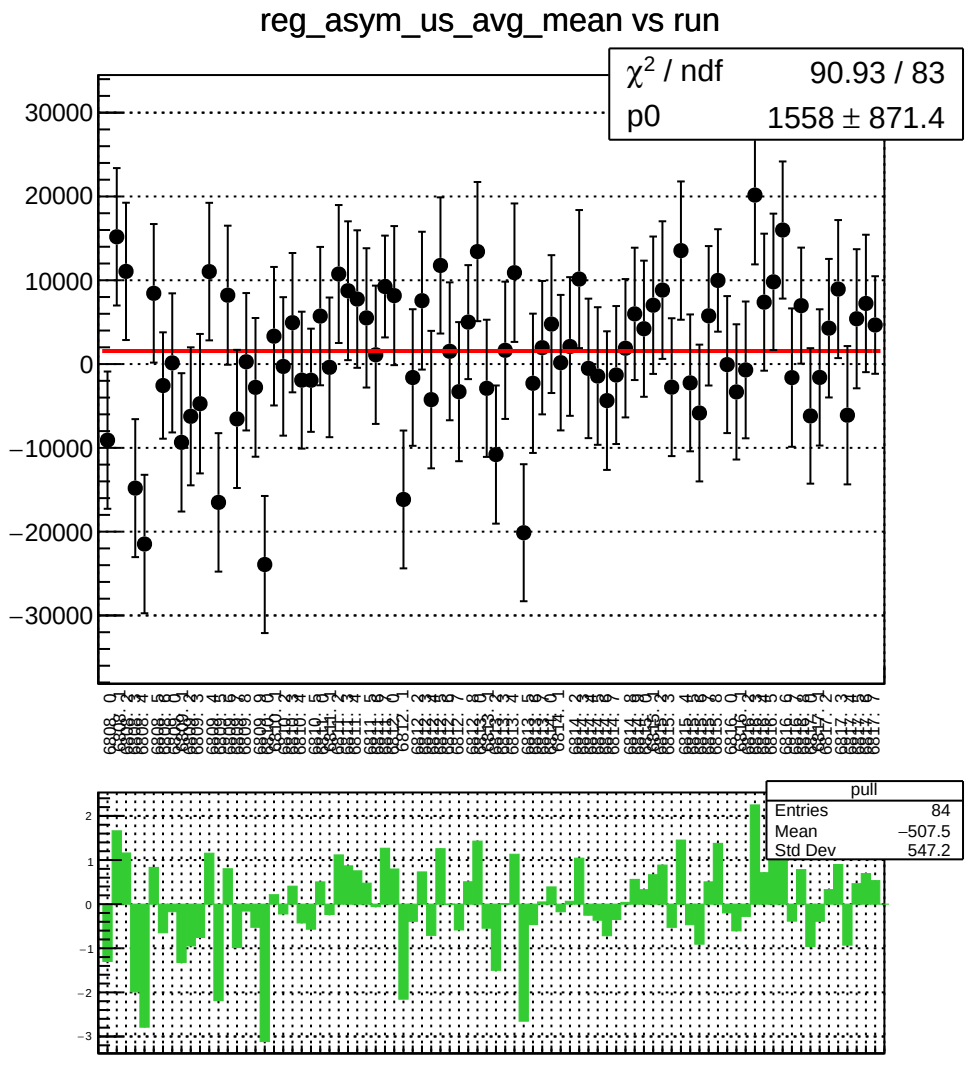
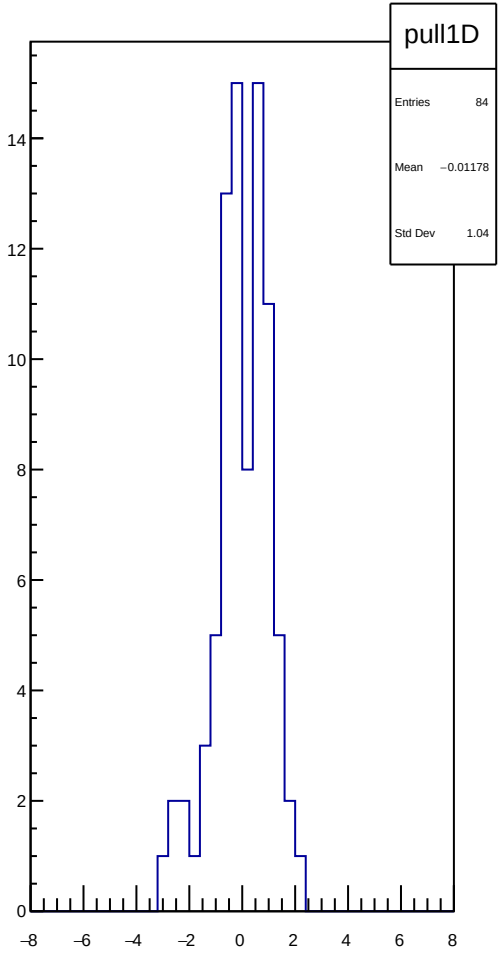
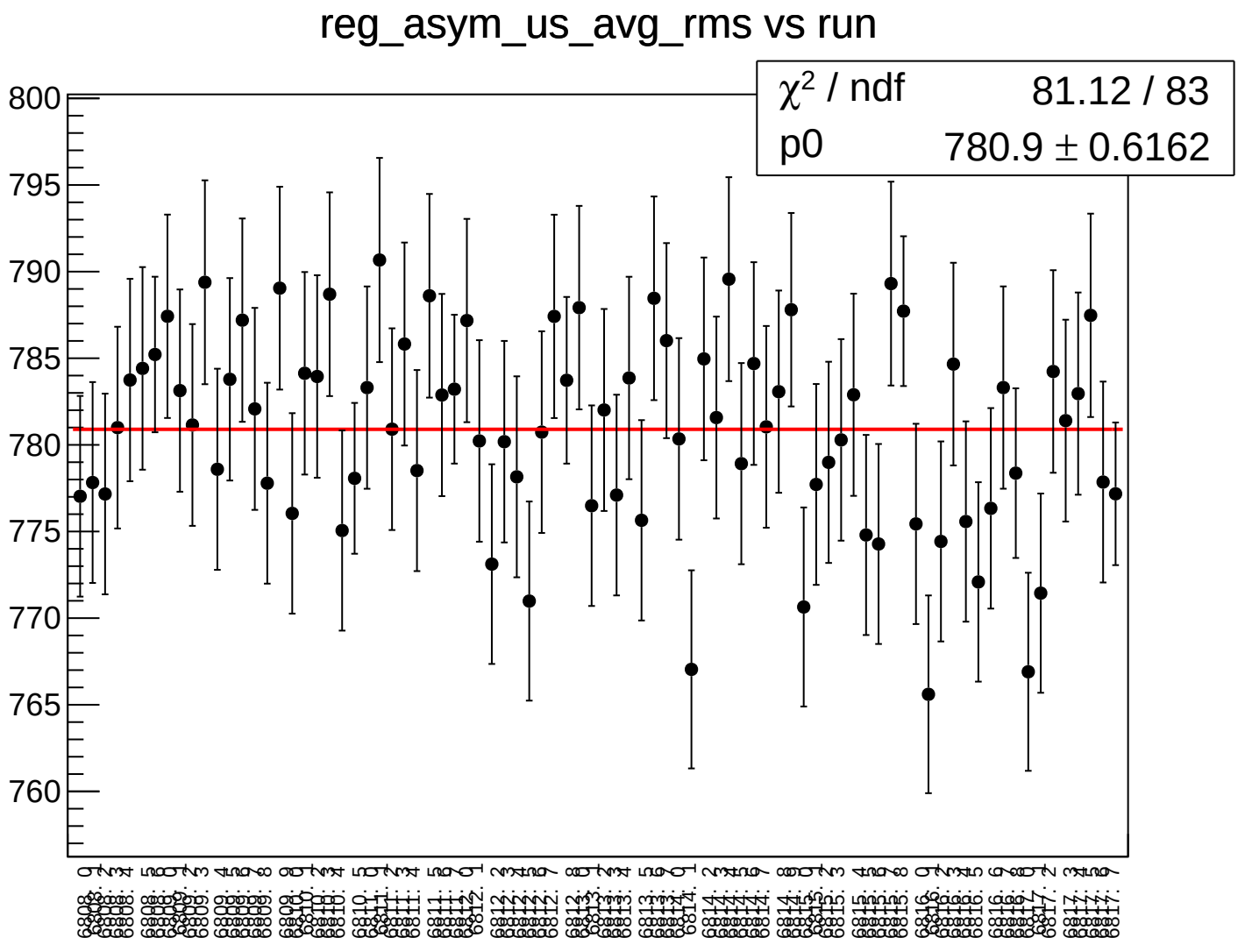
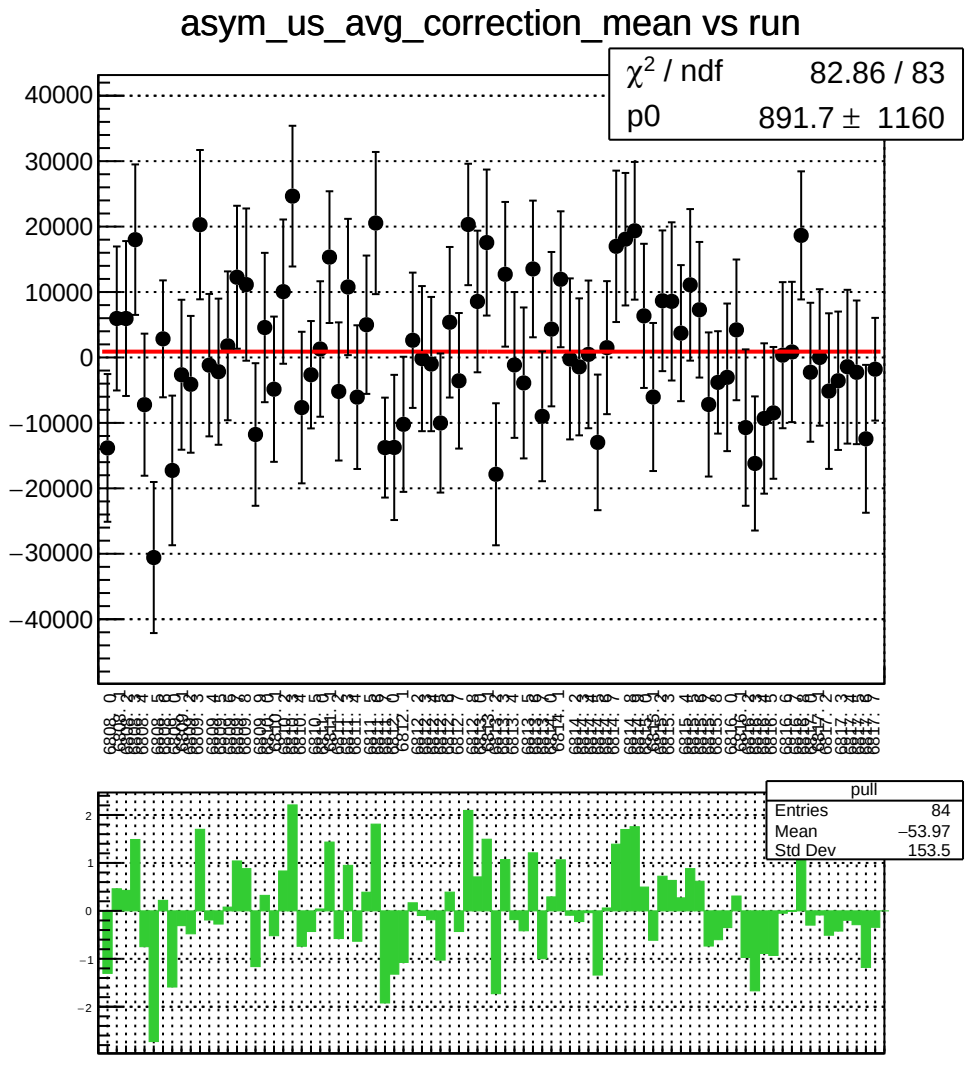
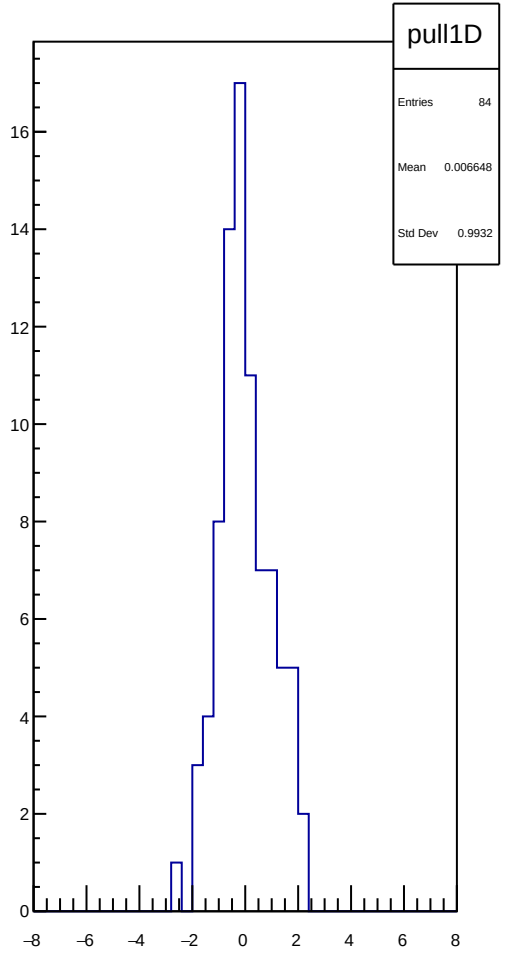
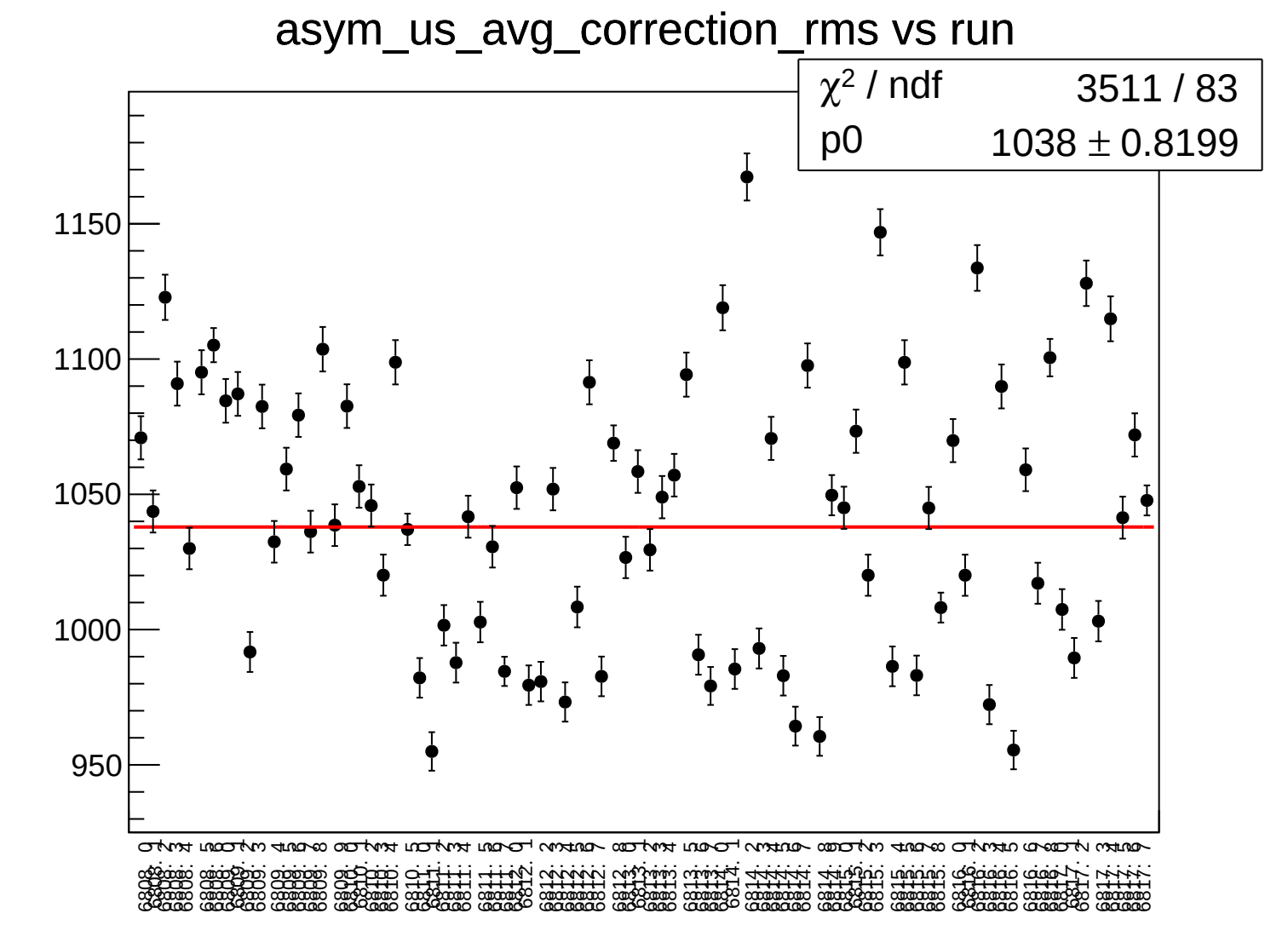

reg_asym_us_avg_mean vs run
χ² / ndf 90.93 / 83
p0 1558 ± 871.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −507.5
Std Dev 547.2
2
1
0
−1
−2
−3

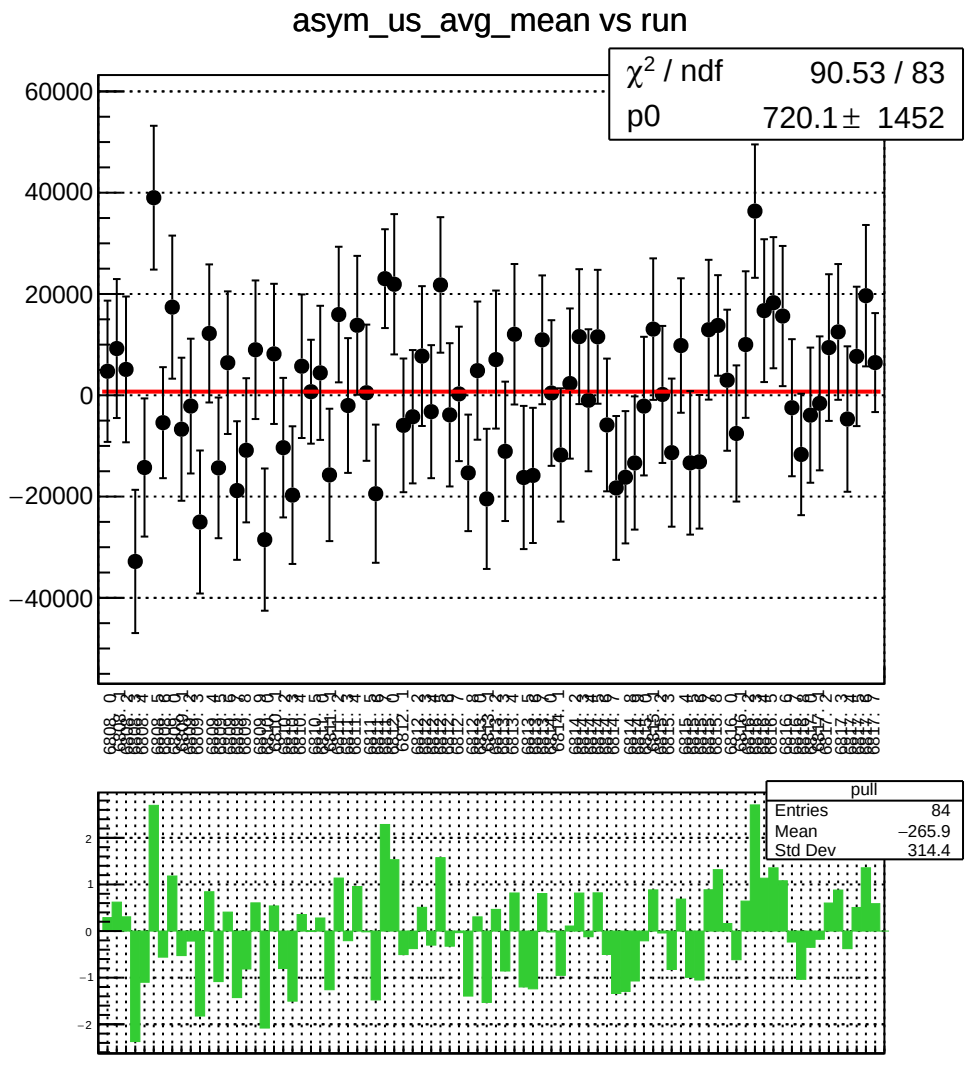

pull1D
Entries 84
Mean −0.01178
Std Dev 1.04
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

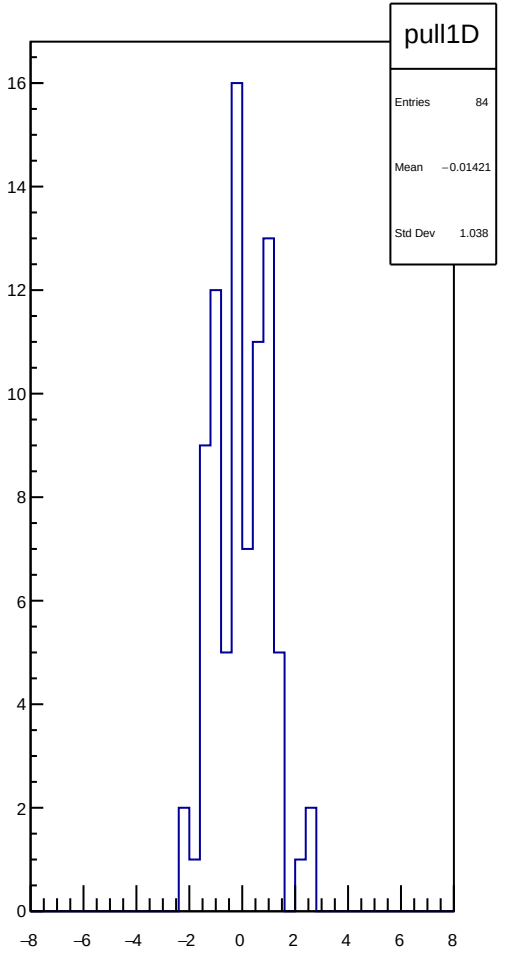

reg_asym_us_avg_rms vs run
χ² / ndf 81.12 / 83
p0 780.9 ± 0.6162
800
795
790
785
780
775
770
765
760

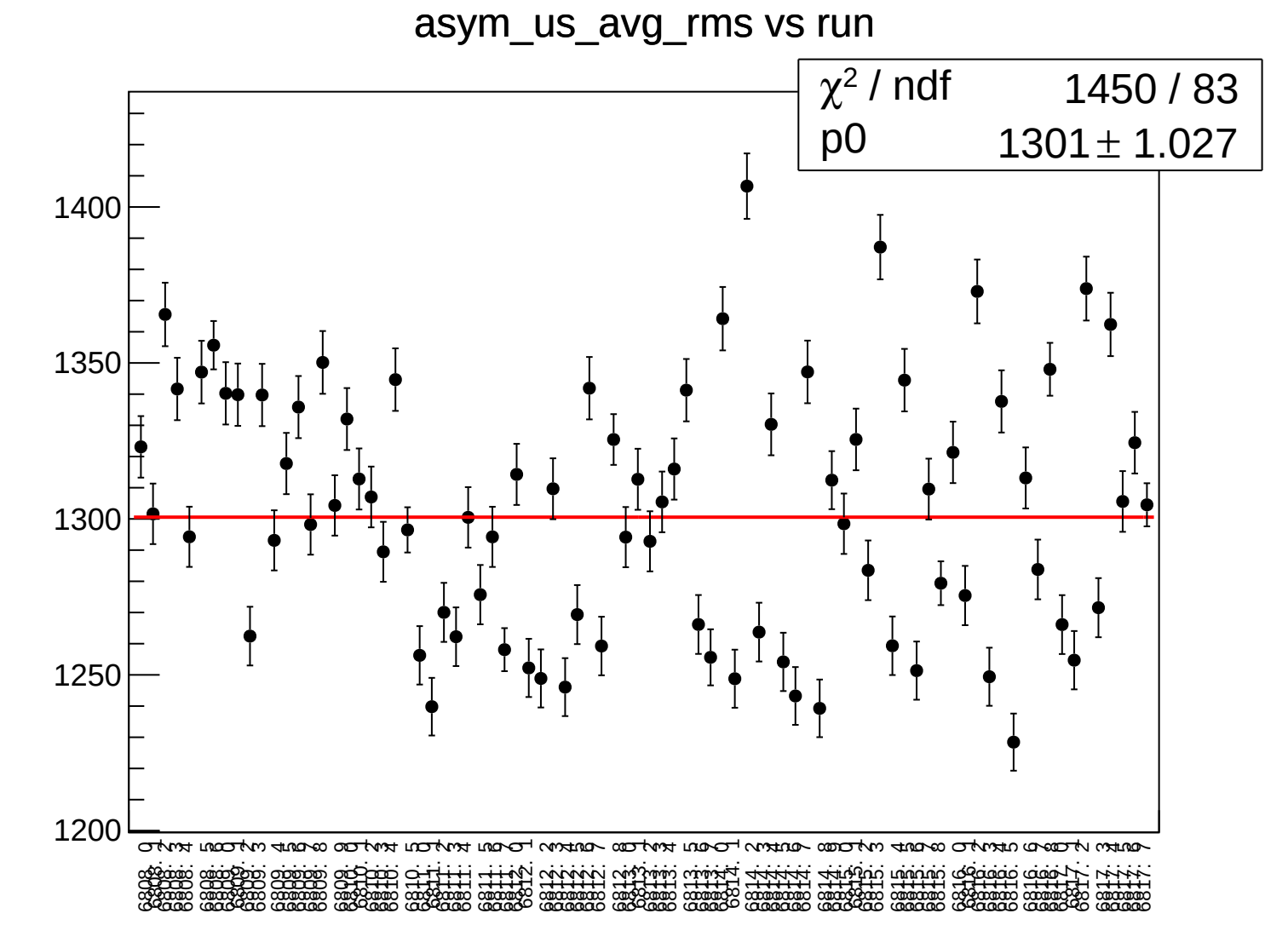

asym_us_avg_correction_mean vs run
χ² / ndf 82.86 / 83
p0 891.7 ± 1160
pull
Entries 84
Mean −53.97
Std Dev 153.5

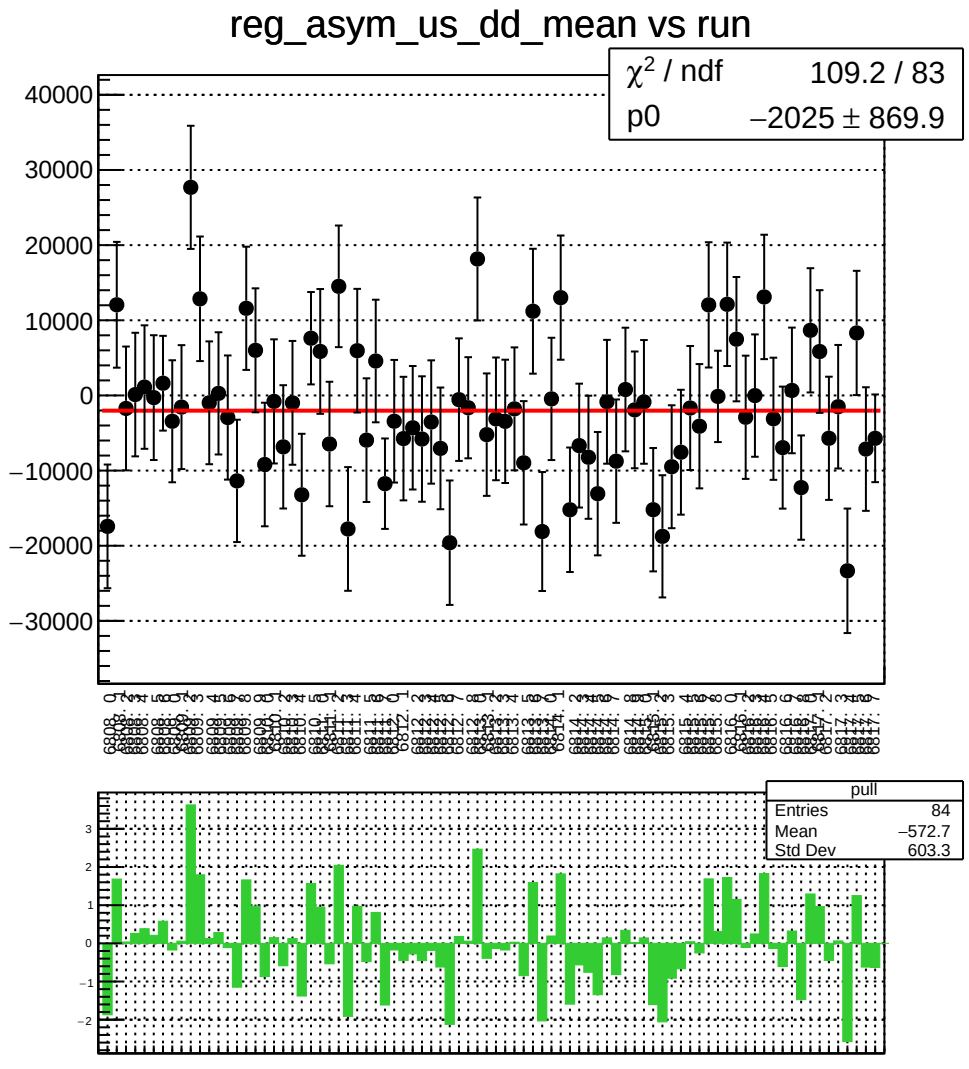

pull1D
Entries 84
Mean 0.006648
Std Dev 0.9932

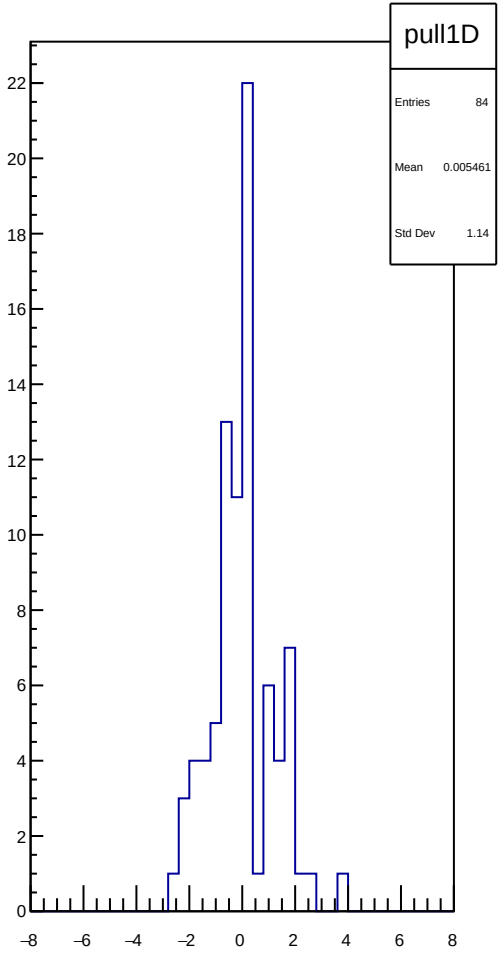

asym_us_avg_correction_rms vs run
χ² / ndf 3511 / 83
p0 1038 ± 0.8199
1150
1100
1050
1000
950

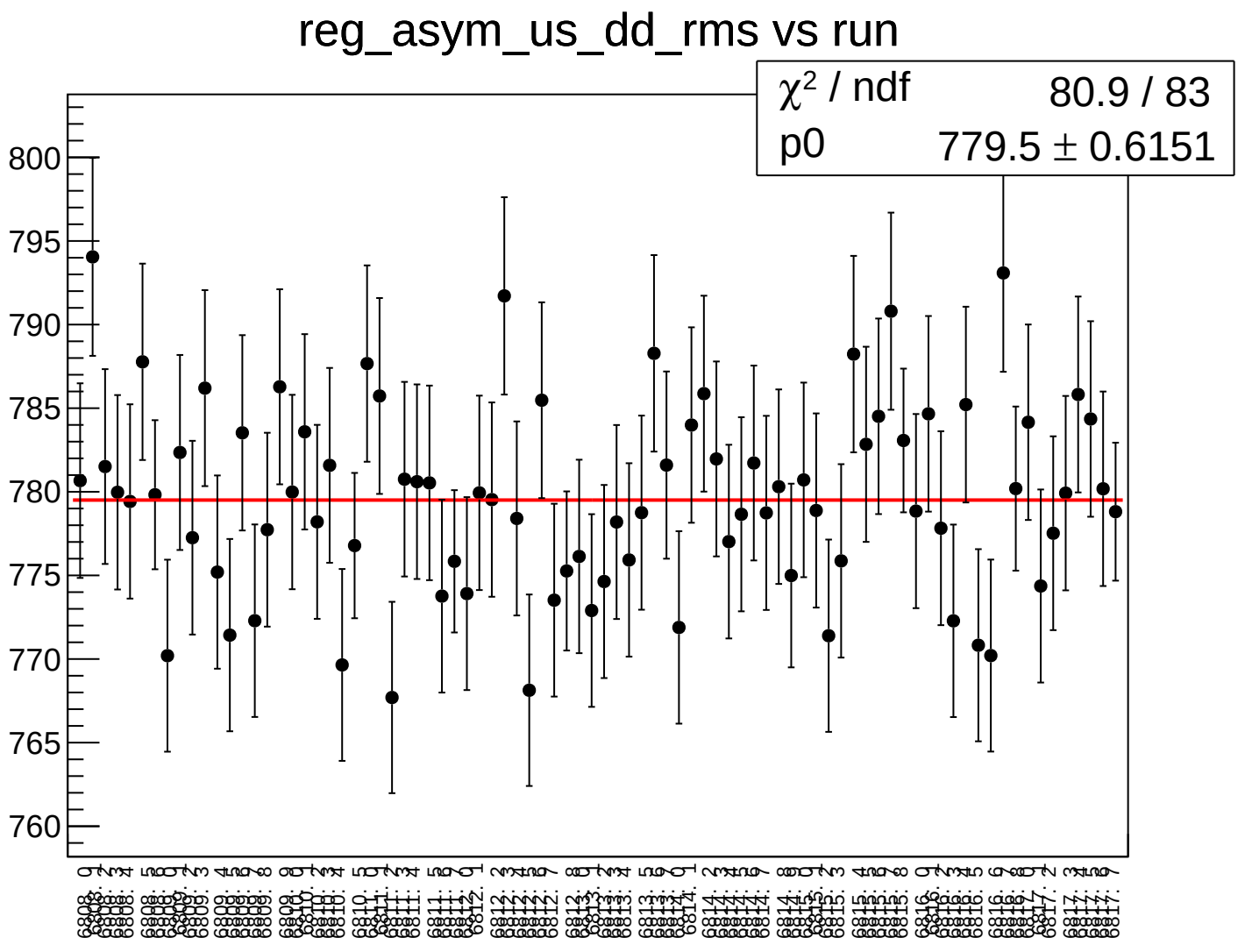

asym_us_avg_mean vs run
χ² / ndf 90.53 / 83
p0 720.1 ± 1452
60000
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −265.9
Std Dev 314.4
2
1
0
−1
−2

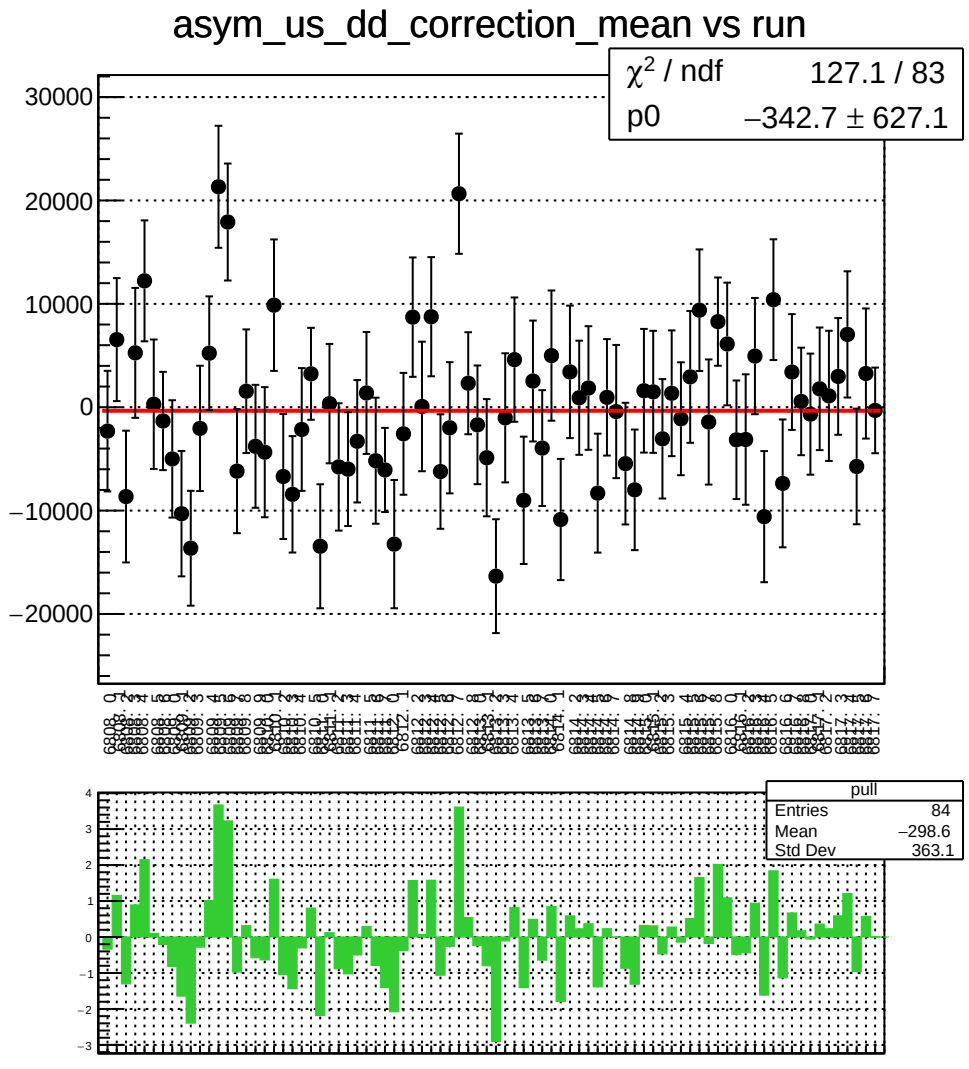

pull1D
Entries 84
Mean −0.01421
Std Dev 1.038
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

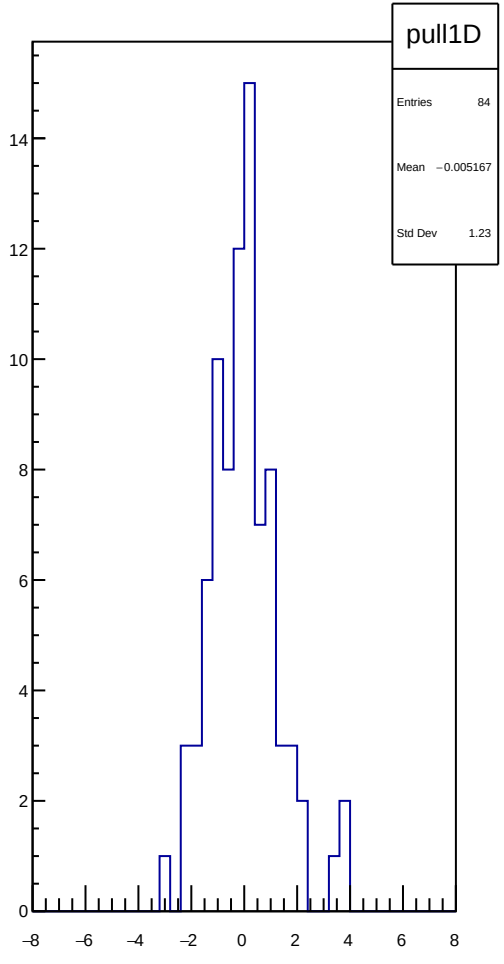

asym_us_avg_rms vs run
χ^2 / ndf 1450 / 83
p0 1301 ± 1.027
1400
1350
1300
1250
1200

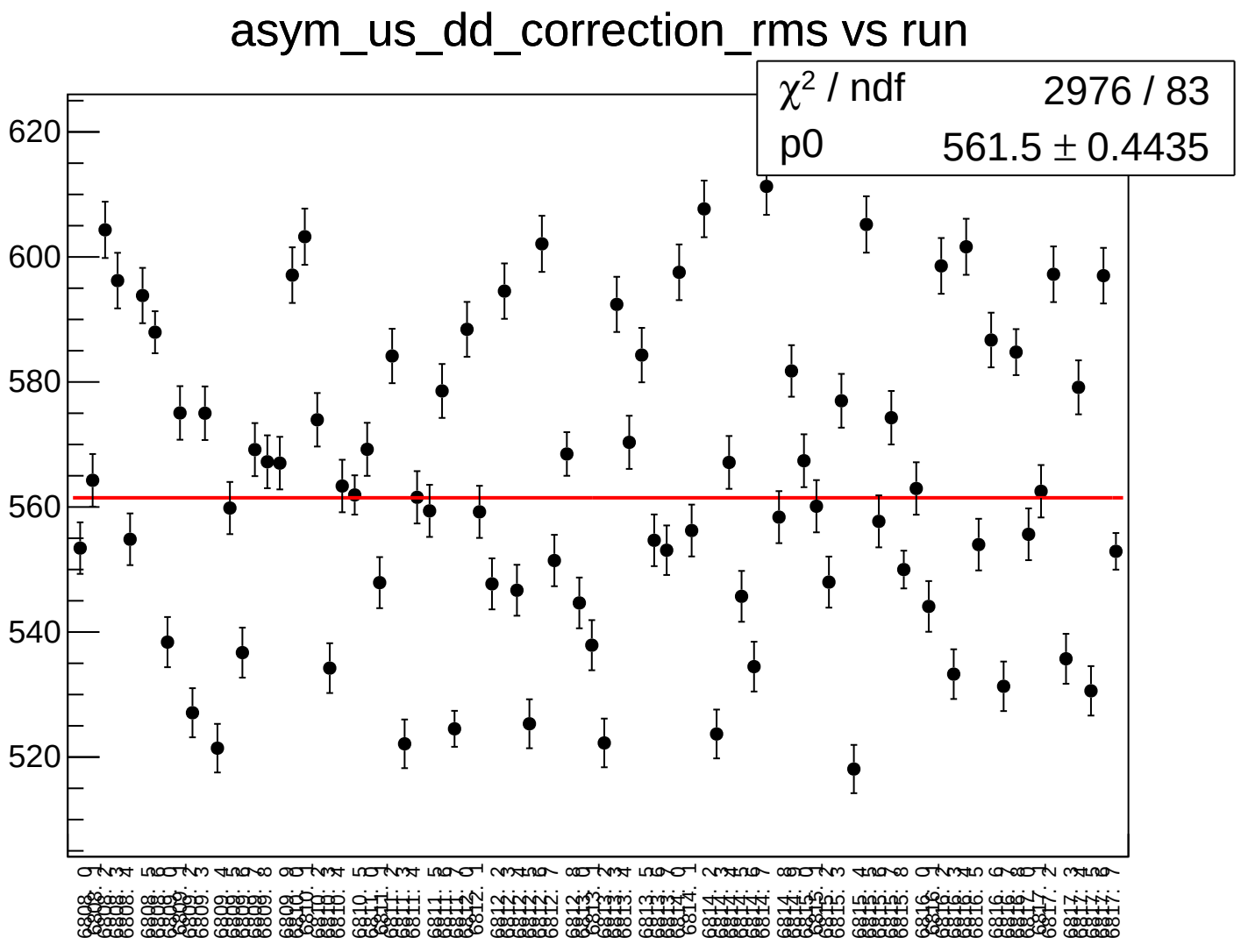

reg_asym_us_dd_mean vs run
χ² / ndf 109.2 / 83
p0 −2025 ± 869.9
pull
Entries 84
Mean −572.7
Std Dev 603.3

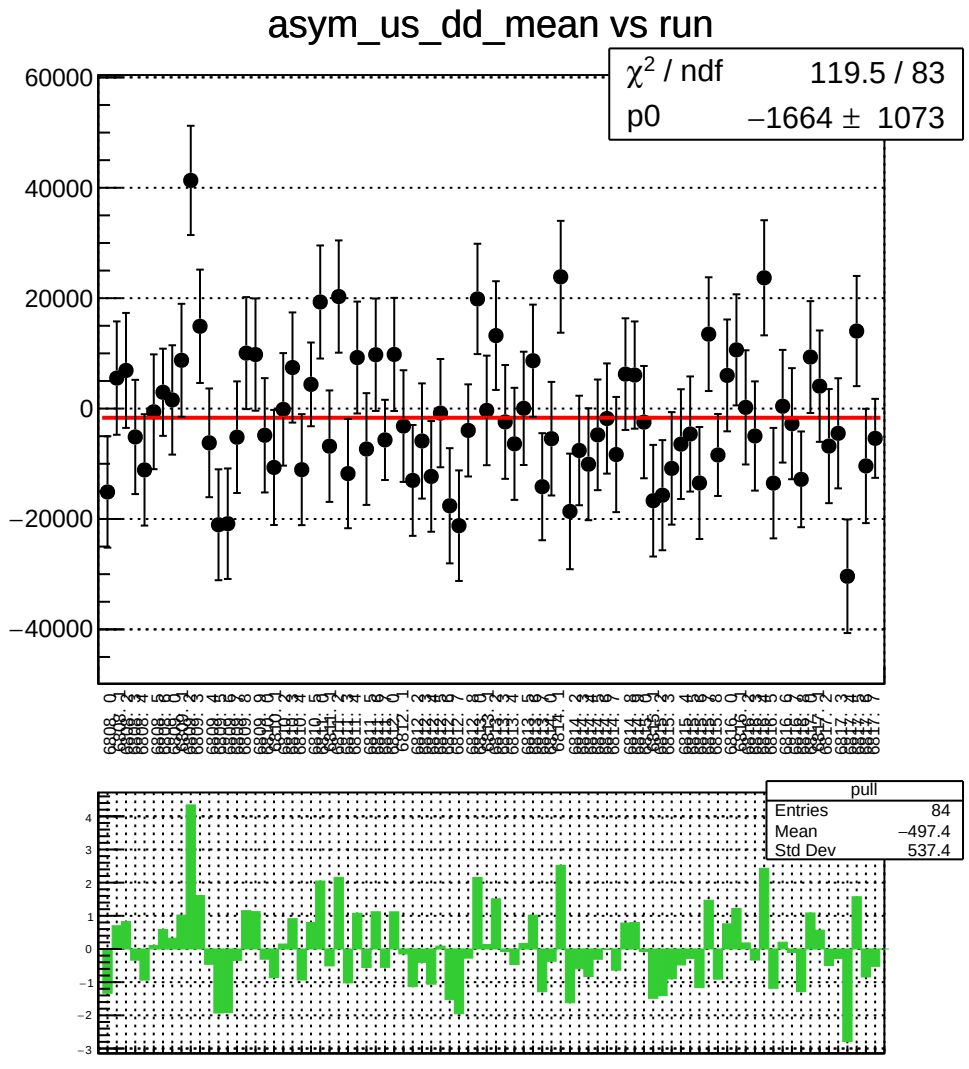

pull1D
Entries 84
Mean 0.005461
Std Dev 1.14

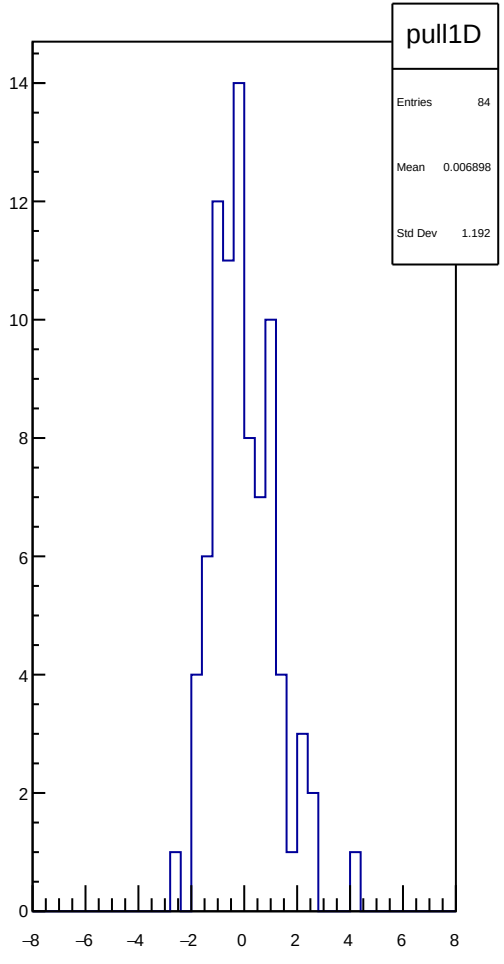

reg_asym_us_dd_rms vs run
χ² / ndf 80.9 / 83
p0 779.5 ± 0.6151
800
795
790
785
780
775
770
765
760

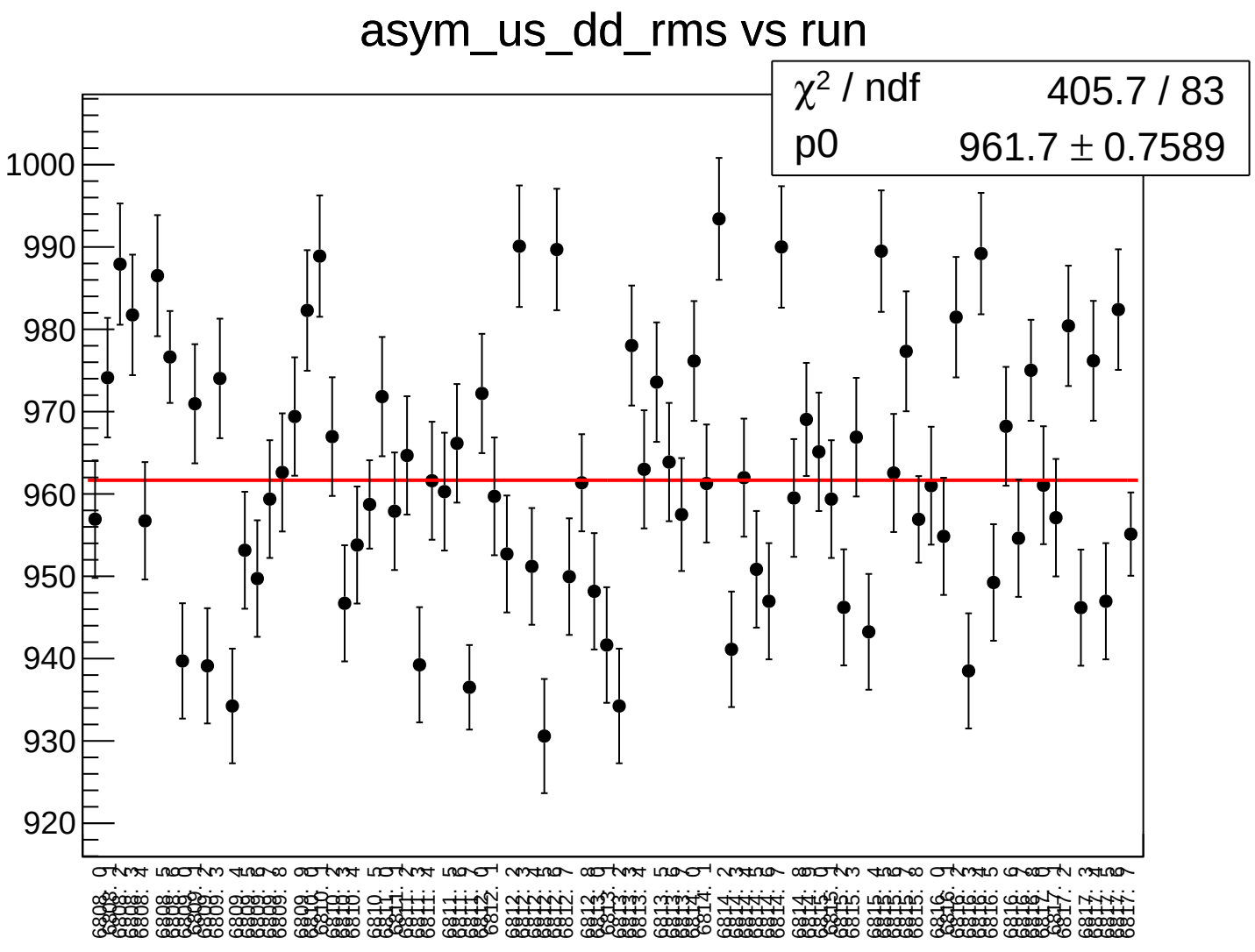

asym_us_dd_correction_mean vs run
χ² / ndf 127.1 / 83
p0 −342.7 ± 627.1
30000
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −298.6
Std Dev 363.1
4
3
2
1
0
−1
−2
−3

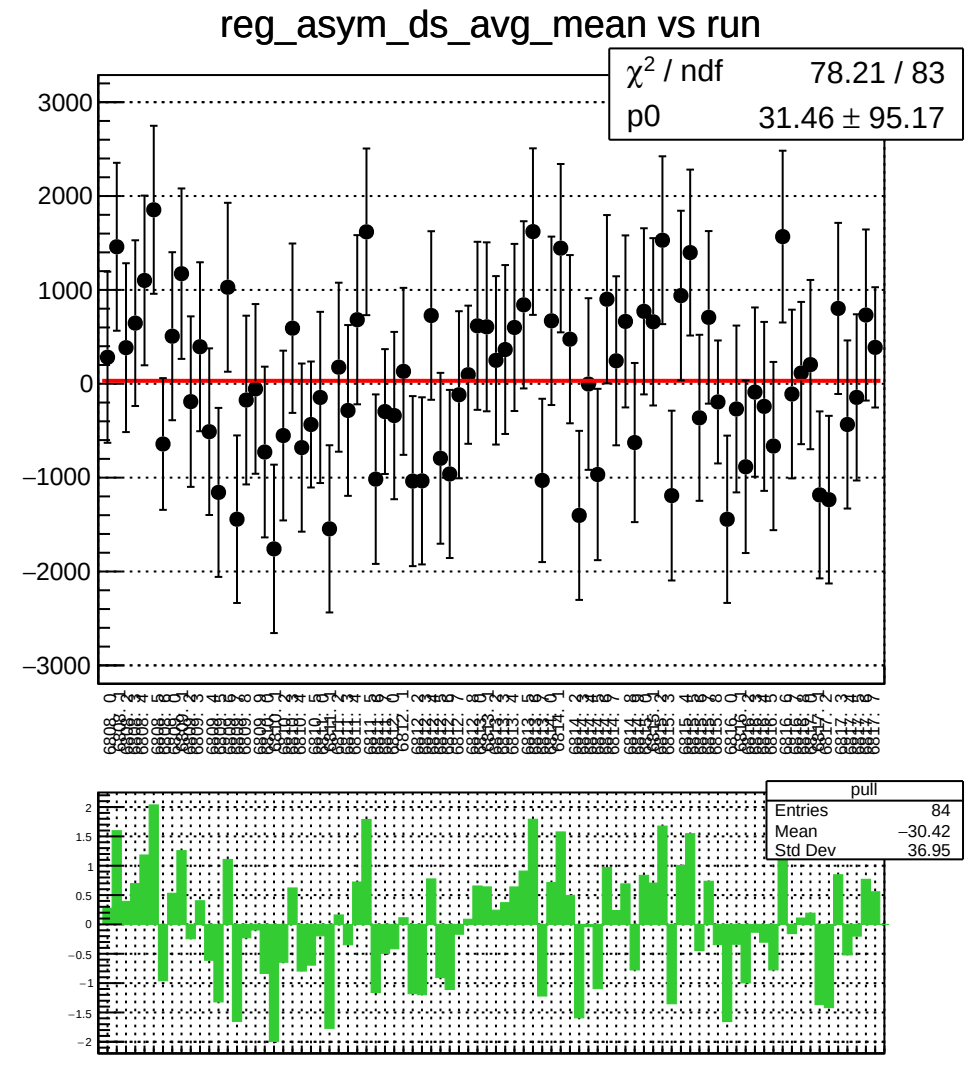

pull1D
Entries 84
Mean −0.005167
Std Dev 1.23
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

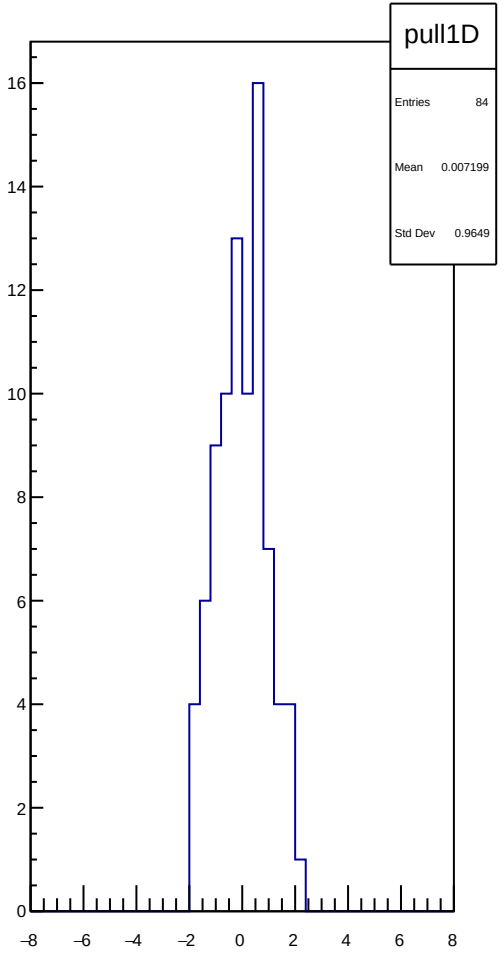

asym_us_dd_correction_rms vs run
χ² / ndf 2976 / 83
p0 561.5 ± 0.4435
620
600
580
560
540
520

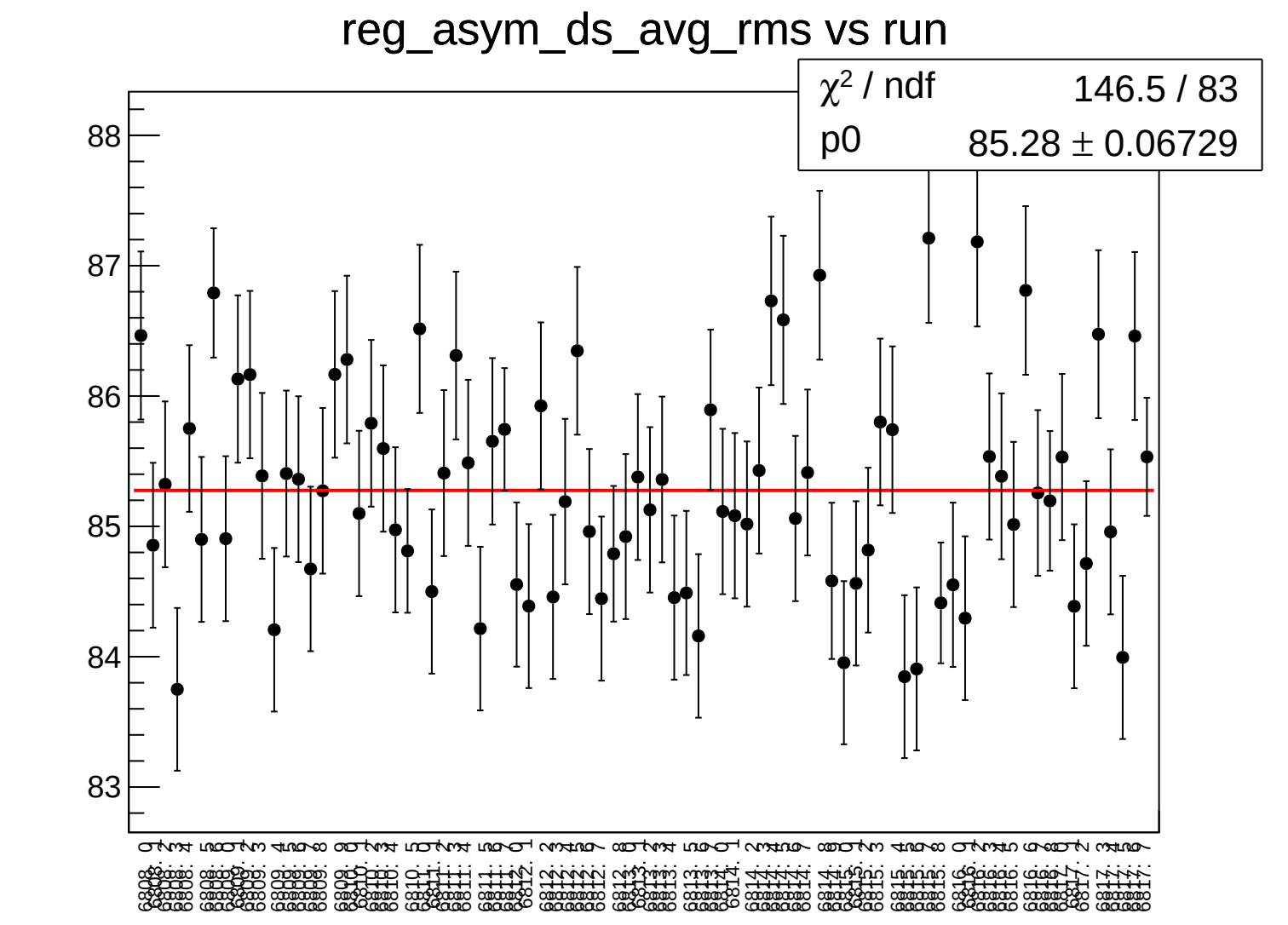

asym_us_dd_mean vs run
χ² / ndf 119.5 / 83
p0 −1664 ± 1073
60000
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −497.4
Std Dev 537.4
4
3
2
1
0
−1
−2
−3

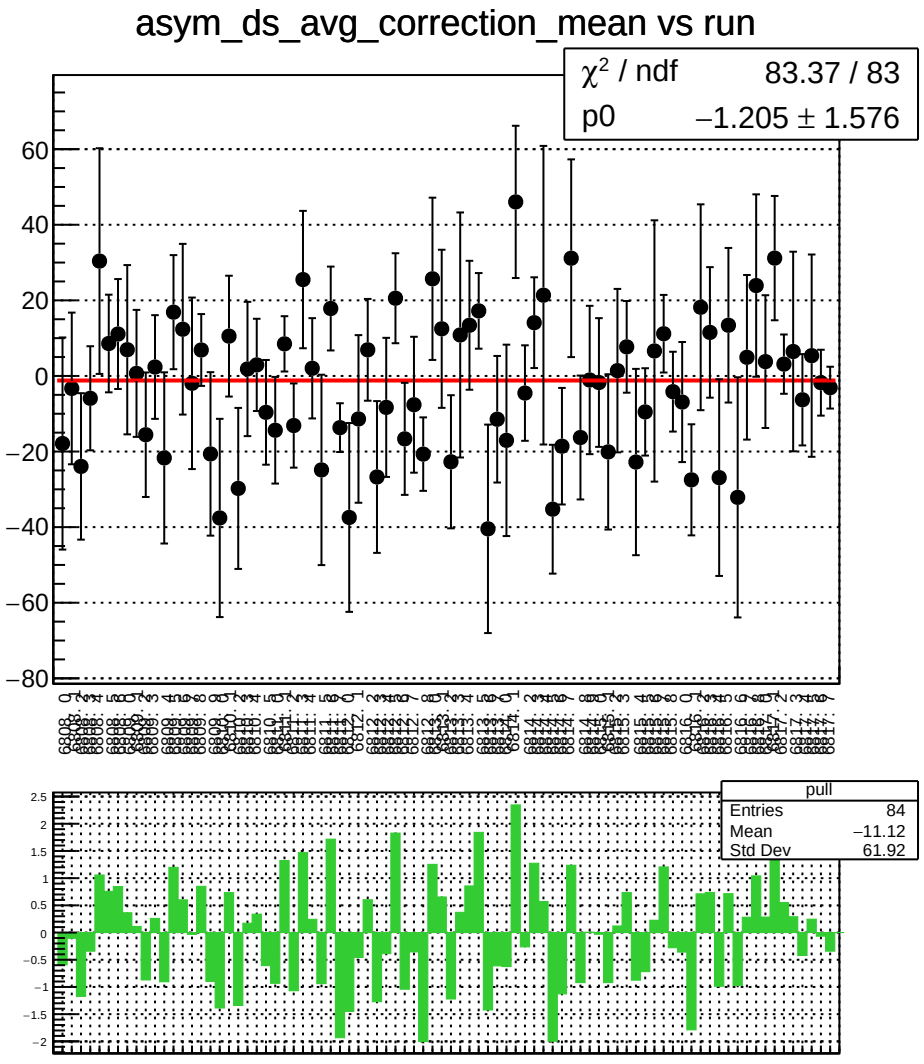

pull1D
Entries 84
Mean 0.006898
Std Dev 1.192
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

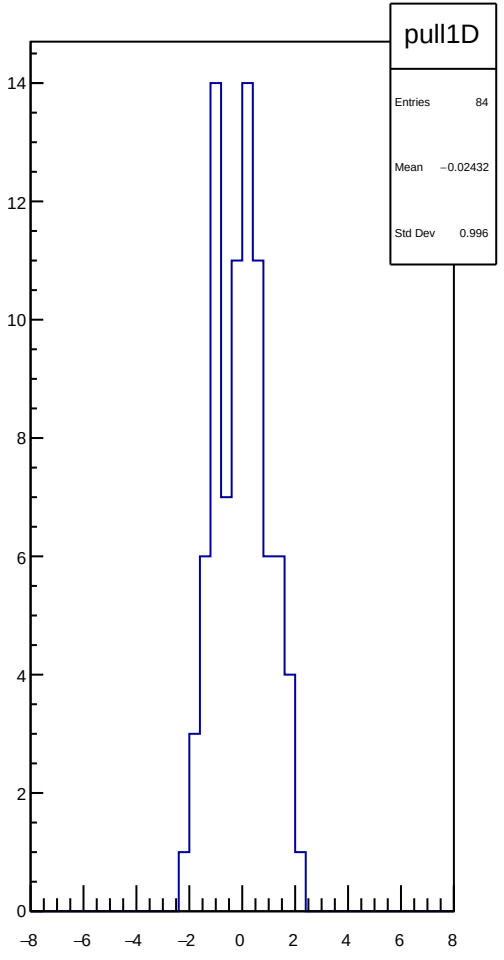

asym_us_dd_rms vs run
χ^2 / ndf 405.7 / 83
p0 961.7 ± 0.7589
1000
990
980
970
960
950
940
930
920

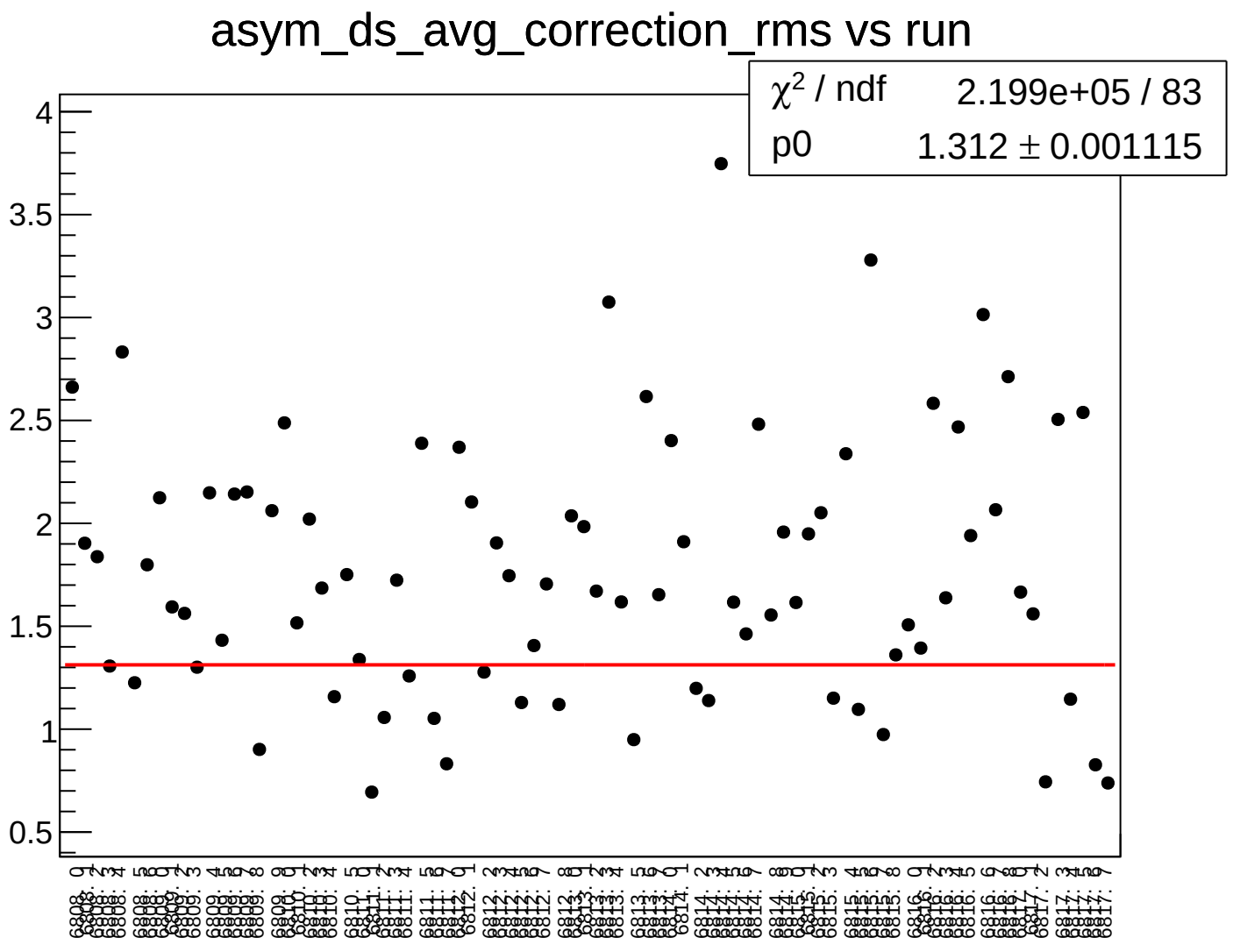

reg_asym_ds_avg_mean vs run
χ² / ndf 78.21 / 83
p0 31.46 ± 95.17
pull
Entries 84
Mean −30.42
Std Dev 36.95

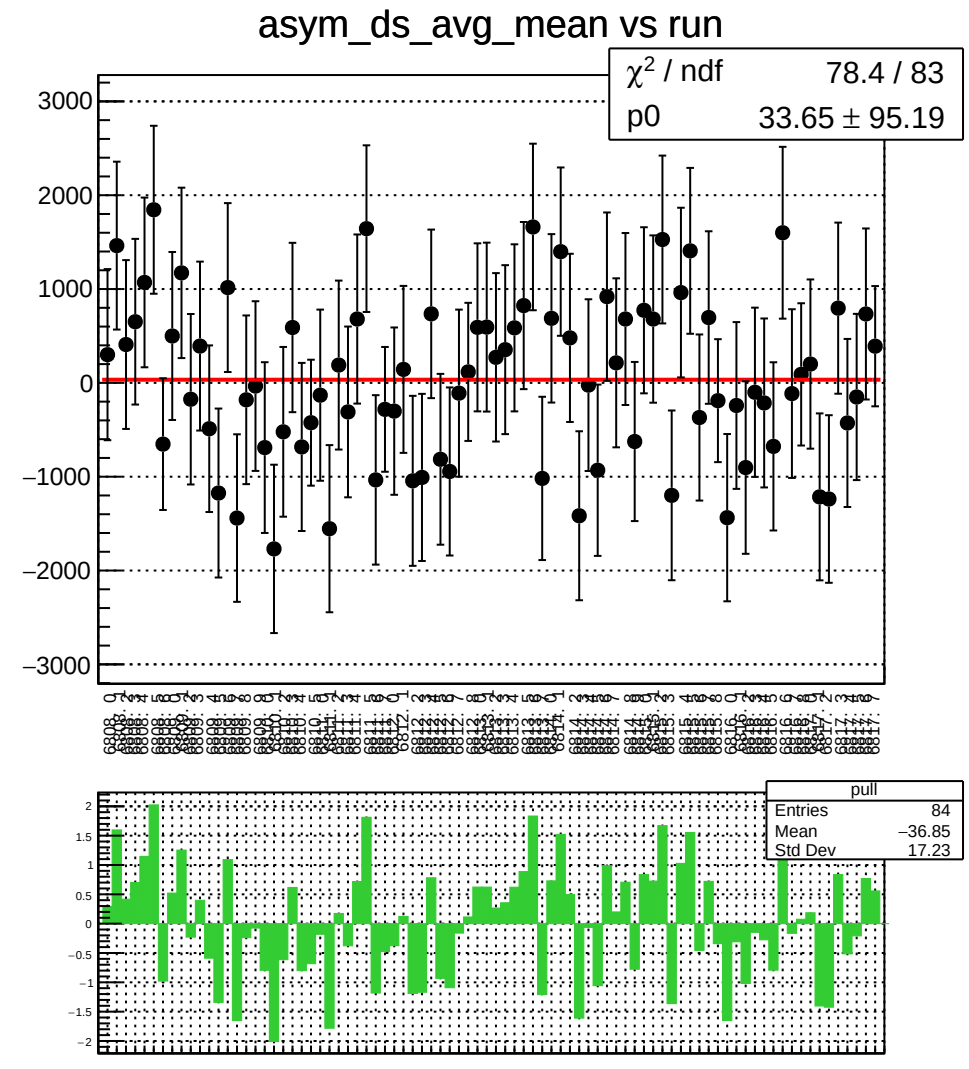

pull1D
Entries 84
Mean 0.007199
Std Dev 0.9649

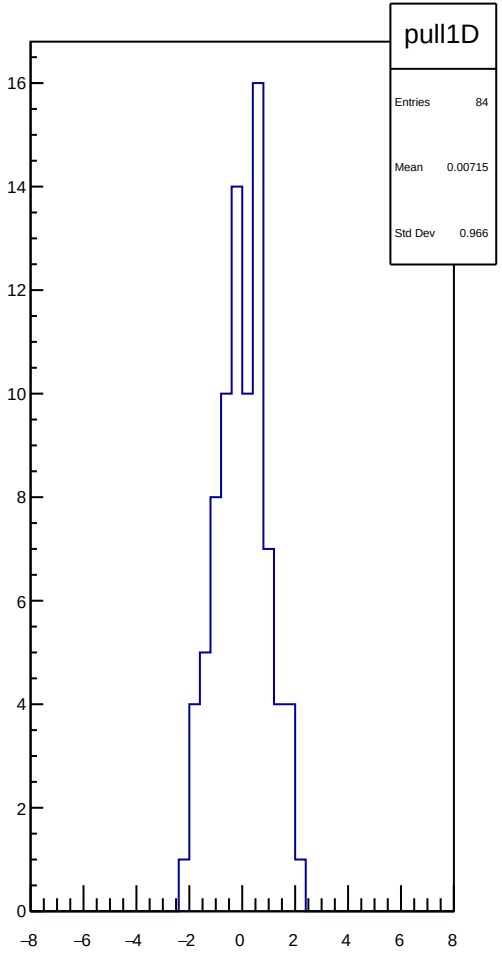

reg_asym_ds_avg_rms vs run
χ^2 / ndf 146.5 / 83
p0 85.28 ± 0.06729
88
87
86
85
84
83

