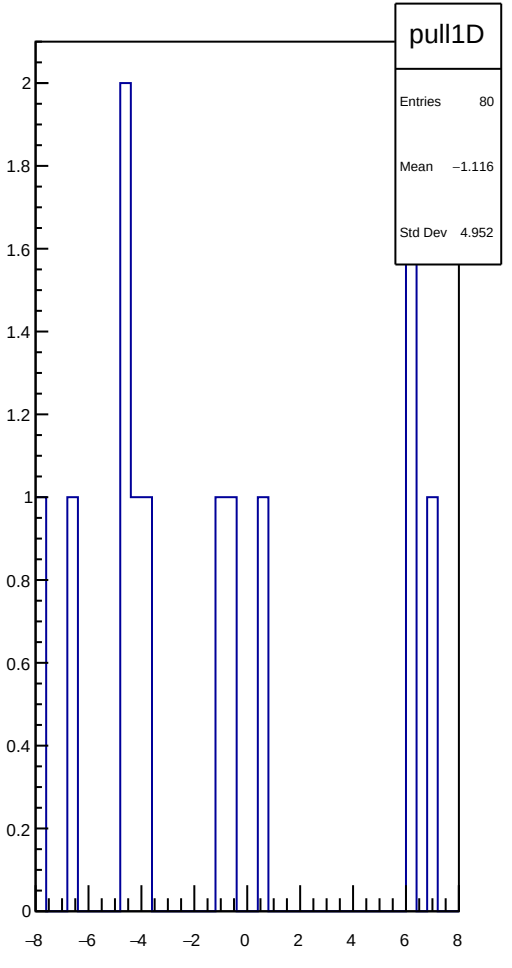

yield_cav4cY_rms vs run
χ² / ndf 5.056e+04 / 79
p0 0.0008684 ± 6.986e−07
0.006
0.005
0.004
0.003
0.002
0.001

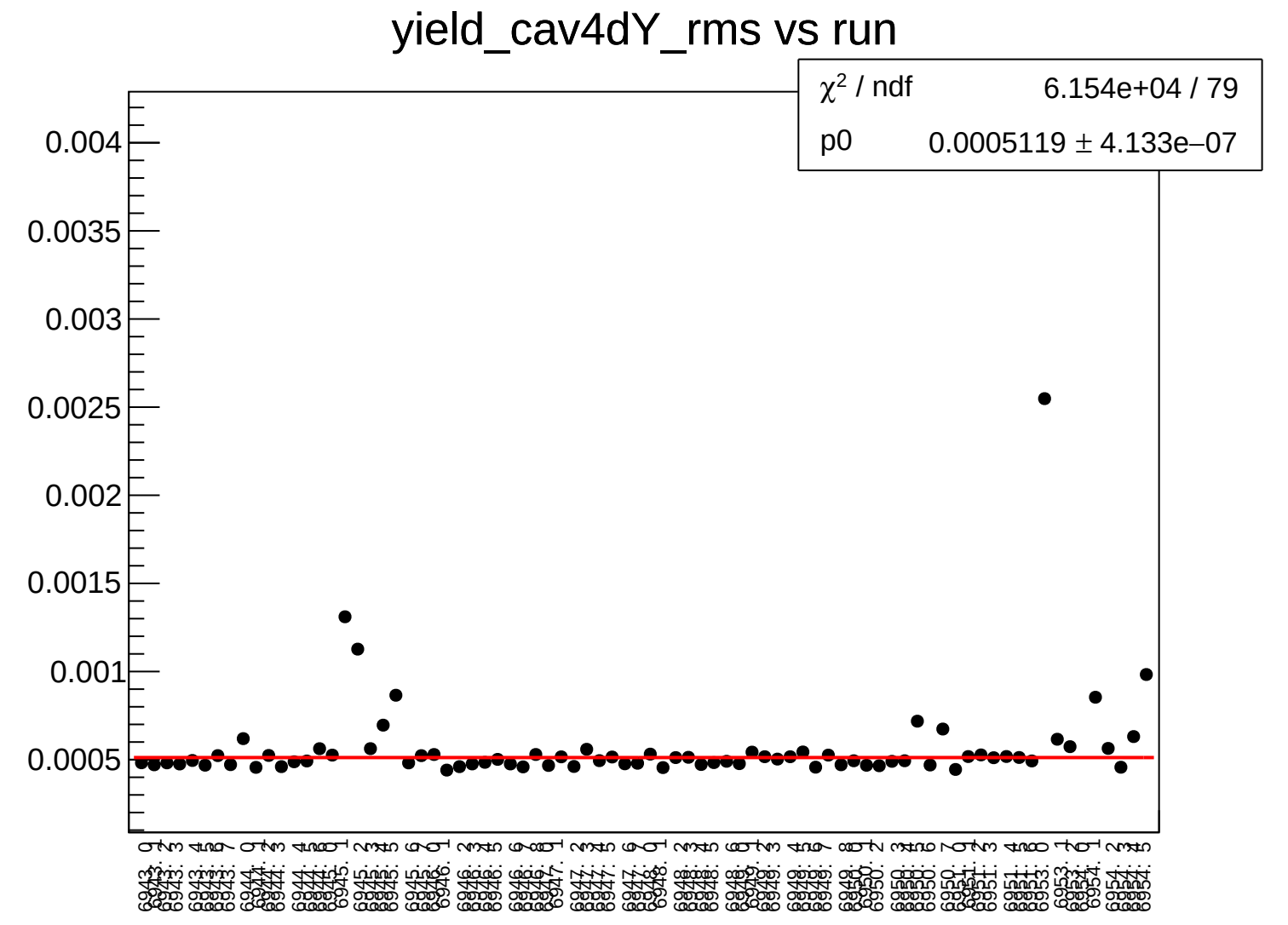

yield_cav4dX_mean vs run
χ² / ndf 2.594e+05 / 79
p0 0.05382 ± 1.238e−05
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
pull
Entries 80
Mean 40.35
Std Dev 34.52
100
50
0
−50
−100

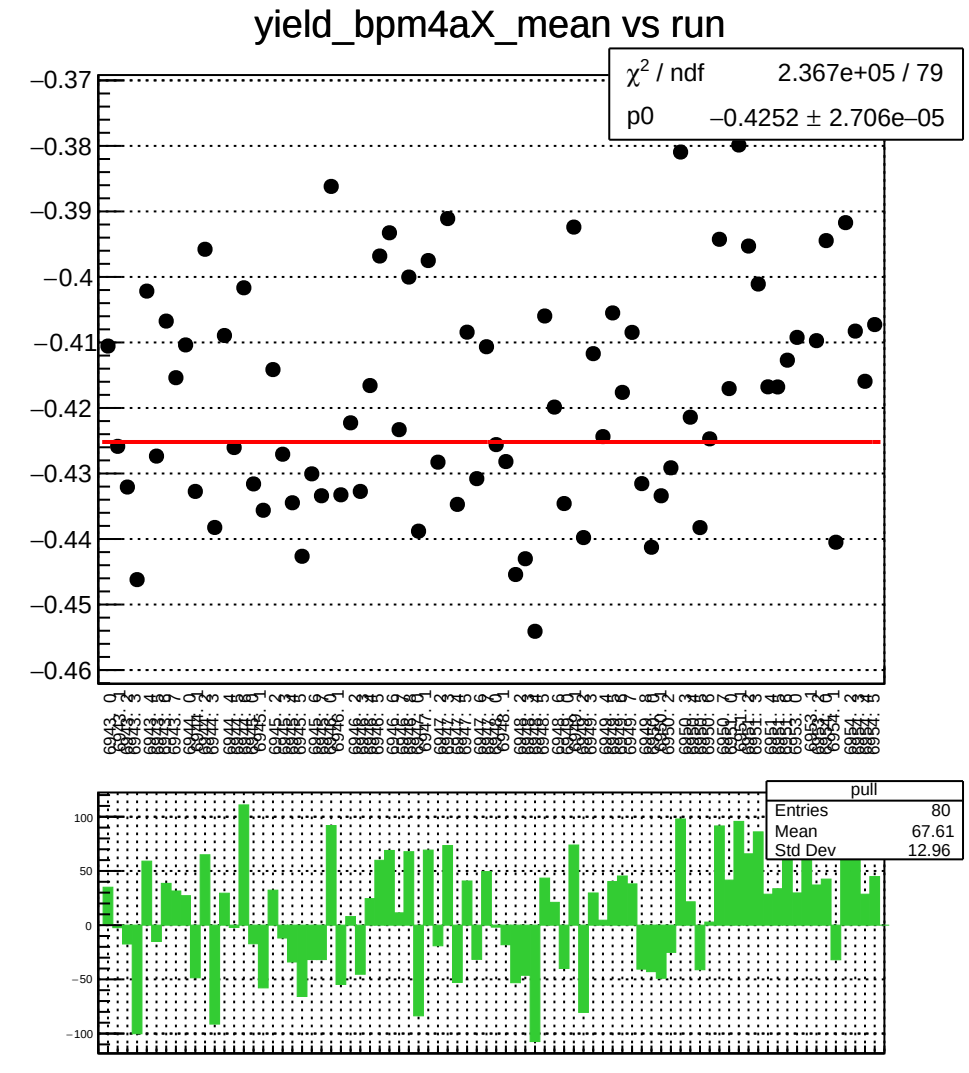

pull1D
Entries 80
Mean −0.7817
Std Dev 4.576
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

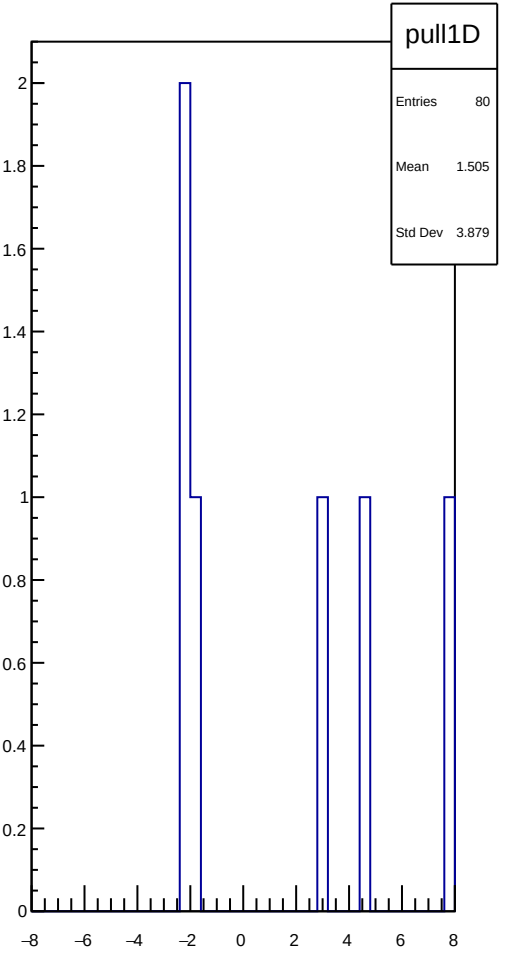

yield_cav4dX_rms vs run
χ² / ndf 2.621e+05 / 79
p0 0.01011 ± 8.751e–06
0.03
0.025
0.02
0.015
0.01
0.005

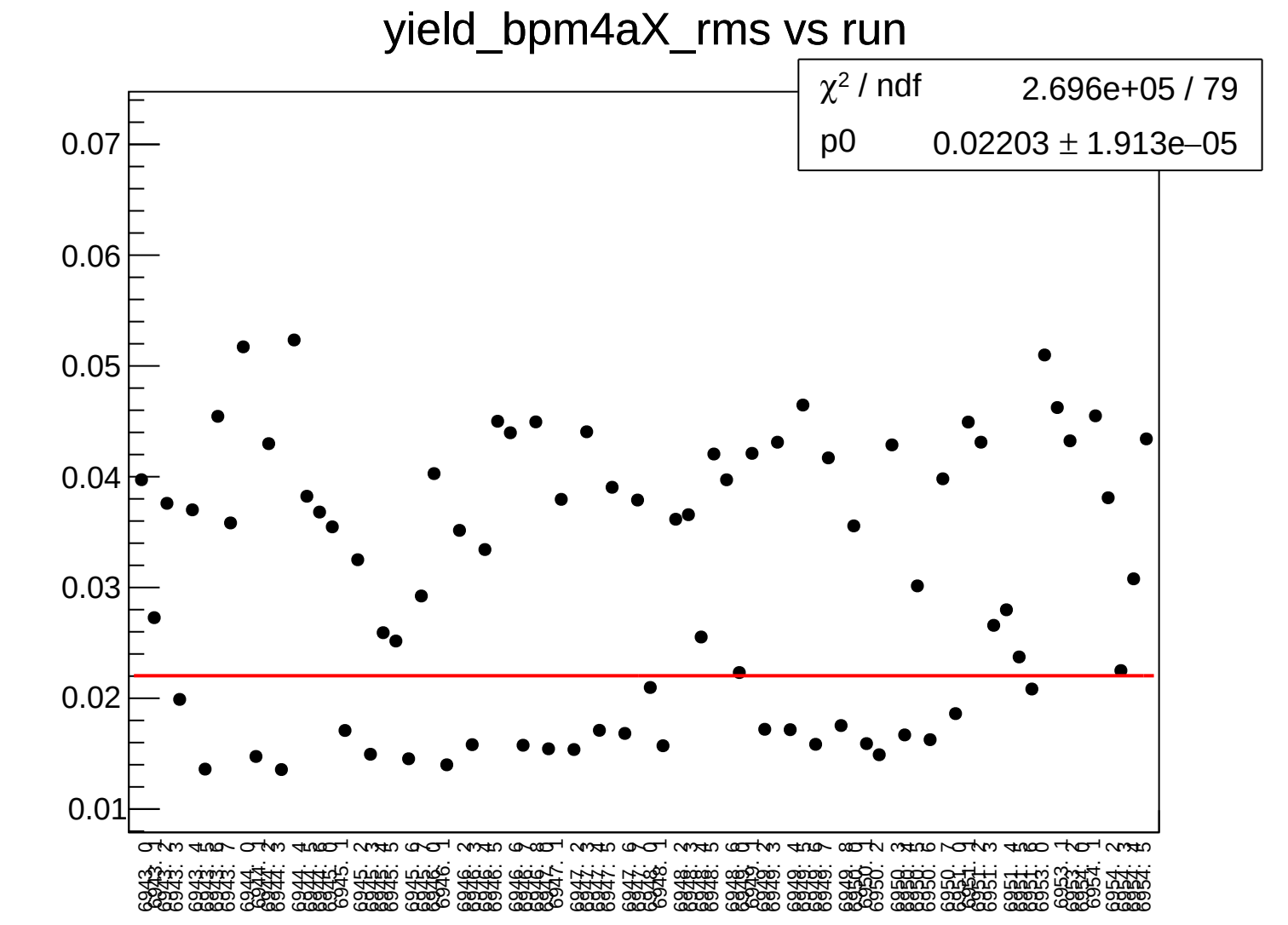

yield_cav4dY_mean vs run
χ² / ndf 1.843e+05 / 79
p0 −0.07618 ± 5.844e−07
−0.074
−0.0745
−0.075
−0.0755
−0.076
−0.0765
−0.077
−0.0775
pull
Entries 80
Mean 1845
Std Dev 1804
100
50
0
−50
−100
−150

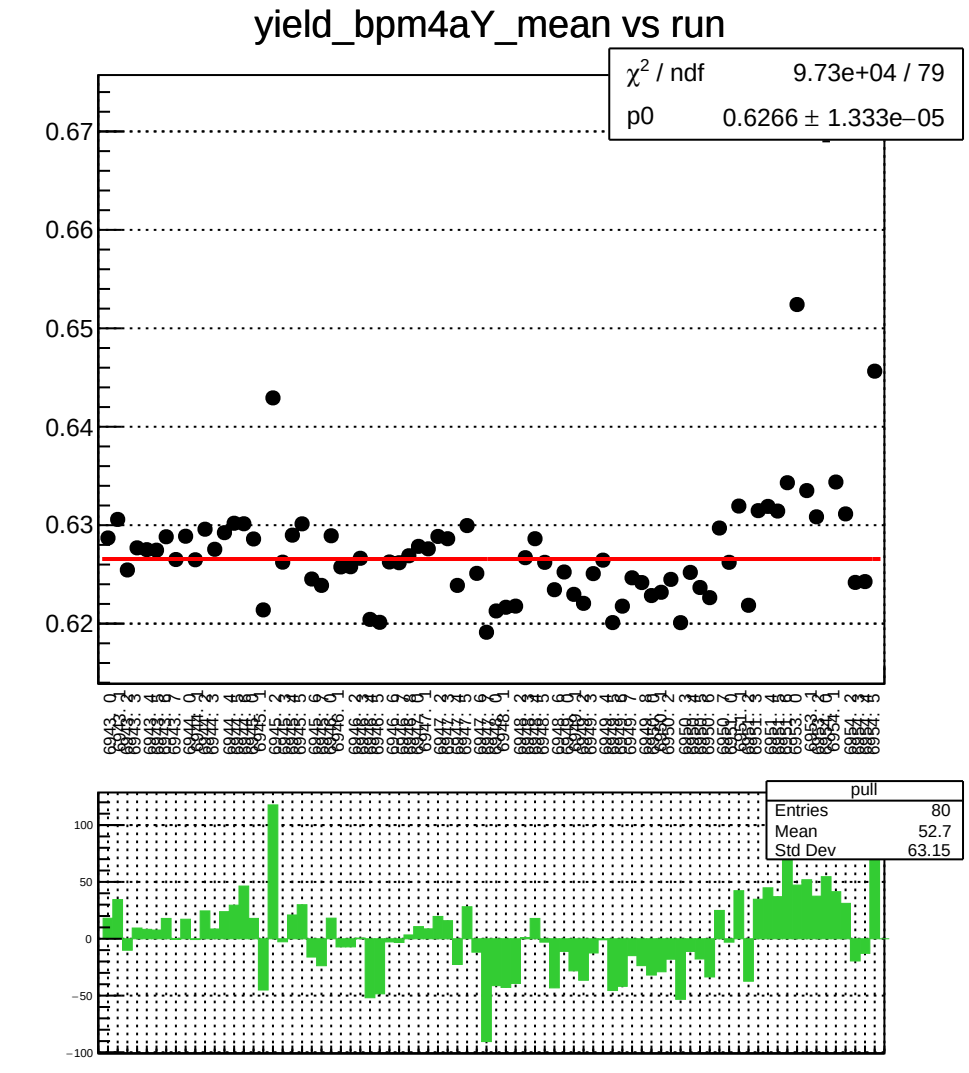

pull1D
Entries 80
Mean −1.116
Std Dev 4.952
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

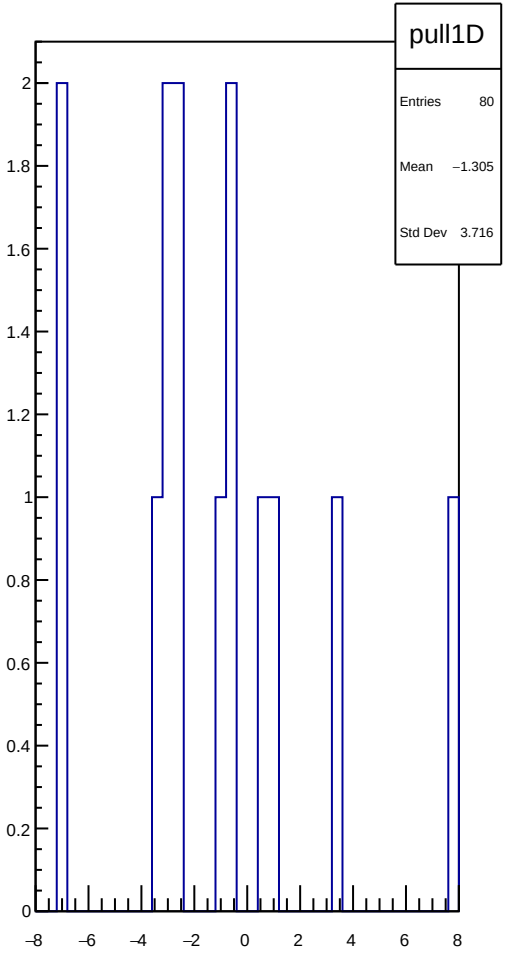

yield_cav4dY_rms vs run
χ² / ndf 6.154e+04 / 79
p0 0.0005119 ± 4.133e−07
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005

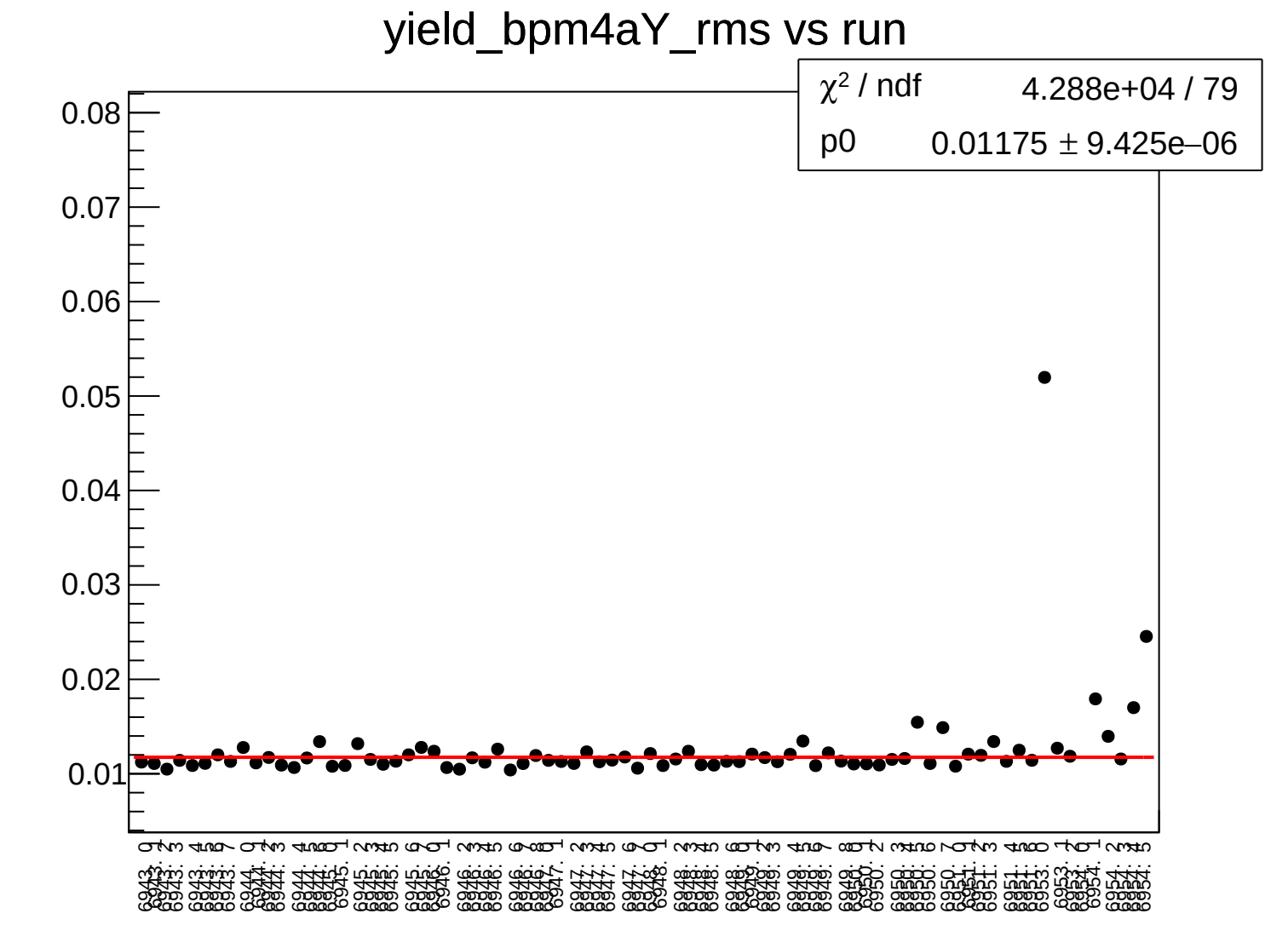

yield_bpm4aX_mean vs run
χ² / ndf 2.367e+05 / 79
p0 −0.4252 ± 2.706e−05
pull
Entries 80
Mean 67.61
Std Dev 12.96

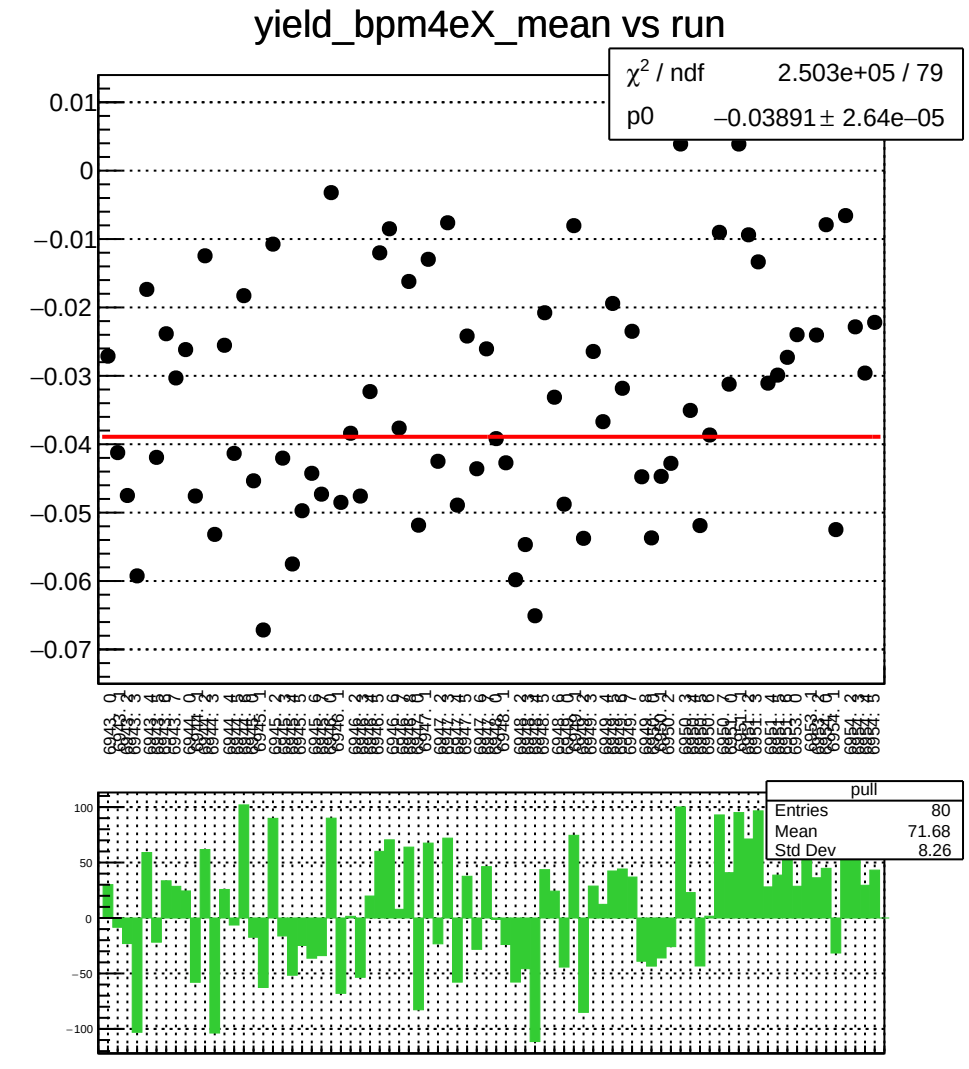

pull1D
Entries 80
Mean 1.505
Std Dev 3.879

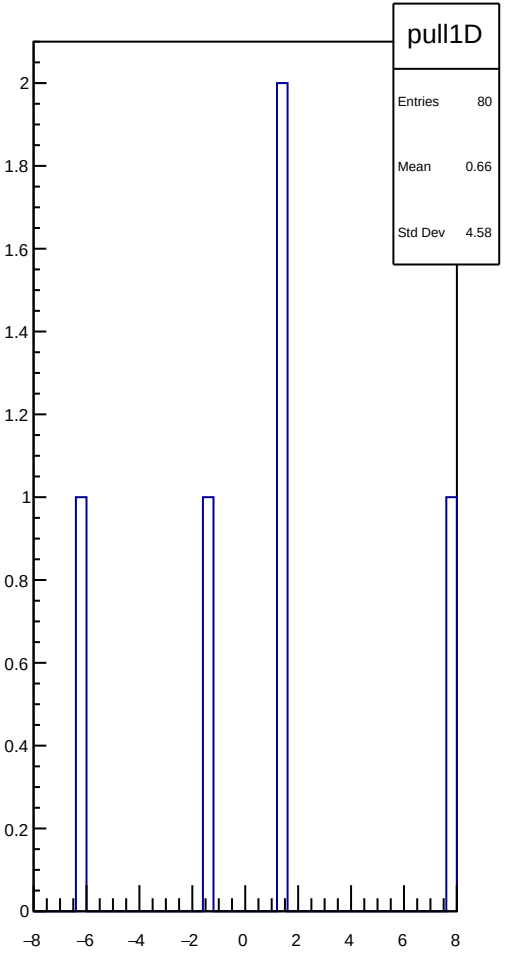

yield_bpm4aX_rms vs run
χ² / ndf 2.696e+05 / 79
p0 0.02203 ± 1.913e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

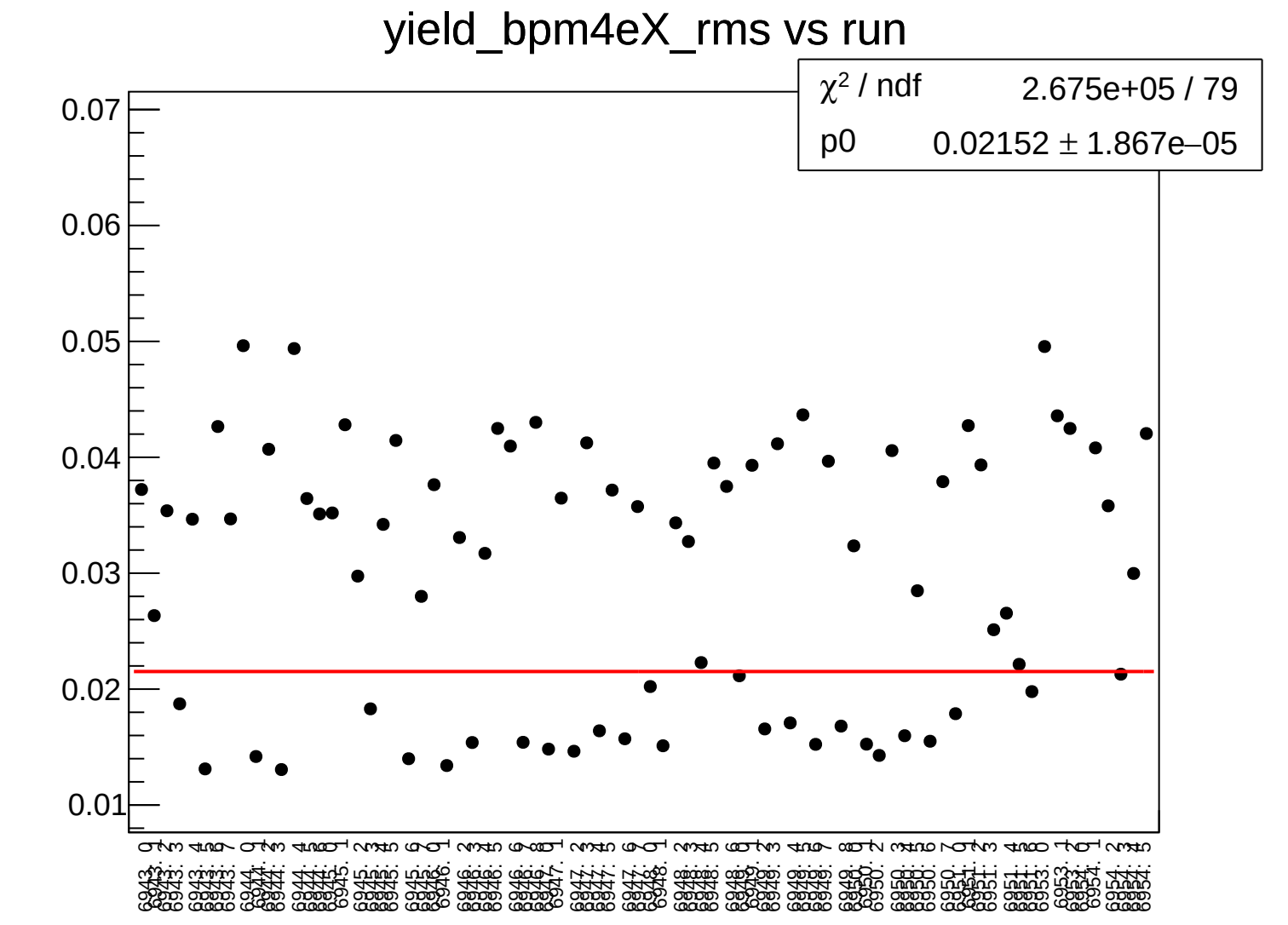

yield_bpm4aY_mean vs run
χ² / ndf 9.73e+04 / 79
p0 0.6266 ± 1.333e−05
0.67
0.66
0.65
0.64
0.63
0.62
pull
Entries 80
Mean 52.7
Std Dev 63.15
100
50
0
−50
−100

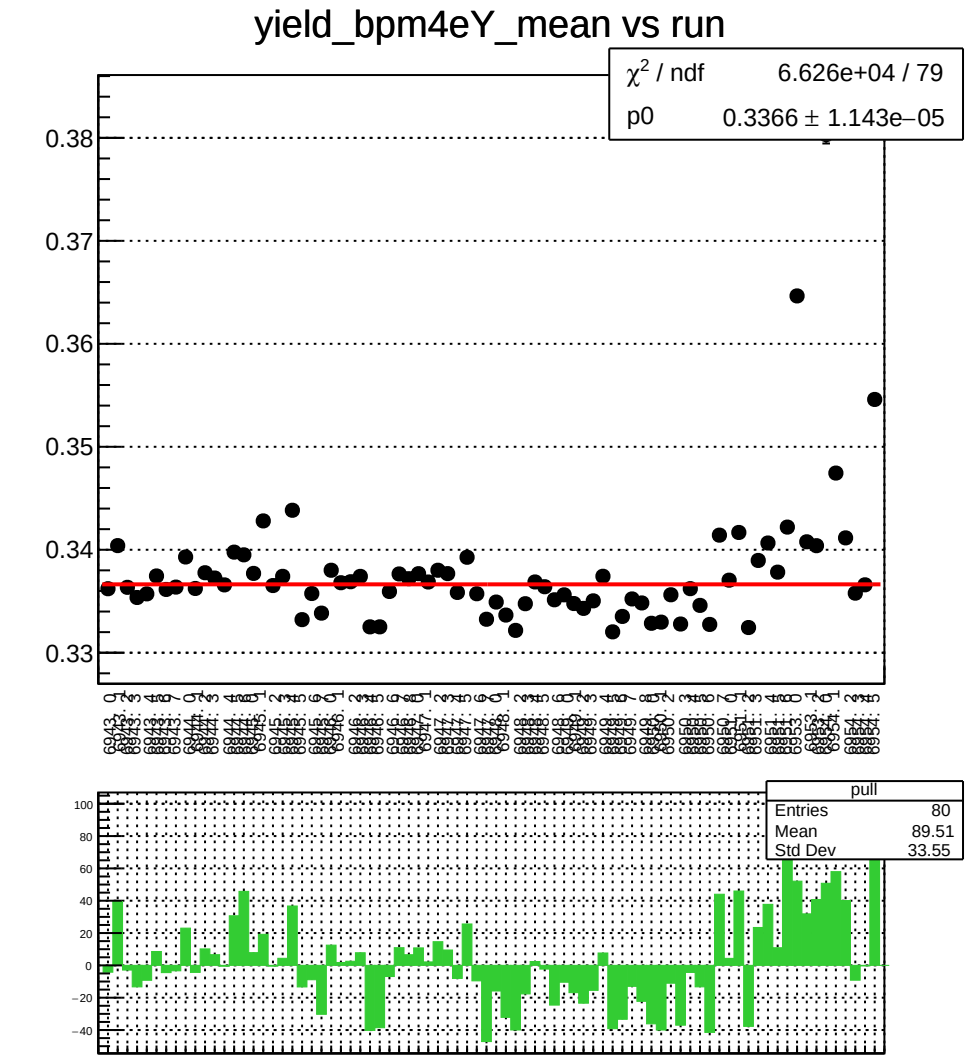

pull1D
Entries 80
Mean −1.305
Std Dev 3.716
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

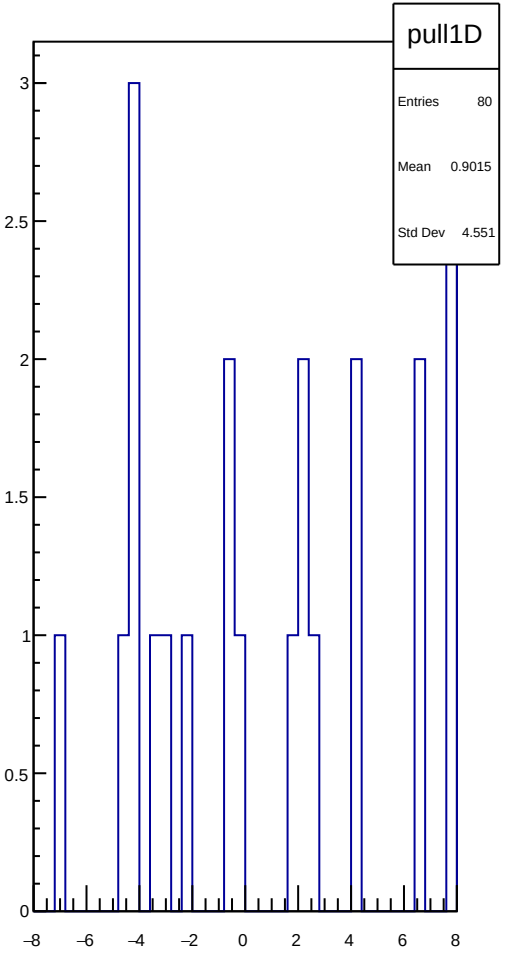

yield_bpm4aY_rms vs run
χ² / ndf 4.288e+04 / 79
p0 0.01175 ± 9.425e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

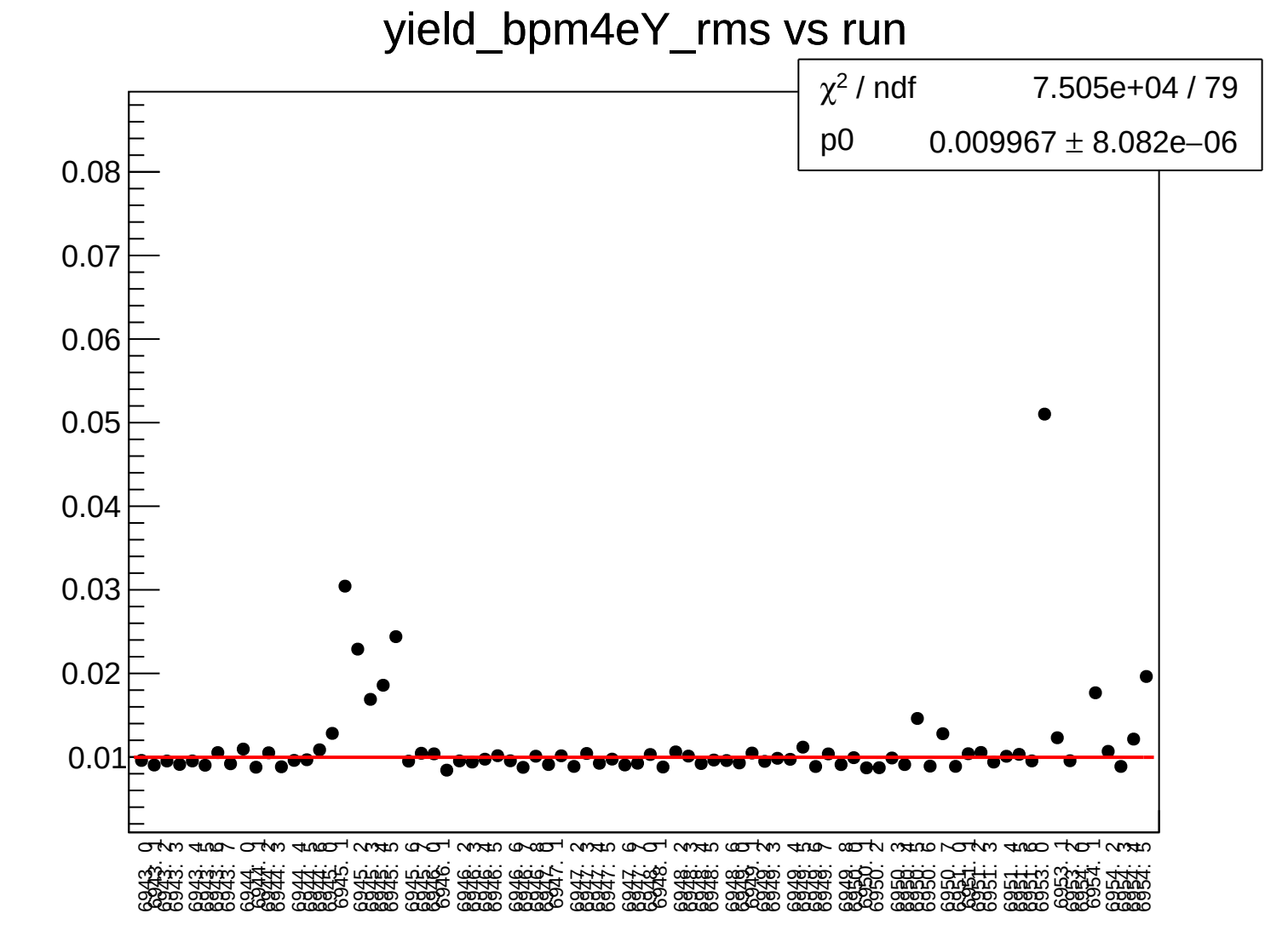

yield_bpm4eX_mean vs run
χ² / ndf 2.503e+05 / 79
p0 −0.03891 ± 2.64e−05
pull
Entries 80
Mean 71.68
Std Dev 8.26

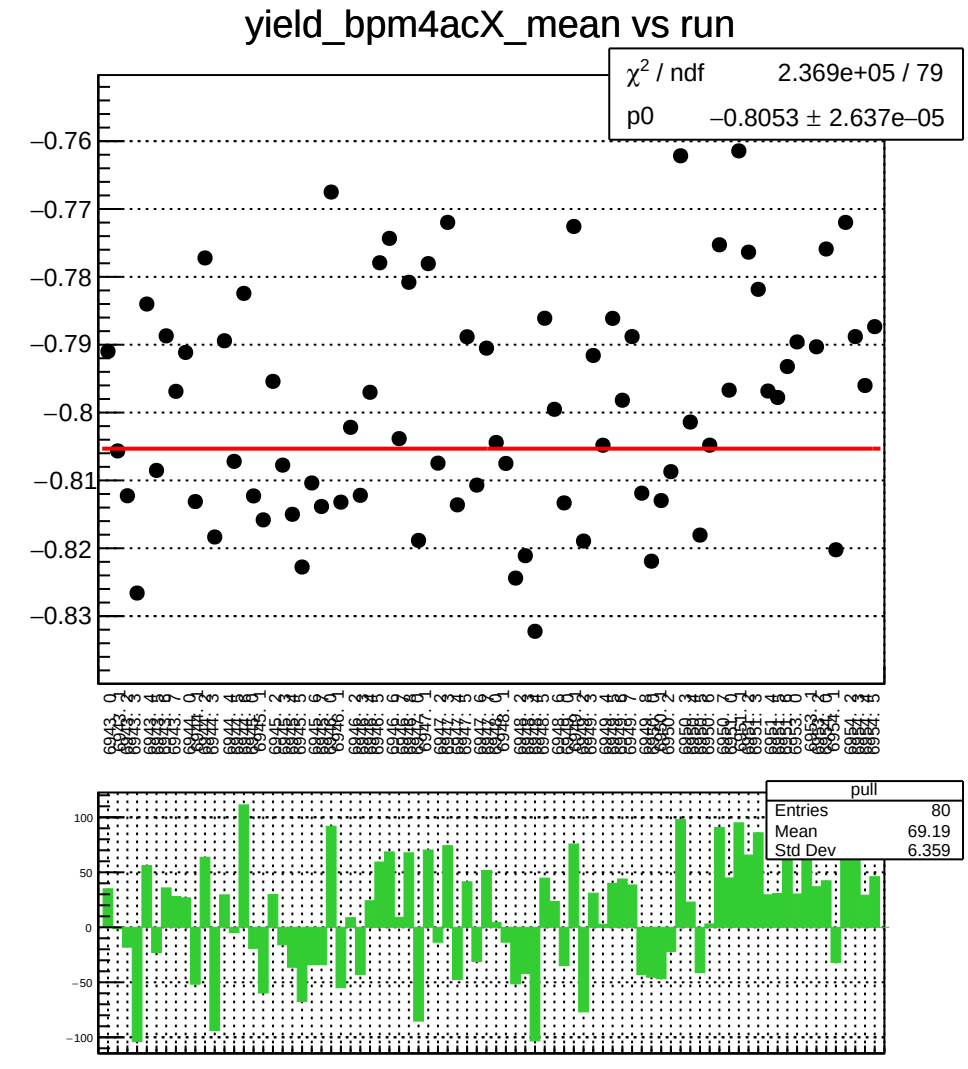

pull1D
Entries 80
Mean 0.66
Std Dev 4.58

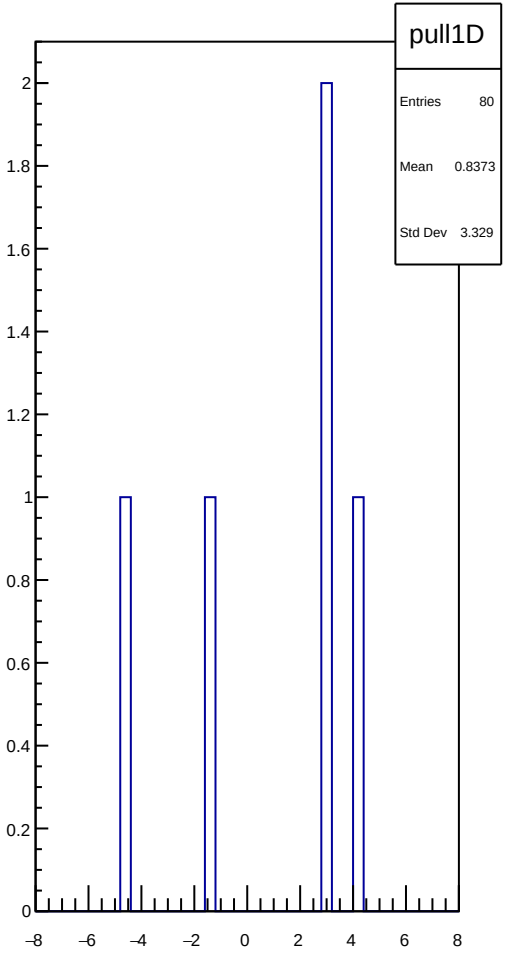

yield_bpm4eX_rms vs run
χ² / ndf 2.675e+05 / 79
p0 0.02152 ± 1.867e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

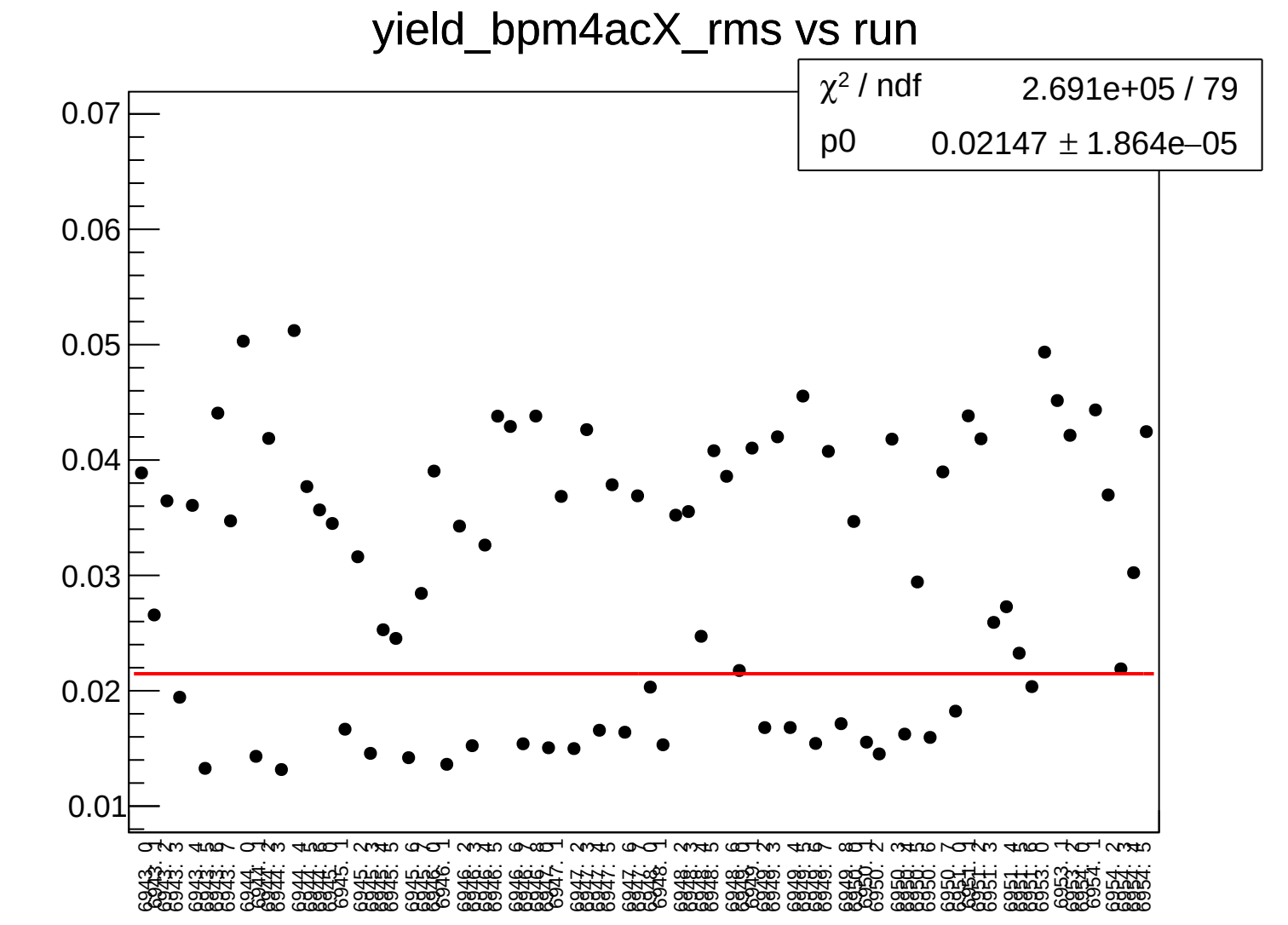

yield_bpm4eY_mean vs run
χ² / ndf 6.626e+04 / 79
p0 0.3366 ± 1.143e−05
0.38
0.37
0.36
0.35
0.34
0.33
pull
Entries 80
Mean 89.51
Std Dev 33.55
100
80
60
40
20
0
−20
−40

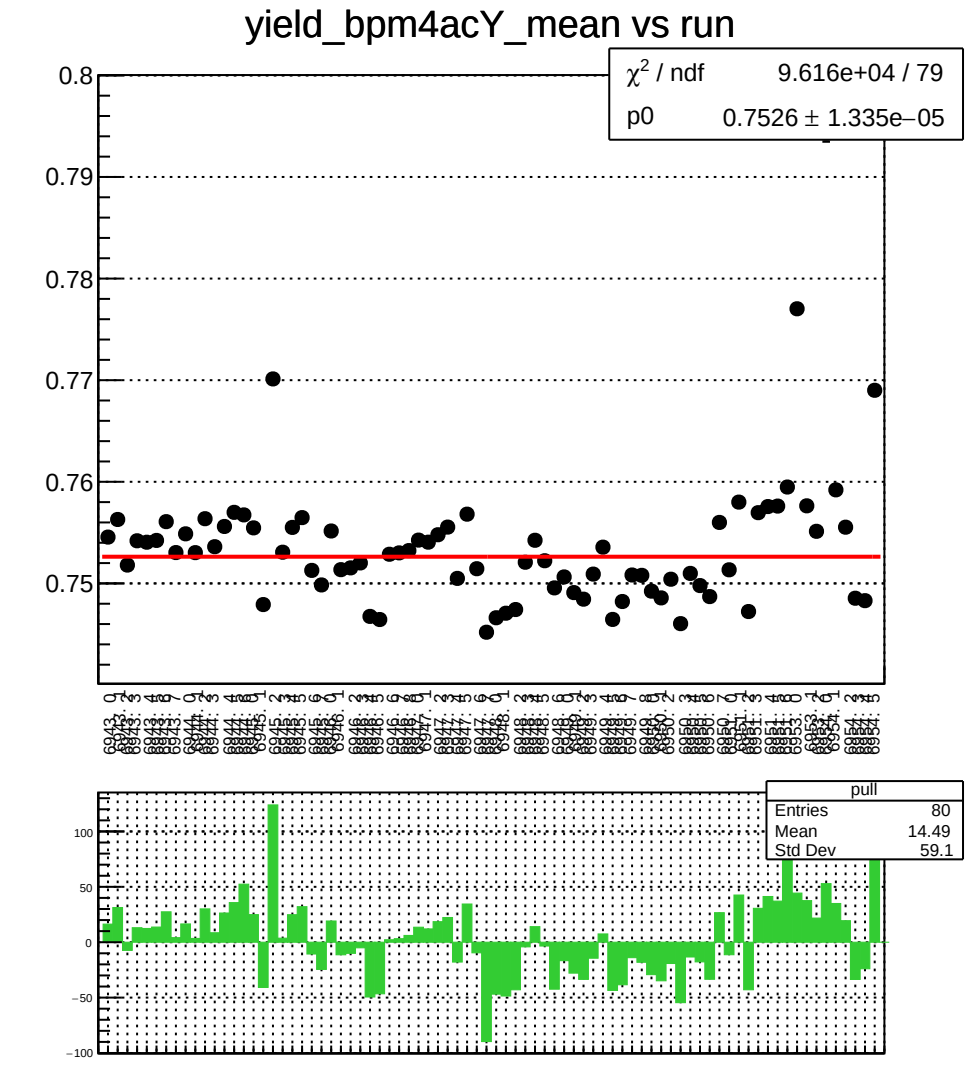

pull1D
Entries 80
Mean 0.9015
Std Dev 4.551
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

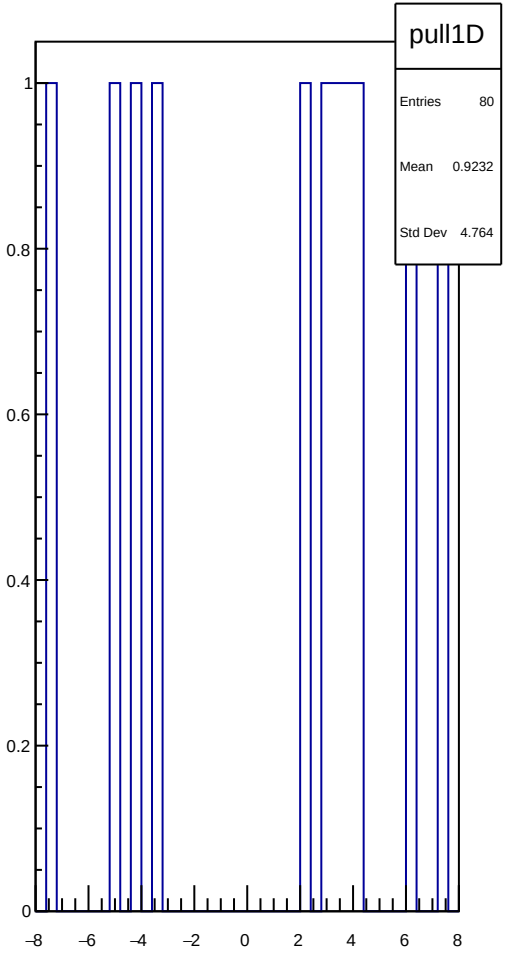

yield_bpm4eY_rms vs run
χ² / ndf 7.505e+04 / 79
p0 0.009967 ± 8.082e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

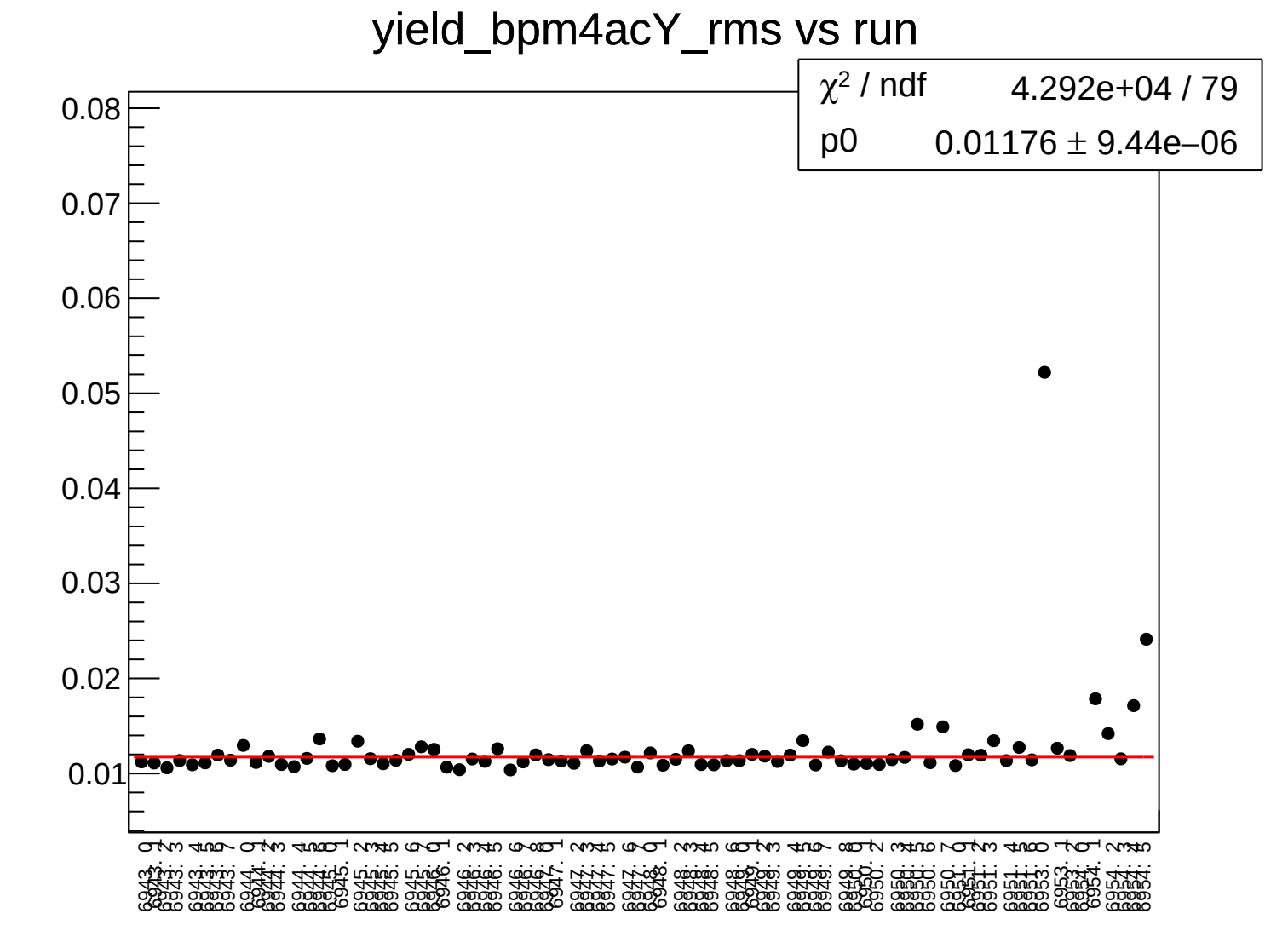

yield_bpm4acX_mean vs run
χ² / ndf 2.369e+05 / 79
p0 −0.8053 ± 2.637e−05
−0.76
−0.77
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
pull
Entries 80
Mean 69.19
Std Dev 6.359
100
50
0
−50
−100

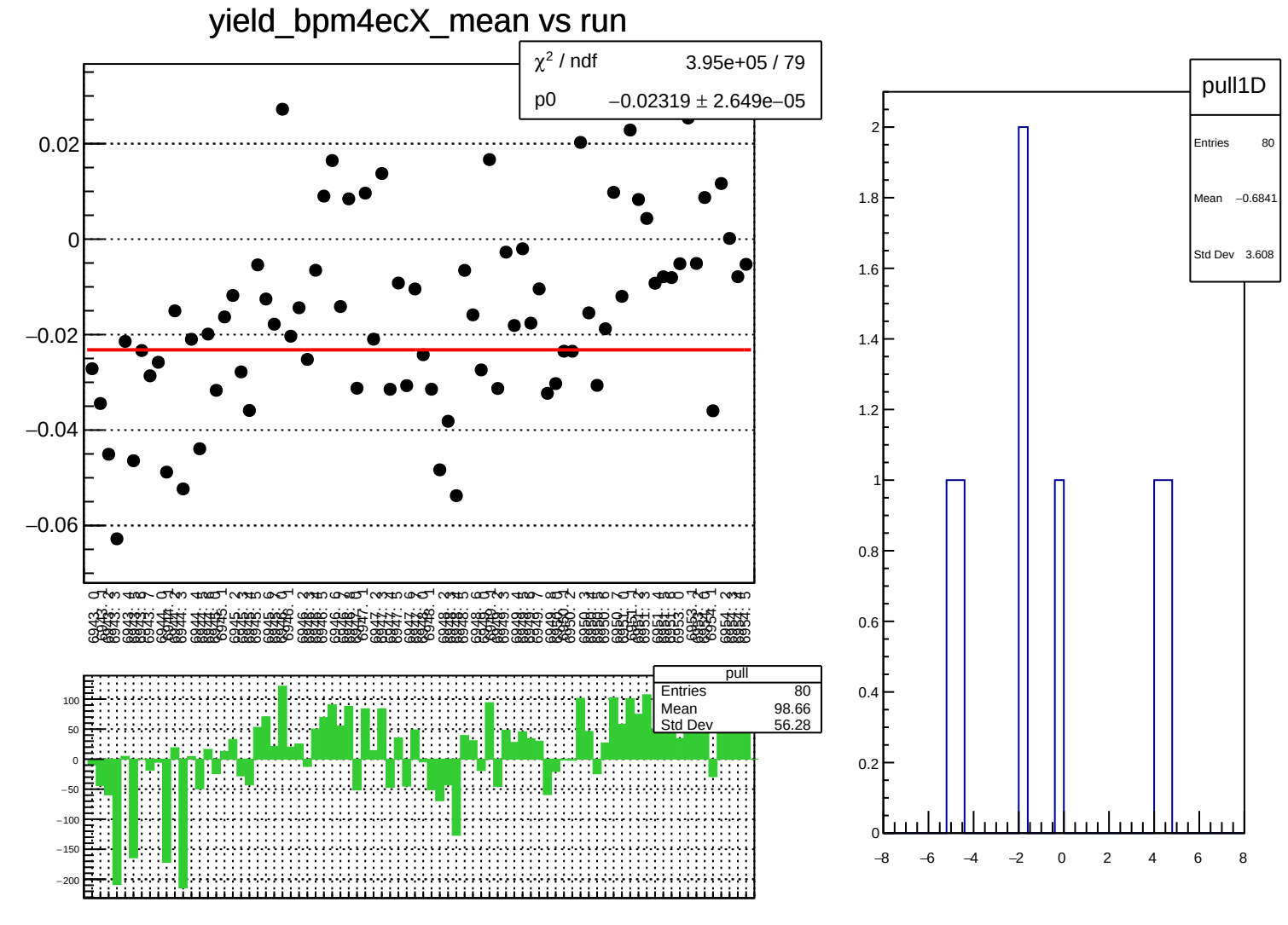

pull1D
Entries 80
Mean 0.8373
Std Dev 3.329
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

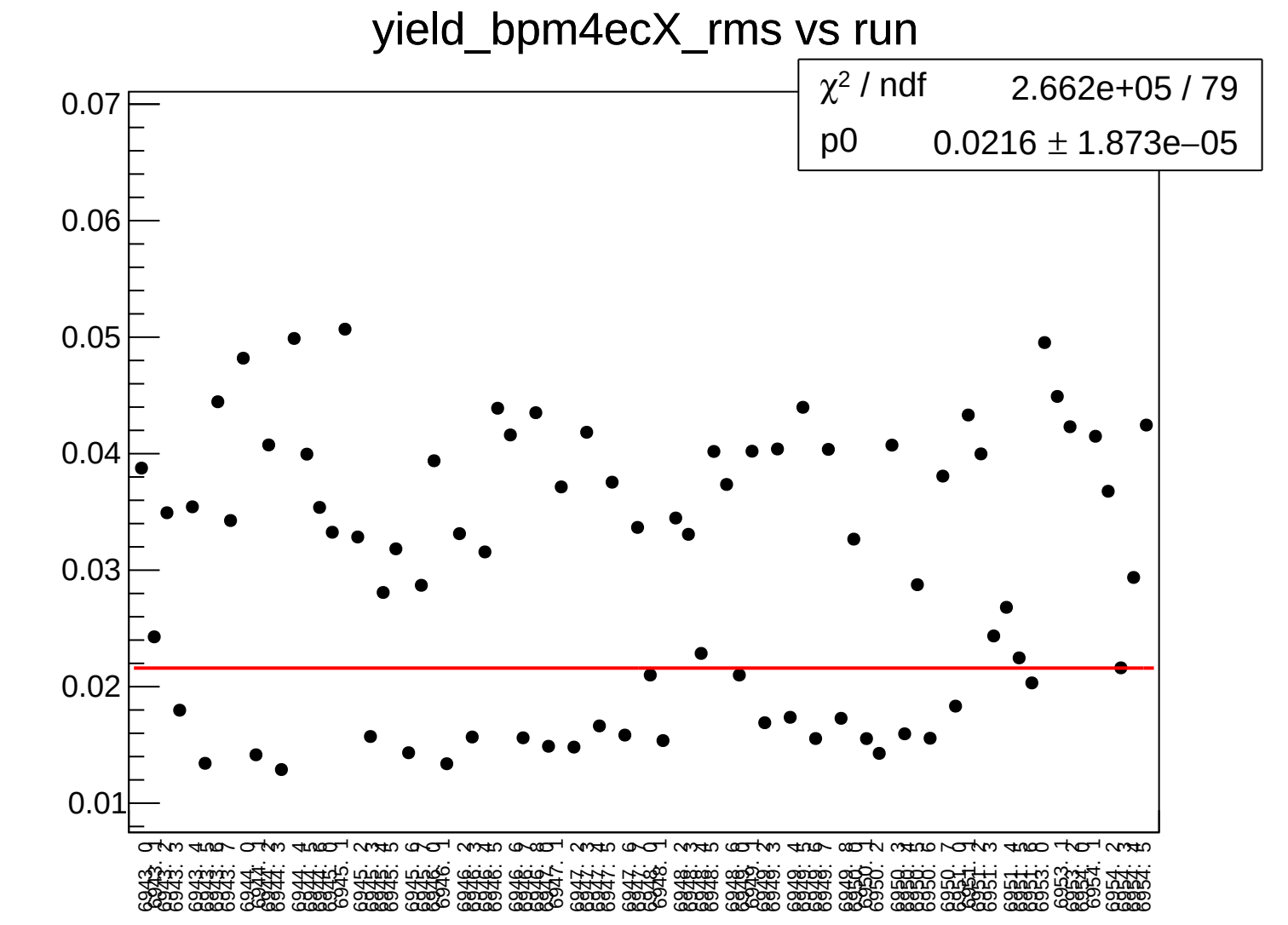

yield_bpm4acX_rms vs run
χ² / ndf 2.691e+05 / 79
p0 0.02147 ± 1.864e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

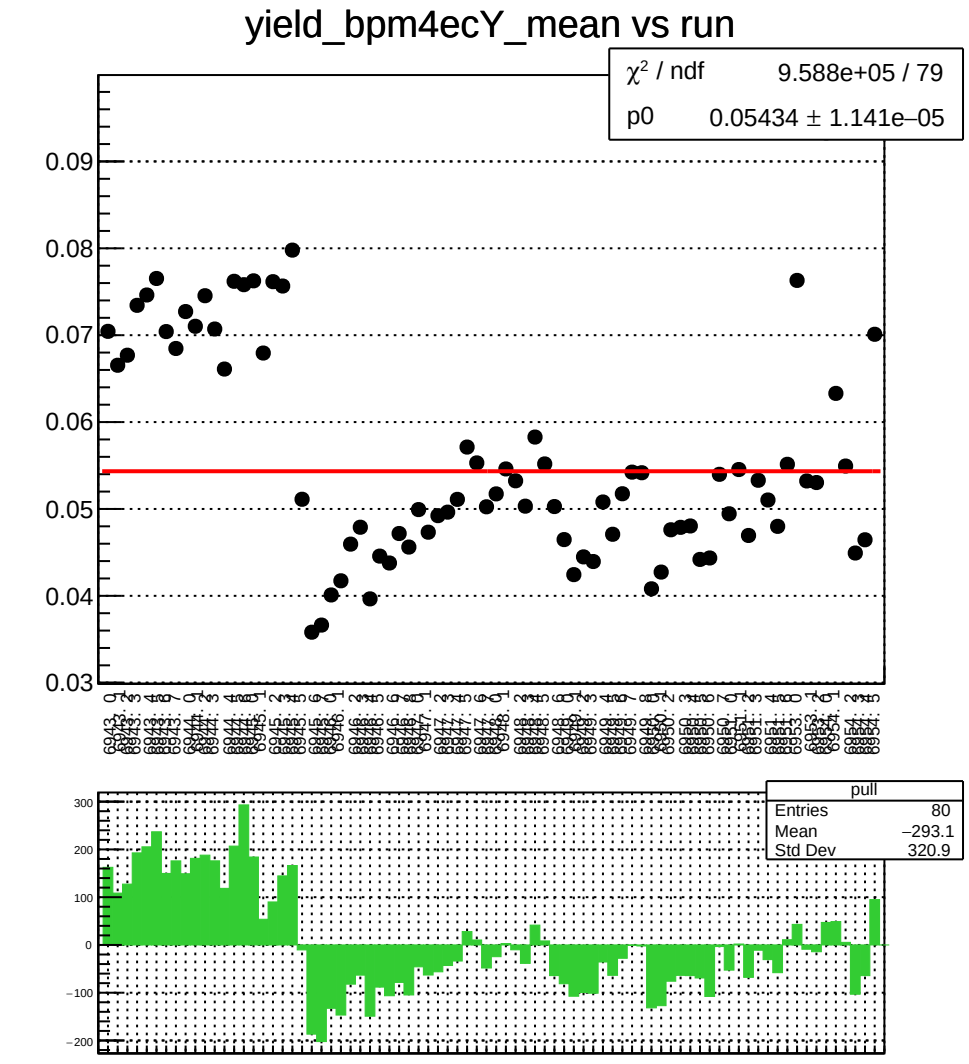

yield_bpm4acY_mean vs run
χ² / ndf 9.616e+04 / 79
p0 0.7526 ± 1.335e−05
0.8
0.79
0.78
0.77
0.76
0.75
pull
Entries 80
Mean 14.49
Std Dev 59.1
100
50
0
−50
−100

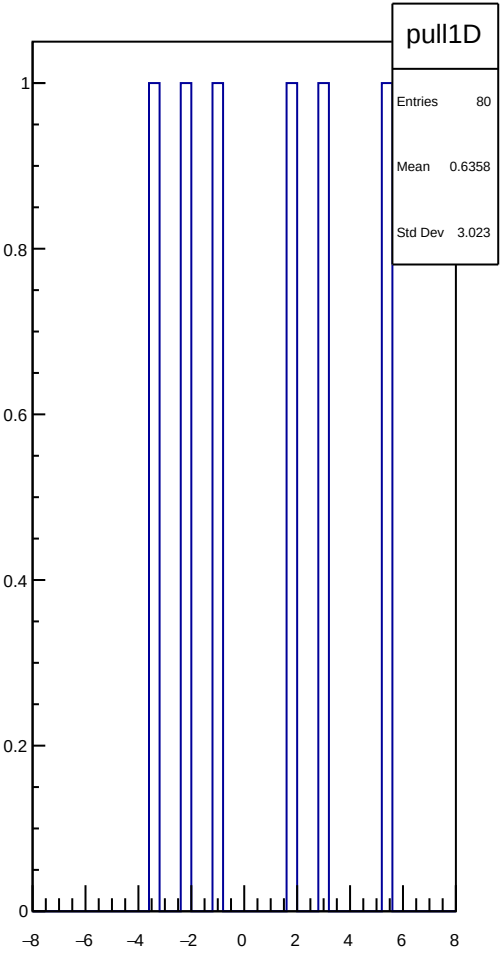

pull1D
Entries 80
Mean 0.9232
Std Dev 4.764
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

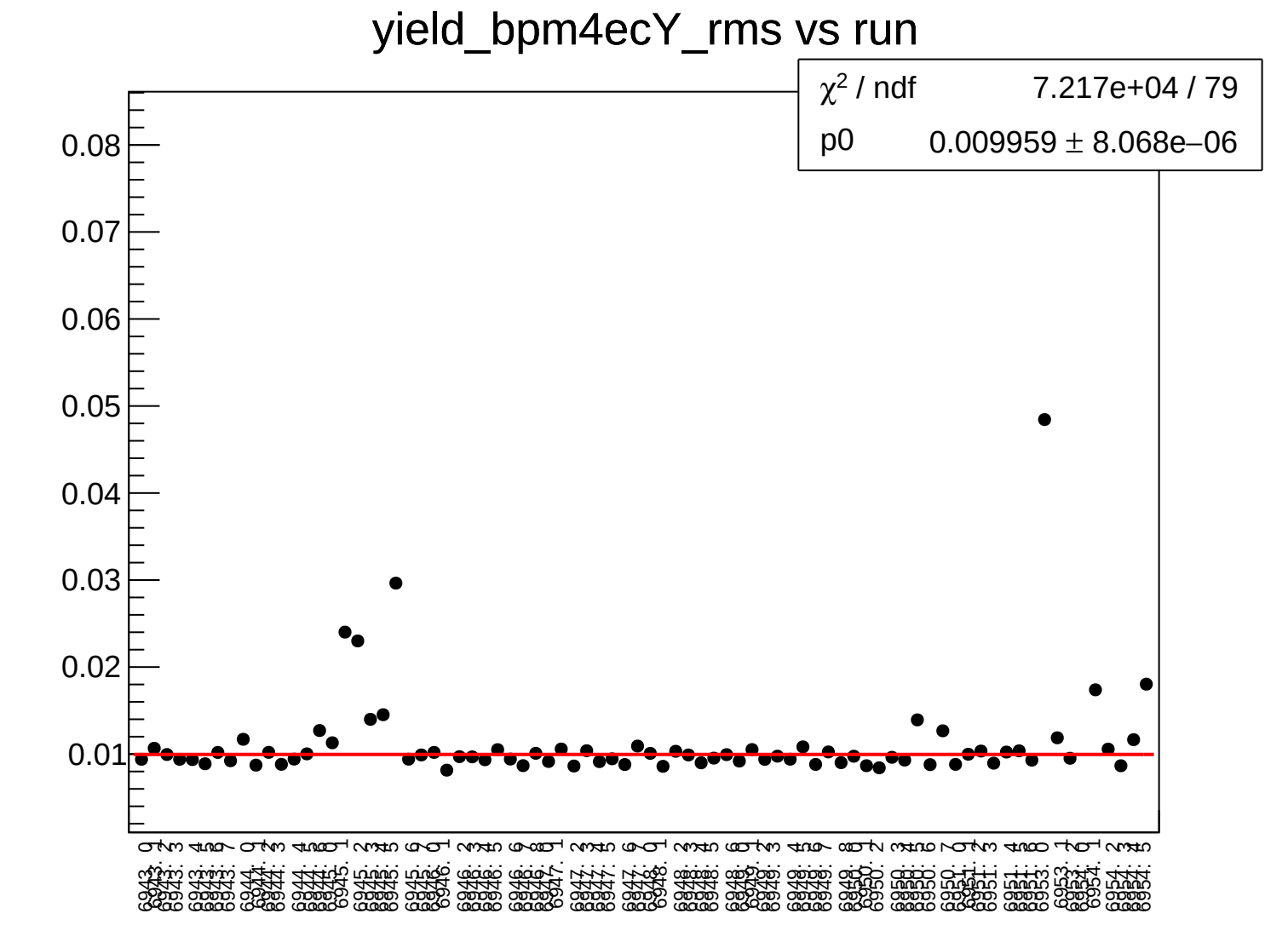

yield_bpm4acY_rms vs run
χ² / ndf 4.292e+04 / 79
p0 0.01176 ± 9.44e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

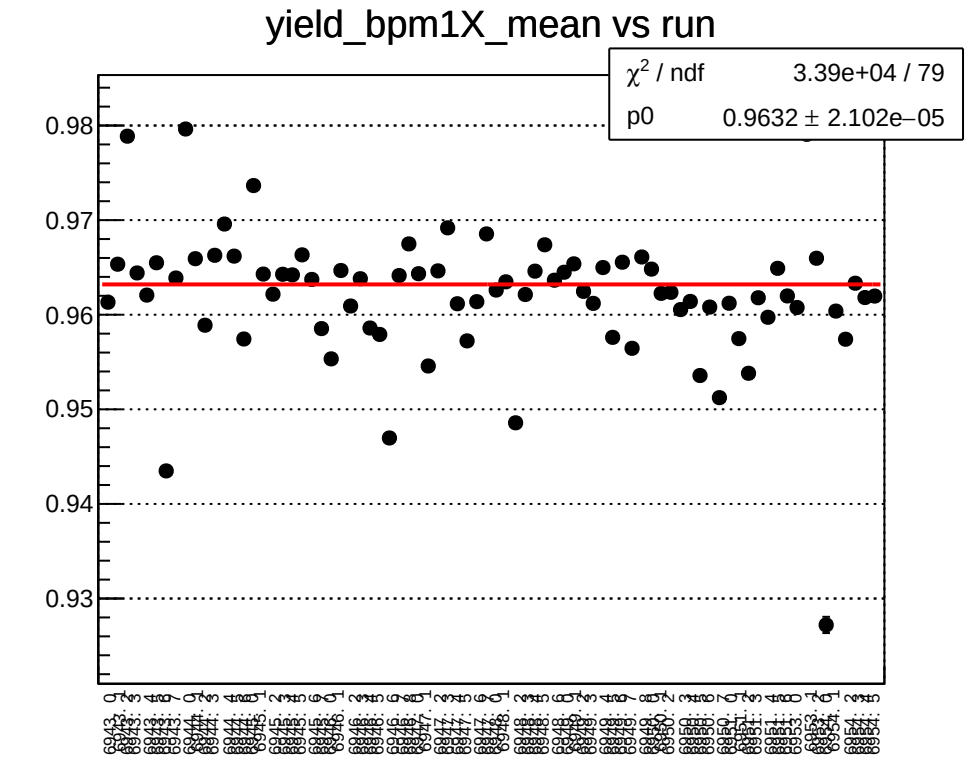

yield_bpm4ecX_mean vs run
χ² / ndf 3.95e+05 / 79
p0 −0.02319 ± 2.649e−05
0.02
0
−0.02
−0.04
−0.06
pull
Entries 80
Mean 98.66
Std Dev 56.28
100
50
0
−50
−100
−150
−200
pull1D
Entries 80
Mean −0.6841
Std Dev 3.608
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

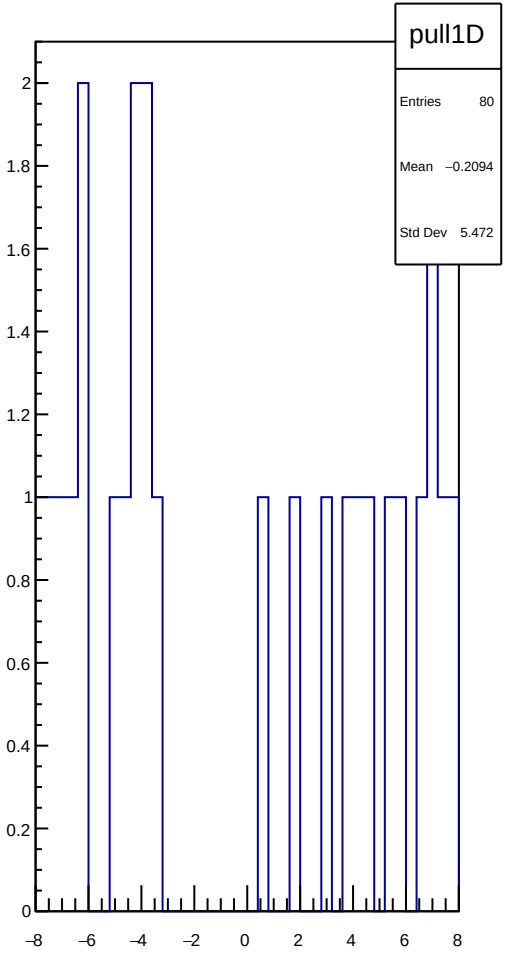

yield_bpm4ecX_rms vs run
χ² / ndf 2.662e+05 / 79
p0 0.0216 ± 1.873e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

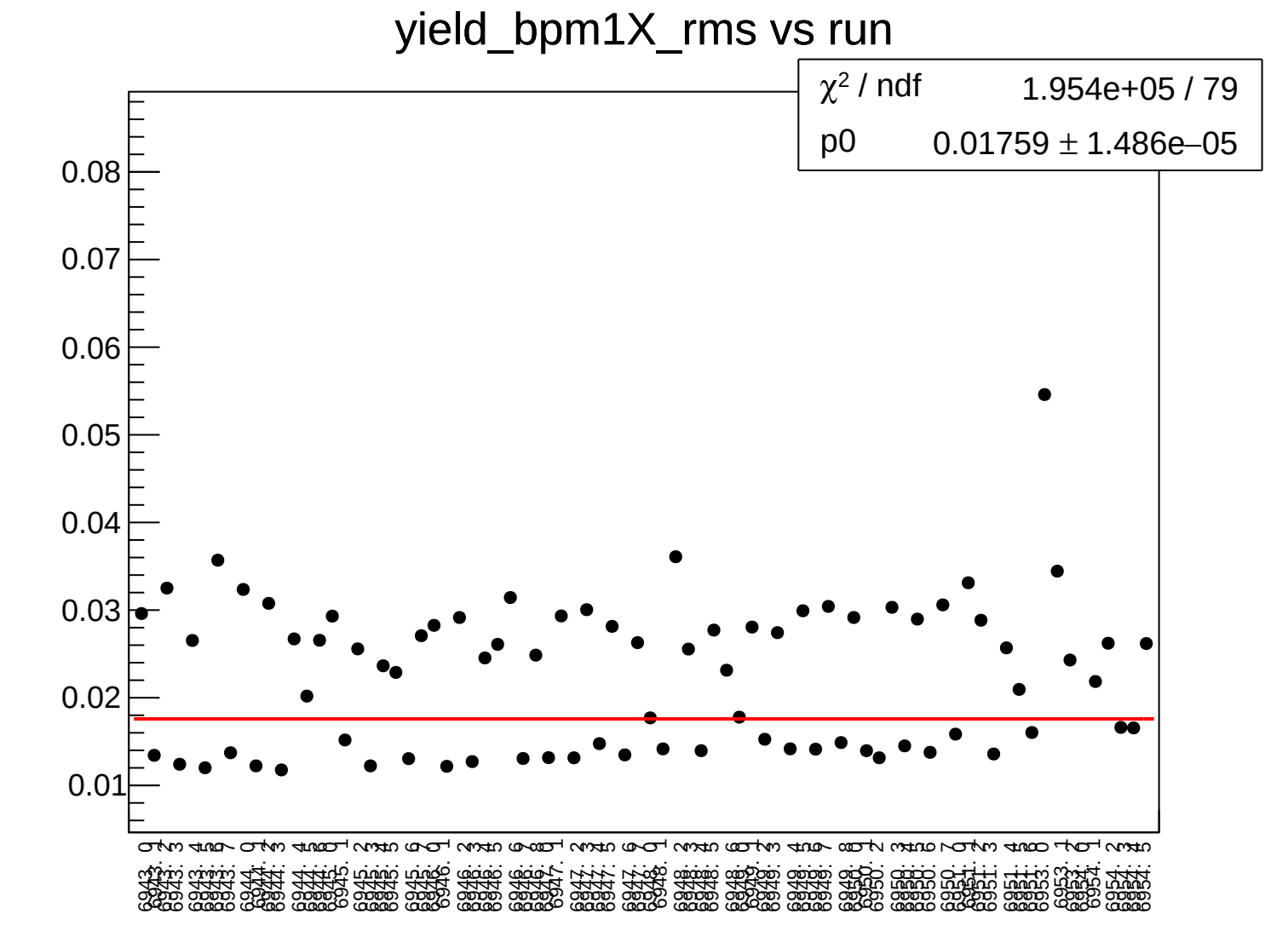

yield_bpm4ecY_mean vs run
χ² / ndf 9.588e+05 / 79
p0 0.05434 ± 1.141e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
pull
Entries 80
Mean −293.1
Std Dev 320.9
300
200
100
0
−100
−200

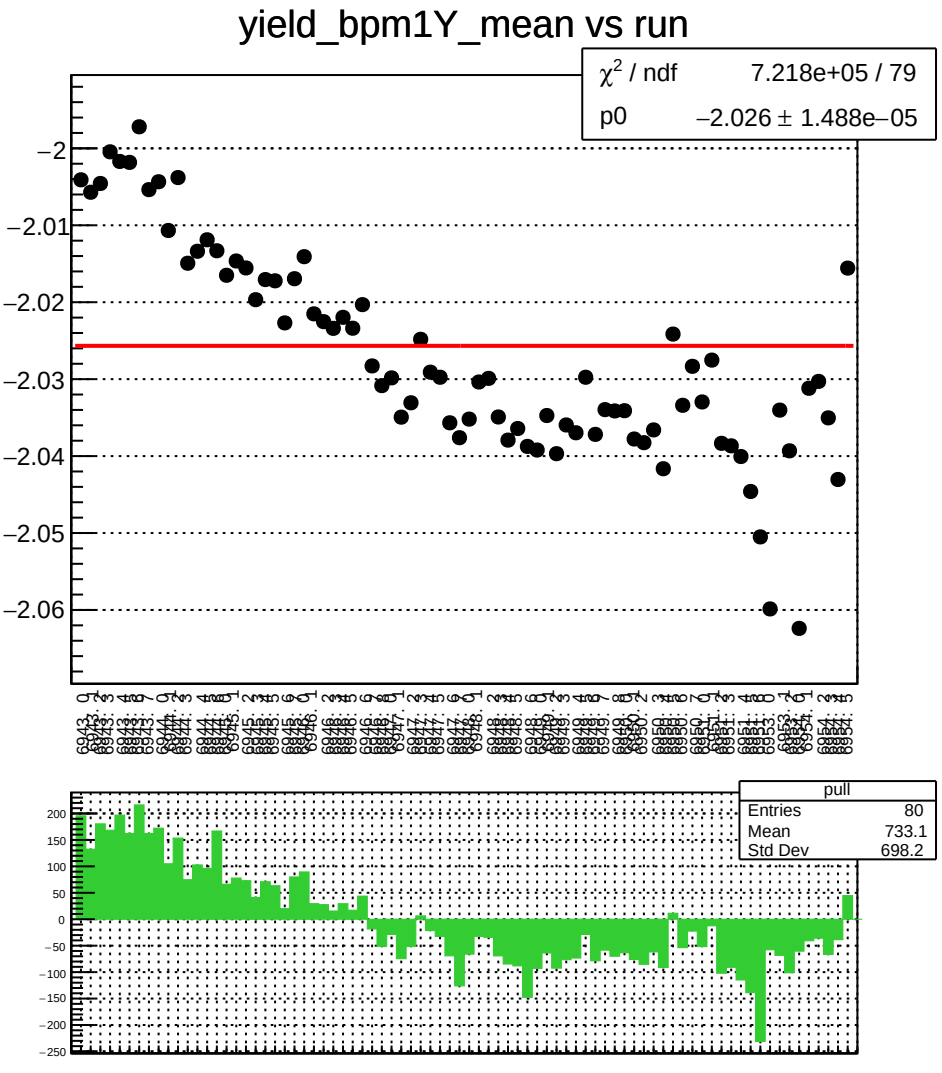

pull1D
Entries 80
Mean 0.6358
Std Dev 3.023
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

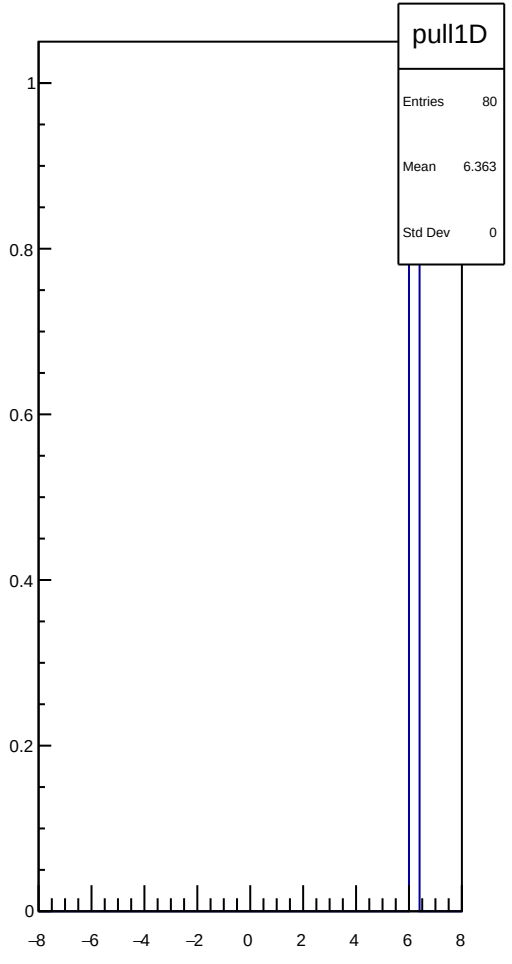

yield_bpm4ecY_rms vs run
χ^2 / ndf 7.217e+04 / 79
p0 0.009959 ± 8.068e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

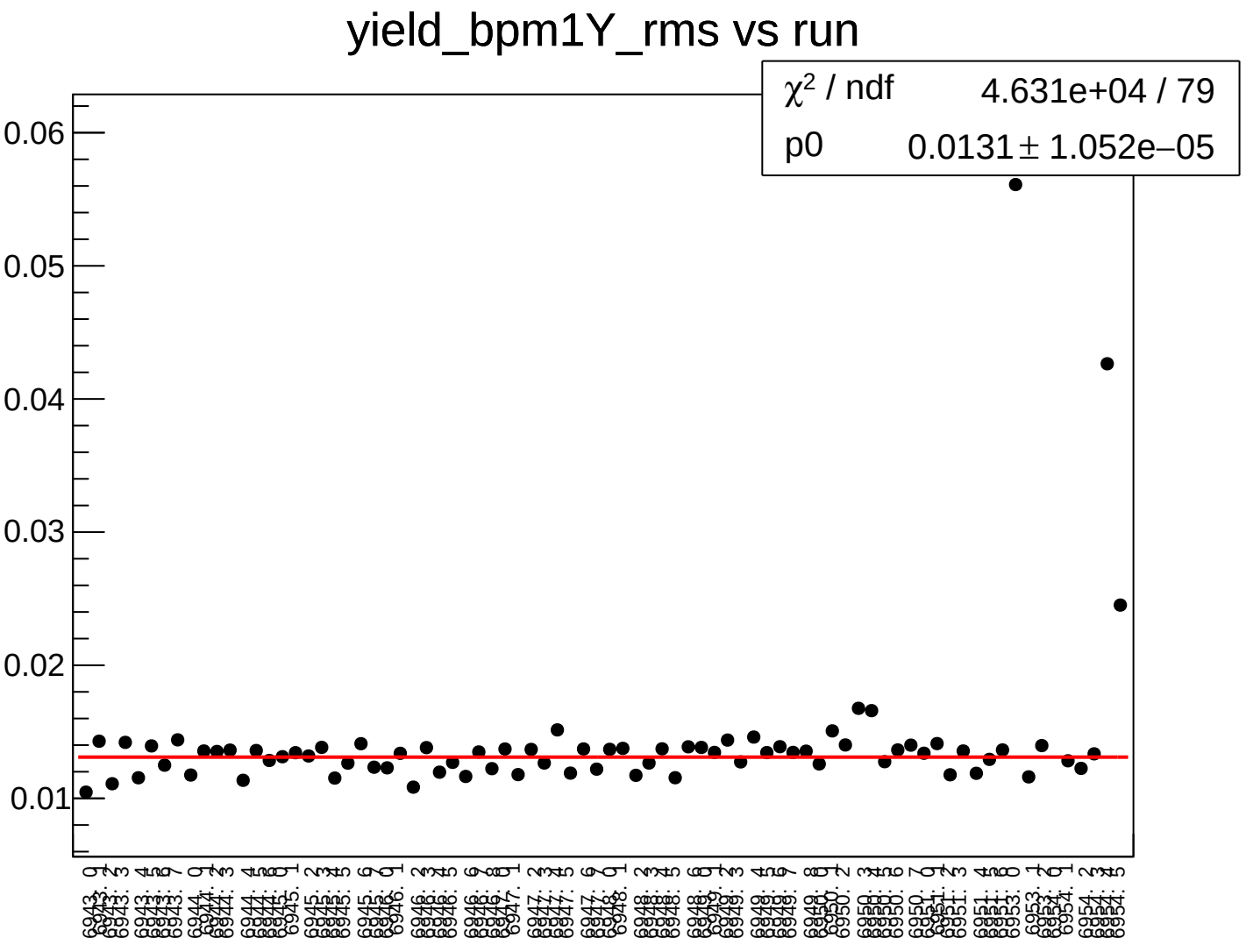

yield_bpm1X_mean vs run
χ² / ndf 3.39e+04 / 79
p0 0.9632 ± 2.102e−05
0.98
0.97
0.96
0.95
0.94
0.93
pull
Entries 80
Mean 97.46
Std Dev 56.07
40
20
0
−20
−40

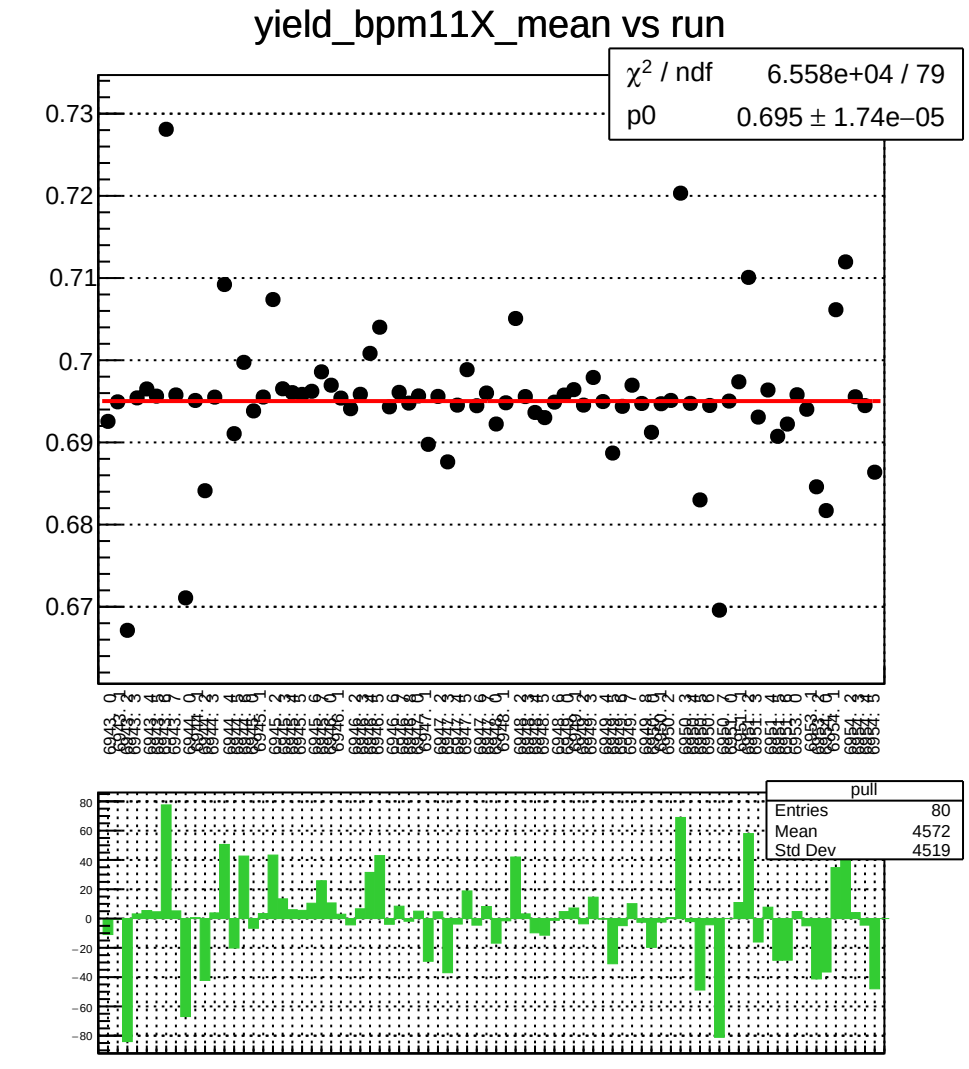

pull1D
Entries 80
Mean −0.2094
Std Dev 5.472
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

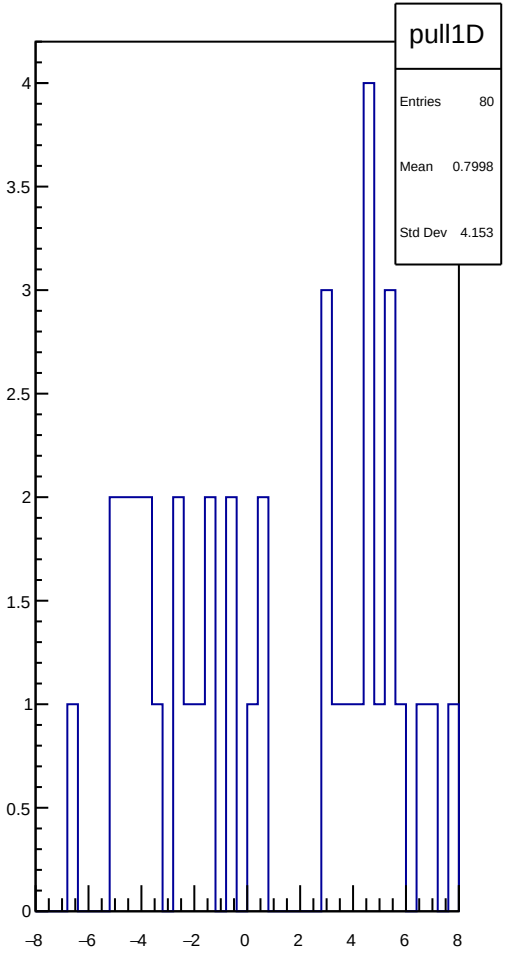

yield_bpm1X_rms vs run
χ² / ndf 1.954e+05 / 79
p0 0.01759 ± 1.486e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

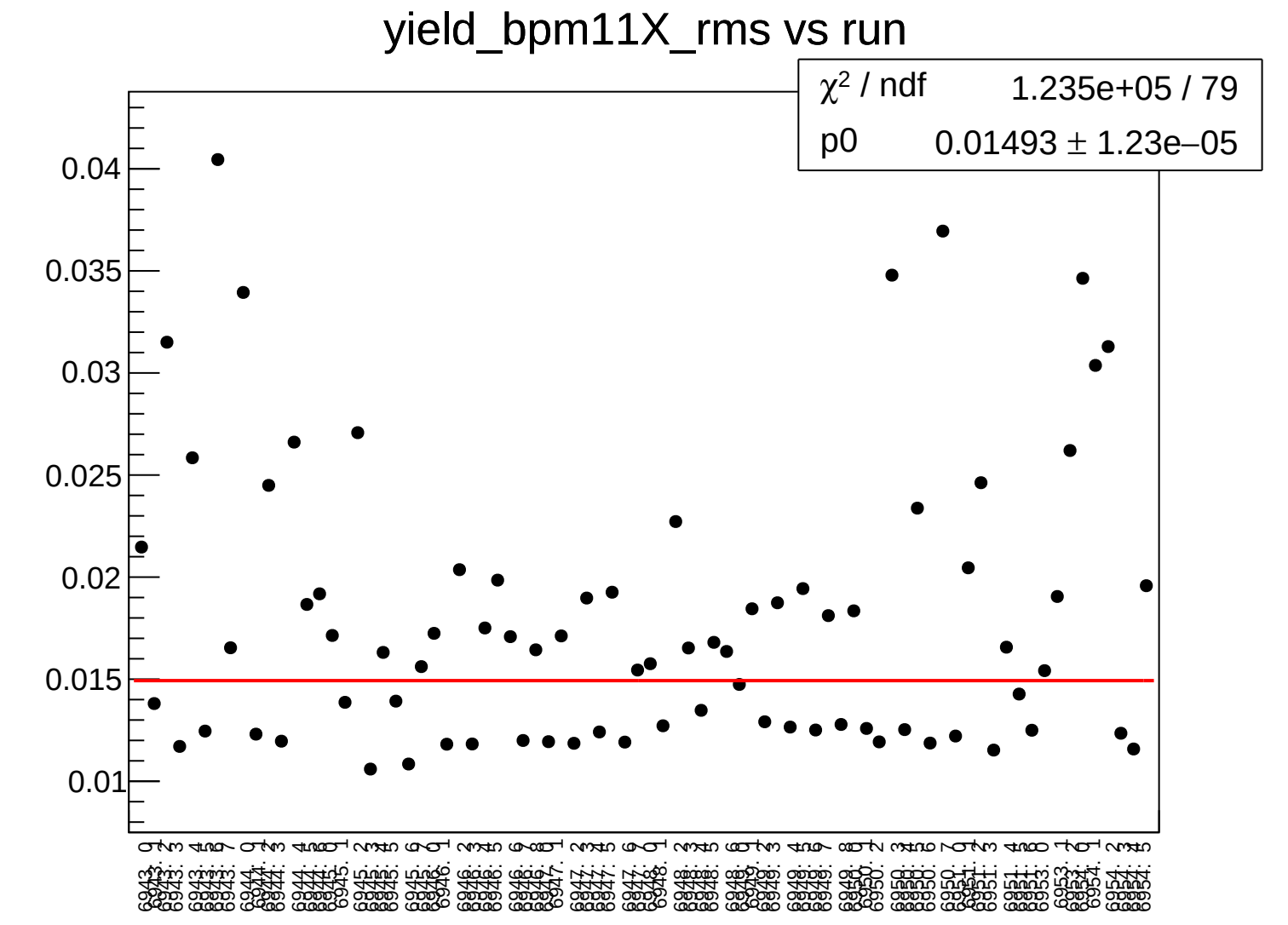

yield_bpm1Y_mean vs run
χ² / ndf 7.218e+05 / 79
p0 −2.026 ± 1.488e−05
pull
Entries 80
Mean 733.1
Std Dev 698.2

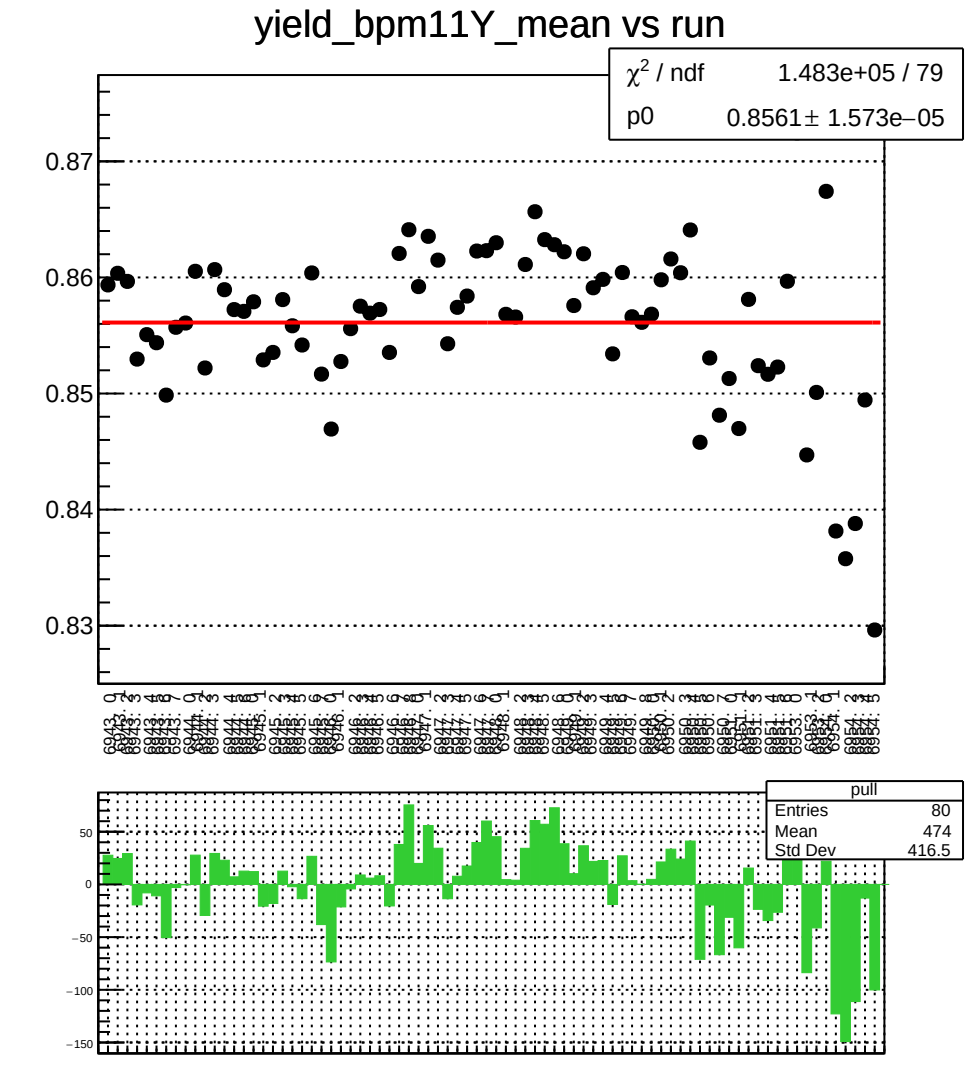

pull1D
Entries 80
Mean 6.363
Std Dev 0

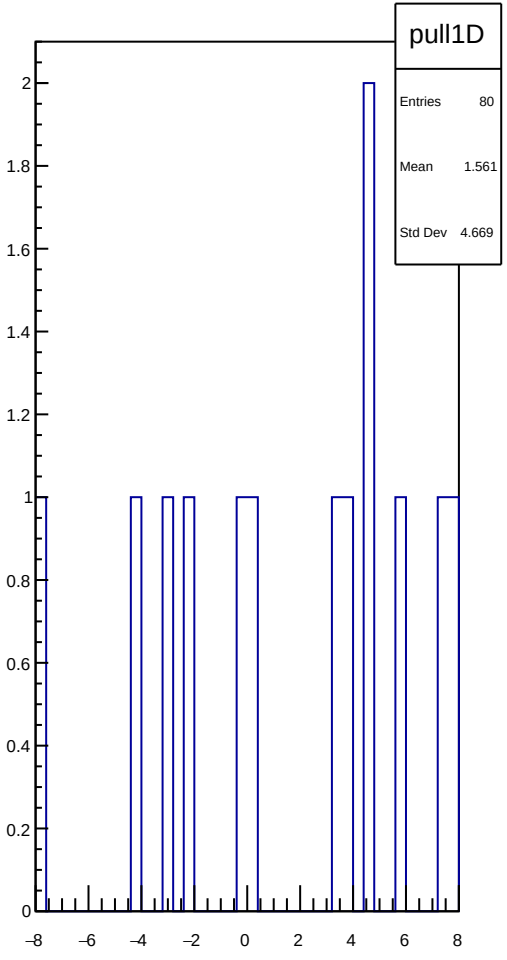

yield_bpm1Y_rms vs run
χ² / ndf 4.631e+04 / 79
p0 0.0131 ± 1.052e−05
0.06
0.05
0.04
0.03
0.02
0.01

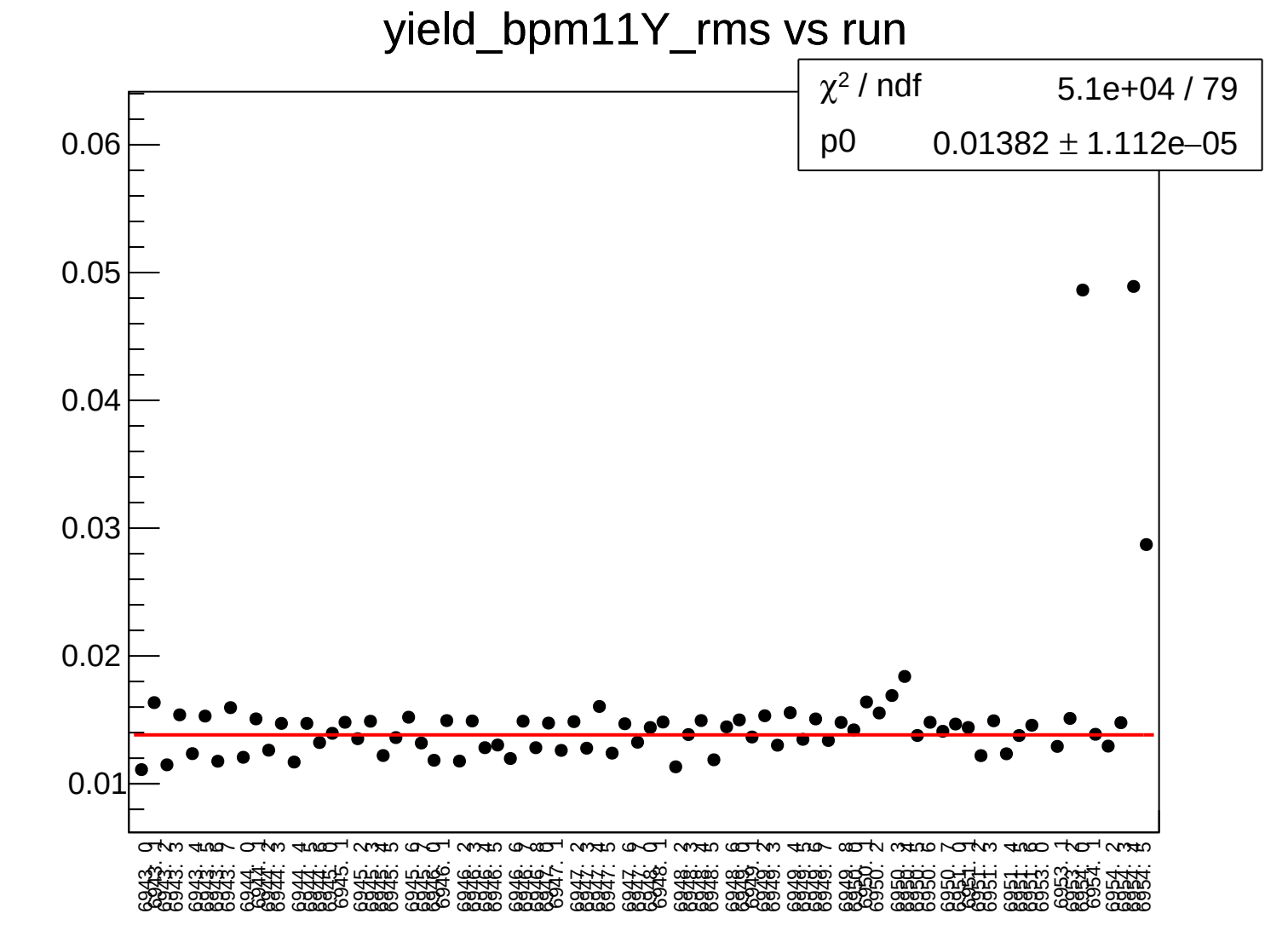

yield_bpm11X_mean vs run
χ² / ndf 6.558e+04 / 79
p0 0.695 ± 1.74e−05
0.73
0.72
0.71
0.7
0.69
0.68
0.67
pull
Entries 80
Mean 4572
Std Dev 4519
80
60
40
20
0
−20
−40
−60
−80

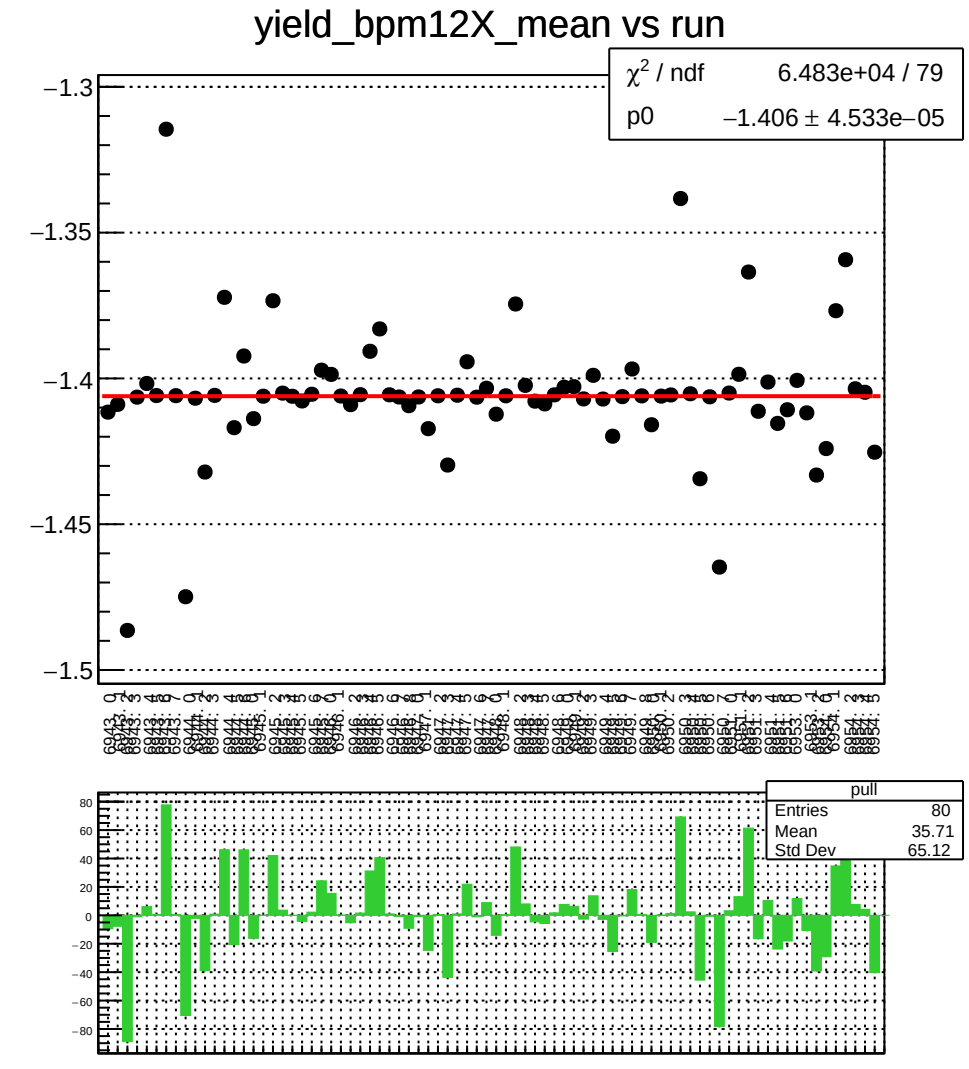

pull1D
Entries 80
Mean 0.7998
Std Dev 4.153
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

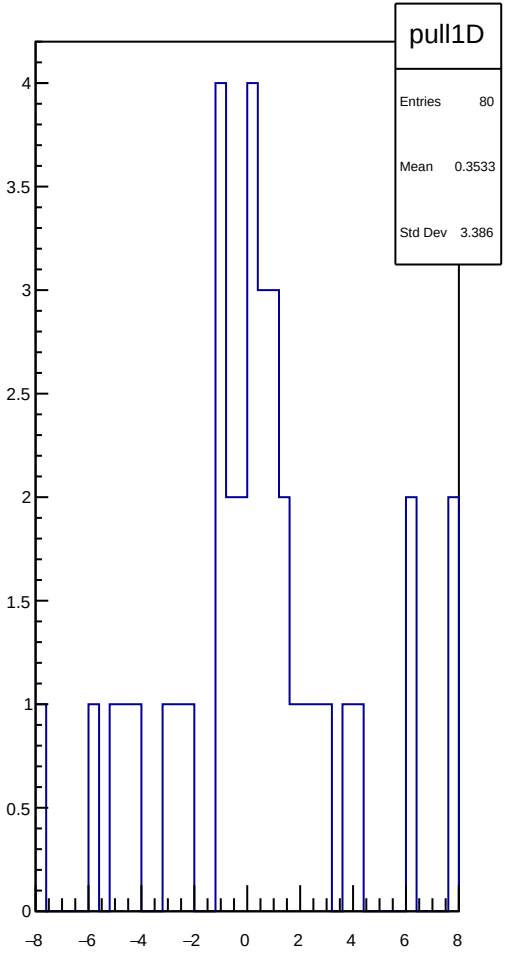

yield_bpm11X_rms vs run
χ² / ndf 1.235e+05 / 79
p0 0.01493 ± 1.23e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

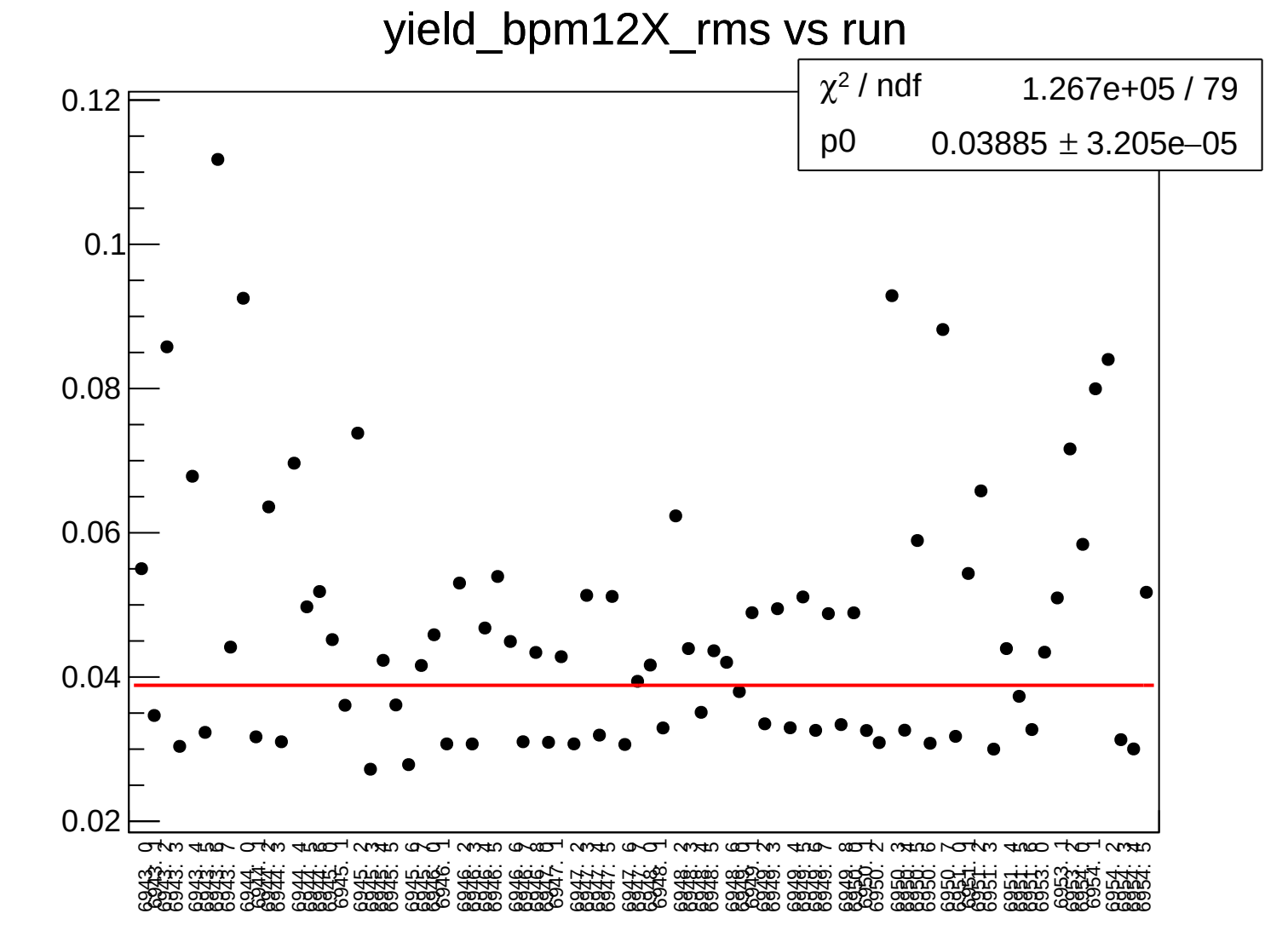

yield_bpm11Y_mean vs run
χ² / ndf 1.483e+05 / 79
p0 0.8561 ± 1.573e−05
0.87
0.86
0.85
0.84
0.83
pull
Entries 80
Mean 474
Std Dev 416.5
50
0
−50
−100
−150

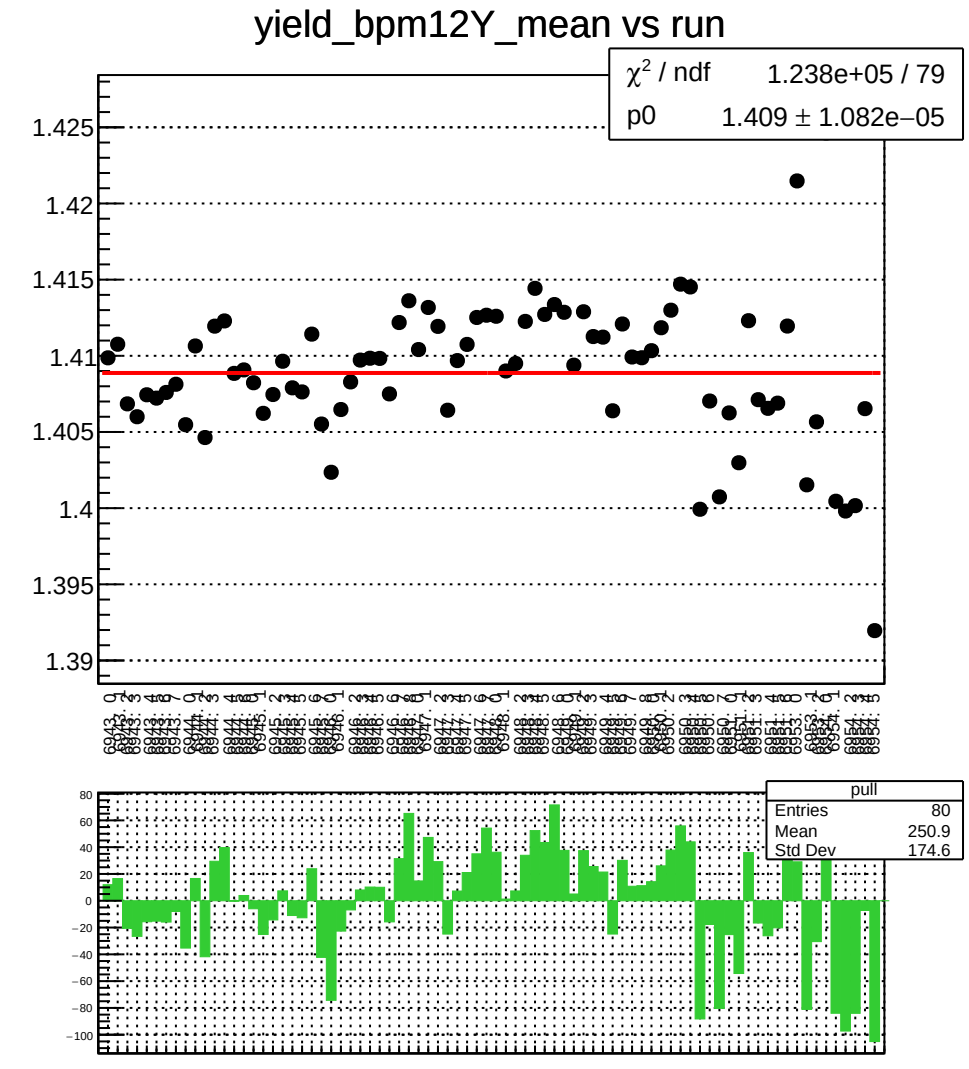

pull1D
Entries 80
Mean 1.561
Std Dev 4.669
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

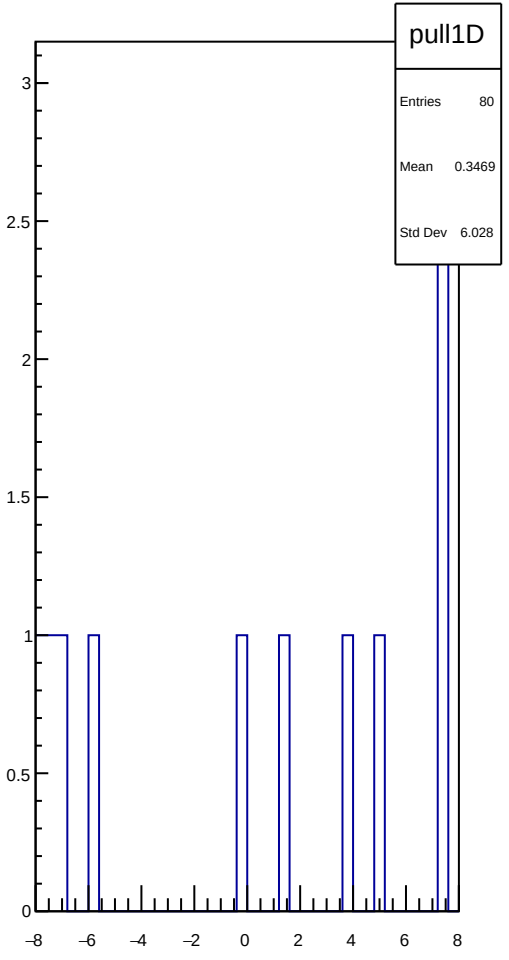

yield_bpm11Y_rms vs run
χ² / ndf 5.1e+04 / 79
p0 0.01382 ± 1.112e−05
0.06
0.05
0.04
0.03
0.02
0.01

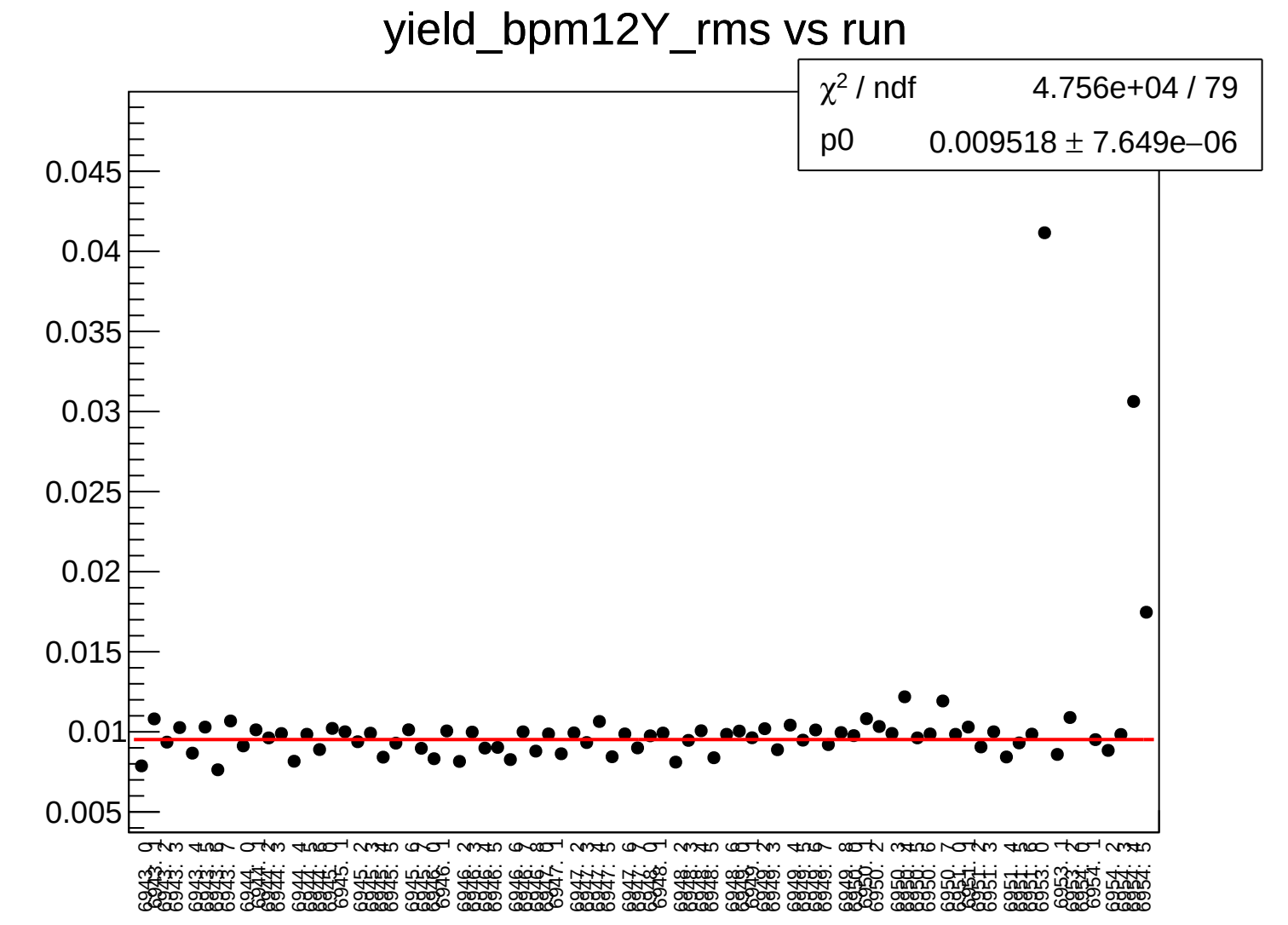

yield_bpm12X_mean vs run
χ² / ndf 6.483e+04 / 79
p0 −1.406 ± 4.533e−05
−1.3
−1.35
−1.4
−1.45
−1.5
pull
Entries 80
Mean 35.71
Std Dev 65.12
80
60
40
20
0
−20
−40
−60
−80

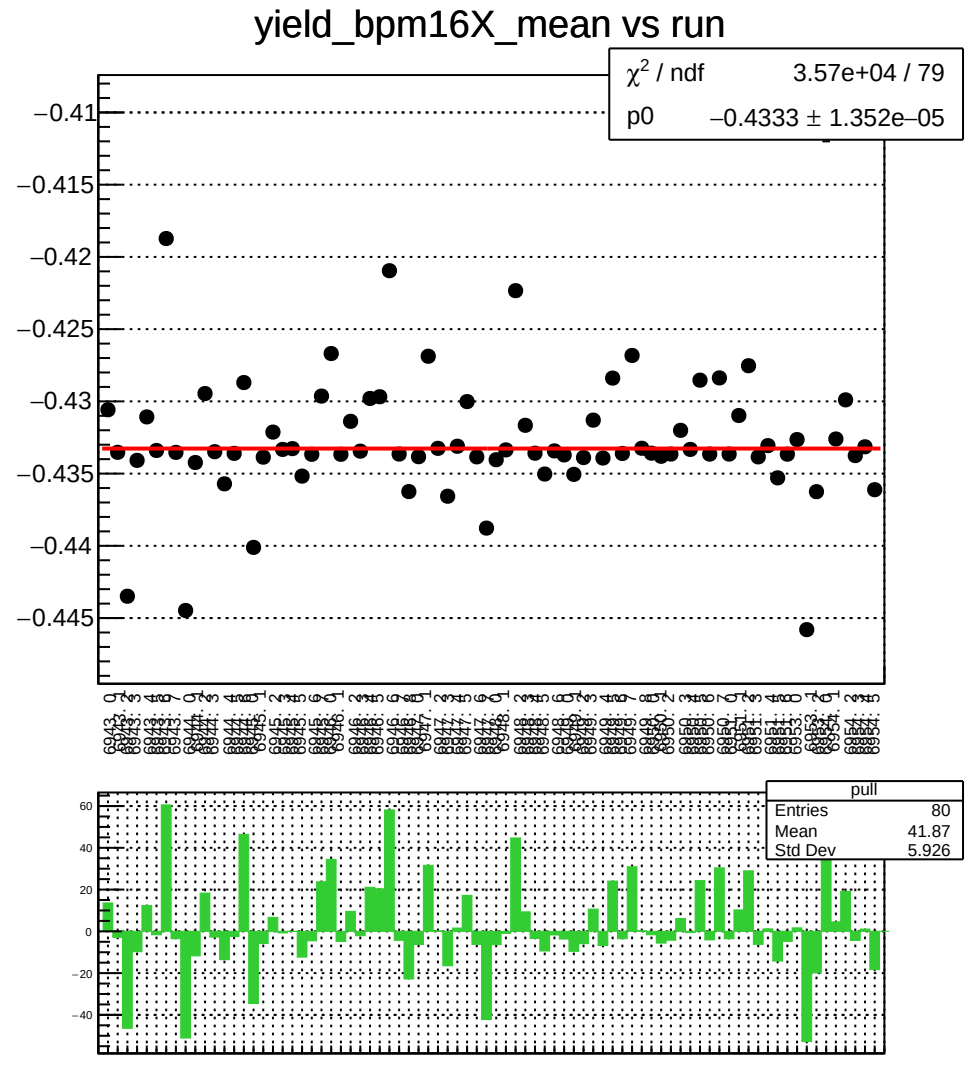

pull1D
Entries 80
Mean 0.3533
Std Dev 3.386
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

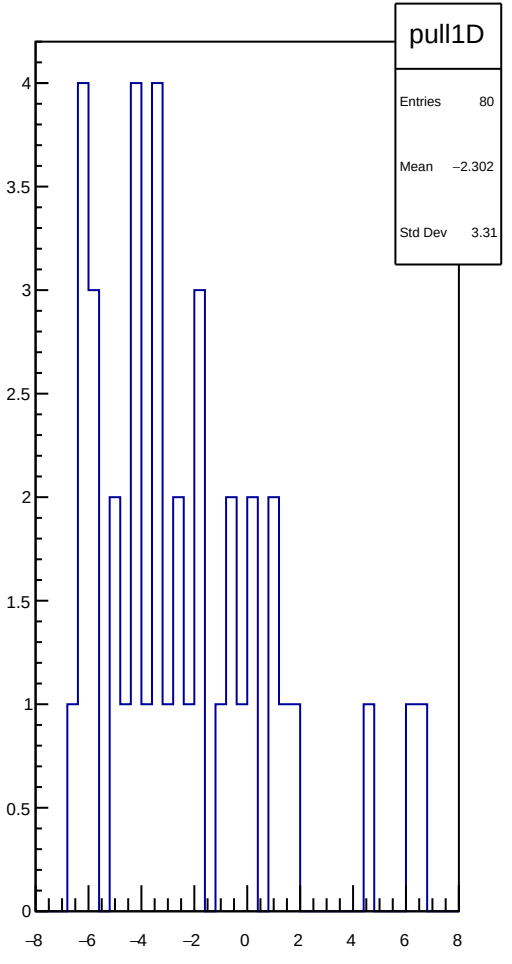

yield_bpm12X_rms vs run
χ² / ndf 1.267e+05 / 79
p0 0.03885 ± 3.205e–05
0.12
0.1
0.08
0.06
0.04
0.02

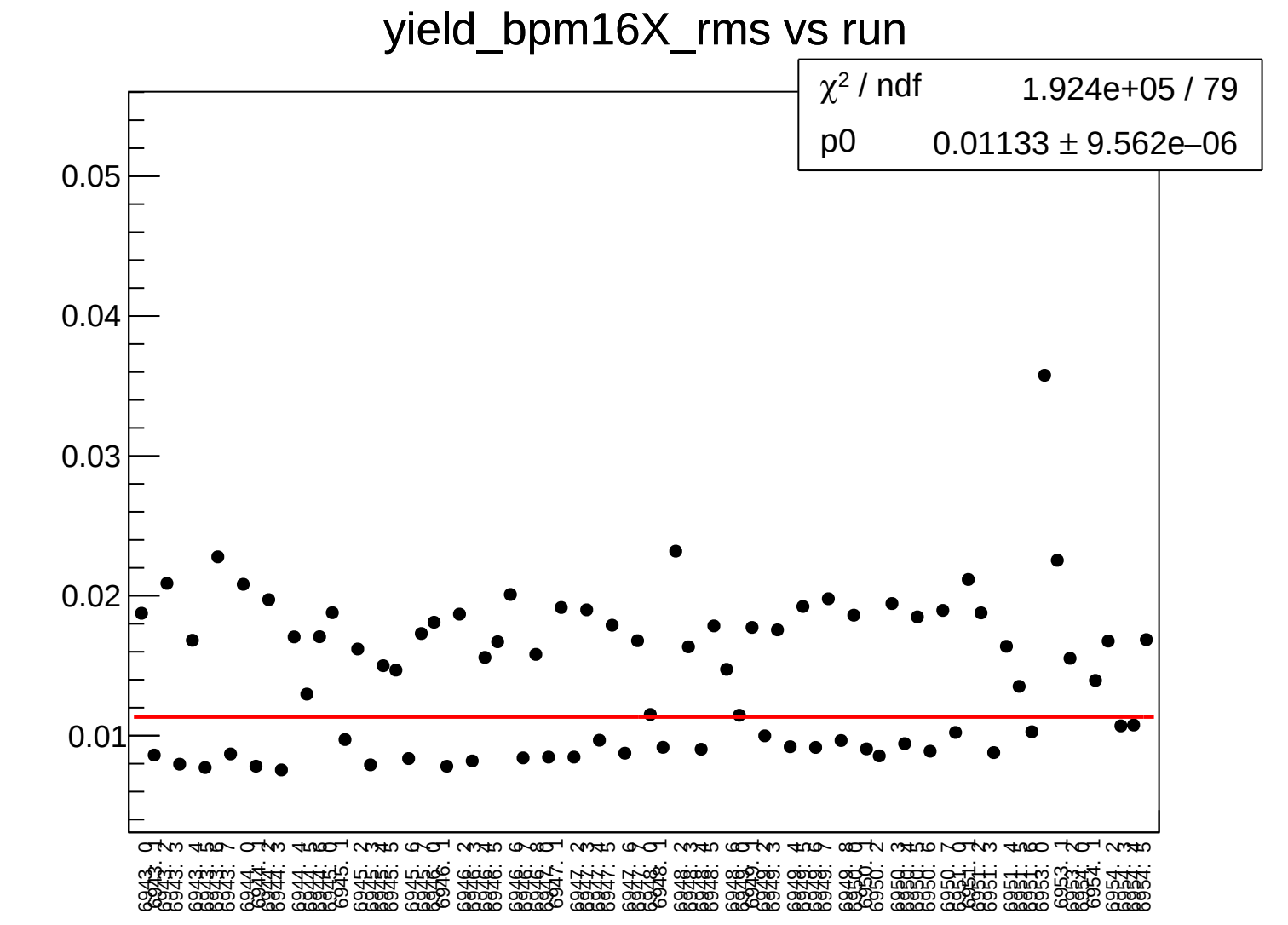

yield_bpm12Y_mean vs run
χ² / ndf 1.238e+05 / 79
p0 1.409 ± 1.082e−05
1.425
1.42
1.415
1.41
1.405
1.4
1.395
1.39
pull
Entries 80
Mean 250.9
Std Dev 174.6
80
60
40
20
0
−20
−40
−60
−80
−100

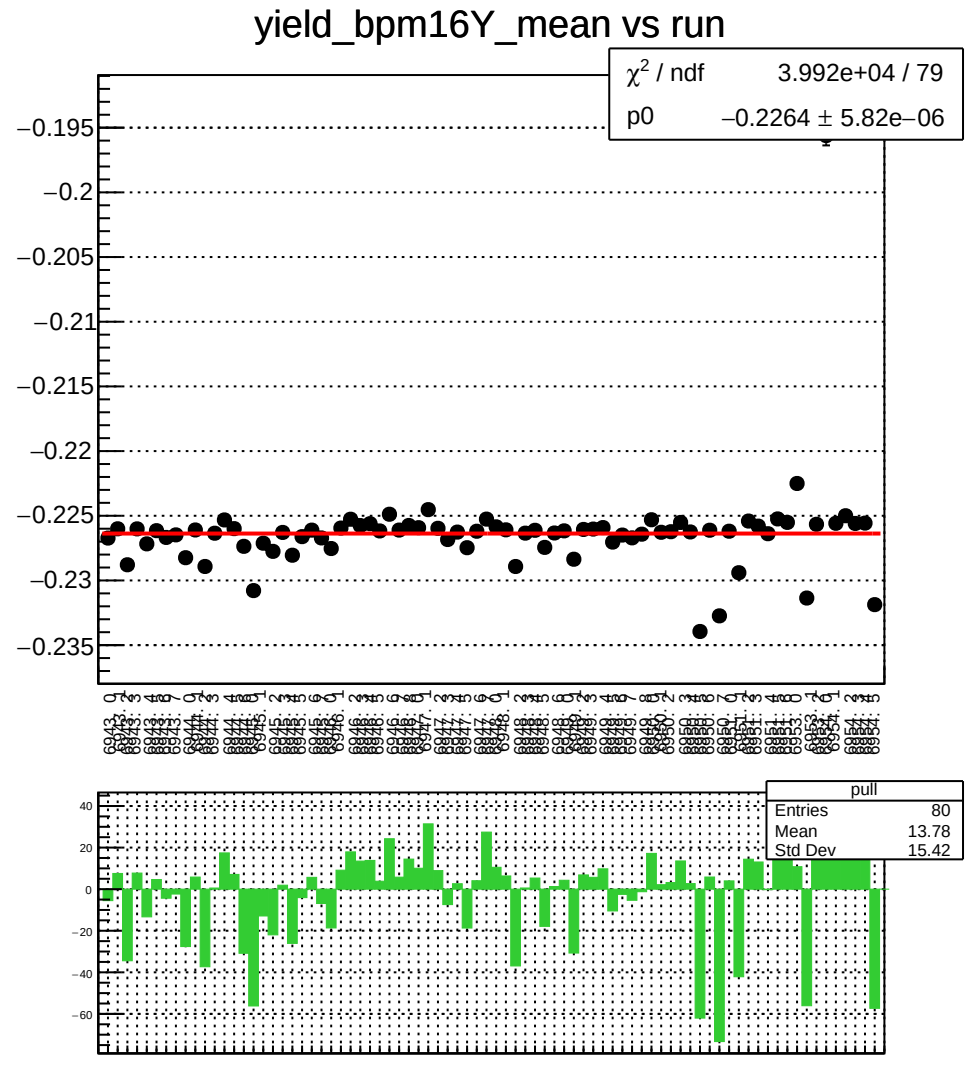

pull1D
Entries 80
Mean 0.3469
Std Dev 6.028
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

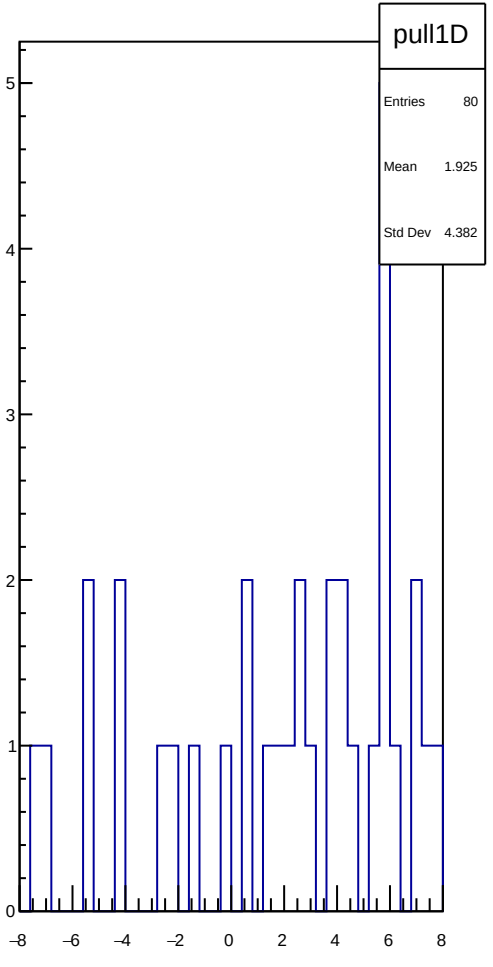

yield_bpm12Y_rms vs run
χ² / ndf 4.756e+04 / 79
p0 0.009518 ± 7.649e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

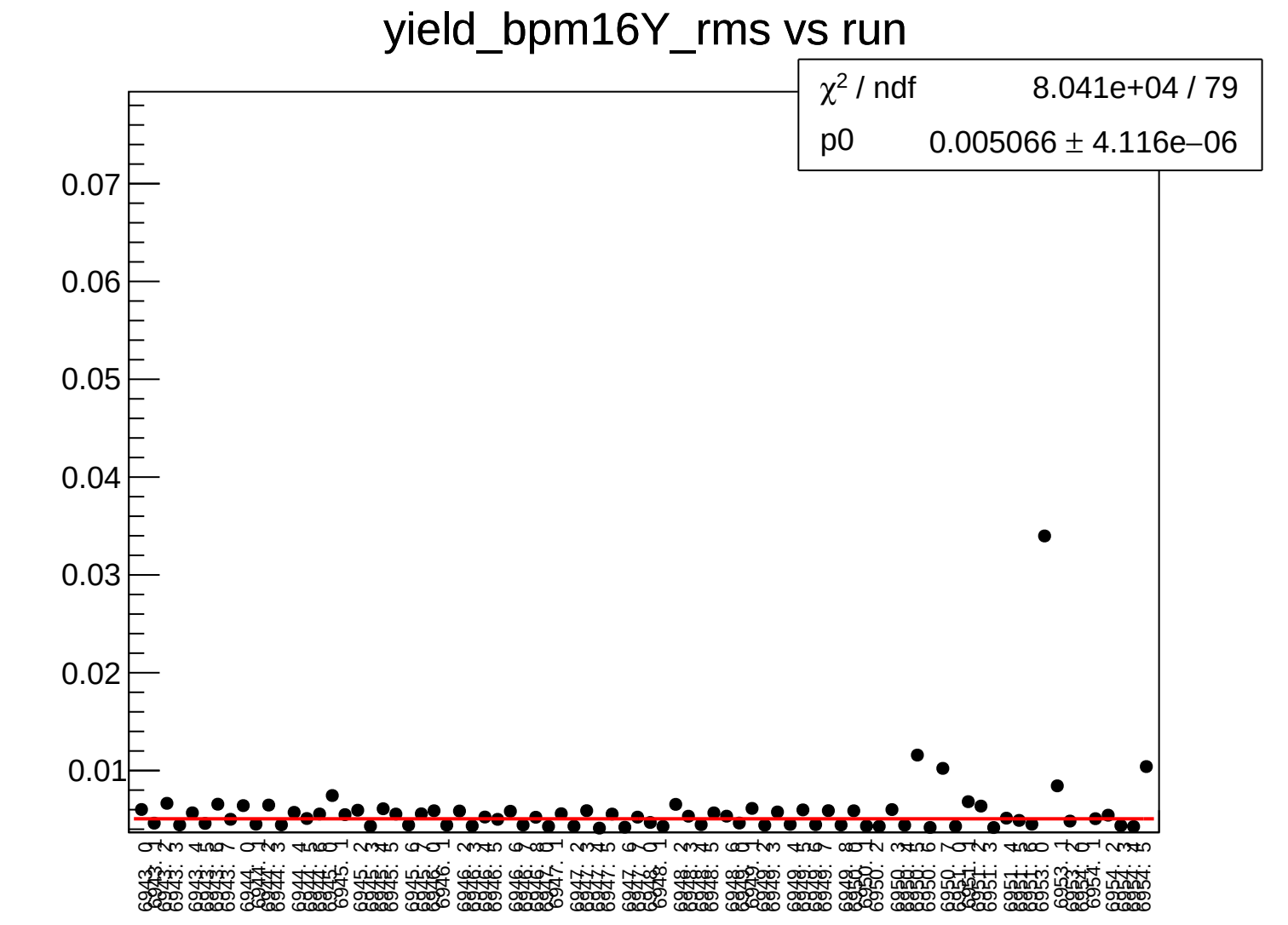

yield_bpm16X_mean vs run
χ² / ndf 3.57e+04 / 79
p0 −0.4333 ± 1.352e−05
−0.41
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
pull
Entries 80
Mean 41.87
Std Dev 5.926
60
40
20
0
−20
−40

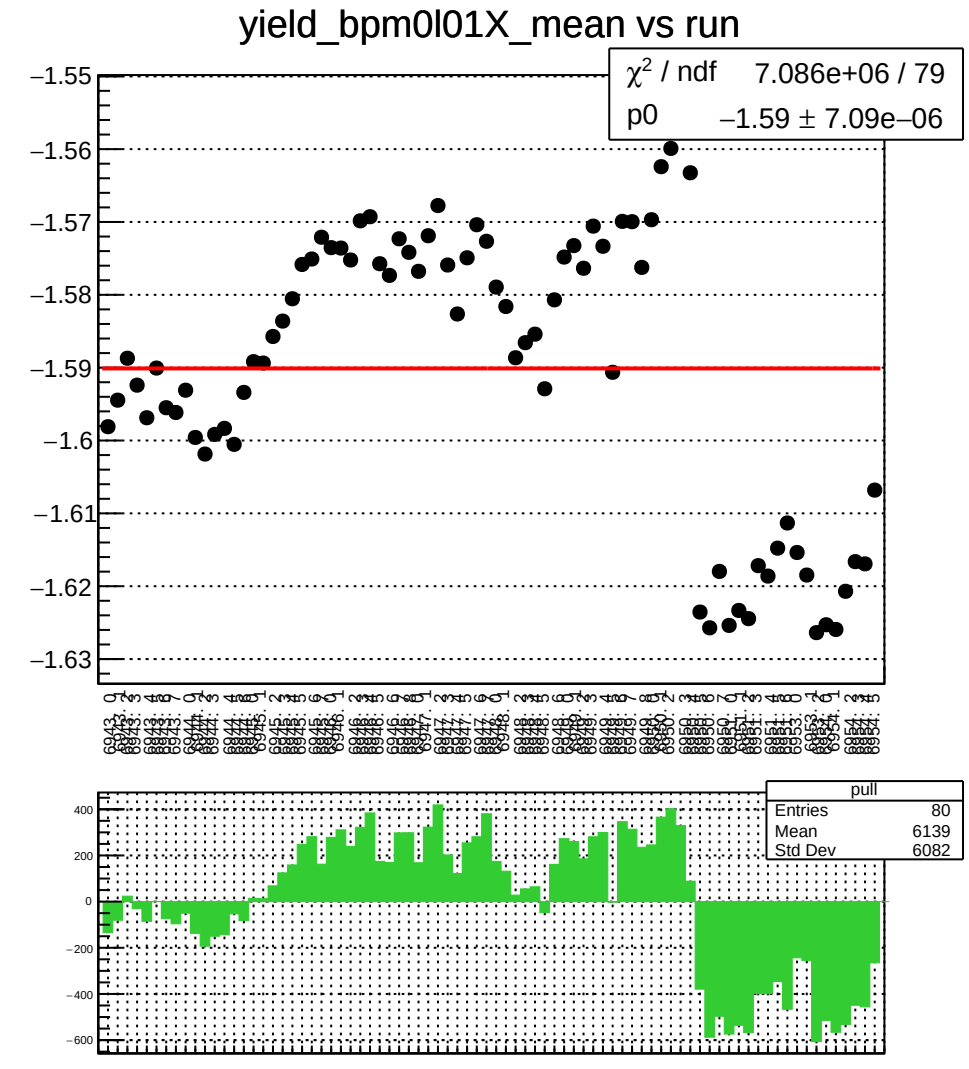

pull1D
Entries 80
Mean −2.302
Std Dev 3.31
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

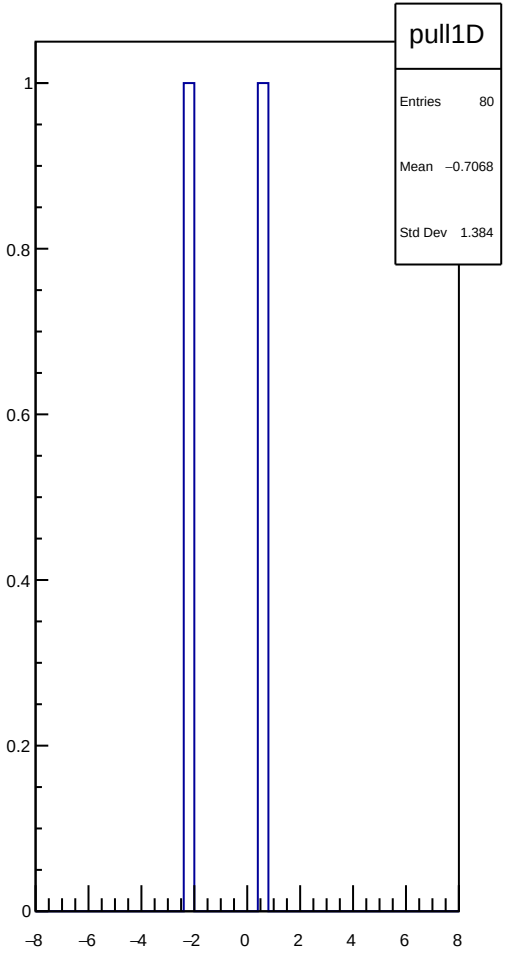

yield_bpm16X_rms vs run
χ² / ndf 1.924e+05 / 79
p0 0.01133 ± 9.562e–06
0.05
0.04
0.03
0.02
0.01

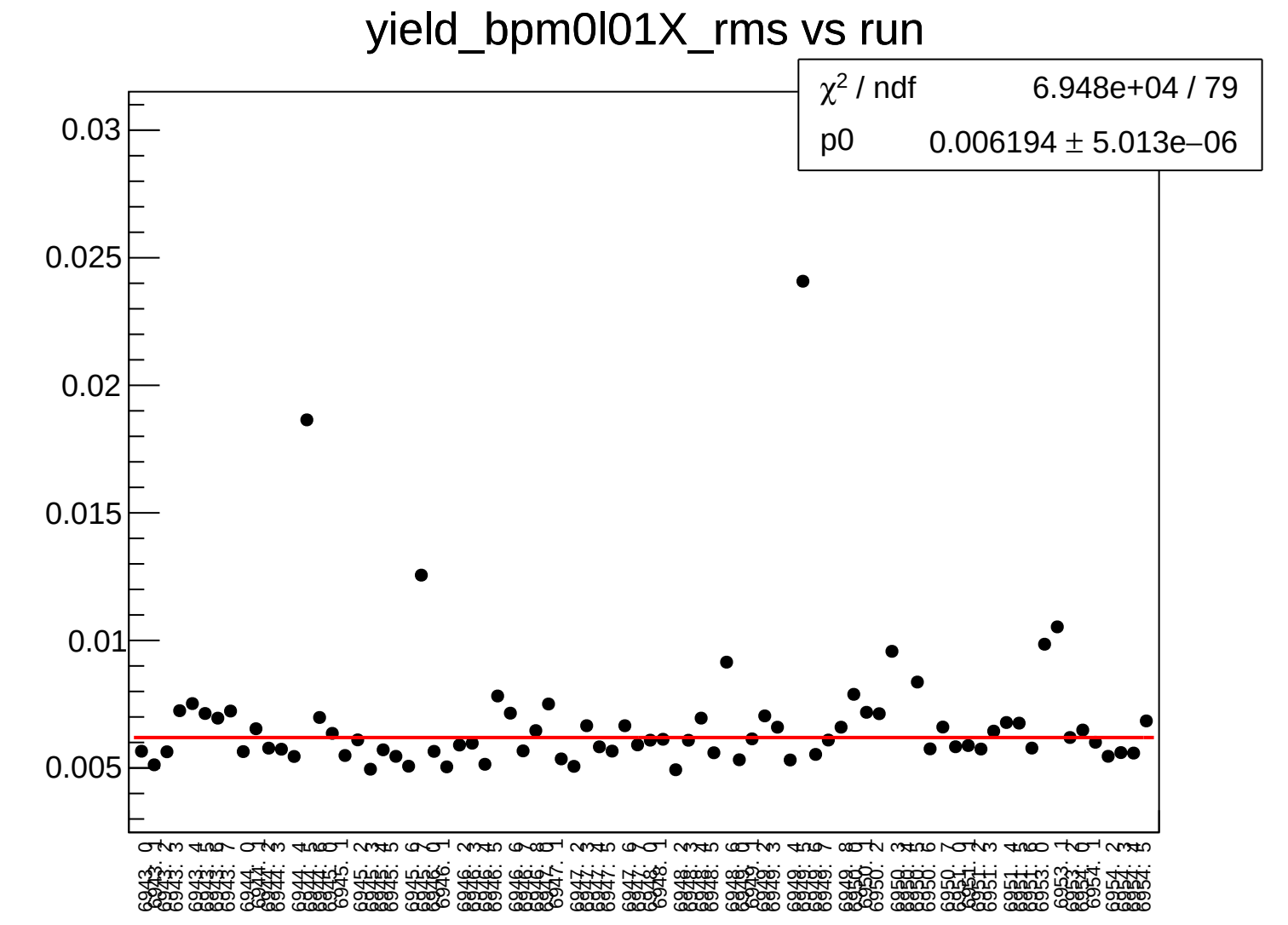

yield_bpm16Y_mean vs run
χ² / ndf 3.992e+04 / 79
p0 −0.2264 ± 5.82e−06
−0.195
−0.2
−0.205
−0.21
−0.215
−0.22
−0.225
−0.23
−0.235
pull
Entries 80
Mean 13.78
Std Dev 15.42
40
20
0
−20
−40
−60

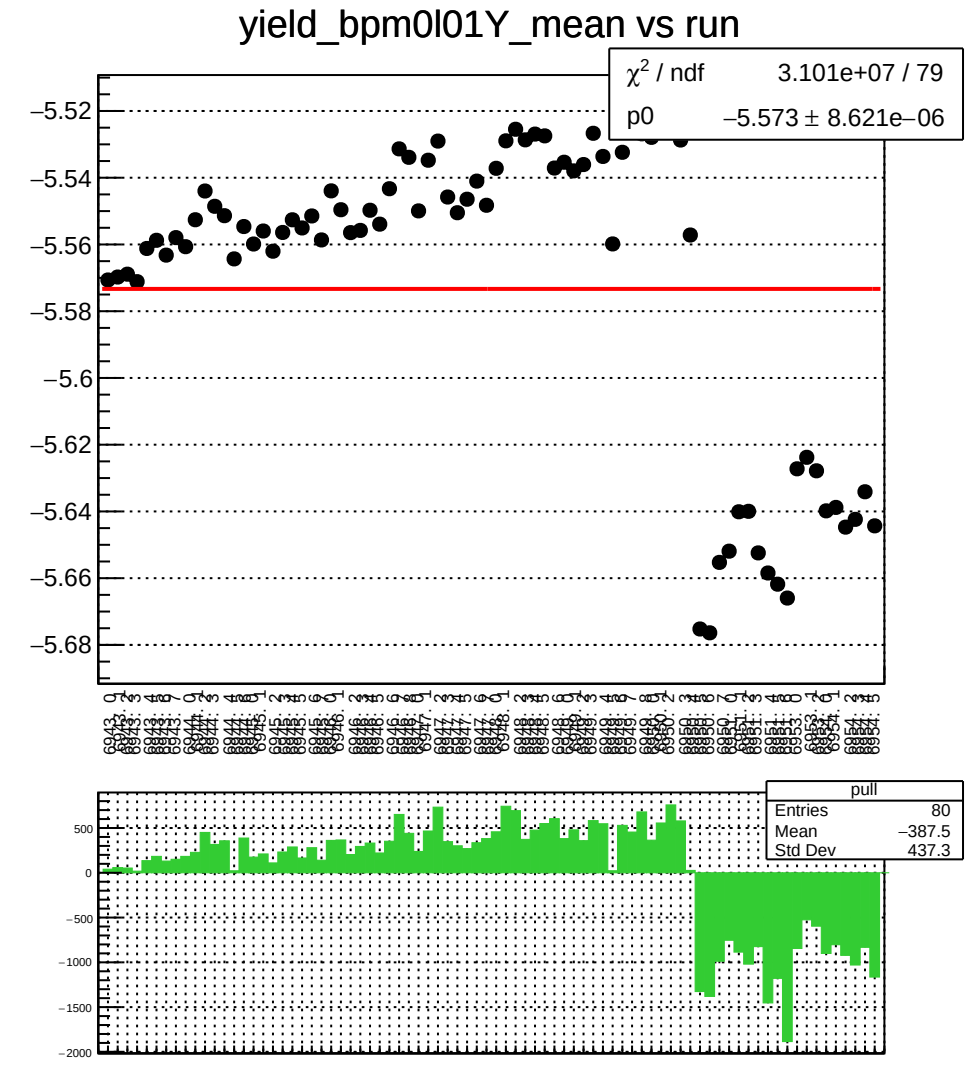

pull1D
Entries 80
Mean 1.925
Std Dev 4.382
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

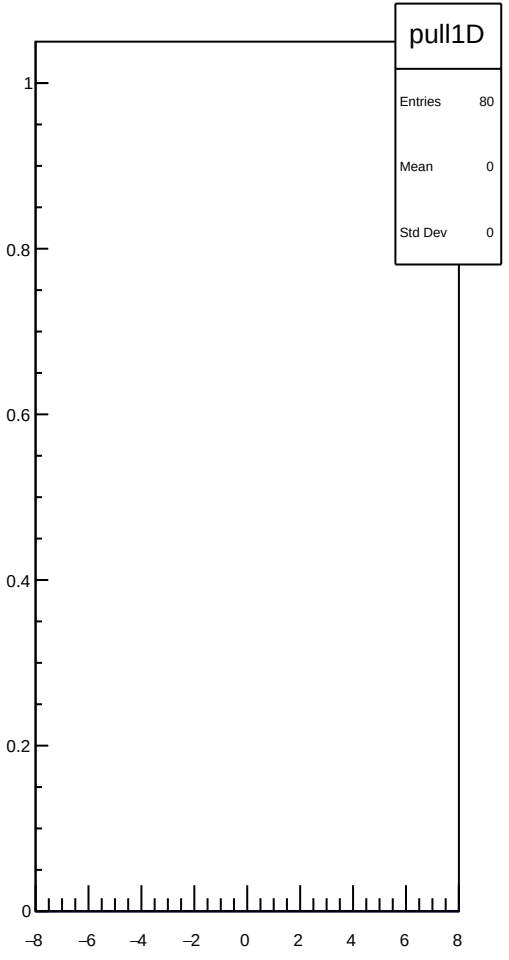

yield_bpm16Y_rms vs run
χ² / ndf 8.041e+04 / 79
p0 0.005066 ± 4.116e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

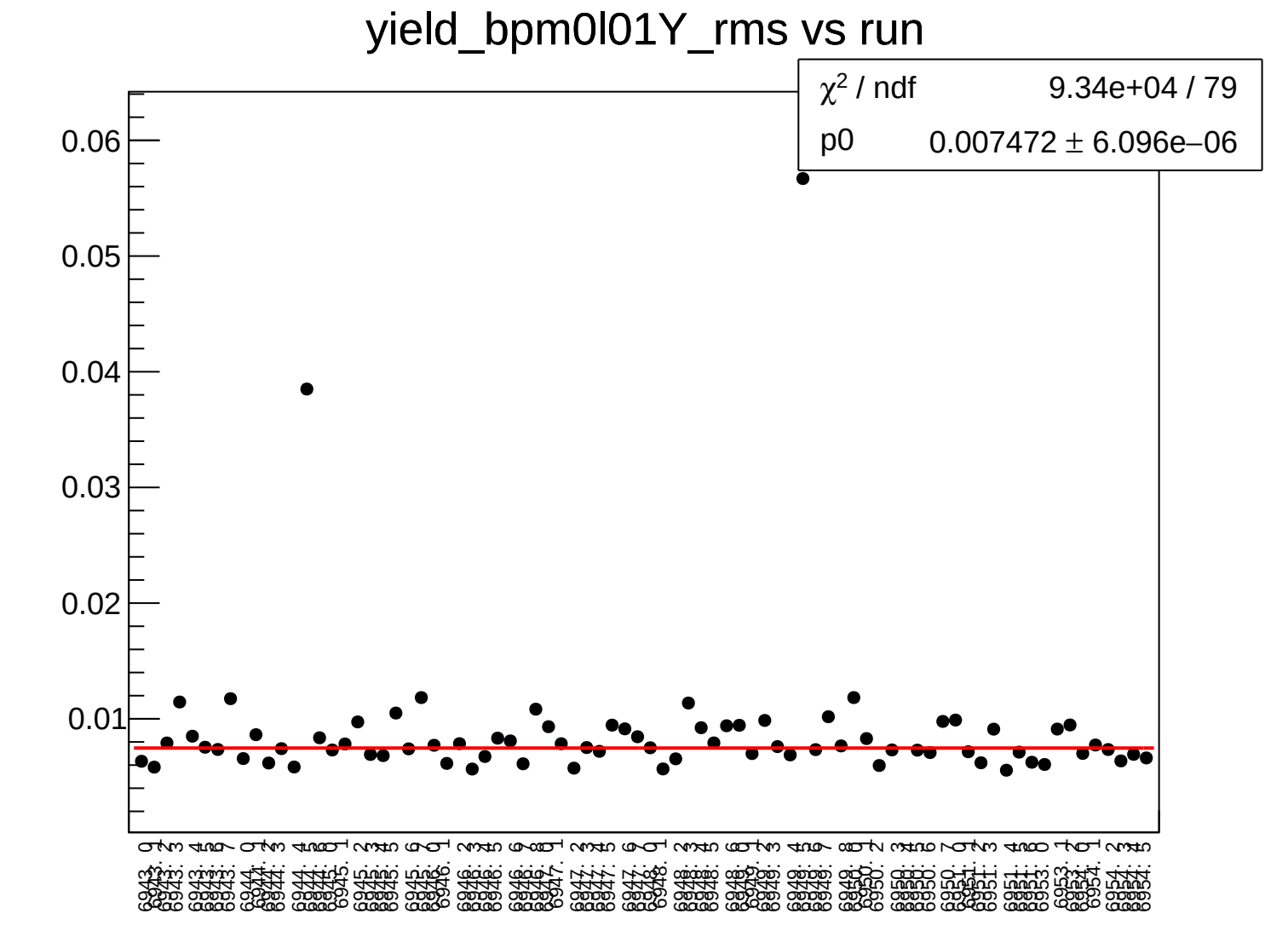

yield_bpm0l01X_mean vs run
χ² / ndf 7.086e+06 / 79
p0 −1.59 ± 7.09e−06
−1.55
−1.56
−1.57
−1.58
−1.59
−1.6
−1.61
−1.62
−1.63
pull
Entries 80
Mean 6139
Std Dev 6082
400
200
0
−200
−400
−600

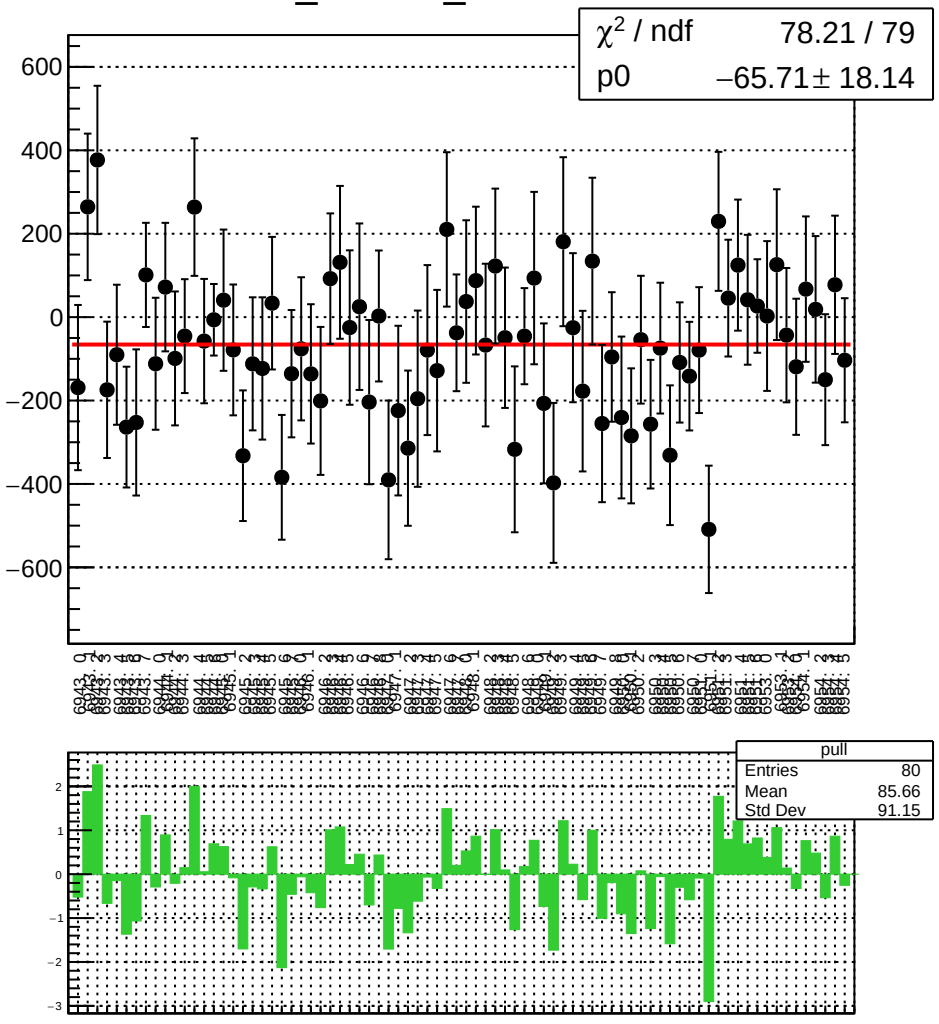

pull1D
Entries 80
Mean −0.7068
Std Dev 1.384
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

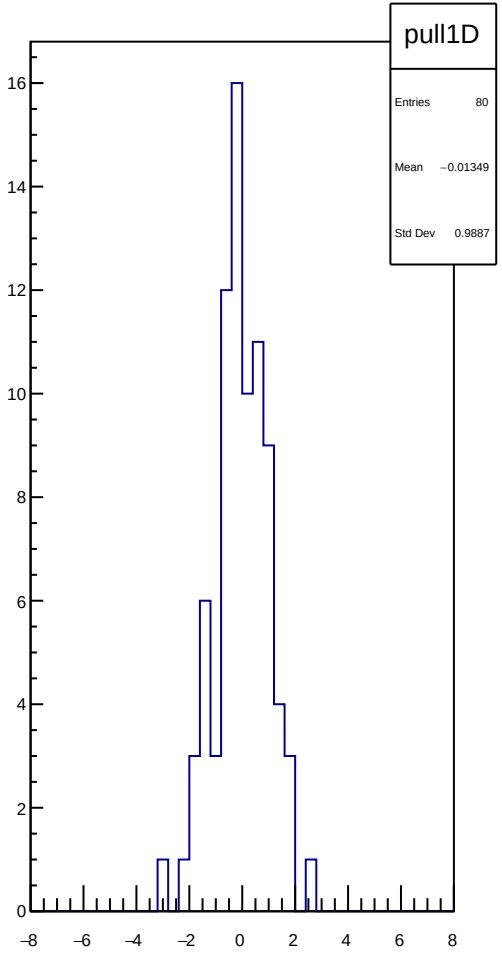

yield_bpm0l01X_rms vs run
χ² / ndf 6.948e+04 / 79
p0 0.006194 ± 5.013e−06
0.03
0.025
0.02
0.015
0.01
0.005

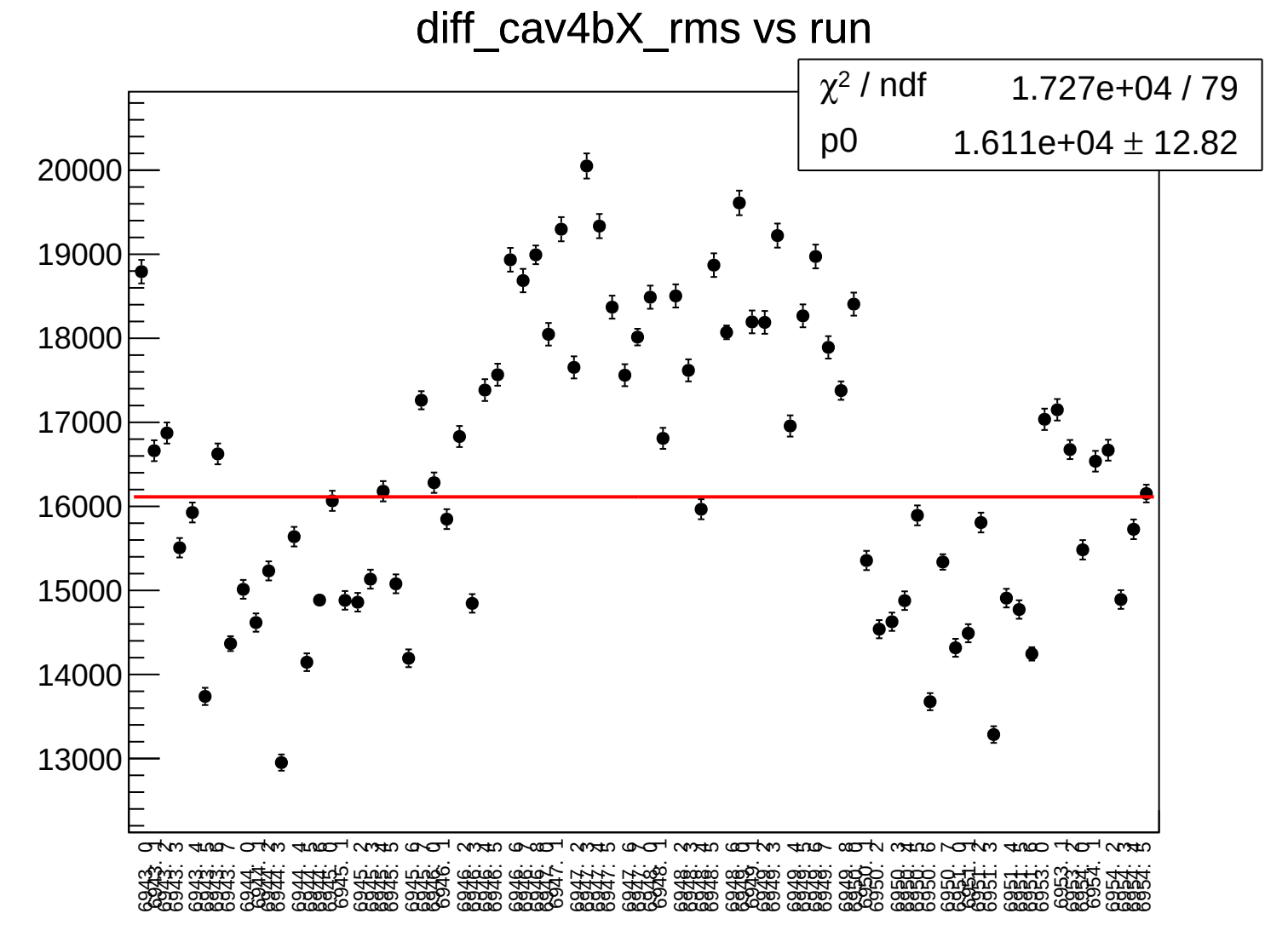

yield_bpm0l01Y_mean vs run
χ² / ndf 3.101e+07 / 79
p0 −5.573 ± 8.621e−06
−5.52
−5.54
−5.56
−5.58
−5.6
−5.62
−5.64
−5.66
−5.68
pull
Entries 80
Mean −387.5
Std Dev 437.3
500
0
−500
−1000
−1500
−2000

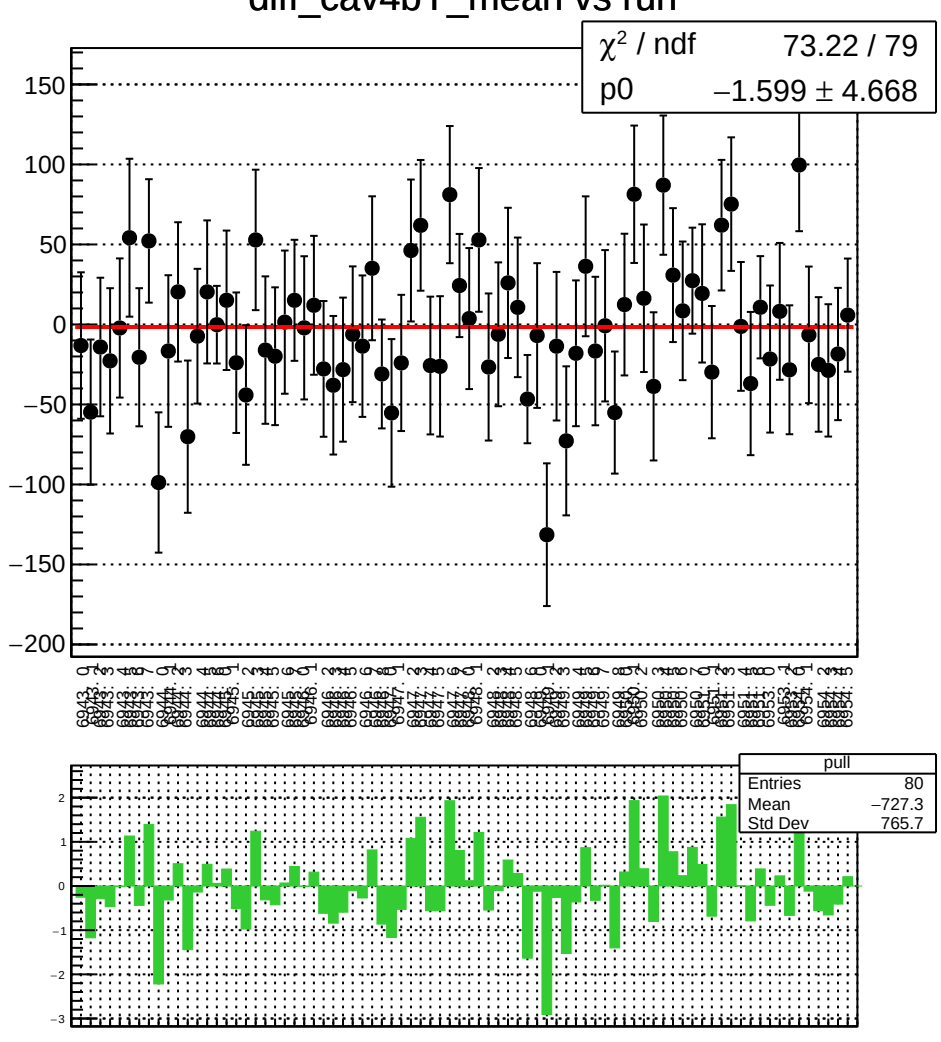

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

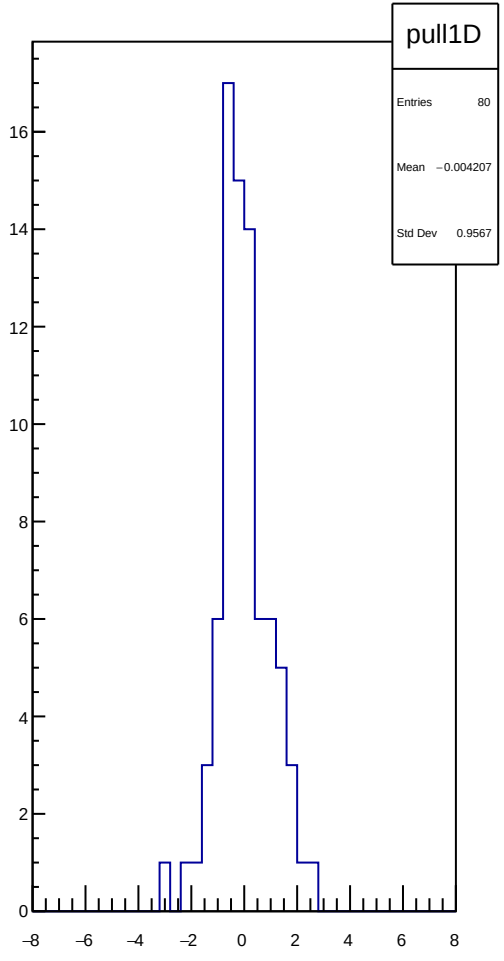

yield_bpm0l01Y_rms vs run
χ² / ndf 9.34e+04 / 79
p0 0.007472 ± 6.096e−06
0.06
0.05
0.04
0.03
0.02
0.01

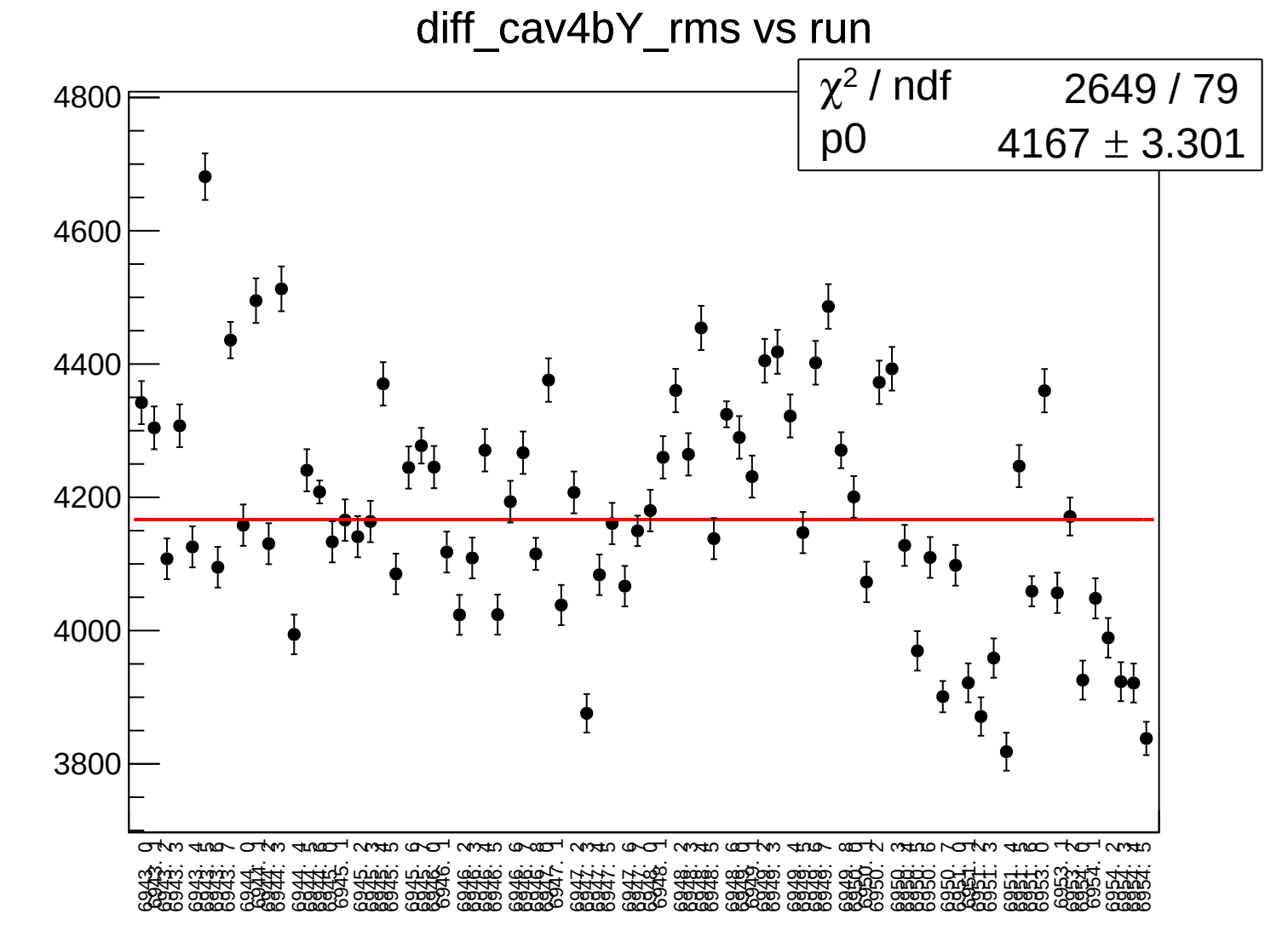

diff_cav4bX_mean vs run
χ^2 / ndf 78.21 / 79
p0 −65.71± 18.14
600
400
200
0
−200
−400
−600
pull
Entries 80
Mean 85.66
Std Dev 91.15
2
1
0
−1
−2
−3

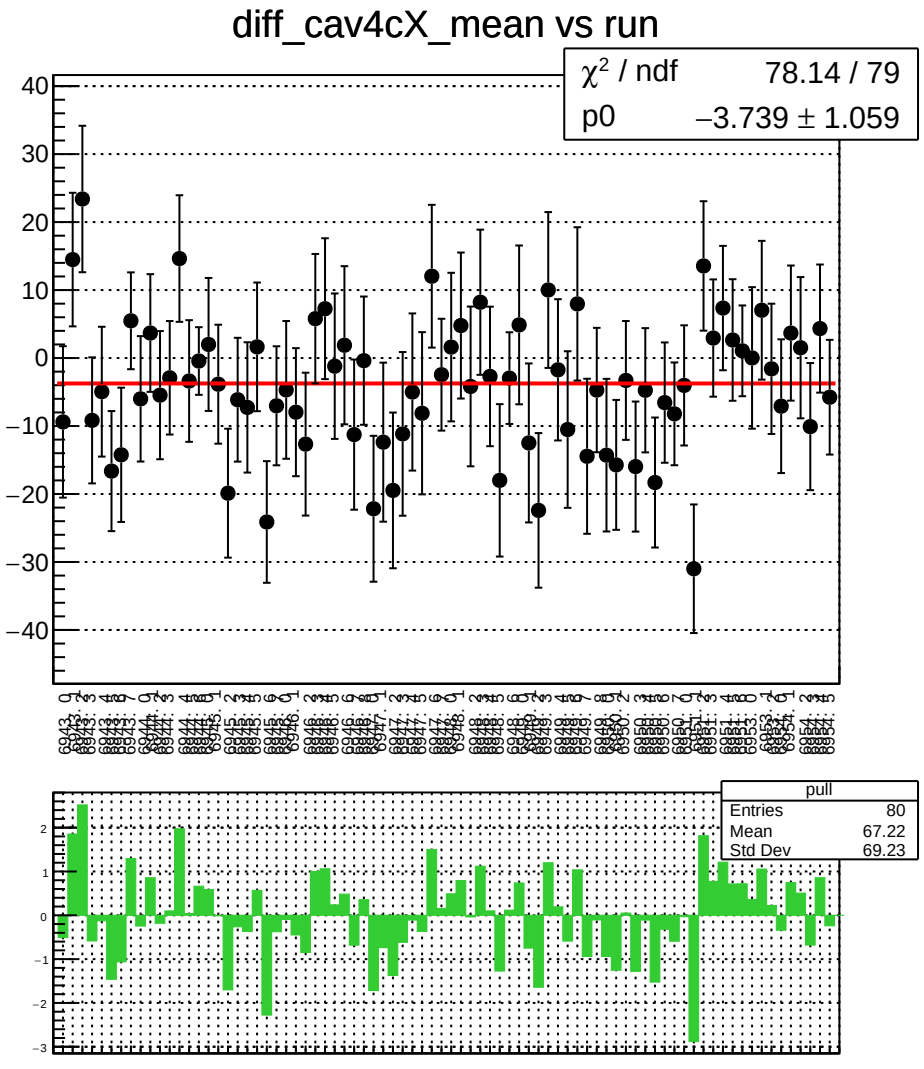

pull1D
Entries 80
Mean −0.01349
Std Dev 0.9887
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

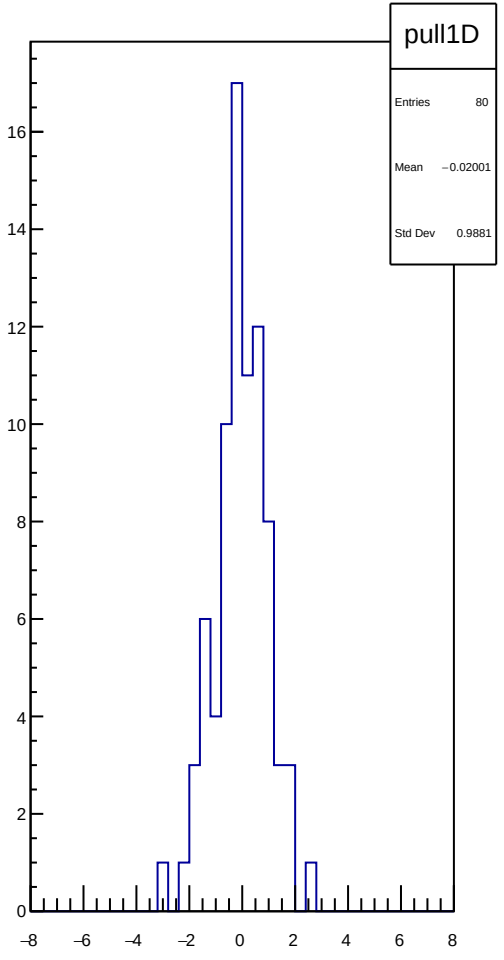

diff_cav4bX_rms vs run
χ² / ndf 1.727e+04 / 79
p0 1.611e+04 ± 12.82
20000
19000
18000
17000
16000
15000
14000
13000

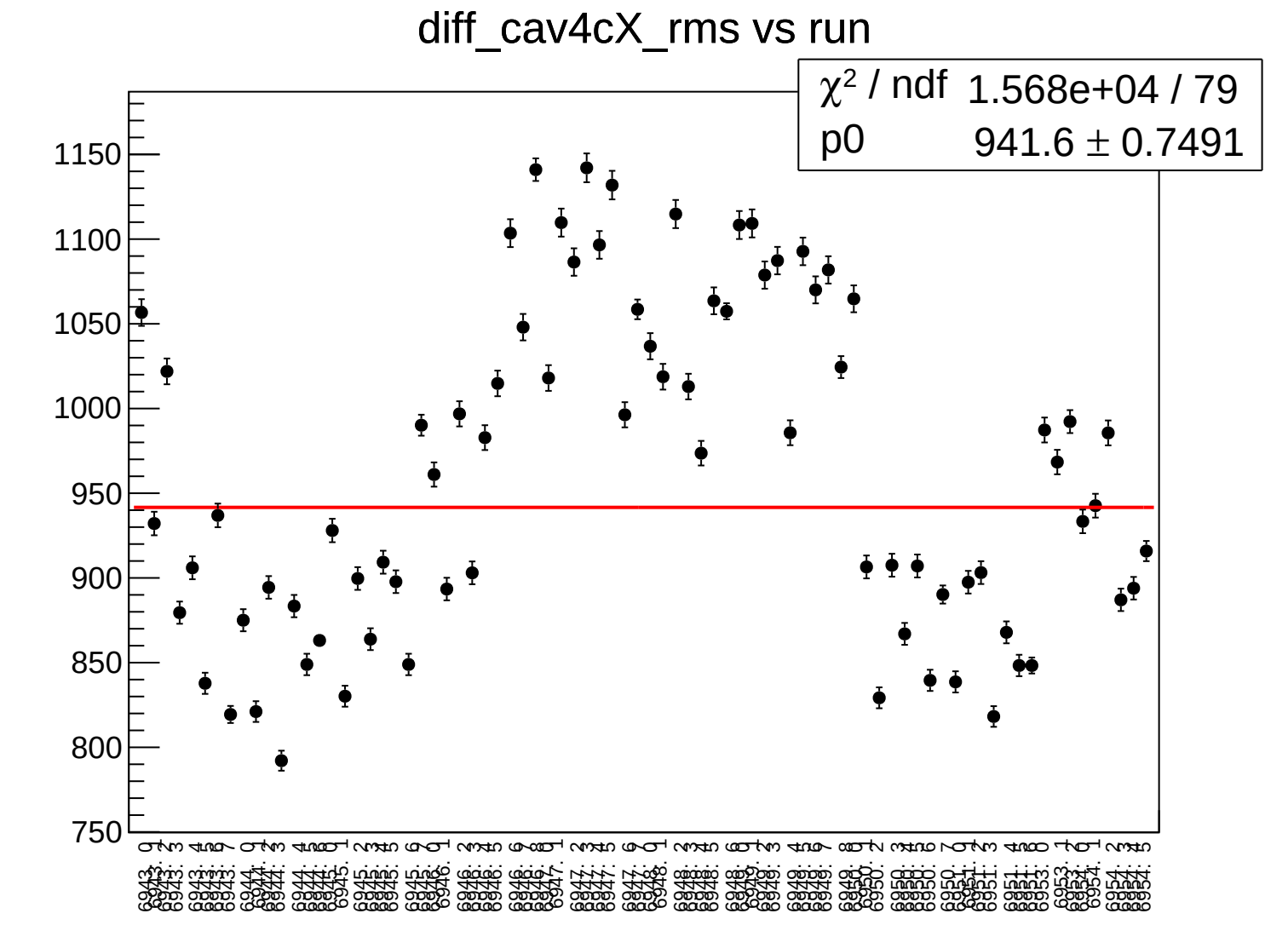

diff_cav4bY_mean vs run
χ^2 / ndf 73.22 / 79
p0 −1.599 ± 4.668
150
100
50
0
−50
−100
−150
−200
pull
Entries 80
Mean −727.3
Std Dev 765.7
2
1
0
−1
−2
−3

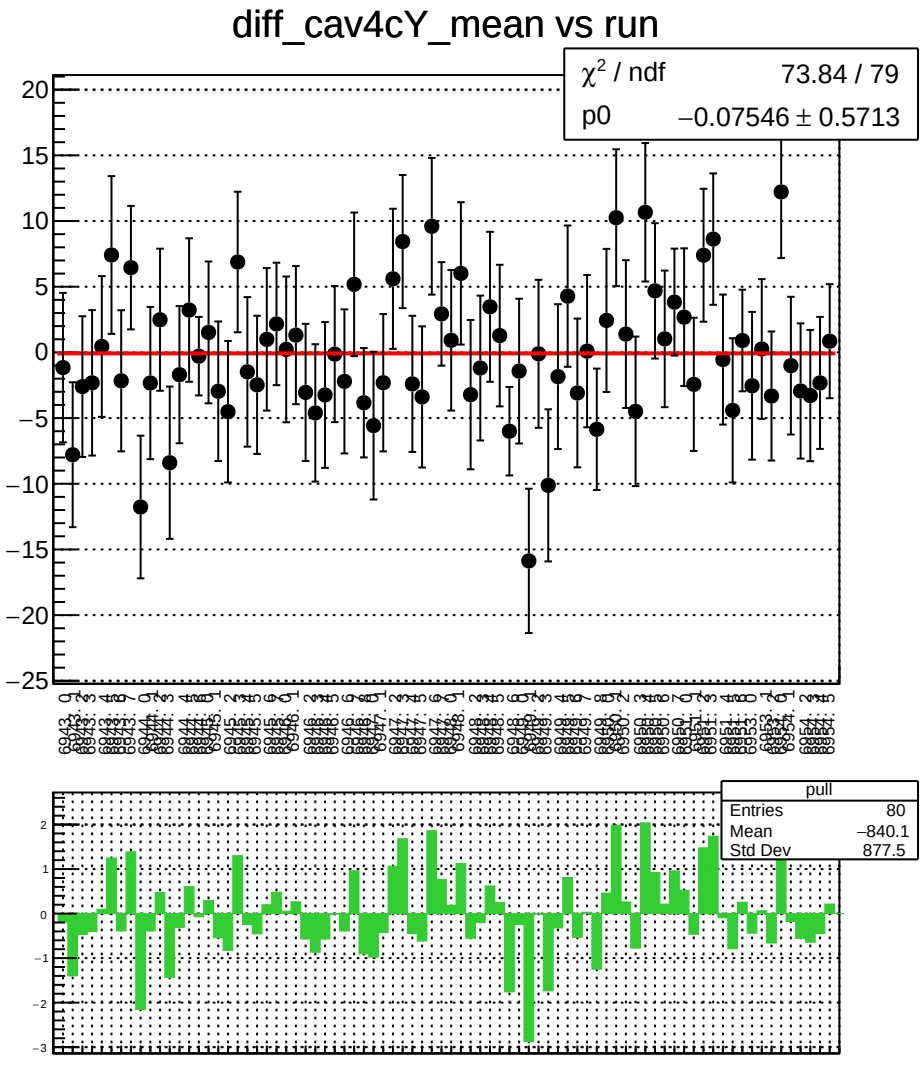

pull1D
Entries 80
Mean −0.004207
Std Dev 0.9567
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

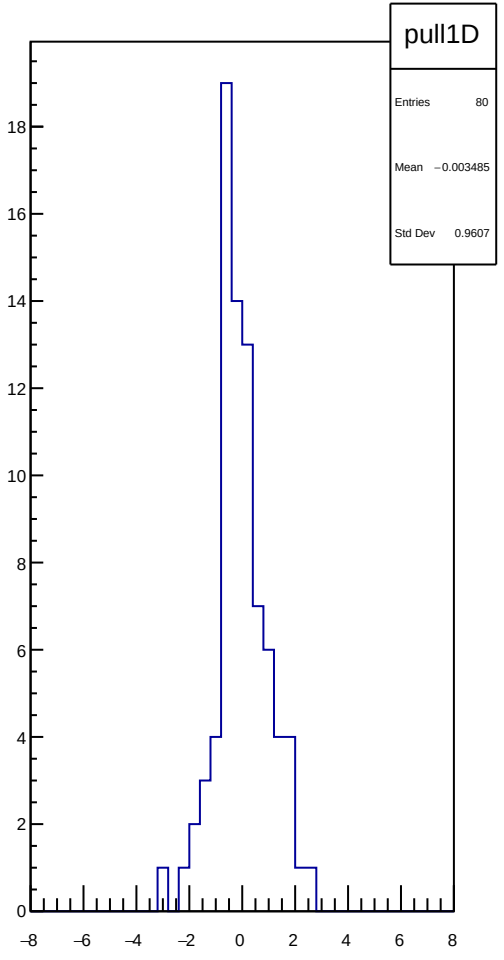

diff_cav4bY_rms vs run
χ² / ndf 2649 / 79
p0 4167 ± 3.301
4800
4600
4400
4200
4000
3800

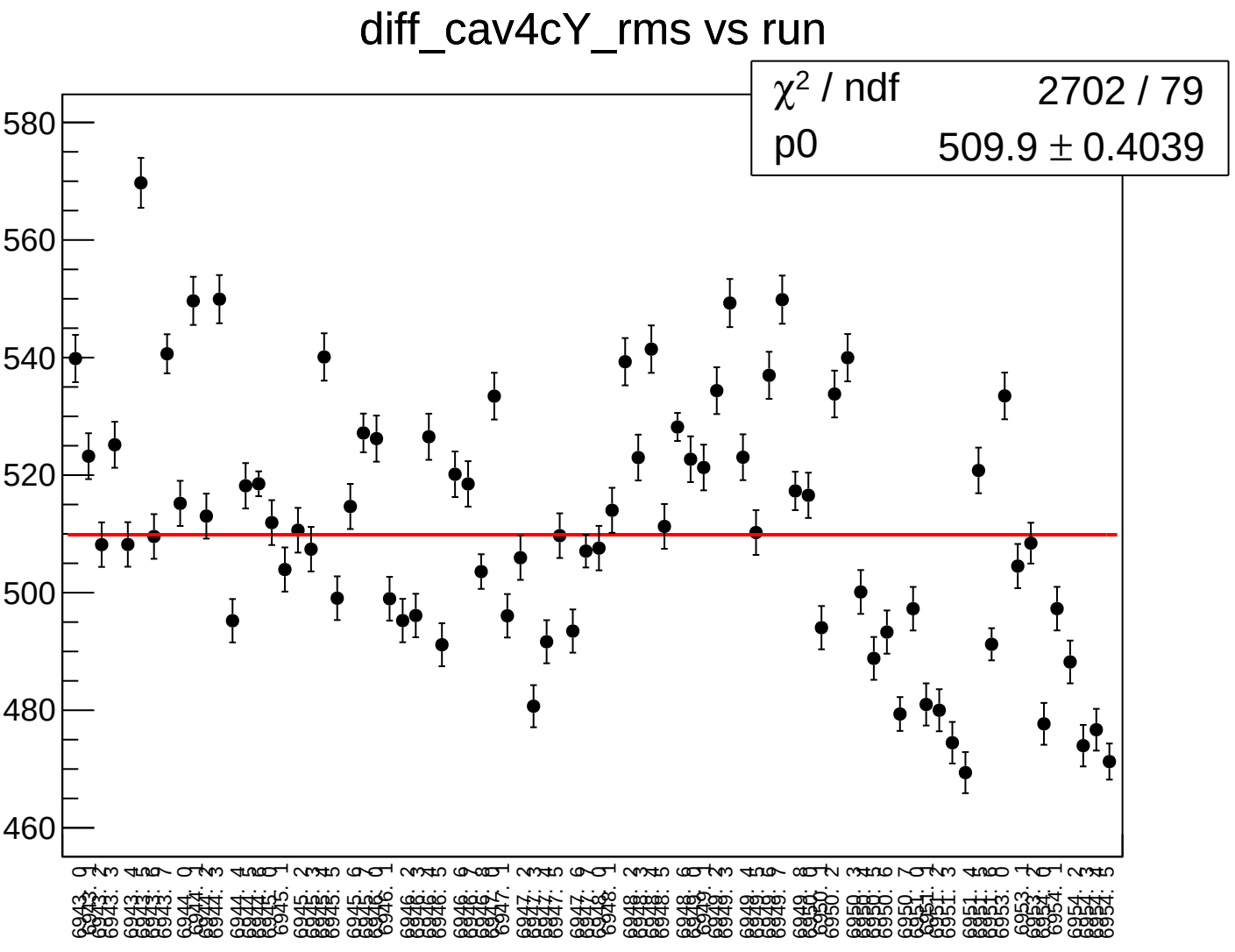

diff_cav4cX_mean vs run
χ² / ndf 78.14 / 79
p0 −3.739 ± 1.059
pull
Entries 80
Mean 67.22
Std Dev 69.23

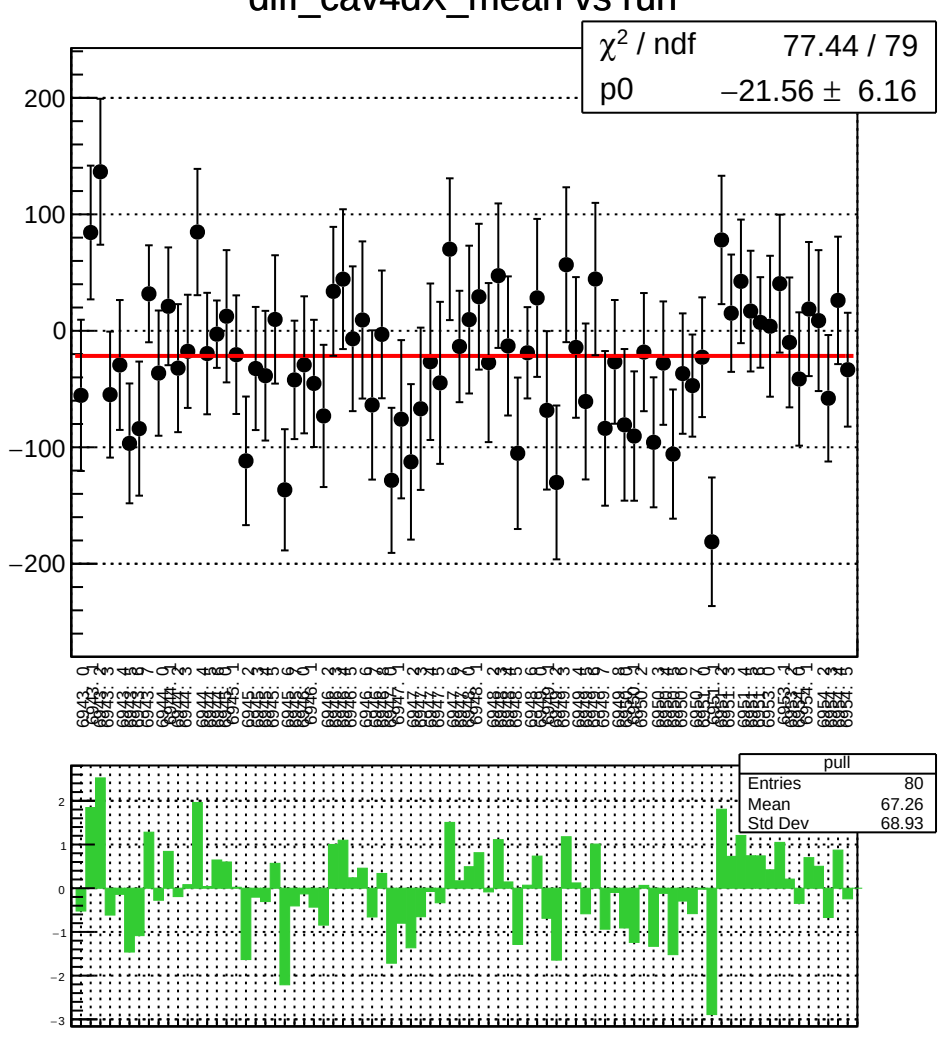

pull1D
Entries 80
Mean −0.02001
Std Dev 0.9881

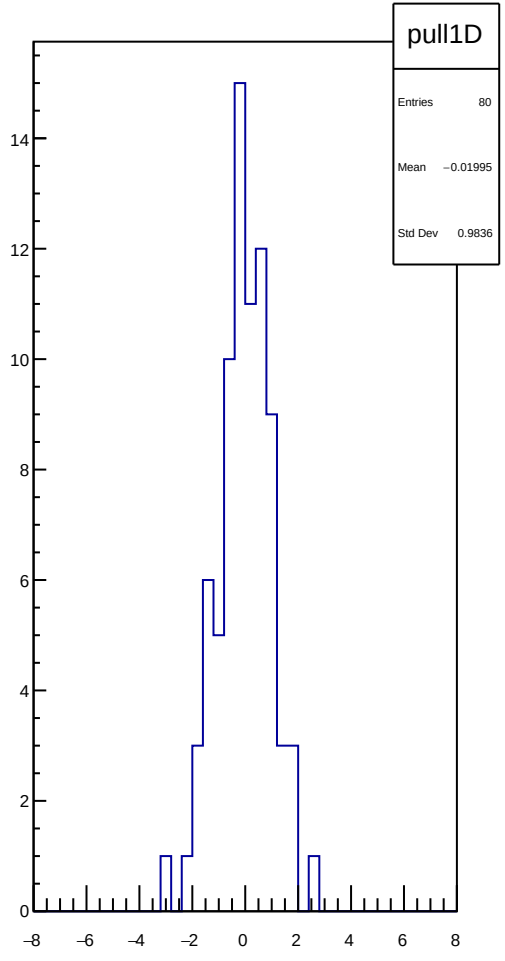

diff_cav4cX_rms vs run
χ² / ndf 1.568e+04 / 79
p0 941.6 ± 0.7491
1150
1100
1050
1000
950
900
850
800
750

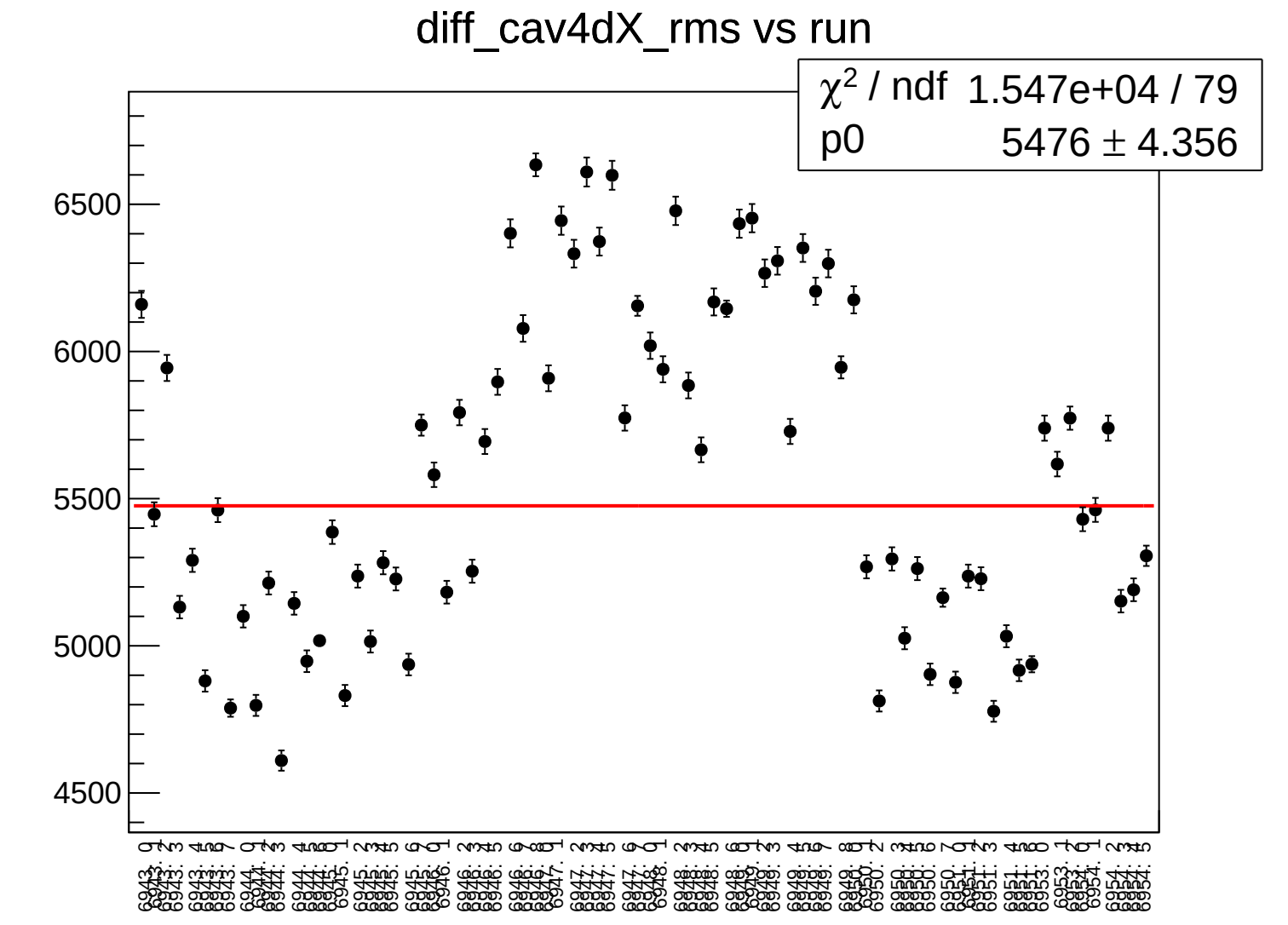

diff_cav4cY_mean vs run
χ^2 / ndf 73.84 / 79
p0 −0.07546 ± 0.5713
pull
Entries 80
Mean −840.1
Std Dev 877.5

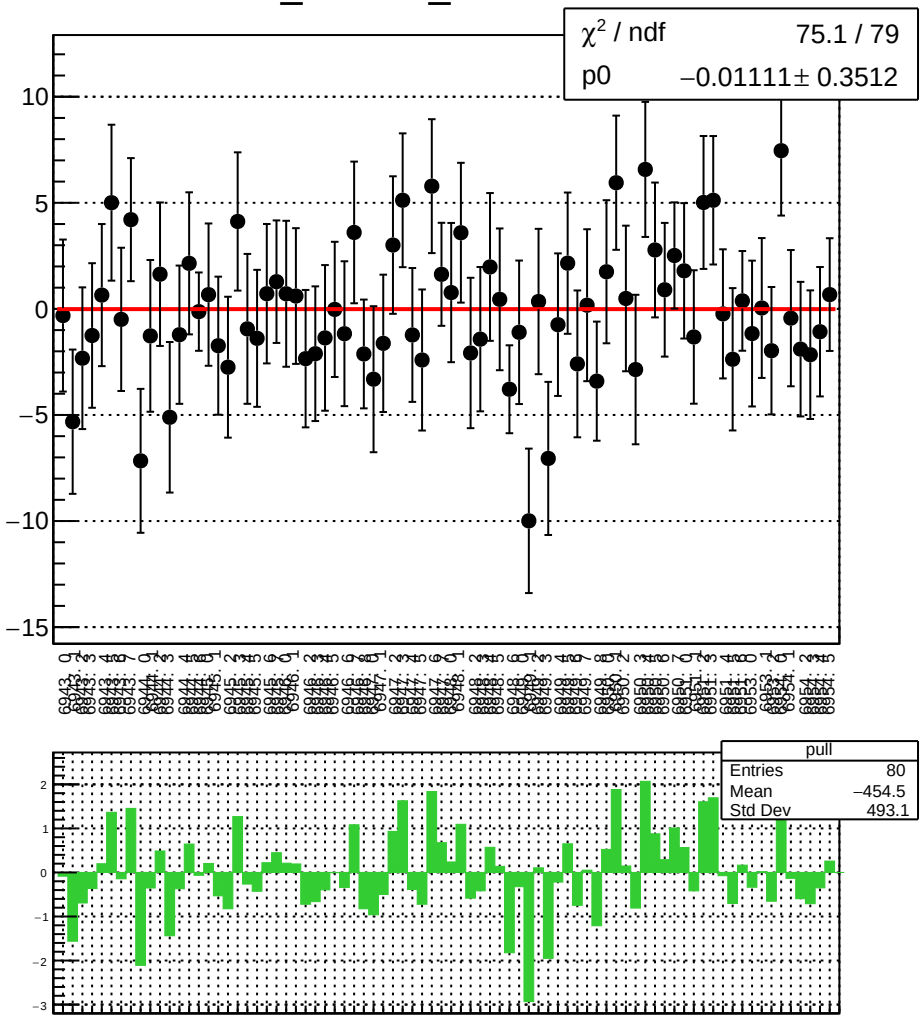

pull1D
Entries 80
Mean −0.003485
Std Dev 0.9607

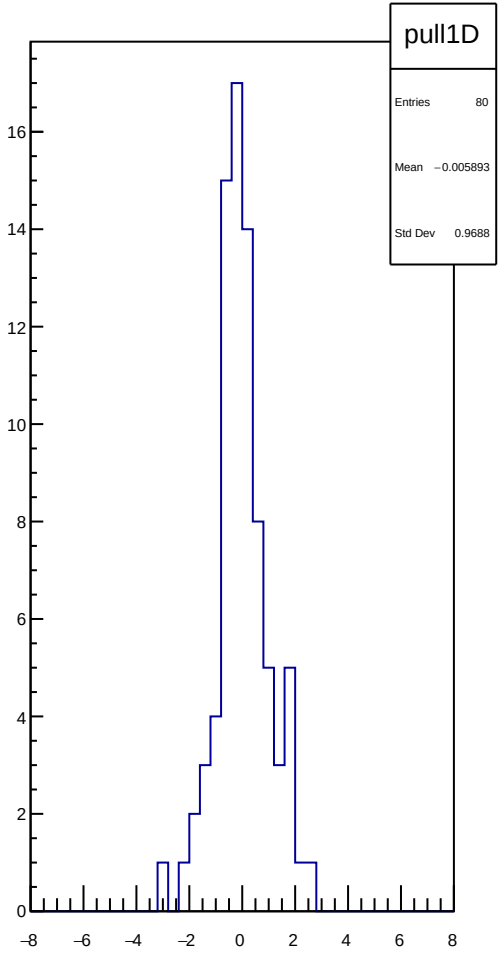

diff_cav4cY_rms vs run
χ² / ndf 2702 / 79
p0 509.9 ± 0.4039
580
560
540
520
500
480
460

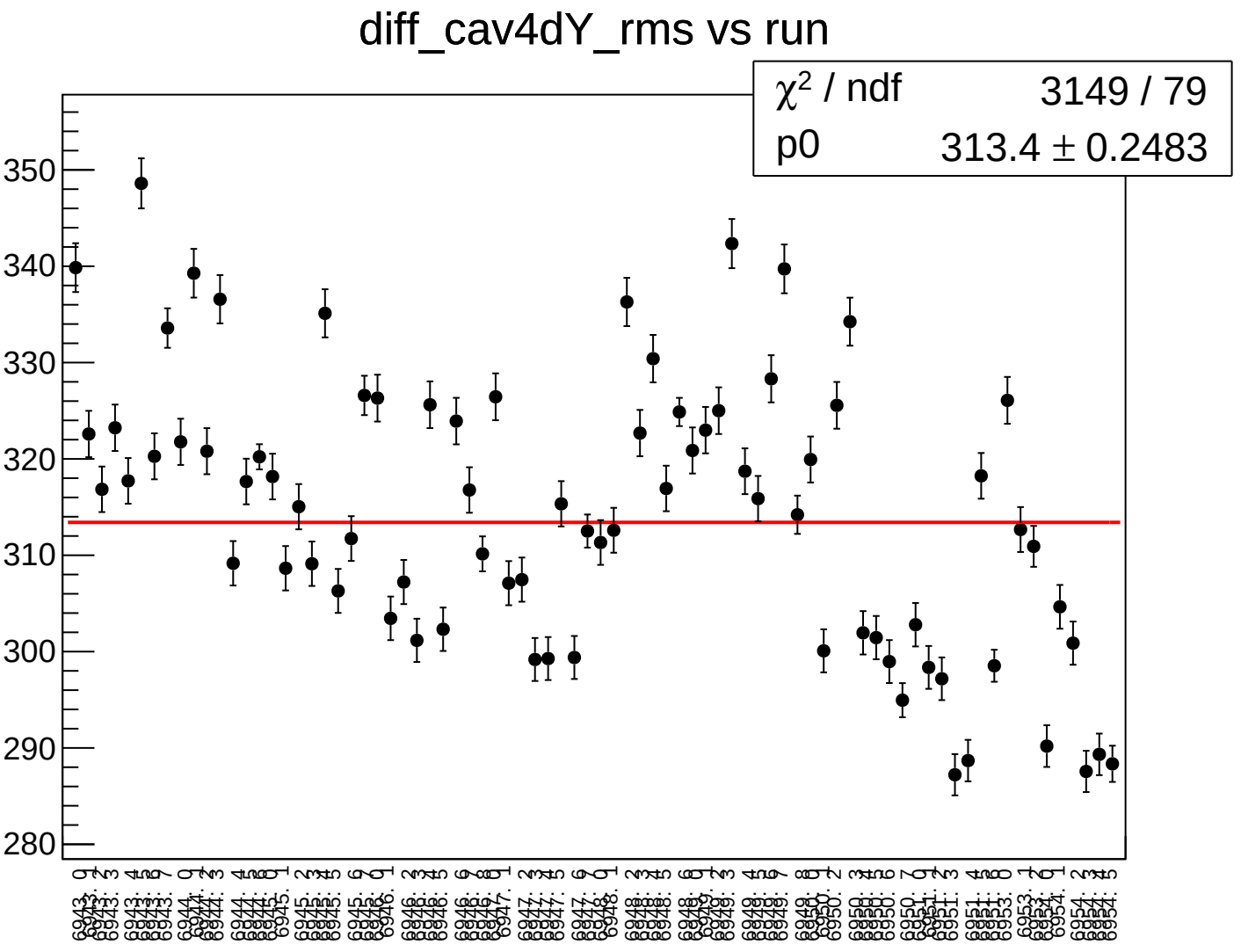

diff_cav4dX_mean vs run
χ^2 / ndf 77.44 / 79
p0 −21.56 ± 6.16
200
100
0
−100
−200
pull
Entries 80
Mean 67.26
Std Dev 68.93
2
1
0
−1
−2
−3

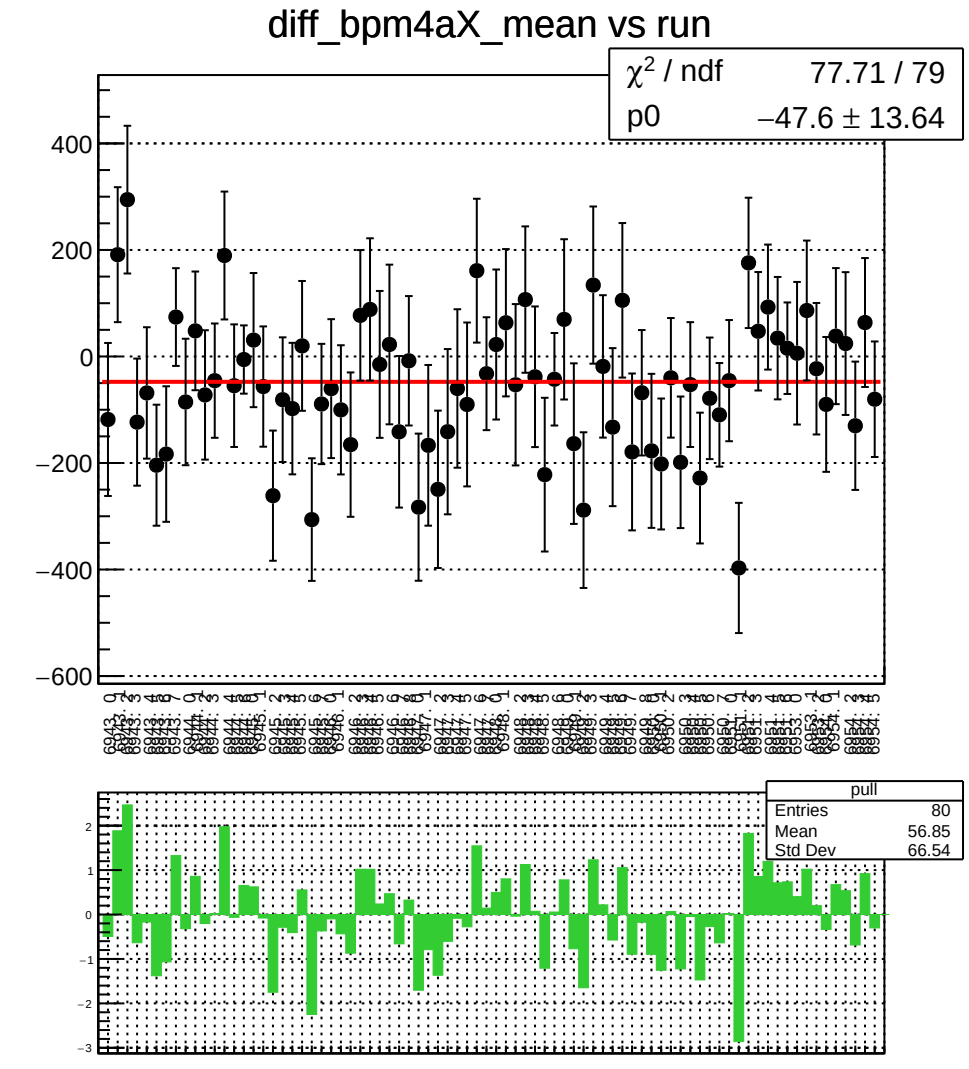

pull1D
Entries 80
Mean −0.01995
Std Dev 0.9836
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

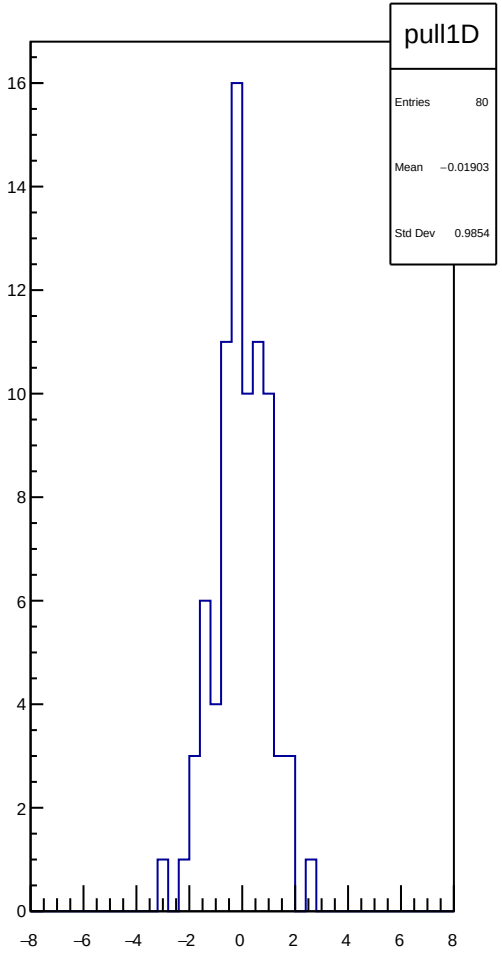

diff_cav4dX_rms vs run
χ^2 / ndf 1.547e+04 / 79
p0 5476 ± 4.356
6500
6000
5500
5000
4500

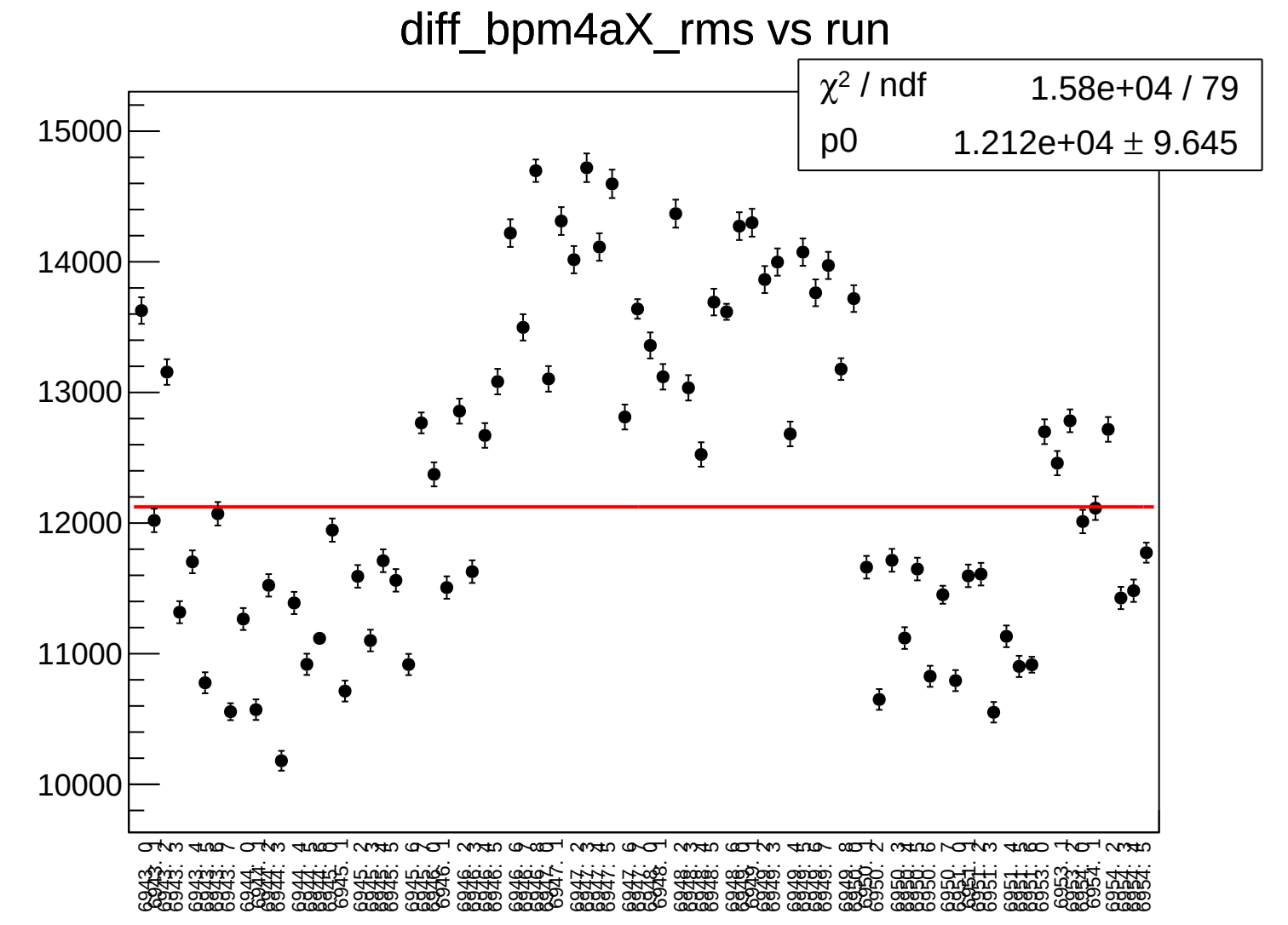

diff_cav4dY_mean vs run
χ^2 / ndf 75.1 / 79
p0 −0.01111± 0.3512
pull
Entries 80
Mean −454.5
Std Dev 493.1

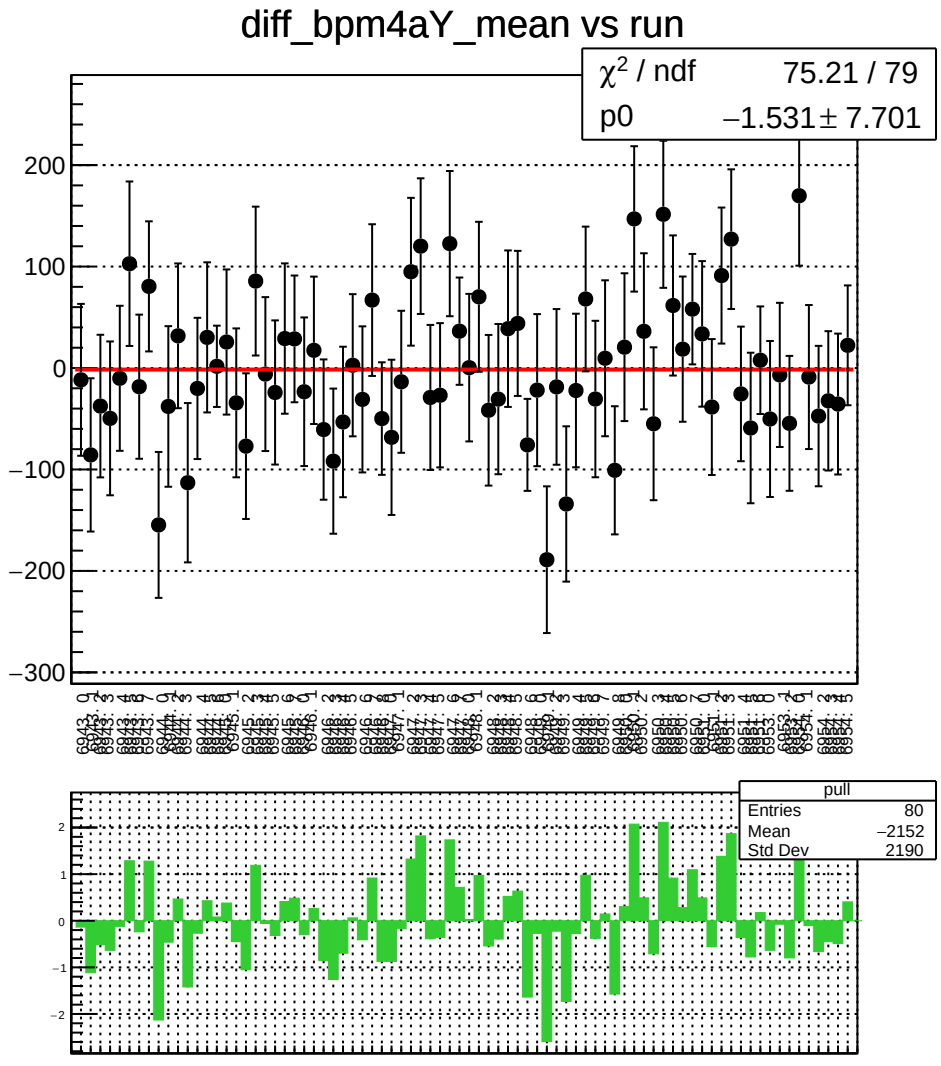

pull1D
Entries 80
Mean −0.005893
Std Dev 0.9688

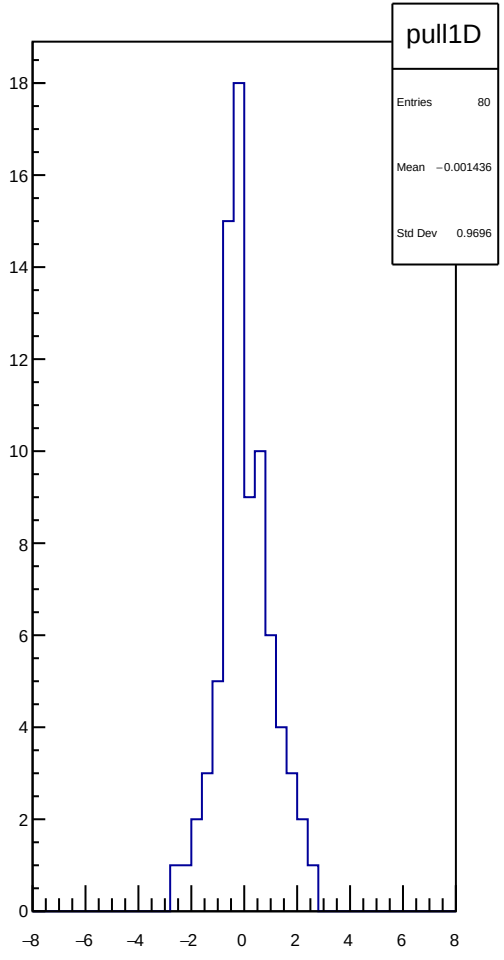

diff_cav4dY_rms vs run
χ² / ndf 3149 / 79
p0 313.4 ± 0.2483
350
340
330
320
310
300
290
280

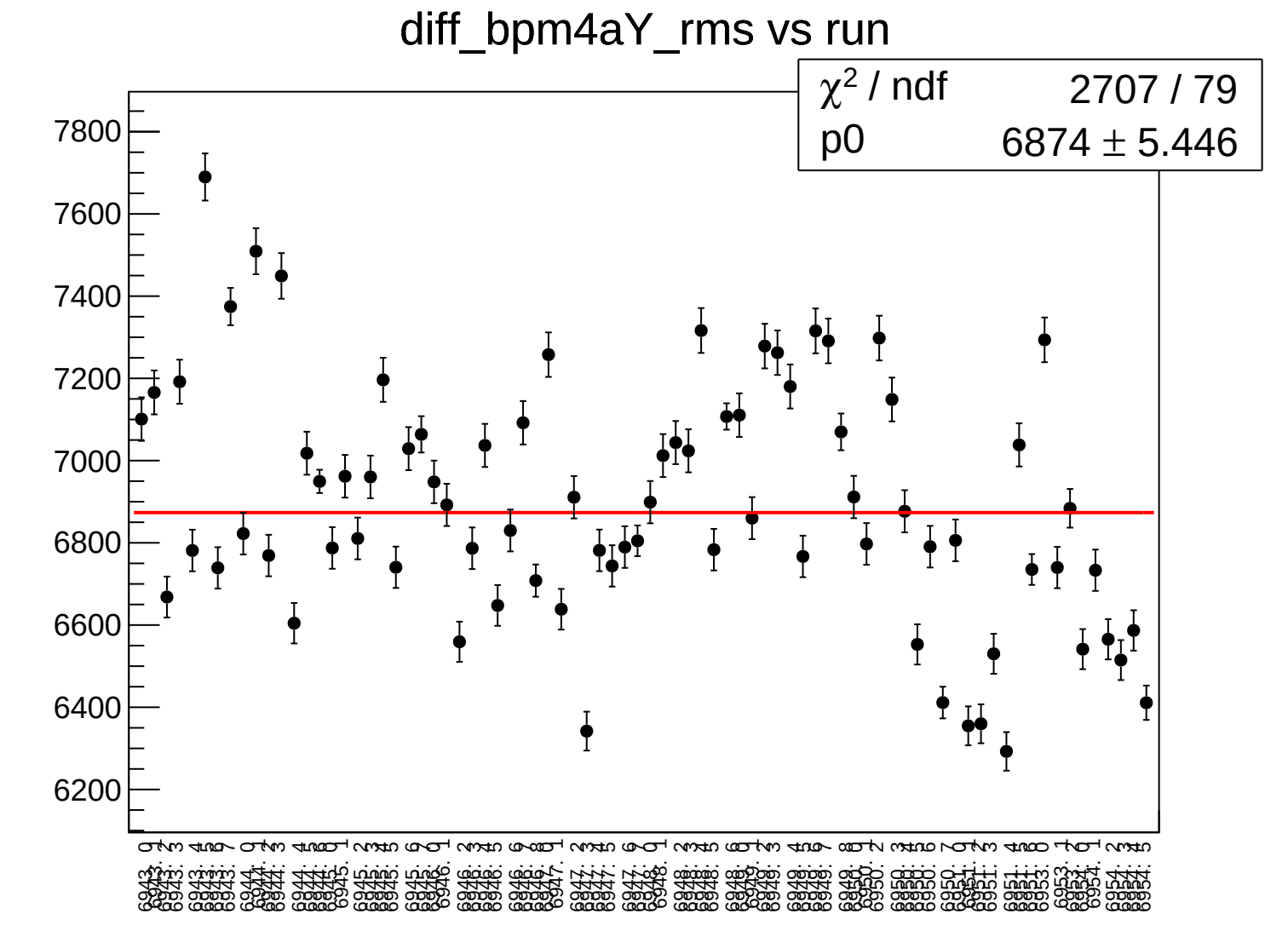

diff_bpm4aX_mean vs run
χ² / ndf 77.71 / 79
p0 −47.6 ± 13.64
pull
Entries 80
Mean 56.85
Std Dev 66.54

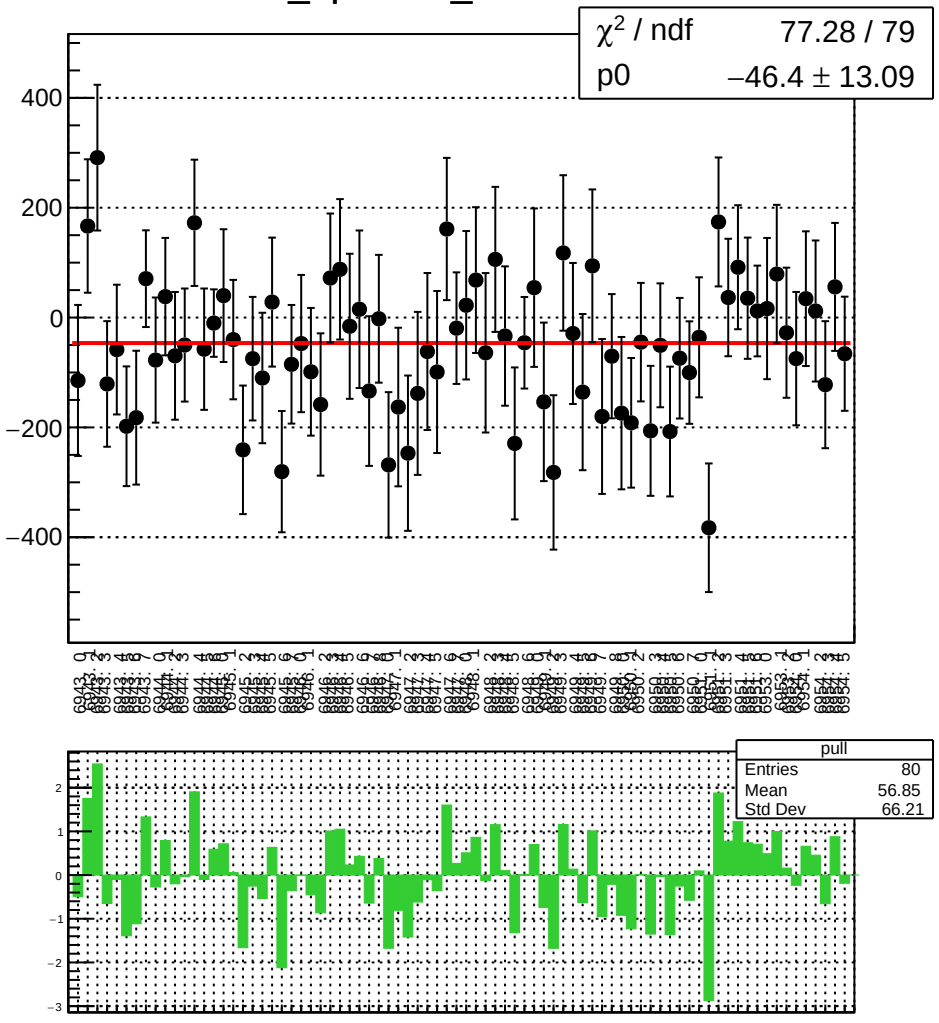

pull1D
Entries 80
Mean −0.01903
Std Dev 0.9854

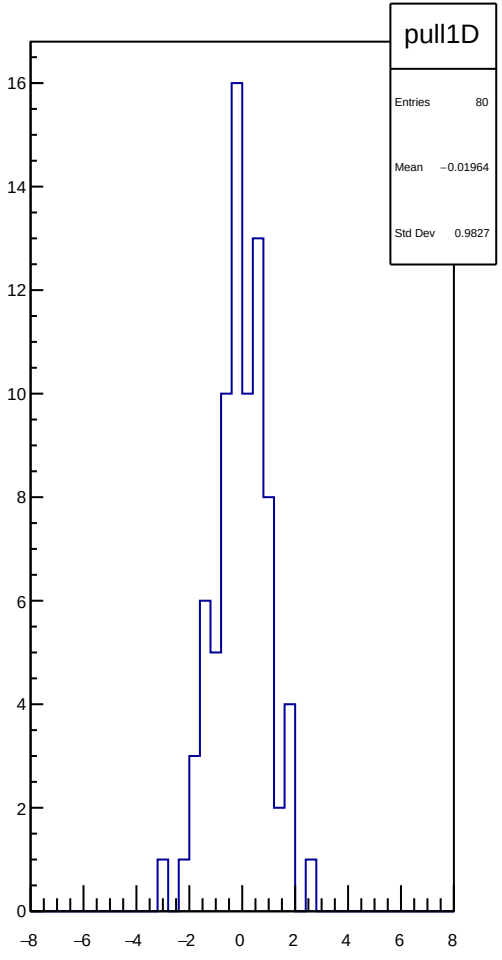

diff_bpm4aX_rms vs run
χ² / ndf 1.58e+04 / 79
p0 1.212e+04 ± 9.645
15000
14000
13000
12000
11000
10000

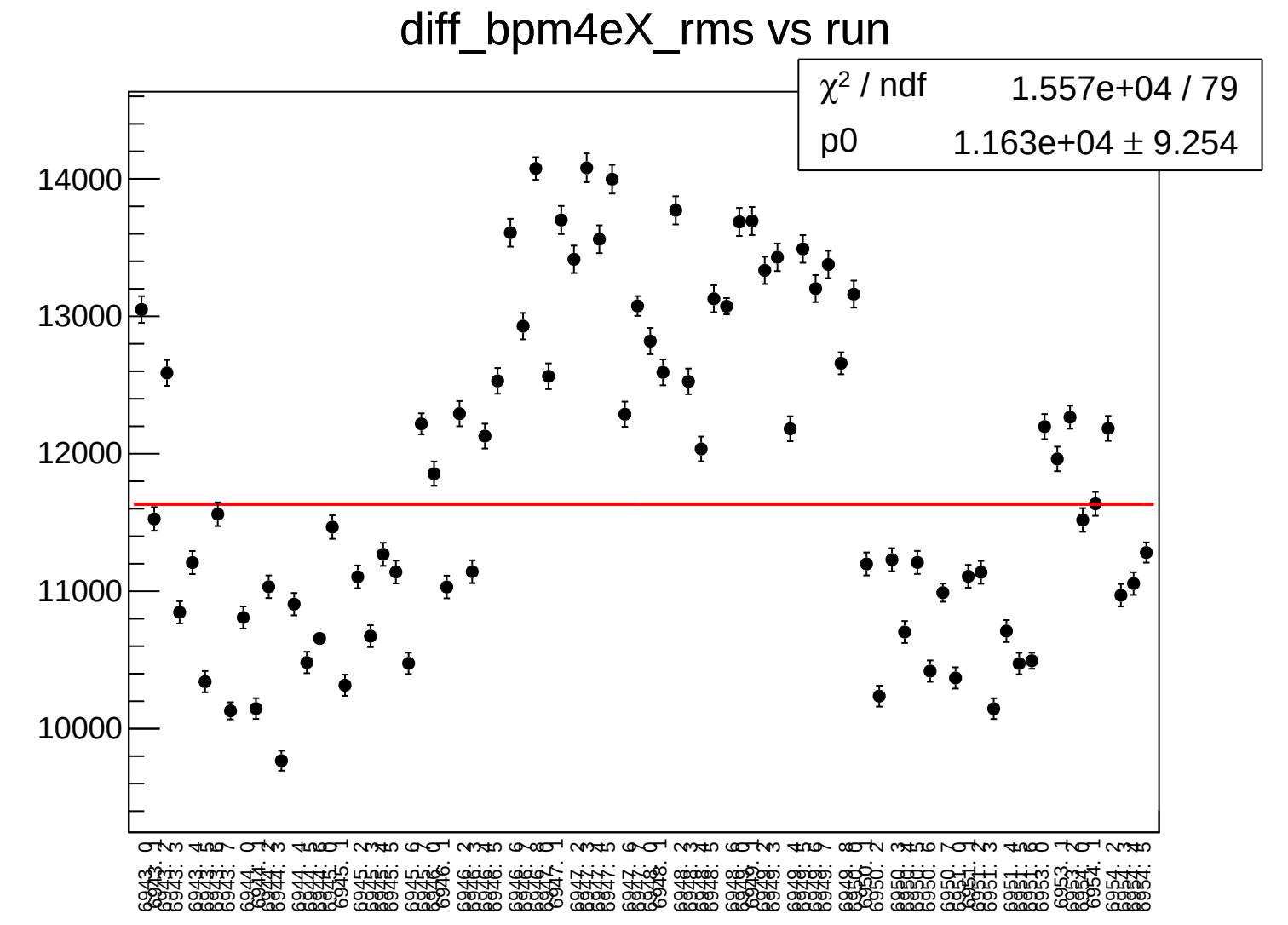

diff_bpm4aY_mean vs run
χ² / ndf 75.21 / 79
p0 −1.531 ± 7.701
pull
Entries 80
Mean −2152
Std Dev 2190

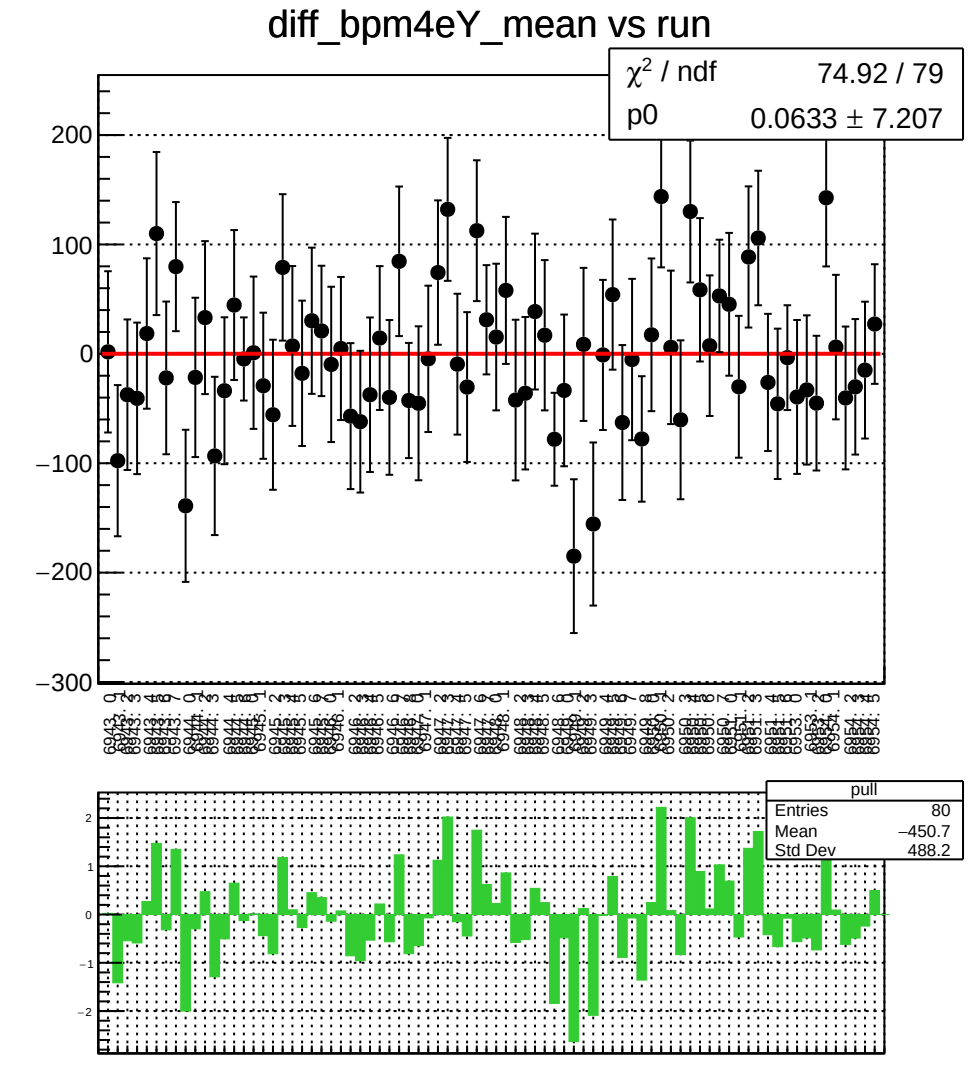

pull1D
Entries 80
Mean −0.001436
Std Dev 0.9696

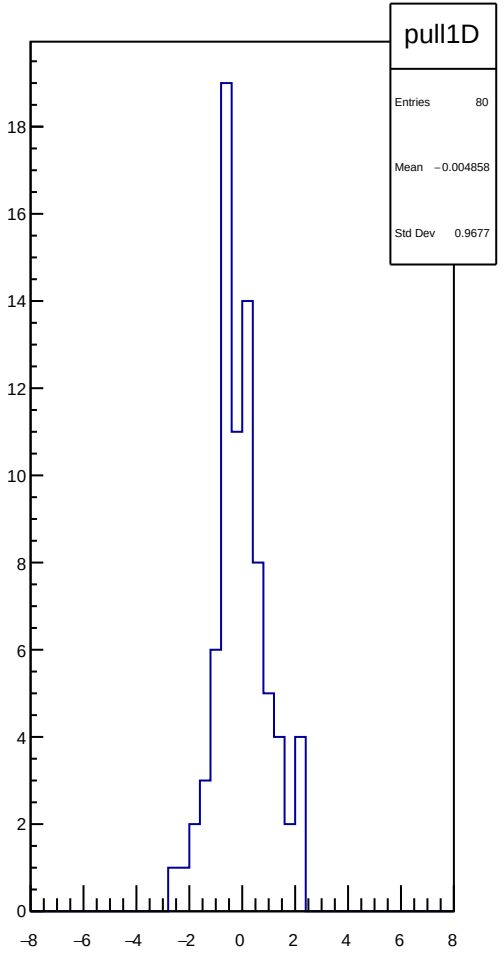

diff_bpm4aY_rms vs run
χ^2 / ndf 2707 / 79
p0 6874 ± 5.446
7800
7600
7400
7200
7000
6800
6600
6400
6200

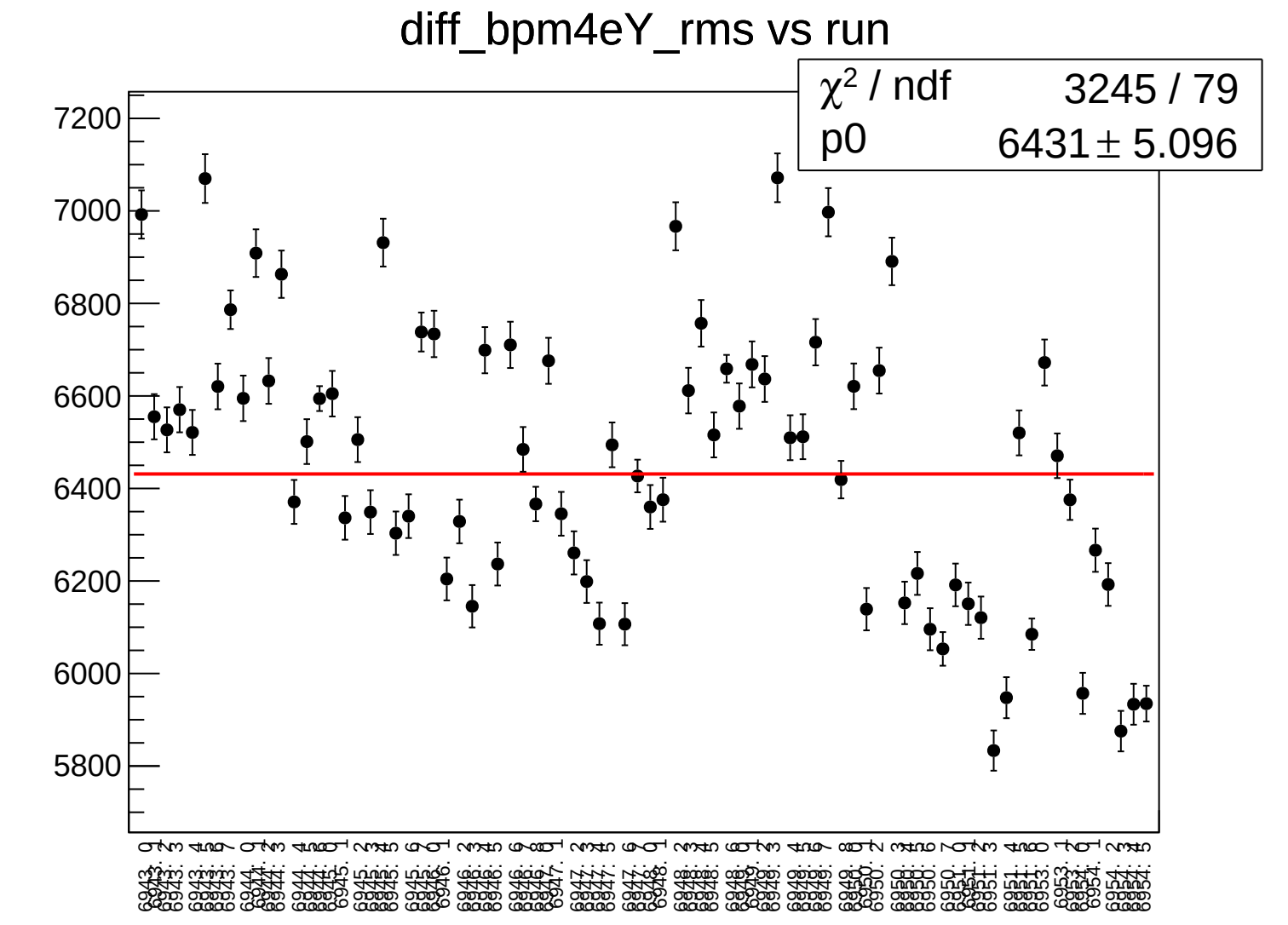

diff_bpm4eX_mean vs run
χ^2 / ndf 77.28 / 79
p0 −46.4 ± 13.09
400
200
0
−200
−400
pull
Entries 80
Mean 56.85
Std Dev 66.21
2
1
0
−1
−2
−3

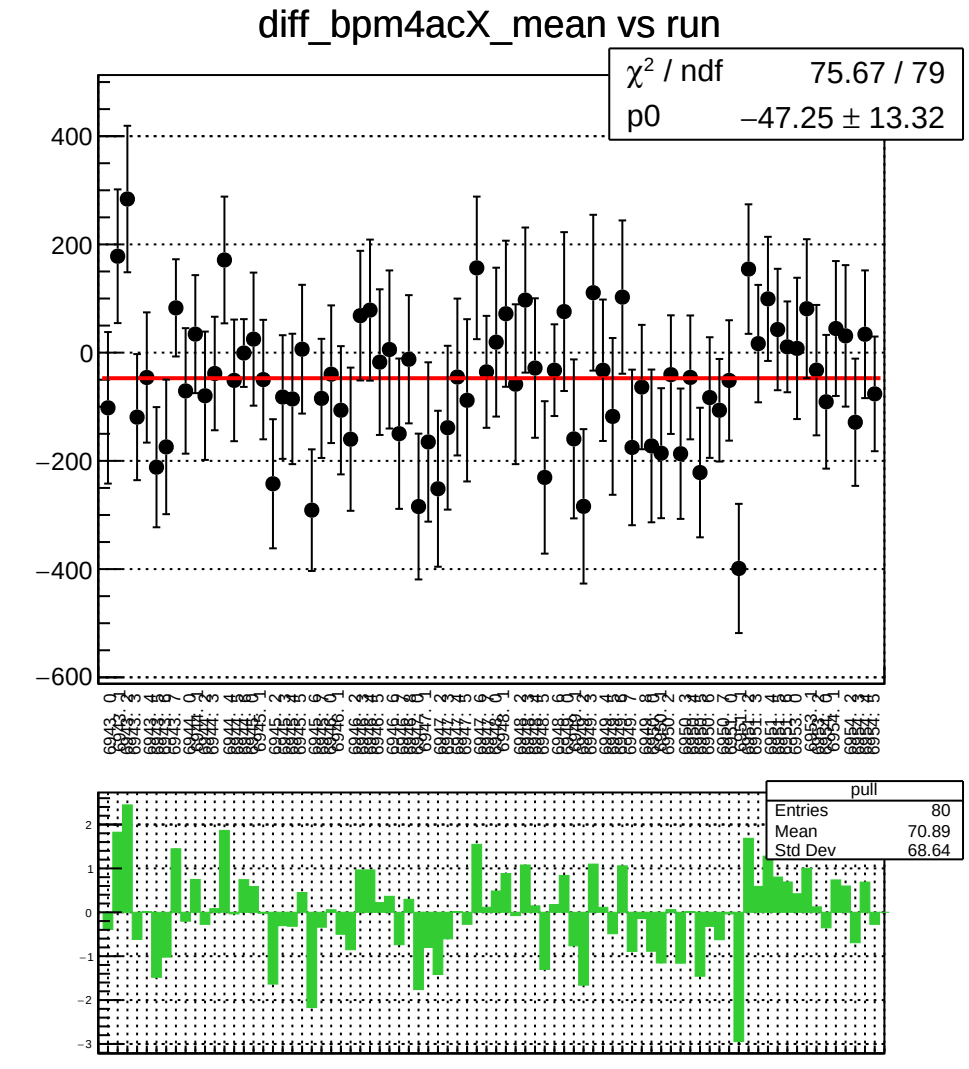

pull1D
Entries 80
Mean −0.01964
Std Dev 0.9827
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

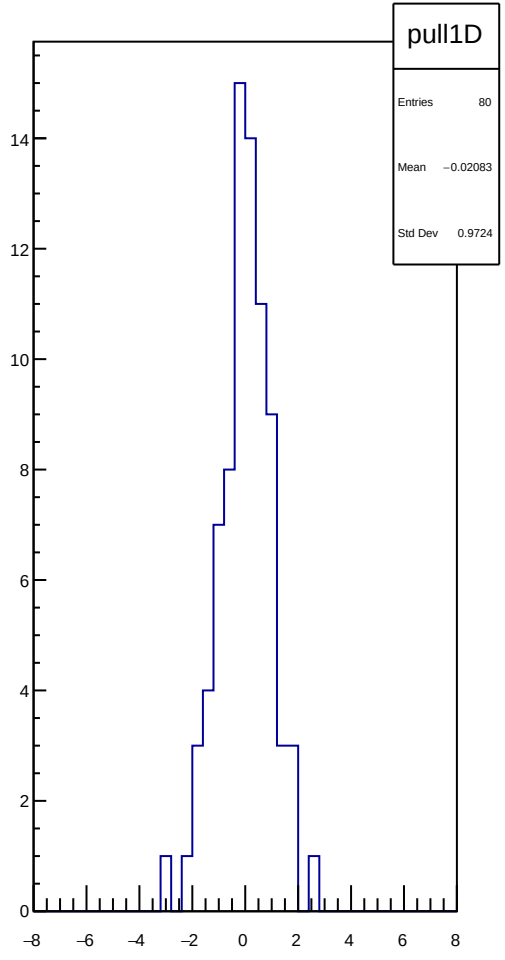

diff_bpm4eX_rms vs run
χ² / ndf 1.557e+04 / 79
p0 1.163e+04 ± 9.254
14000
13000
12000
11000
10000


diff_bpm4eY_mean vs run
χ² / ndf 74.92 / 79
p0 0.0633 ± 7.207
pull
Entries 80
Mean −450.7
Std Dev 488.2

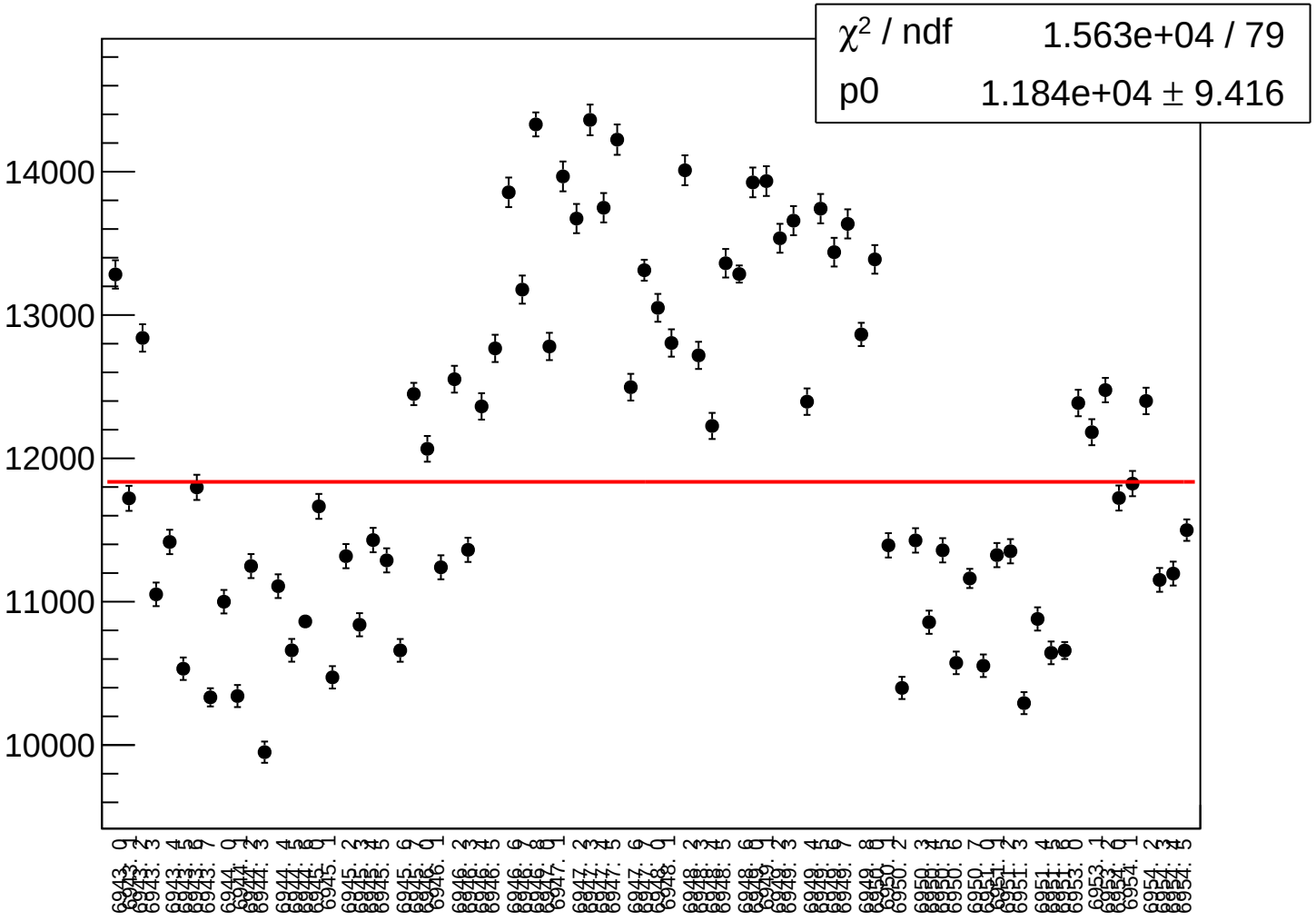

pull1D
Entries 80
Mean −0.004858
Std Dev 0.9677

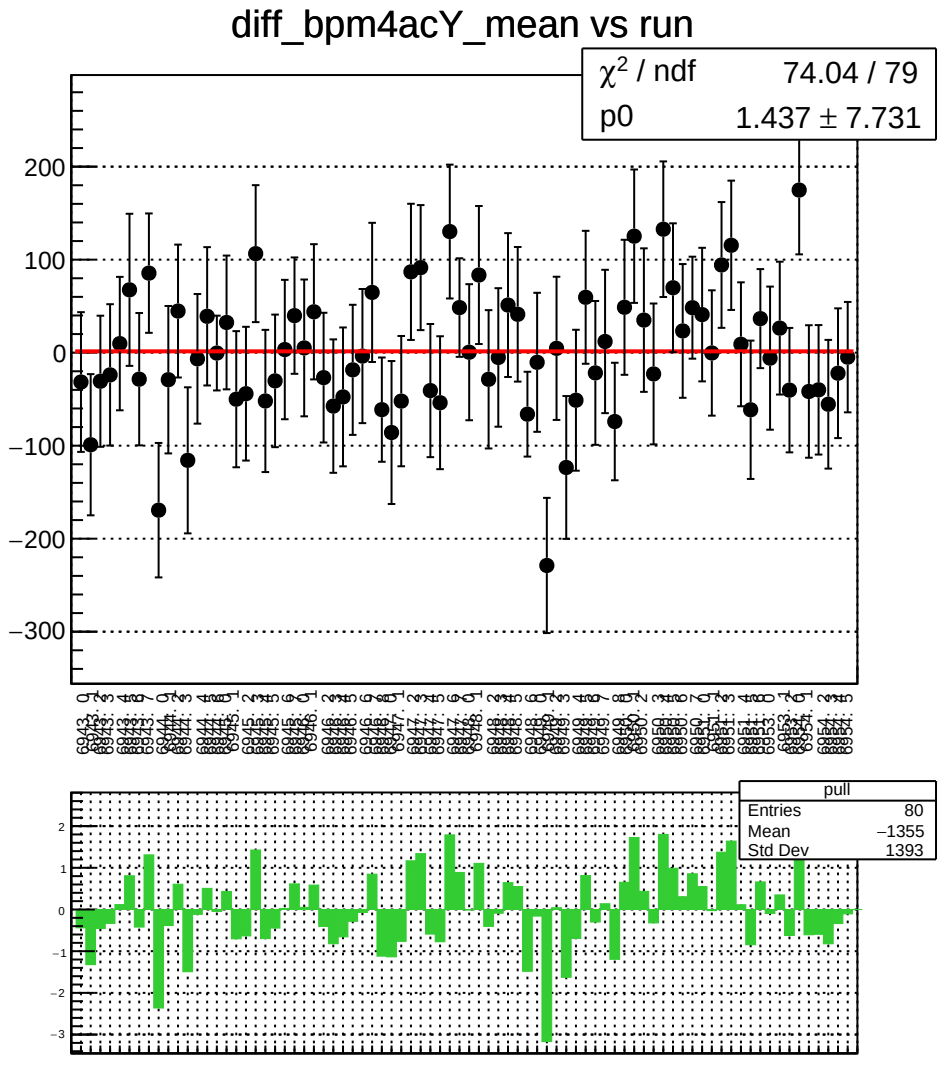

diff_bpm4eY_rms vs run
χ² / ndf 3245 / 79
p0 6431 ± 5.096
7200
7000
6800
6600
6400
6200
6000
5800

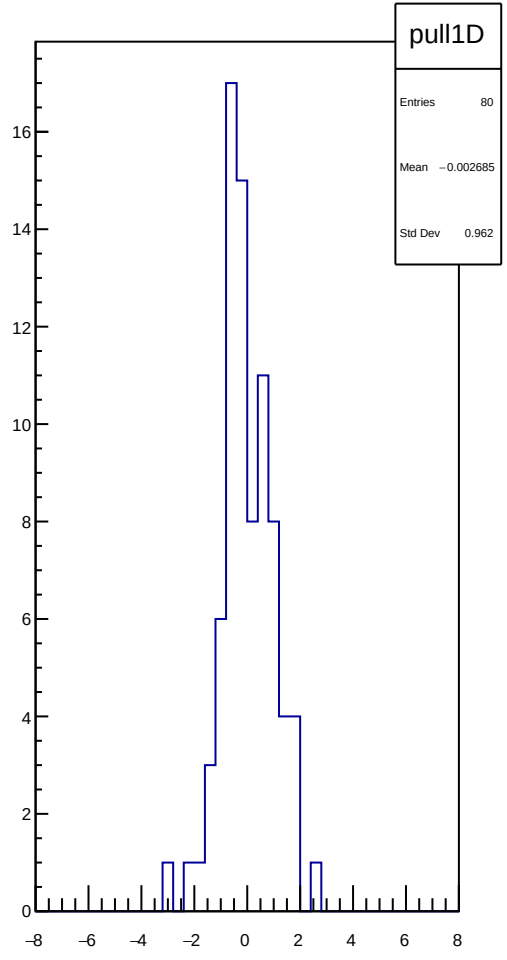

diff_bpm4acX_mean vs run
χ² / ndf 75.67 / 79
p0 −47.25 ± 13.32
pull
Entries 80
Mean 70.89
Std Dev 68.64

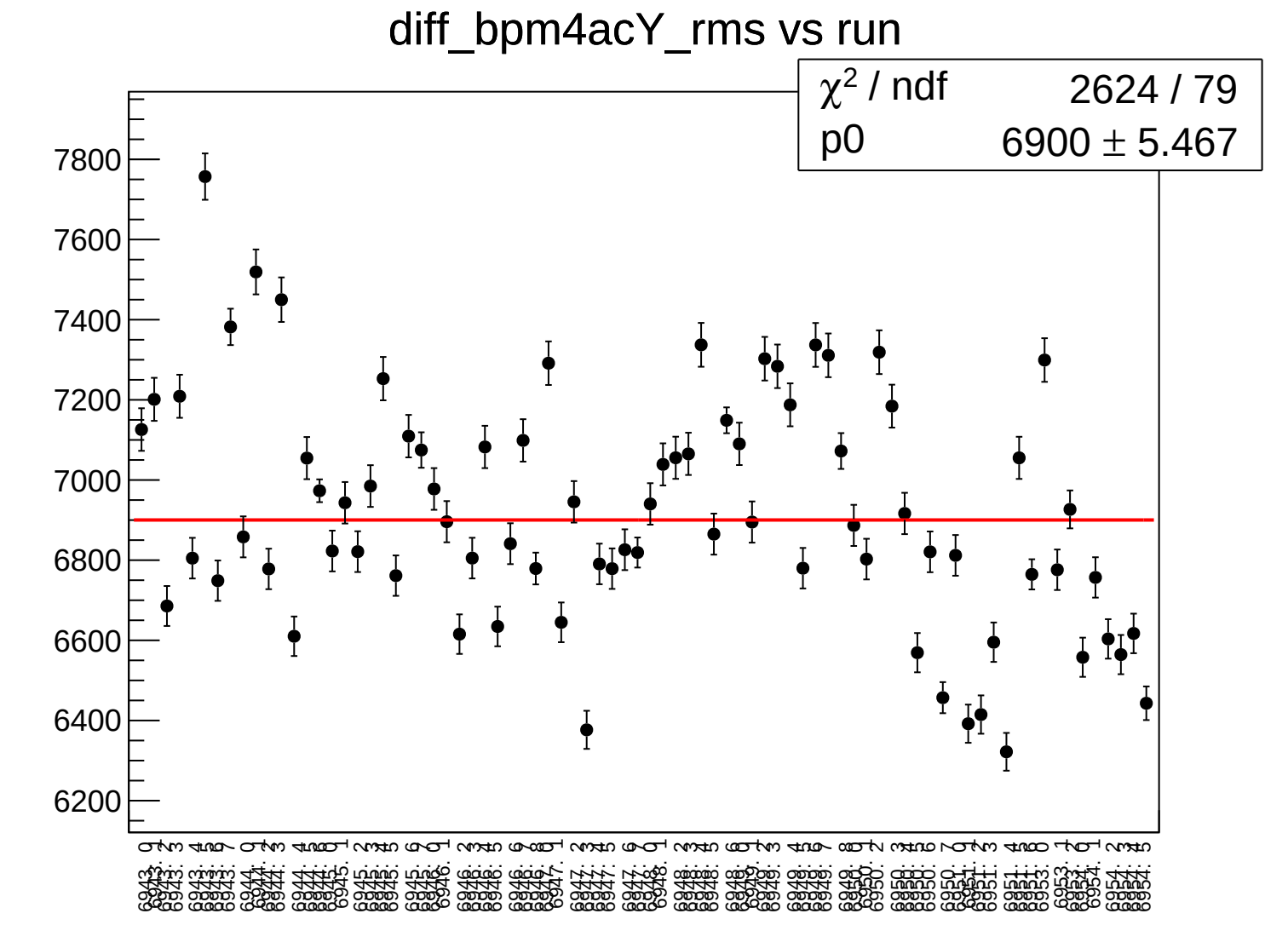

pull1D
Entries 80
Mean −0.02083
Std Dev 0.9724

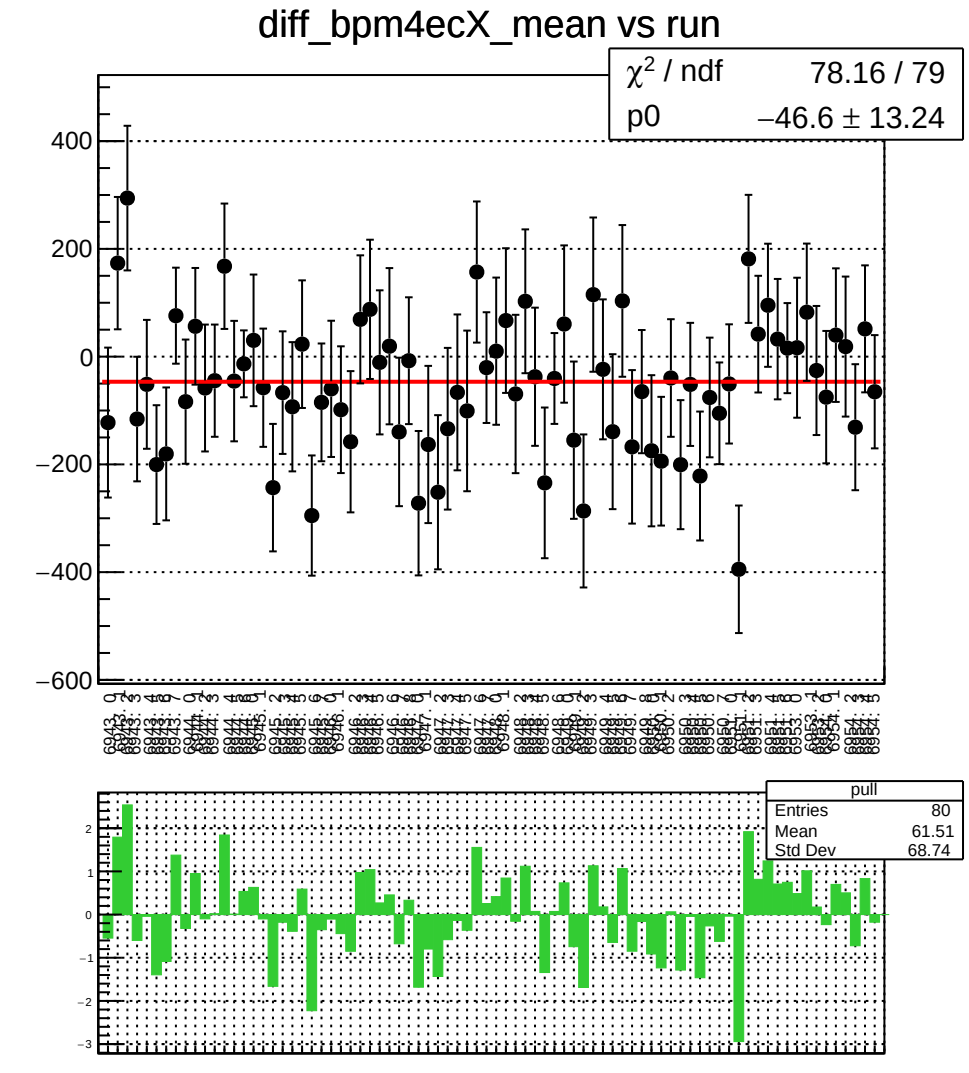
diff_bpm4acX_rms vs run

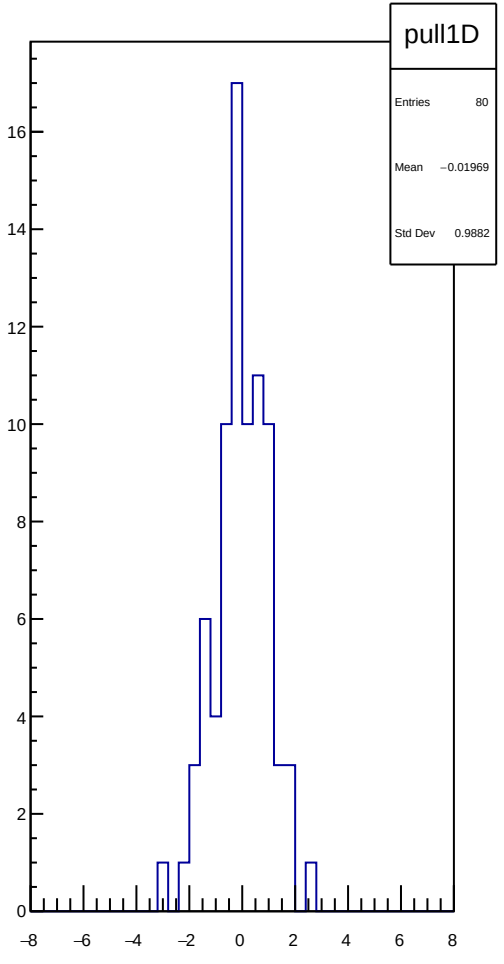


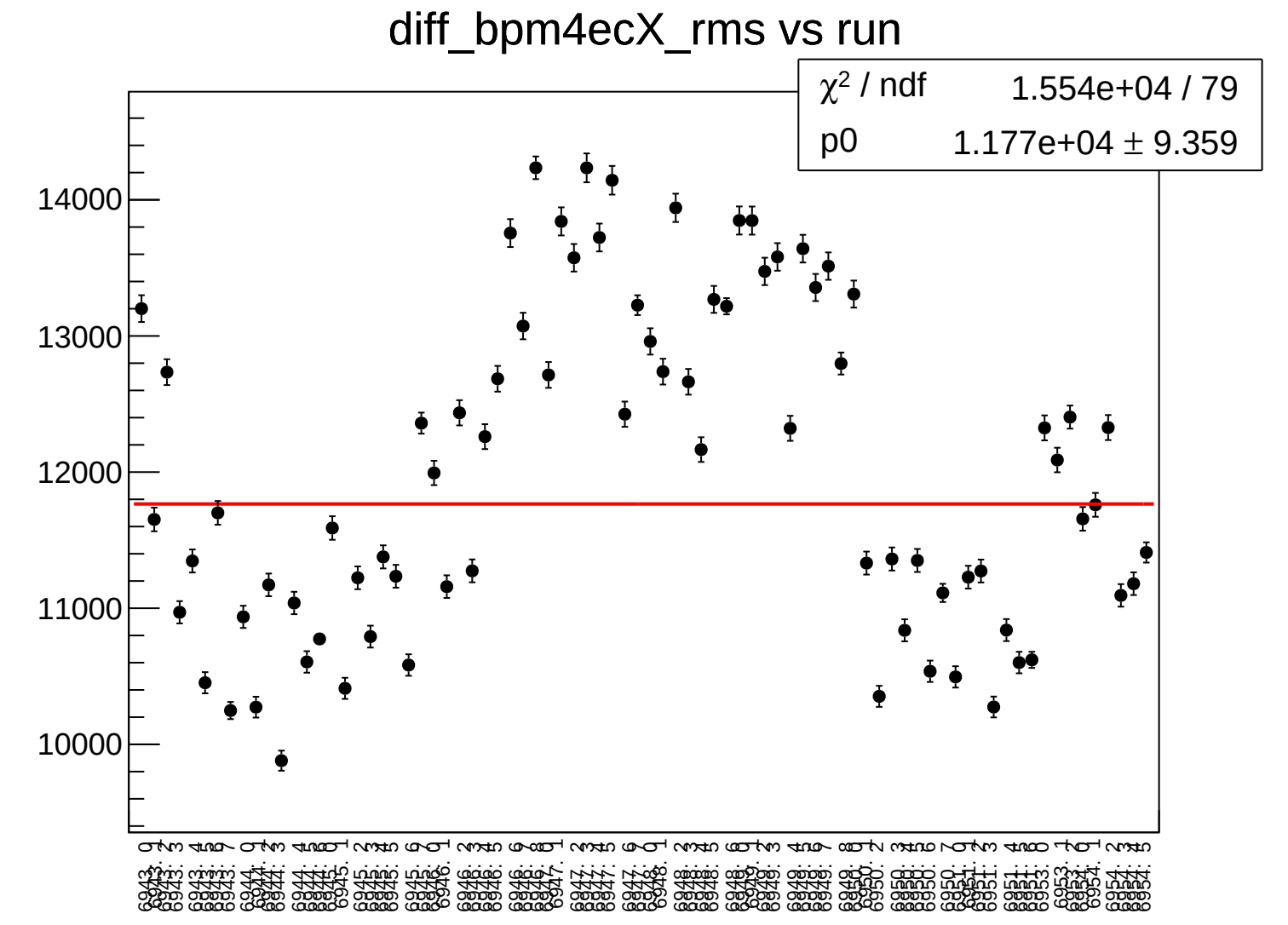

diff_bpm4acY_mean vs run
χ^2 / ndf 74.04 / 79
p0 1.437 ± 7.731
200
100
0
−100
−200
−300
pull
Entries 80
Mean −1355
Std Dev 1393
2
1
0
−1
−2
−3

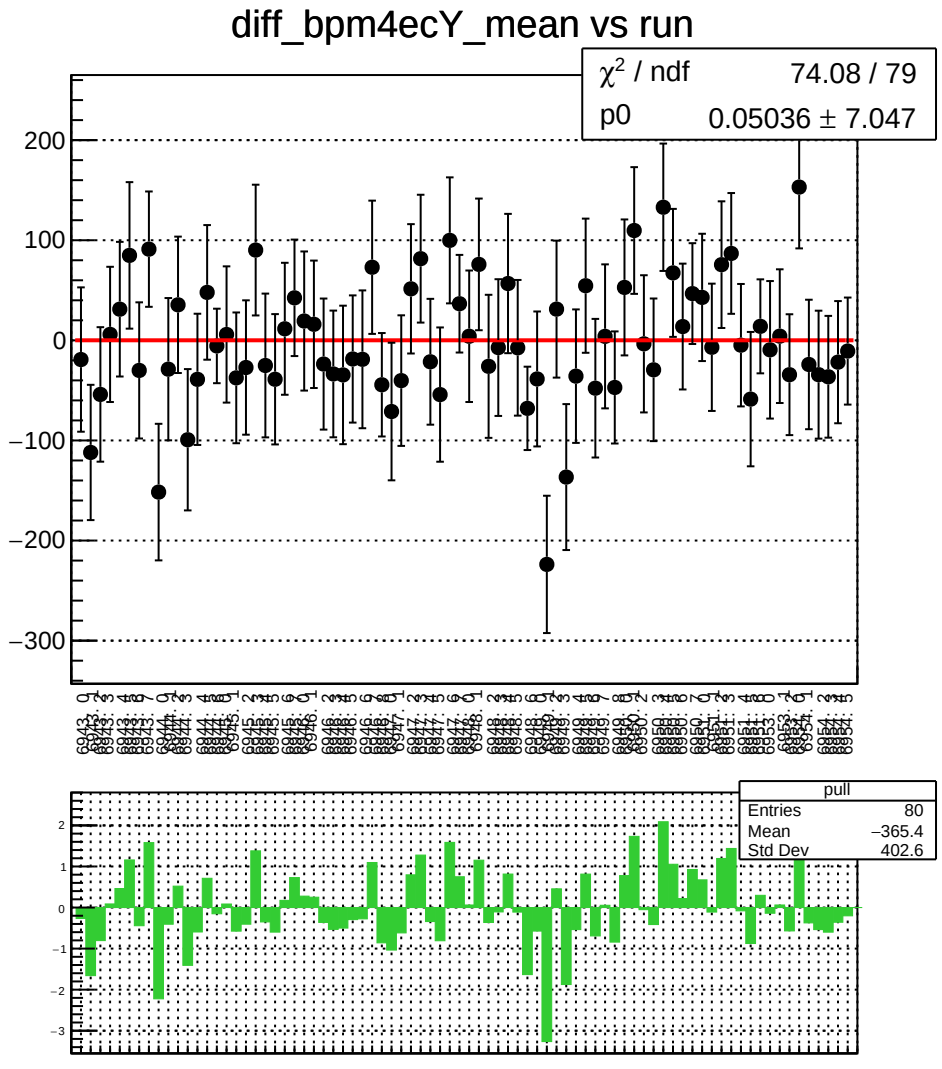

pull1D
Entries 80
Mean −0.002685
Std Dev 0.962
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

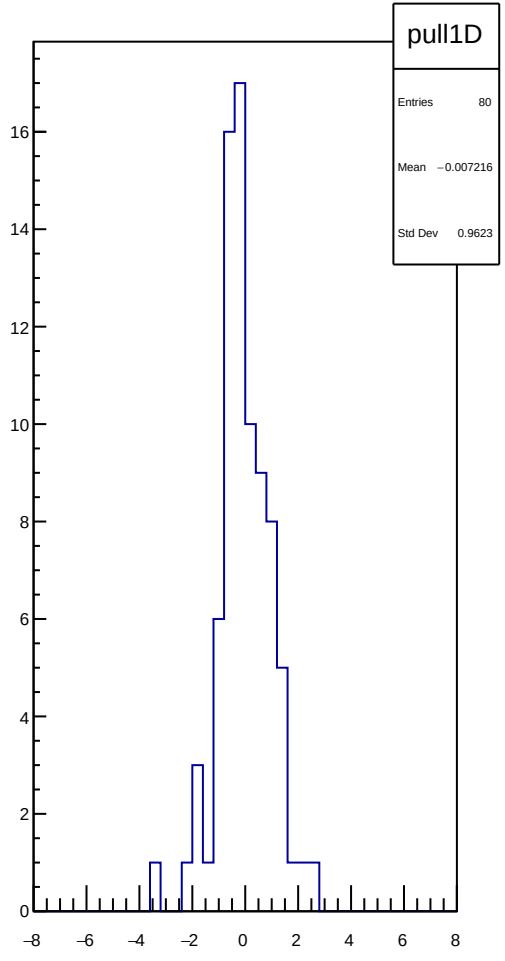

diff_bpm4acY_rms vs run
χ² / ndf 2624 / 79
p0 6900 ± 5.467
7800
7600
7400
7200
7000
6800
6600
6400
6200

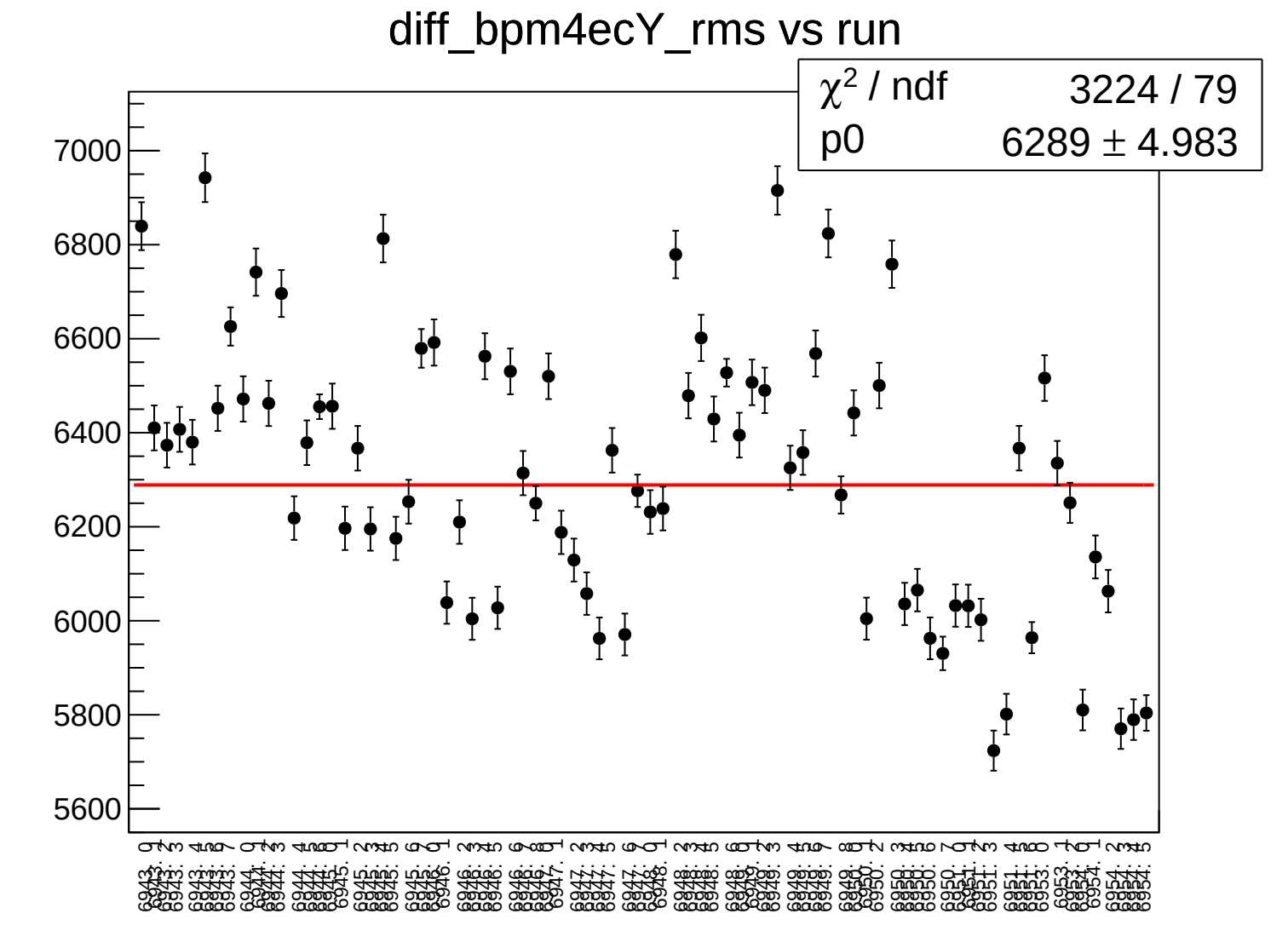

diff_bpm4ecX_mean vs run
χ² / ndf 78.16 / 79
p0 −46.6 ± 13.24
pull
Entries 80
Mean 61.51
Std Dev 68.74

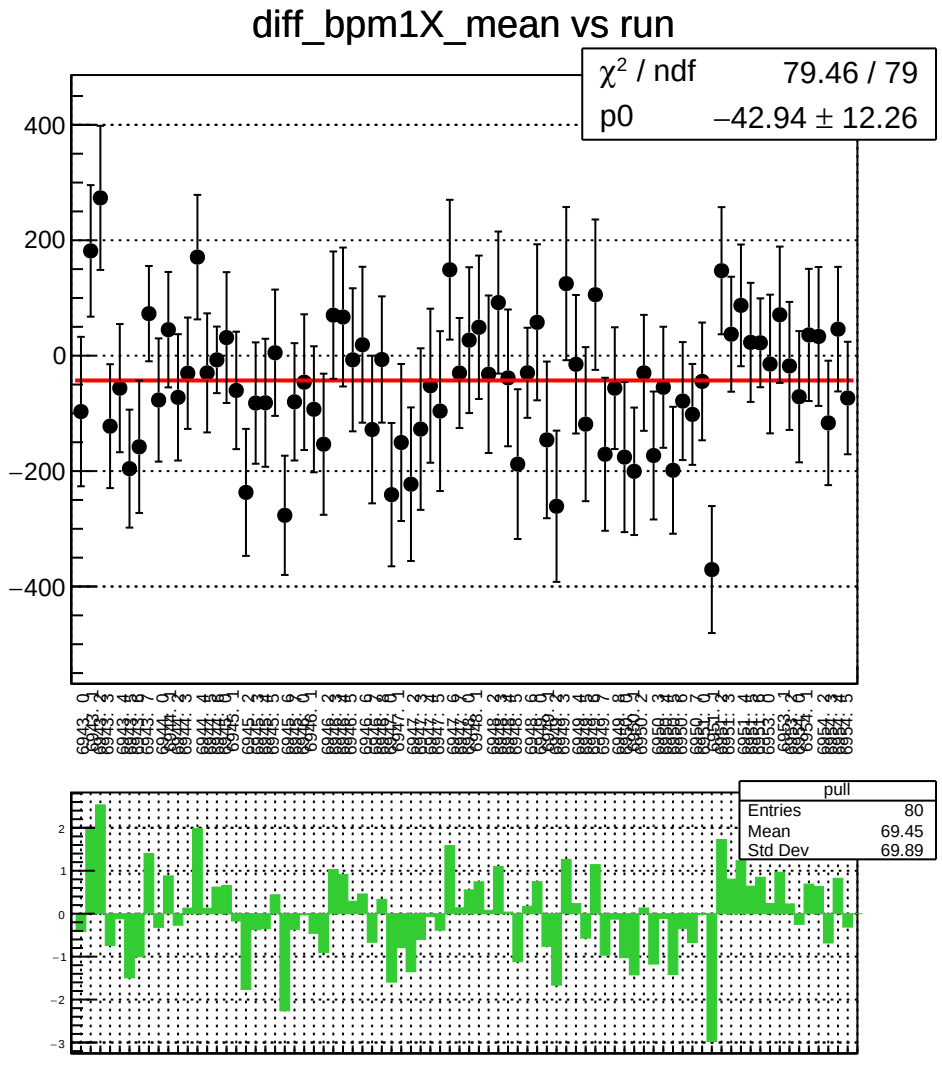

pull1D
Entries 80
Mean −0.01969
Std Dev 0.9882

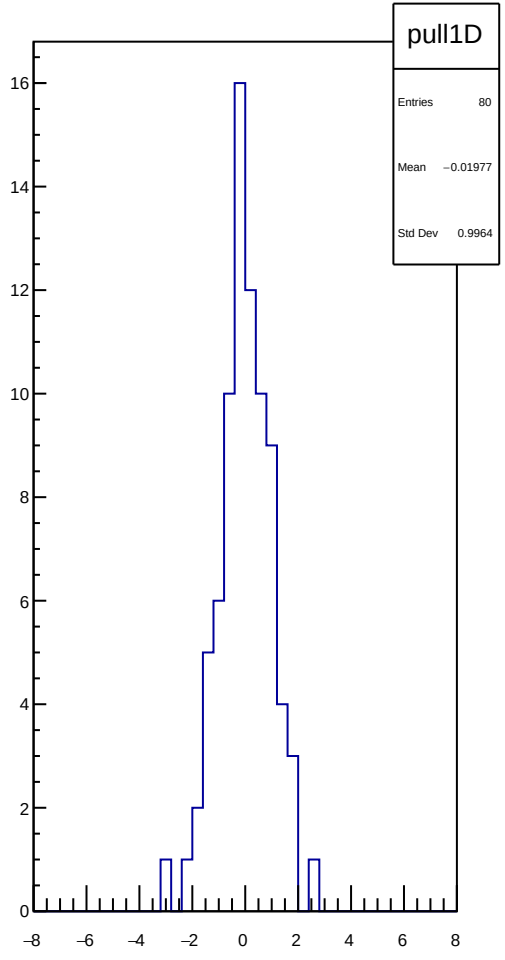

diff_bpm4ecX_rms vs run
χ² / ndf 1.554e+04 / 79
p0 1.177e+04 ± 9.359
14000
13000
12000
11000
10000

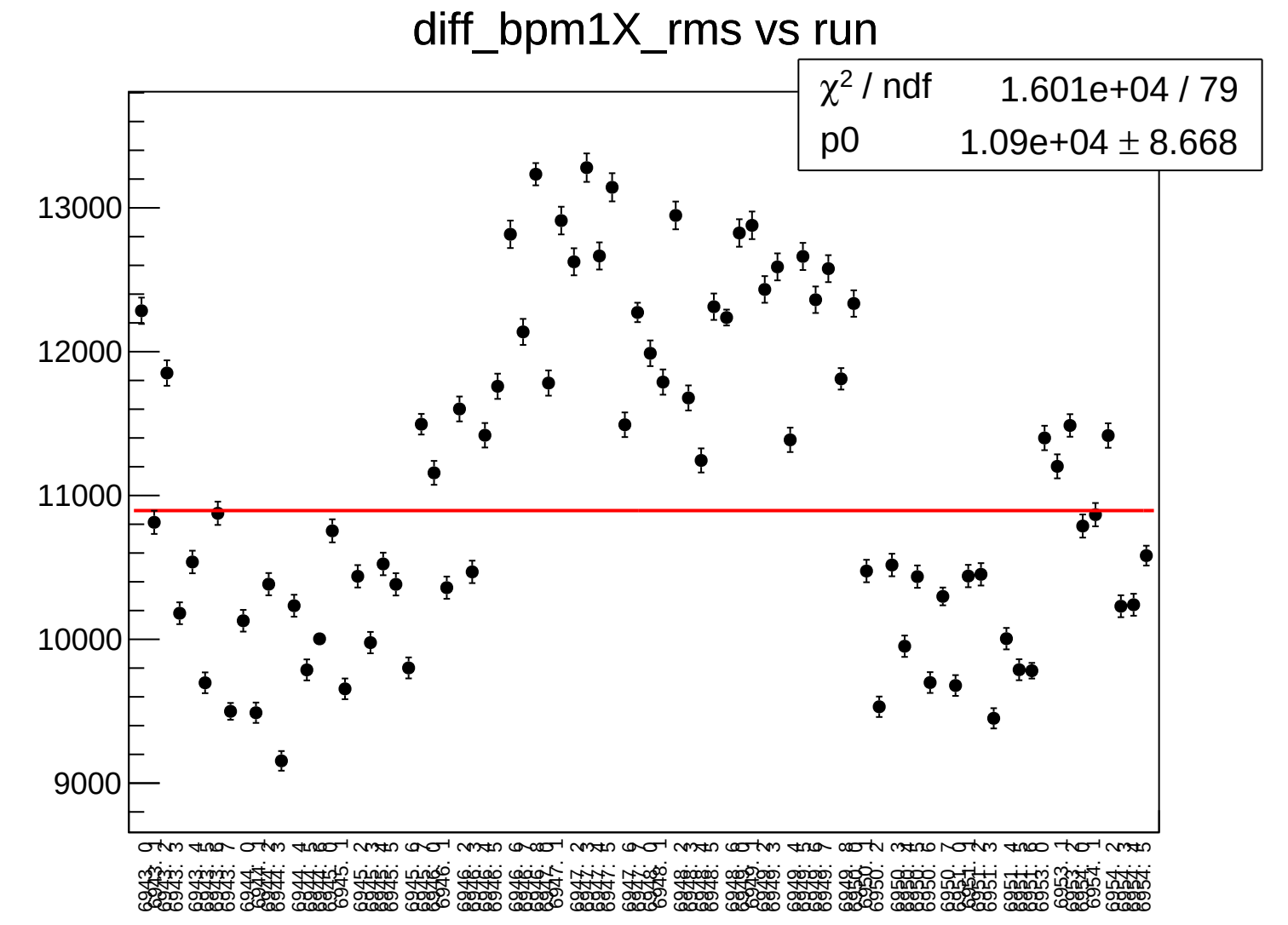

diff_bpm4ecY_mean vs run
χ² / ndf 74.08 / 79
p0 0.05036 ± 7.047
200
100
0
−100
−200
−300
pull
Entries 80
Mean −365.4
Std Dev 402.6
2
1
0
−1
−2
−3

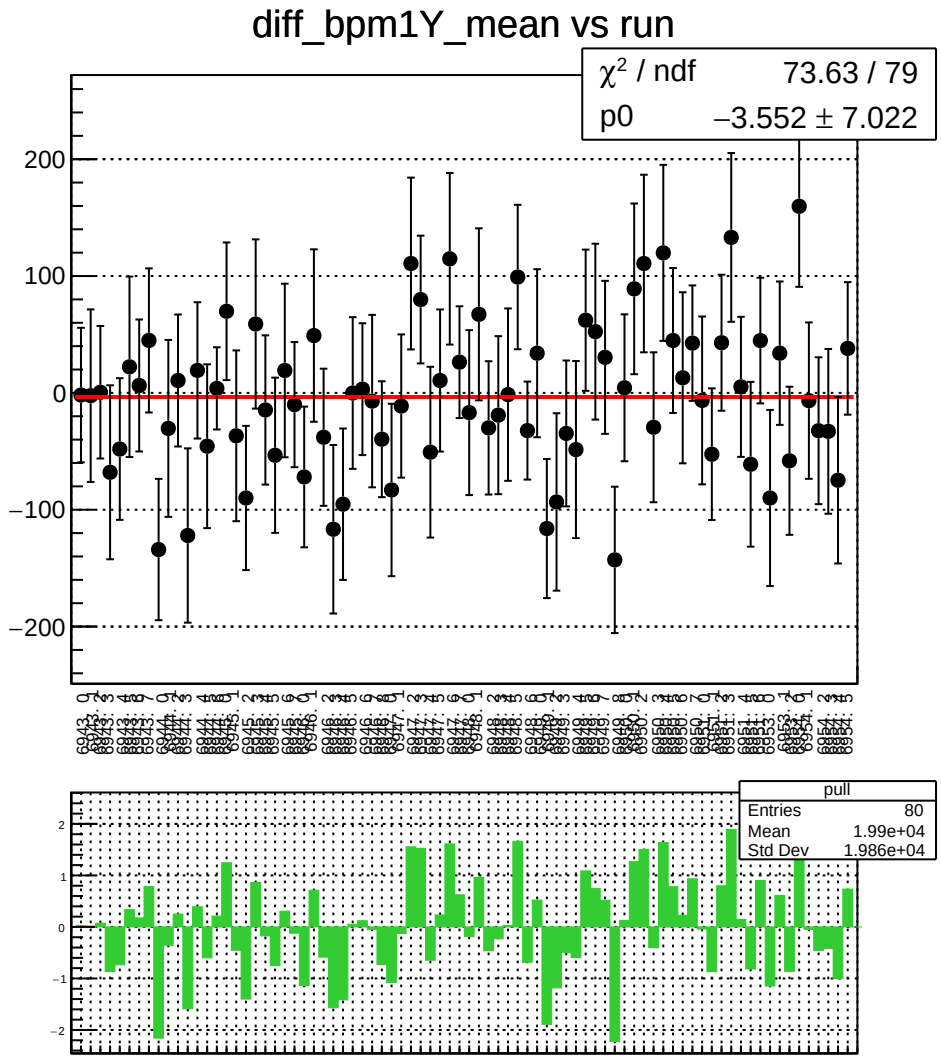

pull1D
Entries 80
Mean −0.007216
Std Dev 0.9623
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

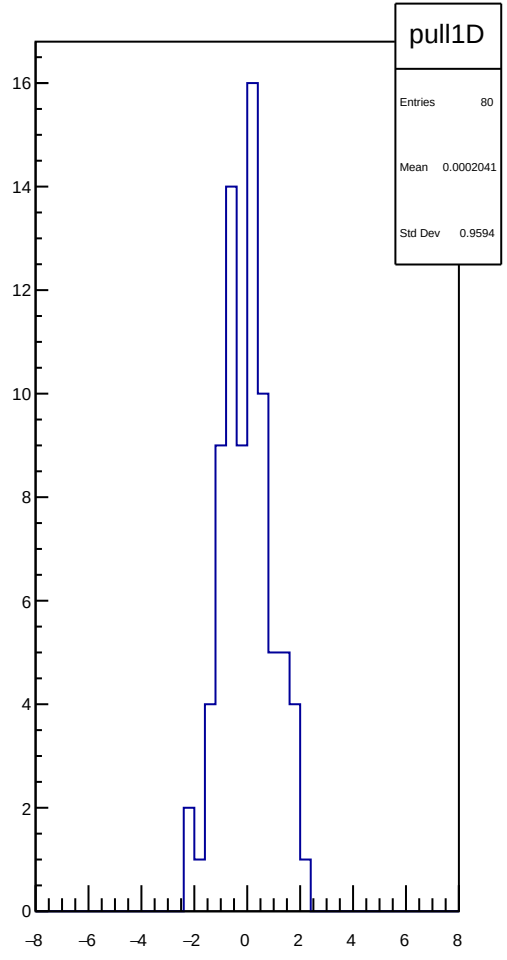

diff_bpm4ecY_rms vs run
χ² / ndf 3224 / 79
p0 6289 ± 4.983
7000
6800
6600
6400
6200
6000
5800
5600

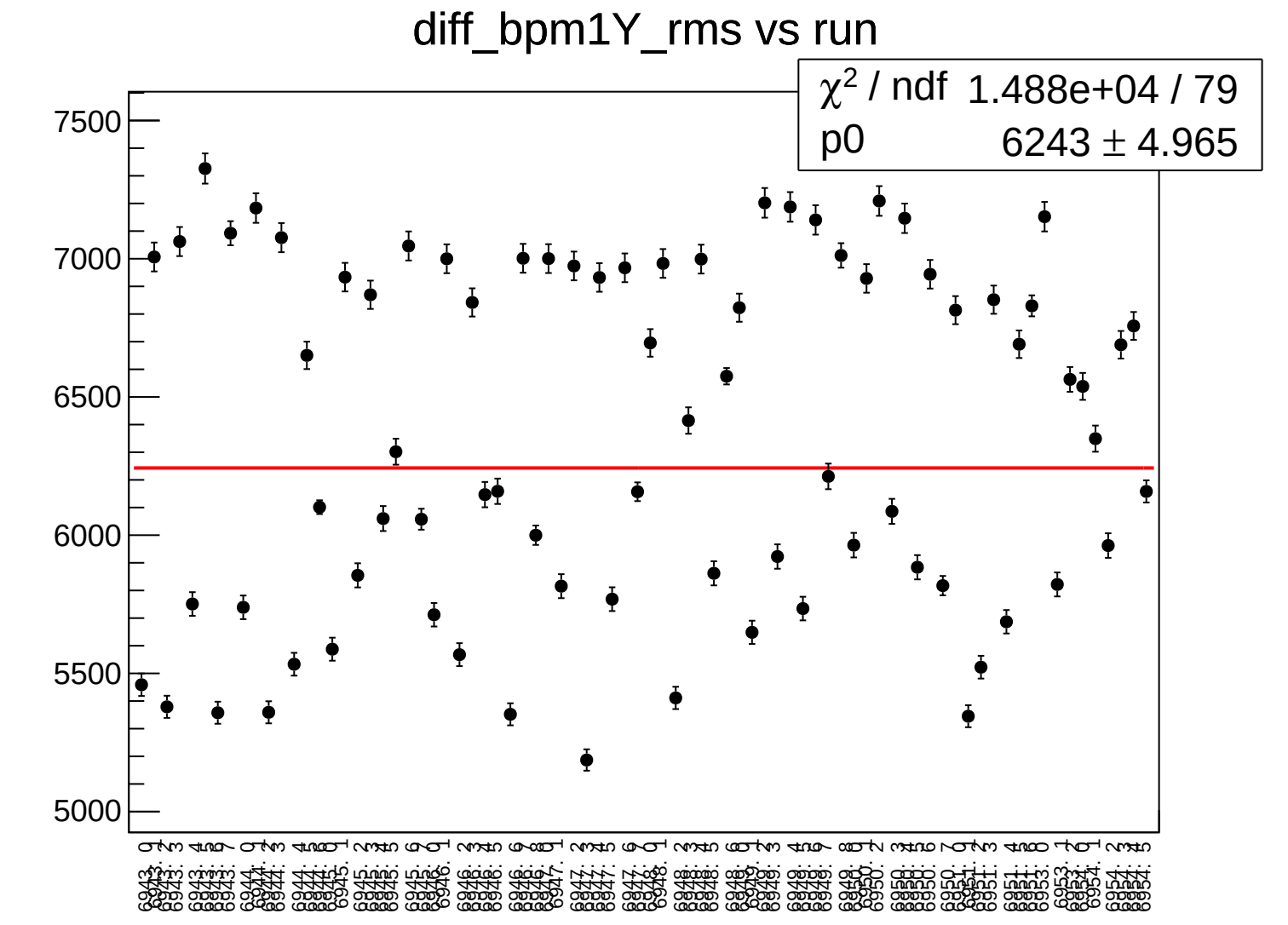

diff_bpm1X_mean vs run
χ² / ndf 79.46 / 79
p0 −42.94 ± 12.26
400
200
0
−200
−400
pull
Entries 80
Mean 69.45
Std Dev 69.89
2
1
0
−1
−2
−3

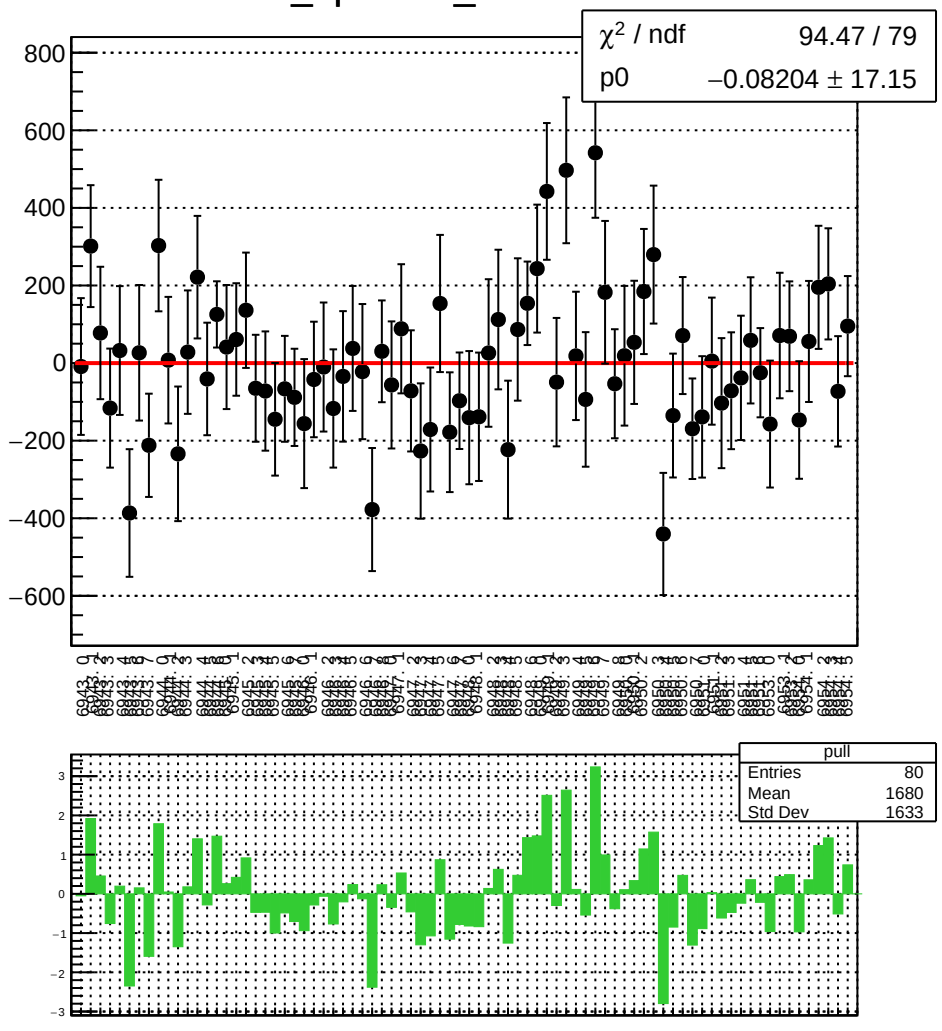

pull1D
Entries 80
Mean −0.01977
Std Dev 0.9964
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

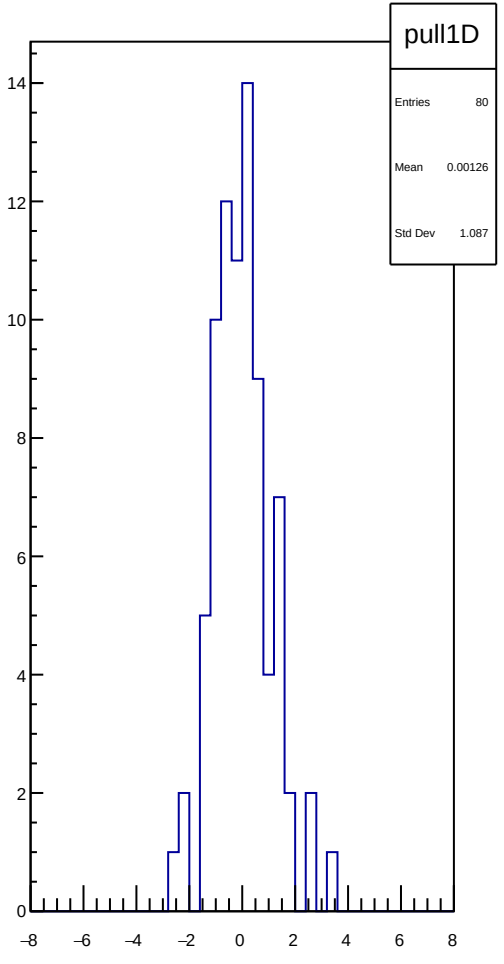

diff_bpm1X_rms vs run
χ² / ndf 1.601e+04 / 79
p0 1.09e+04 ± 8.668
13000
12000
11000
10000
9000

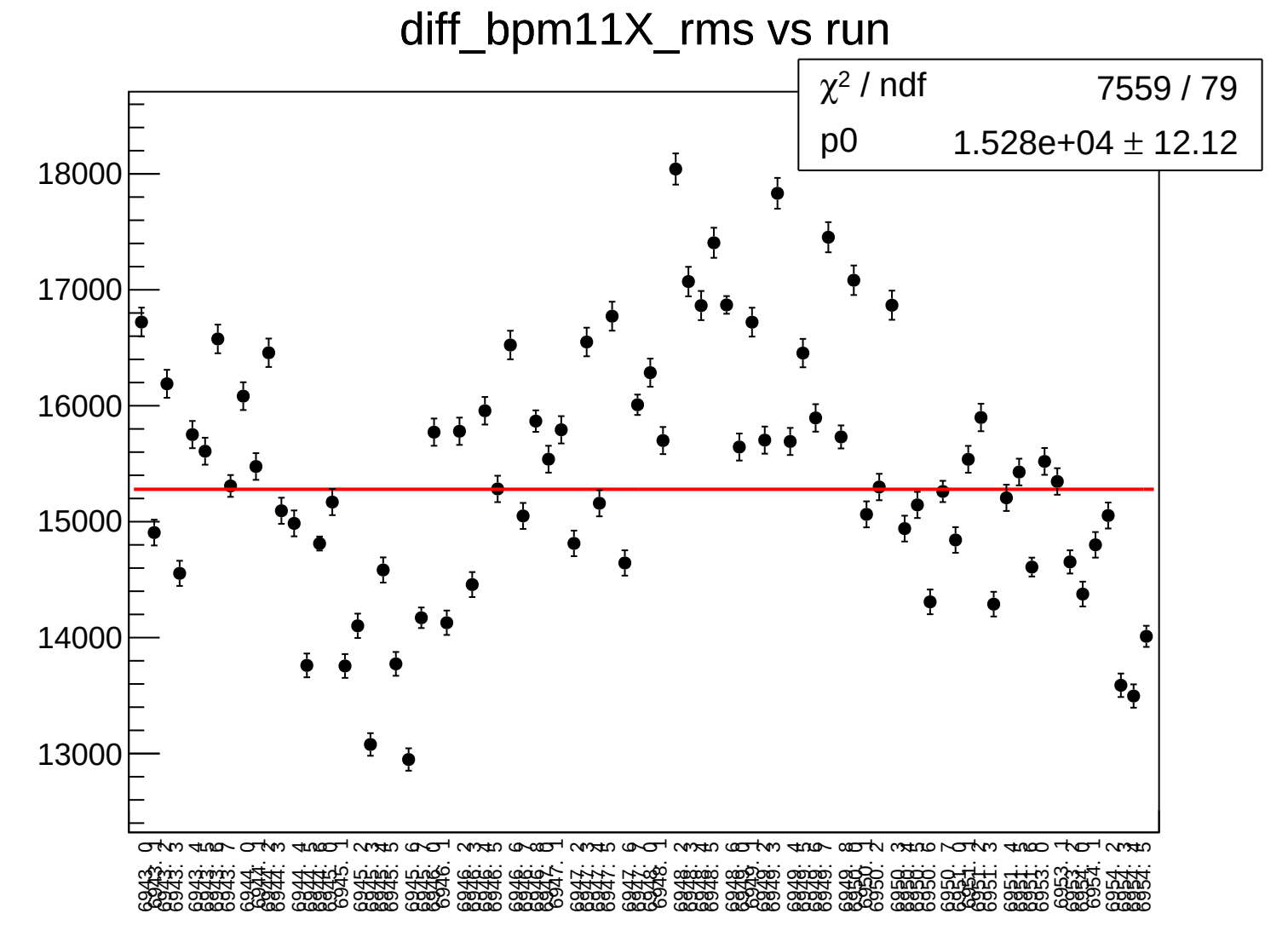

diff_bpm1Y_mean vs run
χ² / ndf 73.63 / 79
p0 −3.552 ± 7.022
200
100
0
−100
−200
pull
Entries 80
Mean 1.99e+04
Std Dev 1.986e+04
2
1
0
−1
−2

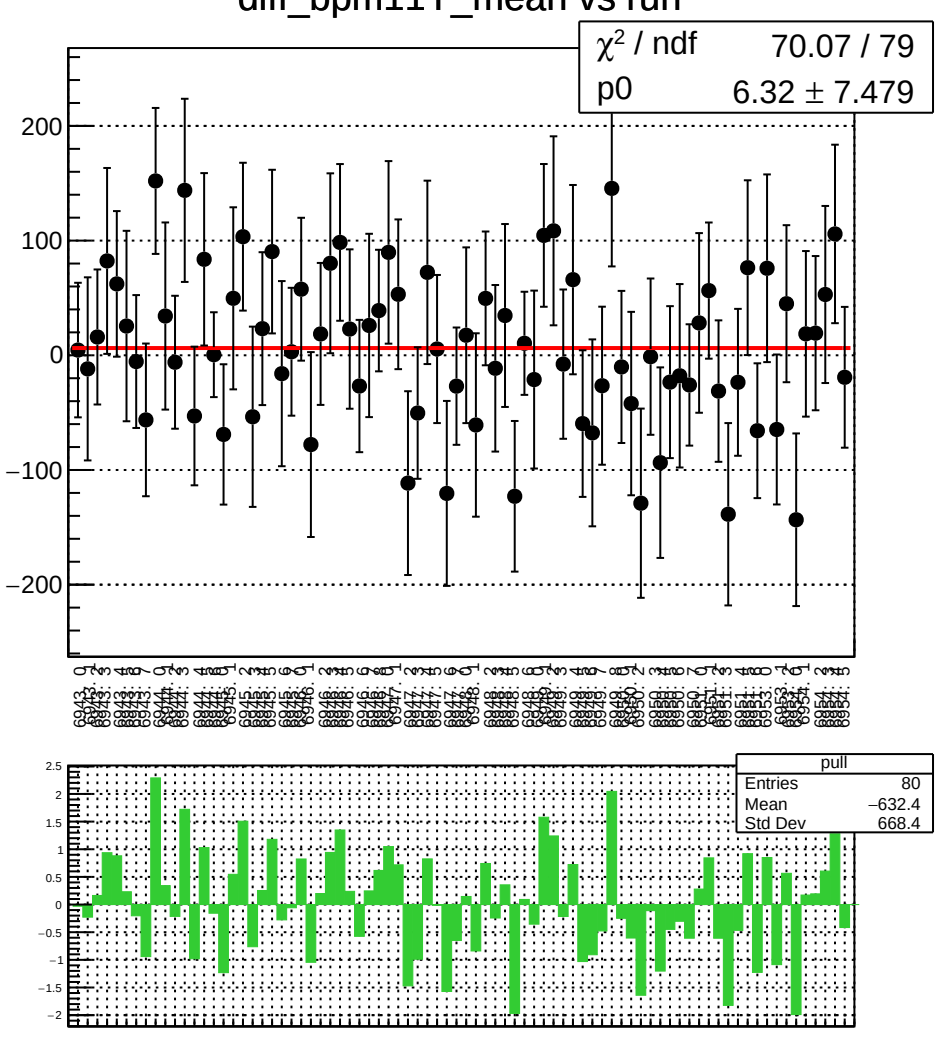

pull1D
Entries 80
Mean 0.0002041
Std Dev 0.9594
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

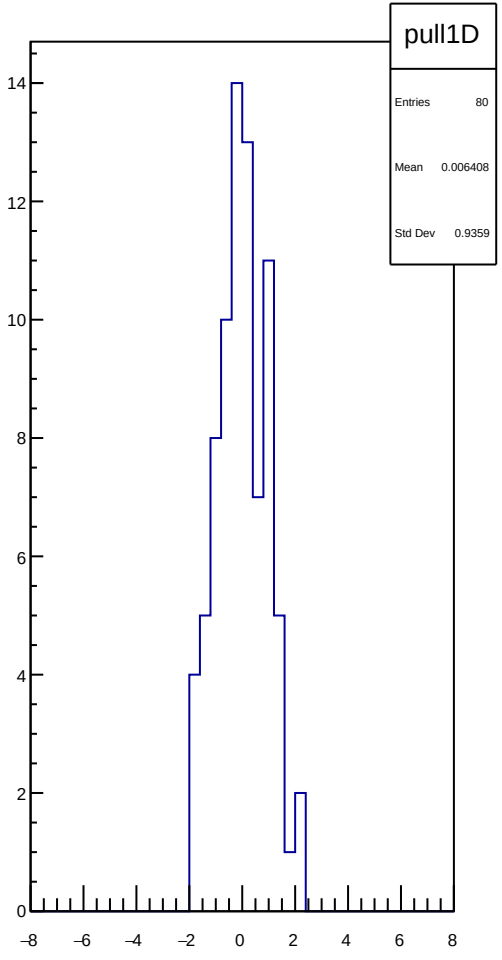

diff_bpm1Y_rms vs run
χ² / ndf 1.488e+04 / 79
p0 6243 ± 4.965
7500
7000
6500
6000
5500
5000

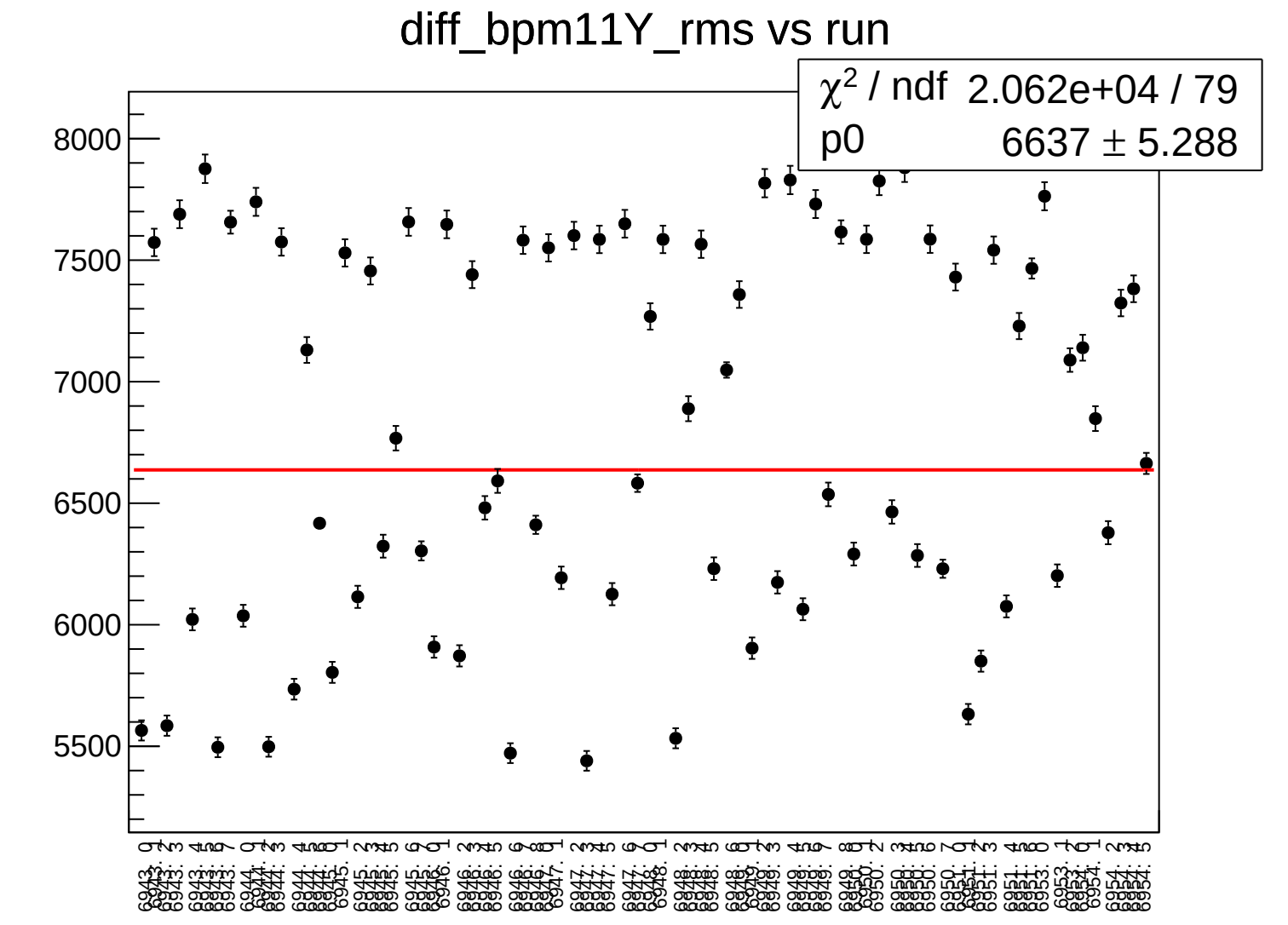

diff_bpm11X_mean vs run
χ² / ndf 94.47 / 79
p0 −0.08204 ± 17.15
pull
Entries 80
Mean 1680
Std Dev 1633

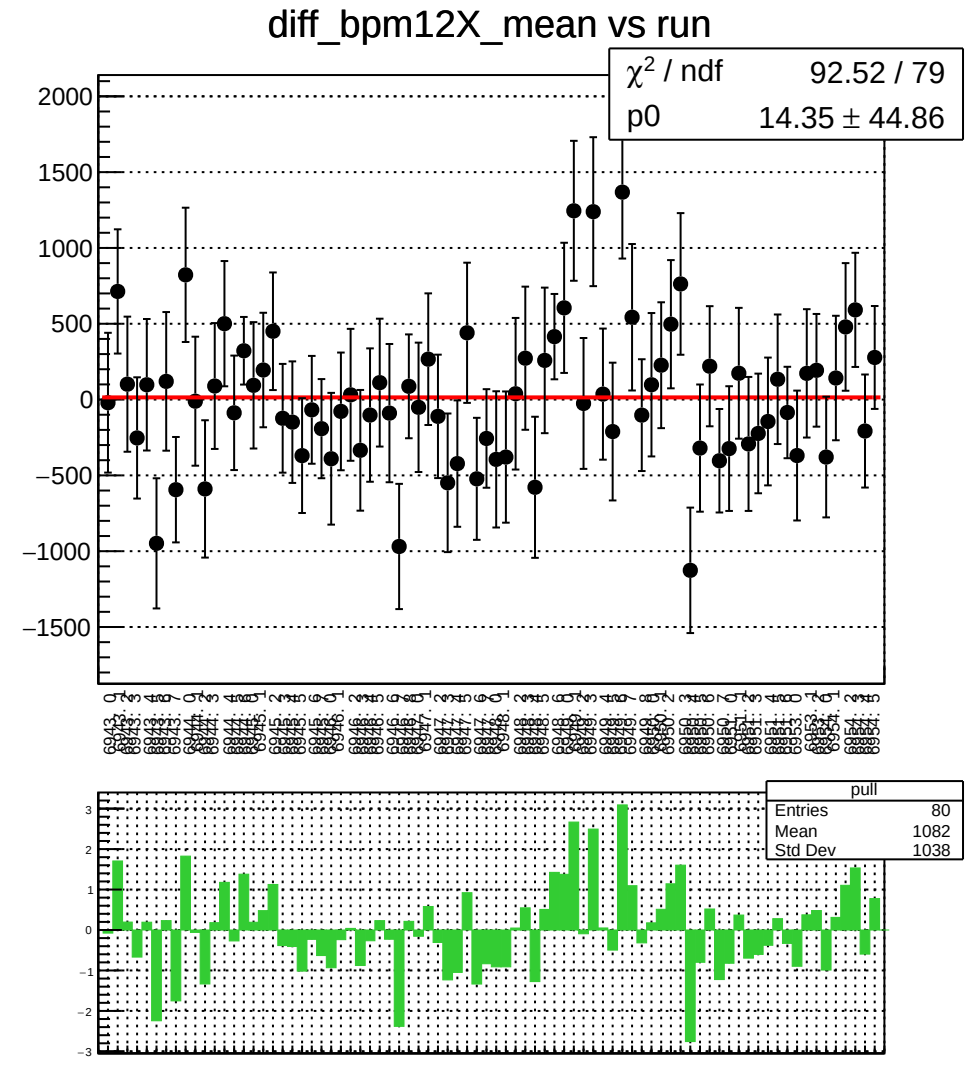

pull1D
Entries 80
Mean 0.00126
Std Dev 1.087

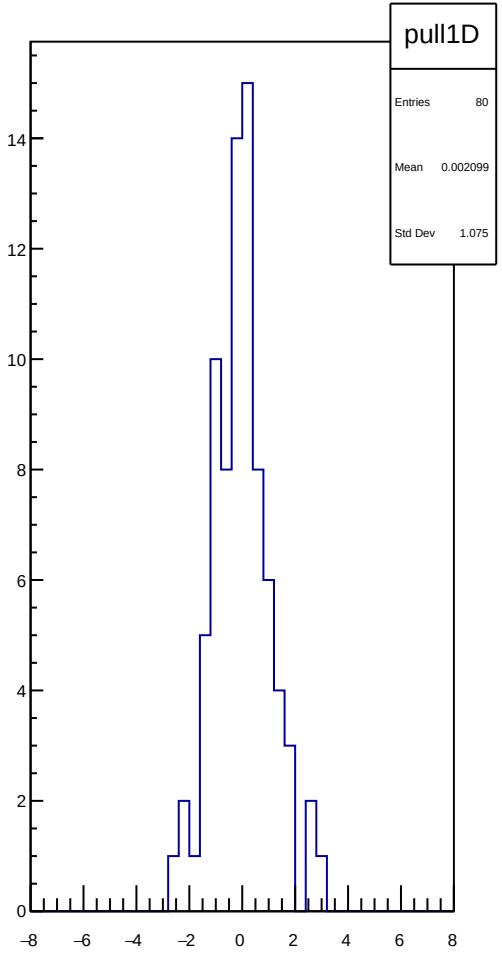

diff_bpm11X_rms vs run
χ² / ndf 7559 / 79
p0 1.528e+04 ± 12.12
18000
17000
16000
15000
14000
13000

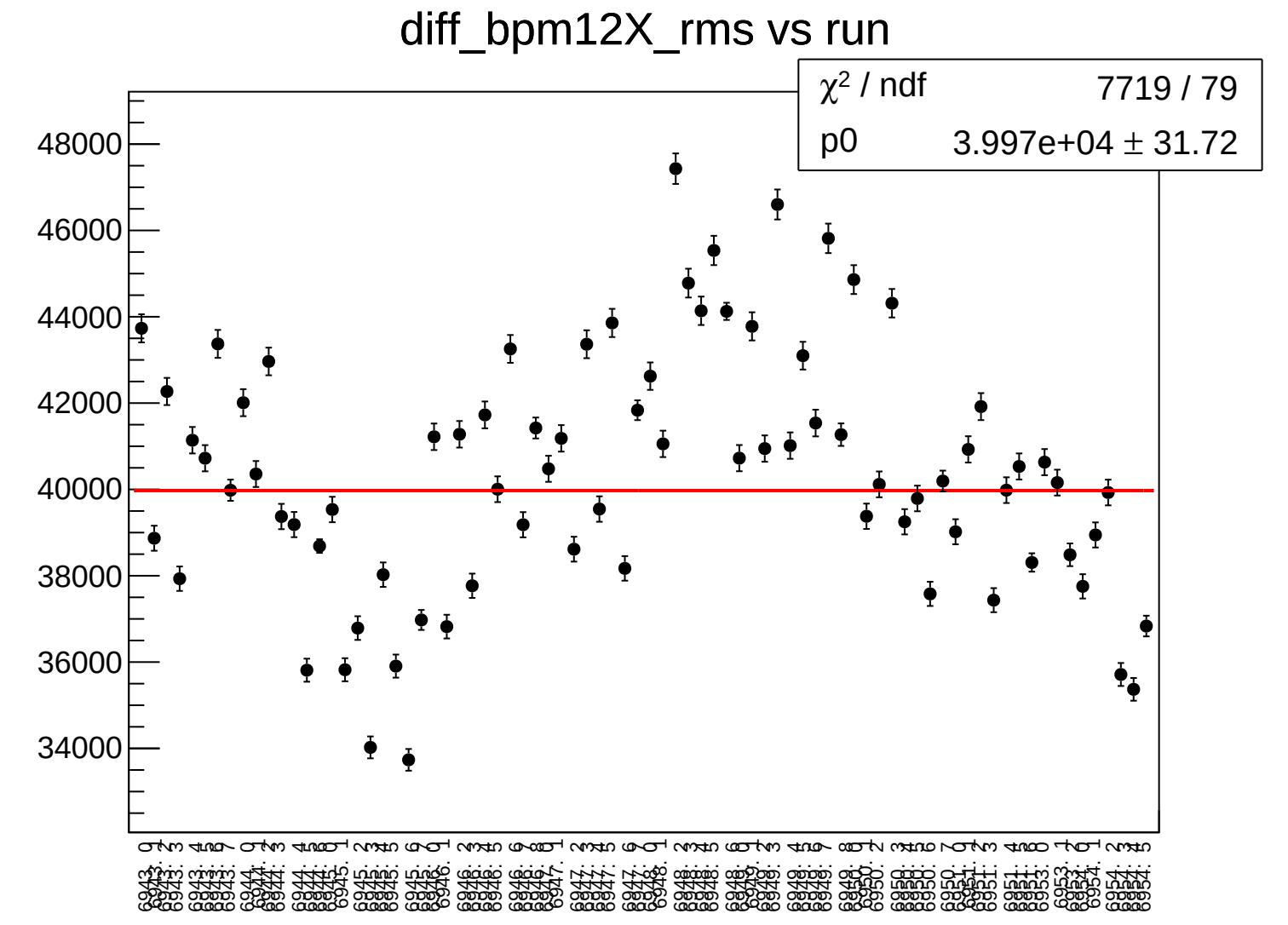

diff_bpm11Y_mean vs run
χ^2 / ndf 70.07 / 79
p0 6.32 ± 7.479
pull
Entries 80
Mean −632.4
Std Dev 668.4

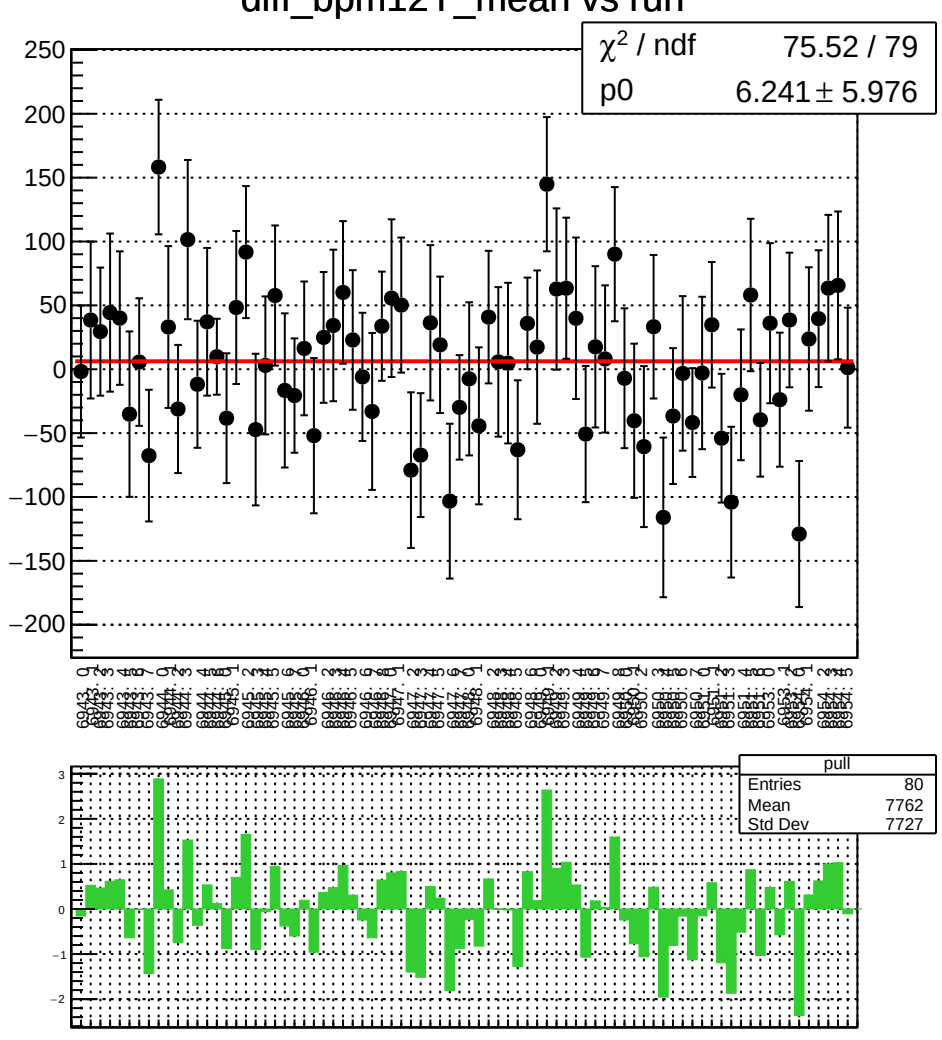

pull1D
Entries 80
Mean 0.006408
Std Dev 0.9359

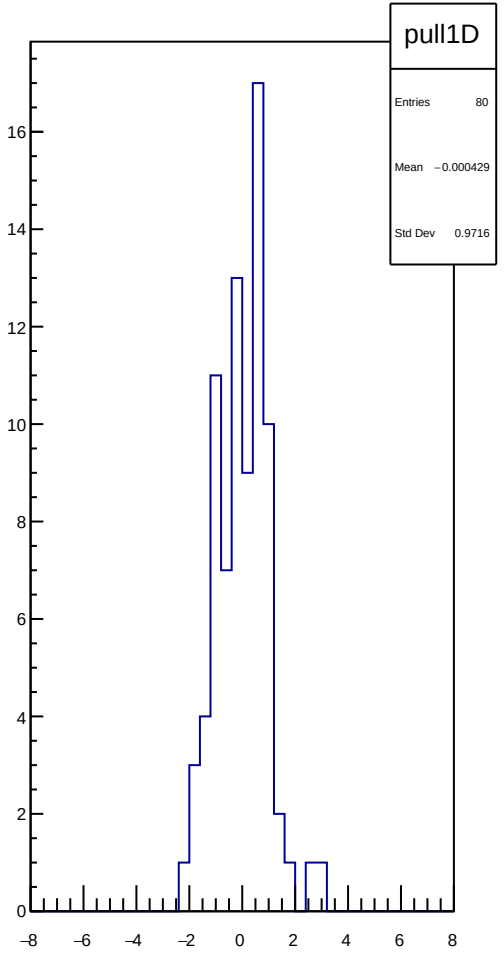

diff_bpm11Y_rms vs run
χ² / ndf 2.062e+04 / 79
p0 6637 ± 5.288
8000
7500
7000
6500
6000
5500

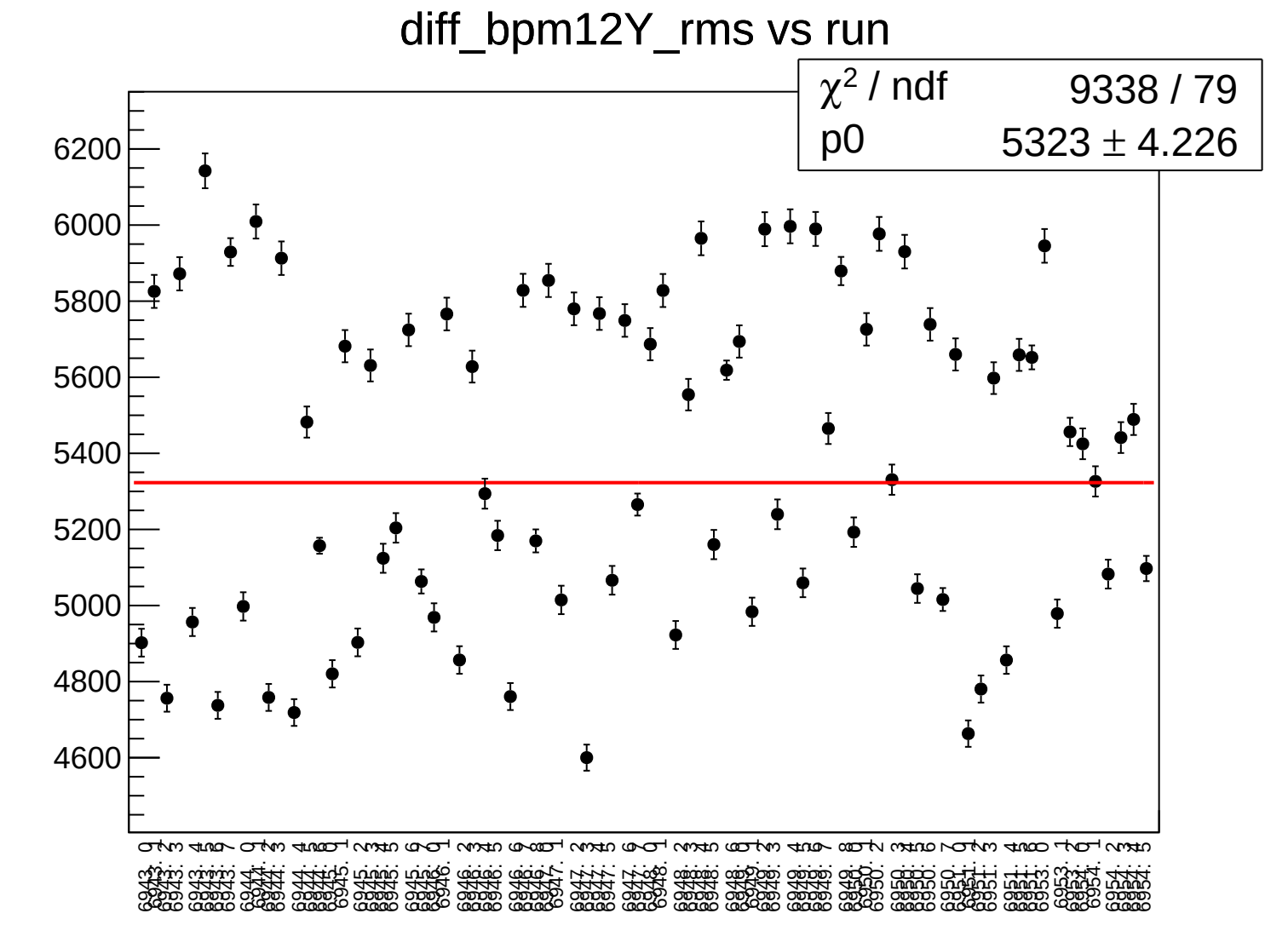

diff_bpm12X_mean vs run
χ^2 / ndf 92.52 / 79
p0 14.35 ± 44.86
pull
Entries 80
Mean 1082
Std Dev 1038

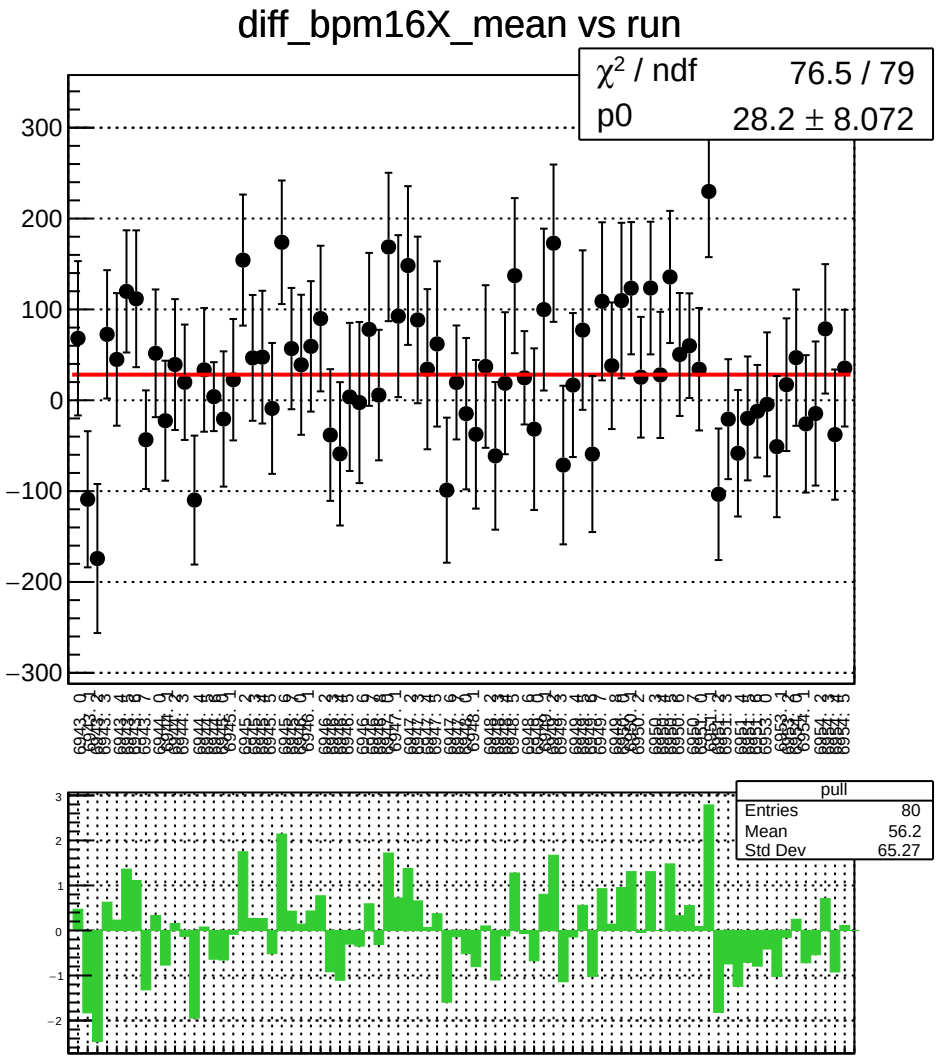

pull1D
Entries 80
Mean 0.002099
Std Dev 1.075

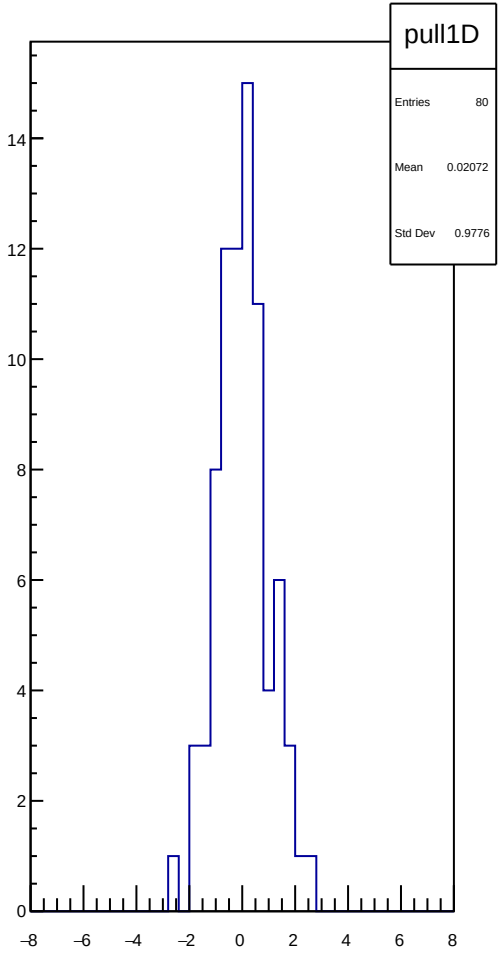

diff_bpm12X_rms vs run
χ² / ndf 7719 / 79
p0 3.997e+04 ± 31.72
48000
46000
44000
42000
40000
38000
36000
34000

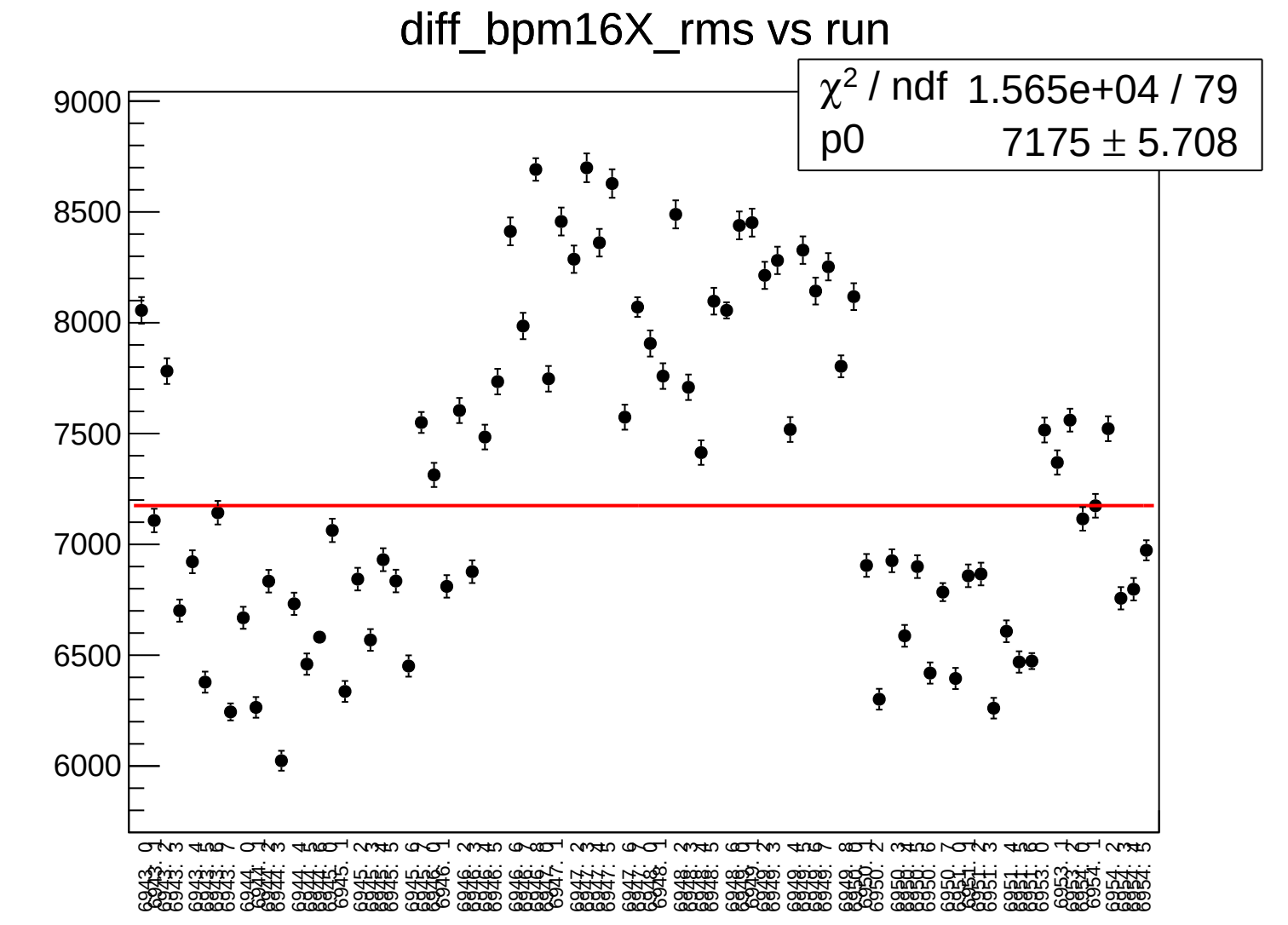

diff_bpm12Y_mean vs run
χ^2 / ndf 75.52 / 79
p0 6.241 ± 5.976
pull
Entries 80
Mean 7762
Std Dev 7727

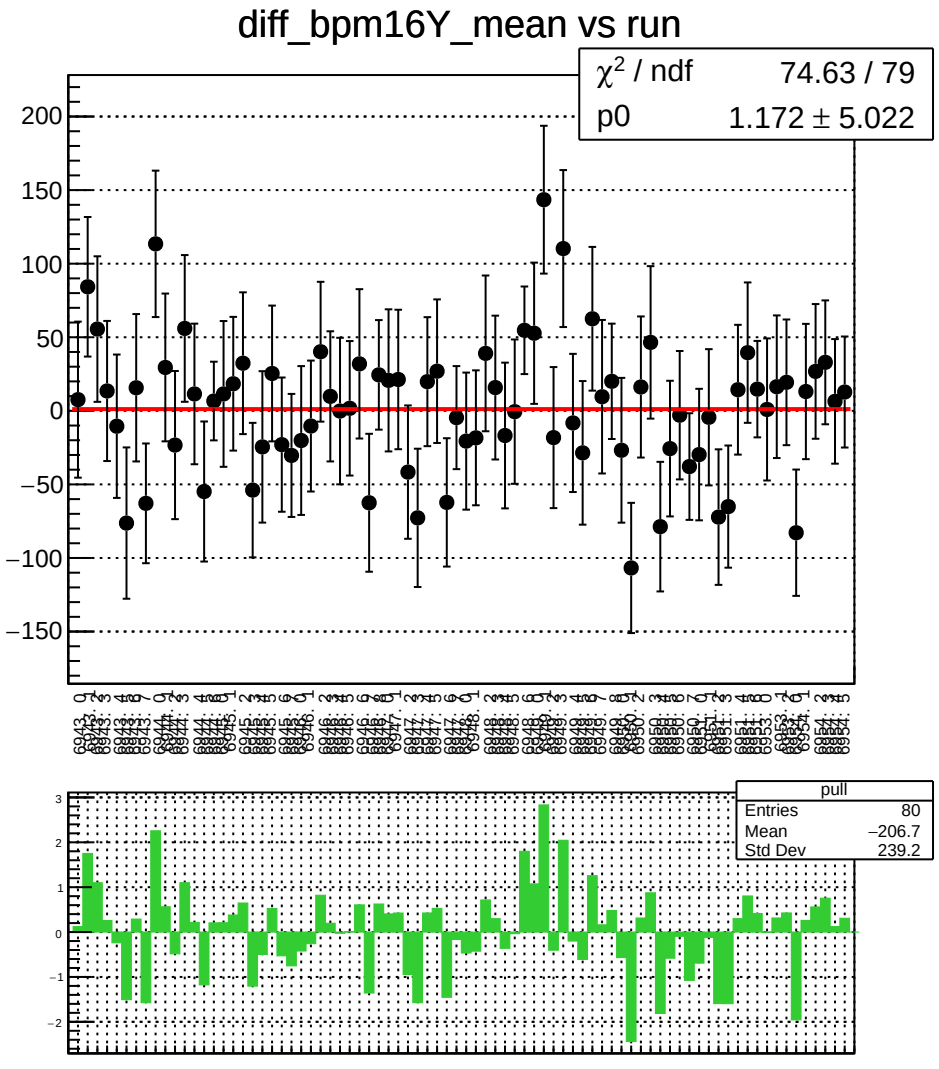

pull1D
Entries 80
Mean −0.000429
Std Dev 0.9716

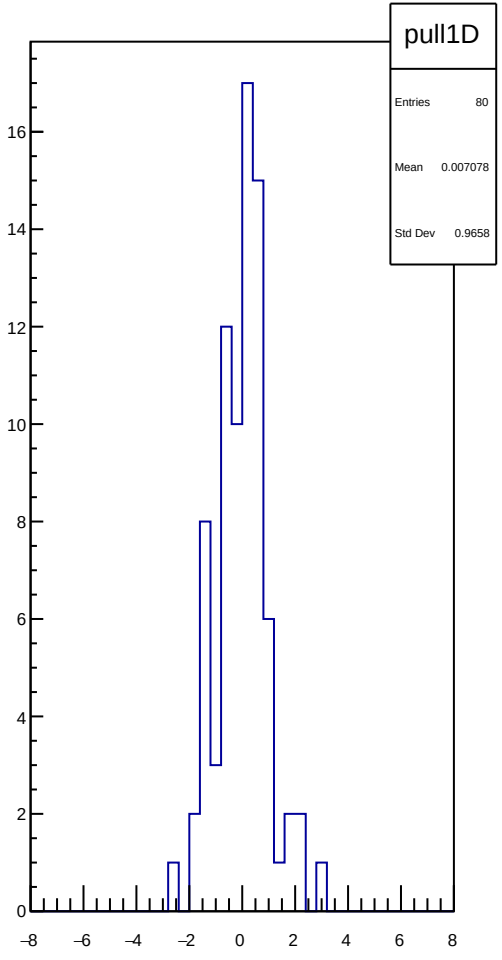

diff_bpm12Y_rms vs run
χ^2 / ndf 9338 / 79
p0 5323 ± 4.226
6200
6000
5800
5600
5400
5200
5000
4800
4600

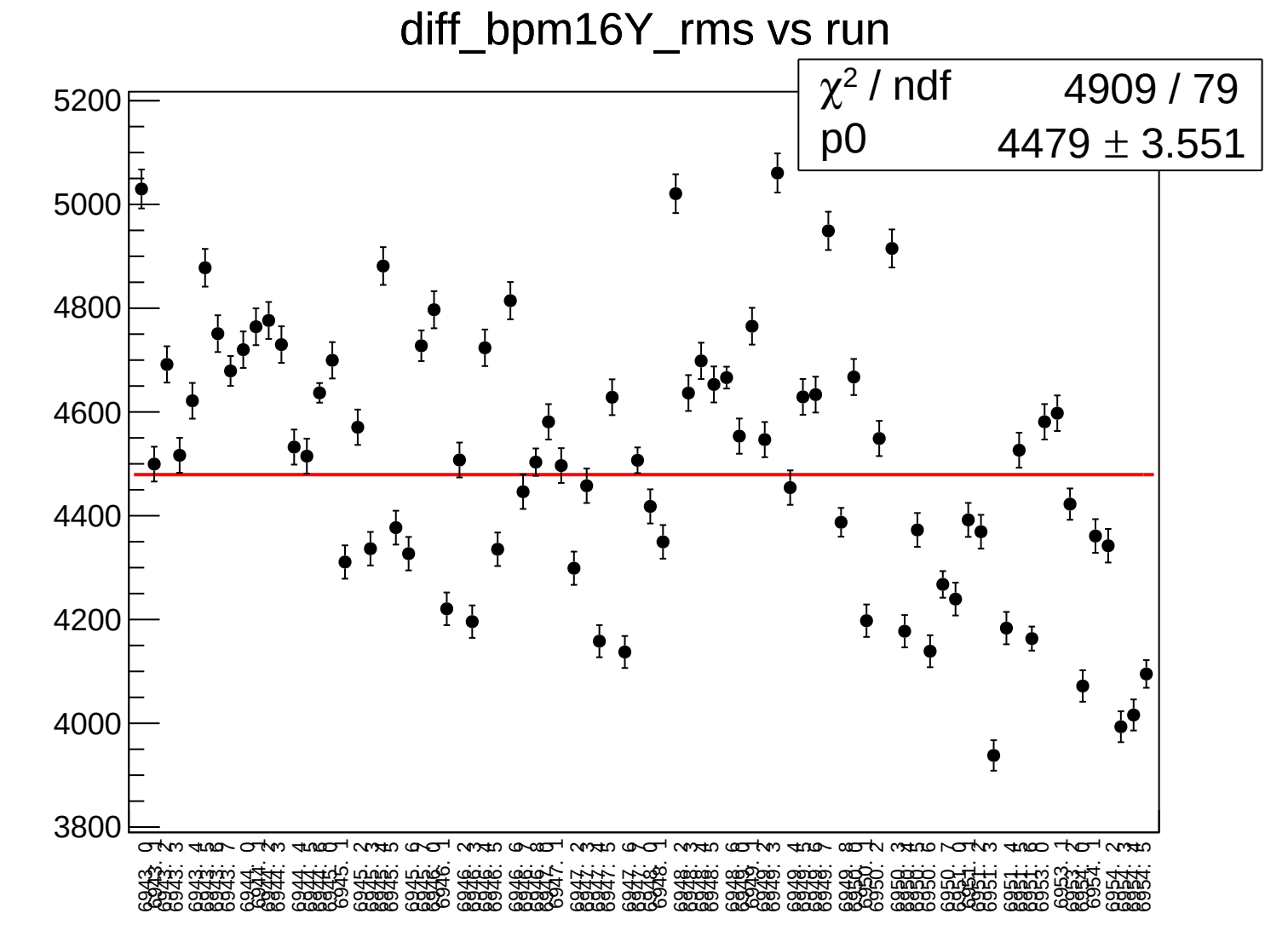

diff_bpm16X_mean vs run
χ² / ndf 76.5 / 79
p0 28.2 ± 8.072
pull
Entries 80
Mean 56.2
Std Dev 65.27

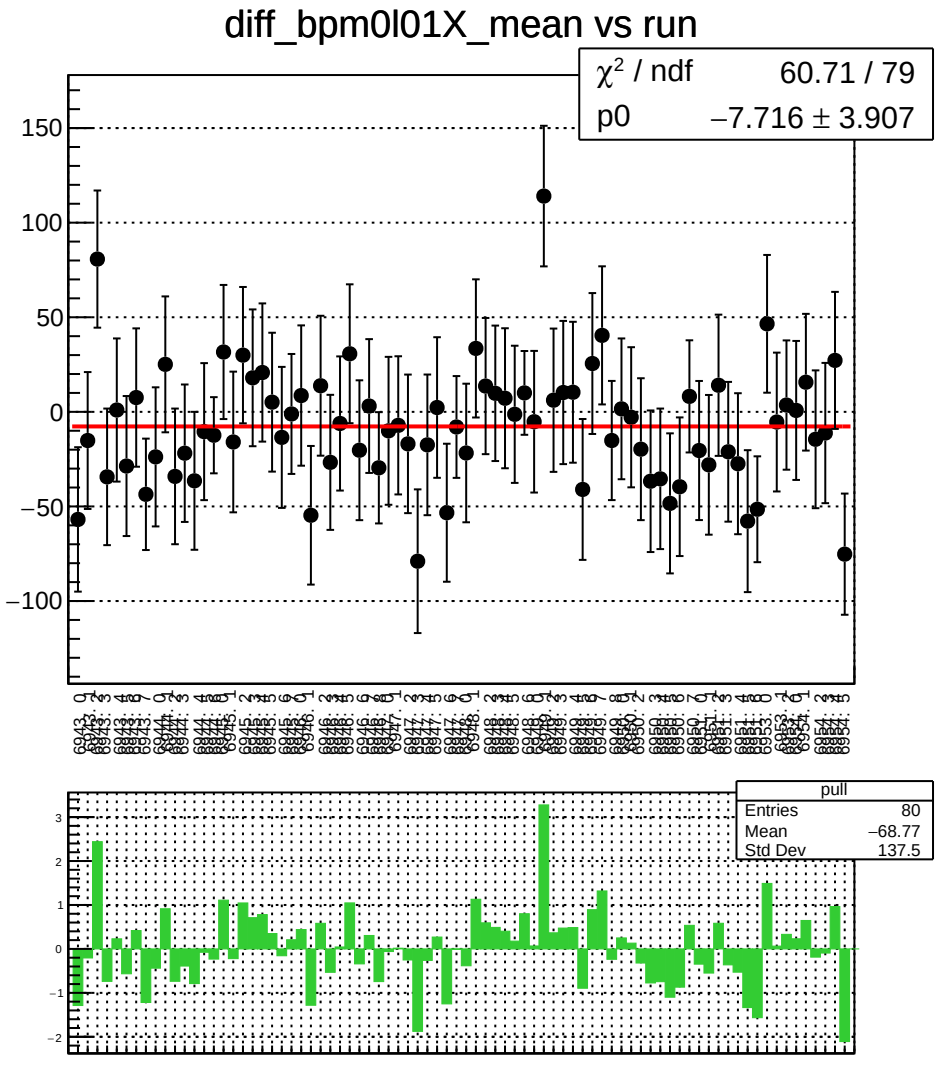

pull1D
Entries 80
Mean 0.02072
Std Dev 0.9776

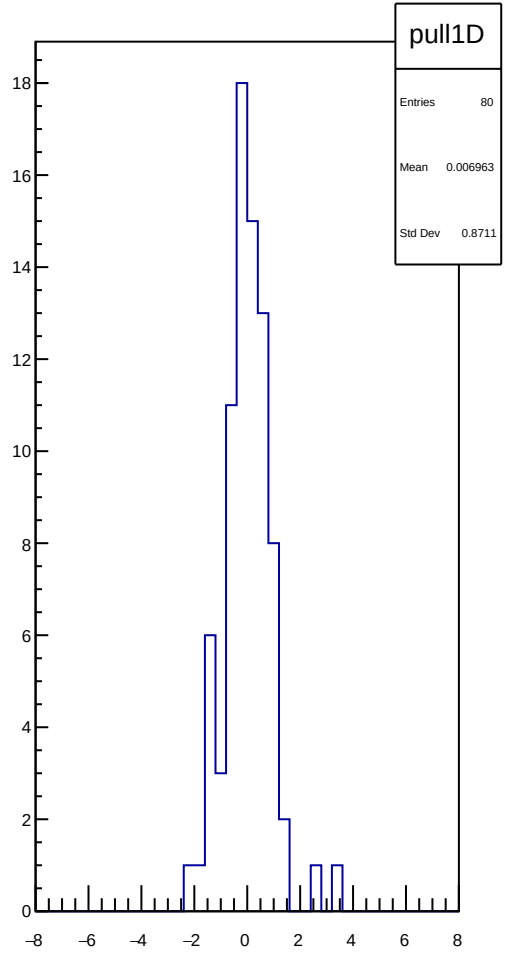

diff_bpm16X_rms vs run
χ² / ndf 1.565e+04 / 79
p0 7175 ± 5.708
9000
8500
8000
7500
7000
6500
6000

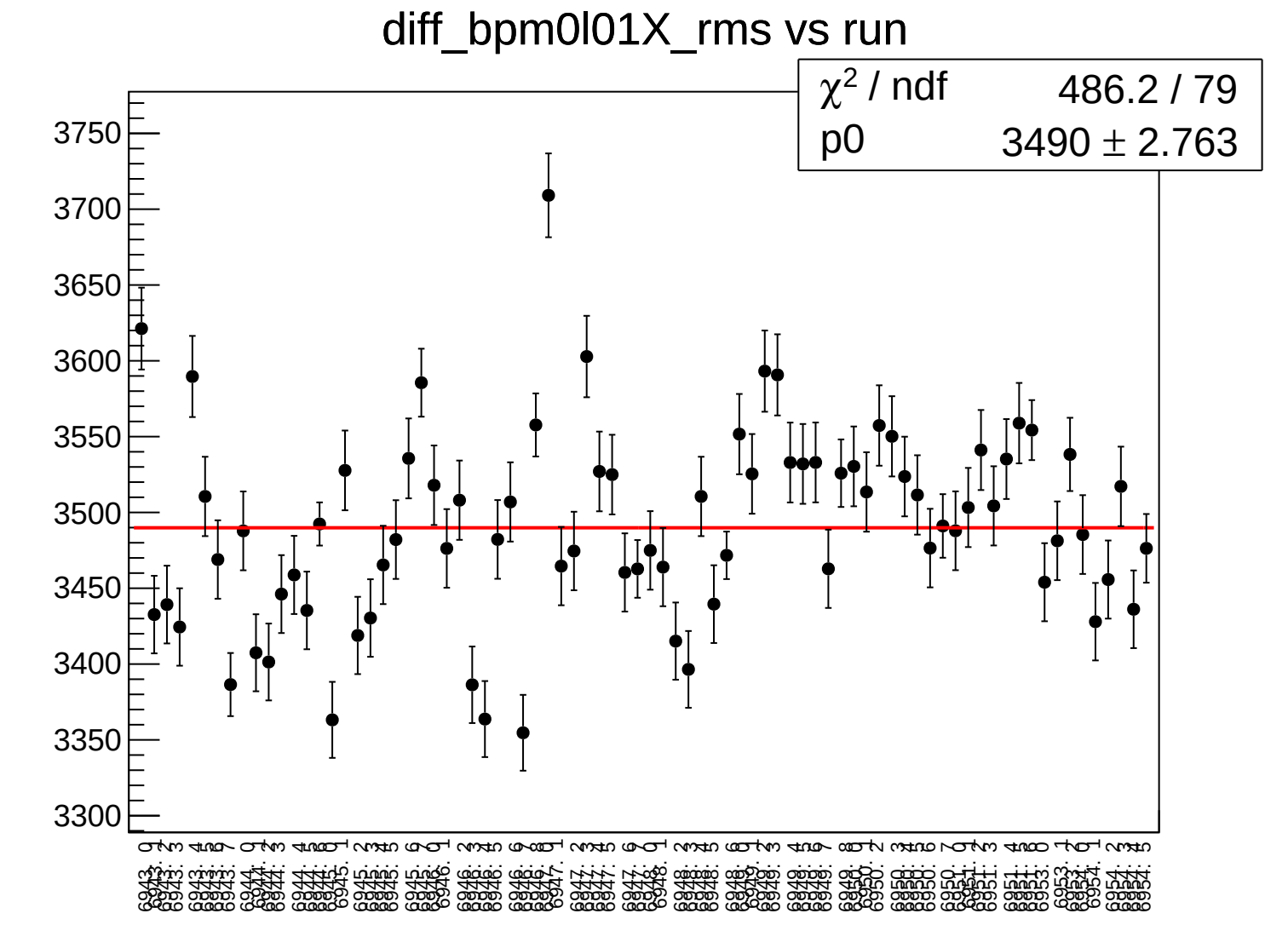

diff_bpm16Y_mean vs run
χ² / ndf 74.63 / 79
p0 1.172 ± 5.022
pull
Entries 80
Mean −206.7
Std Dev 239.2

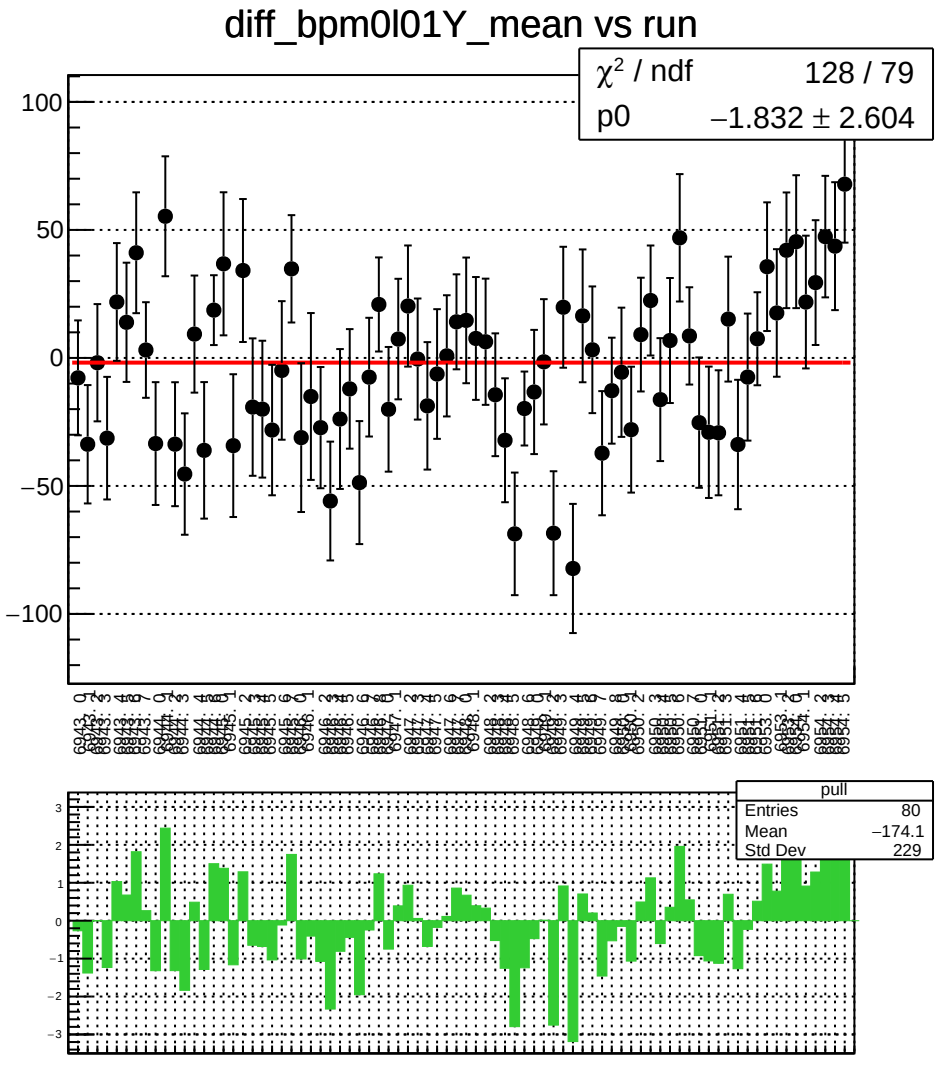

pull1D
Entries 80
Mean 0.007078
Std Dev 0.9658

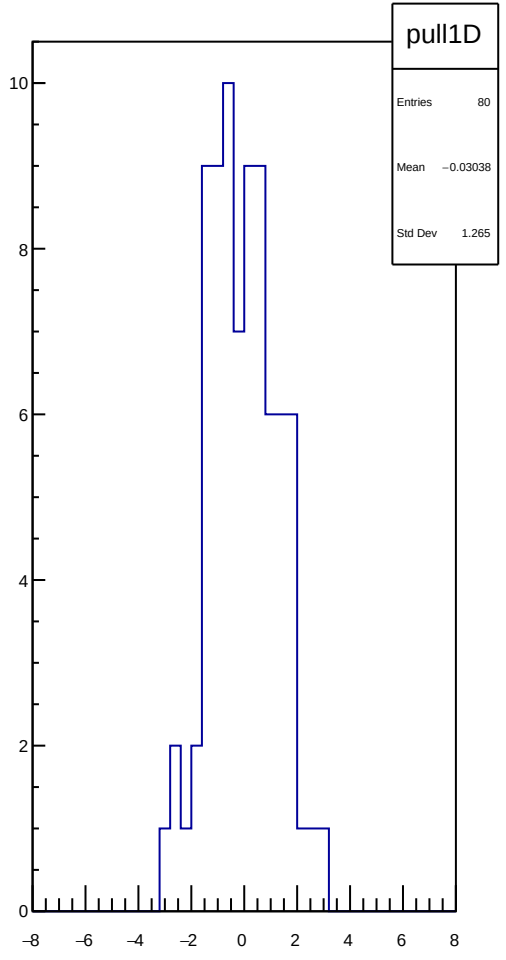

diff_bpm16Y_rms vs run
χ² / ndf 4909 / 79
p0 4479 ± 3.551
5200
5000
4800
4600
4400
4200
4000
3800

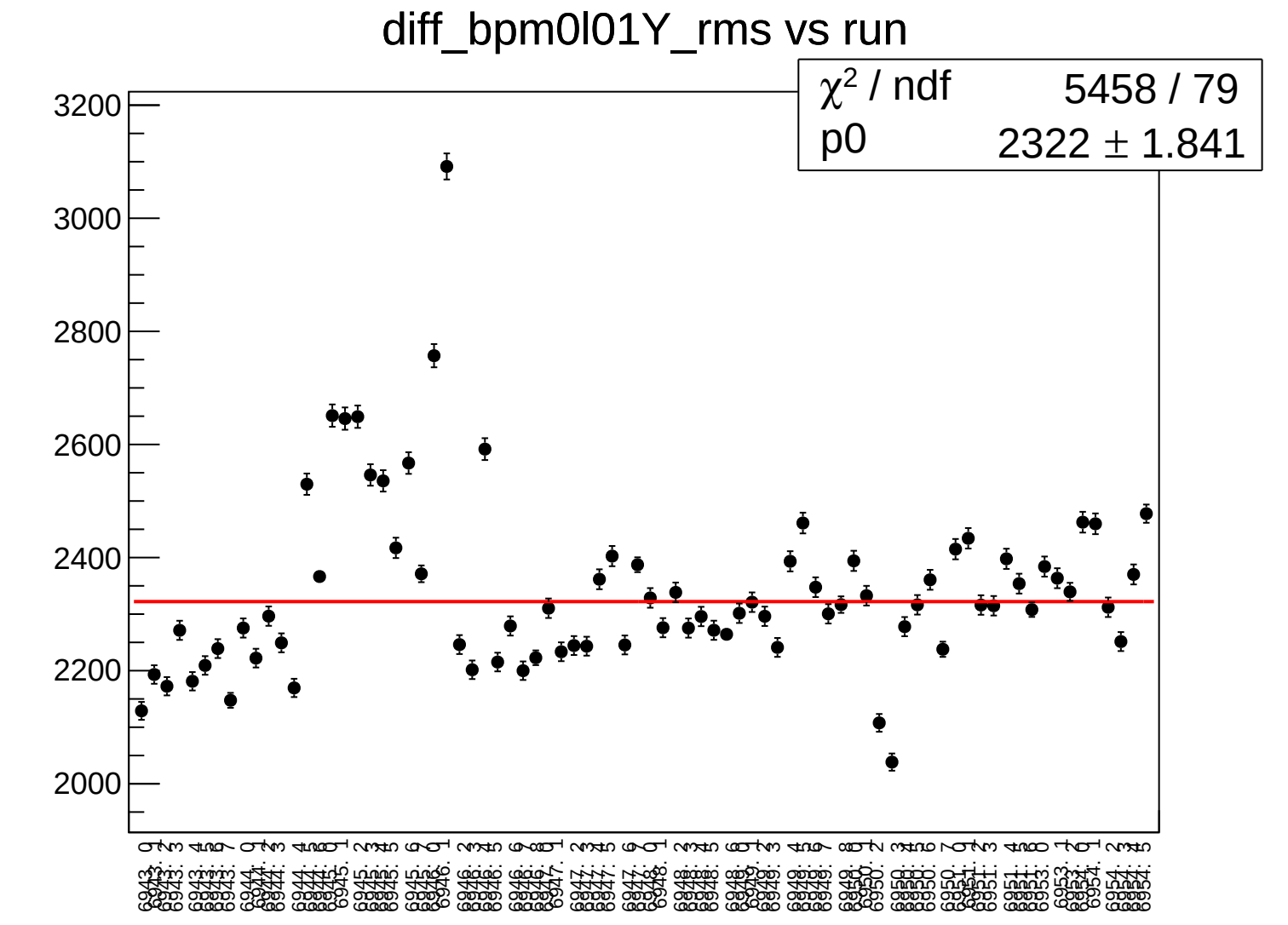

diff_bpm0l01X_mean vs run
χ² / ndf 60.71 / 79
p0 −7.716 ± 3.907
150
100
50
0
−50
−100
pull
Entries 80
Mean −68.77
Std Dev 137.5
3
2
1
0
−1
−2

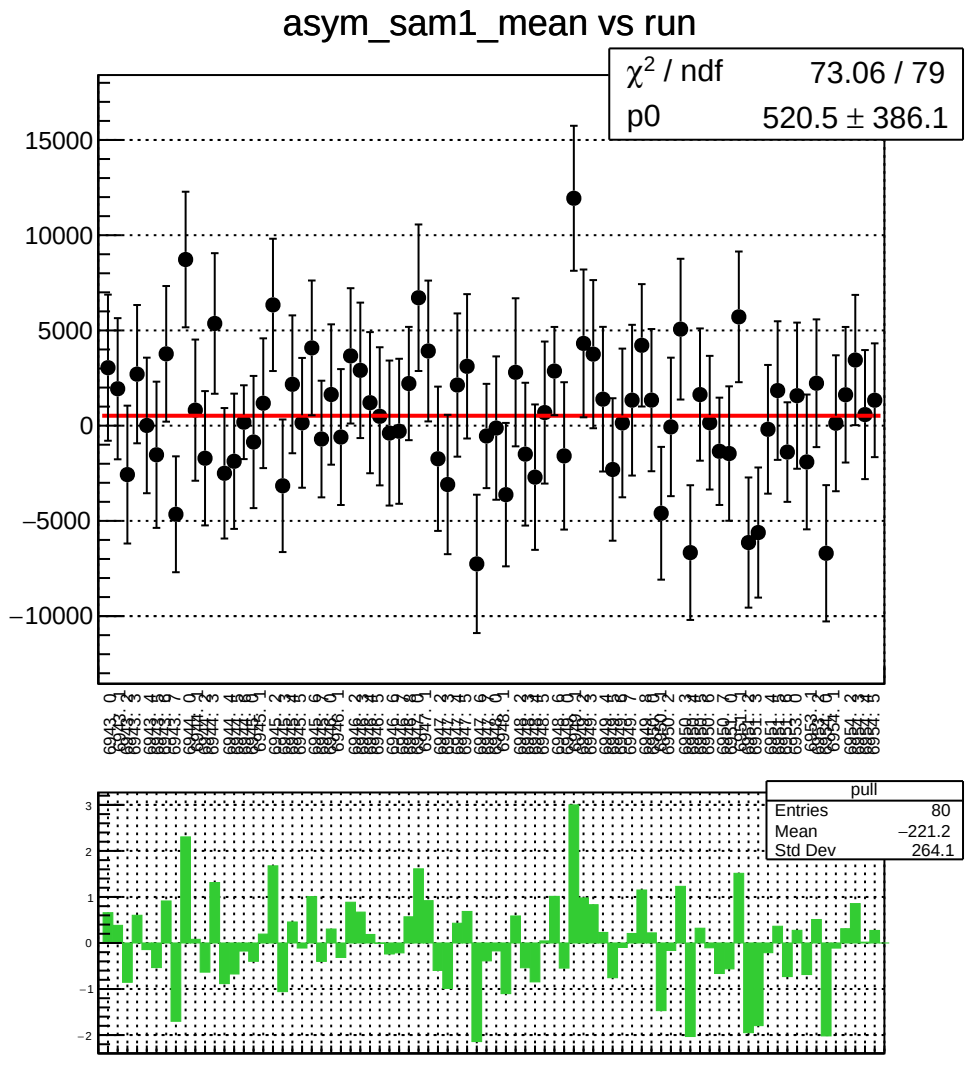

pull1D
Entries 80
Mean 0.006963
Std Dev 0.8711
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

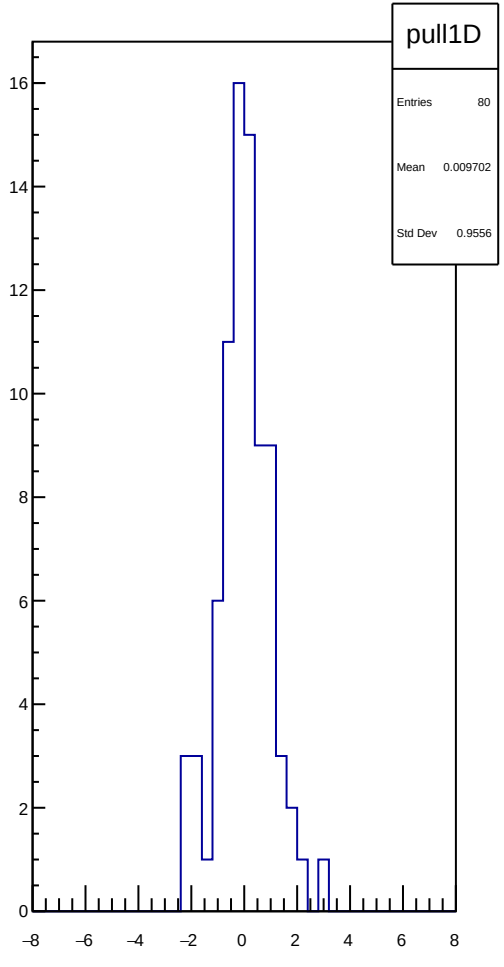

diff_bpm0l01X_rms vs run
χ² / ndf 486.2 / 79
p0 3490 ± 2.763
3750
3700
3650
3600
3550
3500
3450
3400
3350
3300

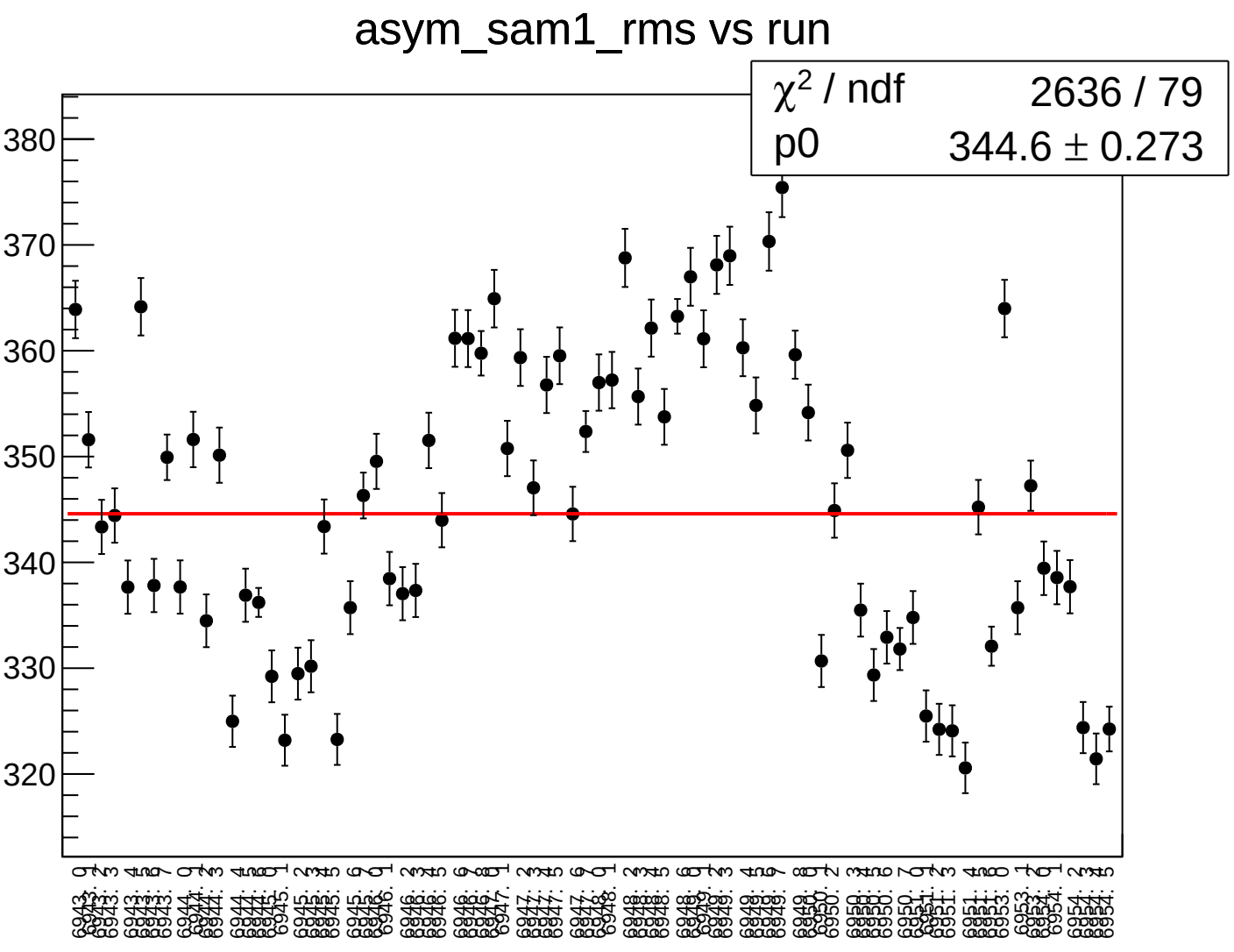

diff_bpm0l01Y_mean vs run
χ² / ndf 128 / 79
p0 −1.832 ± 2.604
100
50
0
−50
−100
pull
Entries 80
Mean −174.1
Std Dev 229
3
2
1
0
−1
−2
−3

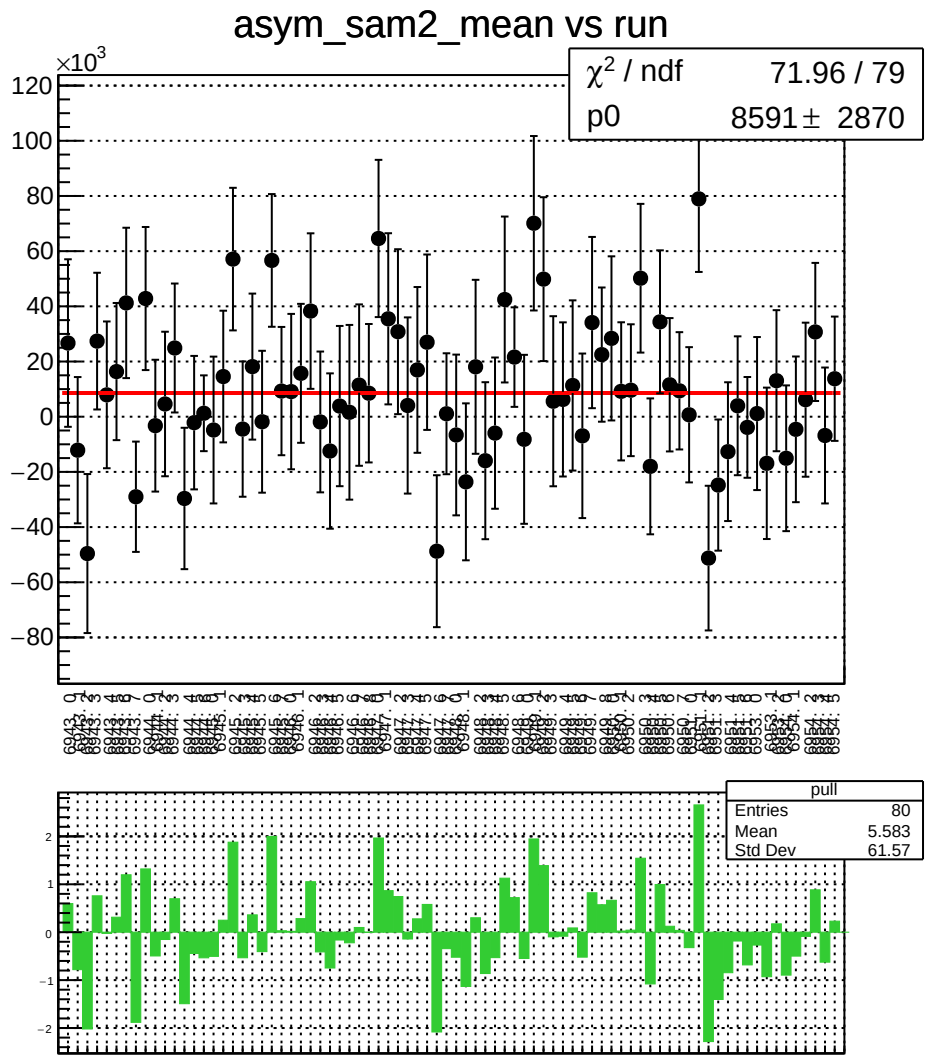

pull1D
Entries 80
Mean −0.03038
Std Dev 1.265
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

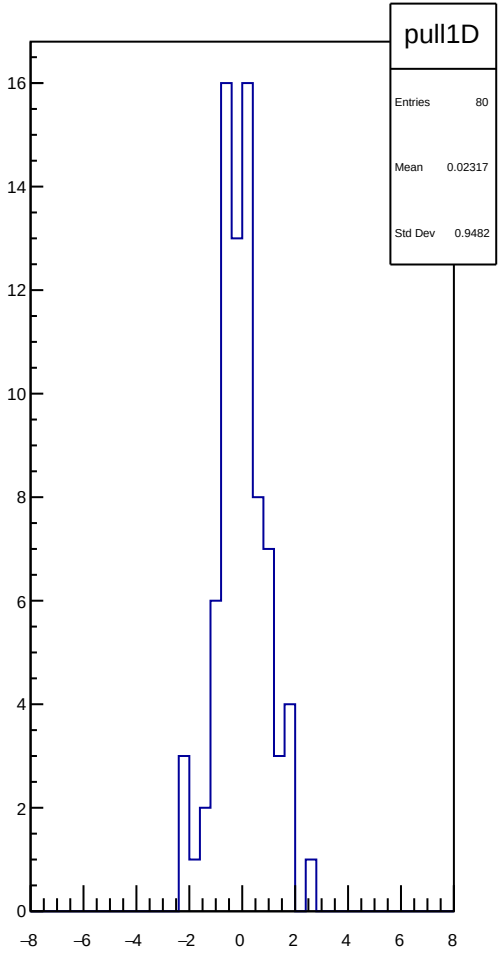

diff_bpm0l01Y_rms vs run
χ² / ndf 5458 / 79
p0 2322 ± 1.841
3200
3000
2800
2600
2400
2200
2000

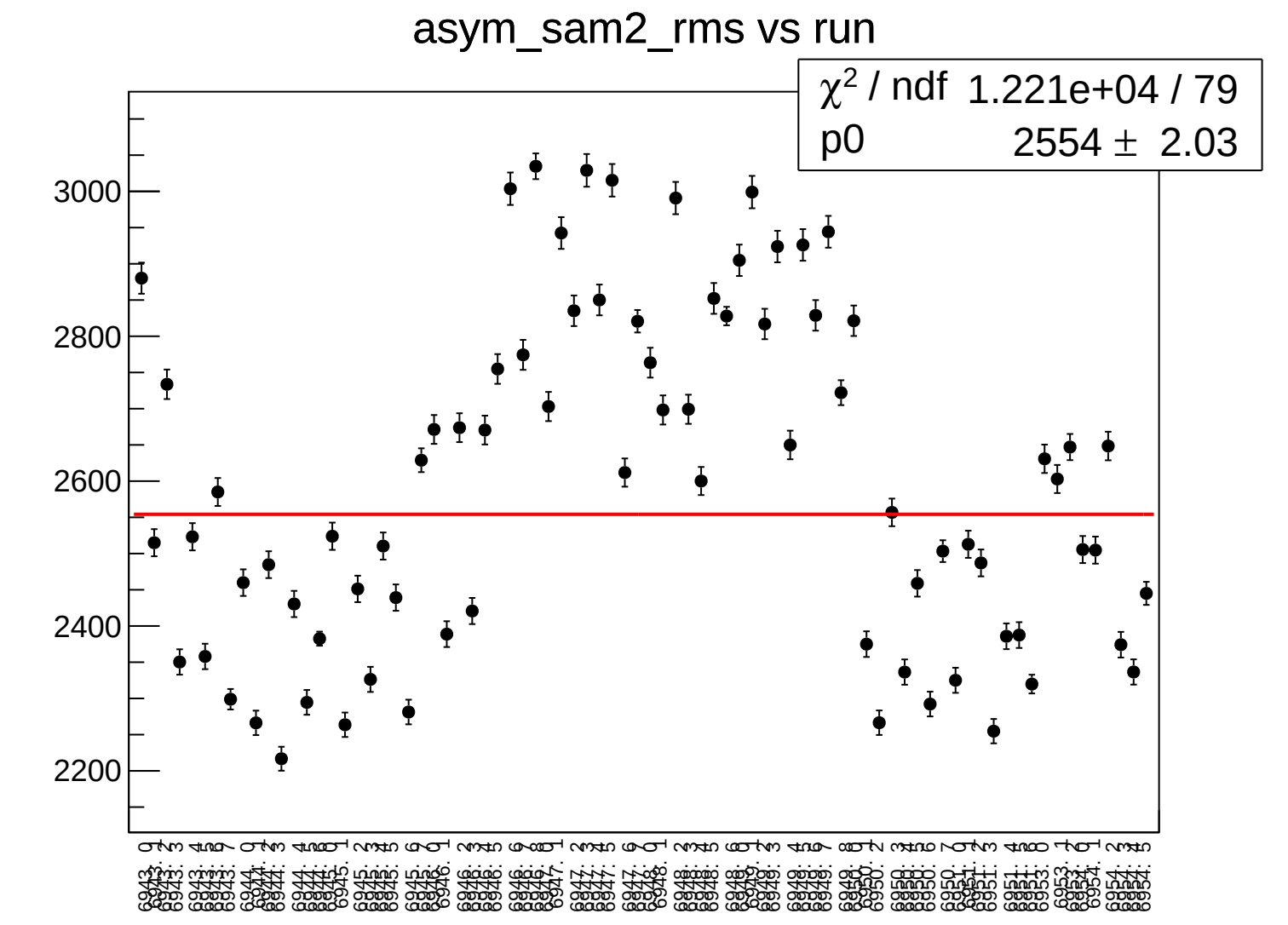

asym_sam1_mean vs run
χ^2 / ndf 73.06 / 79
p0 520.5 ± 386.1
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean −221.2
Std Dev 264.1
3
2
1
0
−1
−2

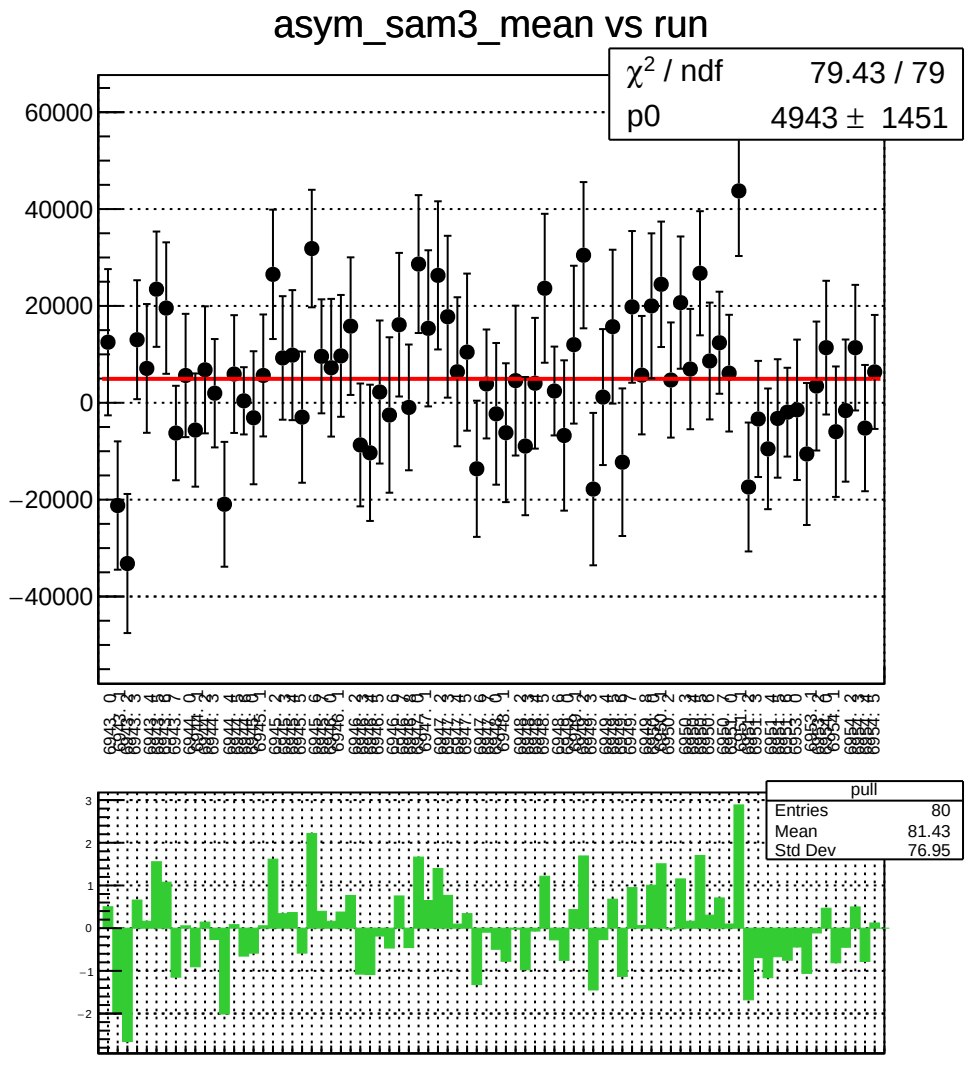

pull1D
Entries 80
Mean 0.009702
Std Dev 0.9556
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

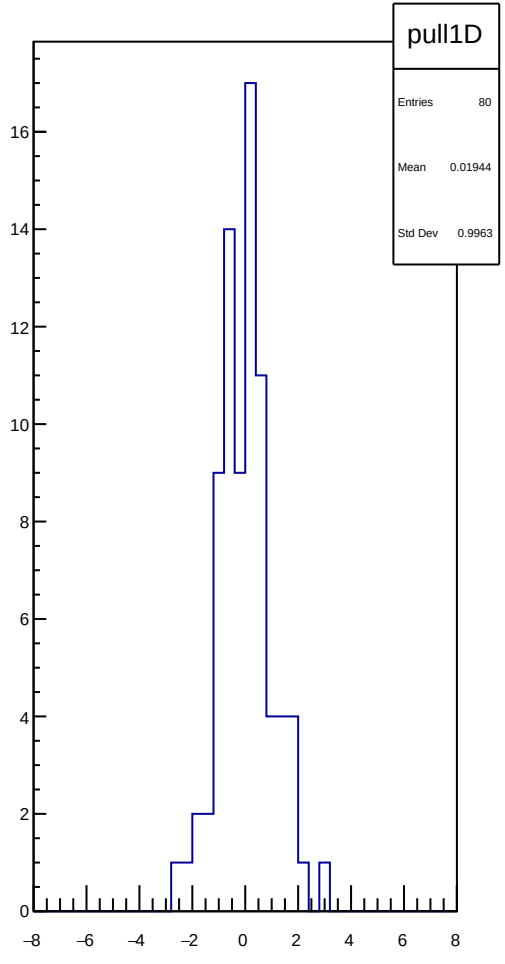

asym_sam1_rms vs run
χ² / ndf 2636 / 79
p0 344.6 ± 0.273
380
370
360
350
340
330
320

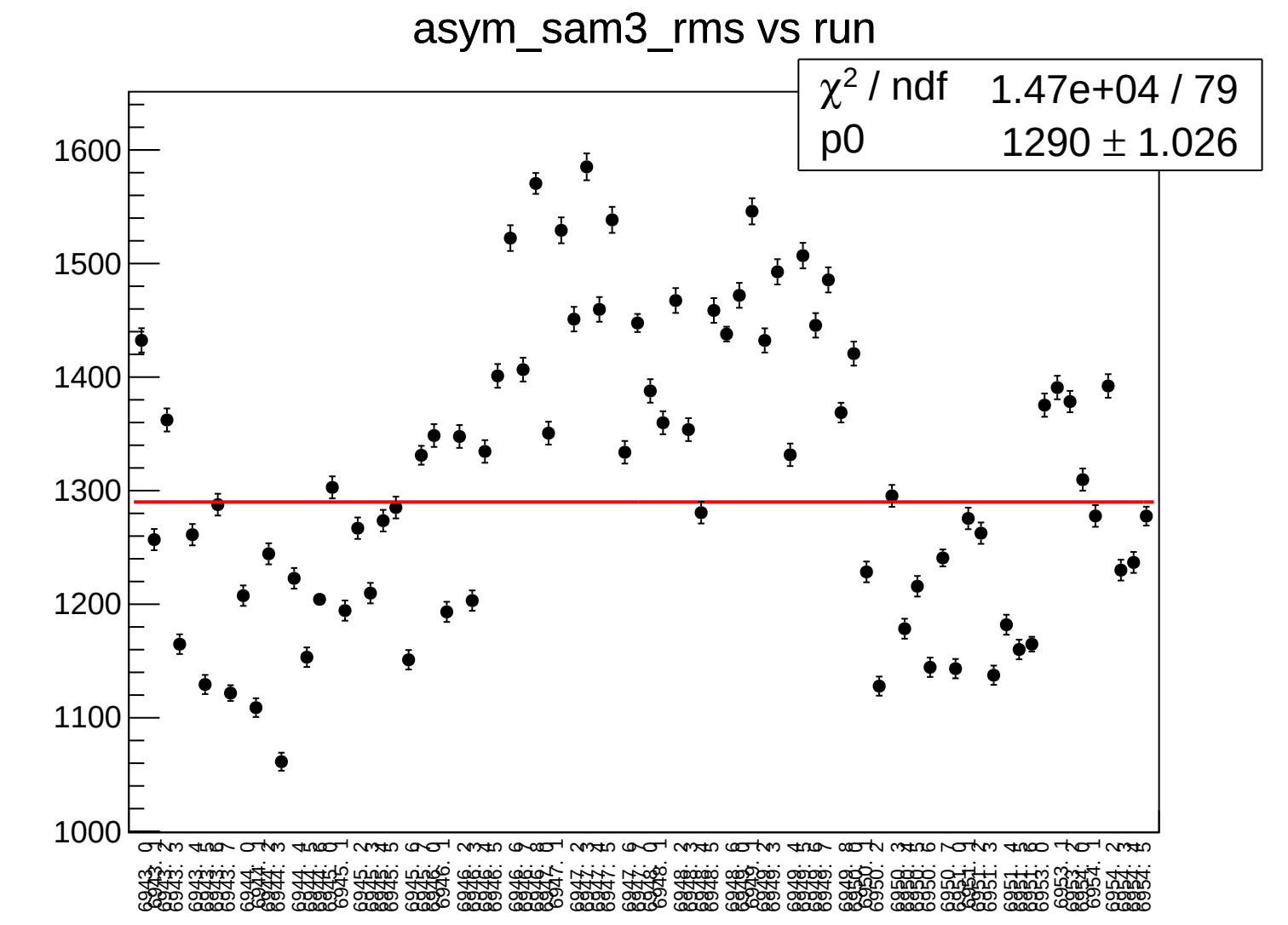

asym_sam2_mean vs run
χ^2 / ndf 71.96 / 79
p0 8591 ± 2870
×10^3
pull
Entries 80
Mean 5.583
Std Dev 61.57

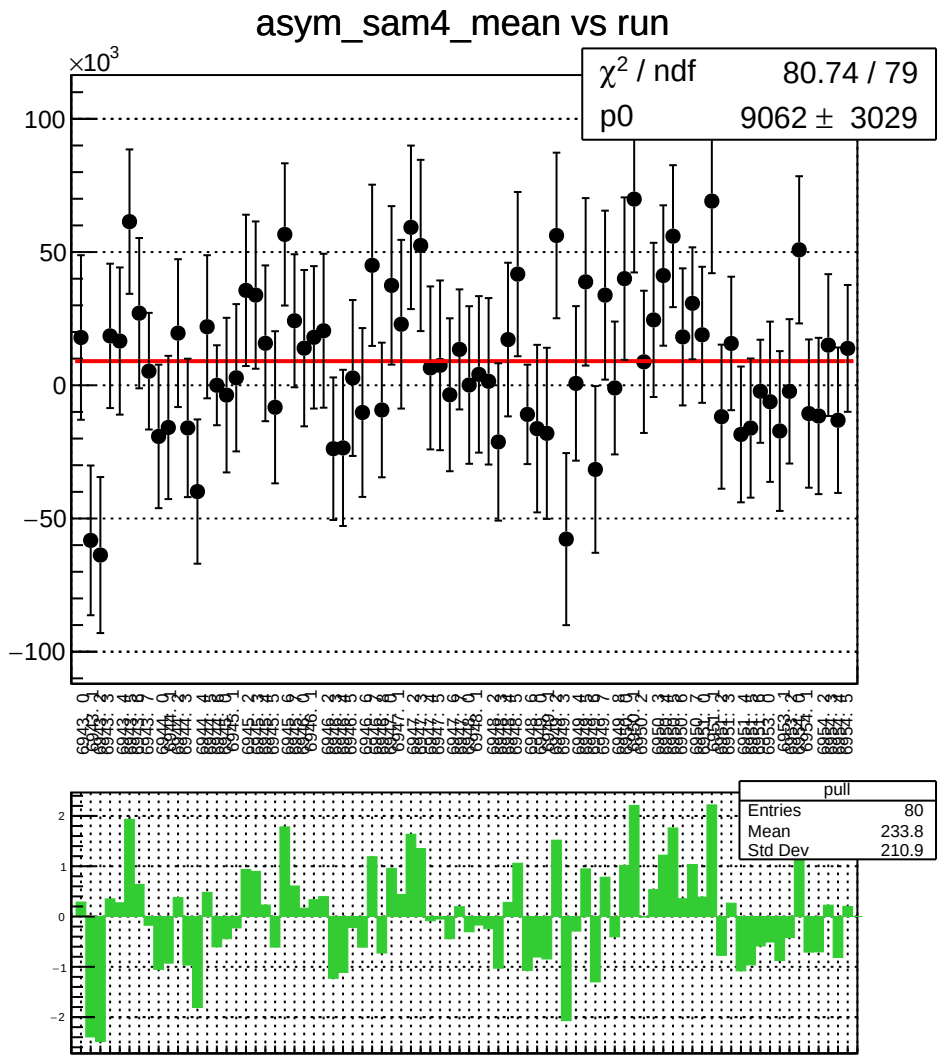

pull1D
Entries 80
Mean 0.02317
Std Dev 0.9482

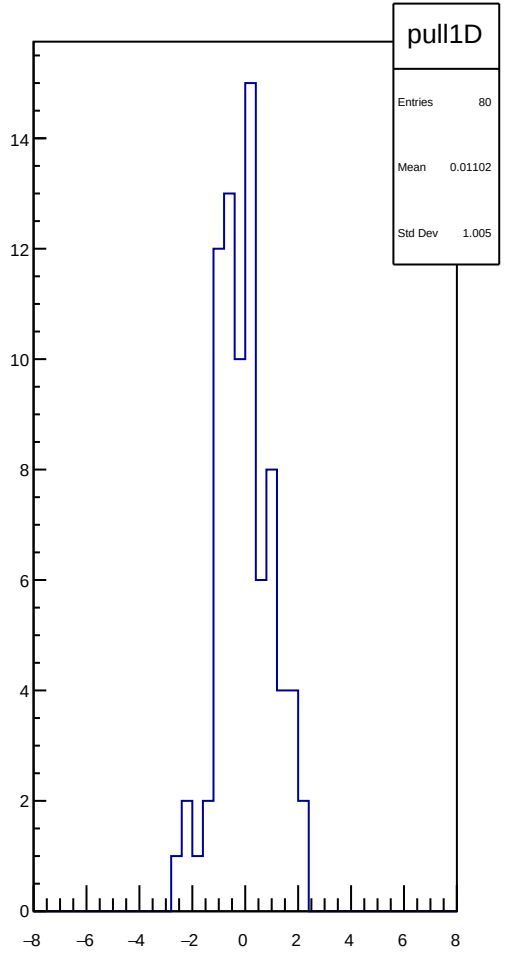

asym_sam2_rms vs run
χ² / ndf 1.221e+04 / 79
p0 2554 ± 2.03
3000
2800
2600
2400
2200

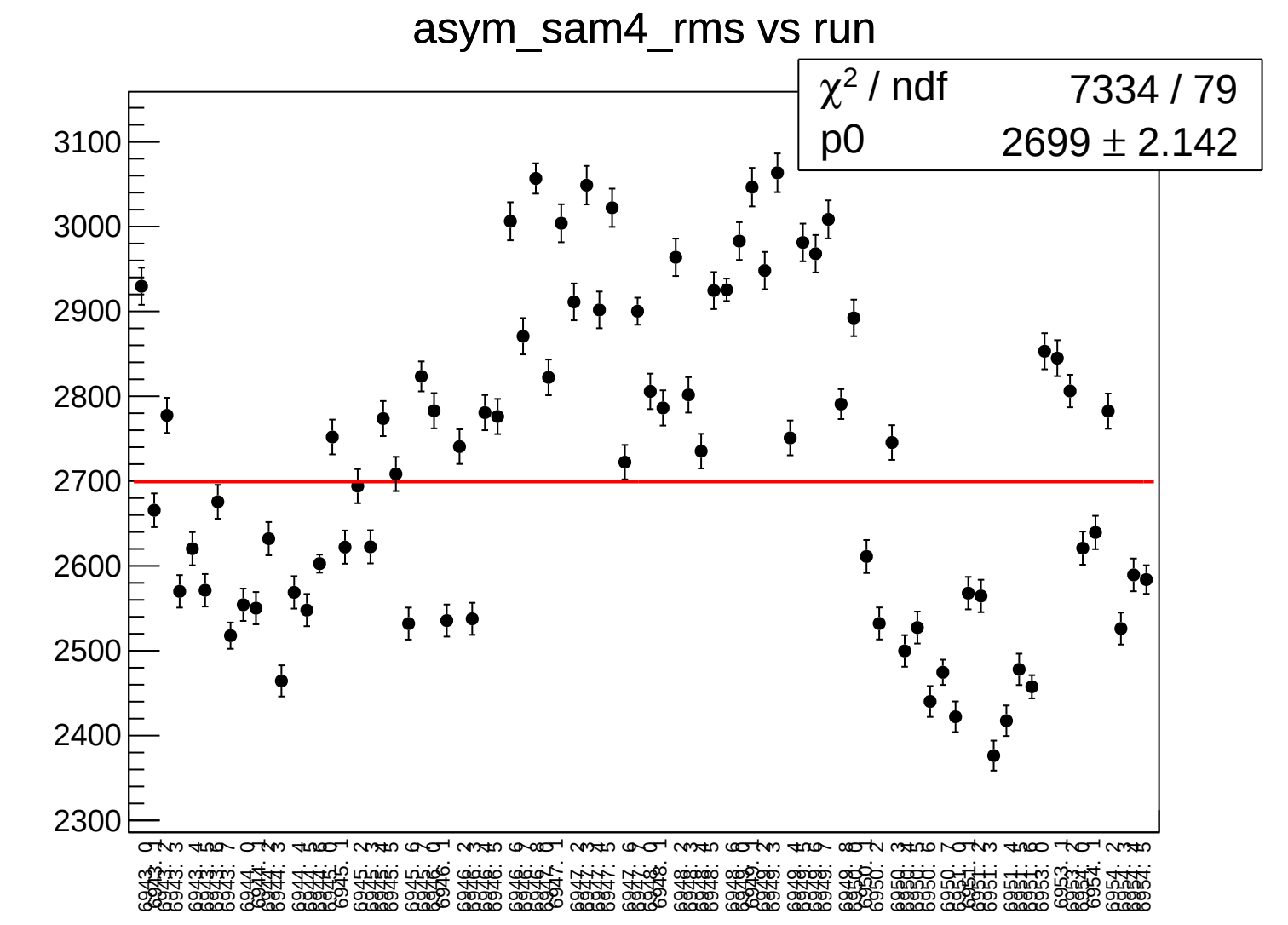

asym_sam3_mean vs run
χ² / ndf 79.43 / 79
p0 4943 ± 1451
60000
40000
20000
0
−20000
−40000
pull
Entries 80
Mean 81.43
Std Dev 76.95
3
2
1
0
−1
−2

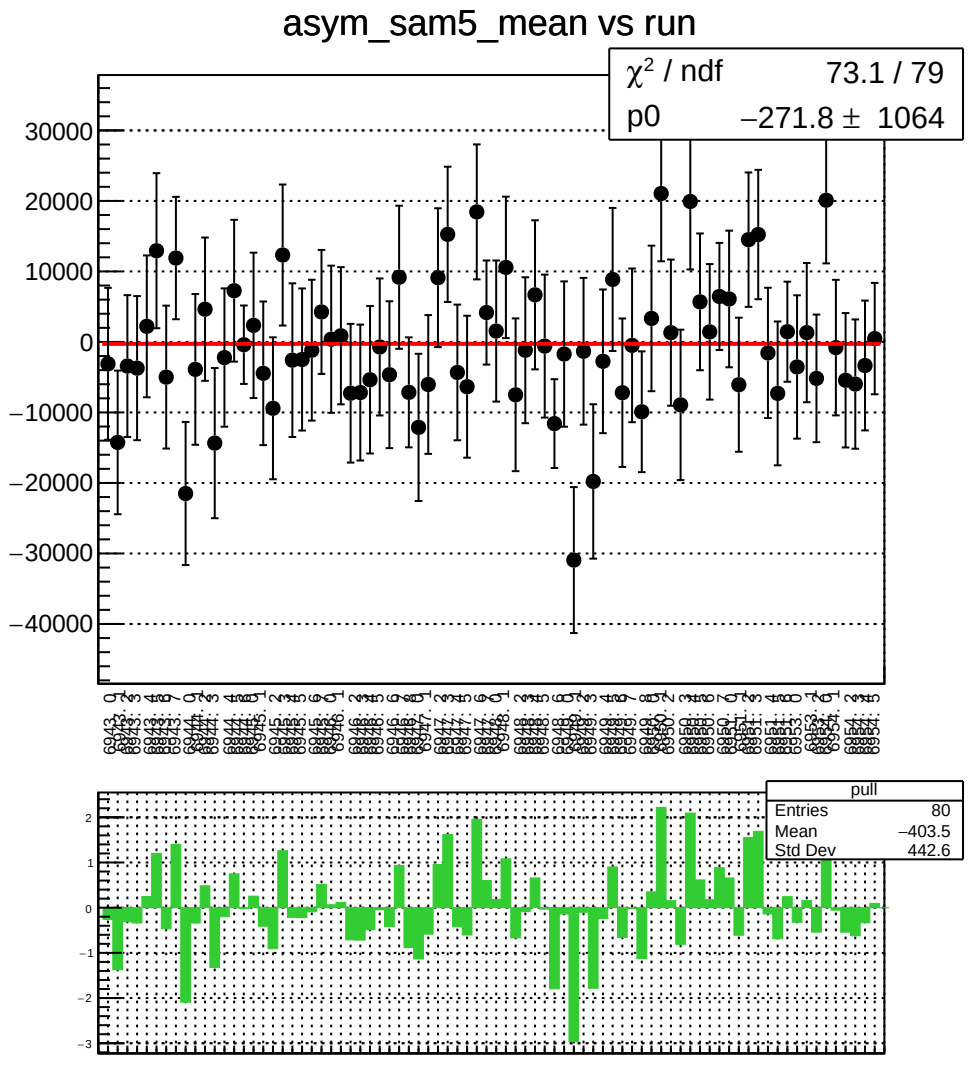

pull1D
Entries 80
Mean 0.01944
Std Dev 0.9963
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

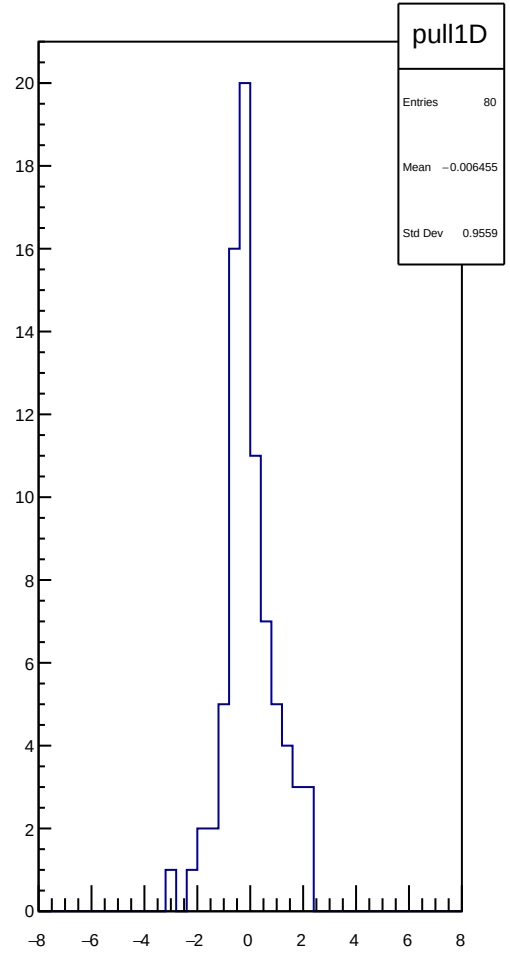

asym_sam3_rms vs run
χ² / ndf 1.47e+04 / 79
p0 1290 ± 1.026
1600
1500
1400
1300
1200
1100
1000

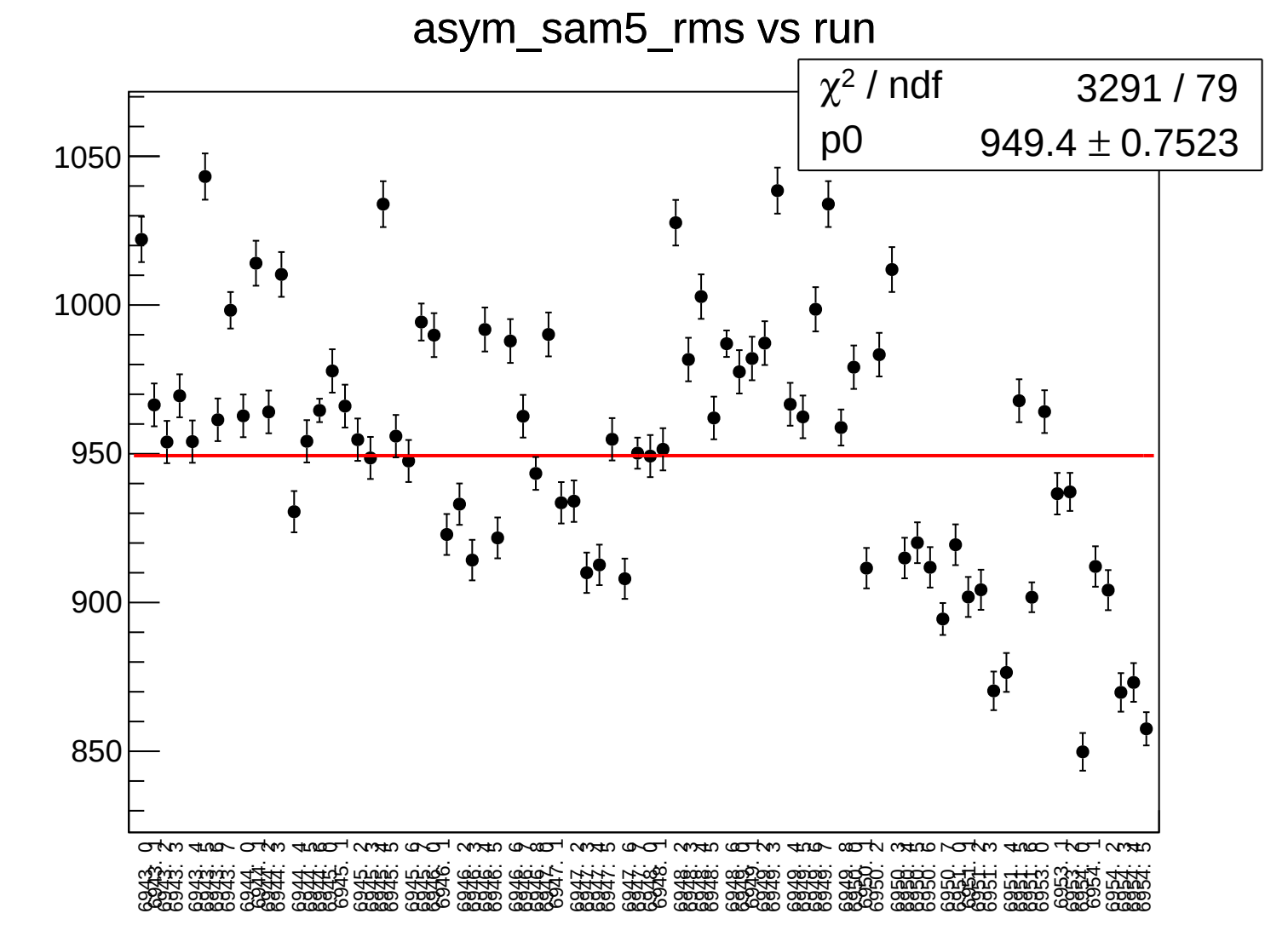

asym_sam4_mean vs run
χ^2 / ndf 80.74 / 79
p0 9062 ± 3029
×10^3
100
50
0
−50
−100
pull
Entries 80
Mean 233.8
Std Dev 210.9
2
1
0
−1
−2

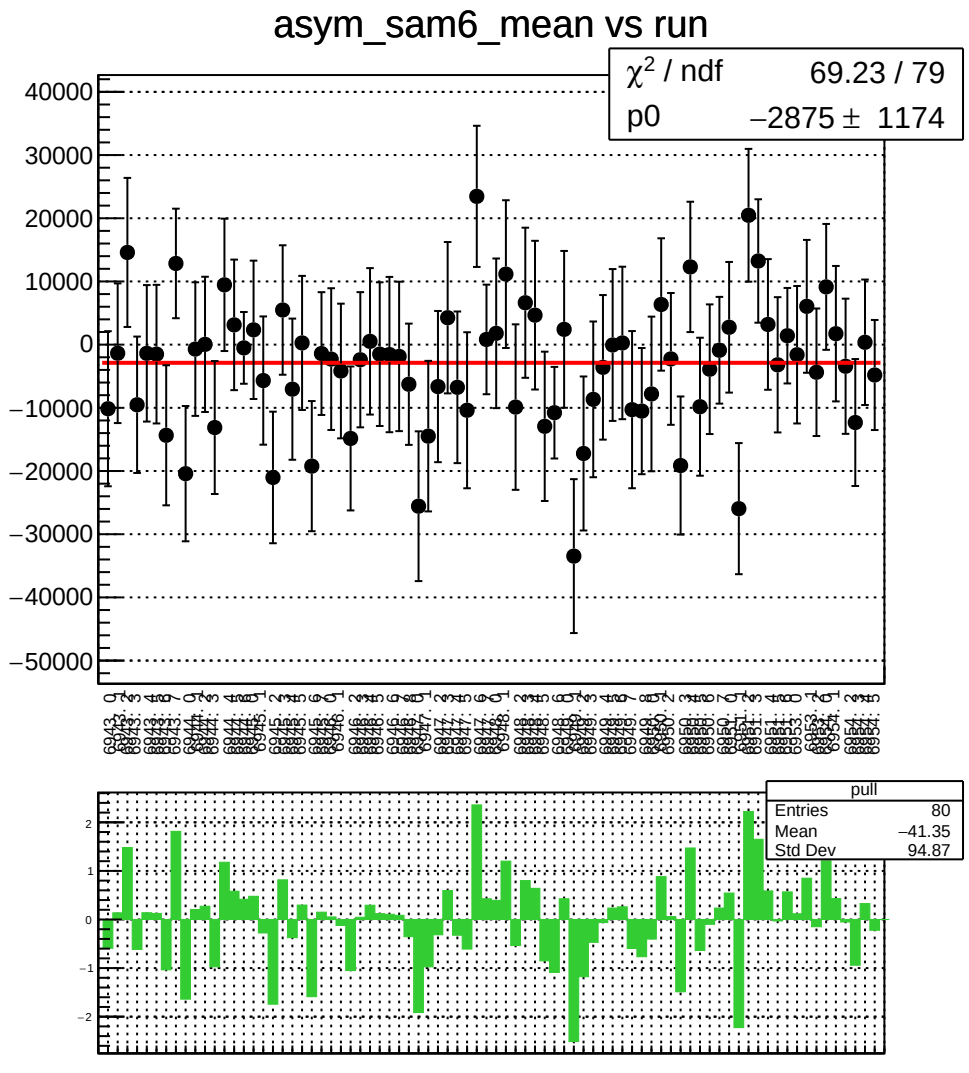

pull1D
Entries 80
Mean 0.01102
Std Dev 1.005
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

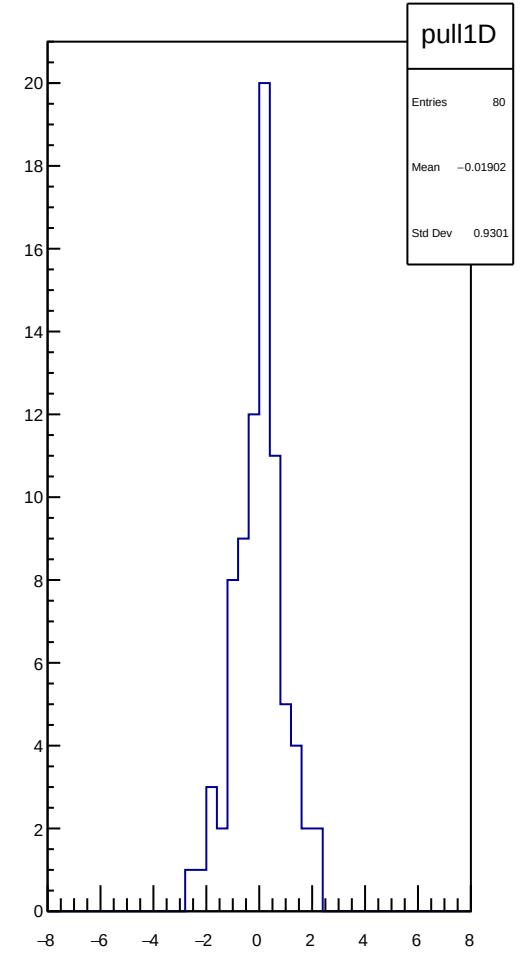

asym_sam4_rms vs run
χ² / ndf 7334 / 79
p0 2699 ± 2.142
3100
3000
2900
2800
2700
2600
2500
2400
2300

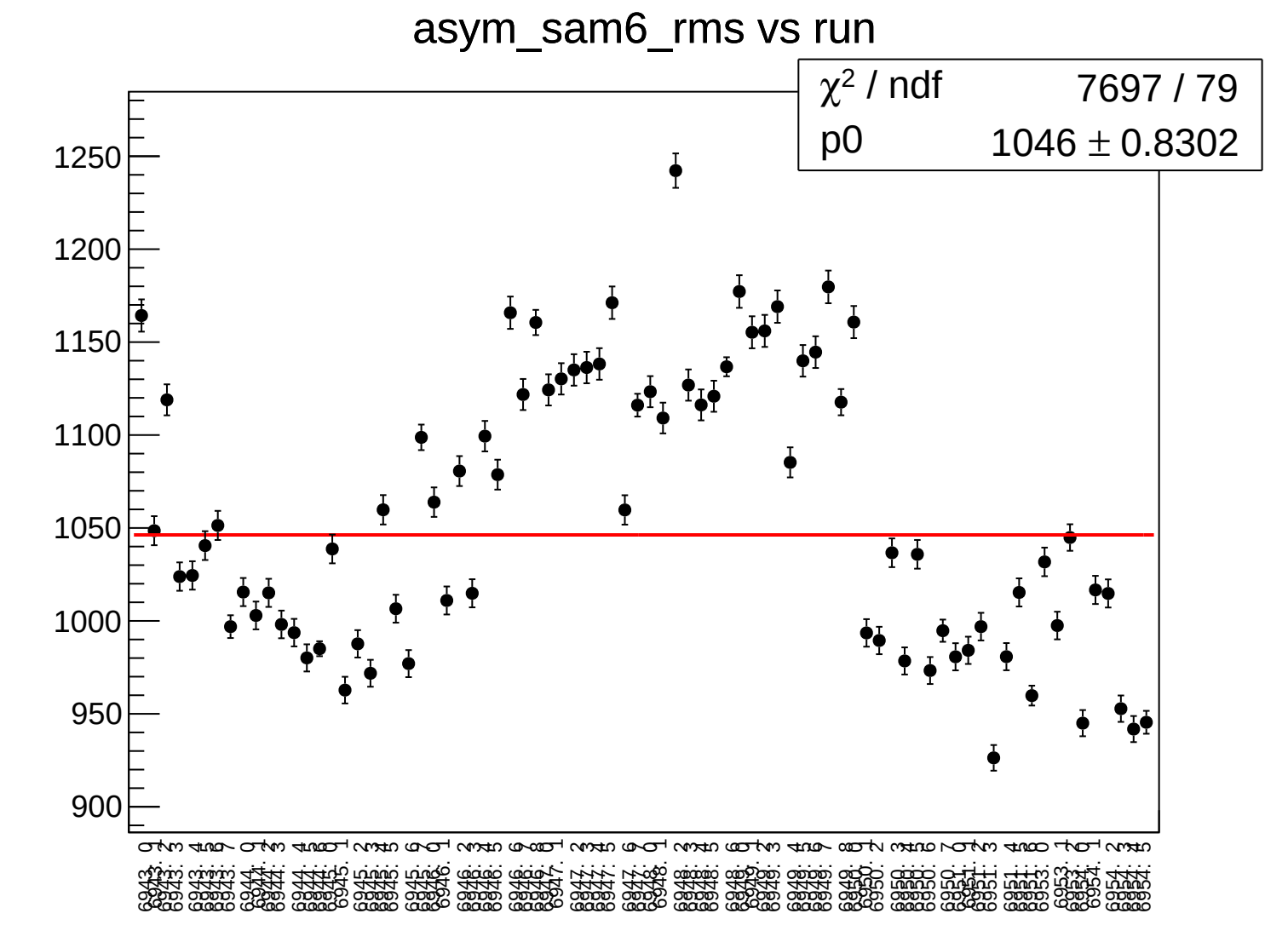

asym_sam5_mean vs run
χ² / ndf 73.1 / 79
p0 −271.8 ± 1064
pull
Entries 80
Mean −403.5
Std Dev 442.6

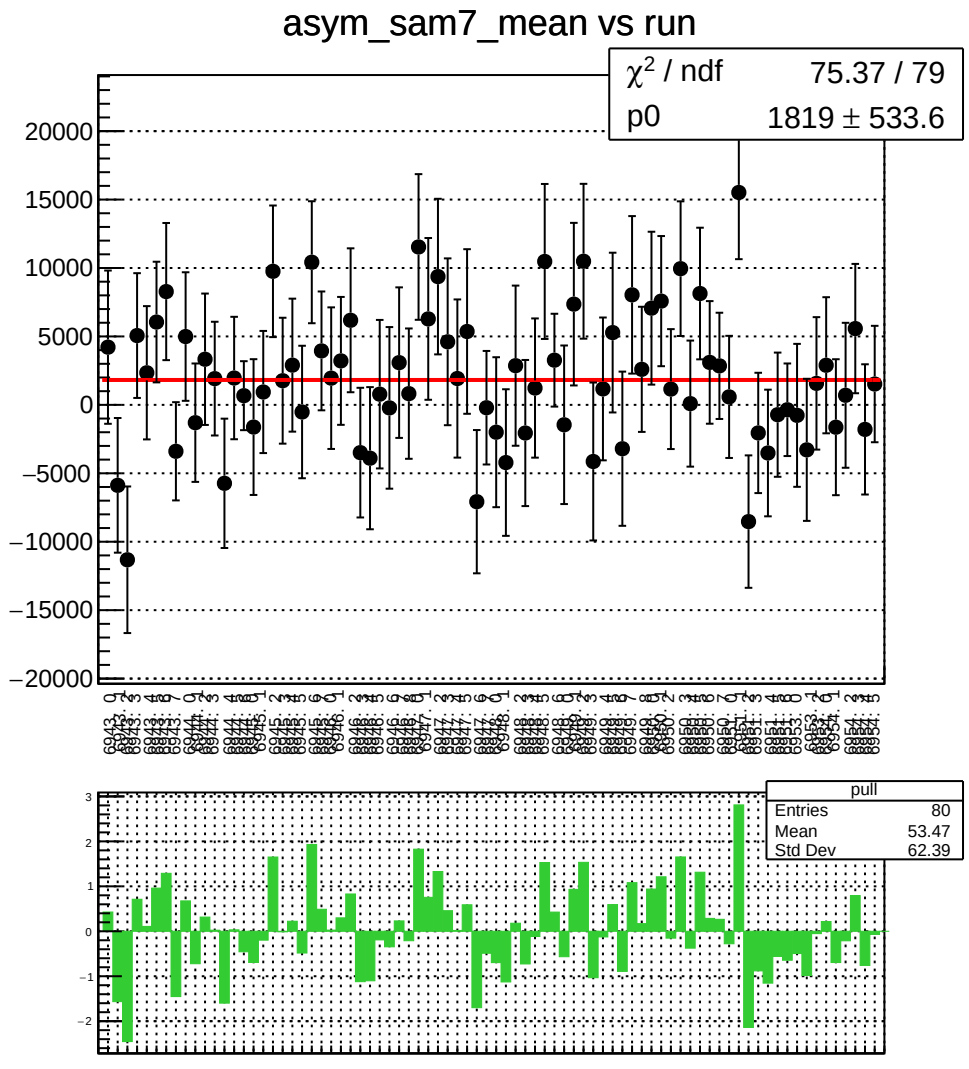

pull1D
Entries 80
Mean −0.006455
Std Dev 0.9559

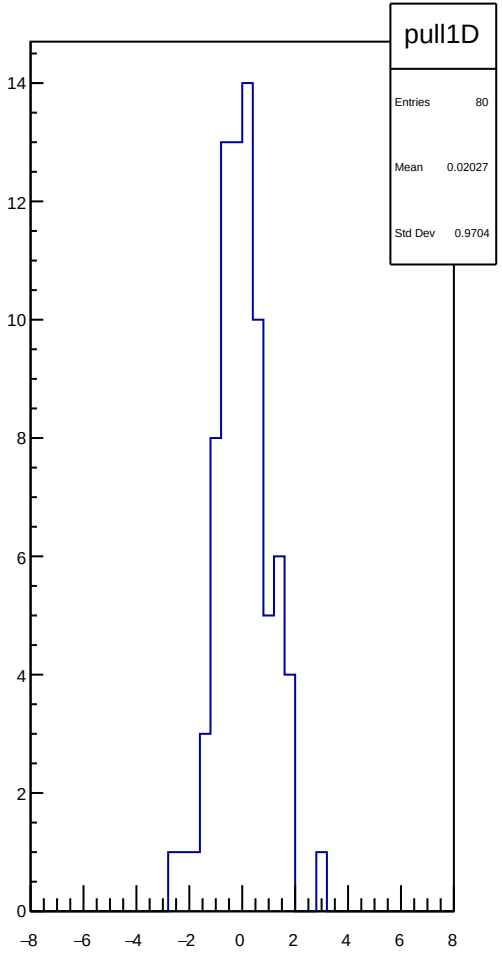

asym_sam5_rms vs run
χ² / ndf 3291 / 79
p0 949.4 ± 0.7523
1050
1000
950
900
850

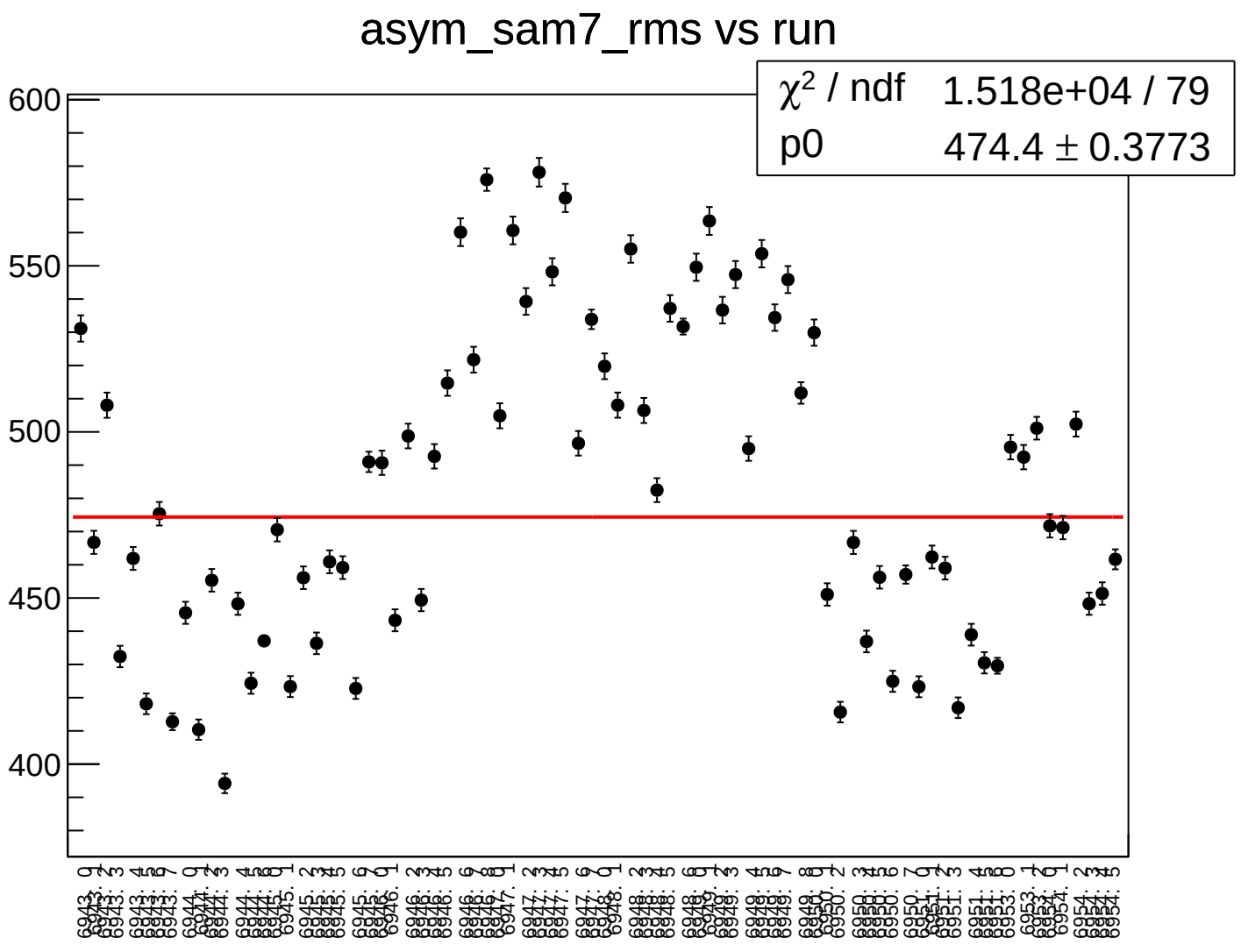

asym_sam6_mean vs run
χ² / ndf 69.23 / 79
p0 −2875 ± 1174
pull
Entries 80
Mean −41.35
Std Dev 94.87

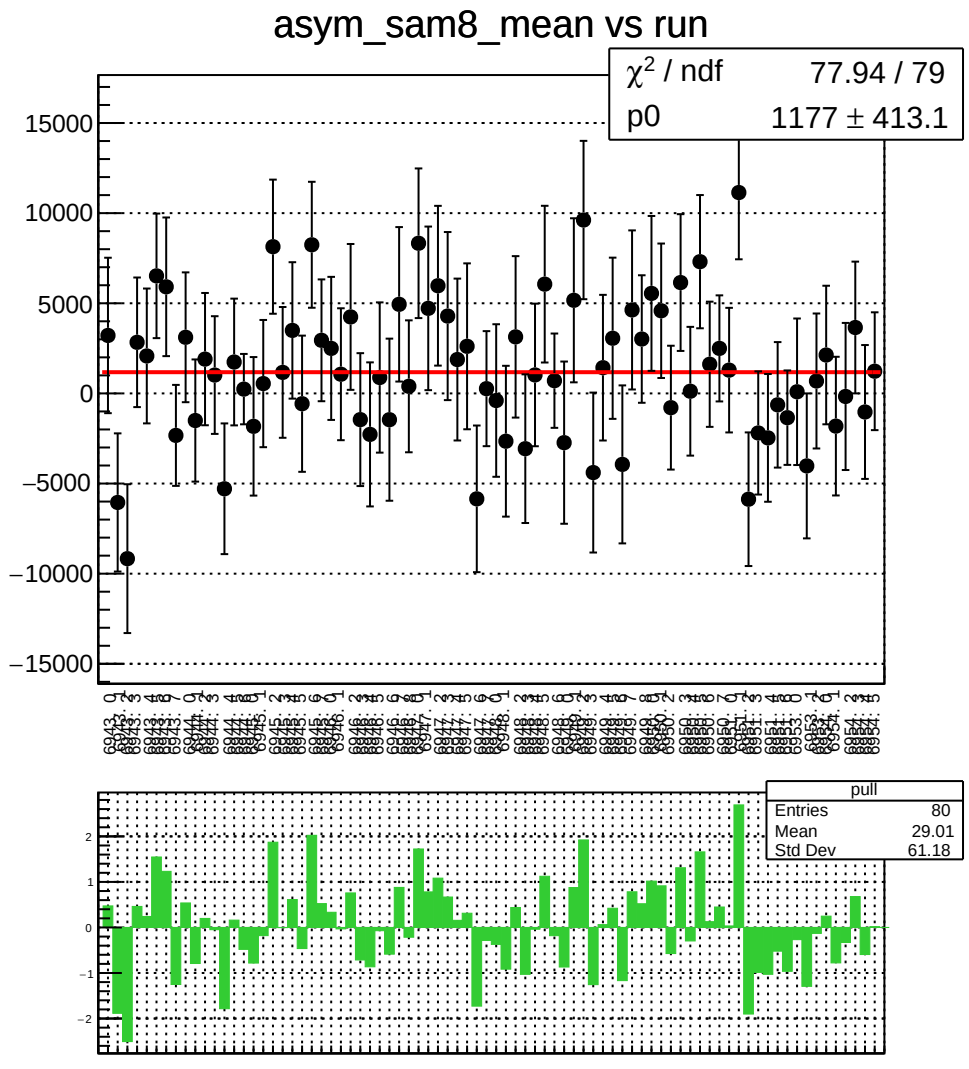

pull1D
Entries 80
Mean −0.01902
Std Dev 0.9301

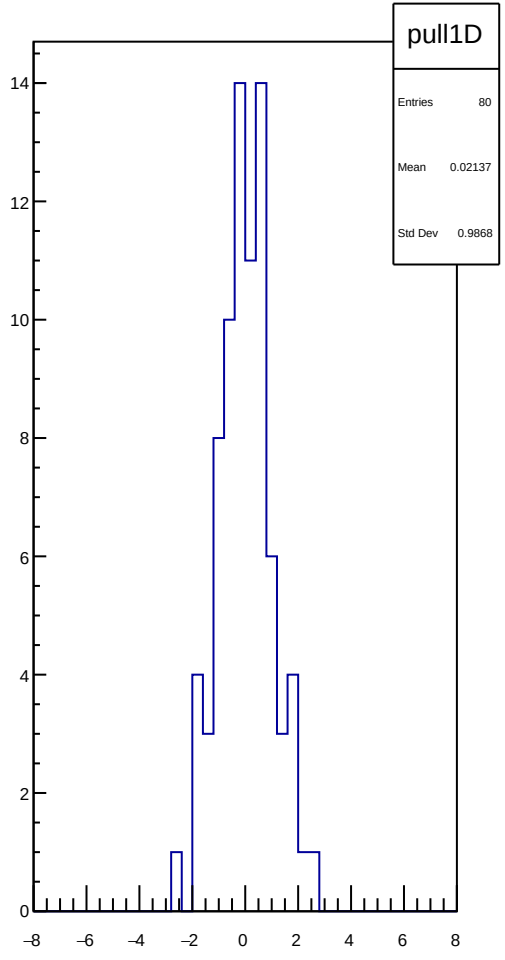

asym_sam6_rms vs run
χ² / ndf 7697 / 79
p0 1046 ± 0.8302
1250
1200
1150
1100
1050
1000
950
900

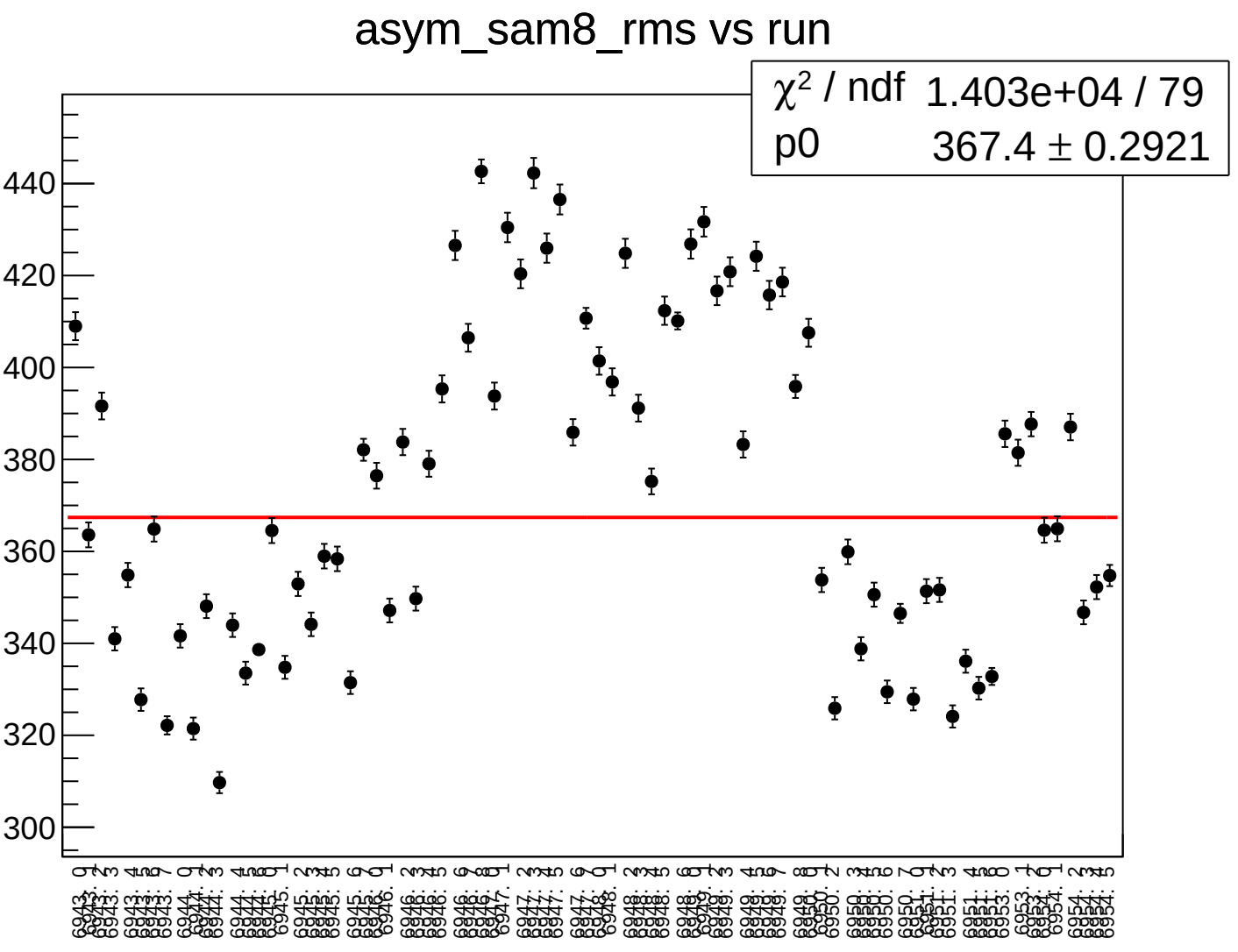

asym_sam7_mean vs run
χ² / ndf 75.37 / 79
p0 1819 ± 533.6
pull
Entries 80
Mean 53.47
Std Dev 62.39

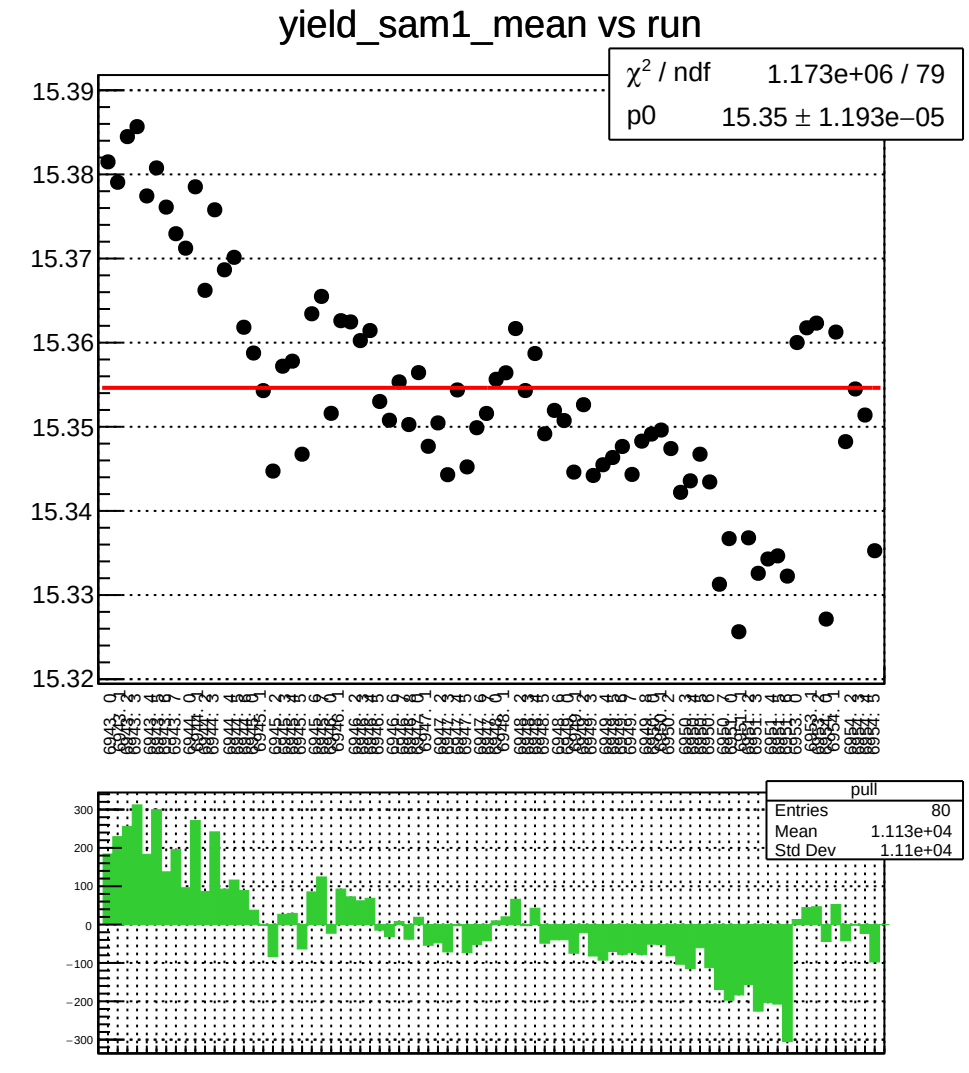

pull1D
Entries 80
Mean 0.02027
Std Dev 0.9704

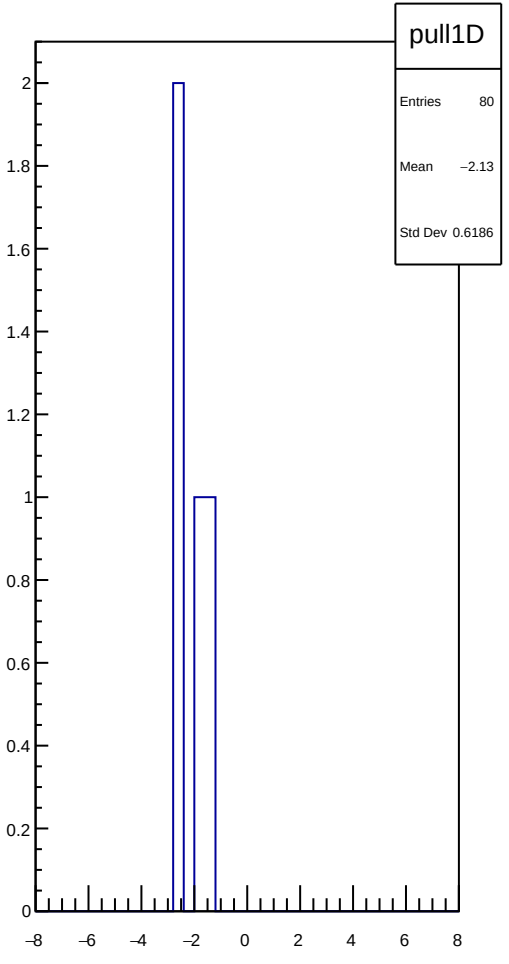

asym_sam7_rms vs run
χ² / ndf 1.518e+04 / 79
p0 474.4 ± 0.3773
600
550
500
450
400

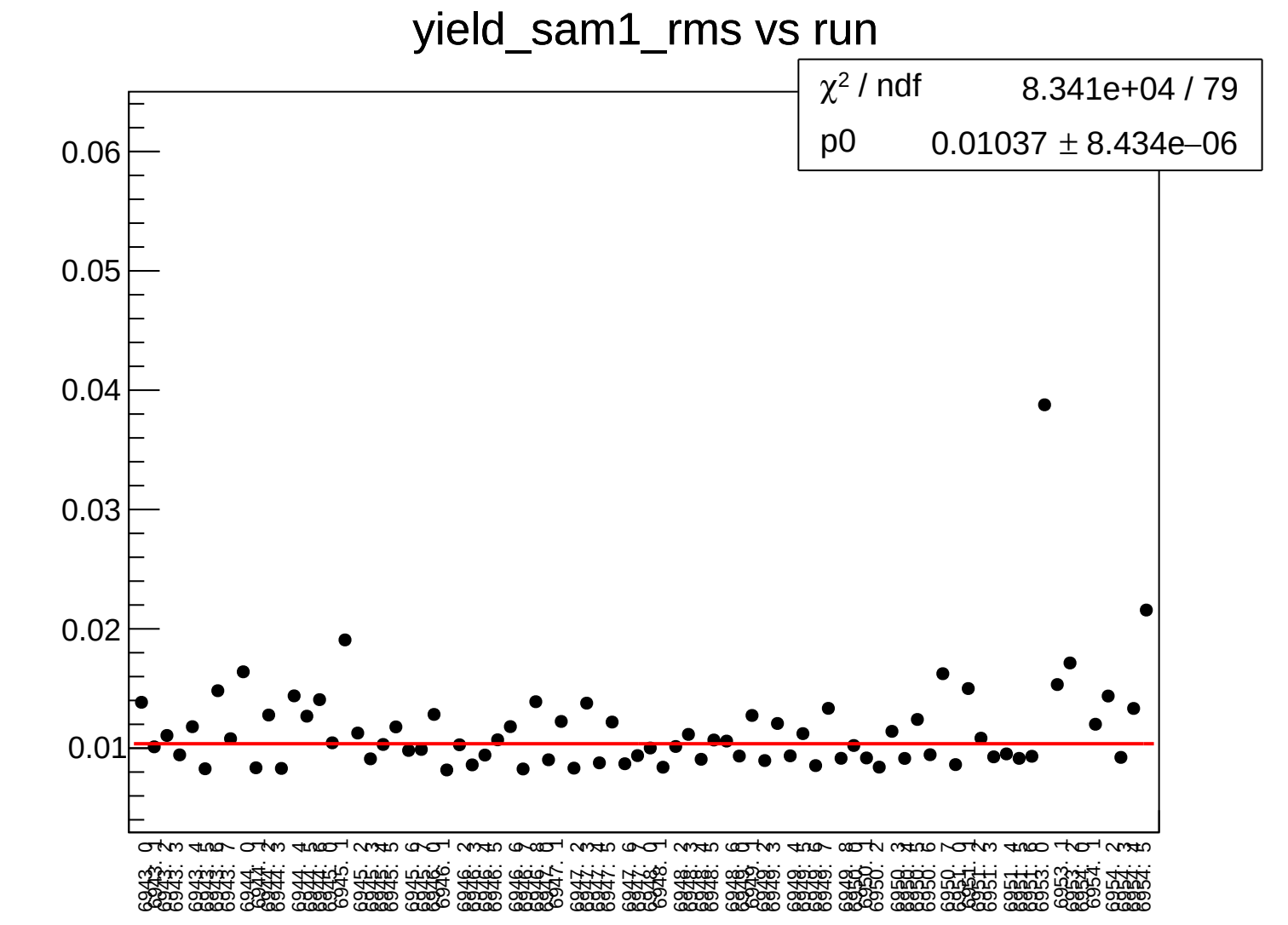

asym_sam8_mean vs run
χ² / ndf 77.94 / 79
p0 1177 ± 413.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 29.01
Std Dev 61.18
2
1
0
−1
−2

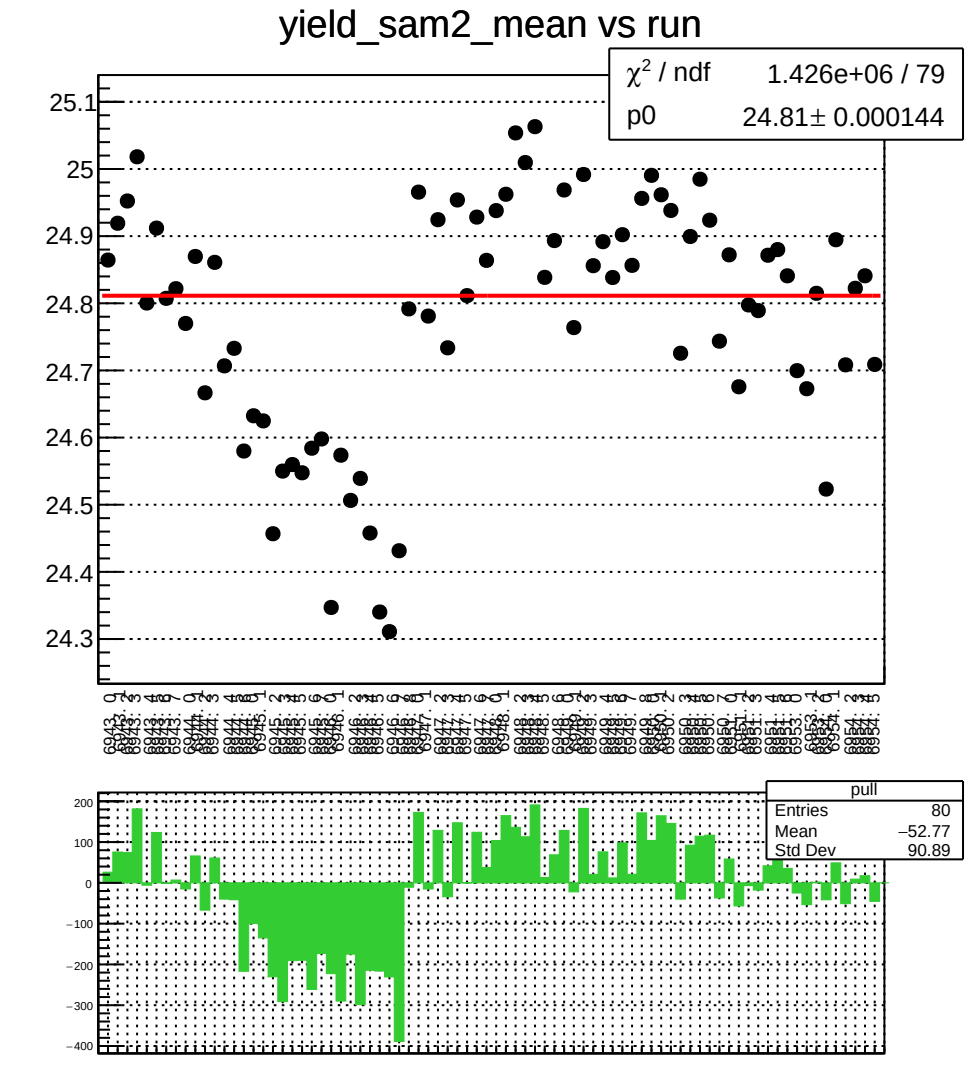

pull1D
Entries 80
Mean 0.02137
Std Dev 0.9868
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

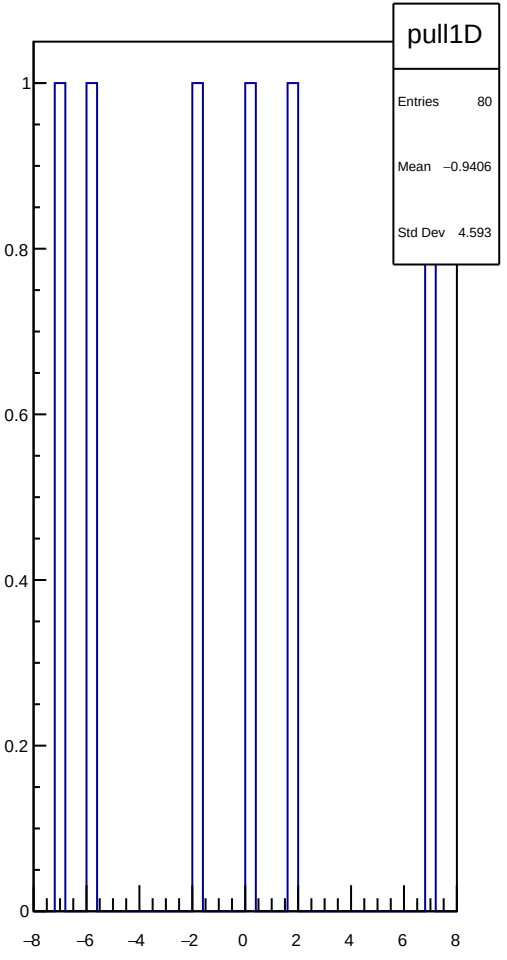

asym_sam8_rms vs run
χ² / ndf 1.403e+04 / 79
p0 367.4 ± 0.2921
440
420
400
380
360
340
320
300

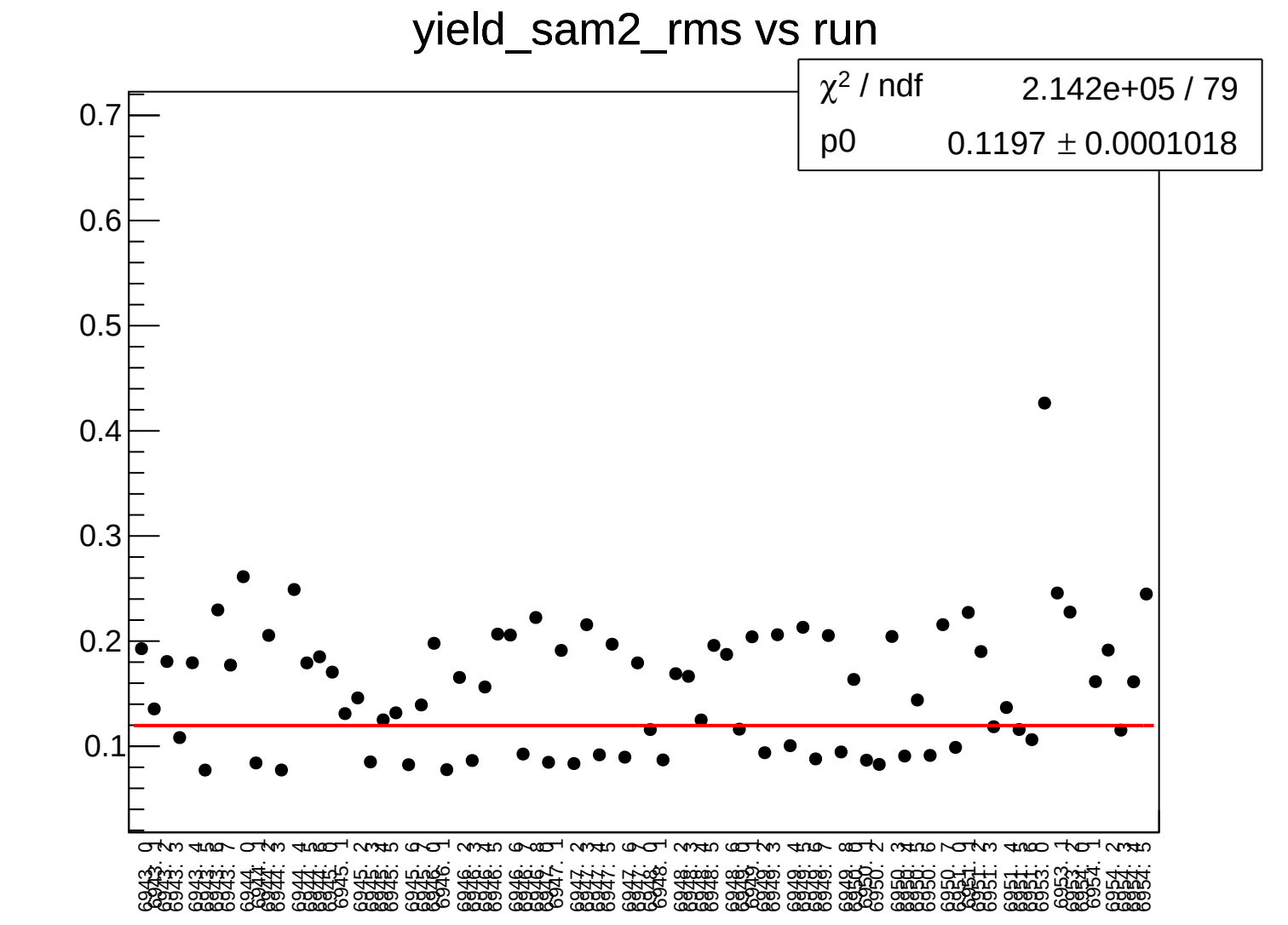

yield_sam1_mean vs run
χ² / ndf 1.173e+06 / 79
p0 15.35 ± 1.193e−05
15.39
15.38
15.37
15.36
15.35
15.34
15.33
15.32
pull
Entries 80
Mean 1.113e+04
Std Dev 1.11e+04
300
200
100
0
−100
−200
−300

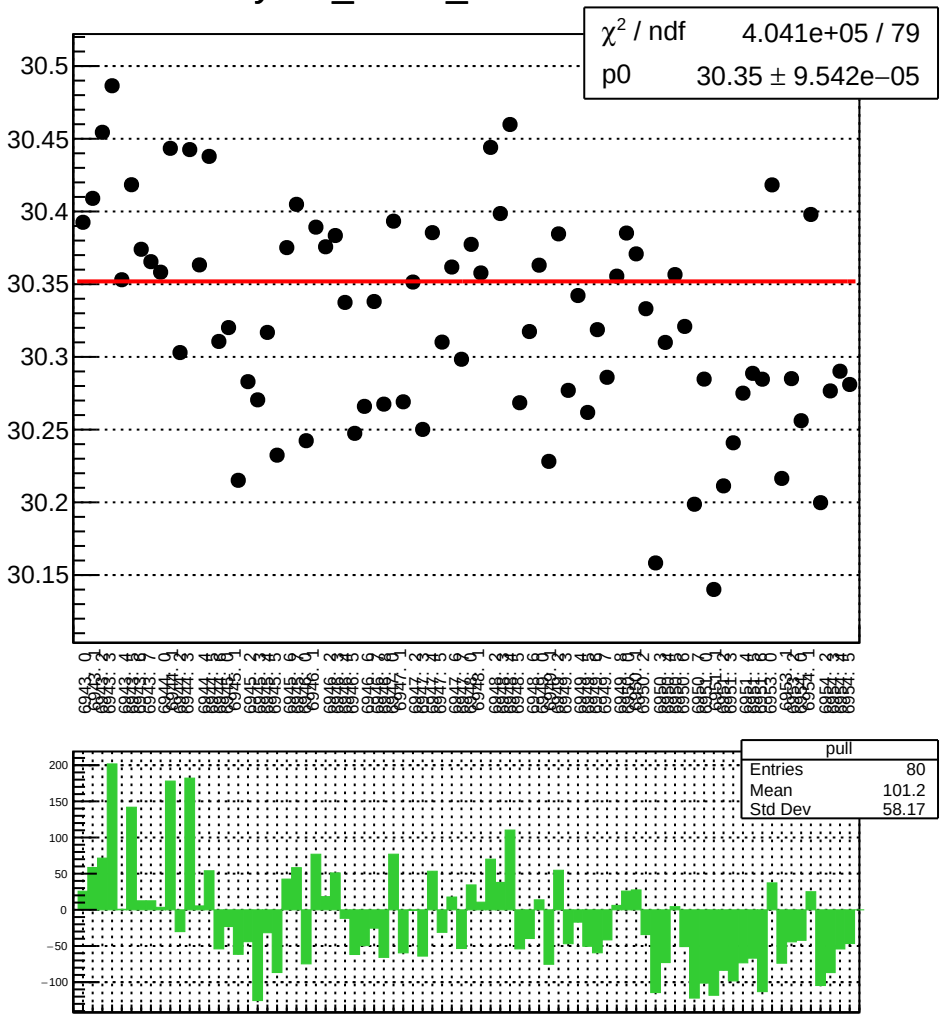

pull1D
Entries 80
Mean −2.13
Std Dev 0.6186
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

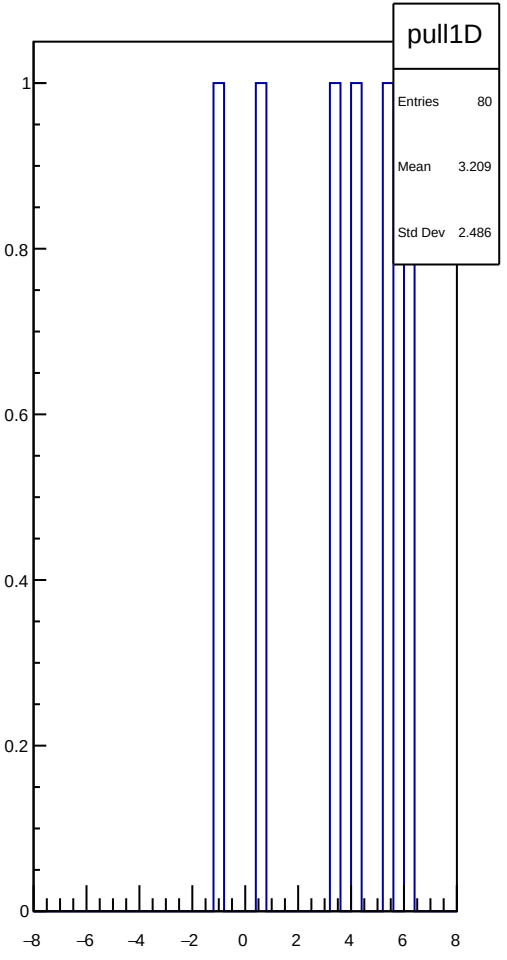

yield_sam1_rms vs run
χ² / ndf 8.341e+04 / 79
p0 0.01037 ± 8.434e–06
0.06
0.05
0.04
0.03
0.02
0.01

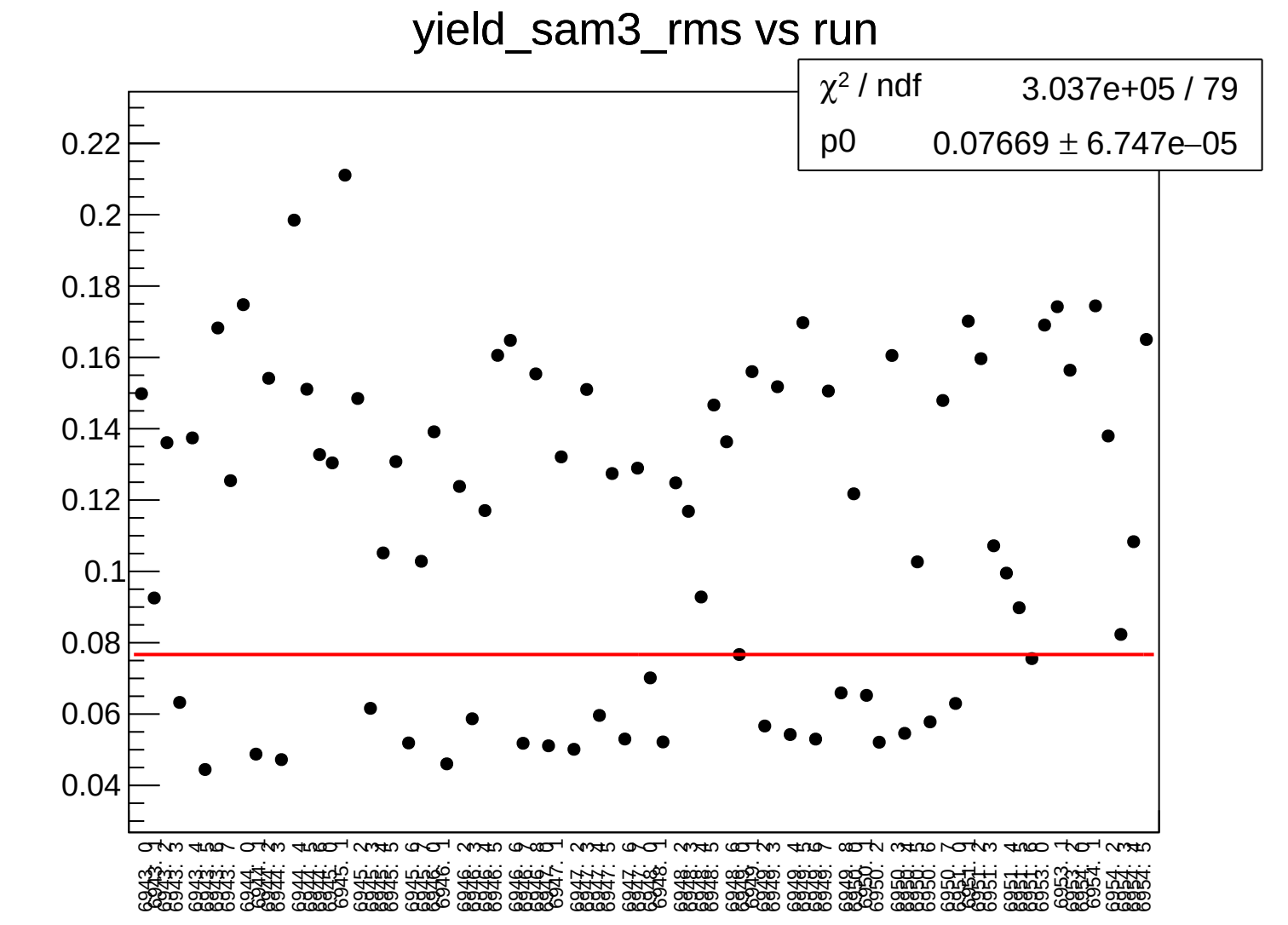

yield_sam2_mean vs run
χ² / ndf 1.426e+06 / 79
p0 24.81± 0.000144
25.1
25
24.9
24.8
24.7
24.6
24.5
24.4
24.3
pull
Entries 80
Mean −52.77
Std Dev 90.89
200
100
0
−100
−200
−300
−400

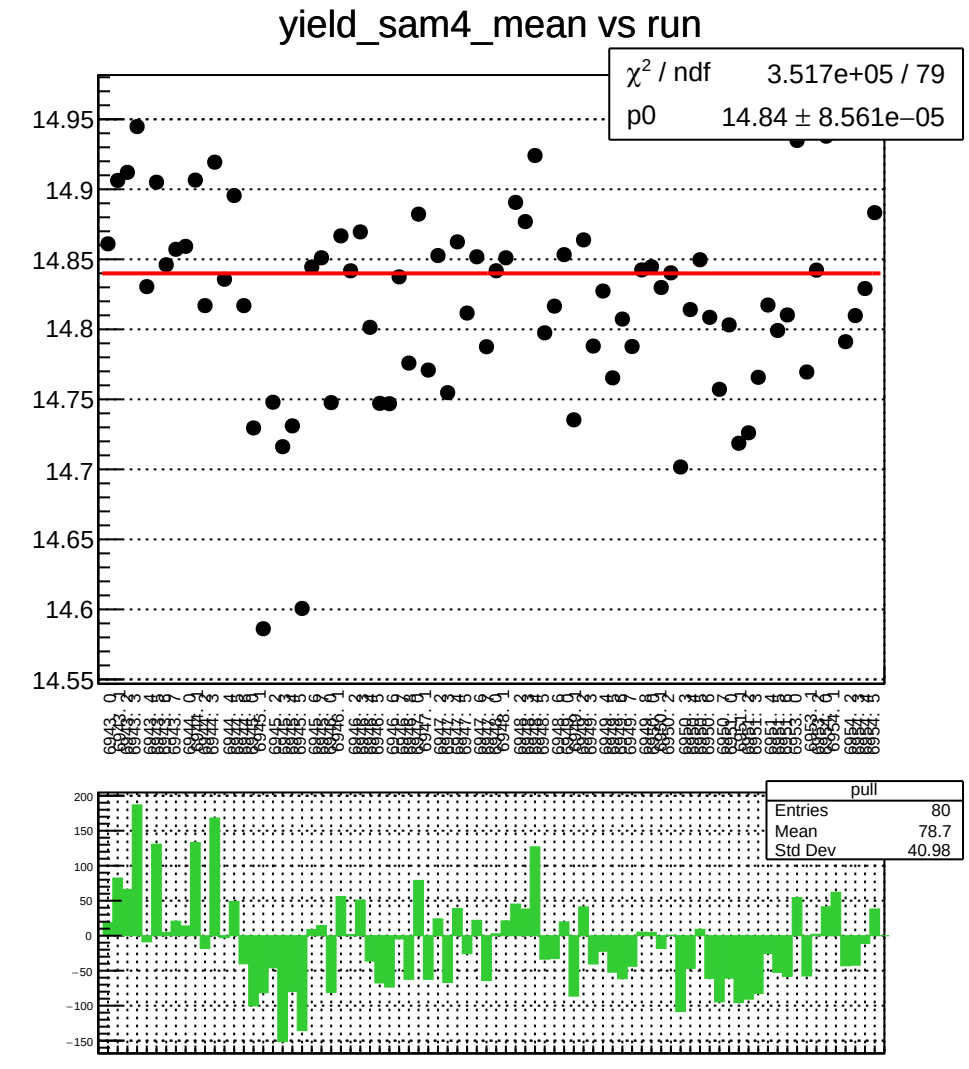

pull1D
Entries 80
Mean −0.9406
Std Dev 4.593
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

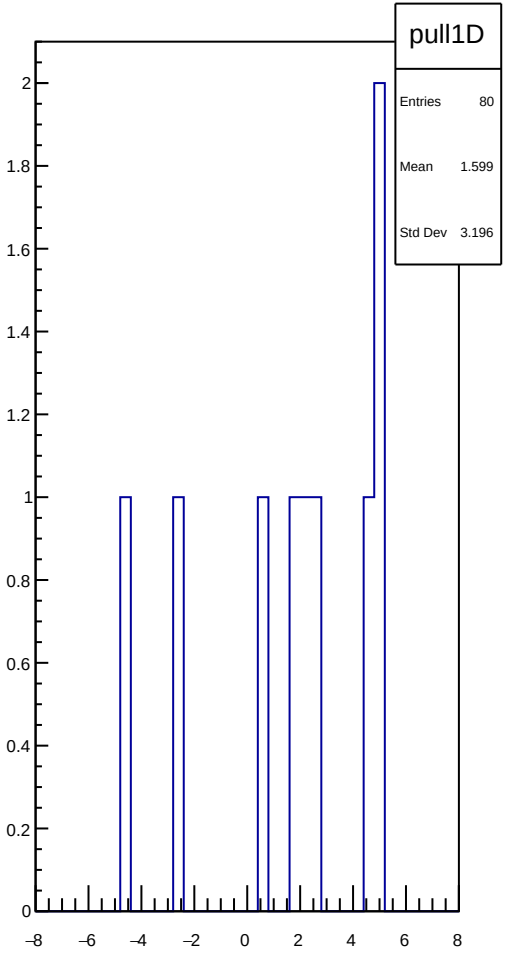

yield_sam2_rms vs run
χ² / ndf 2.142e+05 / 79
p0 0.1197 ± 0.0001018
0.7
0.6
0.5
0.4
0.3
0.2
0.1

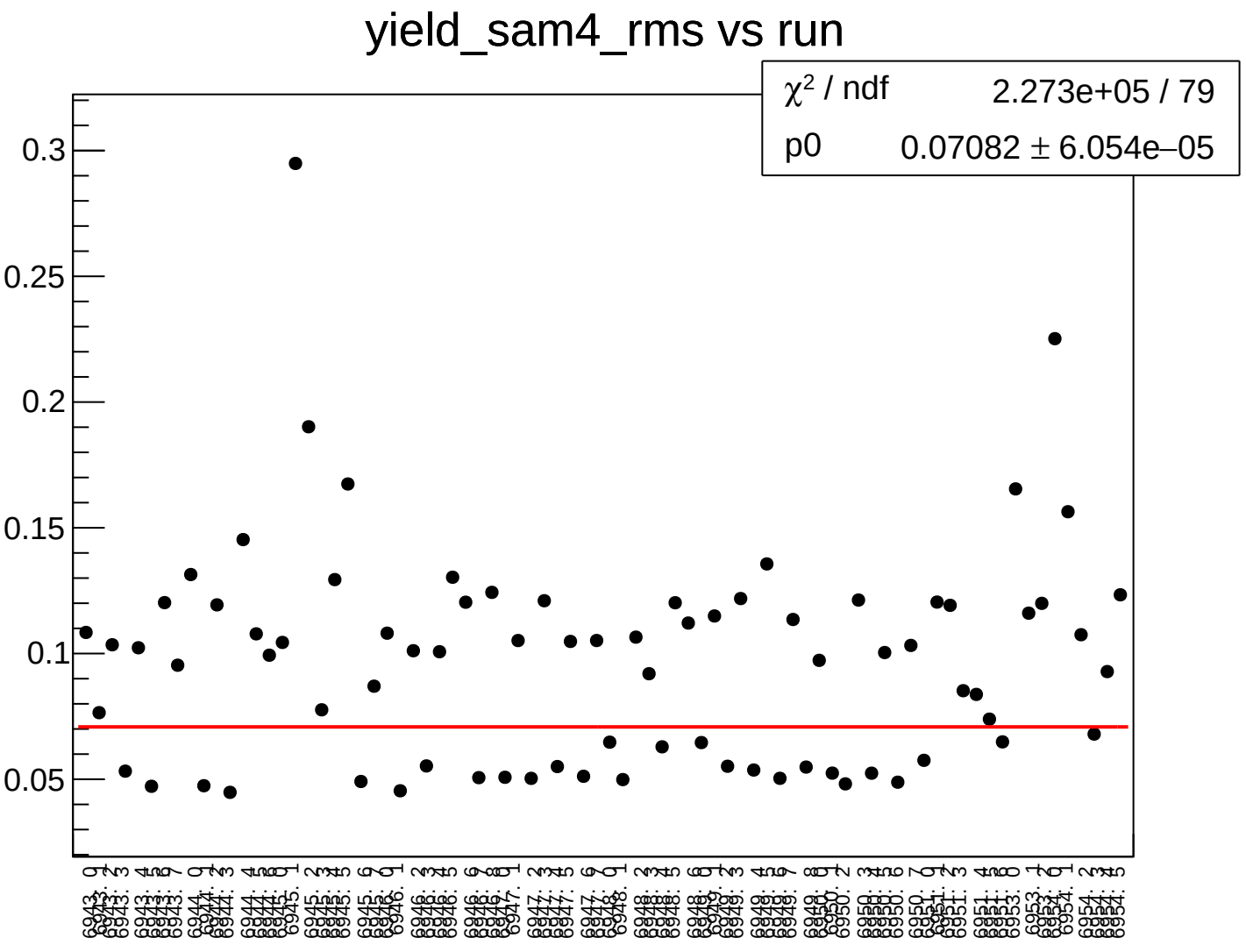

yield_sam3_mean vs run
χ² / ndf 4.041e+05 / 79
p0 30.35 ± 9.542e−05
30.5
30.45
30.4
30.35
30.3
30.25
30.2
30.15
pull
Entries 80
Mean 101.2
Std Dev 58.17
200
150
100
50
0
−50
−100

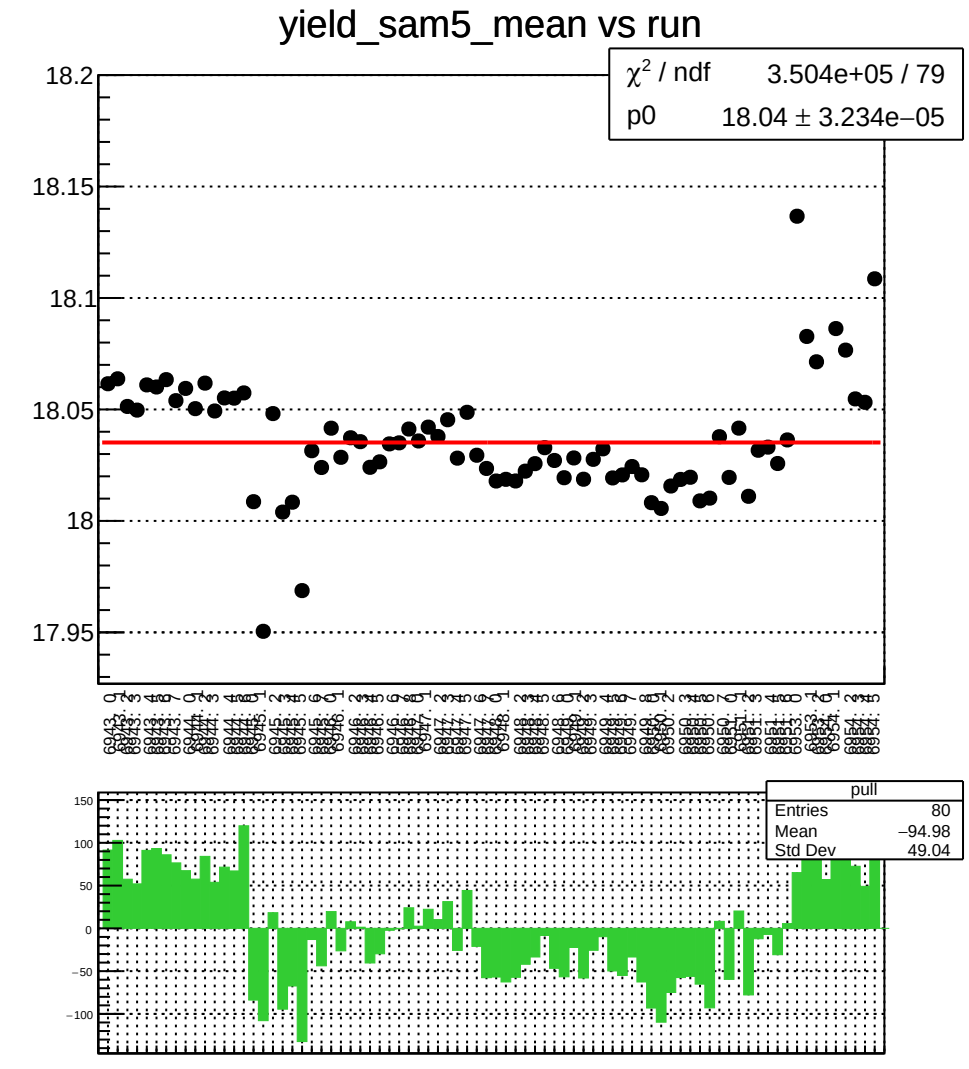

pull1D
Entries 80
Mean 3.209
Std Dev 2.486
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

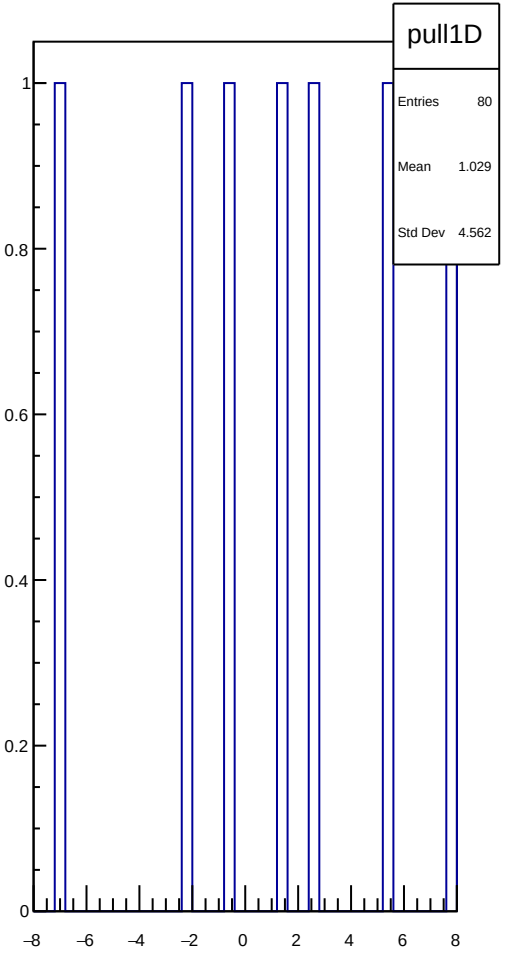

yield_sam3_rms vs run
χ² / ndf 3.037e+05 / 79
p0 0.07669 ± 6.747e−05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

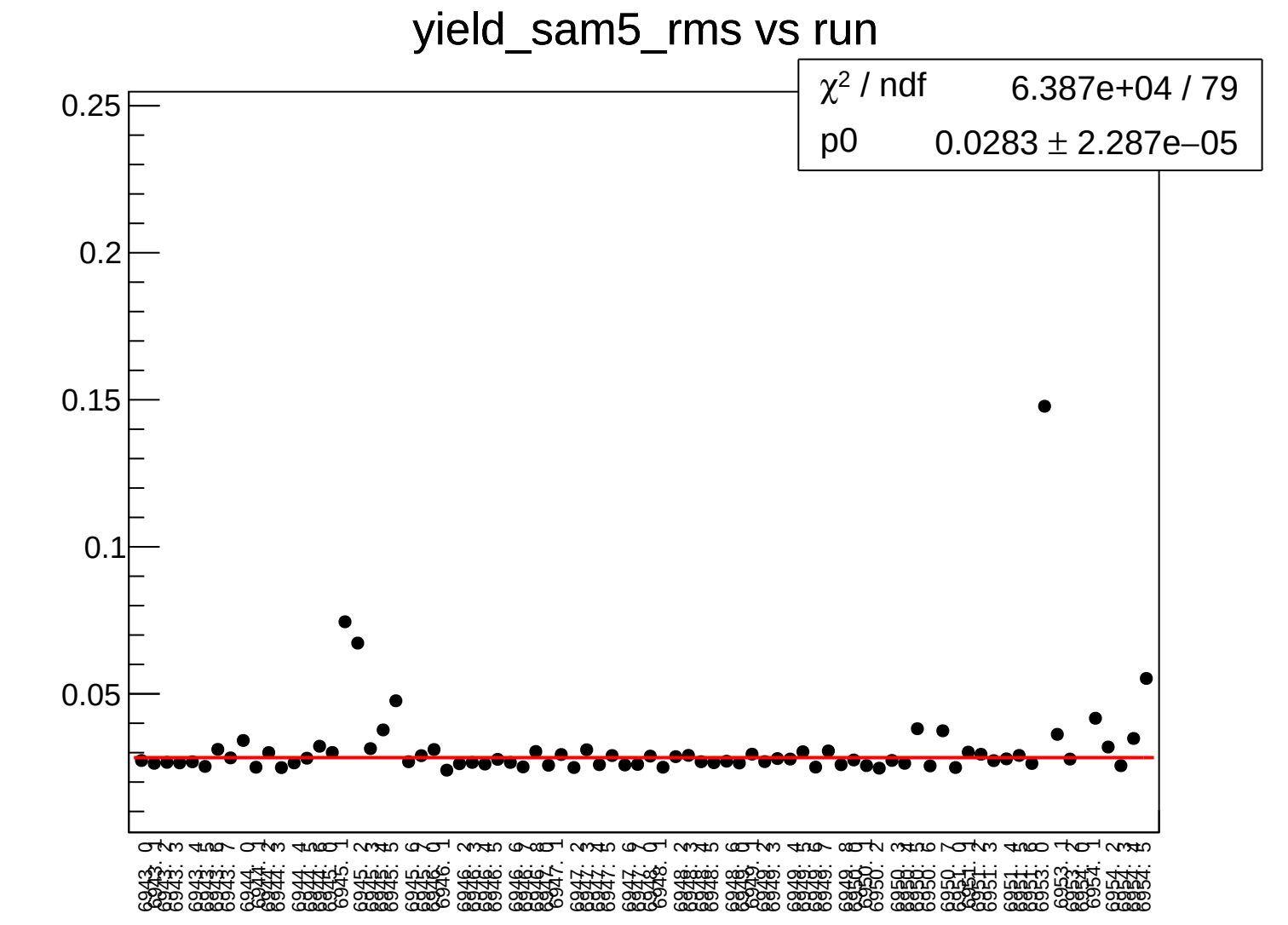

yield_sam4_mean vs run
χ² / ndf 3.517e+05 / 79
p0 14.84 ± 8.561e−05
14.95
14.9
14.85
14.8
14.75
14.7
14.65
14.6
14.55
pull
Entries 80
Mean 78.7
Std Dev 40.98
200
150
100
50
0
−50
−100
−150

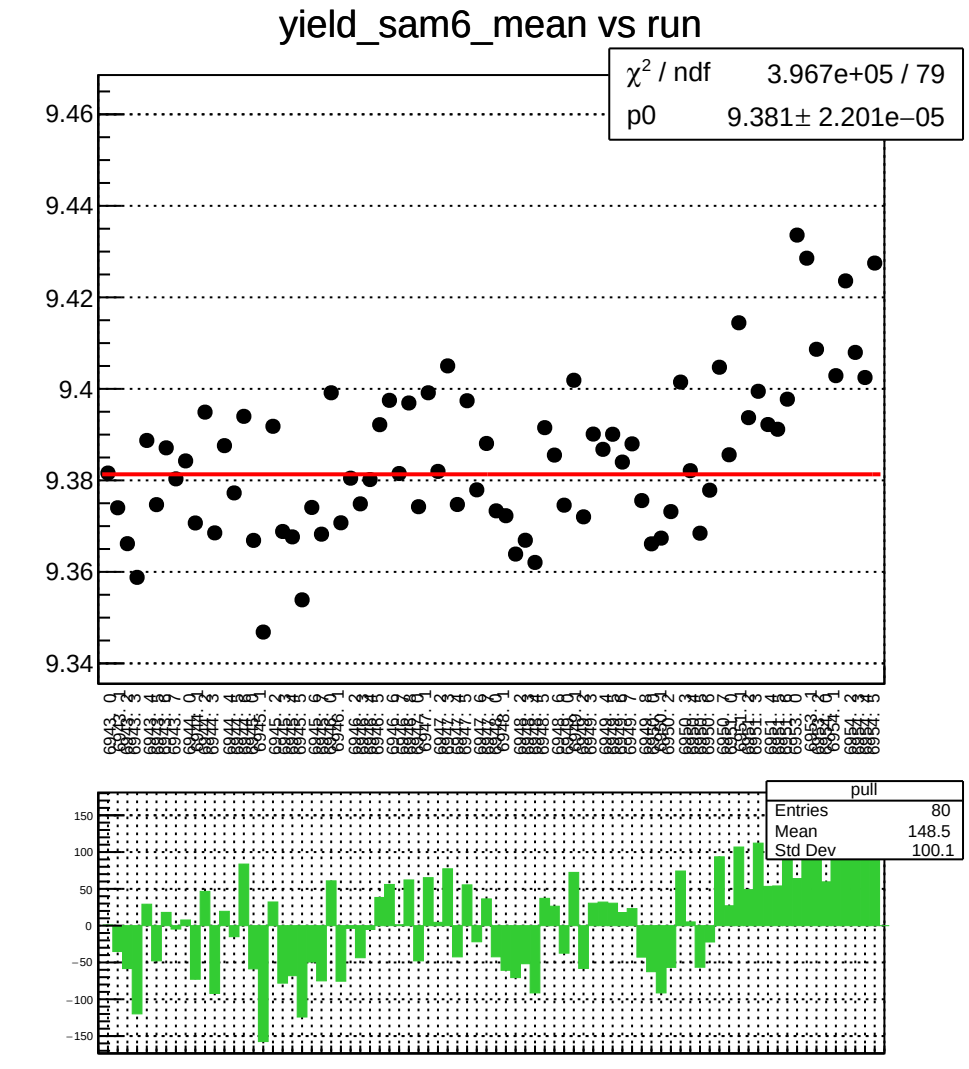

pull1D
Entries 80
Mean 1.599
Std Dev 3.196
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

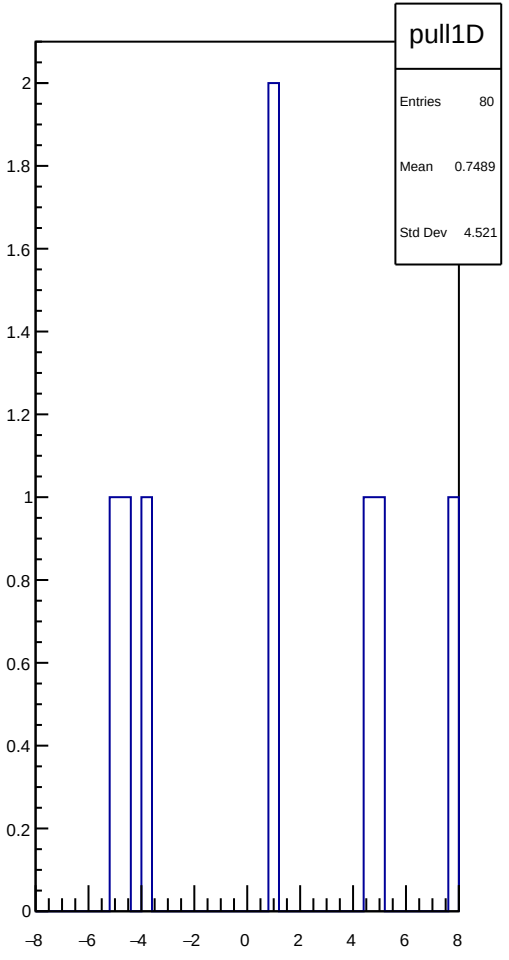

yield_sam4_rms vs run
χ² / ndf 2.273e+05 / 79
p0 0.07082 ± 6.054e−05
0.3
0.25
0.2
0.15
0.1
0.05

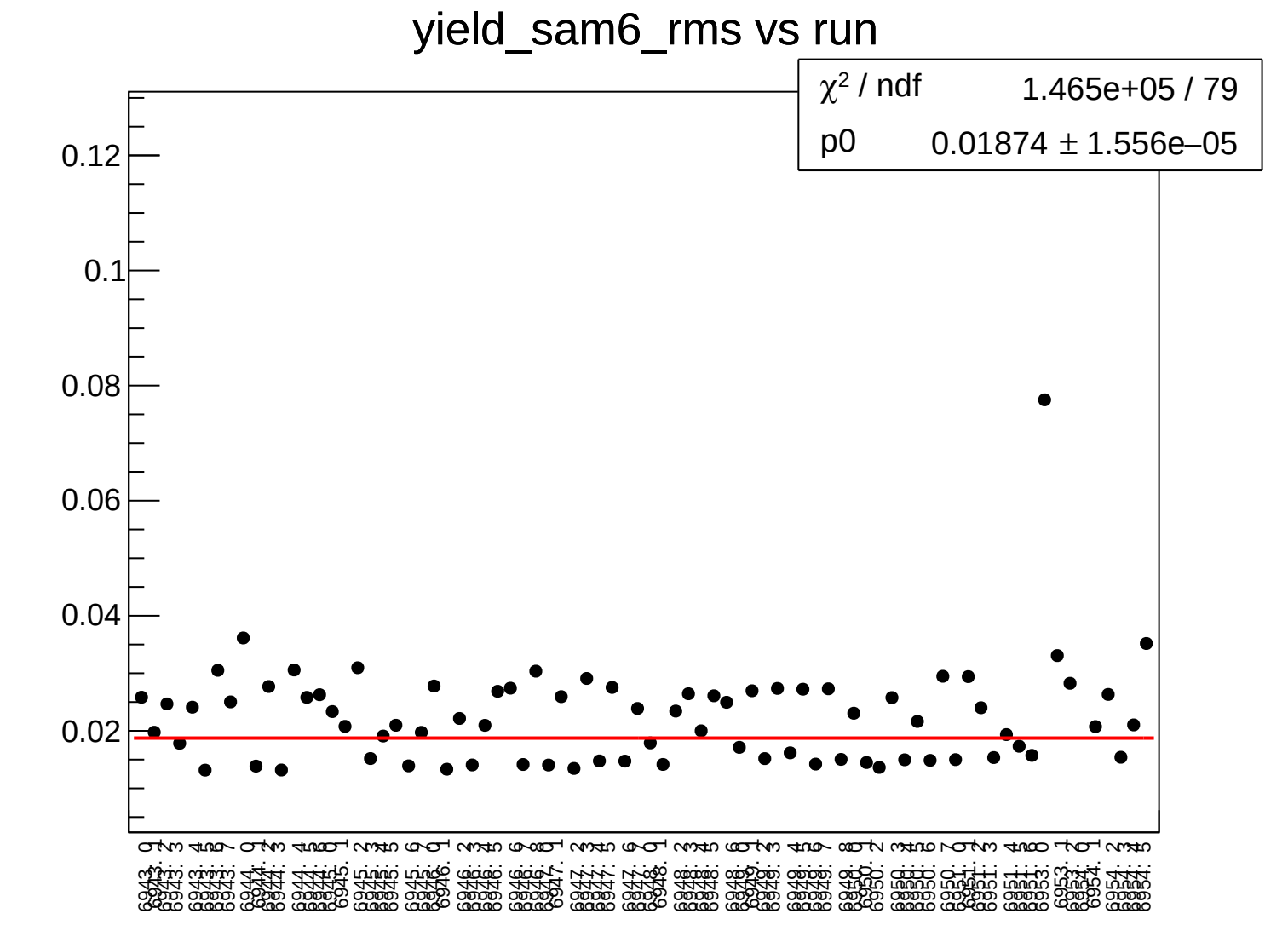

yield_sam5_mean vs run
χ² / ndf 3.504e+05 / 79
p0 18.04 ± 3.234e−05
18.2
18.15
18.1
18.05
18
17.95
pull
Entries 80
Mean −94.98
Std Dev 49.04
150
100
50
0
−50
−100

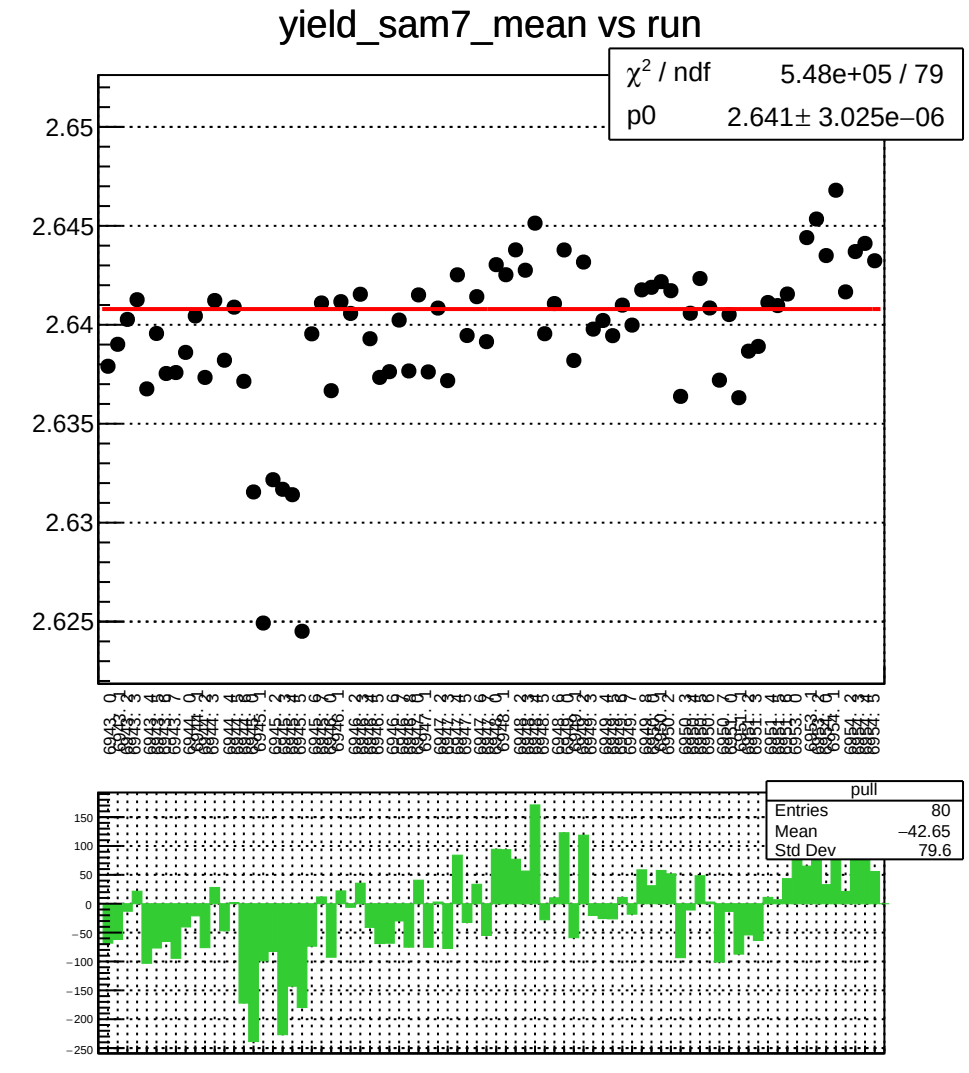

pull1D
Entries 80
Mean 1.029
Std Dev 4.562
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

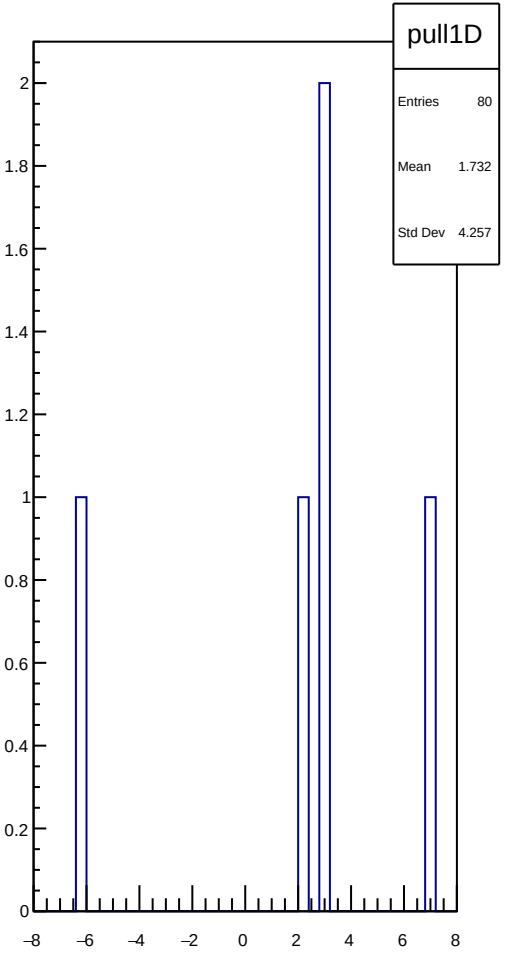

yield_sam5_rms vs run
χ² / ndf 6.387e+04 / 79
p0 0.0283 ± 2.287e−05
0.25
0.2
0.15
0.1
0.05

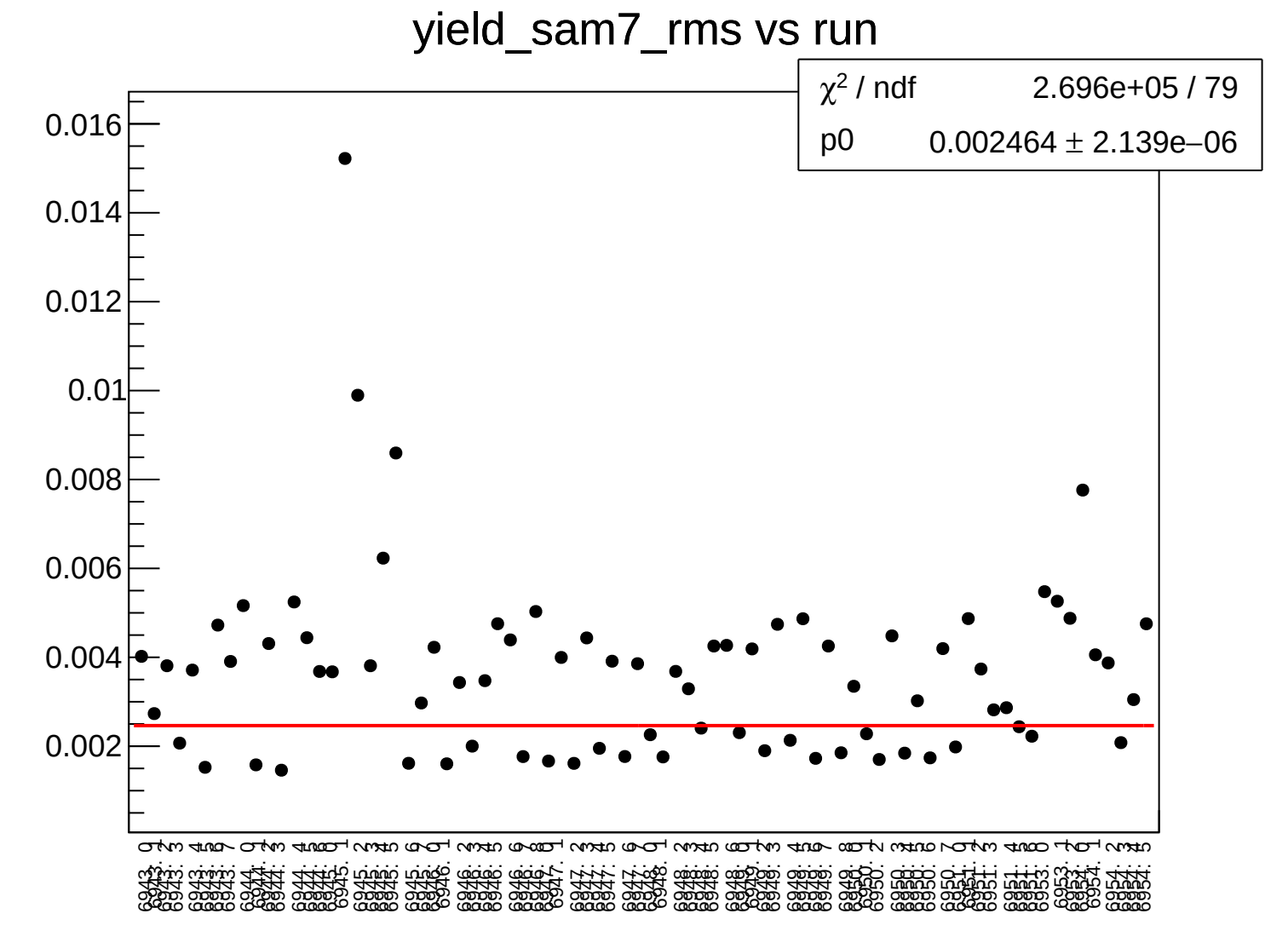

yield_sam6_mean vs run
χ² / ndf 3.967e+05 / 79
p0 9.381± 2.201e−05
9.46
9.44
9.42
9.4
9.38
9.36
9.34
pull
Entries 80
Mean 148.5
Std Dev 100.1
150
100
50
0
−50
−100
−150

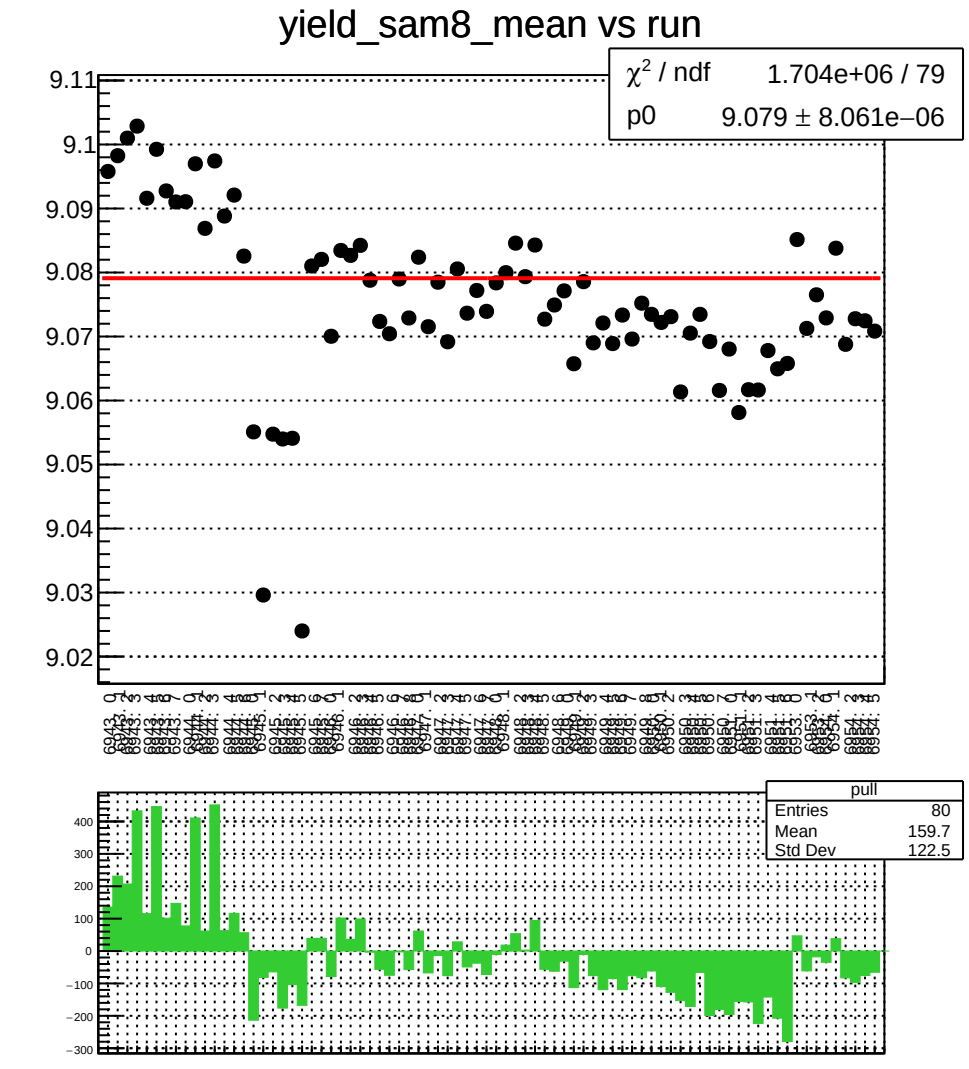

pull1D
Entries 80
Mean 0.7489
Std Dev 4.521
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

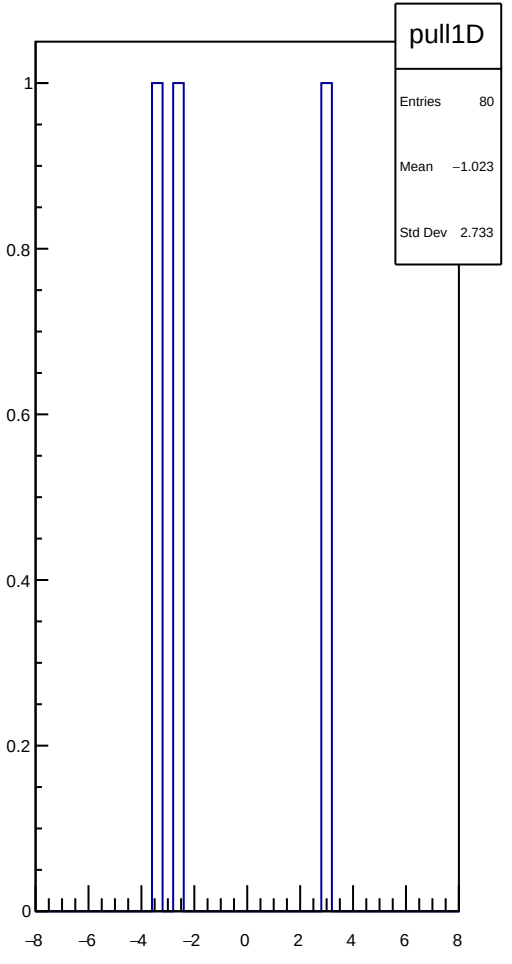

yield_sam6_rms vs run
χ² / ndf 1.465e+05 / 79
p0 0.01874 ± 1.556e−05
0.12
0.1
0.08
0.06
0.04
0.02

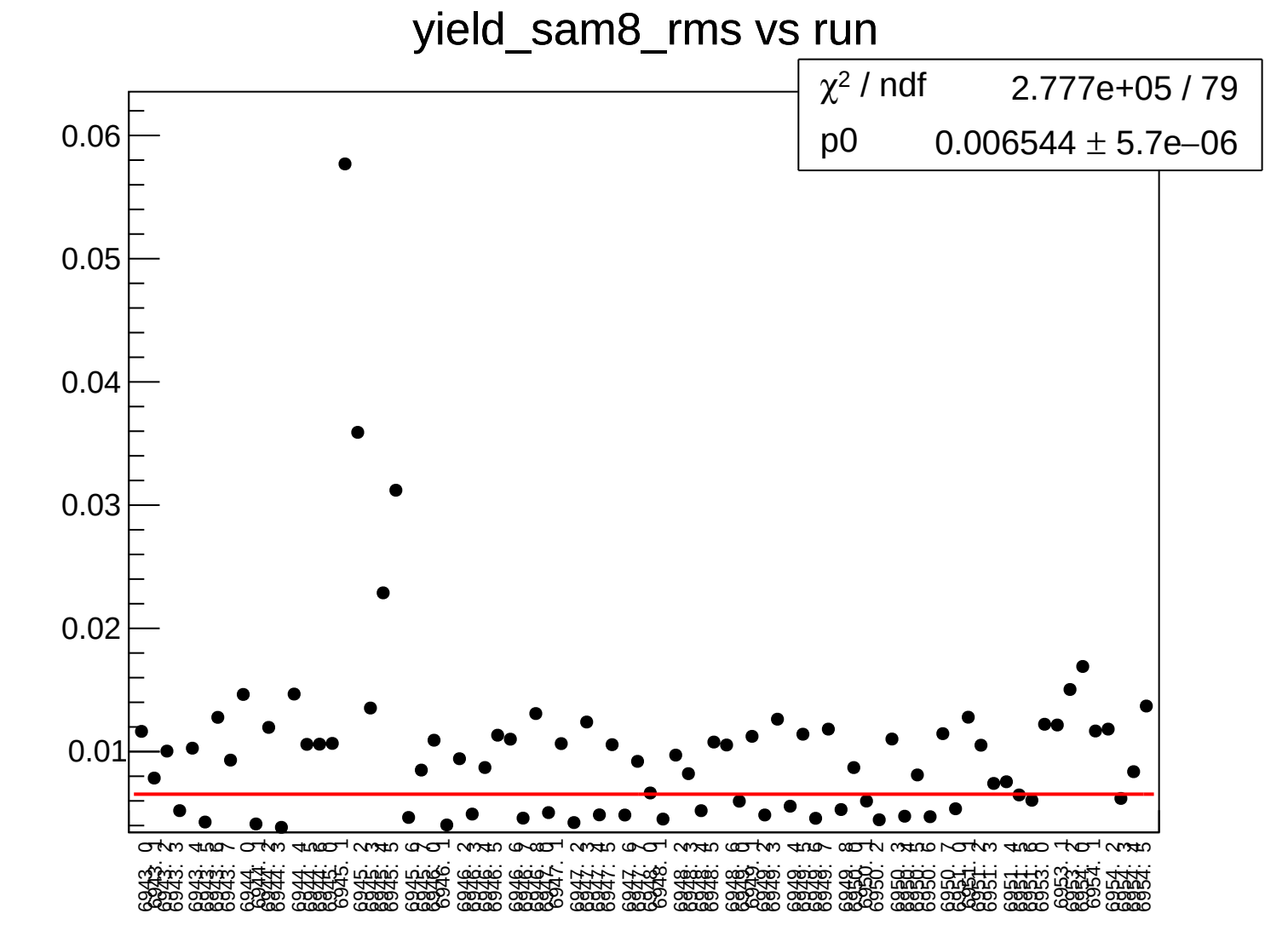

yield_sam7_mean vs run
χ² / ndf 5.48e+05 / 79
p0 2.641± 3.025e−06
2.65
2.645
2.64
2.635
2.63
2.625
pull
Entries 80
Mean −42.65
Std Dev 79.6
150
100
50
0
−50
−100
−150
−200
−250

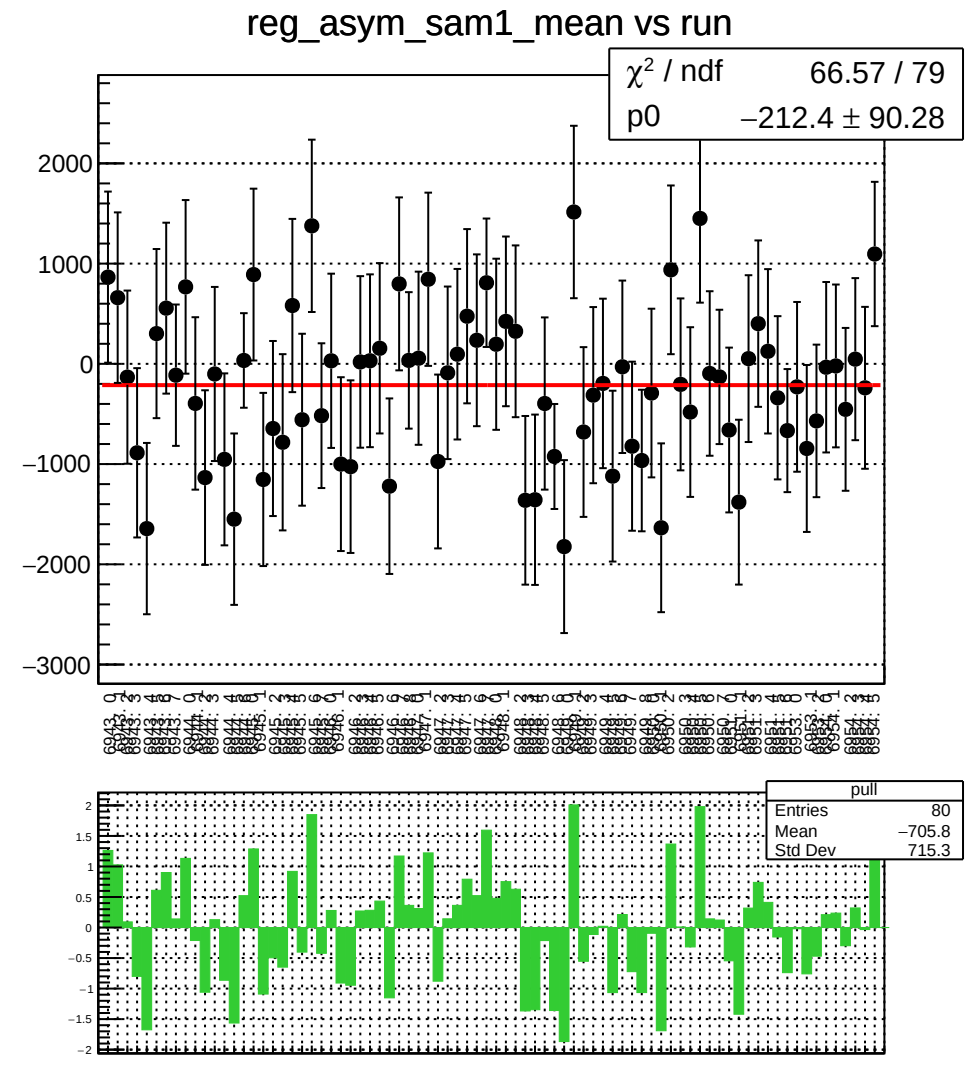

pull1D
Entries 80
Mean 1.732
Std Dev 4.257
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

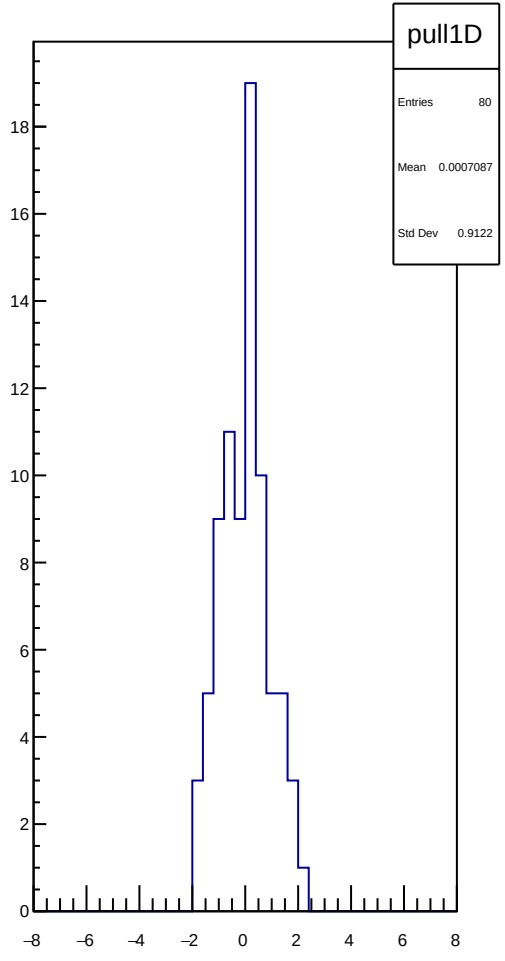

yield_sam7_rms vs run
χ^2 / ndf 2.696e+05 / 79
p0 0.002464 ± 2.139e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

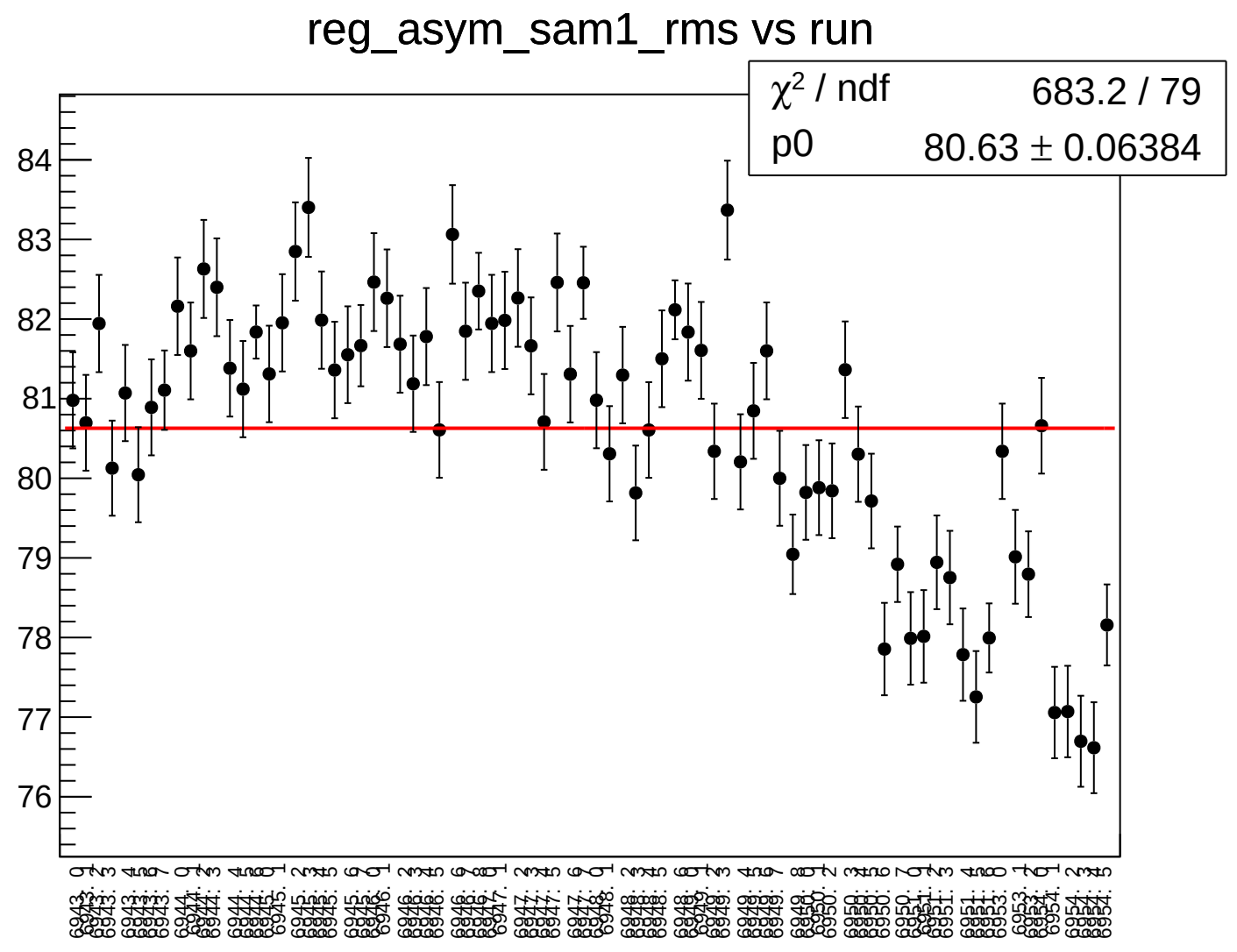

yield_sam8_mean vs run
χ² / ndf 1.704e+06 / 79
p0 9.079 ± 8.061e−06
9.11
9.1
9.09
9.08
9.07
9.06
9.05
9.04
9.03
9.02
pull
Entries 80
Mean 159.7
Std Dev 122.5
400
300
200
100
0
−100
−200
−300

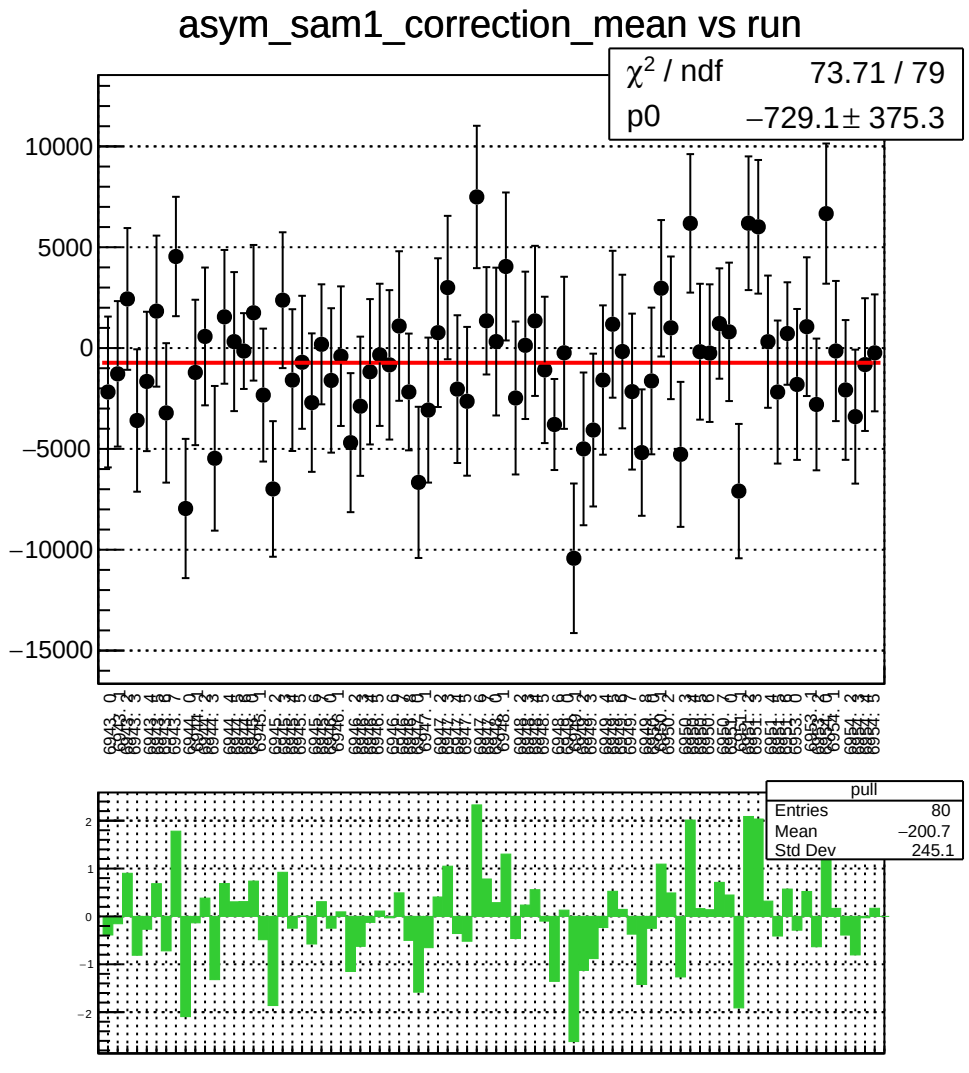

pull1D
Entries 80
Mean −1.023
Std Dev 2.733
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

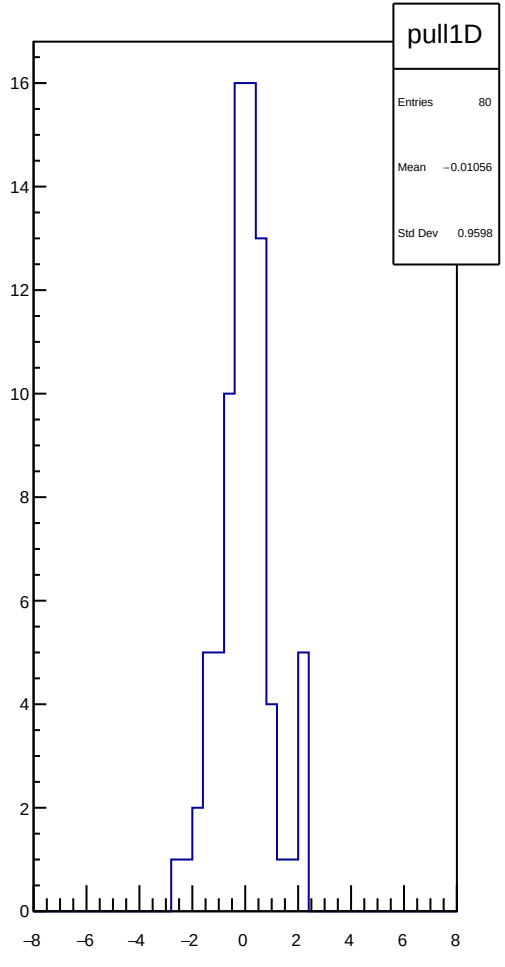

yield_sam8_rms vs run
χ² / ndf 2.777e+05 / 79
p0 0.006544 ± 5.7e−06
0.06
0.05
0.04
0.03
0.02
0.01

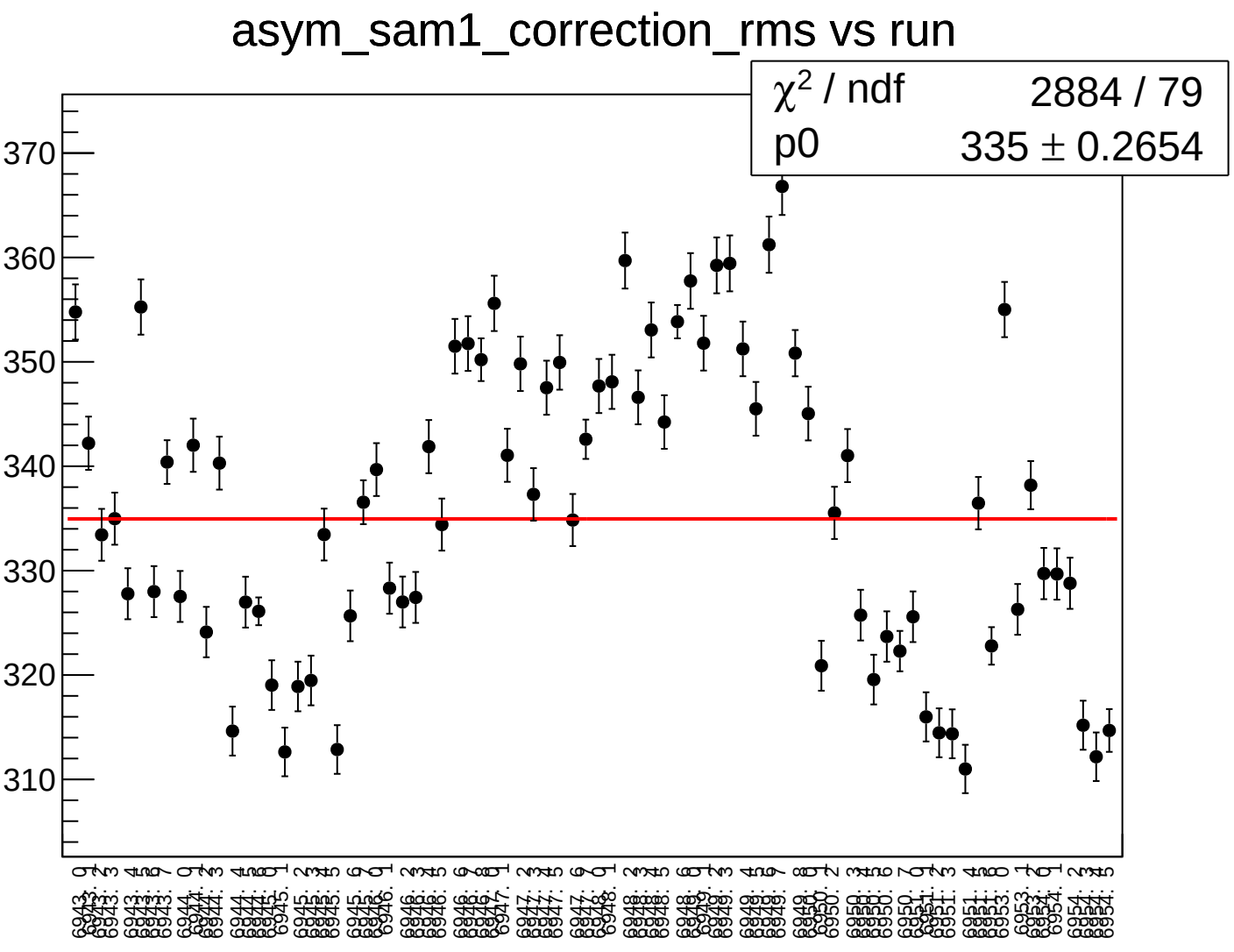

reg_asym_sam1_mean vs run
χ² / ndf 66.57 / 79
p0 −212.4 ± 90.28
2000
1000
0
−1000
−2000
−3000
pull
Entries 80
Mean −705.8
Std Dev 715.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

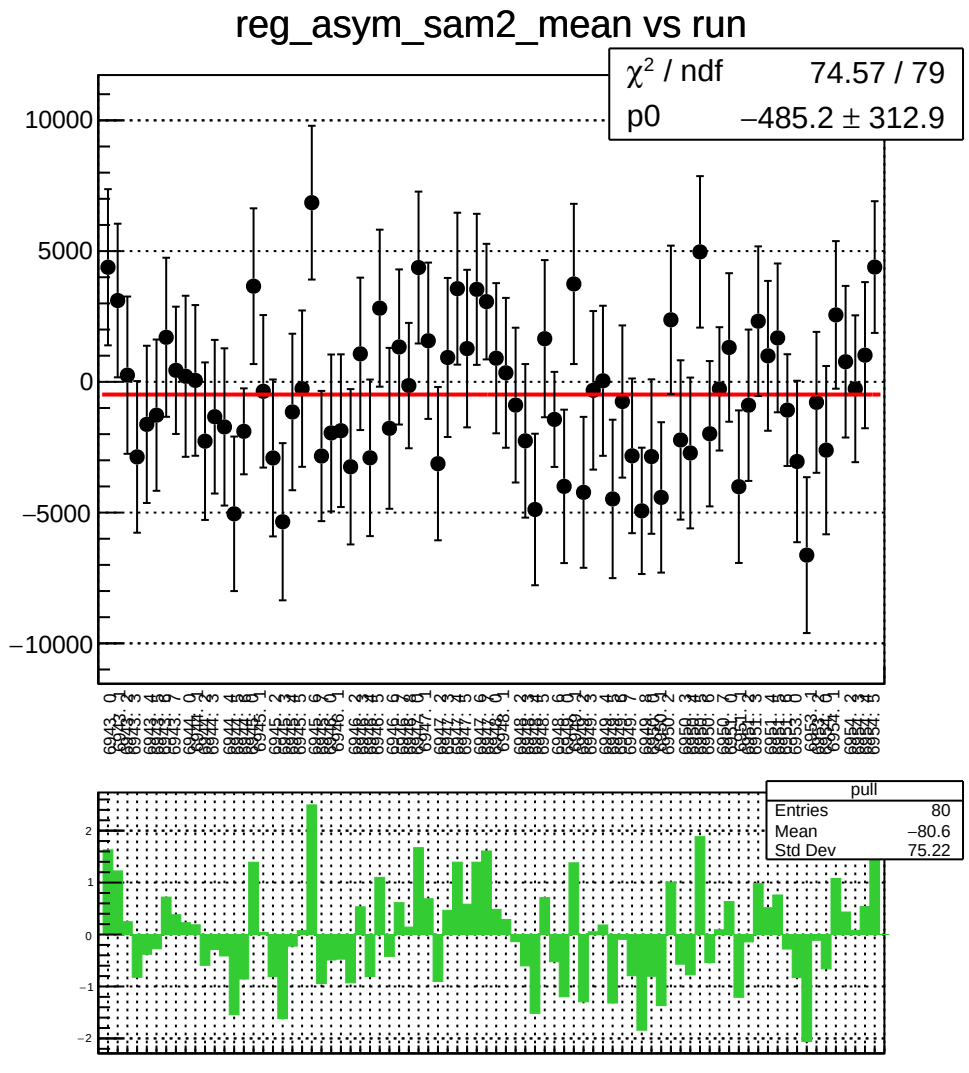

pull1D
Entries 80
Mean 0.0007087
Std Dev 0.9122
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

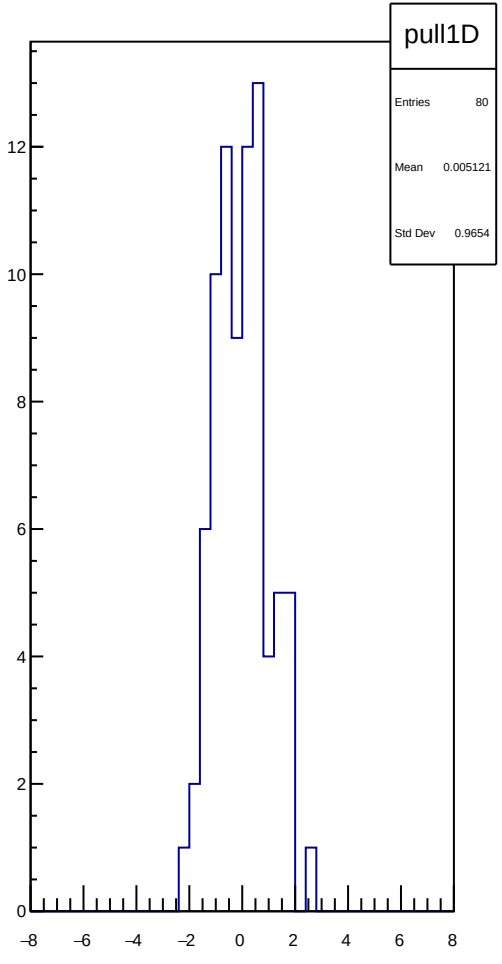

reg_asym_sam1_rms vs run
χ² / ndf 683.2 / 79
p0 80.63 ± 0.06384
84
83
82
81
80
79
78
77
76

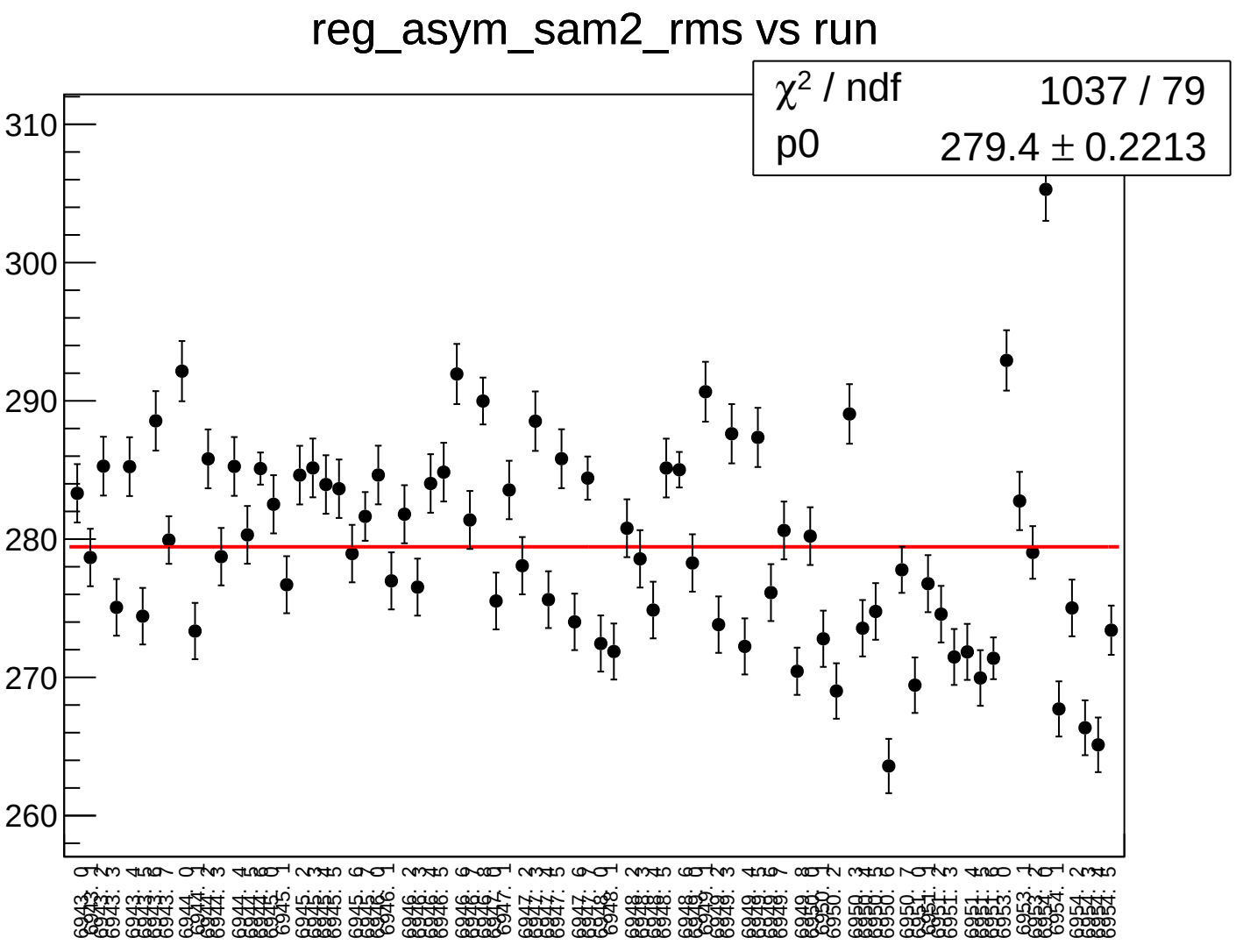

asym_sam1_correction_mean vs run
χ² / ndf 73.71 / 79
p0 −729.1± 375.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean −200.7
Std Dev 245.1
2
1
0
−1
−2

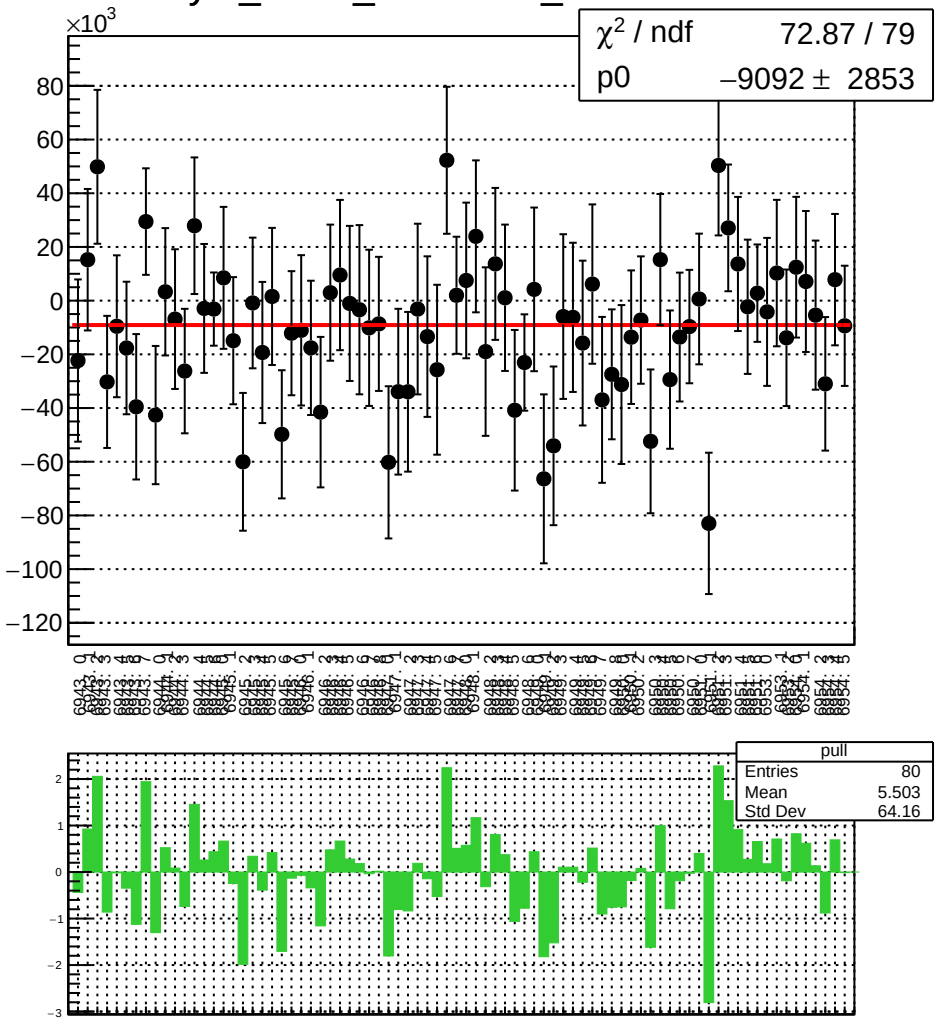

pull1D
Entries 80
Mean −0.01056
Std Dev 0.9598
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

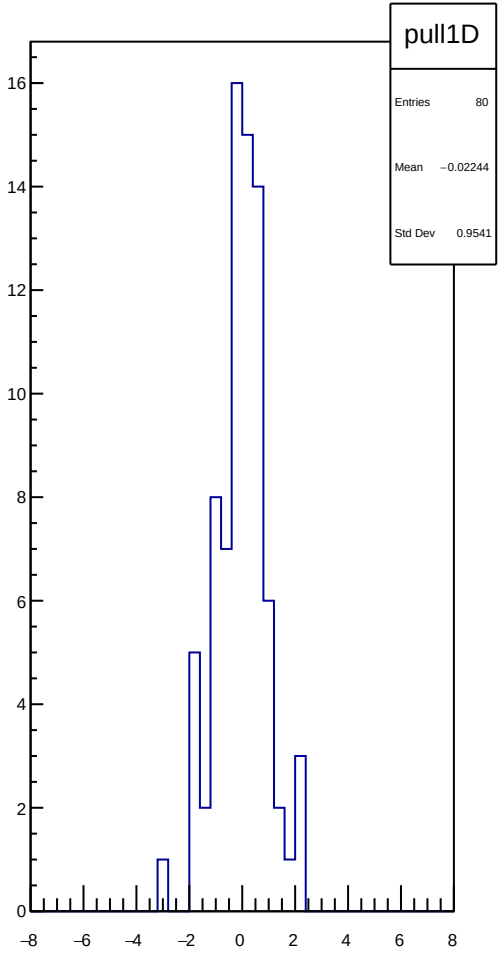

asym_sam1_correction_rms vs run
χ^2 / ndf 2884 / 79
p0 335 ± 0.2654
370
360
350
340
330
320
310


reg_asym_sam2_mean vs run
χ² / ndf 74.57 / 79
p0 −485.2 ± 312.9
10000
5000
0
−5000
−10000
pull
Entries 80
Mean −80.6
Std Dev 75.22
2
1
0
−1
−2

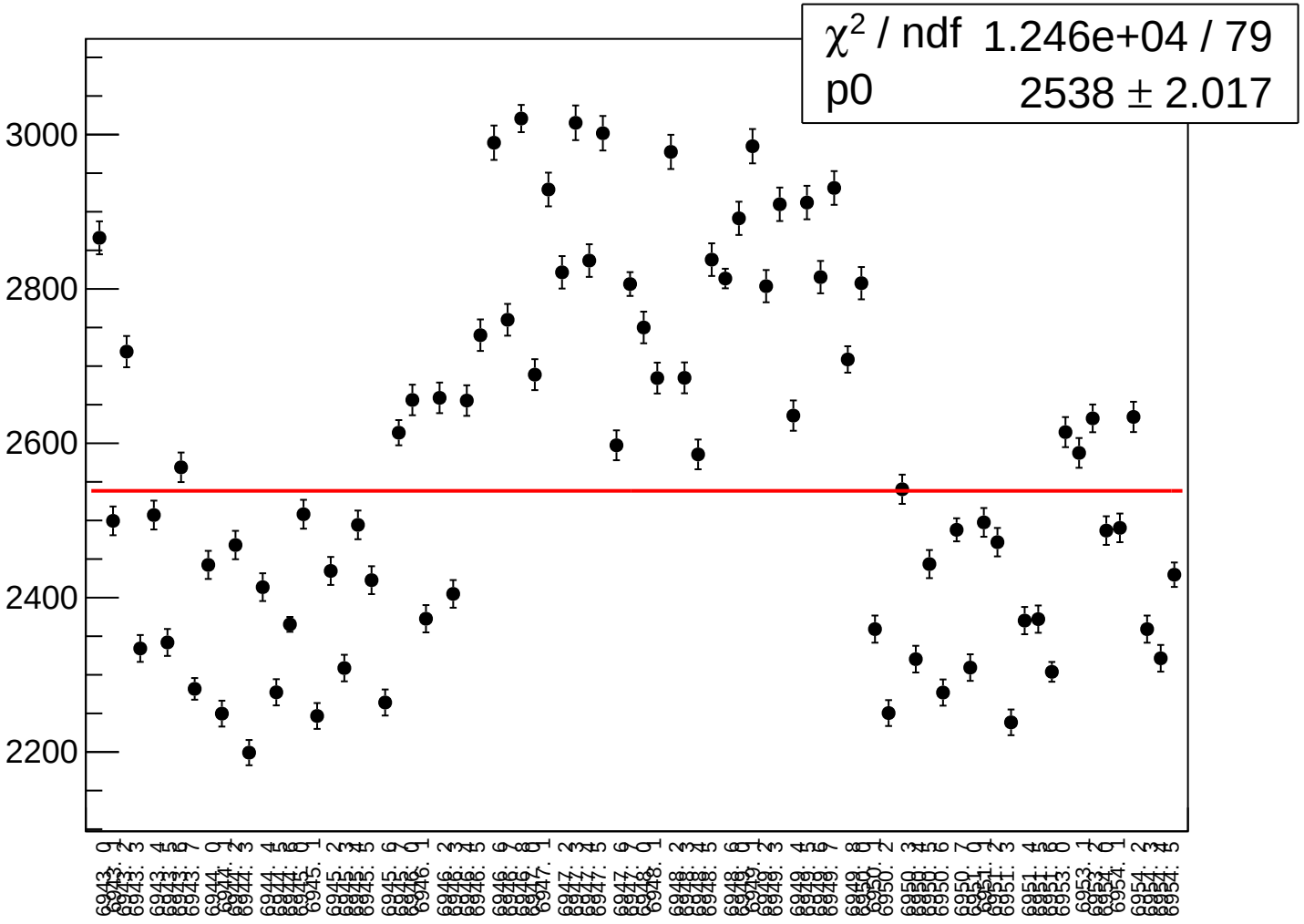

pull1D
Entries 80
Mean 0.005121
Std Dev 0.9654
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

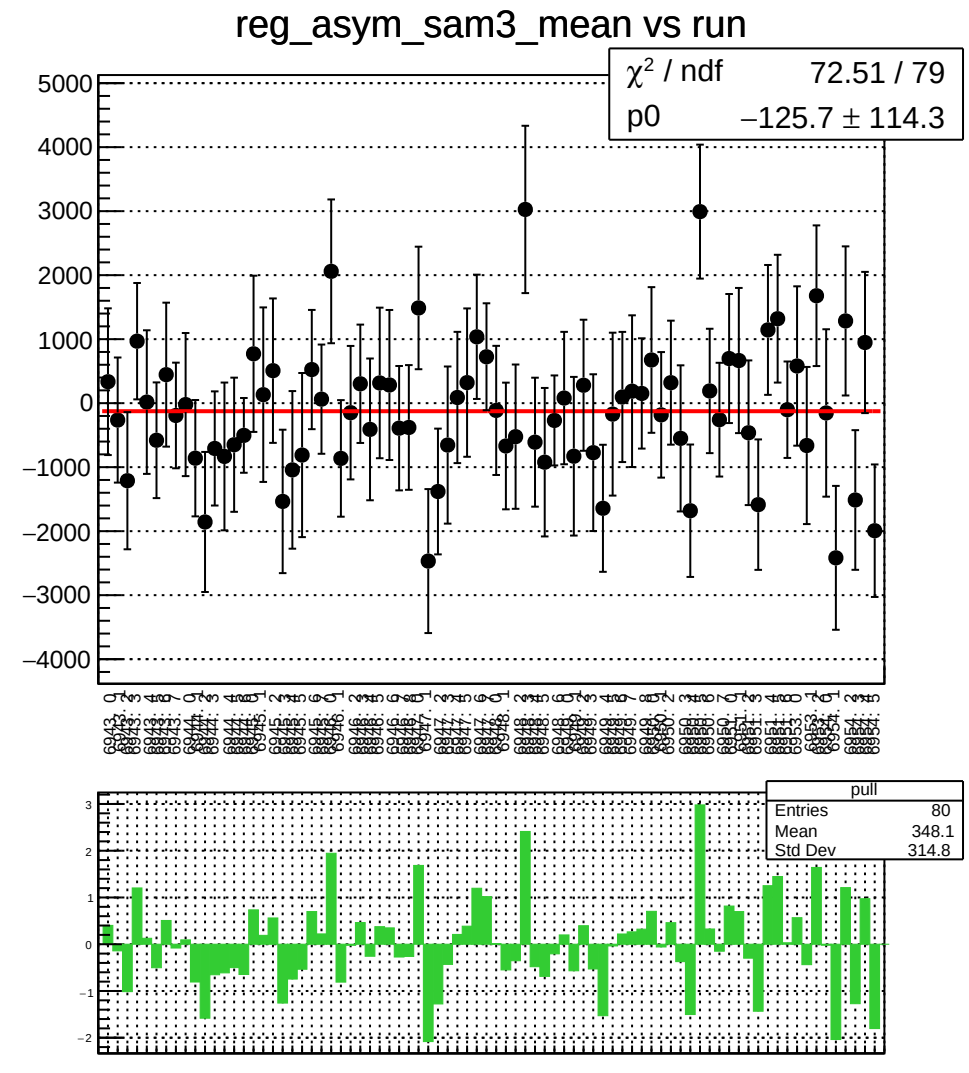

reg_asym_sam2_rms vs run
χ² / ndf 1037 / 79
p0 279.4 ± 0.2213
310
300
290
280
270
260

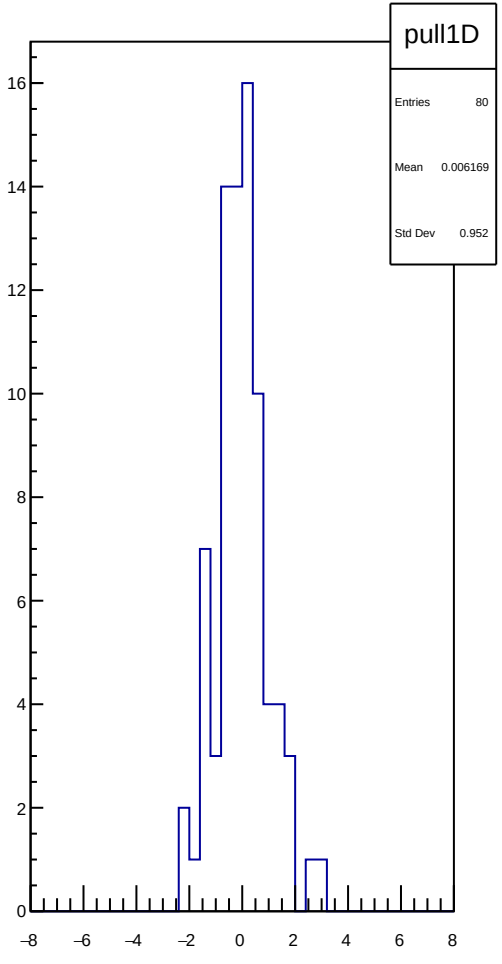

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 72.87 / 79
p0 −9092 ± 2853
pull
Entries 80
Mean 5.503
Std Dev 64.16

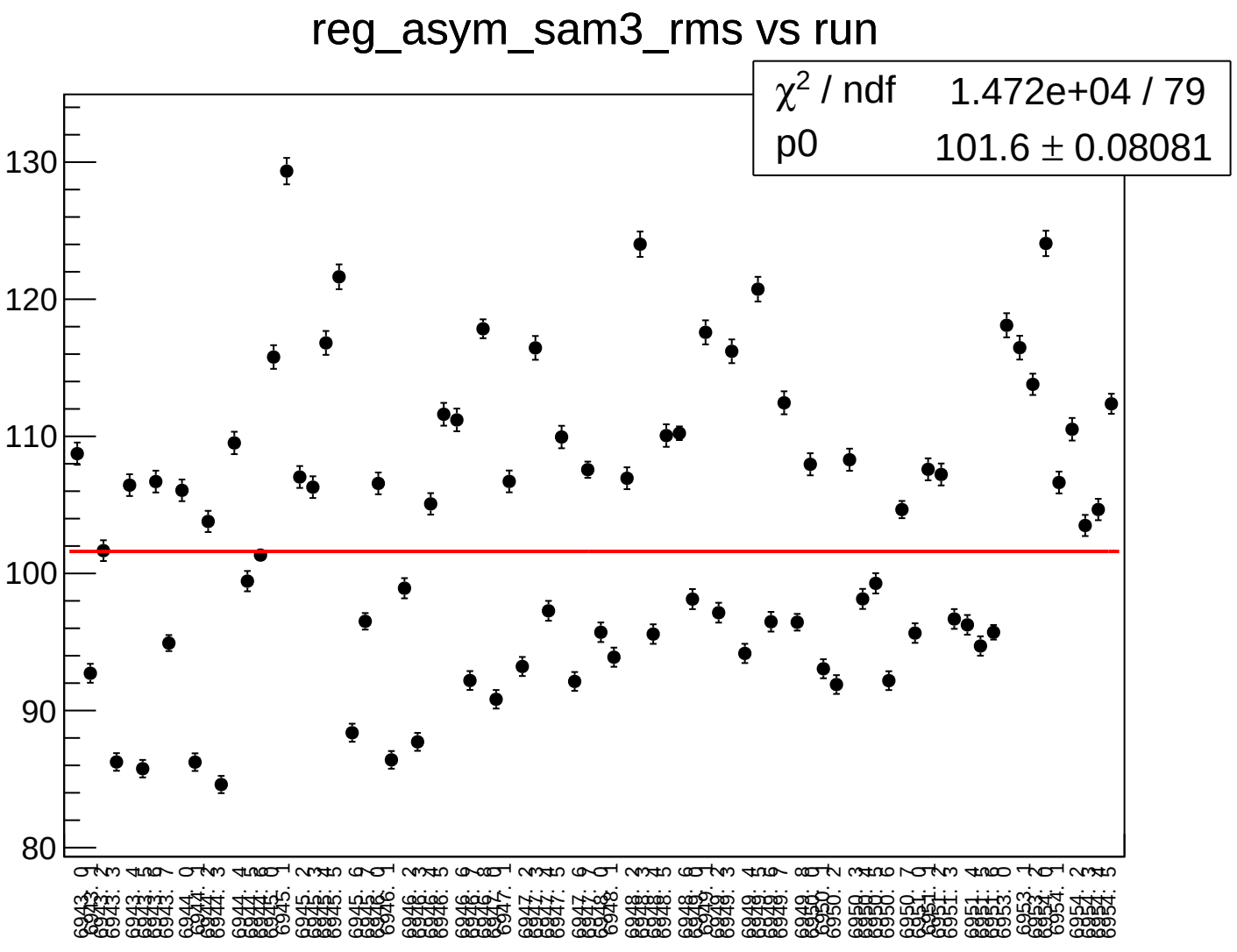

pull1D
Entries 80
Mean −0.02244
Std Dev 0.9541

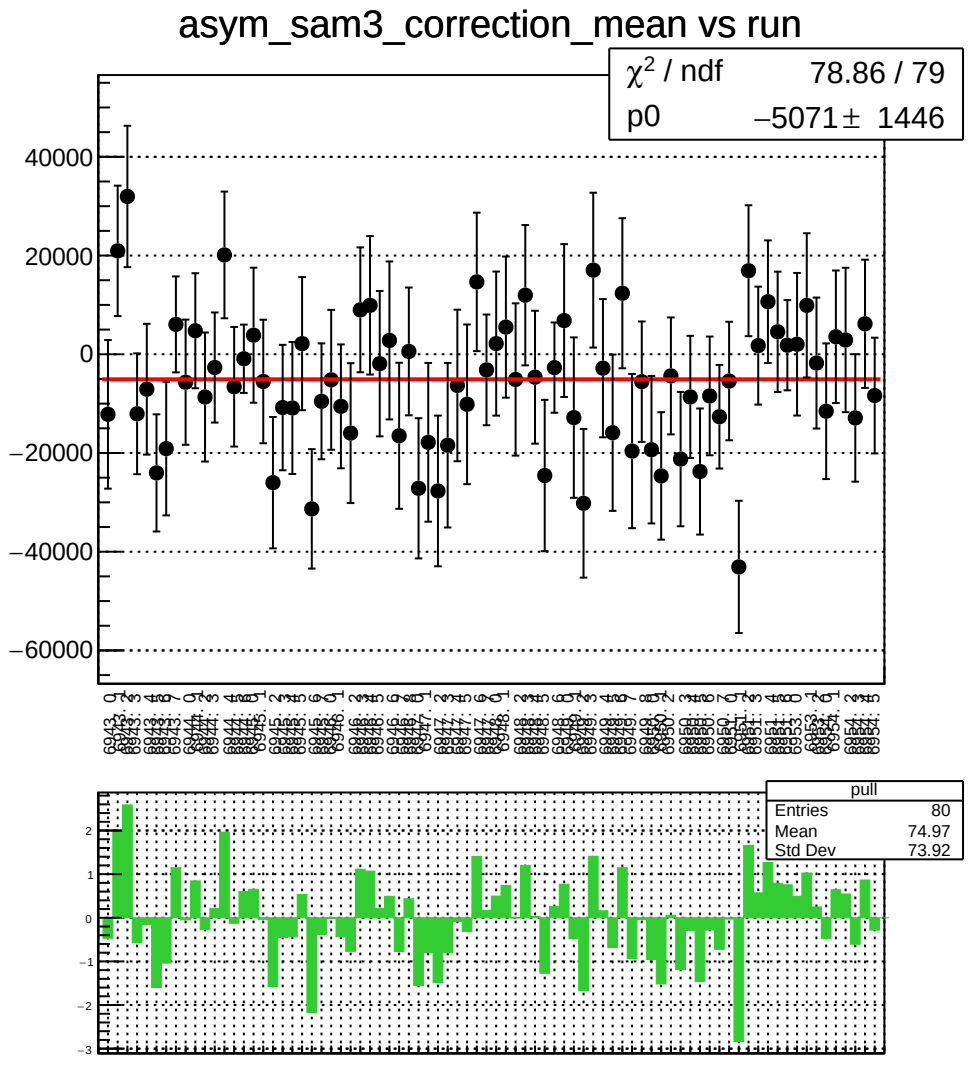
asym_sam2_correction_rms vs run

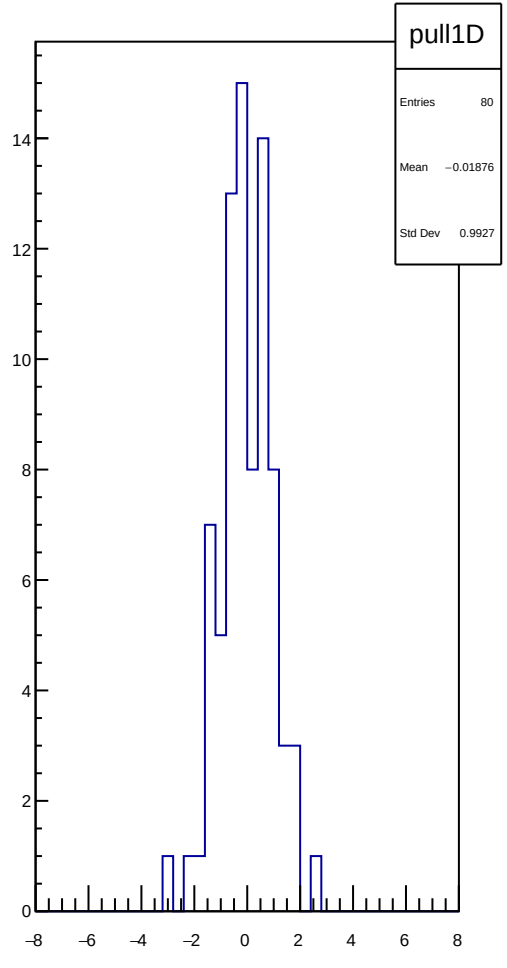


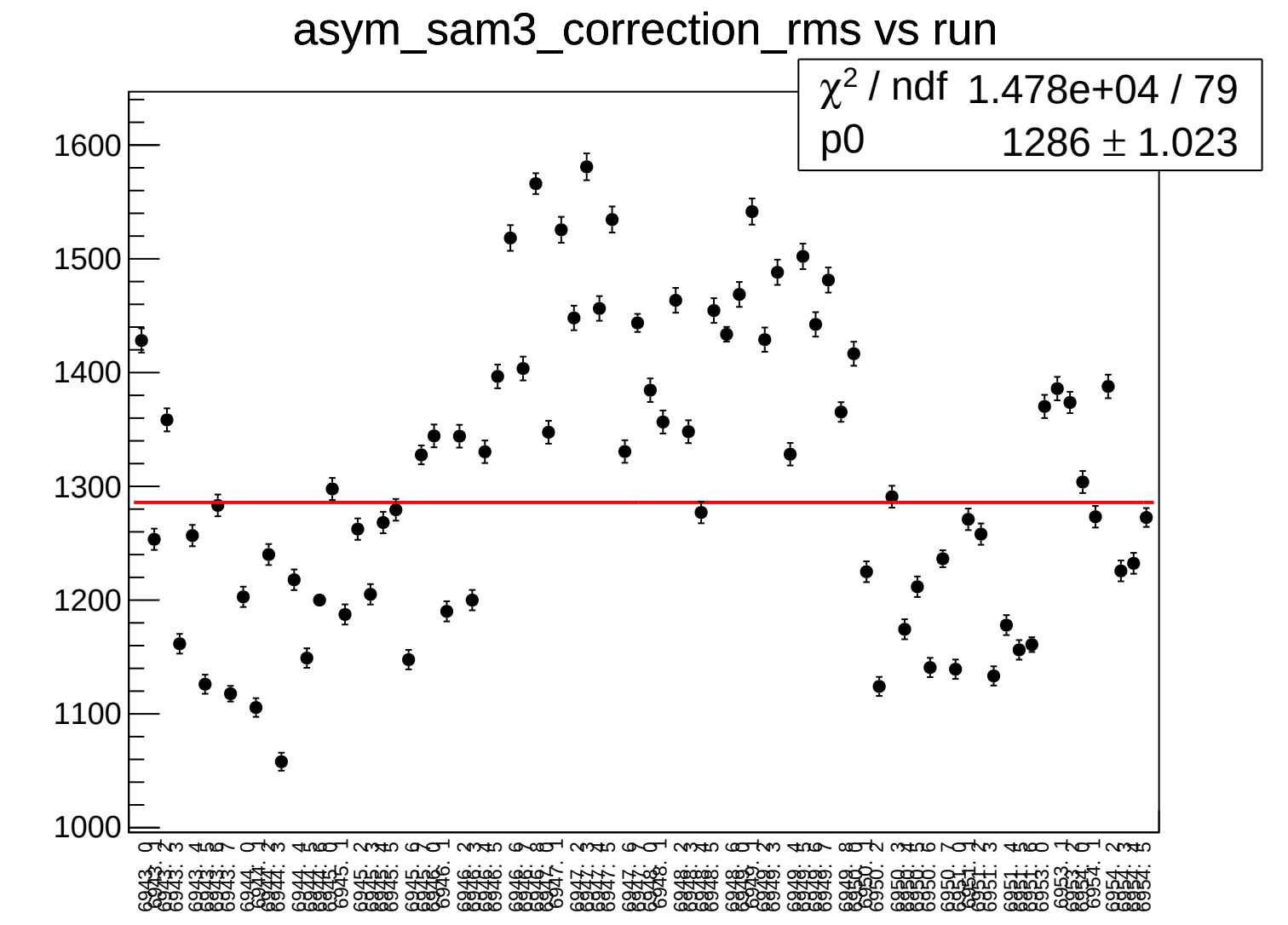

reg_asym_sam3_mean vs run
χ² / ndf 72.51 / 79
p0 −125.7 ± 114.3
pull
Entries 80
Mean 348.1
Std Dev 314.8

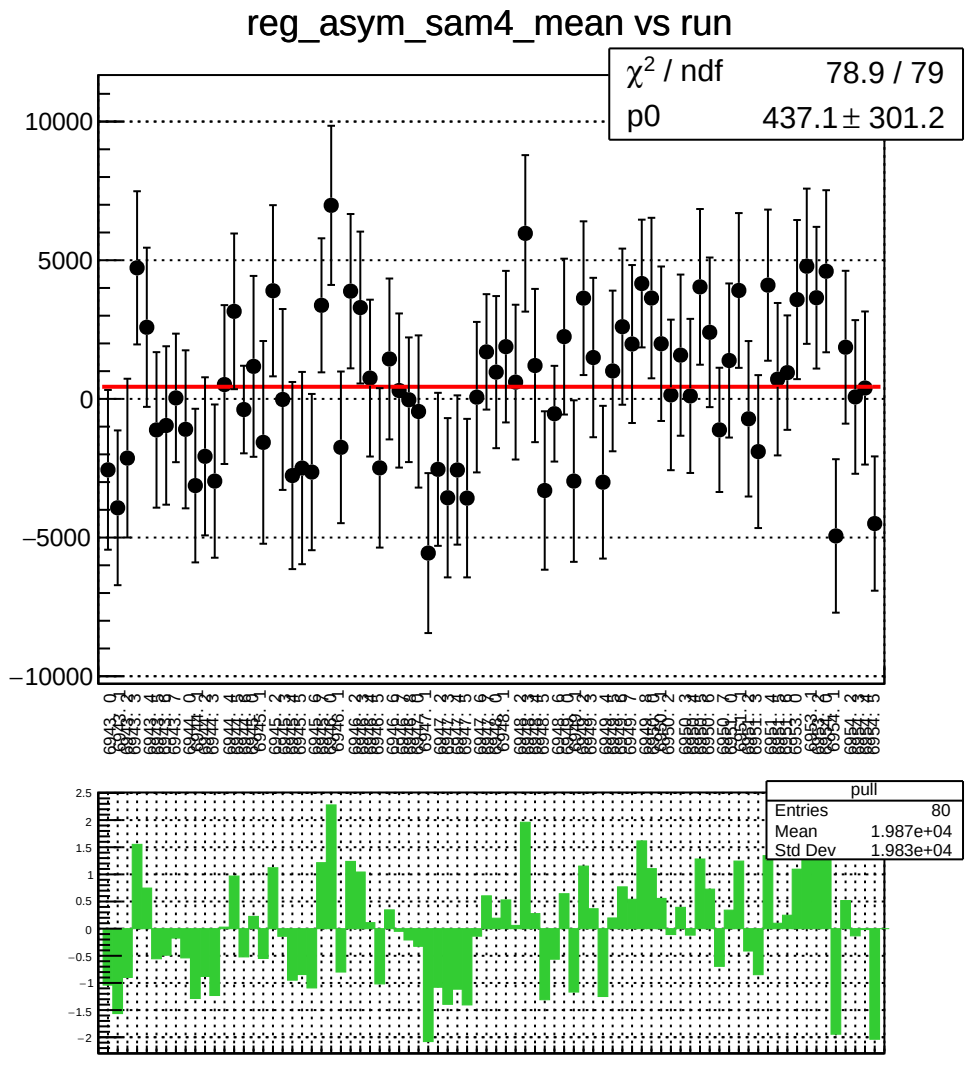

pull1D
Entries 80
Mean 0.006169
Std Dev 0.952

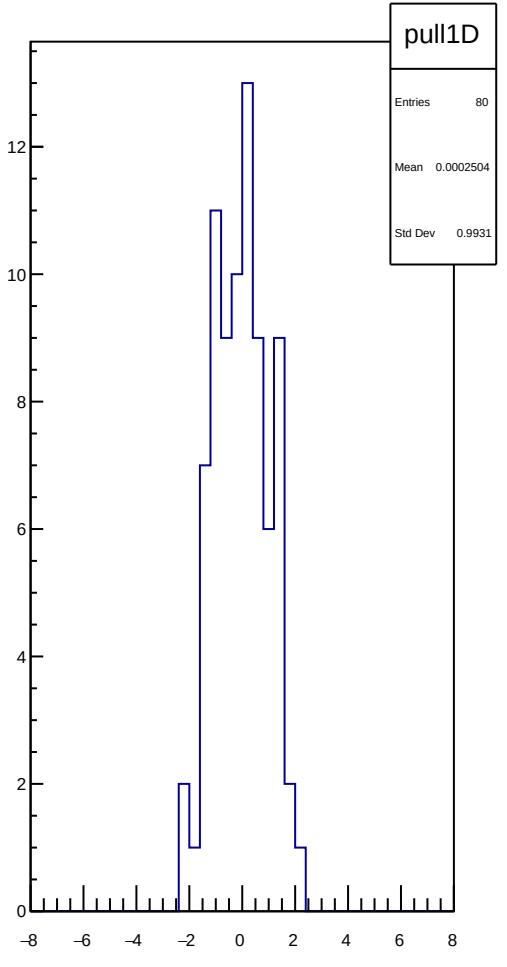

reg_asym_sam3_rms vs run
χ² / ndf 1.472e+04 / 79
p0 101.6 ± 0.08081
130
120
110
100
90
80

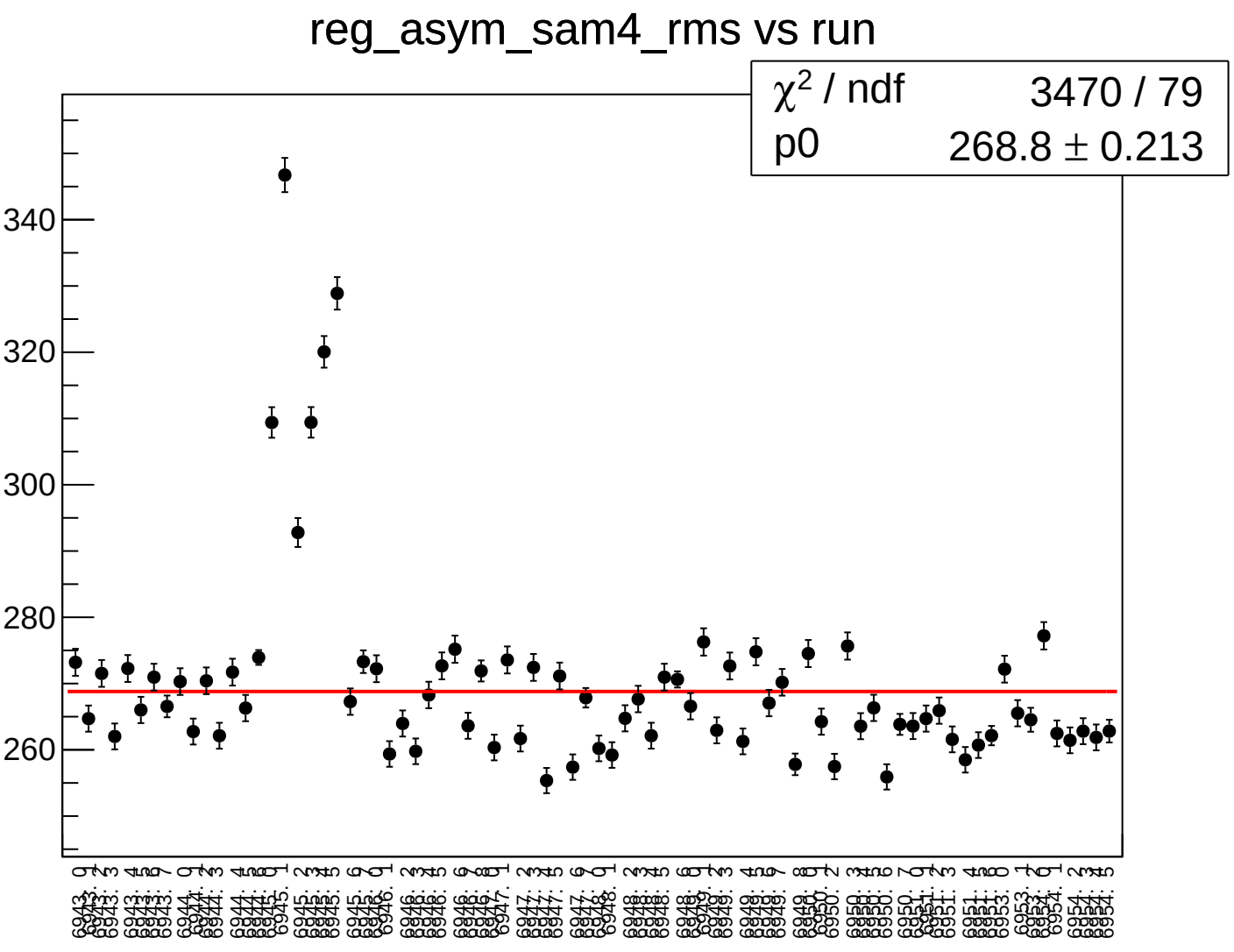

asym_sam3_correction_mean vs run
χ² / ndf 78.86 / 79
p0 −5071 ± 1446
40000
20000
0
−20000
−40000
−60000
pull
Entries 80
Mean 74.97
Std Dev 73.92
2
1
0
−1
−2
−3

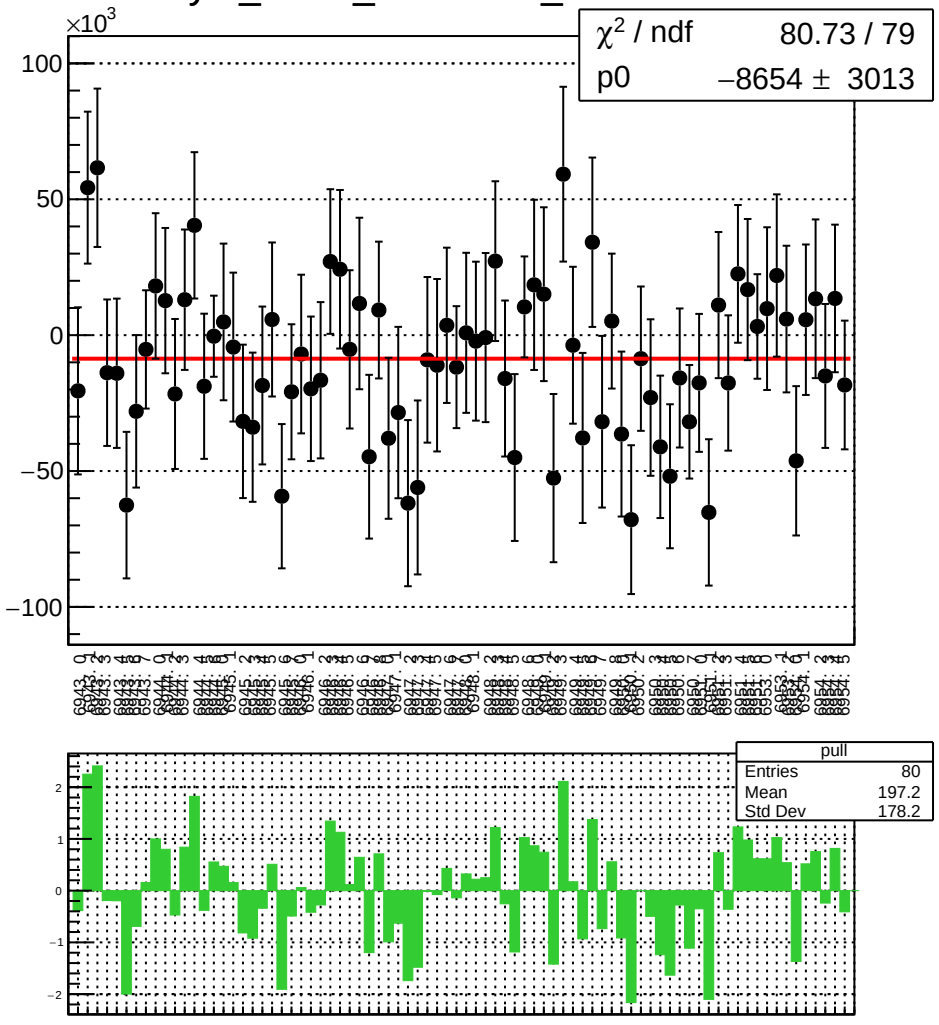

pull1D
Entries 80
Mean −0.01876
Std Dev 0.9927
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

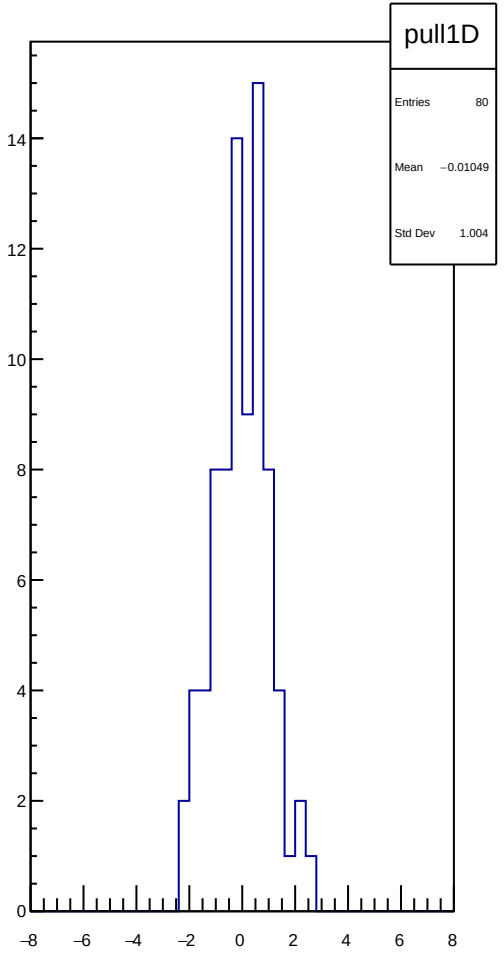

asym_sam3_correction_rms vs run
χ² / ndf 1.478e+04 / 79
p0 1286 ± 1.023
1600
1500
1400
1300
1200
1100
1000


reg_asym_sam4_mean vs run
χ² / ndf 78.9 / 79
p0 437.1 ± 301.2
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 1.987e+04
Std Dev 1.983e+04
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

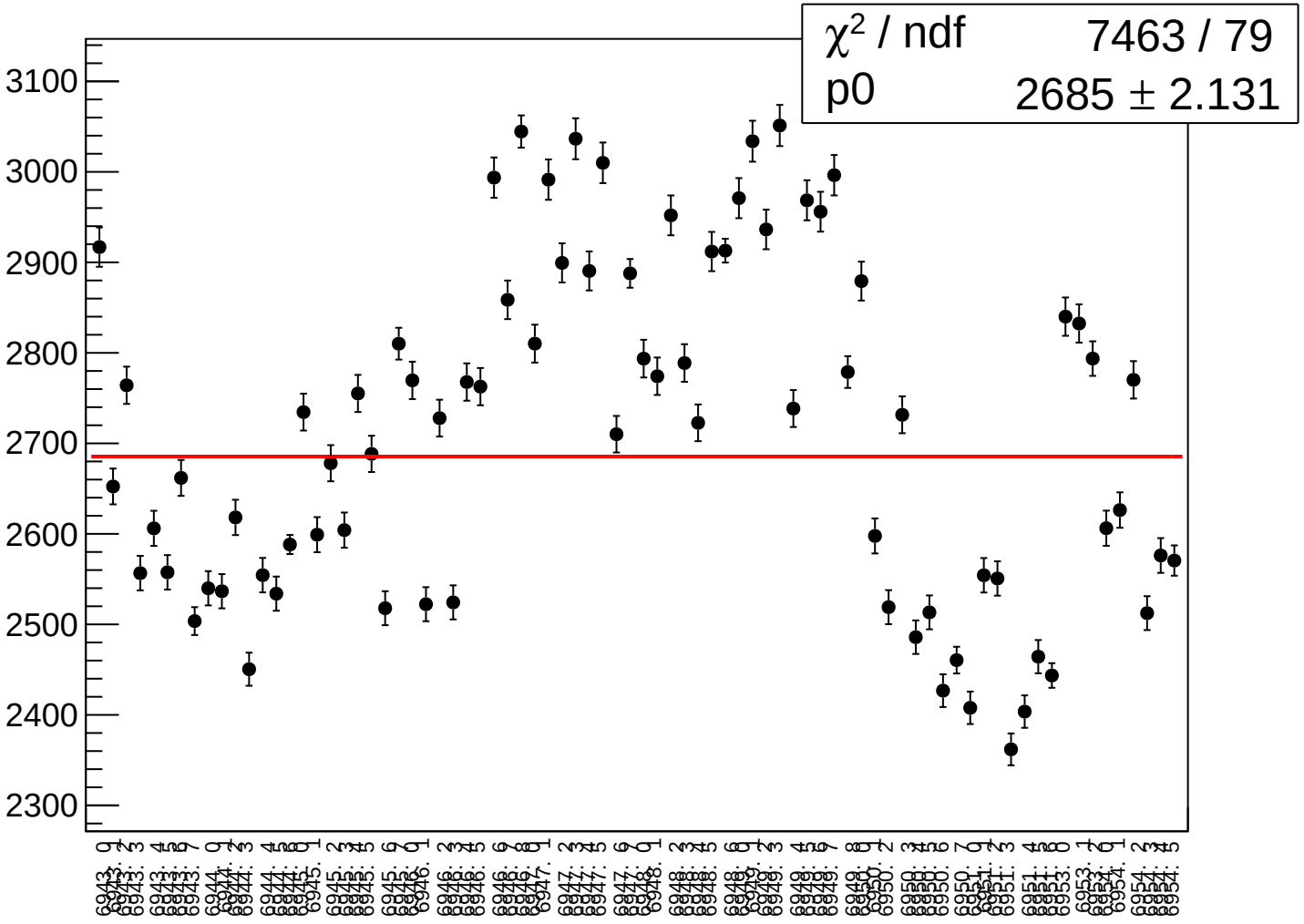

pull1D
Entries 80
Mean 0.0002504
Std Dev 0.9931
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

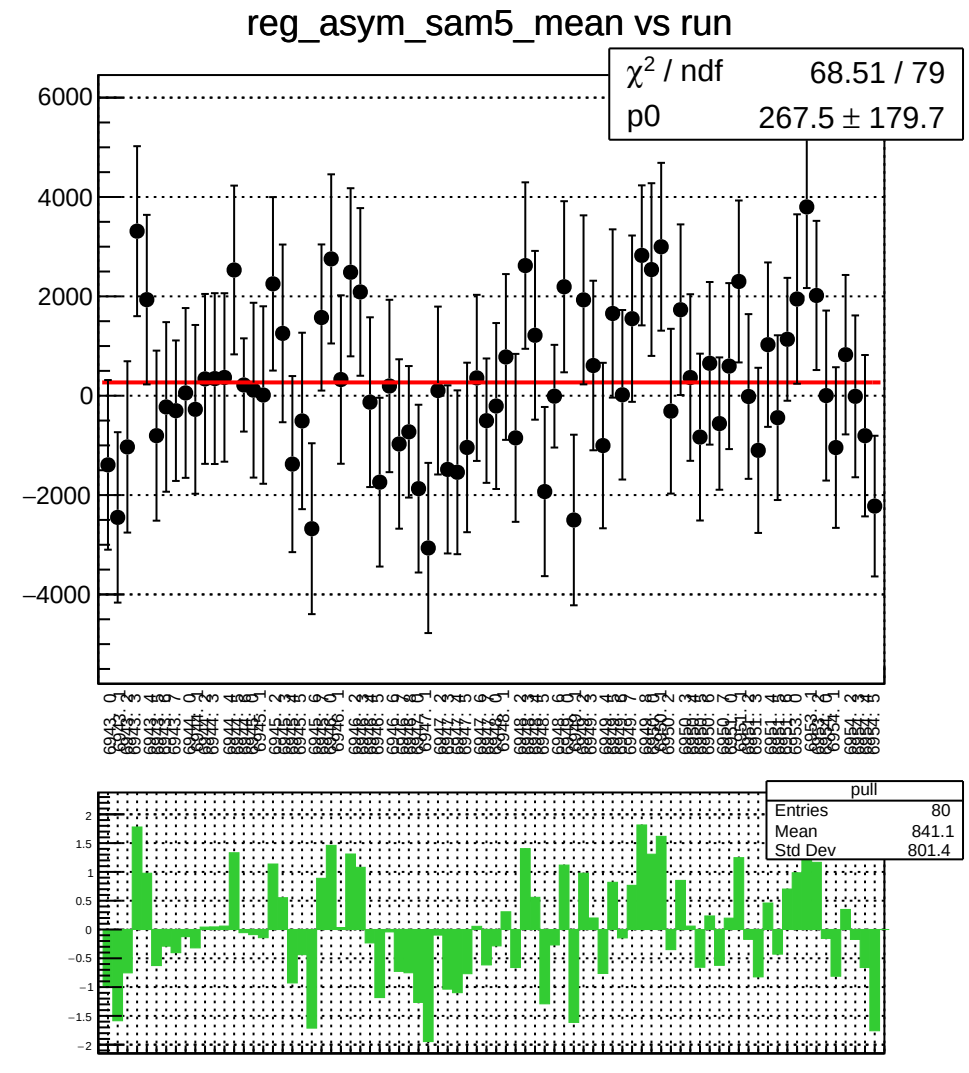

reg_asym_sam4_rms vs run
χ² / ndf 3470 / 79
p0 268.8 ± 0.213
340
320
300
280
260

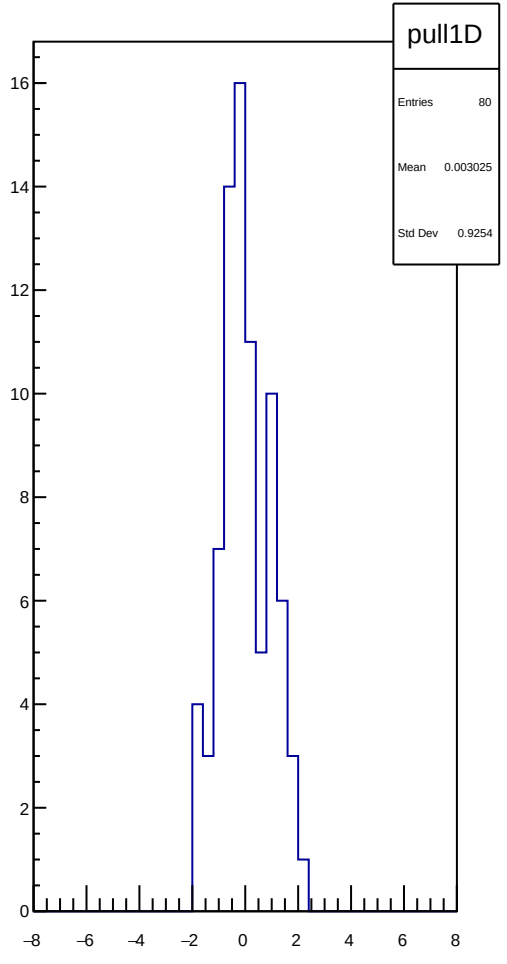

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 80.73 / 79
p0 −8654 ± 3013
100
50
0
−50
−100
pull
Entries 80
Mean 197.2
Std Dev 178.2
2
1
0
−1
−2

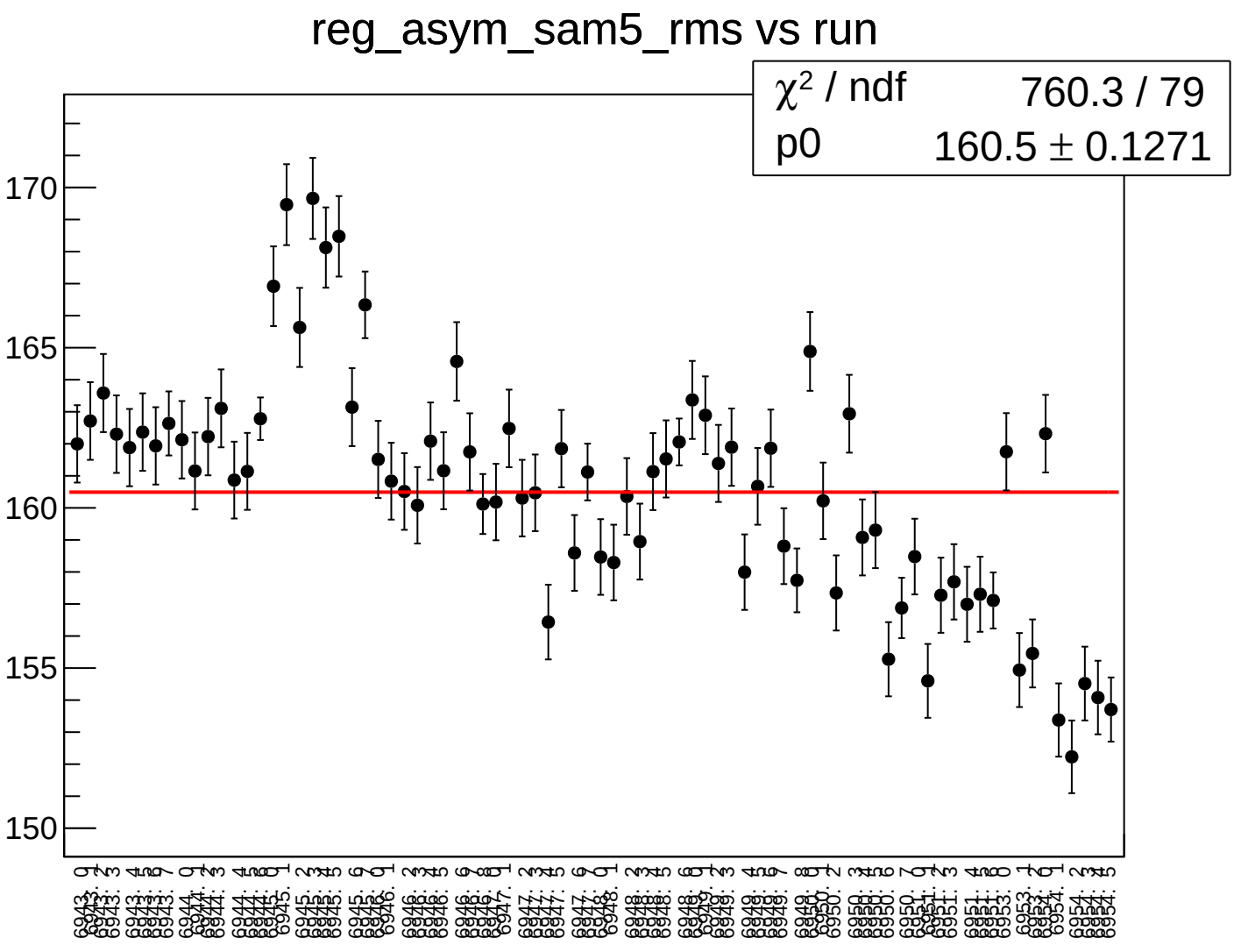

pull1D
Entries 80
Mean −0.01049
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

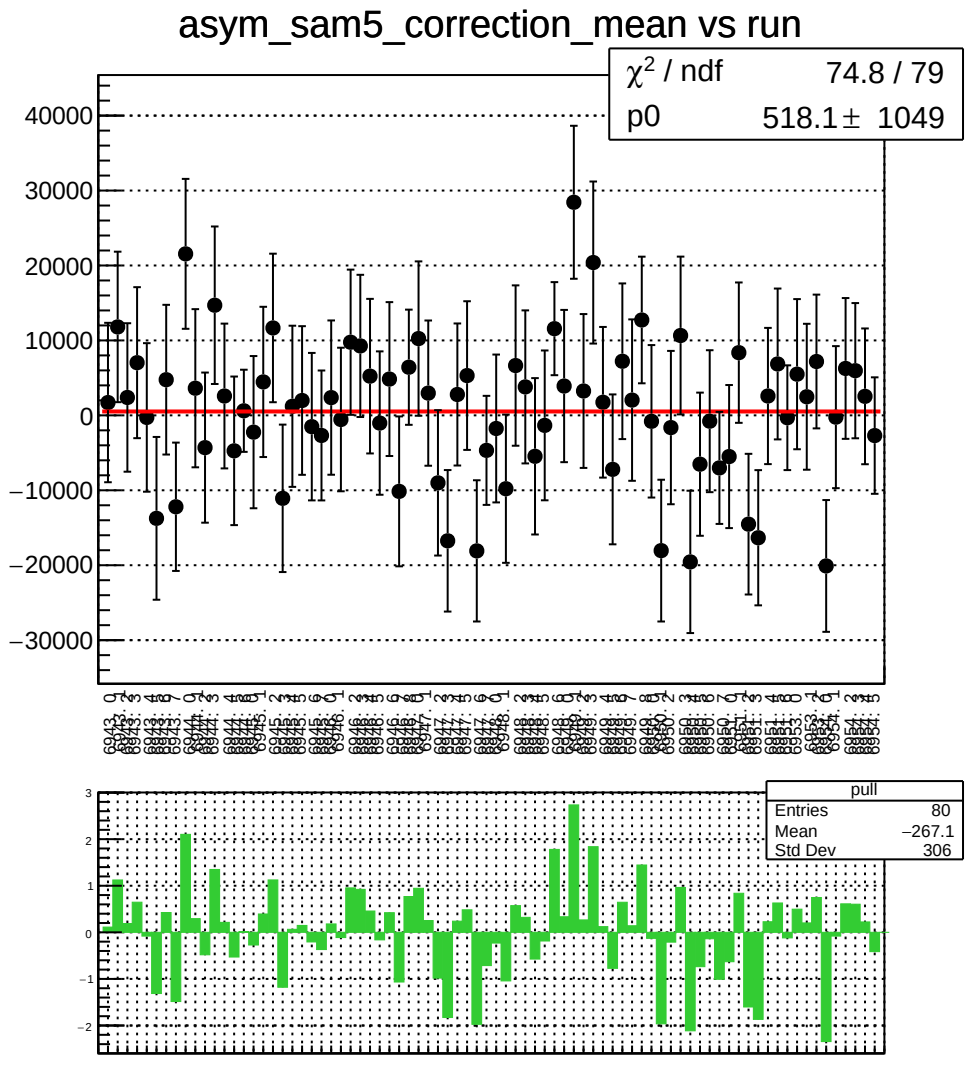
asym_sam4_correction_rms vs run

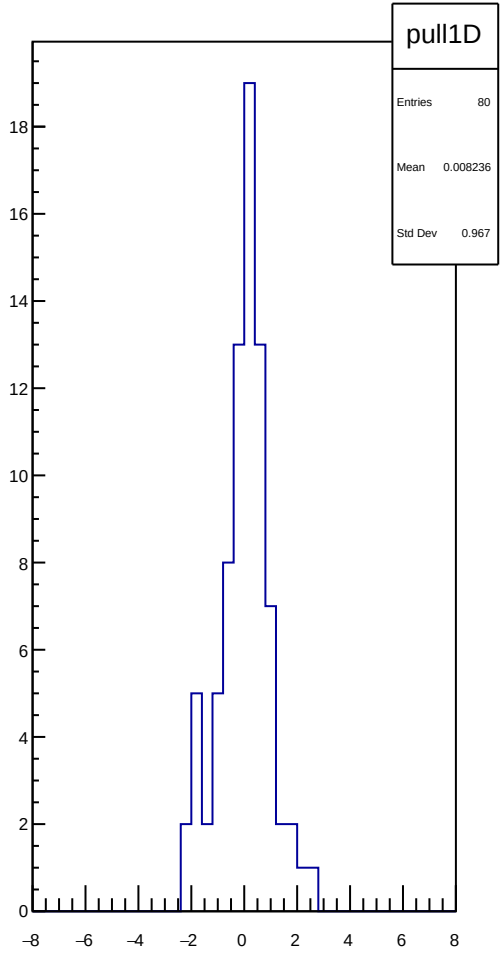


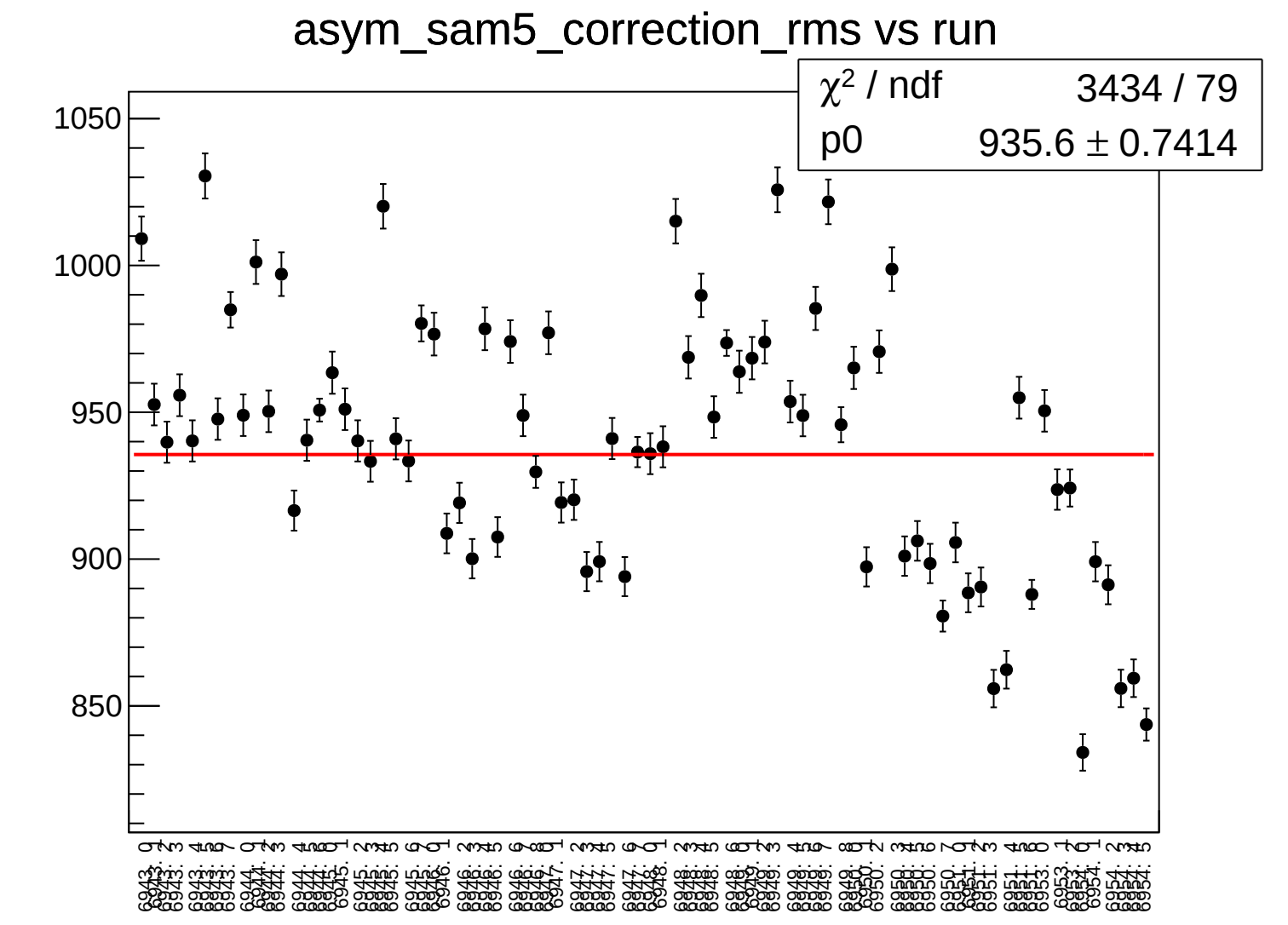

reg_asym_sam5_mean vs run
χ^2 / ndf 68.51 / 79
p0 267.5 ± 179.7
6000
4000
2000
0
−2000
−4000
pull
Entries 80
Mean 841.1
Std Dev 801.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

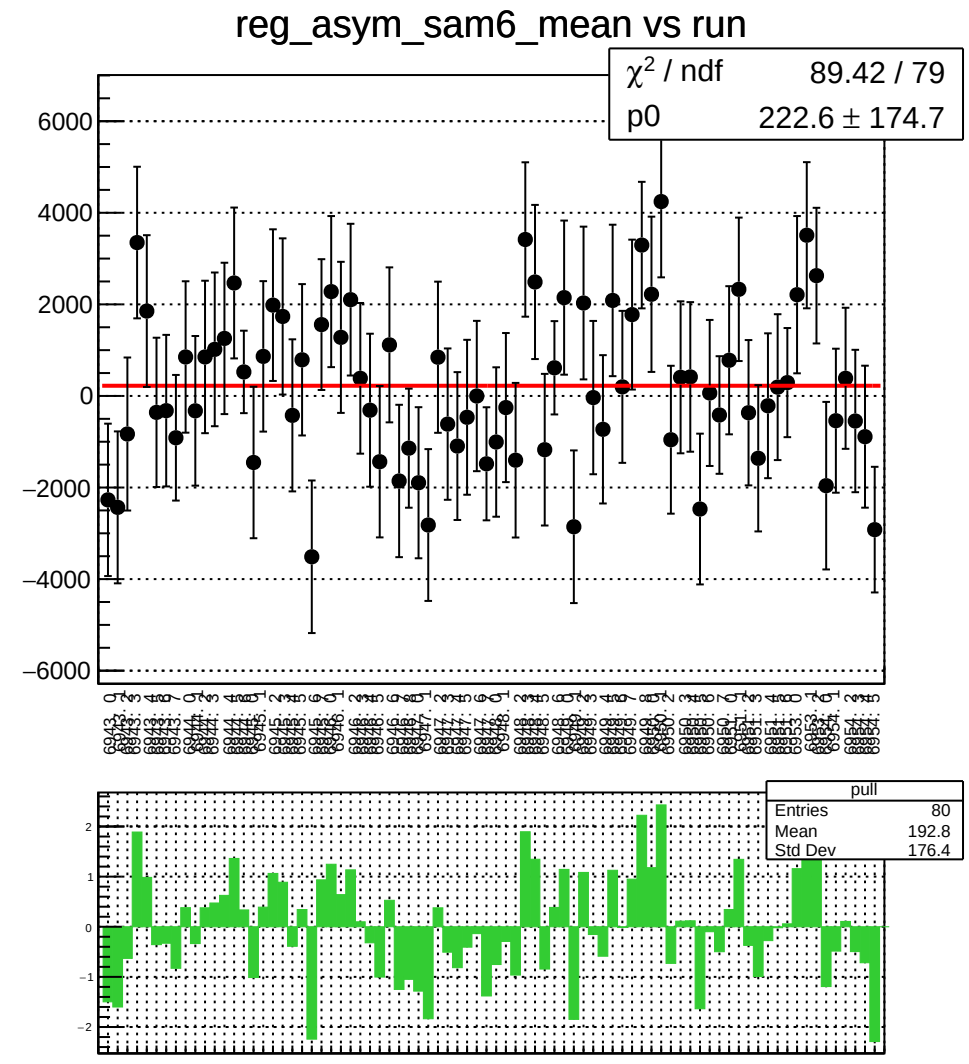

pull1D
Entries 80
Mean 0.003025
Std Dev 0.9254
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

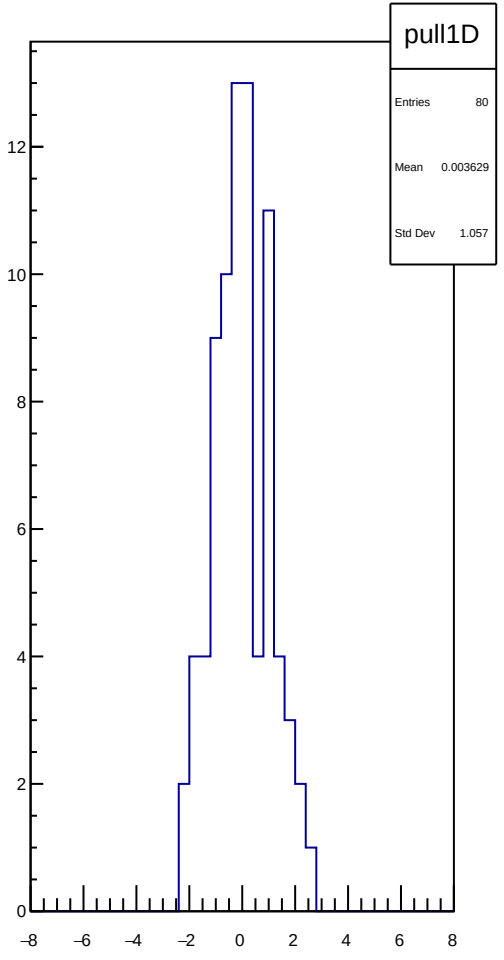

reg_asym_sam5_rms vs run
χ² / ndf 760.3 / 79
p0 160.5 ± 0.1271
170
165
160
155
150

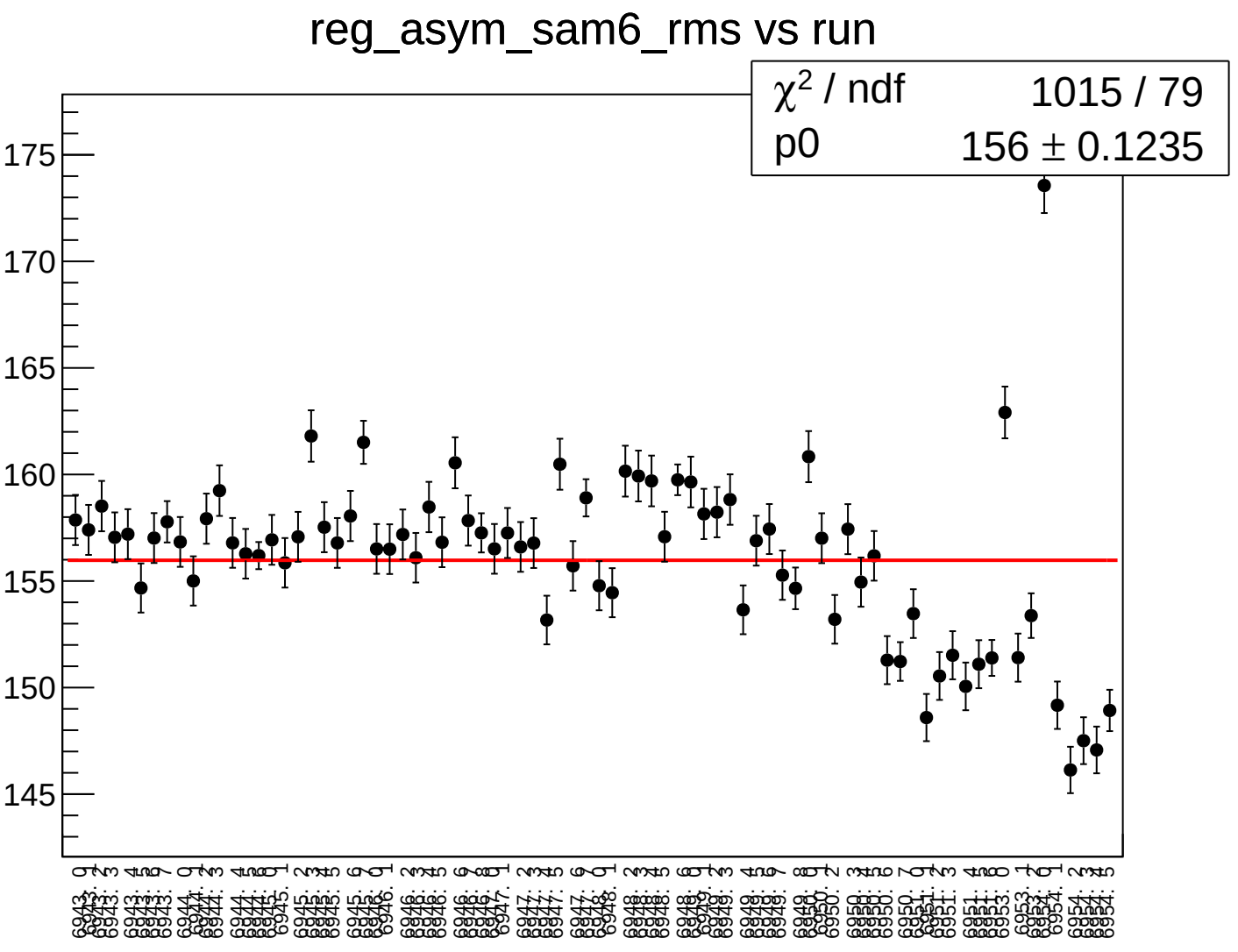

asym_sam5_correction_mean vs run
χ² / ndf 74.8 / 79
p0 518.1 ± 1049
pull
Entries 80
Mean −267.1
Std Dev 306

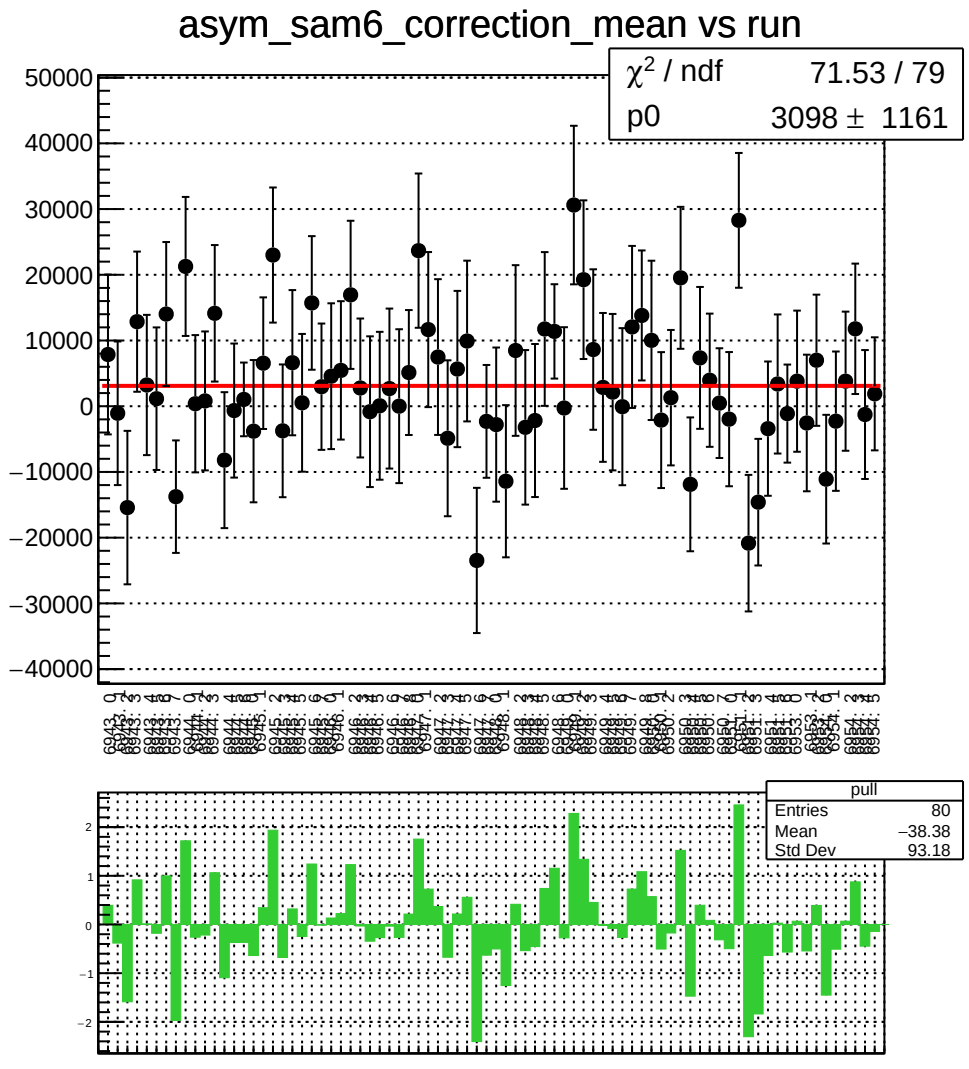

pull1D
Entries 80
Mean 0.008236
Std Dev 0.967

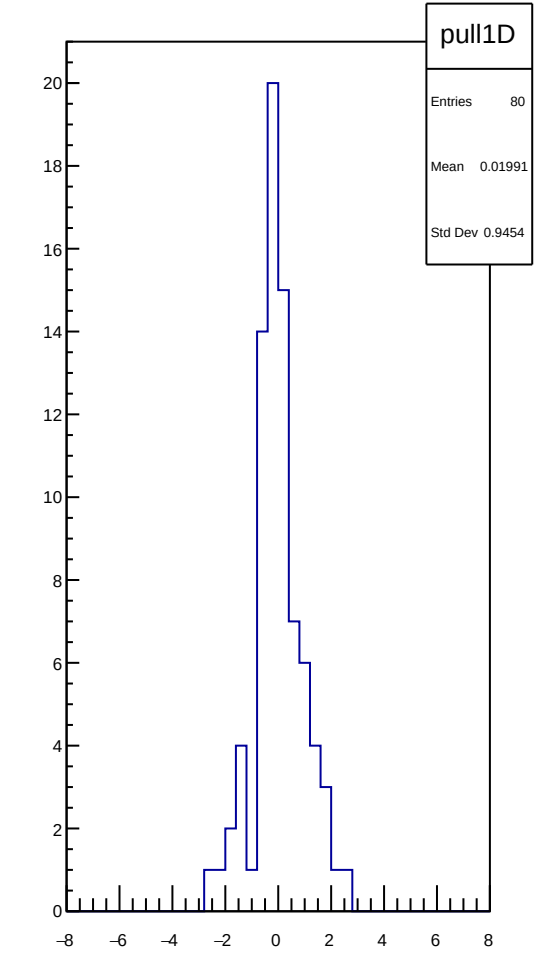

asym_sam5_correction_rms vs run
χ² / ndf 3434 / 79
p0 935.6 ± 0.7414
1050
1000
950
900
850

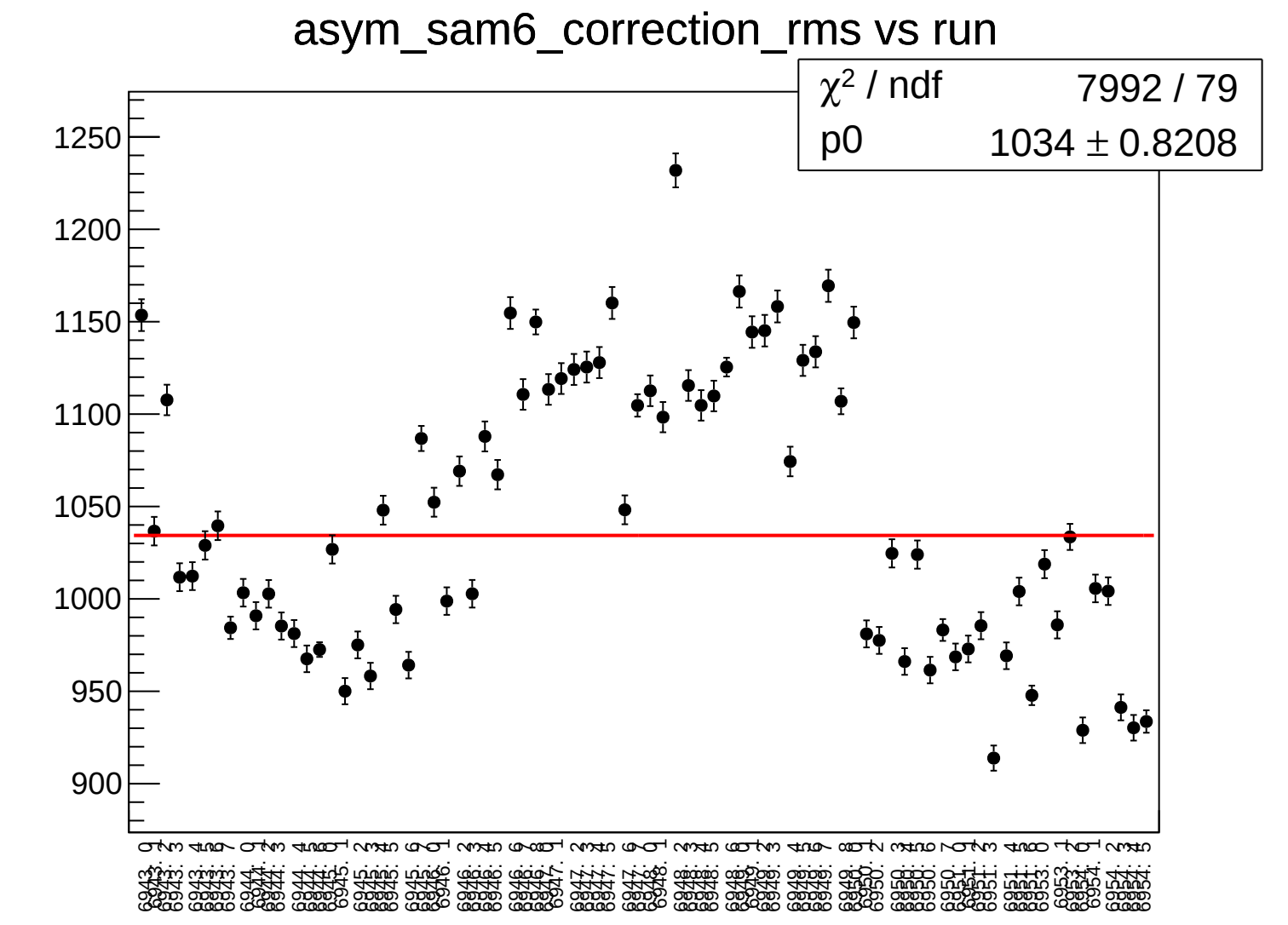

reg_asym_sam6_mean vs run
χ² / ndf 89.42 / 79
p0 222.6 ± 174.7
pull
Entries 80
Mean 192.8
Std Dev 176.4

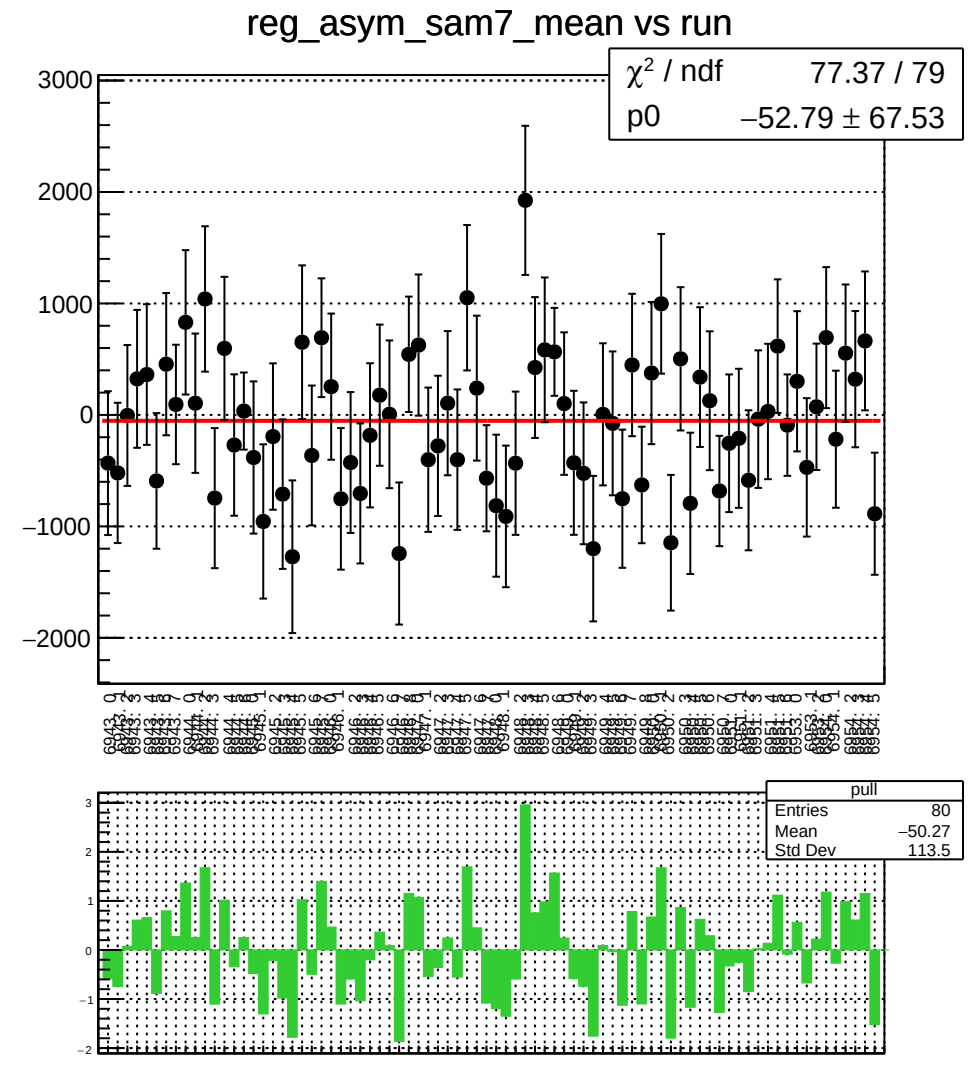

pull1D
Entries 80
Mean 0.003629
Std Dev 1.057

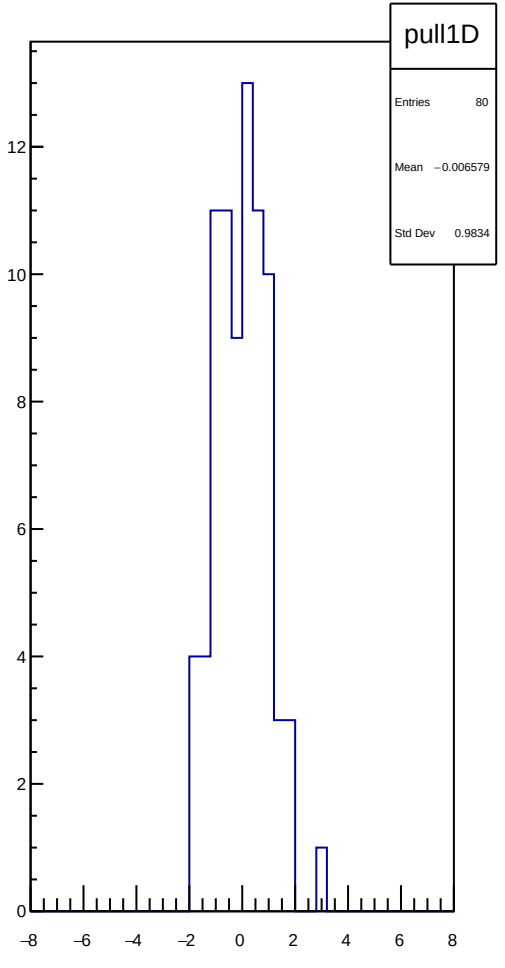

reg_asym_sam6_rms vs run
χ^2 / ndf 1015 / 79
p0 156 ± 0.1235
175
170
165
160
155
150
145

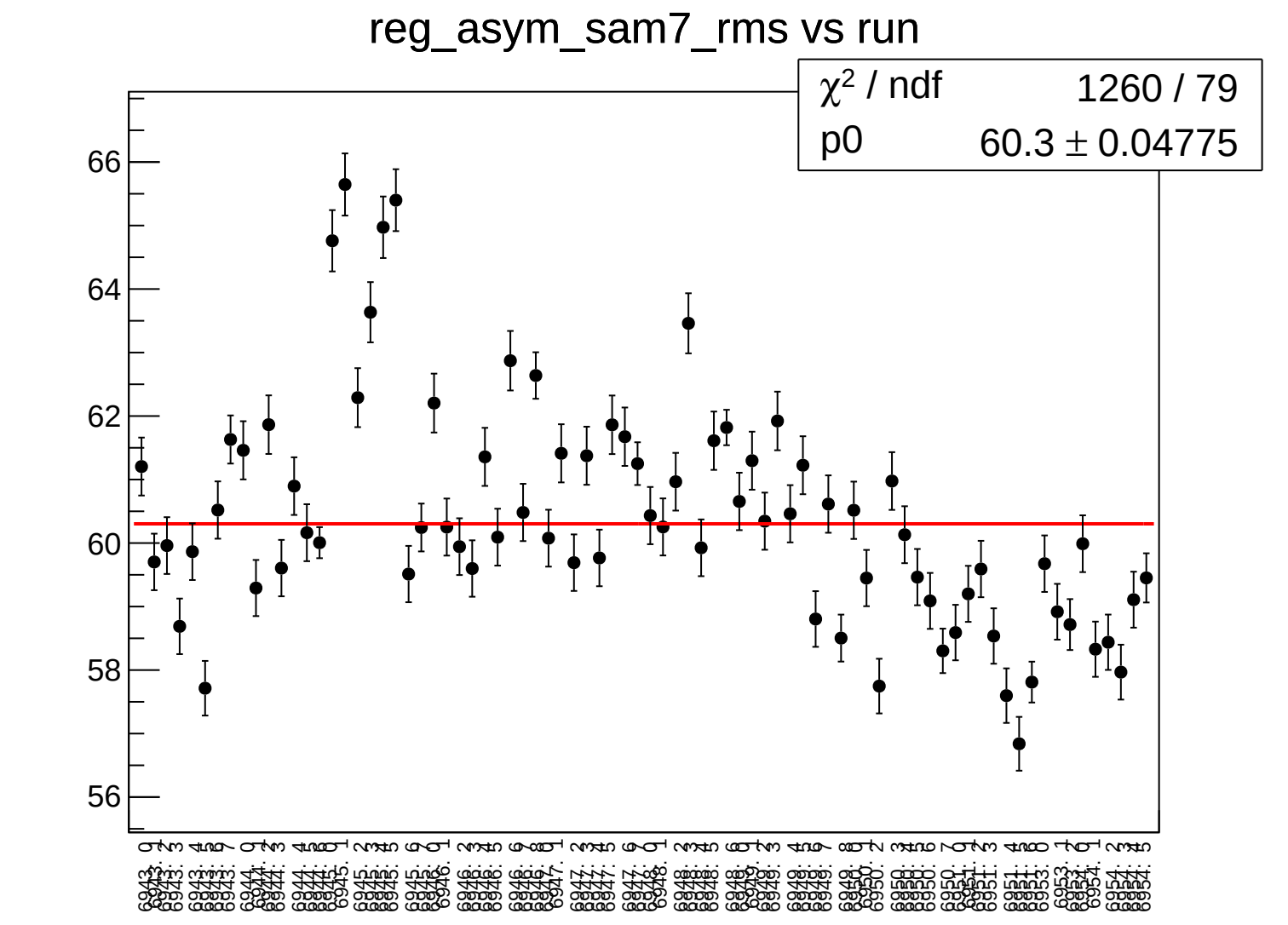

asym_sam6_correction_mean vs run
χ² / ndf 71.53 / 79
p0 3098 ± 1161
pull
Entries 80
Mean −38.38
Std Dev 93.18

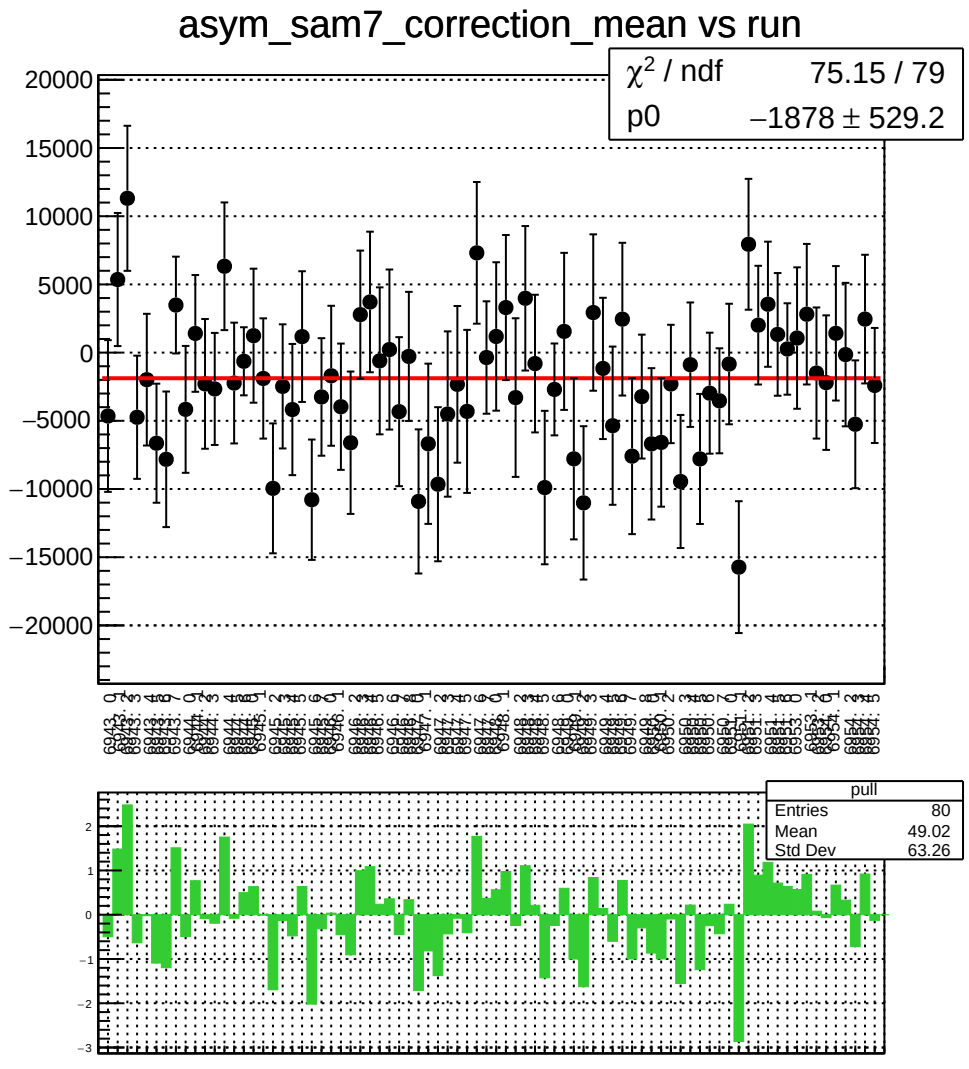

pull1D
Entries 80
Mean 0.01991
Std Dev 0.9454

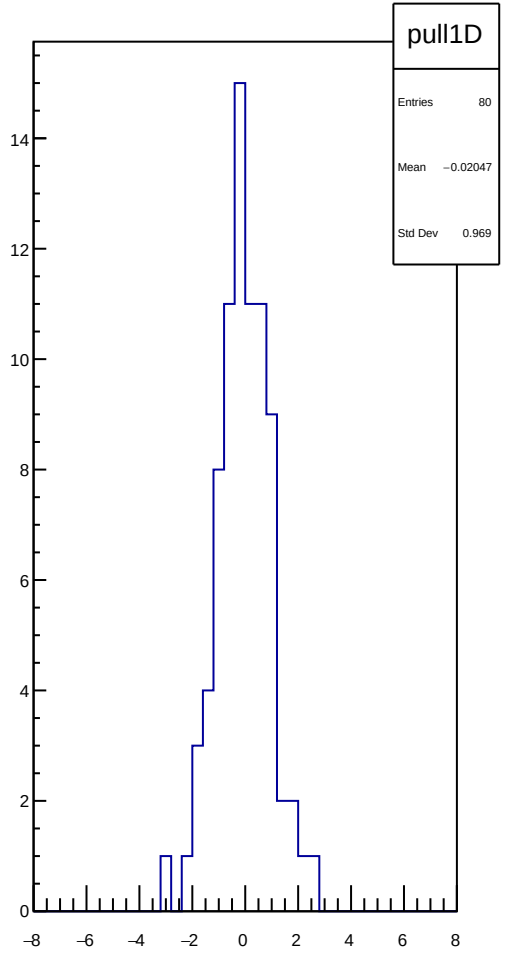

asym_sam6_correction_rms vs run
χ² / ndf 7992 / 79
p0 1034 ± 0.8208
1250
1200
1150
1100
1050
1000
950
900

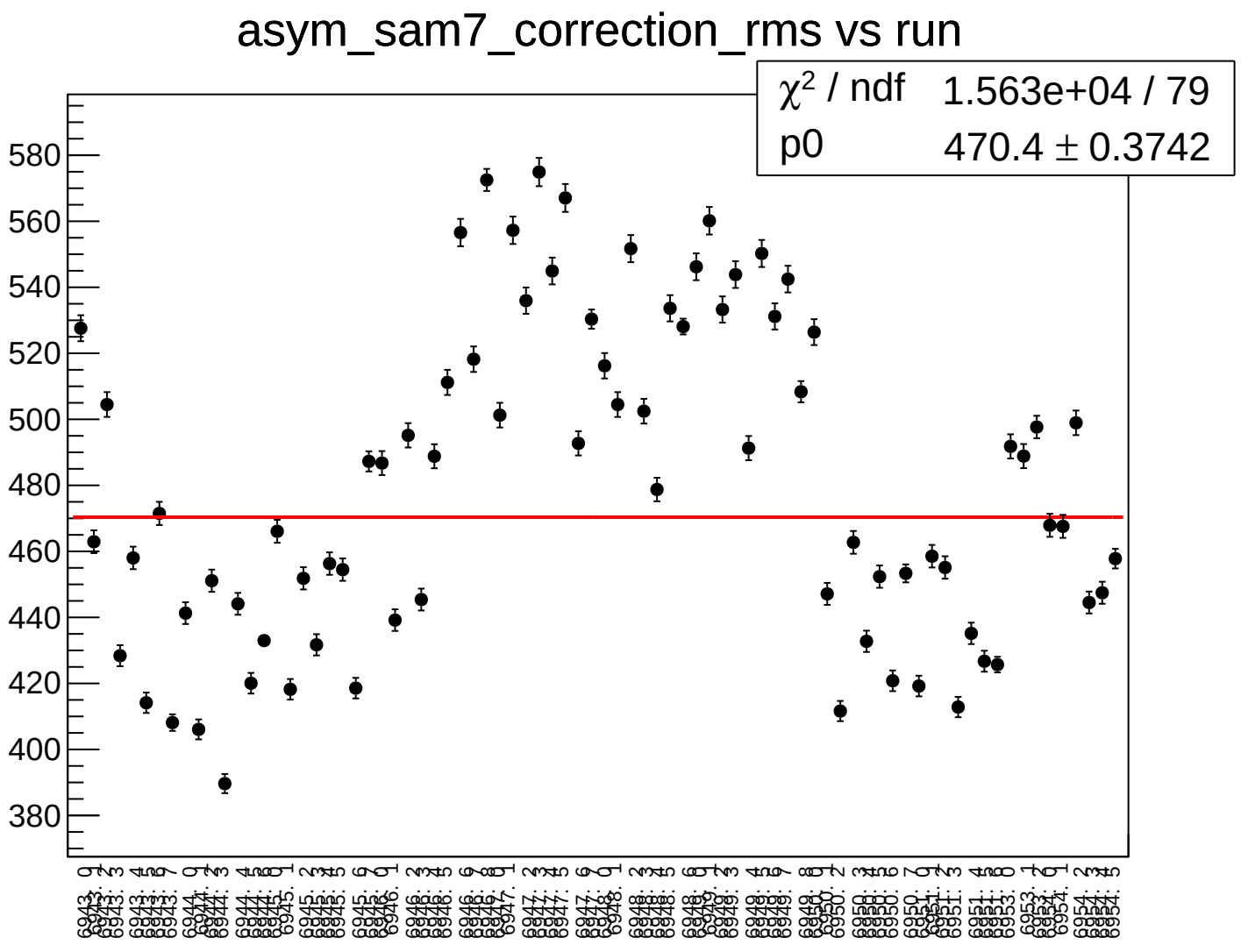

reg_asym_sam7_mean vs run
χ² / ndf 77.37 / 79
p0 −52.79 ± 67.53
pull
Entries 80
Mean −50.27
Std Dev 113.5

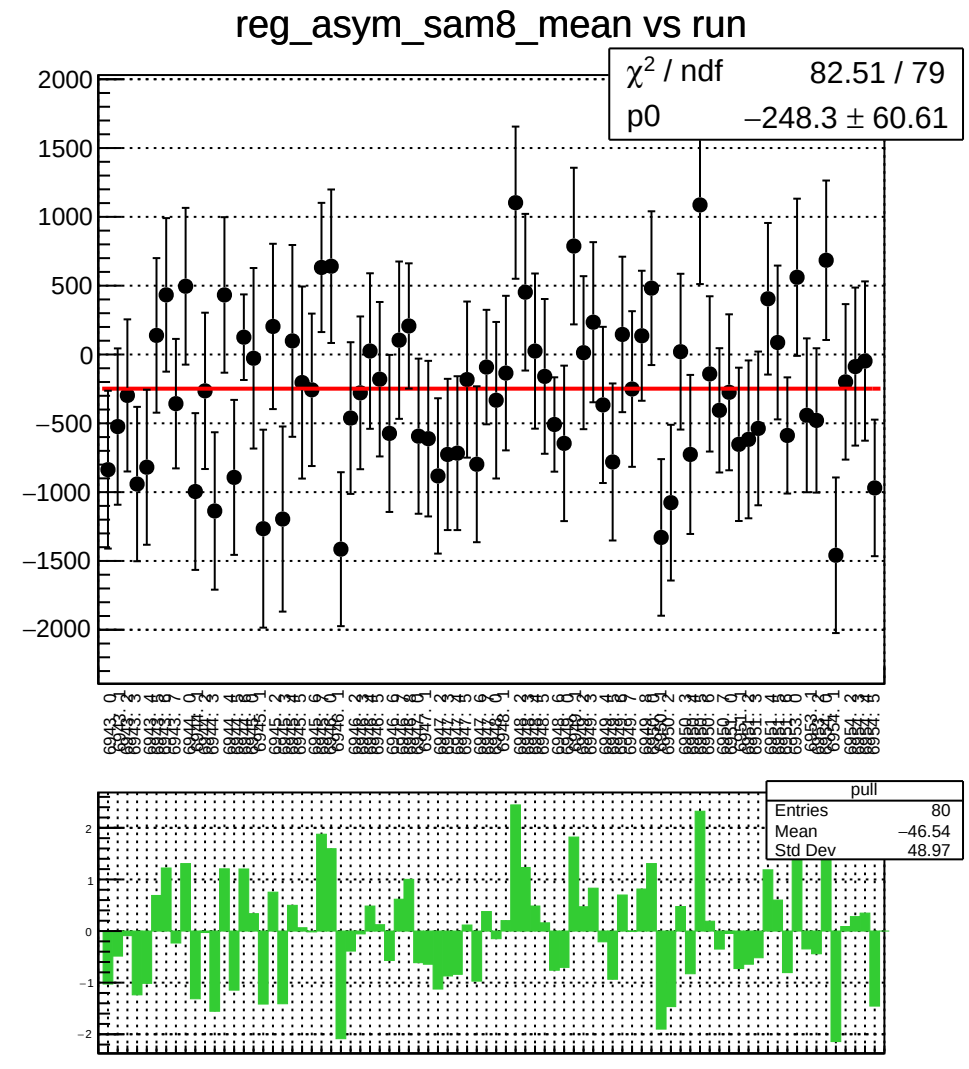

pull1D
Entries 80
Mean −0.006579
Std Dev 0.9834

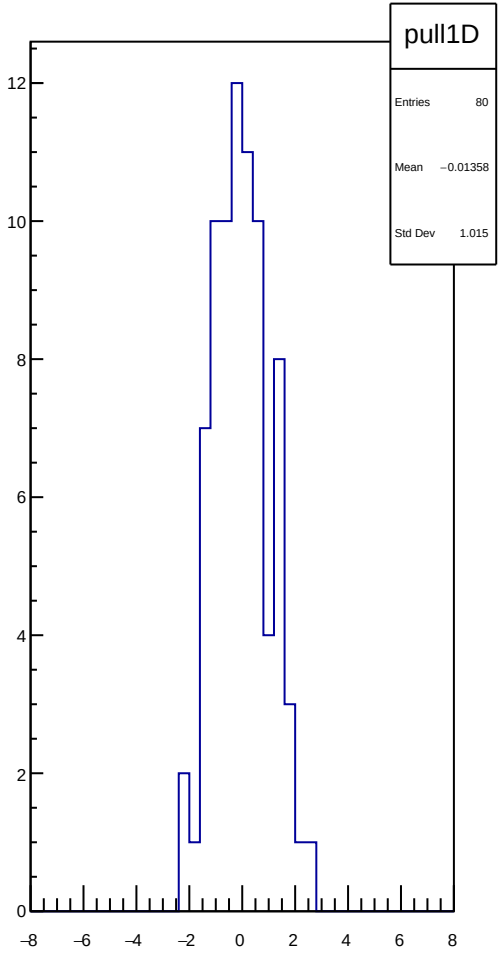

reg_asym_sam7_rms vs run
χ² / ndf 1260 / 79
p0 60.3 ± 0.04775
66
64
62
60
58
56

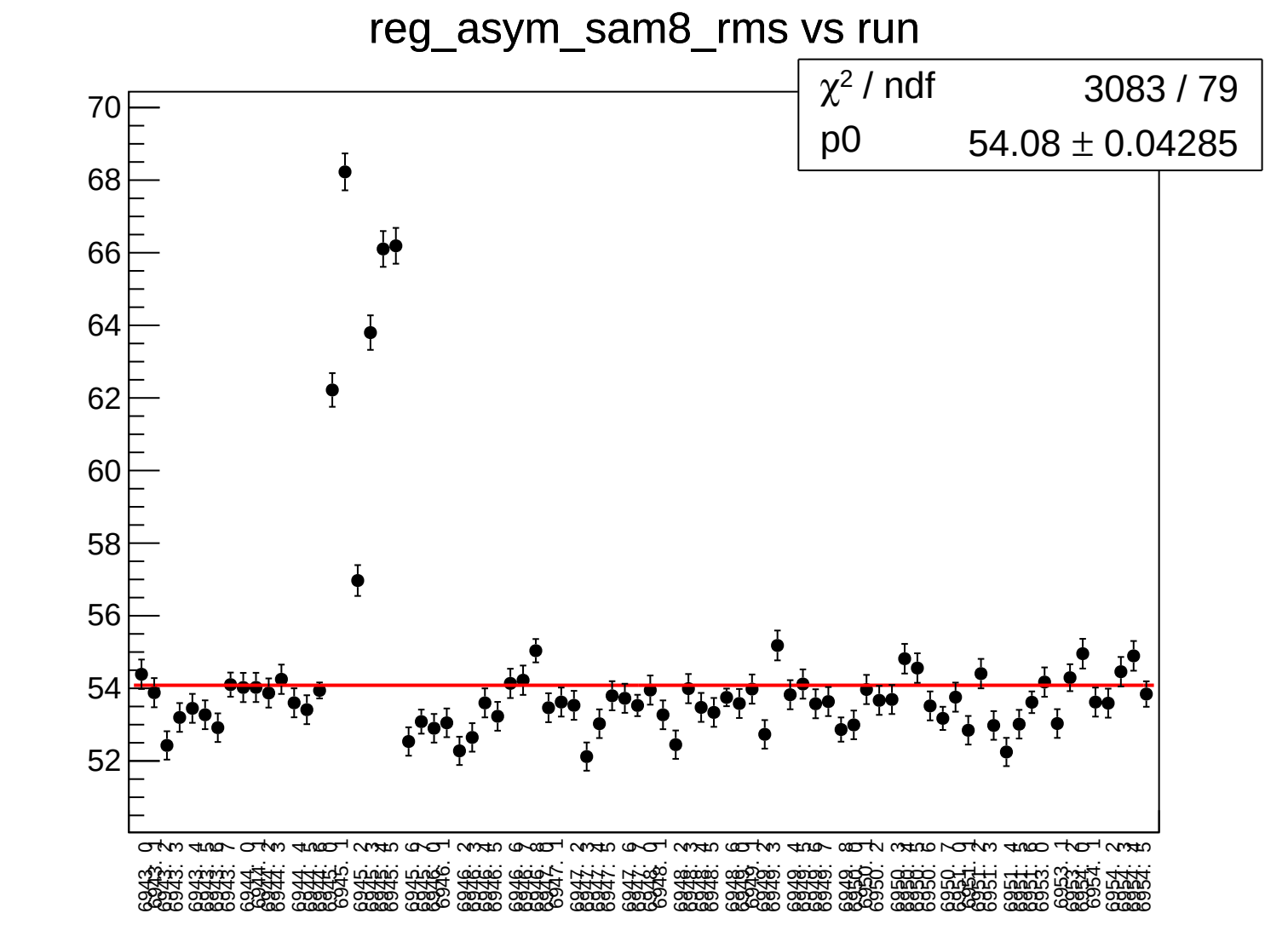

asym_sam7_correction_mean vs run
χ² / ndf 75.15 / 79
p0 −1878 ± 529.2
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 80
Mean 49.02
Std Dev 63.26
2
1
0
−1
−2
−3

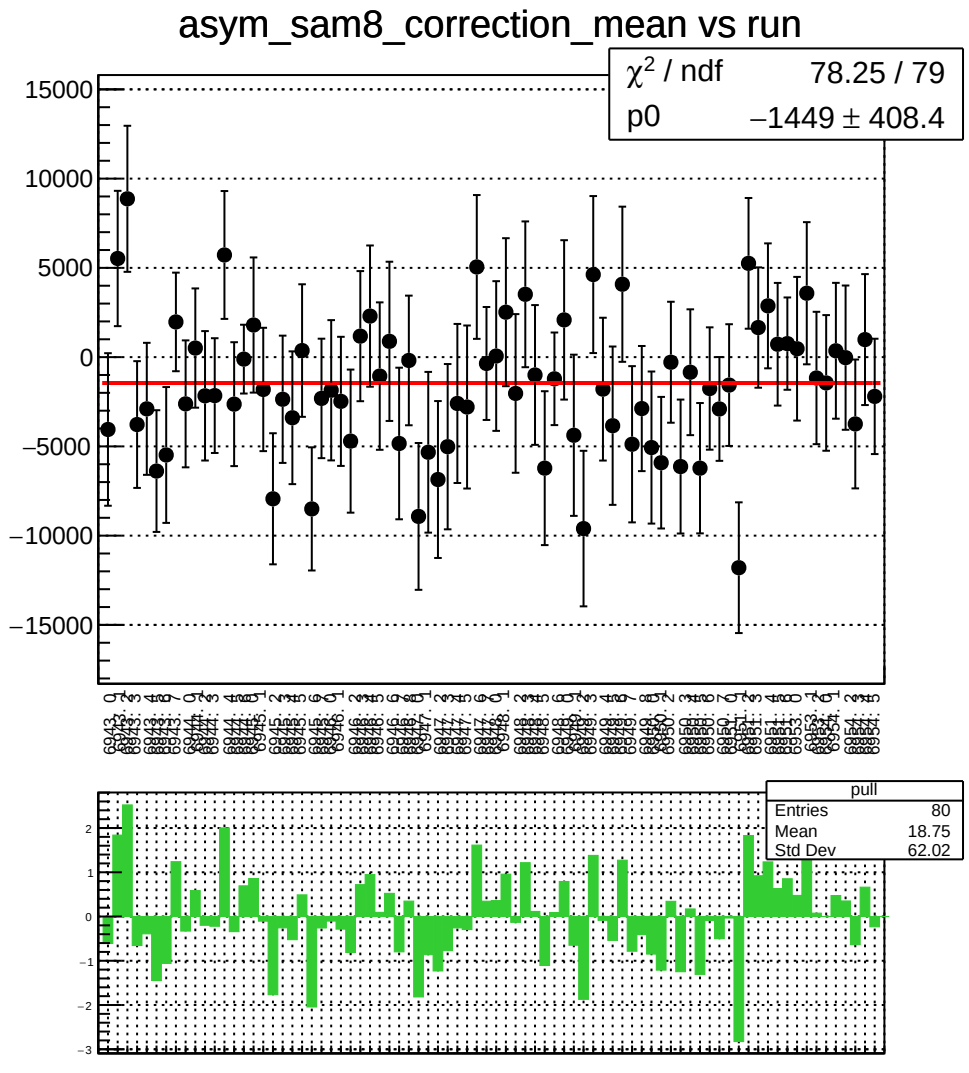

pull1D
Entries 80
Mean −0.02047
Std Dev 0.969
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

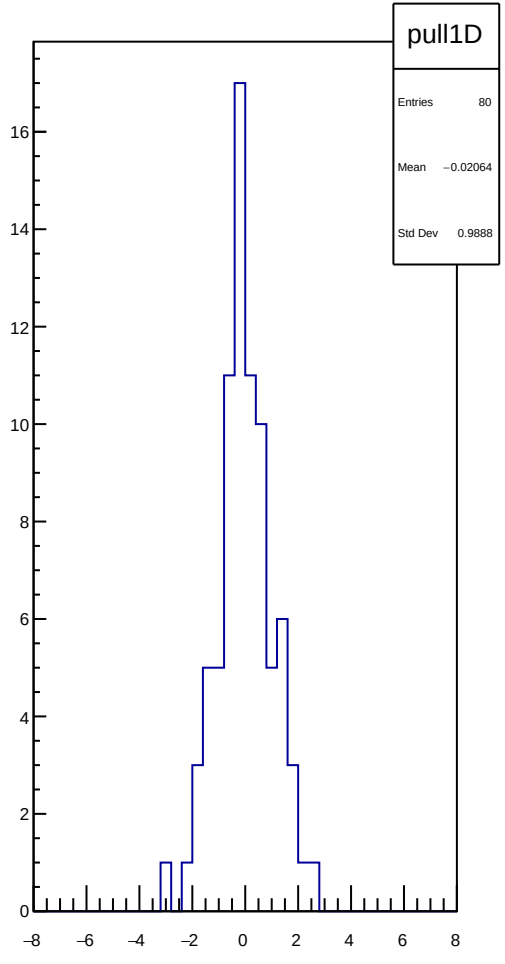

asym_sam7_correction_rms vs run
χ² / ndf 1.563e+04 / 79
p0 470.4 ± 0.3742
580
560
540
520
500
480
460
440
420
400
380

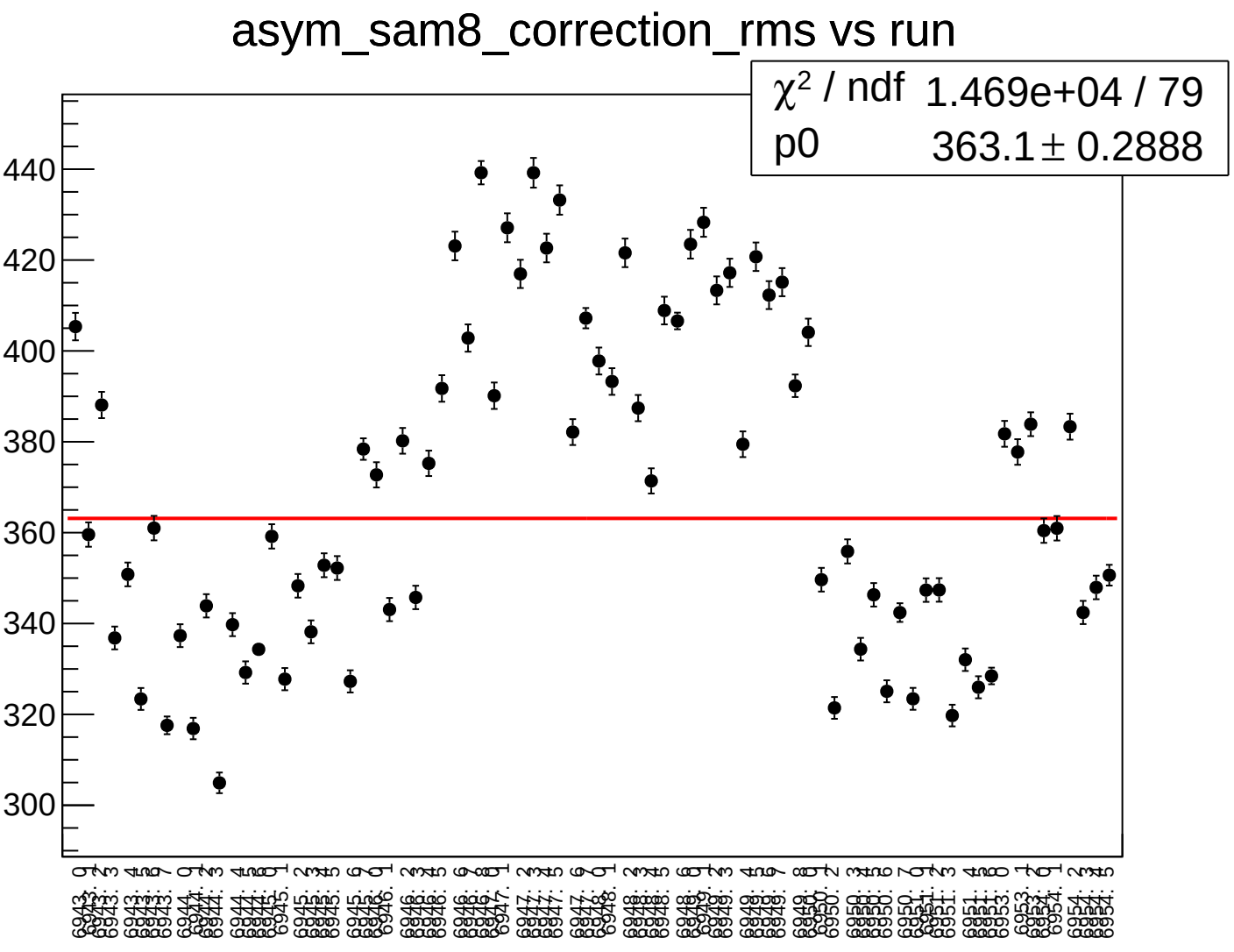

reg_asym_sam8_mean vs run
χ² / ndf 82.51 / 79
p0 −248.3 ± 60.61
pull
Entries 80
Mean −46.54
Std Dev 48.97

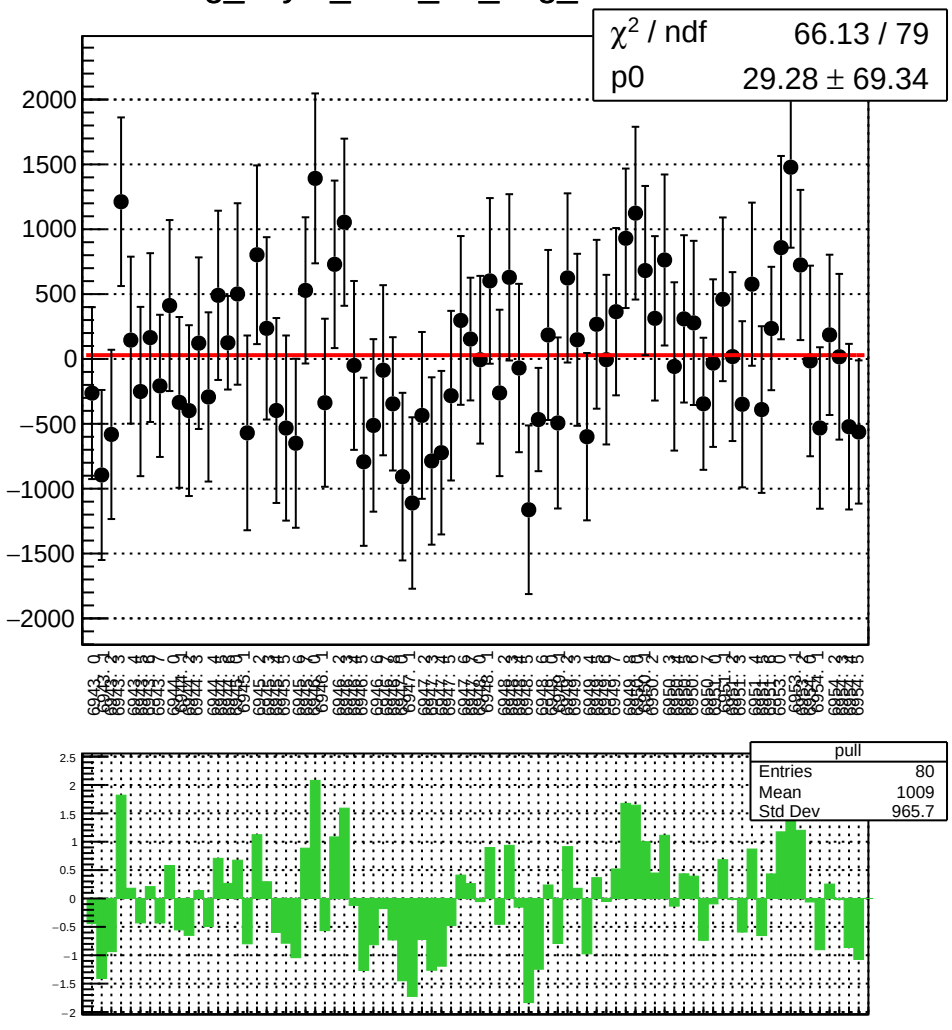

pull1D
Entries 80
Mean −0.01358
Std Dev 1.015

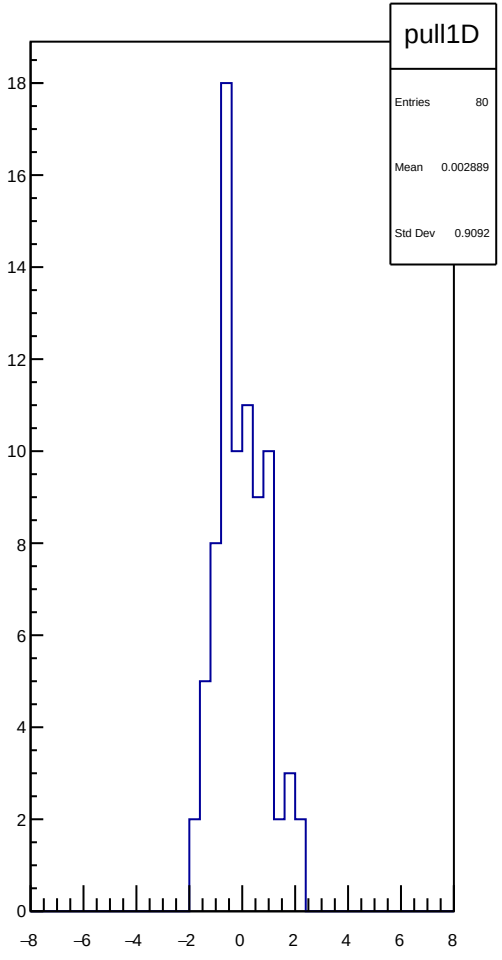

reg_asym_sam8_rms vs run
χ^2 / ndf 3083 / 79
p0 54.08 ± 0.04285
70
68
66
64
62
60
58
56
54
52

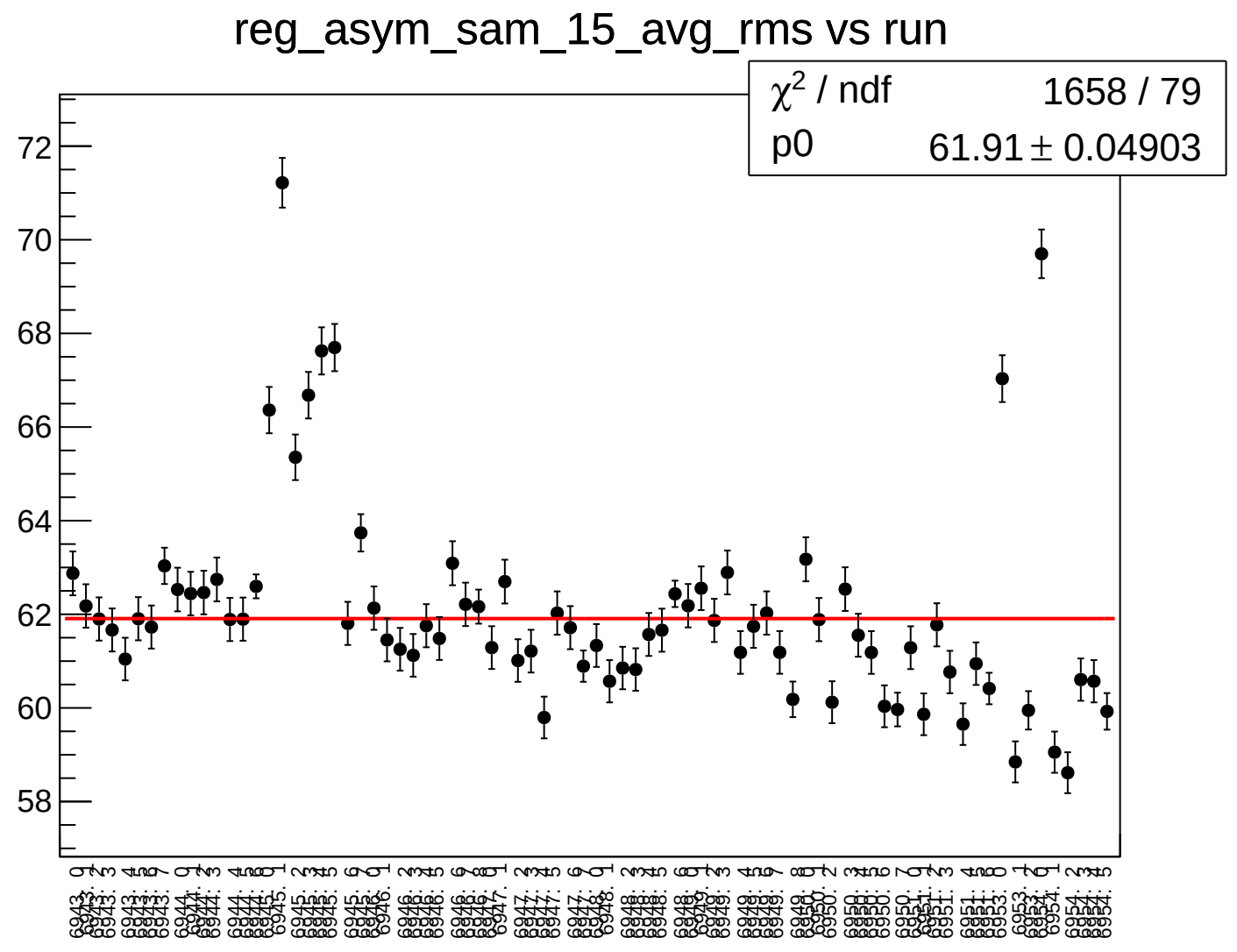

asym_sam8_correction_mean vs run
χ² / ndf 78.25 / 79
p0 −1449 ± 408.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 18.75
Std Dev 62.02
2
1
0
−1
−2
−3

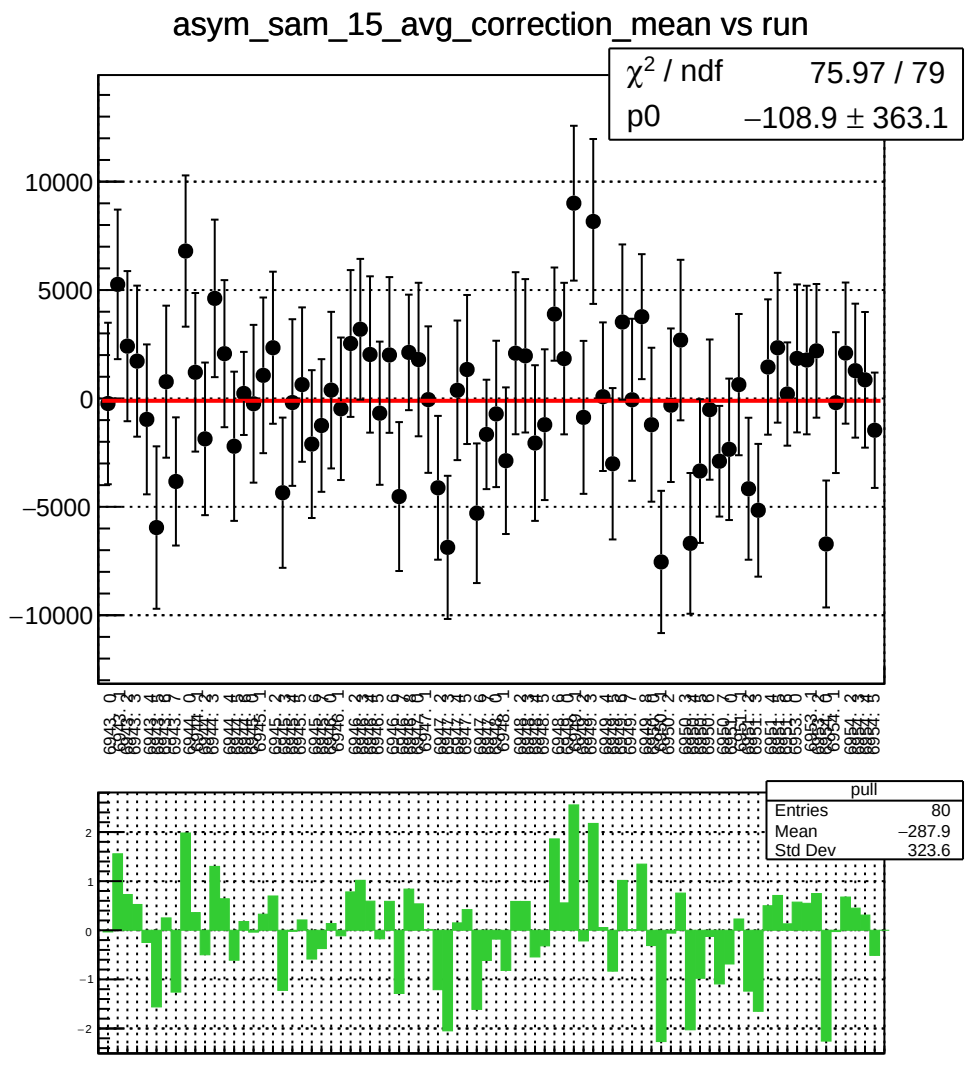

pull1D
Entries 80
Mean −0.02064
Std Dev 0.9888
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

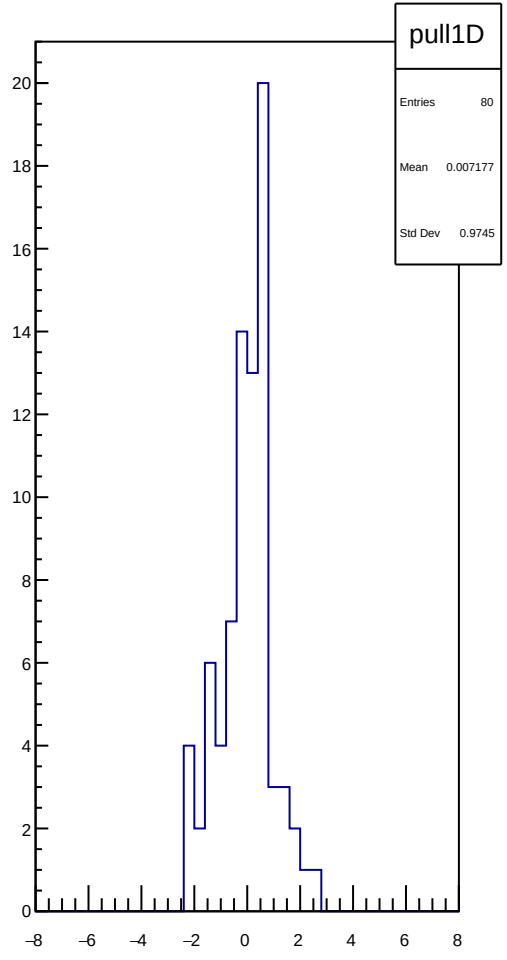

asym_sam8_correction_rms vs run
χ² / ndf 1.469e+04 / 79
p0 363.1 ± 0.2888
440
420
400
380
360
340
320
300

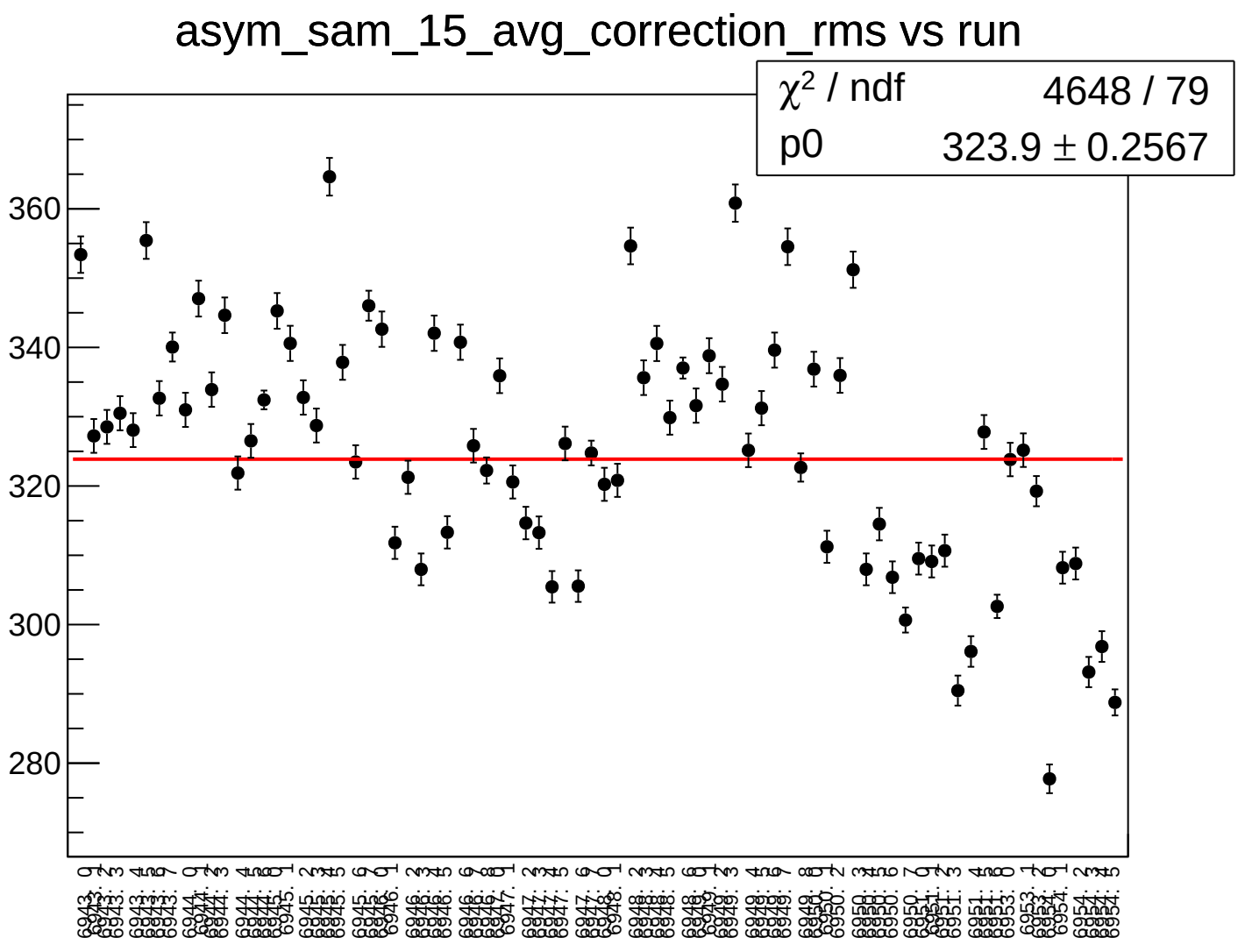

reg_asym_sam_15_avg_mean vs run
χ² / ndf 66.13 / 79
p0 29.28 ± 69.34
pull
Entries 80
Mean 1009
Std Dev 965.7

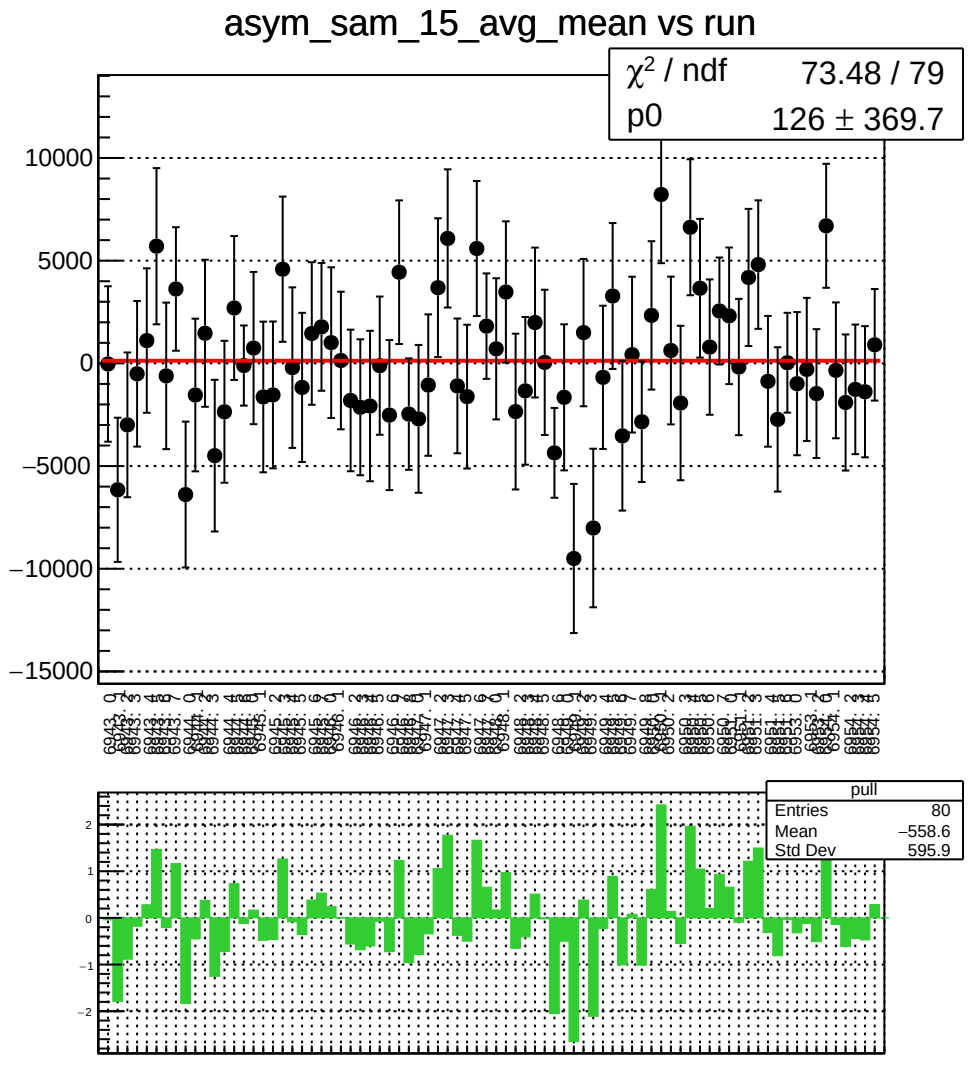

pull1D
Entries 80
Mean 0.002889
Std Dev 0.9092

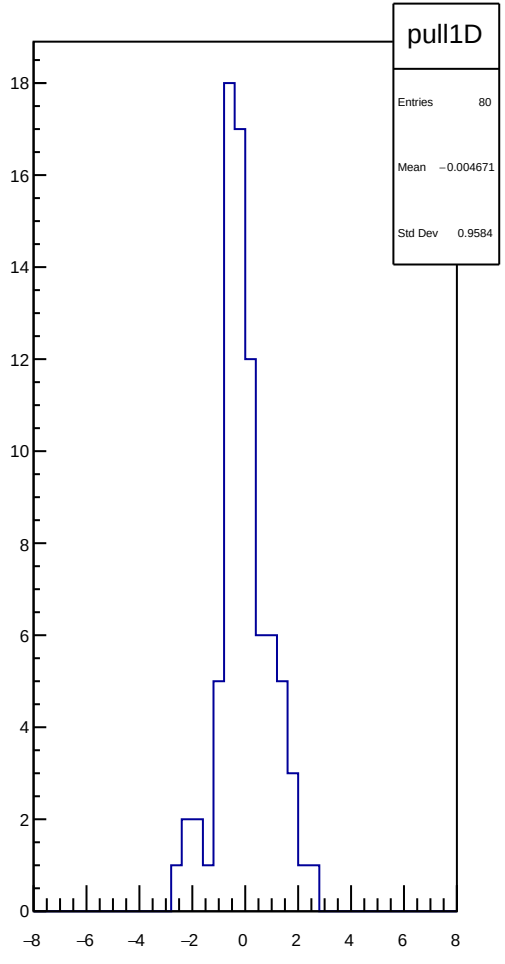

reg_asym_sam_15_avg_rms vs run
χ^2 / ndf 1658 / 79
p0 61.91 ± 0.04903
72
70
68
66
64
62
60
58

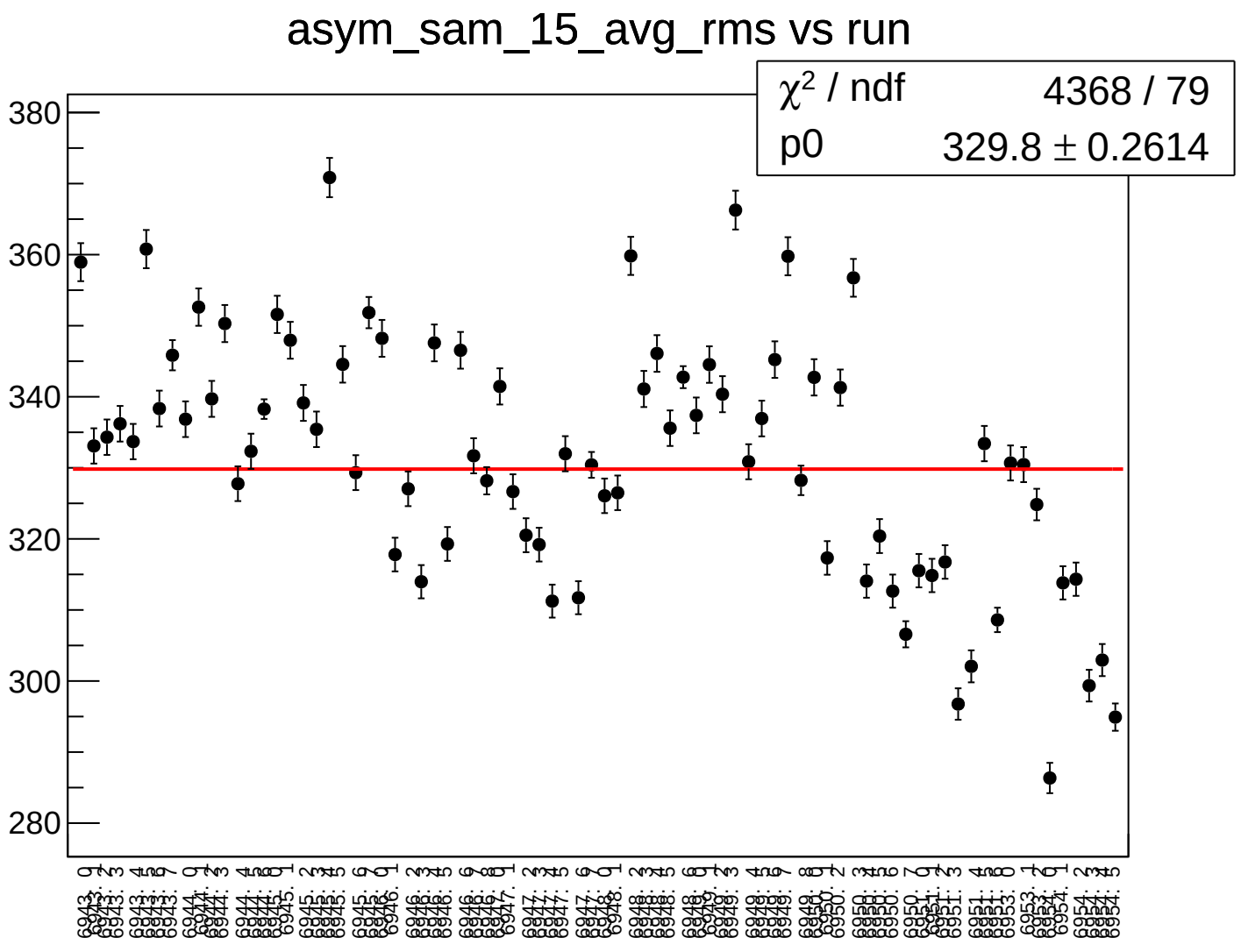

asym_sam_15_avg_correction_mean vs run
χ² / ndf 75.97 / 79
p0 −108.9 ± 363.1
10000
5000
0
−5000
−10000
pull
Entries 80
Mean −287.9
Std Dev 323.6
2
1
0
−1
−2

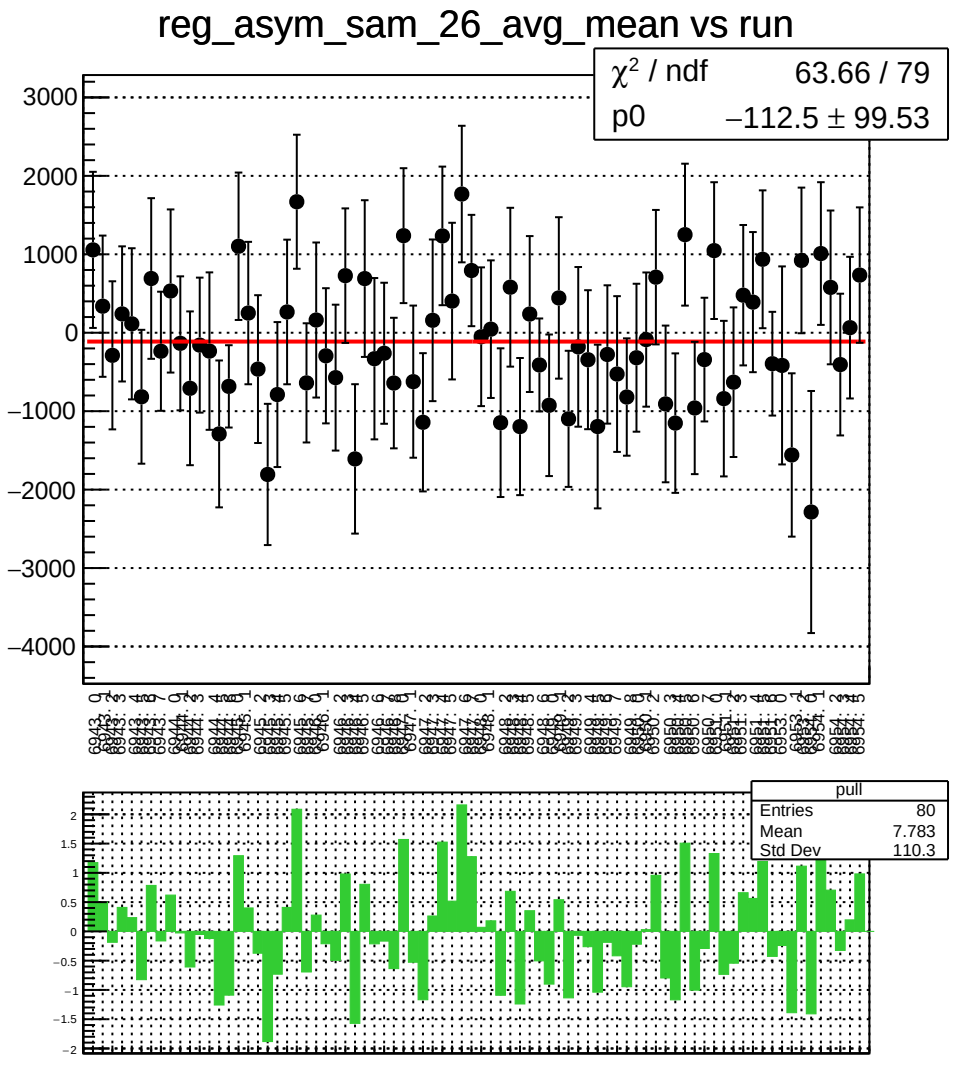

pull1D
Entries 80
Mean 0.007177
Std Dev 0.9745
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

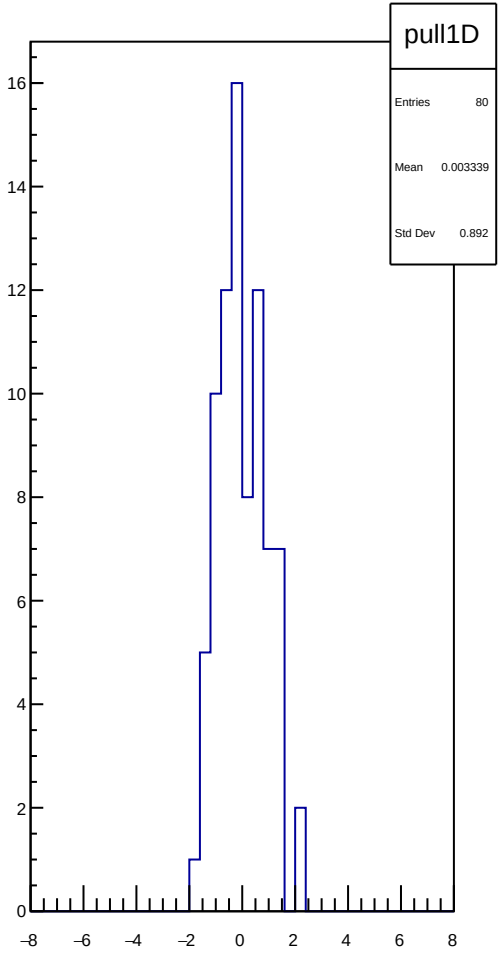

asym_sam_15_avg_correction_rms vs run
χ² / ndf 4648 / 79
p0 323.9 ± 0.2567
360
340
320
300
280

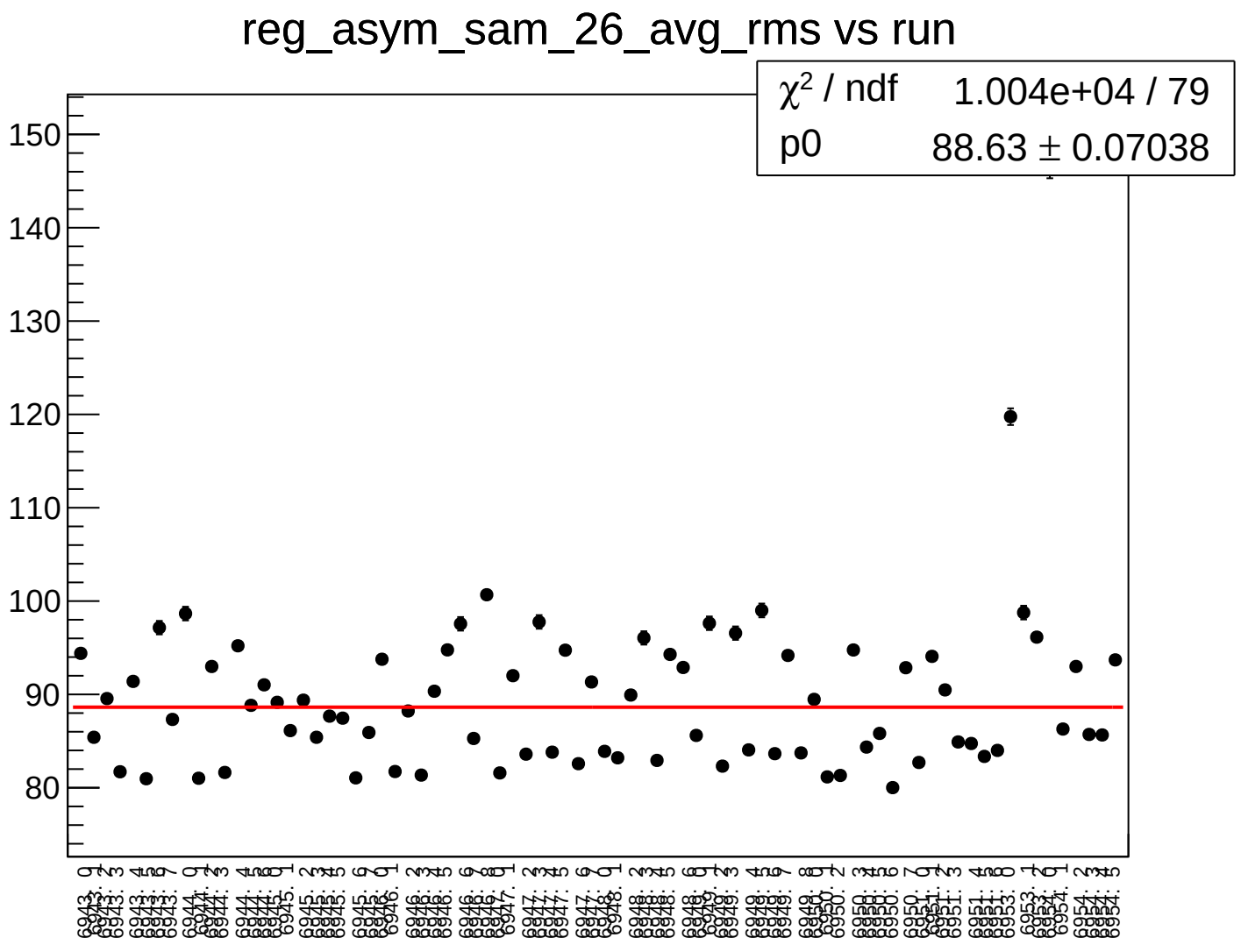

asym_sam_15_avg_mean vs run
χ² / ndf 73.48 / 79
p0 126 ± 369.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean −558.6
Std Dev 595.9
2
1
0
−1
−2

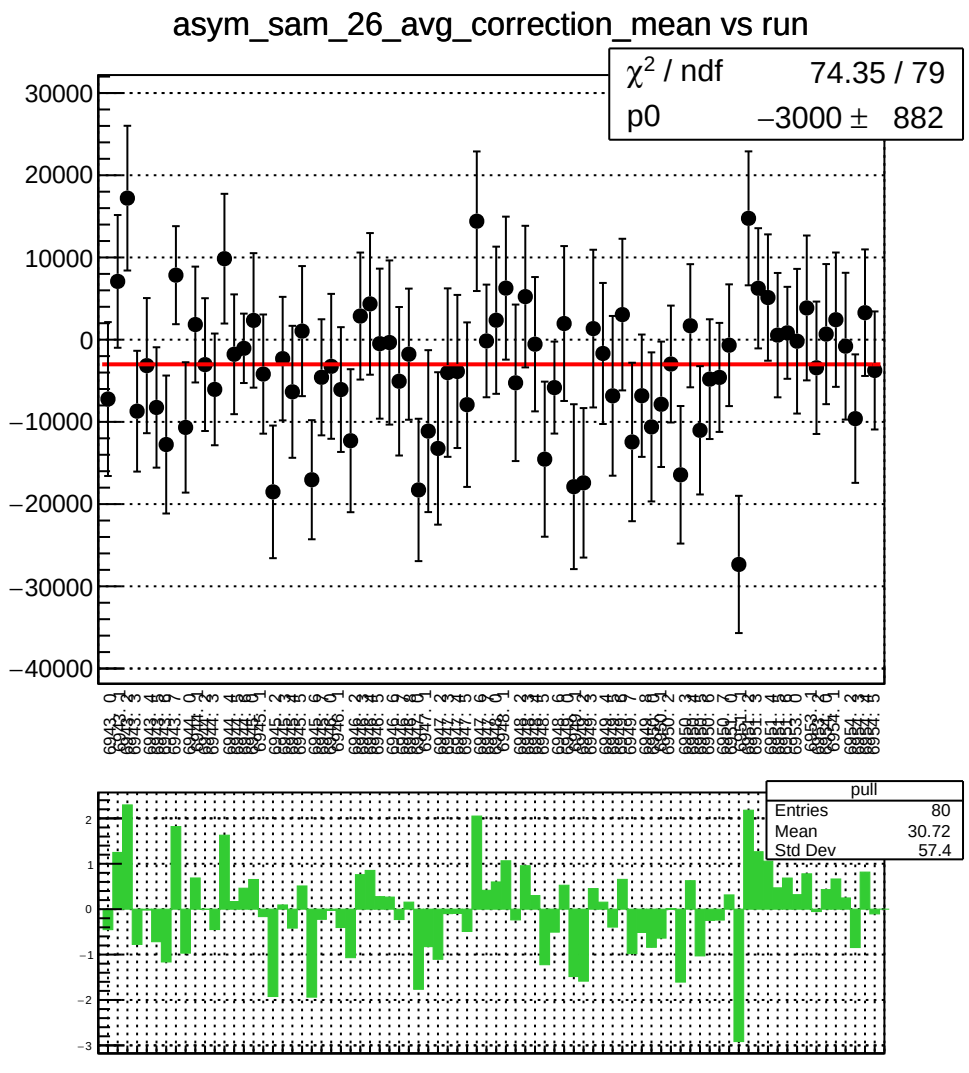

pull1D
Entries 80
Mean −0.004671
Std Dev 0.9584
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

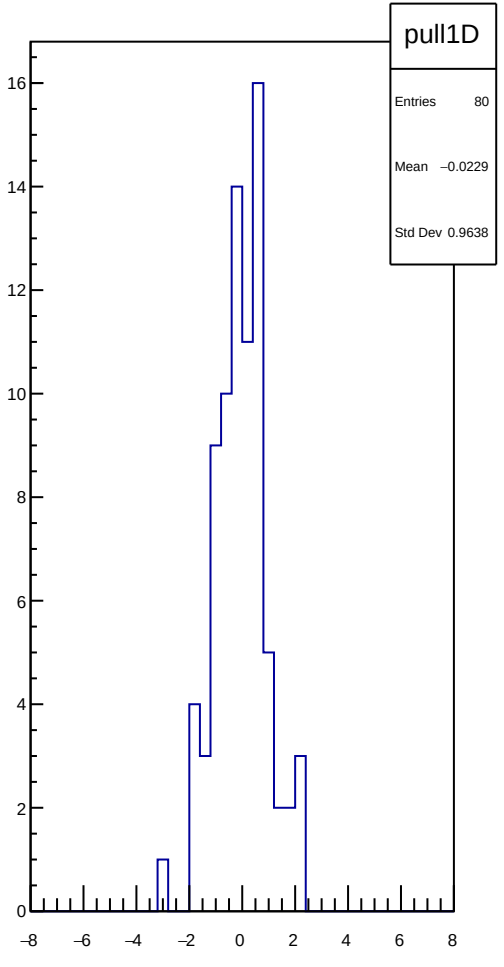

asym_sam_15_avg_rms vs run
χ² / ndf 4368 / 79
p0 329.8 ± 0.2614
380
360
340
320
300
280

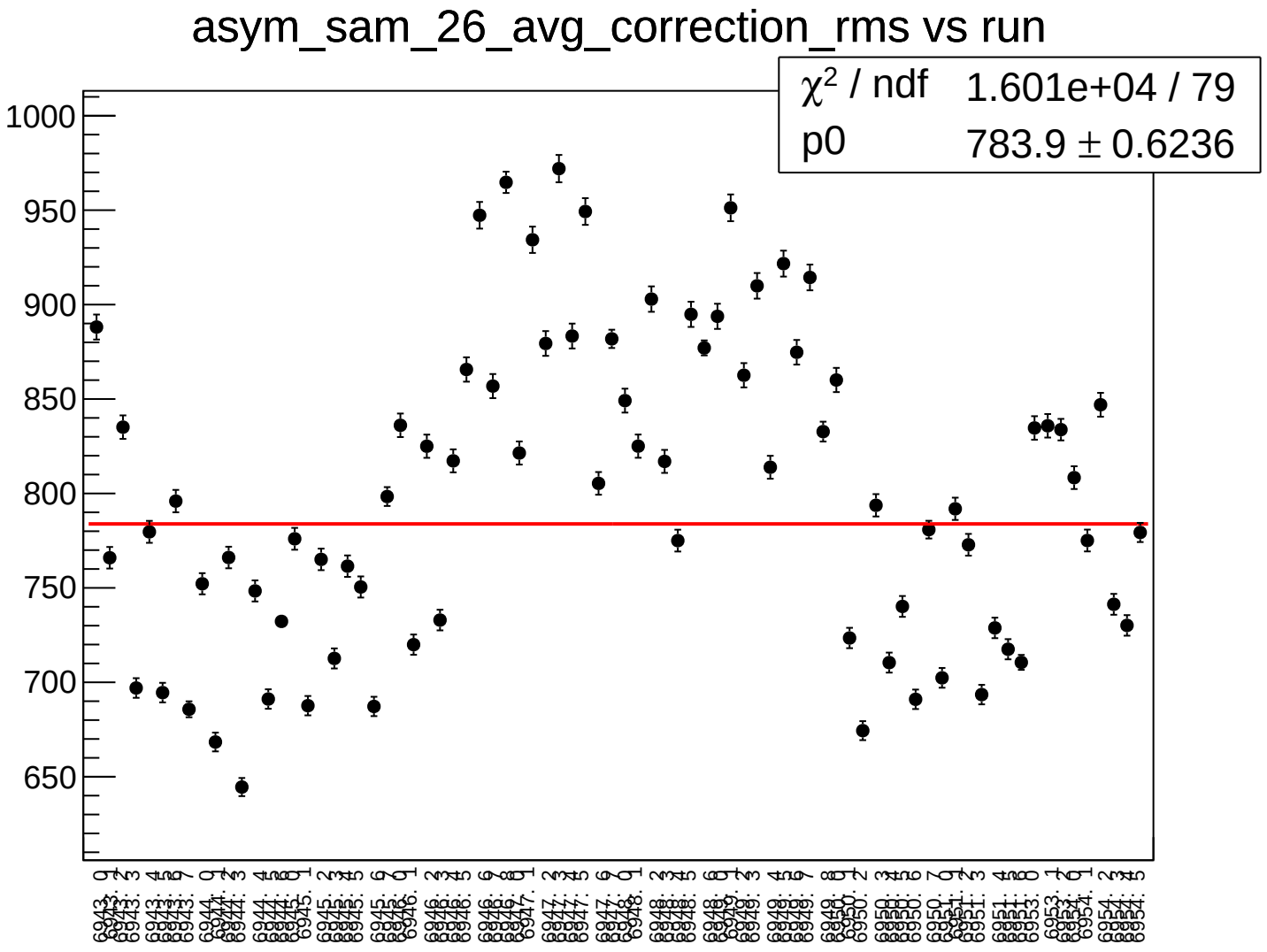

reg_asym_sam_26_avg_mean vs run
χ² / ndf 63.66 / 79
p0 −112.5 ± 99.53
pull
Entries 80
Mean 7.783
Std Dev 110.3

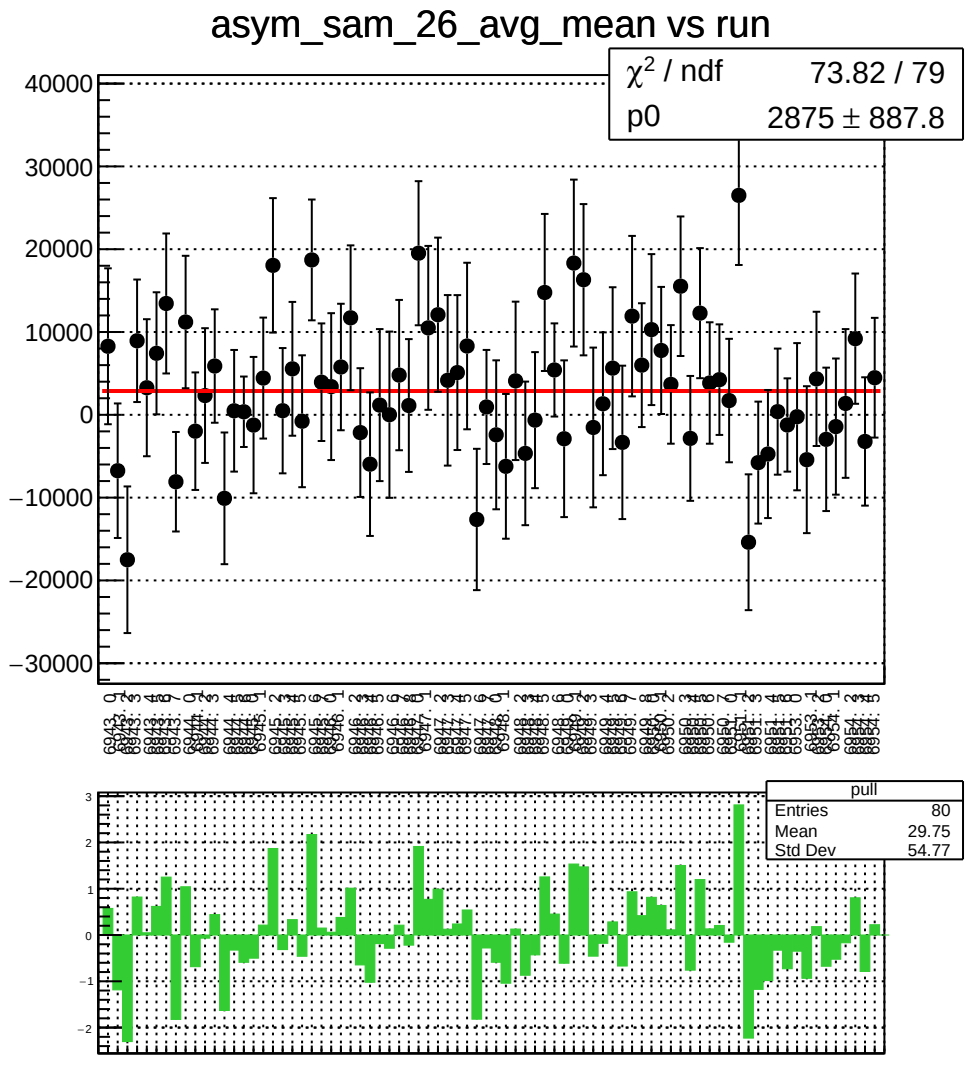

pull1D
Entries 80
Mean 0.003339
Std Dev 0.892

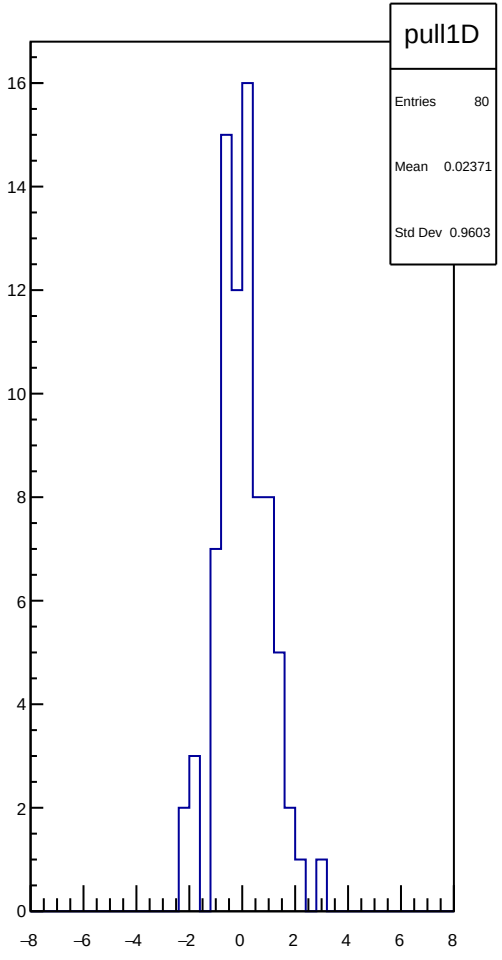

reg_asym_sam_26_avg_rms vs run
χ^2 / ndf 1.004e+04 / 79
p0 88.63 ± 0.07038
150
140
130
120
110
100
90
80

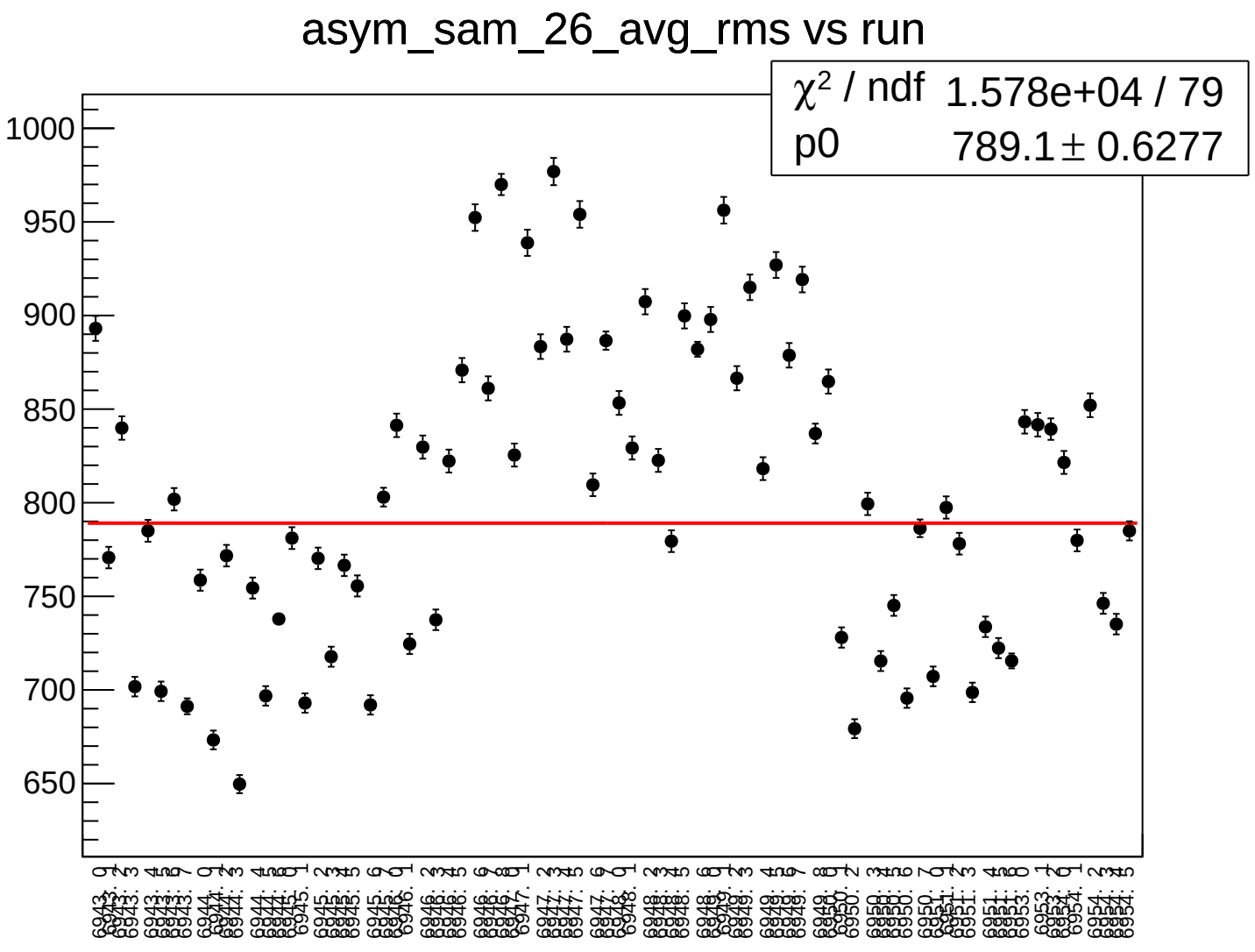

asym_sam_26_avg_correction_mean vs run
χ² / ndf 74.35 / 79
p0 −3000 ± 882
pull
Entries 80
Mean 30.72
Std Dev 57.4

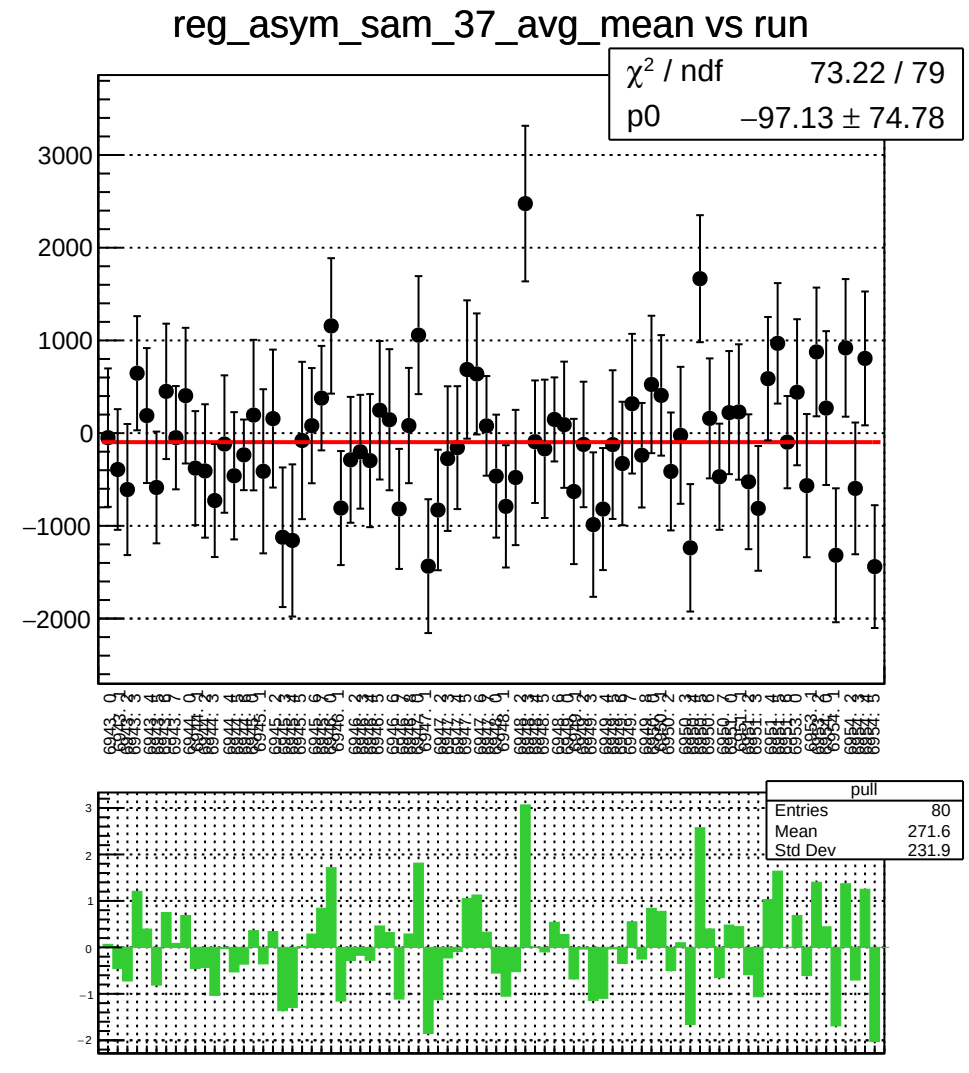

pull1D
Entries 80
Mean −0.0229
Std Dev 0.9638

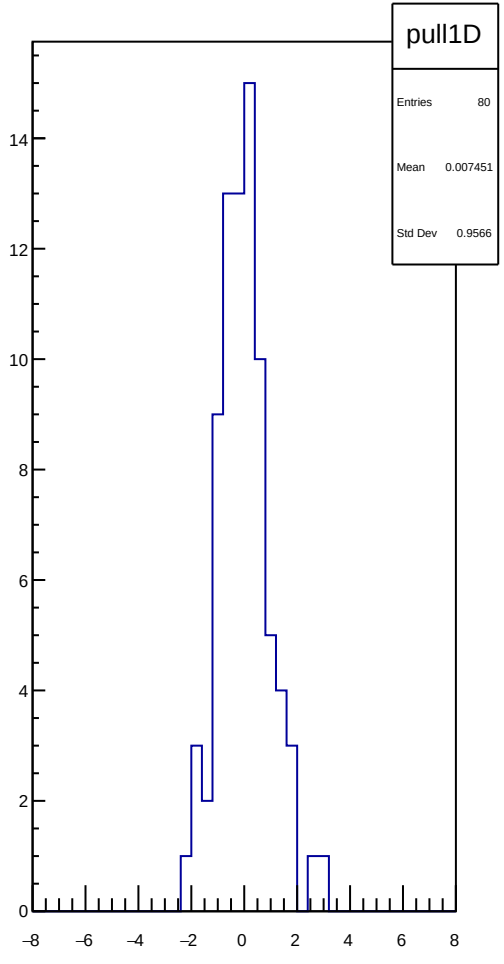

asym_sam_26_avg_correction_rms vs run
χ² / ndf 1.601e+04 / 79
p0 783.9 ± 0.6236
1000
950
900
850
800
750
700
650

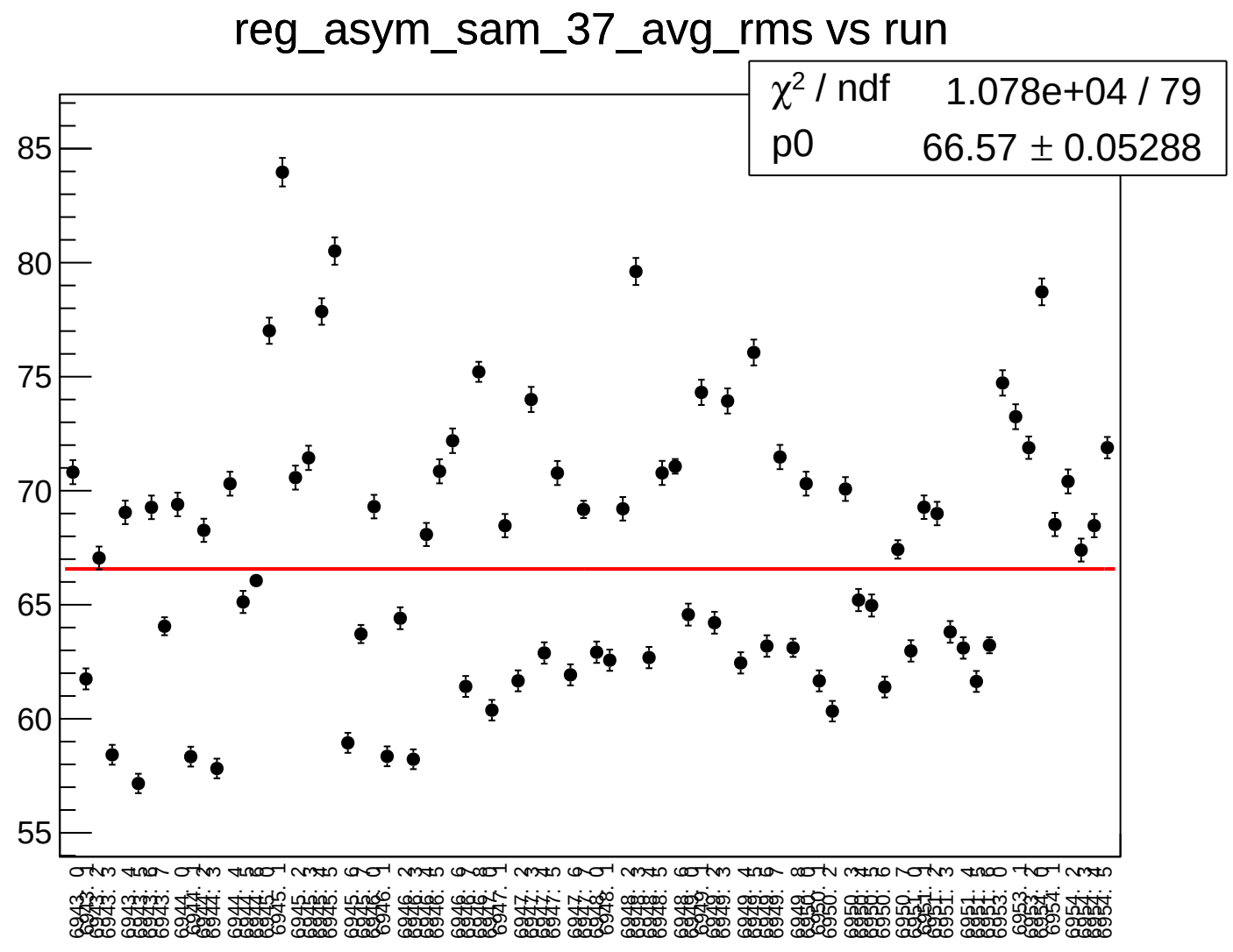

asym_sam_26_avg_mean vs run
χ² / ndf 73.82 / 79
p0 2875 ± 887.8
pull
Entries 80
Mean 29.75
Std Dev 54.77

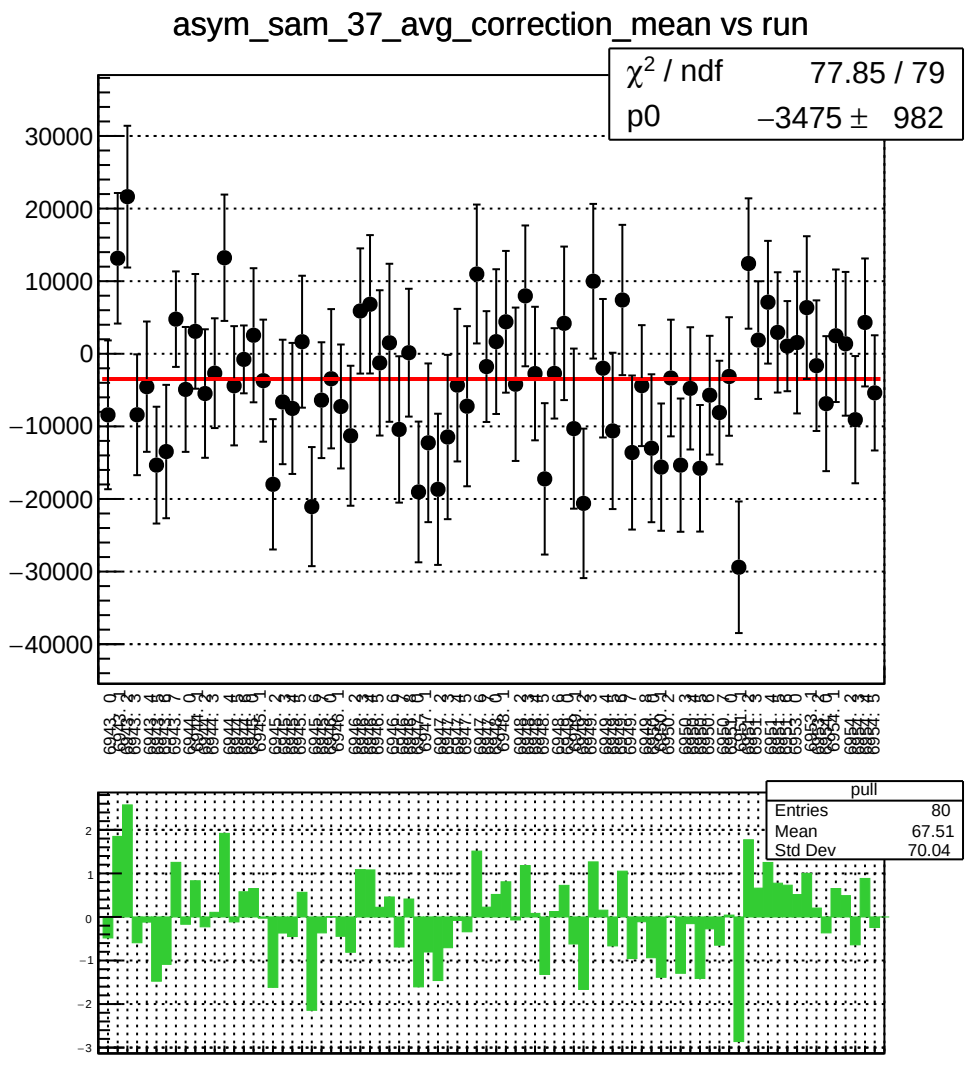

pull1D
Entries 80
Mean 0.02371
Std Dev 0.9603

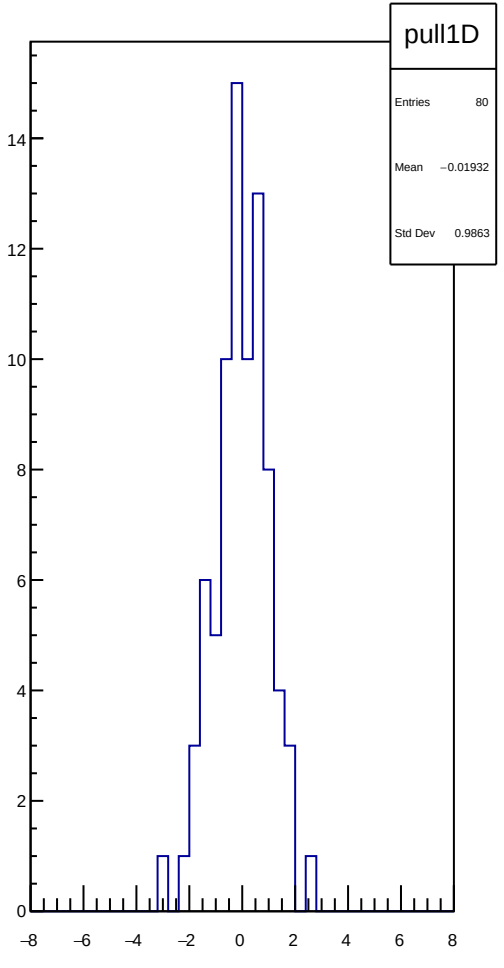

asym_sam_26_avg_rms vs run
χ² / ndf 1.578e+04 / 79
p0 789.1 ± 0.6277
1000
950
900
850
800
750
700
650

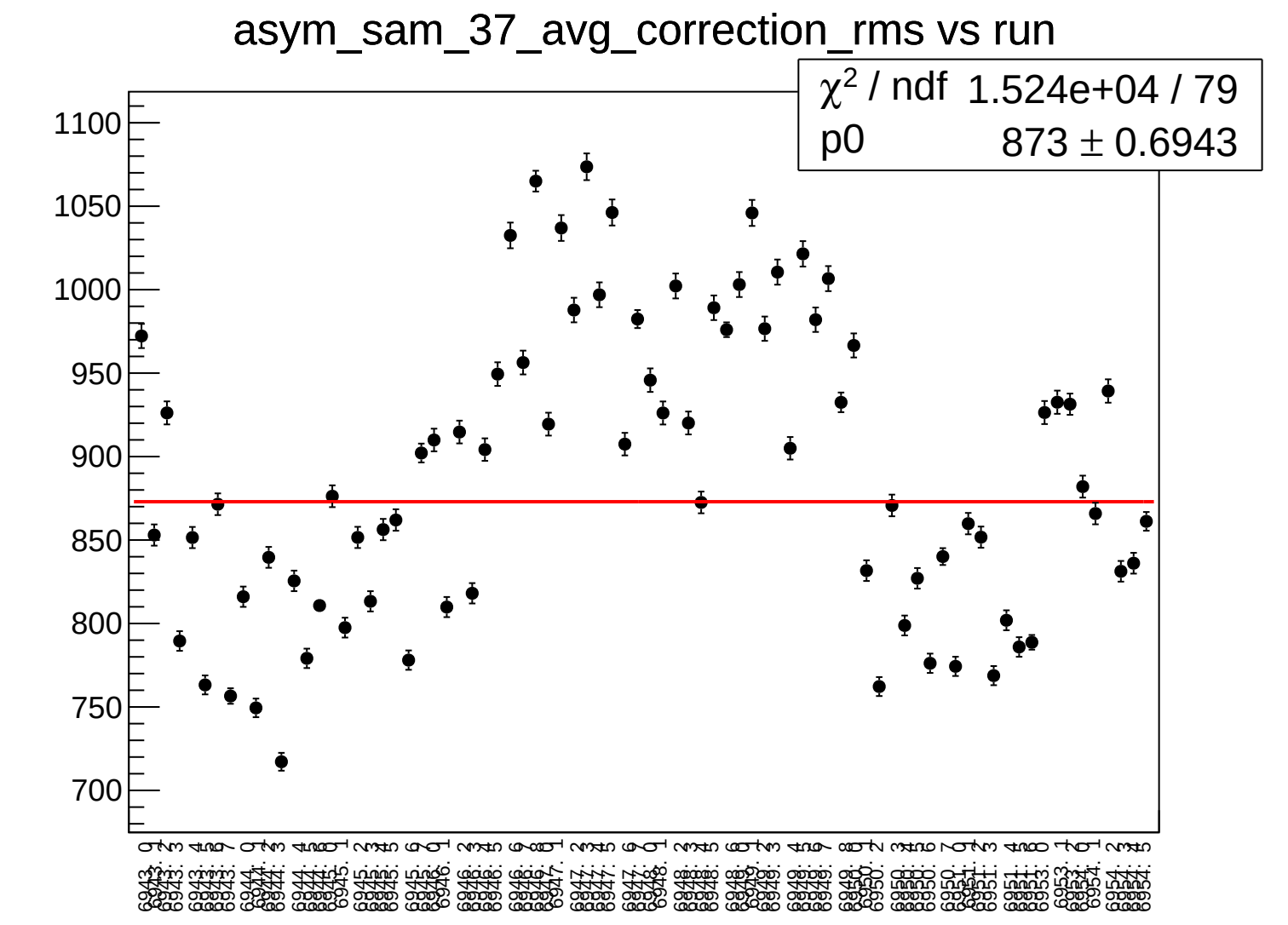

reg_asym_sam_37_avg_mean vs run
χ² / ndf 73.22 / 79
p0 −97.13 ± 74.78
3000
2000
1000
0
−1000
−2000
pull
Entries 80
Mean 271.6
Std Dev 231.9
3
2
1
0
−1
−2

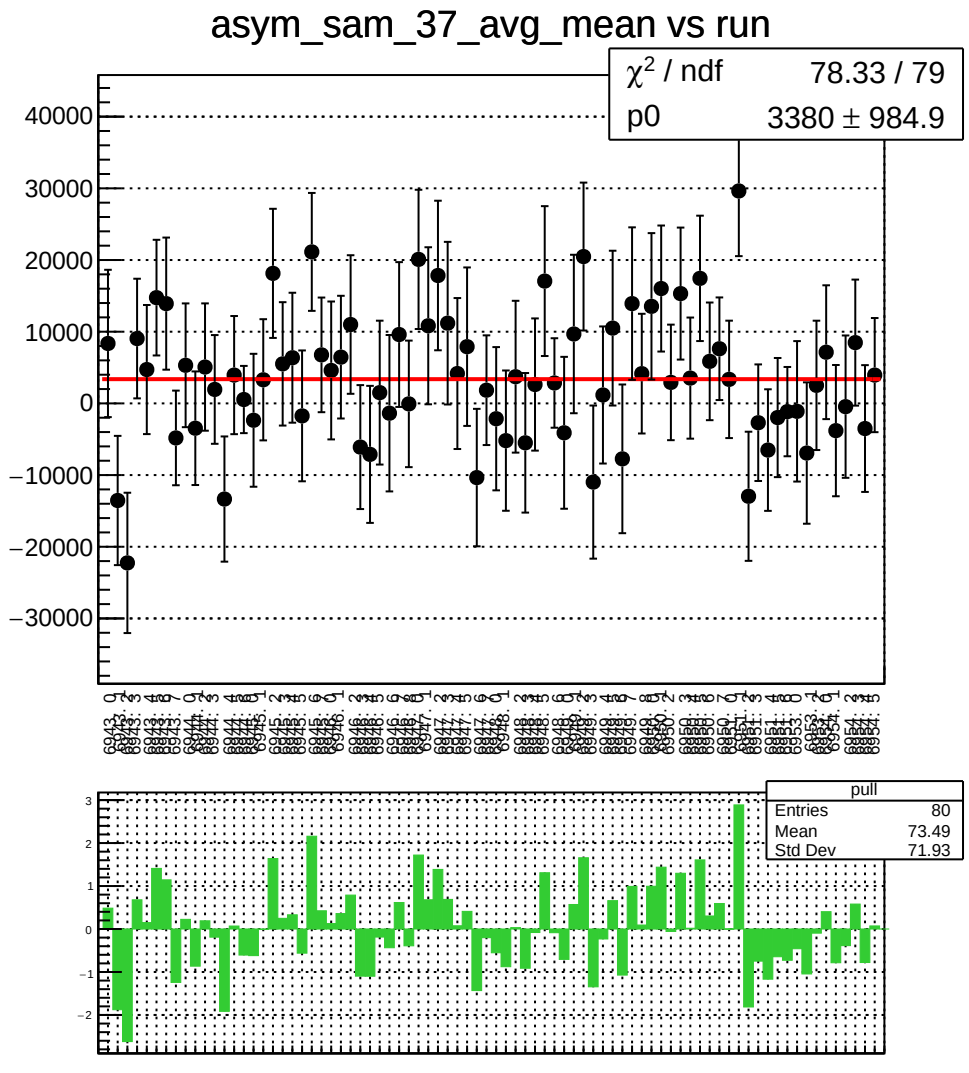

pull1D
Entries 80
Mean 0.007451
Std Dev 0.9566
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