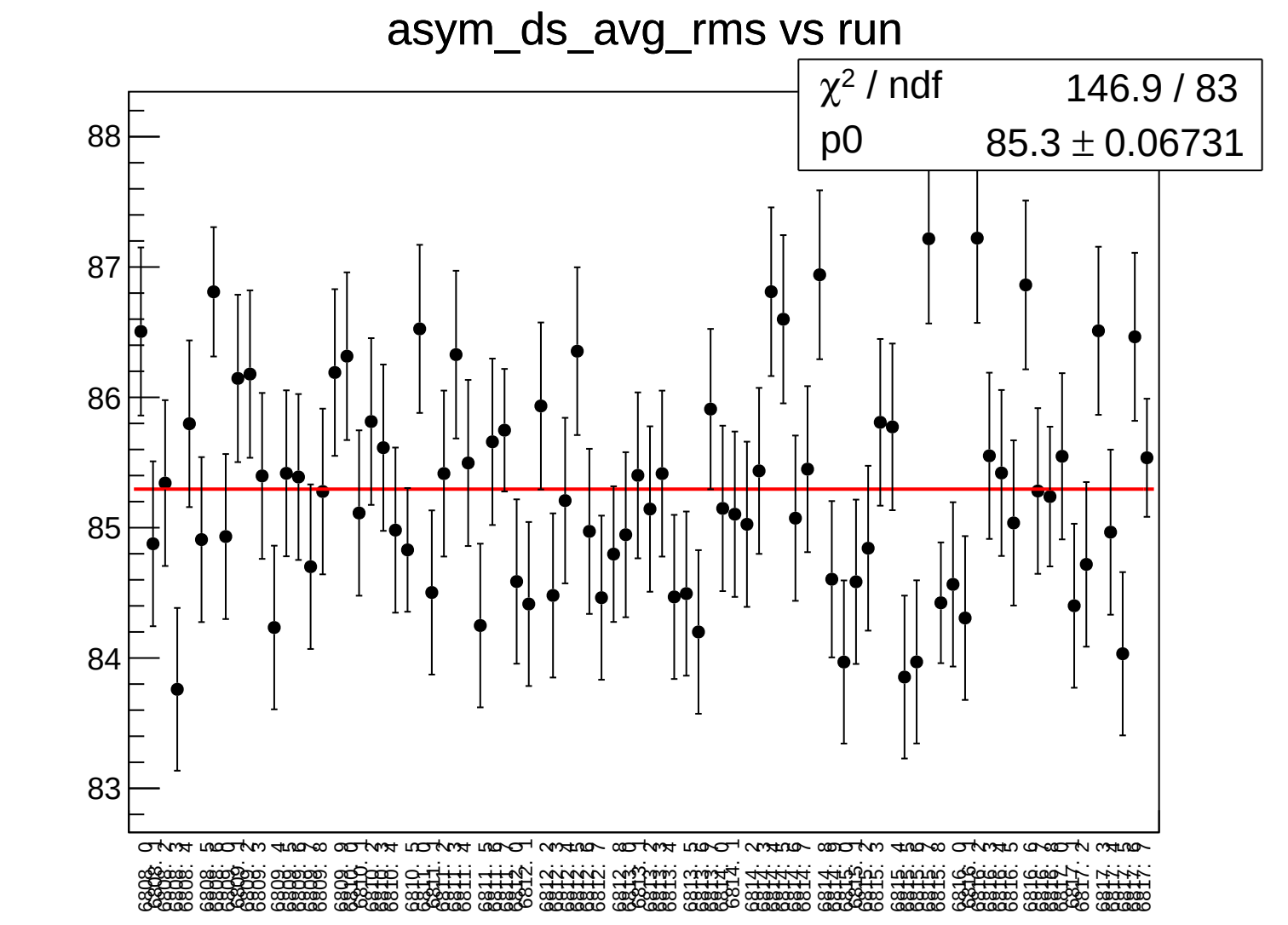

asym_ds_avg_correction_mean vs run
χ² / ndf 83.37 / 83
p0 −1.205 ± 1.576
pull
Entries 84
Mean −11.12
Std Dev 61.92

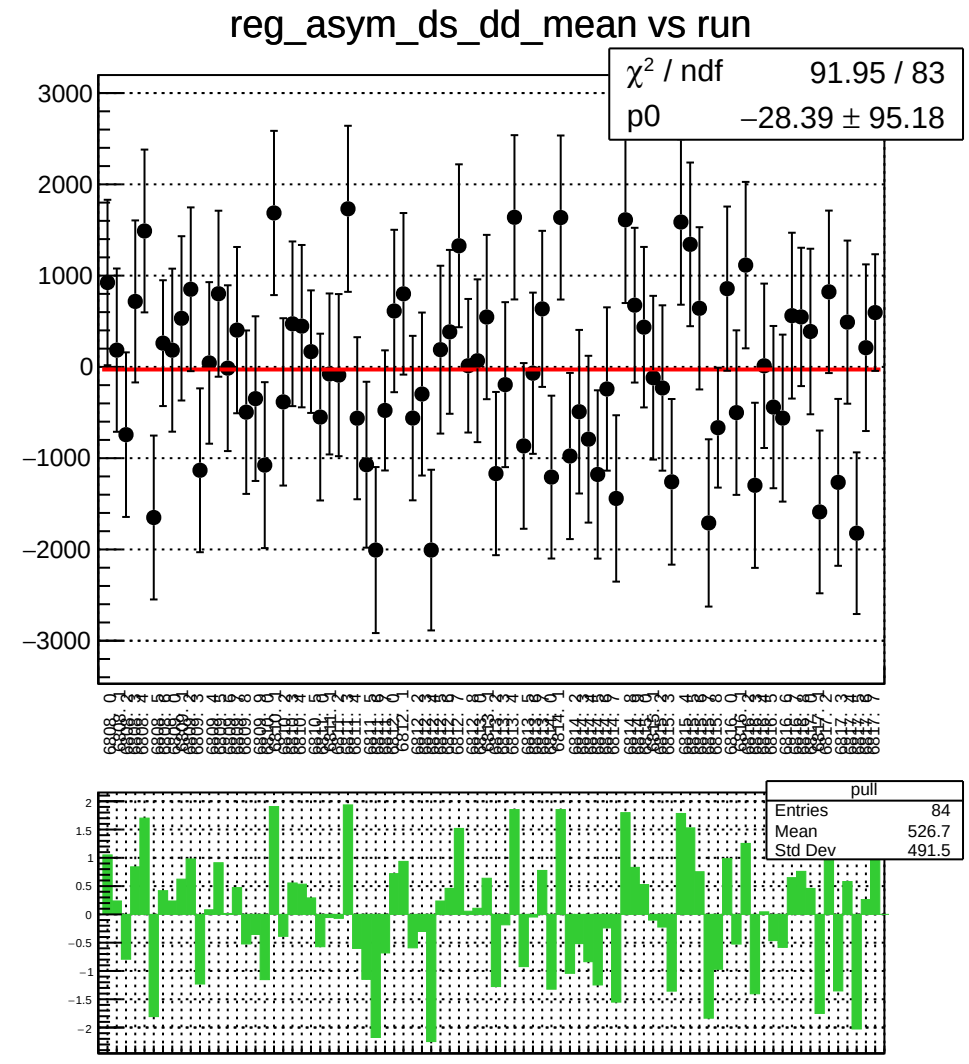

pull1D
Entries 84
Mean −0.02432
Std Dev 0.996

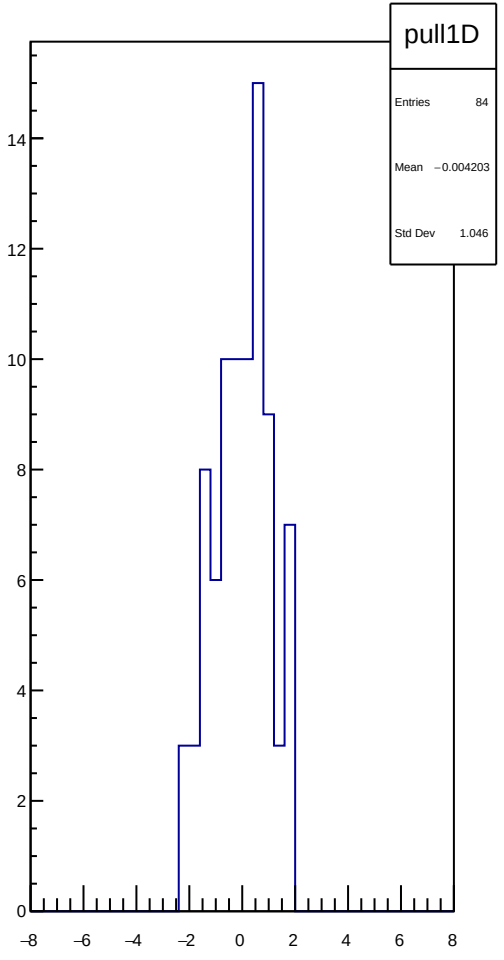

asym_ds_avg_correction_rms vs run
χ^2 / ndf 2.199e+05 / 83
p0 1.312 ± 0.001115
4
3.5
3
2.5
2
1.5
1
0.5

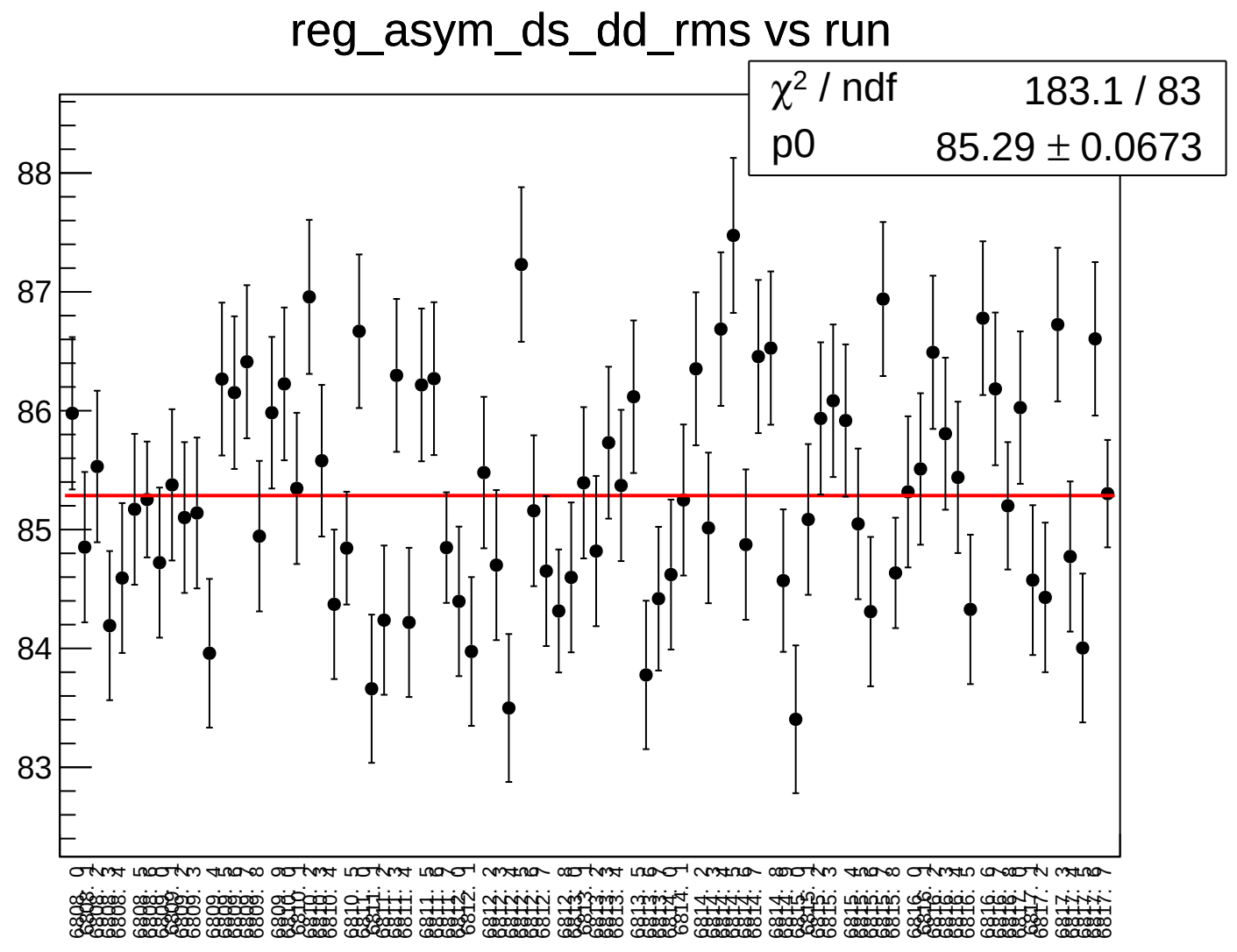

asym_ds_avg_mean vs run
χ² / ndf 78.4 / 83
p0 33.65 ± 95.19
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 84
Mean −36.85
Std Dev 17.23
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

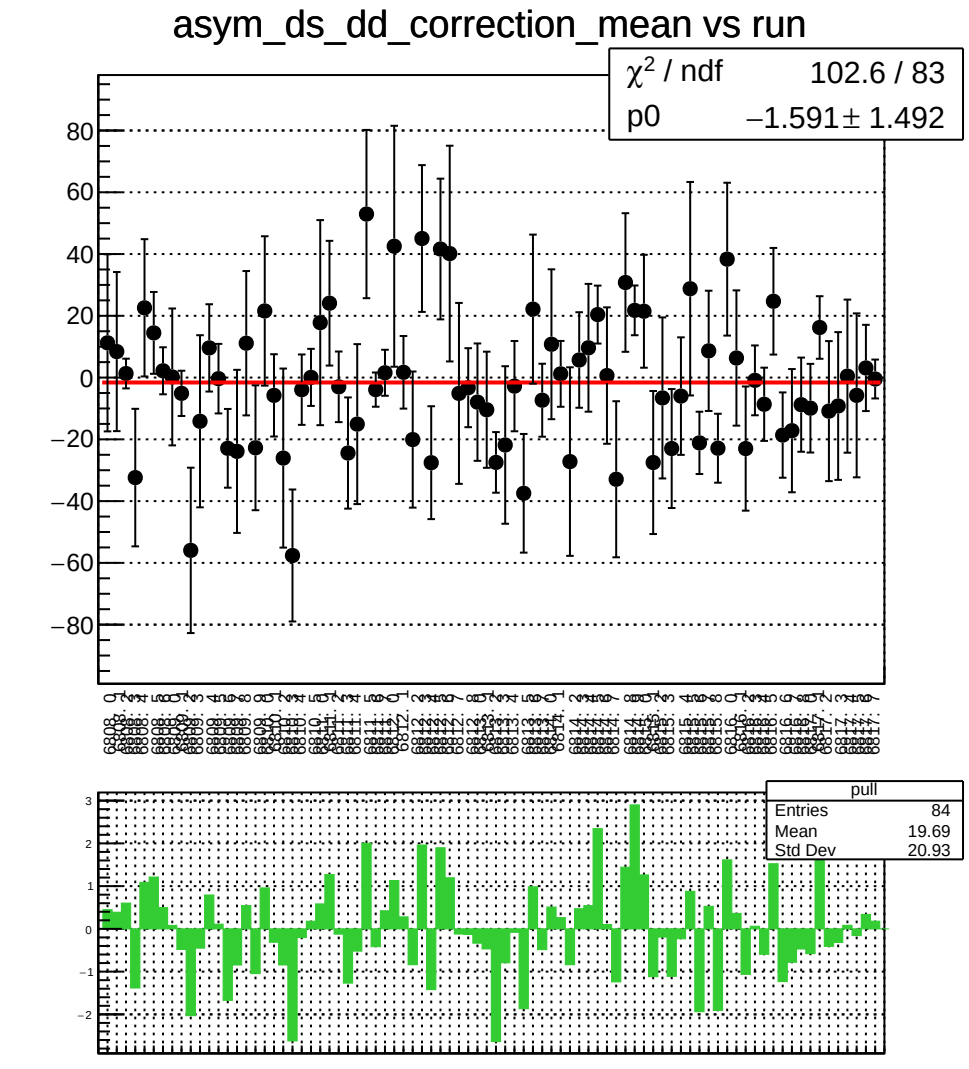

pull1D
Entries 84
Mean 0.00715
Std Dev 0.966
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

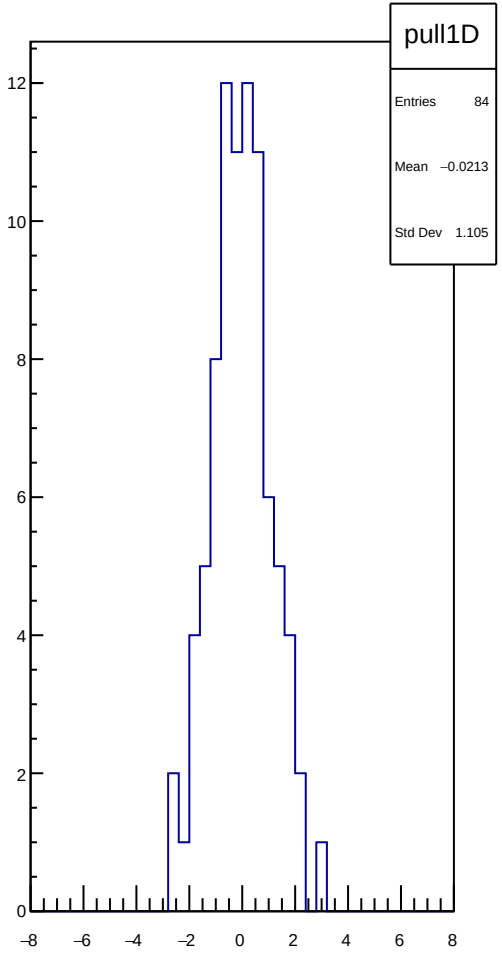

asym_ds_avg_rms vs run
χ² / ndf 146.9 / 83
p0 85.3 ± 0.06731
88
87
86
85
84
83

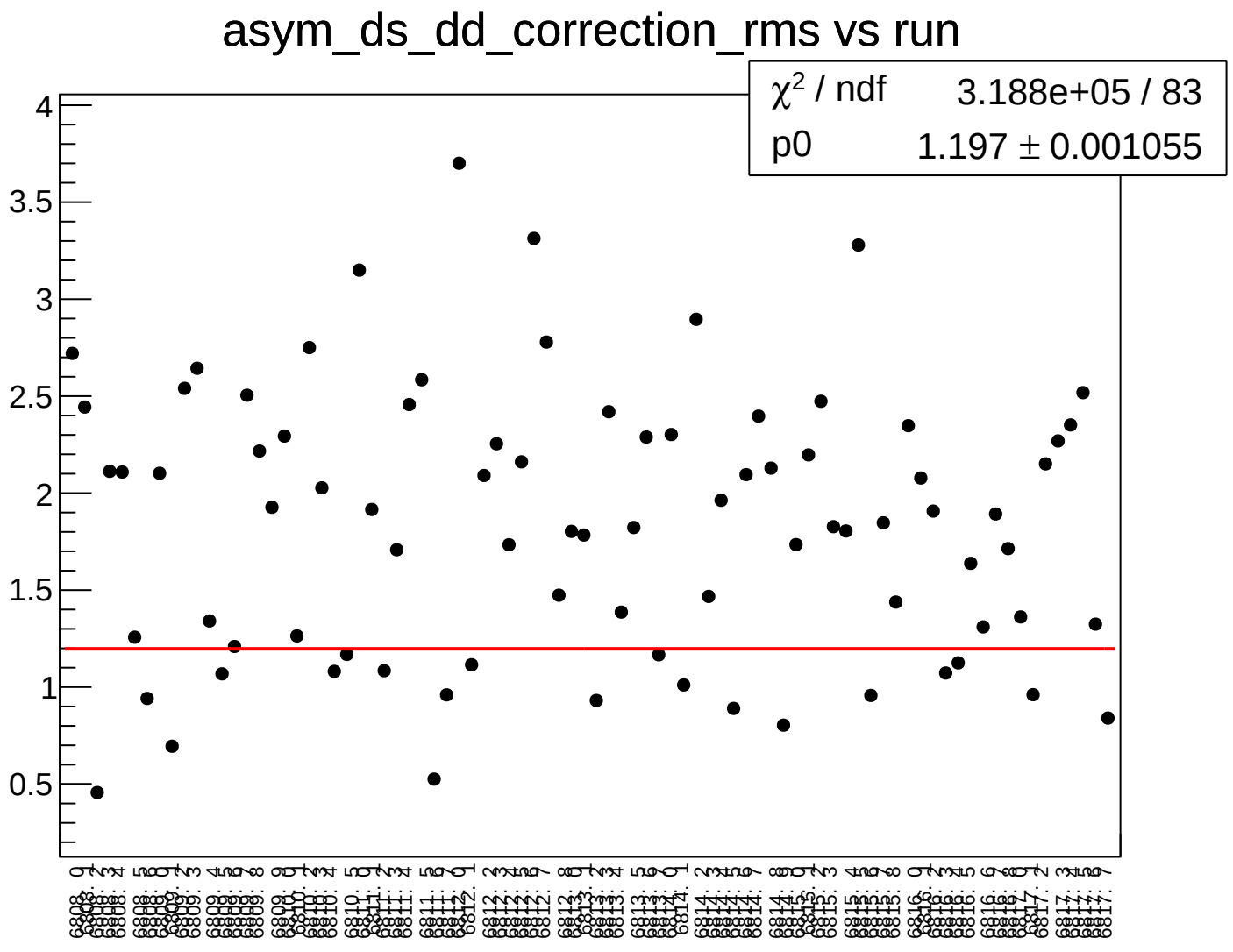

reg_asym_ds_dd_mean vs run
χ² / ndf 91.95 / 83
p0 −28.39 ± 95.18
pull
Entries 84
Mean 526.7
Std Dev 491.5

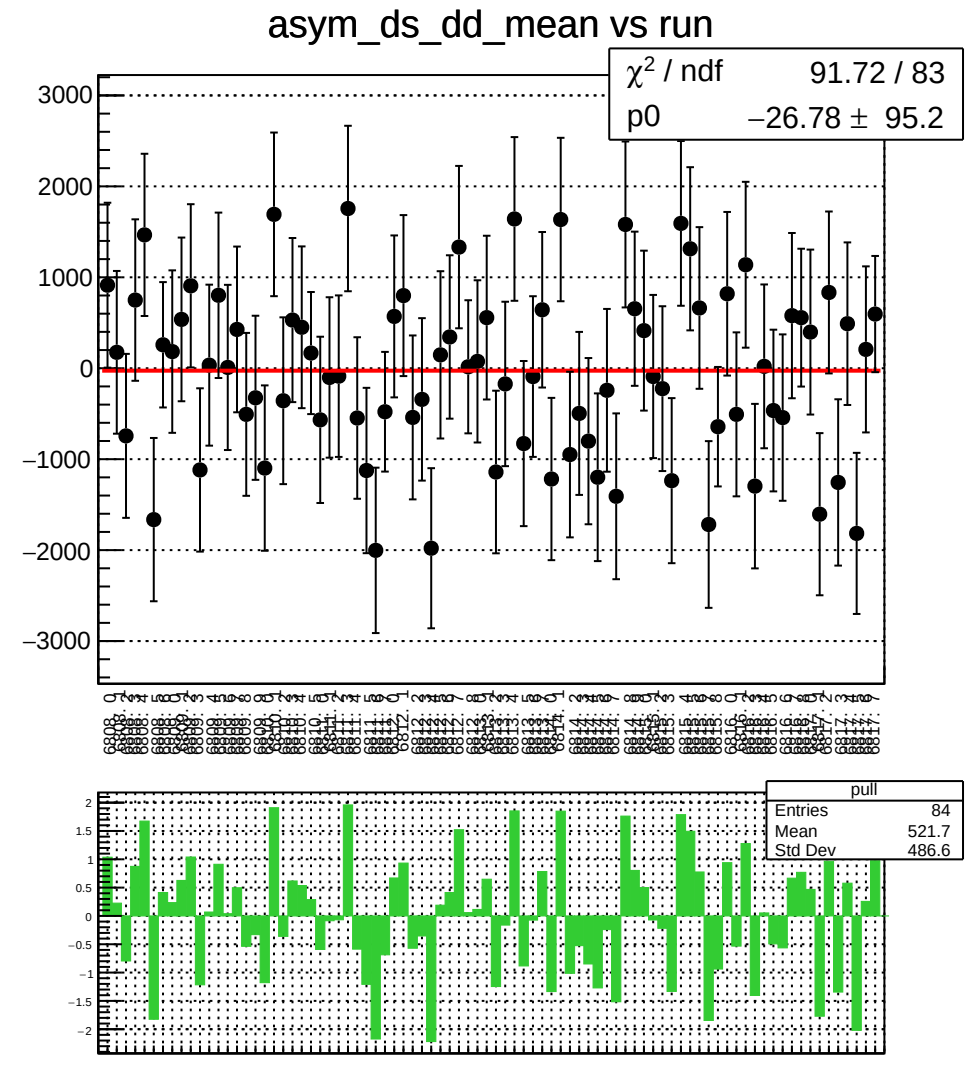

pull1D
Entries 84
Mean −0.004203
Std Dev 1.046

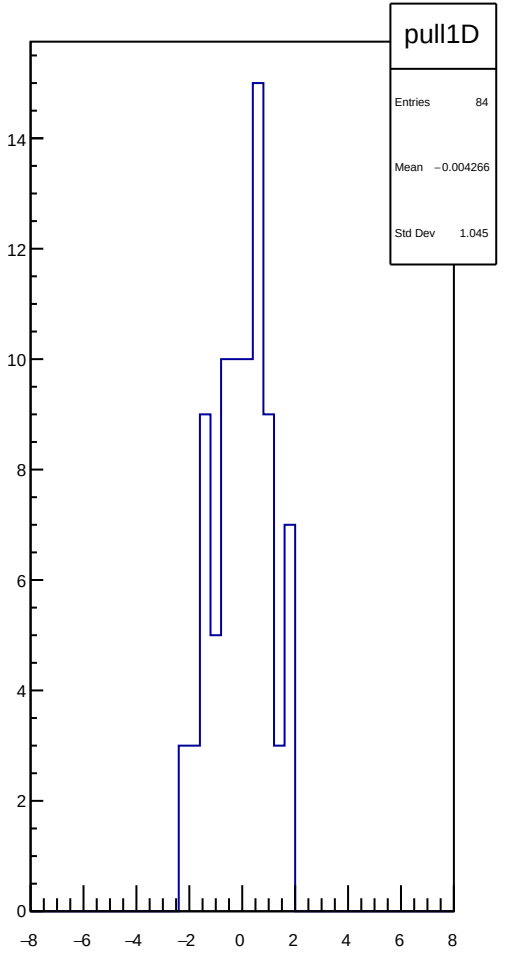

reg_asym_ds_dd_rms vs run
χ² / ndf 183.1 / 83
p0 85.29 ± 0.0673
88
87
86
85
84
83

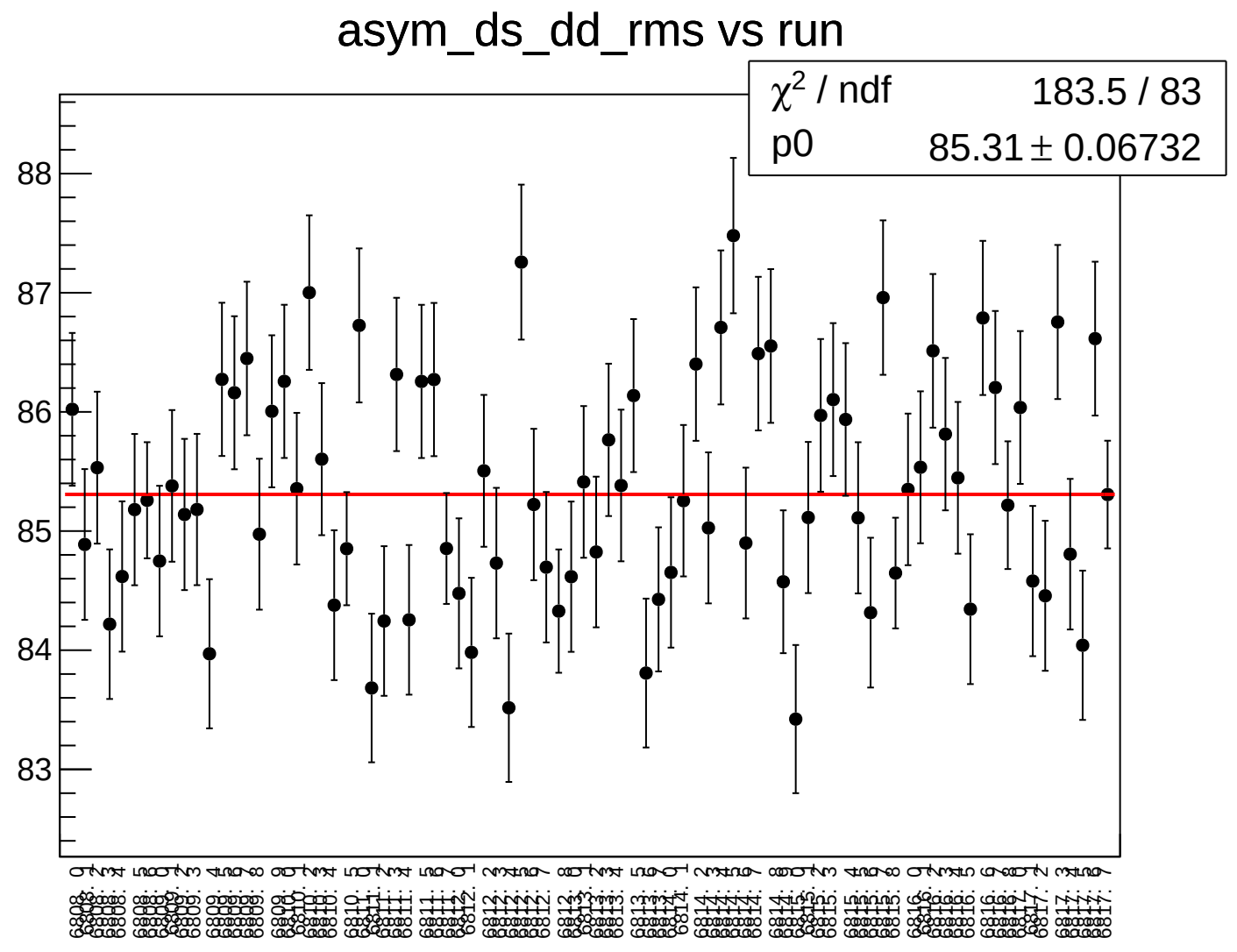

asym_ds_dd_correction_mean vs run
χ² / ndf 102.6 / 83
p0 −1.591 ± 1.492
pull
Entries 84
Mean 19.69
Std Dev 20.93

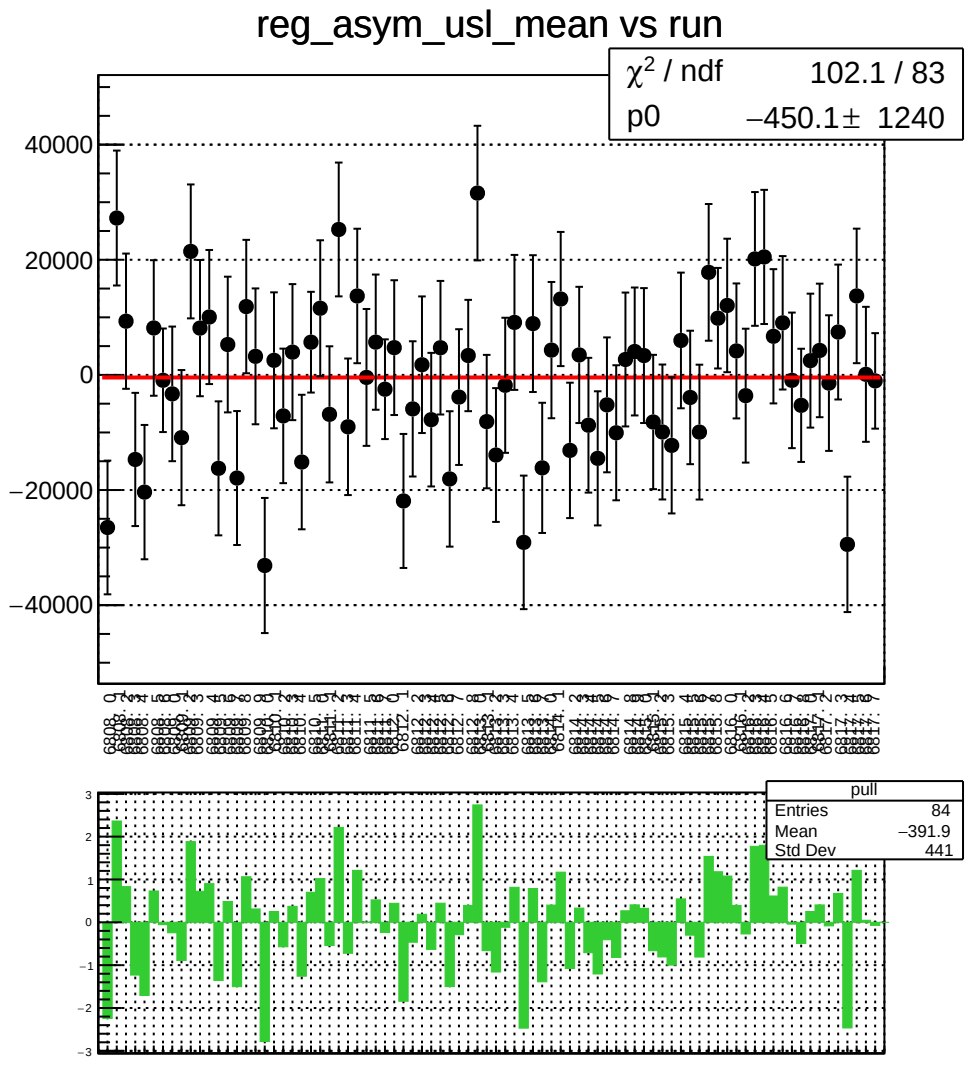

pull1D
Entries 84
Mean −0.0213
Std Dev 1.105

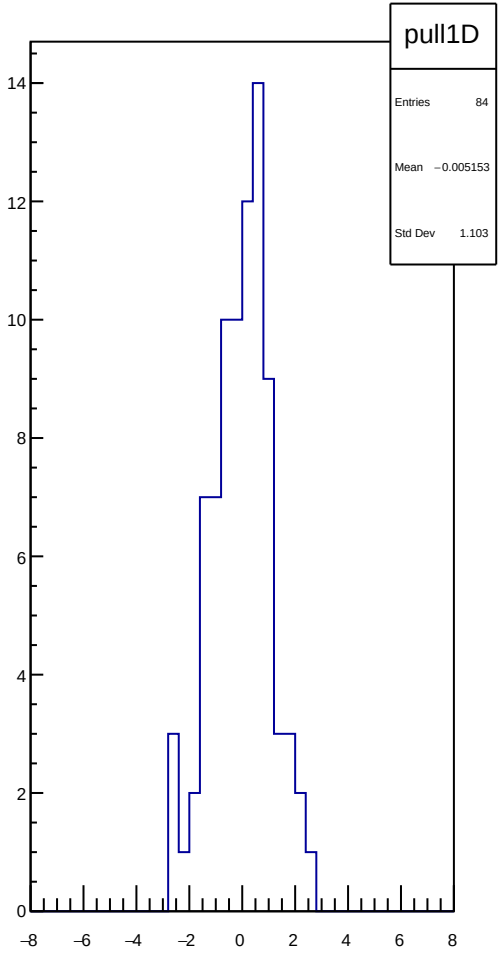

asym_ds_dd_correction_rms vs run
χ^2 / ndf 3.188e+05 / 83
p0 1.197 ± 0.001055
4
3.5
3
2.5
2
1.5
1
0.5

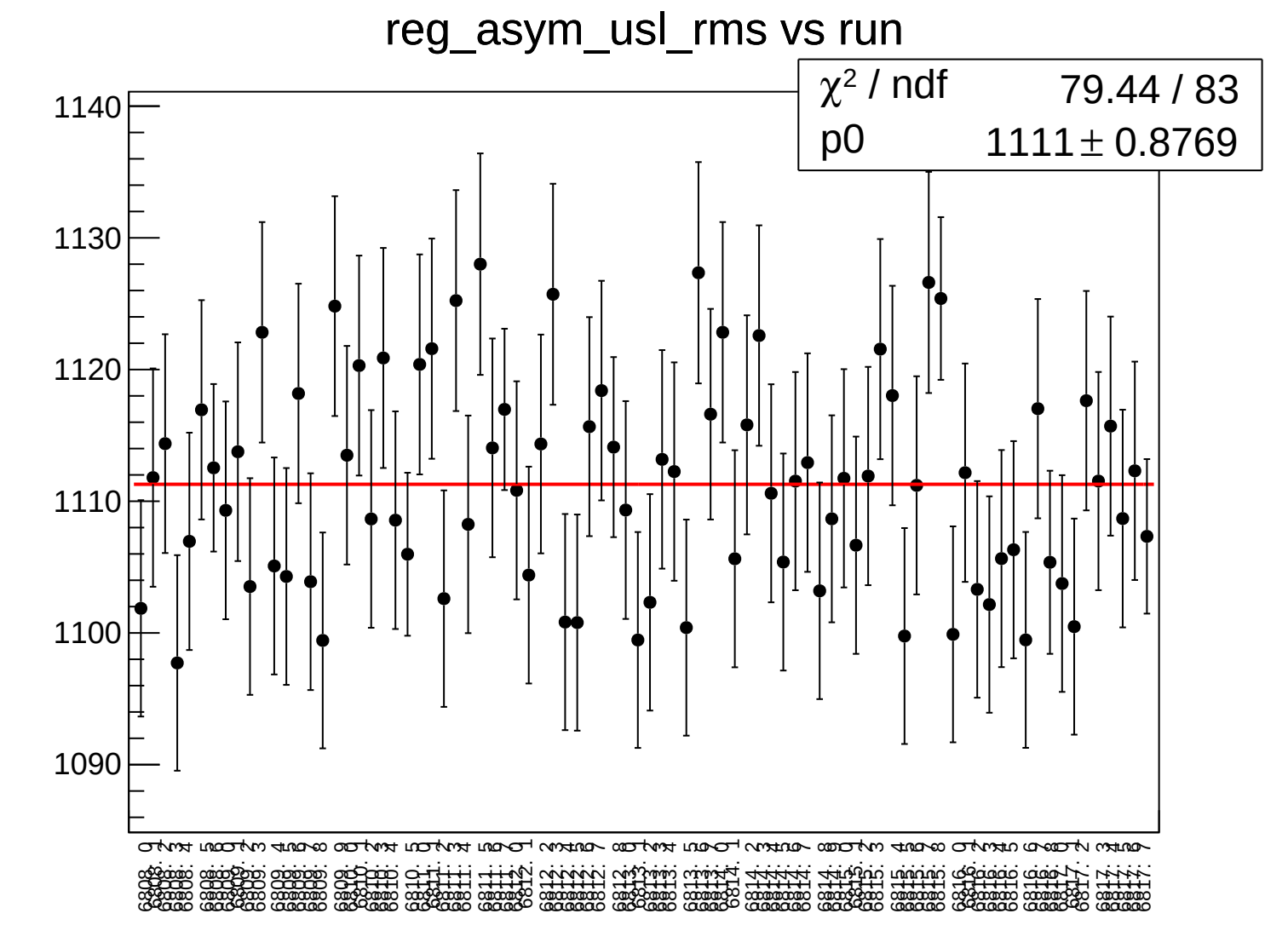

asym_ds_dd_mean vs run
χ² / ndf 91.72 / 83
p0 −26.78 ± 95.2
pull
Entries 84
Mean 521.7
Std Dev 486.6

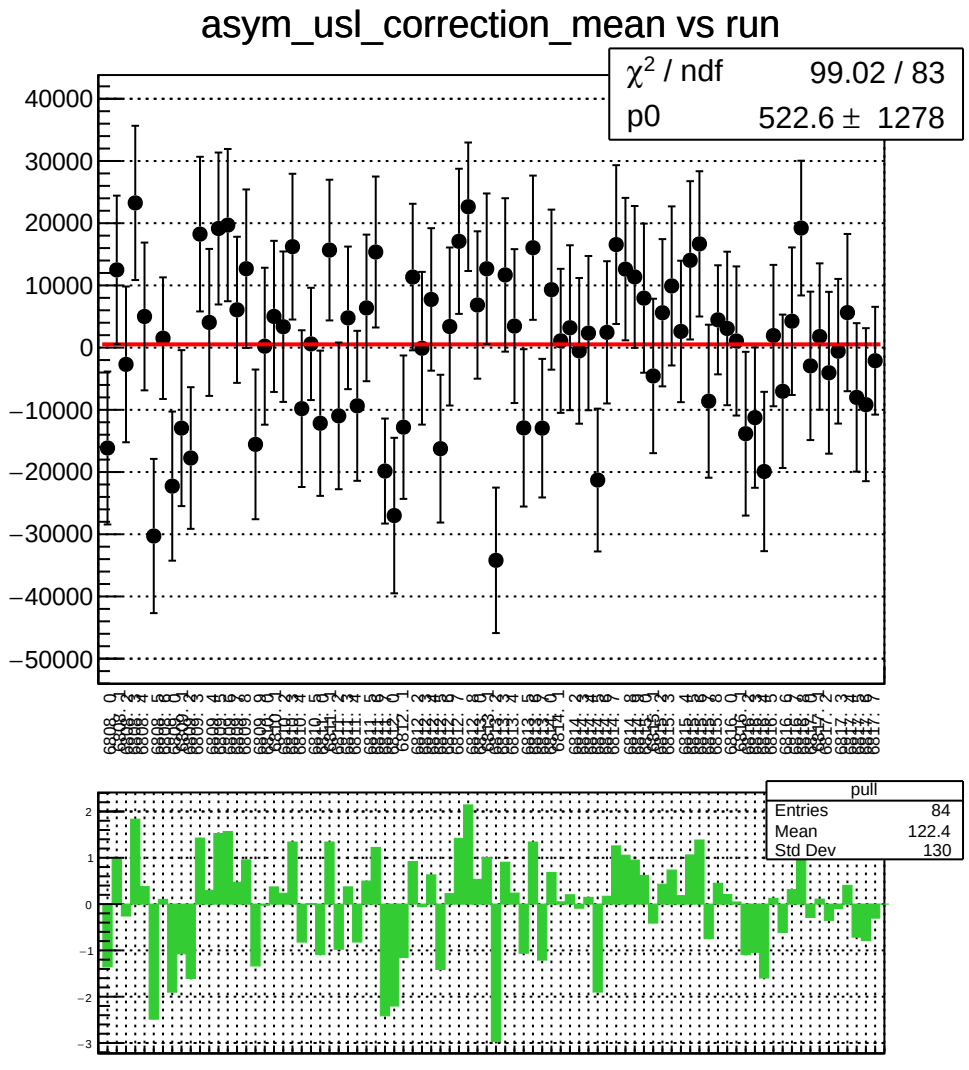

pull1D
Entries 84
Mean −0.004266
Std Dev 1.045

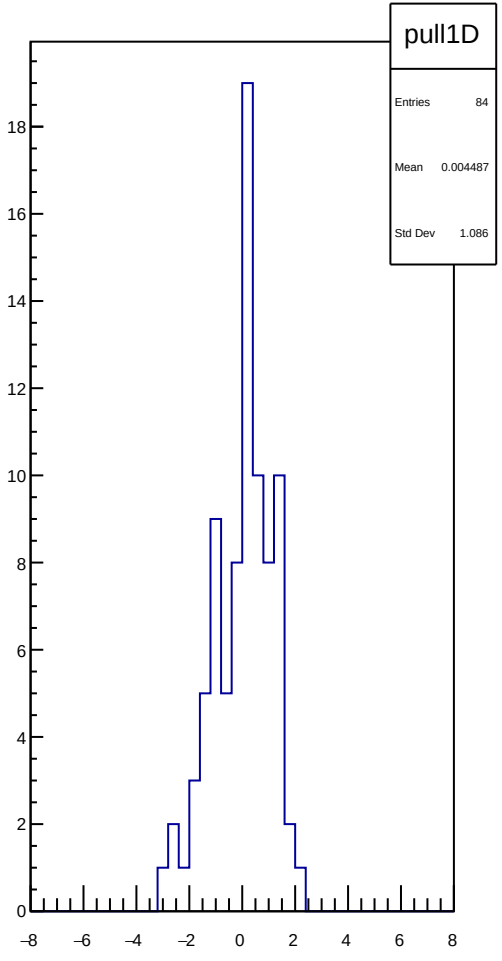

asym_ds_dd_rms vs run
χ^2 / ndf 183.5 / 83
p0 85.31 ± 0.06732
88
87
86
85
84
83

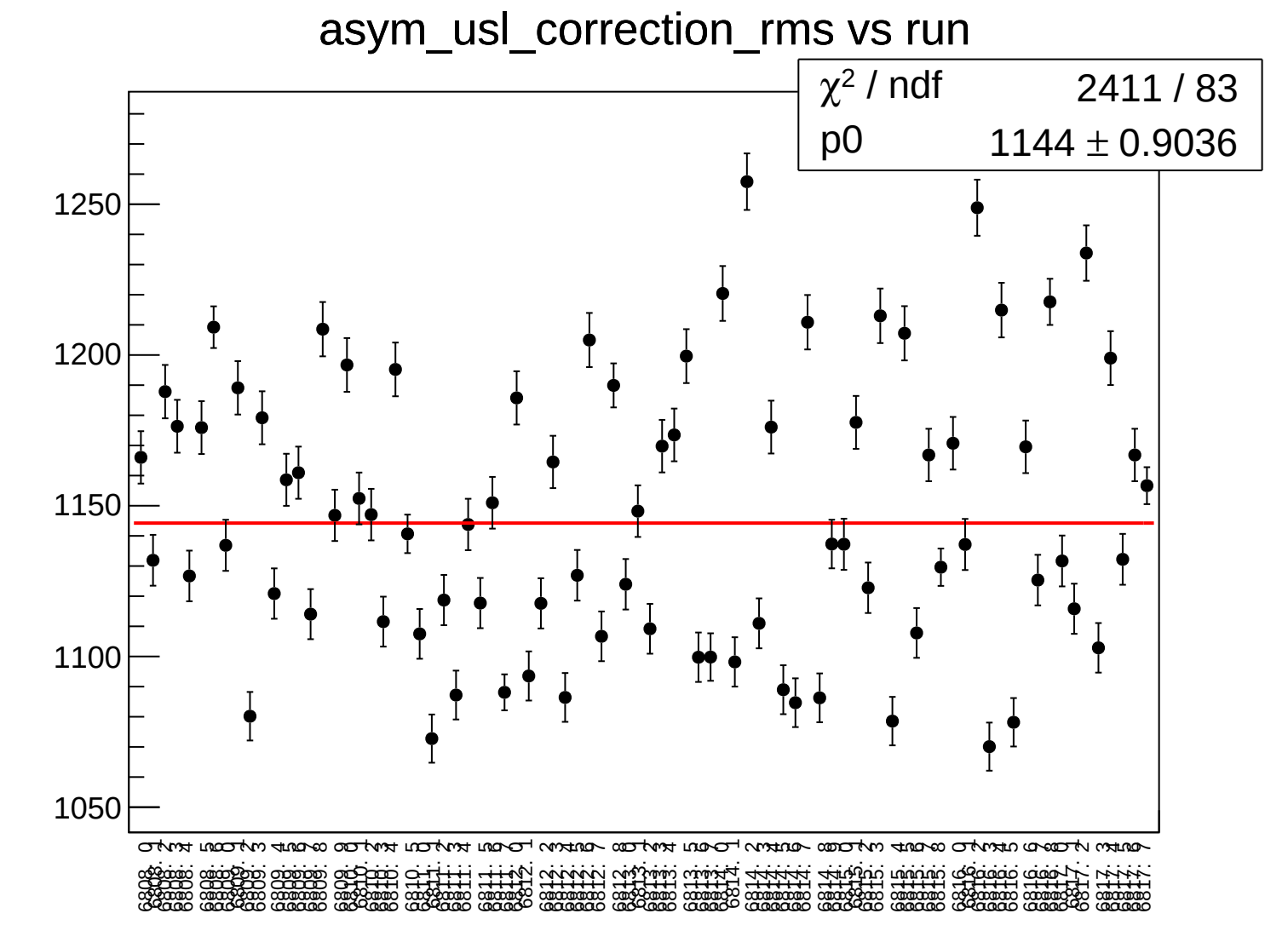

reg_asym_usl_mean vs run
χ² / ndf 102.1 / 83
p0 −450.1± 1240
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −391.9
Std Dev 441
3
2
1
0
−1
−2
−3

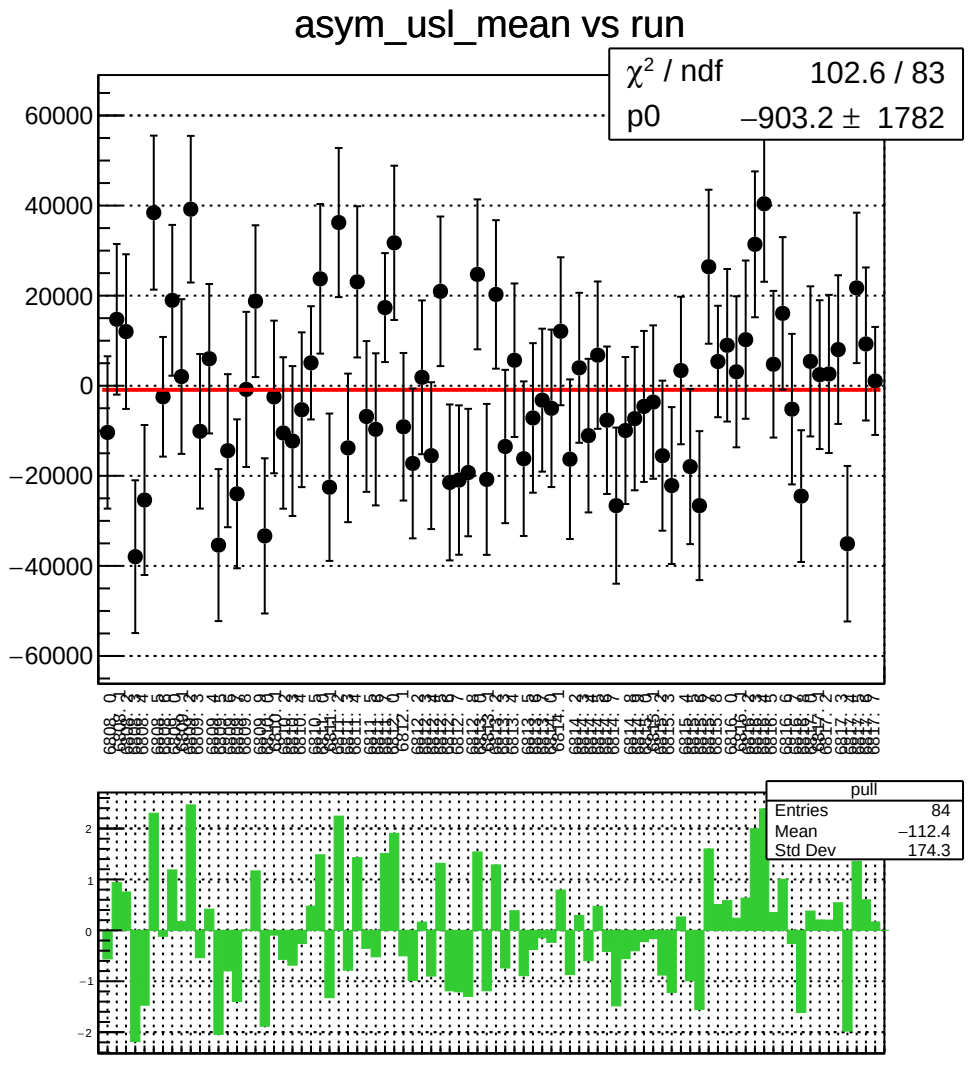

pull1D
Entries 84
Mean −0.005153
Std Dev 1.103
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

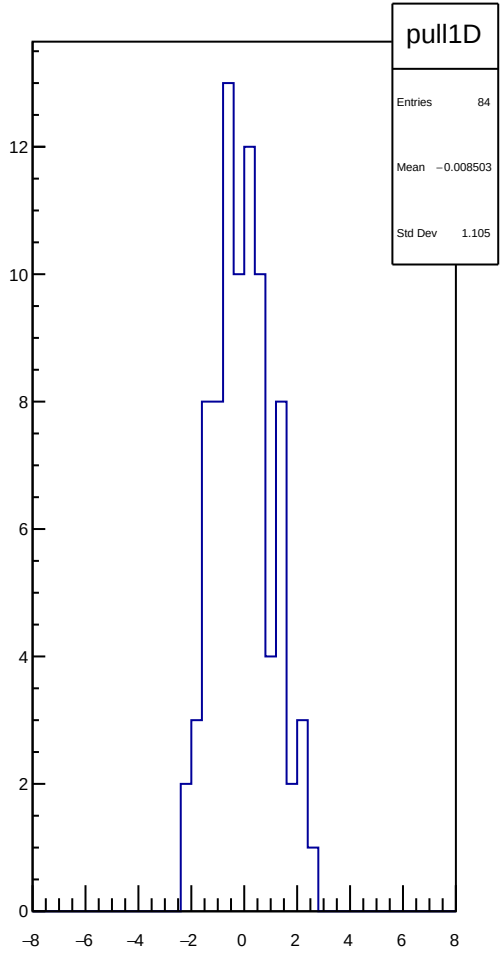

reg_asym_usl_rms vs run
χ² / ndf 79.44 / 83
p0 1111 ± 0.8769
1140
1130
1120
1110
1100
1090

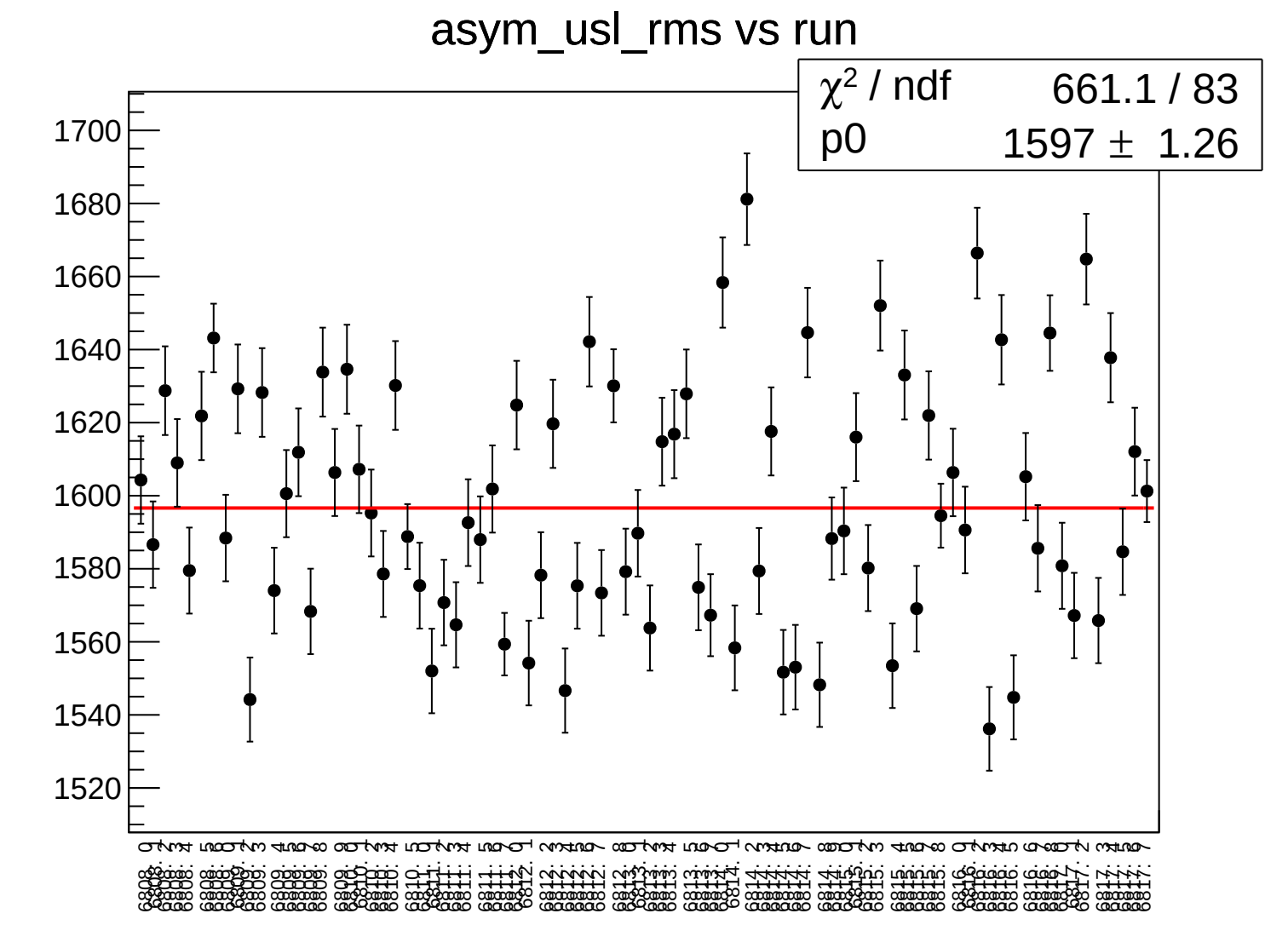

asym_usl_correction_mean vs run
χ² / ndf 99.02 / 83
p0 522.6 ± 1278
pull
Entries 84
Mean 122.4
Std Dev 130

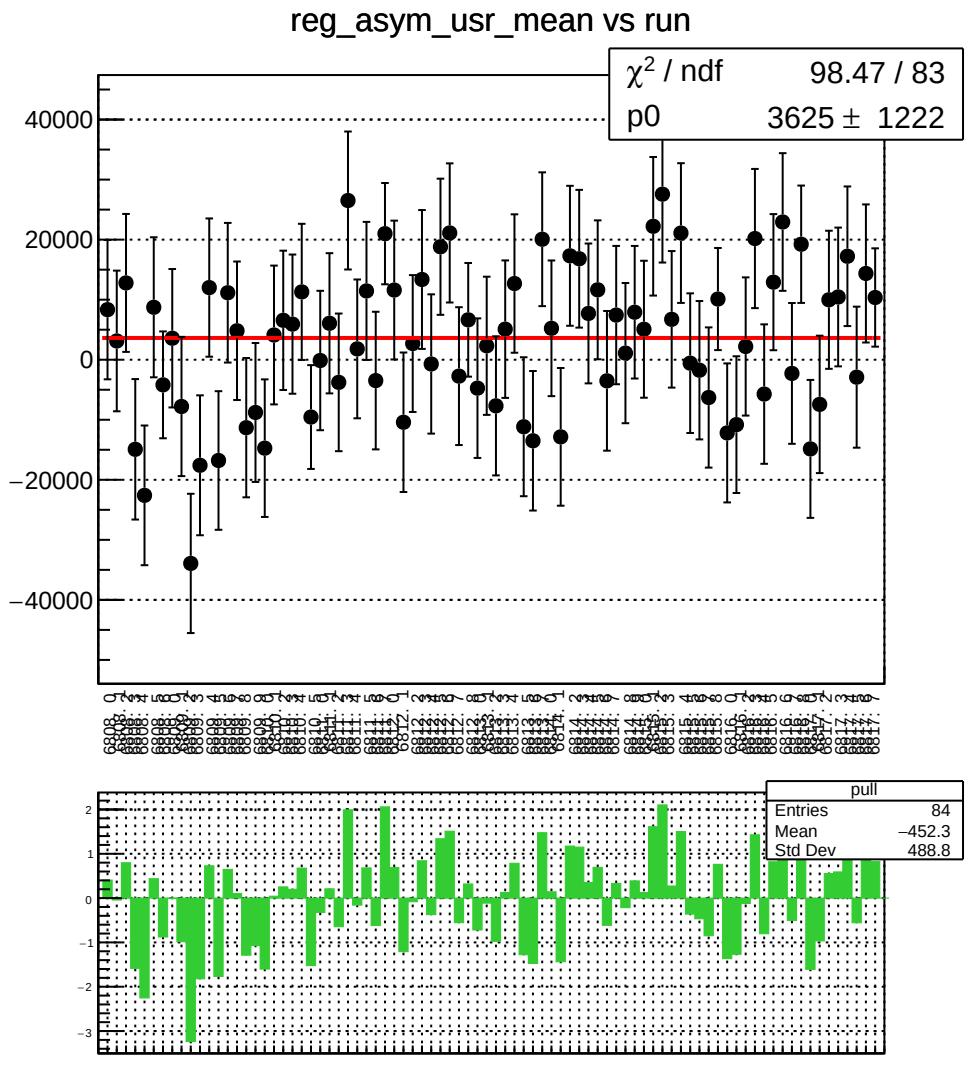

pull1D
Entries 84
Mean 0.004487
Std Dev 1.086

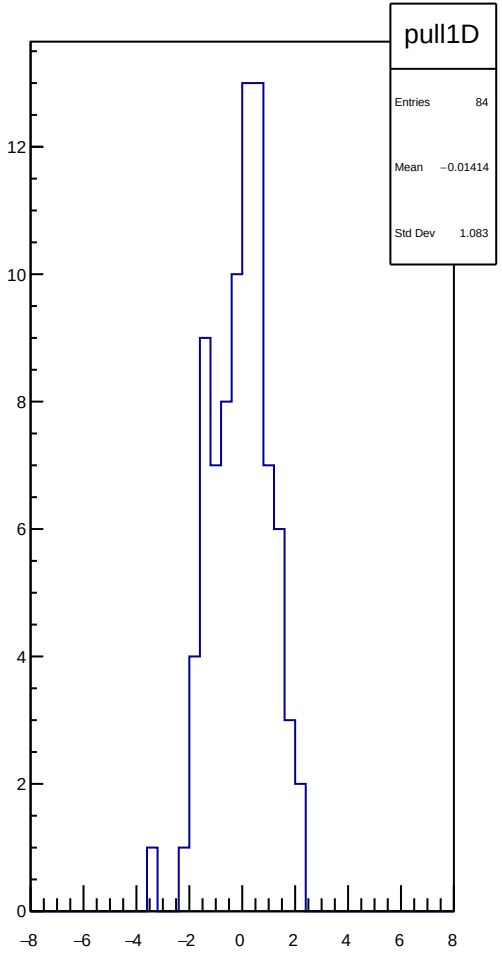

asym_usl_correction_rms vs run
χ² / ndf 2411 / 83
p0 1144 ± 0.9036
1250
1200
1150
1100
1050

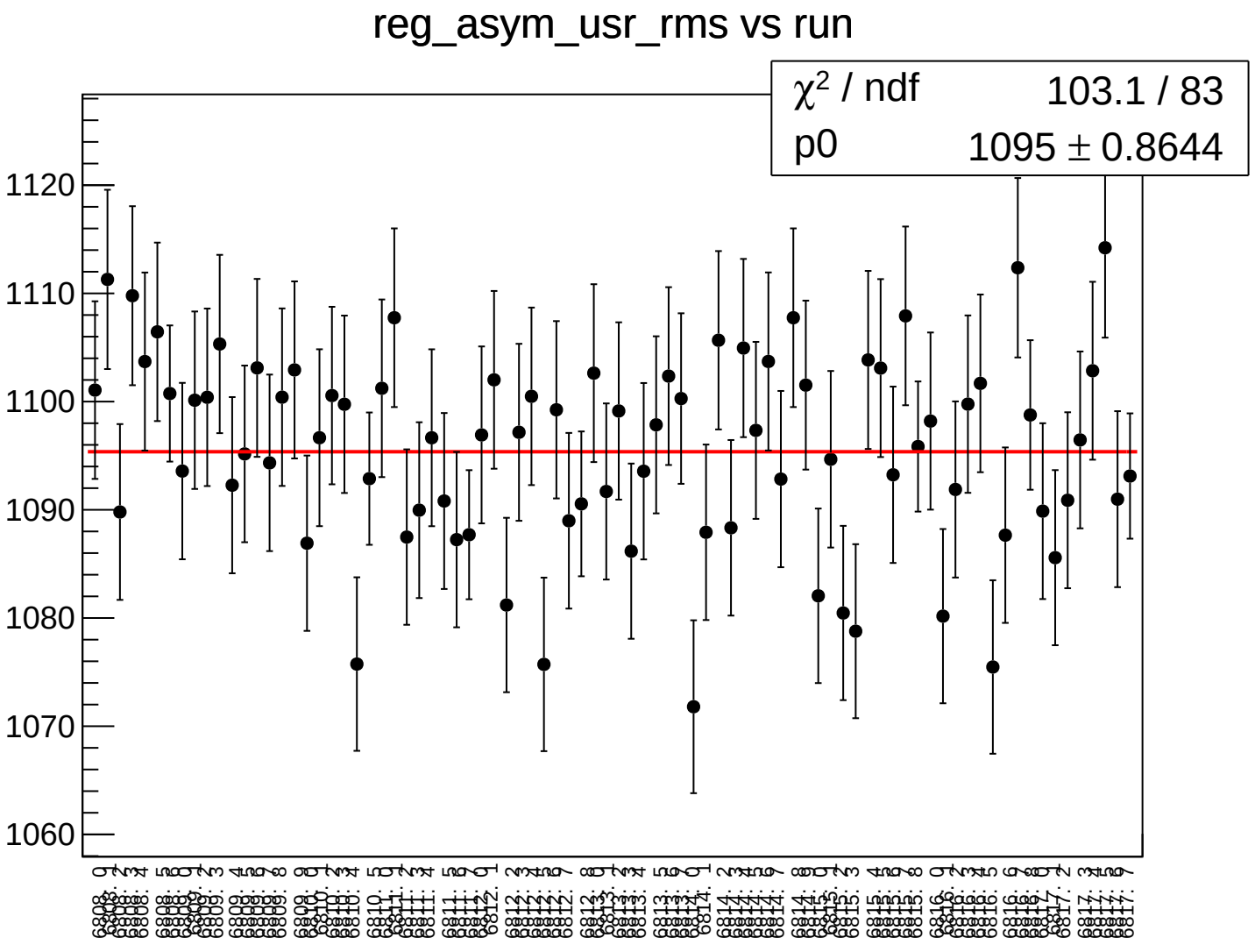

asym_usl_mean vs run
χ² / ndf 102.6 / 83
p0 −903.2 ± 1782
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 84
Mean −112.4
Std Dev 174.3
2
1
0
−1
−2

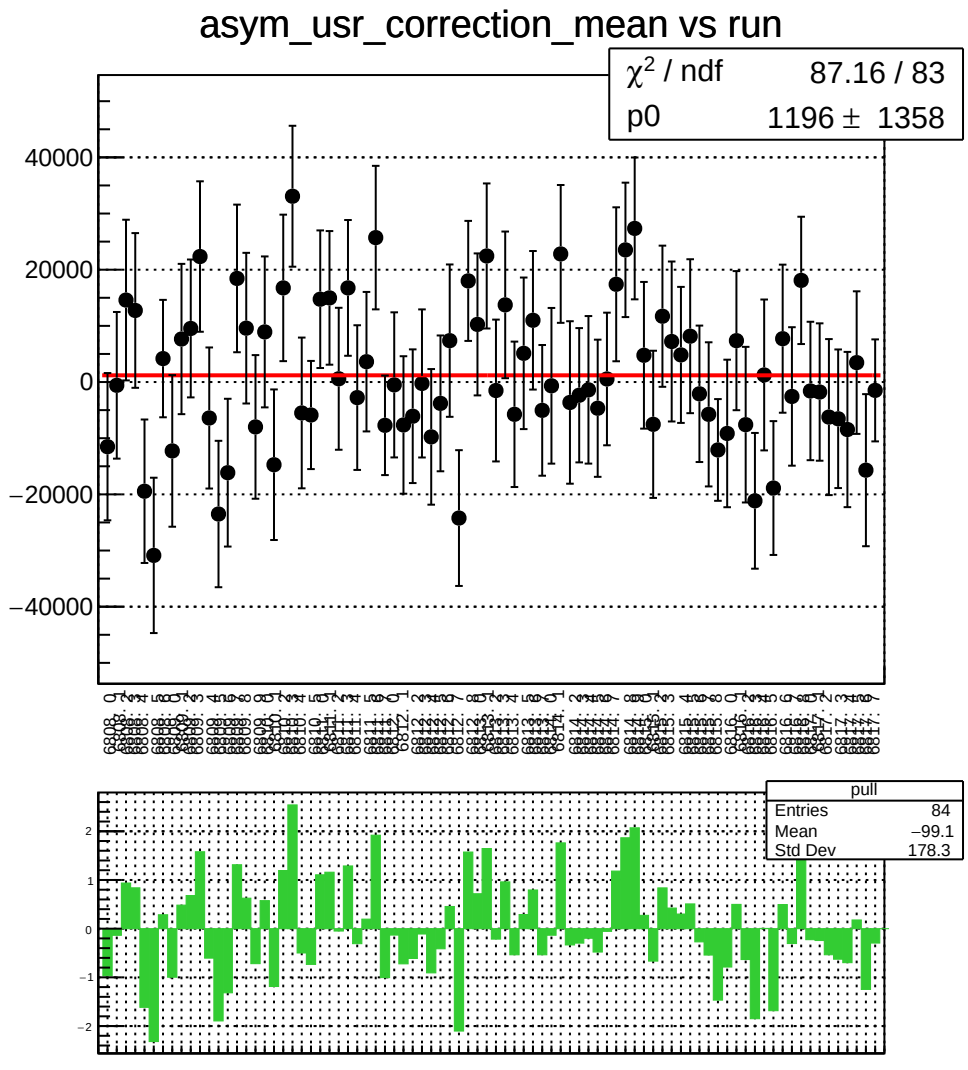

pull1D
Entries 84
Mean −0.008503
Std Dev 1.105
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

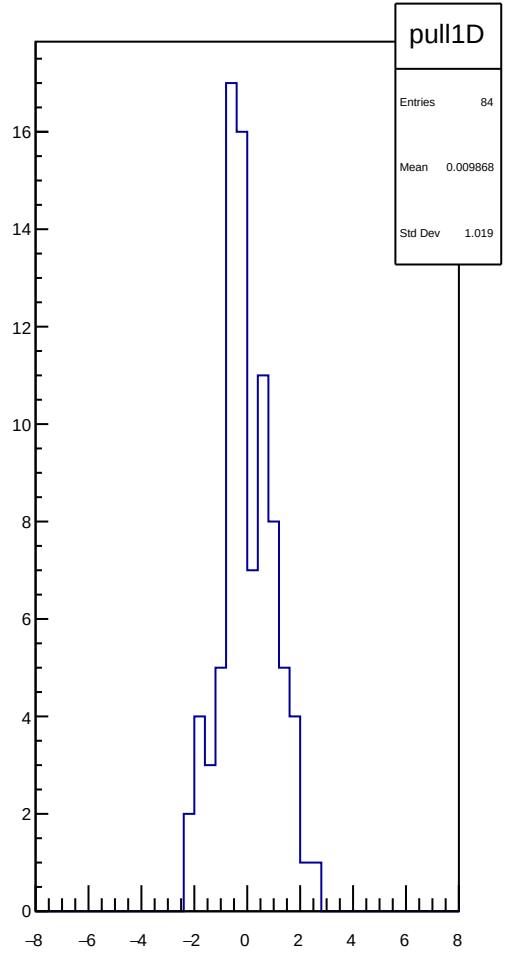

asym_usl_rms vs run
χ² / ndf 661.1 / 83
p0 1597 ± 1.26
1700
1680
1660
1640
1620
1600
1580
1560
1540
1520


reg_asym_usr_mean vs run
χ² / ndf 98.47 / 83
p0 3625 ± 1222
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −452.3
Std Dev 488.8
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean −0.01414
Std Dev 1.083
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_usr_rms vs run
χ² / ndf 103.1 / 83
p0 1095 ± 0.8644
1120
1110
1100
1090
1080
1070
1060


asym_usr_correction_mean vs run
χ² / ndf 87.16 / 83
p0 1196 ± 1358
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −99.1
Std Dev 178.3
2
1
0
−1
−2


pull1D
Entries 84
Mean 0.009868
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
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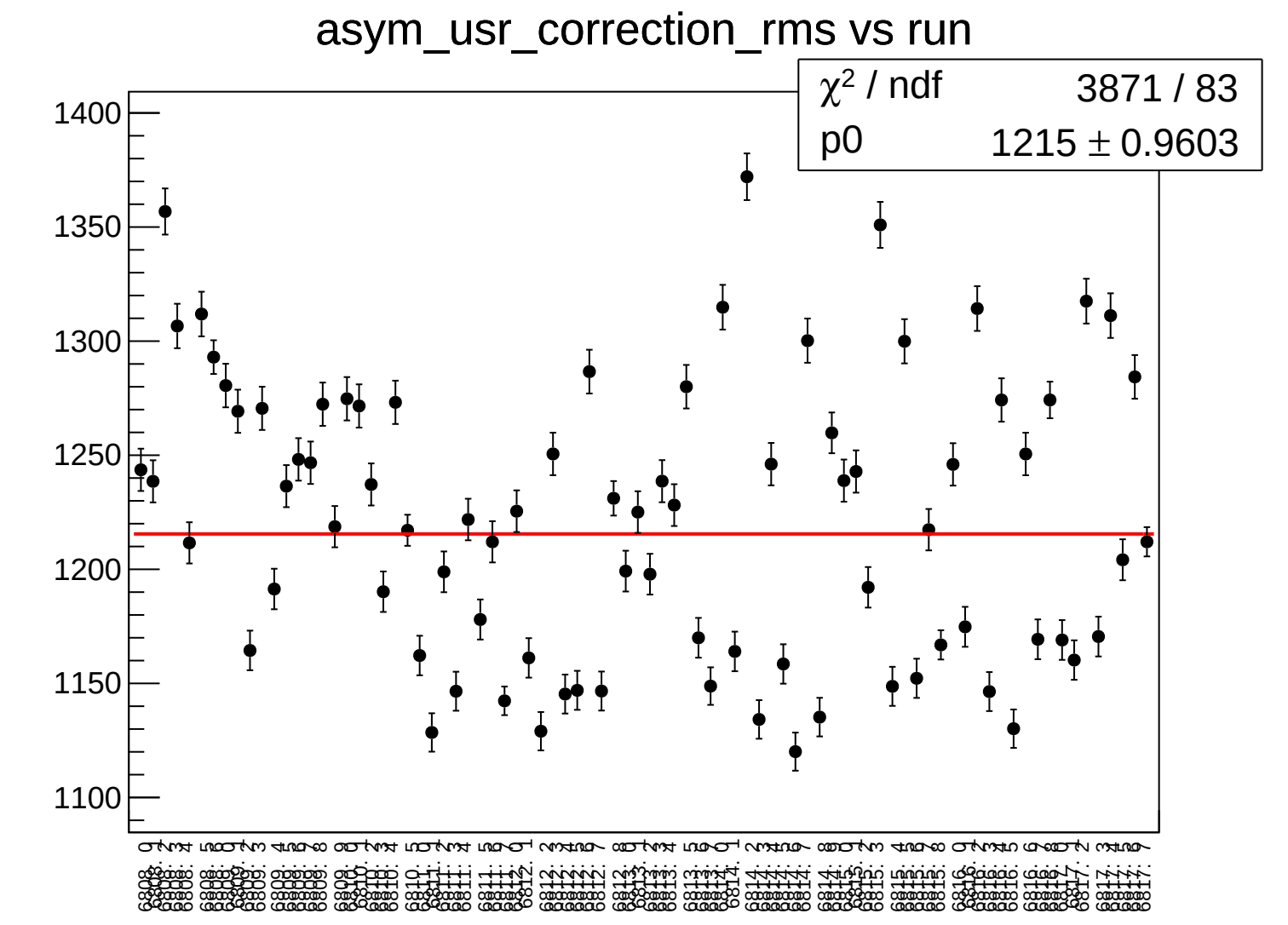
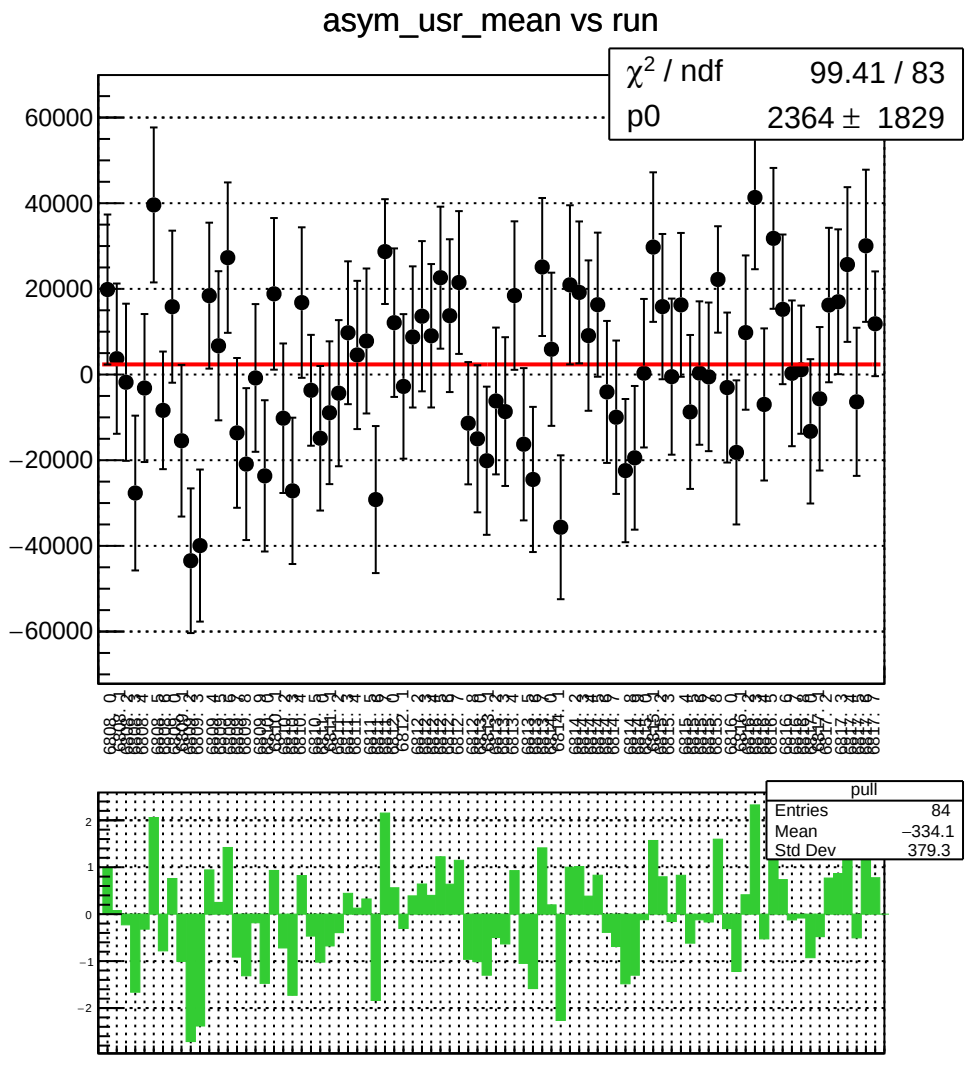
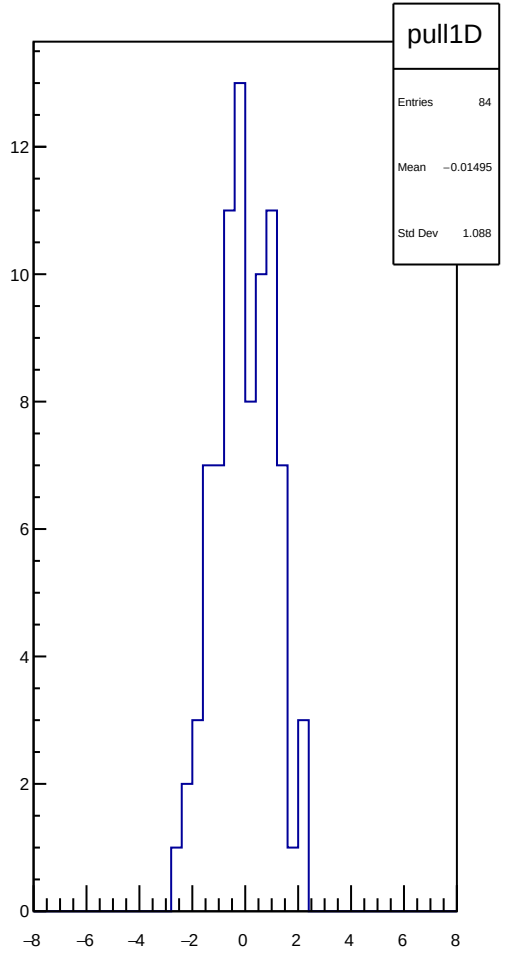
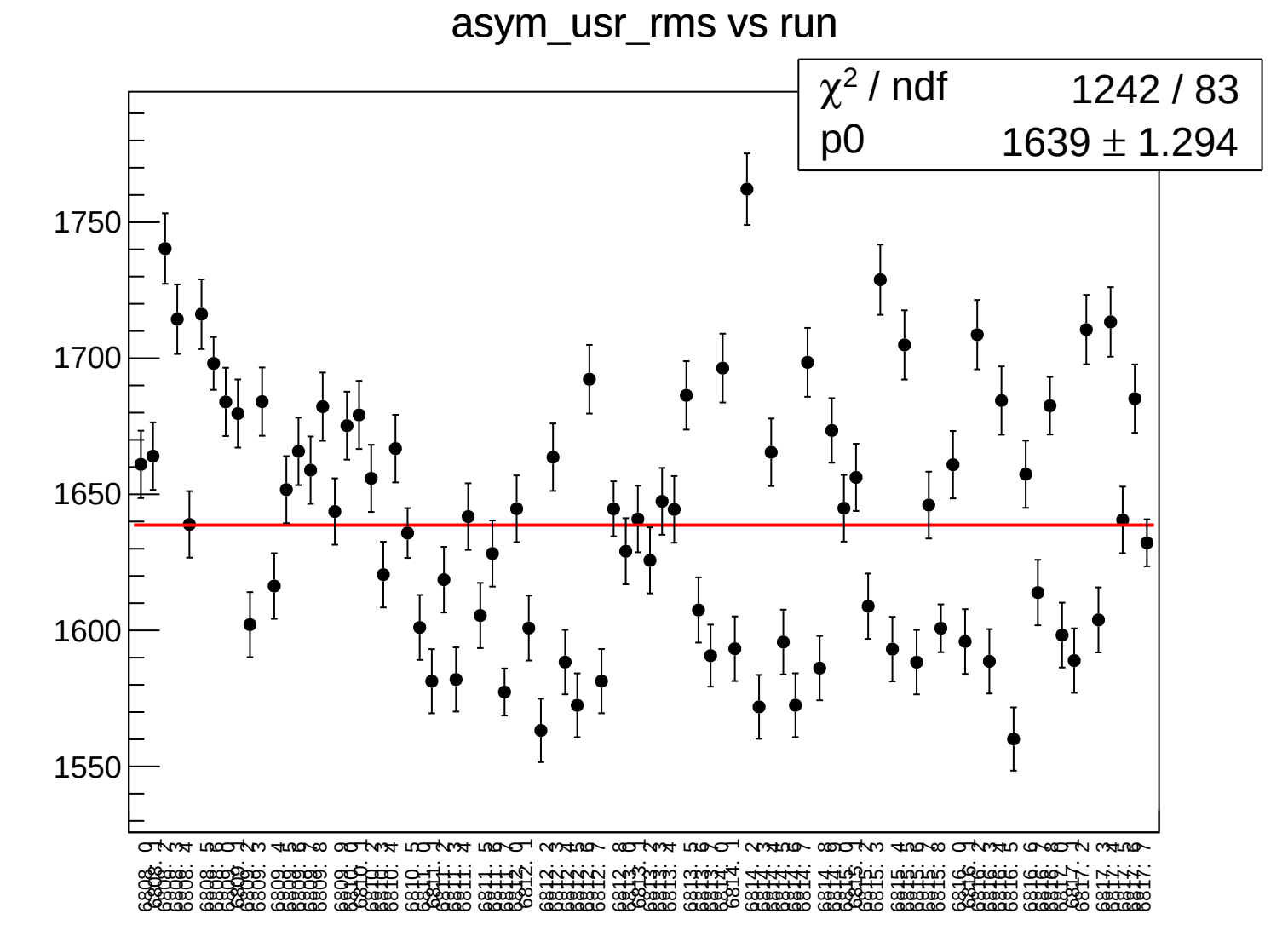
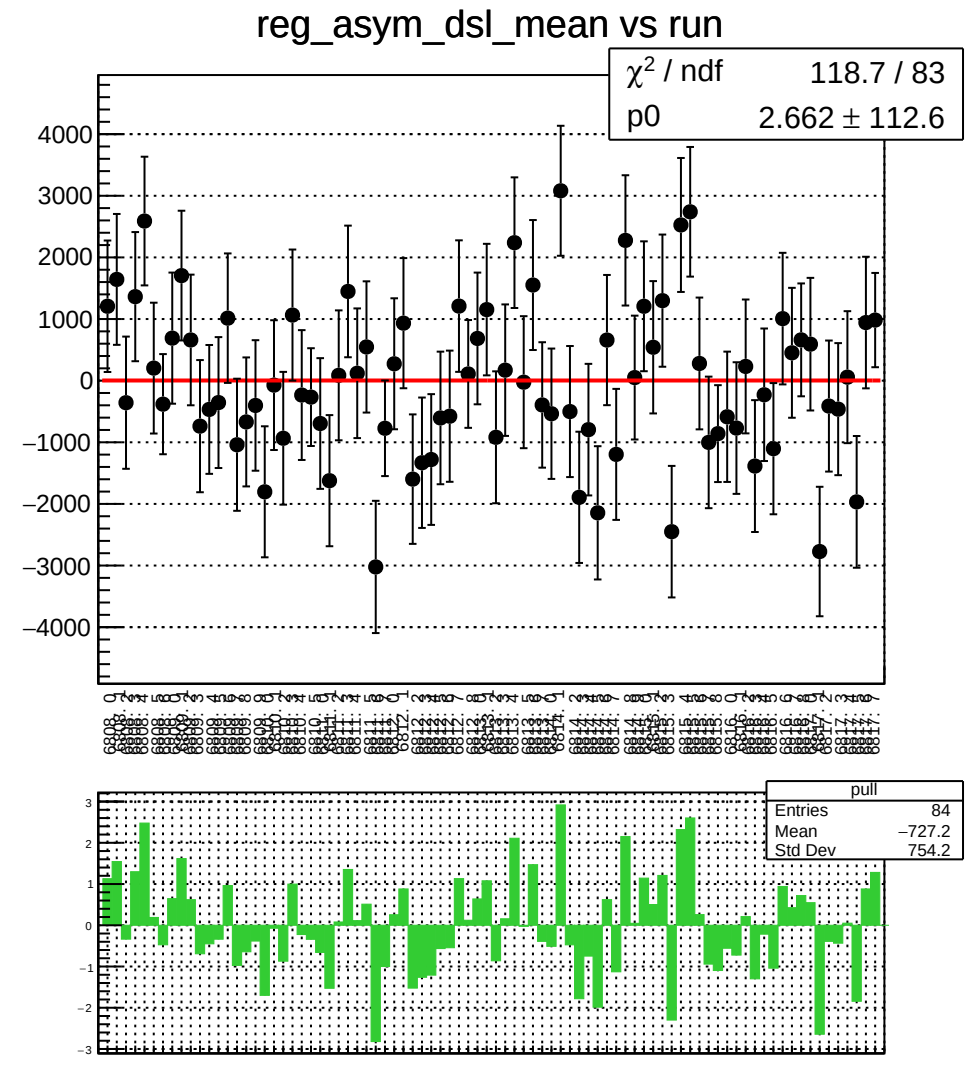
0
2
4
6
8

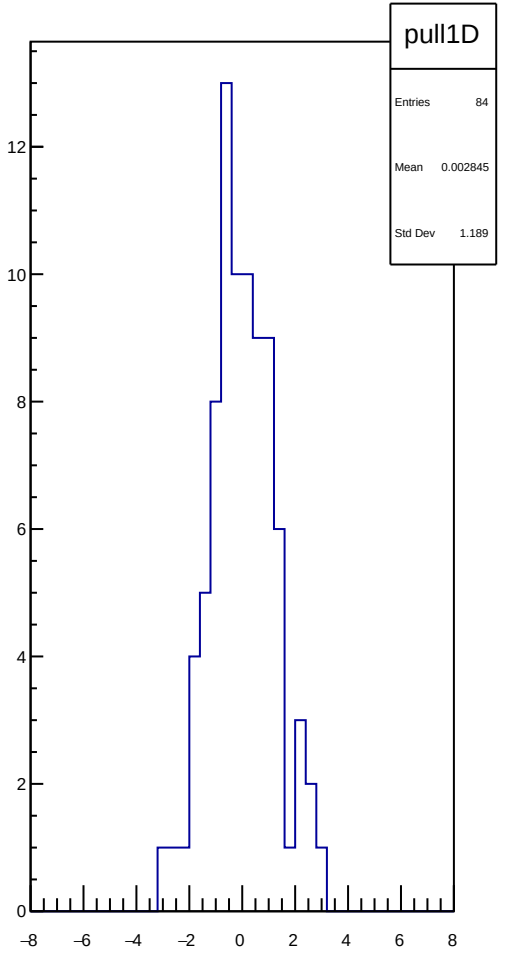

asym_usr_correction_rms vs run
χ² / ndf 3871 / 83
p0 1215 ± 0.9603
1400
1350
1300
1250
1200
1150
1100

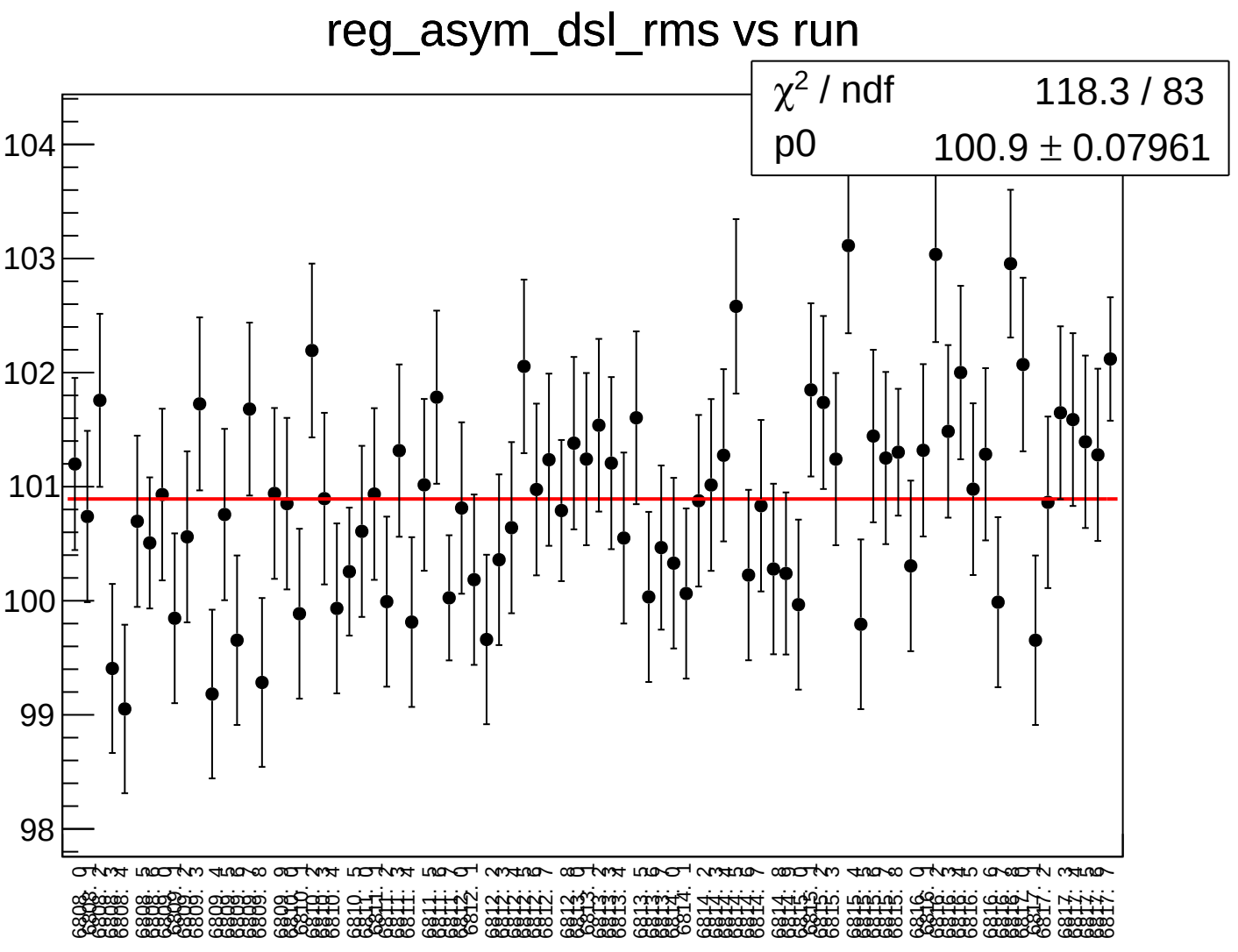

asym_usr_mean vs run
χ² / ndf 99.41 / 83
p0 2364 ± 1829
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 84
Mean −334.1
Std Dev 379.3
2
1
0
−1
−2

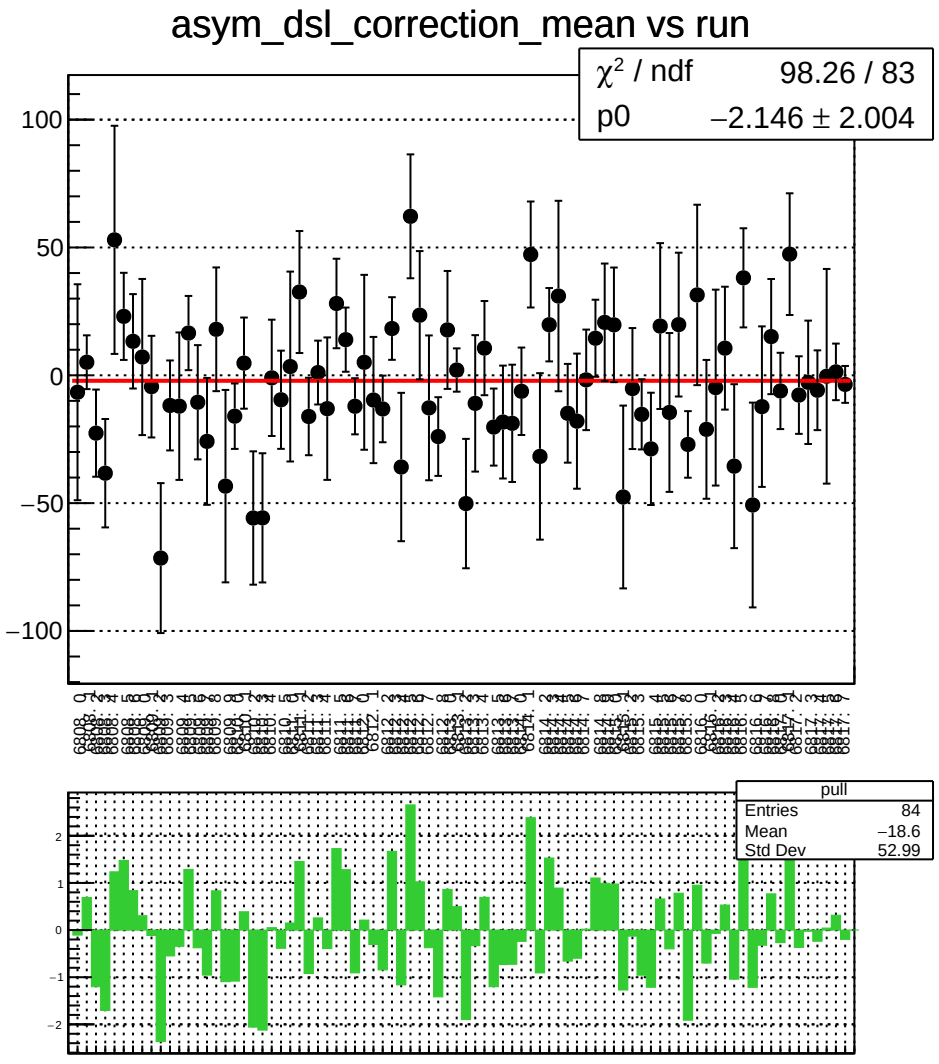

pull1D
Entries 84
Mean −0.01495
Std Dev 1.088
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

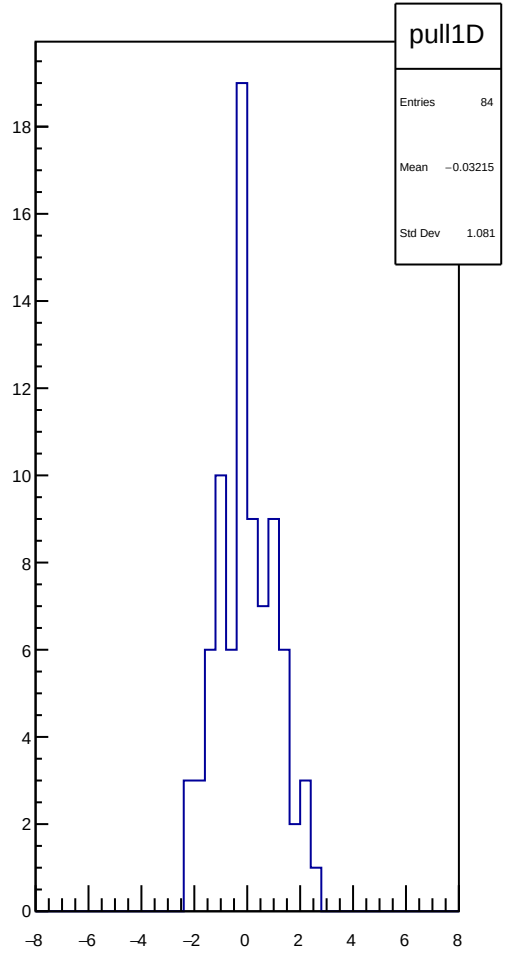

asym_usr_rms vs run
χ² / ndf 1242 / 83
p0 1639 ± 1.294
1750
1700
1650
1600
1550

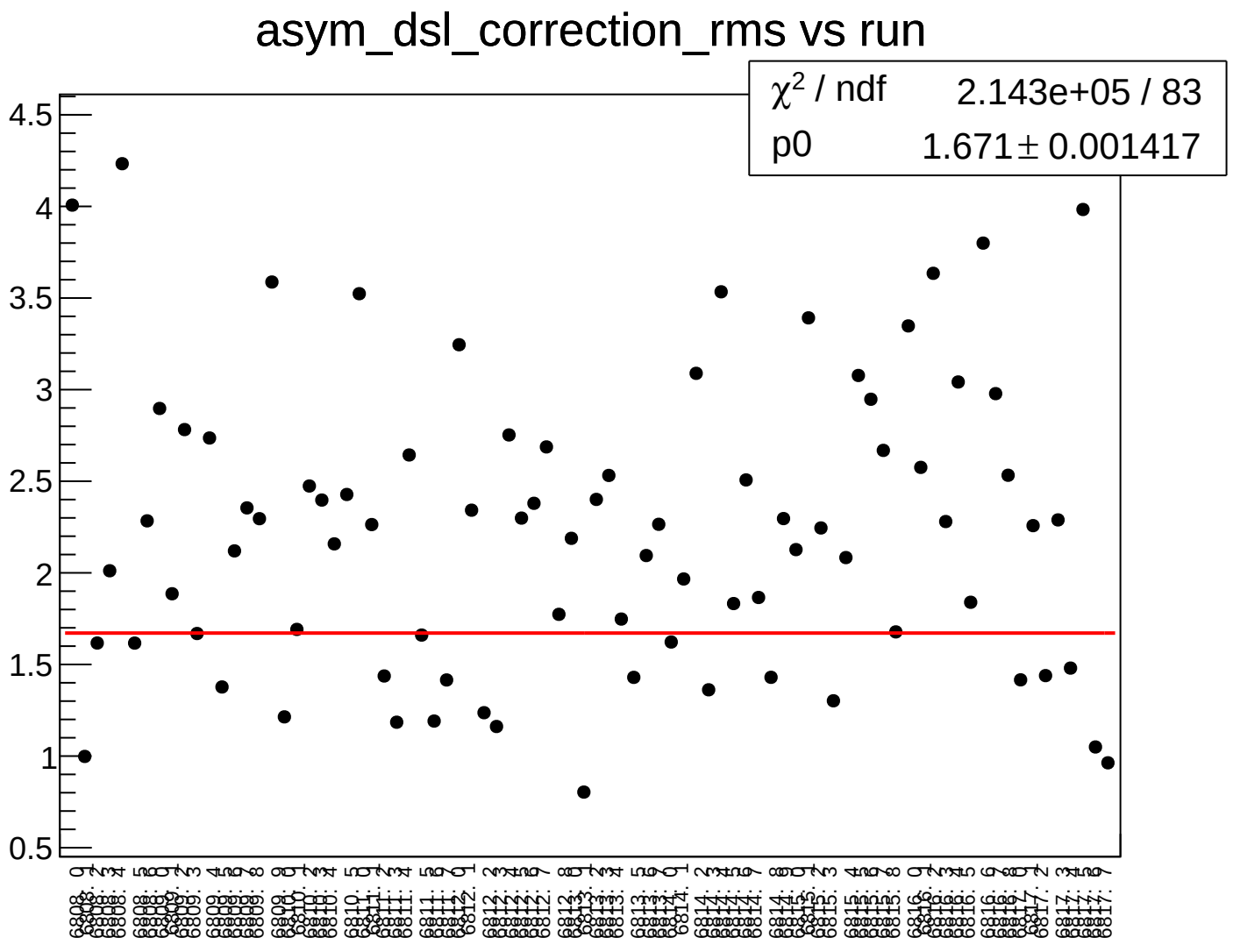

reg_asym_dsl_mean vs run
χ² / ndf 118.7 / 83
p0 2.662 ± 112.6
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 84
Mean −727.2
Std Dev 754.2
3
2
1
0
−1
−2
−3

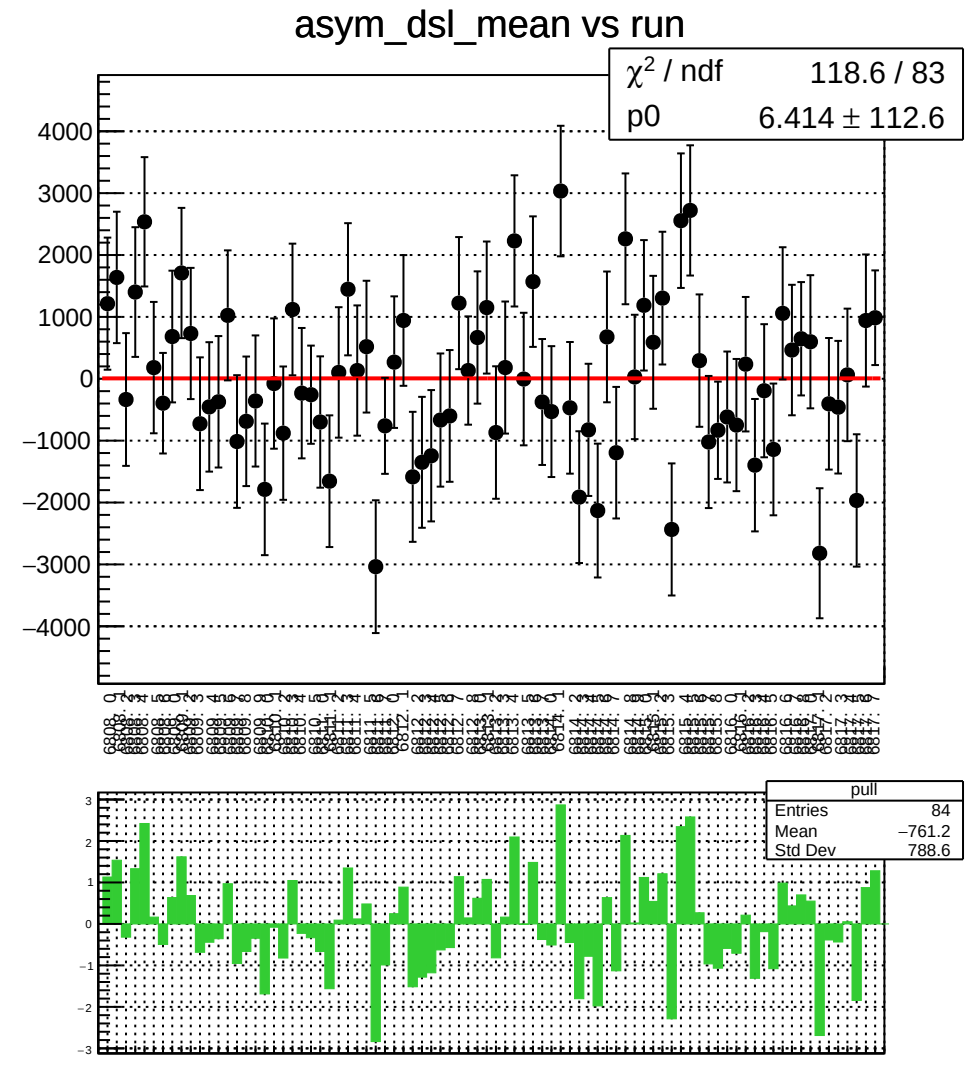

pull1D
Entries 84
Mean 0.002845
Std Dev 1.189
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

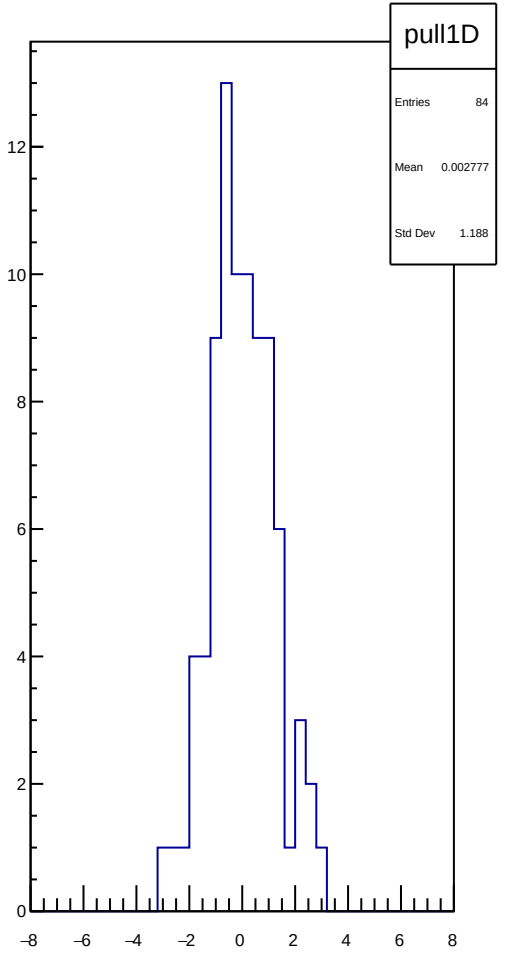

reg_asym_dsl_rms vs run
χ² / ndf 118.3 / 83
p0 100.9 ± 0.07961
104
103
102
101
100
99
98

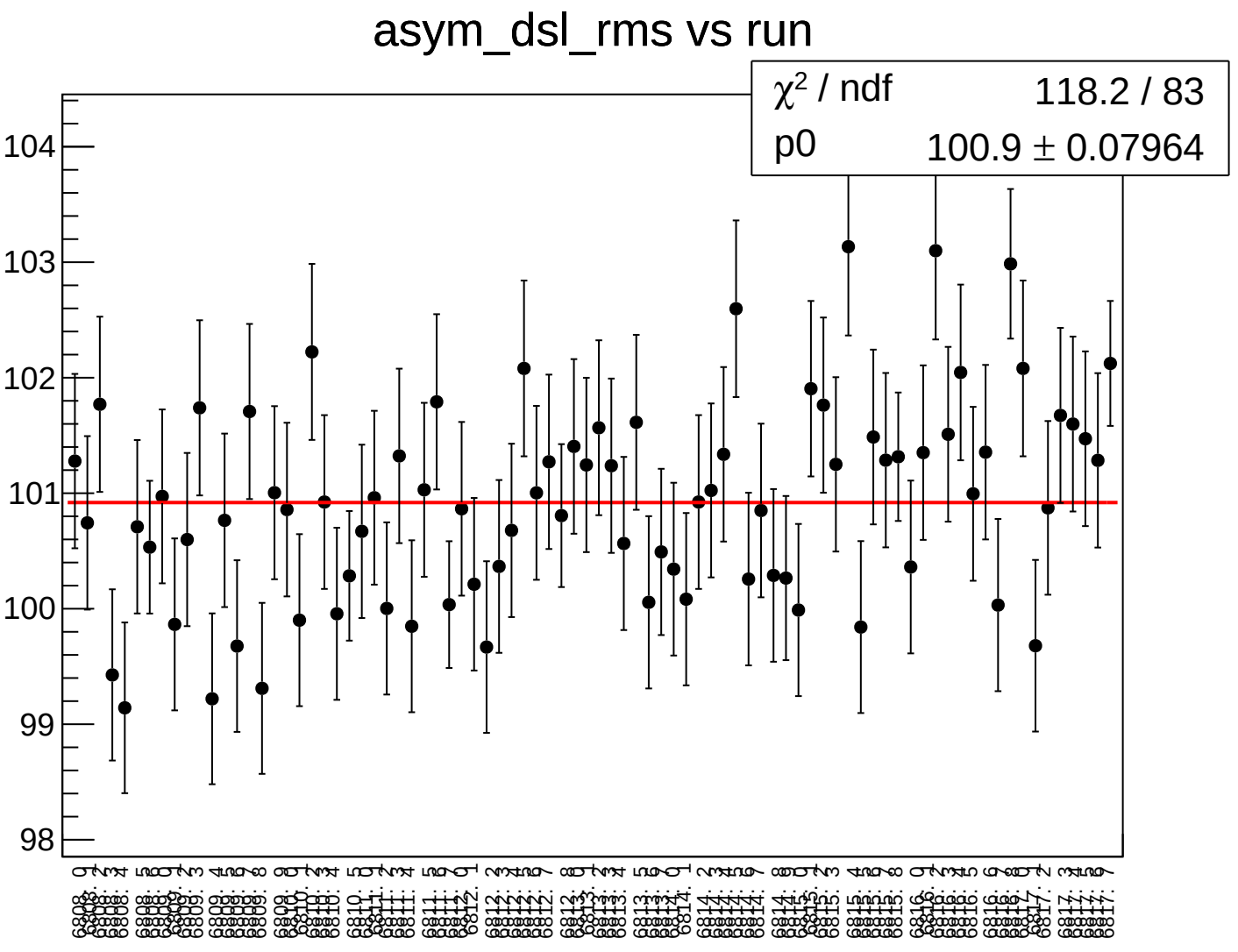

asym_dsl_correction_mean vs run
χ² / ndf 98.26 / 83
p0 −2.146 ± 2.004
100
50
0
−50
−100
pull
Entries 84
Mean −18.6
Std Dev 52.99
2
1
0
−1
−2

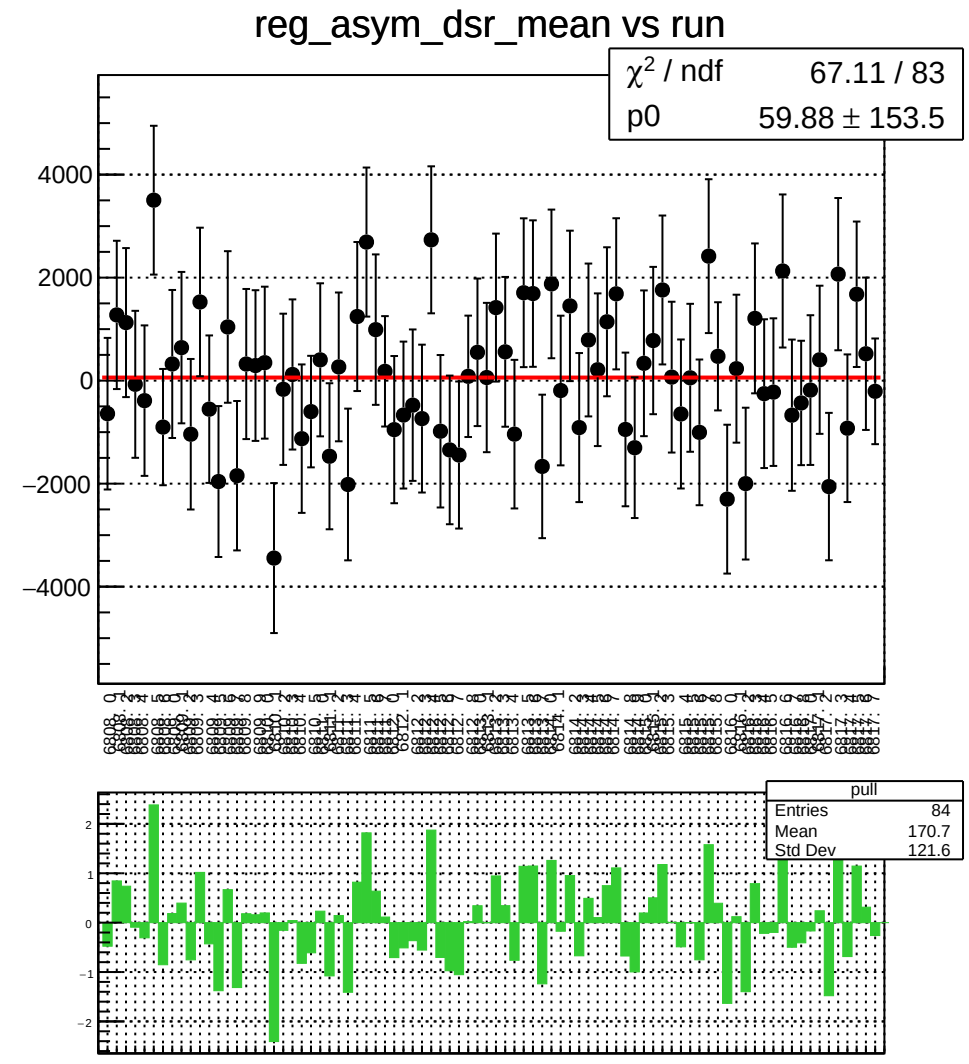

pull1D
Entries 84
Mean −0.03215
Std Dev 1.081
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

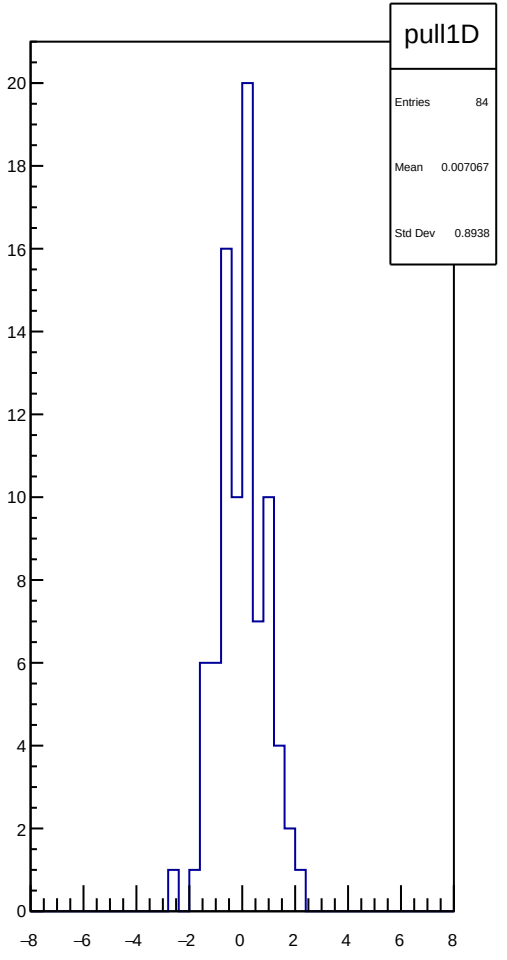

asym_dsl_correction_rms vs run
χ^2 / ndf 2.143e+05 / 83
p0 1.671 ± 0.001417
4.5
4
3.5
3
2.5
2
1.5
1
0.5

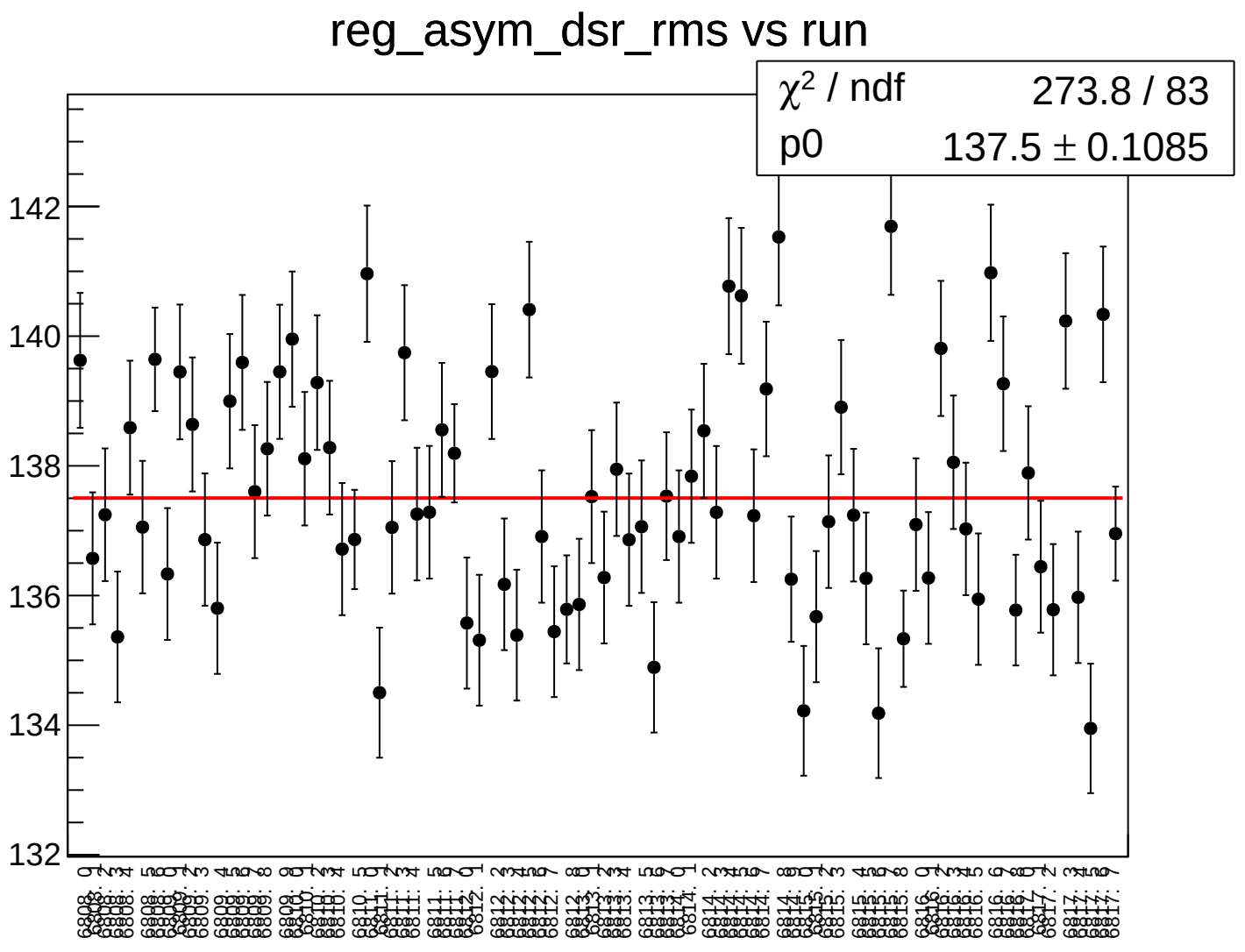

asym_dsl_mean vs run
χ² / ndf 118.6 / 83
p0 6.414 ± 112.6
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 84
Mean −761.2
Std Dev 788.6
3
2
1
0
−1
−2
−3

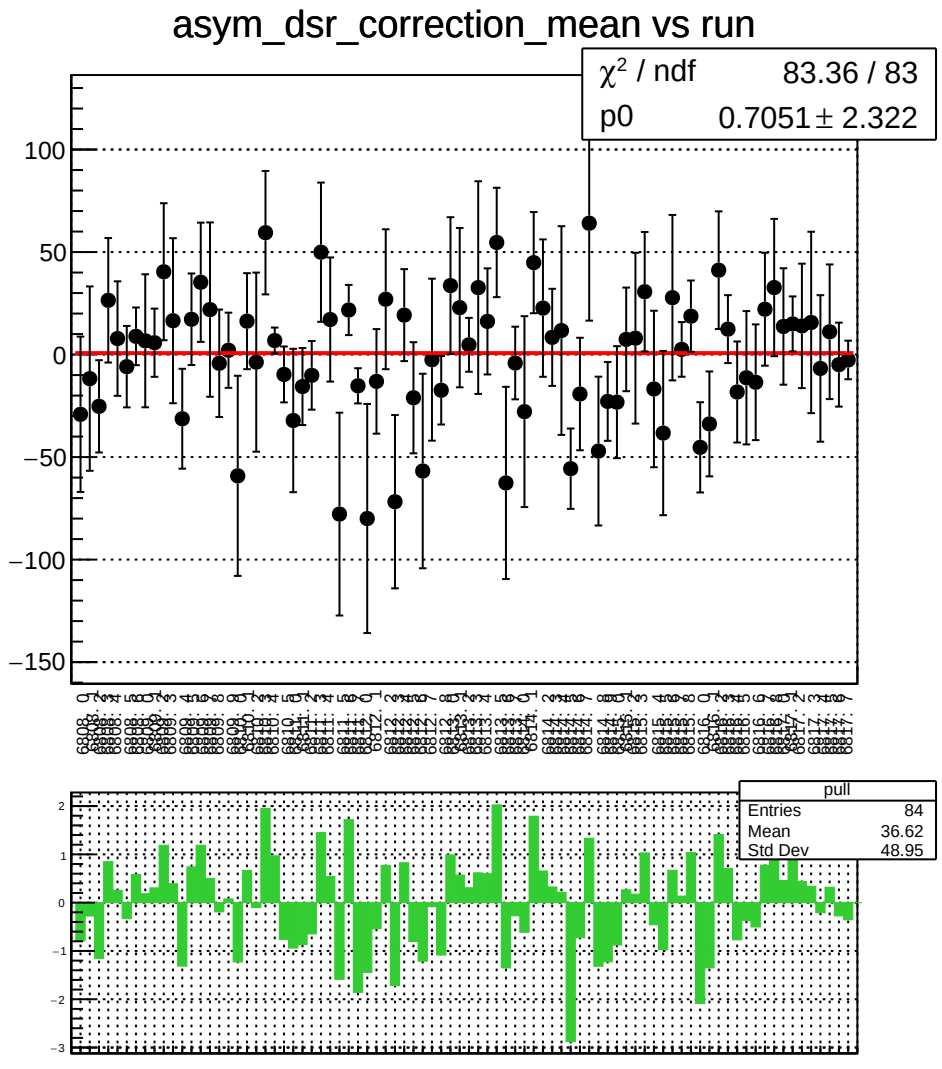

pull1D
Entries 84
Mean 0.002777
Std Dev 1.188
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

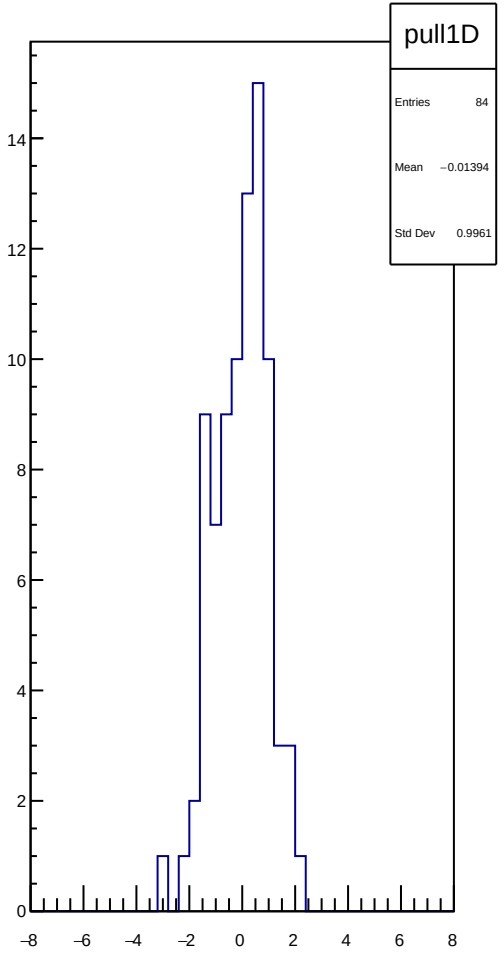

asym_dsl_rms vs run
χ^2 / ndf 118.2 / 83
p0 100.9 ± 0.07964
104
103
102
101
100
99
98

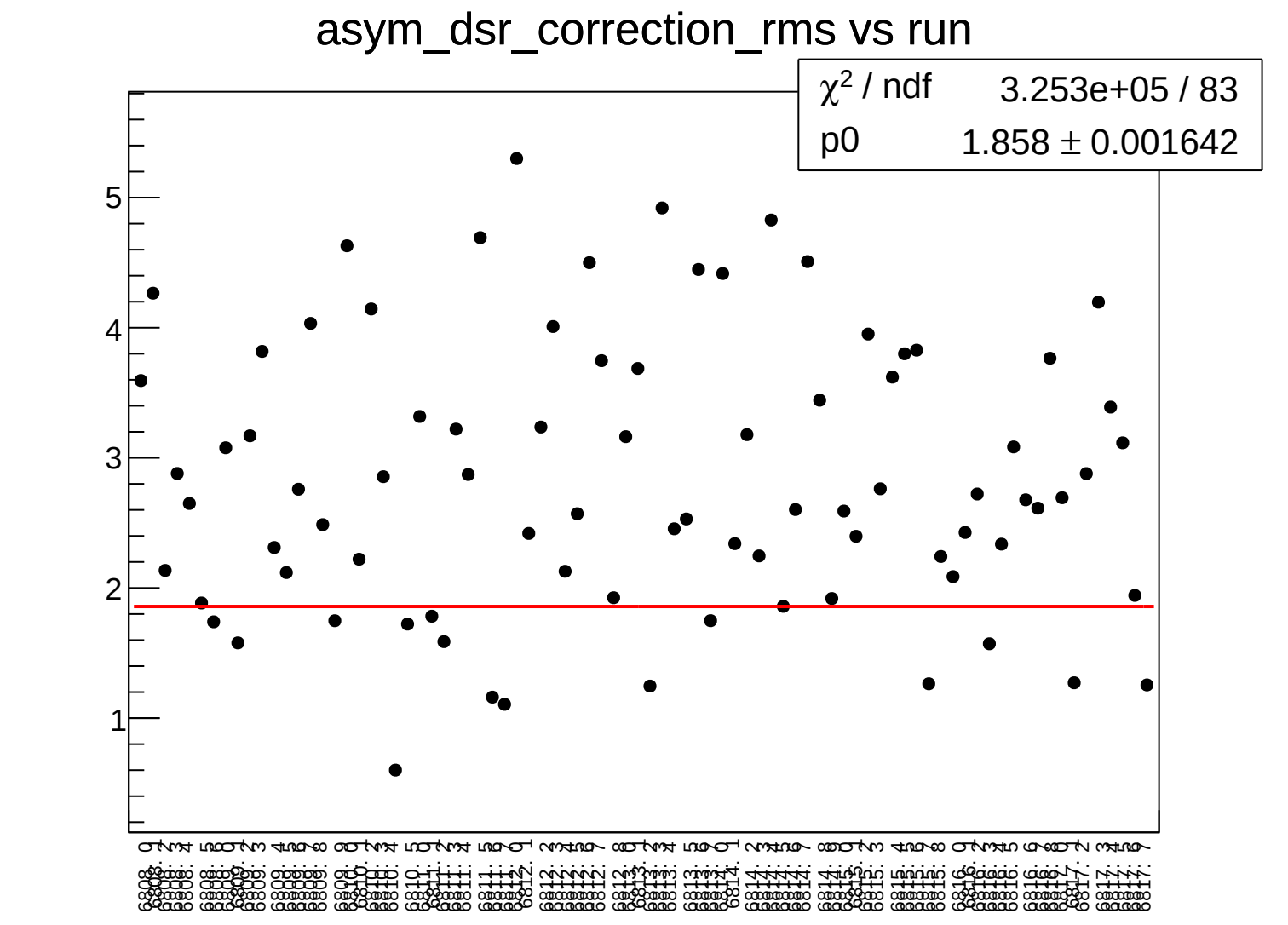

reg_asym_dsr_mean vs run
χ^2 / ndf 67.11 / 83
p0 59.88 ± 153.5
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 170.7
Std Dev 121.6
2
1
0
−1
−2

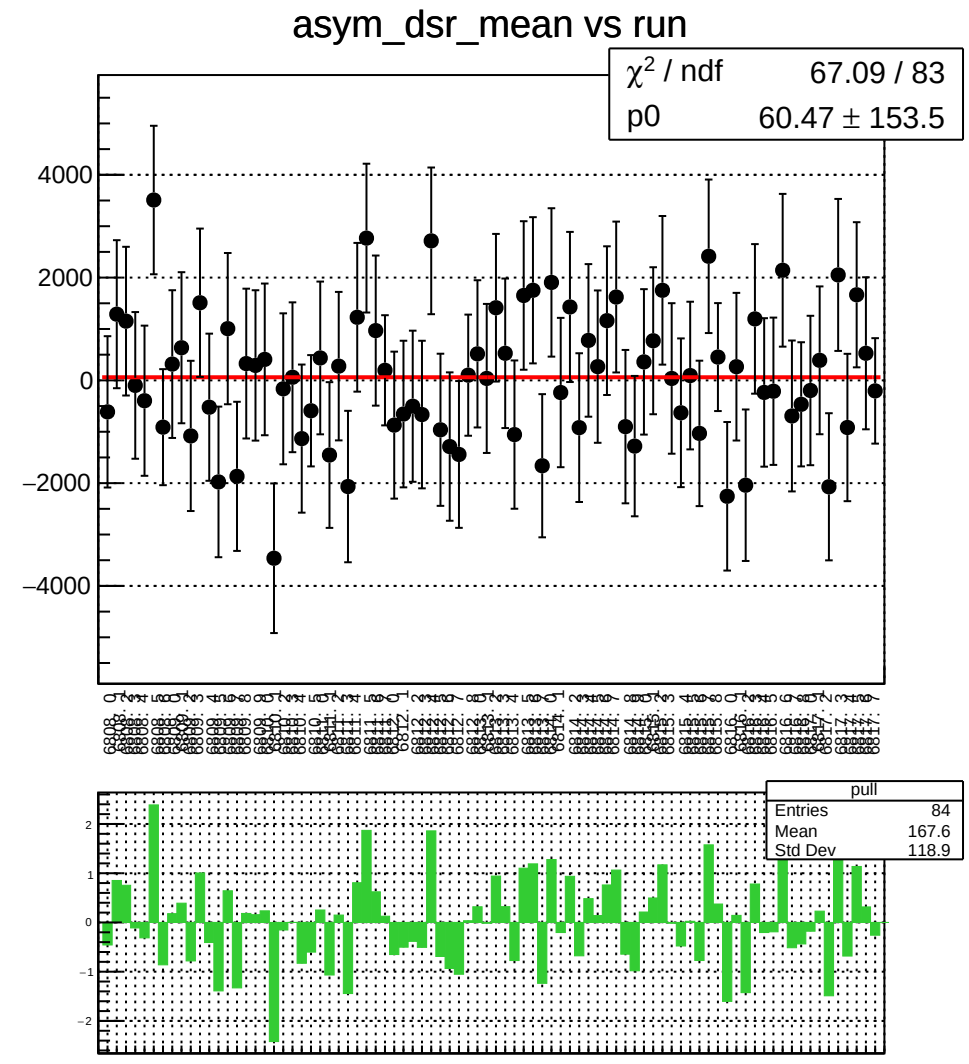

pull1D
Entries 84
Mean 0.007067
Std Dev 0.8938
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

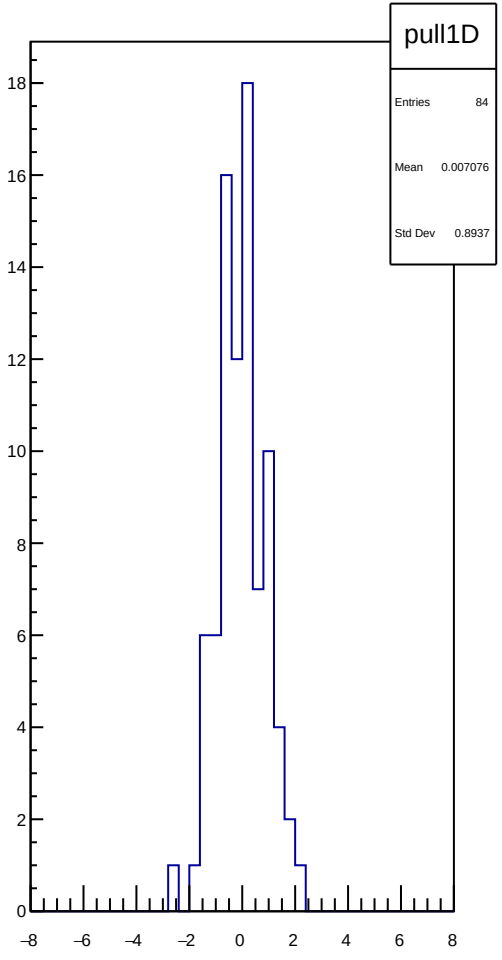

reg_asym_dsr_rms vs run
χ² / ndf 273.8 / 83
p0 137.5 ± 0.1085
142
140
138
136
134
132

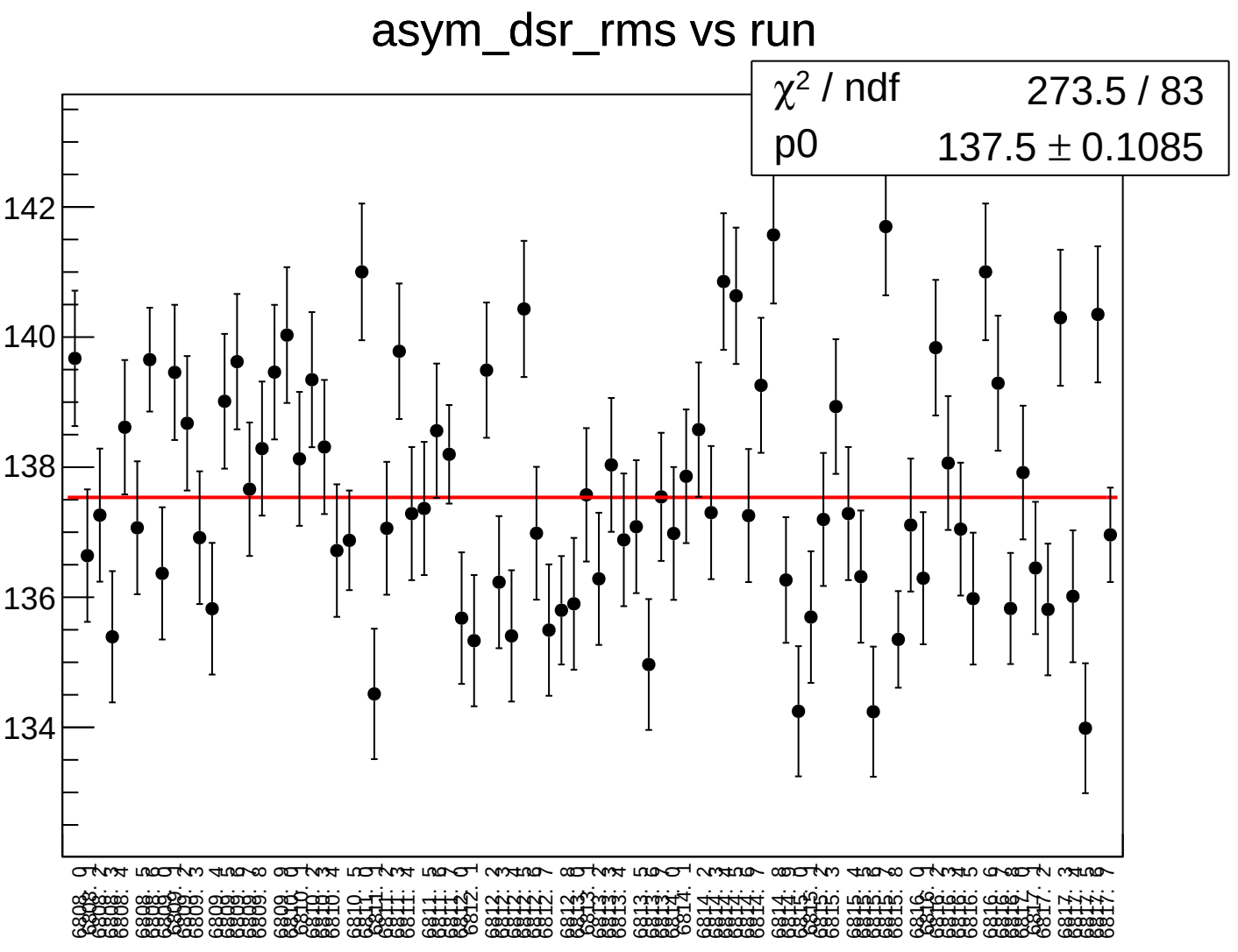

asym_dsr_correction_mean vs run
χ² / ndf 83.36 / 83
p0 0.7051 ± 2.322
pull
Entries 84
Mean 36.62
Std Dev 48.95

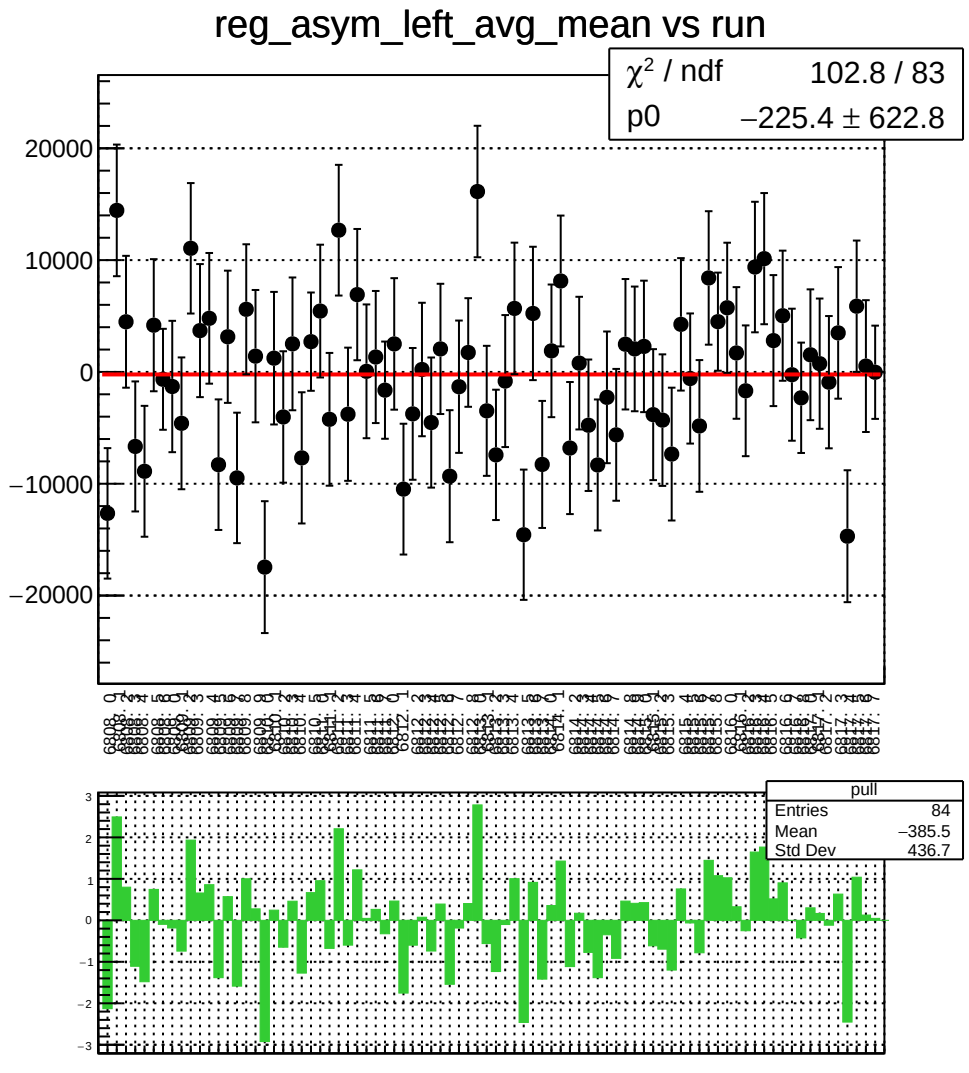

pull1D
Entries 84
Mean −0.01394
Std Dev 0.9961

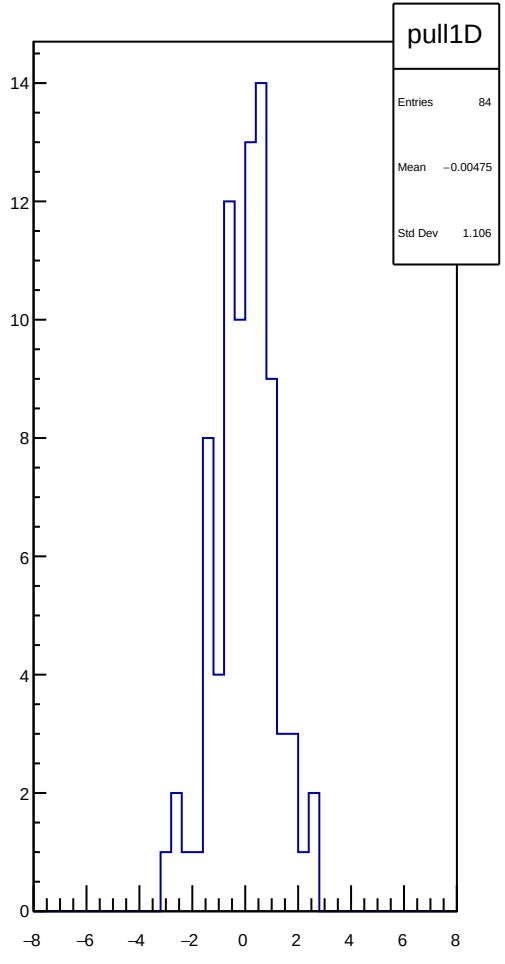

asym_dsr_correction_rms vs run
χ^2 / ndf 3.253e+05 / 83
p0 1.858 ± 0.001642
5
4
3
2
1

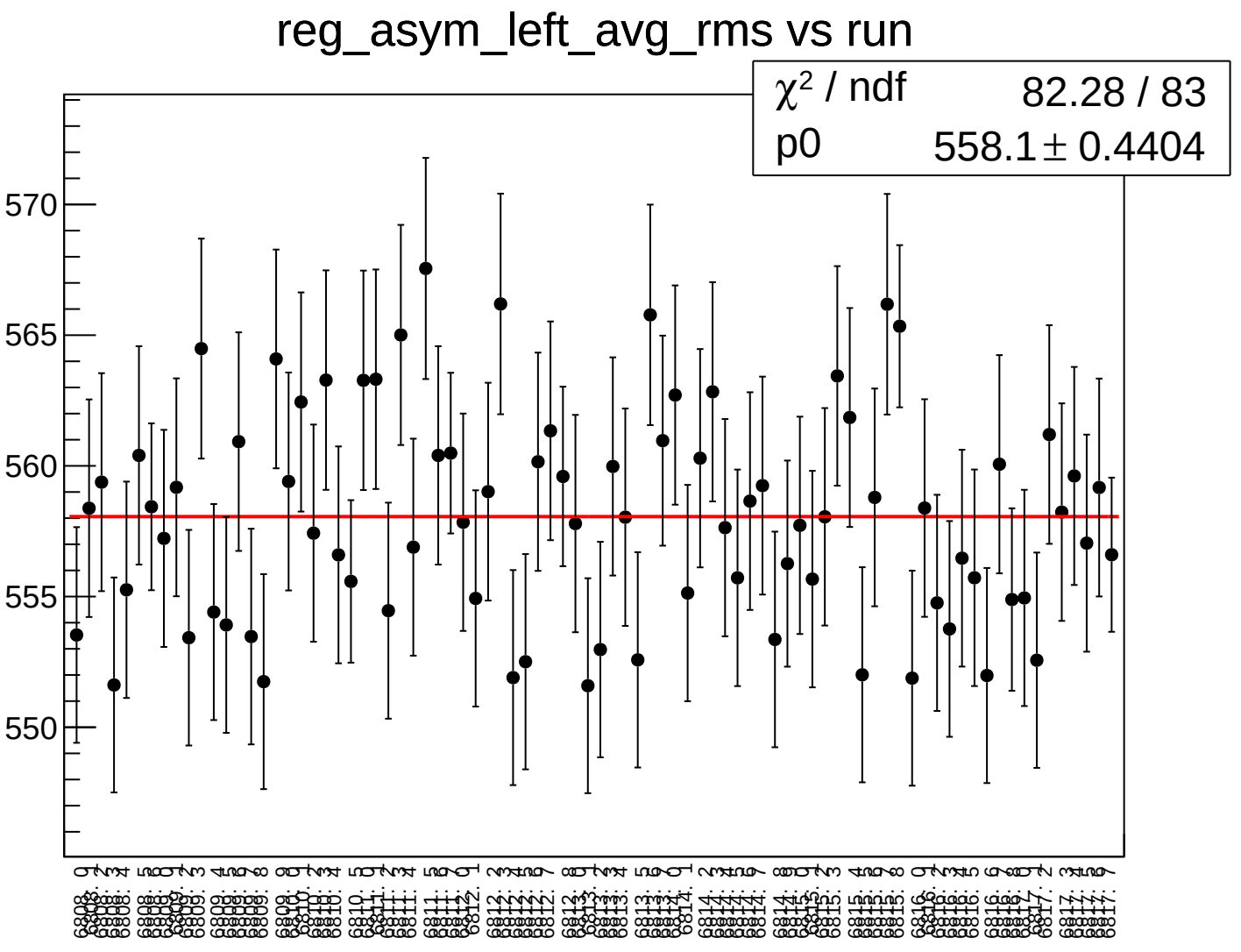

asym_dsr_mean vs run
χ² / ndf 67.09 / 83
p0 60.47 ± 153.5
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 167.6
Std Dev 118.9
2
1
0
−1
−2

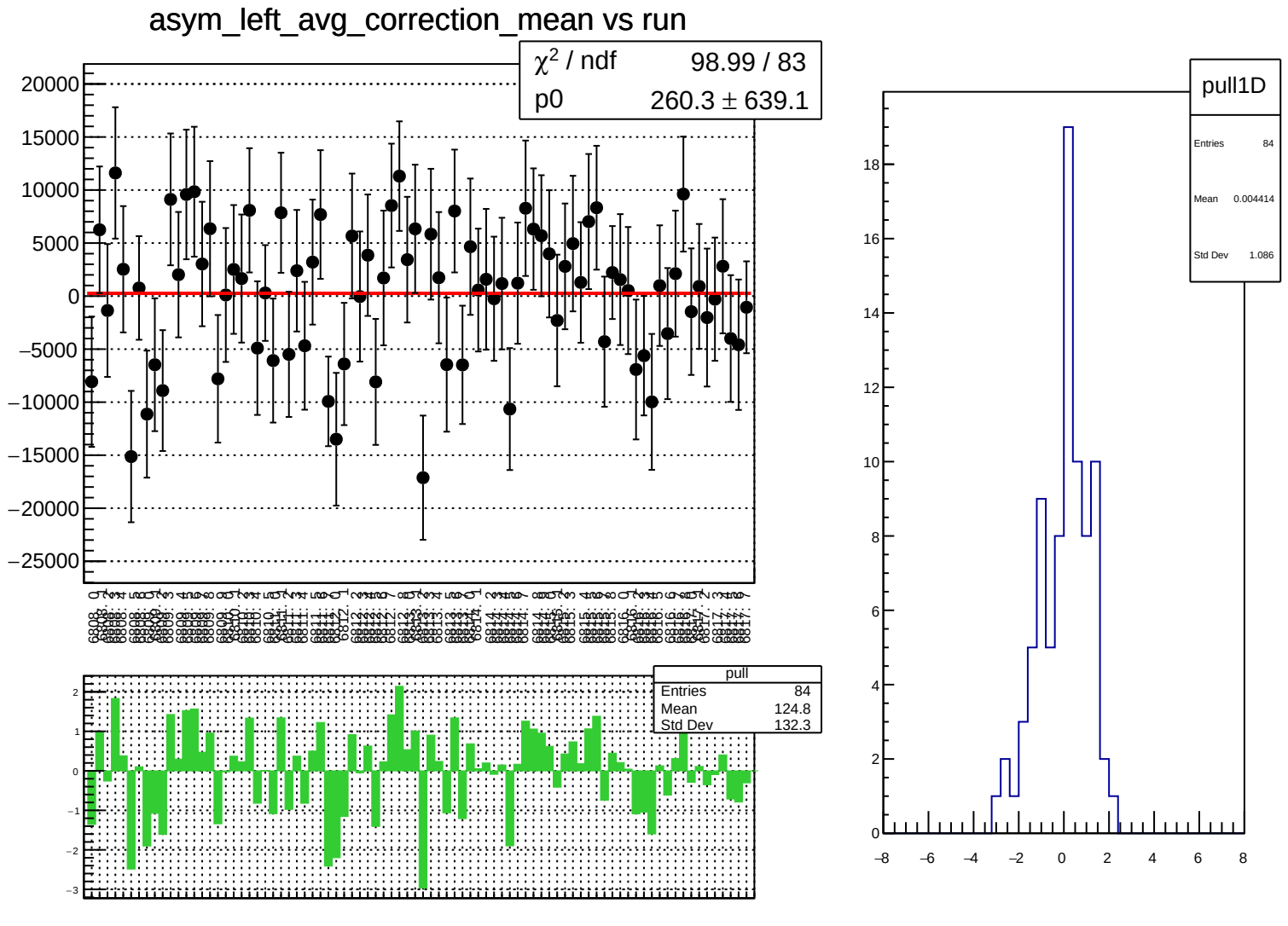

pull1D
Entries 84
Mean 0.007076
Std Dev 0.8937
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