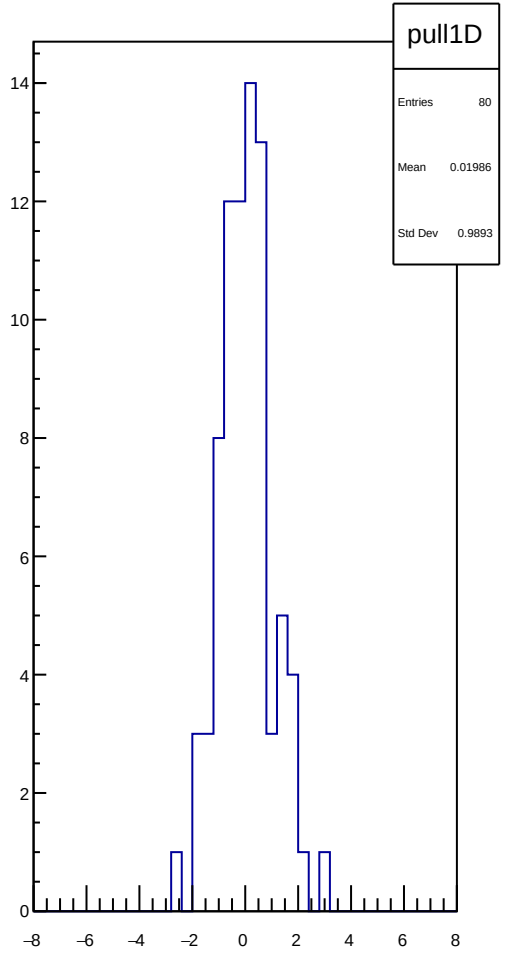

reg_asym_sam_37_avg_rms vs run
χ² / ndf 1.078e+04 / 79
p0 66.57 ± 0.05288
85
80
75
70
65
60
55

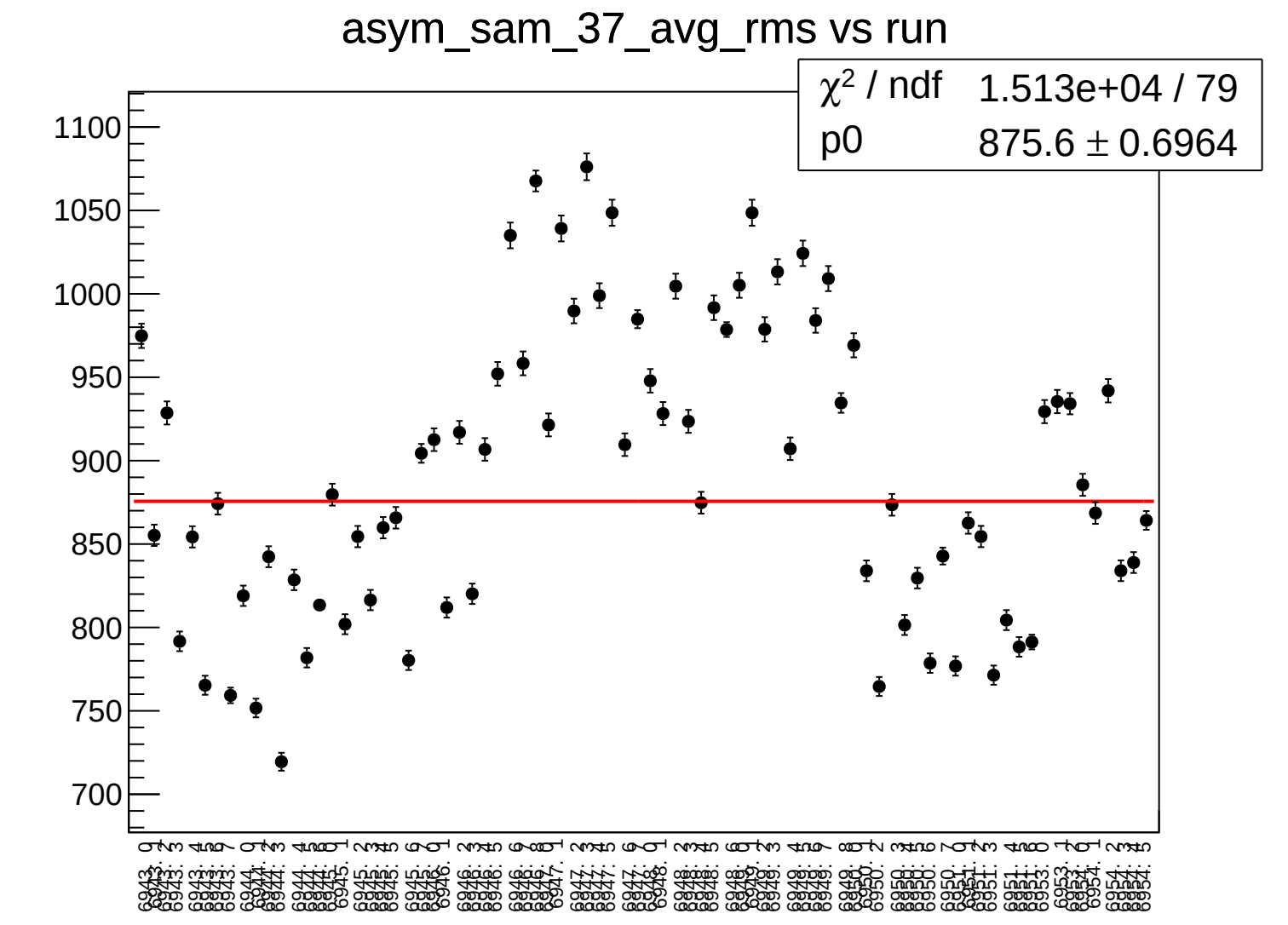

asym_sam_37_avg_correction_mean vs run
χ² / ndf 77.85 / 79
p0 −3475 ± 982
pull
Entries 80
Mean 67.51
Std Dev 70.04

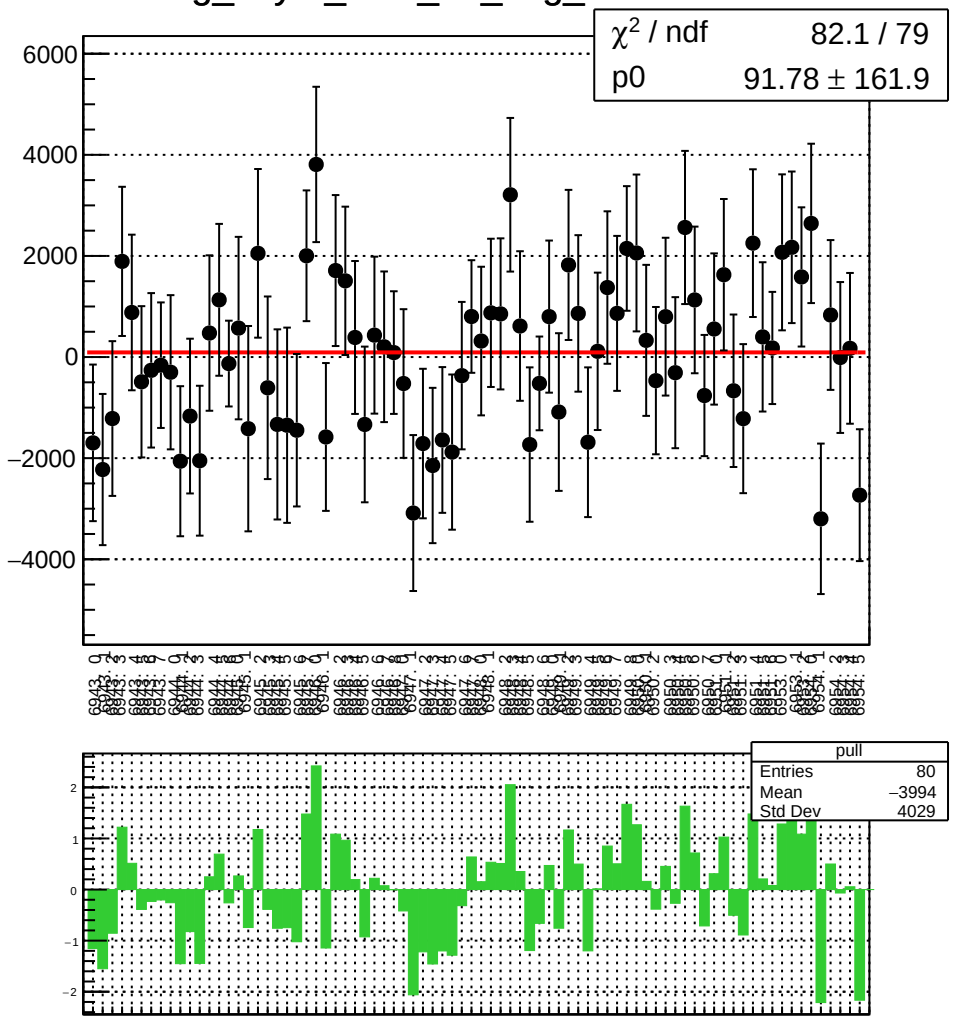

pull1D
Entries 80
Mean −0.01932
Std Dev 0.9863

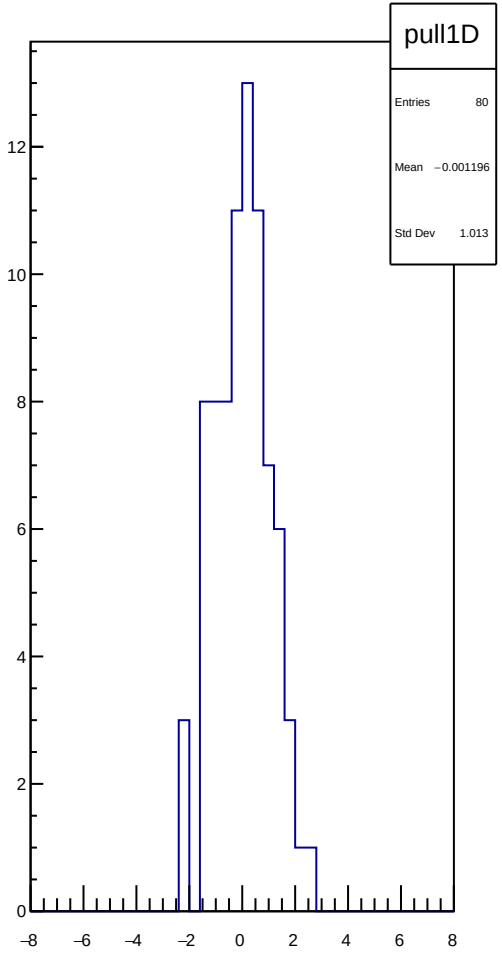

asym_sam_37_avg_correction_rms vs run
χ² / ndf 1.524e+04 / 79
p0 873 ± 0.6943
1100
1050
1000
950
900
850
800
750
700

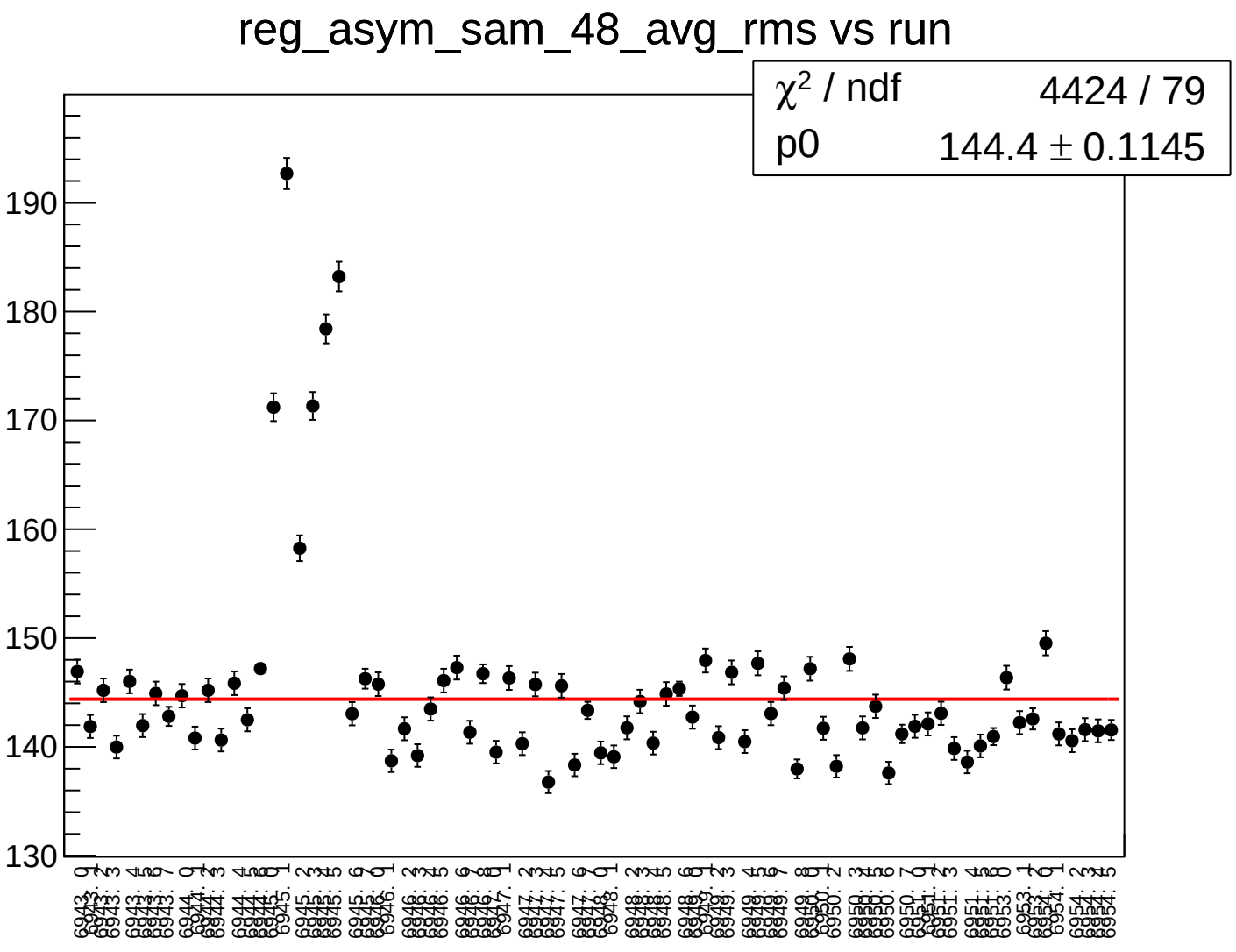

asym_sam_37_avg_mean vs run
χ² / ndf 78.33 / 79
p0 3380 ± 984.9
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean 73.49
Std Dev 71.93
3
2
1
0
−1
−2

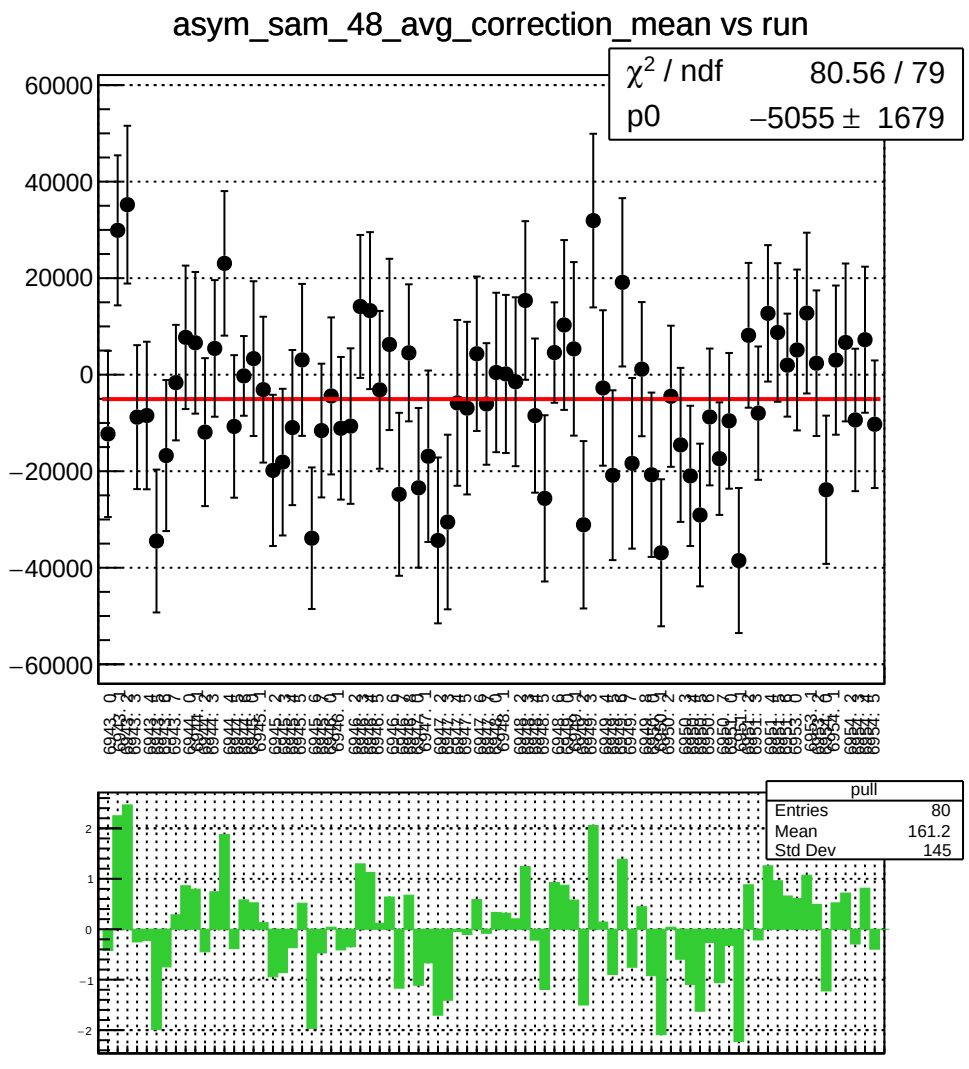

pull1D
Entries 80
Mean 0.01986
Std Dev 0.9893
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

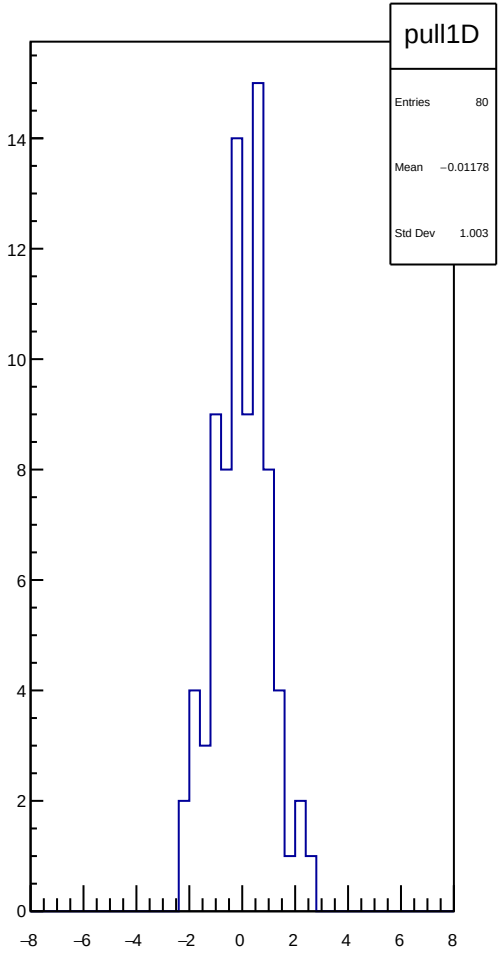

asym_sam_37_avg_rms vs run
χ² / ndf 1.513e+04 / 79
p0 875.6 ± 0.6964
1100
1050
1000
950
900
850
800
750
700

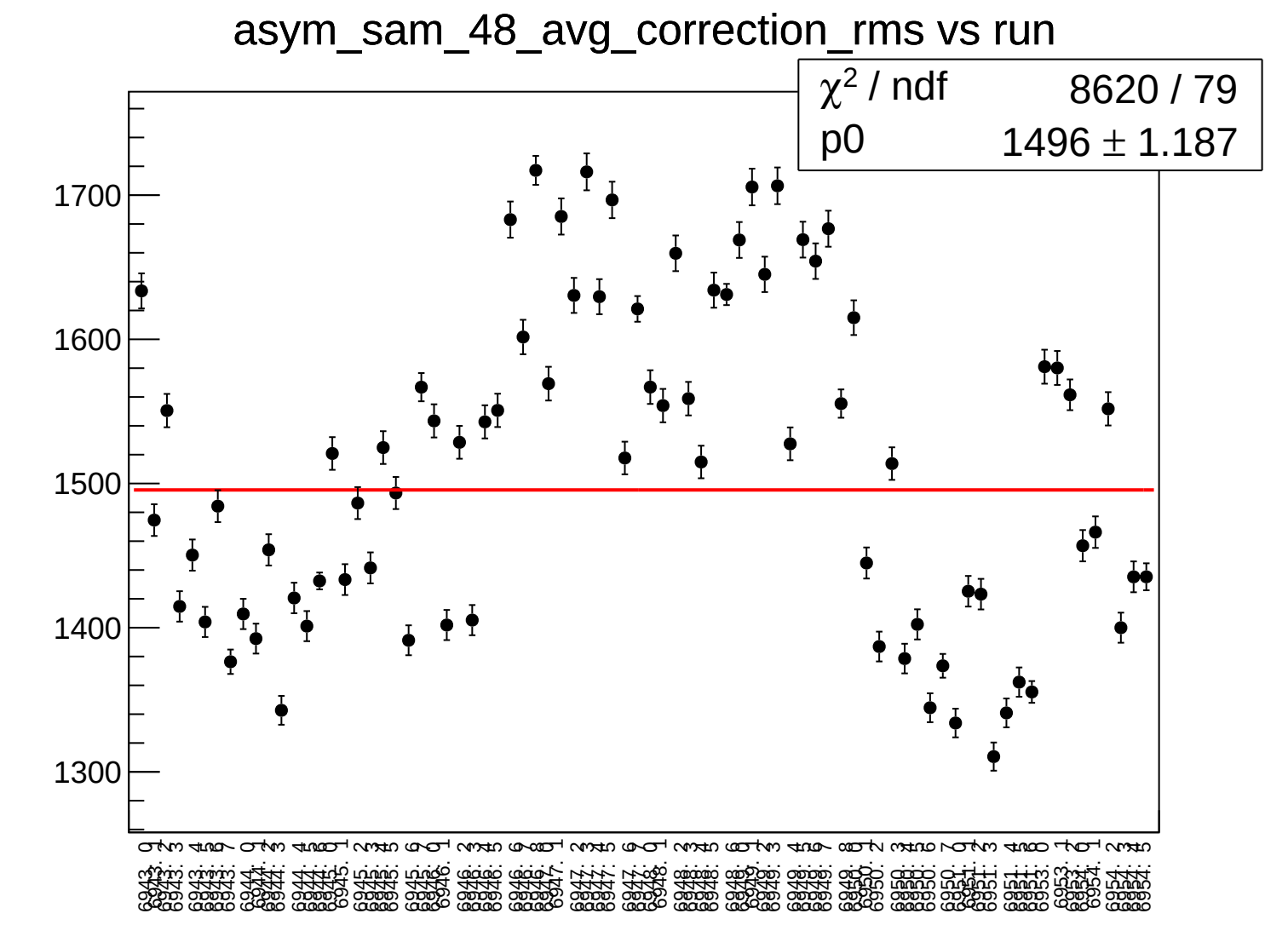

reg_asym_sam_48_avg_mean vs run
χ² / ndf 82.1 / 79
p0 91.78 ± 161.9
pull
Entries 80
Mean −3994
Std Dev 4029

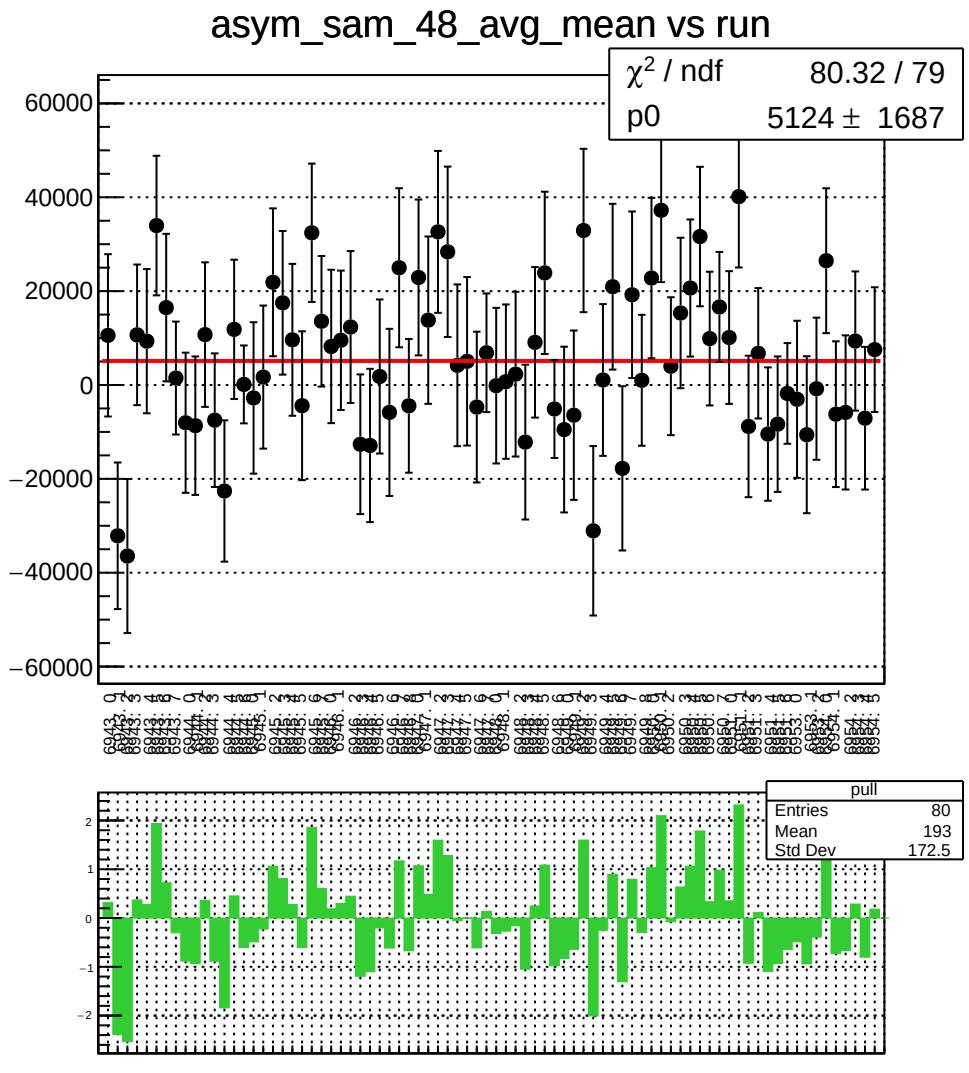

pull1D
Entries 80
Mean −0.001196
Std Dev 1.013

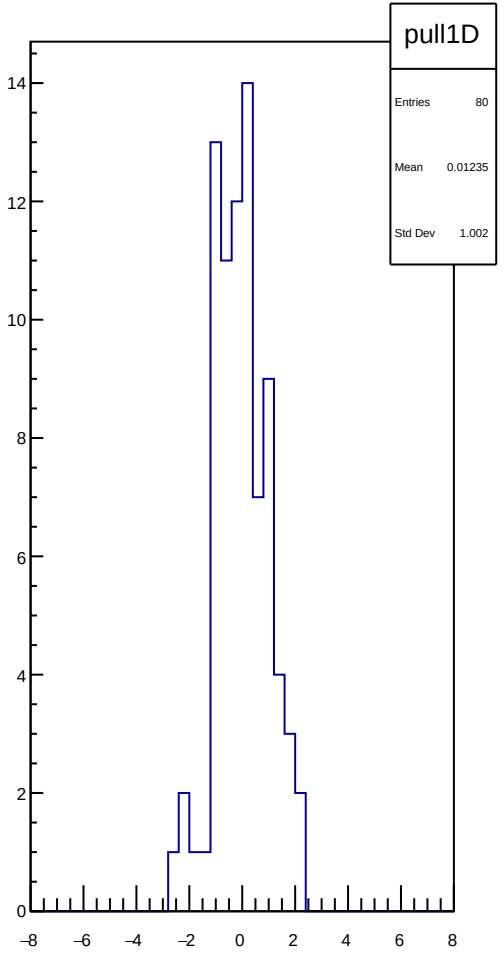

reg_asym_sam_48_avg_rms vs run
χ² / ndf 4424 / 79
p0 144.4 ± 0.1145
190
180
170
160
150
140
130


asym_sam_48_avg_correction_mean vs run
χ² / ndf 80.56 / 79
p0 −5055 ± 1679
pull
Entries 80
Mean 161.2
Std Dev 145

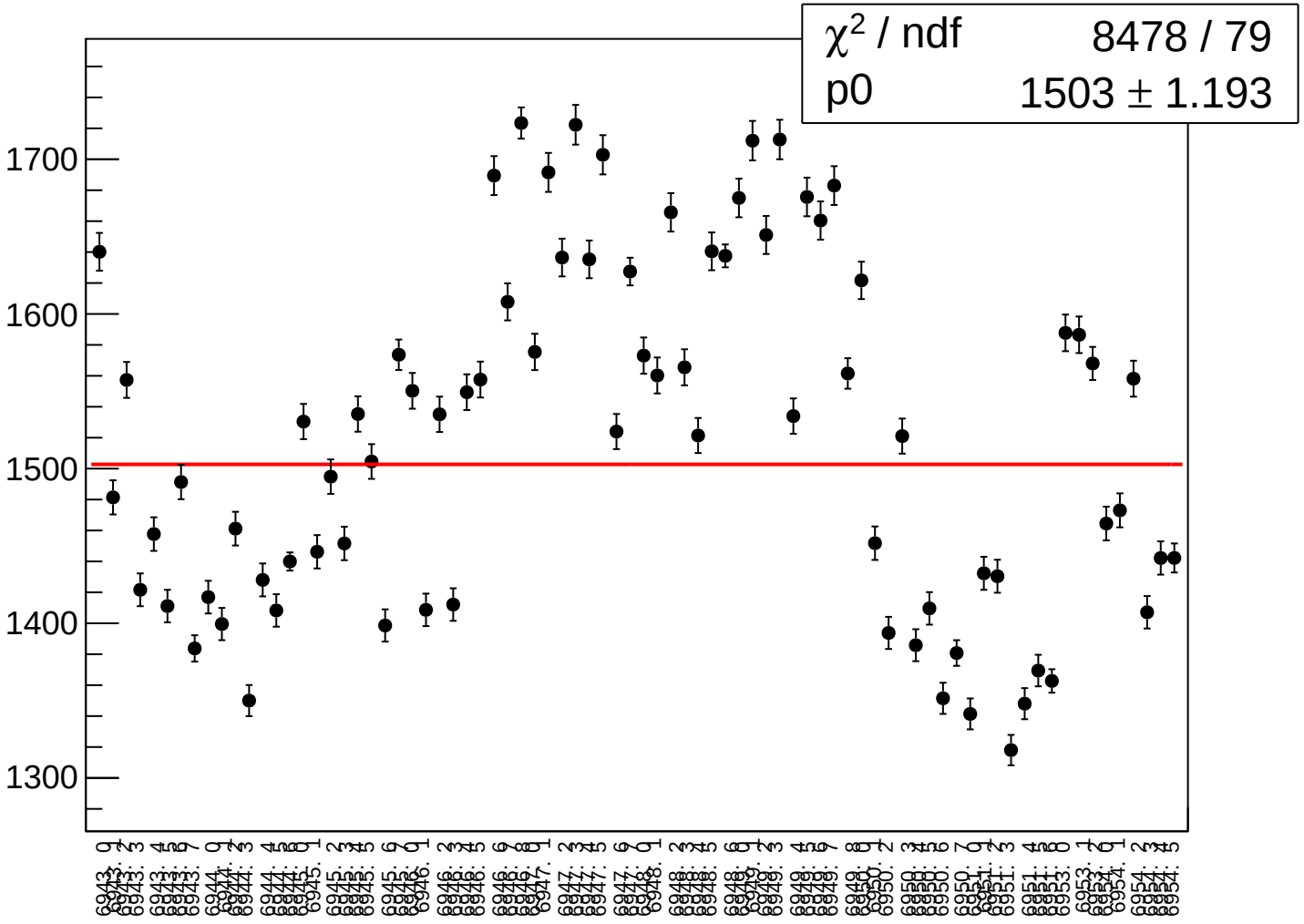

pull1D
Entries 80
Mean −0.01178
Std Dev 1.003

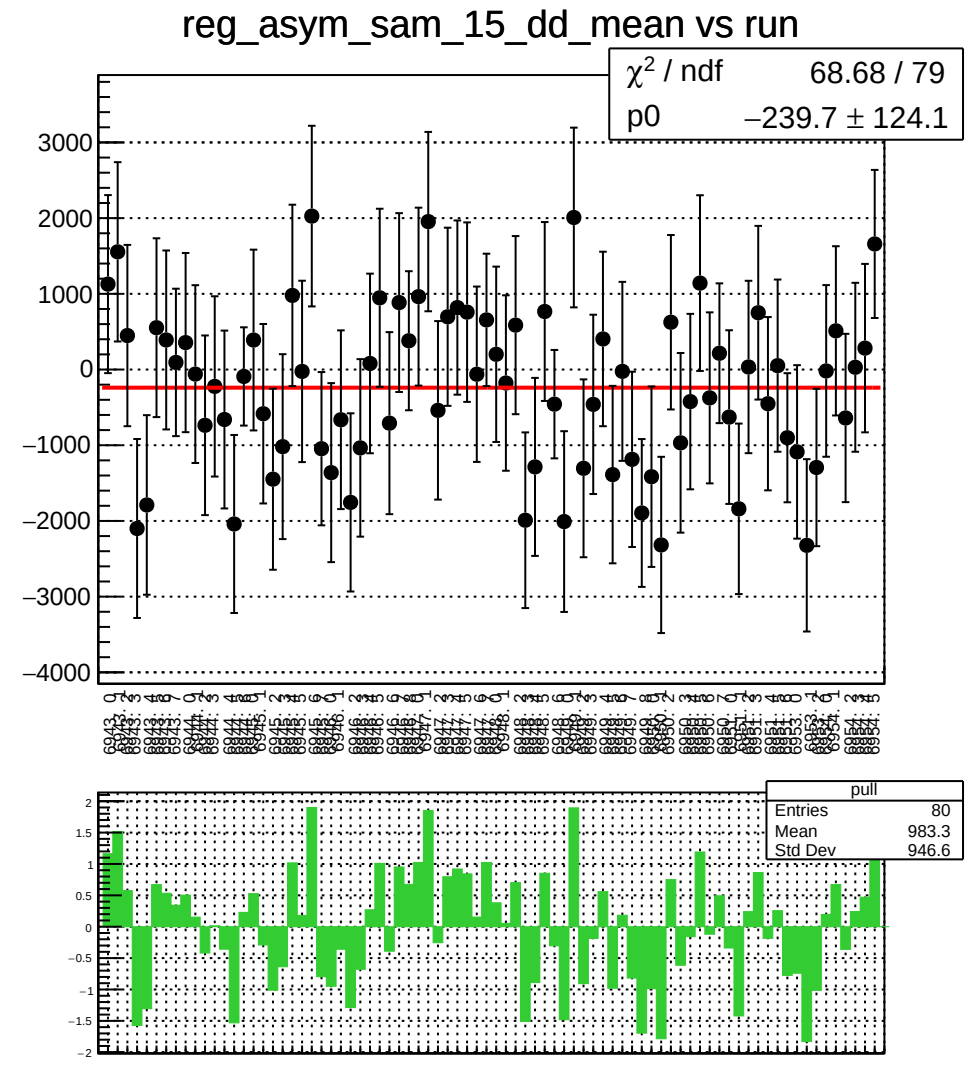

asym_sam_48_avg_correction_rms vs run
χ² / ndf 8620 / 79
p0 1496 ± 1.187
1700
1600
1500
1400
1300

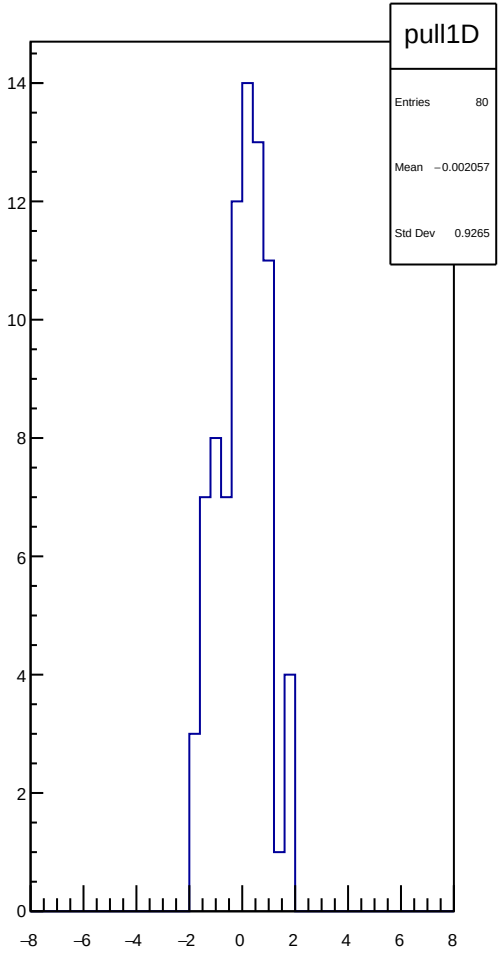

asym_sam_48_avg_mean vs run
χ² / ndf 80.32 / 79
p0 5124 ± 1687
pull
Entries 80
Mean 193
Std Dev 172.5

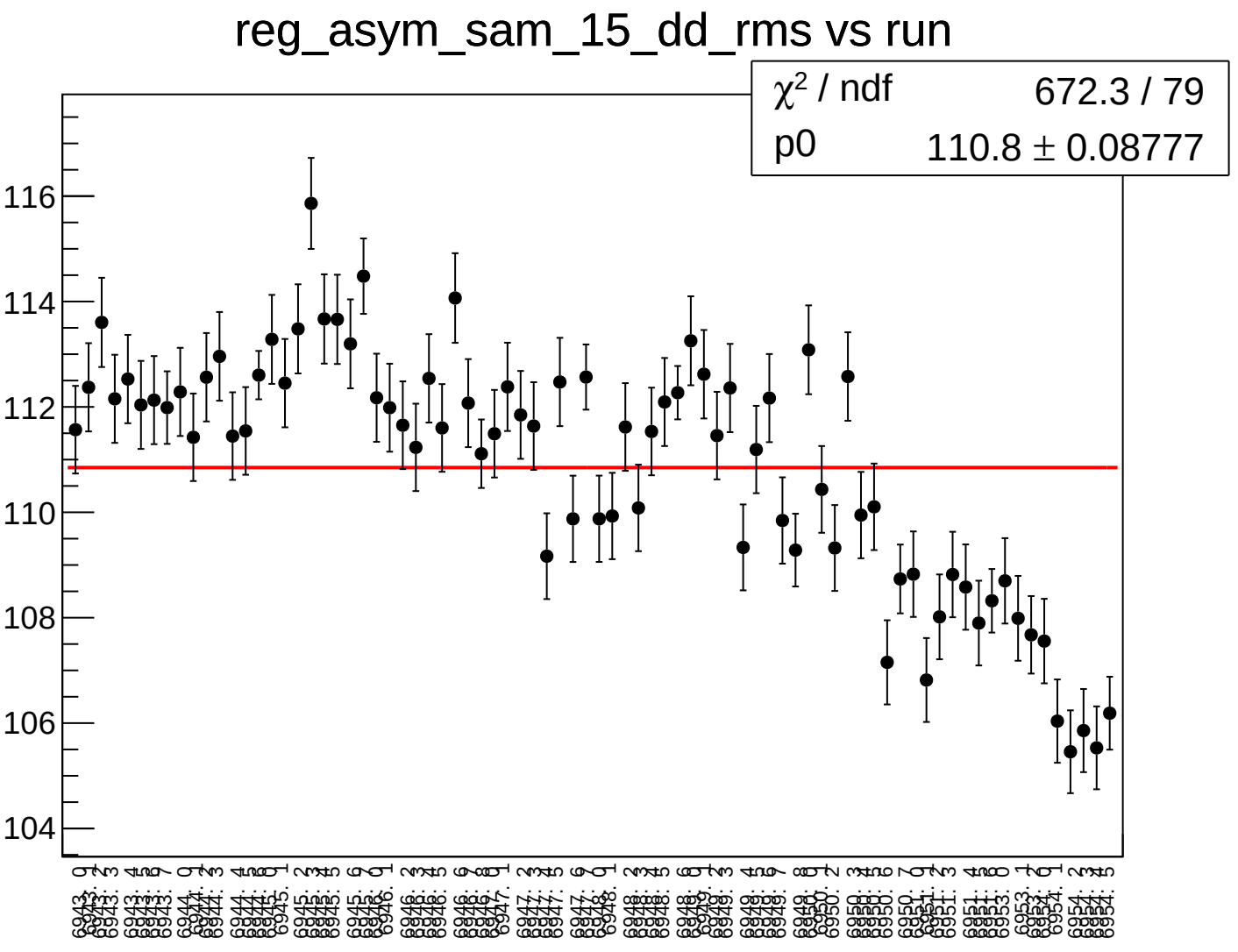

pull1D
Entries 80
Mean 0.01235
Std Dev 1.002

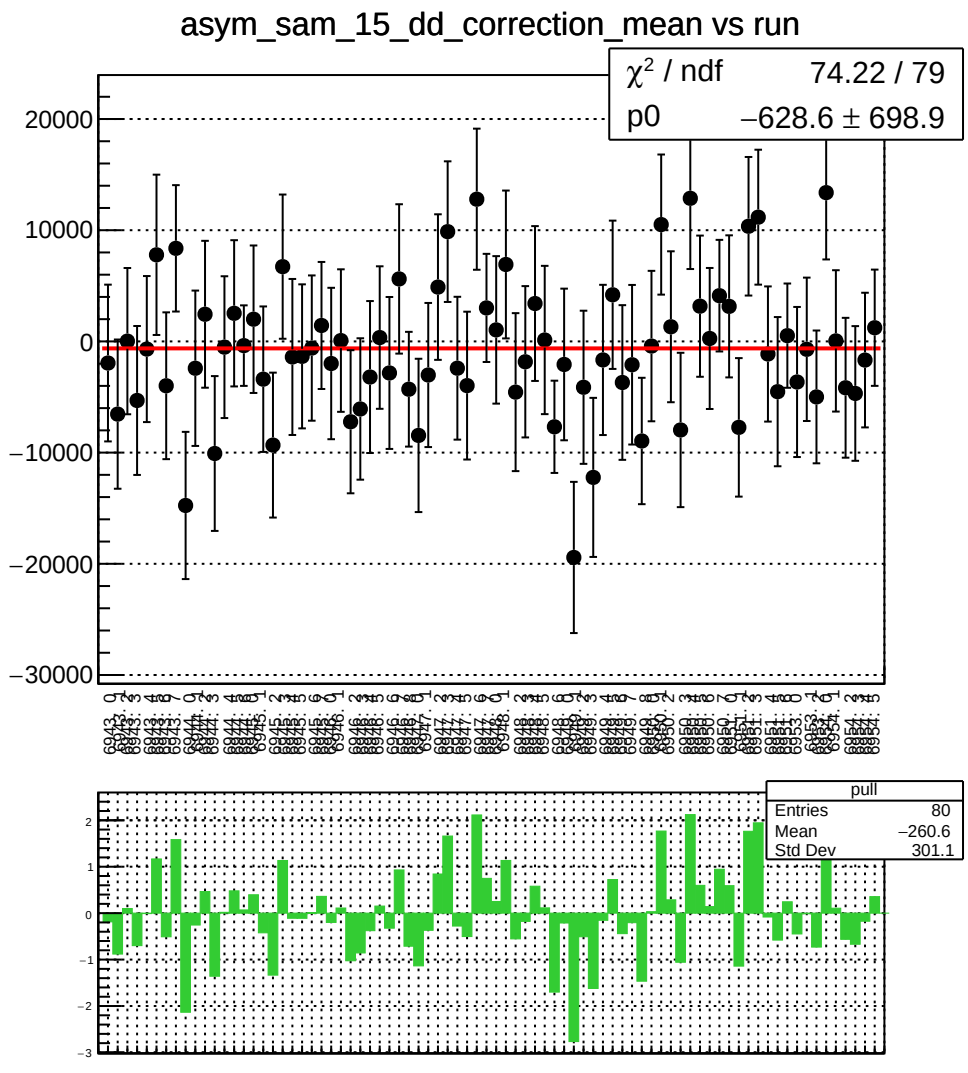
asym_sam_48_avg_rms vs run

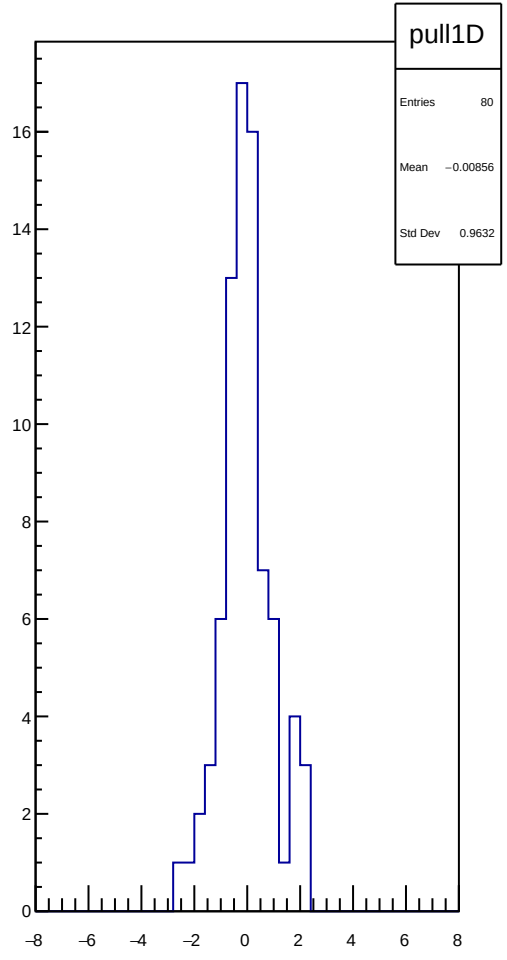


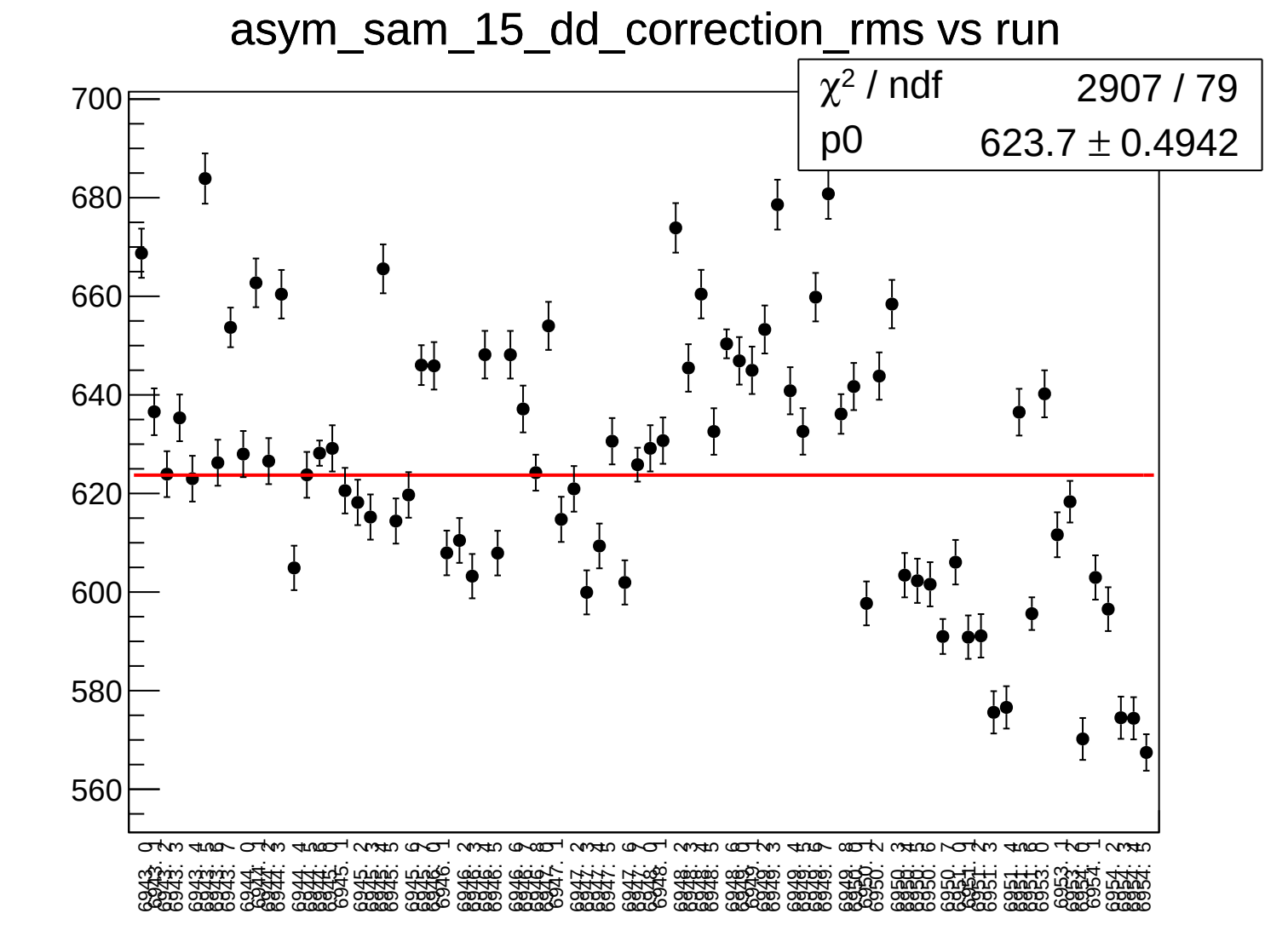

reg_asym_sam_15_dd_mean vs run
χ² / ndf 68.68 / 79
p0 −239.7 ± 124.1
pull
Entries 80
Mean 983.3
Std Dev 946.6

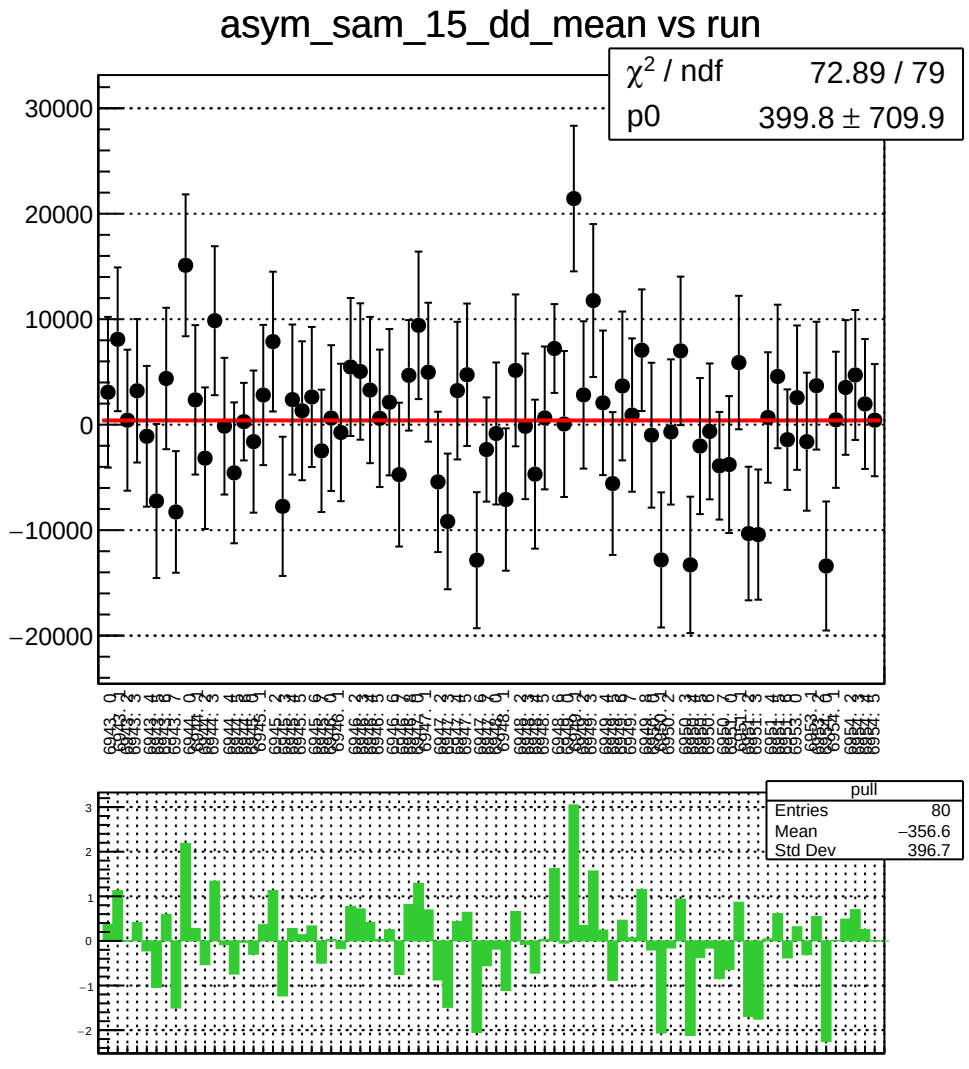

pull1D
Entries 80
Mean −0.002057
Std Dev 0.9265

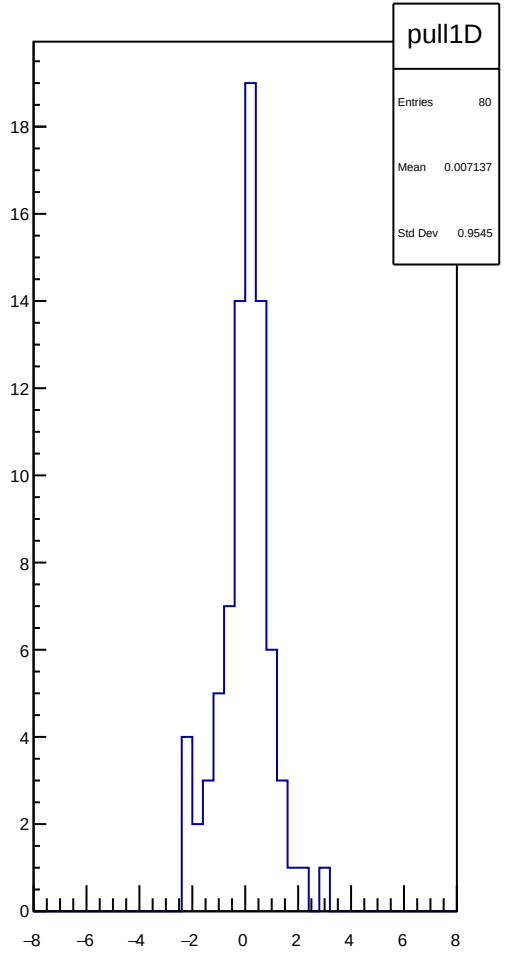

reg_asym_sam_15_dd_rms vs run
χ² / ndf 672.3 / 79
p0 110.8 ± 0.08777
116
114
112
110
108
106
104

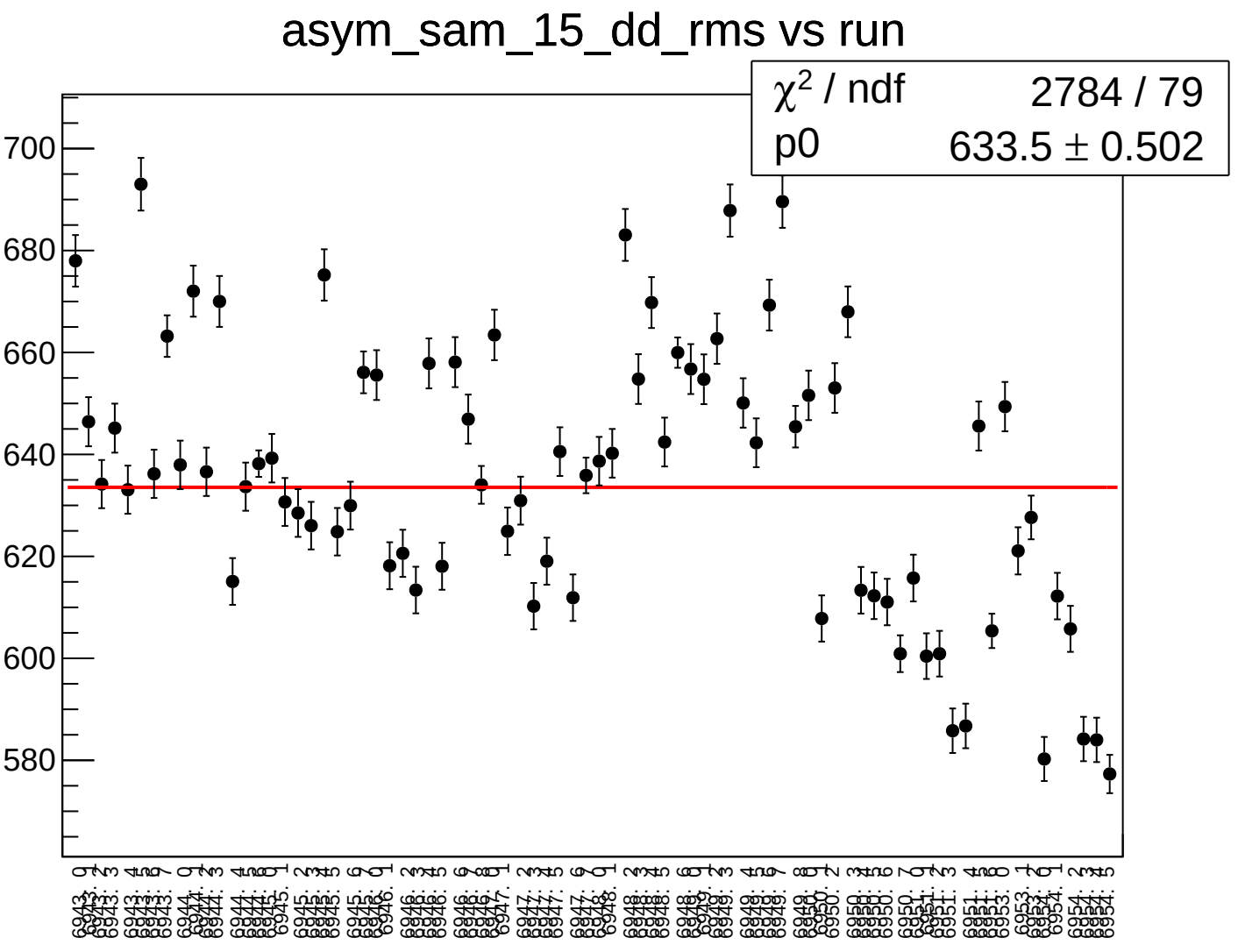

asym_sam_15_dd_correction_mean vs run
χ² / ndf 74.22 / 79
p0 −628.6 ± 698.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean −260.6
Std Dev 301.1
2
1
0
−1
−2
−3

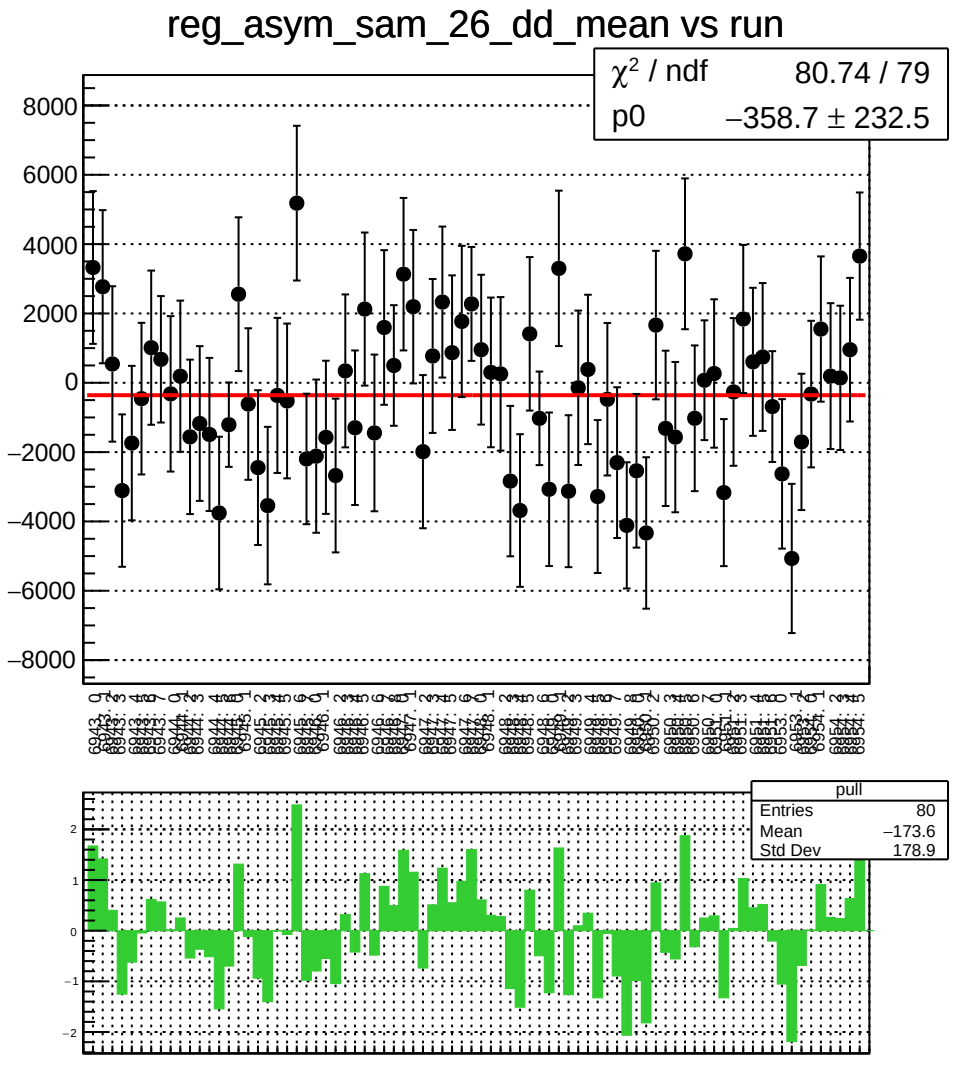

pull1D
Entries 80
Mean −0.00856
Std Dev 0.9632
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

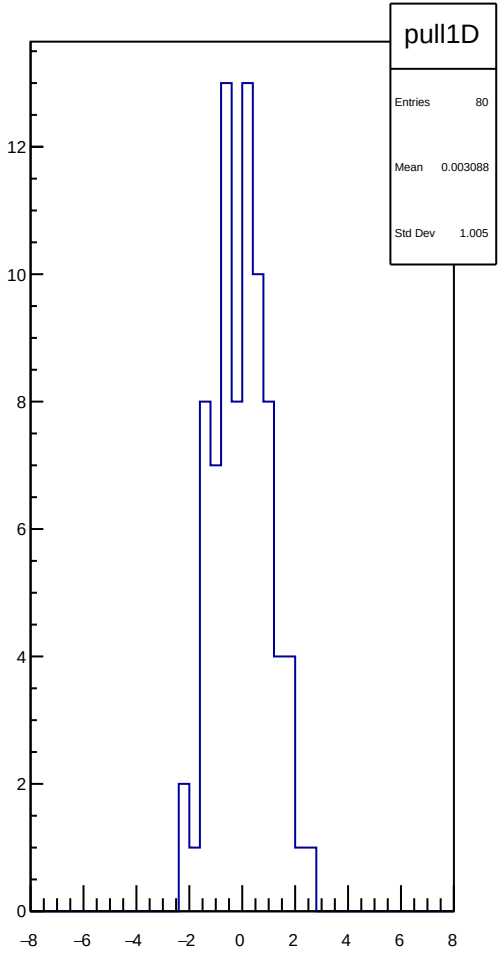

asym_sam_15_dd_correction_rms vs run
χ² / ndf 2907 / 79
p0 623.7 ± 0.4942
700
680
660
640
620
600
580
560

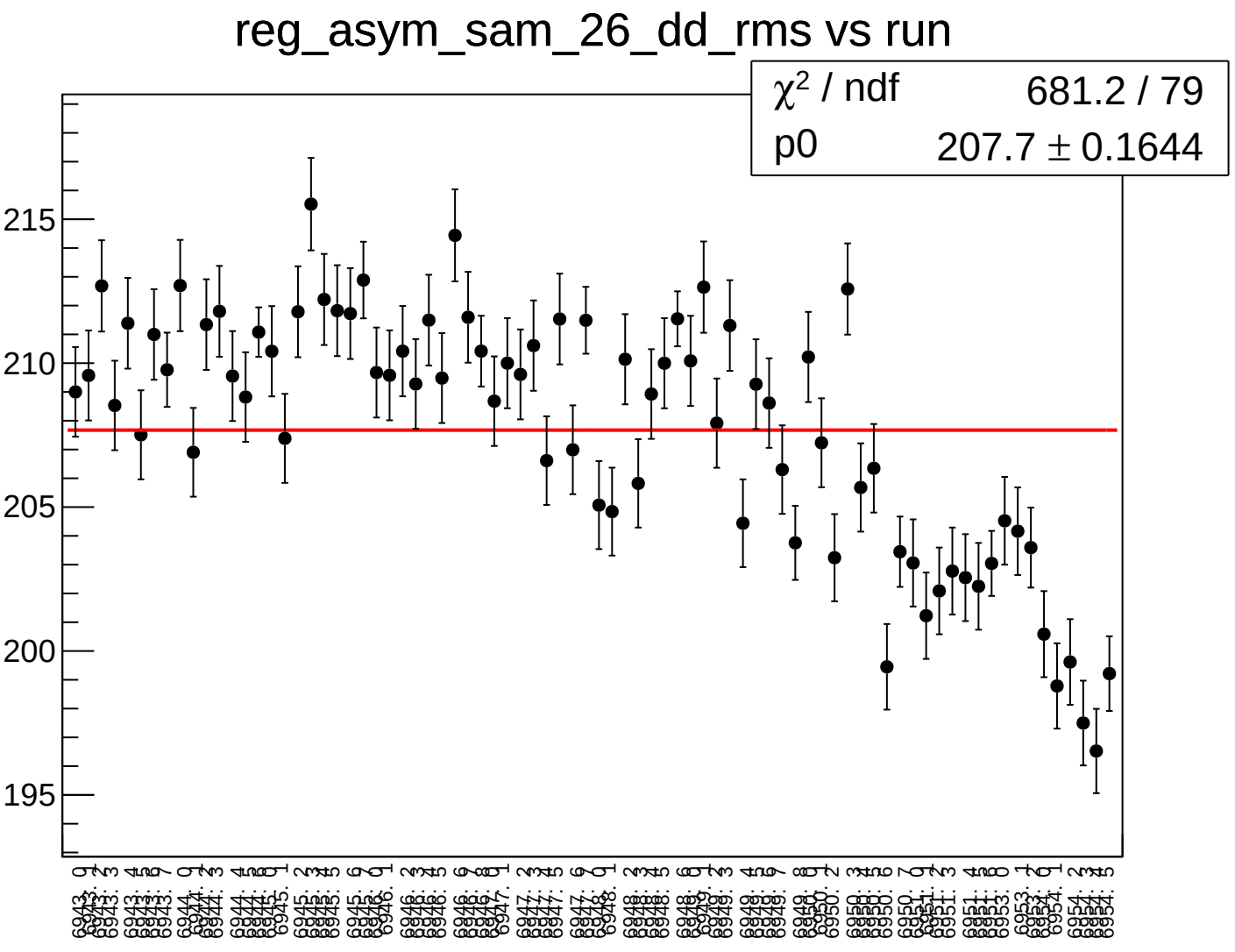

asym_sam_15_dd_mean vs run
χ² / ndf 72.89 / 79
p0 399.8 ± 709.9
30000
20000
10000
0
−10000
−20000
pull
Entries 80
Mean −356.6
Std Dev 396.7
3
2
1
0
−1
−2

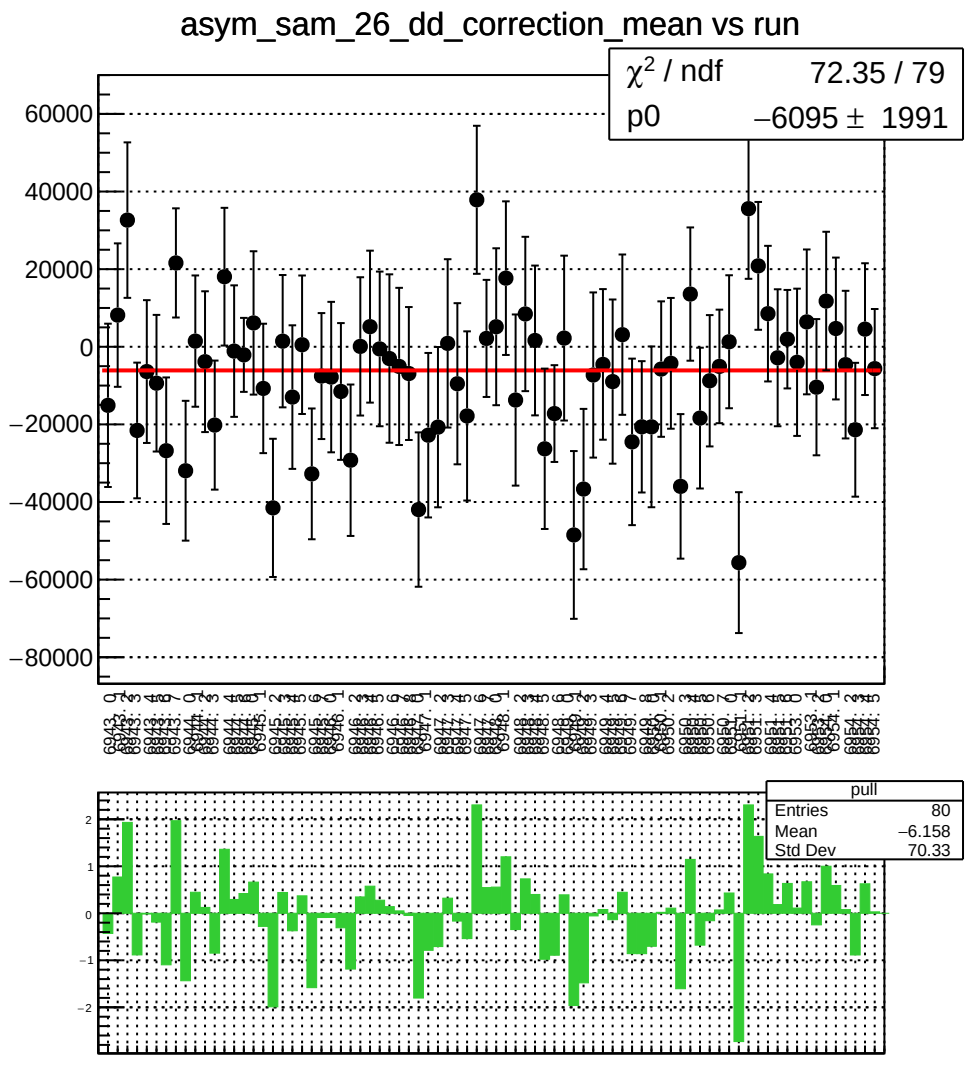

pull1D
Entries 80
Mean 0.007137
Std Dev 0.9545
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

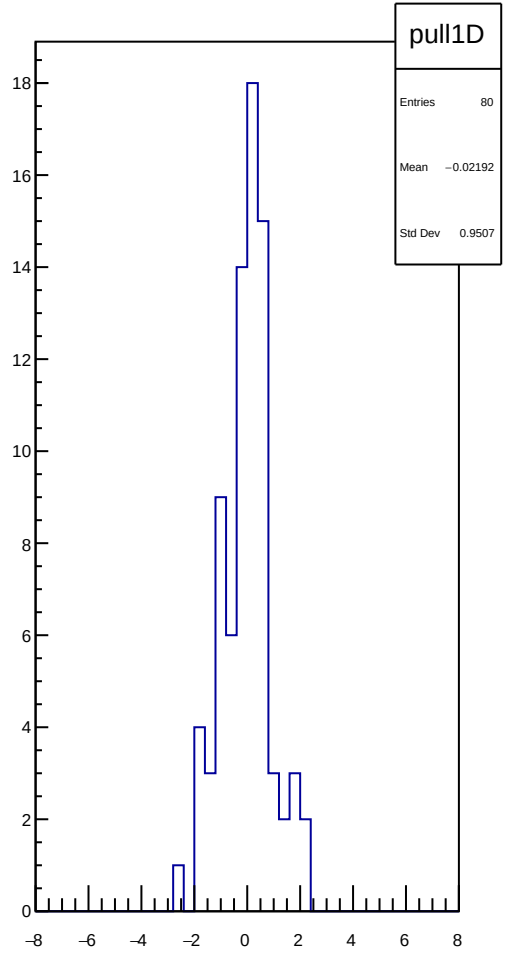

asym_sam_15_dd_rms vs run
χ² / ndf 2784 / 79
p0 633.5 ± 0.502
700
680
660
640
620
600
580


reg_asym_sam_26_dd_mean vs run
χ² / ndf 80.74 / 79
p0 −358.7 ± 232.5
pull
Entries 80
Mean −173.6
Std Dev 178.9

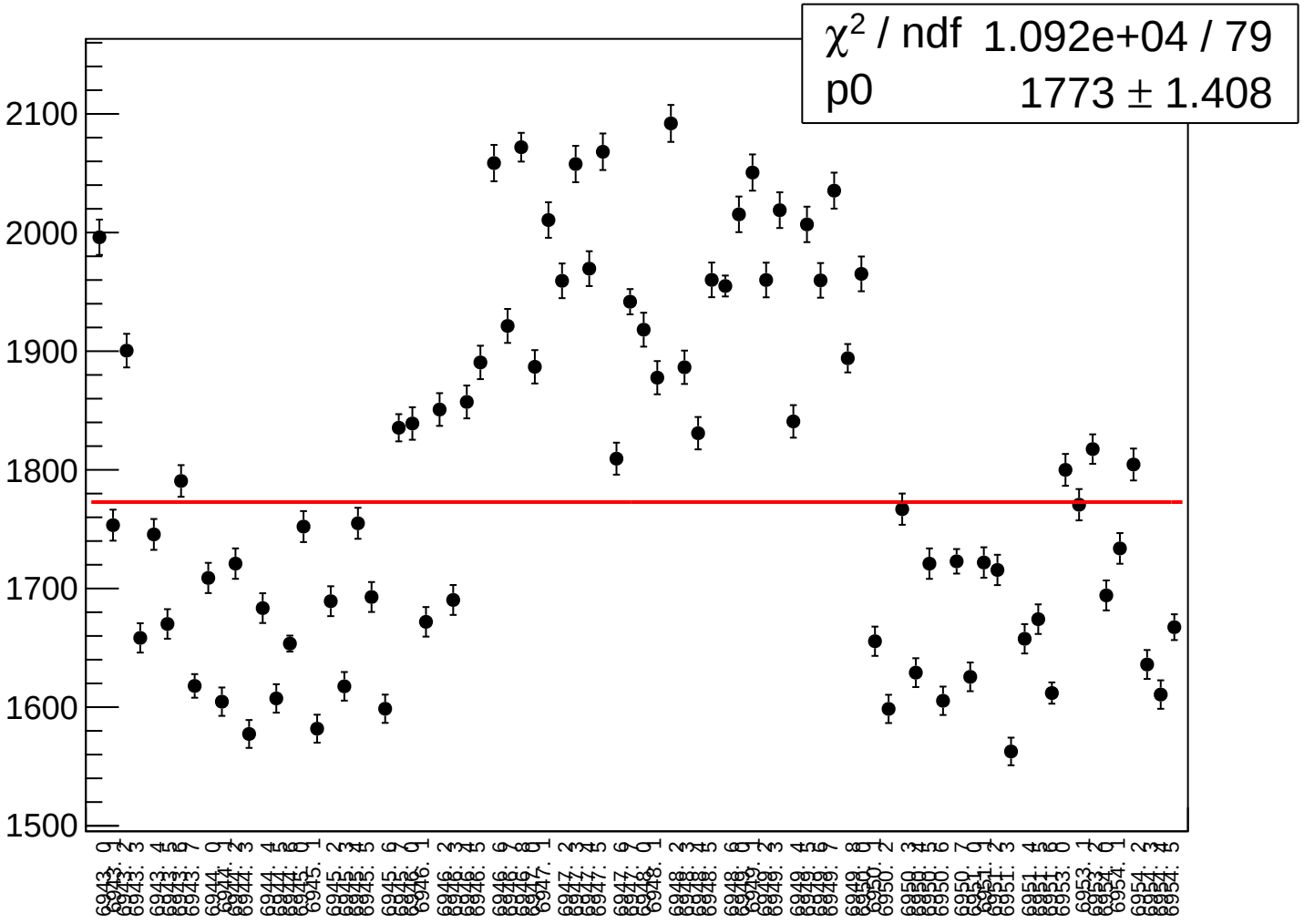

pull1D
Entries 80
Mean 0.003088
Std Dev 1.005

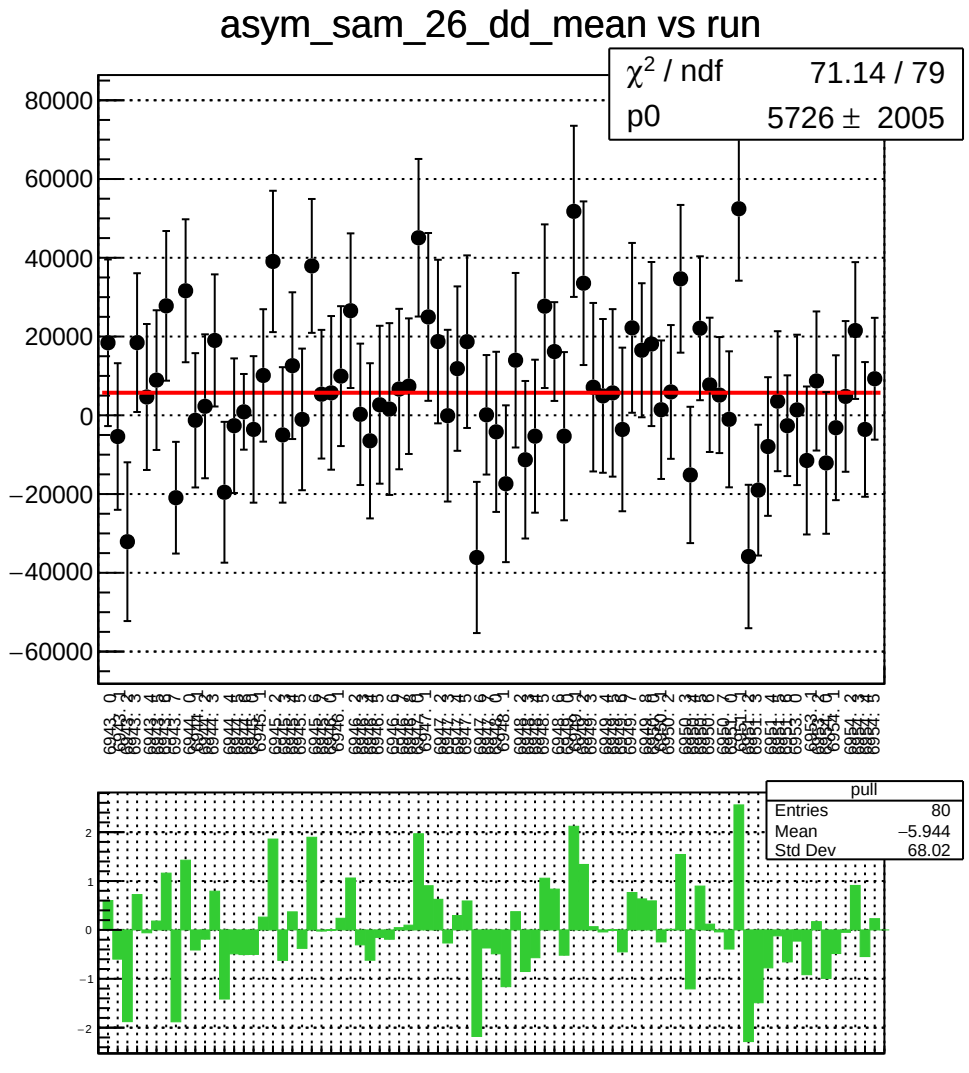

reg_asym_sam_26_dd_rms vs run
χ² / ndf 681.2 / 79
p0 207.7 ± 0.1644
215
210
205
200
195

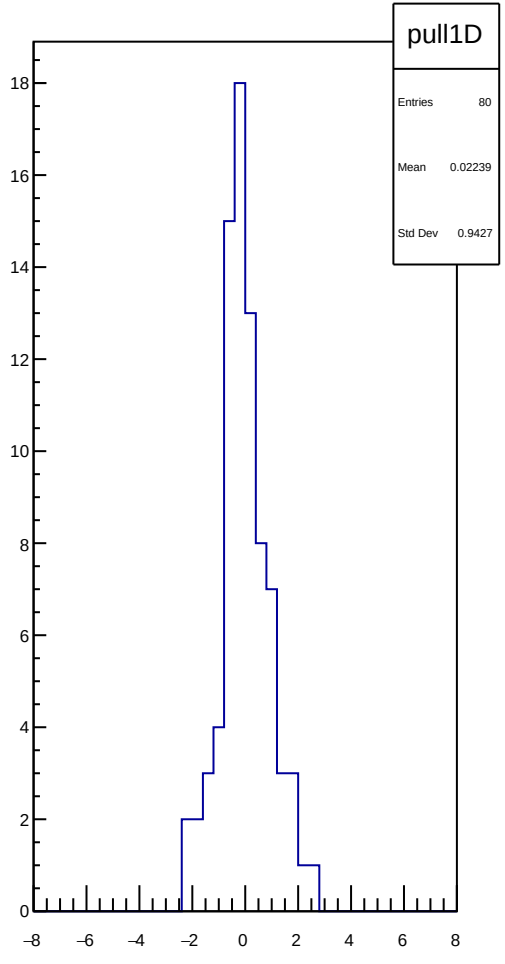

asym_sam_26_dd_correction_mean vs run
χ² / ndf 72.35 / 79
p0 −6095 ± 1991
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 80
Mean −6.158
Std Dev 70.33
2
1
0
−1
−2

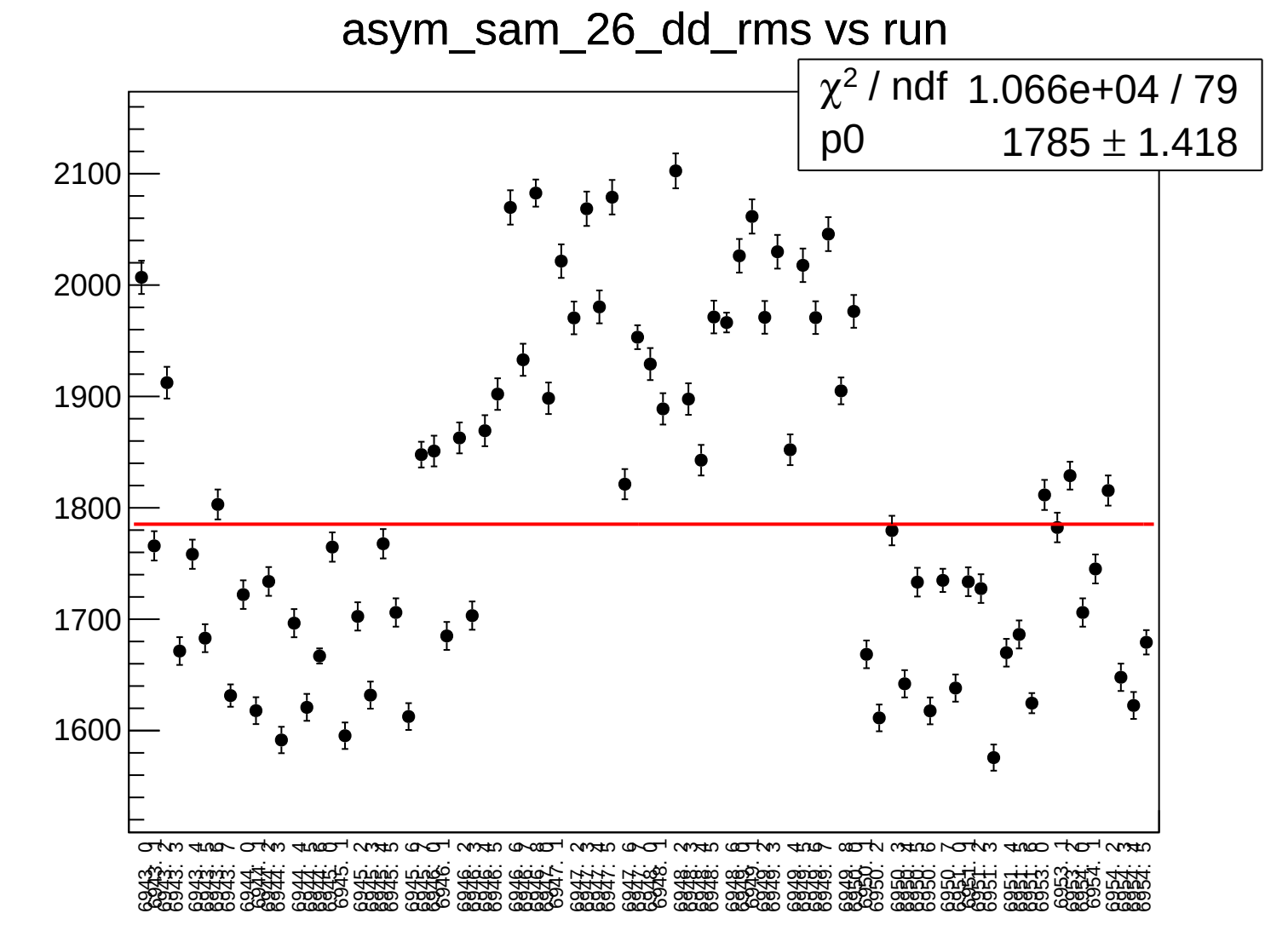

pull1D
Entries 80
Mean −0.02192
Std Dev 0.9507
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

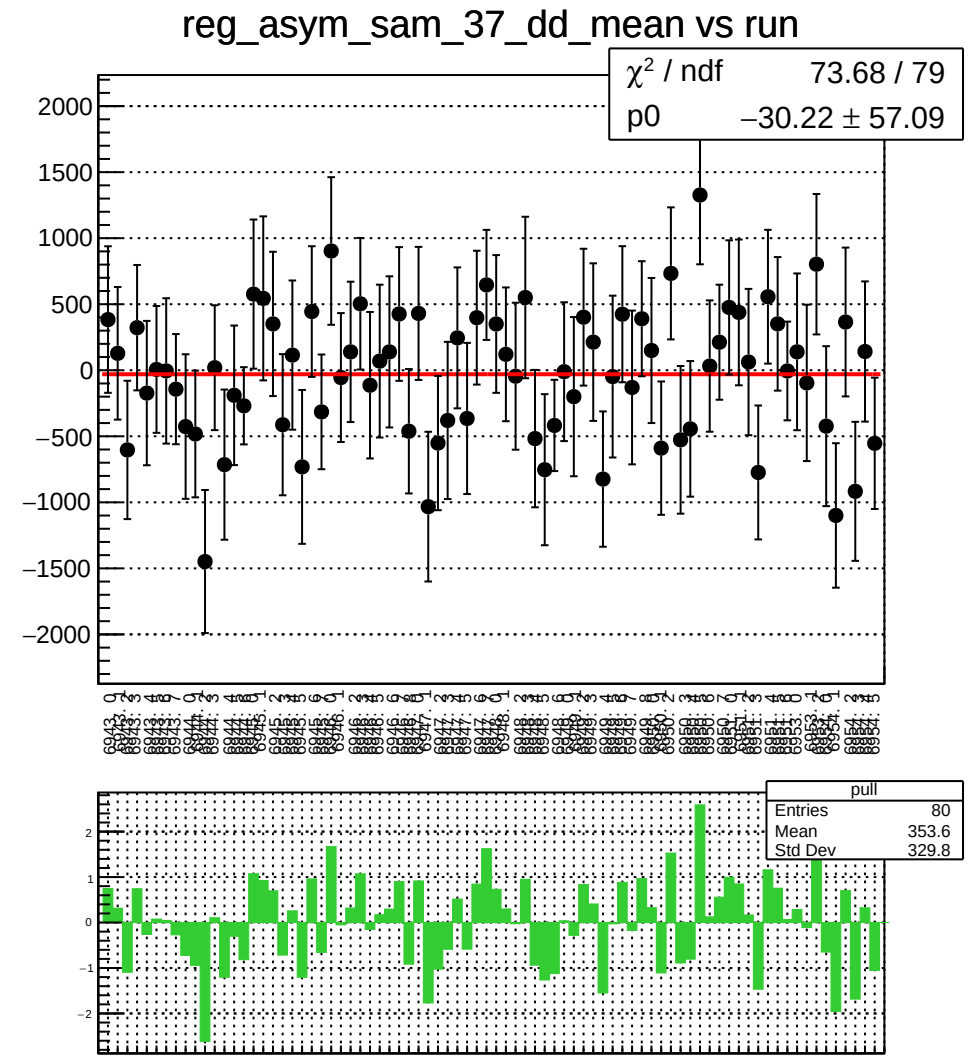
asym_sam_26_dd_correction_rms vs run

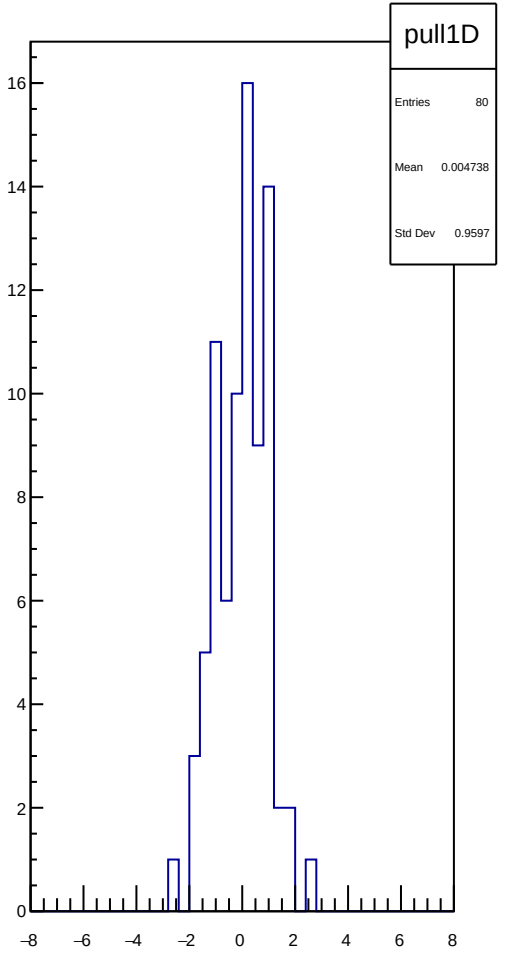


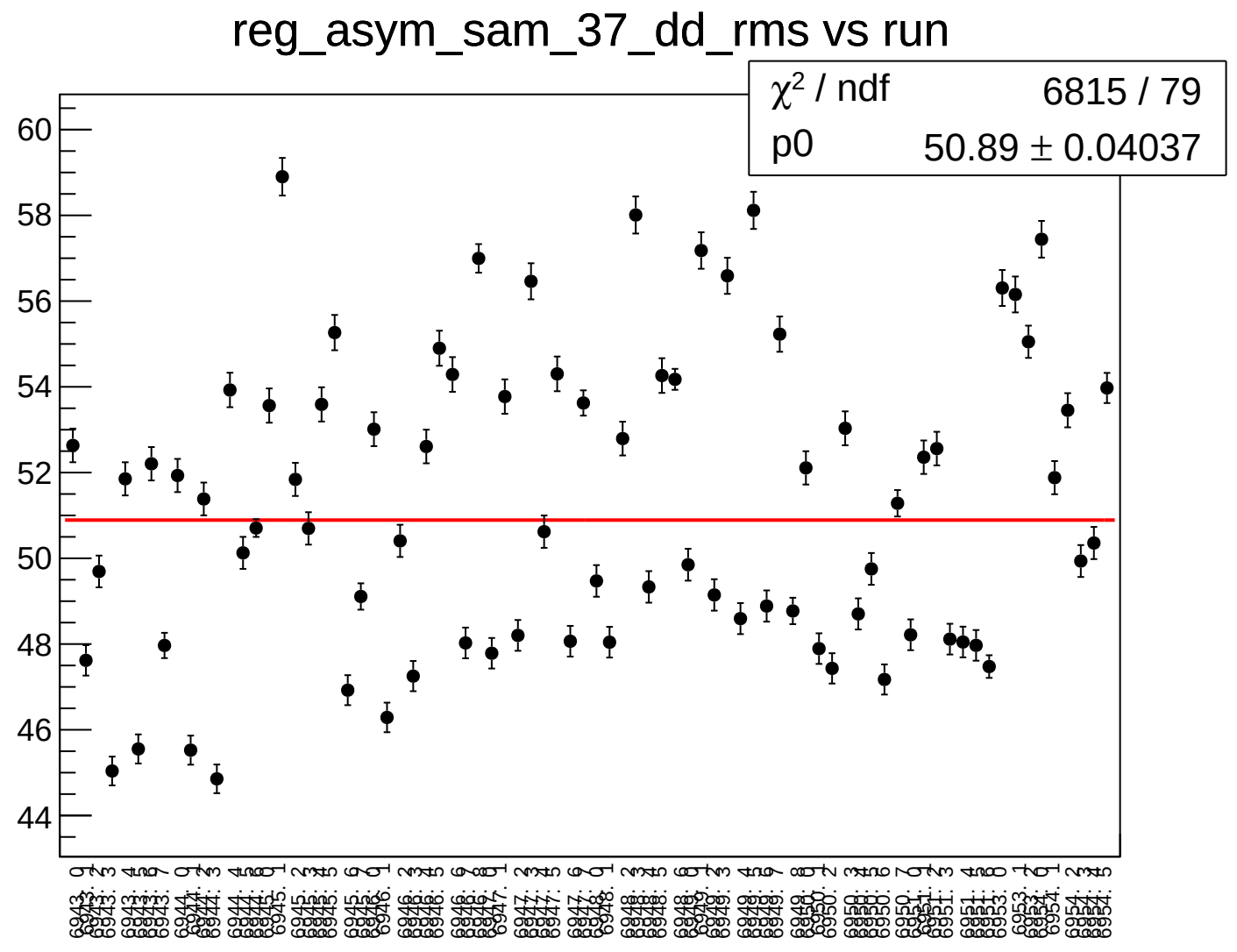

asym_sam_26_dd_mean vs run
χ² / ndf 71.14 / 79
p0 5726 ± 2005
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 80
Mean −5.944
Std Dev 68.02
2
1
0
−1
−2

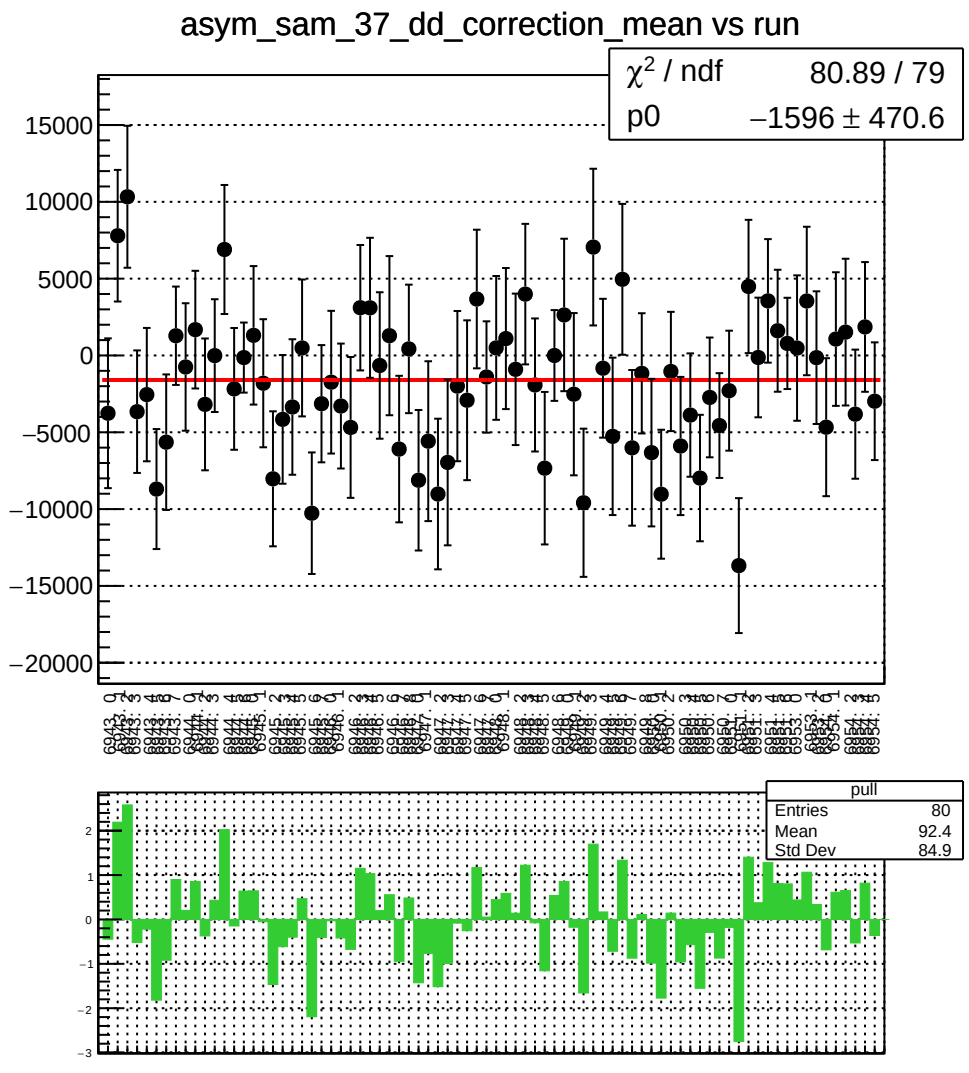

pull1D
Entries 80
Mean 0.02239
Std Dev 0.9427
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

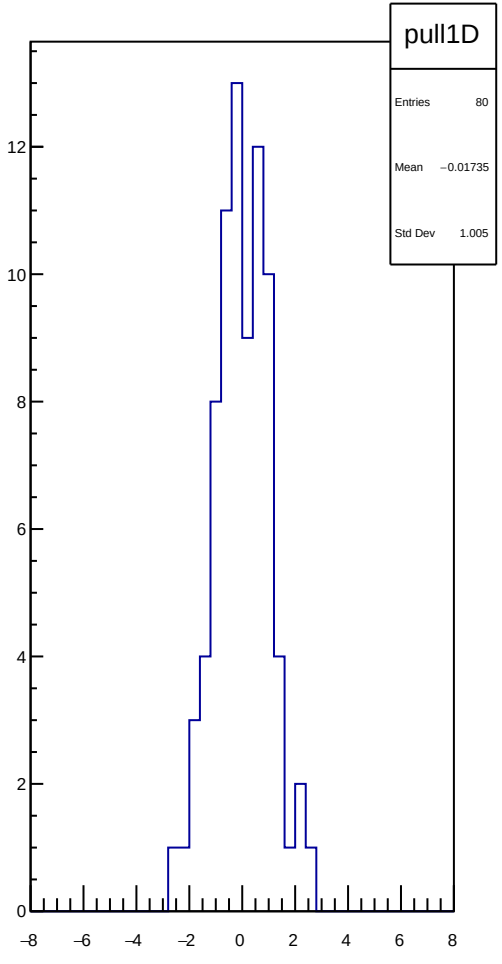

asym_sam_26_dd_rms vs run
χ^2 / ndf 1.066e+04 / 79
p0 1785 ± 1.418
2100
2000
1900
1800
1700
1600

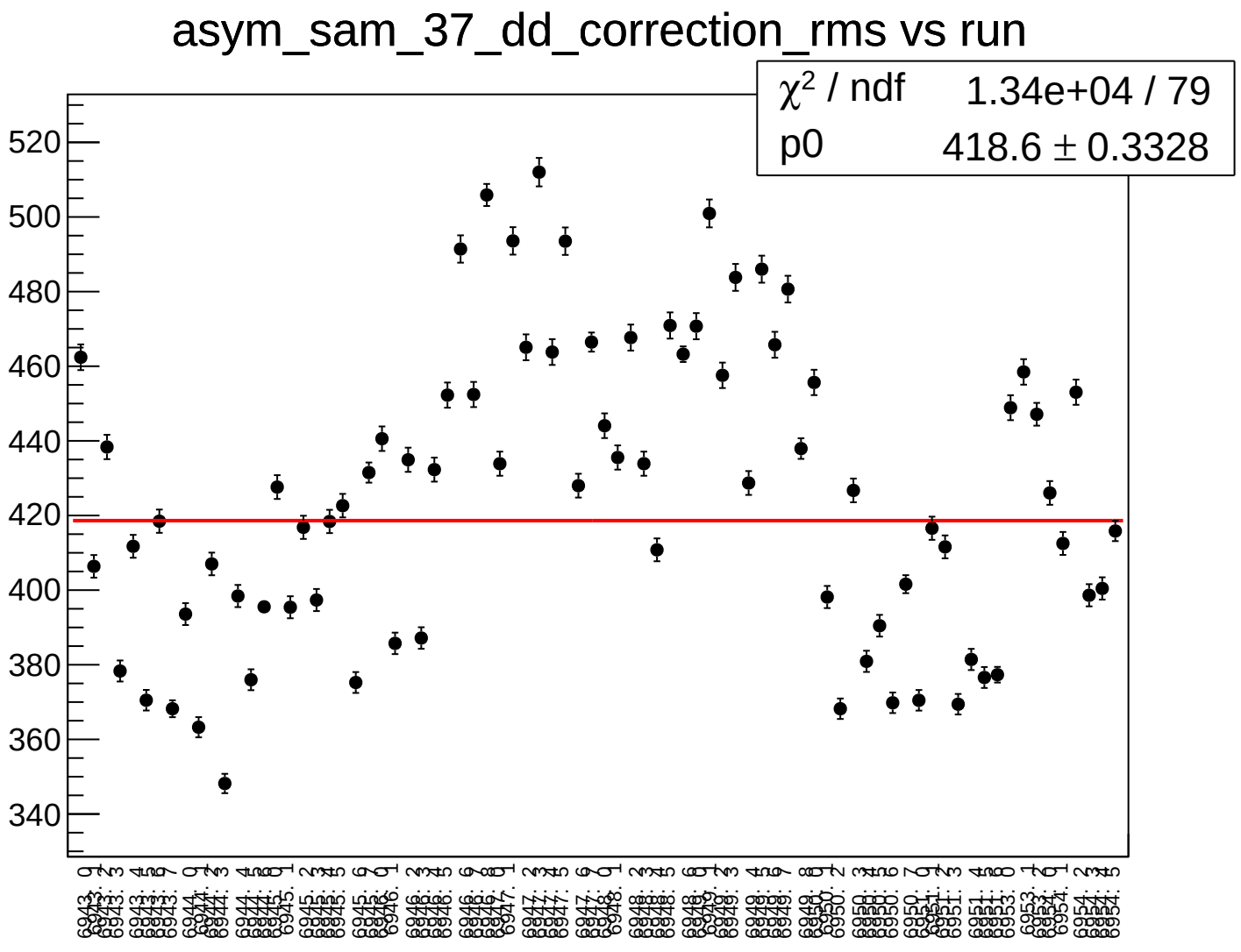

reg_asym_sam_37_dd_mean vs run
χ² / ndf 73.68 / 79
p0 −30.22 ± 57.09
pull
Entries 80
Mean 353.6
Std Dev 329.8

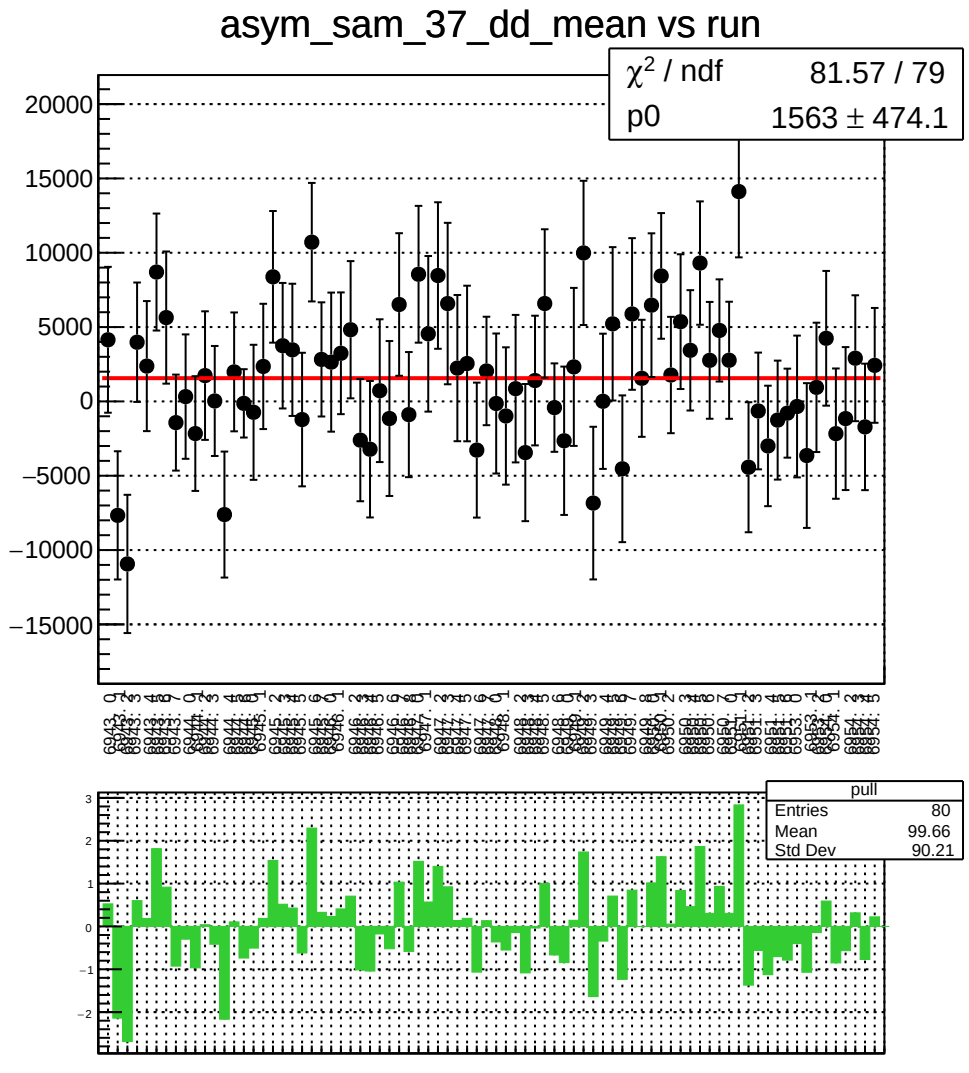

pull1D
Entries 80
Mean 0.004738
Std Dev 0.9597

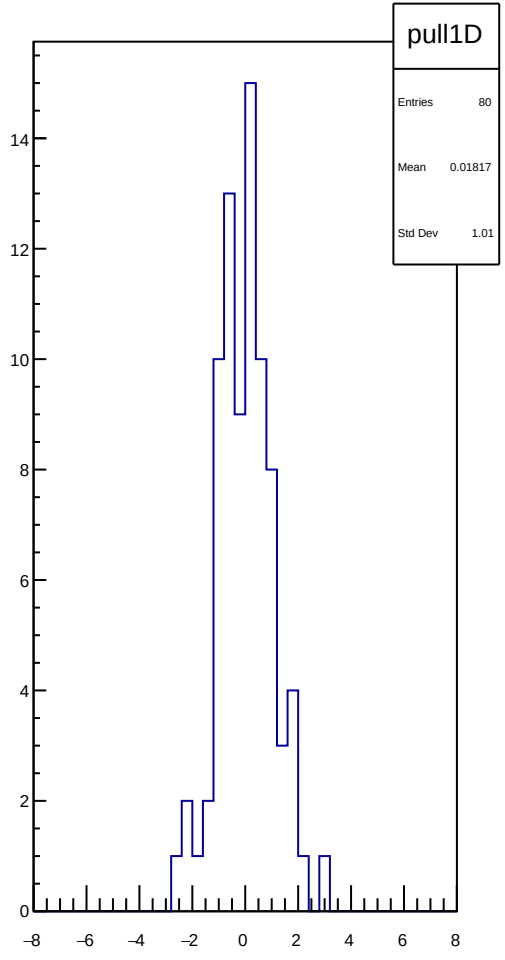

reg_asym_sam_37_dd_rms vs run
χ² / ndf 6815 / 79
p0 50.89 ± 0.04037
60
58
56
54
52
50
48
46
44

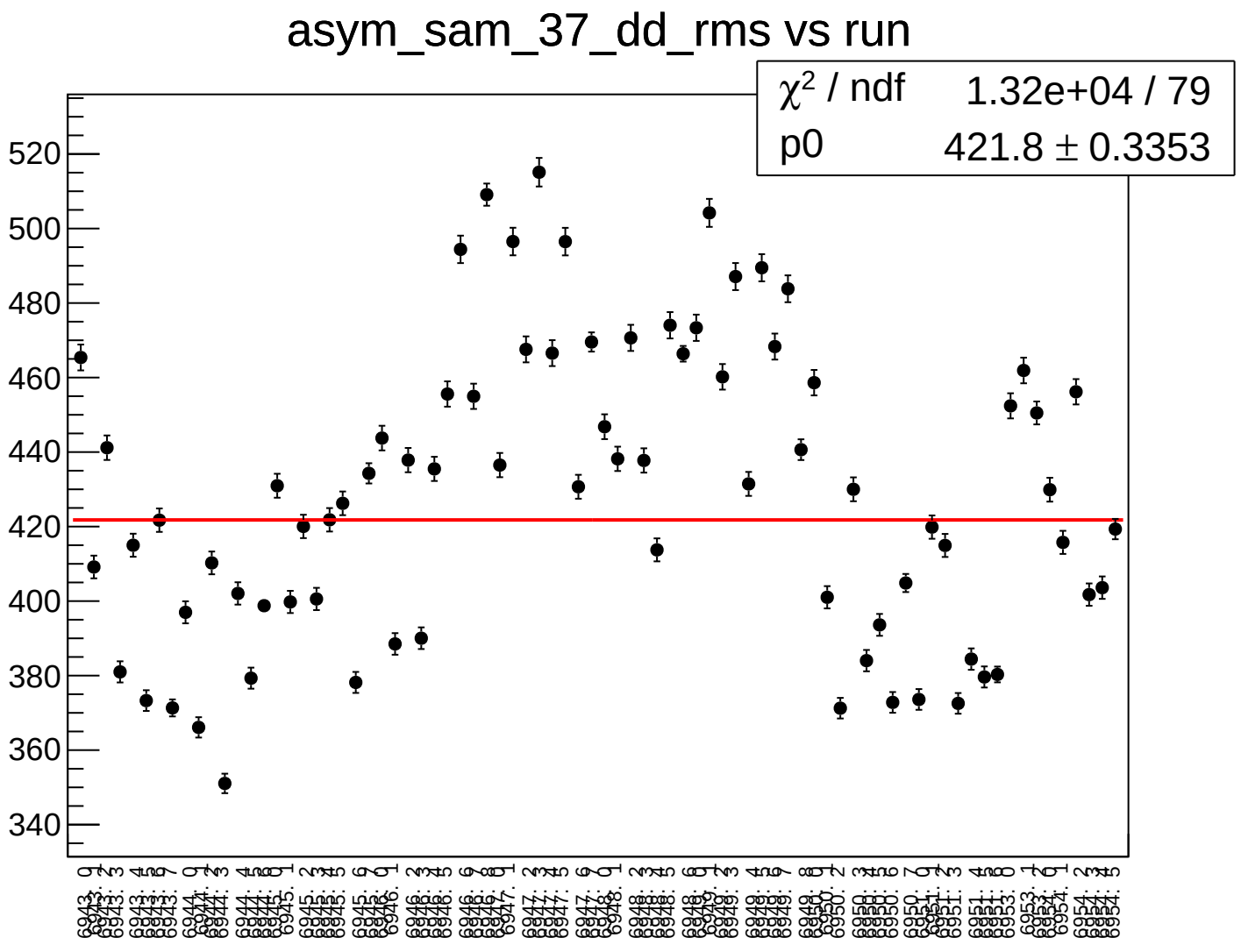

asym_sam_37_dd_correction_mean vs run
χ² / ndf 80.89 / 79
p0 −1596 ± 470.6
pull
Entries 80
Mean 92.4
Std Dev 84.9

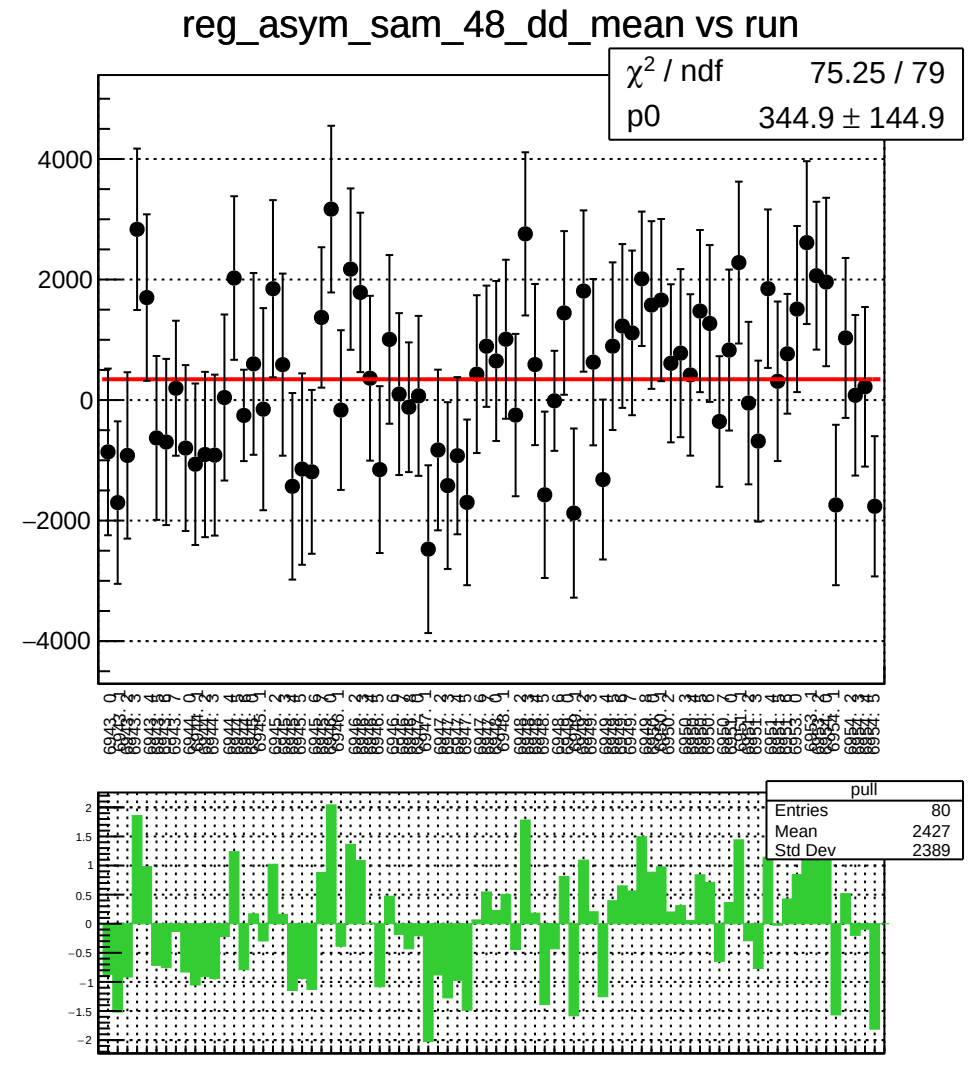

pull1D
Entries 80
Mean −0.01735
Std Dev 1.005

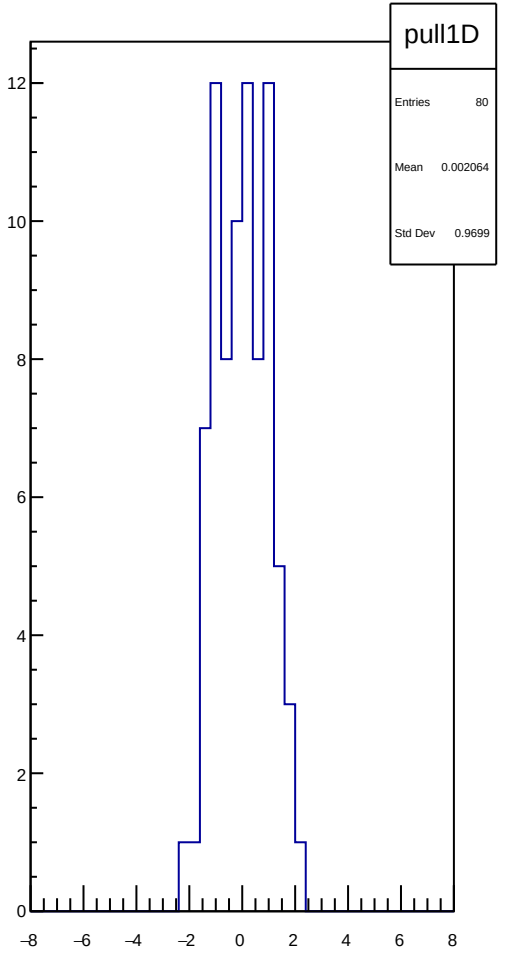

asym_sam_37_dd_correction_rms vs run
χ² / ndf 1.34e+04 / 79
p0 418.6 ± 0.3328
520
500
480
460
440
420
400
380
360
340

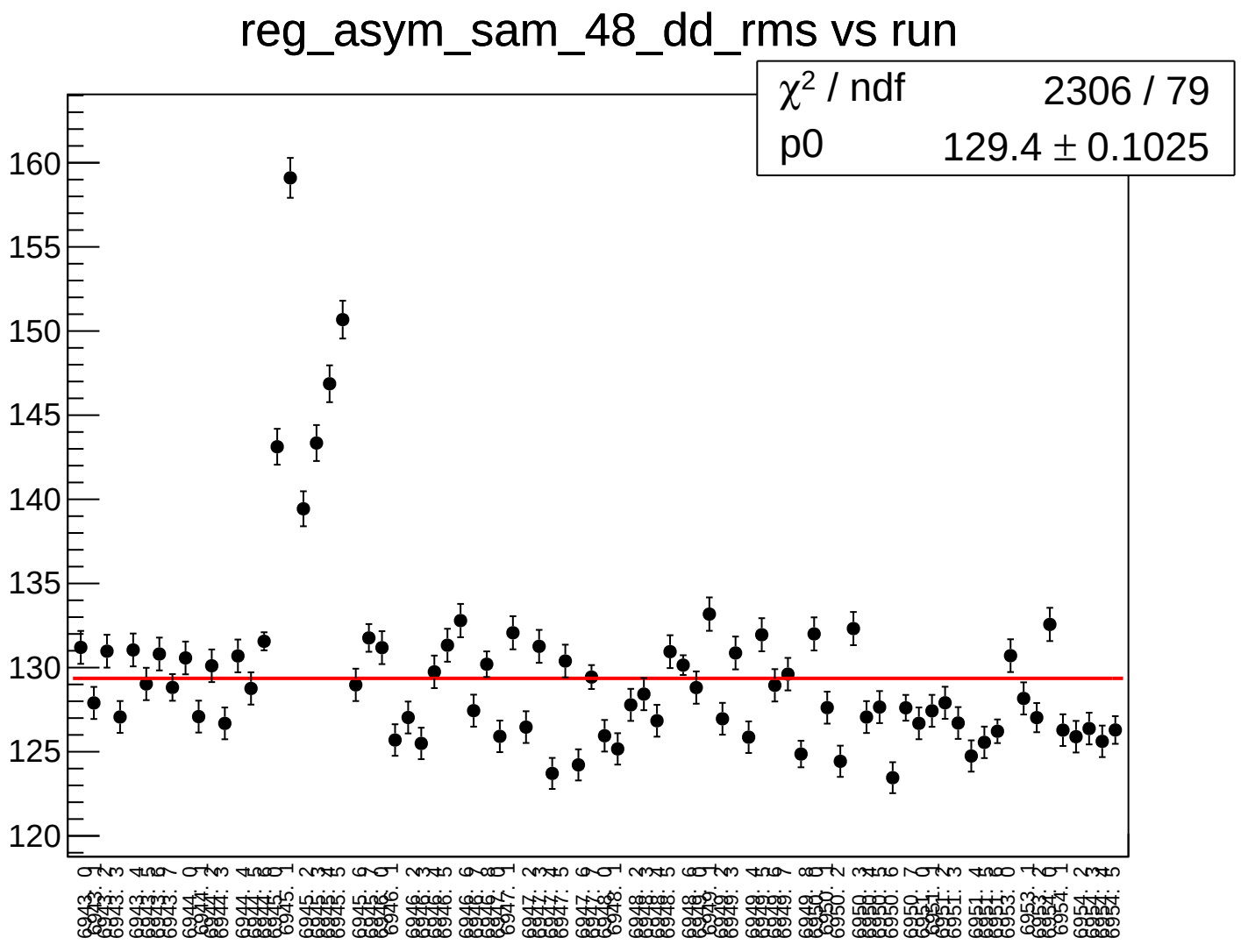

asym_sam_37_dd_mean vs run
χ² / ndf 81.57 / 79
p0 1563 ± 474.1
pull
Entries 80
Mean 99.66
Std Dev 90.21

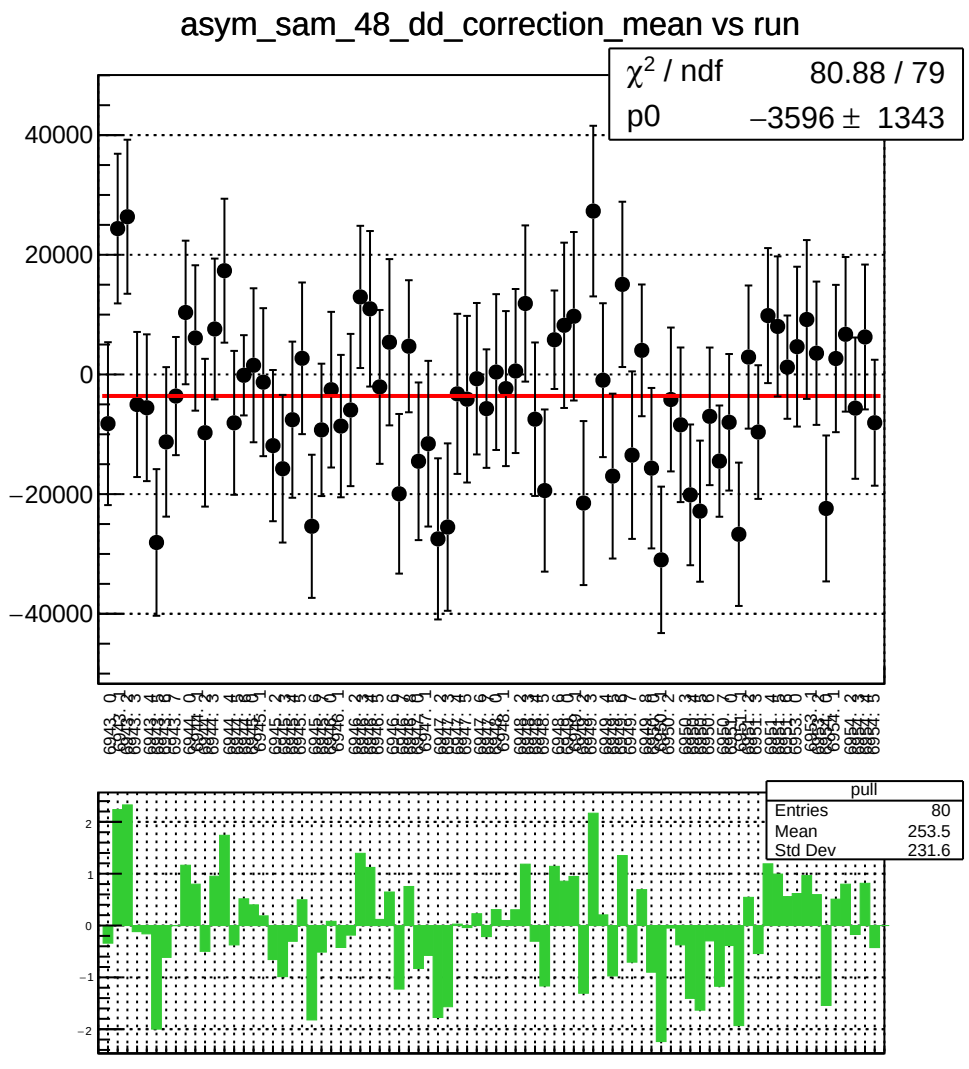

pull1D
Entries 80
Mean 0.01817
Std Dev 1.01

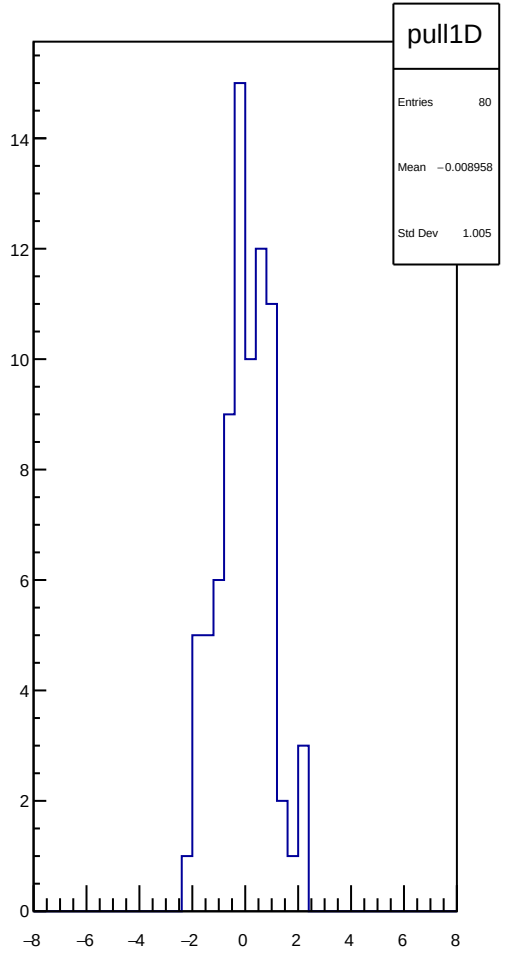

asym_sam_37_dd_rms vs run
χ² / ndf 1.32e+04 / 79
p0 421.8 ± 0.3353
520
500
480
460
440
420
400
380
360
340

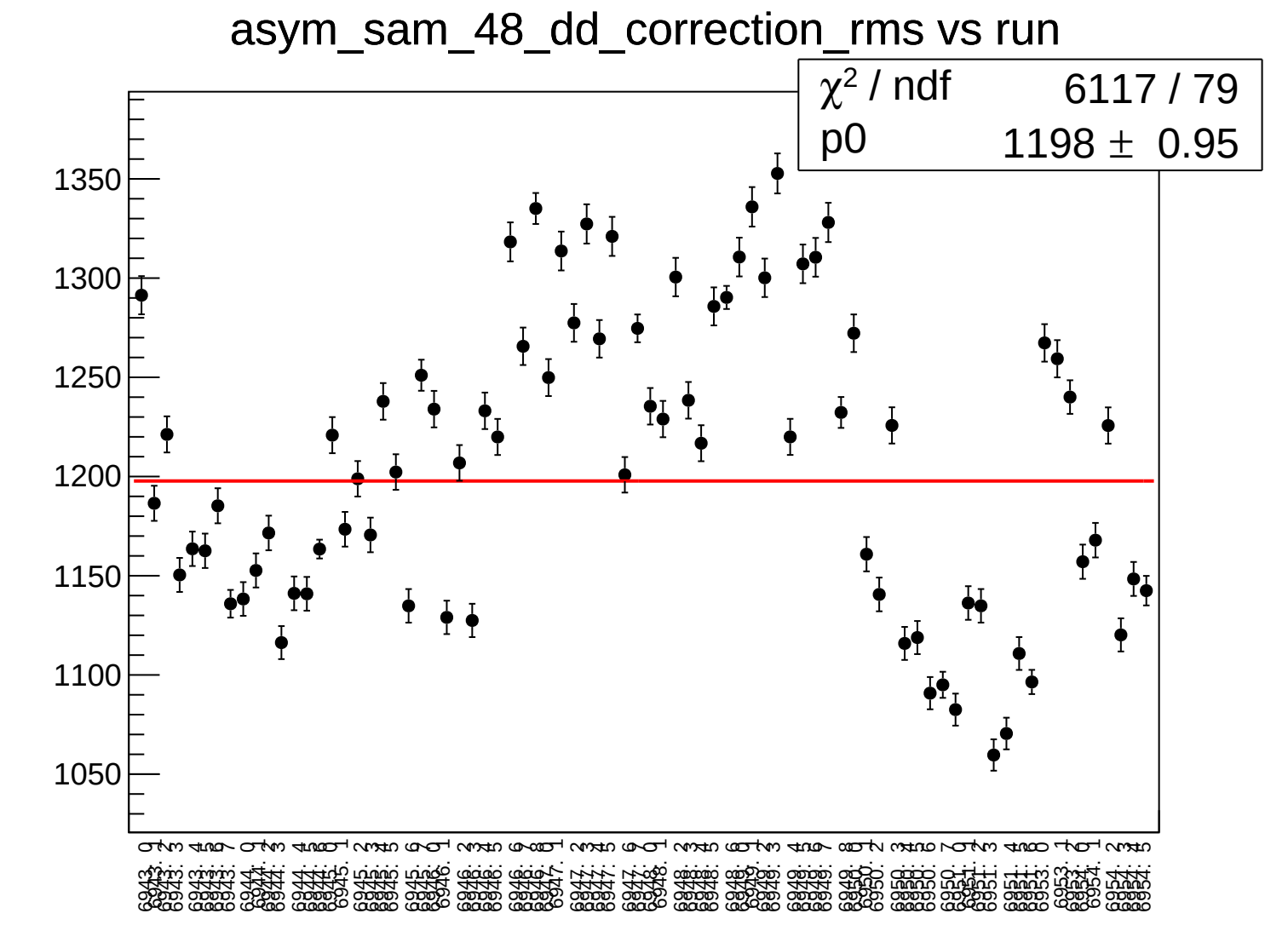

reg_asym_sam_48_dd_mean vs run
χ² / ndf 75.25 / 79
p0 344.9 ± 144.9
4000
2000
0
−2000
−4000
pull
Entries 80
Mean 2427
Std Dev 2389
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

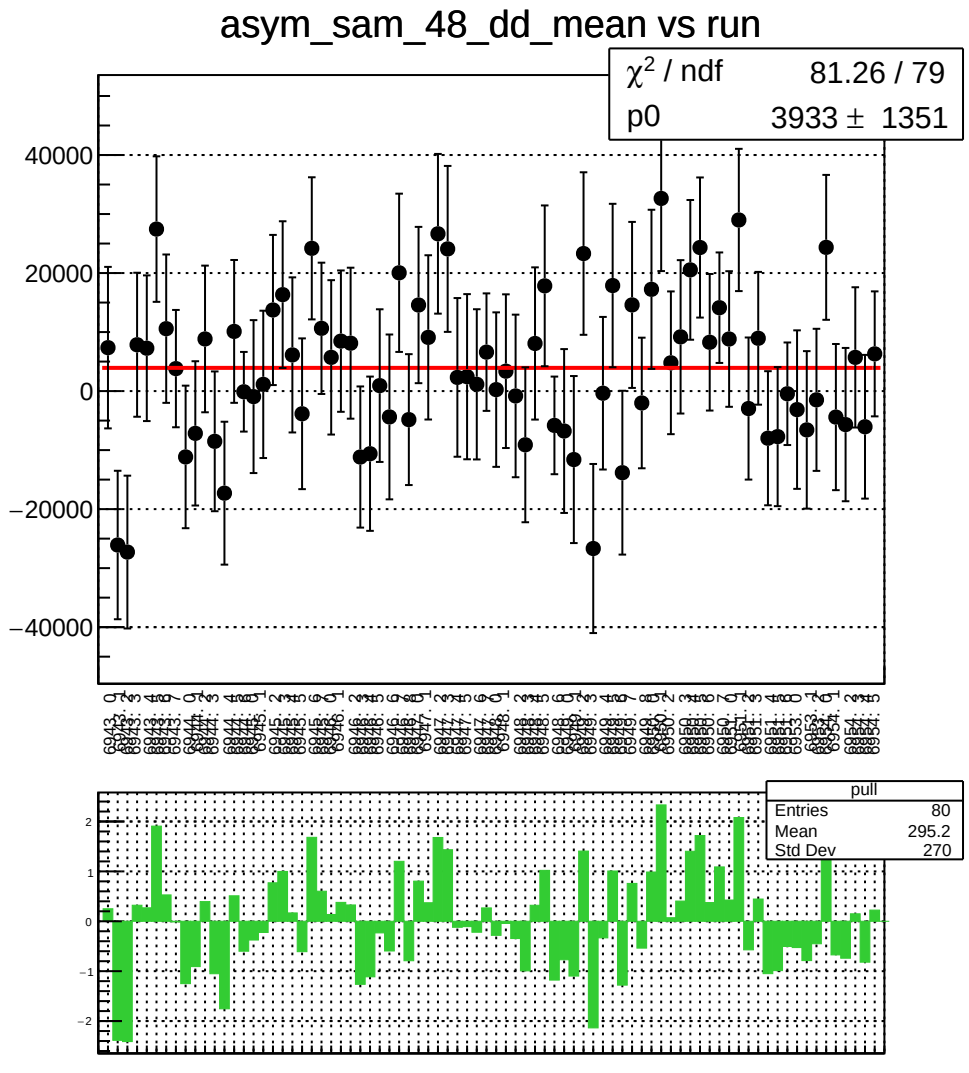

pull1D
Entries 80
Mean 0.002064
Std Dev 0.9699
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

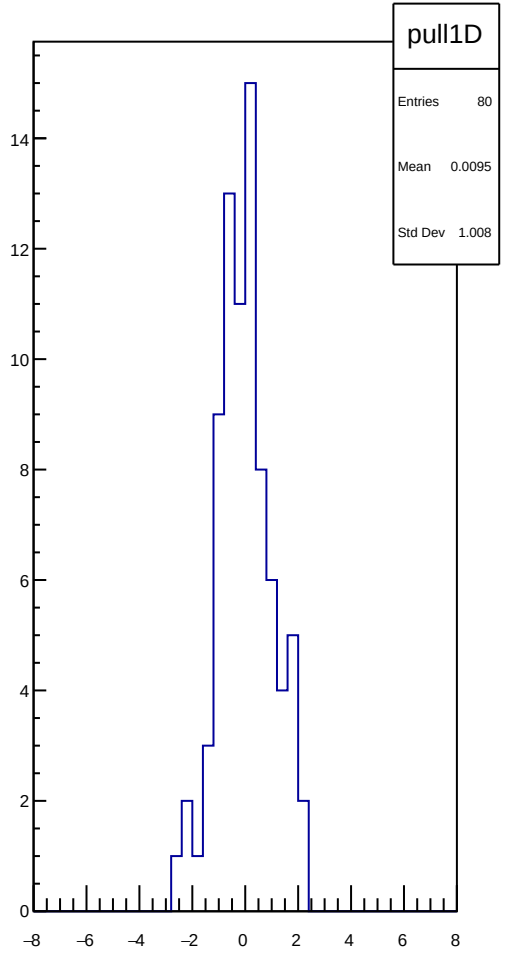

reg_asym_sam_48_dd_rms vs run
χ² / ndf 2306 / 79
p0 129.4 ± 0.1025
160
155
150
145
140
135
130
125
120

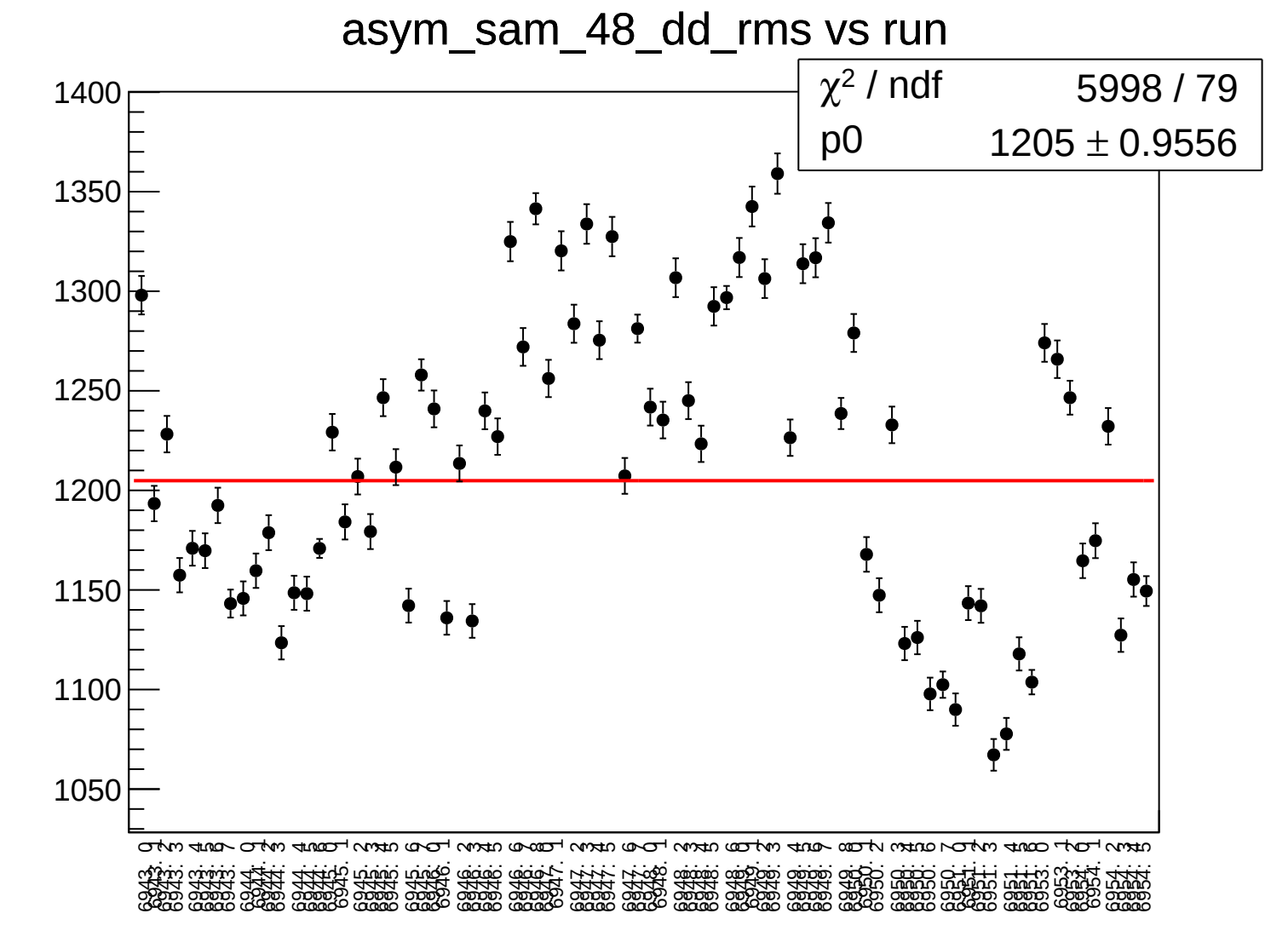

asym_sam_48_dd_correction_mean vs run
χ² / ndf 80.88 / 79
p0 −3596 ± 1343
40000
20000
0
−20000
−40000
pull
Entries 80
Mean 253.5
Std Dev 231.6
2
1
0
−1
−2

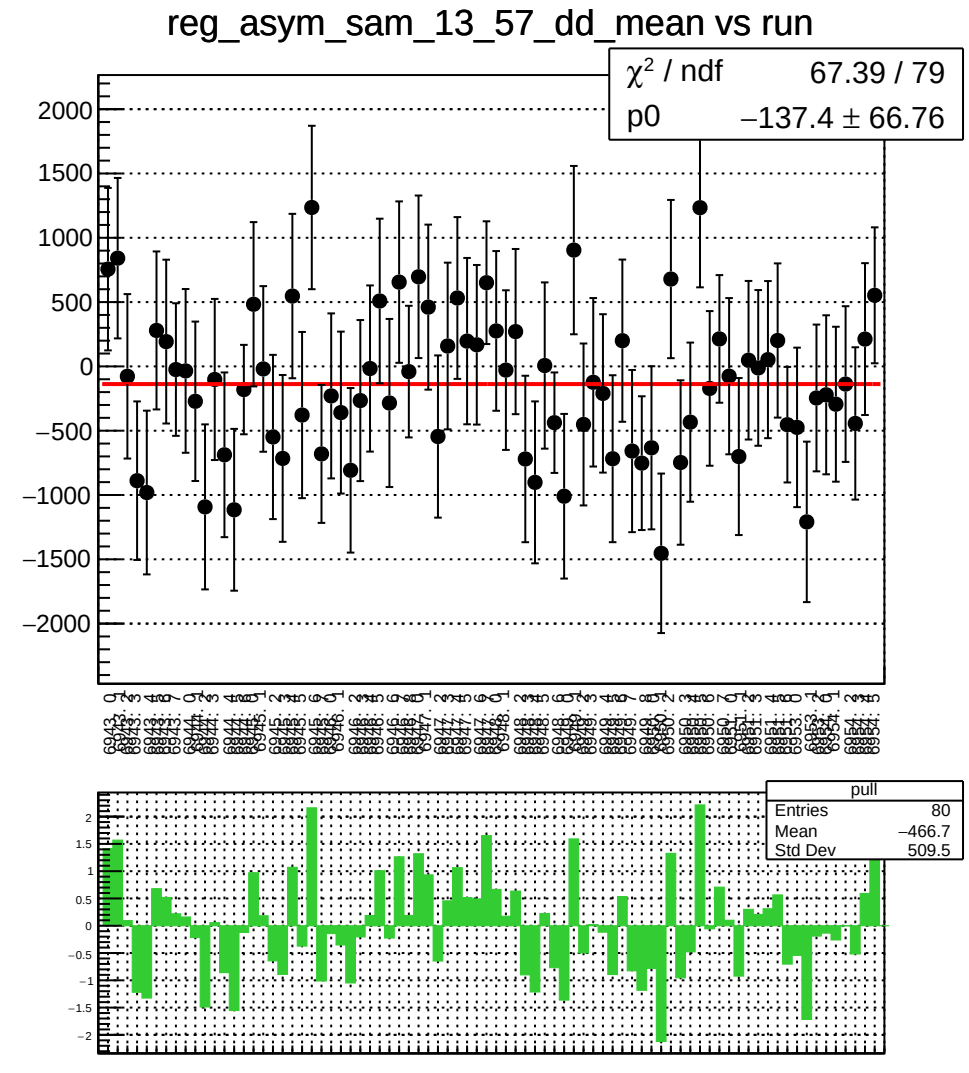

pull1D
Entries 80
Mean −0.008958
Std Dev 1.005
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

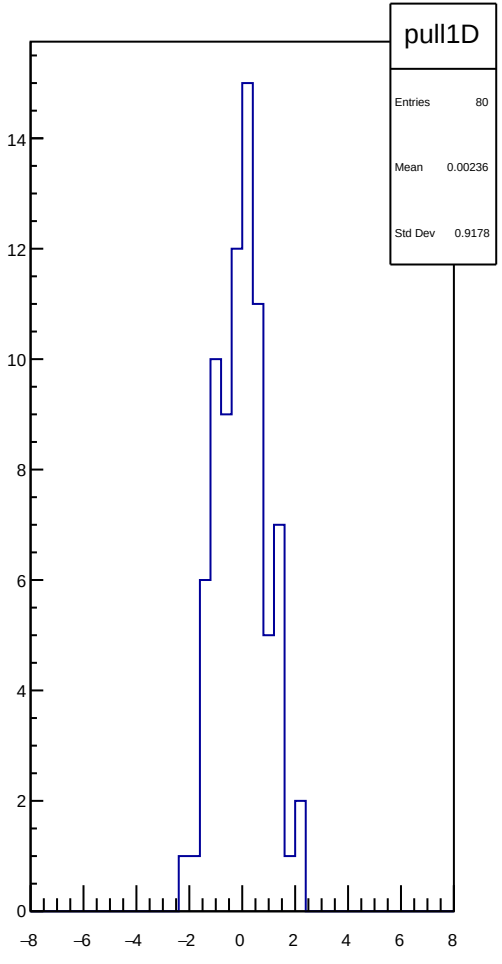

asym_sam_48_dd_correction_rms vs run
χ² / ndf 6117 / 79
p0 1198 ± 0.95
1350
1300
1250
1200
1150
1100
1050

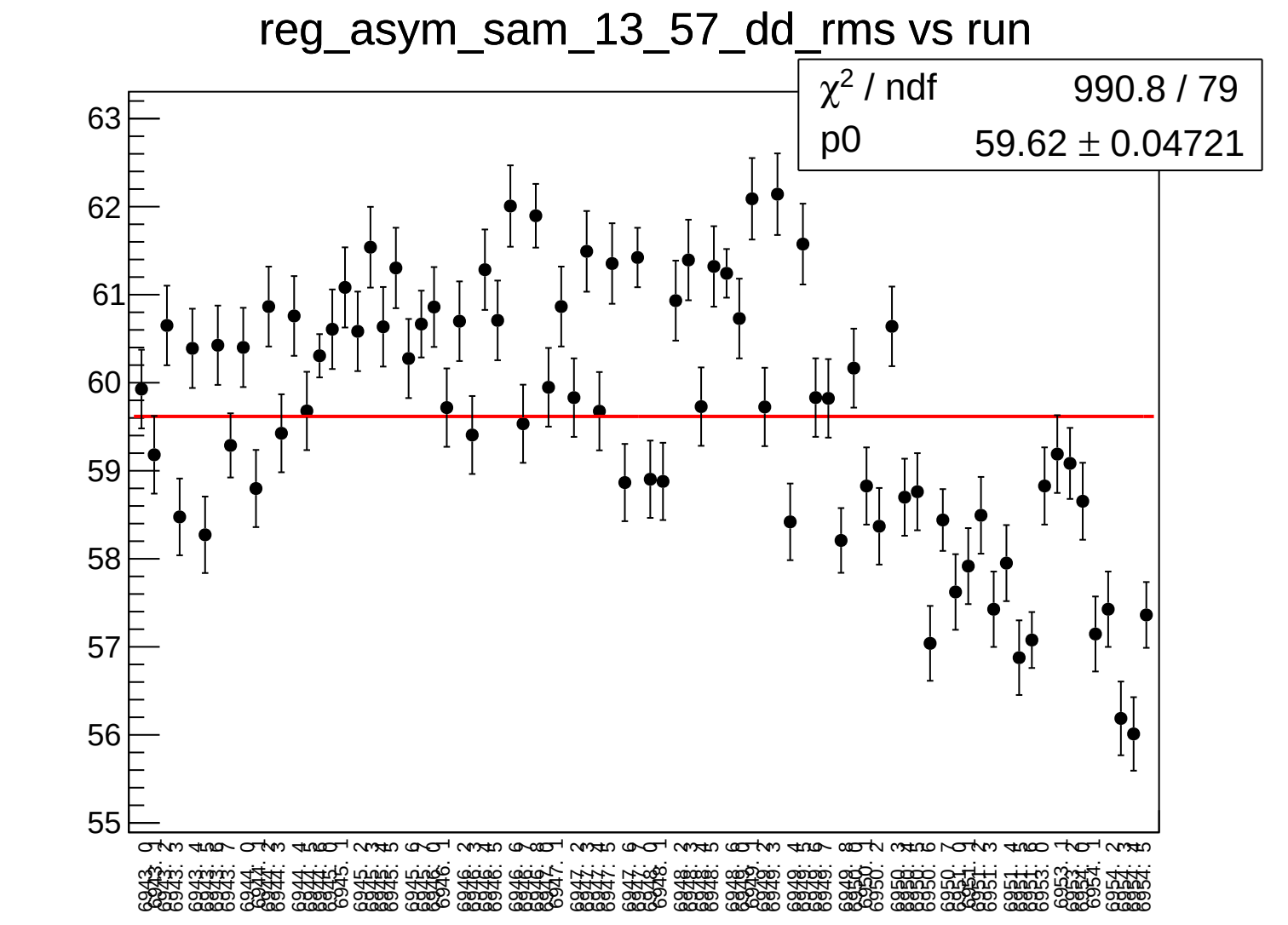

asym_sam_48_dd_mean vs run
χ² / ndf 81.26 / 79
p0 3933 ± 1351
40000
20000
0
−20000
−40000
pull
Entries 80
Mean 295.2
Std Dev 270
2
1
0
−1
−2

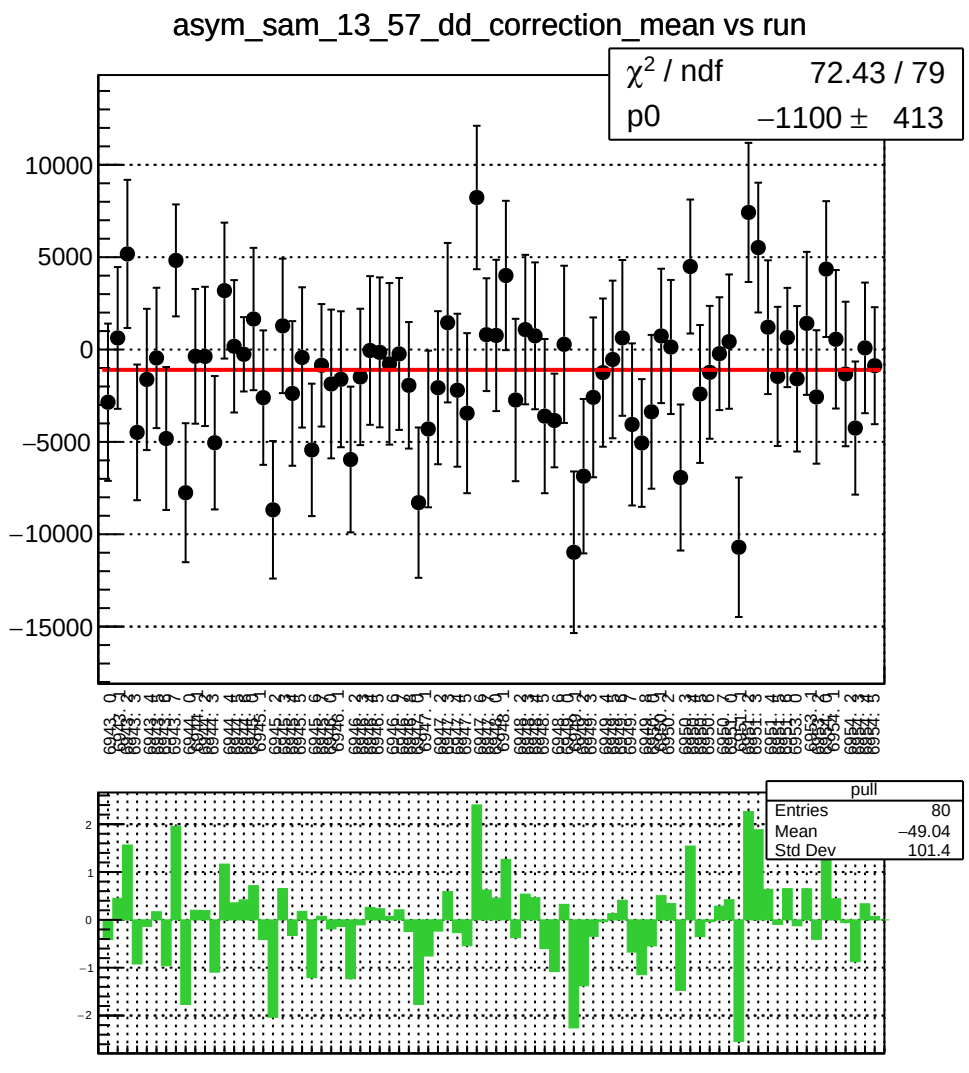

pull1D
Entries 80
Mean 0.0095
Std Dev 1.008
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

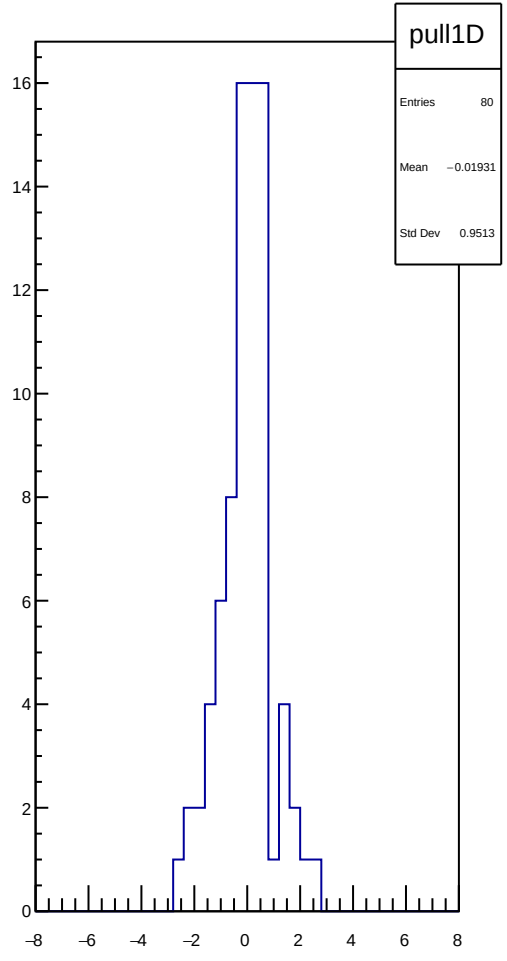

asym_sam_48_dd_rms vs run
χ² / ndf 5998 / 79
p0 1205 ± 0.9556
1400
1350
1300
1250
1200
1150
1100
1050

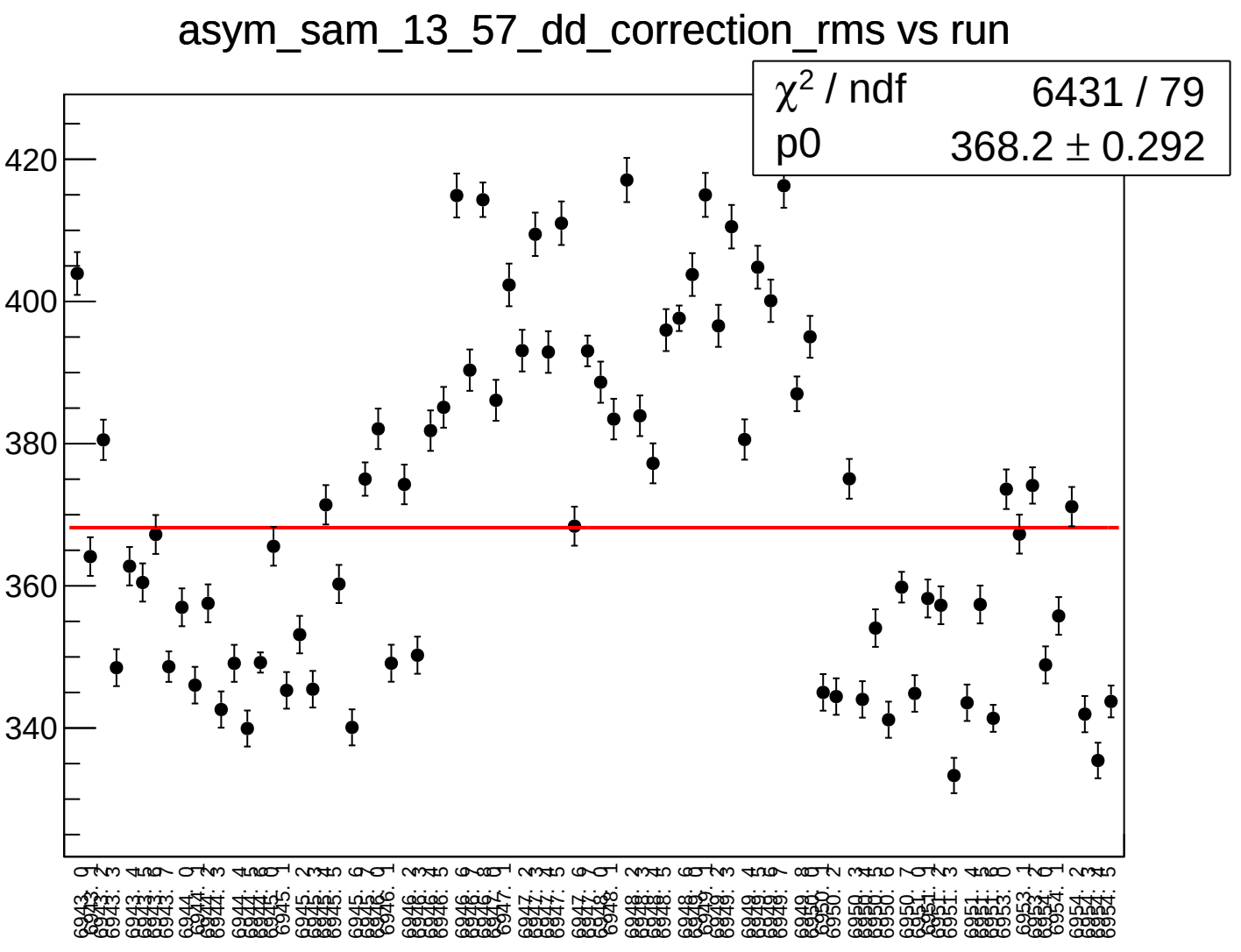

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 67.39 / 79
p0 −137.4 ± 66.76
pull
Entries 80
Mean −466.7
Std Dev 509.5

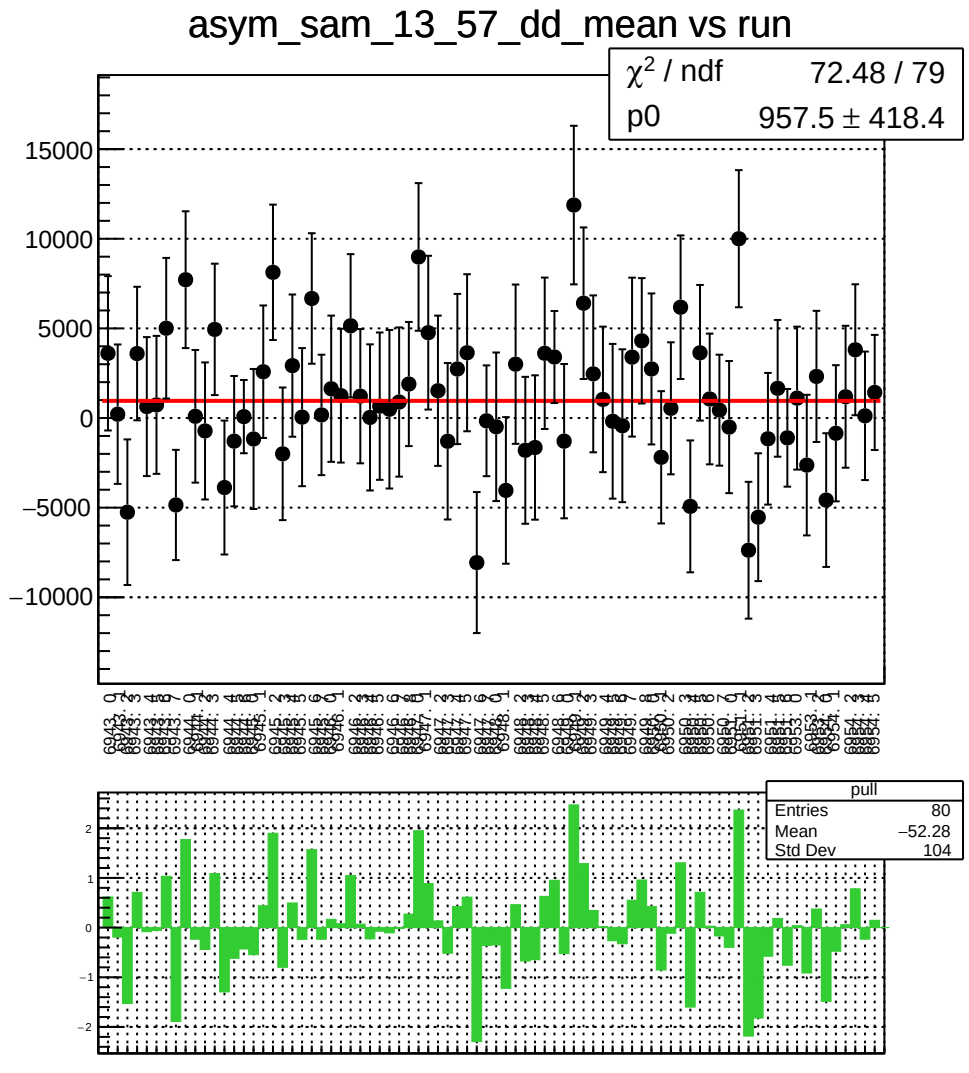

pull1D
Entries 80
Mean 0.00236
Std Dev 0.9178

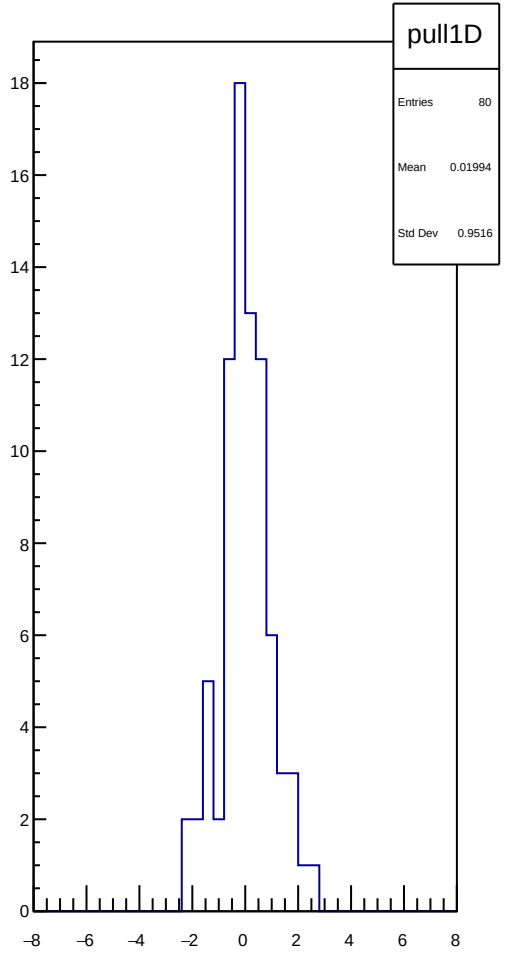

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 990.8 / 79
p0 59.62 ± 0.04721
63
62
61
60
59
58
57
56
55

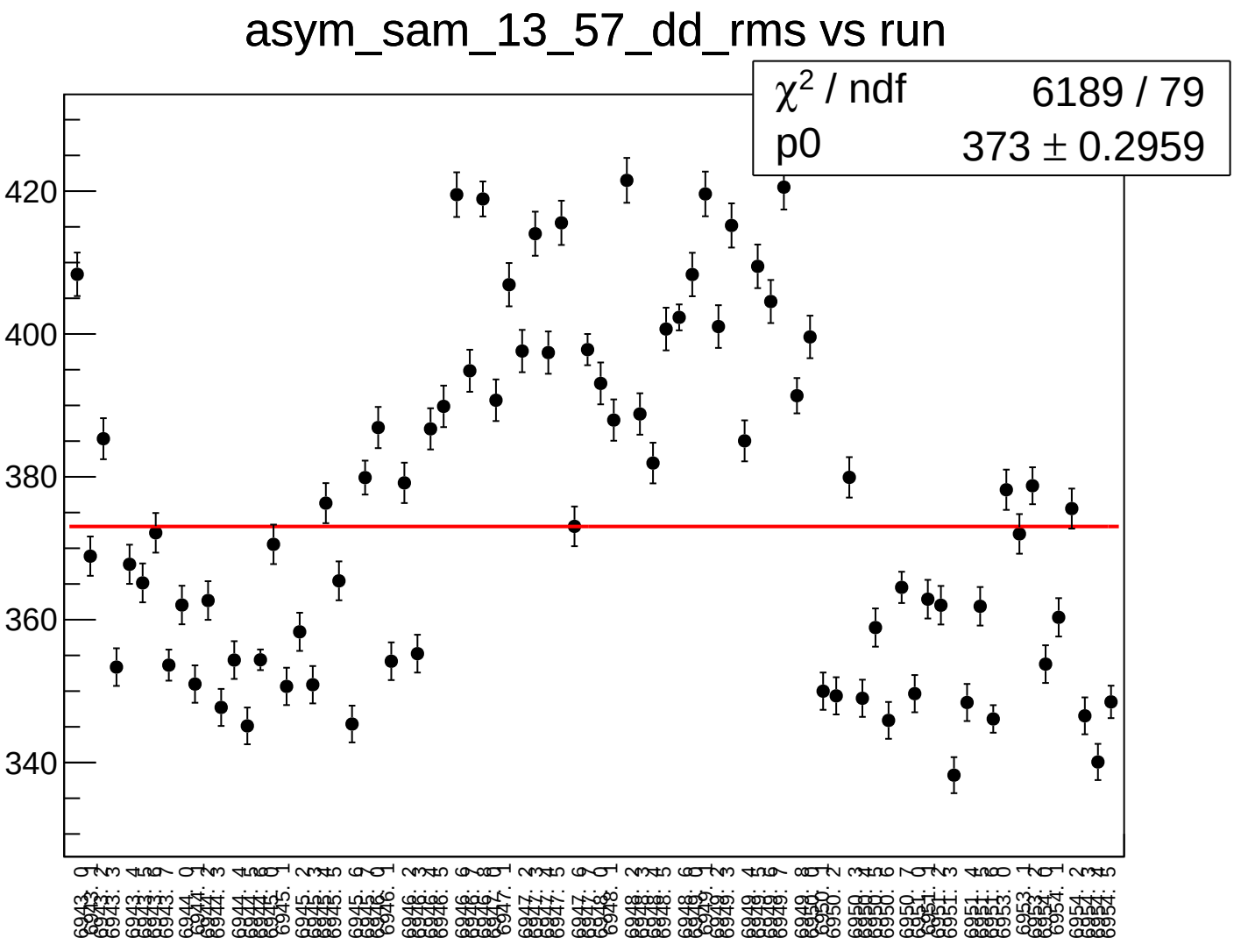

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 72.43 / 79
p0 −1100 ± 413
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean −49.04
Std Dev 101.4
2
1
0
−1
−2

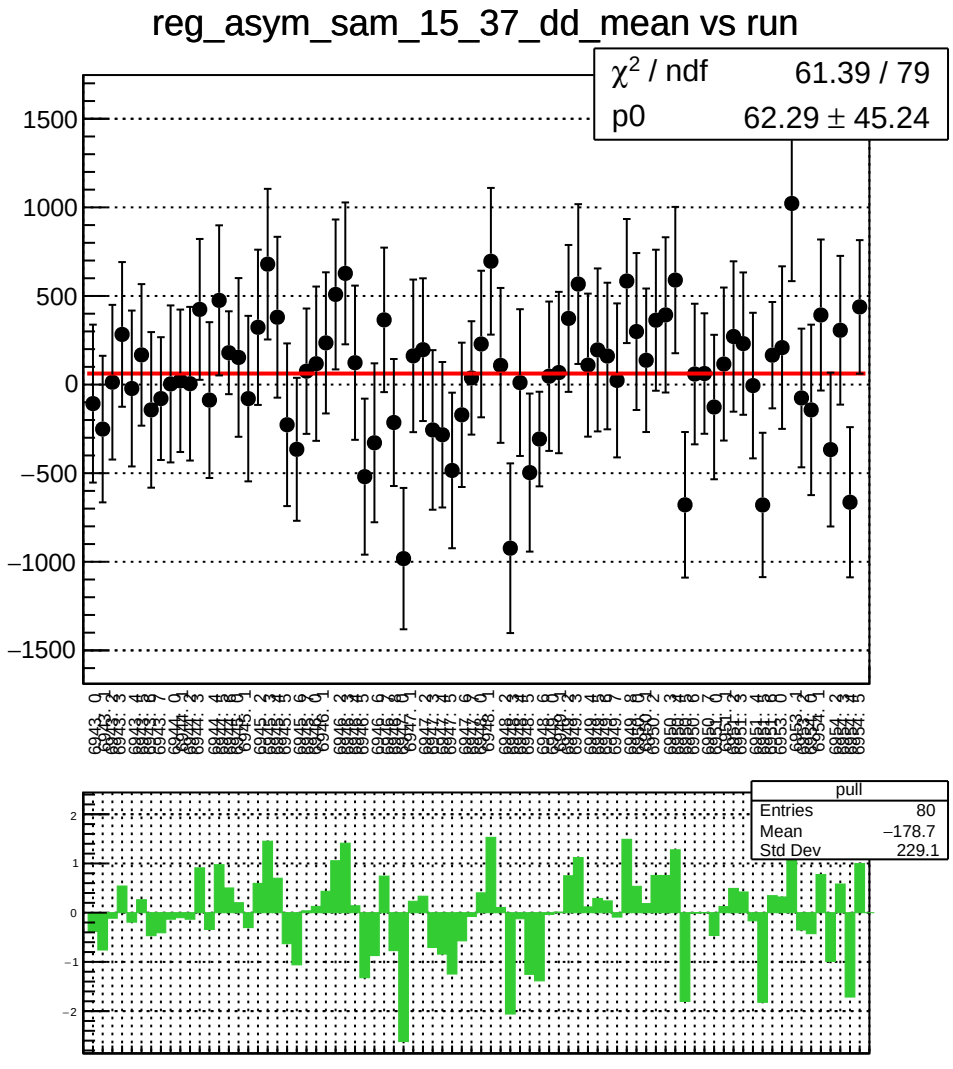

pull1D
Entries 80
Mean −0.01931
Std Dev 0.9513
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

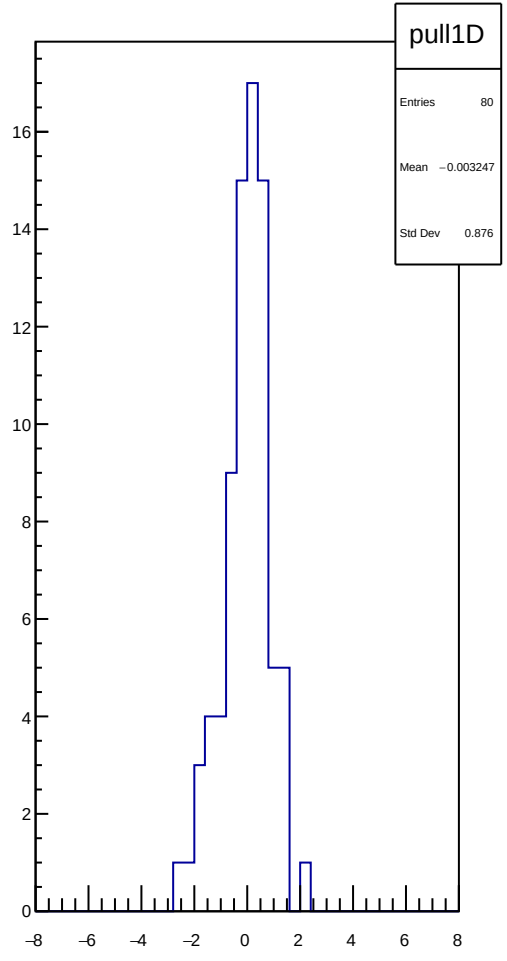

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 6431 / 79
p0 368.2 ± 0.292
420
400
380
360
340

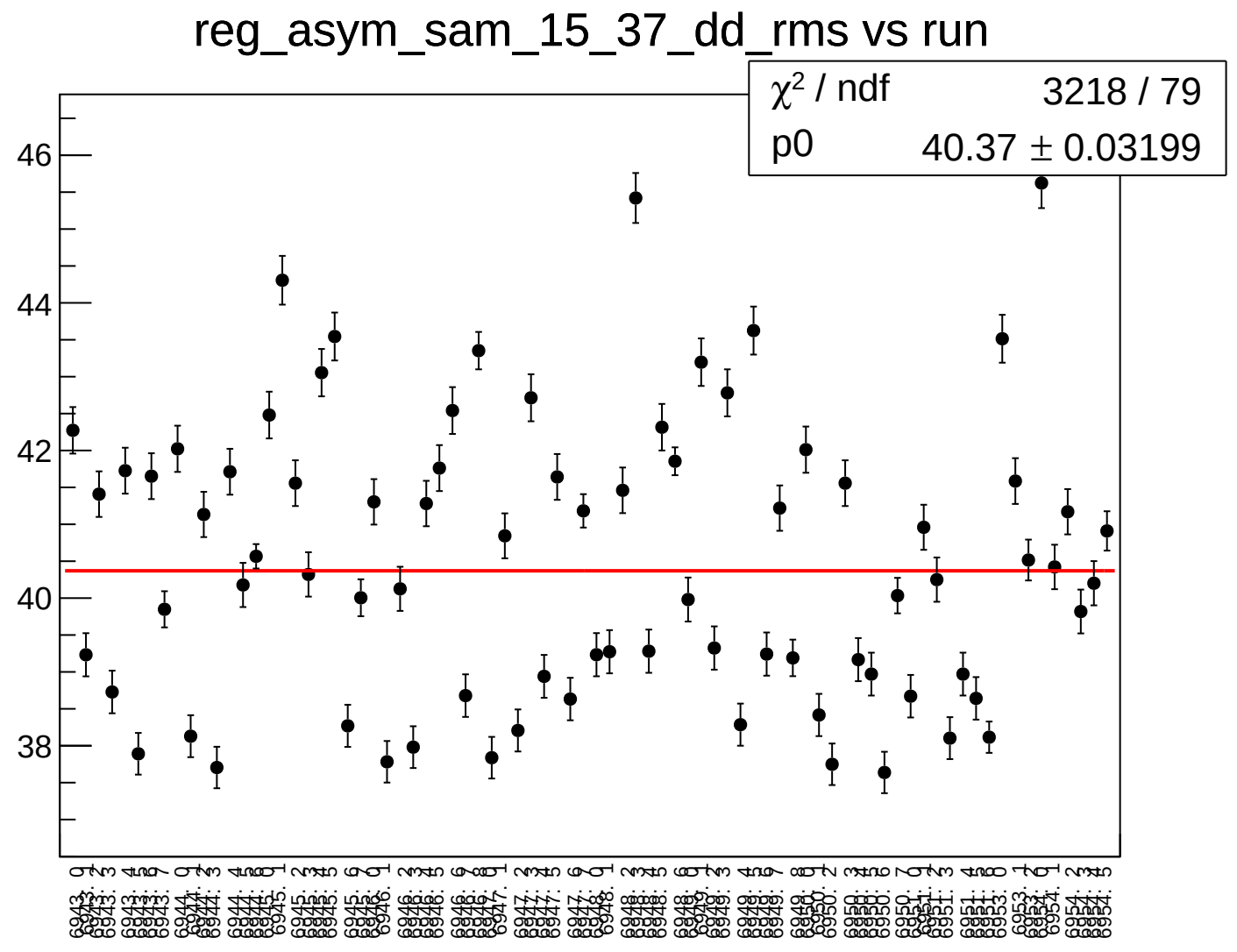

asym_sam_13_57_dd_mean vs run
χ² / ndf 72.48 / 79
p0 957.5 ± 418.4
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean −52.28
Std Dev 104
2
1
0
−1
−2

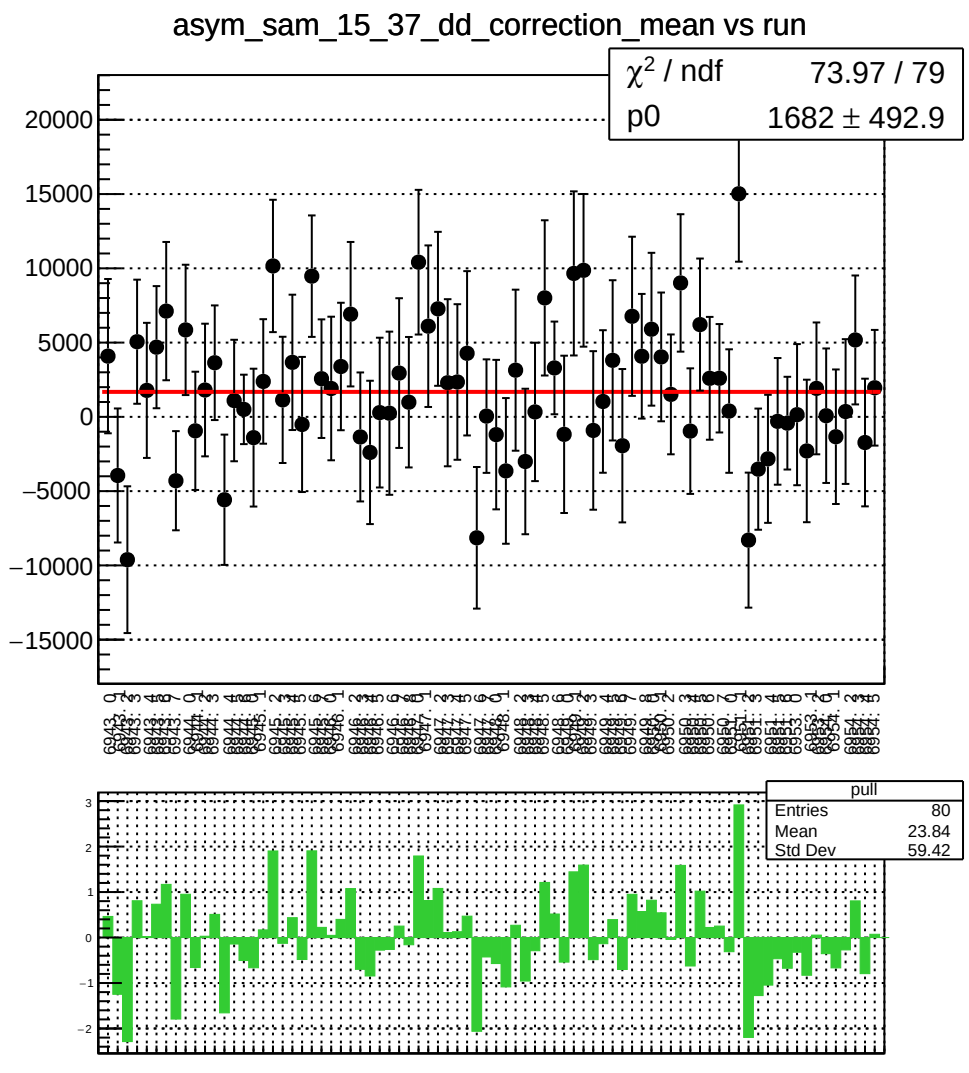

pull1D
Entries 80
Mean 0.01994
Std Dev 0.9516
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

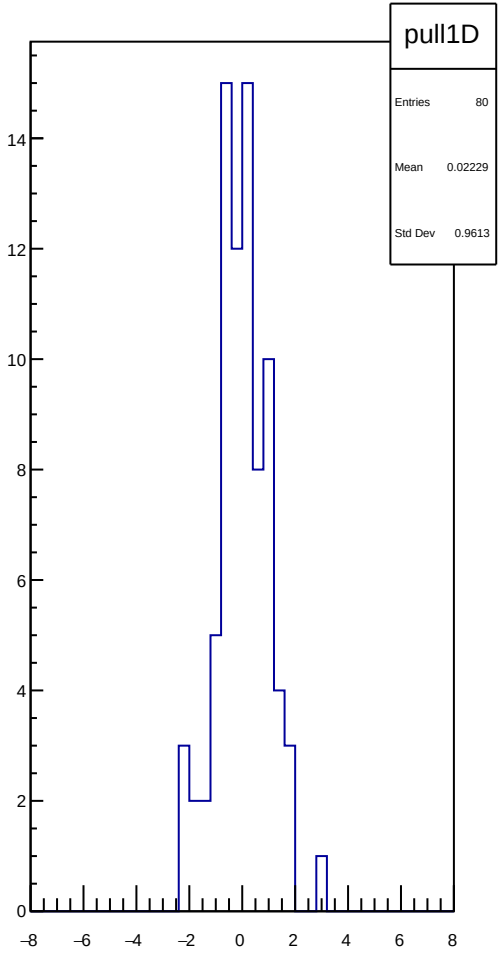

asym_sam_13_57_dd_rms vs run
χ² / ndf 6189 / 79
p0 373 ± 0.2959
420
400
380
360
340

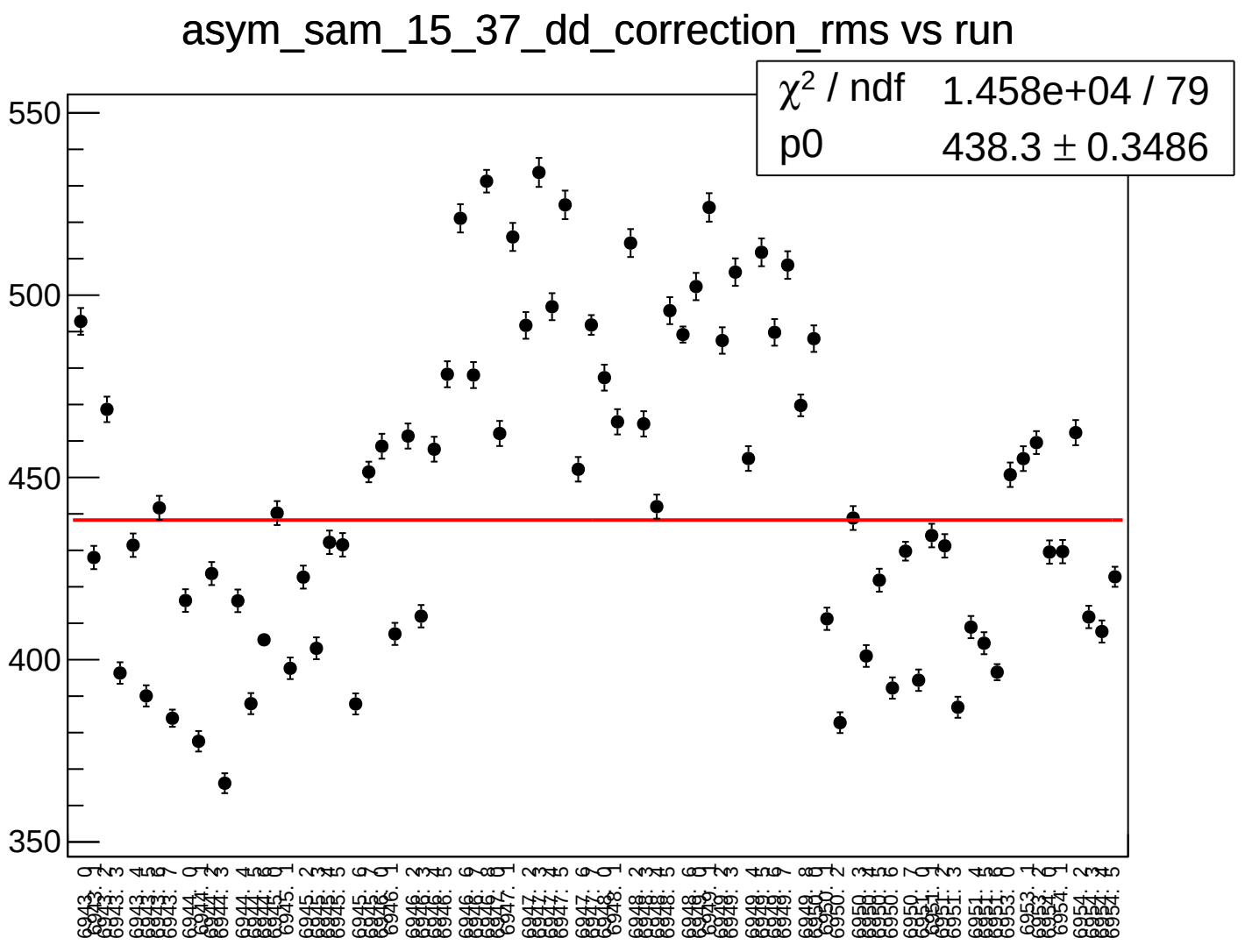

reg_asym_sam_15_37_dd_mean vs run
χ^2 / ndf 61.39 / 79
p0 62.29 ± 45.24
1500
1000
500
0
−500
−1000
−1500
pull
Entries 80
Mean −178.7
Std Dev 229.1
2
1
0
−1
−2

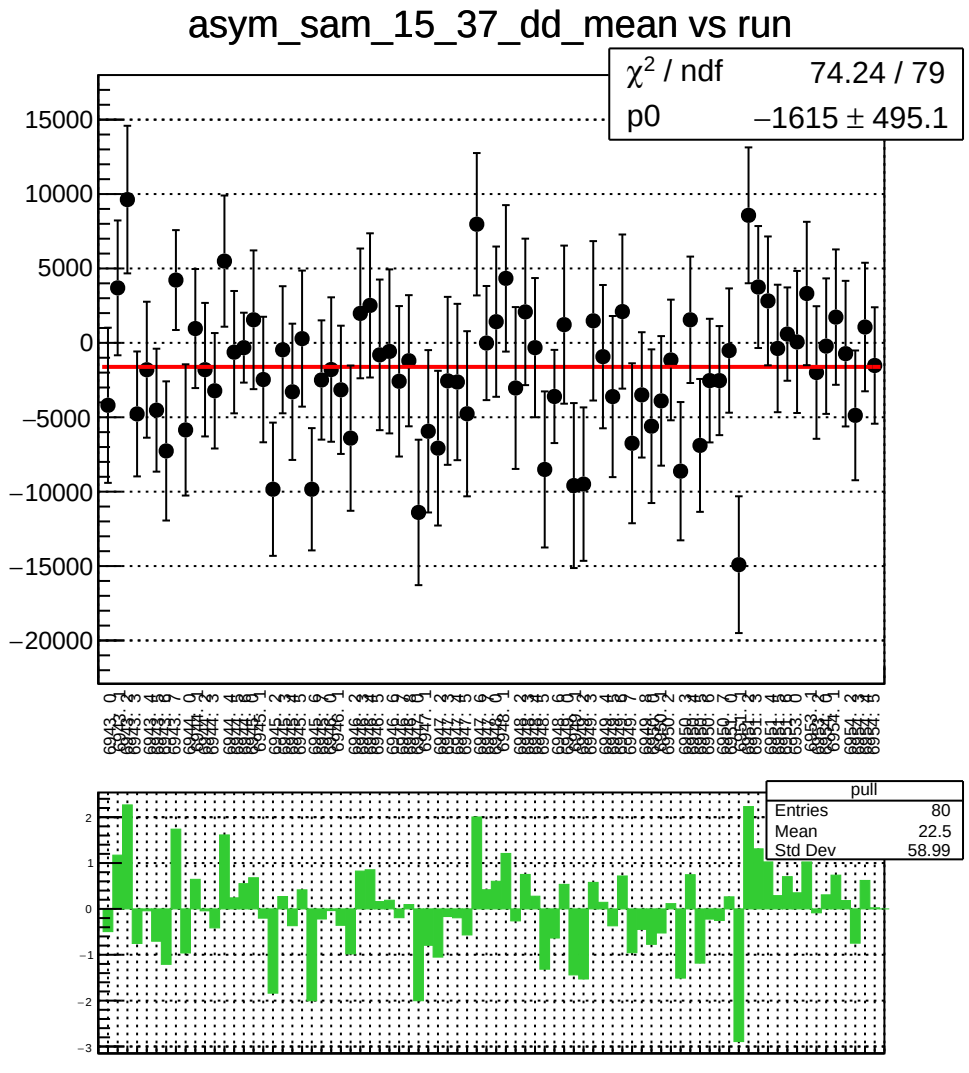

pull1D
Entries 80
Mean −0.003247
Std Dev 0.876
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

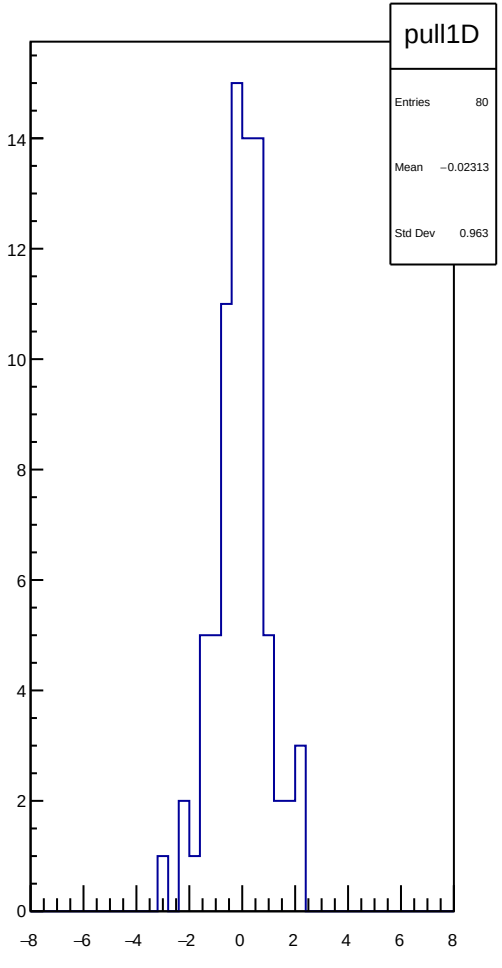

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 3218 / 79
p0 40.37 ± 0.03199
46
44
42
40
38


asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 73.97 / 79
p0 1682 ± 492.9
pull
Entries 80
Mean 23.84
Std Dev 59.42

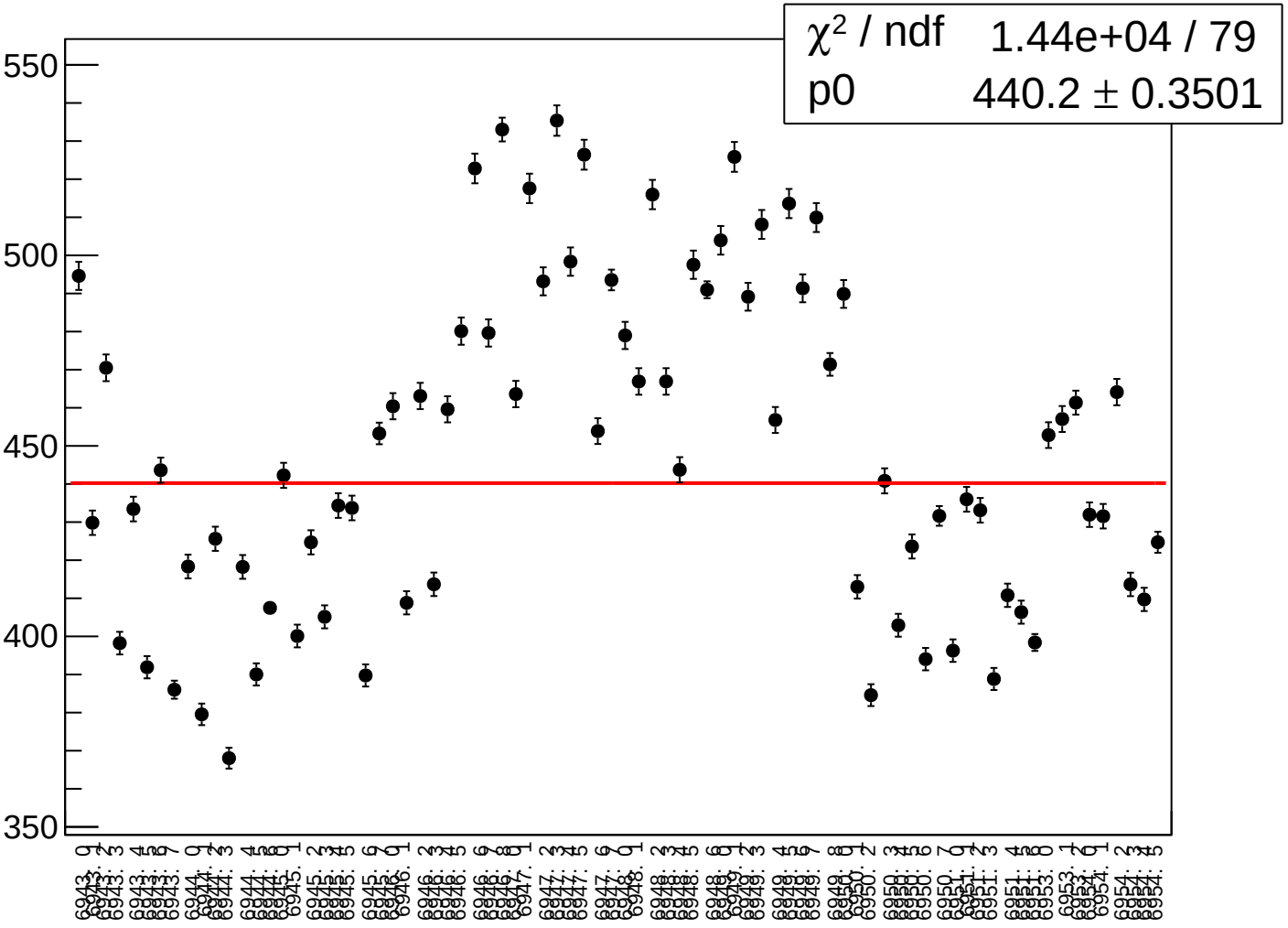

pull1D
Entries 80
Mean 0.02229
Std Dev 0.9613

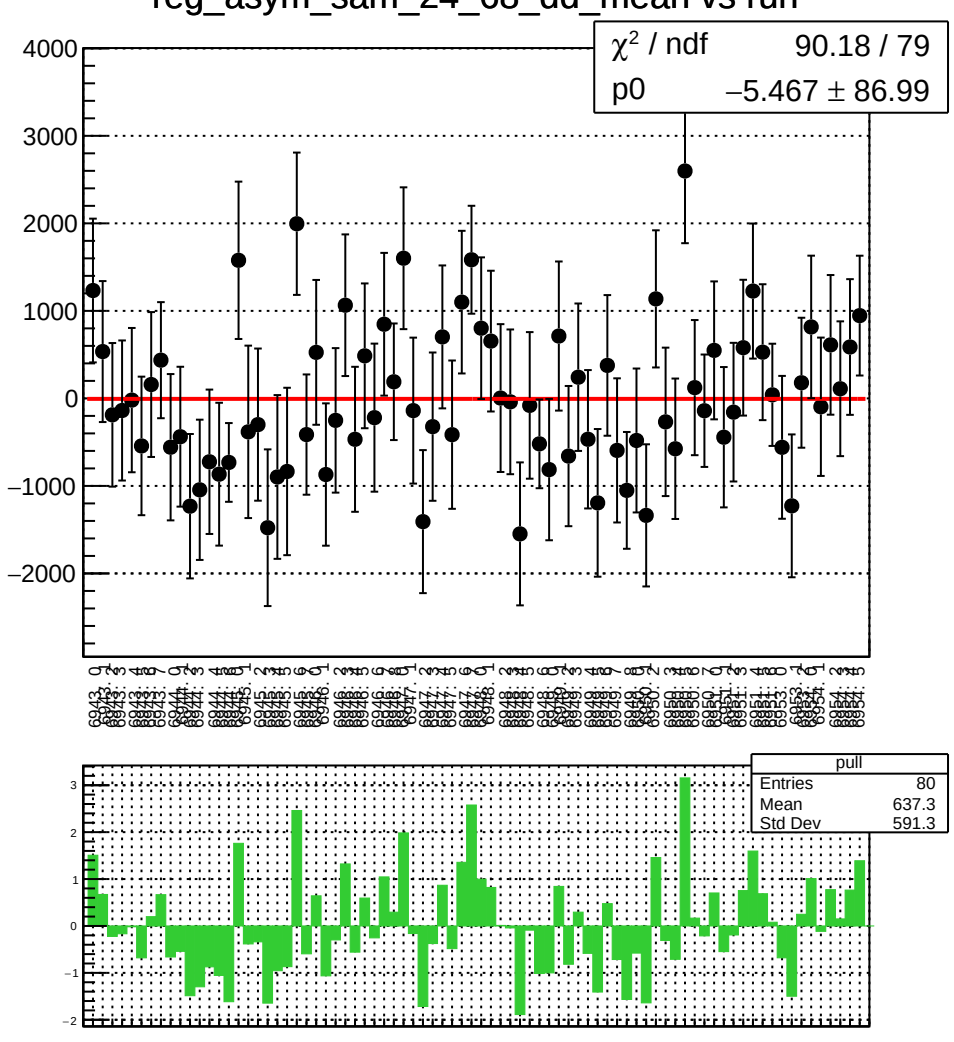

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 1.458e+04 / 79
p0 438.3 ± 0.3486
550
500
450
400
350

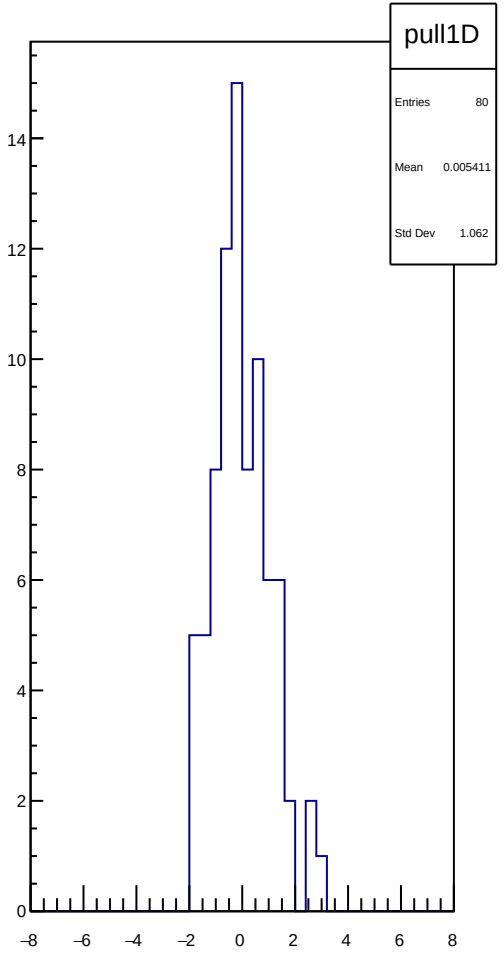

asym_sam_15_37_dd_mean vs run
χ² / ndf 74.24 / 79
p0 −1615 ± 495.1
pull
Entries 80
Mean 22.5
Std Dev 58.99

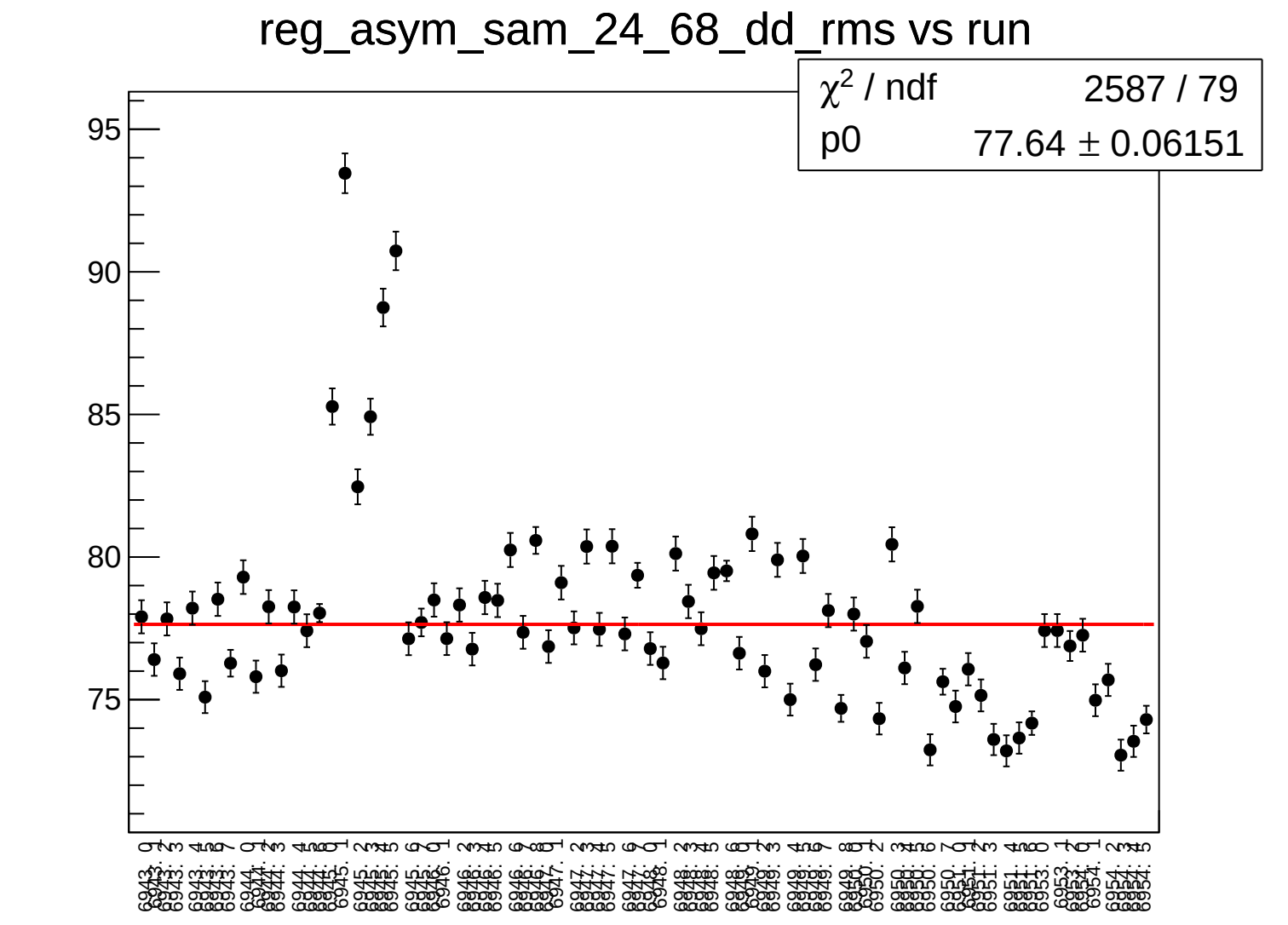

pull1D
Entries 80
Mean −0.02313
Std Dev 0.963

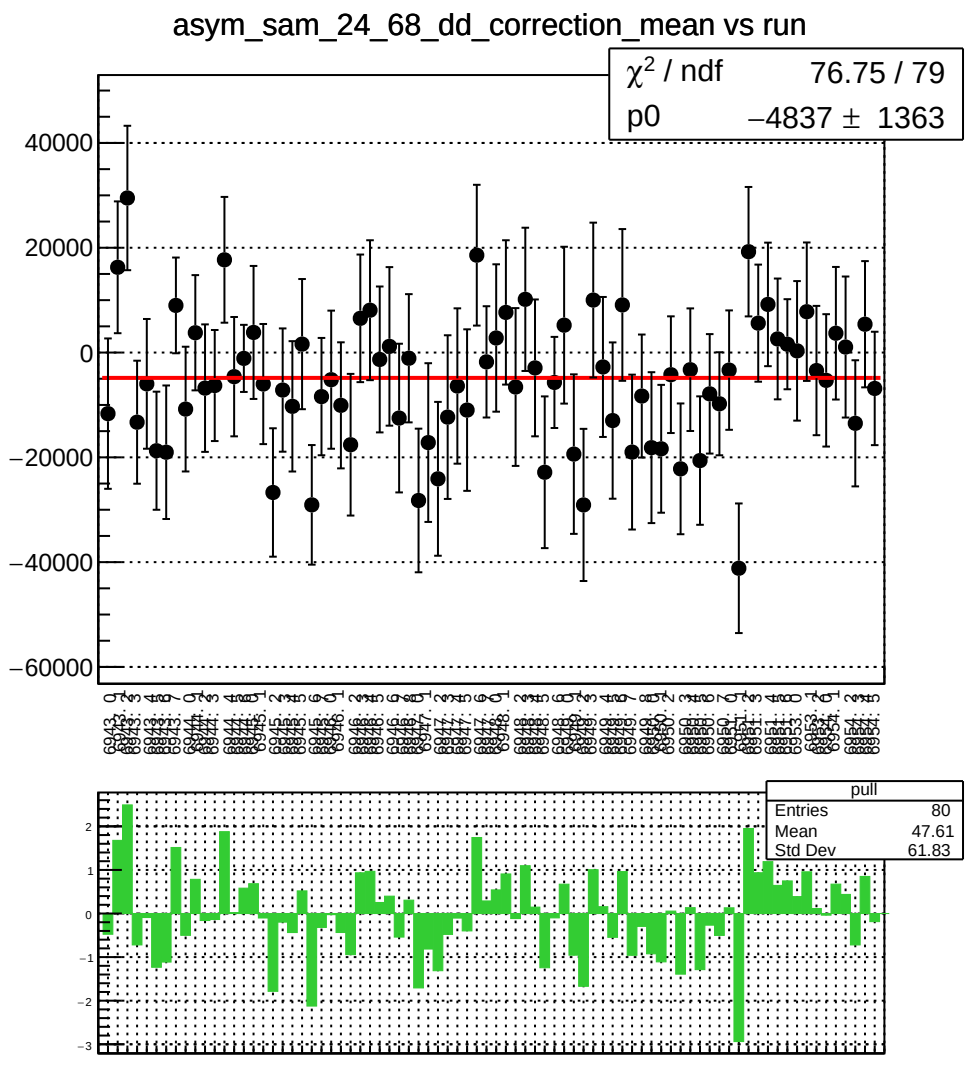
asym_sam_15_37_dd_rms vs run

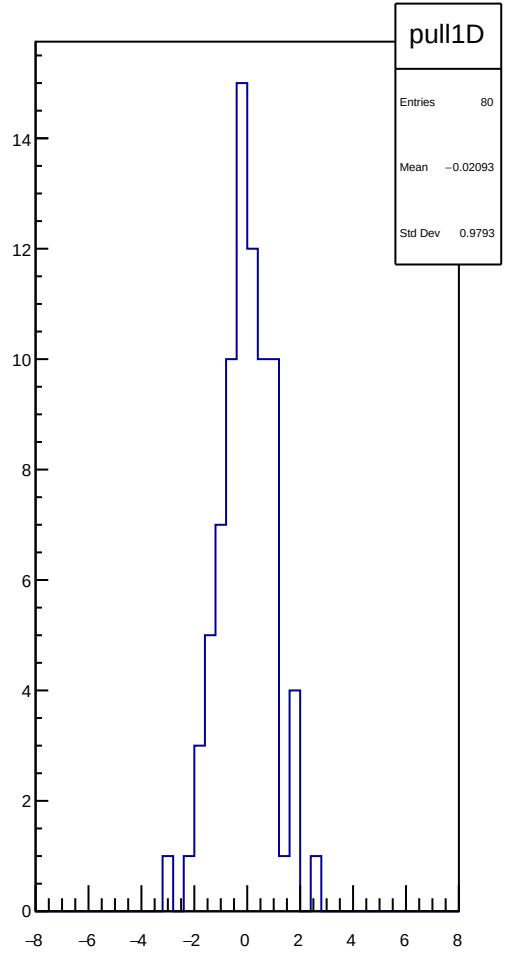


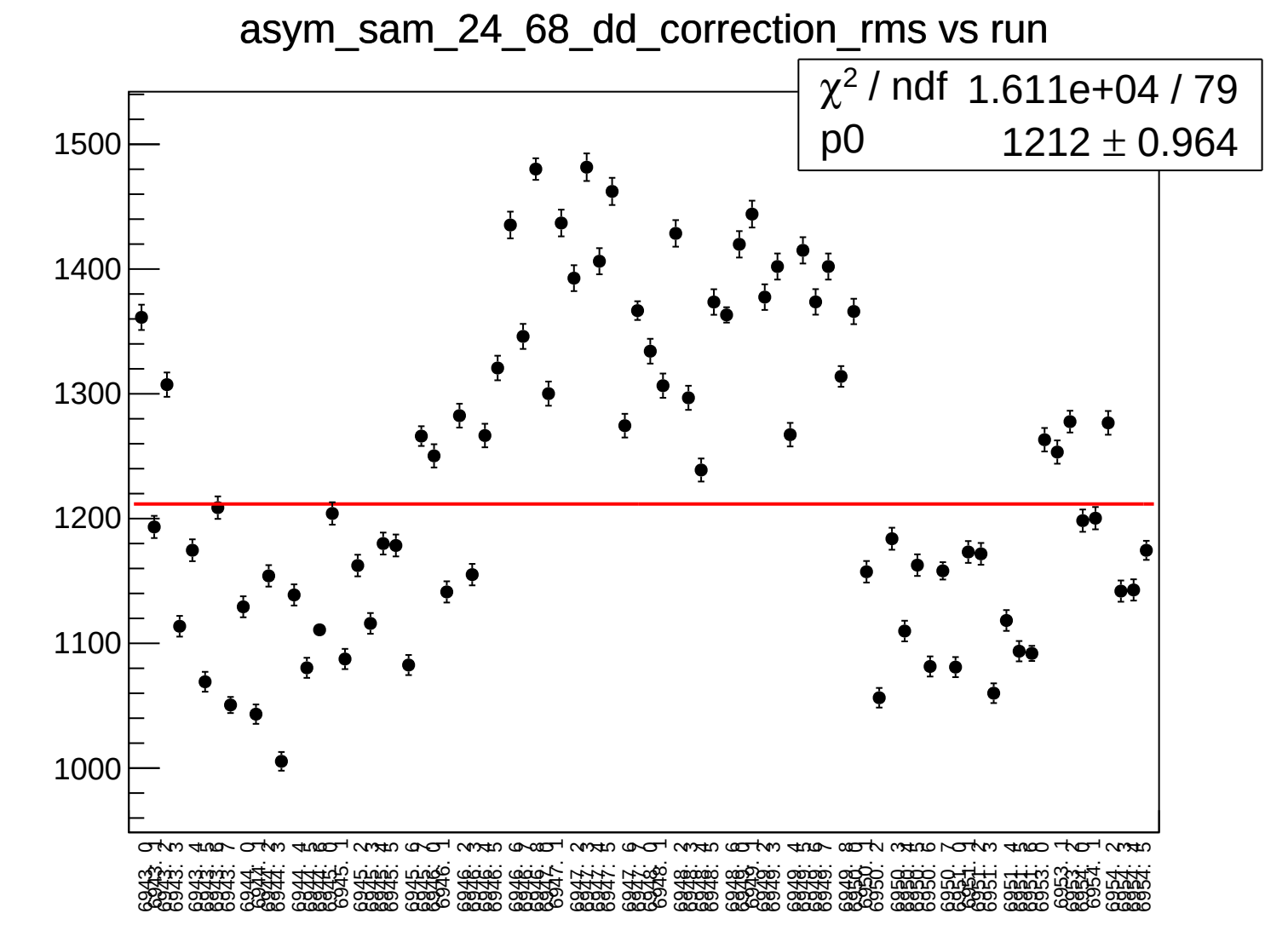

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 90.18 / 79
p0 −5.467 ± 86.99
pull
Entries 80
Mean 637.3
Std Dev 591.3

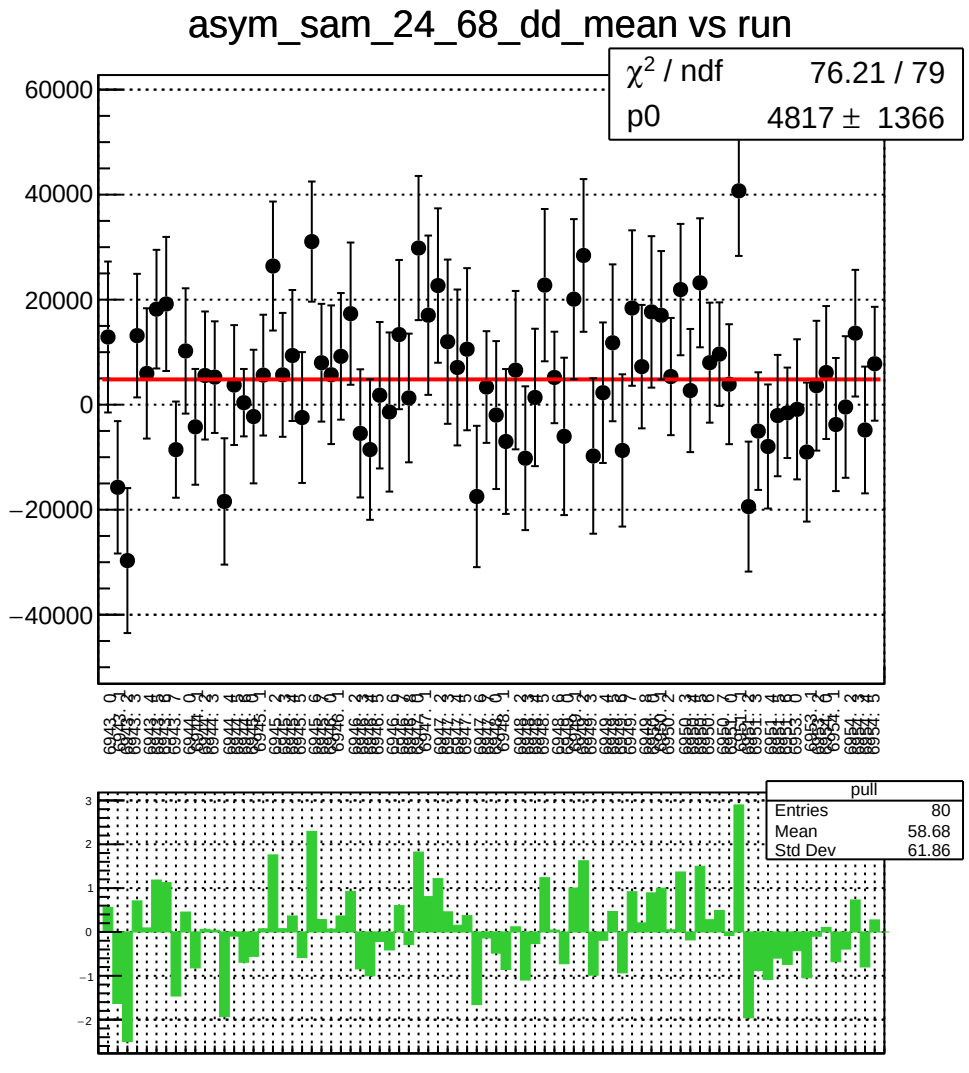

pull1D
Entries 80
Mean 0.005411
Std Dev 1.062

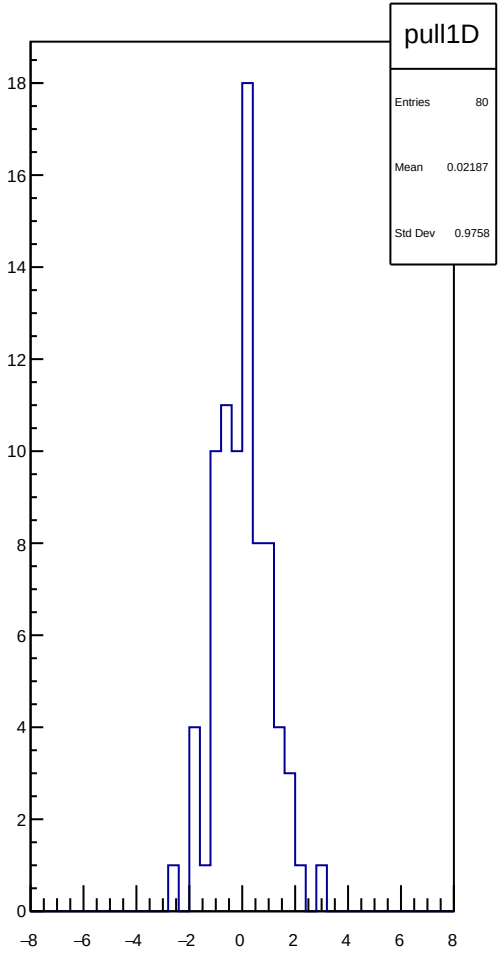

reg_asym_sam_24_68_dd_rms vs run
χ^2 / ndf 2587 / 79
p0 77.64 ± 0.06151
95
90
85
80
75

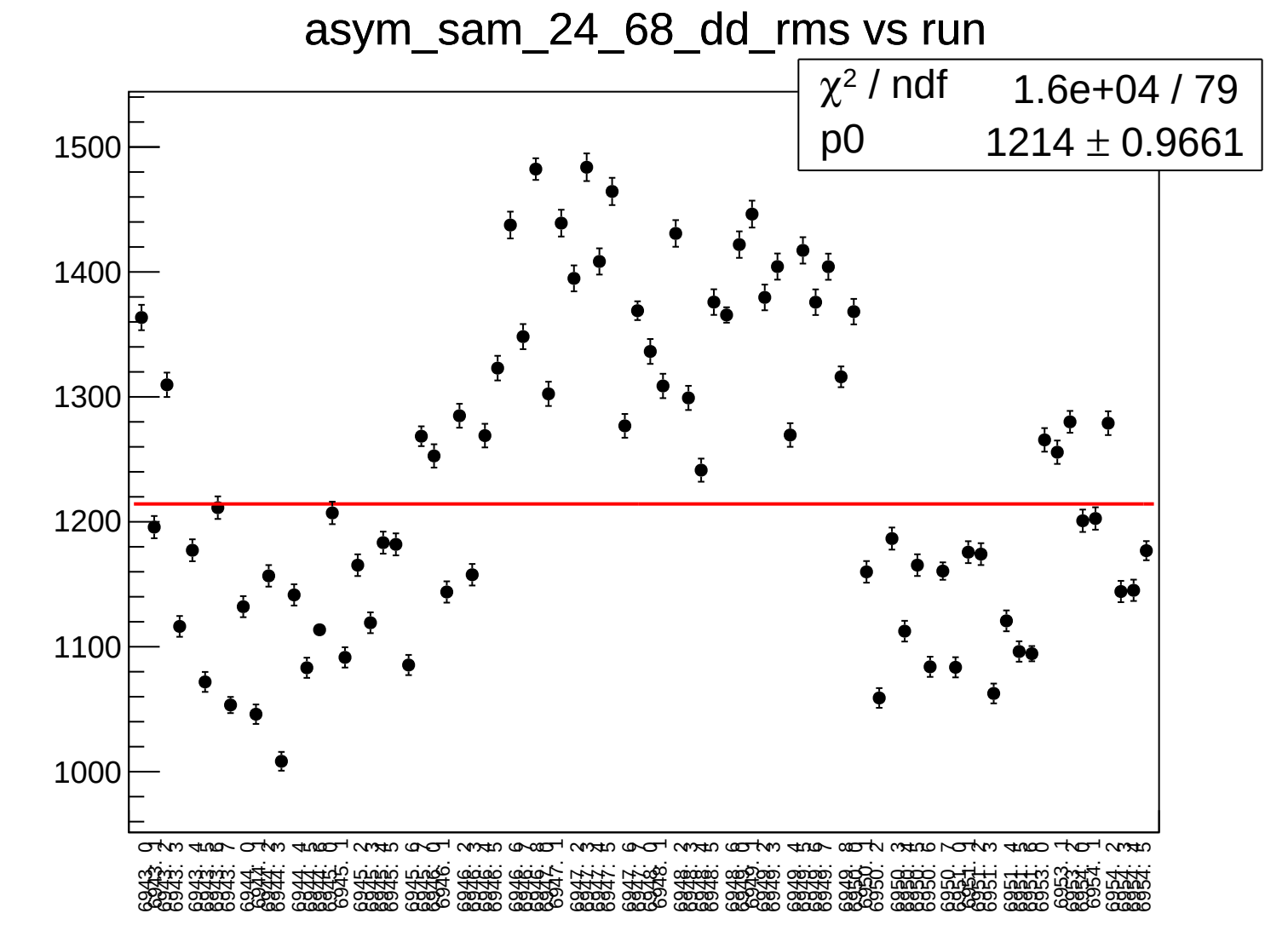

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 76.75 / 79
p0 −4837 ± 1363
40000
20000
0
−20000
−40000
−60000
pull
Entries 80
Mean 47.61
Std Dev 61.83
2
1
0
−1
−2
−3

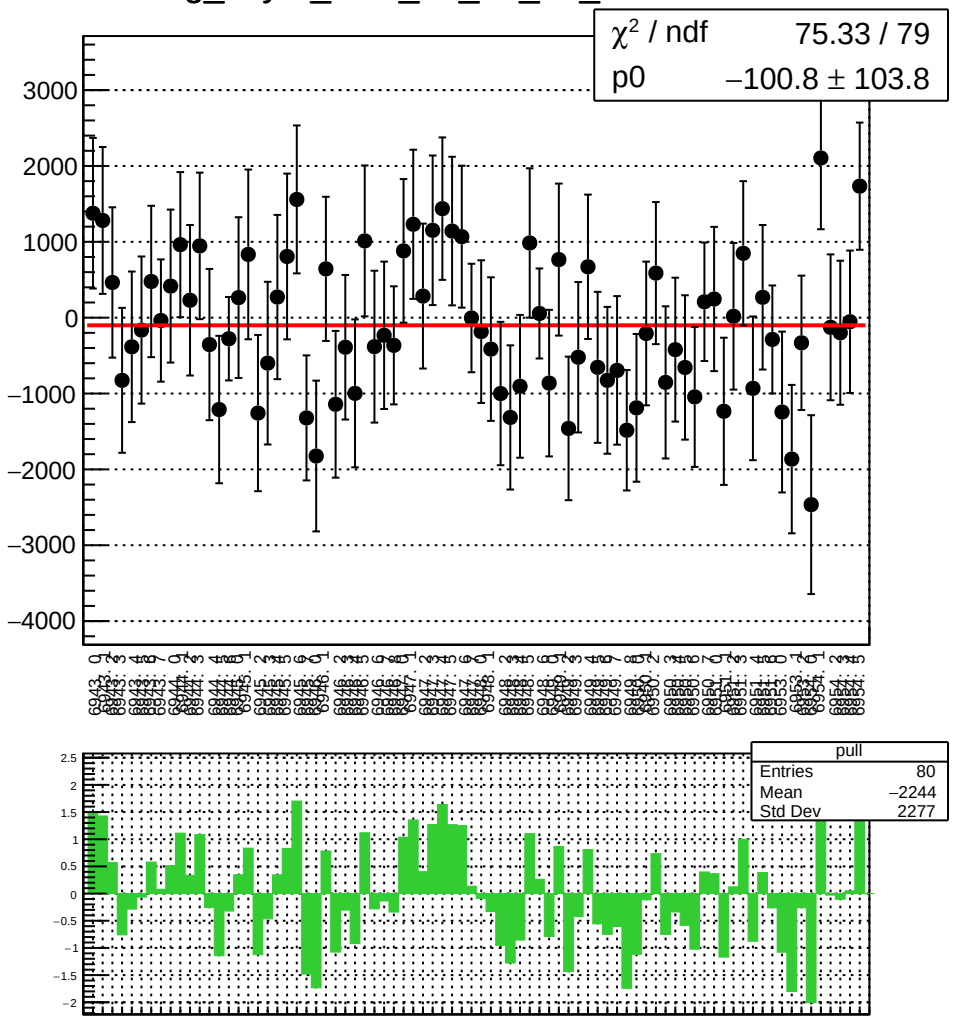

pull1D
Entries 80
Mean −0.02093
Std Dev 0.9793
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

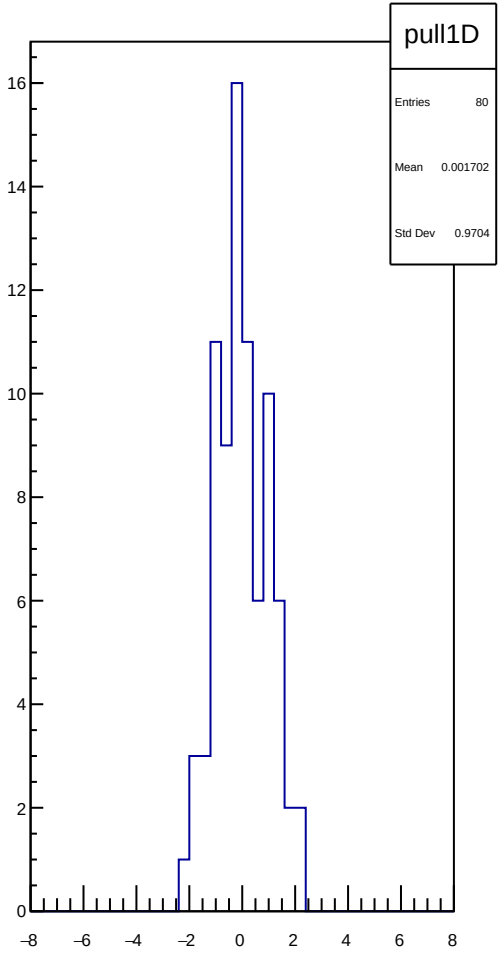

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 1.611e+04 / 79
p0 1212 ± 0.964
1500
1400
1300
1200
1100
1000

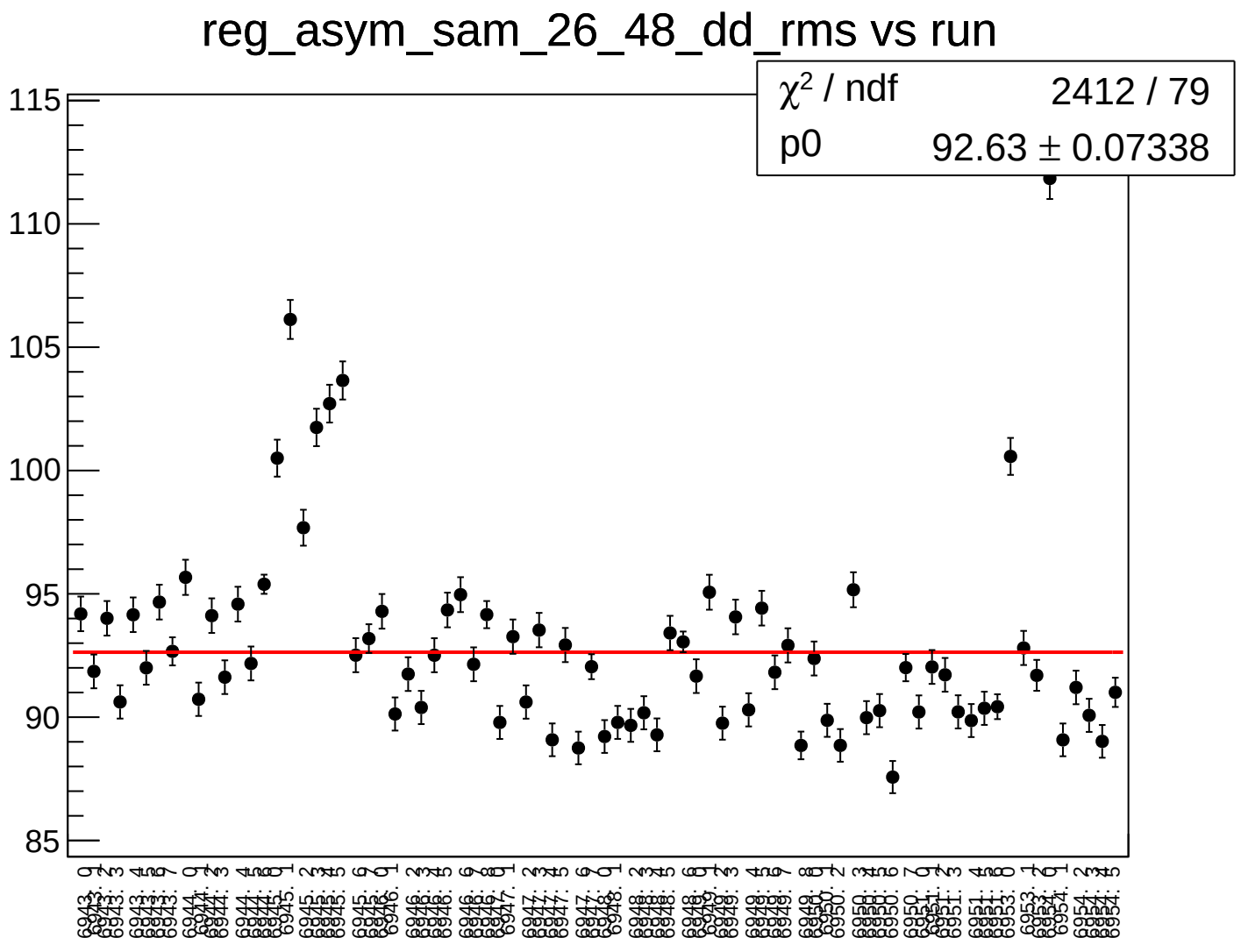

asym_sam_24_68_dd_mean vs run
χ² / ndf 76.21 / 79
p0 4817 ± 1366
pull
Entries 80
Mean 58.68
Std Dev 61.86

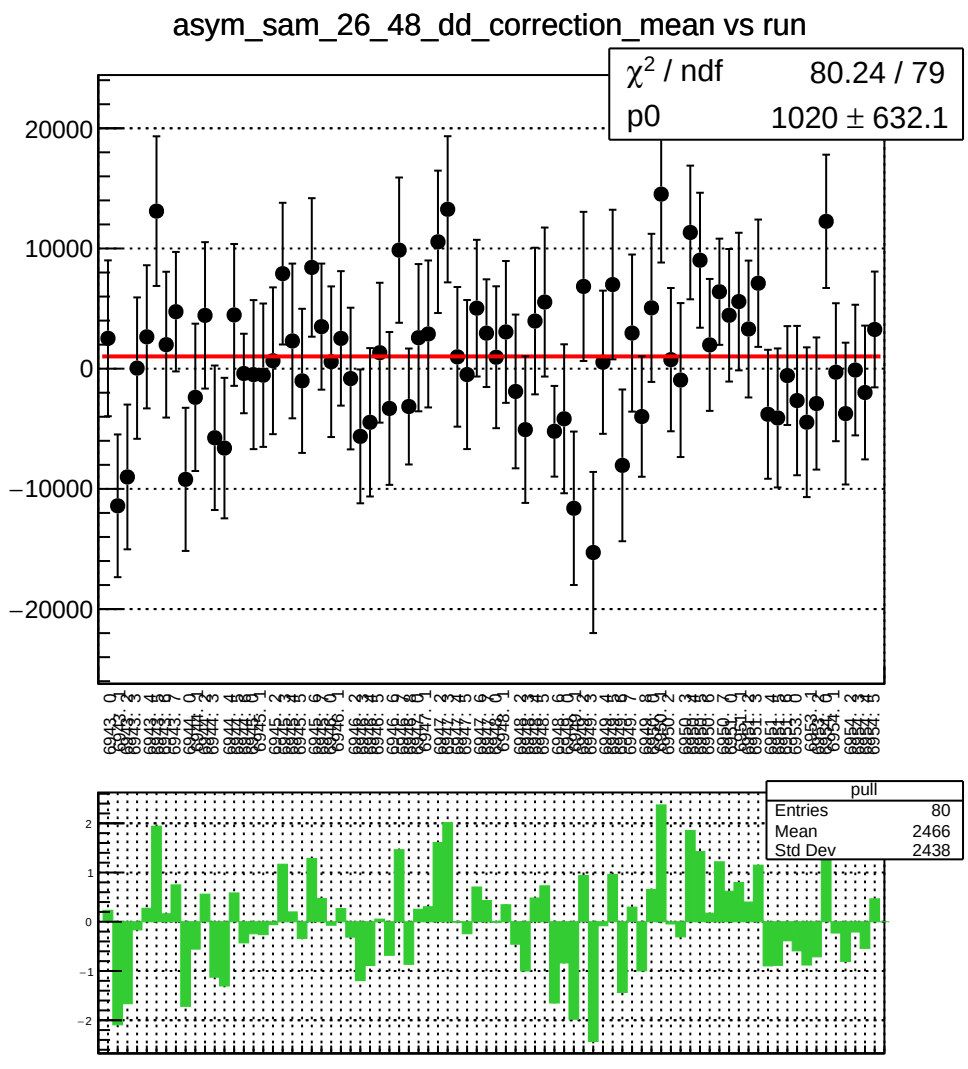

pull1D
Entries 80
Mean 0.02187
Std Dev 0.9758

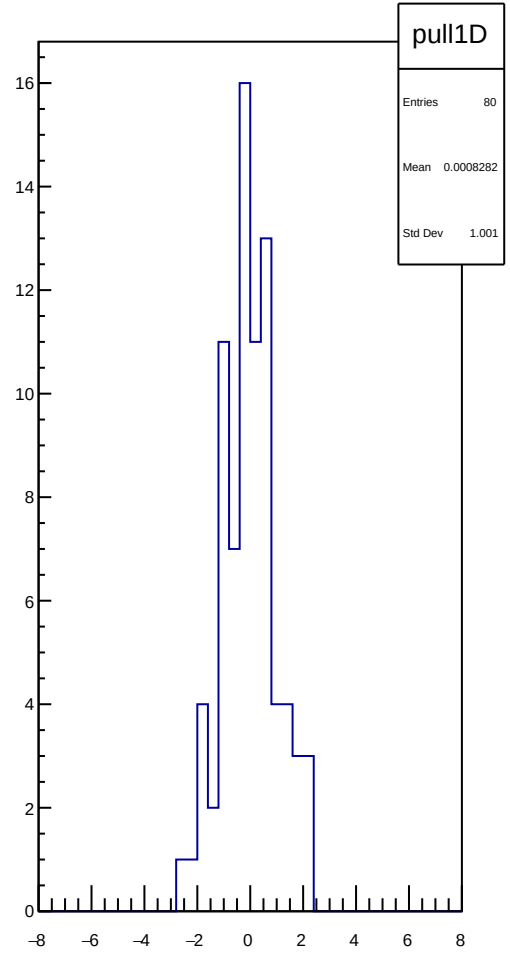

asym_sam_24_68_dd_rms vs run
χ² / ndf 1.6e+04 / 79
p0 1214 ± 0.9661
1500
1400
1300
1200
1100
1000

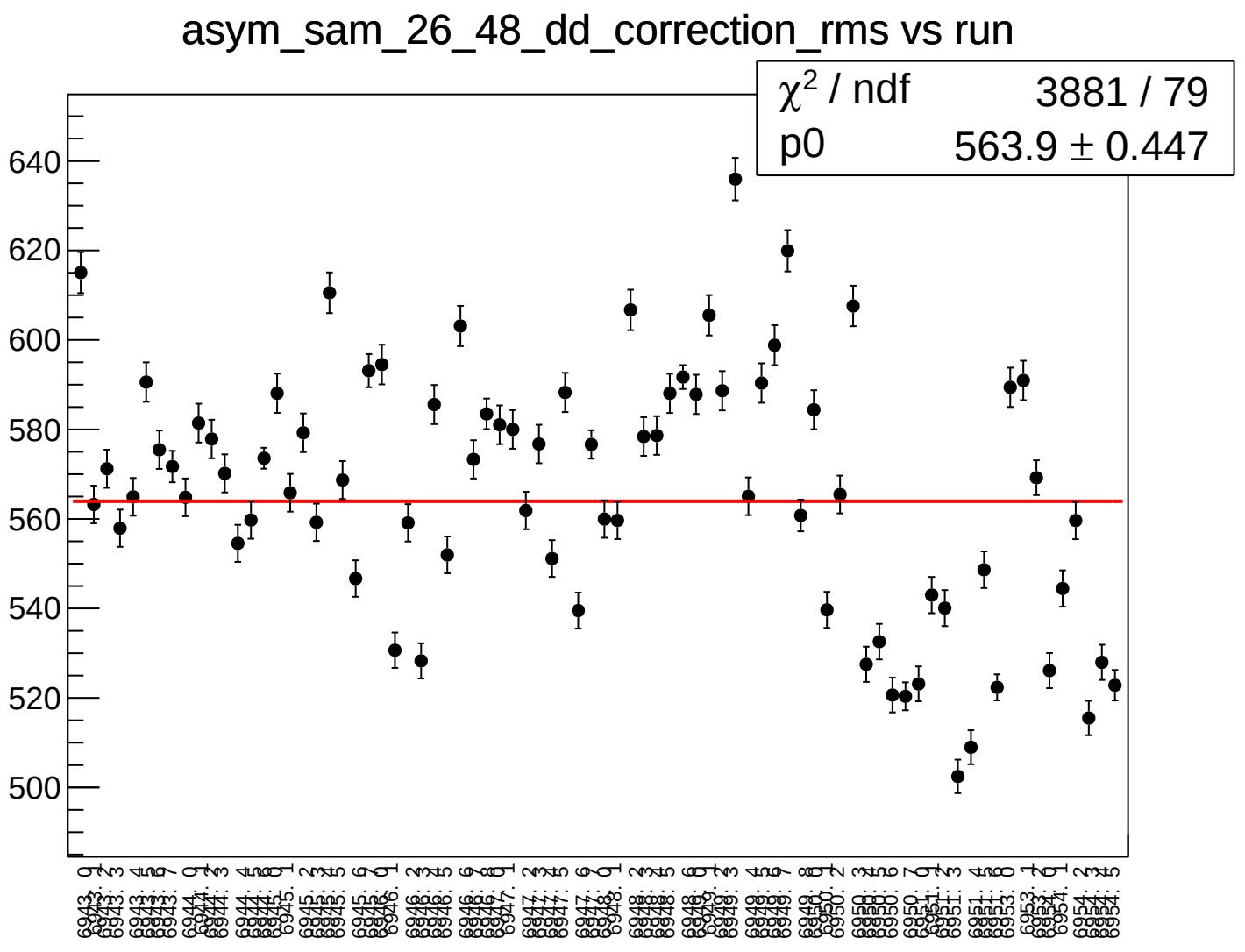

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 75.33 / 79
p0 −100.8 ± 103.8
pull
Entries 80
Mean −2244
Std Dev 2277

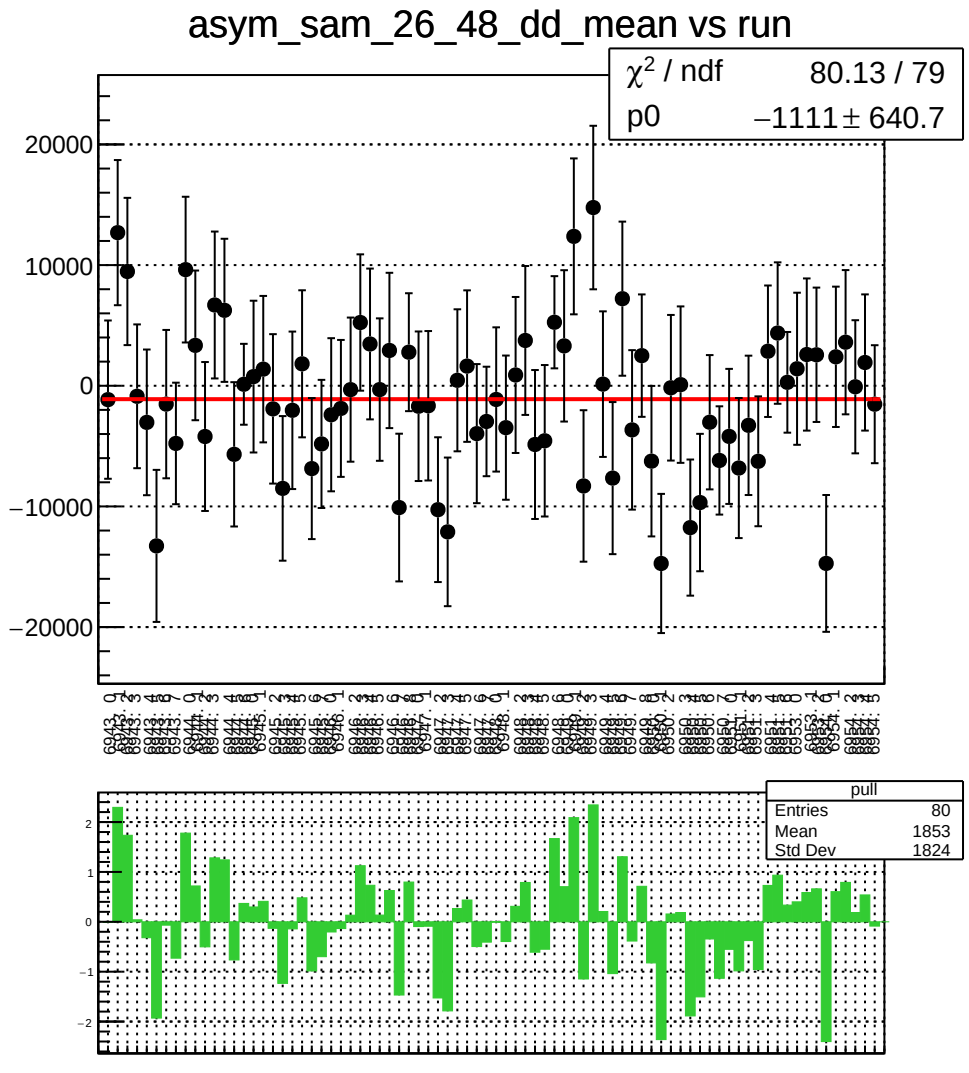

pull1D
Entries 80
Mean 0.001702
Std Dev 0.9704

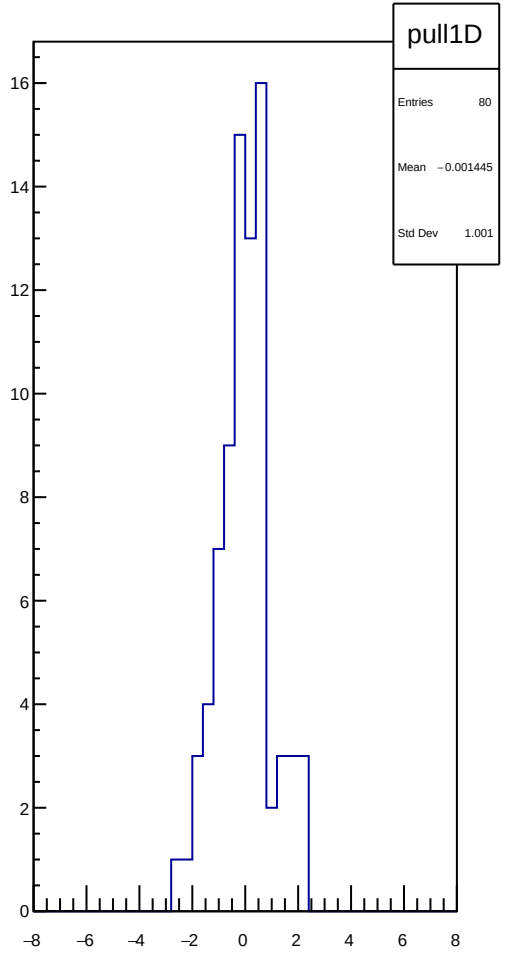

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 2412 / 79
p0 92.63 ± 0.07338
115
110
105
100
95
90
85

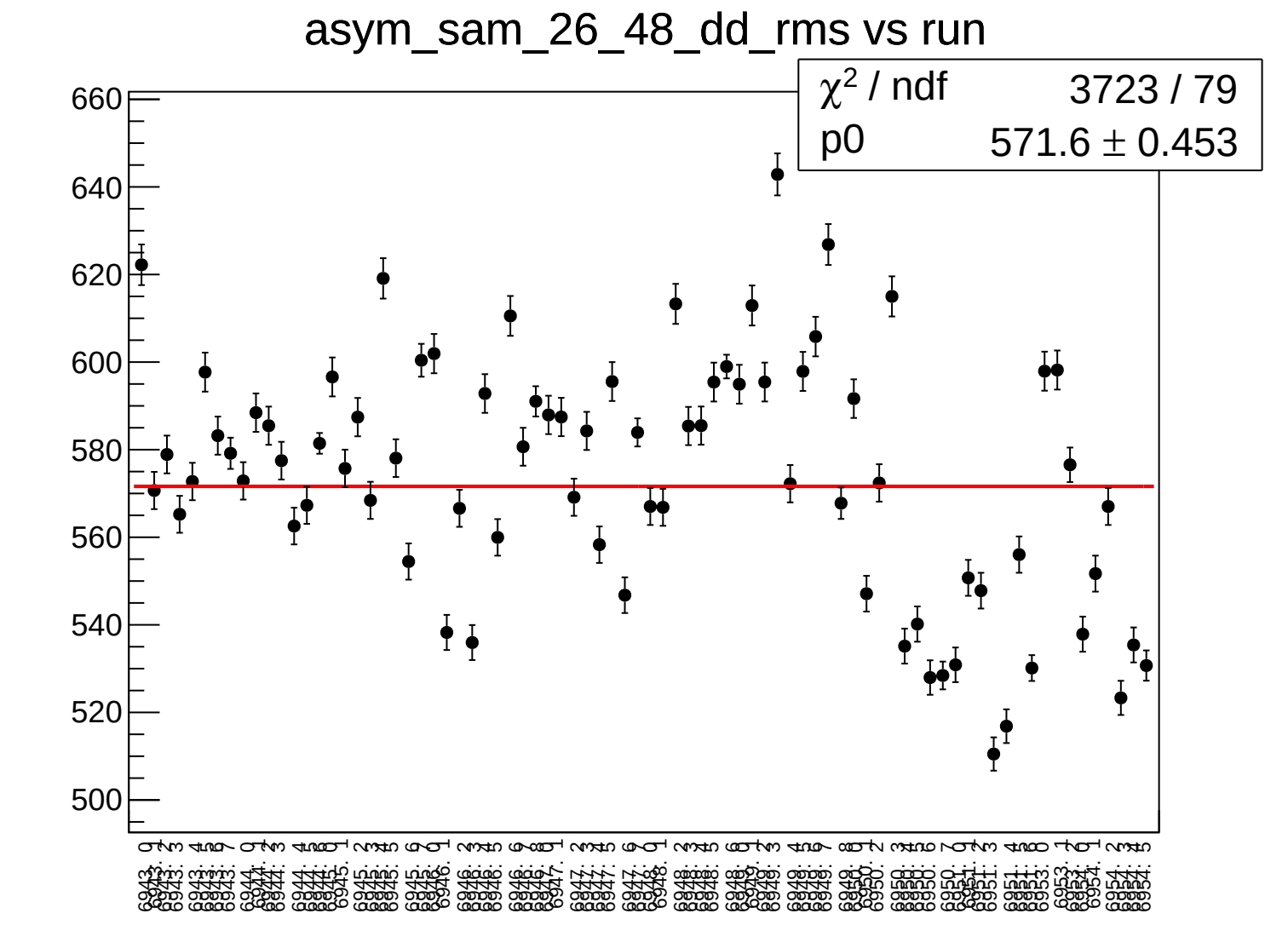

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 80.24 / 79
p0 1020 ± 632.1
pull
Entries 80
Mean 2466
Std Dev 2438

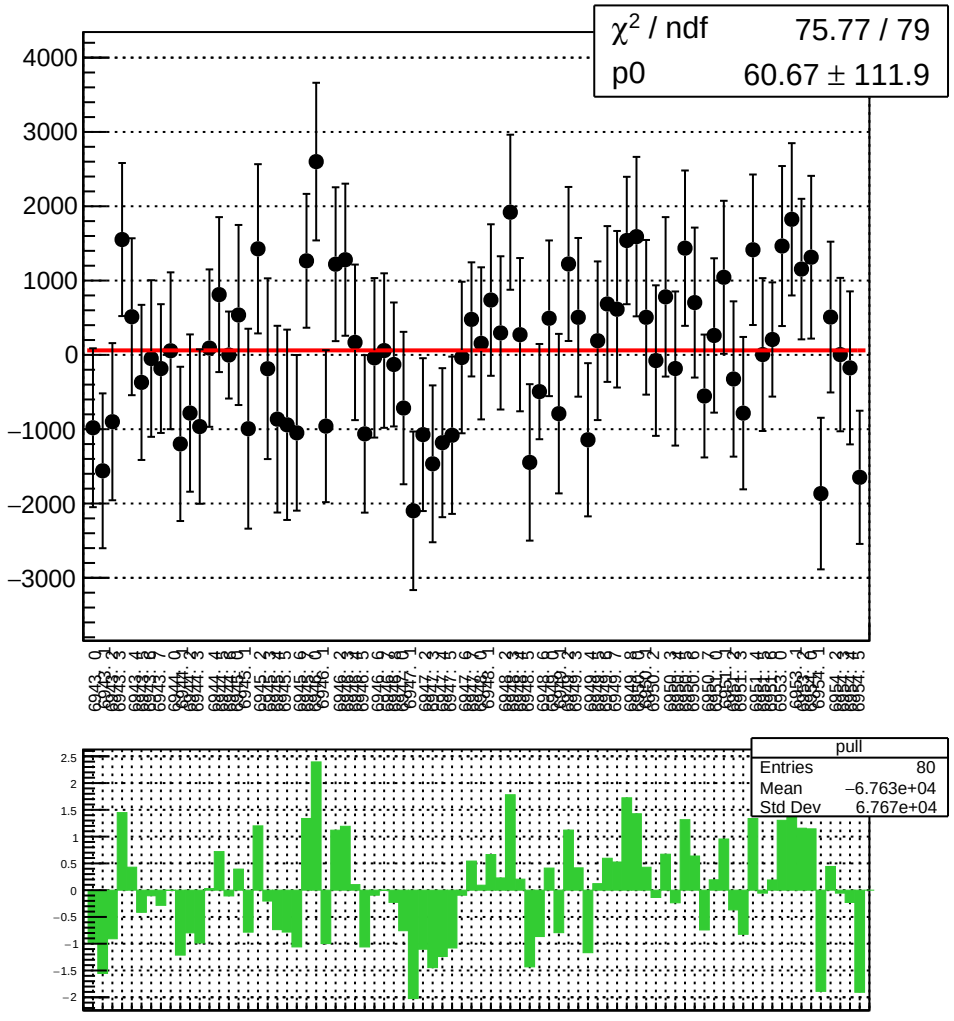

pull1D
Entries 80
Mean 0.0008282
Std Dev 1.001

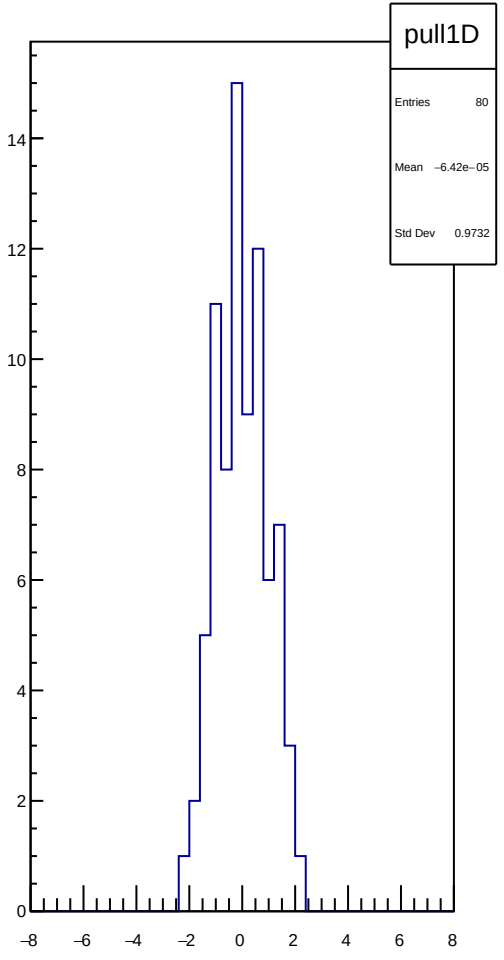

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 3881 / 79
p0 563.9 ± 0.447
640
620
600
580
560
540
520
500

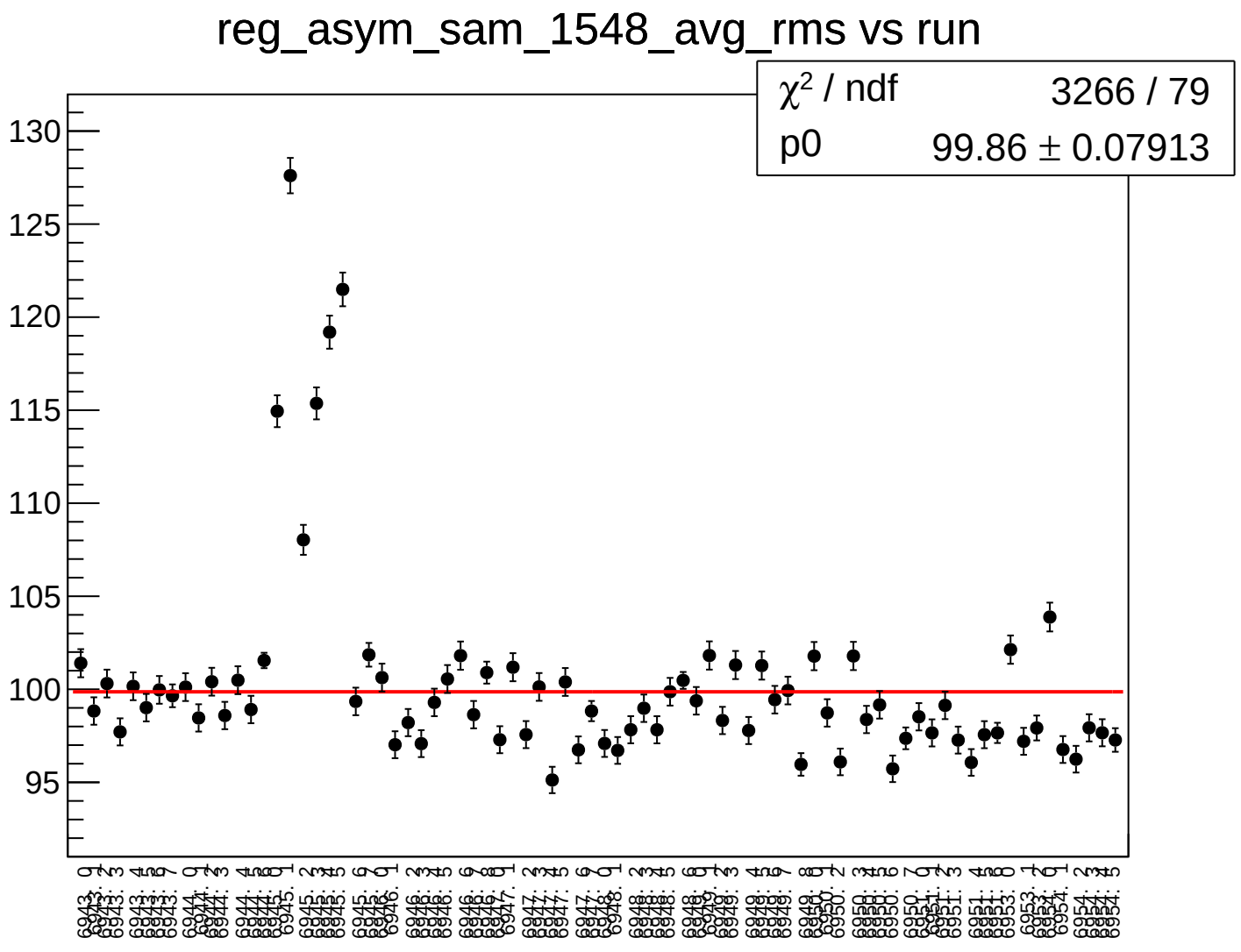

asym_sam_26_48_dd_mean vs run
χ² / ndf 80.13 / 79
p0 −1111 ± 640.7
20000
10000
0
−10000
−20000
pull
Entries 80
Mean 1853
Std Dev 1824
2
1
0
−1
−2

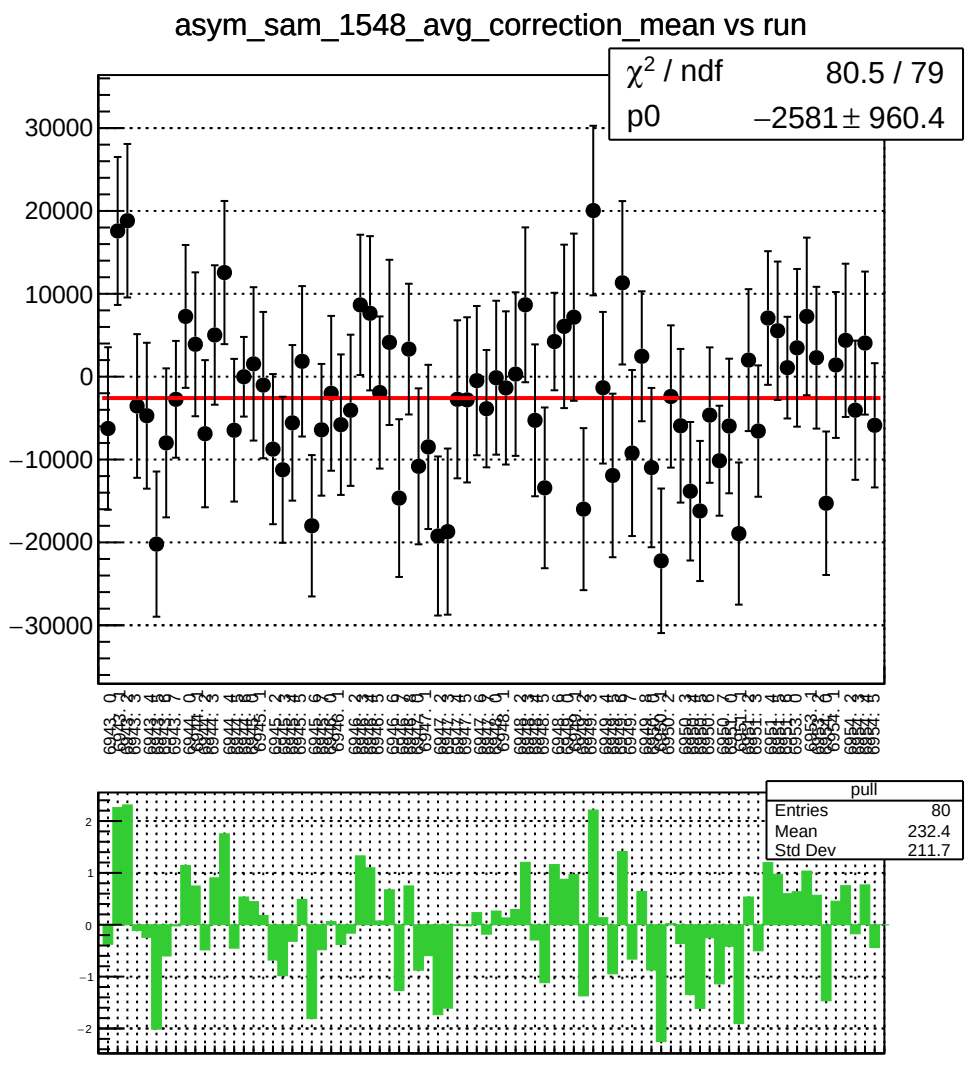

pull1D
Entries 80
Mean −0.001445
Std Dev 1.001
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

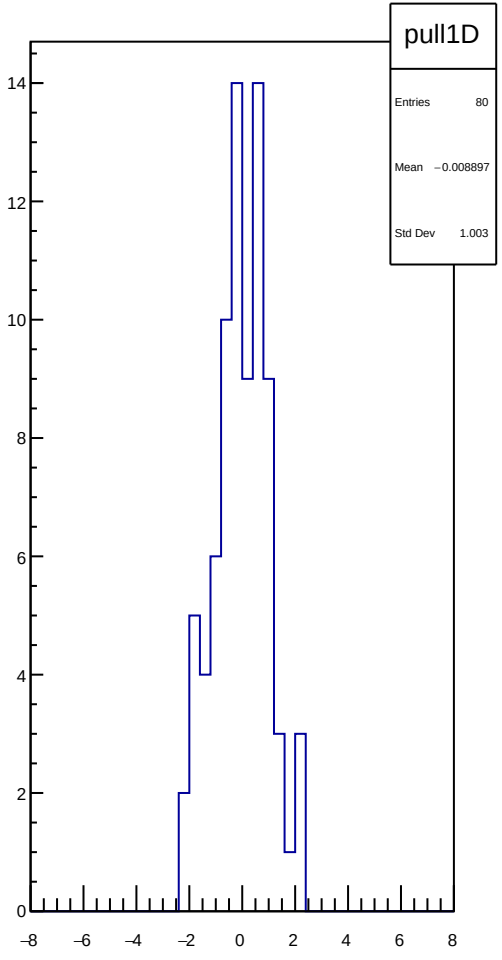

asym_sam_26_48_dd_rms vs run
χ² / ndf 3723 / 79
p0 571.6 ± 0.453
660
640
620
600
580
560
540
520
500

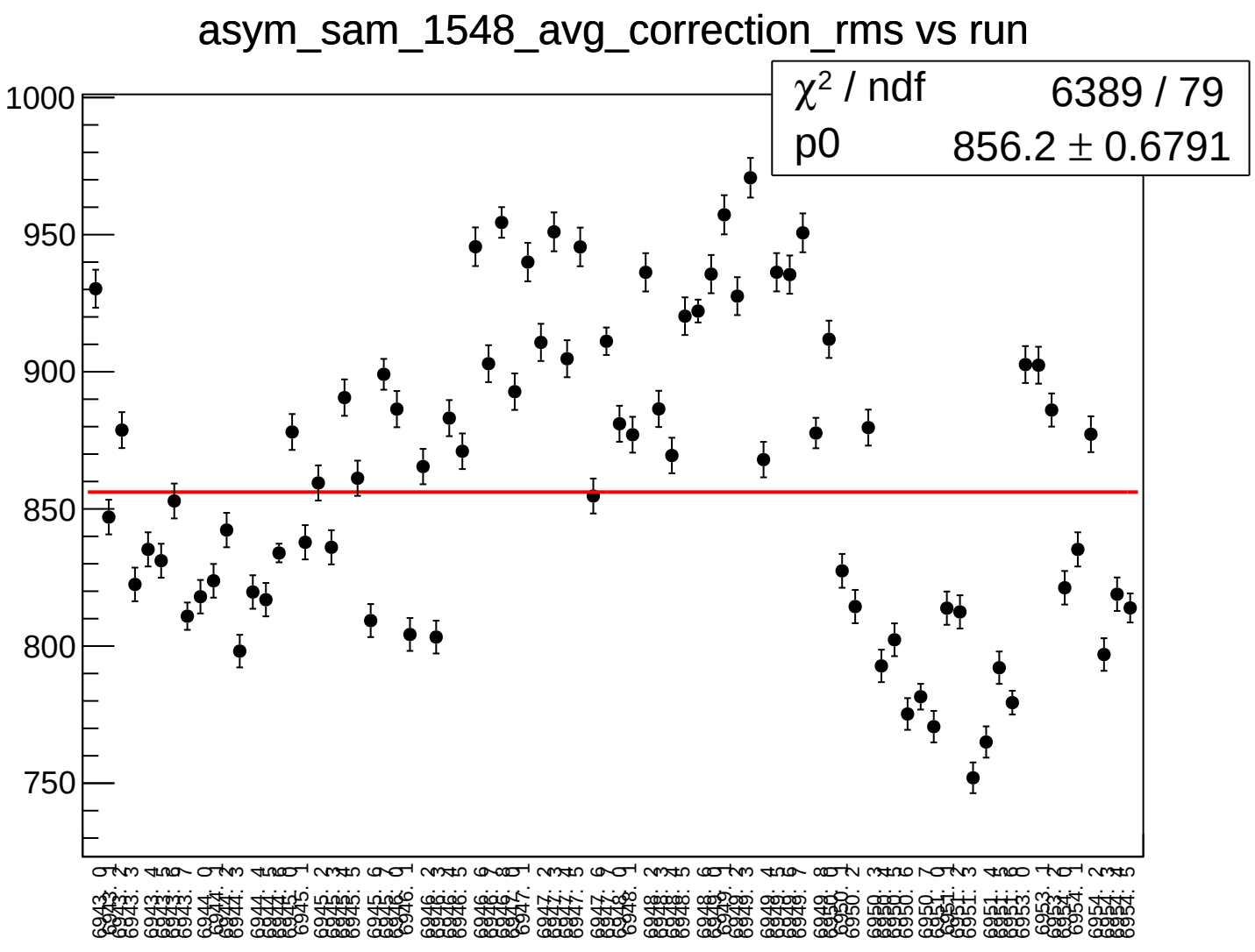

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 75.77 / 79
p0 60.67 ± 111.9
pull
Entries 80
Mean −6.763e+04
Std Dev 6.767e+04

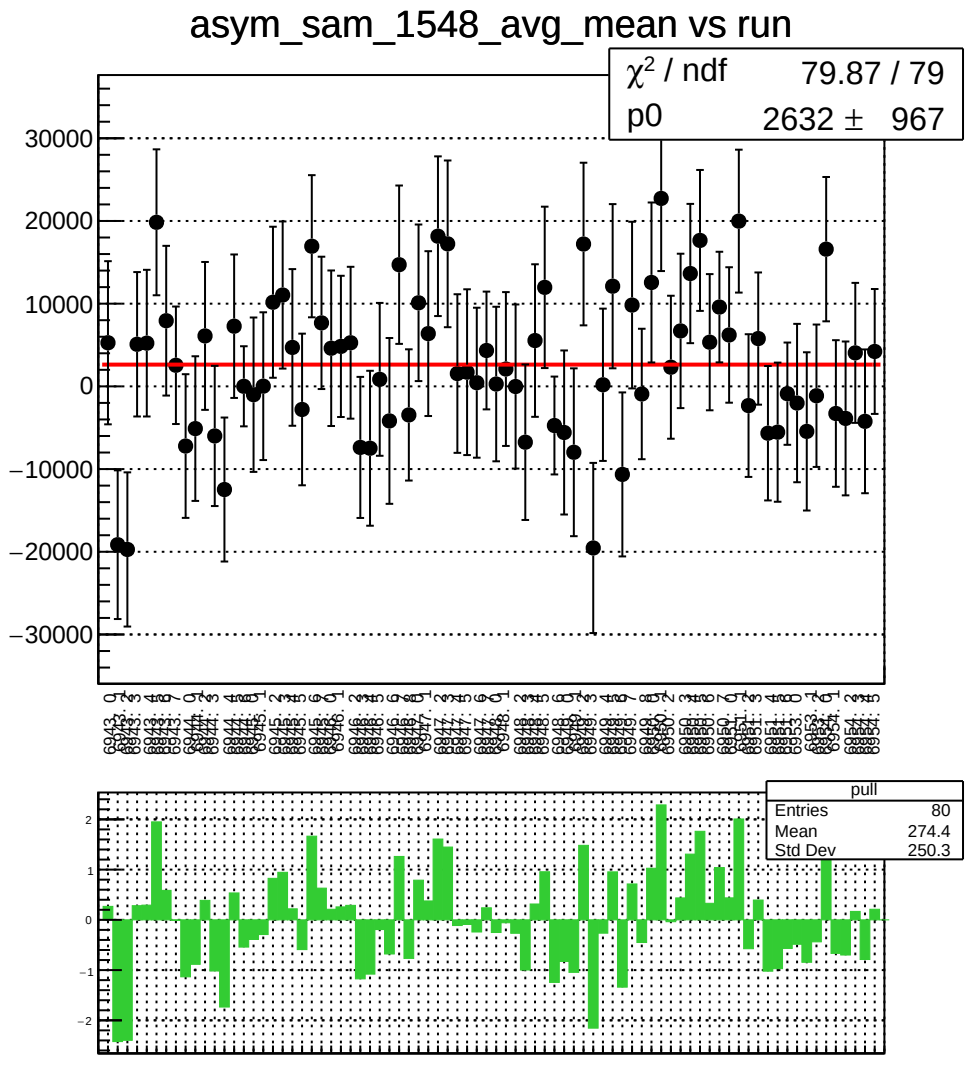

pull1D
Entries 80
Mean −6.42e−05
Std Dev 0.9732

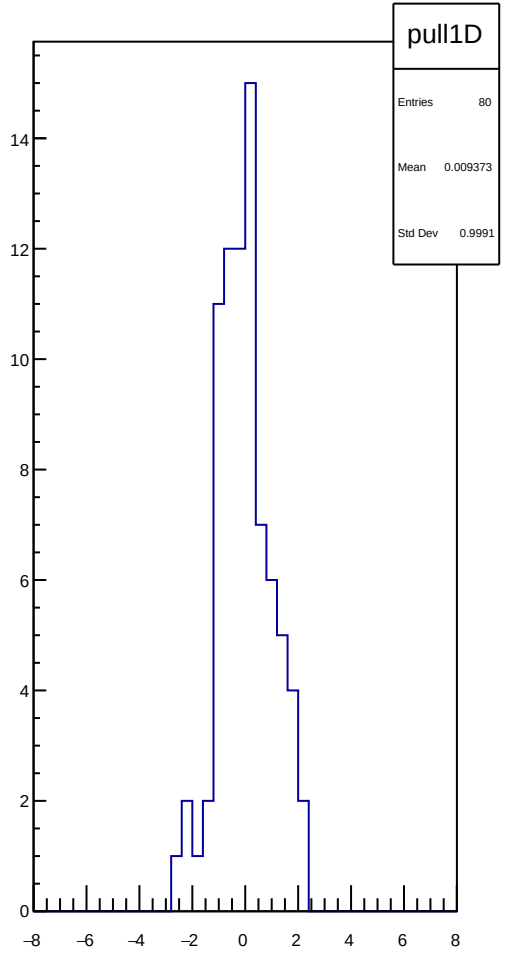

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 3266 / 79
p0 99.86 ± 0.07913
130
125
120
115
110
105
100
95

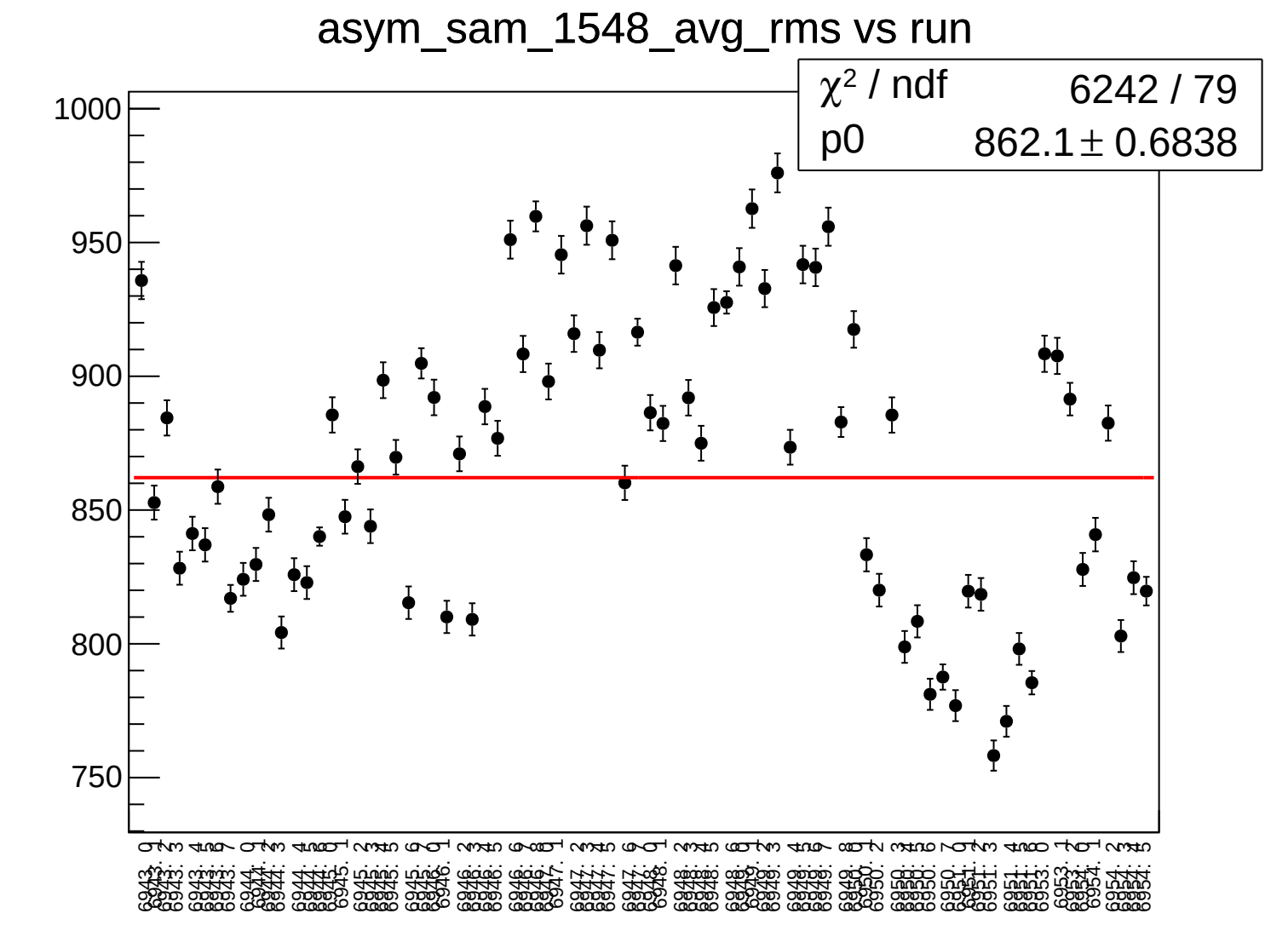

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 80.5 / 79
p0 −2581 ± 960.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean 232.4
Std Dev 211.7
2
1
0
−1
−2

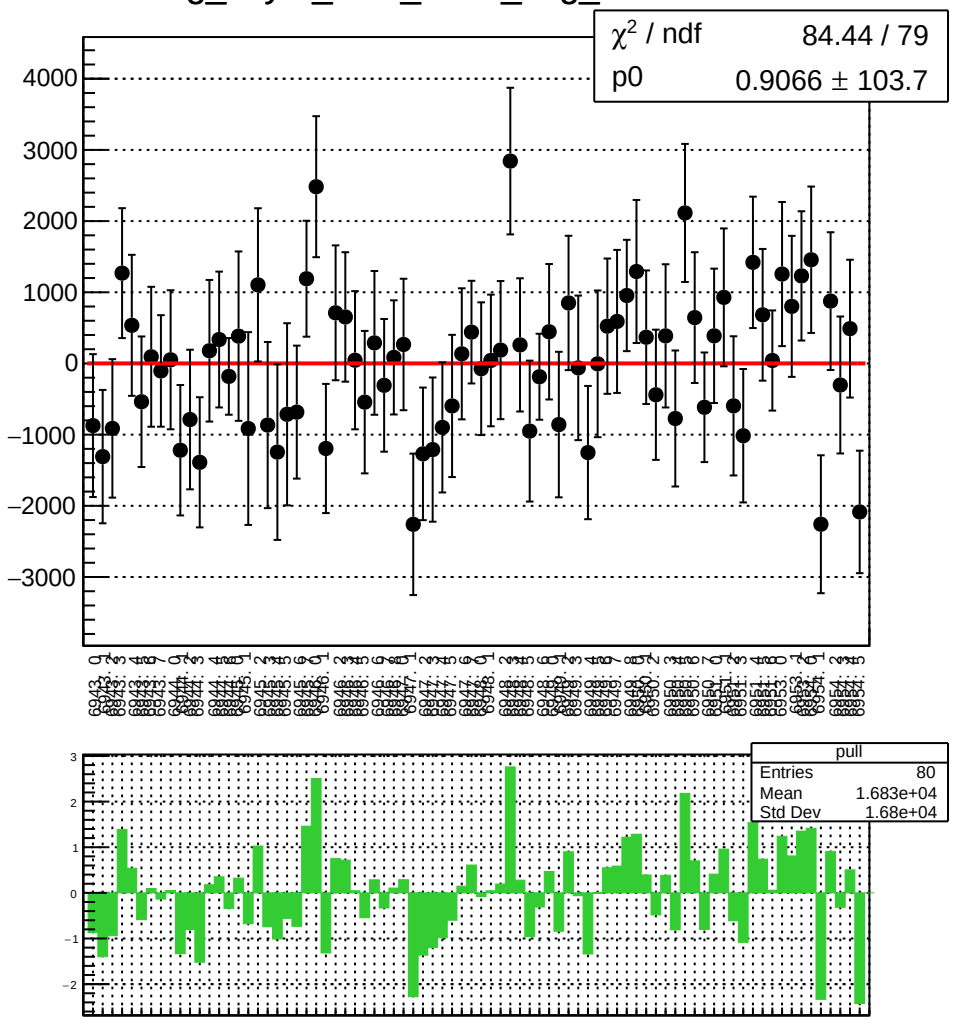

pull1D
Entries 80
Mean −0.008897
Std Dev 1.003
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

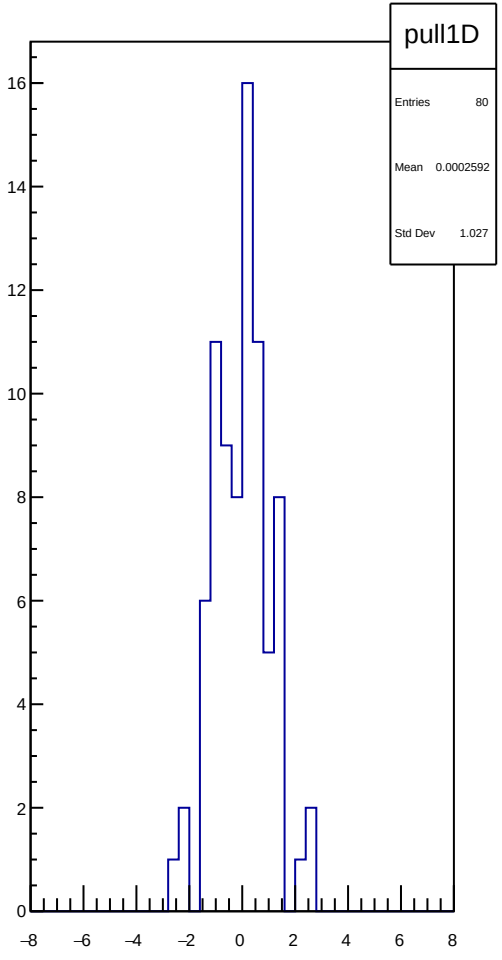

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 6389 / 79
p0 856.2 ± 0.6791
1000
950
900
850
800
750

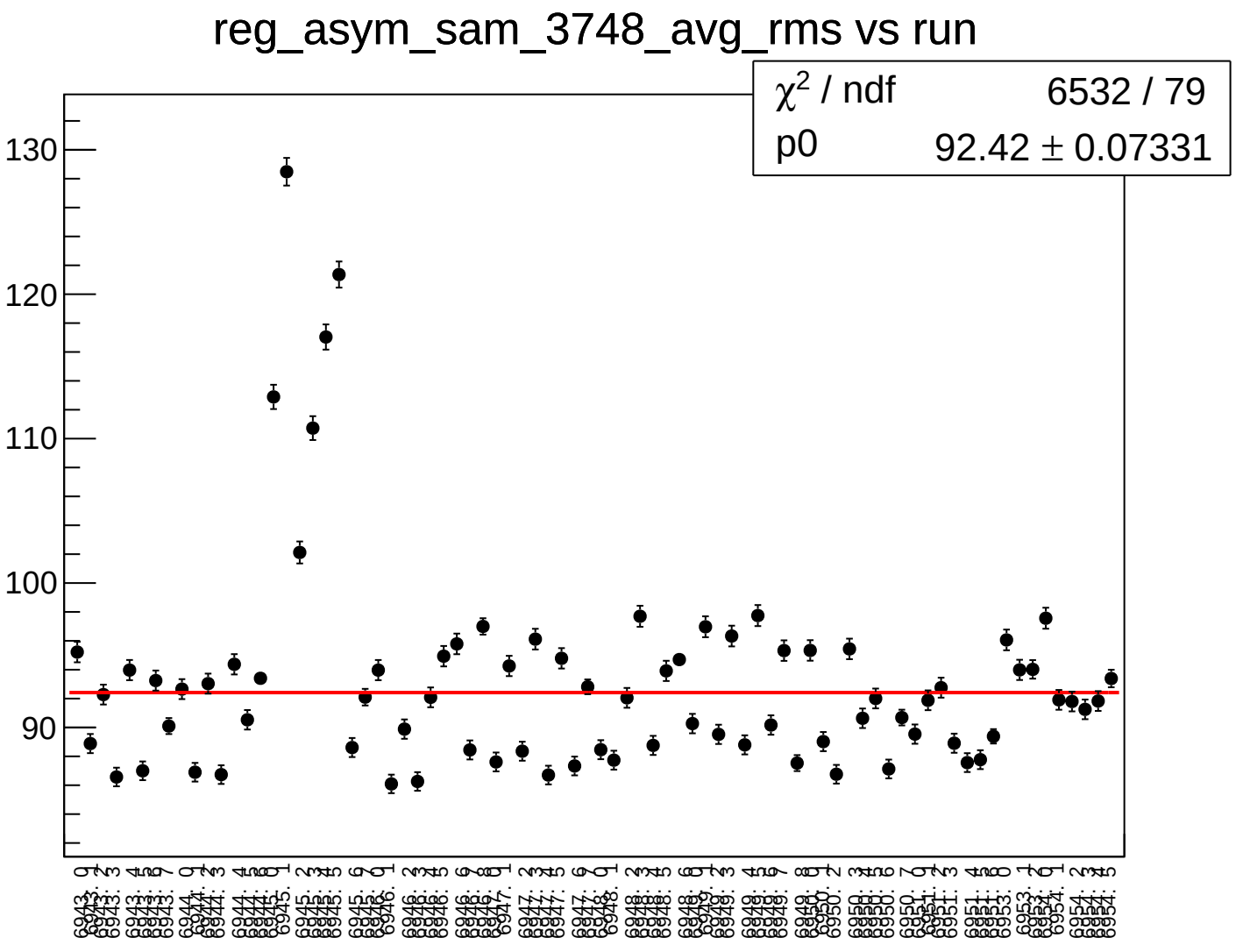

asym_sam_1548_avg_mean vs run
χ² / ndf 79.87 / 79
p0 2632 ± 967
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean 274.4
Std Dev 250.3
2
1
0
−1
−2

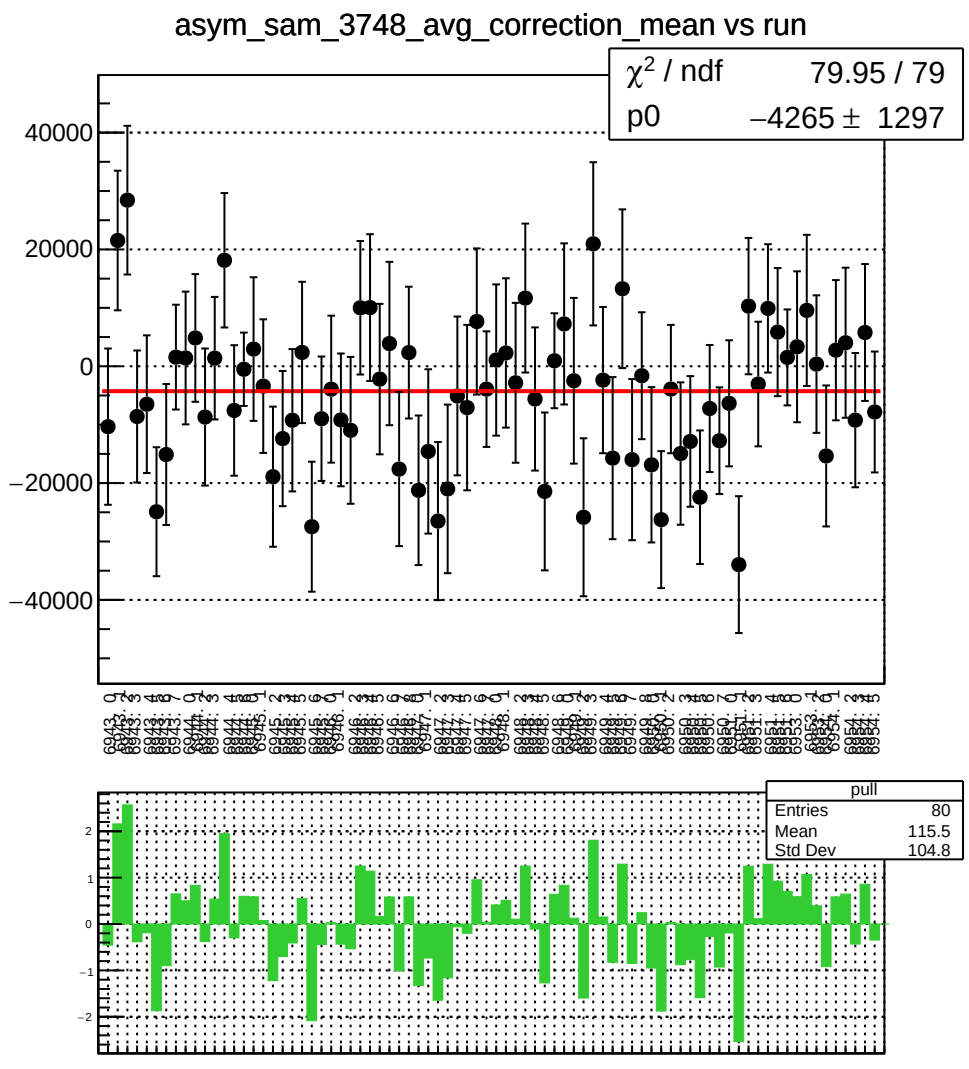

pull1D
Entries 80
Mean 0.009373
Std Dev 0.9991
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

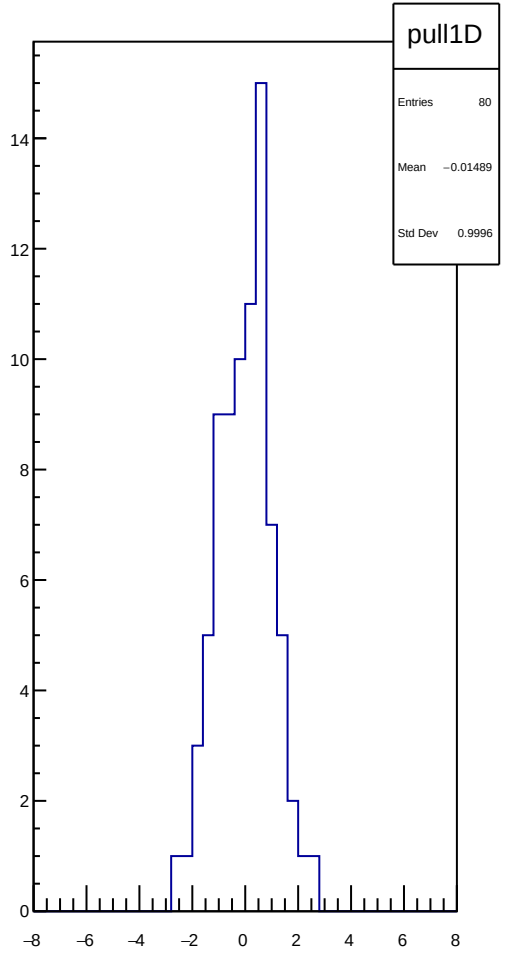

asym_sam_1548_avg_rms vs run
χ² / ndf 6242 / 79
p0 862.1 ± 0.6838
1000
950
900
850
800
750

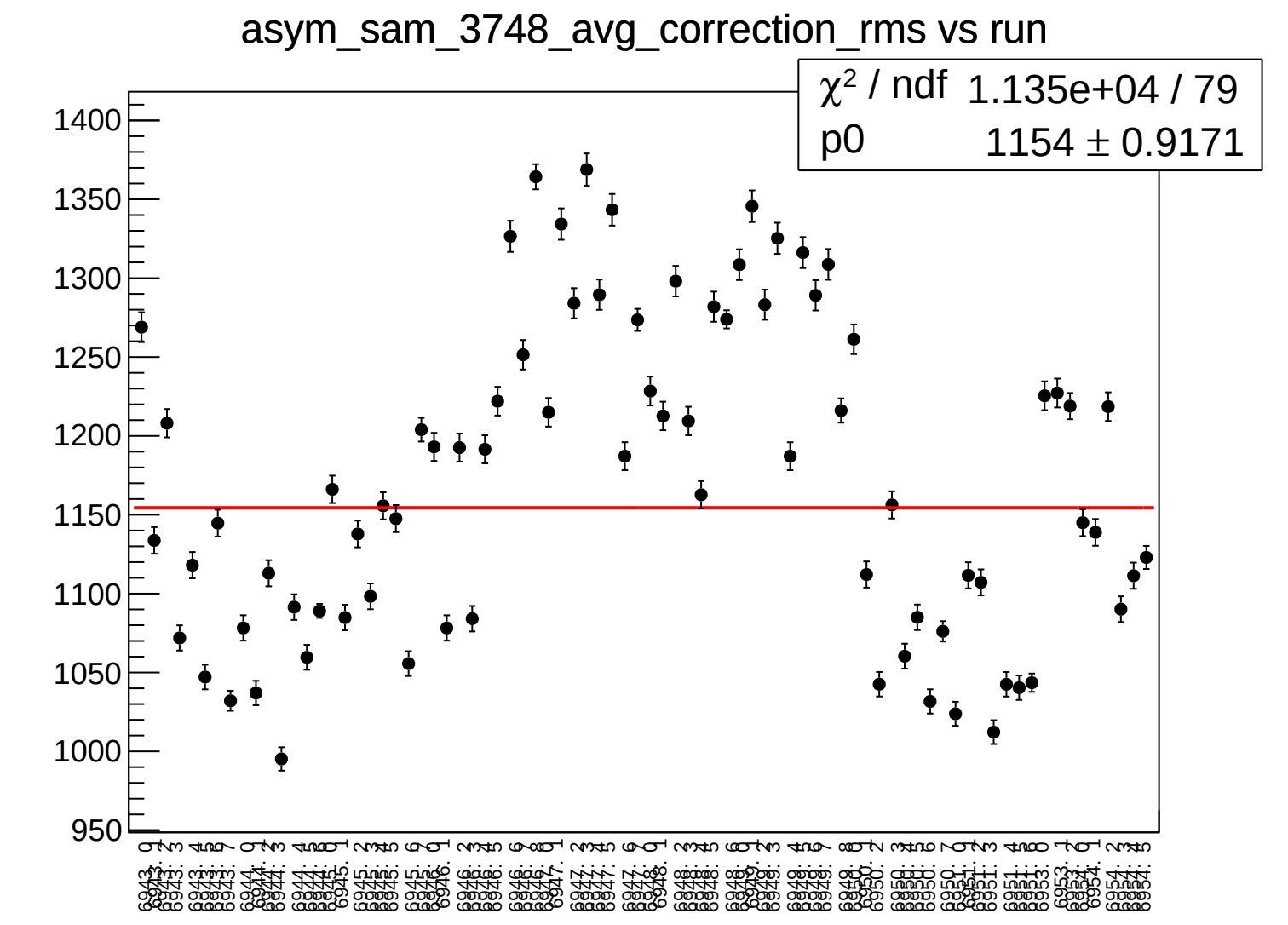

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 84.44 / 79
p0 0.9066 ± 103.7
pull
Entries 80
Mean 1.683e+04
Std Dev 1.68e+04

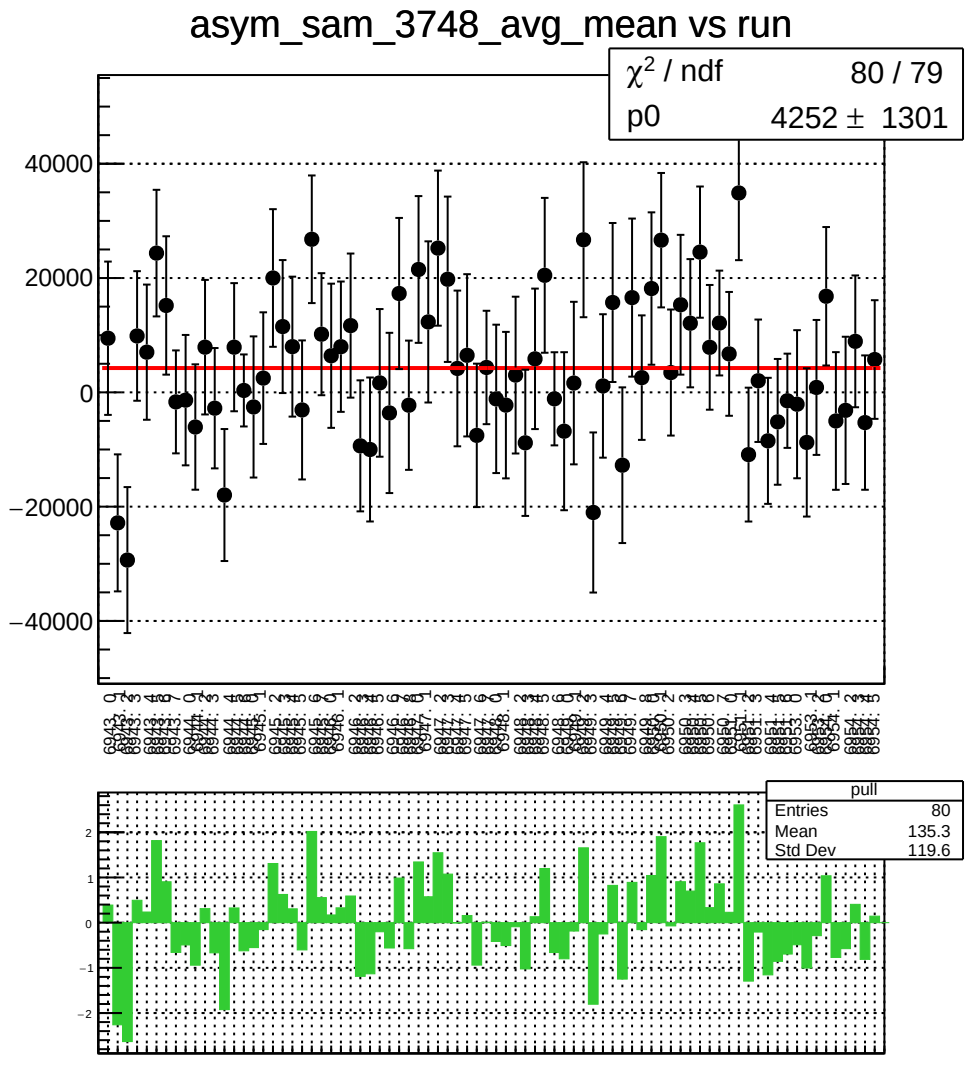

pull1D
Entries 80
Mean 0.0002592
Std Dev 1.027

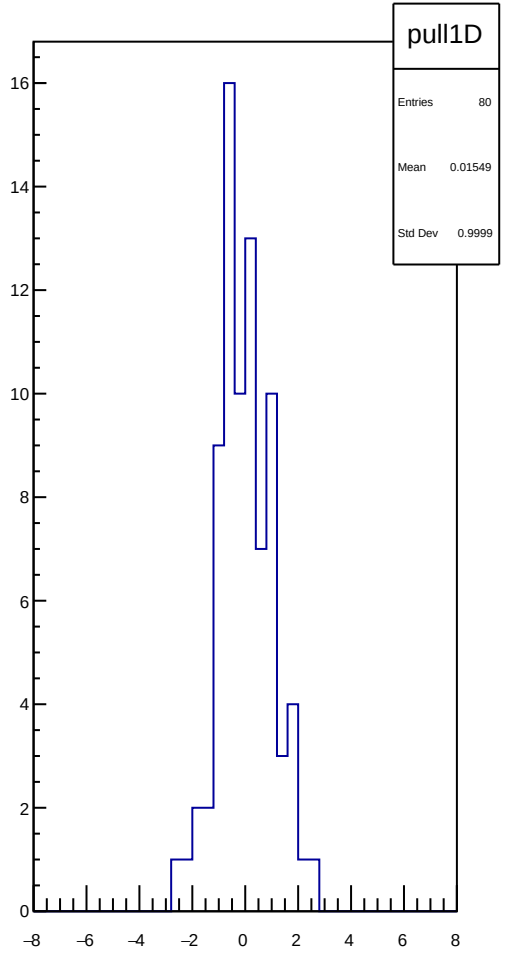

reg_asym_sam_3748_avg_rms vs run
χ^2 / ndf 6532 / 79
p0 92.42 ± 0.07331
130
120
110
100
90

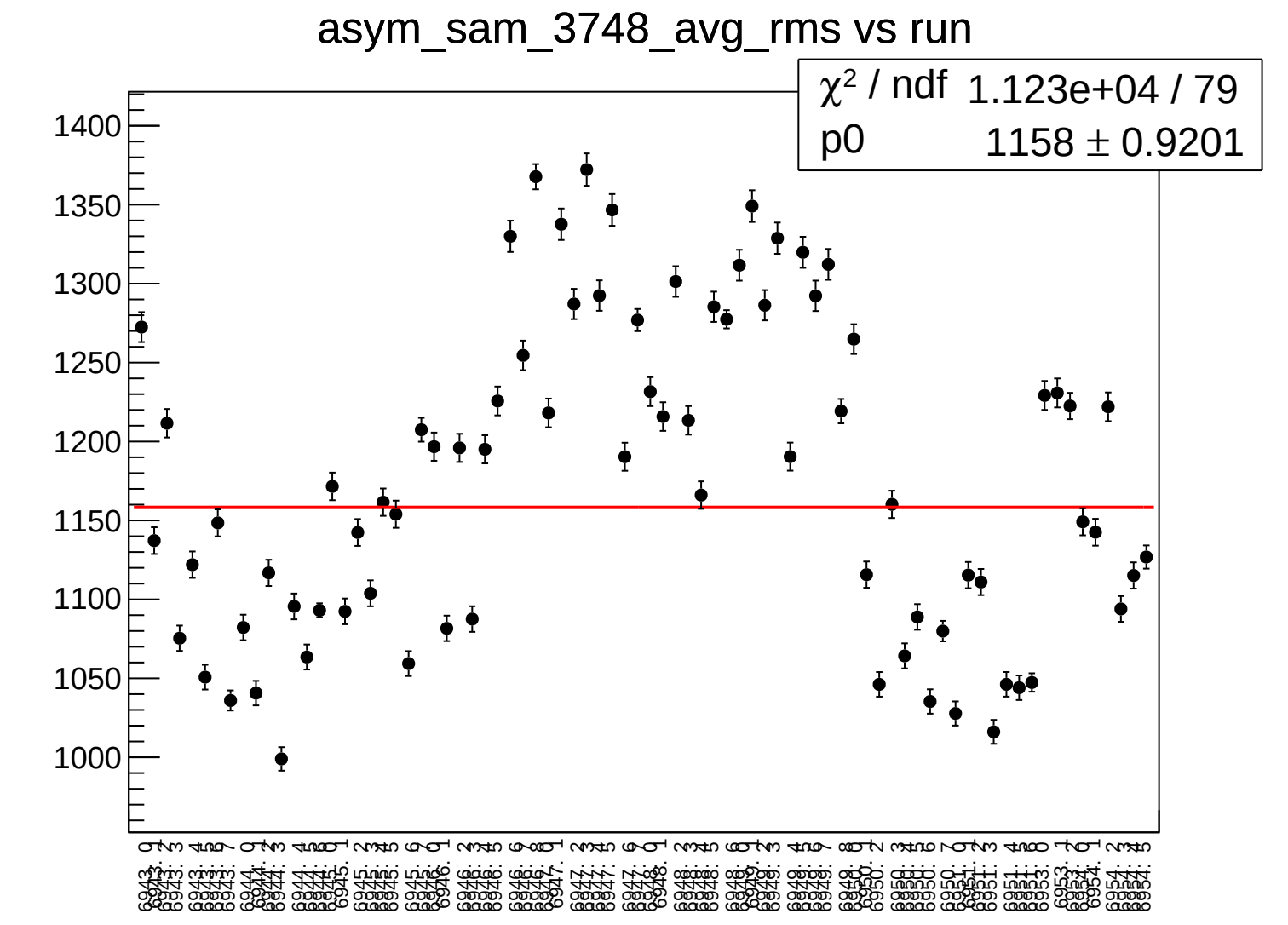

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 79.95 / 79
p0 −4265 ± 1297
40000
20000
0
−20000
−40000
pull
Entries 80
Mean 115.5
Std Dev 104.8
2
1
0
−1
−2

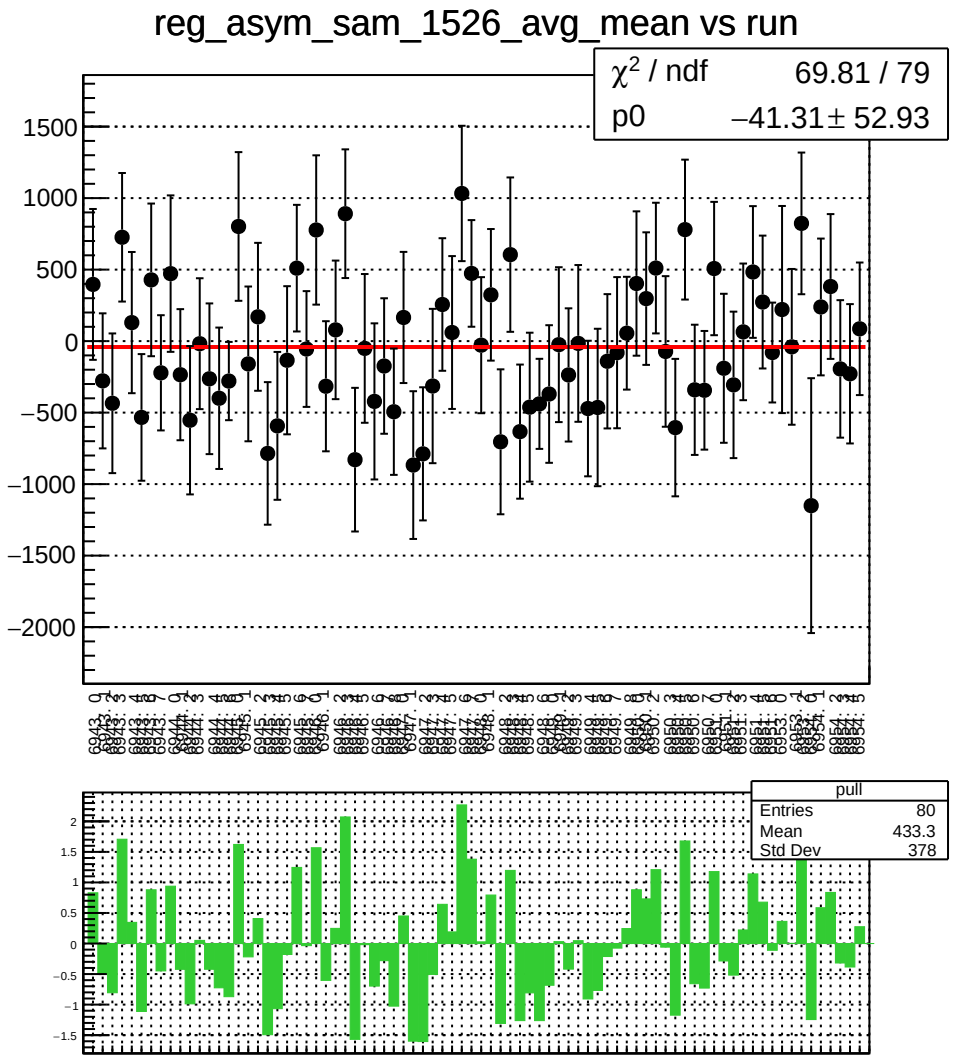

pull1D
Entries 80
Mean −0.01489
Std Dev 0.9996
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

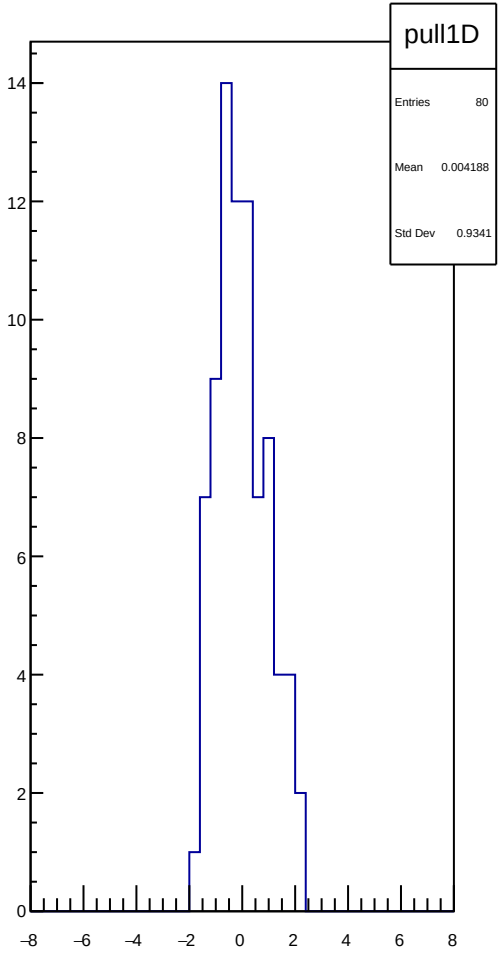

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 1.135e+04 / 79
p0 1154 ± 0.9171
1400
1350
1300
1250
1200
1150
1100
1050
1000
950

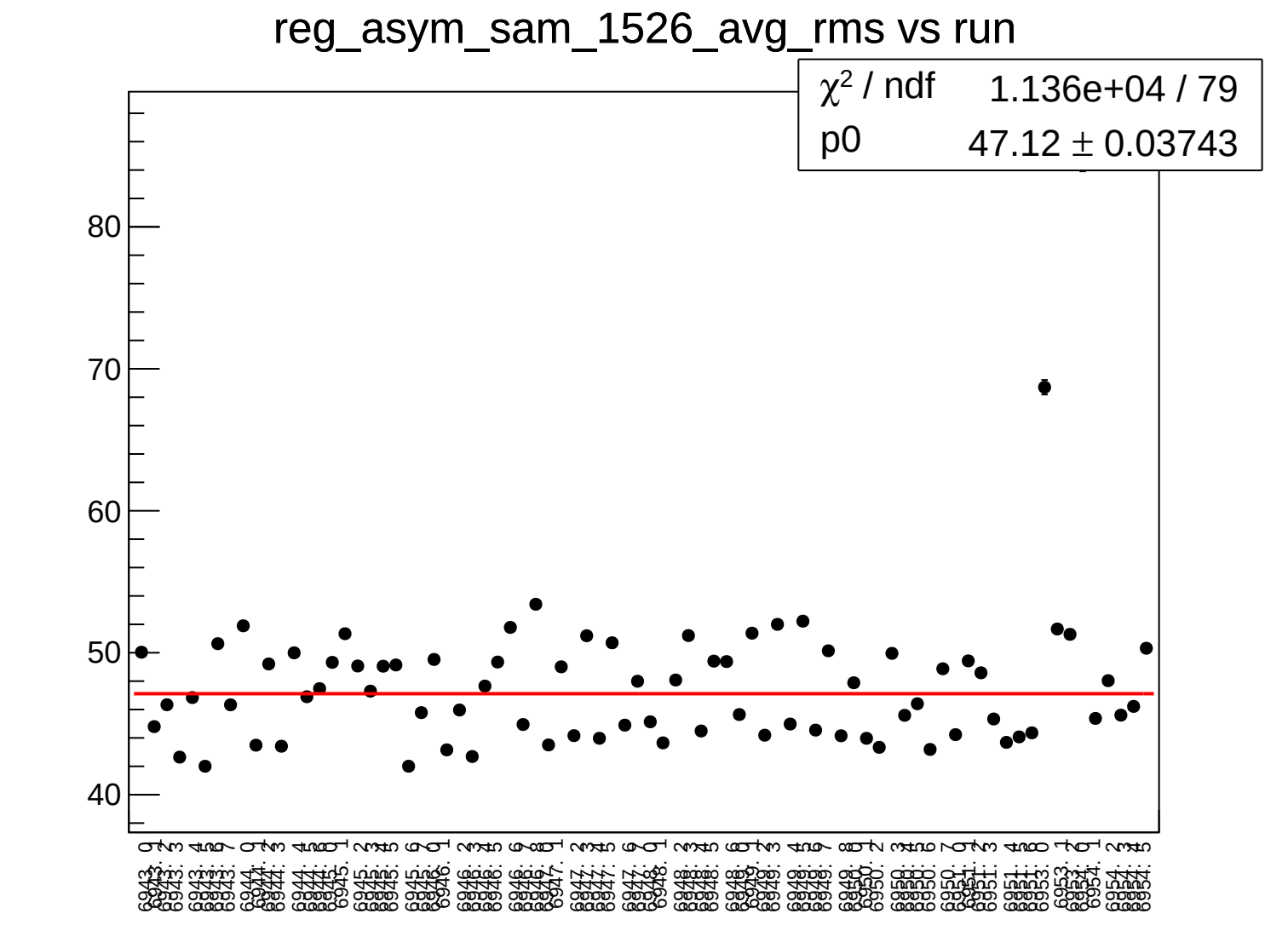

asym_sam_3748_avg_mean vs run
χ² / ndf 80 / 79
p0 4252 ± 1301
40000
20000
0
−20000
−40000
pull
Entries 80
Mean 135.3
Std Dev 119.6
2
1
0
−1
−2

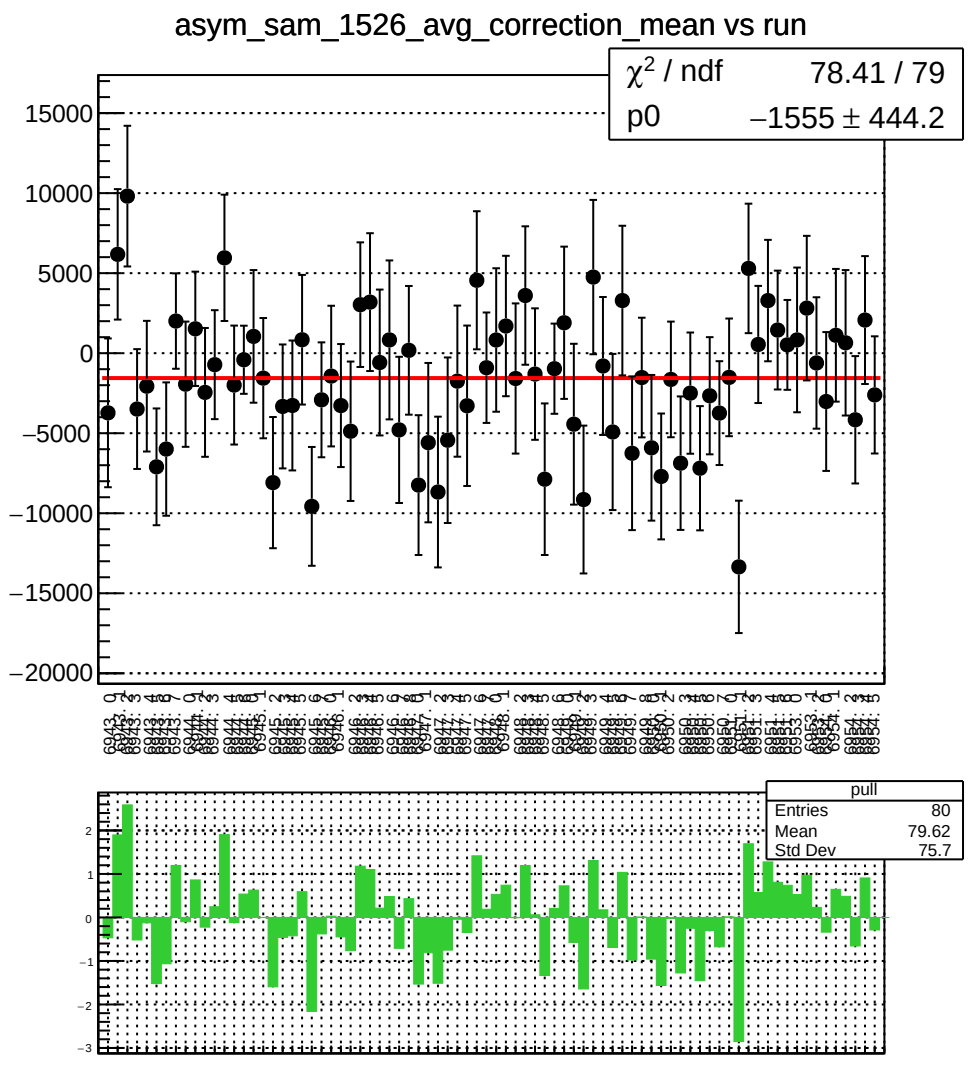

pull1D
Entries 80
Mean 0.01549
Std Dev 0.9999
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

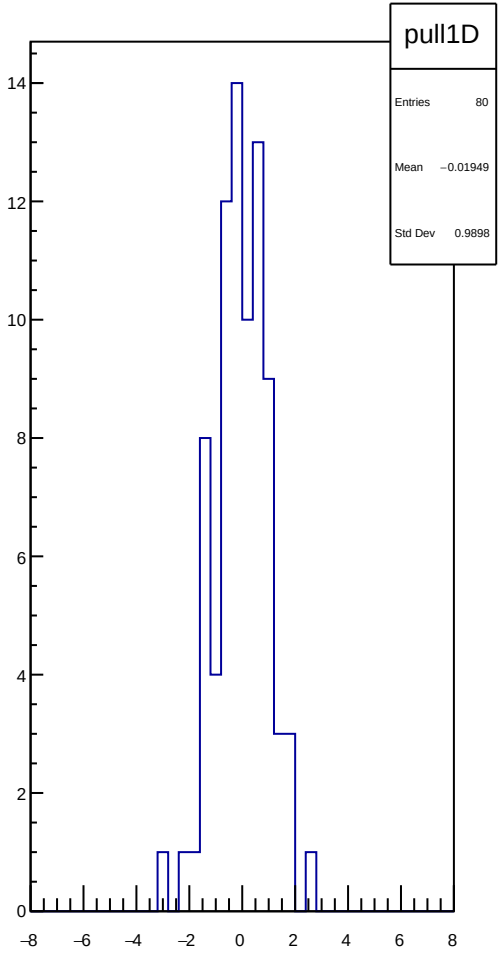

asym_sam_3748_avg_rms vs run
χ² / ndf 1.123e+04 / 79
p0 1158 ± 0.9201
1400
1350
1300
1250
1200
1150
1100
1050
1000

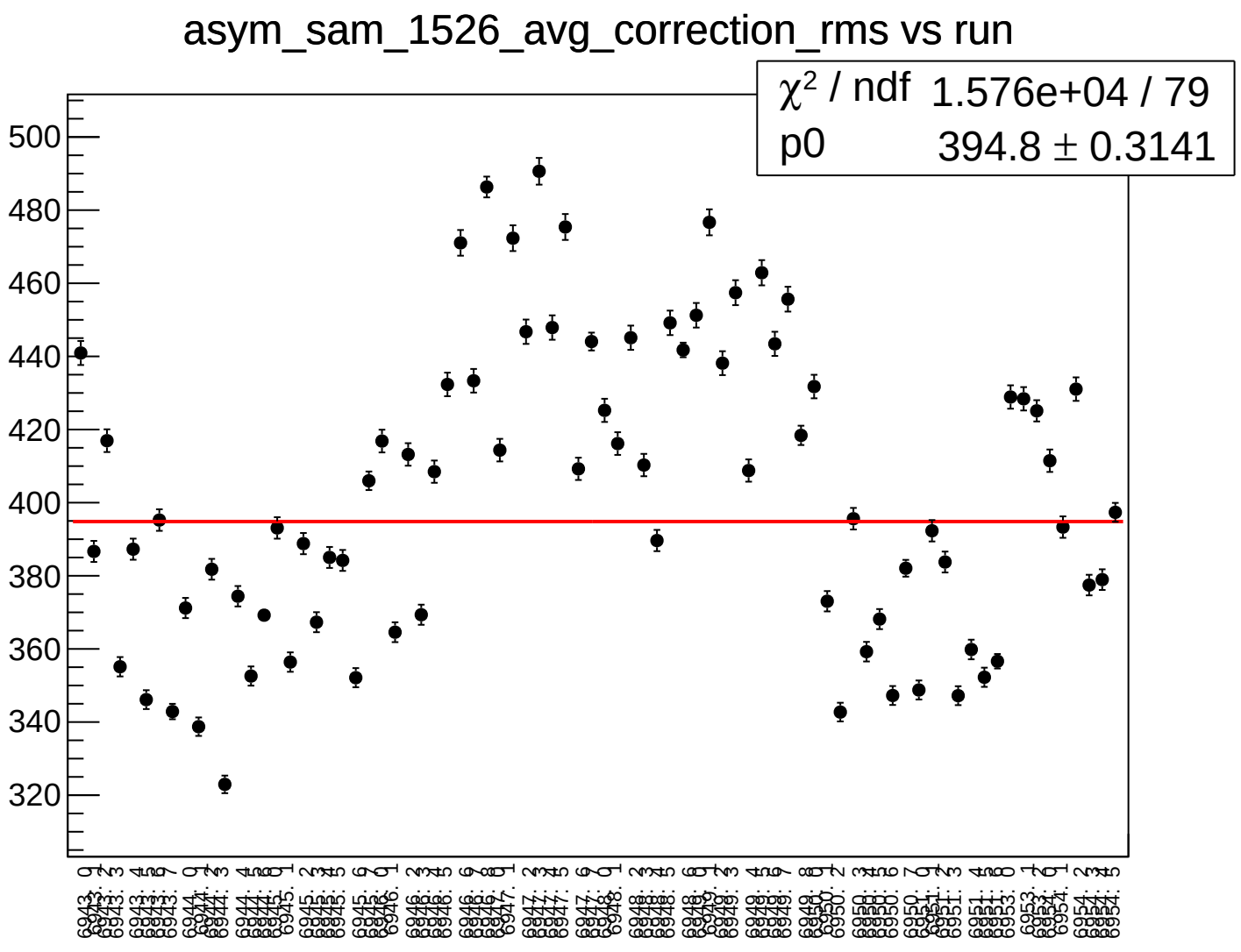

reg_asym_sam_1526_avg_mean vs run
χ^2 / ndf 69.81 / 79
p0 −41.31 ± 52.93
pull
Entries 80
Mean 433.3
Std Dev 378

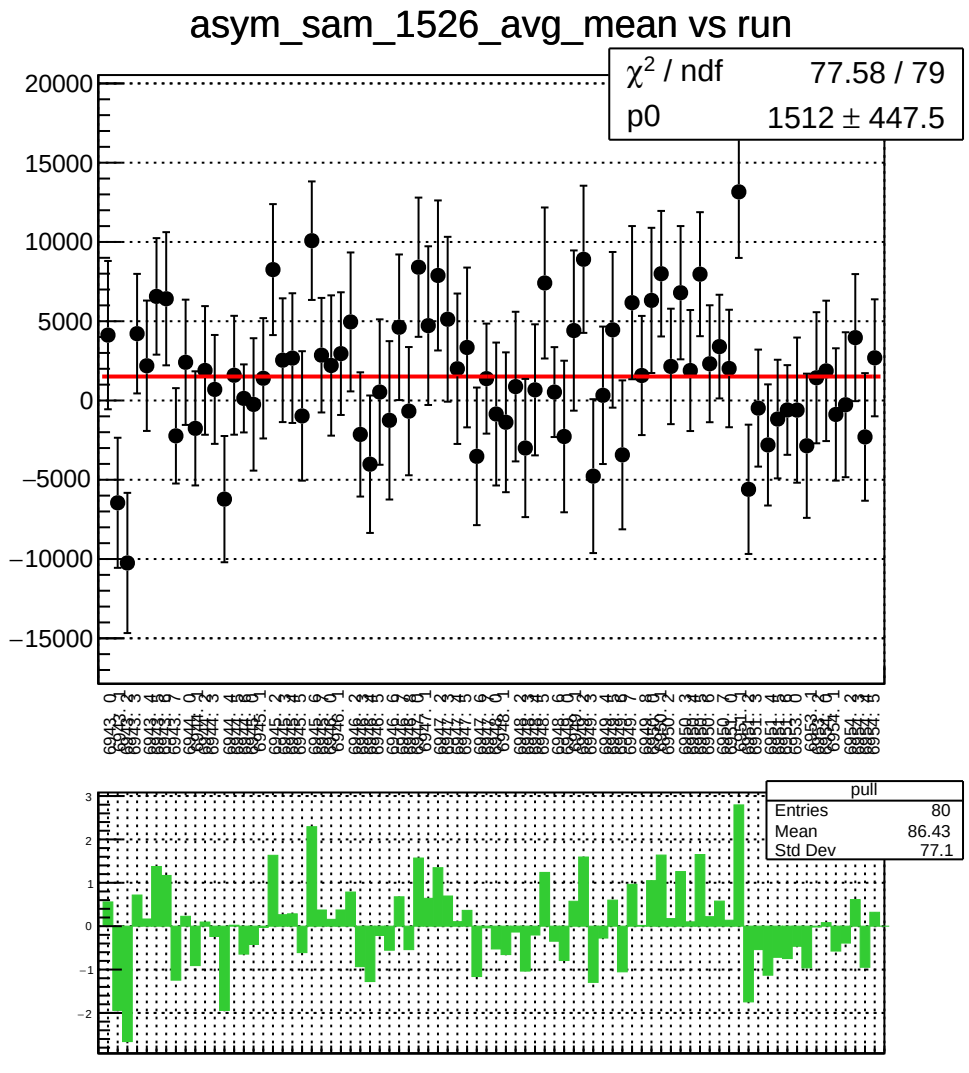

pull1D
Entries 80
Mean 0.004188
Std Dev 0.9341

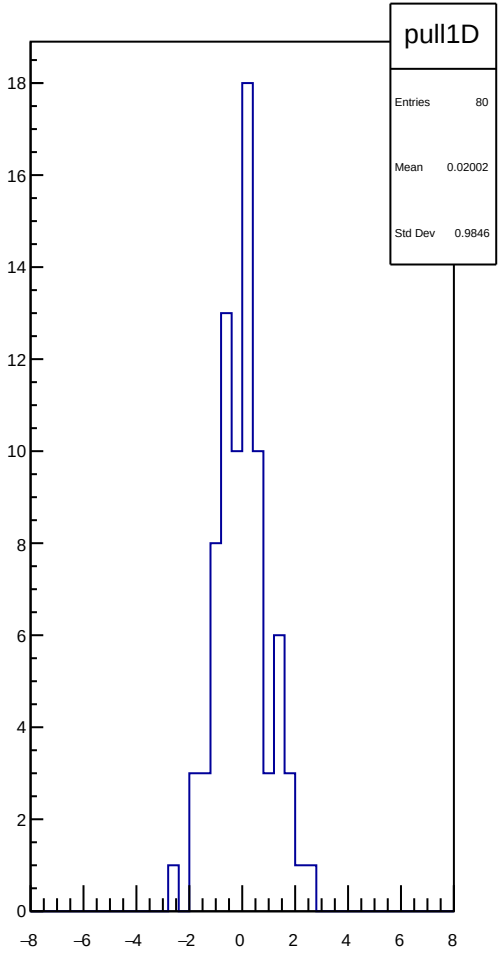

reg_asym_sam_1526_avg_rms vs run
χ^2 / ndf 1.136e+04 / 79
p0 47.12 ± 0.03743
80
70
60
50
40

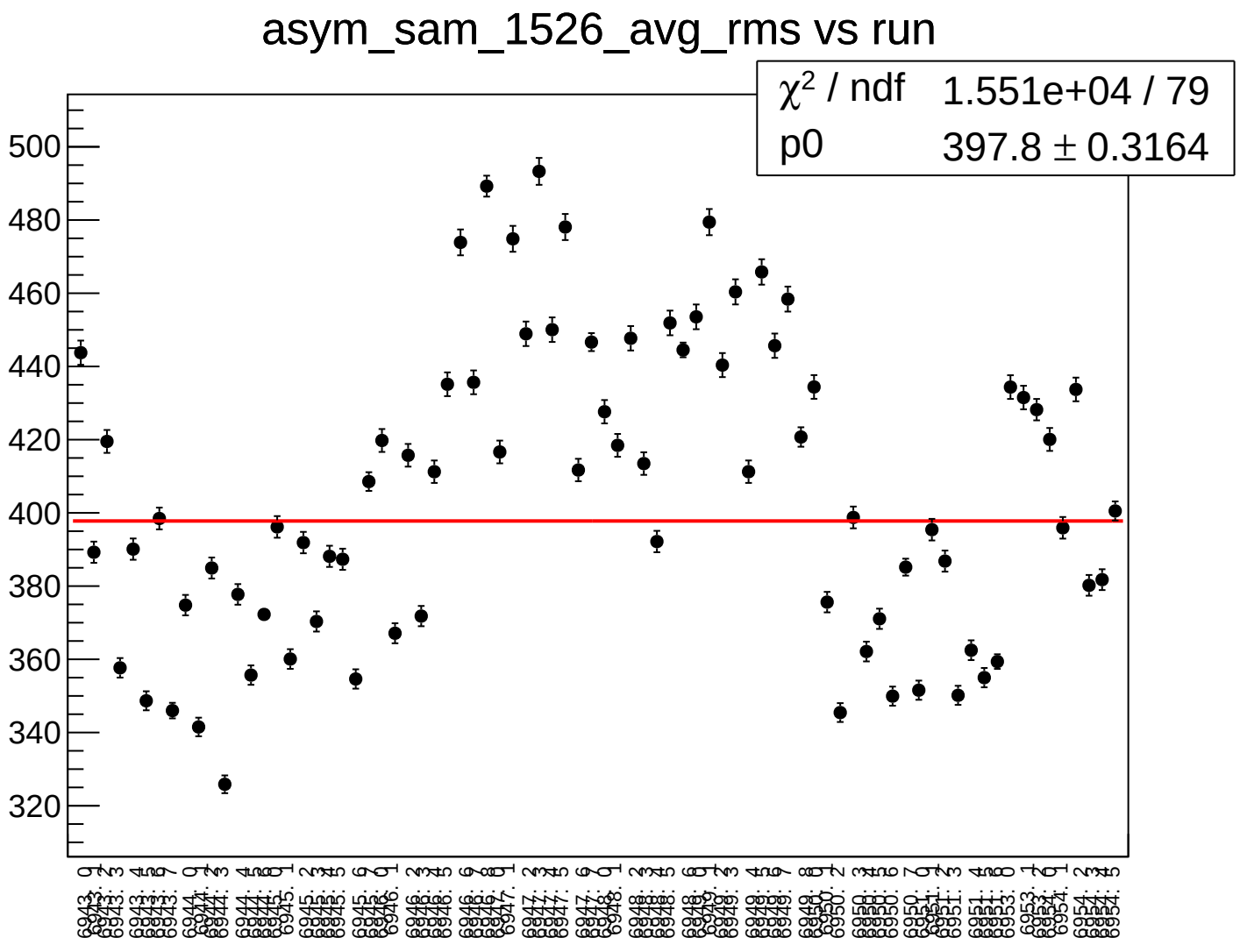

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 78.41 / 79
p0 −1555 ± 444.2
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 80
Mean 79.62
Std Dev 75.7
2
1
0
−1
−2
−3

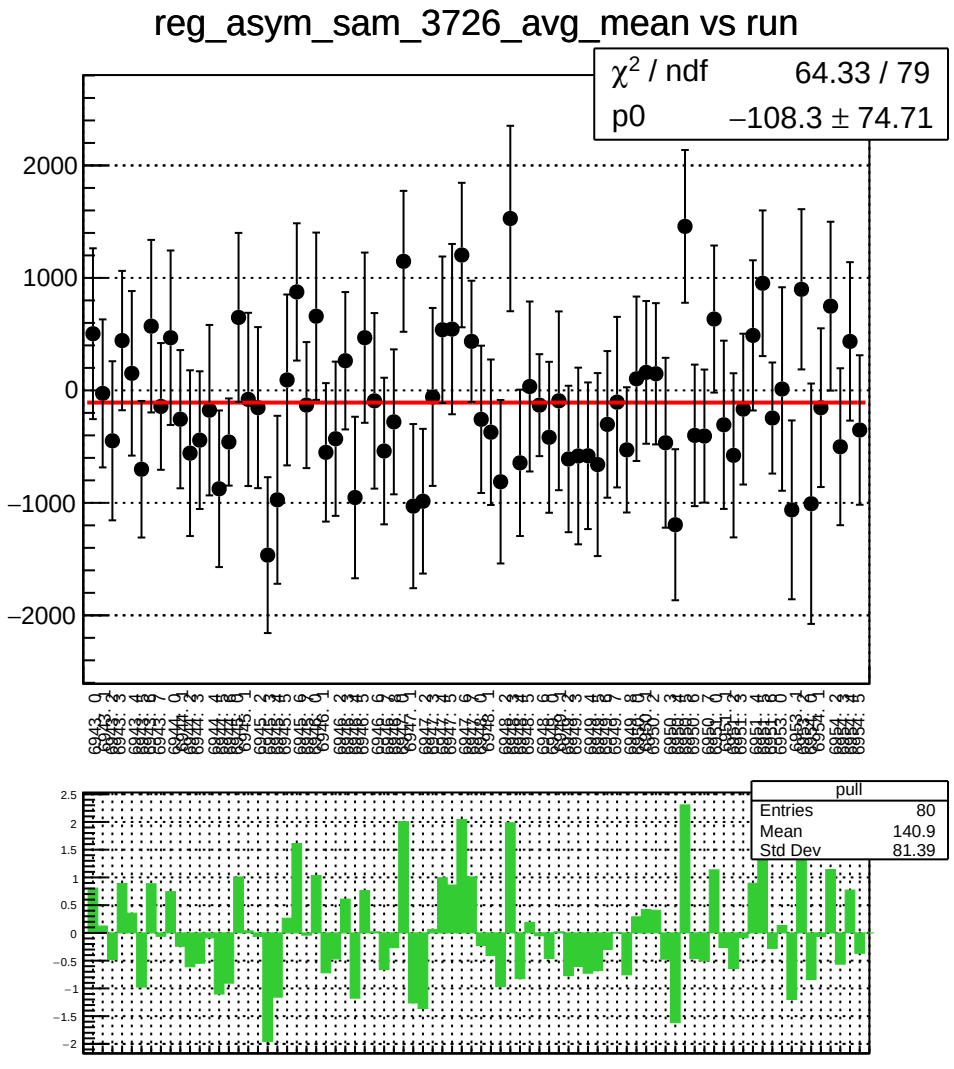

pull1D
Entries 80
Mean −0.01949
Std Dev 0.9898
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

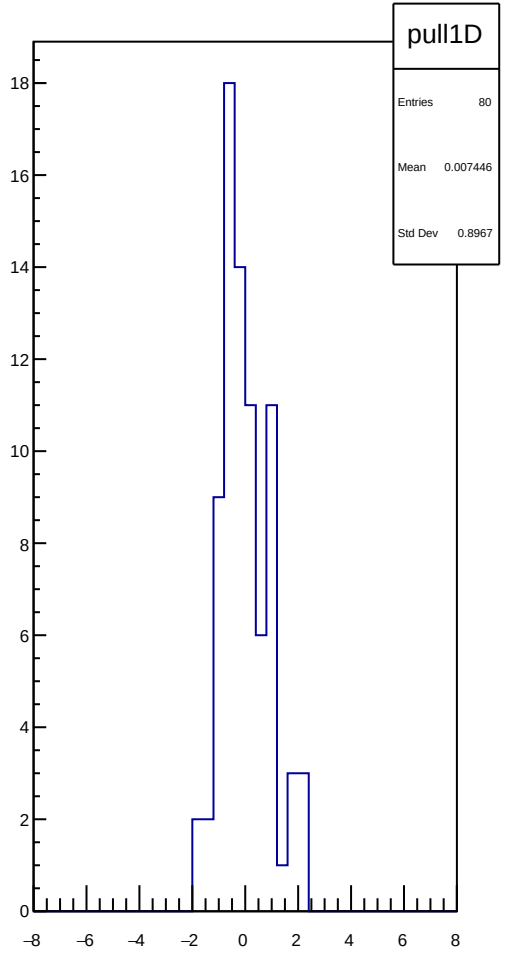

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 1.576e+04 / 79
p0 394.8 ± 0.3141
500
480
460
440
420
400
380
360
340
320

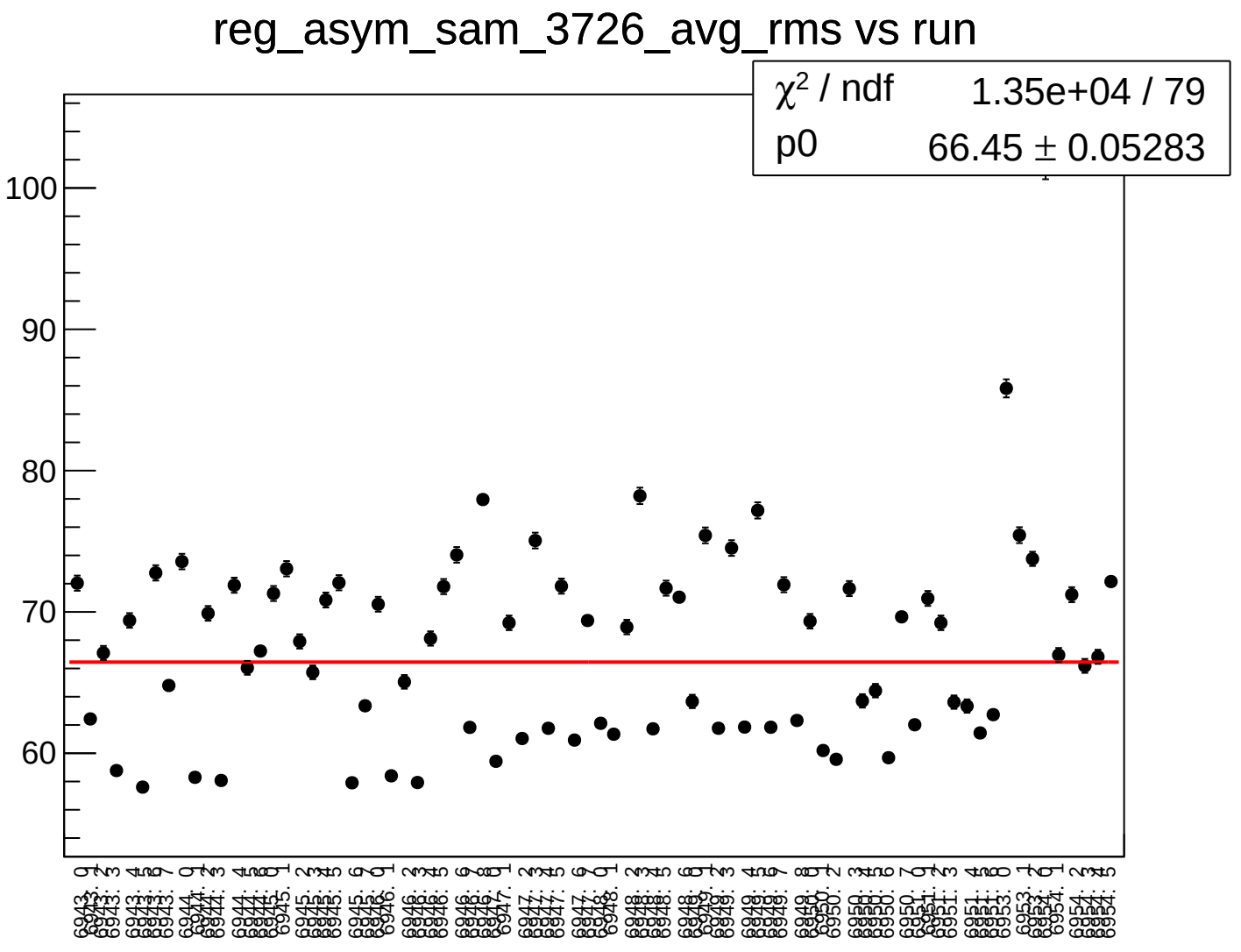

asym_sam_1526_avg_mean vs run
χ² / ndf 77.58 / 79
p0 1512 ± 447.5
pull
Entries 80
Mean 86.43
Std Dev 77.1

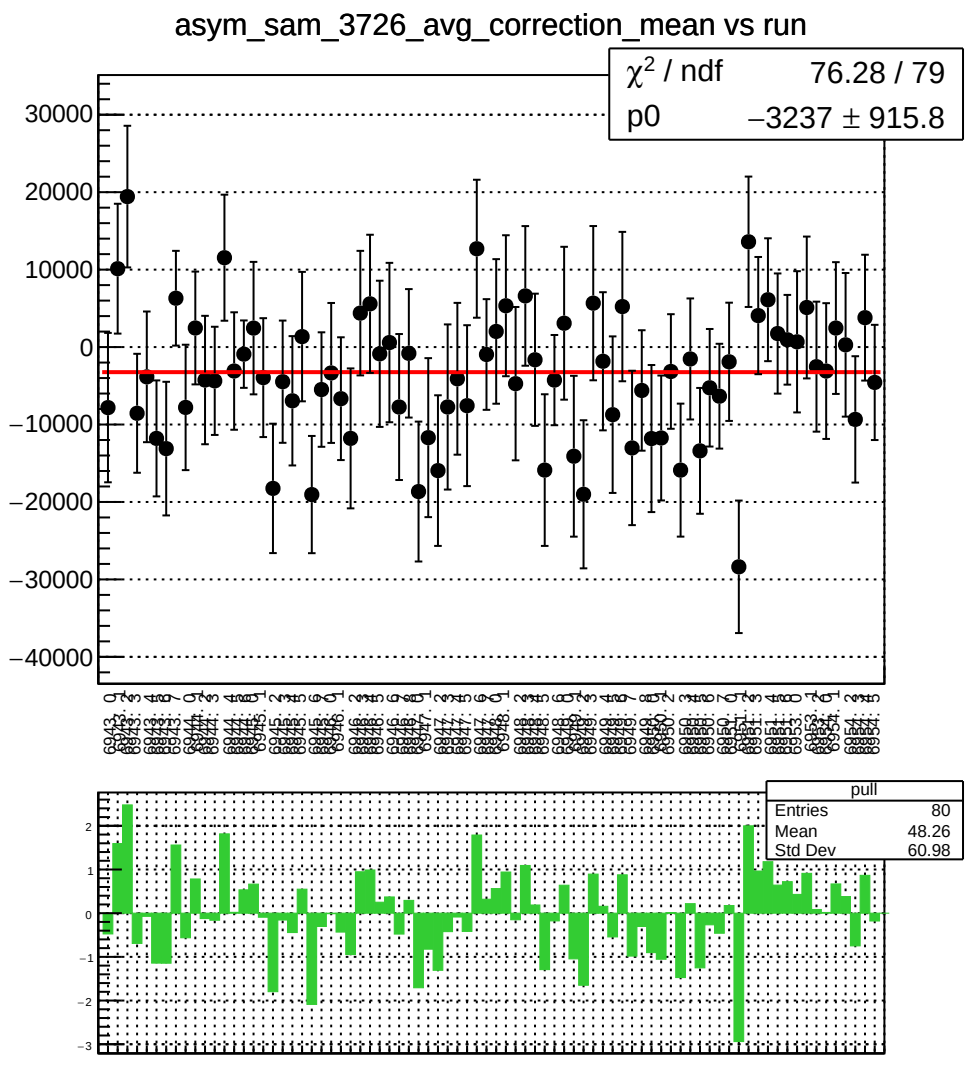

pull1D
Entries 80
Mean 0.02002
Std Dev 0.9846

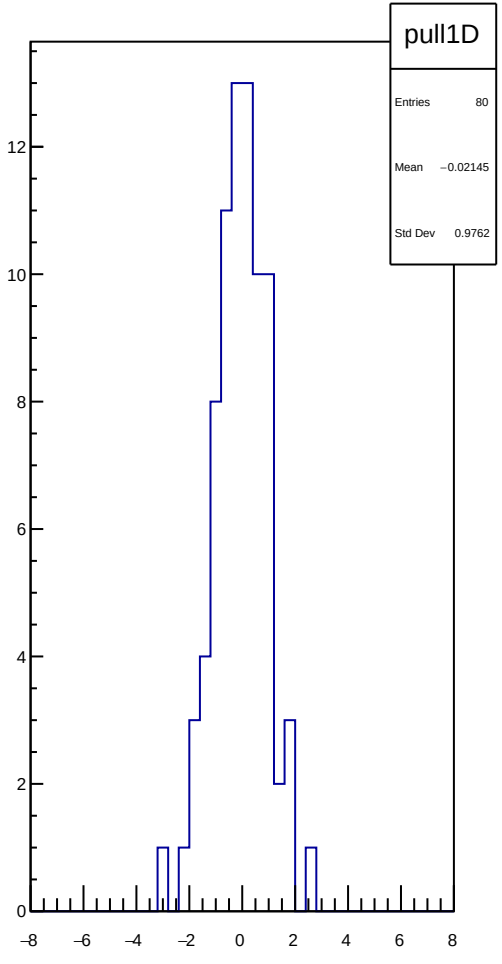

asym_sam_1526_avg_rms vs run
χ² / ndf 1.551e+04 / 79
p0 397.8 ± 0.3164
500
480
460
440
420
400
380
360
340
320

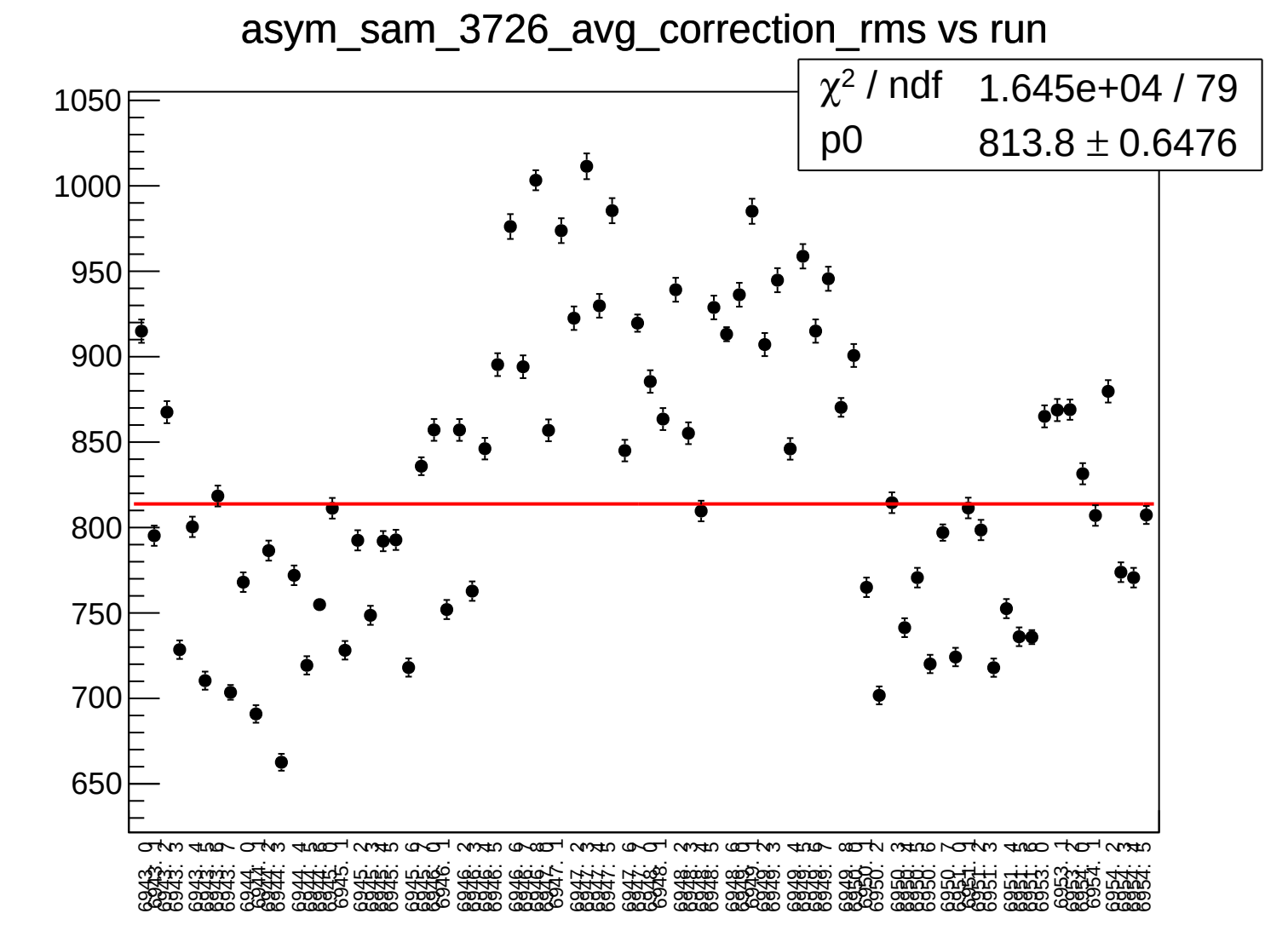

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 64.33 / 79
p0 −108.3 ± 74.71
2000
1000
0
−1000
−2000
pull
Entries 80
Mean 140.9
Std Dev 81.39
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

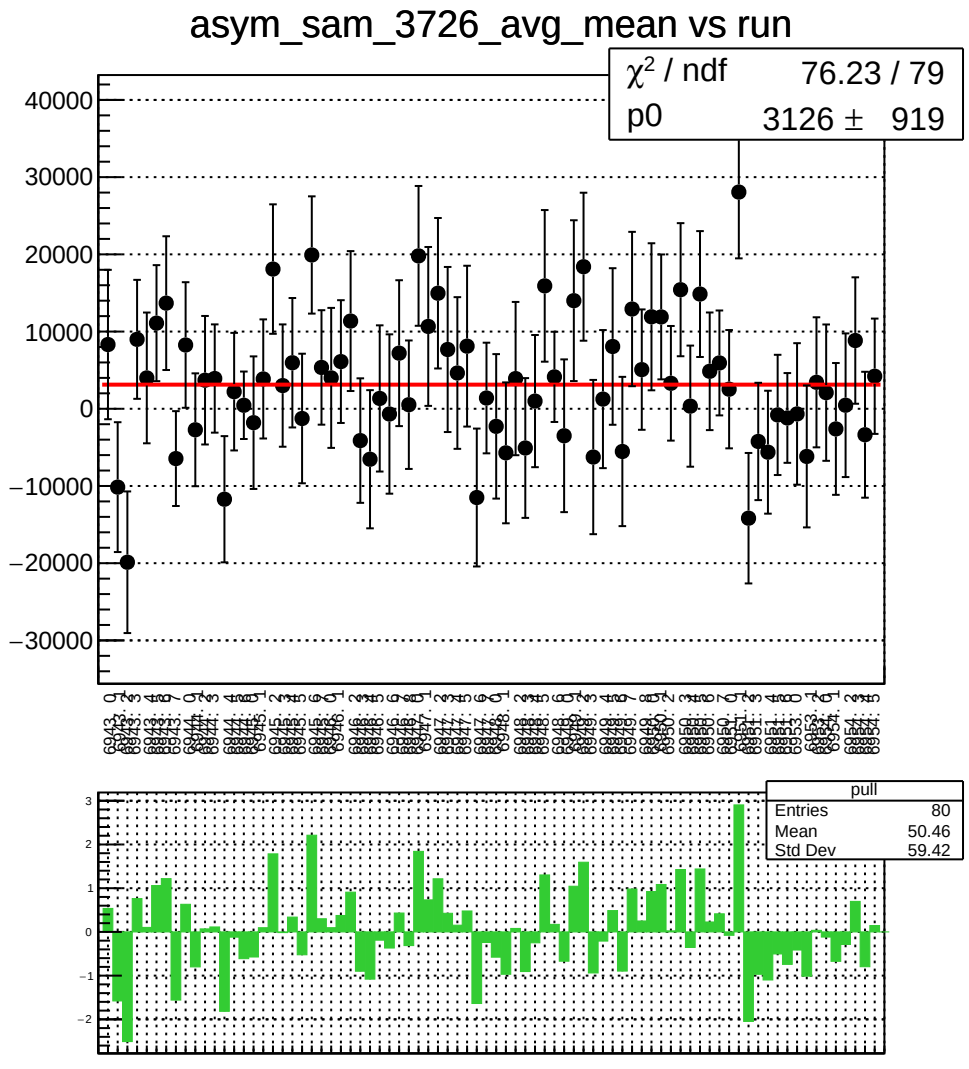

pull1D
Entries 80
Mean 0.007446
Std Dev 0.8967
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

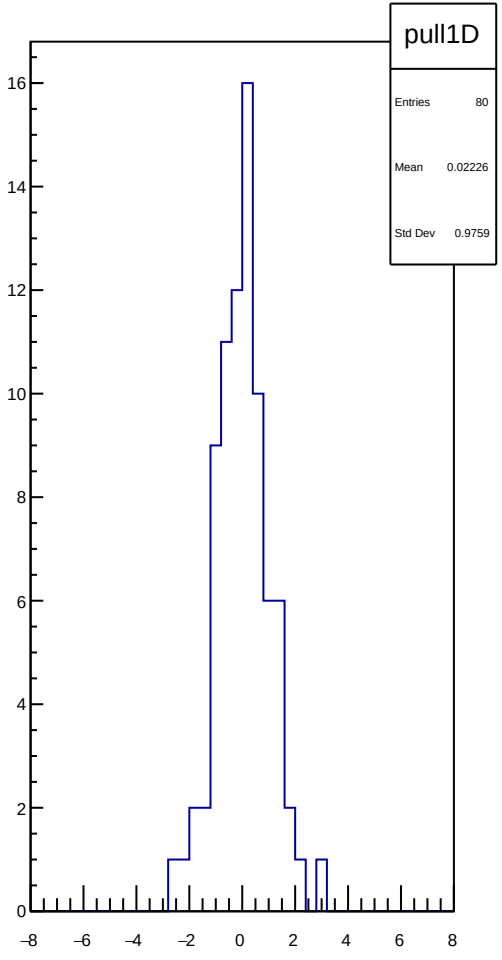

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 1.35e+04 / 79
p0 66.45 ± 0.05283
100
90
80
70
60


asym_sam_3726_avg_correction_mean vs run
χ² / ndf 76.28 / 79
p0 −3237 ± 915.8
pull
Entries 80
Mean 48.26
Std Dev 60.98

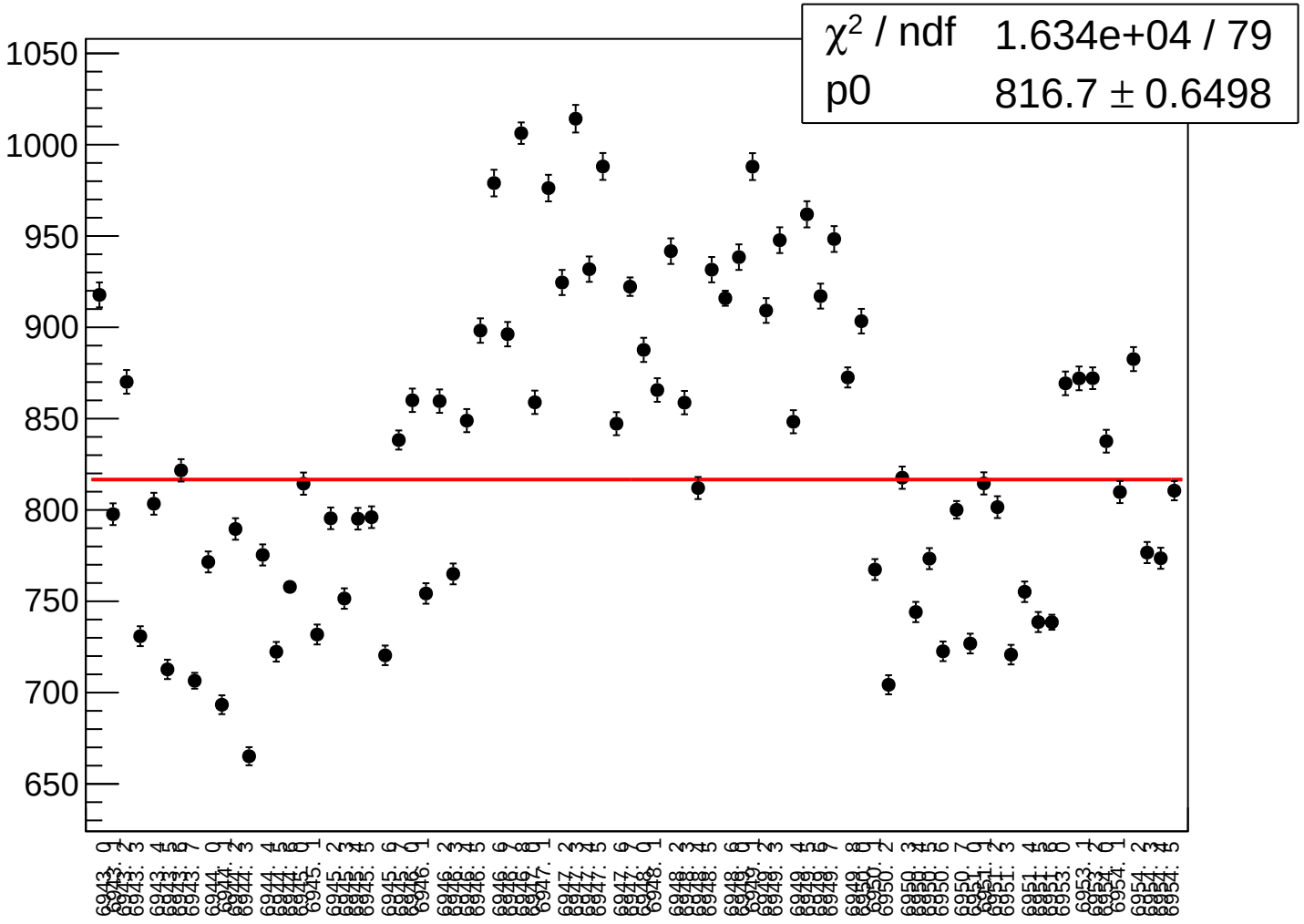

pull1D
Entries 80
Mean −0.02145
Std Dev 0.9762

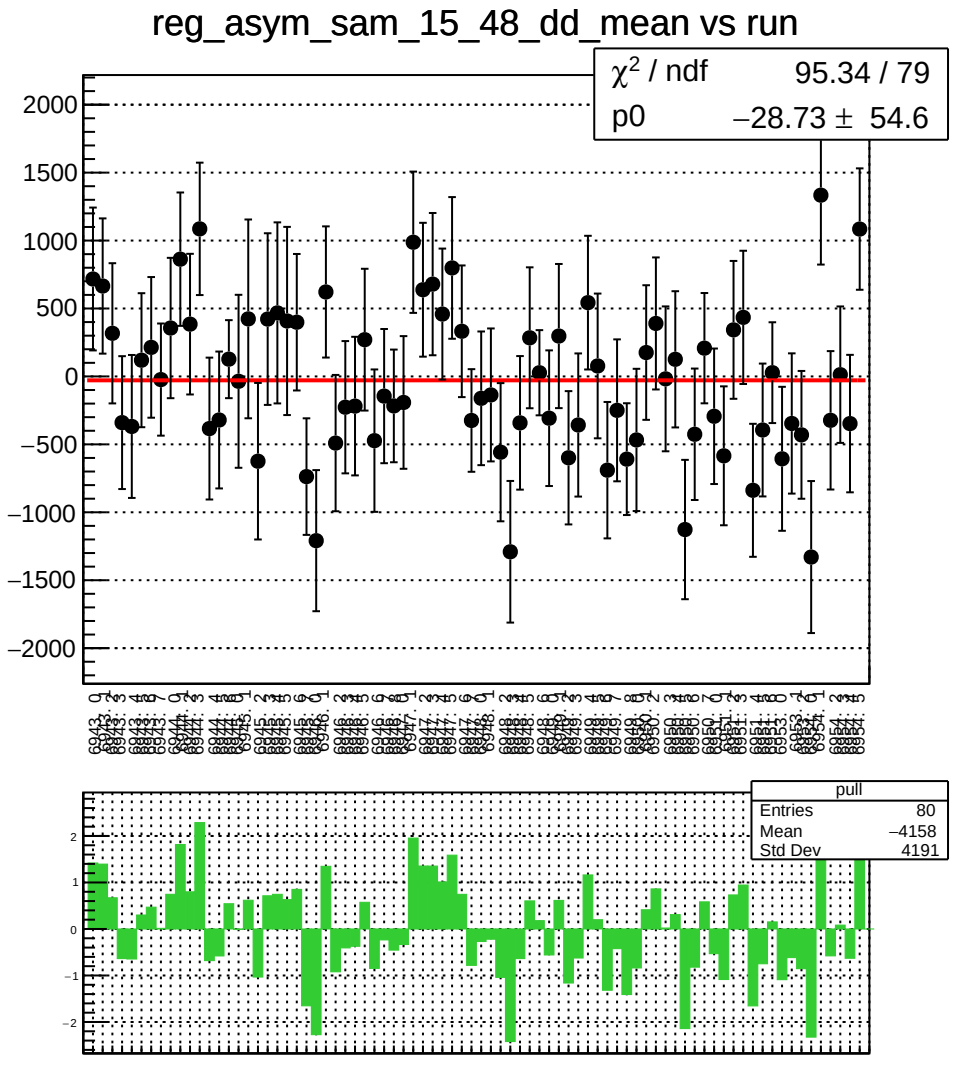

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 1.645e+04 / 79
p0 813.8 ± 0.6476
1050
1000
950
900
850
800
750
700
650

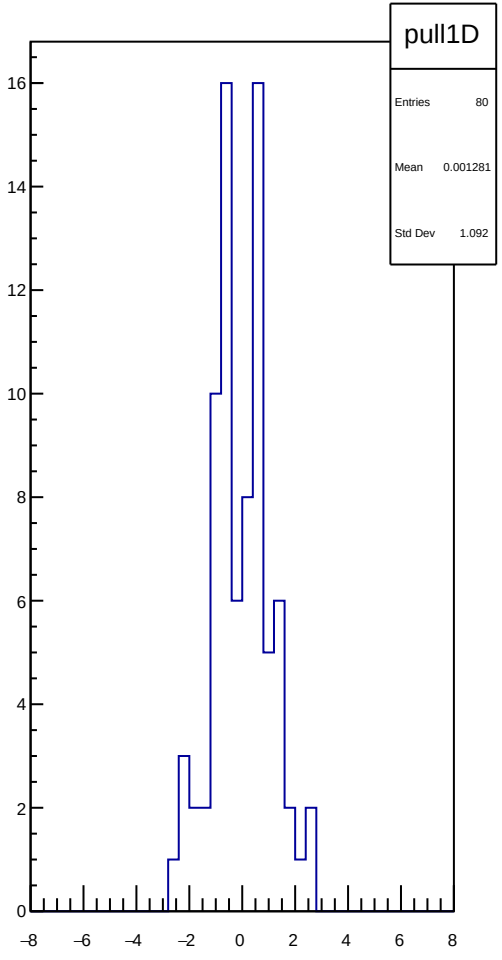

asym_sam_3726_avg_mean vs run
χ² / ndf 76.23 / 79
p0 3126 ± 919
pull
Entries 80
Mean 50.46
Std Dev 59.42

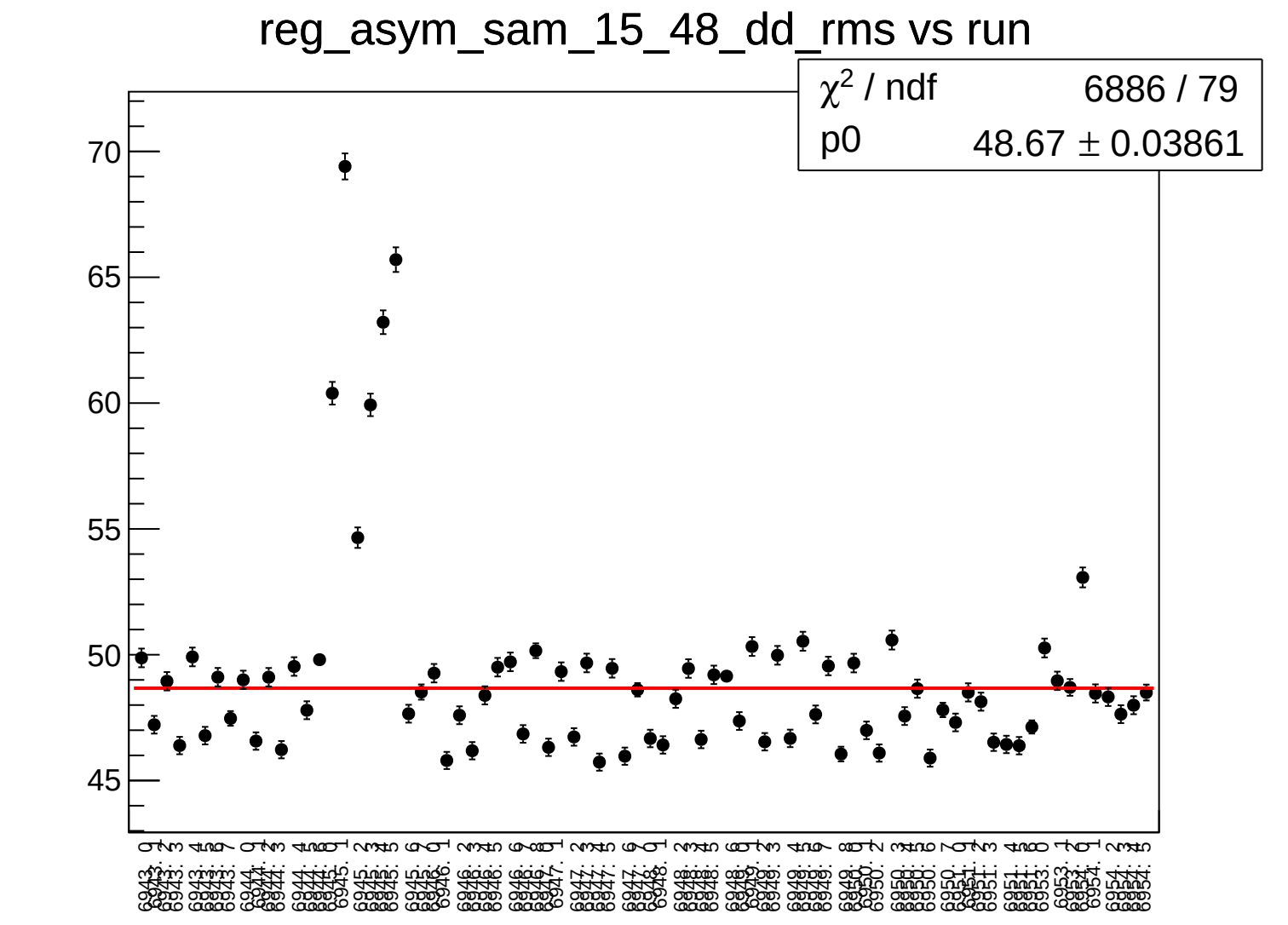

pull1D
Entries 80
Mean 0.02226
Std Dev 0.9759

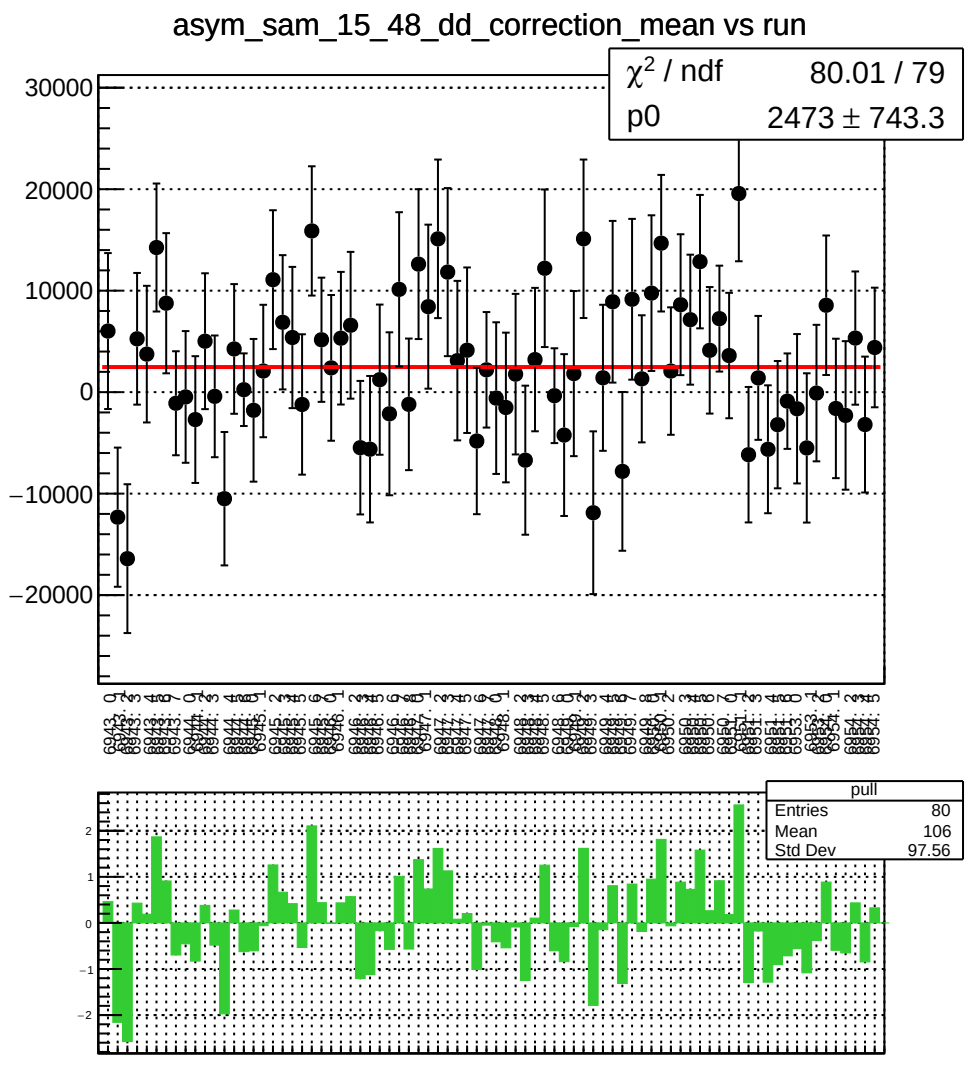
asym_sam_3726_avg_rms vs run

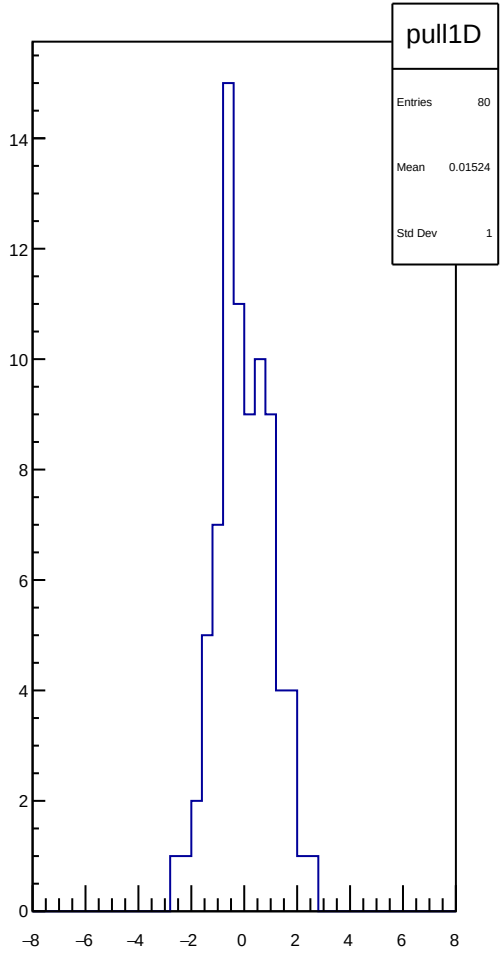


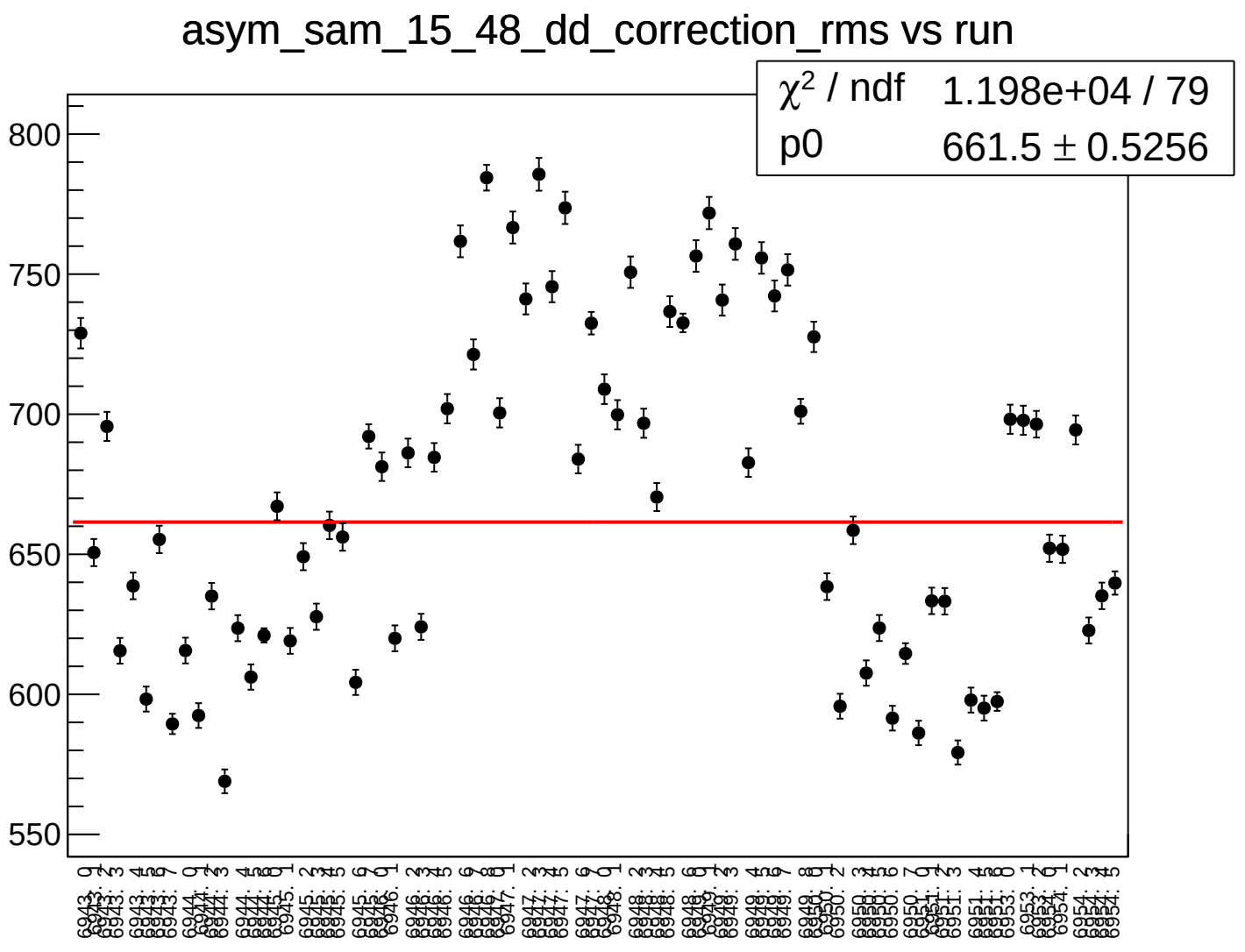

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 95.34 / 79
p0 −28.73 ± 54.6
pull
Entries 80
Mean −4158
Std Dev 4191