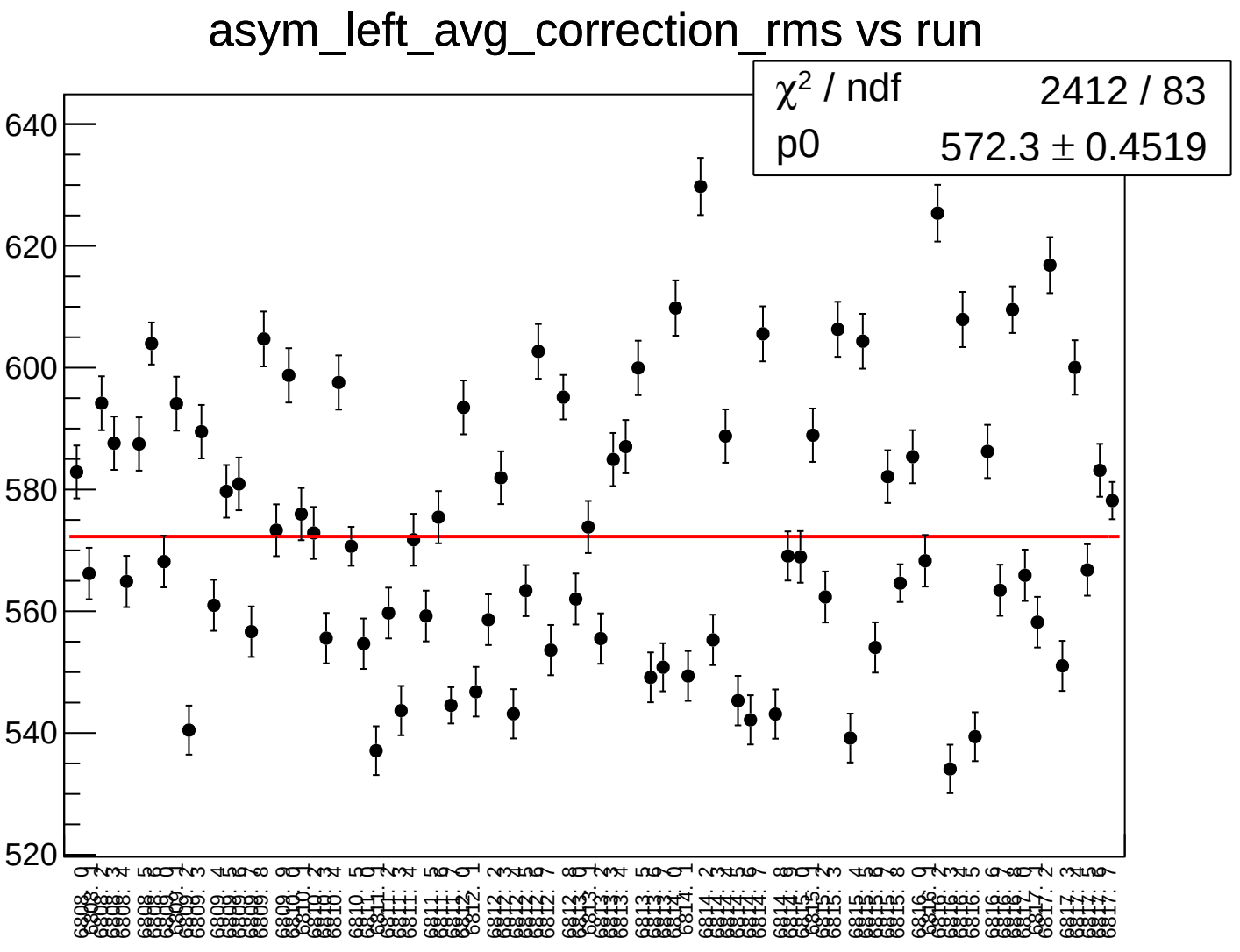

asym_dsr_rms vs run
χ² / ndf 273.5 / 83
p0 137.5 ± 0.1085
142
140
138
136
134

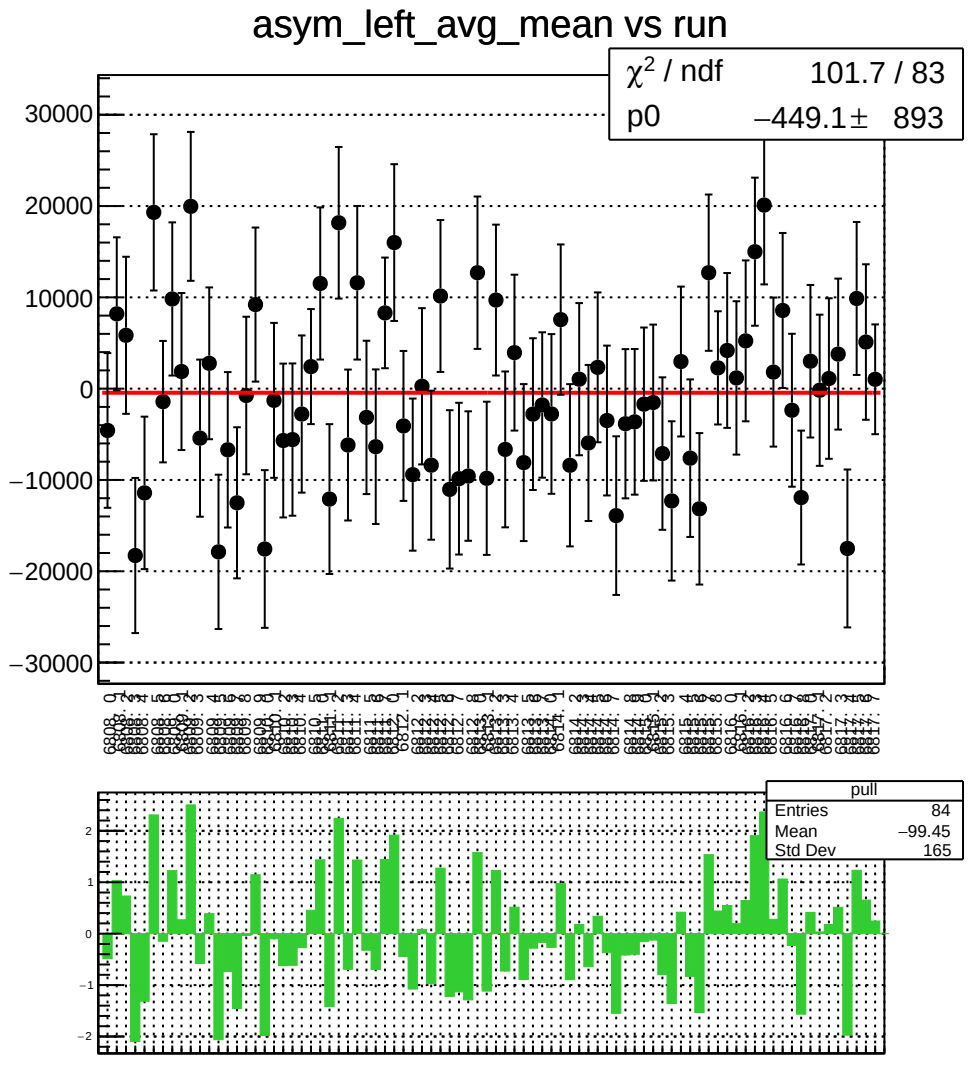

reg_asym_left_avg_mean vs run
χ² / ndf 102.8 / 83
p0 −225.4 ± 622.8
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −385.5
Std Dev 436.7
3
2
1
0
−1
−2
−3

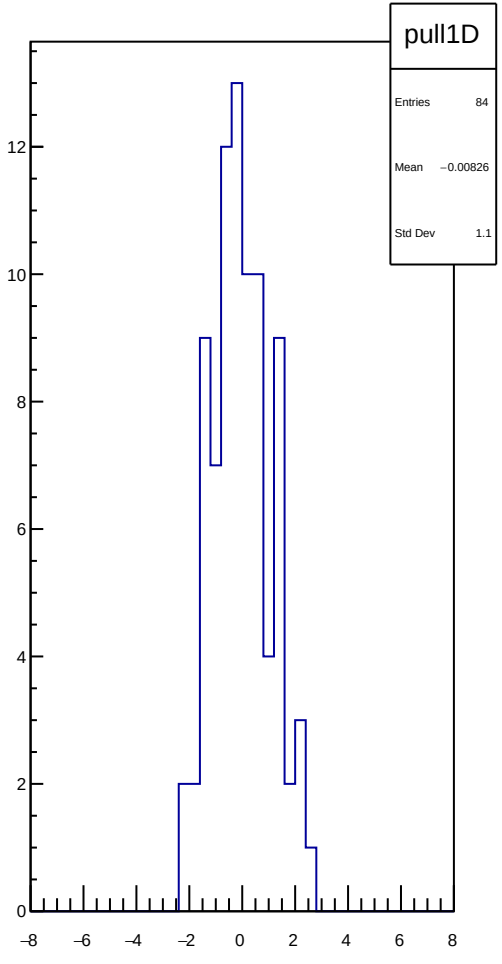

pull1D
Entries 84
Mean −0.00475
Std Dev 1.106
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

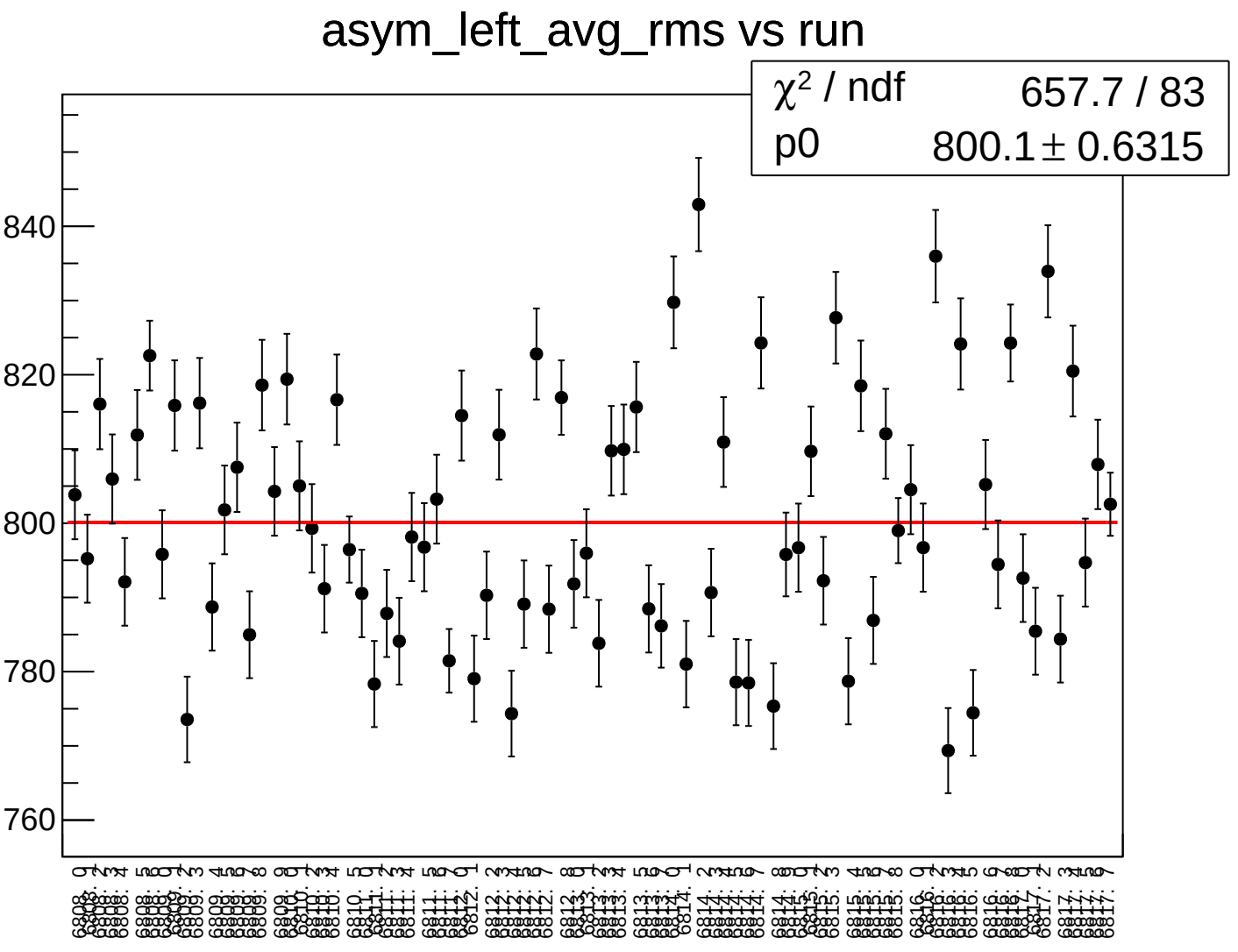

reg_asym_left_avg_rms vs run
χ² / ndf 82.28 / 83
p0 558.1 ± 0.4404
570
565
560
555
550

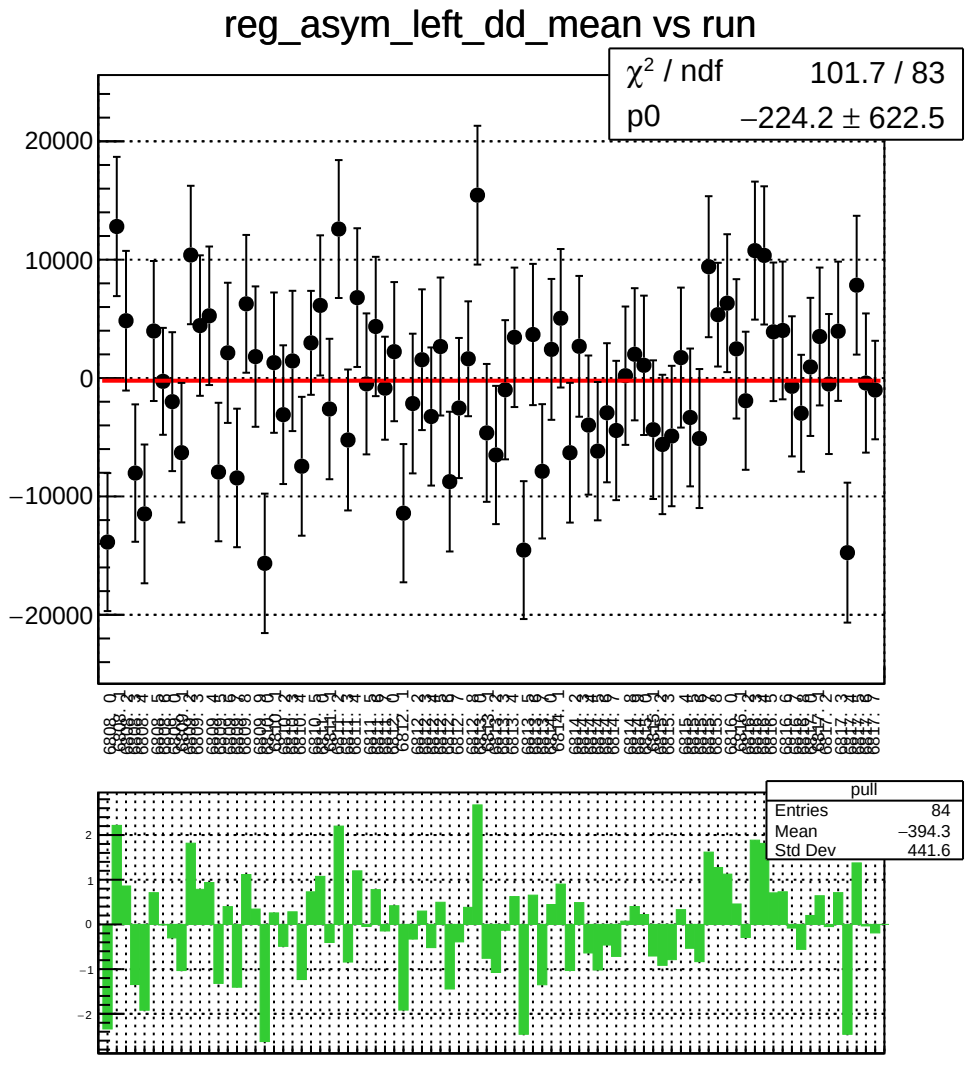

asym_left_avg_correction_mean vs run
χ² / ndf 98.99 / 83
p0 260.3 ± 639.1
pull
Entries 84
Mean 124.8
Std Dev 132.3
pull1D
Entries 84
Mean 0.004414
Std Dev 1.086

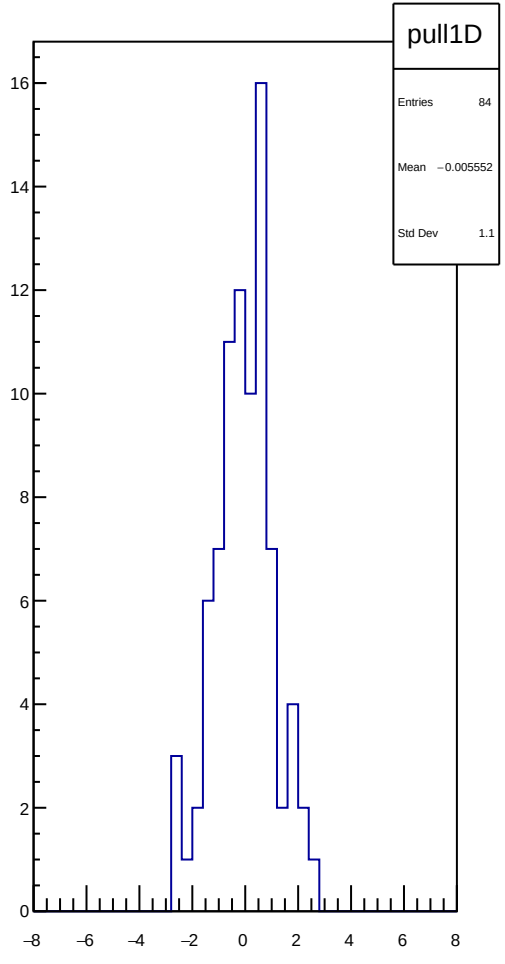

asym_left_avg_correction_rms vs run
χ^2 / ndf 2412 / 83
p0 572.3 ± 0.4519
640
620
600
580
560
540
520

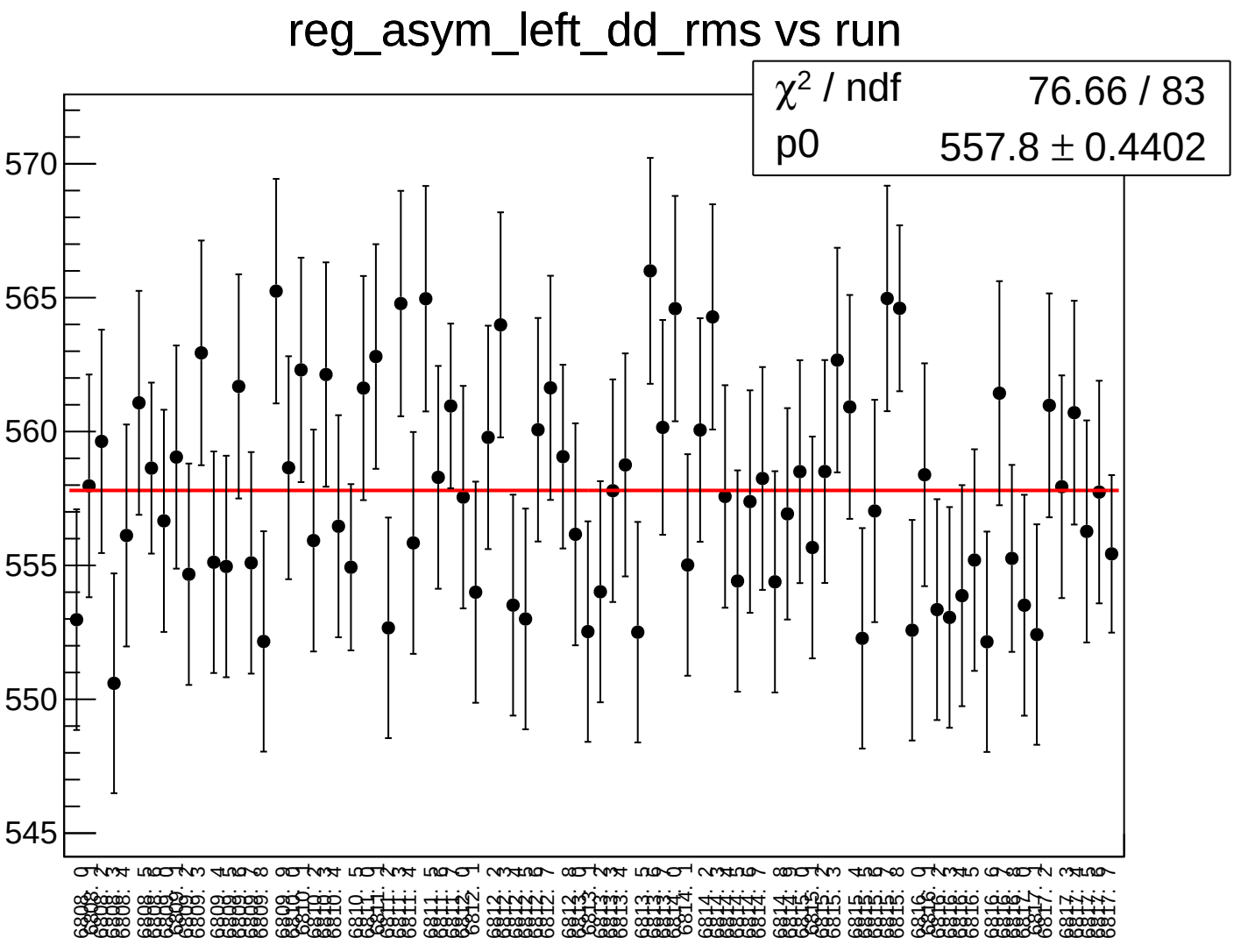

asym_left_avg_mean vs run
χ² / ndf 101.7 / 83
p0 −449.1± 893
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −99.45
Std Dev 165
2
1
0
−1
−2

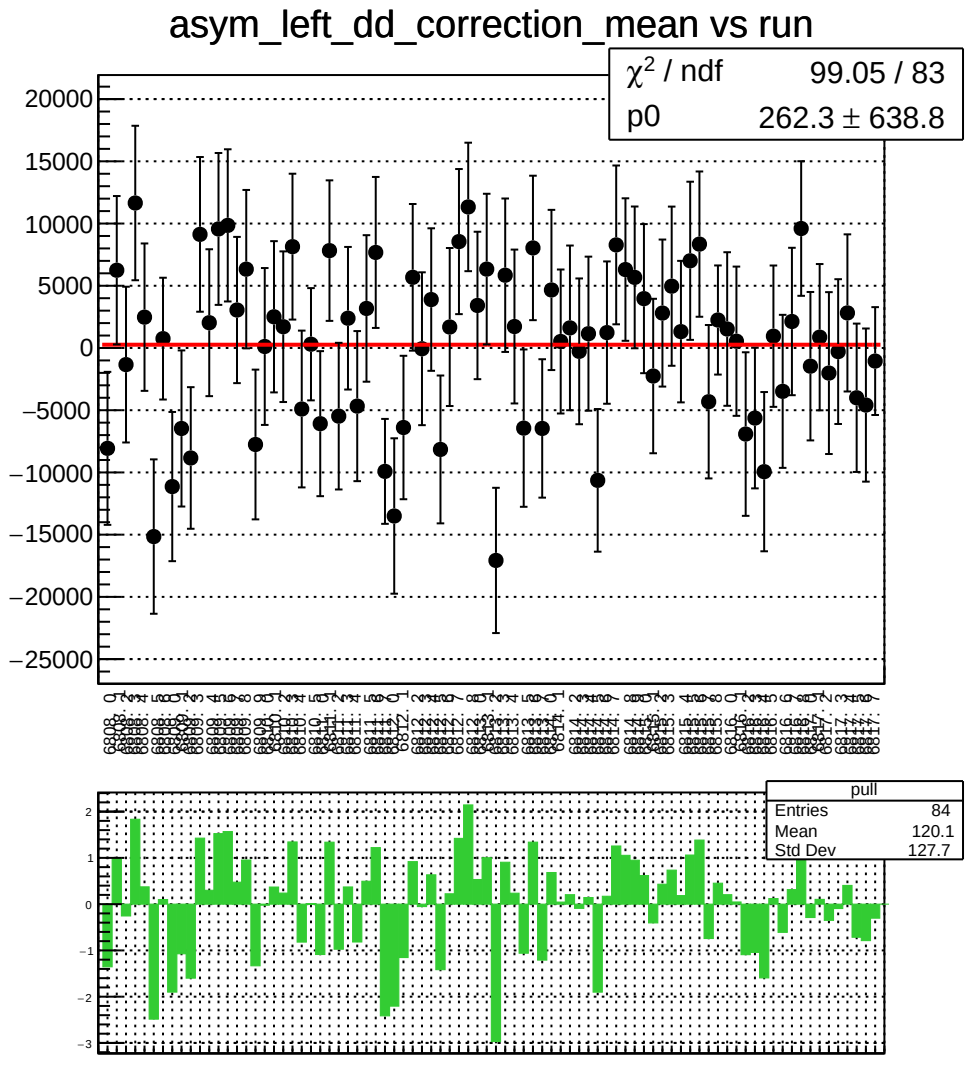

pull1D
Entries 84
Mean −0.00826
Std Dev 1.1
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

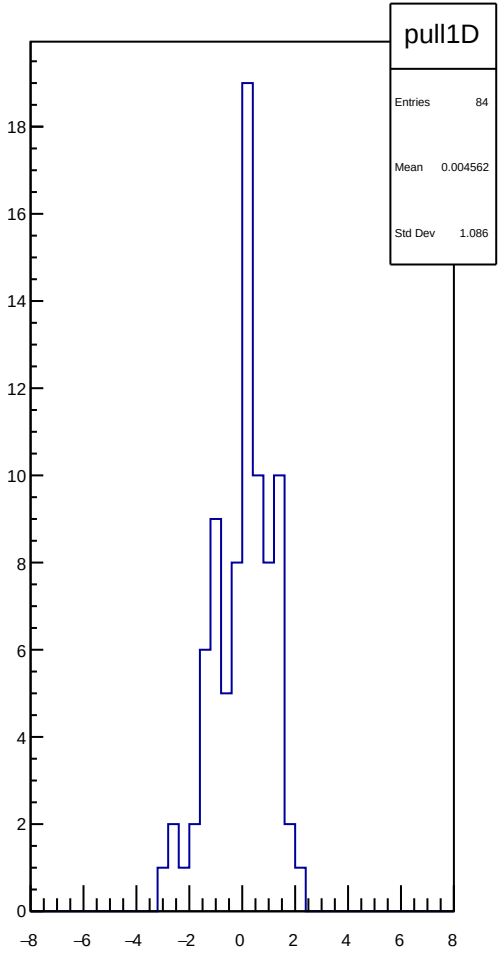

asym_left_avg_rms vs run
χ² / ndf 657.7 / 83
p0 800.1 ± 0.6315
840
820
800
780
760

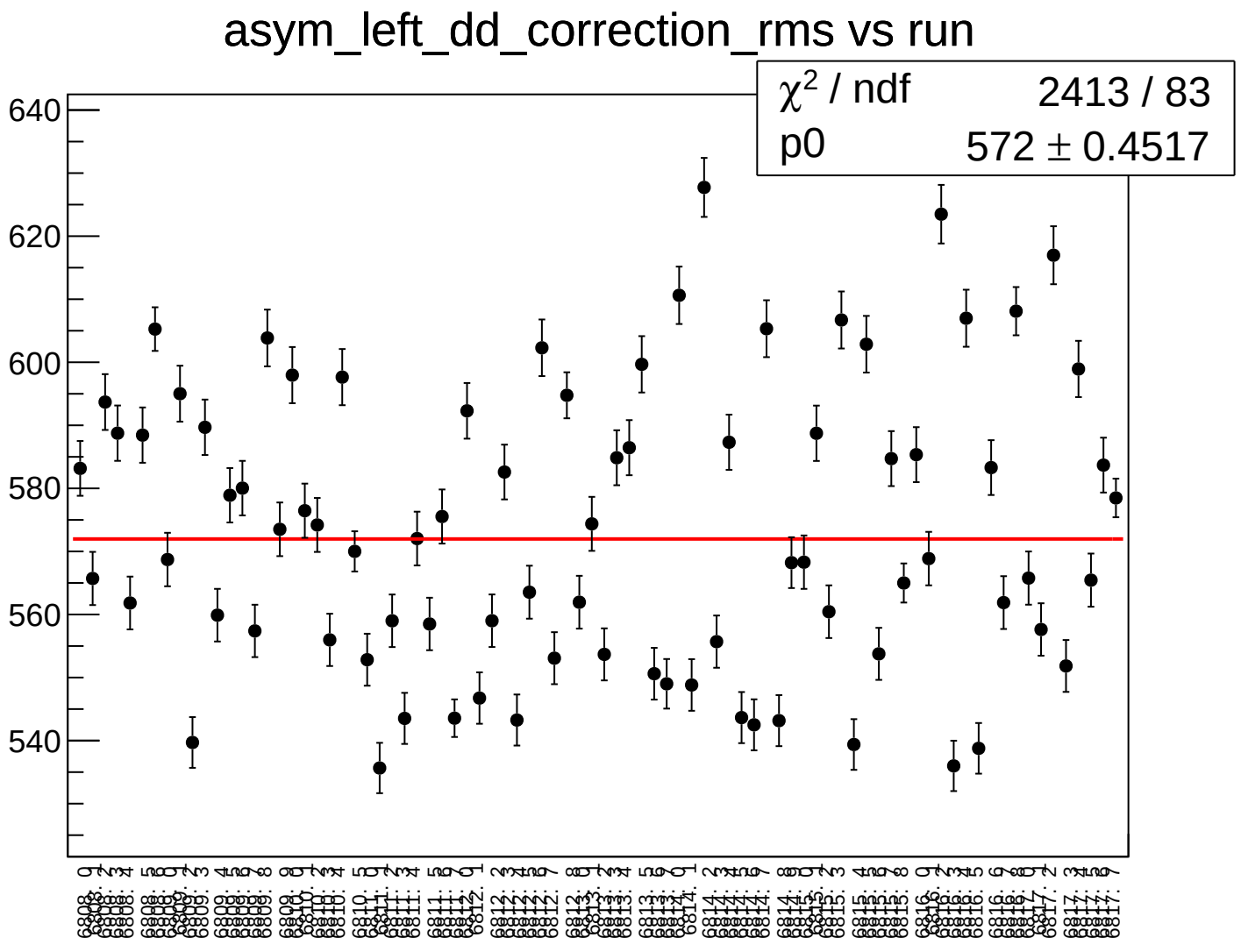

reg_asym_left_dd_mean vs run
χ² / ndf 101.7 / 83
p0 −224.2 ± 622.5
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −394.3
Std Dev 441.6
2
1
0
−1
−2

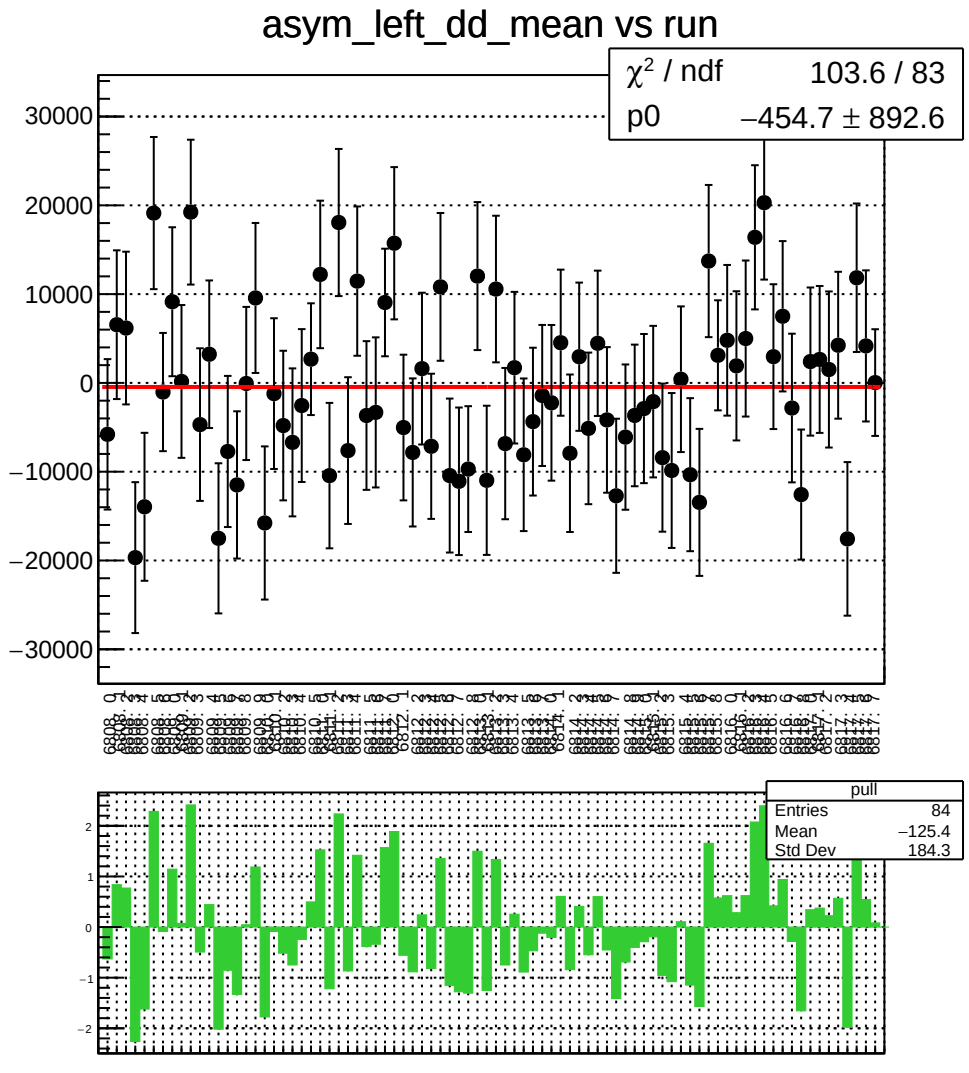

pull1D
Entries 84
Mean −0.005552
Std Dev 1.1
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

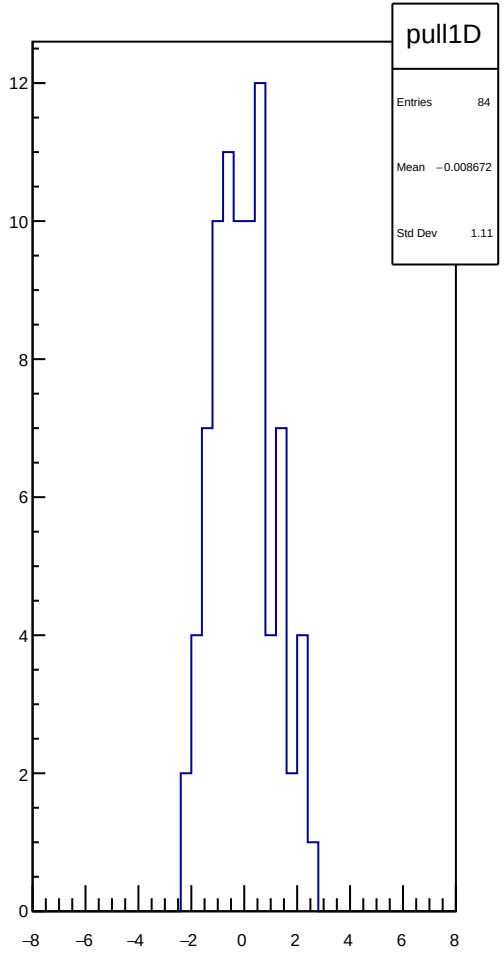

reg_asym_left_dd_rms vs run
χ² / ndf 76.66 / 83
p0 557.8 ± 0.4402
570
565
560
555
550
545

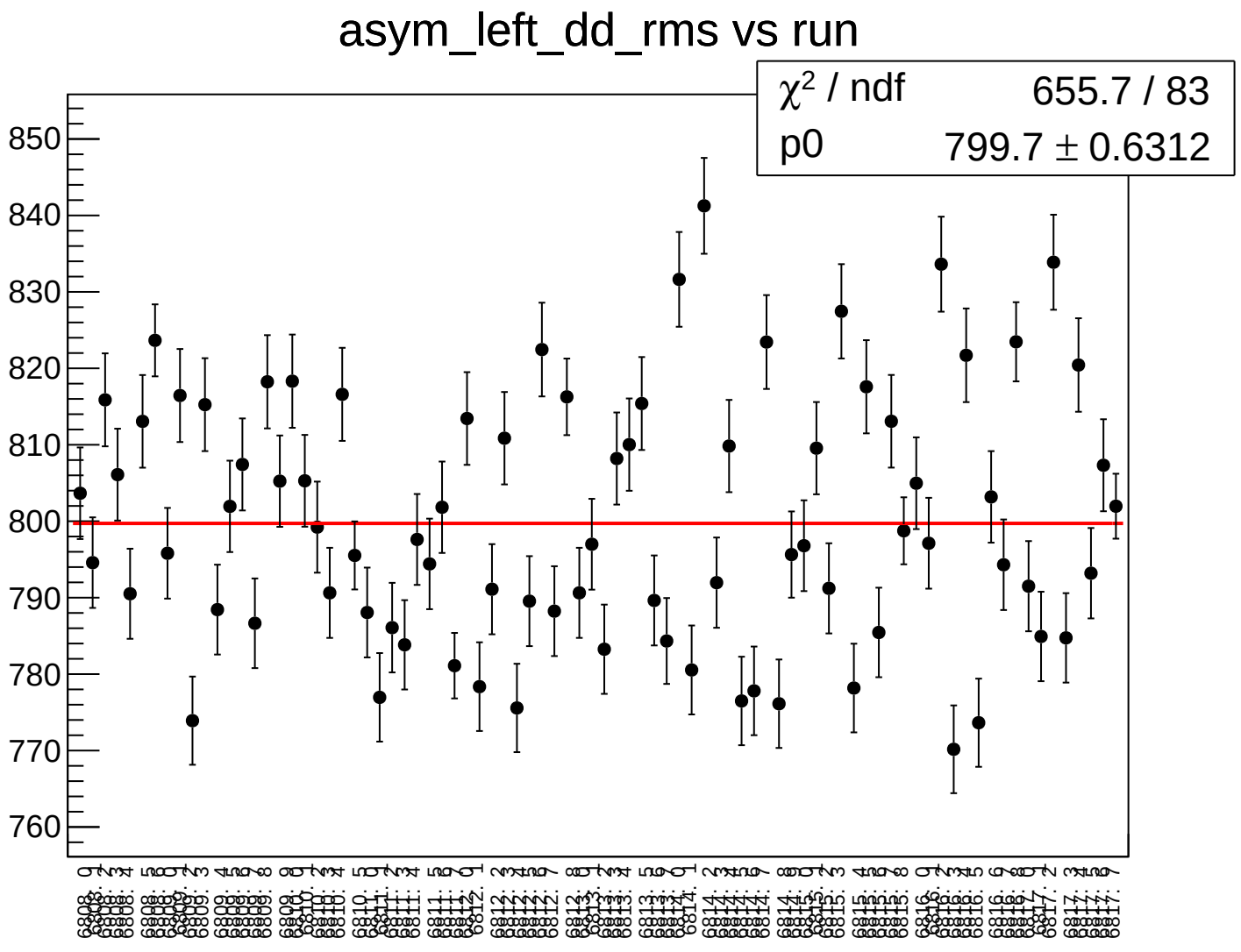

asym_left_dd_correction_mean vs run
χ² / ndf 99.05 / 83
p0 262.3 ± 638.8
pull
Entries 84
Mean 120.1
Std Dev 127.7

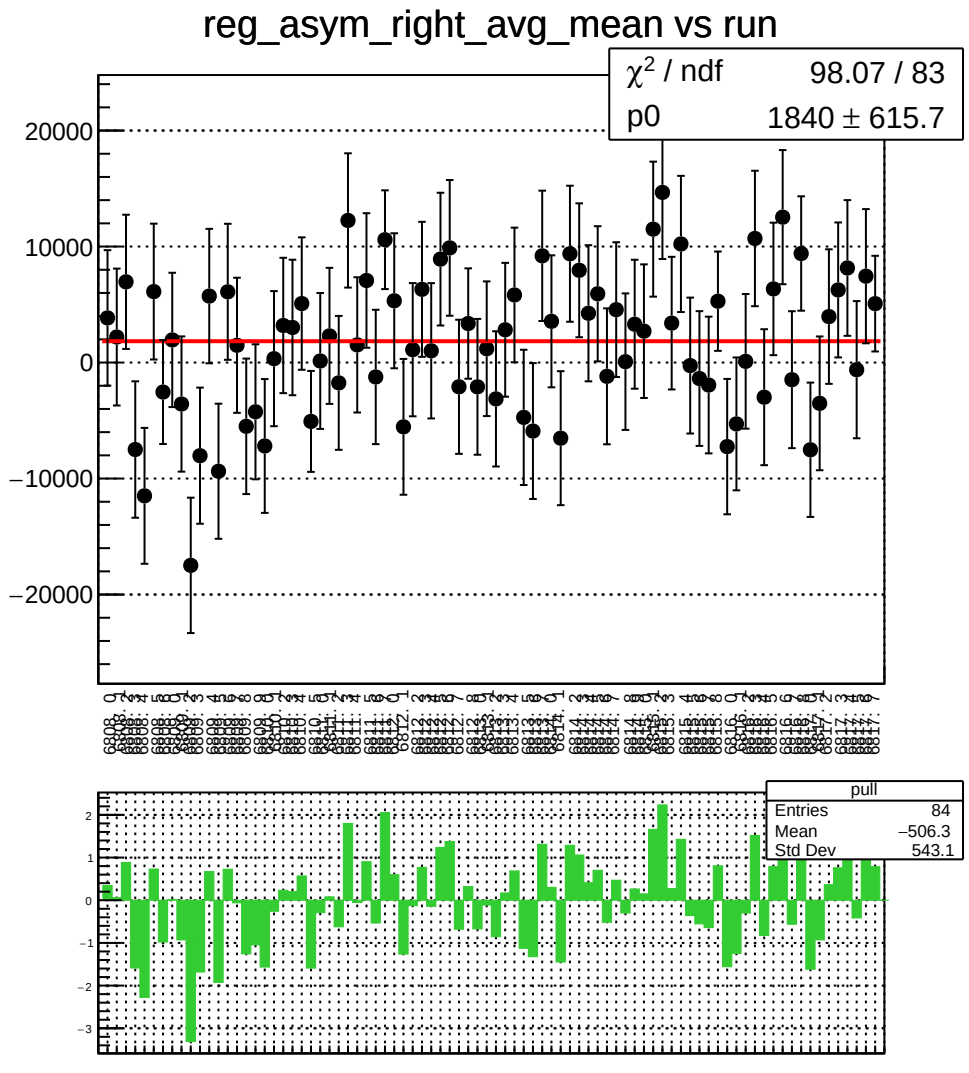

pull1D
Entries 84
Mean 0.004562
Std Dev 1.086

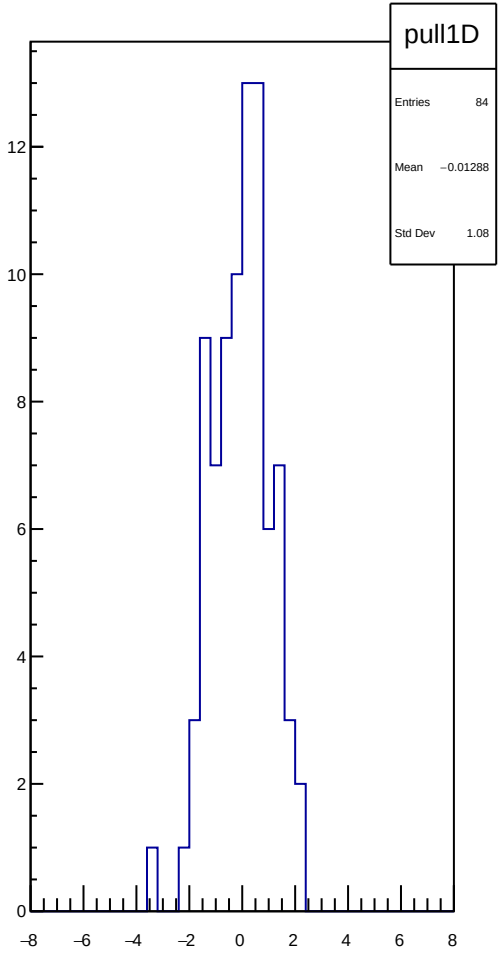

asym_left_dd_correction_rms vs run
χ^2 / ndf 2413 / 83
p0 572 ± 0.4517
640
620
600
580
560
540

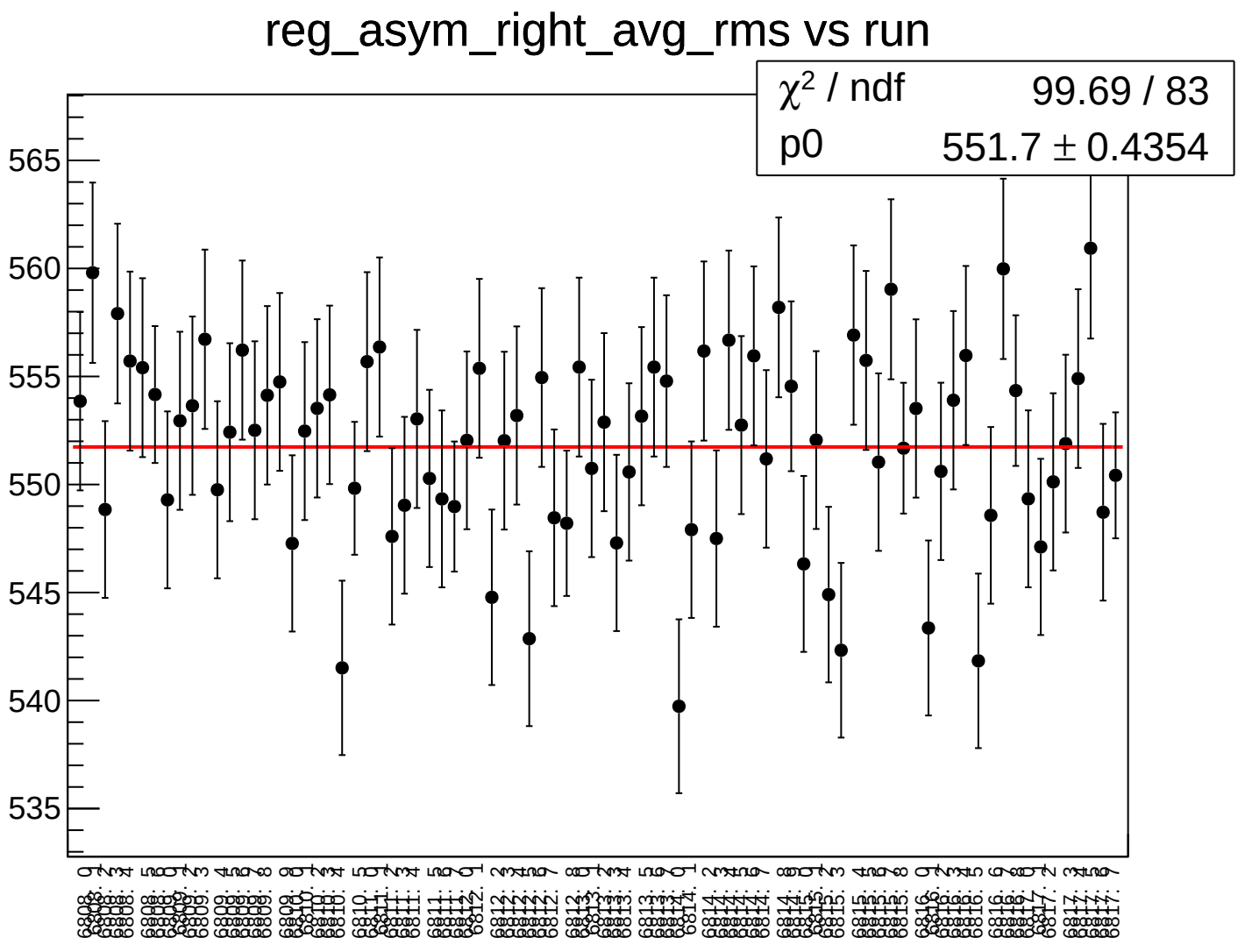

asym_left_dd_mean vs run
χ² / ndf 103.6 / 83
p0 −454.7 ± 892.6
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −125.4
Std Dev 184.3
2
1
0
−1
−2

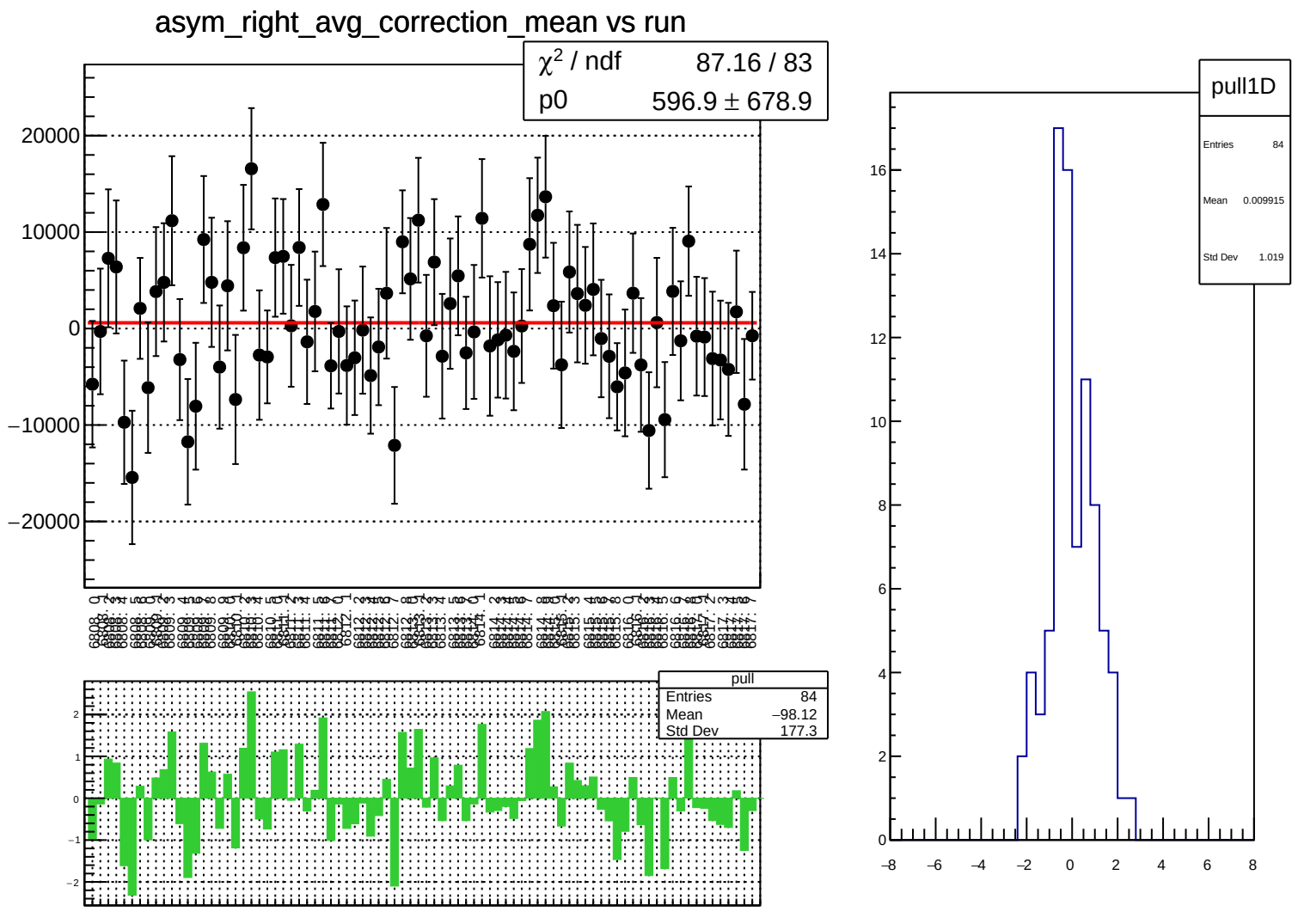

pull1D
Entries 84
Mean −0.008672
Std Dev 1.11
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

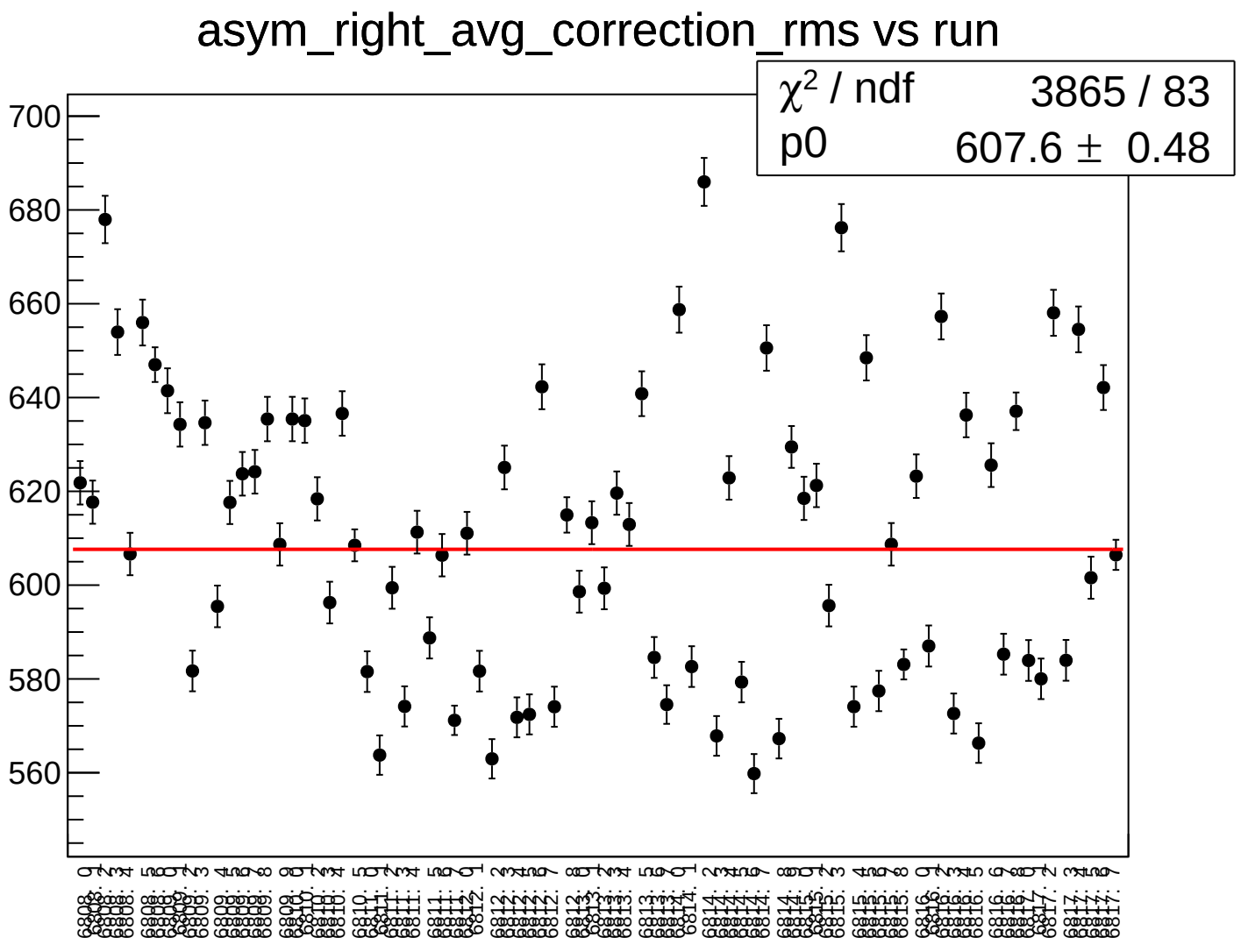

asym_left_dd_rms vs run
χ² / ndf 655.7 / 83
p0 799.7 ± 0.6312
850
840
830
820
810
800
790
780
770
760

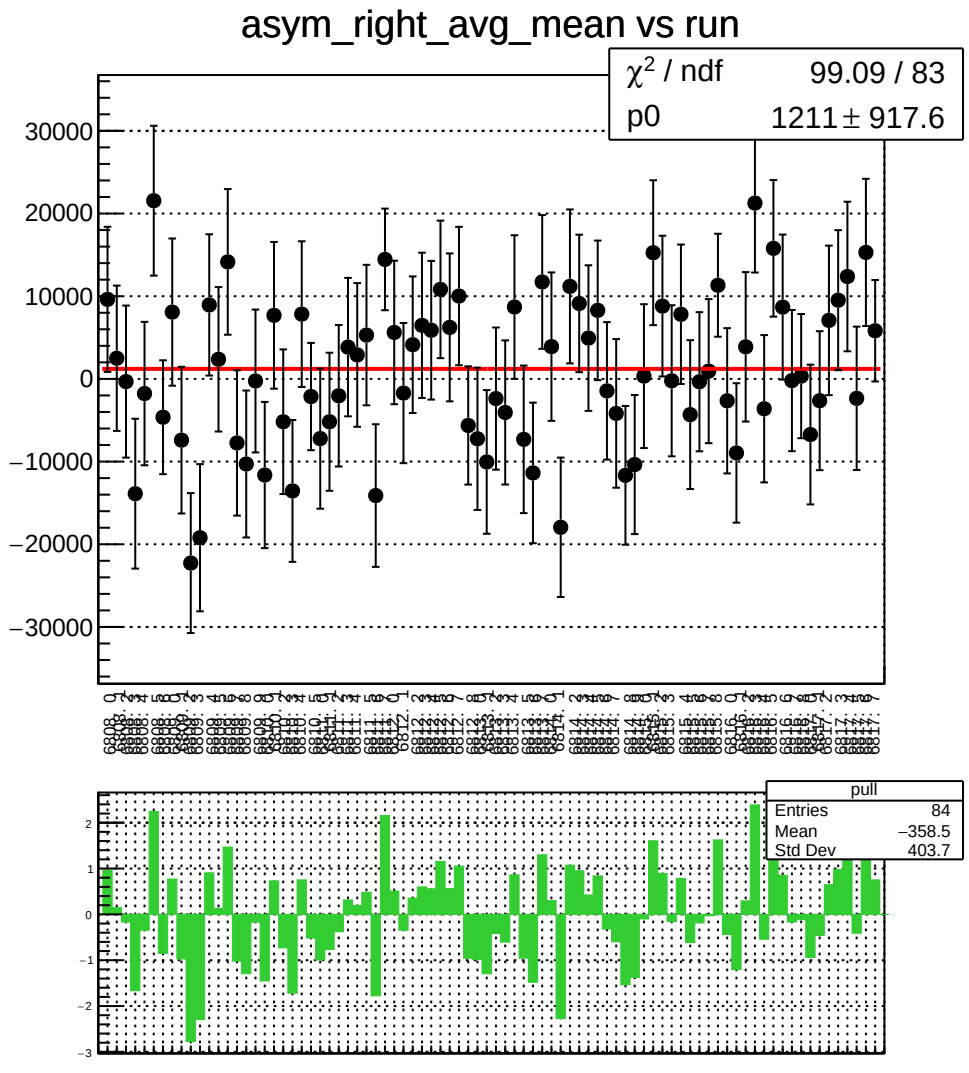

reg_asym_right_avg_mean vs run
χ² / ndf 98.07 / 83
p0 1840 ± 615.7
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −506.3
Std Dev 543.1
2
1
0
−1
−2
−3

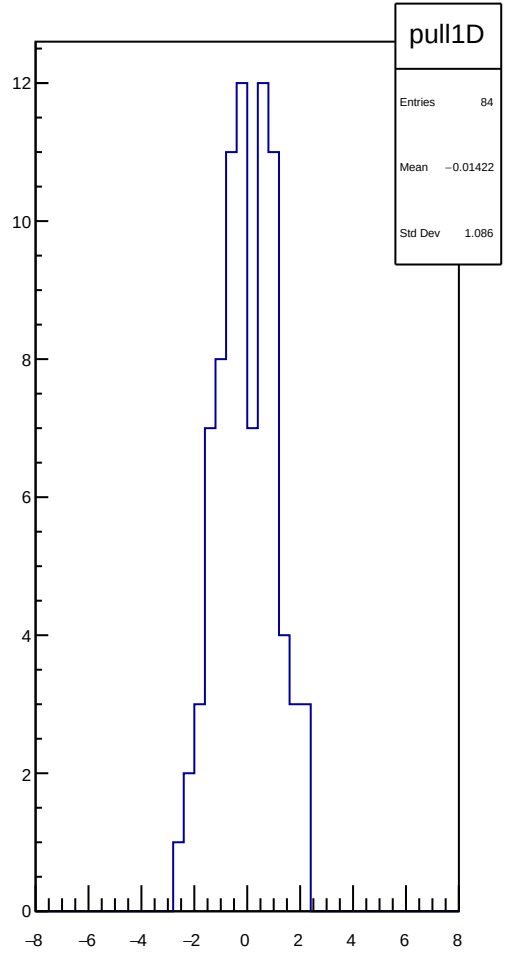

pull1D
Entries 84
Mean −0.01288
Std Dev 1.08
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

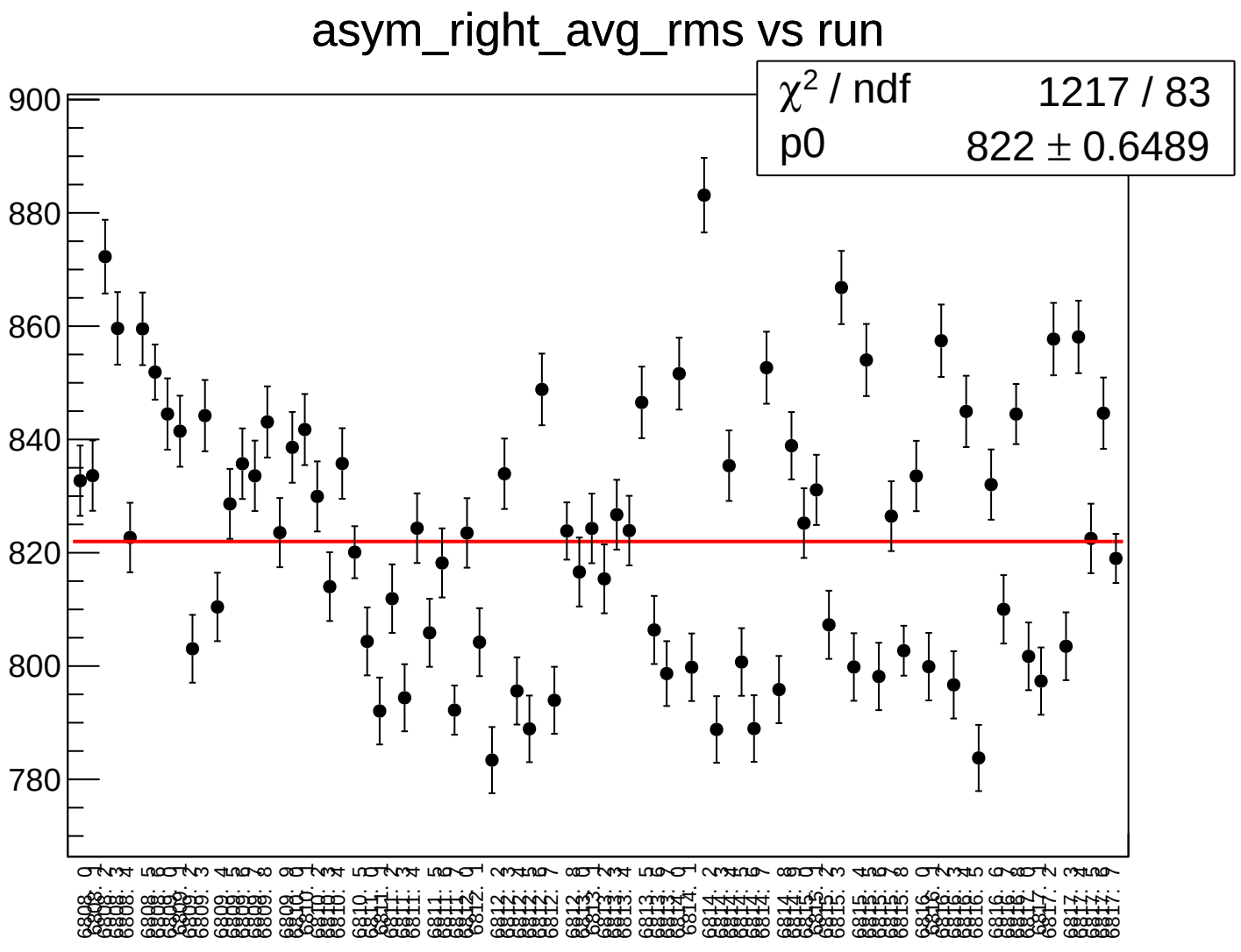

reg_asym_right_avg_rms vs run
χ^2 / ndf 99.69 / 83
p0 551.7 ± 0.4354
565
560
555
550
545
540
535

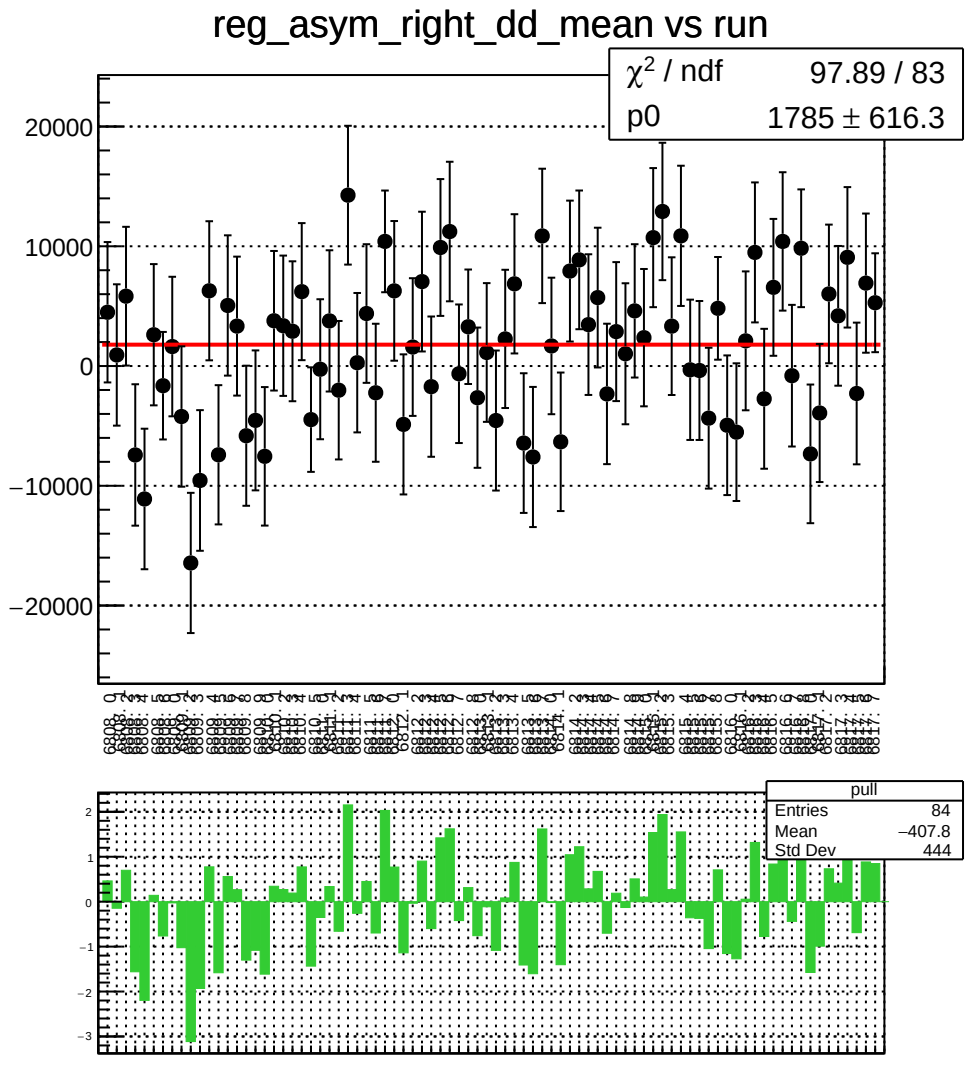

asym_right_avg_correction_mean vs run
χ² / ndf 87.16 / 83
p0 596.9 ± 678.9
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −98.12
Std Dev 177.3
2
1
0
−1
−2
pull1D
Entries 84
Mean 0.009915
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

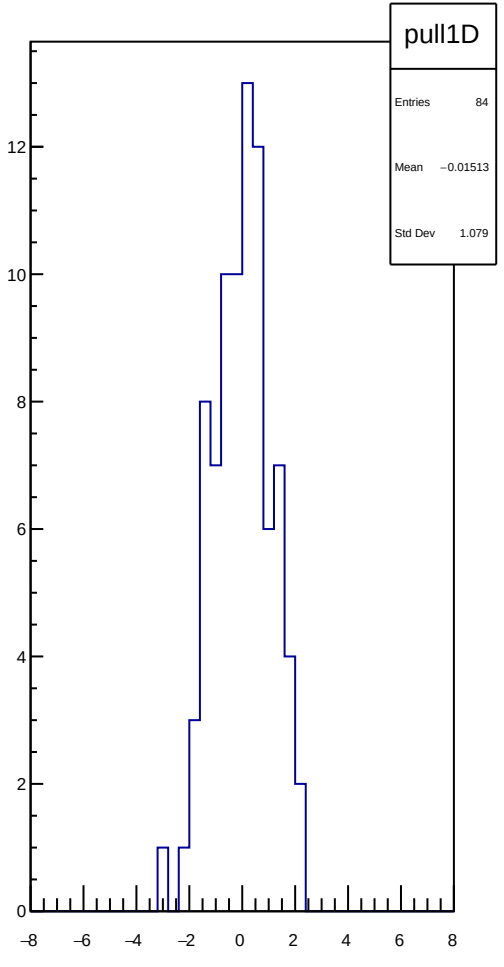

asym_right_avg_correction_rms vs run
χ² / ndf 3865 / 83
p0 607.6 ± 0.48
700
680
660
640
620
600
580
560

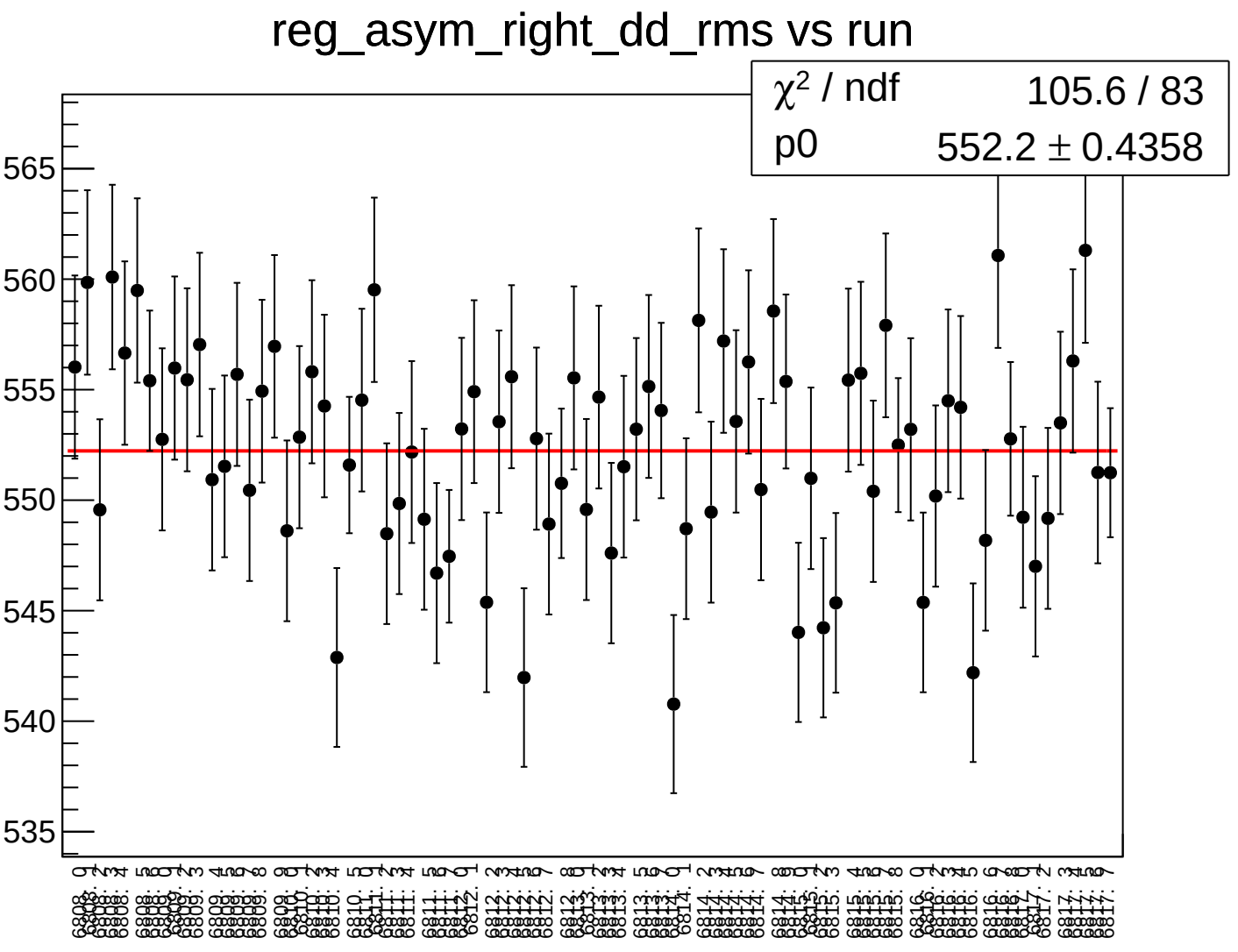

asym_right_avg_mean vs run
χ² / ndf 99.09 / 83
p0 1211 ± 917.6
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −358.5
Std Dev 403.7
2
1
0
−1
−2
−3

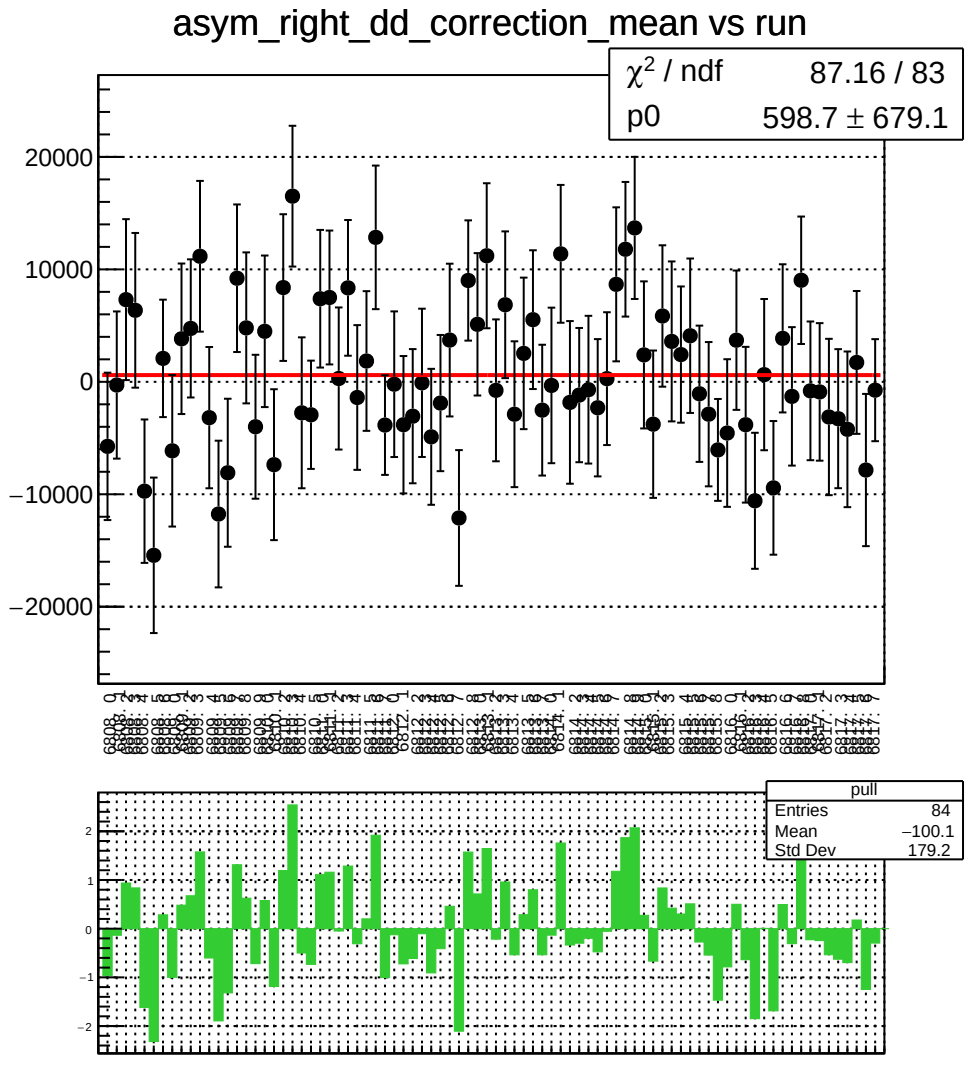

pull1D
Entries 84
Mean −0.01422
Std Dev 1.086
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