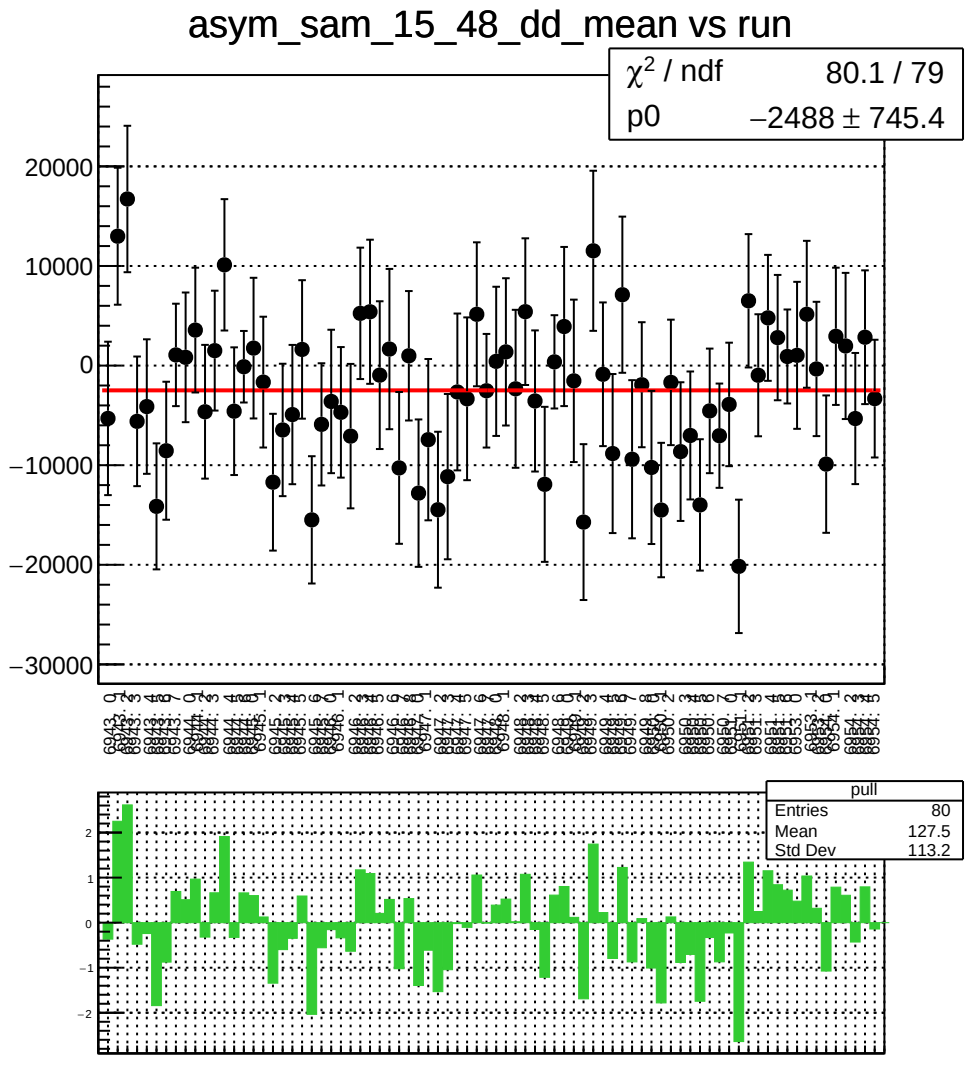

pull1D
Entries 80
Mean 0.001281
Std Dev 1.092

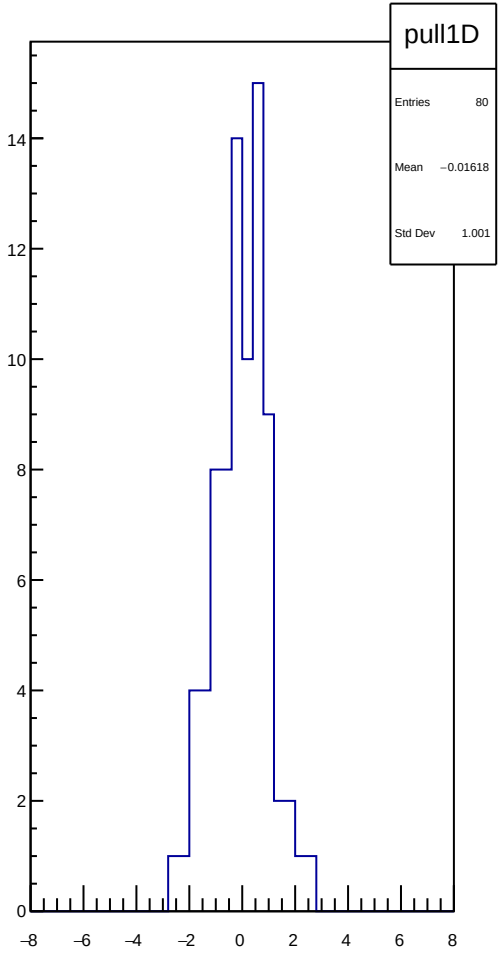

reg_asym_sam_15_48_dd_rms vs run
χ^2 / ndf 6886 / 79
p0 48.67 ± 0.03861
70
65
60
55
50
45

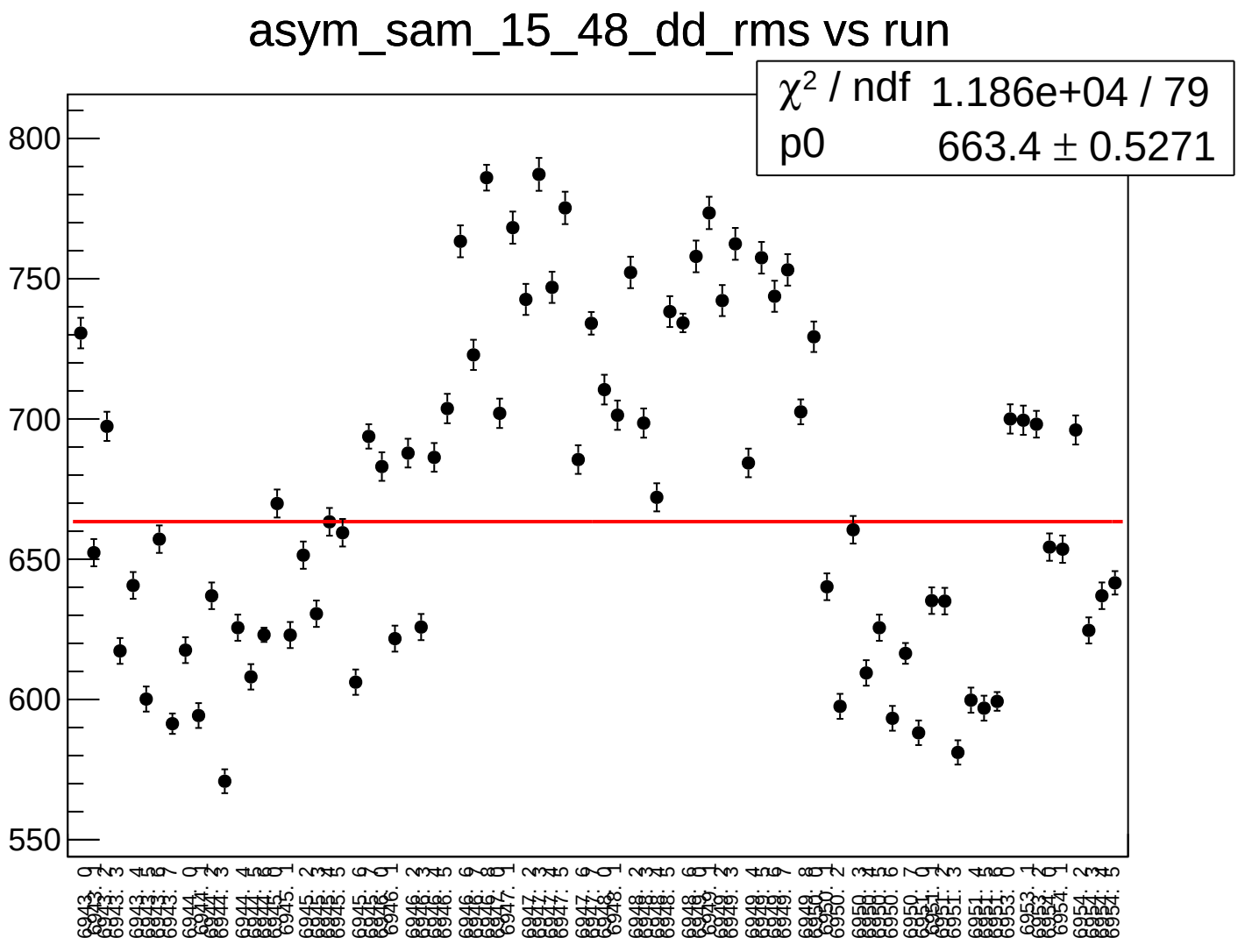

asym_sam_15_48_dd_correction_mean vs run
χ^2 / ndf 80.01 / 79
p0 2473 ± 743.3
30000
20000
10000
0
−10000
−20000
pull
Entries 80
Mean 106
Std Dev 97.56
2
1
0
−1
−2

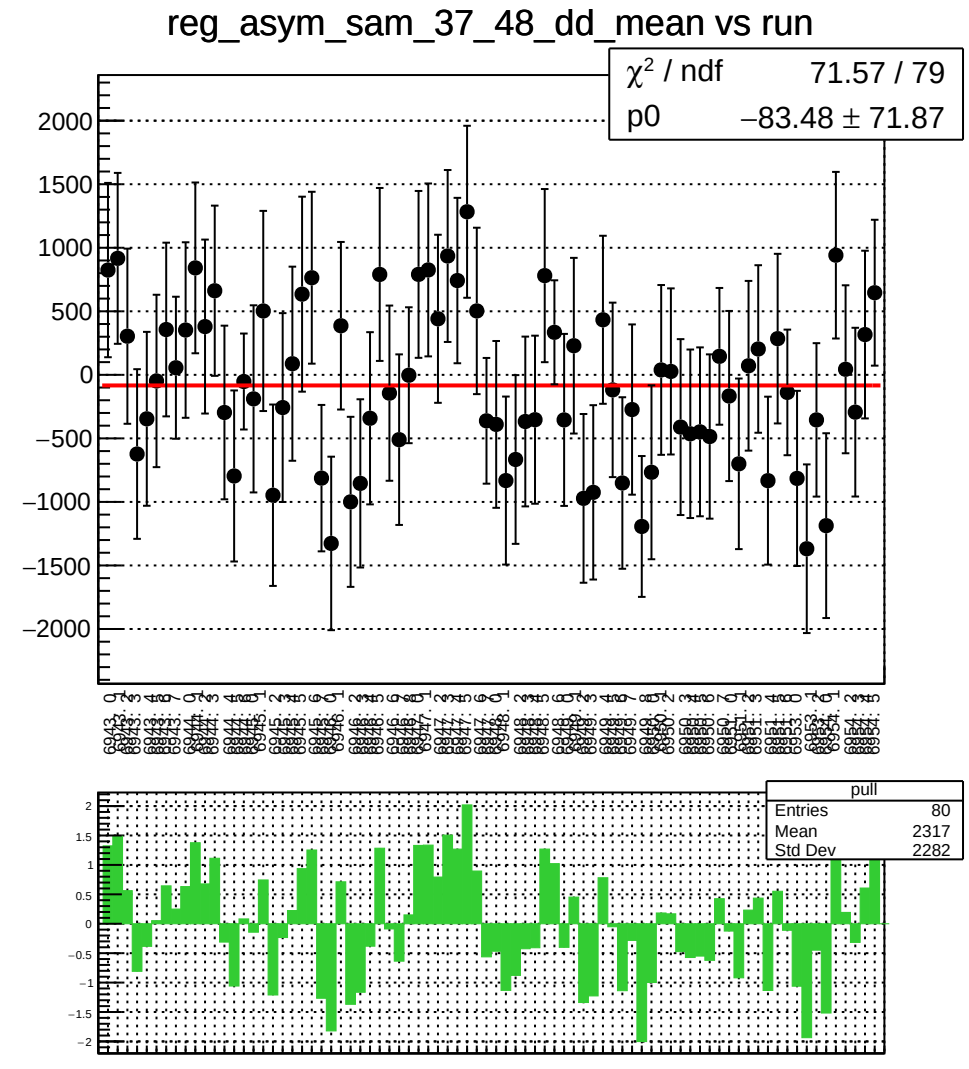

pull1D
Entries 80
Mean 0.01524
Std Dev 1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

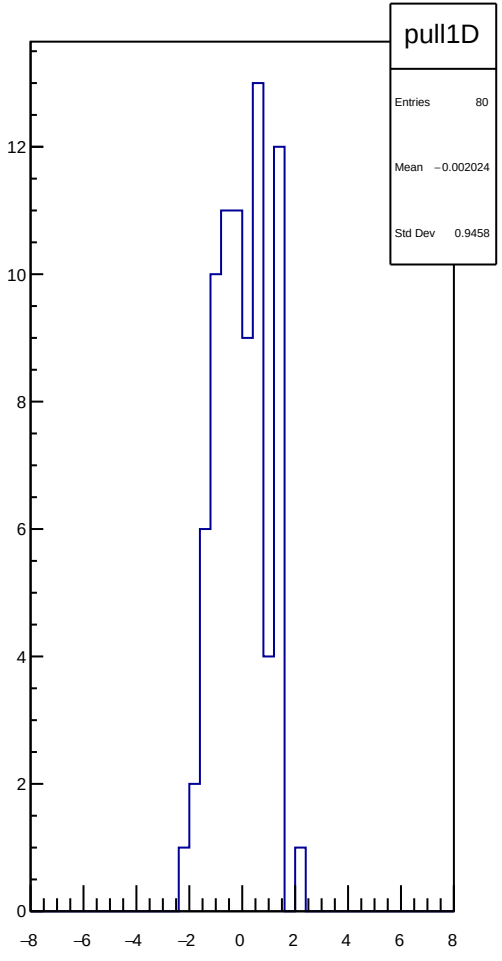

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 1.198e+04 / 79
p0 661.5 ± 0.5256
800
750
700
650
600
550


asym_sam_15_48_dd_mean vs run
χ² / ndf 80.1 / 79
p0 −2488 ± 745.4
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean 127.5
Std Dev 113.2
2
1
0
−1
−2

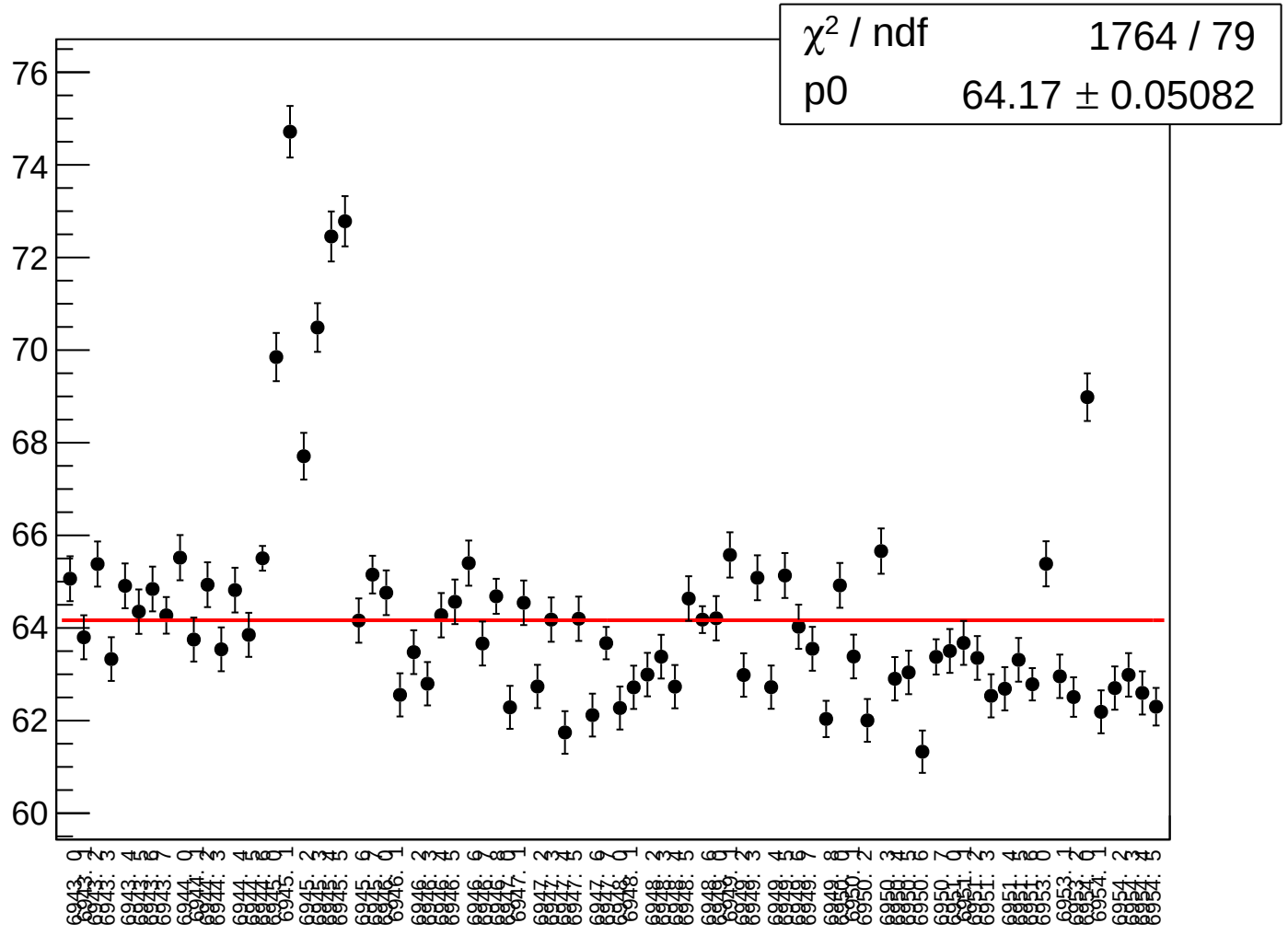

pull1D
Entries 80
Mean −0.01618
Std Dev 1.001
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

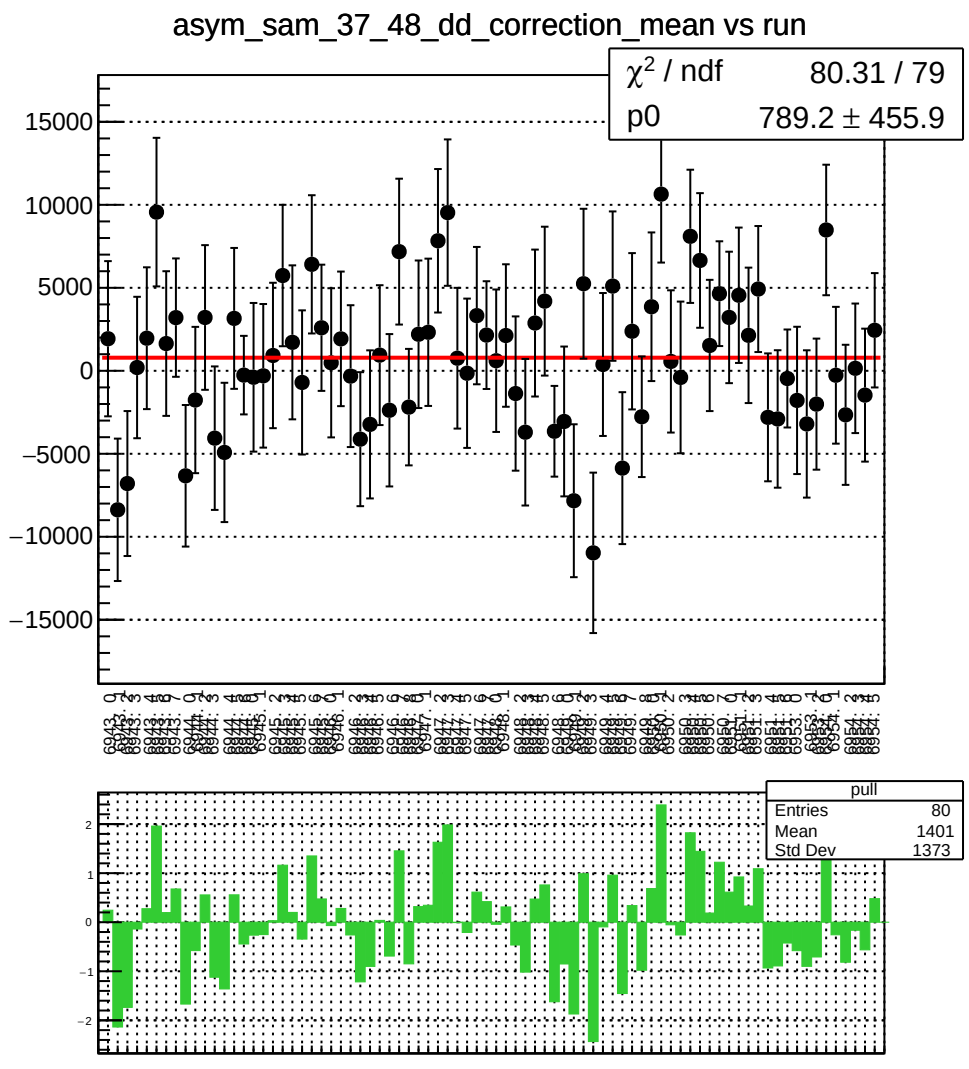

asym_sam_15_48_dd_rms vs run
χ² / ndf 1.186e+04 / 79
p0 663.4 ± 0.5271
800
750
700
650
600
550

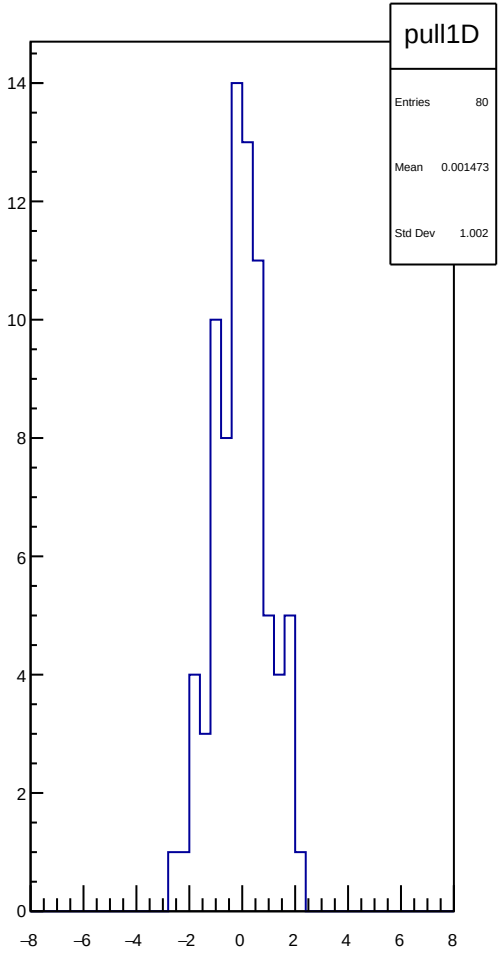

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 71.57 / 79
p0 −83.48 ± 71.87
pull
Entries 80
Mean 2317
Std Dev 2282

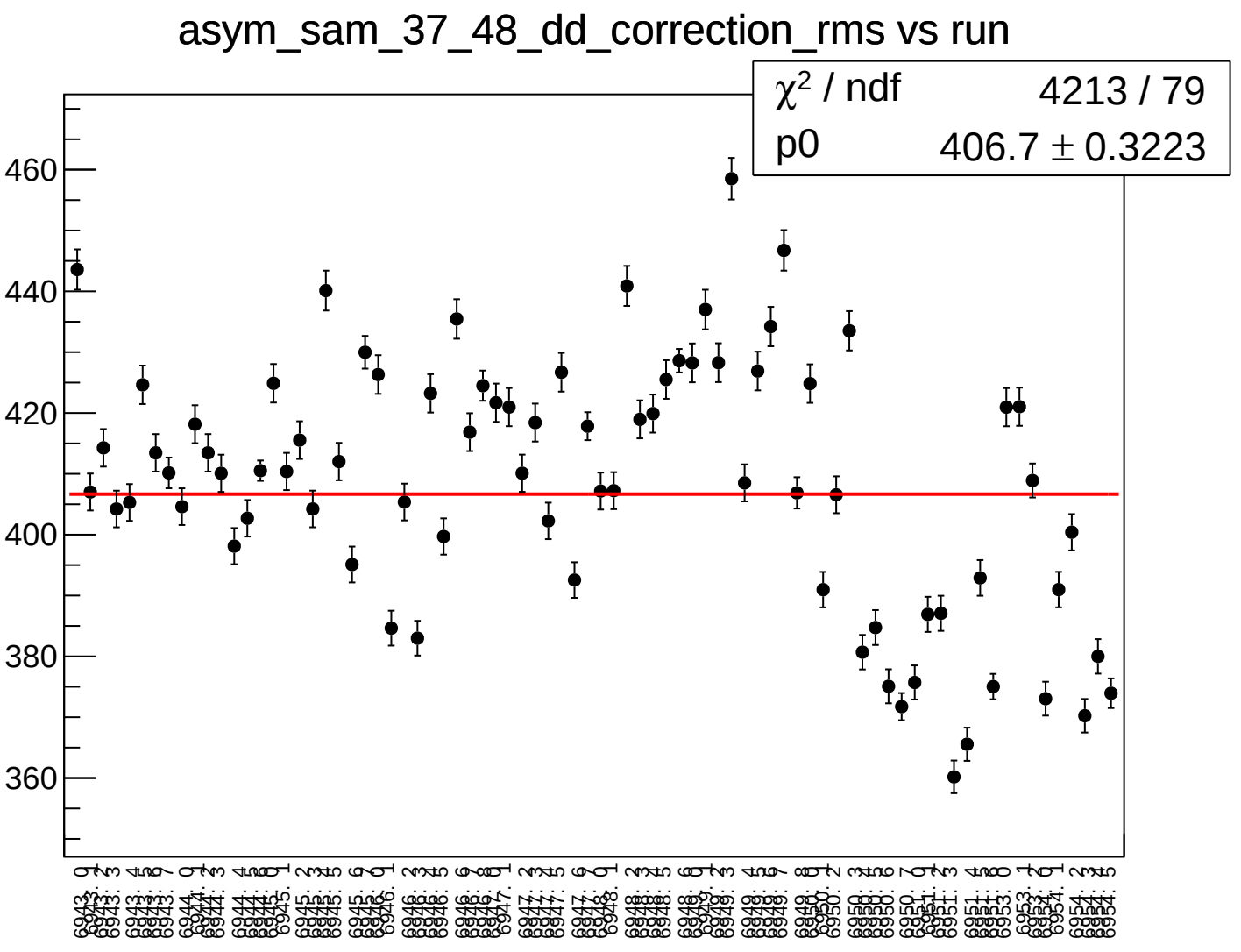

pull1D
Entries 80
Mean −0.002024
Std Dev 0.9458

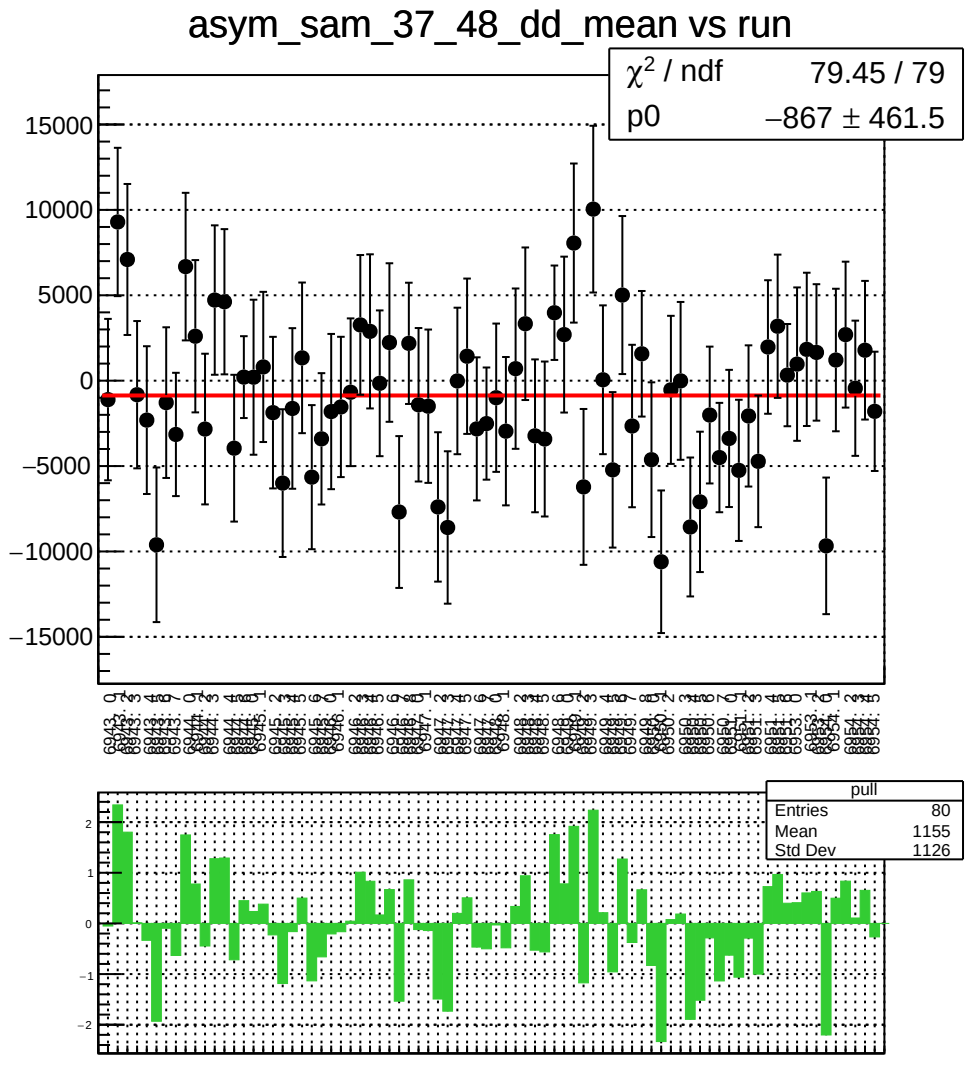
reg_asym_sam_37_48_dd_rms vs run

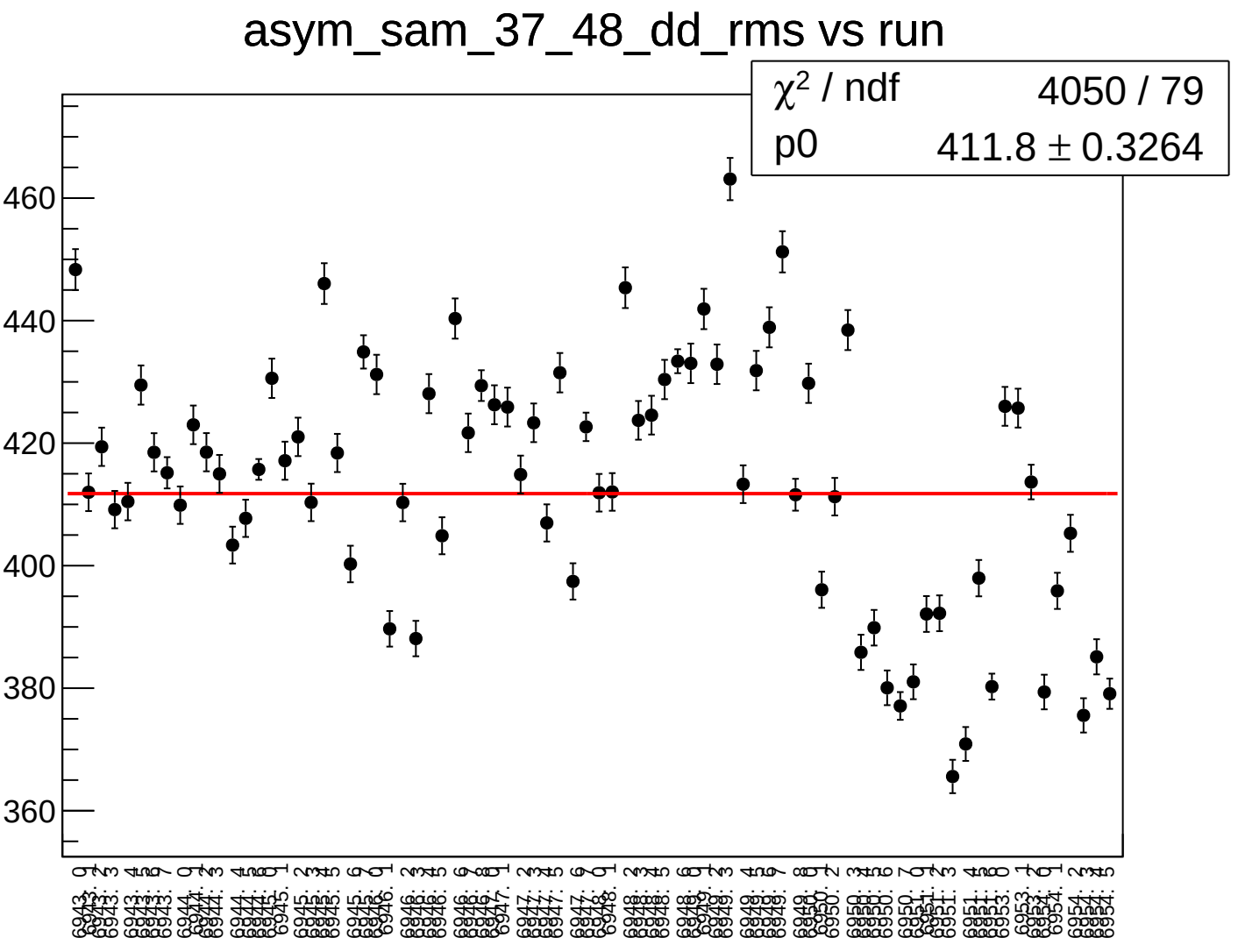


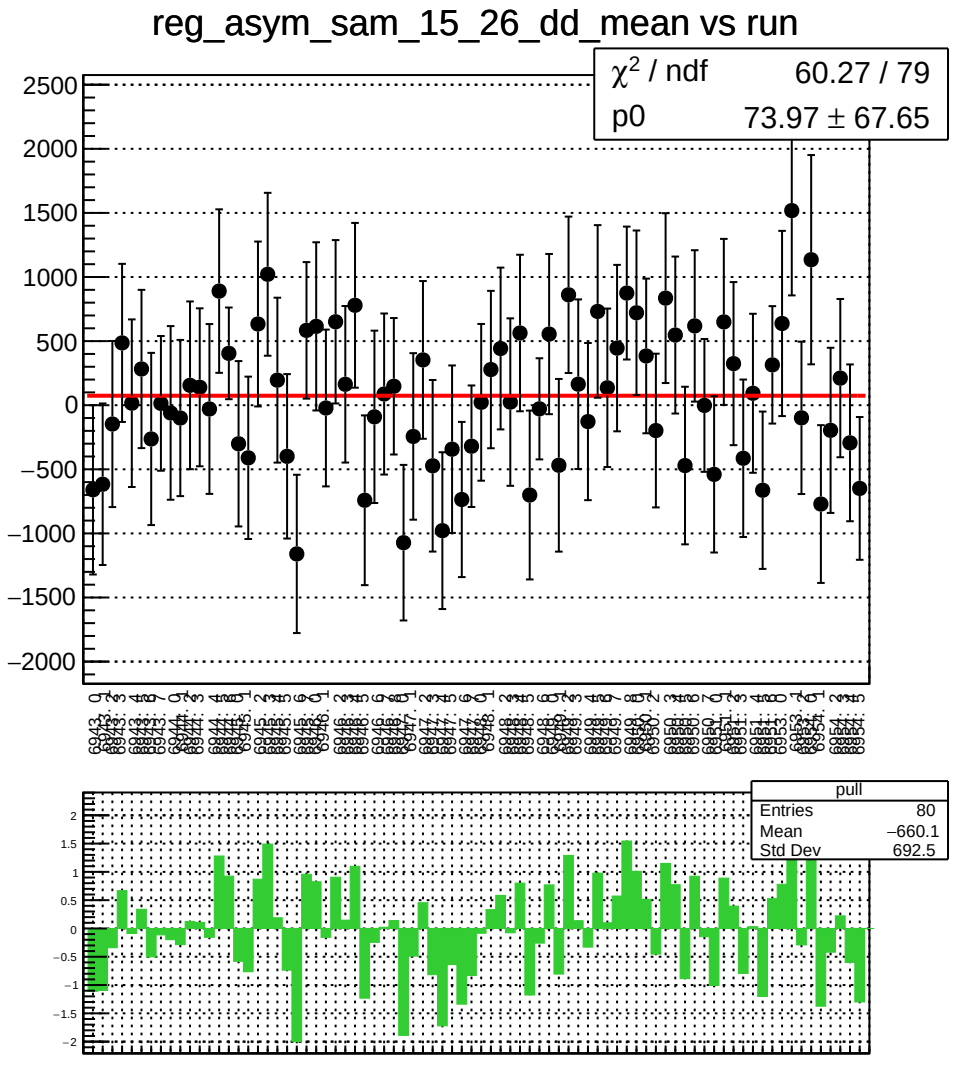

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 80.31 / 79
p0 789.2 ± 455.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 1401
Std Dev 1373
2
1
0
−1
−2

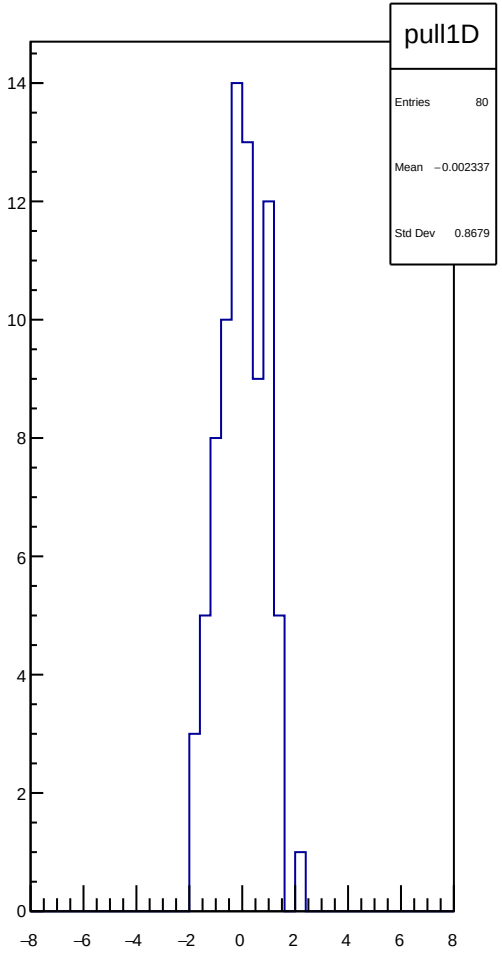

pull1D
Entries 80
Mean 0.001473
Std Dev 1.002
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

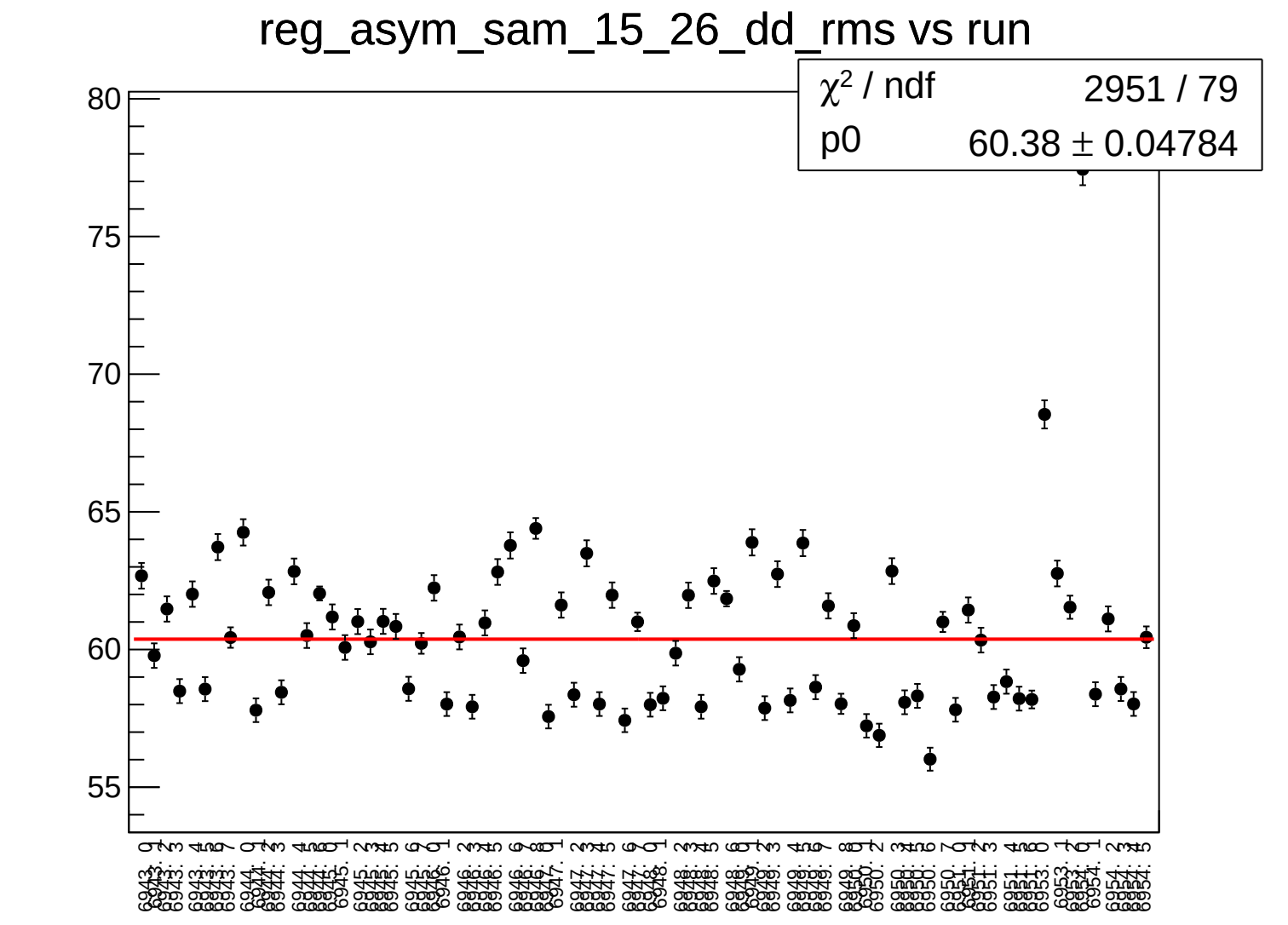

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 4213 / 79
p0 406.7 ± 0.3223
460
440
420
400
380
360

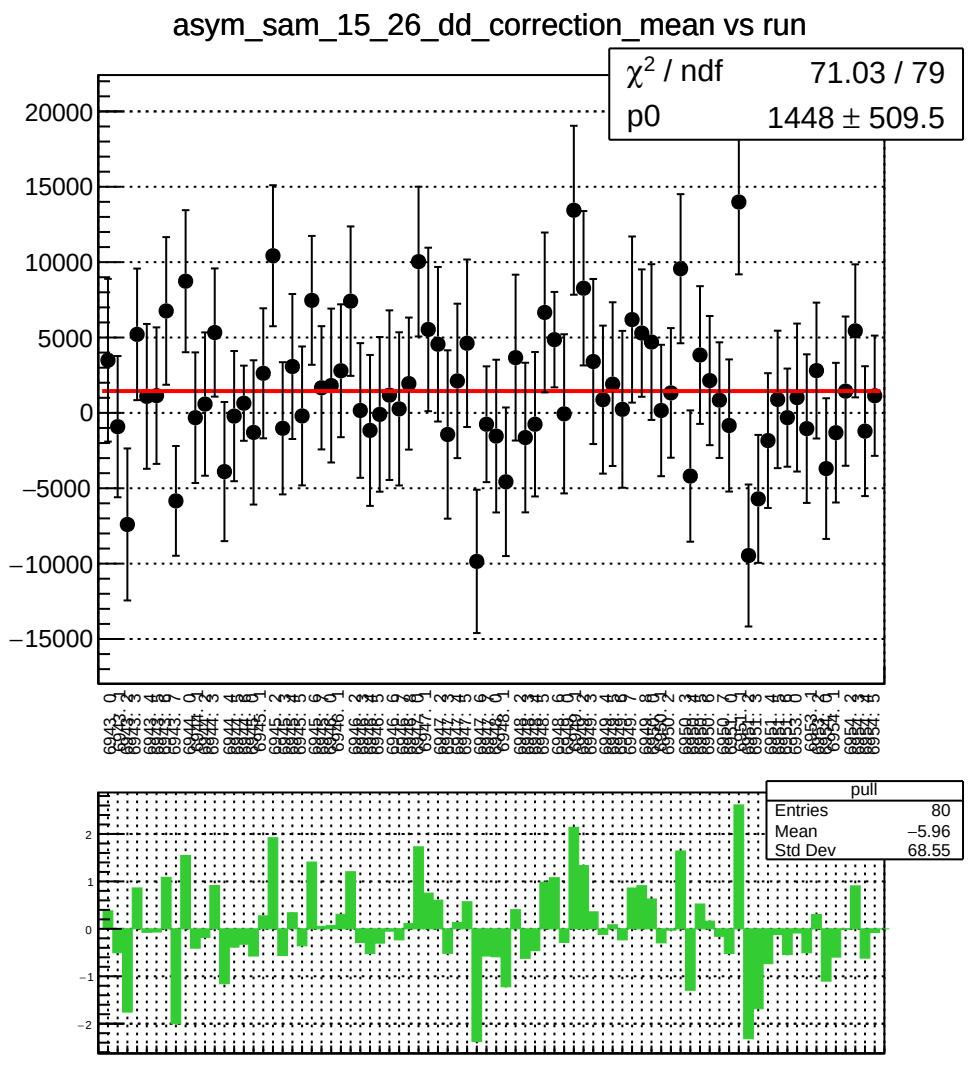

asym_sam_37_48_dd_mean vs run
χ² / ndf 79.45 / 79
p0 −867 ± 461.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 1155
Std Dev 1126
2
1
0
−1
−2
pull1D
Entries 80
Mean −0.002408
Std Dev 0.9965
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

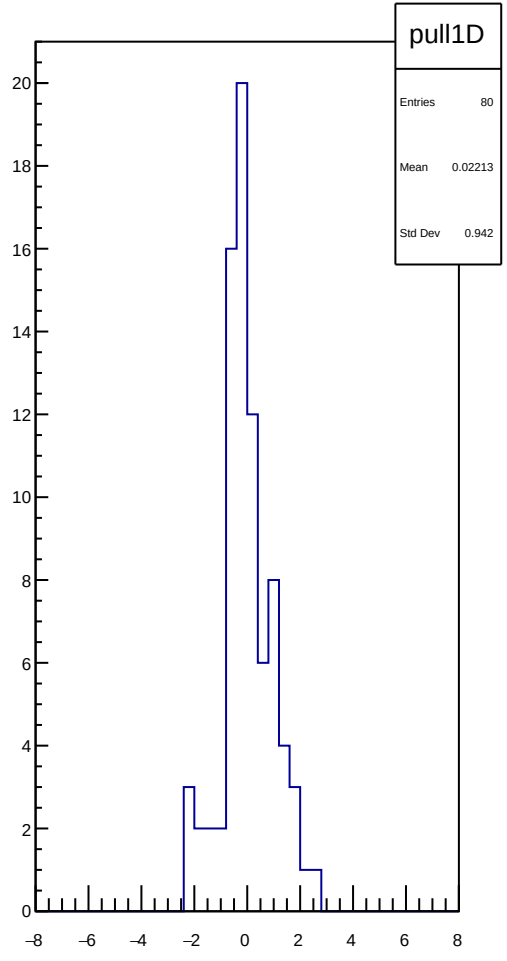

asym_sam_37_48_dd_rms vs run
χ² / ndf 4050 / 79
p0 411.8 ± 0.3264
460
440
420
400
380
360

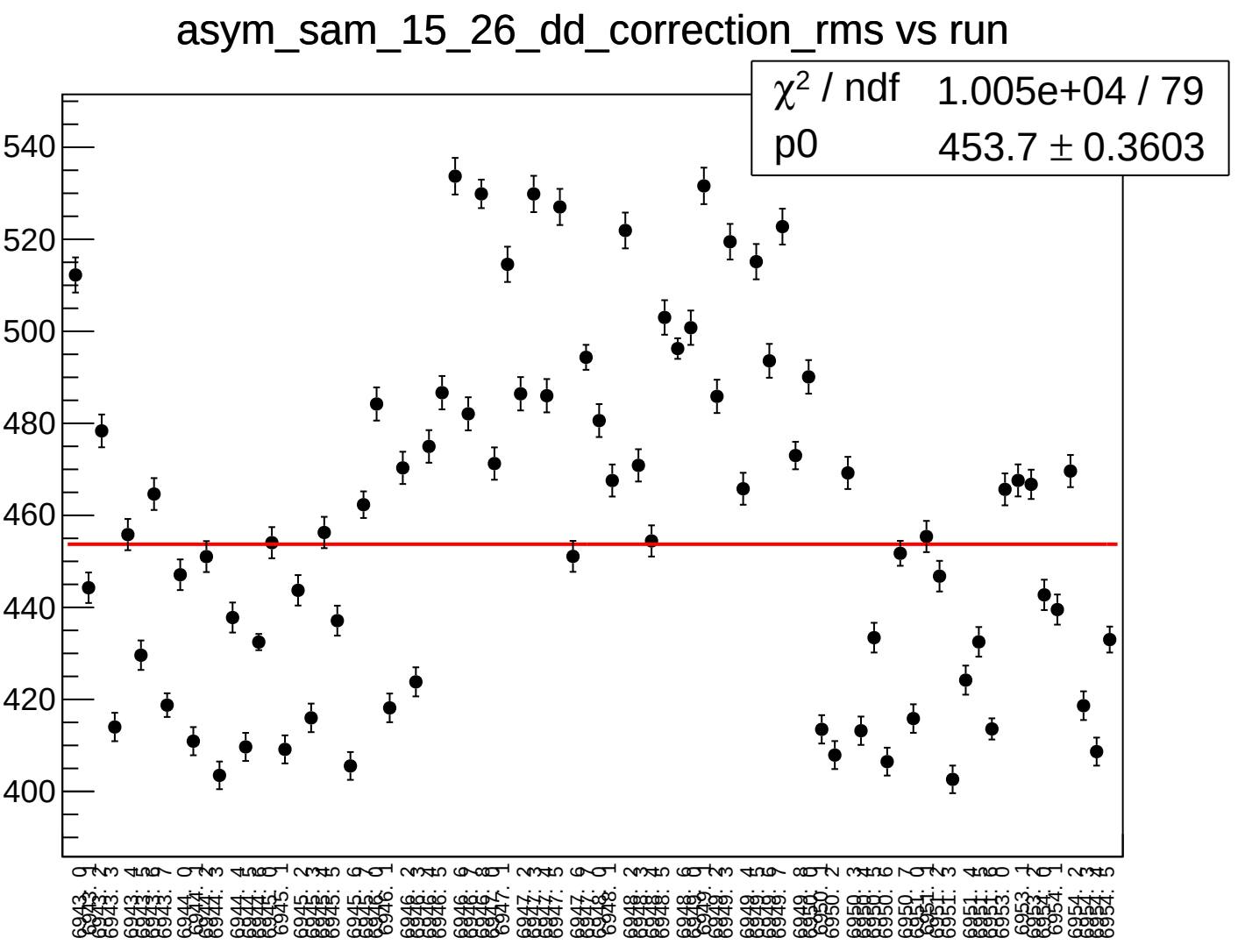

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 60.27 / 79
p0 73.97 ± 67.65
pull
Entries 80
Mean −660.1
Std Dev 692.5

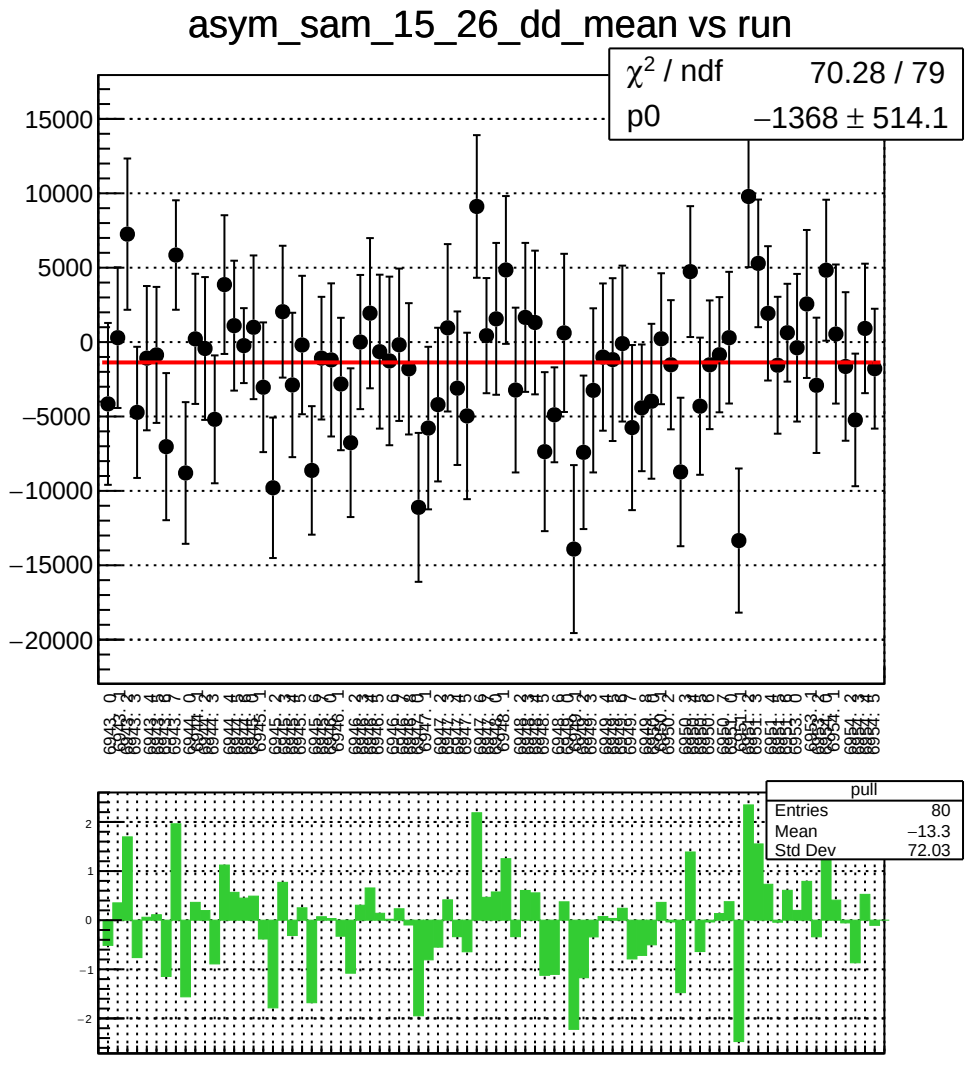

pull1D
Entries 80
Mean −0.002337
Std Dev 0.8679

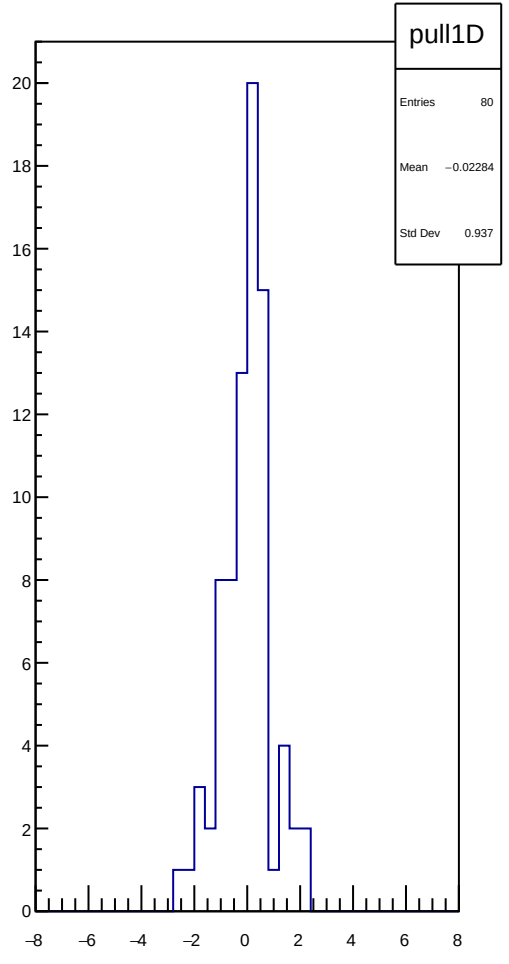

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 2951 / 79
p0 60.38 ± 0.04784
80
75
70
65
60
55

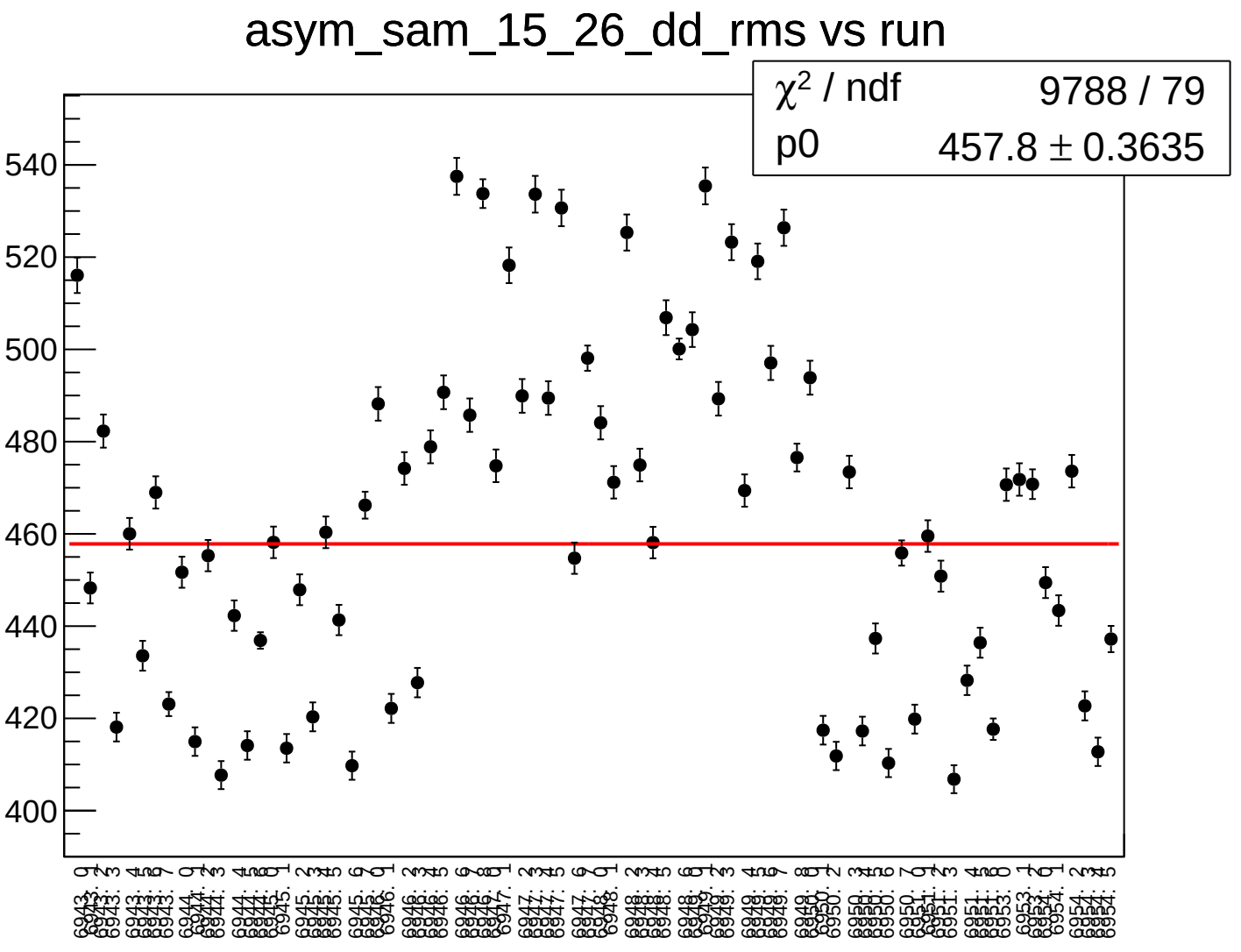

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 71.03 / 79
p0 1448 ± 509.5
pull
Entries 80
Mean −5.96
Std Dev 68.55

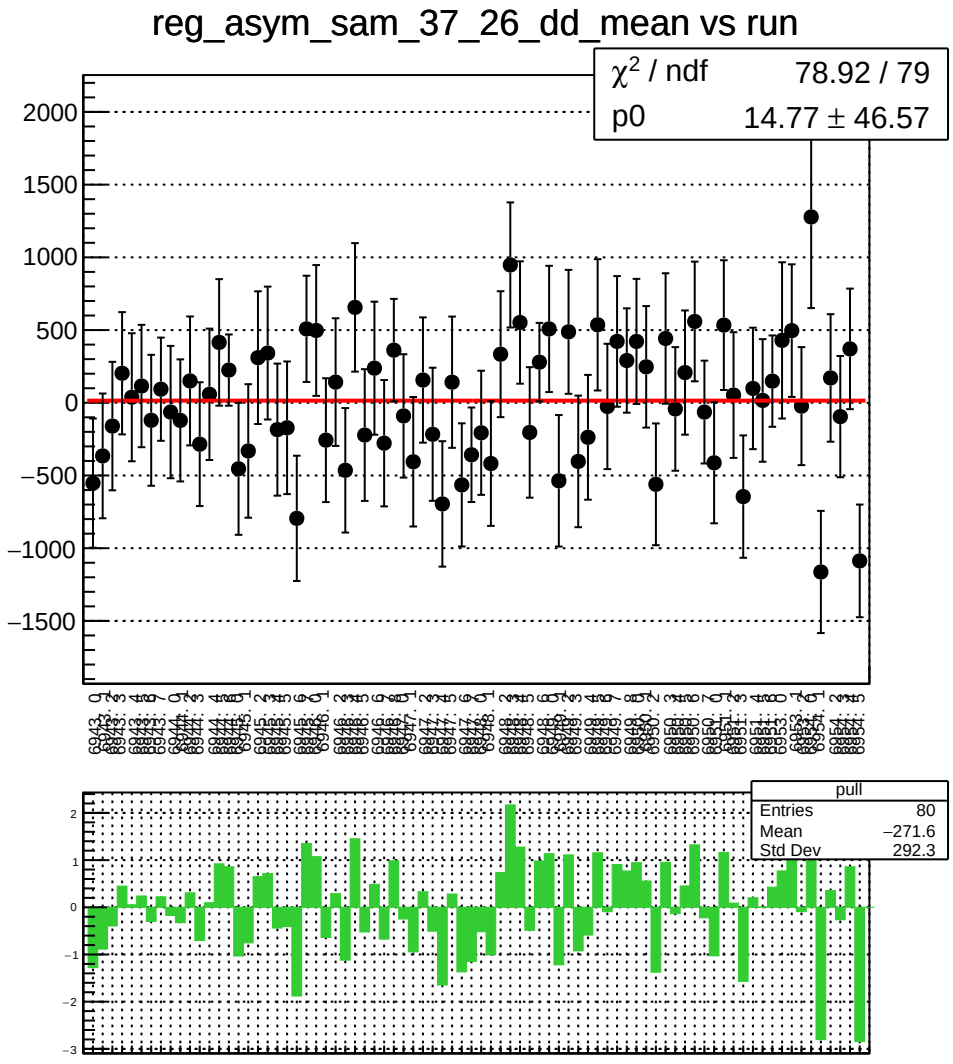

pull1D
Entries 80
Mean 0.02213
Std Dev 0.942

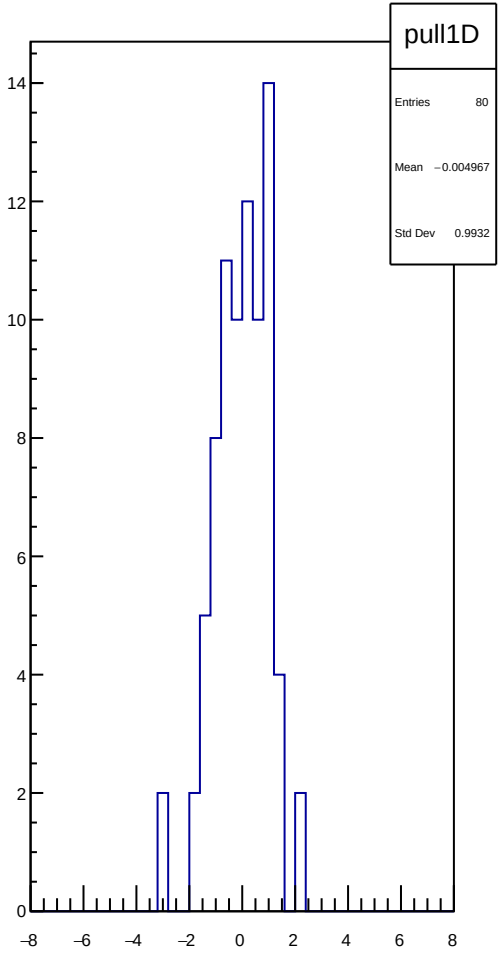

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 1.005e+04 / 79
p0 453.7 ± 0.3603
540
520
500
480
460
440
420
400

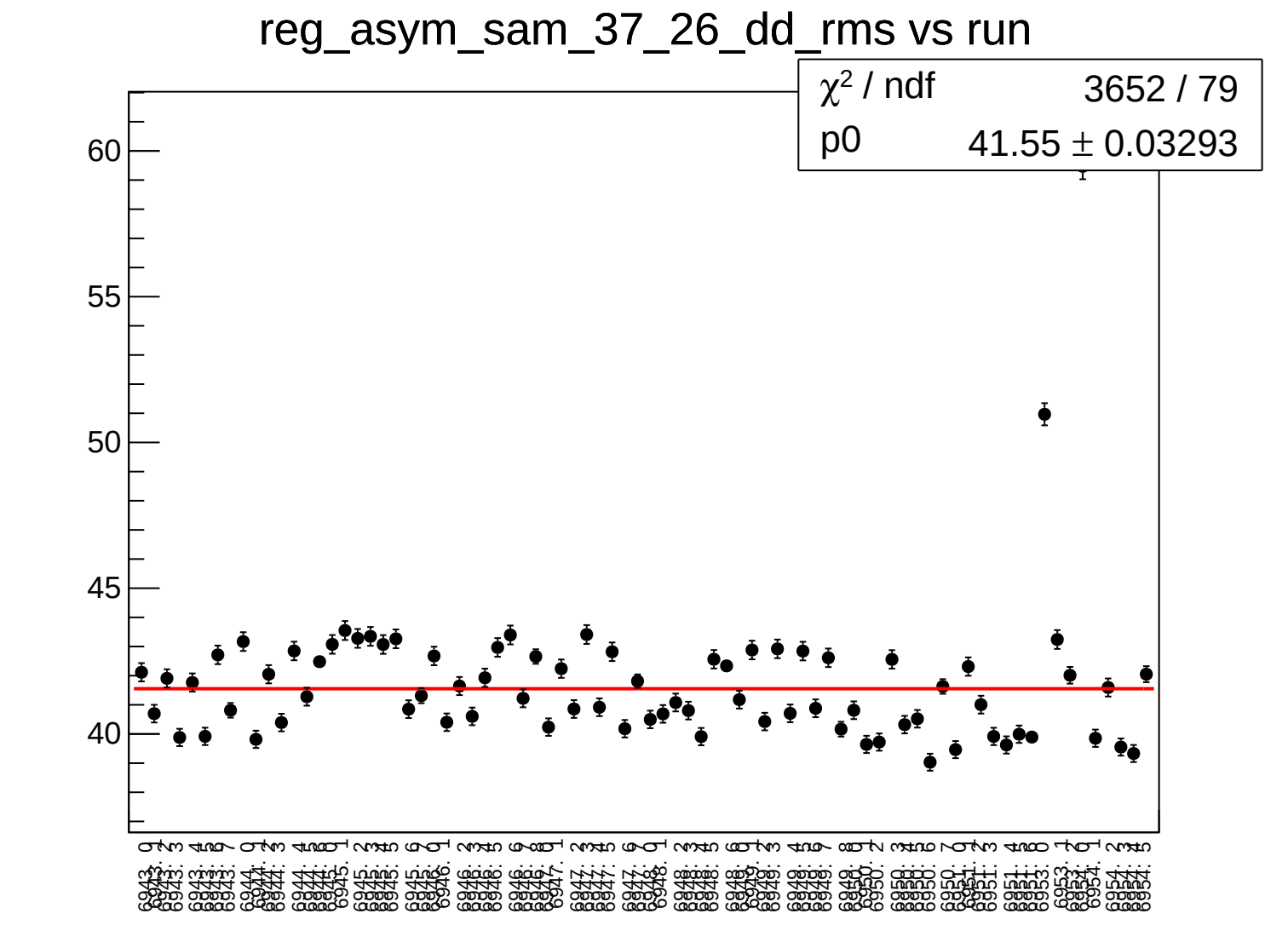

asym_sam_15_26_dd_mean vs run
χ² / ndf 70.28 / 79
p0 −1368 ± 514.1
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 80
Mean −13.3
Std Dev 72.03
2
1
0
−1
−2

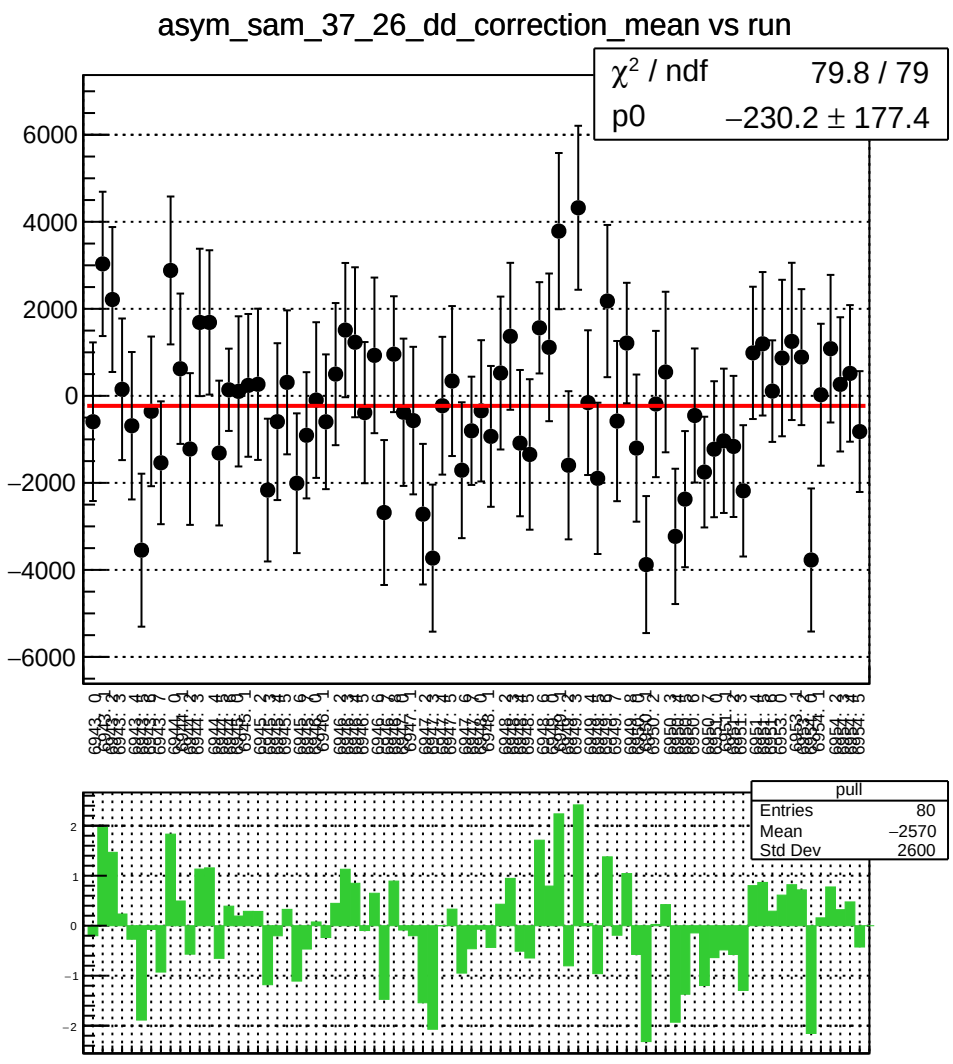

pull1D
Entries 80
Mean −0.02284
Std Dev 0.937
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

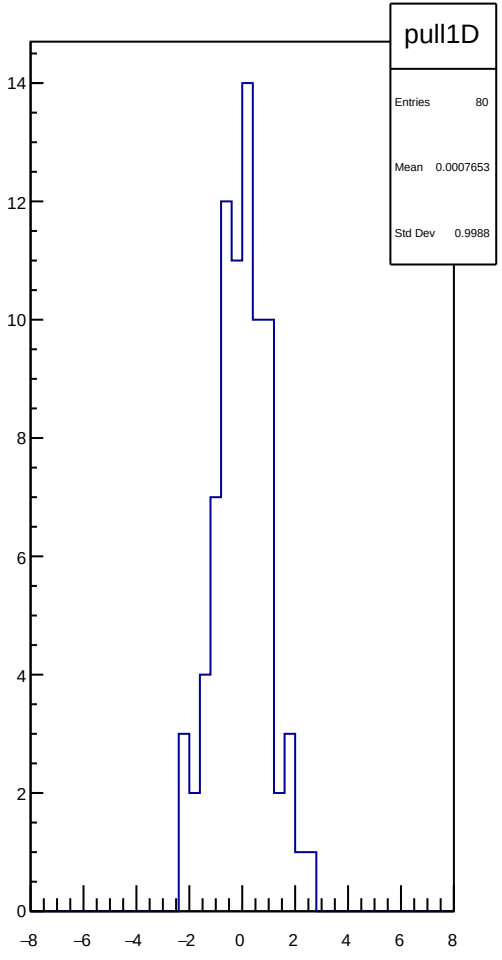

asym_sam_15_26_dd_rms vs run
χ² / ndf 9788 / 79
p0 457.8 ± 0.3635
540
520
500
480
460
440
420
400

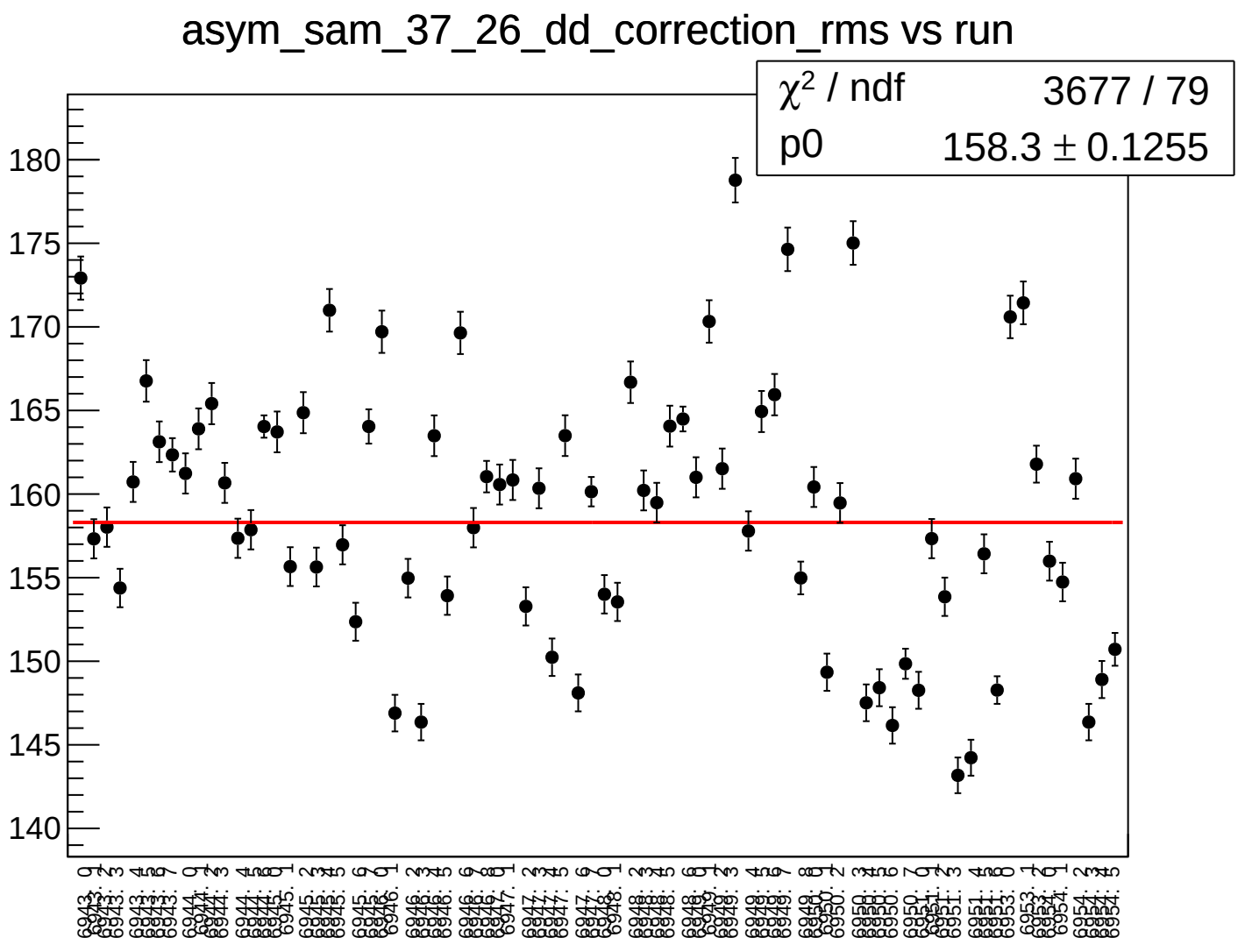

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 78.92 / 79
p0 14.77 ± 46.57
pull
Entries 80
Mean −271.6
Std Dev 292.3

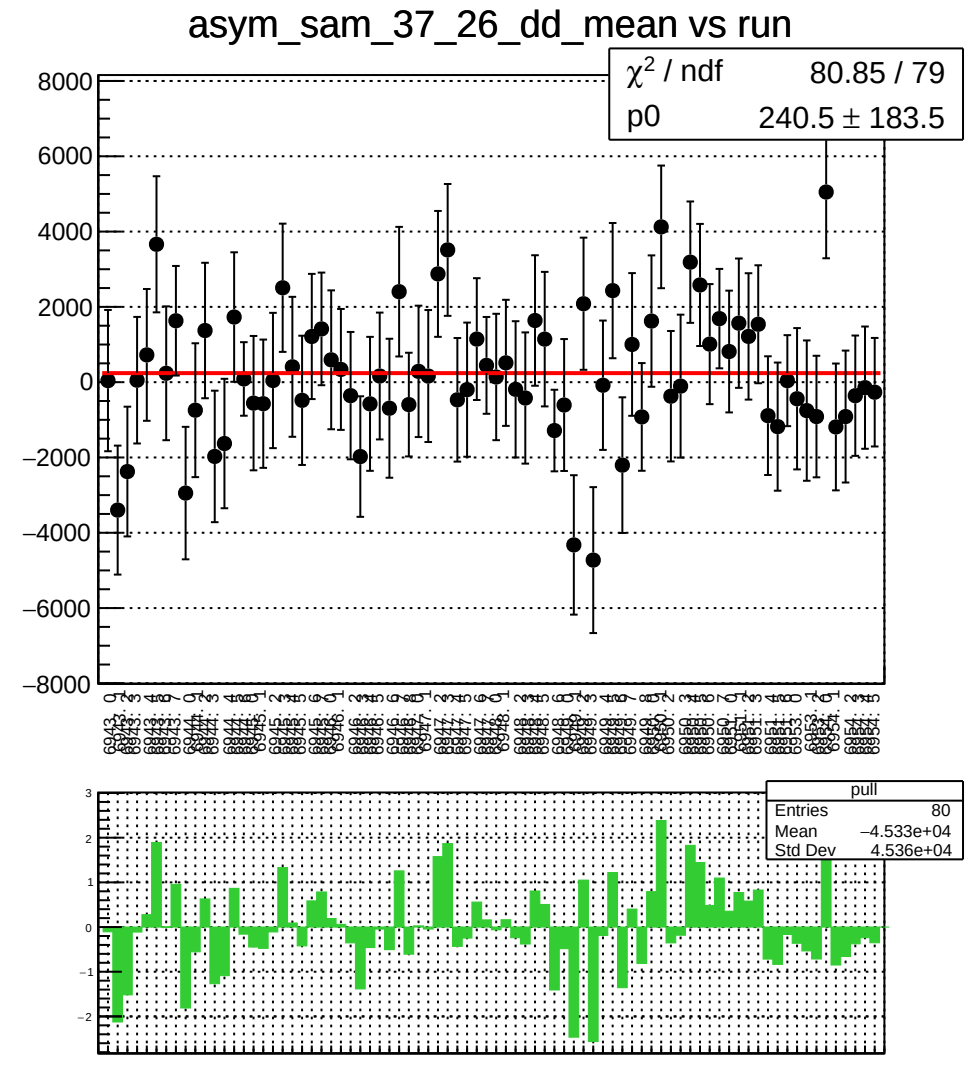

pull1D
Entries 80
Mean −0.004967
Std Dev 0.9932

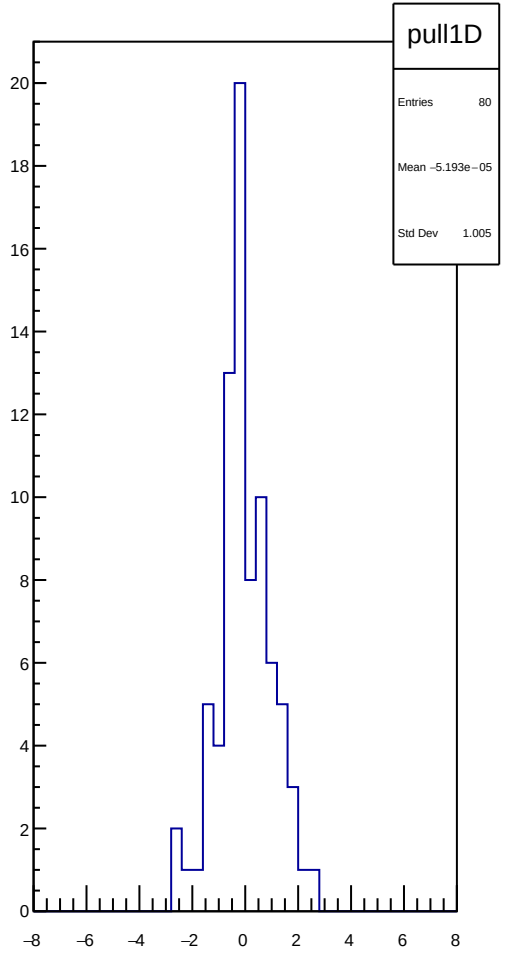

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 3652 / 79
p0 41.55 ± 0.03293
60
55
50
45
40

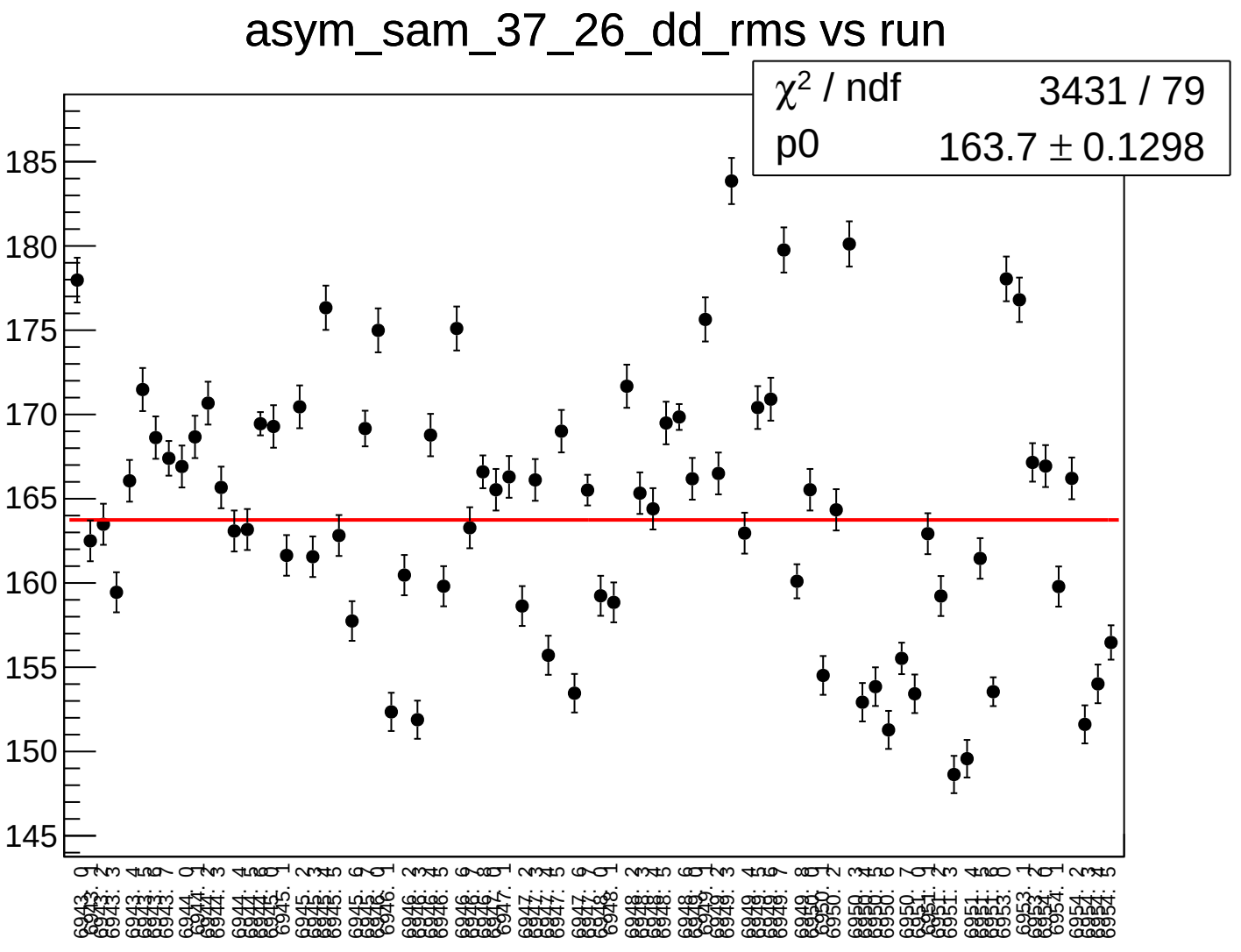

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 79.8 / 79
p0 −230.2 ± 177.4
pull
Entries 80
Mean −2570
Std Dev 2600

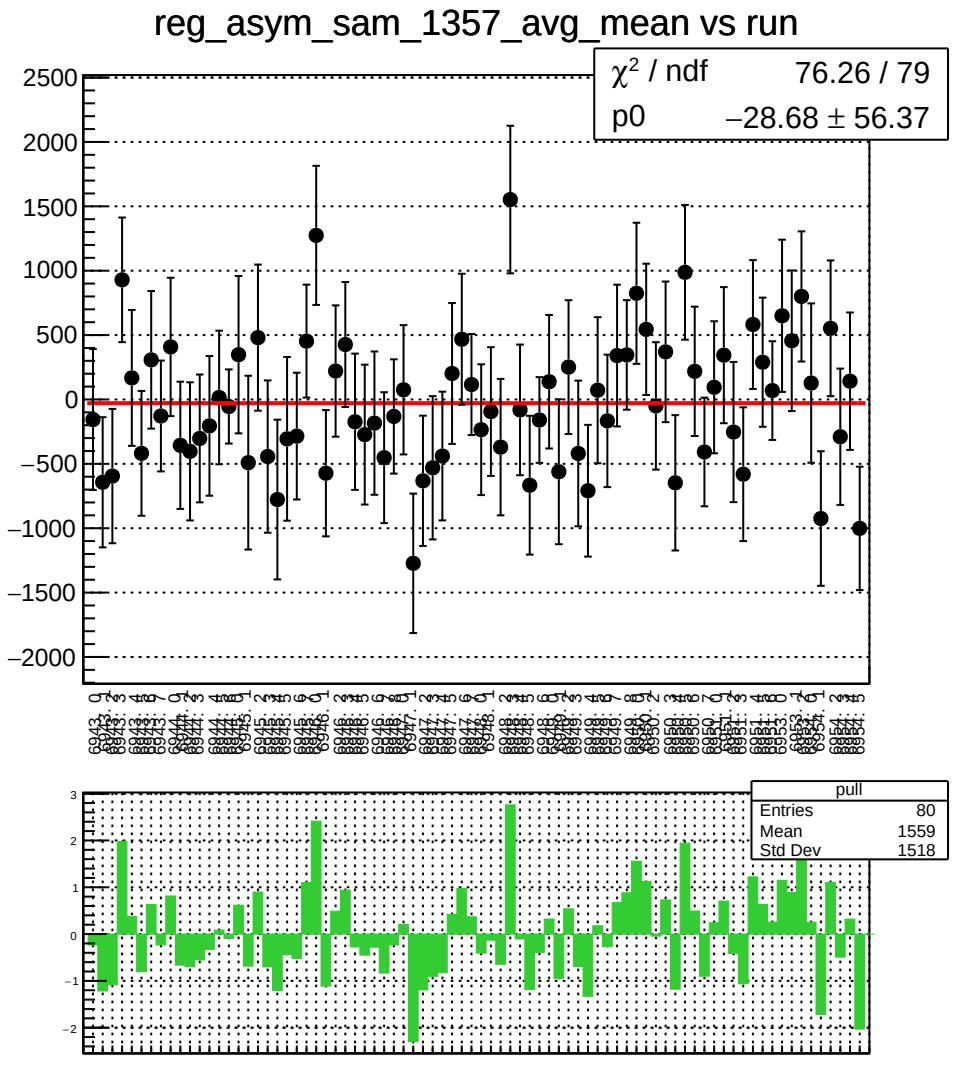

pull1D
Entries 80
Mean 0.0007653
Std Dev 0.9988

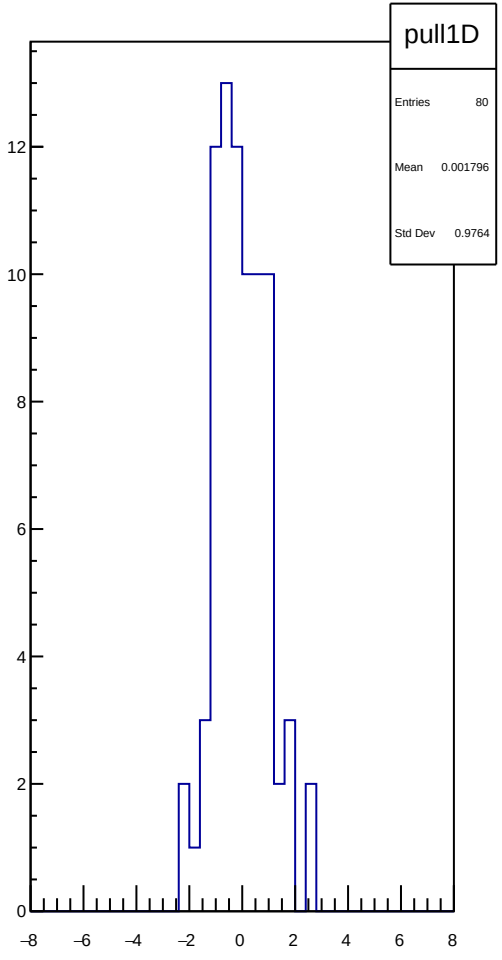

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 3677 / 79
p0 158.3 ± 0.1255
180
175
170
165
160
155
150
145
140

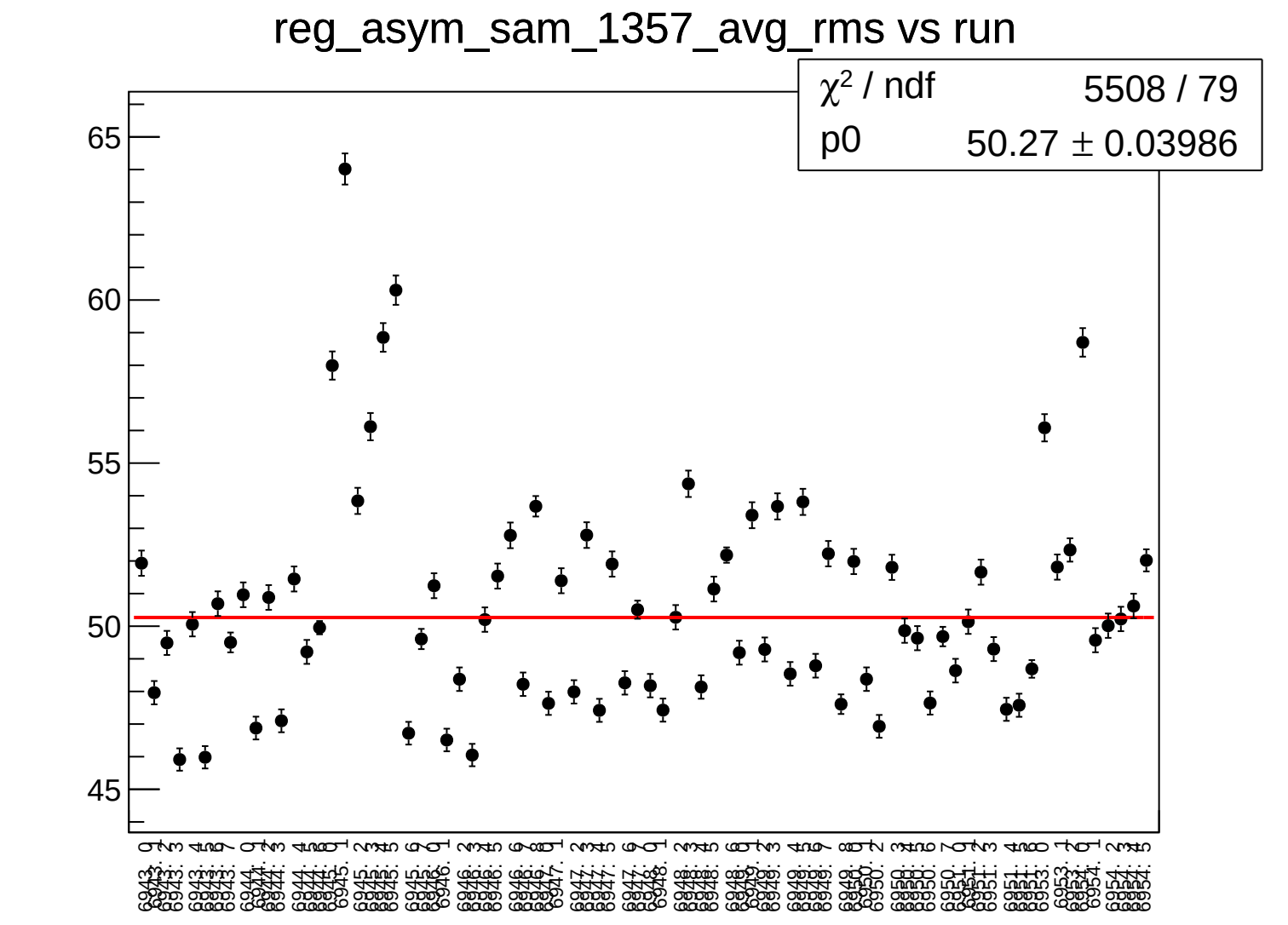

asym_sam_37_26_dd_mean vs run
χ² / ndf 80.85 / 79
p0 240.5 ± 183.5
pull
Entries 80
Mean −4.533e+04
Std Dev 4.536e+04

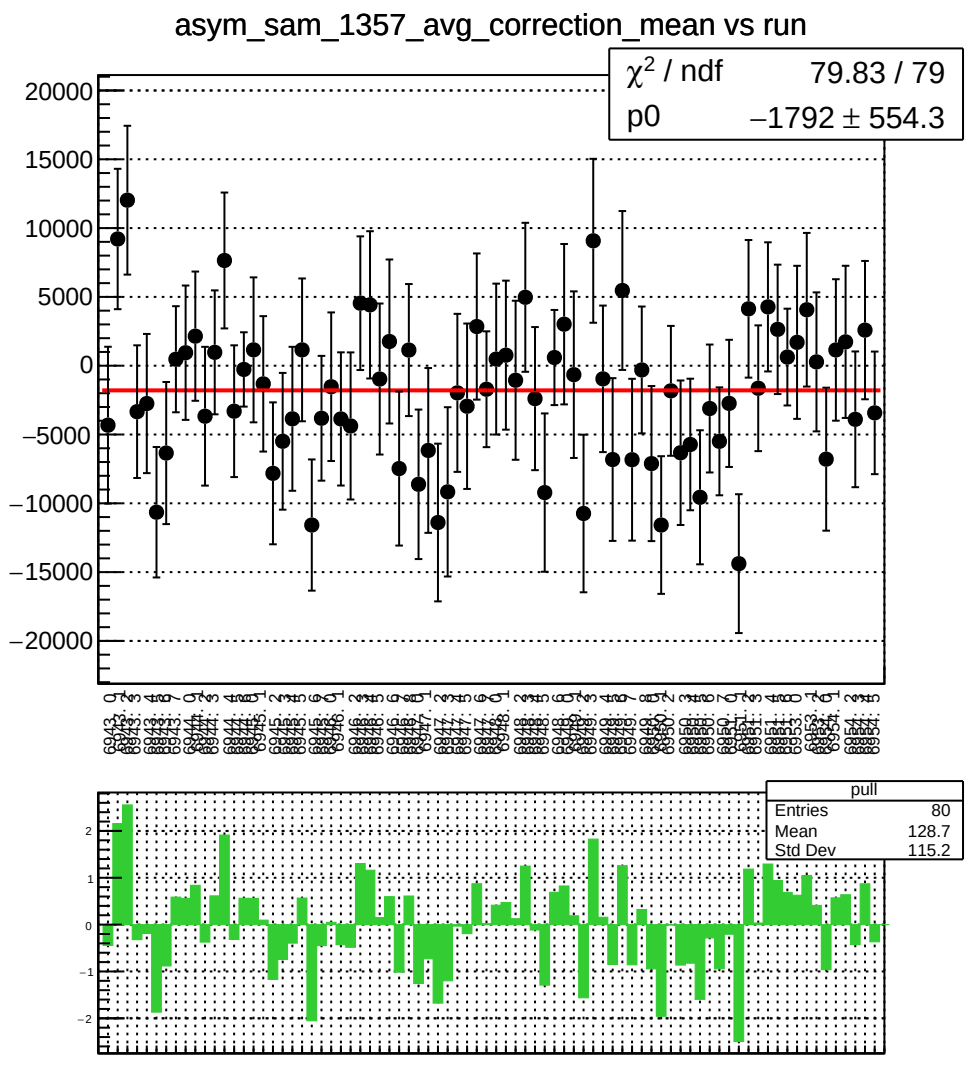

pull1D
Entries 80
Mean −5.193e−05
Std Dev 1.005

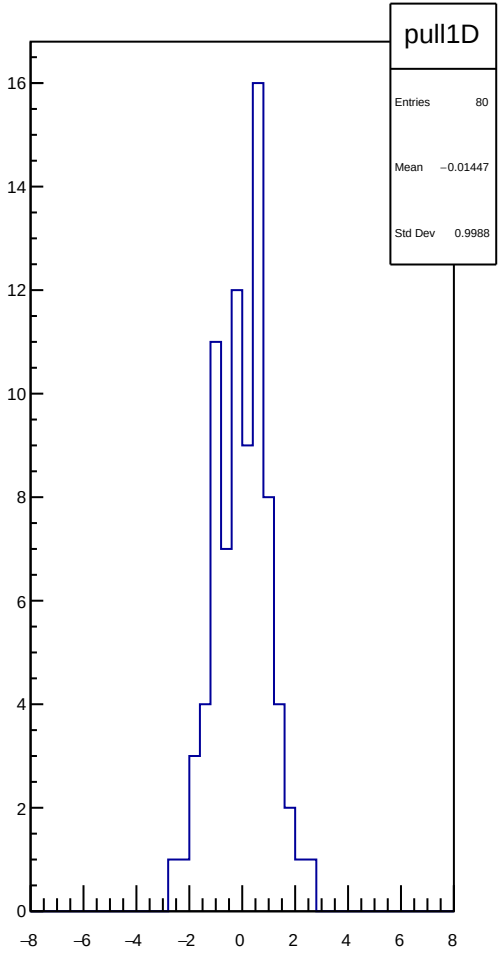

asym_sam_37_26_dd_rms vs run
χ² / ndf 3431 / 79
p0 163.7 ± 0.1298
185
180
175
170
165
160
155
150
145

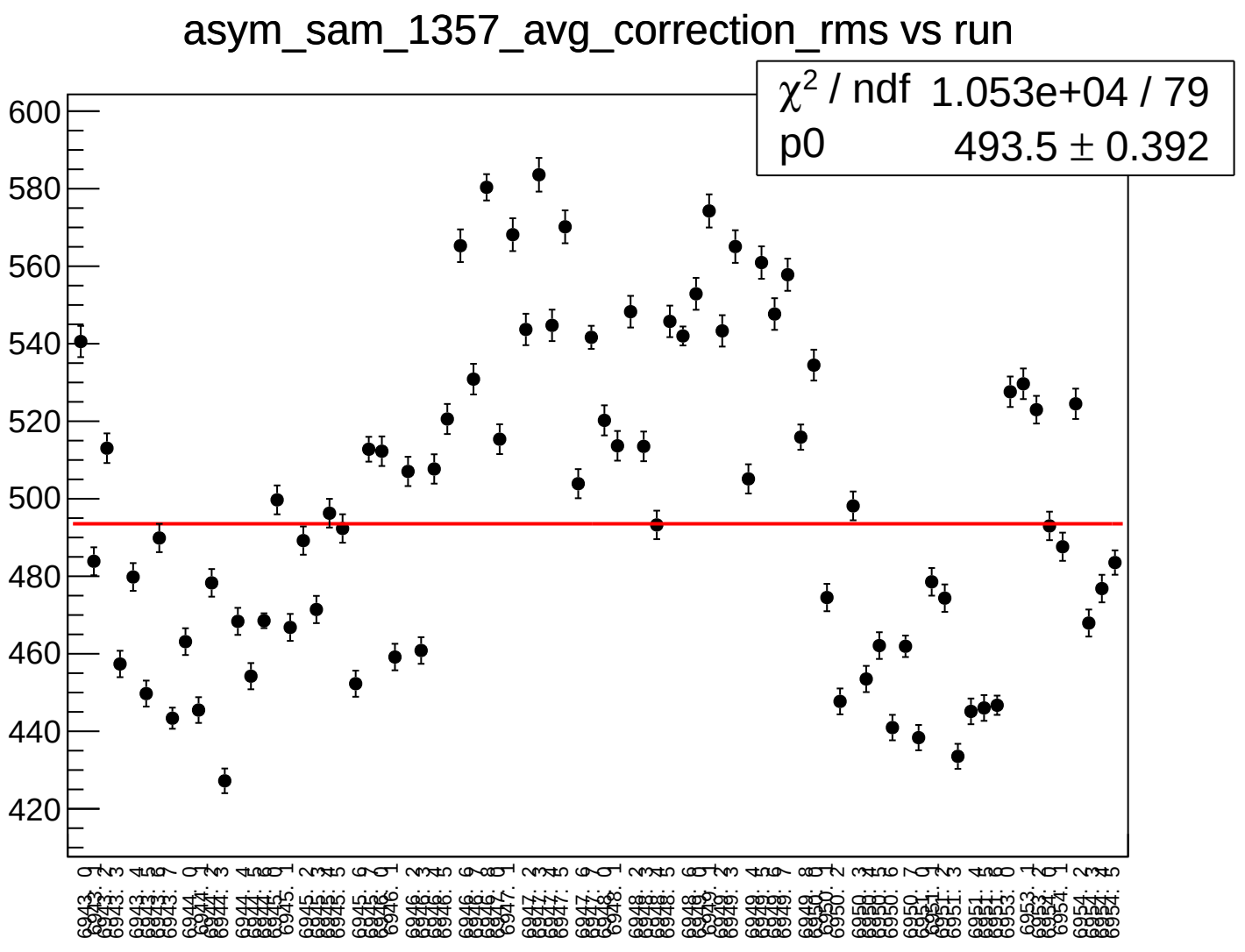

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 76.26 / 79
p0 −28.68 ± 56.37
pull
Entries 80
Mean 1559
Std Dev 1518

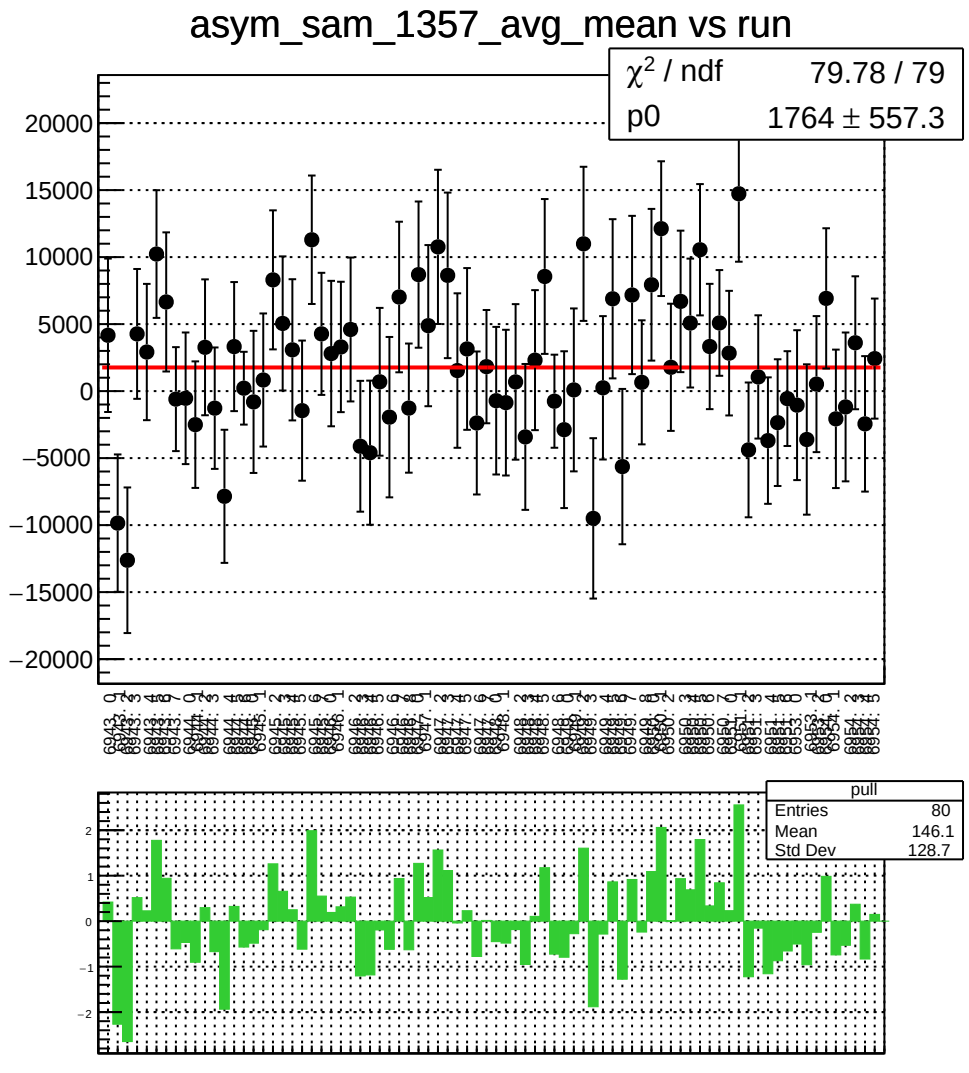

pull1D
Entries 80
Mean 0.001796
Std Dev 0.9764

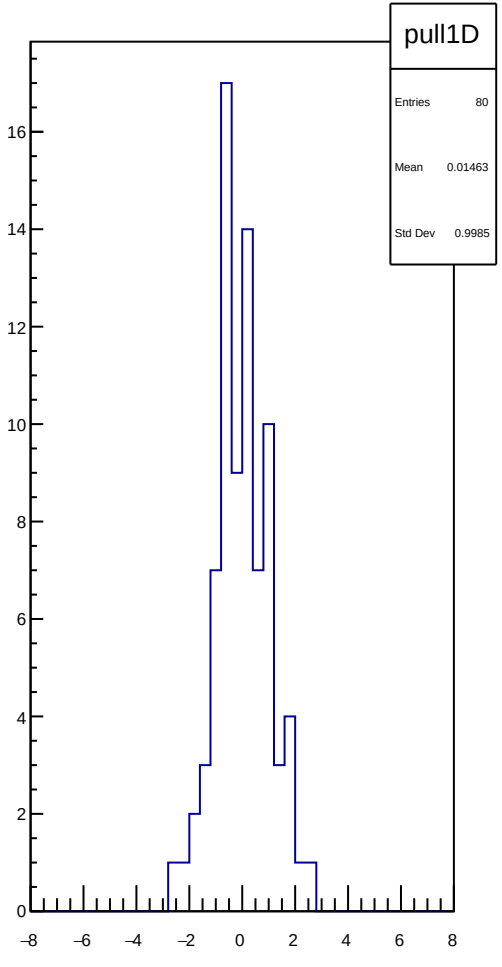

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 5508 / 79
p0 50.27 ± 0.03986
65
60
55
50
45

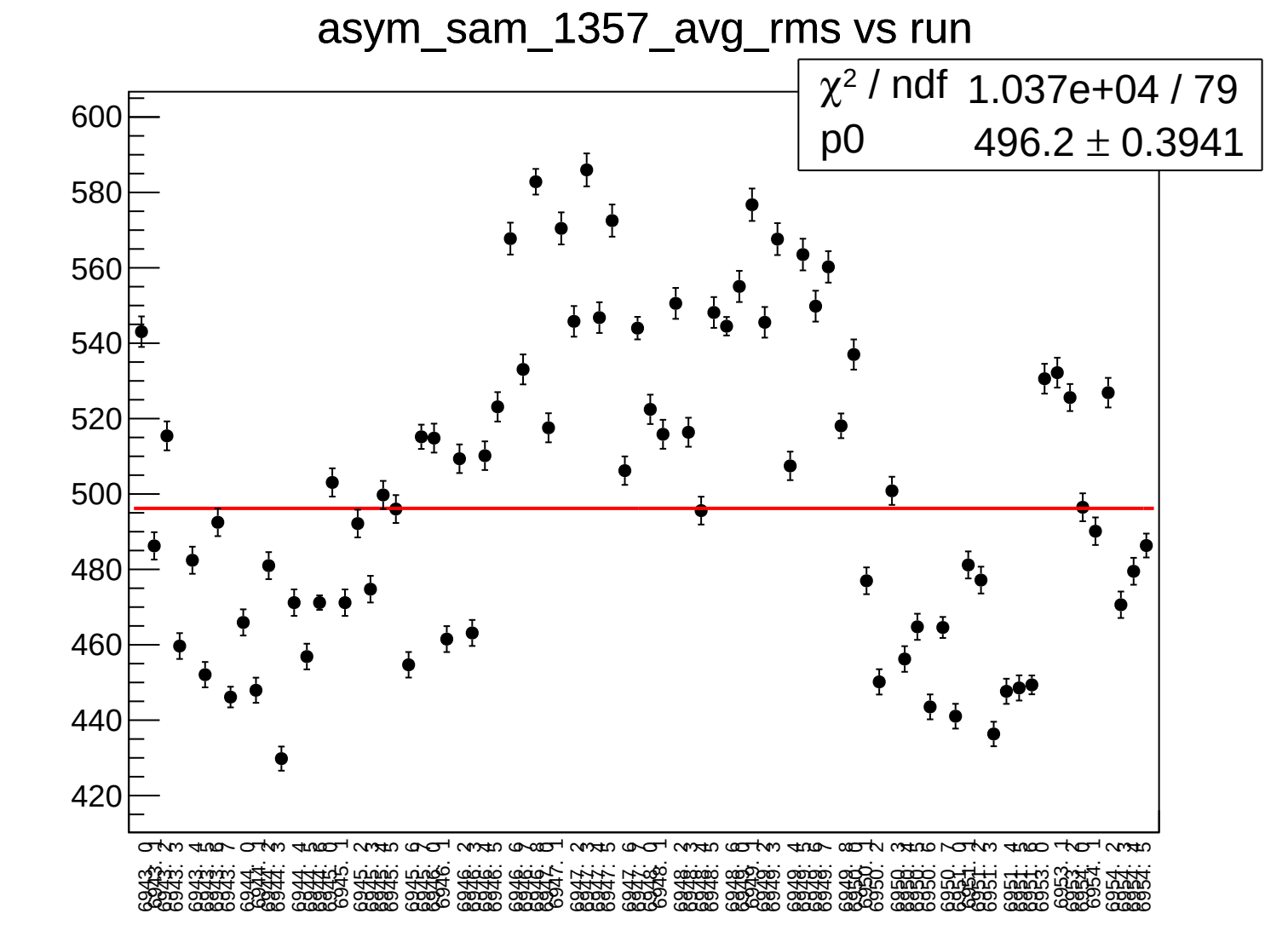

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 79.83 / 79
p0 −1792 ± 554.3
pull
Entries 80
Mean 128.7
Std Dev 115.2

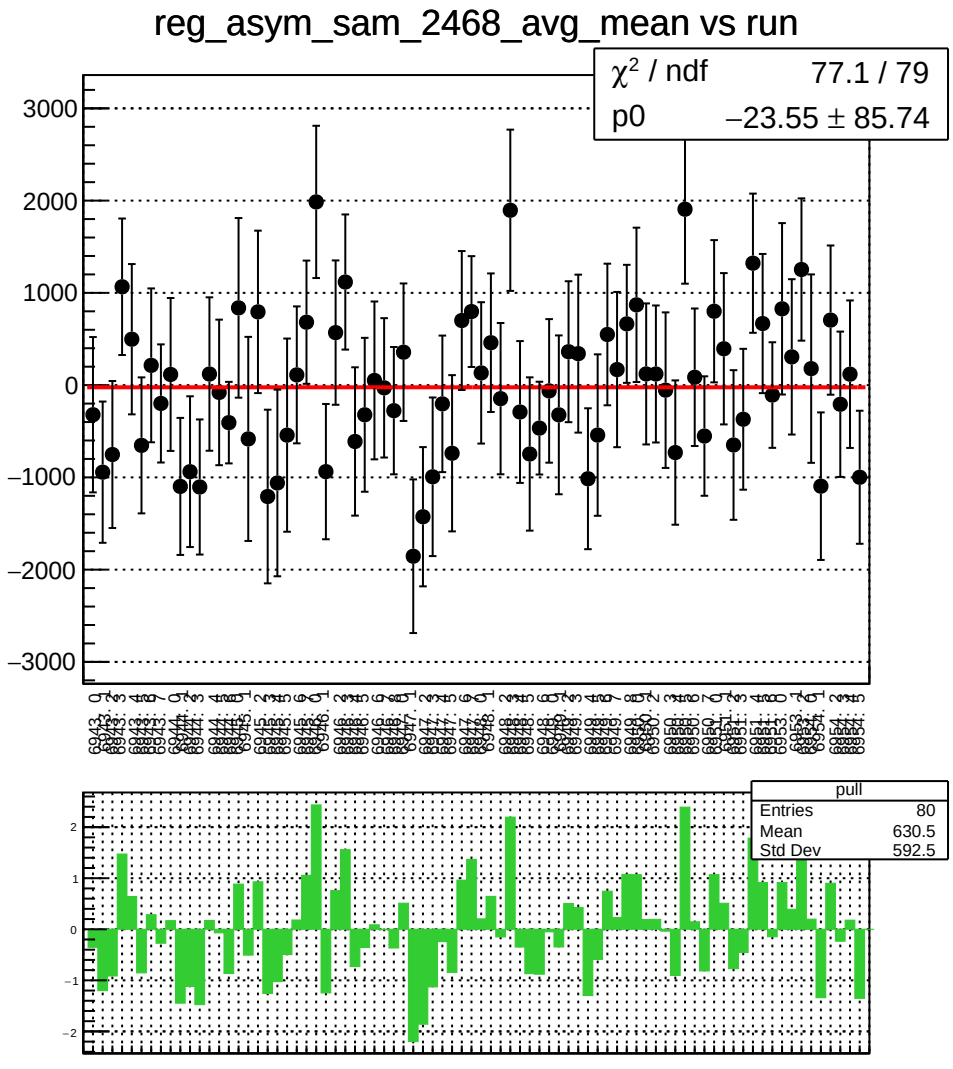

pull1D
Entries 80
Mean −0.01447
Std Dev 0.9988

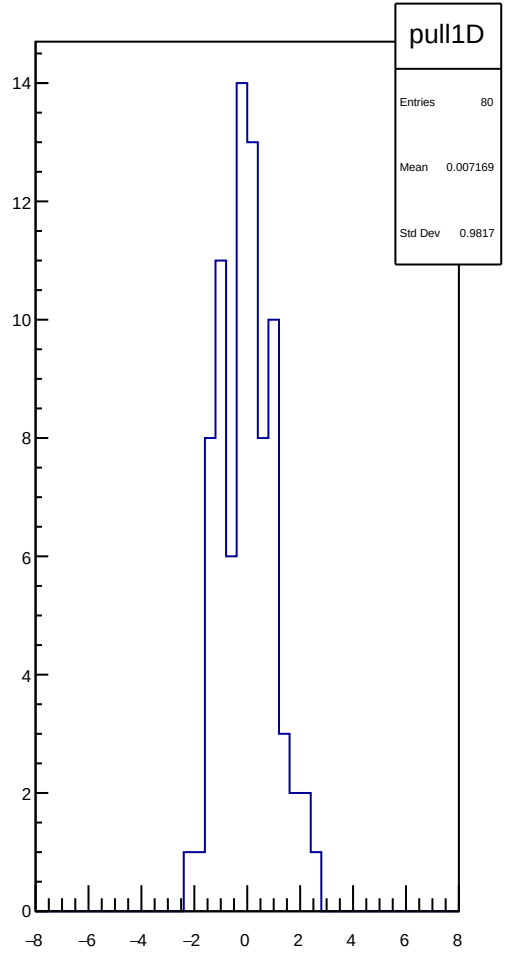

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 1.053e+04 / 79
p0 493.5 ± 0.392
600
580
560
540
520
500
480
460
440
420

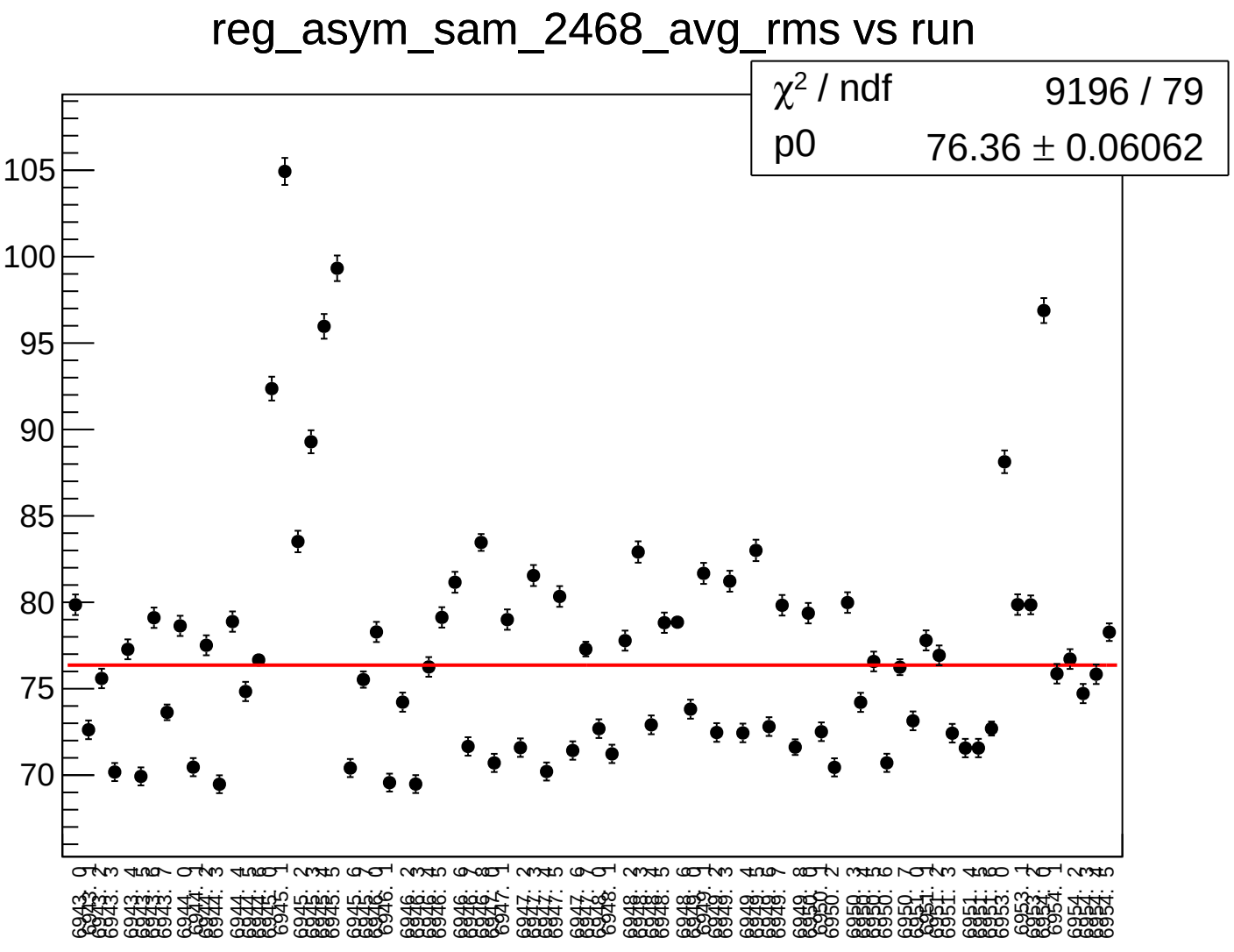

asym_sam_1357_avg_mean vs run
χ² / ndf 79.78 / 79
p0 1764 ± 557.3
pull
Entries 80
Mean 146.1
Std Dev 128.7

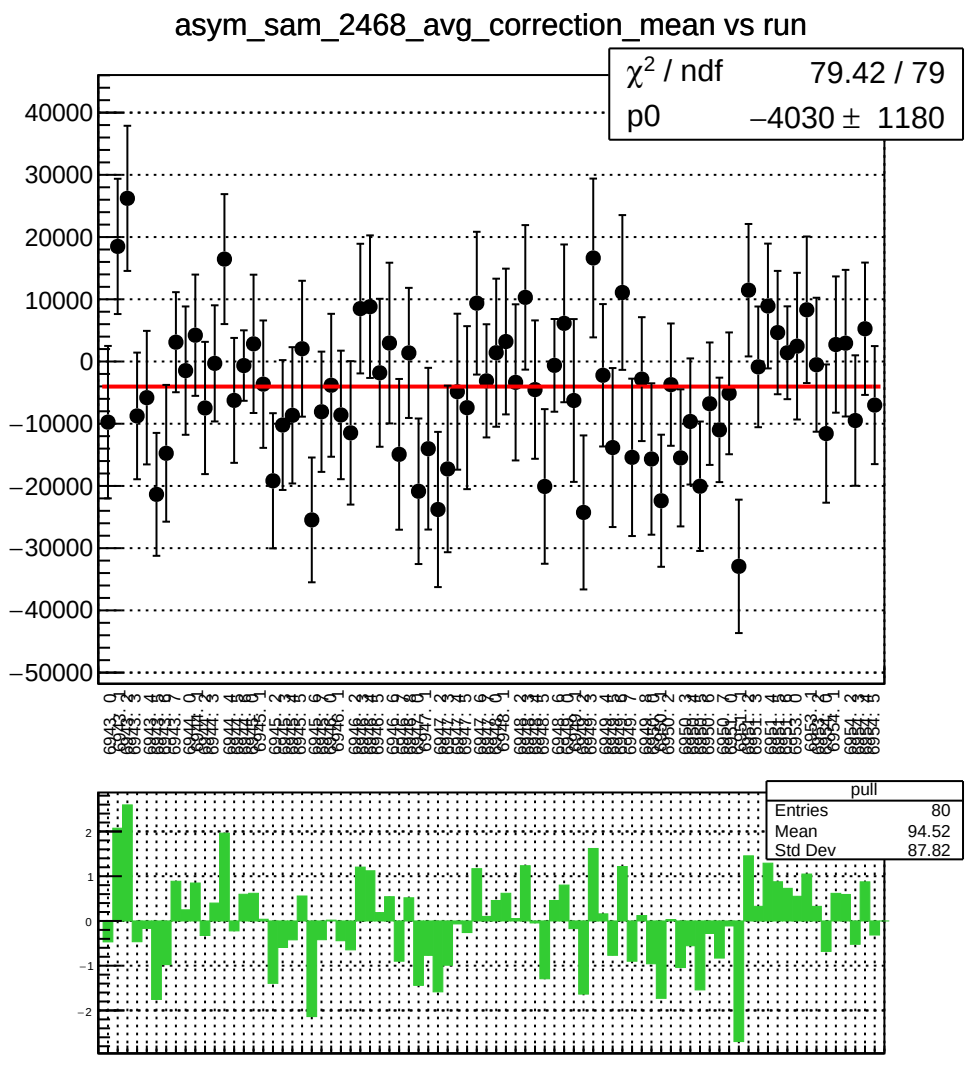

pull1D
Entries 80
Mean 0.01463
Std Dev 0.9985

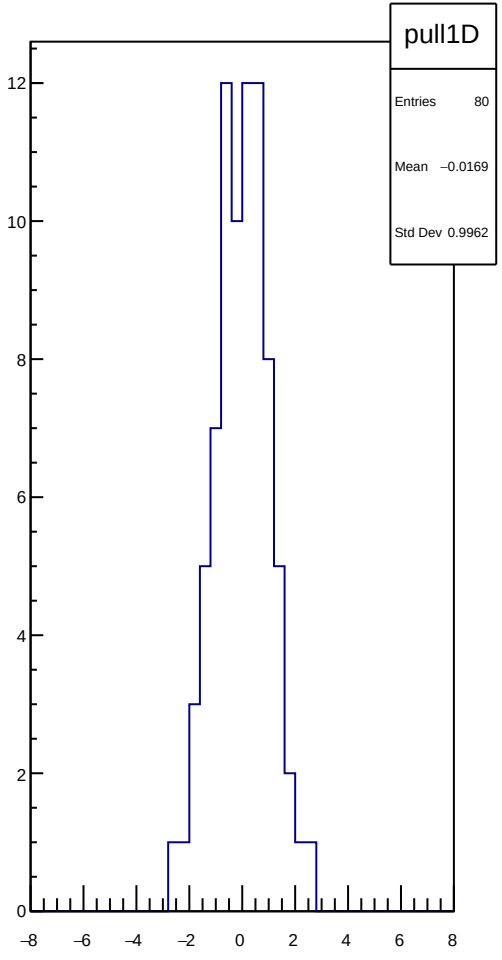

asym_sam_1357_avg_rms vs run
χ² / ndf 1.037e+04 / 79
p0 496.2 ± 0.3941
600
580
560
540
520
500
480
460
440
420

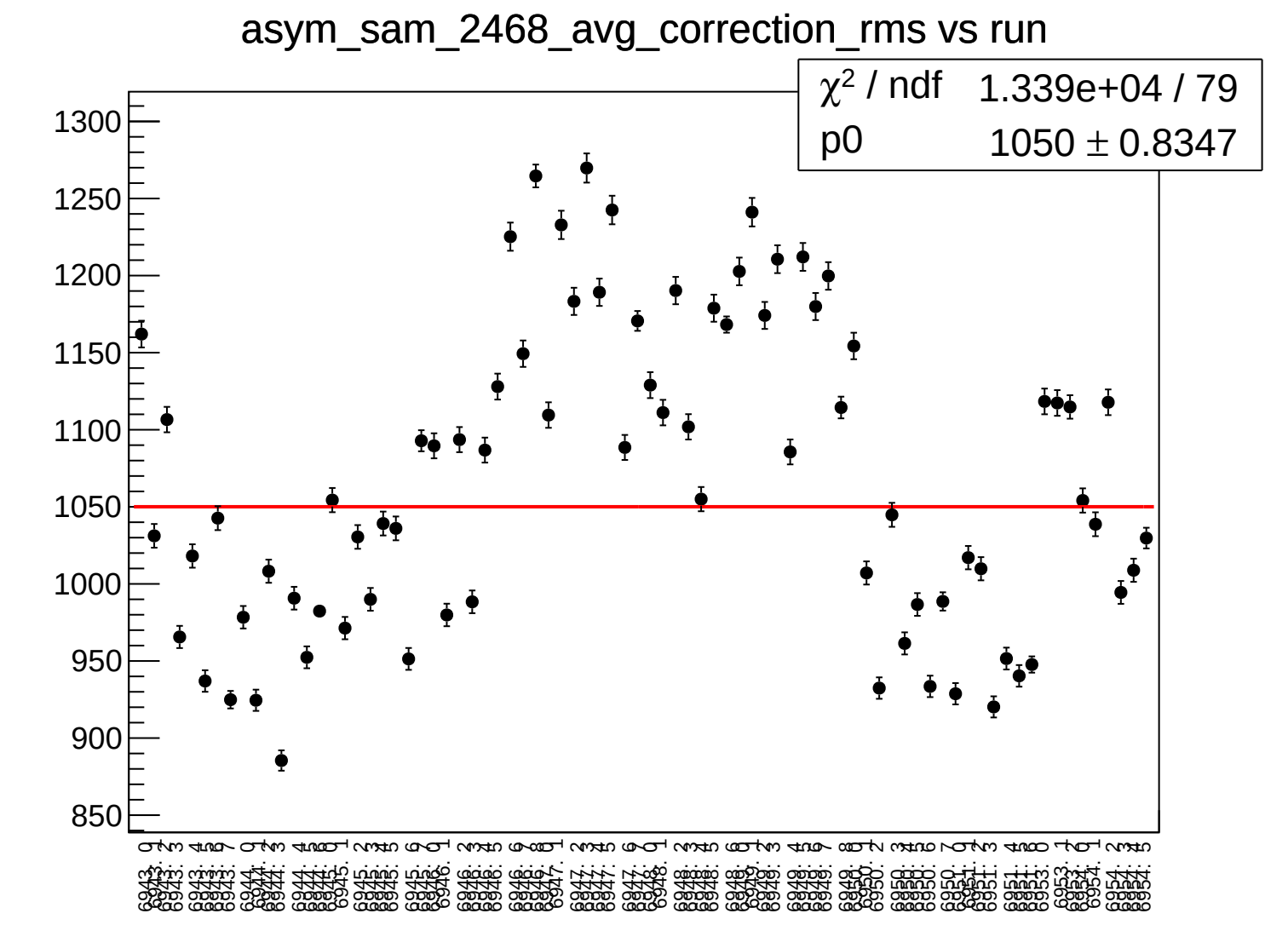

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 77.1 / 79
p0 −23.55 ± 85.74
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 80
Mean 630.5
Std Dev 592.5
2
1
0
−1
−2

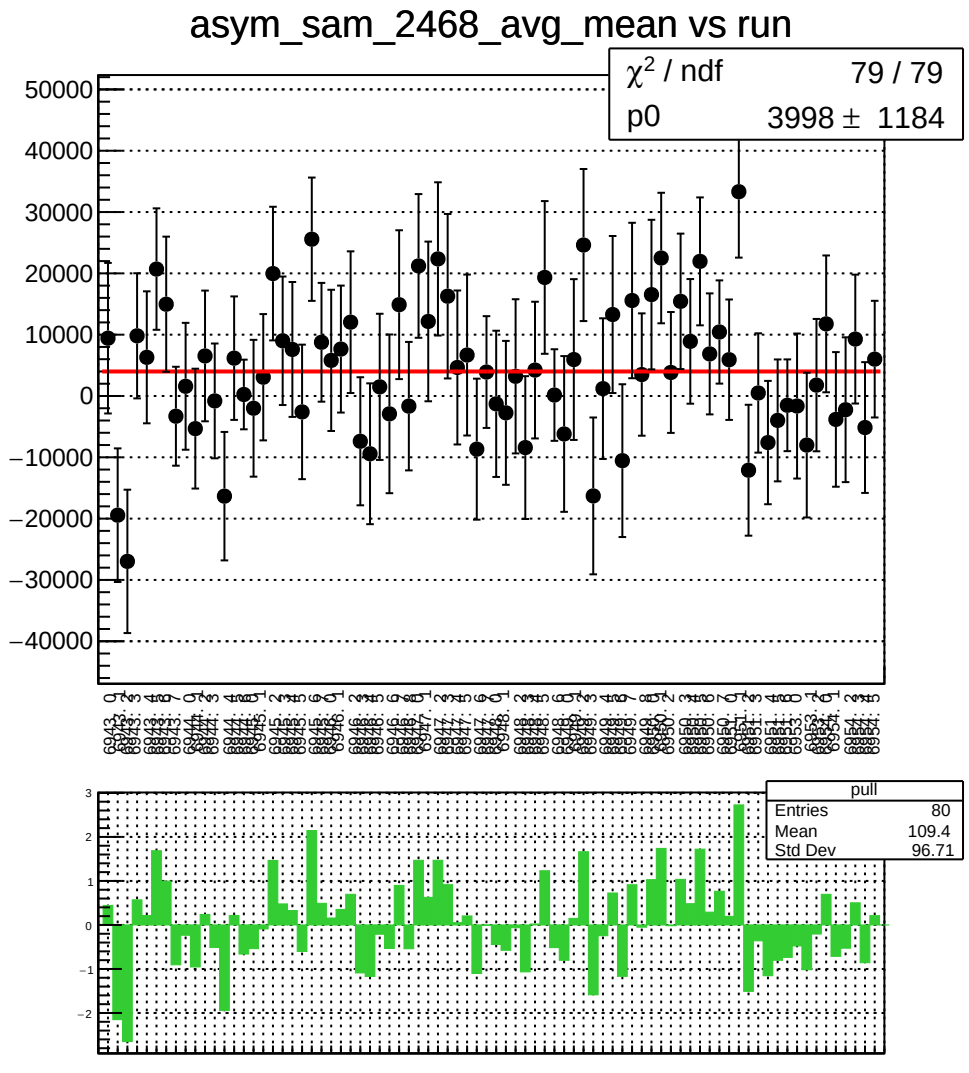

pull1D
Entries 80
Mean 0.007169
Std Dev 0.9817
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

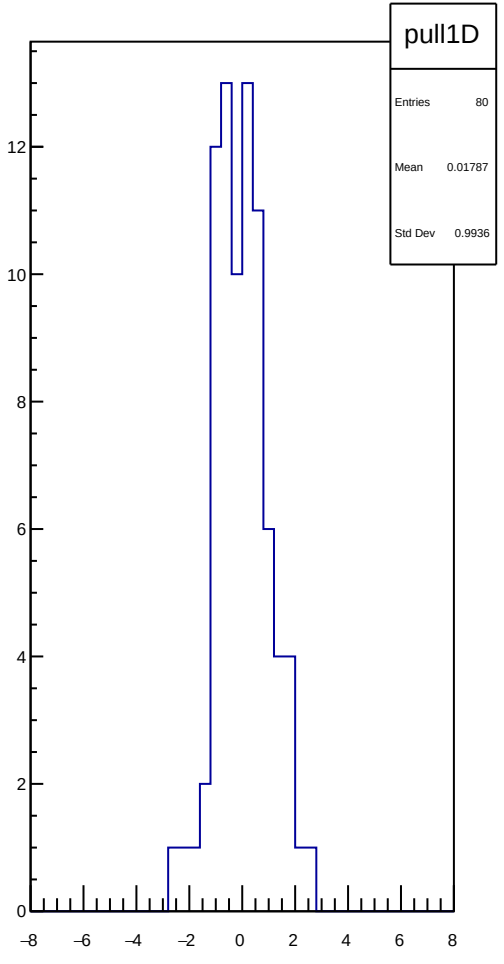

reg_asym_sam_2468_avg_rms vs run
χ^2 / ndf 9196 / 79
p0 76.36 ± 0.06062
105
100
95
90
85
80
75
70

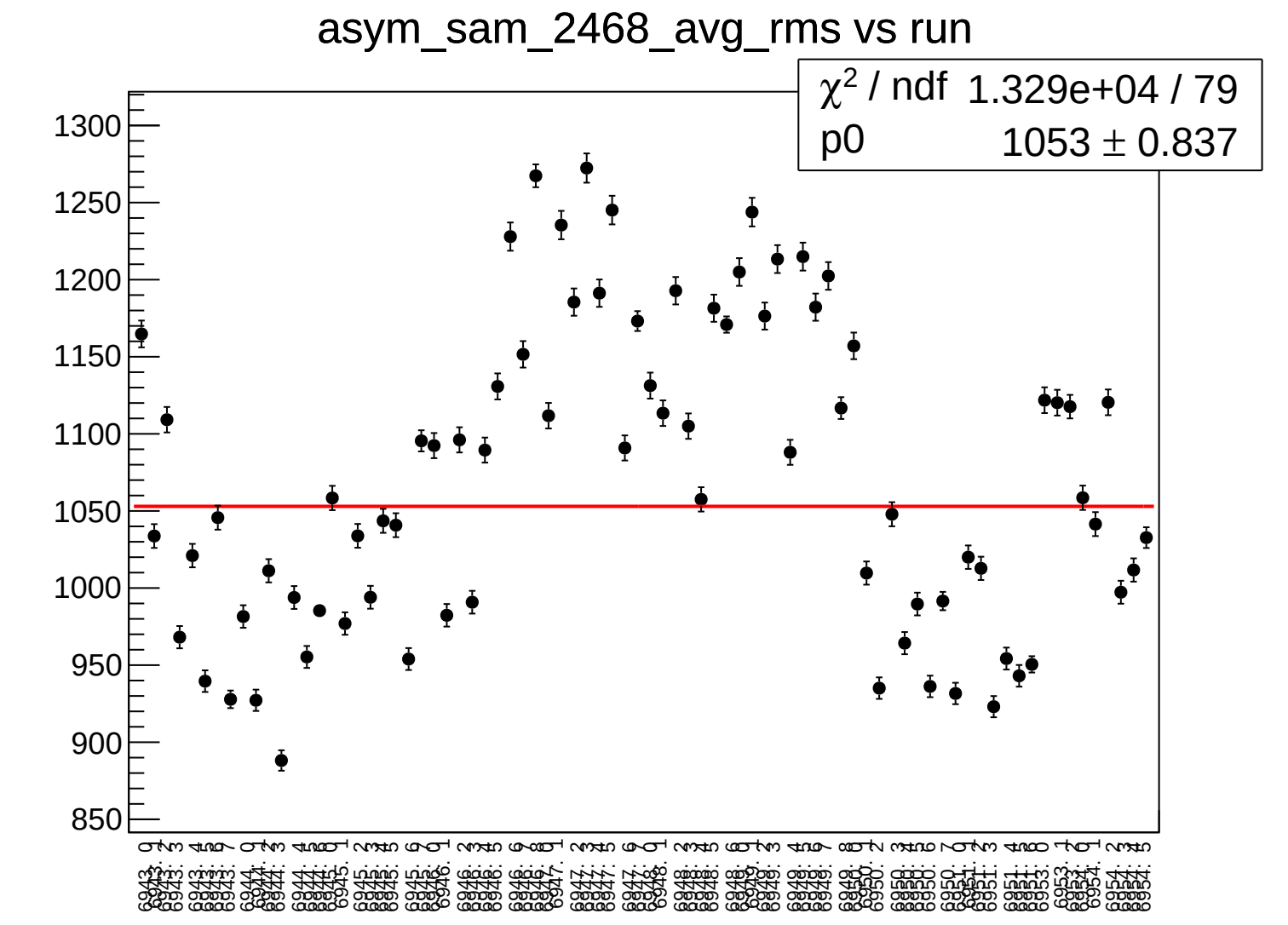

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 79.42 / 79
p0 −4030 ± 1180
pull
Entries 80
Mean 94.52
Std Dev 87.82

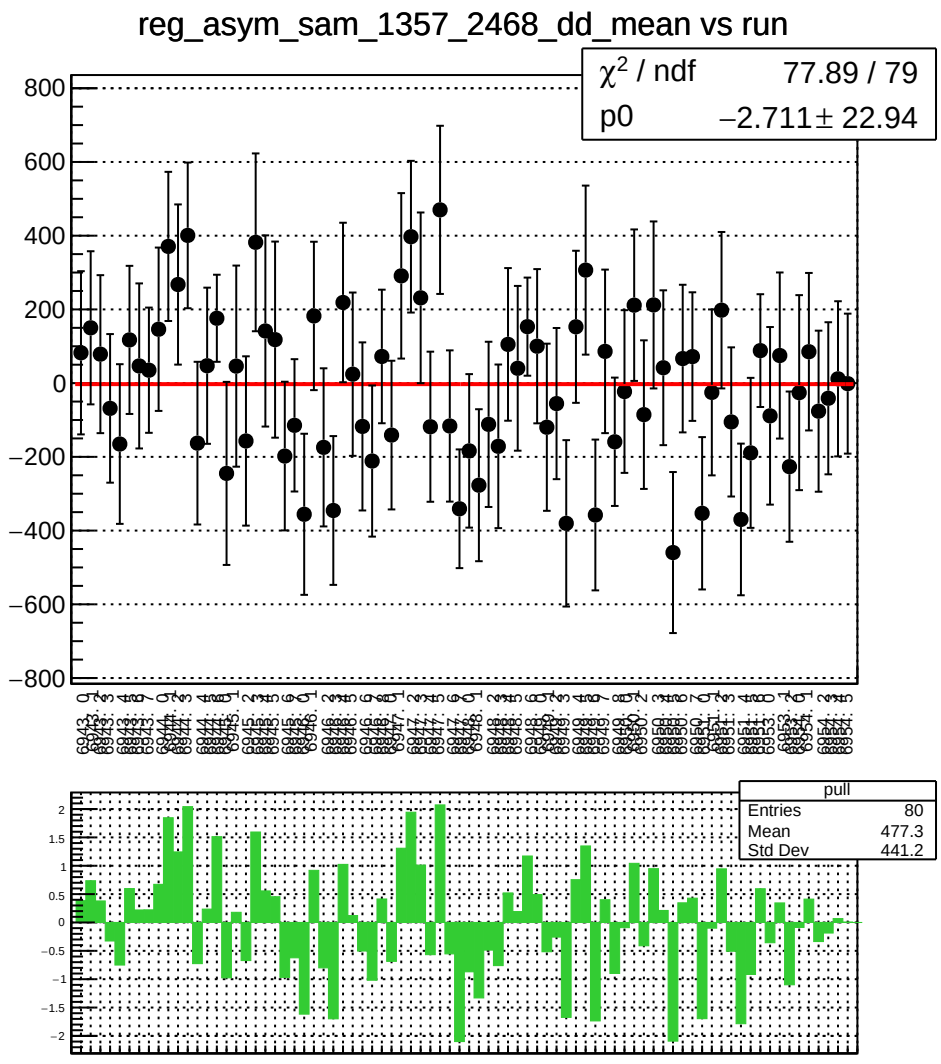

pull1D
Entries 80
Mean −0.0169
Std Dev 0.9962

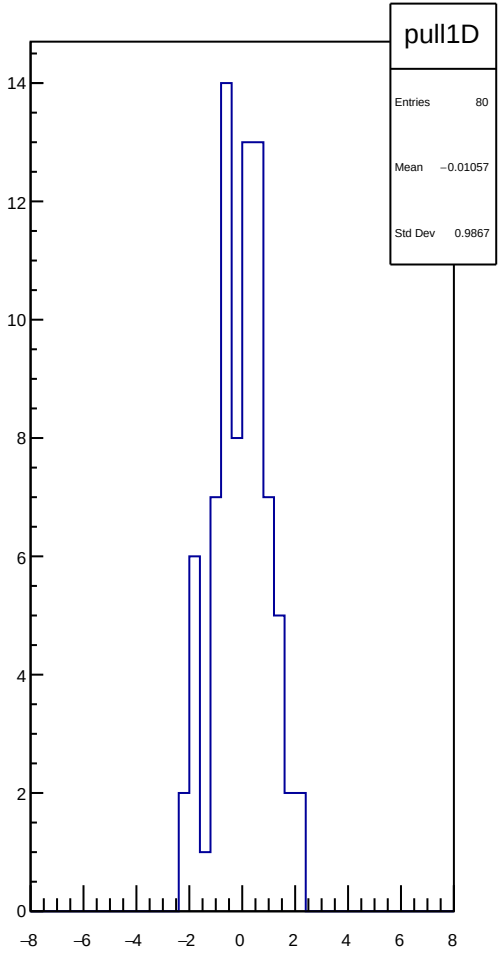

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 1.339e+04 / 79
p0 1050 ± 0.8347
1300
1250
1200
1150
1100
1050
1000
950
900
850

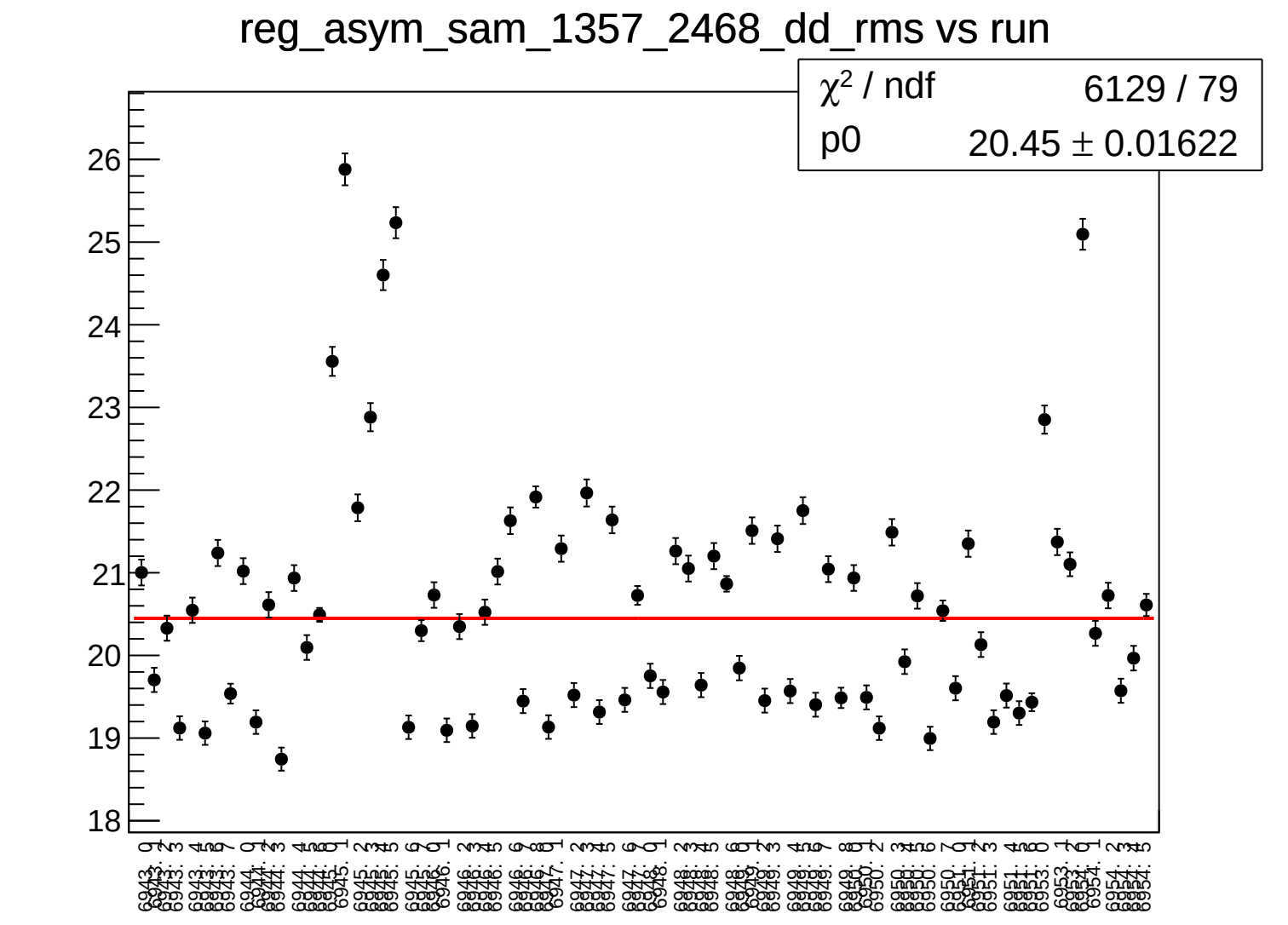

asym_sam_2468_avg_mean vs run
χ² / ndf 79 / 79
p0 3998 ± 1184
pull
Entries 80
Mean 109.4
Std Dev 96.71

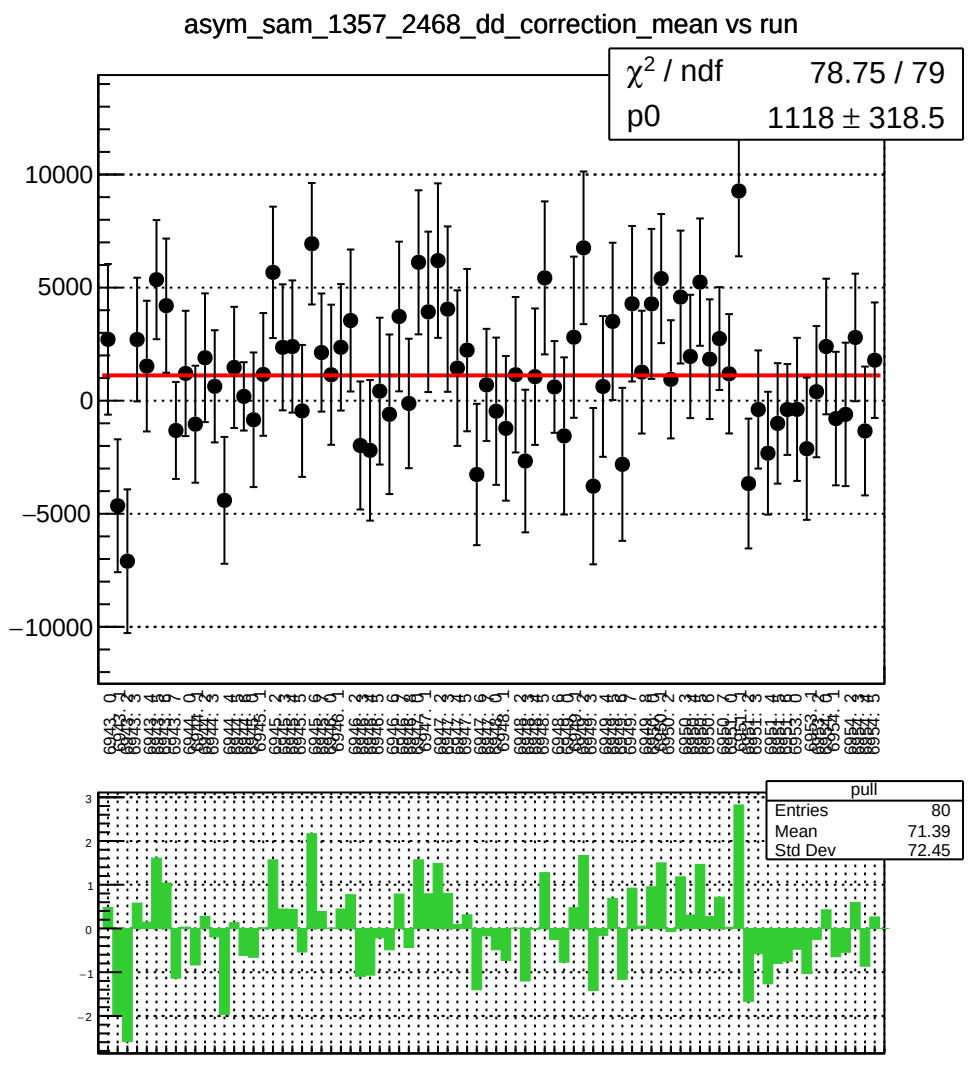

pull1D
Entries 80
Mean 0.01787
Std Dev 0.9936

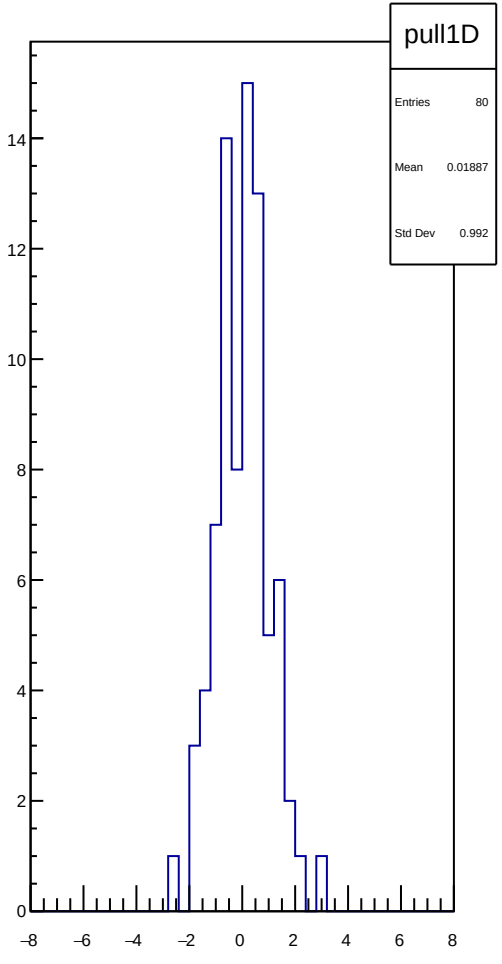

asym_sam_2468_avg_rms vs run
χ² / ndf 1.329e+04 / 79
p0 1053 ± 0.837
1300
1250
1200
1150
1100
1050
1000
950
900
850

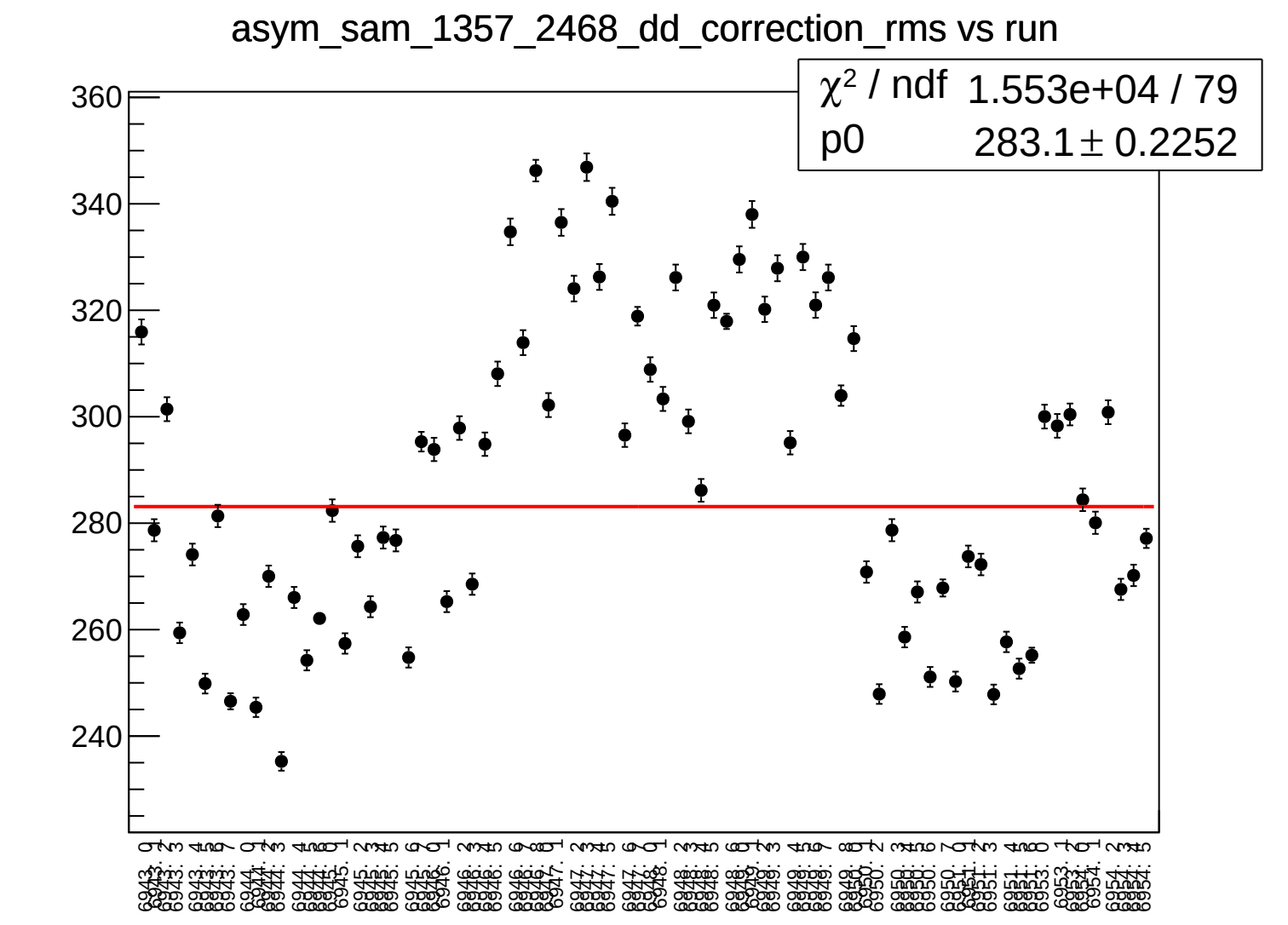

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 77.89 / 79
p0 −2.711 ± 22.94
pull
Entries 80
Mean 477.3
Std Dev 441.2

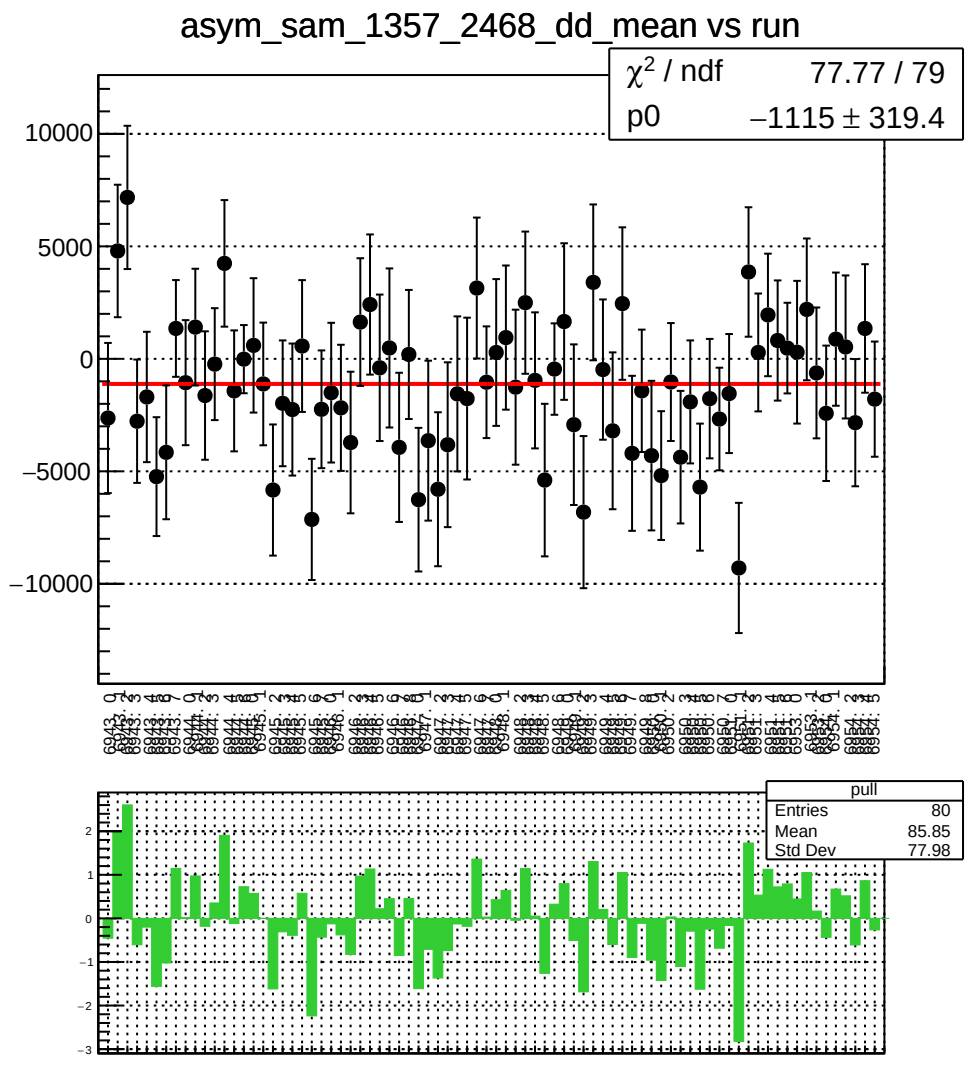

pull1D
Entries 80
Mean −0.01057
Std Dev 0.9867

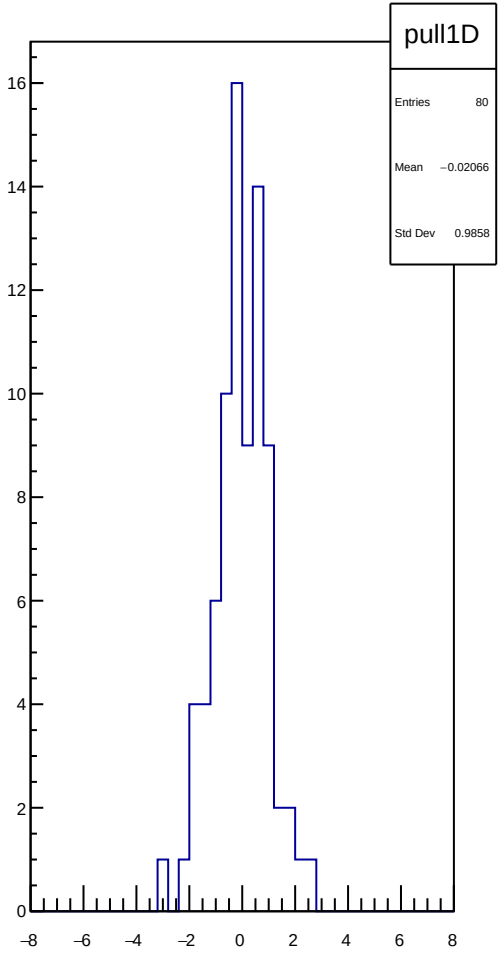

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 6129 / 79
p0 20.45 ± 0.01622
26
25
24
23
22
21
20
19
18


asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 78.75 / 79
p0 1118 ± 318.5
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 71.39
Std Dev 72.45
3
2
1
0
−1
−2

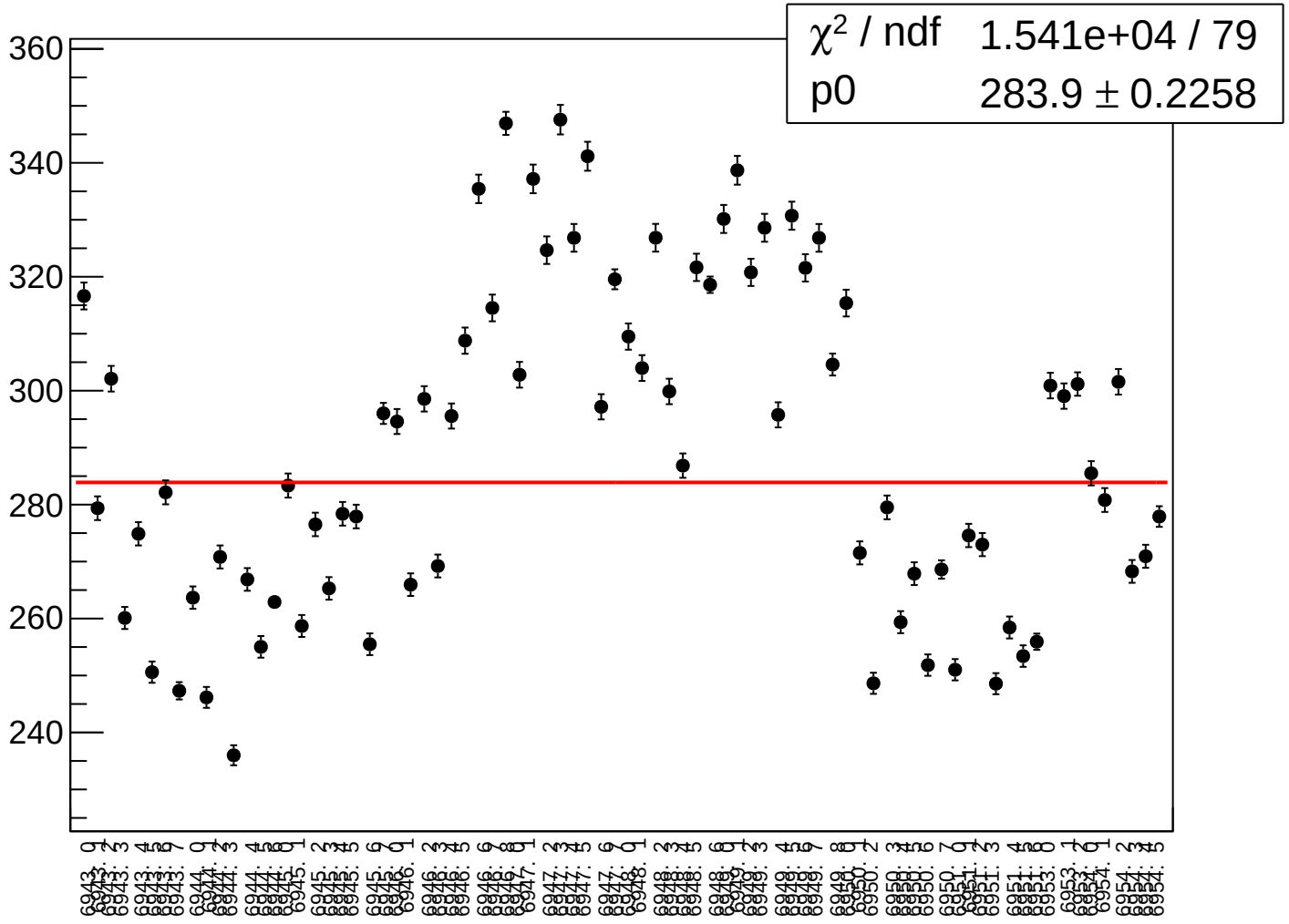

pull1D
Entries 80
Mean 0.01887
Std Dev 0.992
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

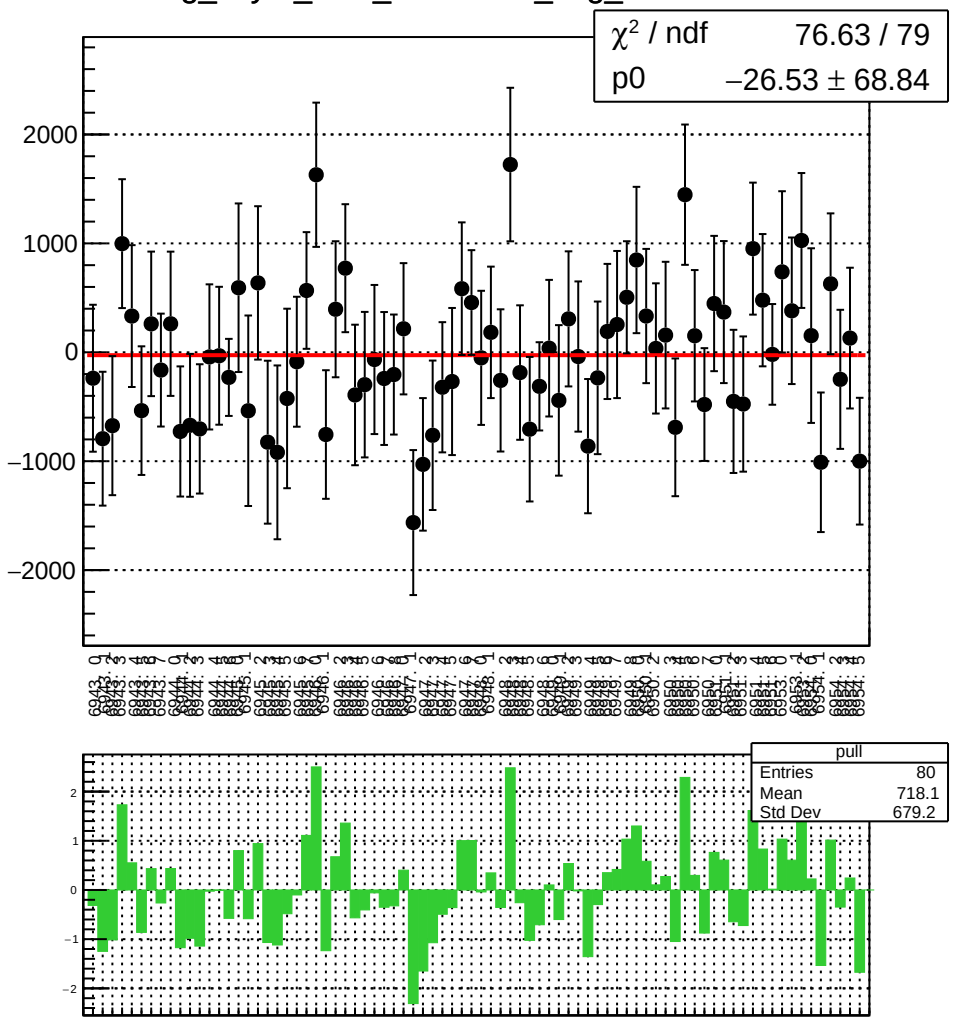

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 1.553e+04 / 79
p0 283.1 ± 0.2252
360
340
320
300
280
260
240

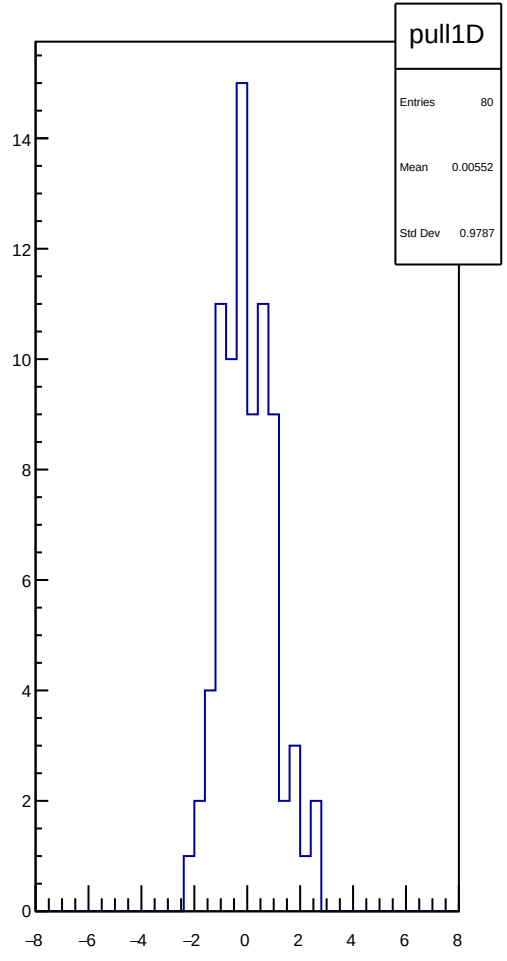

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 77.77 / 79
p0 −1115 ± 319.4
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 85.85
Std Dev 77.98
2
1
0
−1
−2
−3

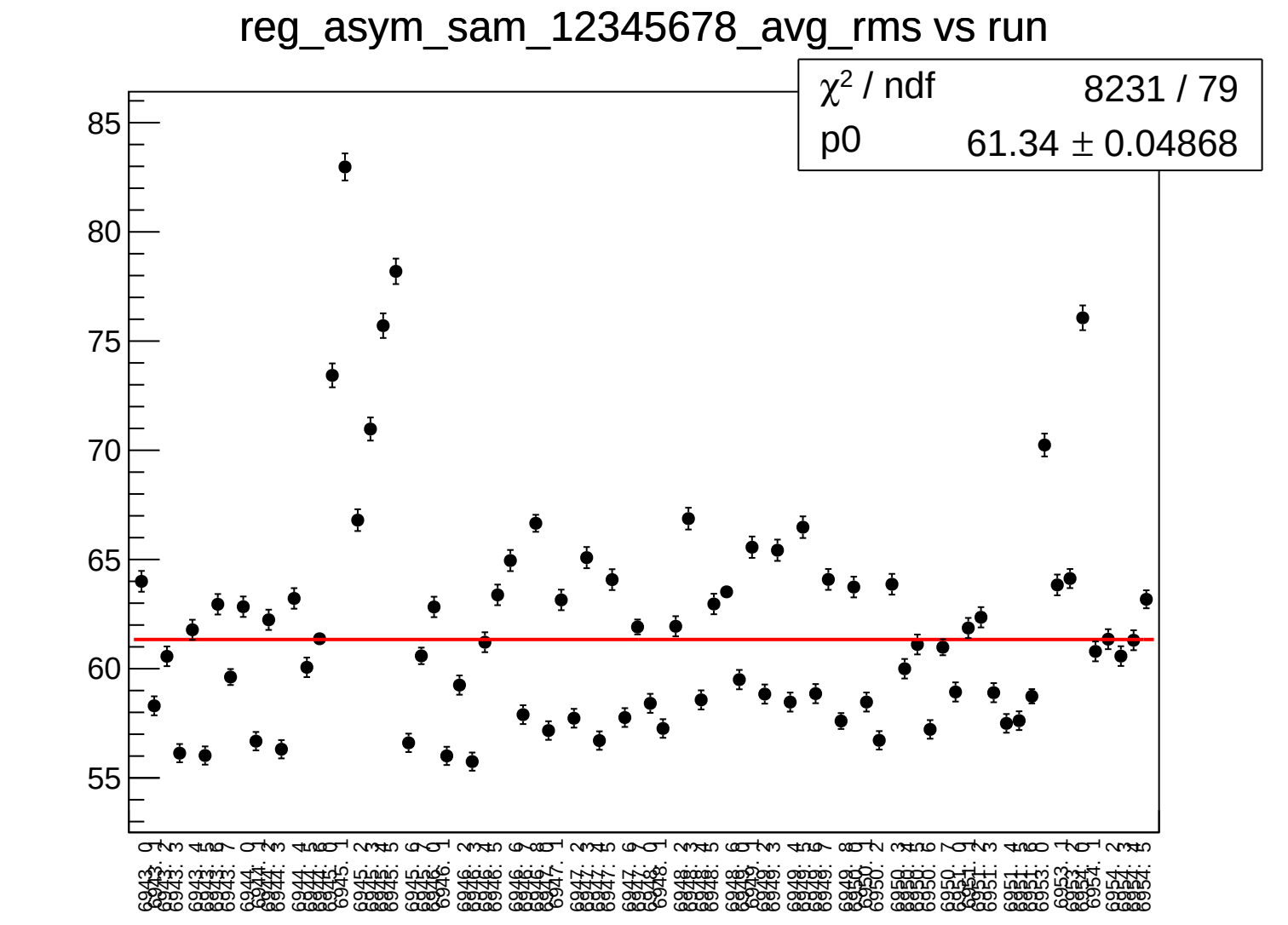

pull1D
Entries 80
Mean −0.02066
Std Dev 0.9858
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

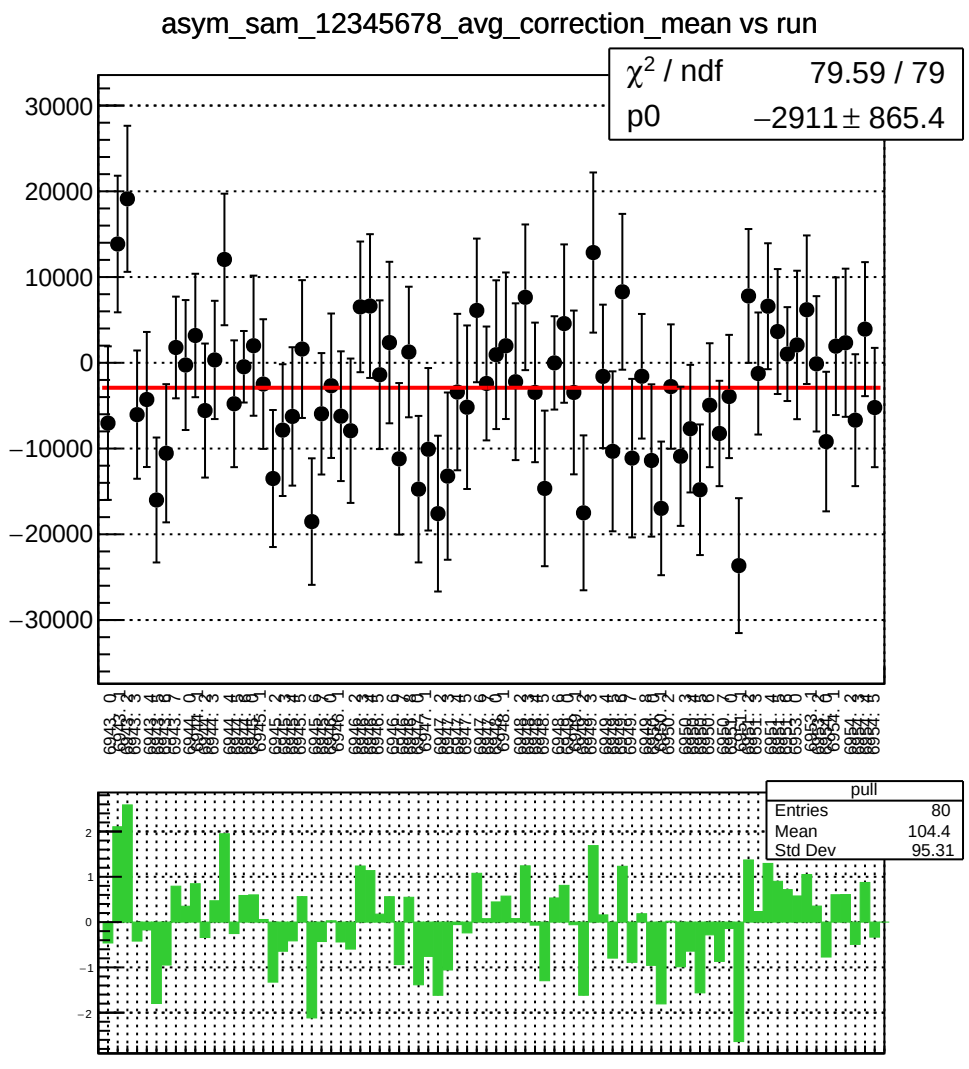
asym_sam_1357_2468_dd_rms vs run

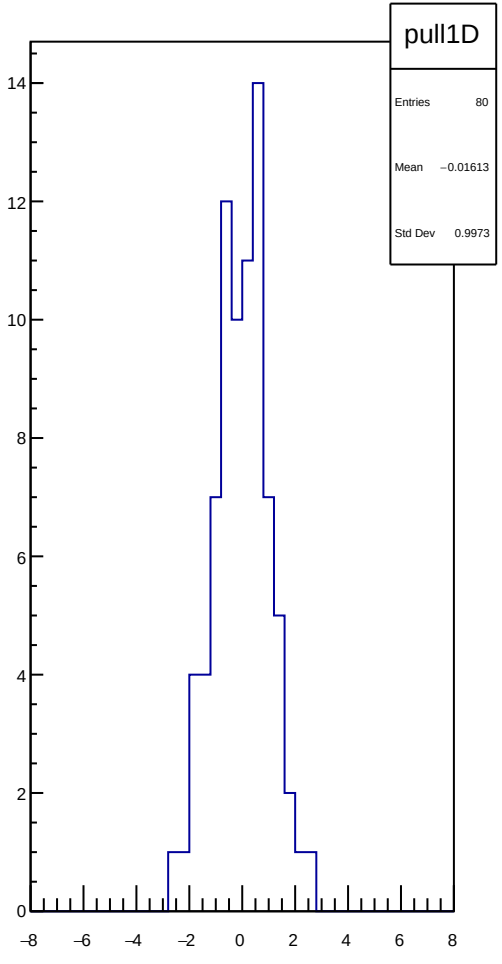


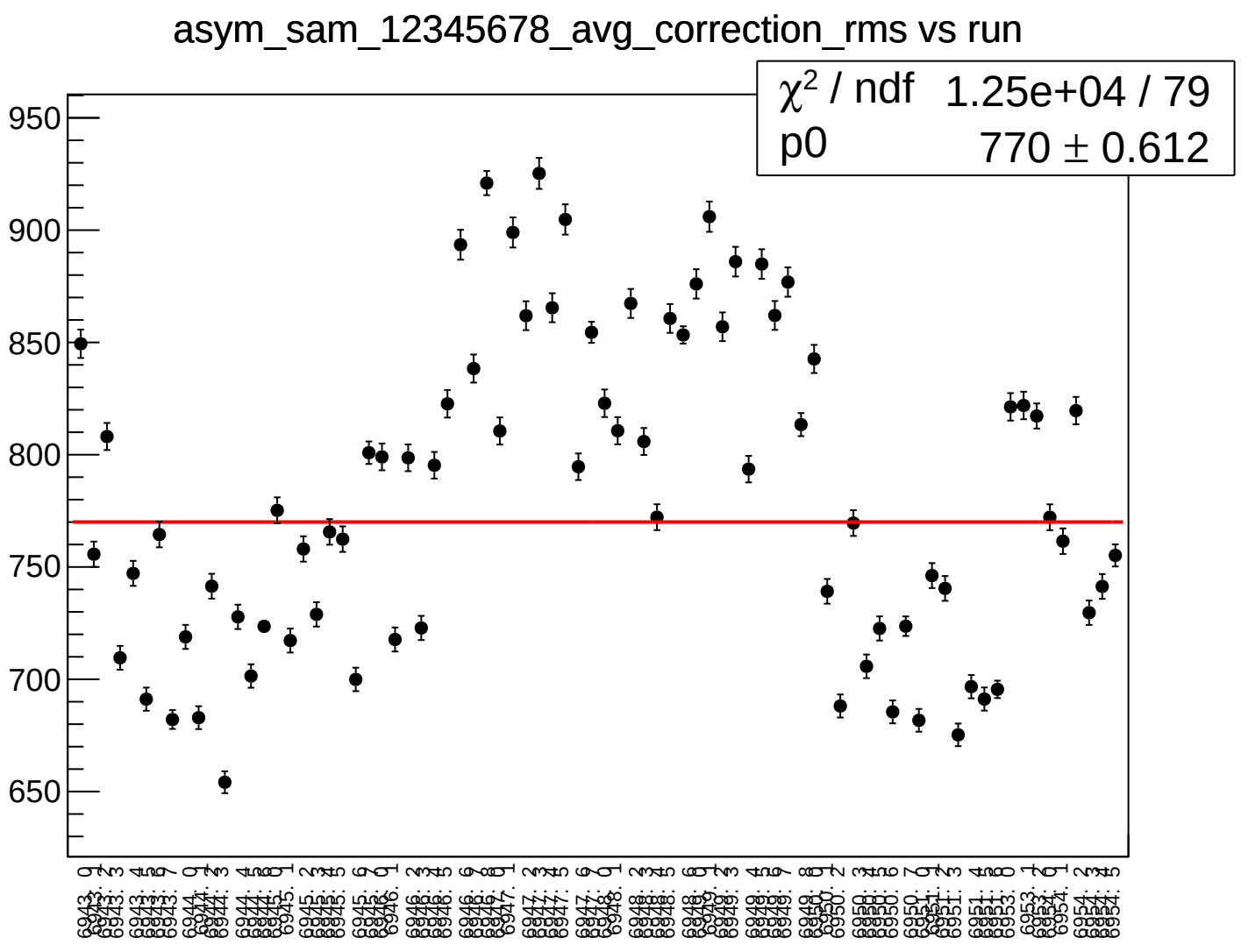

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 76.63 / 79
p0 −26.53 ± 68.84
2000
1000
0
−1000
−2000
pull
Entries 80
Mean 718.1
Std Dev 679.2
2
1
0
−1
−2

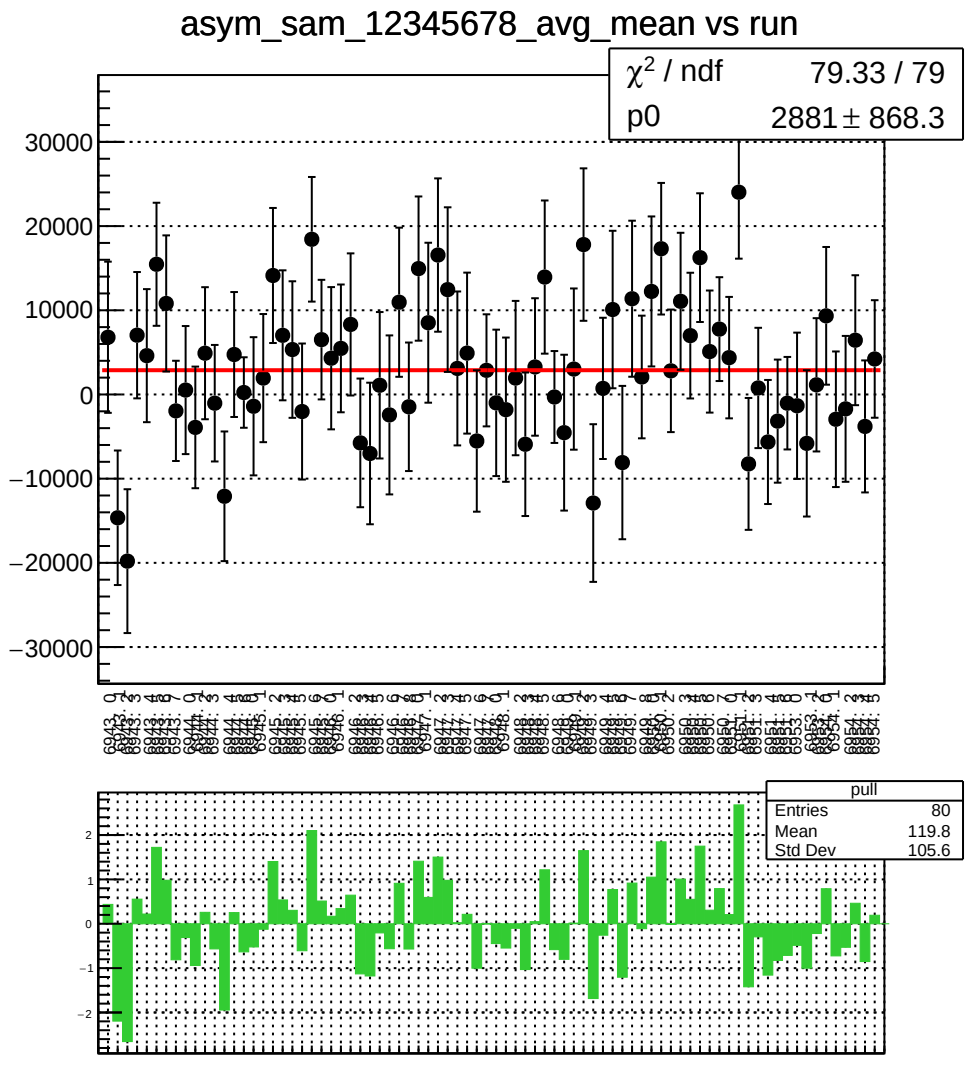

pull1D
Entries 80
Mean 0.00552
Std Dev 0.9787
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

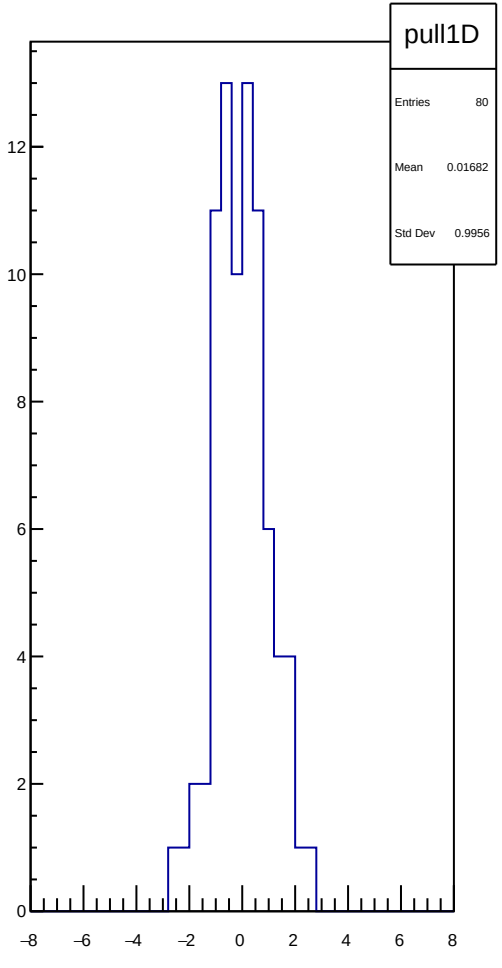

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 8231 / 79
p0 61.34 ± 0.04868
85
80
75
70
65
60
55

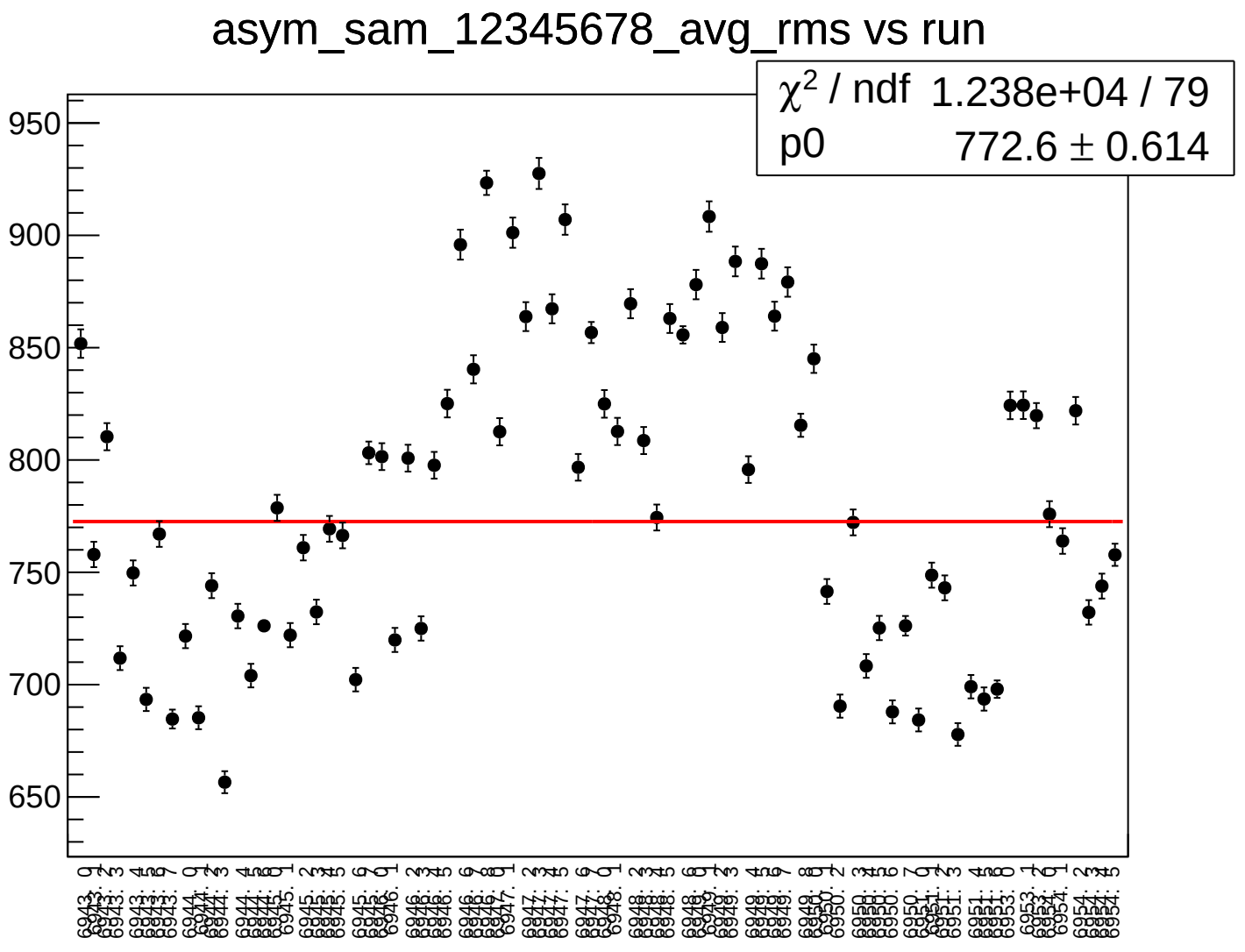

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 79.59 / 79
p0 −2911 ± 865.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 80
Mean 104.4
Std Dev 95.31
2
1
0
−1
−2

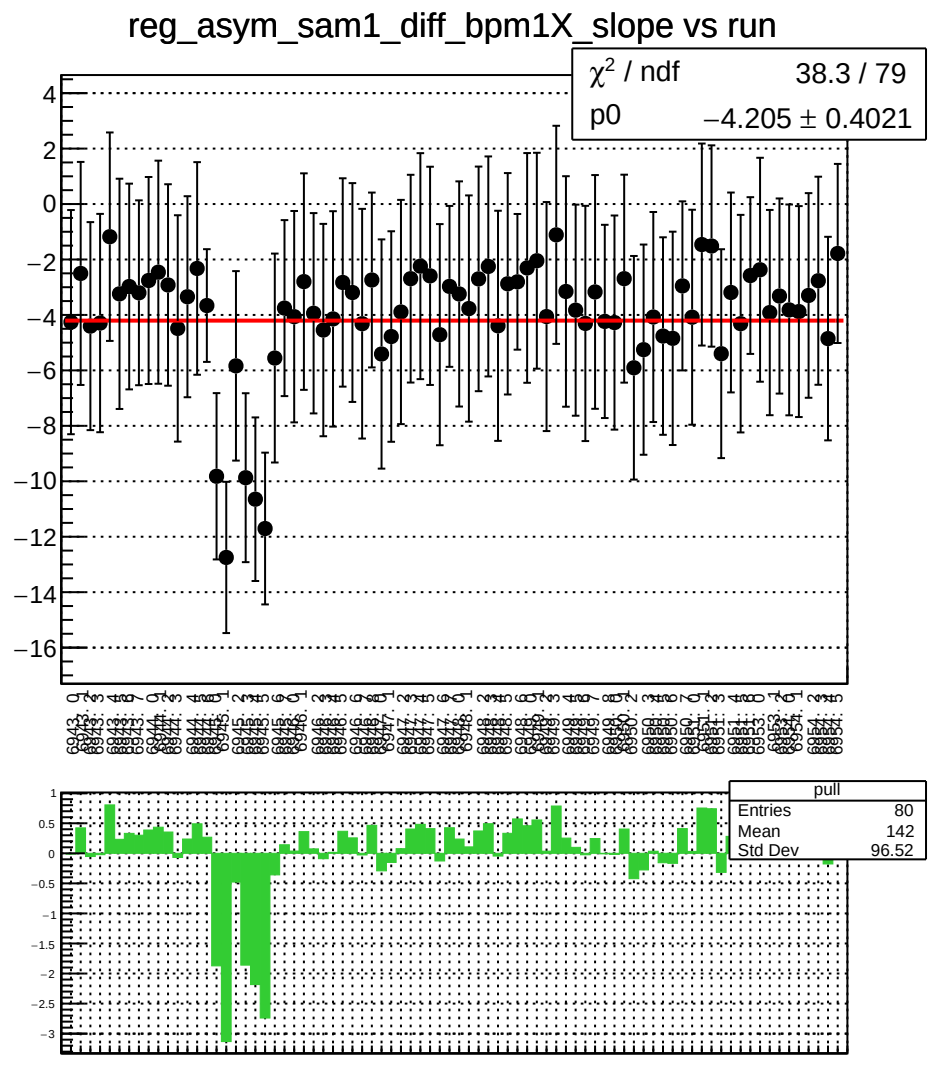

pull1D
Entries 80
Mean −0.01613
Std Dev 0.9973
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

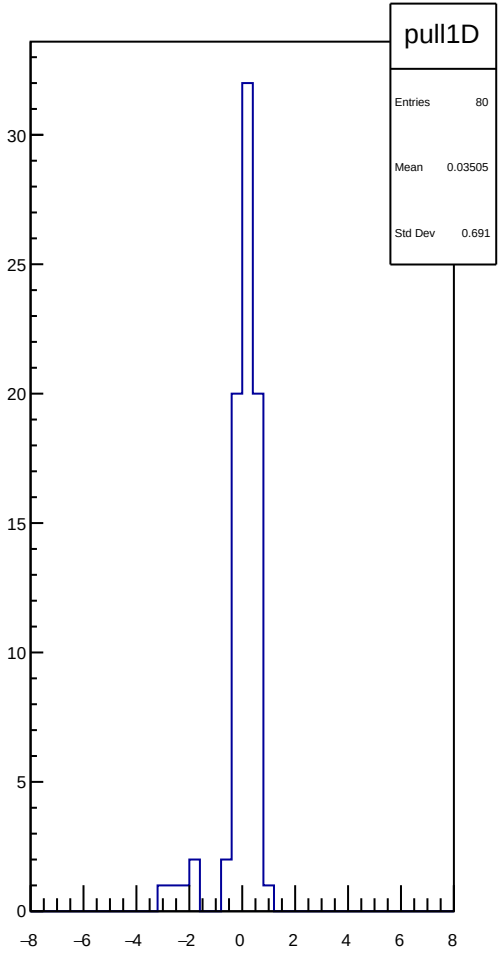

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 1.25e+04 / 79
p0 770 ± 0.612
950
900
850
800
750
700
650

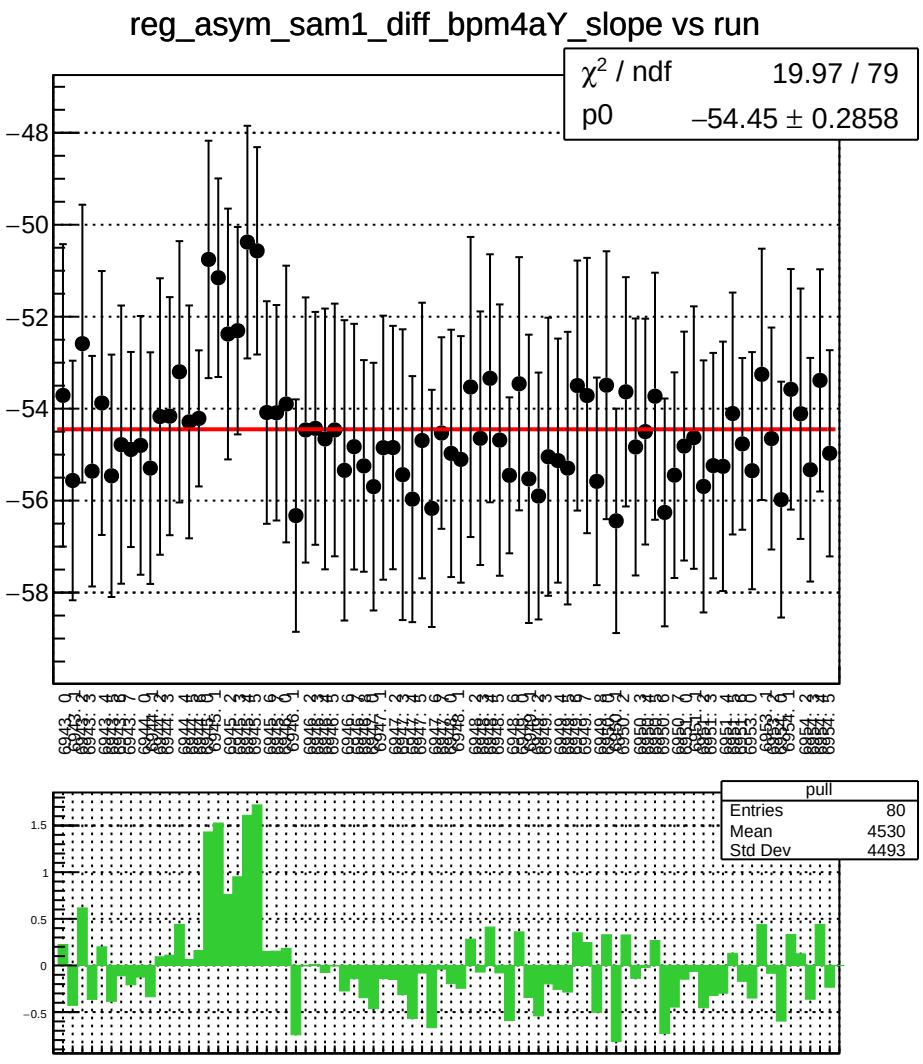

asym_sam_12345678_avg_mean vs run
χ² / ndf 79.33 / 79
p0 2881 ± 868.3
pull
Entries 80
Mean 119.8
Std Dev 105.6

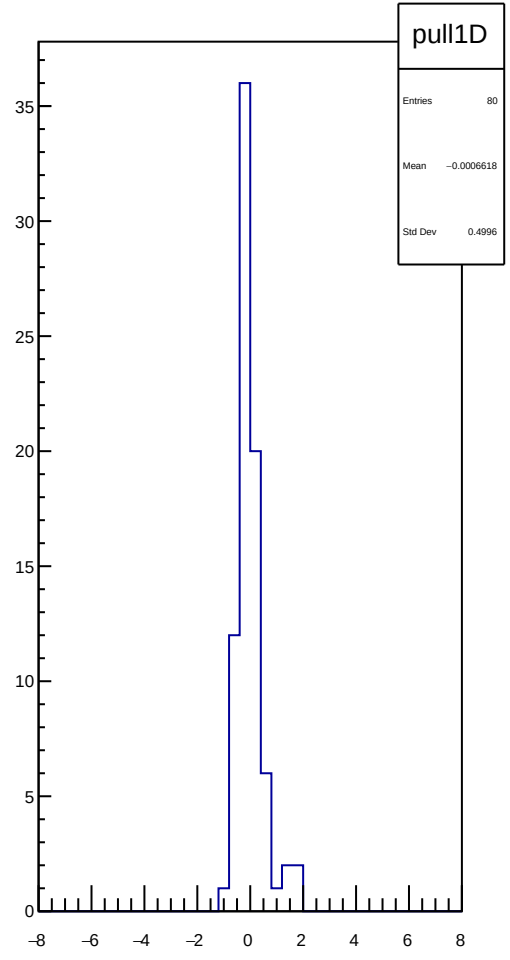

pull1D
Entries 80
Mean 0.01682
Std Dev 0.9956

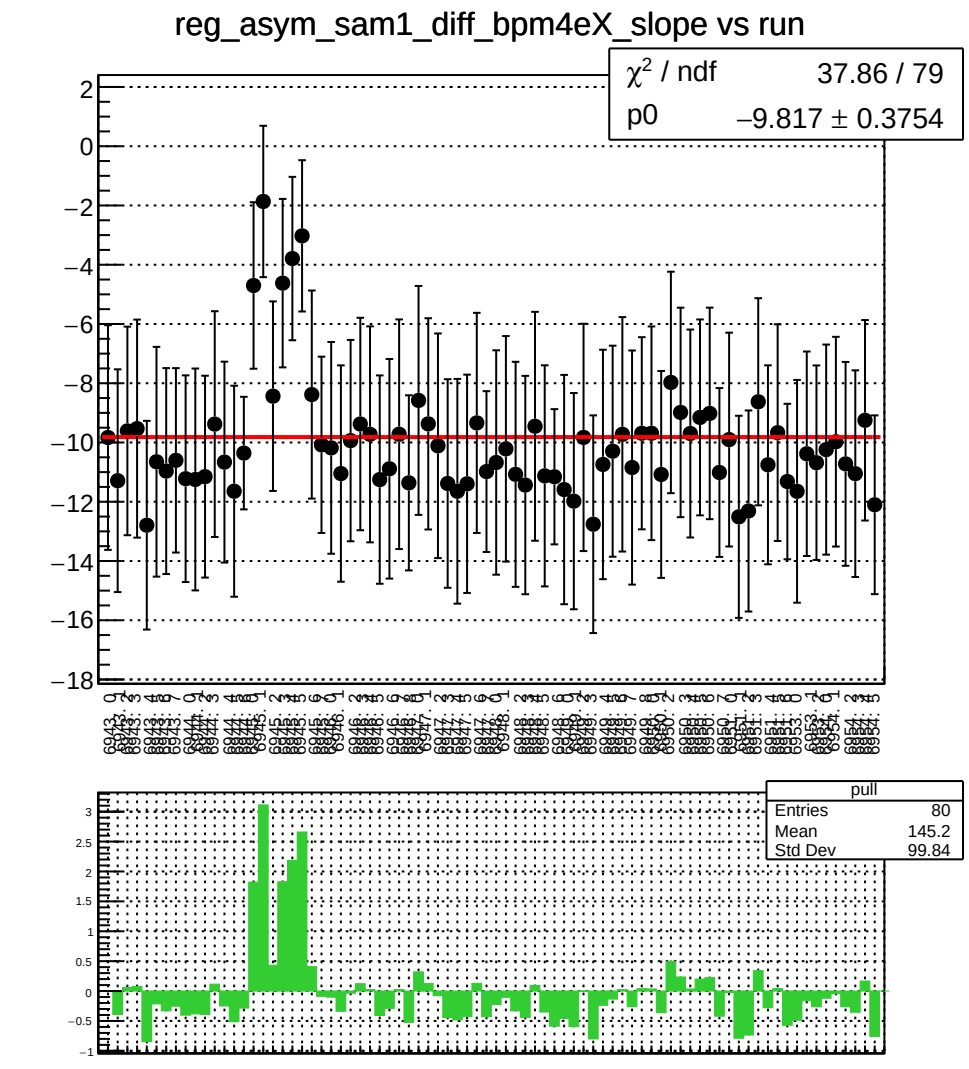

asym_sam_12345678_avg_rms vs run
χ² / ndf 1.238e+04 / 79
p0 772.6 ± 0.614
950
900
850
800
750
700
650

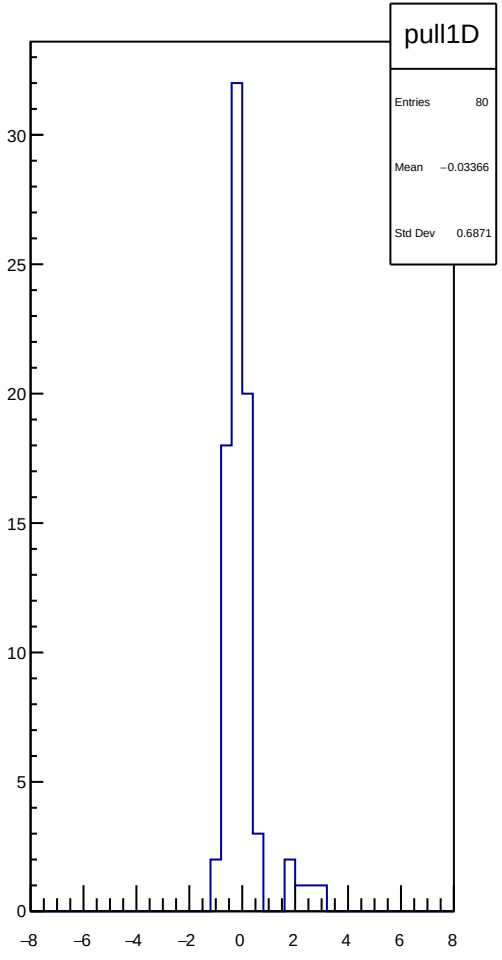

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 38.3 / 79
p0 −4.205 ± 0.4021
pull
Entries 80
Mean 142
Std Dev 96.52

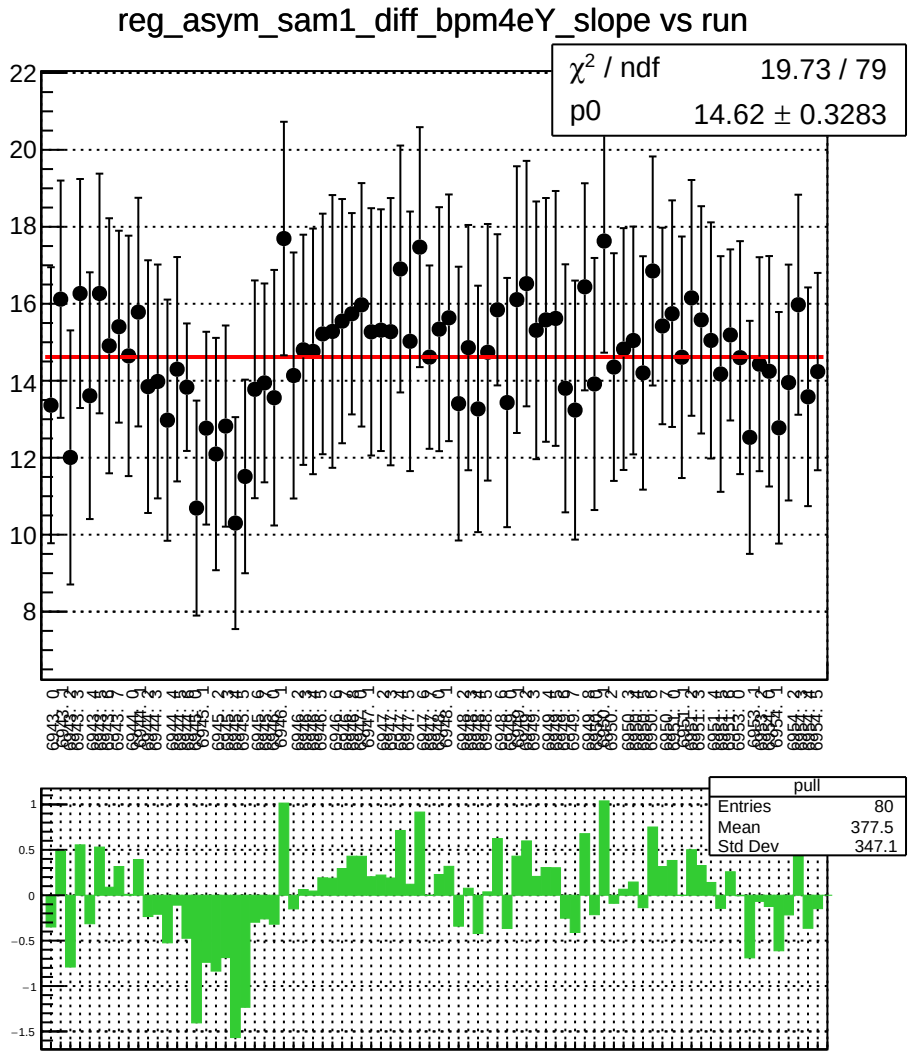

pull1D
Entries 80
Mean 0.03505
Std Dev 0.691

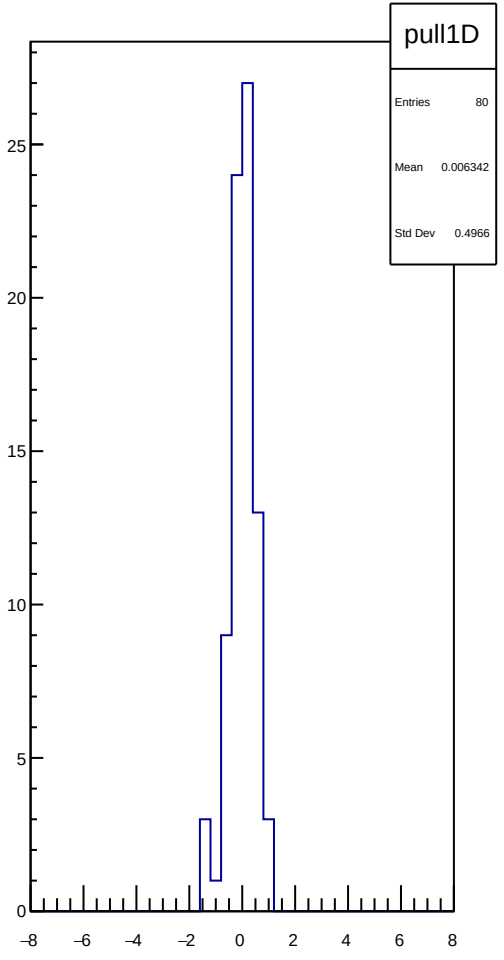

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 19.97 / 79
p0 −54.45 ± 0.2858
pull
Entries 80
Mean 4530
Std Dev 4493

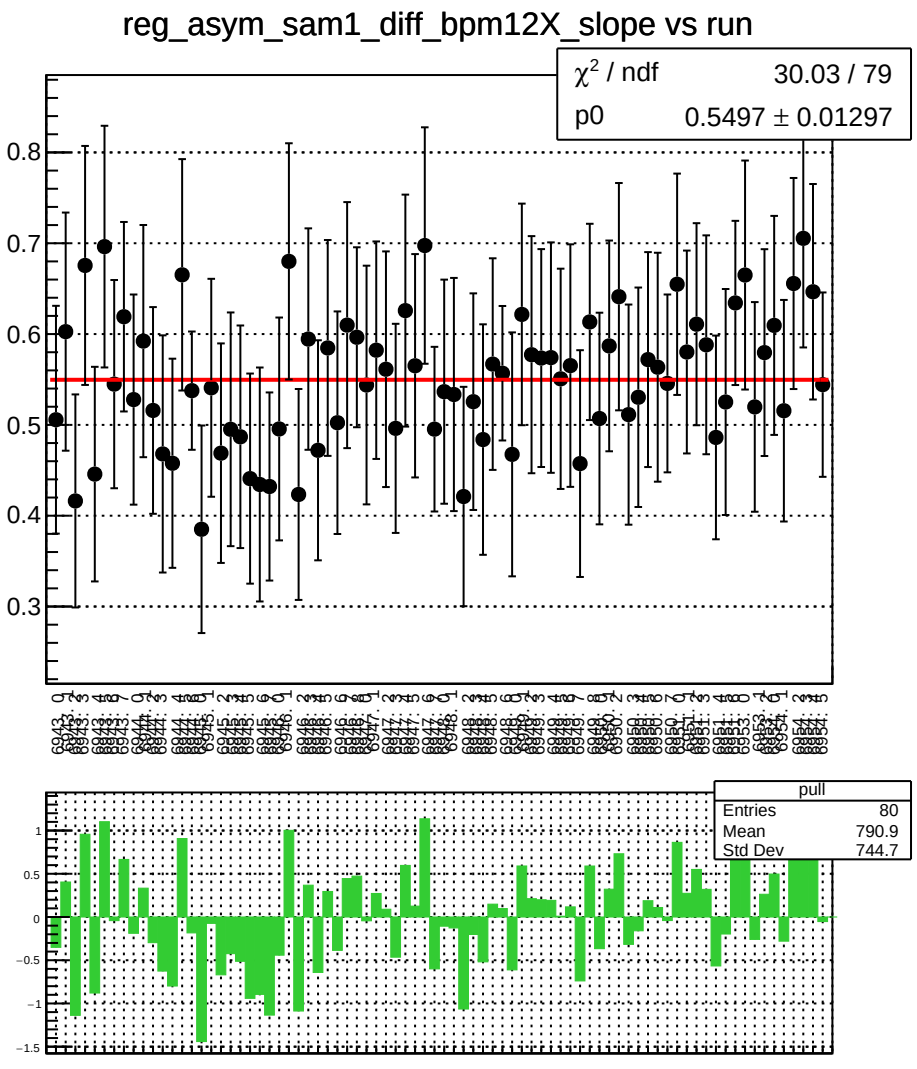

pull1D
Entries 80
Mean −0.0006618
Std Dev 0.4996

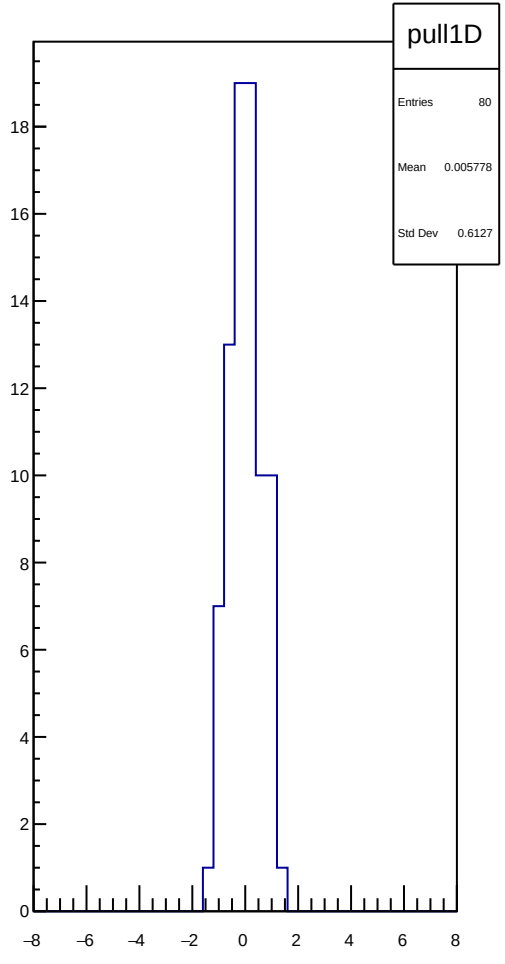

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 37.86 / 79
p0 −9.817 ± 0.3754
pull
Entries 80
Mean 145.2
Std Dev 99.84

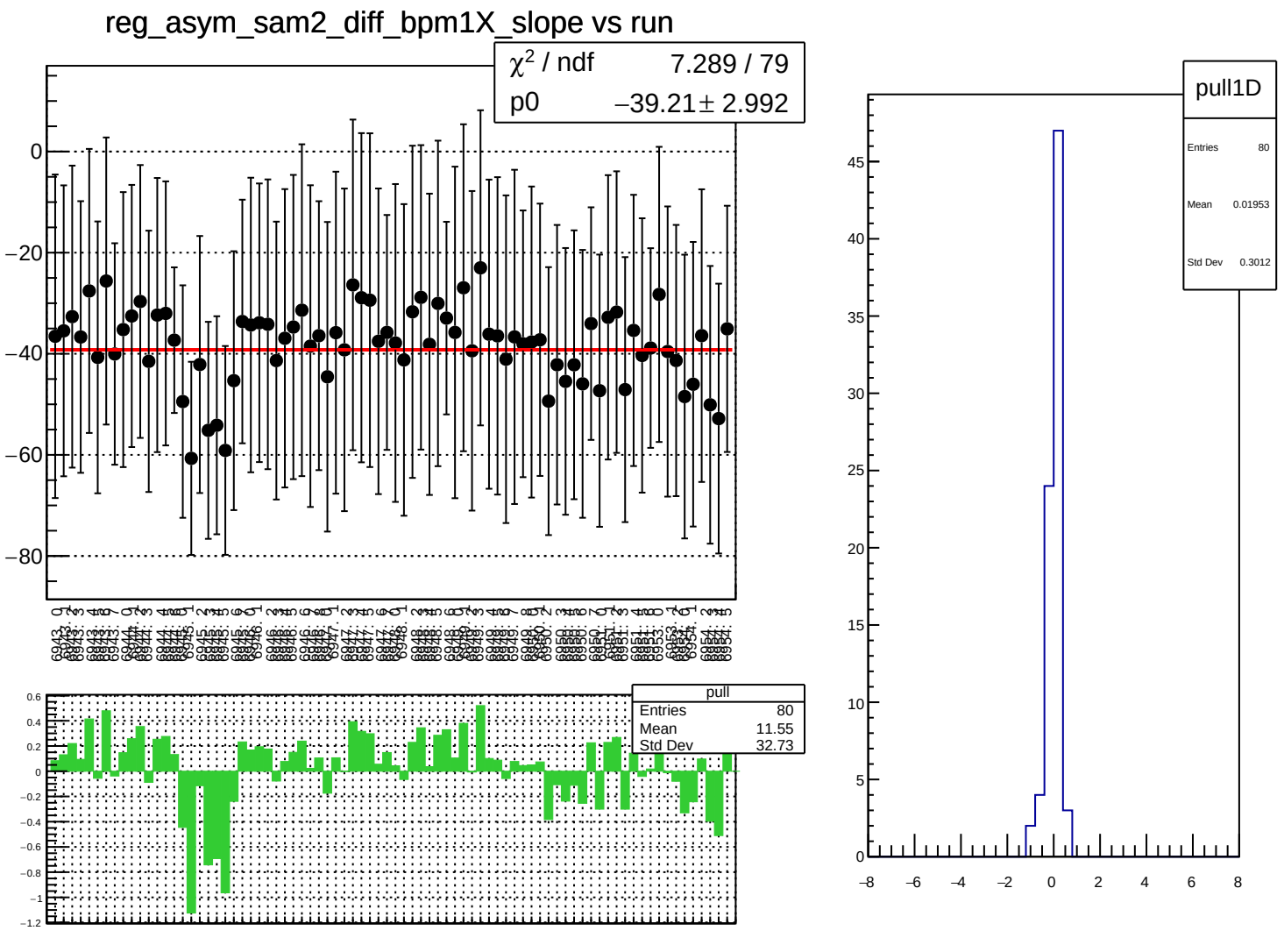

pull1D
Entries 80
Mean −0.03366
Std Dev 0.6871

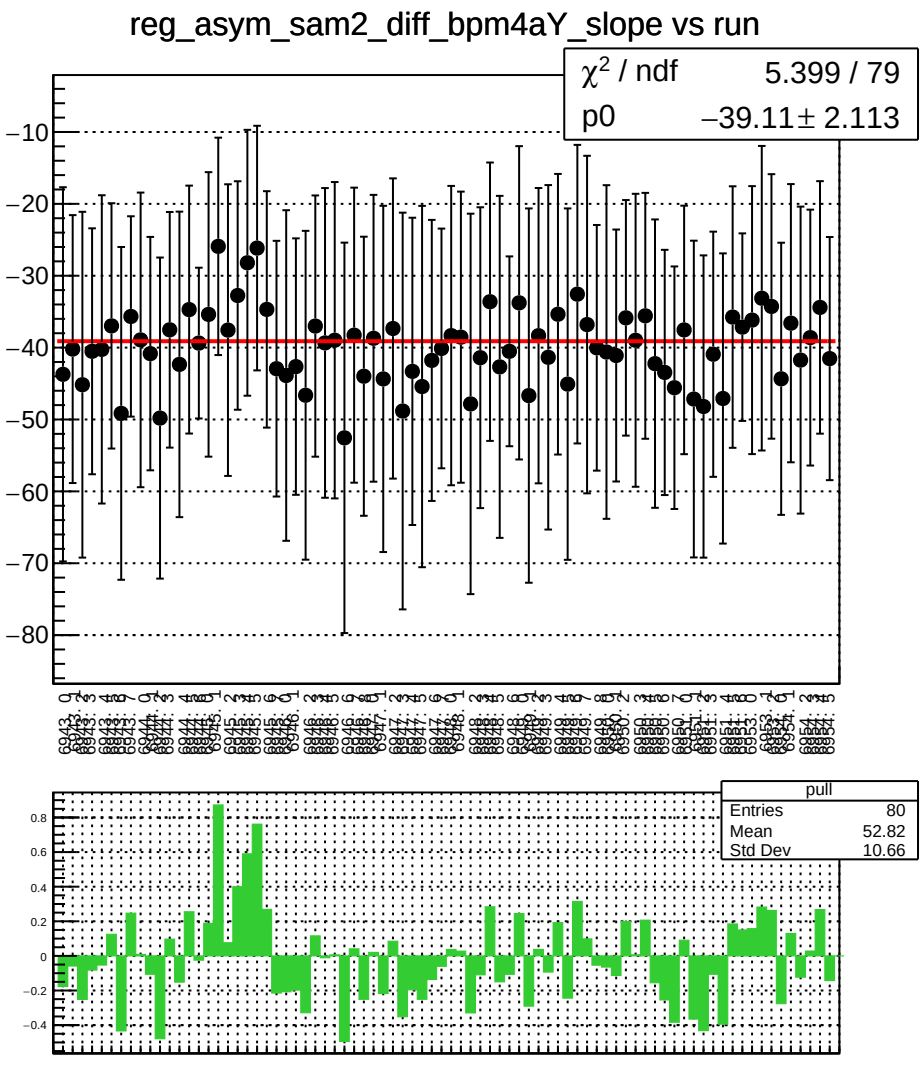

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 19.73 / 79
p0 14.62 ± 0.3283
pull
Entries 80
Mean 377.5
Std Dev 347.1

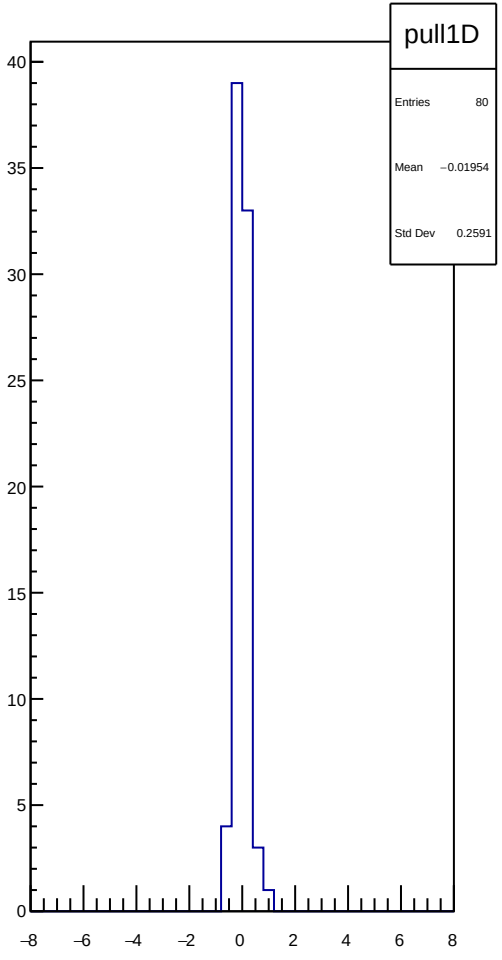

pull1D
Entries 80
Mean 0.006342
Std Dev 0.4966

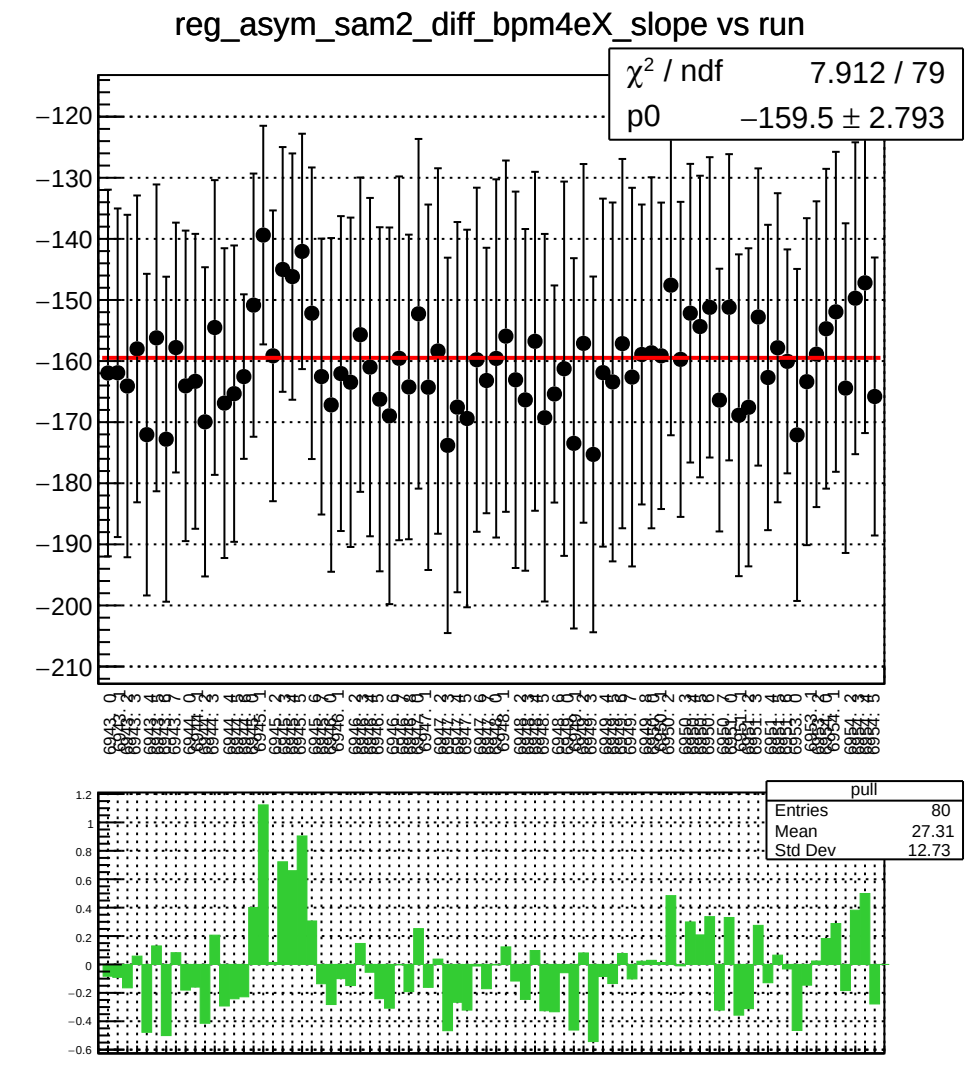

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 30.03 / 79
p0 0.5497 ± 0.01297
pull
Entries 80
Mean 790.9
Std Dev 744.7

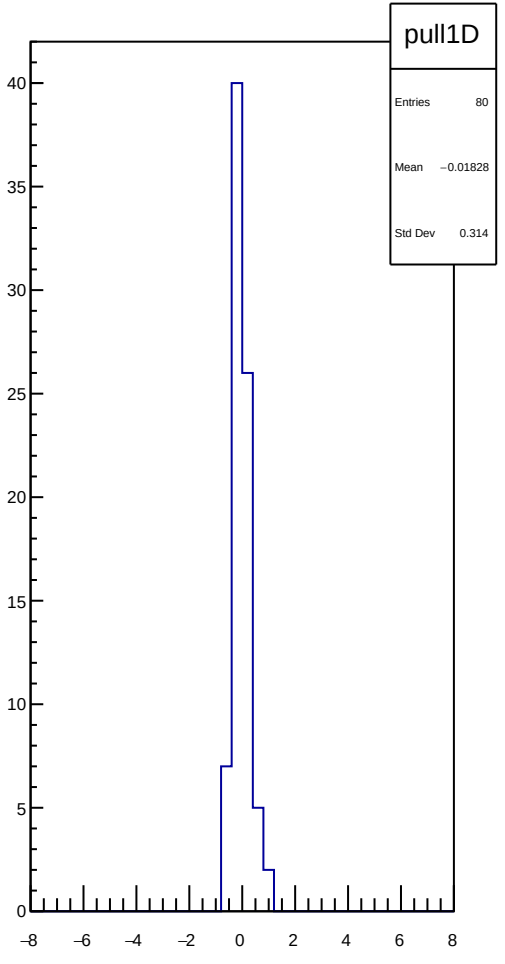

pull1D
Entries 80
Mean 0.005778
Std Dev 0.6127

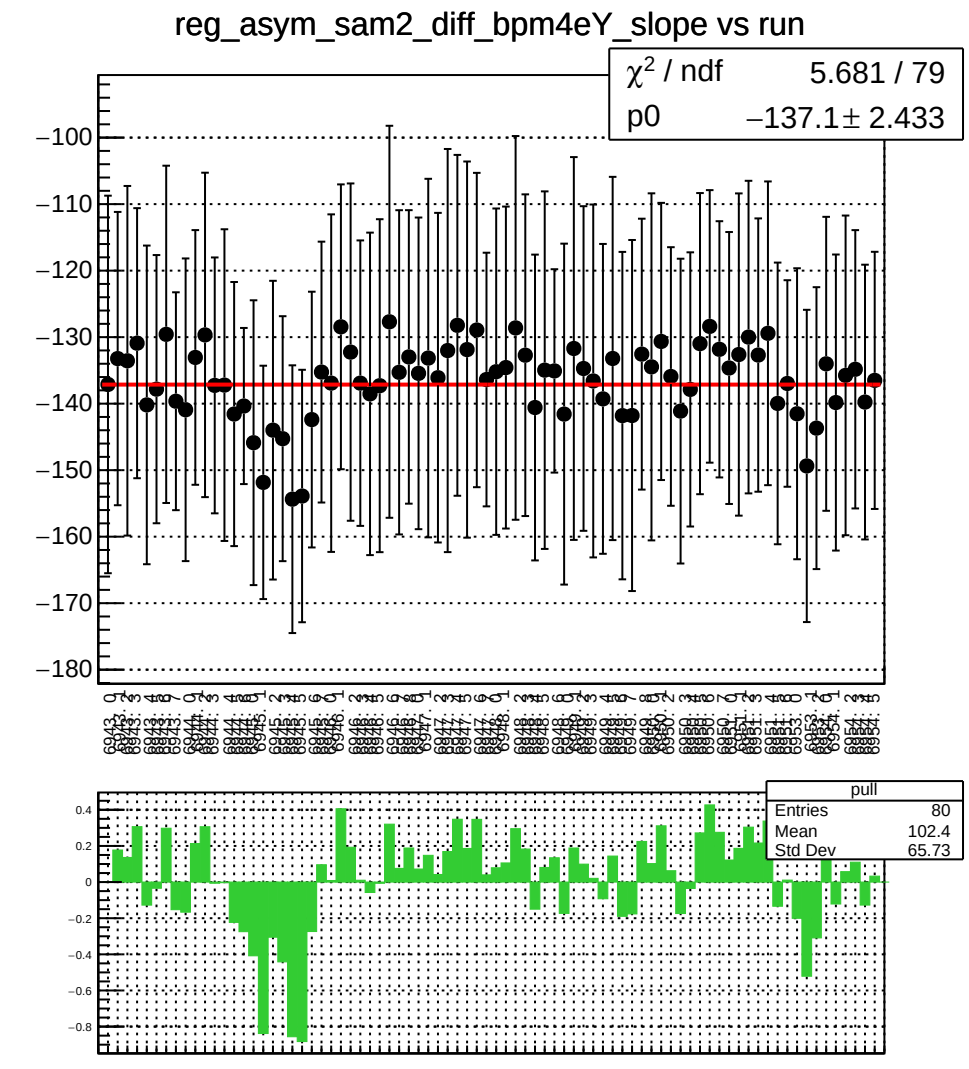

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 7.289 / 79
p0 −39.21 ± 2.992
pull
Entries 80
Mean 11.55
Std Dev 32.73
pull1D
Entries 80
Mean 0.01953
Std Dev 0.3012

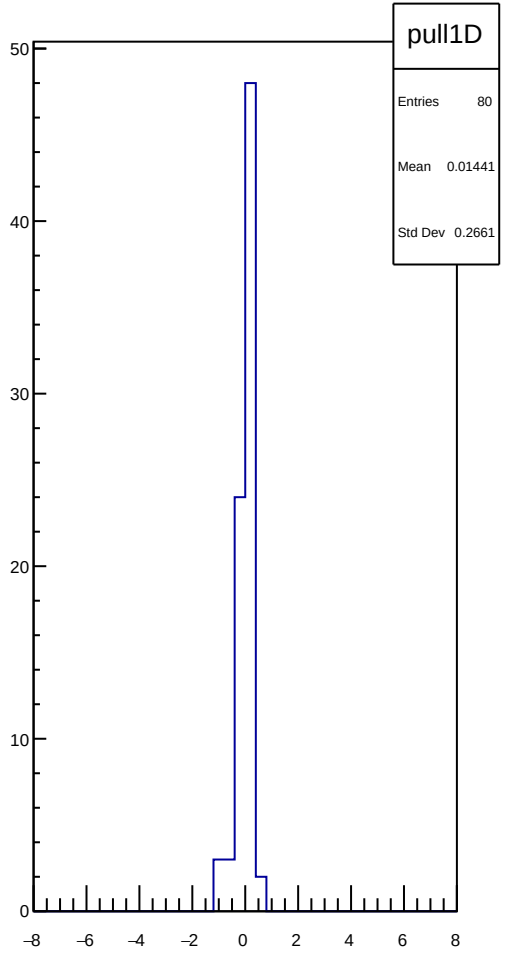

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 5.399 / 79
p0 −39.11 ± 2.113
pull
Entries 80
Mean 52.82
Std Dev 10.66

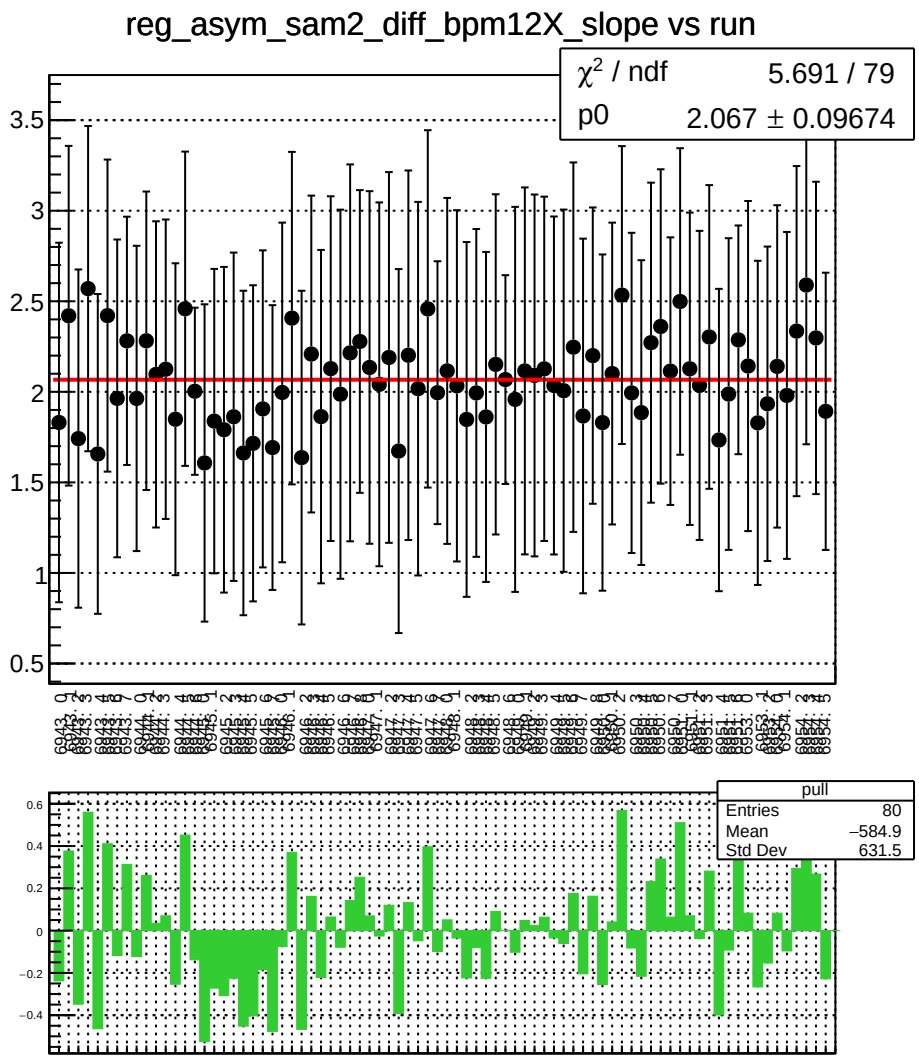

pull1D
Entries 80
Mean −0.01954
Std Dev 0.2591

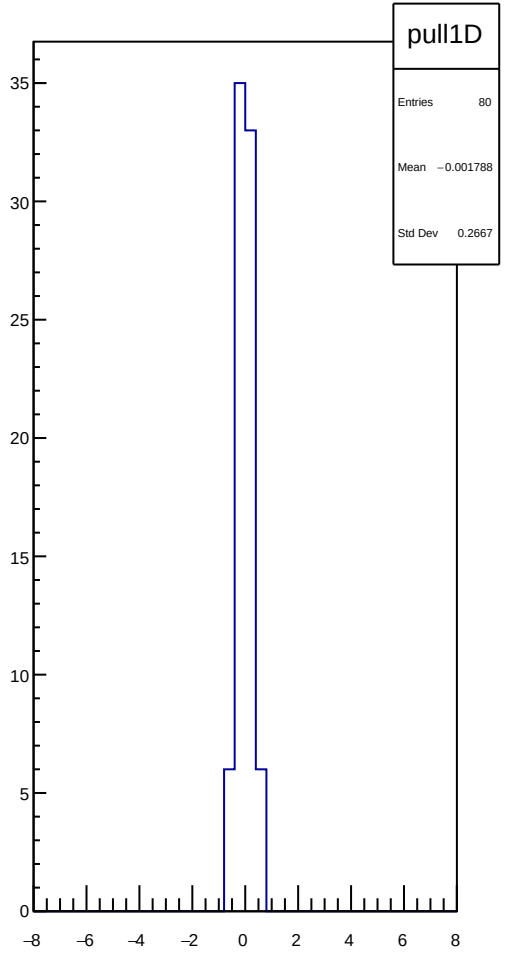

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 7.912 / 79
p0 −159.5 ± 2.793
pull
Entries 80
Mean 27.31
Std Dev 12.73

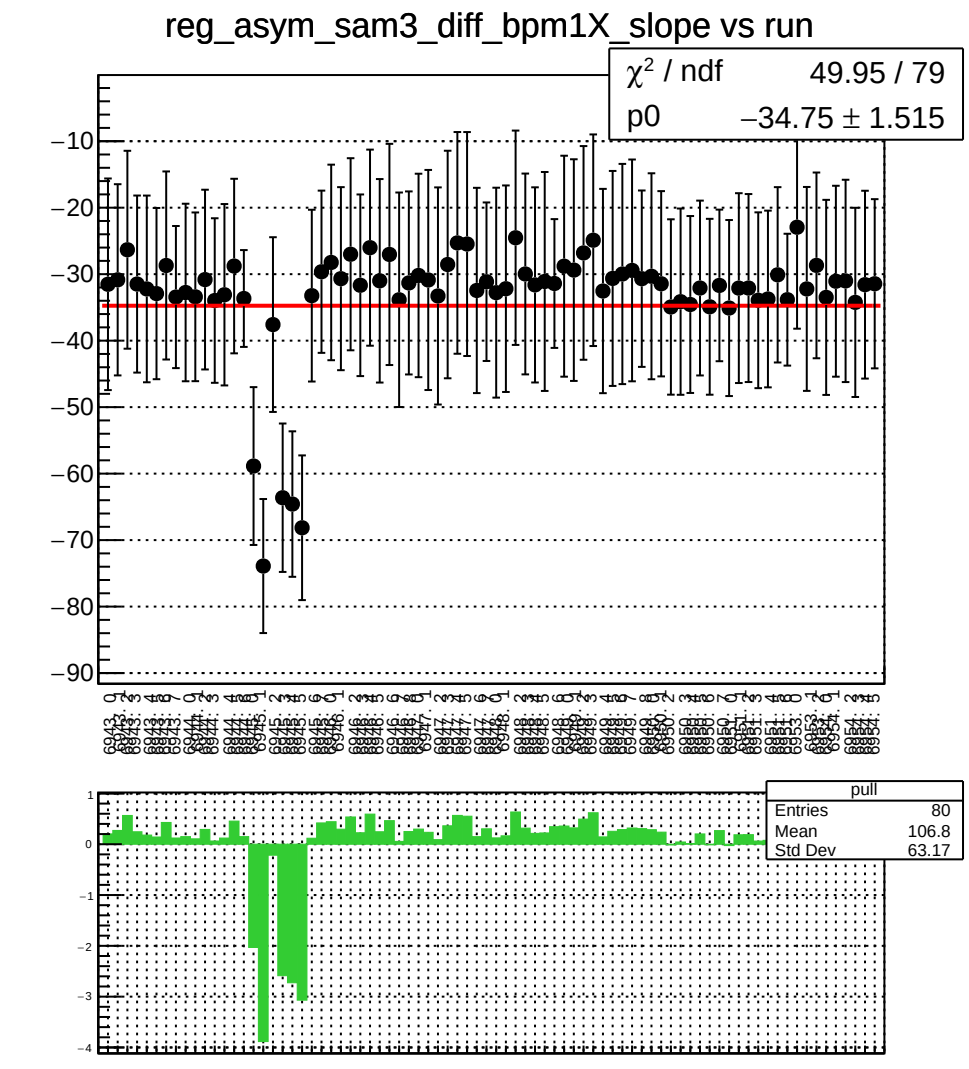

pull1D
Entries 80
Mean −0.01828
Std Dev 0.314

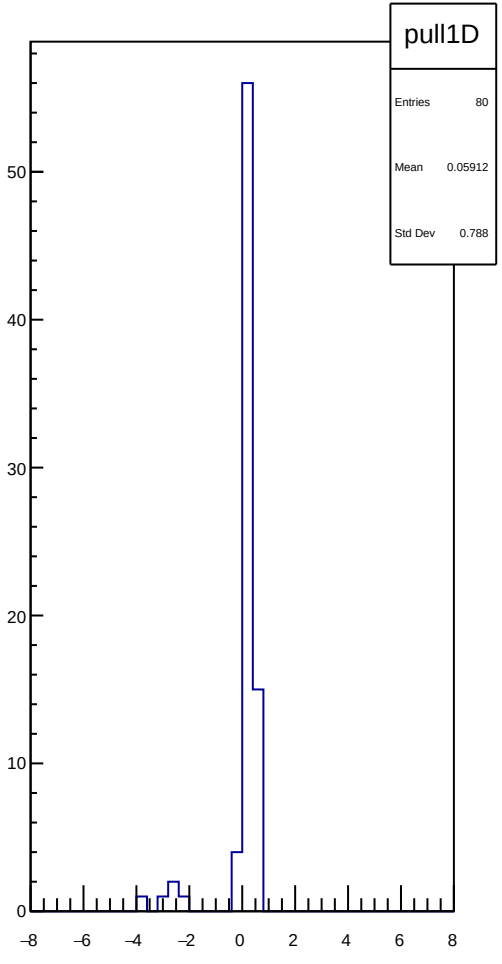

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 5.681 / 79
p0 −137.1± 2.433
pull
Entries 80
Mean 102.4
Std Dev 65.73

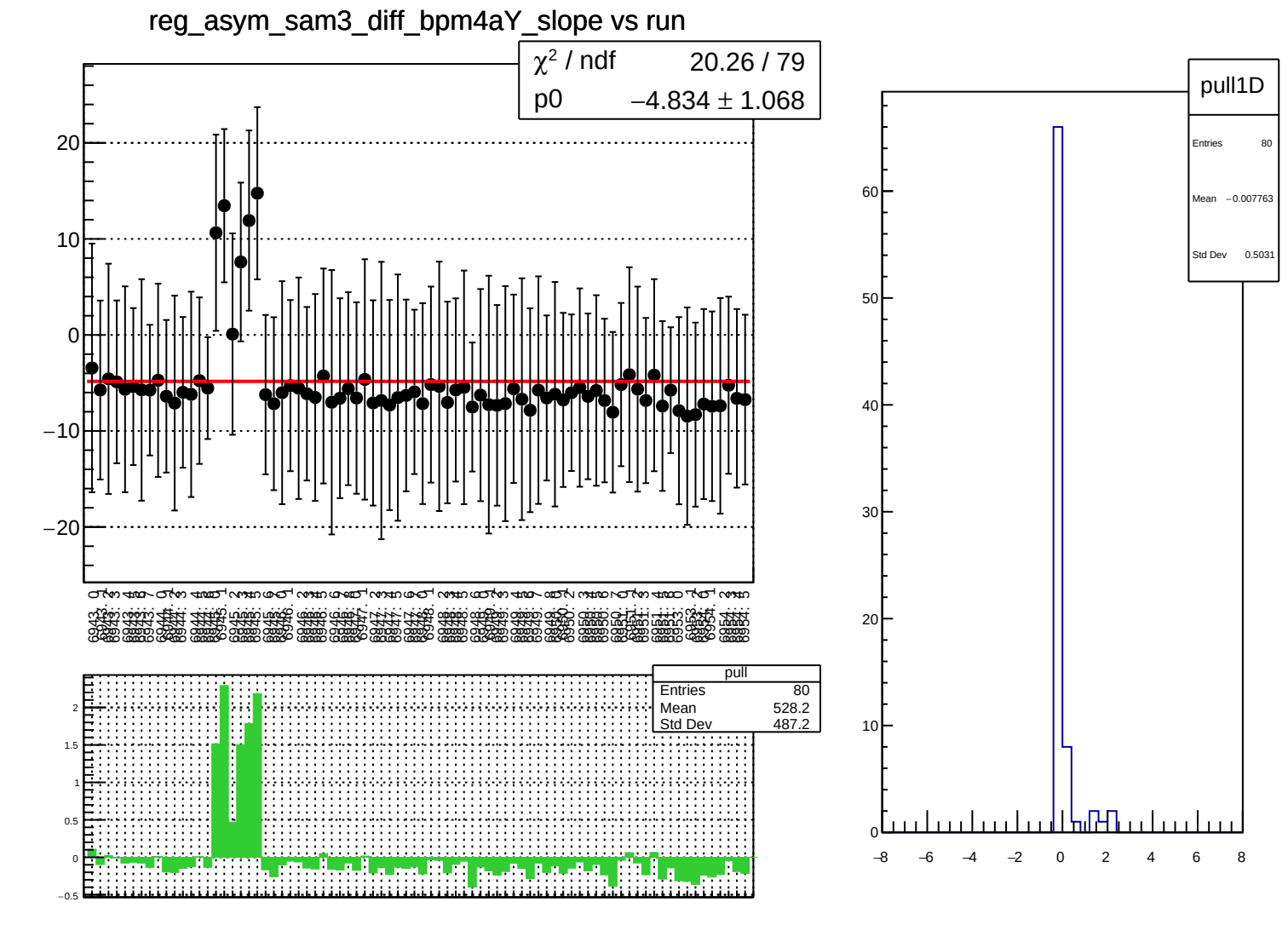

pull1D
Entries 80
Mean 0.01441
Std Dev 0.2661

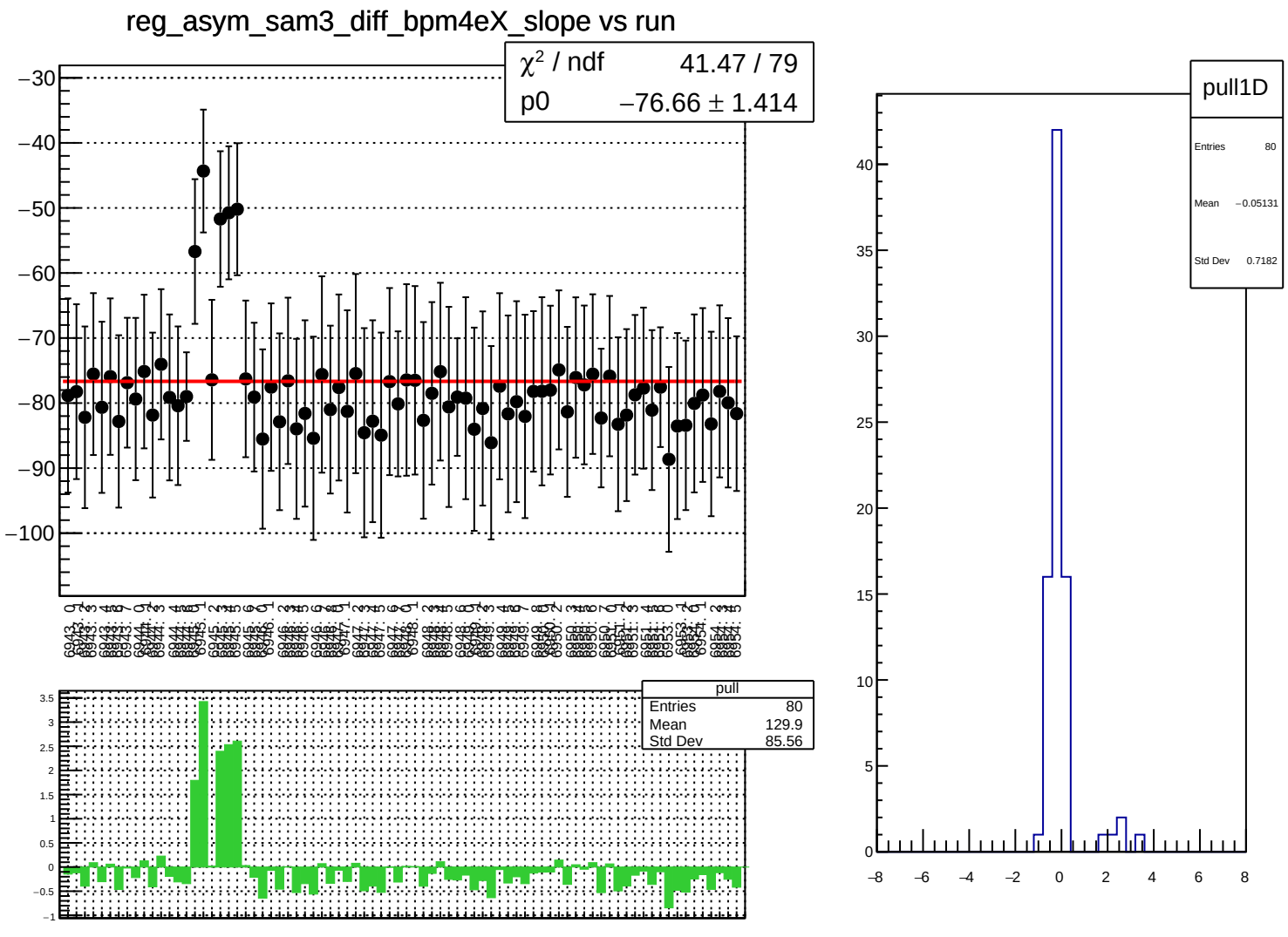

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 5.691 / 79
p0 2.067 ± 0.09674
pull
Entries 80
Mean −584.9
Std Dev 631.5

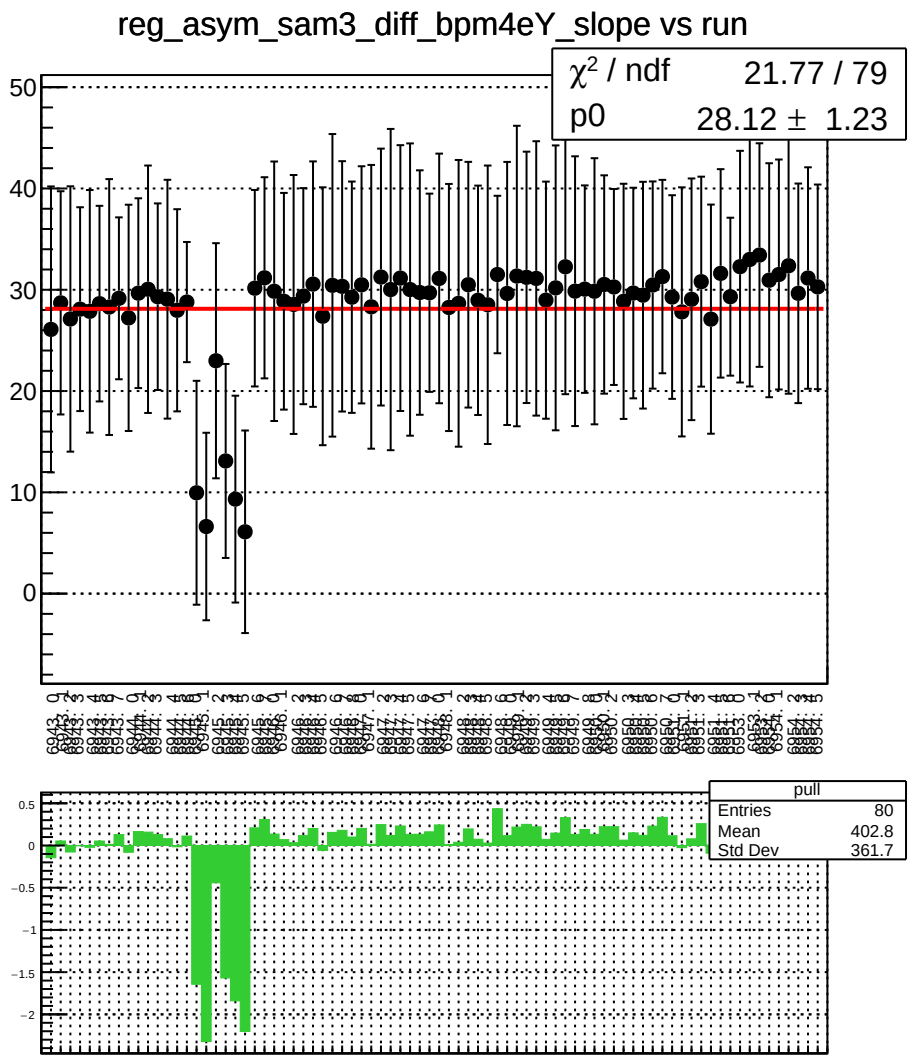

pull1D
Entries 80
Mean −0.001788
Std Dev 0.2667

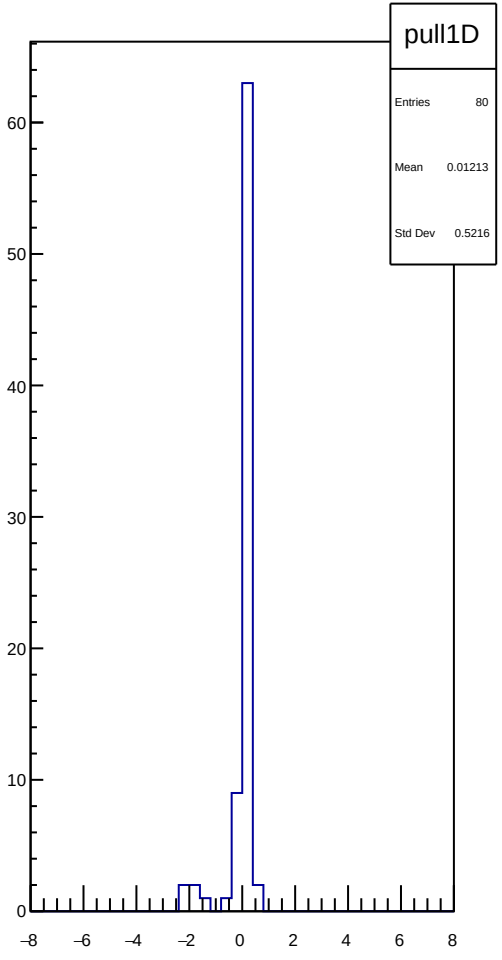

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 49.95 / 79
p0 −34.75 ± 1.515
pull
Entries 80
Mean 106.8
Std Dev 63.17

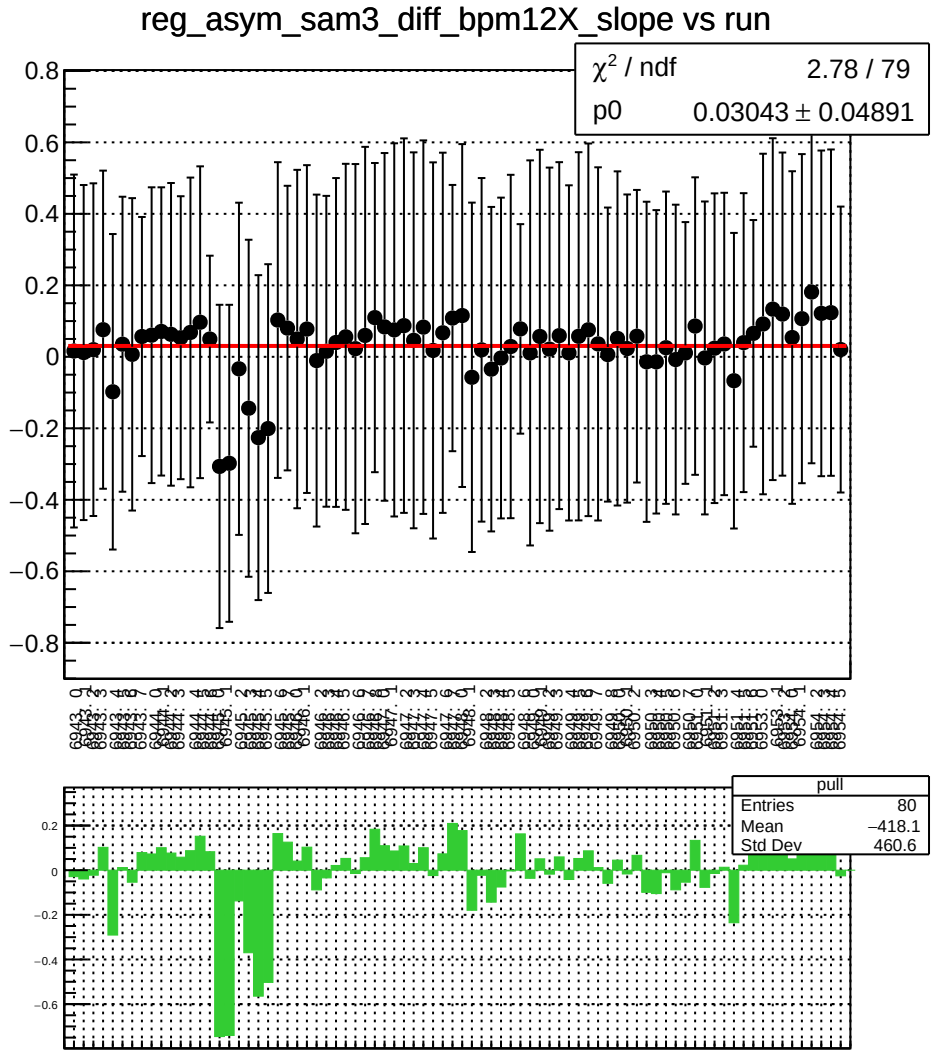

pull1D
Entries 80
Mean 0.05912
Std Dev 0.788

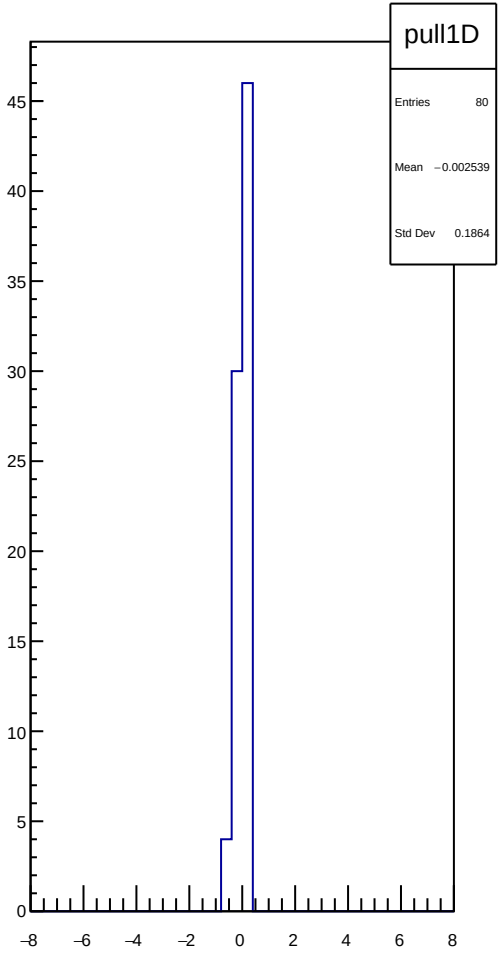

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 20.26 / 79
p0 −4.834 ± 1.068
pull
Entries 80
Mean 528.2
Std Dev 487.2
pull1D
Entries 80
Mean −0.007763
Std Dev 0.5031

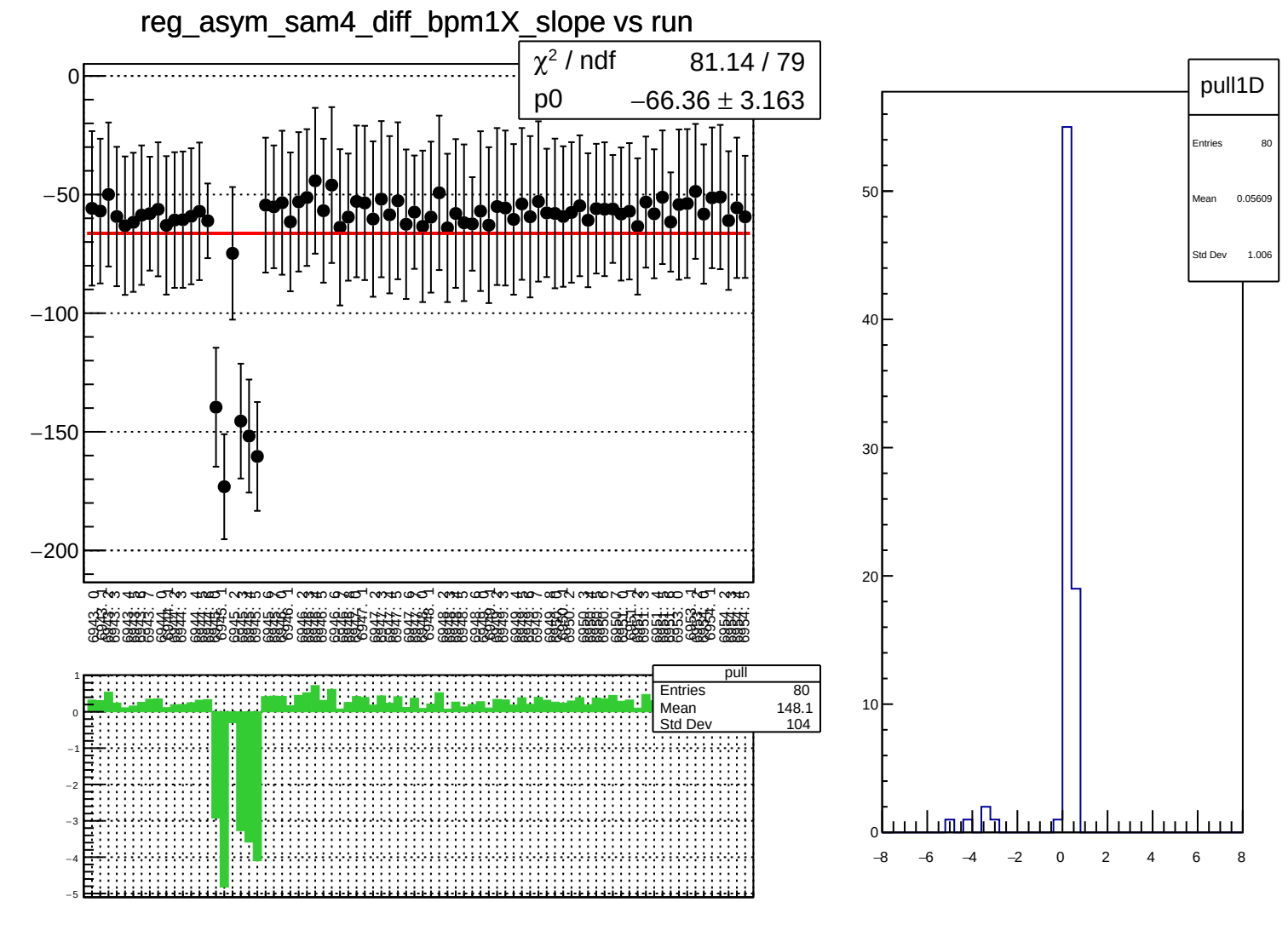

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 41.47 / 79
p0 −76.66 ± 1.414
pull
Entries 80
Mean 129.9
Std Dev 85.56
pull1D
Entries 80
Mean −0.05131
Std Dev 0.7182

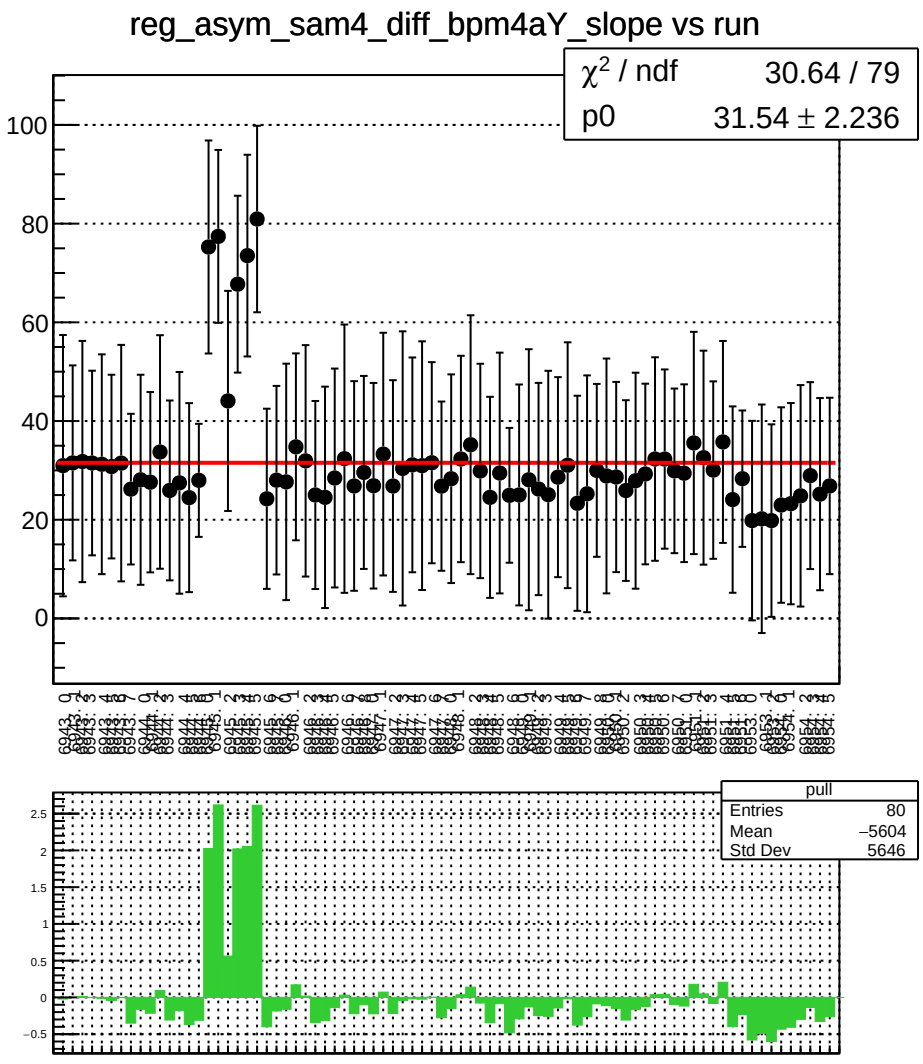

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 21.77 / 79
p0 28.12 ± 1.23
pull
Entries 80
Mean 402.8
Std Dev 361.7

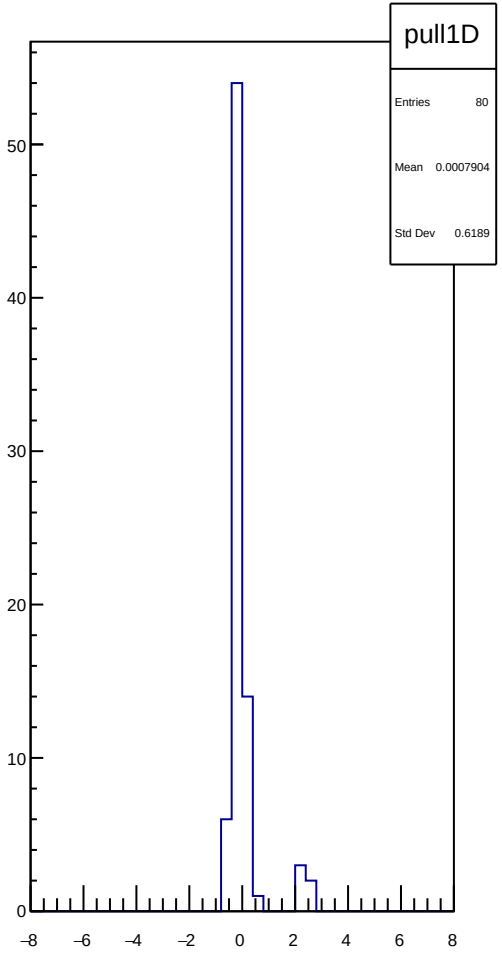

pull1D
Entries 80
Mean 0.01213
Std Dev 0.5216

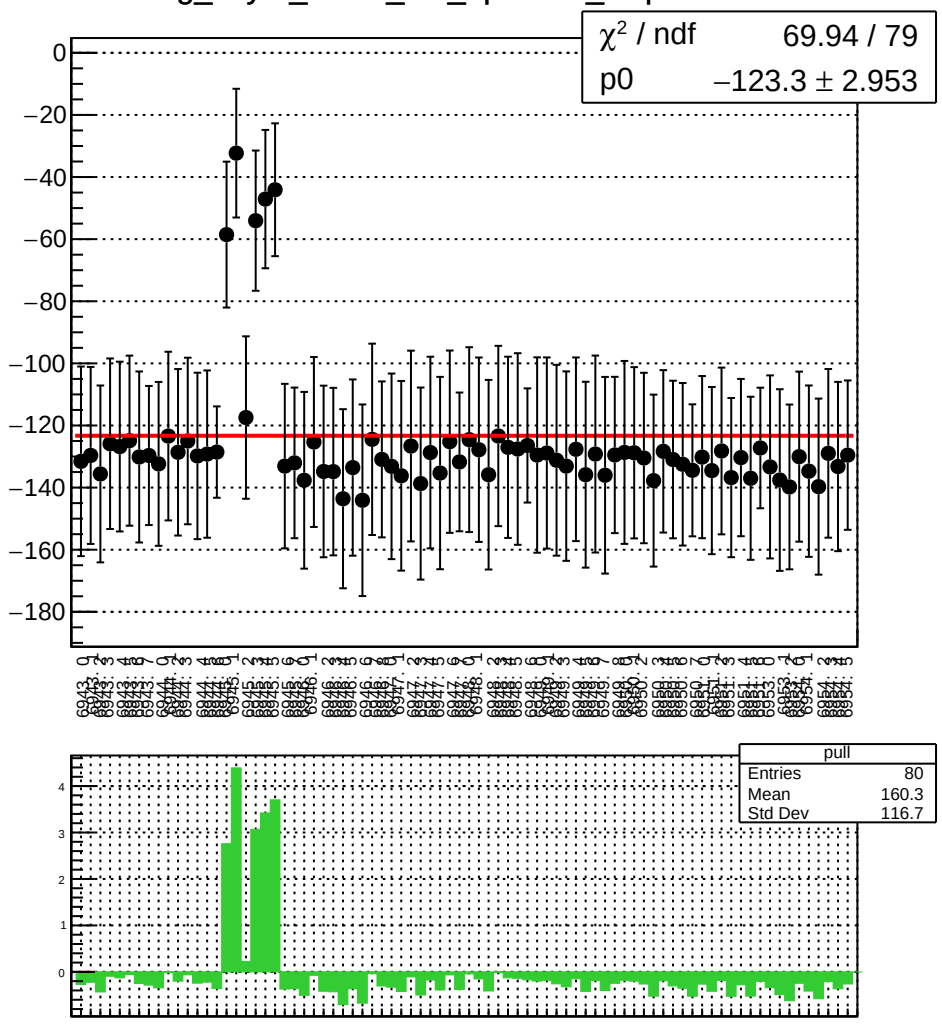

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 2.78 / 79
p0 0.03043 ± 0.04891
pull
Entries 80
Mean −418.1
Std Dev 460.6

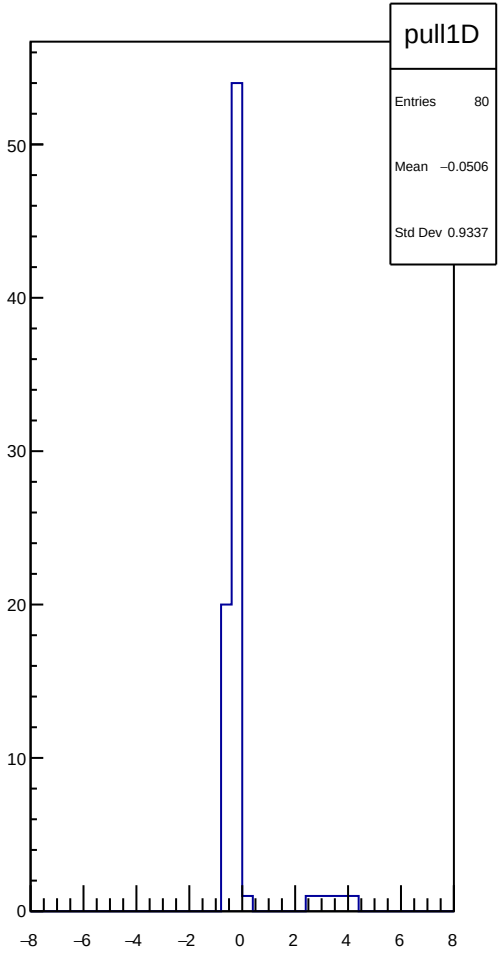

pull1D
Entries 80
Mean −0.002539
Std Dev 0.1864

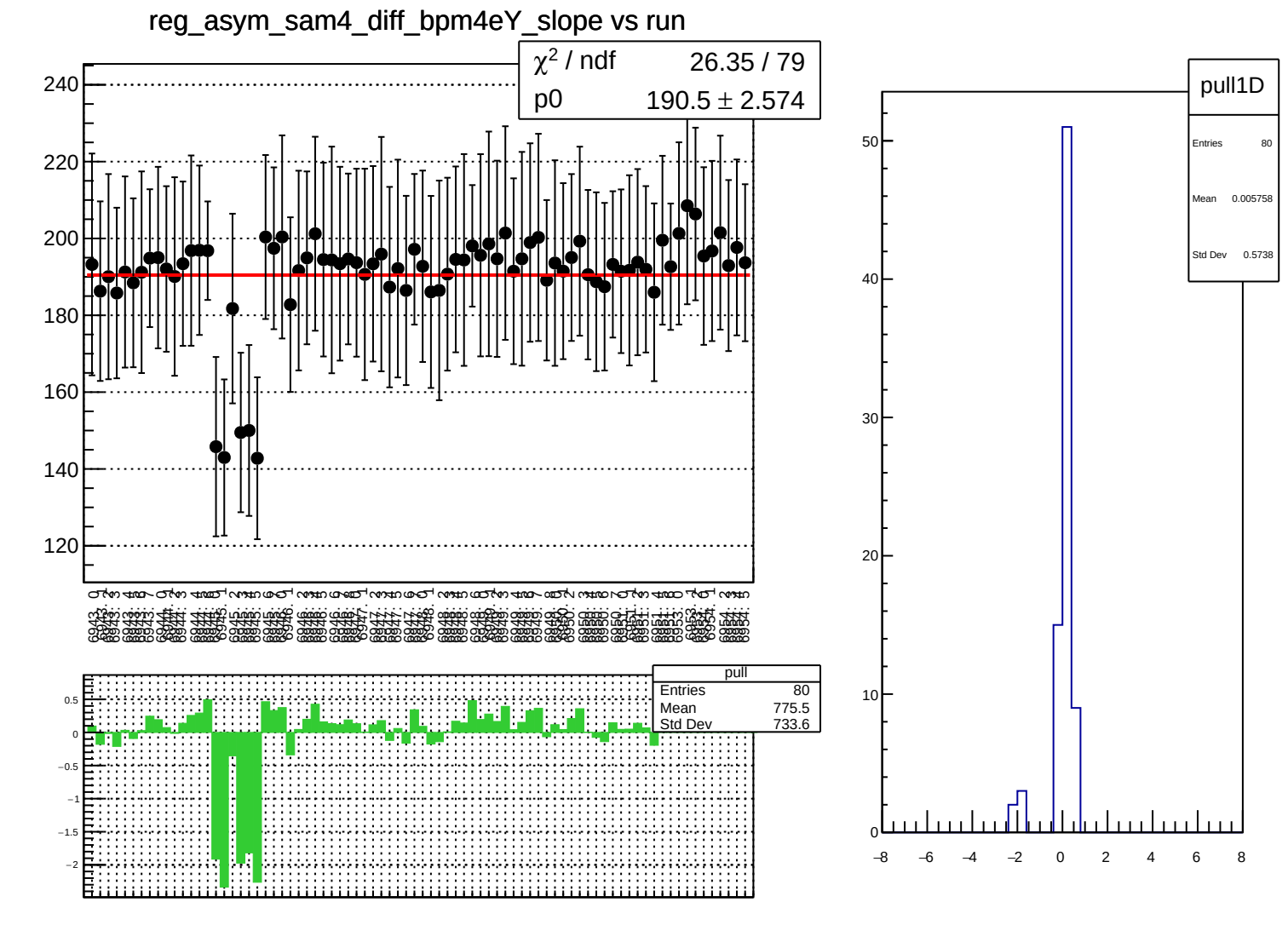

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 81.14 / 79
p0 −66.36 ± 3.163
pull
Entries 80
Mean 148.1
Std Dev 104
pull1D
Entries 80
Mean 0.05609
Std Dev 1.006

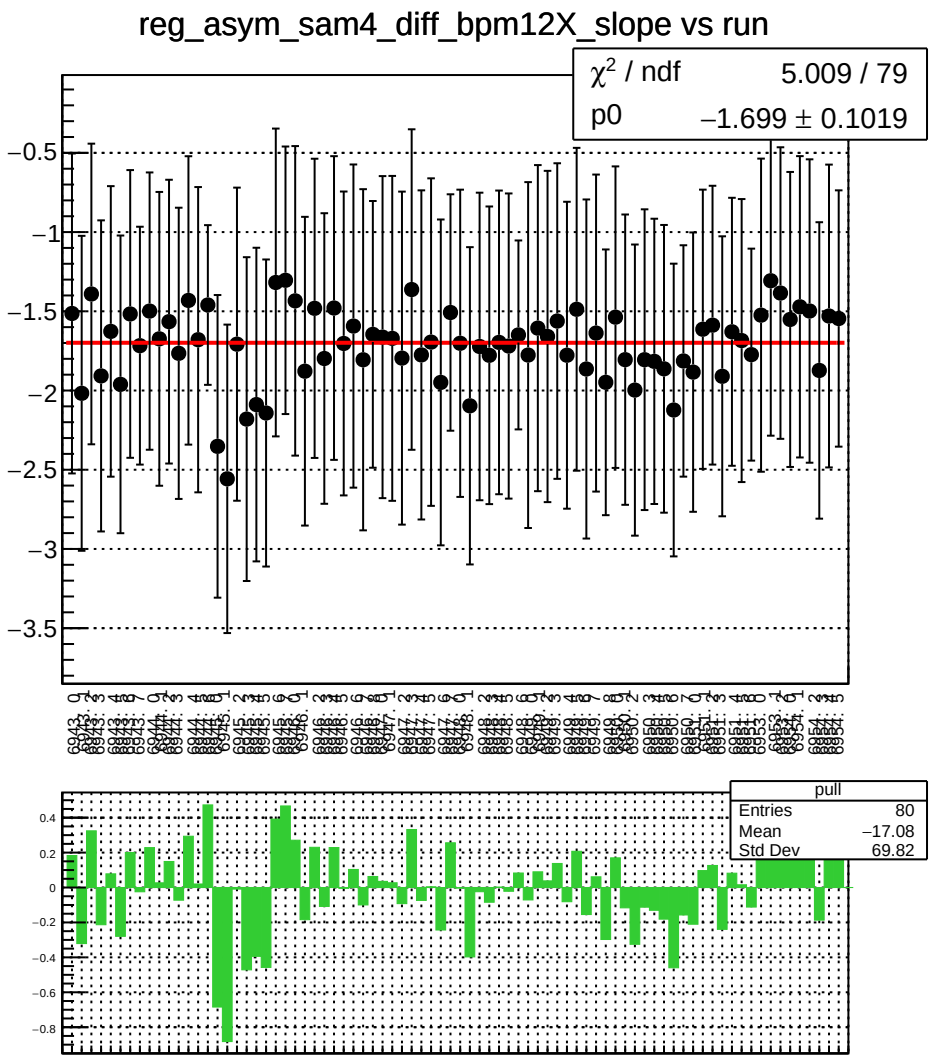

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 30.64 / 79
p0 31.54 ± 2.236
pull
Entries 80
Mean −5604
Std Dev 5646

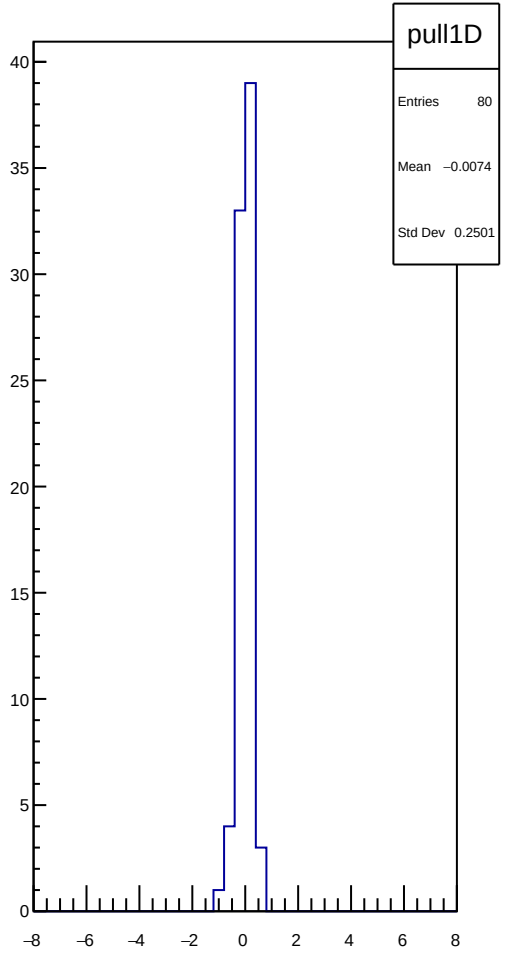

pull1D
Entries 80
Mean 0.0007904
Std Dev 0.6189

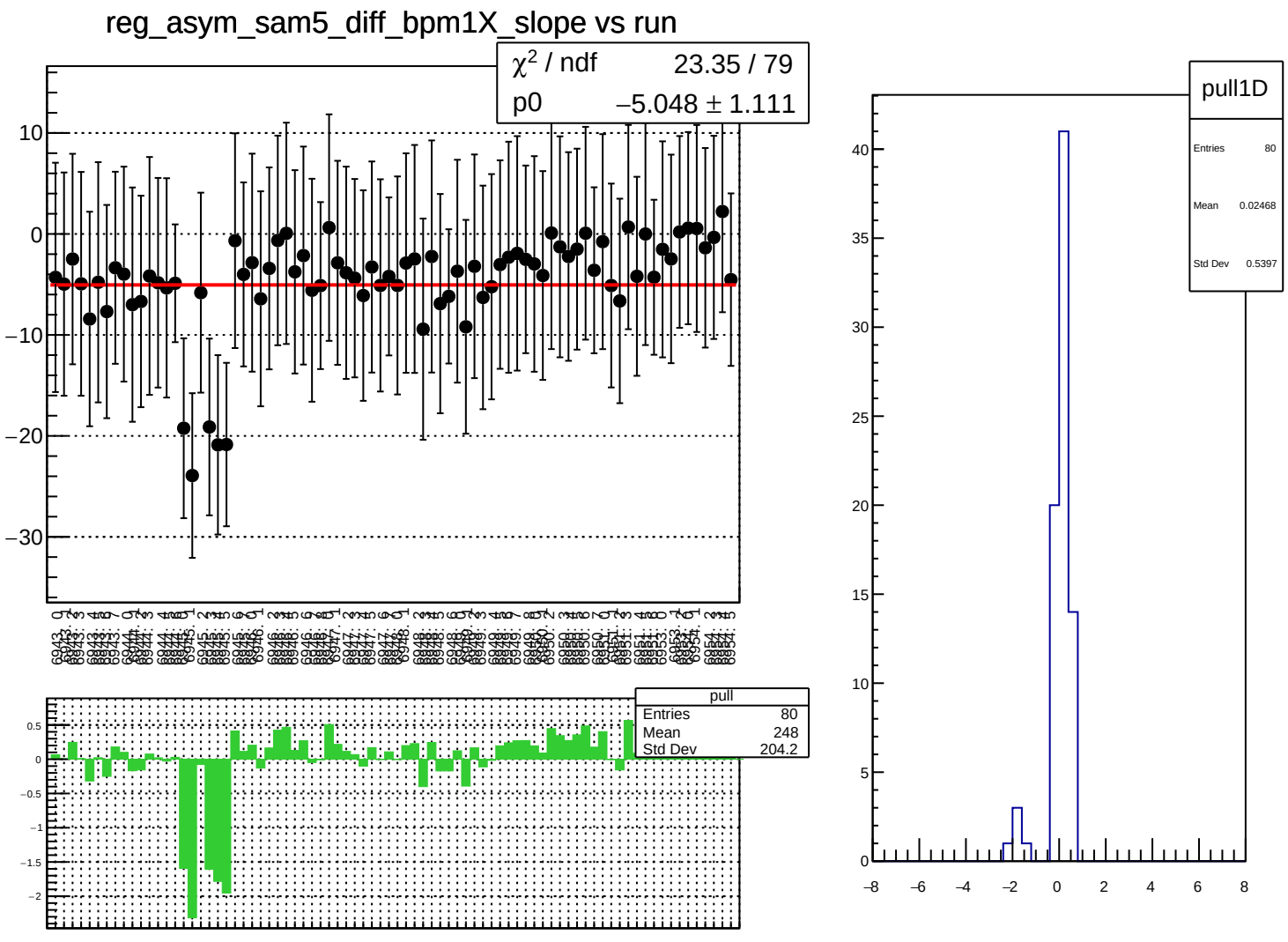

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 69.94 / 79
p0 −123.3 ± 2.953
pull
Entries 80
Mean 160.3
Std Dev 116.7

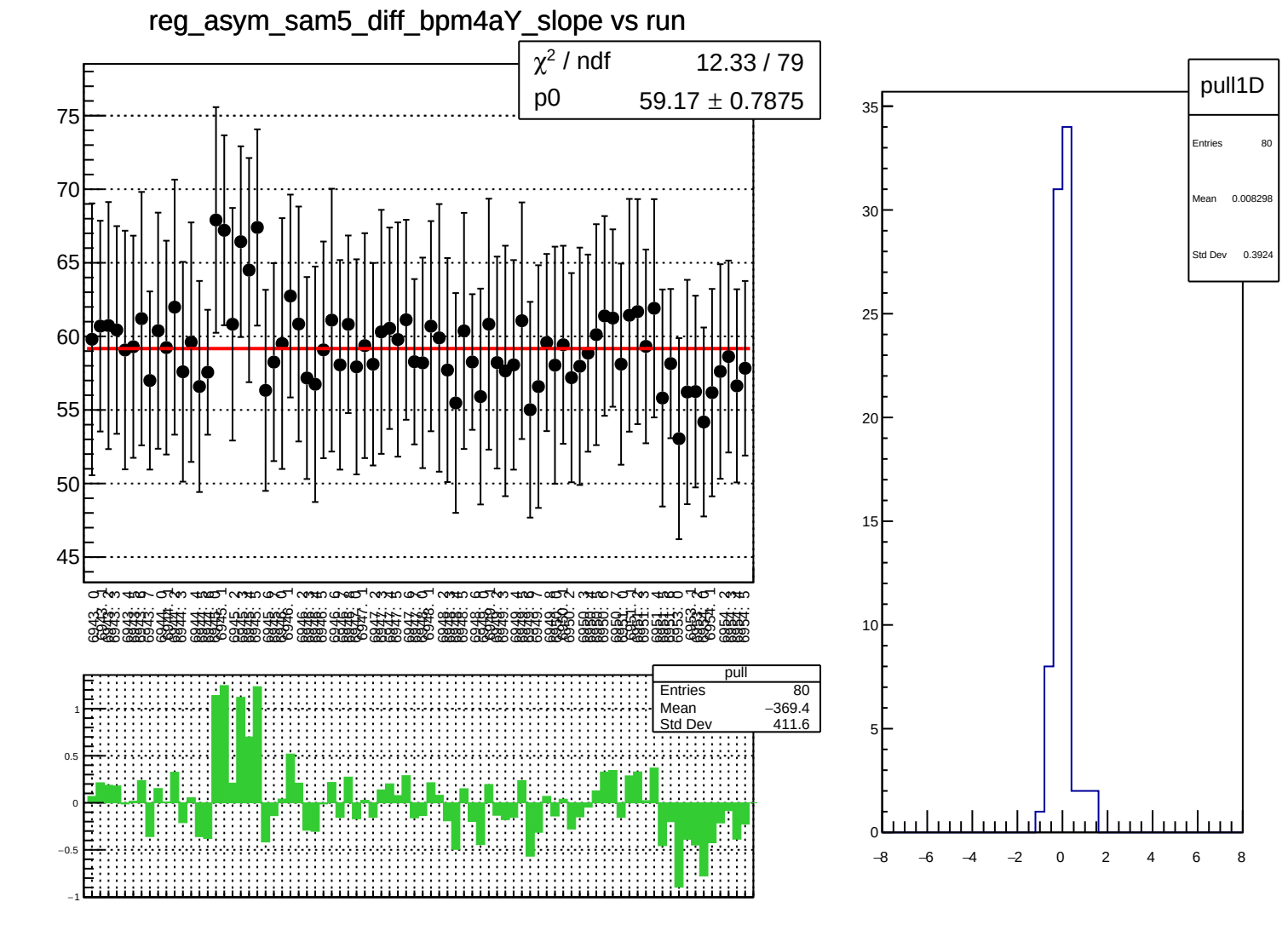

pull1D
Entries 80
Mean −0.0506
Std Dev 0.9337

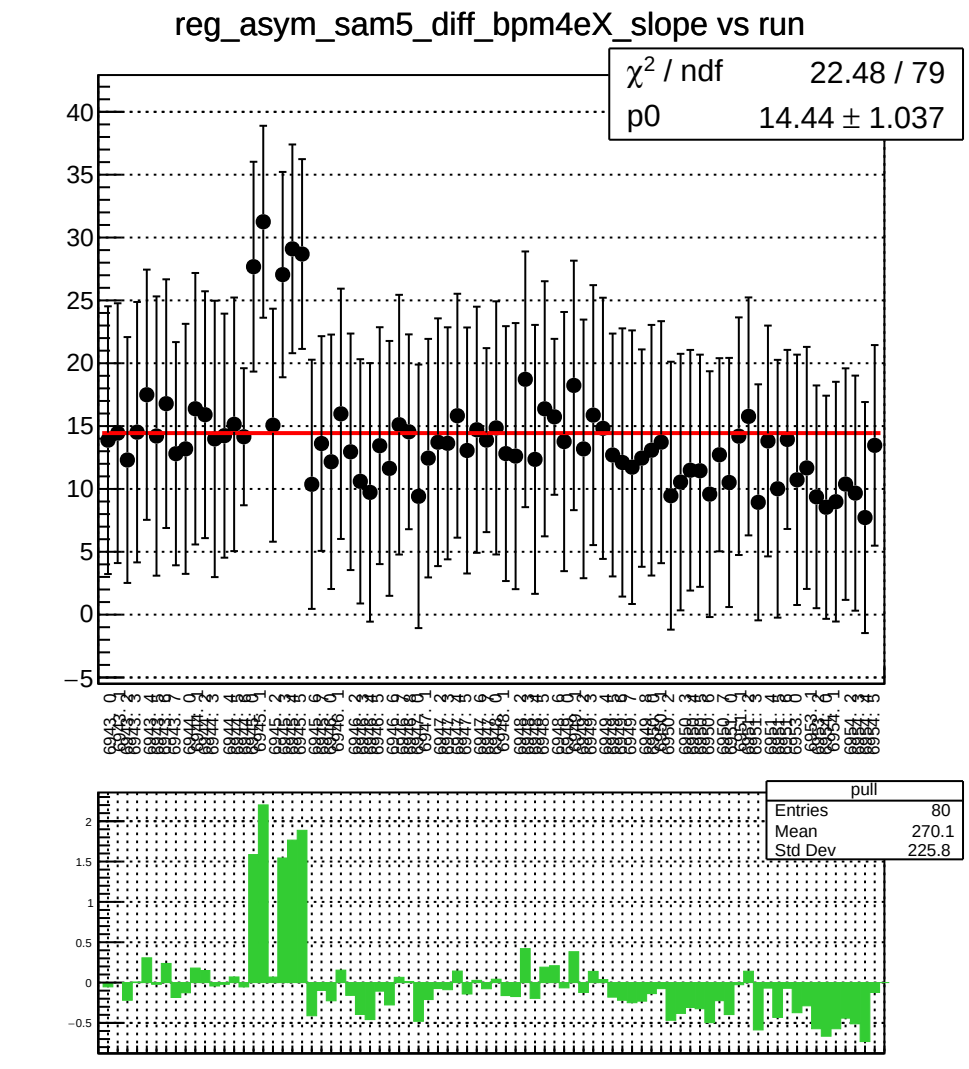

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 26.35 / 79
p0 190.5 ± 2.574
240
220
200
180
160
140
120
pull
Entries 80
Mean 775.5
Std Dev 733.6
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 80
Mean 0.005758
Std Dev 0.5738
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

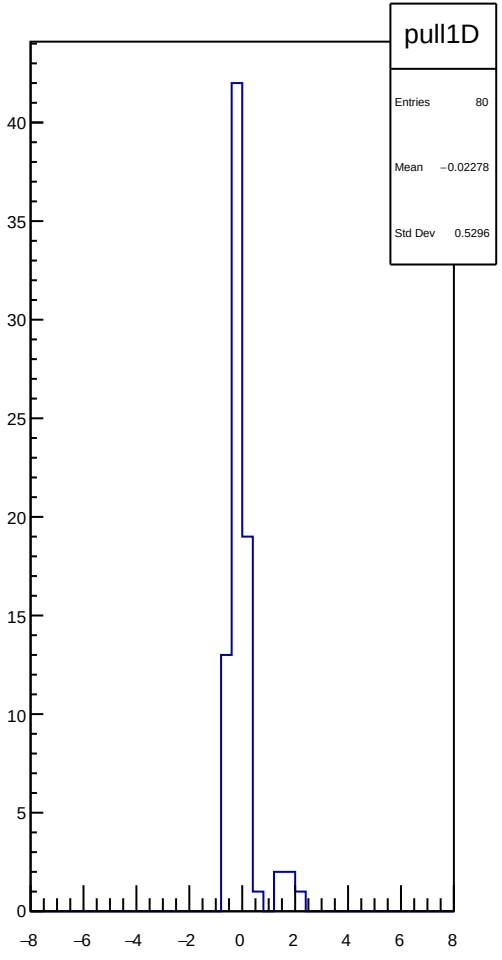

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 5.009 / 79
p0 −1.699 ± 0.1019
pull
Entries 80
Mean −17.08
Std Dev 69.82

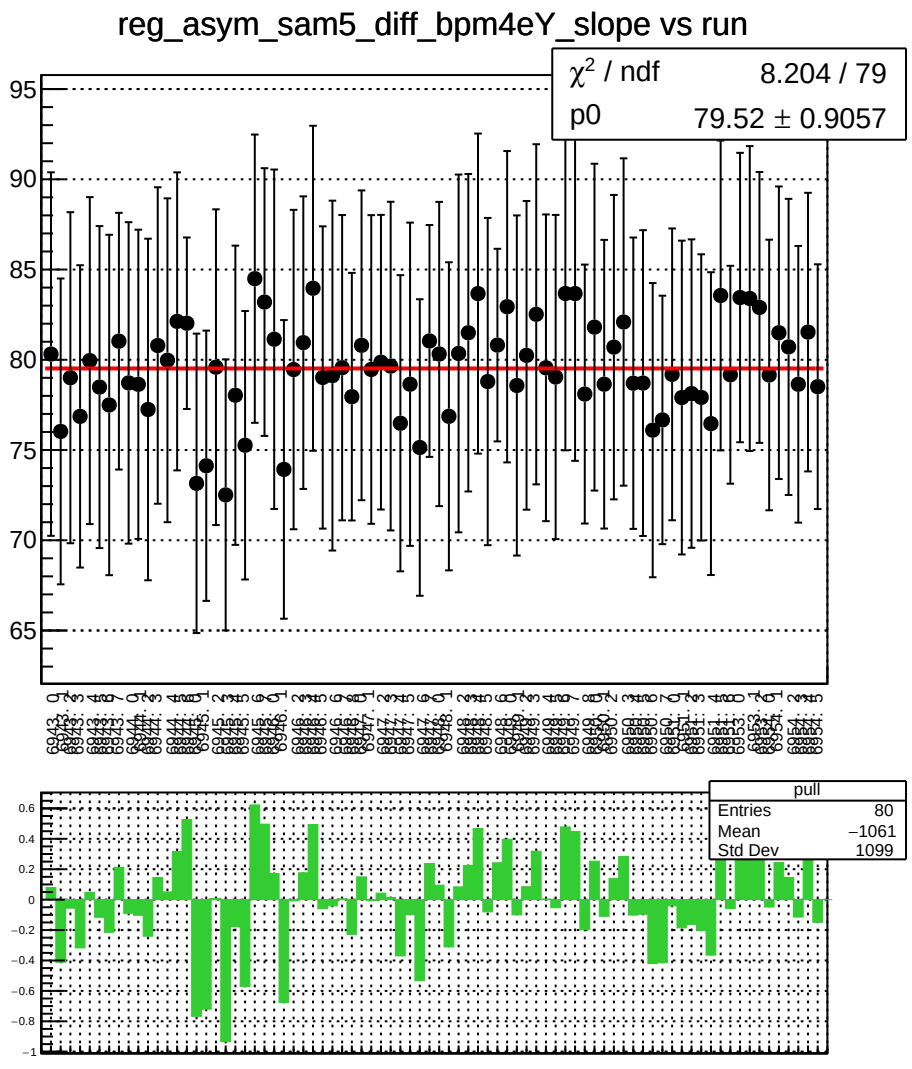

pull1D
Entries 80
Mean −0.0074
Std Dev 0.2501

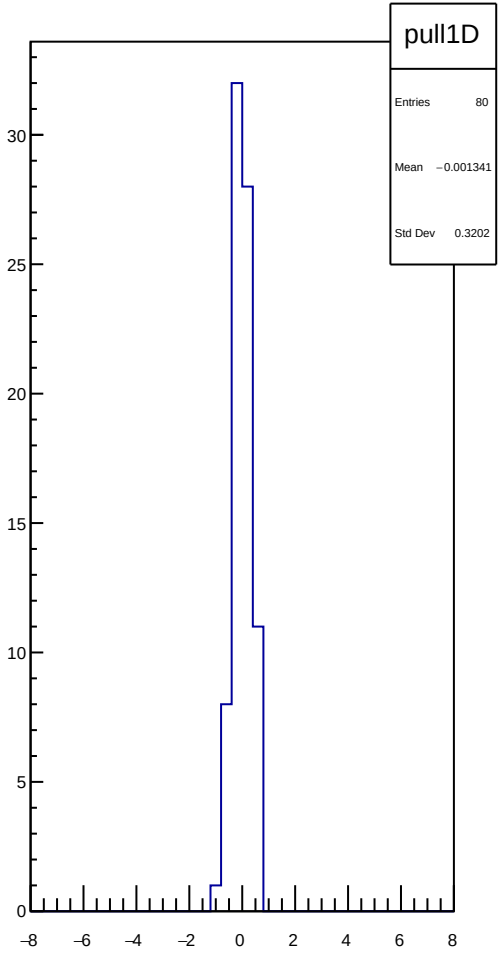

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 23.35 / 79
p0 −5.048 ± 1.111
pull
Entries 80
Mean 248
Std Dev 204.2
pull1D
Entries 80
Mean 0.02468
Std Dev 0.5397

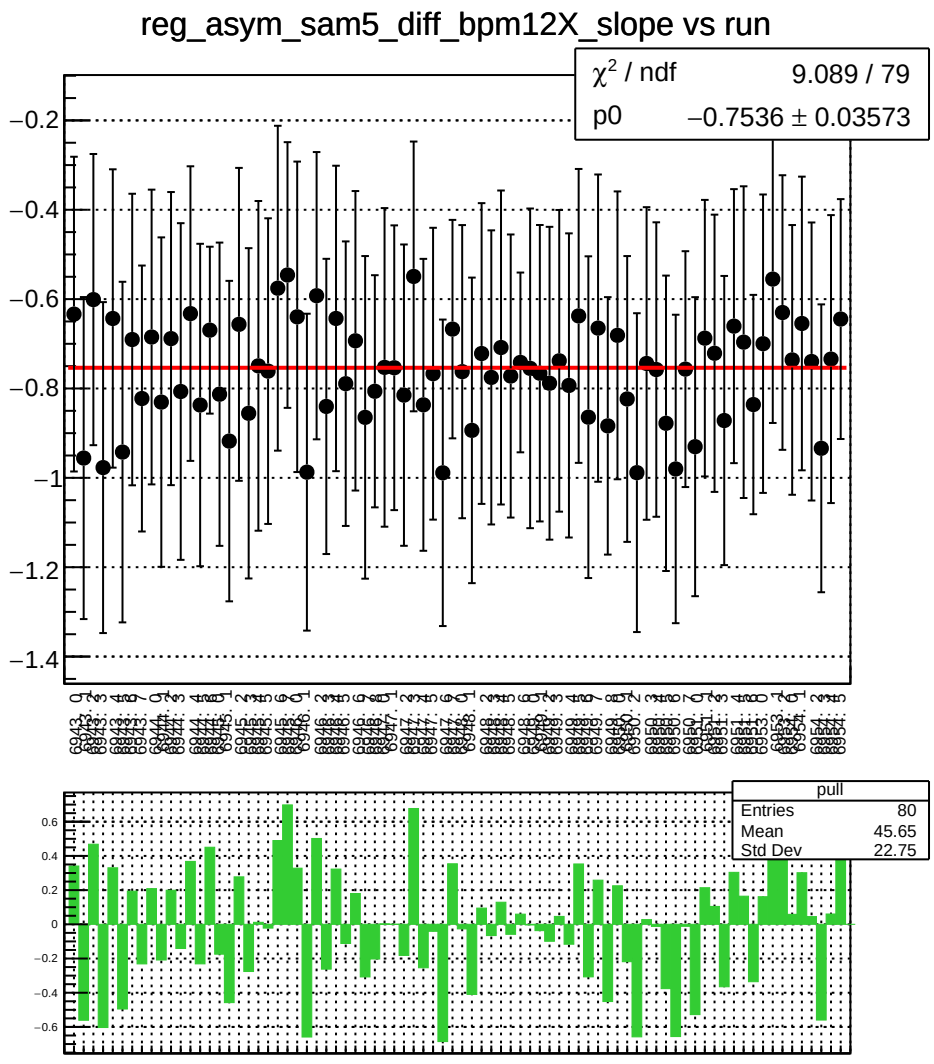

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 12.33 / 79
p0 59.17 ± 0.7875
pull
Entries 80
Mean −369.4
Std Dev 411.6
pull1D
Entries 80
Mean 0.008298
Std Dev 0.3924

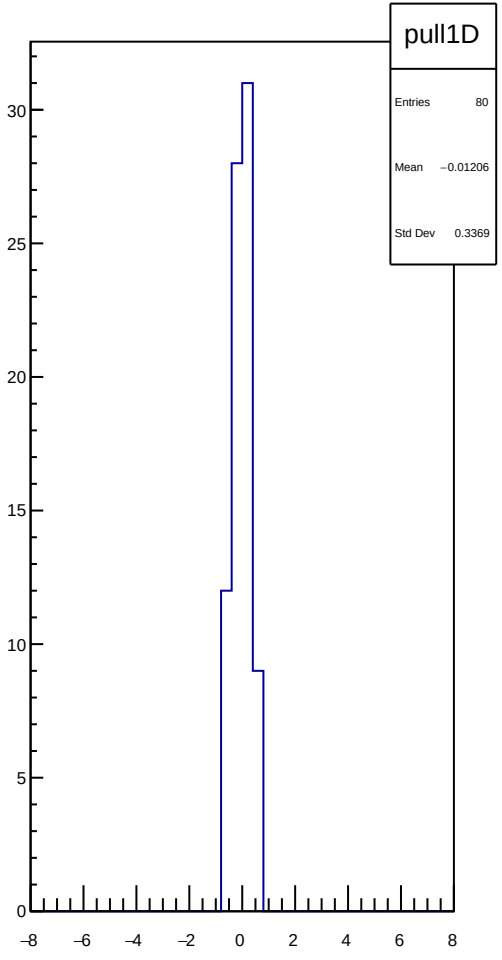

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 22.48 / 79
p0 14.44 ± 1.037
pull
Entries 80
Mean 270.1
Std Dev 225.8

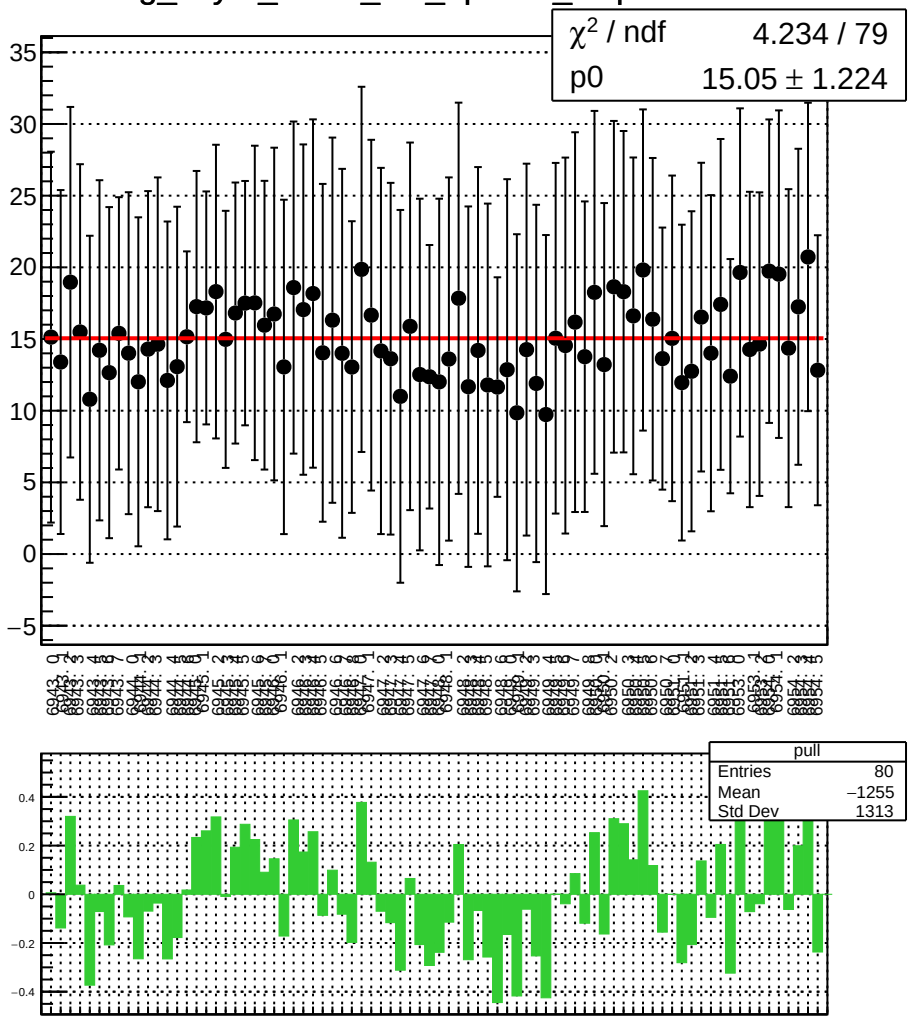

pull1D
Entries 80
Mean −0.02278
Std Dev 0.5296

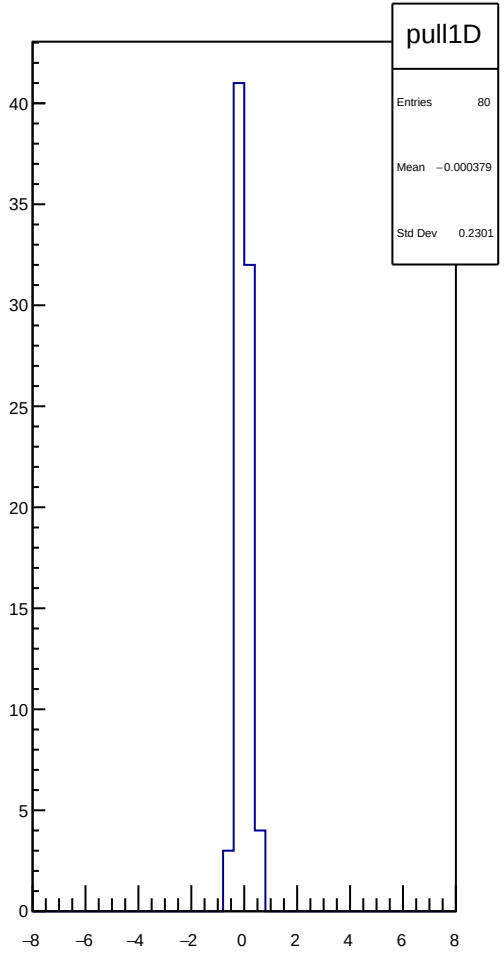

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 8.204 / 79
p0 79.52 ± 0.9057
pull
Entries 80
Mean −1061
Std Dev 1099

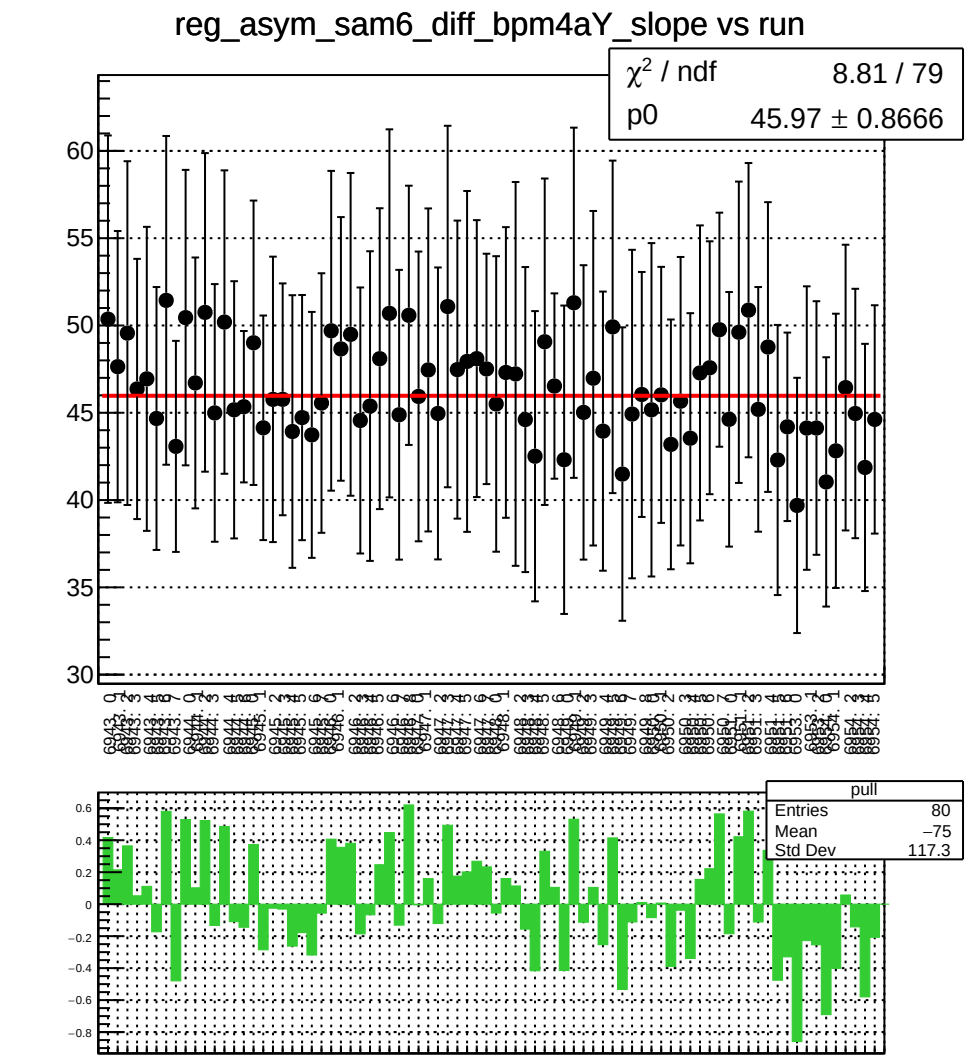

pull1D
Entries 80
Mean −0.001341
Std Dev 0.3202

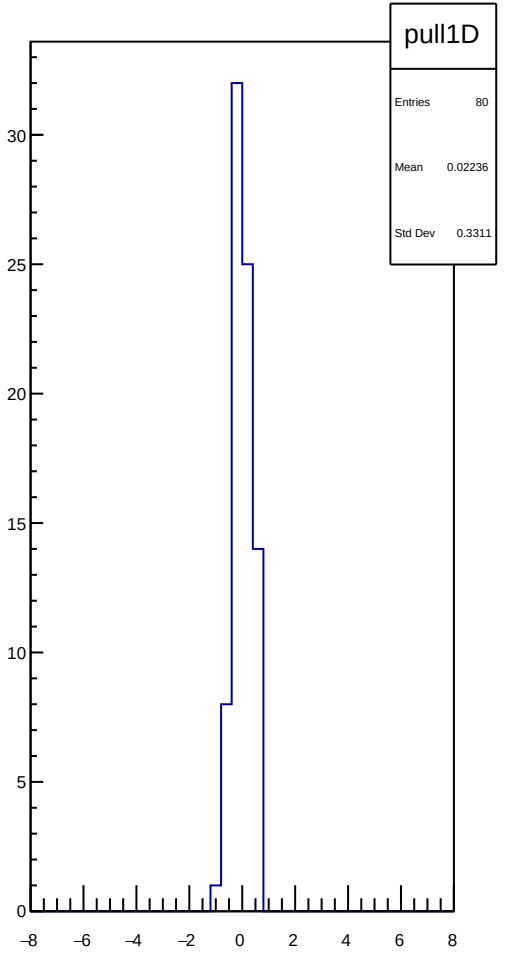

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 9.089 / 79
p0 −0.7536 ± 0.03573
pull
Entries 80
Mean 45.65
Std Dev 22.75

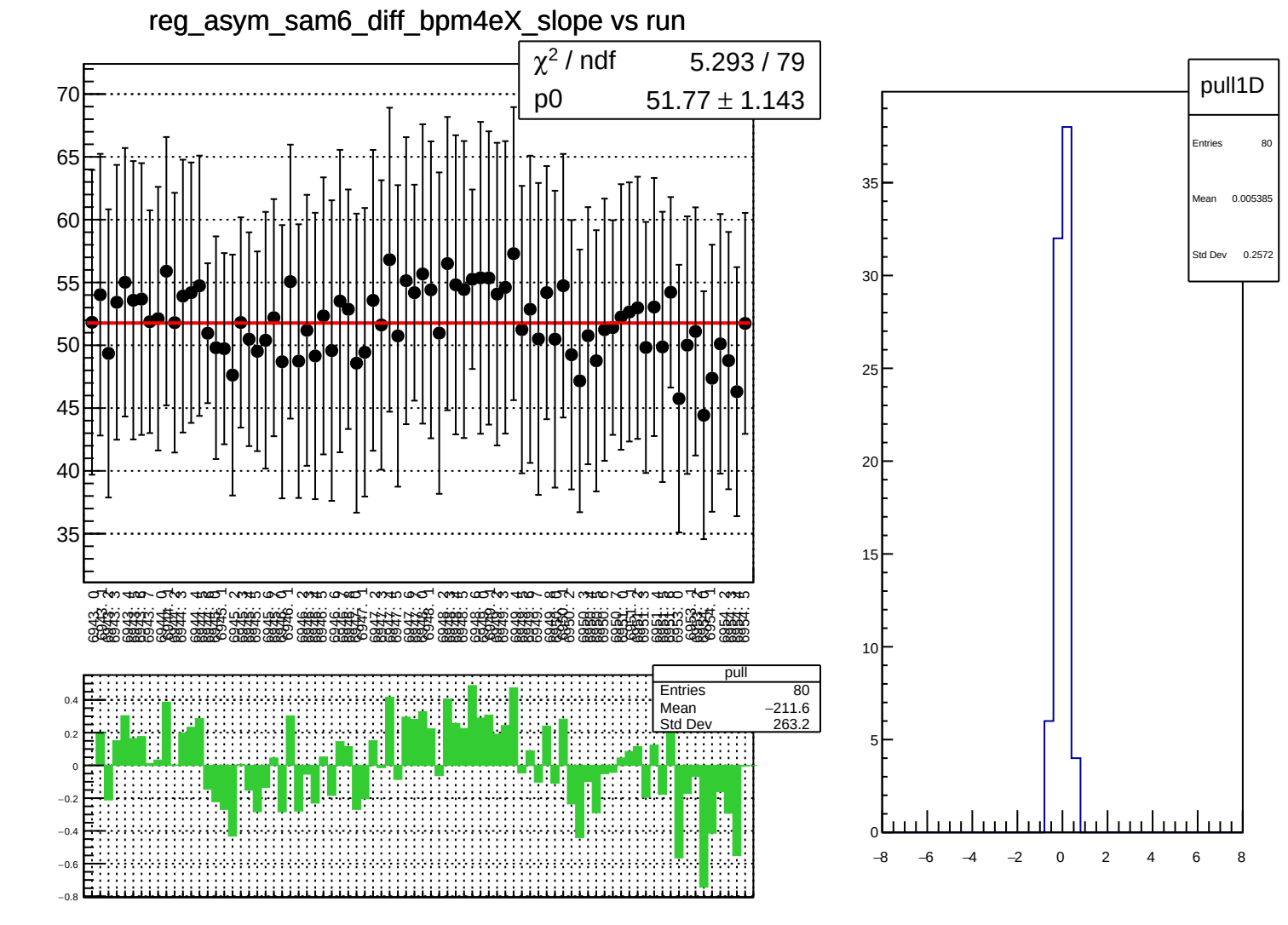

pull1D
Entries 80
Mean −0.01206
Std Dev 0.3369

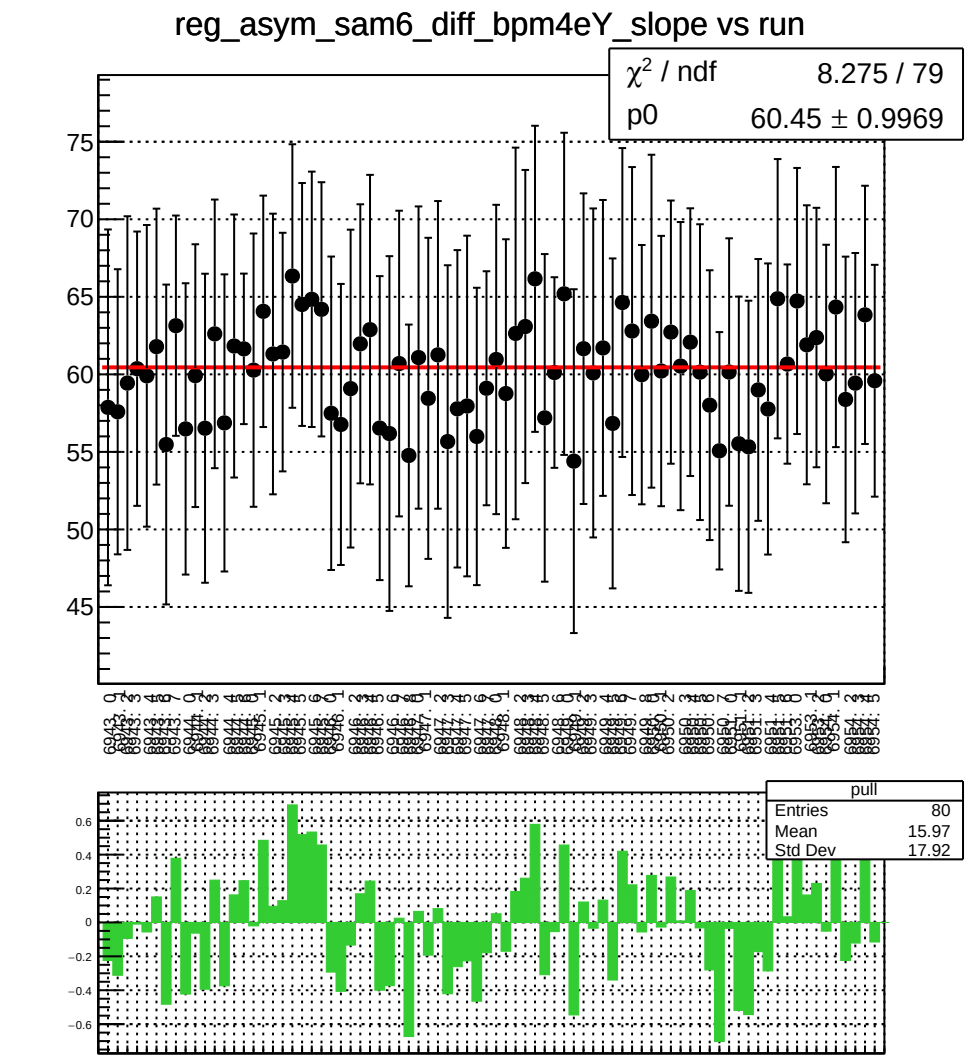

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 4.234 / 79
p0 15.05 ± 1.224
pull
Entries 80
Mean −1255
Std Dev 1313

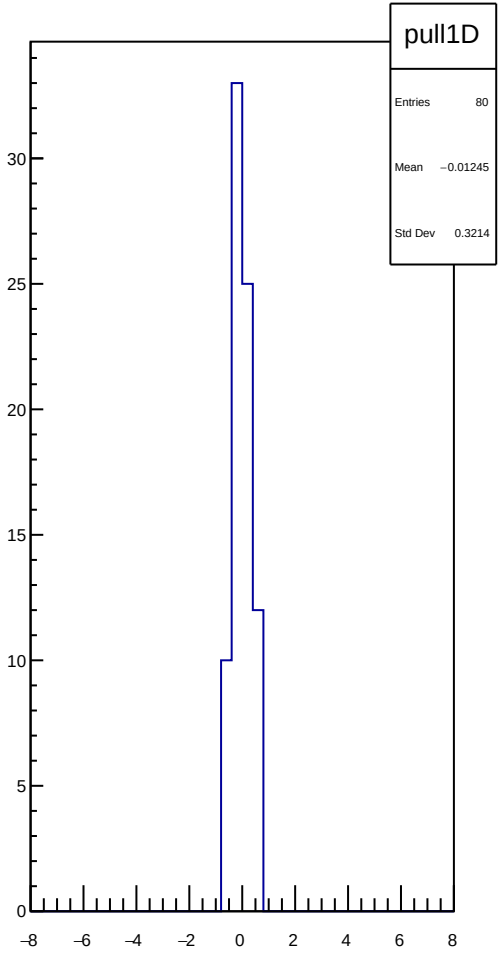

pull1D
Entries 80
Mean −0.000379
Std Dev 0.2301

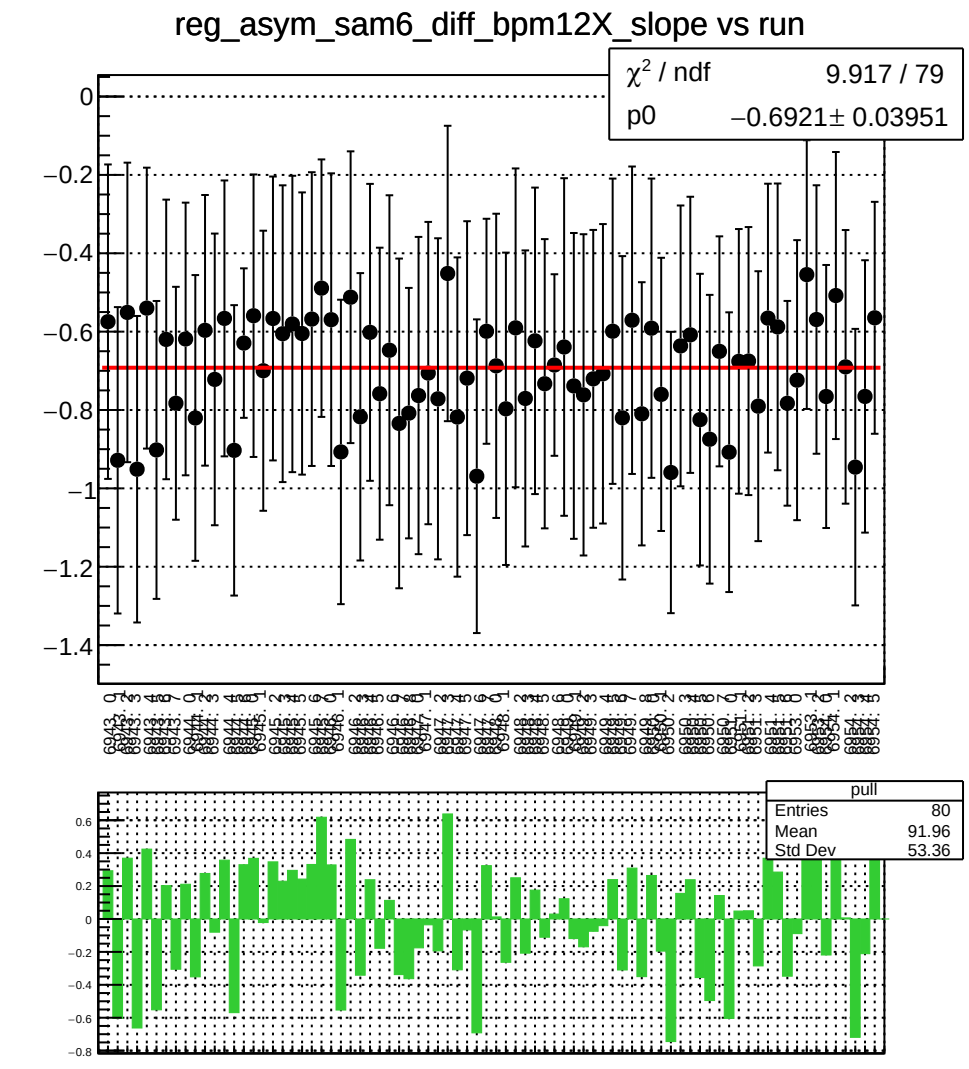

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 8.81 / 79
p0 45.97 ± 0.8666
pull
Entries 80
Mean −75
Std Dev 117.3

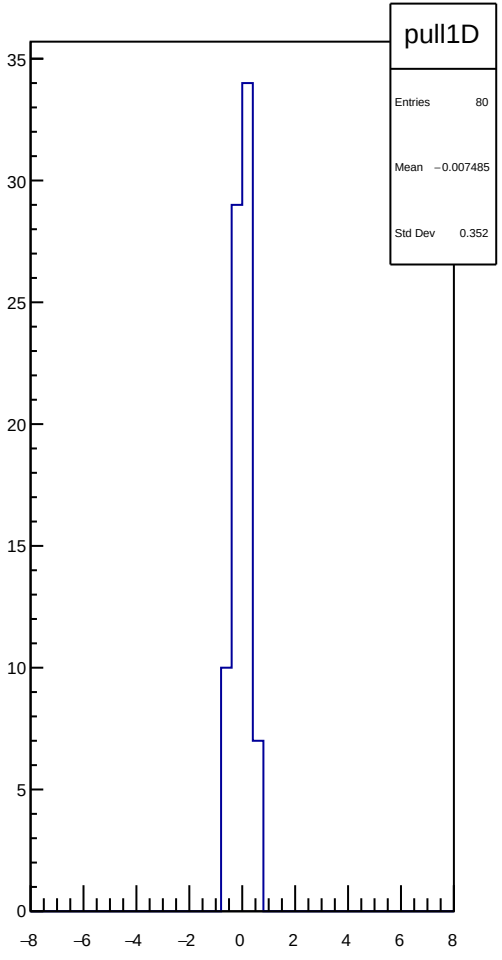

pull1D
Entries 80
Mean 0.02236
Std Dev 0.3311

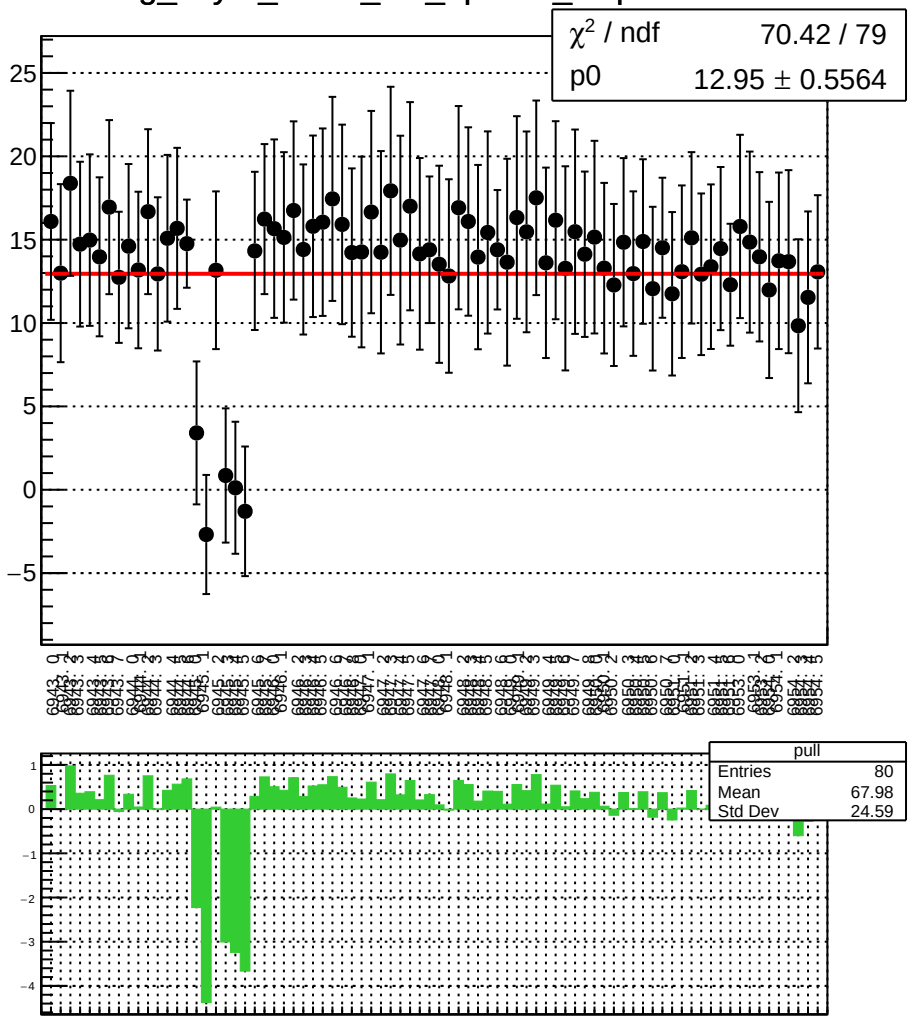

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 5.293 / 79
p0 51.77 ± 1.143
pull
Entries 80
Mean −211.6
Std Dev 263.2
pull1D
Entries 80
Mean 0.005385
Std Dev 0.2572

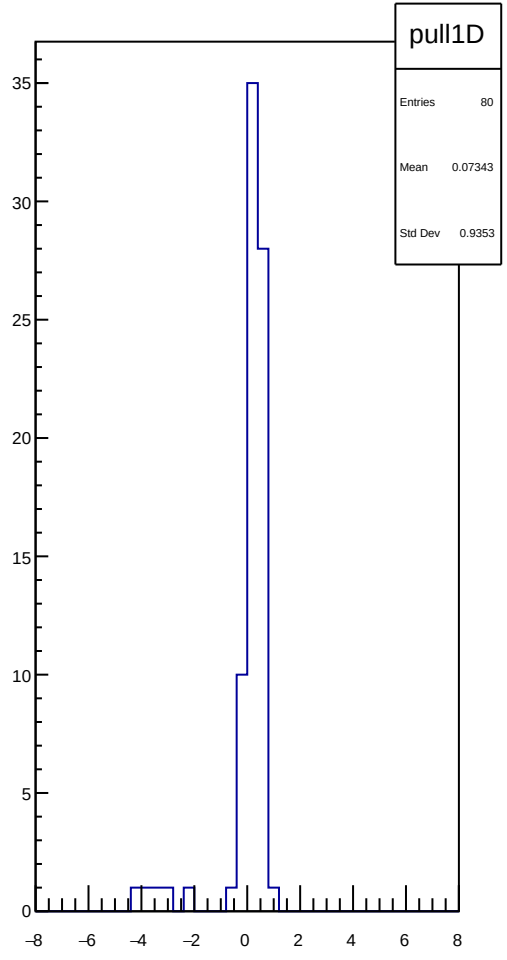

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 8.275 / 79
p0 60.45 ± 0.9969
pull
Entries 80
Mean 15.97
Std Dev 17.92

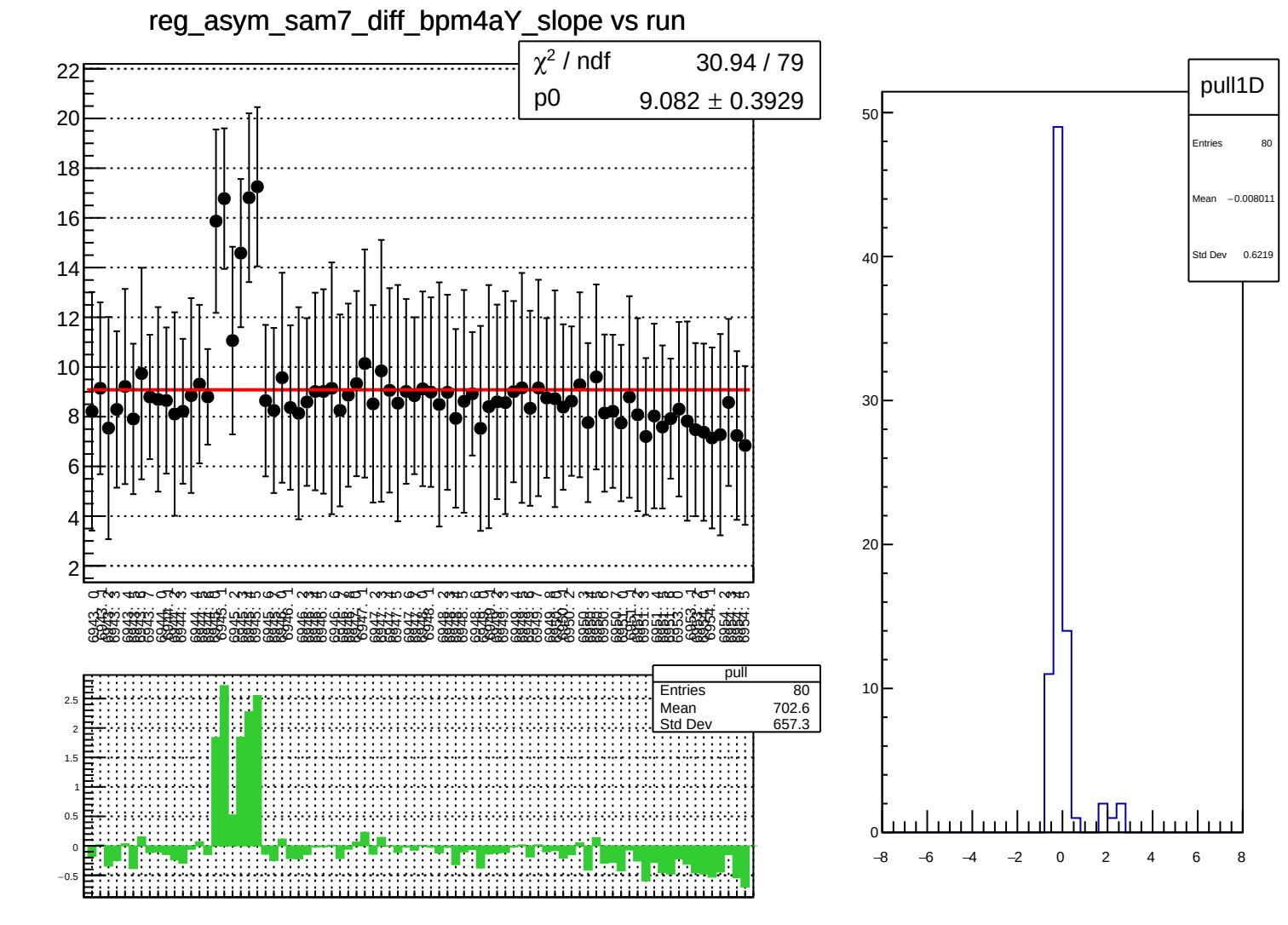

pull1D
Entries 80
Mean −0.01245
Std Dev 0.3214

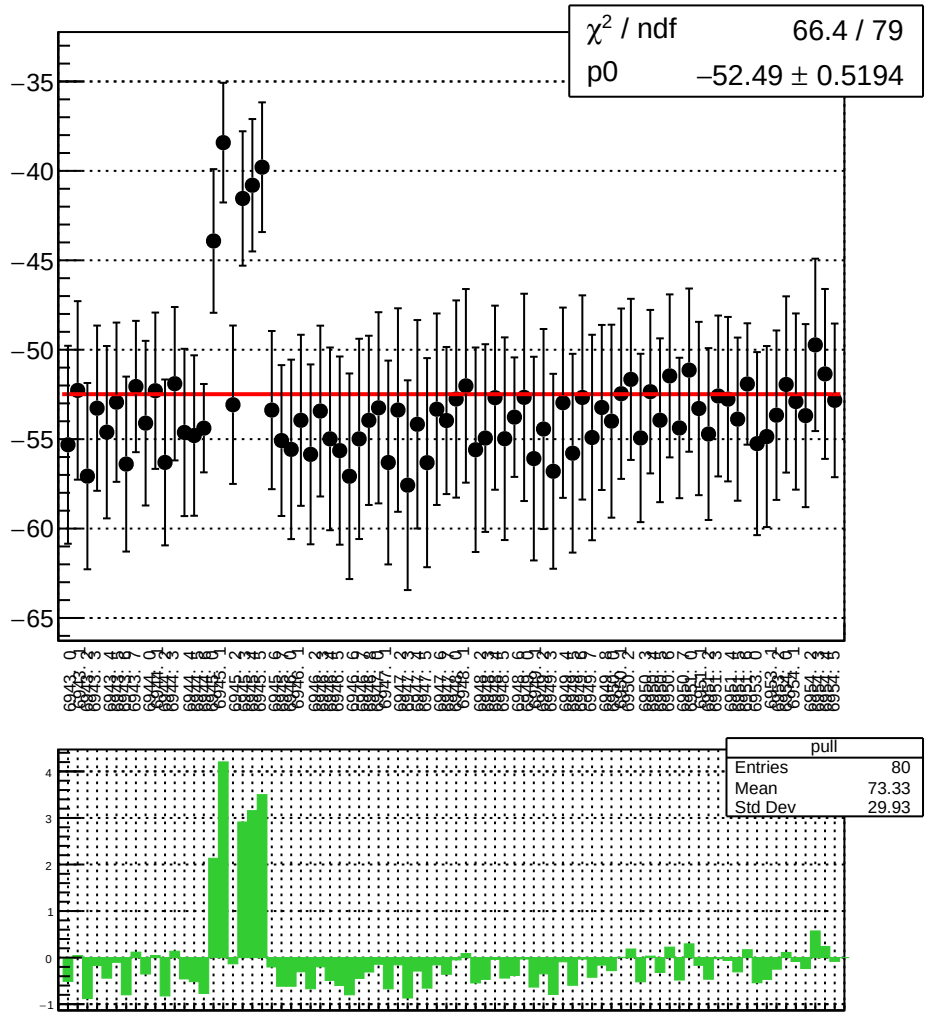

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 9.917 / 79
p0 −0.6921± 0.03951
pull
Entries 80
Mean 91.96
Std Dev 53.36

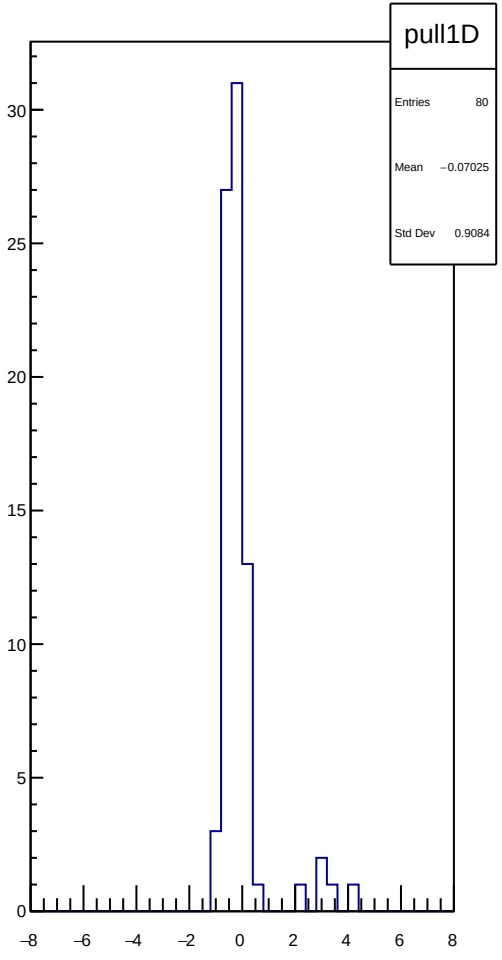

pull1D
Entries 80
Mean −0.007485
Std Dev 0.352

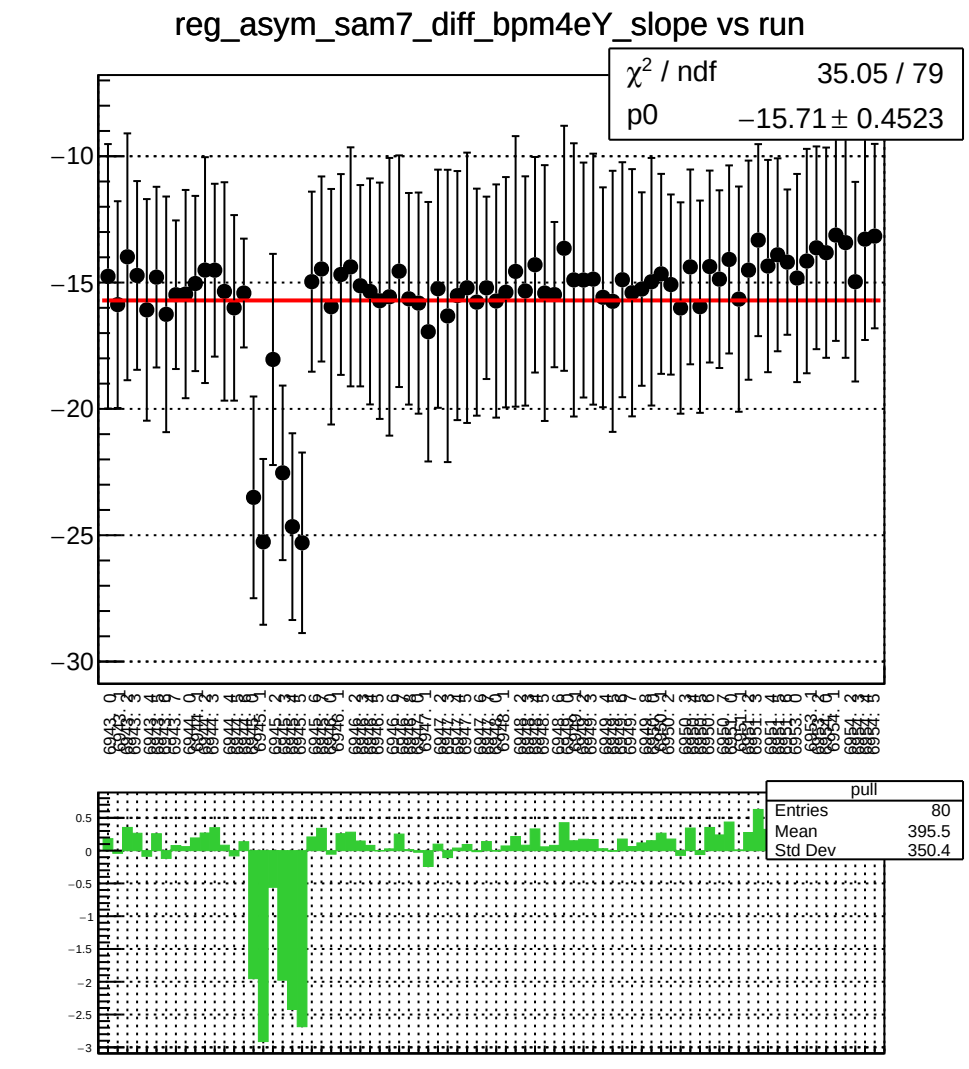

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 70.42 / 79
p0 12.95 ± 0.5564
pull
Entries 80
Mean 67.98
Std Dev 24.59

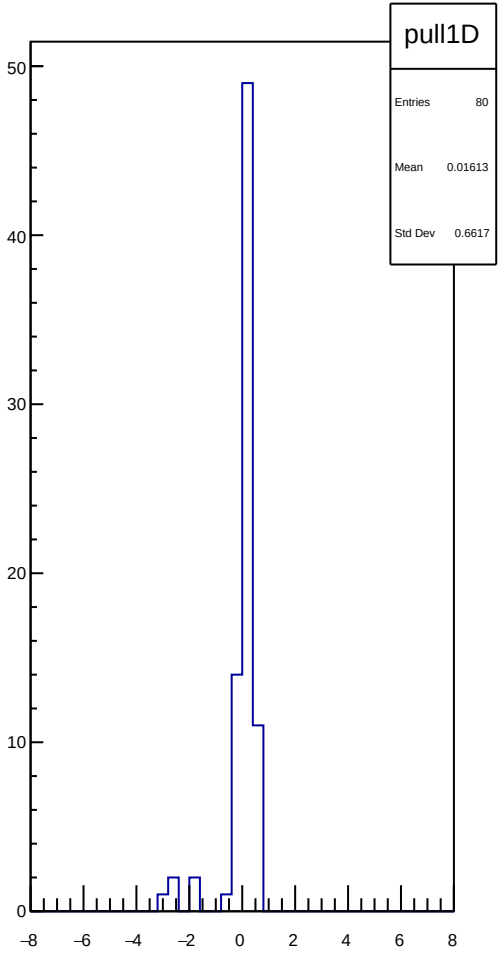

pull1D
Entries 80
Mean 0.07343
Std Dev 0.9353

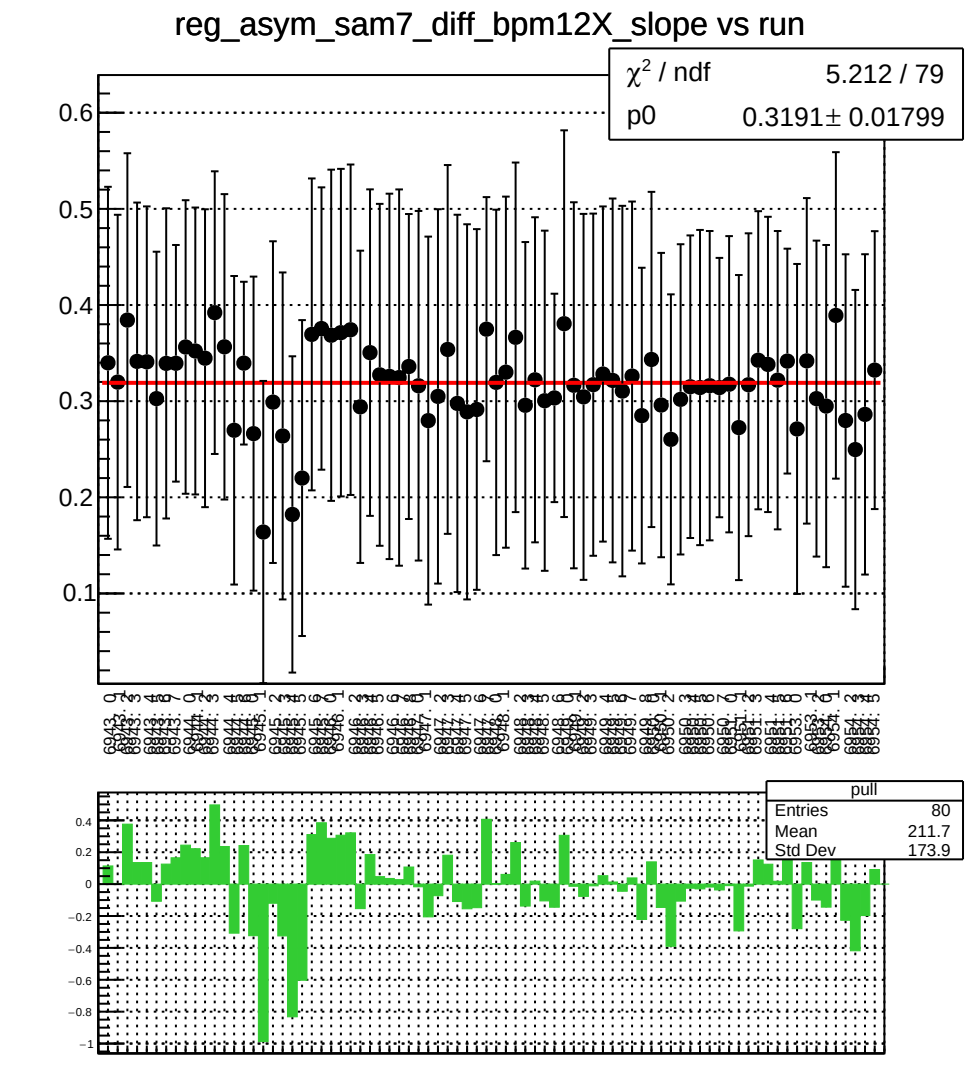

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 30.94 / 79
p0 9.082 ± 0.3929
pull
Entries 80
Mean 702.6
Std Dev 657.3
pull1D
Entries 80
Mean −0.008011
Std Dev 0.6219

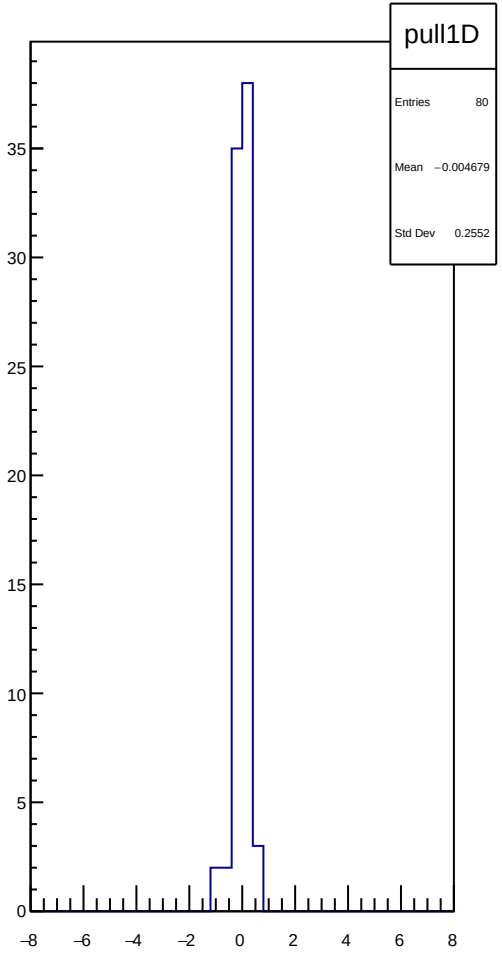

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 66.4 / 79
p0 −52.49 ± 0.5194
pull
Entries 80
Mean 73.33
Std Dev 29.93

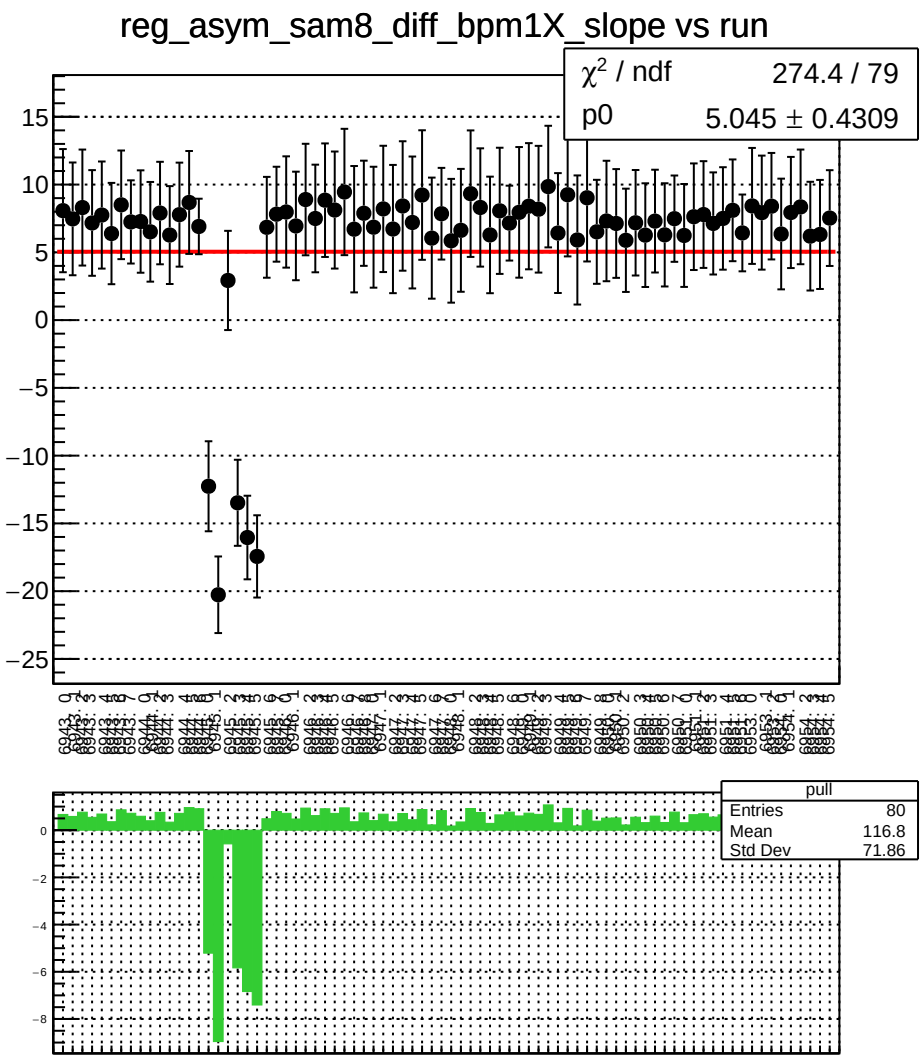

pull1D
Entries 80
Mean −0.07025
Std Dev 0.9084

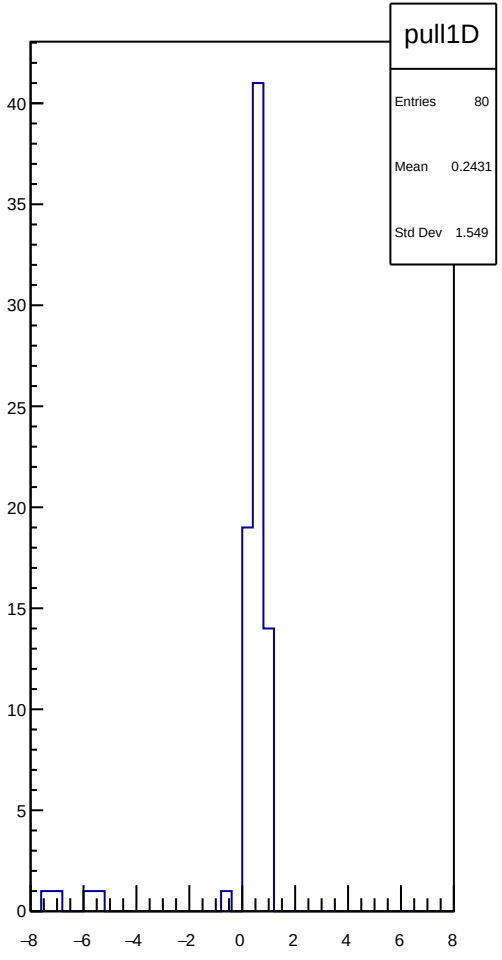

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 35.05 / 79
p0 −15.71 ± 0.4523
pull
Entries 80
Mean 395.5
Std Dev 350.4

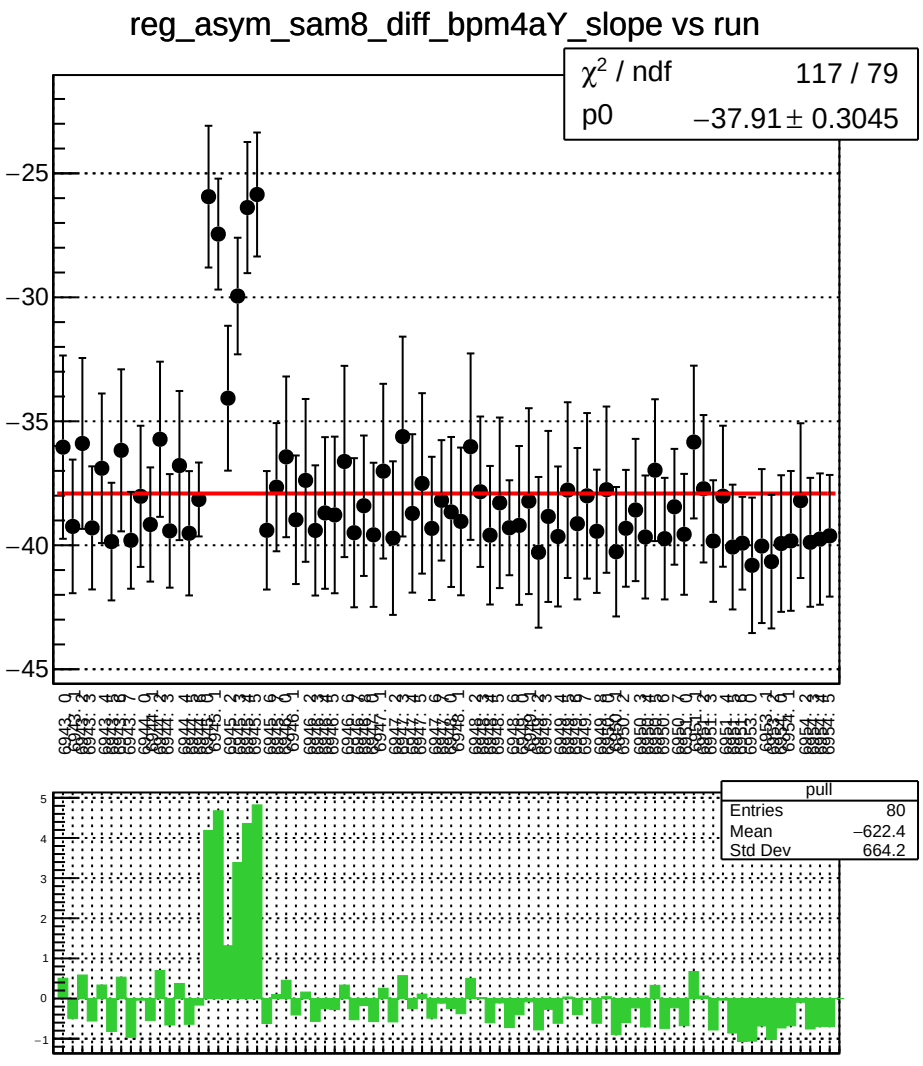

pull1D
Entries 80
Mean 0.01613
Std Dev 0.6617

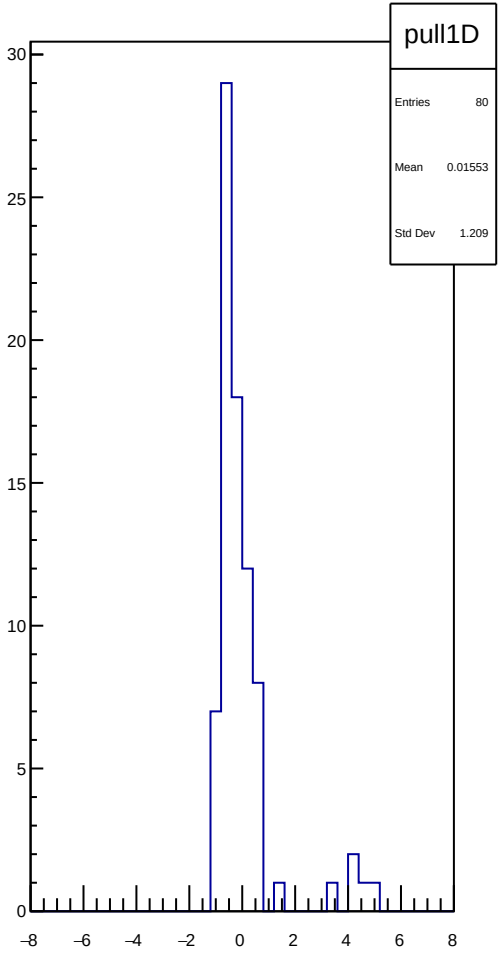

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 5.212 / 79
p0 0.3191± 0.01799
pull
Entries 80
Mean 211.7
Std Dev 173.9

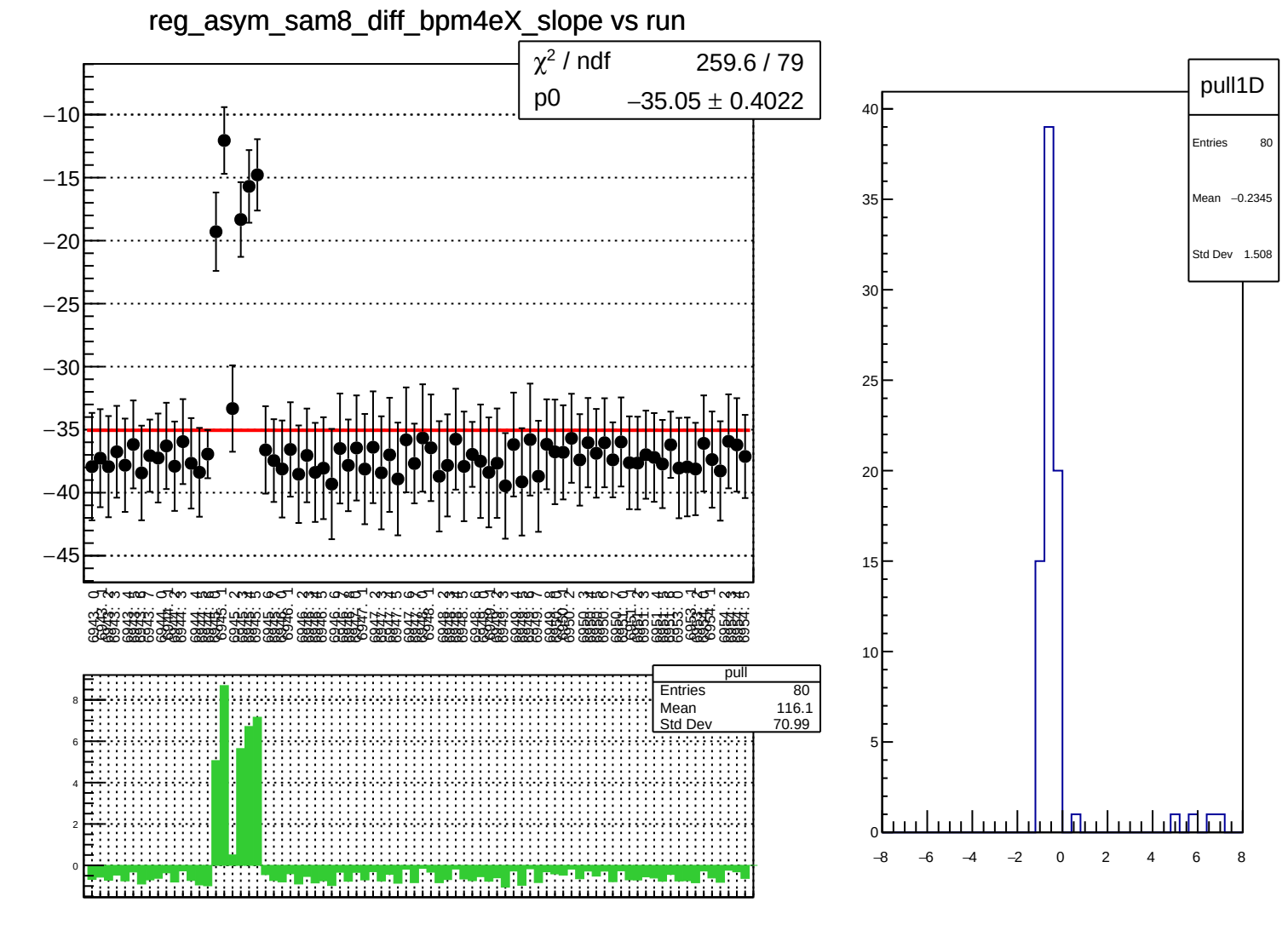

pull1D
Entries 80
Mean −0.004679
Std Dev 0.2552

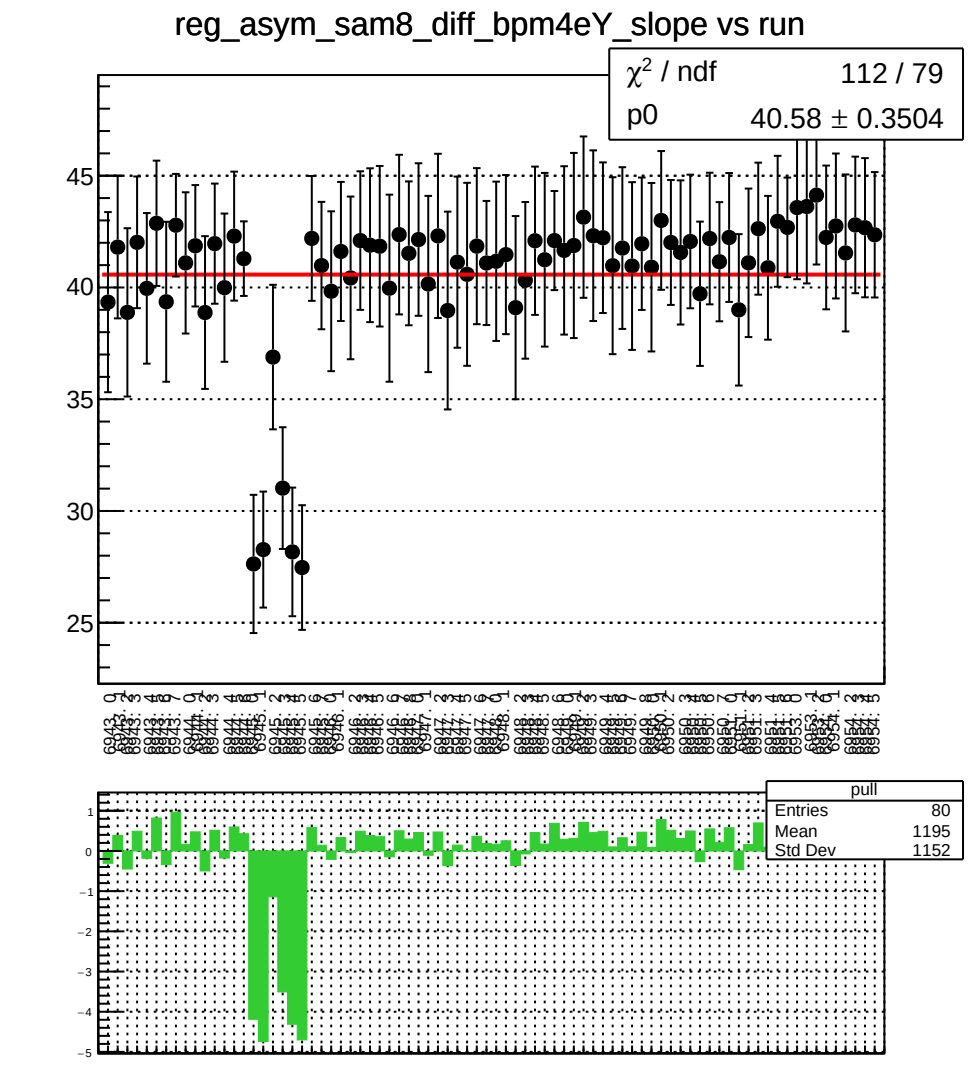

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 274.4 / 79
p0 5.045 ± 0.4309
pull
Entries 80
Mean 116.8
Std Dev 71.86

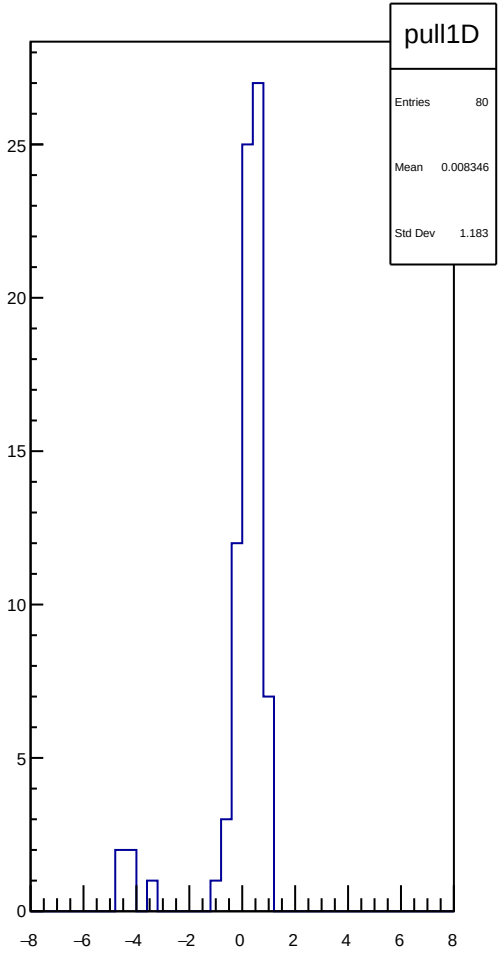

pull1D
Entries 80
Mean 0.2431
Std Dev 1.549

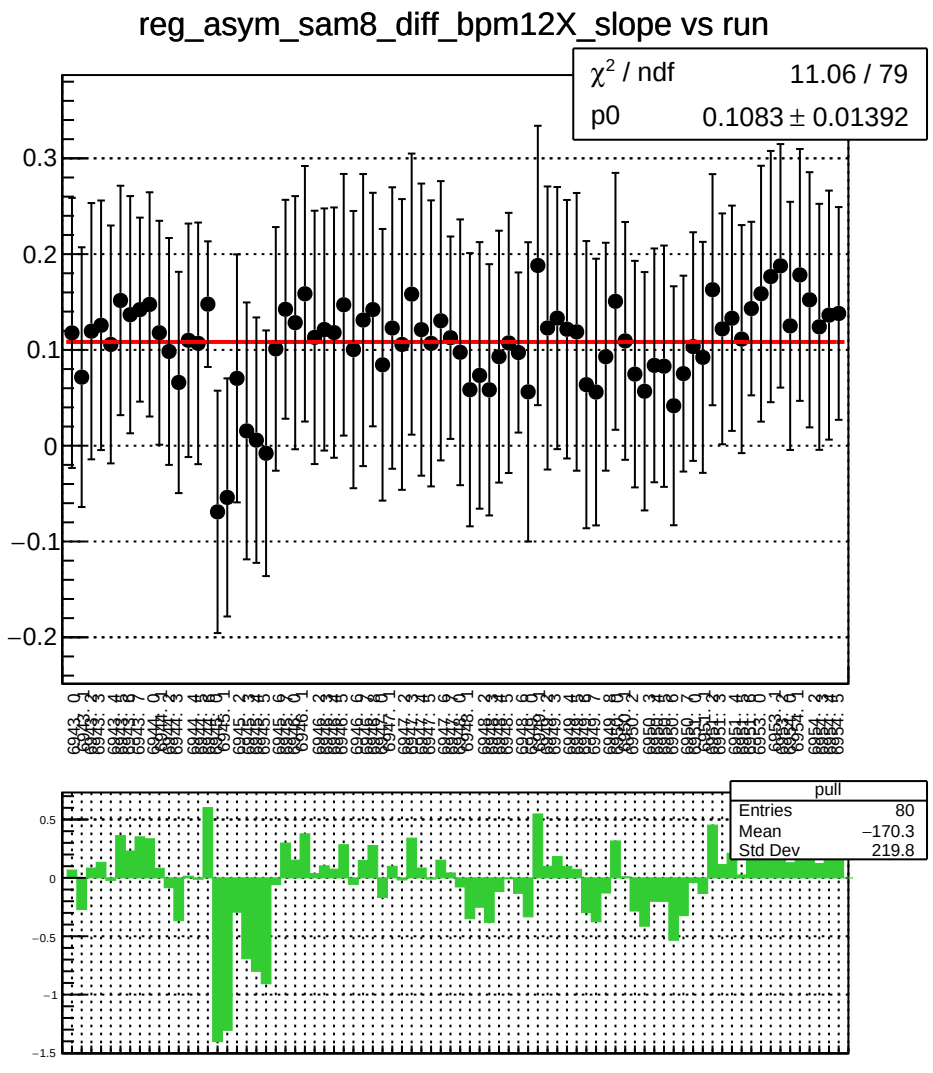

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 117 / 79
p0 −37.91 ± 0.3045
pull
Entries 80
Mean −622.4
Std Dev 664.2

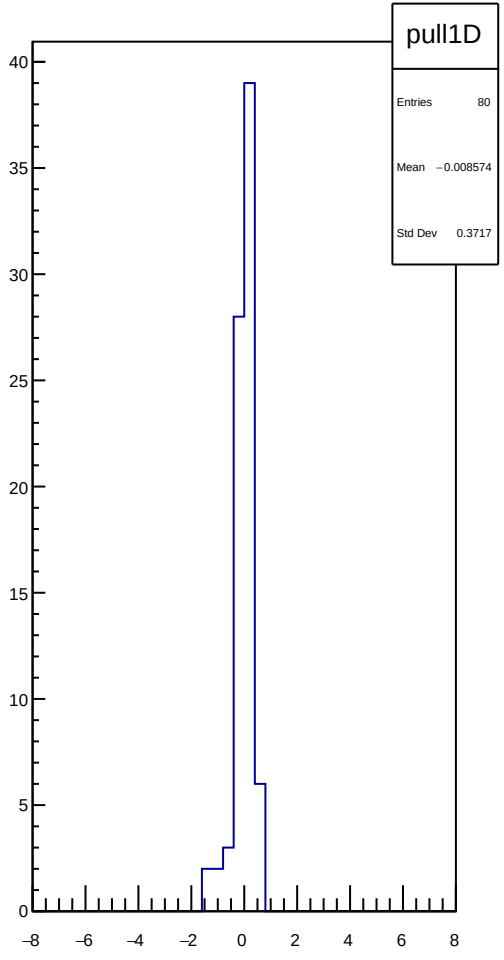

pull1D
Entries 80
Mean 0.01553
Std Dev 1.209

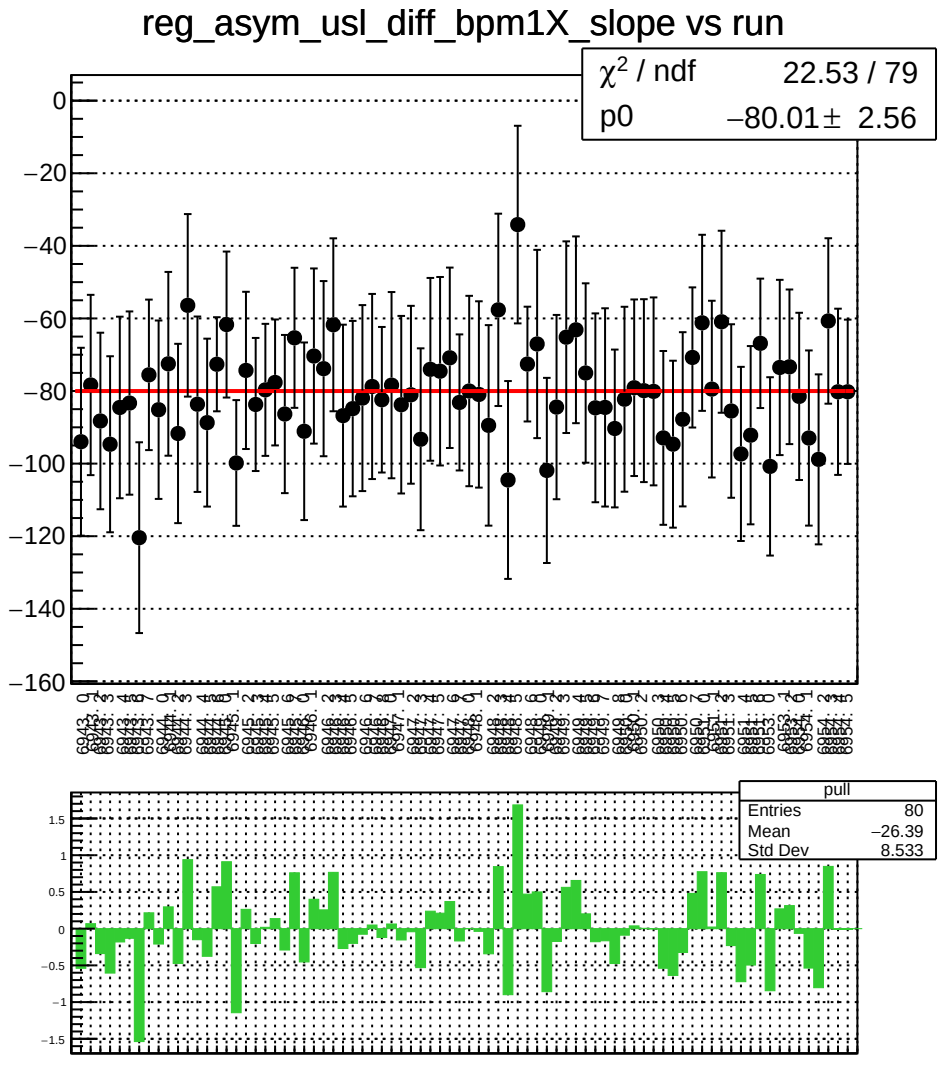

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 259.6 / 79
p0 −35.05 ± 0.4022
pull
Entries 80
Mean 116.1
Std Dev 70.99
pull1D
Entries 80
Mean −0.2345
Std Dev 1.508

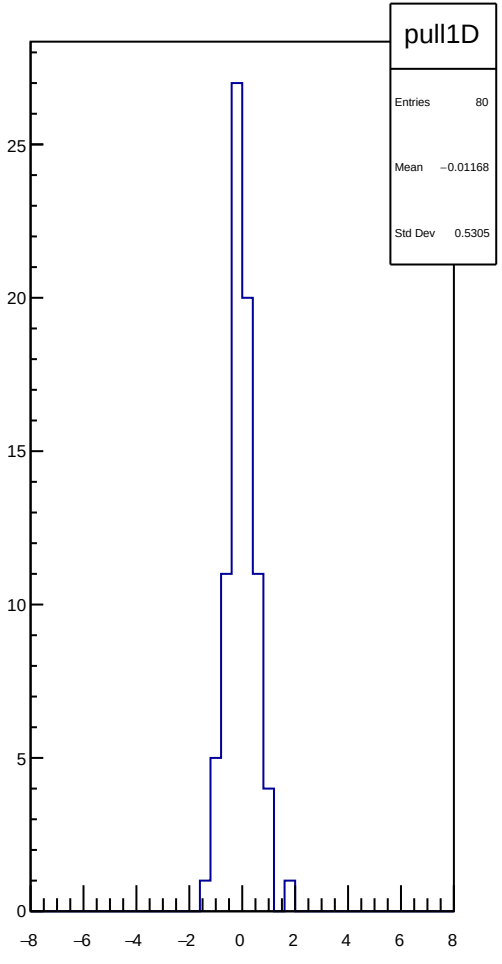

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 112 / 79
p0 40.58 ± 0.3504
pull
Entries 80
Mean 1195
Std Dev 1152

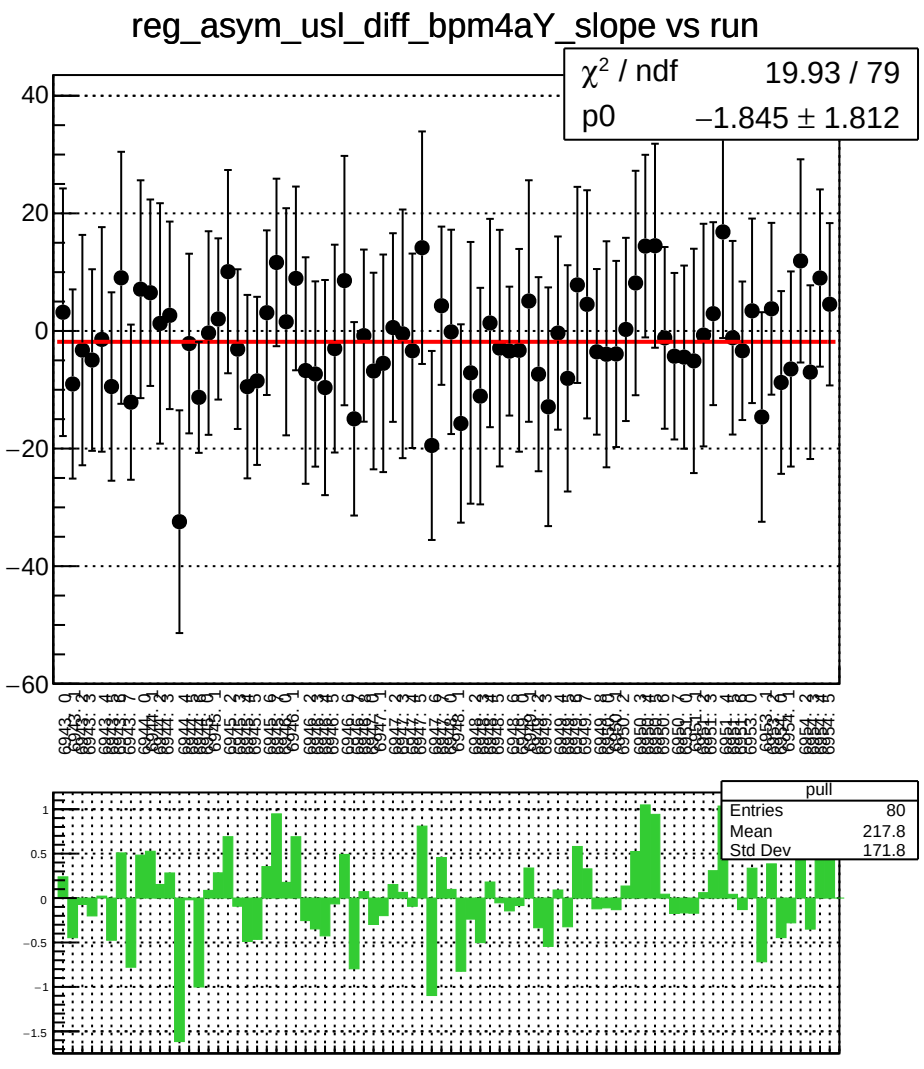

pull1D
Entries 80
Mean 0.008346
Std Dev 1.183

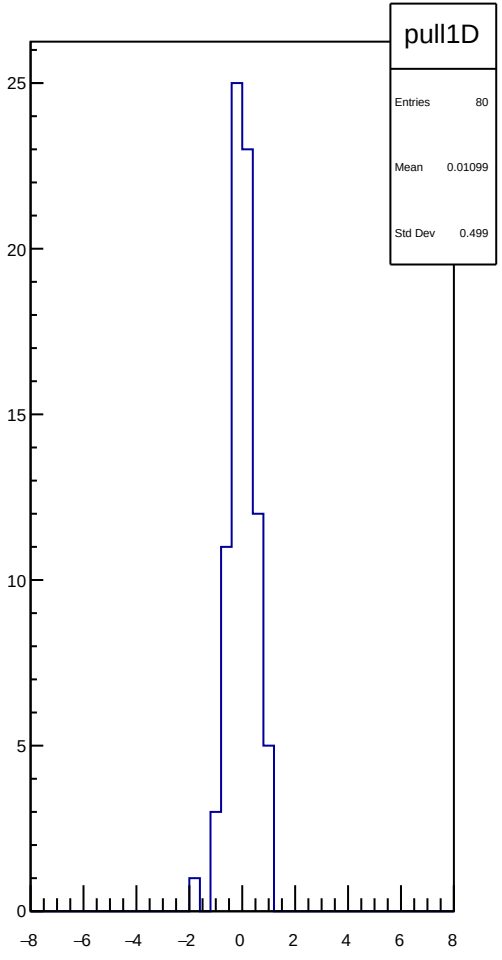

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 11.06 / 79
p0 0.1083 ± 0.01392
pull
Entries 80
Mean −170.3
Std Dev 219.8

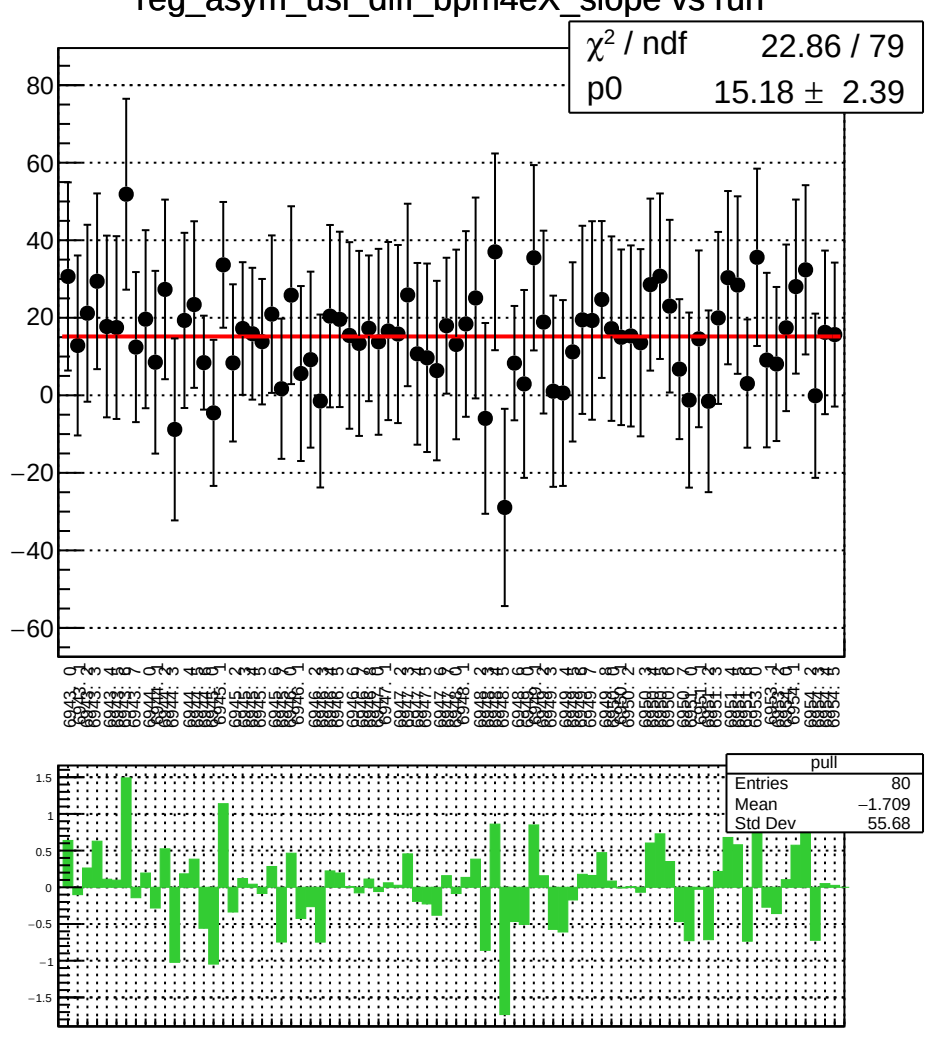

pull1D
Entries 80
Mean −0.008574
Std Dev 0.3717

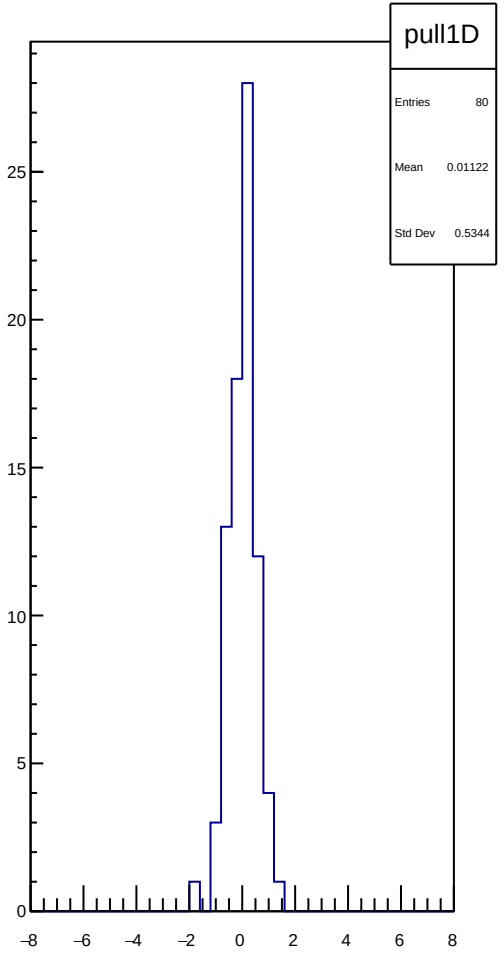

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 22.53 / 79
p0 −80.01 ± 2.56
pull
Entries 80
Mean −26.39
Std Dev 8.533

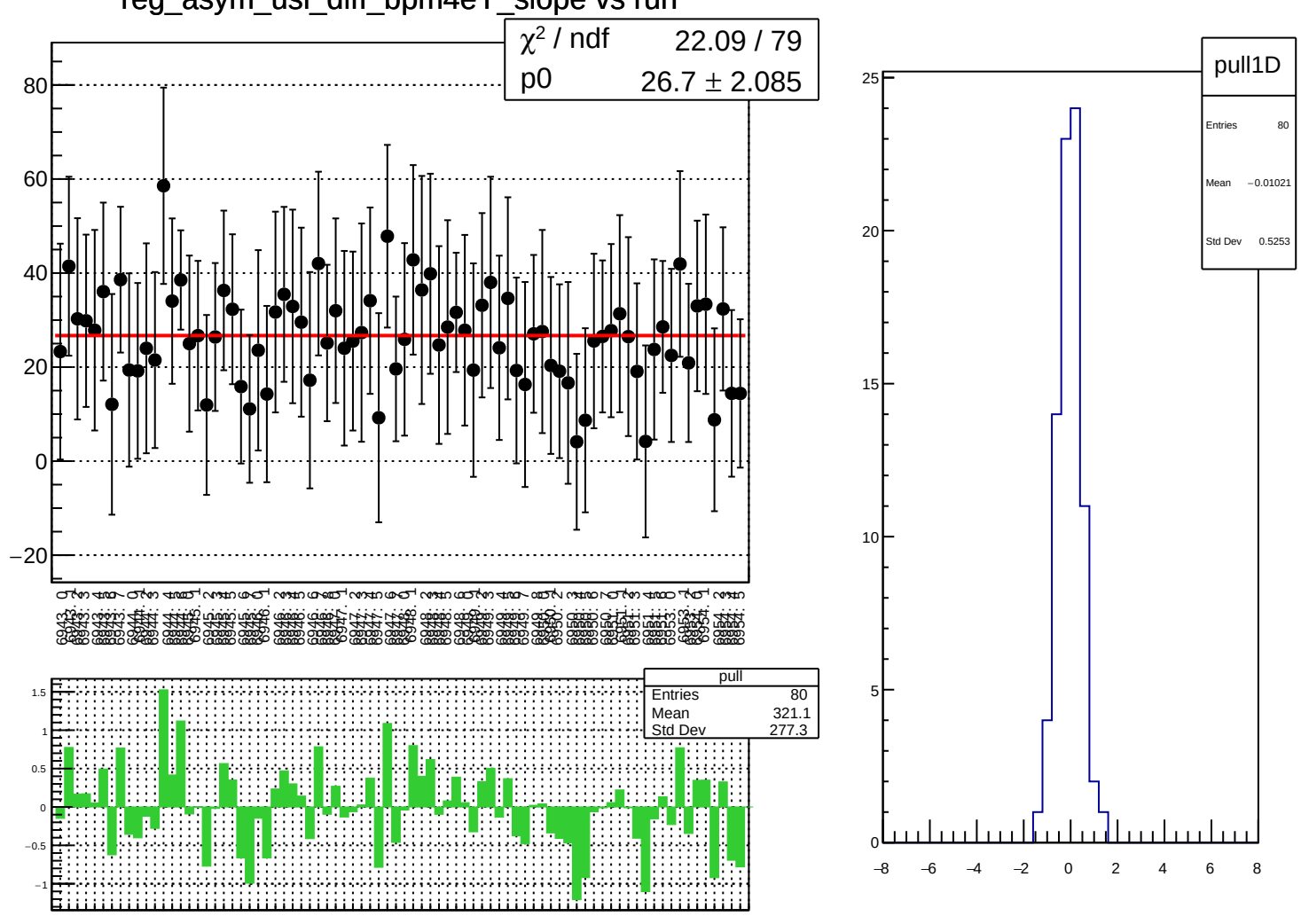

pull1D
Entries 80
Mean −0.01168
Std Dev 0.5305

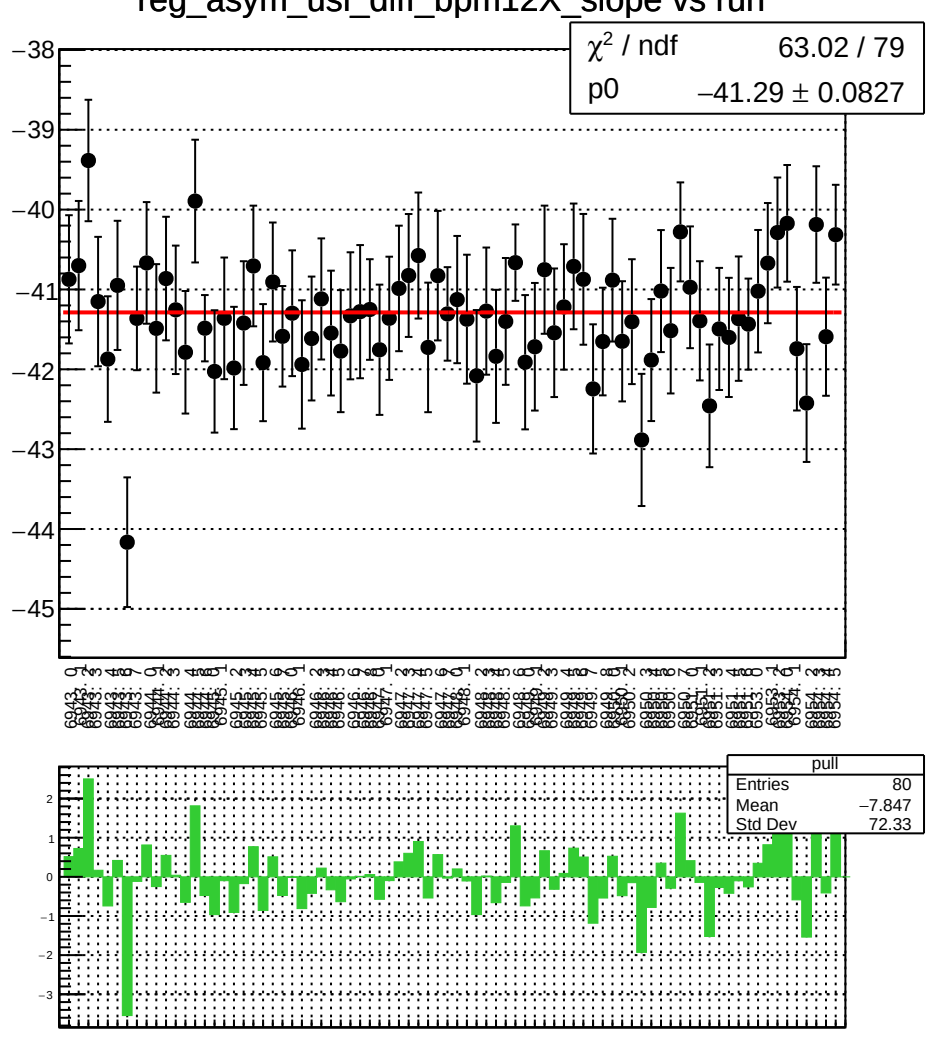

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 19.93 / 79
p0 −1.845 ± 1.812
pull
Entries 80
Mean 217.8
Std Dev 171.8

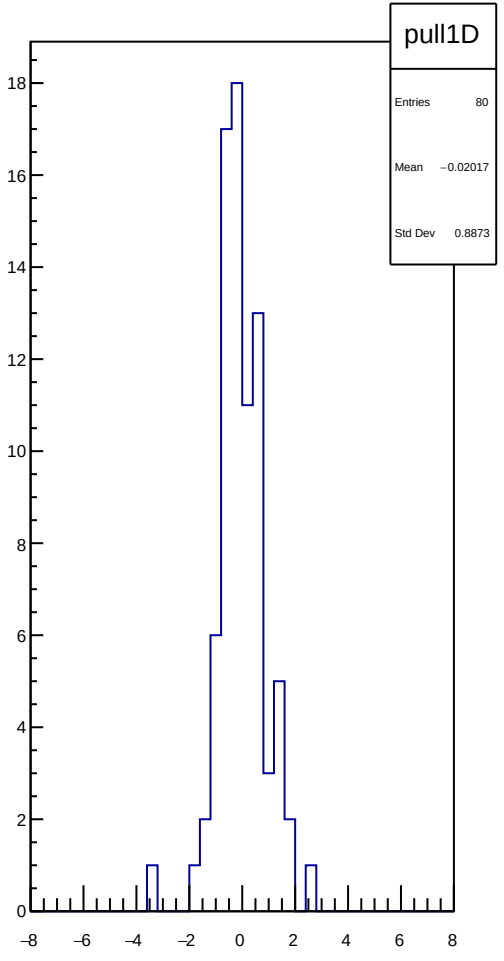

pull1D
Entries 80
Mean 0.01099
Std Dev 0.499

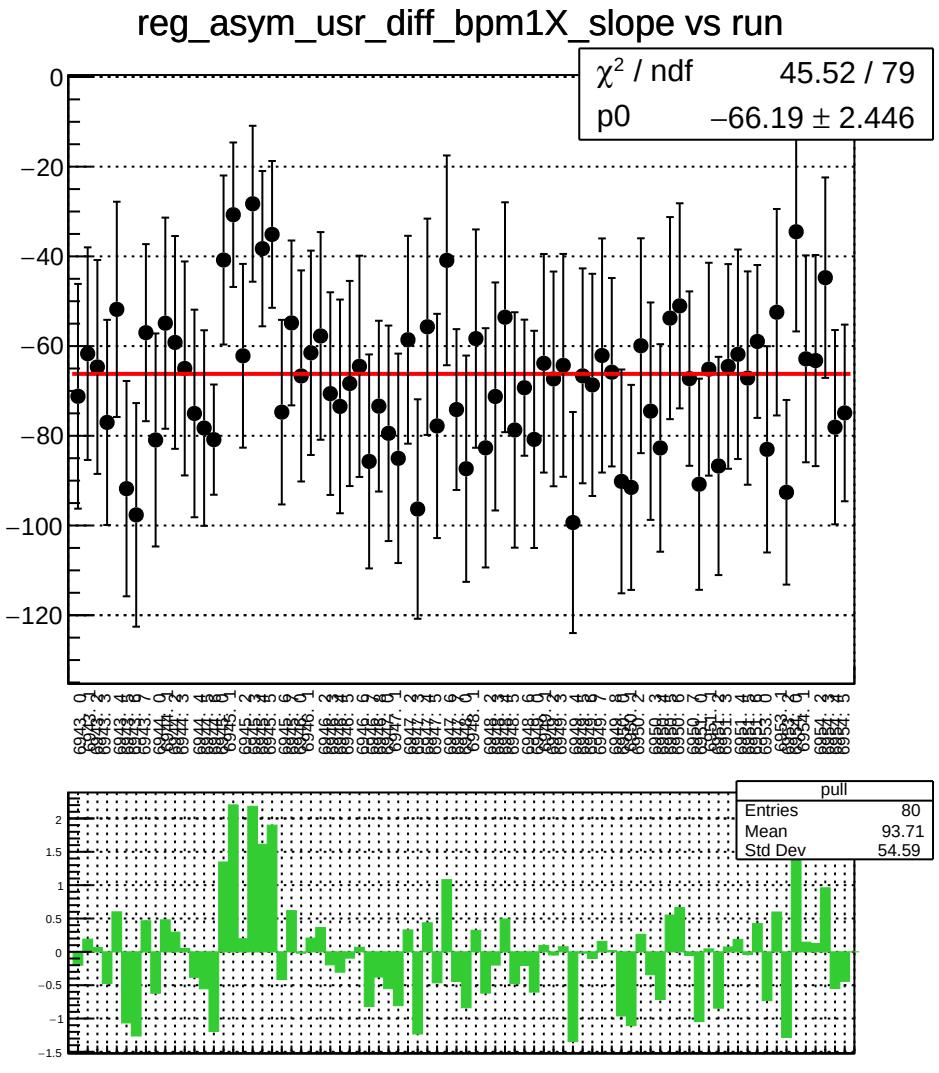

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 22.86 / 79
p0 15.18 ± 2.39
pull
Entries 80
Mean −1.709
Std Dev 55.68

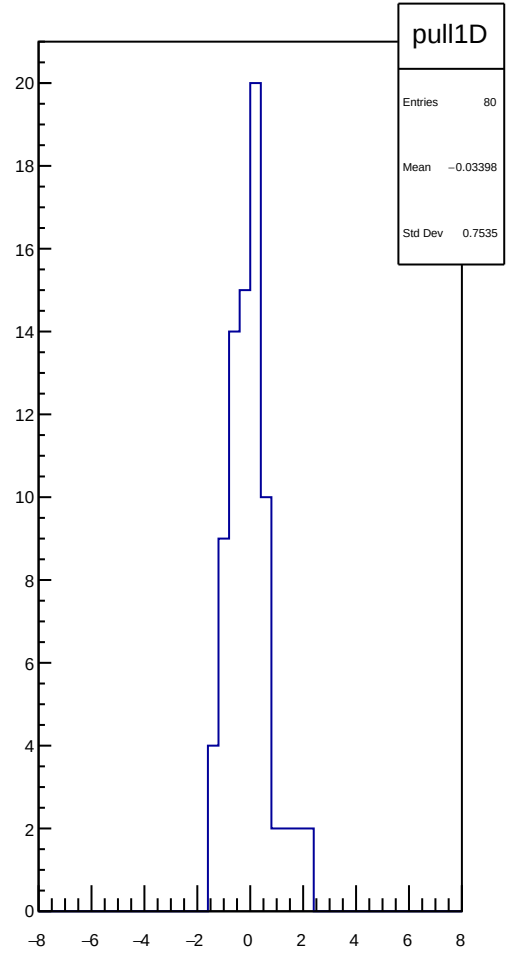

pull1D
Entries 80
Mean 0.01122
Std Dev 0.5344

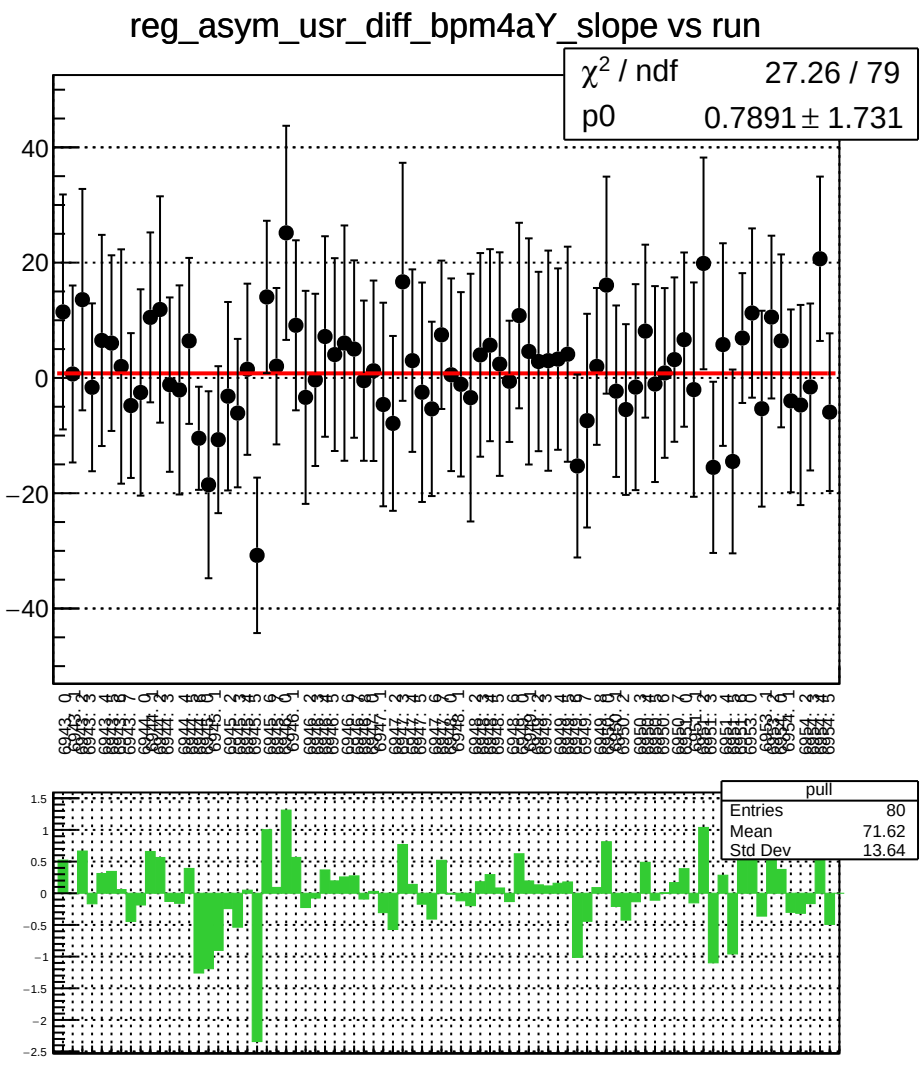

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 22.09 / 79
p0 26.7 ± 2.085
pull
Entries 80
Mean 321.1
Std Dev 277.3
pull1D
Entries 80
Mean −0.01021
Std Dev 0.5253

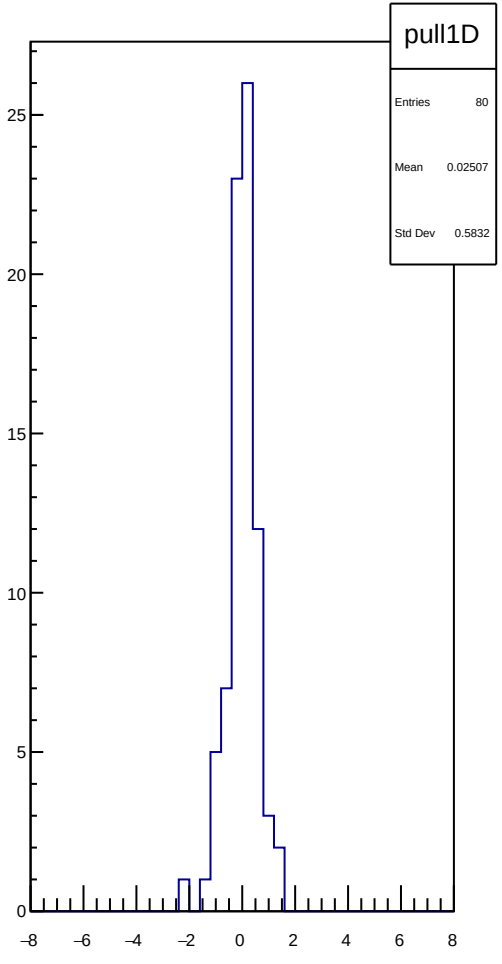

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 63.02 / 79
p0 −41.29 ± 0.0827
pull
Entries 80
Mean −7.847
Std Dev 72.33

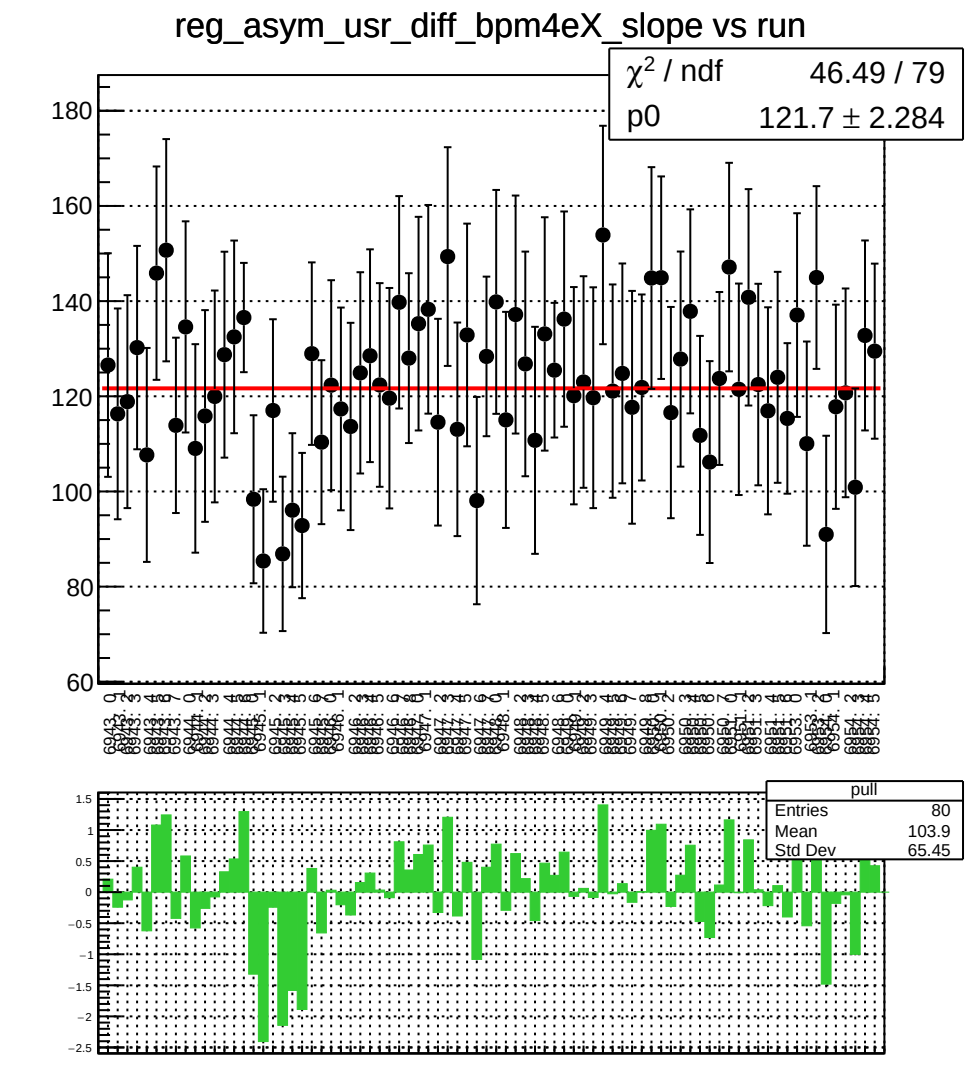

pull1D
Entries 80
Mean −0.02017
Std Dev 0.8873

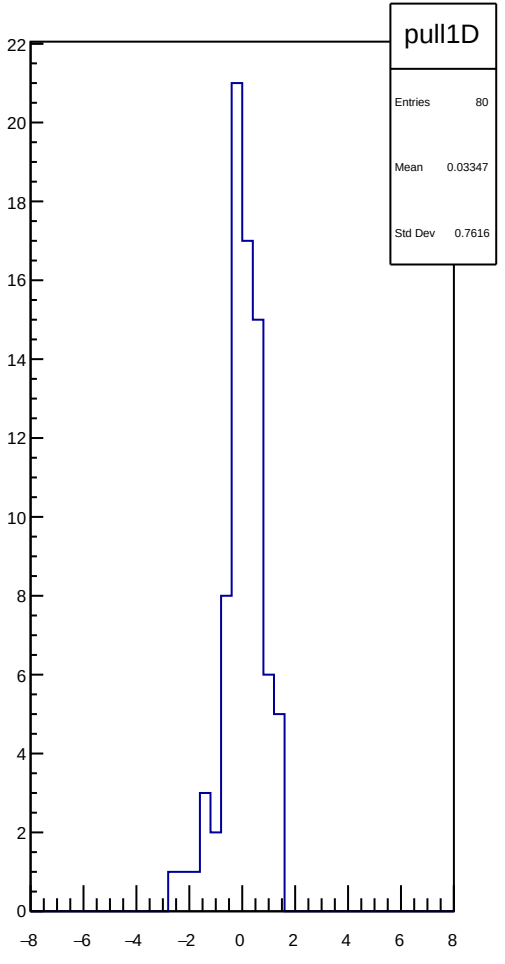

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 45.52 / 79
p0 −66.19 ± 2.446
pull
Entries 80
Mean 93.71
Std Dev 54.59

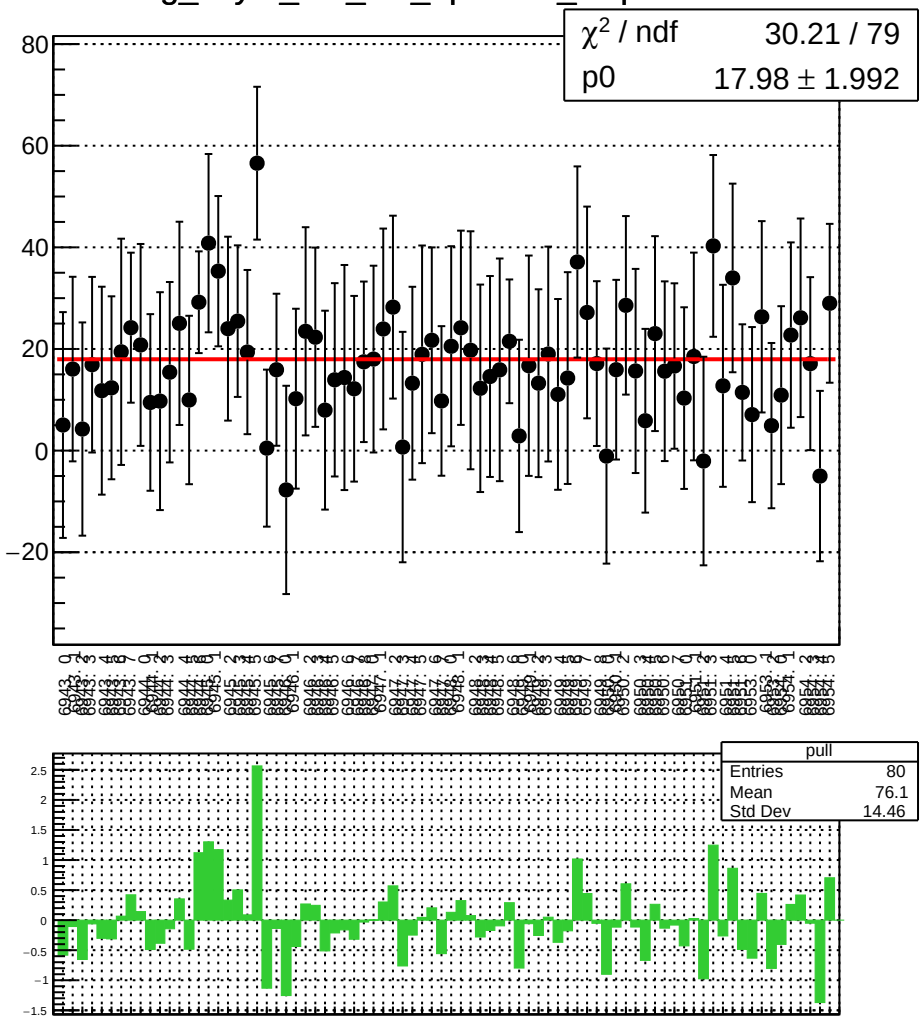

pull1D
Entries 80
Mean −0.03398
Std Dev 0.7535

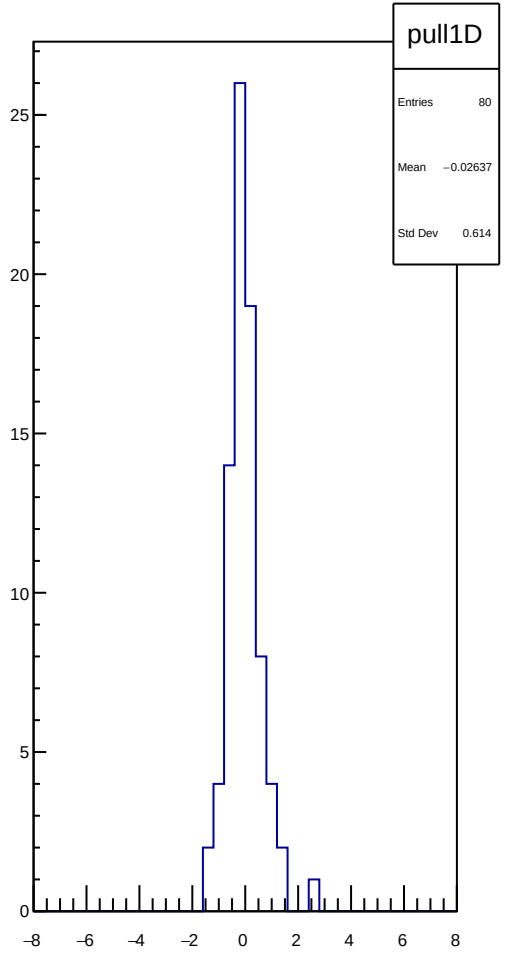

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 27.26 / 79
p0 0.7891 ± 1.731
pull
Entries 80
Mean 71.62
Std Dev 13.64

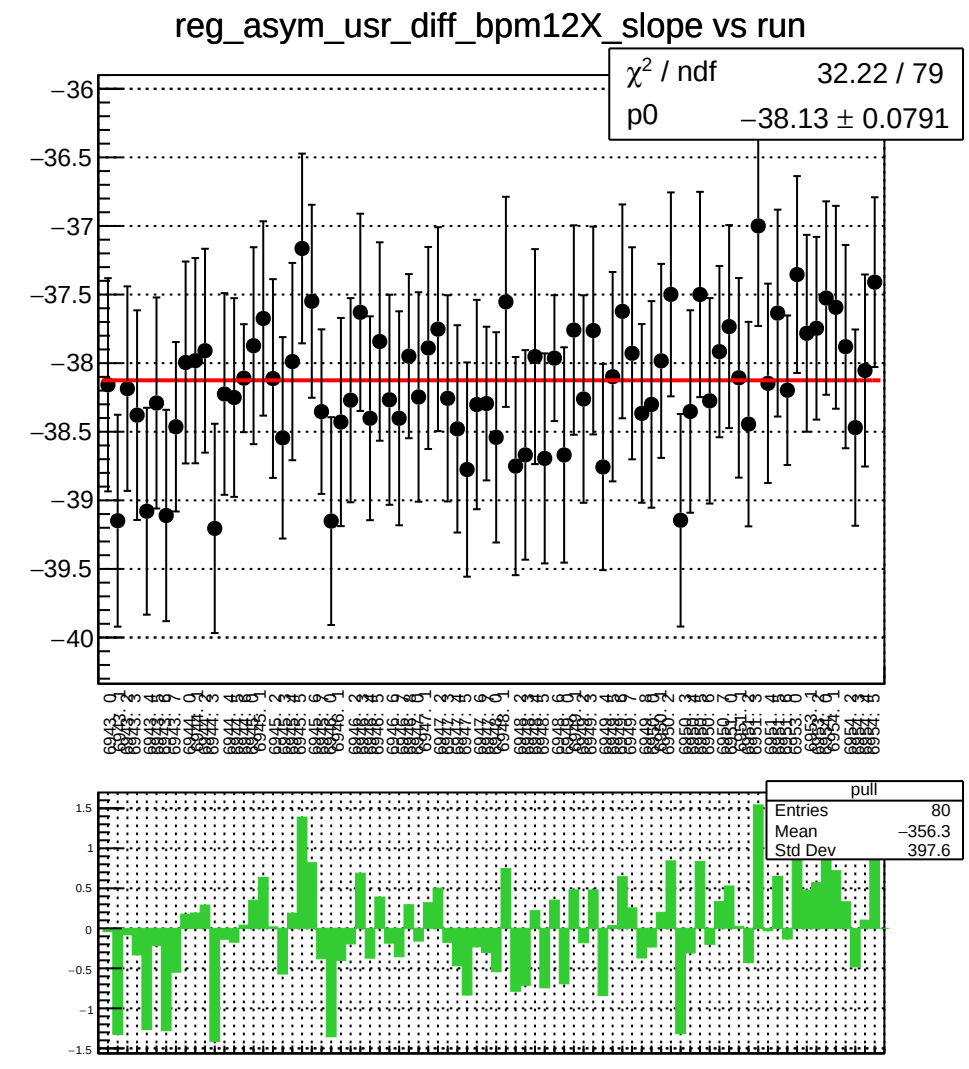

pull1D
Entries 80
Mean 0.02507
Std Dev 0.5832

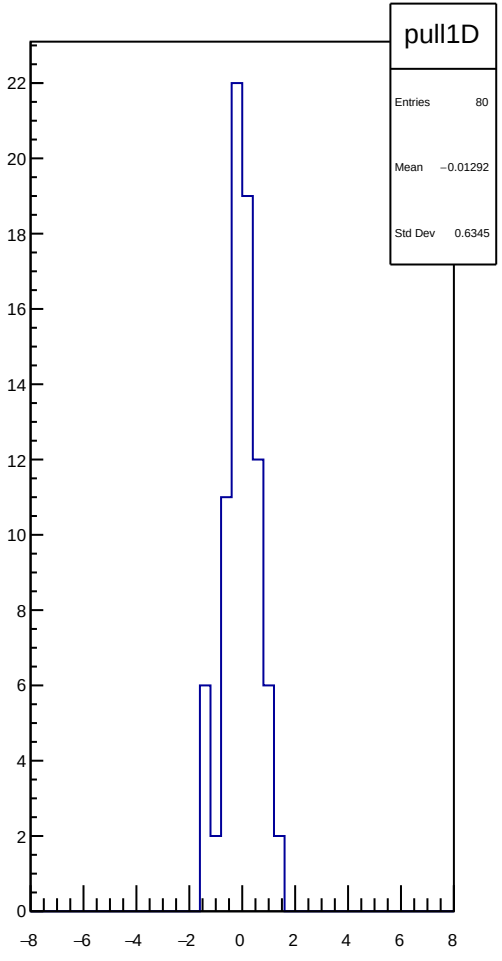

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 46.49 / 79
p0 121.7 ± 2.284
pull
Entries 80
Mean 103.9
Std Dev 65.45

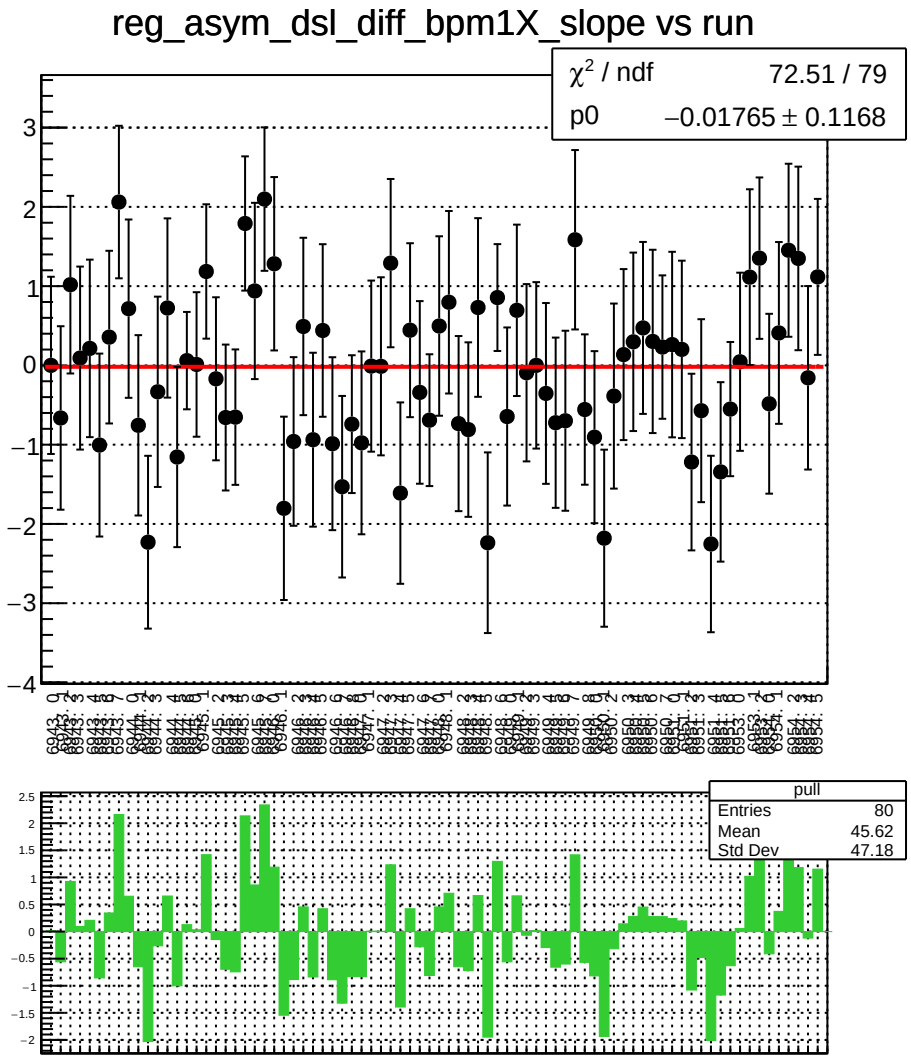

pull1D
Entries 80
Mean 0.03347
Std Dev 0.7616

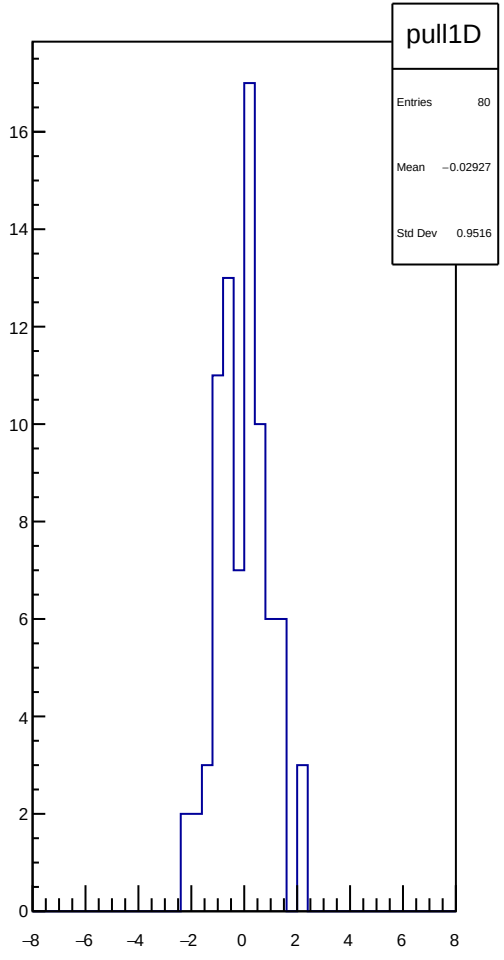

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 30.21 / 79
p0 17.98 ± 1.992
pull
Entries 80
Mean 76.1
Std Dev 14.46

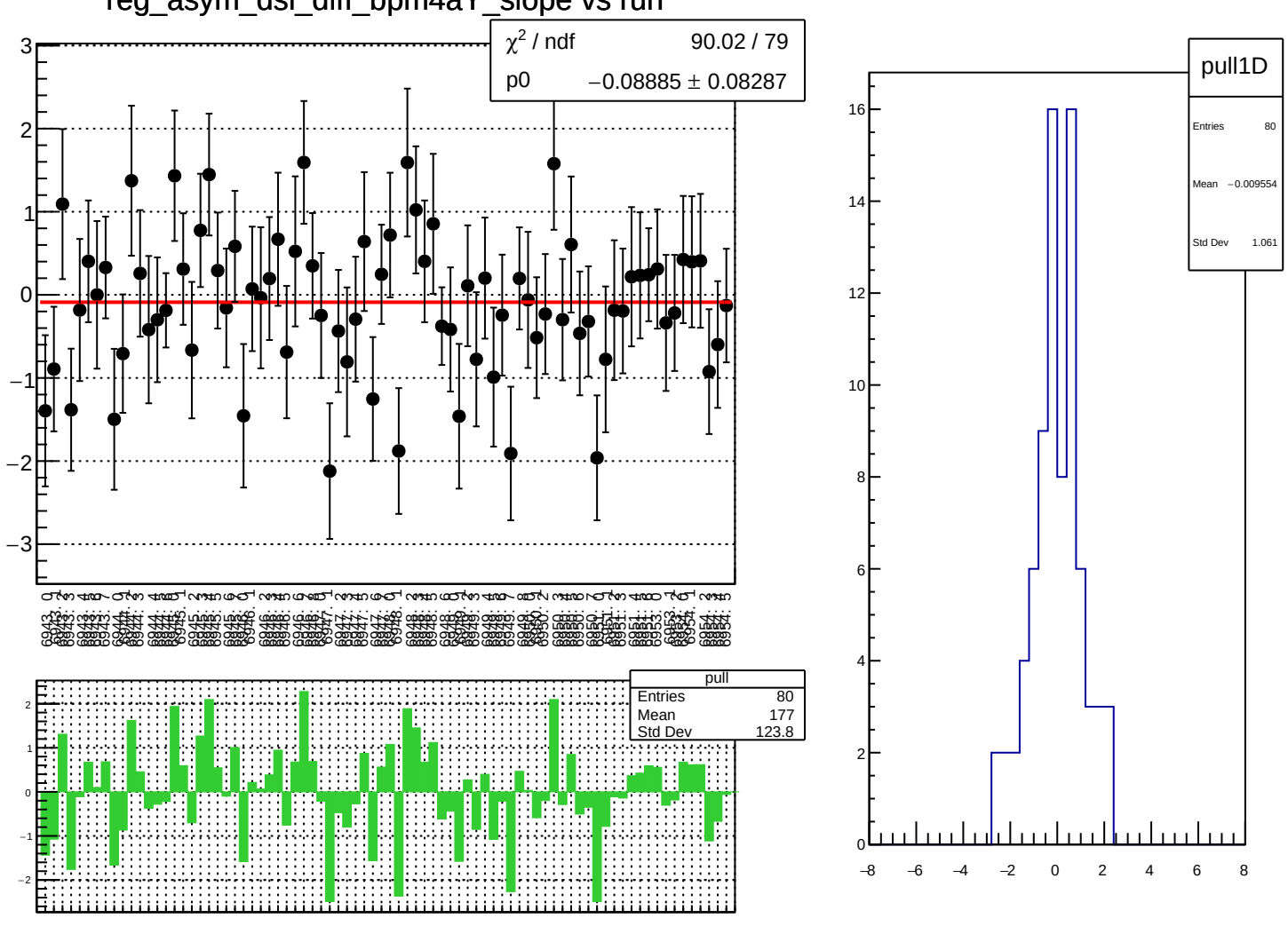

pull1D
Entries 80
Mean −0.02637
Std Dev 0.614

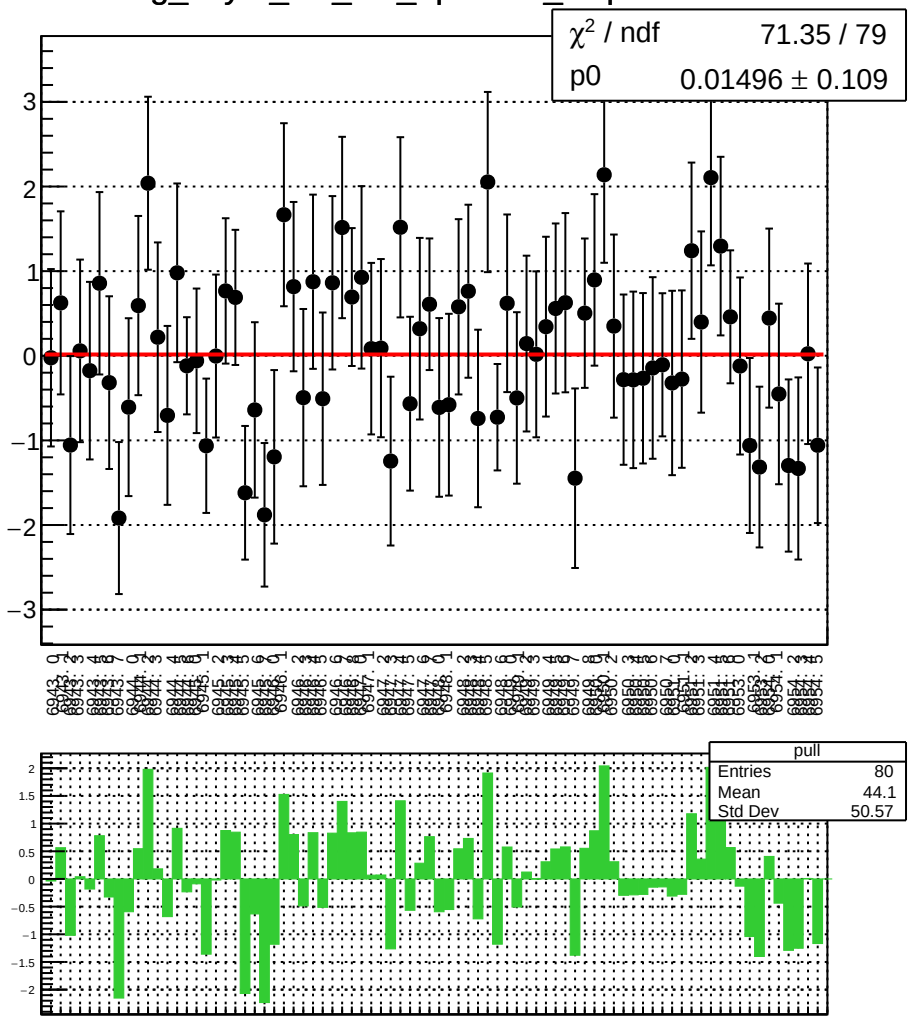

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 32.22 / 79
p0 −38.13 ± 0.0791
pull
Entries 80
Mean −356.3
Std Dev 397.6

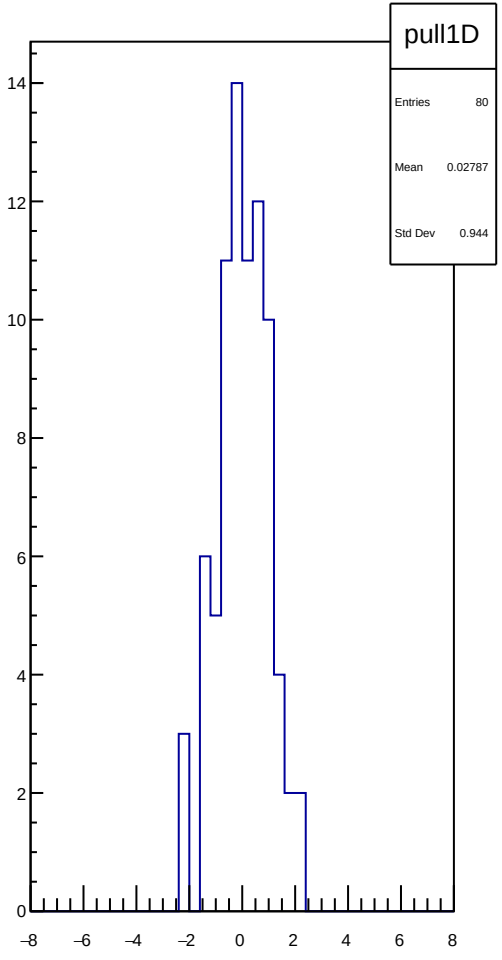

pull1D
Entries 80
Mean −0.01292
Std Dev 0.6345

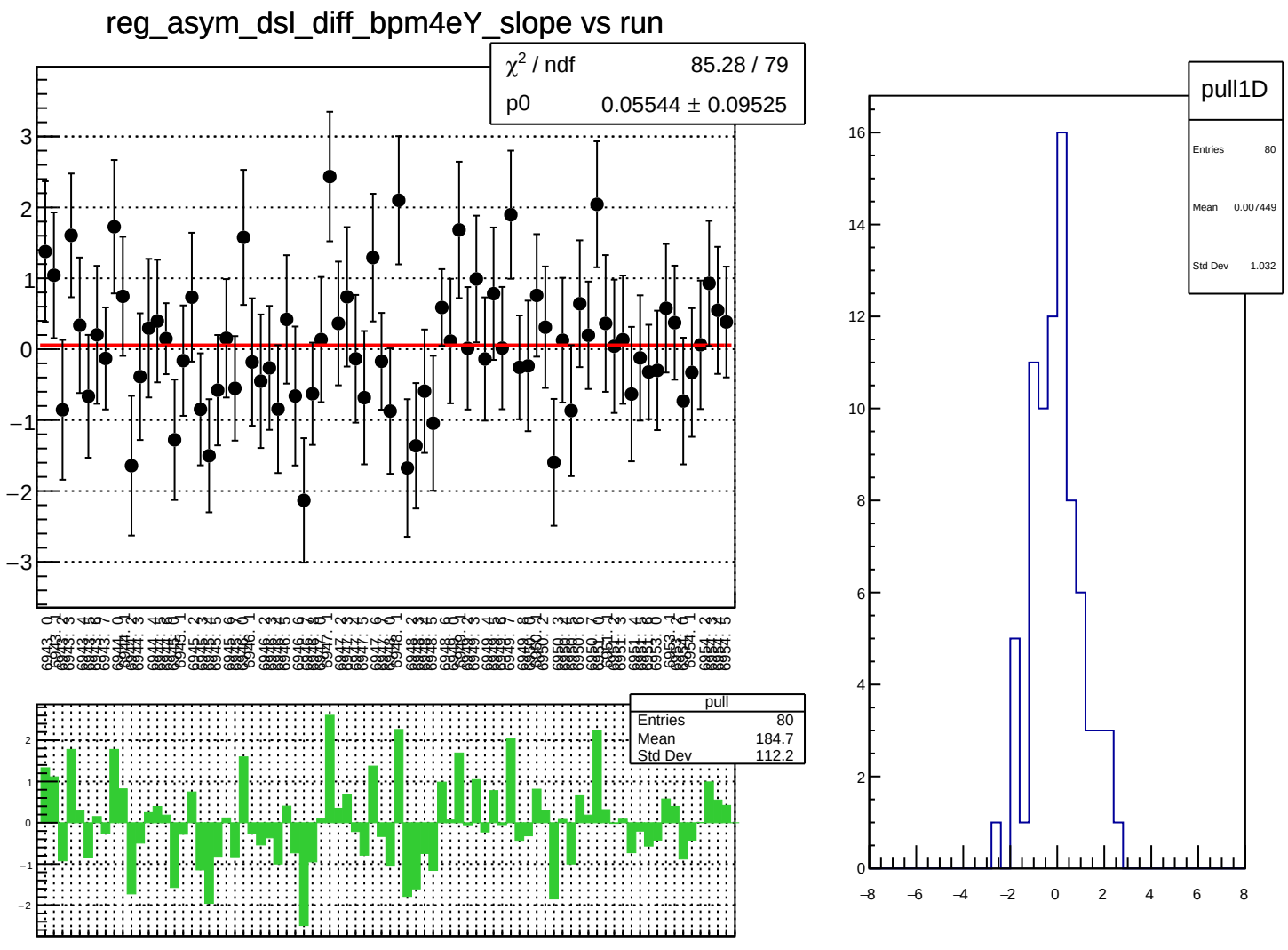

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 72.51 / 79
p0 −0.01765 ± 0.1168
pull
Entries 80
Mean 45.62
Std Dev 47.18

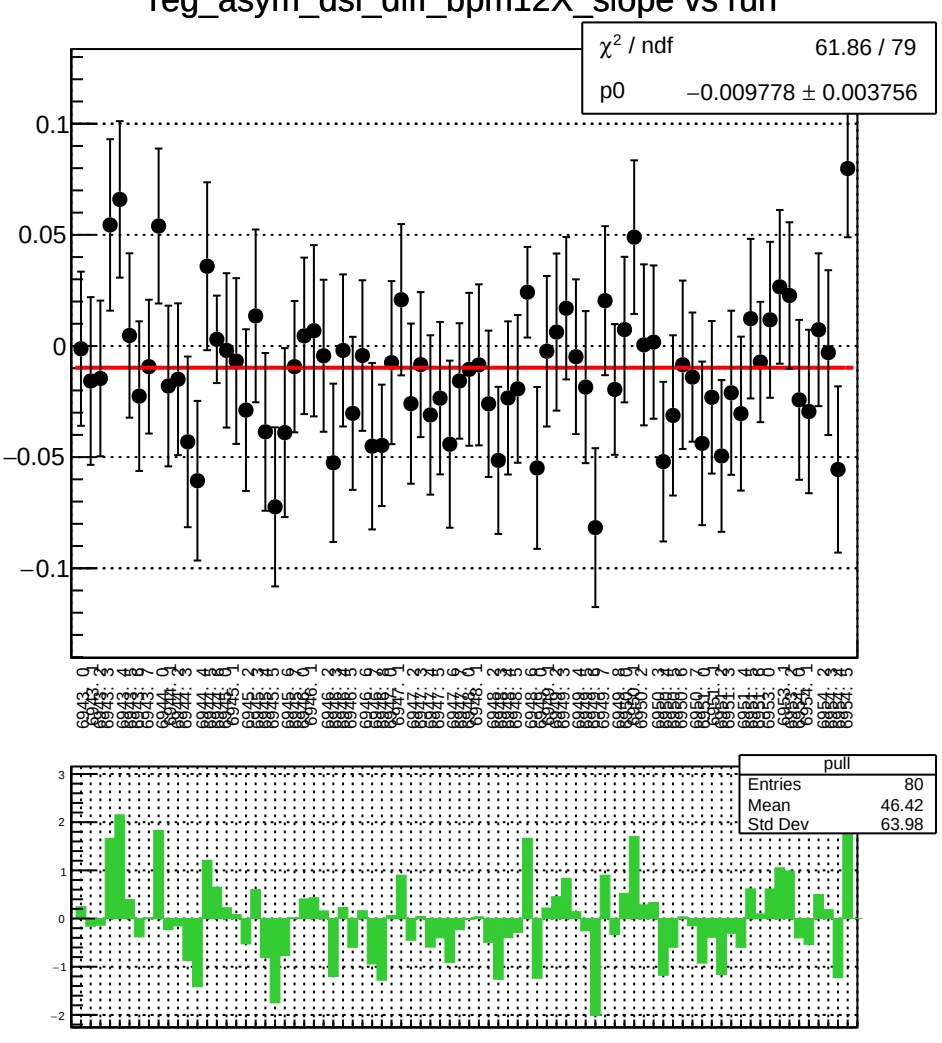

pull1D
Entries 80
Mean −0.02927
Std Dev 0.9516

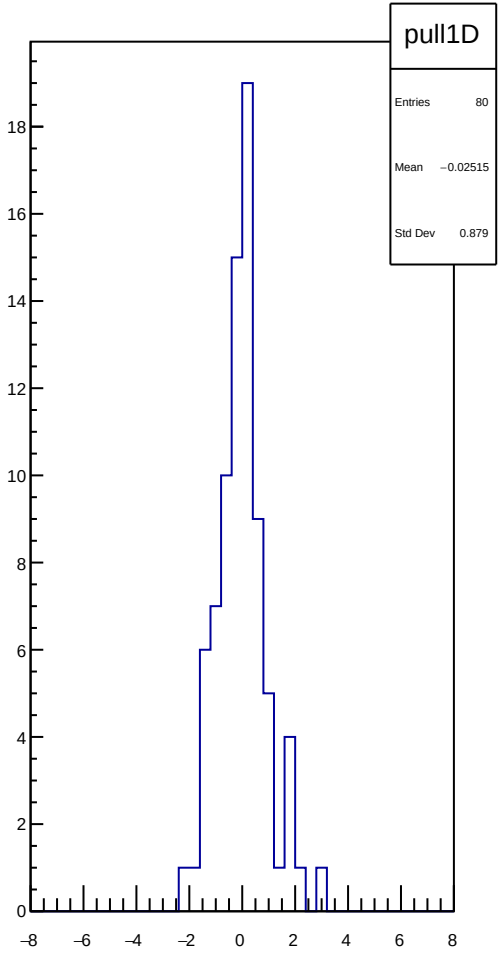

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 90.02 / 79
p0 −0.08885 ± 0.08287
pull
Entries 80
Mean 177
Std Dev 123.8
pull1D
Entries 80
Mean −0.009554
Std Dev 1.061

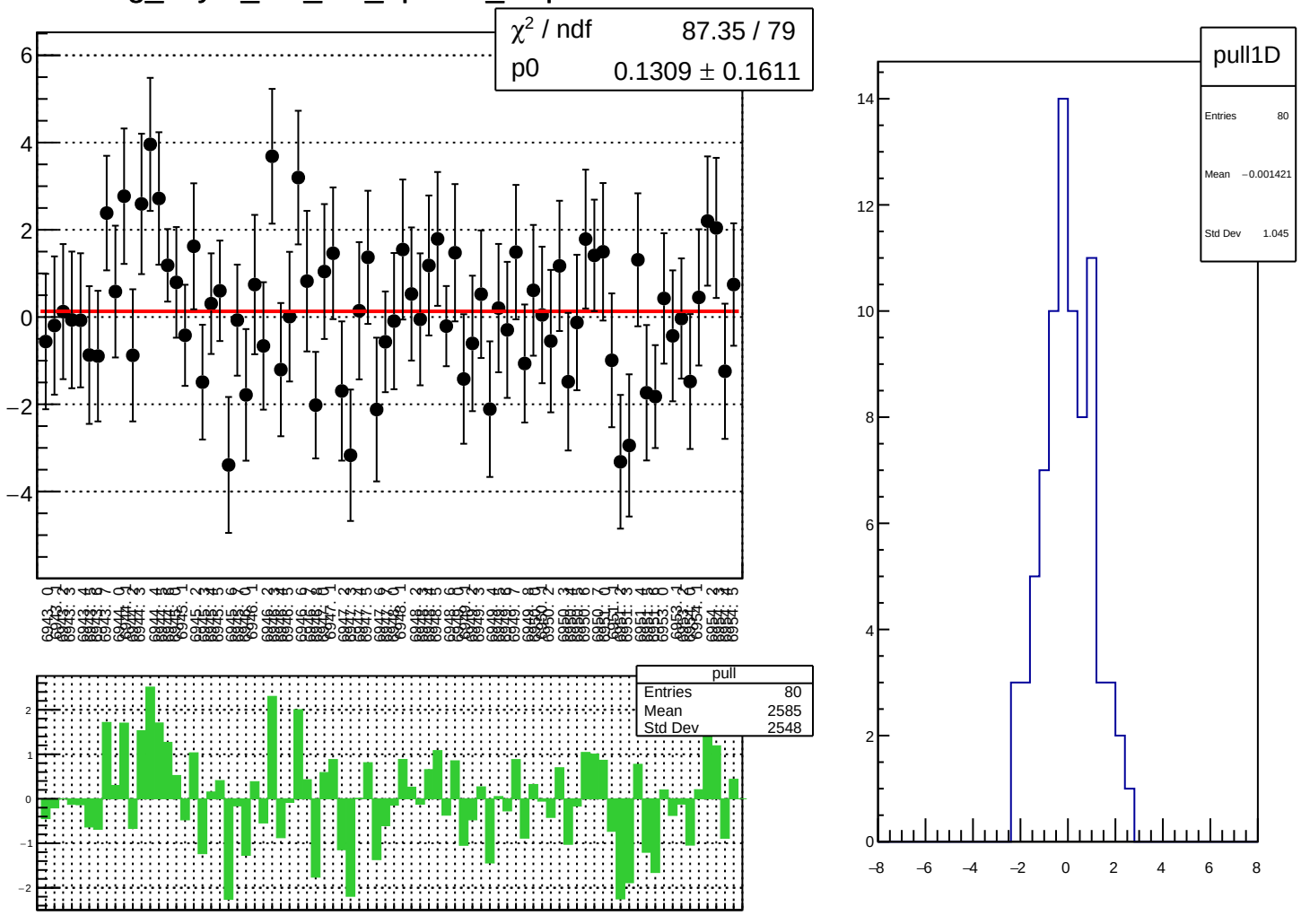

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 71.35 / 79
p0 0.01496 ± 0.109
pull
Entries 80
Mean 44.1
Std Dev 50.57

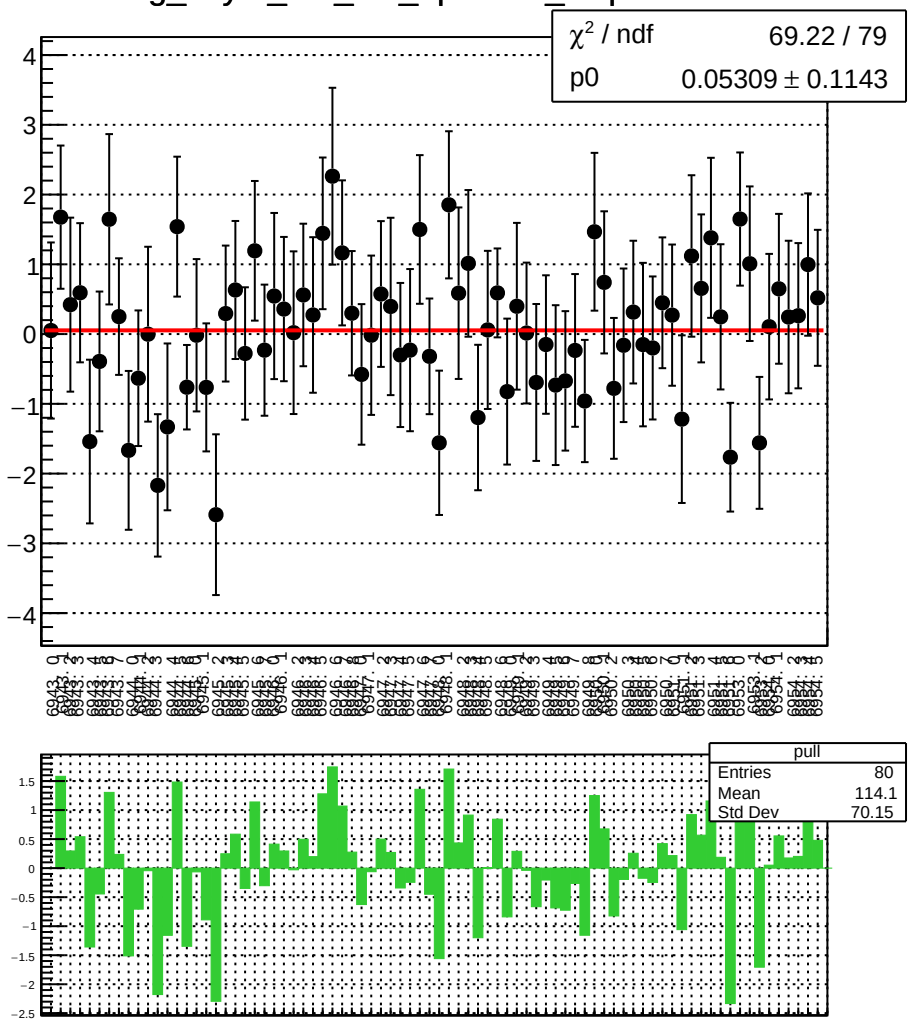

pull1D
Entries 80
Mean 0.02787
Std Dev 0.944

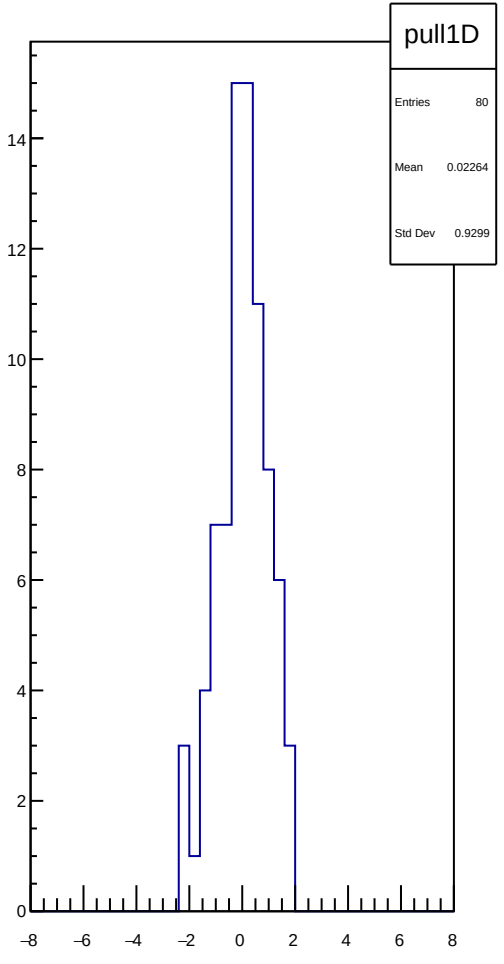

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 85.28 / 79
p0 0.05544 ± 0.09525
pull
Entries 80
Mean 184.7
Std Dev 112.2
pull1D
Entries 80
Mean 0.007449
Std Dev 1.032

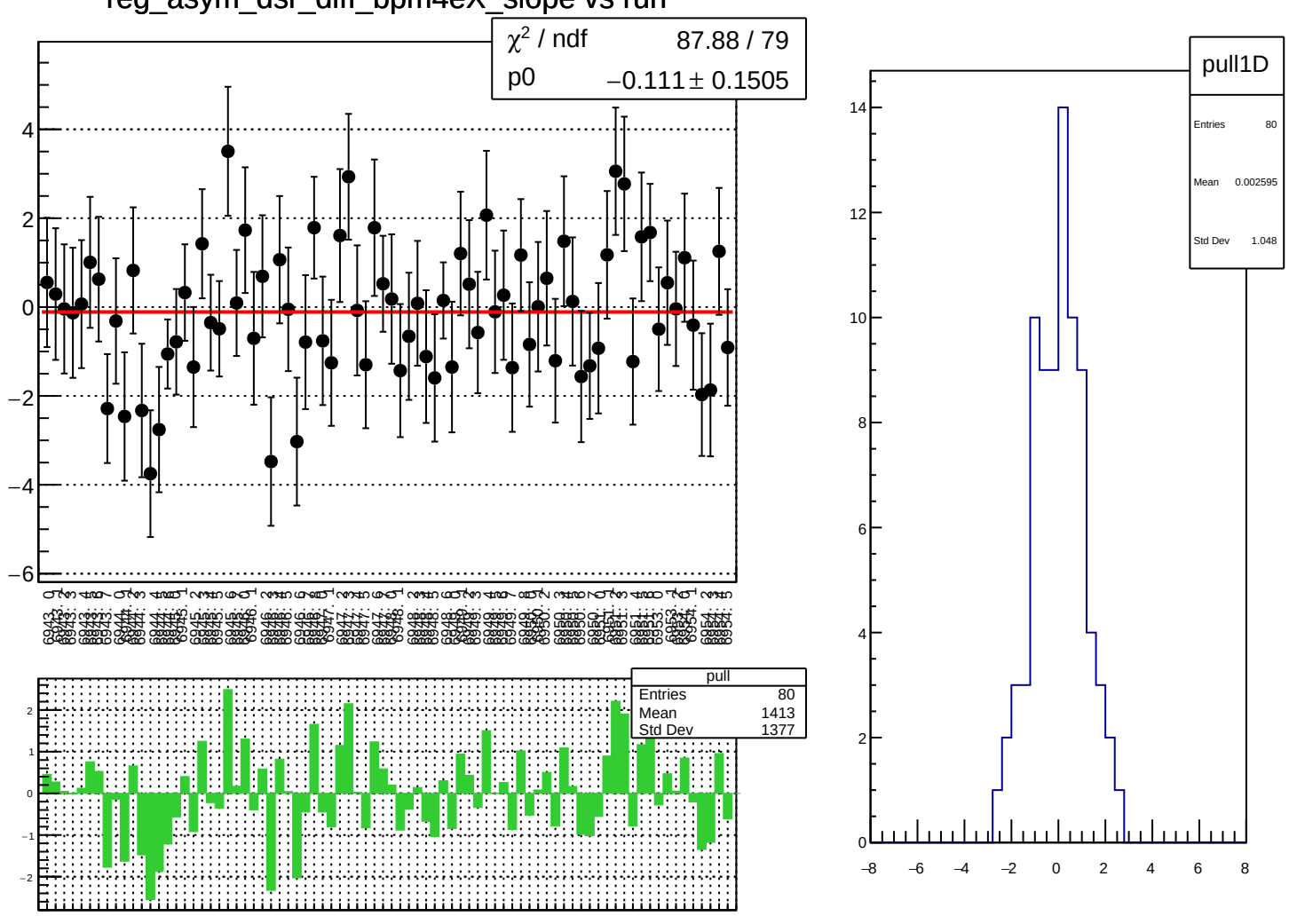

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 61.86 / 79
p0 −0.009778 ± 0.003756
pull
Entries 80
Mean 46.42
Std Dev 63.98

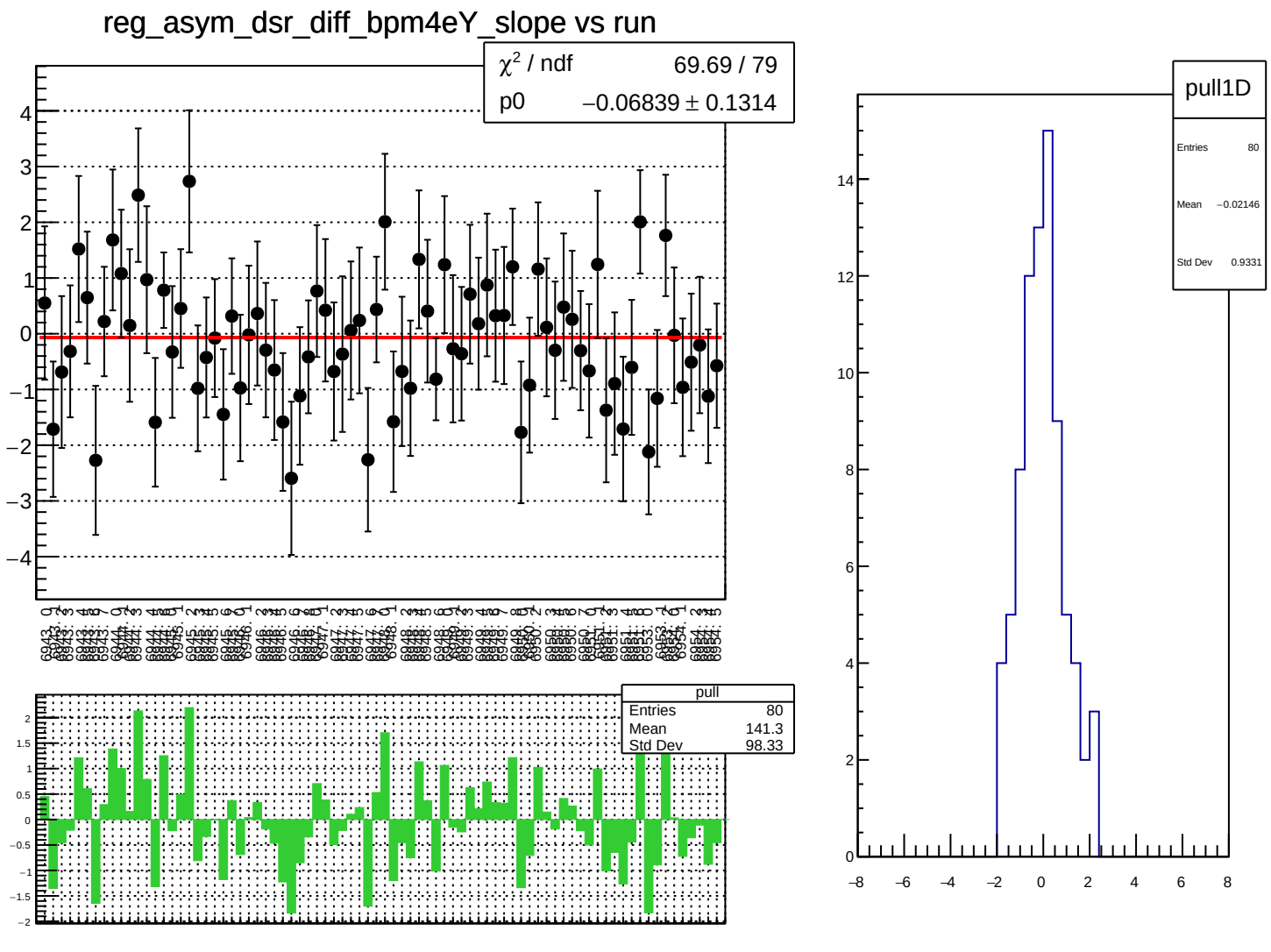

pull1D
Entries 80
Mean −0.02515
Std Dev 0.879

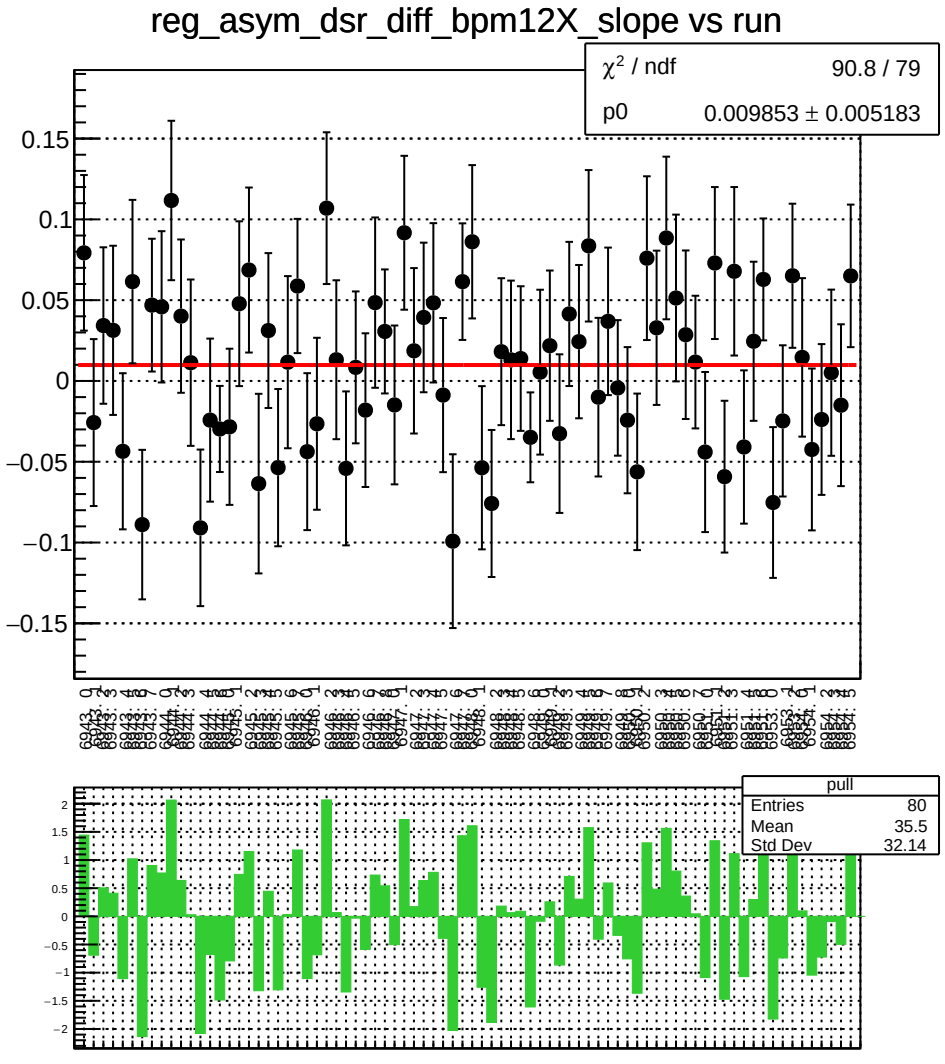

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 87.35 / 79
p0 0.1309 ± 0.1611
pull
Entries 80
Mean 2585
Std Dev 2548
pull1D
Entries 80
Mean −0.001421
Std Dev 1.045

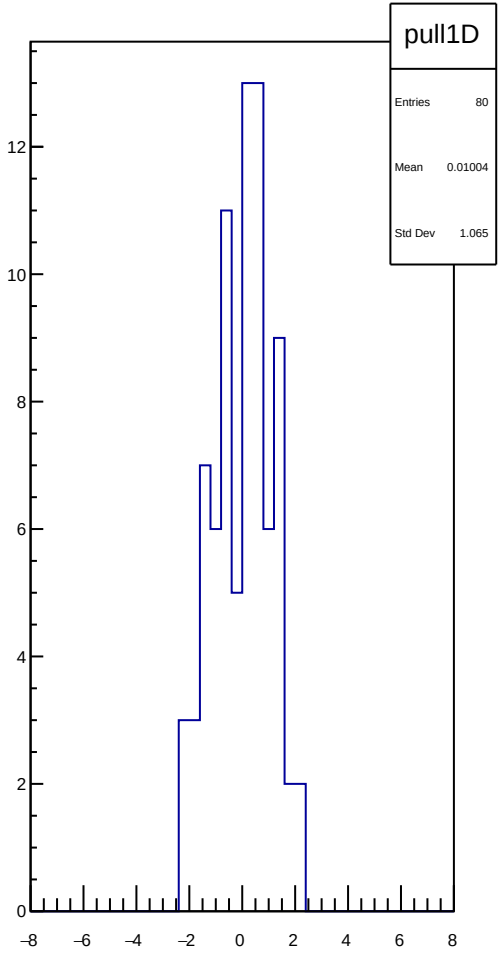

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 69.22 / 79
p0 0.05309 ± 0.1143
pull
Entries 80
Mean 114.1
Std Dev 70.15

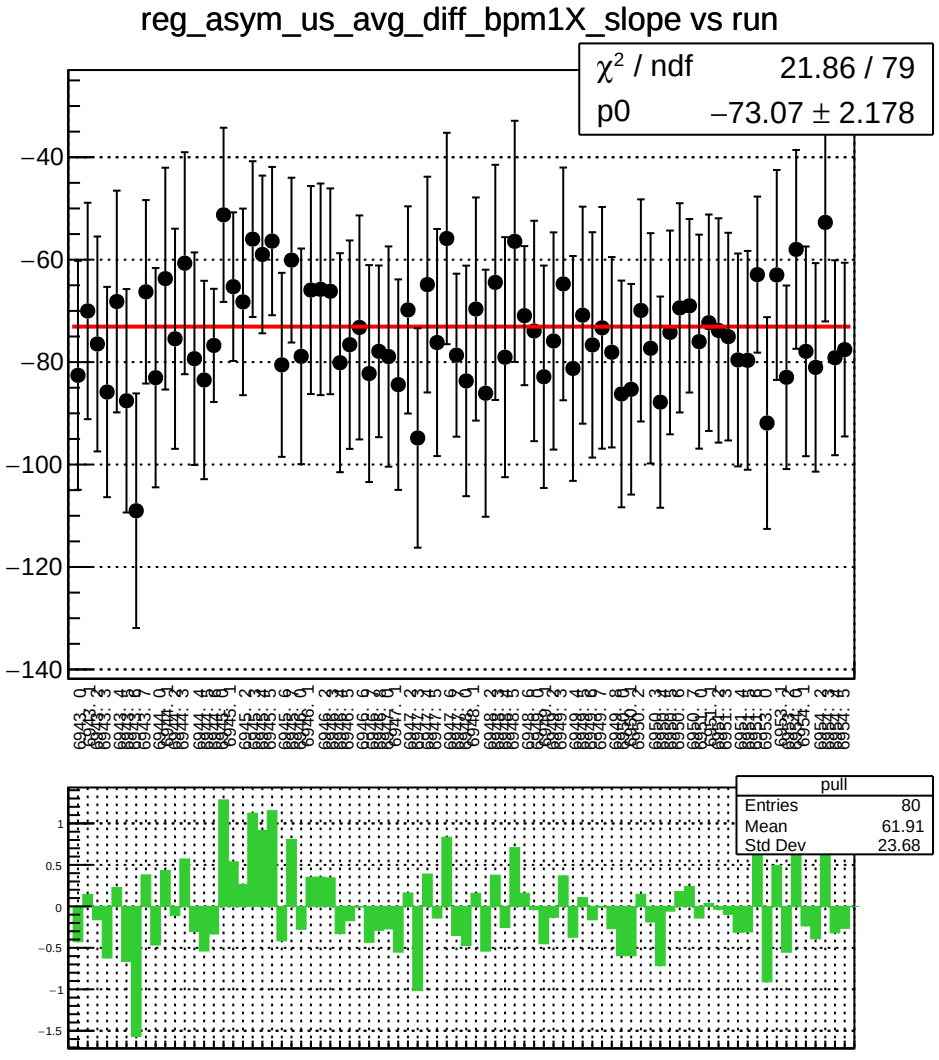

pull1D
Entries 80
Mean 0.02264
Std Dev 0.9299

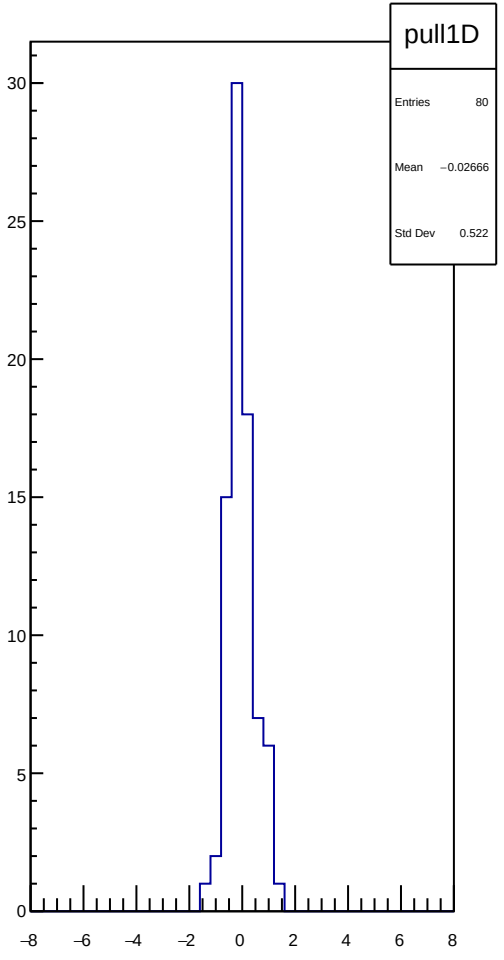

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 87.88 / 79
p0 −0.111 ± 0.1505
pull
Entries 80
Mean 1413
Std Dev 1377
pull1D
Entries 80
Mean 0.002595
Std Dev 1.048

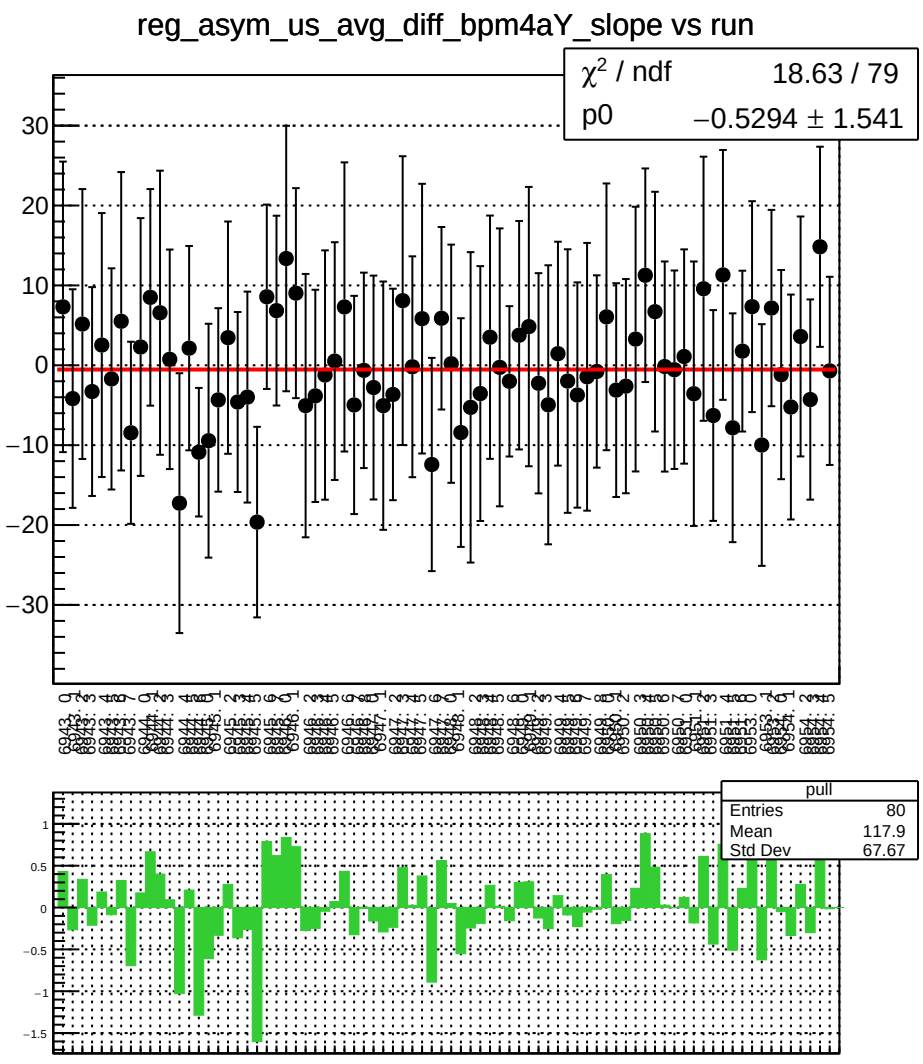

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 69.69 / 79
p0 −0.06839 ± 0.1314
pull
Entries 80
Mean 141.3
Std Dev 98.33
pull1D
Entries 80
Mean −0.02146
Std Dev 0.9331

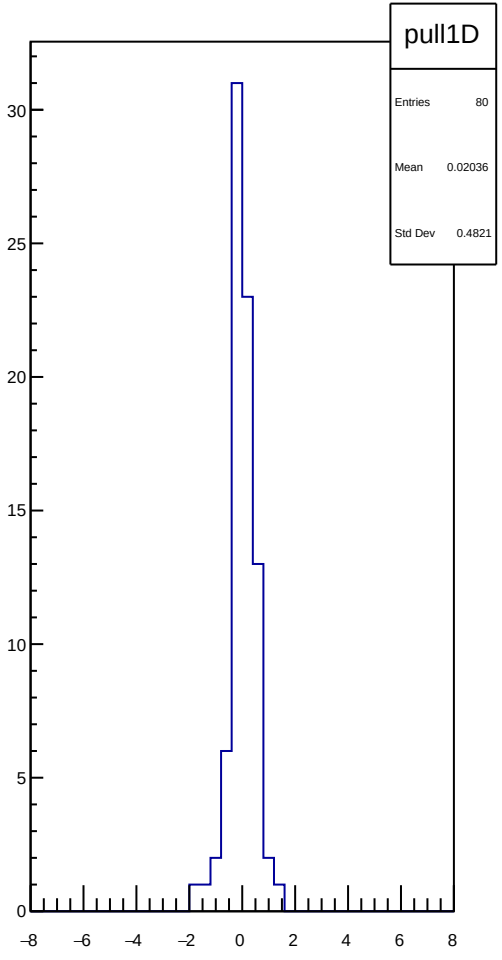

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 90.8 / 79
p0 0.009853 ± 0.005183
pull
Entries 80
Mean 35.5
Std Dev 32.14

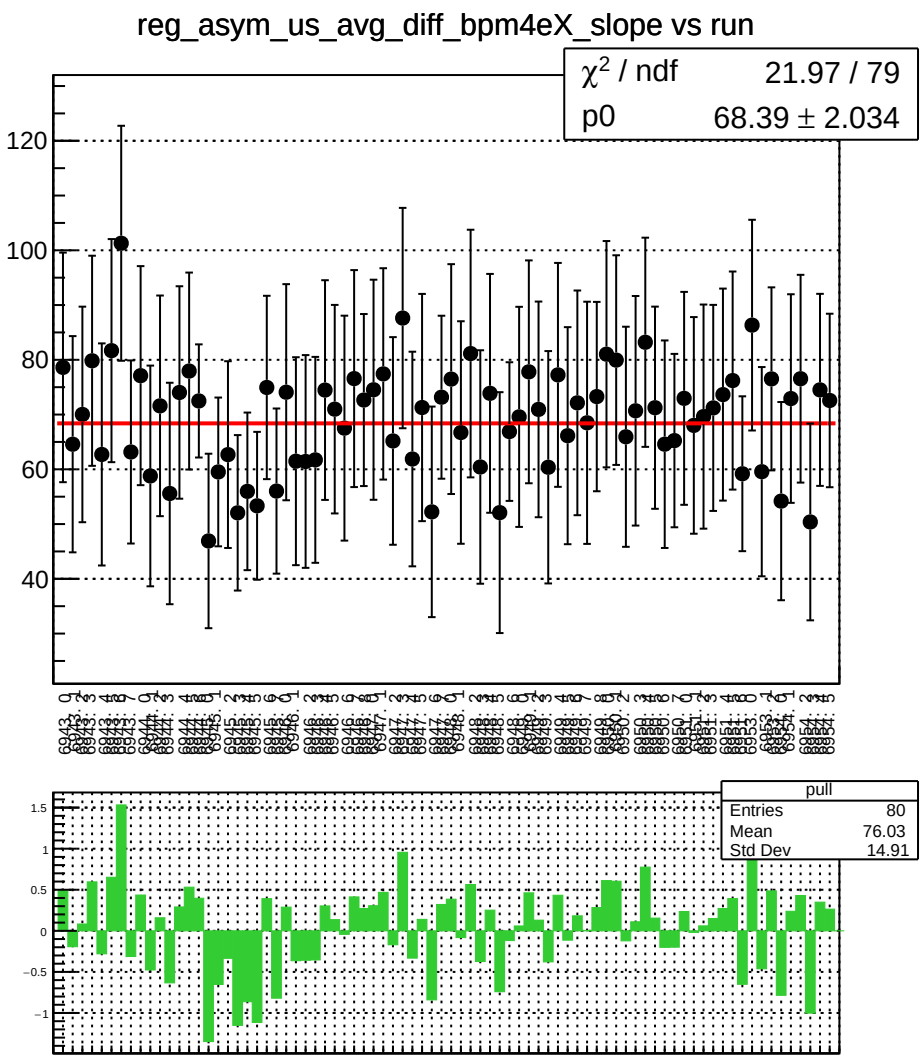

pull1D
Entries 80
Mean 0.01004
Std Dev 1.065

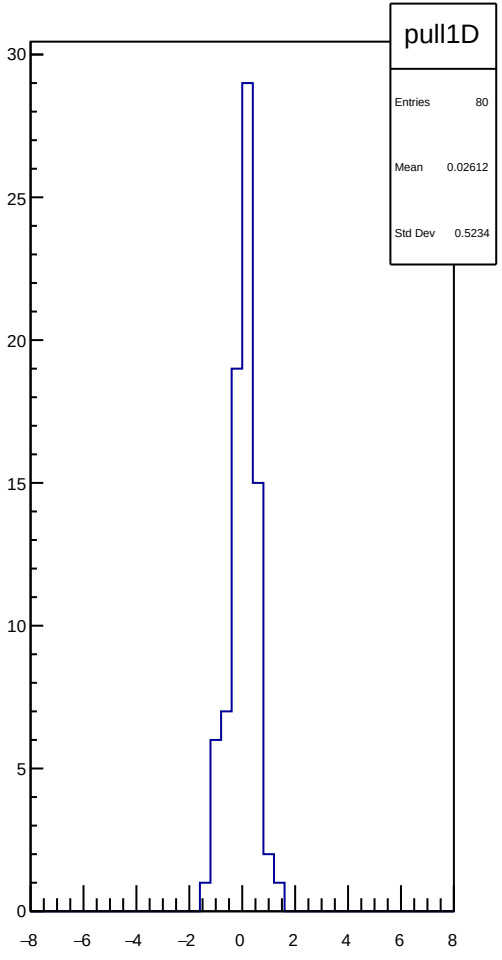

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 21.86 / 79
p0 −73.07 ± 2.178
pull
Entries 80
Mean 61.91
Std Dev 23.68

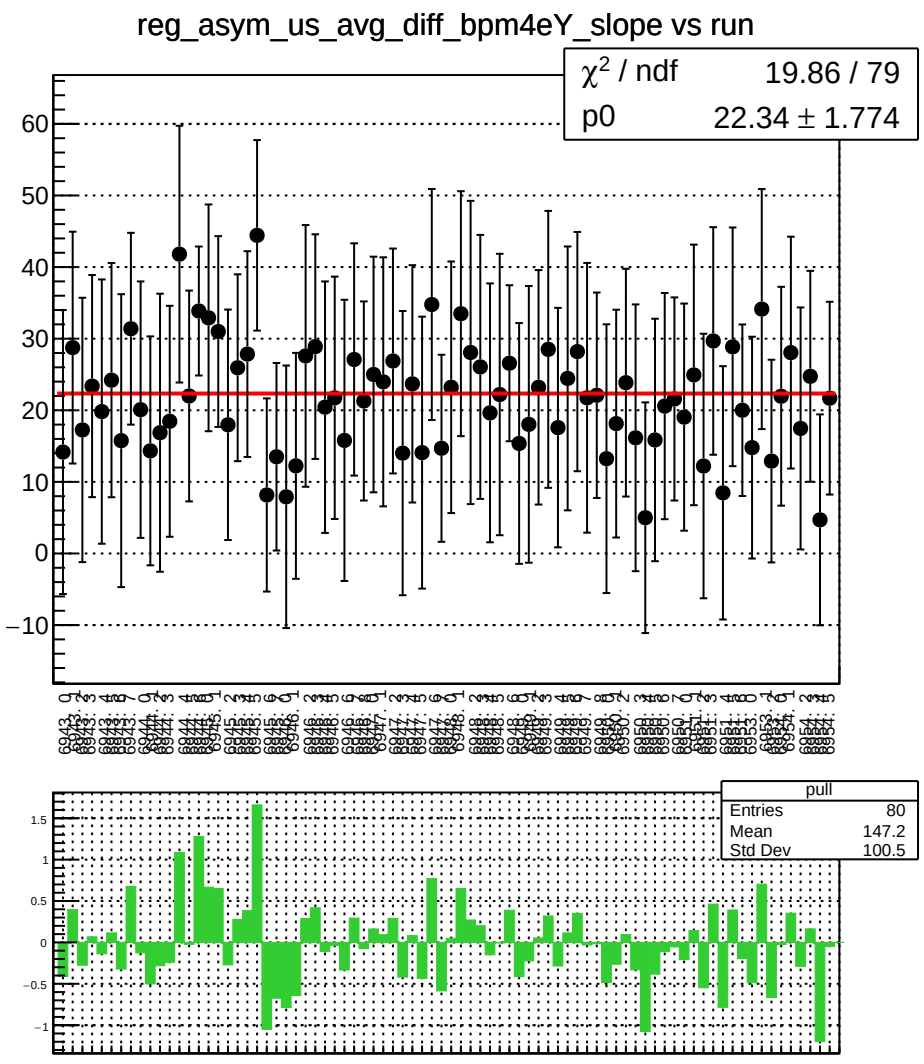

pull1D
Entries 80
Mean −0.02666
Std Dev 0.522

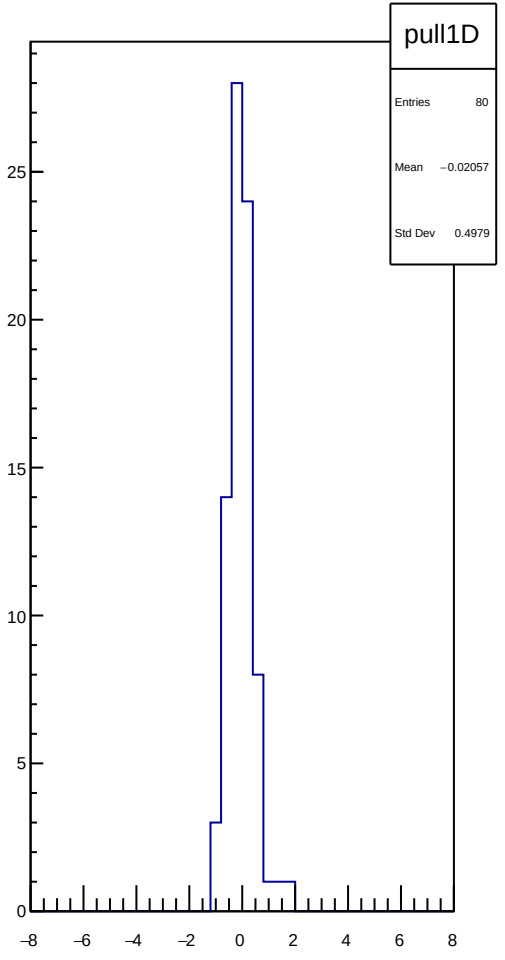

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 18.63 / 79
p0 −0.5294 ± 1.541
pull
Entries 80
Mean 117.9
Std Dev 67.67

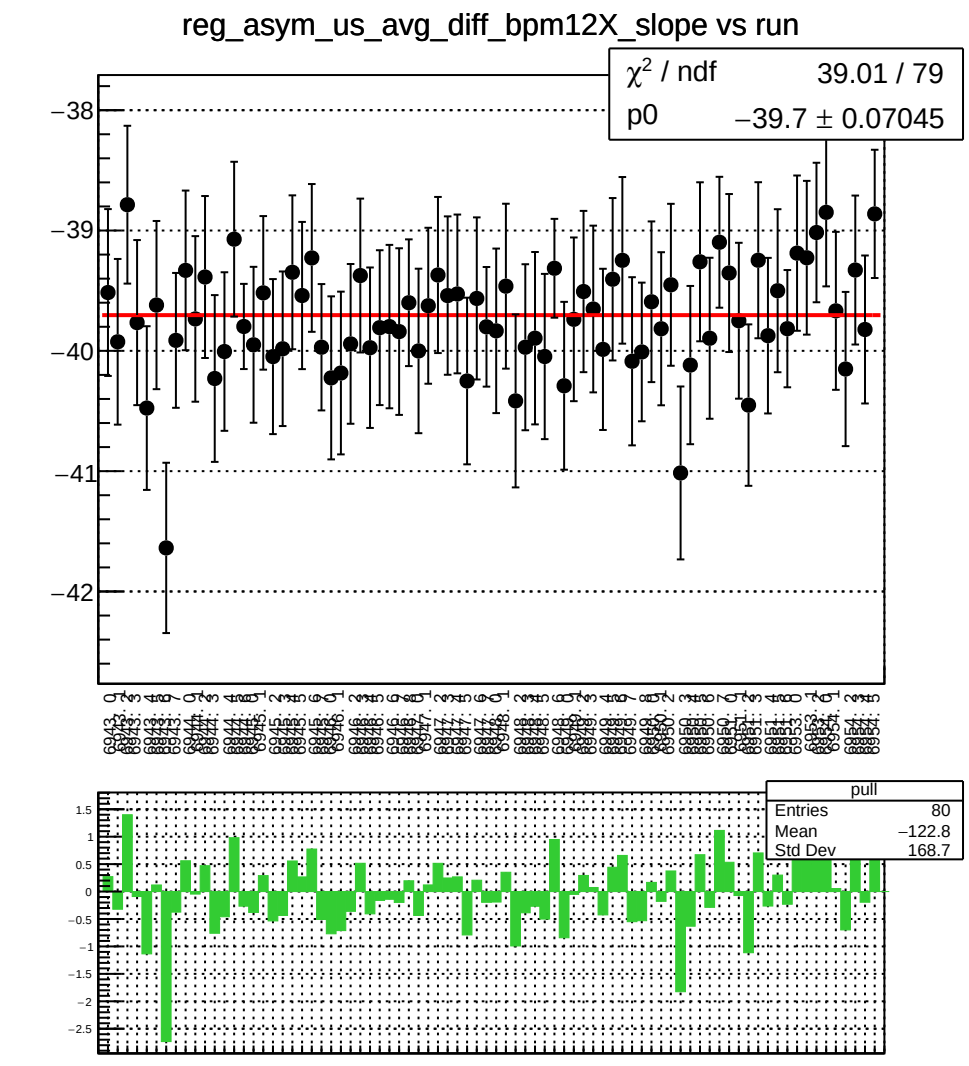

pull1D
Entries 80
Mean 0.02036
Std Dev 0.4821

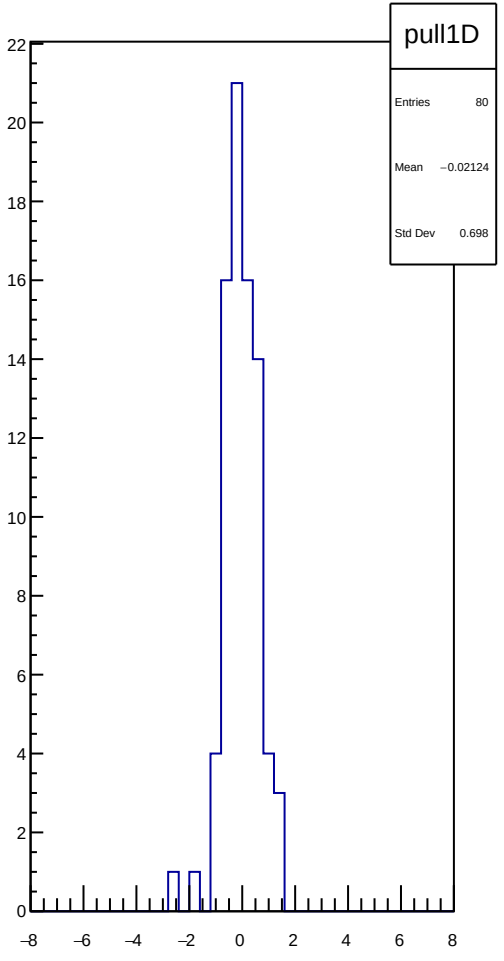

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 21.97 / 79
p0 68.39 ± 2.034
120
100
80
60
40
pull
Entries 80
Mean 76.03
Std Dev 14.91
1.5
1
0.5
0
−0.5
−1

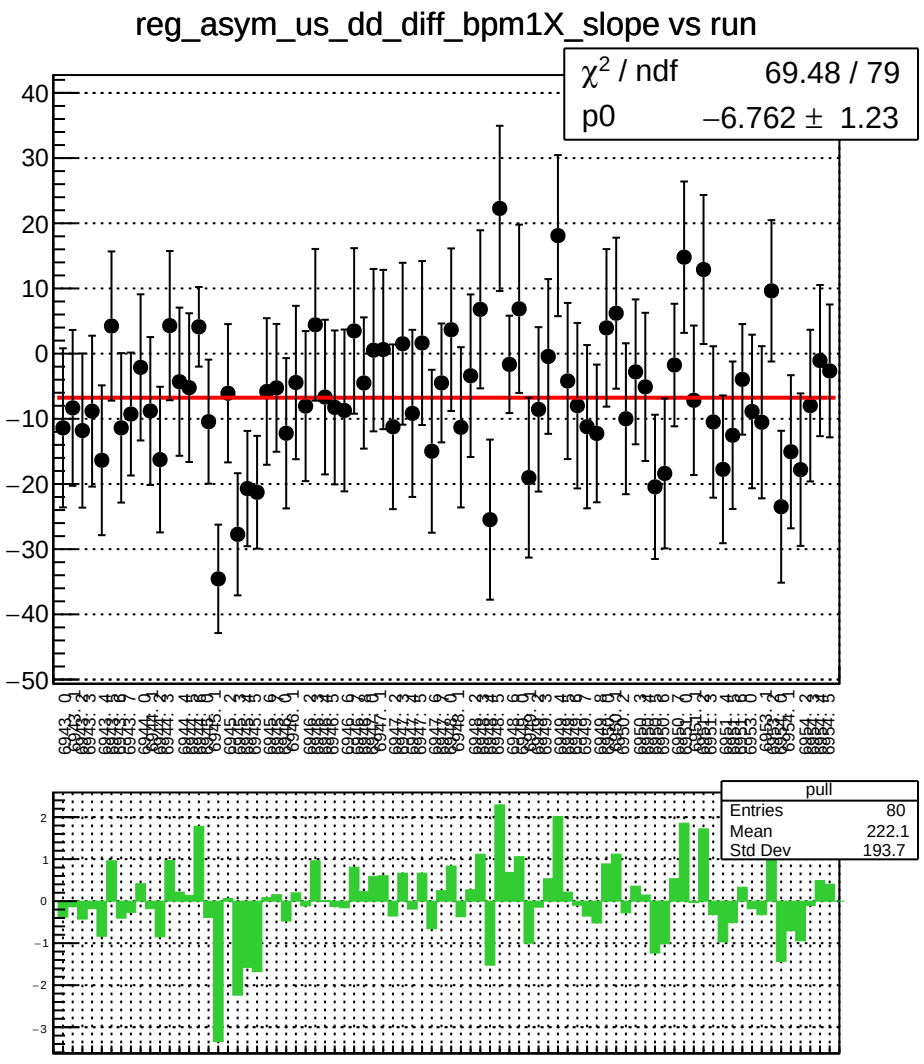

pull1D
Entries 80
Mean 0.02612
Std Dev 0.5234
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

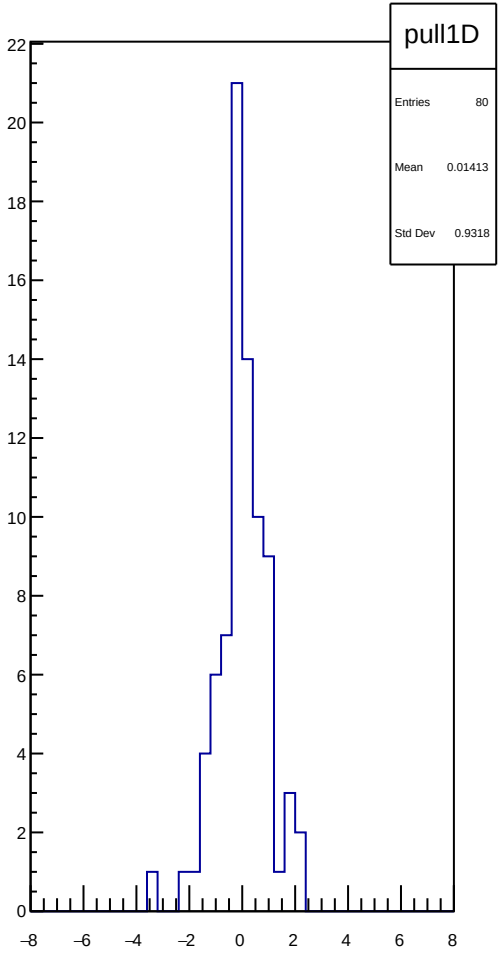

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 19.86 / 79
p0 22.34 ± 1.774
pull
Entries 80
Mean 147.2
Std Dev 100.5

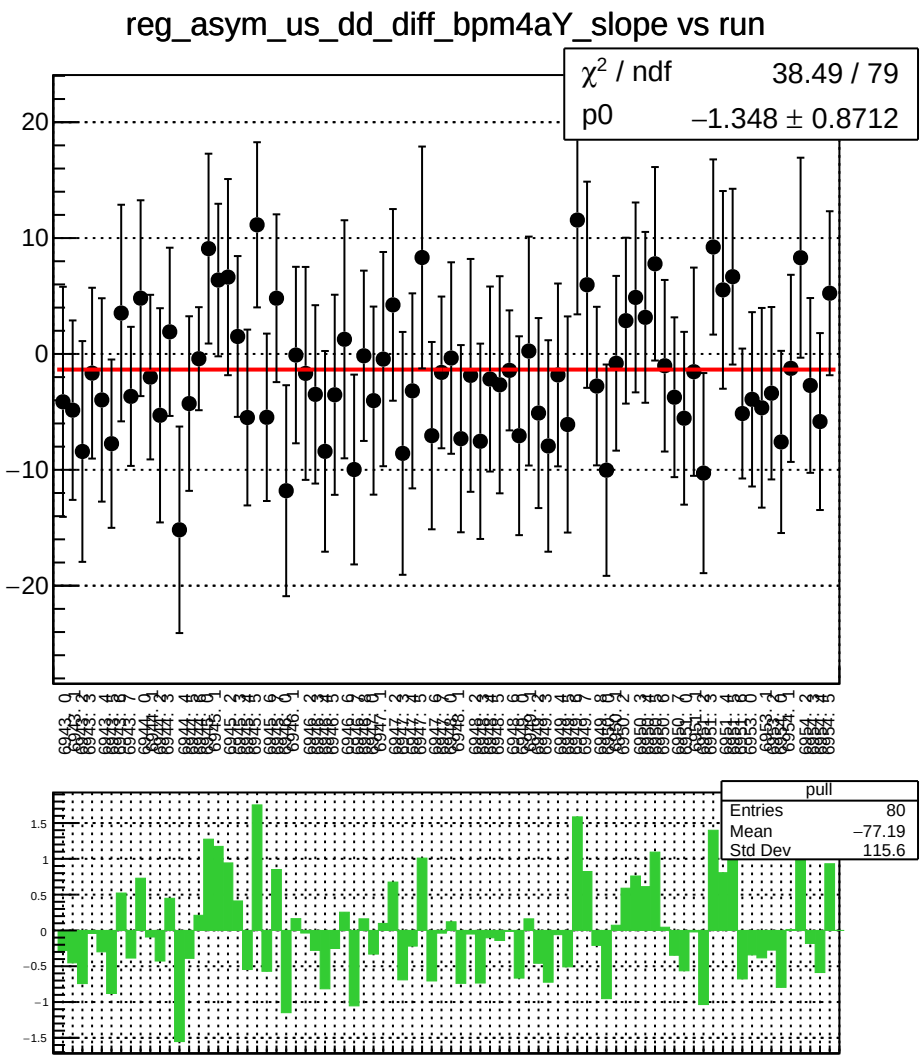

pull1D
Entries 80
Mean −0.02057
Std Dev 0.4979

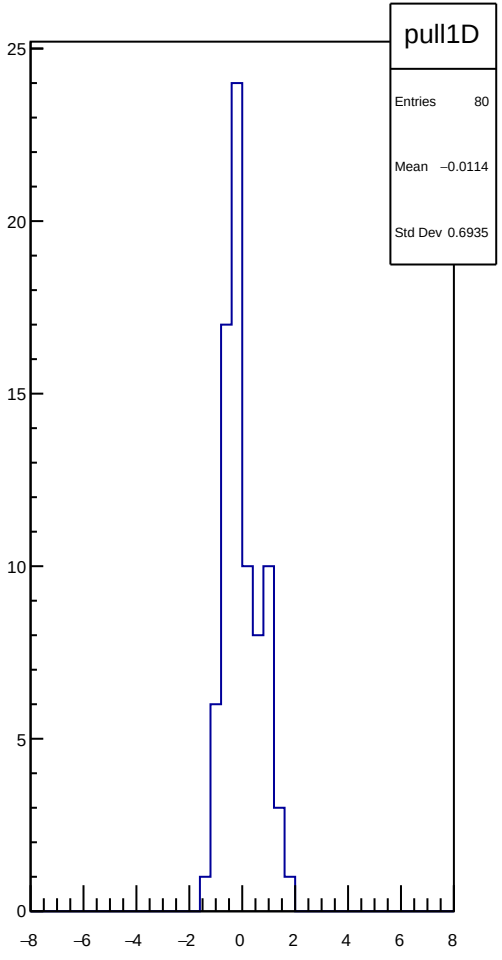

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 39.01 / 79
p0 −39.7 ± 0.07045
pull
Entries 80
Mean −122.8
Std Dev 168.7

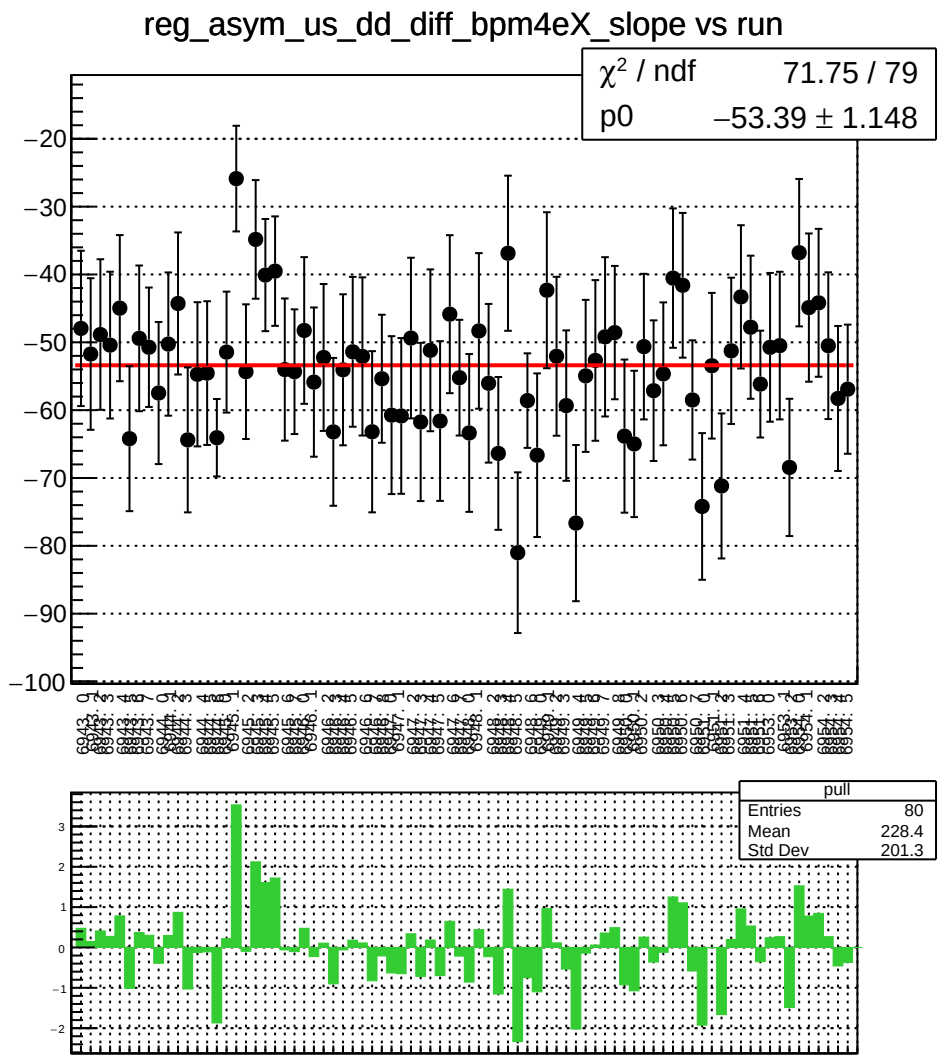

pull1D
Entries 80
Mean −0.02124
Std Dev 0.698

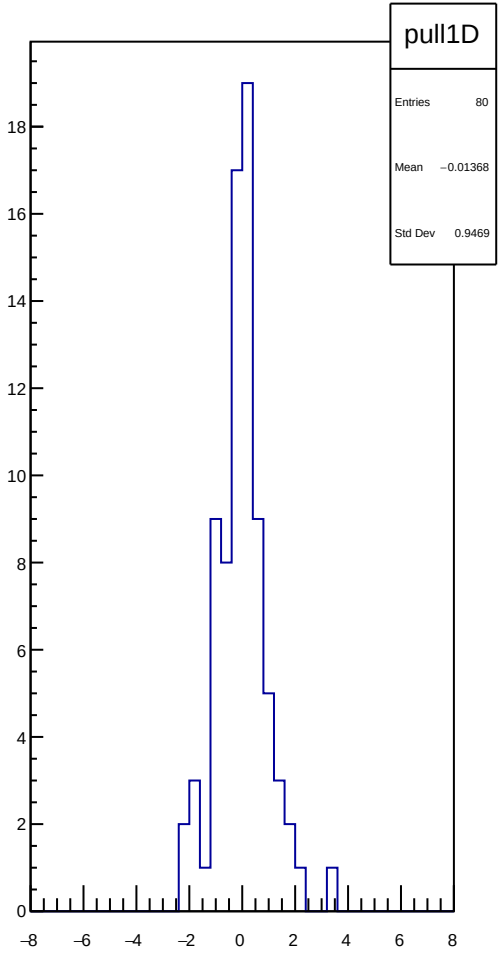

reg_asym_us_dd_diff_bpm1X_slope vs run
χ^2 / ndf 69.48 / 79
p0 −6.762 ± 1.23
pull
Entries 80
Mean 222.1
Std Dev 193.7

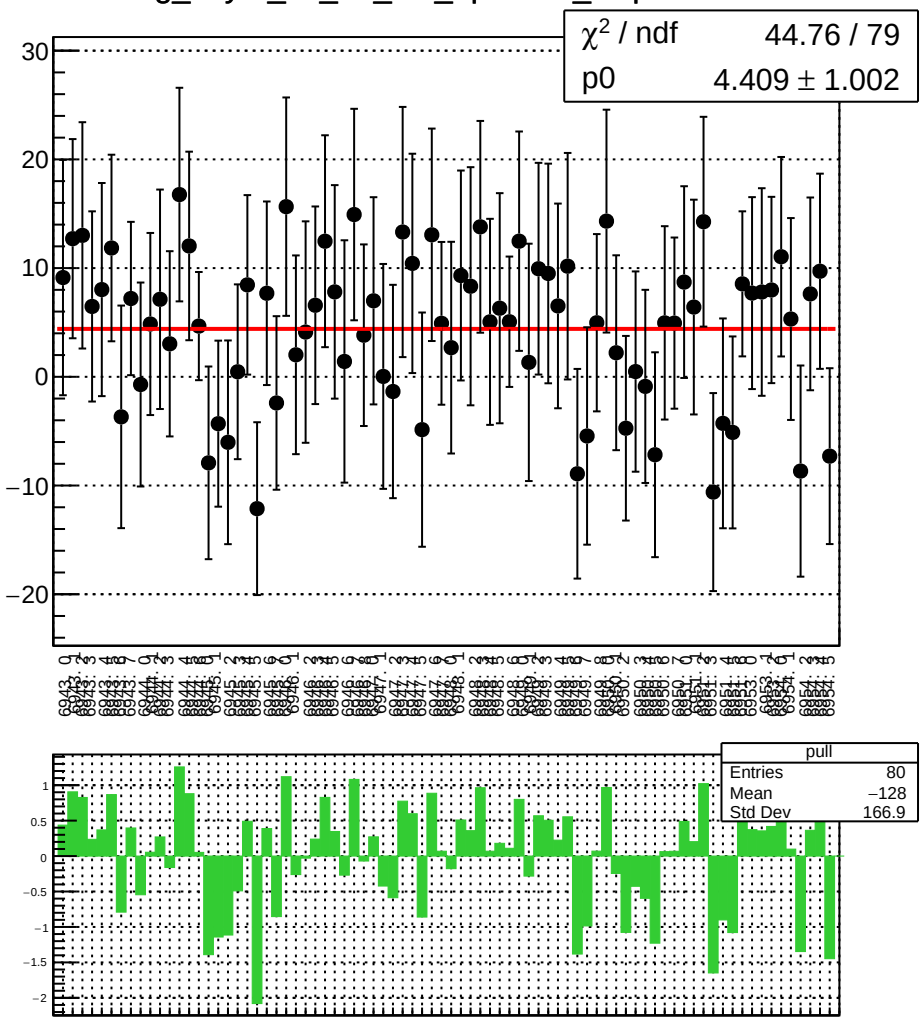

pull1D
Entries 80
Mean 0.01413
Std Dev 0.9318

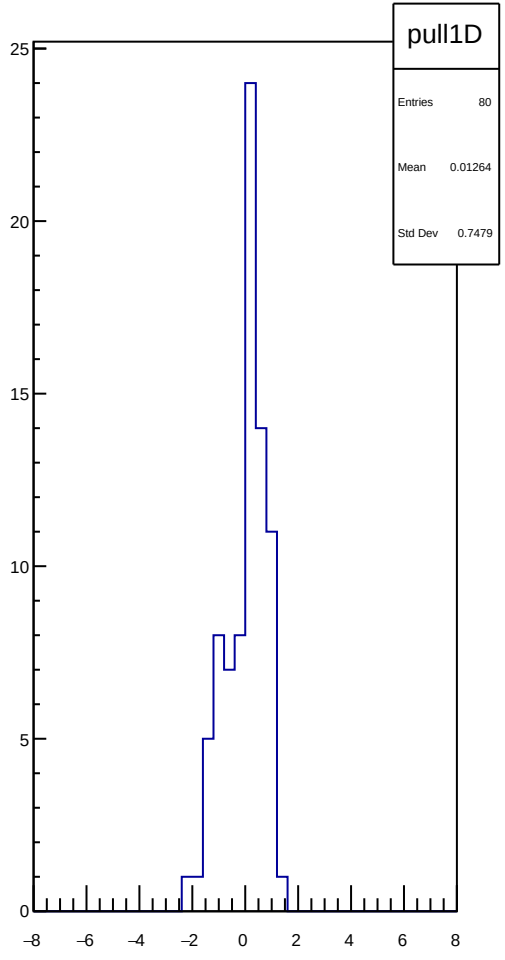

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 38.49 / 79
p0 −1.348 ± 0.8712
pull
Entries 80
Mean −77.19
Std Dev 115.6

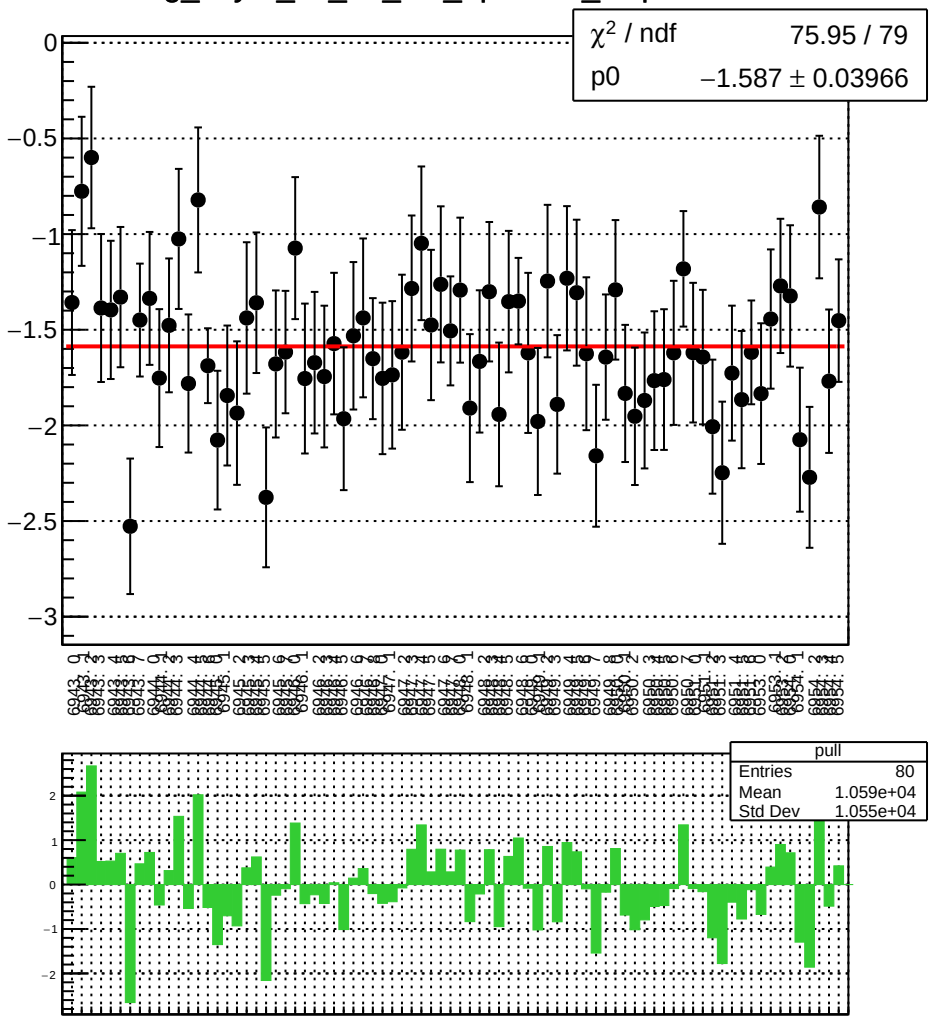

pull1D
Entries 80
Mean −0.0114
Std Dev 0.6935

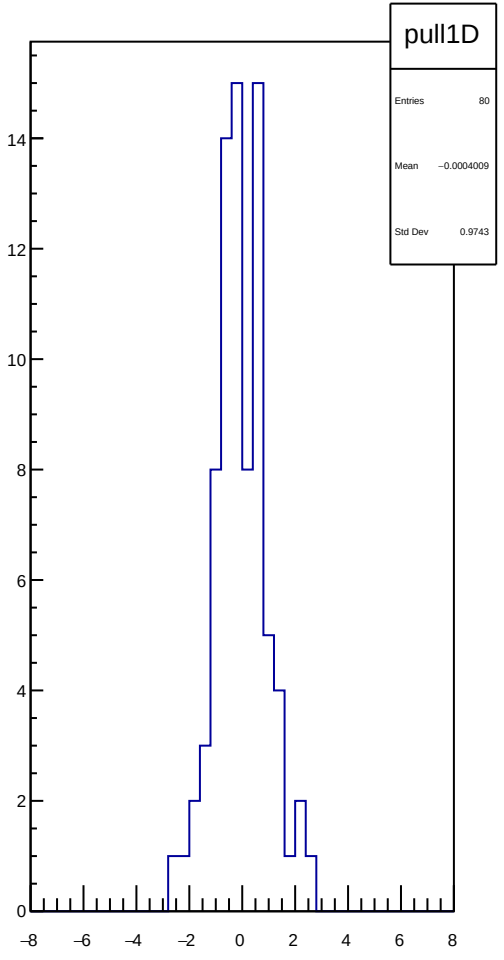

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 71.75 / 79
p0 −53.39 ± 1.148
pull
Entries 80
Mean 228.4
Std Dev 201.3

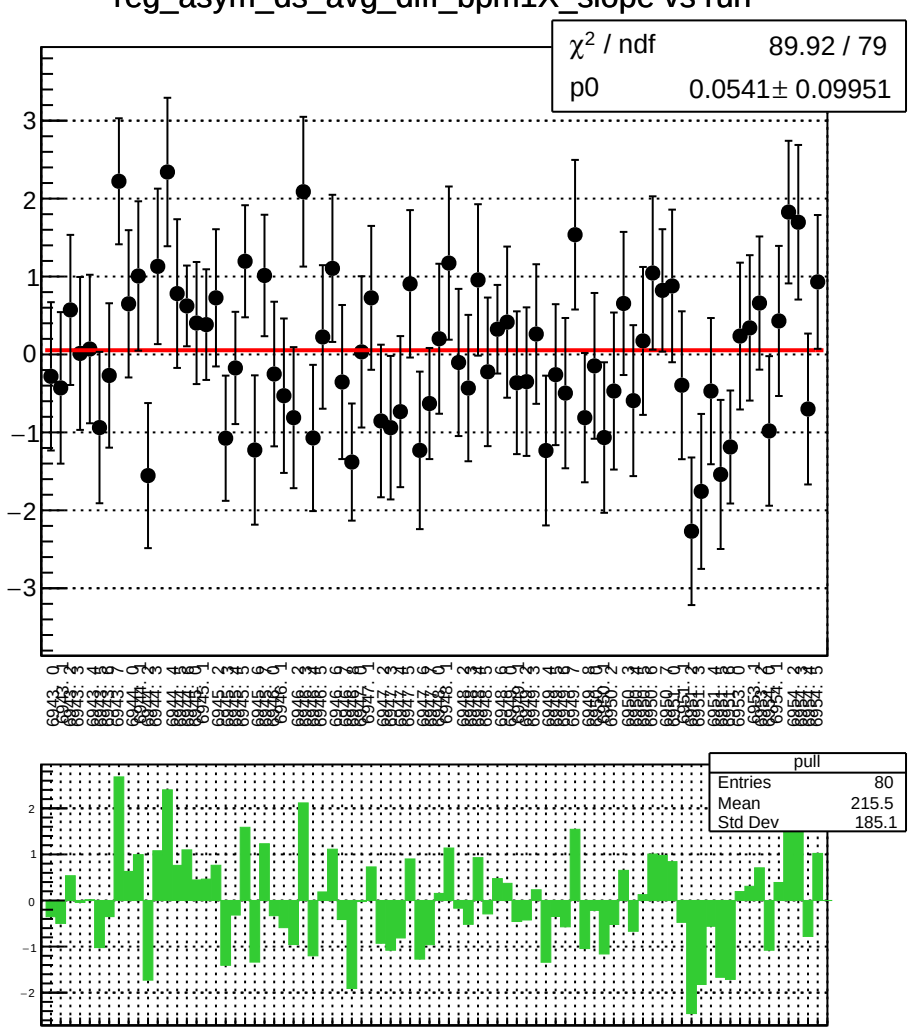

pull1D
Entries 80
Mean −0.01368
Std Dev 0.9469

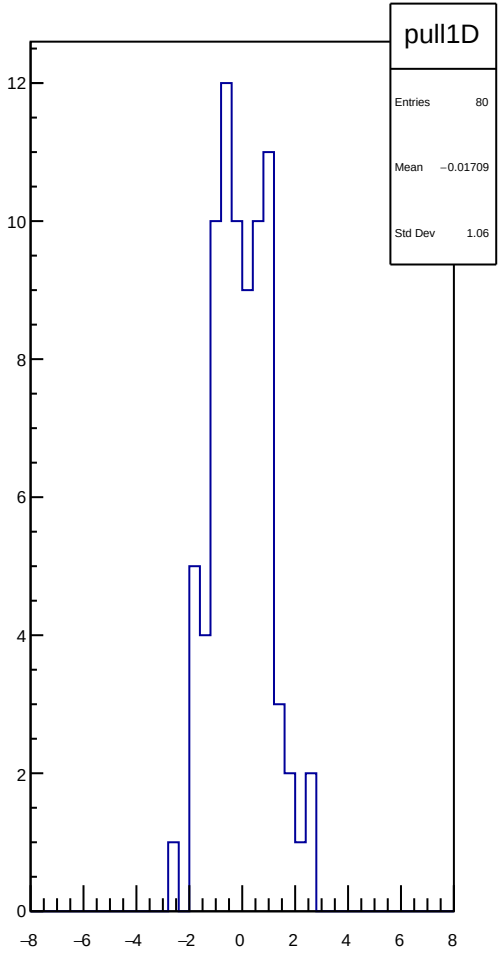

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 44.76 / 79
p0 4.409 ± 1.002
pull
Entries 80
Mean −128
Std Dev 166.9

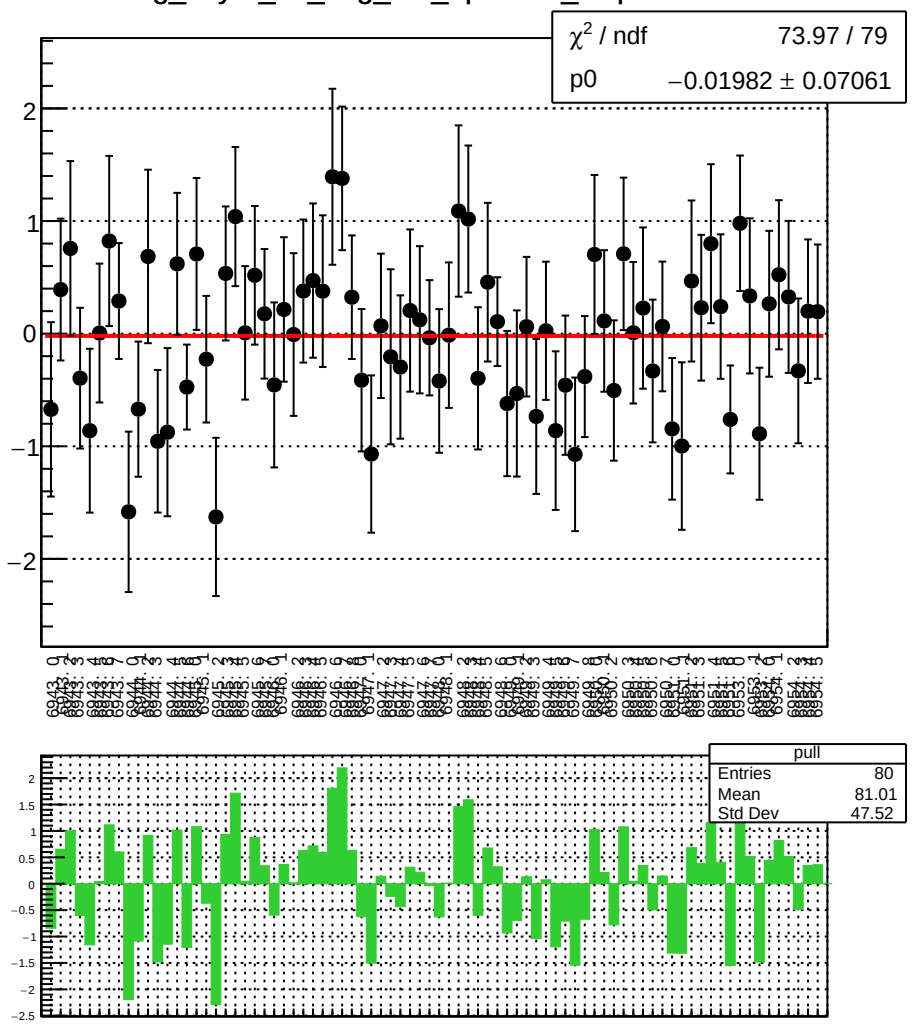

pull1D
Entries 80
Mean 0.01264
Std Dev 0.7479

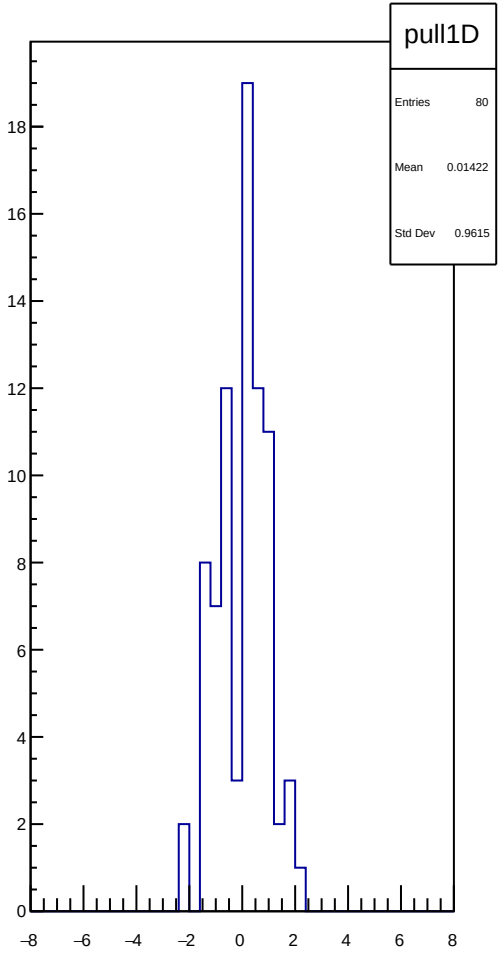

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 75.95 / 79
p0 −1.587 ± 0.03966
pull
Entries 80
Mean 1.059e+04
Std Dev 1.055e+04

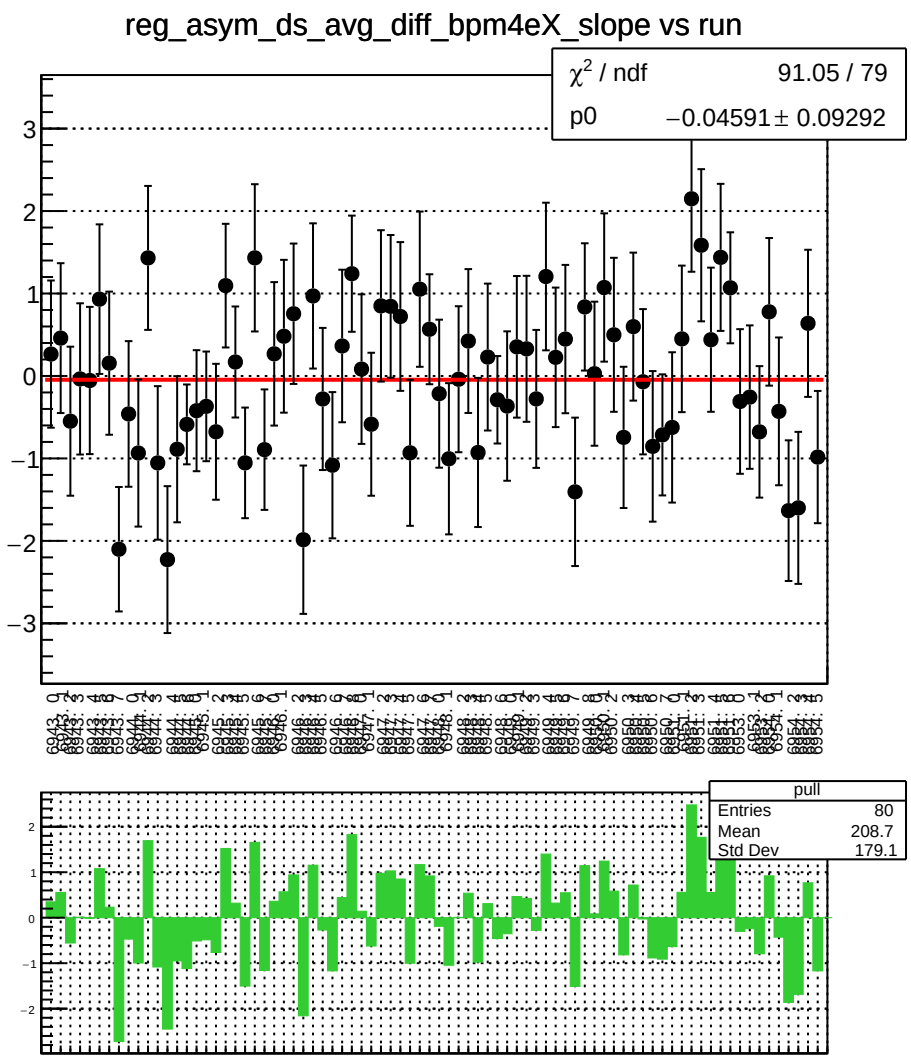

pull1D
Entries 80
Mean −0.0004009
Std Dev 0.9743

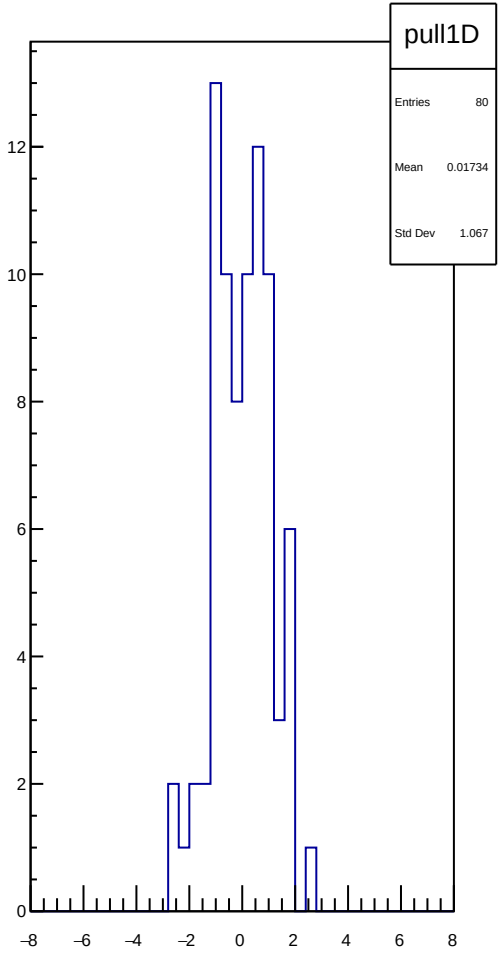

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 89.92 / 79
p0 0.0541± 0.09951
pull
Entries 80
Mean 215.5
Std Dev 185.1

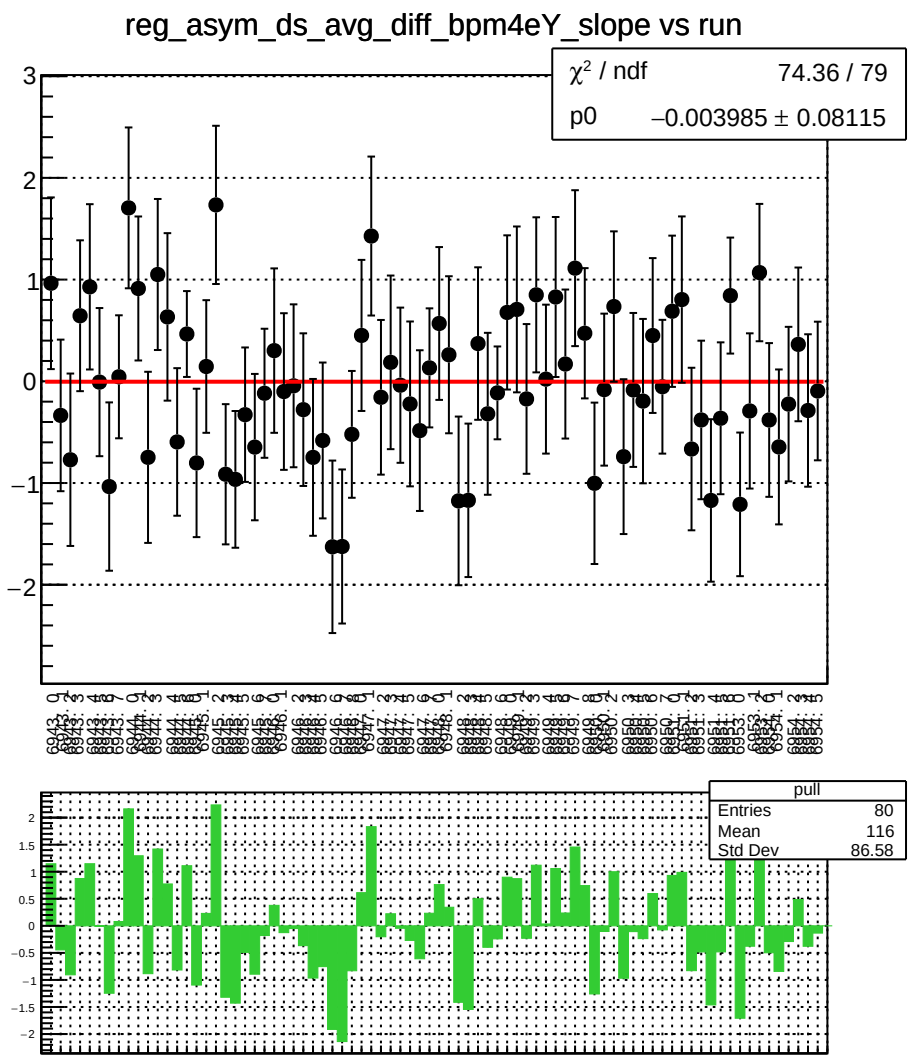

pull1D
Entries 80
Mean −0.01709
Std Dev 1.06

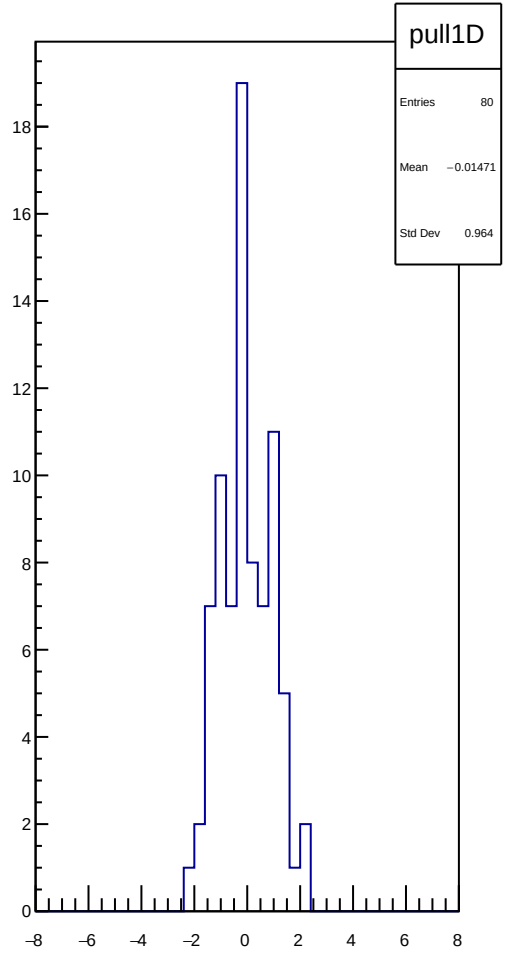

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 73.97 / 79
p0 −0.01982 ± 0.07061
pull
Entries 80
Mean 81.01
Std Dev 47.52

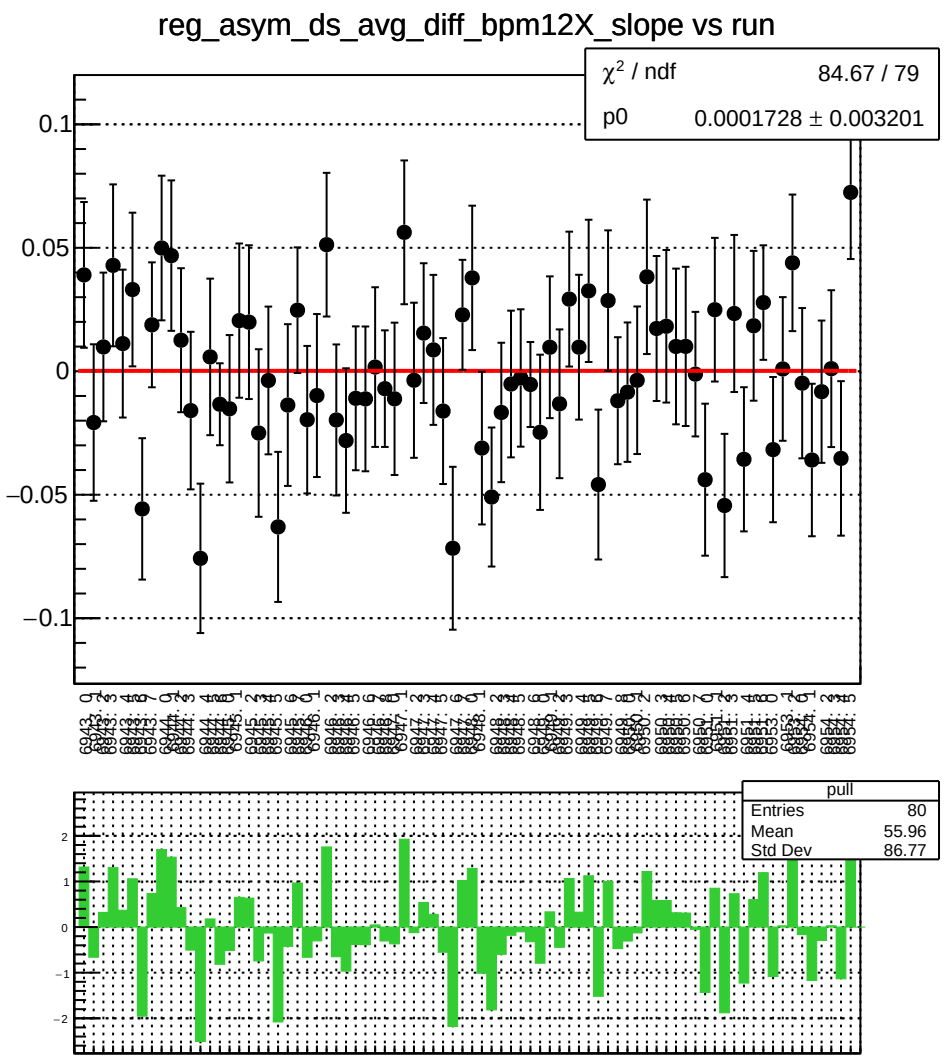

pull1D
Entries 80
Mean 0.01422
Std Dev 0.9615

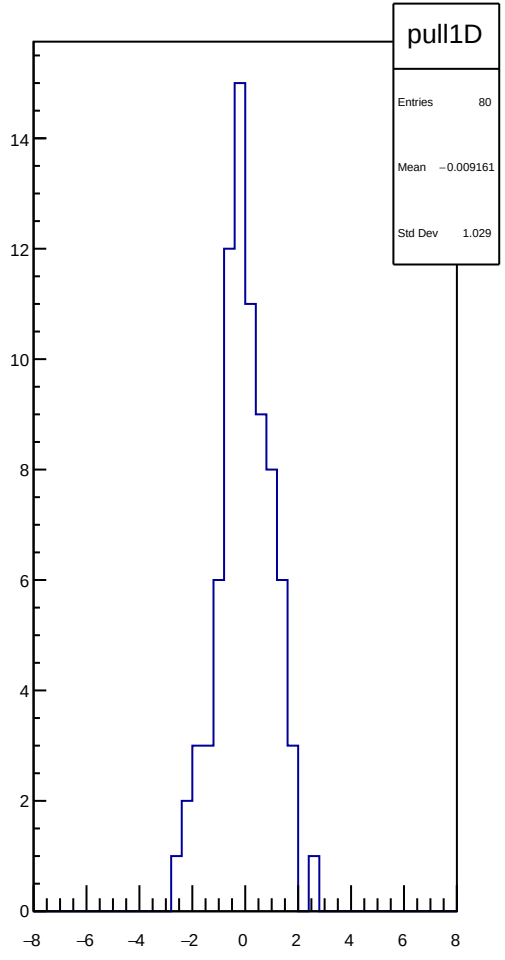

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 91.05 / 79
p0 −0.04591 ± 0.09292
pull
Entries 80
Mean 208.7
Std Dev 179.1

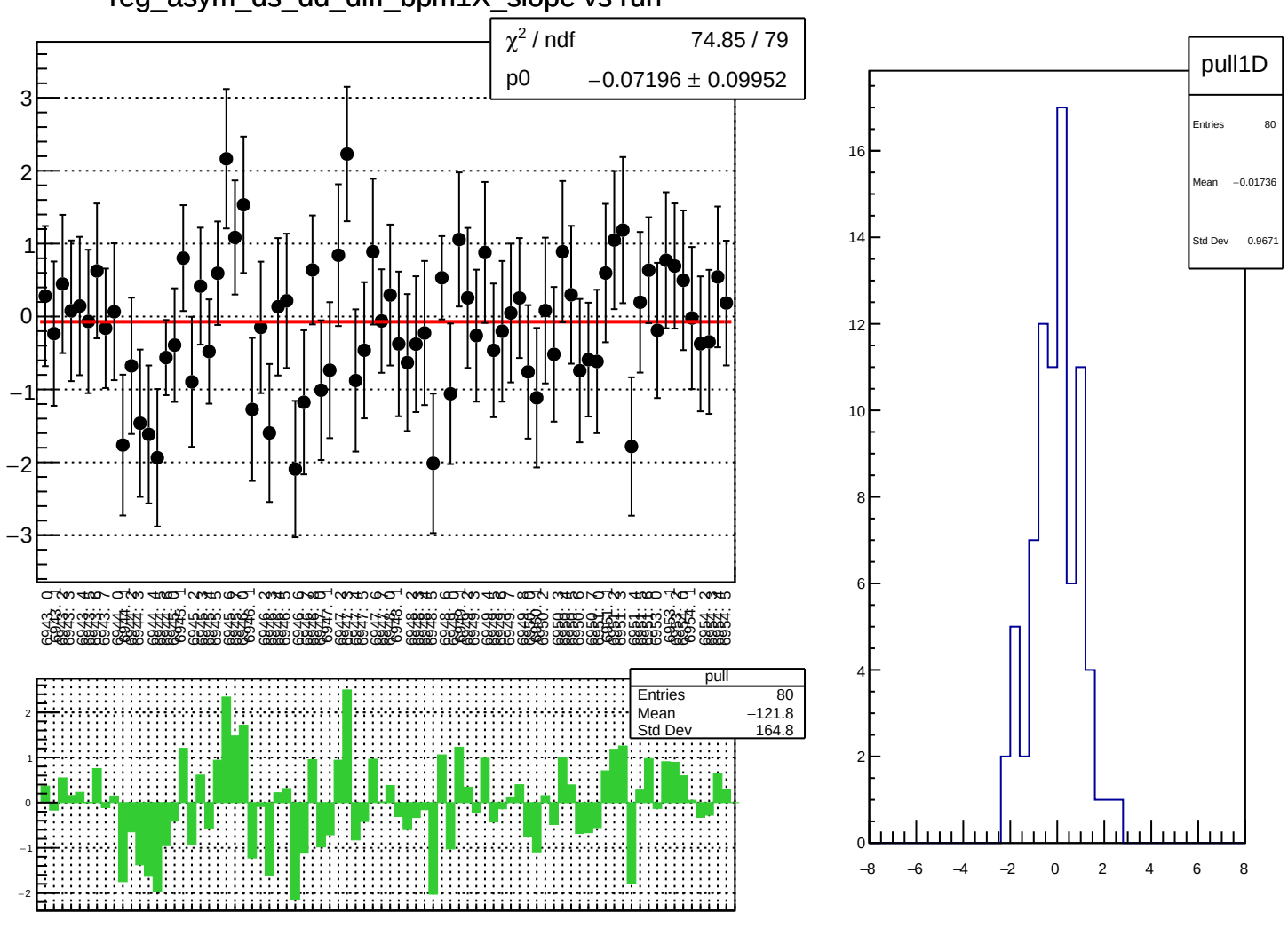

pull1D
Entries 80
Mean 0.01734
Std Dev 1.067

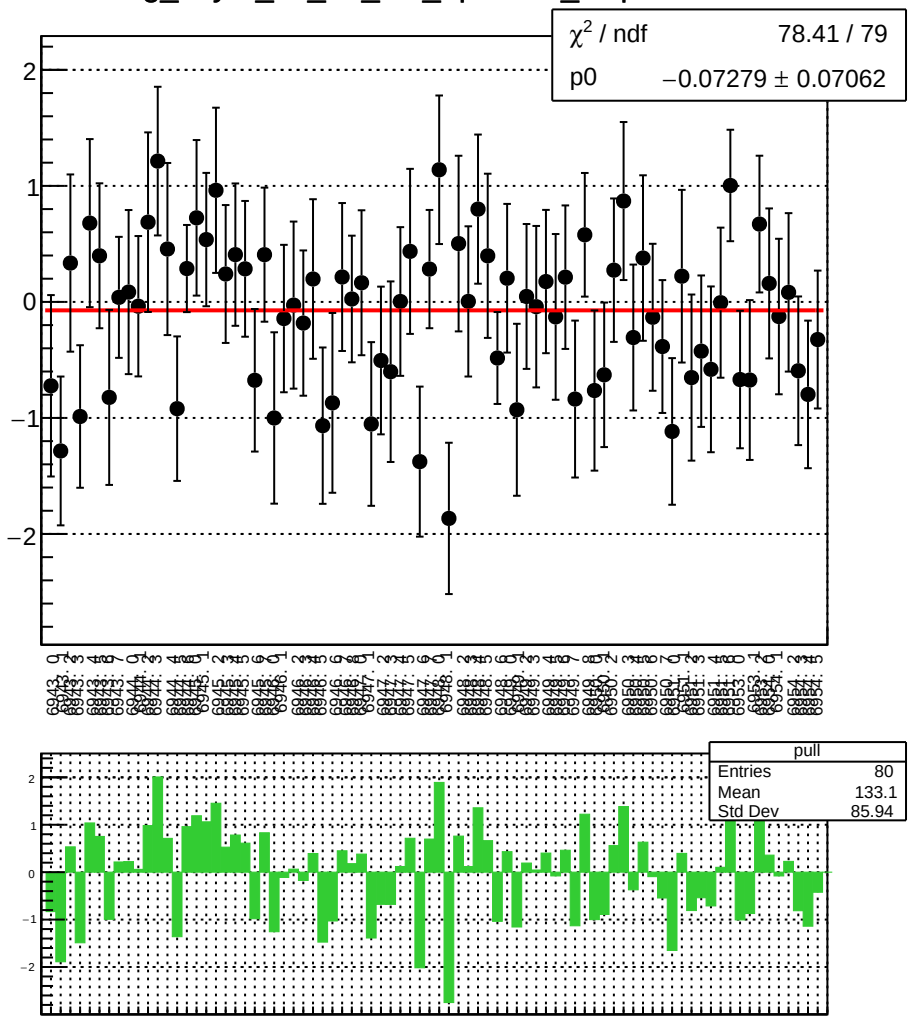

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 74.36 / 79
p0 −0.003985 ± 0.08115
pull
Entries 80
Mean 116
Std Dev 86.58

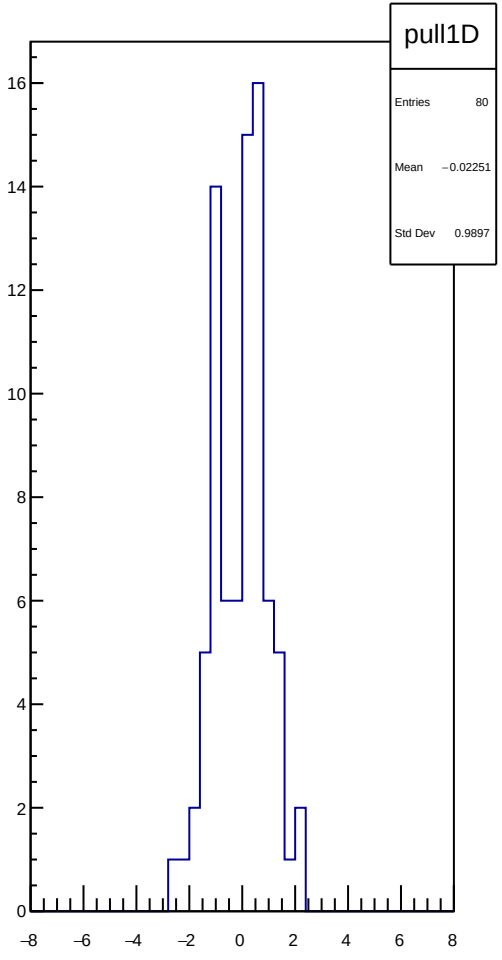

pull1D
Entries 80
Mean −0.01471
Std Dev 0.964

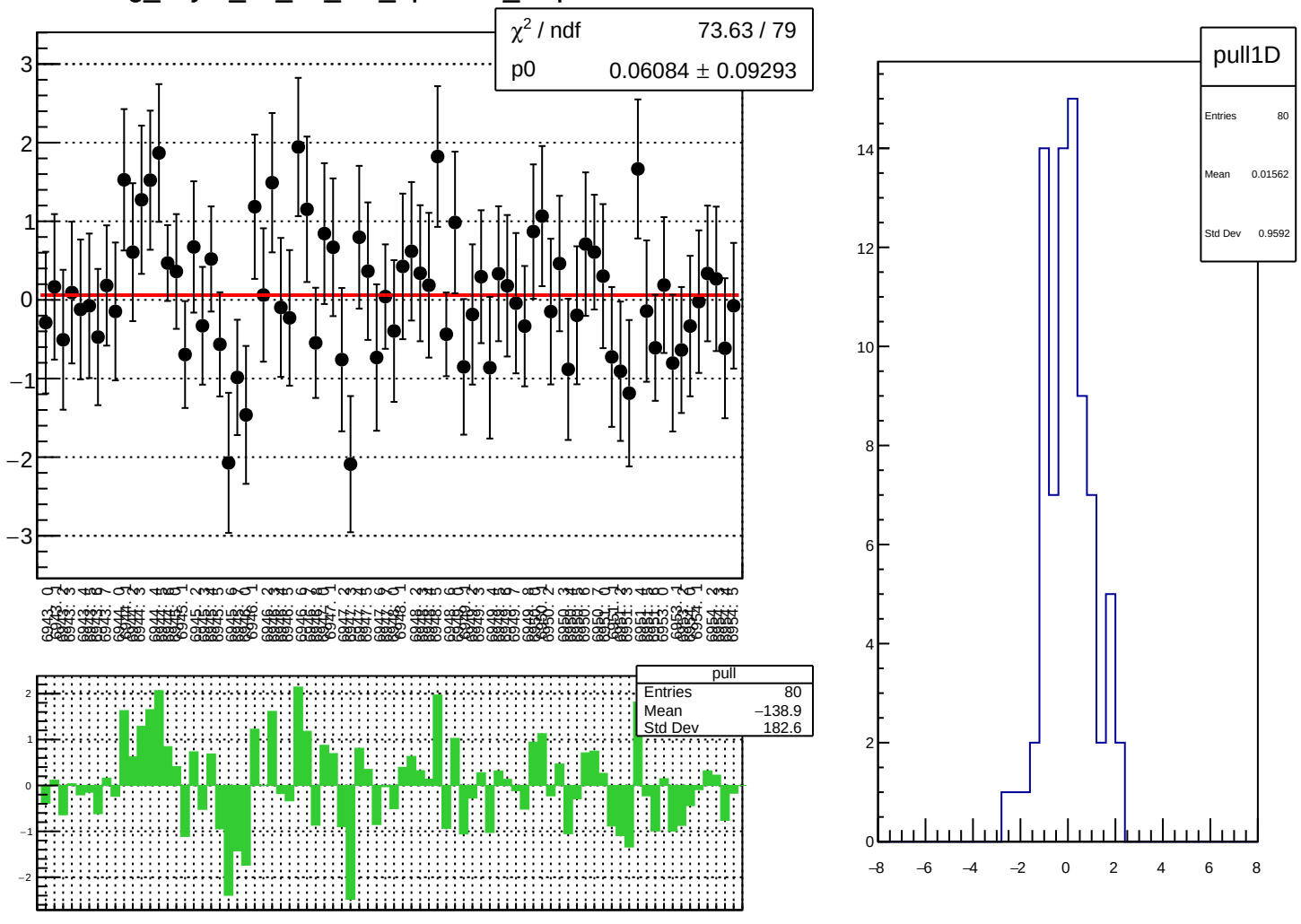

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 84.67 / 79
p0 0.0001728 ± 0.003201
0.1
0.05
0
−0.05
−0.1
pull
Entries 80
Mean 55.96
Std Dev 86.77
2
1
0
−1
−2

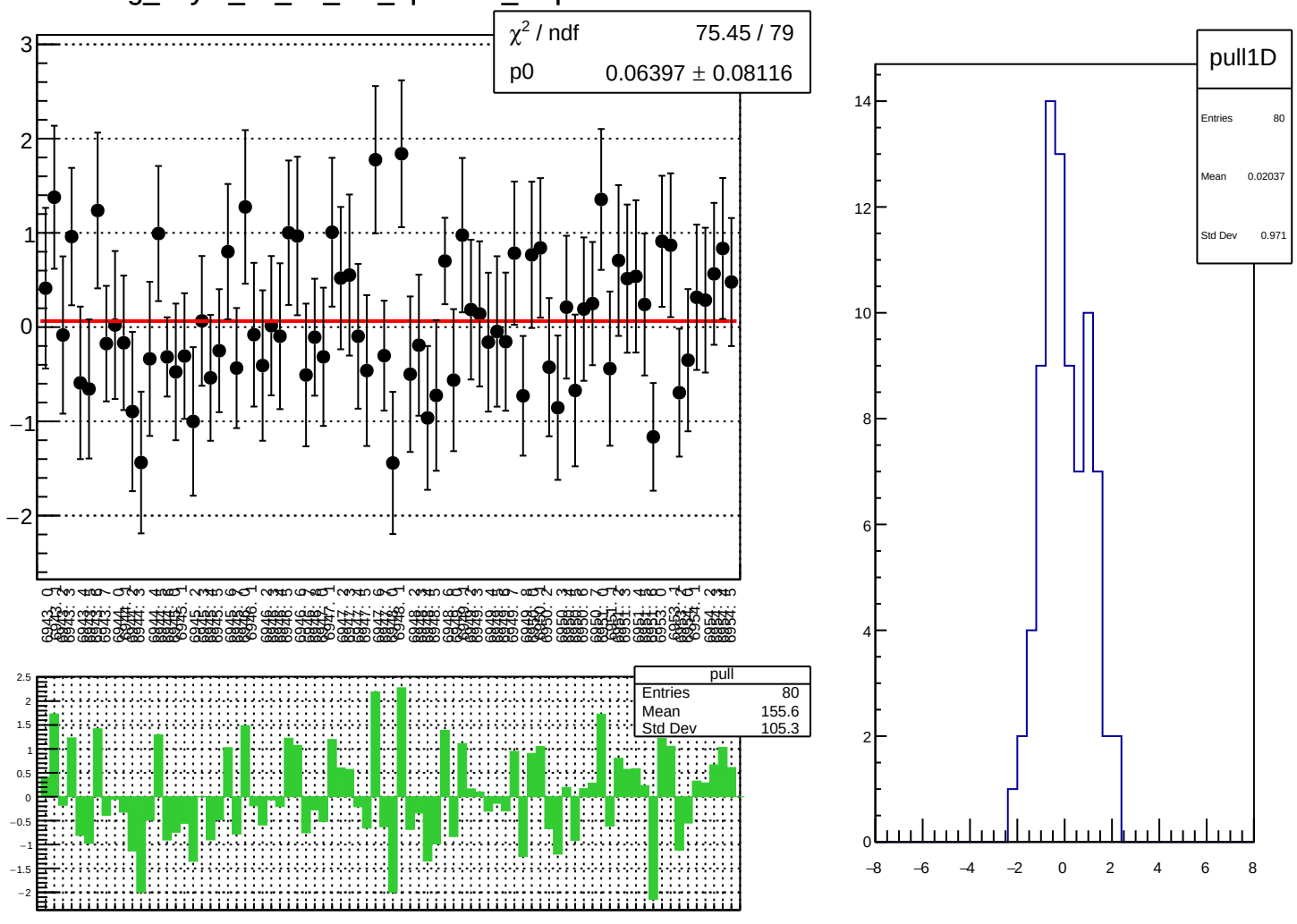

pull1D
Entries 80
Mean −0.009161
Std Dev 1.029
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

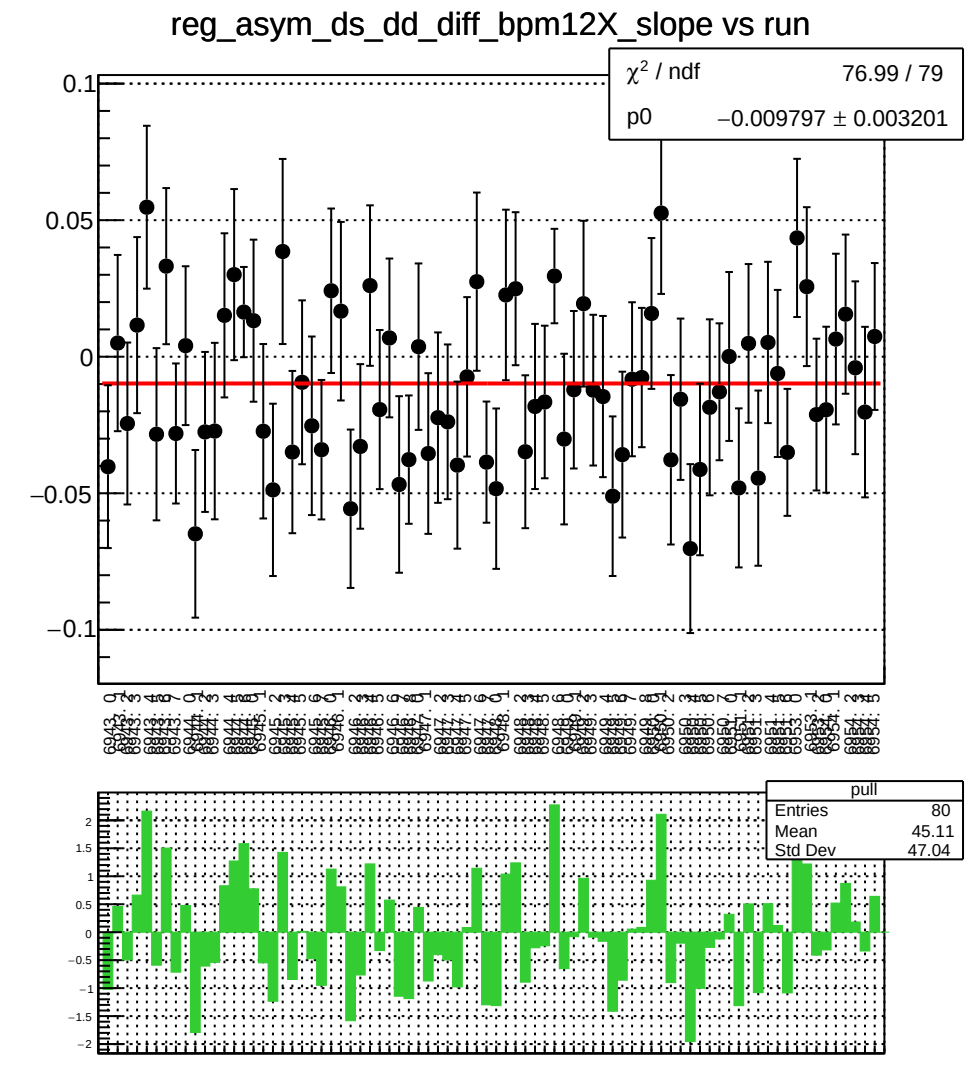

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 74.85 / 79
p0 −0.07196 ± 0.09952
pull
Entries 80
Mean −121.8
Std Dev 164.8
pull1D
Entries 80
Mean −0.01736
Std Dev 0.9671

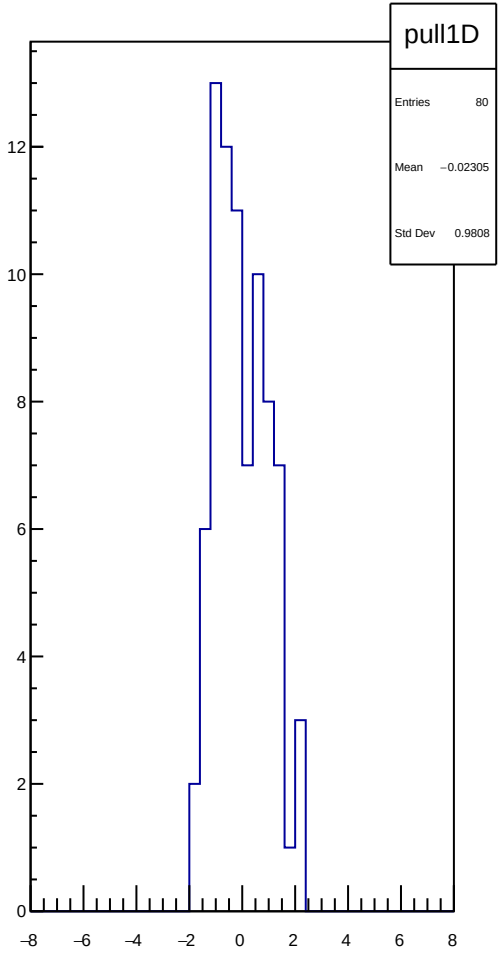

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 78.41 / 79
p0 −0.07279 ± 0.07062
pull
Entries 80
Mean 133.1
Std Dev 85.94

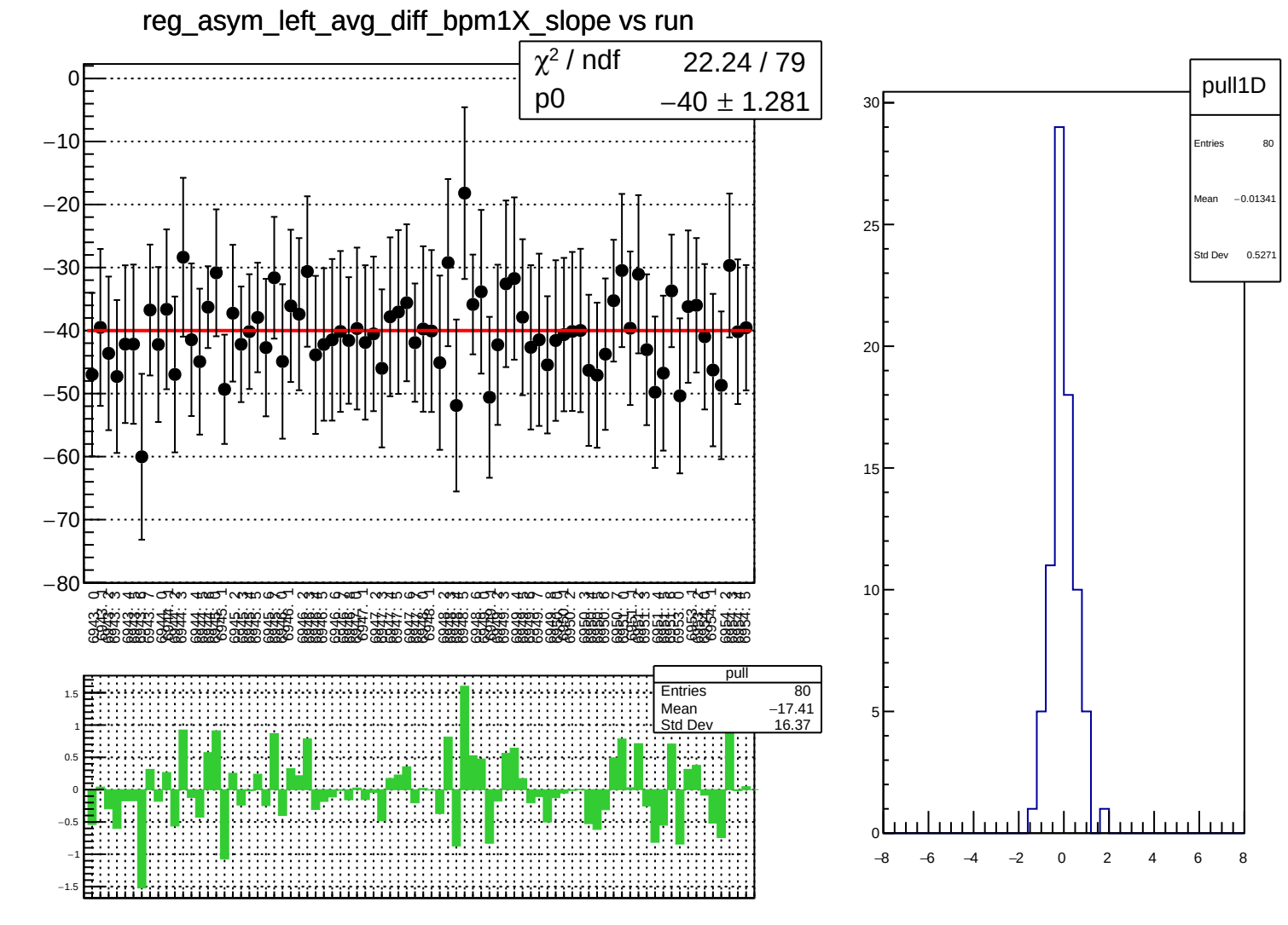

pull1D
Entries 80
Mean −0.02251
Std Dev 0.9897

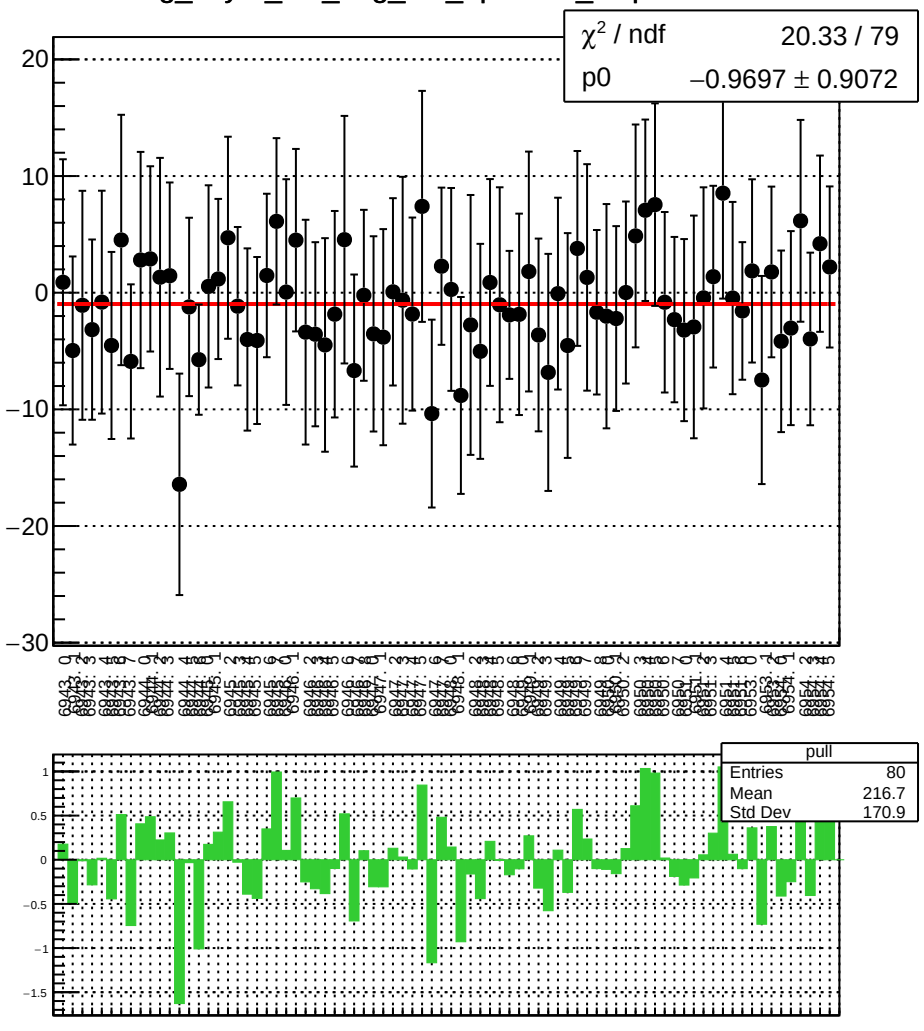

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 73.63 / 79
p0 0.06084 ± 0.09293
pull
Entries 80
Mean −138.9
Std Dev 182.6
pull1D
Entries 80
Mean 0.01562
Std Dev 0.9592

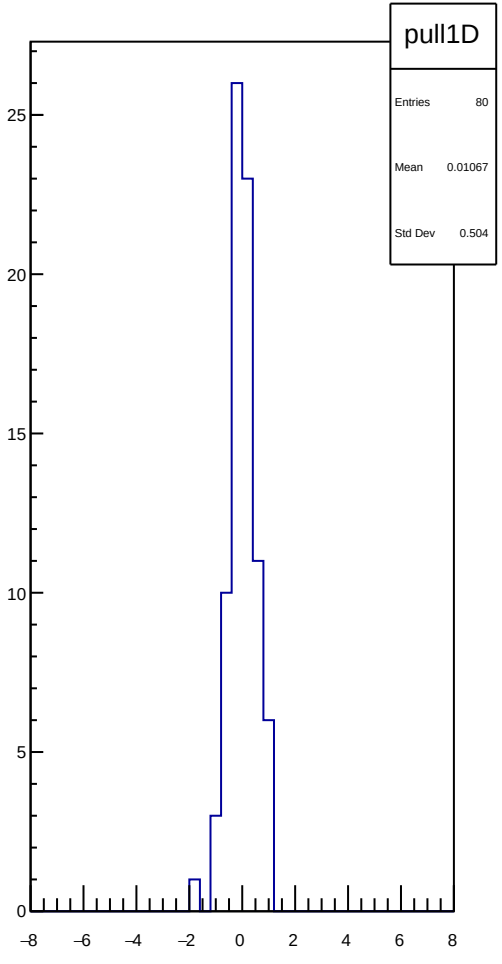

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 75.45 / 79
p0 0.06397 ± 0.08116
pull
Entries 80
Mean 155.6
Std Dev 105.3
pull1D
Entries 80
Mean 0.02037
Std Dev 0.971

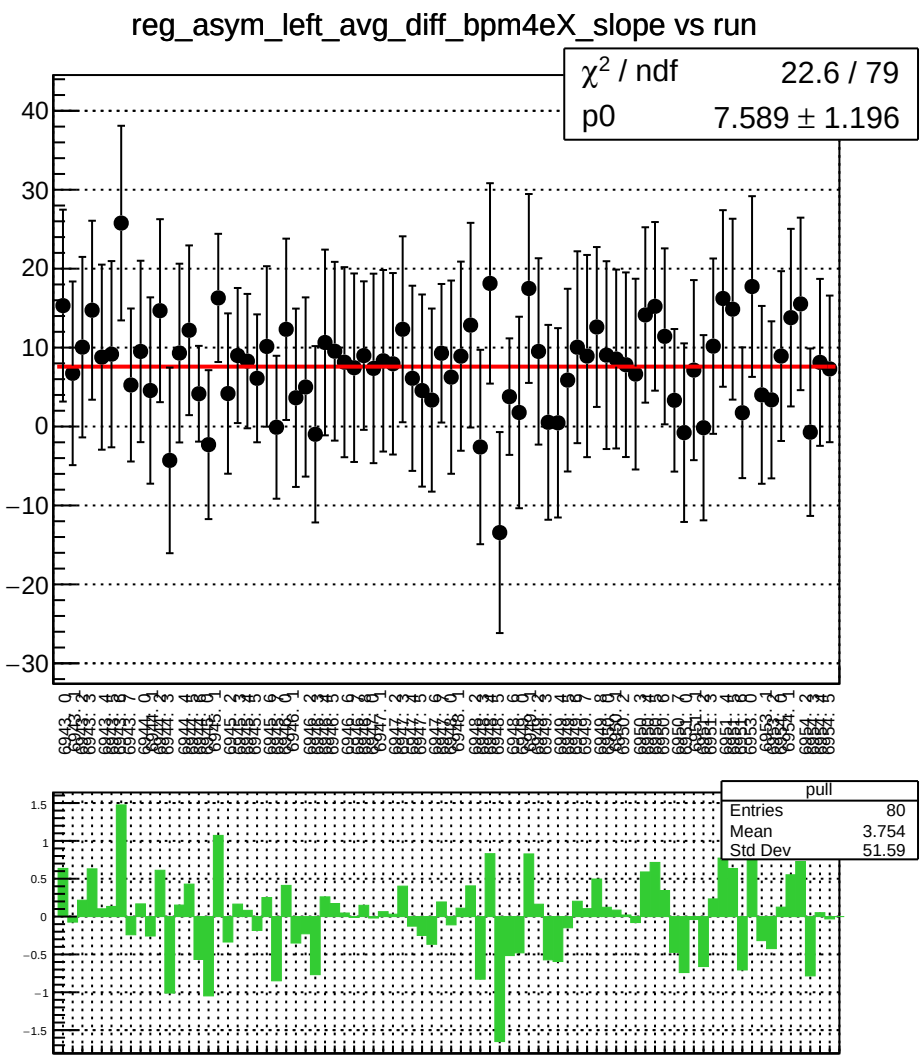

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 76.99 / 79
p0 −0.009797 ± 0.003201
pull
Entries 80
Mean 45.11
Std Dev 47.04

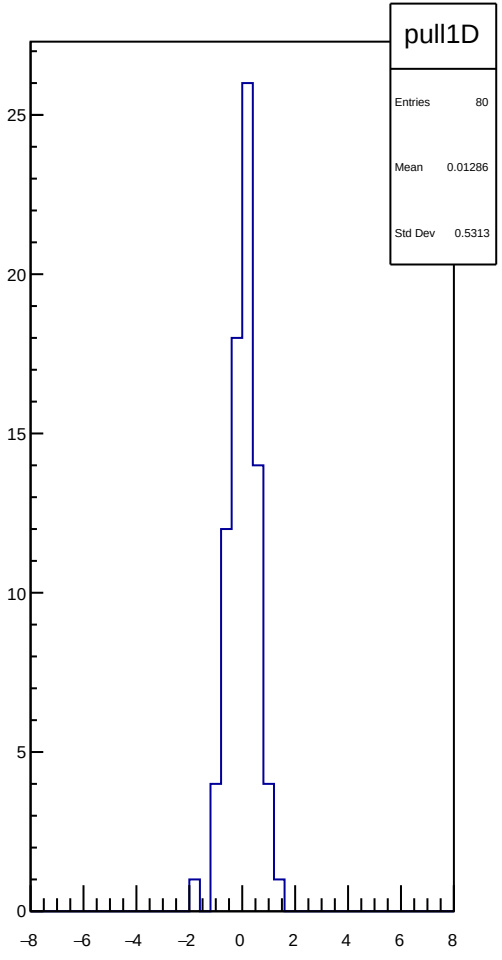

pull1D
Entries 80
Mean −0.02305
Std Dev 0.9808

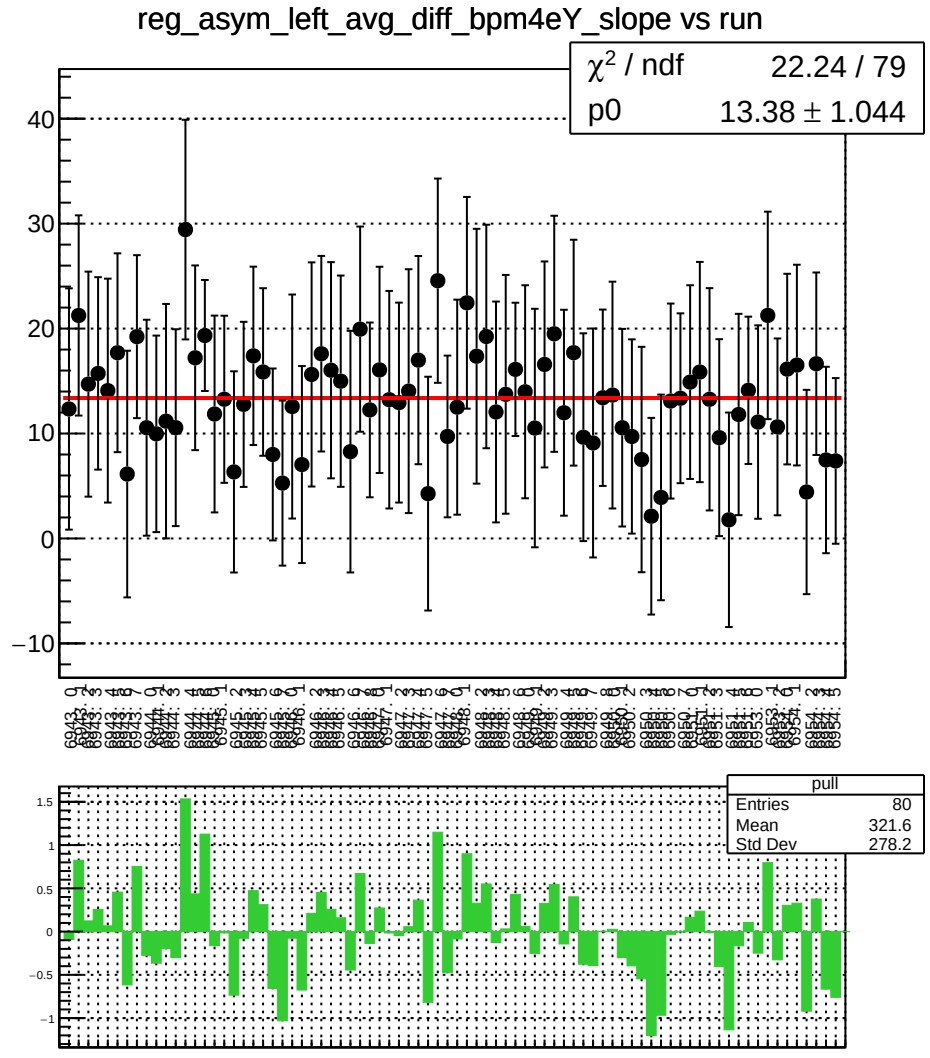

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 22.24 / 79
p0 −40 ± 1.281
pull
Entries 80
Mean −17.41
Std Dev 16.37
pull1D
Entries 80
Mean −0.01341
Std Dev 0.5271

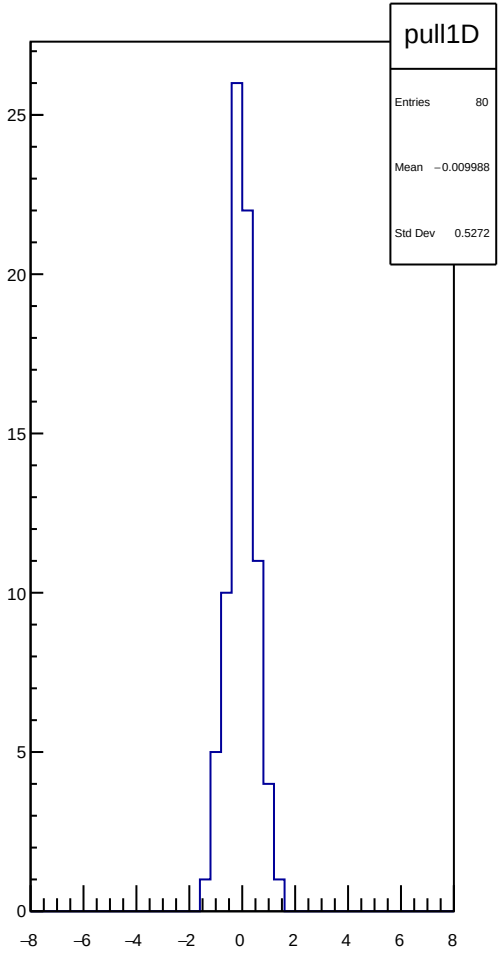

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 20.33 / 79
p0 −0.9697 ± 0.9072
pull
Entries 80
Mean 216.7
Std Dev 170.9

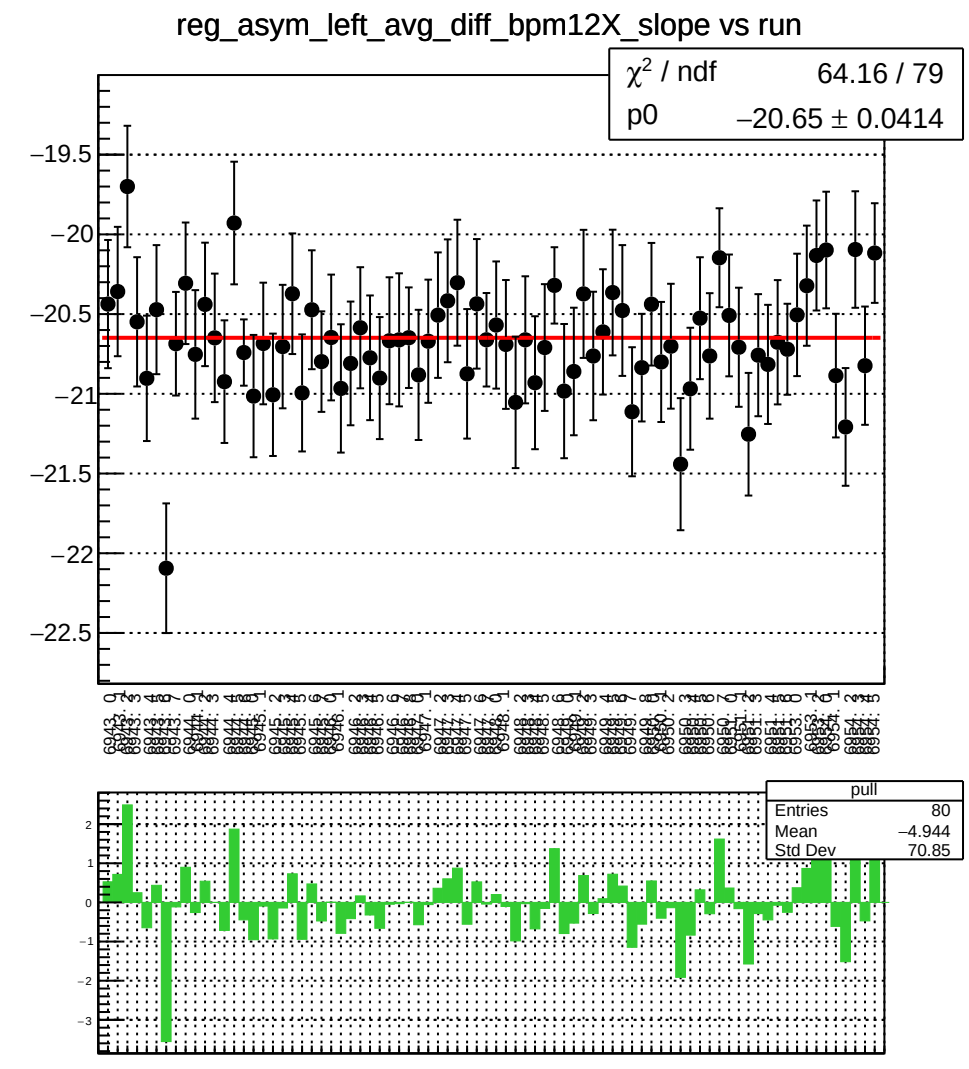

pull1D
Entries 80
Mean 0.01067
Std Dev 0.504

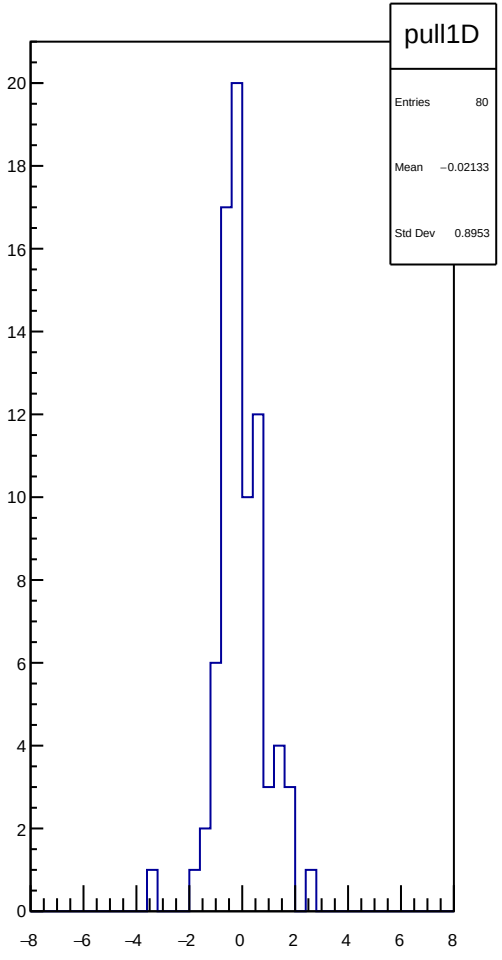

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 22.6 / 79
p0 7.589 ± 1.196
pull
Entries 80
Mean 3.754
Std Dev 51.59

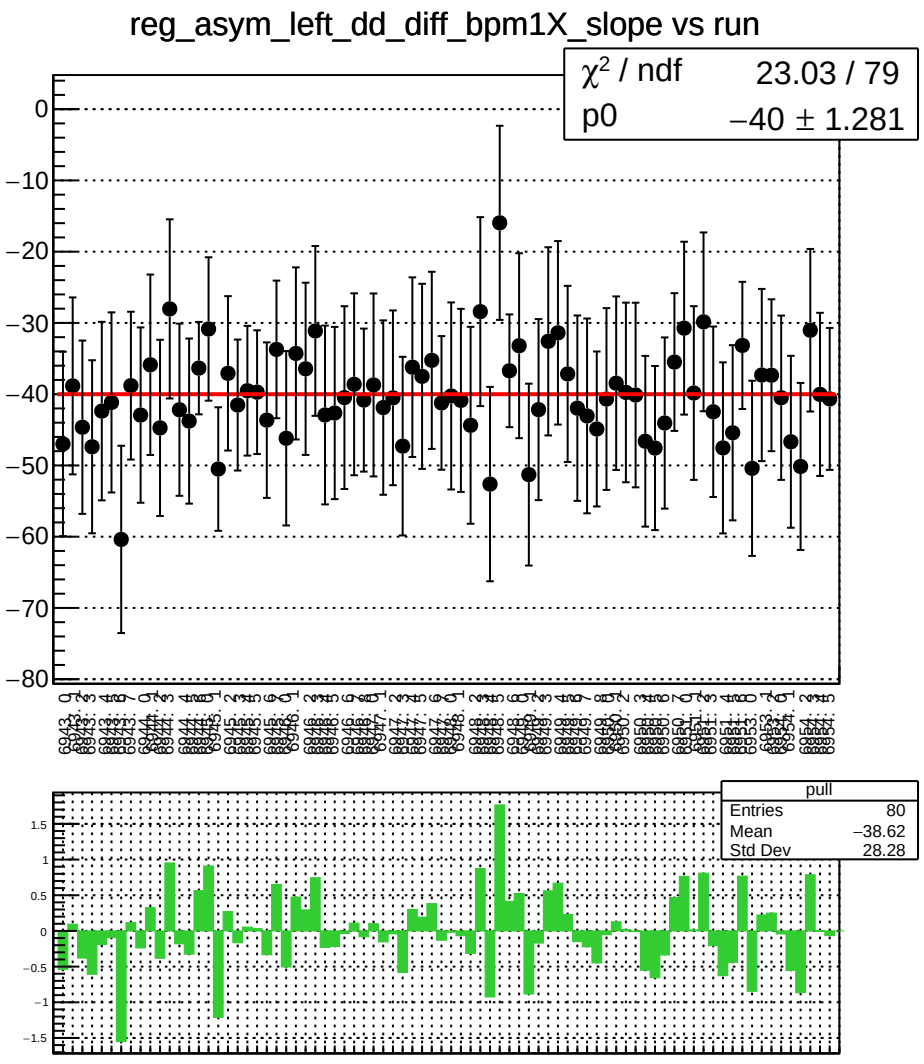

pull1D
Entries 80
Mean 0.01286
Std Dev 0.5313

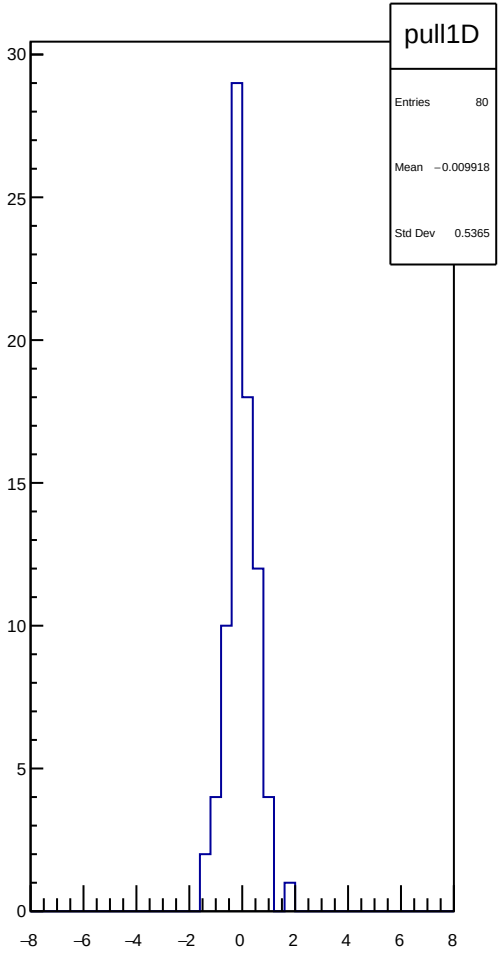

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 22.24 / 79
p0 13.38 ± 1.044
pull
Entries 80
Mean 321.6
Std Dev 278.2

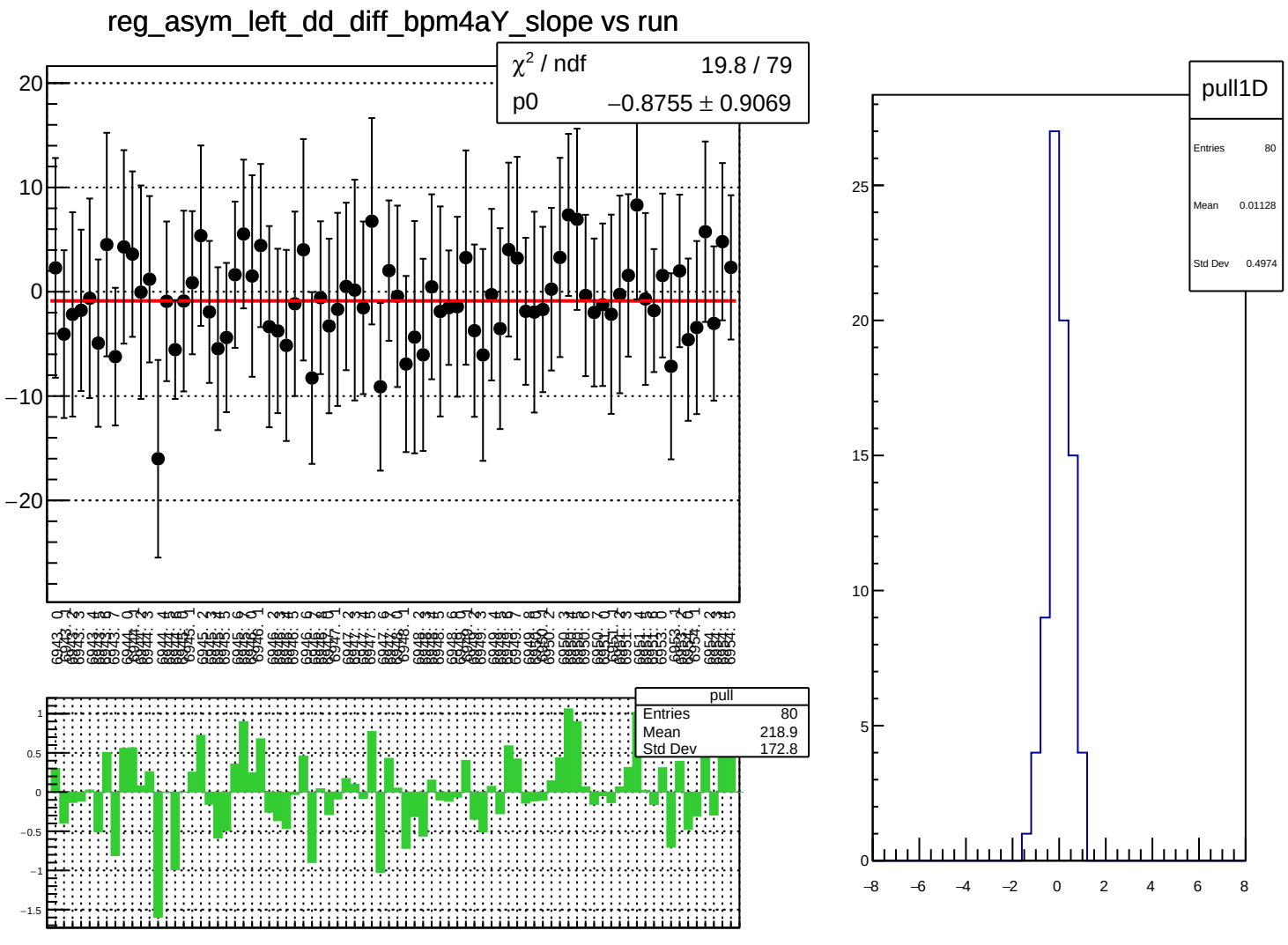

pull1D
Entries 80
Mean −0.009988
Std Dev 0.5272

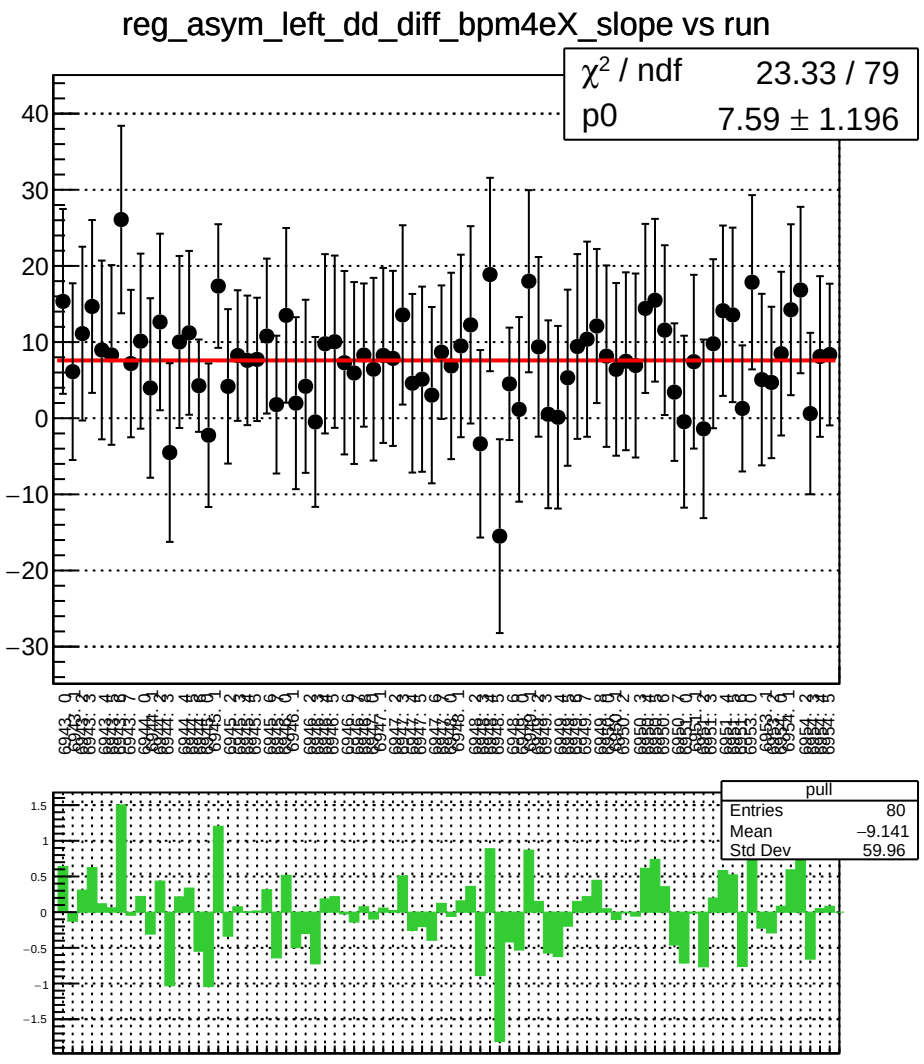

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 64.16 / 79
p0 −20.65 ± 0.0414
pull
Entries 80
Mean −4.944
Std Dev 70.85

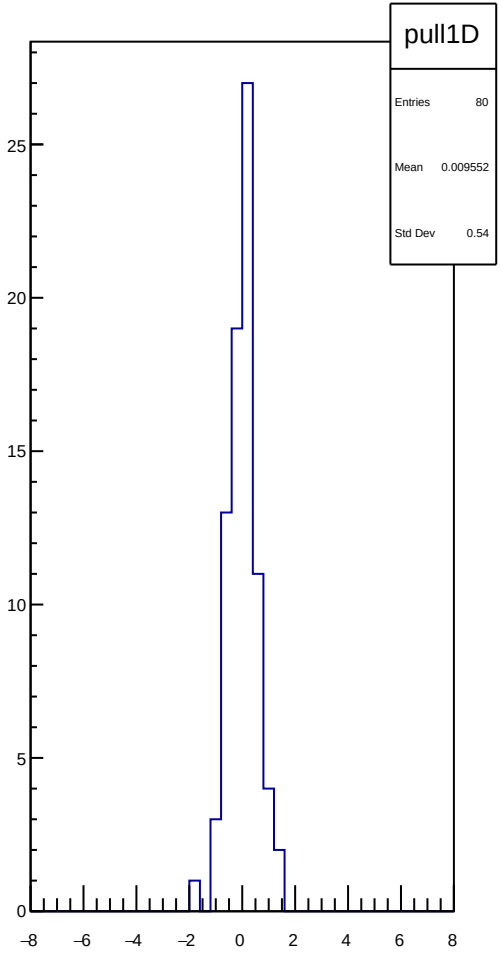

pull1D
Entries 80
Mean −0.02133
Std Dev 0.8953

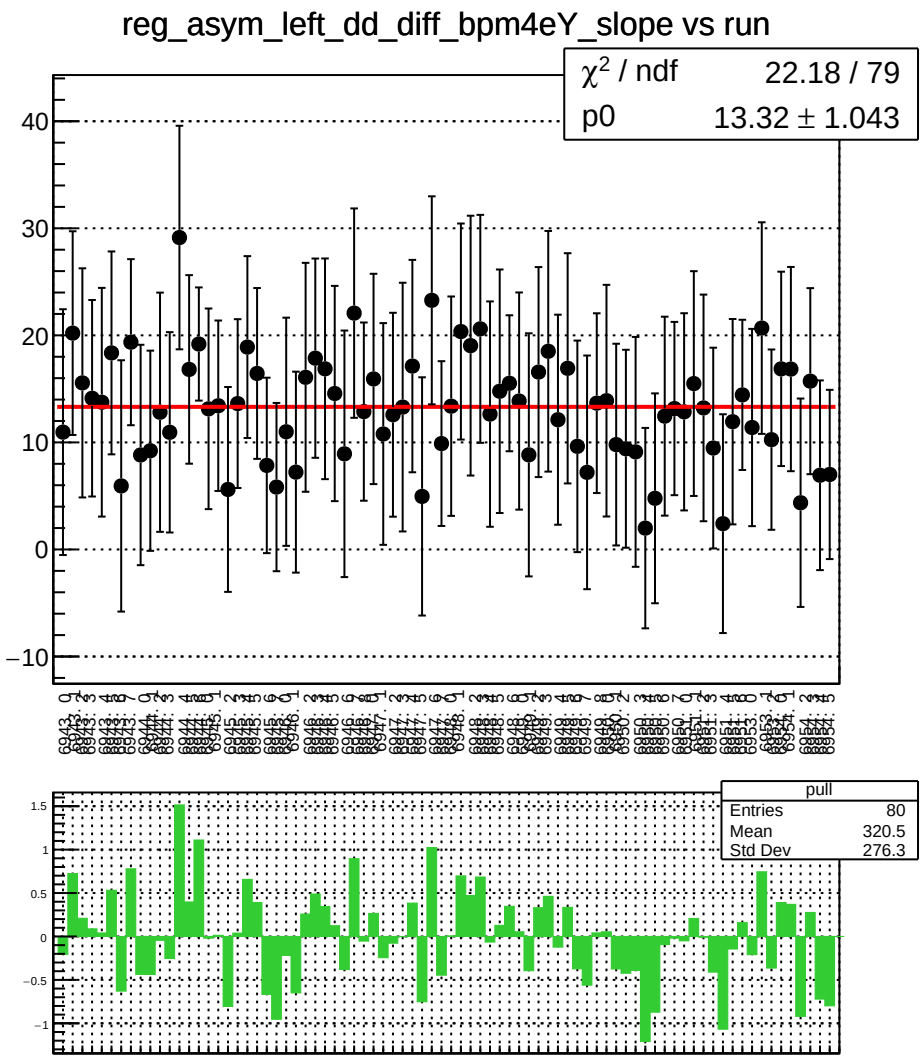

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 23.03 / 79
p0 −40 ± 1.281
pull
Entries 80
Mean −38.62
Std Dev 28.28

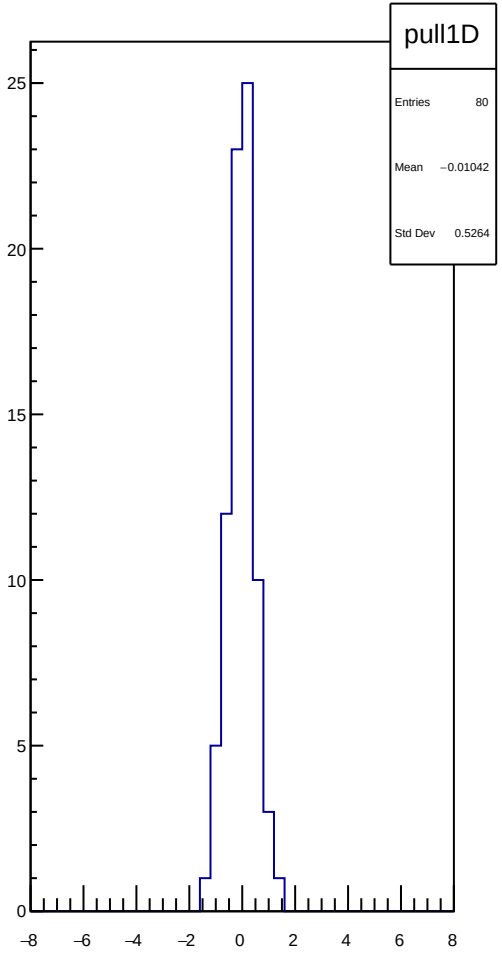

pull1D
Entries 80
Mean −0.009918
Std Dev 0.5365

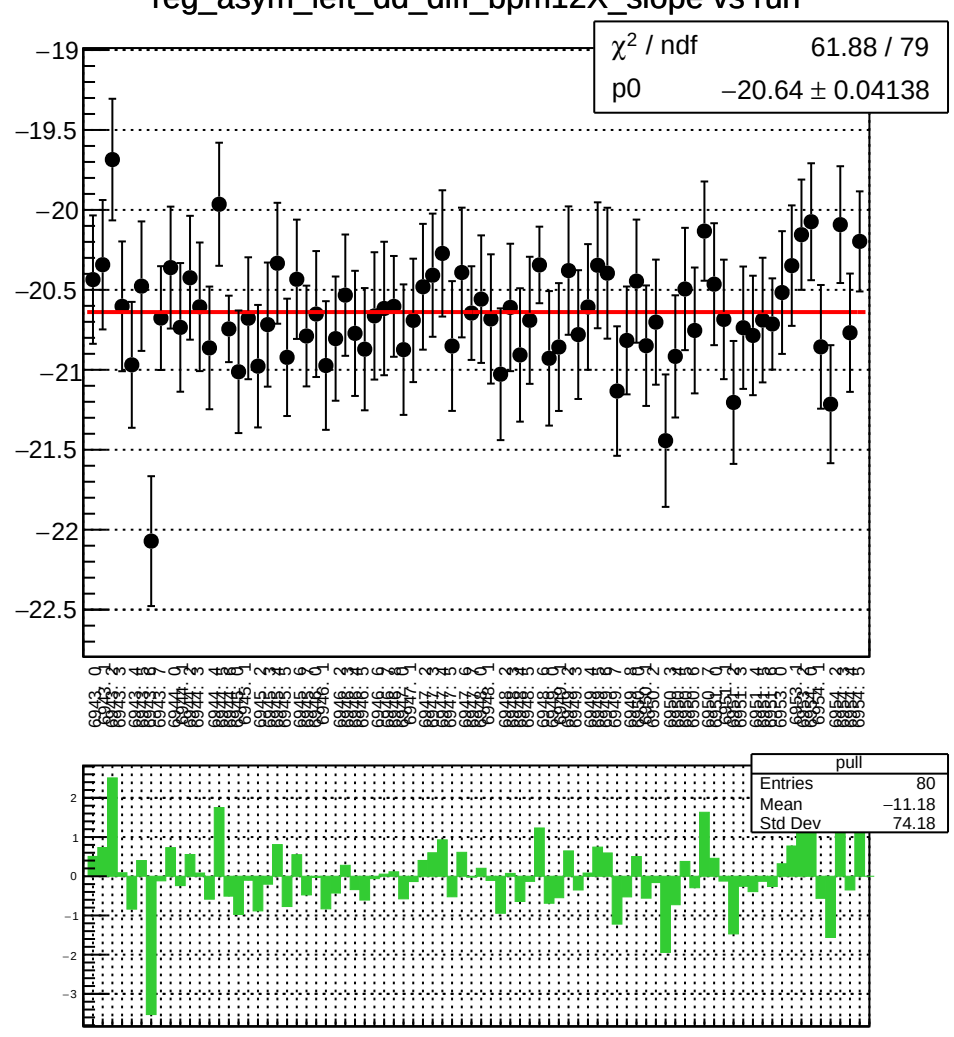

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 19.8 / 79
p0 −0.8755 ± 0.9069
pull
Entries 80
Mean 218.9
Std Dev 172.8
pull1D
Entries 80
Mean 0.01128
Std Dev 0.4974

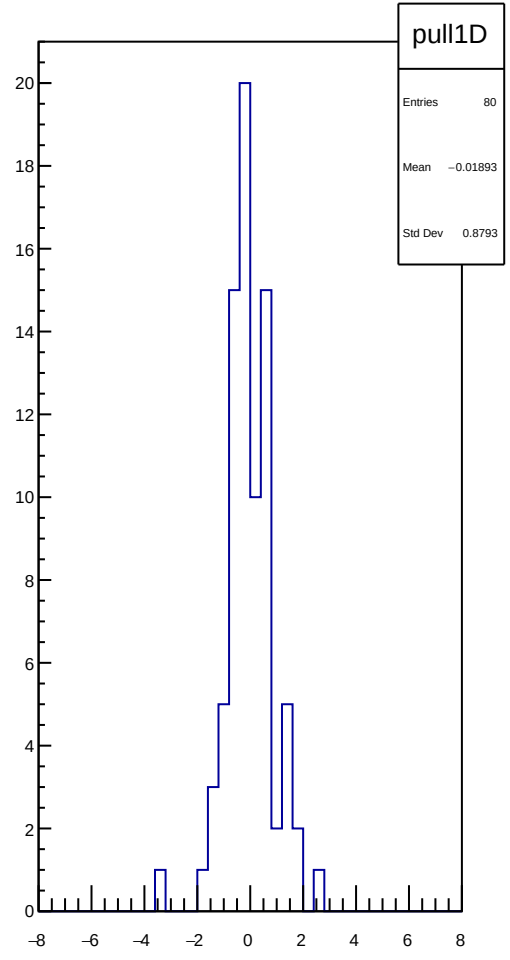

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.33 / 79
p0 7.59 ± 1.196
pull
Entries 80
Mean −9.141
Std Dev 59.96

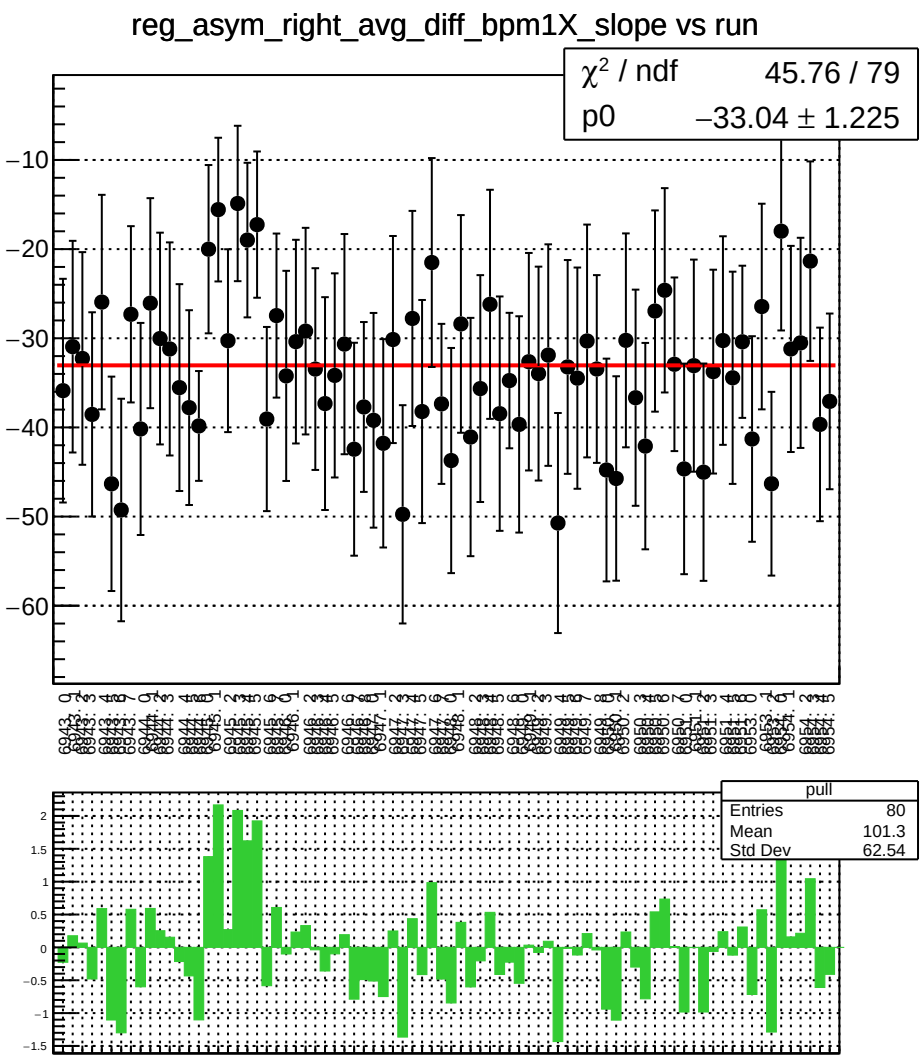

pull1D
Entries 80
Mean 0.009552
Std Dev 0.54

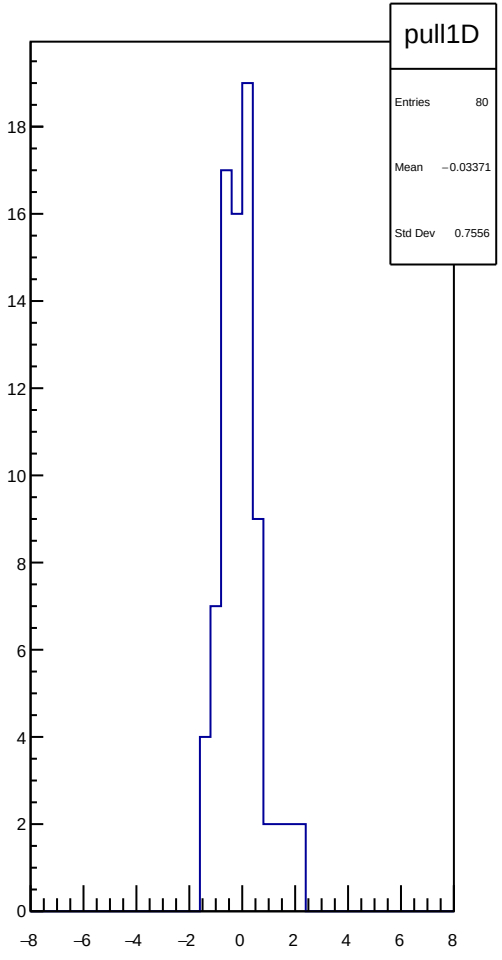

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ^2 / ndf 22.18 / 79
p0 13.32 ± 1.043
pull
Entries 80
Mean 320.5
Std Dev 276.3

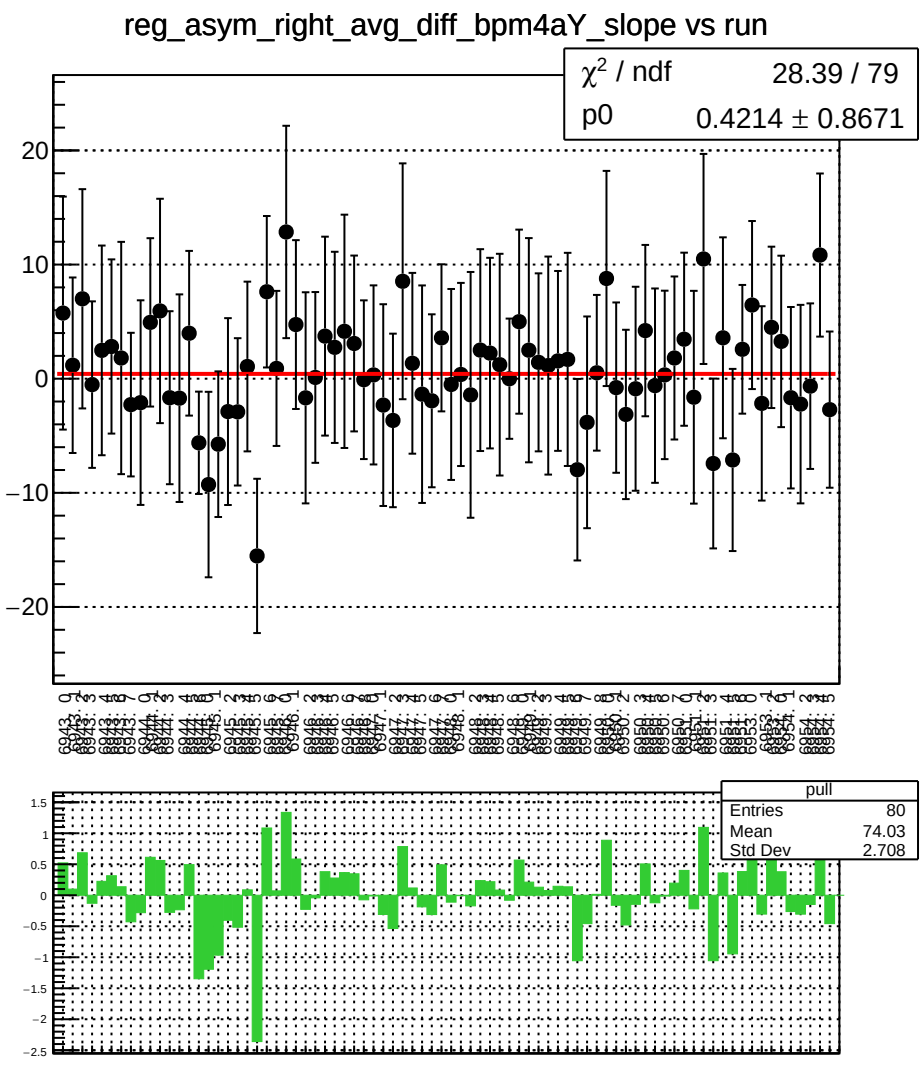

pull1D
Entries 80
Mean −0.01042
Std Dev 0.5264

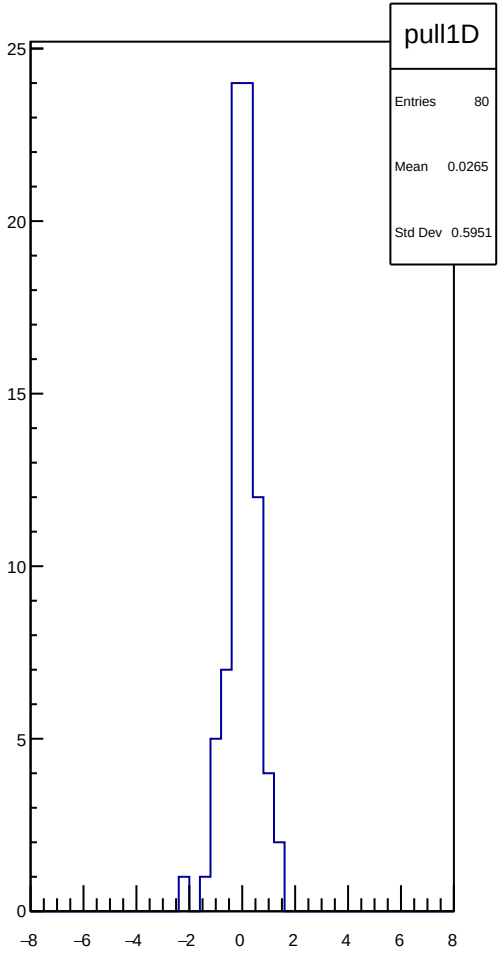

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 61.88 / 79
p0 −20.64 ± 0.04138
pull
Entries 80
Mean −11.18
Std Dev 74.18

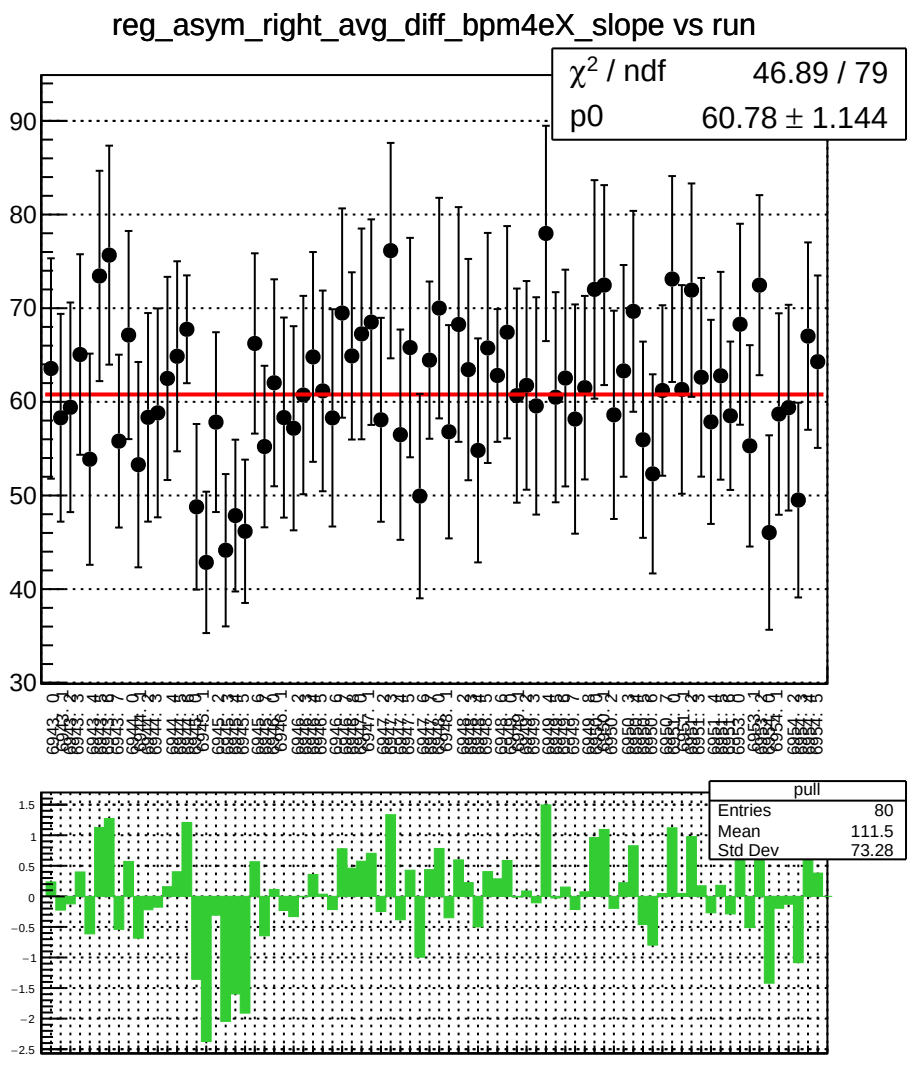

pull1D
Entries 80
Mean −0.01893
Std Dev 0.8793

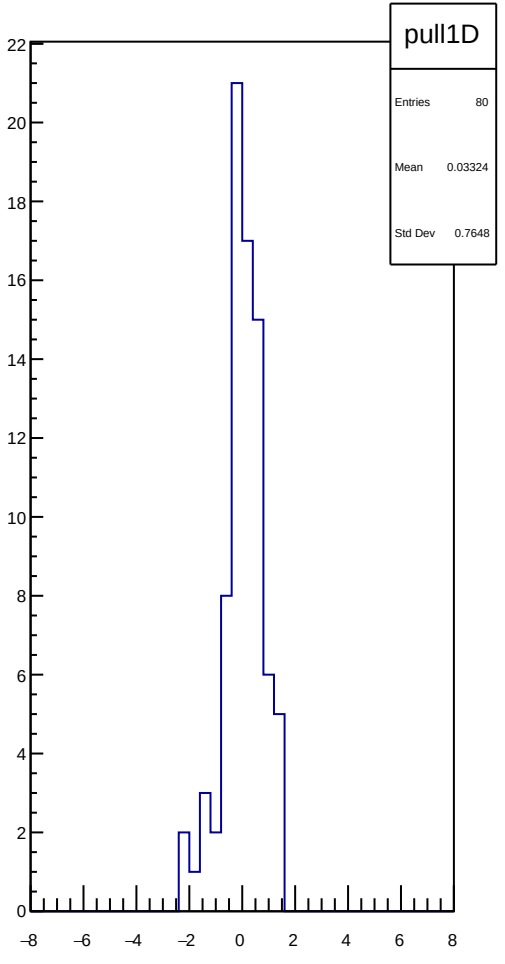

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 45.76 / 79
p0 −33.04 ± 1.225
pull
Entries 80
Mean 101.3
Std Dev 62.54

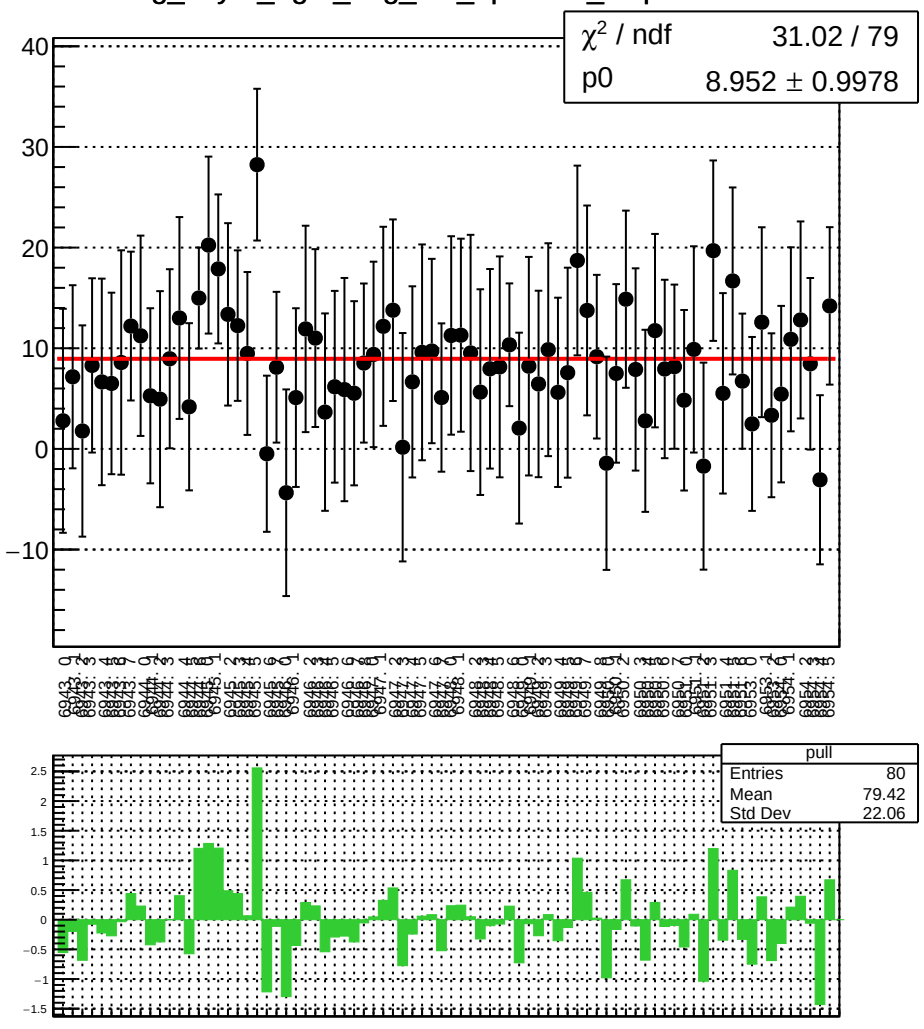

pull1D
Entries 80
Mean −0.03371
Std Dev 0.7556

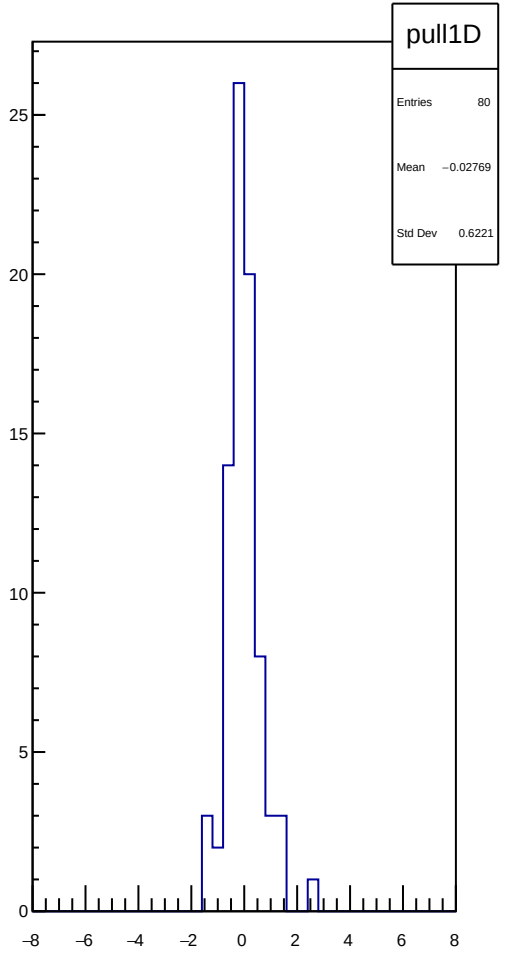

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 28.39 / 79
p0 0.4214 ± 0.8671
pull
Entries 80
Mean 74.03
Std Dev 2.708

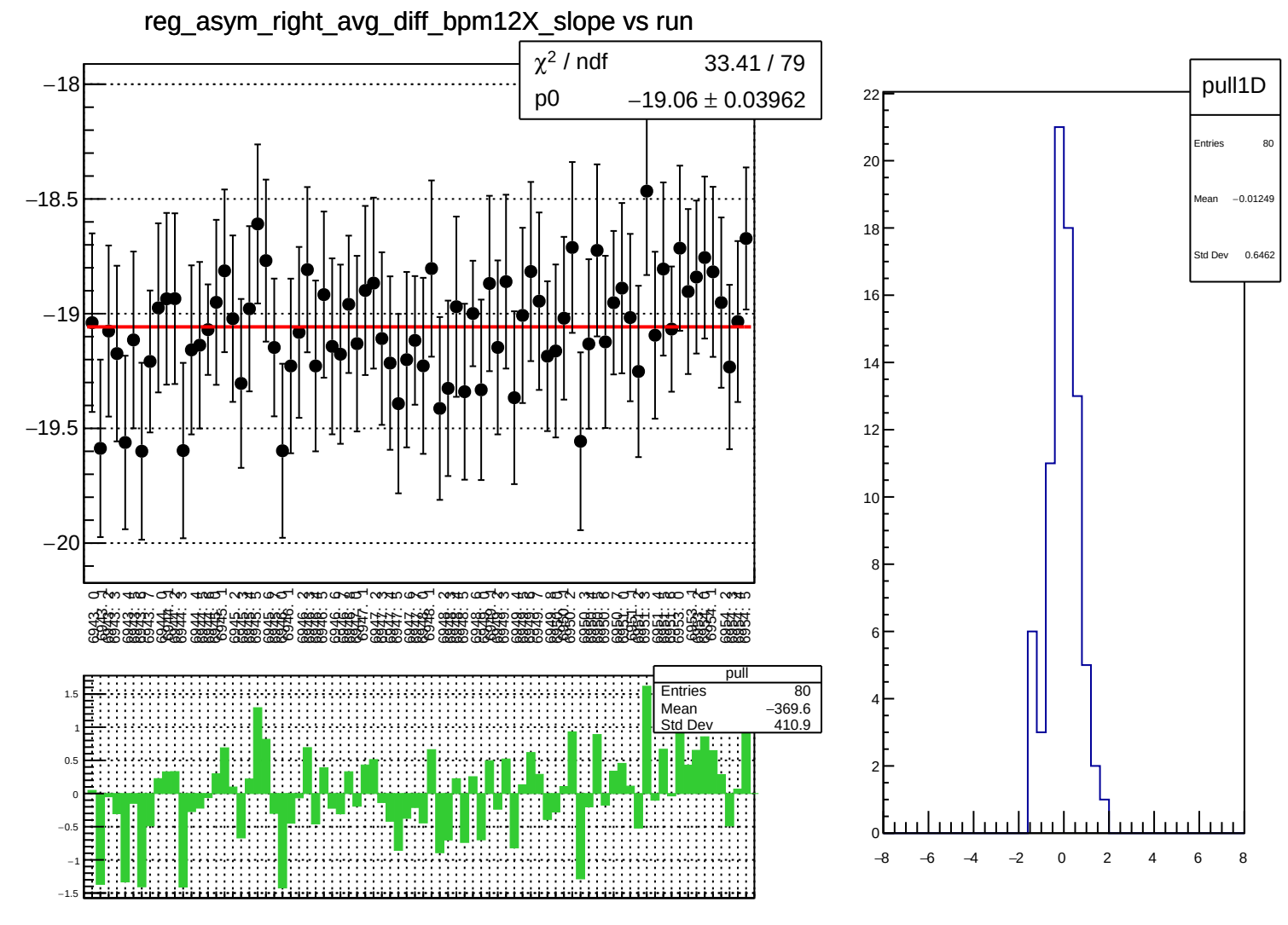

pull1D
Entries 80
Mean 0.0265
Std Dev 0.5951

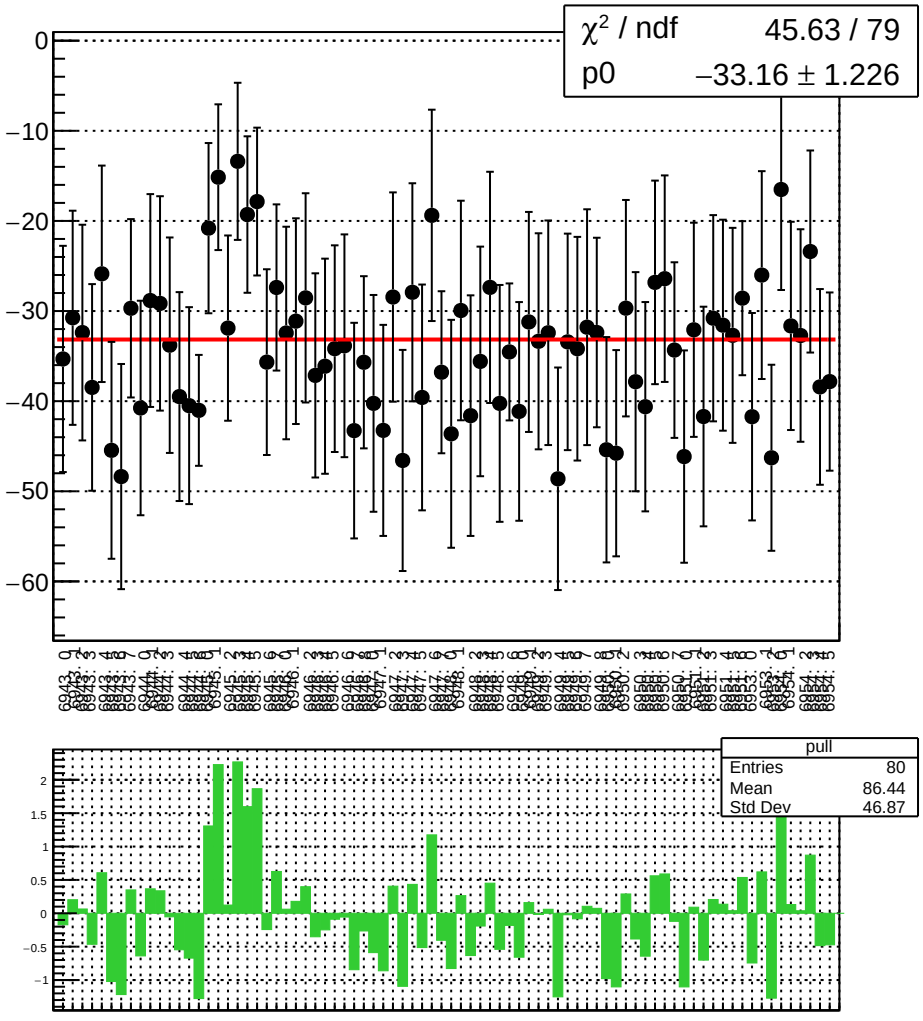

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 46.89 / 79
p0 60.78 ± 1.144
pull
Entries 80
Mean 111.5
Std Dev 73.28

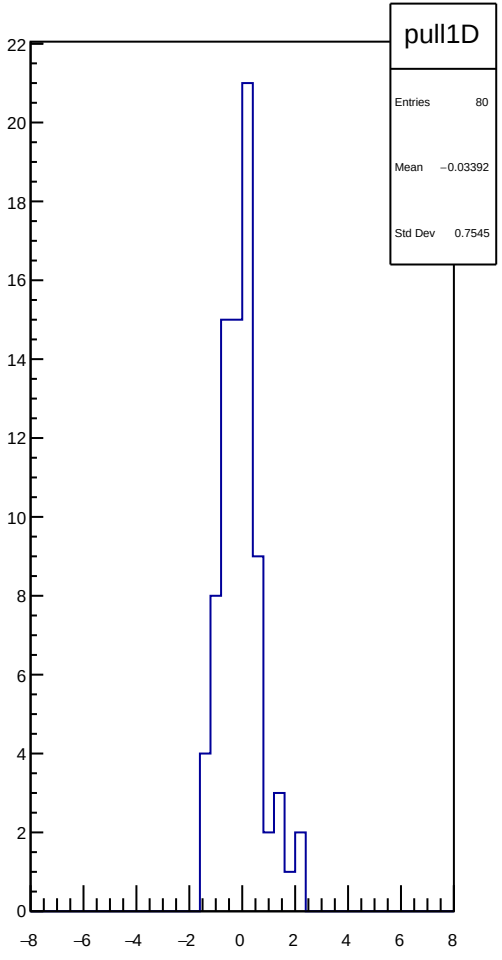

pull1D
Entries 80
Mean 0.03324
Std Dev 0.7648

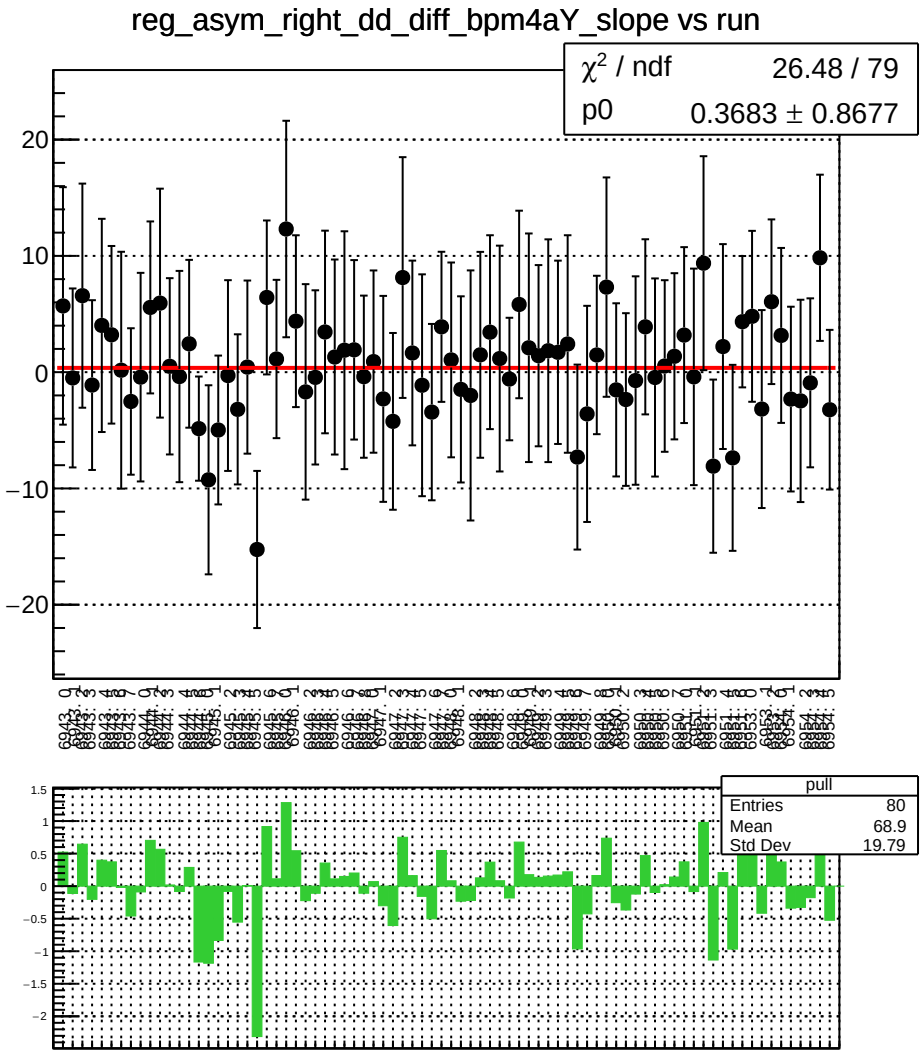

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 31.02 / 79
p0 8.952 ± 0.9978
pull
Entries 80
Mean 79.42
Std Dev 22.06

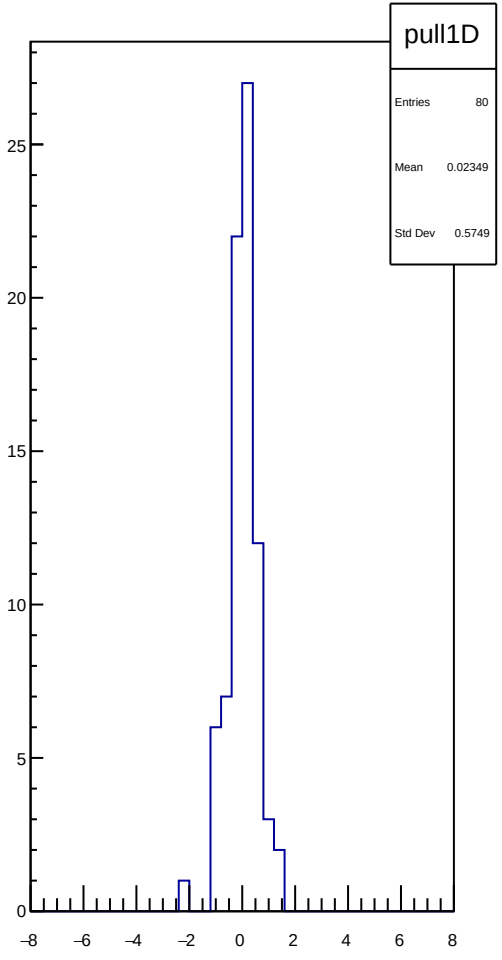

pull1D
Entries 80
Mean −0.02769
Std Dev 0.6221

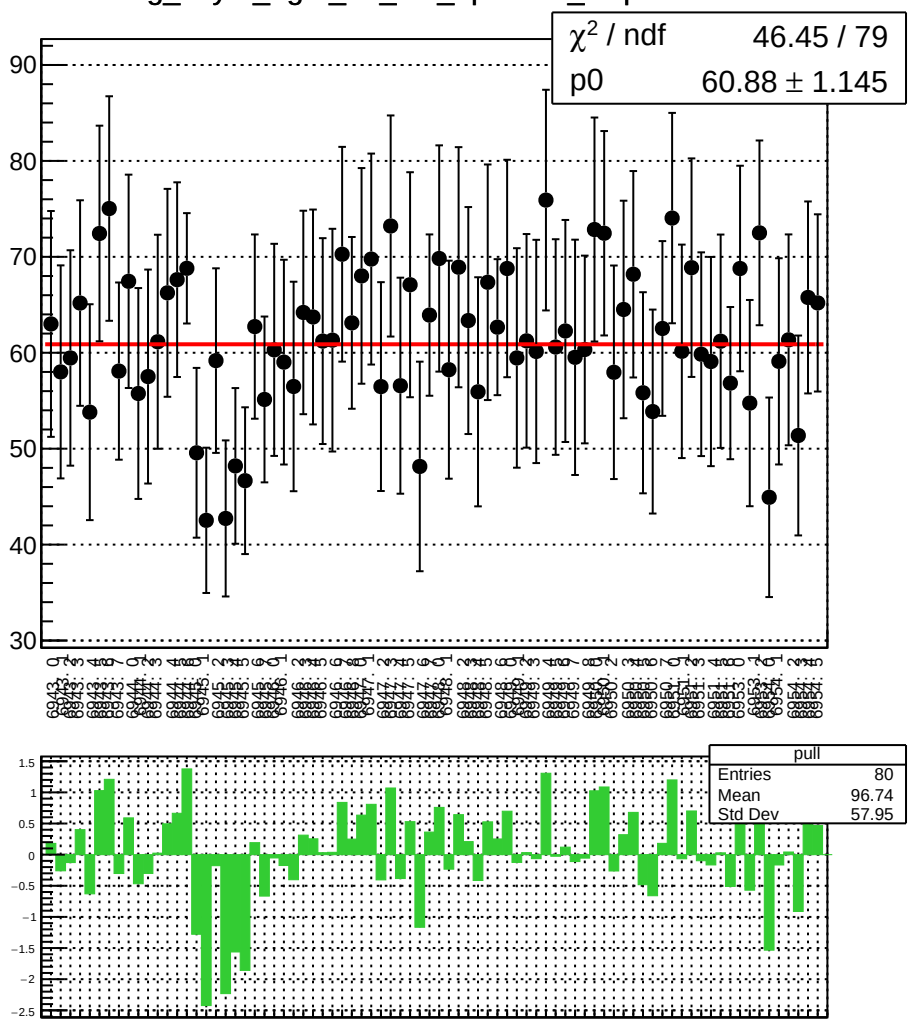

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 33.41 / 79
p0 −19.06 ± 0.03962
−18
−18.5
−19
−19.5
−20
pull
Entries 80
Mean −369.6
Std Dev 410.9
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 80
Mean −0.01249
Std Dev 0.6462
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

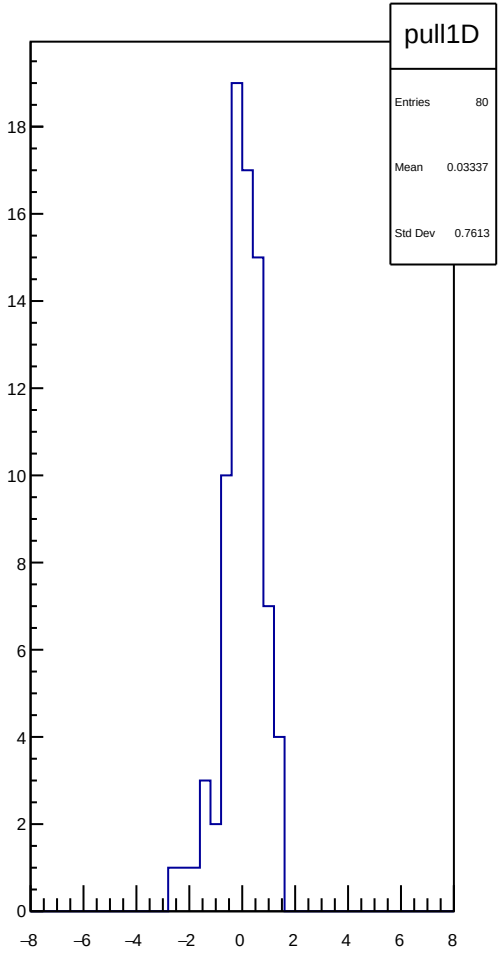

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 45.63 / 79
p0 −33.16 ± 1.226
pull
Entries 80
Mean 86.44
Std Dev 46.87

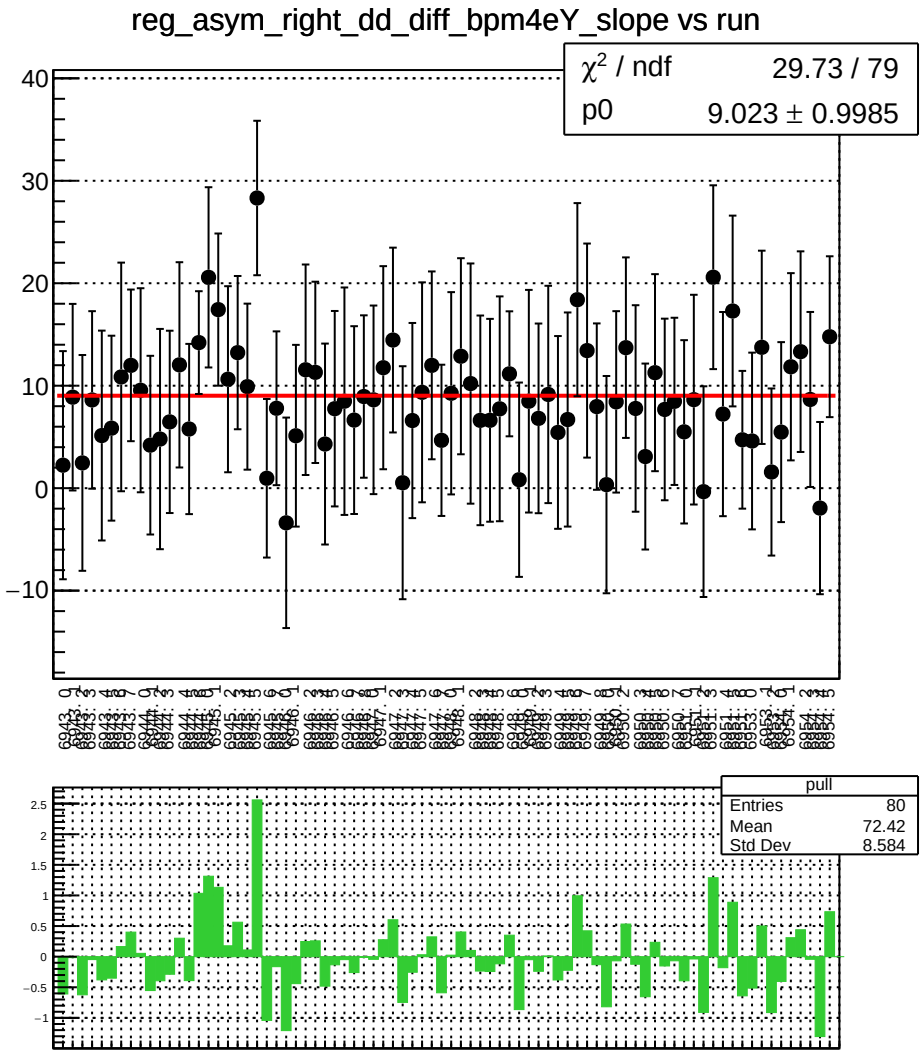

pull1D
Entries 80
Mean −0.03392
Std Dev 0.7545

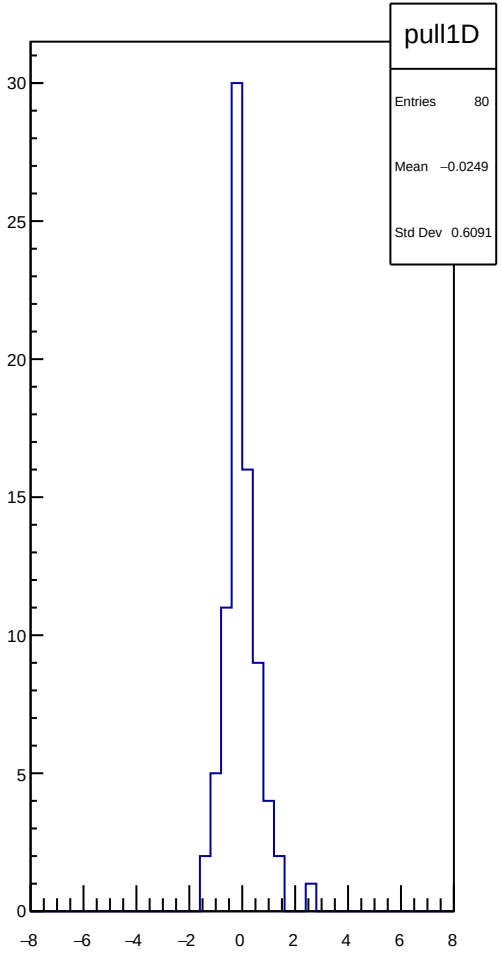

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 26.48 / 79
p0 0.3683 ± 0.8677
pull
Entries 80
Mean 68.9
Std Dev 19.79

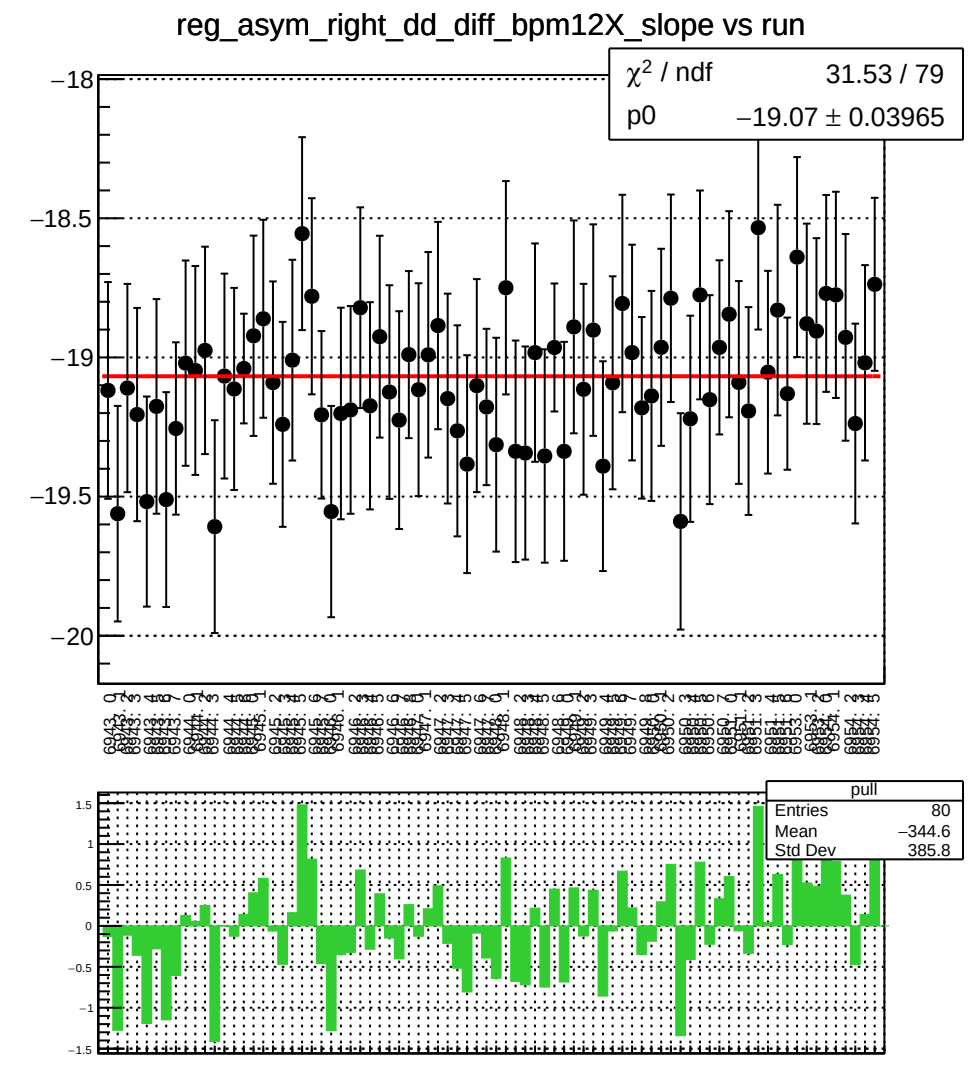

pull1D
Entries 80
Mean 0.02349
Std Dev 0.5749

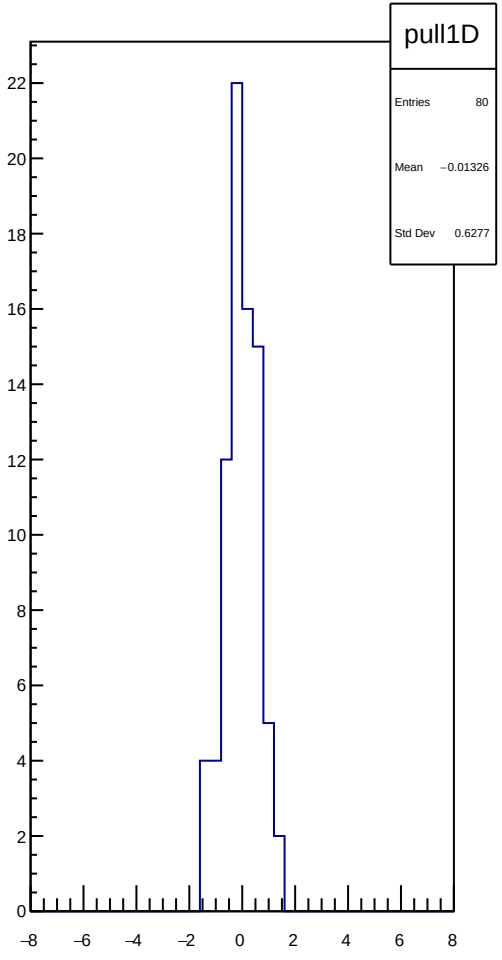

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 46.45 / 79
p0 60.88 ± 1.145
pull
Entries 80
Mean 96.74
Std Dev 57.95

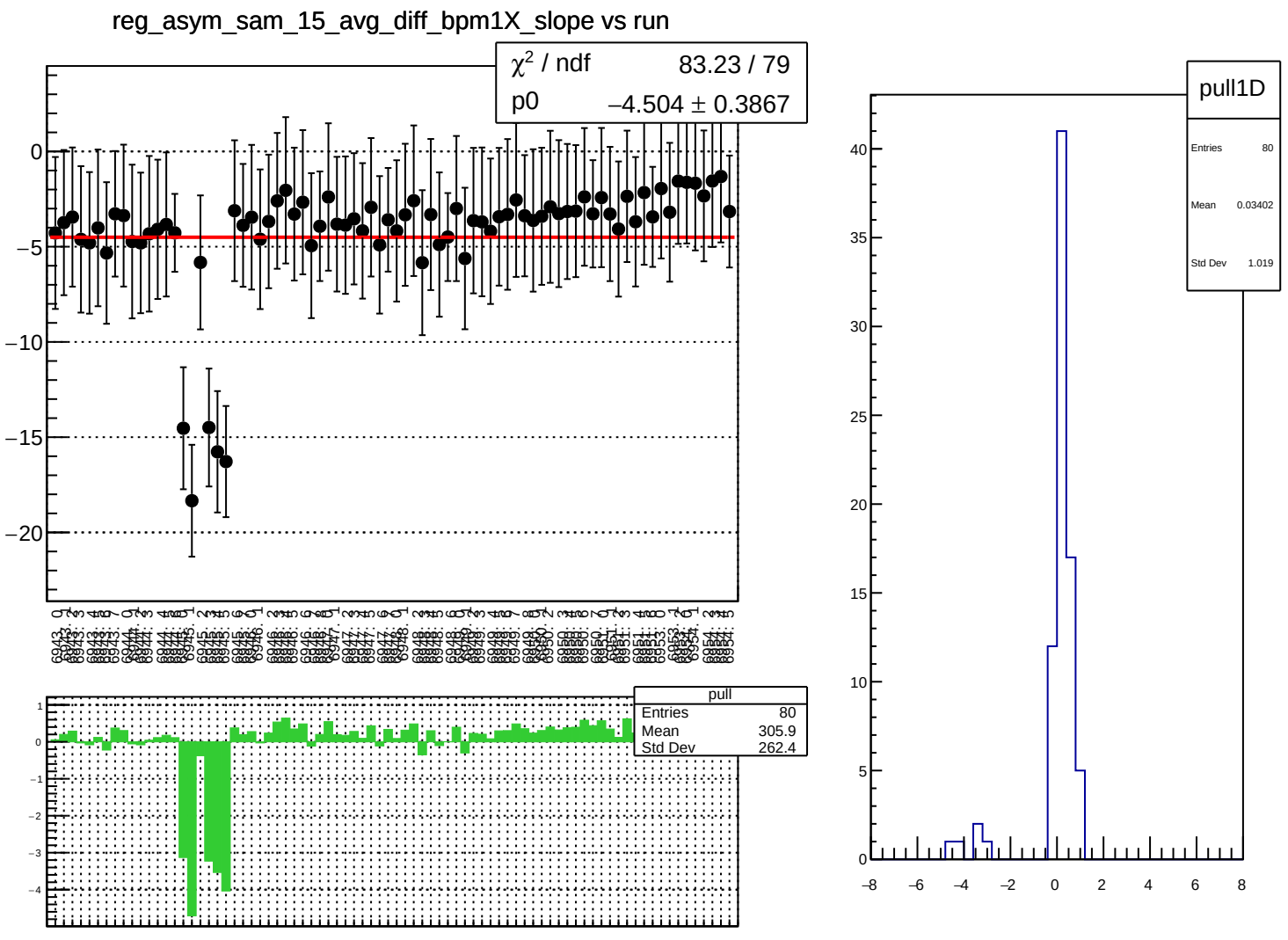

pull1D
Entries 80
Mean 0.03337
Std Dev 0.7613

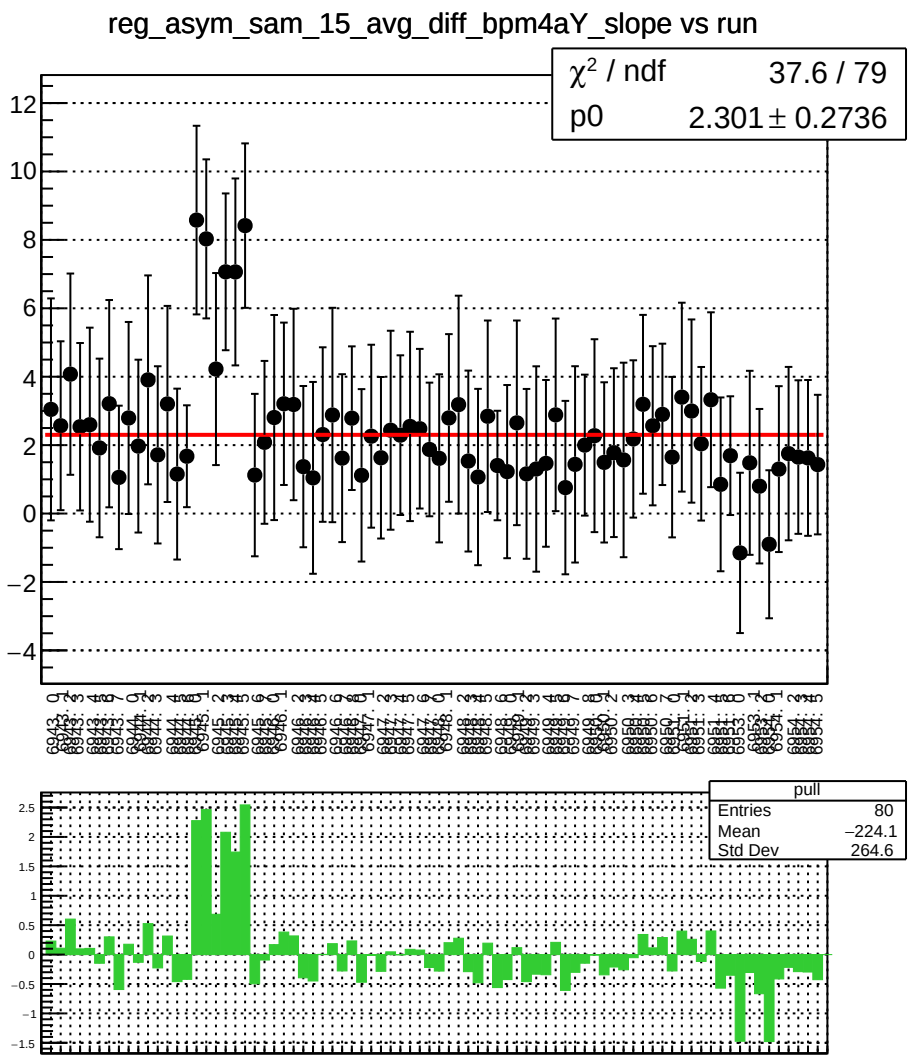

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 29.73 / 79
p0 9.023 ± 0.9985
pull
Entries 80
Mean 72.42
Std Dev 8.584

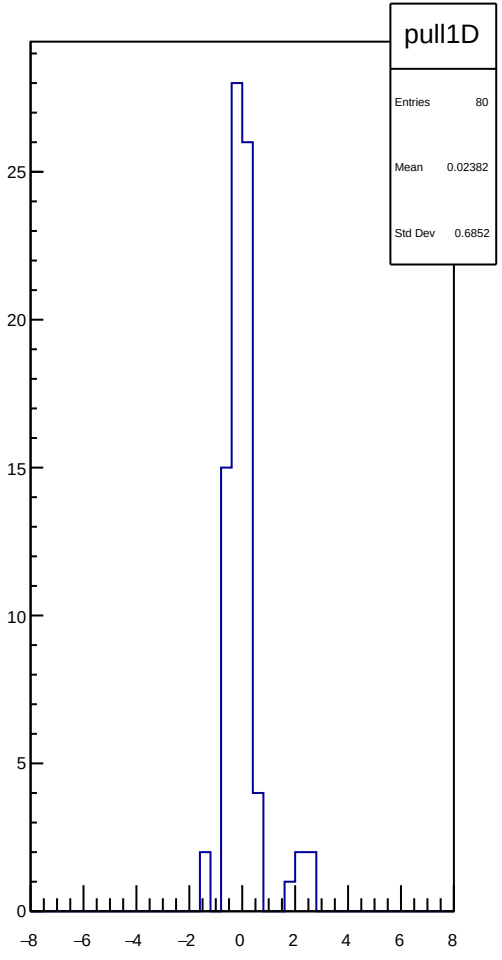

pull1D
Entries 80
Mean −0.0249
Std Dev 0.6091

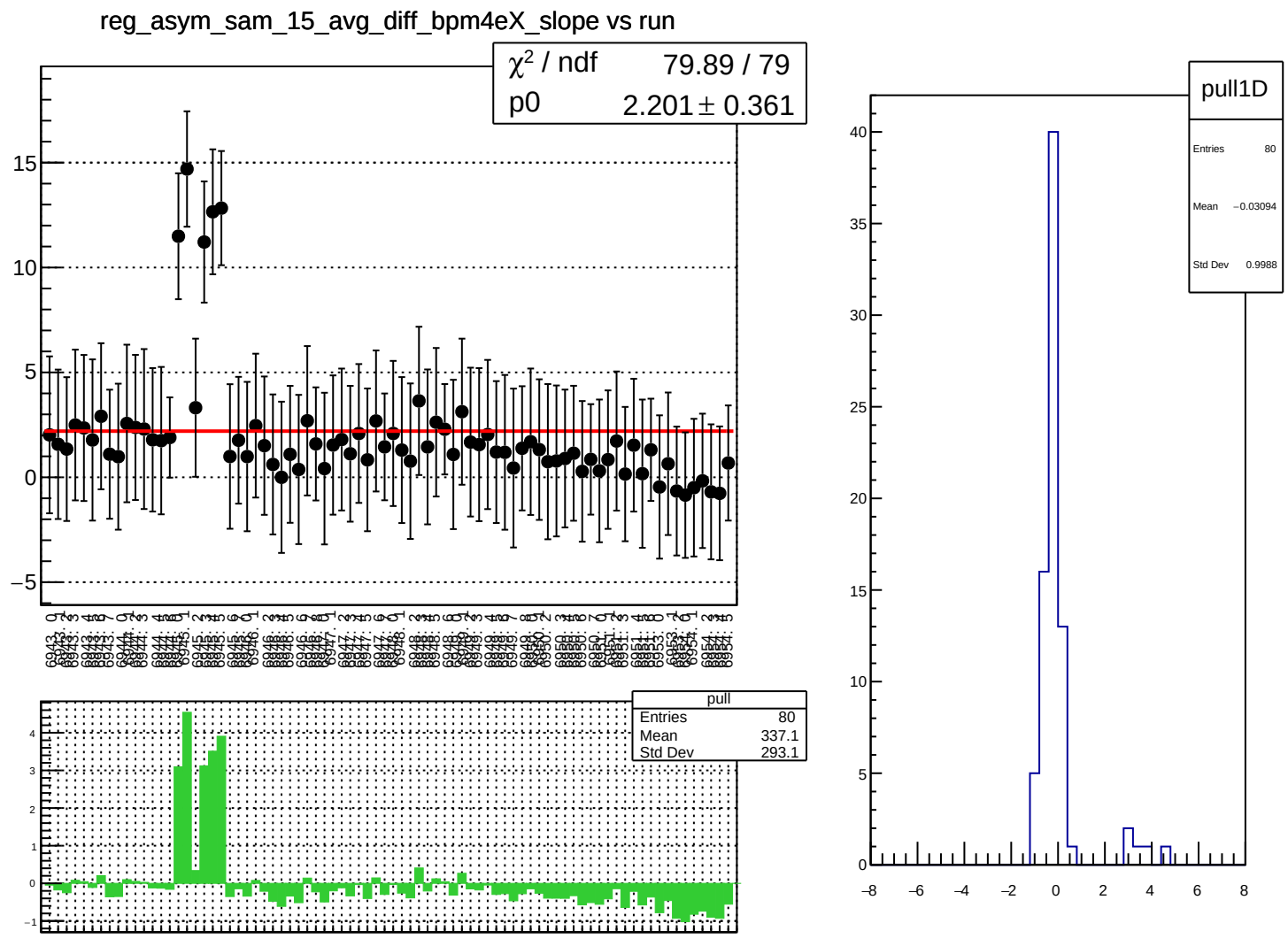

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 31.53 / 79
p0 −19.07 ± 0.03965
pull
Entries 80
Mean −344.6
Std Dev 385.8

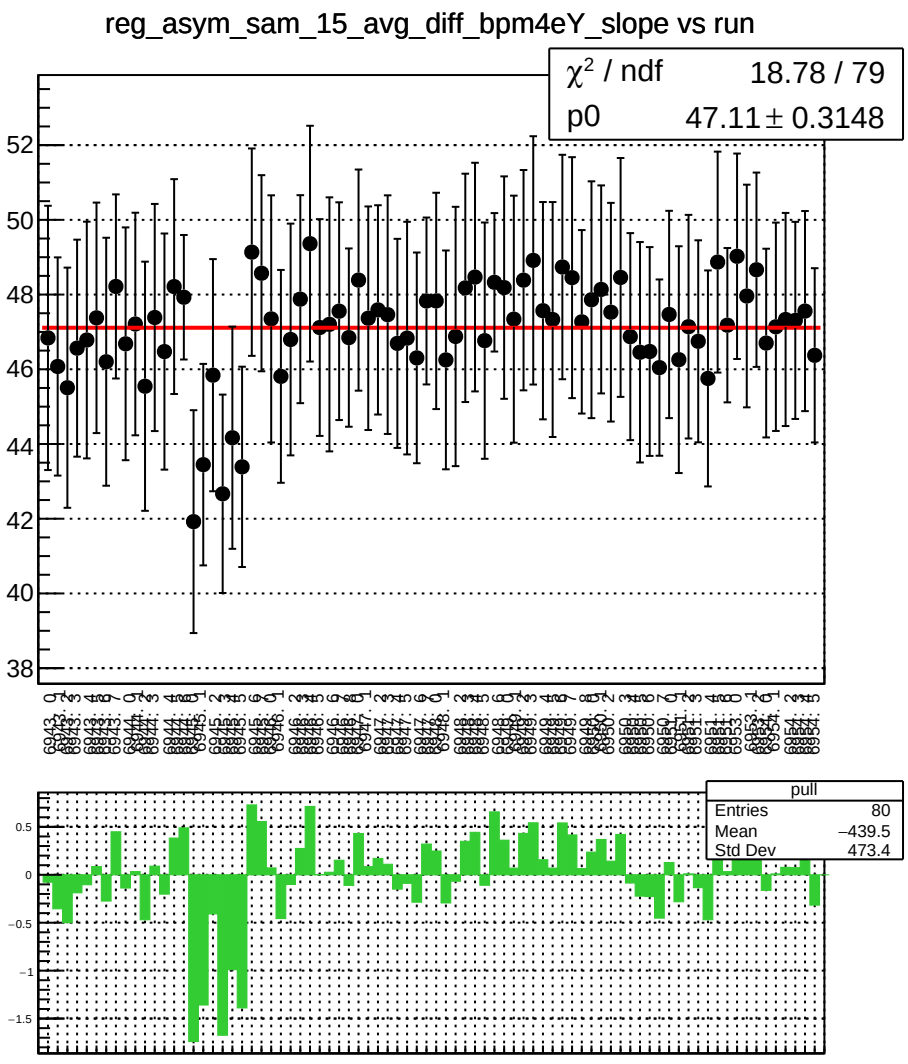

pull1D
Entries 80
Mean −0.01326
Std Dev 0.6277

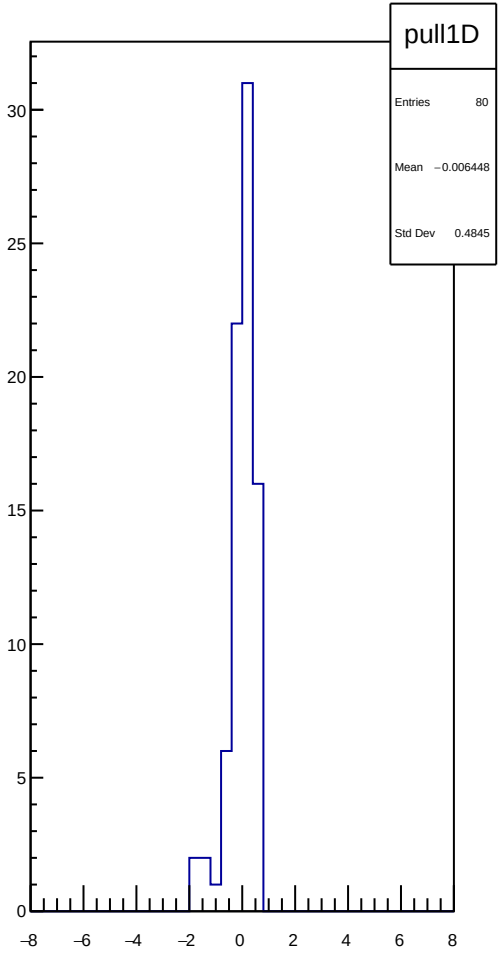

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 83.23 / 79
p0 −4.504 ± 0.3867
pull
Entries 80
Mean 305.9
Std Dev 262.4
pull1D
Entries 80
Mean 0.03402
Std Dev 1.019

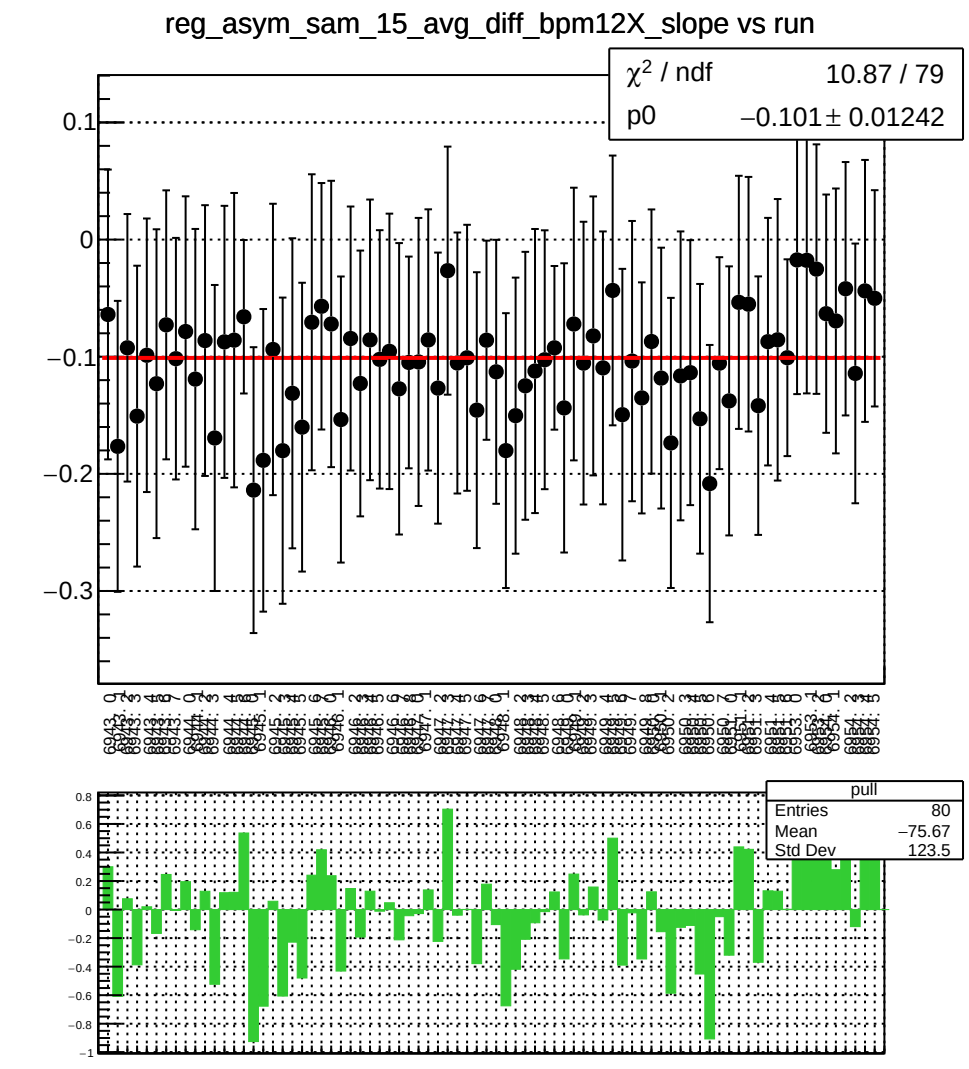

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 37.6 / 79
p0 2.301 ± 0.2736
pull
Entries 80
Mean −224.1
Std Dev 264.6

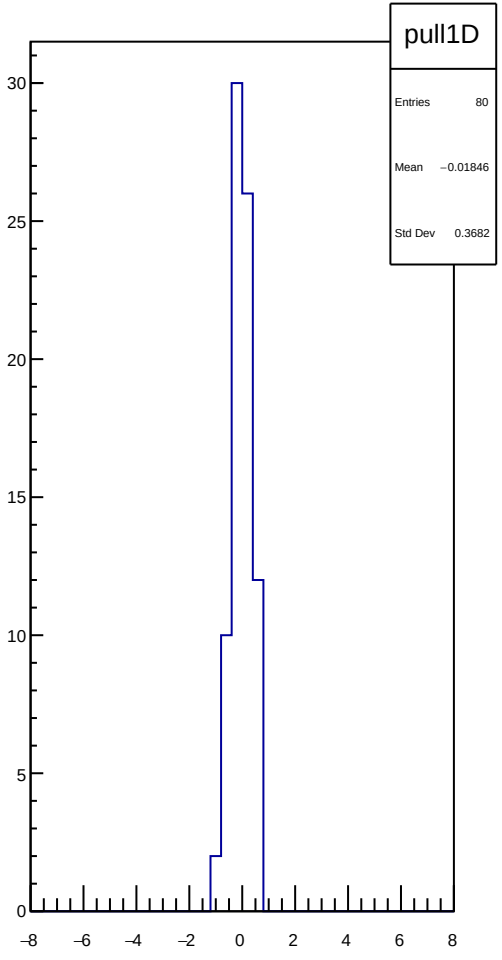

pull1D
Entries 80
Mean 0.02382
Std Dev 0.6852

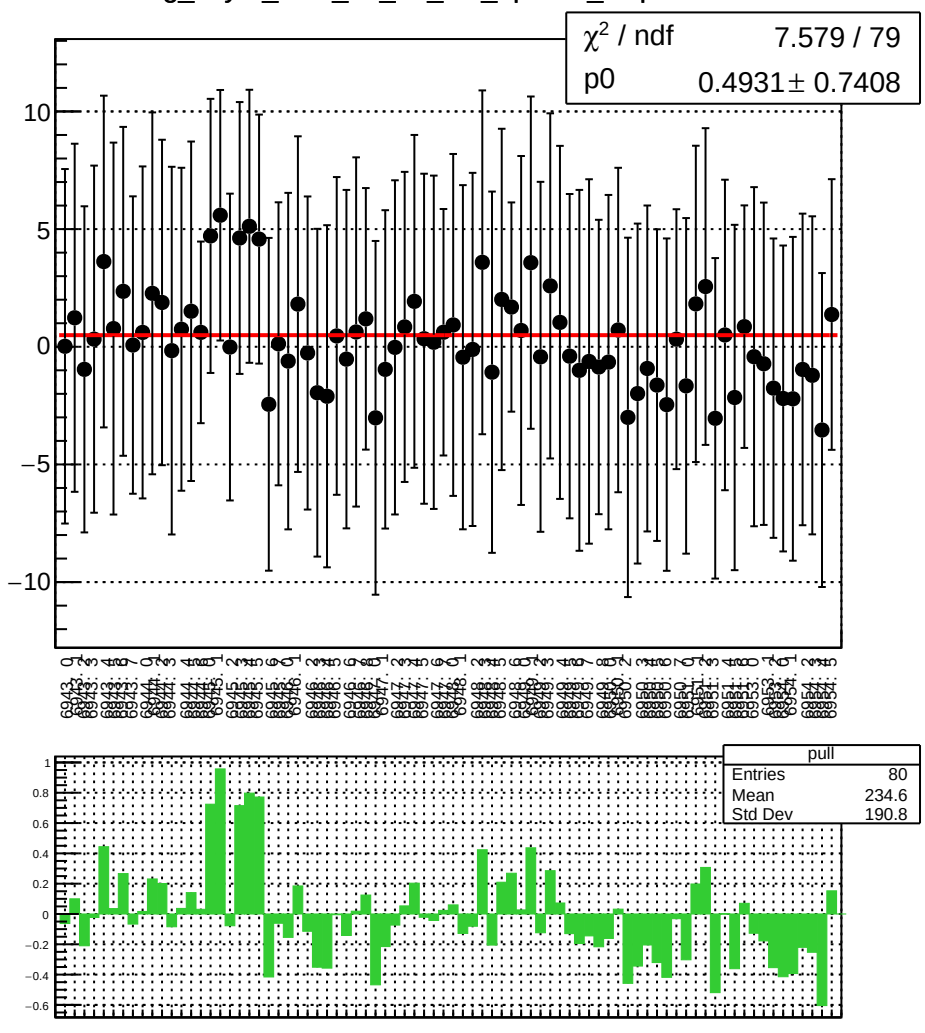

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 79.89 / 79
p0 2.201 ± 0.361
pull
Entries 80
Mean 337.1
Std Dev 293.1
pull1D
Entries 80
Mean −0.03094
Std Dev 0.9988

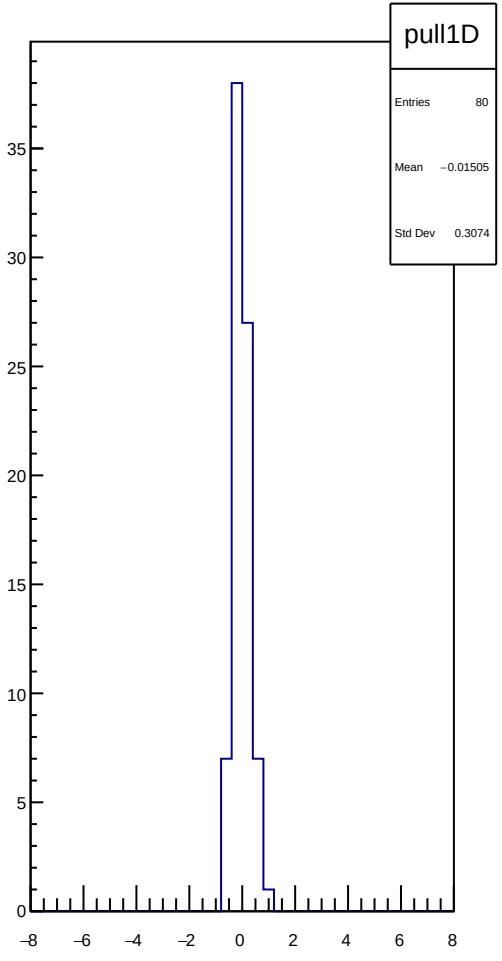

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 18.78 / 79
p0 47.11 ± 0.3148
pull
Entries 80
Mean −439.5
Std Dev 473.4

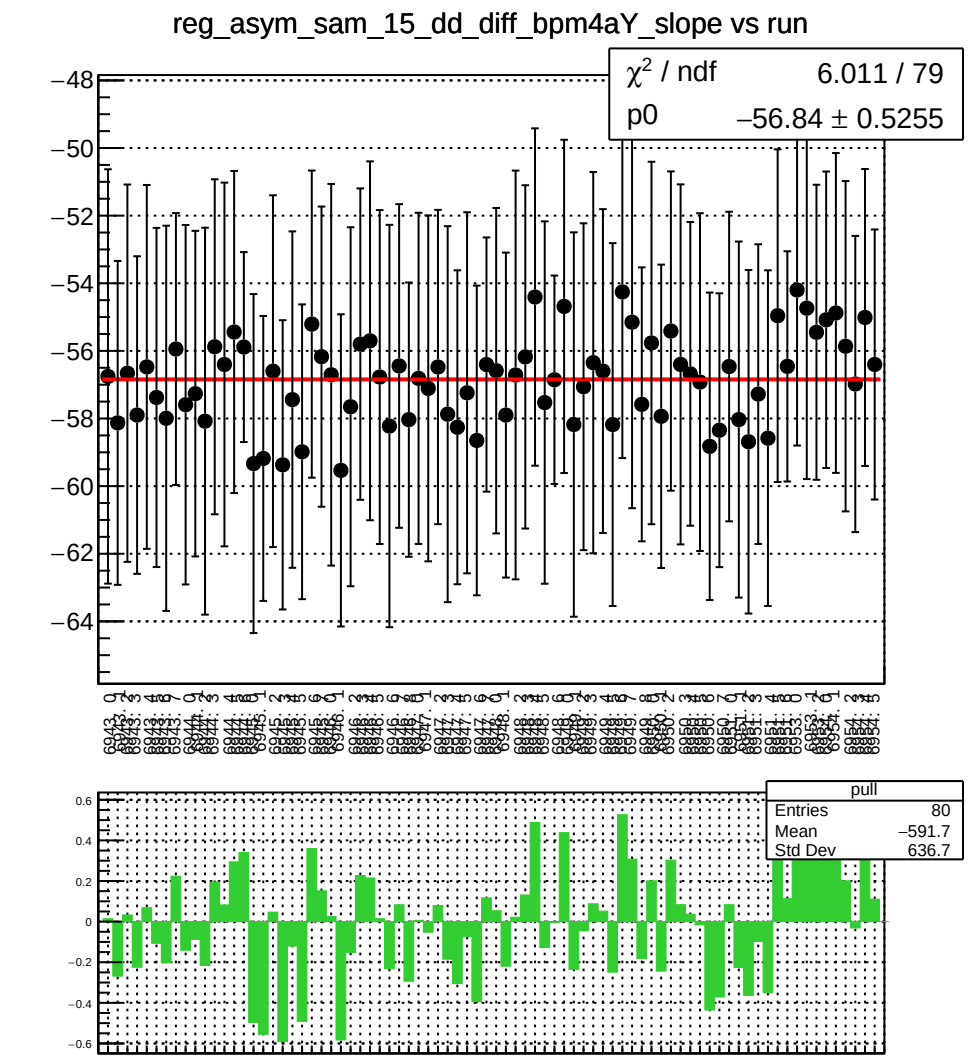

pull1D
Entries 80
Mean −0.006448
Std Dev 0.4845

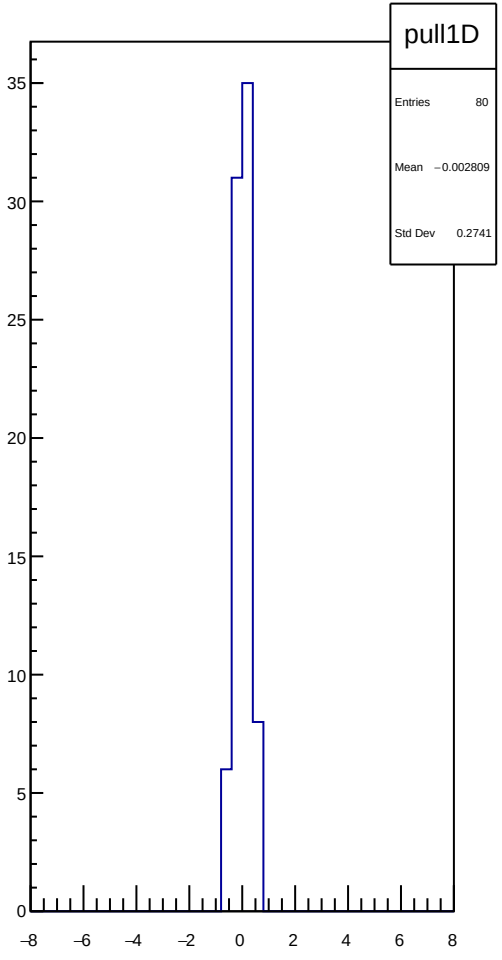

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 10.87 / 79
p0 −0.101 ± 0.01242
pull
Entries 80
Mean −75.67
Std Dev 123.5

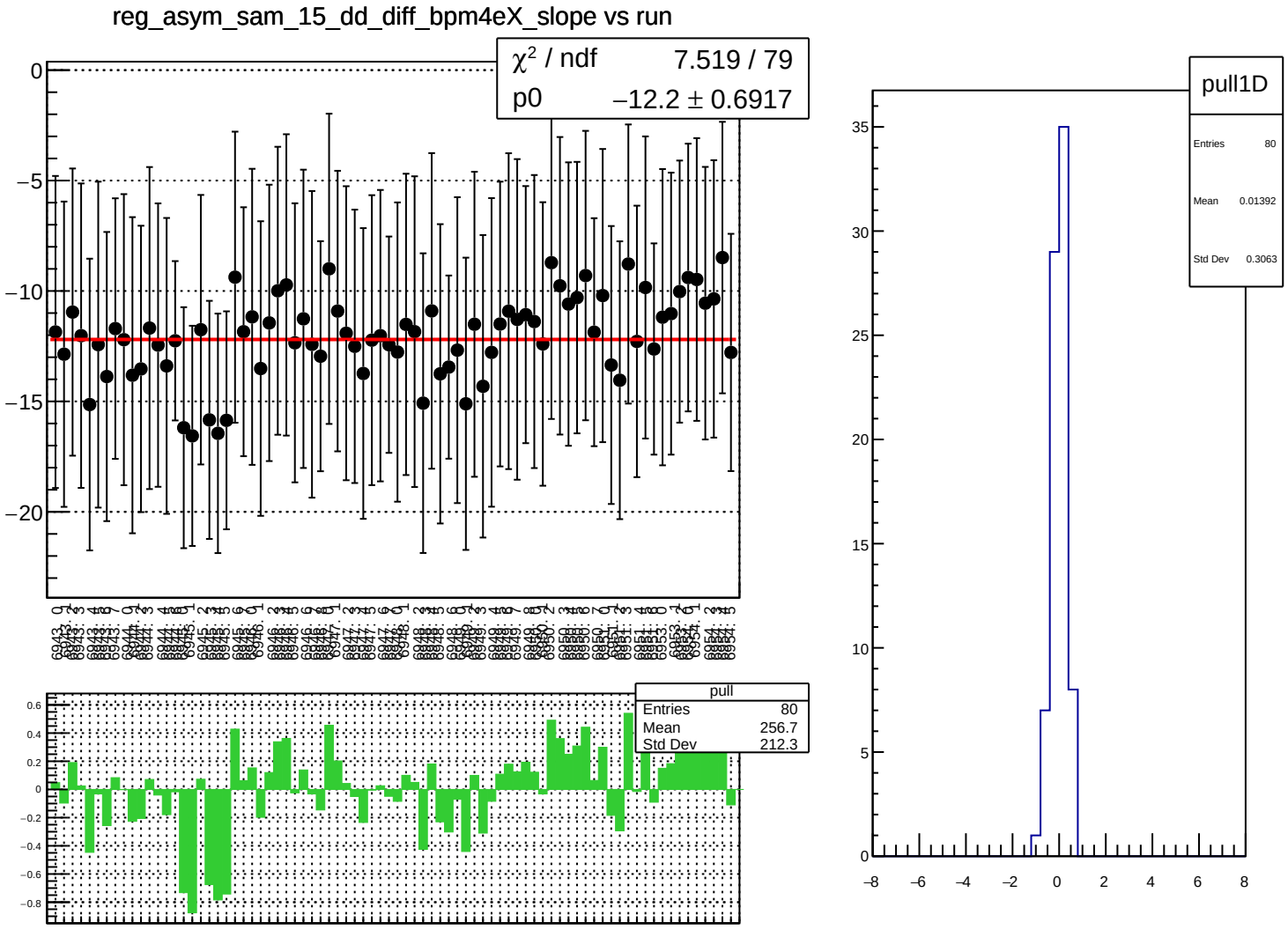

pull1D
Entries 80
Mean −0.01846
Std Dev 0.3682

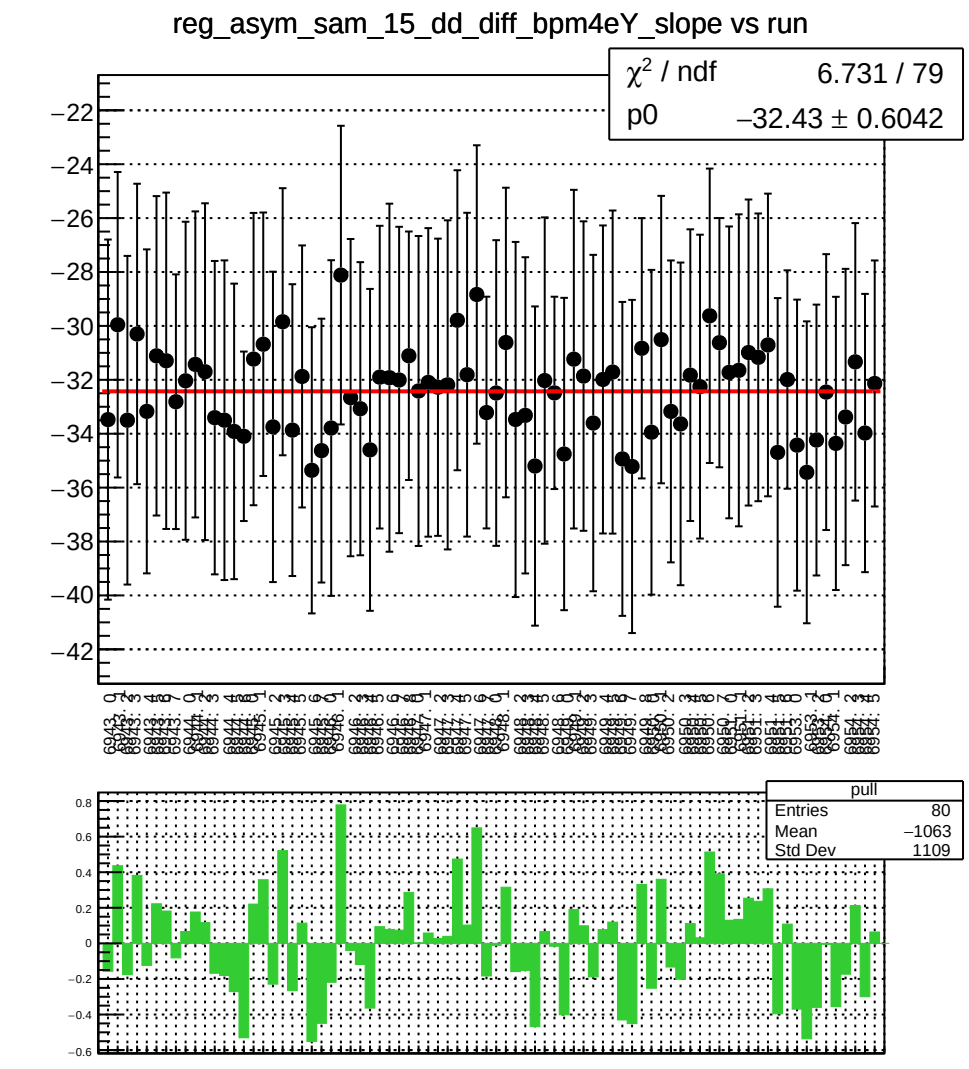

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 7.579 / 79
p0 0.4931 ± 0.7408
pull
Entries 80
Mean 234.6
Std Dev 190.8

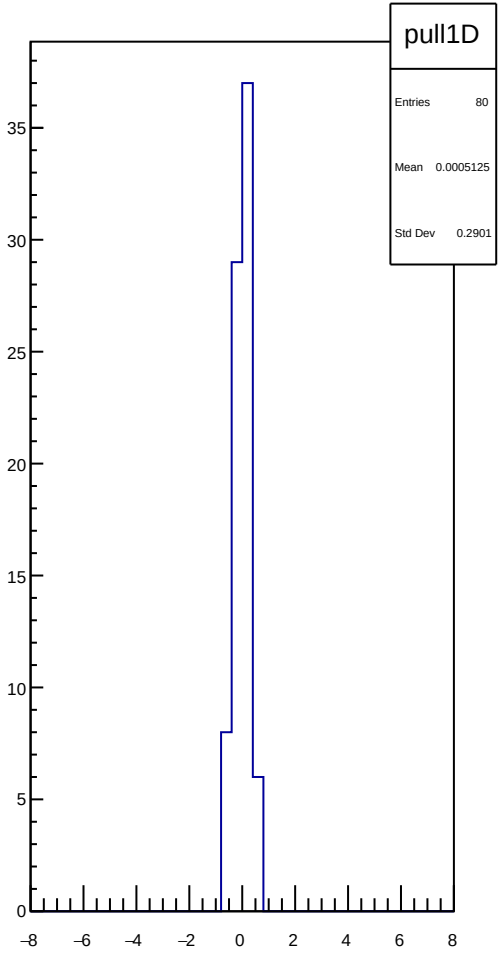

pull1D
Entries 80
Mean −0.01505
Std Dev 0.3074

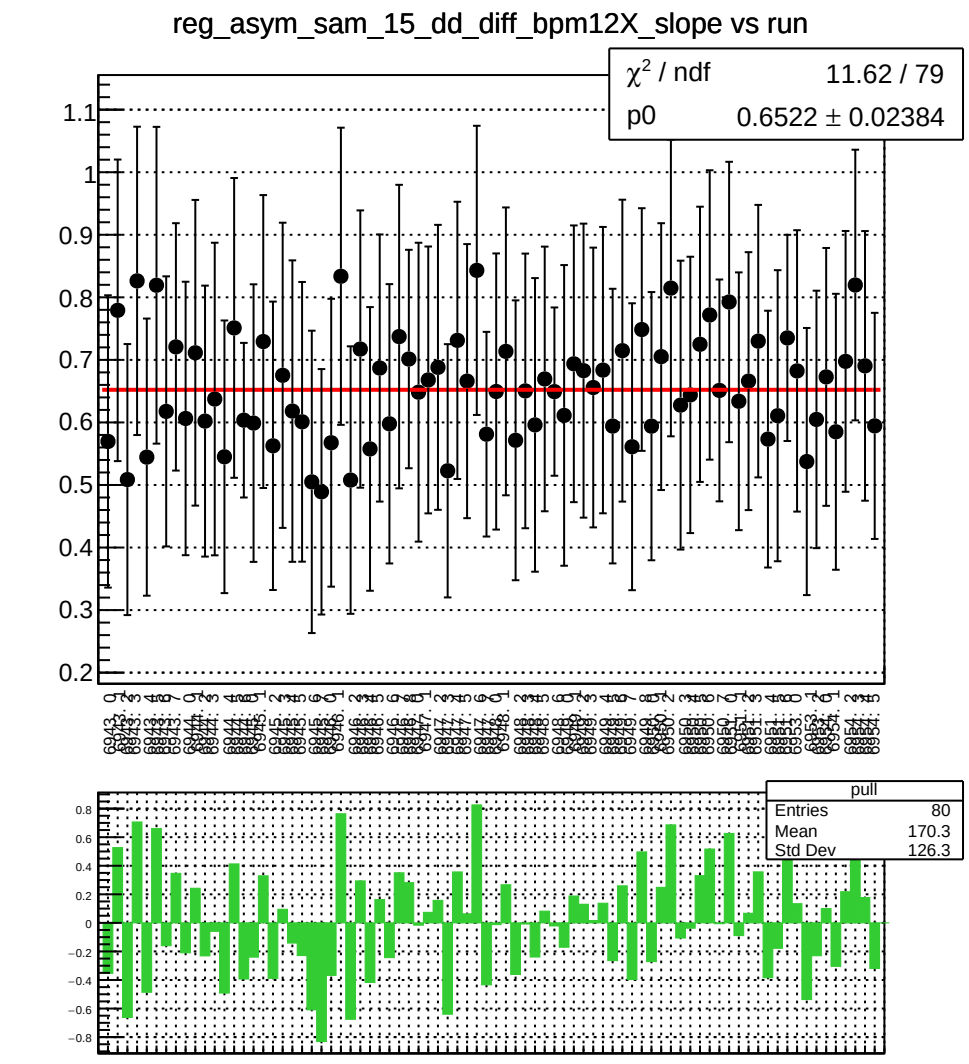

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.011 / 79
p0 −56.84 ± 0.5255
pull
Entries 80
Mean −591.7
Std Dev 636.7

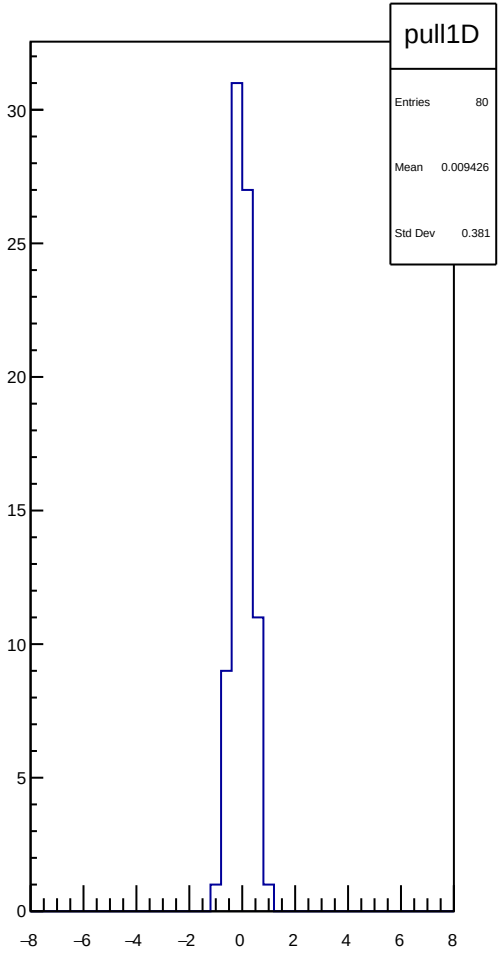

pull1D
Entries 80
Mean −0.002809
Std Dev 0.2741

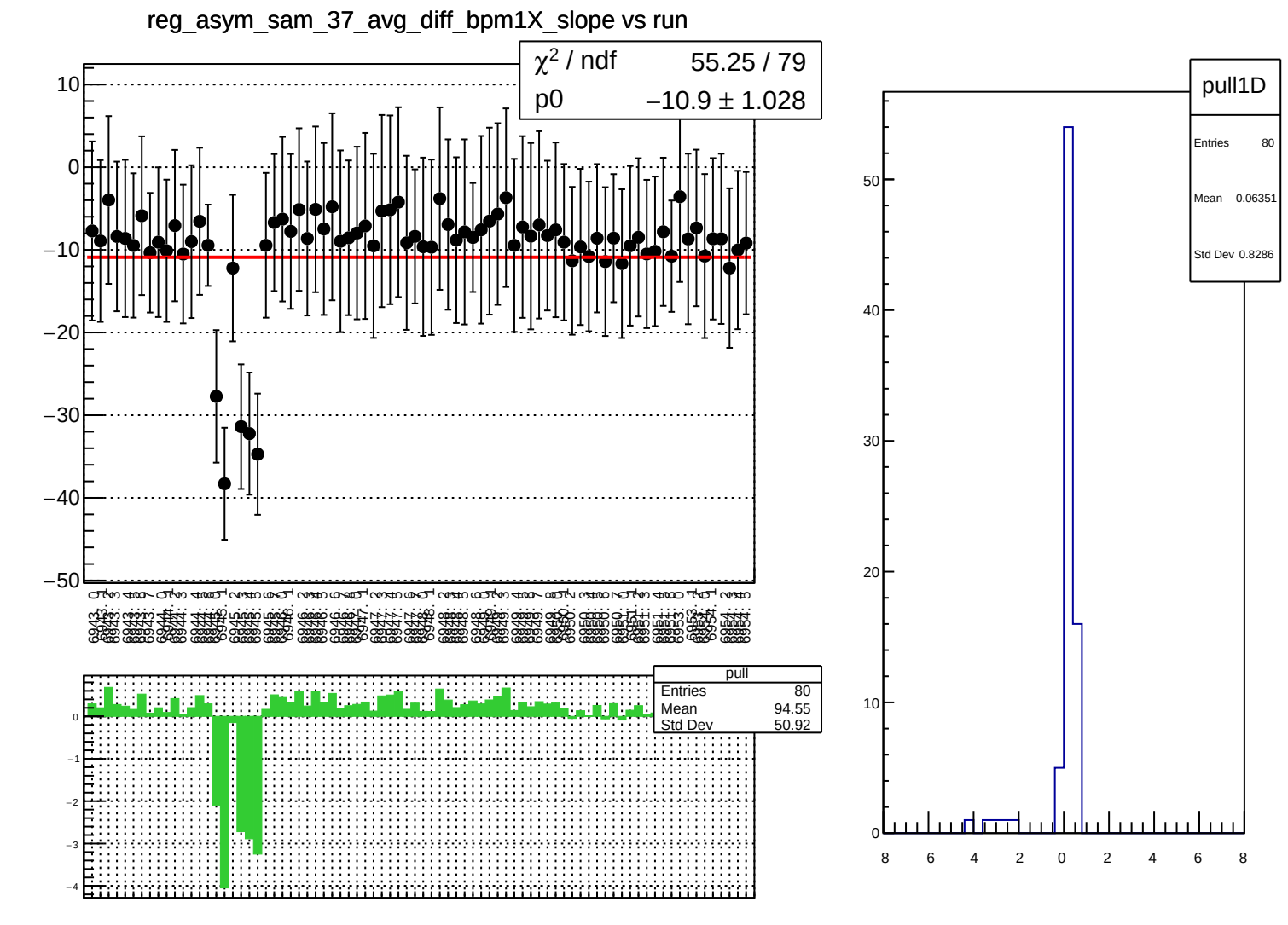

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 7.519 / 79
p0 −12.2 ± 0.6917
pull
Entries 80
Mean 256.7
Std Dev 212.3
pull1D
Entries 80
Mean 0.01392
Std Dev 0.3063

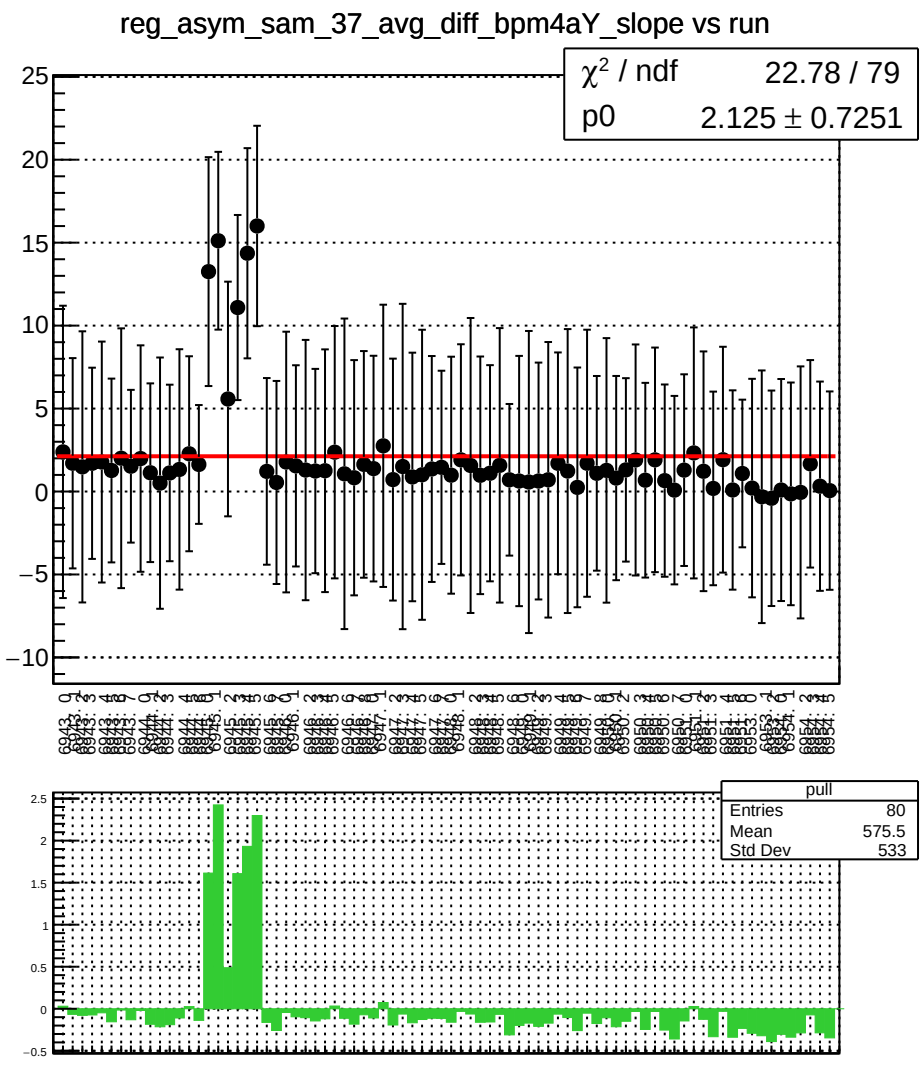

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.731 / 79
p0 −32.43 ± 0.6042
pull
Entries 80
Mean −1063
Std Dev 1109

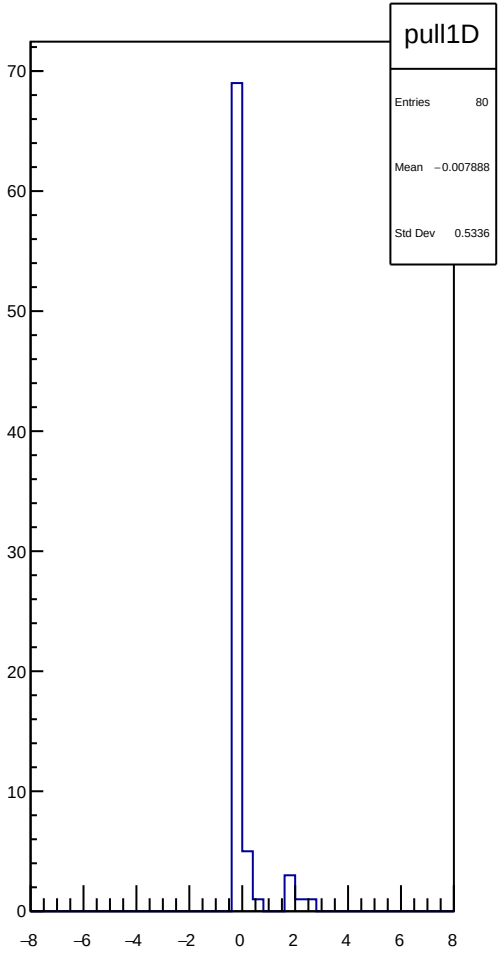

pull1D
Entries 80
Mean 0.0005125
Std Dev 0.2901

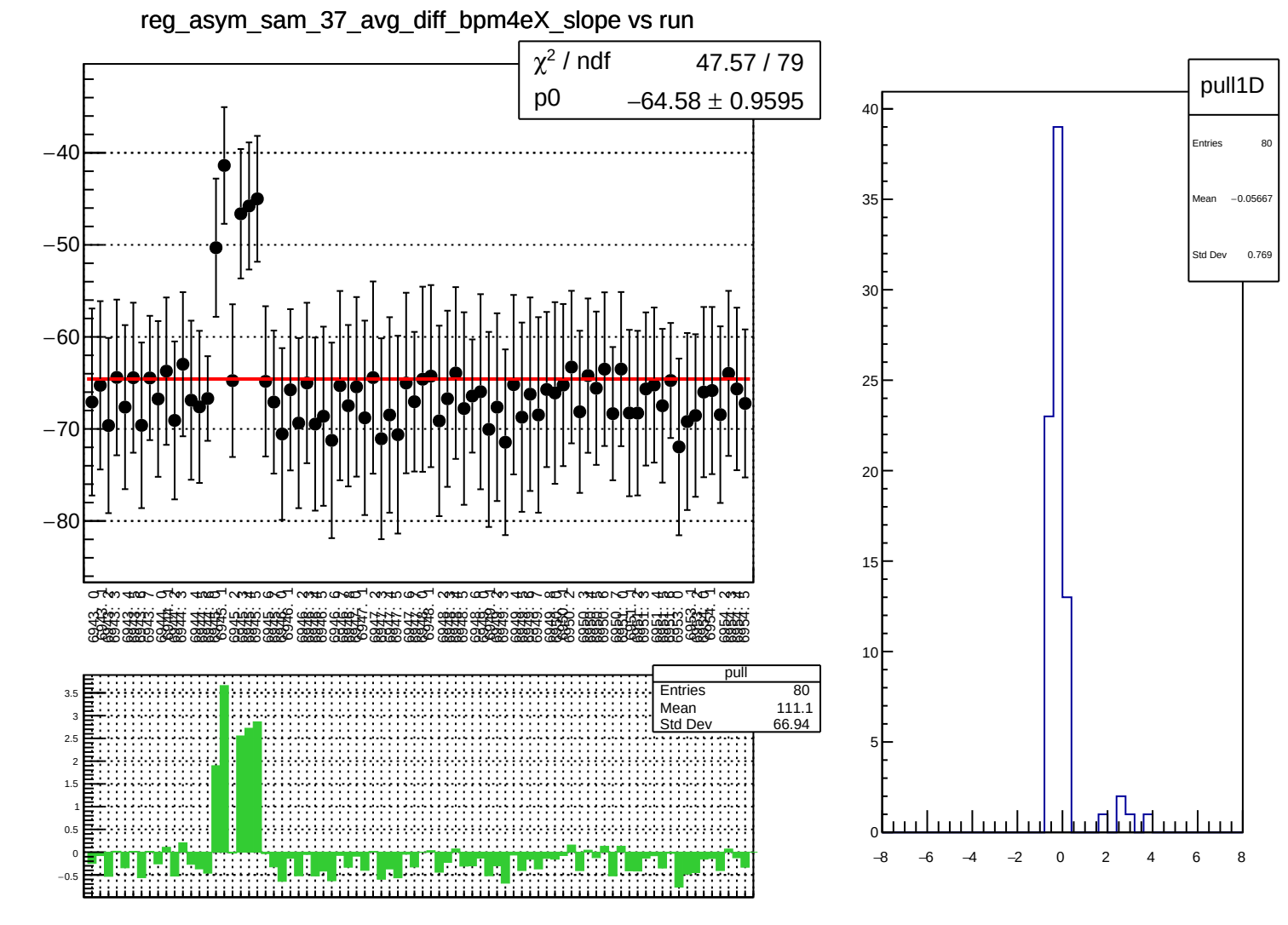

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 11.62 / 79
p0 0.6522 ± 0.02384
pull
Entries 80
Mean 170.3
Std Dev 126.3

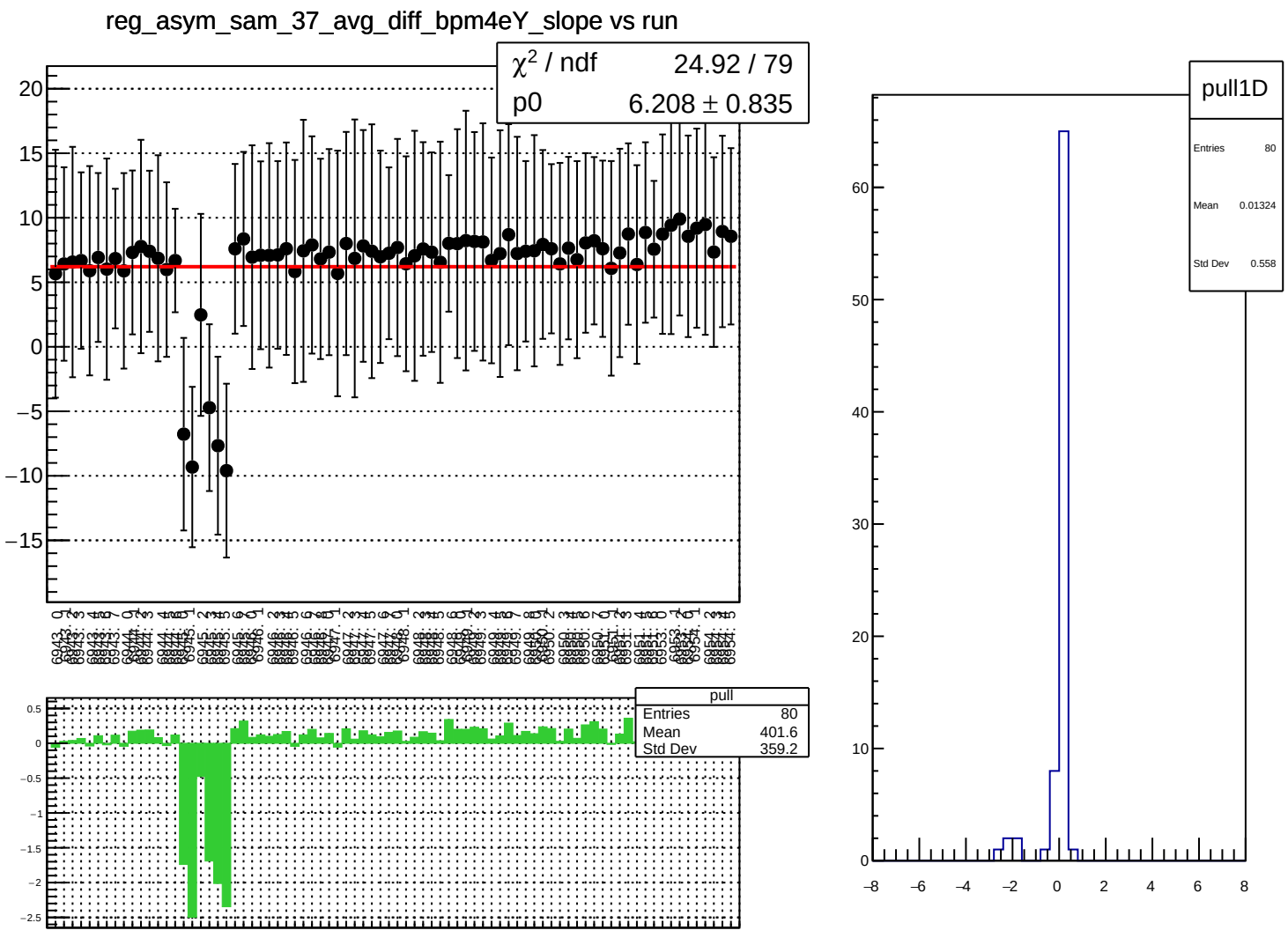

pull1D
Entries 80
Mean 0.009426
Std Dev 0.381

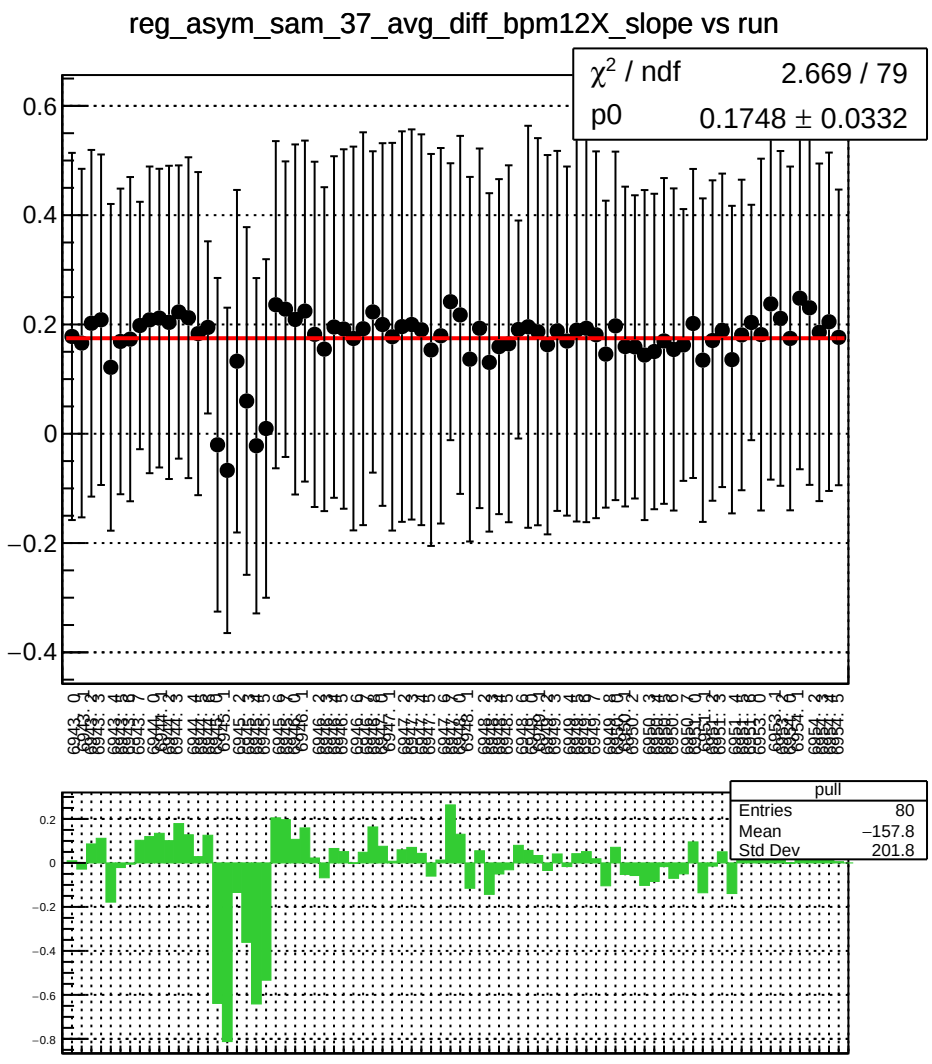

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 55.25 / 79
p0 −10.9 ± 1.028
pull
Entries 80
Mean 94.55
Std Dev 50.92
pull1D
Entries 80
Mean 0.06351
Std Dev 0.8286

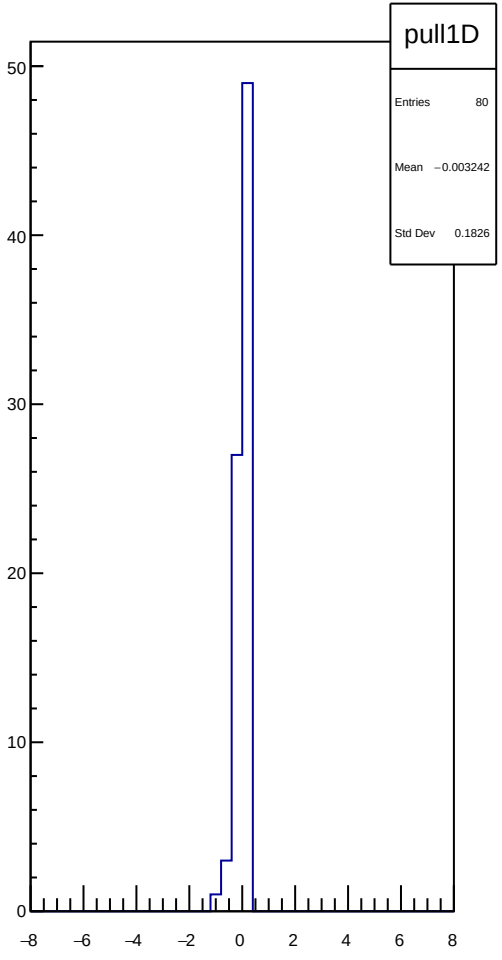

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 22.78 / 79
p0 2.125 ± 0.7251
pull
Entries 80
Mean 575.5
Std Dev 533

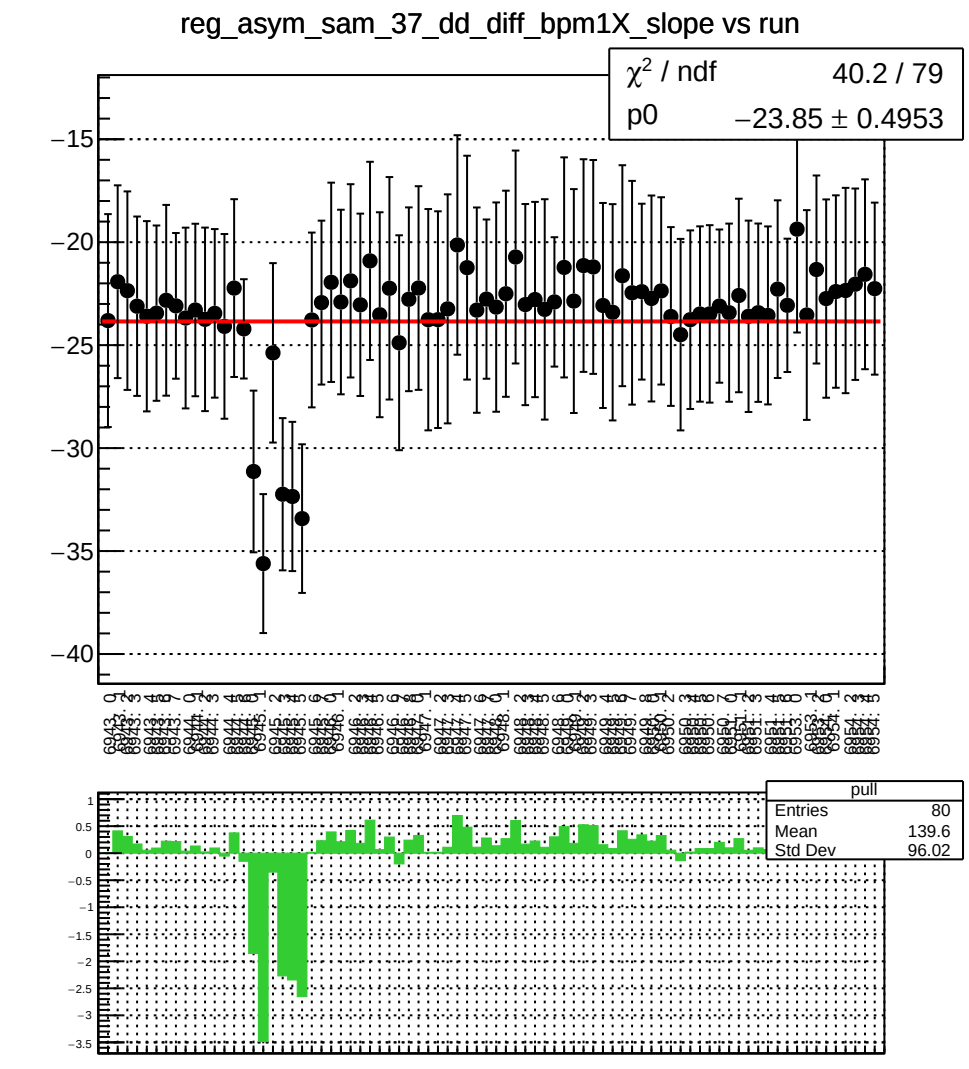

pull1D
Entries 80
Mean −0.007888
Std Dev 0.5336

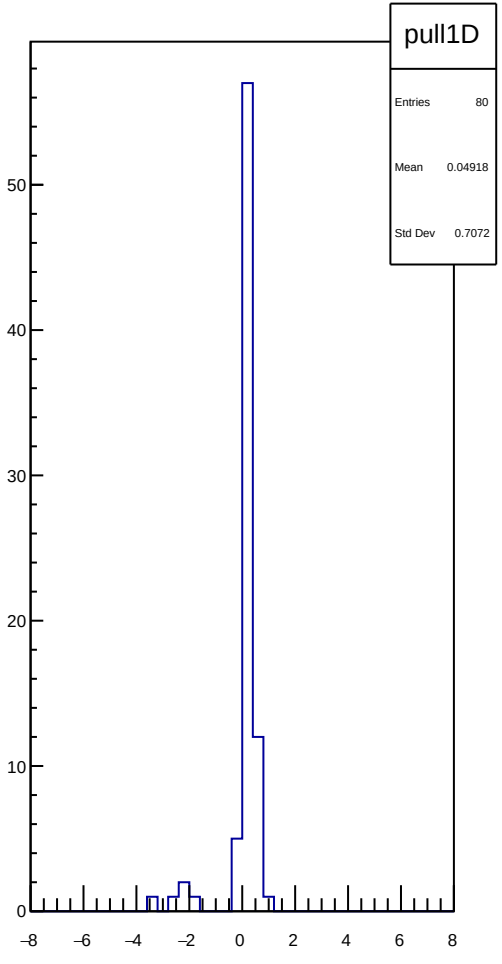

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 47.57 / 79
p0 −64.58 ± 0.9595
pull
Entries 80
Mean 111.1
Std Dev 66.94
pull1D
Entries 80
Mean −0.05667
Std Dev 0.769

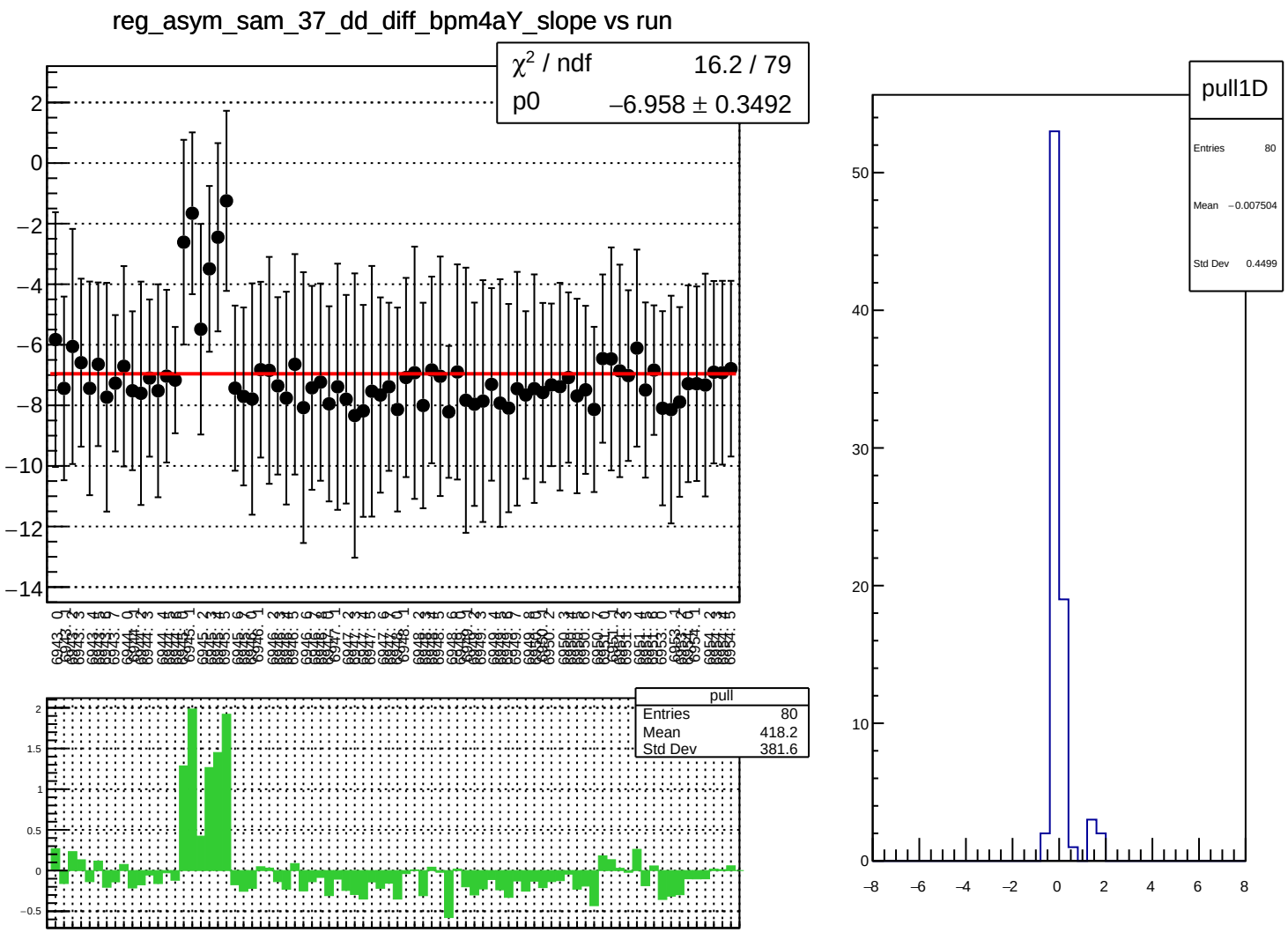

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 24.92 / 79
p0 6.208 ± 0.835
pull
Entries 80
Mean 401.6
Std Dev 359.2
pull1D
Entries 80
Mean 0.01324
Std Dev 0.558

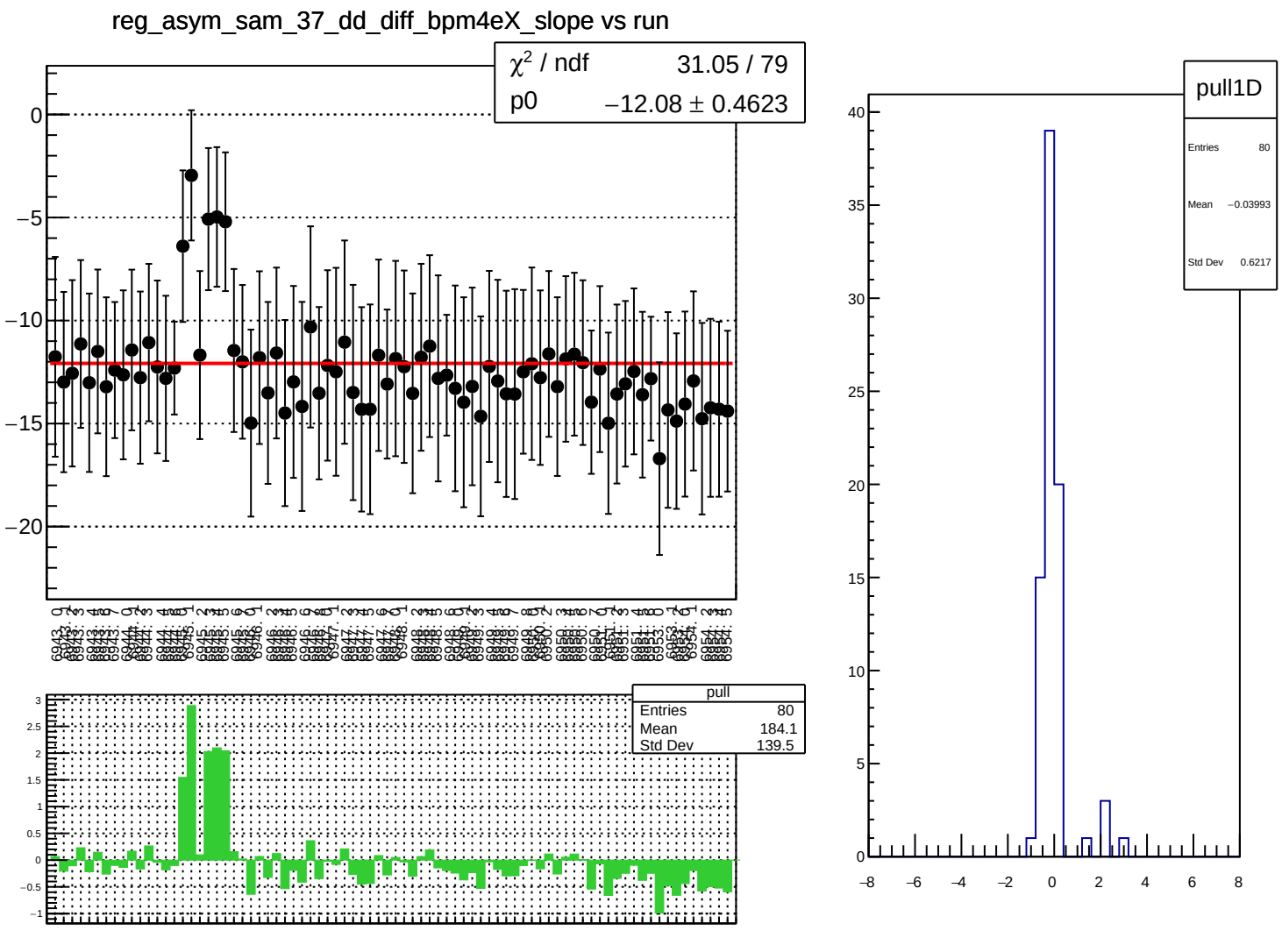

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 2.669 / 79
p0 0.1748 ± 0.0332
pull
Entries 80
Mean −157.8
Std Dev 201.8

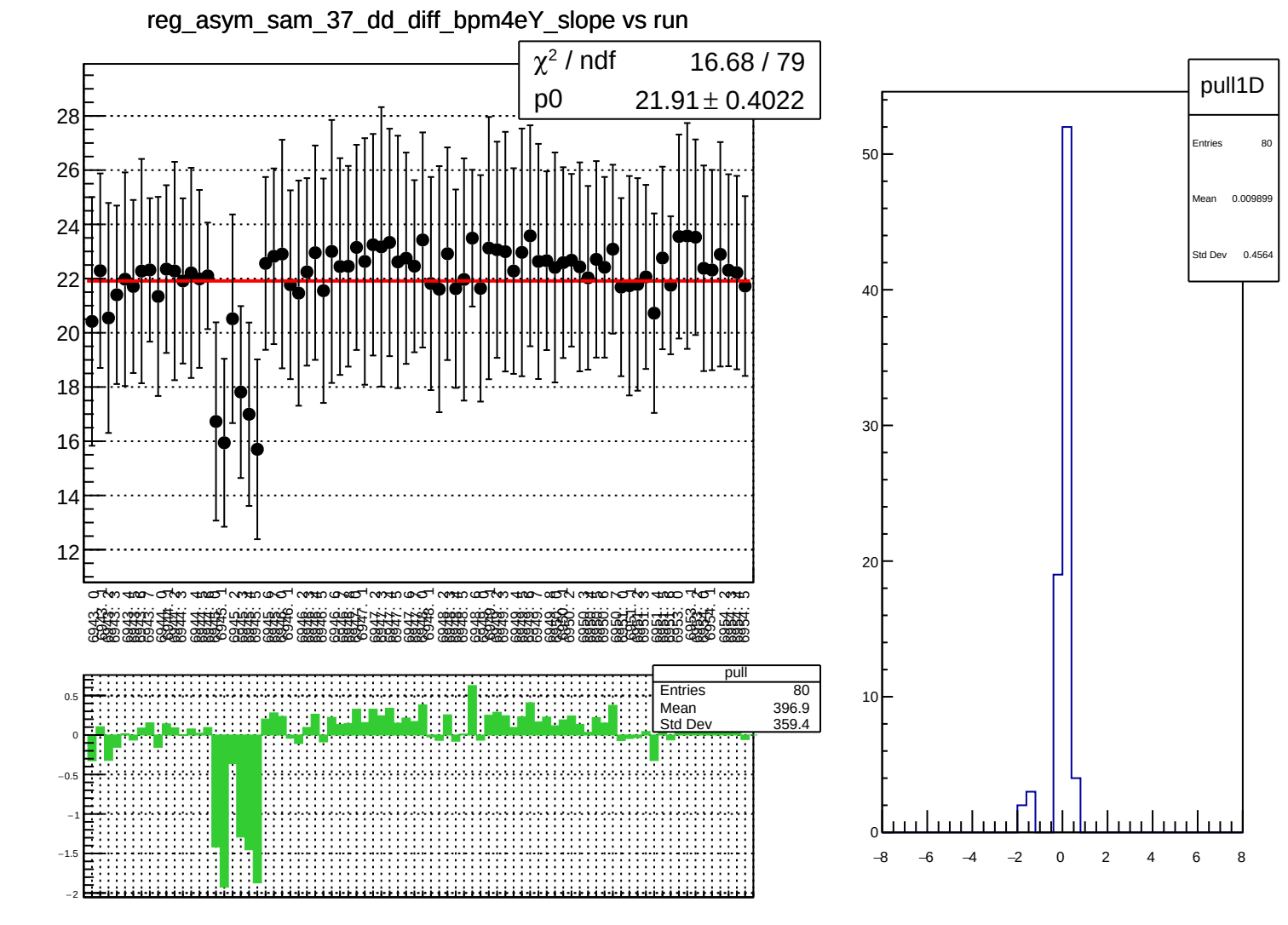

pull1D
Entries 80
Mean −0.003242
Std Dev 0.1826

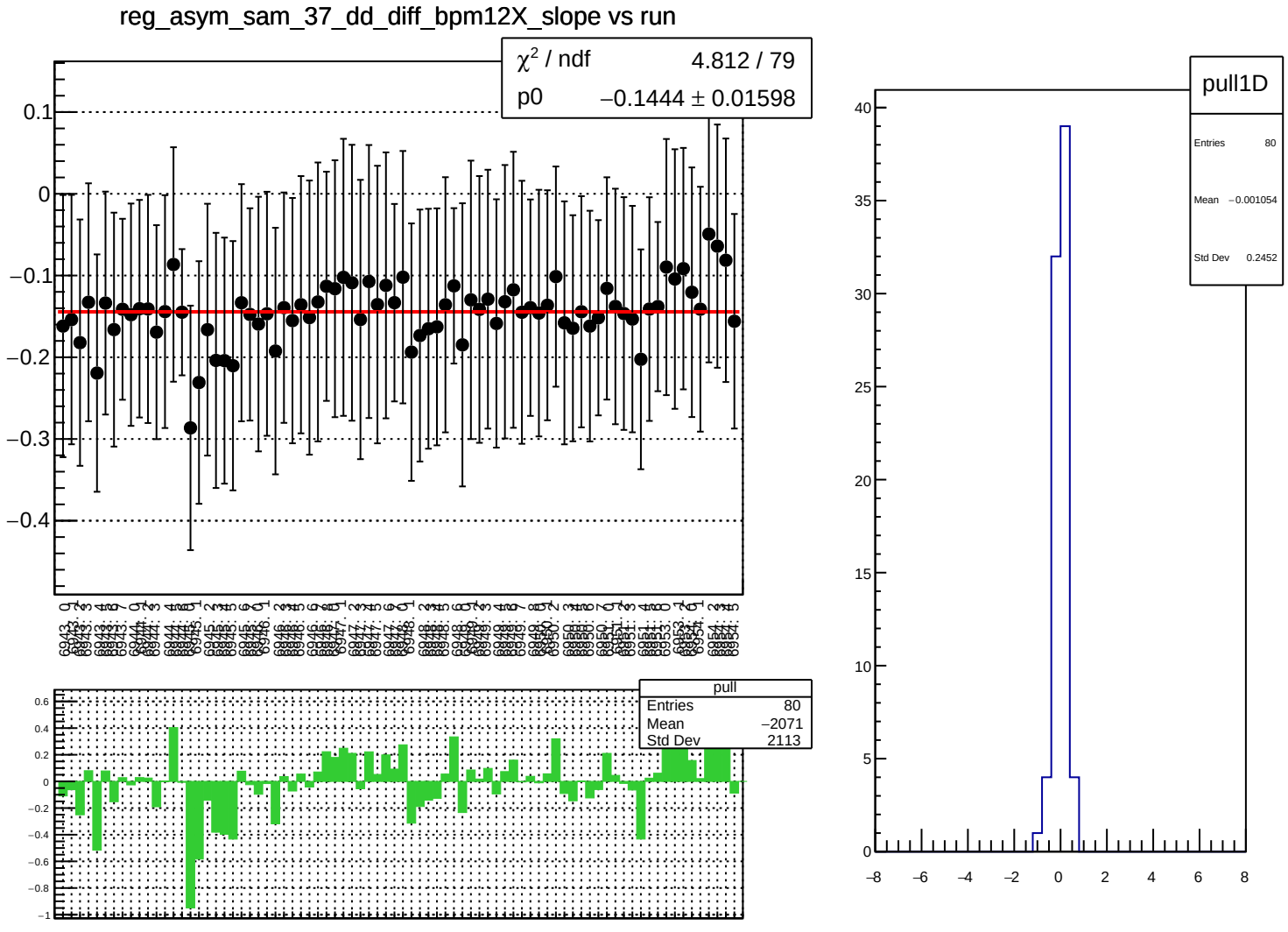

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 40.2 / 79
p0 −23.85 ± 0.4953
pull
Entries 80
Mean 139.6
Std Dev 96.02