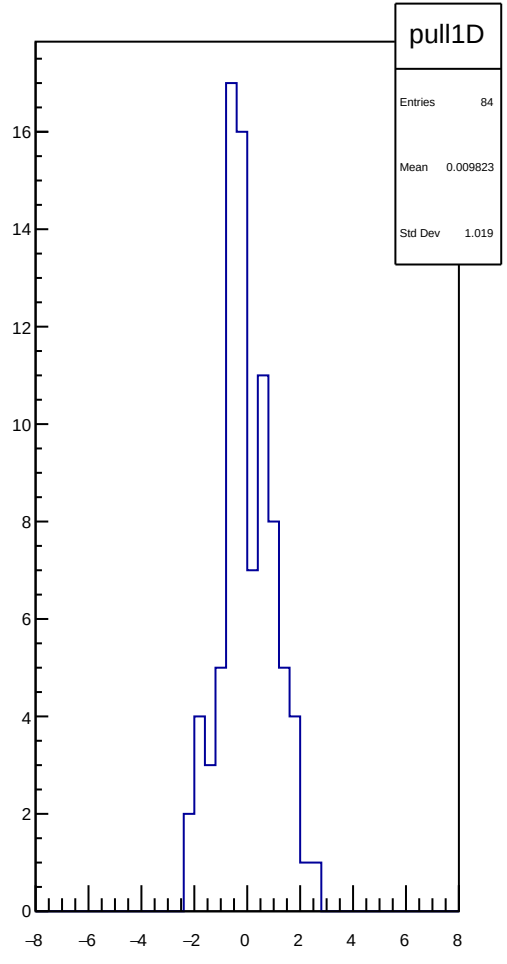

asym_right_avg_rms vs run
χ^2 / ndf 1217 / 83
p0 822 ± 0.6489
900
880
860
840
820
800
780

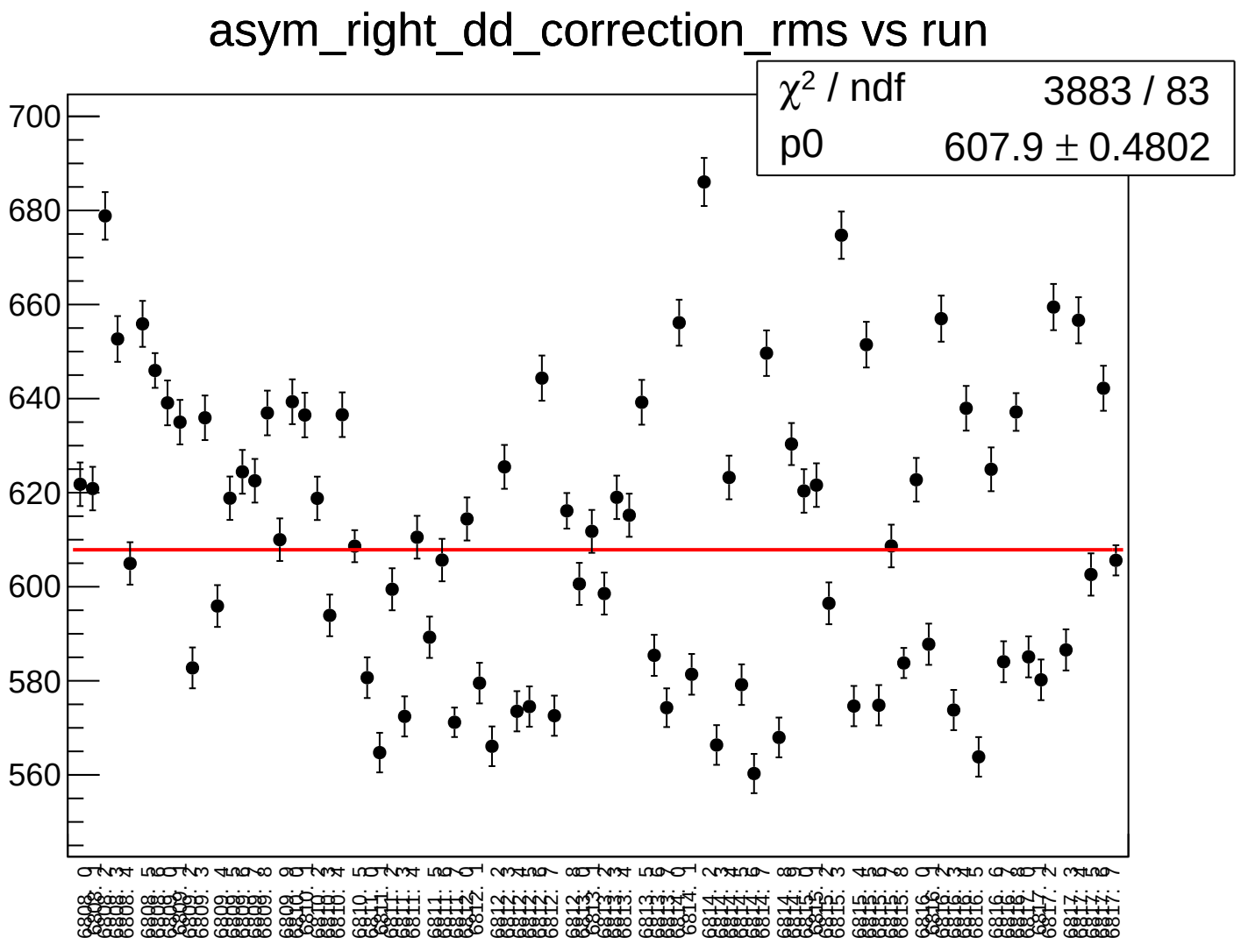

reg_asym_right_dd_mean vs run
χ² / ndf 97.89 / 83
p0 1785 ± 616.3
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −407.8
Std Dev 444
2
1
0
−1
−2
−3

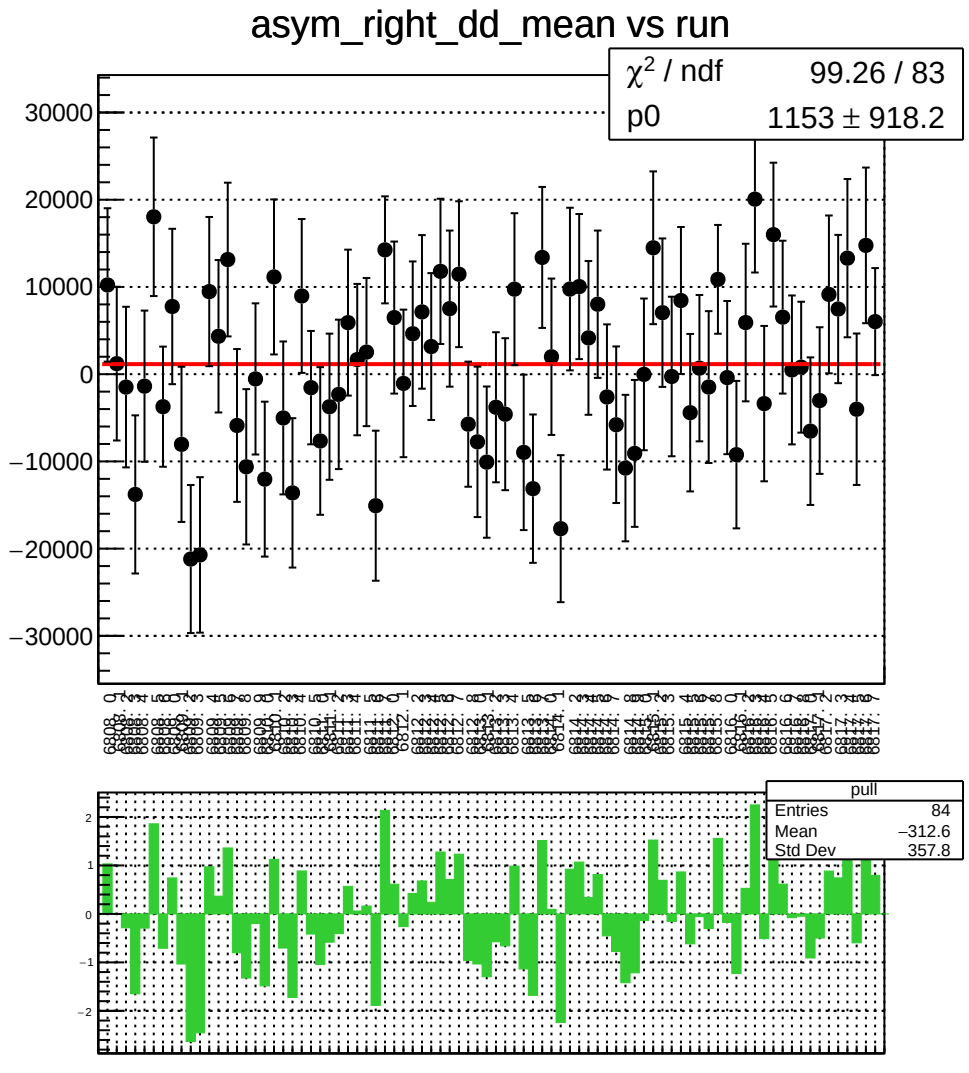

pull1D
Entries 84
Mean −0.01513
Std Dev 1.079
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

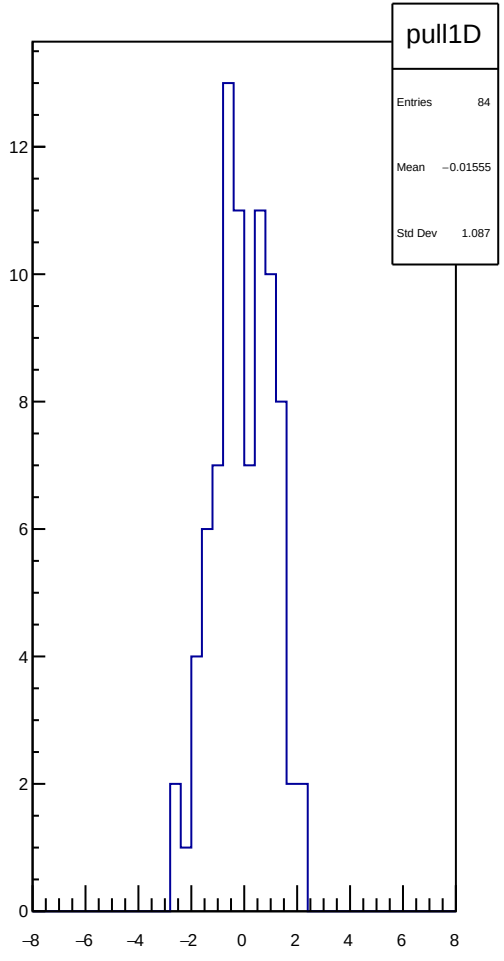

reg_asym_right_dd_rms vs run
χ² / ndf 105.6 / 83
p0 552.2 ± 0.4358
565
560
555
550
545
540
535

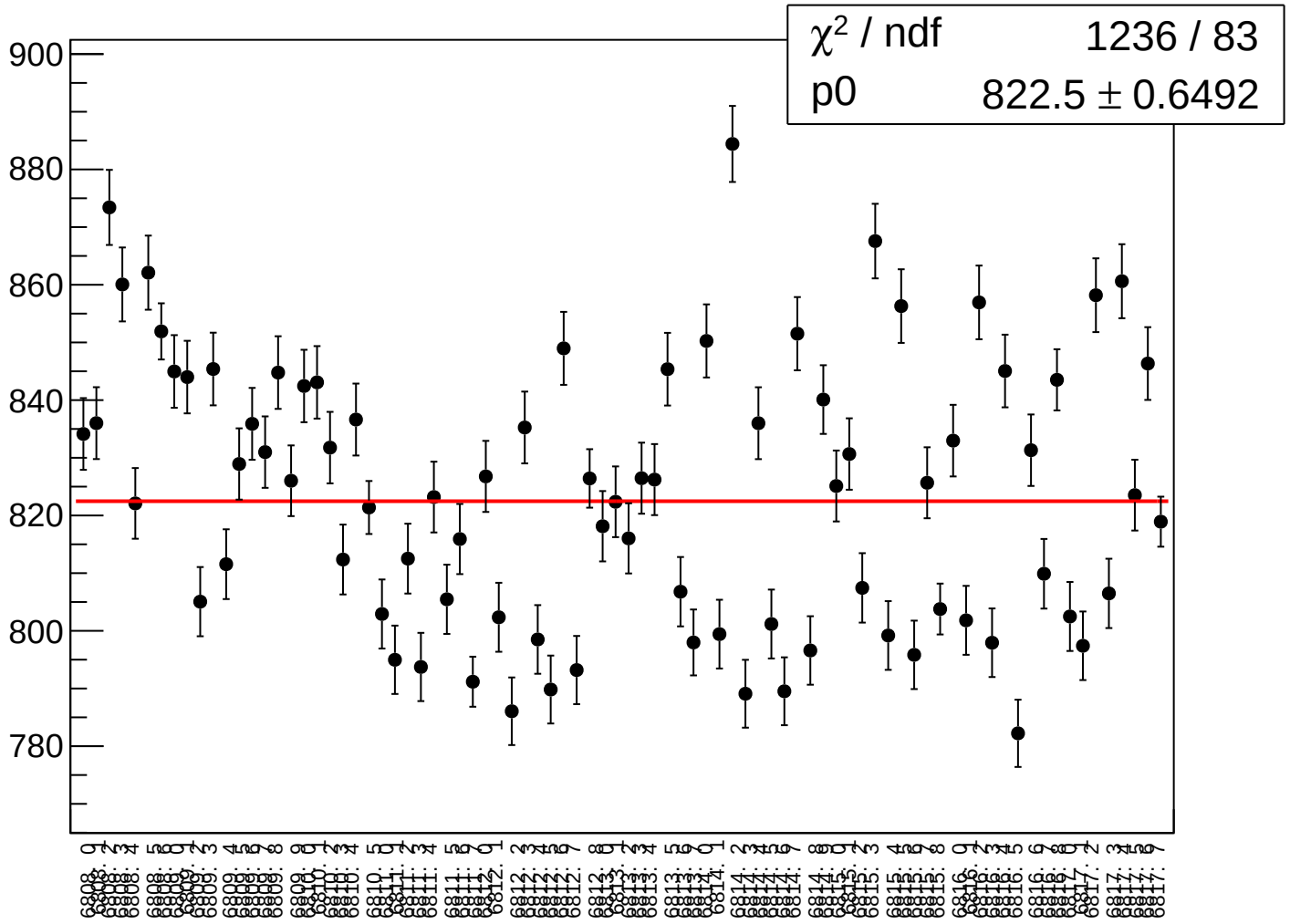

asym_right_dd_correction_mean vs run
χ² / ndf 87.16 / 83
p0 598.7 ± 679.1
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −100.1
Std Dev 179.2
2
1
0
−1
−2

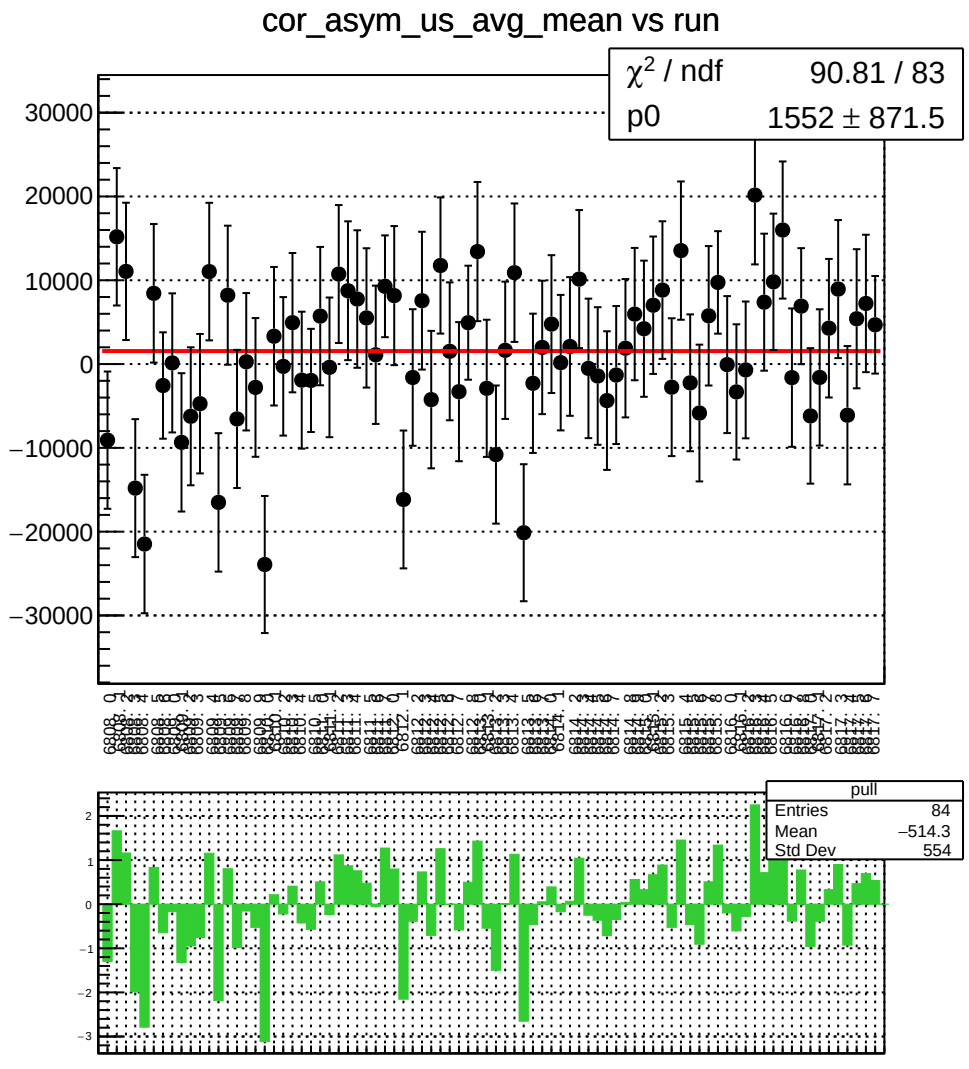

pull1D
Entries 84
Mean 0.009823
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

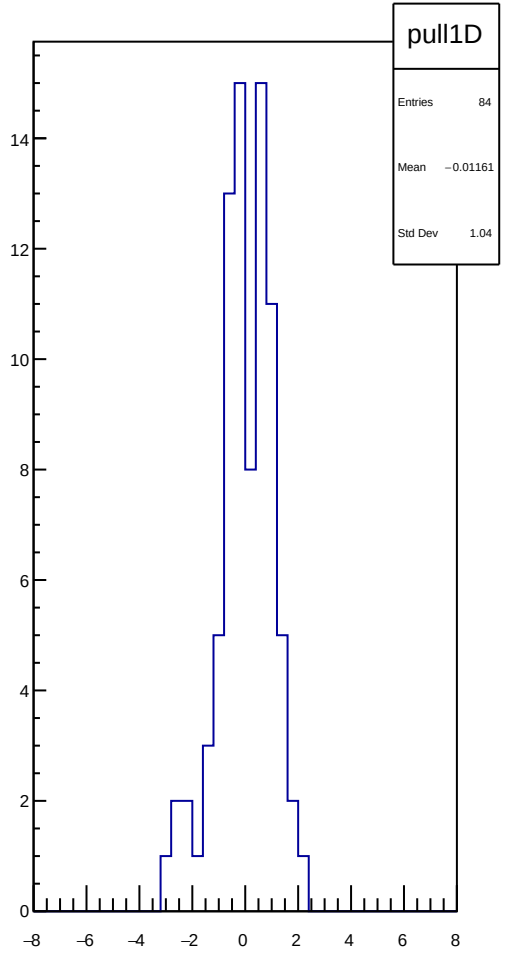

asym_right_dd_correction_rms vs run
χ² / ndf 3883 / 83
p0 607.9 ± 0.4802
700
680
660
640
620
600
580
560

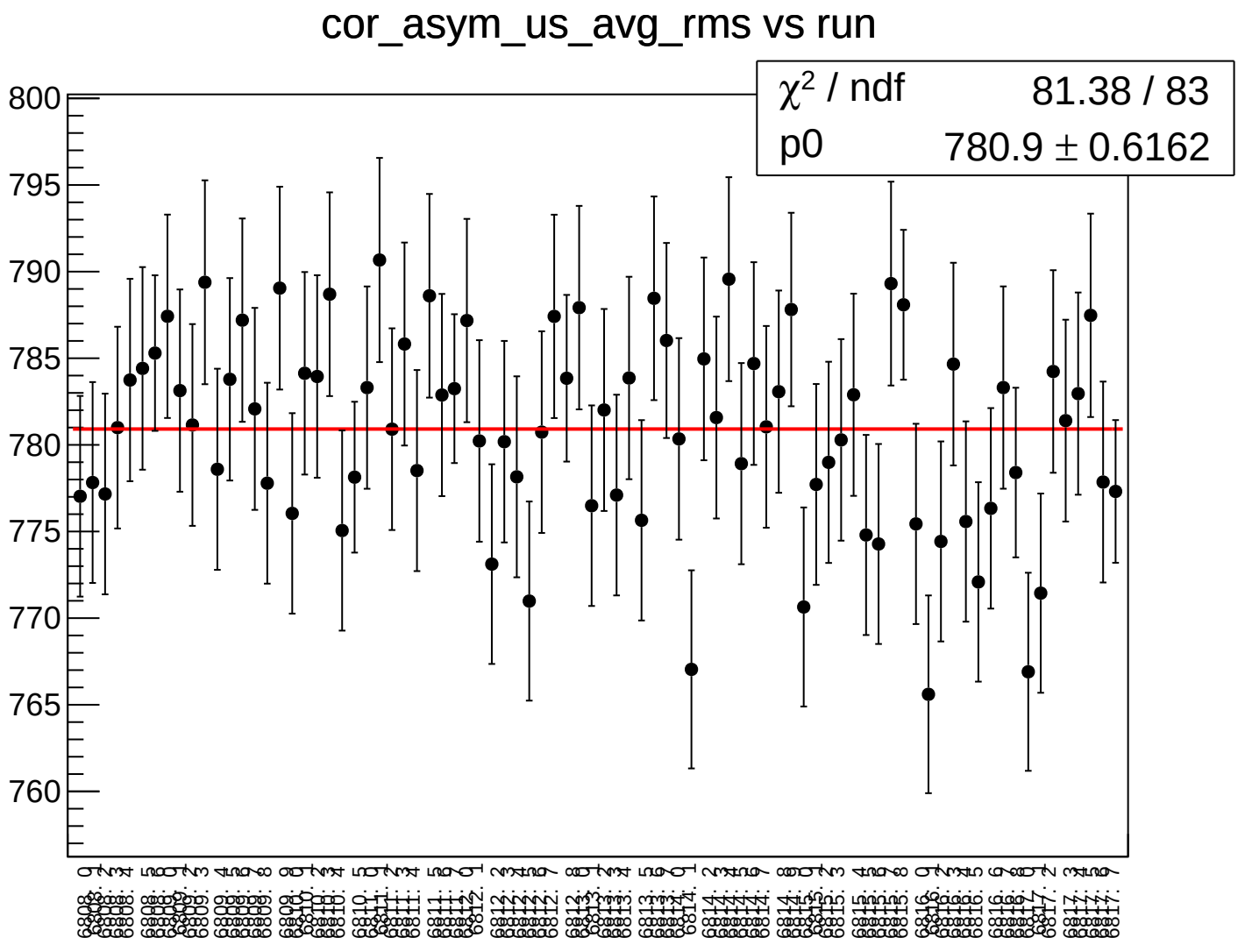

asym_right_dd_mean vs run
χ² / ndf 99.26 / 83
p0 1153 ± 918.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −312.6
Std Dev 357.8
2
1
0
−1
−2

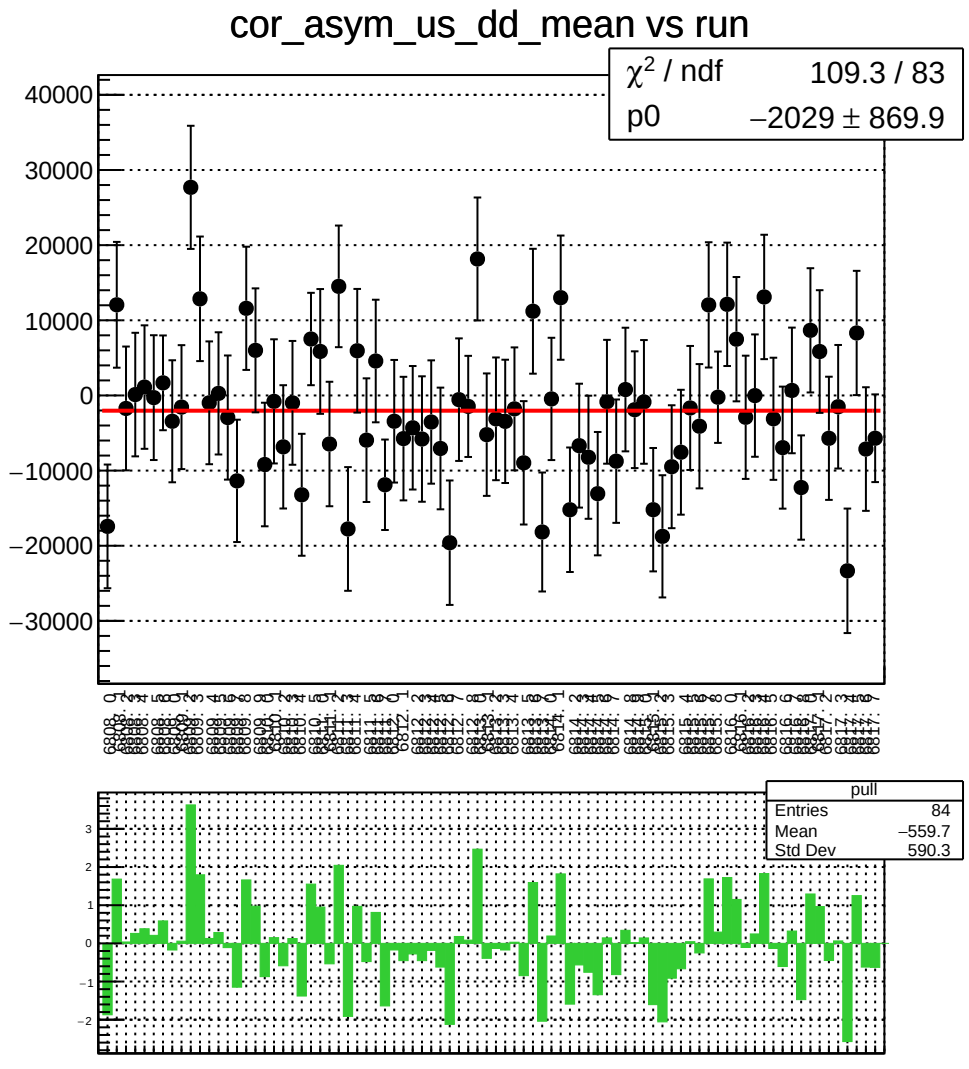

pull1D
Entries 84
Mean −0.01555
Std Dev 1.087
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

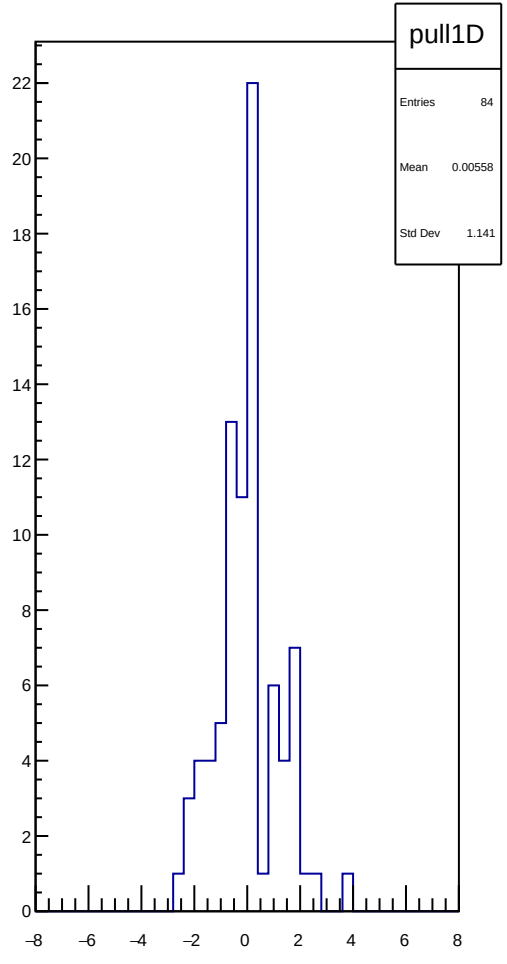

asym_right_dd_rms vs run
χ^2 / ndf 1236 / 83
p0 822.5 ± 0.6492
900
880
860
840
820
800
780

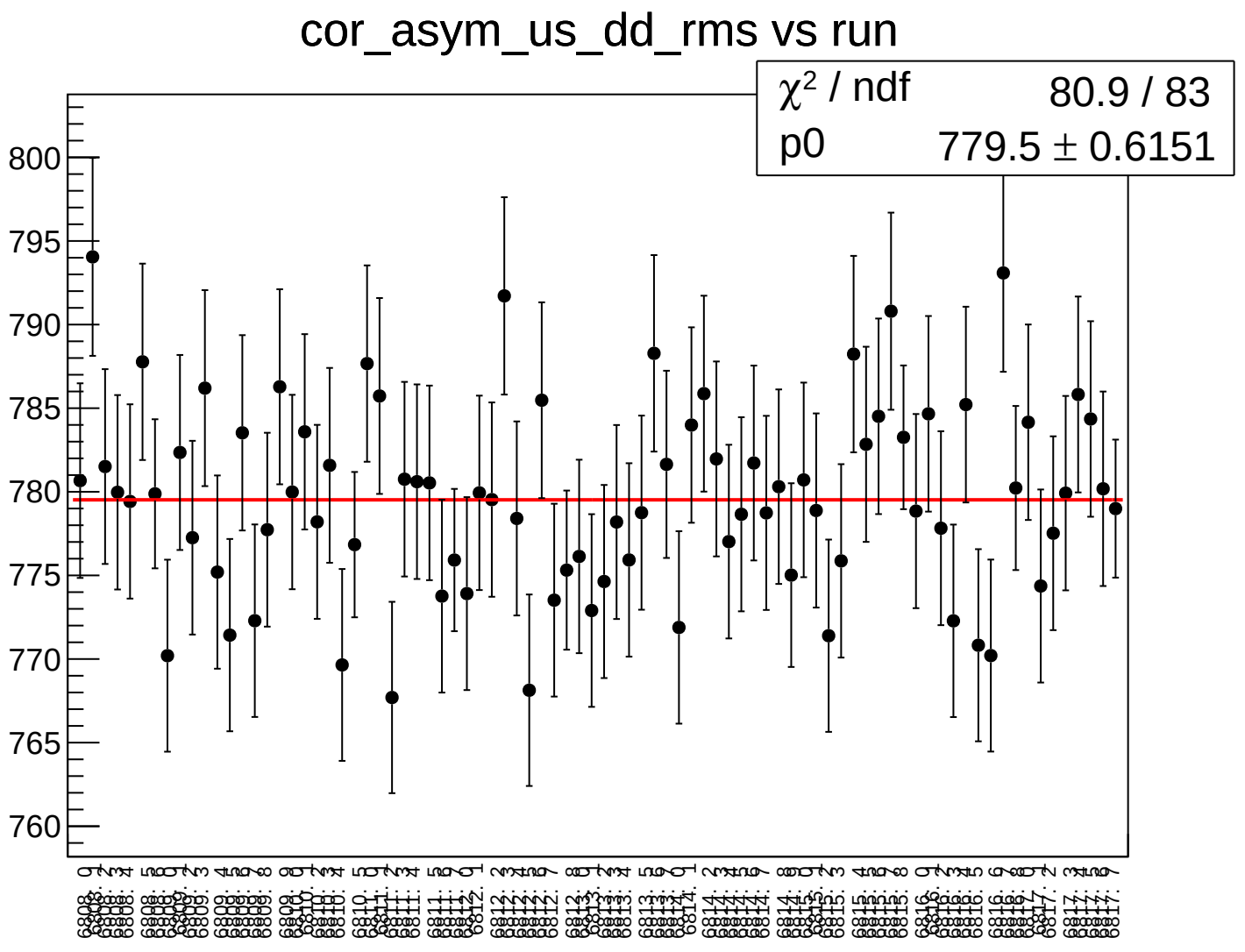

cor_asym_us_avg_mean vs run
χ² / ndf 90.81 / 83
p0 1552 ± 871.5
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −514.3
Std Dev 554
2
1
0
−1
−2
−3

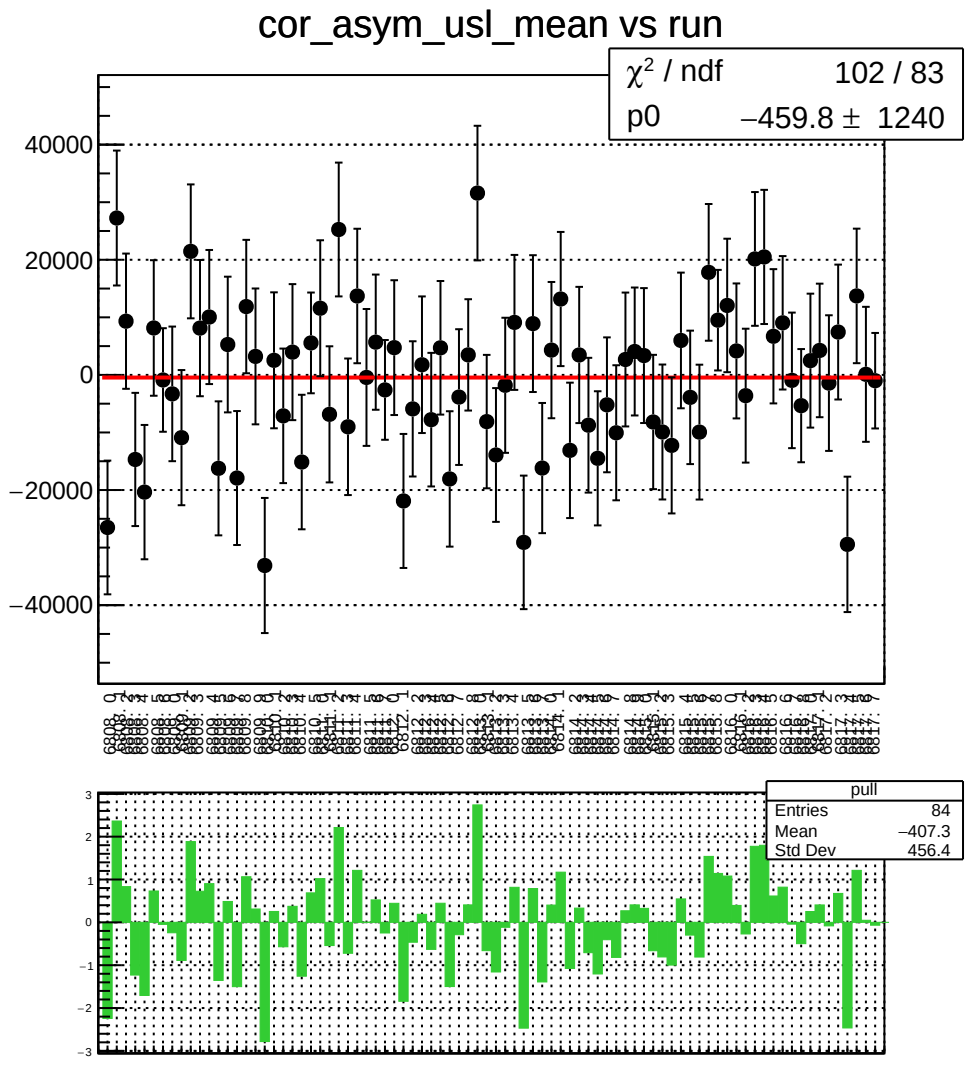

pull1D
Entries 84
Mean −0.01161
Std Dev 1.04
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

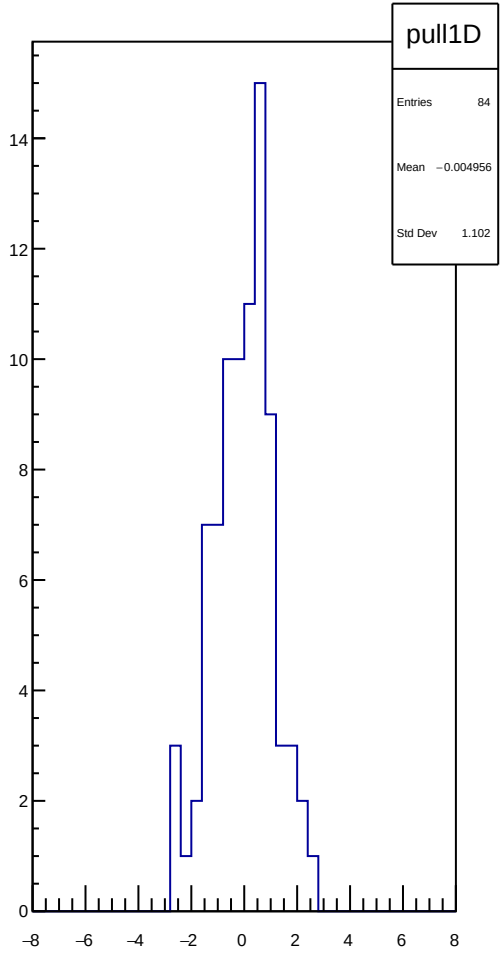

cor_asym_us_avg_rms vs run
χ^2 / ndf 81.38 / 83
p0 780.9 ± 0.6162
800
795
790
785
780
775
770
765
760

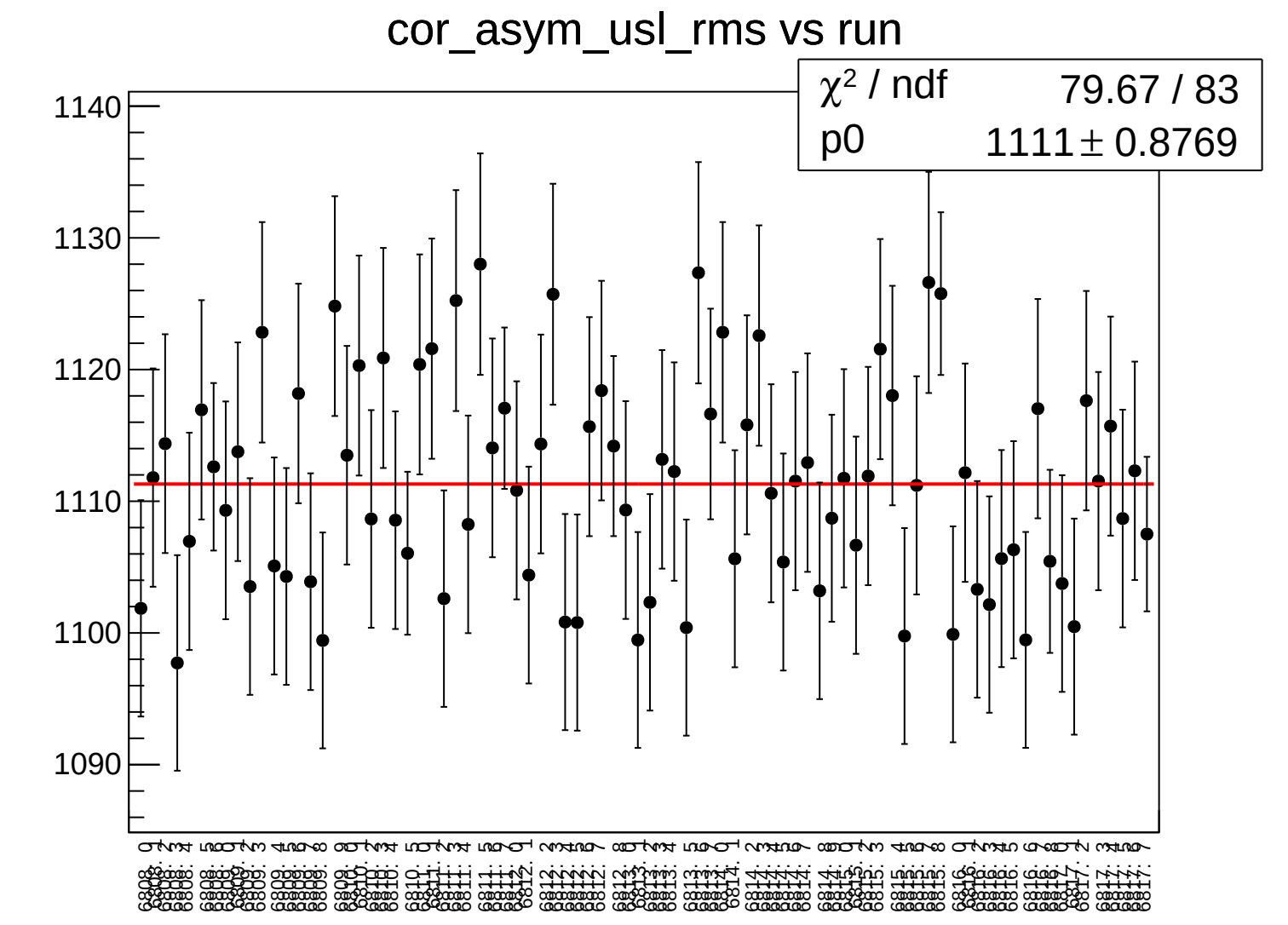

cor_asym_us_dd_mean vs run
χ² / ndf 109.3 / 83
p0 −2029 ± 869.9
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −559.7
Std Dev 590.3
3
2
1
0
−1
−2

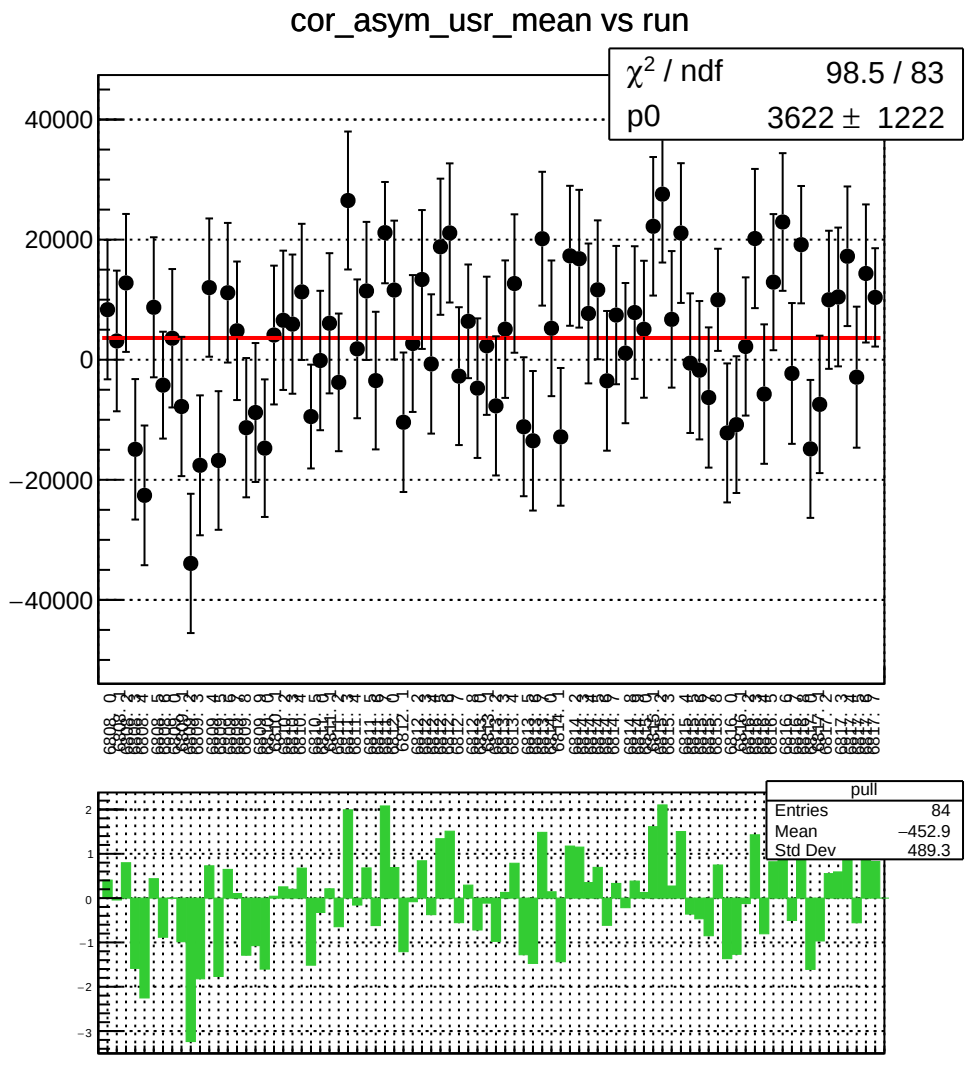

pull1D
Entries 84
Mean 0.00558
Std Dev 1.141
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

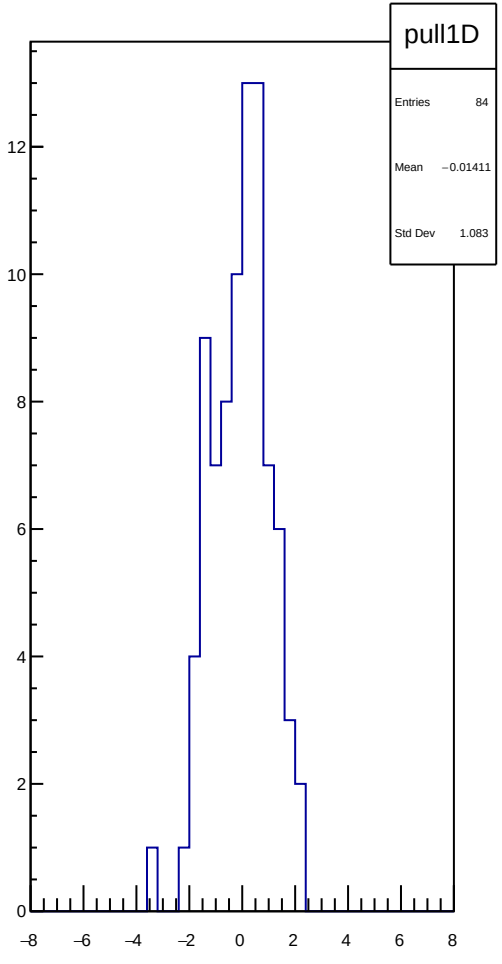

cor_asym_us_dd_rms vs run
χ² / ndf 80.9 / 83
p0 779.5 ± 0.6151
800
795
790
785
780
775
770
765
760

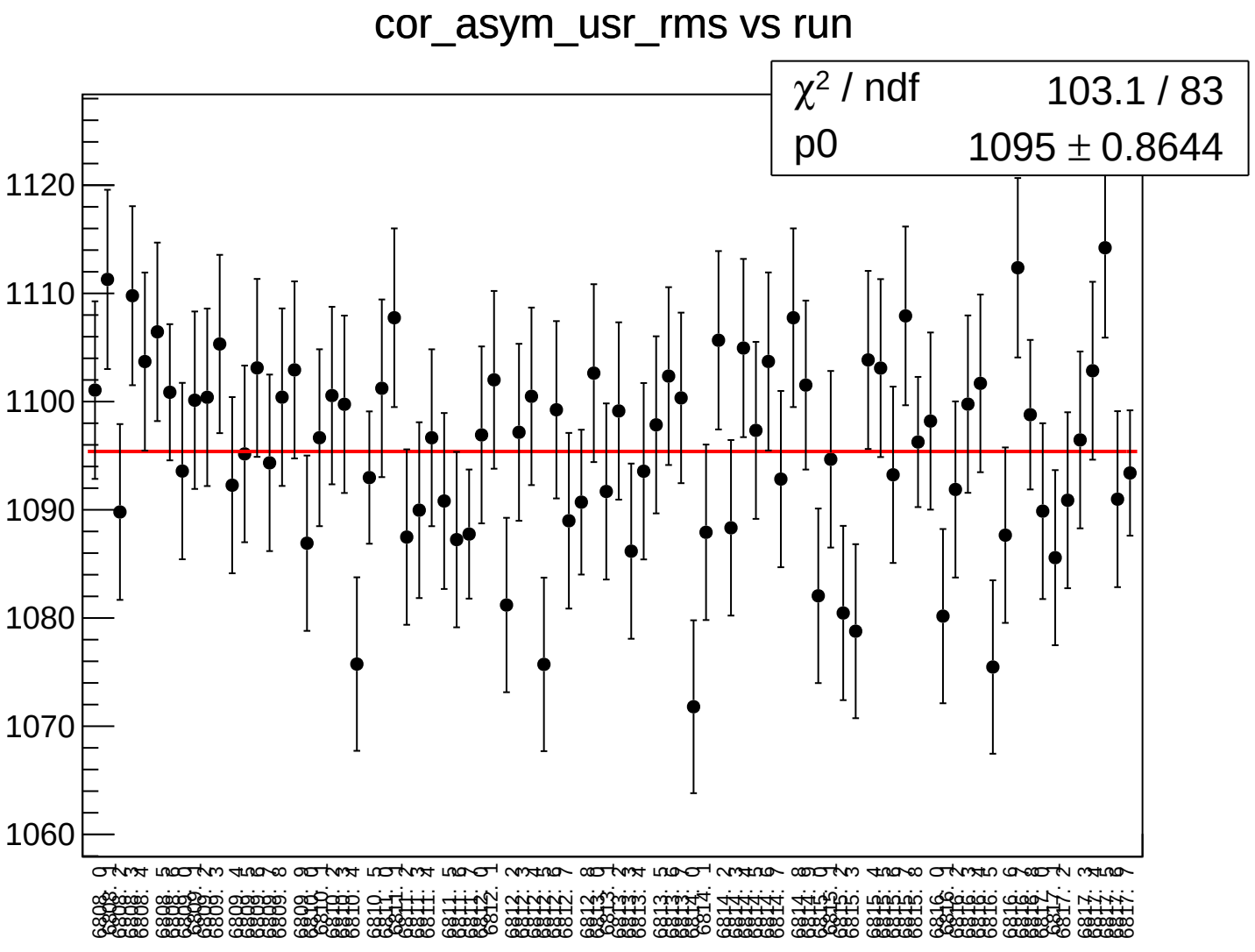

cor_asym_usl_mean vs run
χ² / ndf 102 / 83
p0 −459.8 ± 1240
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −407.3
Std Dev 456.4
3
2
1
0
−1
−2
−3

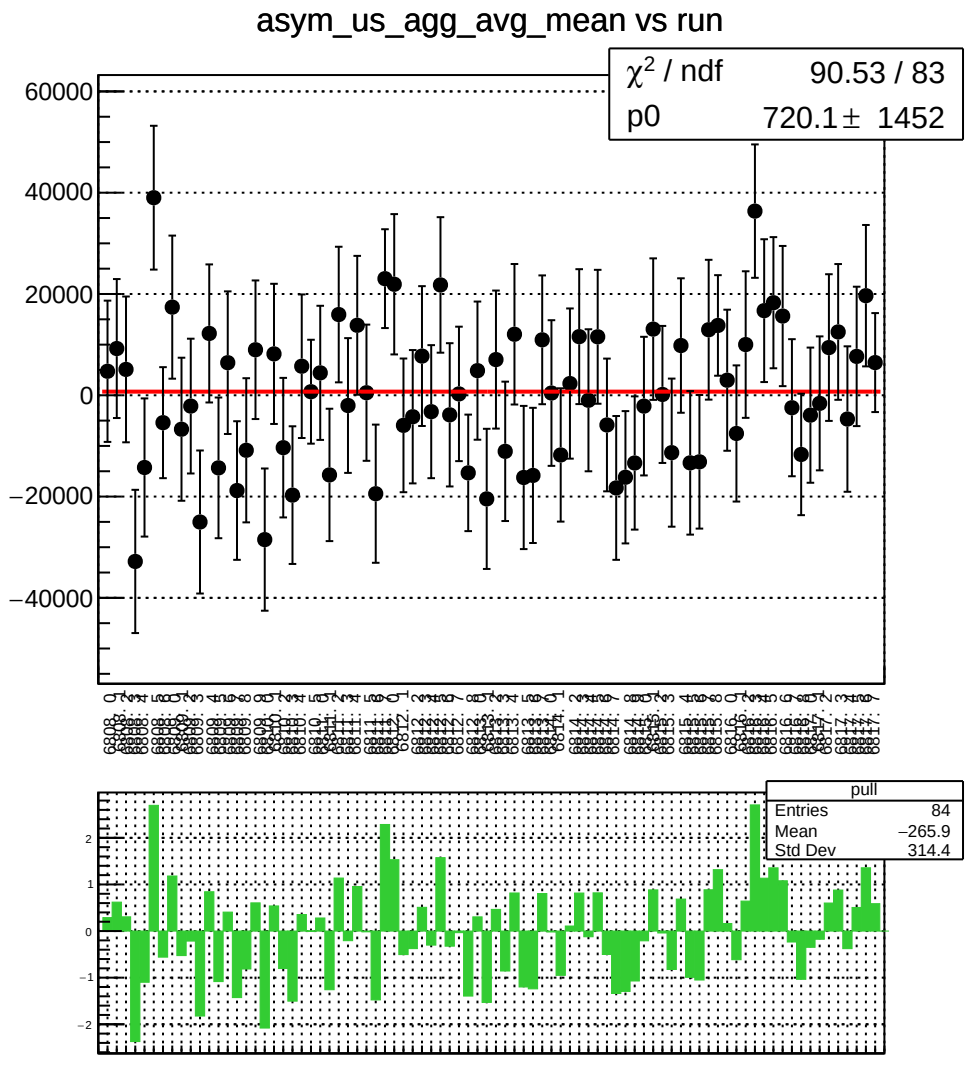

pull1D
Entries 84
Mean −0.004956
Std Dev 1.102
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

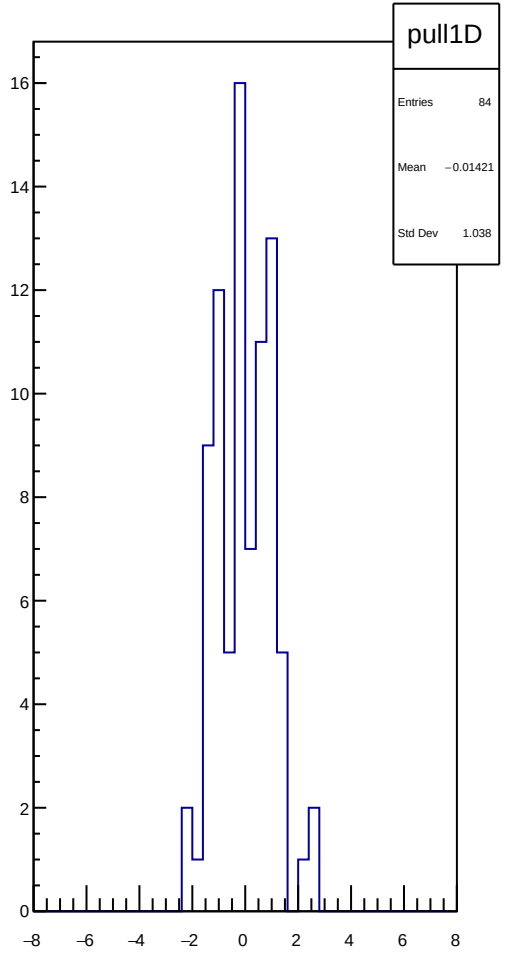

cor_asym_usl_rms vs run
χ² / ndf 79.67 / 83
p0 1111 ± 0.8769
1140
1130
1120
1110
1100
1090

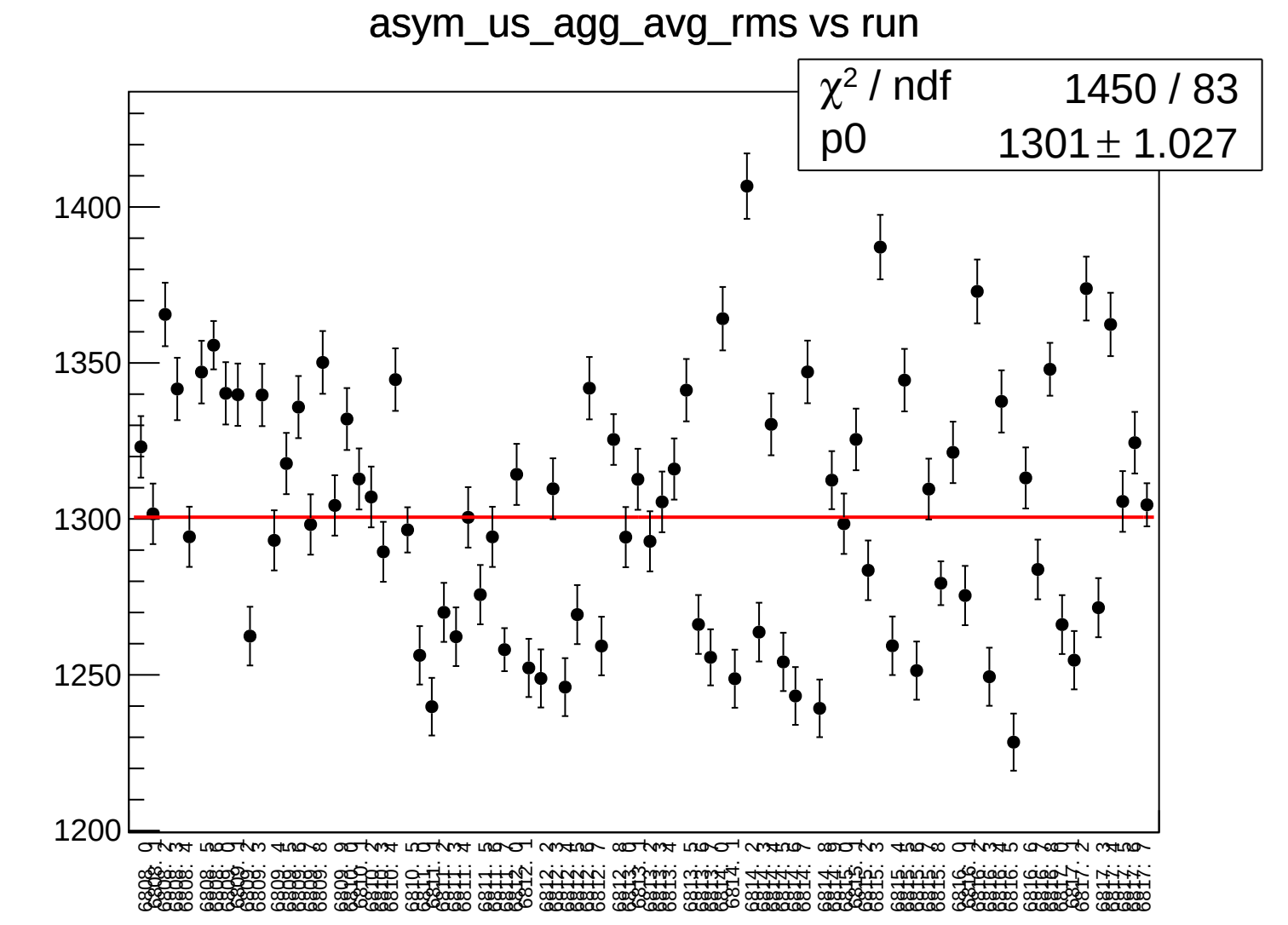

cor_asym_usr_mean vs run
χ² / ndf 98.5 / 83
p0 3622 ± 1222
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −452.9
Std Dev 489.3
2
1
0
−1
−2
−3

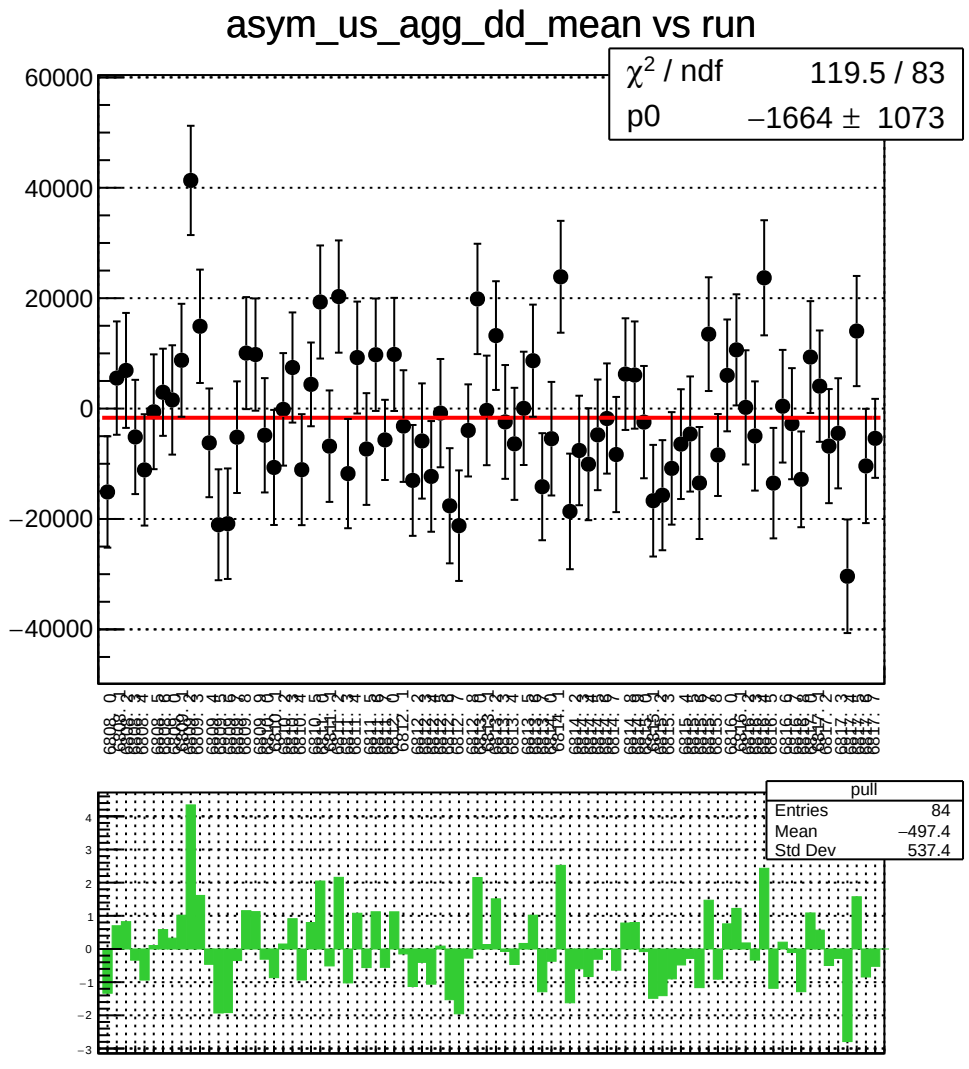

pull1D
Entries 84
Mean −0.01411
Std Dev 1.083
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

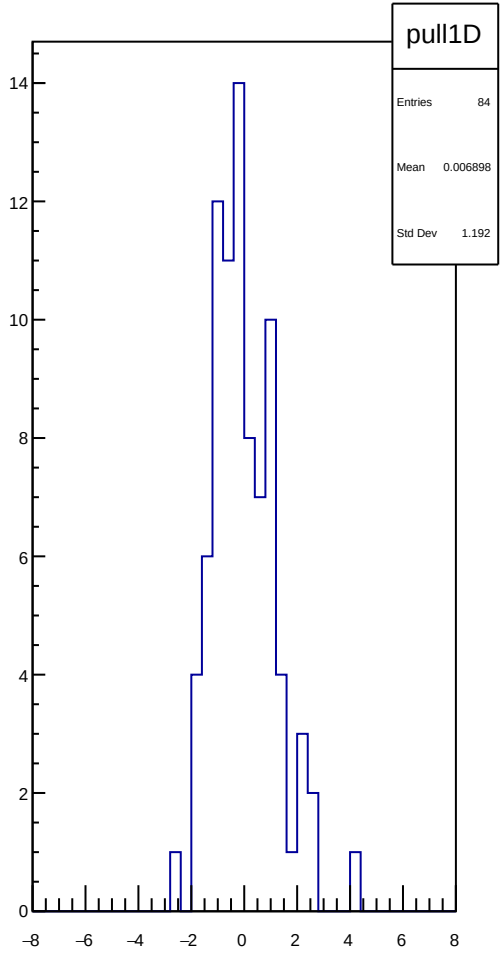

cor_asym_usr_rms vs run
χ² / ndf 103.1 / 83
p0 1095 ± 0.8644
1120
1110
1100
1090
1080
1070
1060

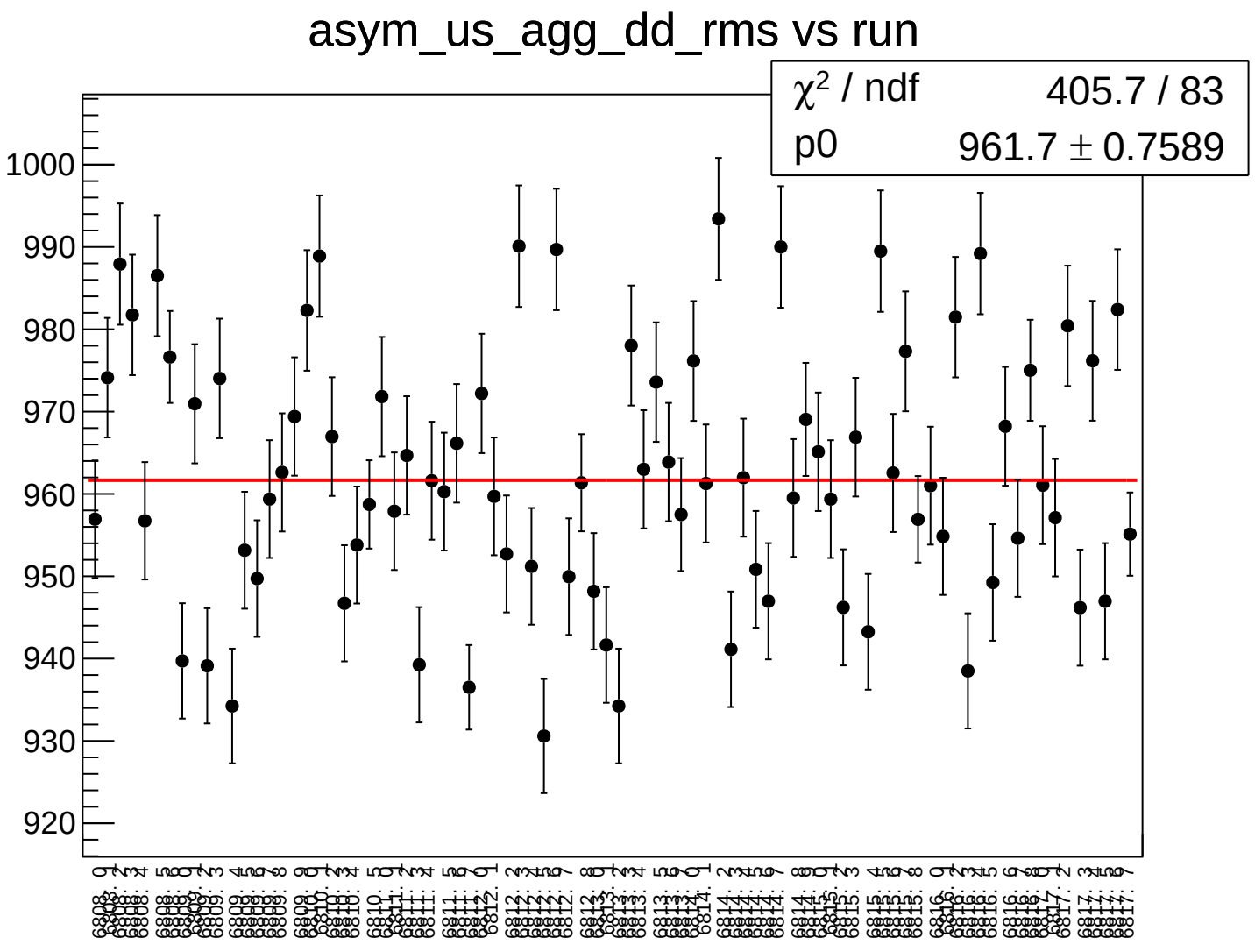

asym_us_agg_avg_mean vs run
χ² / ndf 90.53 / 83
p0 720.1 ± 1452
60000
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −265.9
Std Dev 314.4
2
1
0
−1
−2

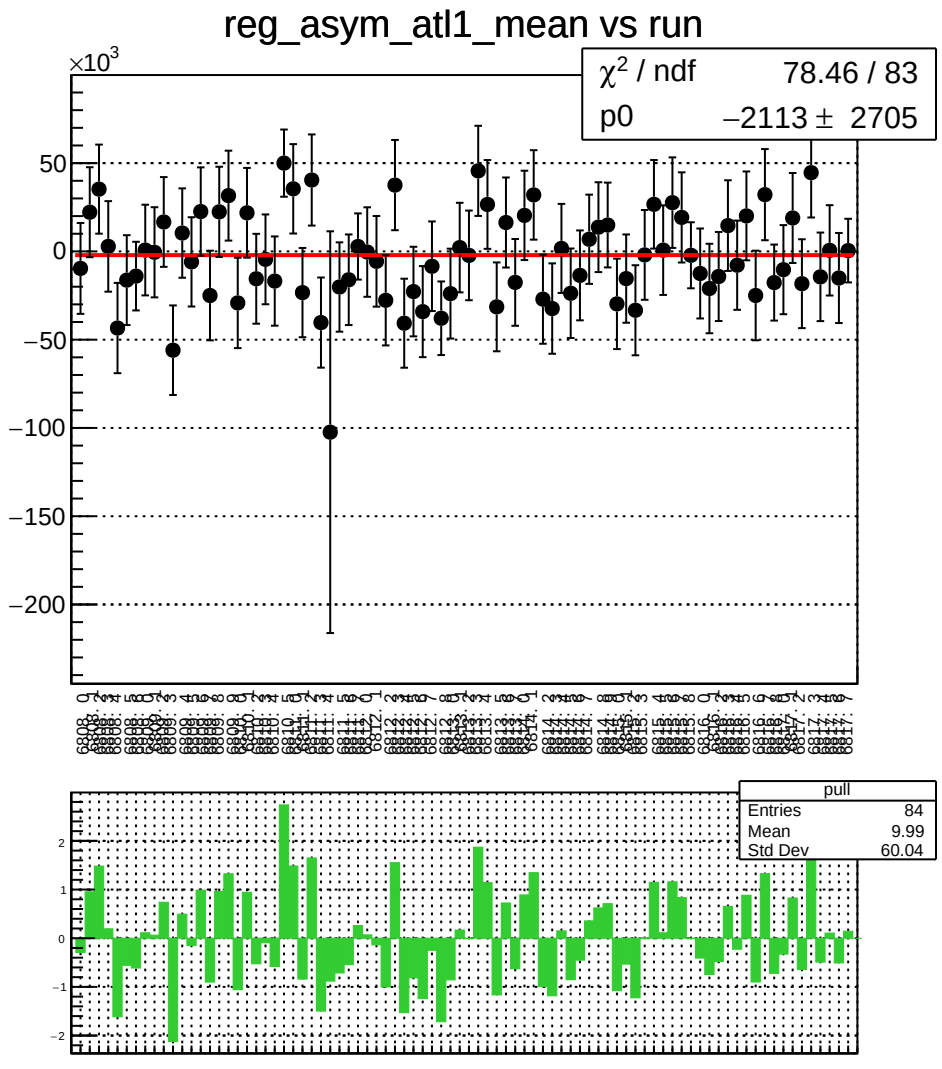

pull1D
Entries 84
Mean −0.01421
Std Dev 1.038
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

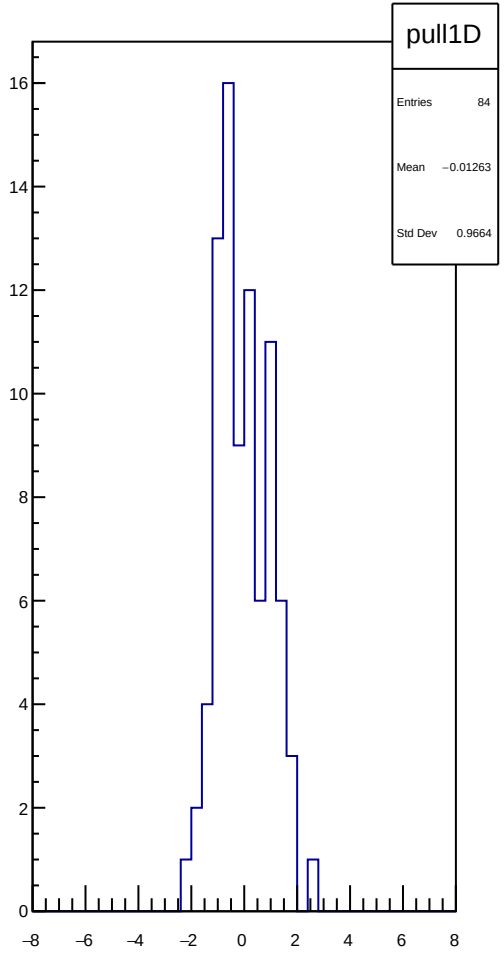

asym_us_agg_avg_rms vs run
χ² / ndf 1450 / 83
p0 1301 ± 1.027
1400
1350
1300
1250
1200

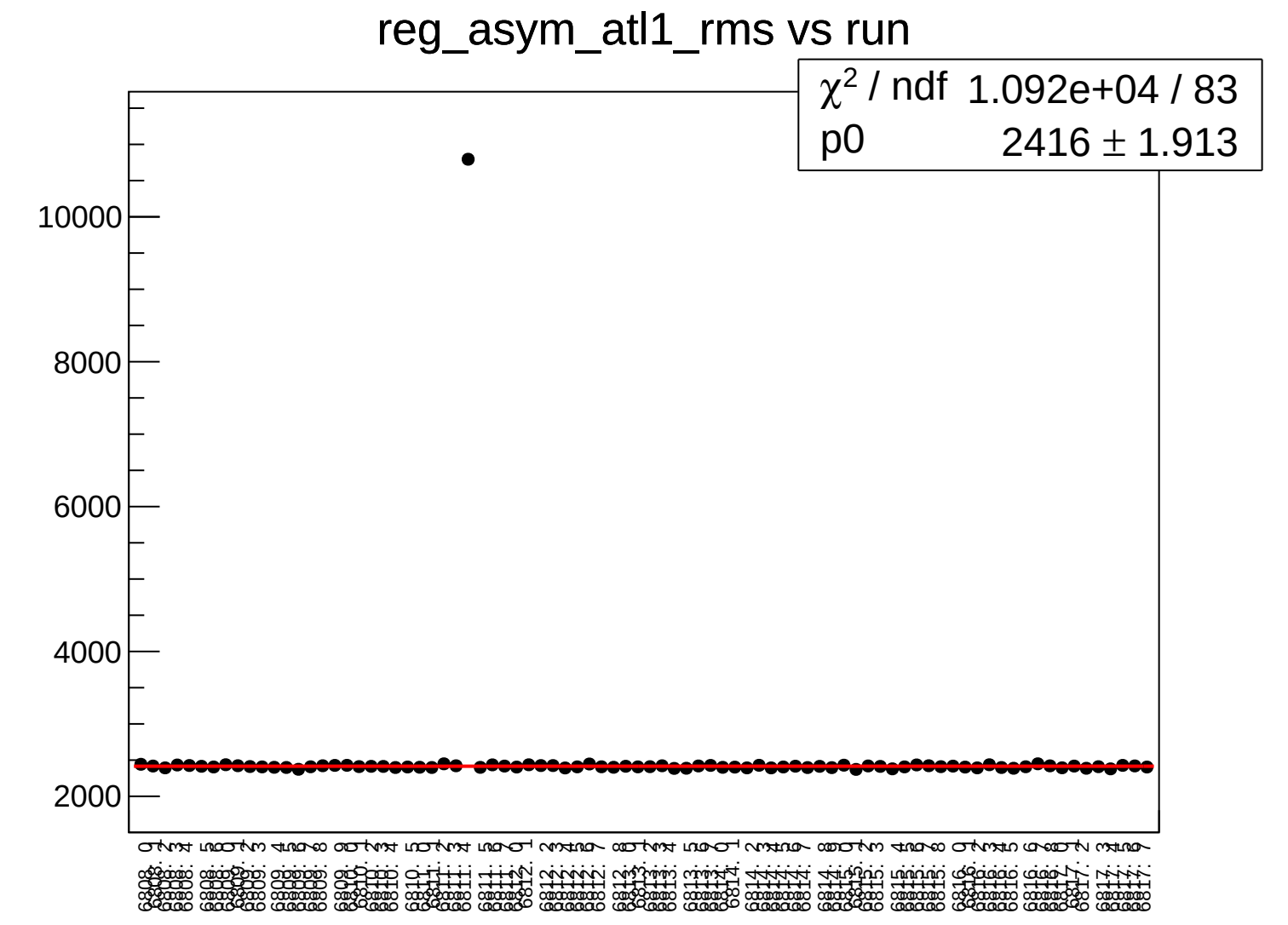

asym_us_agg_dd_mean vs run
χ^2 / ndf 119.5 / 83
p0 −1664 ± 1073
60000
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −497.4
Std Dev 537.4
4
3
2
1
0
−1
−2
−3