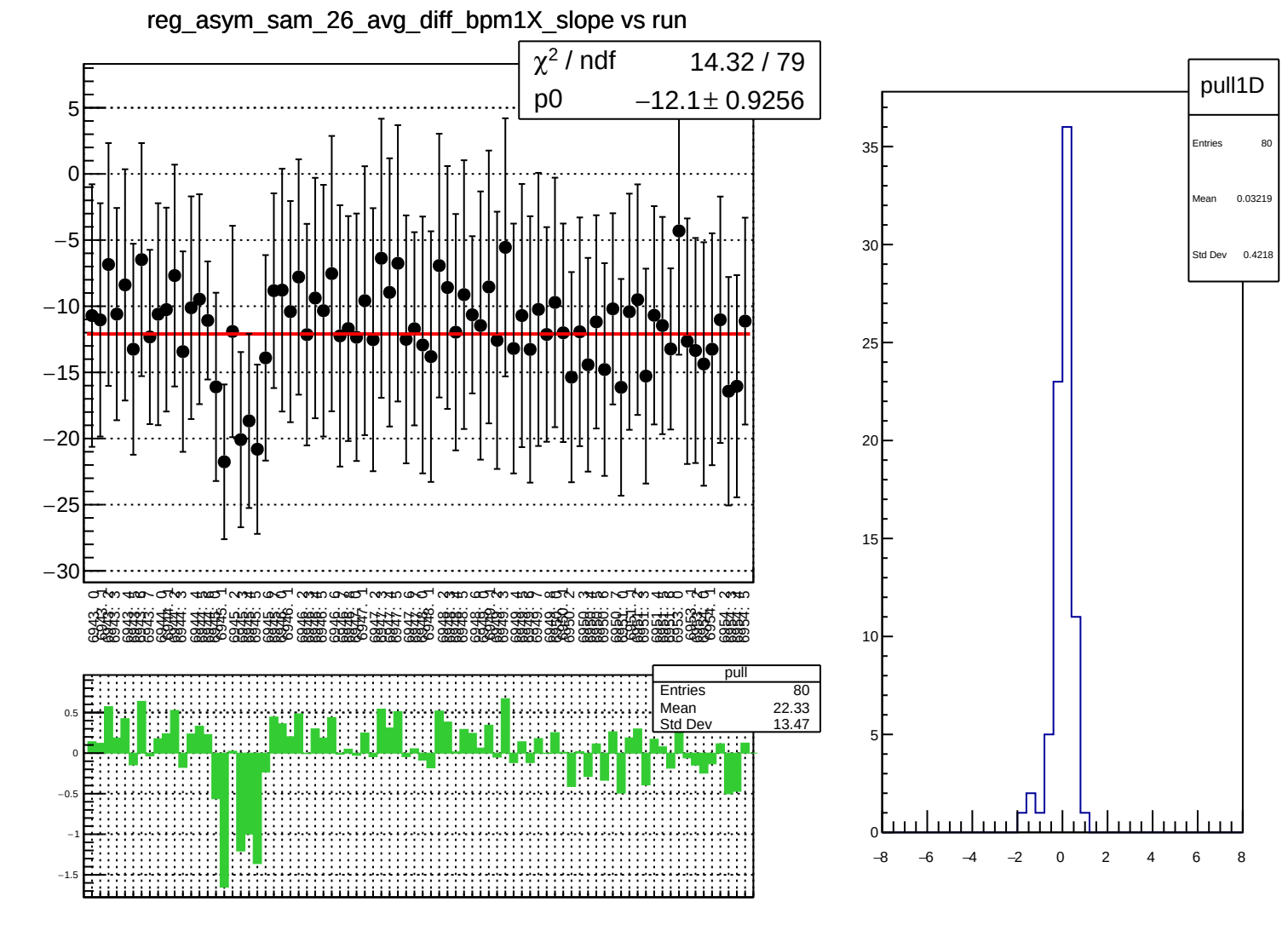

pull1D
Entries 80
Mean 0.04918
Std Dev 0.7072

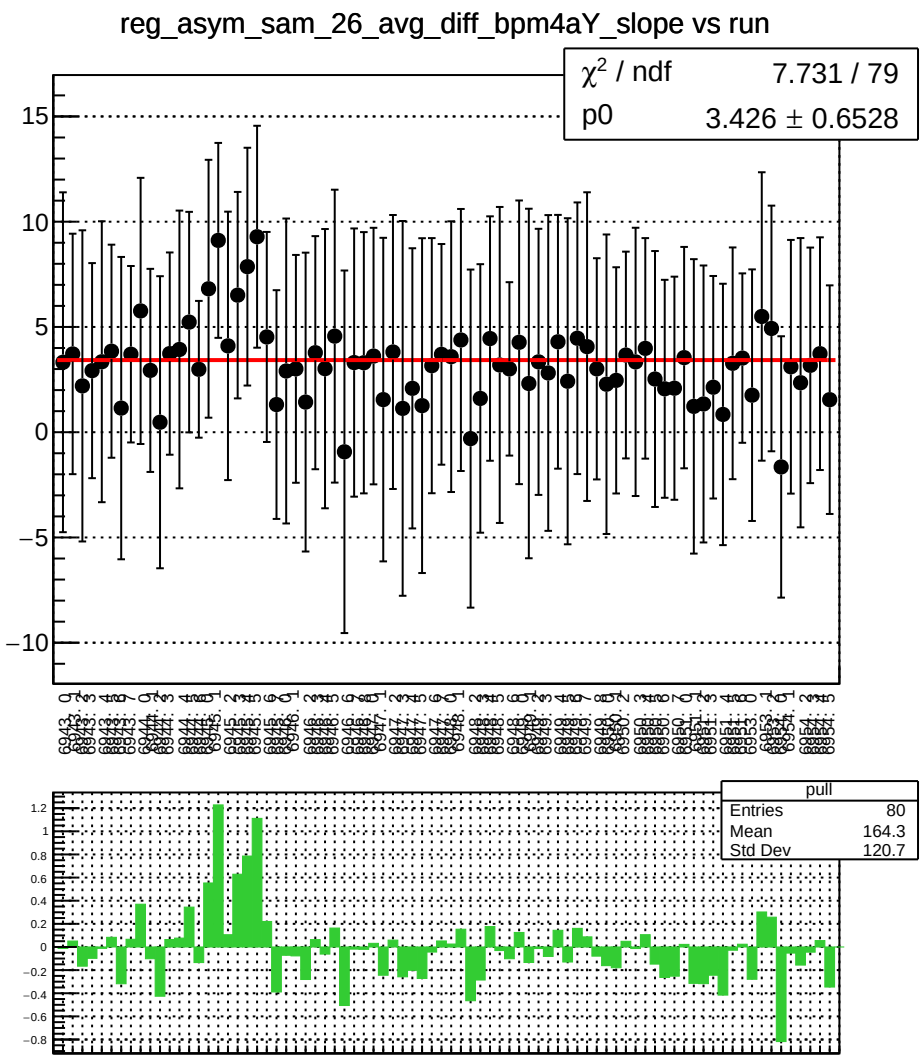

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 16.2 / 79
p0 −6.958 ± 0.3492
pull
Entries 80
Mean 418.2
Std Dev 381.6
pull1D
Entries 80
Mean −0.007504
Std Dev 0.4499

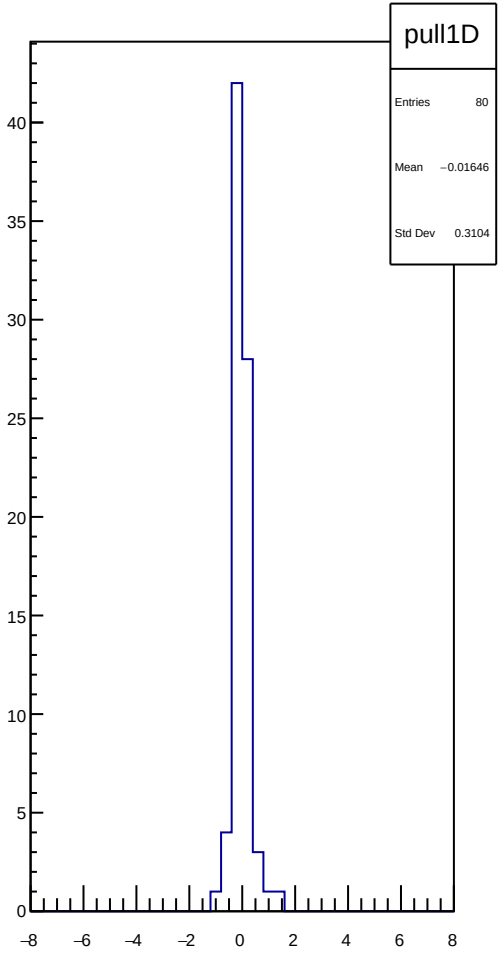

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 31.05 / 79
p0 −12.08 ± 0.4623
pull
Entries 80
Mean 184.1
Std Dev 139.5
pull1D
Entries 80
Mean −0.03993
Std Dev 0.6217

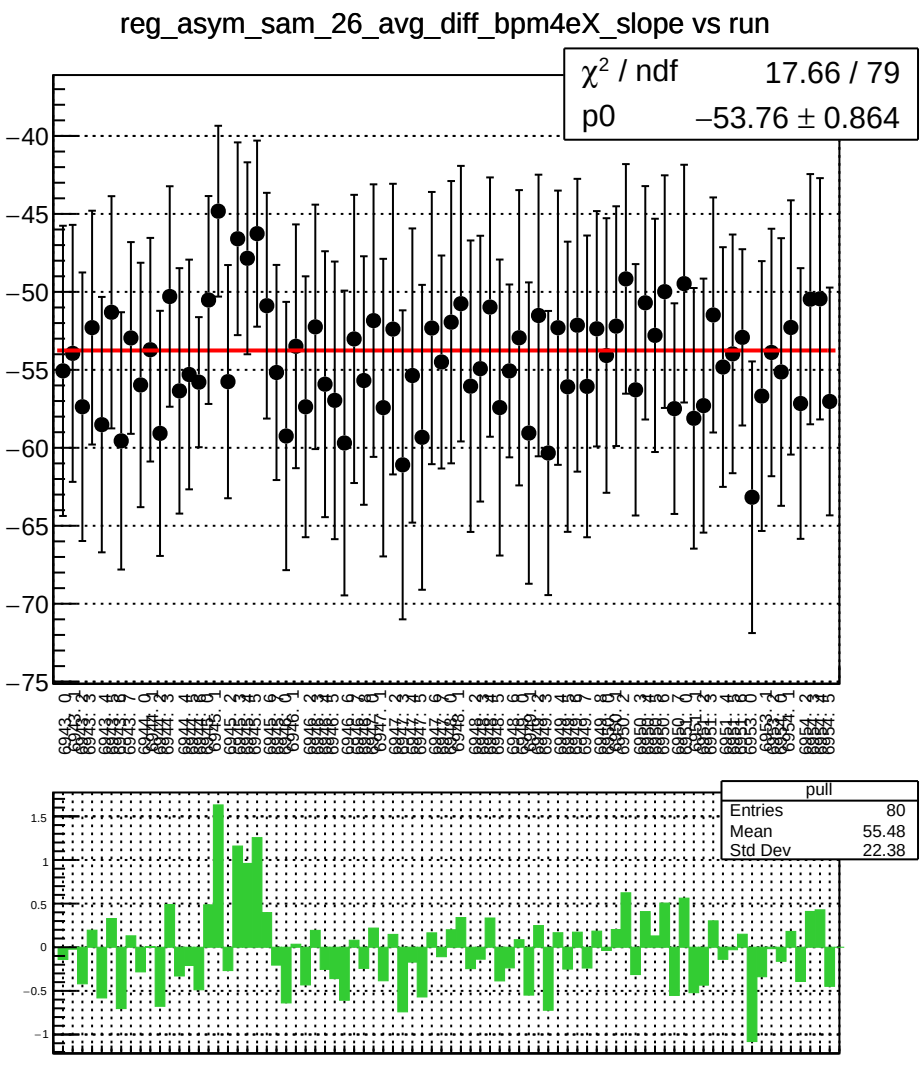

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 16.68 / 79
p0 21.91 ± 0.4022
pull
Entries 80
Mean 396.9
Std Dev 359.4
pull1D
Entries 80
Mean 0.009899
Std Dev 0.4564

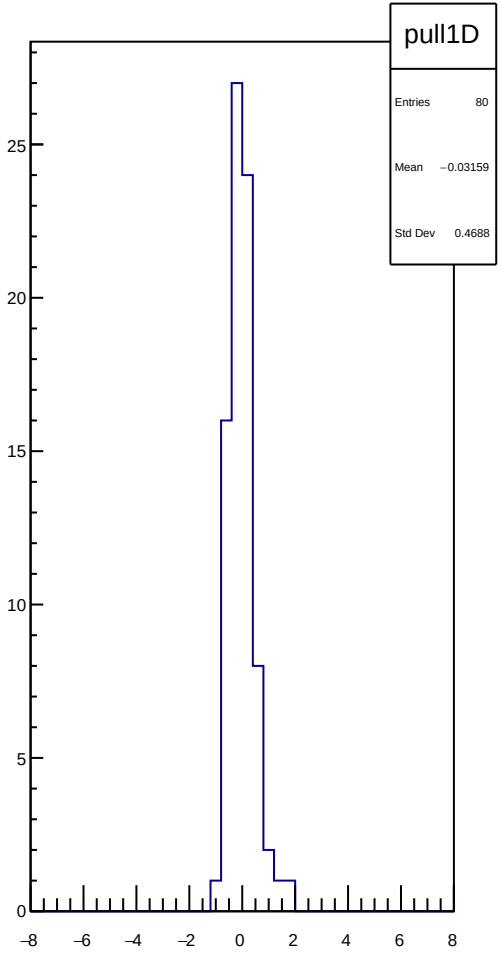

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 4.812 / 79
p0 −0.1444 ± 0.01598
pull
Entries 80
Mean −2071
Std Dev 2113
pull1D
Entries 80
Mean −0.001054
Std Dev 0.2452

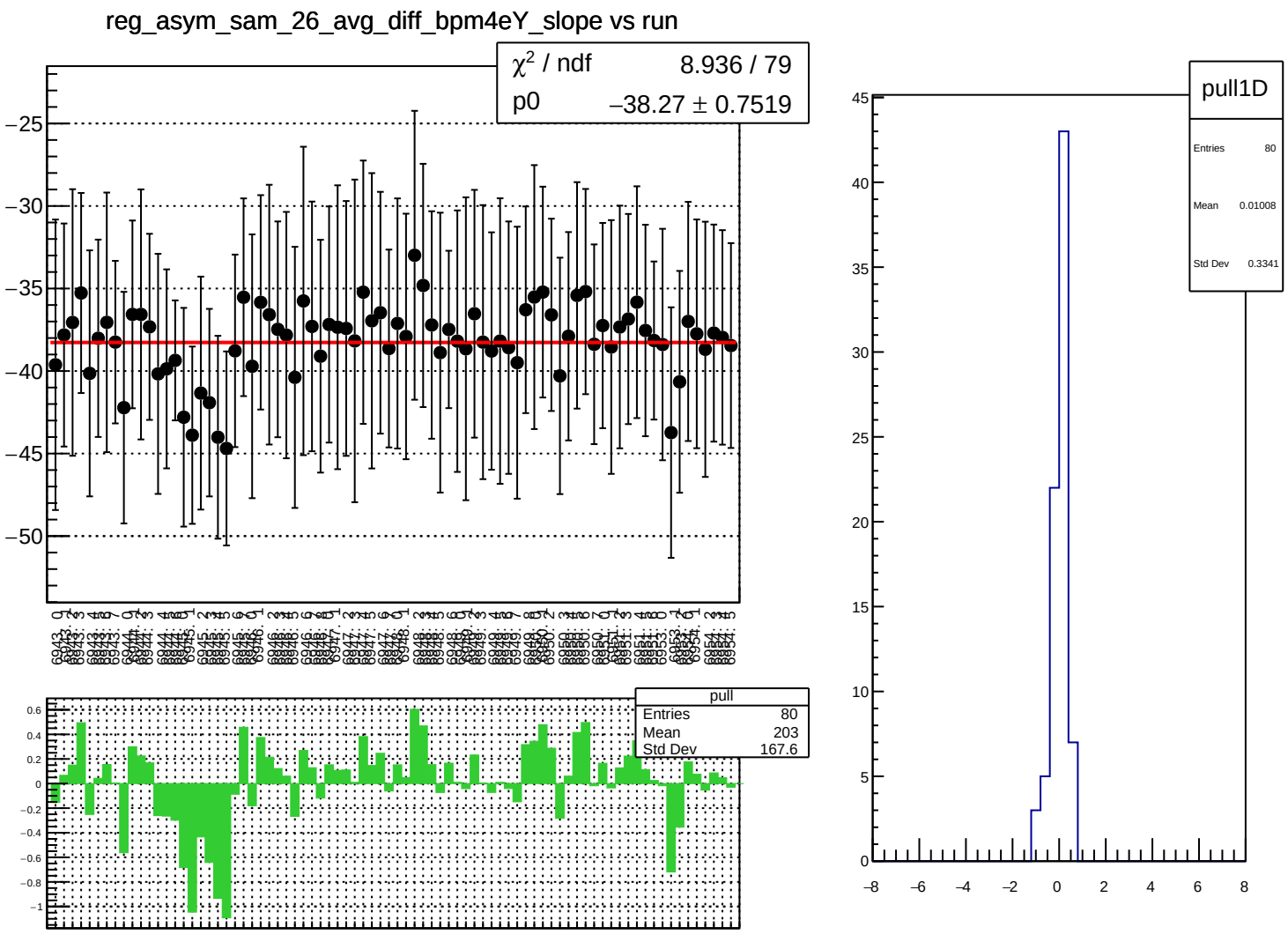

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 14.32 / 79
p0 −12.1 ± 0.9256
pull
Entries 80
Mean 22.33
Std Dev 13.47
pull1D
Entries 80
Mean 0.03219
Std Dev 0.4218

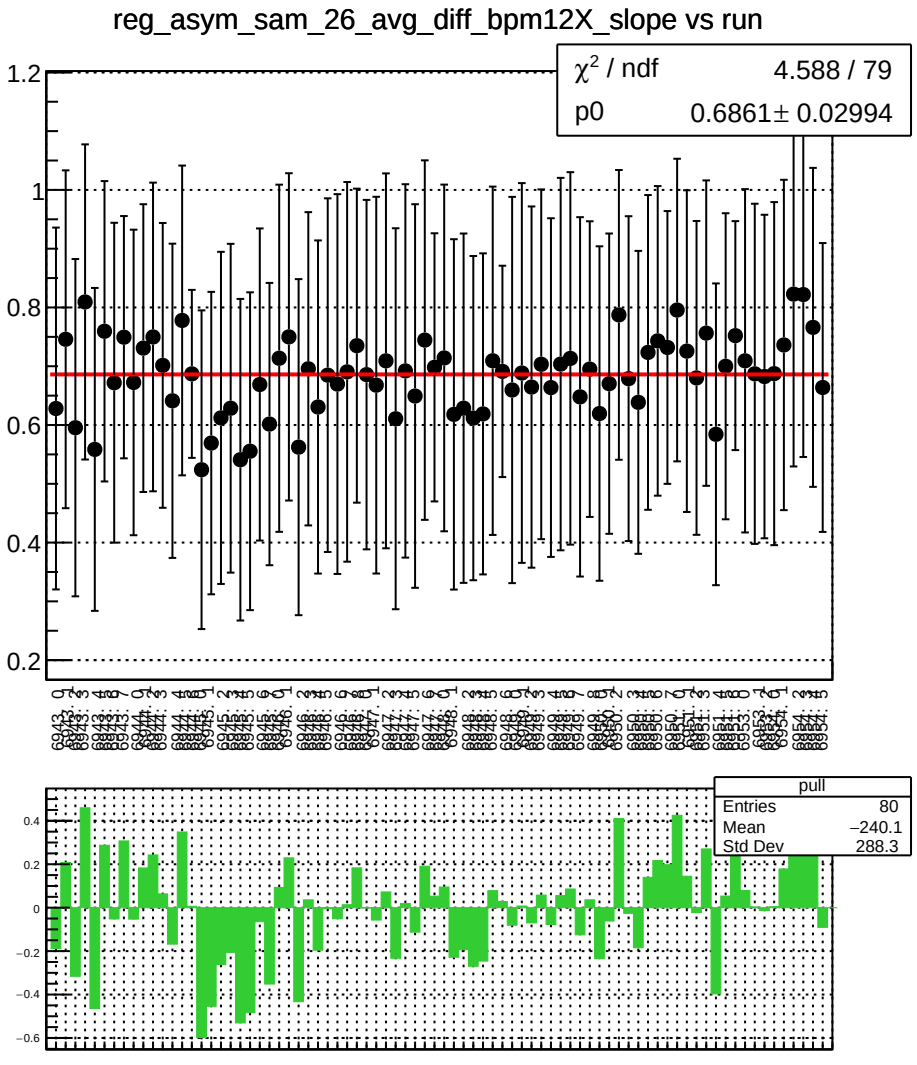

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.731 / 79
p0 3.426 ± 0.6528
pull
Entries 80
Mean 164.3
Std Dev 120.7

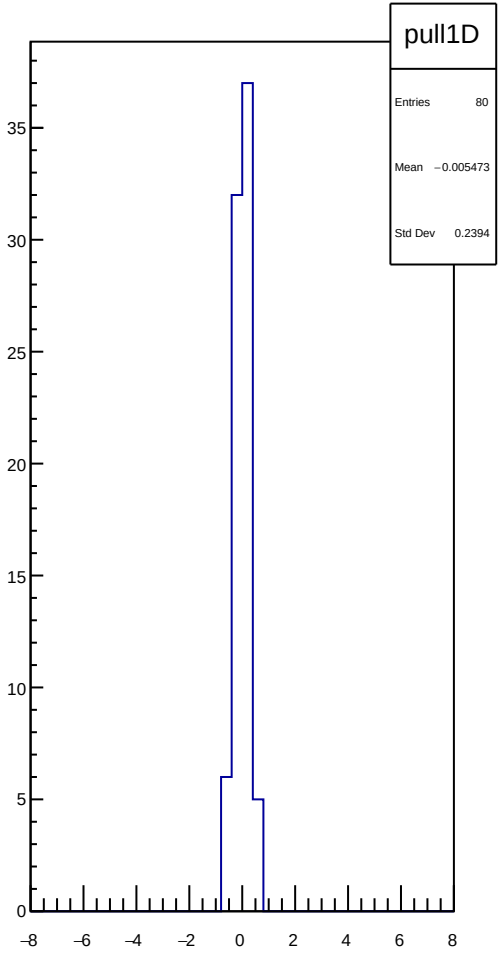

pull1D
Entries 80
Mean −0.01646
Std Dev 0.3104

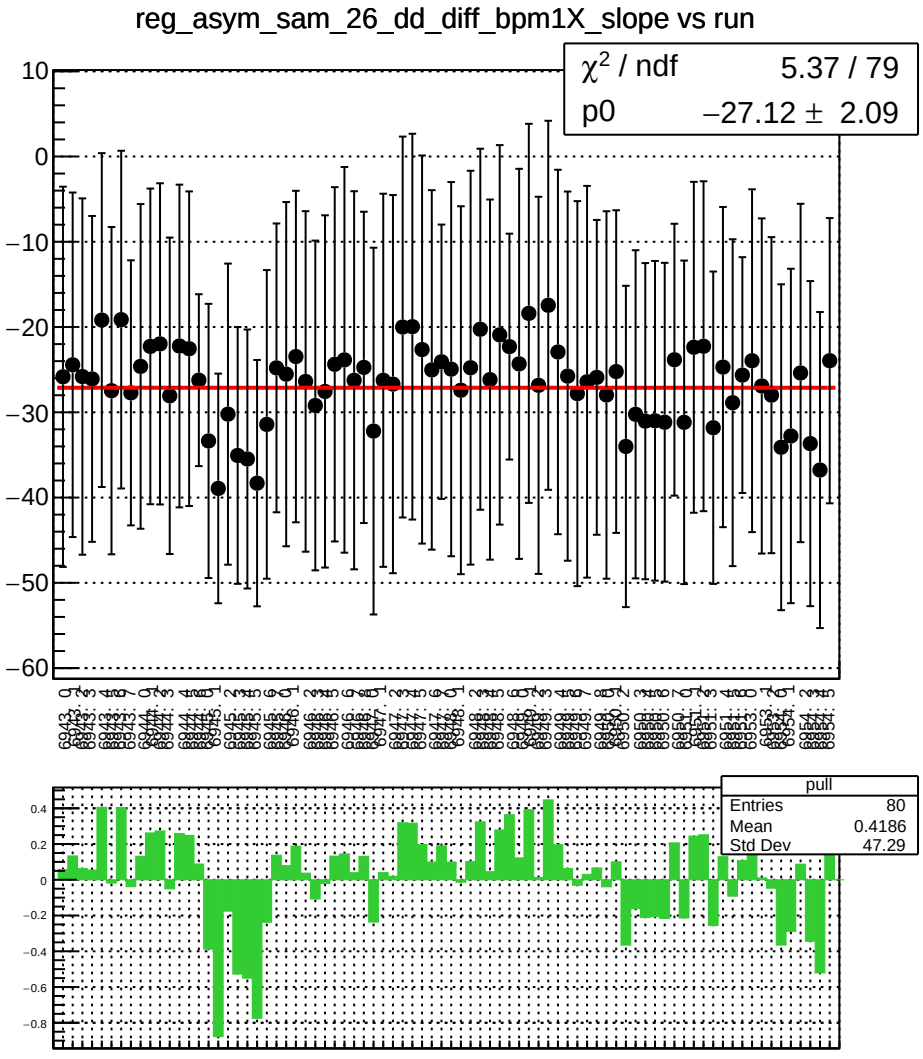

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 17.66 / 79
p0 −53.76 ± 0.864
pull
Entries 80
Mean 55.48
Std Dev 22.38

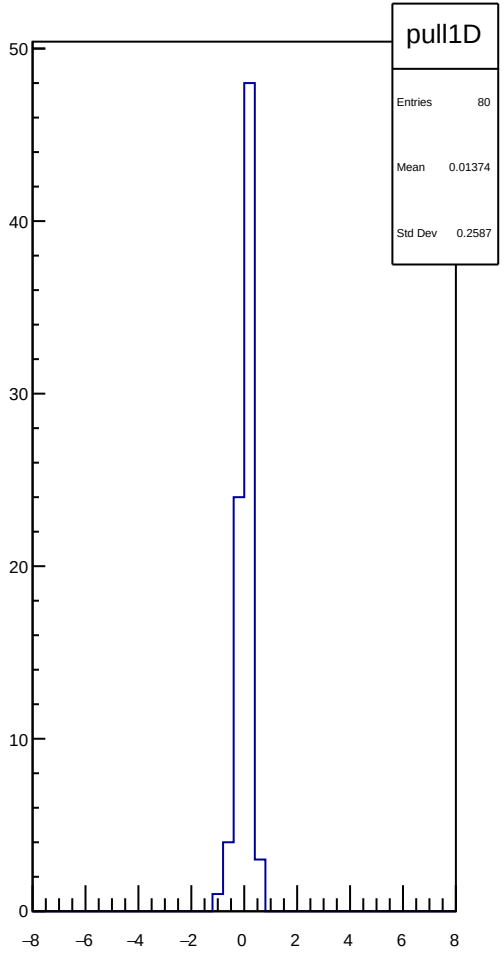

pull1D
Entries 80
Mean −0.03159
Std Dev 0.4688

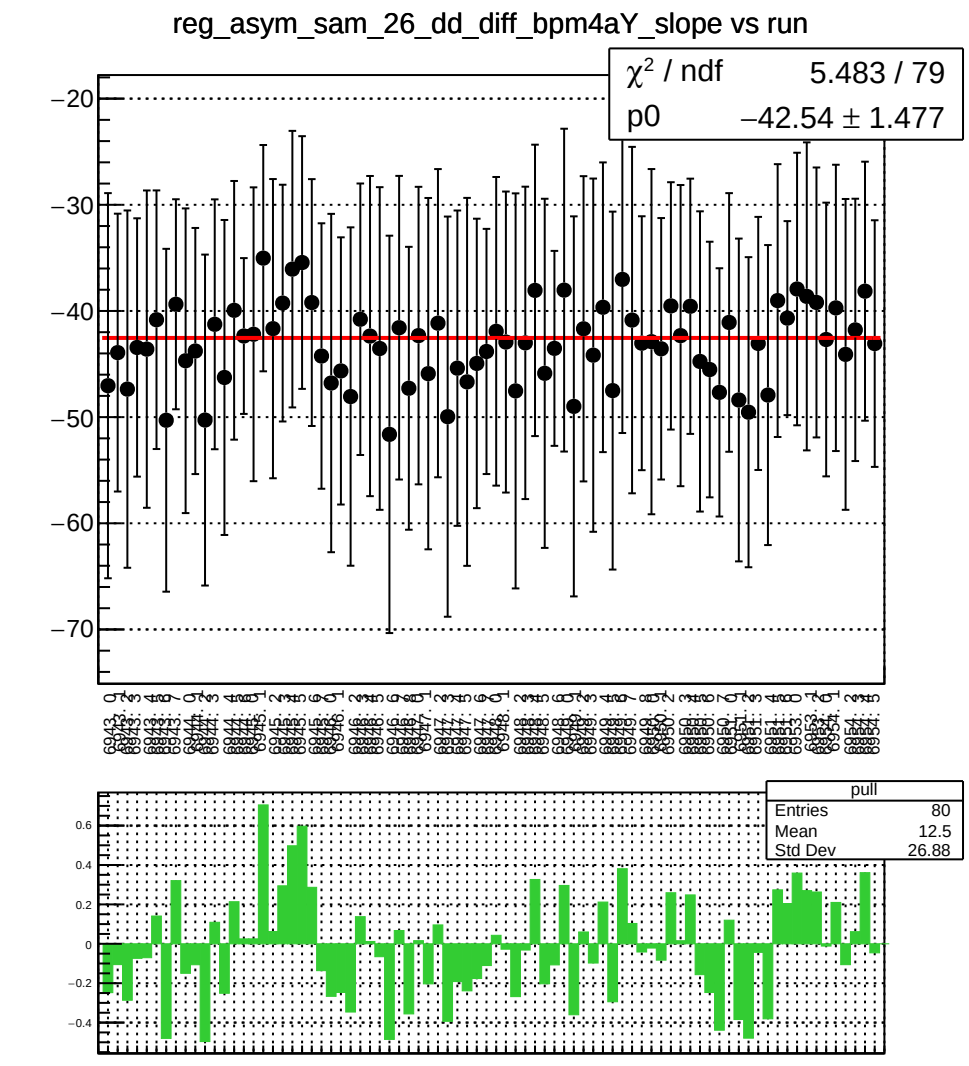

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.936 / 79
p0 −38.27 ± 0.7519
pull
Entries 80
Mean 203
Std Dev 167.6
pull1D
Entries 80
Mean 0.01008
Std Dev 0.3341

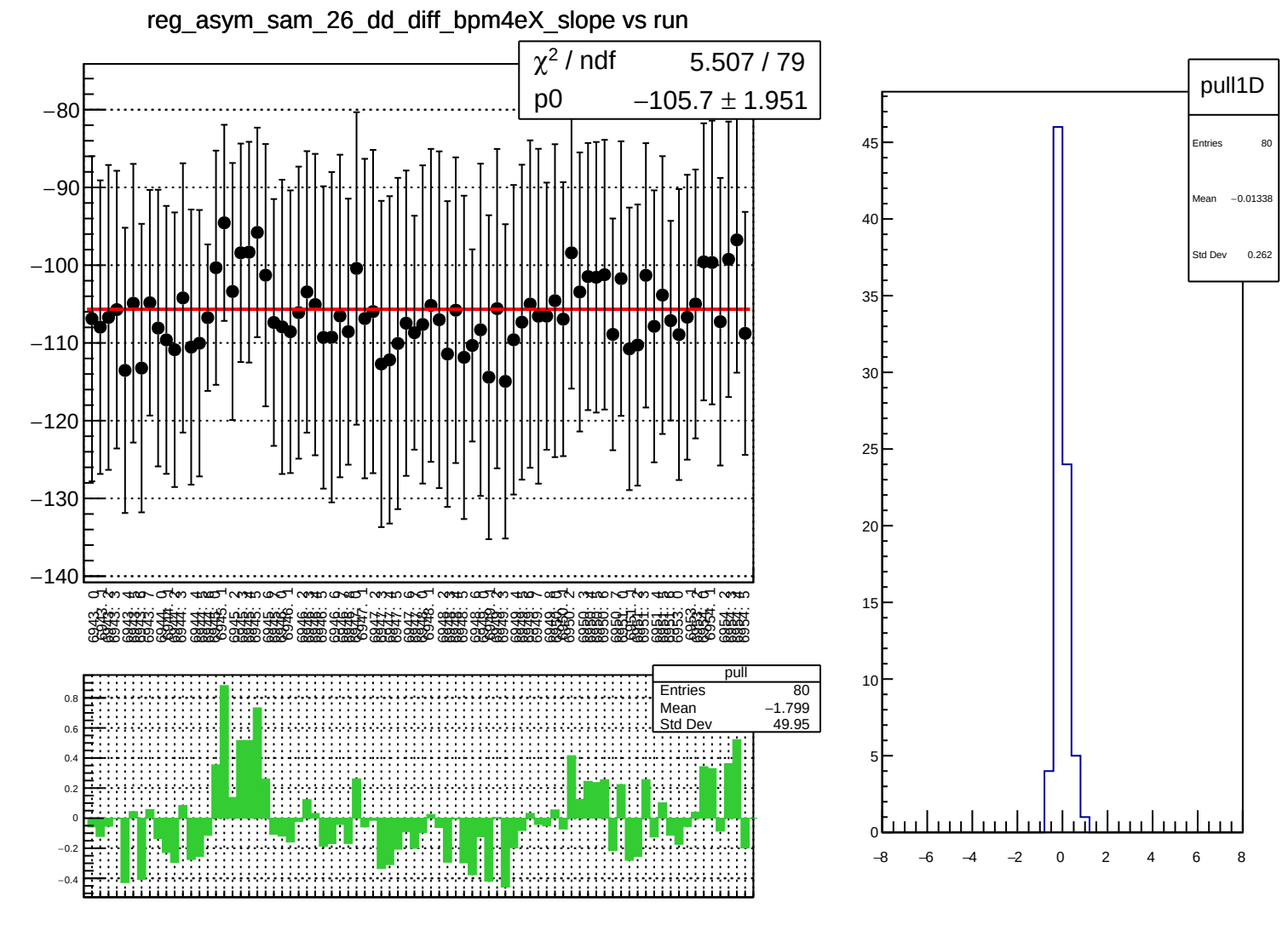

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 4.588 / 79
p0 0.6861± 0.02994
pull
Entries 80
Mean −240.1
Std Dev 288.3

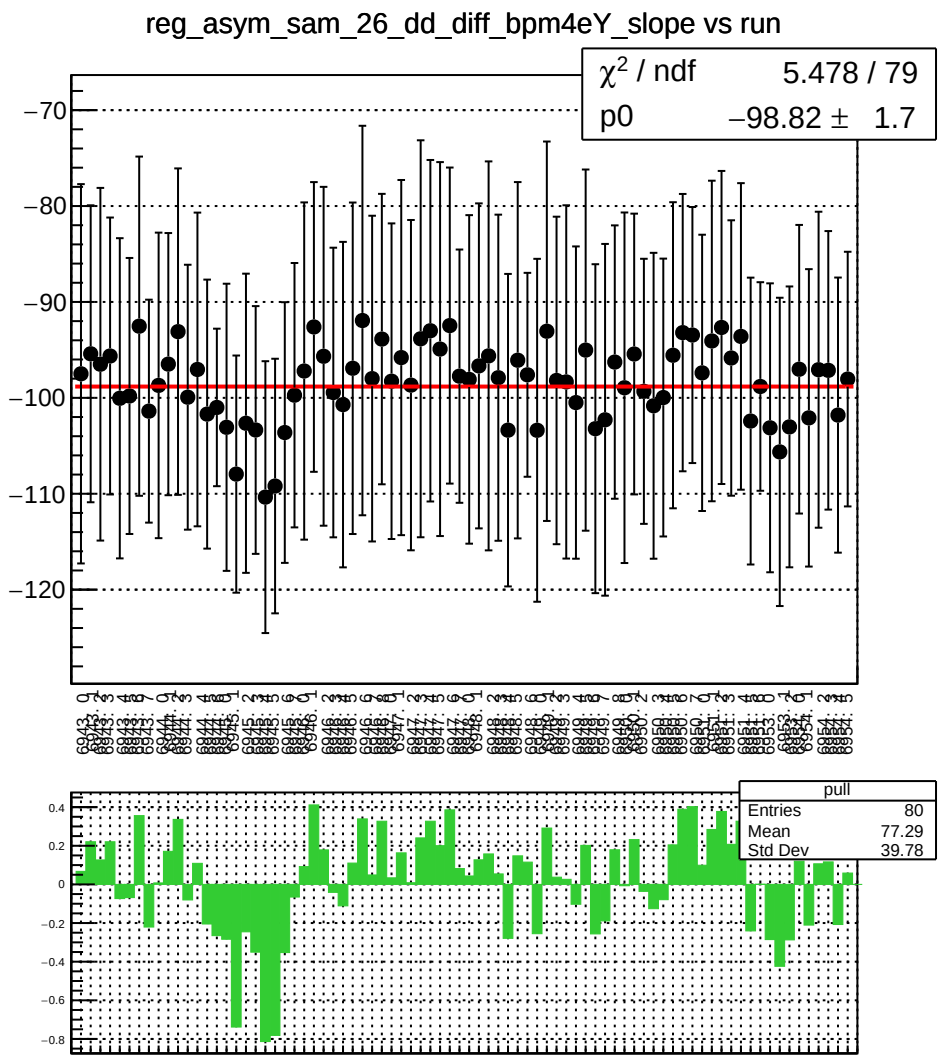

pull1D
Entries 80
Mean −0.005473
Std Dev 0.2394

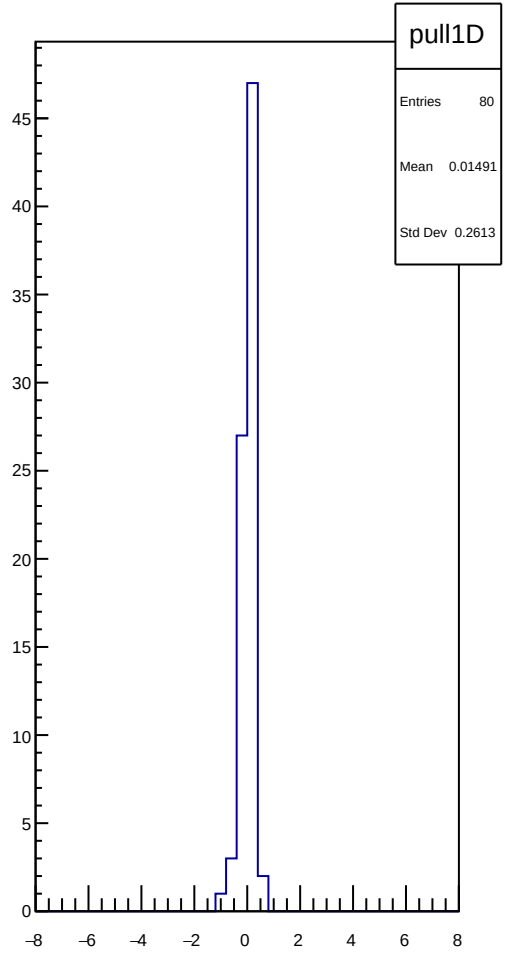

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 5.37 / 79
p0 −27.12 ± 2.09
pull
Entries 80
Mean 0.4186
Std Dev 47.29

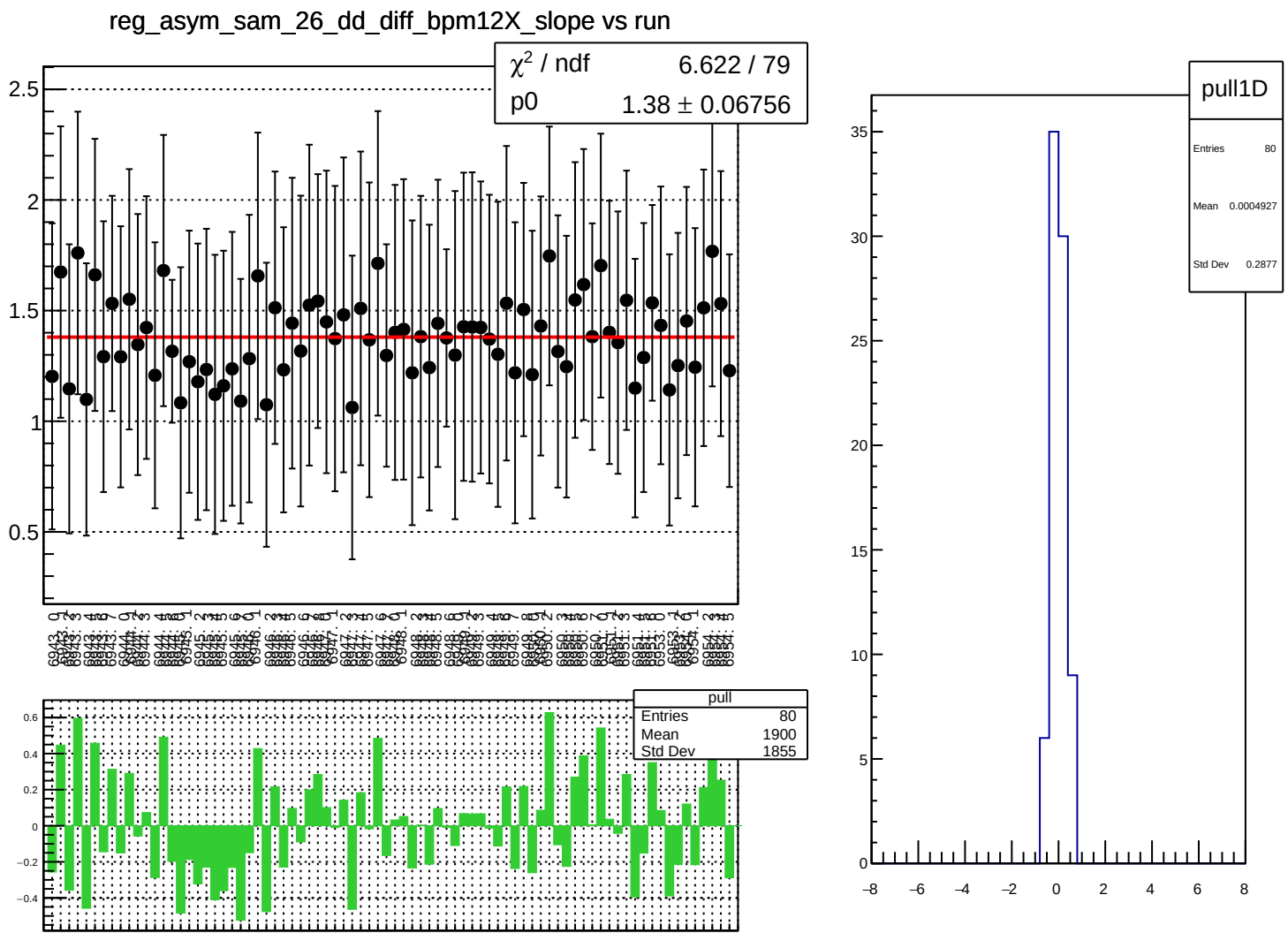

pull1D
Entries 80
Mean 0.01374
Std Dev 0.2587

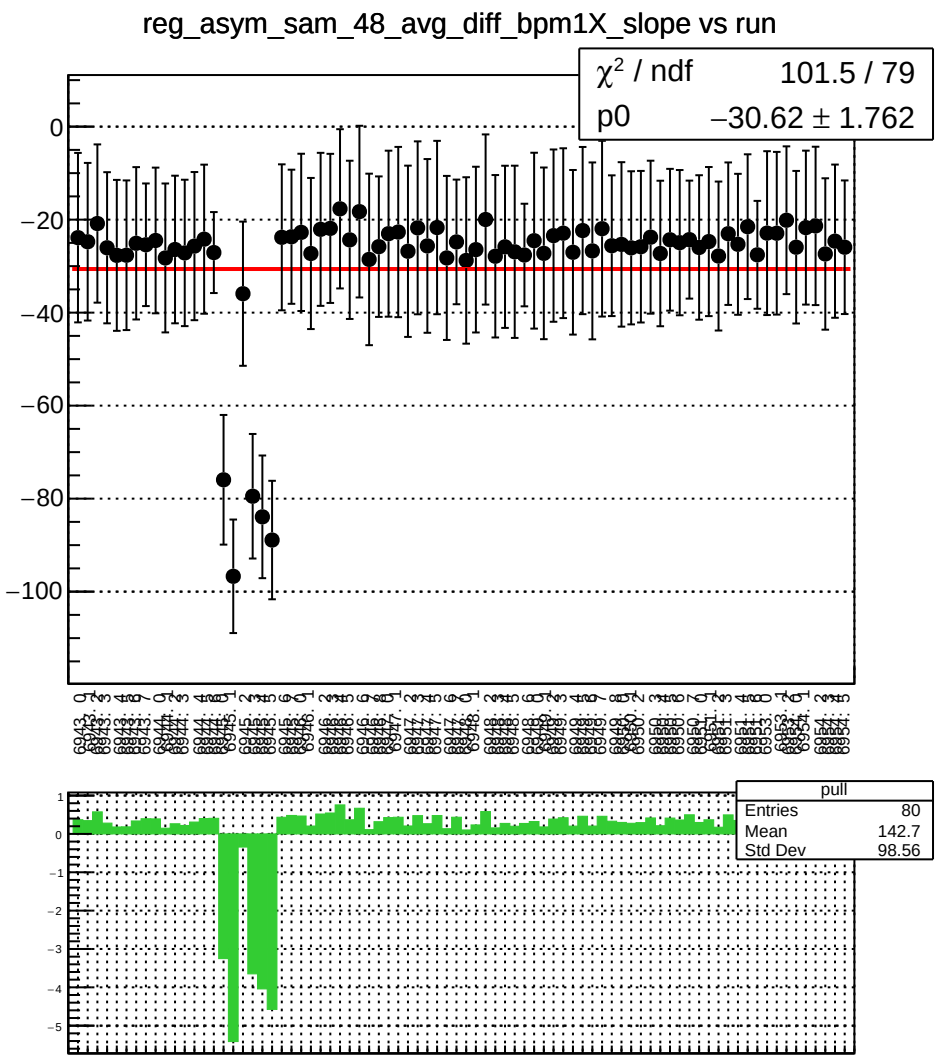

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.483 / 79
p0 −42.54 ± 1.477
pull
Entries 80
Mean 12.5
Std Dev 26.88
pull1D
Entries 80
Mean −0.02054
Std Dev 0.261

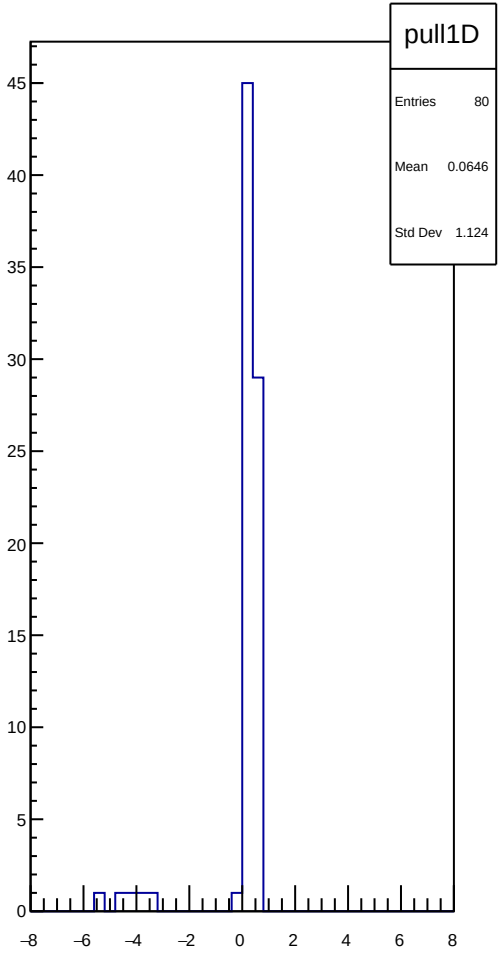

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.507 / 79
p0 −105.7 ± 1.951
pull
Entries 80
Mean −1.799
Std Dev 49.95
pull1D
Entries 80
Mean −0.01338
Std Dev 0.262

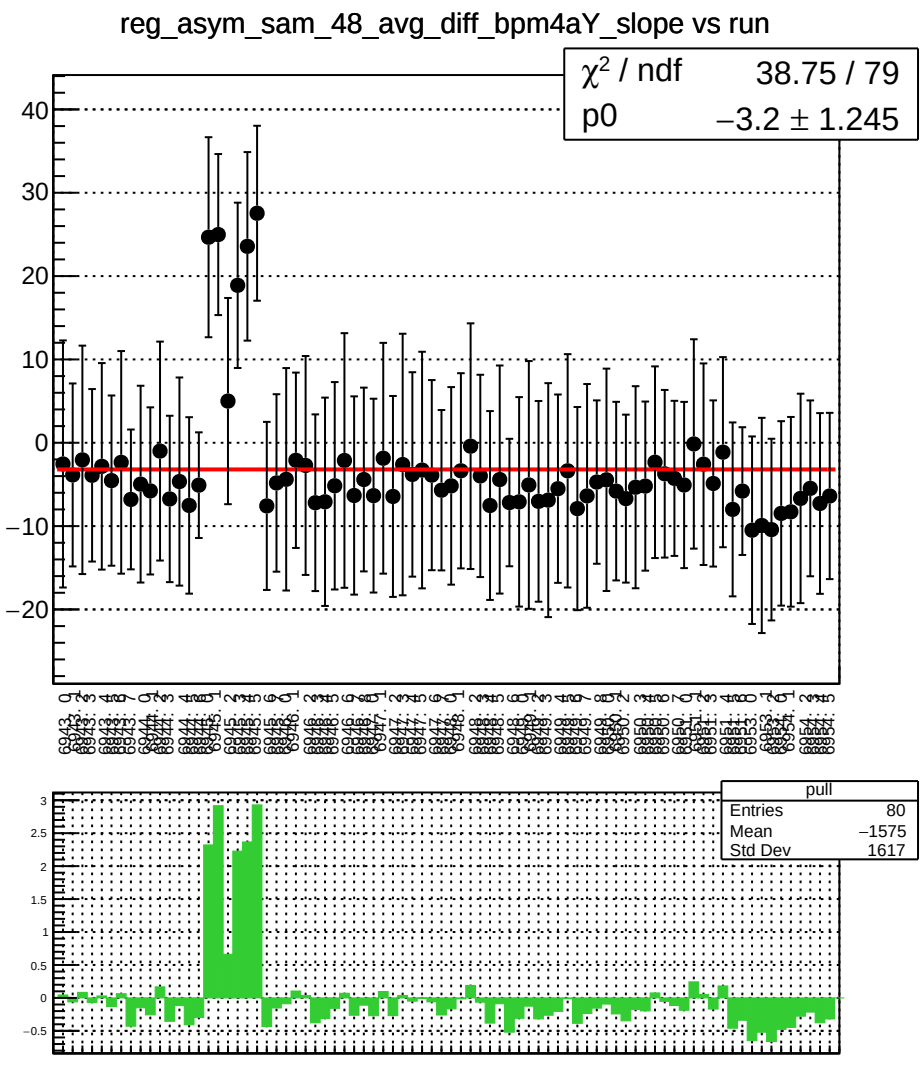

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.478 / 79
p0 −98.82 ± 1.7
pull
Entries 80
Mean 77.29
Std Dev 39.78

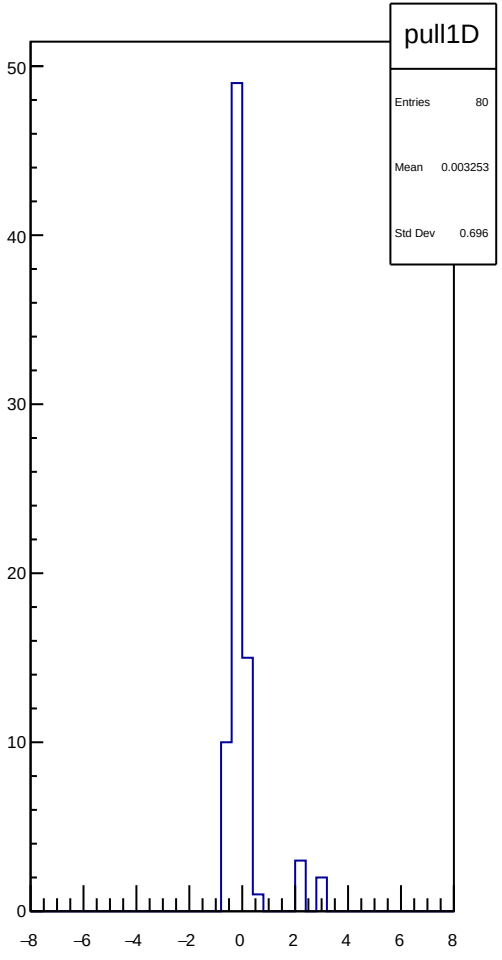

pull1D
Entries 80
Mean 0.01491
Std Dev 0.2613

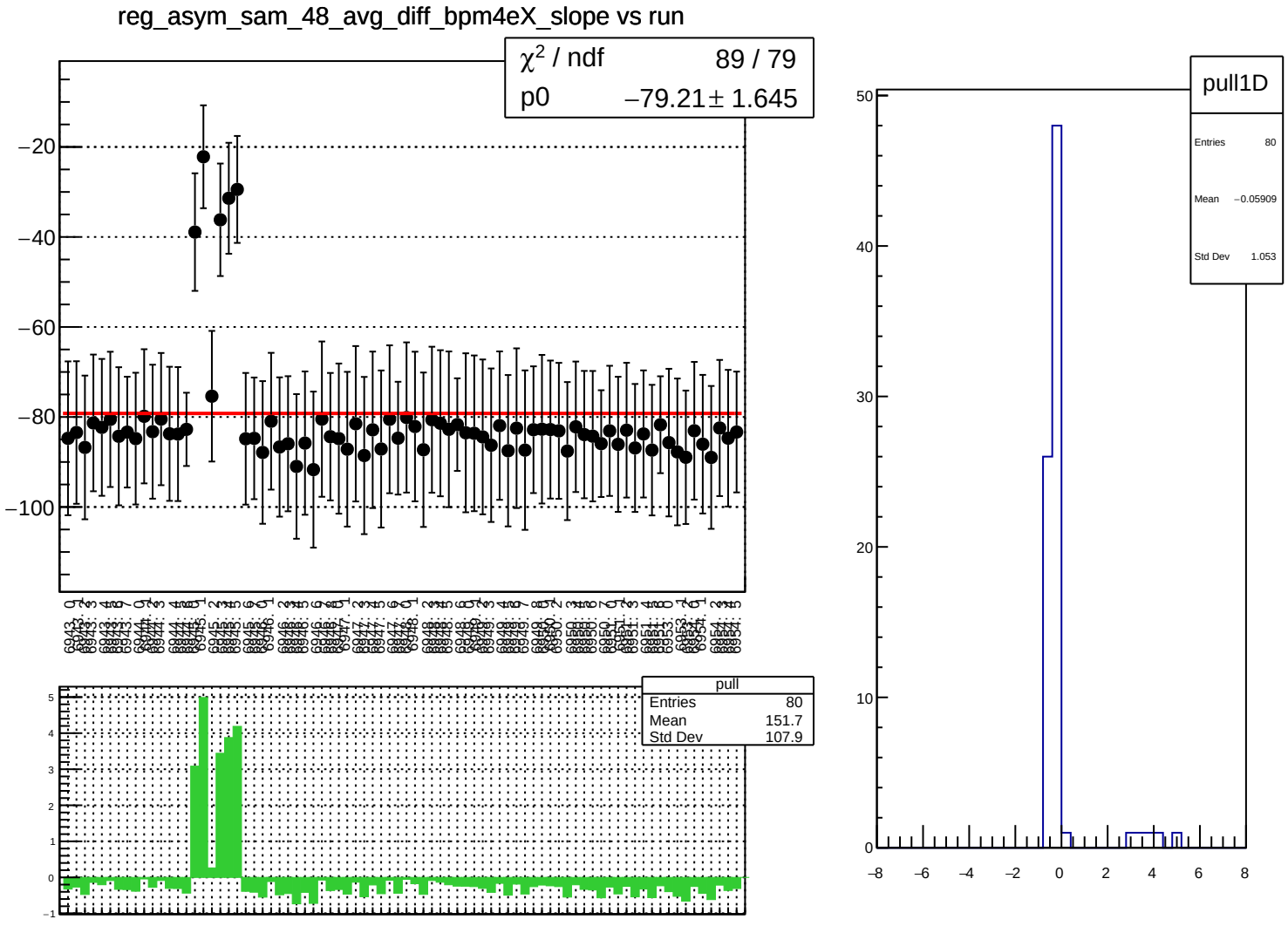

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 6.622 / 79
p0 1.38 ± 0.06756
pull
Entries 80
Mean 1900
Std Dev 1855
pull1D
Entries 80
Mean 0.0004927
Std Dev 0.2877

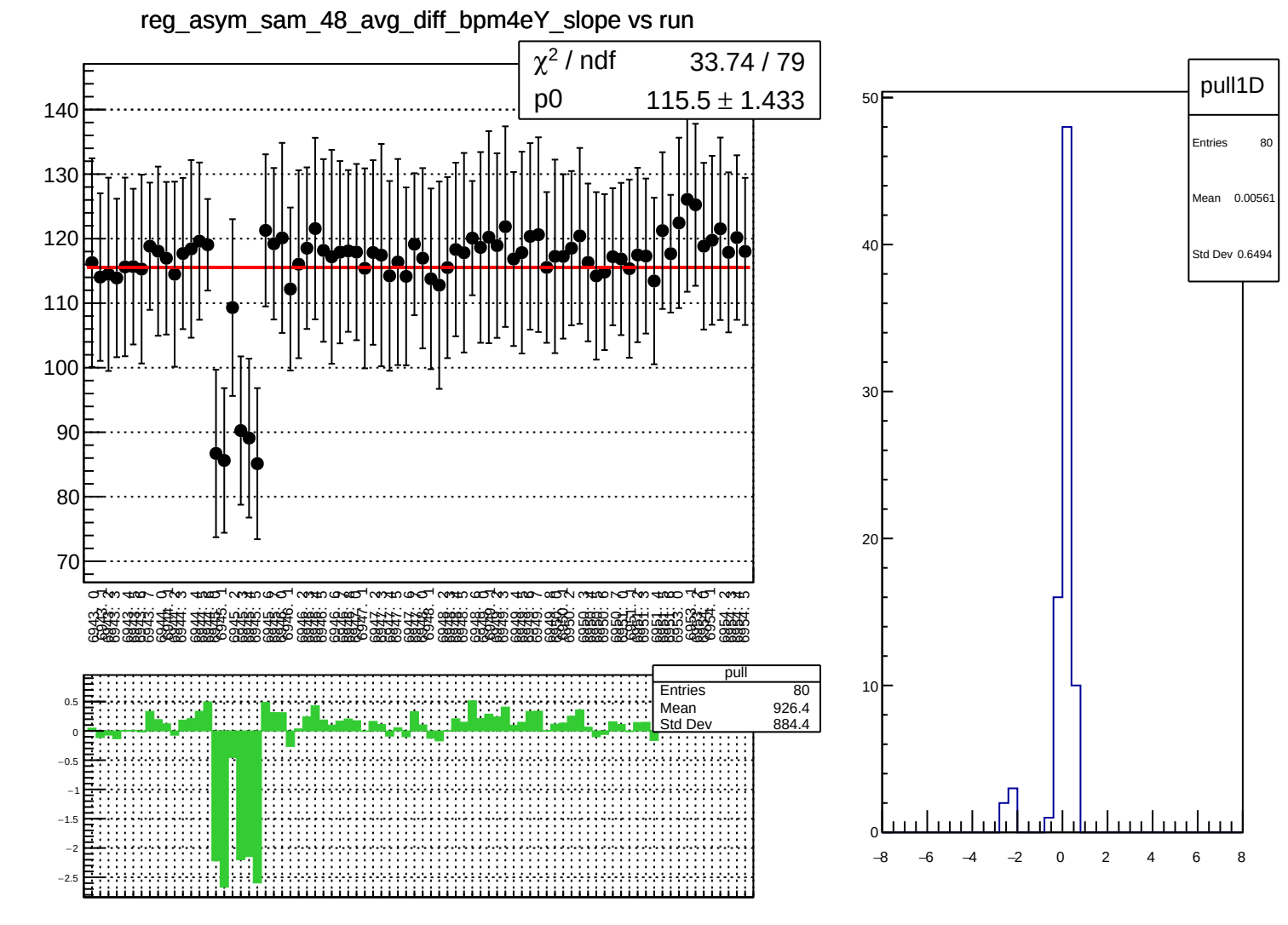

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 101.5 / 79
p0 −30.62 ± 1.762
pull
Entries 80
Mean 142.7
Std Dev 98.56

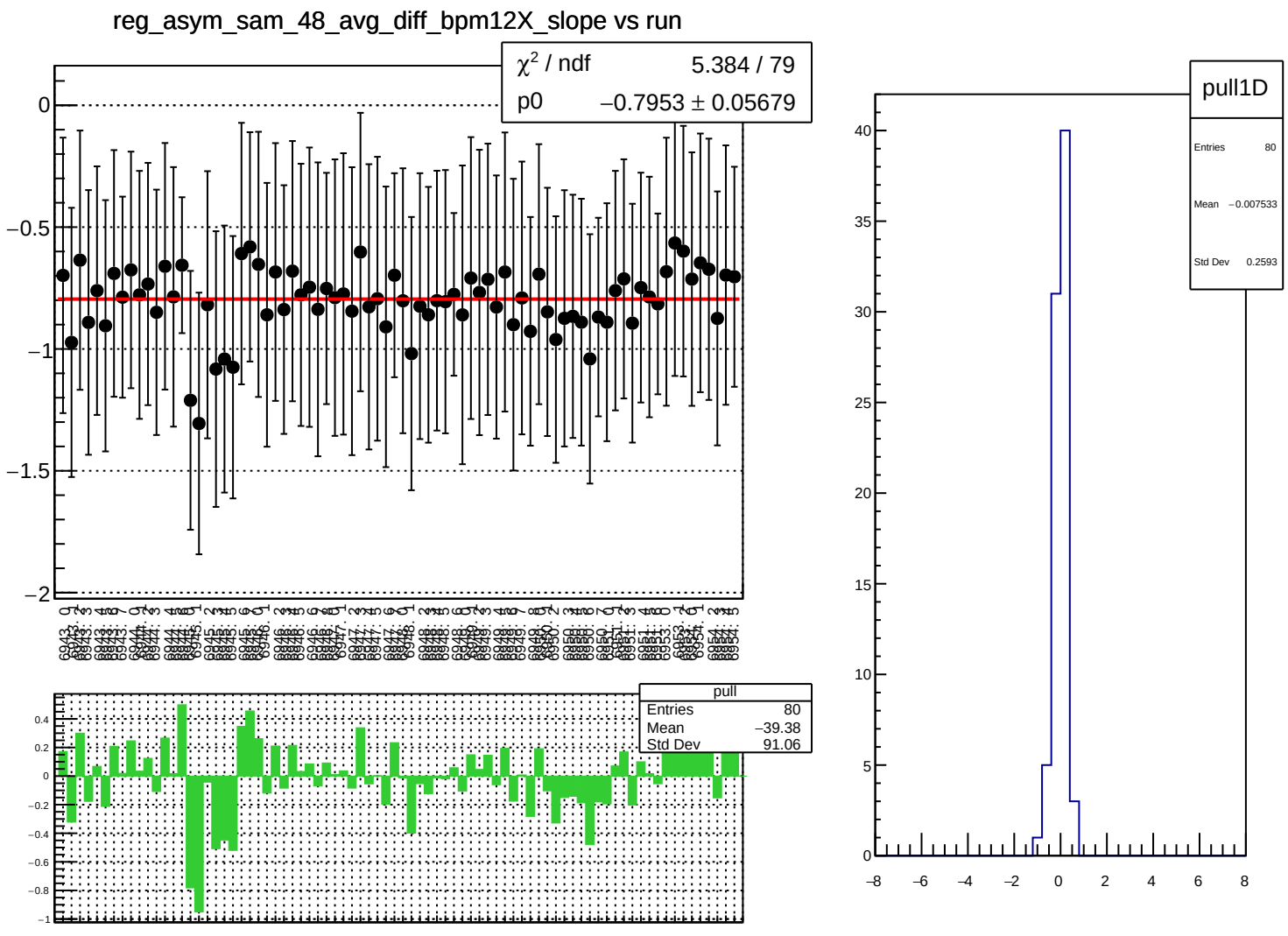

pull1D
Entries 80
Mean 0.0646
Std Dev 1.124

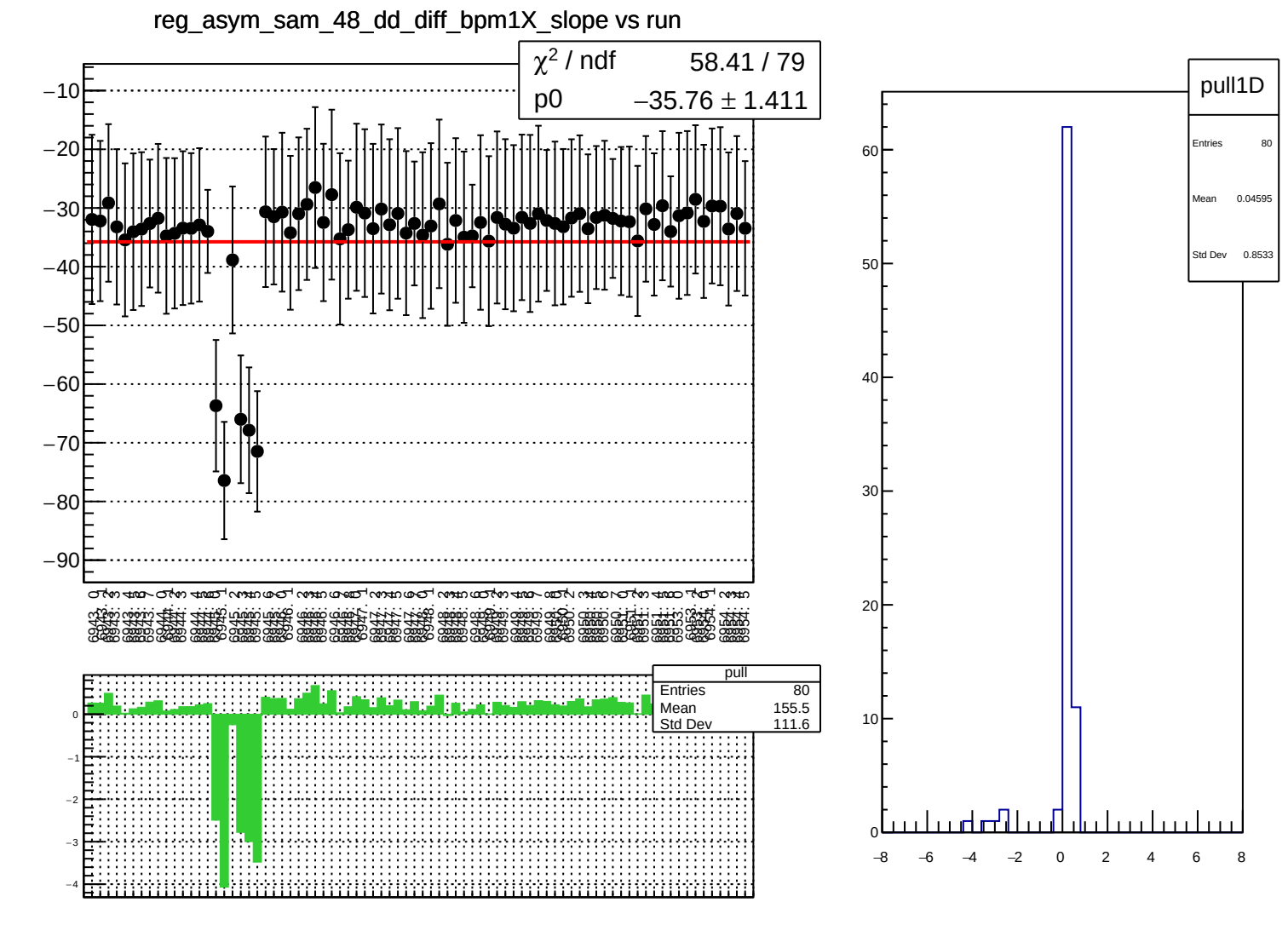

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 38.75 / 79
p0 −3.2 ± 1.245
pull
Entries 80
Mean −1575
Std Dev 1617

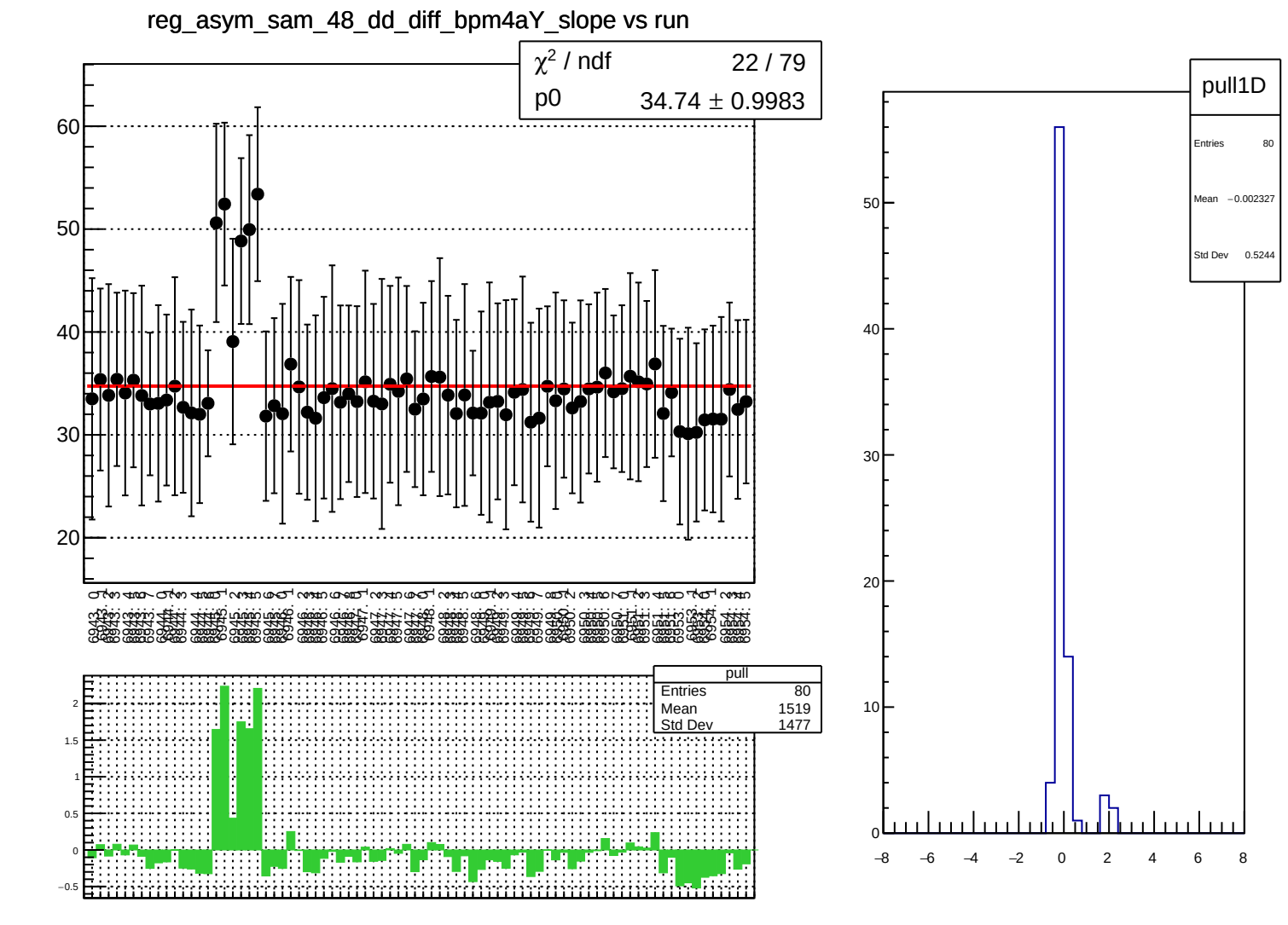

pull1D
Entries 80
Mean 0.003253
Std Dev 0.696

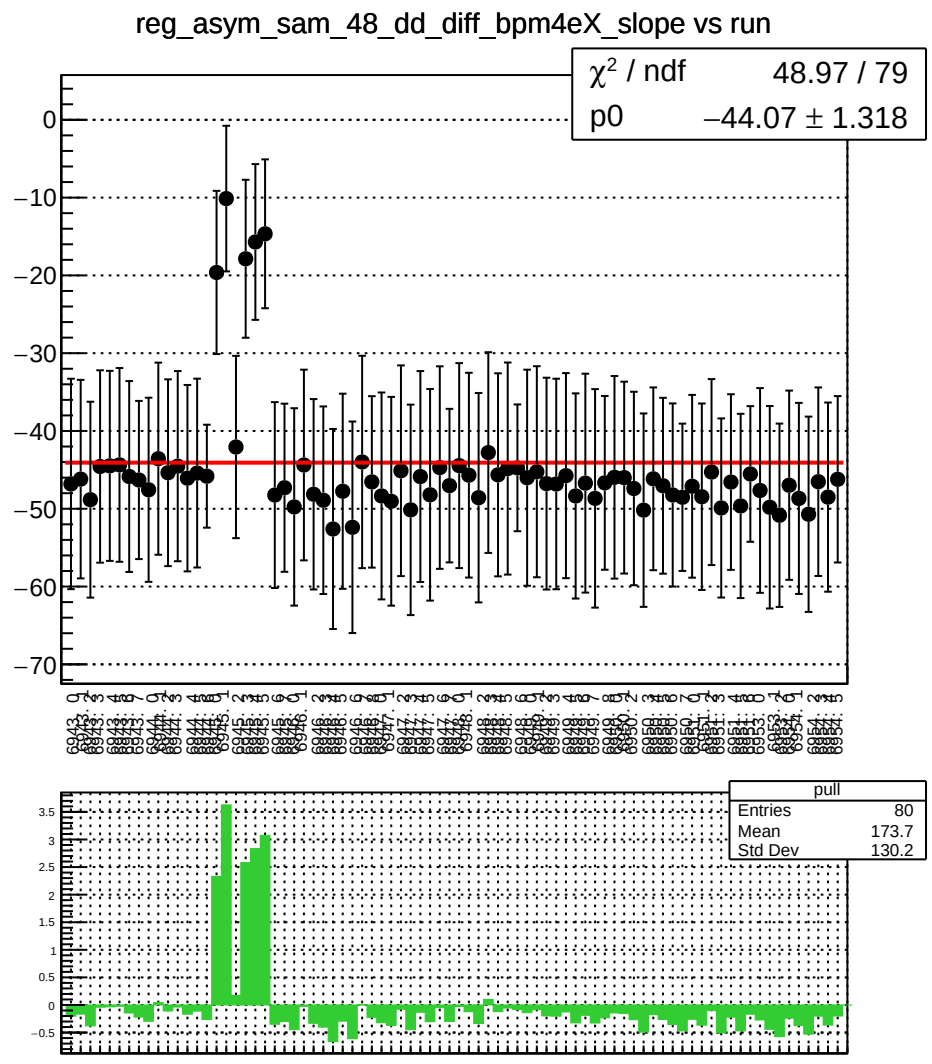

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 89 / 79
p0 −79.21 ± 1.645
−20
−40
−60
−80
−100
pull
Entries 80
Mean 151.7
Std Dev 107.9
pull1D
Entries 80
Mean −0.05909
Std Dev 1.053
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

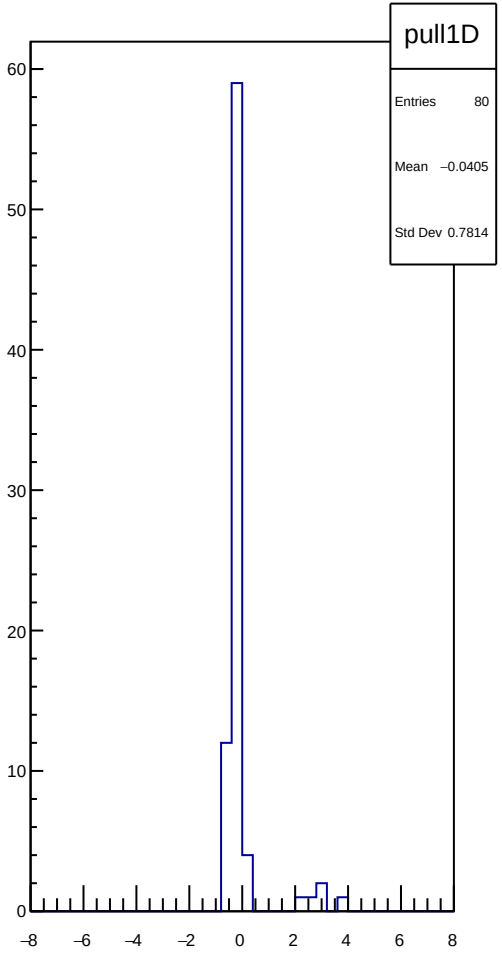

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 33.74 / 79
p0 115.5 ± 1.433
pull
Entries 80
Mean 926.4
Std Dev 884.4
pull1D
Entries 80
Mean 0.00561
Std Dev 0.6494

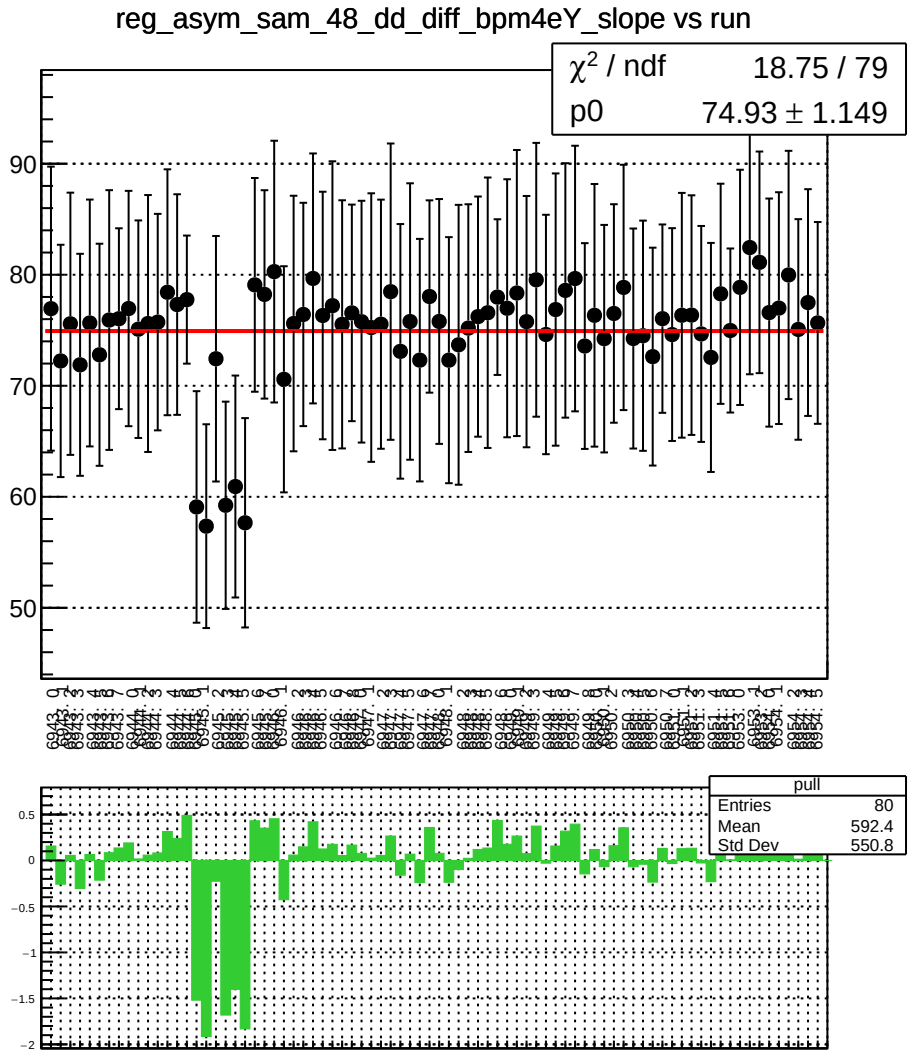

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 5.384 / 79
p0 −0.7953 ± 0.05679
pull
Entries 80
Mean −39.38
Std Dev 91.06
pull1D
Entries 80
Mean −0.007533
Std Dev 0.2593

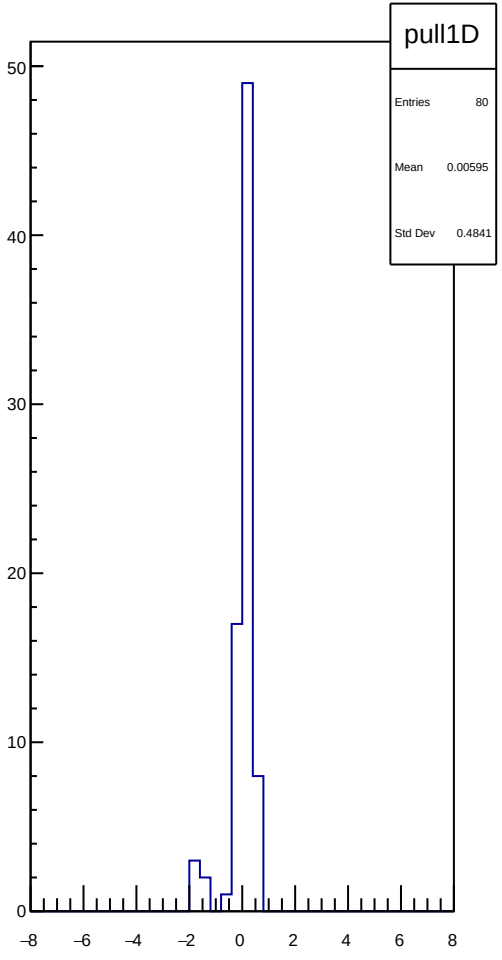

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 58.41 / 79
p0 −35.76 ± 1.411
pull
Entries 80
Mean 155.5
Std Dev 111.6
pull1D
Entries 80
Mean 0.04595
Std Dev 0.8533

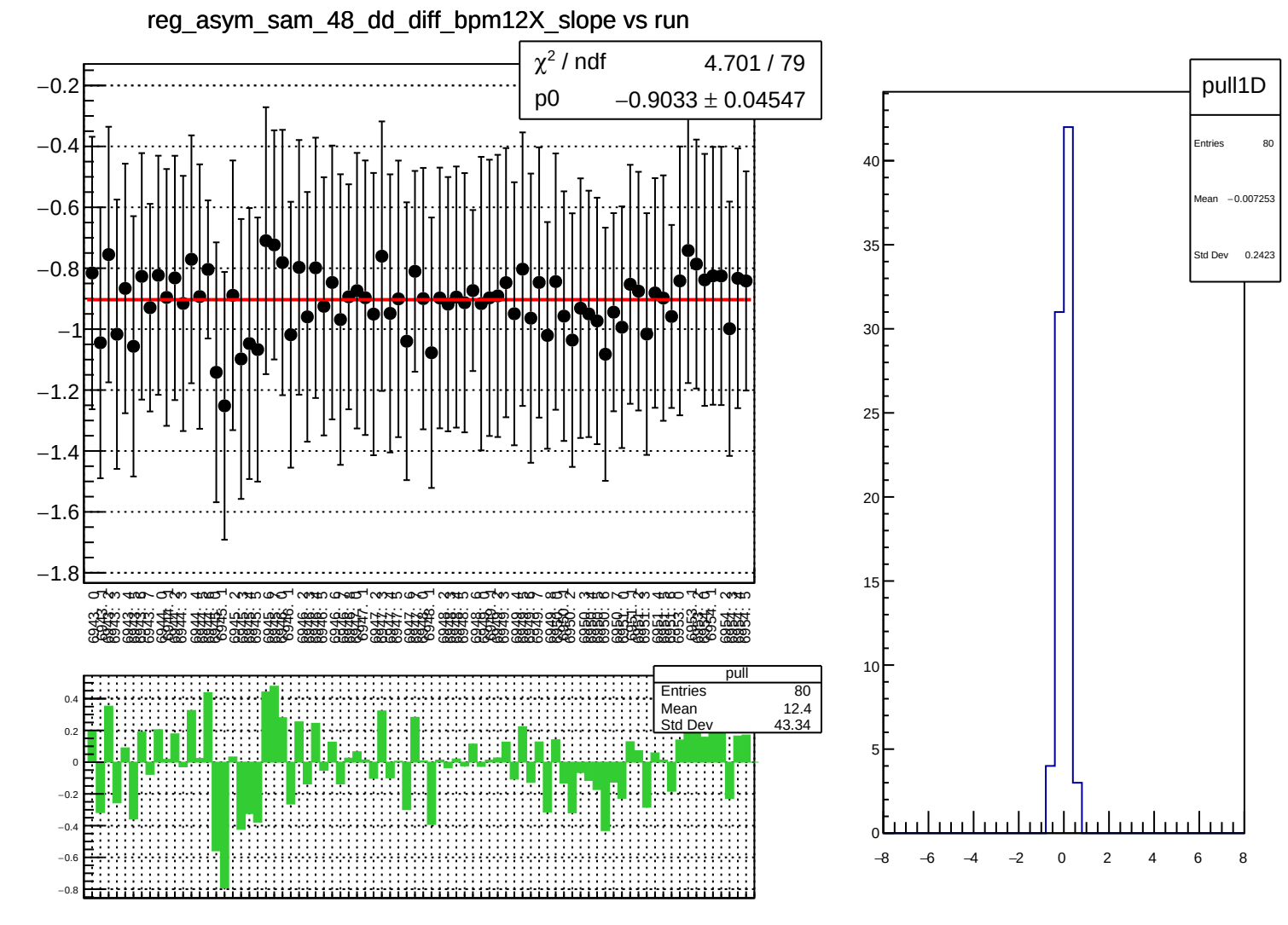

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 22 / 79
p0 34.74 ± 0.9983
pull
Entries 80
Mean 1519
Std Dev 1477
pull1D
Entries 80
Mean −0.002327
Std Dev 0.5244

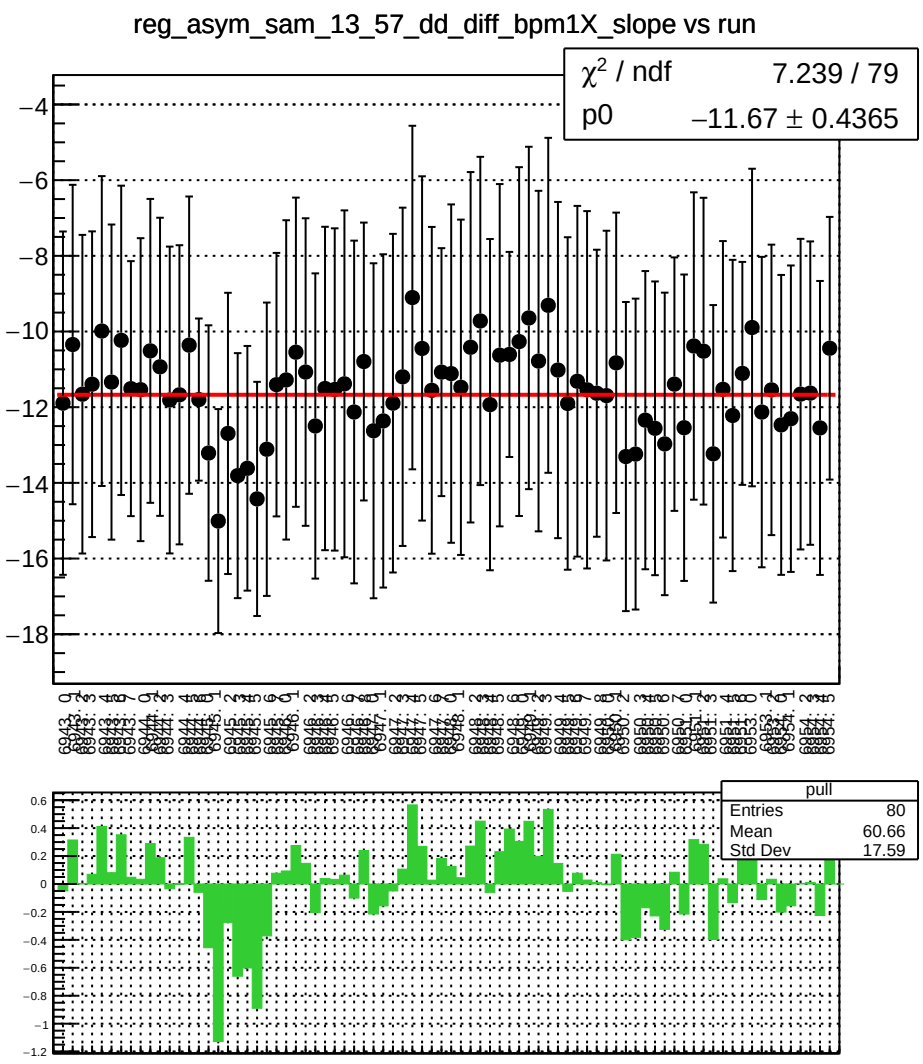

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 48.97 / 79
p0 −44.07 ± 1.318
pull
Entries 80
Mean 173.7
Std Dev 130.2

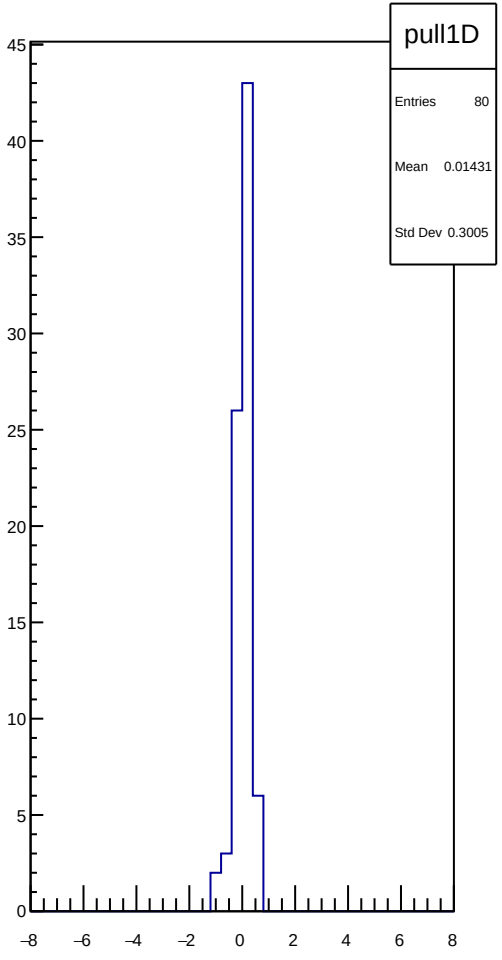

pull1D
Entries 80
Mean −0.0405
Std Dev 0.7814

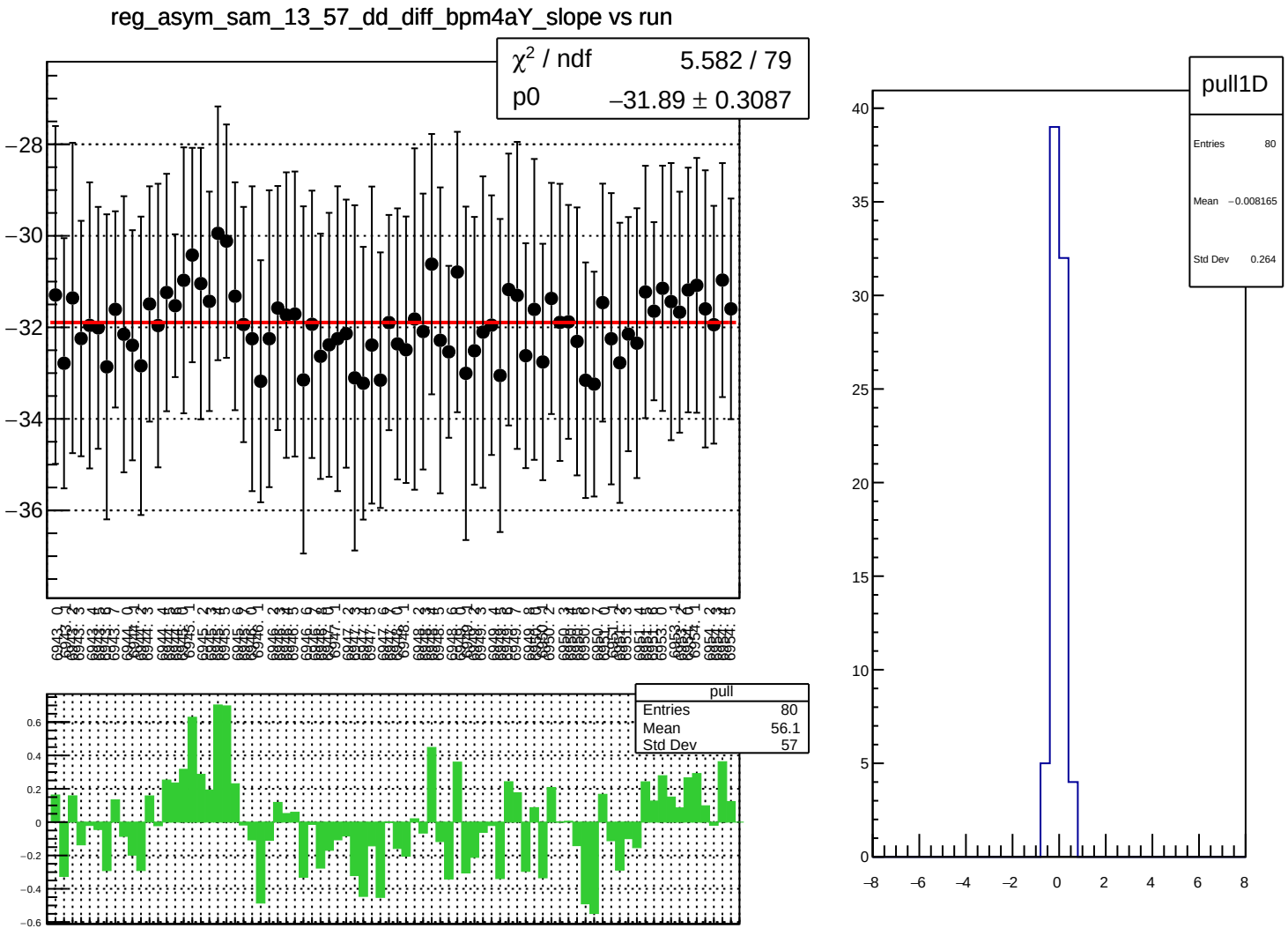

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 18.75 / 79
p0 74.93 ± 1.149
90
80
70
60
50
pull
Entries 80
Mean 592.4
Std Dev 550.8
0.5
0
−0.5
−1
−1.5
−2

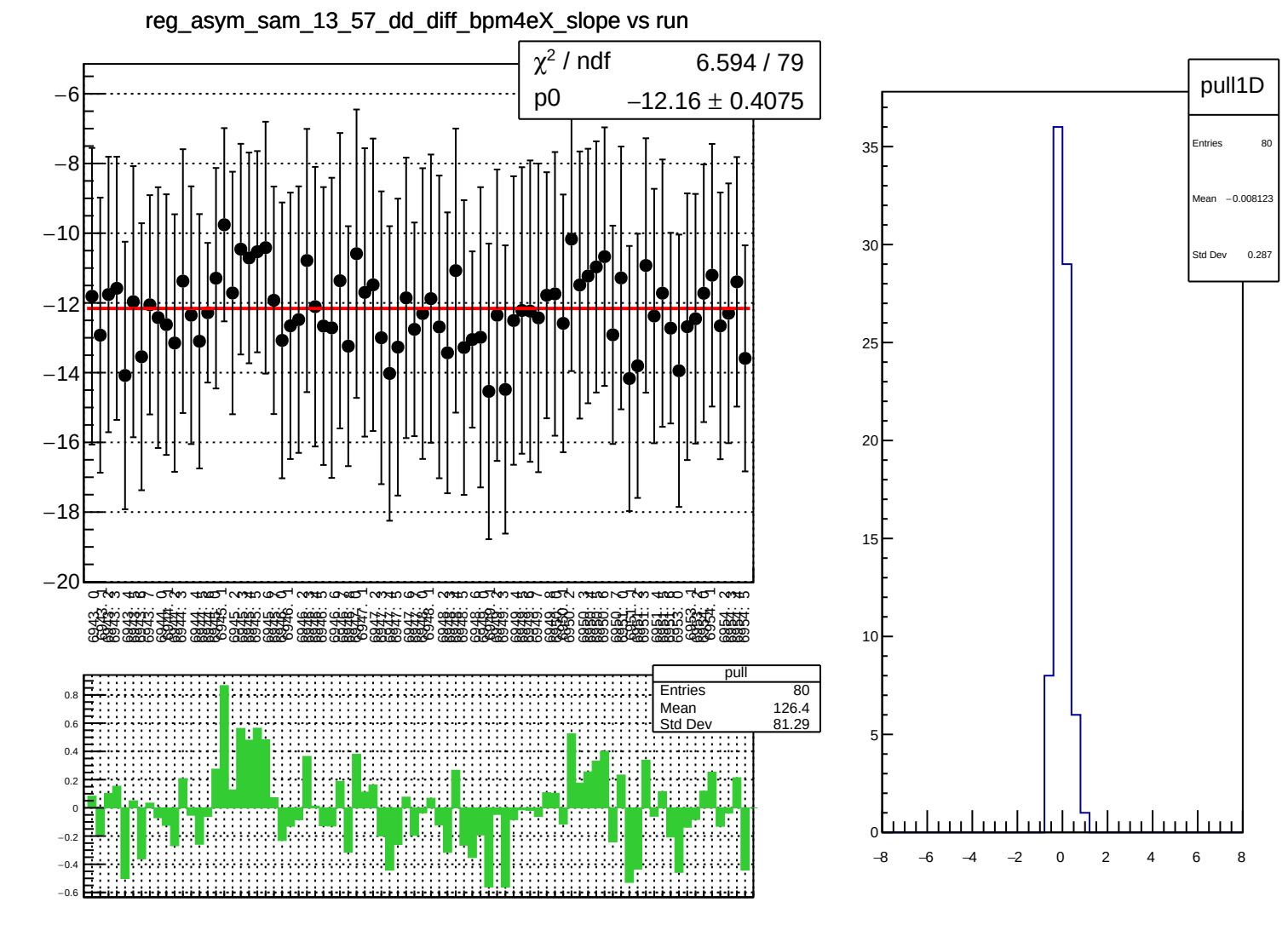

pull1D
Entries 80
Mean 0.00595
Std Dev 0.4841
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

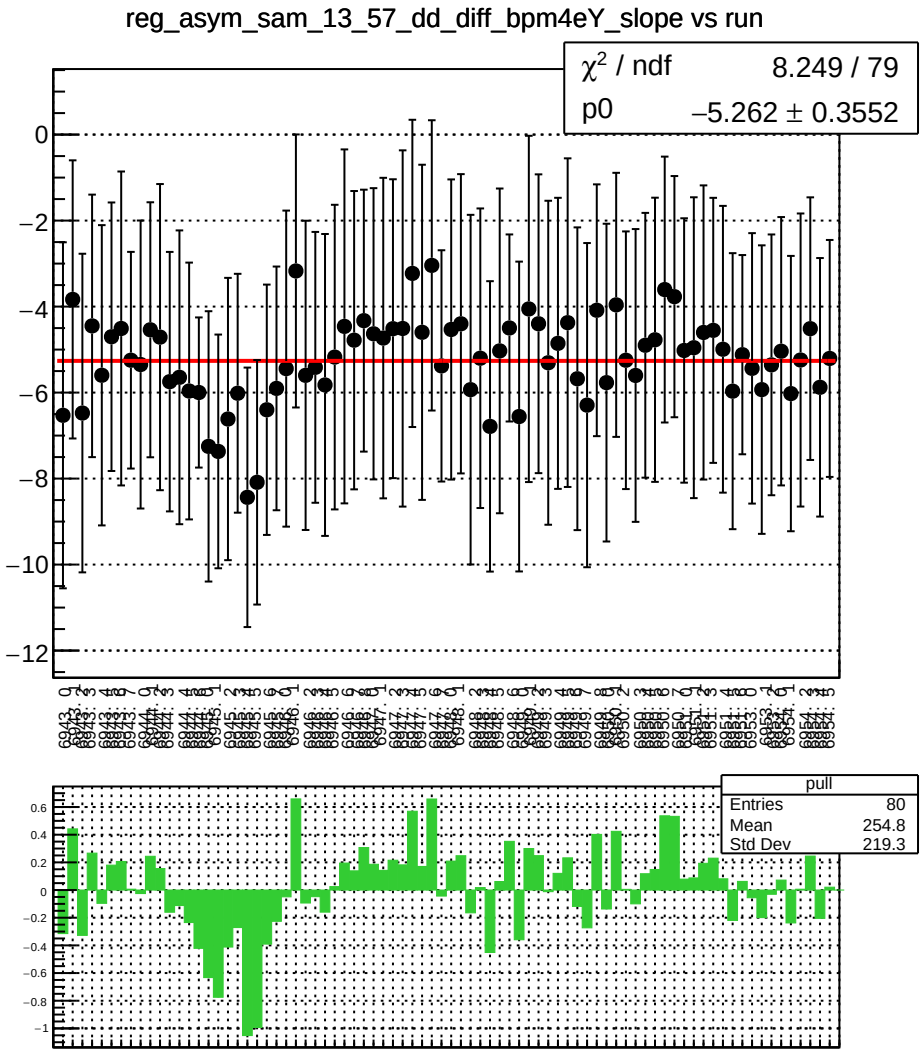

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 4.701 / 79
p0 −0.9033 ± 0.04547
pull
Entries 80
Mean 12.4
Std Dev 43.34
pull1D
Entries 80
Mean −0.007253
Std Dev 0.2423

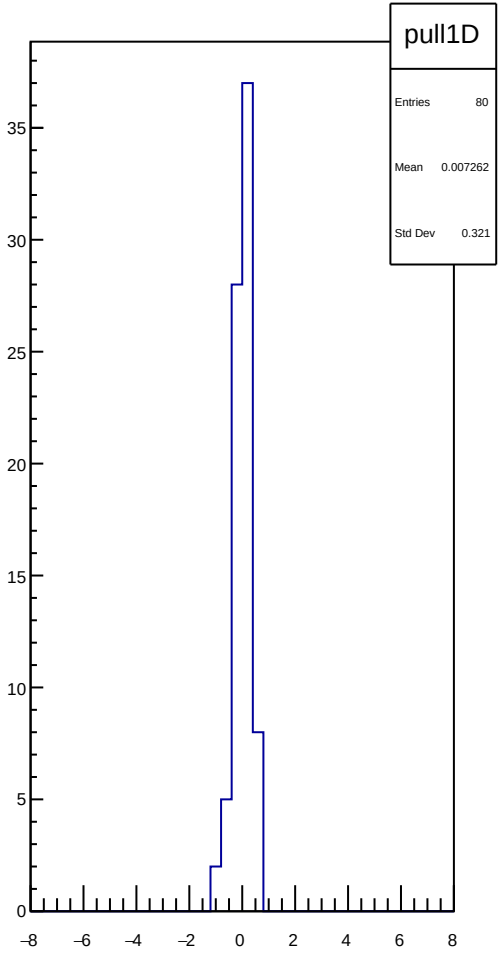

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 7.239 / 79
p0 −11.67 ± 0.4365
pull
Entries 80
Mean 60.66
Std Dev 17.59

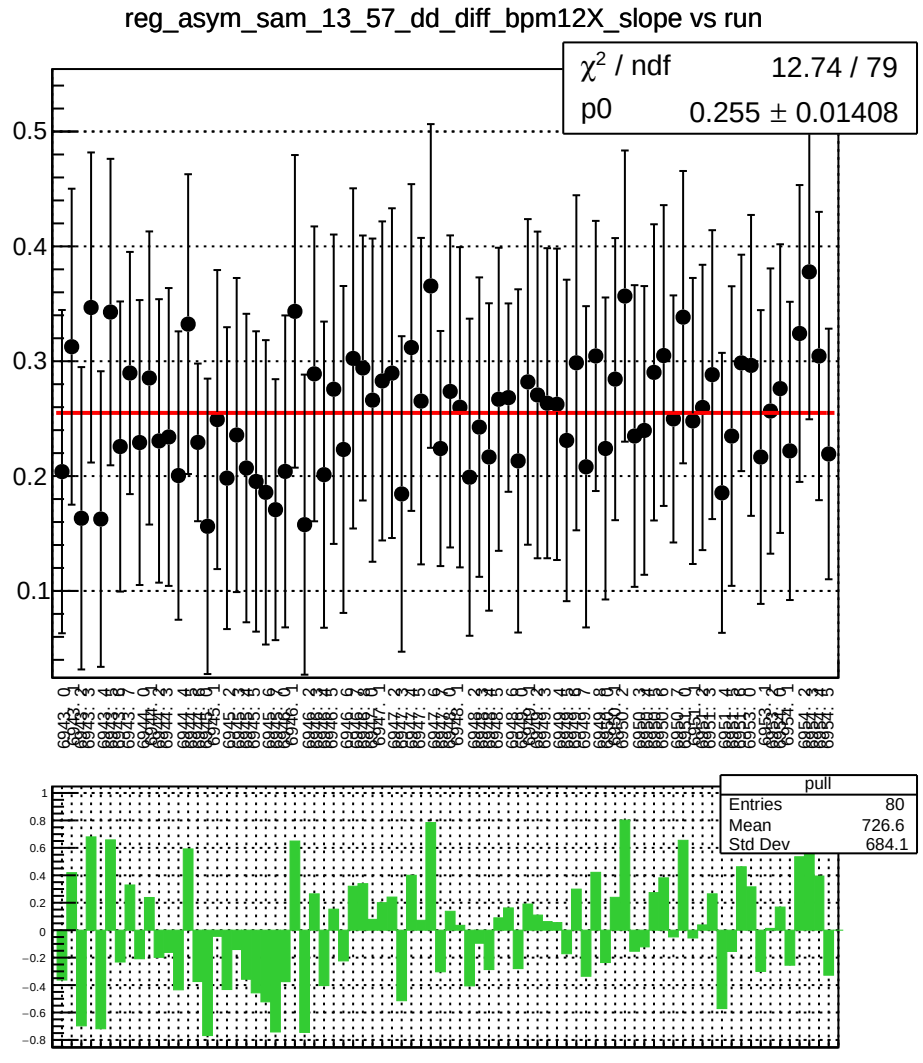

pull1D
Entries 80
Mean 0.01431
Std Dev 0.3005

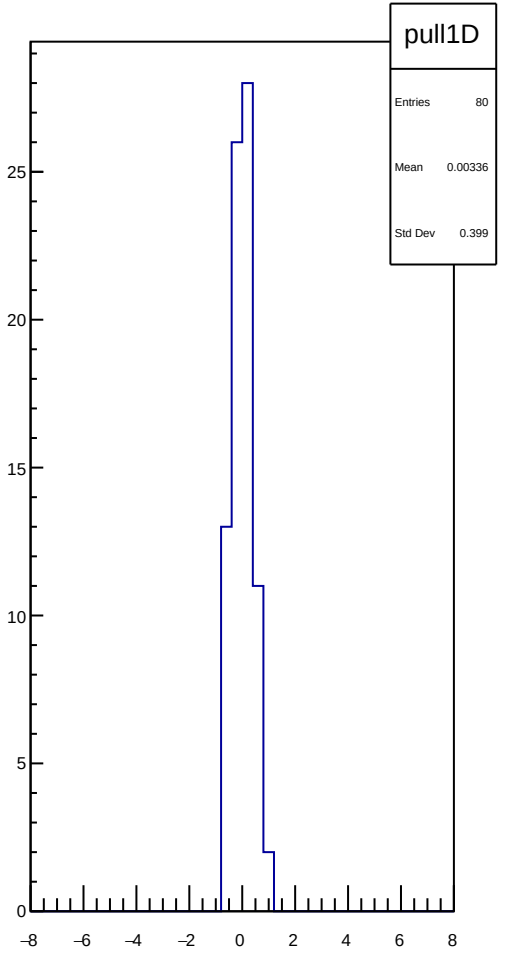

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.582 / 79
p0 −31.89 ± 0.3087
pull
Entries 80
Mean 56.1
Std Dev 57
pull1D
Entries 80
Mean −0.008165
Std Dev 0.264

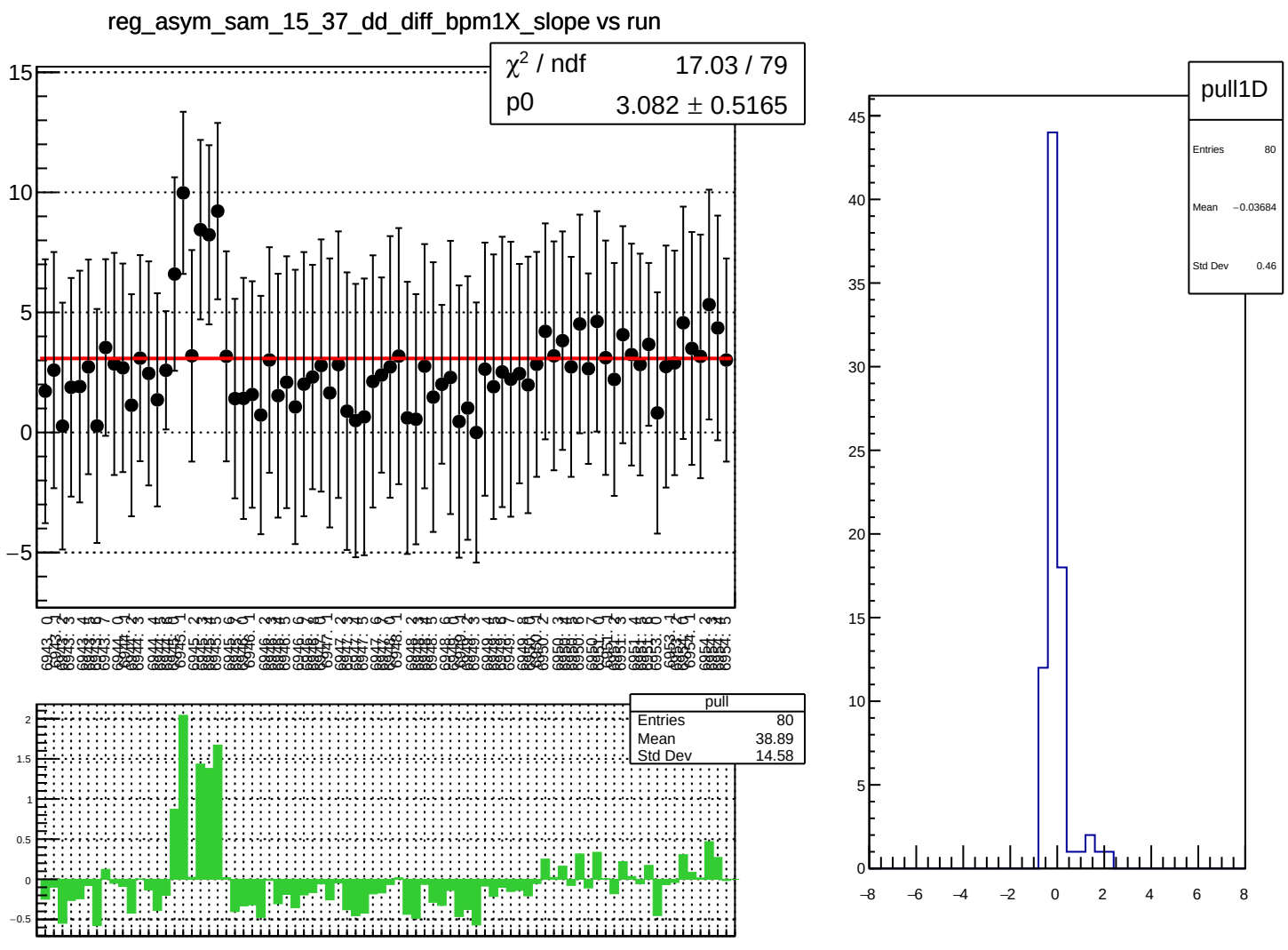

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 6.594 / 79
p0 −12.16 ± 0.4075
pull
Entries 80
Mean 126.4
Std Dev 81.29
pull1D
Entries 80
Mean −0.008123
Std Dev 0.287

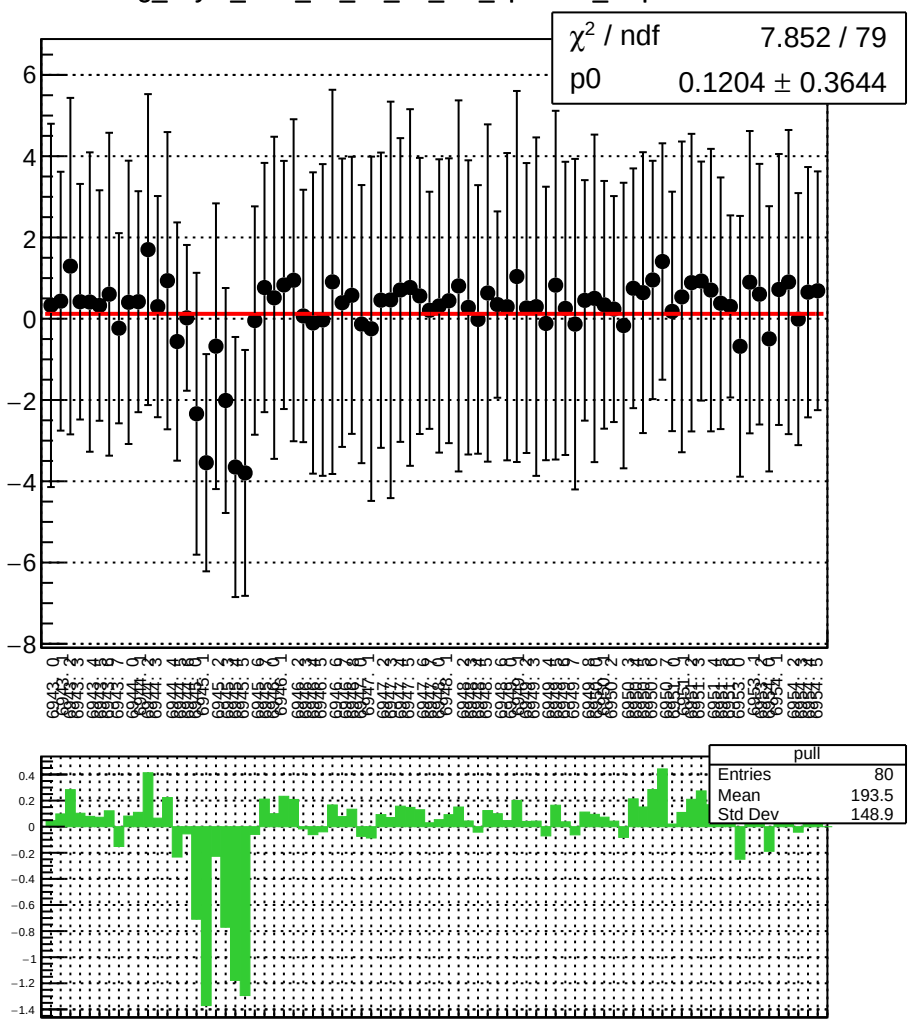

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 8.249 / 79
p0 −5.262 ± 0.3552
pull
Entries 80
Mean 254.8
Std Dev 219.3

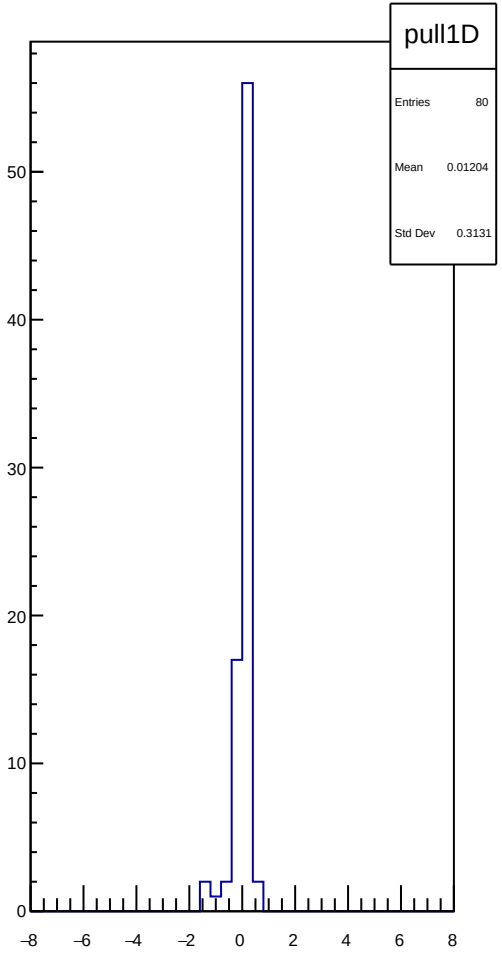

pull1D
Entries 80
Mean 0.007262
Std Dev 0.321

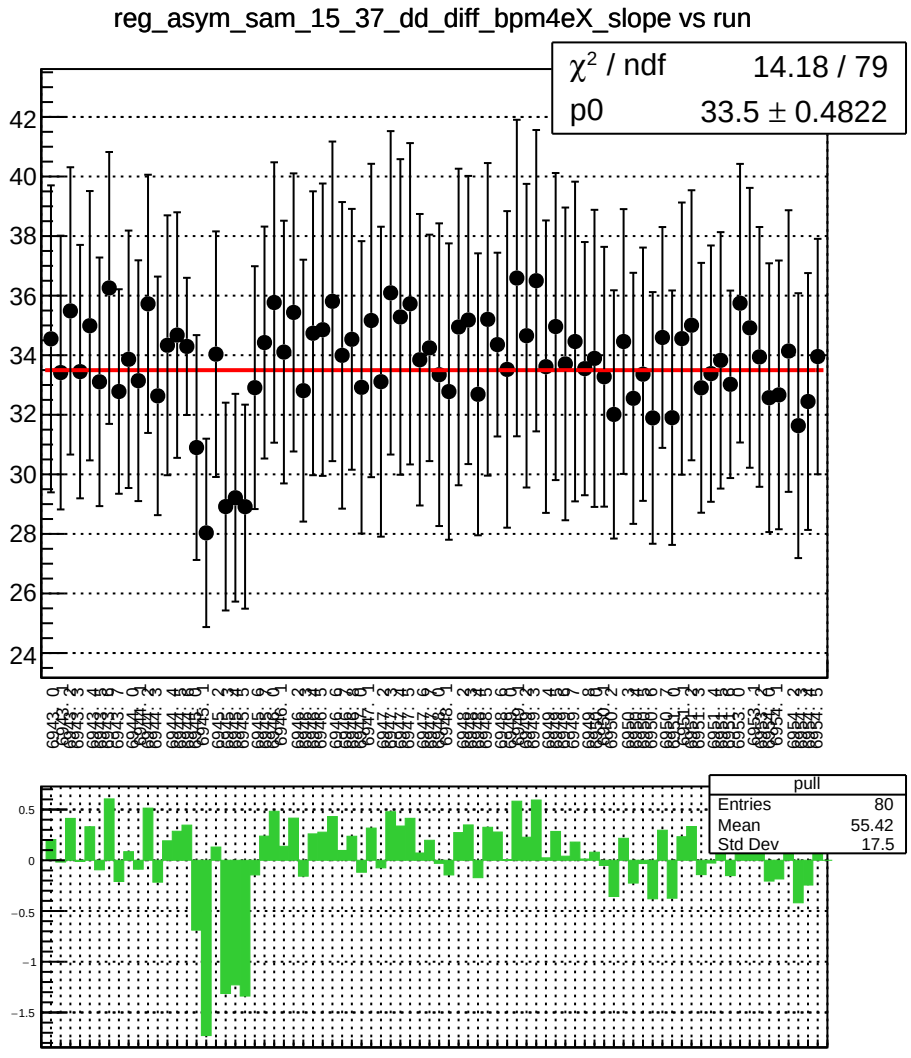

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 12.74 / 79
p0 0.255 ± 0.01408
pull
Entries 80
Mean 726.6
Std Dev 684.1

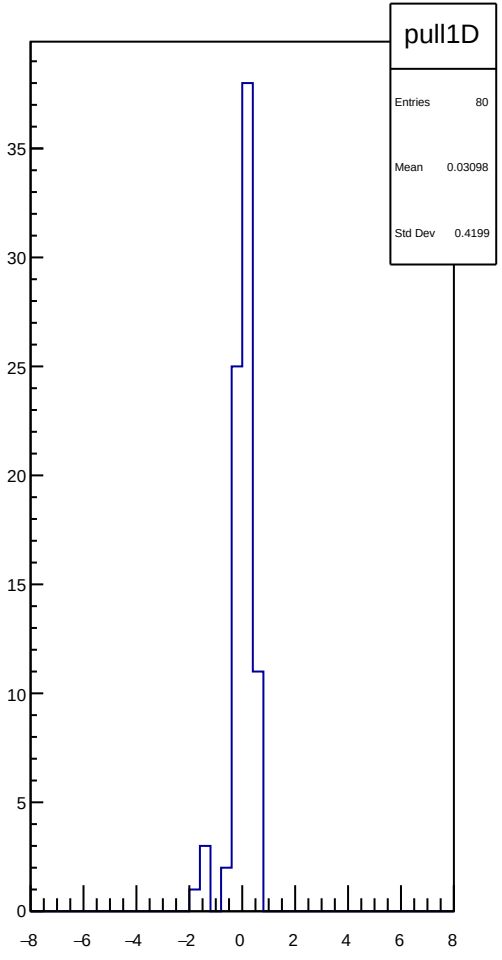

pull1D
Entries 80
Mean 0.00336
Std Dev 0.399

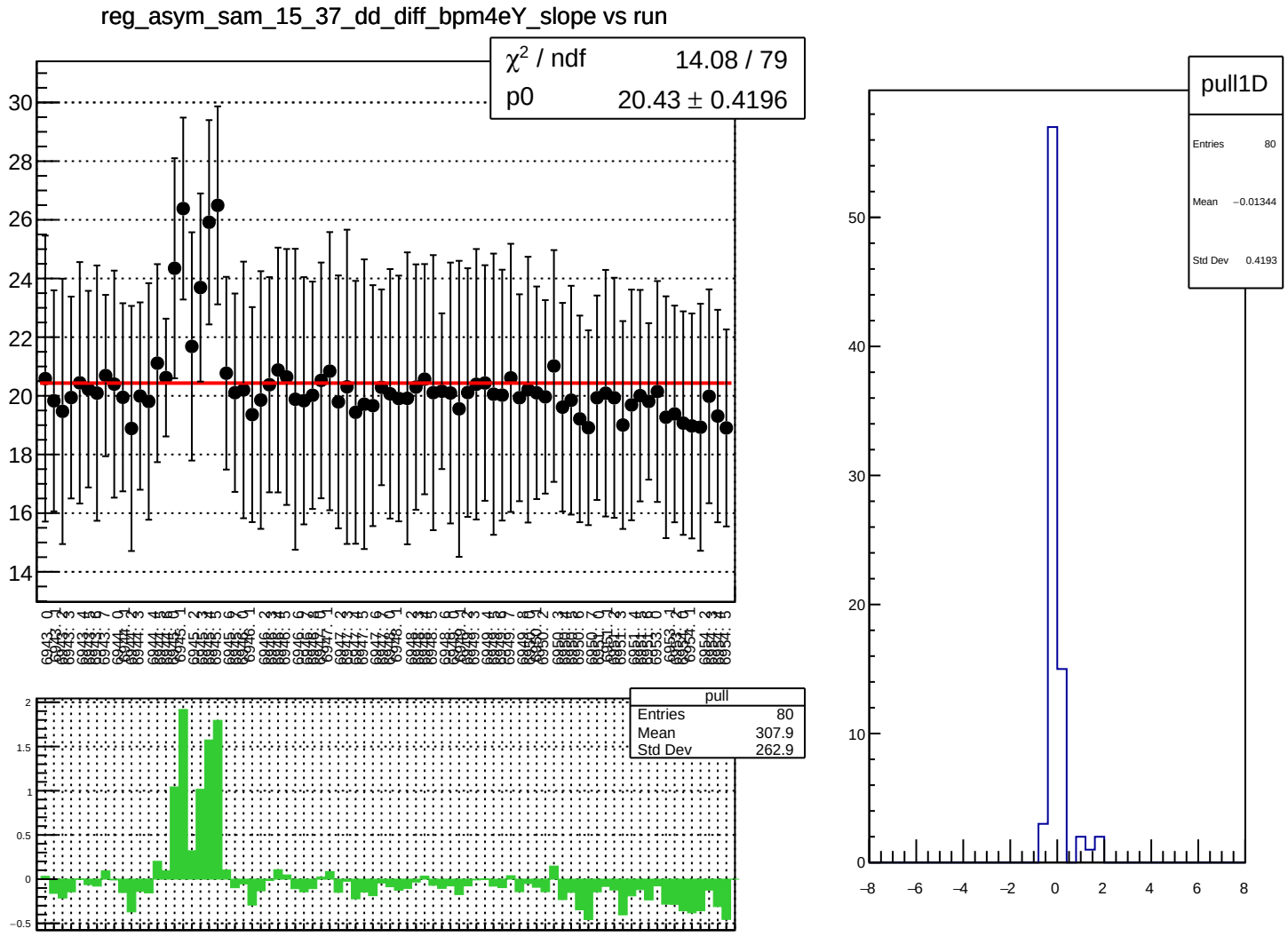

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 17.03 / 79
p0 3.082 ± 0.5165
pull
Entries 80
Mean 38.89
Std Dev 14.58
pull1D
Entries 80
Mean −0.03684
Std Dev 0.46

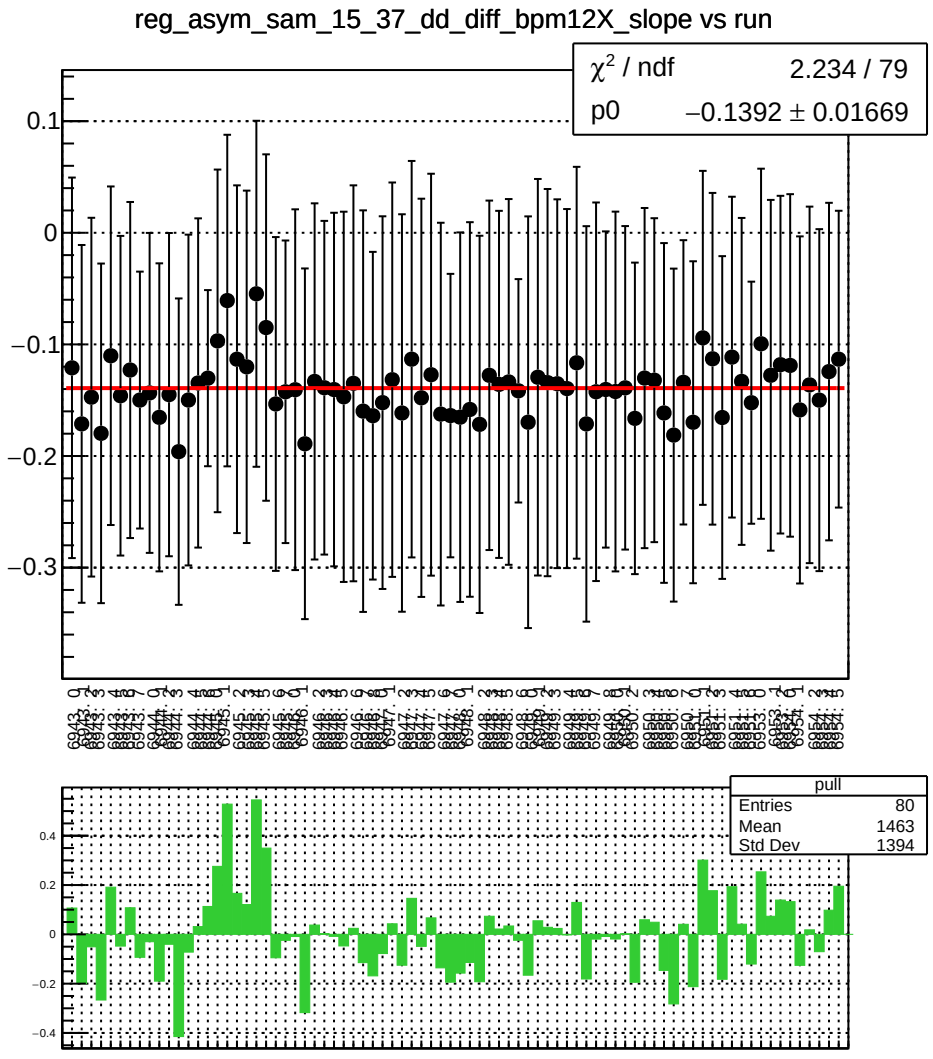

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.852 / 79
p0 0.1204 ± 0.3644
pull
Entries 80
Mean 193.5
Std Dev 148.9

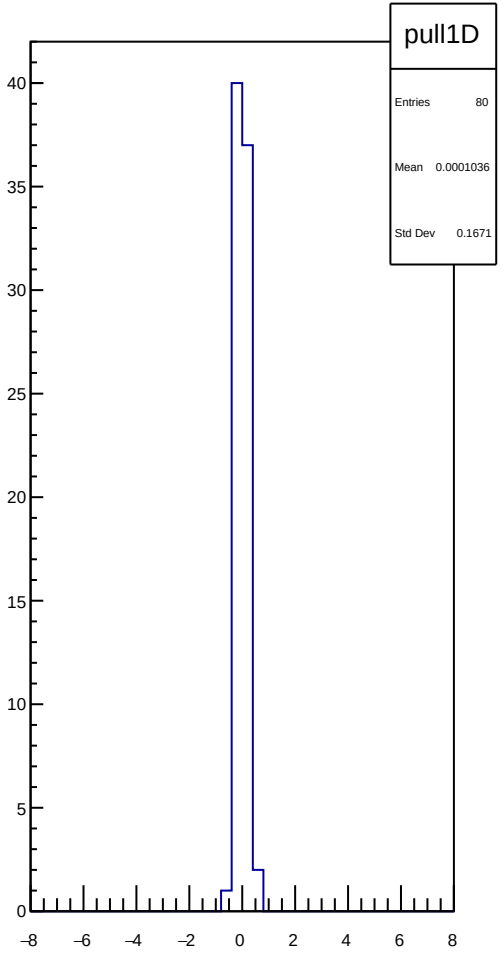

pull1D
Entries 80
Mean 0.01204
Std Dev 0.3131

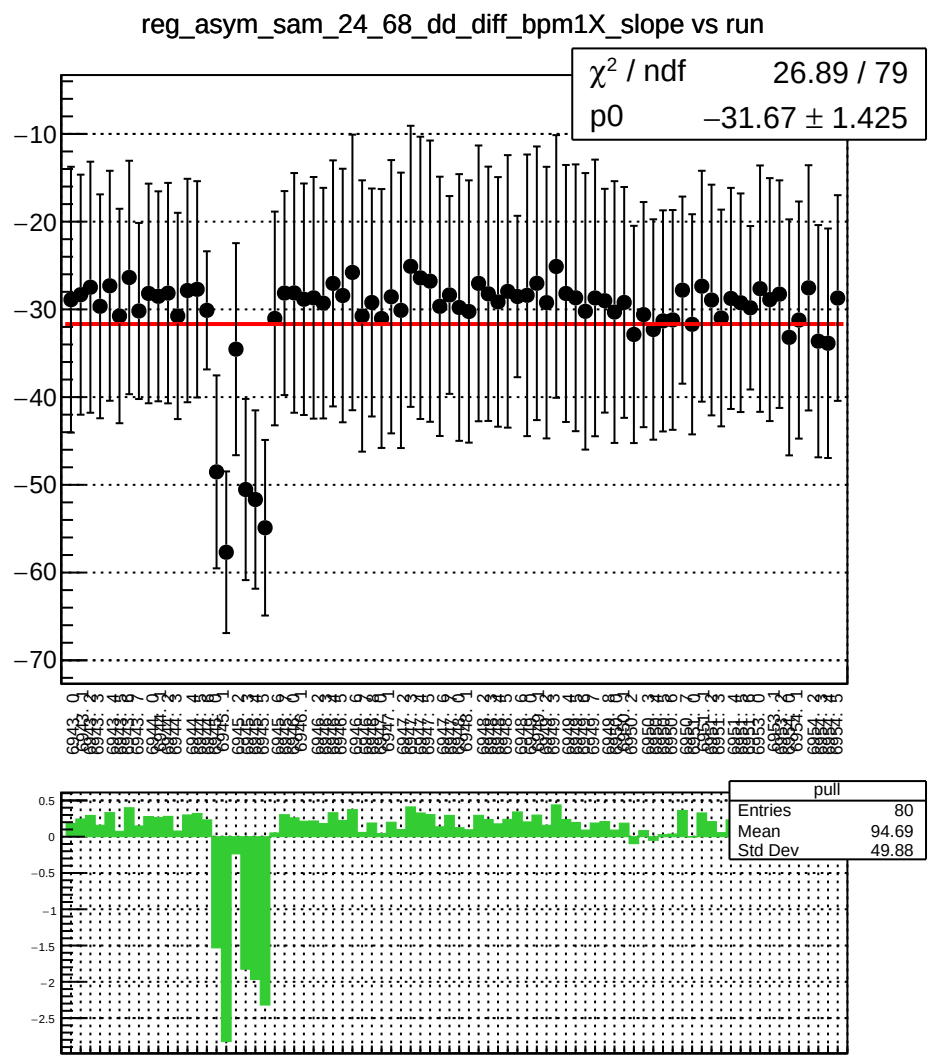

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 14.18 / 79
p0 33.5 ± 0.4822
pull
Entries 80
Mean 55.42
Std Dev 17.5

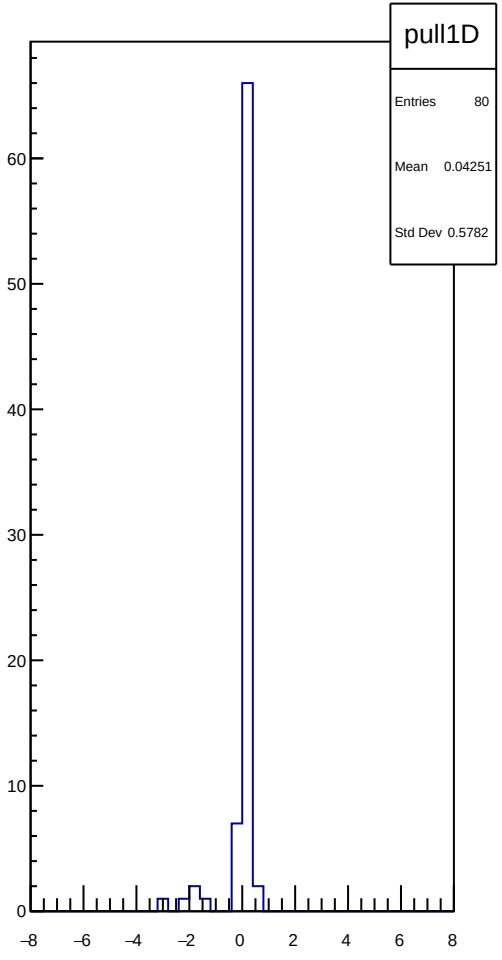

pull1D
Entries 80
Mean 0.03098
Std Dev 0.4199

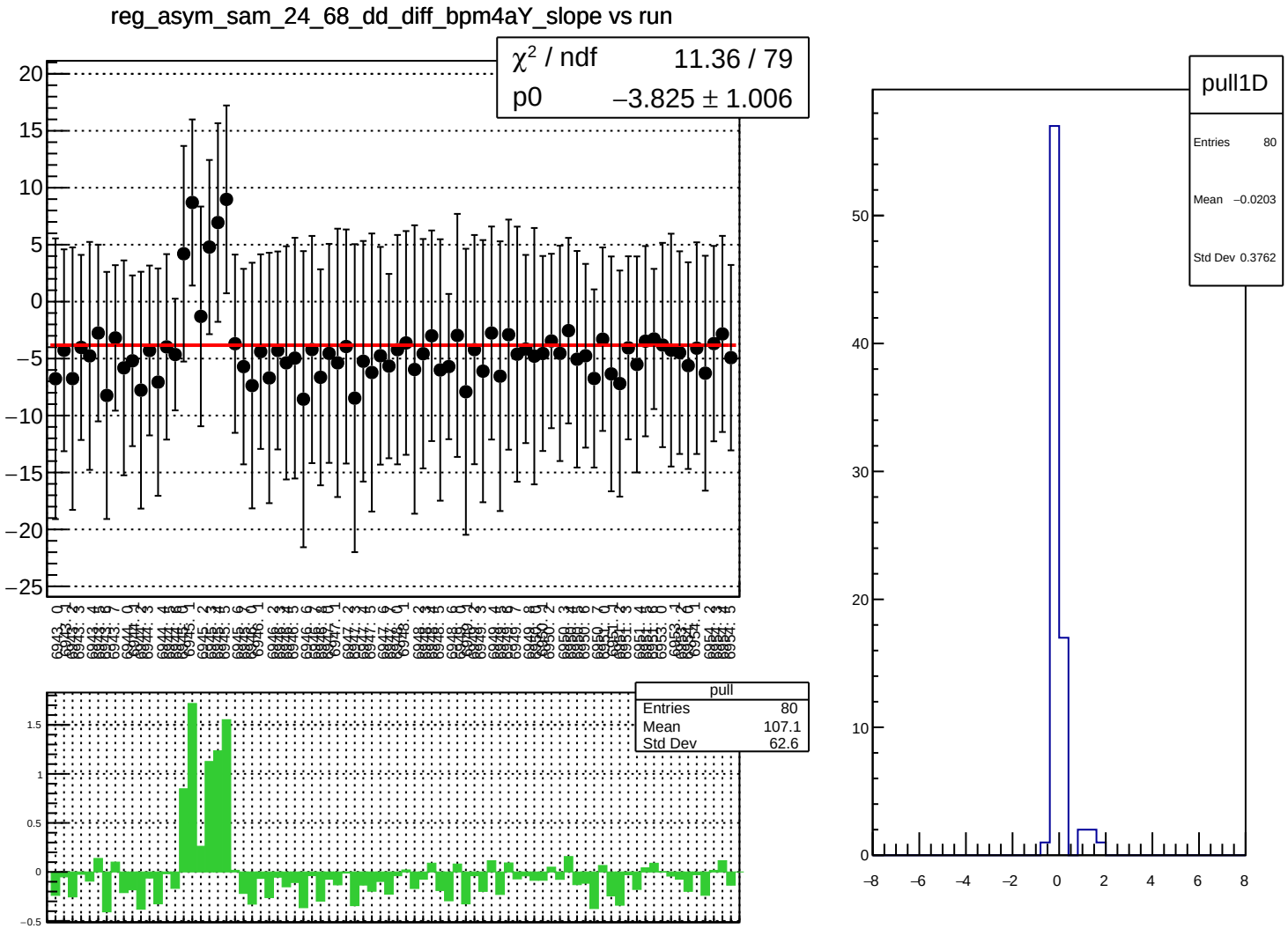

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.08 / 79
p0 20.43 ± 0.4196
pull
Entries 80
Mean 307.9
Std Dev 262.9
pull1D
Entries 80
Mean −0.01344
Std Dev 0.4193

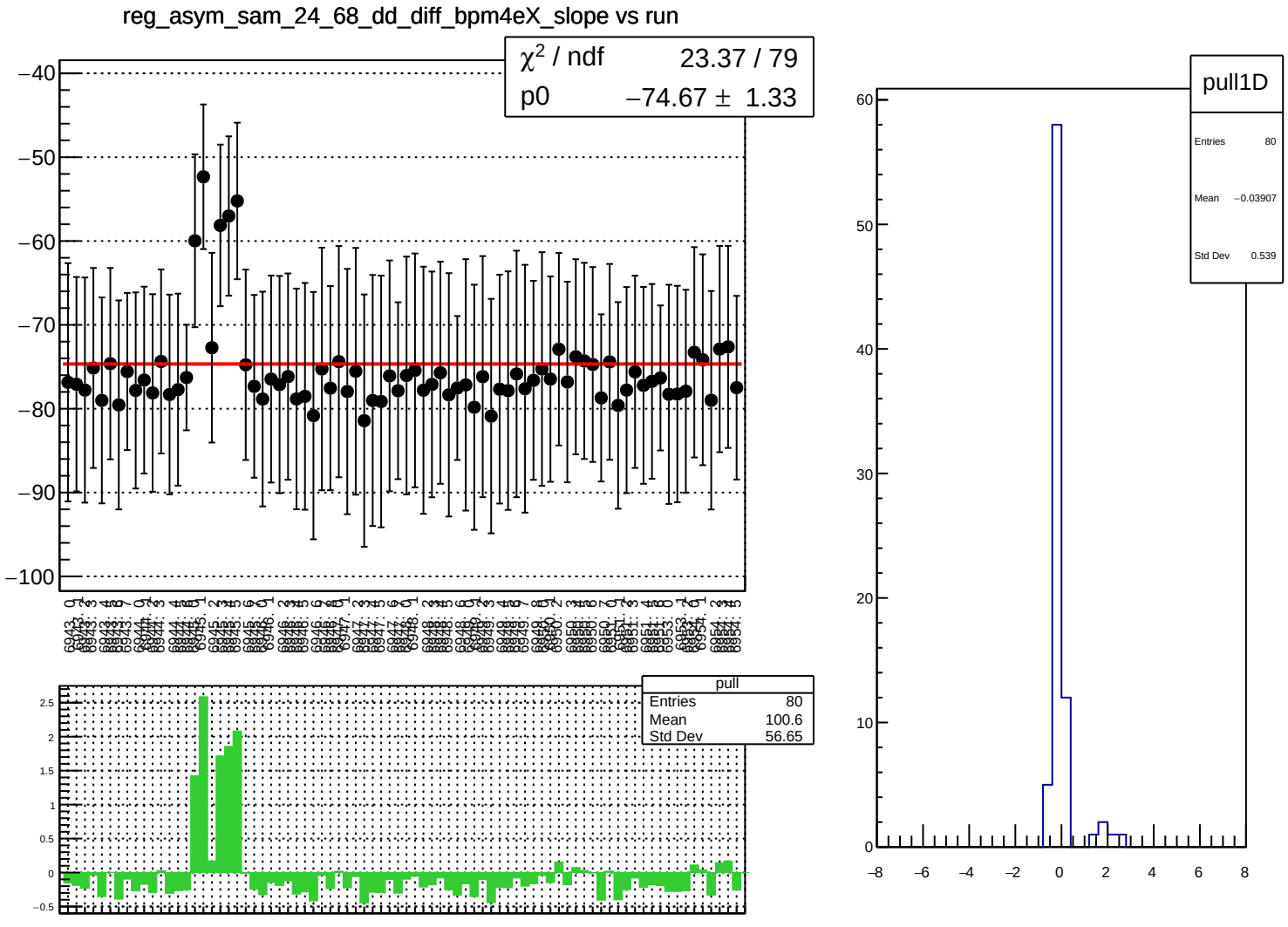

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 2.234 / 79
p0 −0.1392 ± 0.01669
pull
Entries 80
Mean 1463
Std Dev 1394

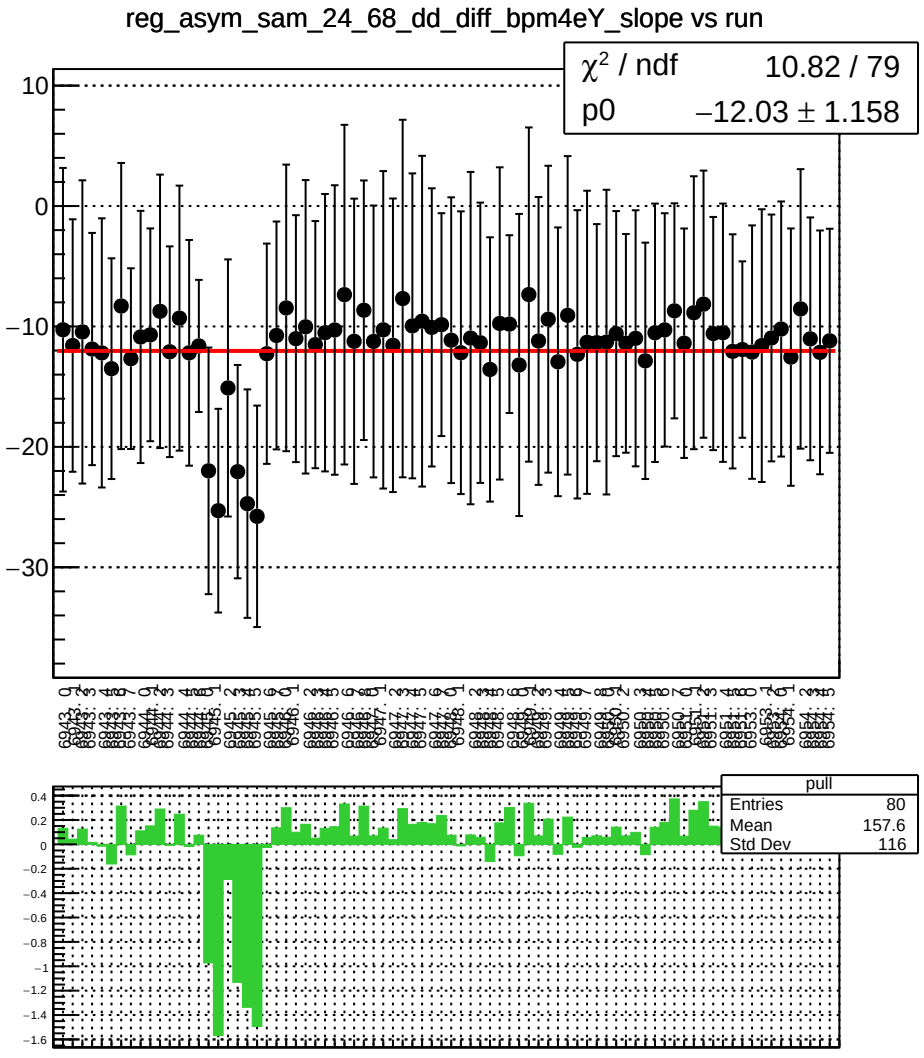

pull1D
Entries 80
Mean 0.0001036
Std Dev 0.1671

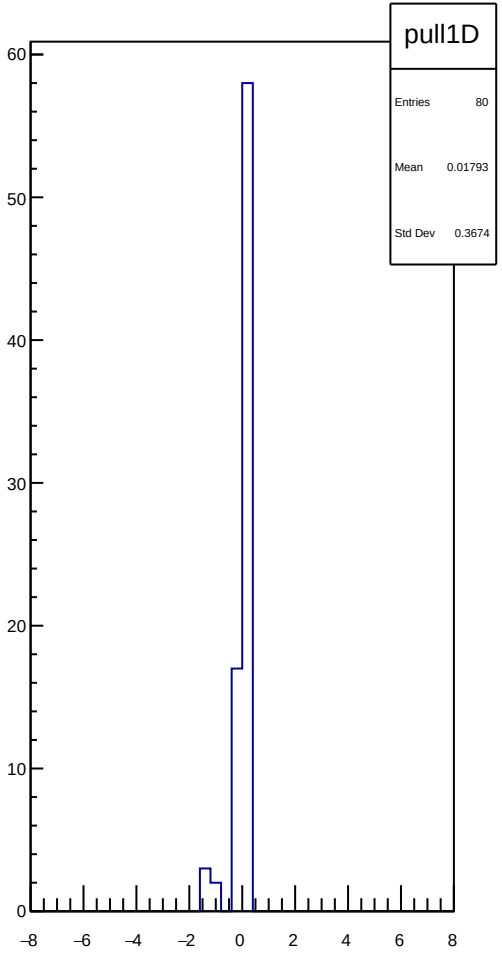

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 26.89 / 79
p0 −31.67 ± 1.425
pull
Entries 80
Mean 94.69
Std Dev 49.88

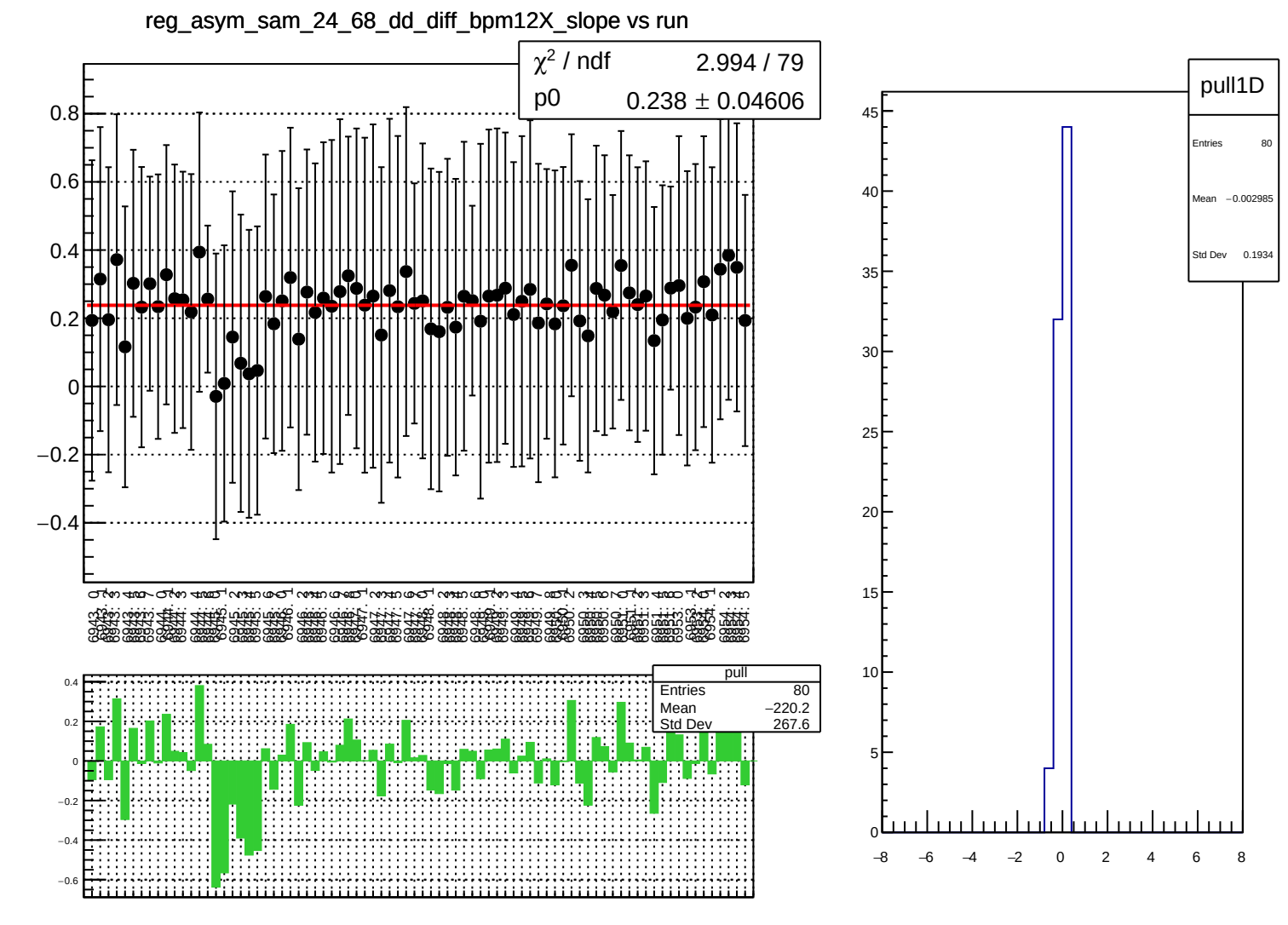

pull1D
Entries 80
Mean 0.04251
Std Dev 0.5782

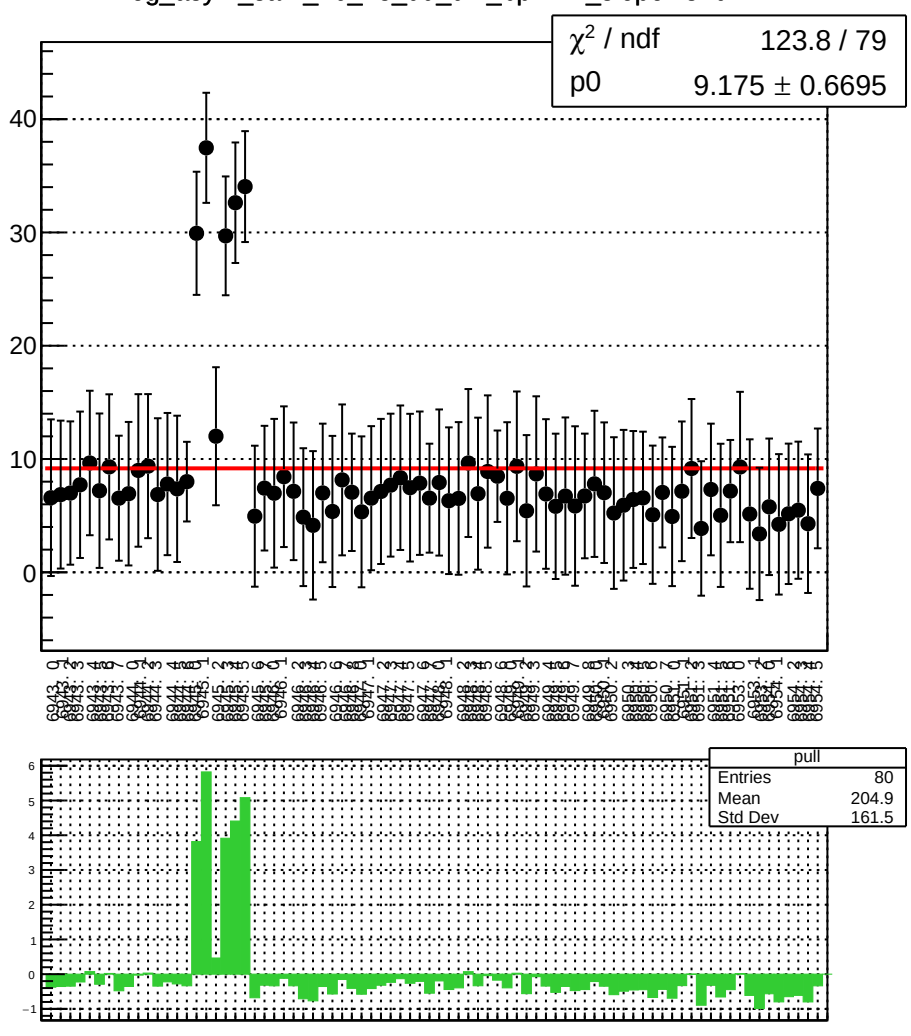

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.36 / 79
p0 −3.825 ± 1.006
pull
Entries 80
Mean 107.1
Std Dev 62.6
pull1D
Entries 80
Mean −0.0203
Std Dev 0.3762

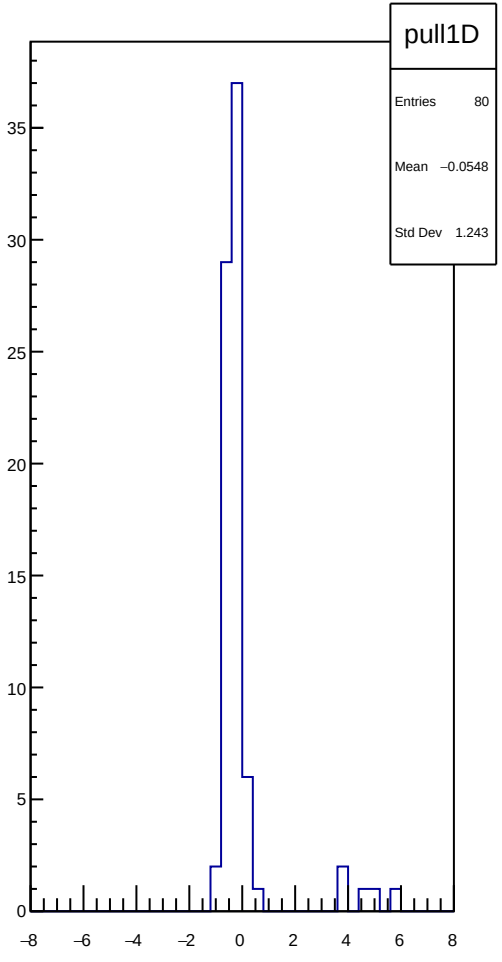

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 23.37 / 79
p0 −74.67 ± 1.33
pull
Entries 80
Mean 100.6
Std Dev 56.65
pull1D
Entries 80
Mean −0.03907
Std Dev 0.539

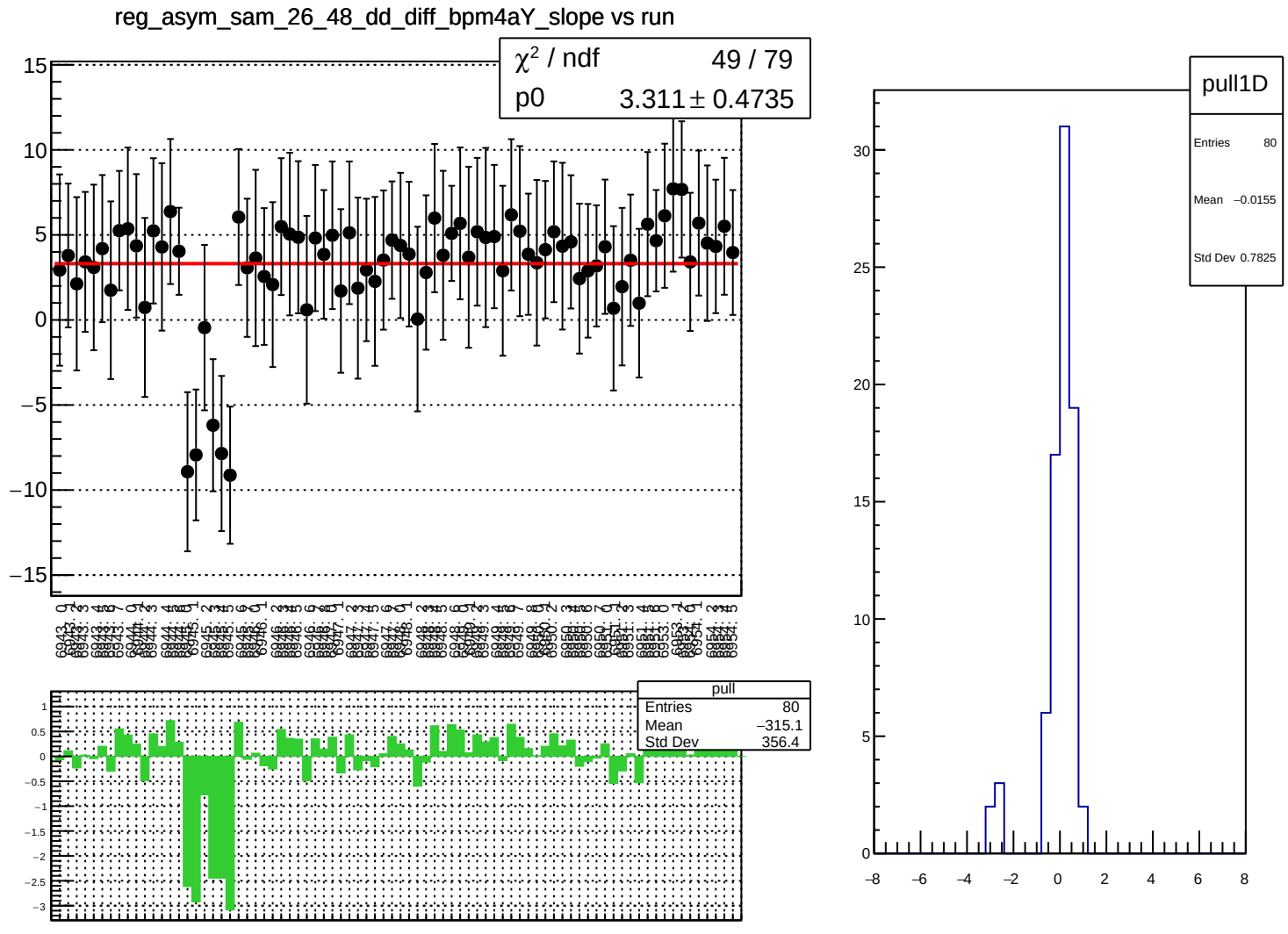

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.82 / 79
p0 −12.03 ± 1.158
pull
Entries 80
Mean 157.6
Std Dev 116

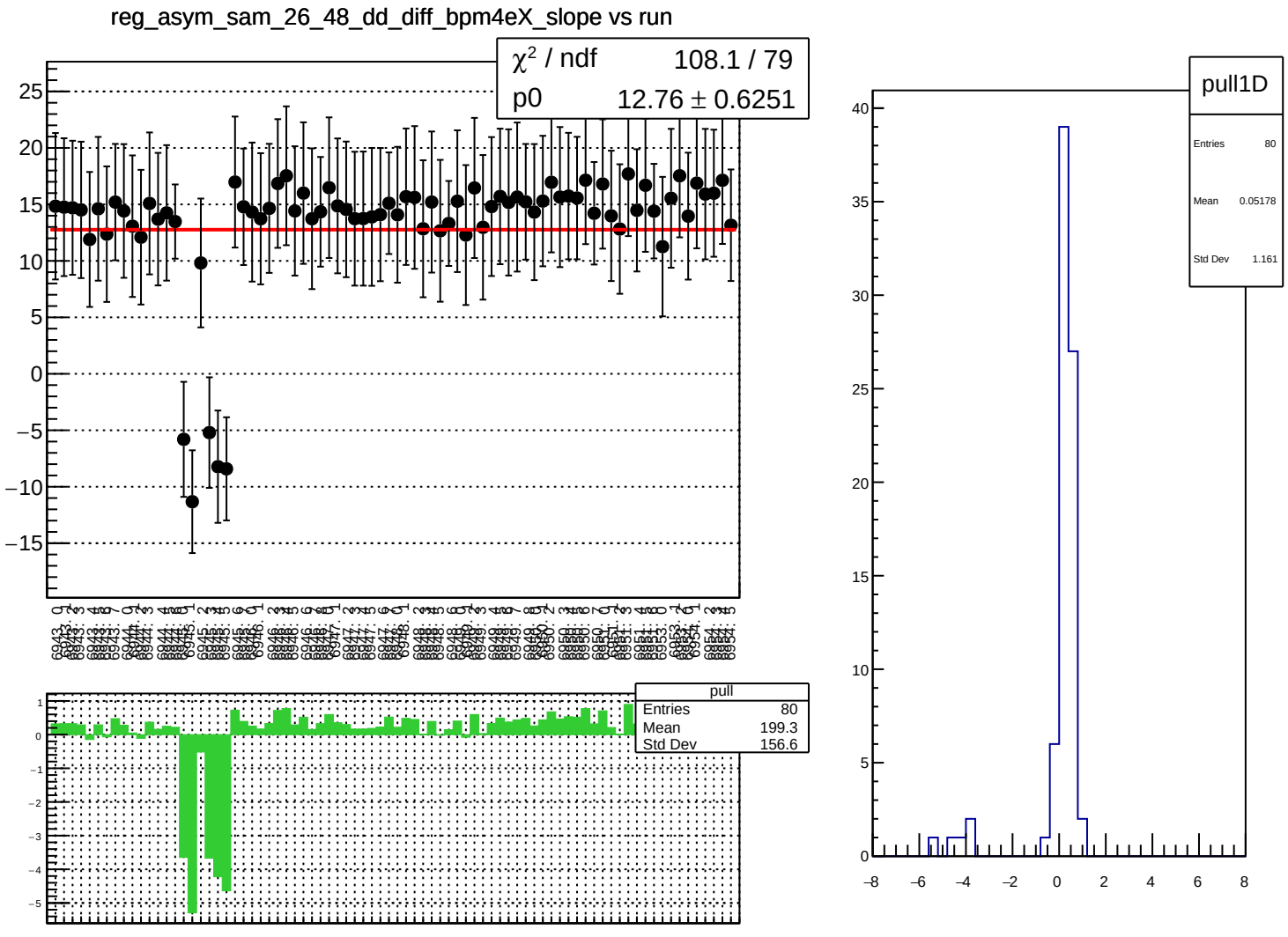

pull1D
Entries 80
Mean 0.01793
Std Dev 0.3674

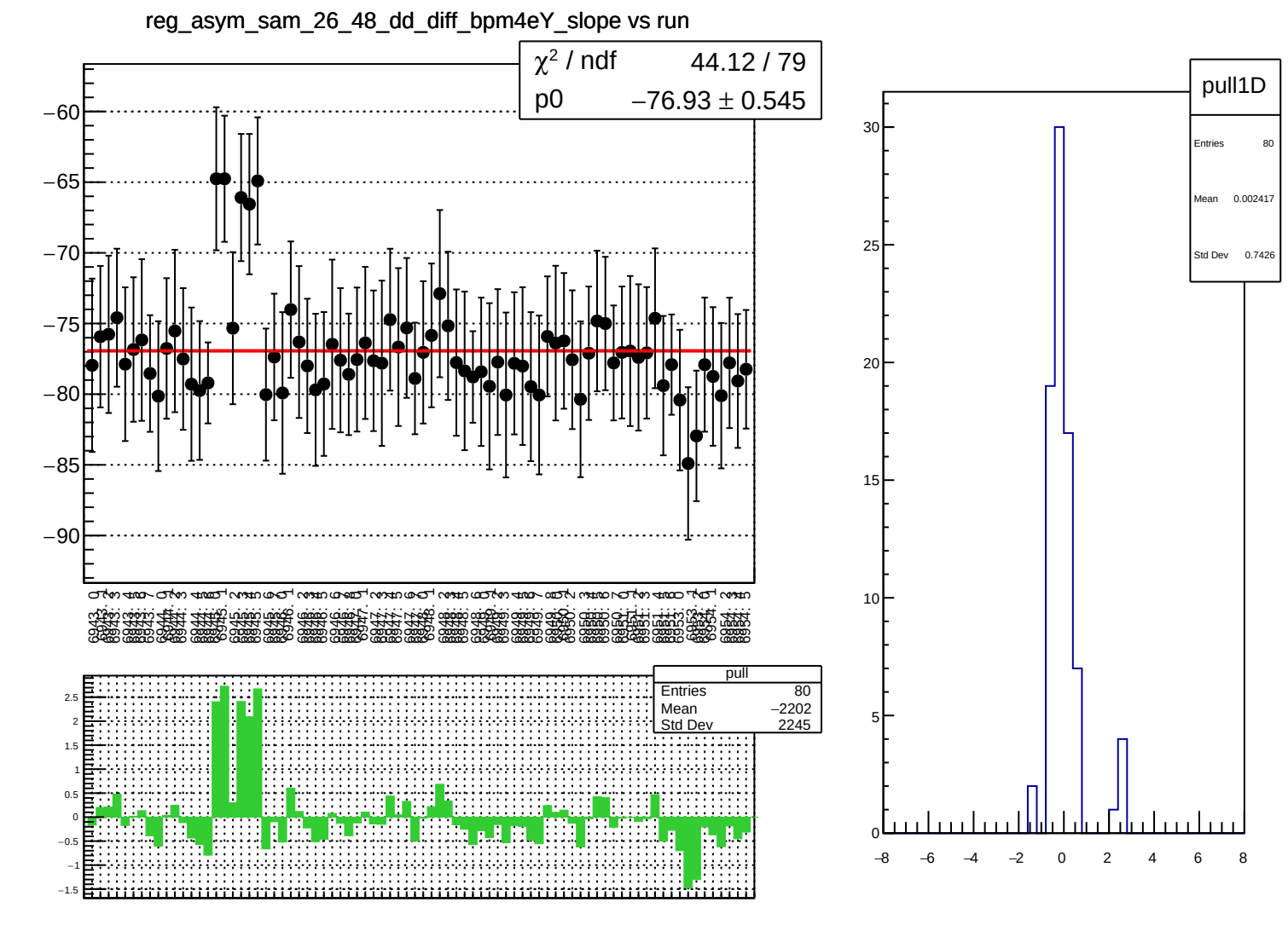

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 2.994 / 79
p0 0.238 ± 0.04606
pull
Entries 80
Mean −220.2
Std Dev 267.6
pull1D
Entries 80
Mean −0.002985
Std Dev 0.1934

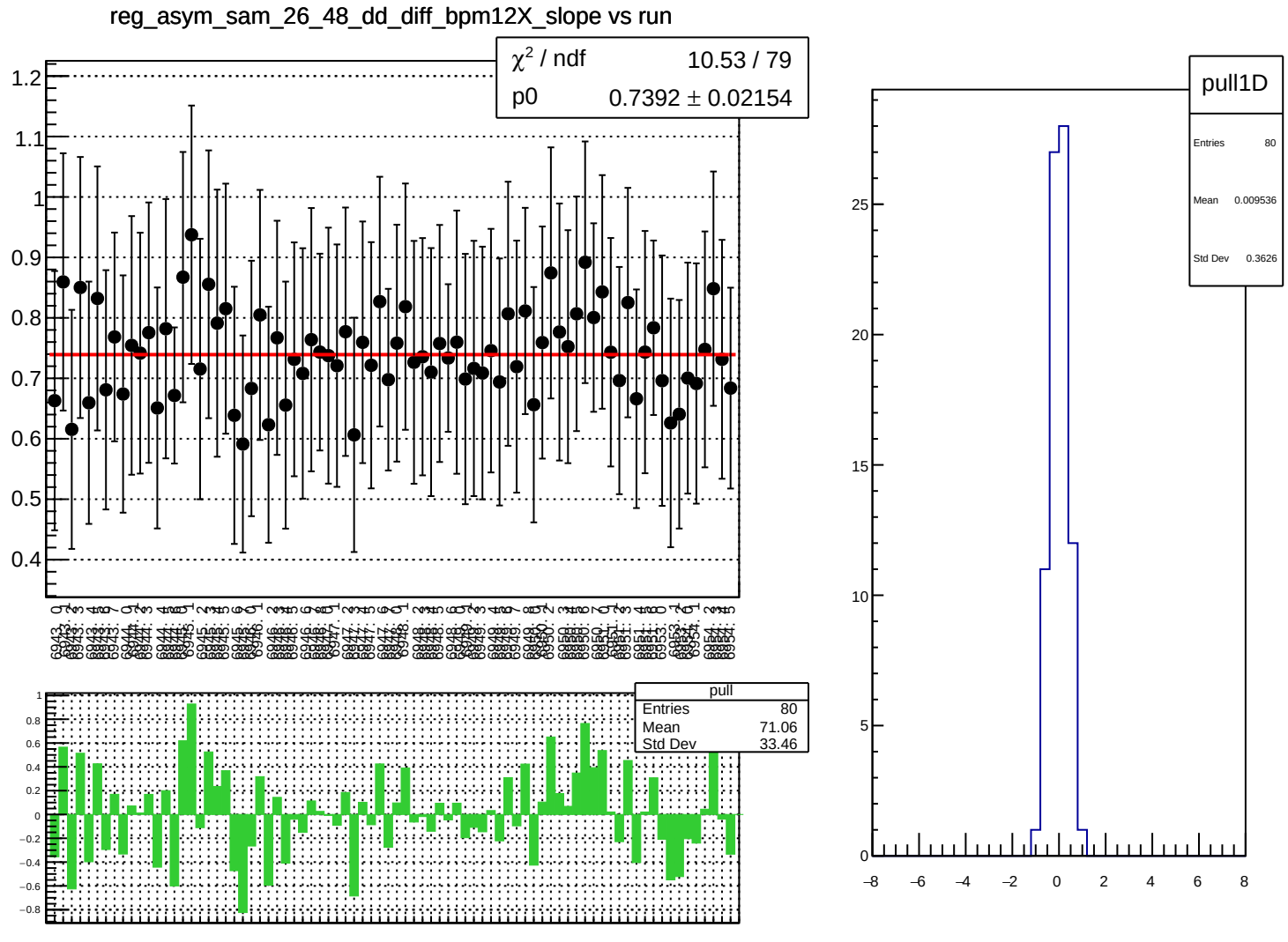

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 123.8 / 79
p0 9.175 ± 0.6695
pull
Entries 80
Mean 204.9
Std Dev 161.5

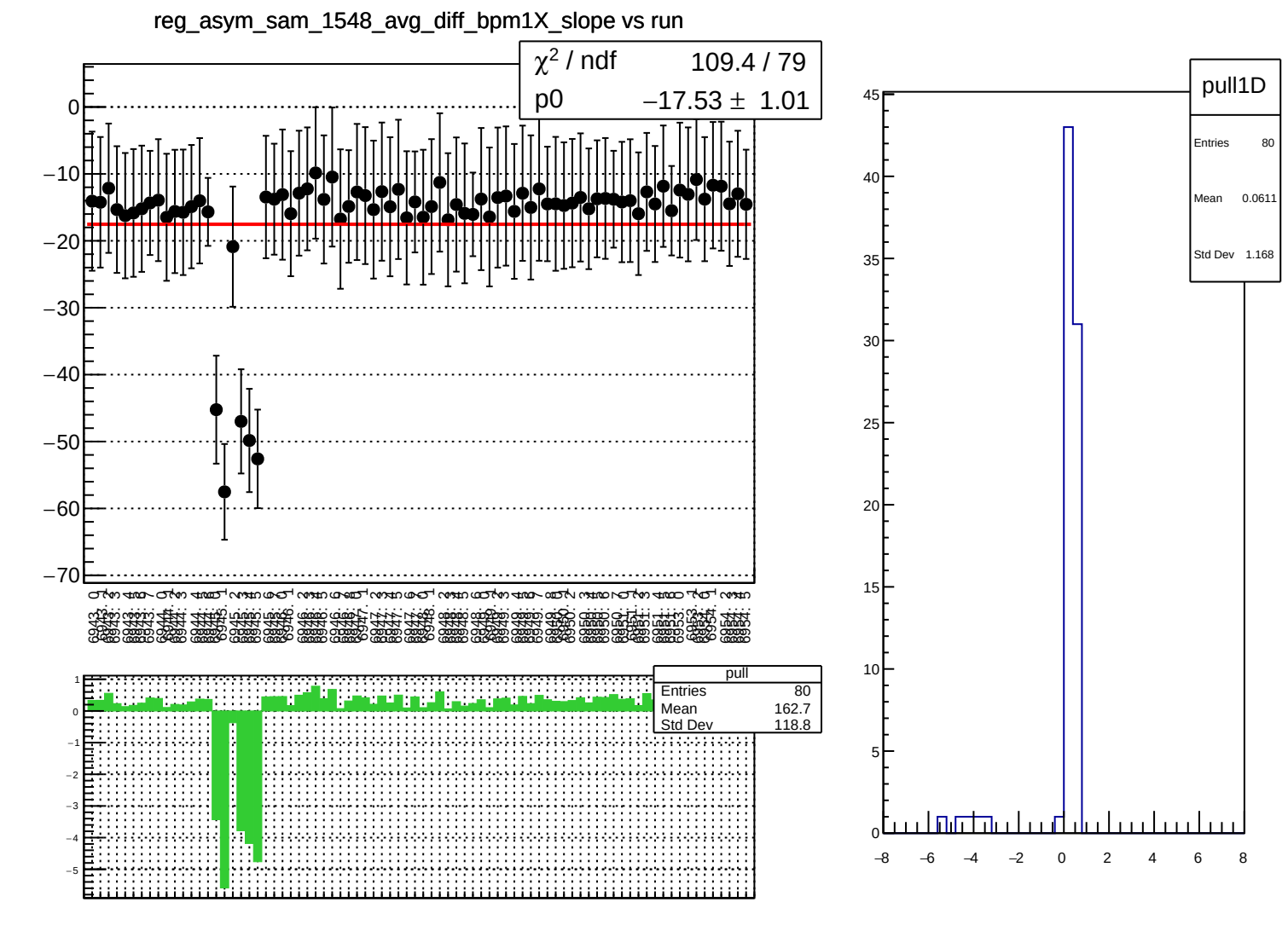

pull1D
Entries 80
Mean −0.0548
Std Dev 1.243

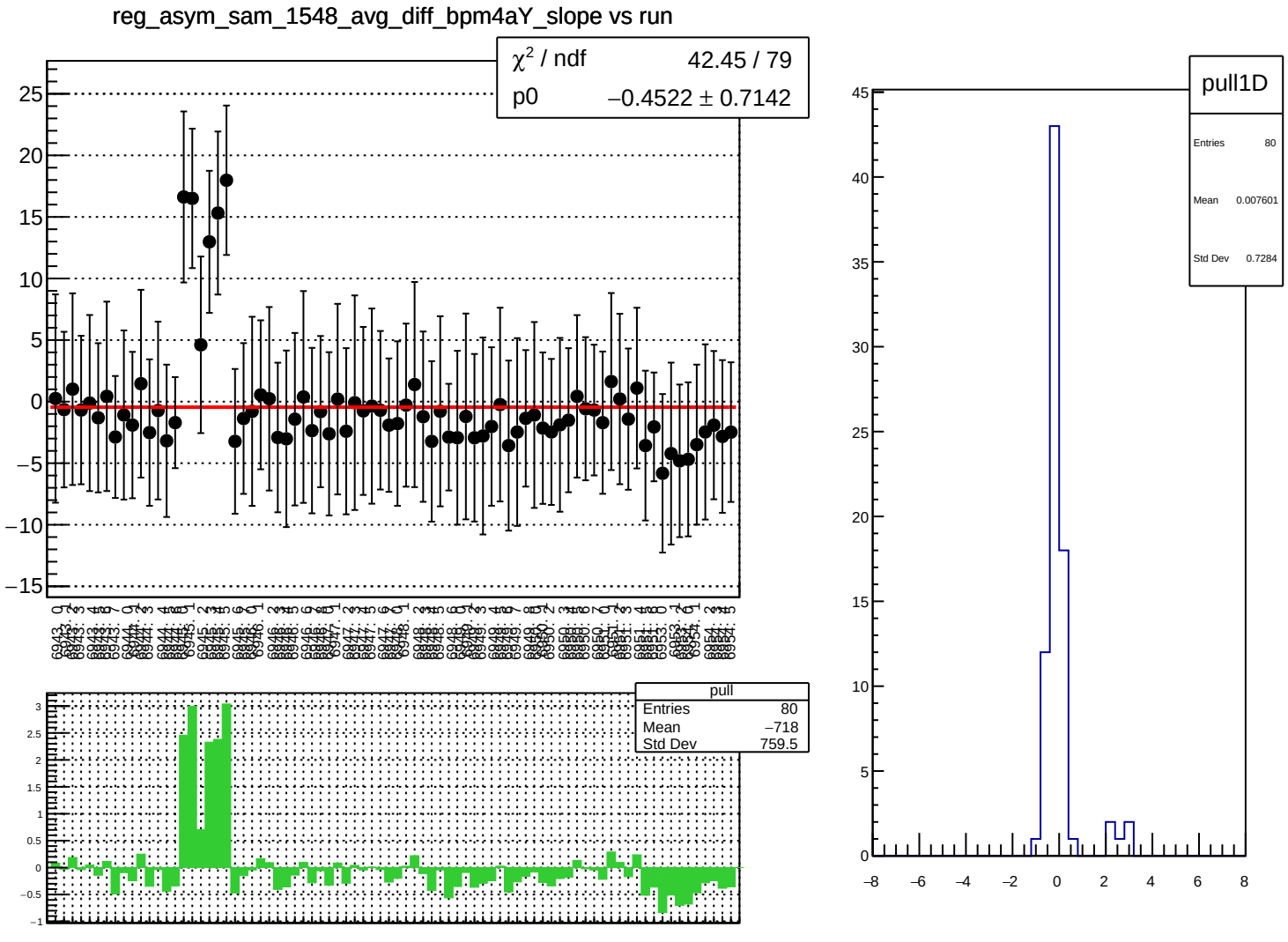

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 49 / 79
p0 3.311 ± 0.4735
pull
Entries 80
Mean −315.1
Std Dev 356.4
pull1D
Entries 80
Mean −0.0155
Std Dev 0.7825

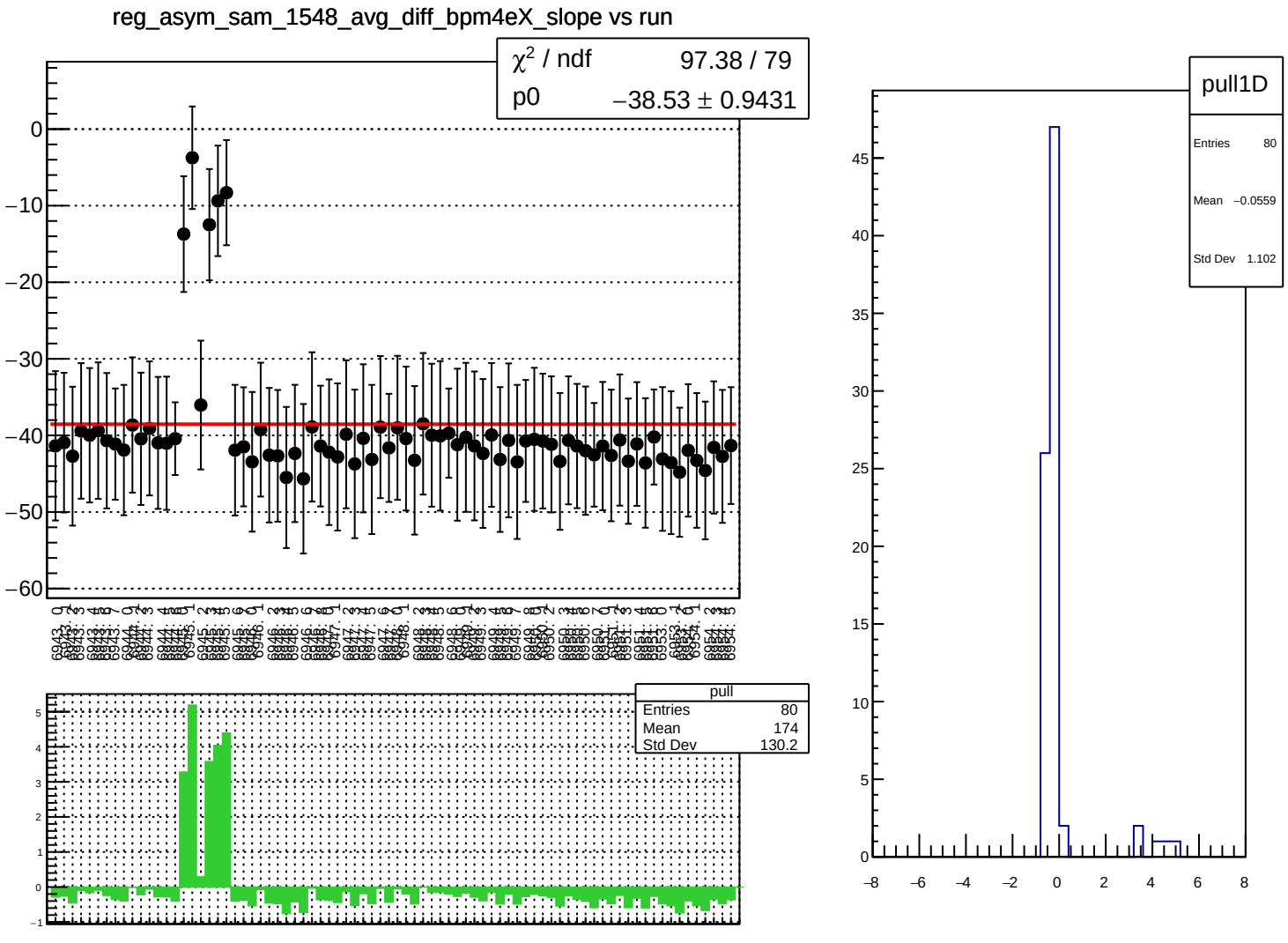

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 108.1 / 79
p0 12.76 ± 0.6251
pull
Entries 80
Mean 199.3
Std Dev 156.6
pull1D
Entries 80
Mean 0.05178
Std Dev 1.161

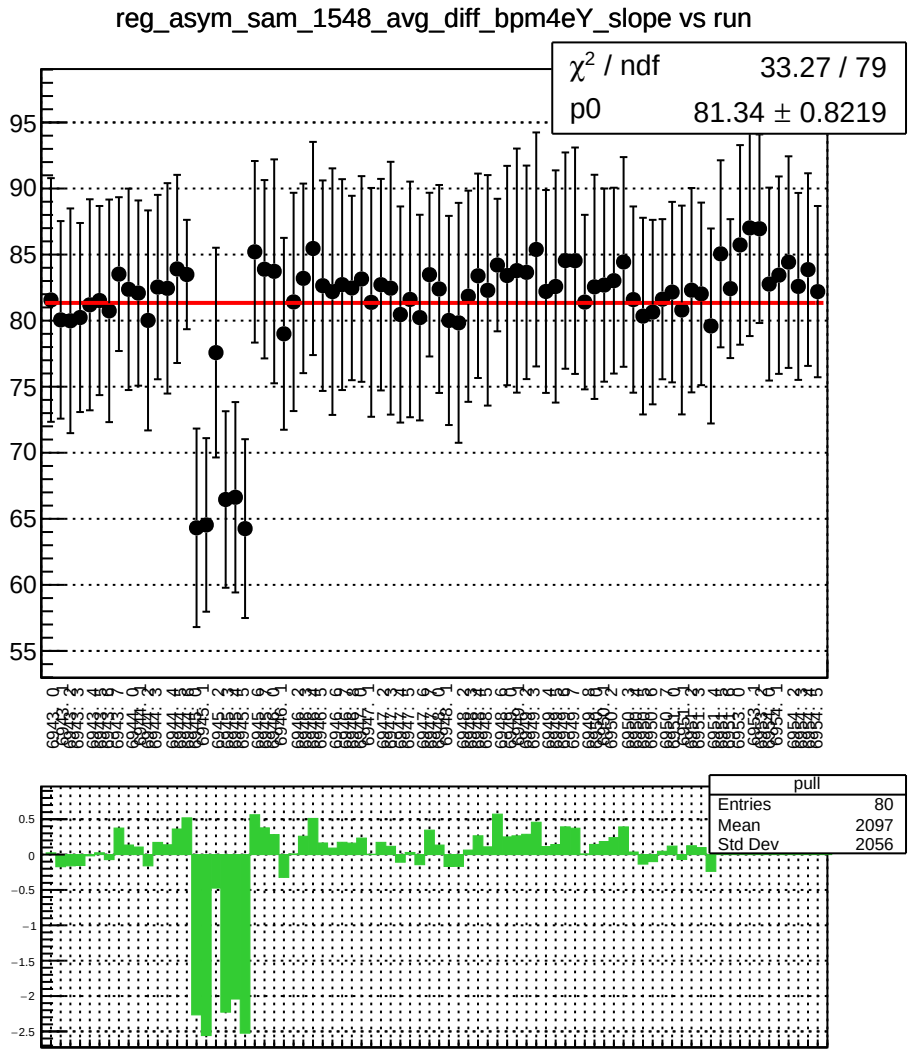

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 44.12 / 79
p0 −76.93 ± 0.545
pull
Entries 80
Mean −2202
Std Dev 2245
pull1D
Entries 80
Mean 0.002417
Std Dev 0.7426

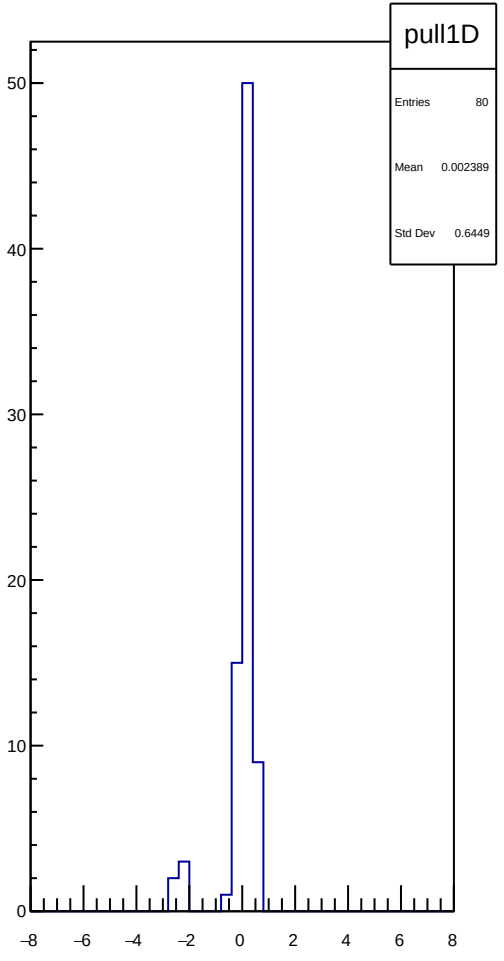

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 10.53 / 79
p0 0.7392 ± 0.02154
pull
Entries 80
Mean 71.06
Std Dev 33.46
pull1D
Entries 80
Mean 0.009536
Std Dev 0.3626

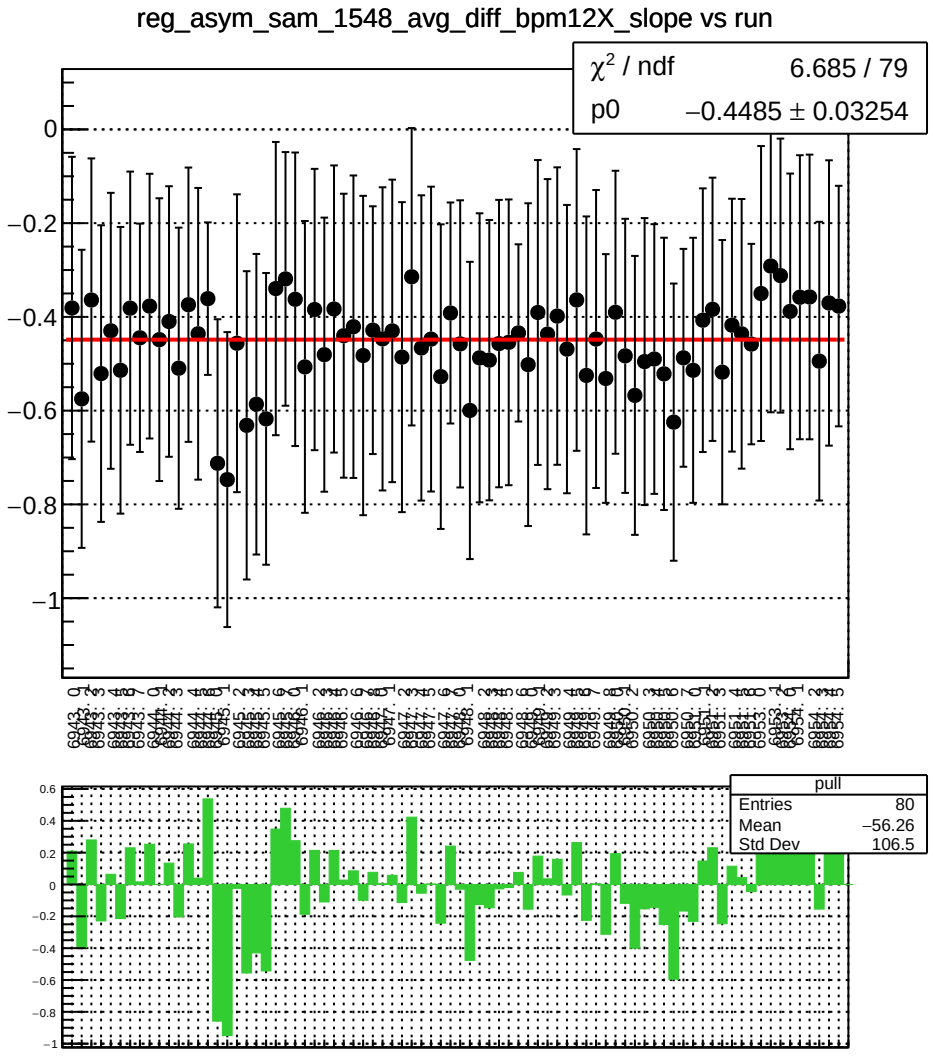

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 109.4 / 79
p0 −17.53 ± 1.01
pull
Entries 80
Mean 162.7
Std Dev 118.8
pull1D
Entries 80
Mean 0.0611
Std Dev 1.168

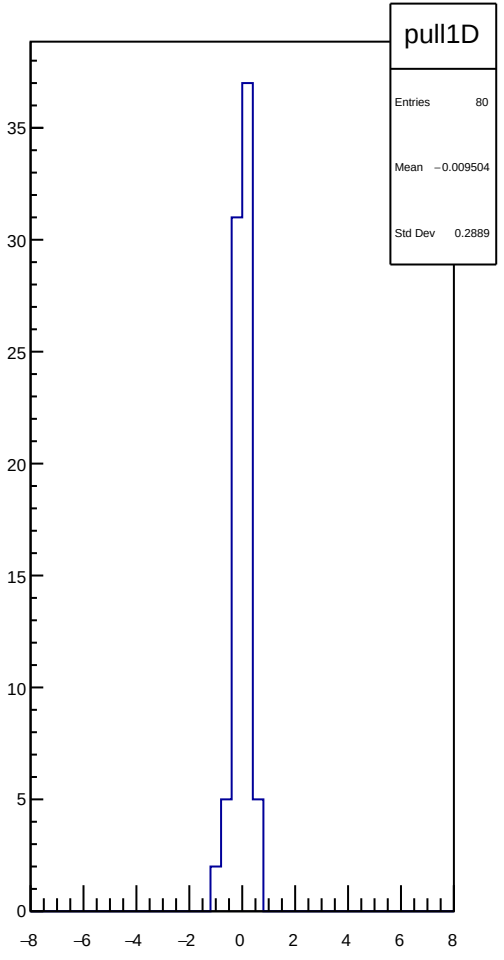

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 42.45 / 79
p0 −0.4522 ± 0.7142
pull
Entries 80
Mean −718
Std Dev 759.5
pull1D
Entries 80
Mean 0.007601
Std Dev 0.7284

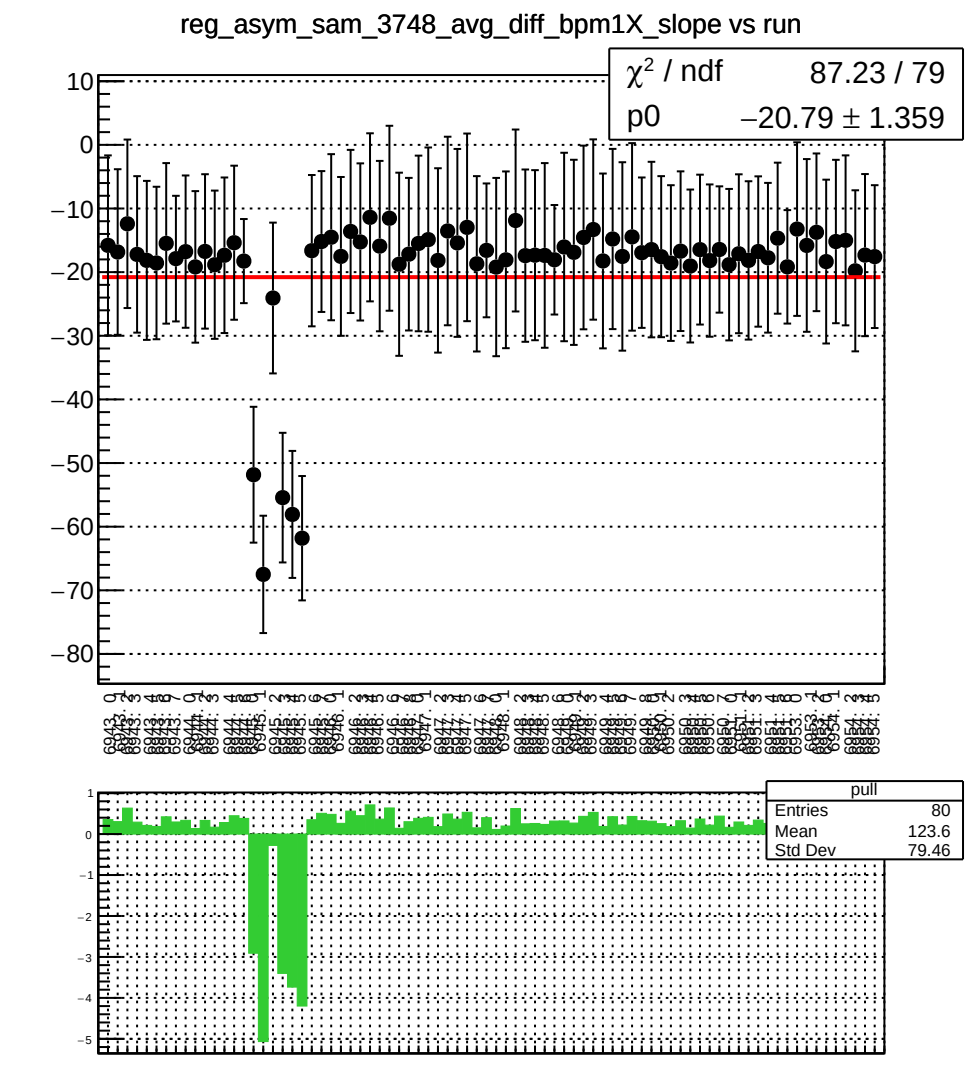

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 97.38 / 79
p0 −38.53 ± 0.9431
pull
Entries 80
Mean 174
Std Dev 130.2
pull1D
Entries 80
Mean −0.0559
Std Dev 1.102

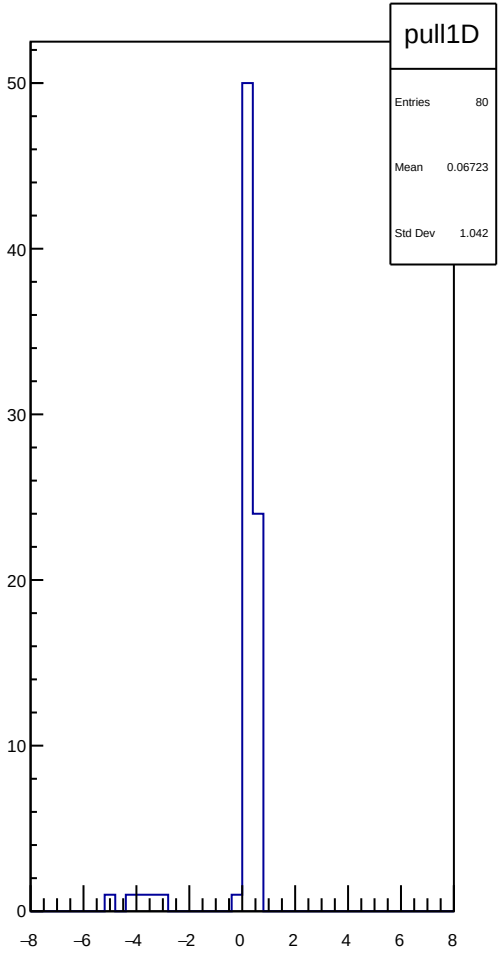

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 33.27 / 79
p0 81.34 ± 0.8219
pull
Entries 80
Mean 2097
Std Dev 2056

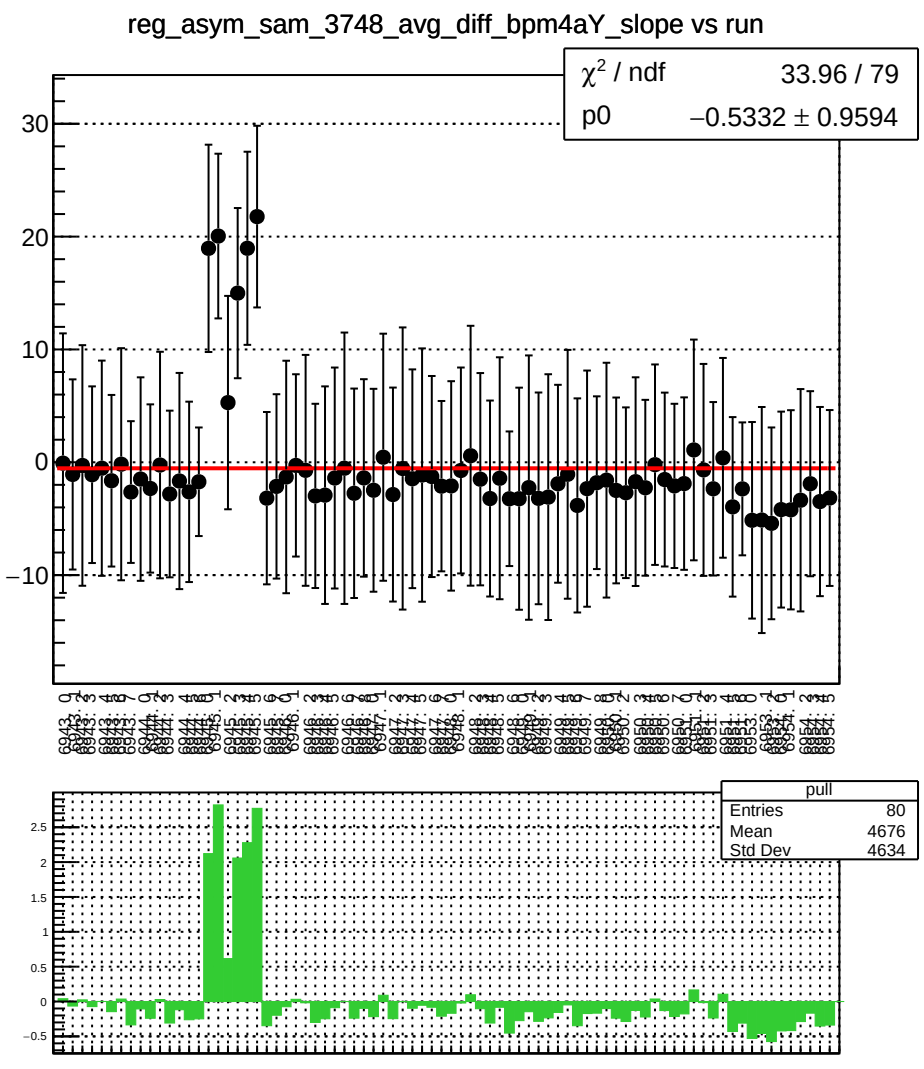

pull1D
Entries 80
Mean 0.002389
Std Dev 0.6449

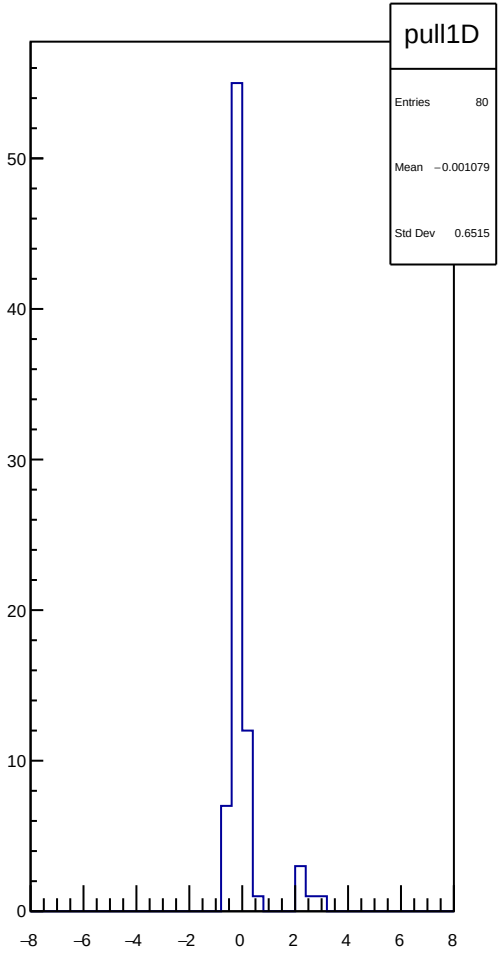

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 6.685 / 79
p0 −0.4485 ± 0.03254
pull
Entries 80
Mean −56.26
Std Dev 106.5

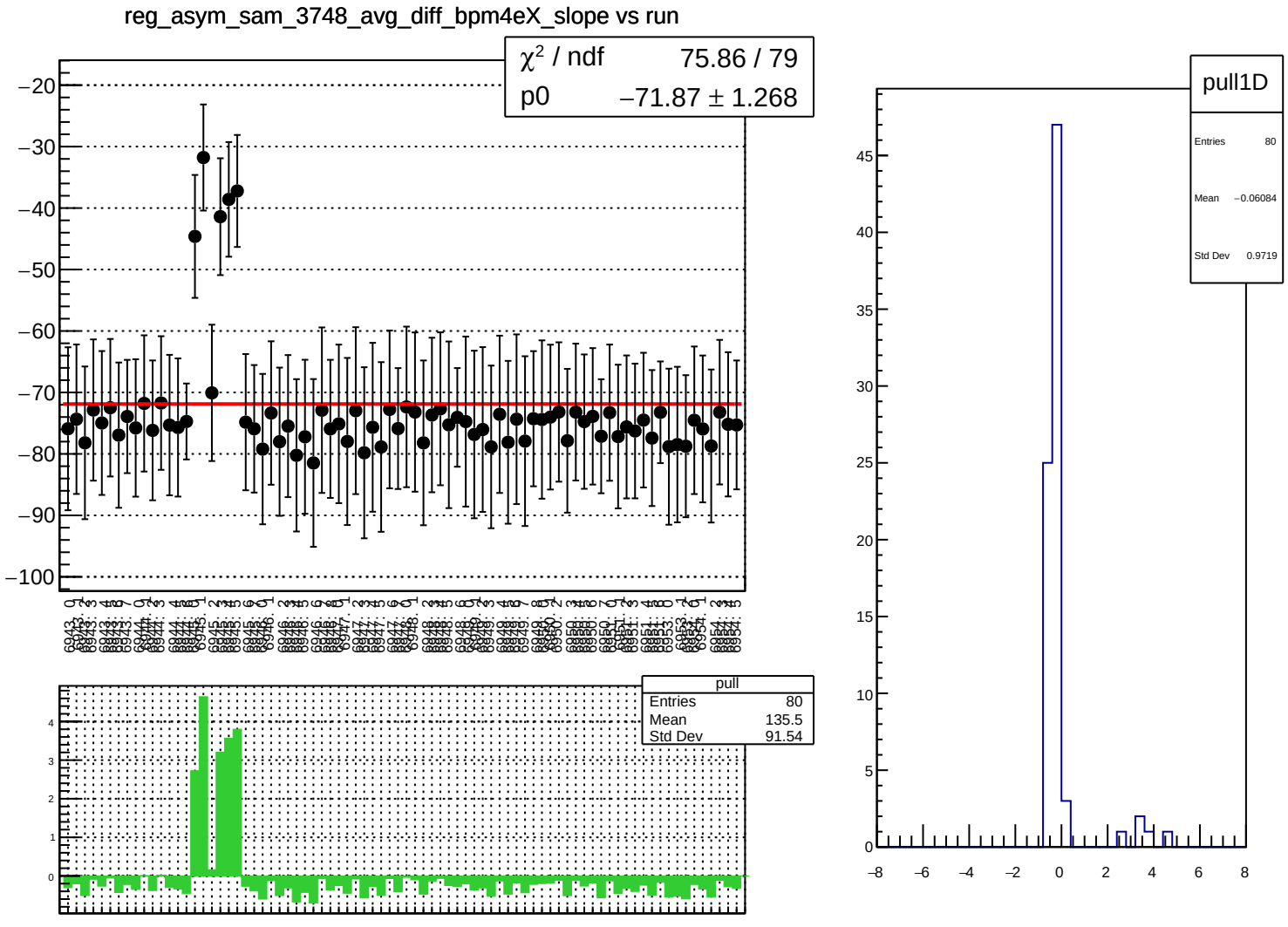

pull1D
Entries 80
Mean −0.009504
Std Dev 0.2889

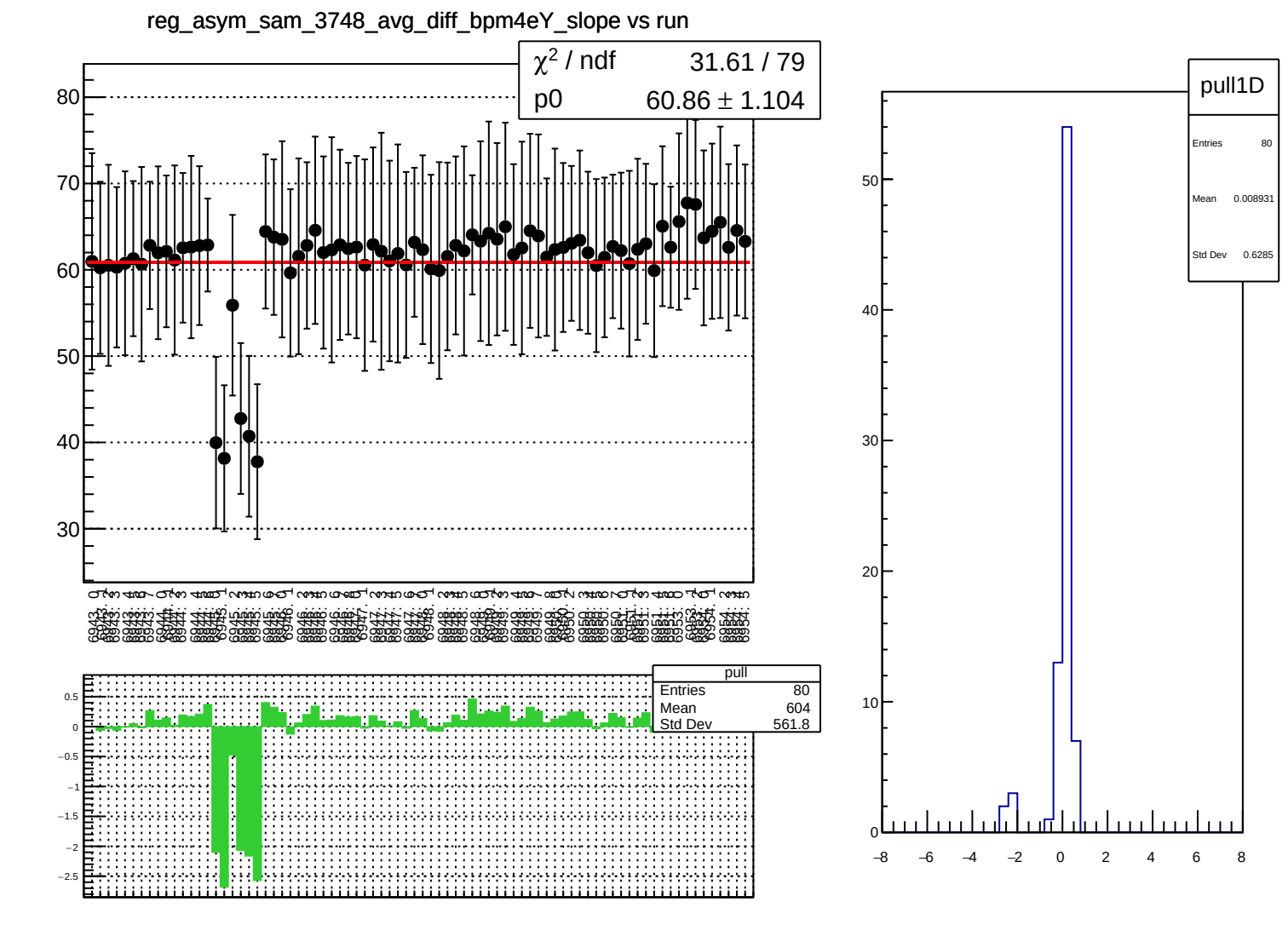

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 87.23 / 79
p0 −20.79 ± 1.359
pull
Entries 80
Mean 123.6
Std Dev 79.46

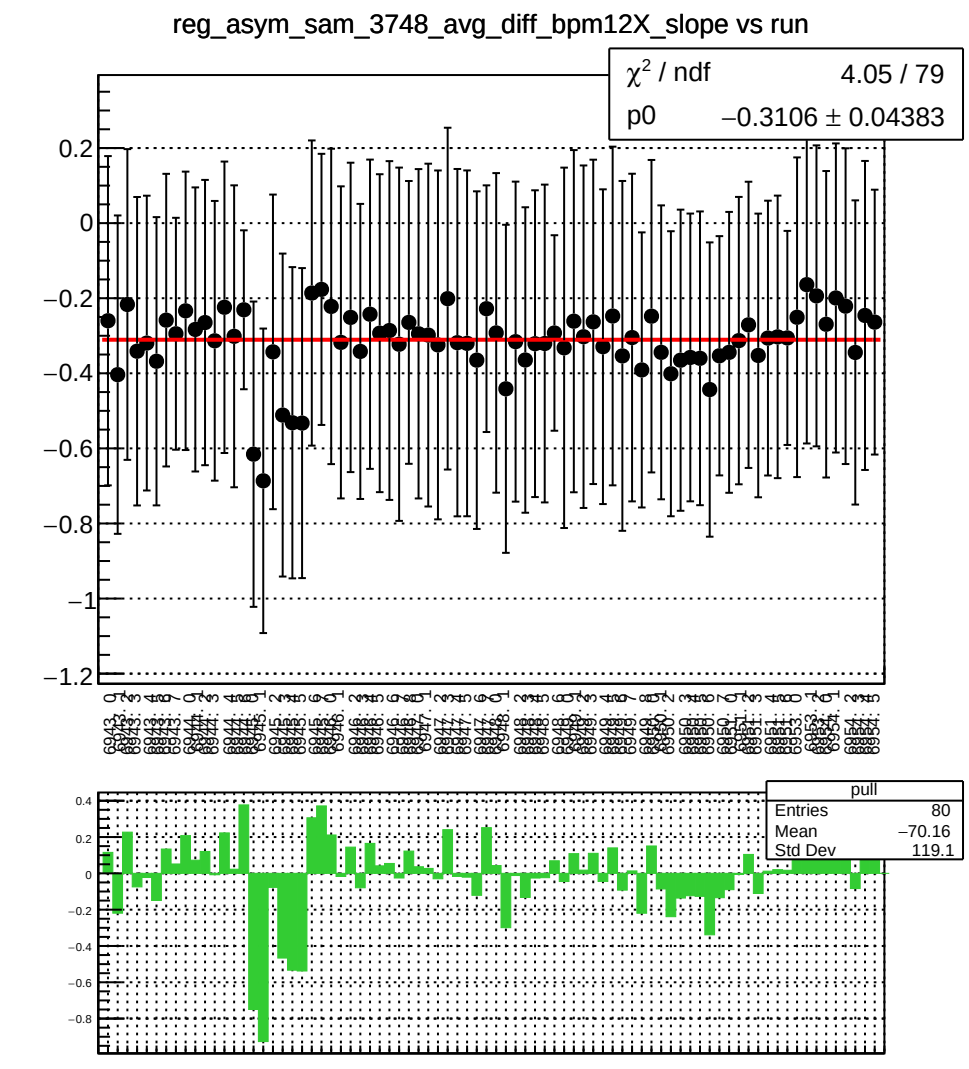

pull1D
Entries 80
Mean 0.06723
Std Dev 1.042

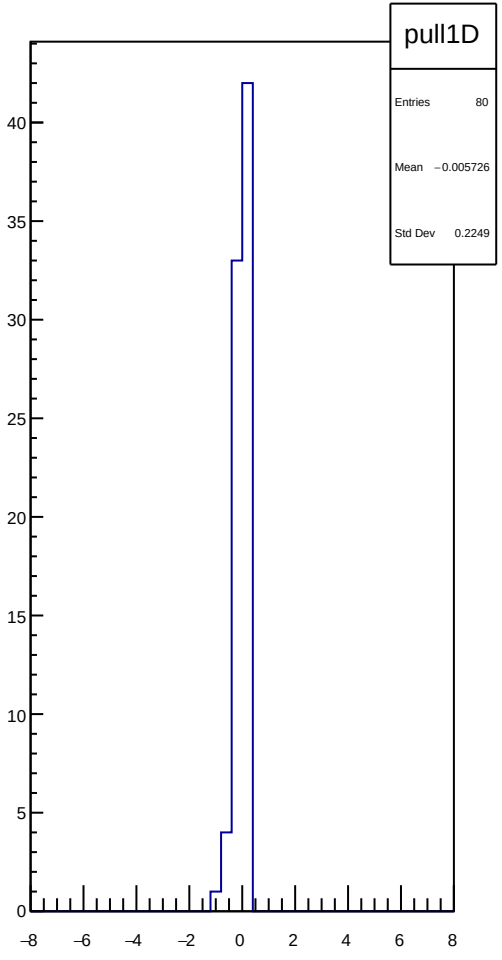

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 33.96 / 79
p0 −0.5332 ± 0.9594
pull
Entries 80
Mean 4676
Std Dev 4634

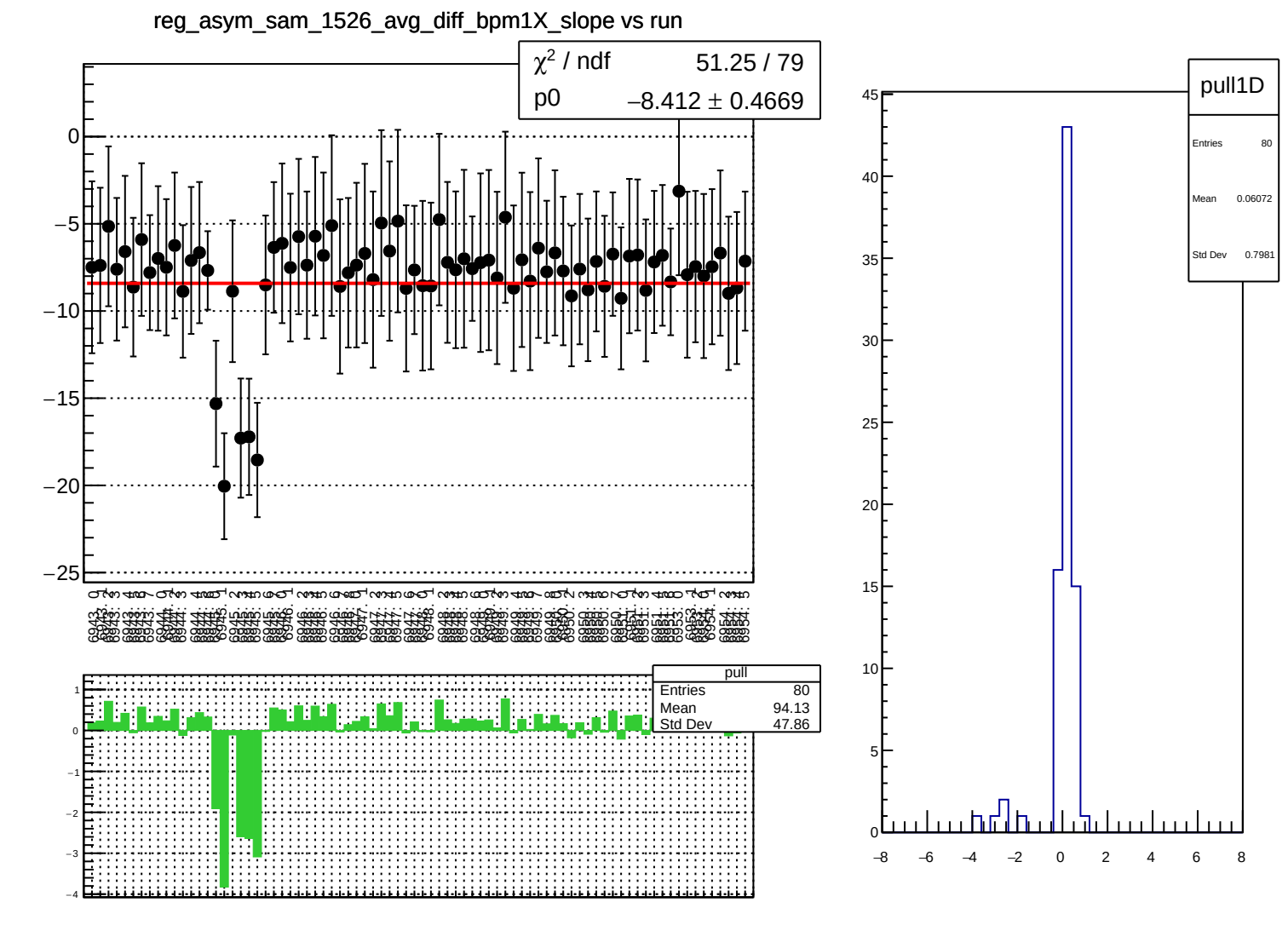

pull1D
Entries 80
Mean −0.001079
Std Dev 0.6515

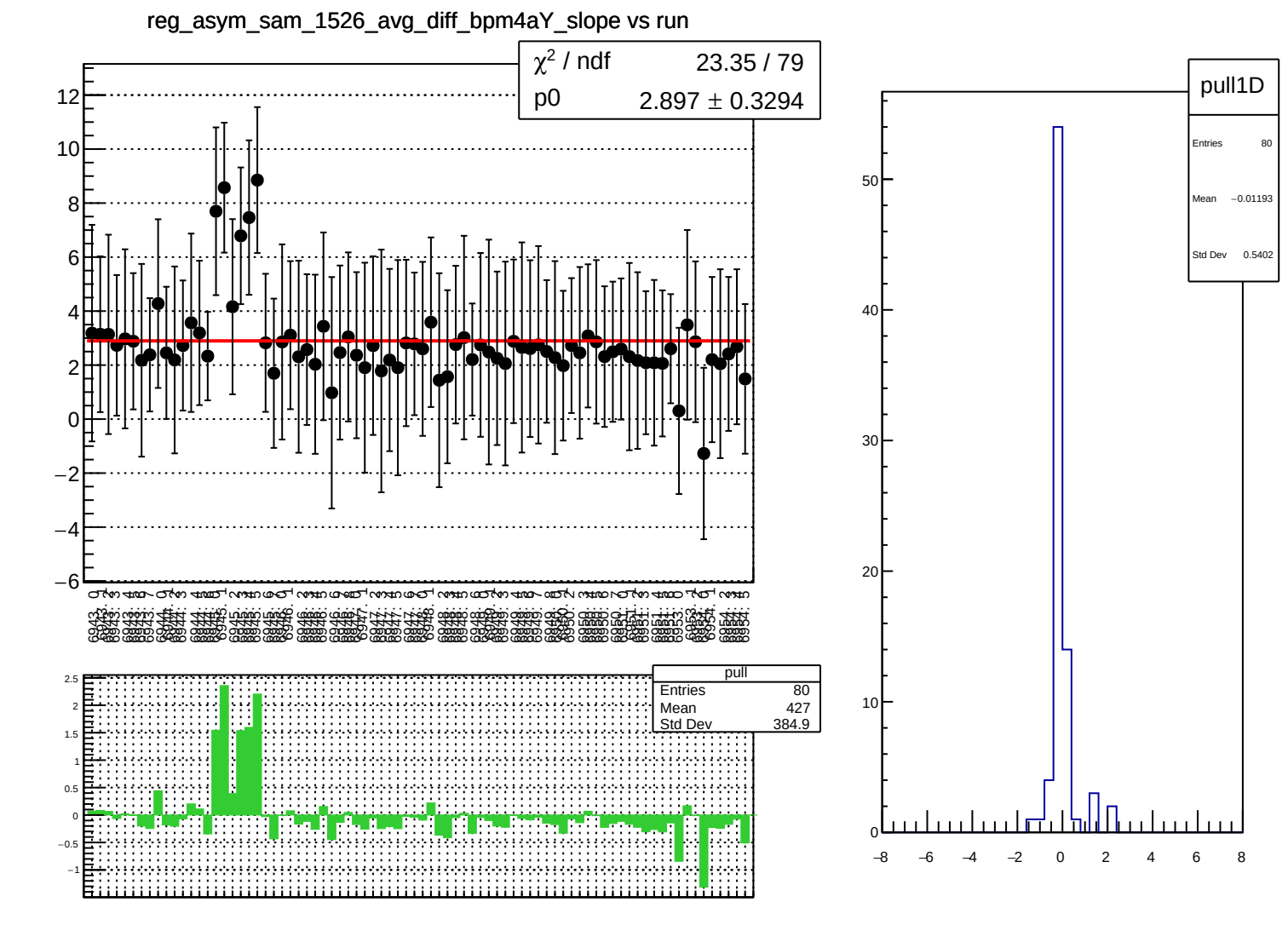

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 75.86 / 79
p0 −71.87 ± 1.268
pull
Entries 80
Mean 135.5
Std Dev 91.54
pull1D
Entries 80
Mean −0.06084
Std Dev 0.9719

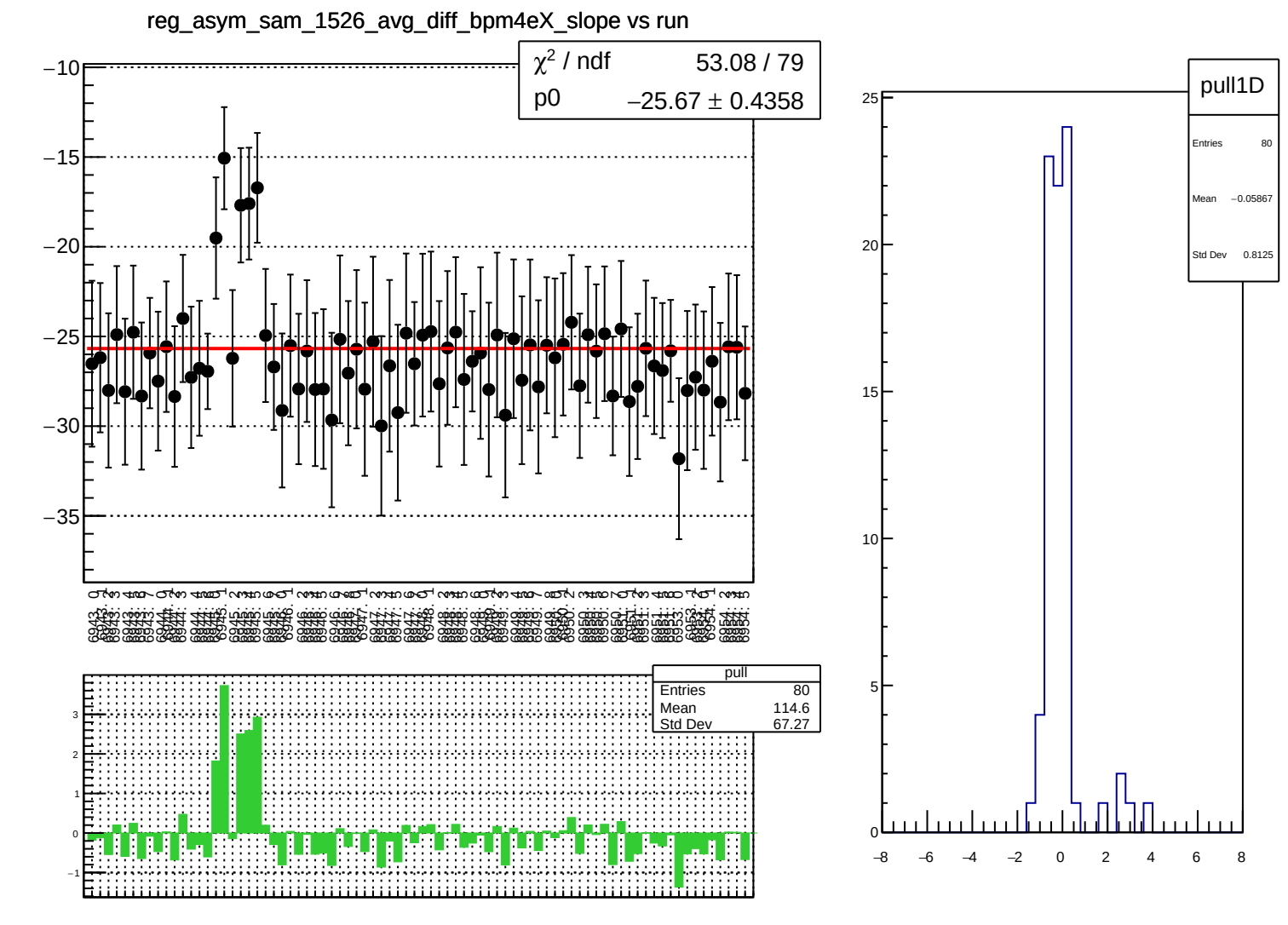

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 31.61 / 79
p0 60.86 ± 1.104
pull
Entries 80
Mean 604
Std Dev 561.8
pull1D
Entries 80
Mean 0.008931
Std Dev 0.6285

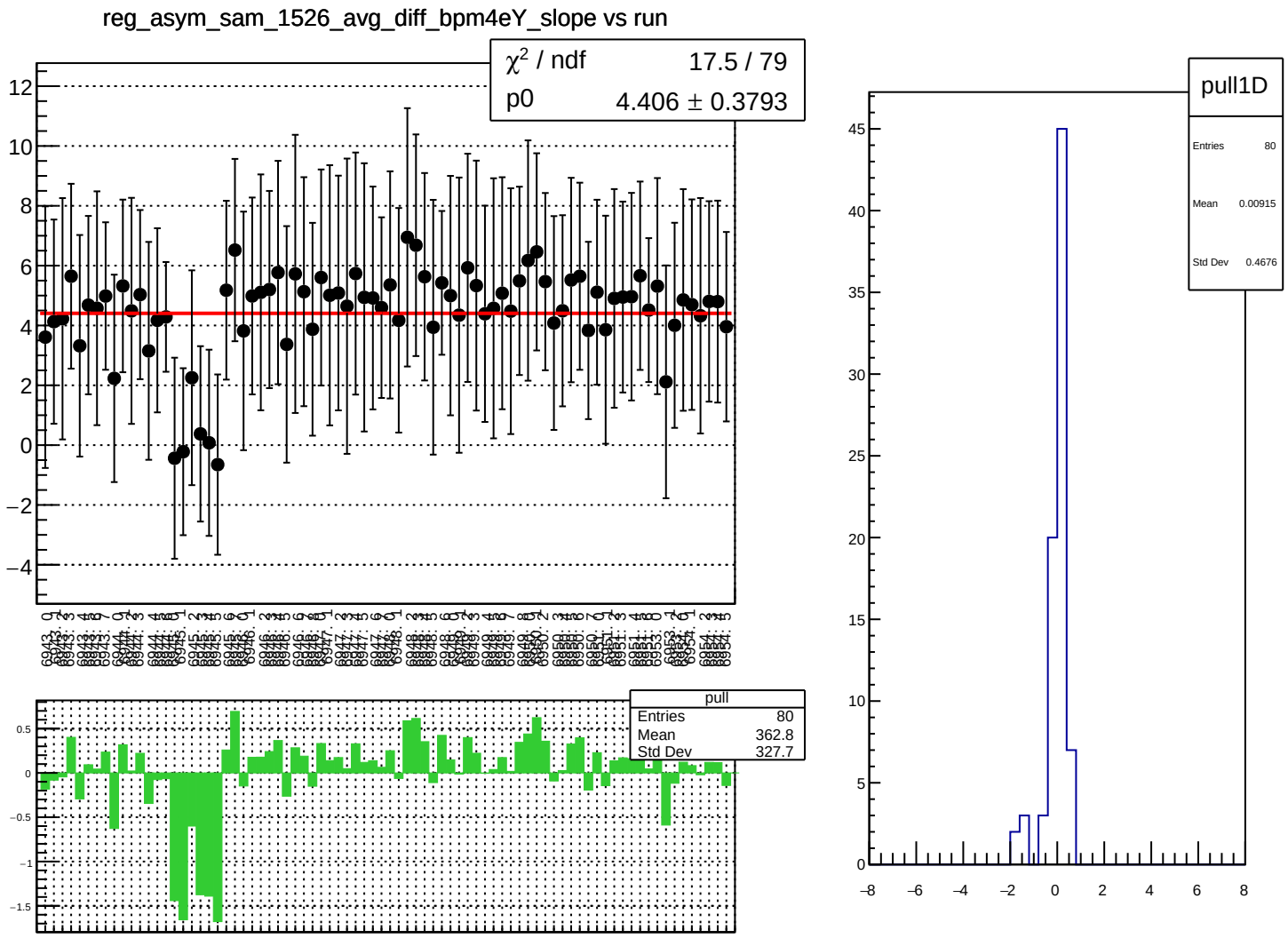

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 4.05 / 79
p0 −0.3106 ± 0.04383
pull
Entries 80
Mean −70.16
Std Dev 119.1

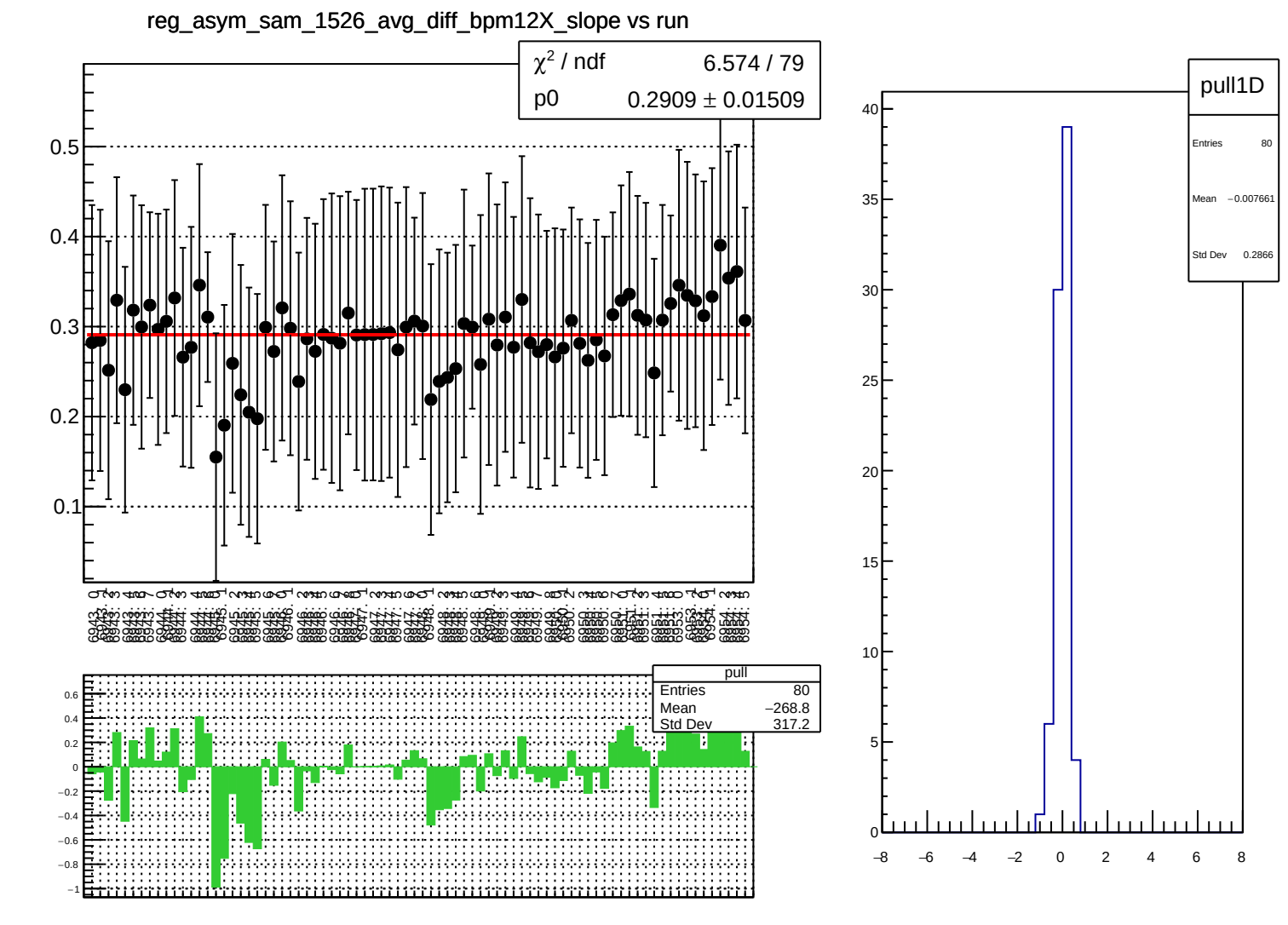

pull1D
Entries 80
Mean −0.005726
Std Dev 0.2249

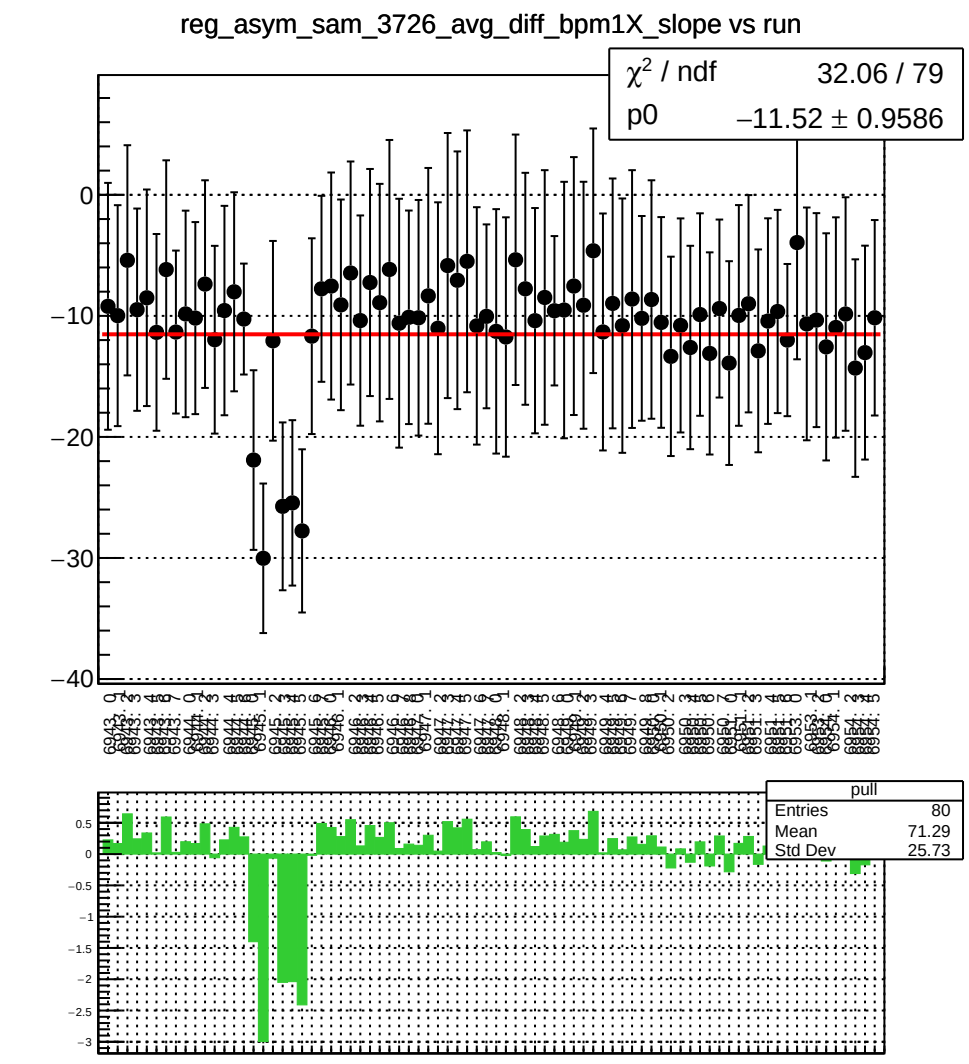

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 51.25 / 79
p0 −8.412 ± 0.4669
pull
Entries 80
Mean 94.13
Std Dev 47.86
pull1D
Entries 80
Mean 0.06072
Std Dev 0.7981

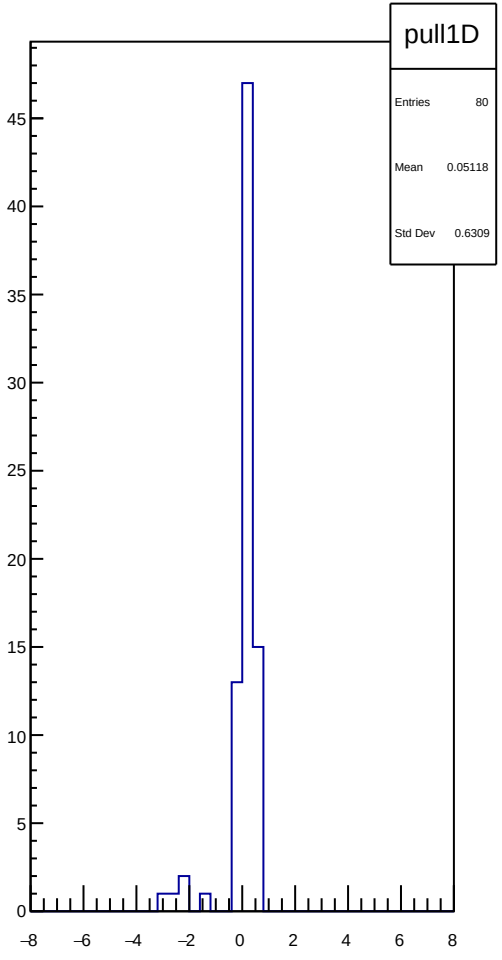

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 23.35 / 79
p0 2.897 ± 0.3294
pull
Entries 80
Mean 427
Std Dev 384.9
pull1D
Entries 80
Mean −0.01193
Std Dev 0.5402

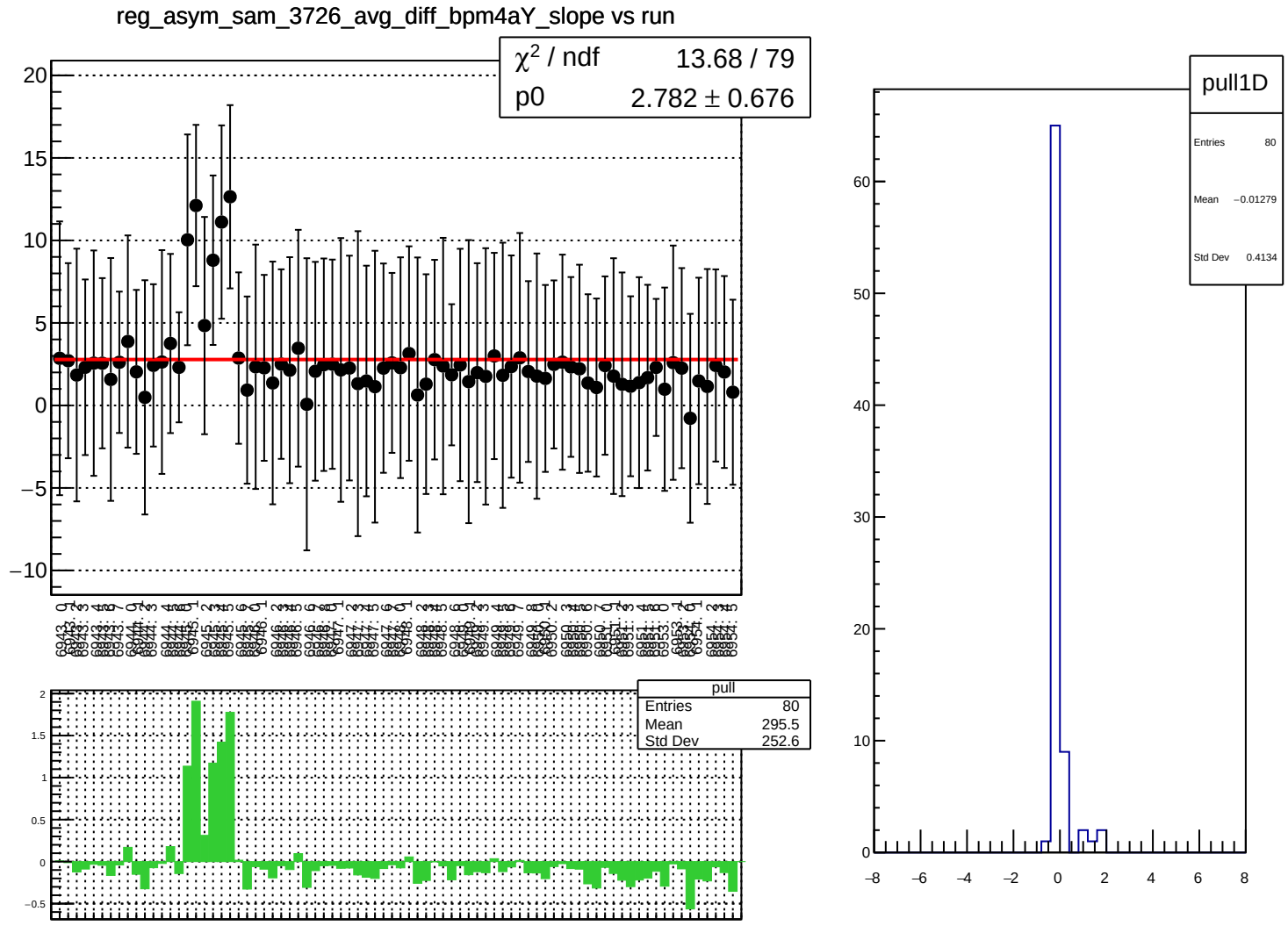

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 53.08 / 79
p0 −25.67 ± 0.4358
pull
Entries 80
Mean 114.6
Std Dev 67.27
pull1D
Entries 80
Mean −0.05867
Std Dev 0.8125

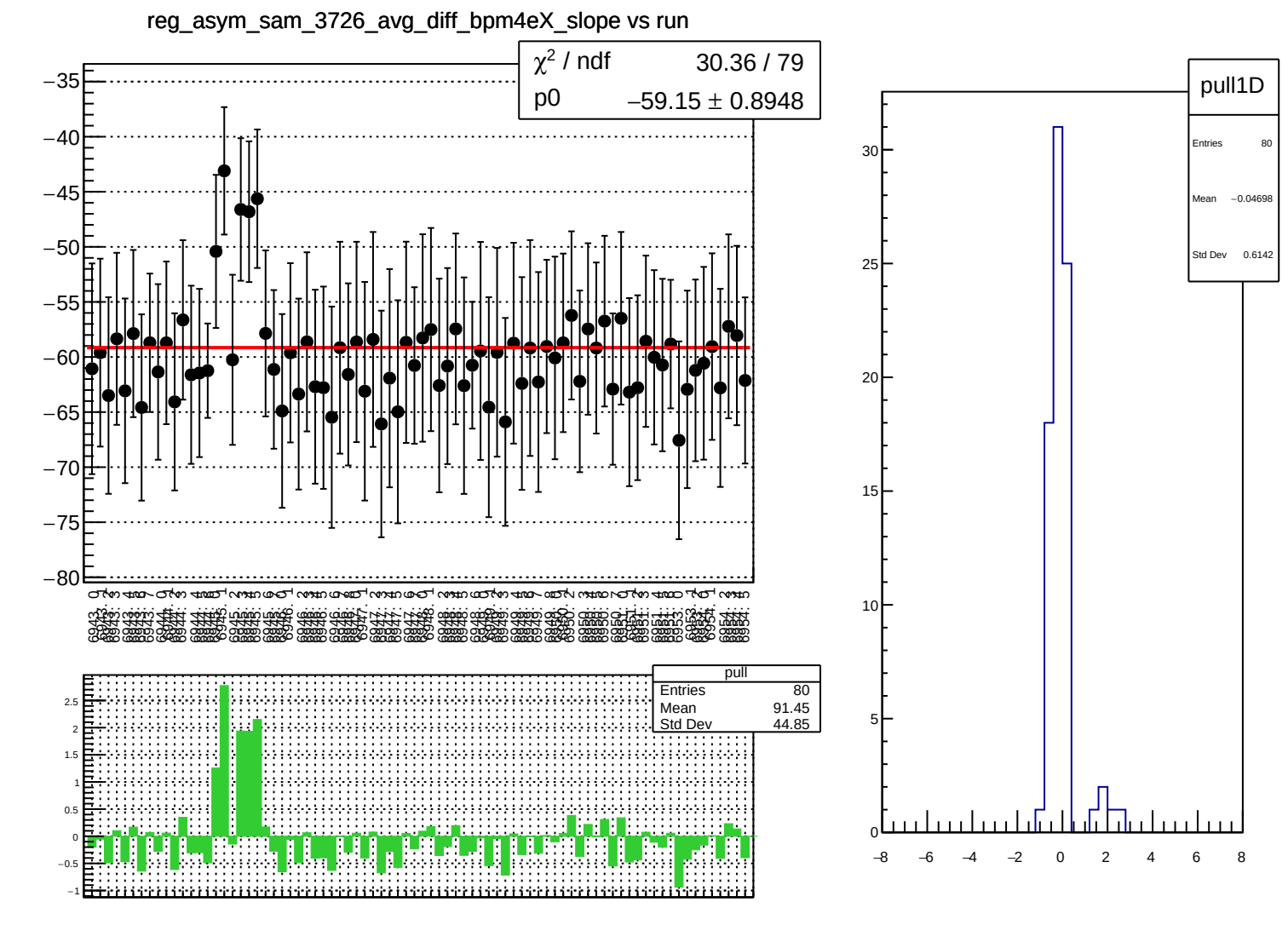

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 17.5 / 79
p0 4.406 ± 0.3793
pull
Entries 80
Mean 362.8
Std Dev 327.7
pull1D
Entries 80
Mean 0.00915
Std Dev 0.4676

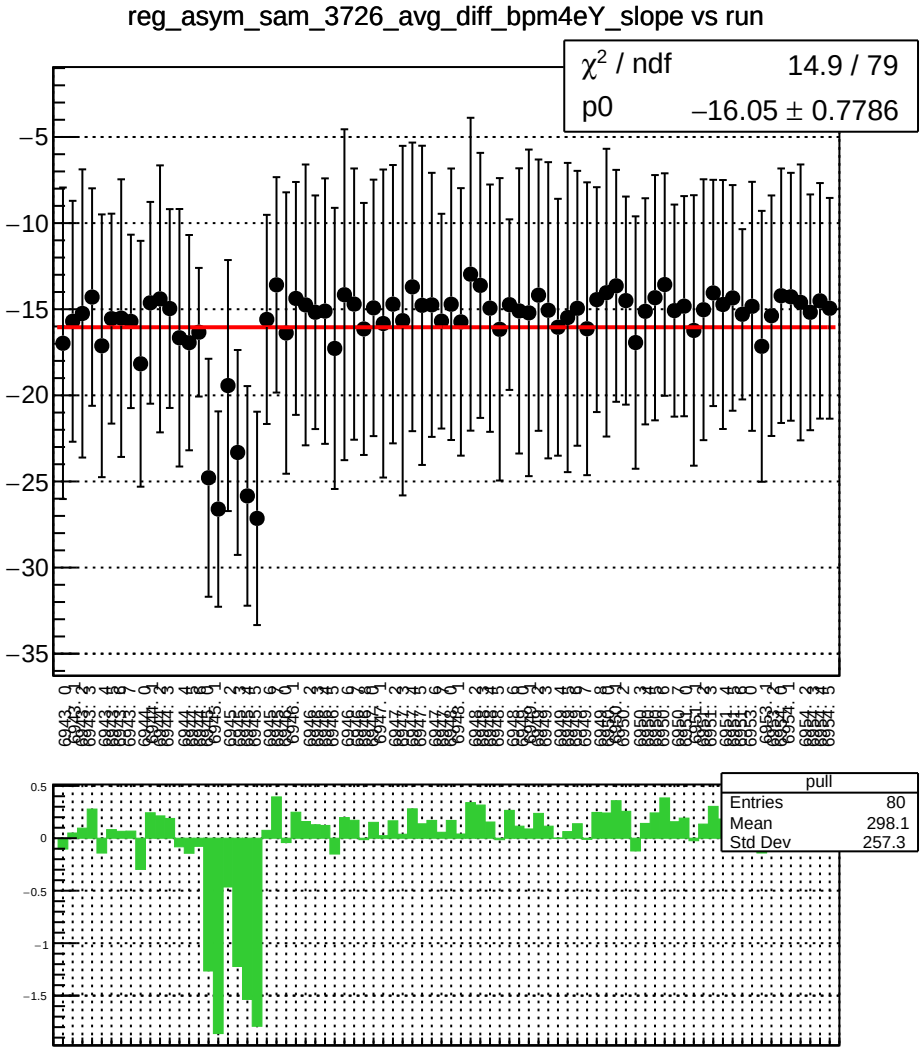

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 6.574 / 79
p0 0.2909 ± 0.01509
pull
Entries 80
Mean −268.8
Std Dev 317.2
pull1D
Entries 80
Mean −0.007661
Std Dev 0.2866

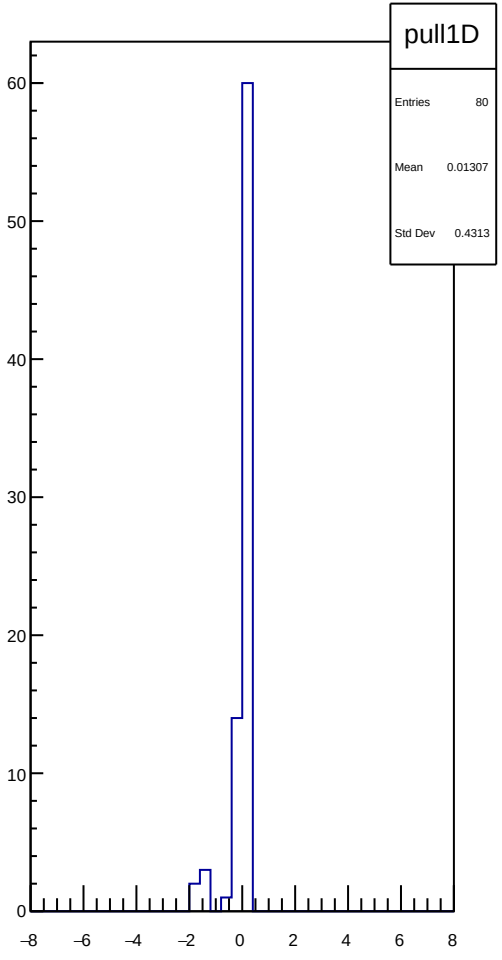

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 32.06 / 79
p0 −11.52 ± 0.9586
pull
Entries 80
Mean 71.29
Std Dev 25.73

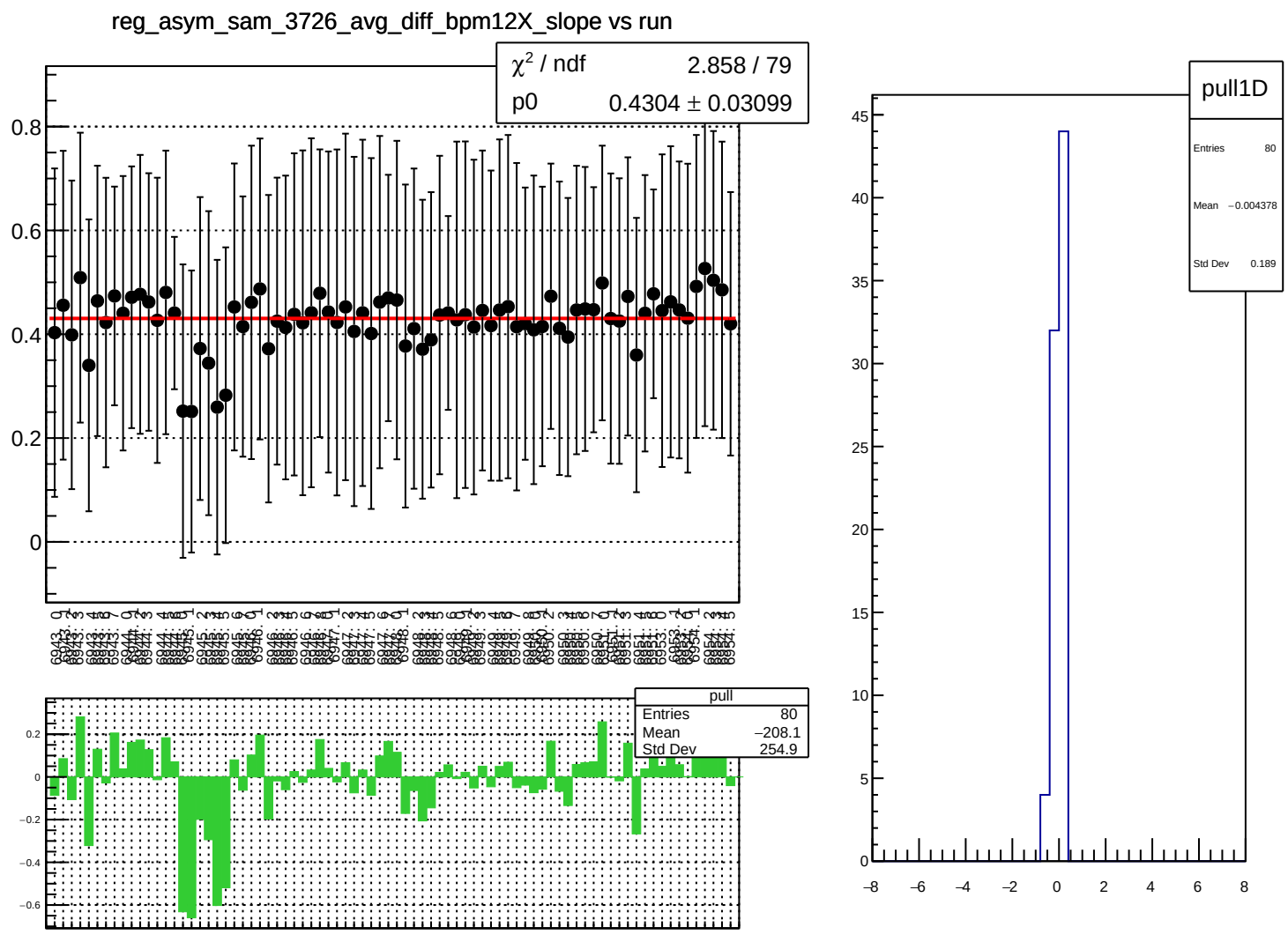

pull1D
Entries 80
Mean 0.05118
Std Dev 0.6309

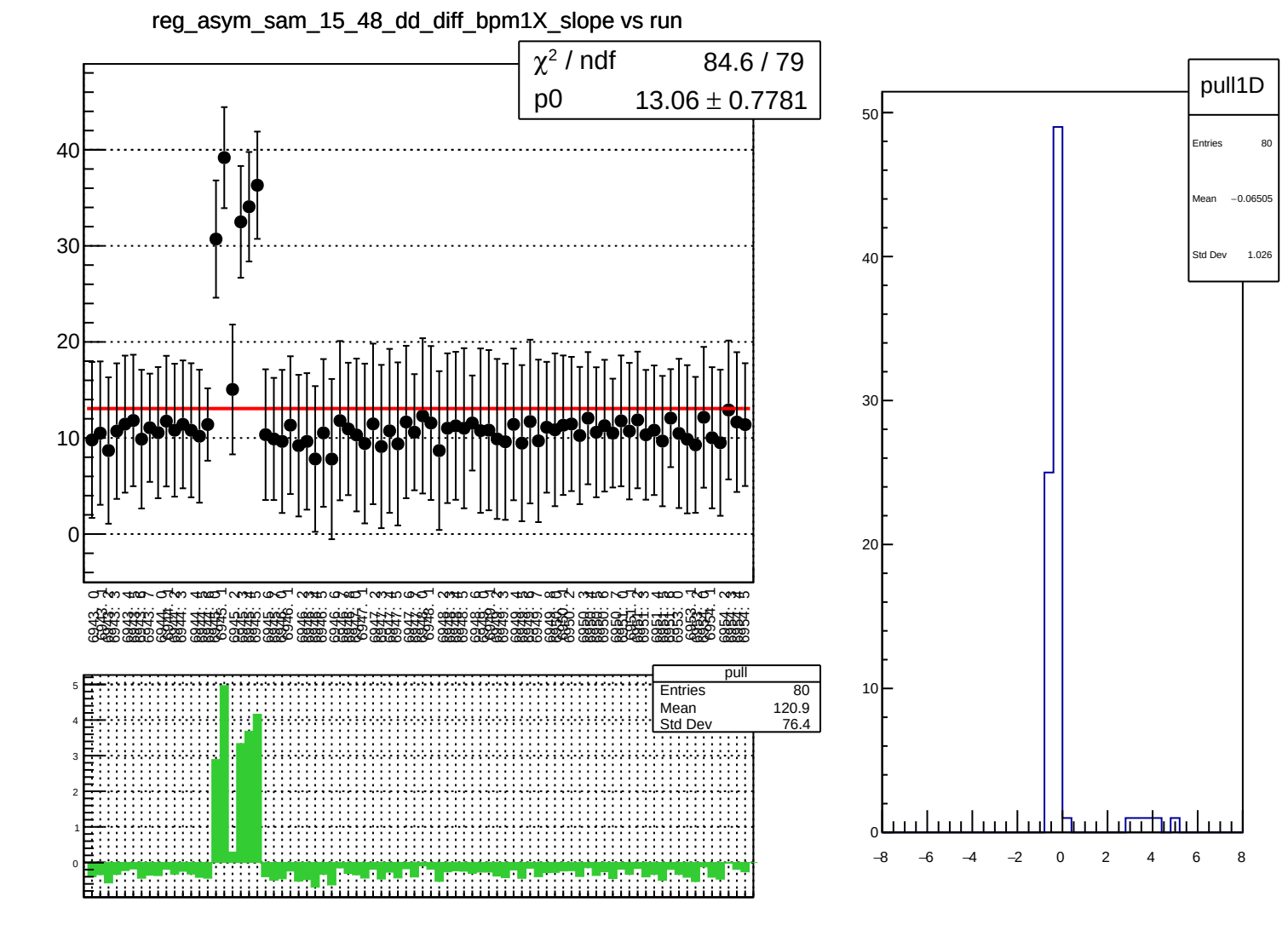

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.68 / 79
p0 2.782 ± 0.676
pull
Entries 80
Mean 295.5
Std Dev 252.6
pull1D
Entries 80
Mean −0.01279
Std Dev 0.4134

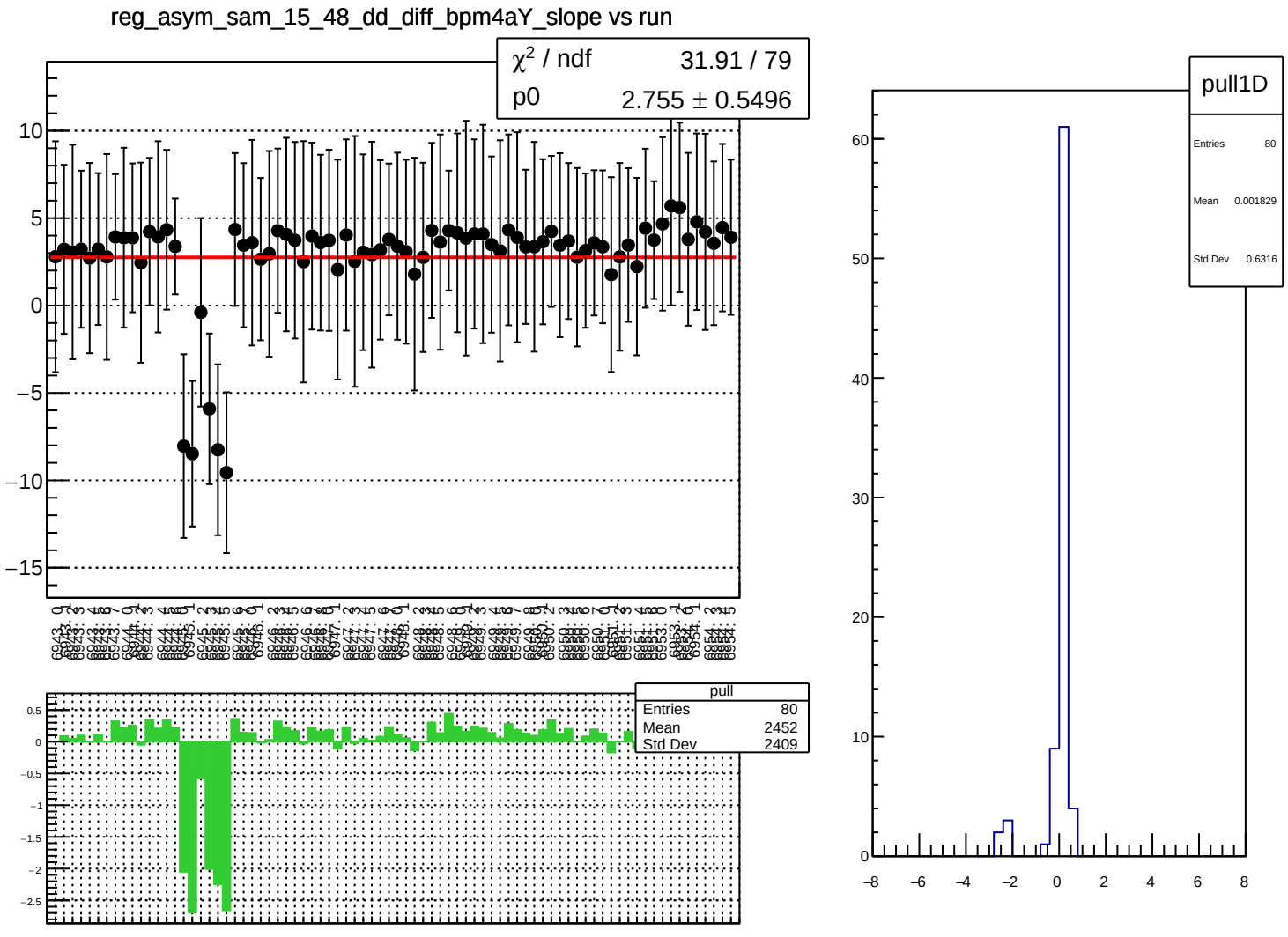

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 30.36 / 79
p0 −59.15 ± 0.8948
pull
Entries 80
Mean 91.45
Std Dev 44.85
pull1D
Entries 80
Mean −0.04698
Std Dev 0.6142

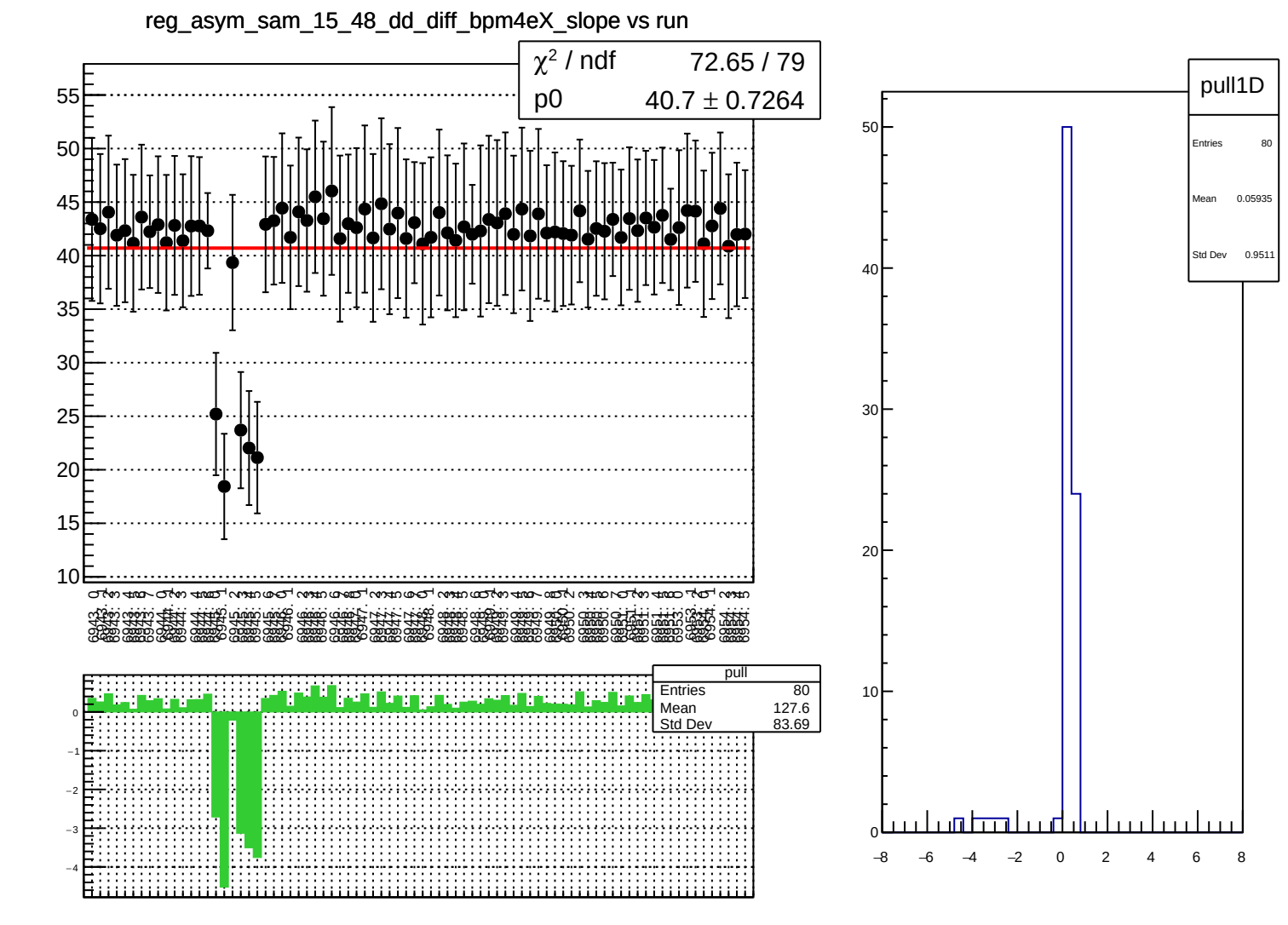

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.9 / 79
p0 −16.05 ± 0.7786
pull
Entries 80
Mean 298.1
Std Dev 257.3

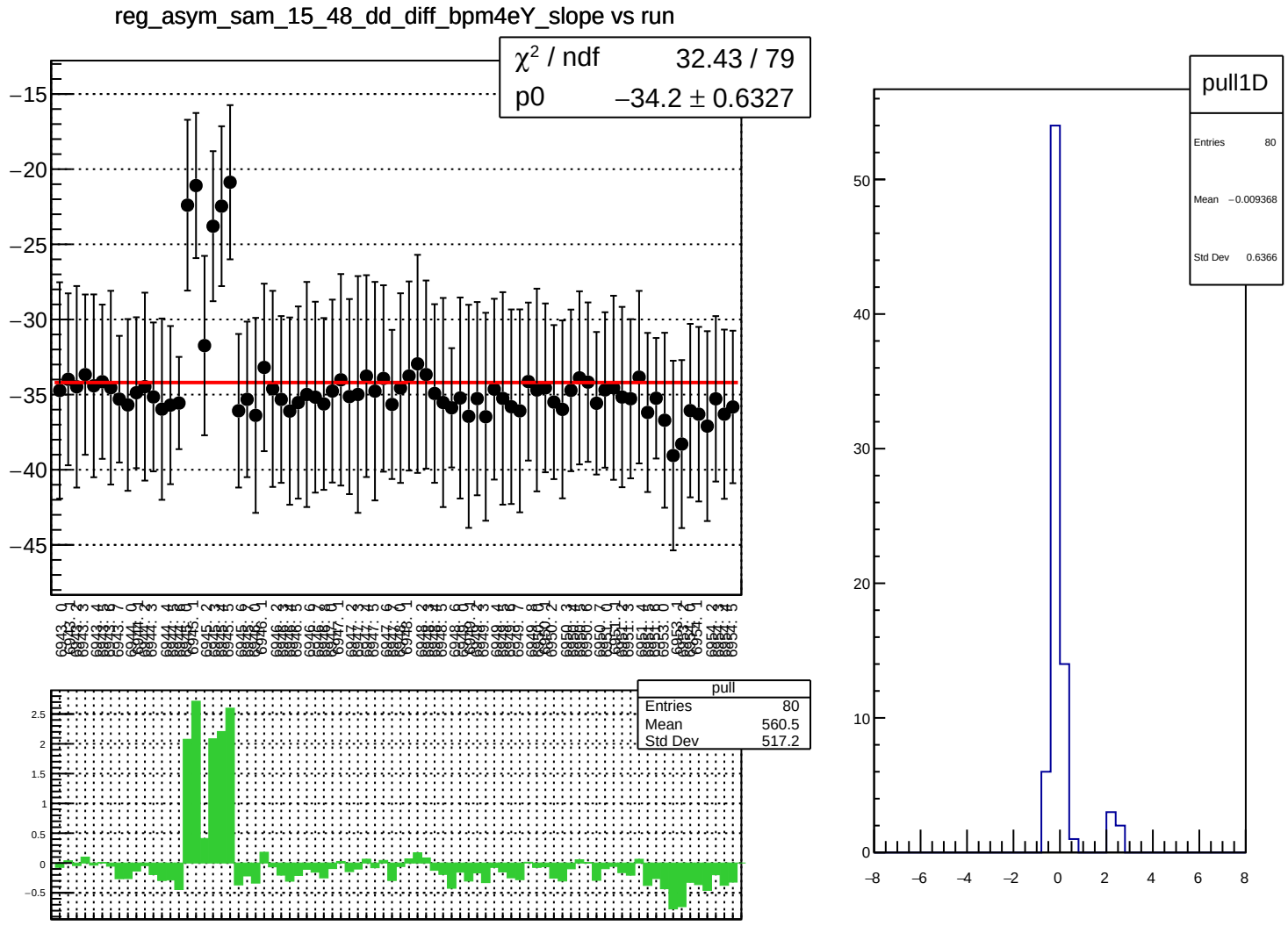

pull1D
Entries 80
Mean 0.01307
Std Dev 0.4313

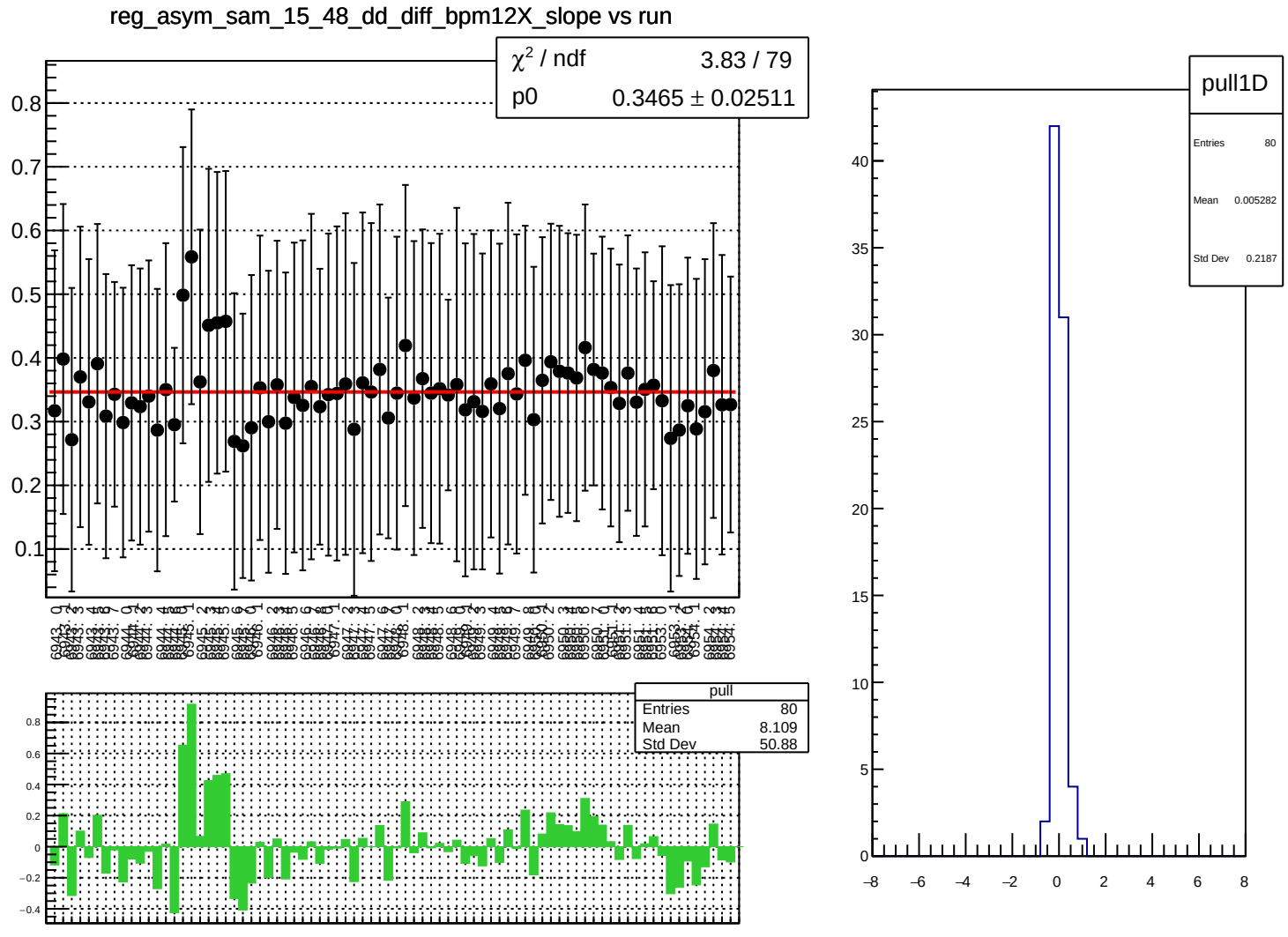

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 2.858 / 79
p0 0.4304 ± 0.03099
pull
Entries 80
Mean −208.1
Std Dev 254.9
pull1D
Entries 80
Mean −0.004378
Std Dev 0.189

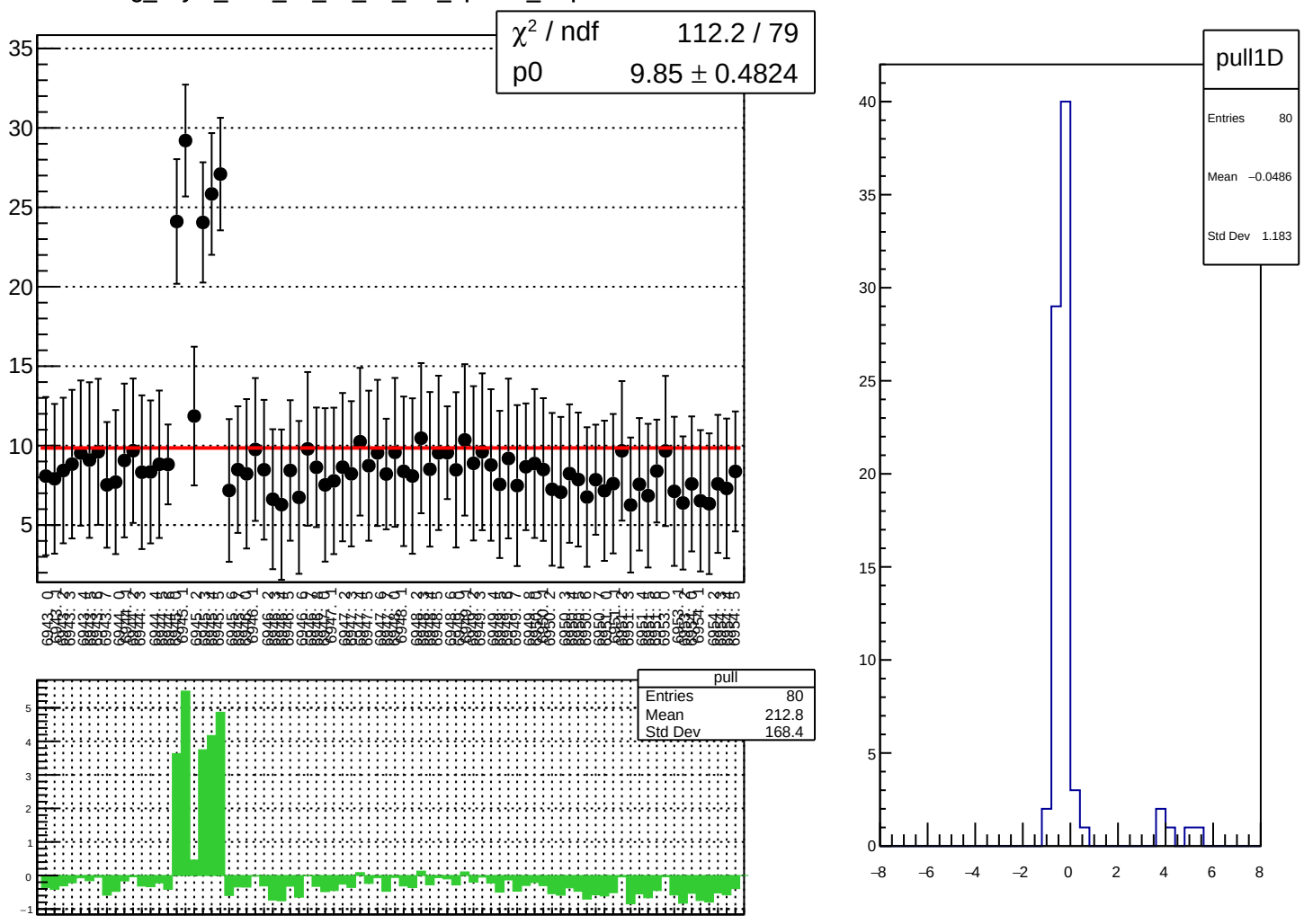

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 84.6 / 79
p0 13.06 ± 0.7781
pull
Entries 80
Mean 120.9
Std Dev 76.4
pull1D
Entries 80
Mean −0.06505
Std Dev 1.026

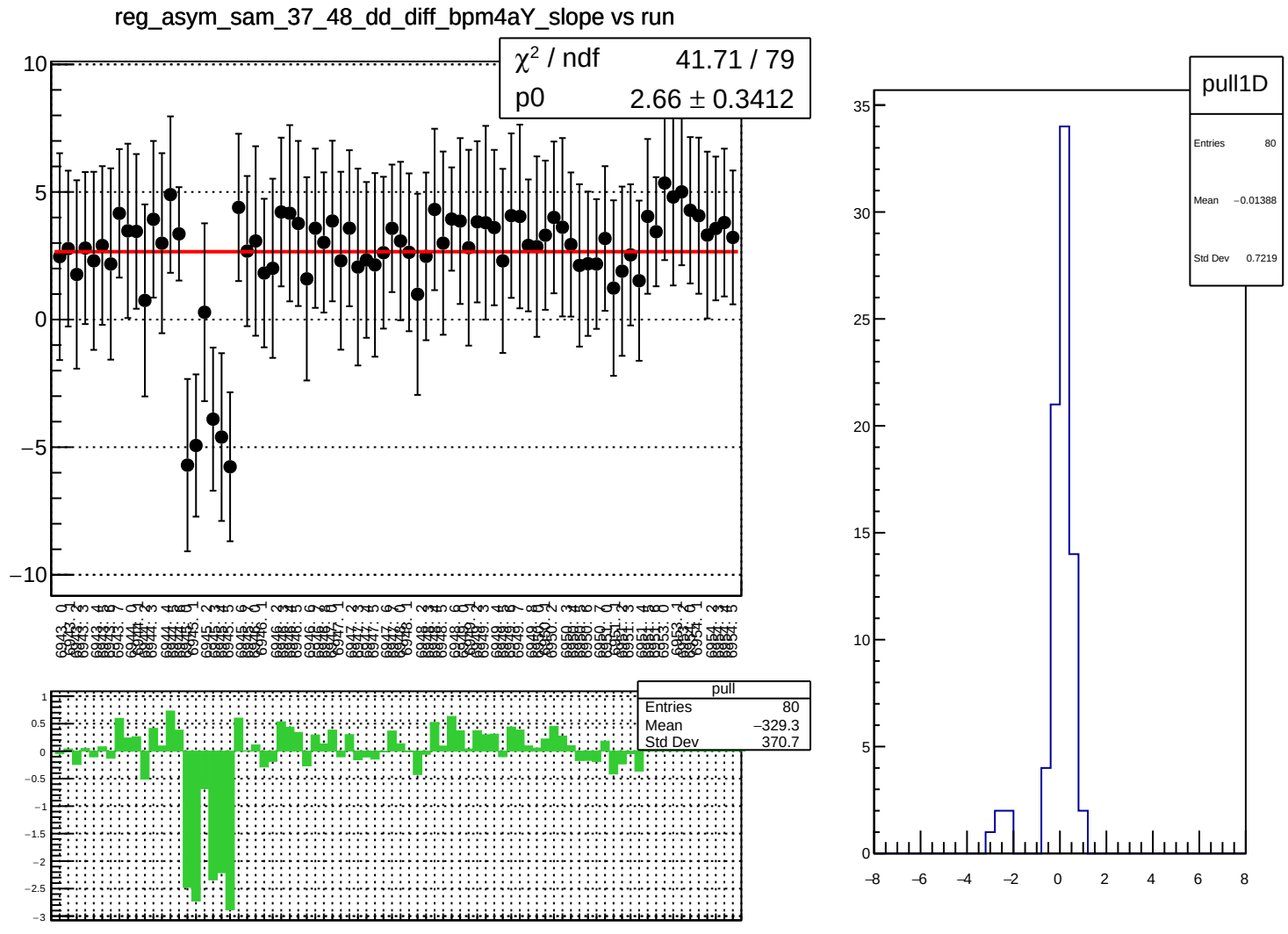

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 31.91 / 79
p0 2.755 ± 0.5496
pull
Entries 80
Mean 2452
Std Dev 2409
pull1D
Entries 80
Mean 0.001829
Std Dev 0.6316

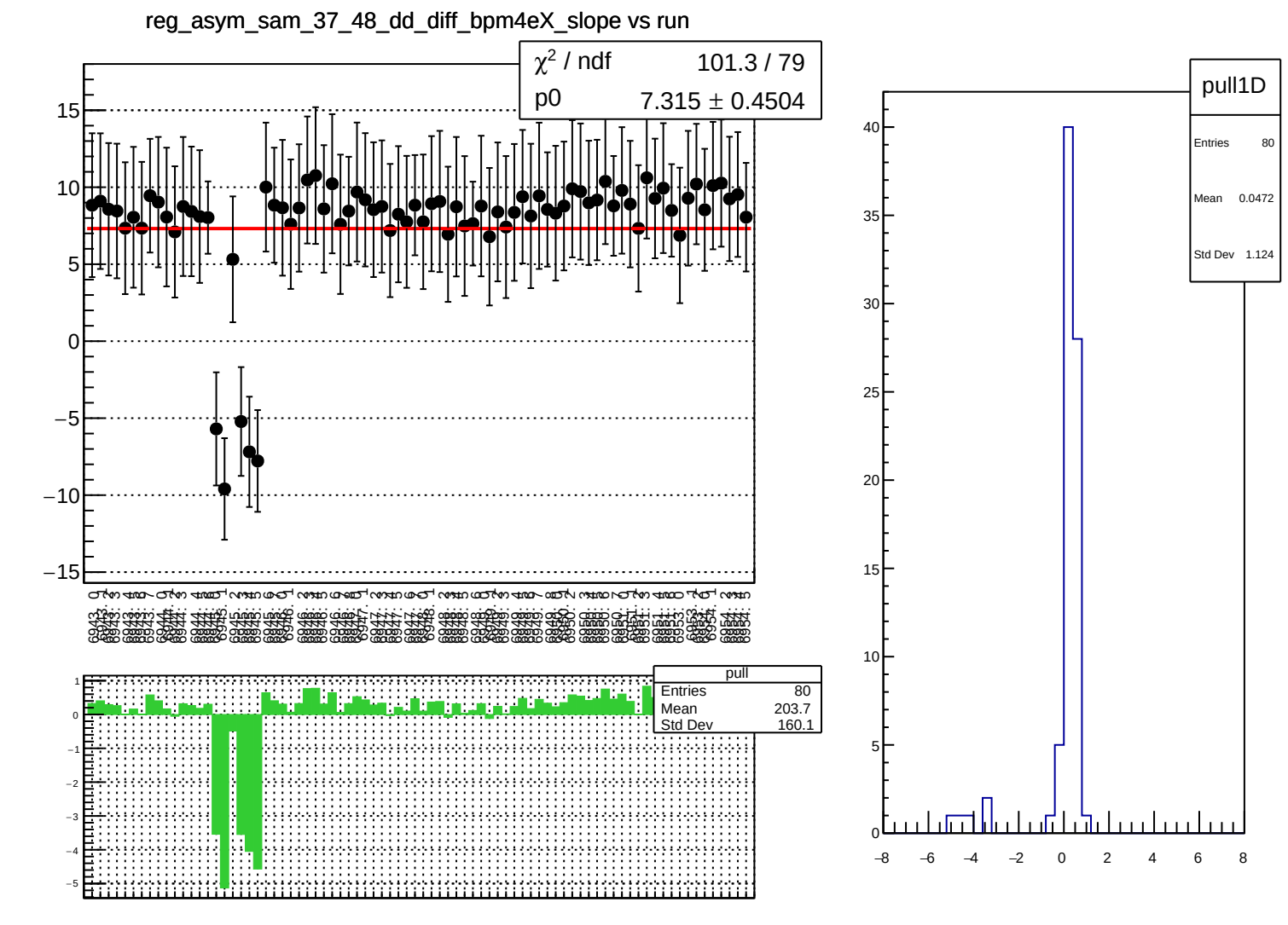

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 72.65 / 79
p0 40.7 ± 0.7264
pull
Entries 80
Mean 127.6
Std Dev 83.69
pull1D
Entries 80
Mean 0.05935
Std Dev 0.9511

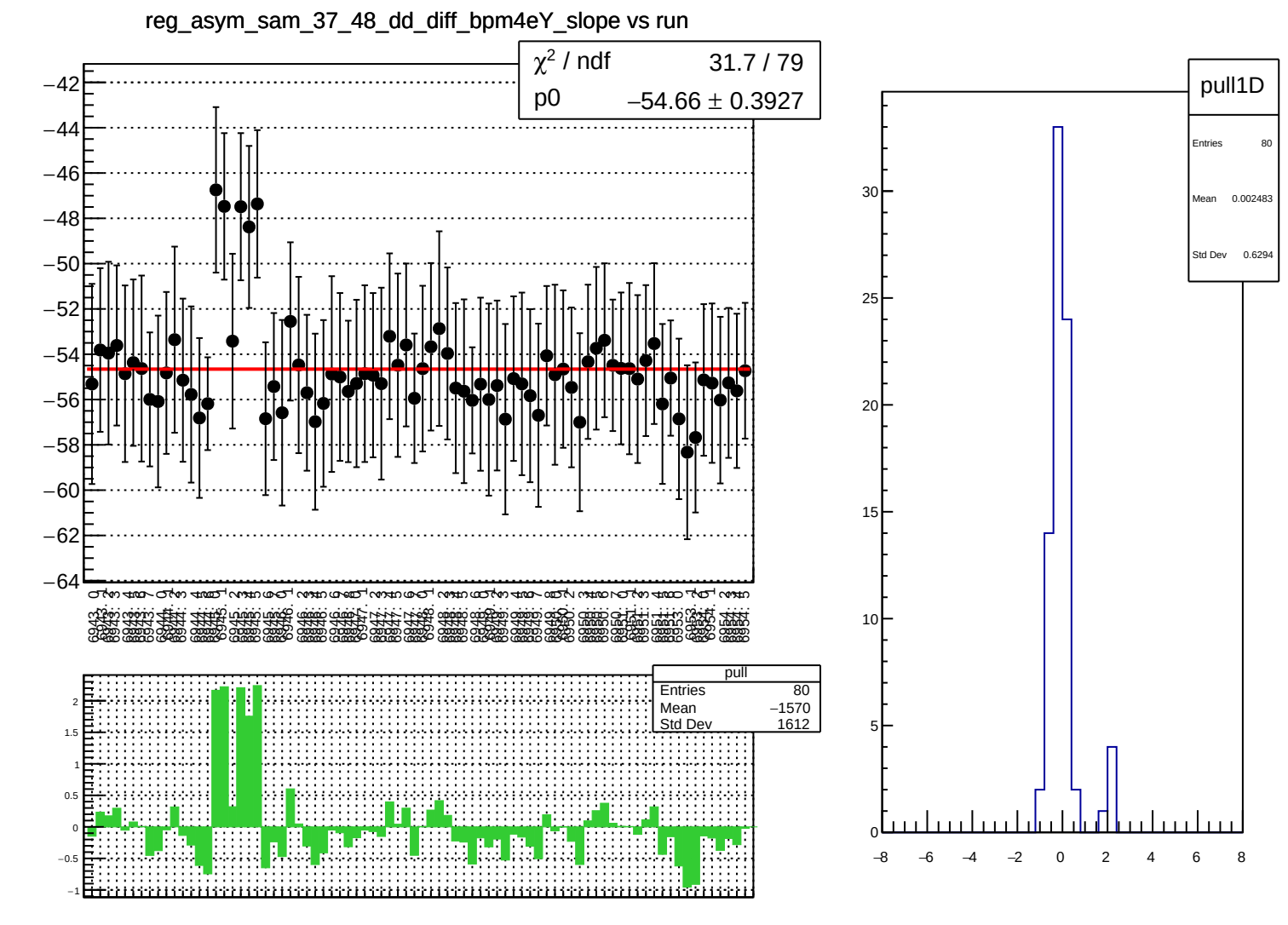

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 32.43 / 79
p0 −34.2 ± 0.6327
pull
Entries 80
Mean 560.5
Std Dev 517.2
pull1D
Entries 80
Mean −0.009368
Std Dev 0.6366

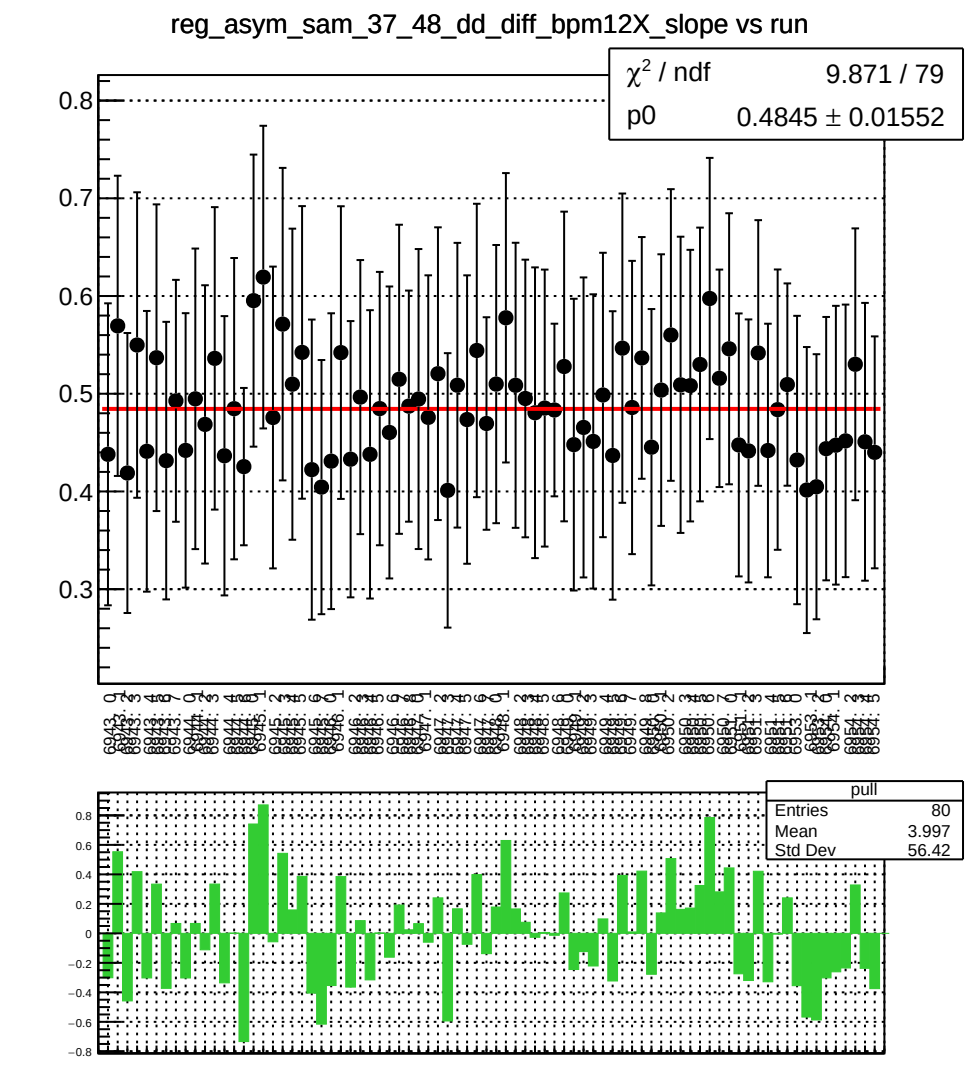

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 3.83 / 79
p0 0.3465 ± 0.02511
pull
Entries 80
Mean 8.109
Std Dev 50.88
pull1D
Entries 80
Mean 0.005282
Std Dev 0.2187

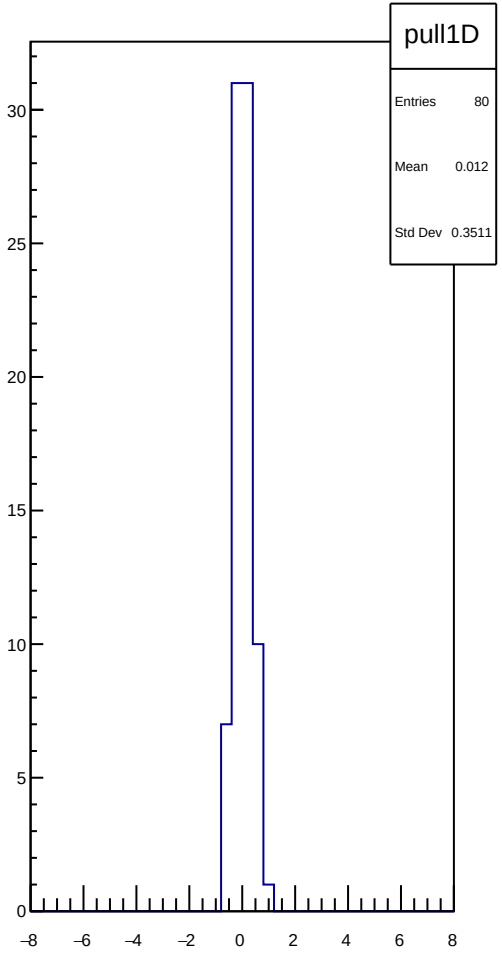

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 112.2 / 79
p0 9.85 ± 0.4824
pull
Entries 80
Mean 212.8
Std Dev 168.4
pull1D
Entries 80
Mean −0.0486
Std Dev 1.183

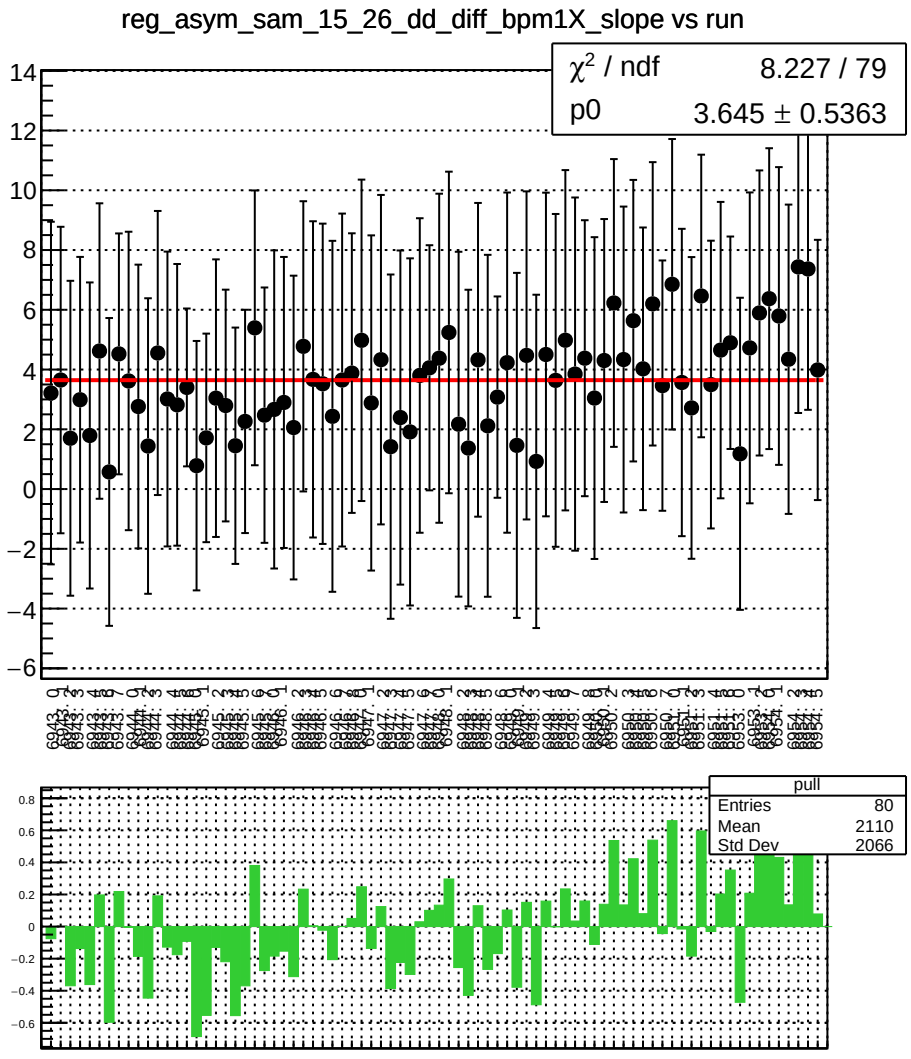

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 41.71 / 79
p0 2.66 ± 0.3412
pull
Entries 80
Mean −329.3
Std Dev 370.7
pull1D
Entries 80
Mean −0.01388
Std Dev 0.7219

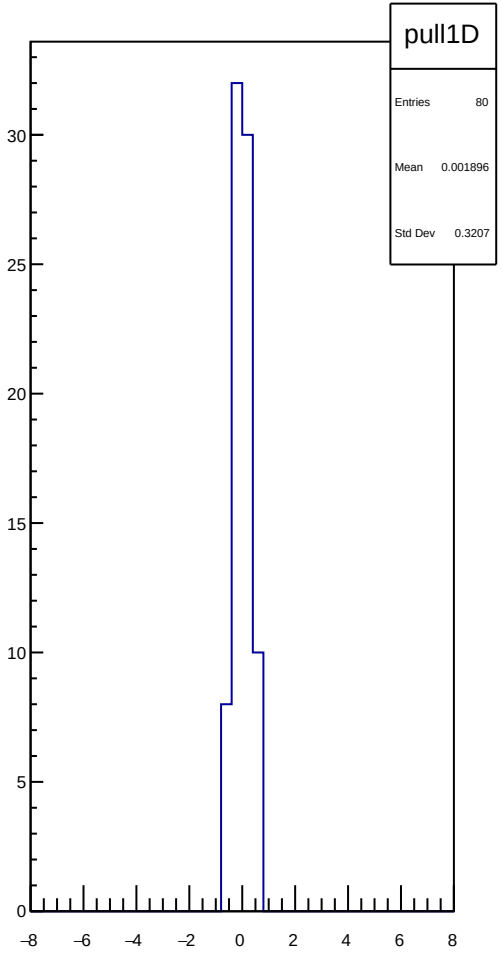

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 101.3 / 79
p0 7.315 ± 0.4504
pull
Entries 80
Mean 203.7
Std Dev 160.1
pull1D
Entries 80
Mean 0.0472
Std Dev 1.124

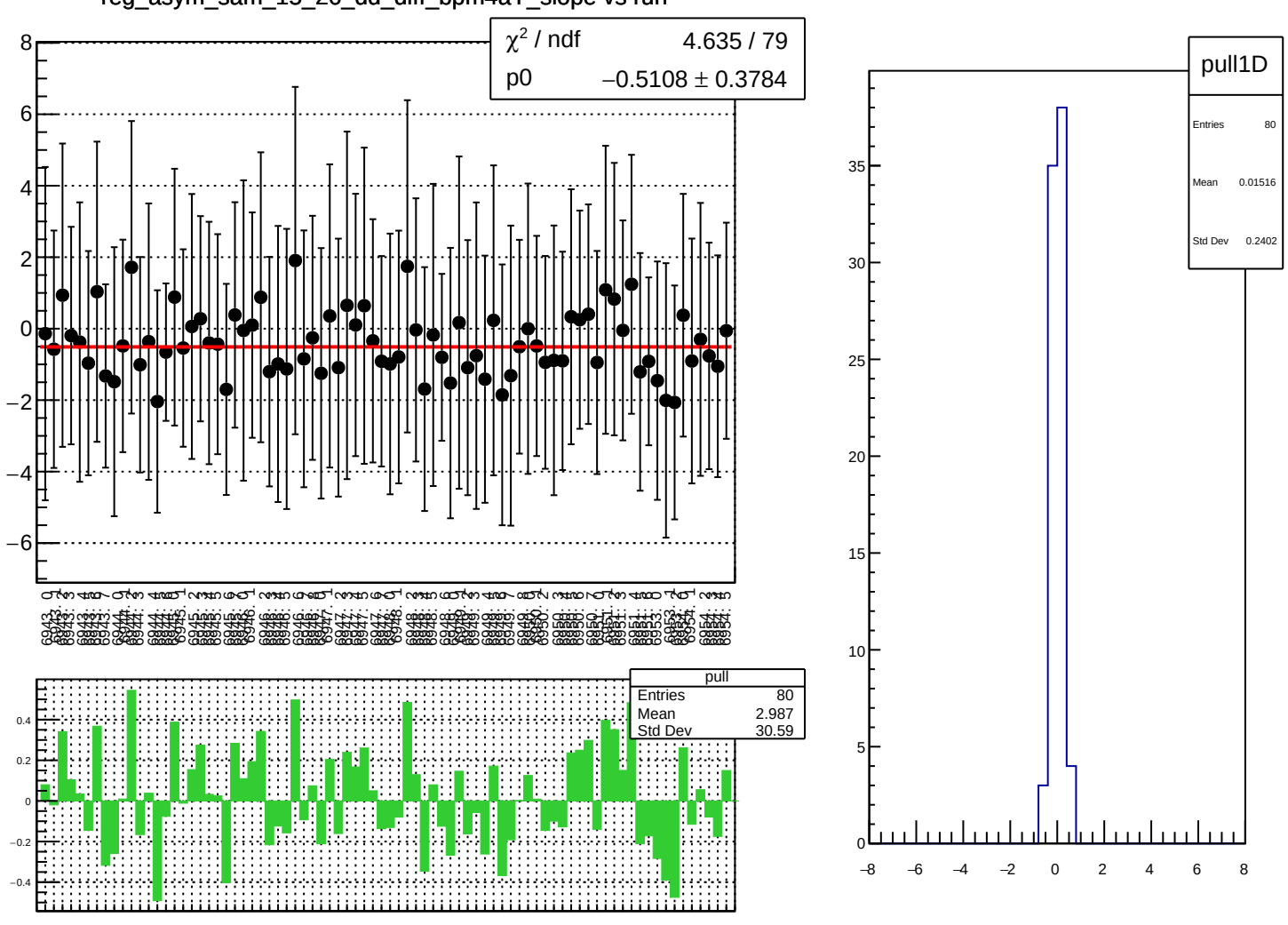

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 31.7 / 79
p0 −54.66 ± 0.3927
pull
Entries 80
Mean −1570
Std Dev 1612
pull1D
Entries 80
Mean 0.002483
Std Dev 0.6294

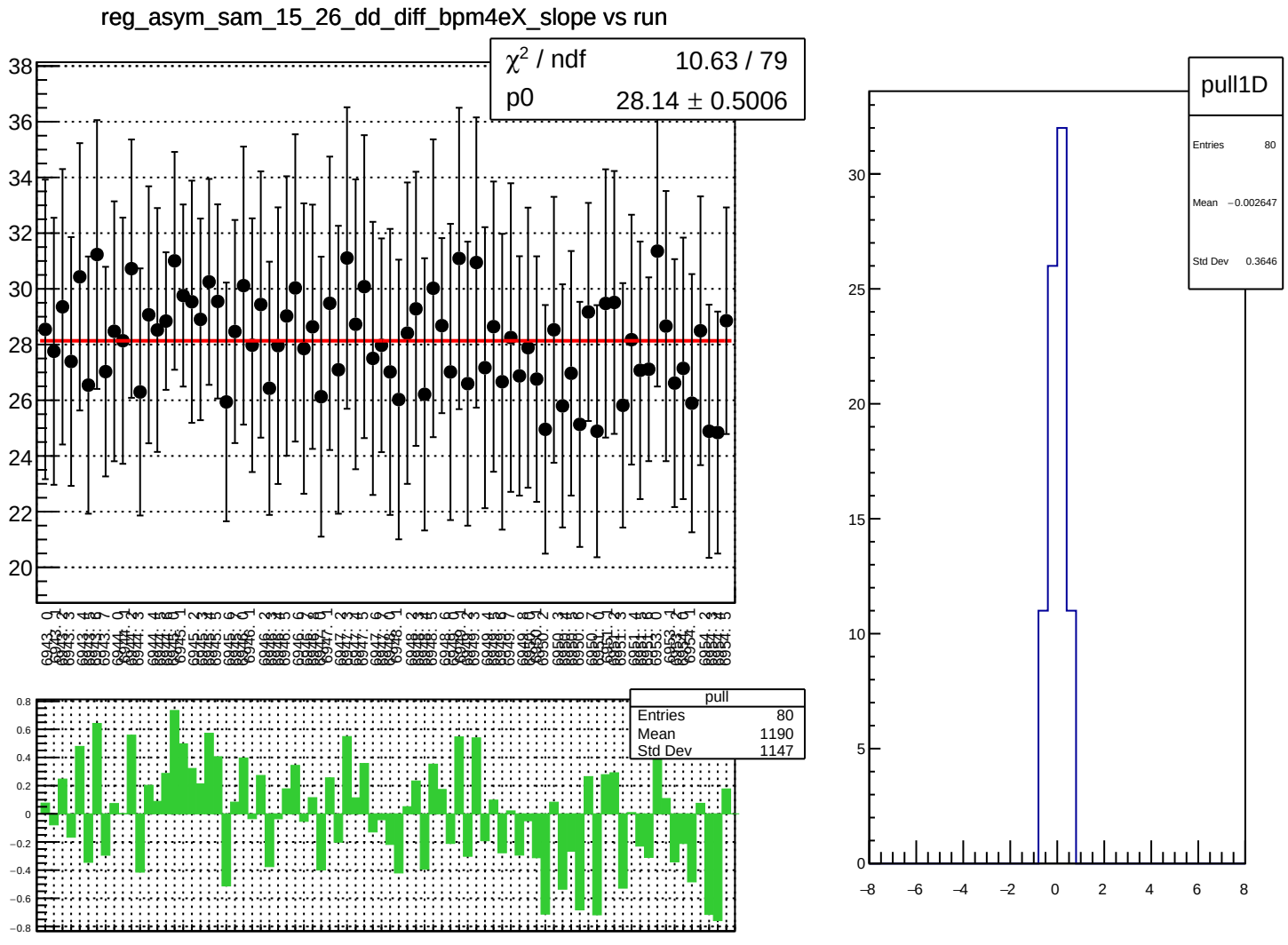

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 9.871 / 79
p0 0.4845 ± 0.01552
pull
Entries 80
Mean 3.997
Std Dev 56.42

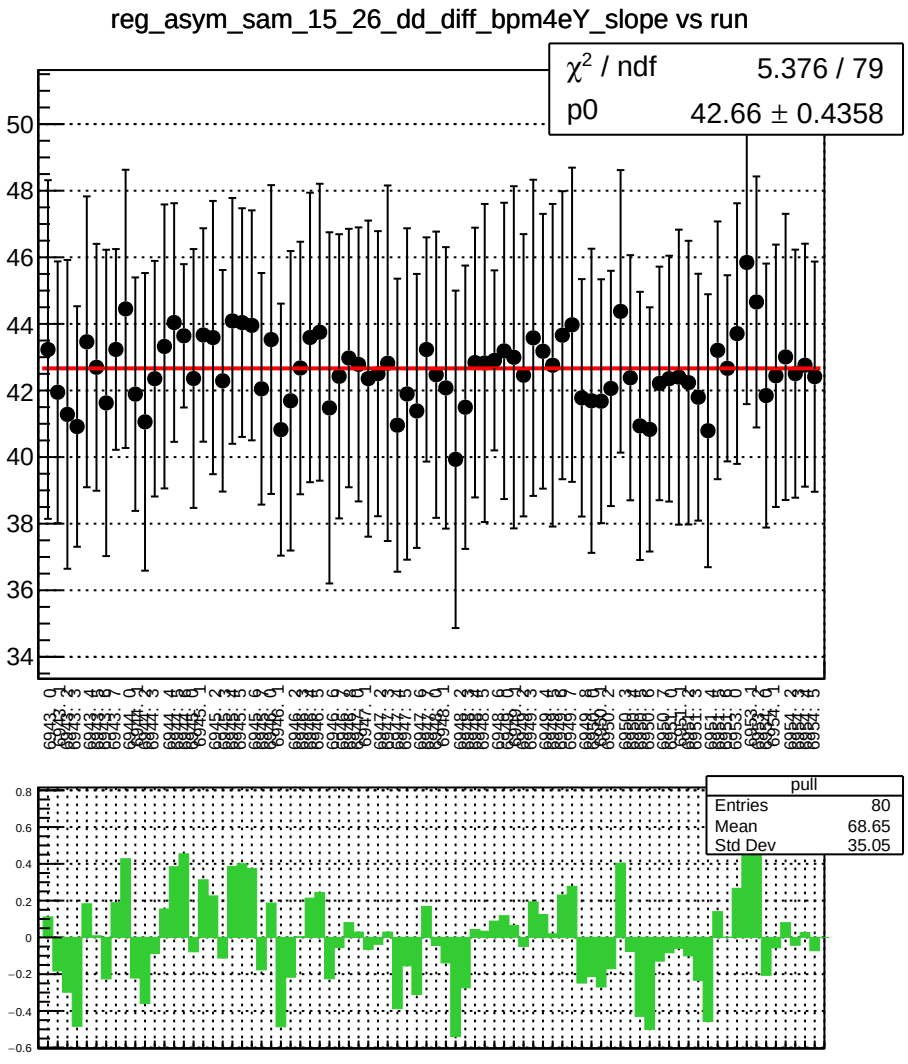

pull1D
Entries 80
Mean 0.012
Std Dev 0.3511

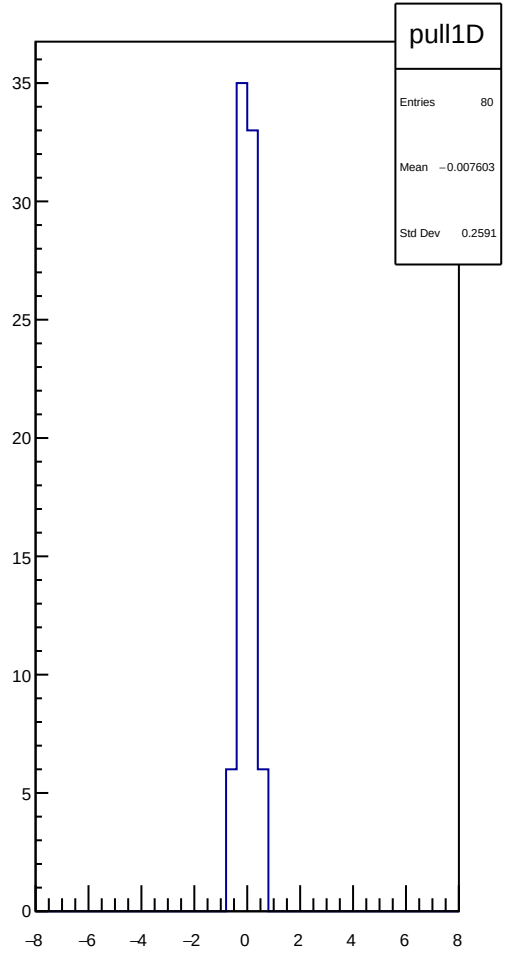

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 8.227 / 79
p0 3.645 ± 0.5363
pull
Entries 80
Mean 2110
Std Dev 2066

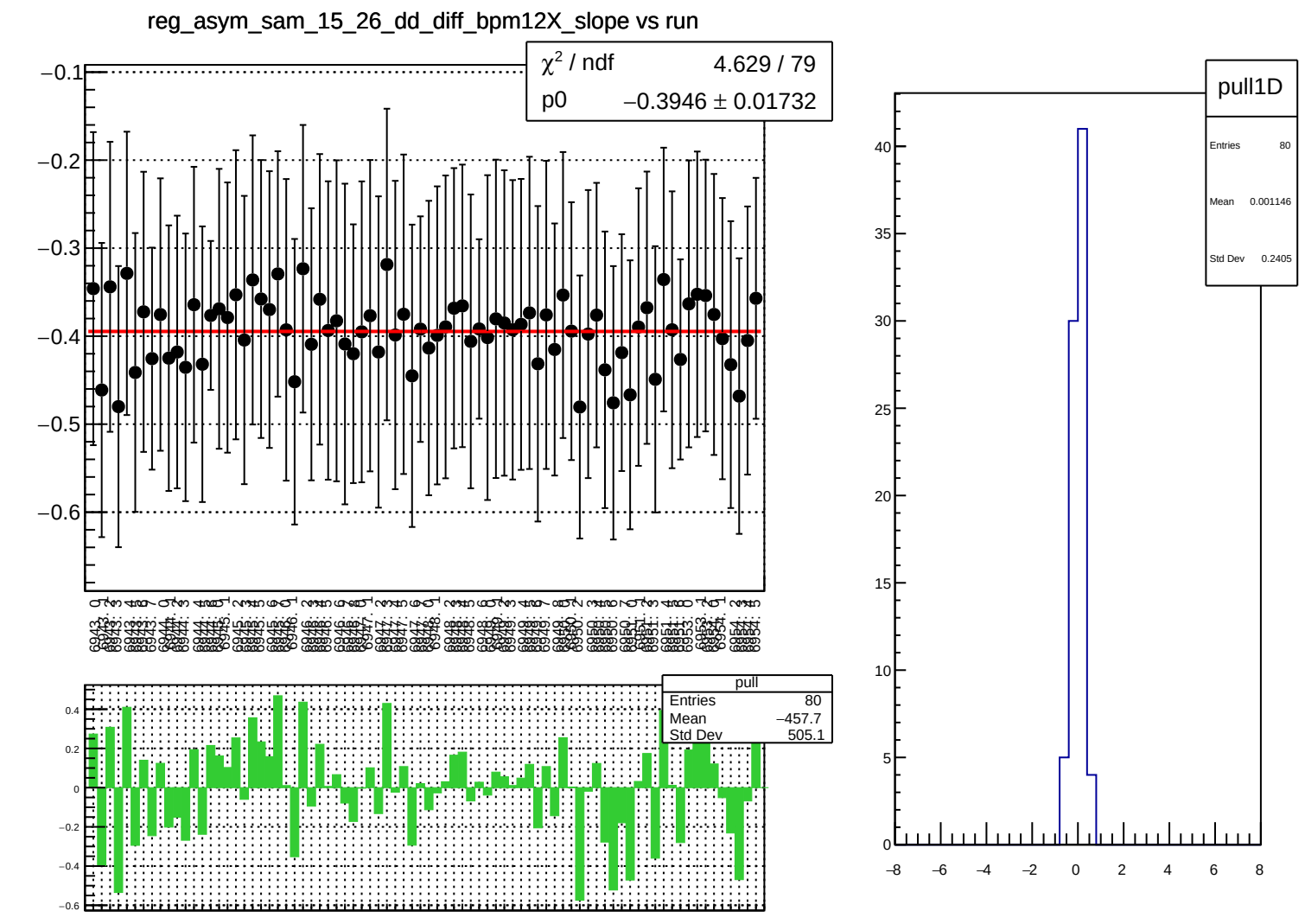

pull1D
Entries 80
Mean 0.001896
Std Dev 0.3207

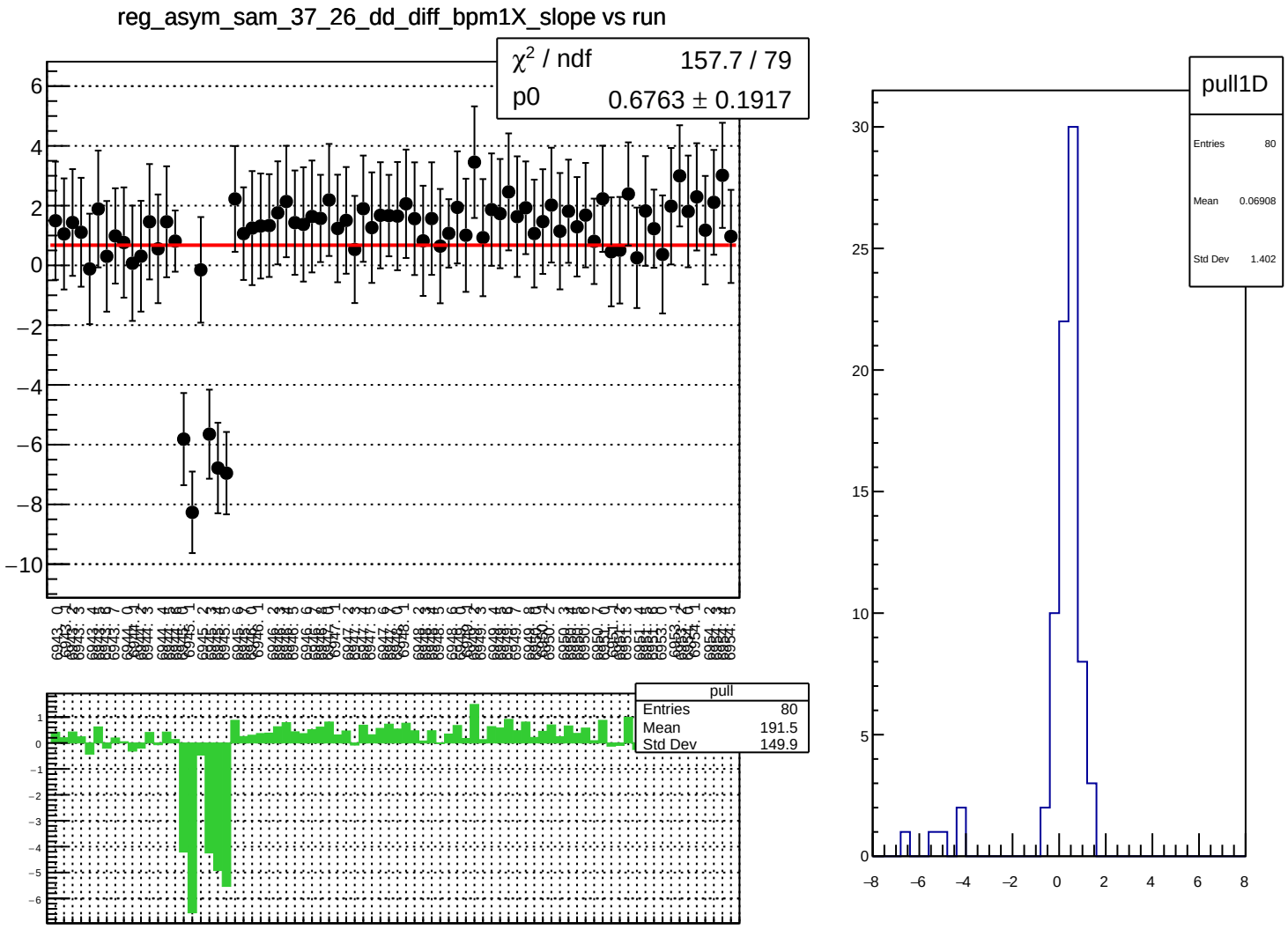

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.635 / 79
p0 −0.5108 ± 0.3784
pull
Entries 80
Mean 2.987
Std Dev 30.59
pull1D
Entries 80
Mean 0.01516
Std Dev 0.2402

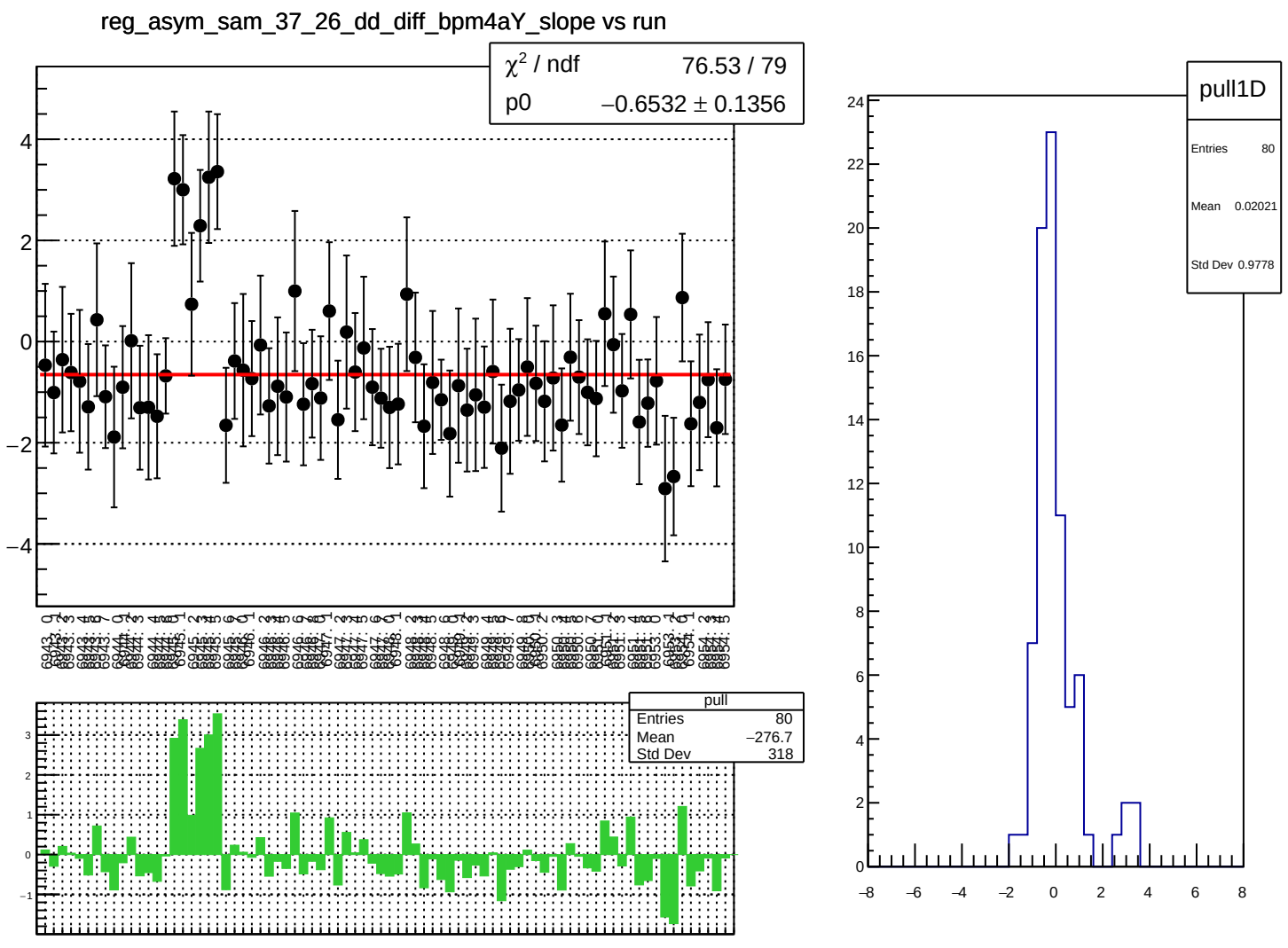

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 10.63 / 79
p0 28.14 ± 0.5006
pull
Entries 80
Mean 1190
Std Dev 1147
pull1D
Entries 80
Mean −0.002647
Std Dev 0.3646

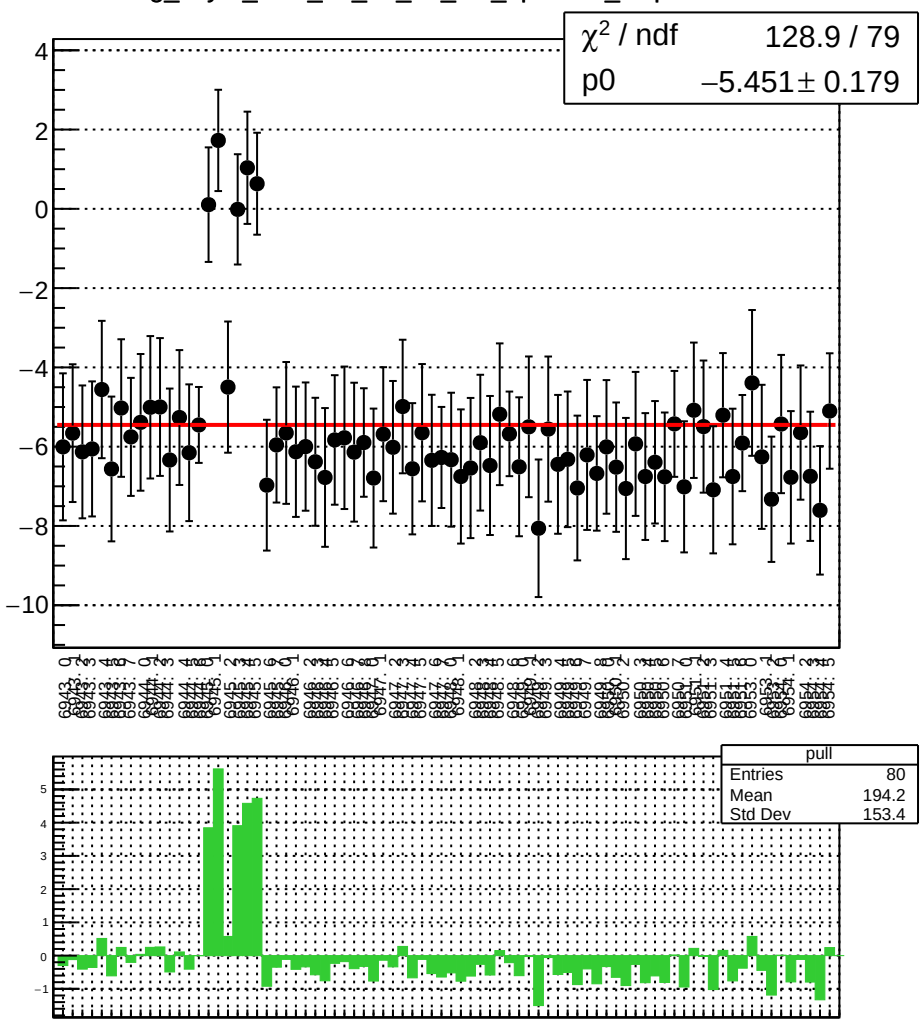

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.376 / 79
p0 42.66 ± 0.4358
pull
Entries 80
Mean 68.65
Std Dev 35.05

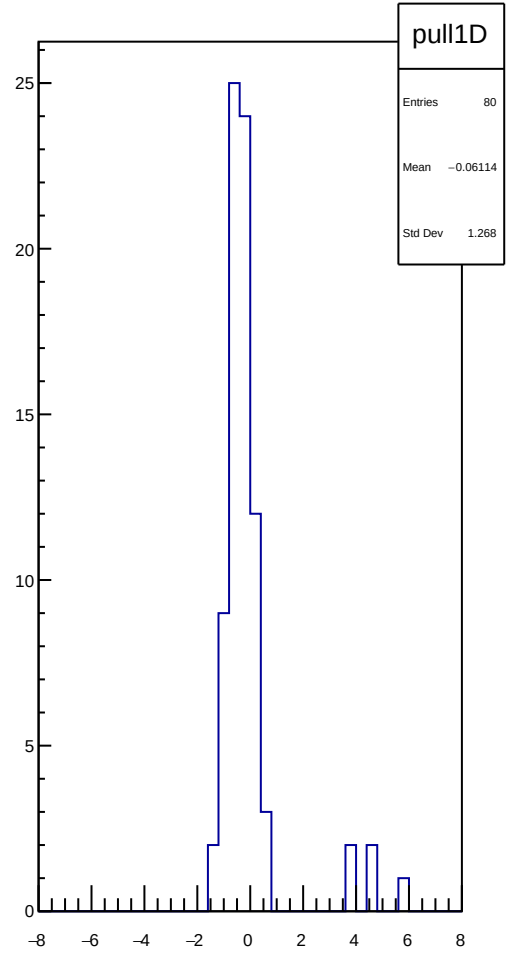

pull1D
Entries 80
Mean −0.007603
Std Dev 0.2591

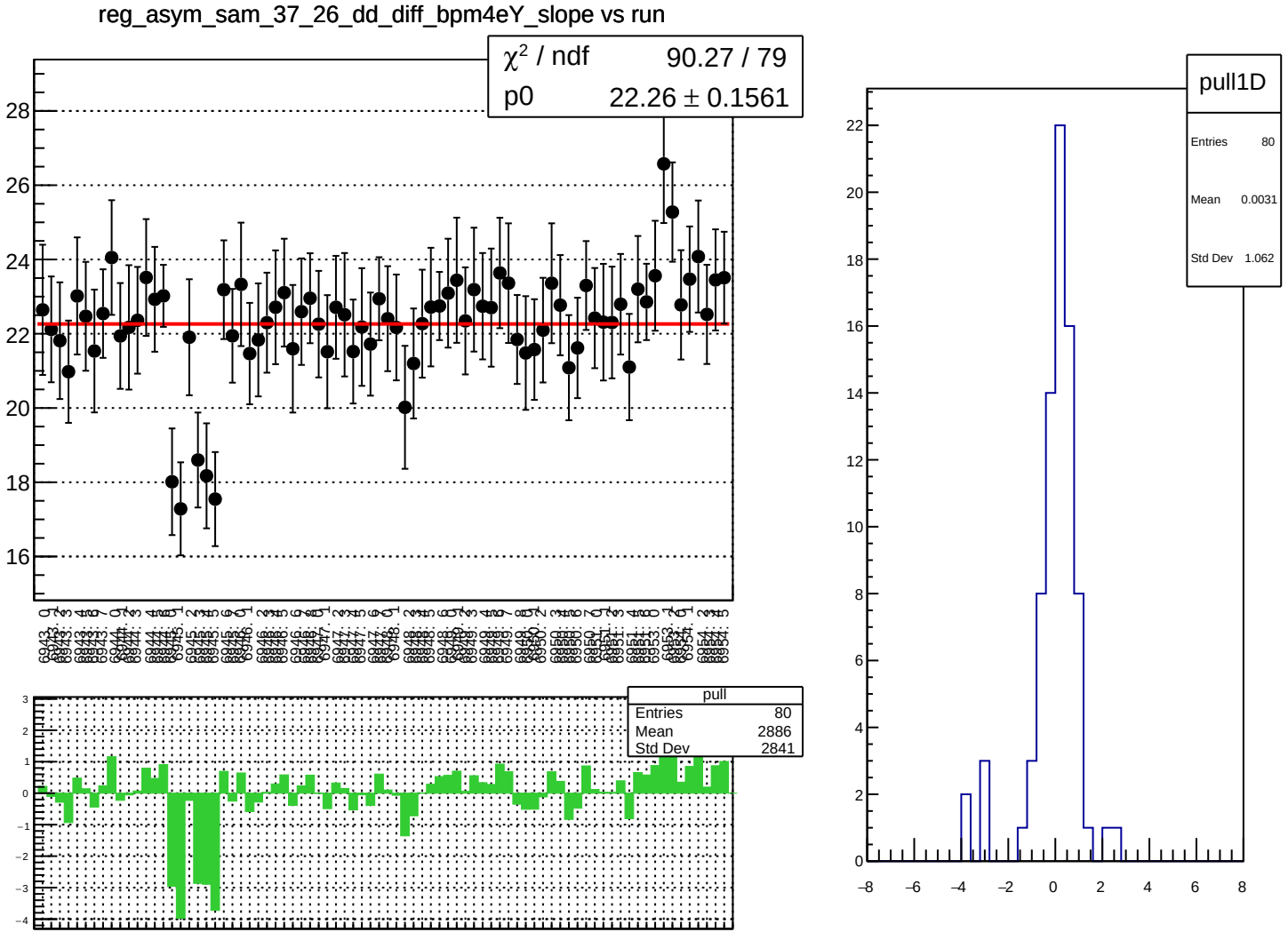

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 4.629 / 79
p0 −0.3946 ± 0.01732
pull
Entries 80
Mean −457.7
Std Dev 505.1
pull1D
Entries 80
Mean 0.001146
Std Dev 0.2405

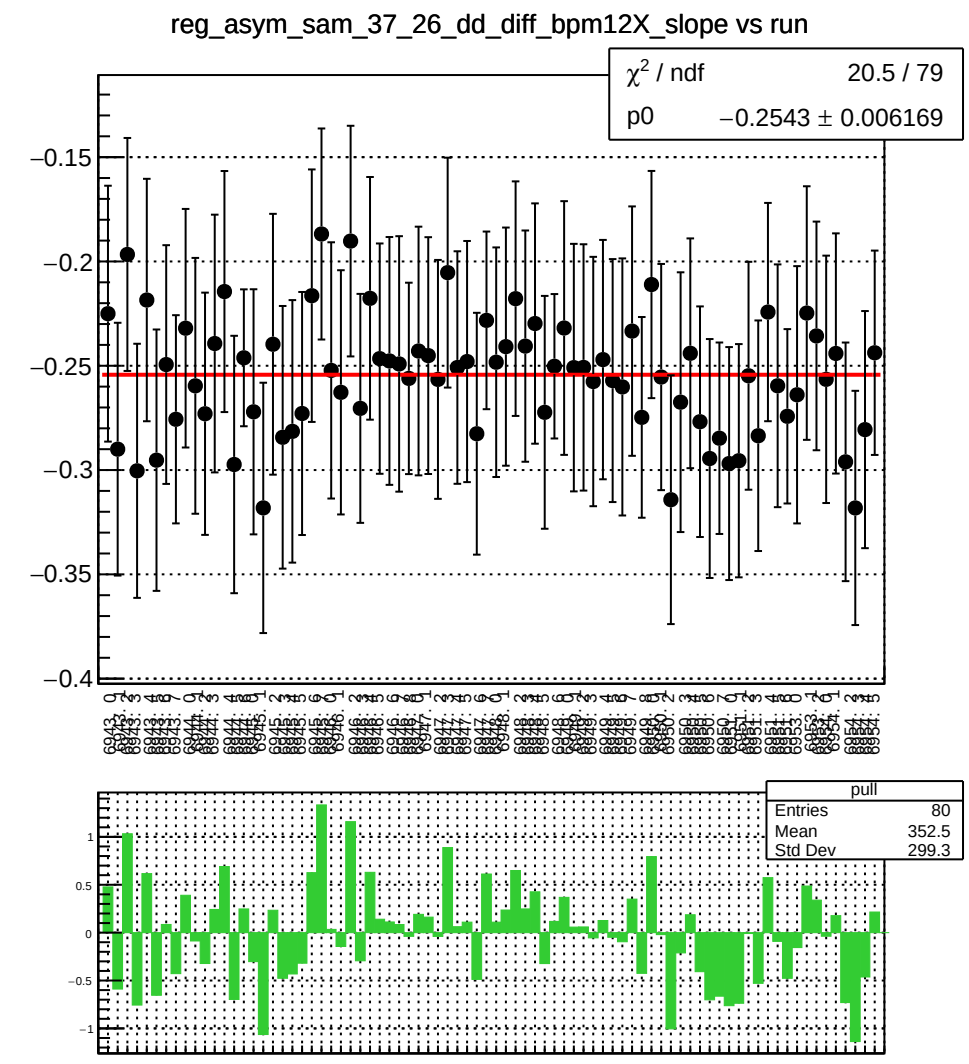

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 157.7 / 79
p0 0.6763 ± 0.1917
pull
Entries 80
Mean 191.5
Std Dev 149.9
pull1D
Entries 80
Mean 0.06908
Std Dev 1.402

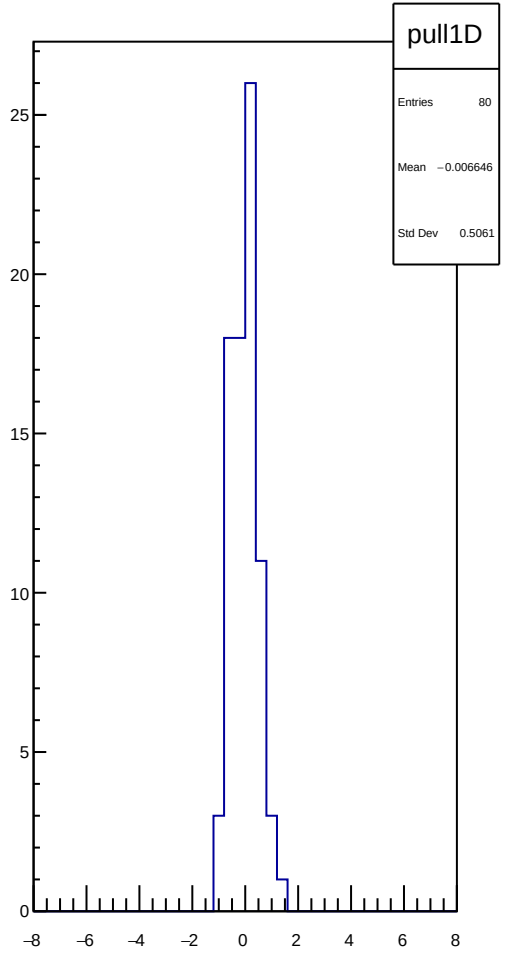

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 76.53 / 79
p0 −0.6532 ± 0.1356
pull
Entries 80
Mean −276.7
Std Dev 318
pull1D
Entries 80
Mean 0.02021
Std Dev 0.9778

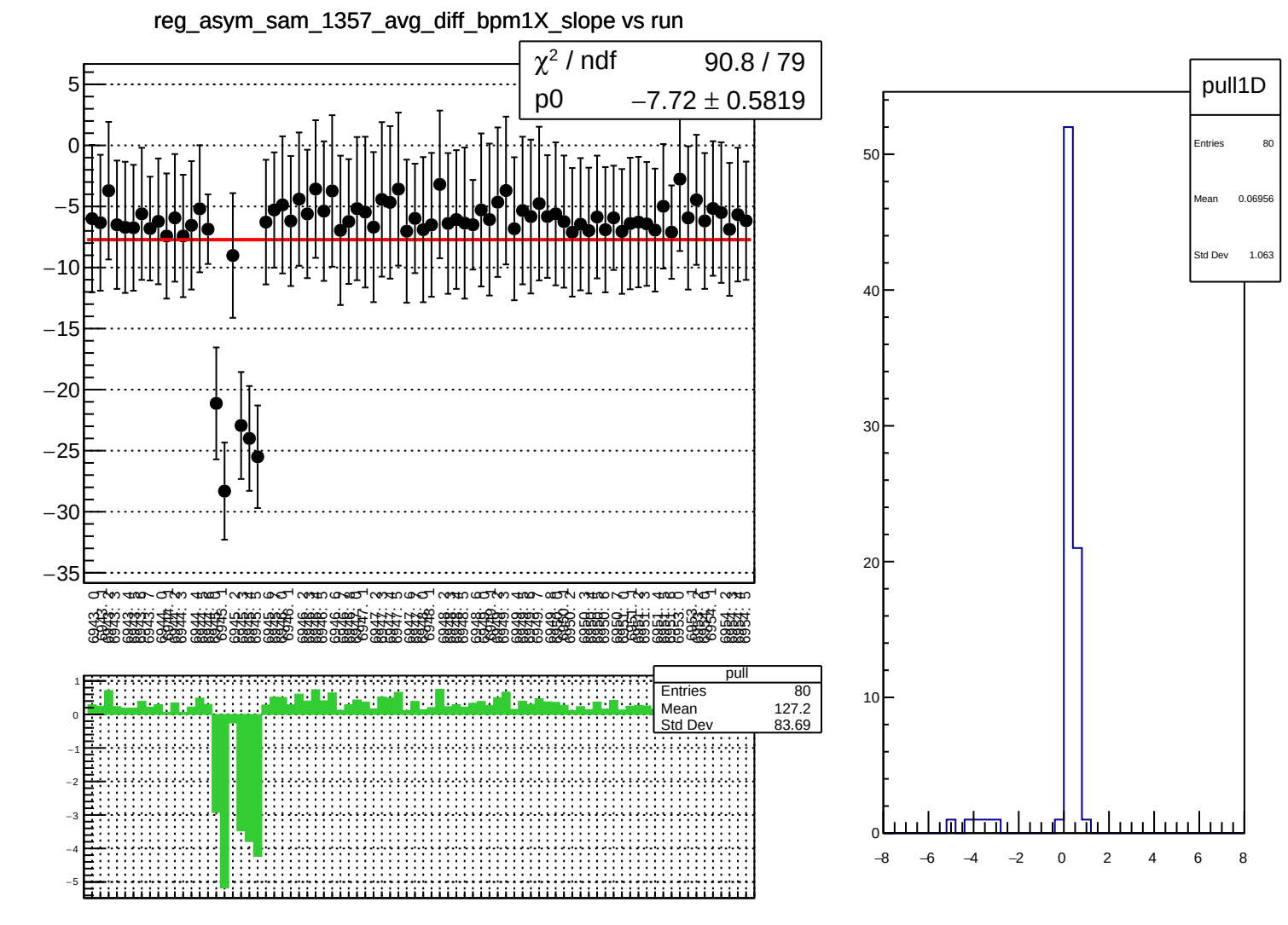

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 128.9 / 79
p0 −5.451 ± 0.179
pull
Entries 80
Mean 194.2
Std Dev 153.4

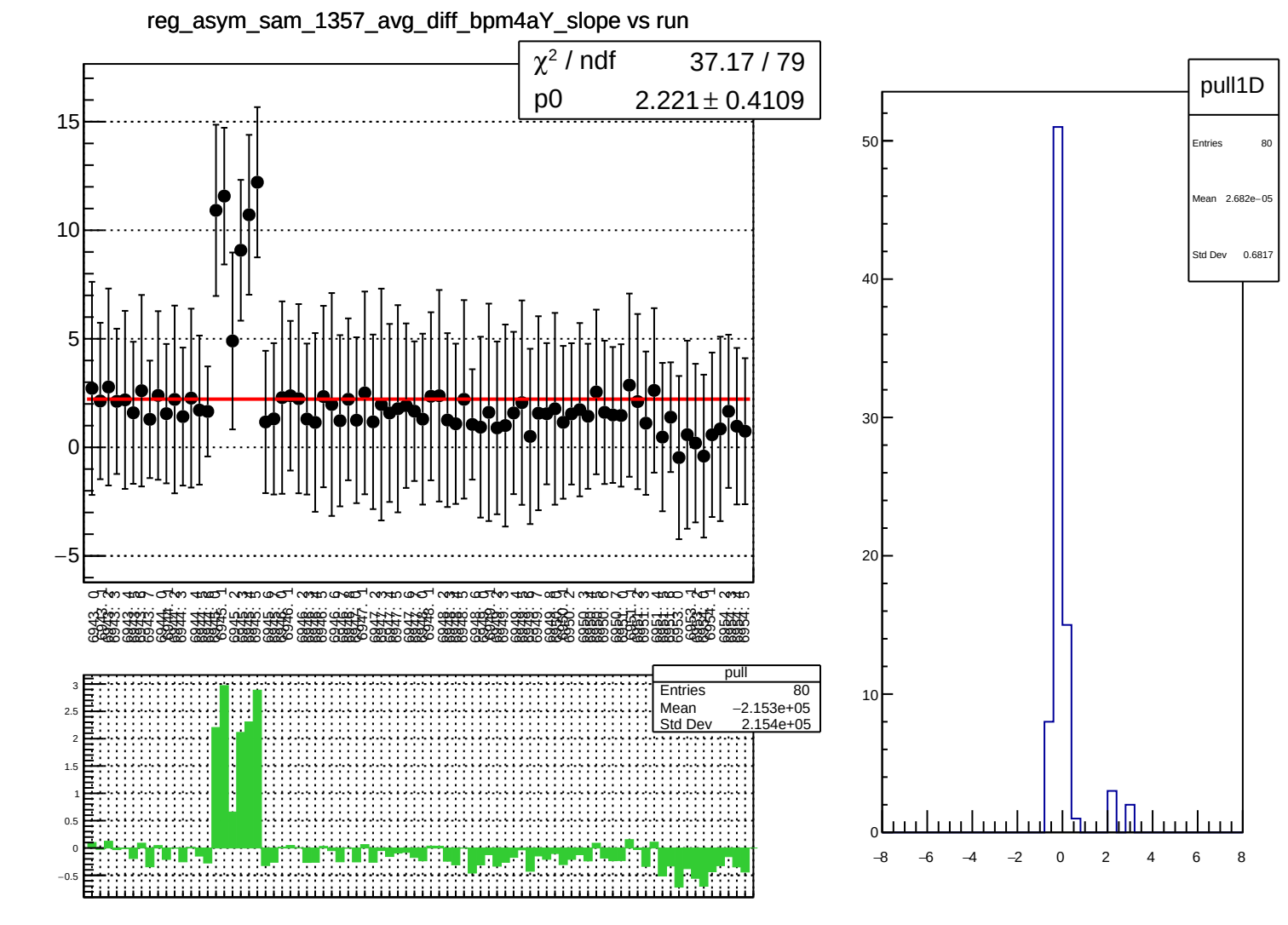

pull1D
Entries 80
Mean −0.06114
Std Dev 1.268

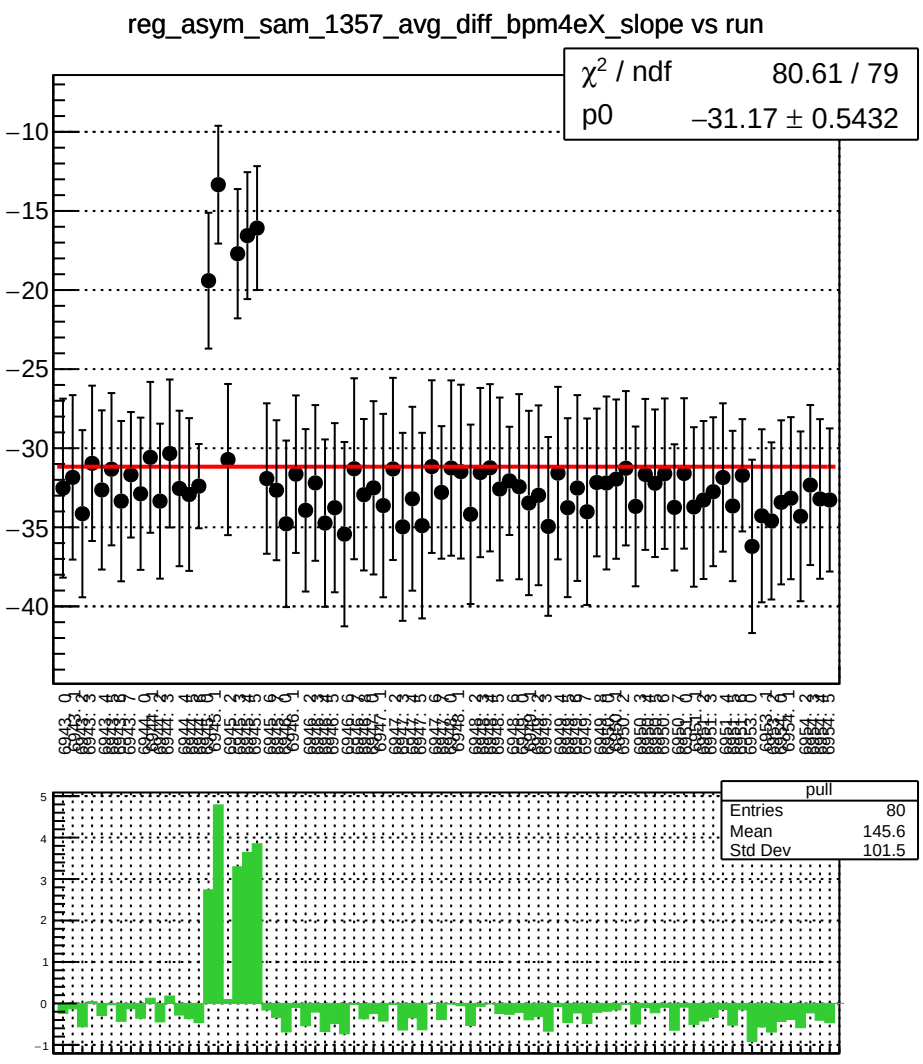

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 90.27 / 79
p0 22.26 ± 0.1561
pull
Entries 80
Mean 2886
Std Dev 2841
pull1D
Entries 80
Mean 0.0031
Std Dev 1.062

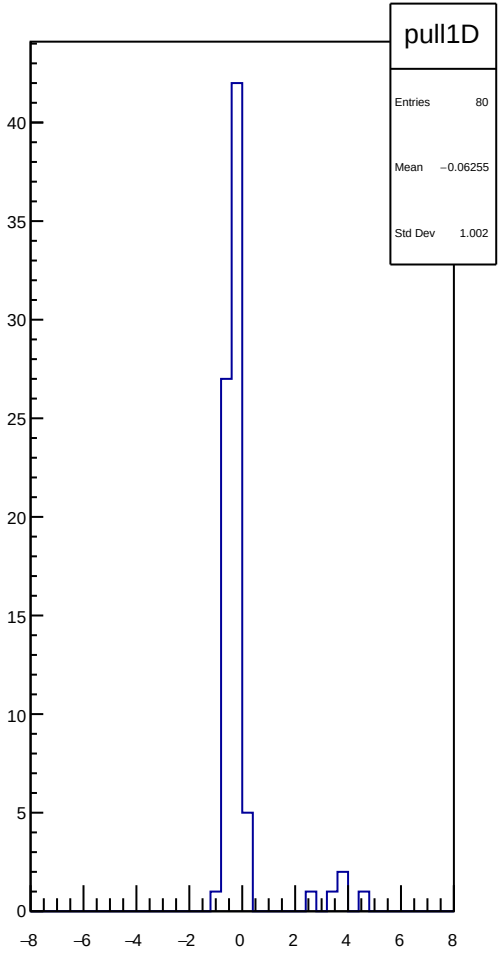

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 20.5 / 79
p0 −0.2543 ± 0.006169
−0.15
−0.2
−0.25
−0.3
−0.35
−0.4
pull
Entries 80
Mean 352.5
Std Dev 299.3
1
0.5
0
−0.5
−1

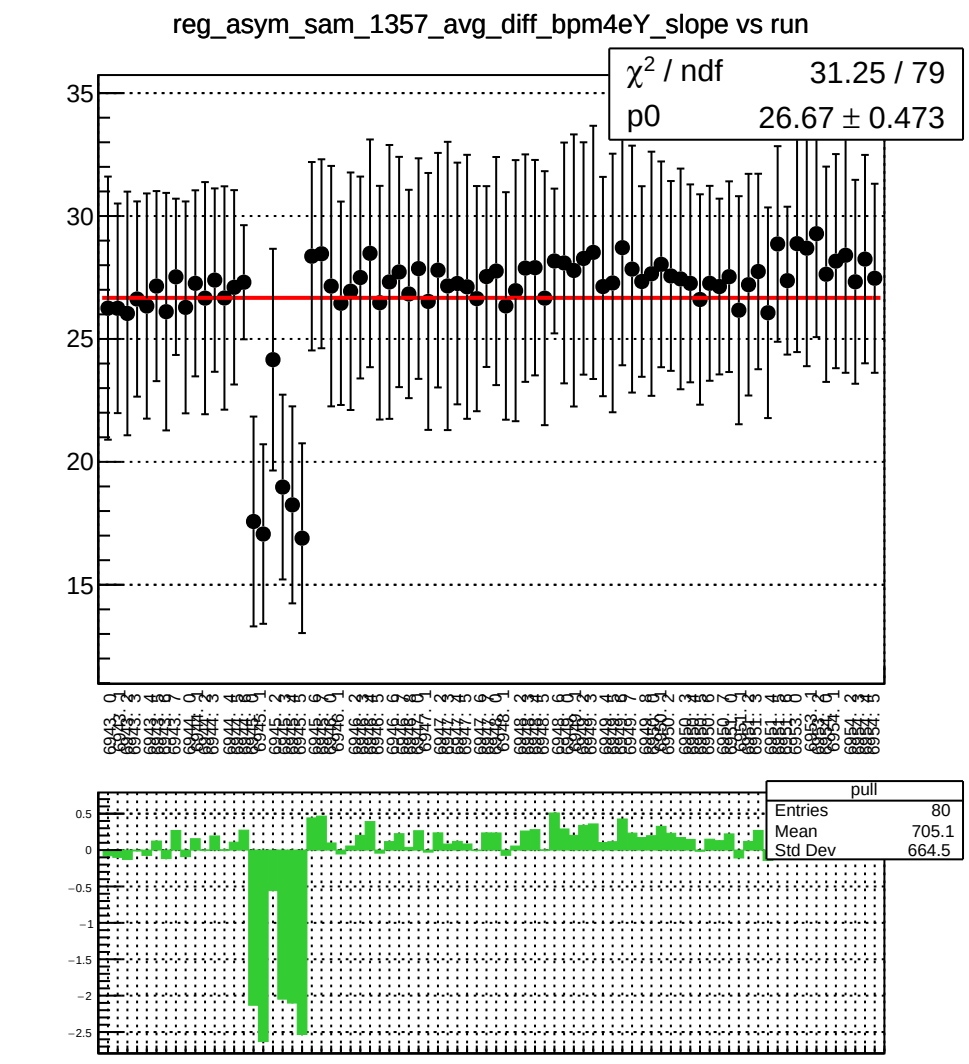

pull1D
Entries 80
Mean −0.006646
Std Dev 0.5061
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

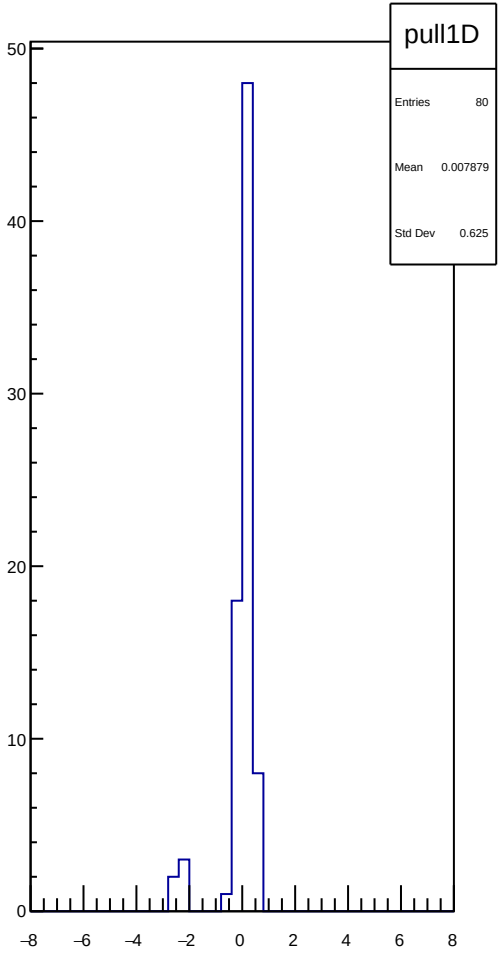

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 90.8 / 79
p0 −7.72 ± 0.5819
pull
Entries 80
Mean 127.2
Std Dev 83.69
pull1D
Entries 80
Mean 0.06956
Std Dev 1.063

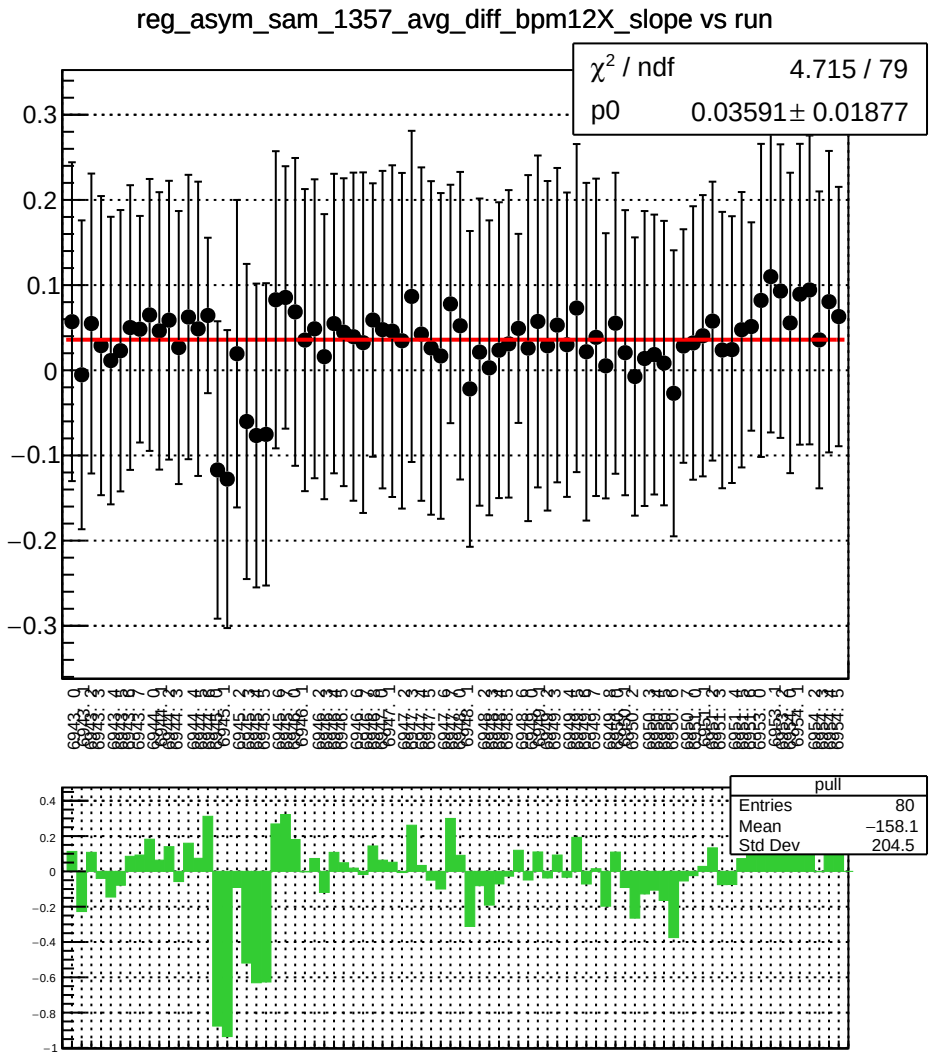

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 37.17 / 79
p0 2.221 ± 0.4109
pull
Entries 80
Mean −2.153e+05
Std Dev 2.154e+05
pull1D
Entries 80
Mean 2.682e−05
Std Dev 0.6817

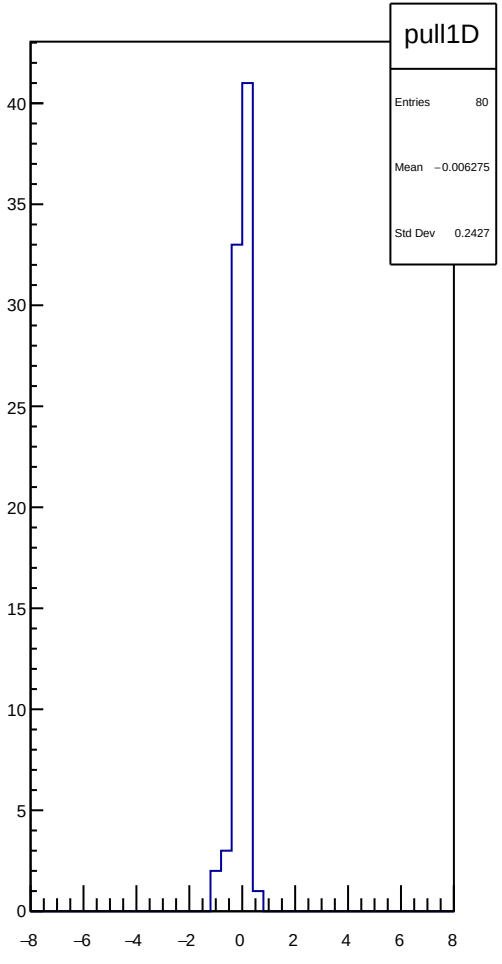

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 80.61 / 79
p0 −31.17 ± 0.5432
pull
Entries 80
Mean 145.6
Std Dev 101.5

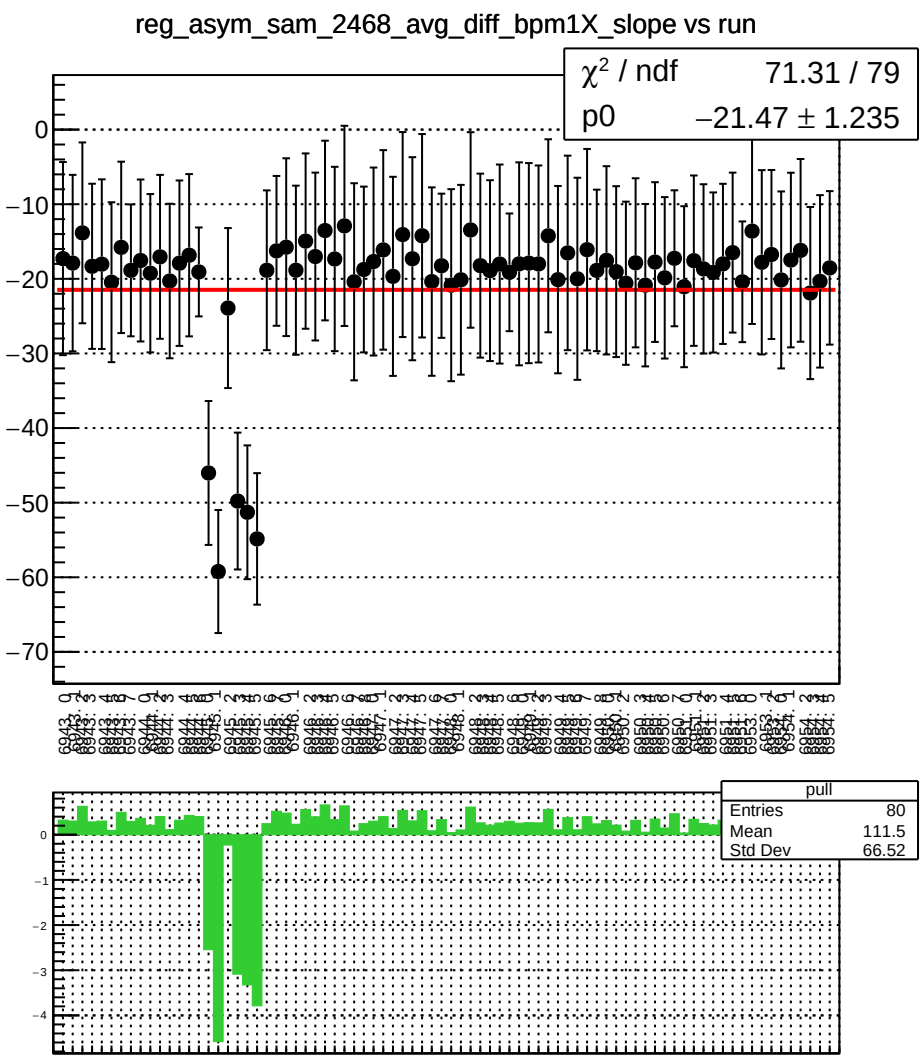

pull1D
Entries 80
Mean −0.06255
Std Dev 1.002

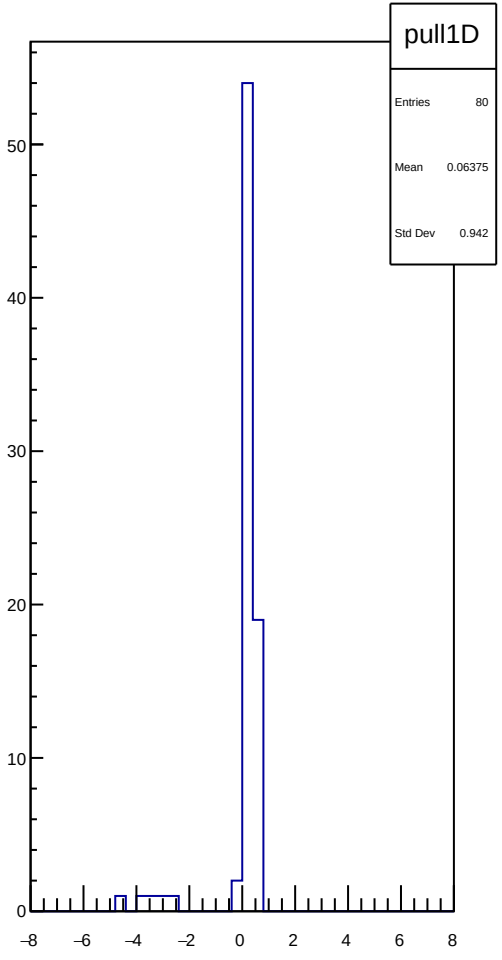

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 31.25 / 79
p0 26.67 ± 0.473
pull
Entries 80
Mean 705.1
Std Dev 664.5

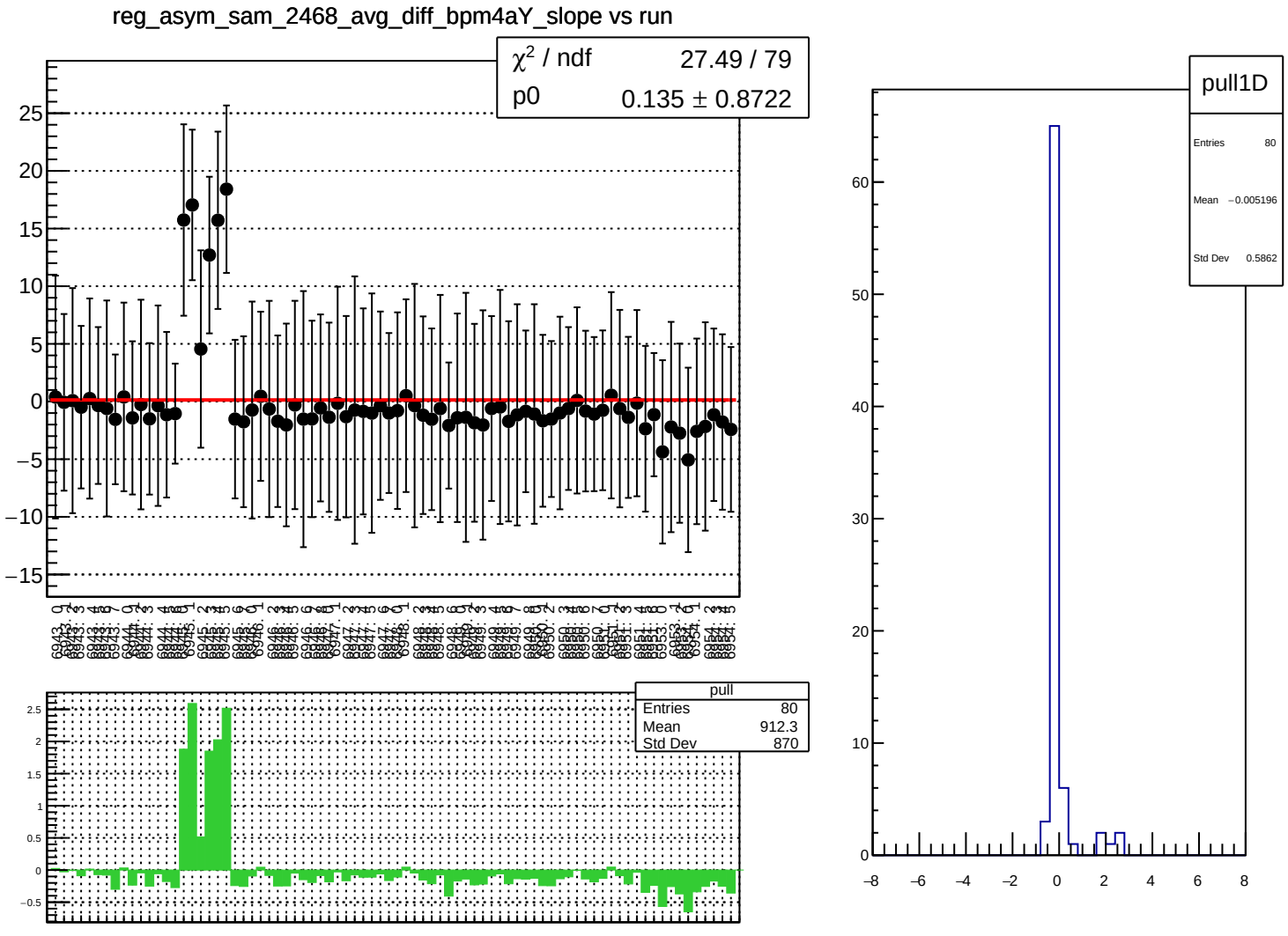

pull1D
Entries 80
Mean 0.007879
Std Dev 0.625

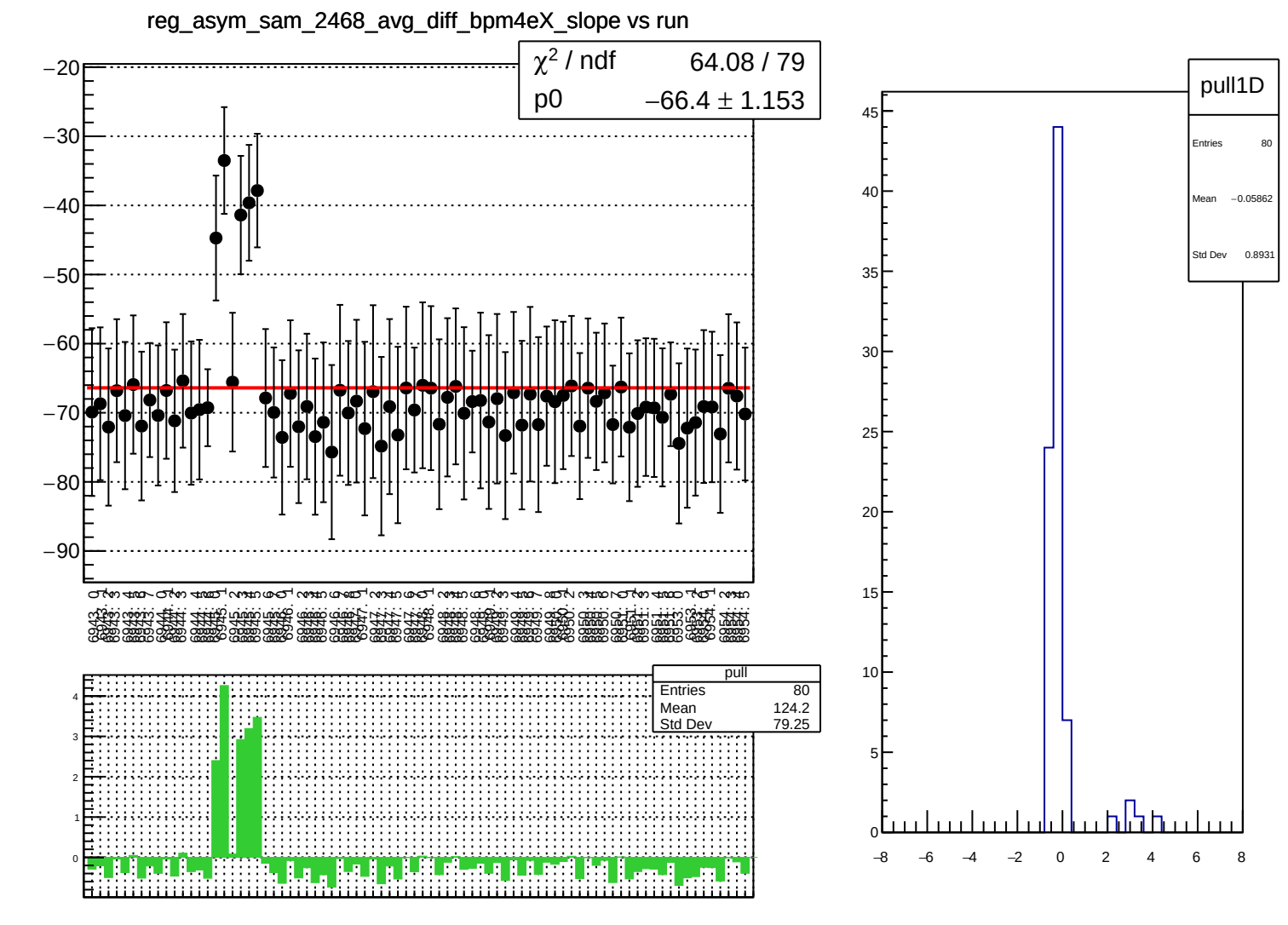

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 4.715 / 79
p0 0.03591 ± 0.01877
pull
Entries 80
Mean −158.1
Std Dev 204.5

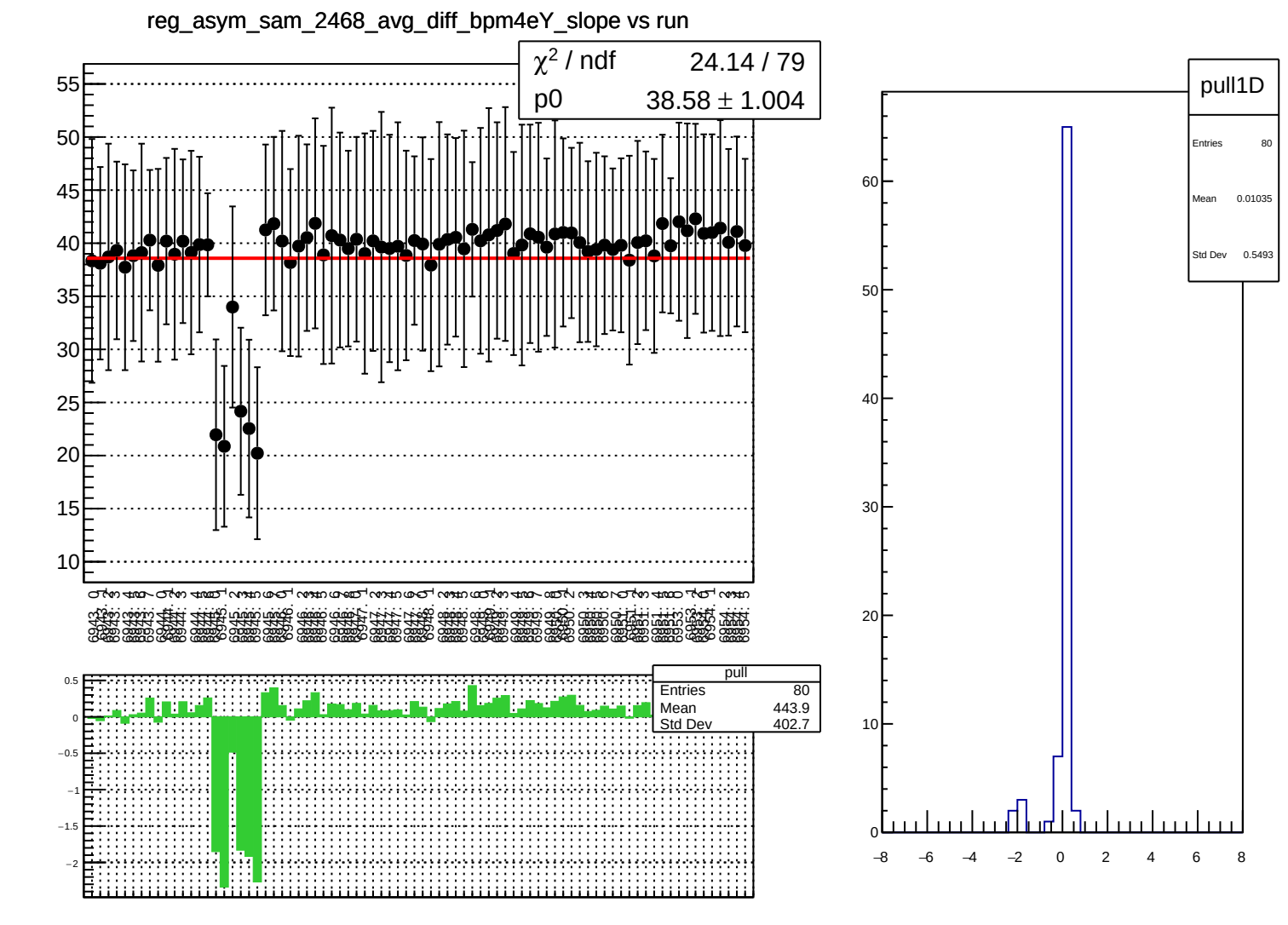

pull1D
Entries 80
Mean −0.006275
Std Dev 0.2427

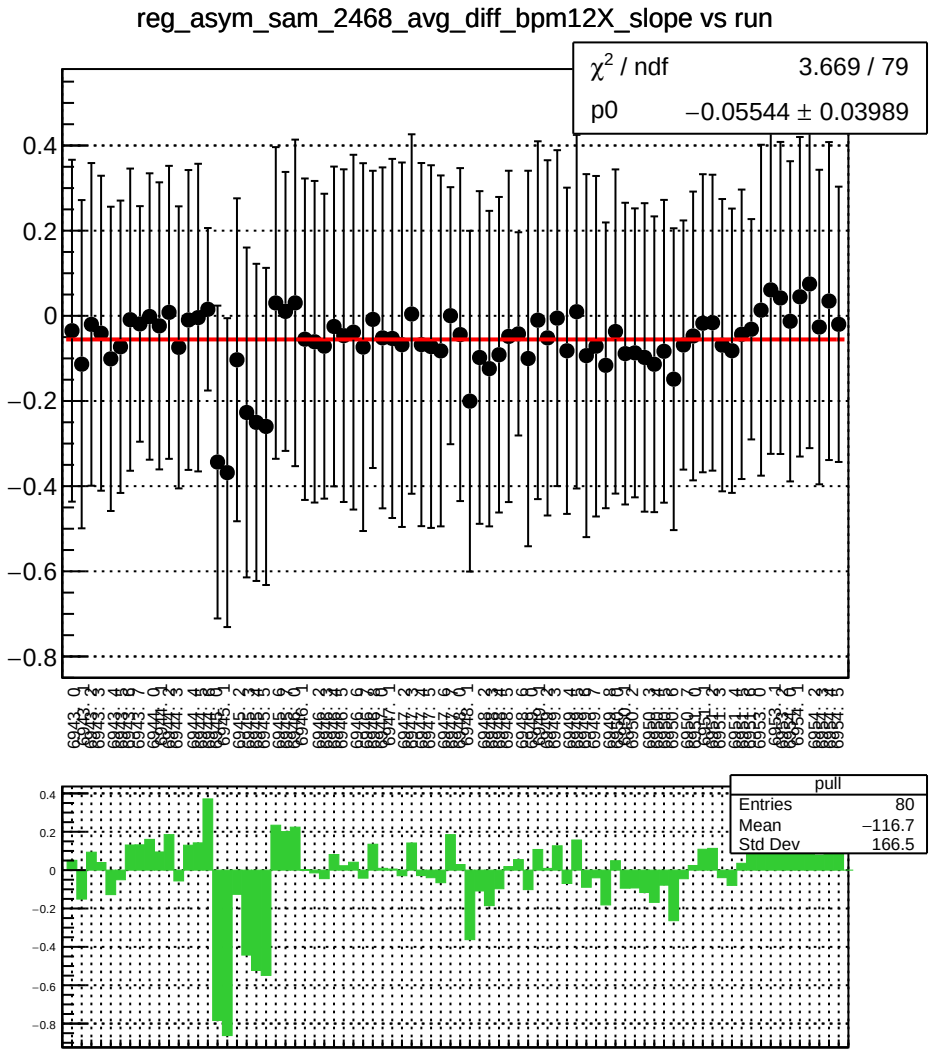

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 71.31 / 79
p0 −21.47 ± 1.235
pull
Entries 80
Mean 111.5
Std Dev 66.52

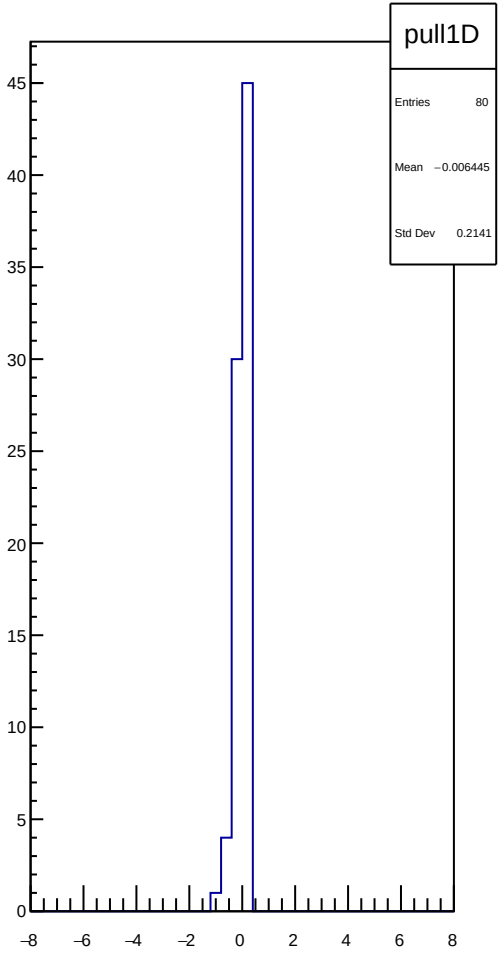

pull1D
Entries 80
Mean 0.06375
Std Dev 0.942

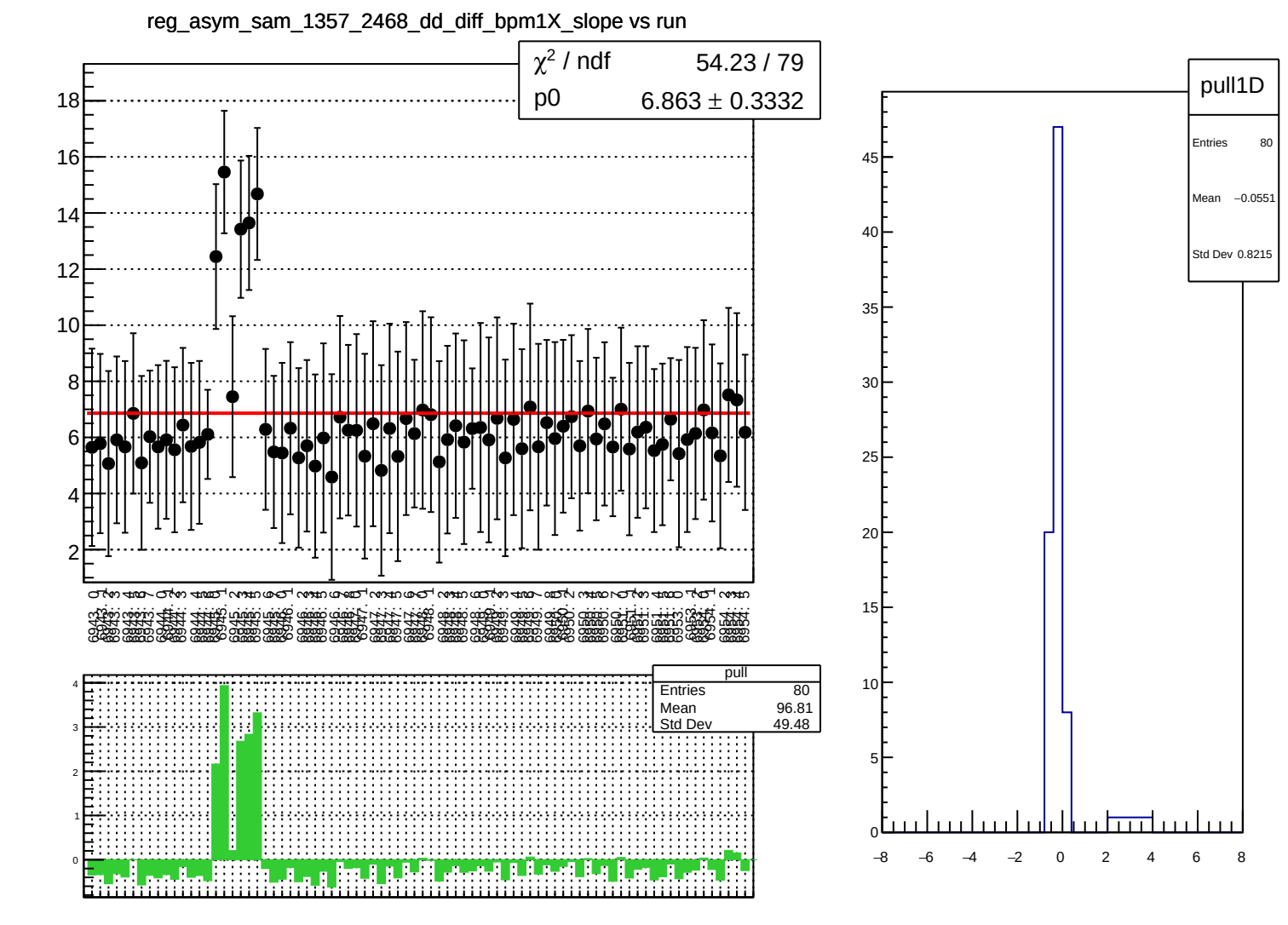

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 27.49 / 79
p0 0.135 ± 0.8722
pull
Entries 80
Mean 912.3
Std Dev 870
pull1D
Entries 80
Mean −0.005196
Std Dev 0.5862

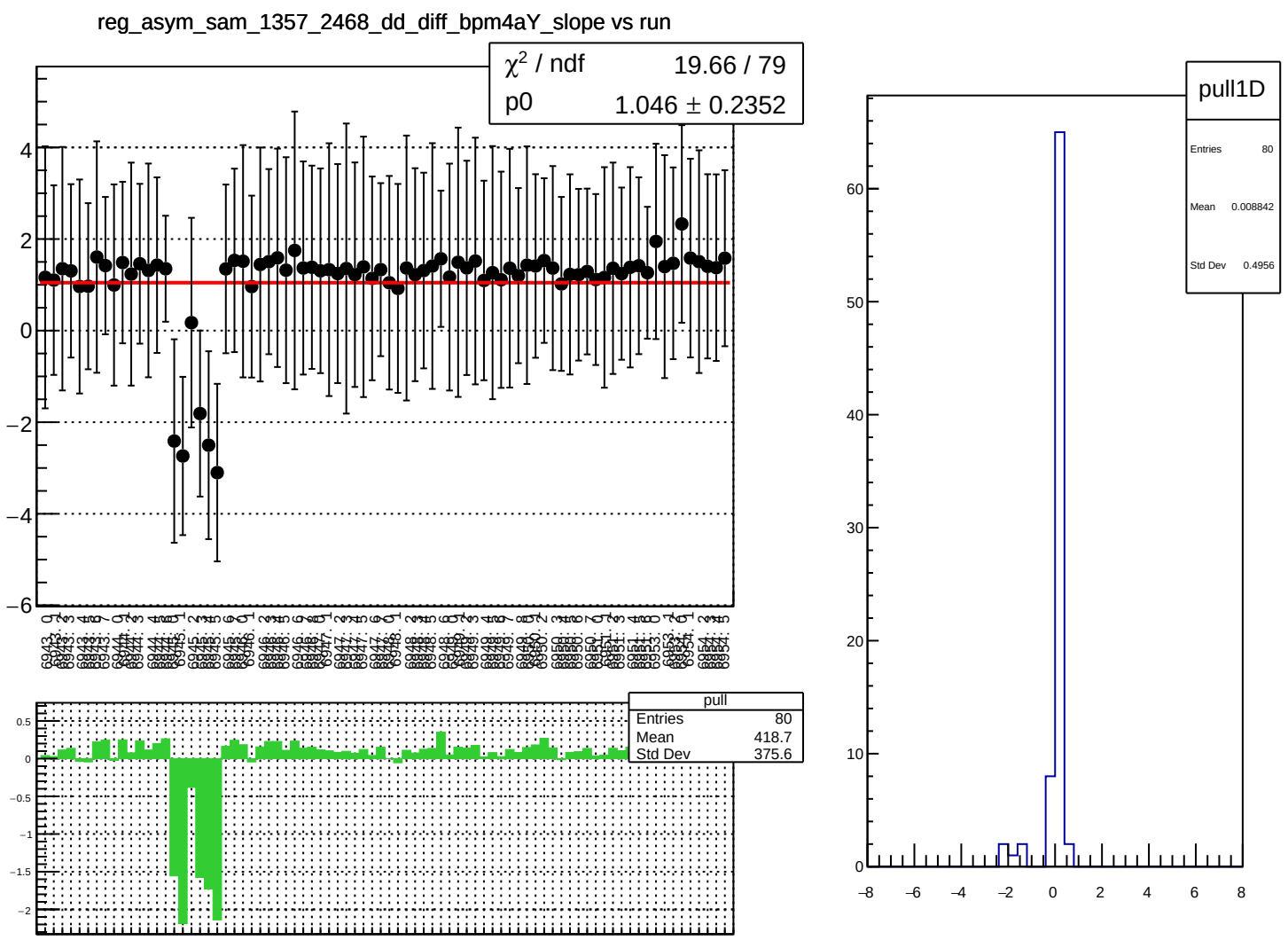

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 64.08 / 79
p0 −66.4 ± 1.153
pull
Entries 80
Mean 124.2
Std Dev 79.25
pull1D
Entries 80
Mean −0.05862
Std Dev 0.8931

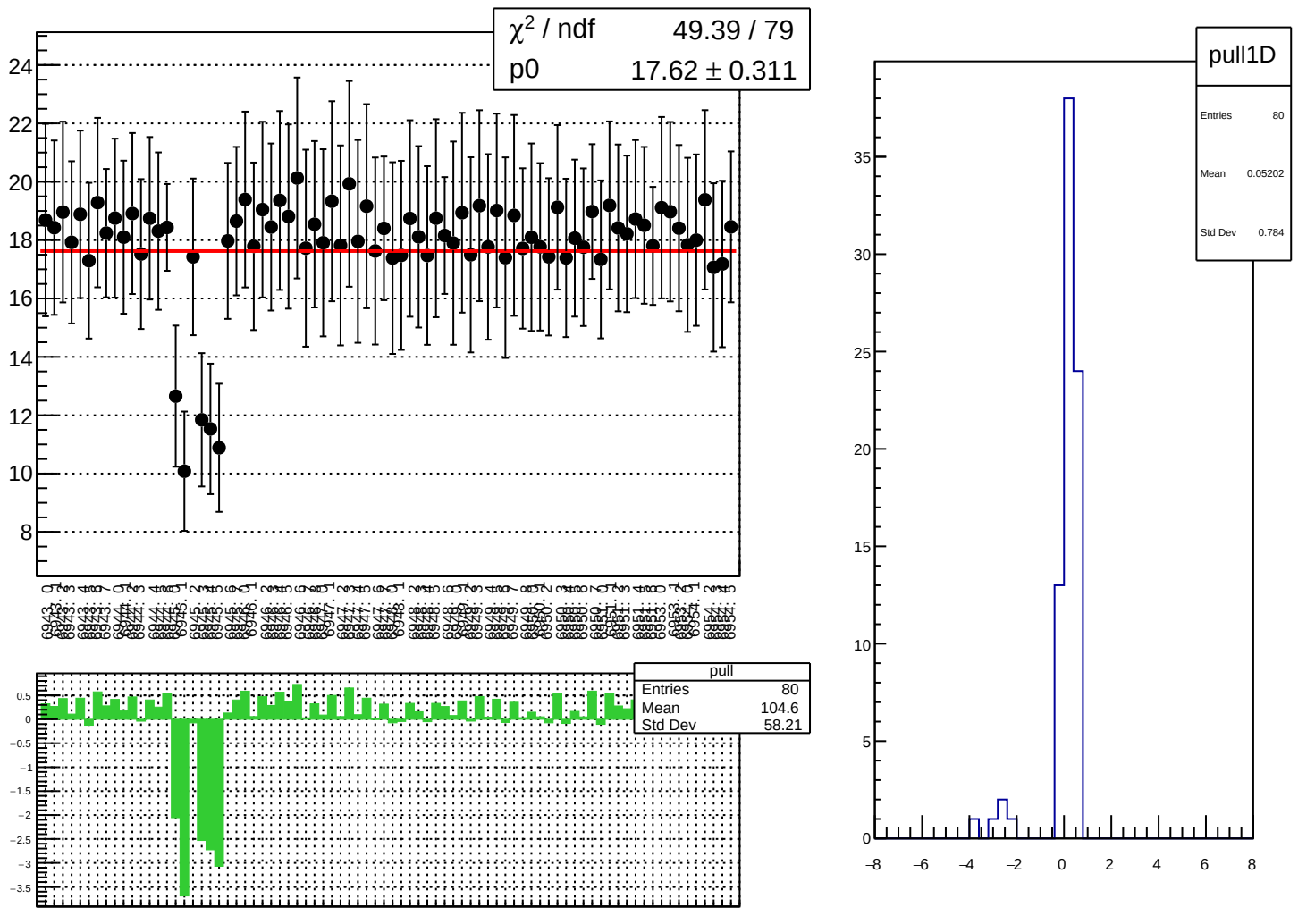

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 24.14 / 79
p0 38.58 ± 1.004
pull
Entries 80
Mean 443.9
Std Dev 402.7
pull1D
Entries 80
Mean 0.01035
Std Dev 0.5493

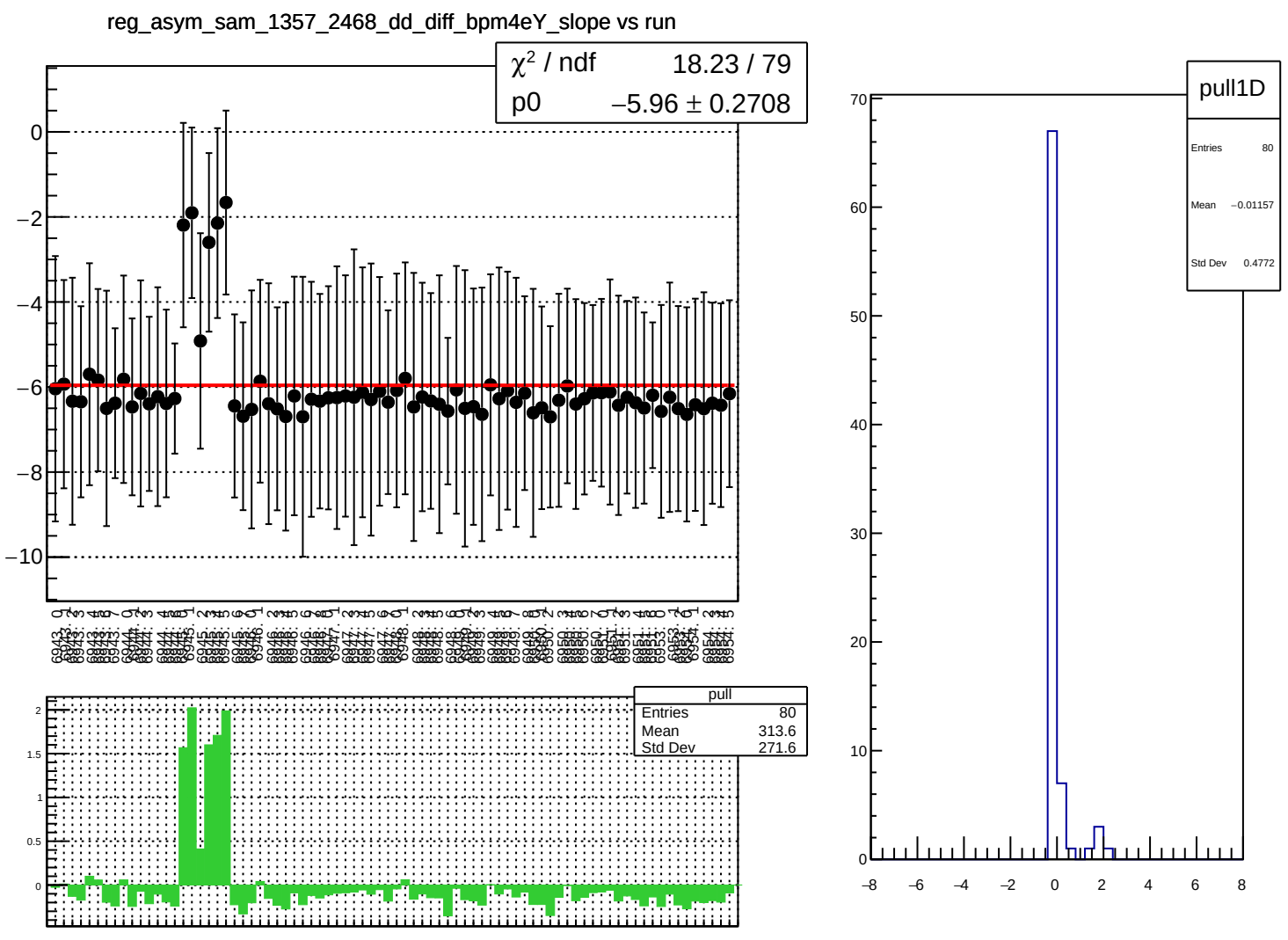

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 3.669 / 79
p0 −0.05544 ± 0.03989
pull
Entries 80
Mean −116.7
Std Dev 166.5

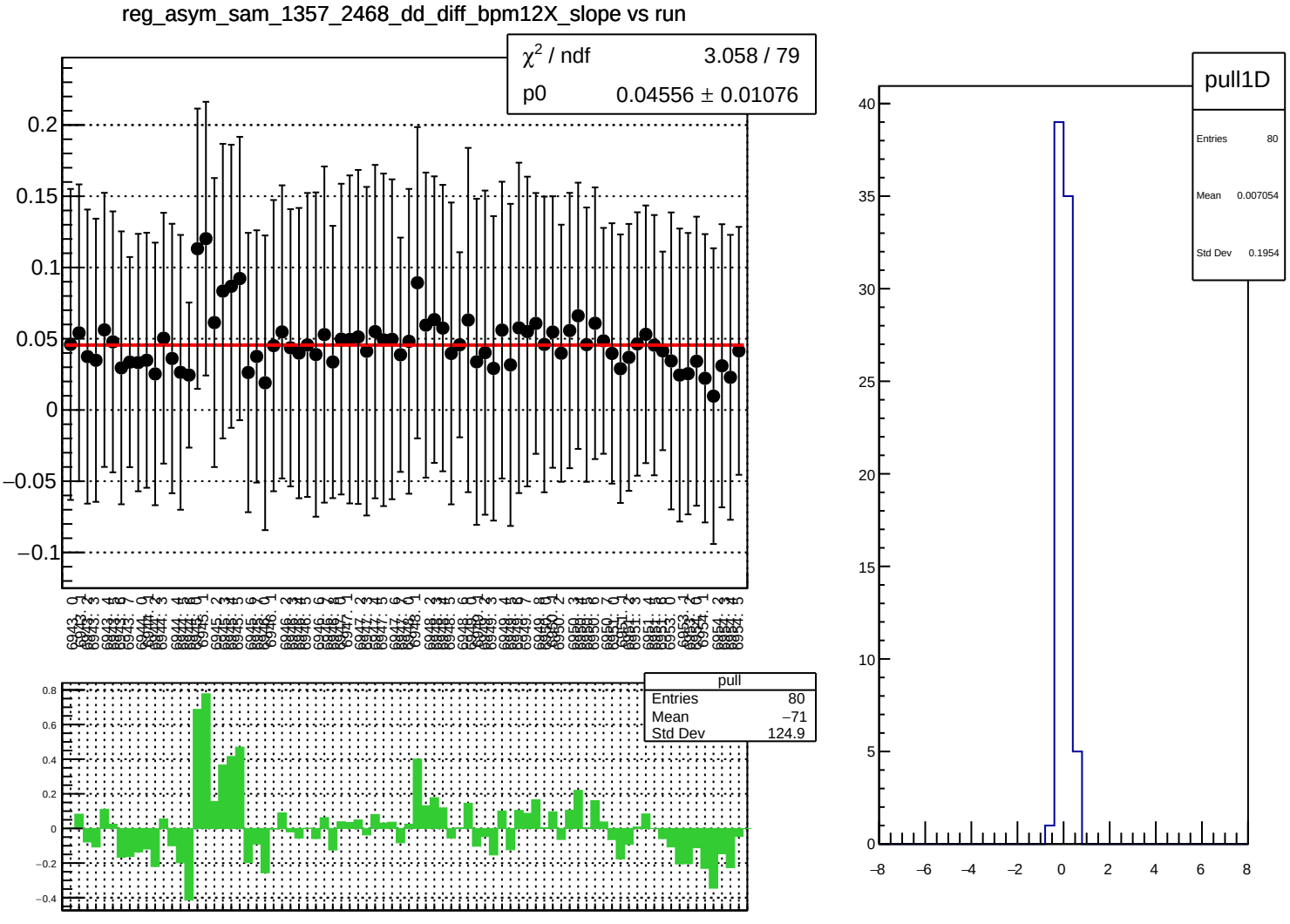

pull1D
Entries 80
Mean −0.006445
Std Dev 0.2141

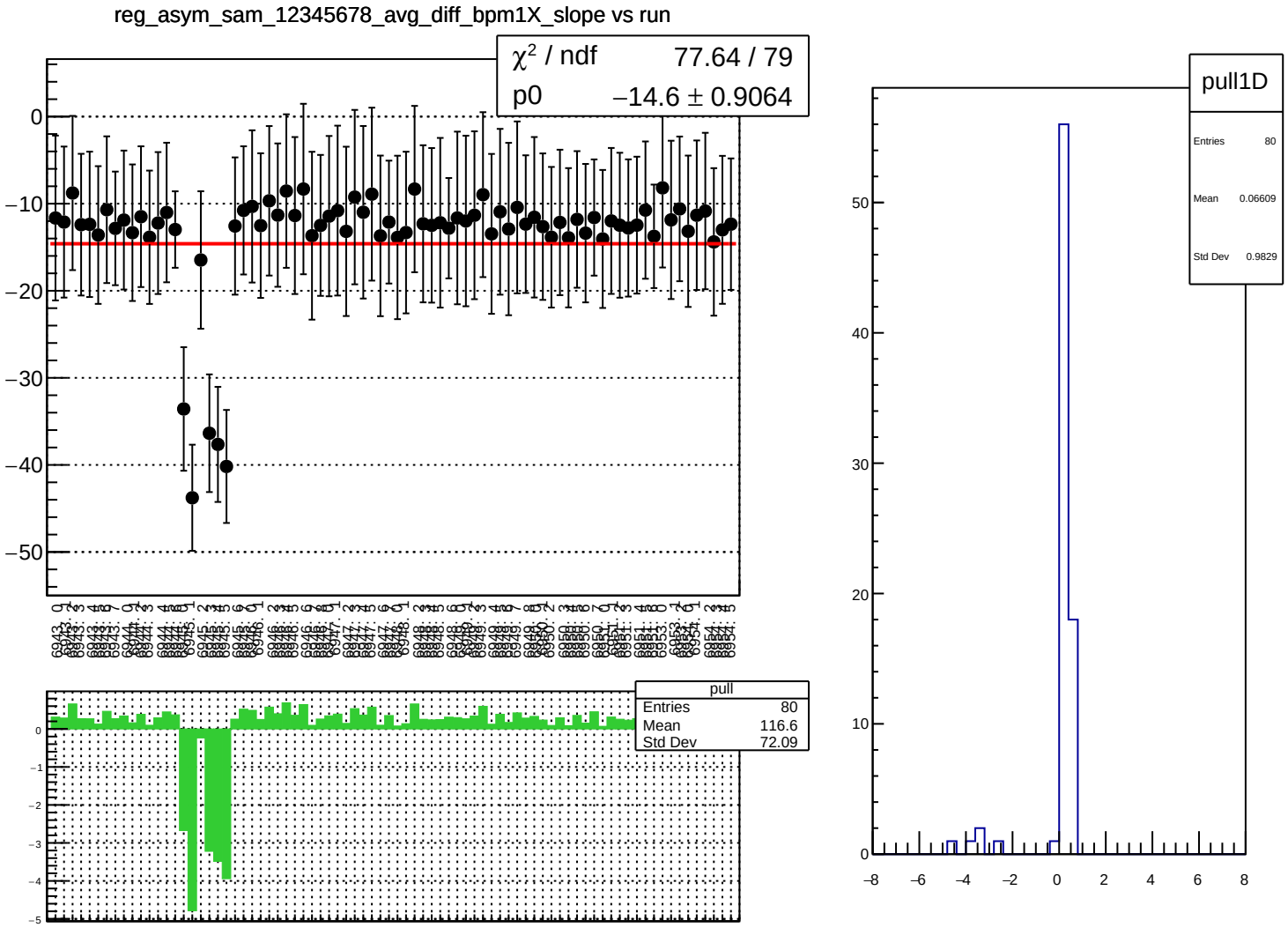

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 54.23 / 79
p0 6.863 ± 0.3332
pull
Entries 80
Mean 96.81
Std Dev 49.48
pull1D
Entries 80
Mean −0.0551
Std Dev 0.8215

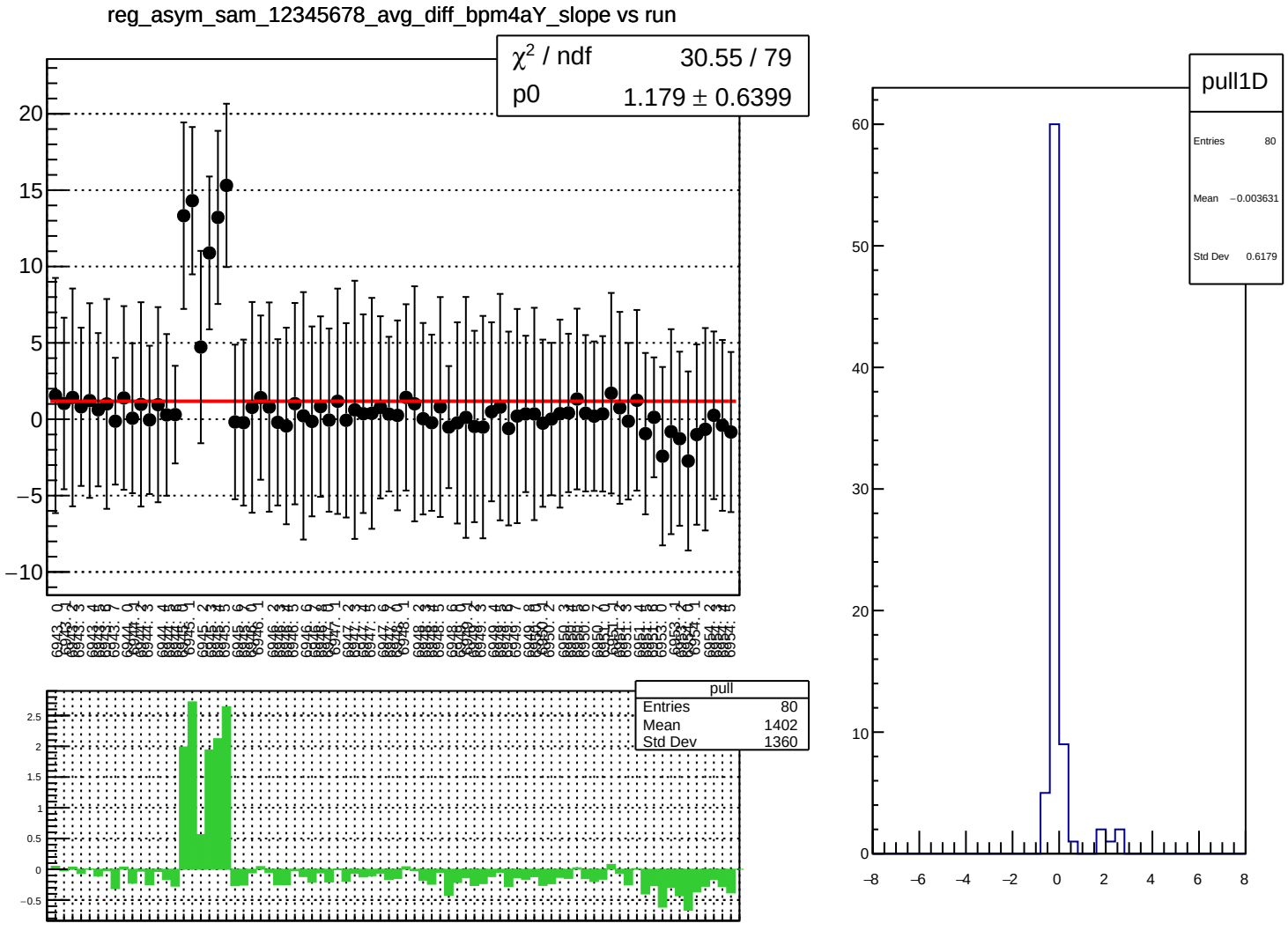

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 19.66 / 79
p0 1.046 ± 0.2352
pull
Entries 80
Mean 418.7
Std Dev 375.6
pull1D
Entries 80
Mean 0.008842
Std Dev 0.4956

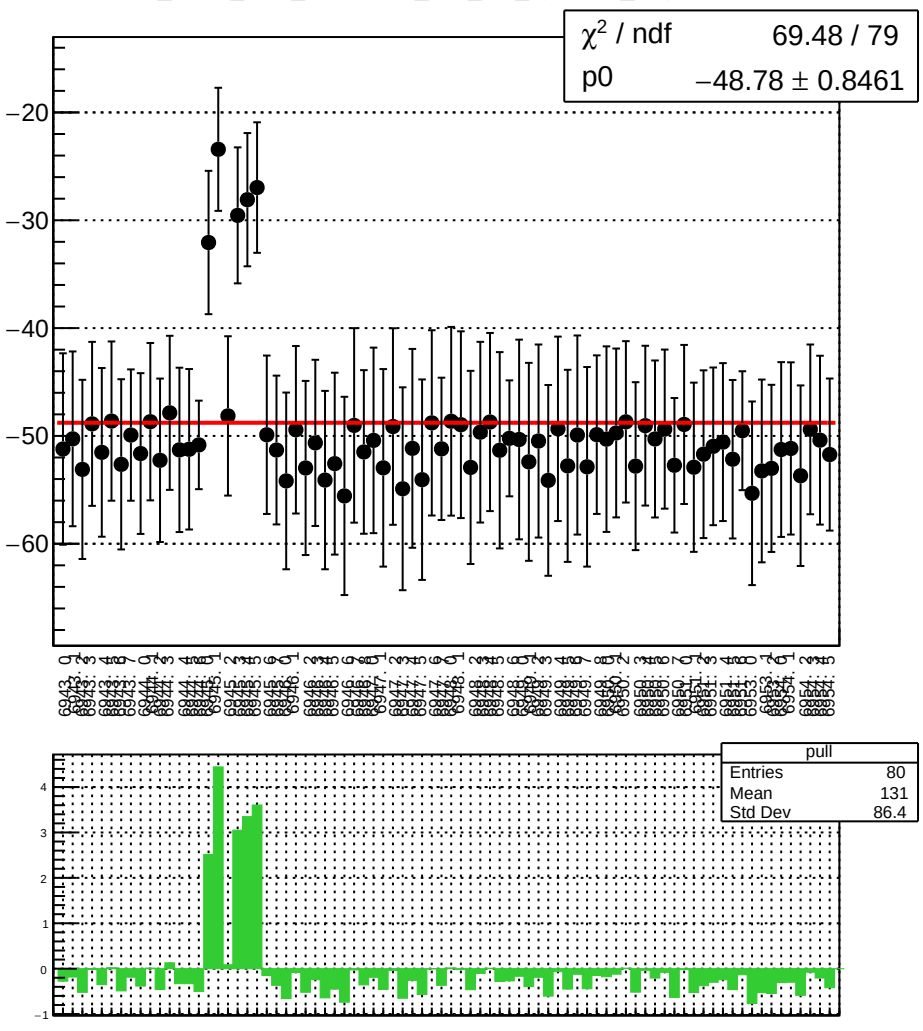

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 49.39 / 79
p0 17.62 ± 0.311
pull
Entries 80
Mean 104.6
Std Dev 58.21
pull1D
Entries 80
Mean 0.05202
Std Dev 0.784

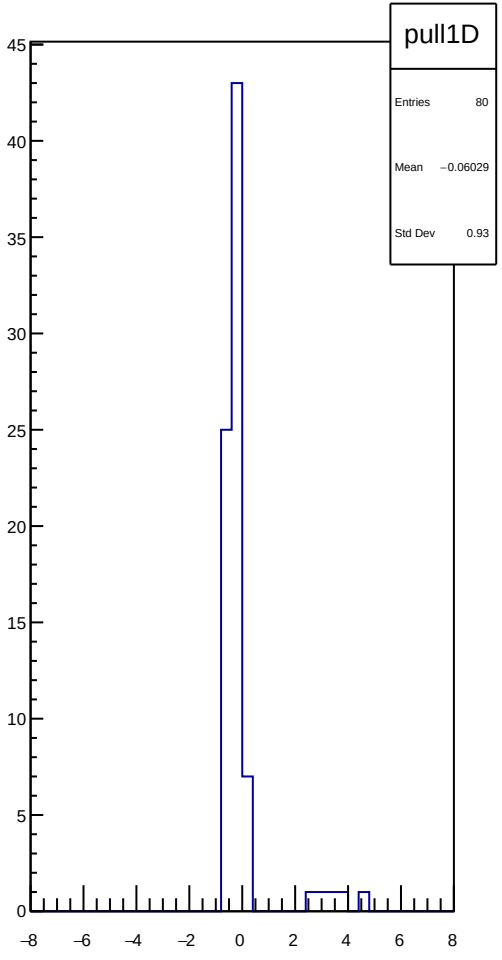

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 18.23 / 79
p0 −5.96 ± 0.2708
pull
Entries 80
Mean 313.6
Std Dev 271.6
pull1D
Entries 80
Mean −0.01157
Std Dev 0.4772

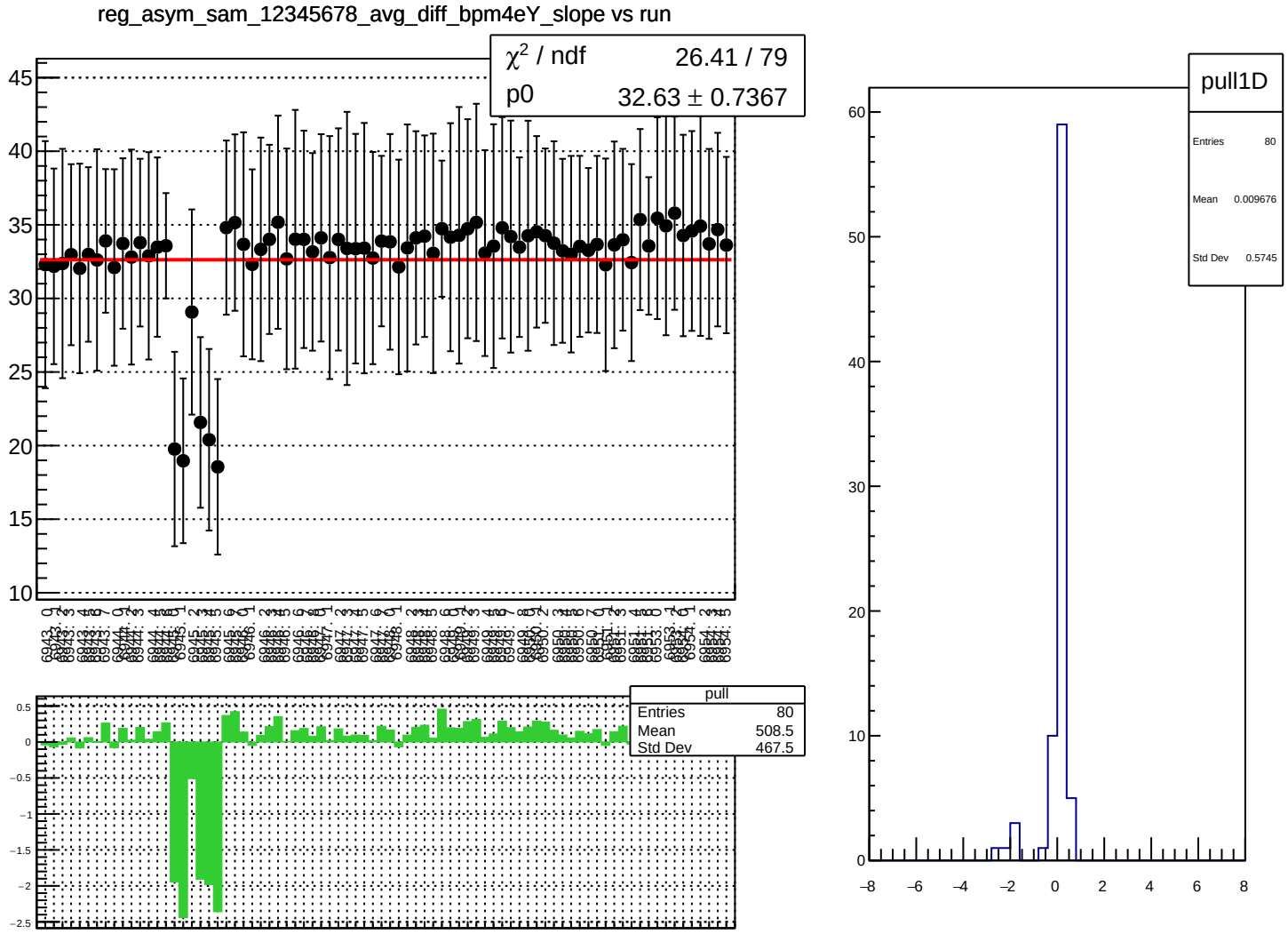

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 3.058 / 79
p0 0.04556 ± 0.01076
pull
Entries 80
Mean −71
Std Dev 124.9
pull1D
Entries 80
Mean 0.007054
Std Dev 0.1954

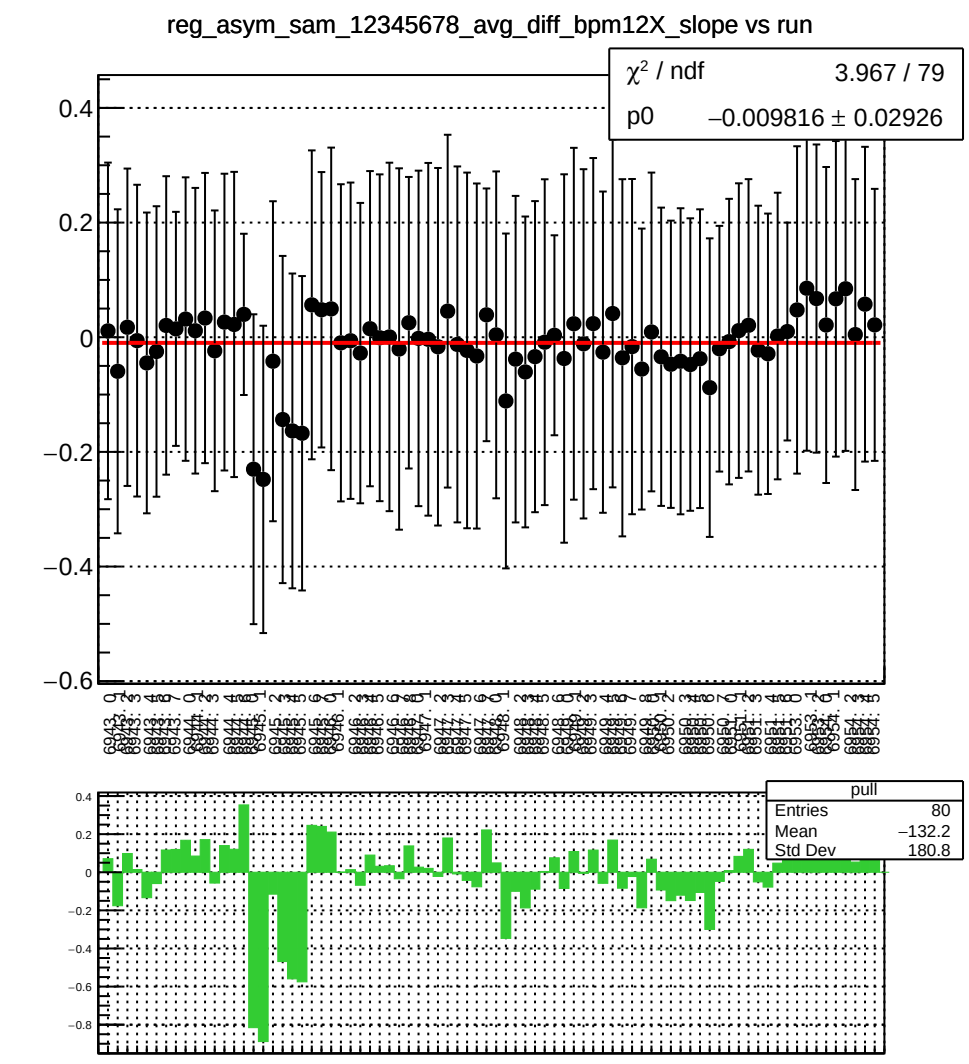

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 77.64 / 79
p0 −14.6 ± 0.9064
pull
Entries 80
Mean 116.6
Std Dev 72.09
pull1D
Entries 80
Mean 0.06609
Std Dev 0.9829

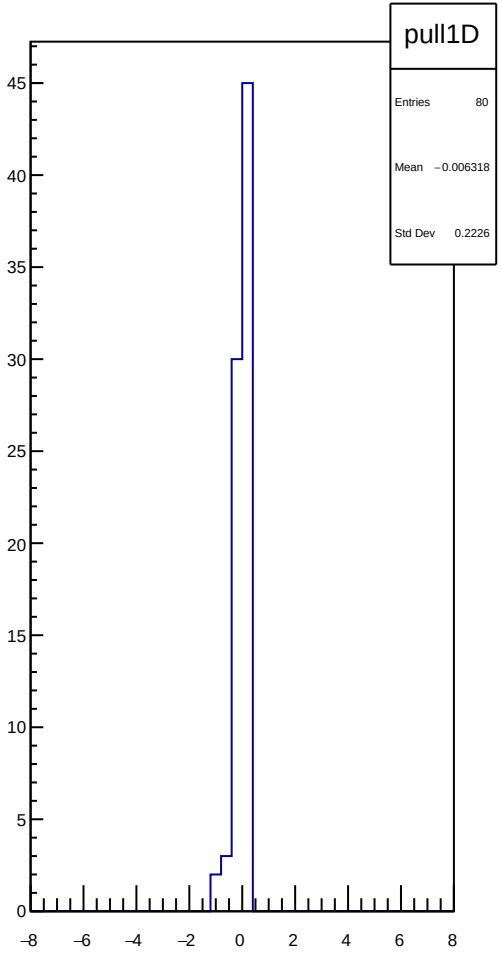

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 30.55 / 79
p0 1.179 ± 0.6399
pull
Entries 80
Mean 1402
Std Dev 1360
pull1D
Entries 80
Mean −0.003631
Std Dev 0.6179

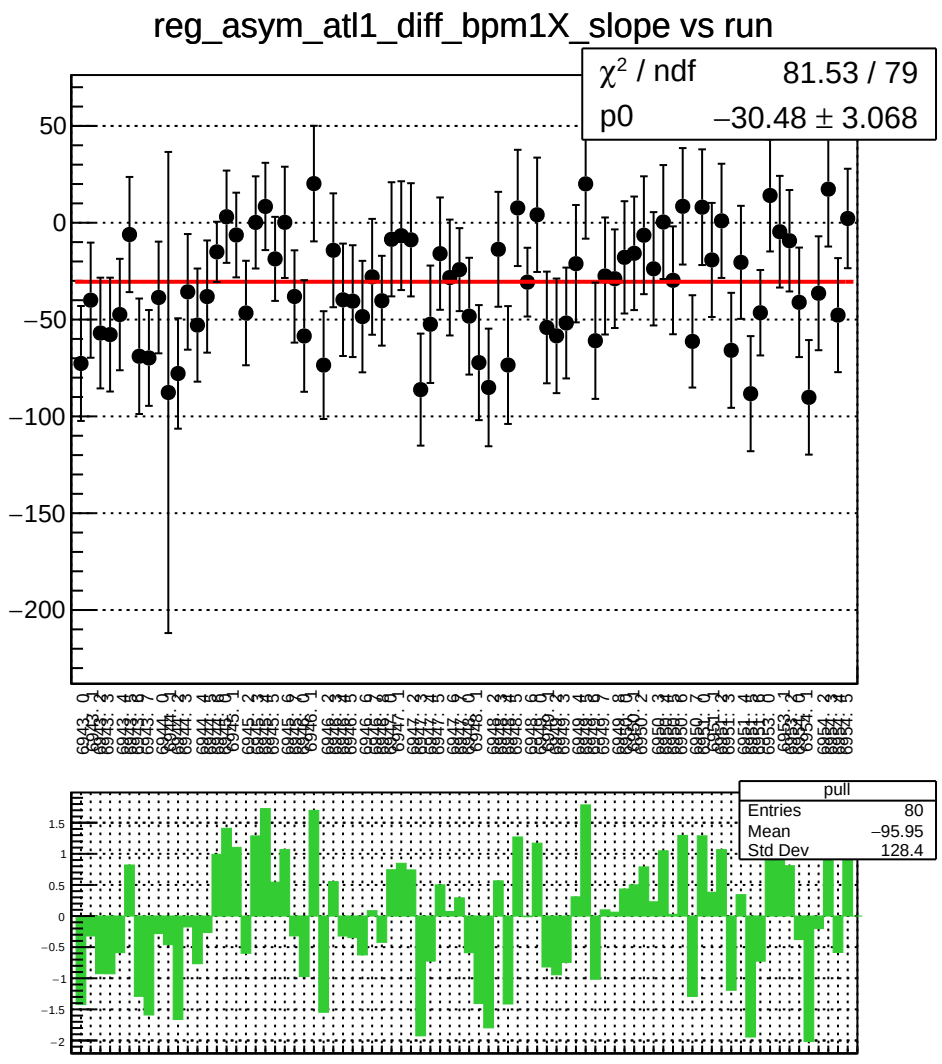

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 69.48 / 79
p0 −48.78 ± 0.8461
pull
Entries 80
Mean 131
Std Dev 86.4

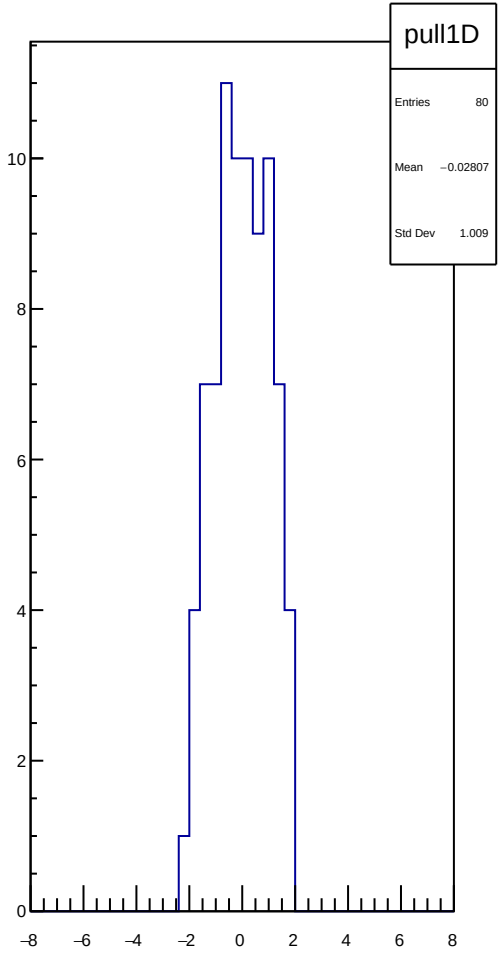

pull1D
Entries 80
Mean −0.06029
Std Dev 0.93

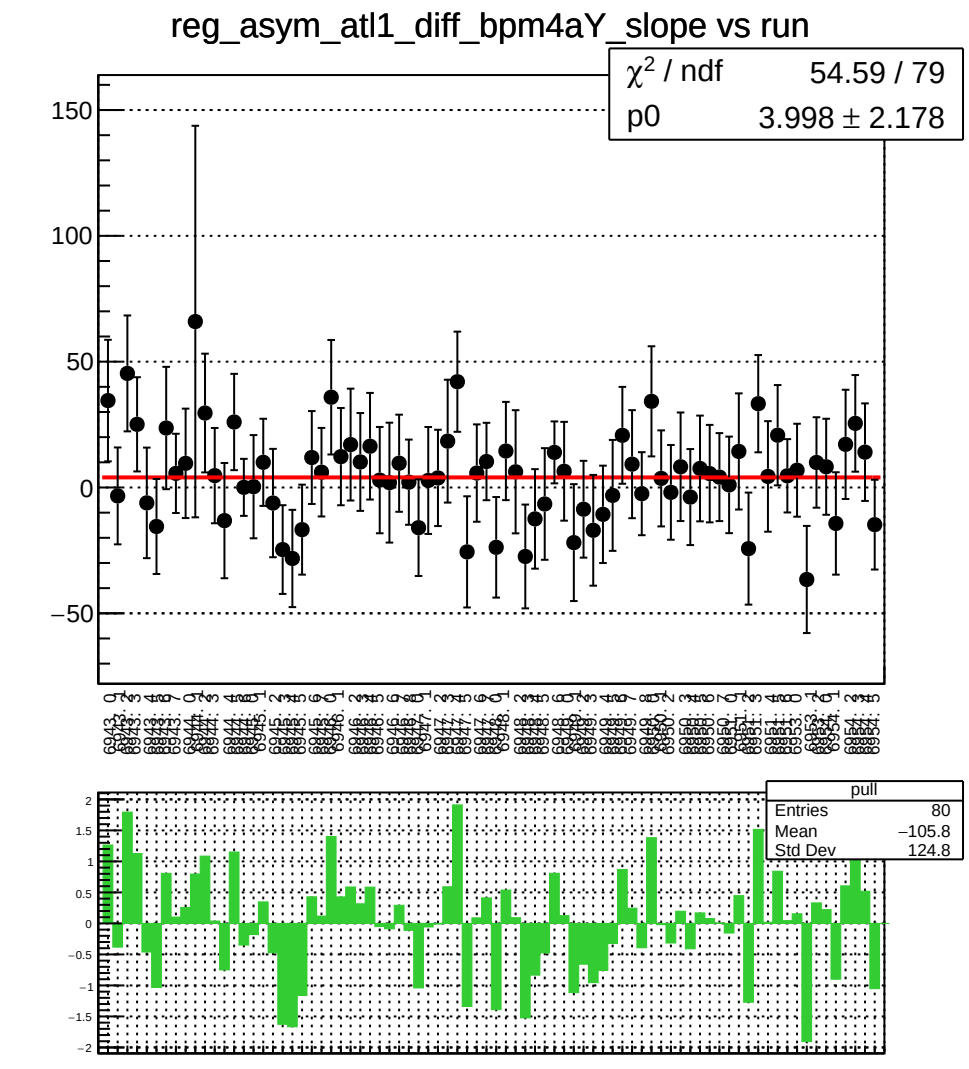

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 26.41 / 79
p0 32.63 ± 0.7367
pull
Entries 80
Mean 508.5
Std Dev 467.5
pull1D
Entries 80
Mean 0.009676
Std Dev 0.5745

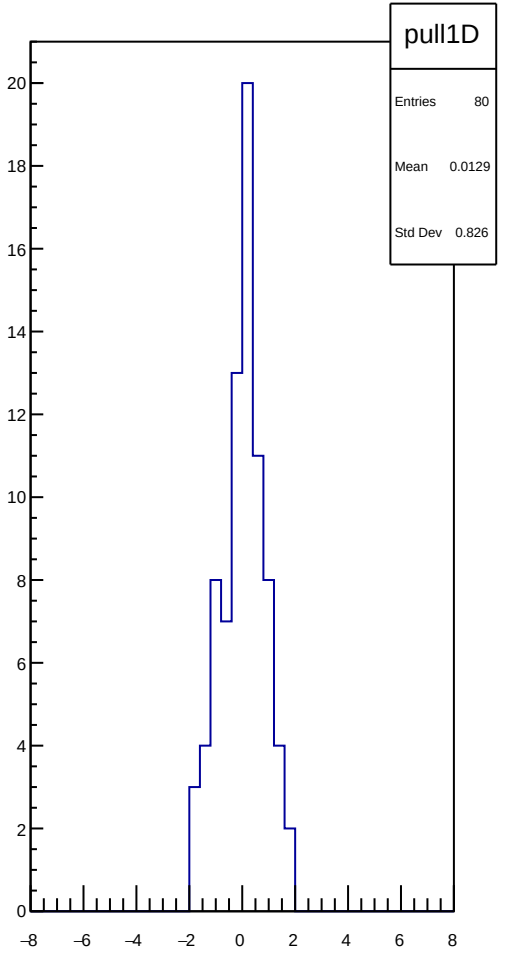

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 3.967 / 79
p0 −0.009816 ± 0.02926
pull
Entries 80
Mean −132.2
Std Dev 180.8

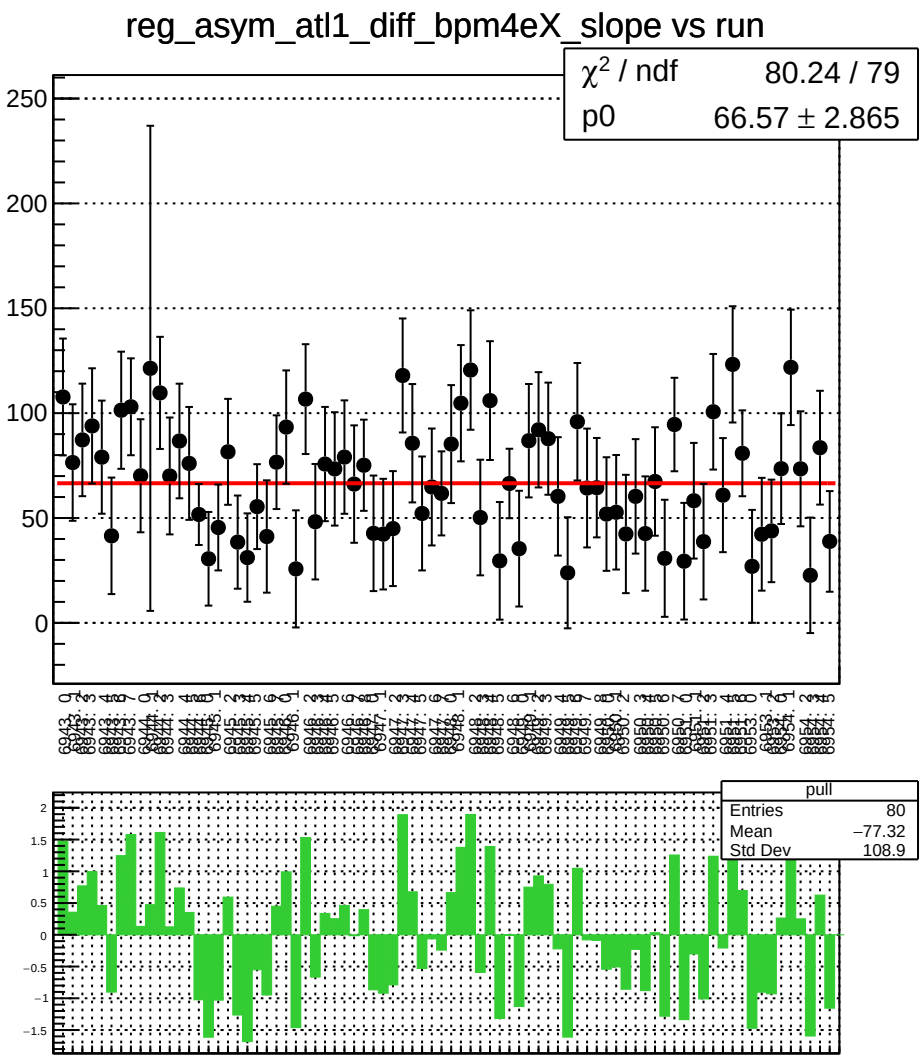

pull1D
Entries 80
Mean −0.006318
Std Dev 0.2226

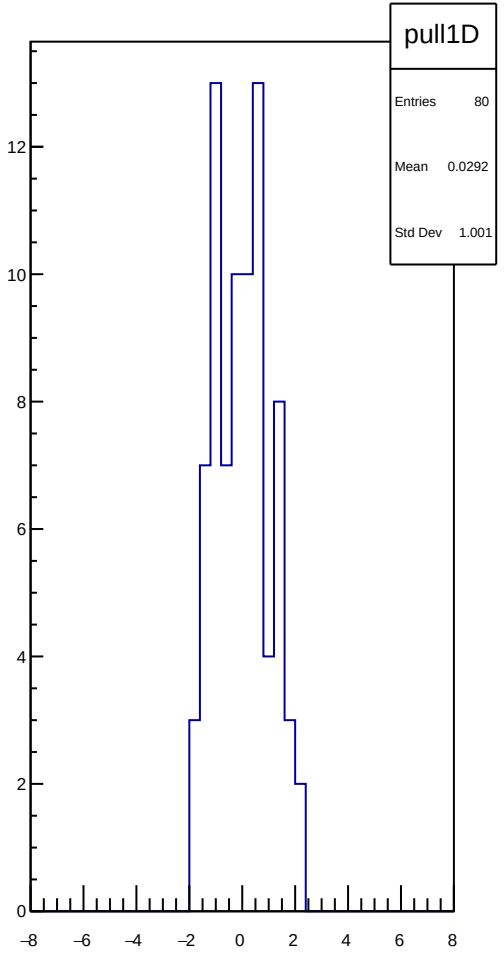

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 81.53 / 79
p0 −30.48 ± 3.068
50
0
−50
−100
−150
−200
pull
Entries 80
Mean −95.95
Std Dev 128.4
1.5
1
0.5
0
−0.5
−1
−1.5
−2

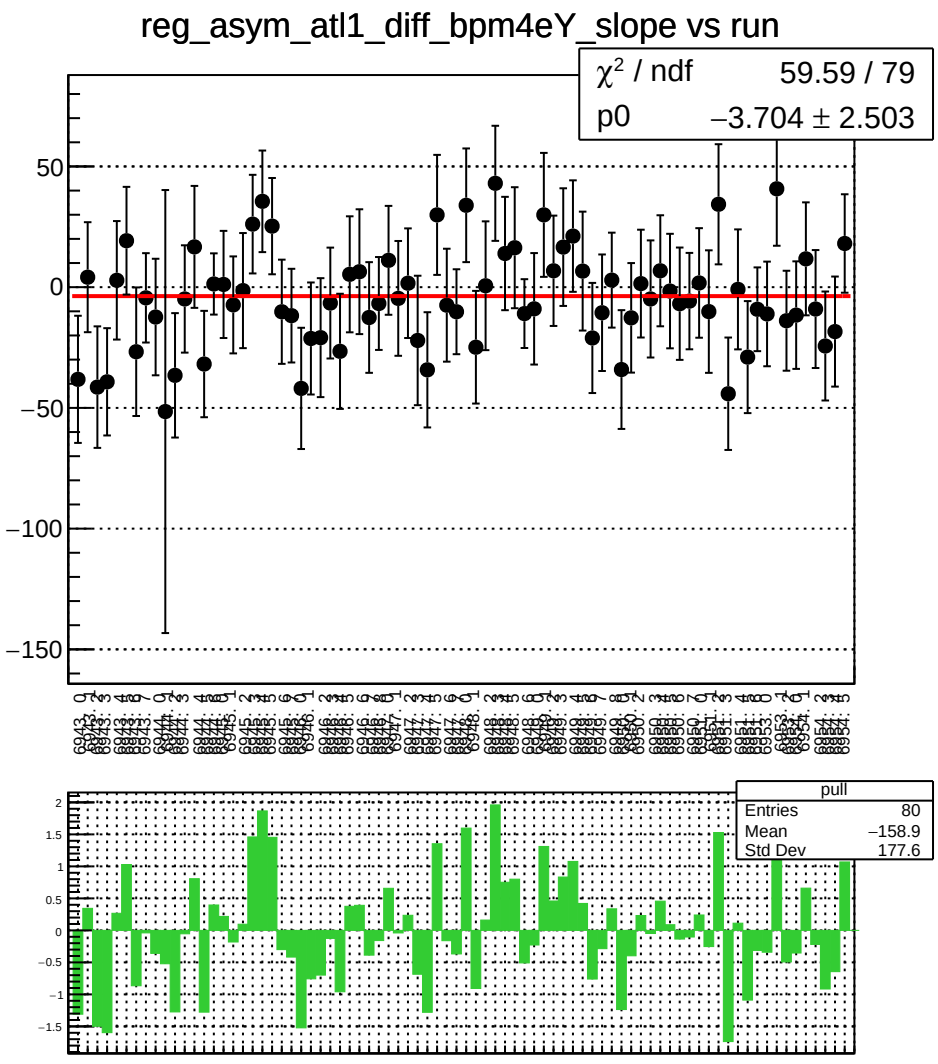

pull1D
Entries 80
Mean −0.02807
Std Dev 1.009
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

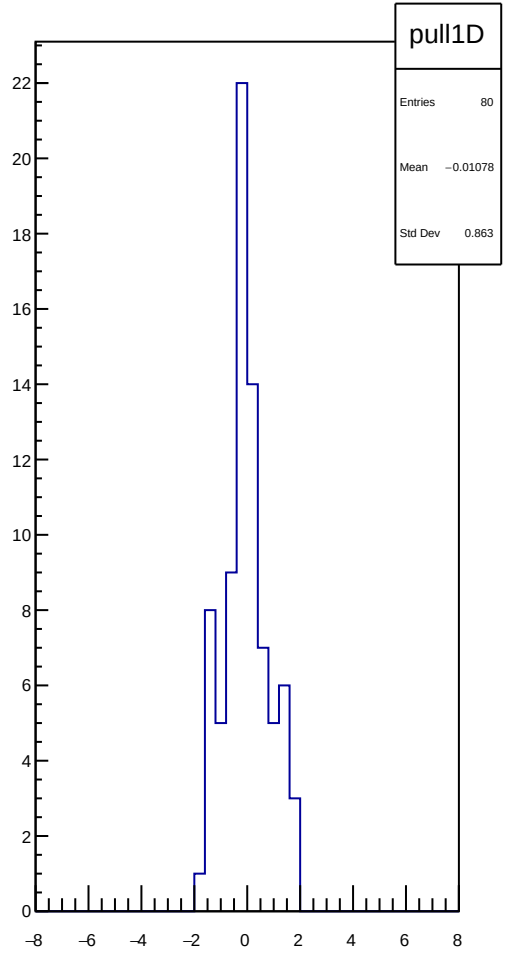

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 54.59 / 79
p0 3.998 ± 2.178
150
100
50
0
−50
pull
Entries 80
Mean −105.8
Std Dev 124.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

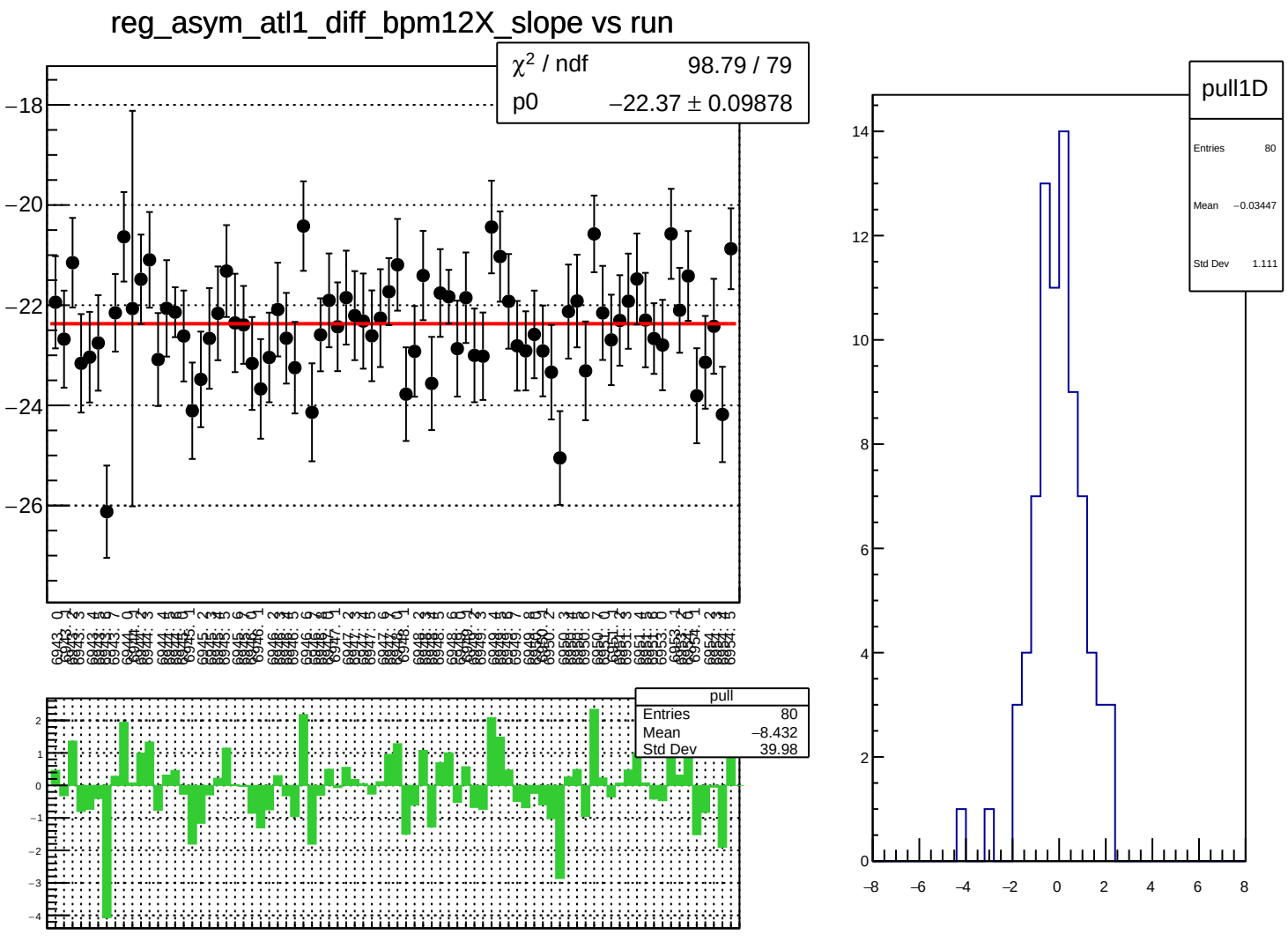

pull1D
Entries 80
Mean 0.0129
Std Dev 0.826
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

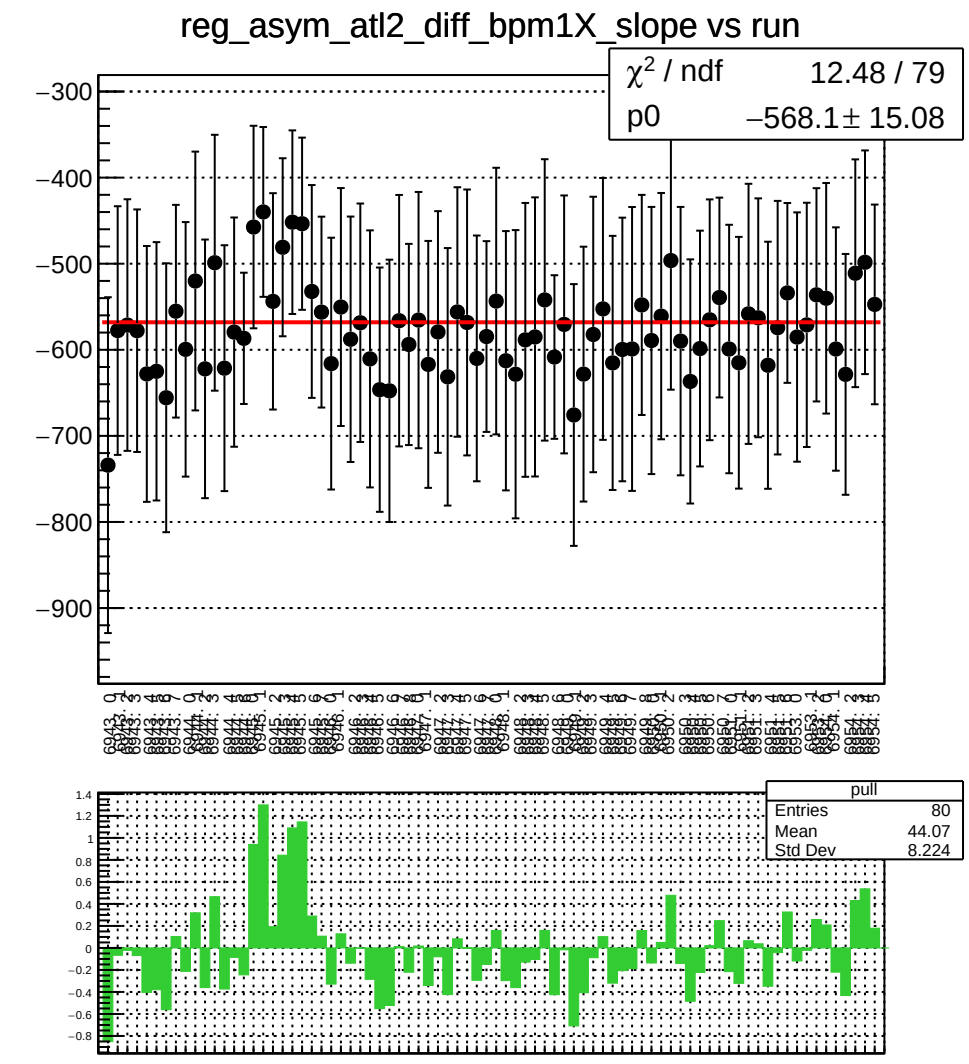

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 80.24 / 79
p0 66.57 ± 2.865
250
200
150
100
50
0
pull
Entries 80
Mean −77.32
Std Dev 108.9
2
1.5
1
0.5
0
−0.5
−1
−1.5

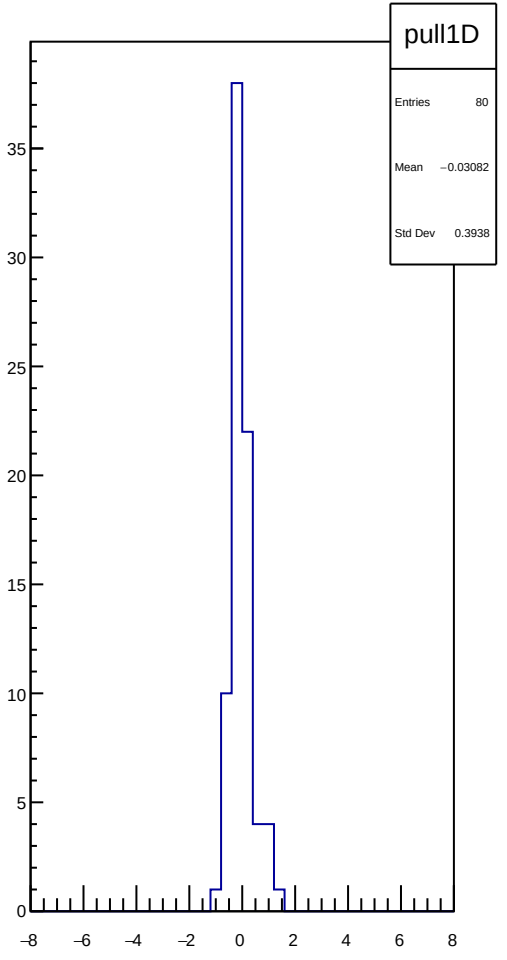

pull1D
Entries 80
Mean 0.0292
Std Dev 1.001
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

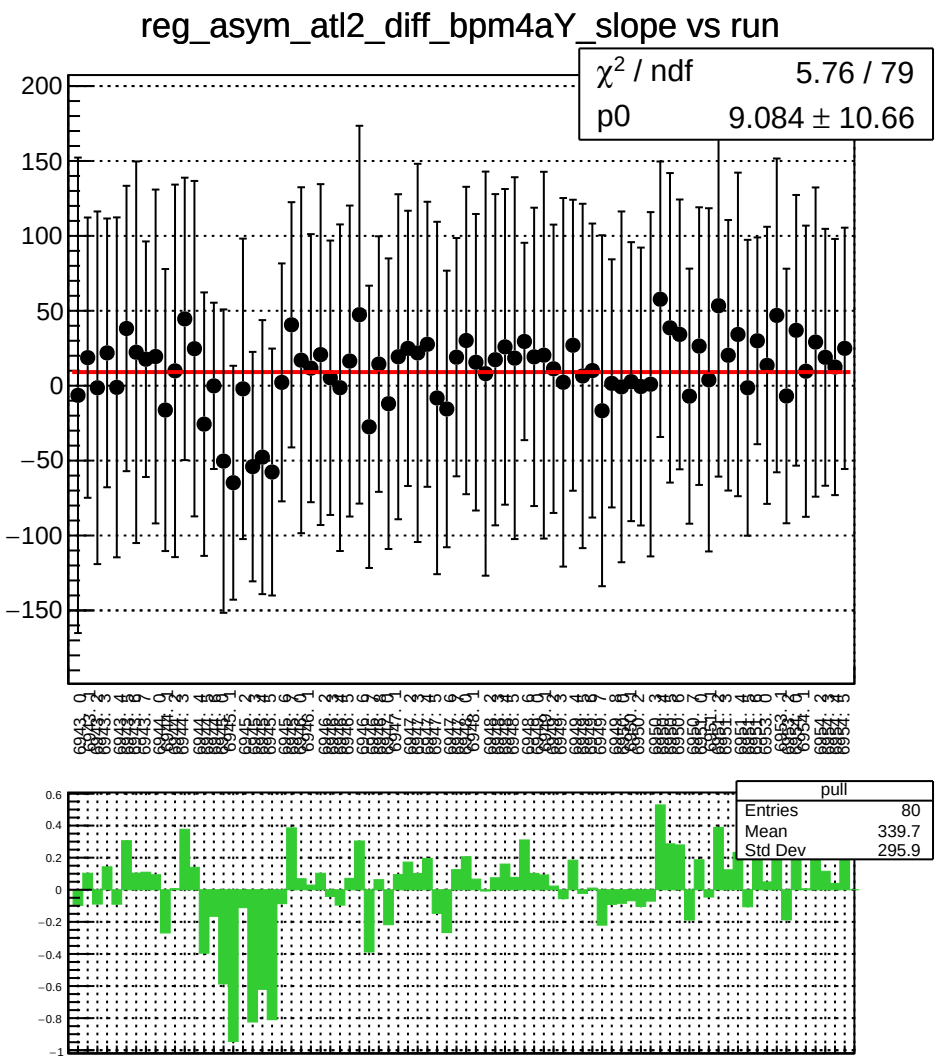

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 59.59 / 79
p0 −3.704 ± 2.503
50
0
−50
−100
−150
pull
Entries 80
Mean −158.9
Std Dev 177.6
2
1.5
1
0.5
0
−0.5
−1
−1.5

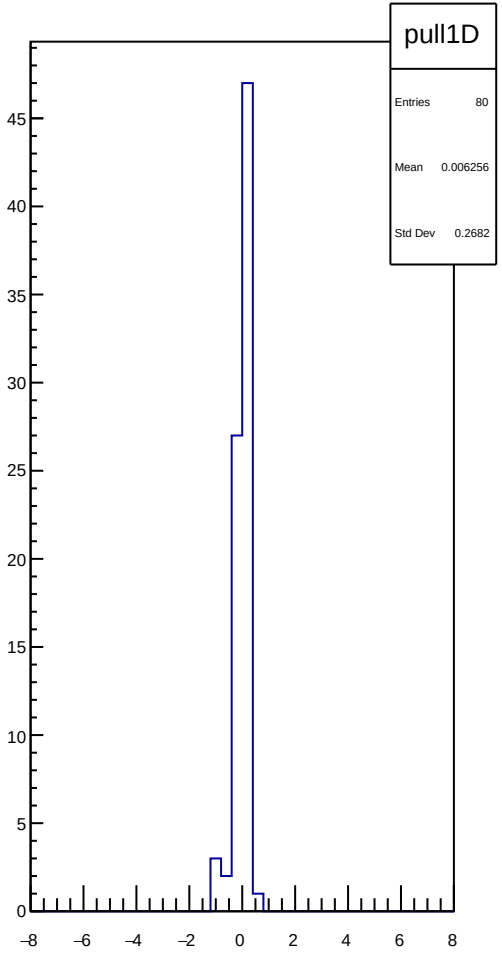

pull1D
Entries 80
Mean −0.01078
Std Dev 0.863
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

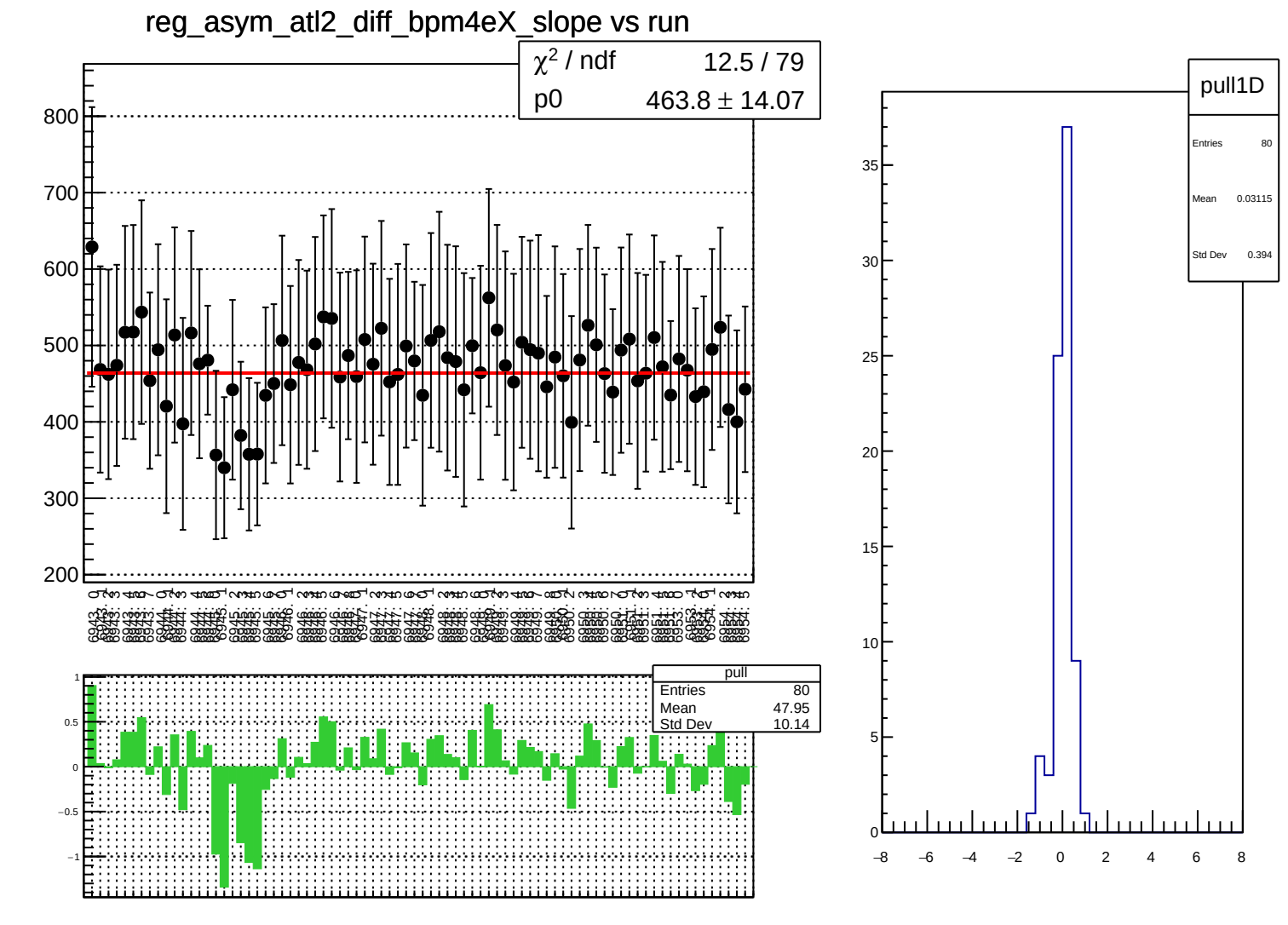

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 98.79 / 79
p0 −22.37 ± 0.09878
pull
Entries 80
Mean −8.432
Std Dev 39.98
pull1D
Entries 80
Mean −0.03447
Std Dev 1.111

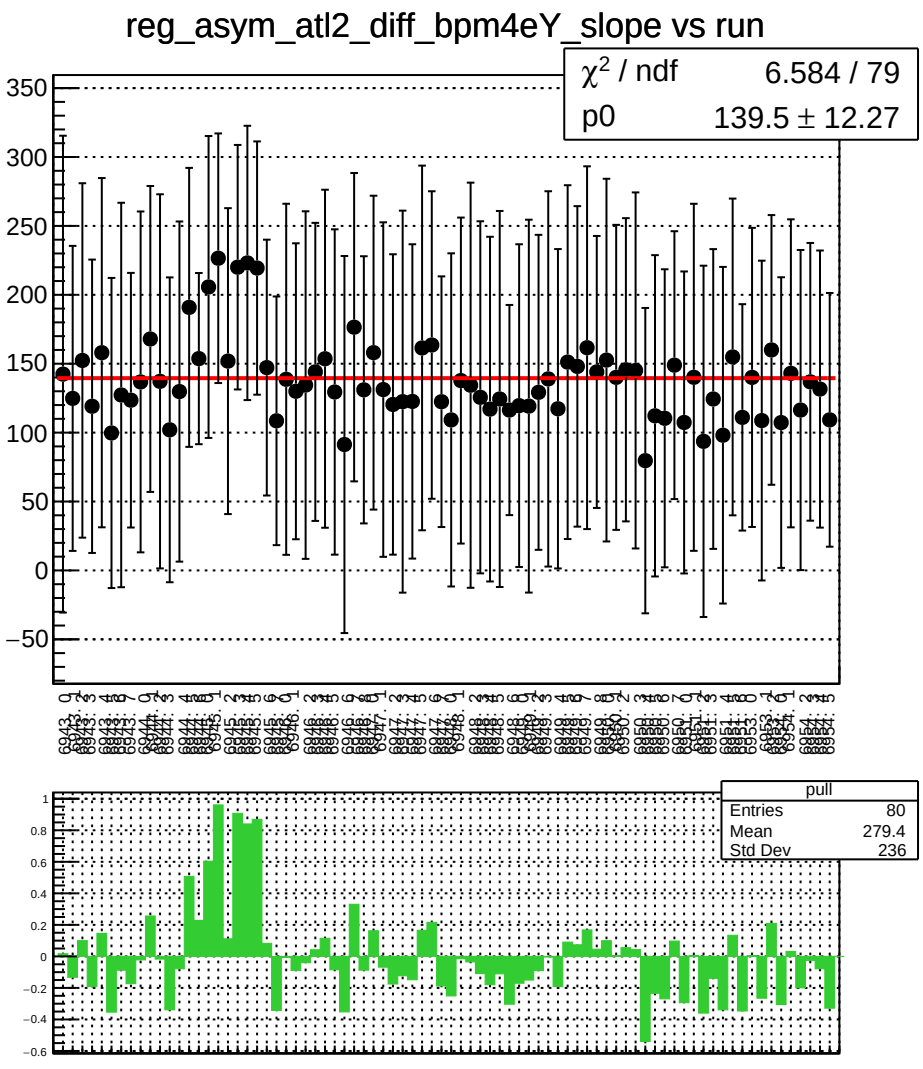

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 12.48 / 79
p0 −568.1± 15.08
−300
−400
−500
−600
−700
−800
−900
pull
Entries 80
Mean 44.07
Std Dev 8.224
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

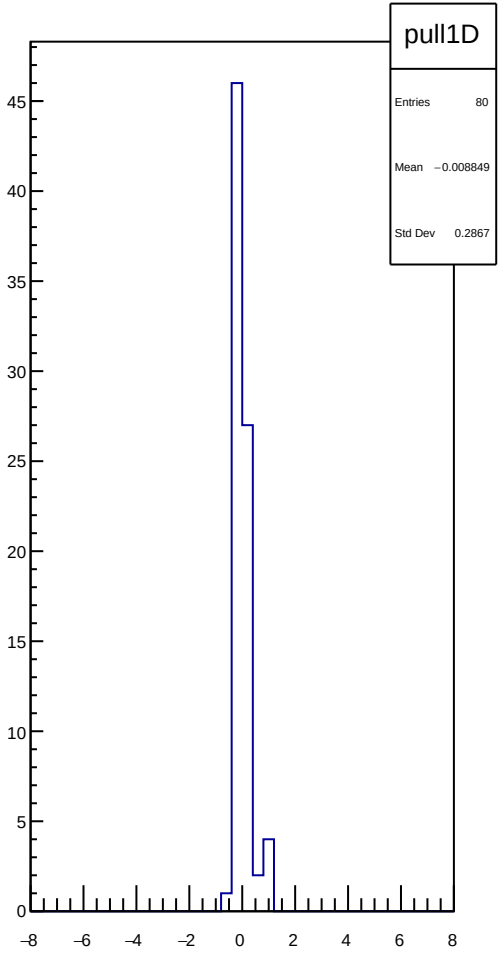

pull1D
Entries 80
Mean −0.03082
Std Dev 0.3938
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

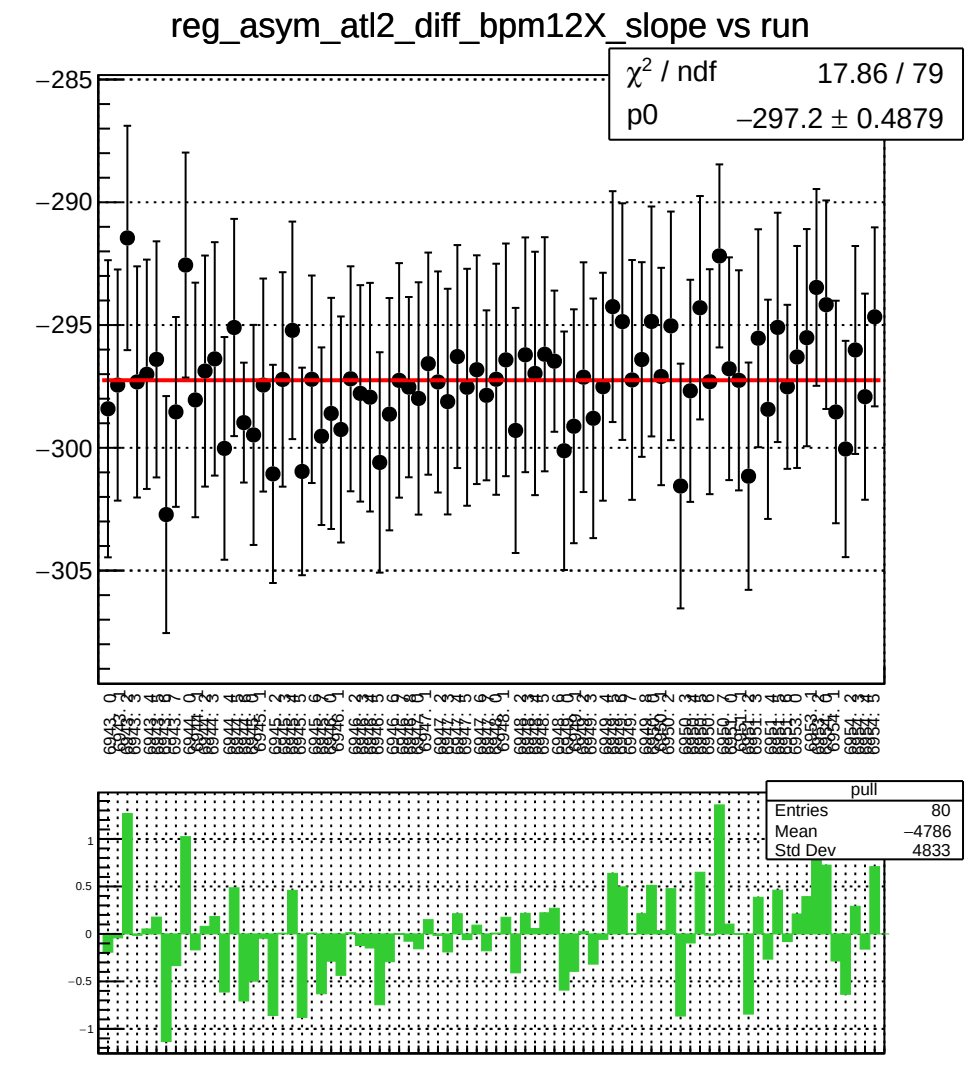

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 5.76 / 79
p0 9.084 ± 10.66
pull
Entries 80
Mean 339.7
Std Dev 295.9

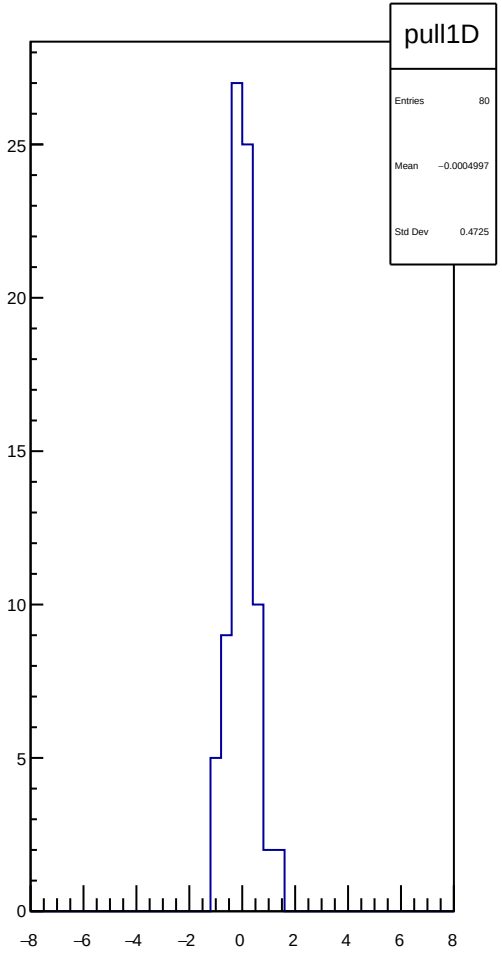

pull1D
Entries 80
Mean 0.006256
Std Dev 0.2682

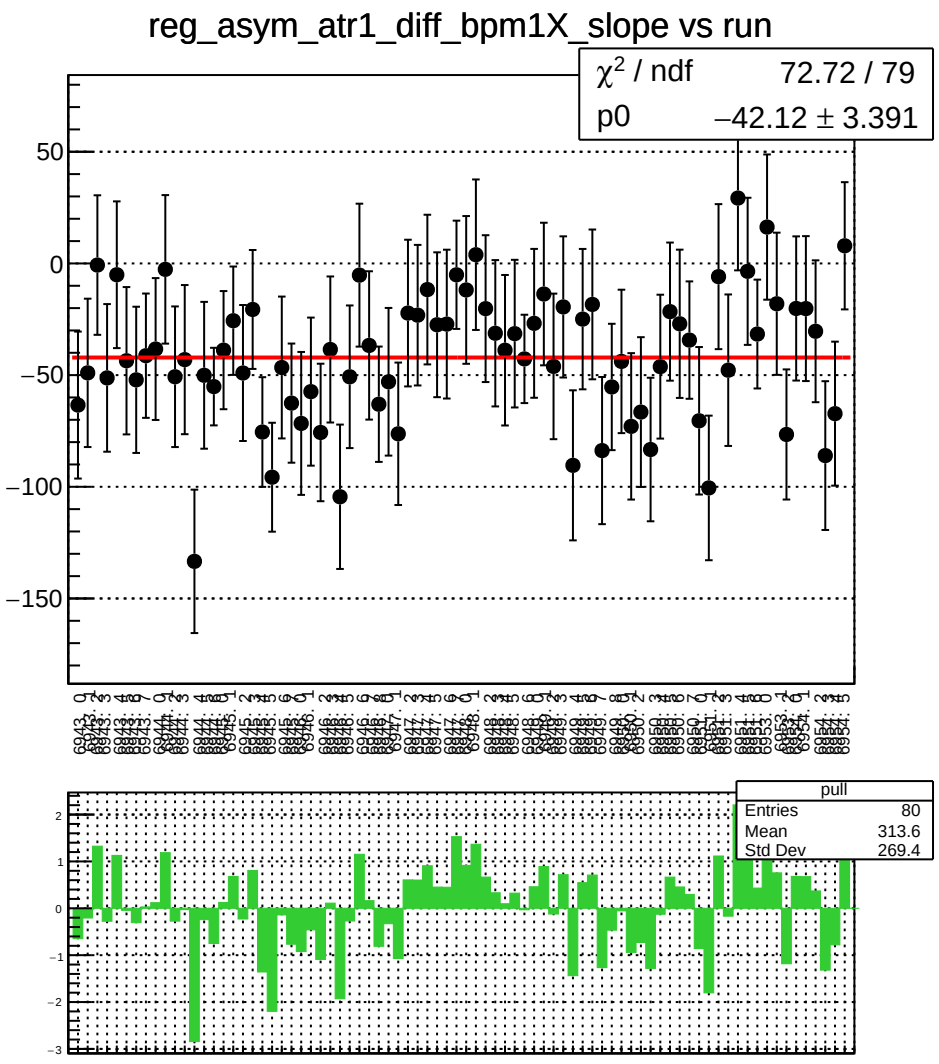

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 12.5 / 79
p0 463.8 ± 14.07
pull
Entries 80
Mean 47.95
Std Dev 10.14
pull1D
Entries 80
Mean 0.03115
Std Dev 0.394

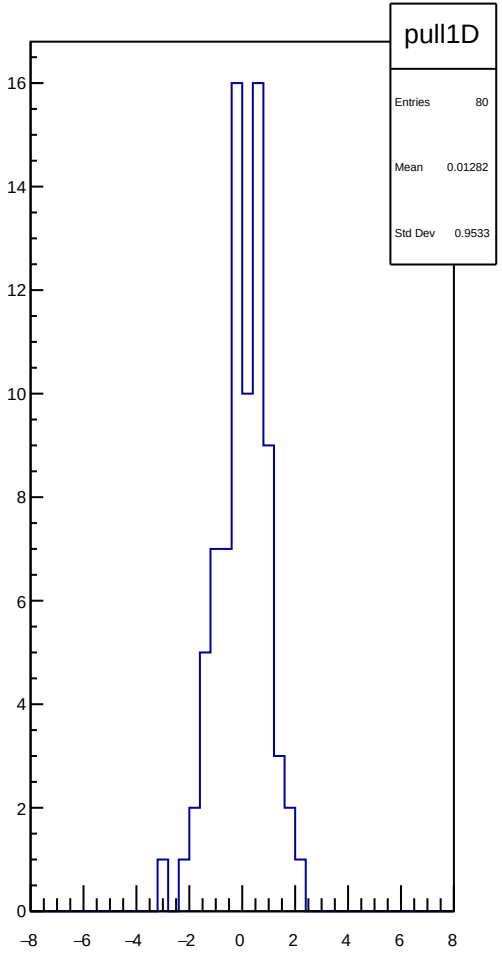

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 6.584 / 79
p0 139.5 ± 12.27
pull
Entries 80
Mean 279.4
Std Dev 236

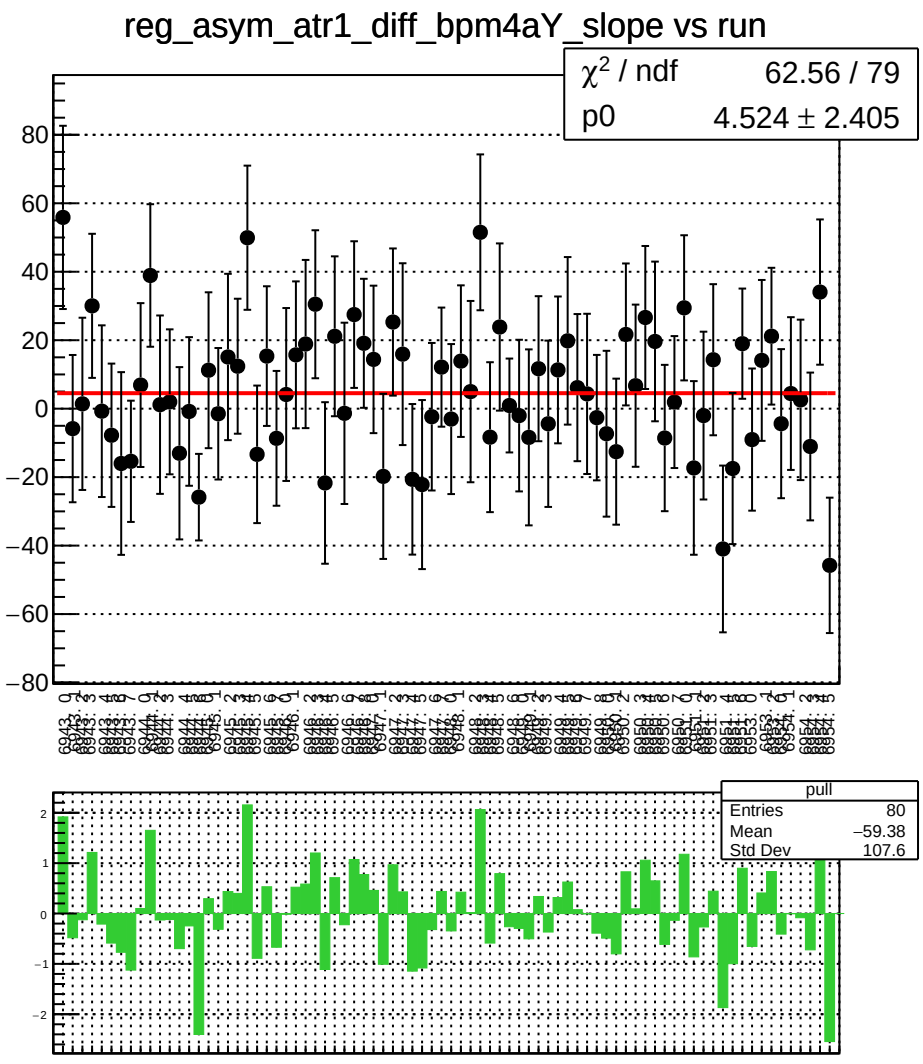

pull1D
Entries 80
Mean −0.008849
Std Dev 0.2867

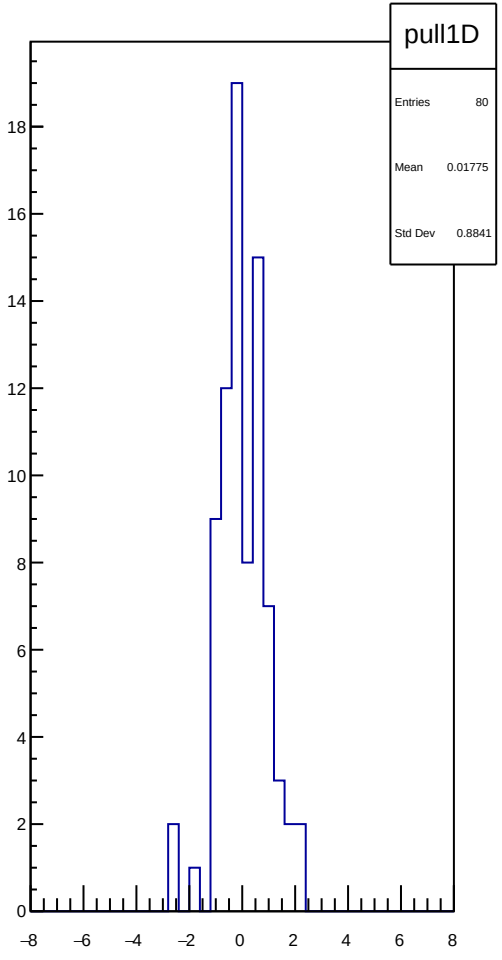

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 17.86 / 79
p0 −297.2 ± 0.4879
−285
−290
−295
−300
−305
pull
Entries 80
Mean −4786
Std Dev 4833
1
0.5
0
−0.5
−1

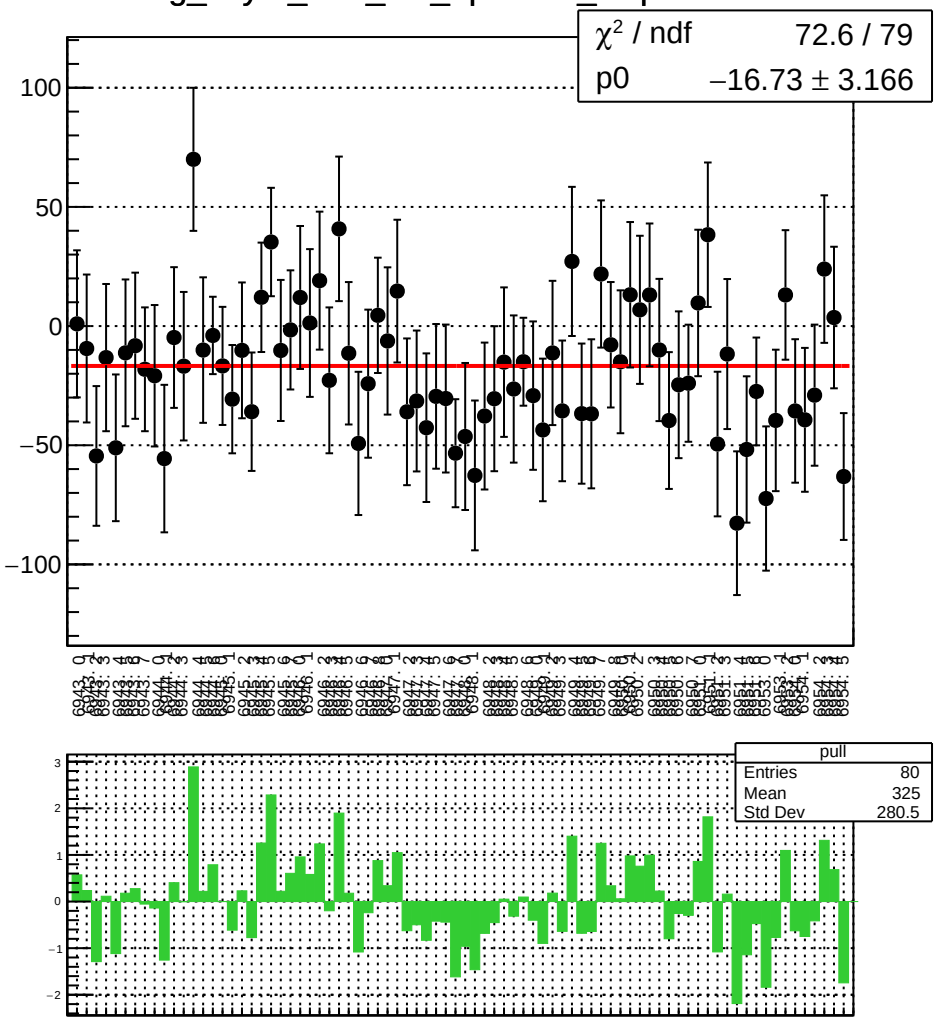

pull1D
Entries 80
Mean −0.0004997
Std Dev 0.4725
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

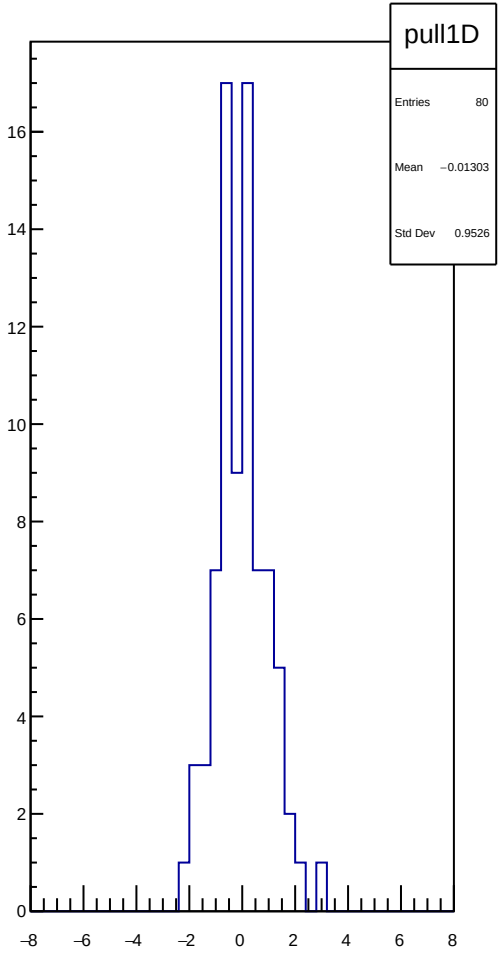

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 72.72 / 79
p0 −42.12 ± 3.391
pull
Entries 80
Mean 313.6
Std Dev 269.4

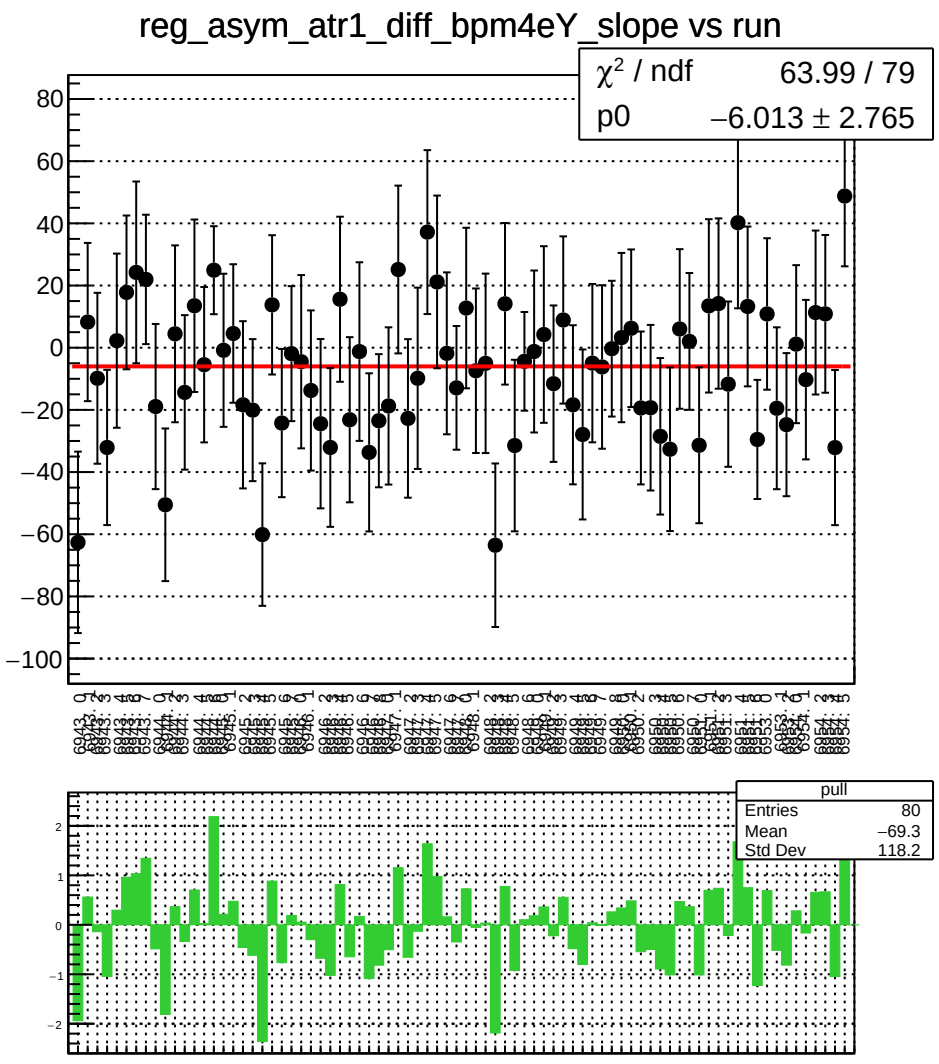

pull1D
Entries 80
Mean 0.01282
Std Dev 0.9533

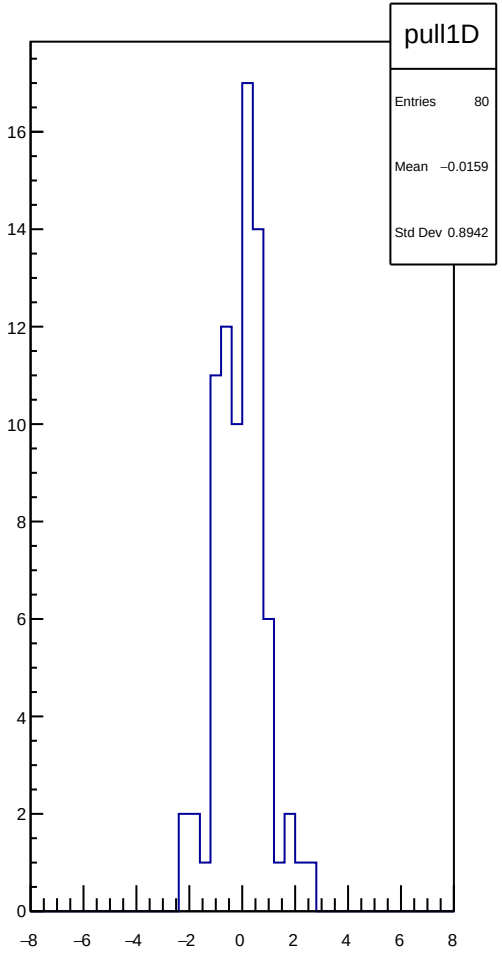

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 62.56 / 79
p0 4.524 ± 2.405
pull
Entries 80
Mean −59.38
Std Dev 107.6

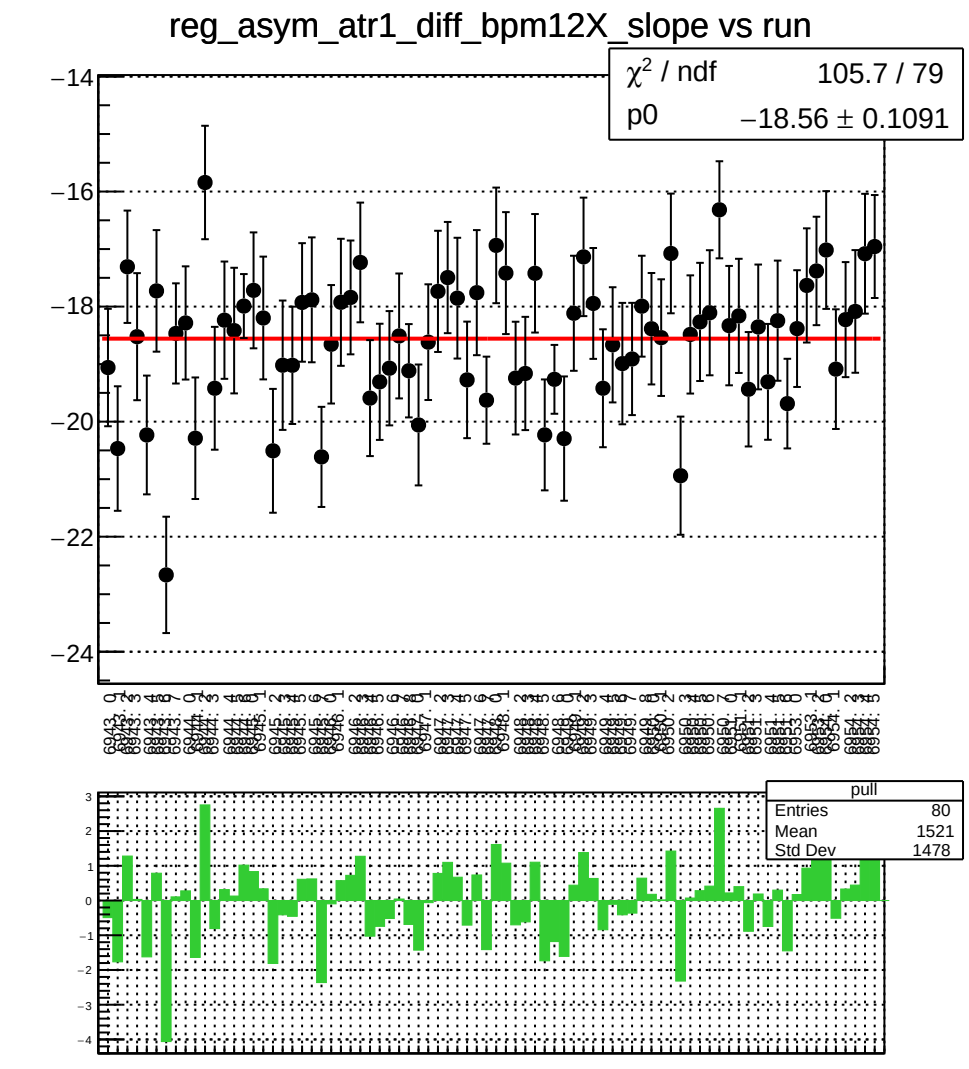

pull1D
Entries 80
Mean 0.01775
Std Dev 0.8841

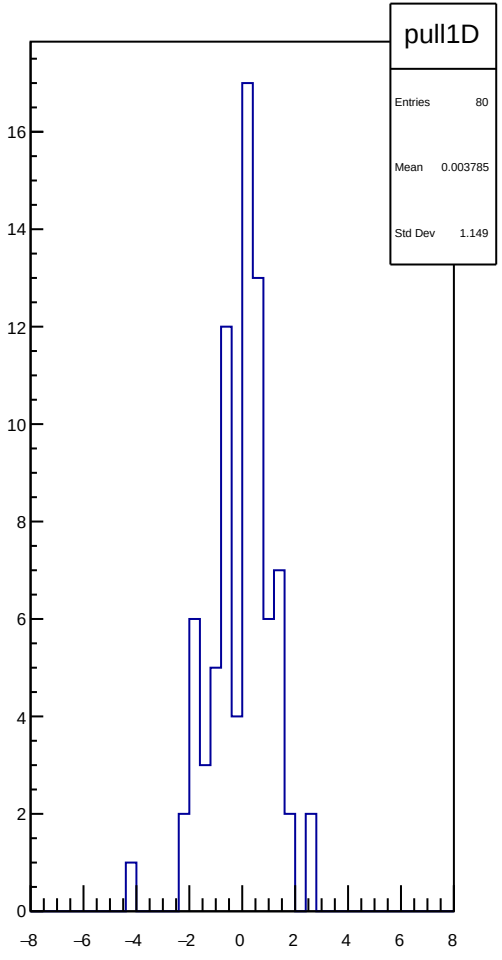

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 72.6 / 79
p0 −16.73 ± 3.166
pull
Entries 80
Mean 325
Std Dev 280.5

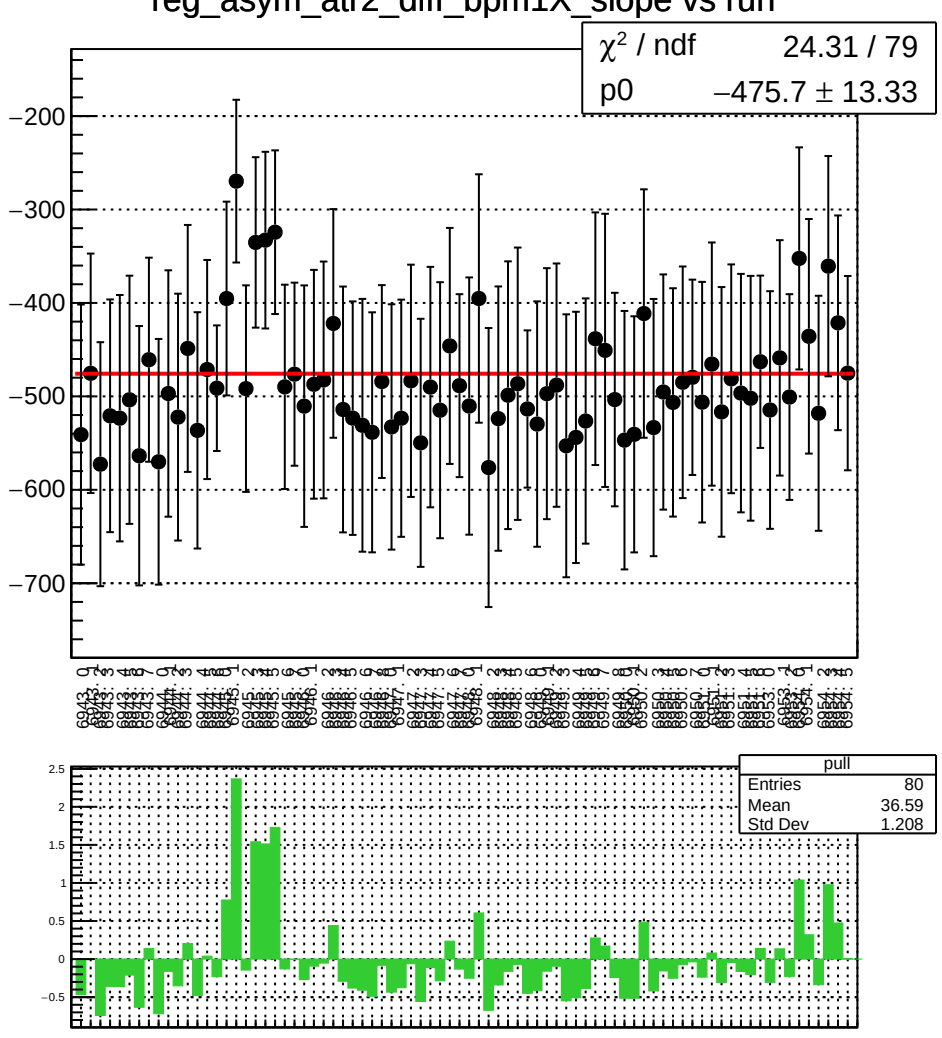

pull1D
Entries 80
Mean −0.01303
Std Dev 0.9526

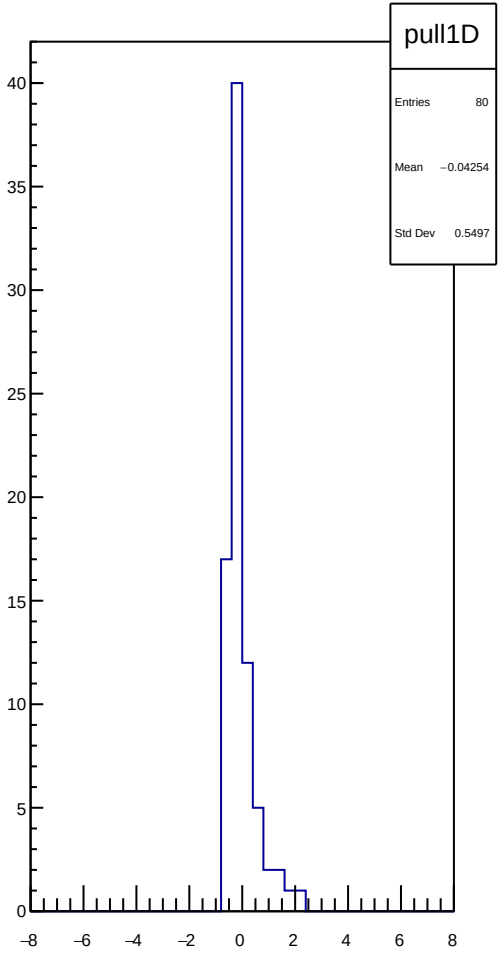

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 63.99 / 79
p0 −6.013 ± 2.765
pull
Entries 80
Mean −69.3
Std Dev 118.2

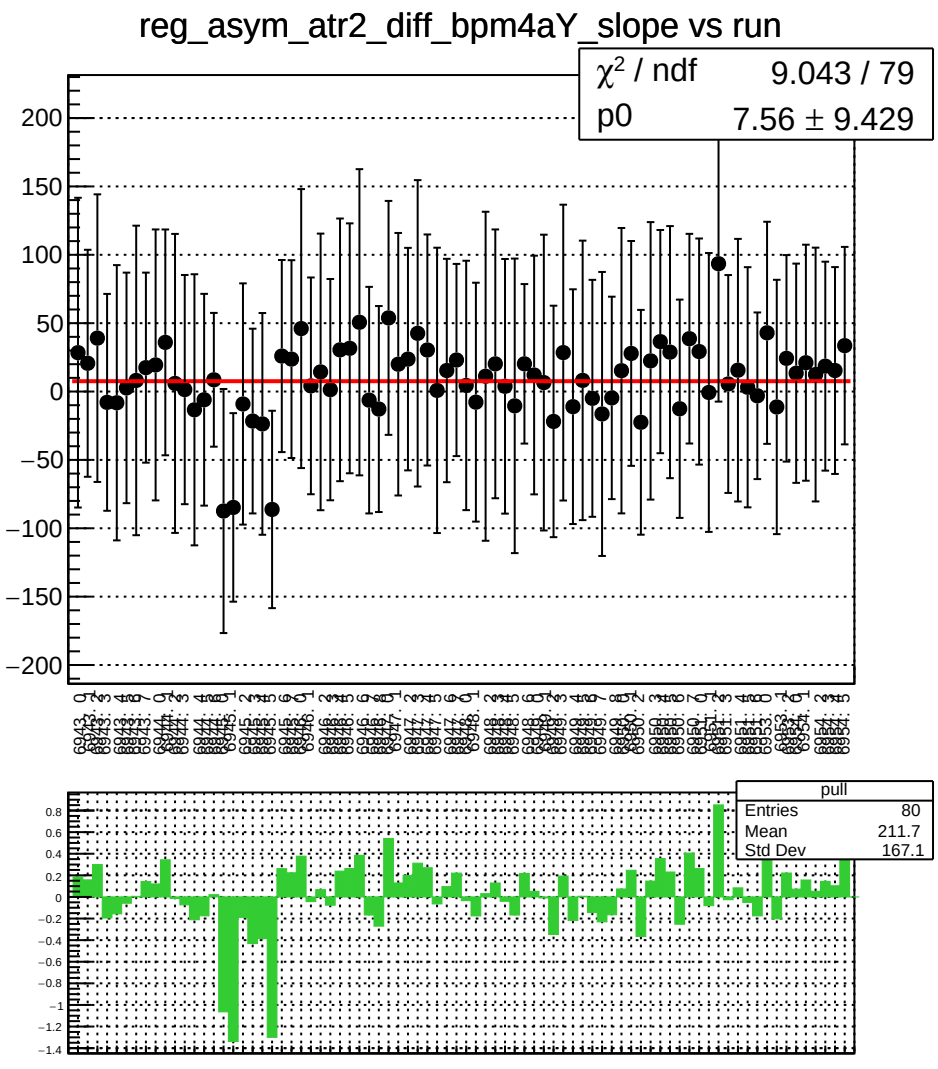

pull1D
Entries 80
Mean −0.0159
Std Dev 0.8942

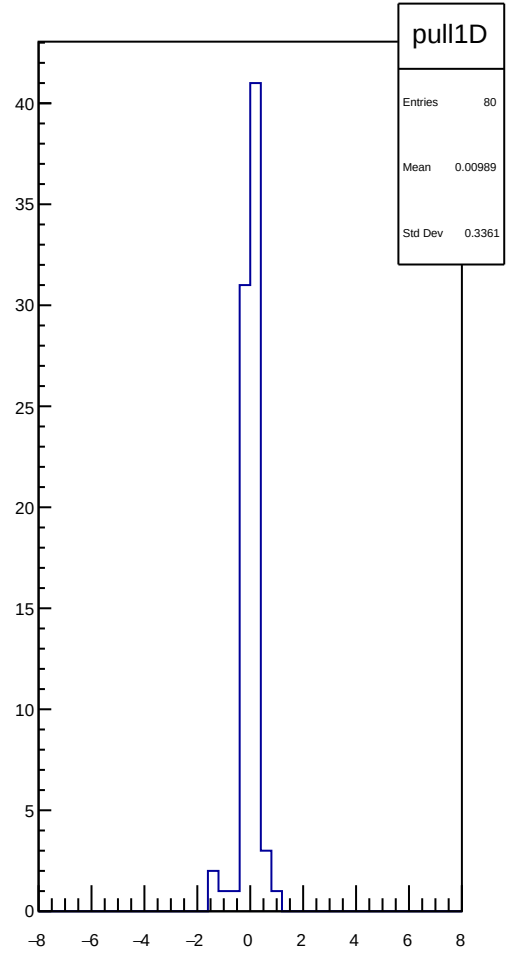

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 105.7 / 79
p0 −18.56 ± 0.1091
pull
Entries 80
Mean 1521
Std Dev 1478

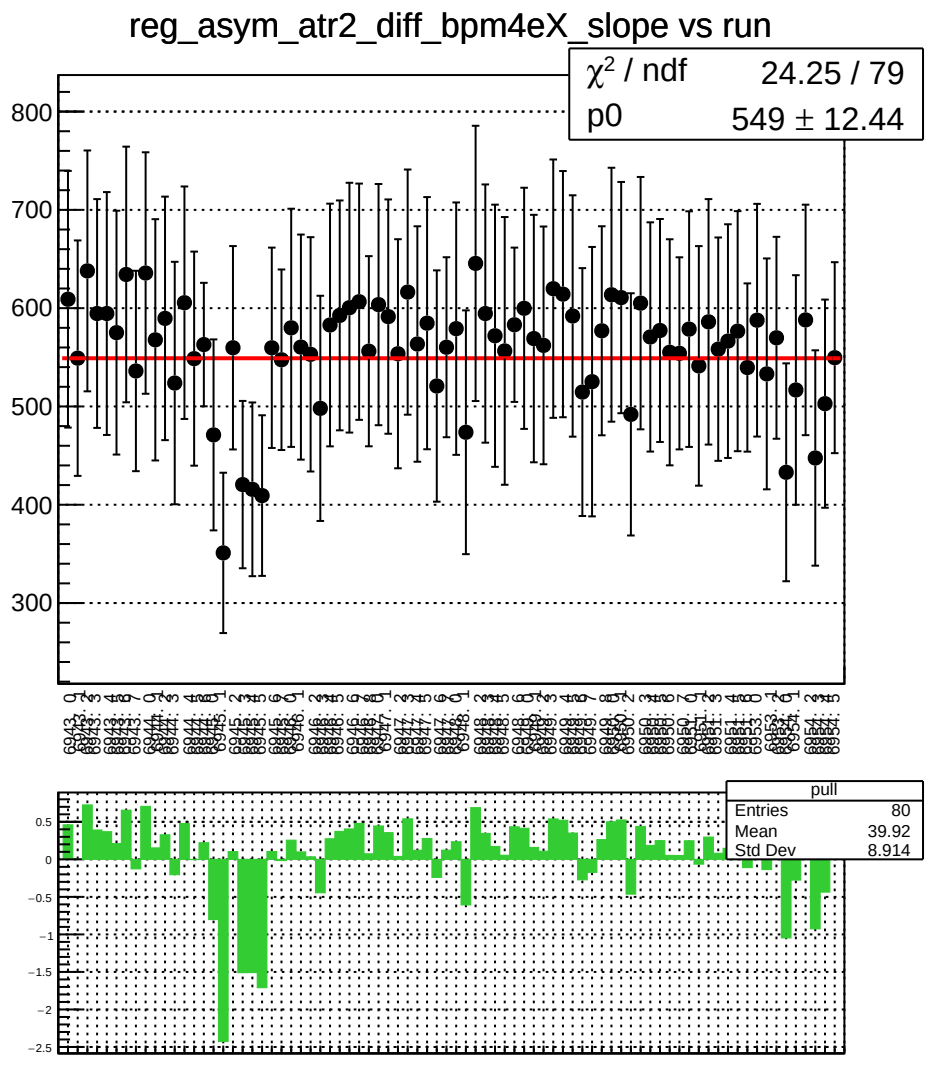

pull1D
Entries 80
Mean 0.003785
Std Dev 1.149

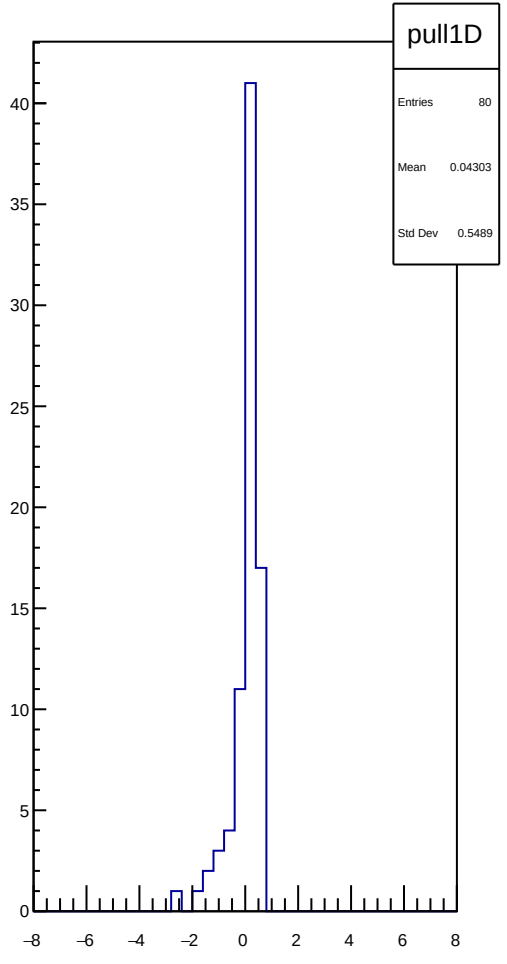

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 24.31 / 79
p0 −475.7 ± 13.33
pull
Entries 80
Mean 36.59
Std Dev 1.208

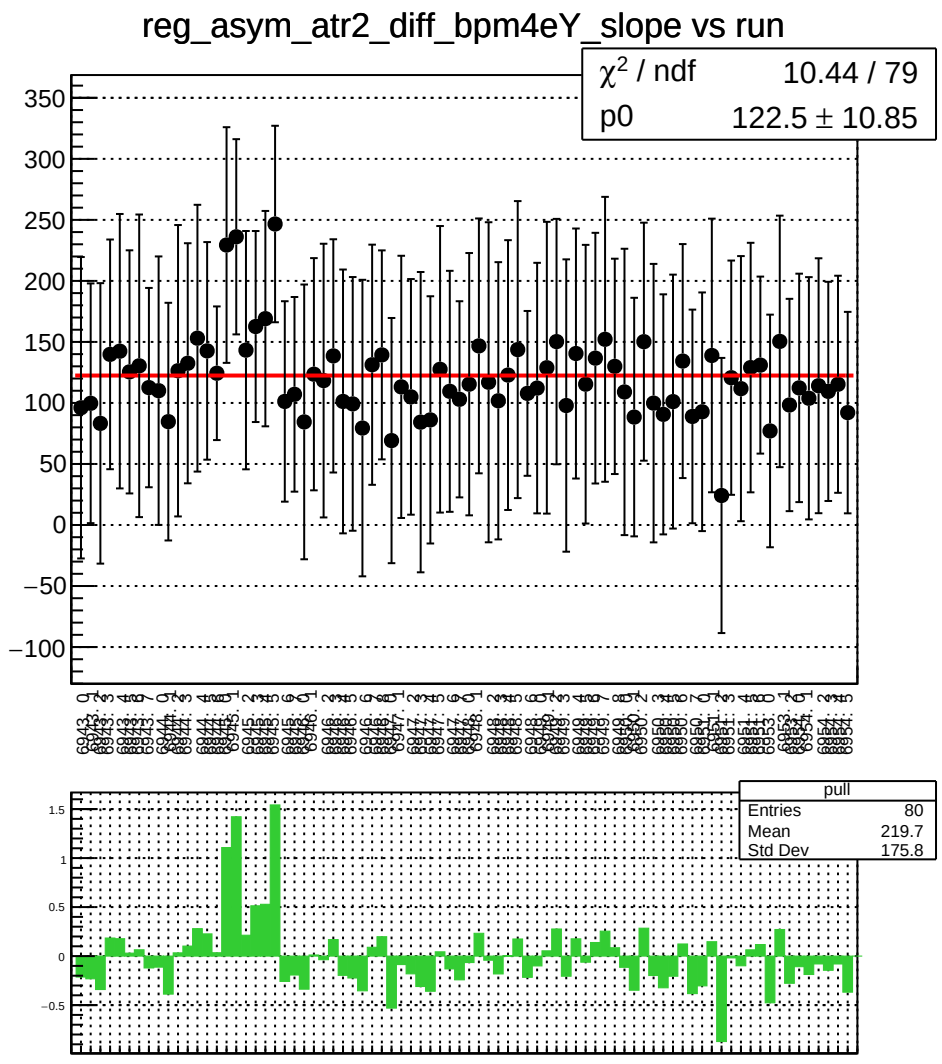

pull1D
Entries 80
Mean −0.04254
Std Dev 0.5497

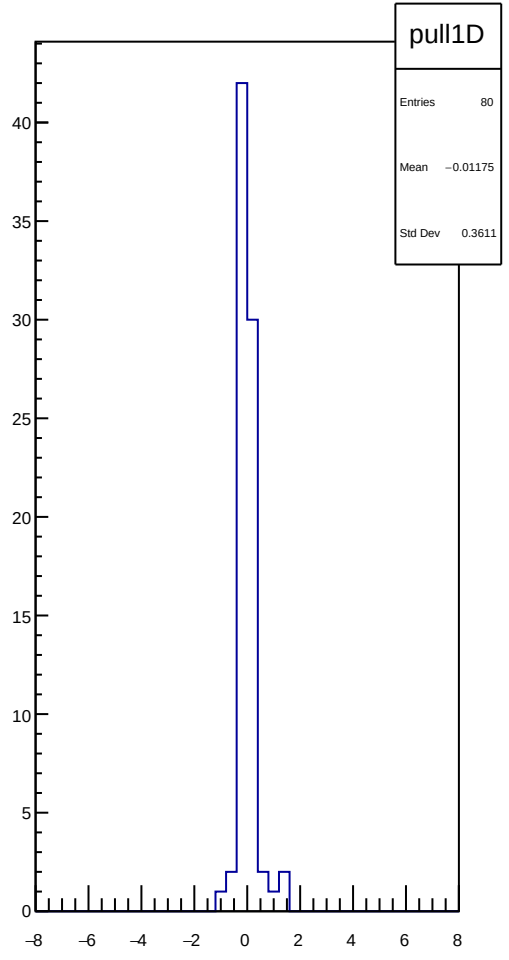

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 9.043 / 79
p0 7.56 ± 9.429
pull
Entries 80
Mean 211.7
Std Dev 167.1

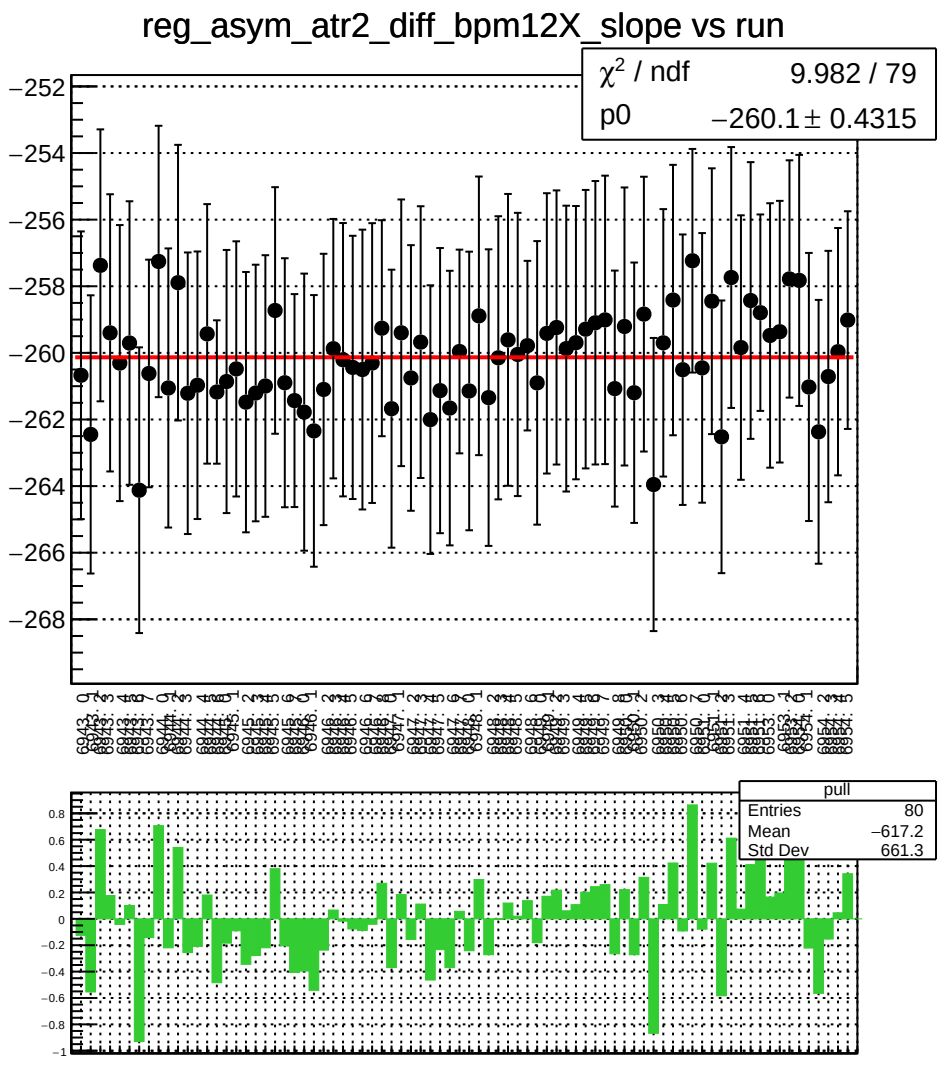

pull1D
Entries 80
Mean 0.00989
Std Dev 0.3361

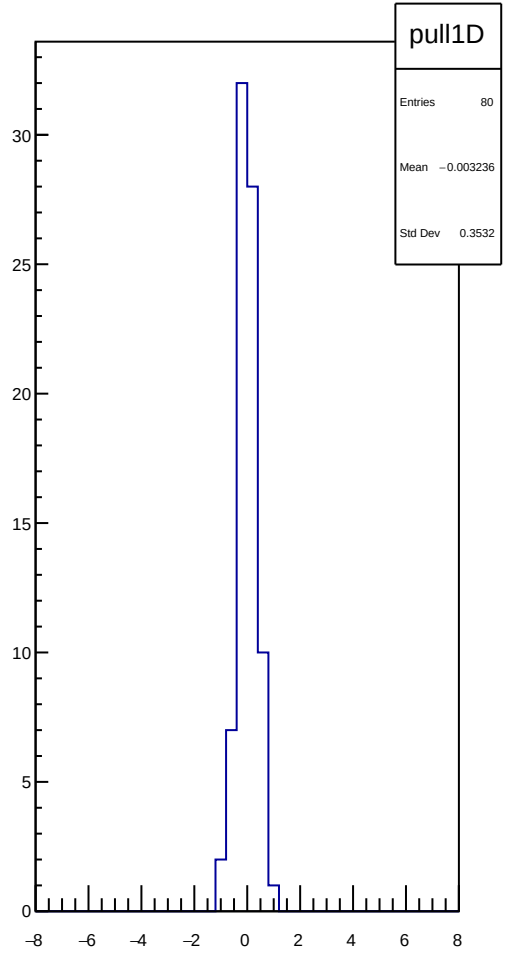

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 24.25 / 79
p0 549 ± 12.44
800
700
600
500
400
300
pull
Entries 80
Mean 39.92
Std Dev 8.914
0.5
0
−0.5
−1
−1.5
−2
−2.5

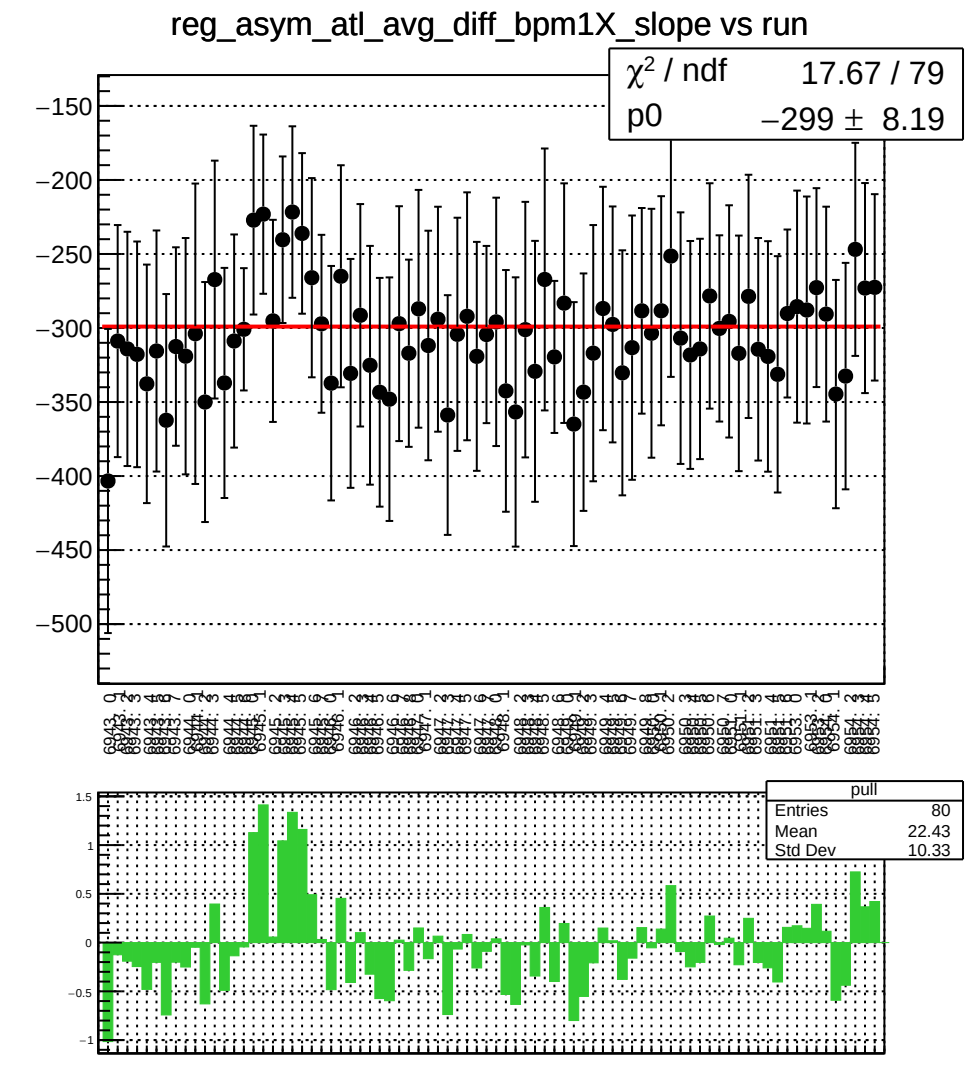

pull1D
Entries 80
Mean 0.04303
Std Dev 0.5489
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

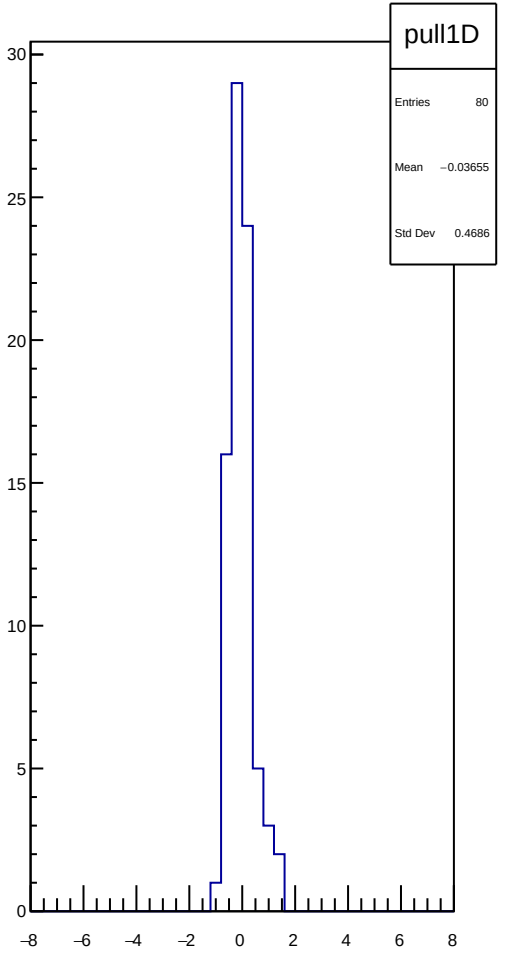

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 10.44 / 79
p0 122.5 ± 10.85
pull
Entries 80
Mean 219.7
Std Dev 175.8

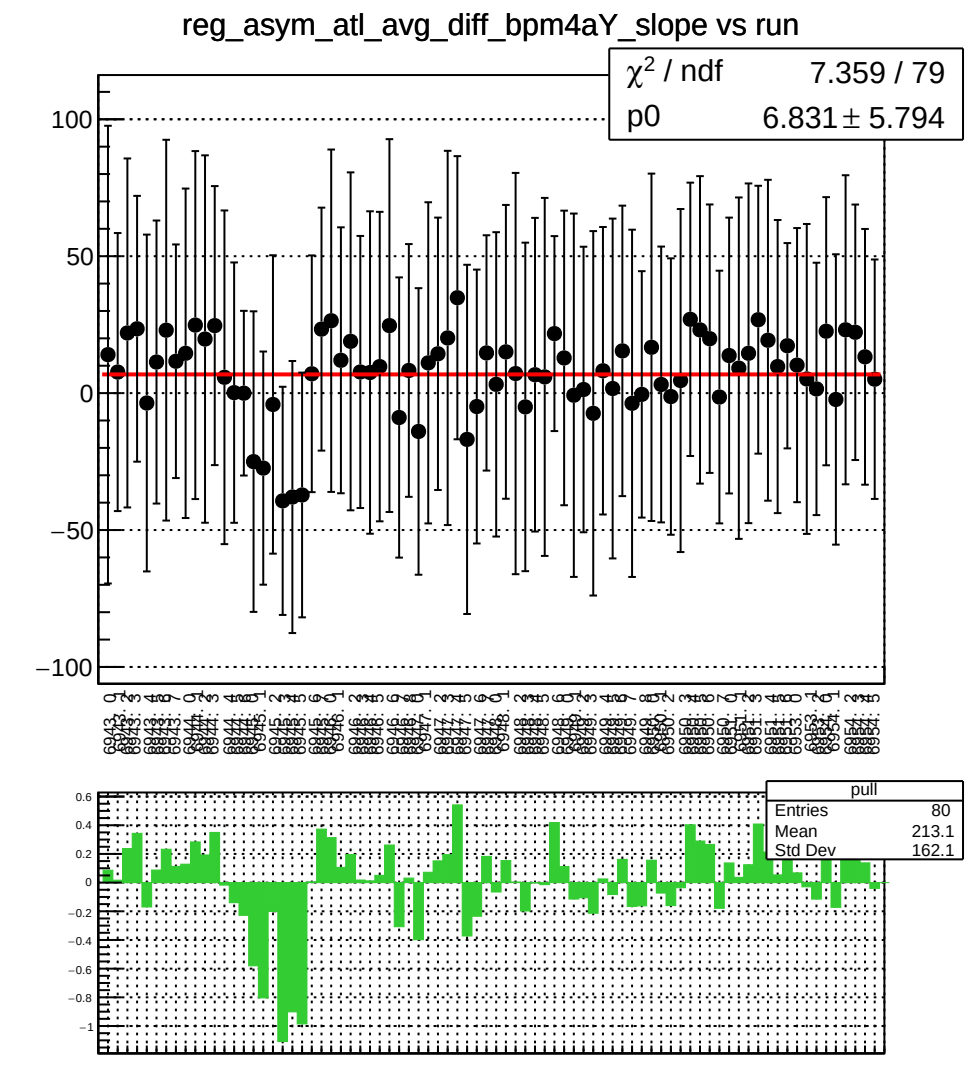

pull1D
Entries 80
Mean −0.01175
Std Dev 0.3611

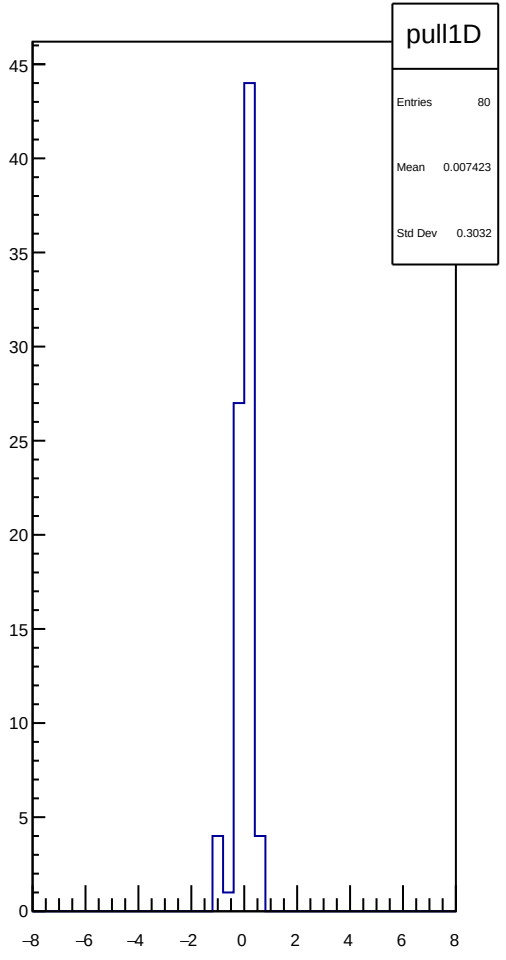

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 9.982 / 79
p0 −260.1 ± 0.4315
pull
Entries 80
Mean −617.2
Std Dev 661.3

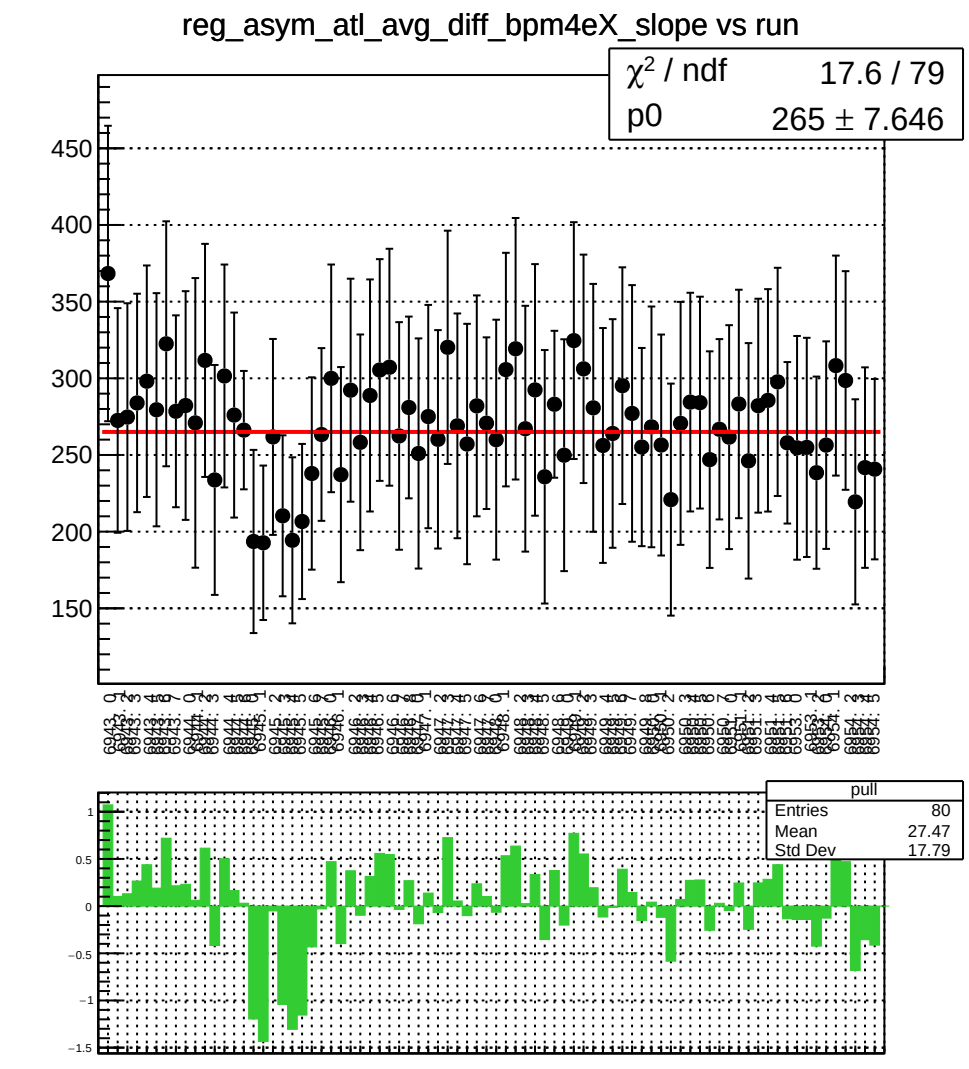

pull1D
Entries 80
Mean −0.003236
Std Dev 0.3532

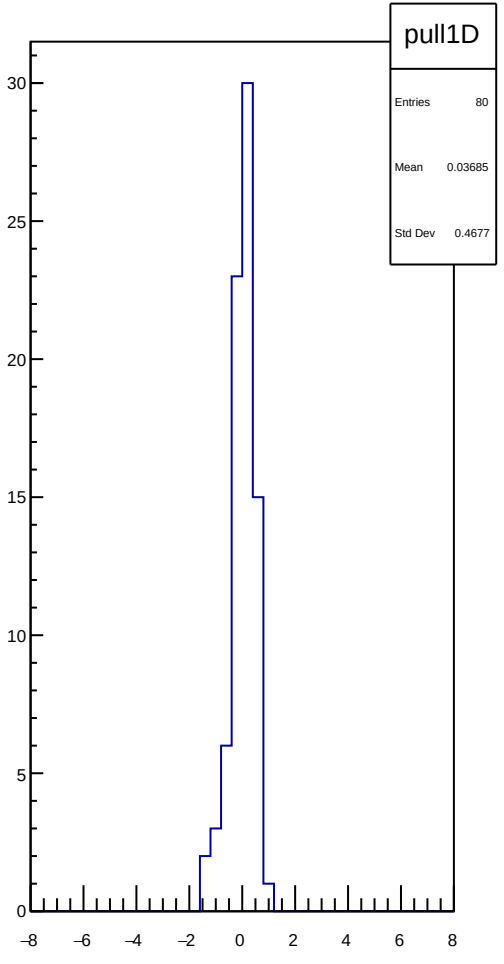

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 17.67 / 79
p0 −299 ± 8.19
−150
−200
−250
−300
−350
−400
−450
−500
pull
Entries 80
Mean 22.43
Std Dev 10.33
1.5
1
0.5
0
−0.5
−1

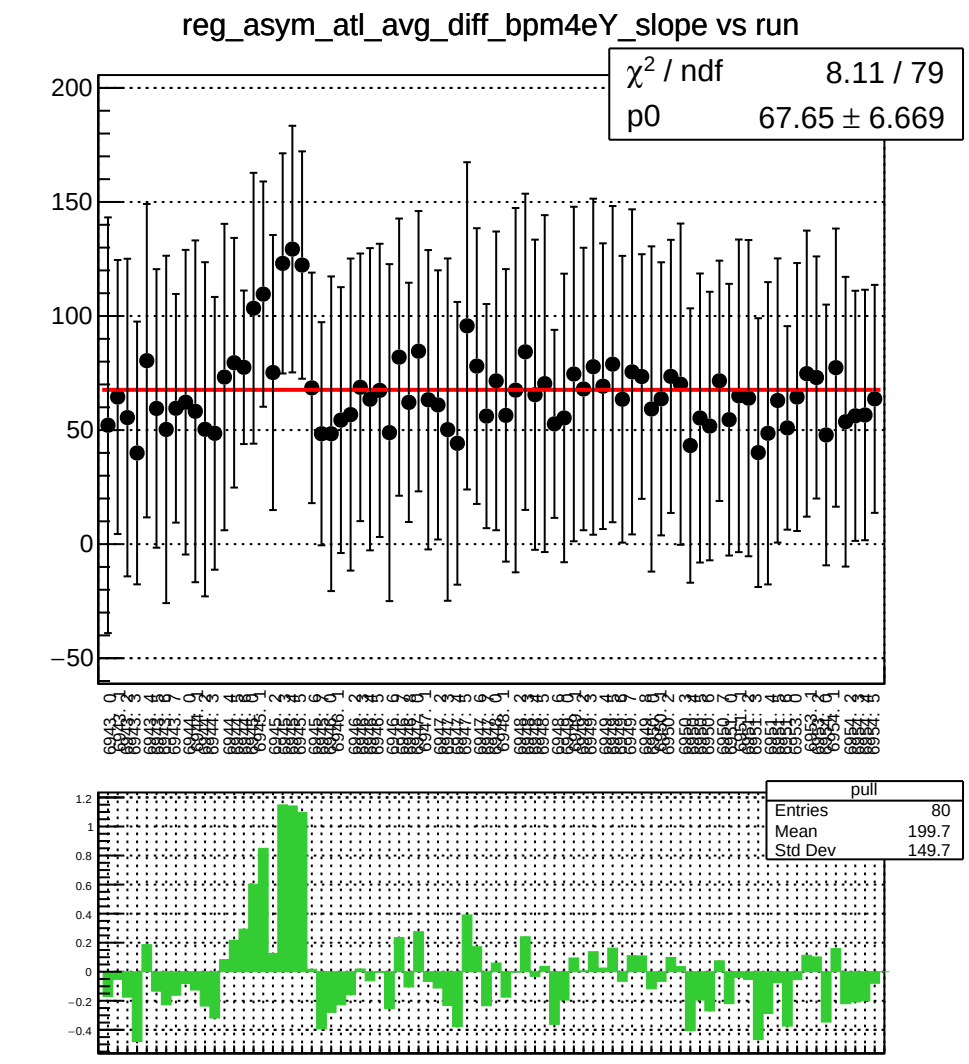

pull1D
Entries 80
Mean −0.03655
Std Dev 0.4686
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

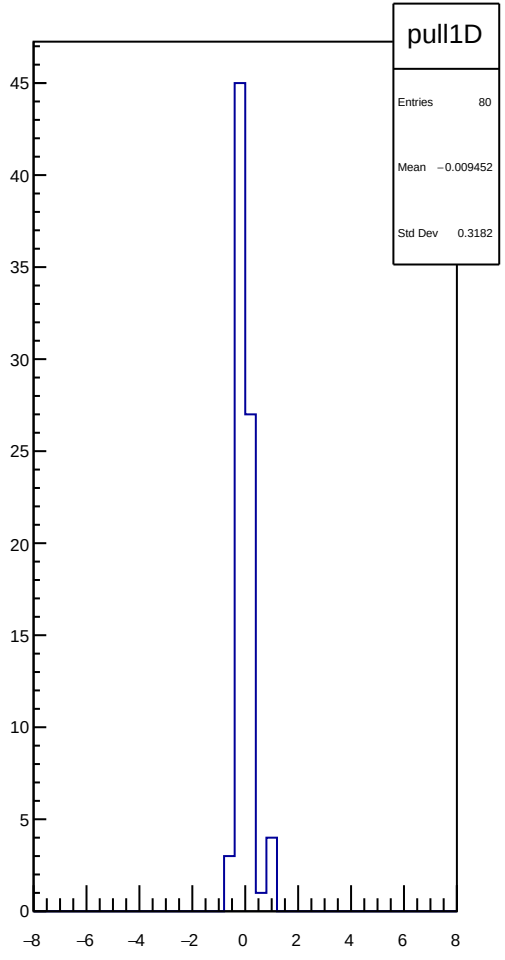

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.359 / 79
p0 6.831 ± 5.794
100
50
0
−50
−100
pull
Entries 80
Mean 213.1
Std Dev 162.1
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

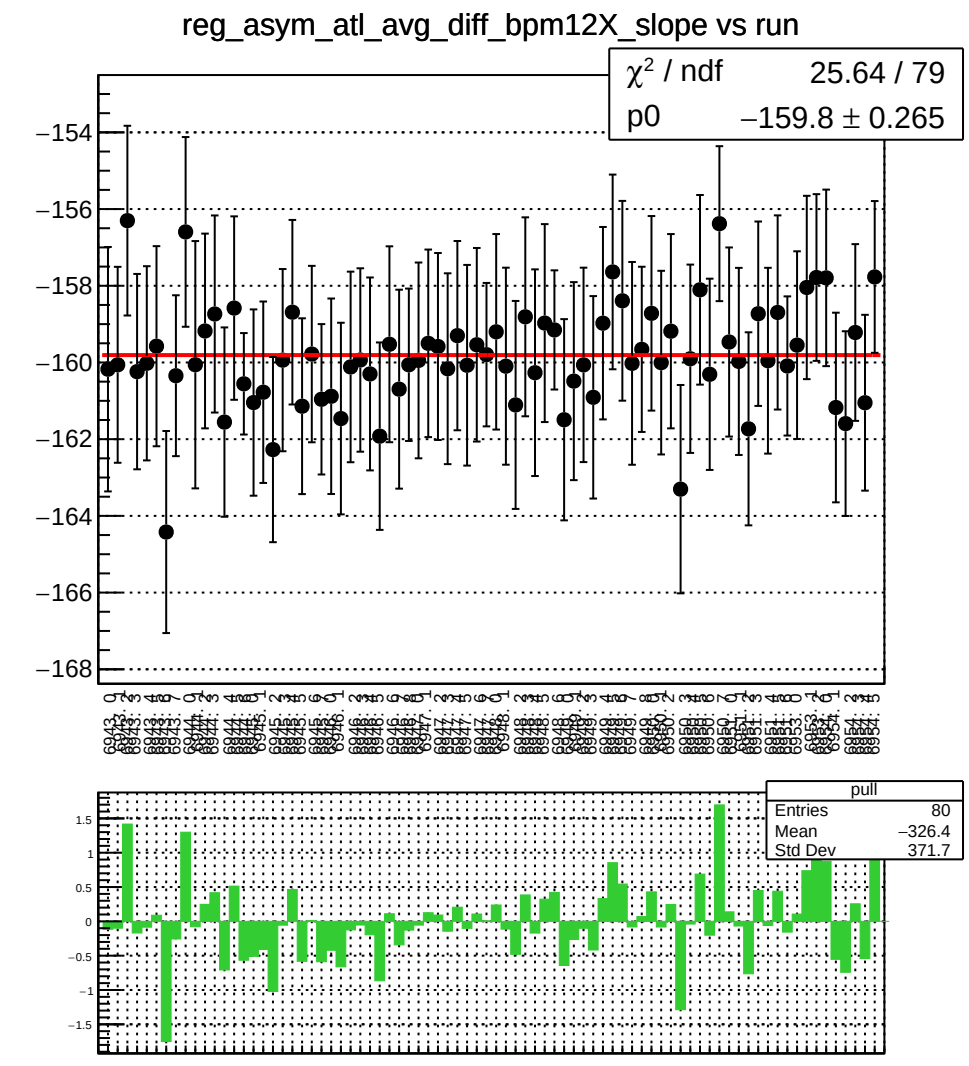

pull1D
Entries 80
Mean 0.007423
Std Dev 0.3032
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

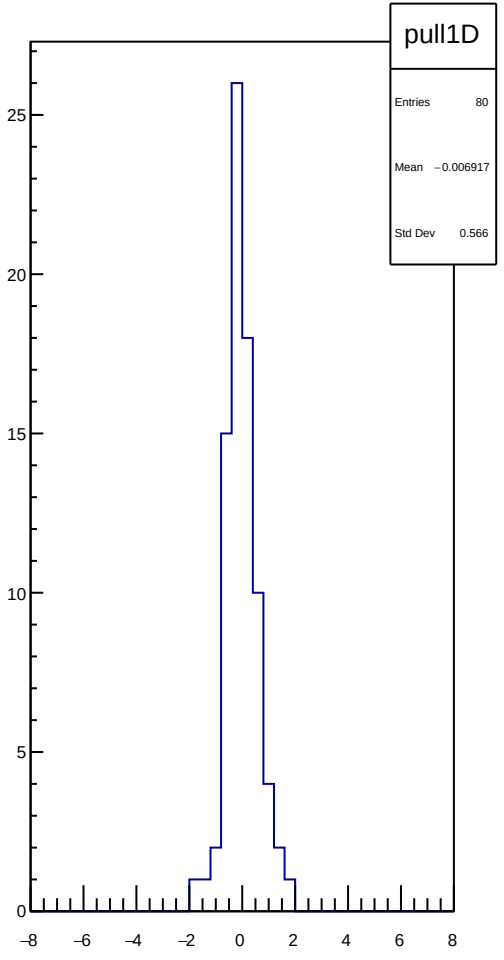

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 17.6 / 79
p0 265 ± 7.646
pull
Entries 80
Mean 27.47
Std Dev 17.79

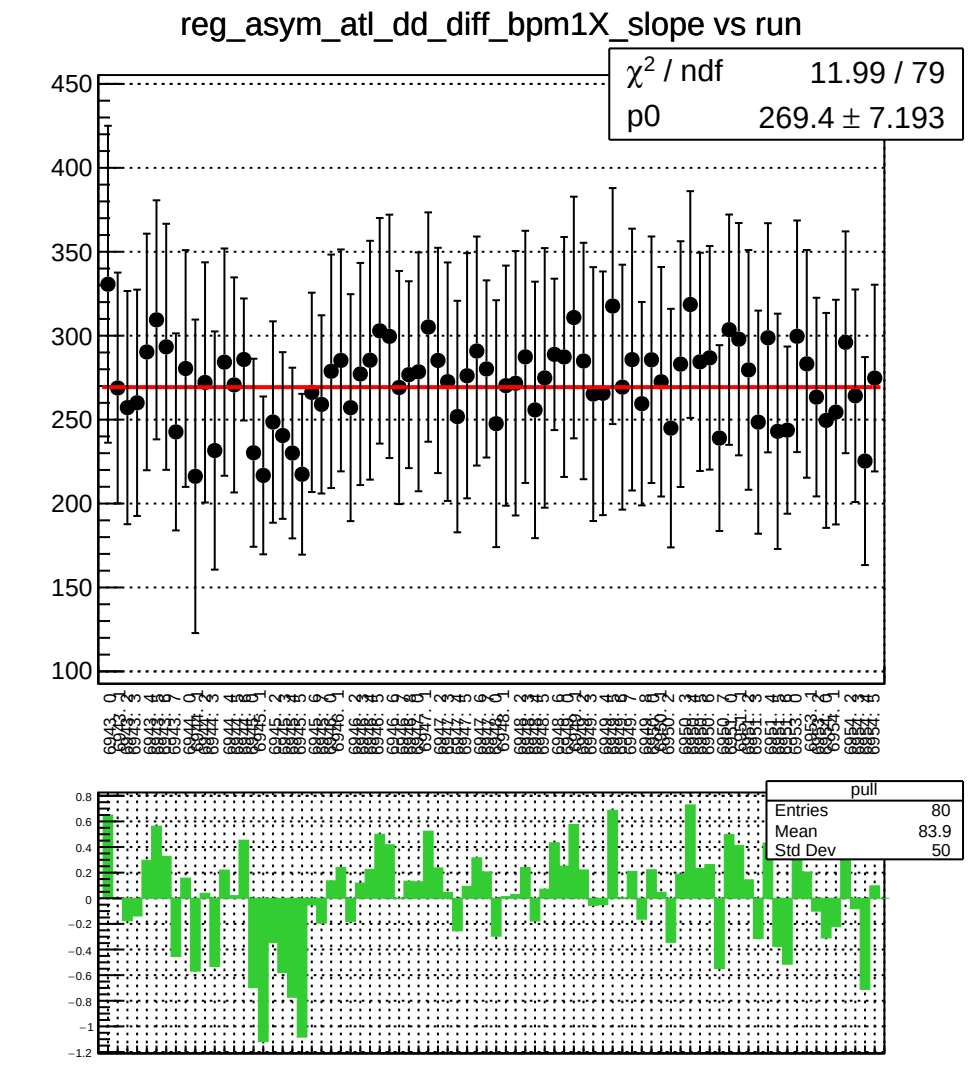

pull1D
Entries 80
Mean 0.03685
Std Dev 0.4677

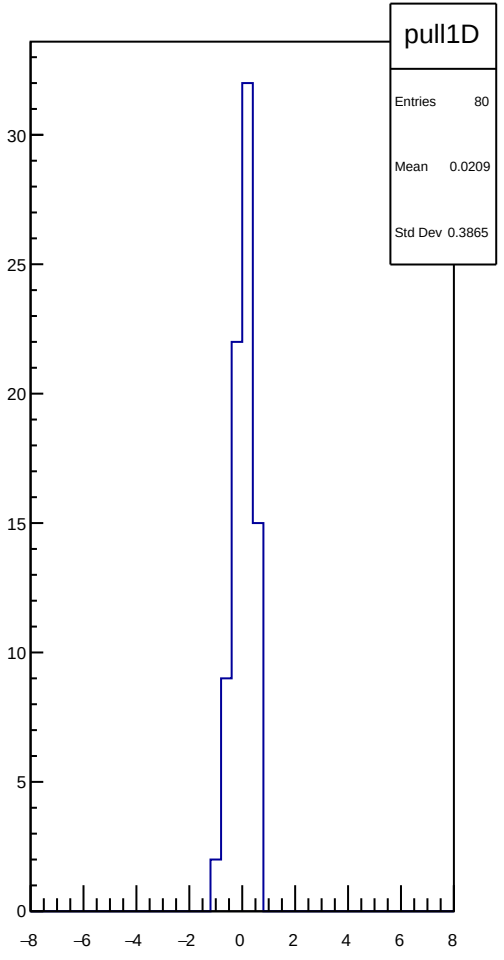

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.11 / 79
p0 67.65 ± 6.669
200
150
100
50
0
−50
pull
Entries 80
Mean 199.7
Std Dev 149.7
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4

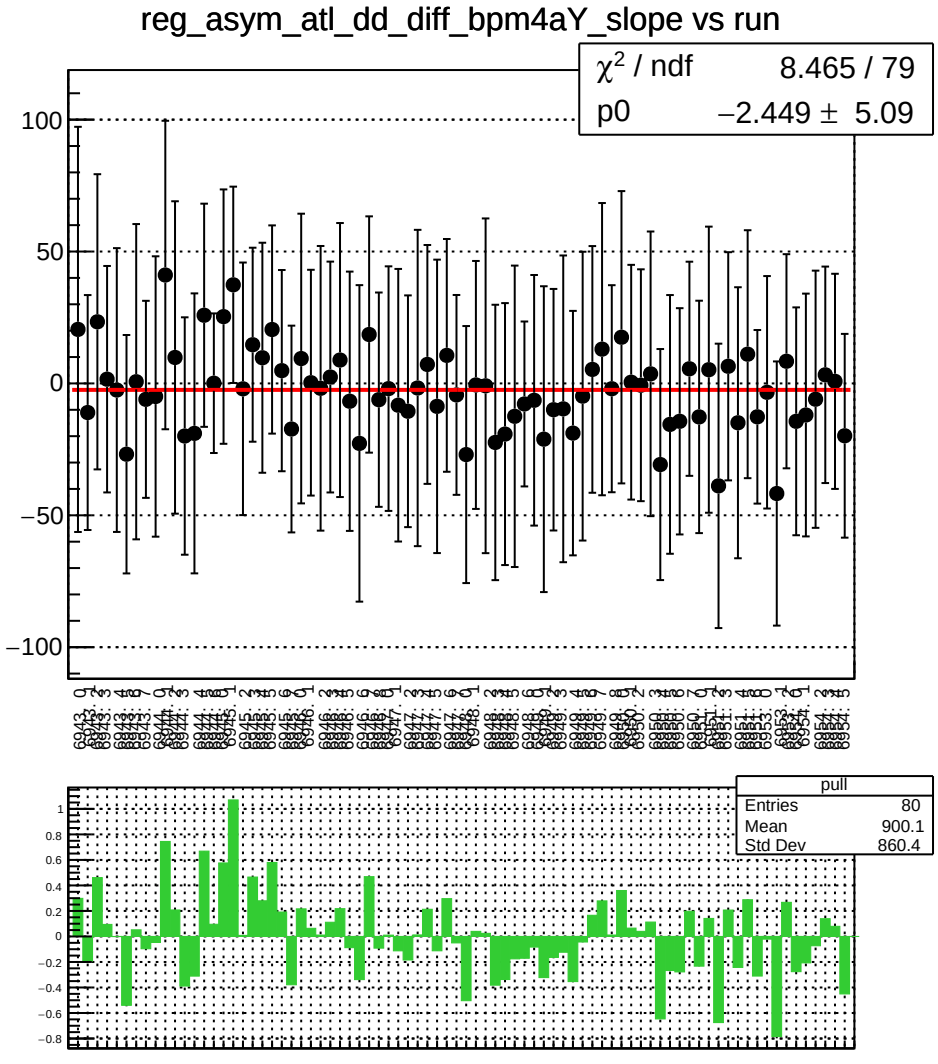

pull1D
Entries 80
Mean −0.009452
Std Dev 0.3182
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

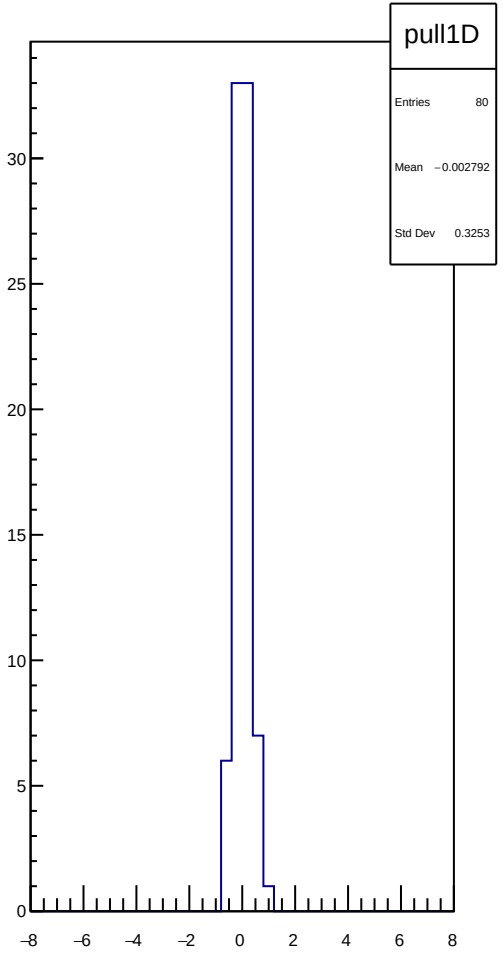

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 25.64 / 79
p0 −159.8 ± 0.265
pull
Entries 80
Mean −326.4
Std Dev 371.7

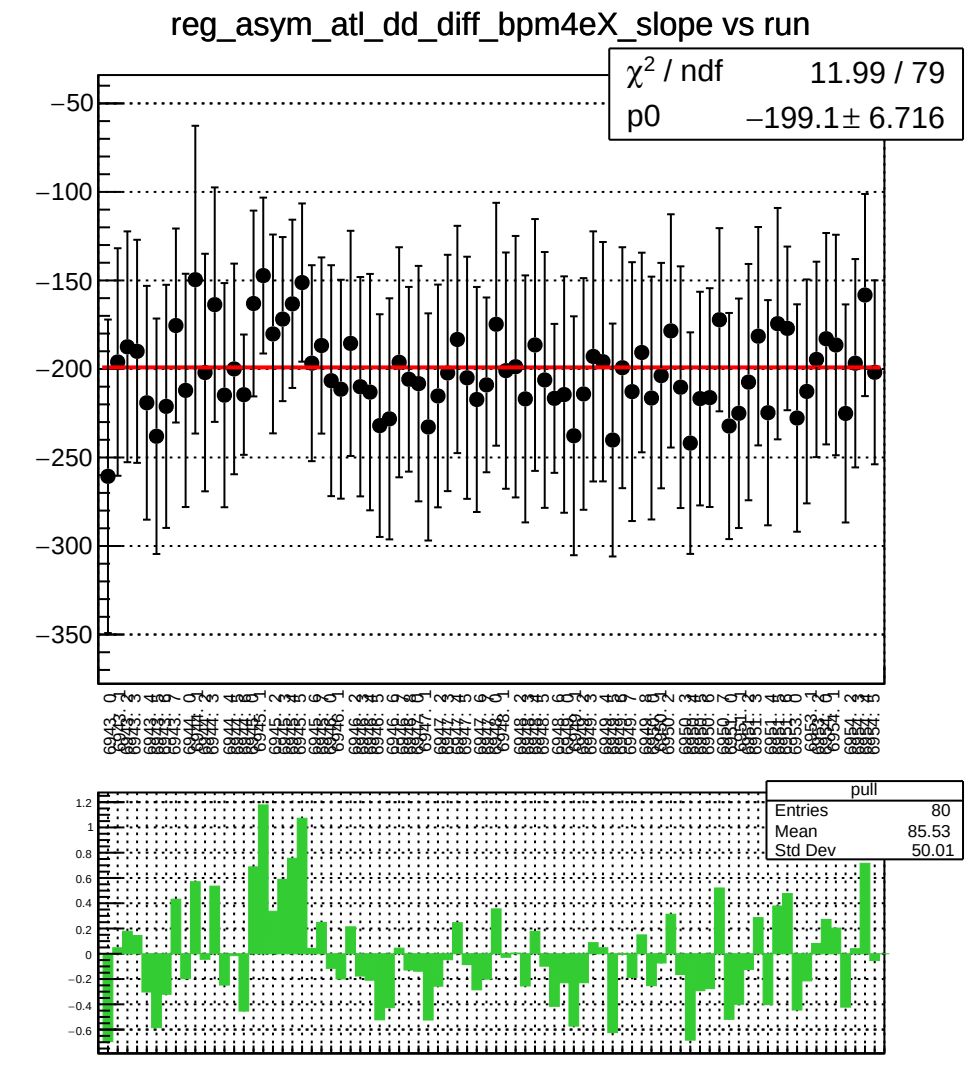

pull1D
Entries 80
Mean −0.006917
Std Dev 0.566

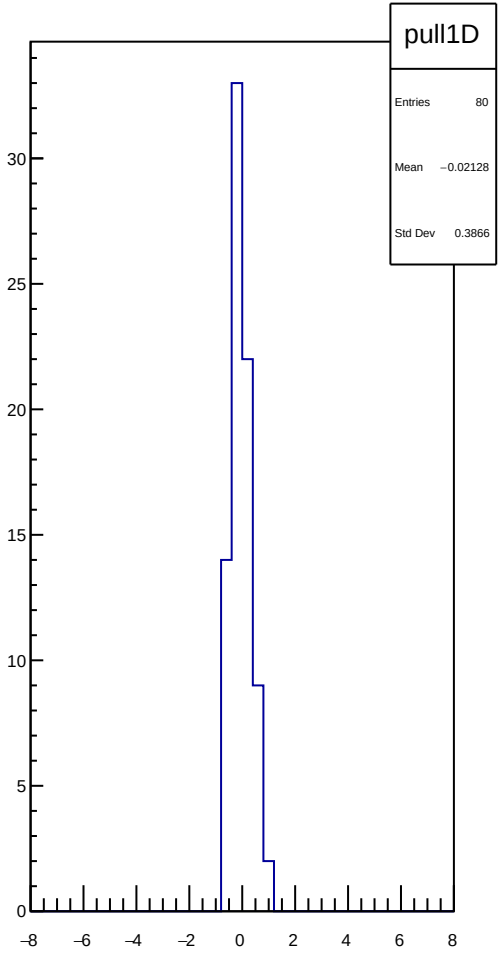

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 11.99 / 79
p0 269.4 ± 7.193
pull
Entries 80
Mean 83.9
Std Dev 50

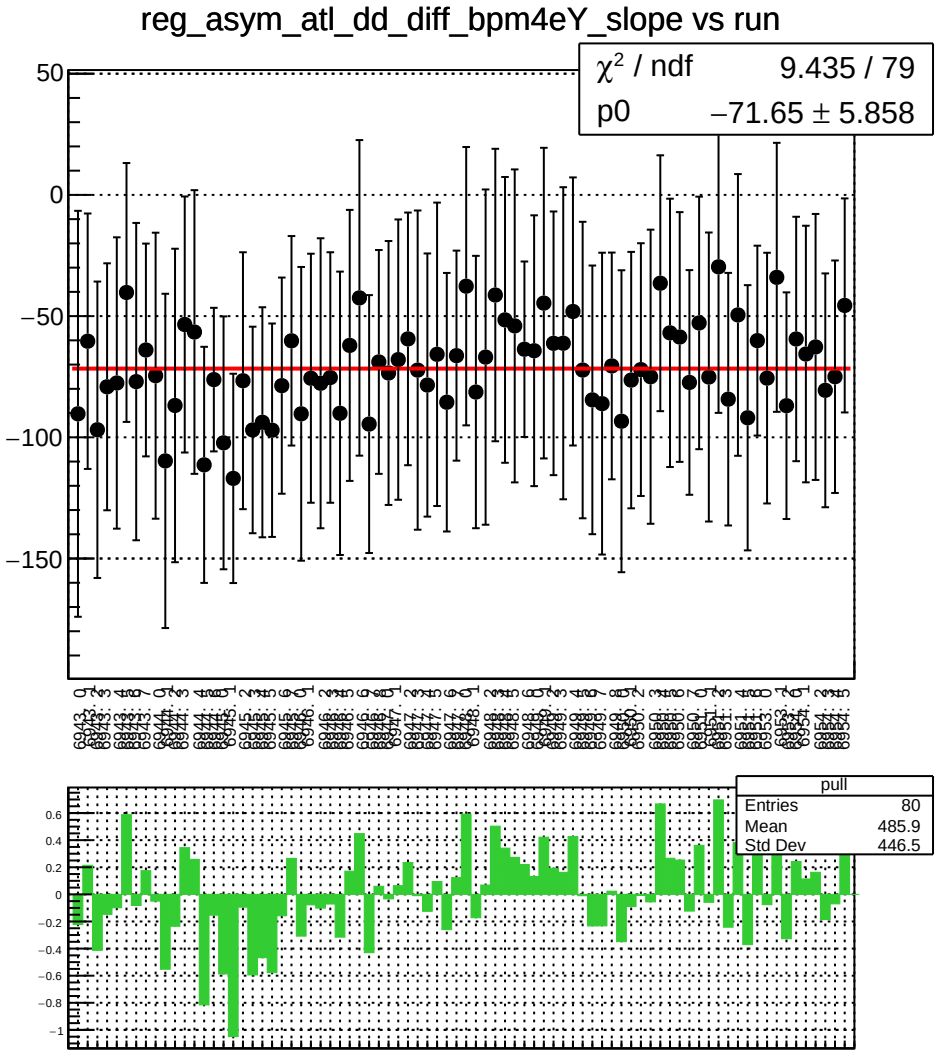

pull1D
Entries 80
Mean 0.0209
Std Dev 0.3865

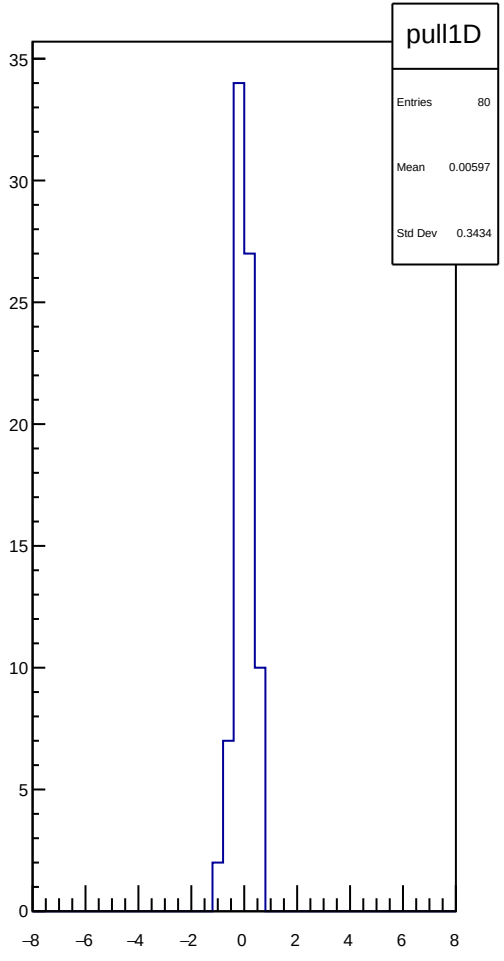

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.465 / 79
p0 −2.449 ± 5.09
pull
Entries 80
Mean 900.1
Std Dev 860.4

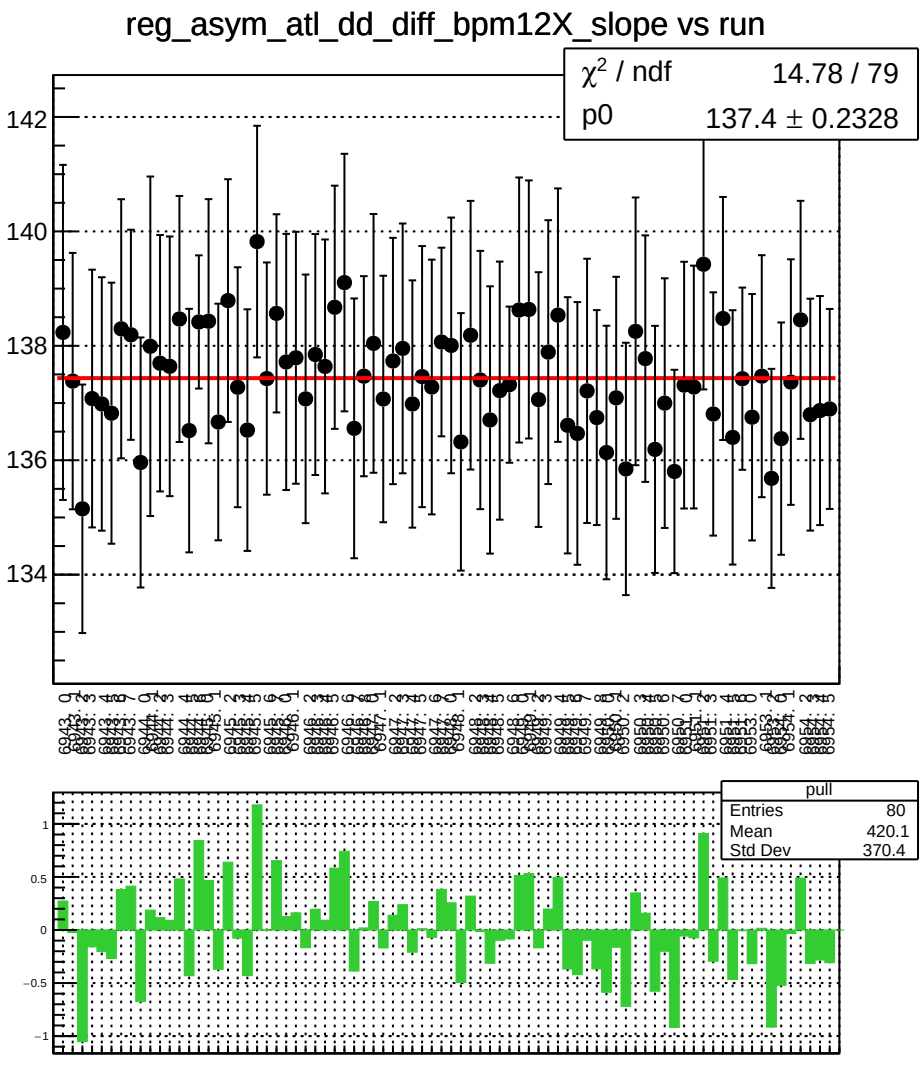

pull1D
Entries 80
Mean −0.002792
Std Dev 0.3253

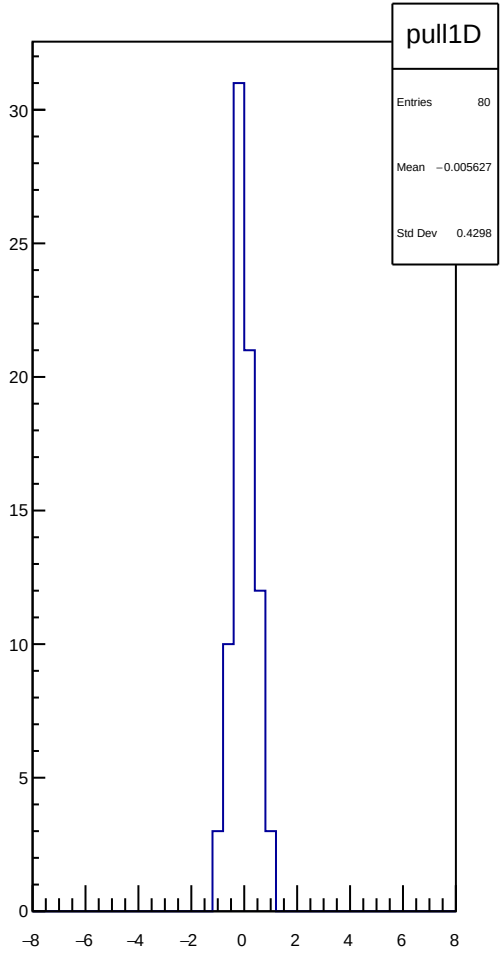

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 11.99 / 79
p0 −199.1 ± 6.716
pull
Entries 80
Mean 85.53
Std Dev 50.01

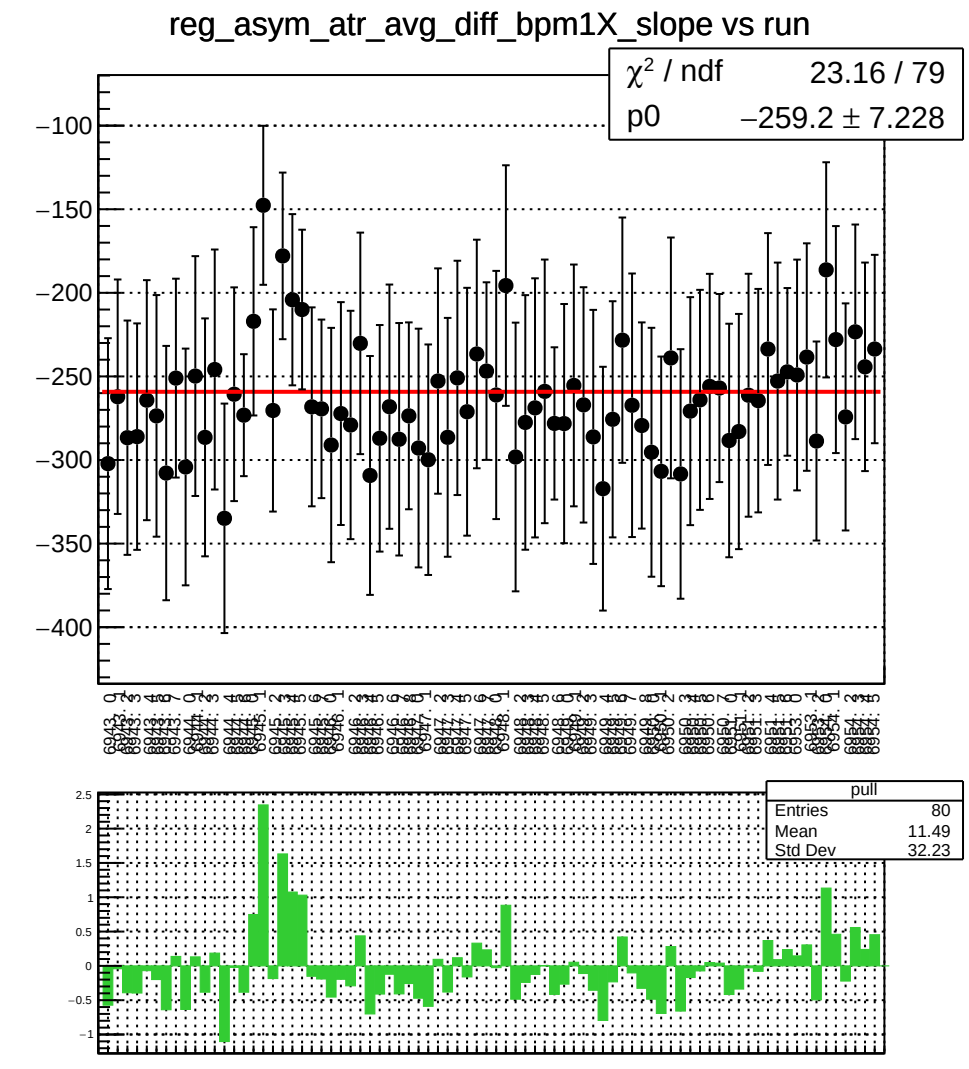

pull1D
Entries 80
Mean −0.02128
Std Dev 0.3866

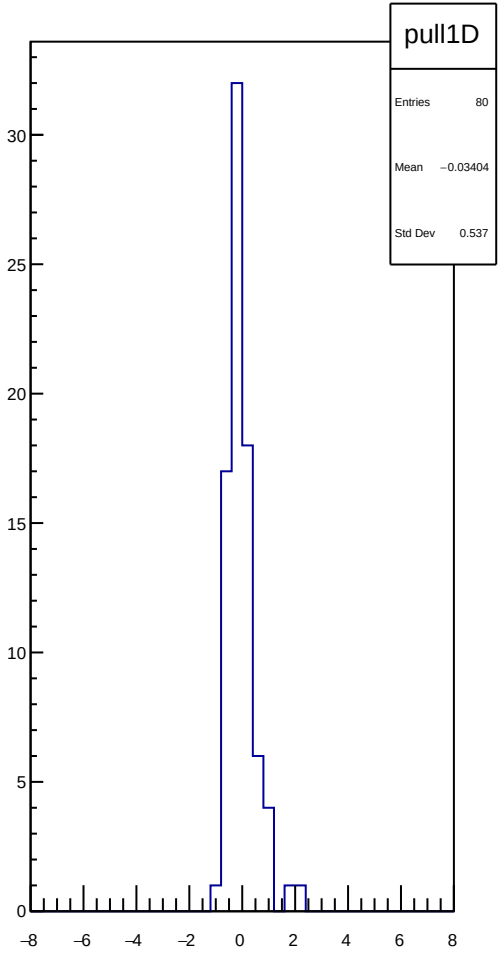

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ^2 / ndf 9.435 / 79
p0 −71.65 ± 5.858
50
0
−50
−100
−150
pull
Entries 80
Mean 485.9
Std Dev 446.5
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

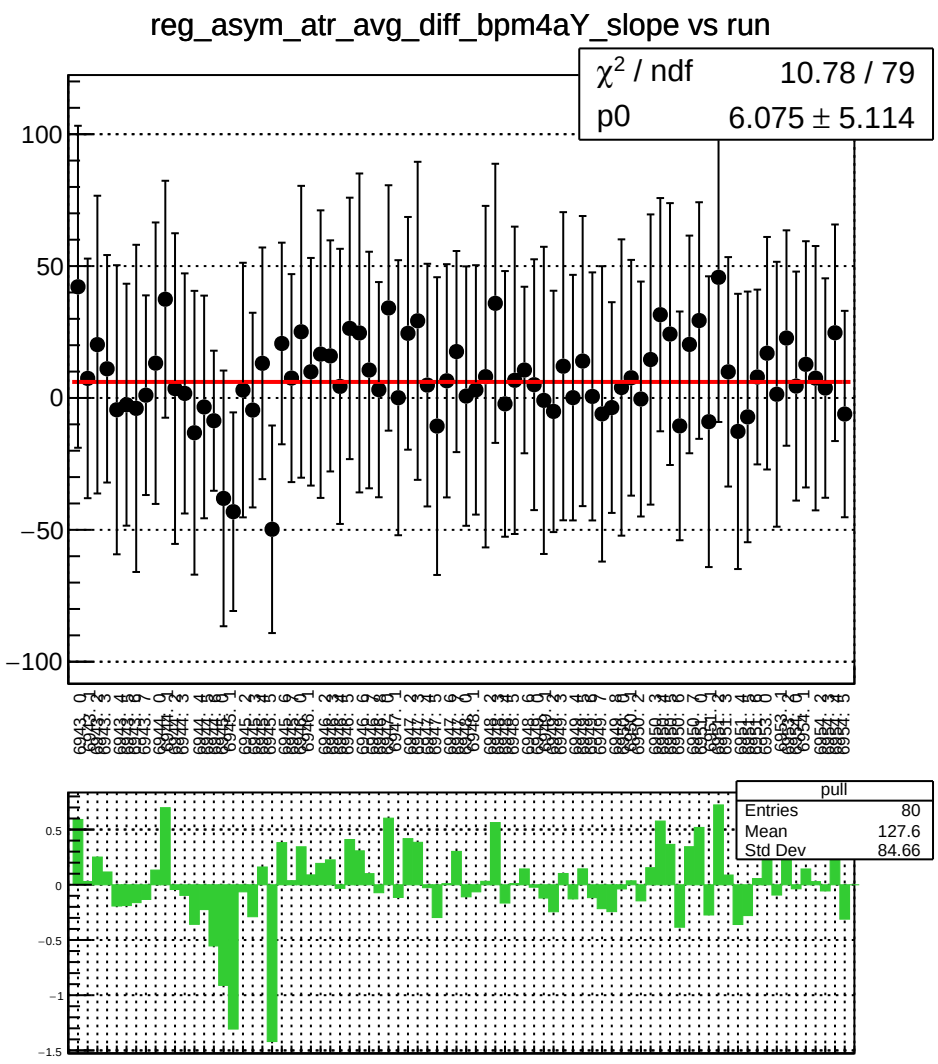

pull1D
Entries 80
Mean 0.00597
Std Dev 0.3434
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

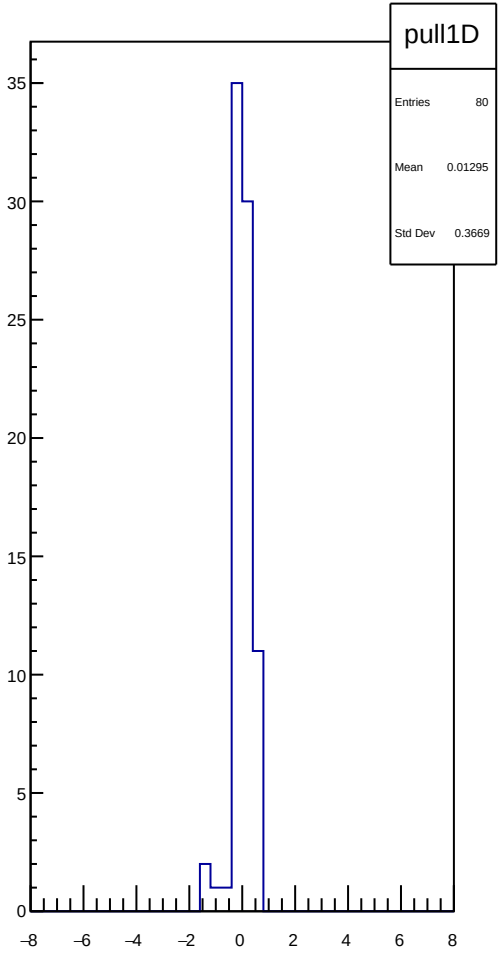

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 14.78 / 79
p0 137.4 ± 0.2328
142
140
138
136
134
pull
Entries 80
Mean 420.1
Std Dev 370.4
1
0.5
0
−0.5
−1

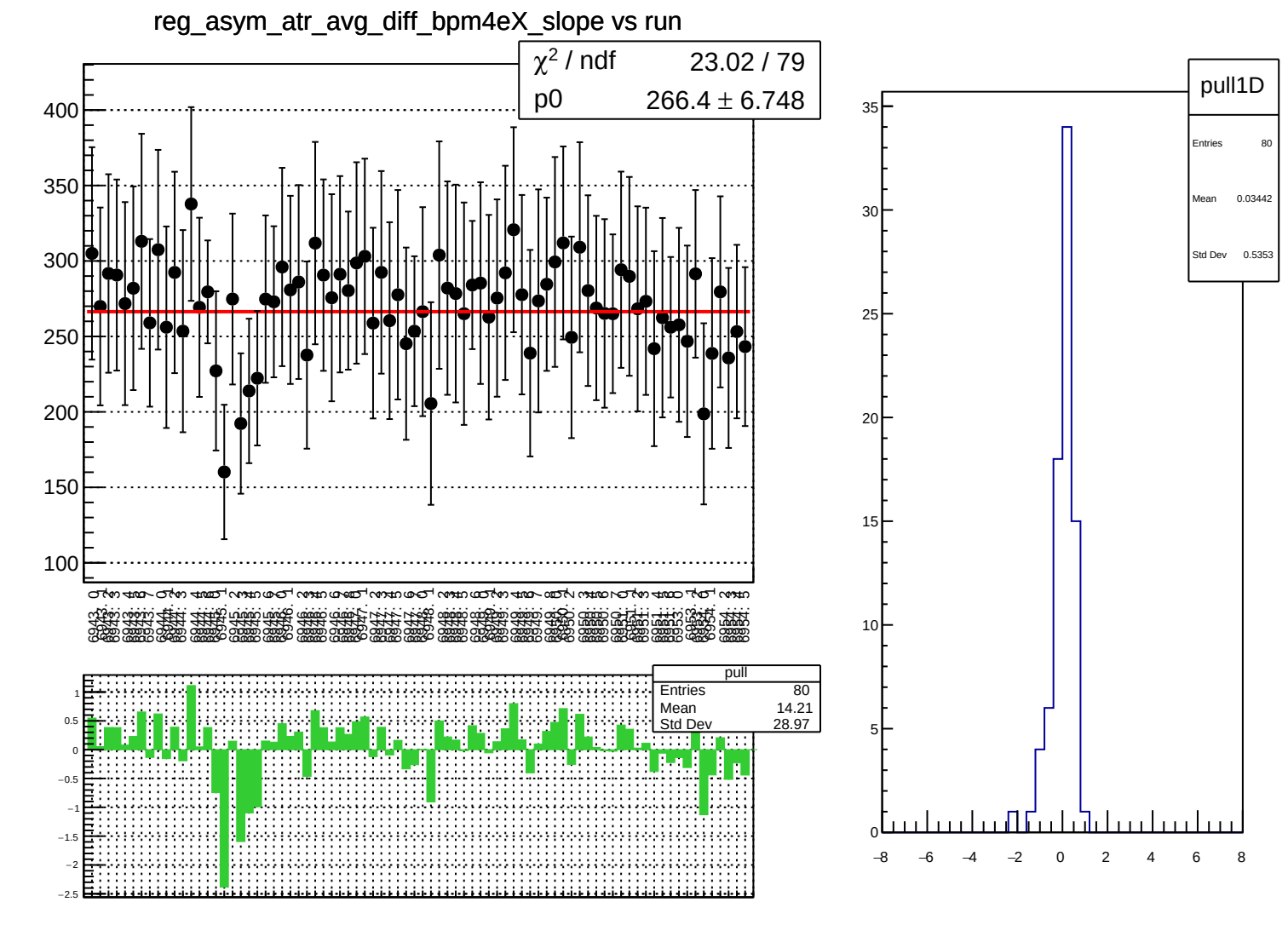

pull1D
Entries 80
Mean −0.005627
Std Dev 0.4298
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

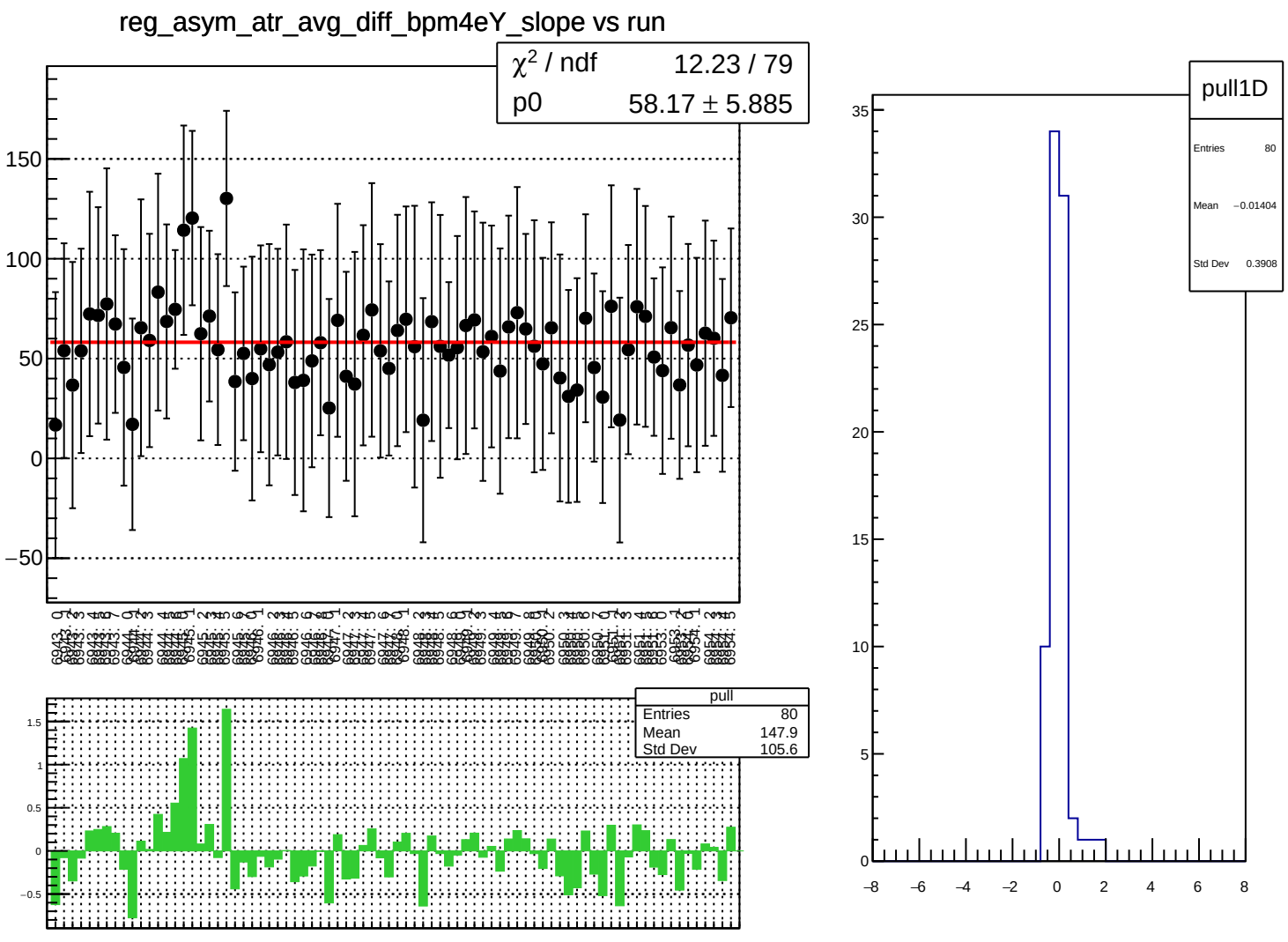

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 23.16 / 79
p0 −259.2 ± 7.228
pull
Entries 80
Mean 11.49
Std Dev 32.23

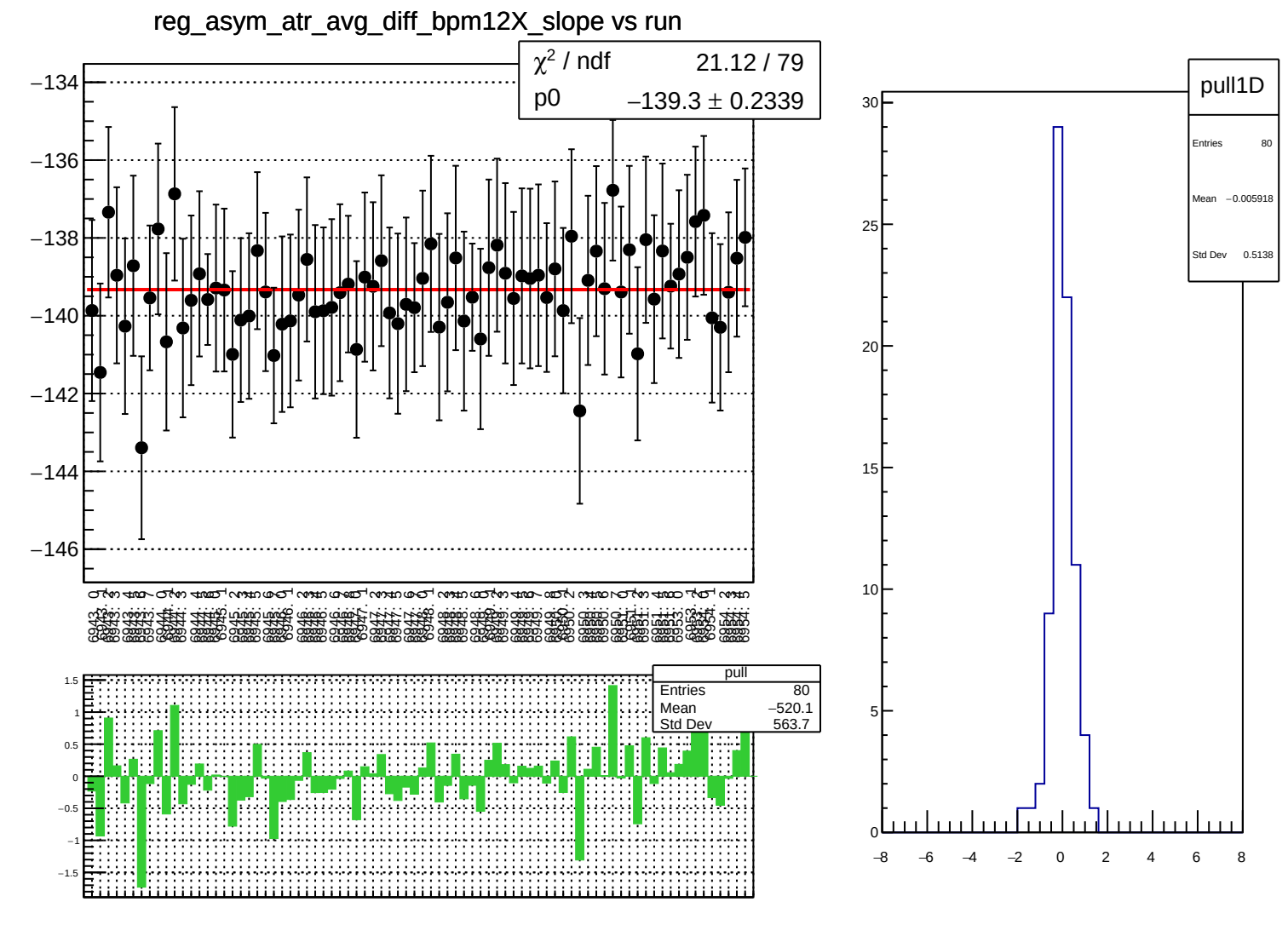

pull1D
Entries 80
Mean −0.03404
Std Dev 0.537

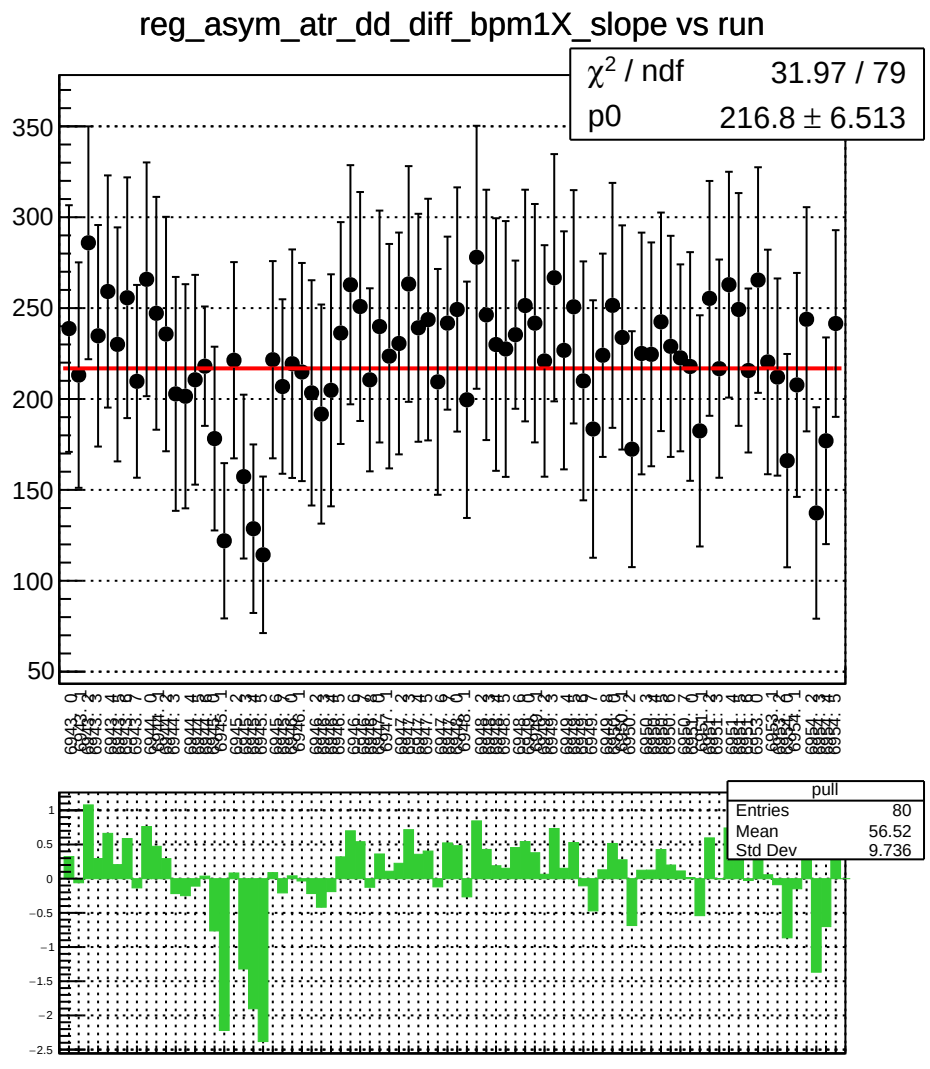

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.78 / 79
p0 6.075 ± 5.114
pull
Entries 80
Mean 127.6
Std Dev 84.66

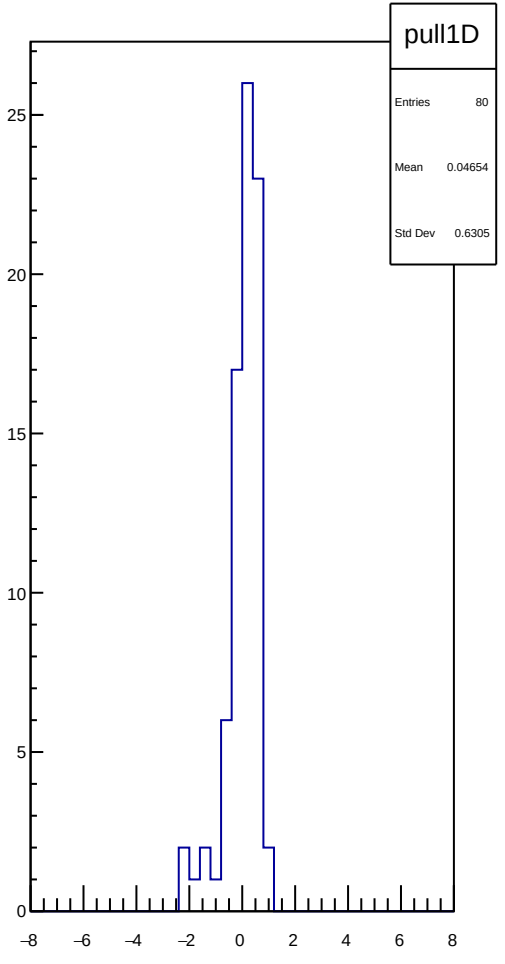

pull1D
Entries 80
Mean 0.01295
Std Dev 0.3669

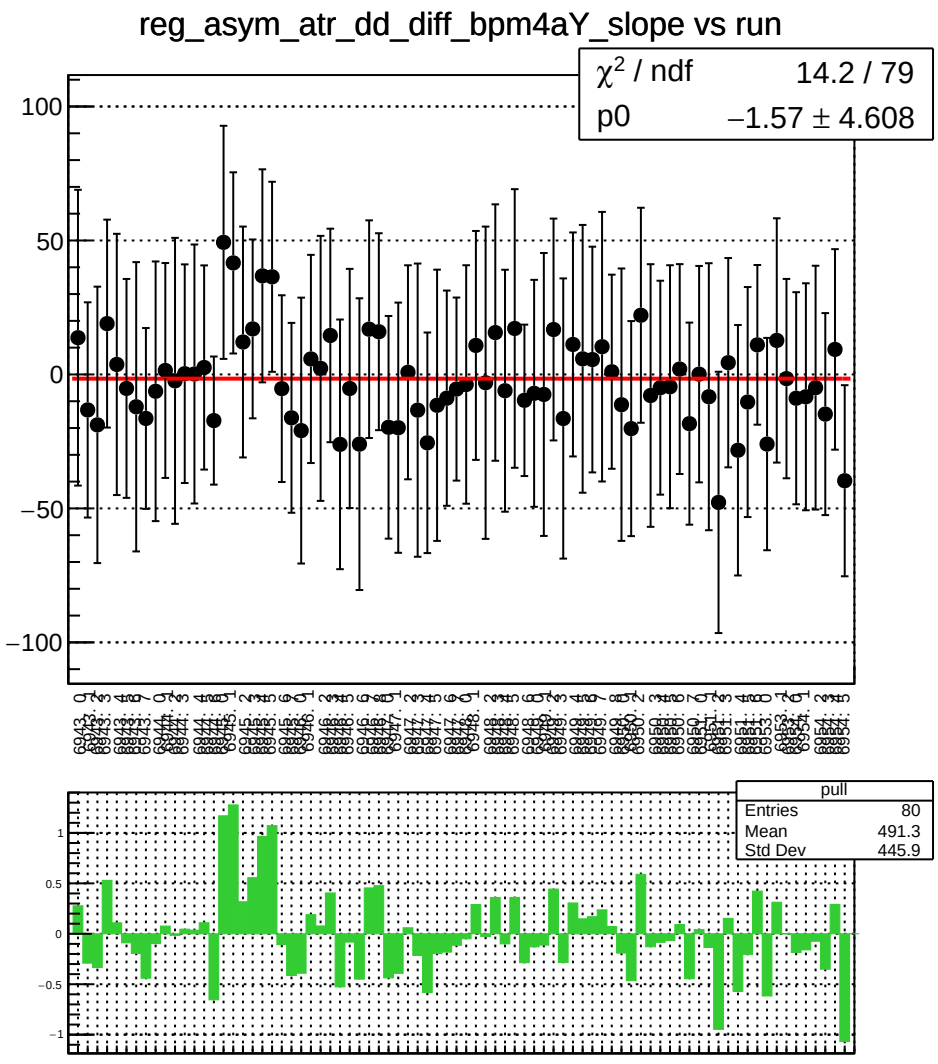

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 23.02 / 79
p0 266.4 ± 6.748
pull
Entries 80
Mean 14.21
Std Dev 28.97
pull1D
Entries 80
Mean 0.03442
Std Dev 0.5353

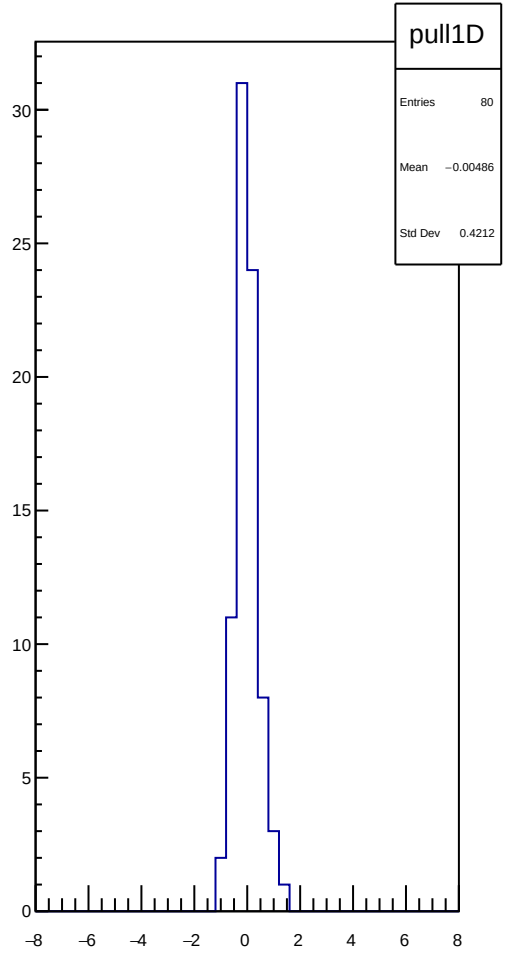

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 12.23 / 79
p0 58.17 ± 5.885
150
100
50
0
−50
pull
Entries 80
Mean 147.9
Std Dev 105.6
1.5
1
0.5
0
−0.5
pull1D
Entries 80
Mean −0.01404
Std Dev 0.3908
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

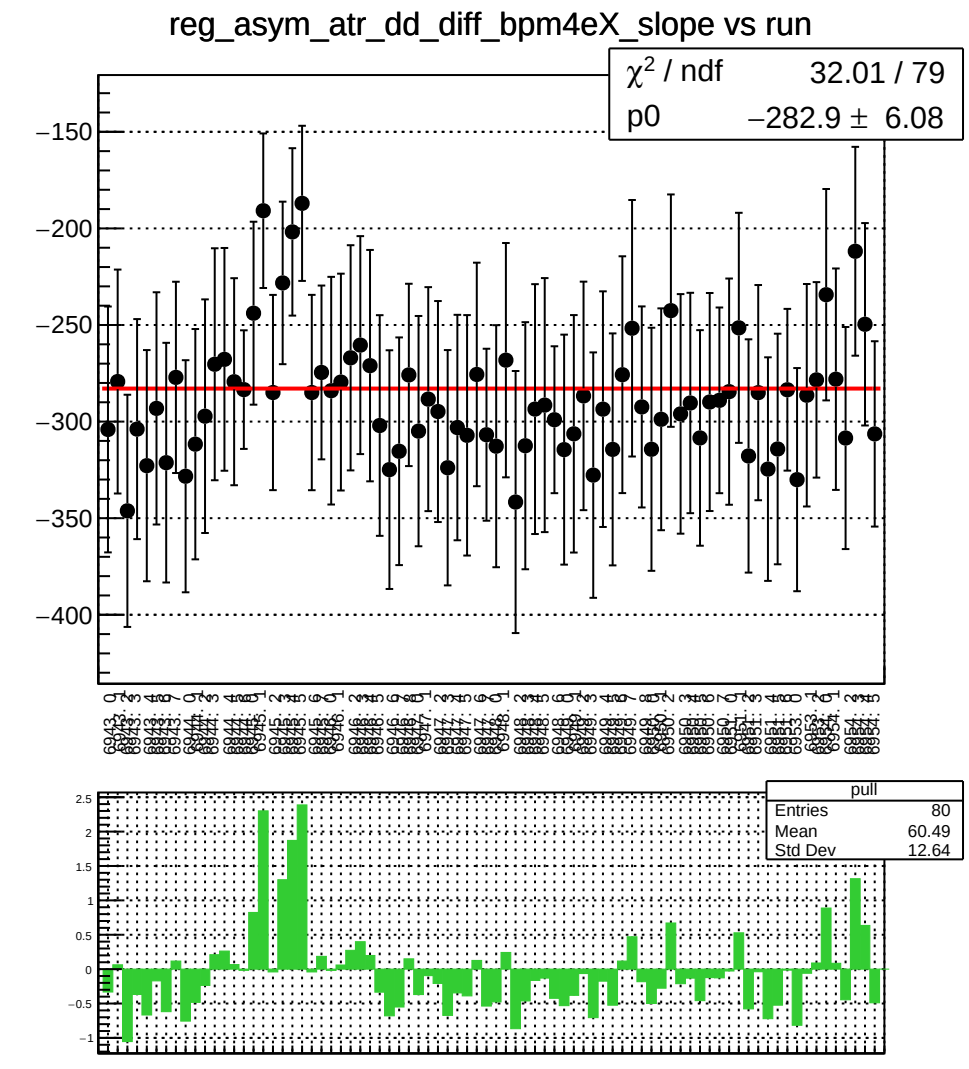

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 21.12 / 79
p0 −139.3 ± 0.2339
−134
−136
−138
−140
−142
−144
−146
pull
Entries 80
Mean −520.1
Std Dev 563.7
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 80
Mean −0.005918
Std Dev 0.5138
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

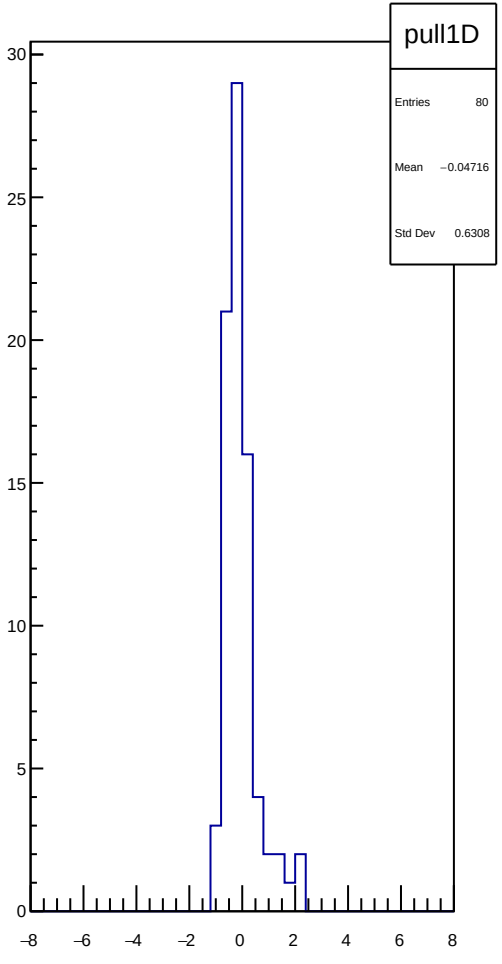

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ^2 / ndf 31.97 / 79
p0 216.8 ± 6.513
pull
Entries 80
Mean 56.52
Std Dev 9.736

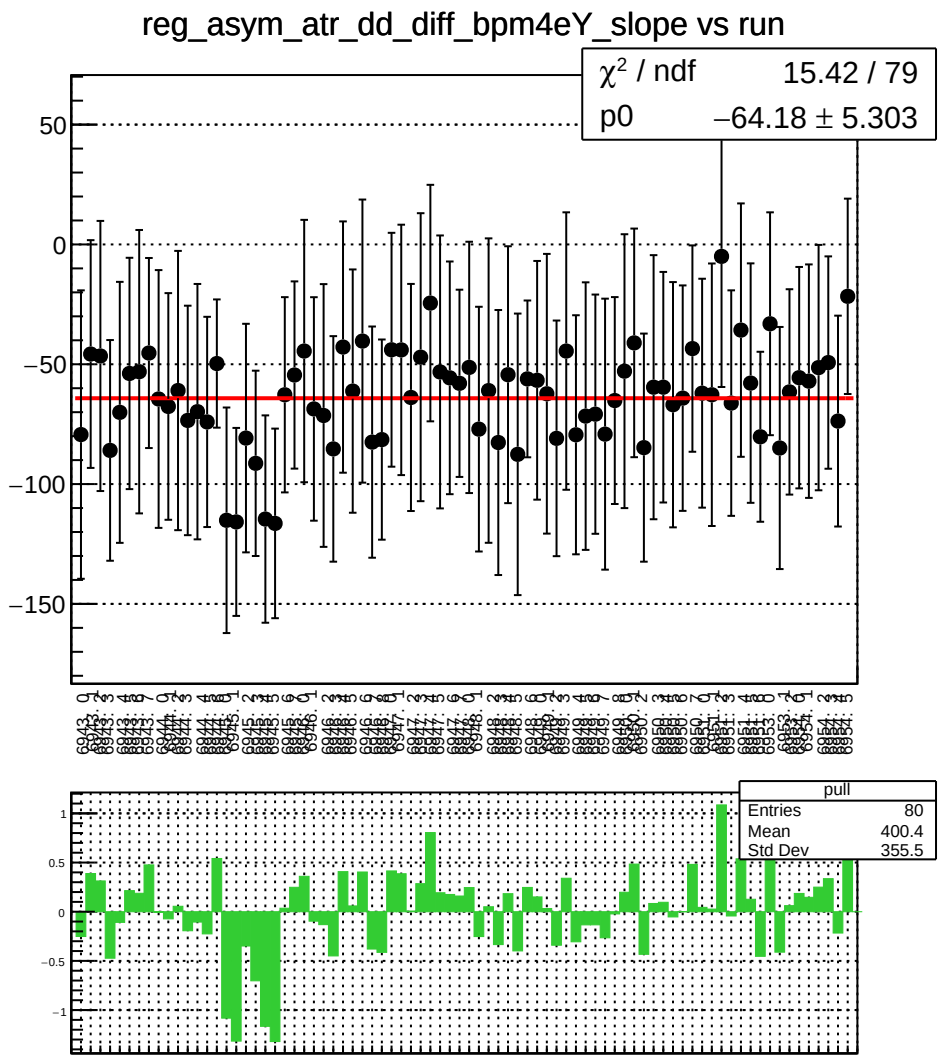

pull1D
Entries 80
Mean 0.04654
Std Dev 0.6305

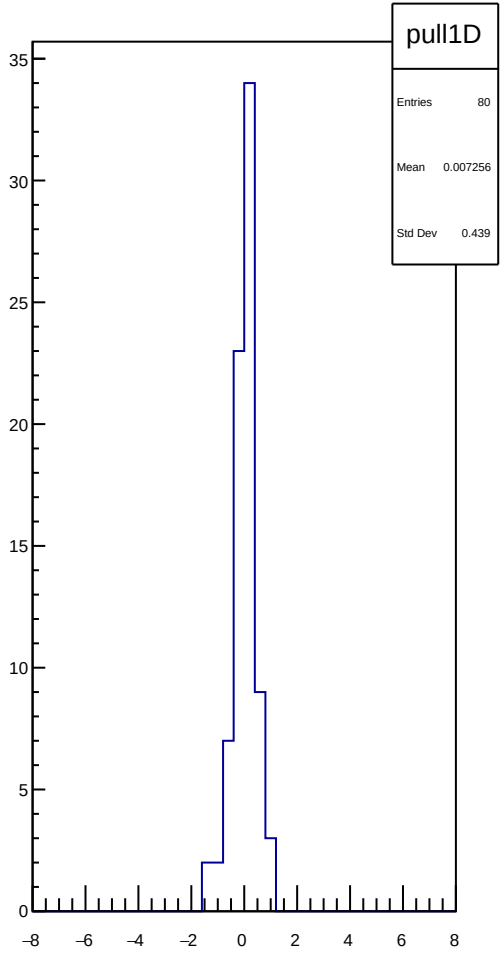

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 14.2 / 79
p0 −1.57 ± 4.608
100
50
0
−50
−100
pull
Entries 80
Mean 491.3
Std Dev 445.9
1
0.5
0
−0.5
−1

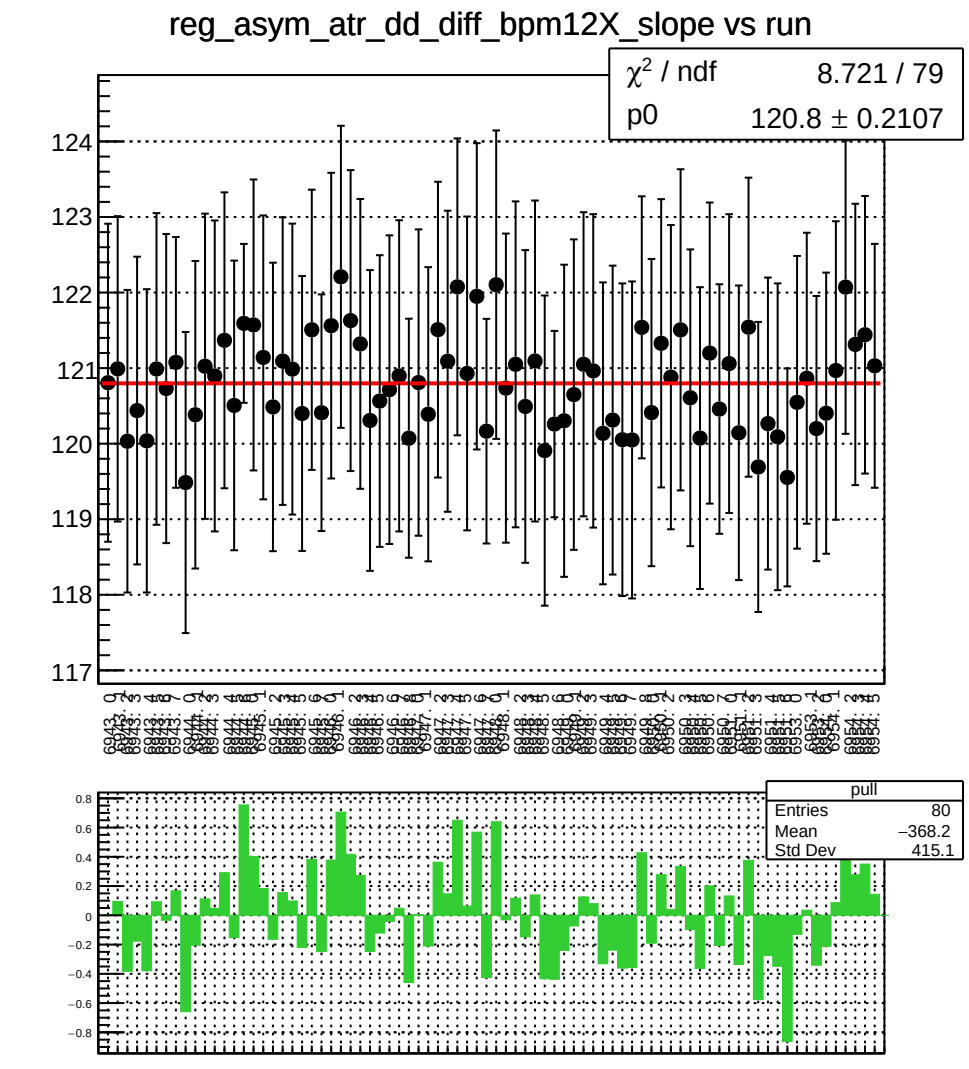

pull1D
Entries 80
Mean −0.00486
Std Dev 0.4212
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

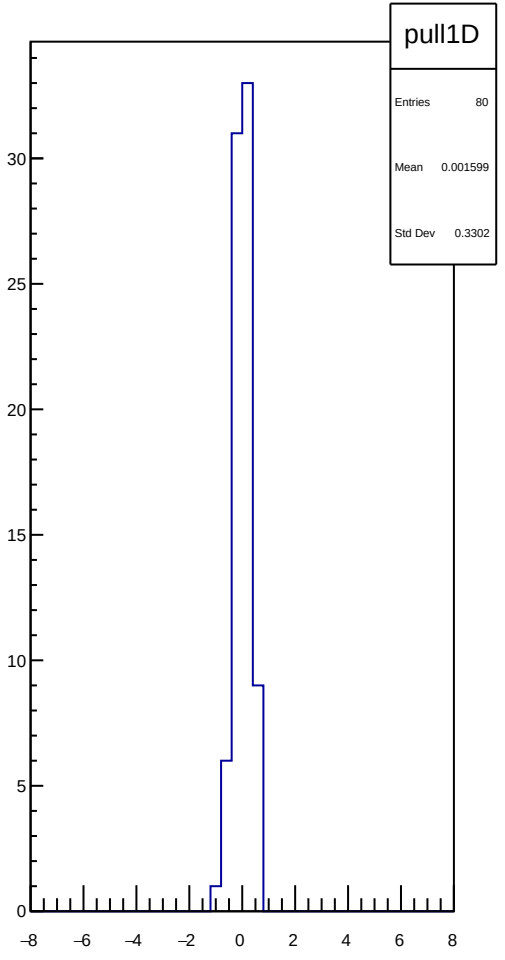

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 32.01 / 79
p0 −282.9 ± 6.08
pull
Entries 80
Mean 60.49
Std Dev 12.64

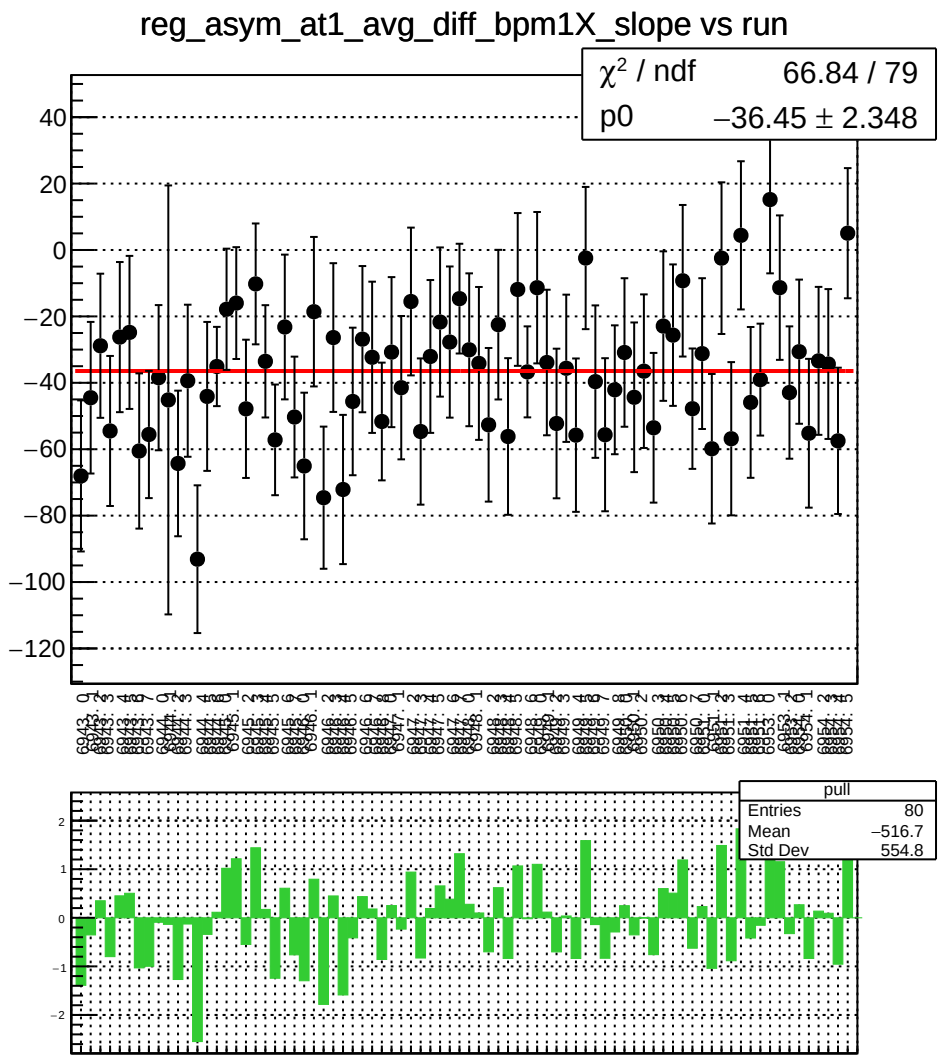

pull1D
Entries 80
Mean −0.04716
Std Dev 0.6308

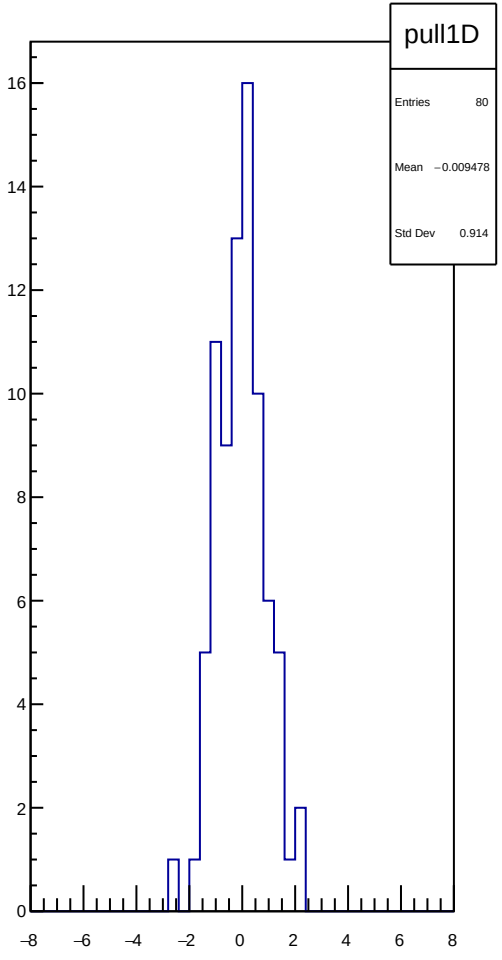

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 15.42 / 79
p0 −64.18 ± 5.303
50
0
−50
−100
−150
pull
Entries 80
Mean 400.4
Std Dev 355.5
1
0.5
0
−0.5
−1

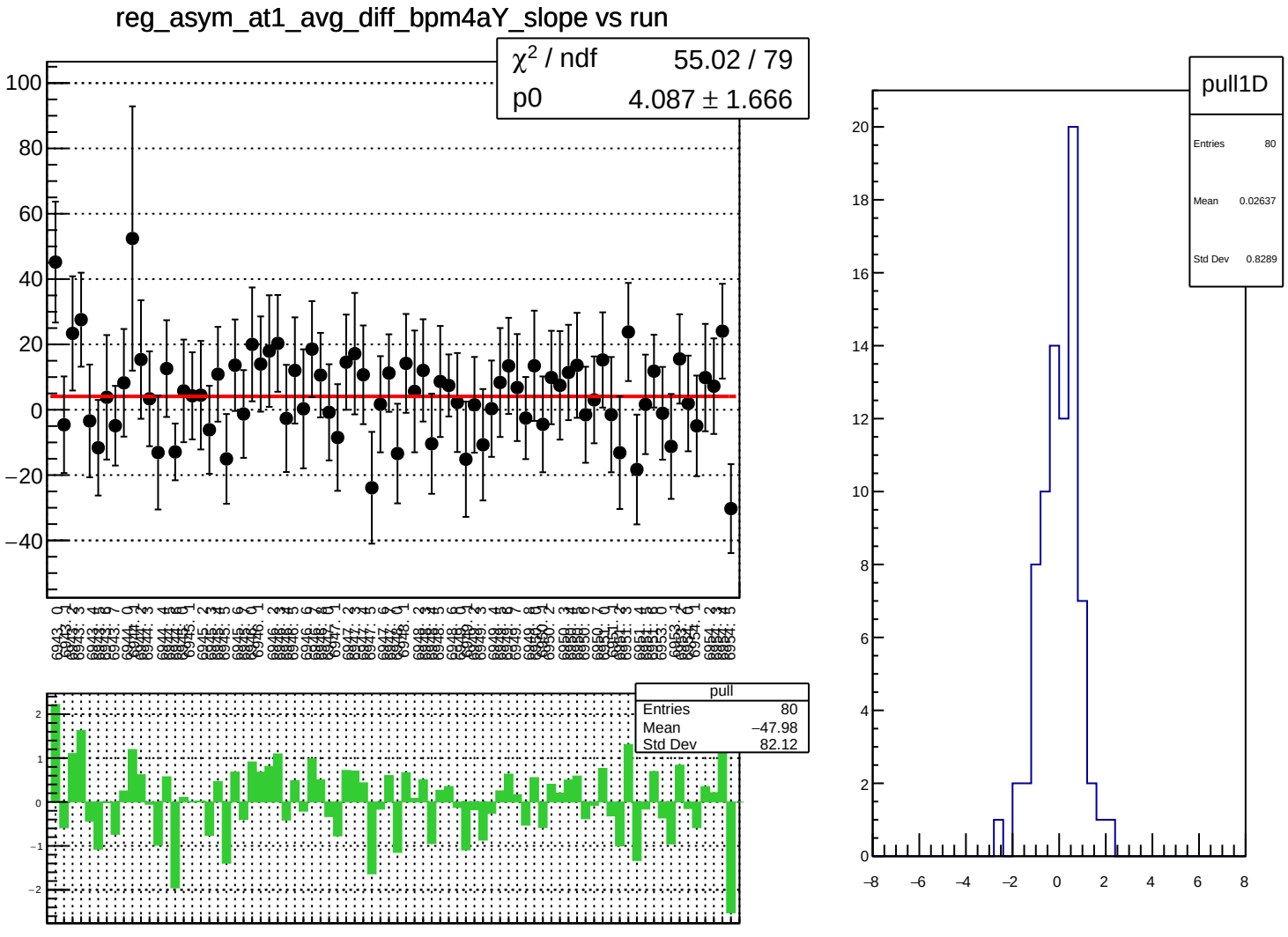

pull1D
Entries 80
Mean 0.007256
Std Dev 0.439
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

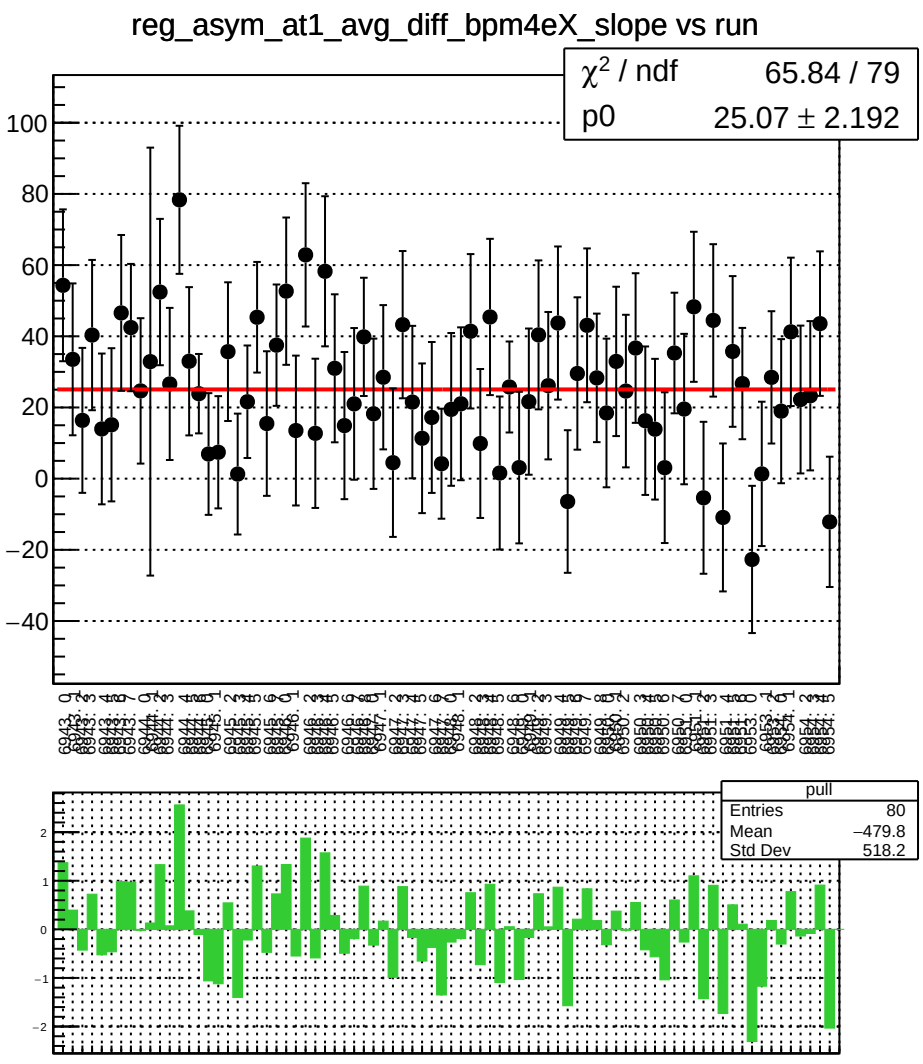

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 8.721 / 79
p0 120.8 ± 0.2107
pull
Entries 80
Mean −368.2
Std Dev 415.1

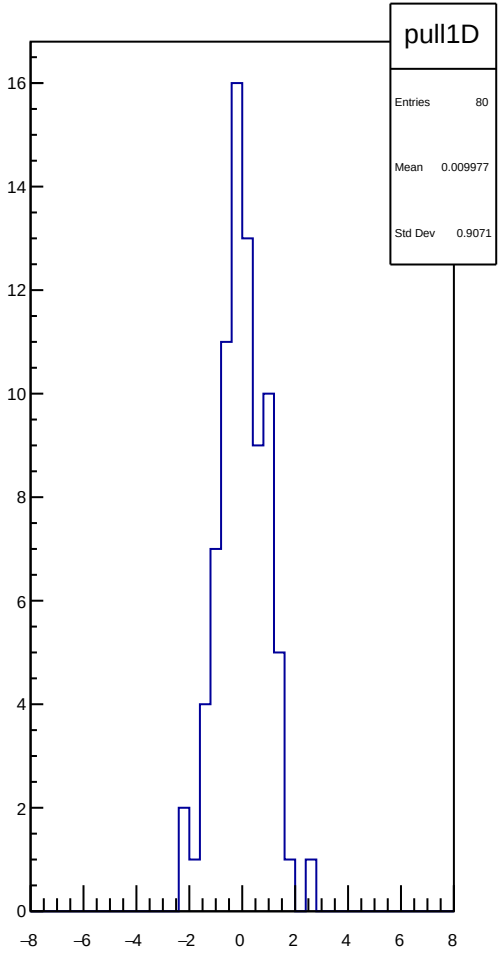

pull1D
Entries 80
Mean 0.001599
Std Dev 0.3302

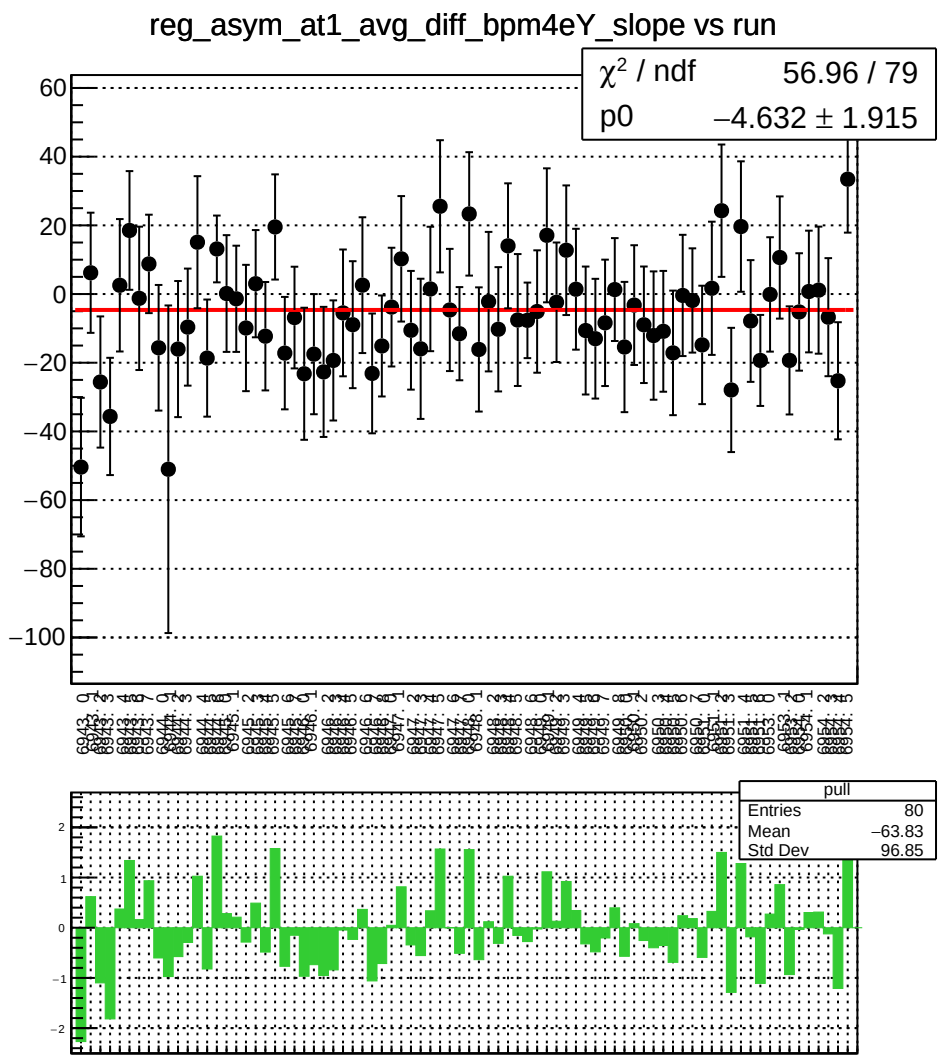

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 66.84 / 79
p0 −36.45 ± 2.348
pull
Entries 80
Mean −516.7
Std Dev 554.8

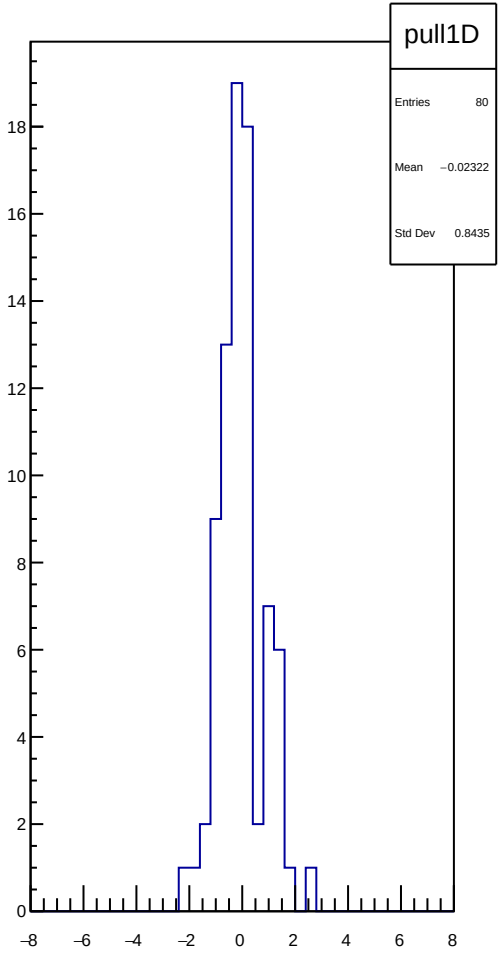

pull1D
Entries 80
Mean −0.009478
Std Dev 0.914

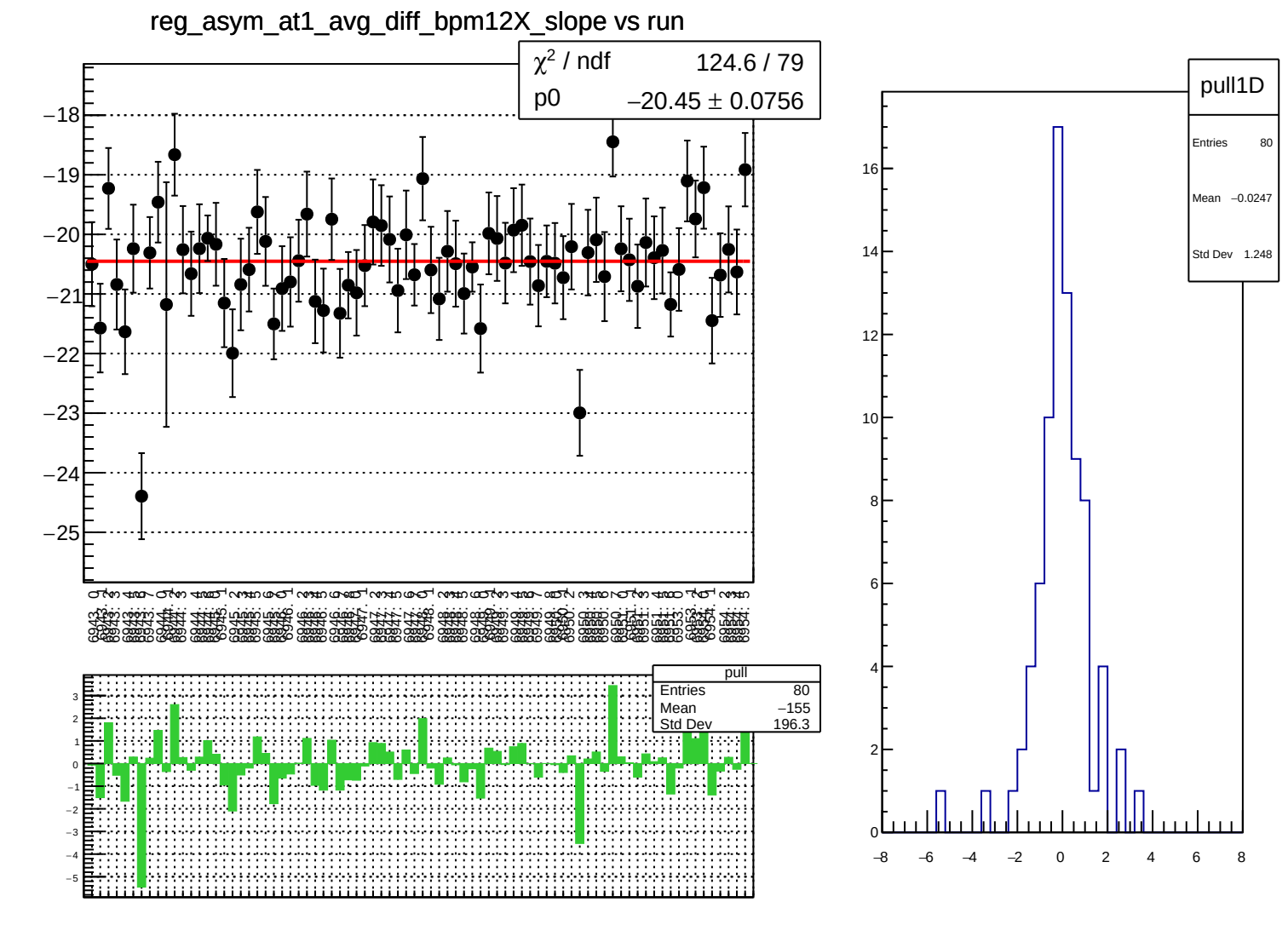

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 55.02 / 79
p0 4.087 ± 1.666
pull
Entries 80
Mean −47.98
Std Dev 82.12
pull1D
Entries 80
Mean 0.02637
Std Dev 0.8289

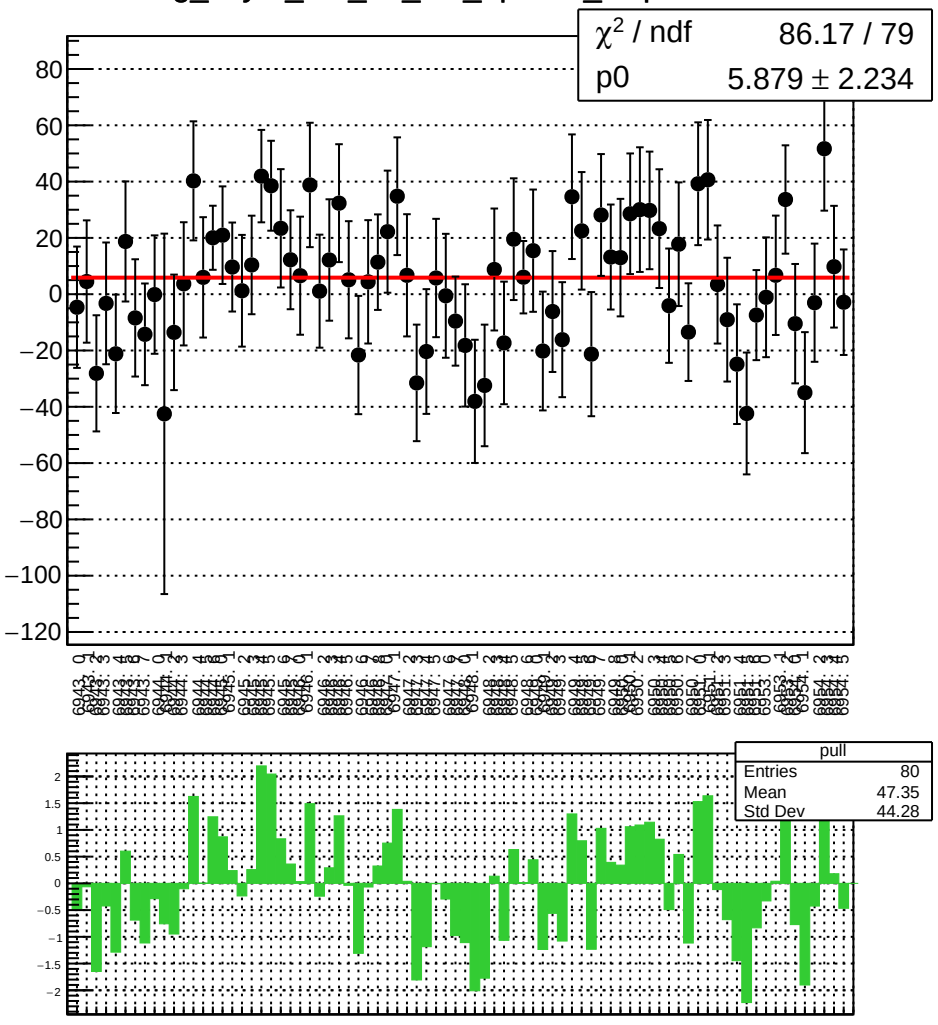

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 65.84 / 79
p0 25.07 ± 2.192
pull
Entries 80
Mean −479.8
Std Dev 518.2

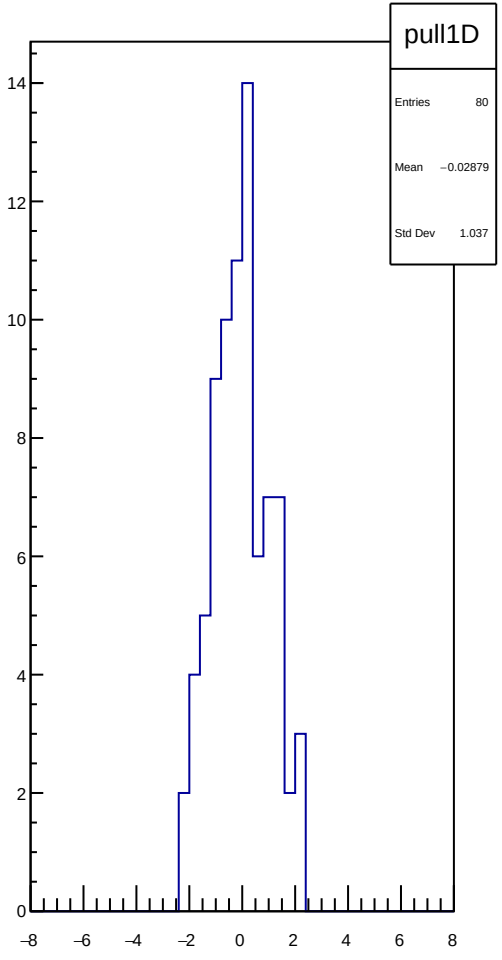

pull1D
Entries 80
Mean 0.009977
Std Dev 0.9071

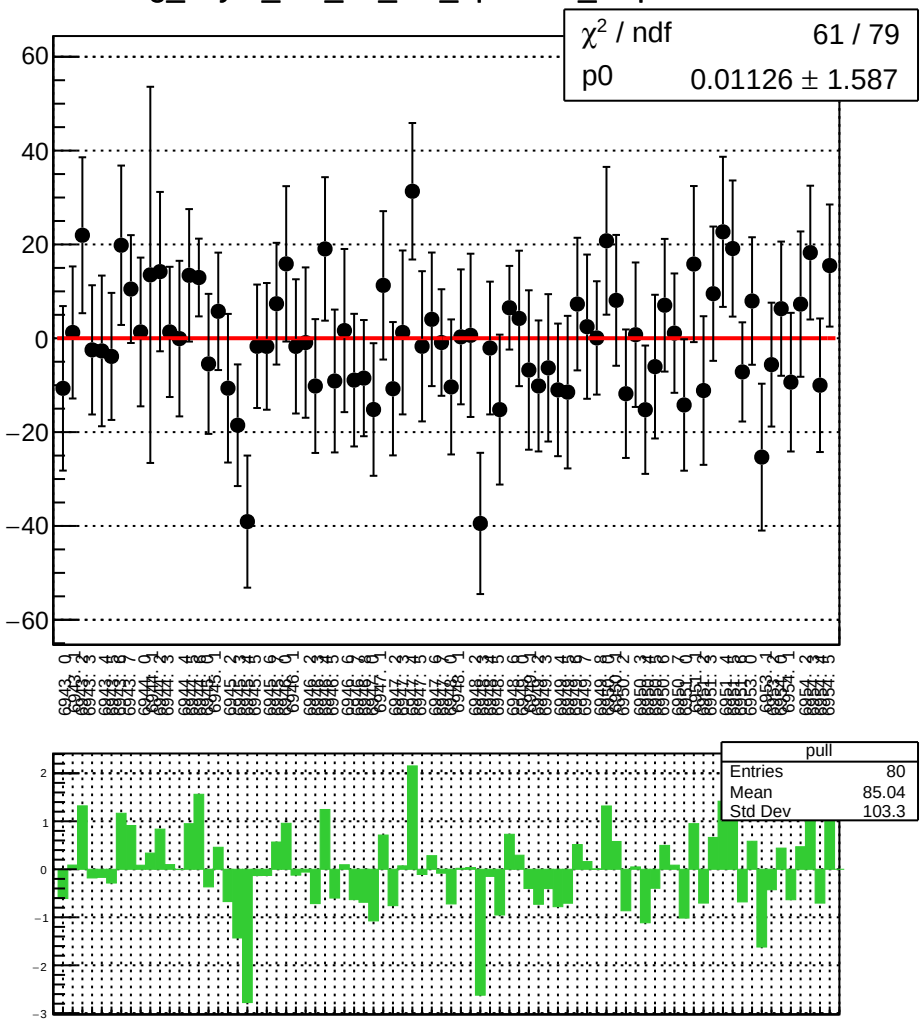

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 56.96 / 79
p0 −4.632 ± 1.915
pull
Entries 80
Mean −63.83
Std Dev 96.85

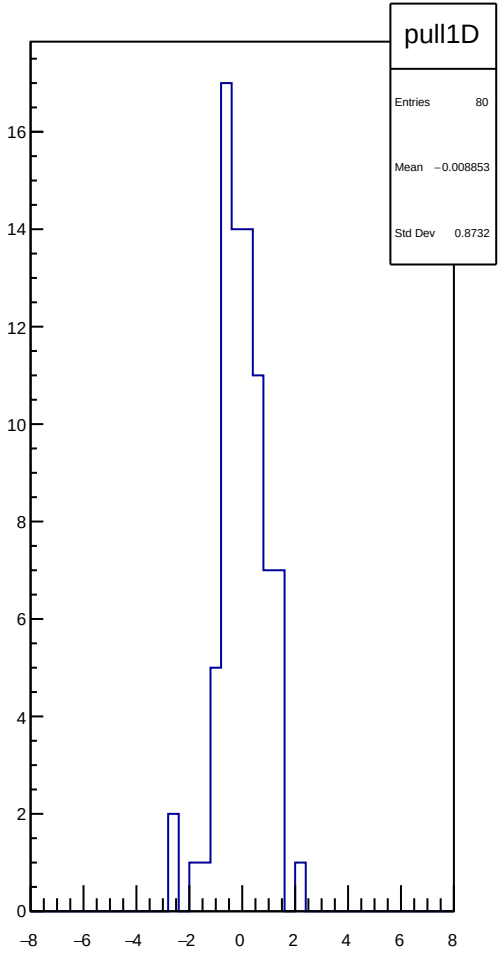

pull1D
Entries 80
Mean −0.02322
Std Dev 0.8435

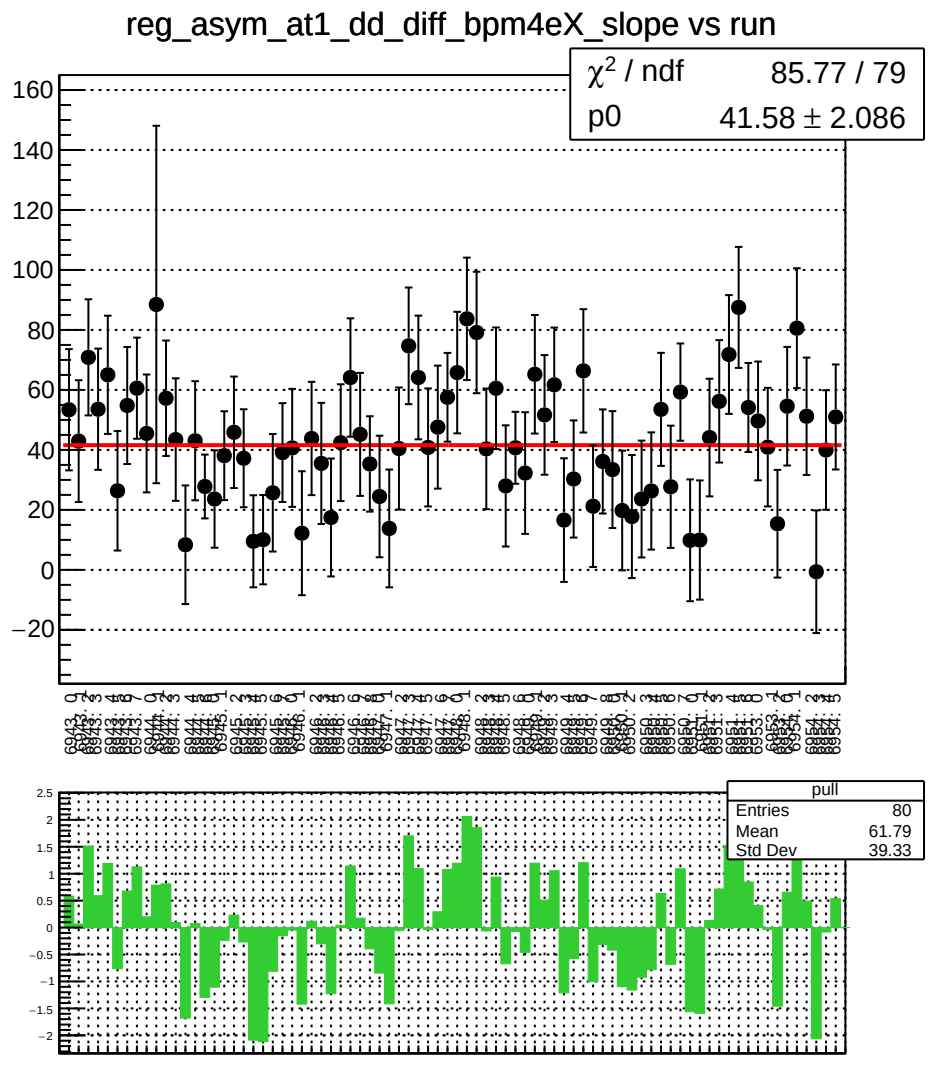

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 124.6 / 79
p0 −20.45 ± 0.0756
pull
Entries 80
Mean −155
Std Dev 196.3
pull1D
Entries 80
Mean −0.0247
Std Dev 1.248

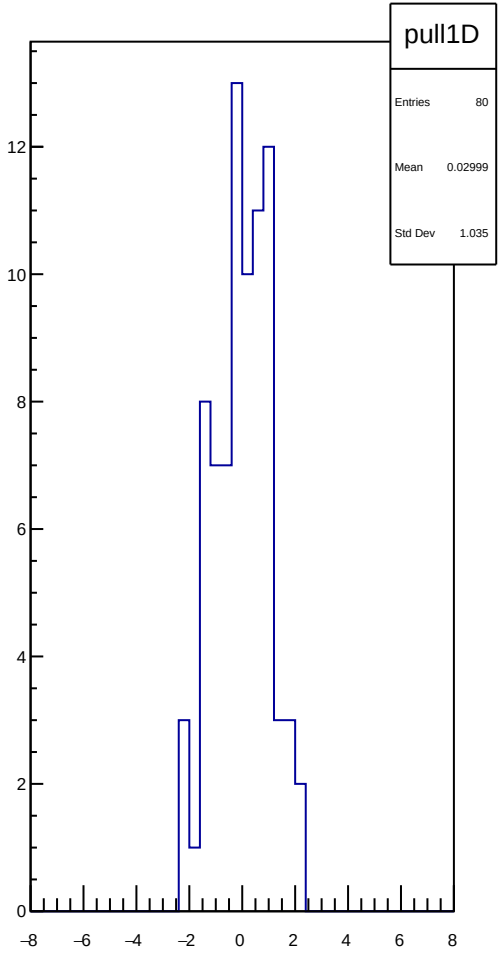

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ^2 / ndf 86.17 / 79
p0 5.879 ± 2.234
pull
Entries 80
Mean 47.35
Std Dev 44.28

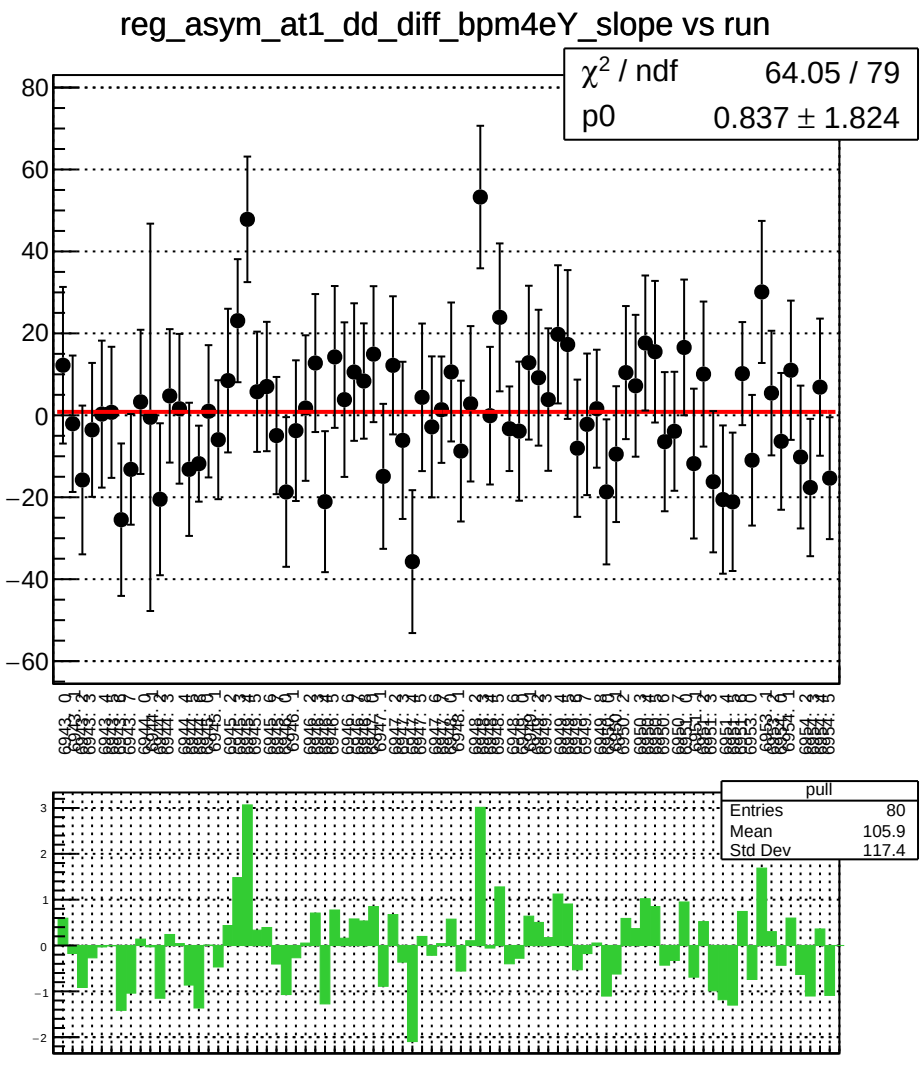

pull1D
Entries 80
Mean −0.02879
Std Dev 1.037

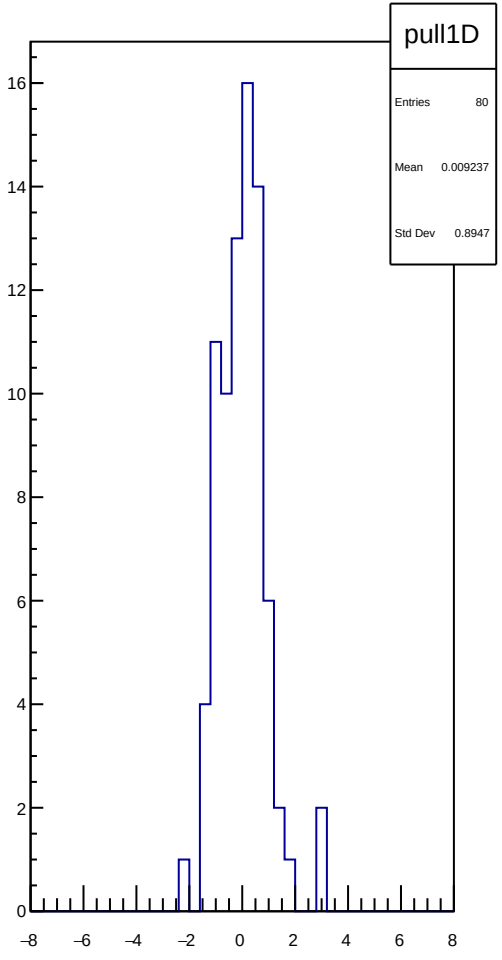

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 61 / 79
p0 0.01126 ± 1.587
pull
Entries 80
Mean 85.04
Std Dev 103.3

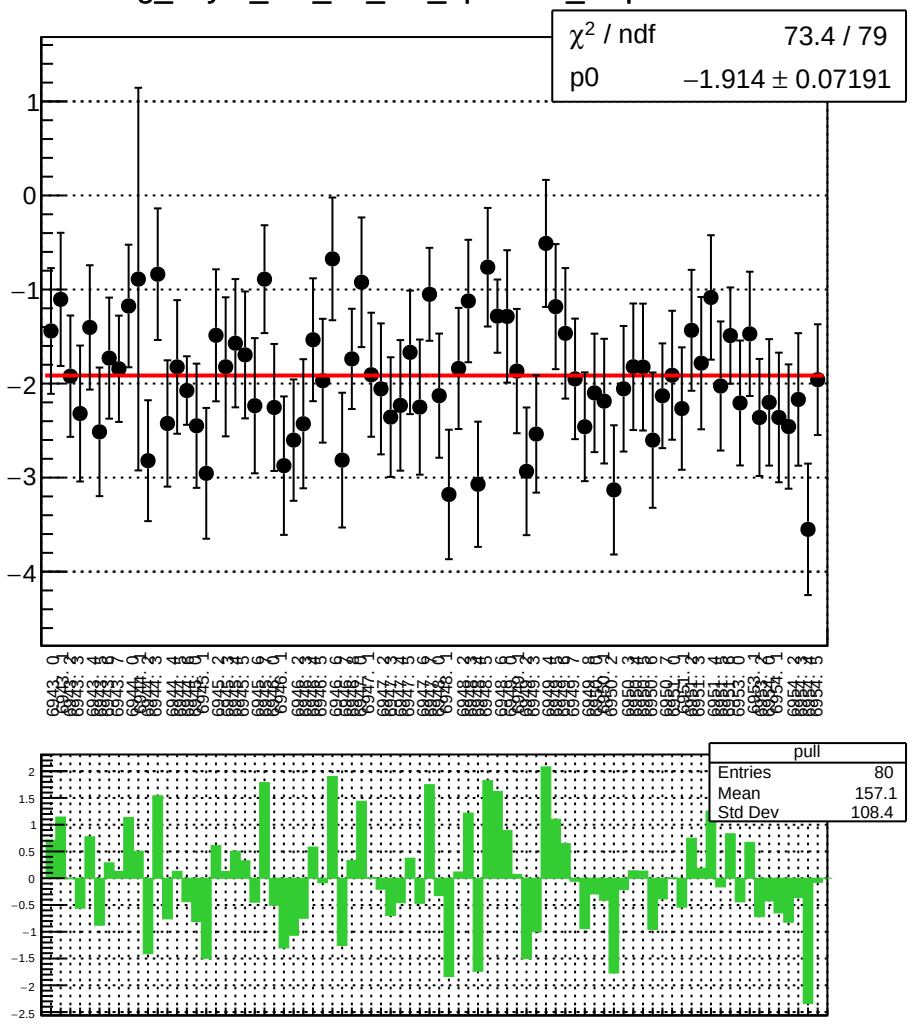

pull1D
Entries 80
Mean −0.008853
Std Dev 0.8732

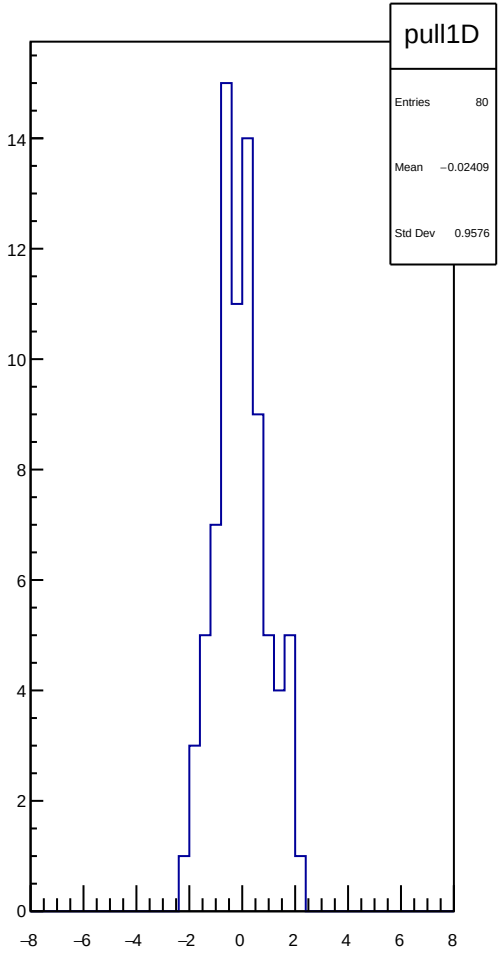

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 85.77 / 79
p0 41.58 ± 2.086
pull
Entries 80
Mean 61.79
Std Dev 39.33

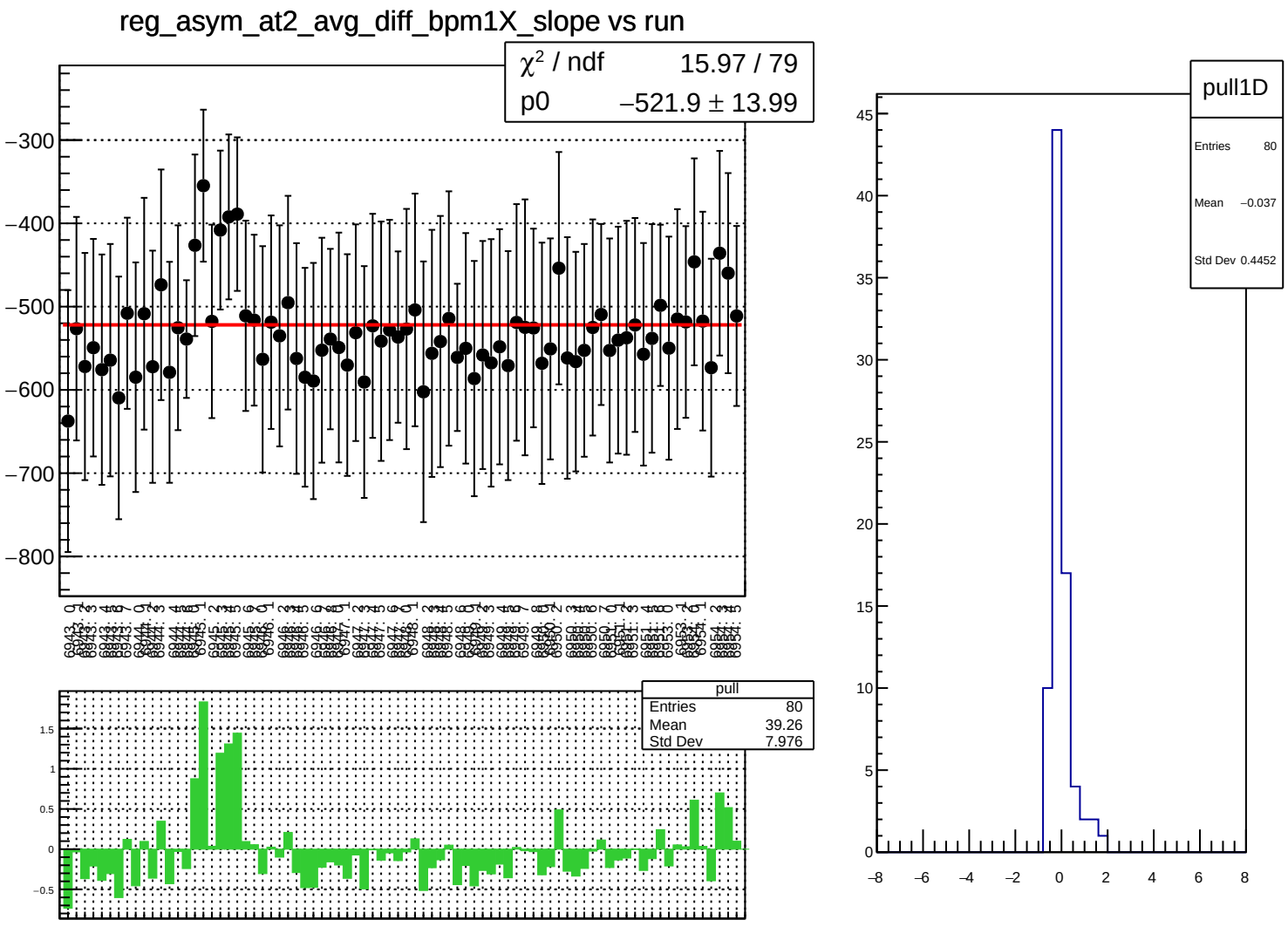

pull1D
Entries 80
Mean 0.02999
Std Dev 1.035

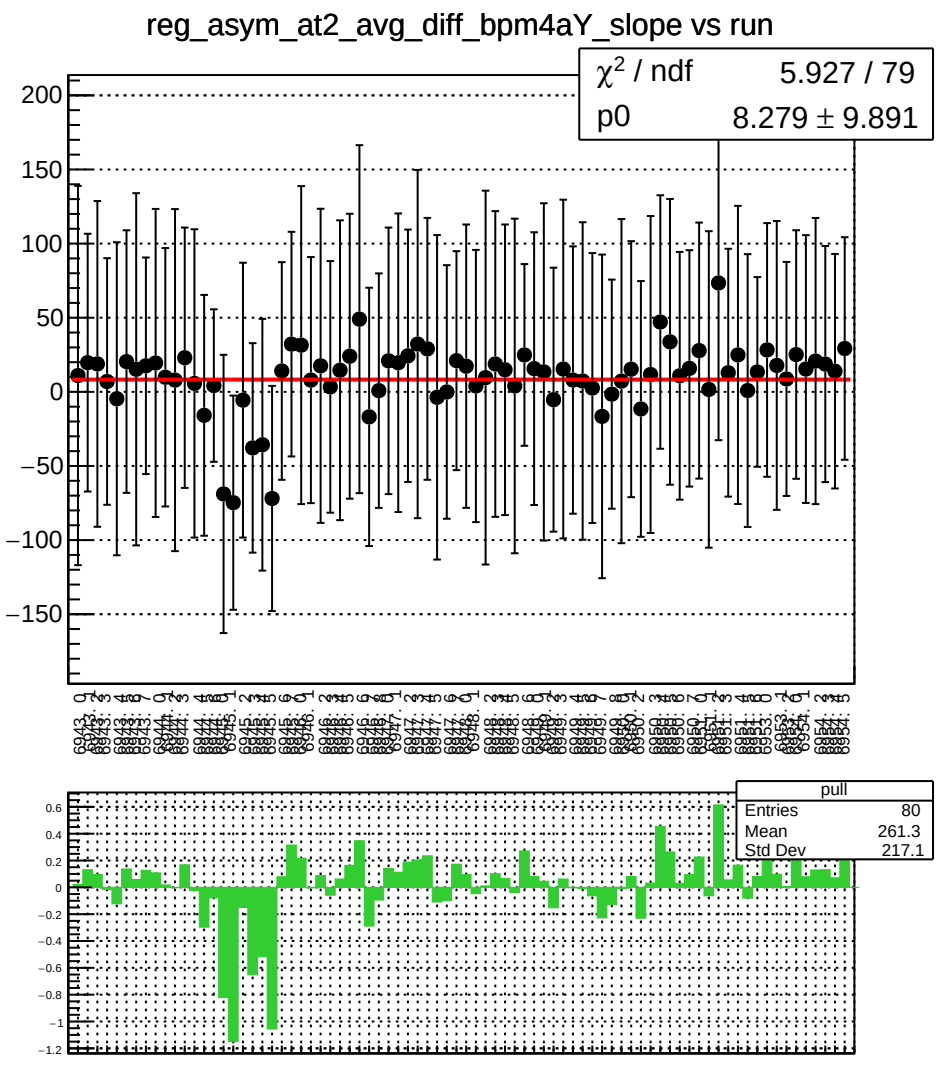

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 64.05 / 79
p0 0.837 ± 1.824
pull
Entries 80
Mean 105.9
Std Dev 117.4

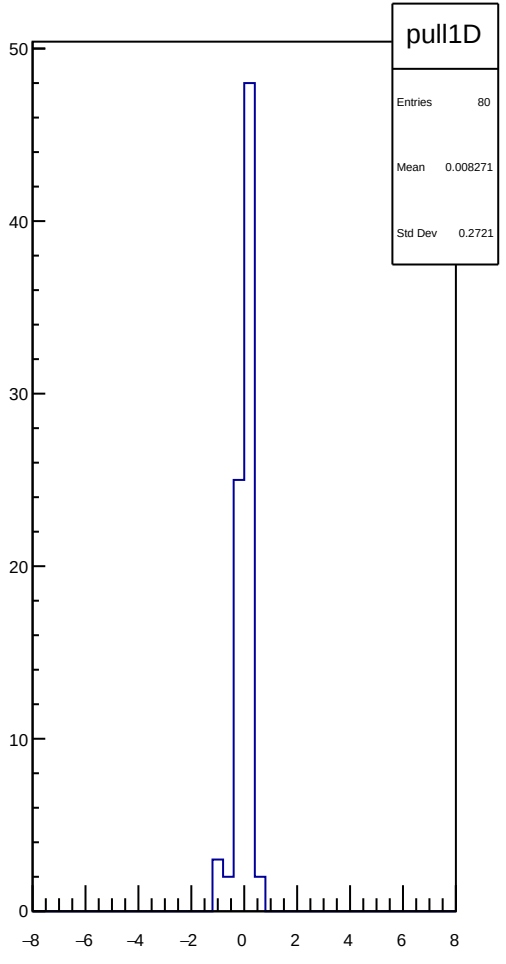

pull1D
Entries 80
Mean 0.009237
Std Dev 0.8947

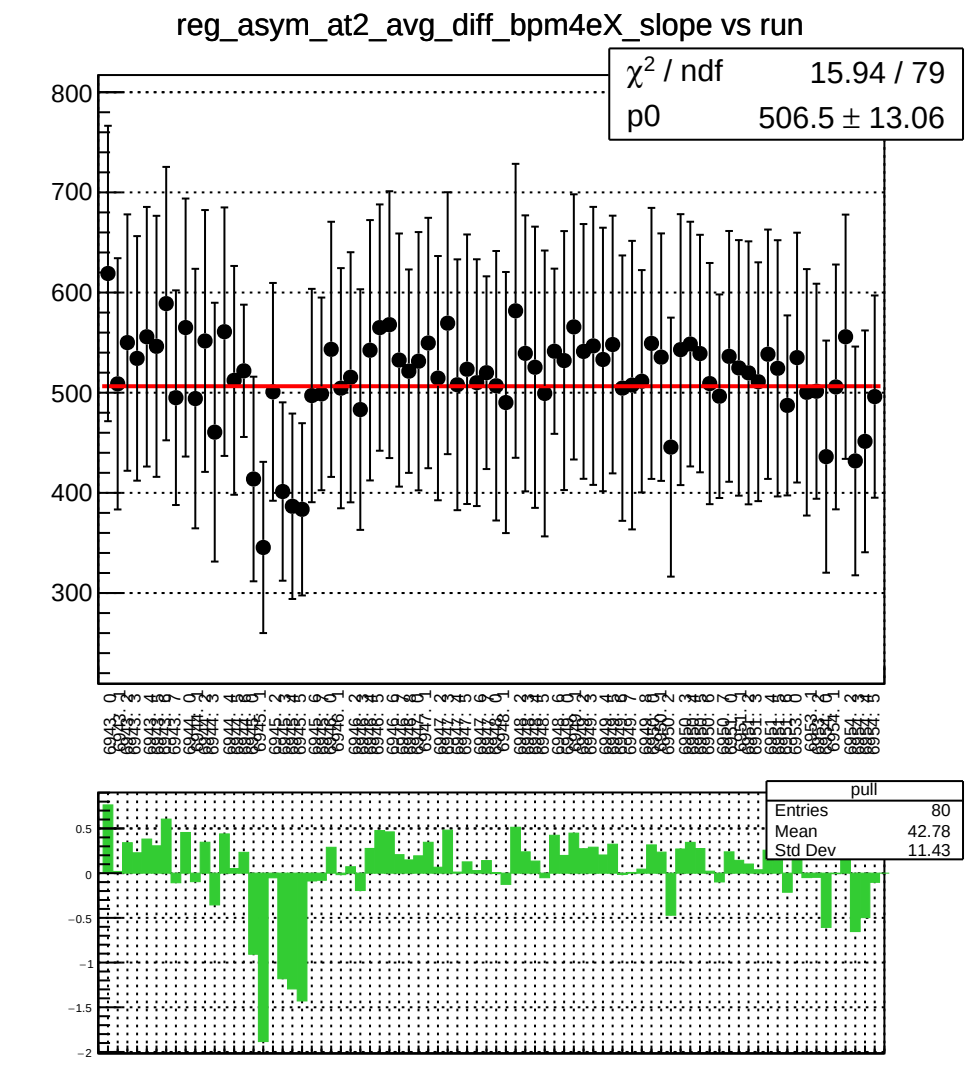

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 73.4 / 79
p0 −1.914 ± 0.07191
pull
Entries 80
Mean 157.1
Std Dev 108.4

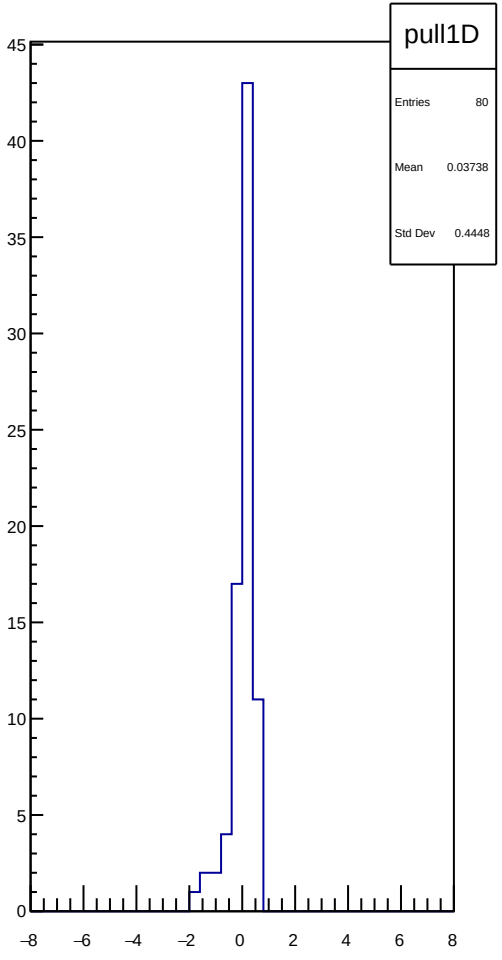

pull1D
Entries 80
Mean −0.02409
Std Dev 0.9576

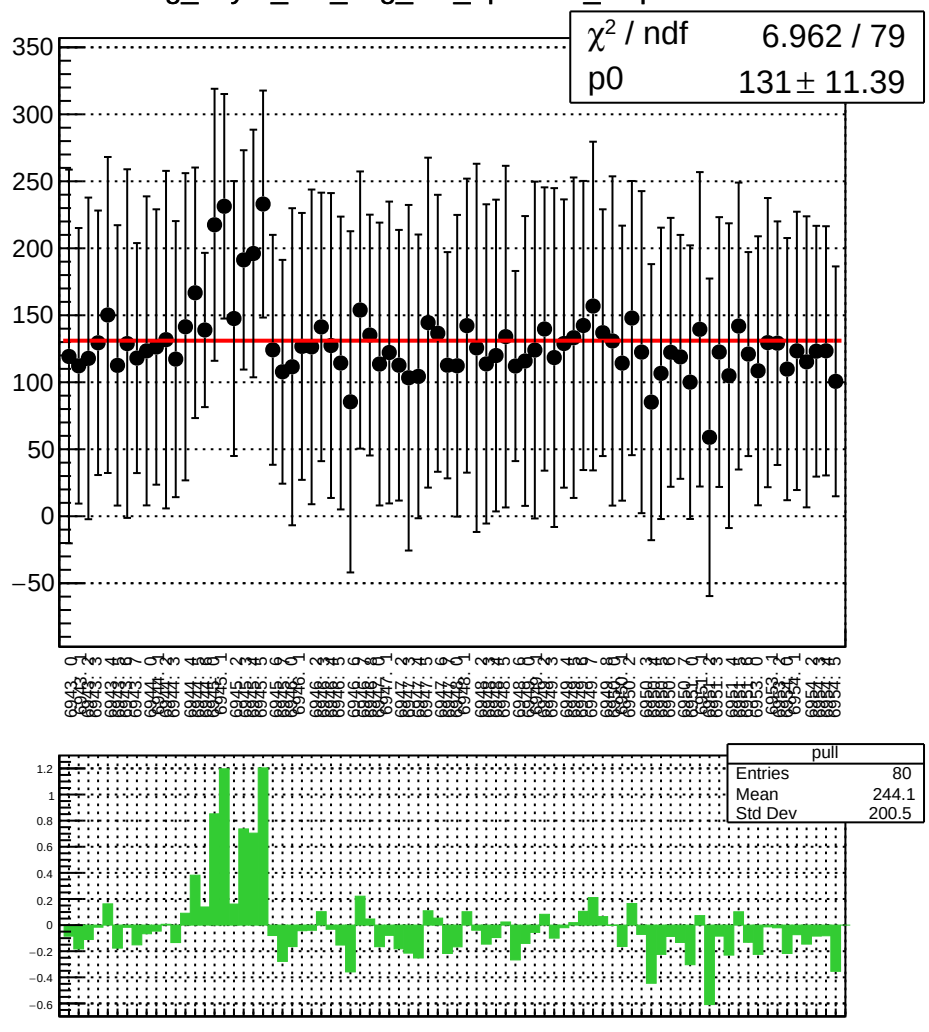

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 15.97 / 79
p0 −521.9 ± 13.99
−300
−400
−500
−600
−700
−800
pull
Entries 80
Mean 39.26
Std Dev 7.976
1.5
1
0.5
0
−0.5
pull1D
Entries 80
Mean −0.037
Std Dev 0.4452
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

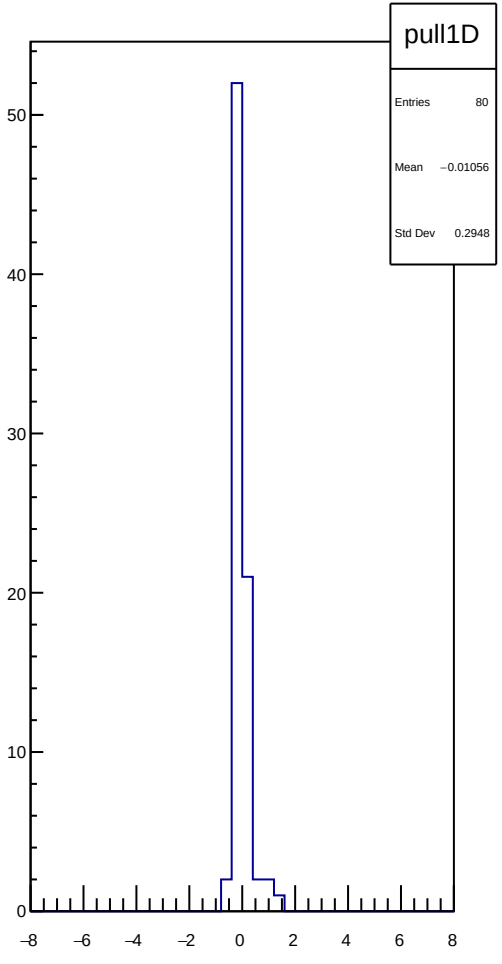

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.927 / 79
p0 8.279 ± 9.891
pull
Entries 80
Mean 261.3
Std Dev 217.1

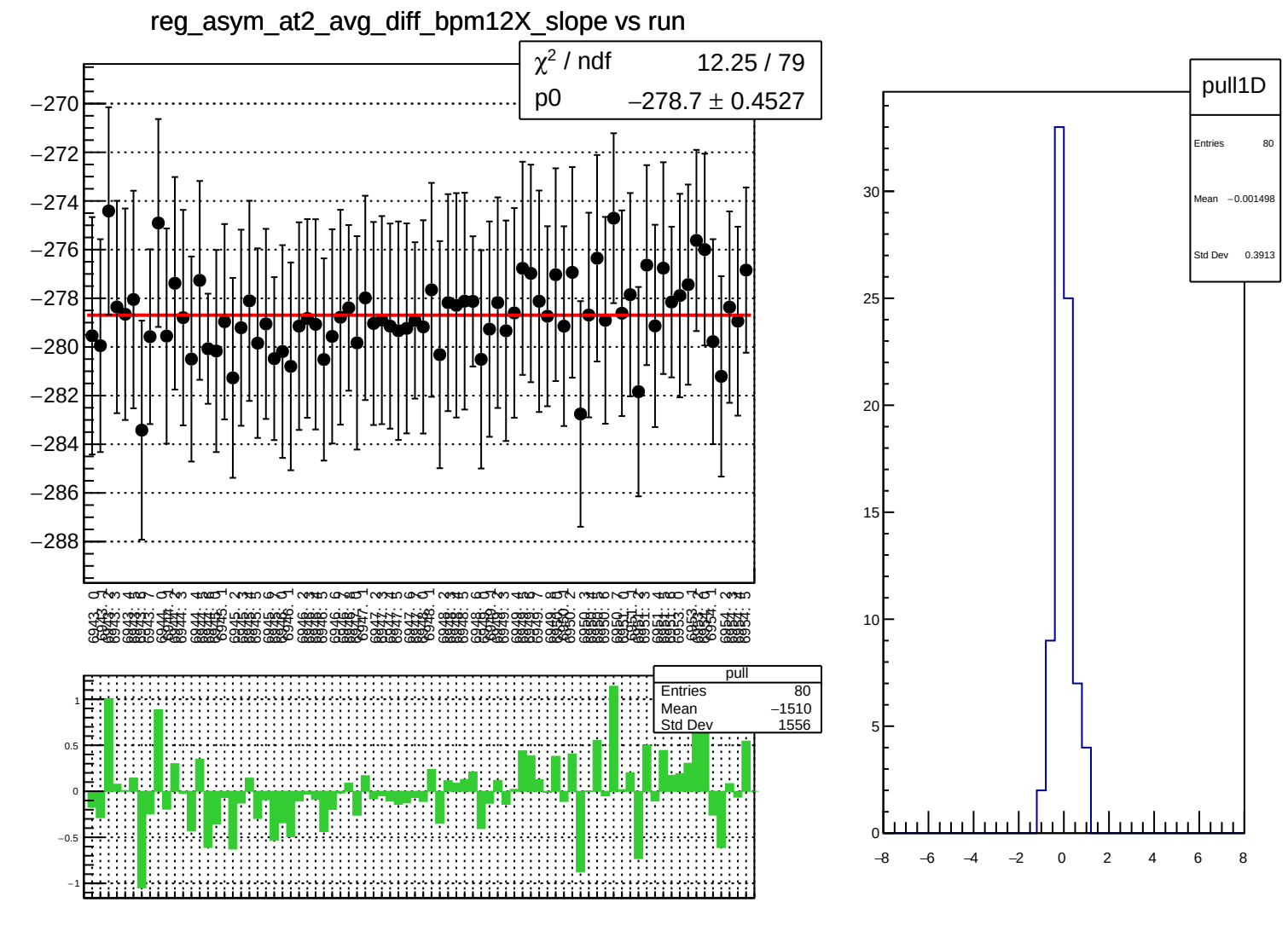

pull1D
Entries 80
Mean 0.008271
Std Dev 0.2721

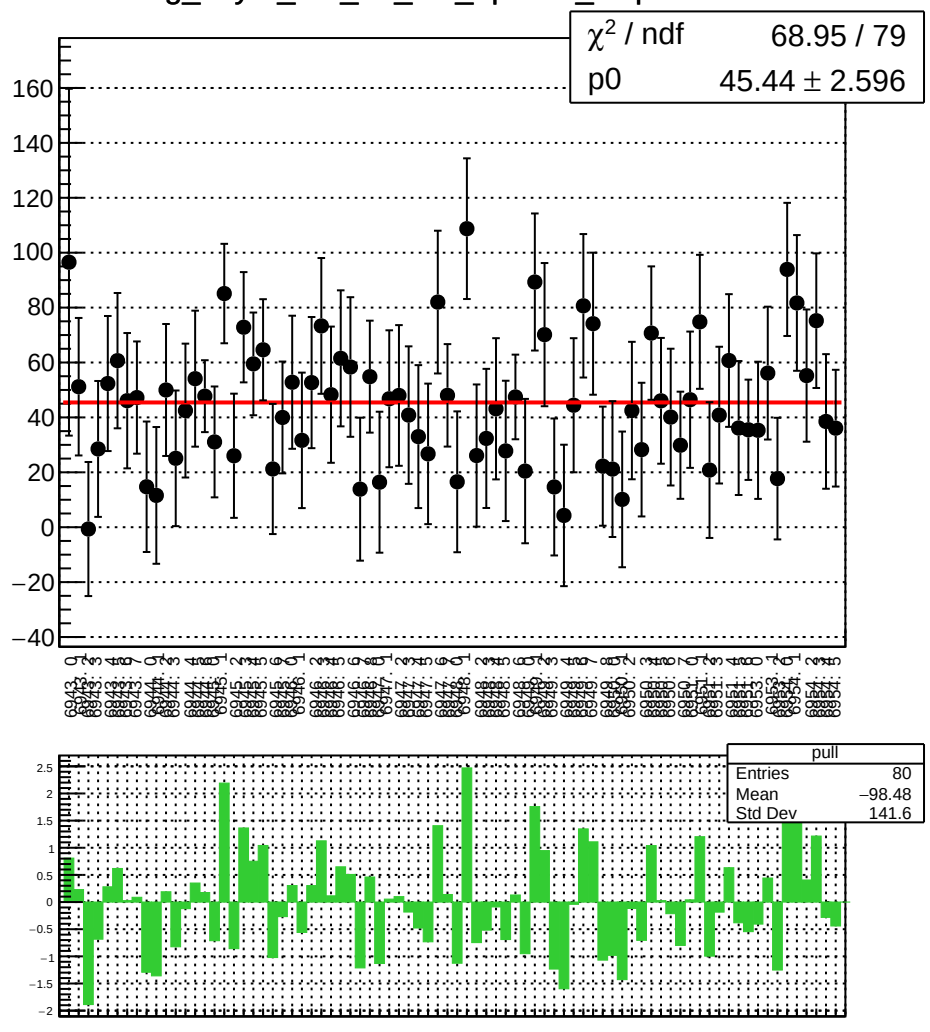

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 15.94 / 79
p0 506.5 ± 13.06
800
700
600
500
400
300
pull
Entries 80
Mean 42.78
Std Dev 11.43
0.5
0
−0.5
−1
−1.5
−2

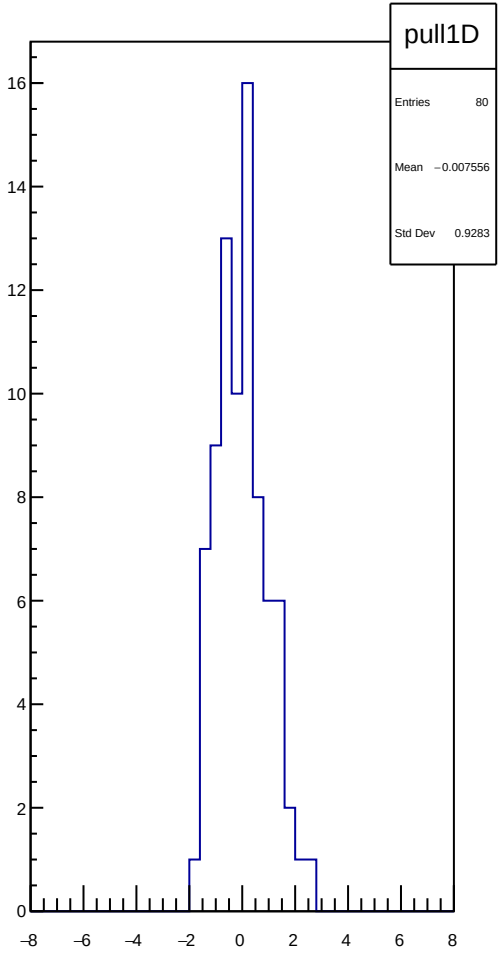

pull1D
Entries 80
Mean 0.03738
Std Dev 0.4448
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

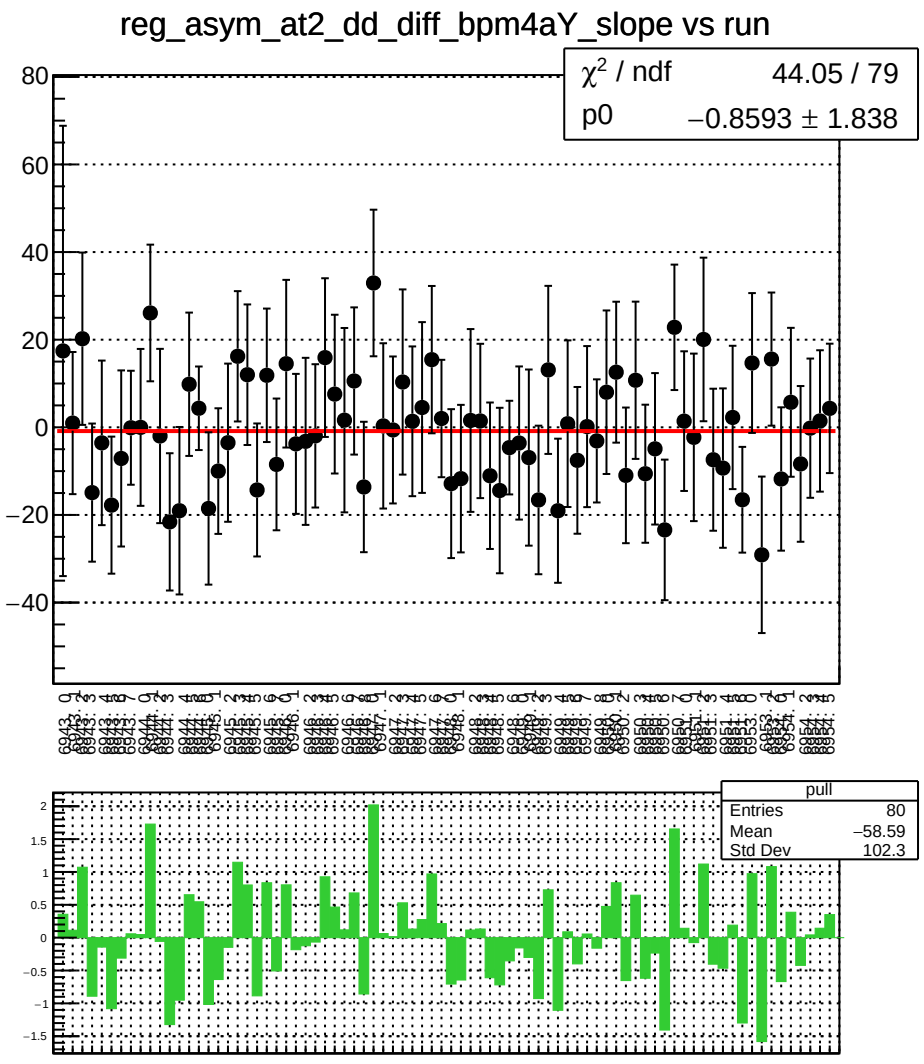

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.962 / 79
p0 131 ± 11.39
pull
Entries 80
Mean 244.1
Std Dev 200.5

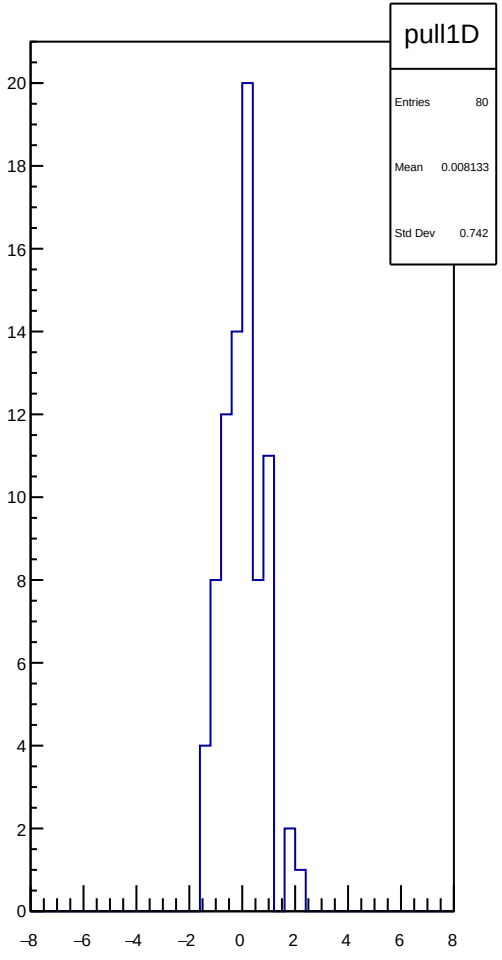

pull1D
Entries 80
Mean −0.01056
Std Dev 0.2948

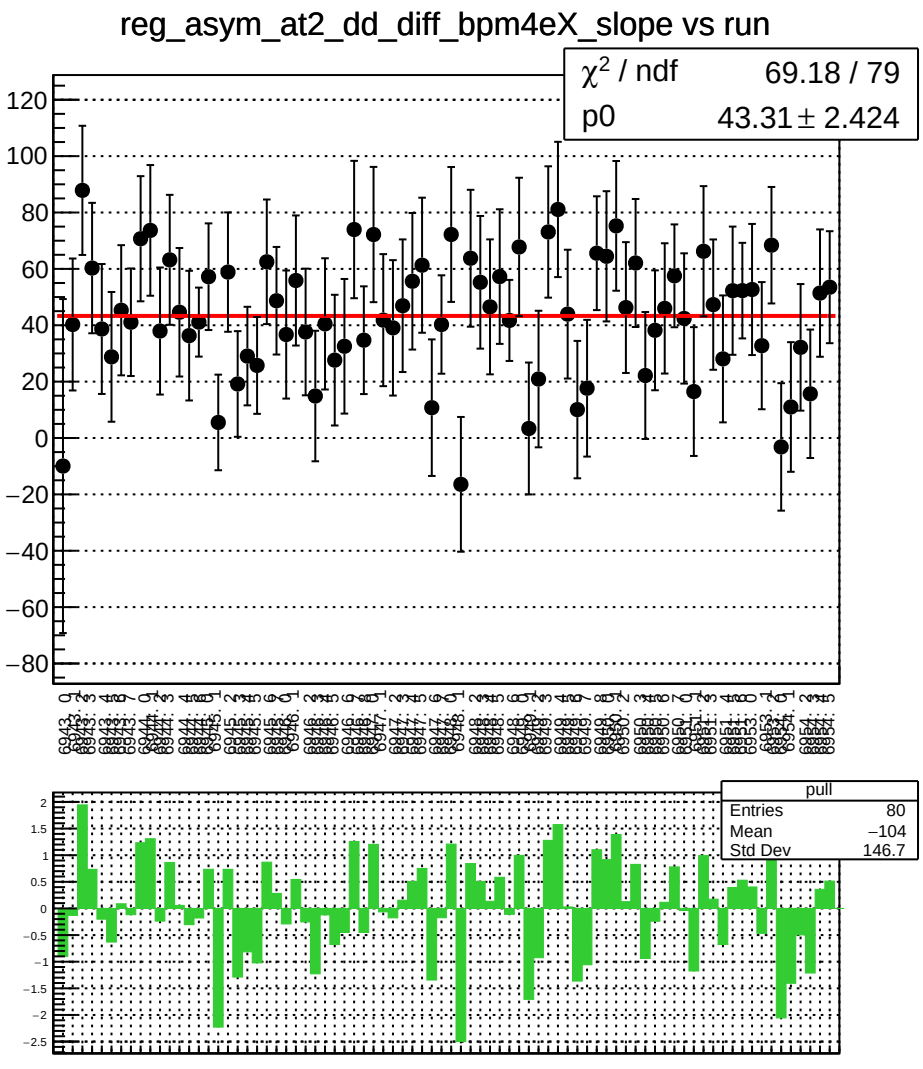

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 12.25 / 79
p0 −278.7 ± 0.4527
pull
Entries 80
Mean −1510
Std Dev 1556
pull1D
Entries 80
Mean −0.001498
Std Dev 0.3913

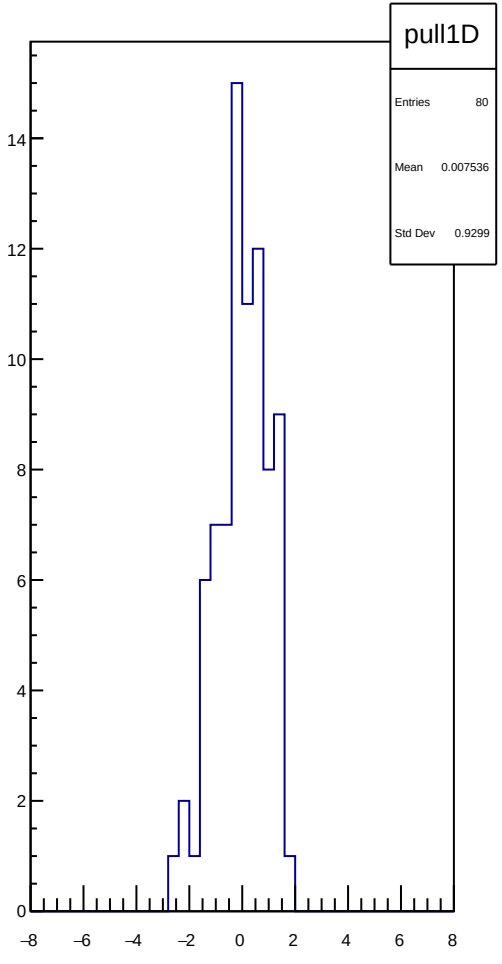

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 68.95 / 79
p0 45.44 ± 2.596
pull
Entries 80
Mean −98.48
Std Dev 141.6

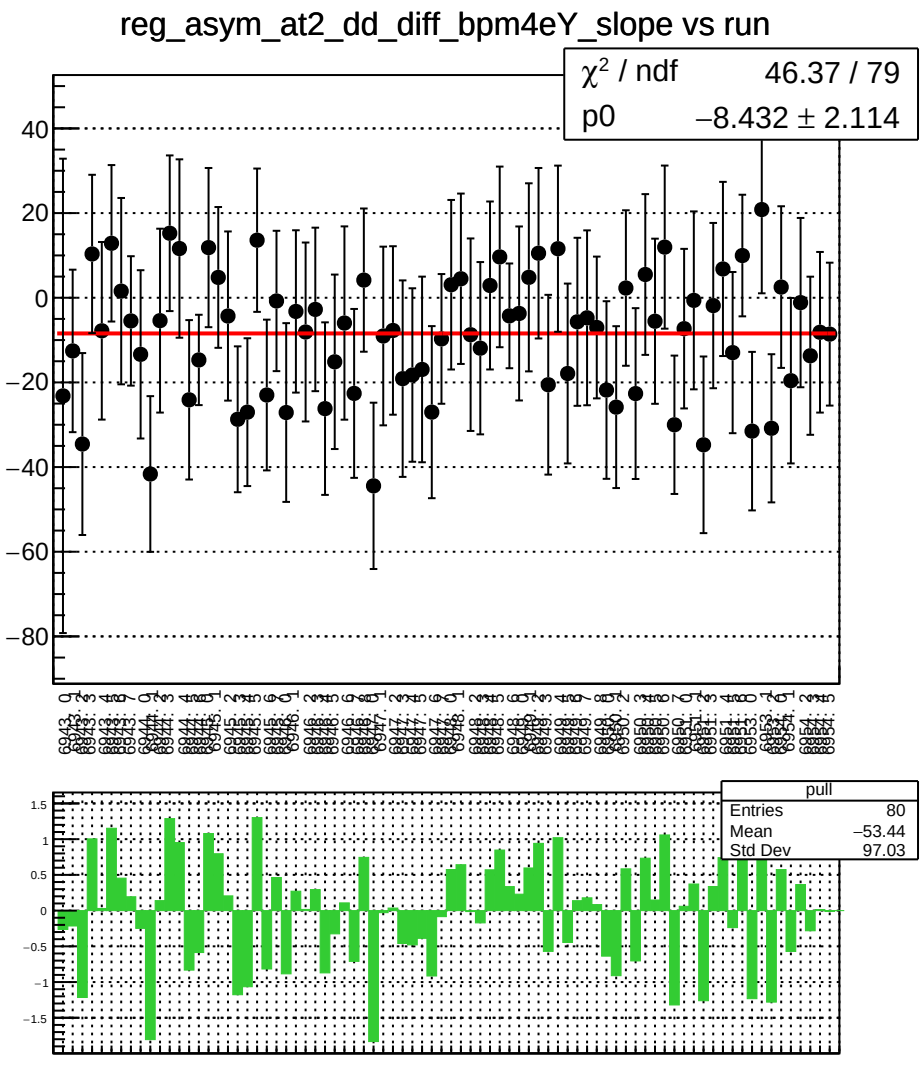

pull1D
Entries 80
Mean −0.007556
Std Dev 0.9283

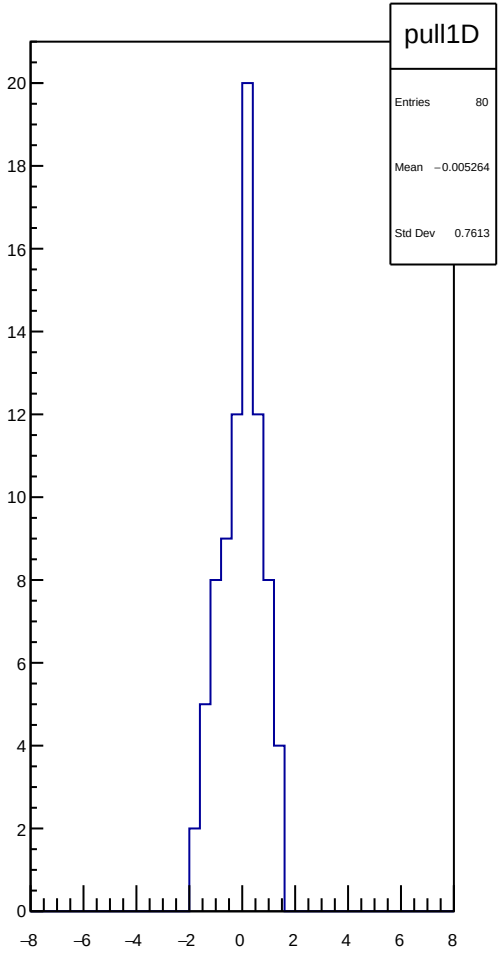

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 44.05 / 79
p0 −0.8593 ± 1.838
pull
Entries 80
Mean −58.59
Std Dev 102.3

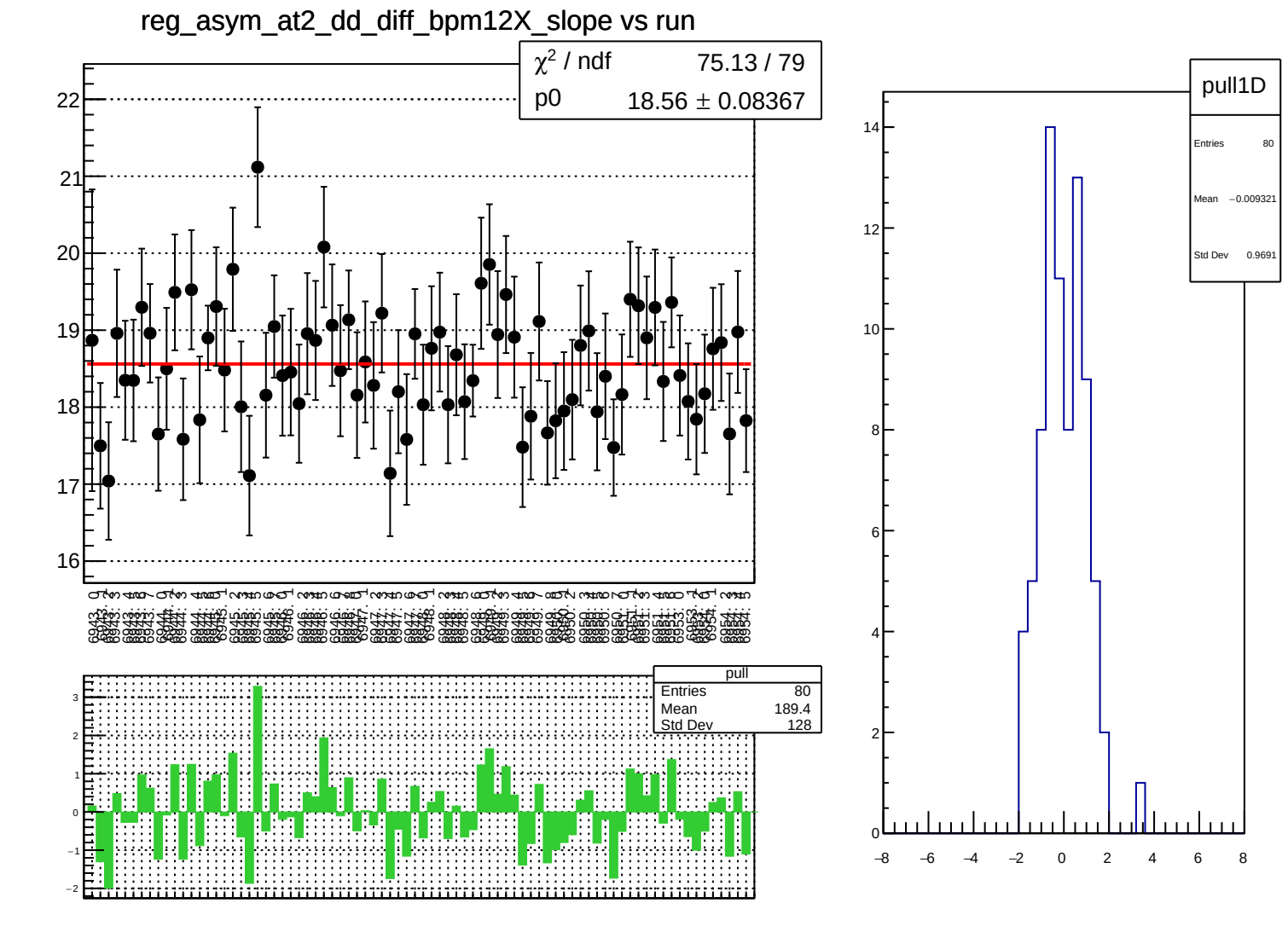

pull1D
Entries 80
Mean 0.008133
Std Dev 0.742

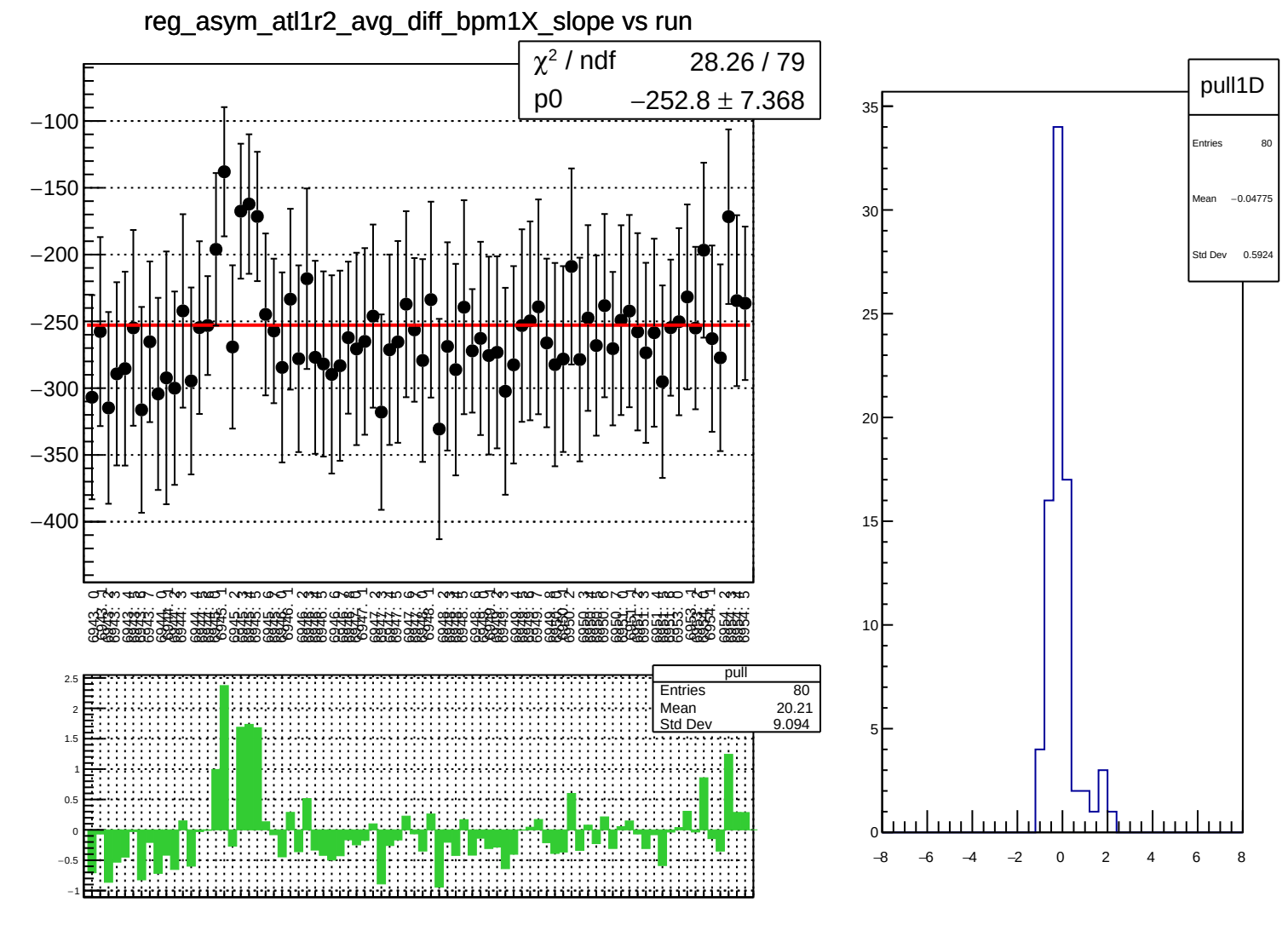

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 69.18 / 79
p0 43.31 ± 2.424
pull
Entries 80
Mean −104
Std Dev 146.7

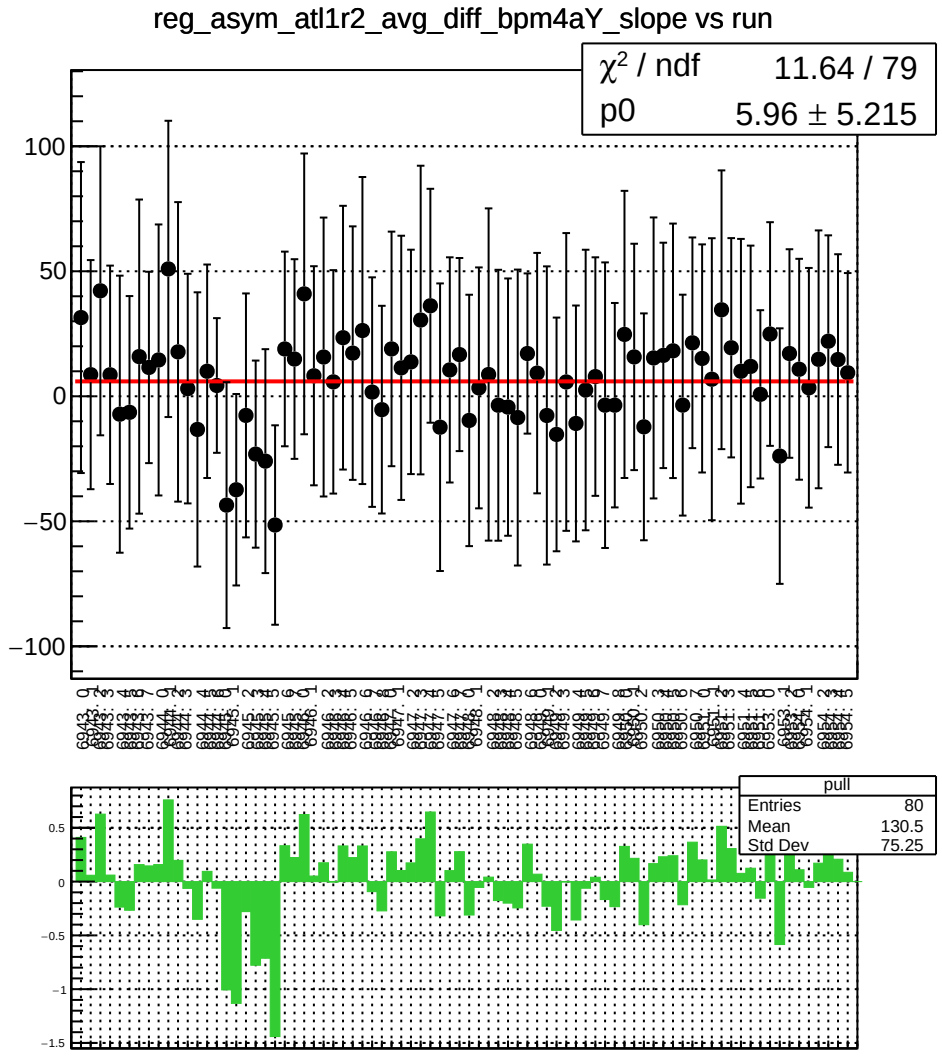

pull1D
Entries 80
Mean 0.007536
Std Dev 0.9299

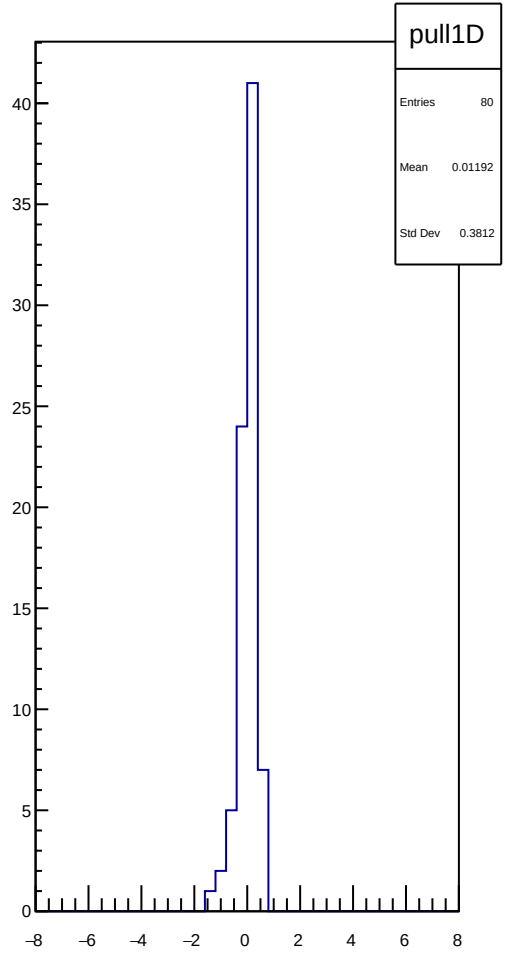

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 46.37 / 79
p0 −8.432 ± 2.114
pull
Entries 80
Mean −53.44
Std Dev 97.03

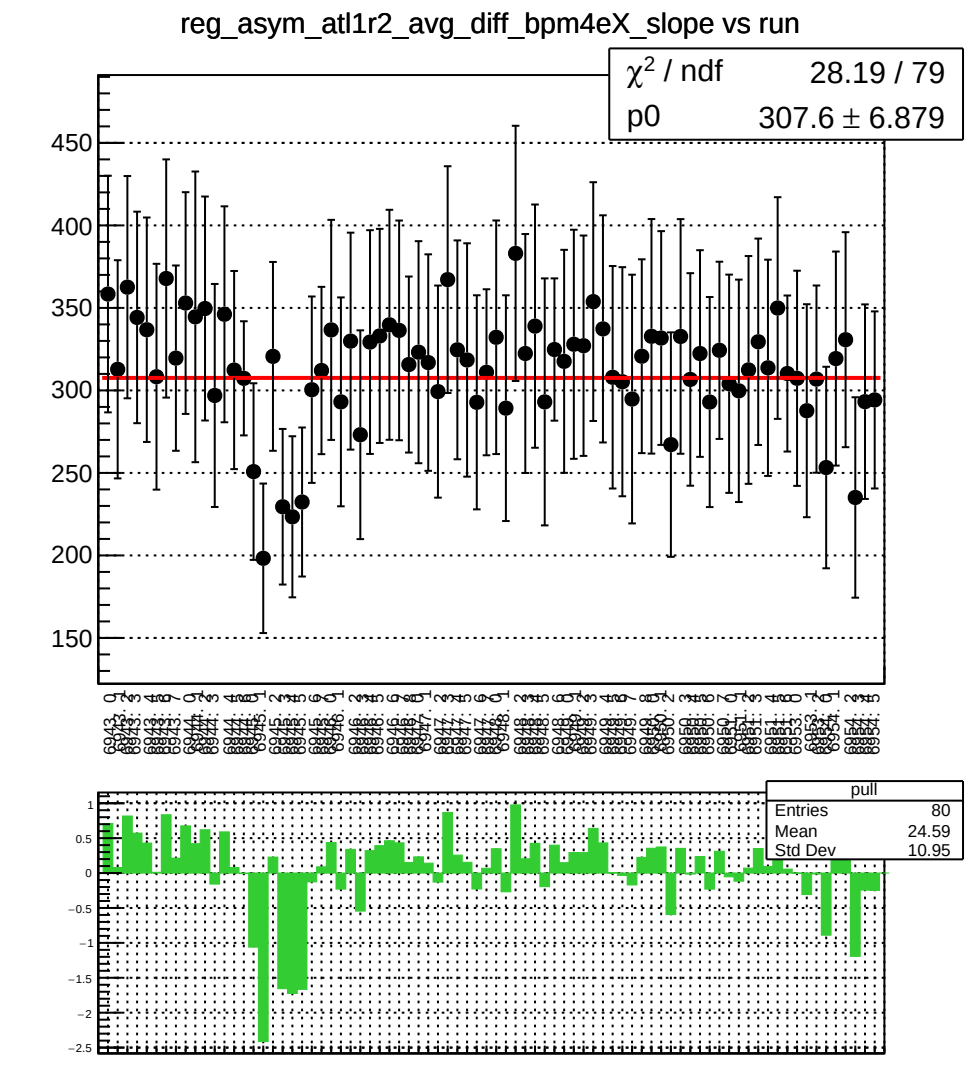

pull1D
Entries 80
Mean −0.005264
Std Dev 0.7613

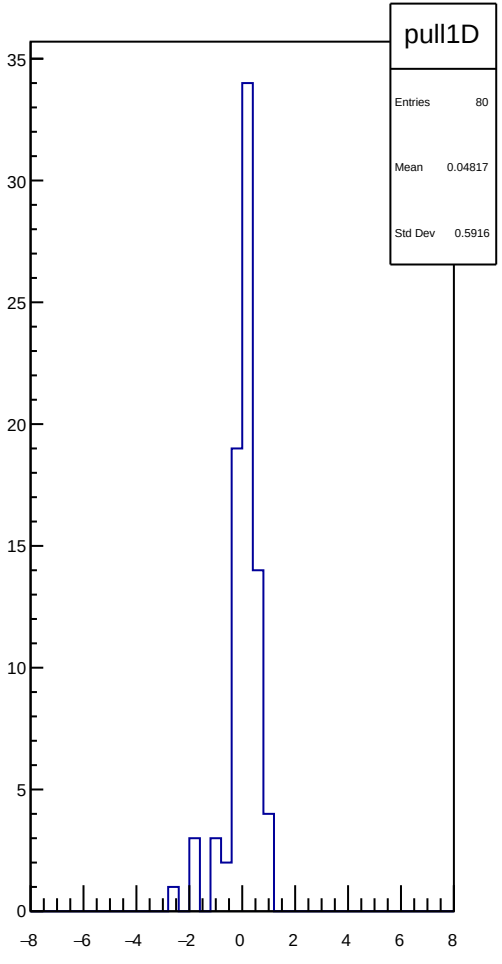

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 75.13 / 79
p0 18.56 ± 0.08367
pull
Entries 80
Mean 189.4
Std Dev 128
pull1D
Entries 80
Mean −0.009321
Std Dev 0.9691

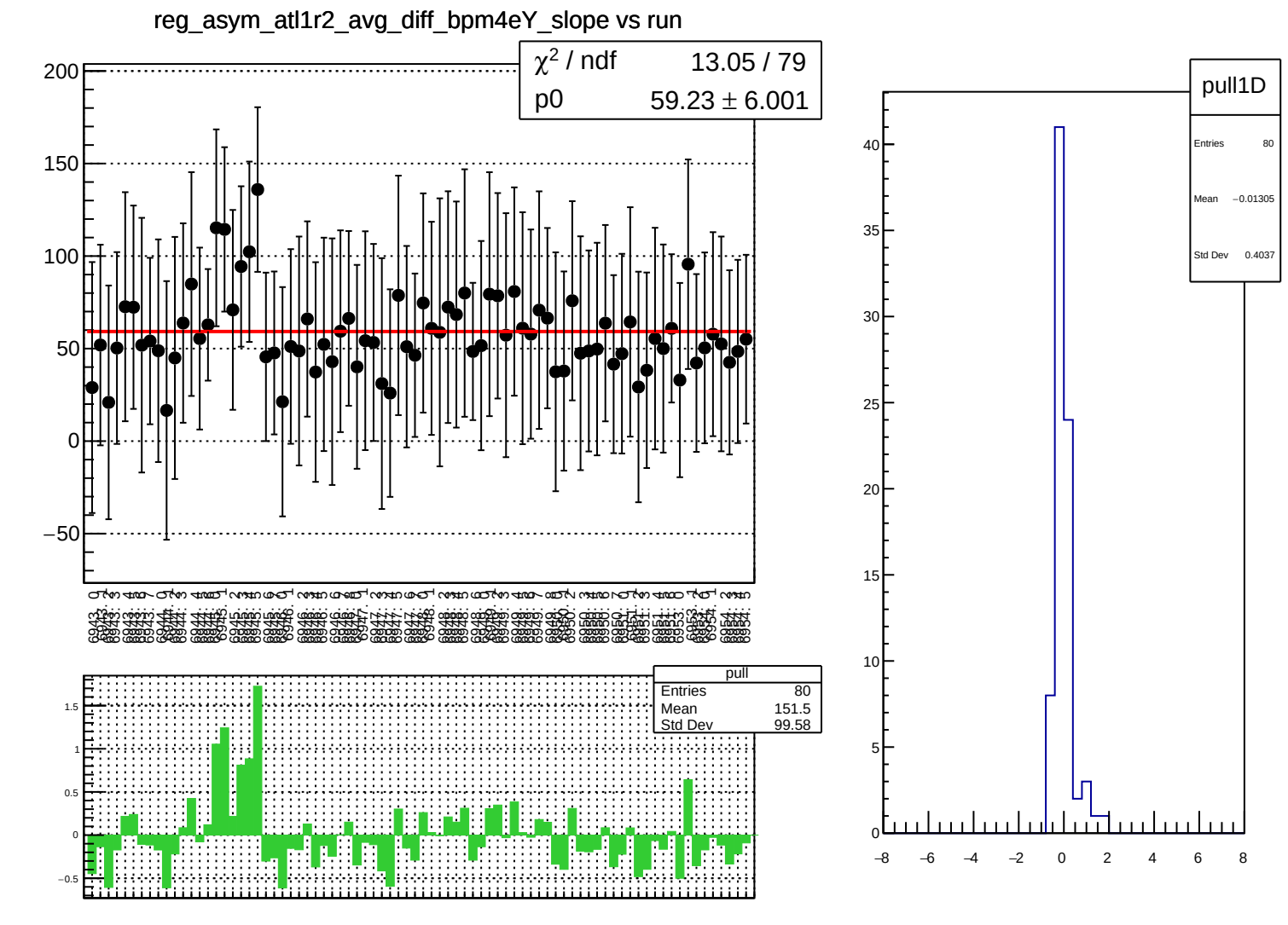

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 28.26 / 79
p0 −252.8 ± 7.368
pull
Entries 80
Mean 20.21
Std Dev 9.094
pull1D
Entries 80
Mean −0.04775
Std Dev 0.5924

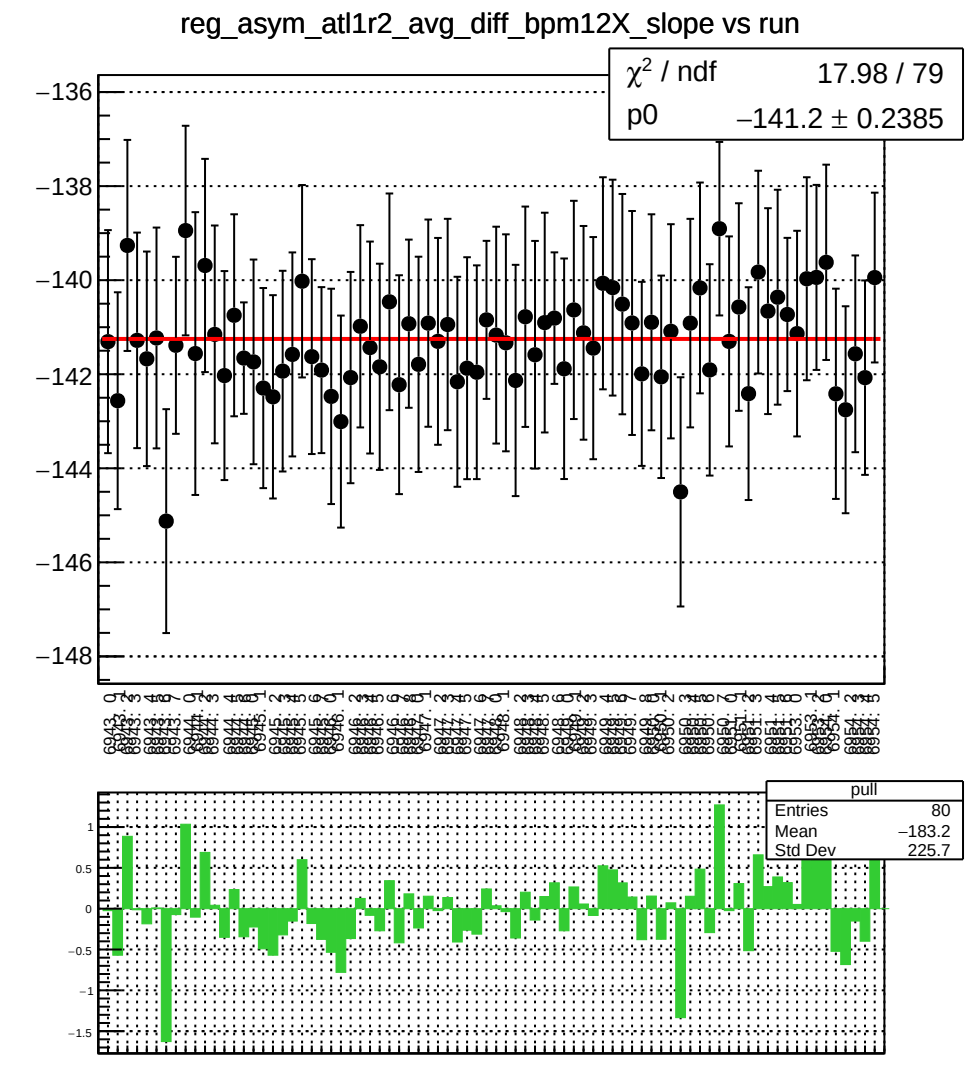

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 11.64 / 79
p0 5.96 ± 5.215
pull
Entries 80
Mean 130.5
Std Dev 75.25

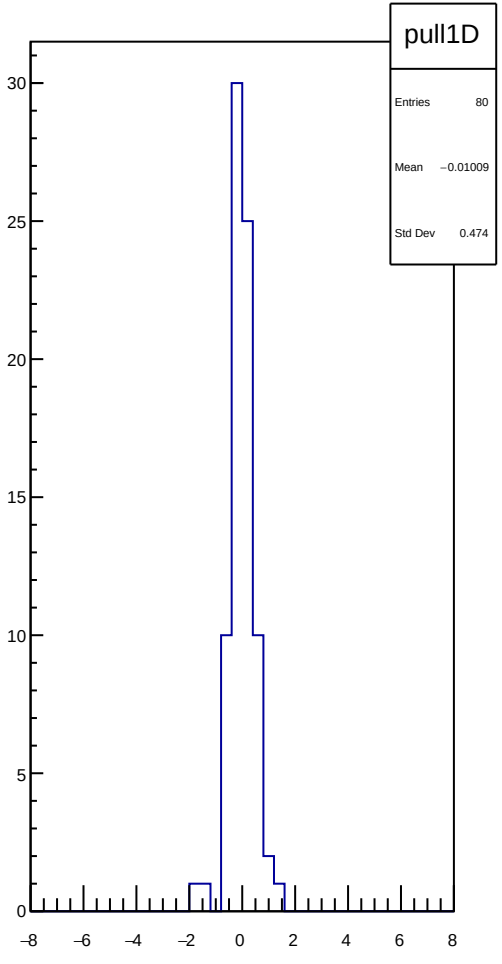

pull1D
Entries 80
Mean 0.01192
Std Dev 0.3812

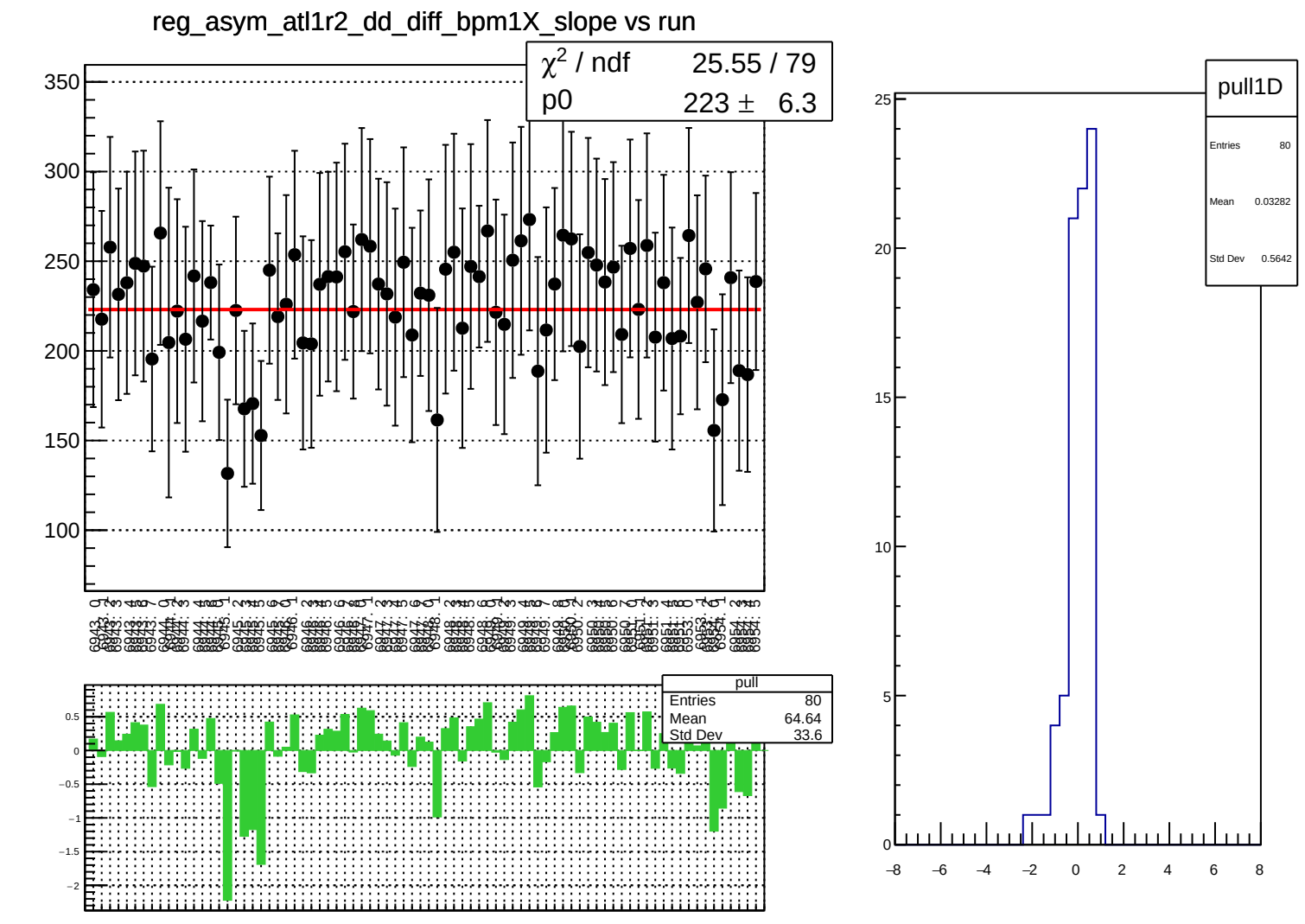

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 28.19 / 79
p0 307.6 ± 6.879
pull
Entries 80
Mean 24.59
Std Dev 10.95