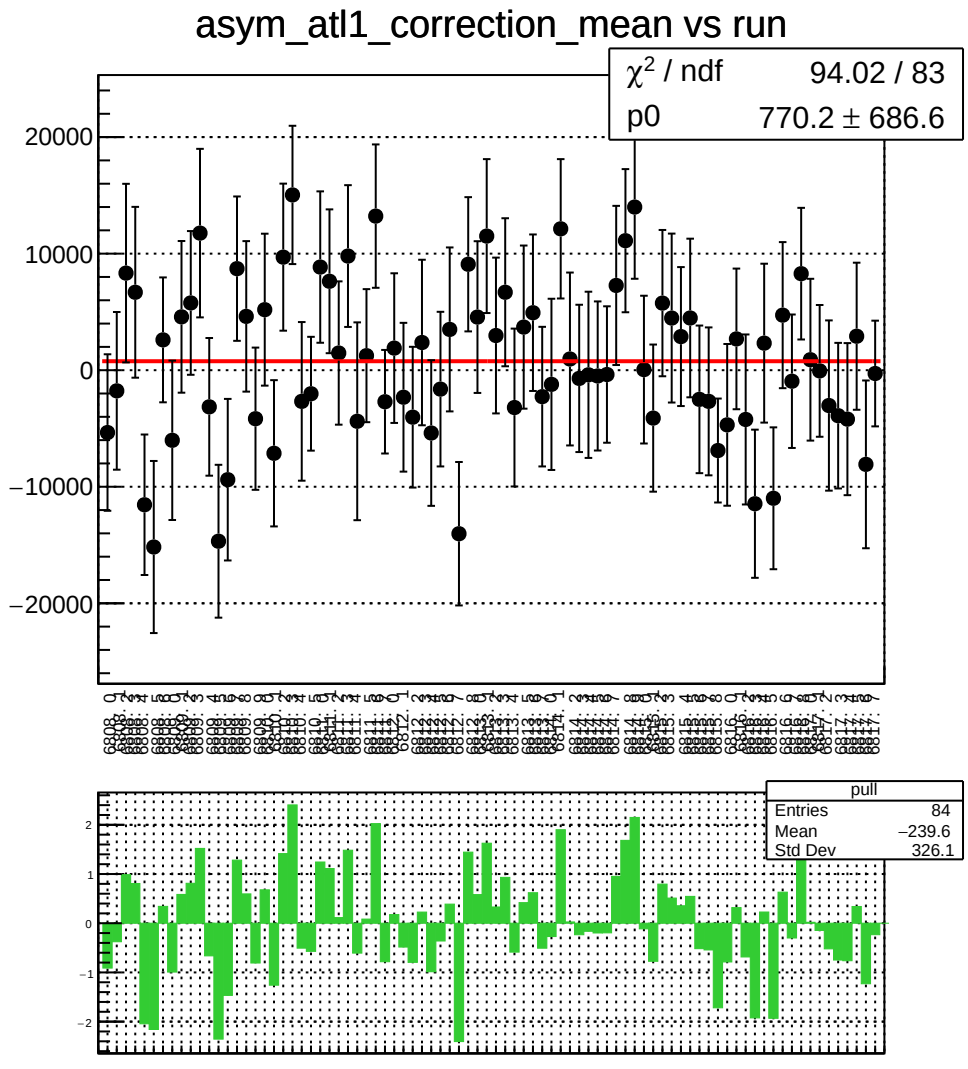

pull1D
Entries 84
Mean 0.006898
Std Dev 1.192
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

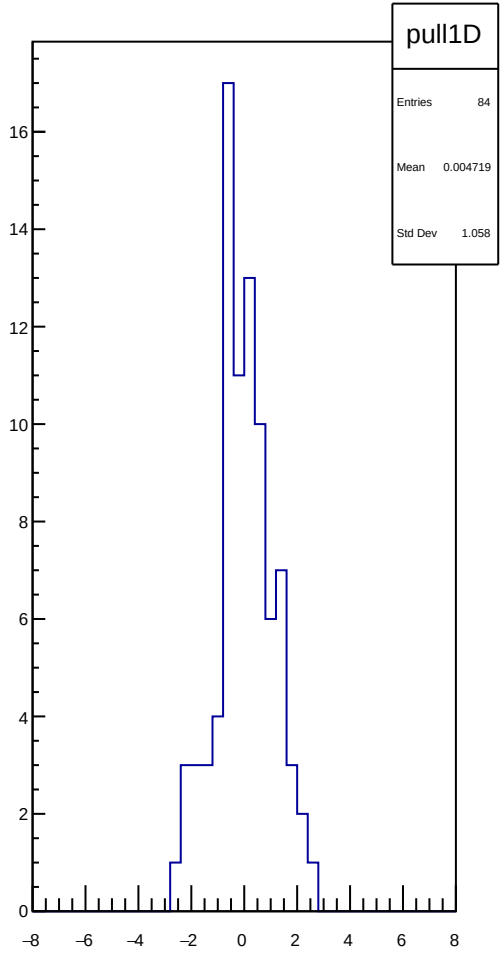

asym_us_agg_dd_rms vs run
χ² / ndf 405.7 / 83
p0 961.7 ± 0.7589
1000
990
980
970
960
950
940
930
920

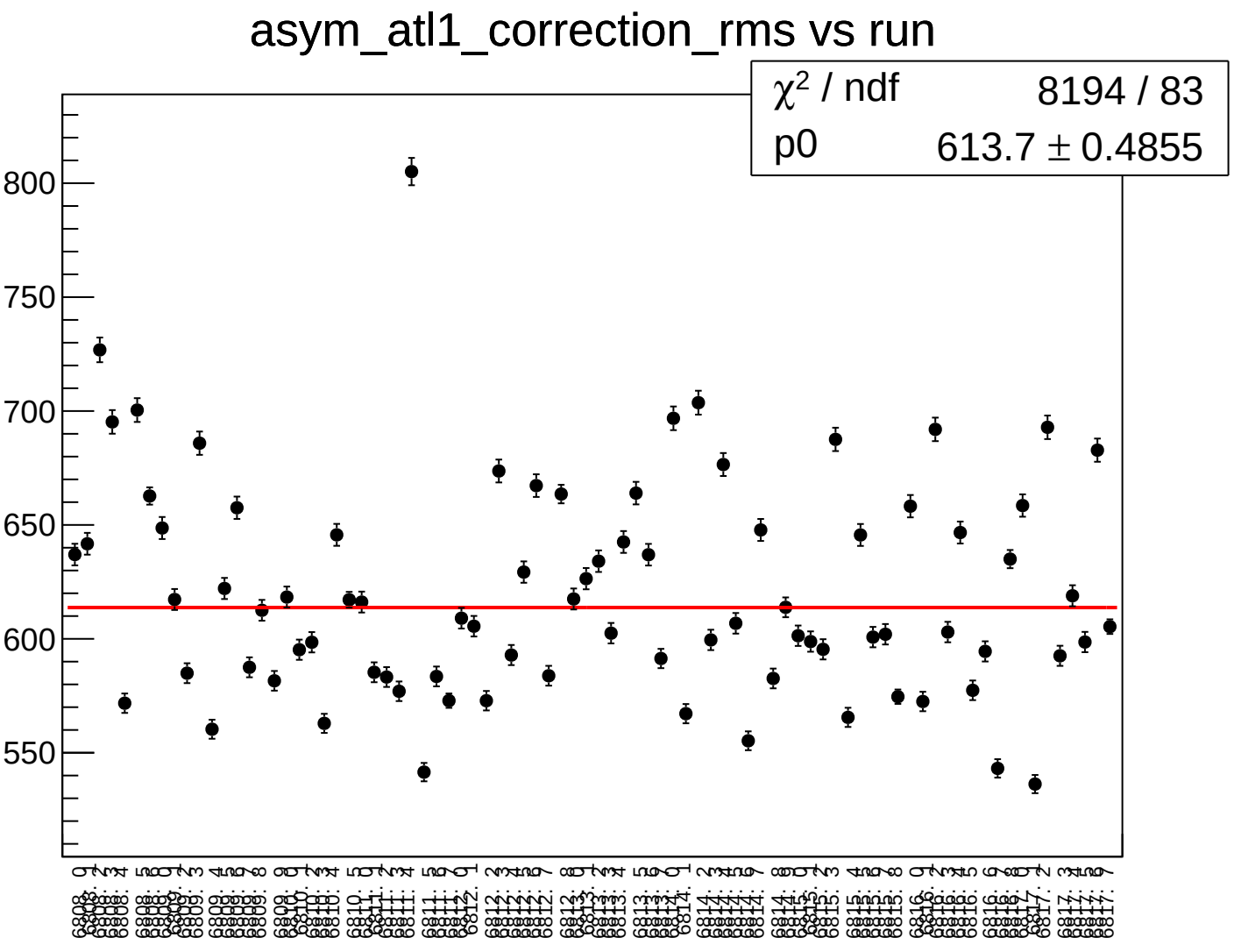

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 78.46 / 83
p0 −2113 ± 2705
50
0
−50
−100
−150
−200
pull
Entries 84
Mean 9.99
Std Dev 60.04
2
1
0
−1
−2

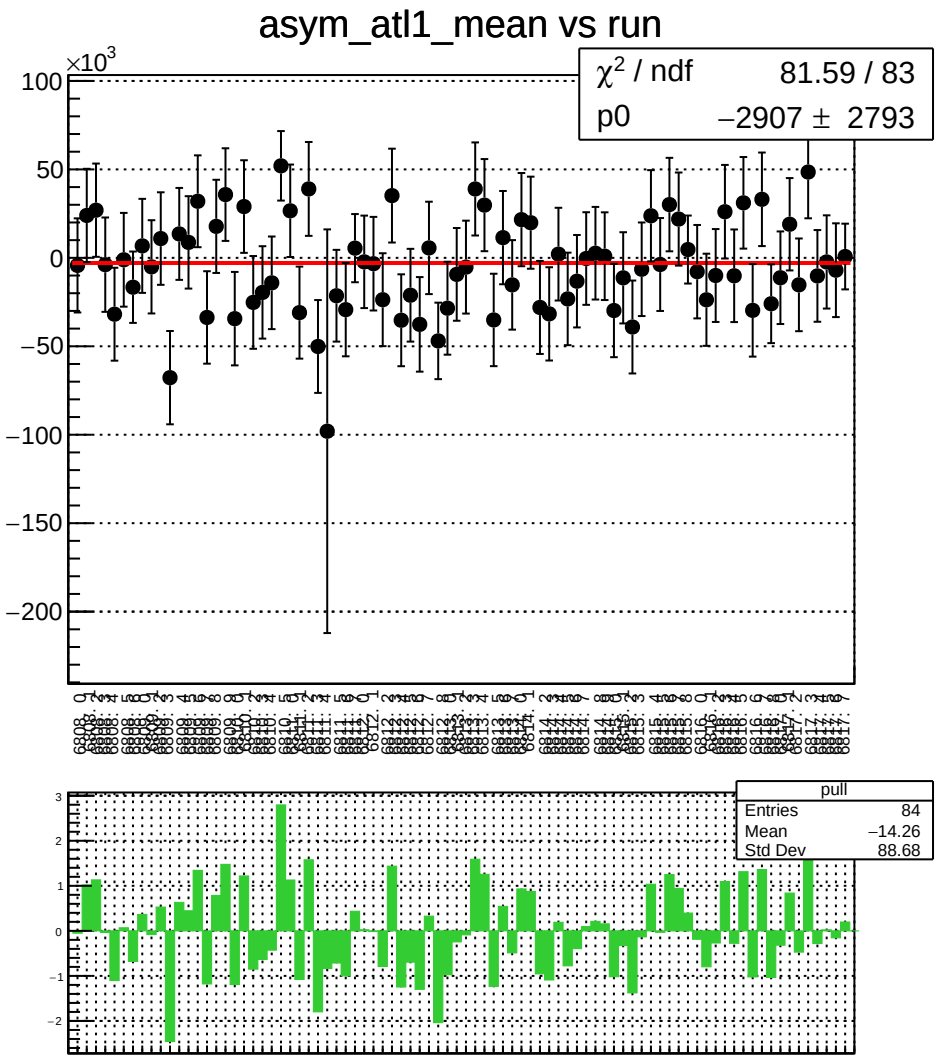

pull1D
Entries 84
Mean −0.01263
Std Dev 0.9664
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

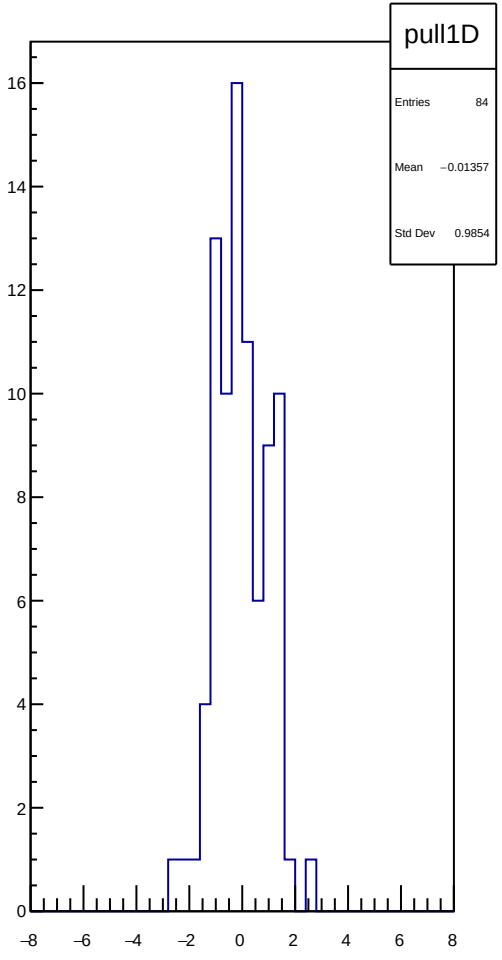

reg_asym_atl1_rms vs run
χ² / ndf 1.092e+04 / 83
p0 2416 ± 1.913
10000
8000
6000
4000
2000

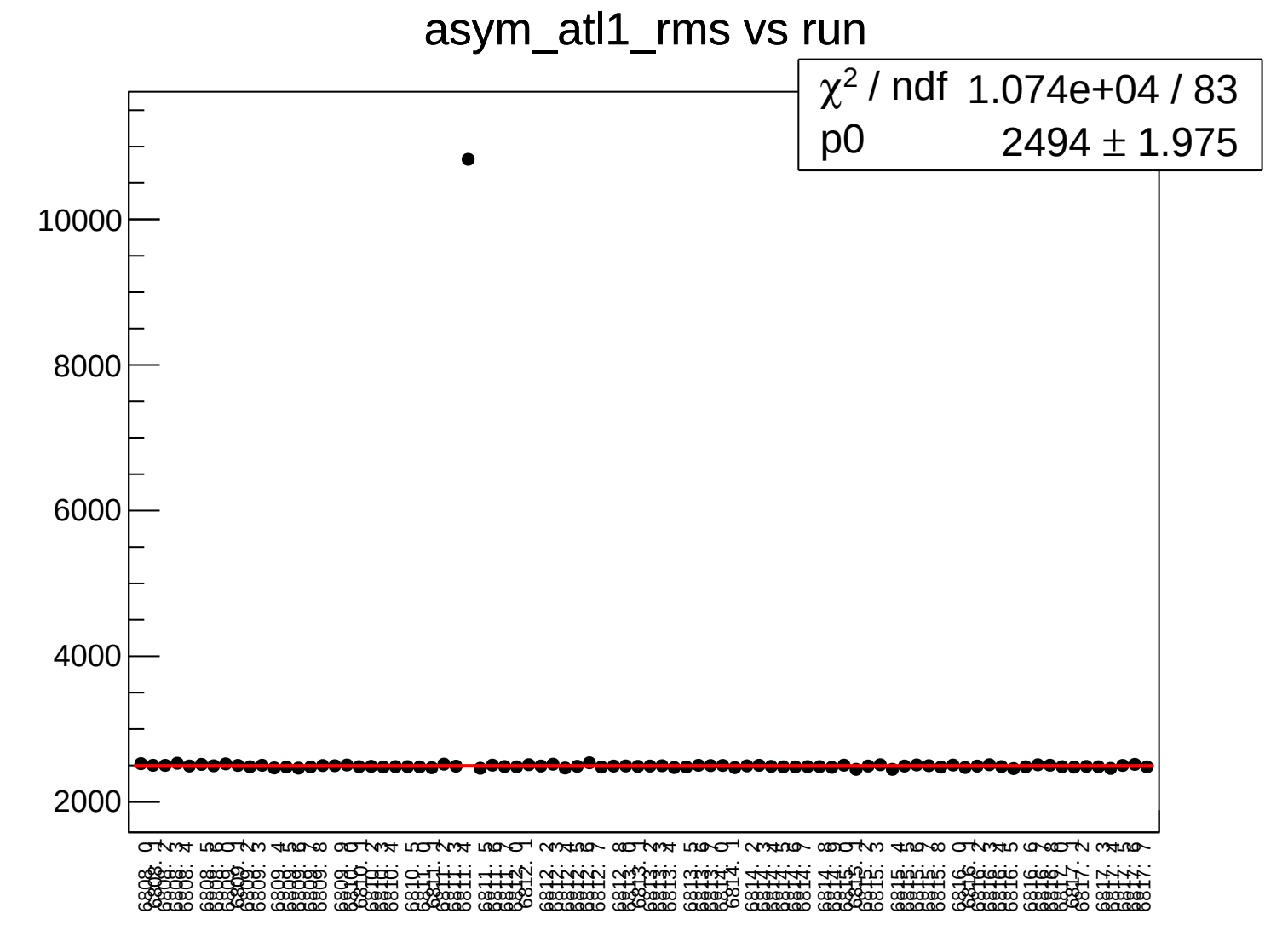

asym_atl1_correction_mean vs run
χ² / ndf 94.02 / 83
p0 770.2 ± 686.6
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −239.6
Std Dev 326.1
2
1
0
−1
−2

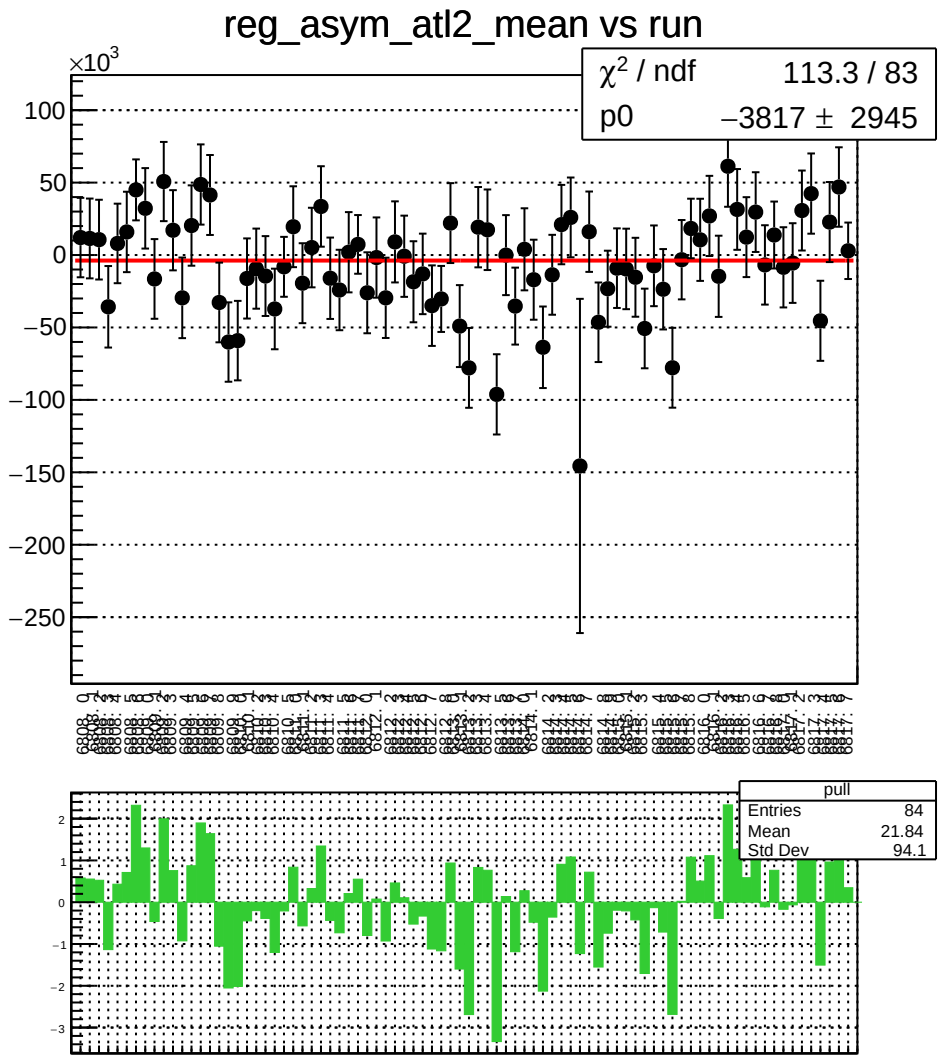

pull1D
Entries 84
Mean 0.004719
Std Dev 1.058
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

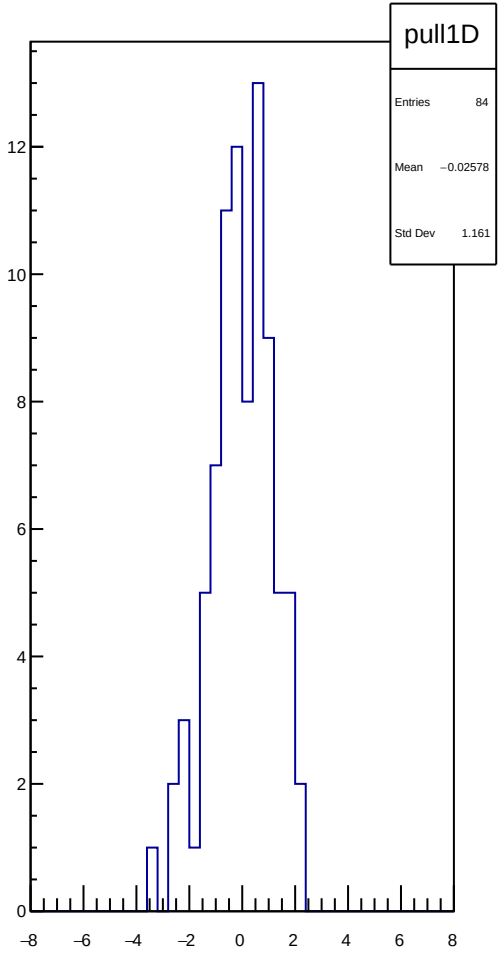

asym_atl1_correction_rms vs run
χ² / ndf 8194 / 83
p0 613.7 ± 0.4855
800
750
700
650
600
550

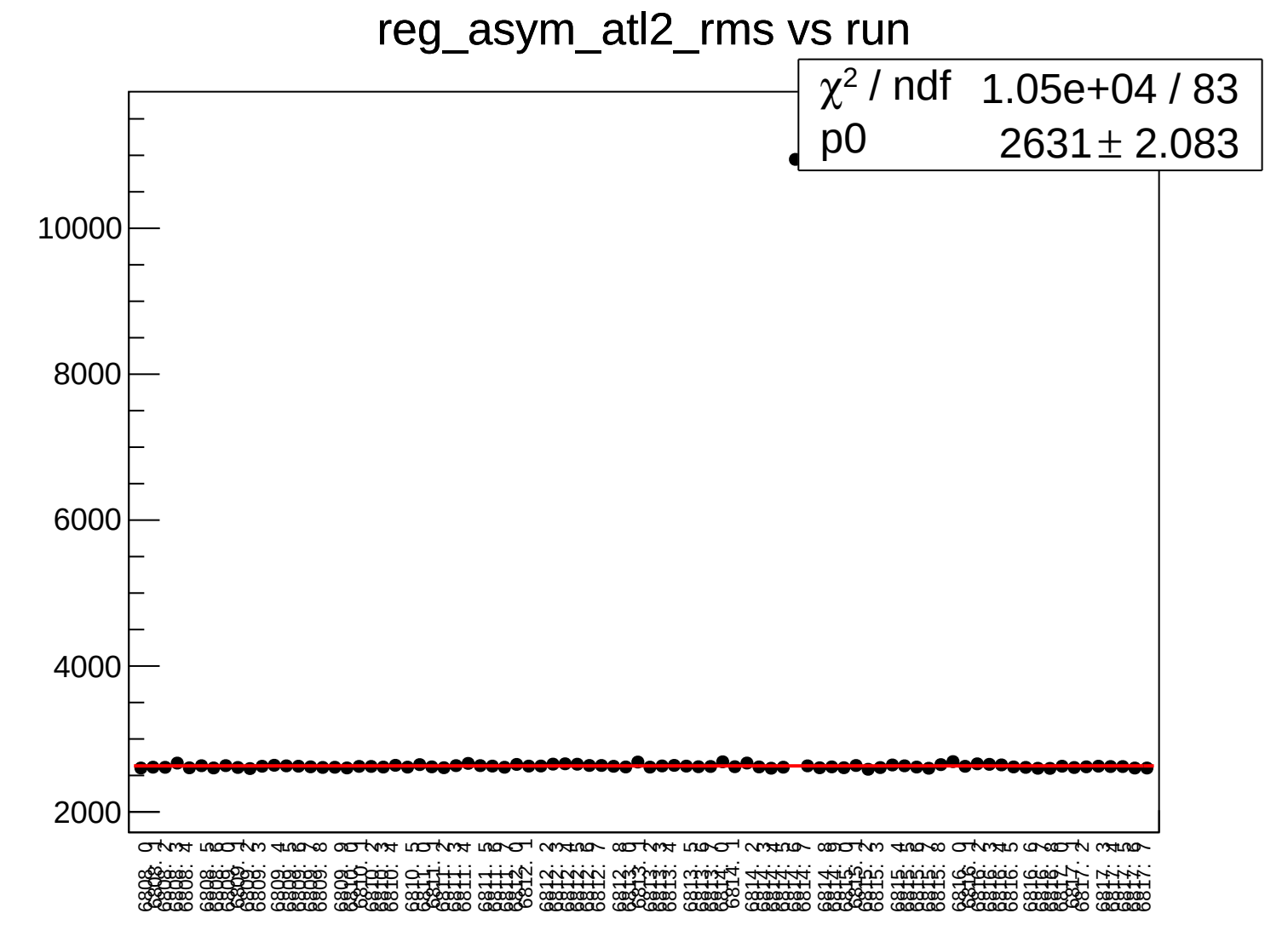

asym_atl1_mean vs run
×10^3
χ² / ndf 81.59 / 83
p0 −2907 ± 2793
pull
Entries 84
Mean −14.26
Std Dev 88.68

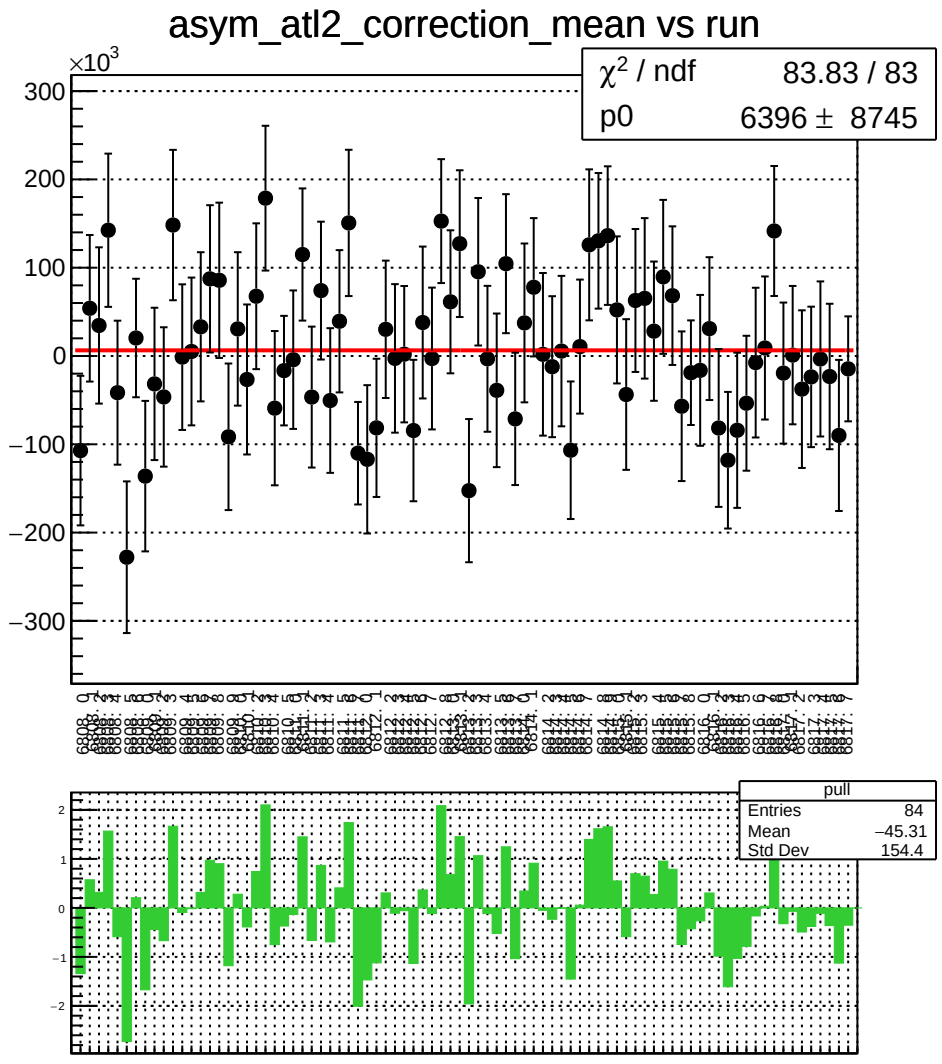

pull1D
Entries 84
Mean −0.01357
Std Dev 0.9854

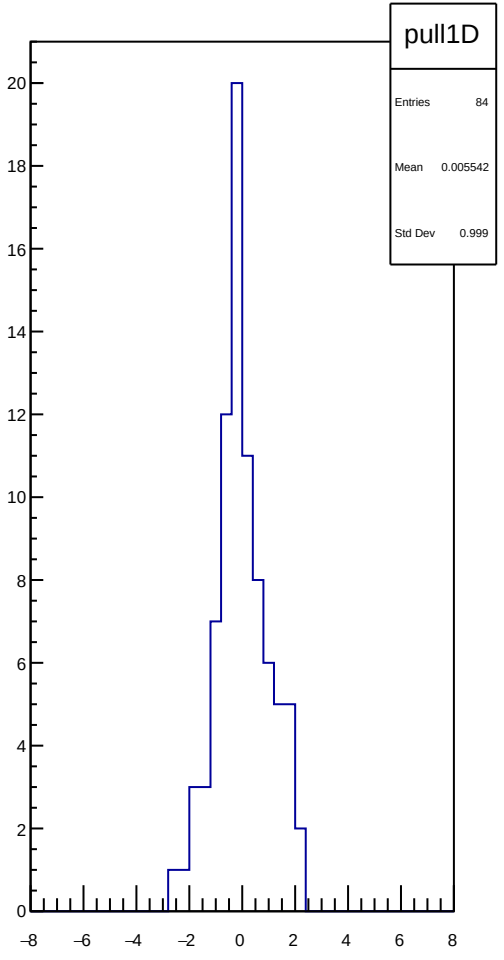

asym_atl1_rms vs run
χ² / ndf 1.074e+04 / 83
p0 2494 ± 1.975
10000
8000
6000
4000
2000

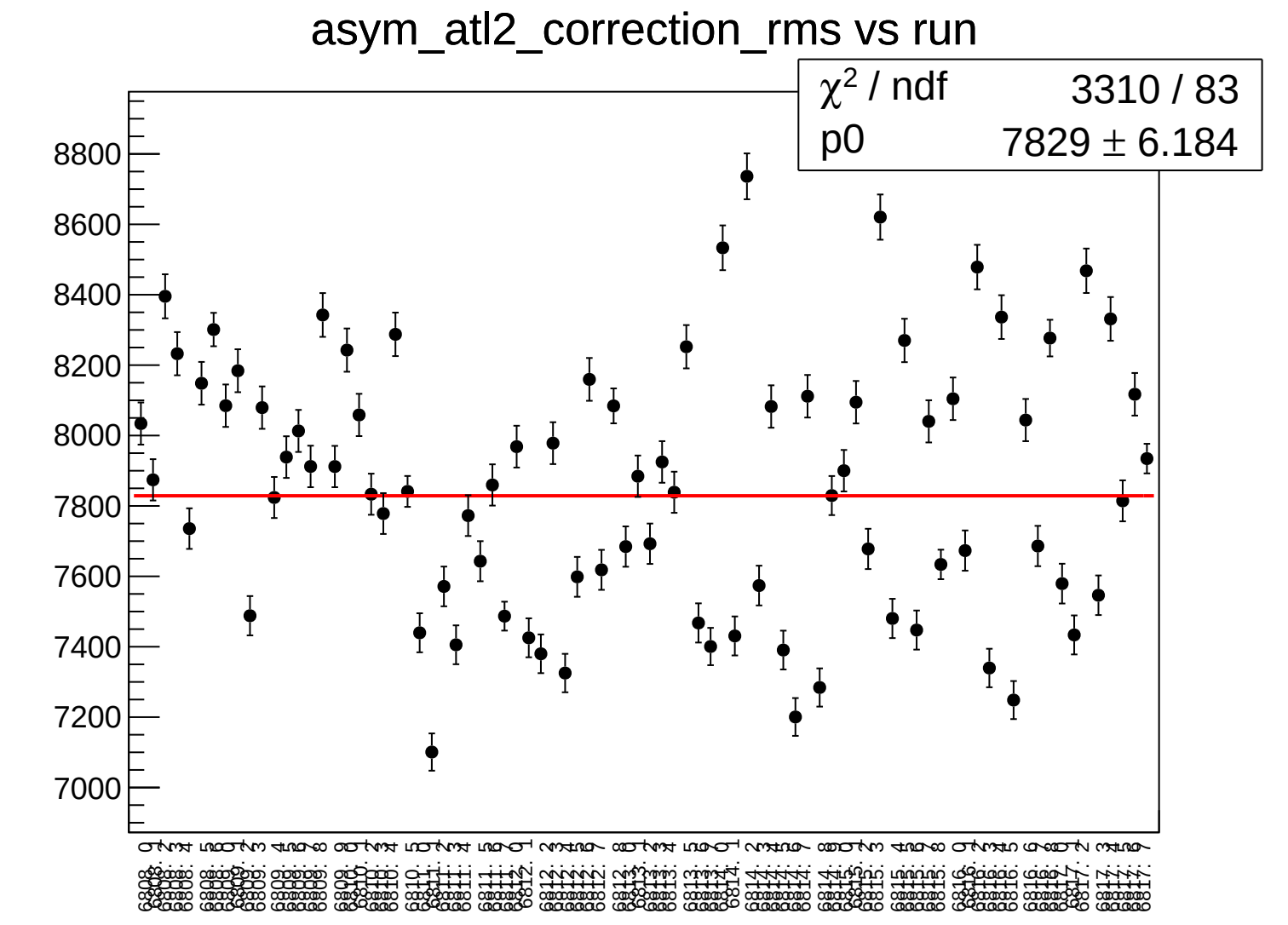

reg_asym_atl2_mean vs run
×10^3
χ^2 / ndf 113.3 / 83
p0 −3817 ± 2945
100
50
0
−50
−100
−150
−200
−250
pull
Entries 84
Mean 21.84
Std Dev 94.1
2
1
0
−1
−2
−3

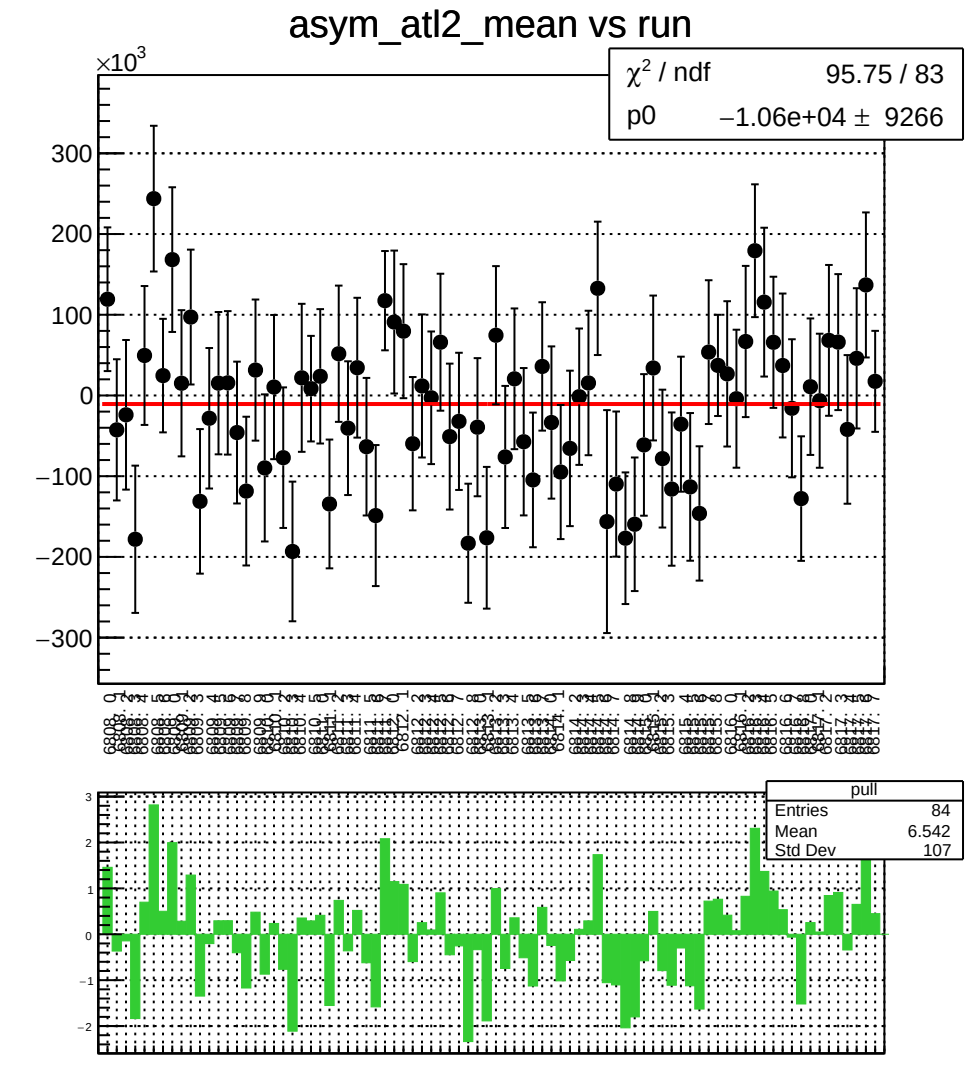

pull1D
Entries 84
Mean −0.02578
Std Dev 1.161
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

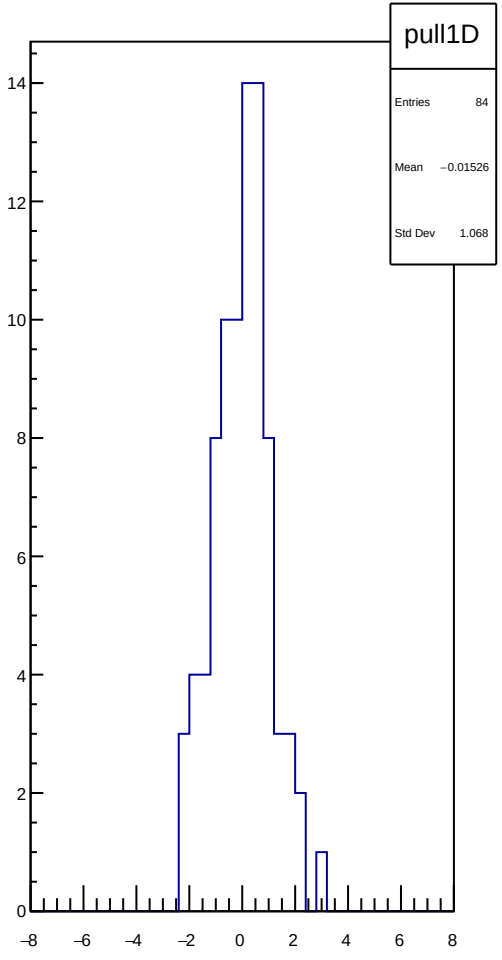

reg_asym_atl2_rms vs run
χ² / ndf 1.05e+04 / 83
p0 2631 ± 2.083
10000
8000
6000
4000
2000

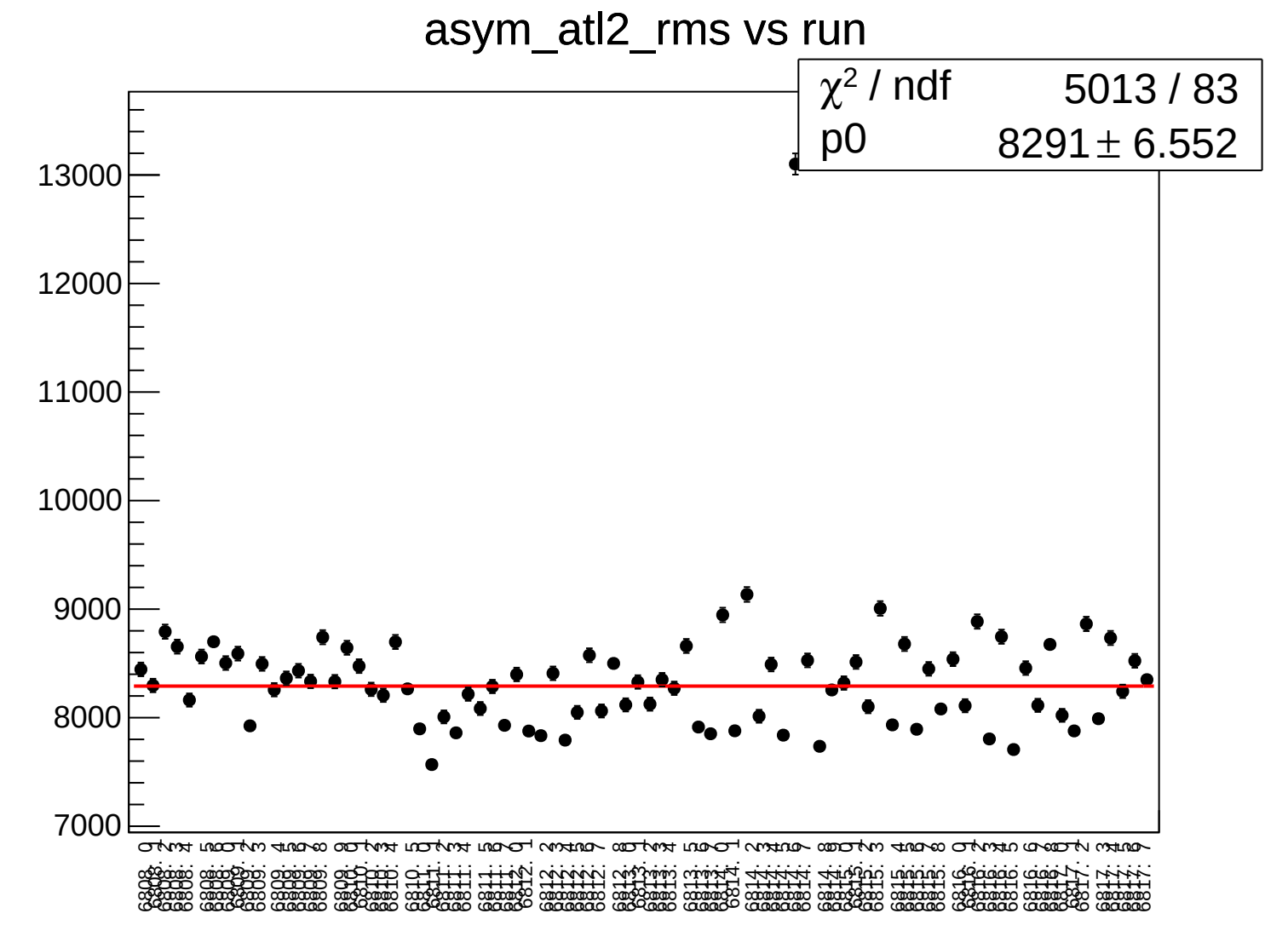

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 83.83 / 83
p0 6396 ± 8745
pull
Entries 84
Mean −45.31
Std Dev 154.4

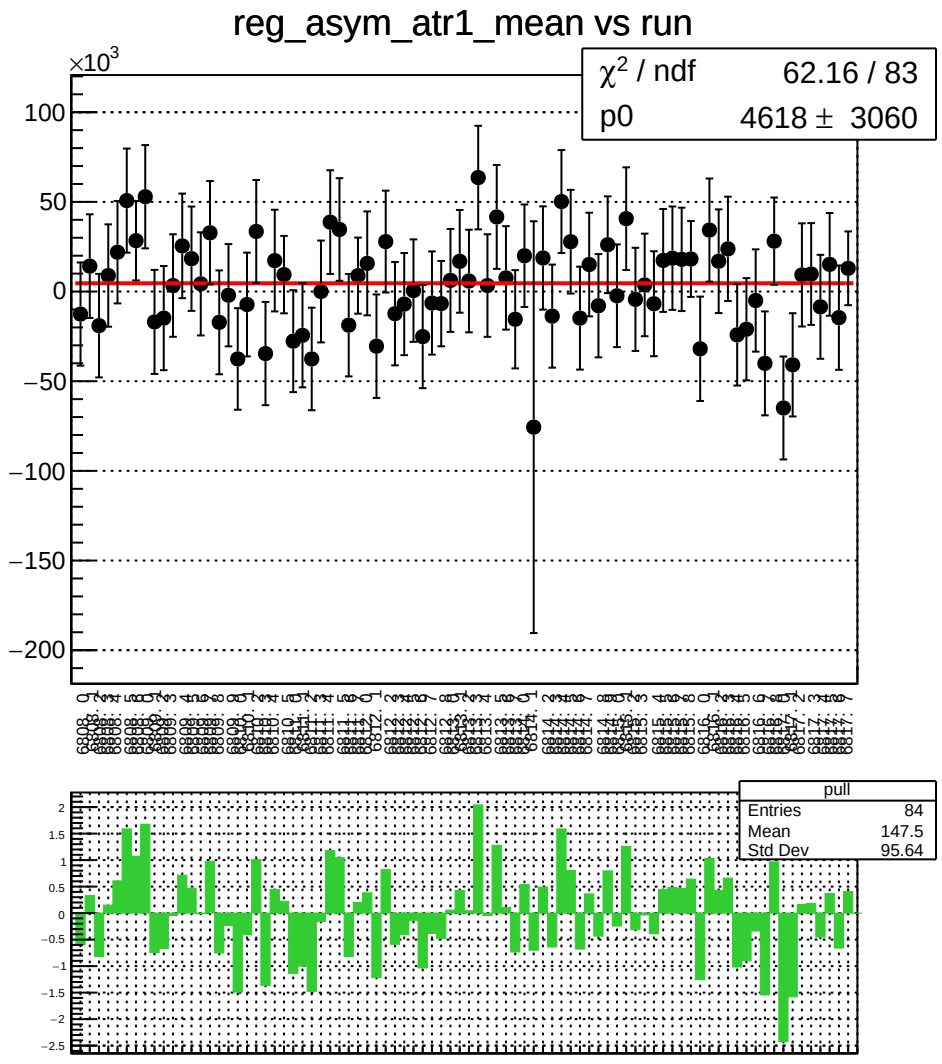

pull1D
Entries 84
Mean 0.005542
Std Dev 0.999

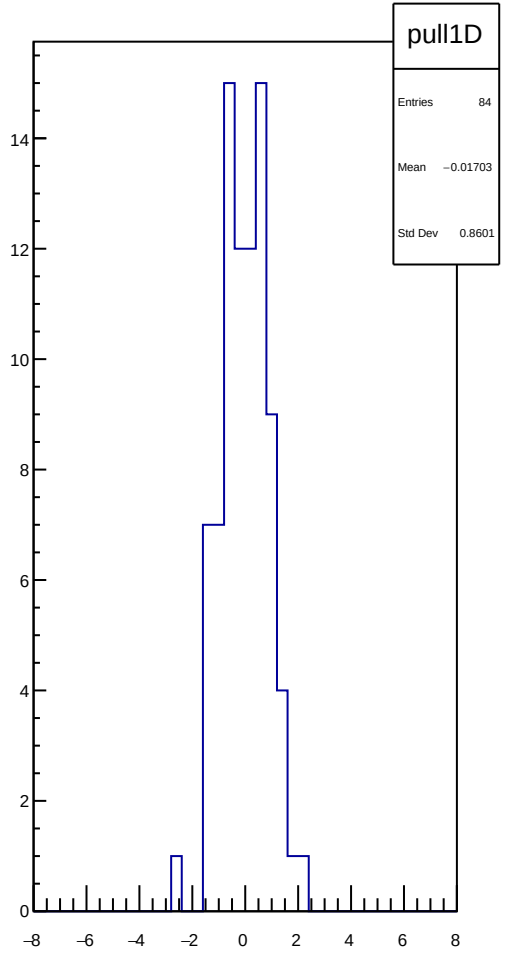

asym_atl2_correction_rms vs run
χ² / ndf 3310 / 83
p0 7829 ± 6.184
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000

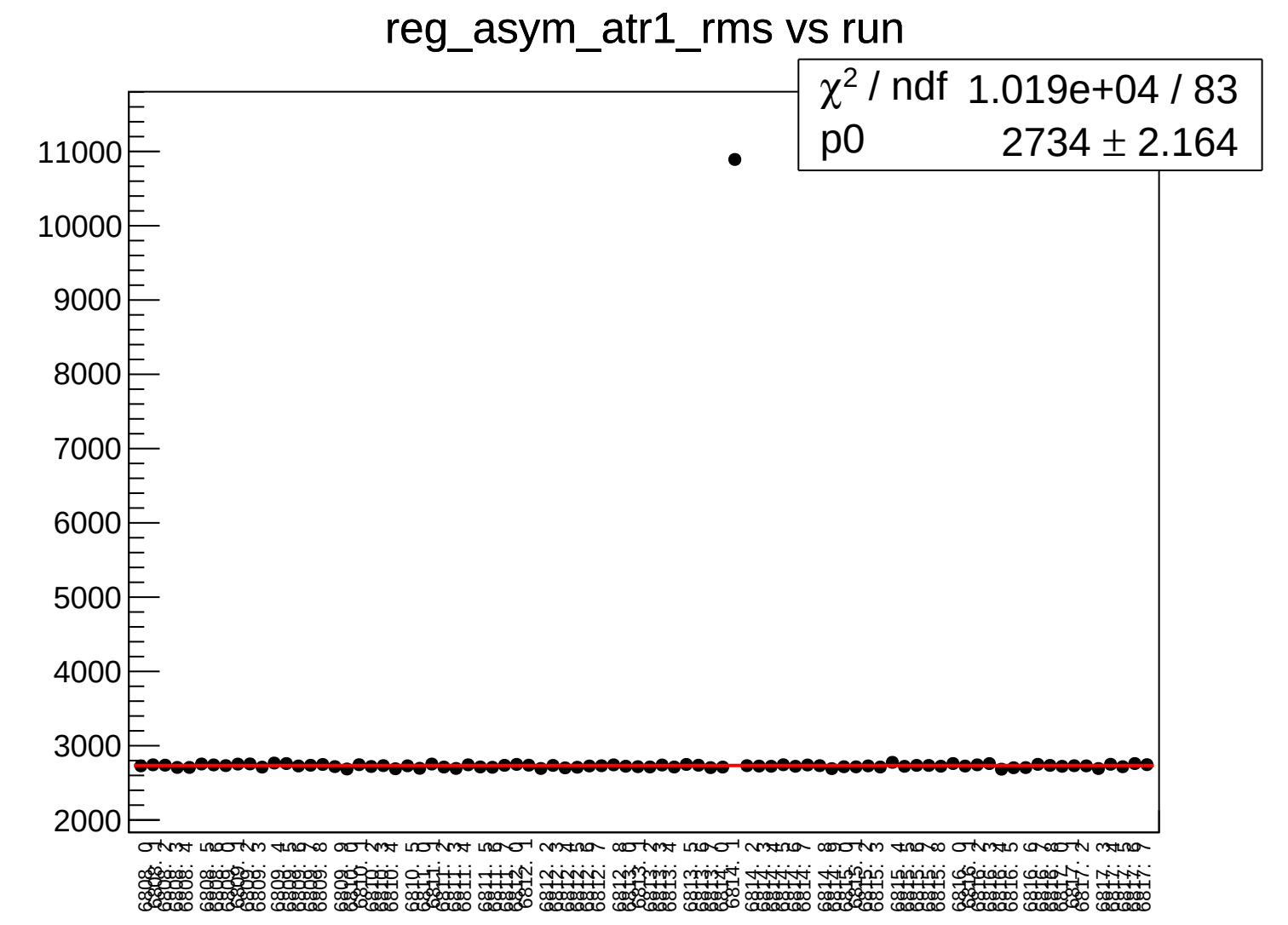

asym_atl2_mean vs run
×10^3
χ² / ndf 95.75 / 83
p0 −1.06e+04 ± 9266
300
200
100
0
−100
−200
−300
pull
Entries 84
Mean 6.542
Std Dev 107
3
2
1
0
−1
−2

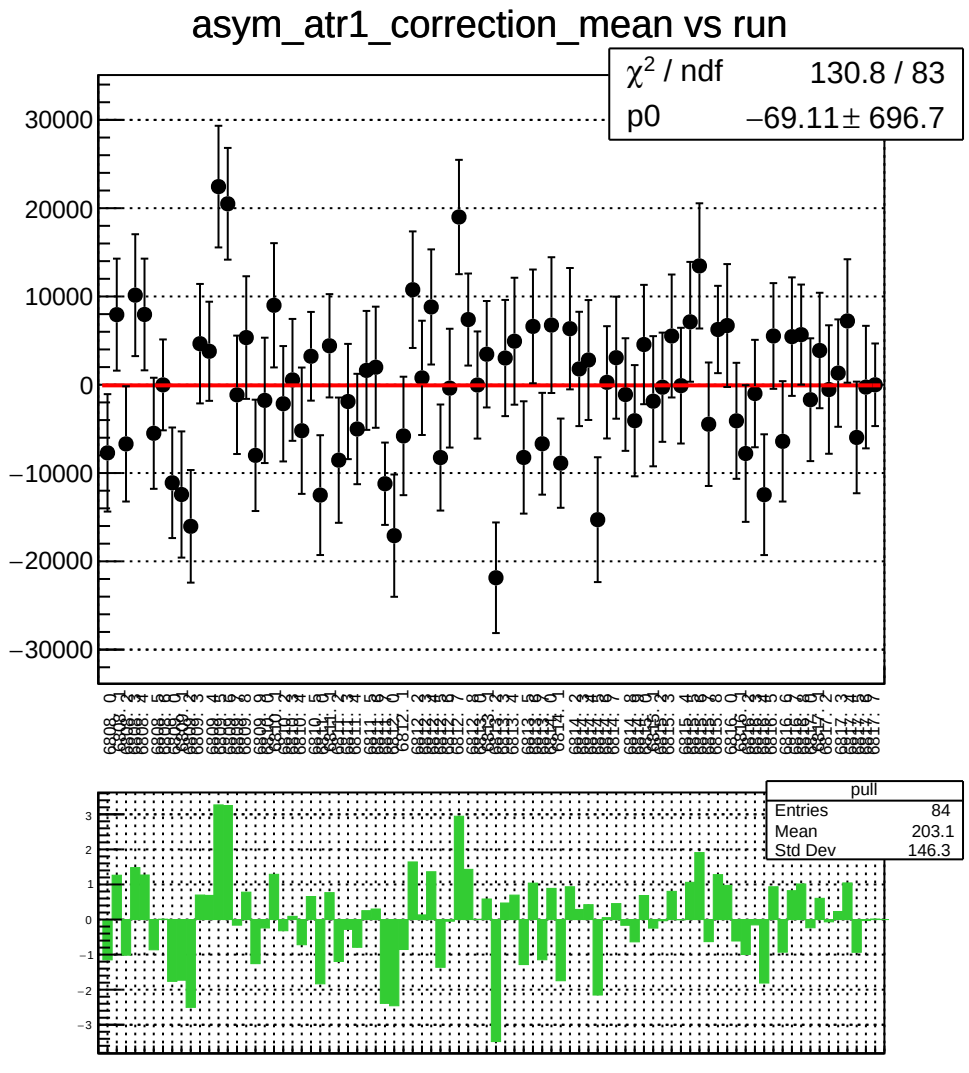

pull1D
Entries 84
Mean −0.01526
Std Dev 1.068
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

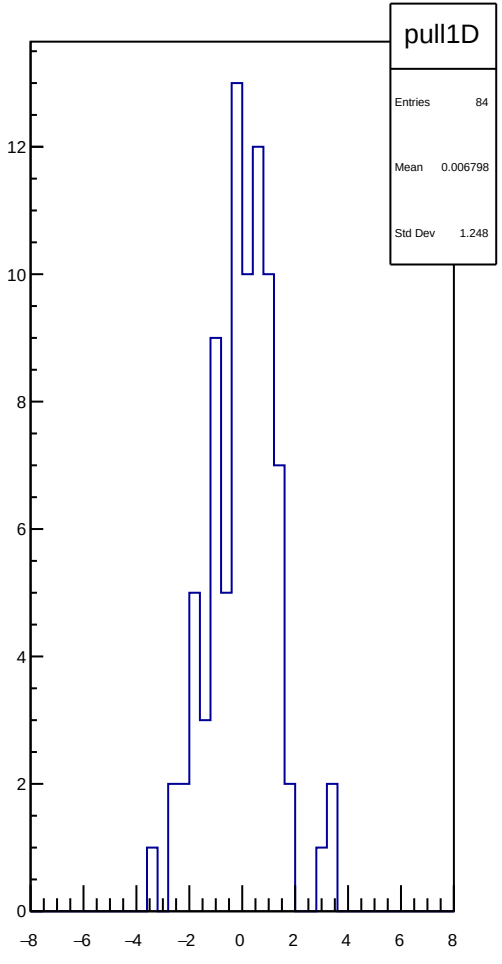

asym_atl2_rms vs run
χ² / ndf 5013 / 83
p0 8291 ± 6.552
13000
12000
11000
10000
9000
8000
7000

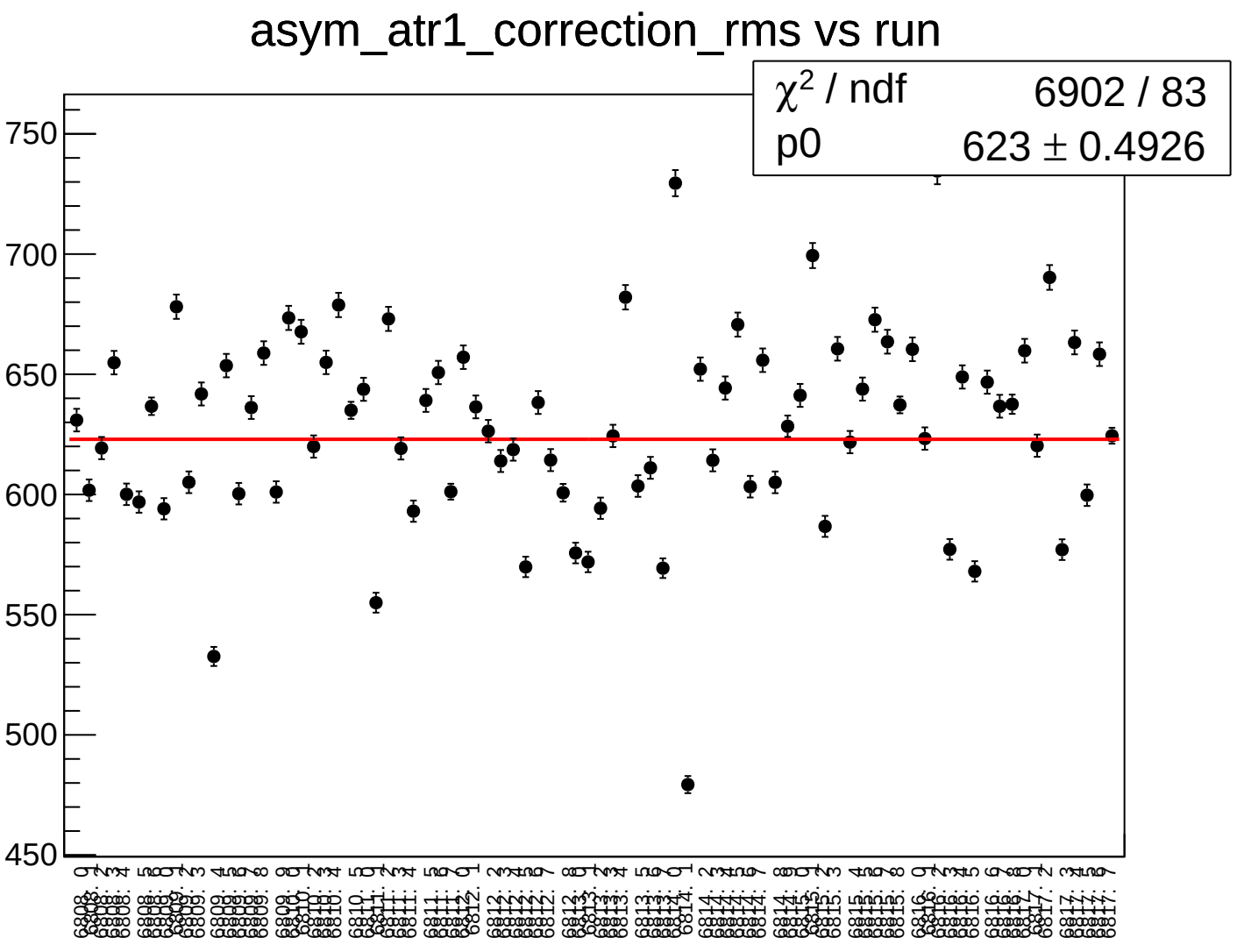

reg_asym_atr1_mean vs run
×10^3
χ^2 / ndf 62.16 / 83
p0 4618 ± 3060
100
50
0
−50
−100
−150
−200
pull
Entries 84
Mean 147.5
Std Dev 95.64
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

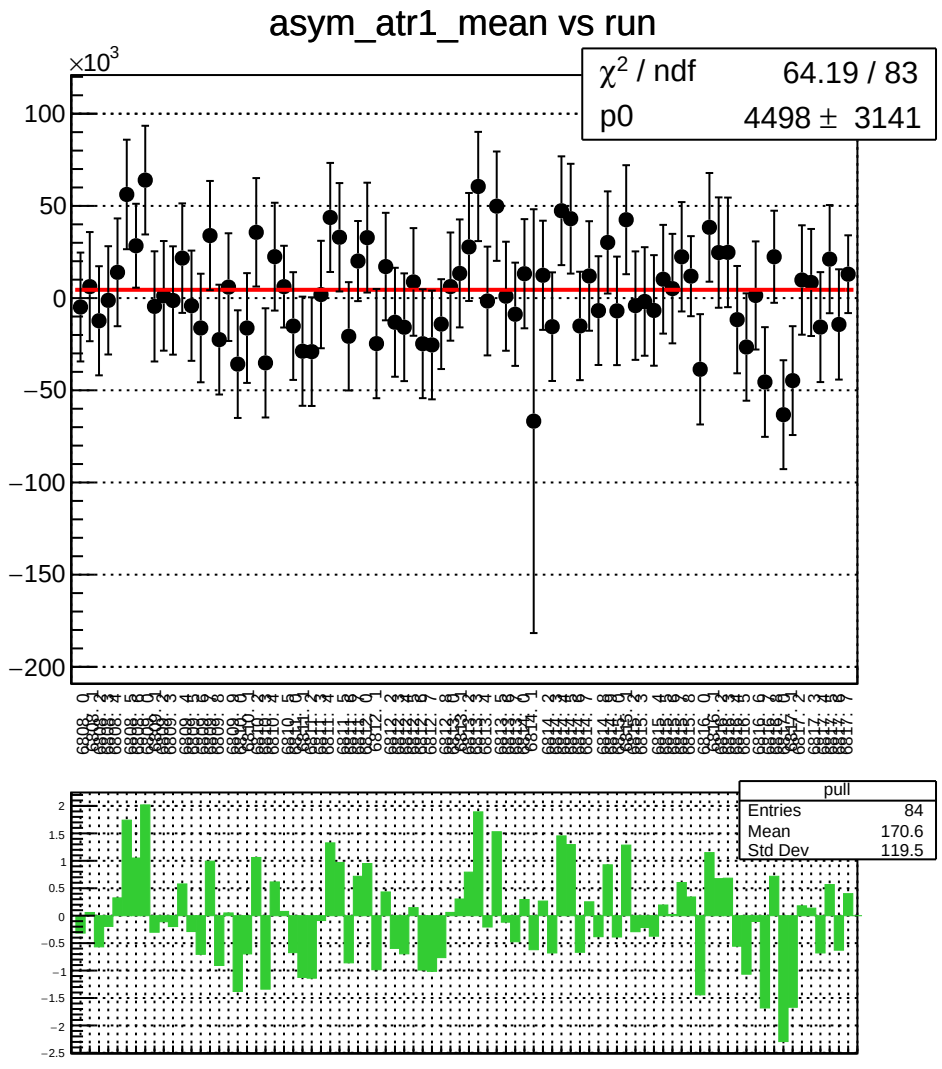

pull1D
Entries 84
Mean −0.01703
Std Dev 0.8601
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

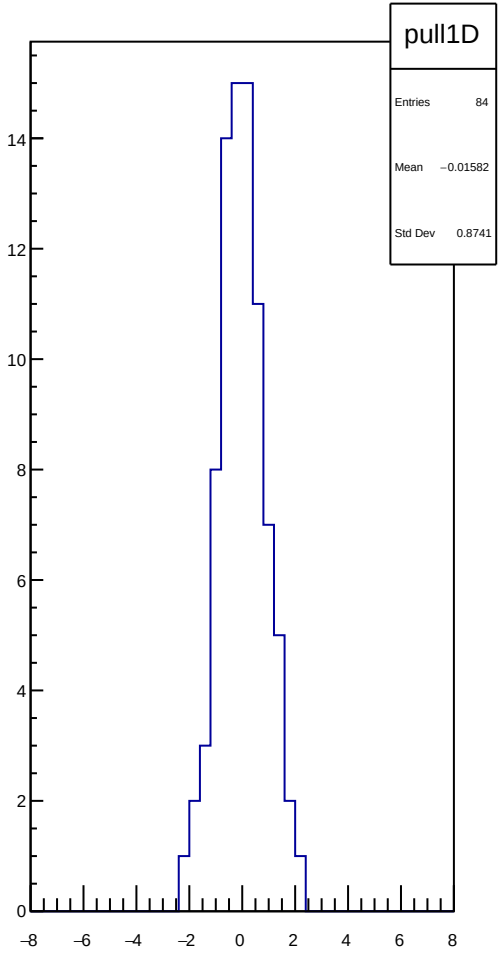

reg_asym_atr1_rms vs run
χ^2 / ndf 1.019e+04 / 83
p0 2734 ± 2.164
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

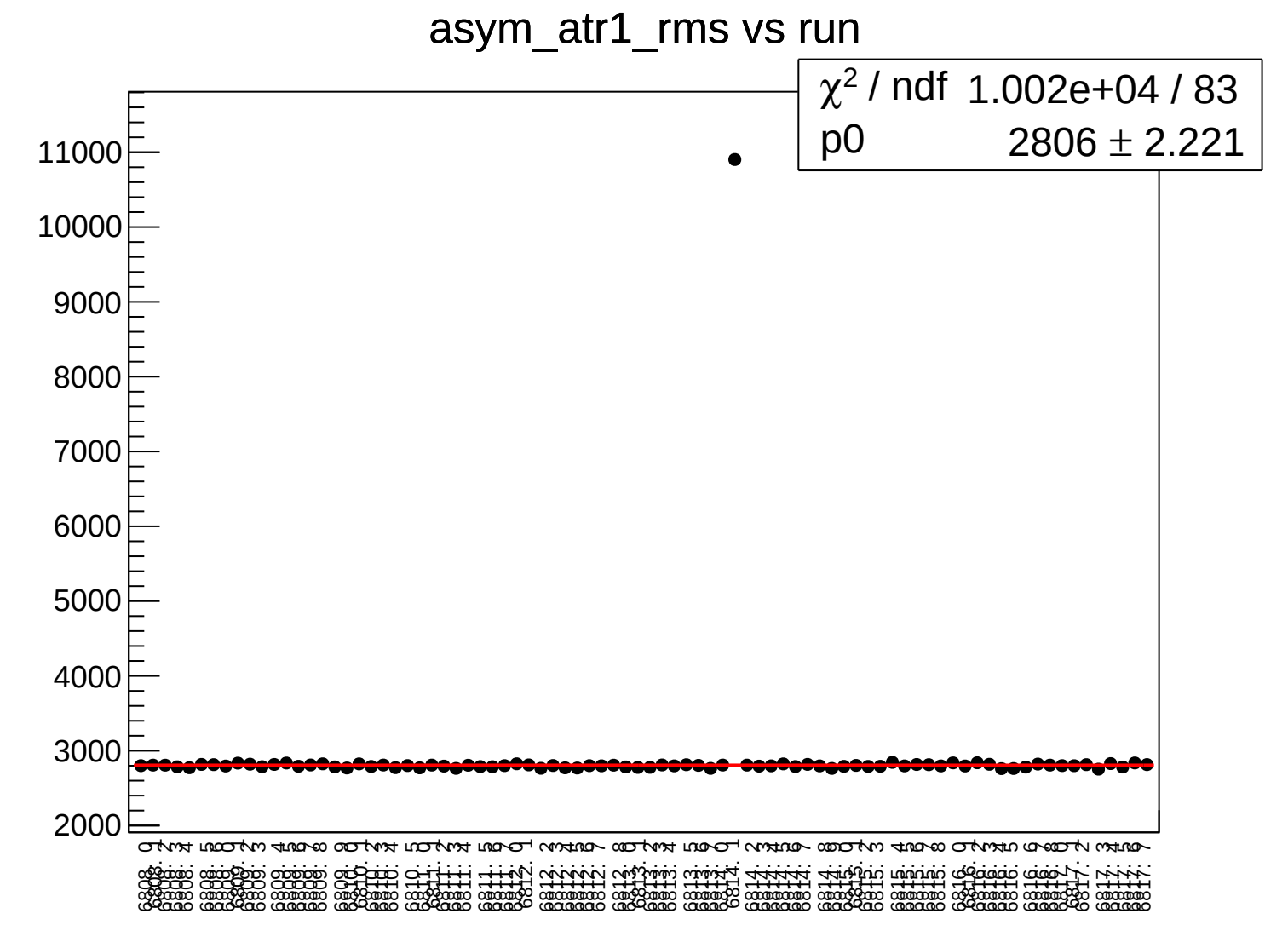

asym_atr1_correction_mean vs run
χ² / ndf 130.8 / 83
p0 −69.11 ± 696.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean 203.1
Std Dev 146.3
3
2
1
0
−1
−2
−3

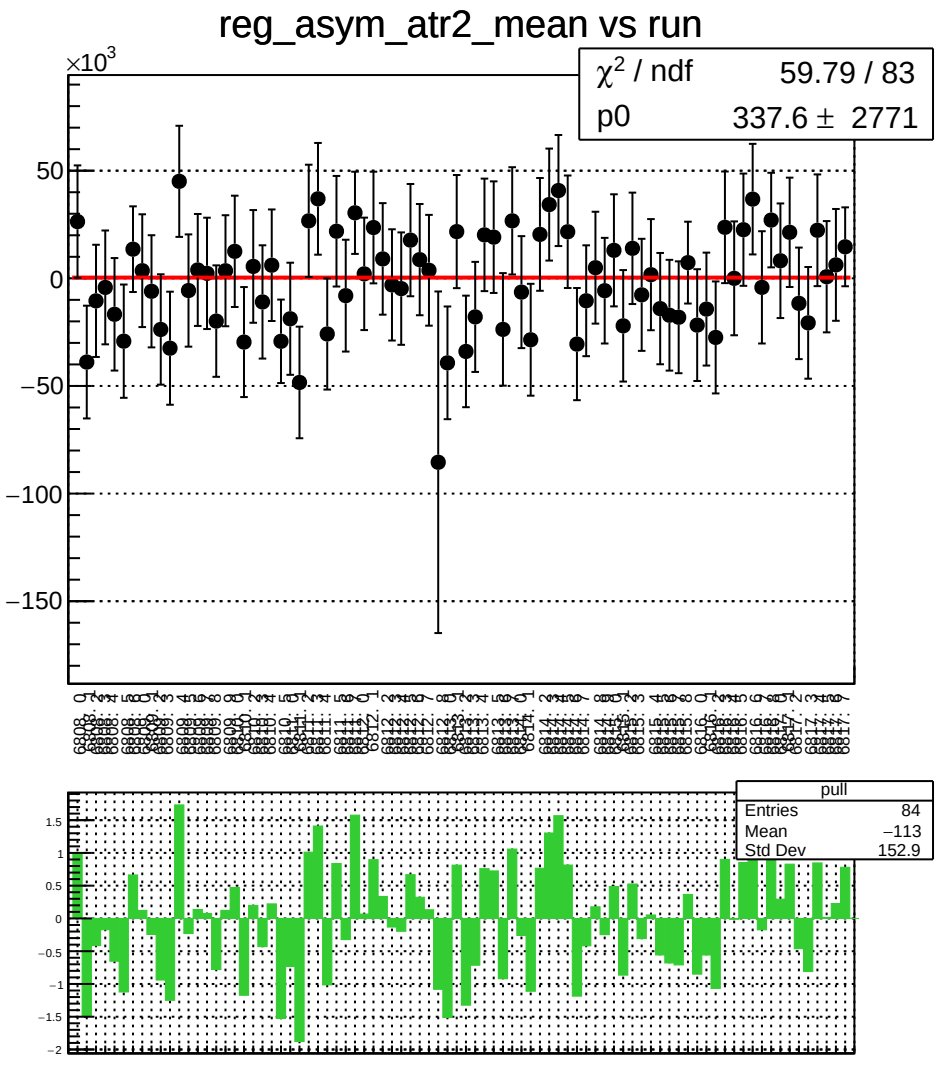

pull1D
Entries 84
Mean 0.006798
Std Dev 1.248
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