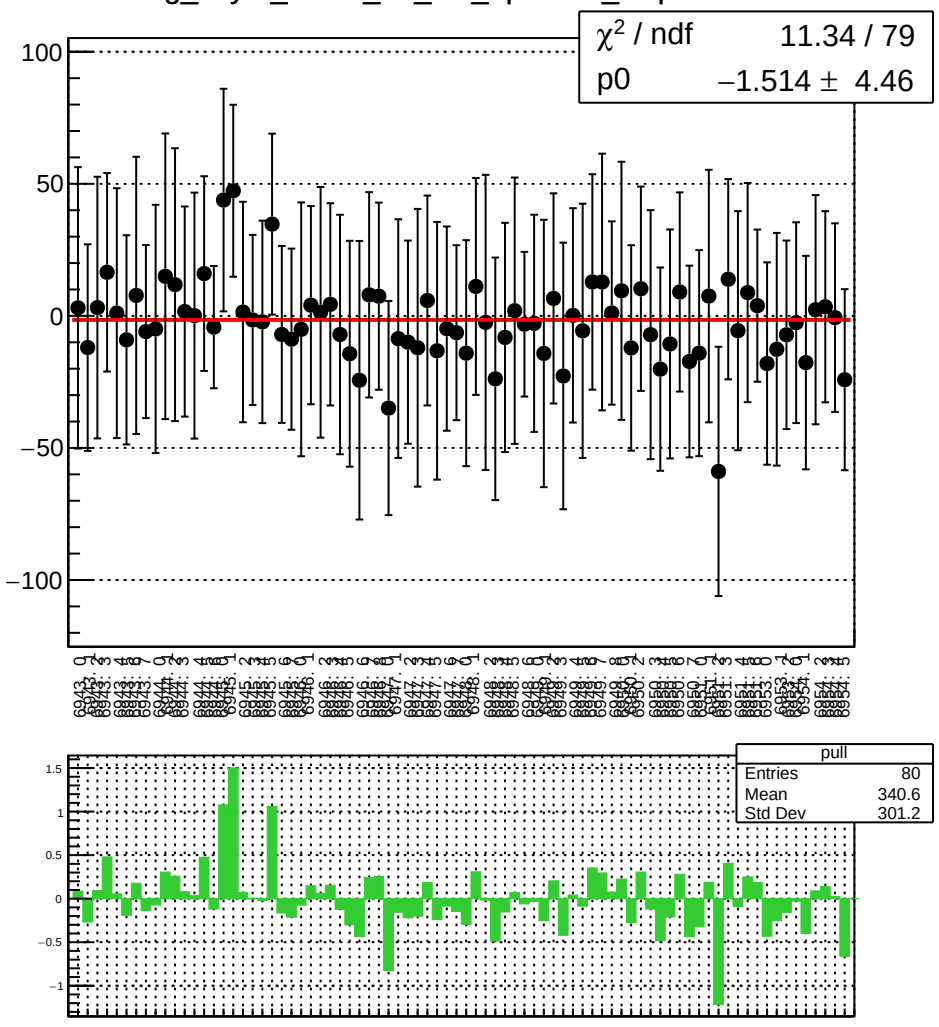

pull1D
Entries 80
Mean 0.04817
Std Dev 0.5916

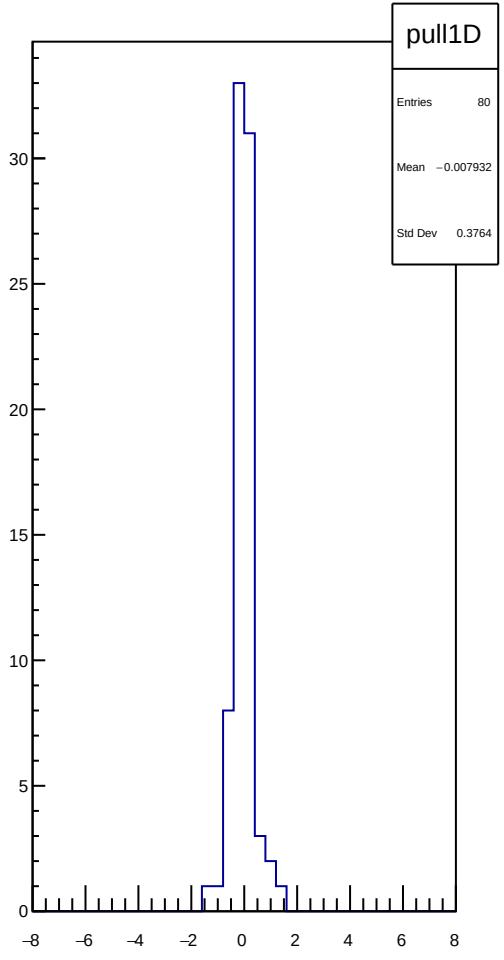

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 13.05 / 79
p0 59.23 ± 6.001
pull
Entries 80
Mean 151.5
Std Dev 99.58
pull1D
Entries 80
Mean −0.01305
Std Dev 0.4037

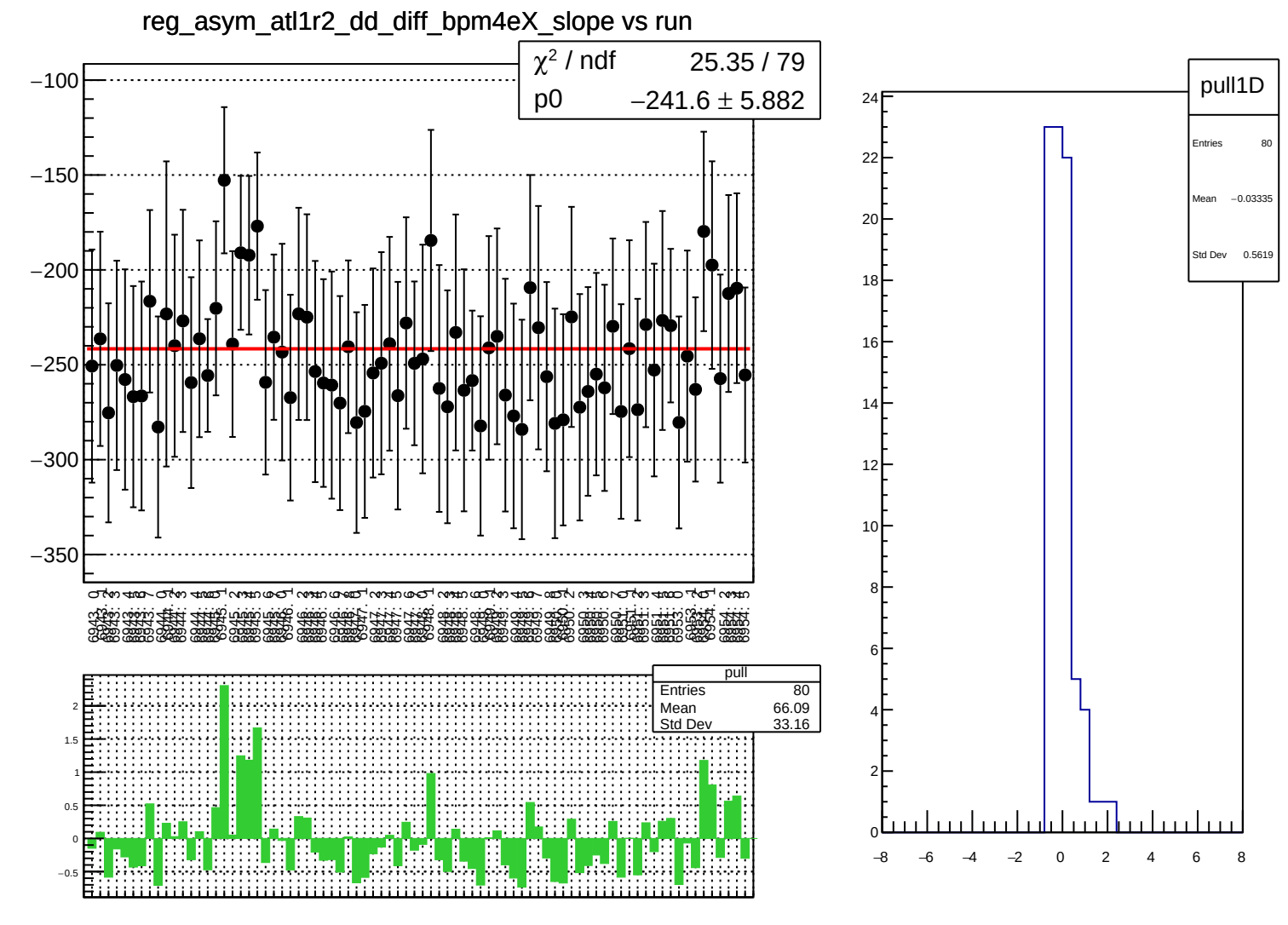

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 17.98 / 79
p0 −141.2 ± 0.2385
pull
Entries 80
Mean −183.2
Std Dev 225.7

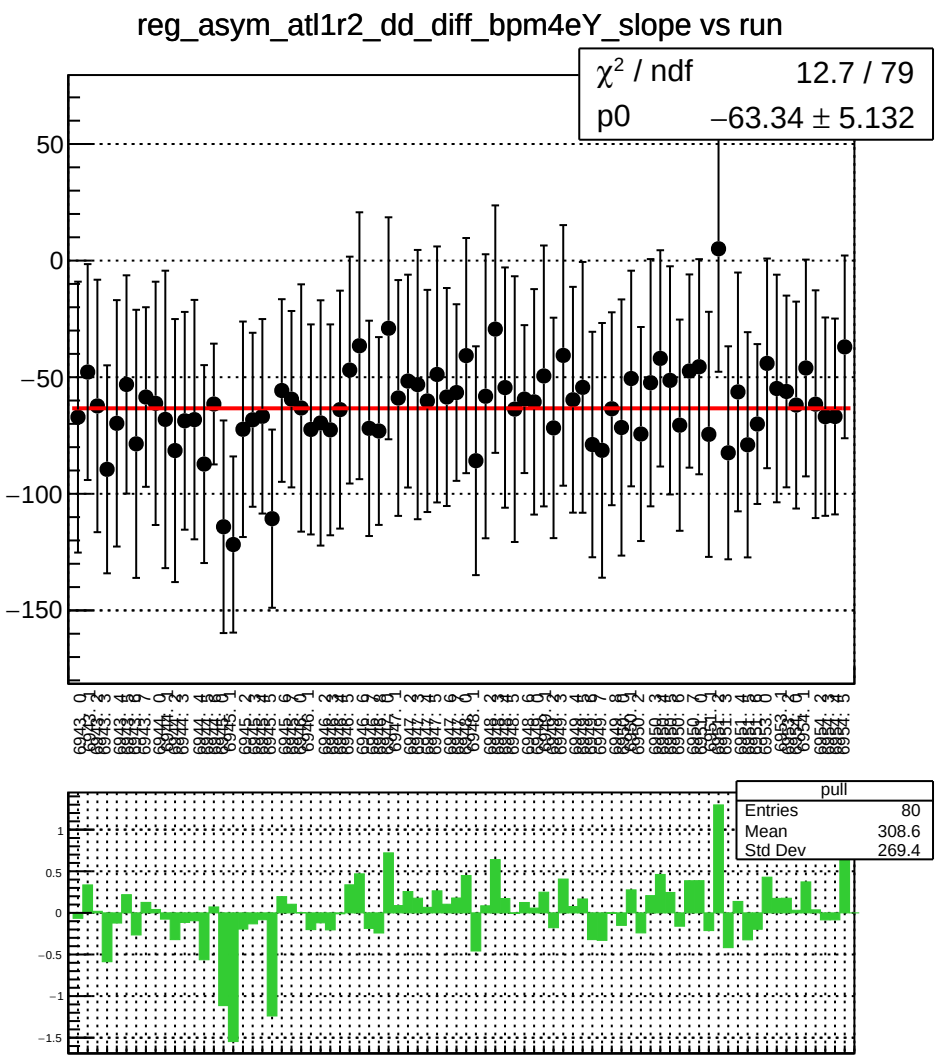

pull1D
Entries 80
Mean −0.01009
Std Dev 0.474

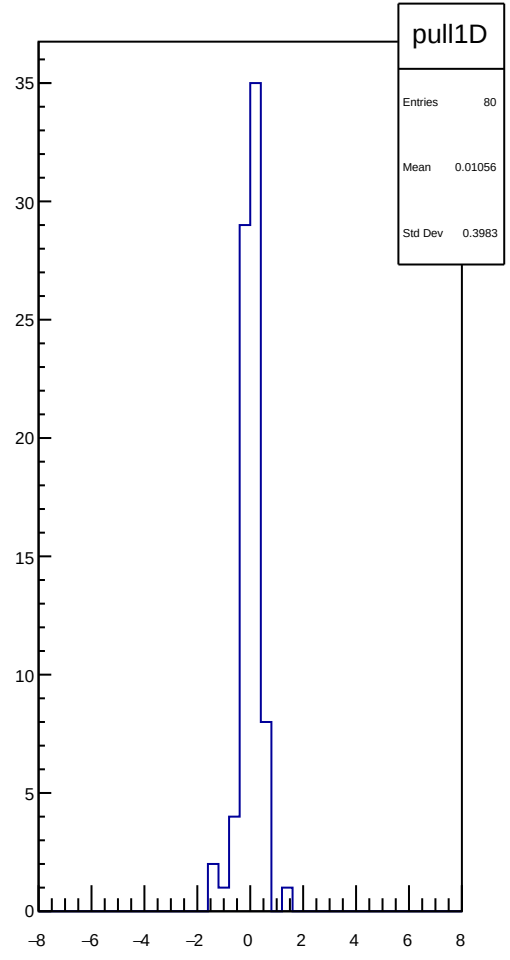

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 25.55 / 79
p0 223 ± 6.3
350
300
250
200
150
100
pull
Entries 80
Mean 64.64
Std Dev 33.6
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 80
Mean 0.03282
Std Dev 0.5642
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

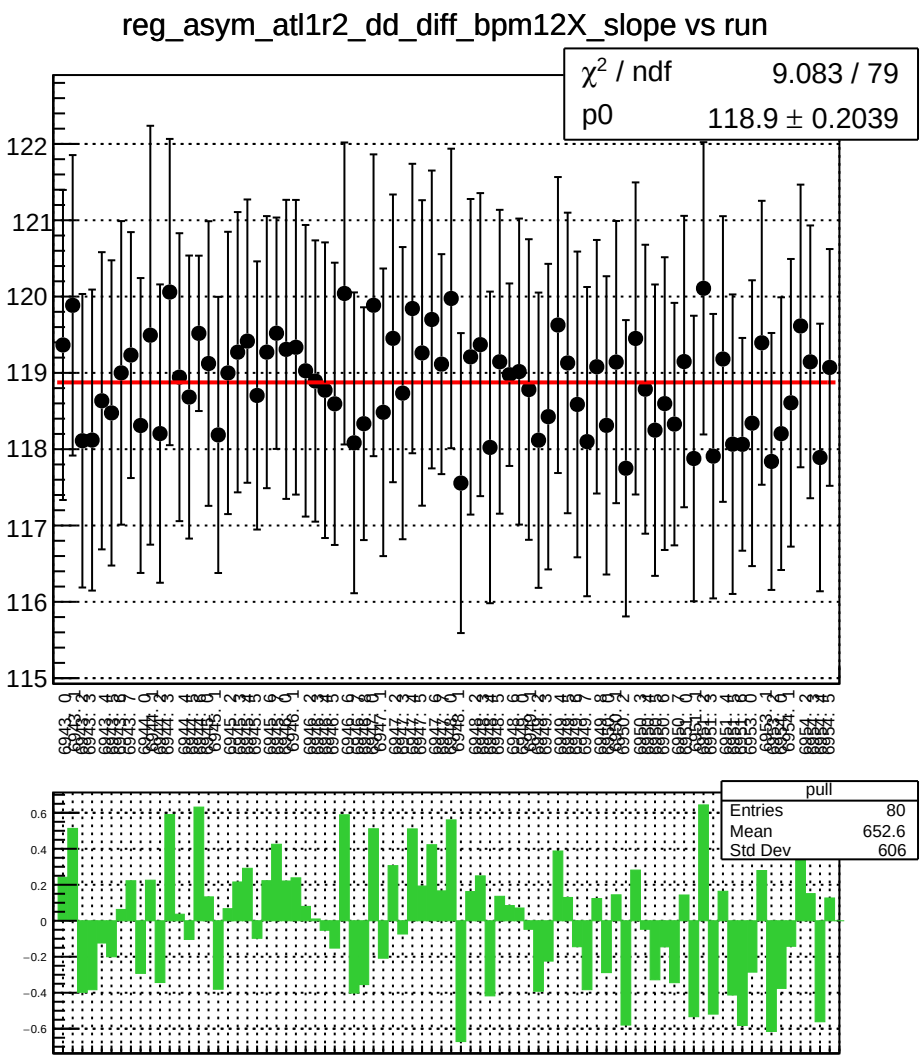

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.34 / 79
p0 −1.514 ± 4.46
pull
Entries 80
Mean 340.6
Std Dev 301.2

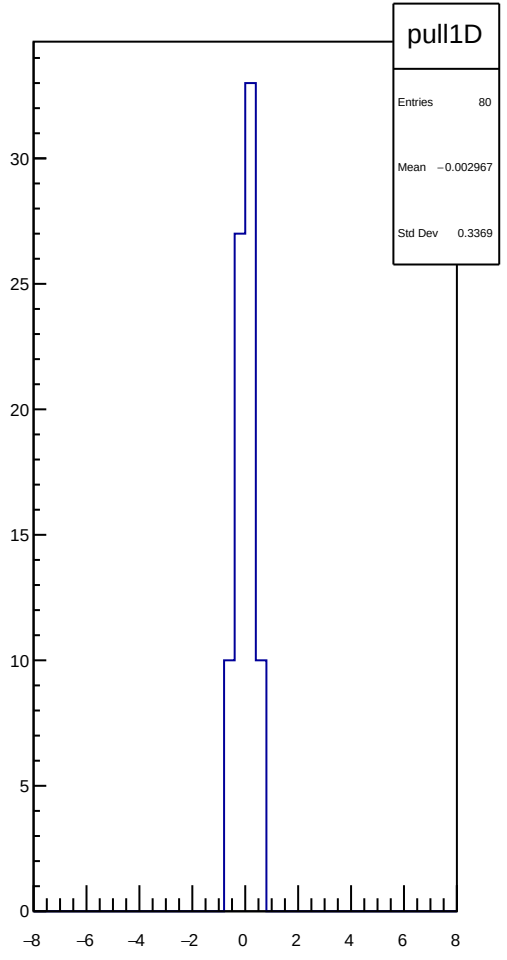

pull1D
Entries 80
Mean −0.007932
Std Dev 0.3764

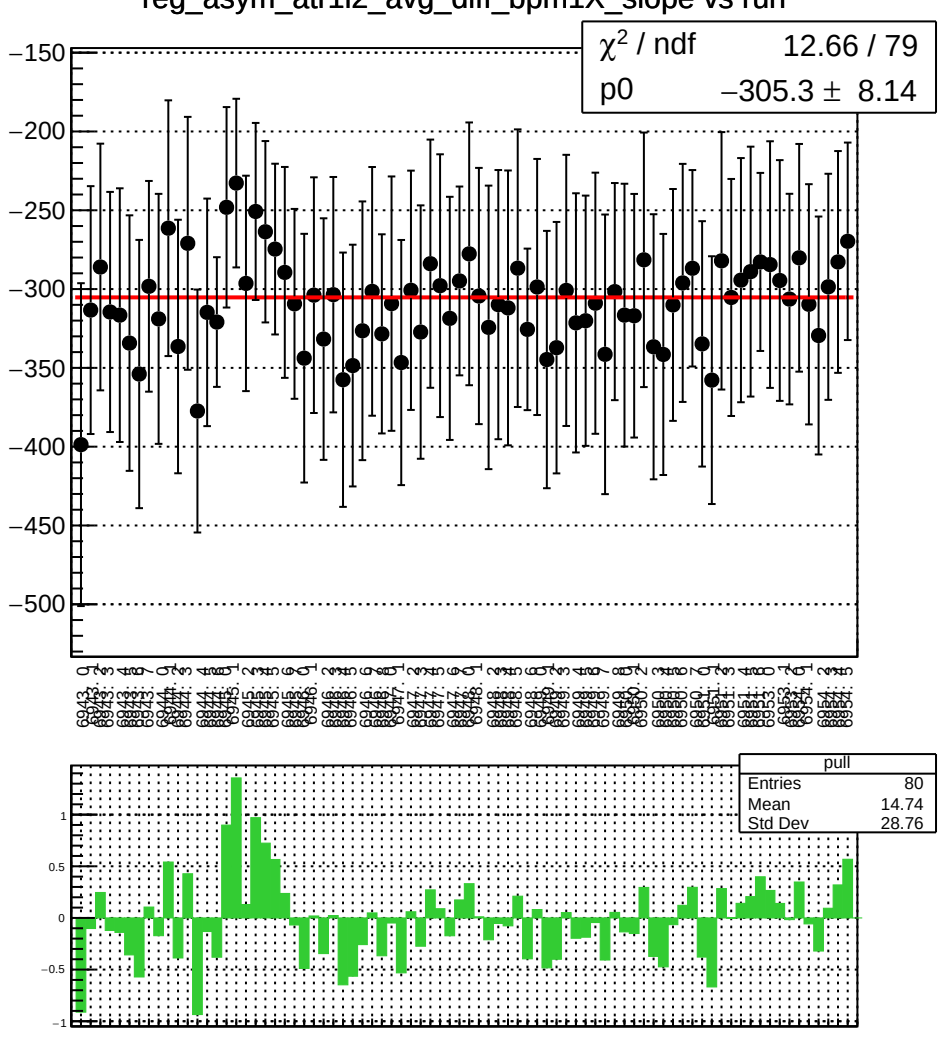

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 25.35 / 79
p0 −241.6 ± 5.882
pull
Entries 80
Mean 66.09
Std Dev 33.16
pull1D
Entries 80
Mean −0.03335
Std Dev 0.5619

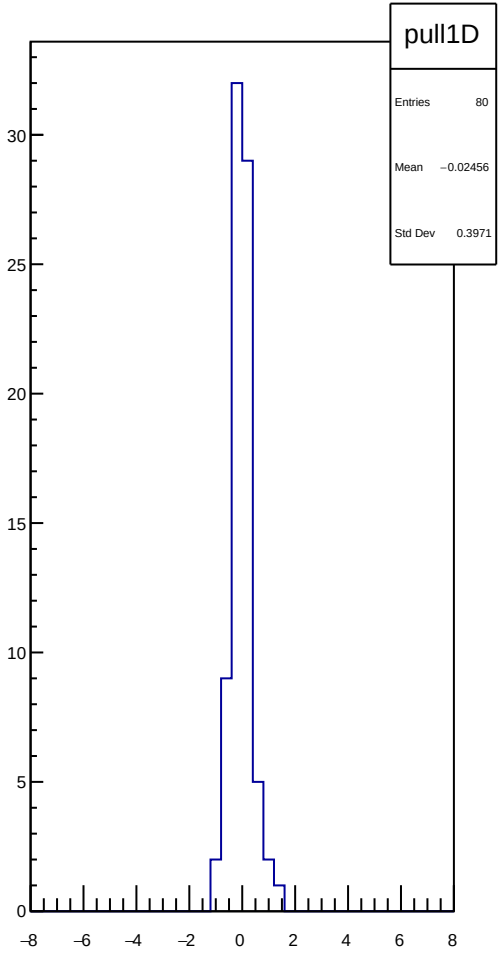

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 12.7 / 79
p0 −63.34 ± 5.132
50
0
−50
−100
−150
pull
Entries 80
Mean 308.6
Std Dev 269.4
1
0.5
0
−0.5
−1
−1.5

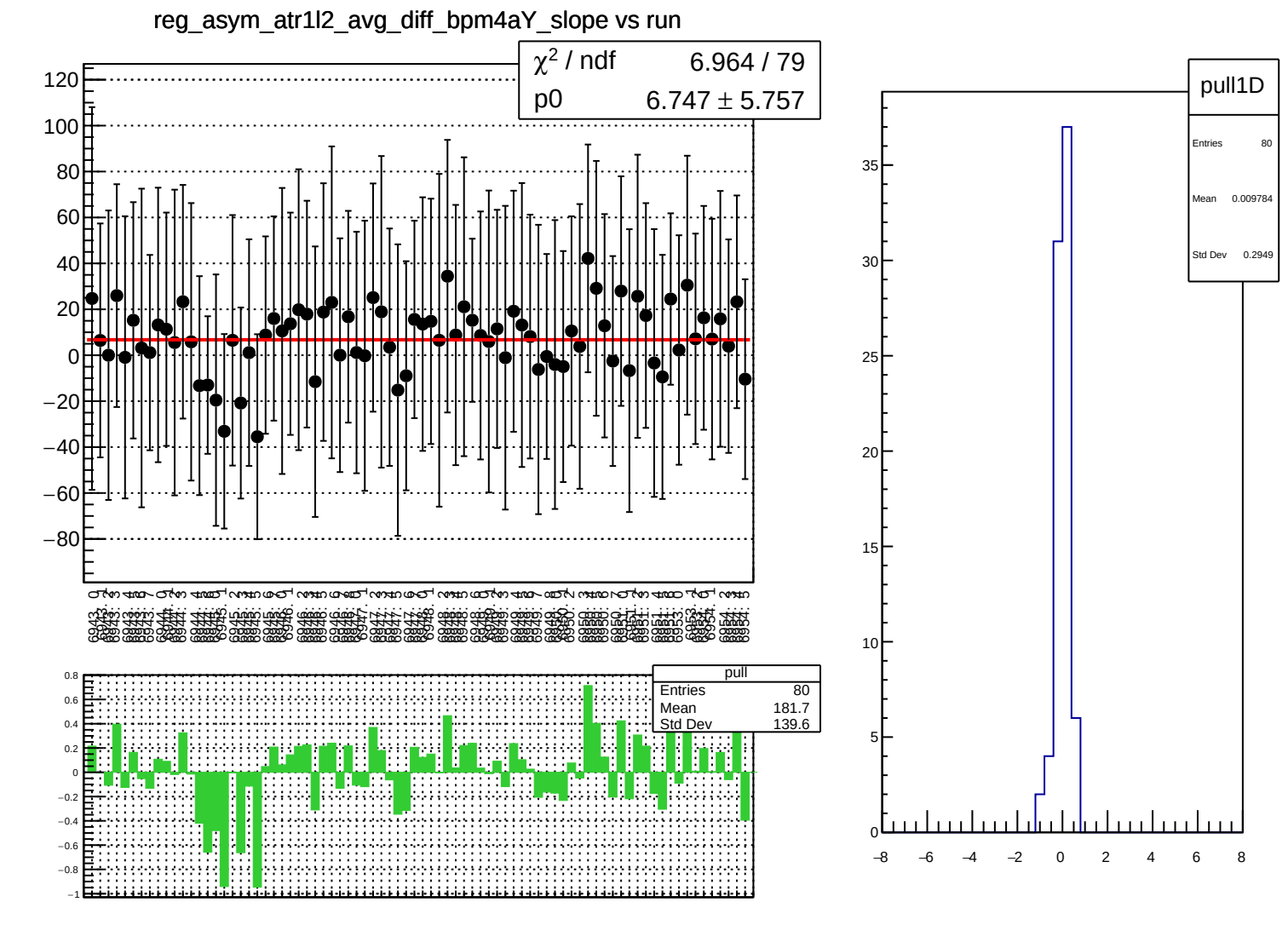

pull1D
Entries 80
Mean 0.01056
Std Dev 0.3983
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

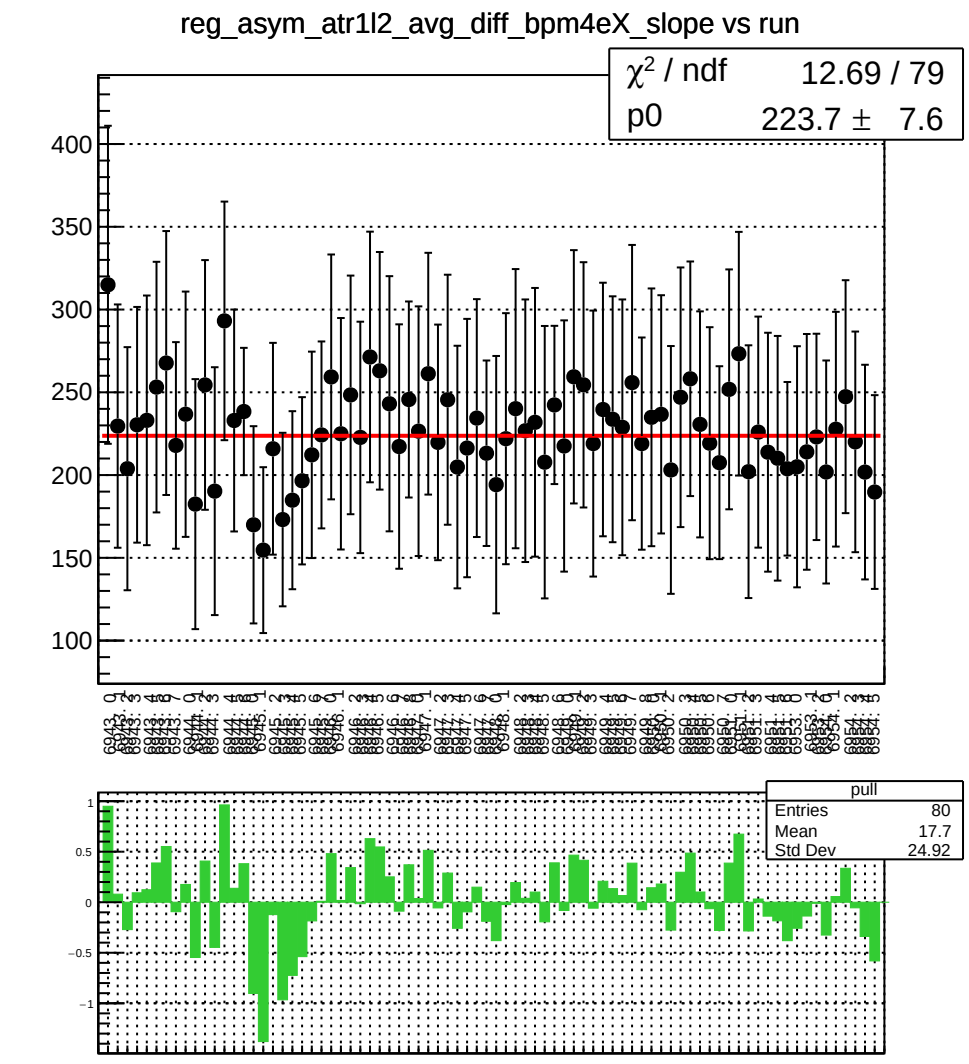

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 9.083 / 79
p0 118.9 ± 0.2039
pull
Entries 80
Mean 652.6
Std Dev 606

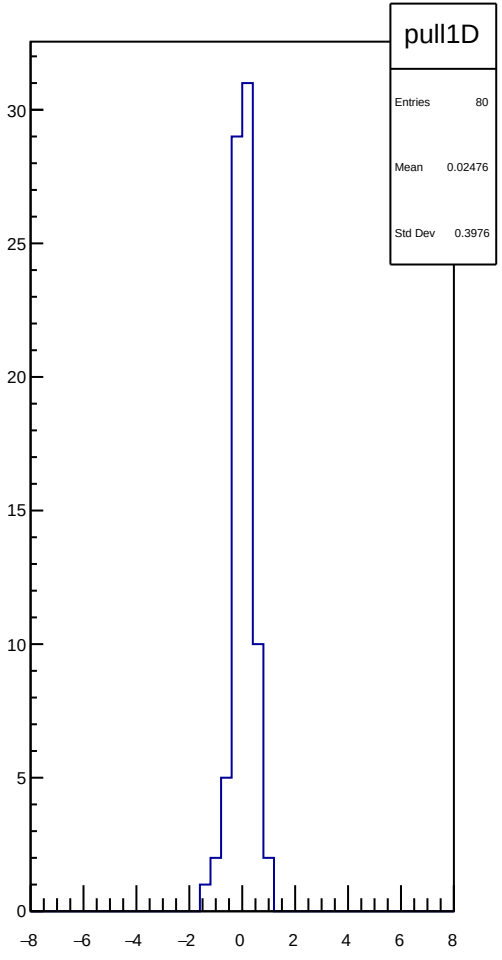

pull1D
Entries 80
Mean −0.002967
Std Dev 0.3369

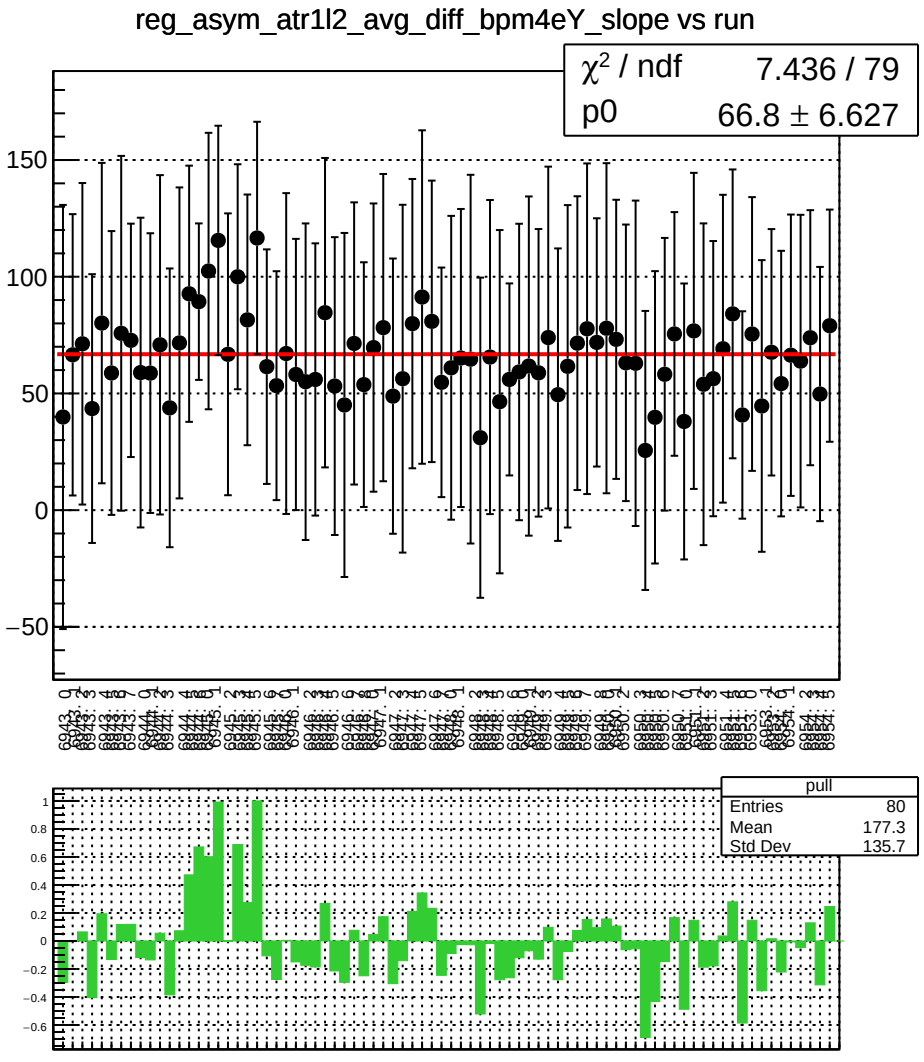

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 12.66 / 79
p0 −305.3 ± 8.14
pull
Entries 80
Mean 14.74
Std Dev 28.76

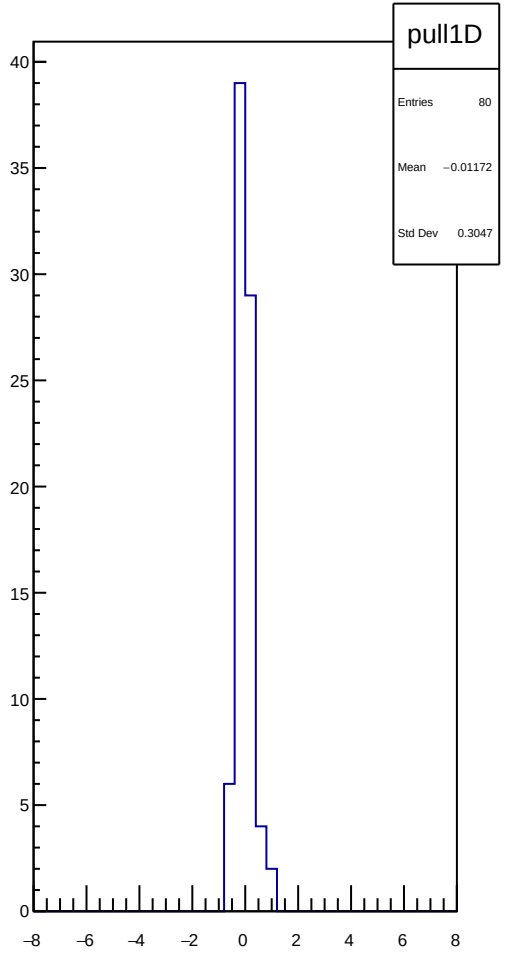

pull1D
Entries 80
Mean −0.02456
Std Dev 0.3971

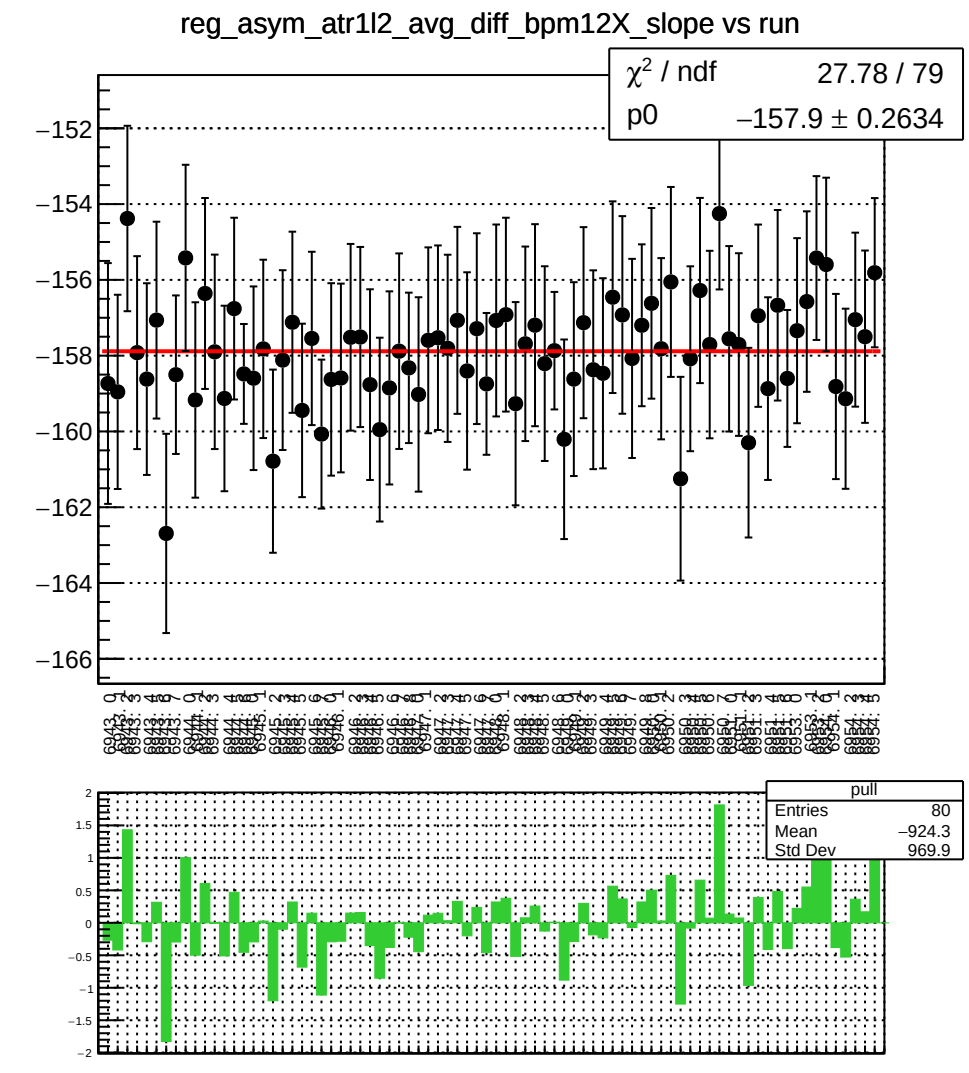

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.964 / 79
p0 6.747 ± 5.757
pull
Entries 80
Mean 181.7
Std Dev 139.6
pull1D
Entries 80
Mean 0.009784
Std Dev 0.2949

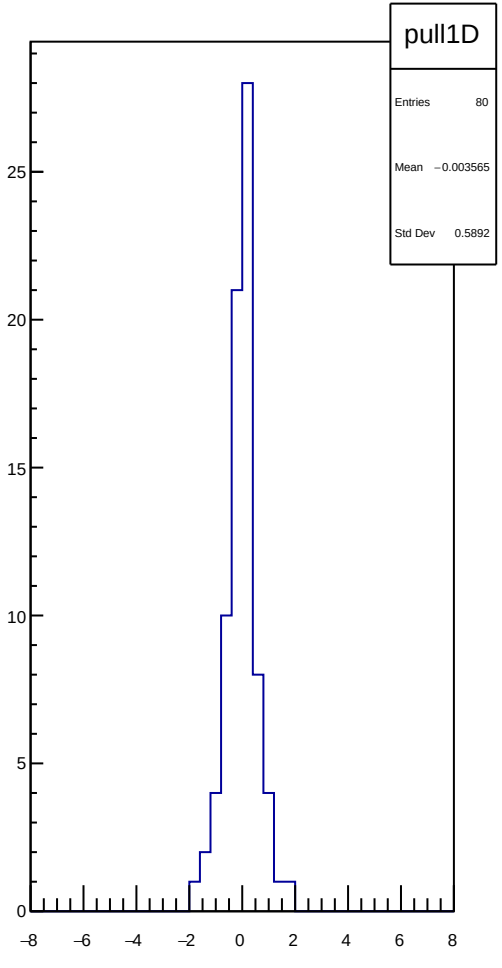

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.69 / 79
p0 223.7 ± 7.6
pull
Entries 80
Mean 17.7
Std Dev 24.92

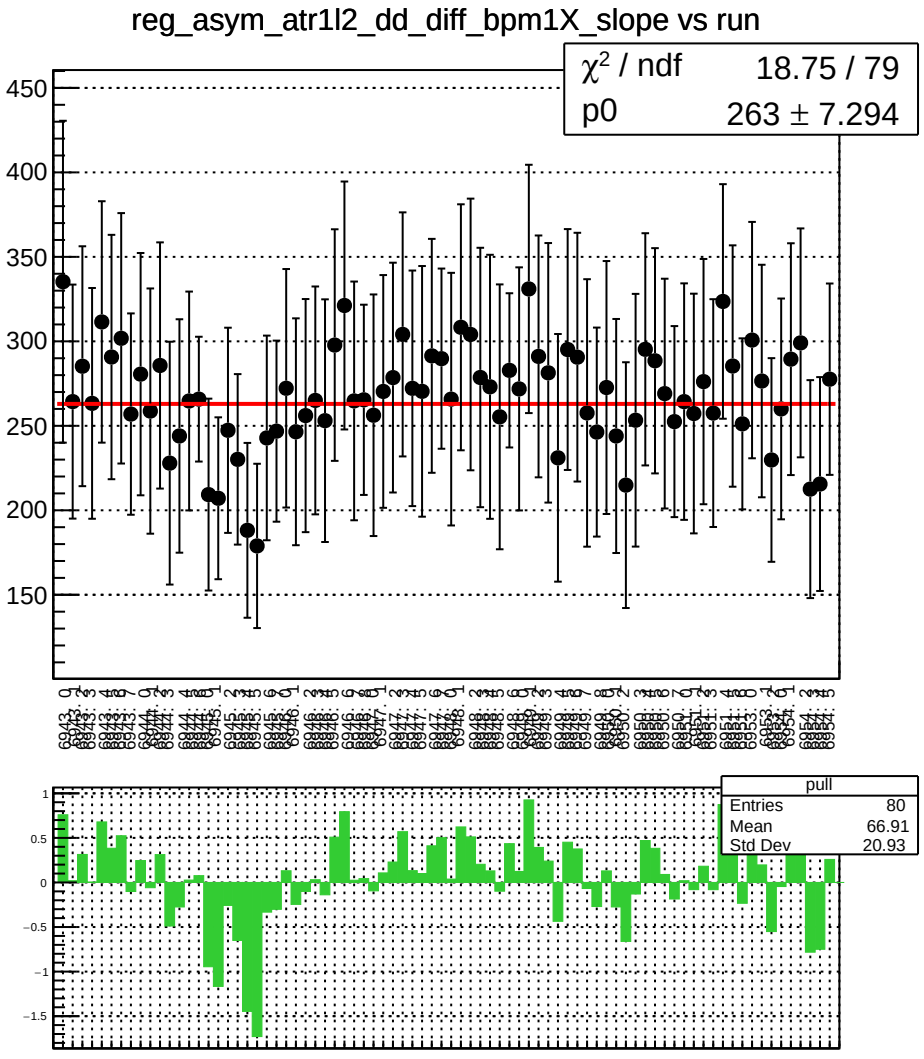

pull1D
Entries 80
Mean 0.02476
Std Dev 0.3976

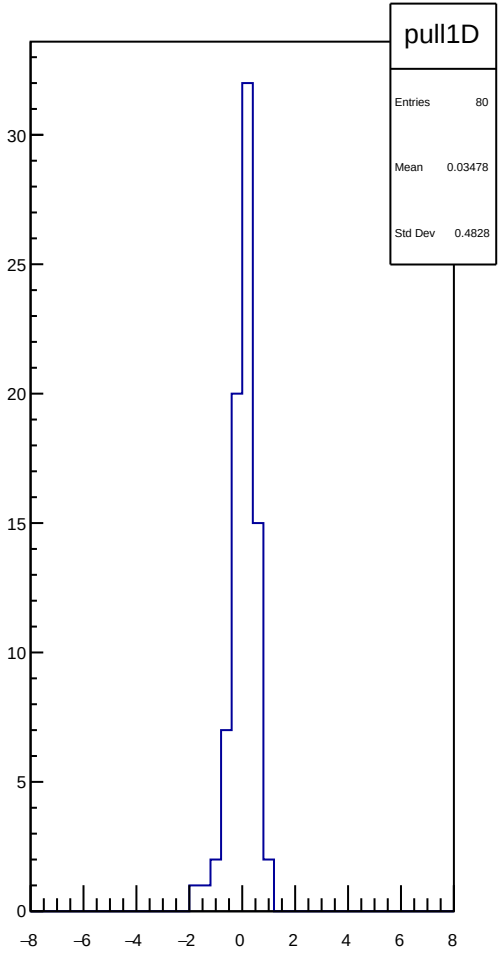

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.436 / 79
p0 66.8 ± 6.627
150
100
50
0
−50
pull
Entries 80
Mean 177.3
Std Dev 135.7
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

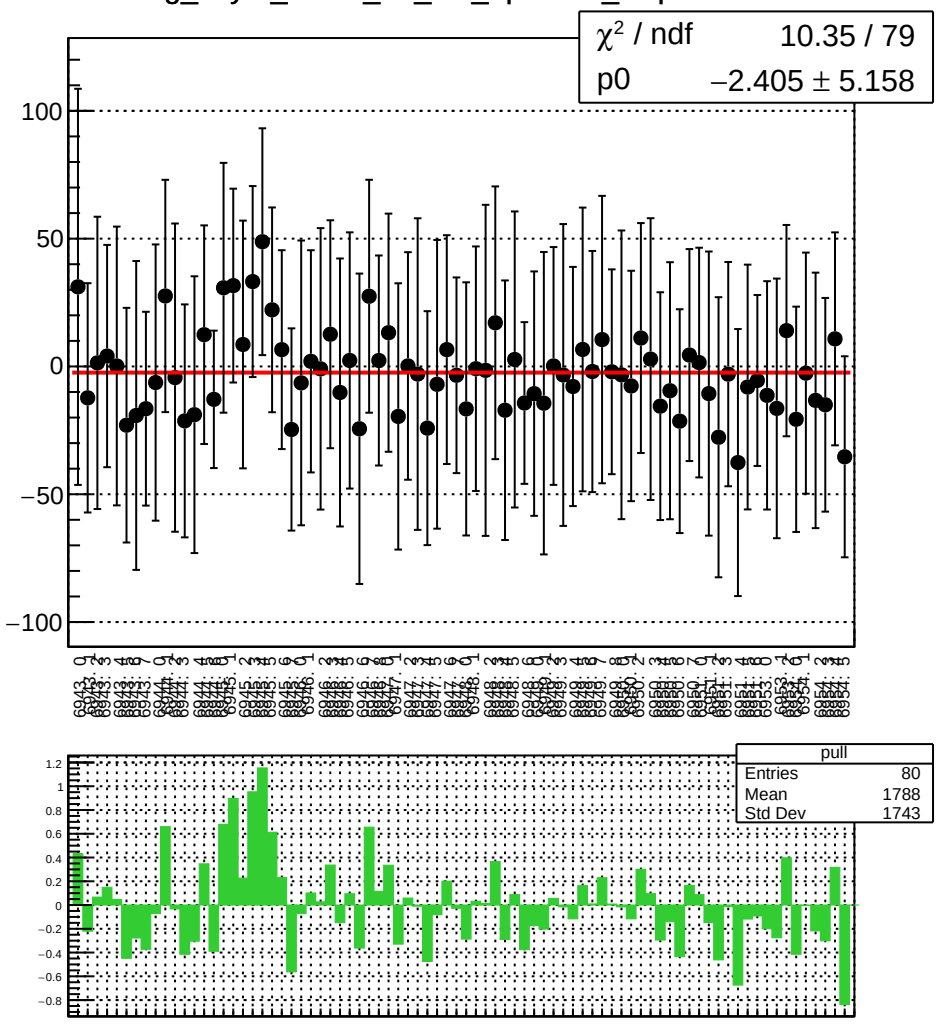

pull1D
Entries 80
Mean −0.01172
Std Dev 0.3047
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

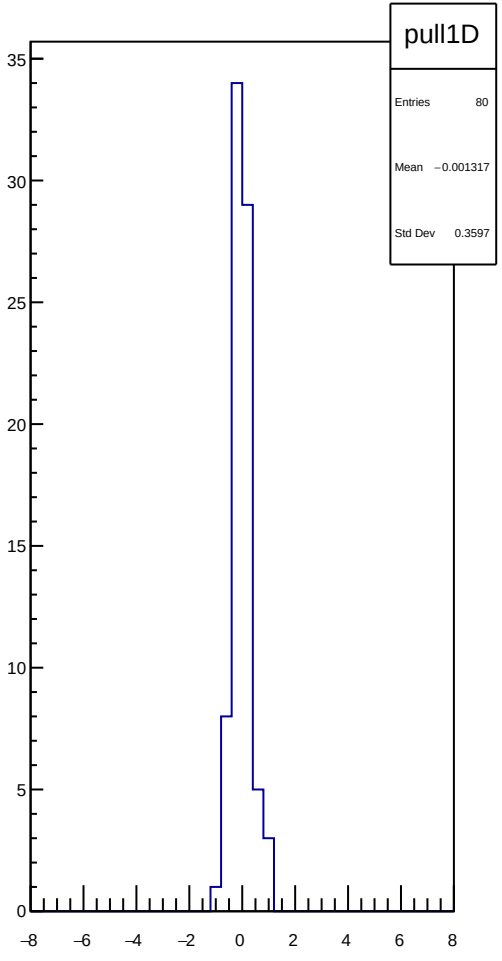

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 27.78 / 79
p0 −157.9 ± 0.2634
pull
Entries 80
Mean −924.3
Std Dev 969.9

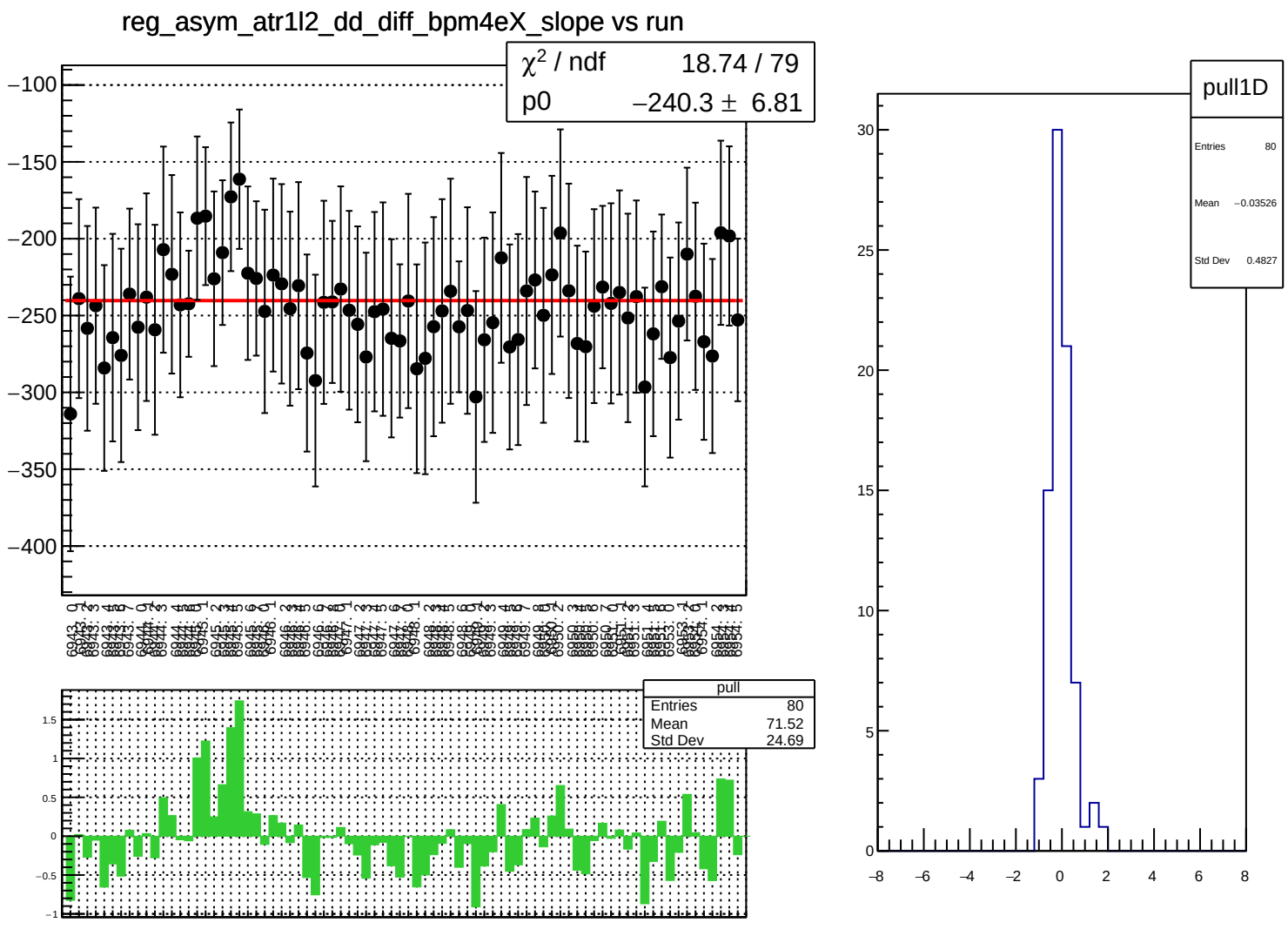

pull1D
Entries 80
Mean −0.003565
Std Dev 0.5892

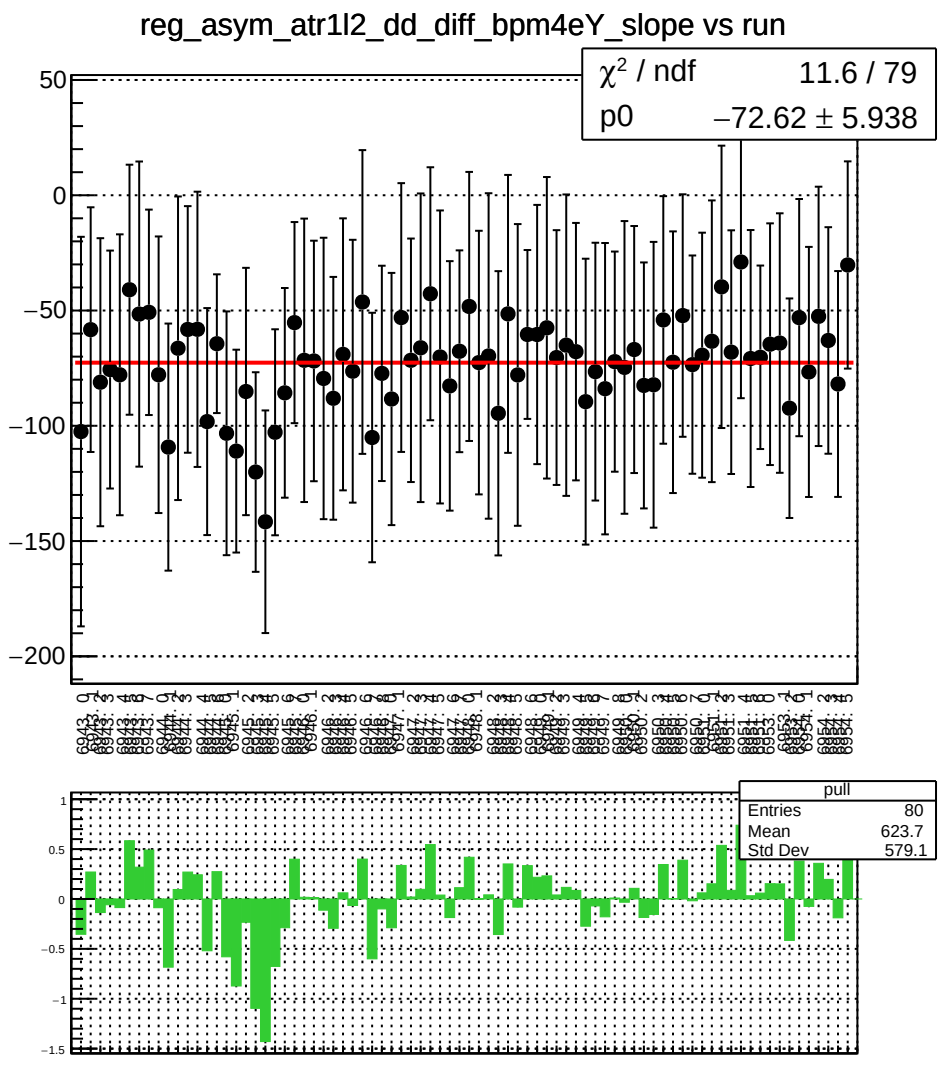

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ^2 / ndf 18.75 / 79
p0 263 ± 7.294
pull
Entries 80
Mean 66.91
Std Dev 20.93

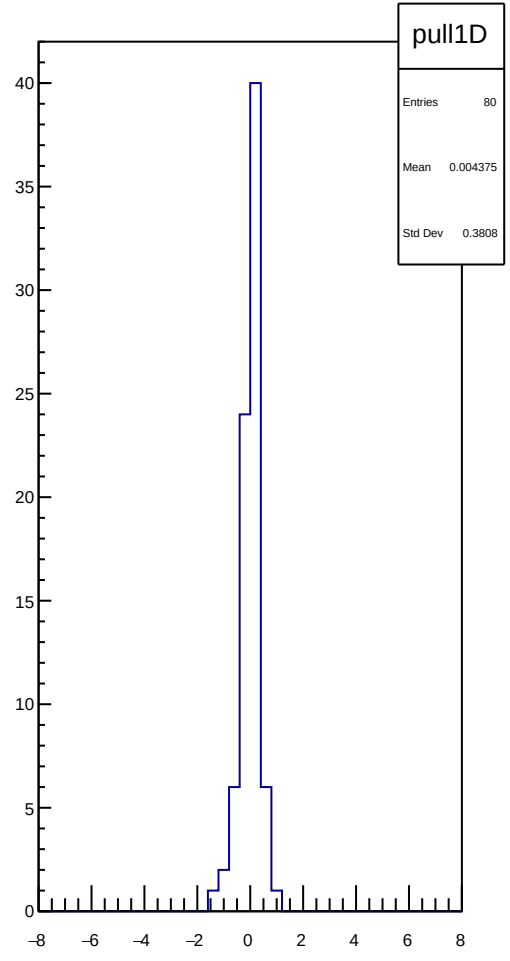

pull1D
Entries 80
Mean 0.03478
Std Dev 0.4828

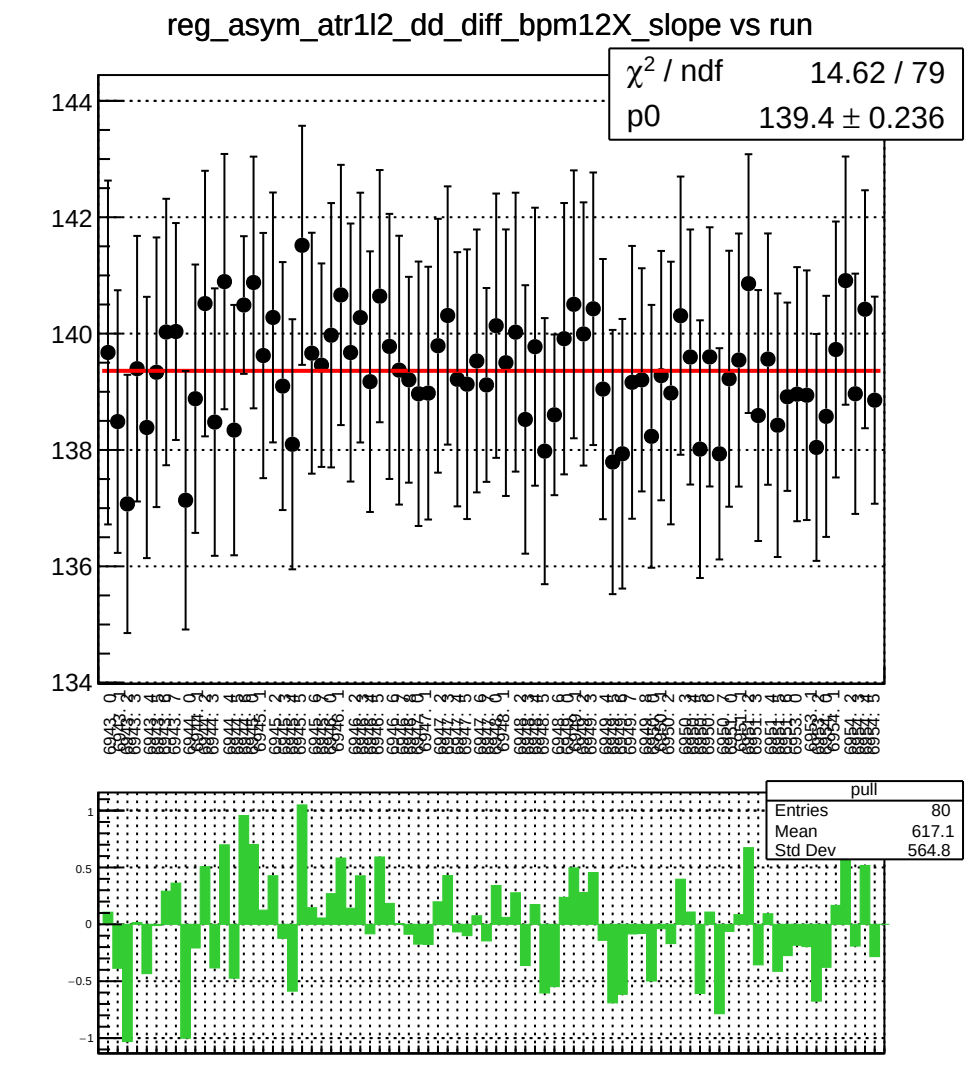

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.35 / 79
p0 −2.405 ± 5.158
pull
Entries 80
Mean 1788
Std Dev 1743

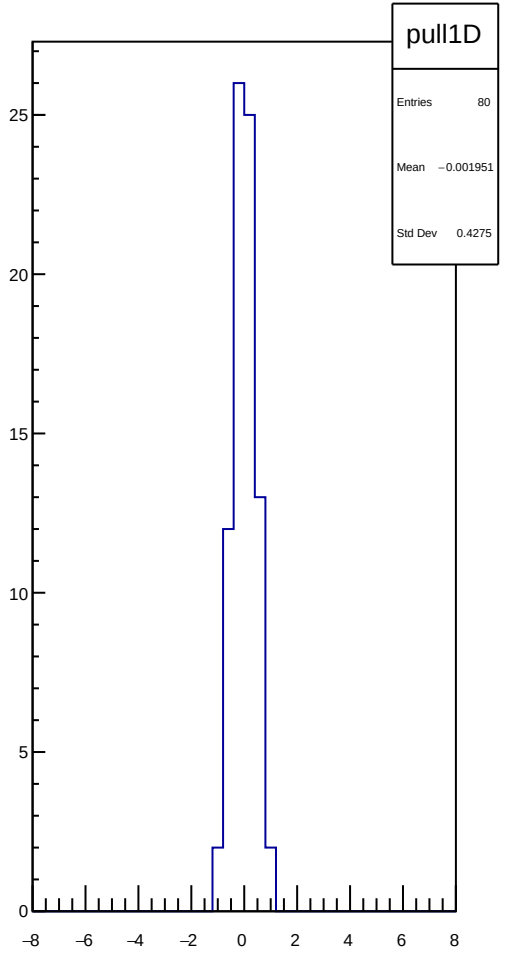

pull1D
Entries 80
Mean −0.001317
Std Dev 0.3597

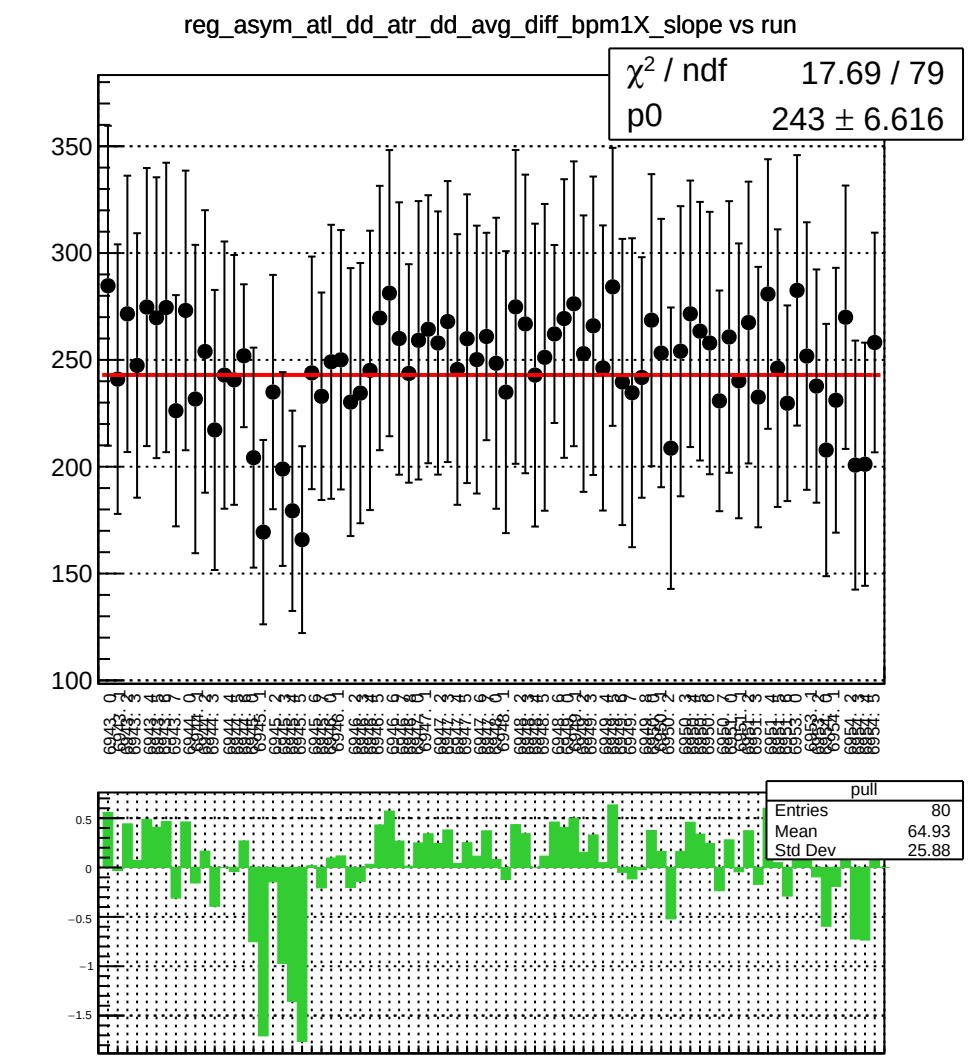

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.74 / 79
p0 −240.3 ± 6.81
−100
−150
−200
−250
−300
−350
−400
pull
Entries 80
Mean 71.52
Std Dev 24.69
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 80
Mean −0.03526
Std Dev 0.4827
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

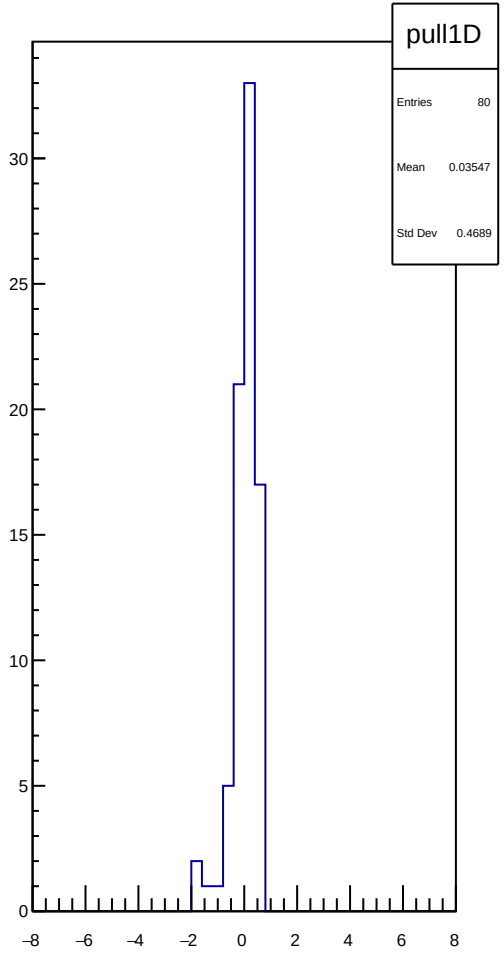

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 11.6 / 79
p0 −72.62 ± 5.938
pull
Entries 80
Mean 623.7
Std Dev 579.1

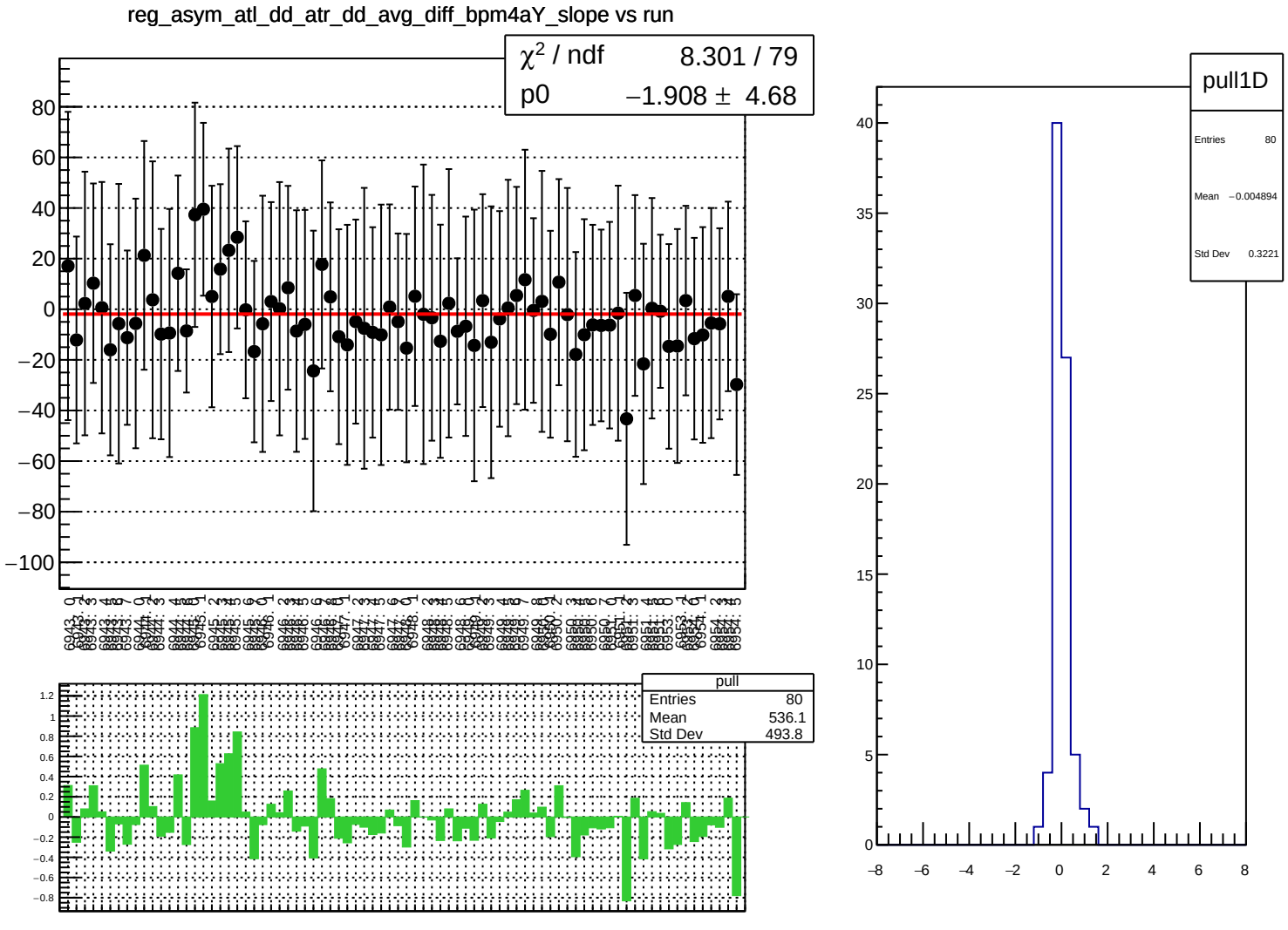

pull1D
Entries 80
Mean 0.004375
Std Dev 0.3808

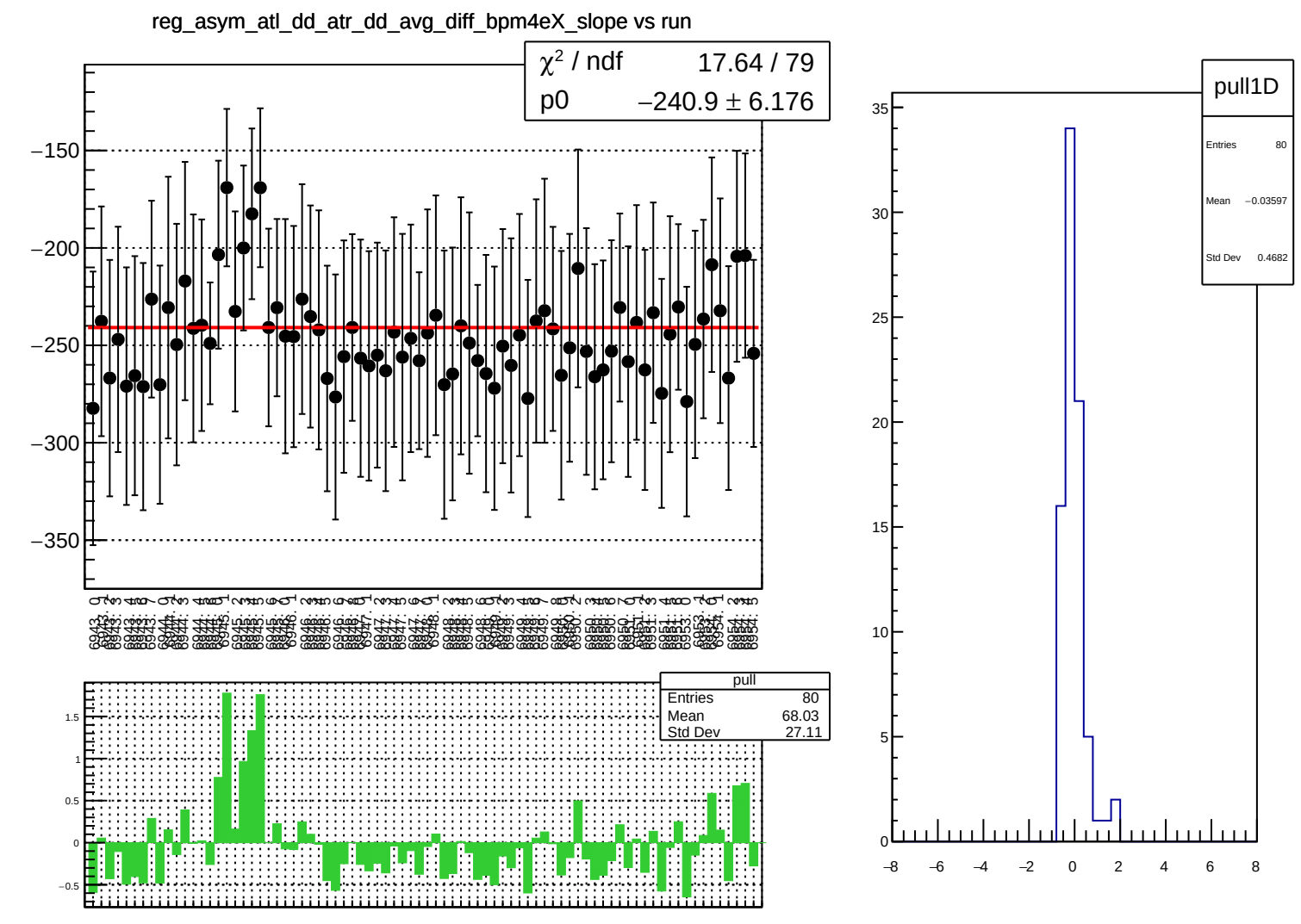

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 14.62 / 79
p0 139.4 ± 0.236
144
142
140
138
136
134
pull
Entries 80
Mean 617.1
Std Dev 564.8
1
0.5
0
−0.5
−1

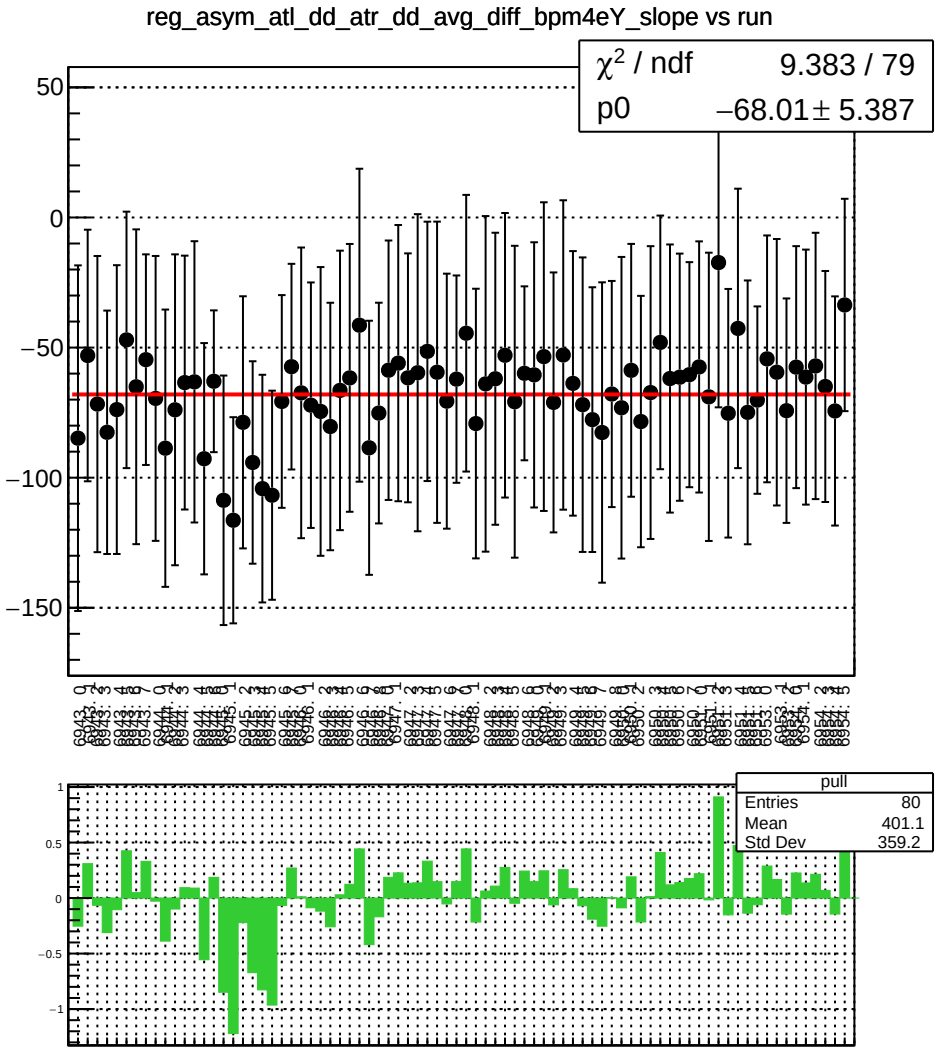

pull1D
Entries 80
Mean −0.001951
Std Dev 0.4275
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

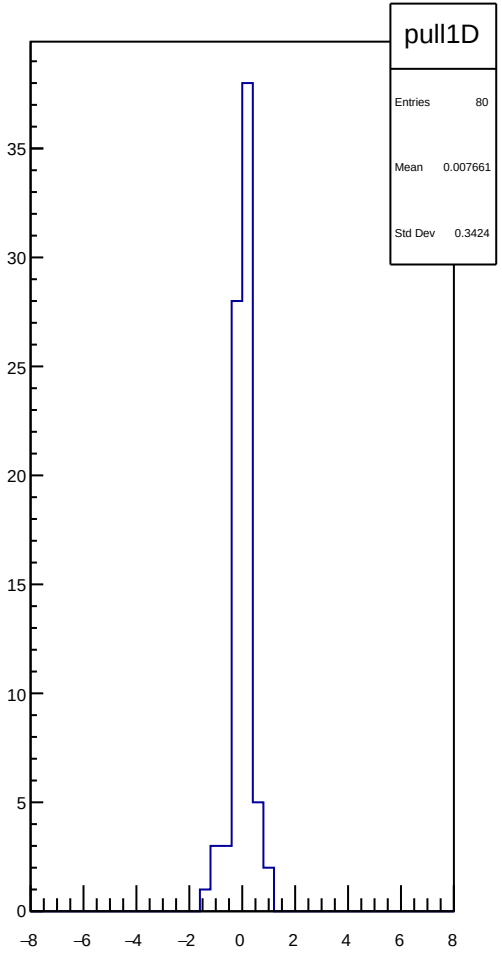

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 17.69 / 79
p0 243 ± 6.616
pull
Entries 80
Mean 64.93
Std Dev 25.88

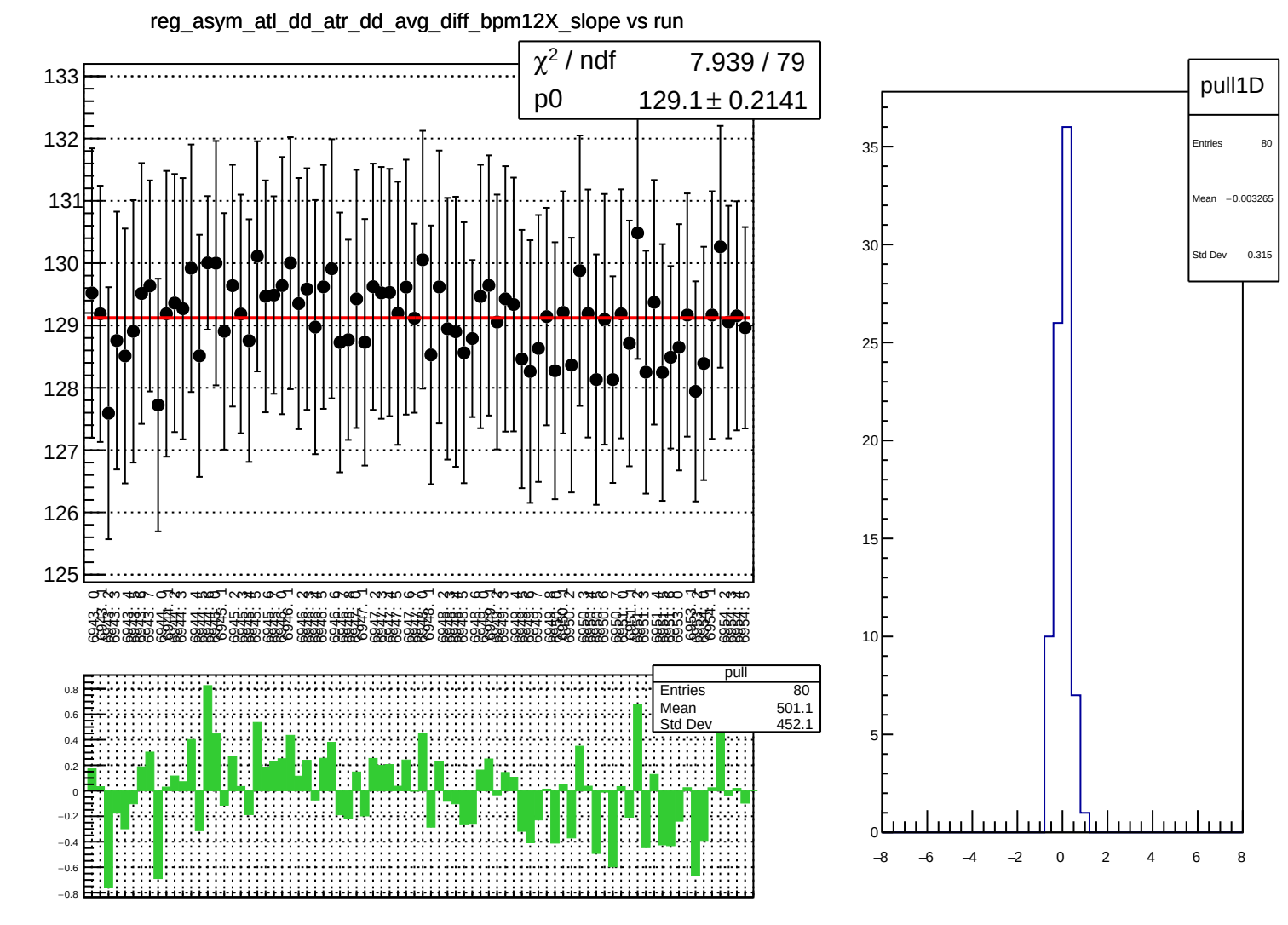

pull1D
Entries 80
Mean 0.03547
Std Dev 0.4689

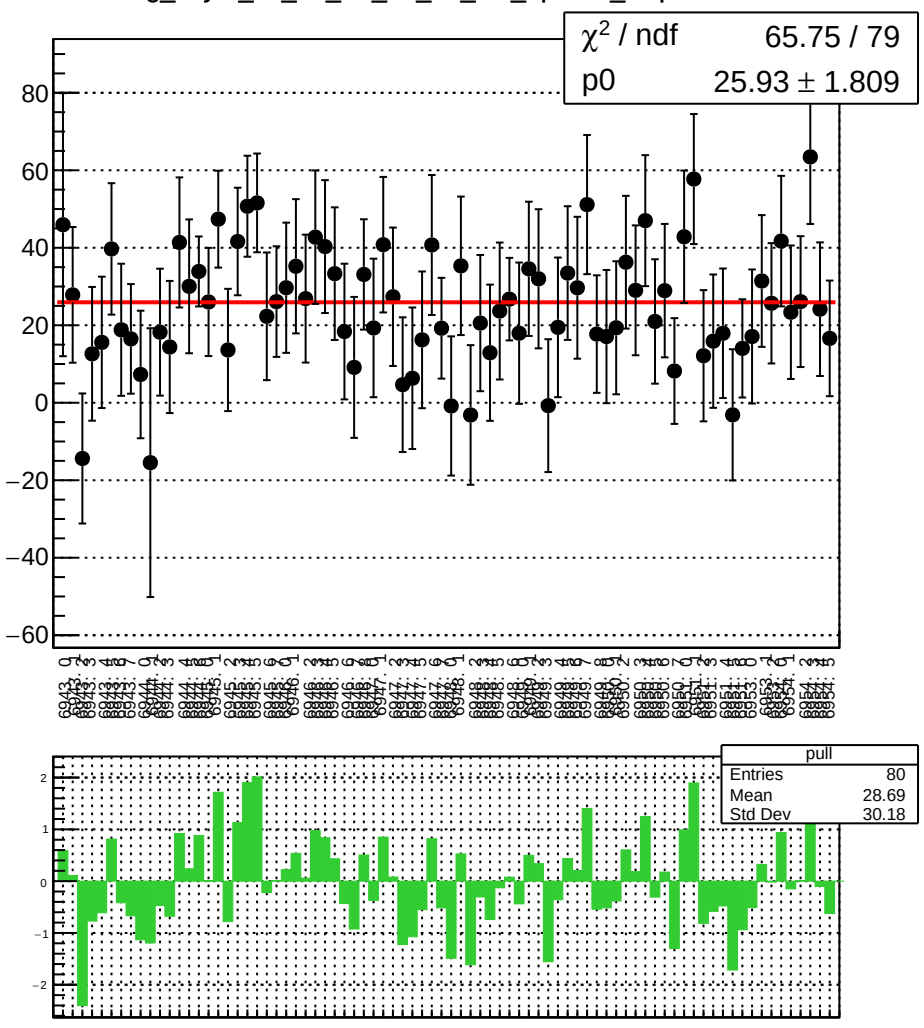

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.301 / 79
p0 −1.908 ± 4.68
pull
Entries 80
Mean 536.1
Std Dev 493.8
pull1D
Entries 80
Mean −0.004894
Std Dev 0.3221

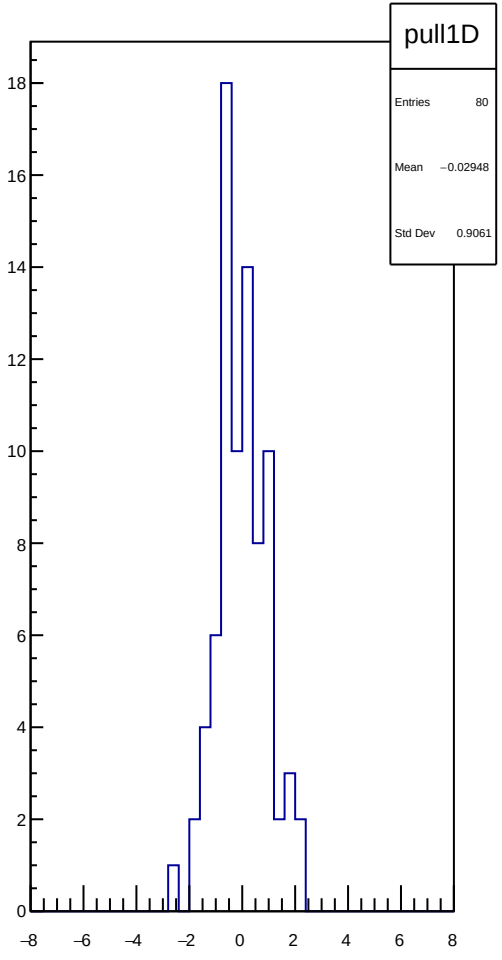

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 17.64 / 79
p0 −240.9 ± 6.176
−150
−200
−250
−300
−350
pull
Entries 80
Mean 68.03
Std Dev 27.11
1.5
1
0.5
0
−0.5
pull1D
Entries 80
Mean −0.03597
Std Dev 0.4682
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

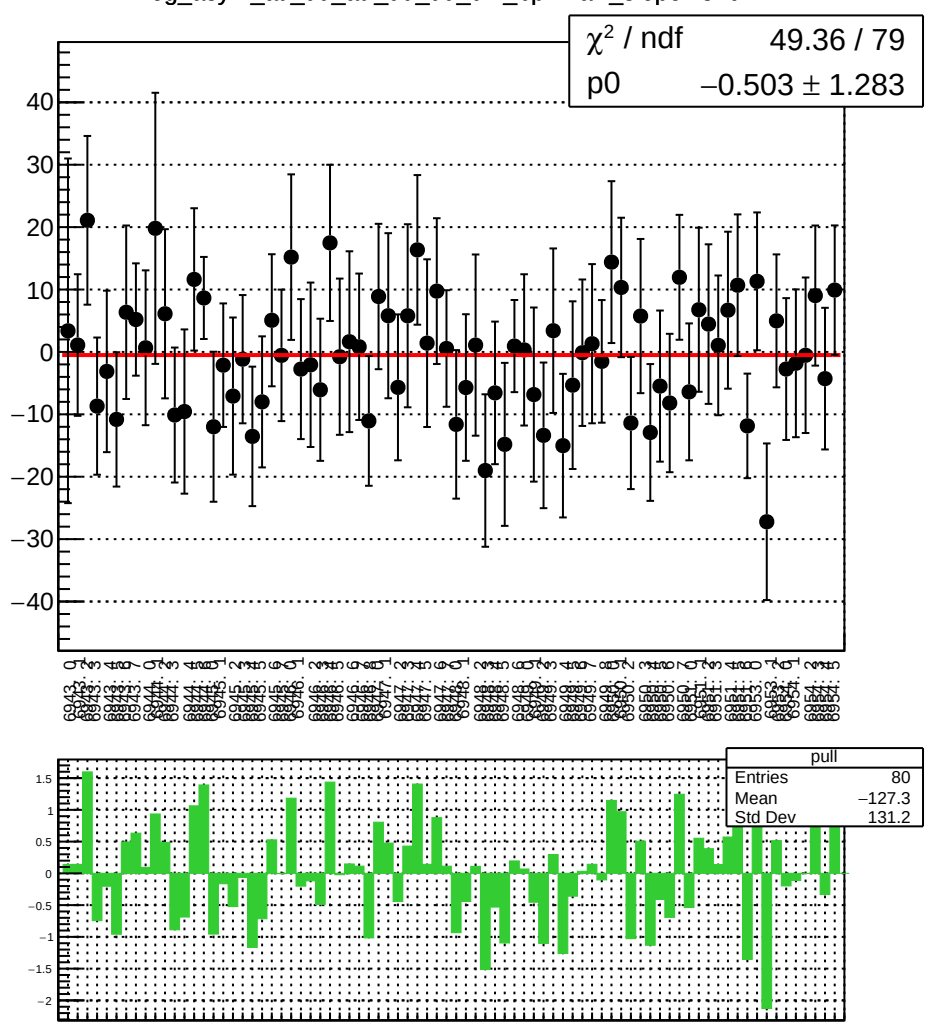

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.383 / 79
p0 −68.01 ± 5.387
pull
Entries 80
Mean 401.1
Std Dev 359.2

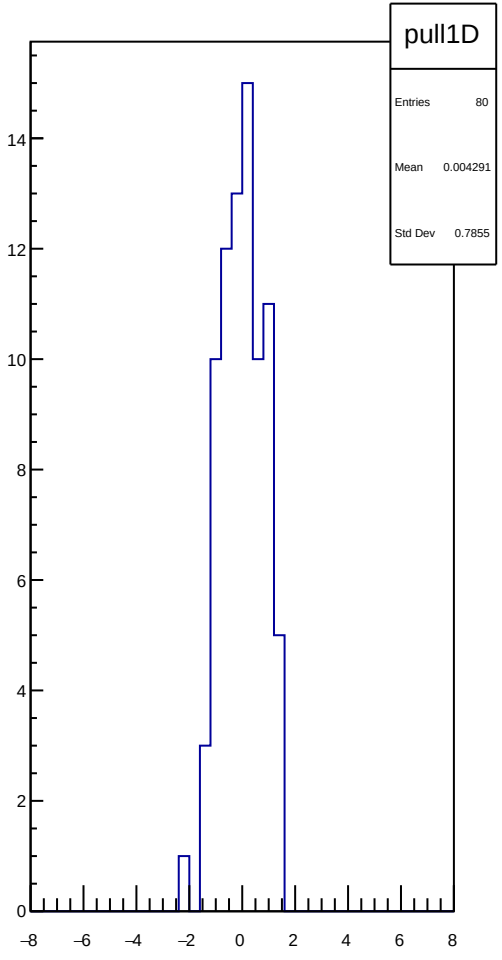

pull1D
Entries 80
Mean 0.007661
Std Dev 0.3424

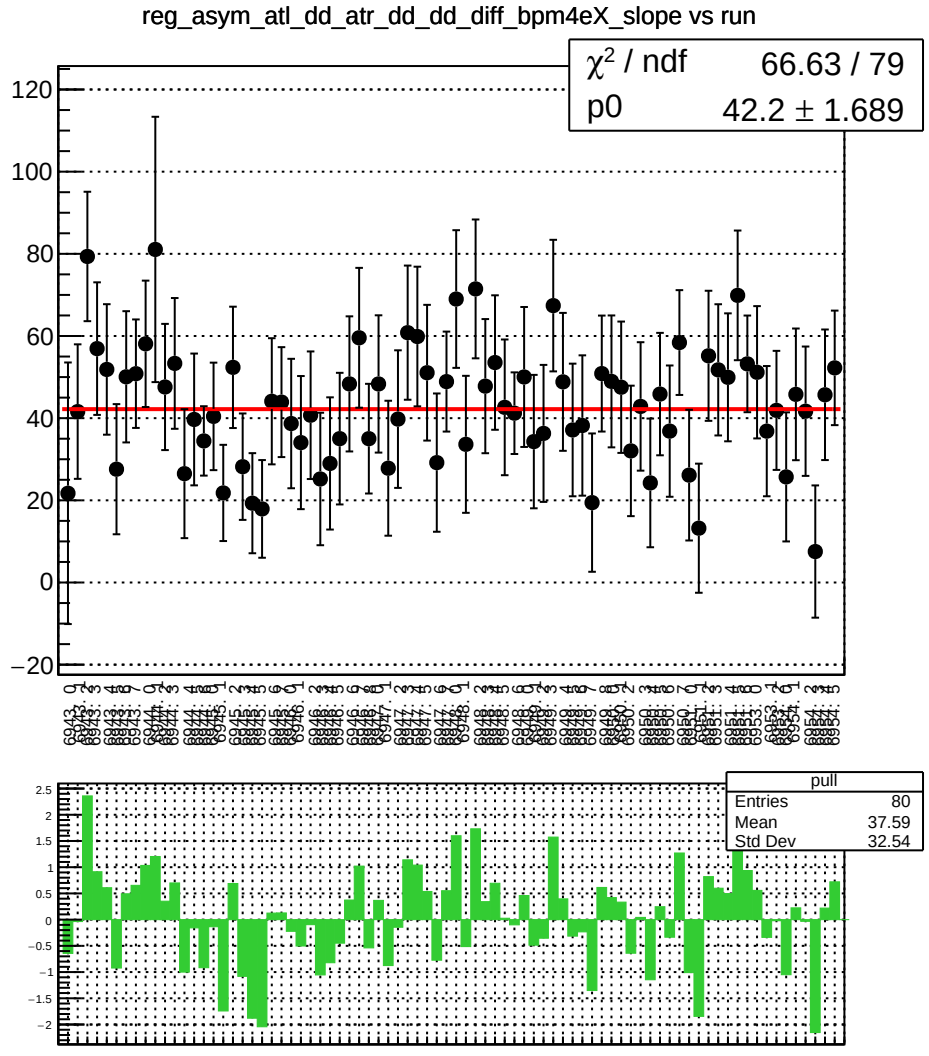

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 7.939 / 79
p0 129.1 ± 0.2141
pull
Entries 80
Mean 501.1
Std Dev 452.1
pull1D
Entries 80
Mean −0.003265
Std Dev 0.315

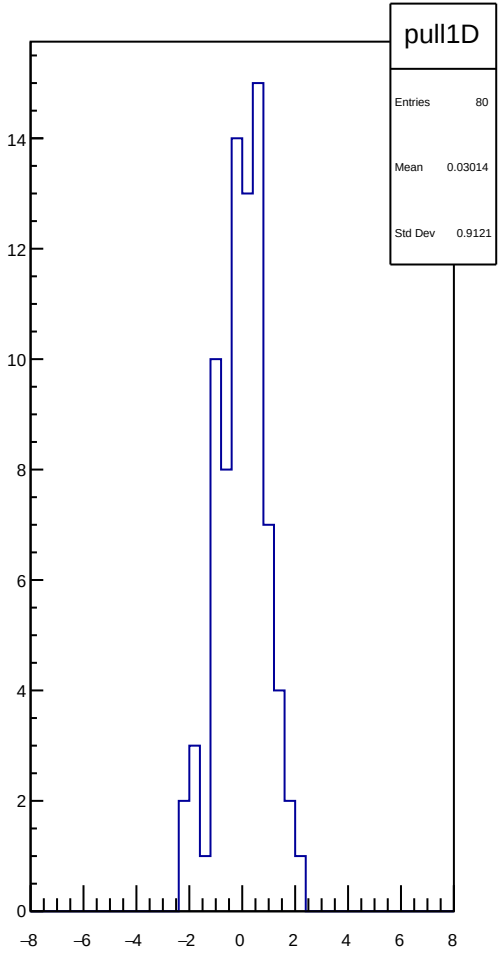

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 65.75 / 79
p0 25.93 ± 1.809
pull
Entries 80
Mean 28.69
Std Dev 30.18

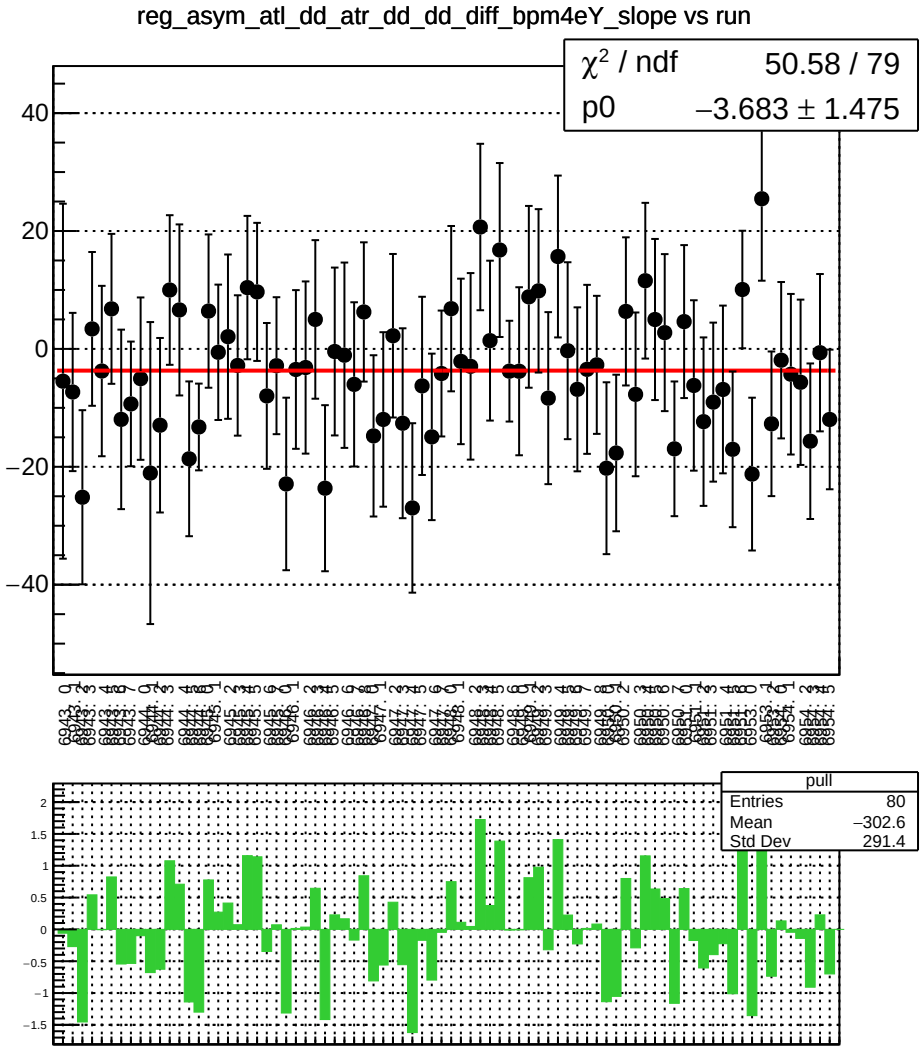

pull1D
Entries 80
Mean −0.02948
Std Dev 0.9061

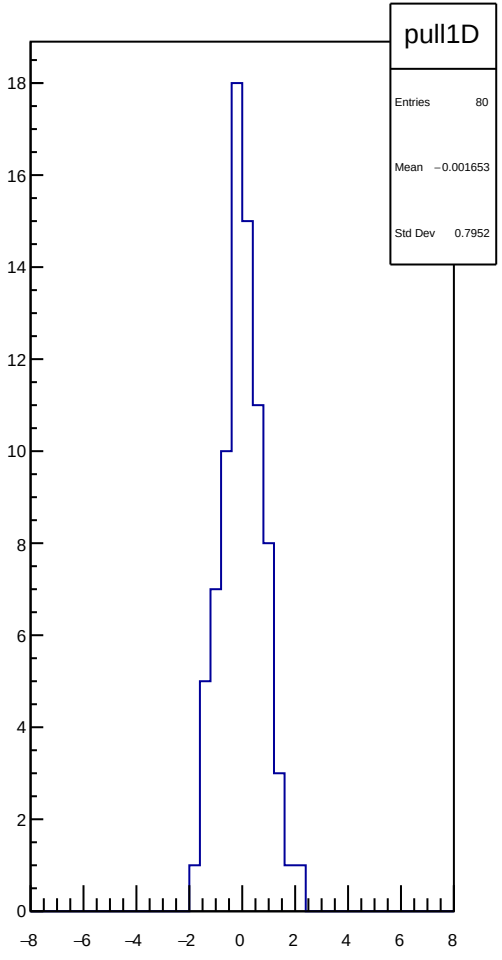

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 49.36 / 79
p0 −0.503 ± 1.283
pull
Entries 80
Mean −127.3
Std Dev 131.2

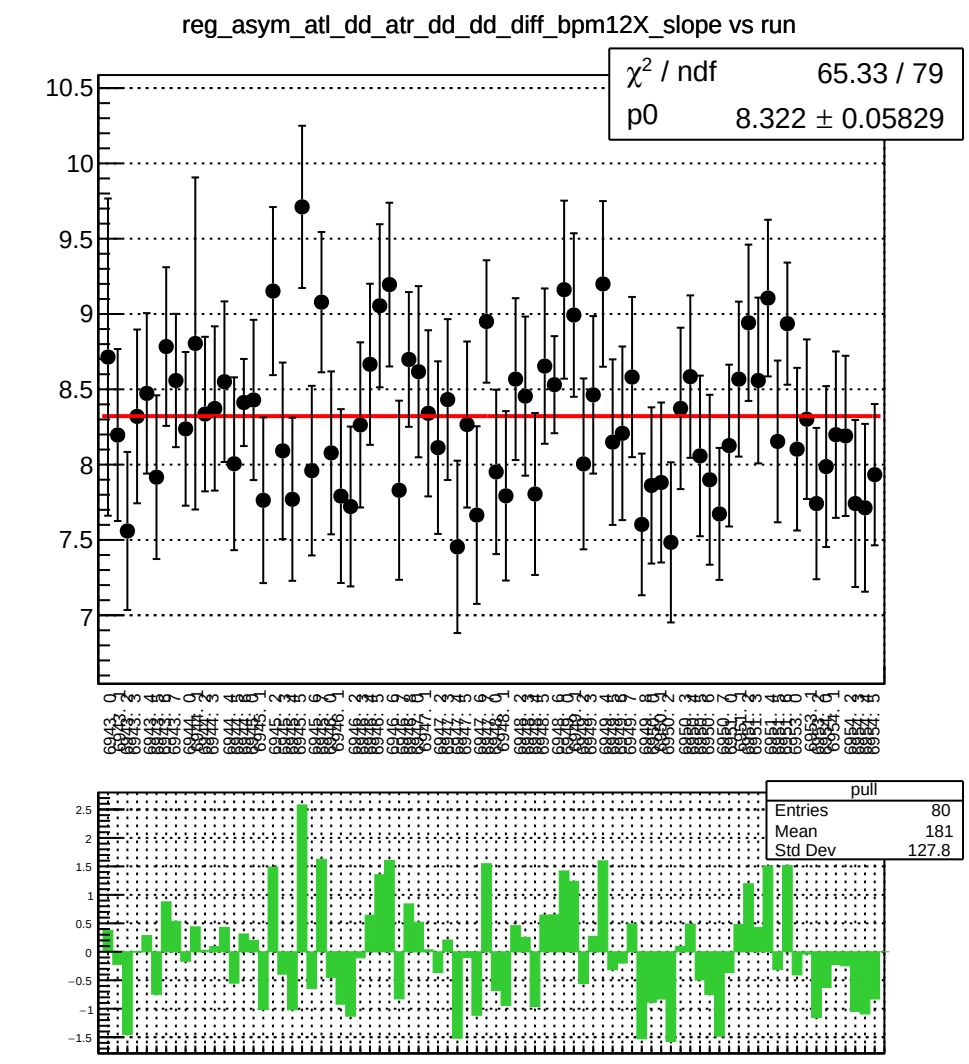

pull1D
Entries 80
Mean 0.004291
Std Dev 0.7855

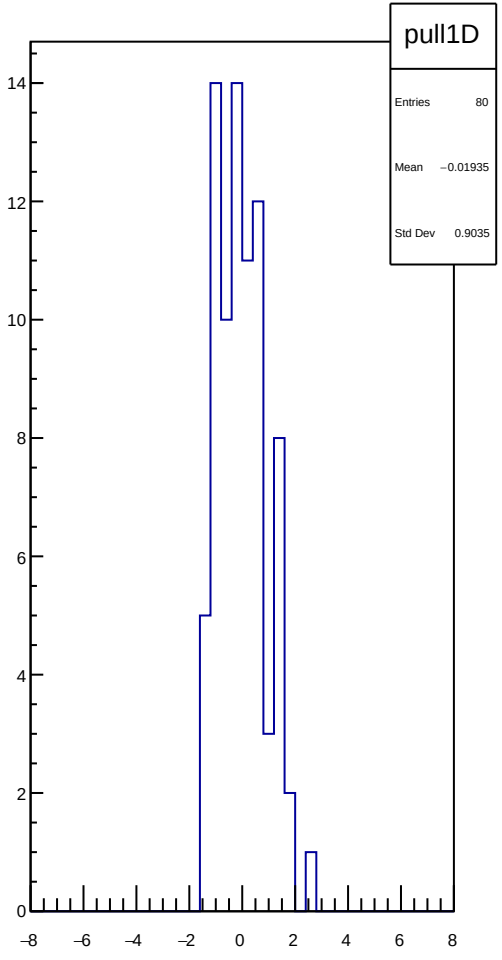

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 66.63 / 79
p0 42.2 ± 1.689
pull
Entries 80
Mean 37.59
Std Dev 32.54

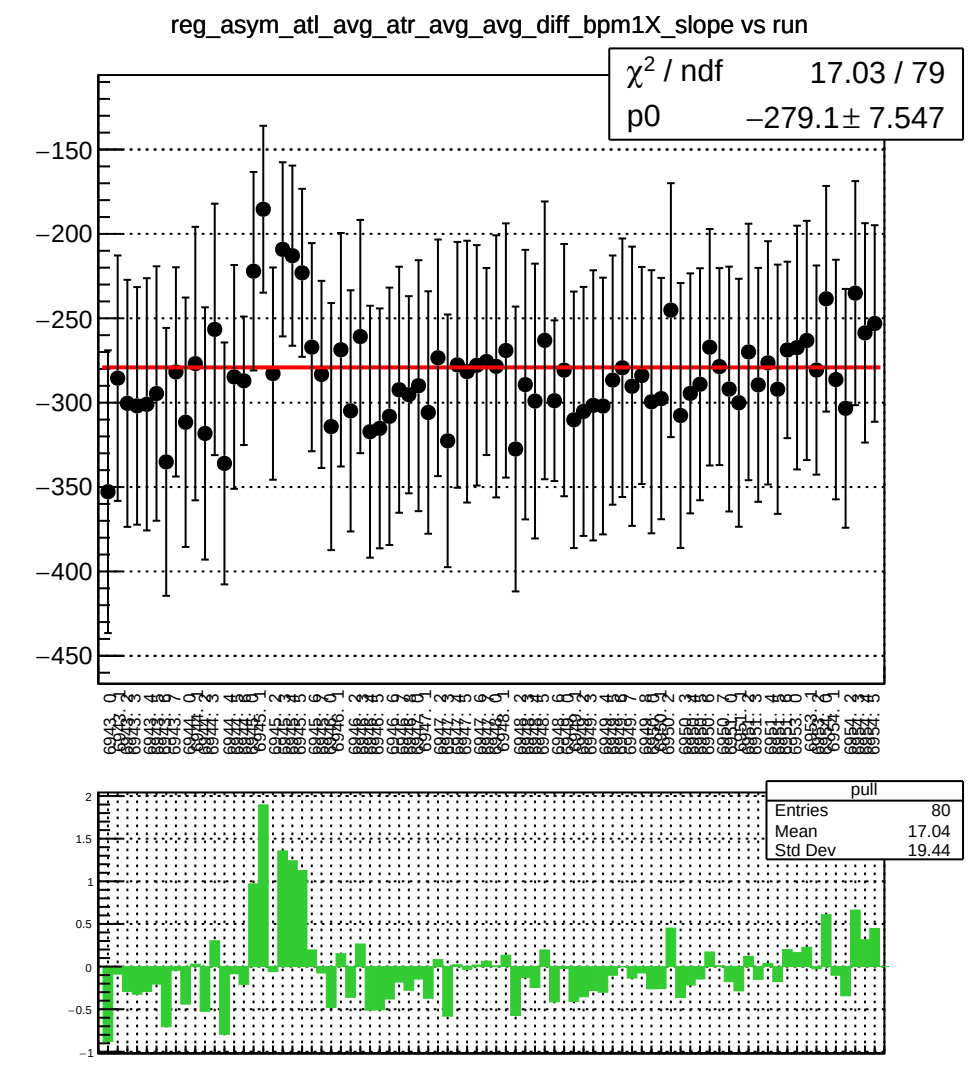

pull1D
Entries 80
Mean 0.03014
Std Dev 0.9121

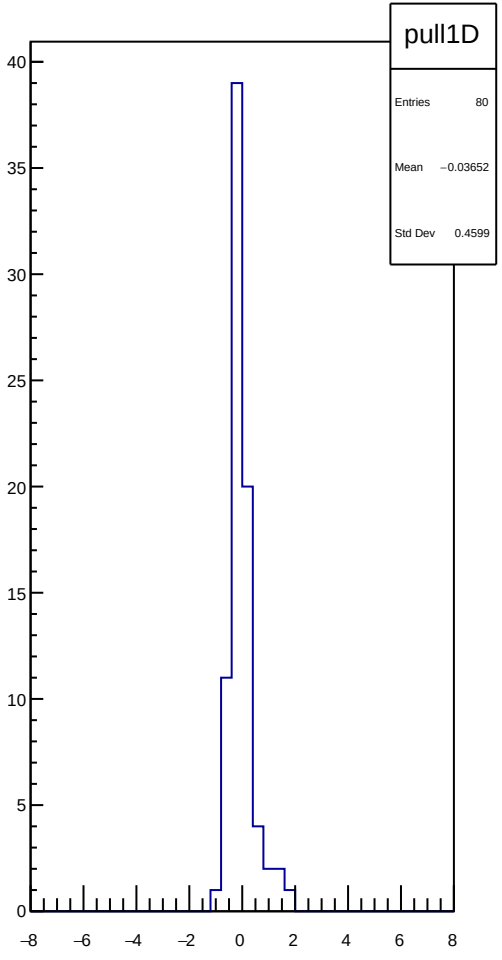

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 50.58 / 79
p0 −3.683 ± 1.475
pull
Entries 80
Mean −302.6
Std Dev 291.4

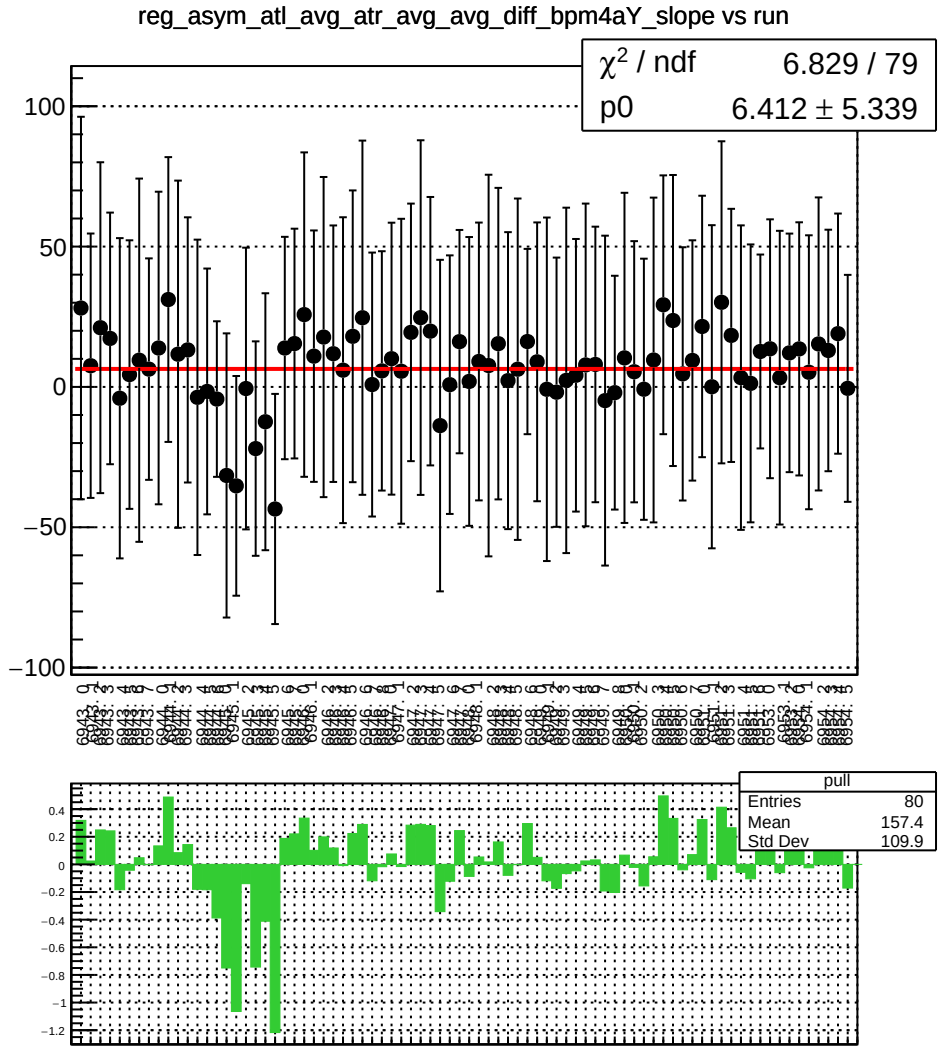

pull1D
Entries 80
Mean −0.001653
Std Dev 0.7952

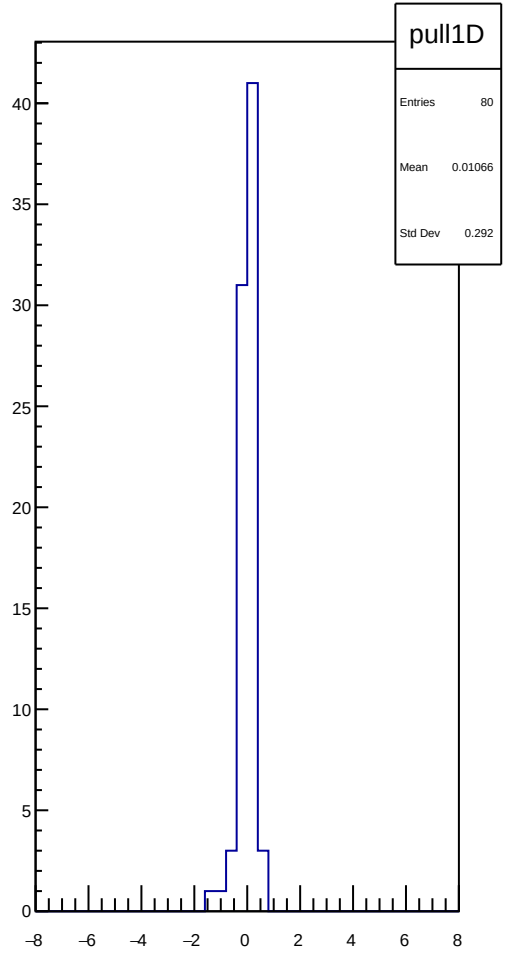

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 65.33 / 79
p0 8.322 ± 0.05829
pull
Entries 80
Mean 181
Std Dev 127.8

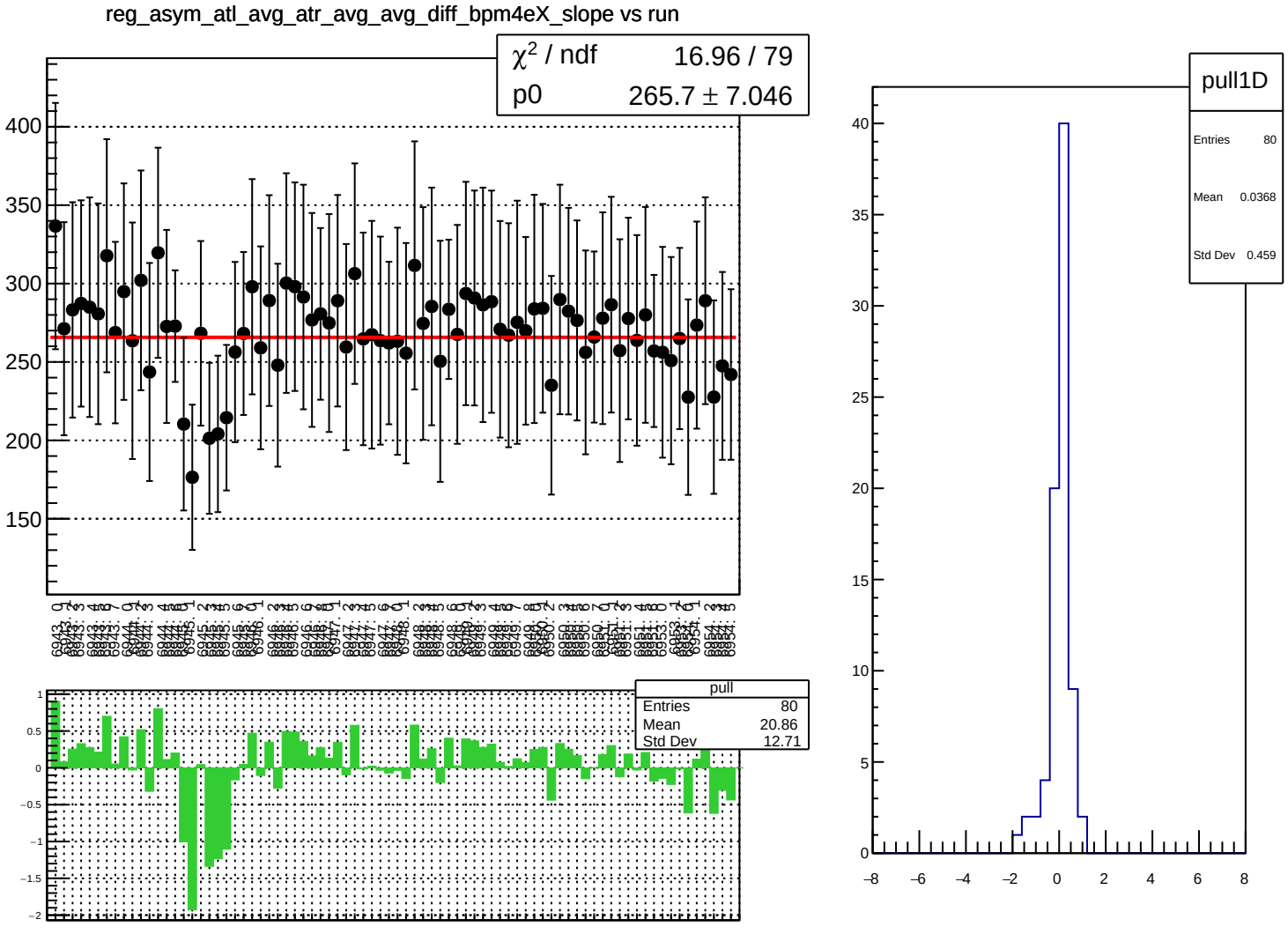

pull1D
Entries 80
Mean −0.01935
Std Dev 0.9035

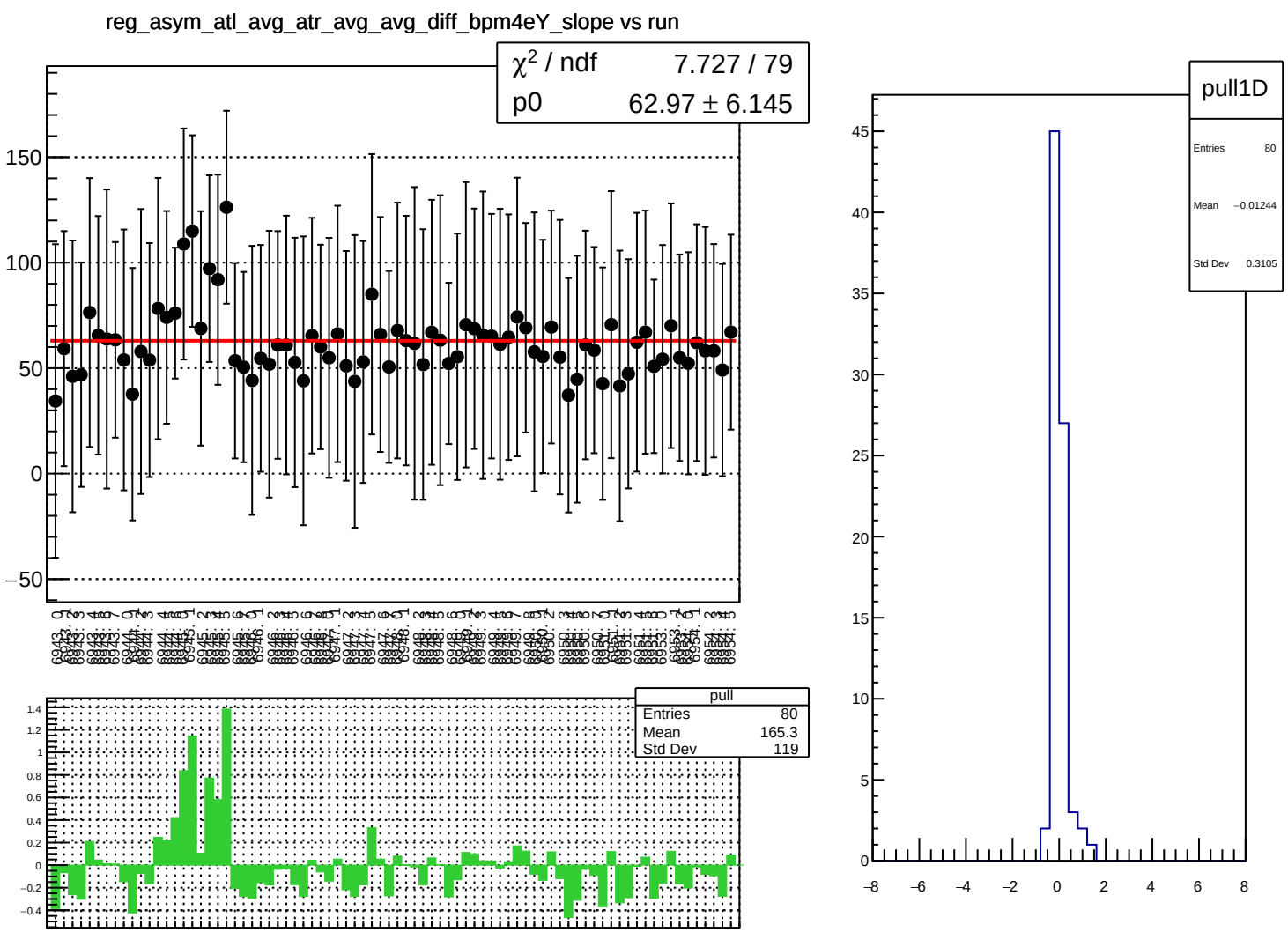

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 17.03 / 79
p0 −279.1± 7.547
pull
Entries 80
Mean 17.04
Std Dev 19.44

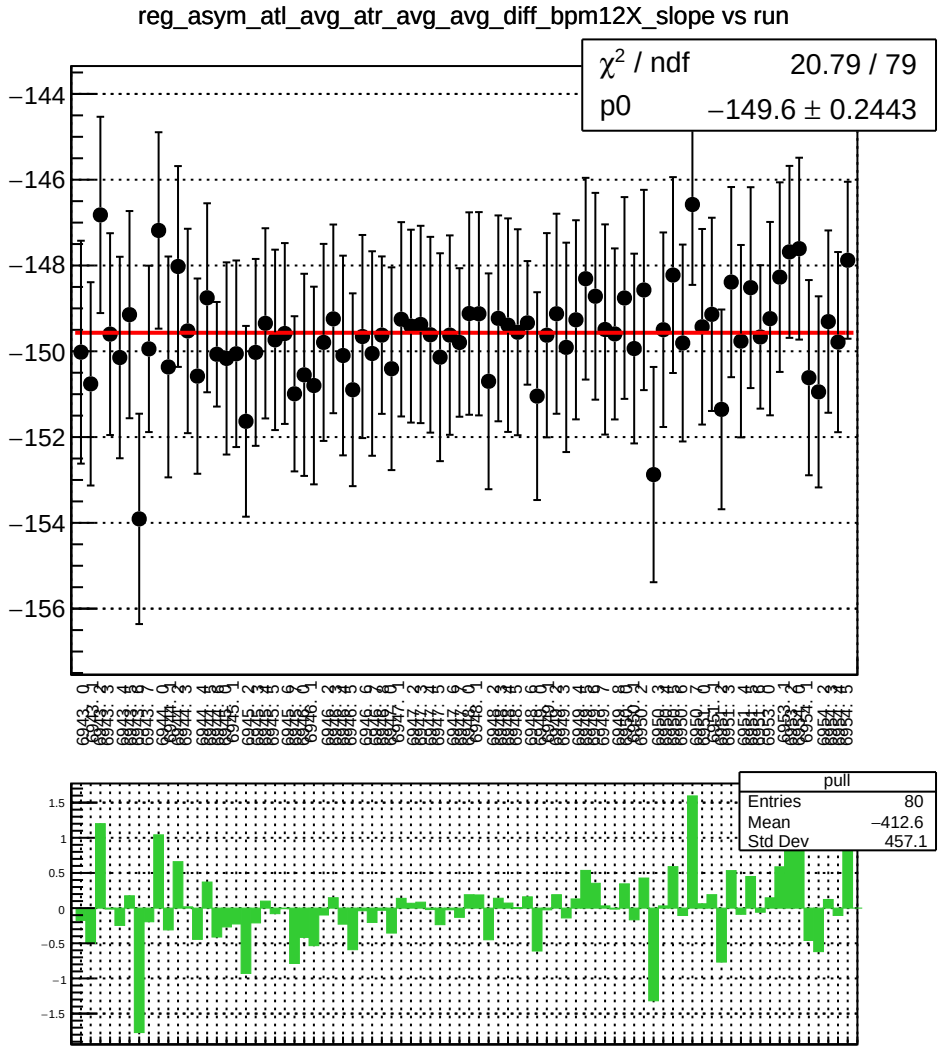

pull1D
Entries 80
Mean −0.03652
Std Dev 0.4599

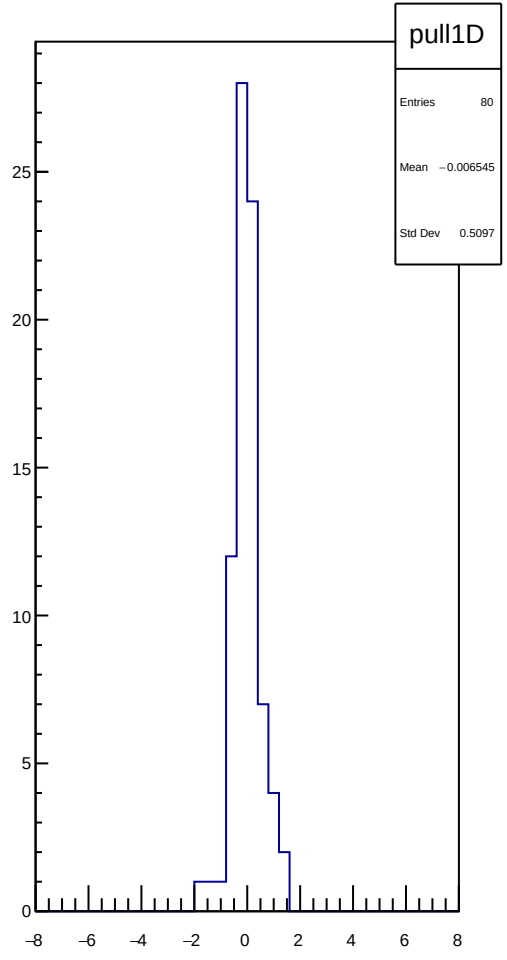

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.829 / 79
p0 6.412 ± 5.339
pull
Entries 80
Mean 157.4
Std Dev 109.9

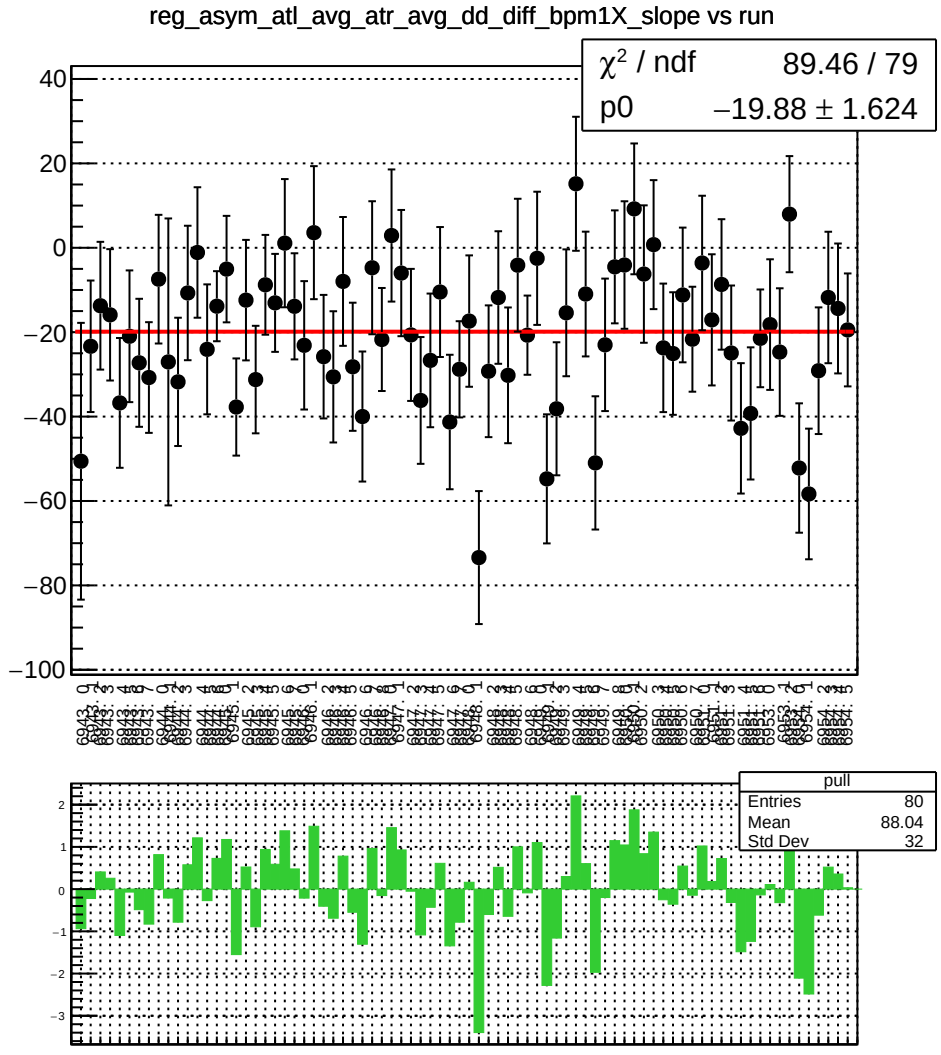

pull1D
Entries 80
Mean 0.01066
Std Dev 0.292

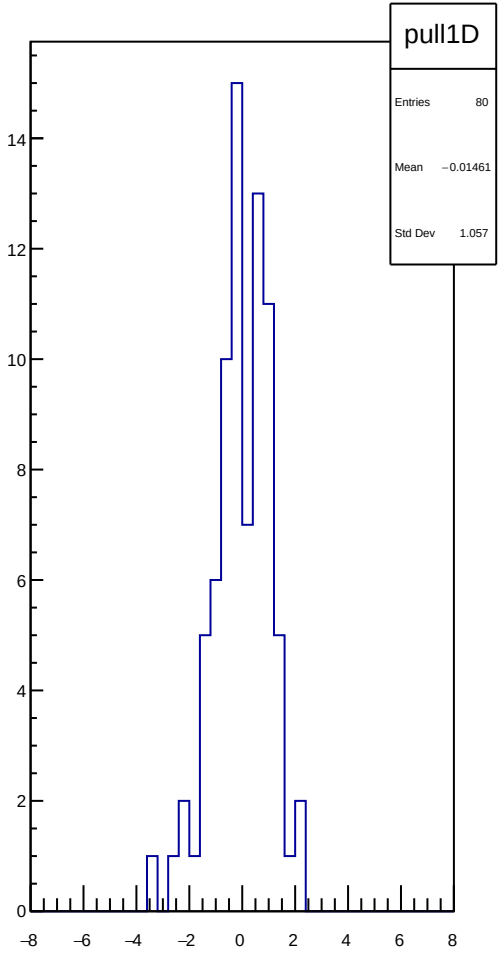

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 16.96 / 79
p0 265.7 ± 7.046
pull
Entries 80
Mean 20.86
Std Dev 12.71
pull1D
Entries 80
Mean 0.0368
Std Dev 0.459

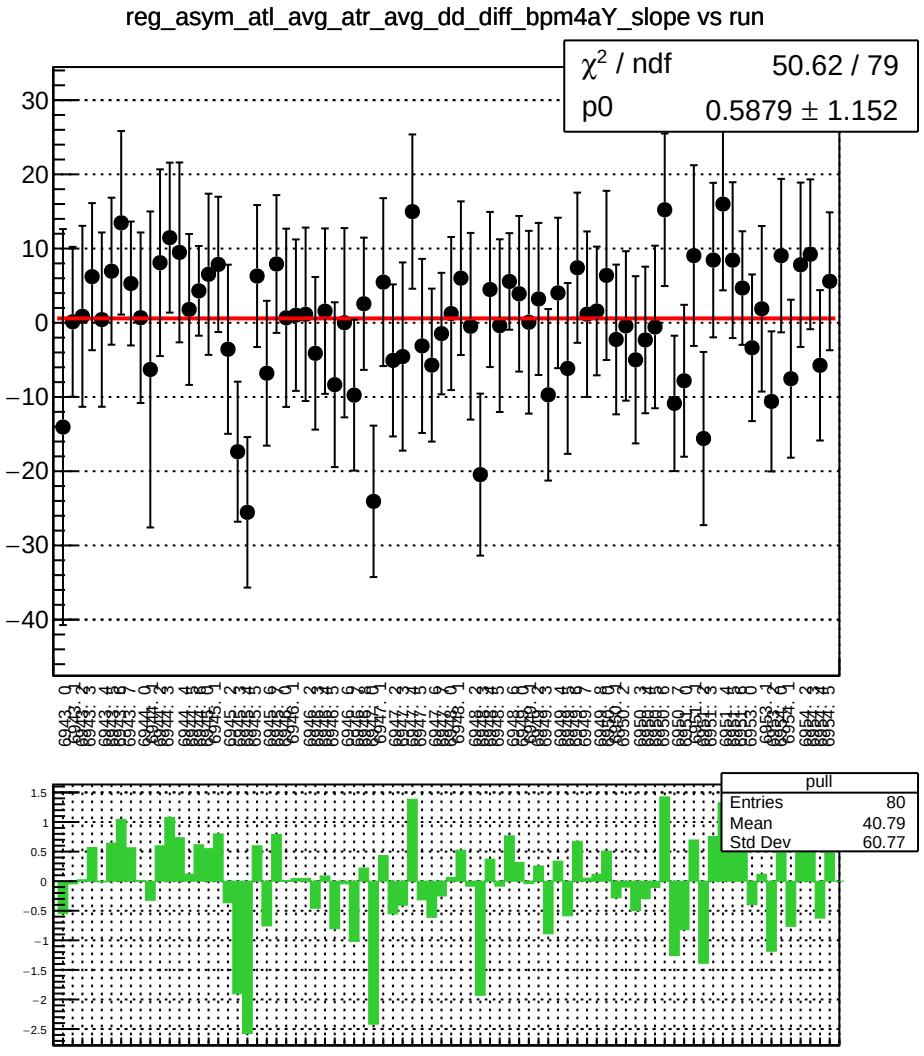

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.727 / 79
p0 62.97 ± 6.145
150
100
50
0
−50
pull
Entries 80
Mean 165.3
Std Dev 119
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 80
Mean −0.01244
Std Dev 0.3105
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

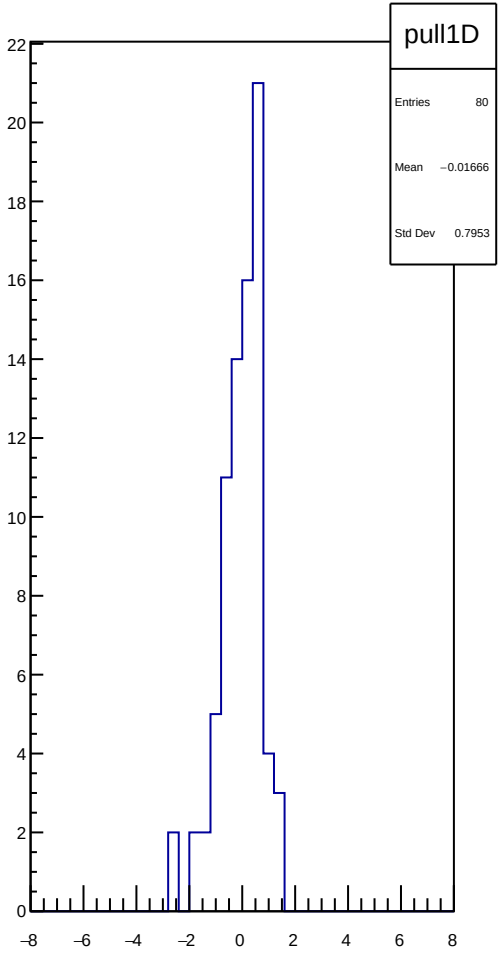

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 20.79 / 79
p0 −149.6 ± 0.2443
pull
Entries 80
Mean −412.6
Std Dev 457.1

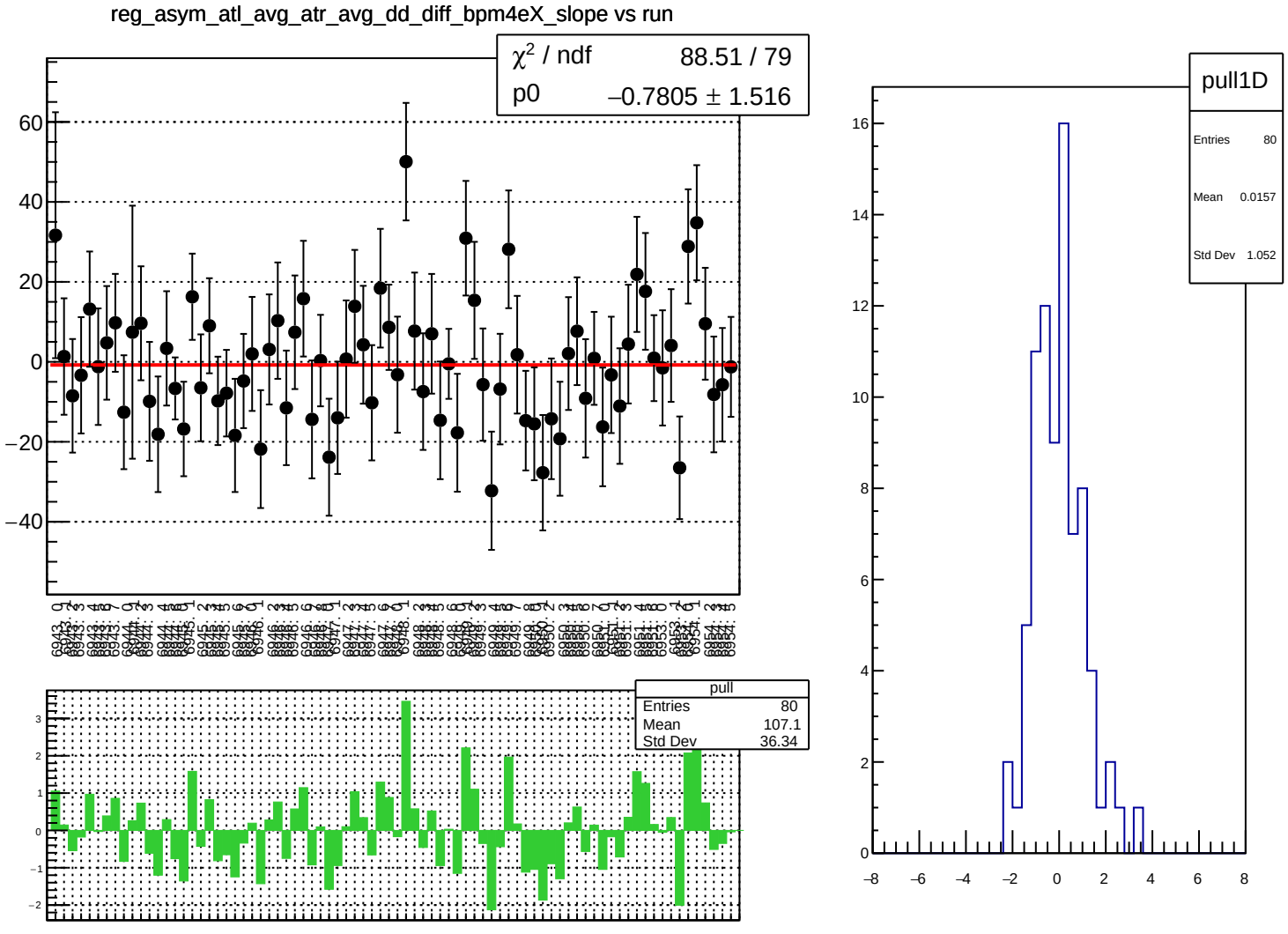

pull1D
Entries 80
Mean −0.006545
Std Dev 0.5097

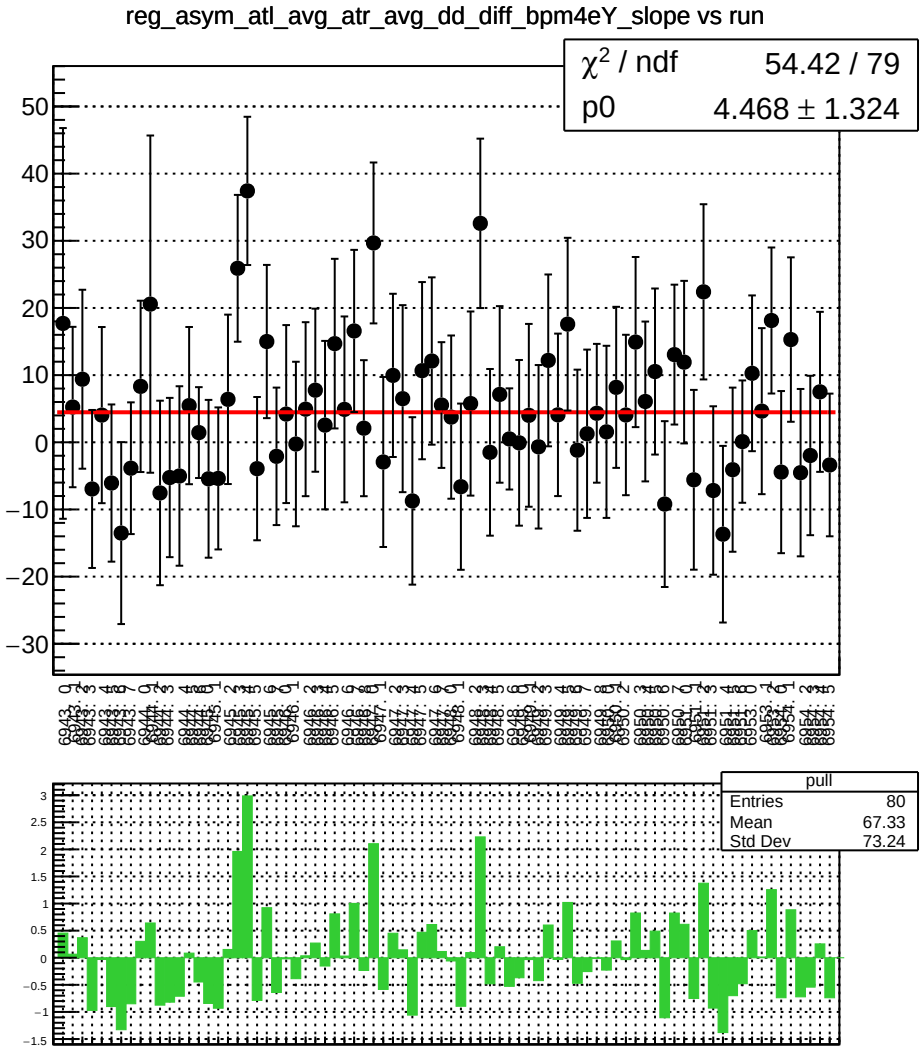

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 89.46 / 79
p0 −19.88 ± 1.624
pull
Entries 80
Mean 88.04
Std Dev 32

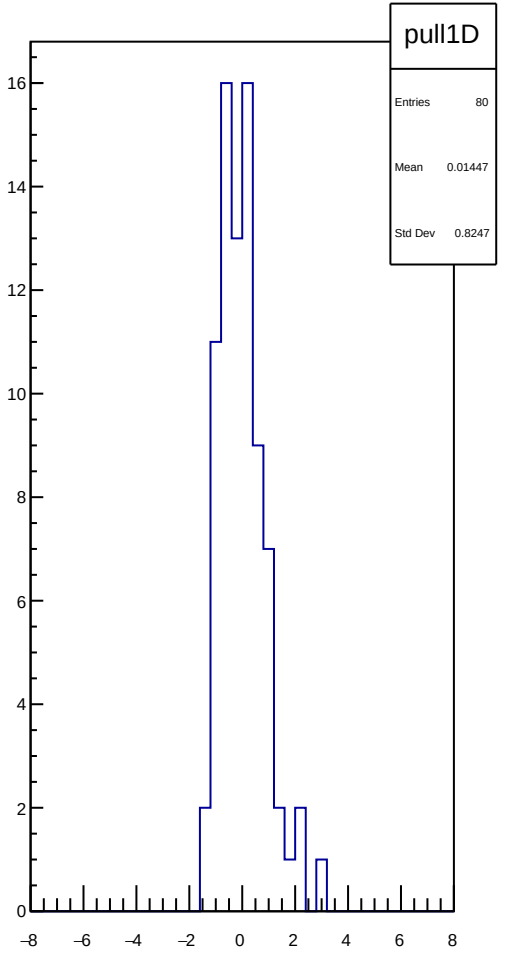

pull1D
Entries 80
Mean −0.01461
Std Dev 1.057

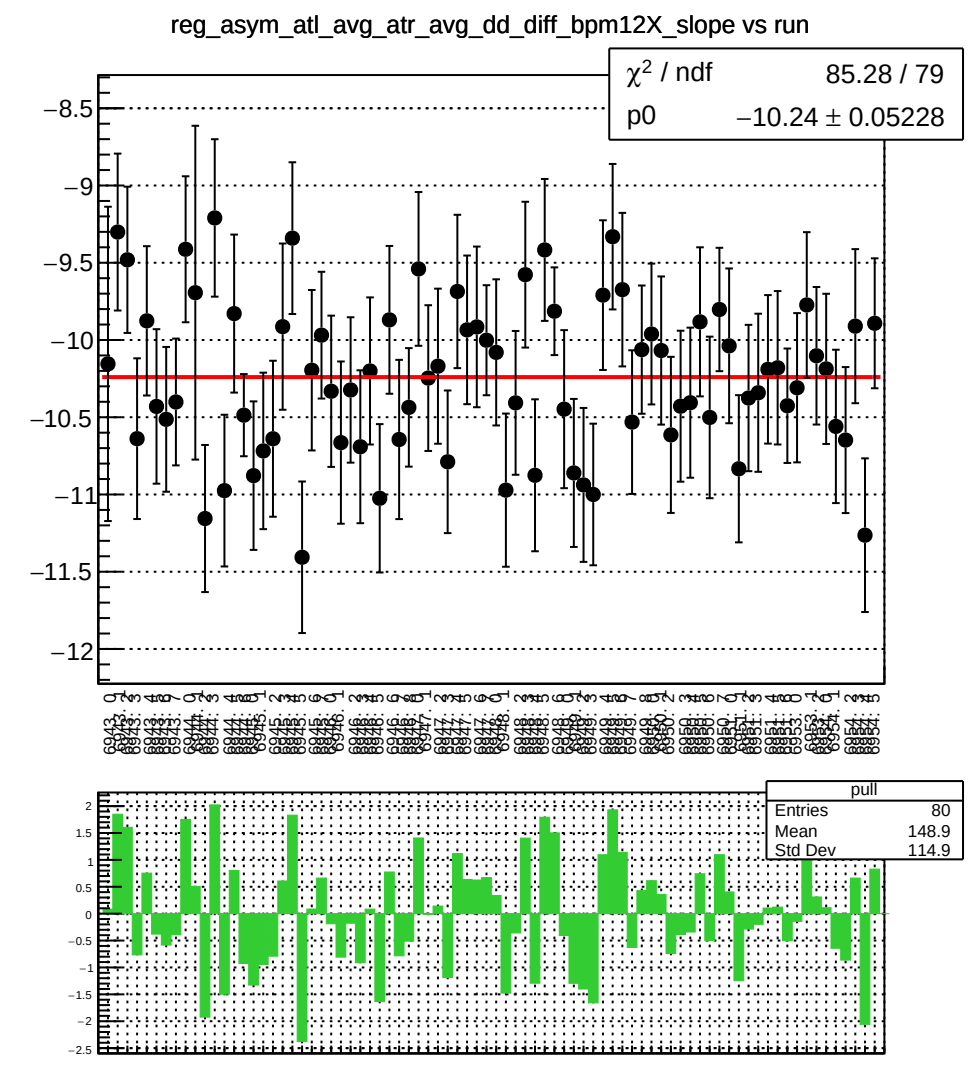

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 50.62 / 79
p0 0.5879 ± 1.152
pull
Entries 80
Mean 40.79
Std Dev 60.77

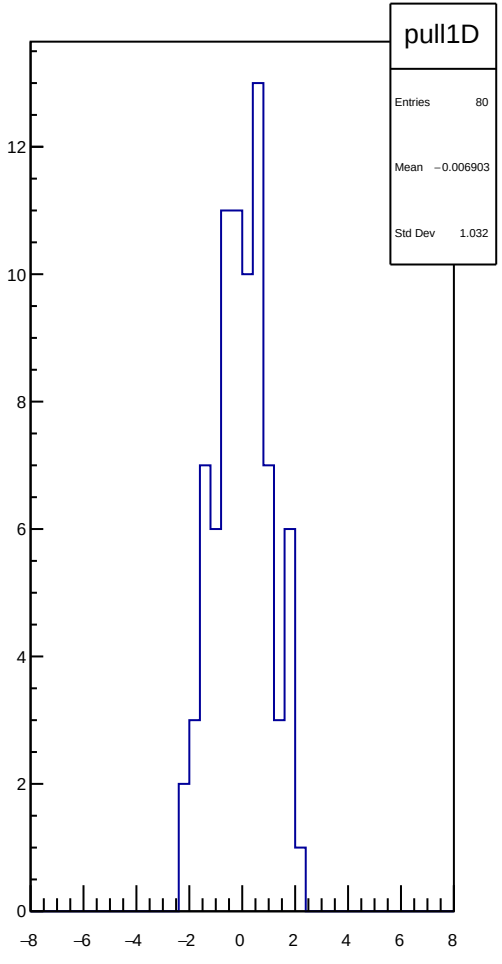

pull1D
Entries 80
Mean −0.01666
Std Dev 0.7953

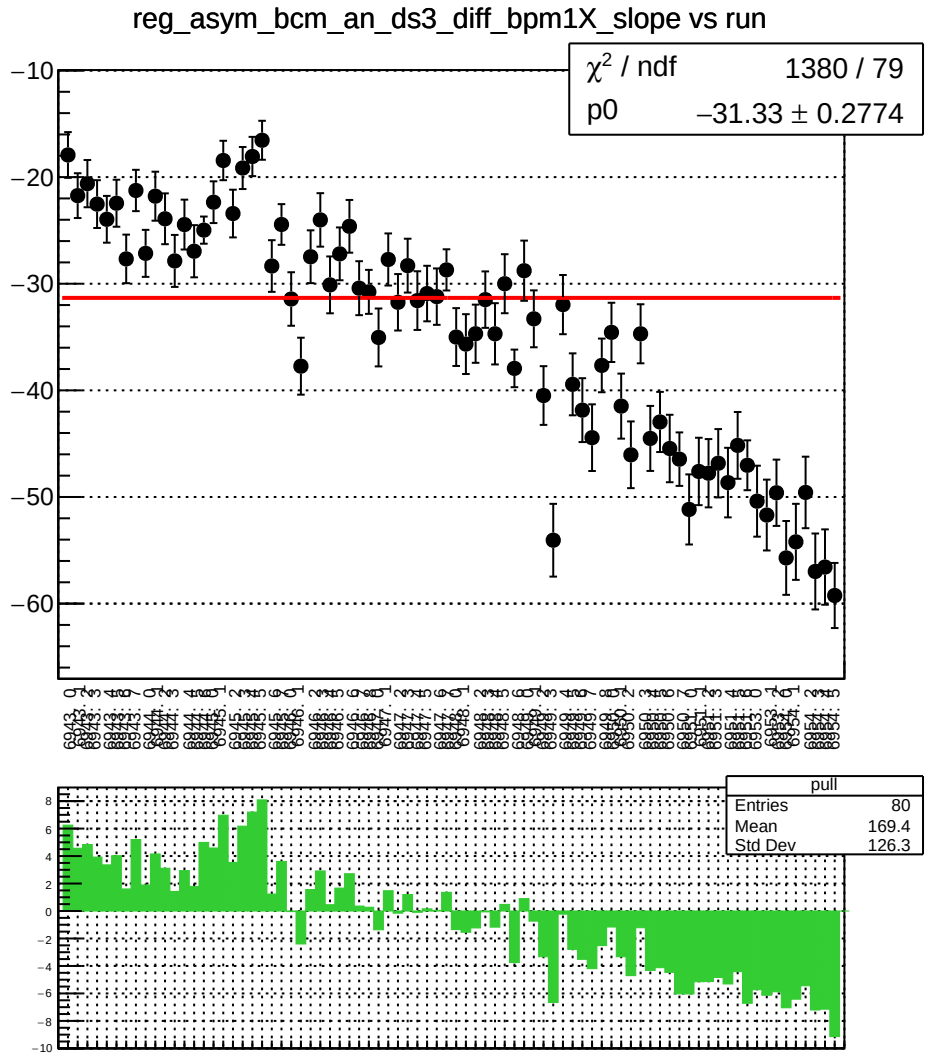

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 88.51 / 79
p0 −0.7805 ± 1.516
pull
Entries 80
Mean 107.1
Std Dev 36.34
pull1D
Entries 80
Mean 0.0157
Std Dev 1.052

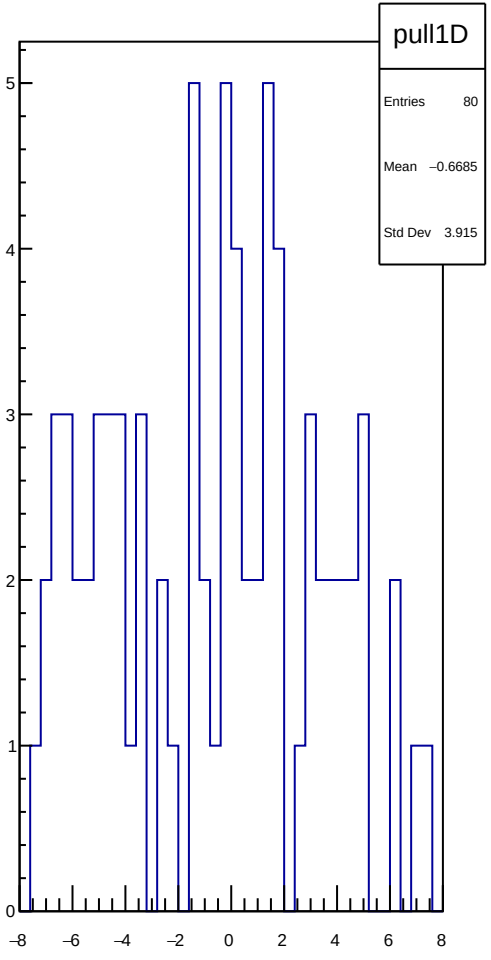

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 54.42 / 79
p0 4.468 ± 1.324
pull
Entries 80
Mean 67.33
Std Dev 73.24

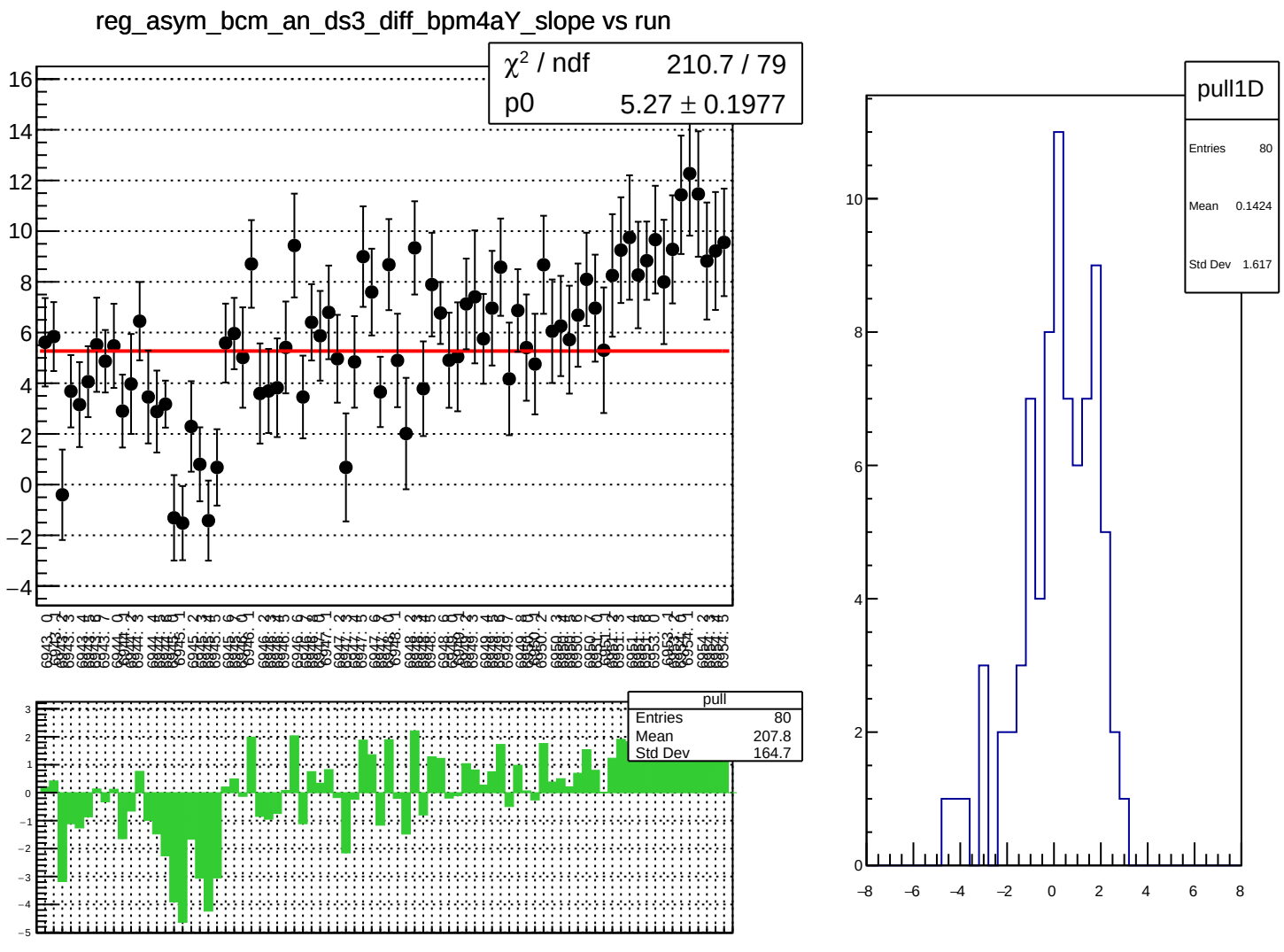

pull1D
Entries 80
Mean 0.01447
Std Dev 0.8247

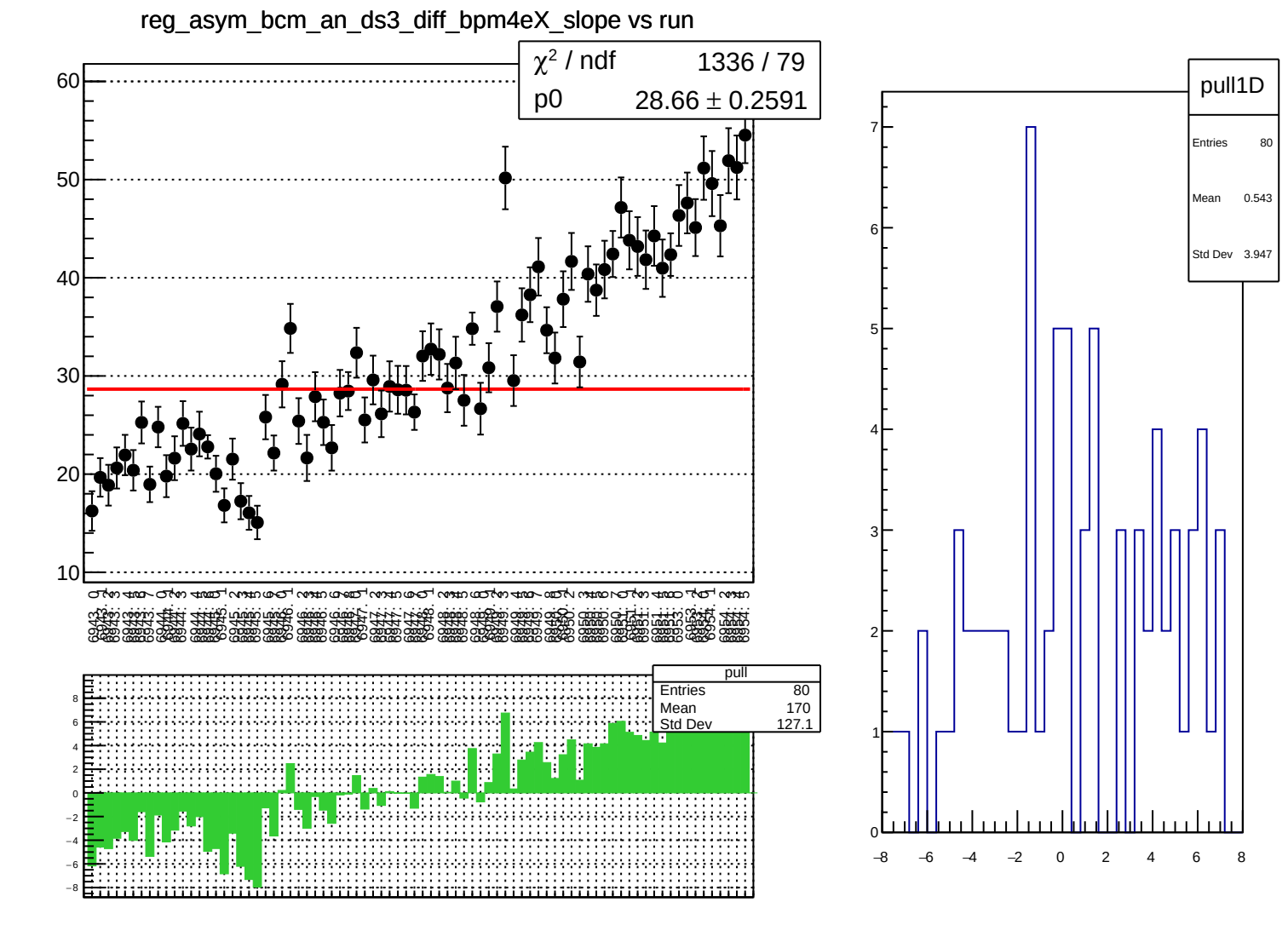

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 85.28 / 79
p0 −10.24 ± 0.05228
pull
Entries 80
Mean 148.9
Std Dev 114.9

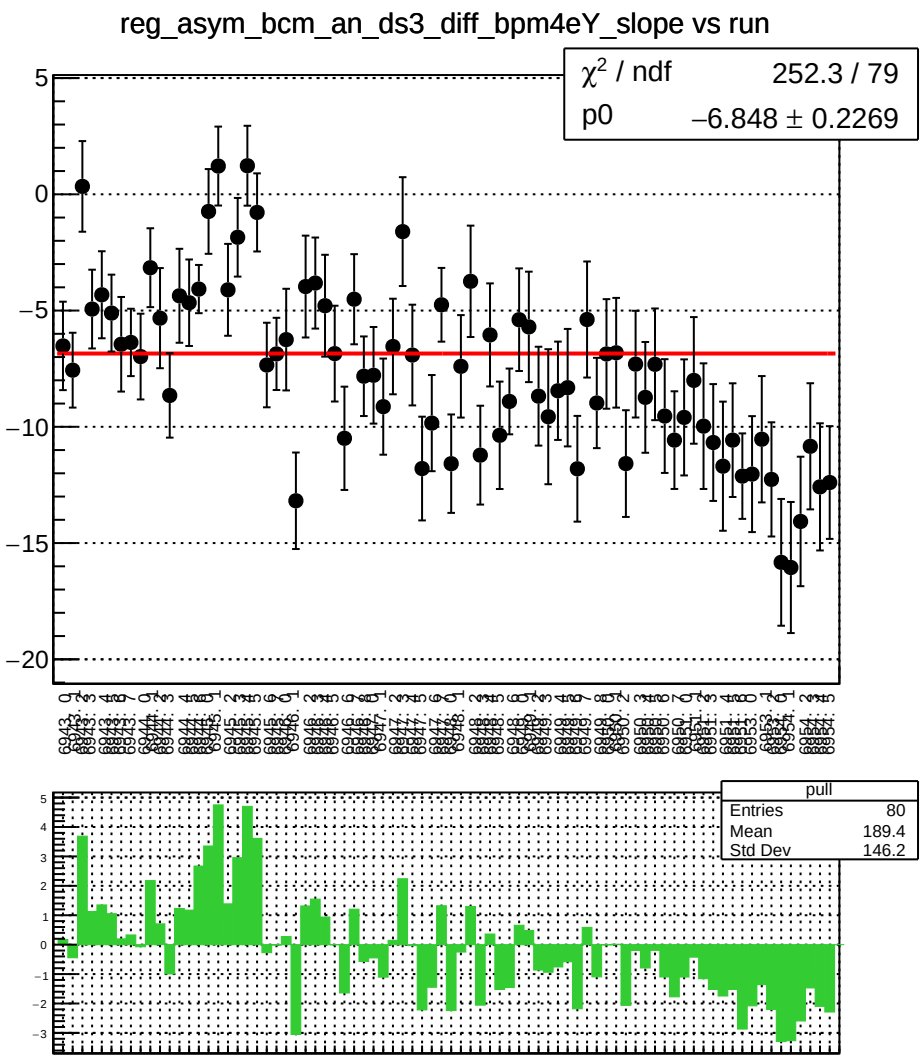

pull1D
Entries 80
Mean −0.006903
Std Dev 1.032

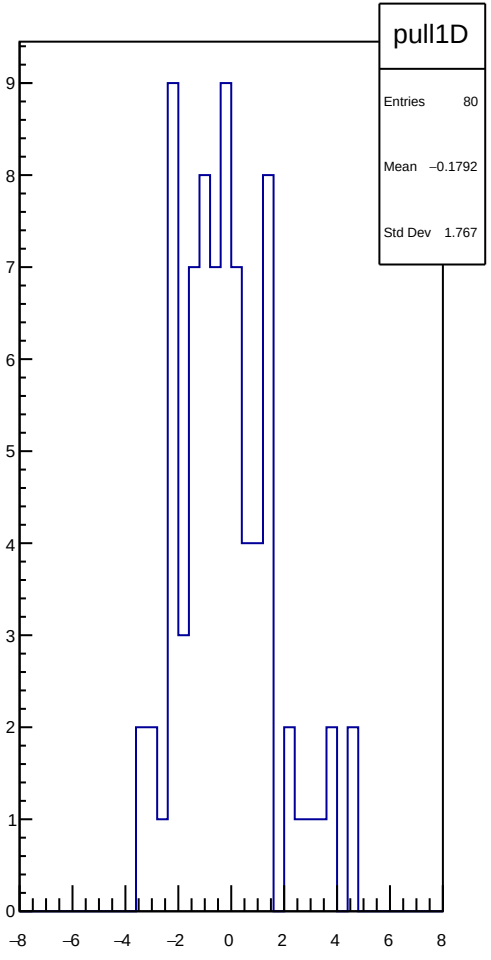

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 1380 / 79
p0 −31.33 ± 0.2774
pull
Entries 80
Mean 169.4
Std Dev 126.3

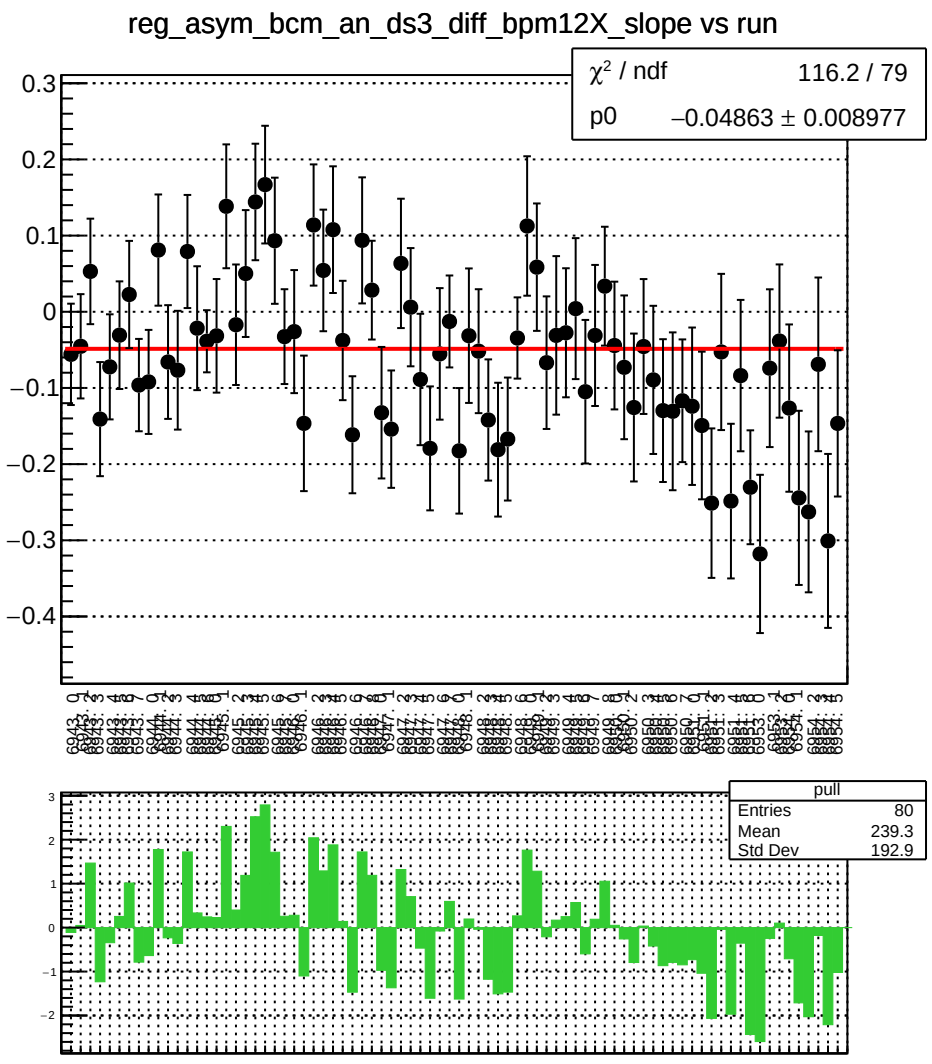

pull1D
Entries 80
Mean −0.6685
Std Dev 3.915

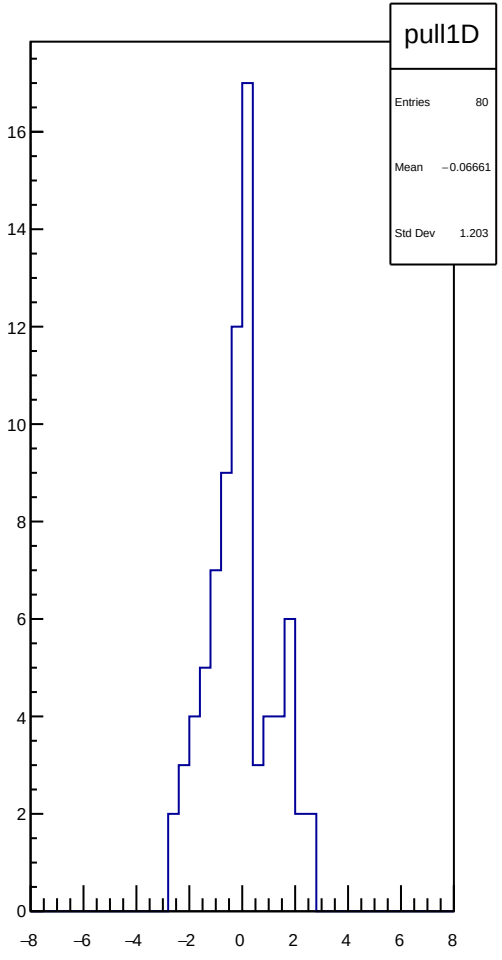

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 210.7 / 79
p0 5.27 ± 0.1977
pull
Entries 80
Mean 207.8
Std Dev 164.7
pull1D
Entries 80
Mean 0.1424
Std Dev 1.617

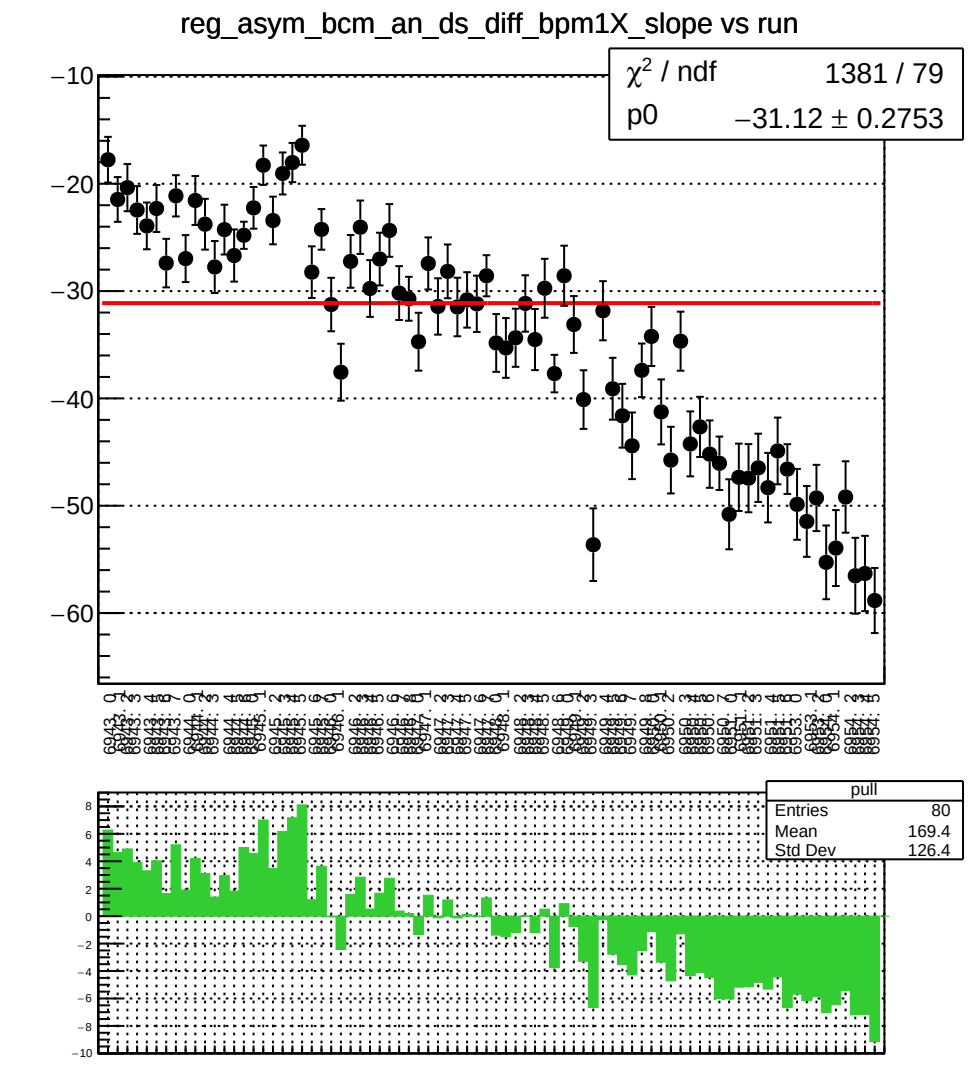

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 1336 / 79
p0 28.66 ± 0.2591
pull
Entries 80
Mean 170
Std Dev 127.1
pull1D
Entries 80
Mean 0.543
Std Dev 3.947

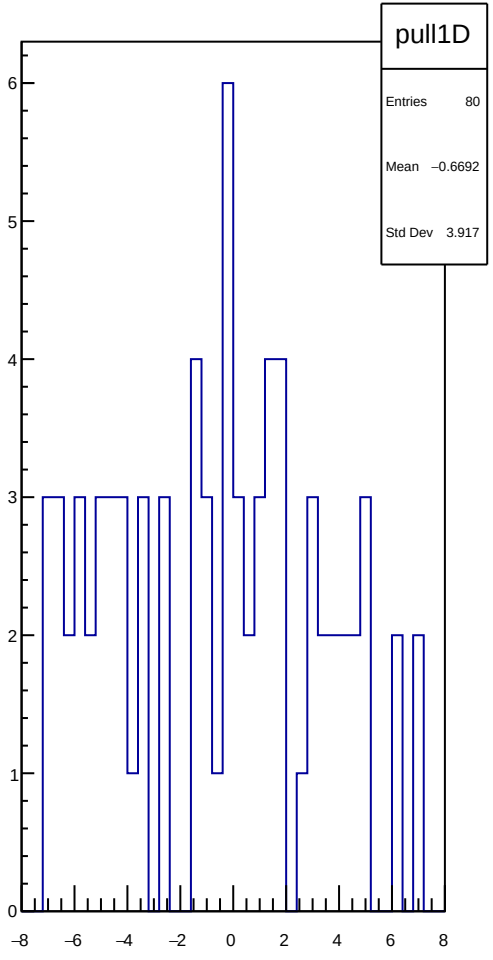

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 252.3 / 79
p0 −6.848 ± 0.2269
pull
Entries 80
Mean 189.4
Std Dev 146.2

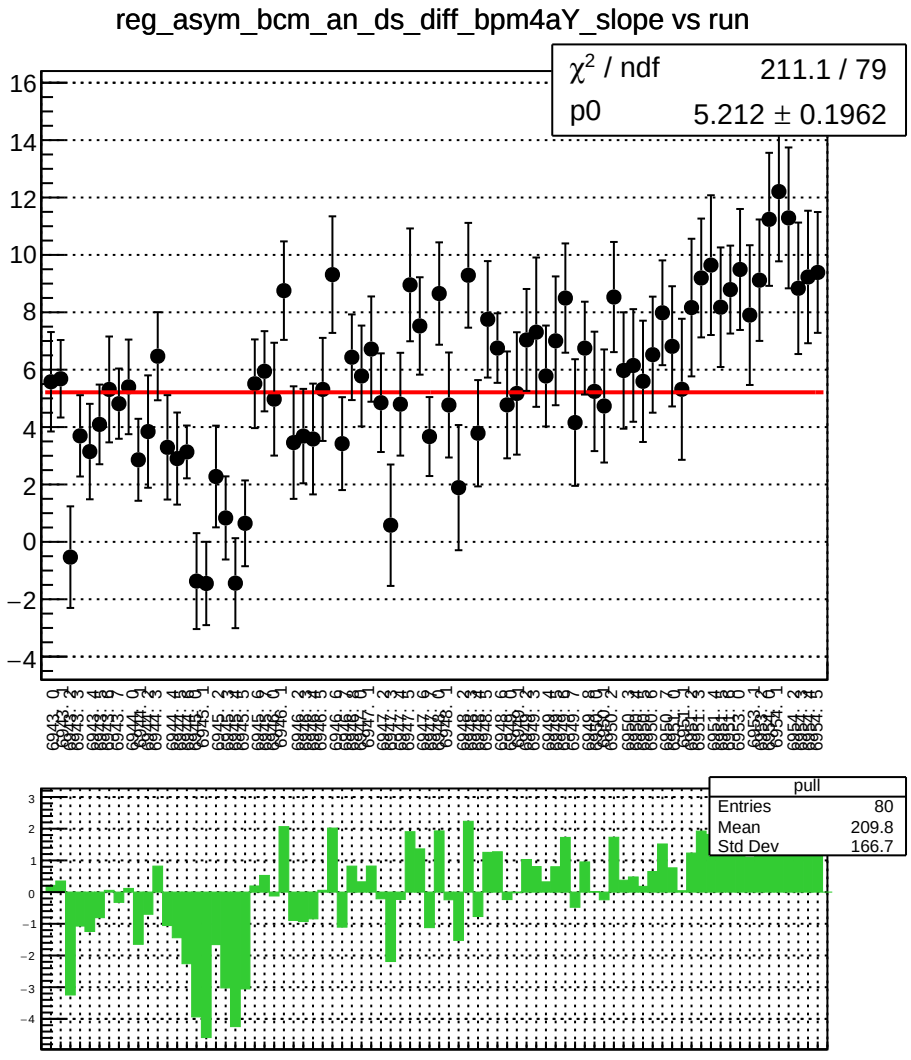

pull1D
Entries 80
Mean −0.1792
Std Dev 1.767

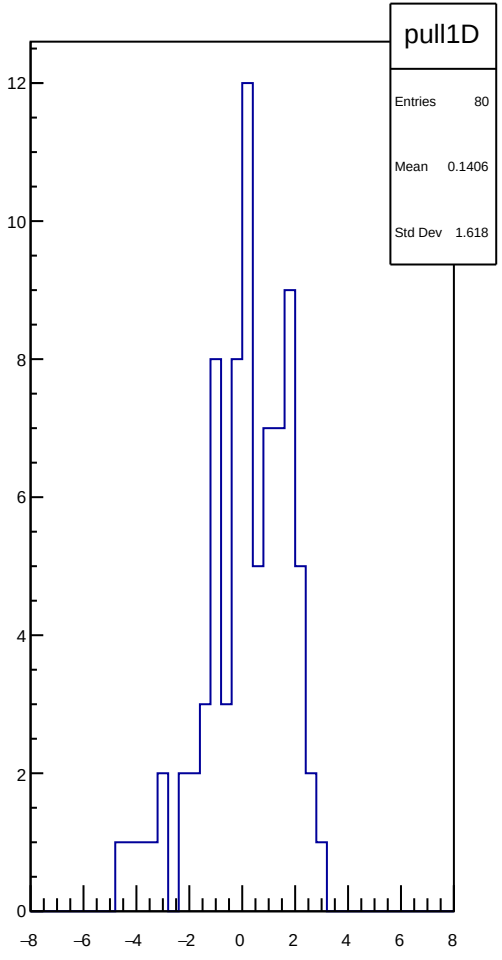

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 116.2 / 79
p0 −0.04863 ± 0.008977
pull
Entries 80
Mean 239.3
Std Dev 192.9

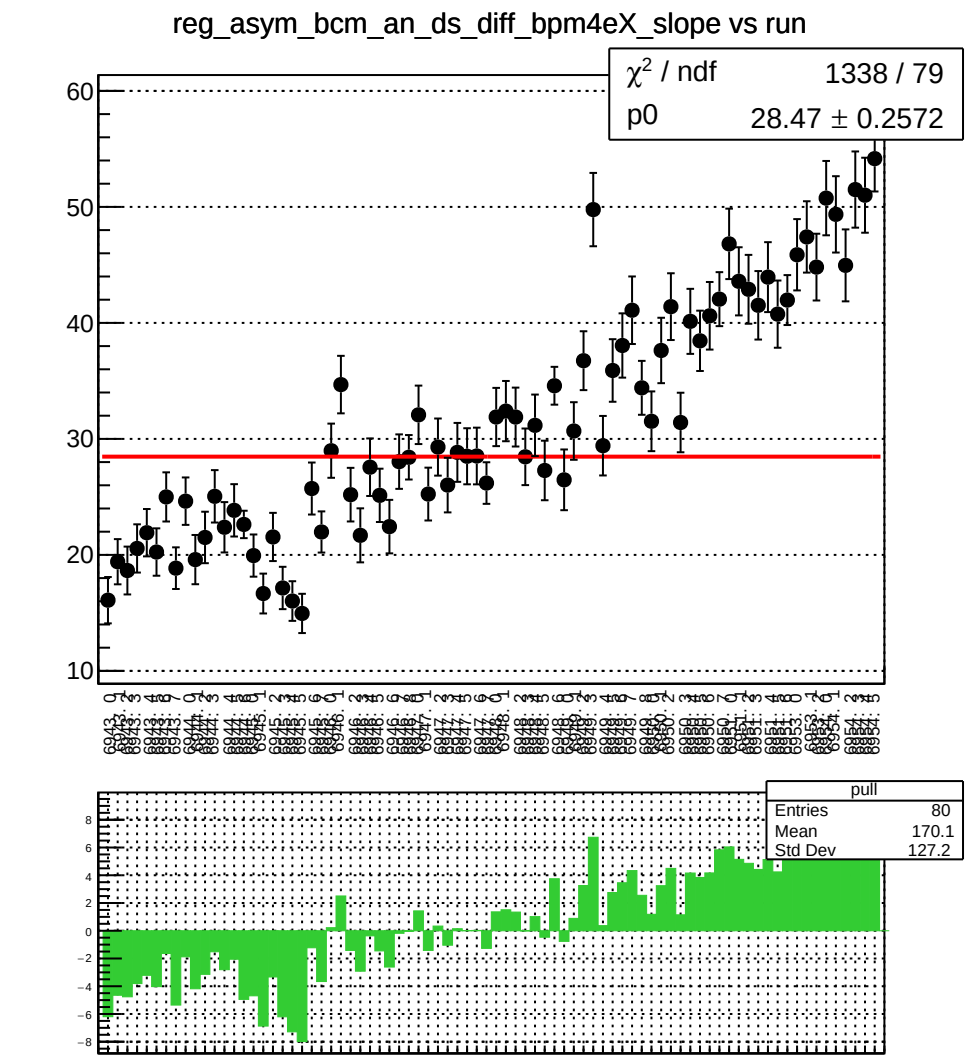

pull1D
Entries 80
Mean −0.06661
Std Dev 1.203

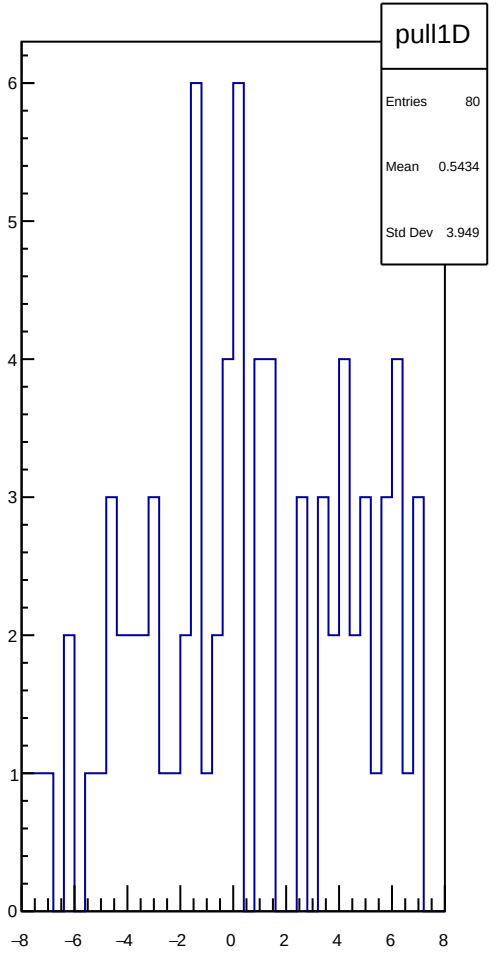

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 1381 / 79
p0 −31.12 ± 0.2753
pull
Entries 80
Mean 169.4
Std Dev 126.4

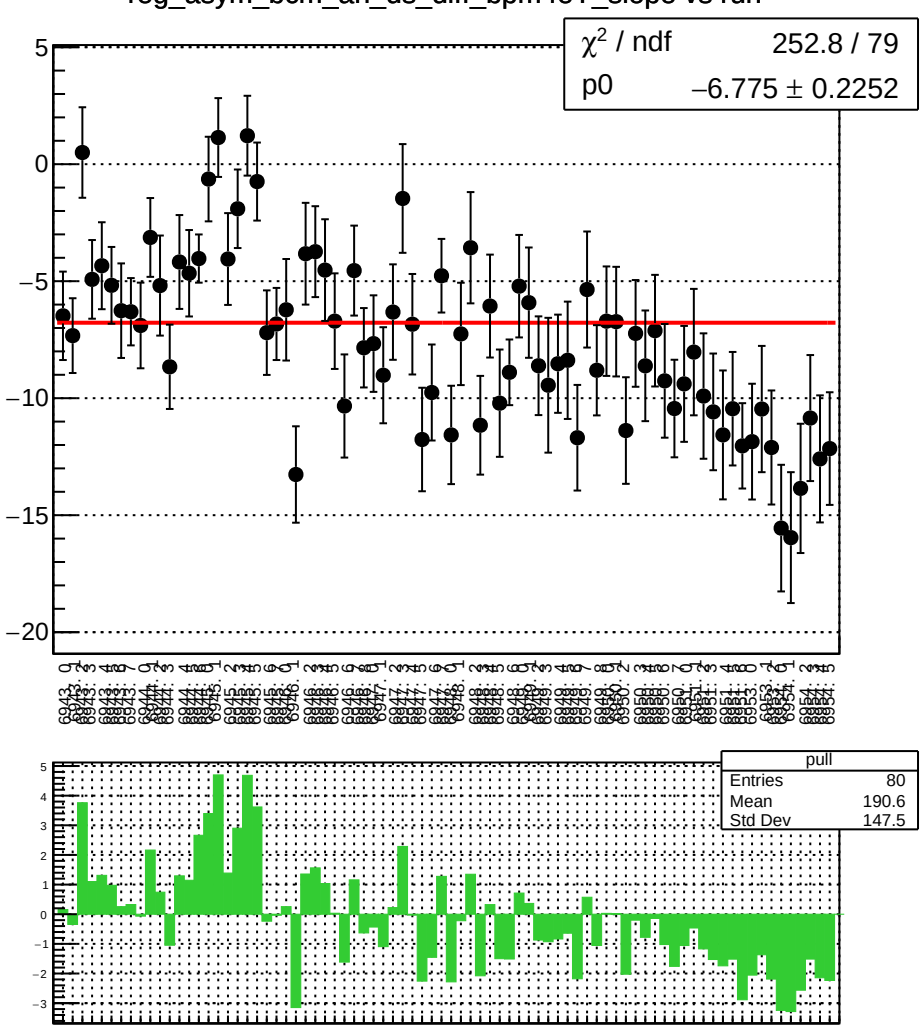

pull1D
Entries 80
Mean −0.6692
Std Dev 3.917

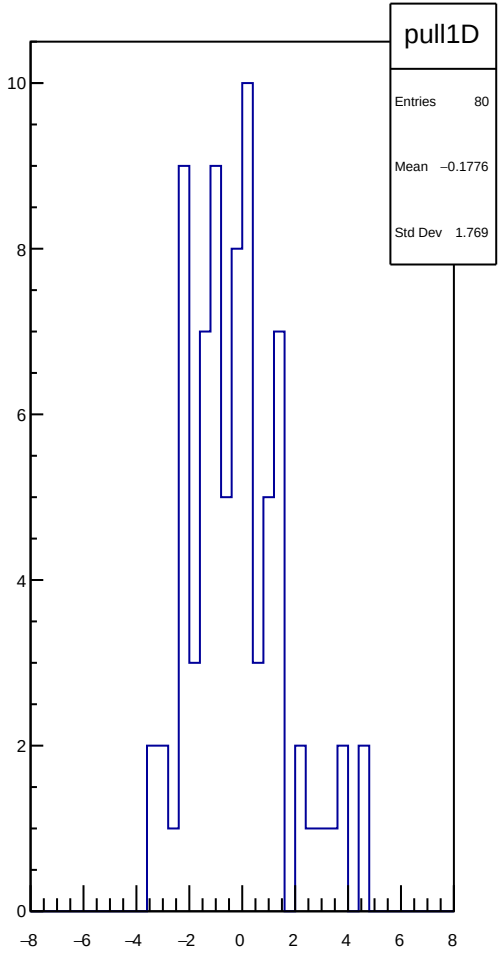

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 211.1 / 79
p0 5.212 ± 0.1962
pull
Entries 80
Mean 209.8
Std Dev 166.7

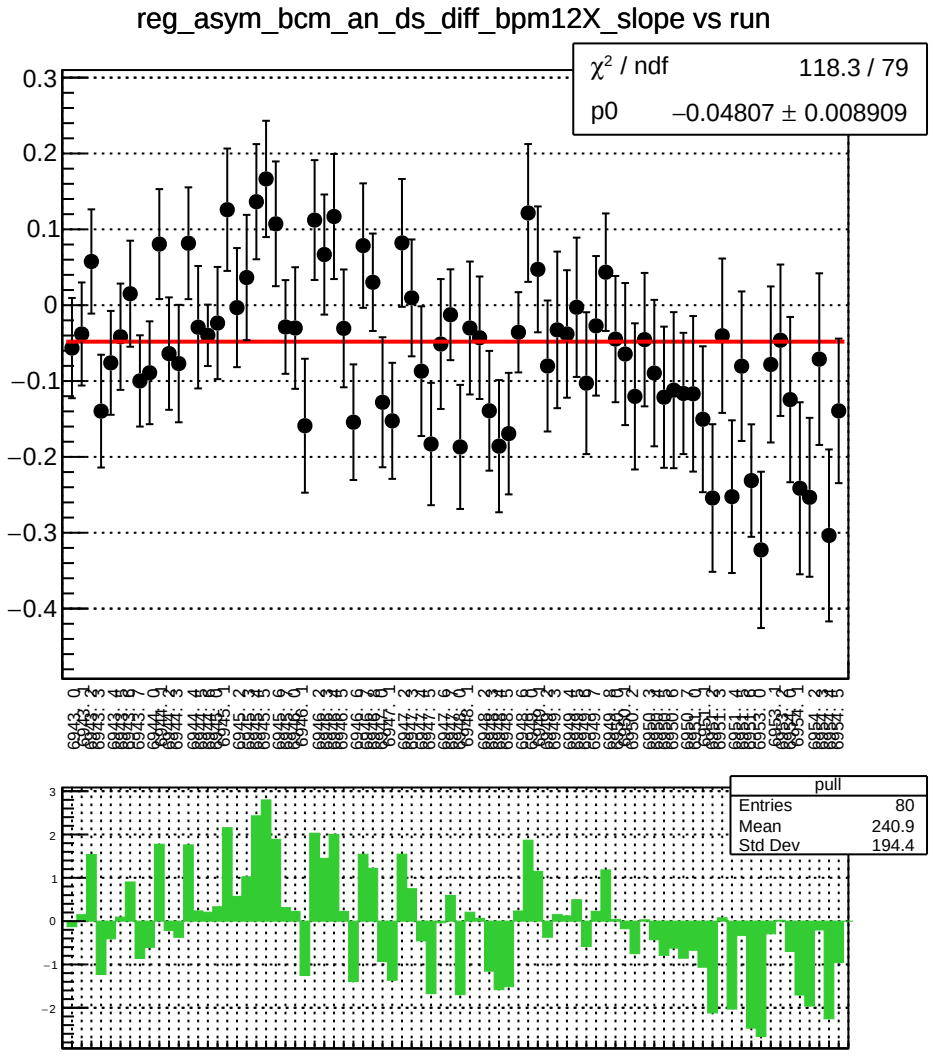

pull1D
Entries 80
Mean 0.1406
Std Dev 1.618

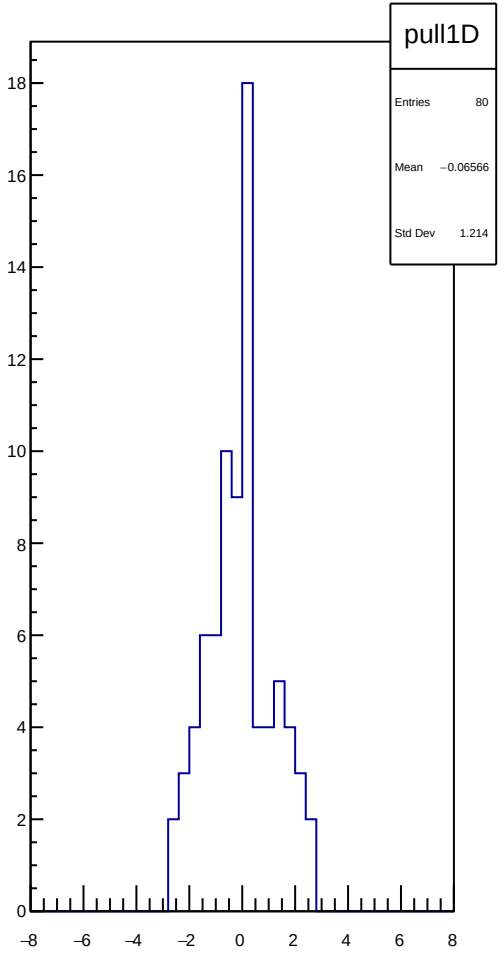

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 1338 / 79
p0 28.47 ± 0.2572
pull
Entries 80
Mean 170.1
Std Dev 127.2

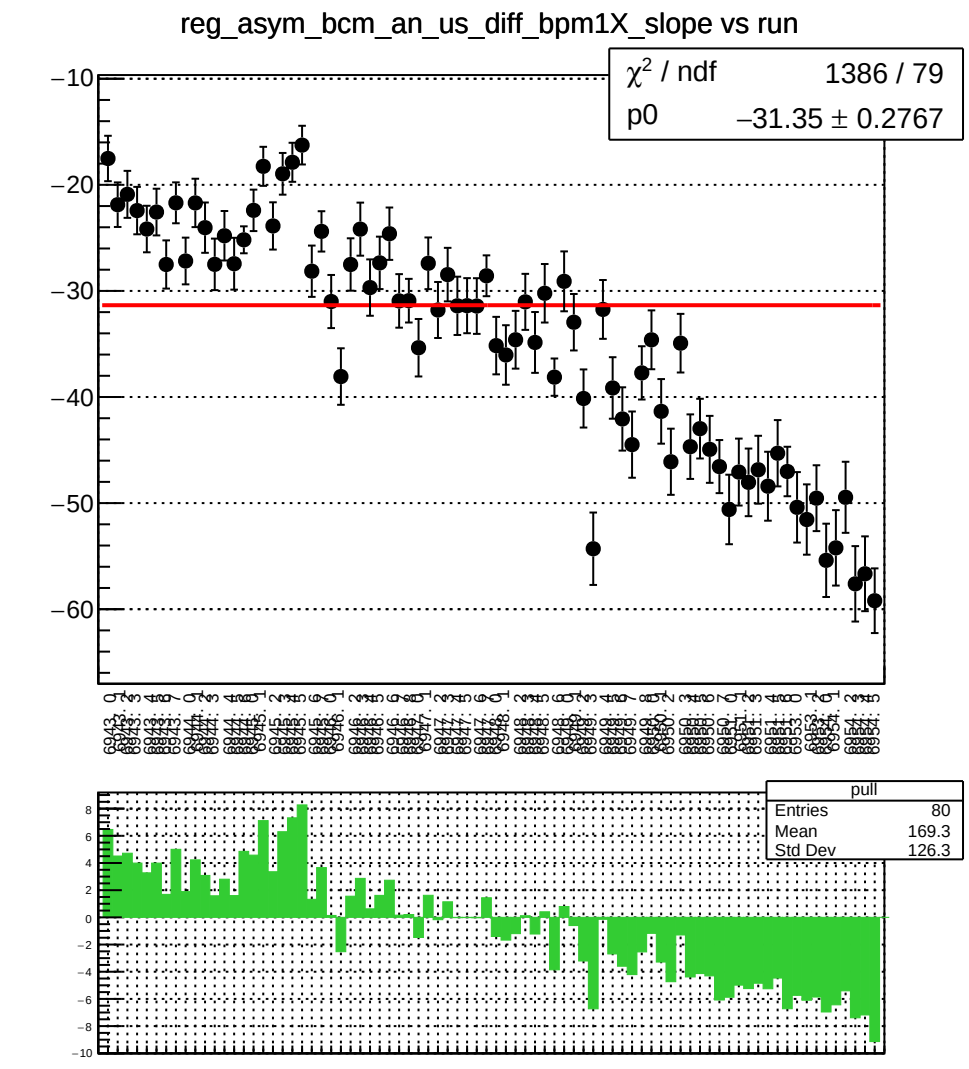

pull1D
Entries 80
Mean 0.5434
Std Dev 3.949

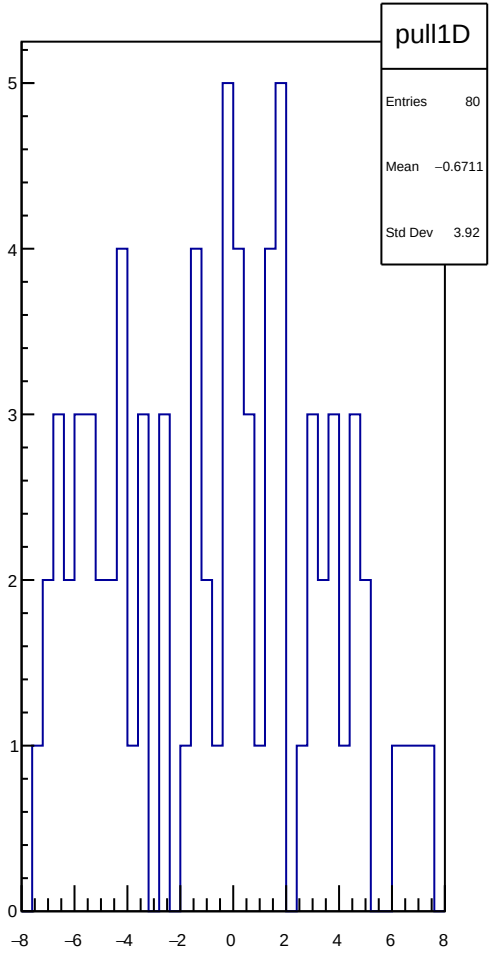

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 252.8 / 79
p0 −6.775 ± 0.2252
pull
Entries 80
Mean 190.6
Std Dev 147.5

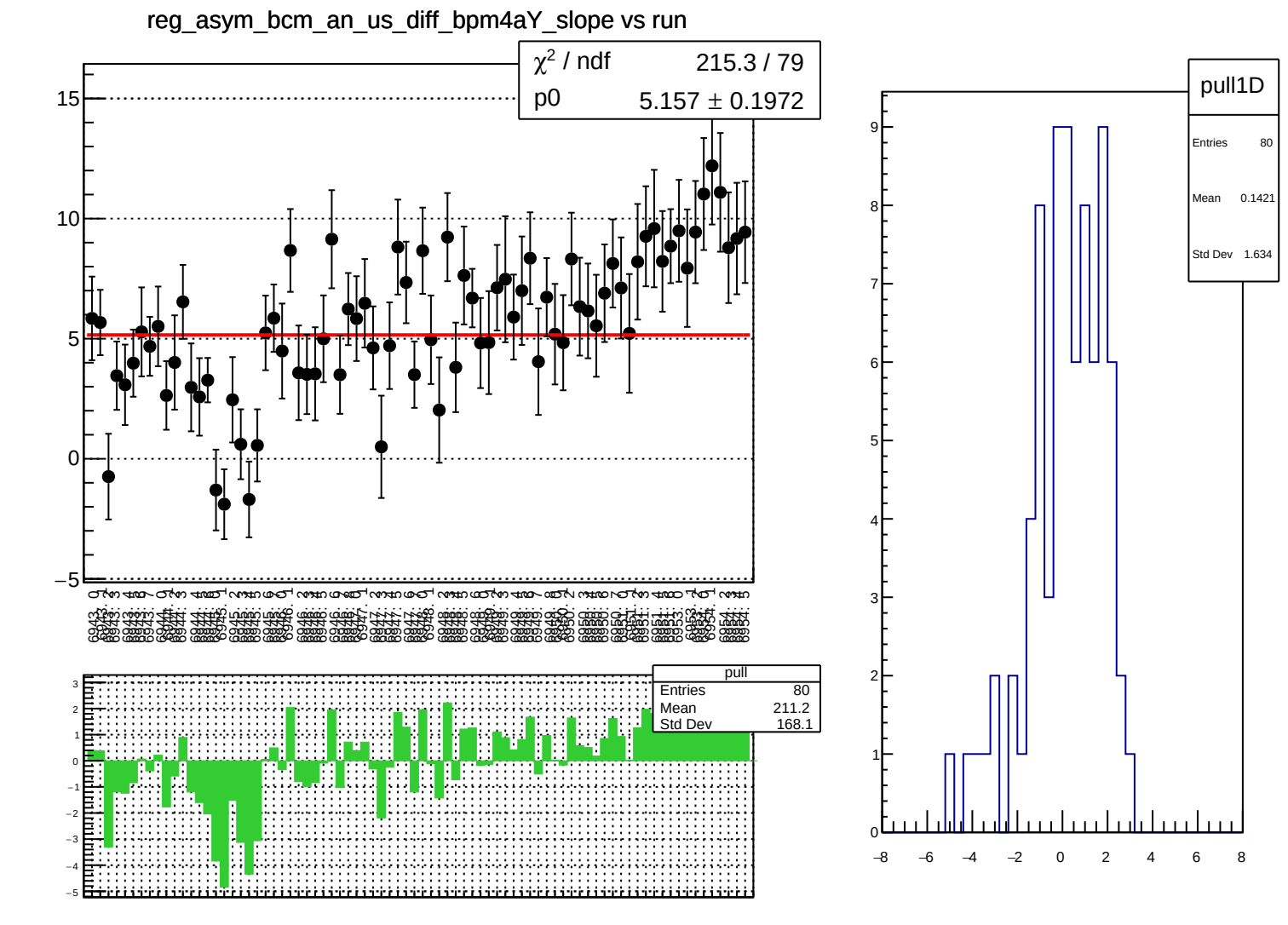

pull1D
Entries 80
Mean −0.1776
Std Dev 1.769

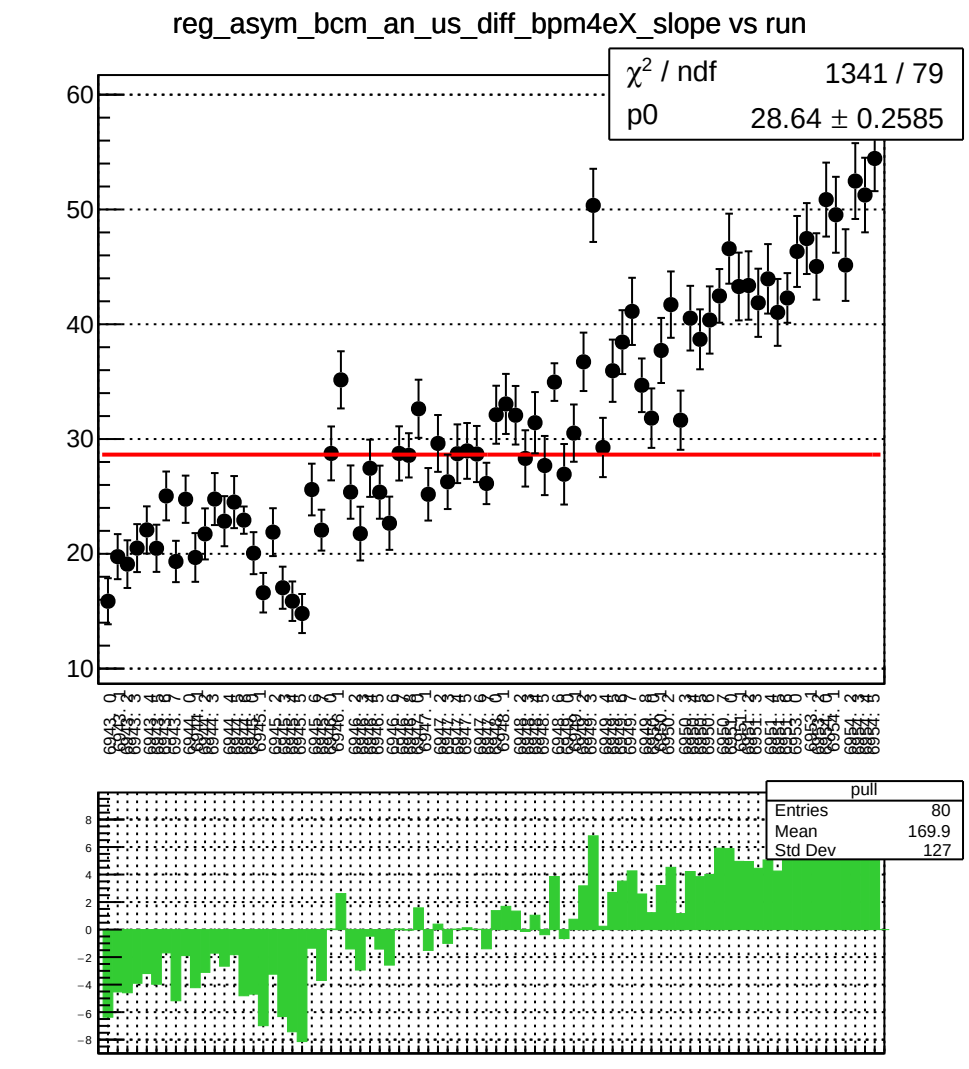

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 118.3 / 79
p0 −0.04807 ± 0.008909
pull
Entries 80
Mean 240.9
Std Dev 194.4

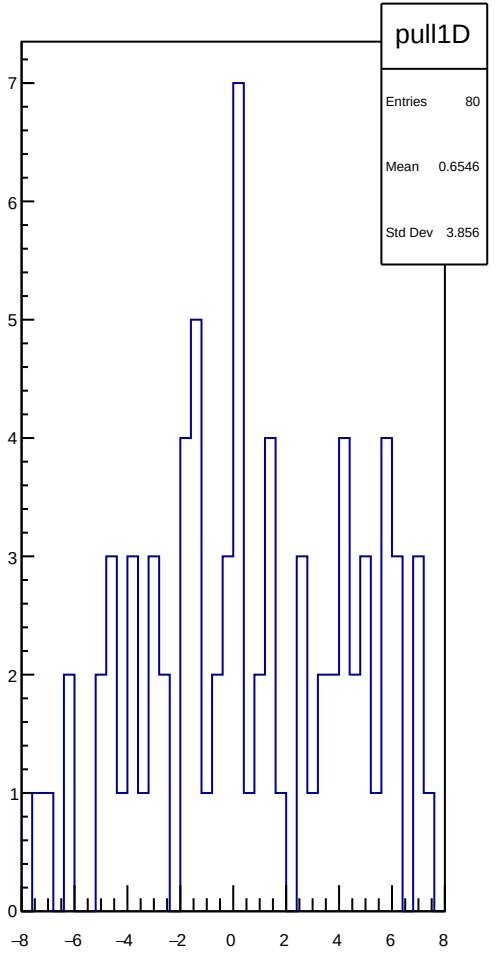

pull1D
Entries 80
Mean −0.06566
Std Dev 1.214

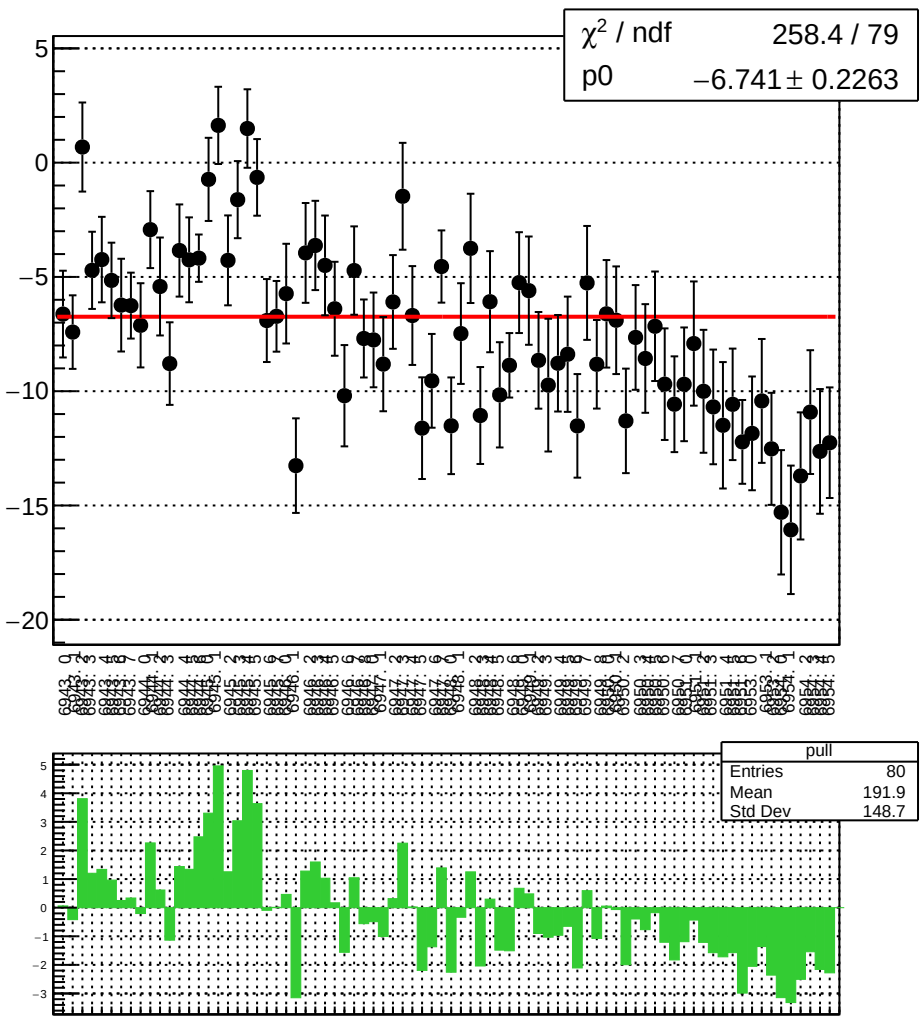

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 1386 / 79
p0 −31.35 ± 0.2767
pull
Entries 80
Mean 169.3
Std Dev 126.3

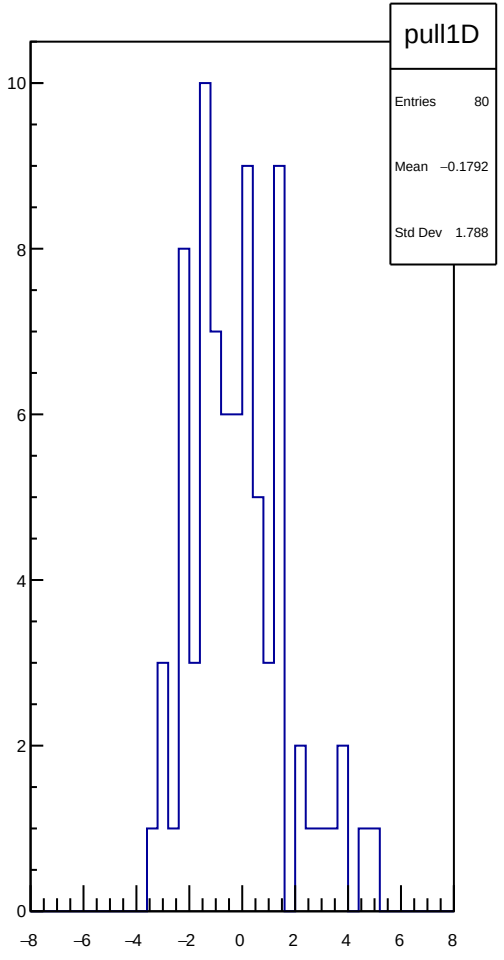

pull1D
Entries 80
Mean −0.6711
Std Dev 3.92

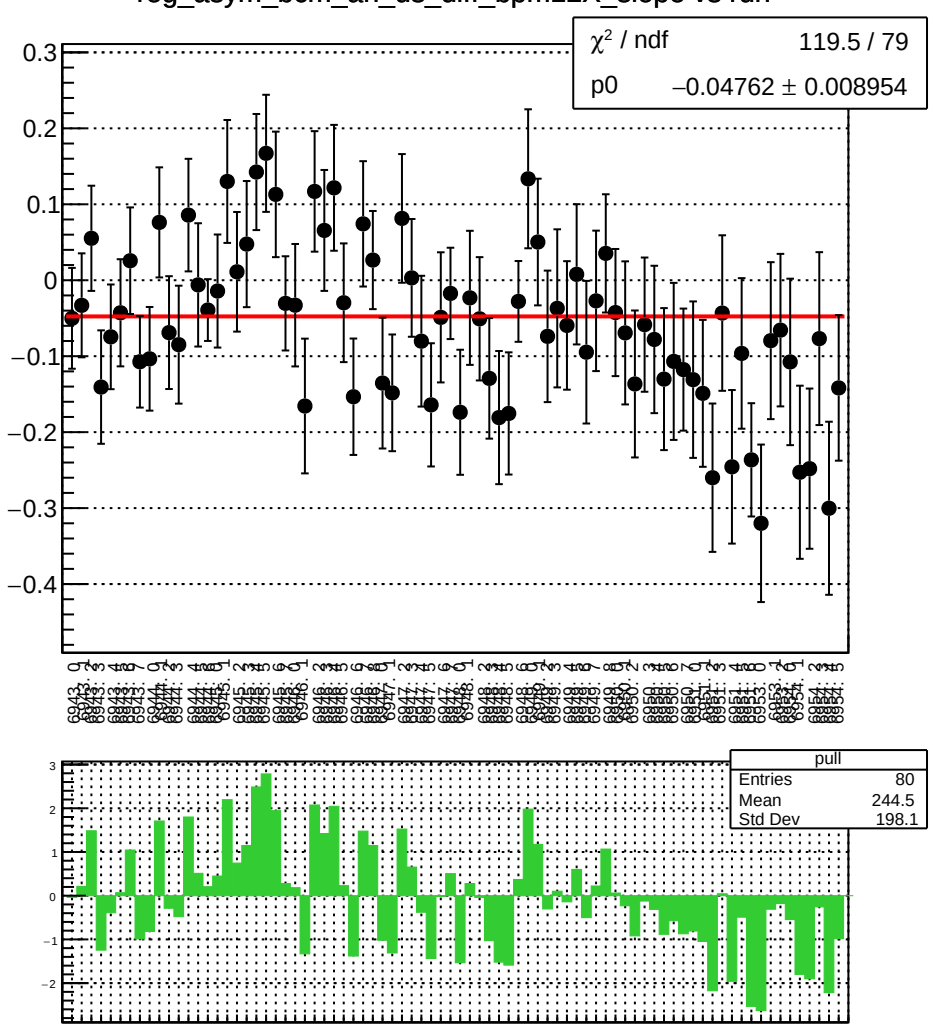

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 215.3 / 79
p0 5.157 ± 0.1972
pull
Entries 80
Mean 211.2
Std Dev 168.1
pull1D
Entries 80
Mean 0.1421
Std Dev 1.634

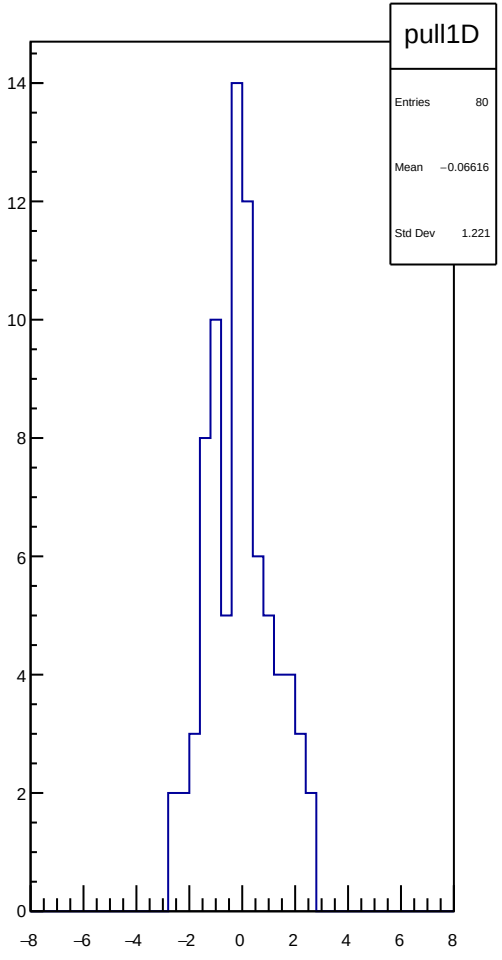

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 1341 / 79
p0 28.64 ± 0.2585
pull
Entries 80
Mean 169.9
Std Dev 127

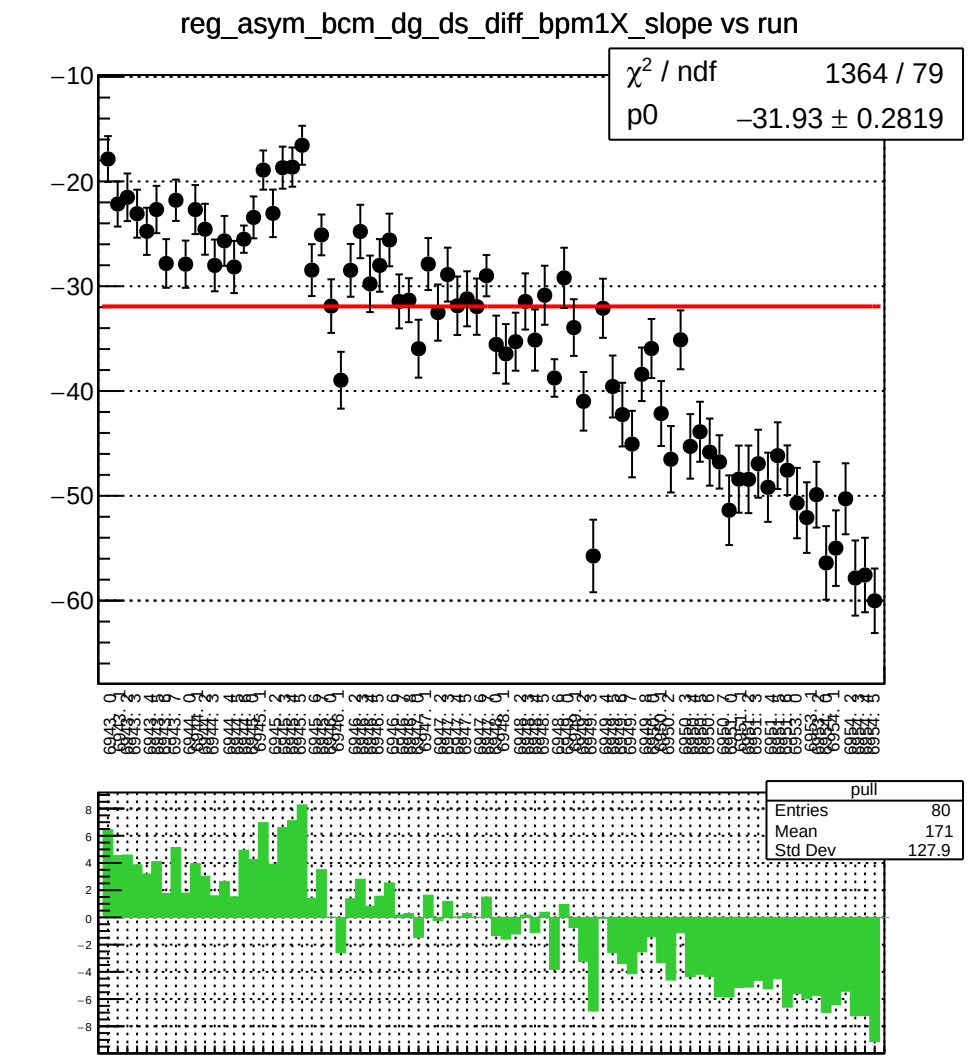

pull1D
Entries 80
Mean 0.6546
Std Dev 3.856

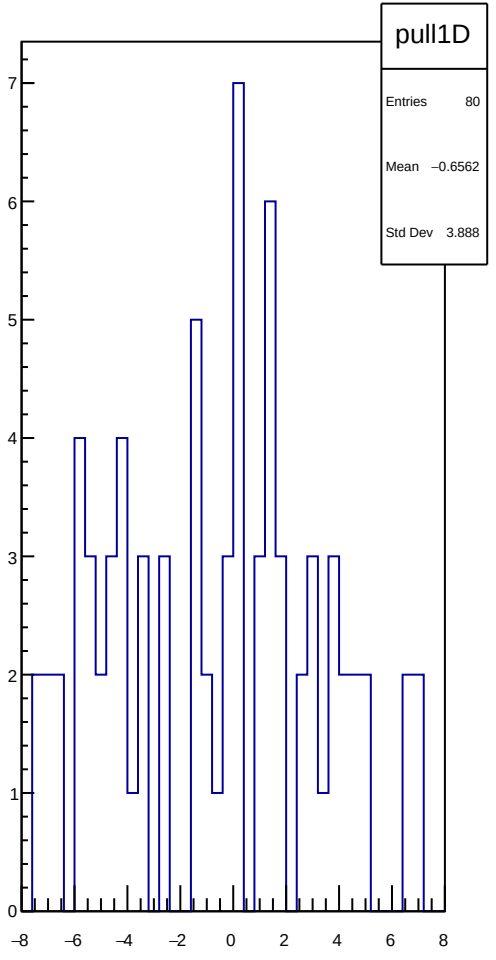

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 258.4 / 79
p0 −6.741 ± 0.2263
pull
Entries 80
Mean 191.9
Std Dev 148.7

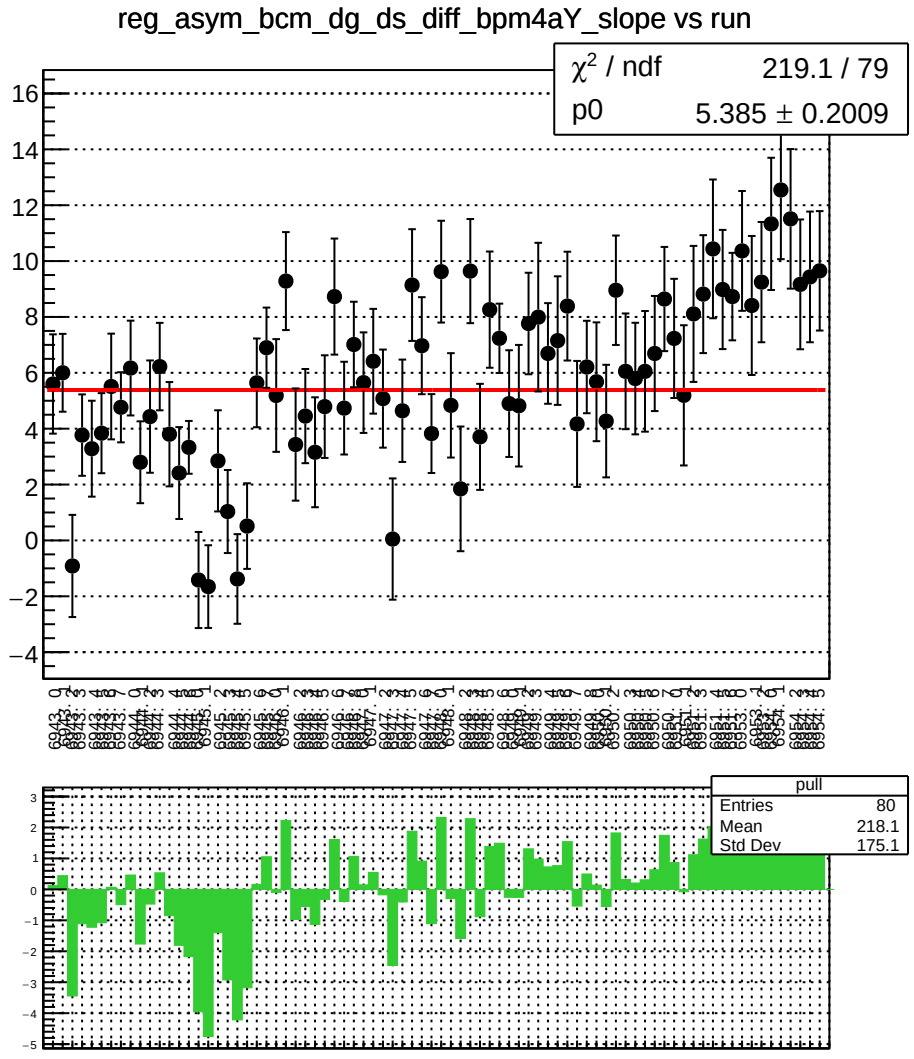

pull1D
Entries 80
Mean −0.1792
Std Dev 1.788

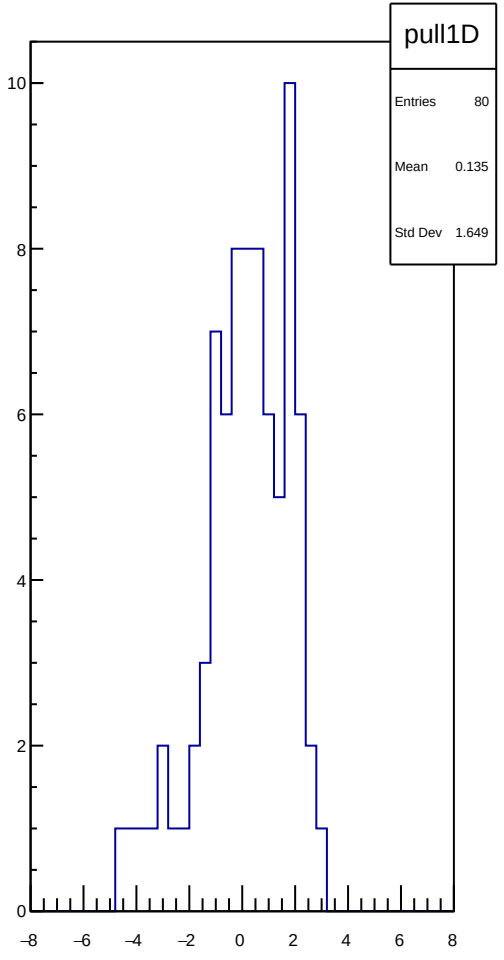

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 119.5 / 79
p0 −0.04762 ± 0.008954
pull
Entries 80
Mean 244.5
Std Dev 198.1

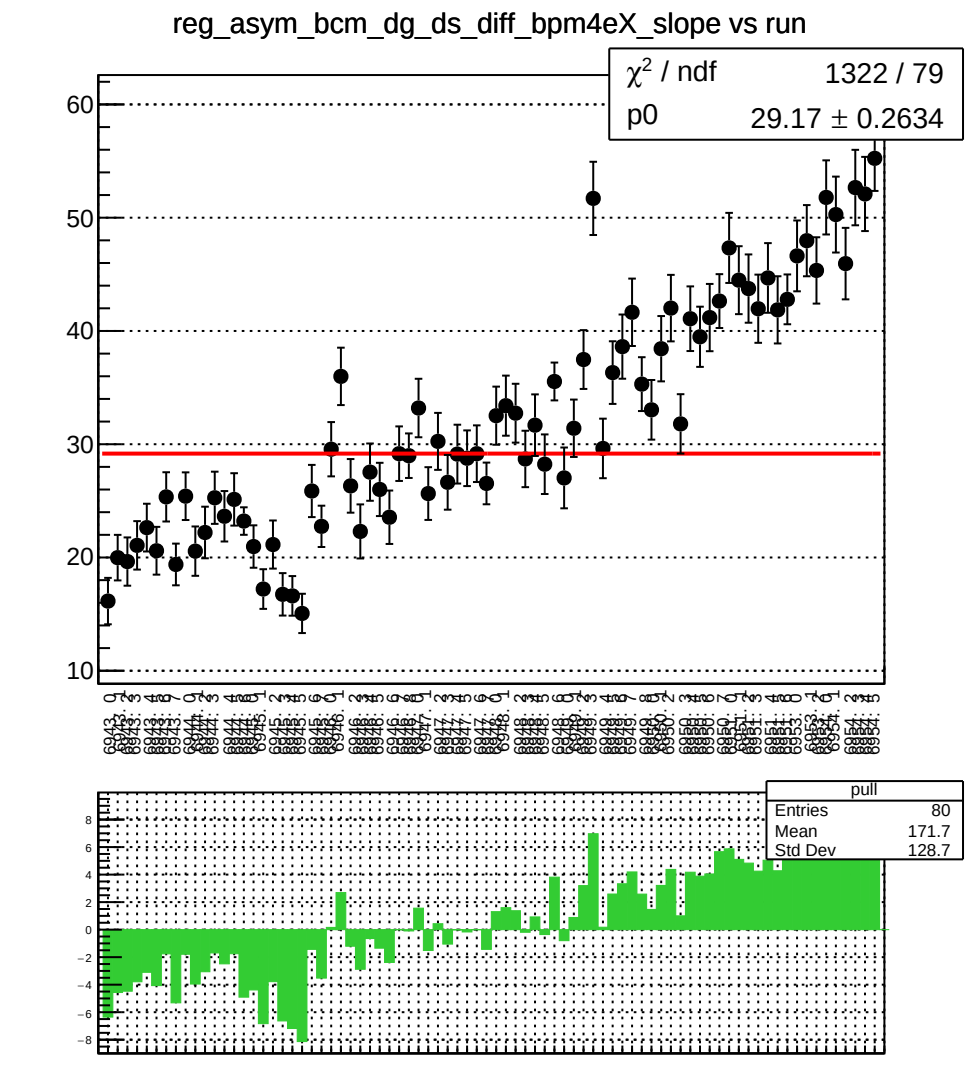

pull1D
Entries 80
Mean −0.06616
Std Dev 1.221

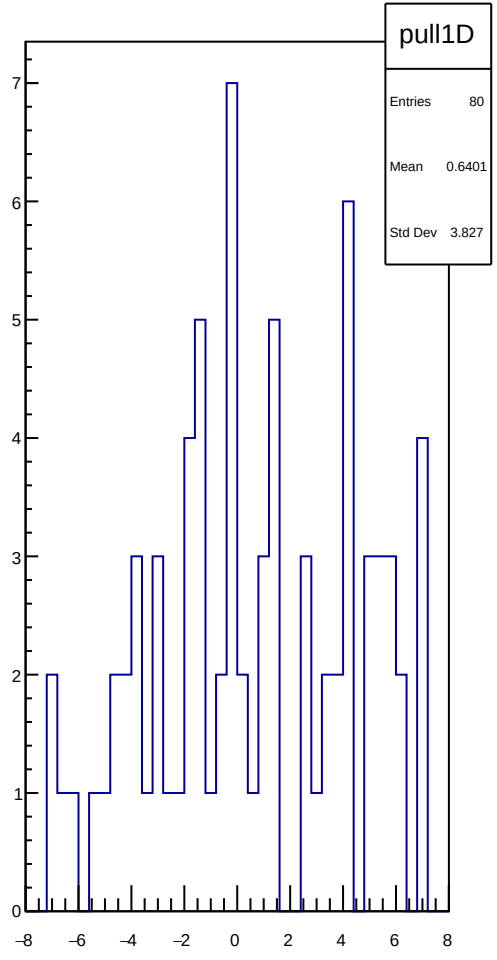

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 1364 / 79
p0 −31.93 ± 0.2819
pull
Entries 80
Mean 171
Std Dev 127.9

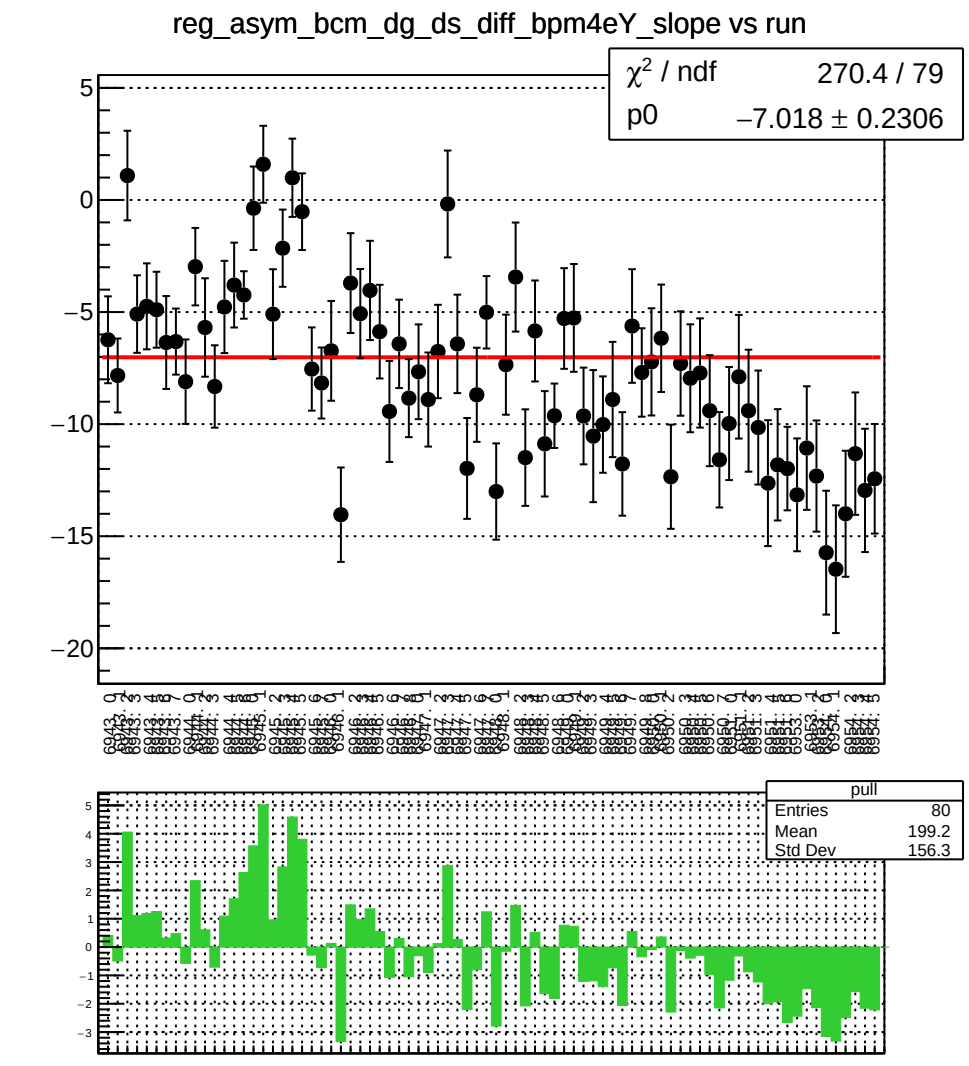

pull1D
Entries 80
Mean −0.6562
Std Dev 3.888

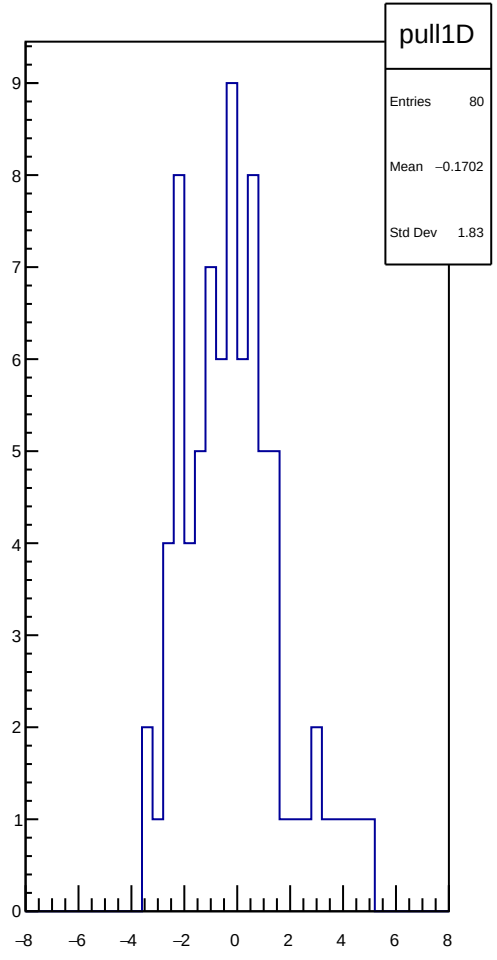

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 219.1 / 79
p0 5.385 ± 0.2009
pull
Entries 80
Mean 218.1
Std Dev 175.1

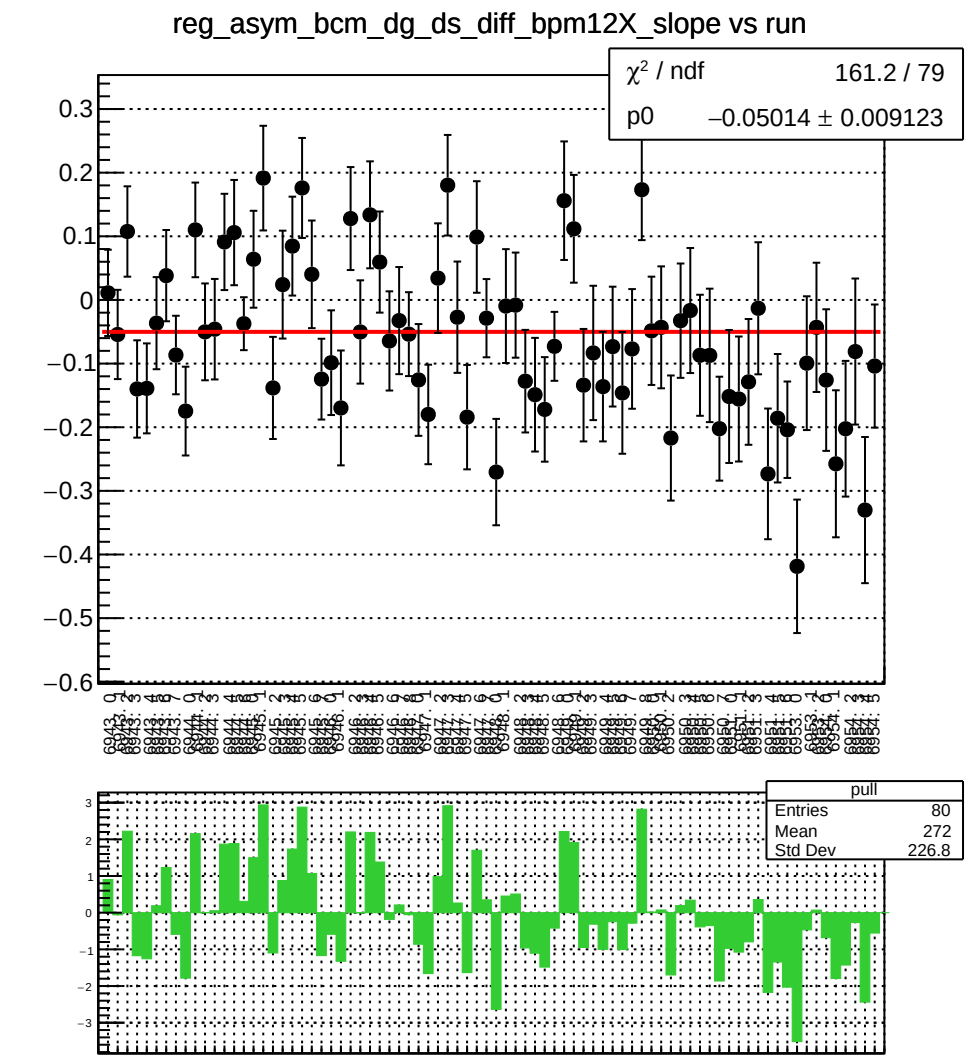

pull1D
Entries 80
Mean 0.135
Std Dev 1.649

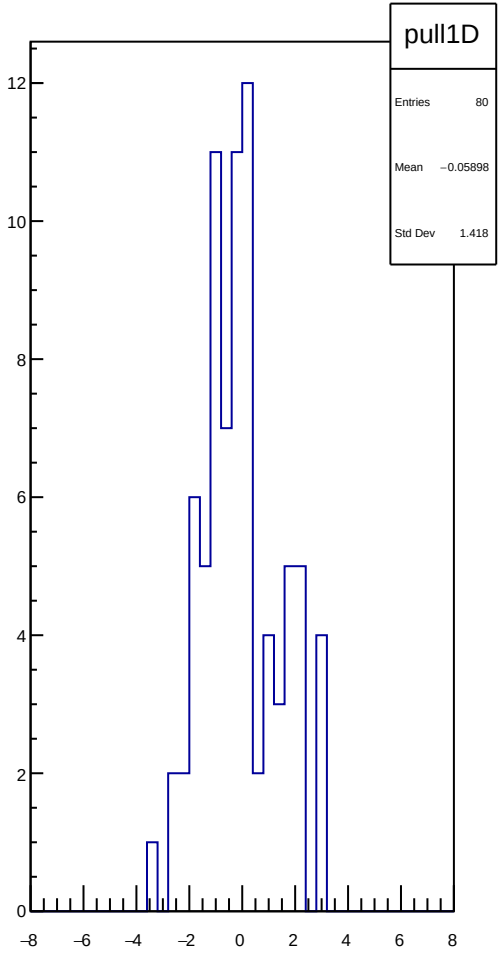

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 1322 / 79
p0 29.17 ± 0.2634
pull
Entries 80
Mean 171.7
Std Dev 128.7

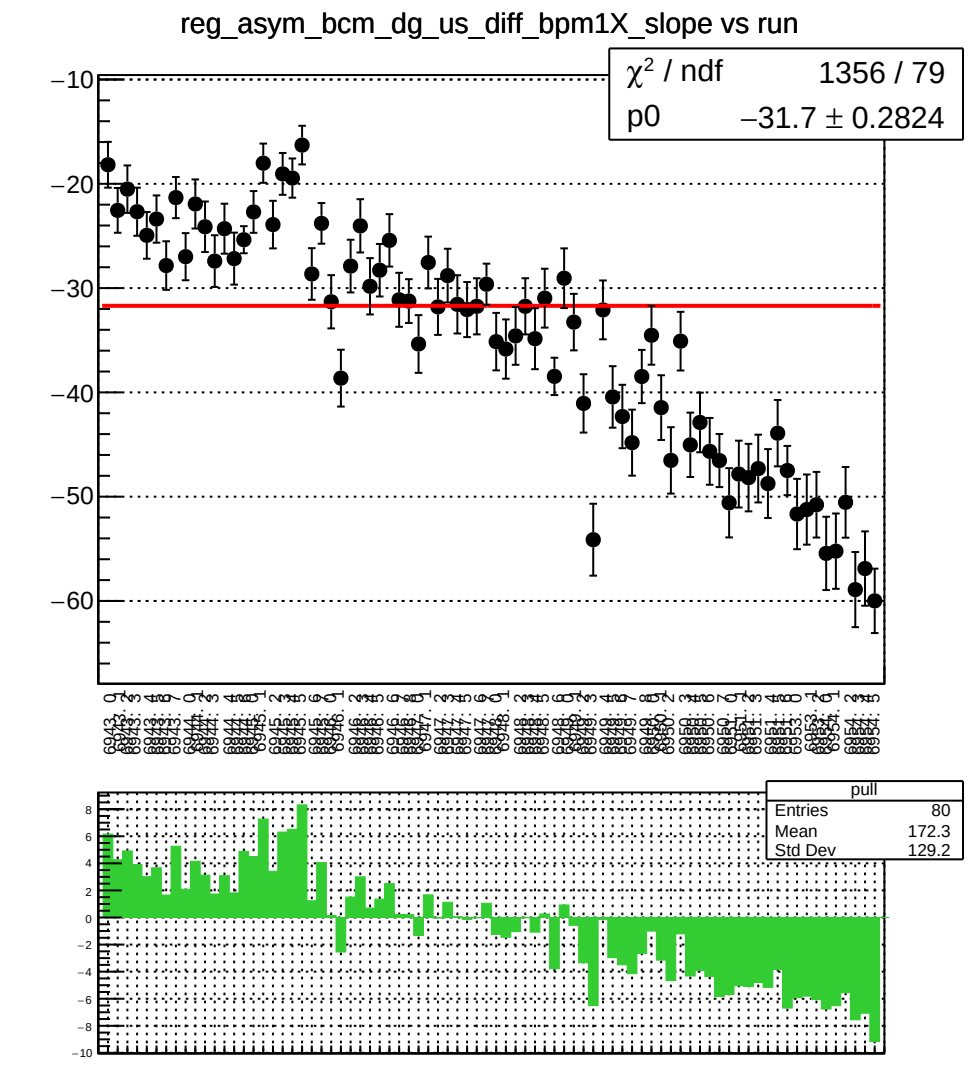

pull1D
Entries 80
Mean 0.6401
Std Dev 3.827

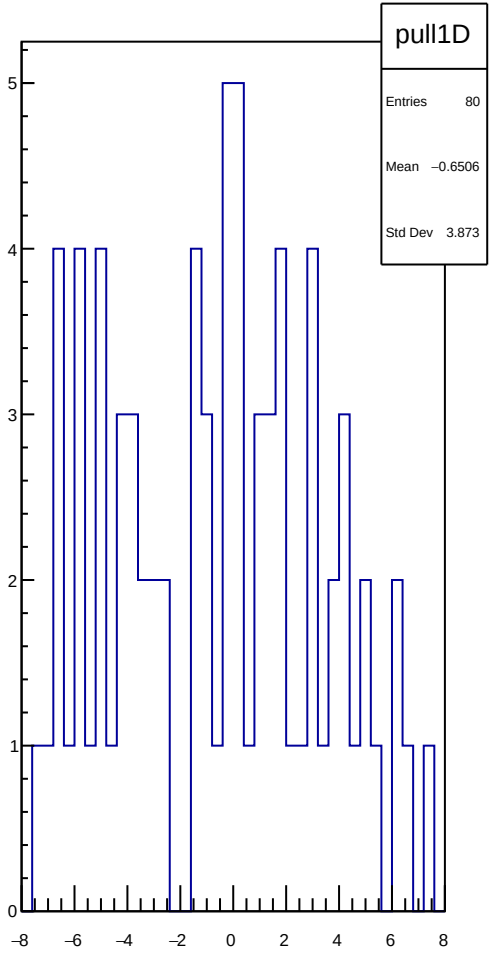

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 270.4 / 79
p0 −7.018 ± 0.2306
pull
Entries 80
Mean 199.2
Std Dev 156.3

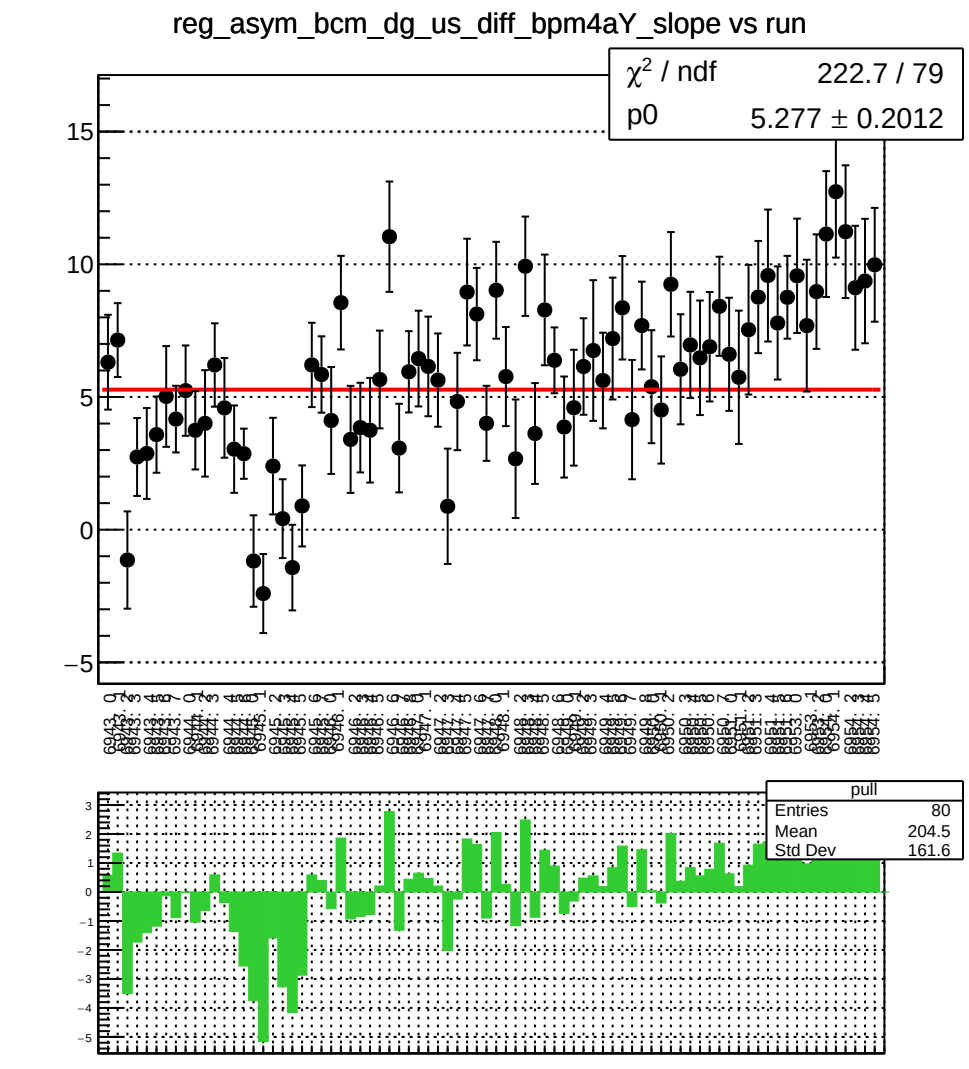

pull1D
Entries 80
Mean −0.1702
Std Dev 1.83

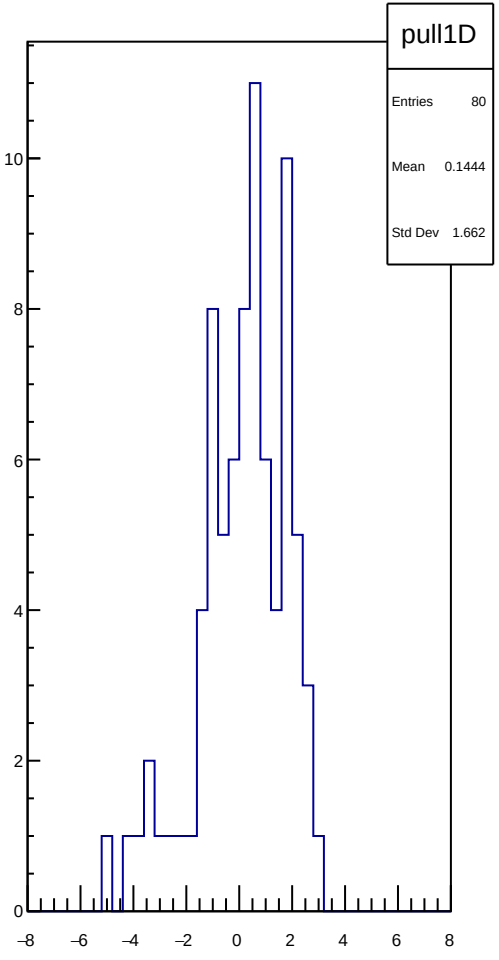

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 161.2 / 79
p0 −0.05014 ± 0.009123
pull
Entries 80
Mean 272
Std Dev 226.8

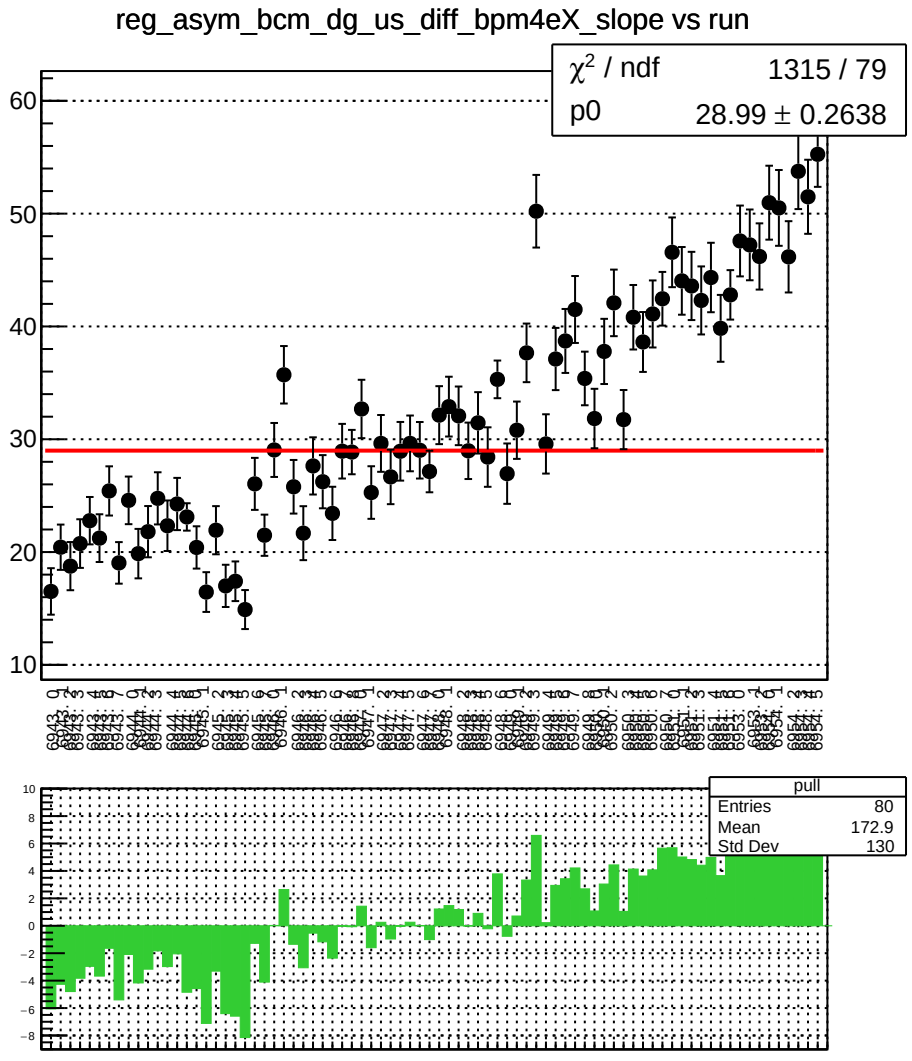

pull1D
Entries 80
Mean −0.05898
Std Dev 1.418

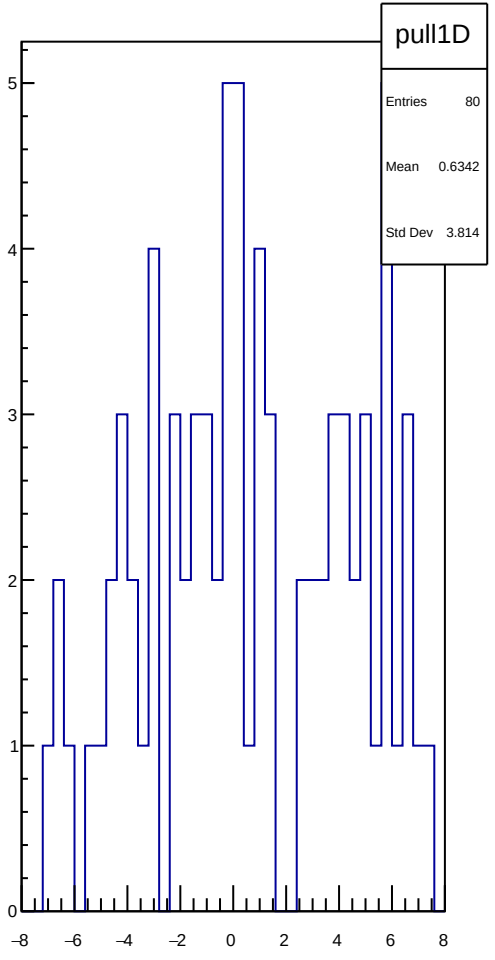

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 1356 / 79
p0 −31.7 ± 0.2824
pull
Entries 80
Mean 172.3
Std Dev 129.2

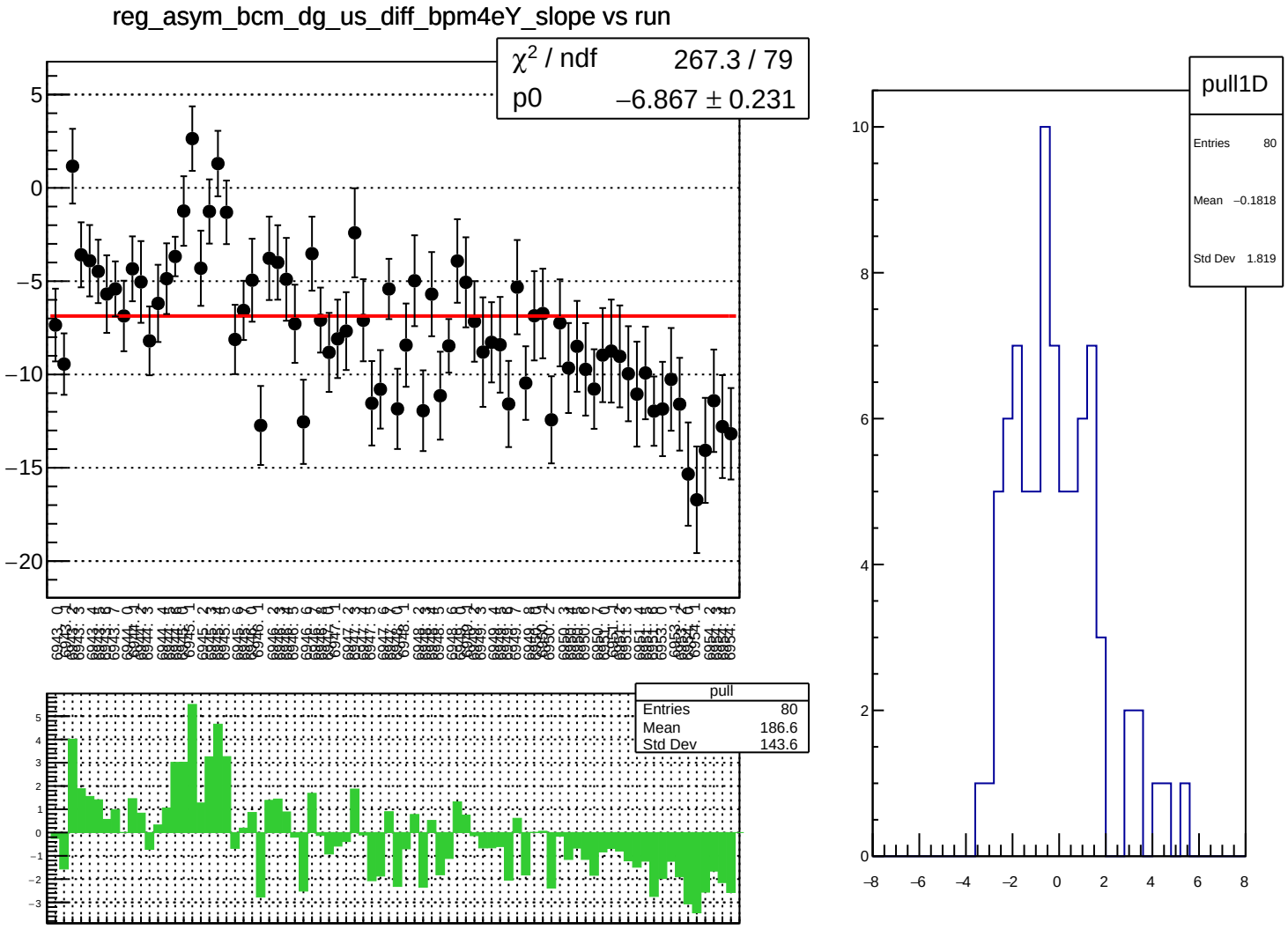

pull1D
Entries 80
Mean −0.6506
Std Dev 3.873

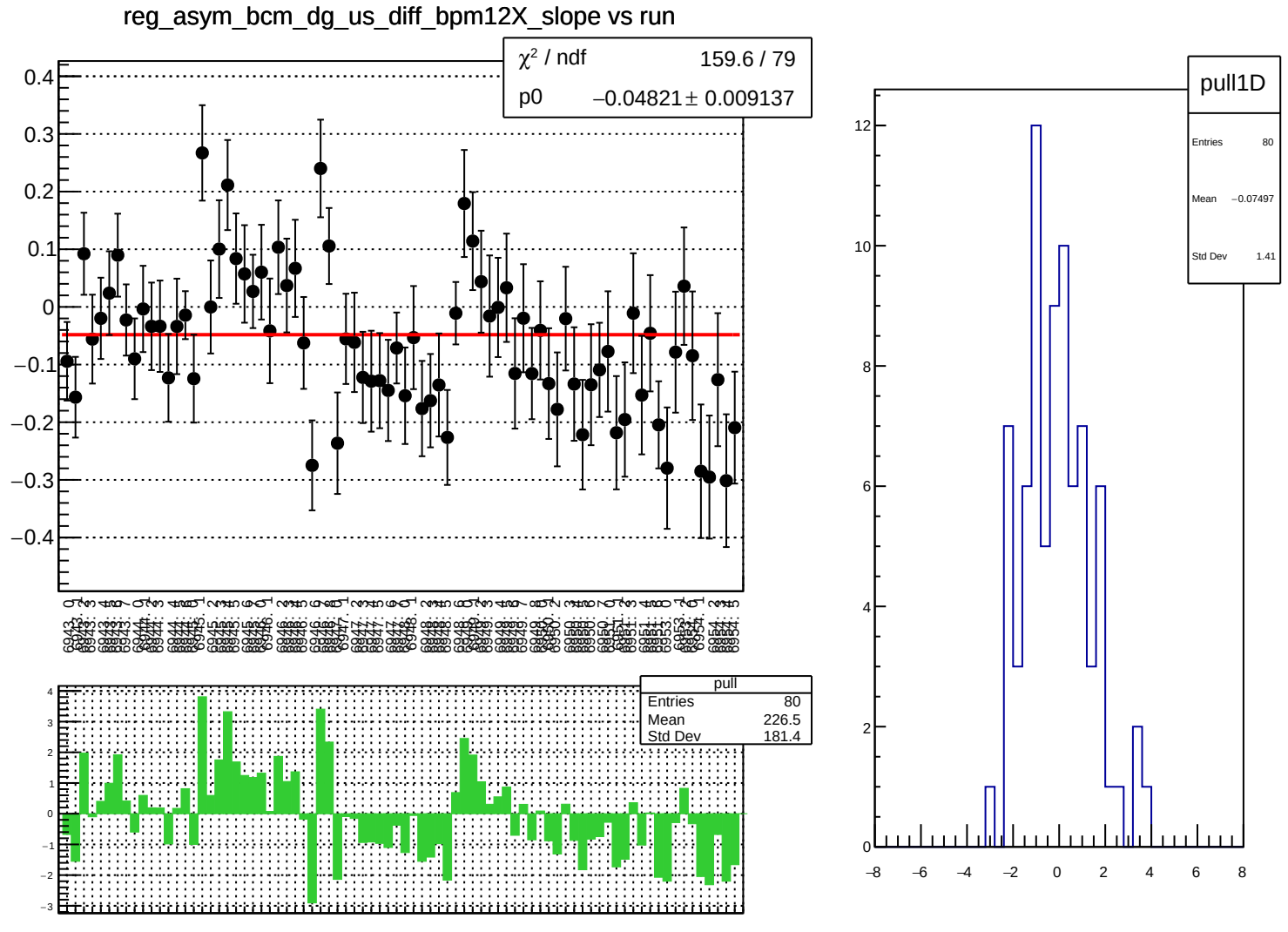

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 222.7 / 79
p0 5.277 ± 0.2012
pull
Entries 80
Mean 204.5
Std Dev 161.6

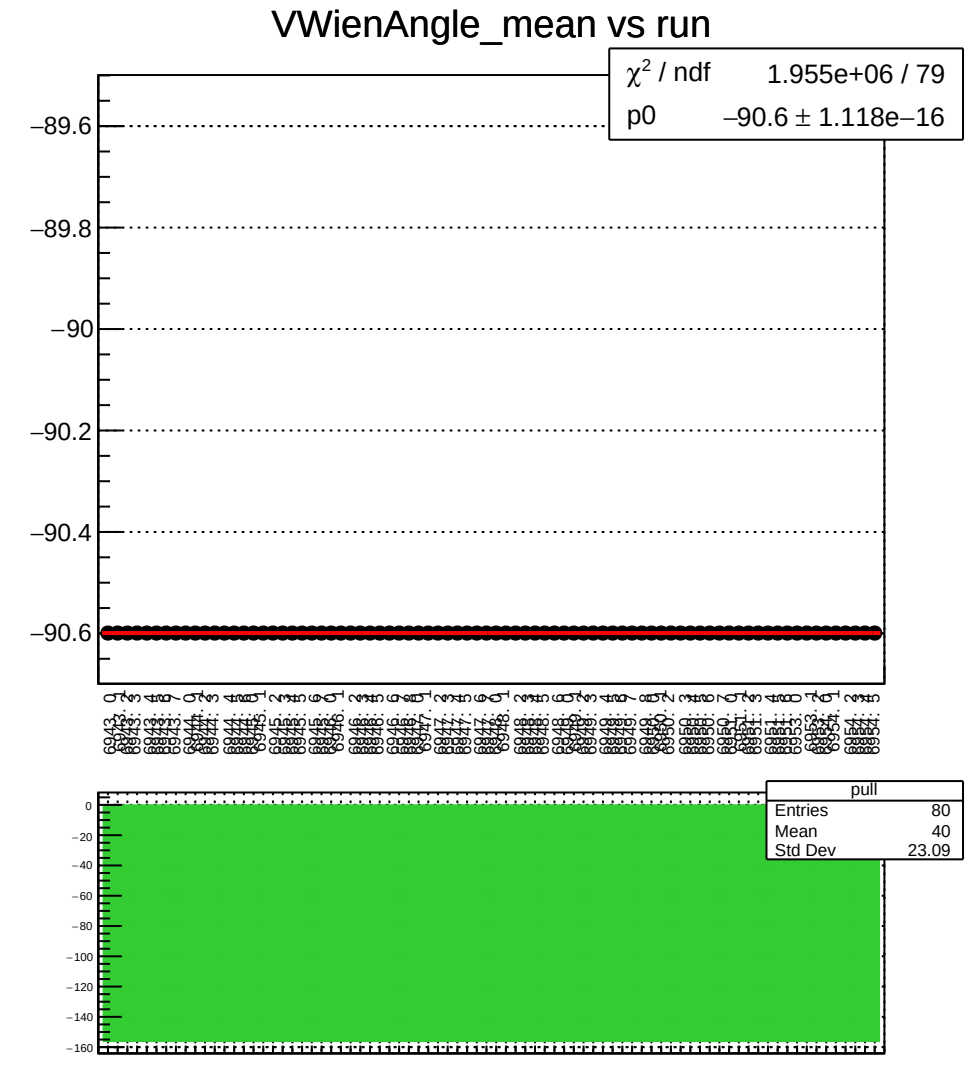

pull1D
Entries 80
Mean 0.1444
Std Dev 1.662

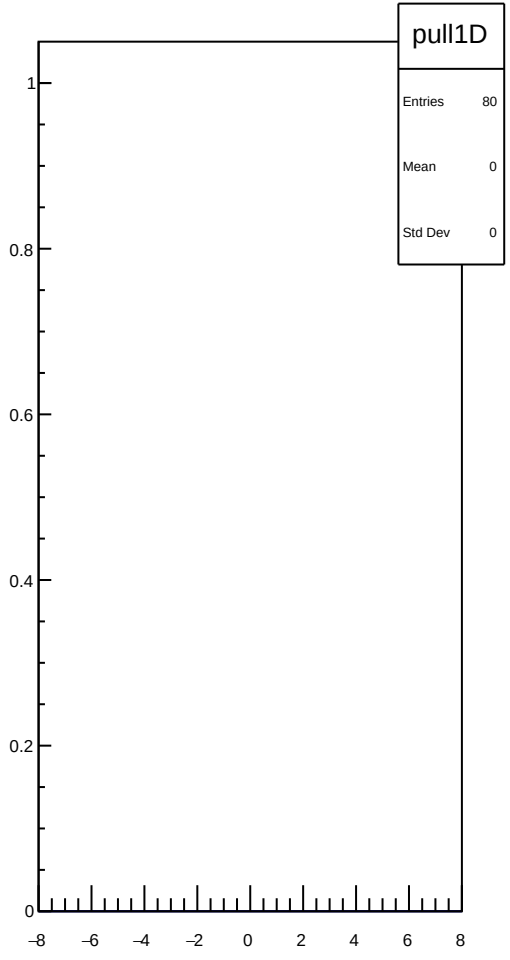

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 1315 / 79
p0 28.99 ± 0.2638
pull
Entries 80
Mean 172.9
Std Dev 130

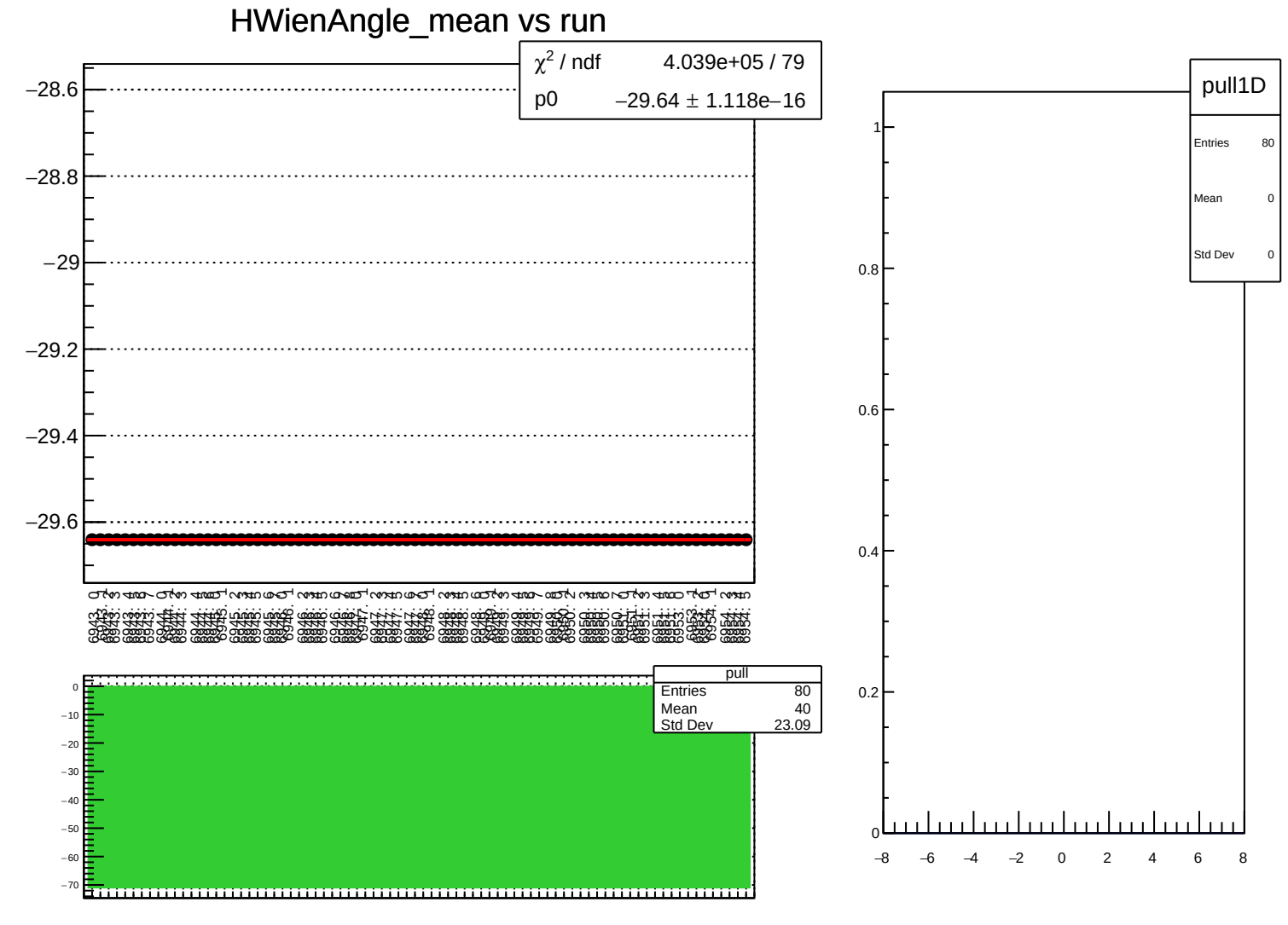

pull1D
Entries 80
Mean 0.6342
Std Dev 3.814

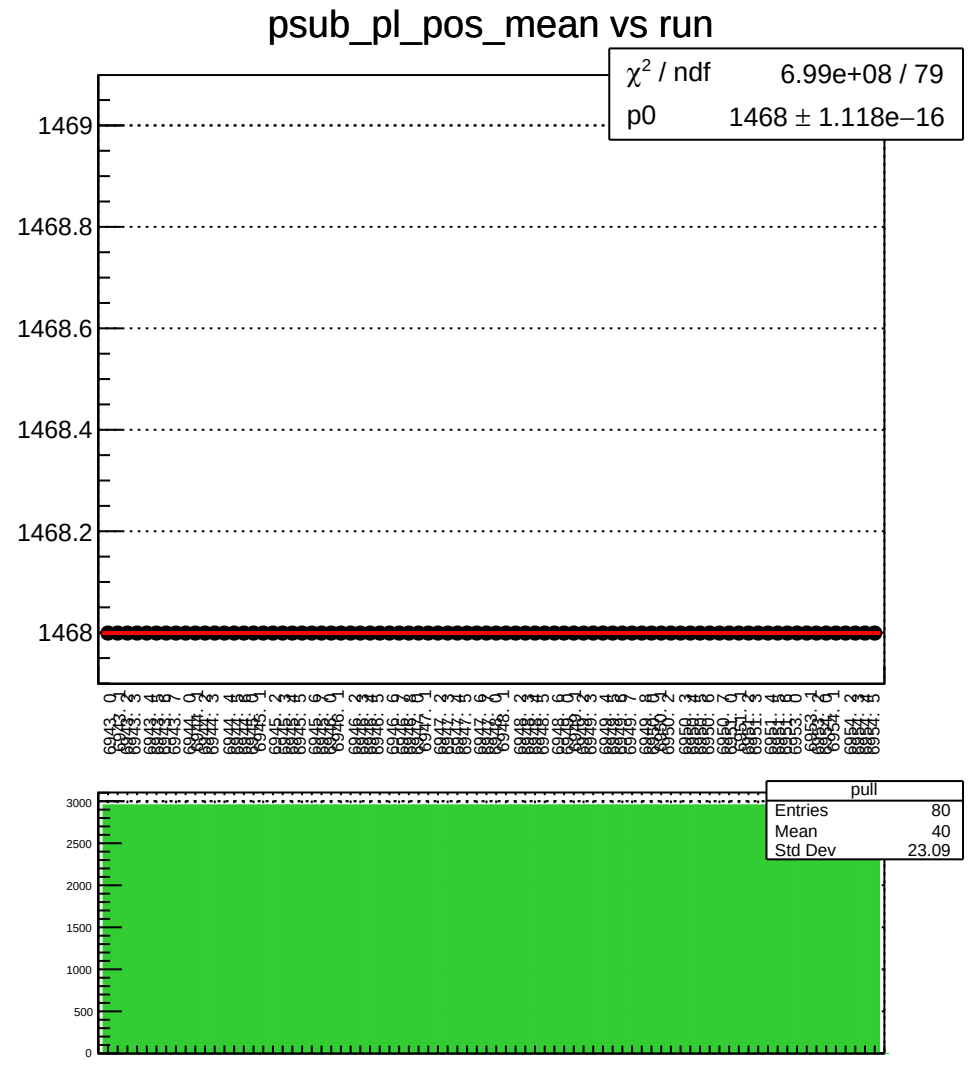

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 267.3 / 79
p0 −6.867 ± 0.231
pull
Entries 80
Mean 186.6
Std Dev 143.6
pull1D
Entries 80
Mean −0.1818
Std Dev 1.819

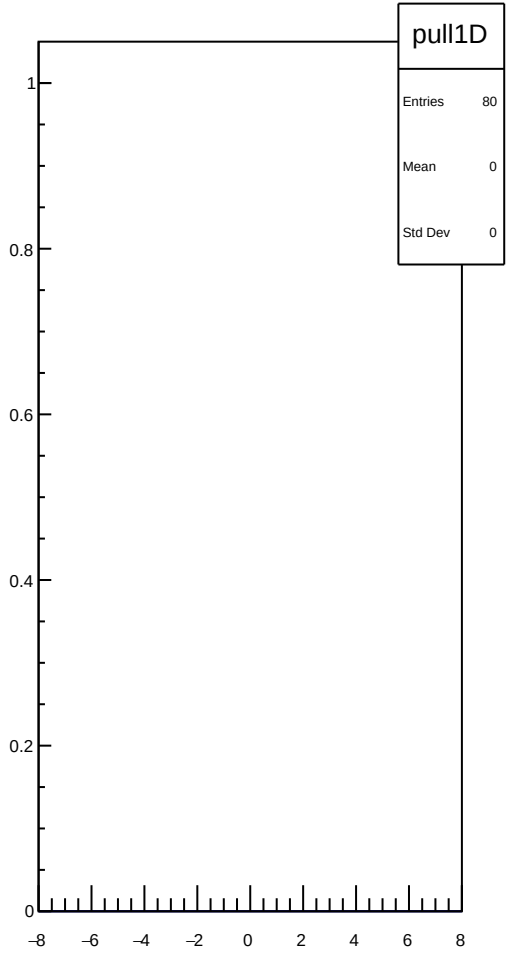

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 159.6 / 79
p0 −0.04821 ± 0.009137
pull
Entries 80
Mean 226.5
Std Dev 181.4
pull1D
Entries 80
Mean −0.07497
Std Dev 1.41

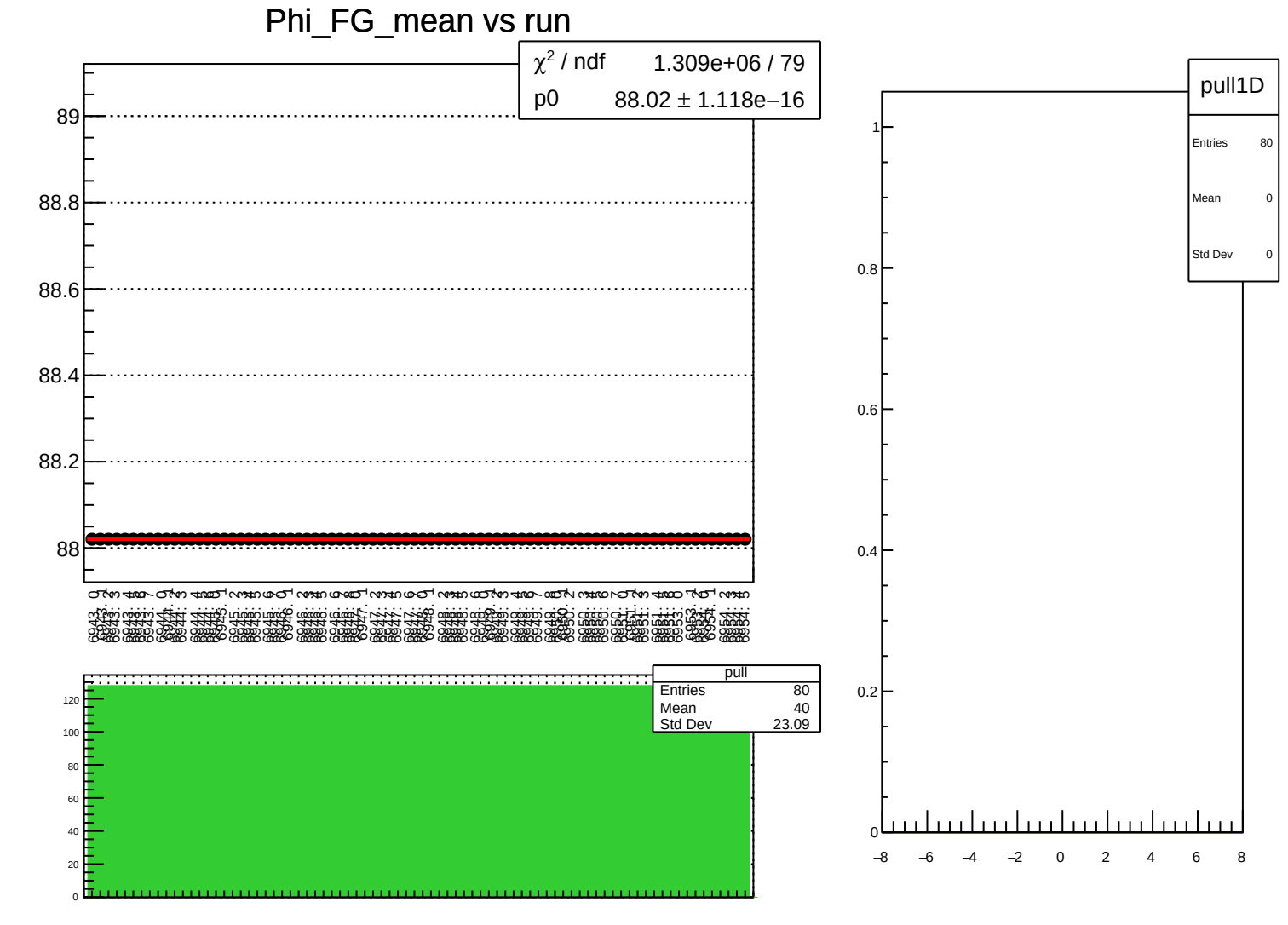

VWienAngle_mean vs run
χ² / ndf 1.955e+06 / 79
p0 −90.6 ± 1.118e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 80
Mean 40
Std Dev 23.09
0
−20
−40
−60
−80
−100
−120
−140
−160

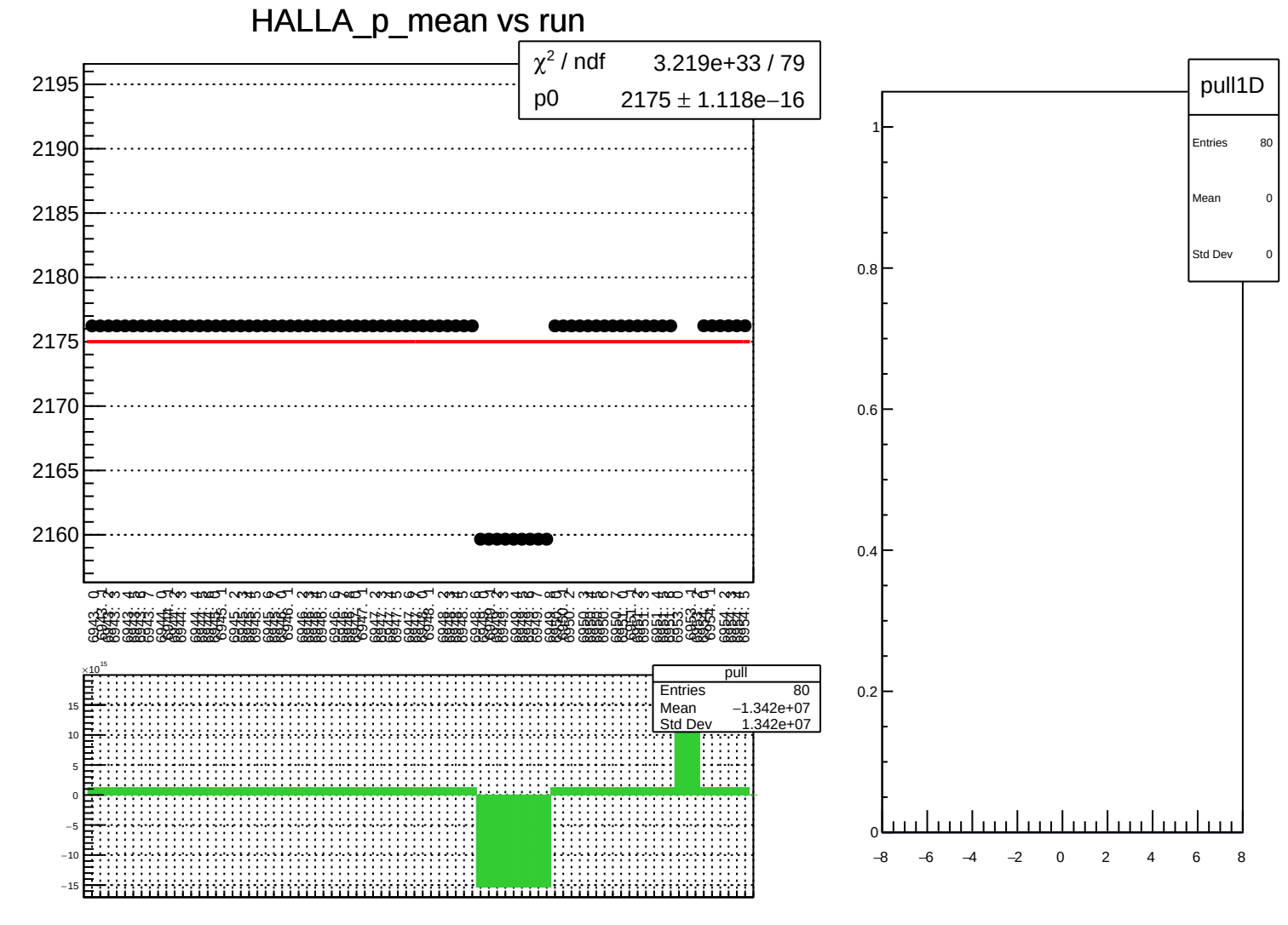

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

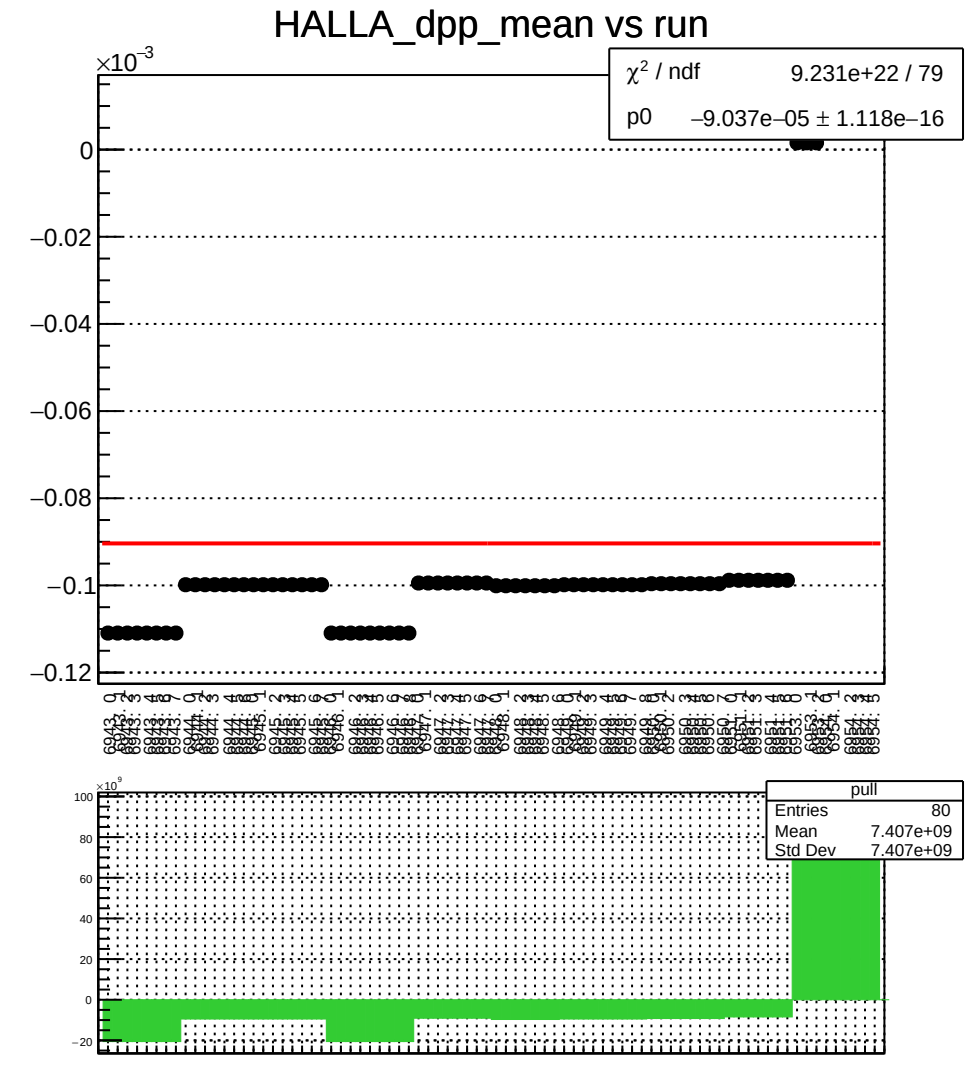

HWienAngle_mean vs run
χ² / ndf 4.039e+05 / 79
p0 −29.64 ± 1.118e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 80
Mean 40
Std Dev 23.09
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

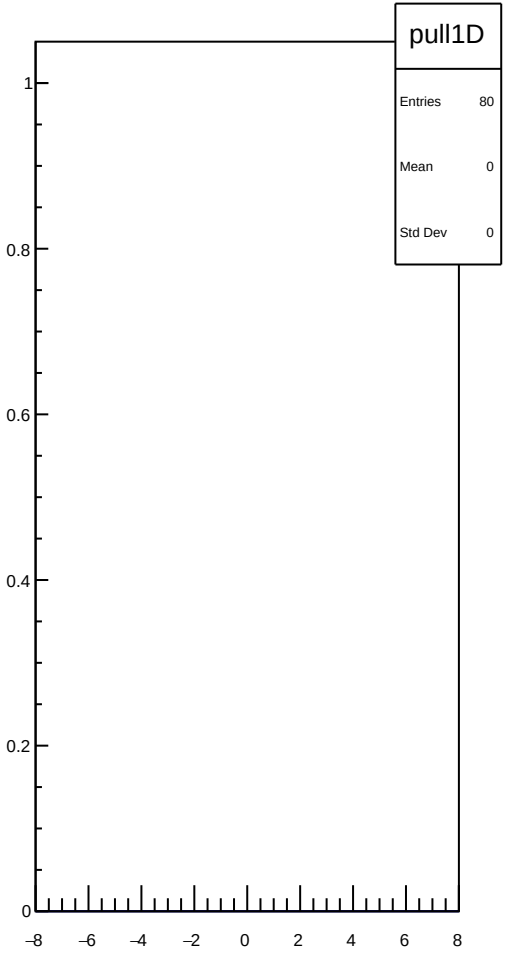

psub_pl_pos_mean vs run
χ² / ndf 6.99e+08 / 79
p0 1468 ± 1.118e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 80
Mean 40
Std Dev 23.09
3000
2500
2000
1500
1000
500
0

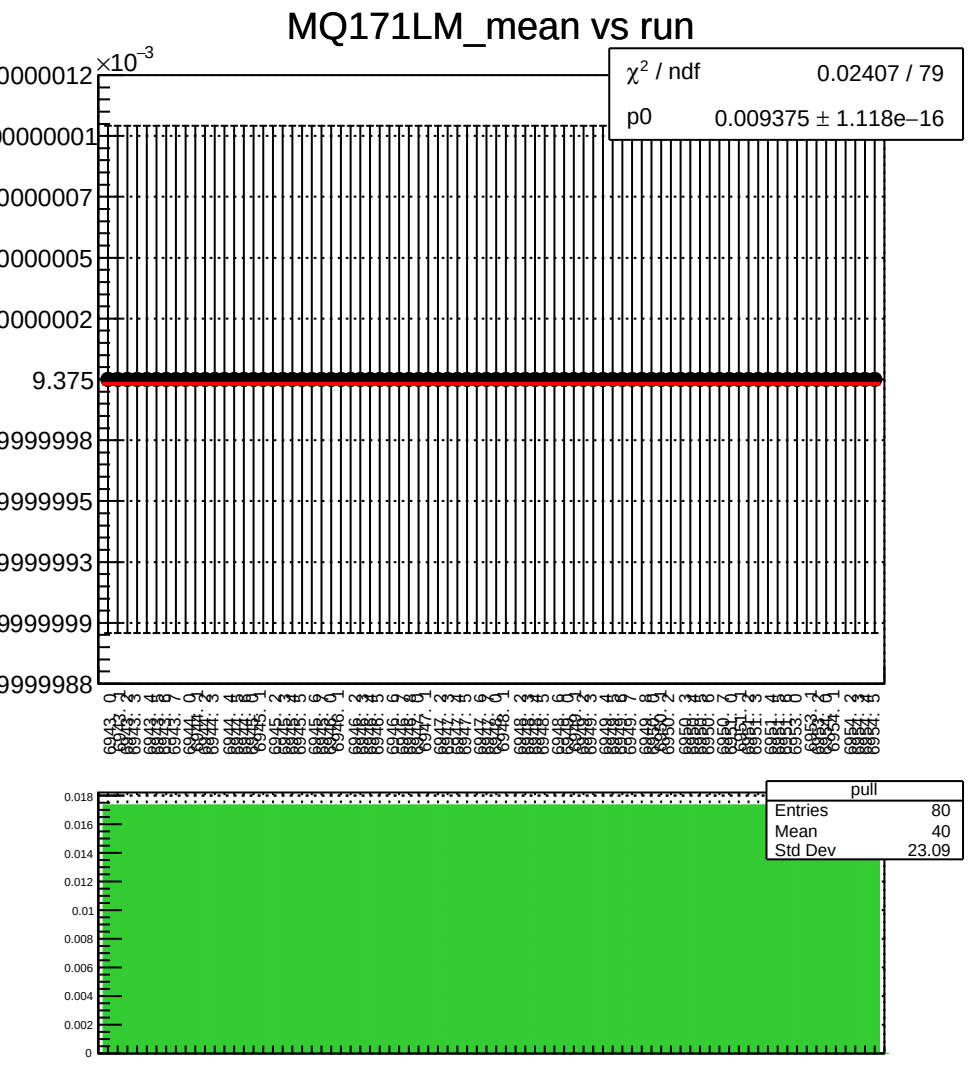

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

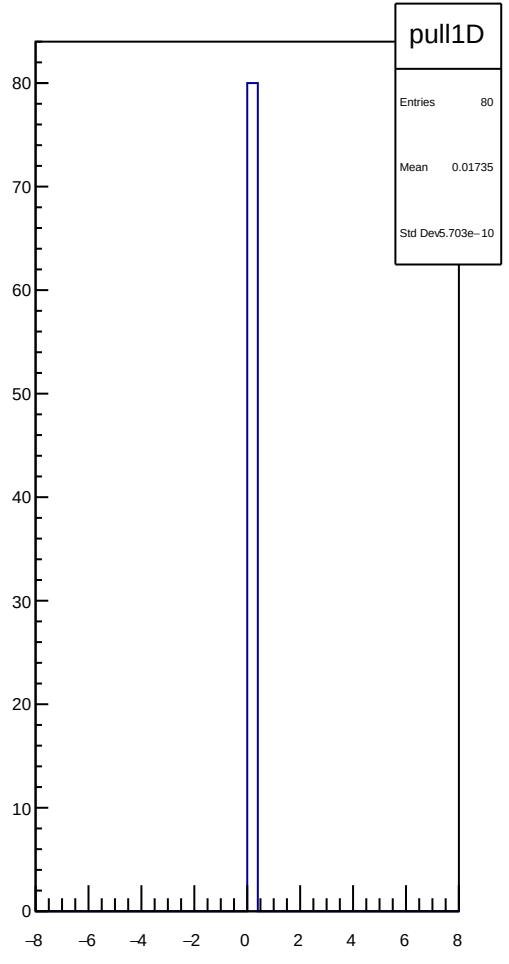

Phi_FG_mean vs run
χ² / ndf 1.309e+06 / 79
p0 88.02 ± 1.118e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 80
Mean 40
Std Dev 23.09
120
100
80
60
40
20
0
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

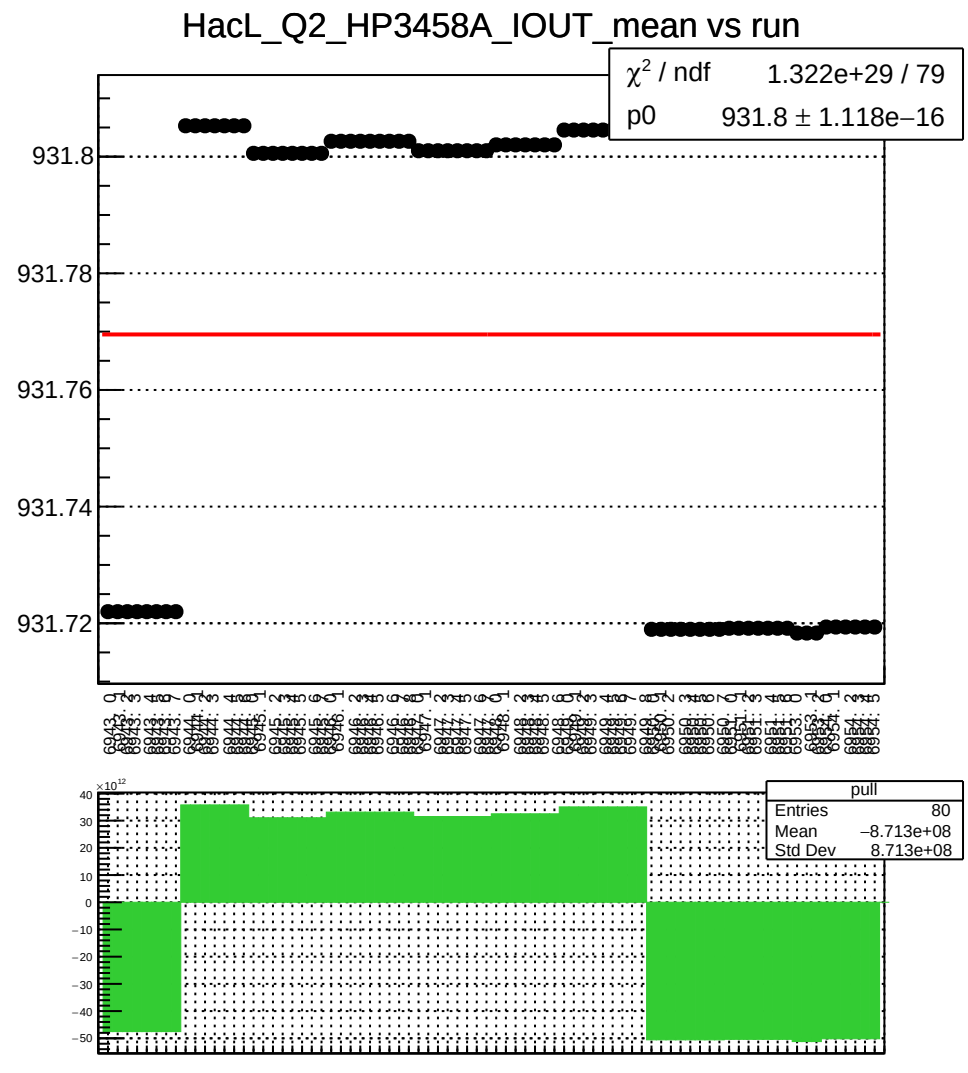

HALLA_p_mean vs run
χ² / ndf 3.219e+33 / 79
p0 2175 ± 1.118e−16
2195
2190
2185
2180
2175
2170
2165
2160
pull
Entries 80
Mean −1.342e+07
Std Dev 1.342e+07
×10¹⁵
15
10
5
0
−5
−10
−15
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

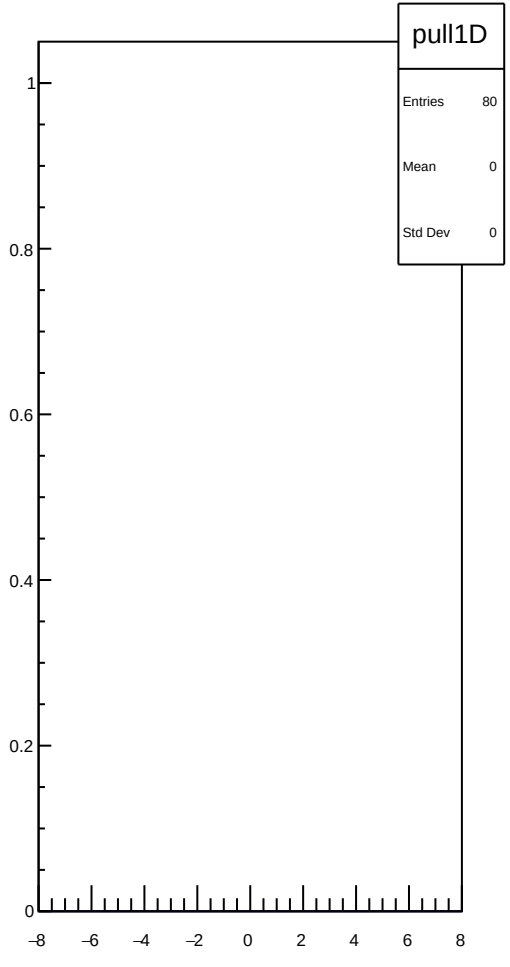

HALLA_dpp_mean vs run
χ² / ndf 9.231e+22 / 79
p0 −9.037e−05 ± 1.118e−16
pull
Entries 80
Mean 7.407e+09
Std Dev 7.407e+09

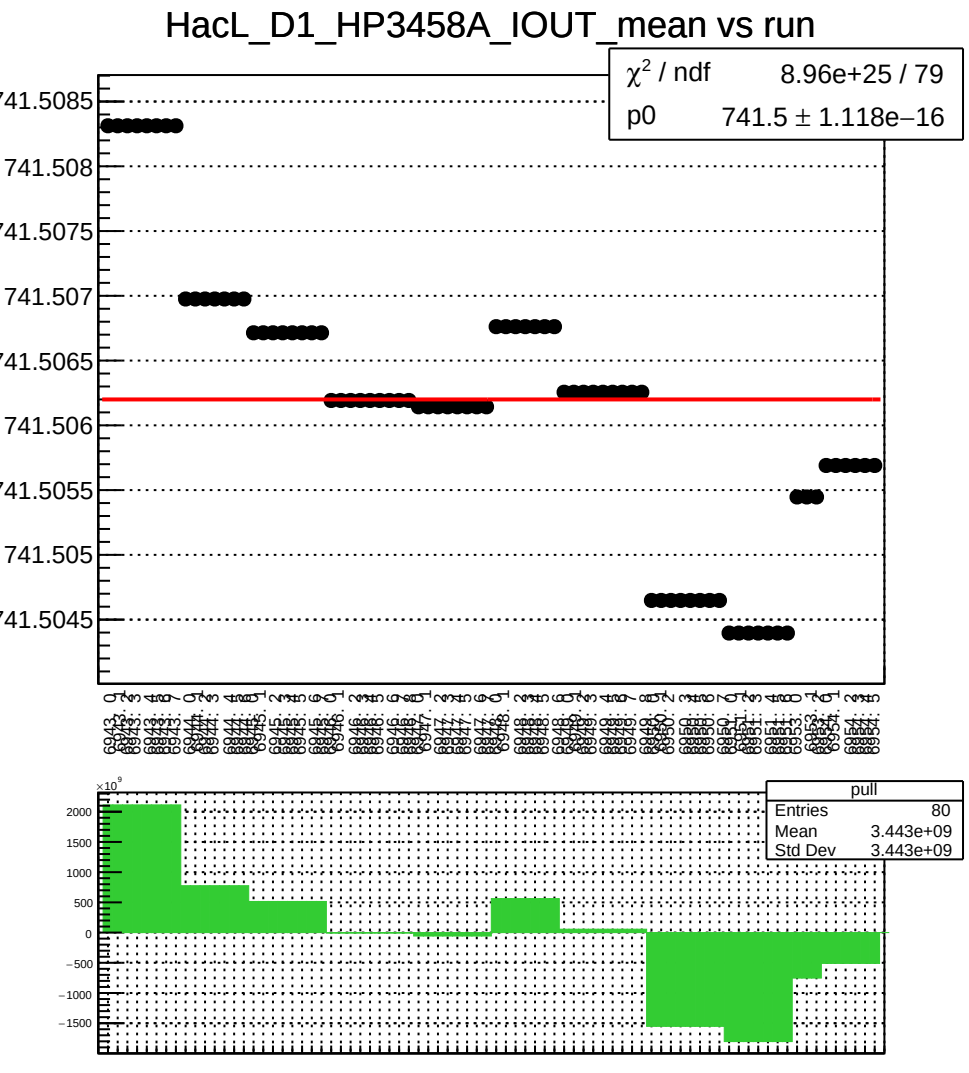

pull1D
Entries 80
Mean 0
Std Dev 0

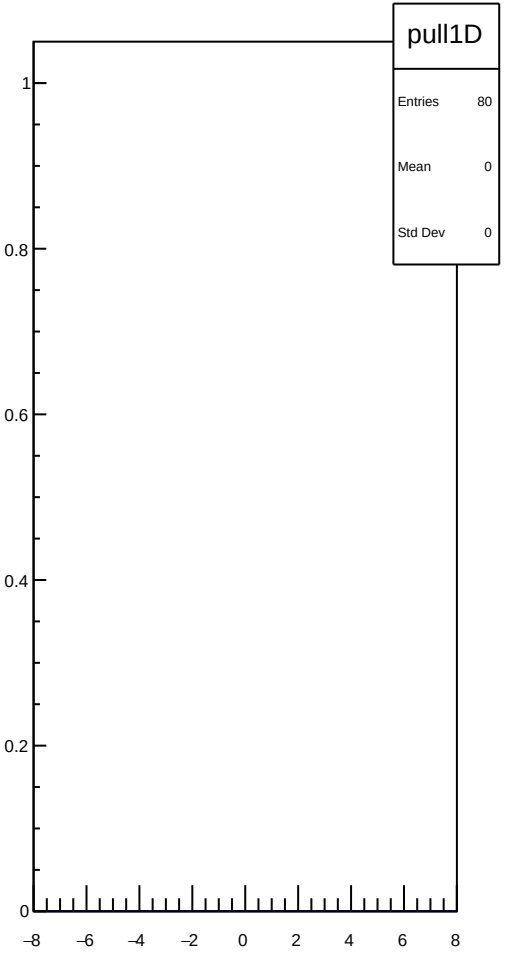

MQ171LM_mean vs run
χ² / ndf 0.02407 / 79
p0 0.009375 ± 1.118e−16
×10⁻³
pull
Entries 80
Mean 40
Std Dev 23.09

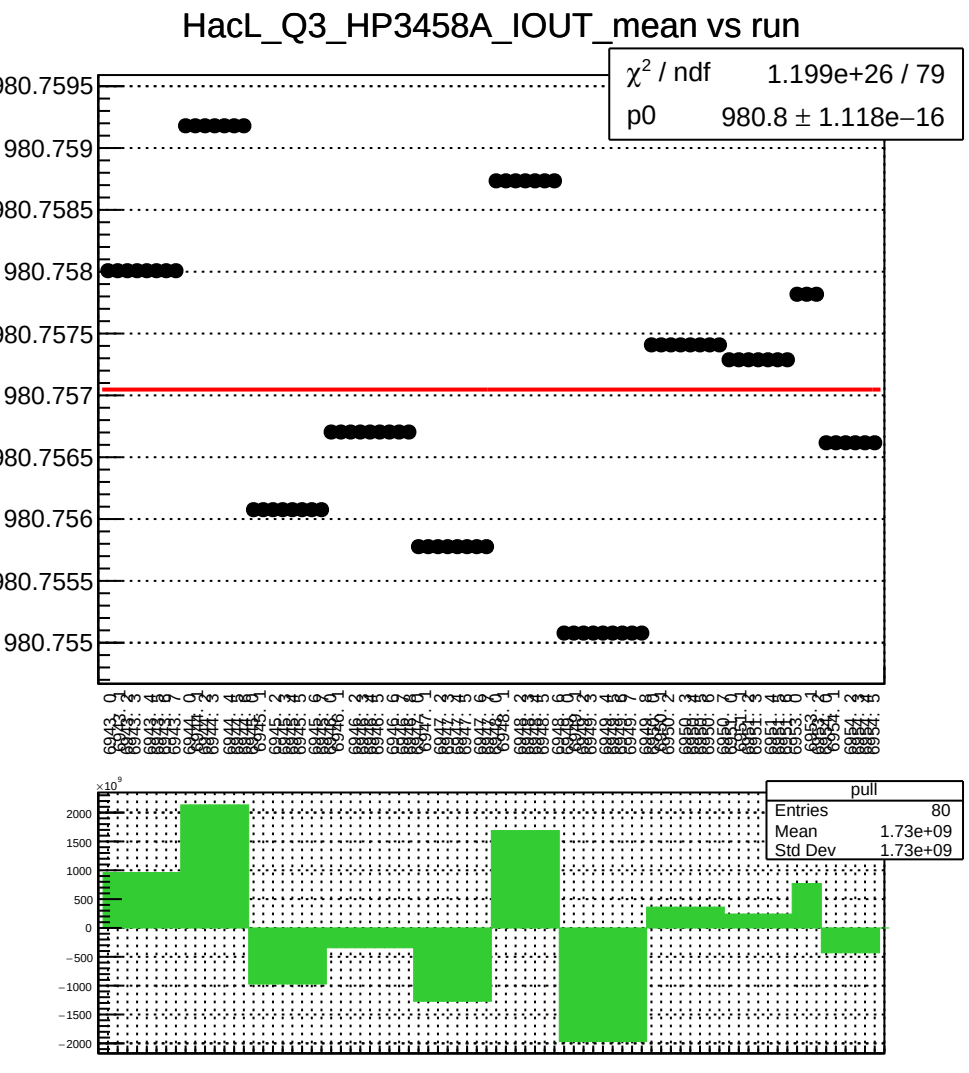

pull1D
Entries 80
Mean 0.01735
Std Dev 5.703e−10

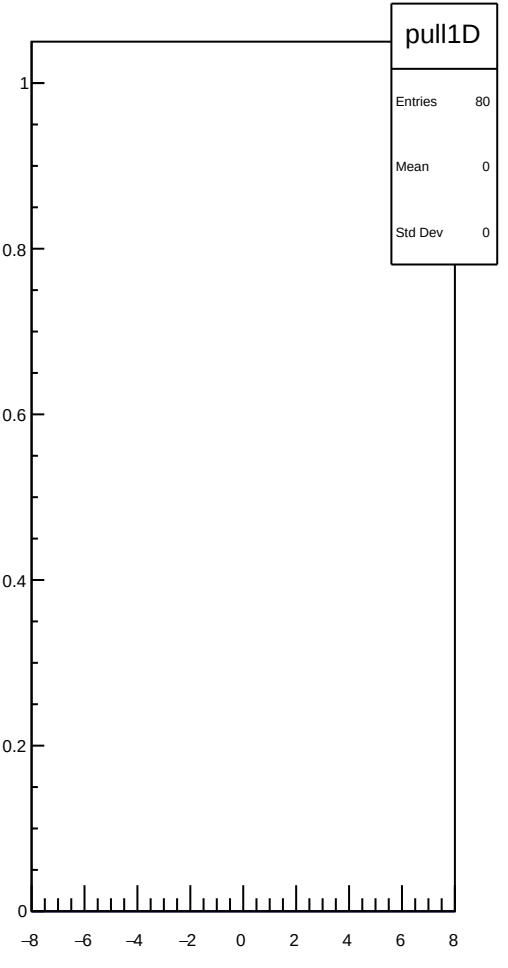

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.322e+29 / 79
p0 931.8 ± 1.118e−16
931.8
931.78
931.76
931.74
931.72
pull
Entries 80
Mean −8.713e+08
Std Dev 8.713e+08
×10¹²
40
30
20
10
0
−10
−20
−30
−40
−50

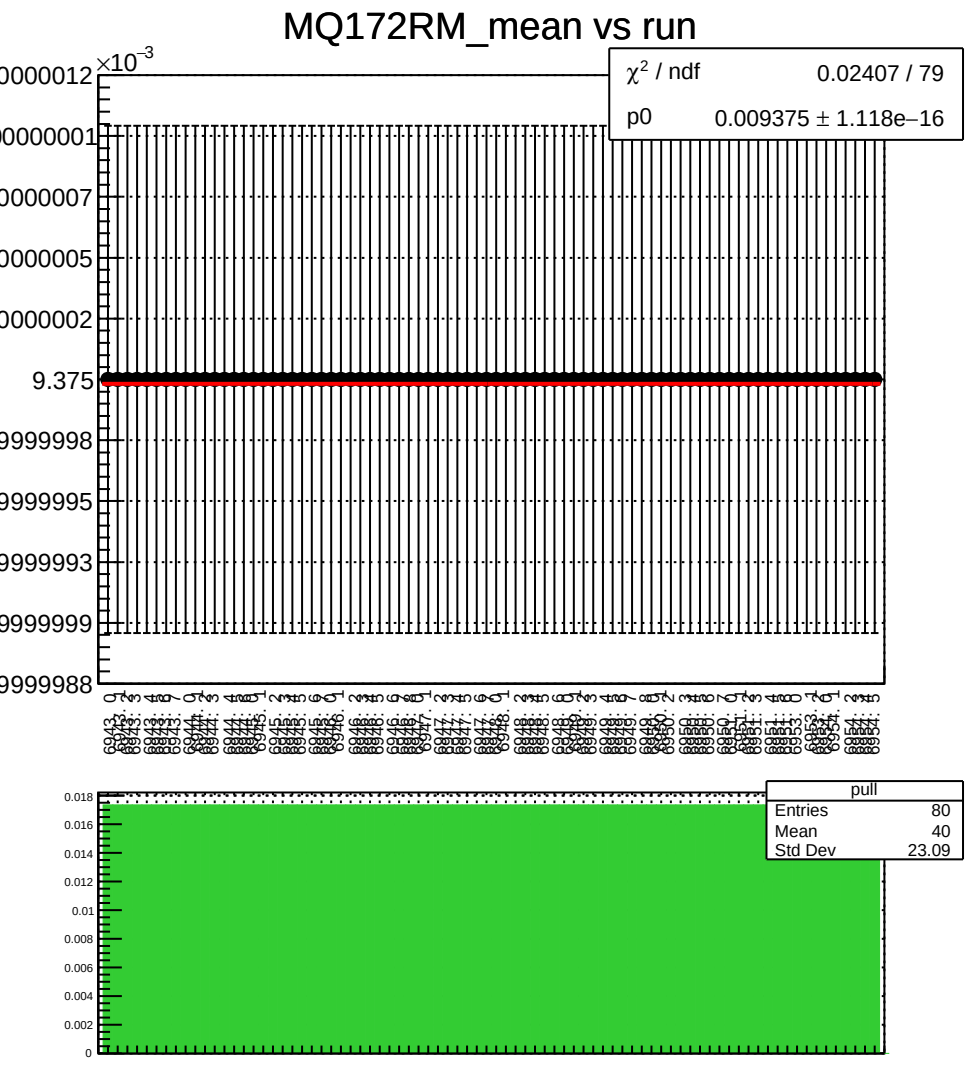

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

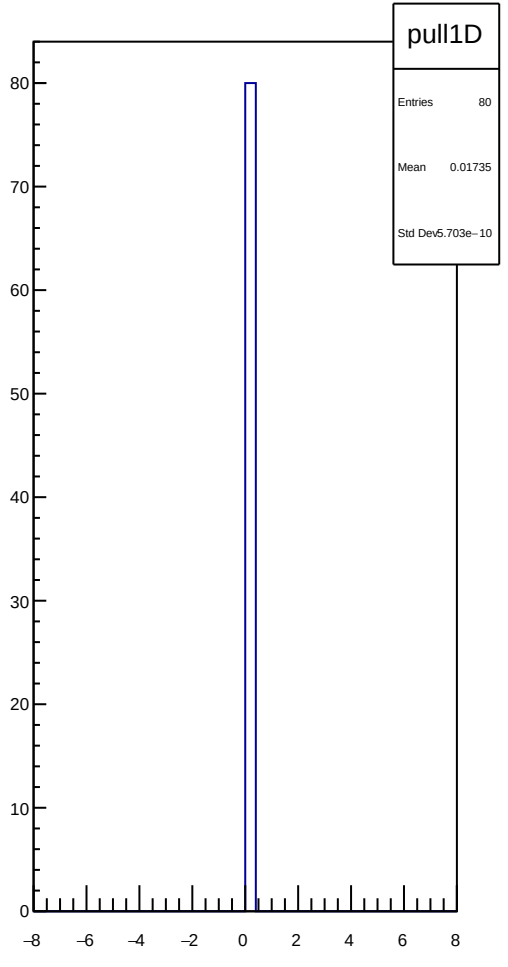

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 8.96e+25 / 79
p0 741.5 ± 1.118e−16
741.5085
741.508
741.5075
741.507
741.5065
741.506
741.5055
741.505
741.5045
pull
Entries 80
Mean 3.443e+09
Std Dev 3.443e+09
×10⁹
2000
1500
1000
500
0
−500
−1000
−1500

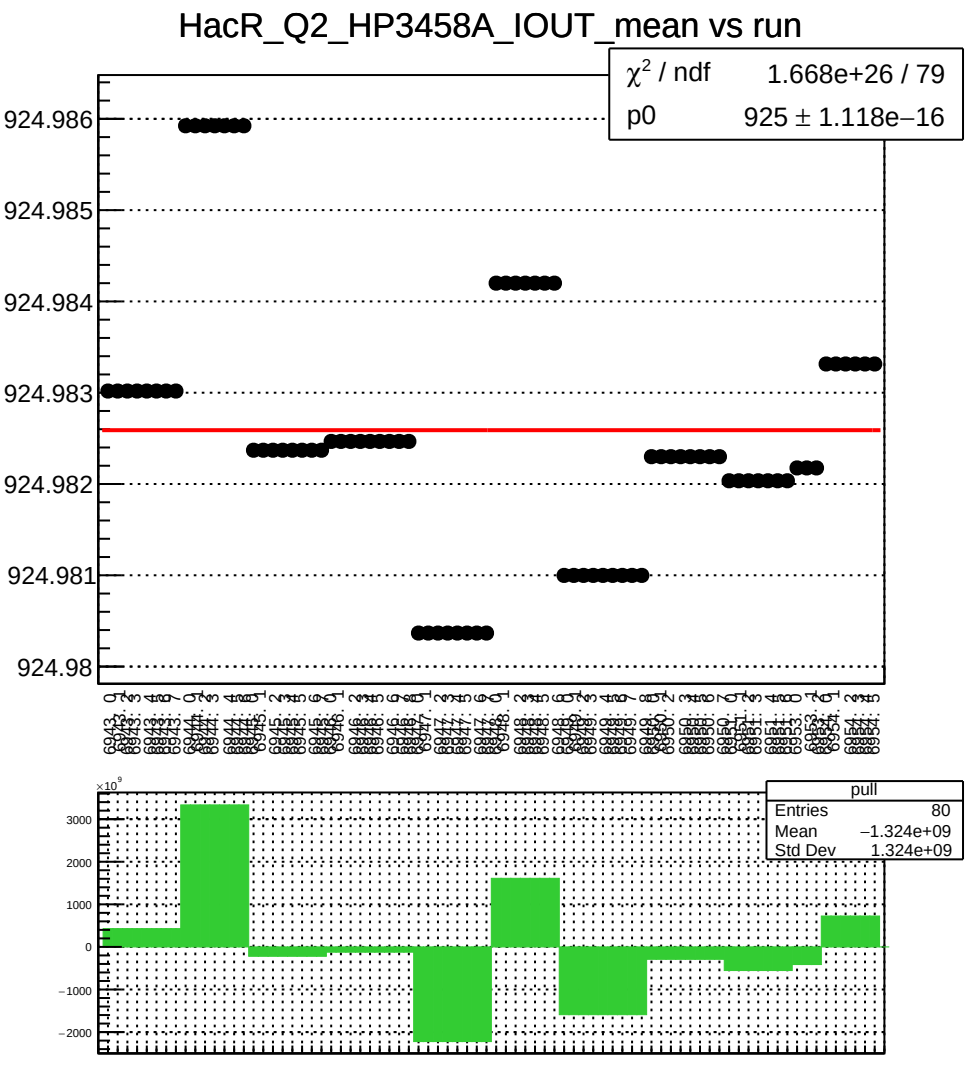

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

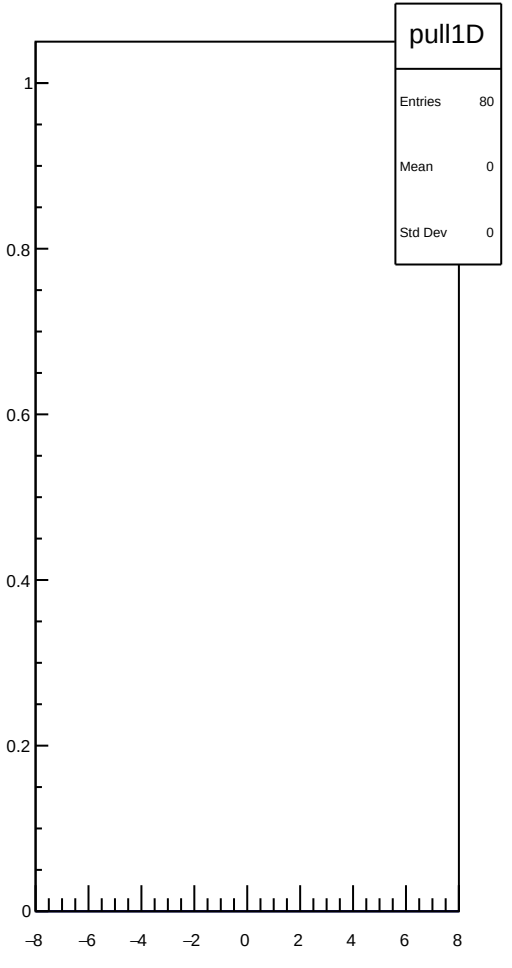

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.199e+26 / 79
p0 980.8 ± 1.118e−16
980.7595
980.759
980.7585
980.758
980.7575
980.757
980.7565
980.756
980.7555
980.755
pull
Entries 80
Mean 1.73e+09
Std Dev 1.73e+09
×10⁹
2000
1500
1000
500
0
−500
−1000
−1500
−2000

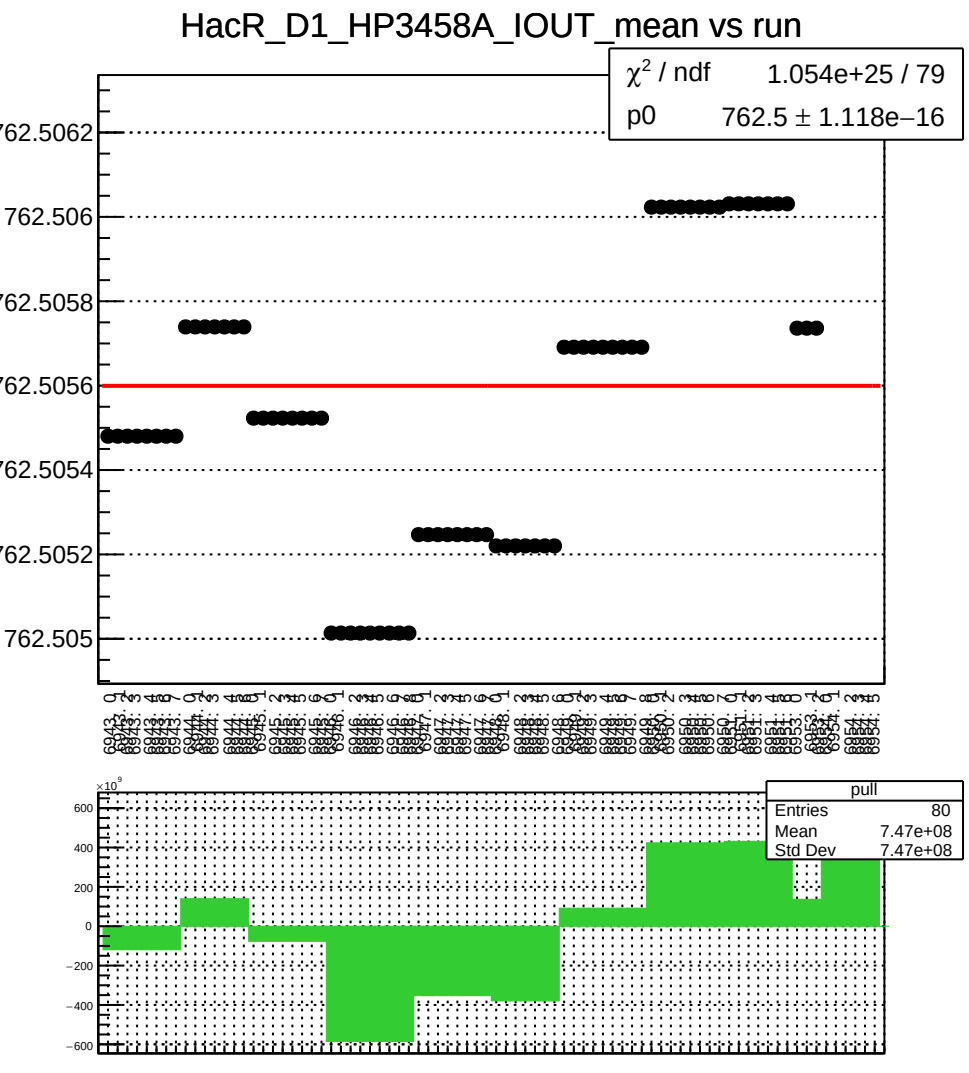

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

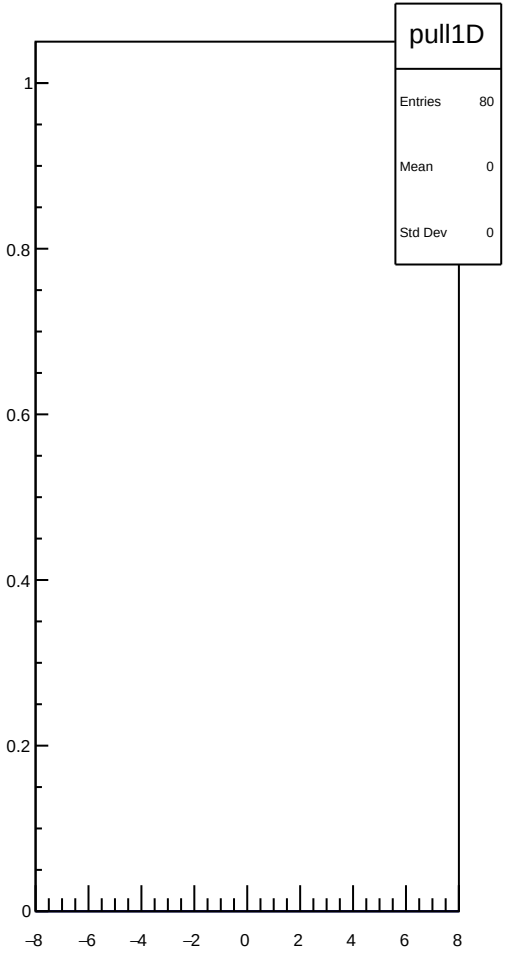

MQ172RM_mean vs run
×10⁻³
χ² / ndf 0.02407 / 79
p0 0.009375 ± 1.118e−16
pull
Entries 80
Mean 40
Std Dev 23.09

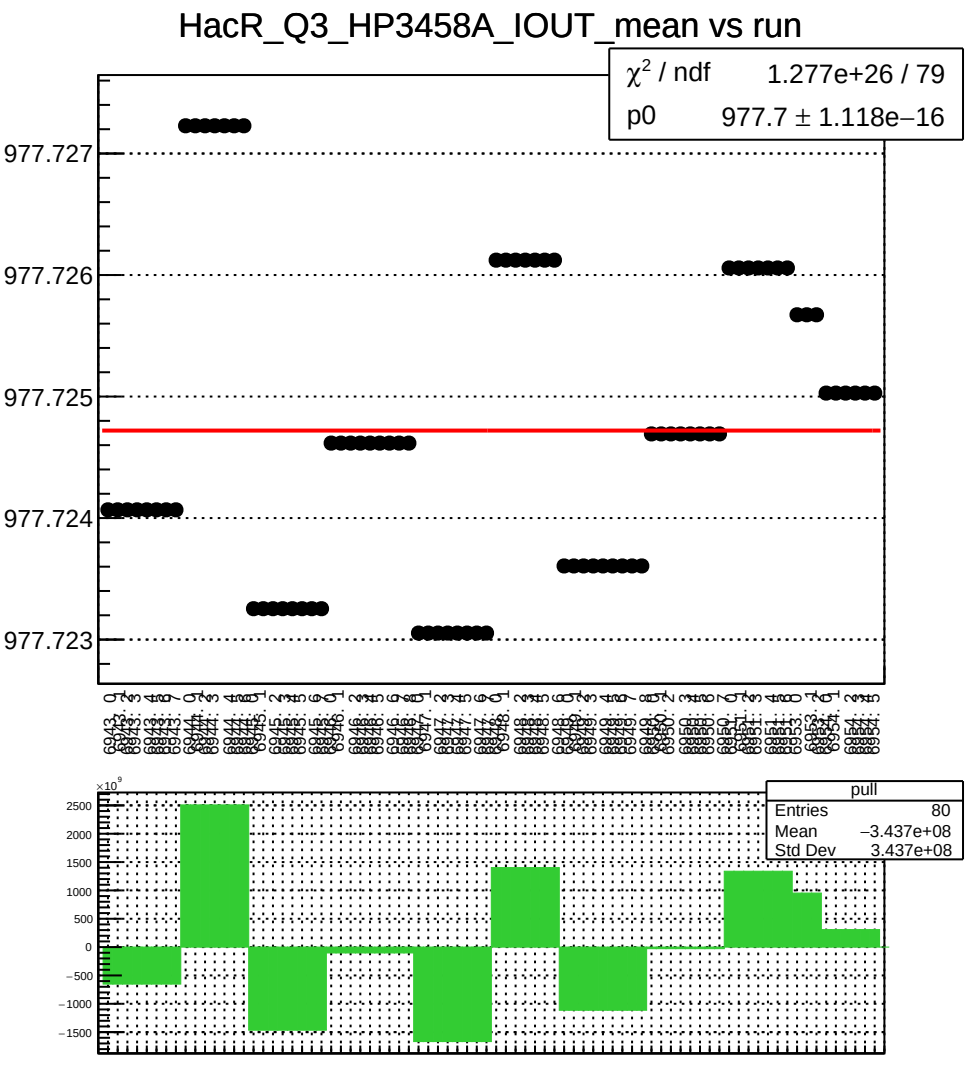

pull1D
Entries 80
Mean 0.01735
Std Dev 5.703e−10

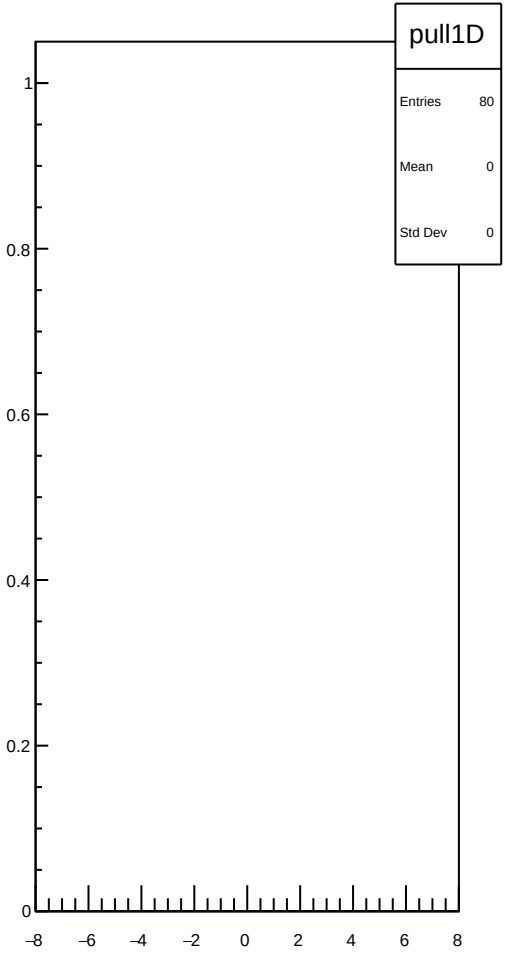

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.668e+26 / 79
p0 925 ± 1.118e−16
924.986
924.985
924.984
924.983
924.982
924.981
924.98
pull
Entries 80
Mean −1.324e+09
Std Dev 1.324e+09
×10⁹
3000
2000
1000
0
−1000
−2000

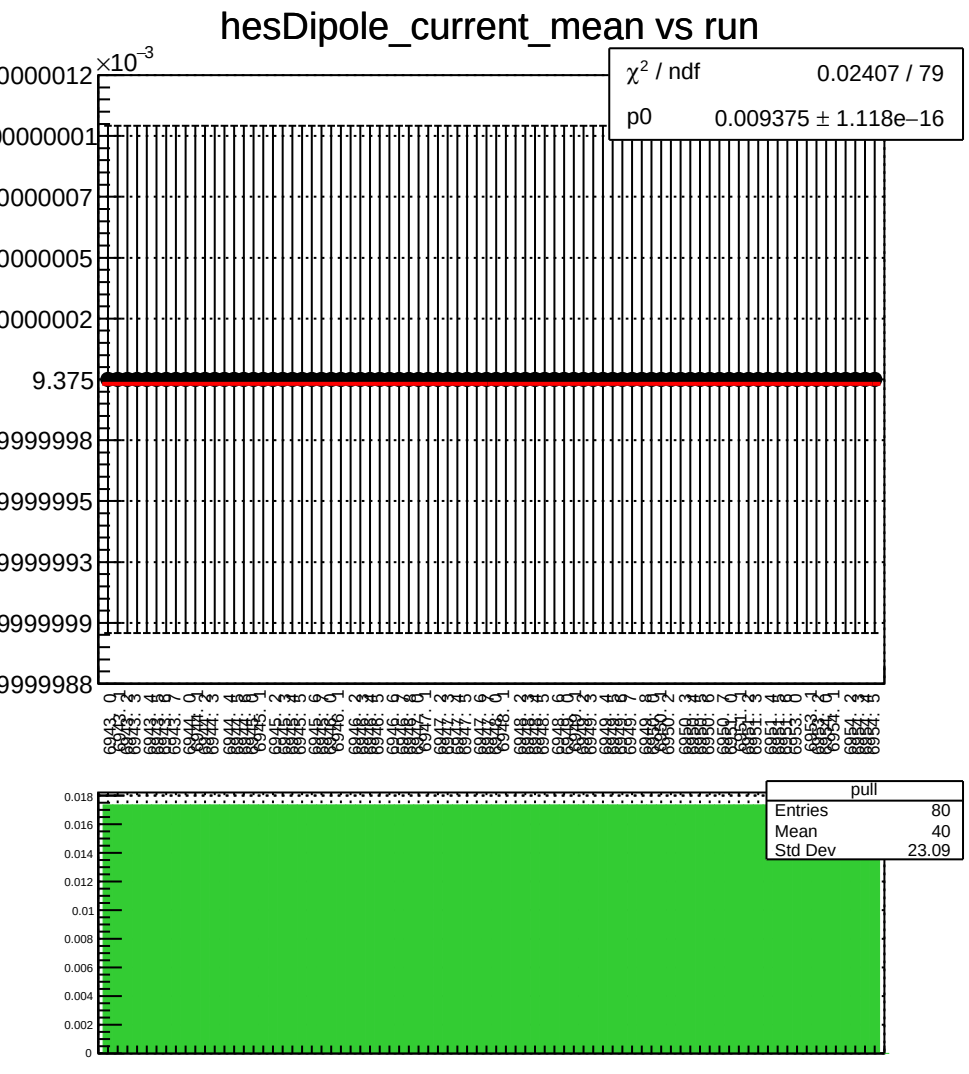

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

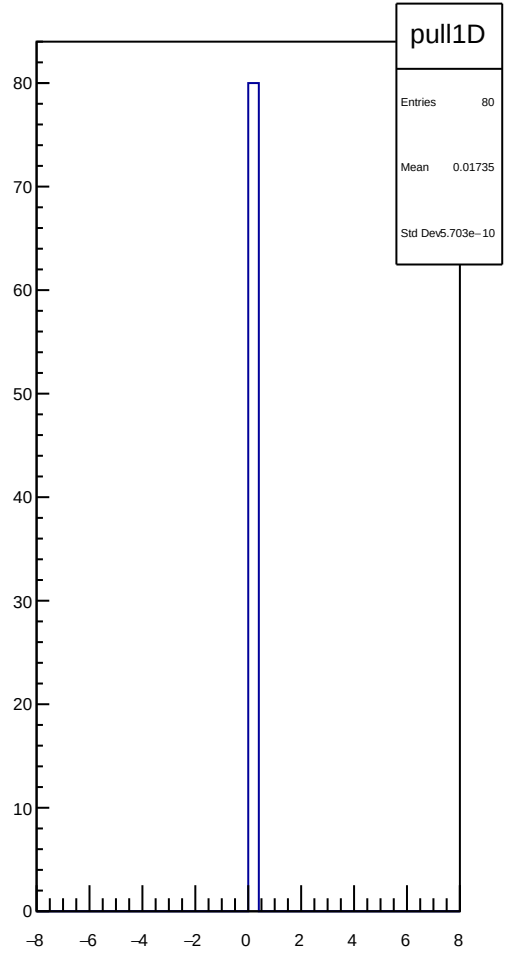

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.054e+25 / 79
p0 762.5 ± 1.118e−16
762.5062
762.506
762.5058
762.5056
762.5054
762.5052
762.505
pull
Entries 80
Mean 7.47e+08
Std Dev 7.47e+08
×10⁹
600
400
200
0
−200
−400
−600

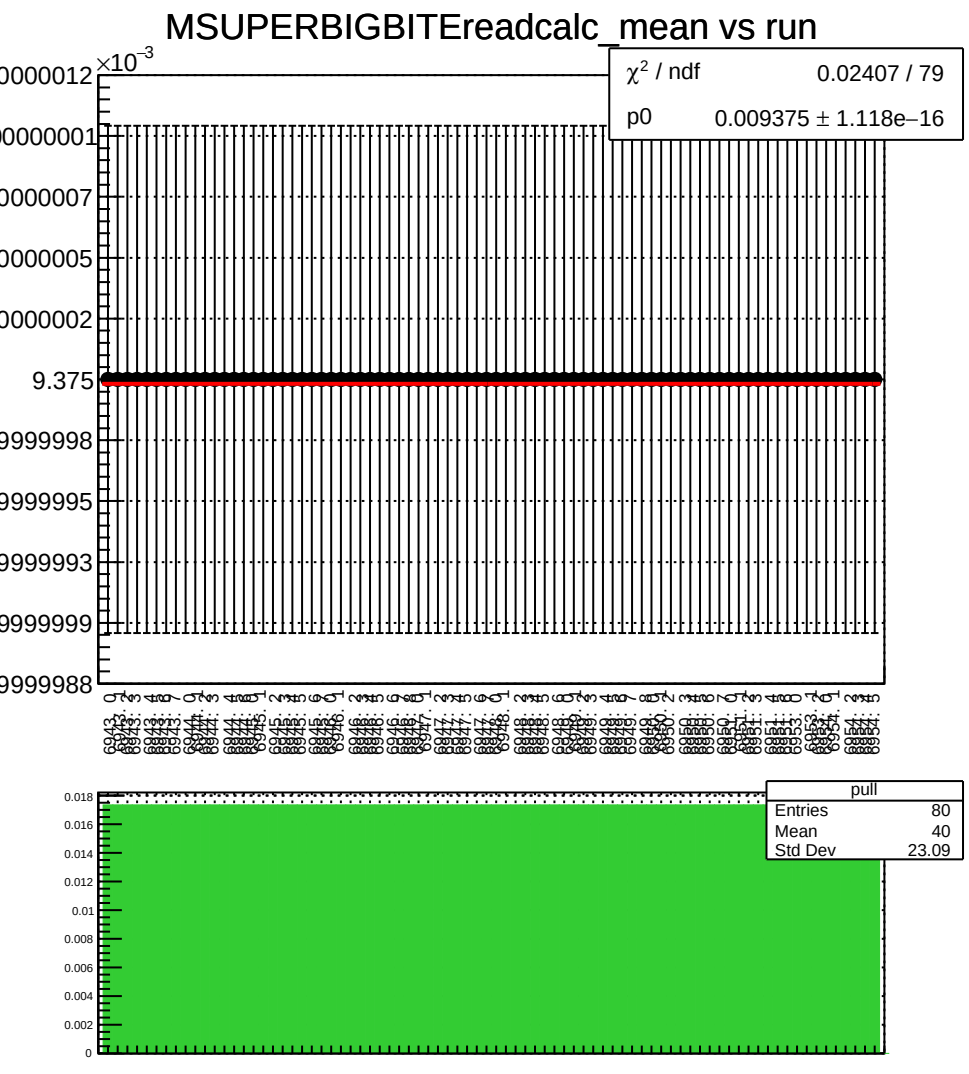

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

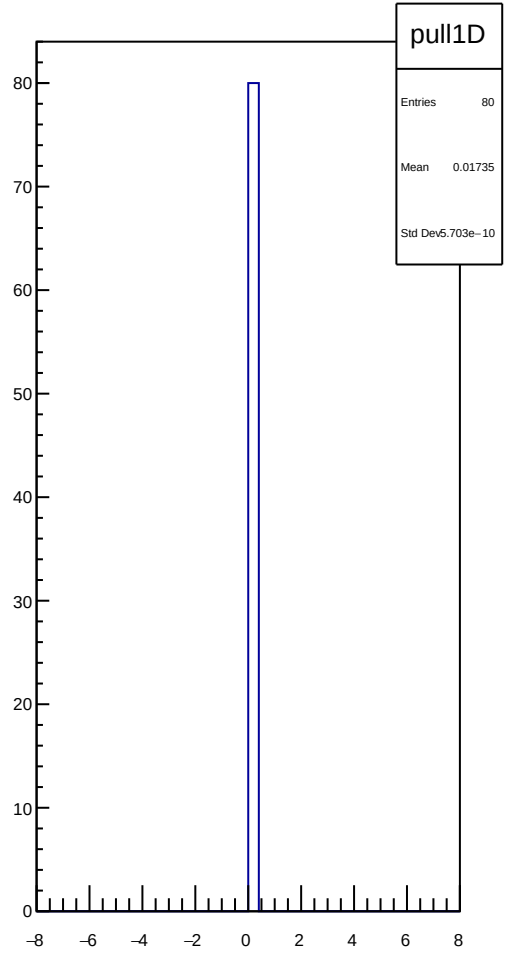

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.277e+26 / 79
p0 977.7 ± 1.118e−16
977.727
977.726
977.725
977.724
977.723
pull
Entries 80
Mean −3.437e+08
Std Dev 3.437e+08
×10⁹
2500
2000
1500
1000
500
0
−500
−1000
−1500

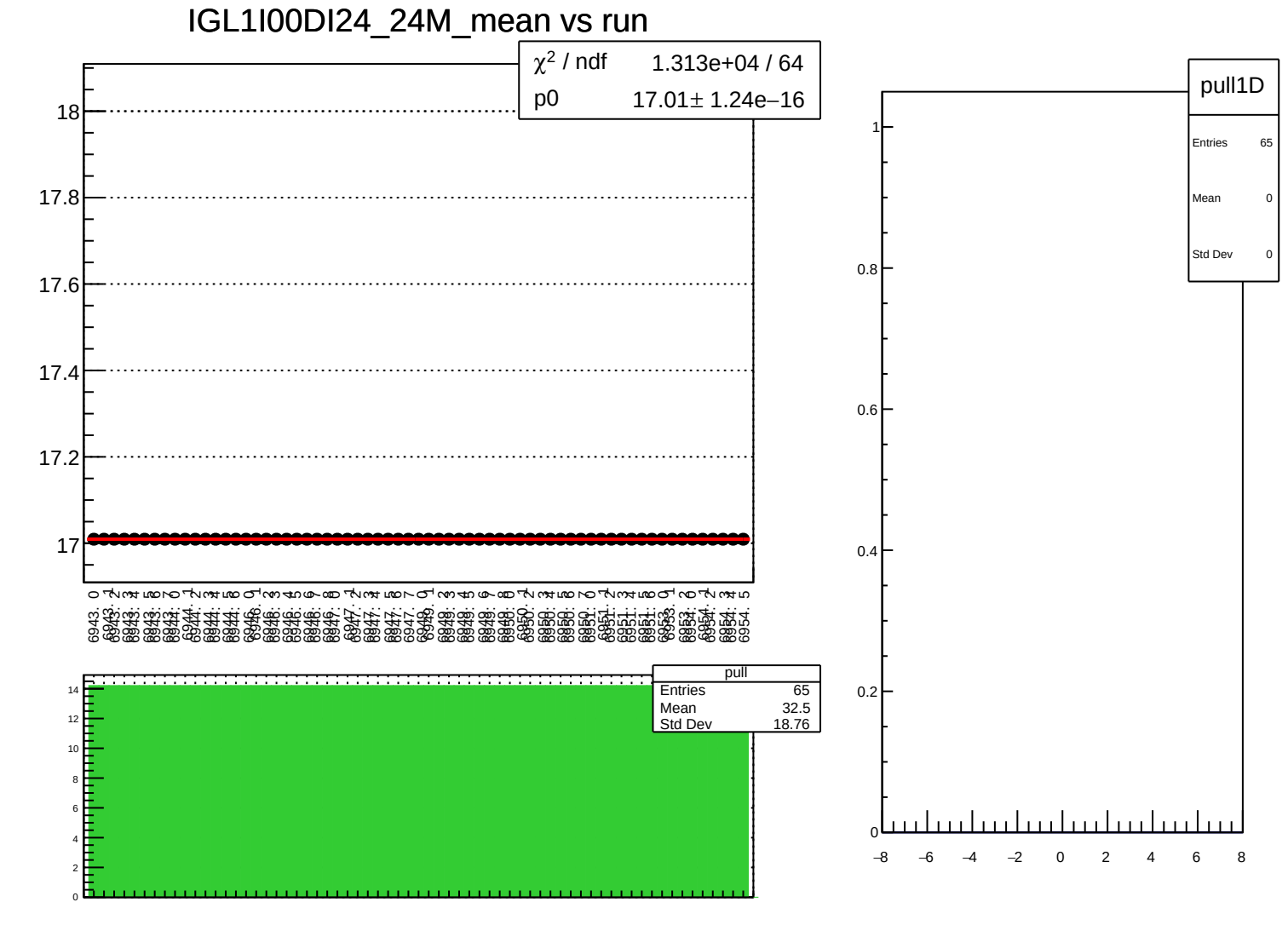

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

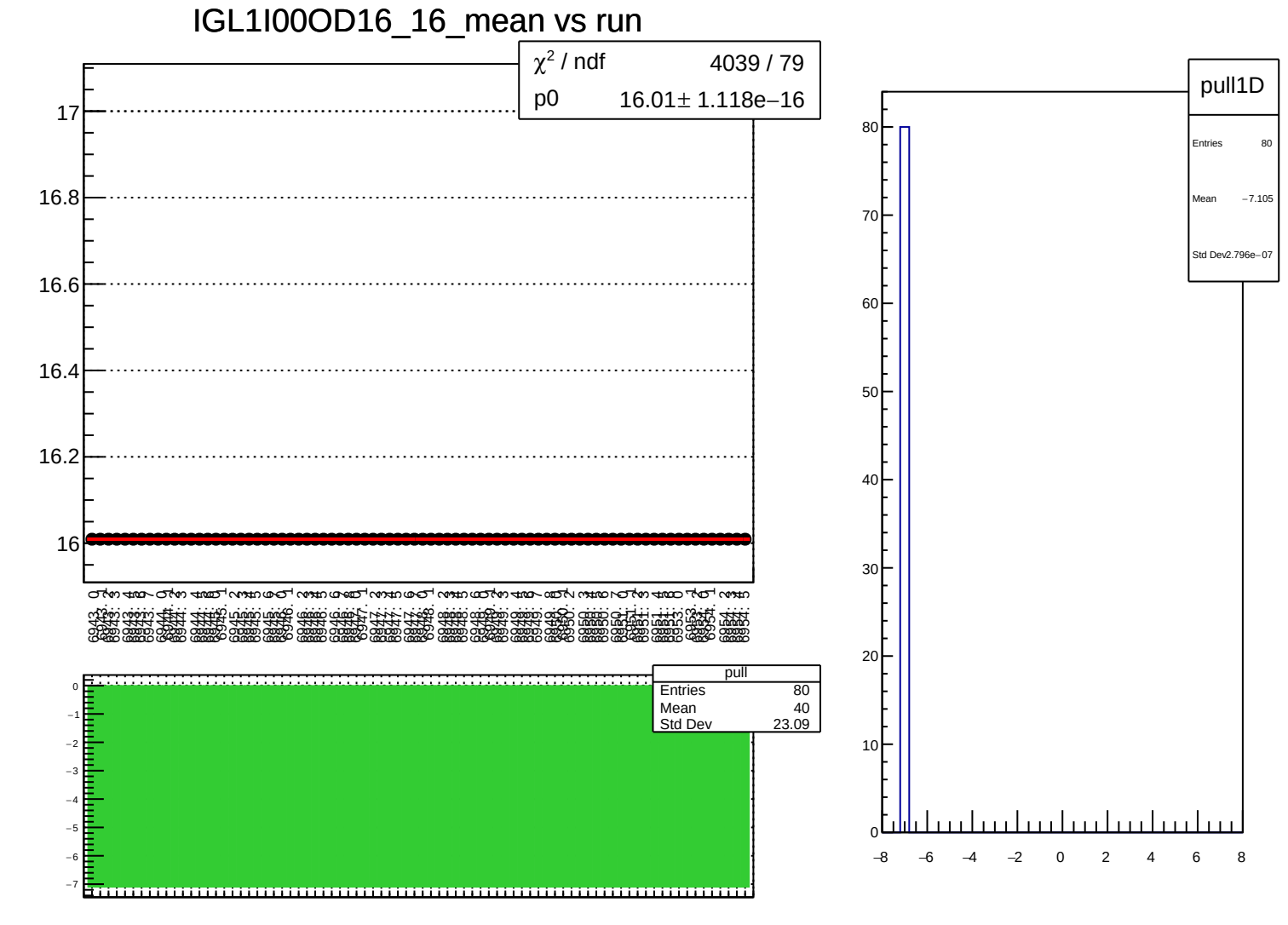

hesDipole_current_mean vs run
χ² / ndf 0.02407 / 79
p0 0.009375 ± 1.118e−16
×10⁻³
9.375
pull
Entries 80
Mean 40
Std Dev 23.09

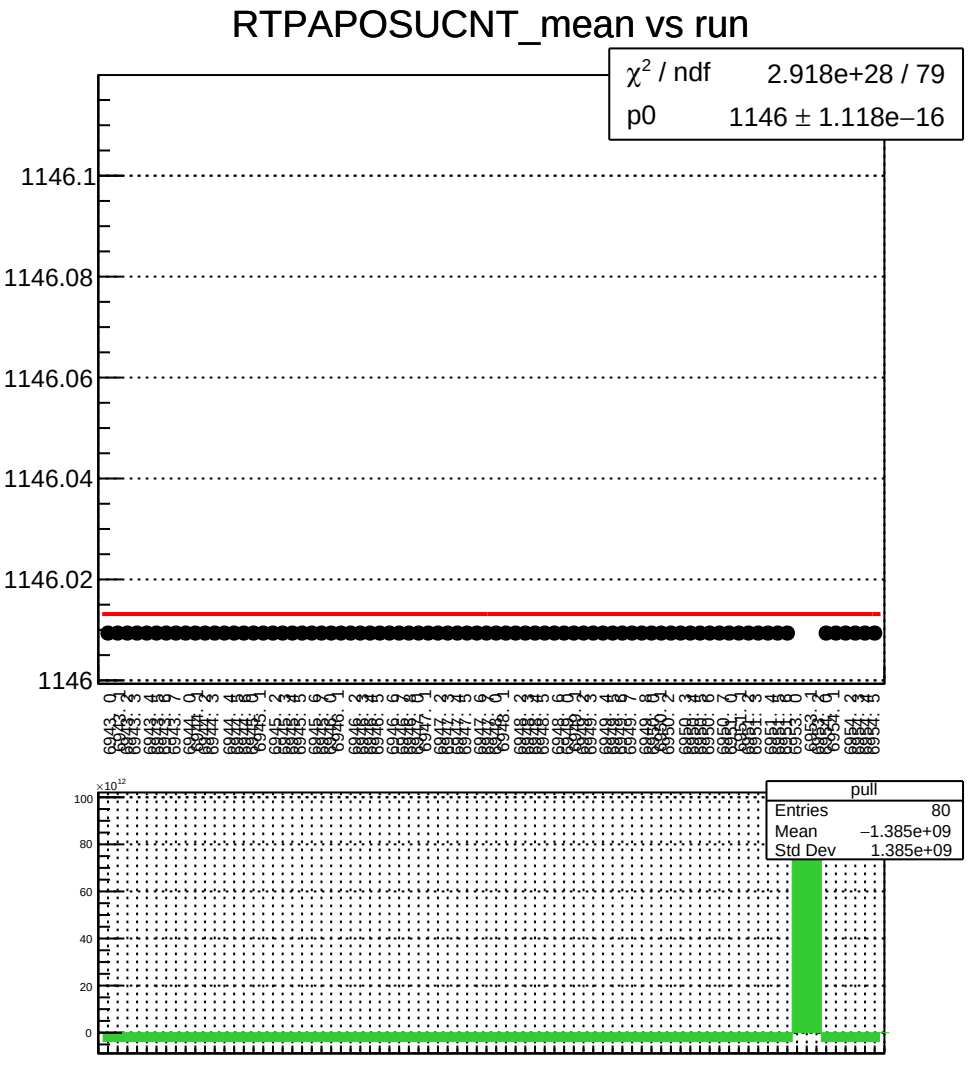

pull1D
Entries 80
Mean 0.01735
Std Dev 5.703e−10

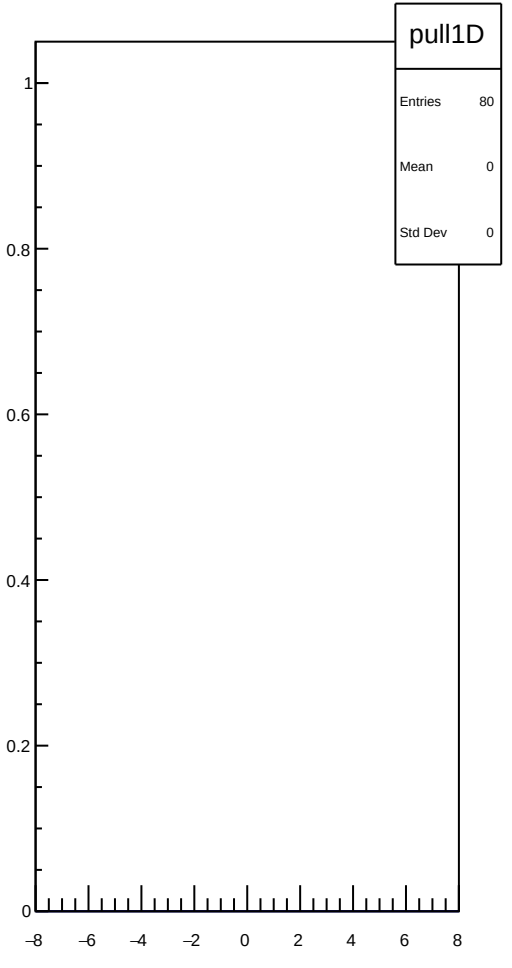

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.02407 / 79
p0 0.009375 ± 1.118e−16
×10⁻³
pull
Entries 80
Mean 40
Std Dev 23.09

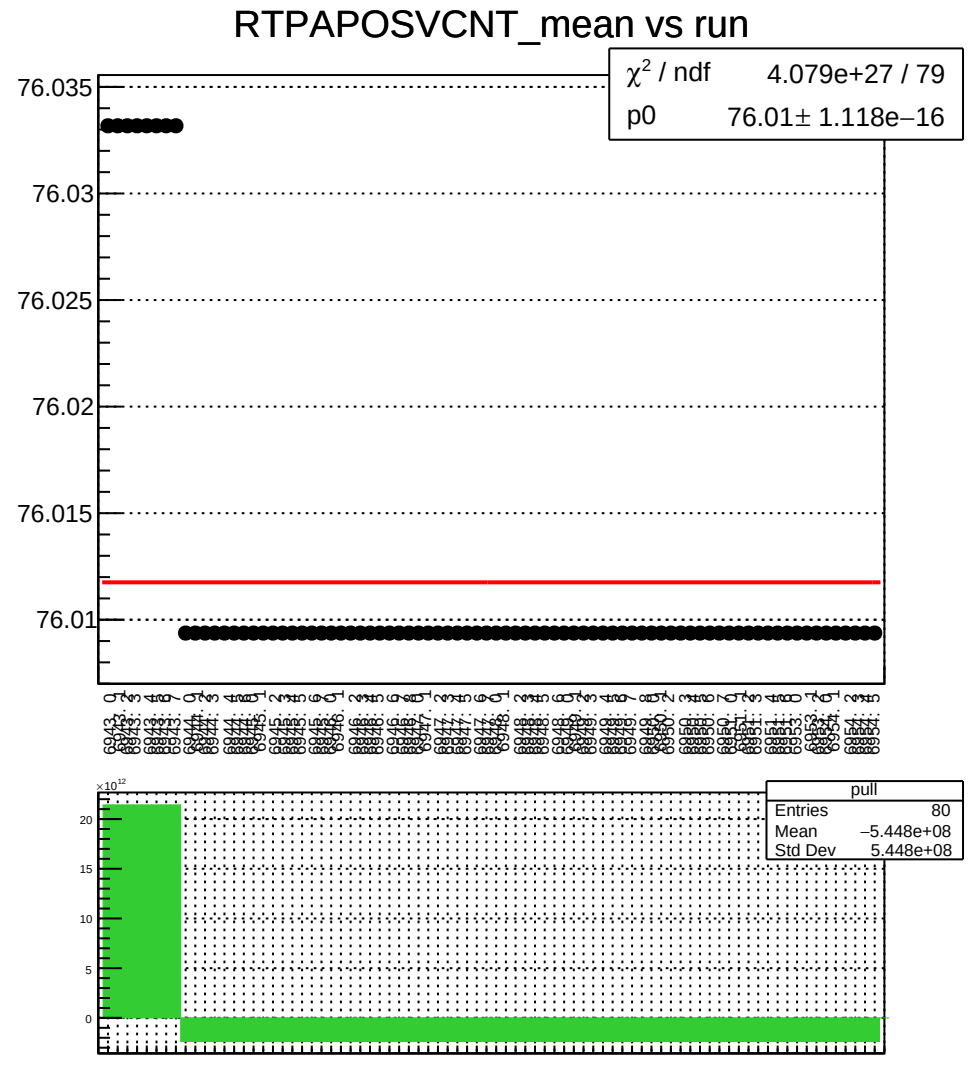

pull1D
Entries 80
Mean 0.01735
Std Dev 5.703e−10

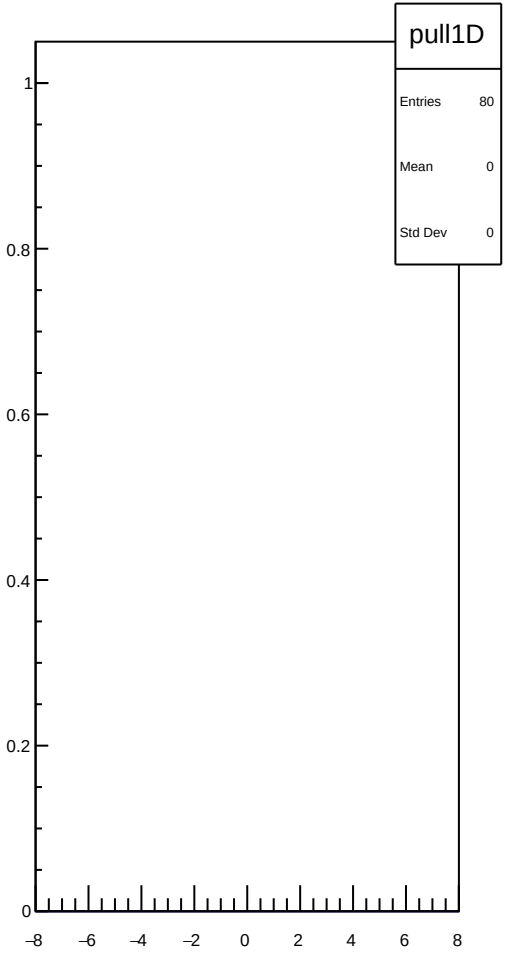

IGL1I00DI24_24M_mean vs run
χ² / ndf 1.313e+04 / 64
p0 17.01± 1.24e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 65
Mean 32.5
Std Dev 18.76
14
12
10
8
6
4
2
0
pull1D
Entries 65
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 4039 / 79
p0 16.01± 1.118e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 80
Mean 40
Std Dev 23.09
0
−1
−2
−3
−4
−5
−6
−7
pull1D
Entries 80
Mean −7.105
Std Dev2.796e−07
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 2.918e+28 / 79
p0 1146 ± 1.118e−16
1146.1
1146.08
1146.06
1146.04
1146.02
1146
pull
Entries 80
Mean −1.385e+09
Std Dev 1.385e+09
×10¹²
100
80
60
40
20
0


pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 4.079e+27 / 79
p0 76.01± 1.118e−16
76.035
76.03
76.025
76.02
76.015
76.01
pull
Entries 80
Mean −5.448e+08
Std Dev 5.448e+08
×10¹²
20
15
10
5
0


pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8