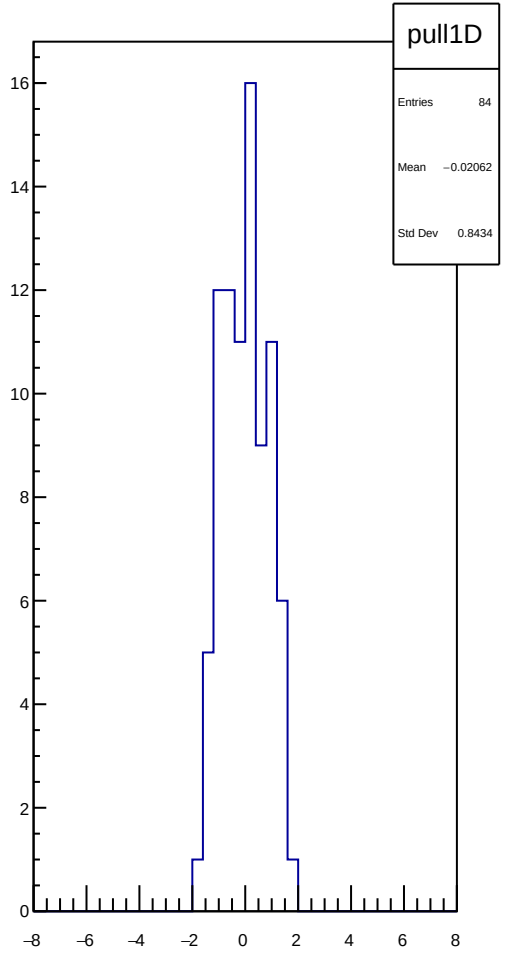

asym_atr1_correction_rms vs run
χ² / ndf 6902 / 83
p0 623 ± 0.4926
750
700
650
600
550
500
450

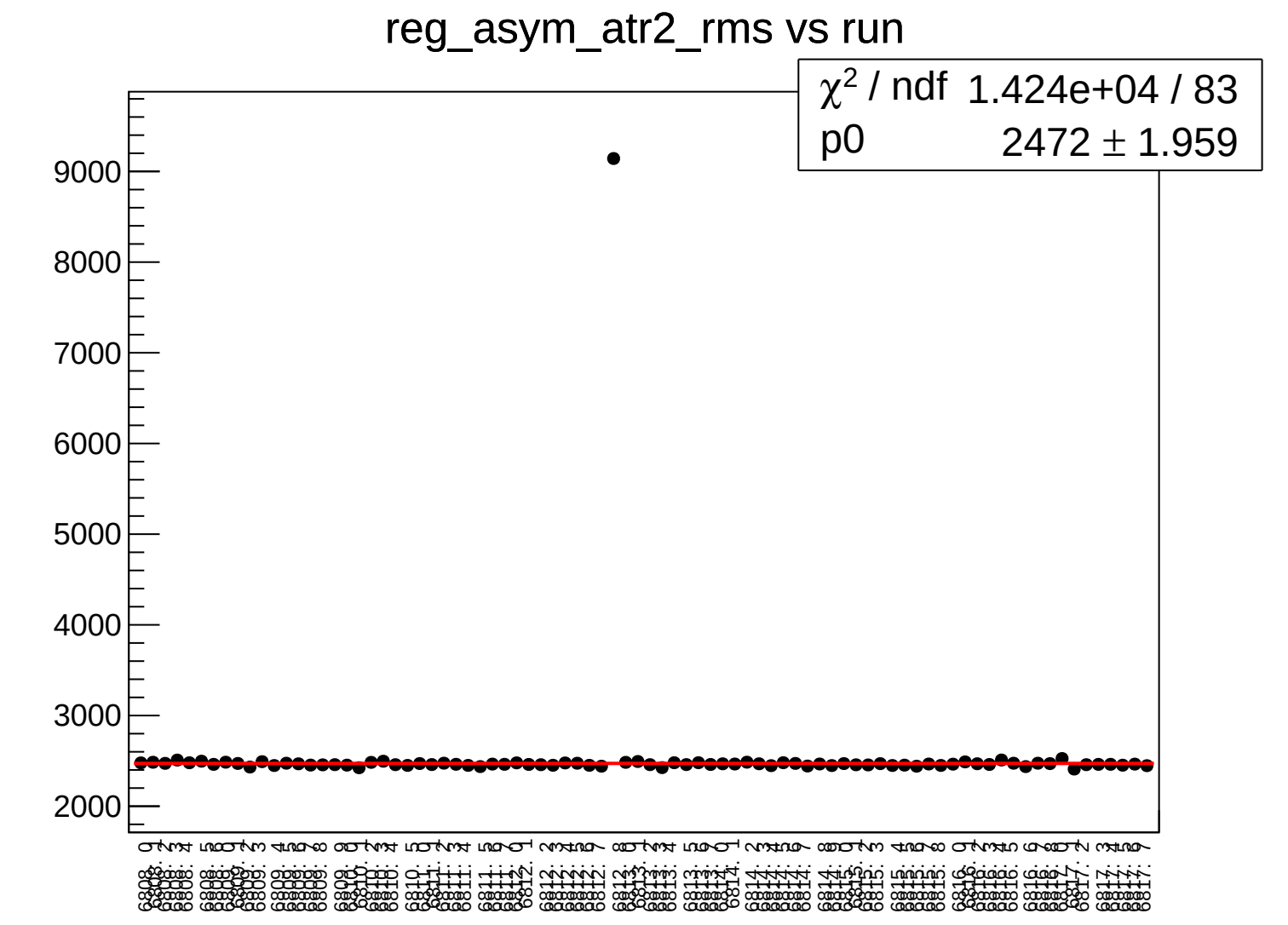

asym_atr1_mean vs run
×10^3
χ^2 / ndf 64.19 / 83
p0 4498 ± 3141
pull
Entries 84
Mean 170.6
Std Dev 119.5

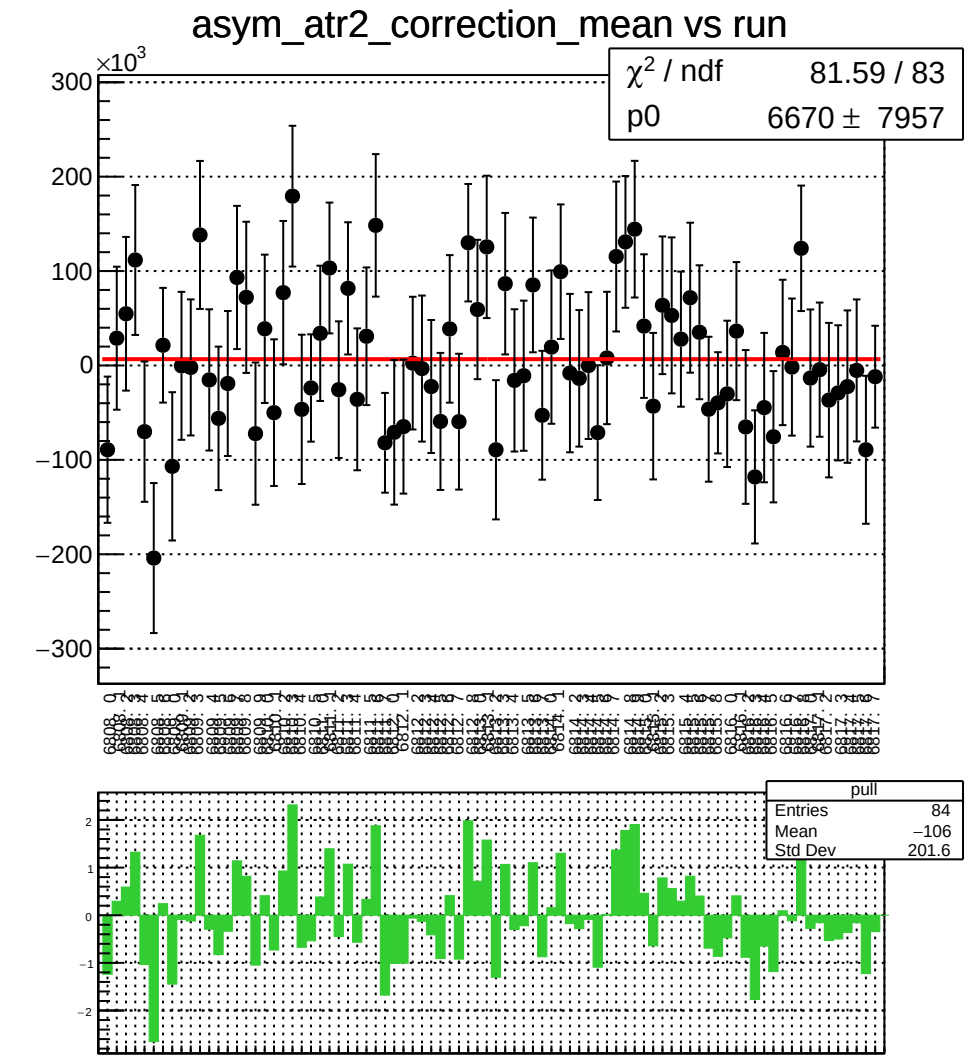

pull1D
Entries 84
Mean −0.01582
Std Dev 0.8741

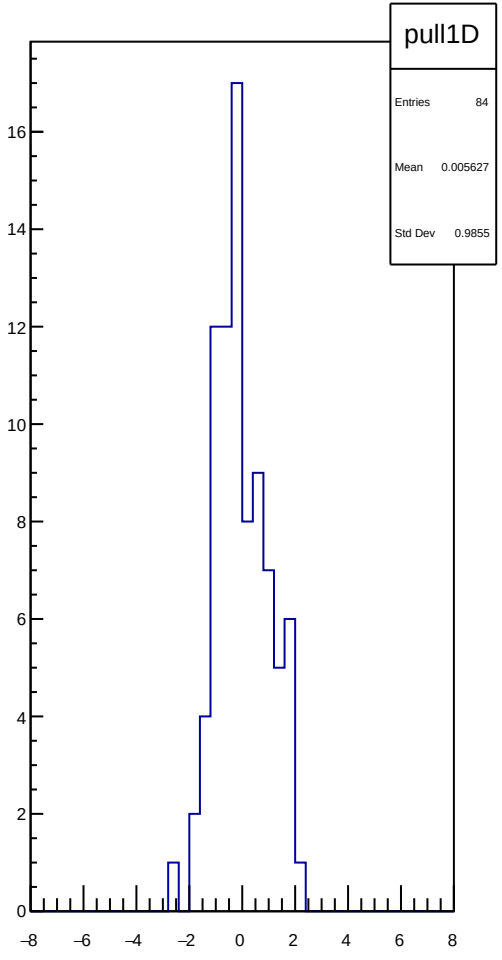

asym_atr1_rms vs run
χ² / ndf 1.002e+04 / 83
p0 2806 ± 2.221
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

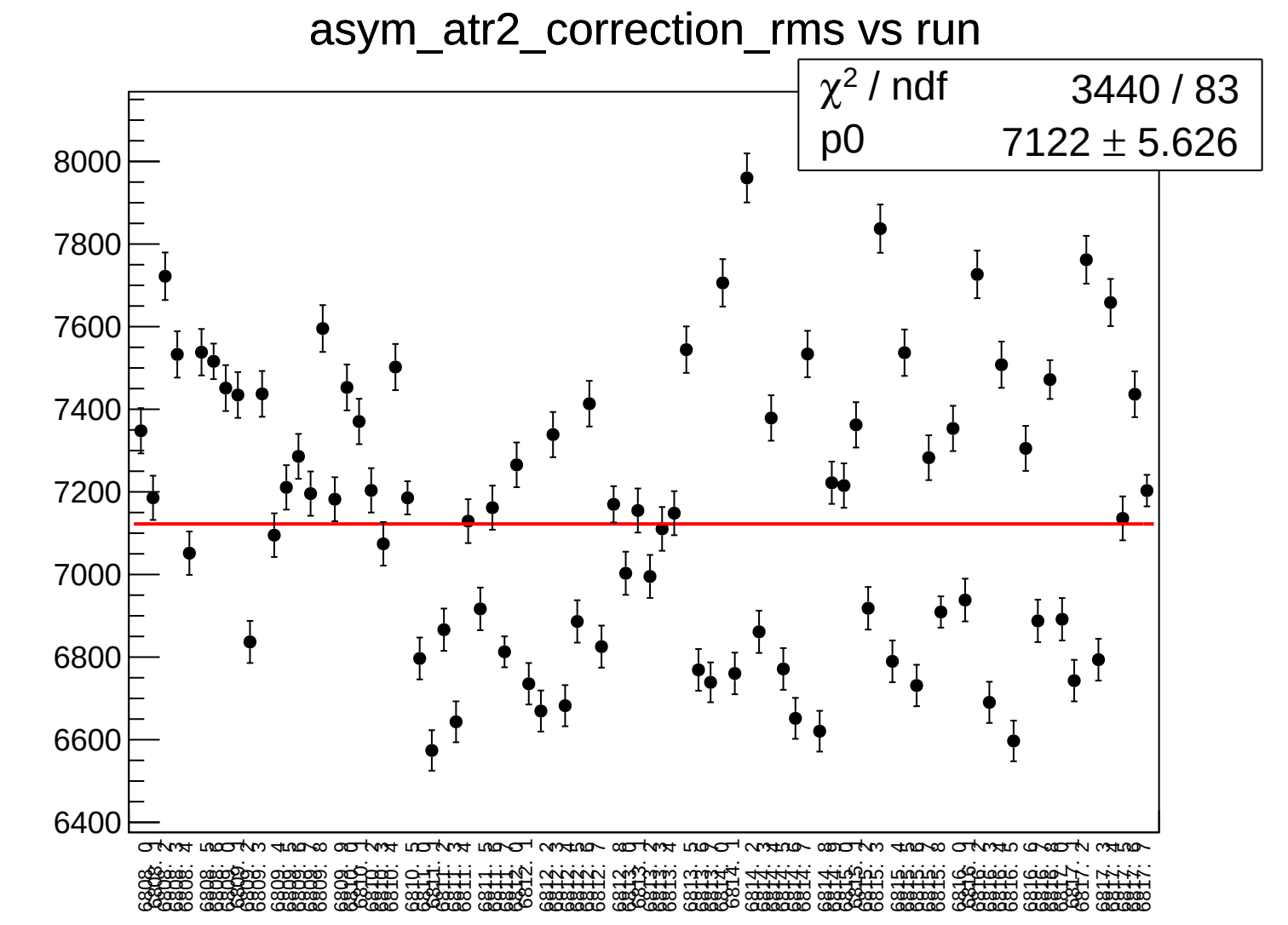

reg_asym_atr2_mean vs run
×10^3
χ^2 / ndf 59.79 / 83
p0 337.6 ± 2771
50
0
−50
−100
−150
pull
Entries 84
Mean −113
Std Dev 152.9
1.5
1
0.5
0
−0.5
−1
−1.5
−2

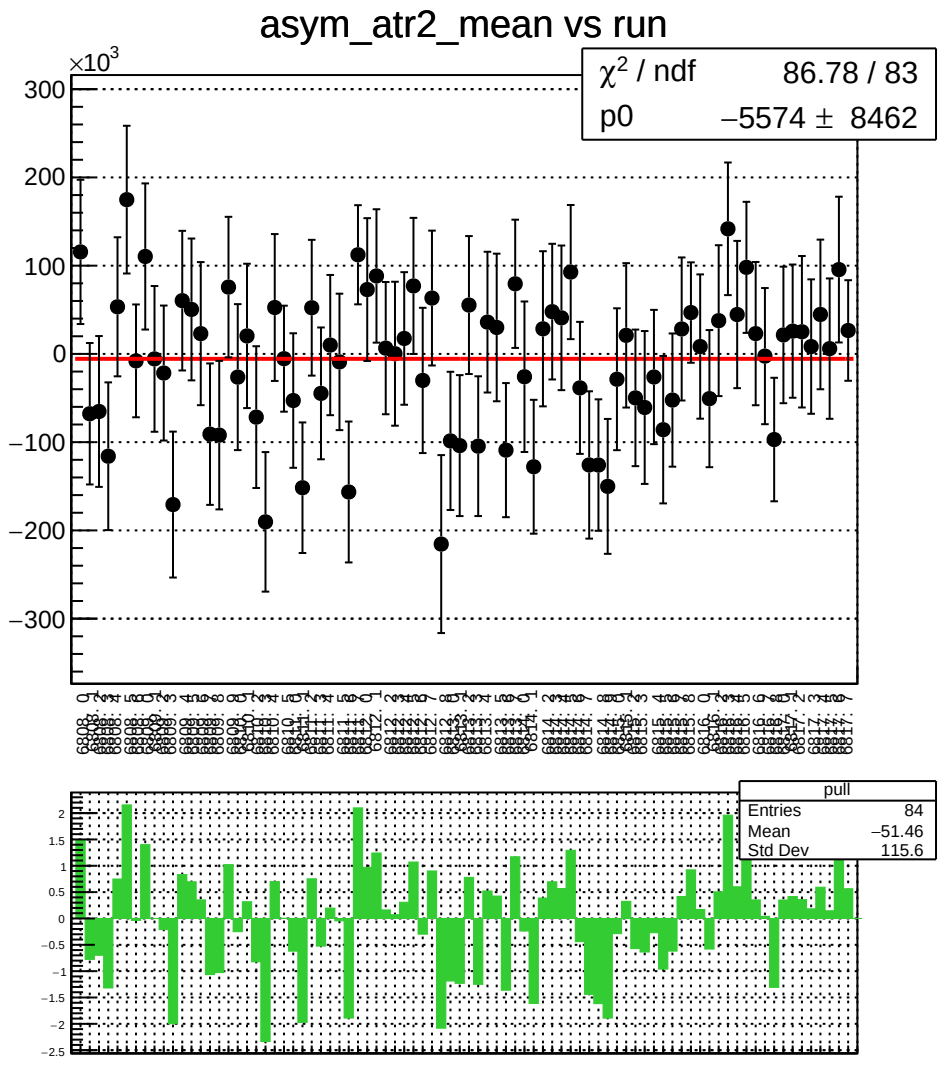

pull1D
Entries 84
Mean −0.02062
Std Dev 0.8434
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

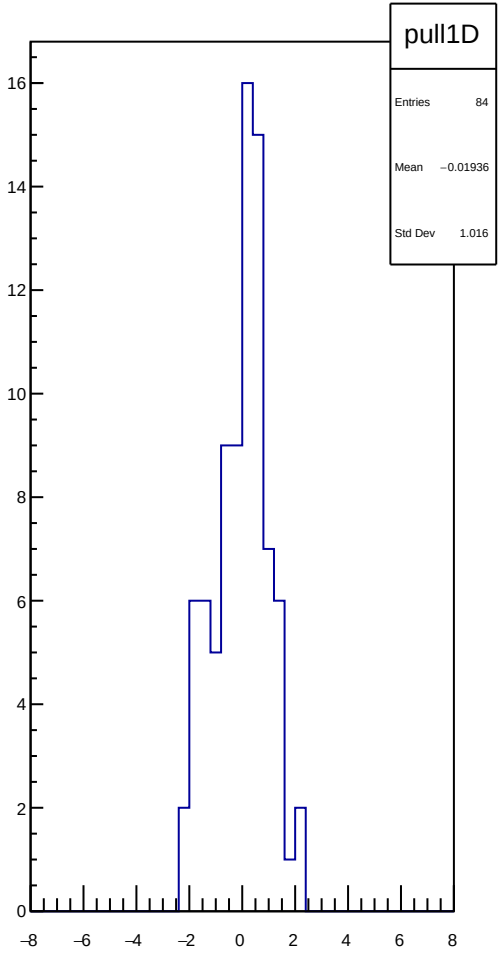

reg_asym_atr2_rms vs run
χ^2 / ndf 1.424e+04 / 83
p0 2472 ± 1.959
9000
8000
7000
6000
5000
4000
3000
2000

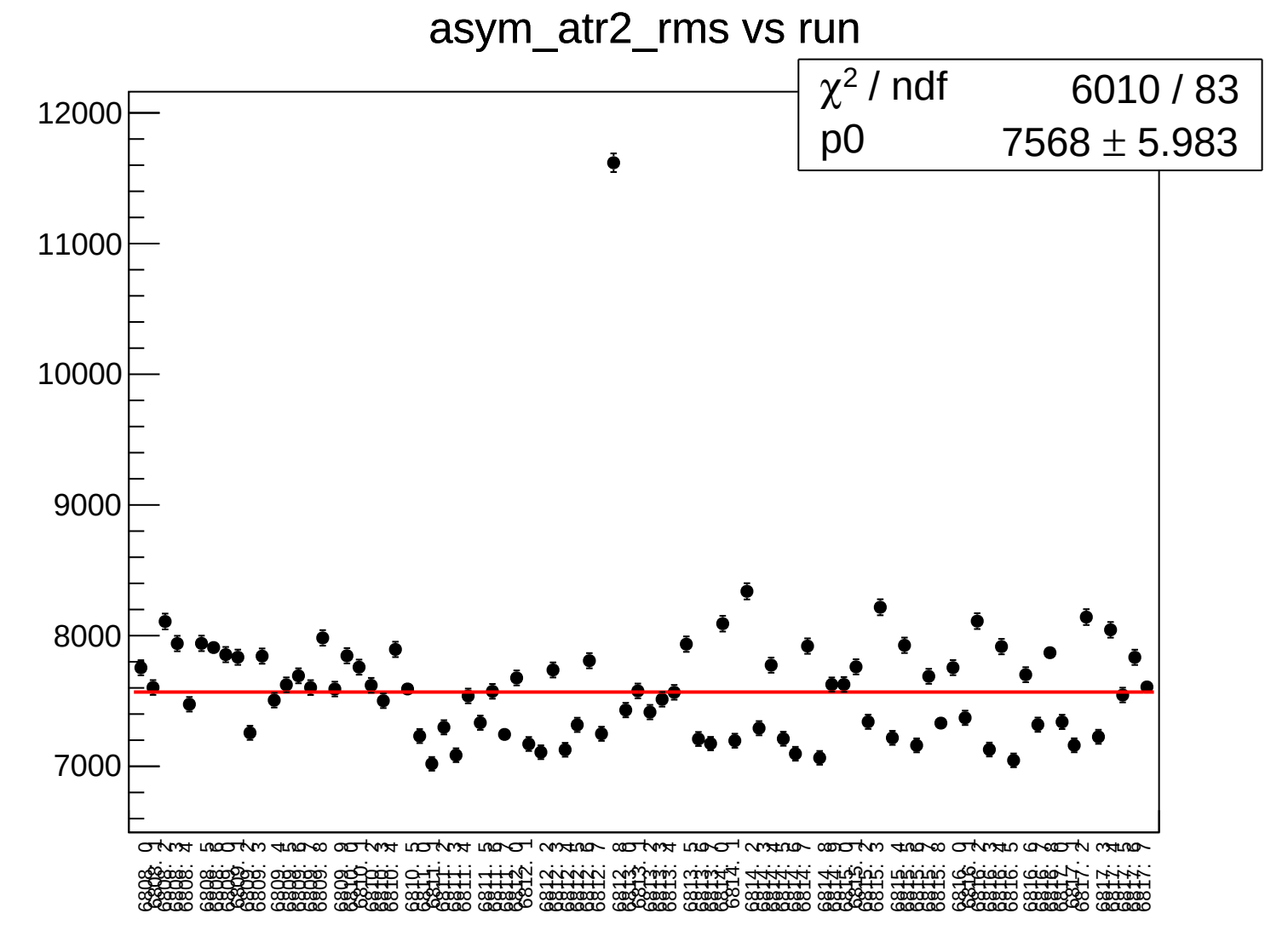

asym_atr2_correction_mean vs run
×10^3
χ^2 / ndf 81.59 / 83
p0 6670 ± 7957
pull
Entries 84
Mean −106
Std Dev 201.6

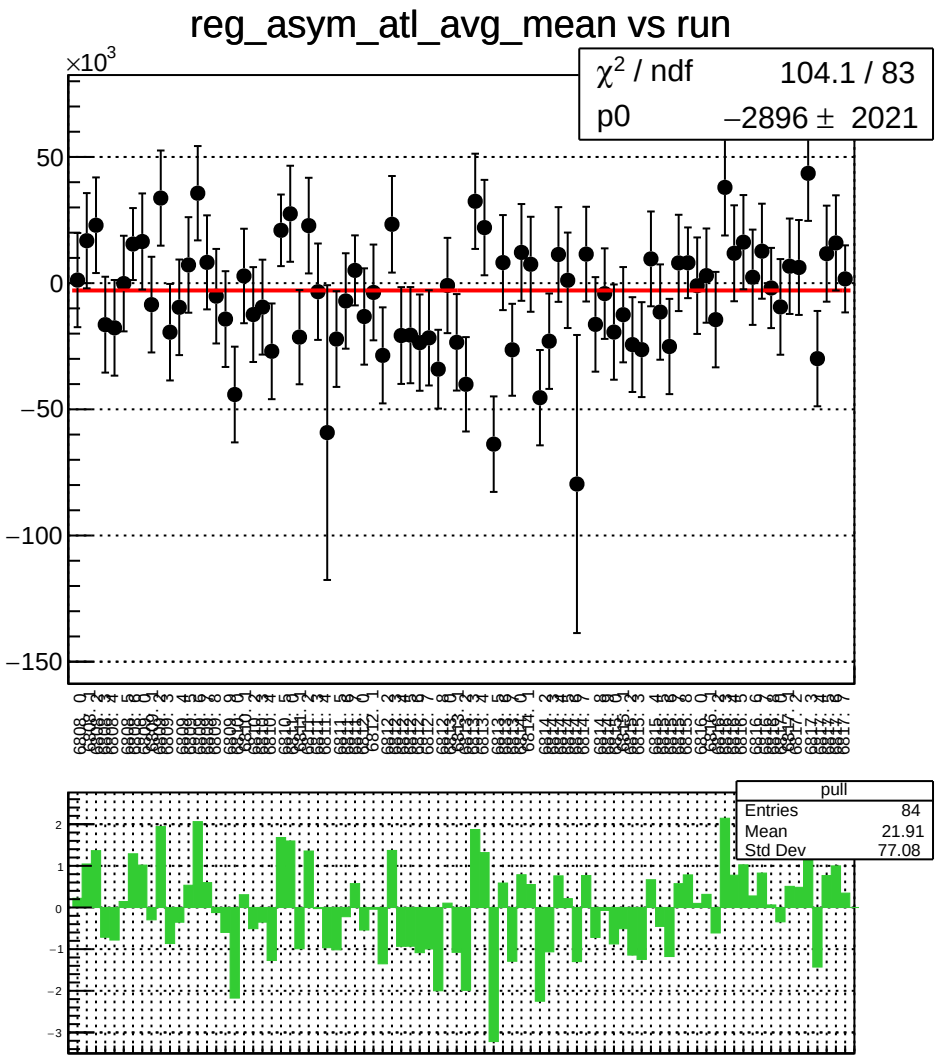

pull1D
Entries 84
Mean 0.005627
Std Dev 0.9855

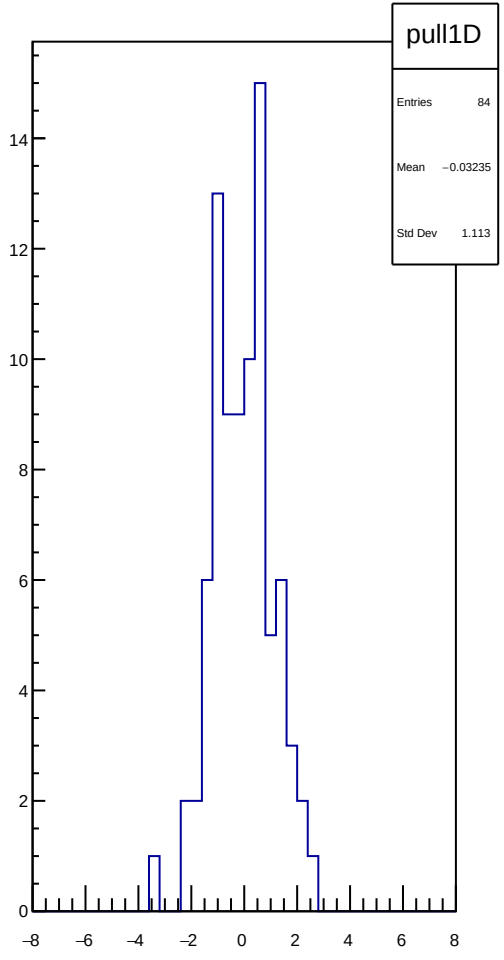

asym_atr2_correction_rms vs run
χ² / ndf 3440 / 83
p0 7122 ± 5.626
8000
7800
7600
7400
7200
7000
6800
6600
6400

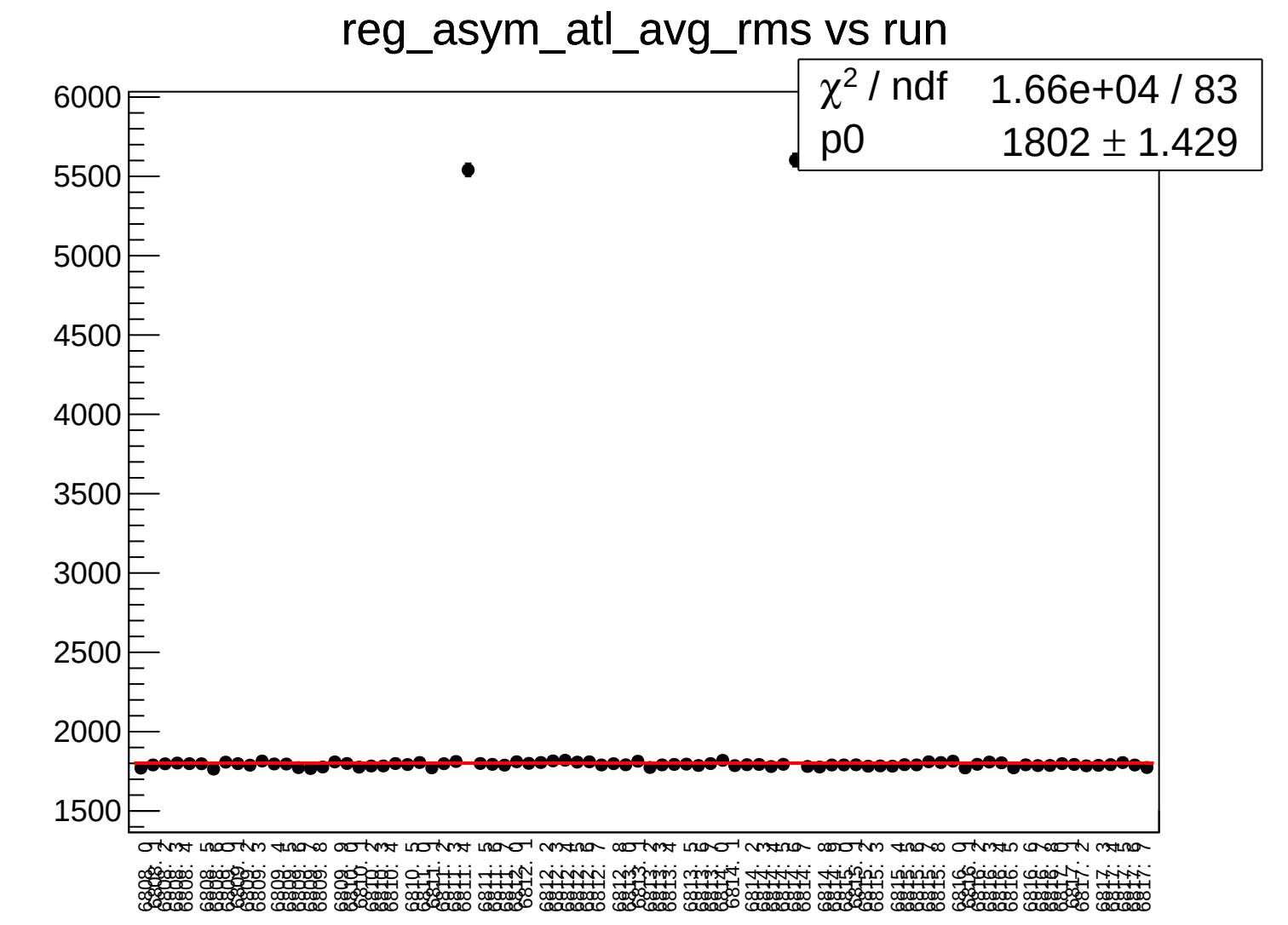

asym_atr2_mean vs run
×10^3
χ² / ndf 86.78 / 83
p0 −5574 ± 8462
pull
Entries 84
Mean −51.46
Std Dev 115.6

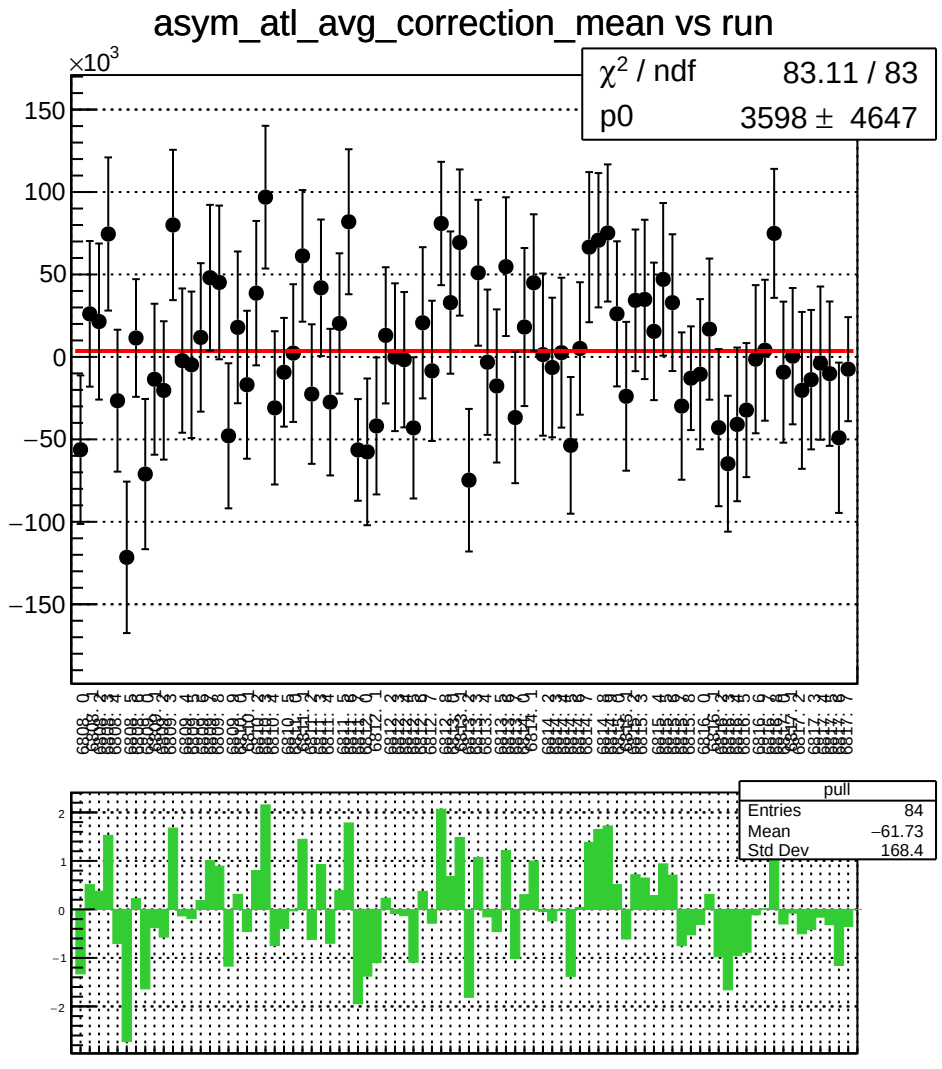

pull1D
Entries 84
Mean −0.01936
Std Dev 1.016

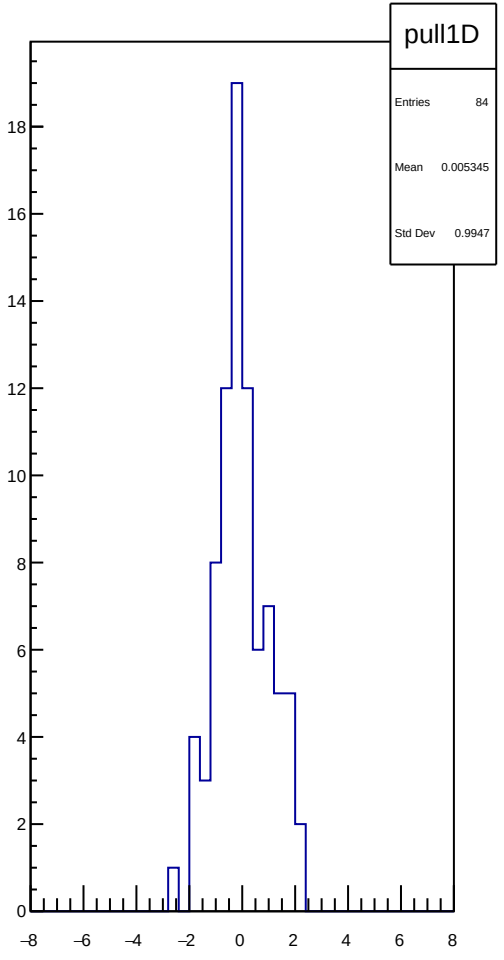

asym_atr2_rms vs run
χ^2 / ndf 6010 / 83
p0 7568 ± 5.983
12000
11000
10000
9000
8000
7000

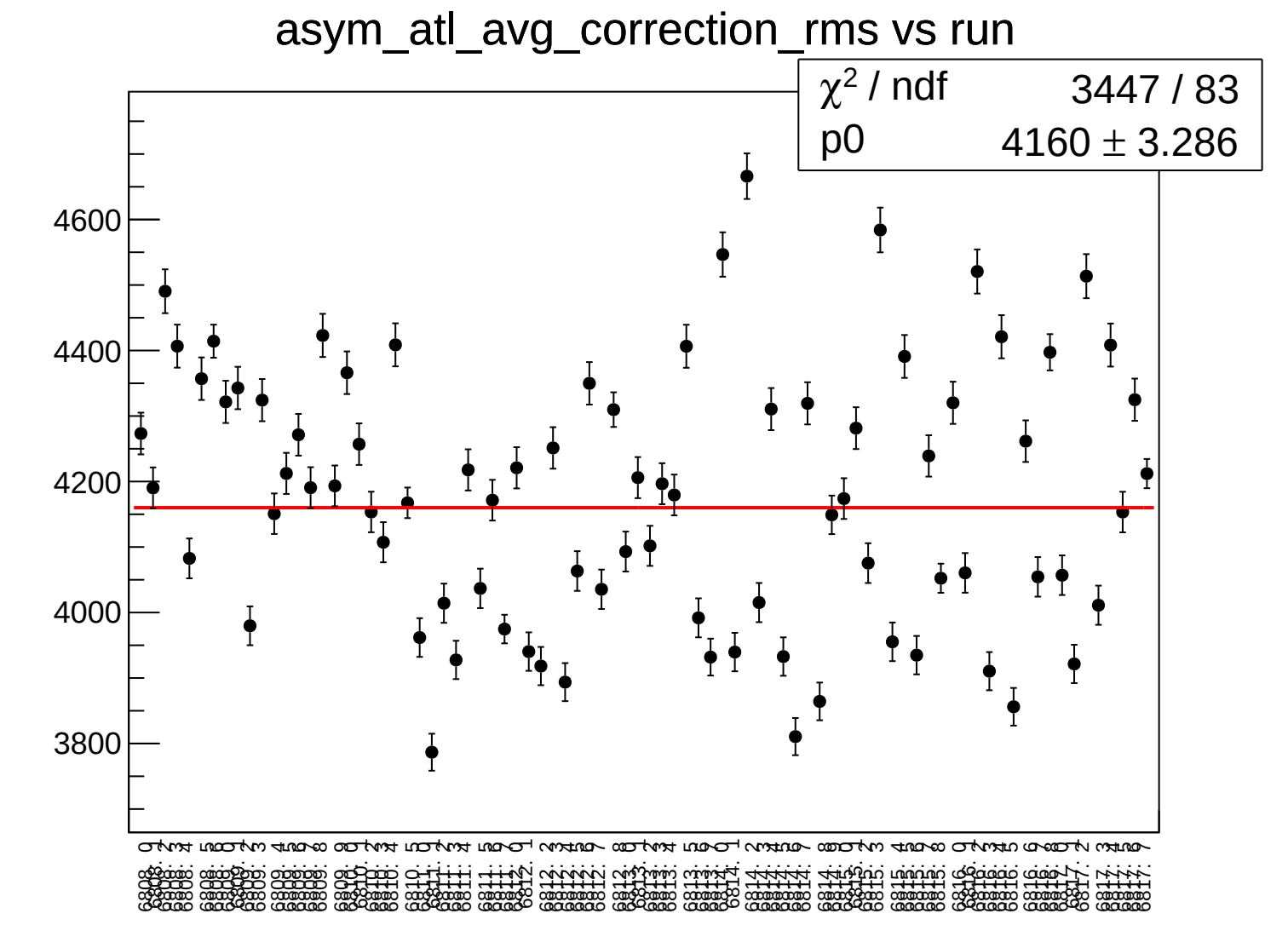

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 104.1 / 83
p0 −2896 ± 2021
50
0
−50
−100
−150
pull
Entries 84
Mean 21.91
Std Dev 77.08
2
1
0
−1
−2
−3

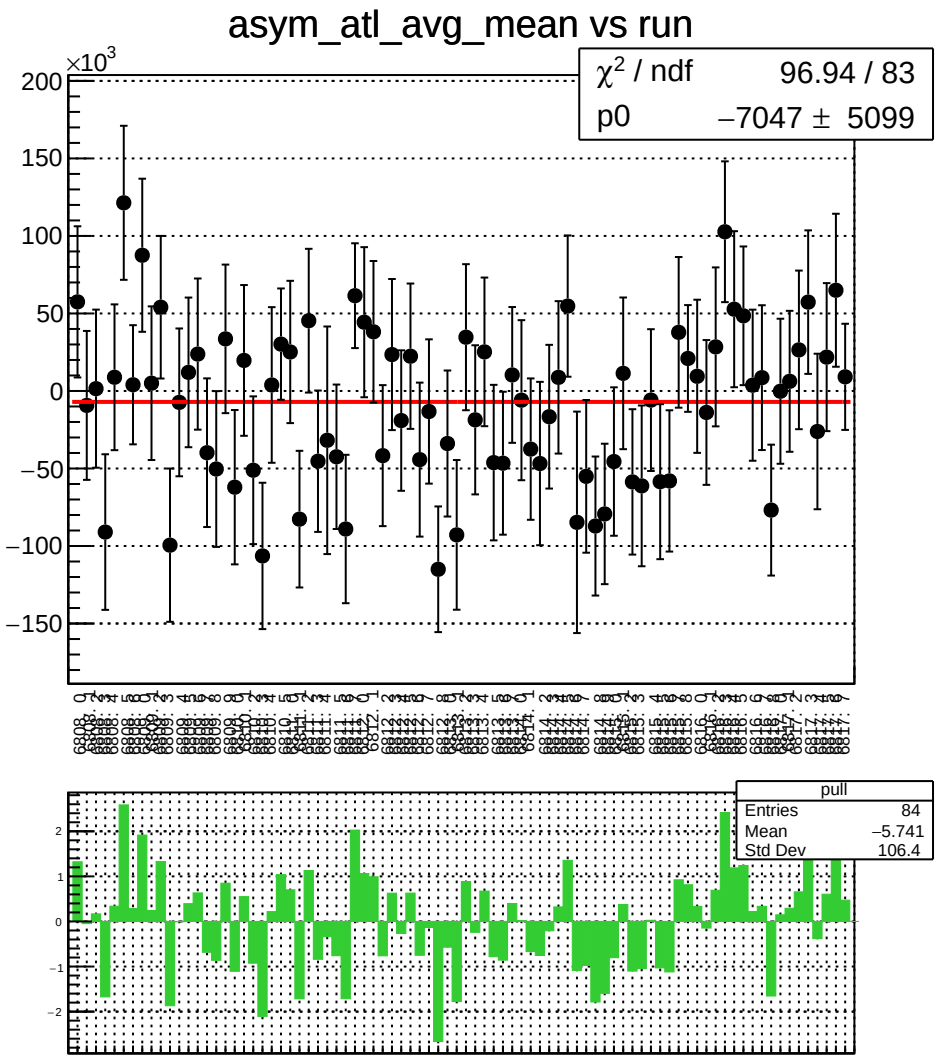

pull1D
Entries 84
Mean −0.03235
Std Dev 1.113
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

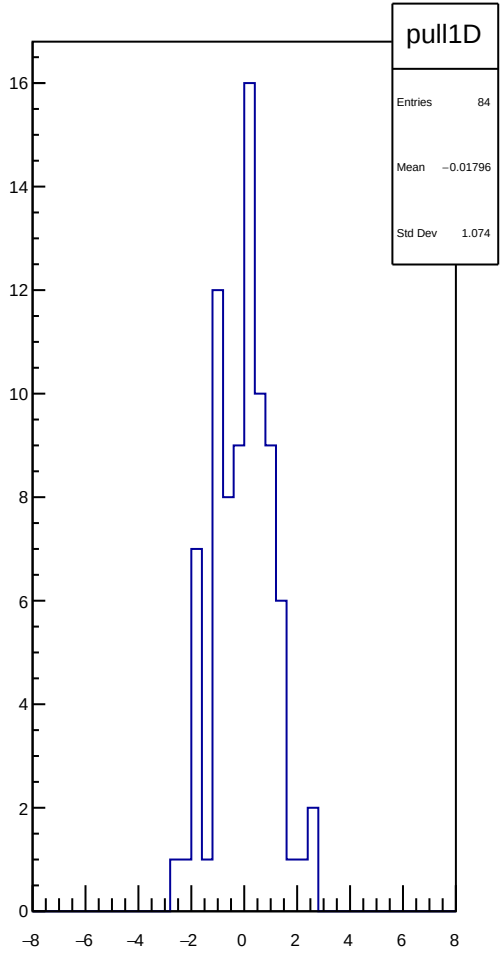

reg_asym_atl_avg_rms vs run
χ^2 / ndf 1.66e+04 / 83
p0 1802 ± 1.429
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

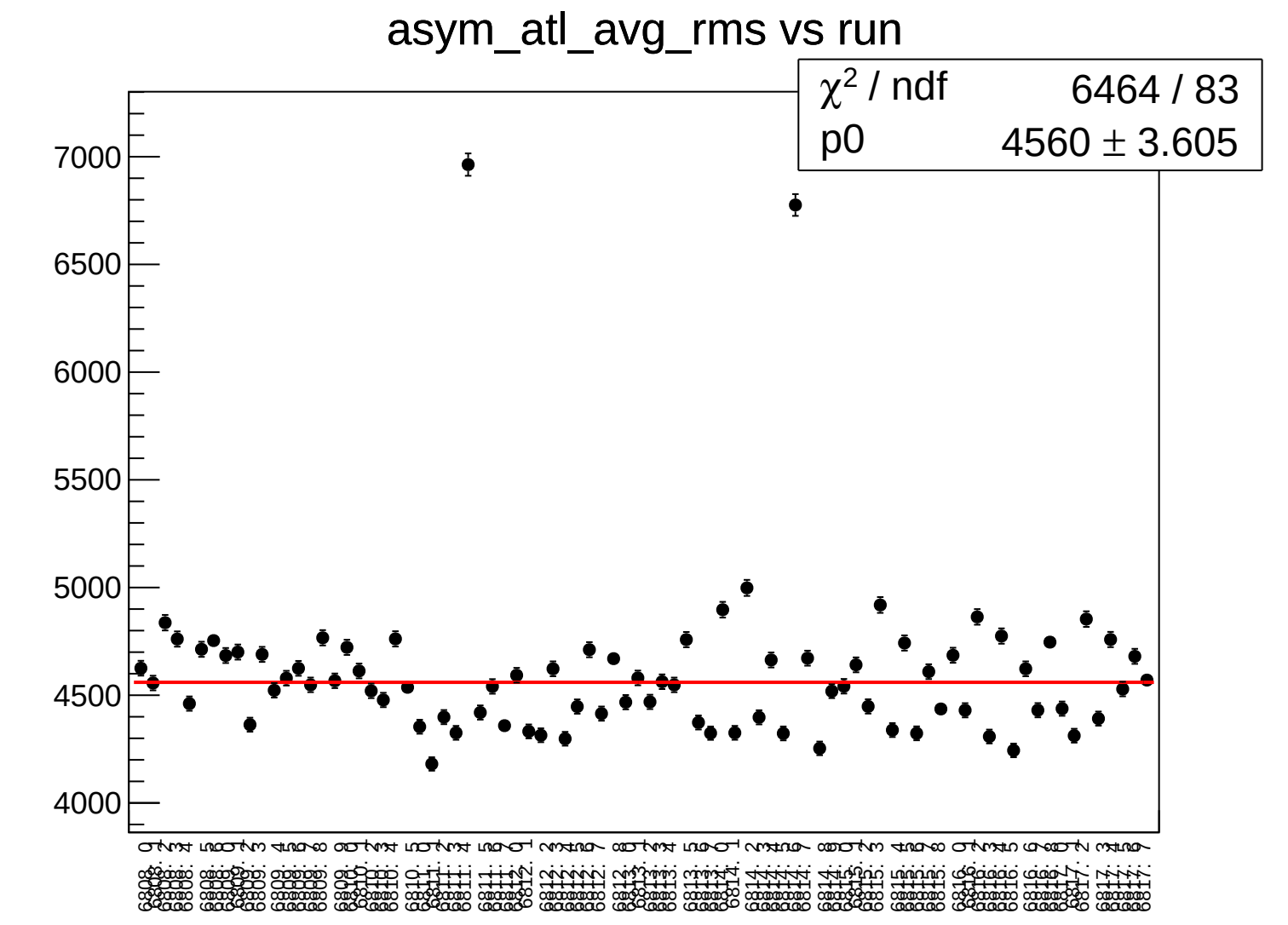

asym_atl_avg_correction_mean vs run
×10^3
χ^2 / ndf 83.11 / 83
p0 3598 ± 4647
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −61.73
Std Dev 168.4
2
1
0
−1
−2

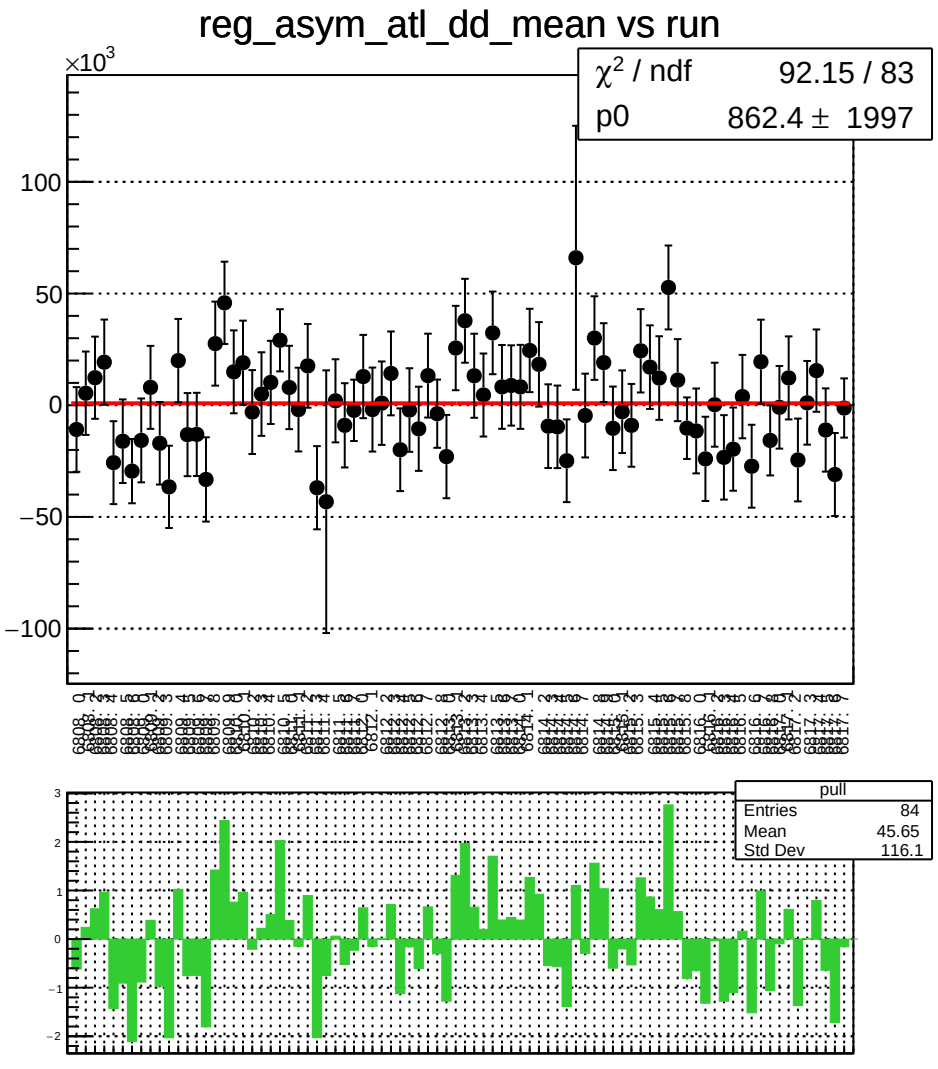

pull1D
Entries 84
Mean 0.005345
Std Dev 0.9947
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

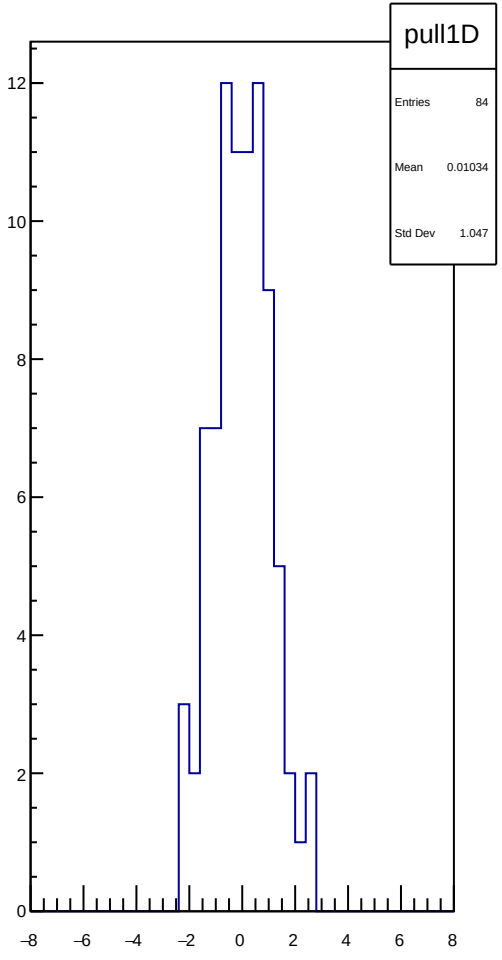

asym_atl_avg_correction_rms vs run
χ² / ndf 3447 / 83
p0 4160 ± 3.286
4600
4400
4200
4000
3800

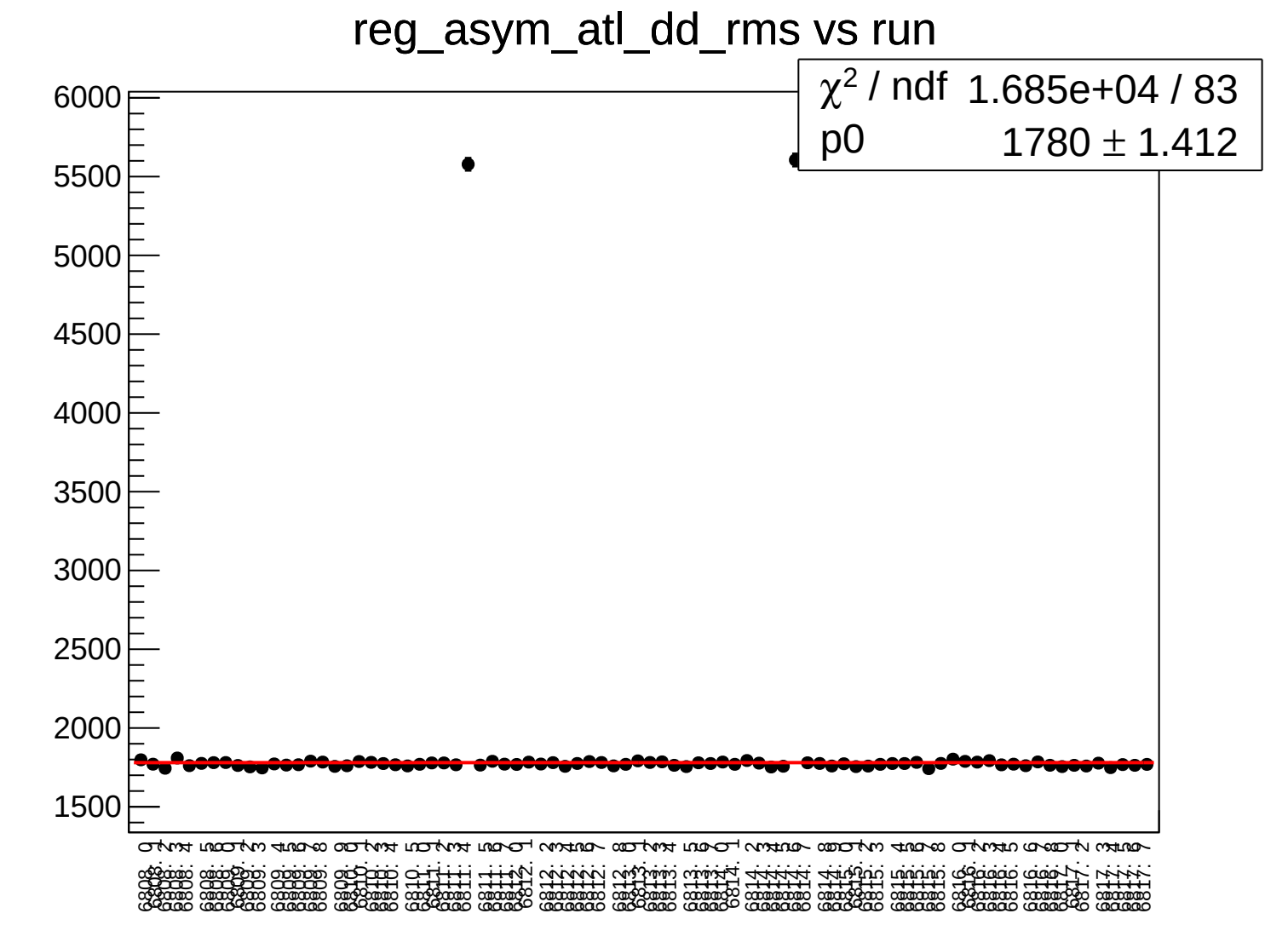

asym_atl_avg_mean vs run
×10^3
χ² / ndf 96.94 / 83
p0 −7047 ± 5099
200
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −5.741
Std Dev 106.4
2
1
0
−1
−2

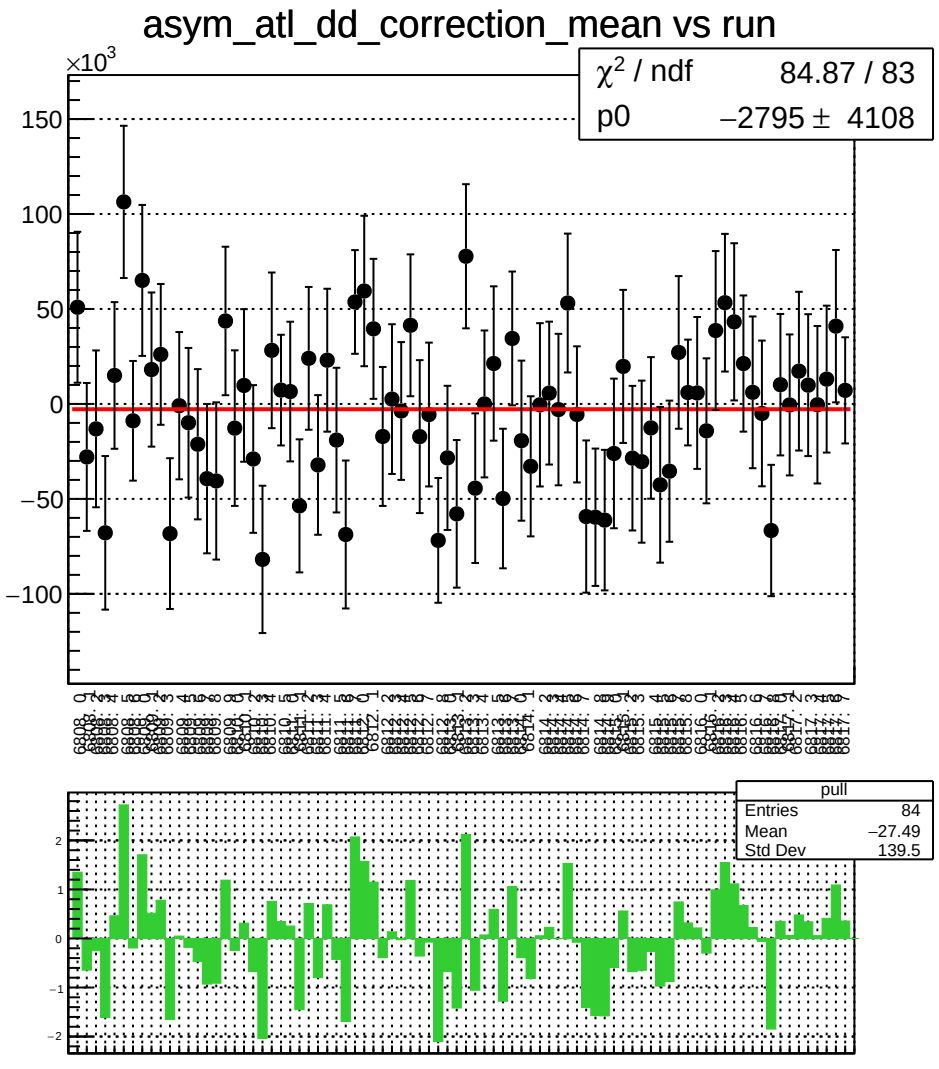

pull1D
Entries 84
Mean −0.01796
Std Dev 1.074
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

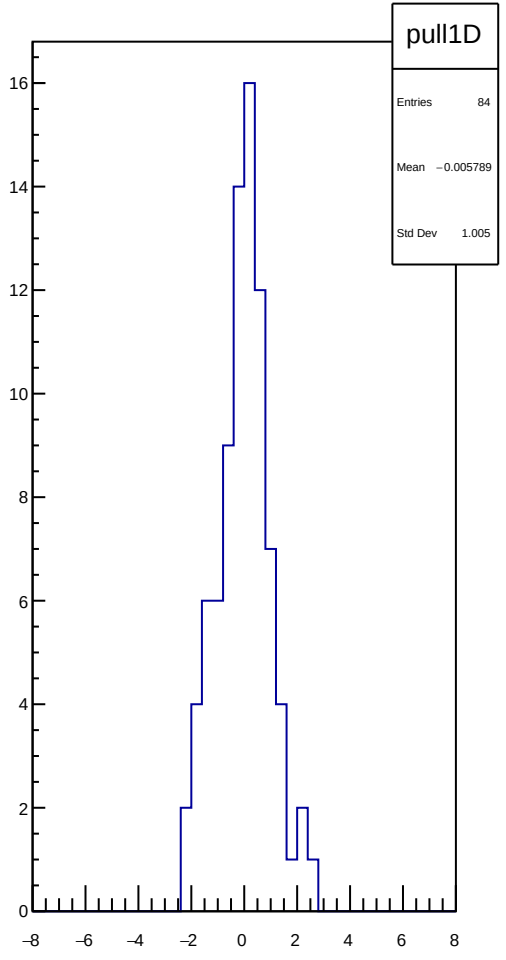

asym_atl_avg_rms vs run
χ^2 / ndf 6464 / 83
p0 4560 ± 3.605
7000
6500
6000
5500
5000
4500
4000

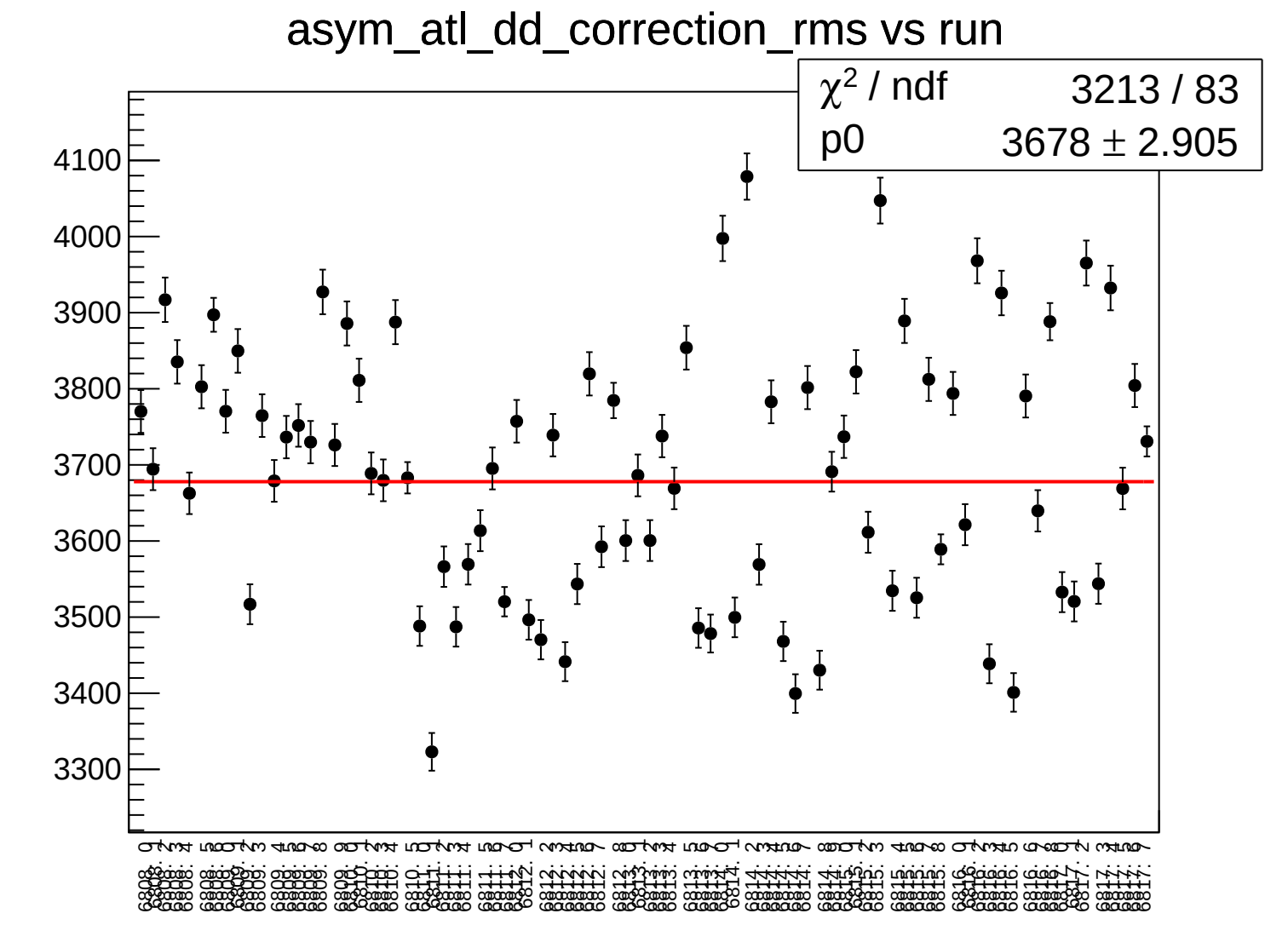

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 92.15 / 83
p0 862.4 ± 1997
100
50
0
−50
−100
pull
Entries 84
Mean 45.65
Std Dev 116.1
3
2
1
0
−1
−2

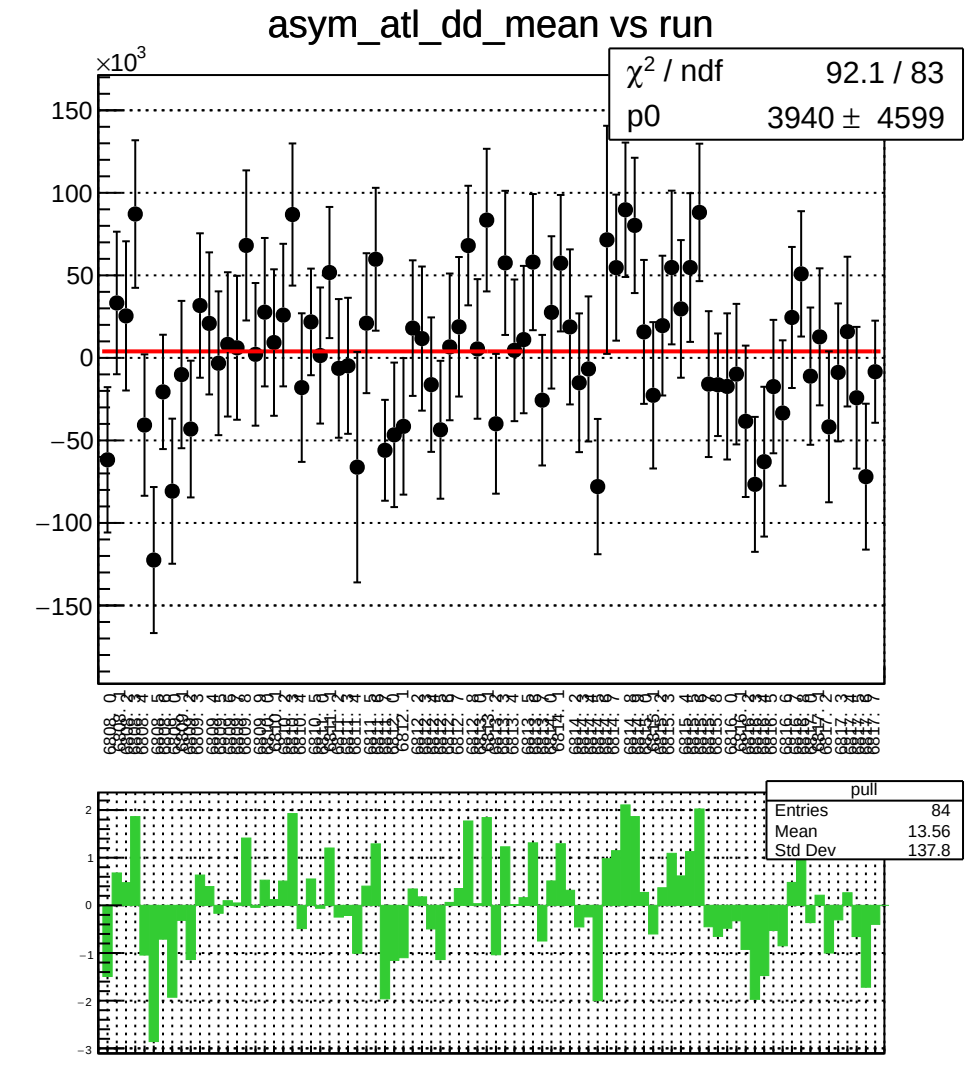

pull1D
Entries 84
Mean 0.01034
Std Dev 1.047
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

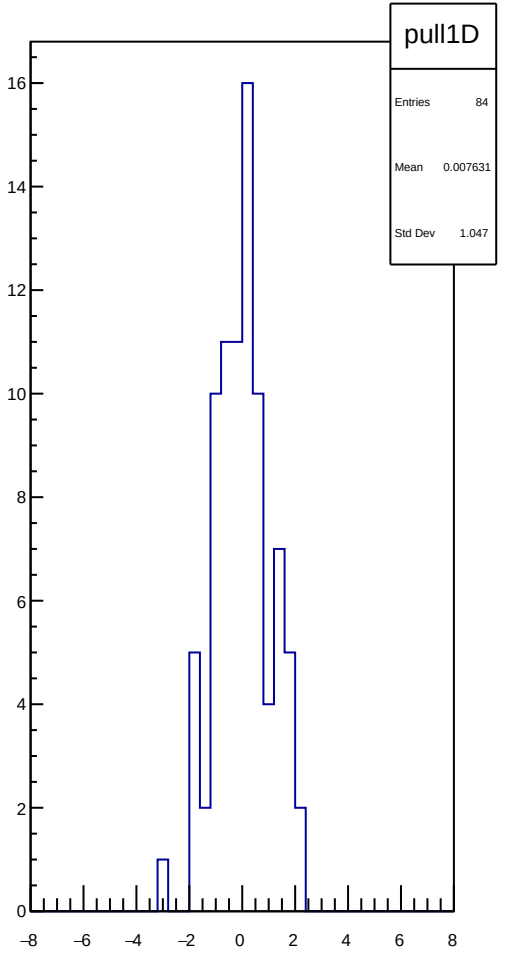

reg_asym_atl_dd_rms vs run
χ² / ndf 1.685e+04 / 83
p0 1780 ± 1.412
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

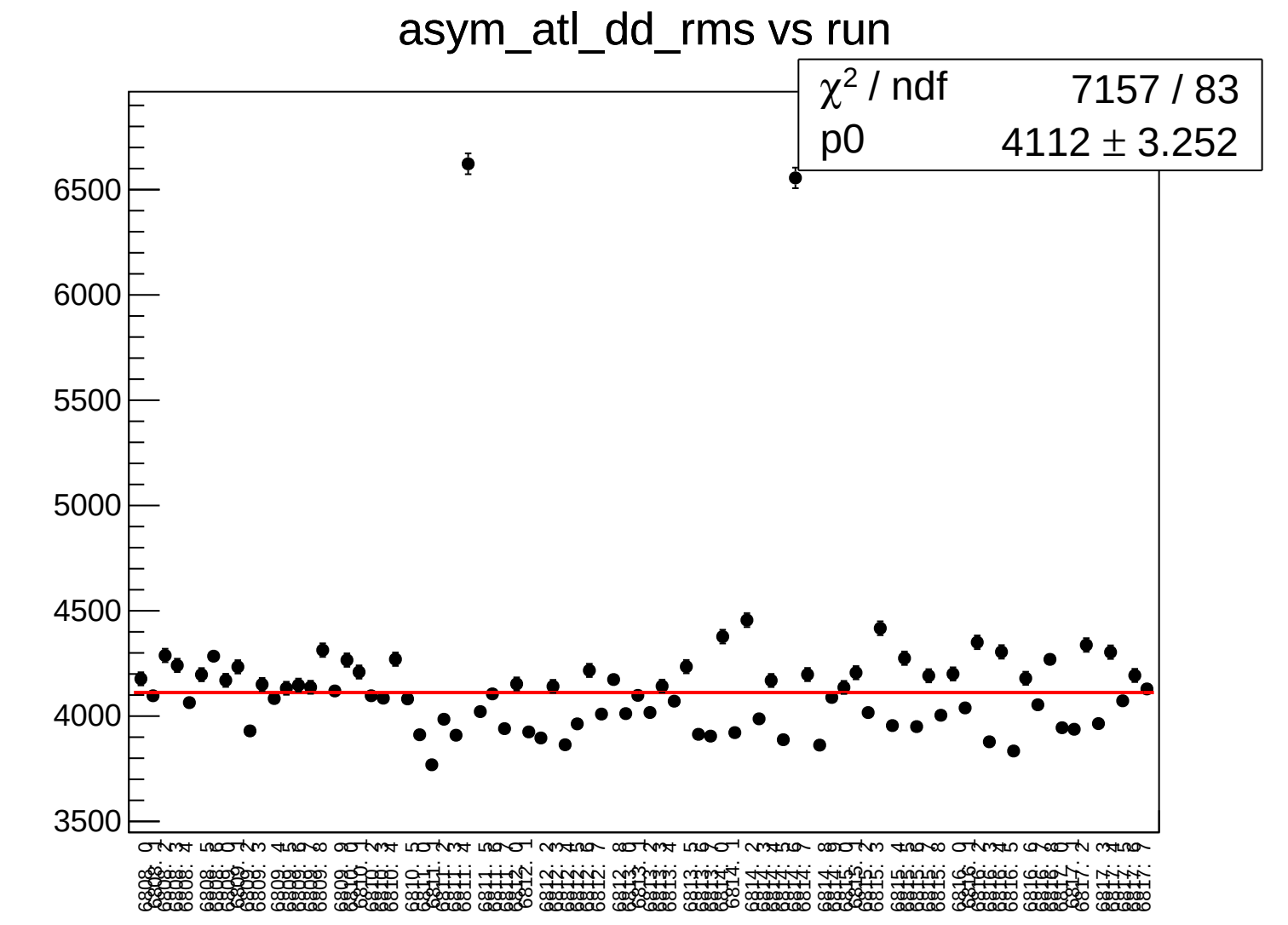

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 84.87 / 83
p0 −2795 ± 4108
150
100
50
0
−50
−100
pull
Entries 84
Mean −27.49
Std Dev 139.5
2
1
0
−1
−2

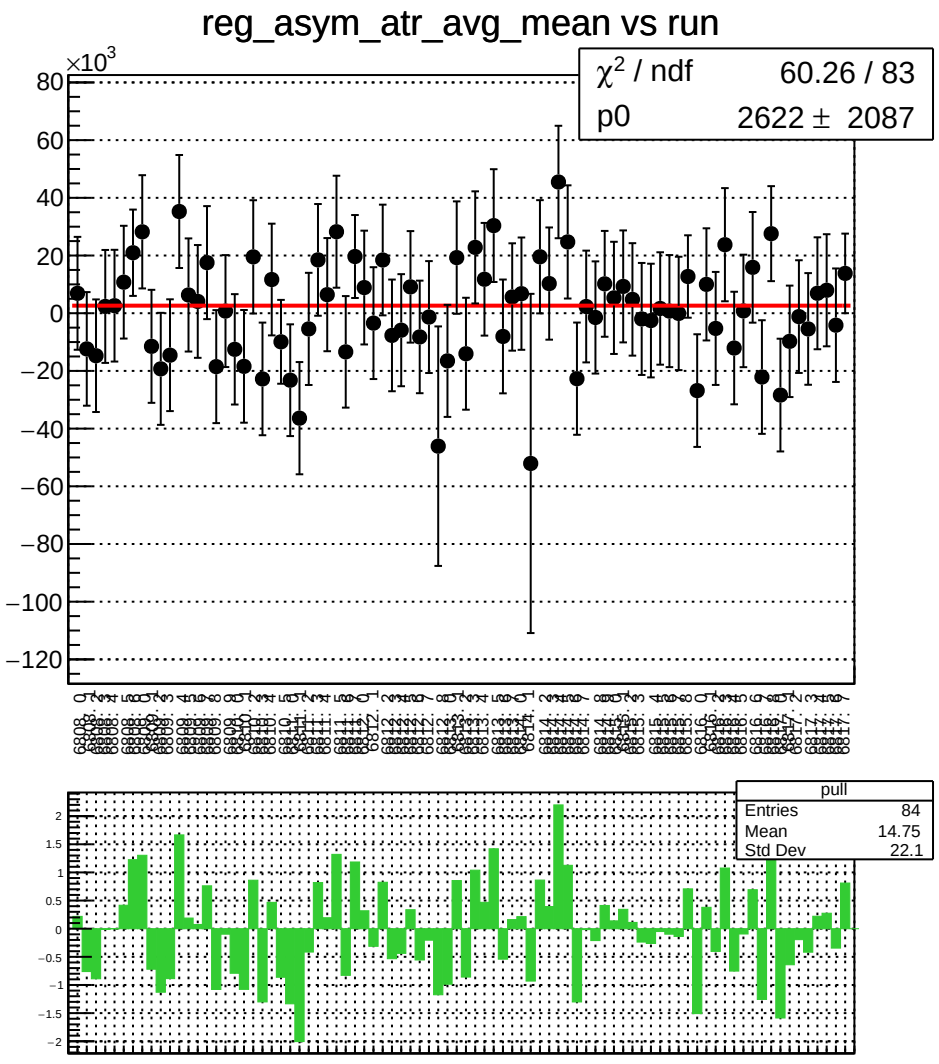

pull1D
Entries 84
Mean −0.005789
Std Dev 1.005
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

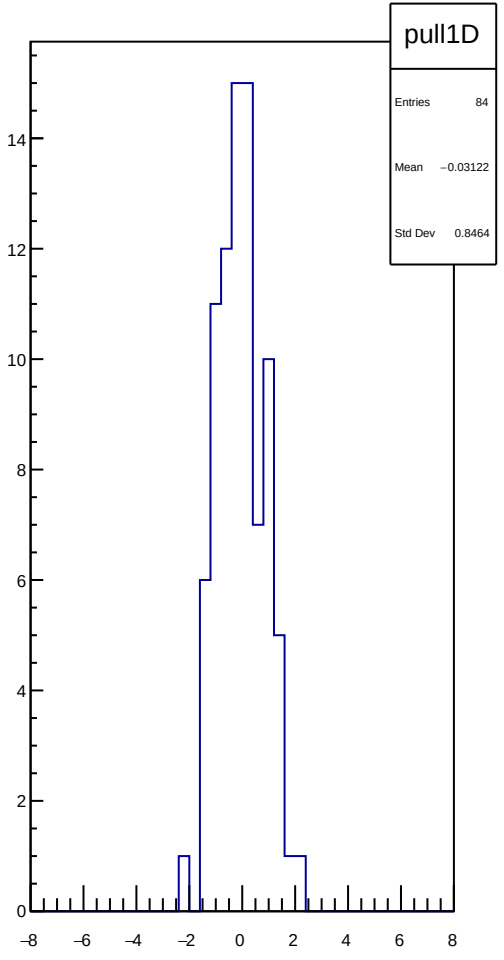

asym_atl_dd_correction_rms vs run
χ^2 / ndf 3213 / 83
p0 3678 ± 2.905
4100
4000
3900
3800
3700
3600
3500
3400
3300

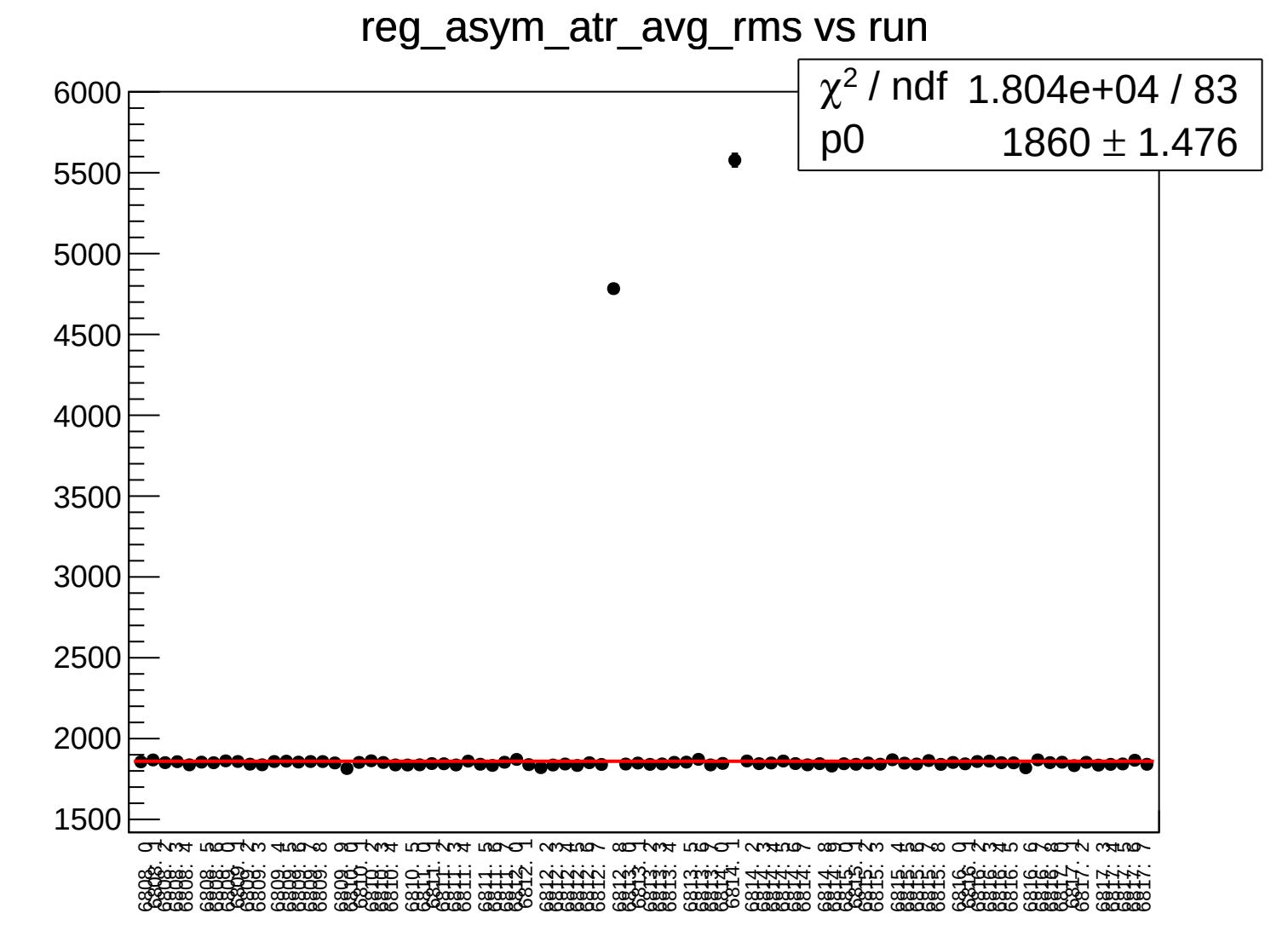

asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 92.1 / 83
p0 3940 ± 4599
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean 13.56
Std Dev 137.8
2
1
0
−1
−2
−3

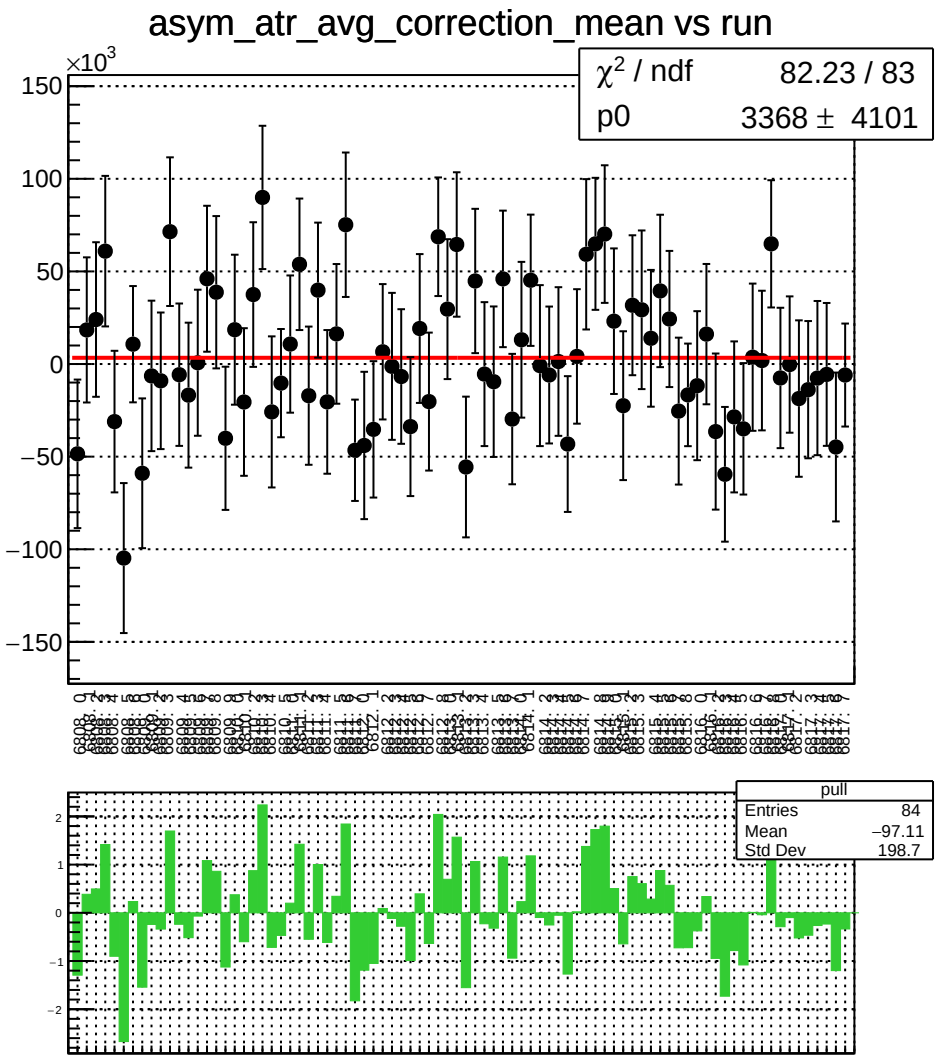

pull1D
Entries 84
Mean 0.007631
Std Dev 1.047
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

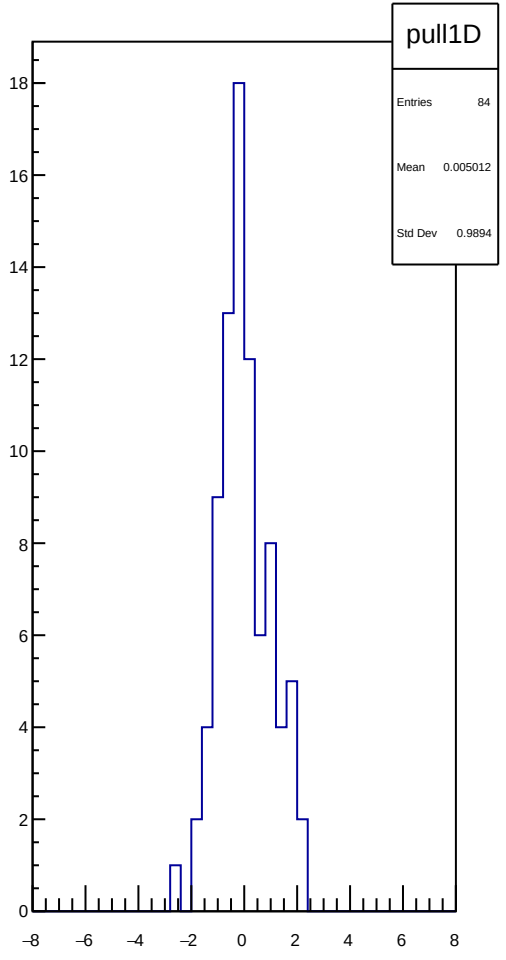

asym_atl_dd_rms vs run
χ^2 / ndf 7157 / 83
p0 4112 ± 3.252
6500
6000
5500
5000
4500
4000
3500

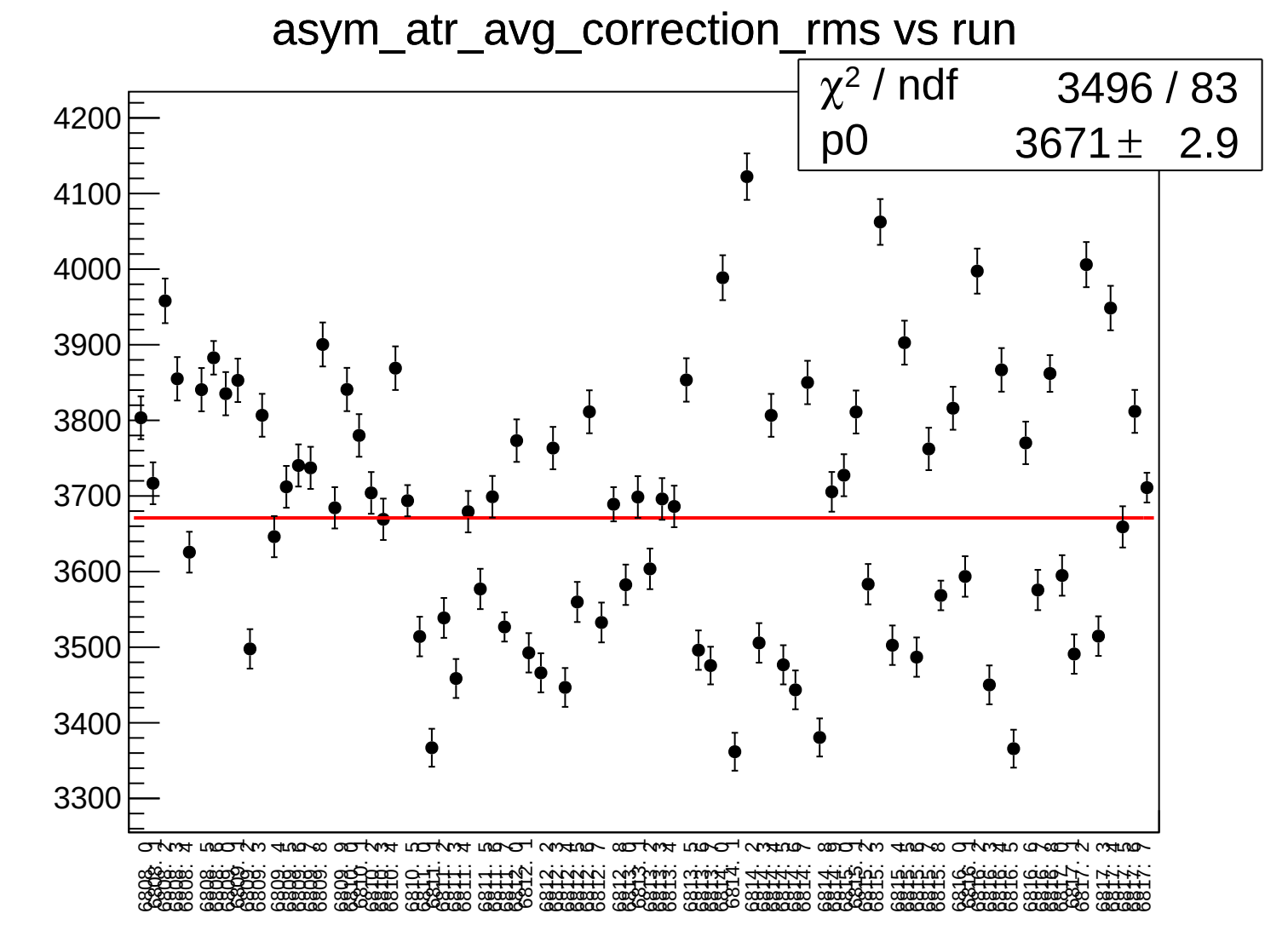

reg_asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 60.26 / 83
p0 2622 ± 2087
pull
Entries 84
Mean 14.75
Std Dev 22.1

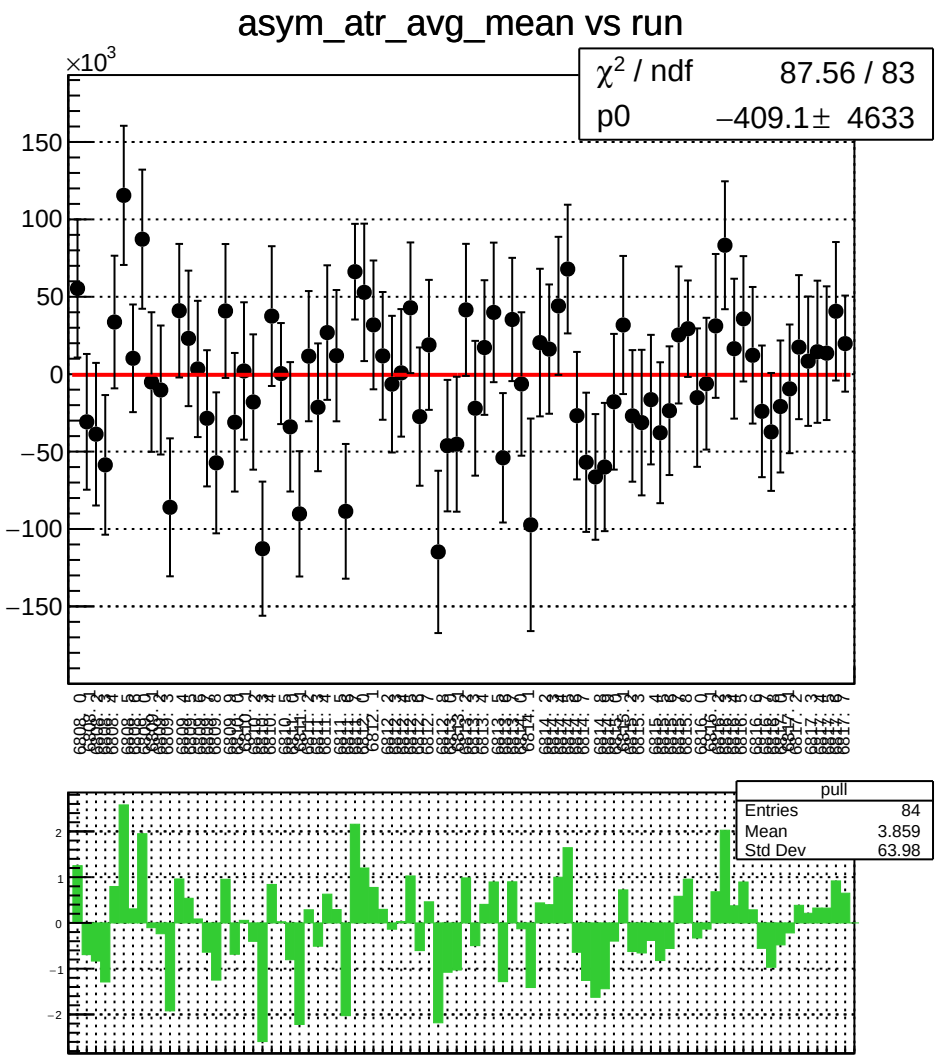

pull1D
Entries 84
Mean −0.03122
Std Dev 0.8464

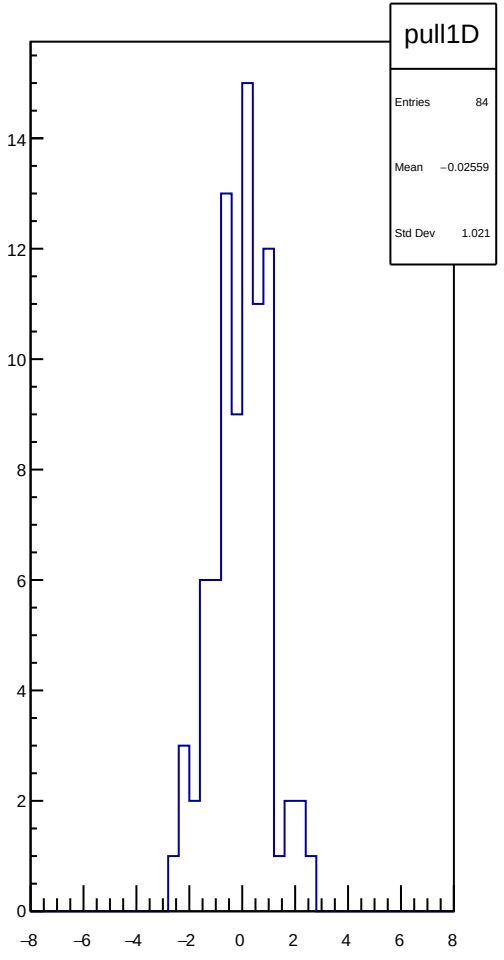

reg_asym_atr_avg_rms vs run
χ^2 / ndf 1.804e+04 / 83
p0 1860 ± 1.476
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

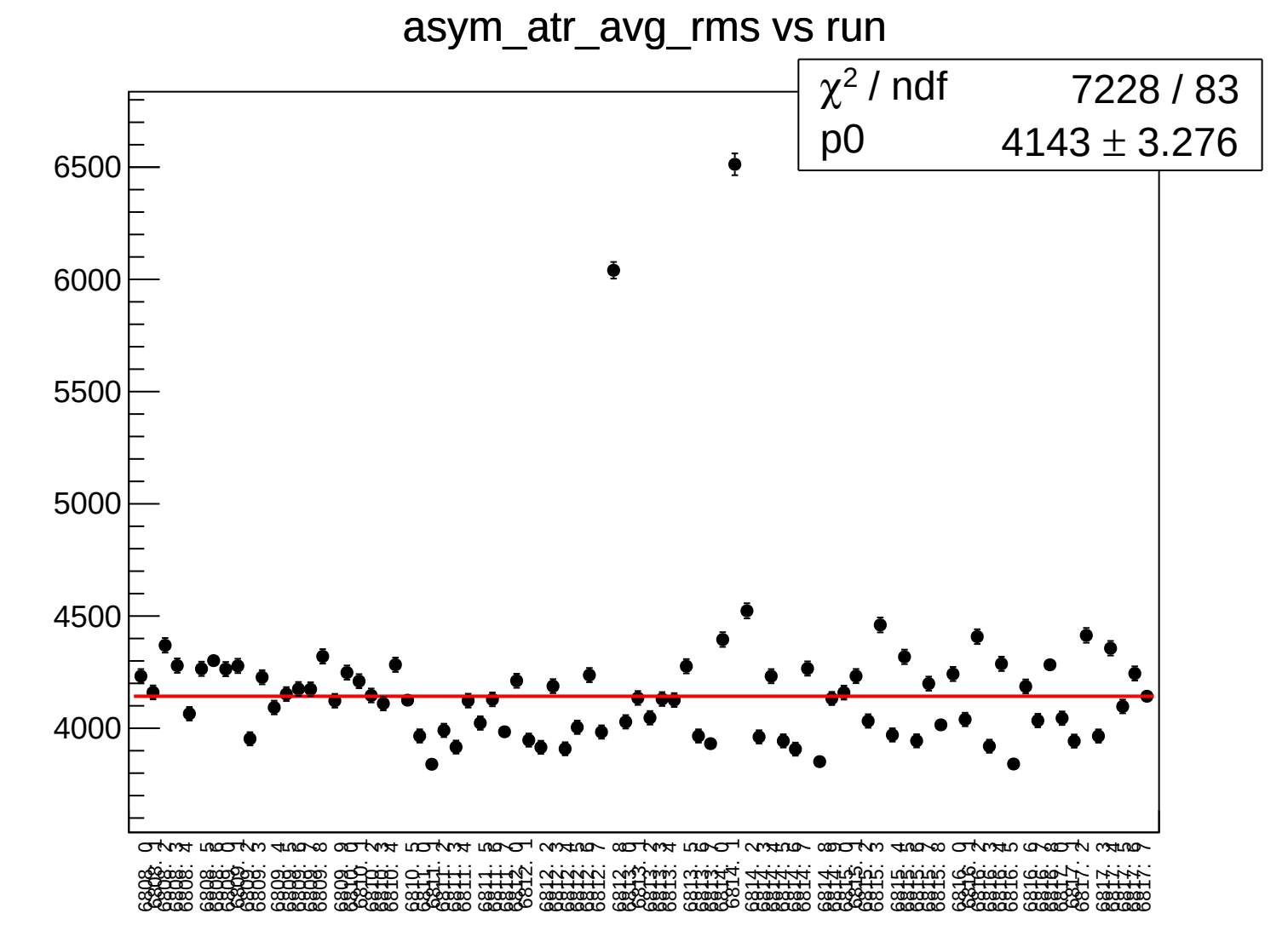

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 82.23 / 83
p0 3368 ± 4101
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −97.11
Std Dev 198.7
2
1
0
−1
−2

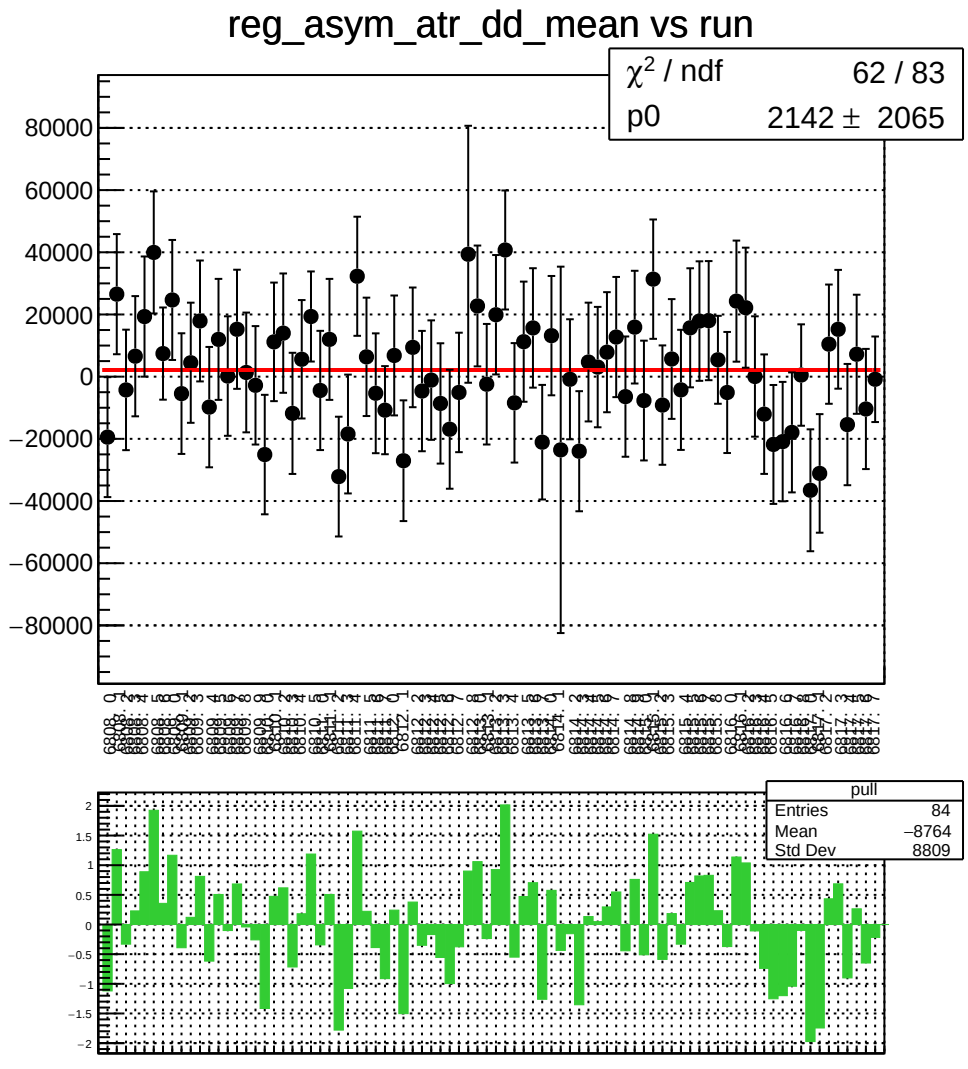

pull1D
Entries 84
Mean 0.005012
Std Dev 0.9894
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

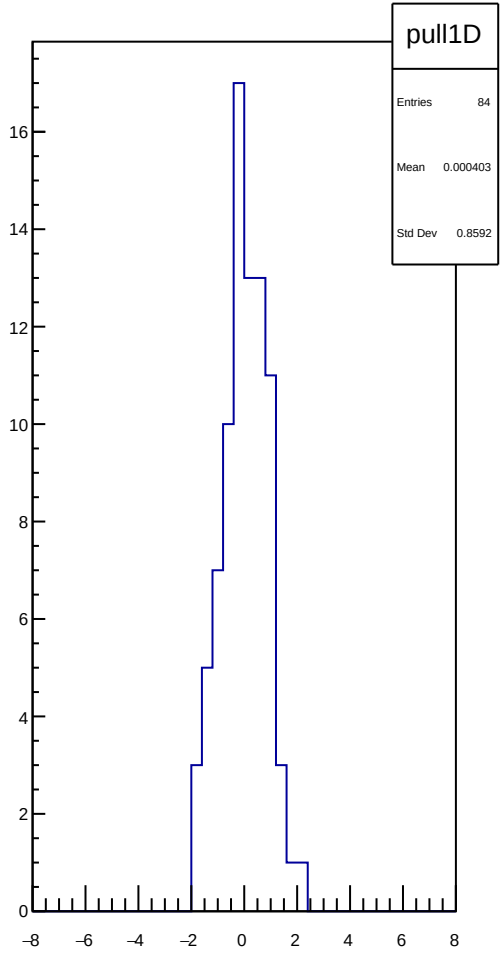

asym_atr_avg_correction_rms vs run
χ² / ndf 3496 / 83
p0 3671 ± 2.9
4200
4100
4000
3900
3800
3700
3600
3500
3400
3300

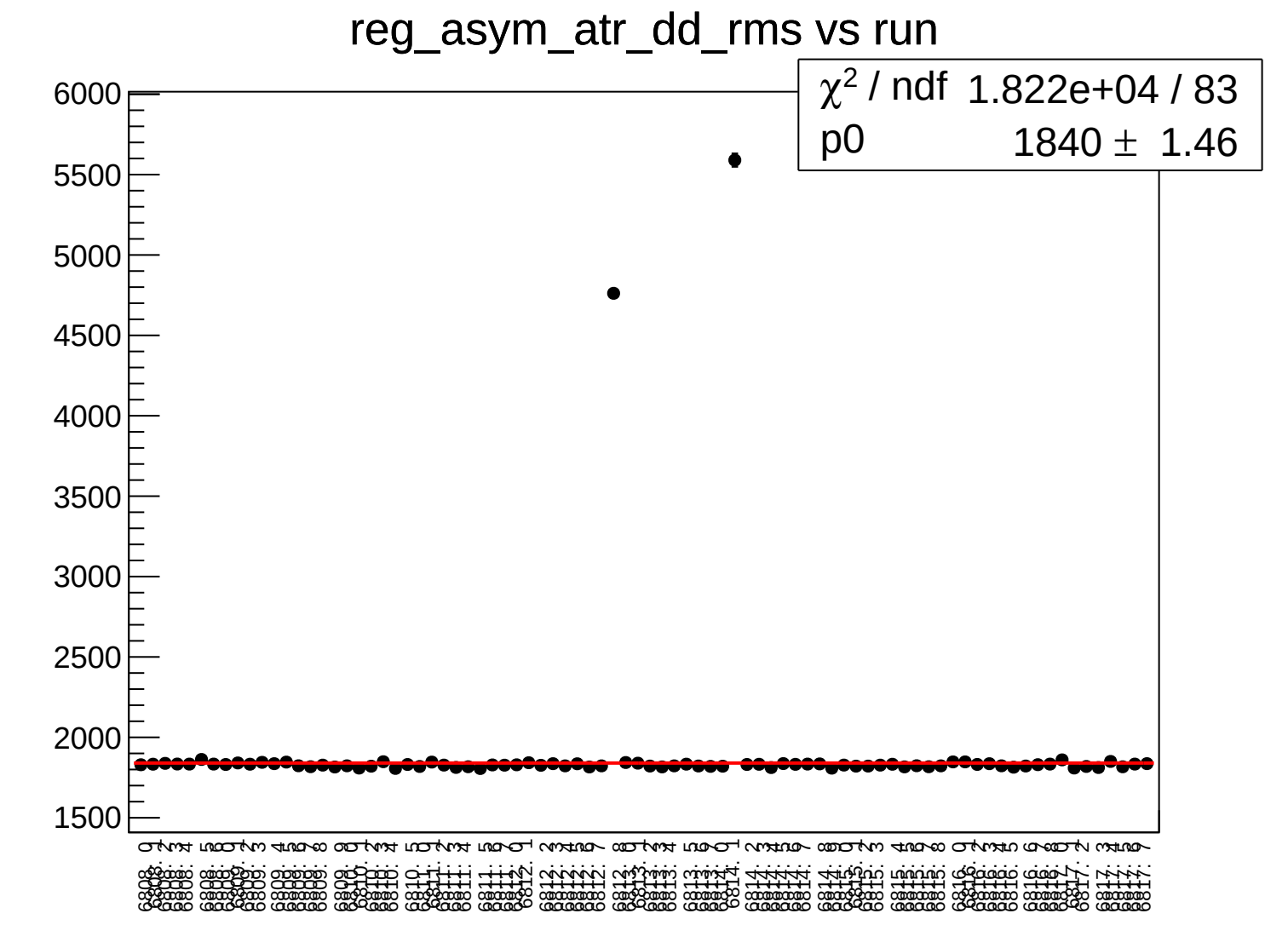

asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 87.56 / 83
p0 −409.1± 4633
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean 3.859
Std Dev 63.98
2
1
0
−1
−2

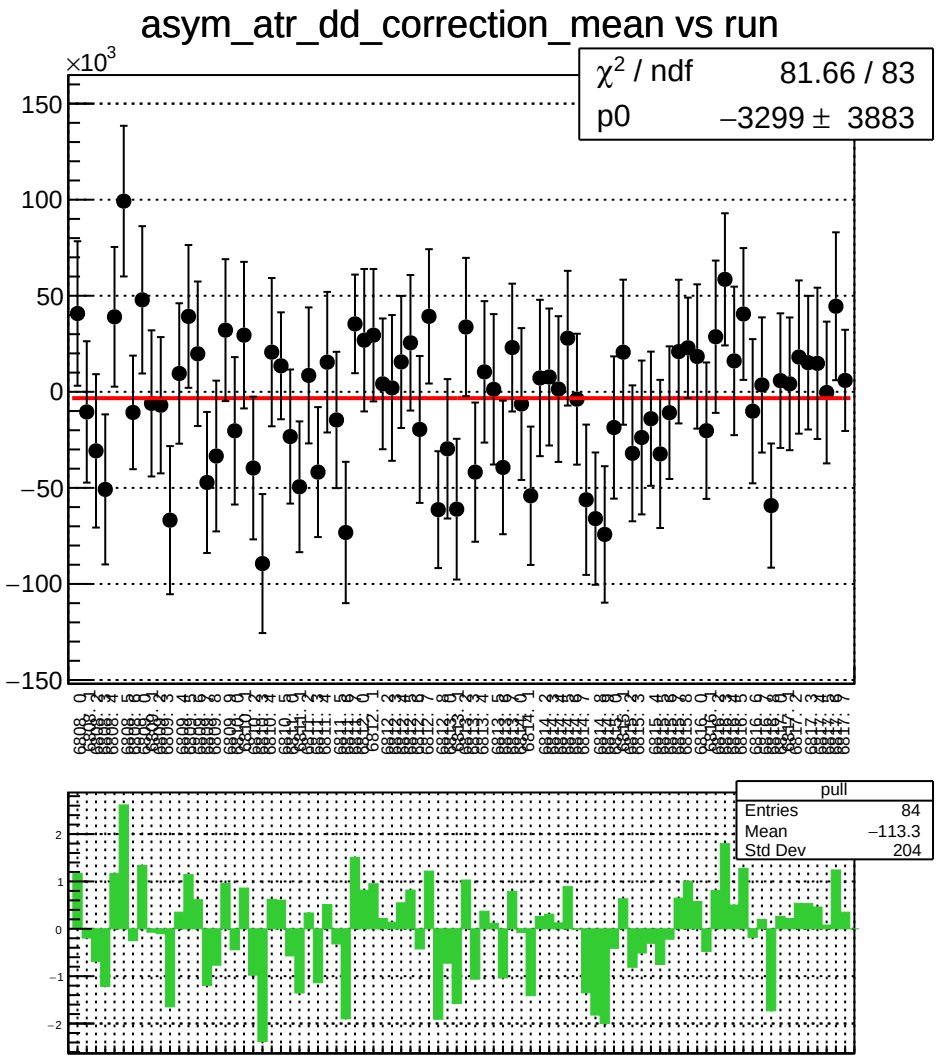

pull1D
Entries 84
Mean −0.02559
Std Dev 1.021
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

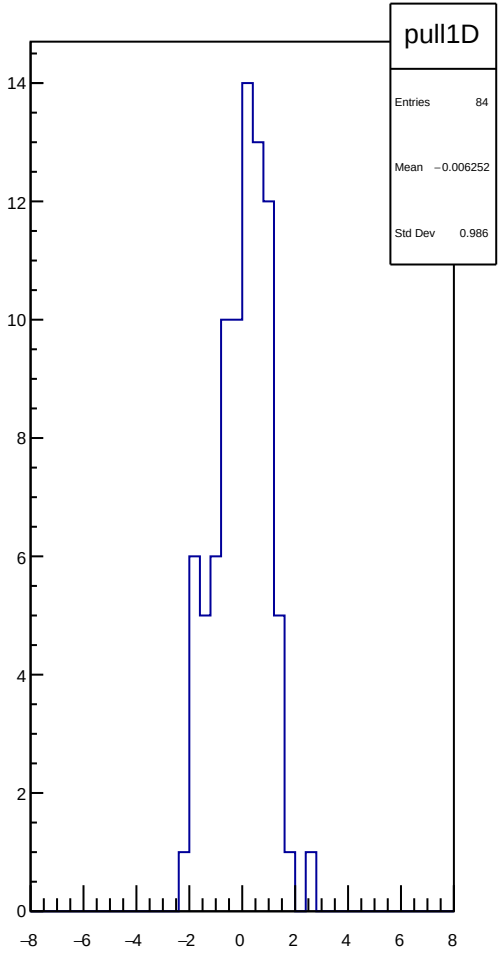

asym_atr_avg_rms vs run
χ² / ndf 7228 / 83
p0 4143 ± 3.276
6500
6000
5500
5000
4500
4000

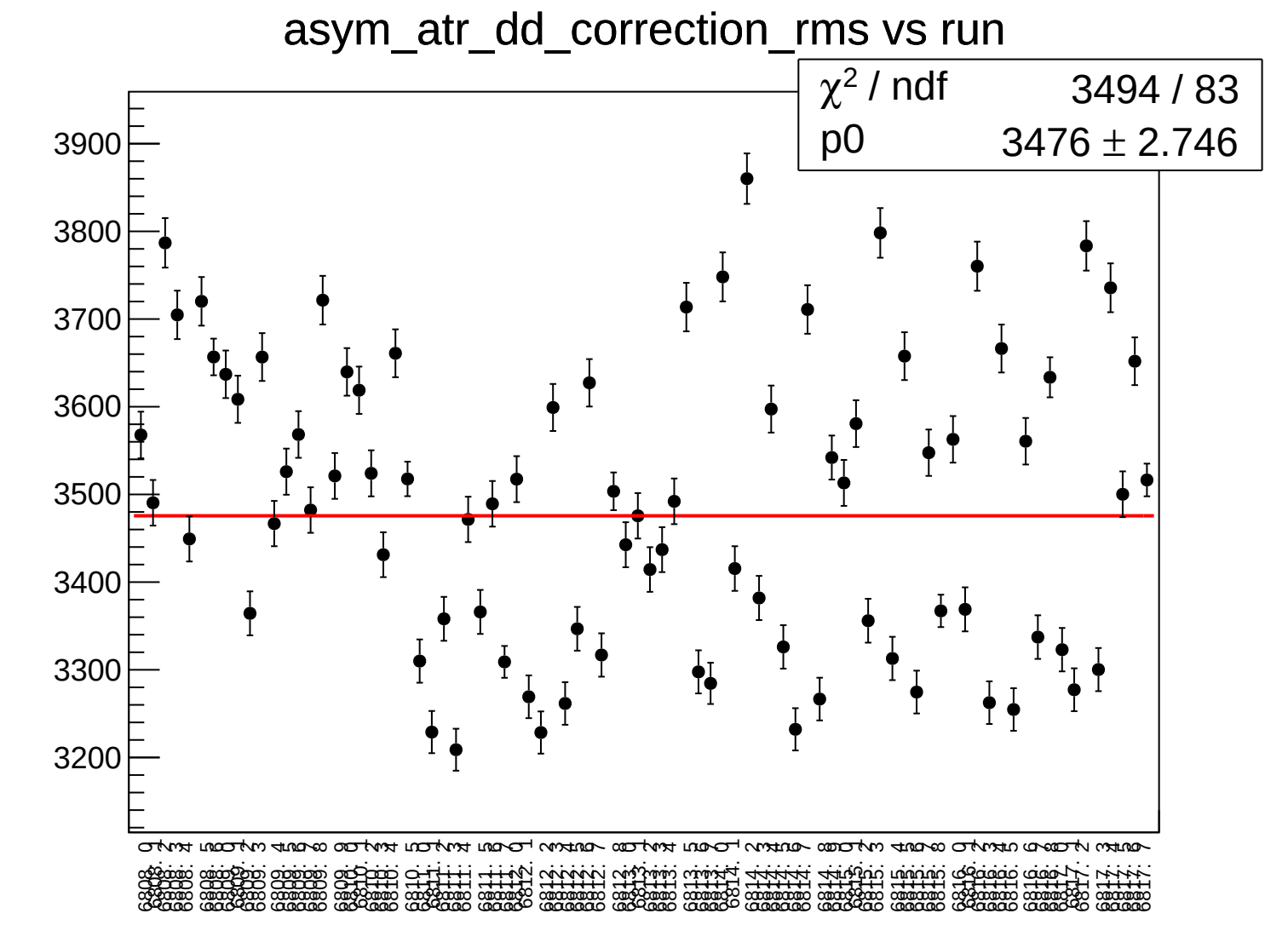

reg_asym_atr_dd_mean vs run
χ² / ndf 62 / 83
p0 2142 ± 2065
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 84
Mean −8764
Std Dev 8809
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

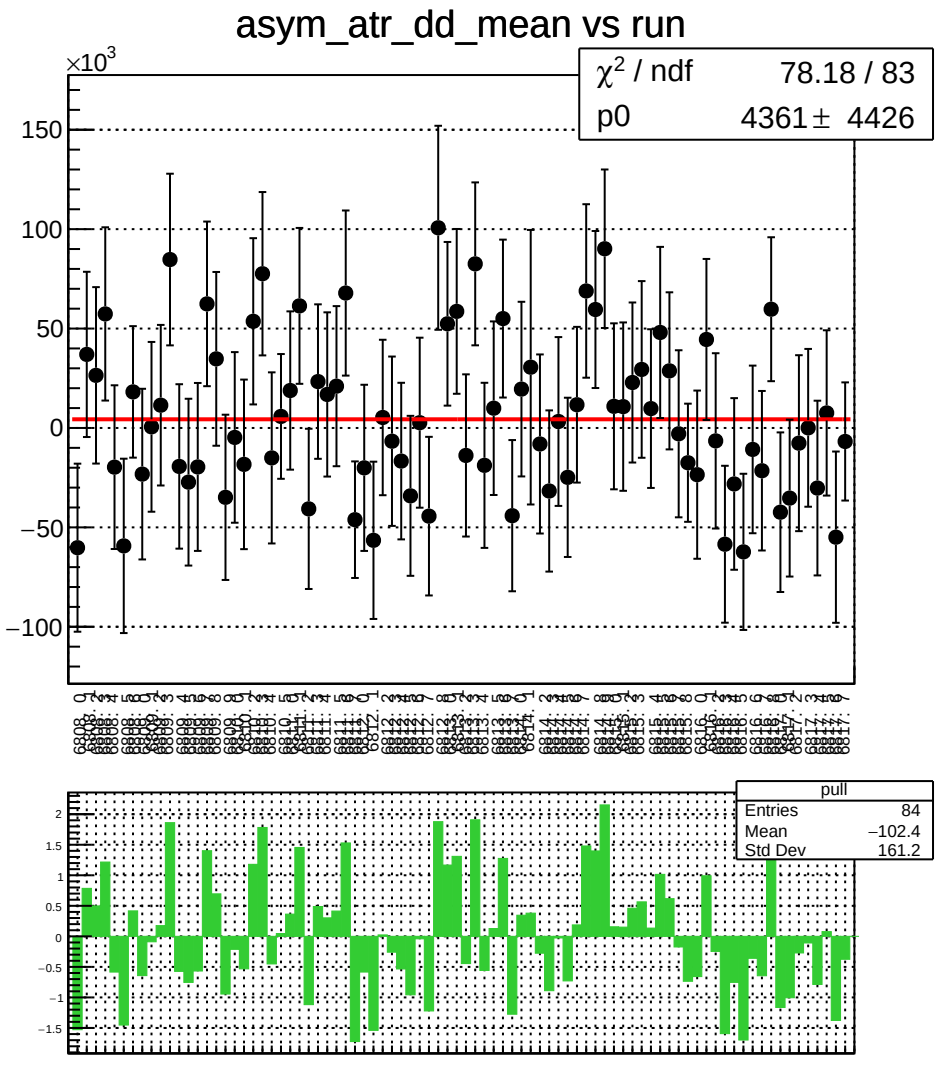

pull1D
Entries 84
Mean 0.000403
Std Dev 0.8592
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

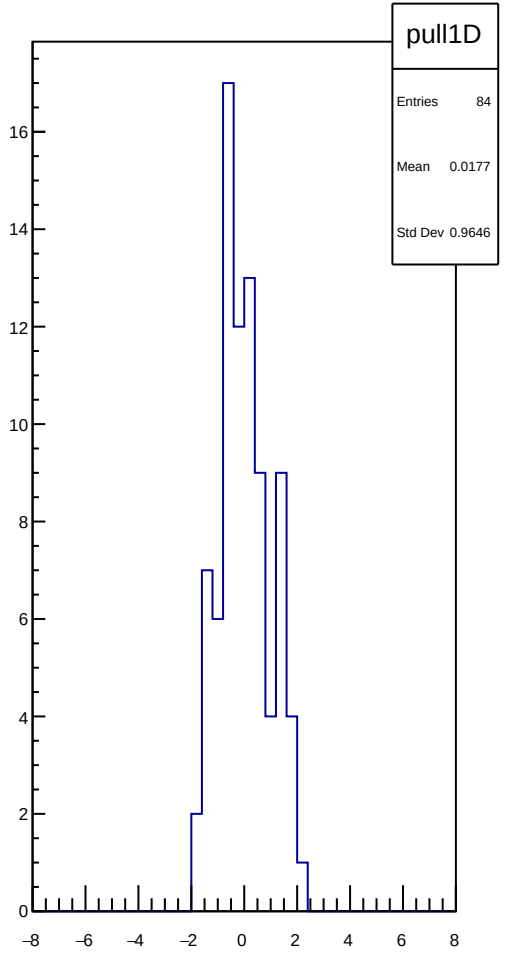

reg_asym_atr_dd_rms vs run
χ² / ndf 1.822e+04 / 83
p0 1840 ± 1.46
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

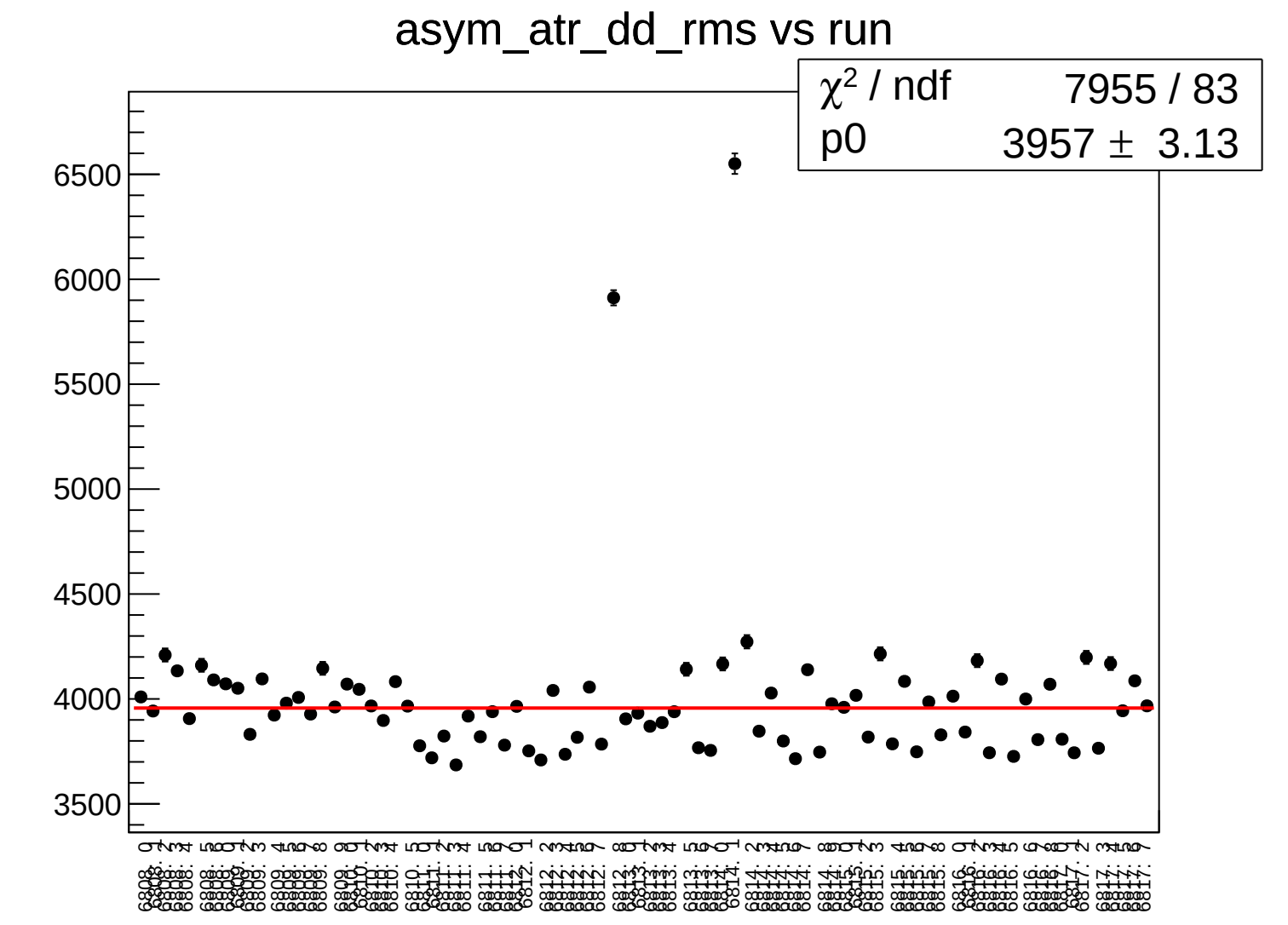

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 81.66 / 83
p0 −3299 ± 3883
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −113.3
Std Dev 204
2
1
0
−1
−2

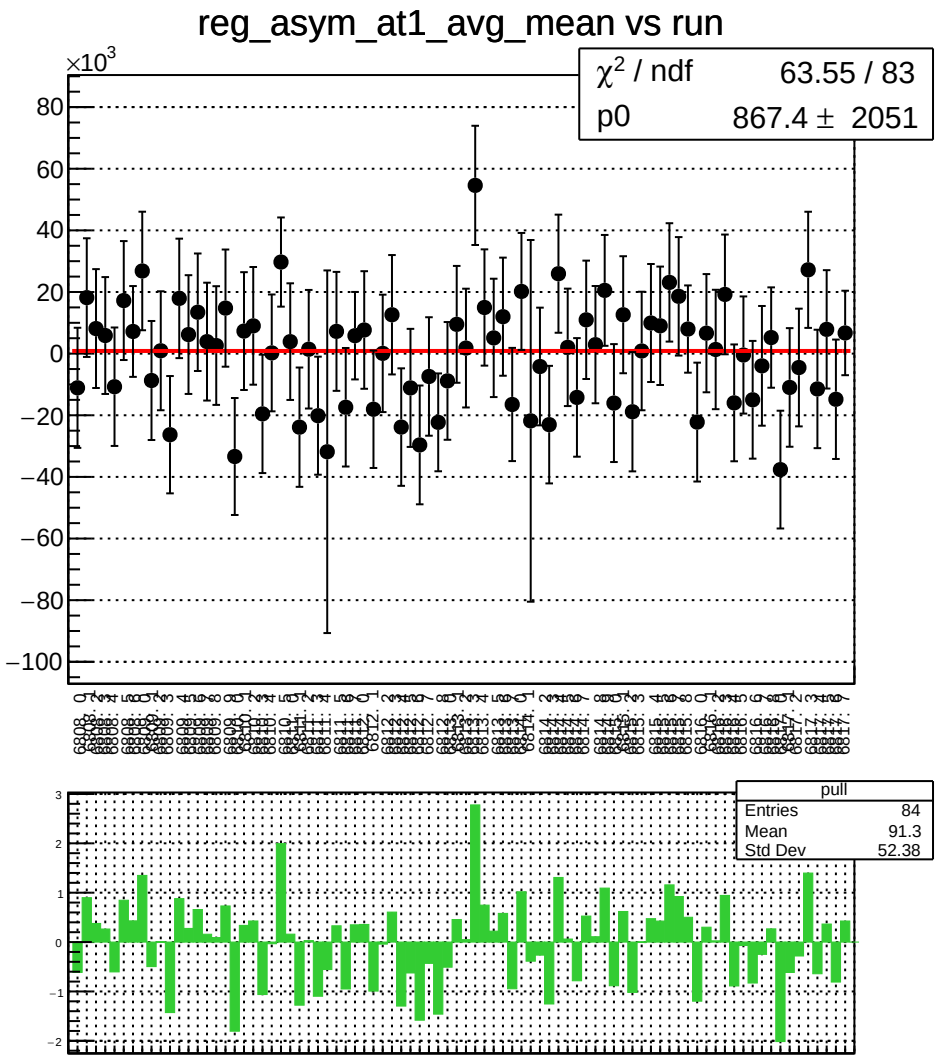

pull1D
Entries 84
Mean −0.006252
Std Dev 0.986
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

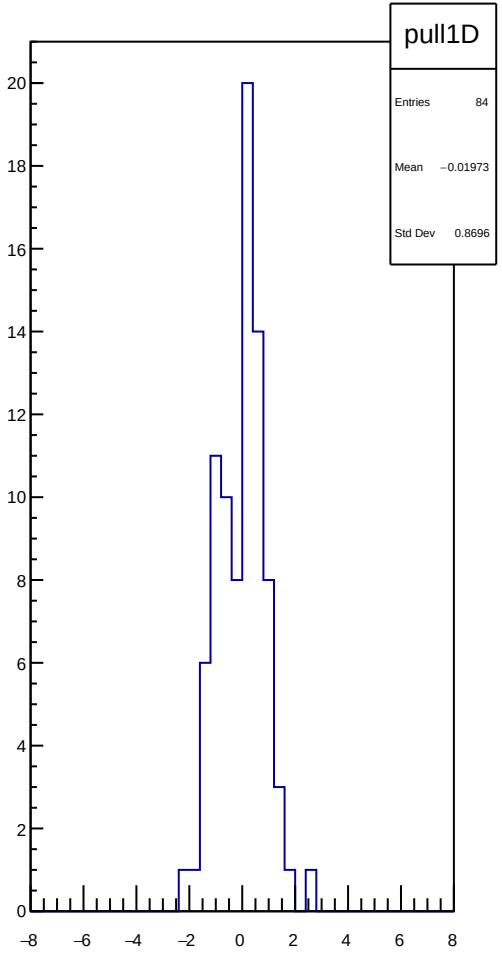

asym_atr_dd_correction_rms vs run
χ² / ndf 3494 / 83
p0 3476 ± 2.746
3900
3800
3700
3600
3500
3400
3300
3200

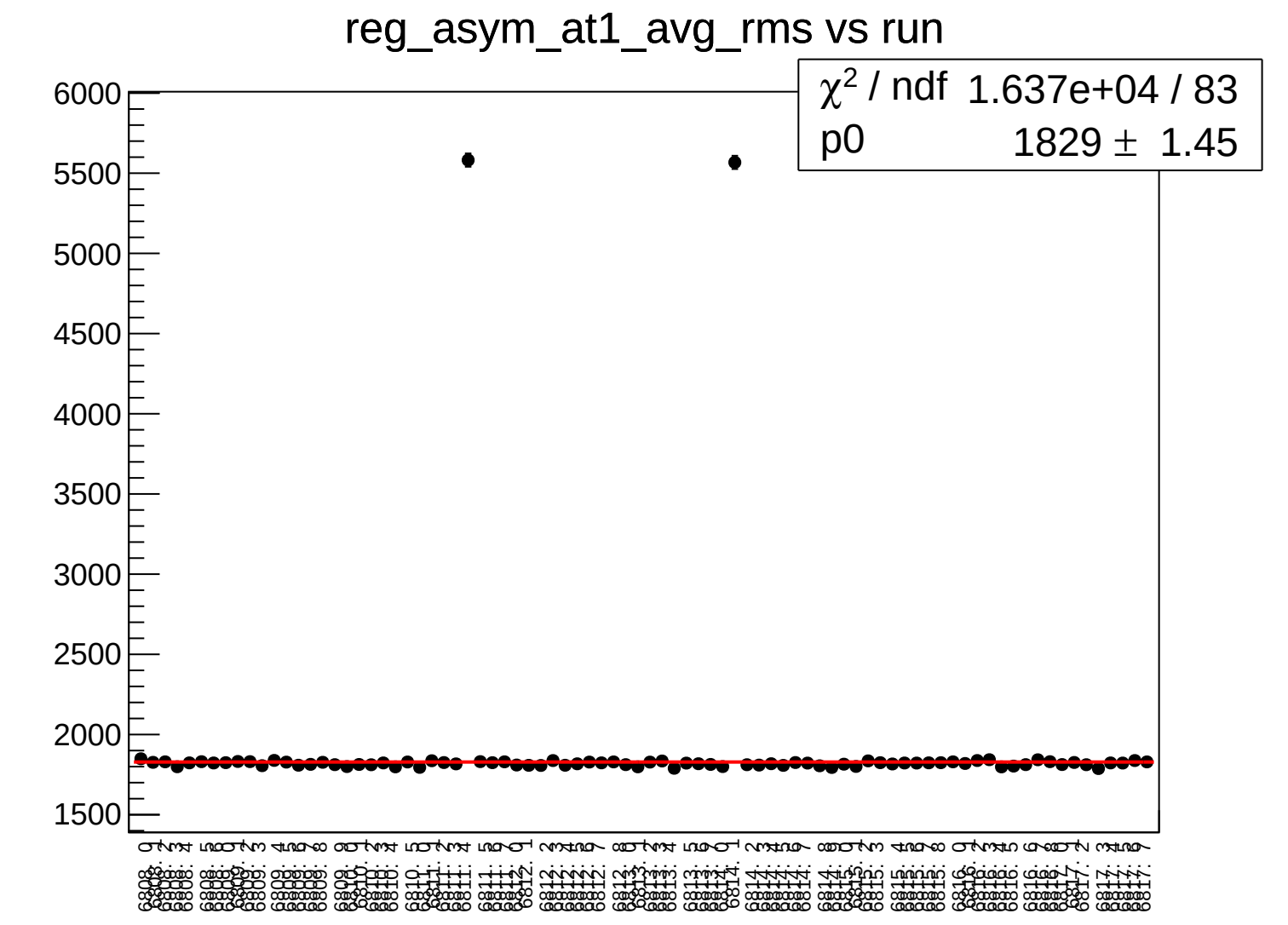

asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 78.18 / 83
p0 4361 ± 4426
150
100
50
0
−50
−100
pull
Entries 84
Mean −102.4
Std Dev 161.2
2
1.5
1
0.5
0
−0.5
−1
−1.5

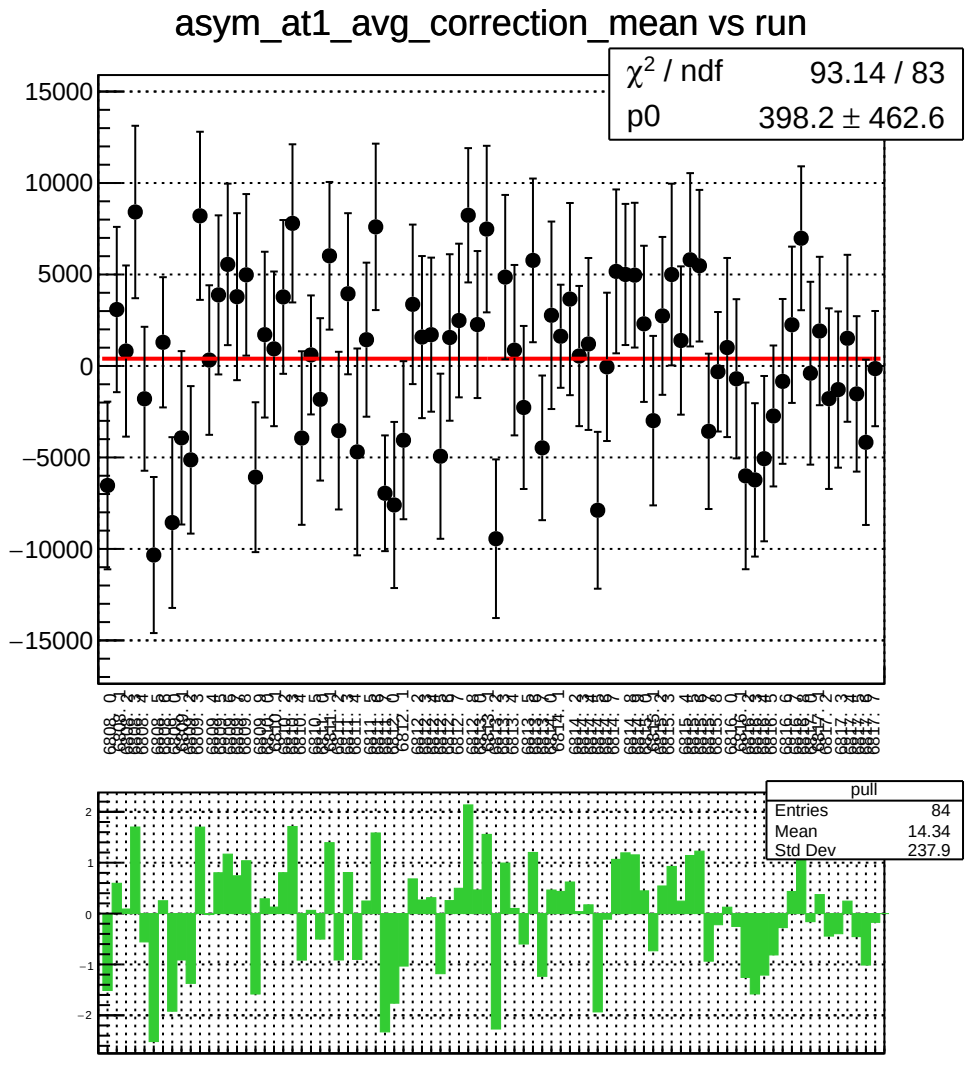

pull1D
Entries 84
Mean 0.0177
Std Dev 0.9646
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

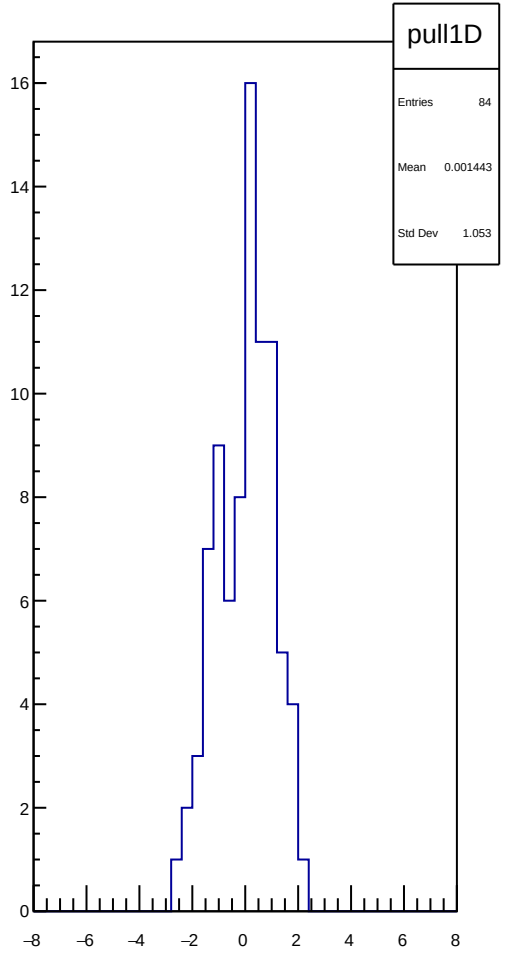

asym_atr_dd_rms vs run
χ^2 / ndf 7955 / 83
p0 3957 ± 3.13
6500
6000
5500
5000
4500
4000
3500

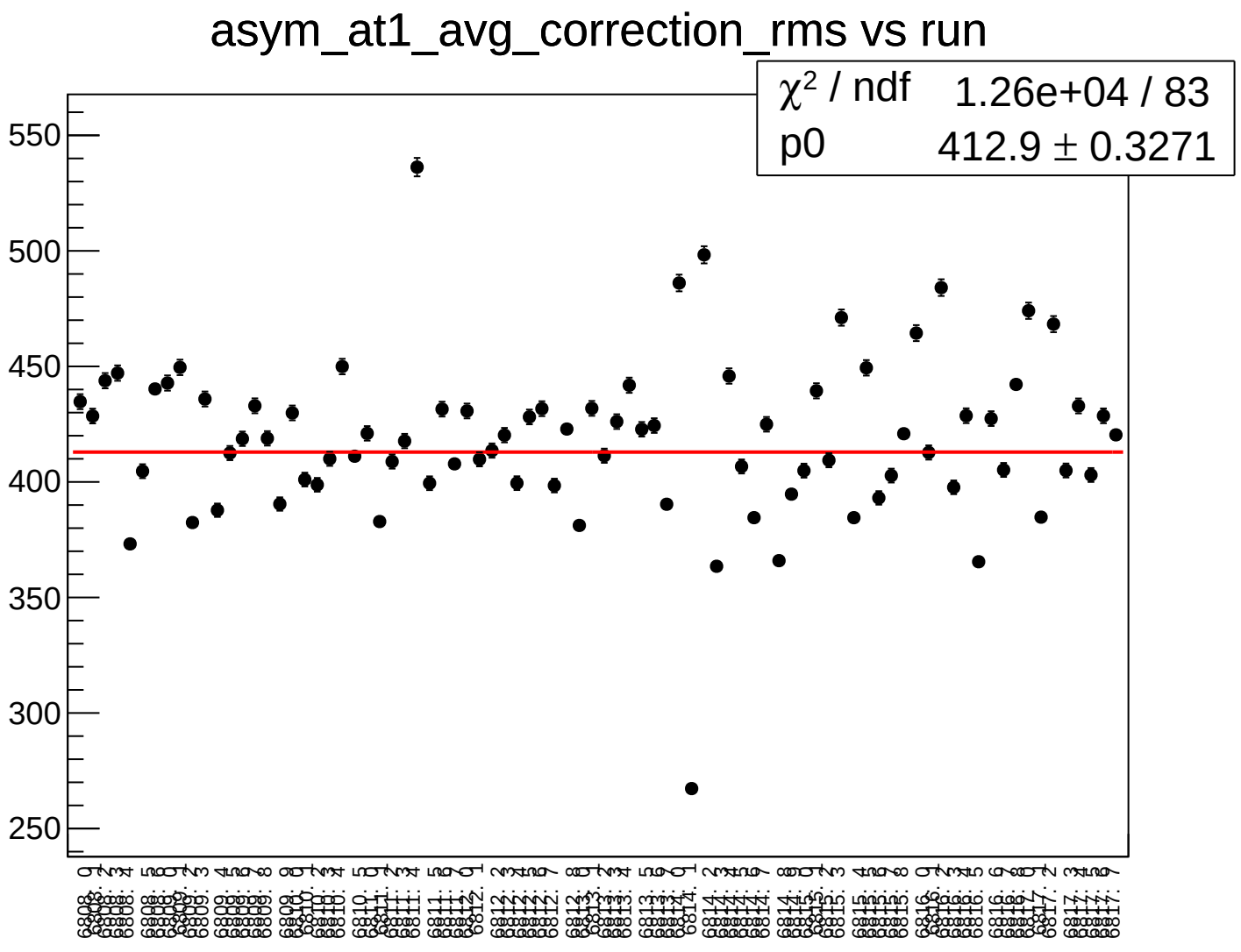

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 63.55 / 83
p0 867.4 ± 2051
pull
Entries 84
Mean 91.3
Std Dev 52.38

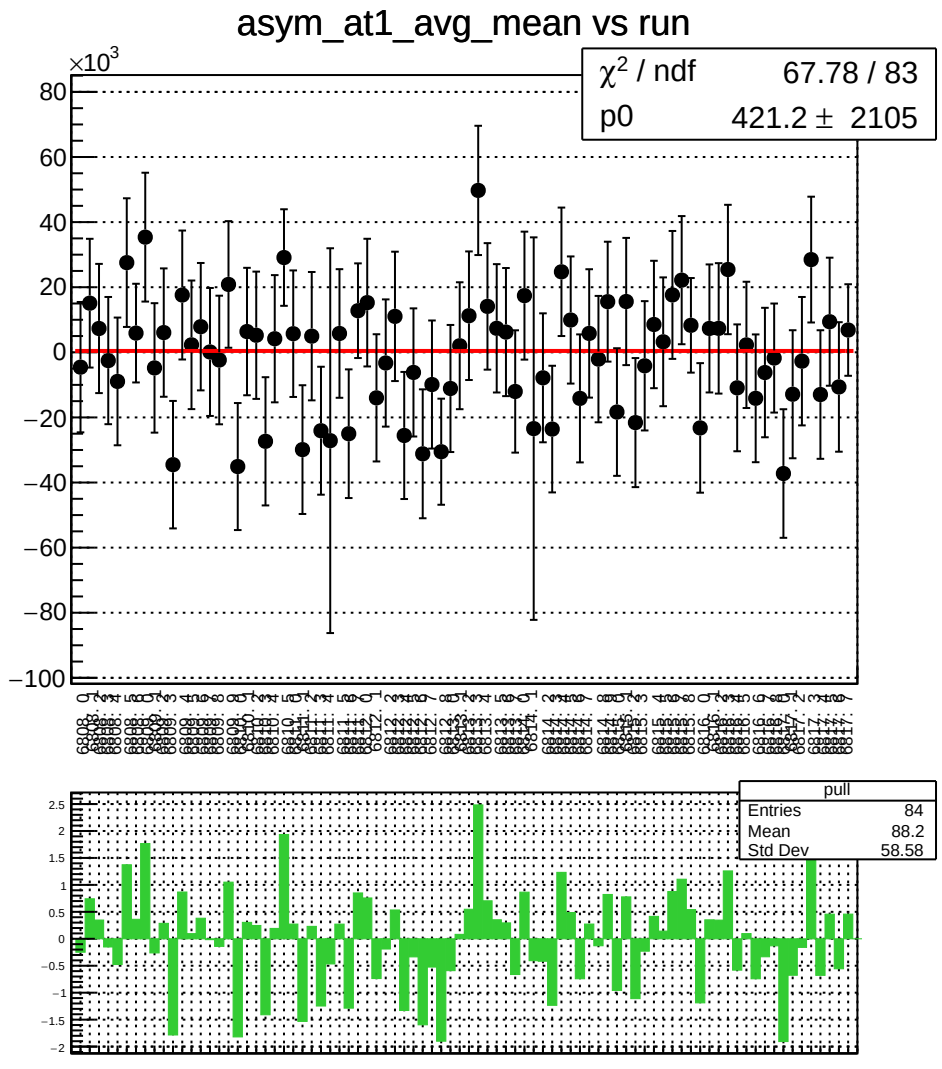

pull1D
Entries 84
Mean −0.01973
Std Dev 0.8696

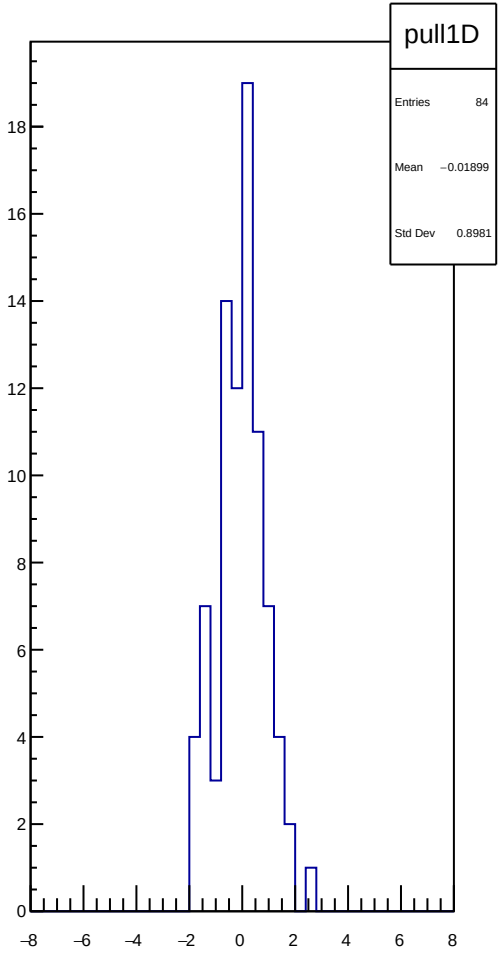

reg_asym_at1_avg_rms vs run
χ² / ndf 1.637e+04 / 83
p0 1829 ± 1.45
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

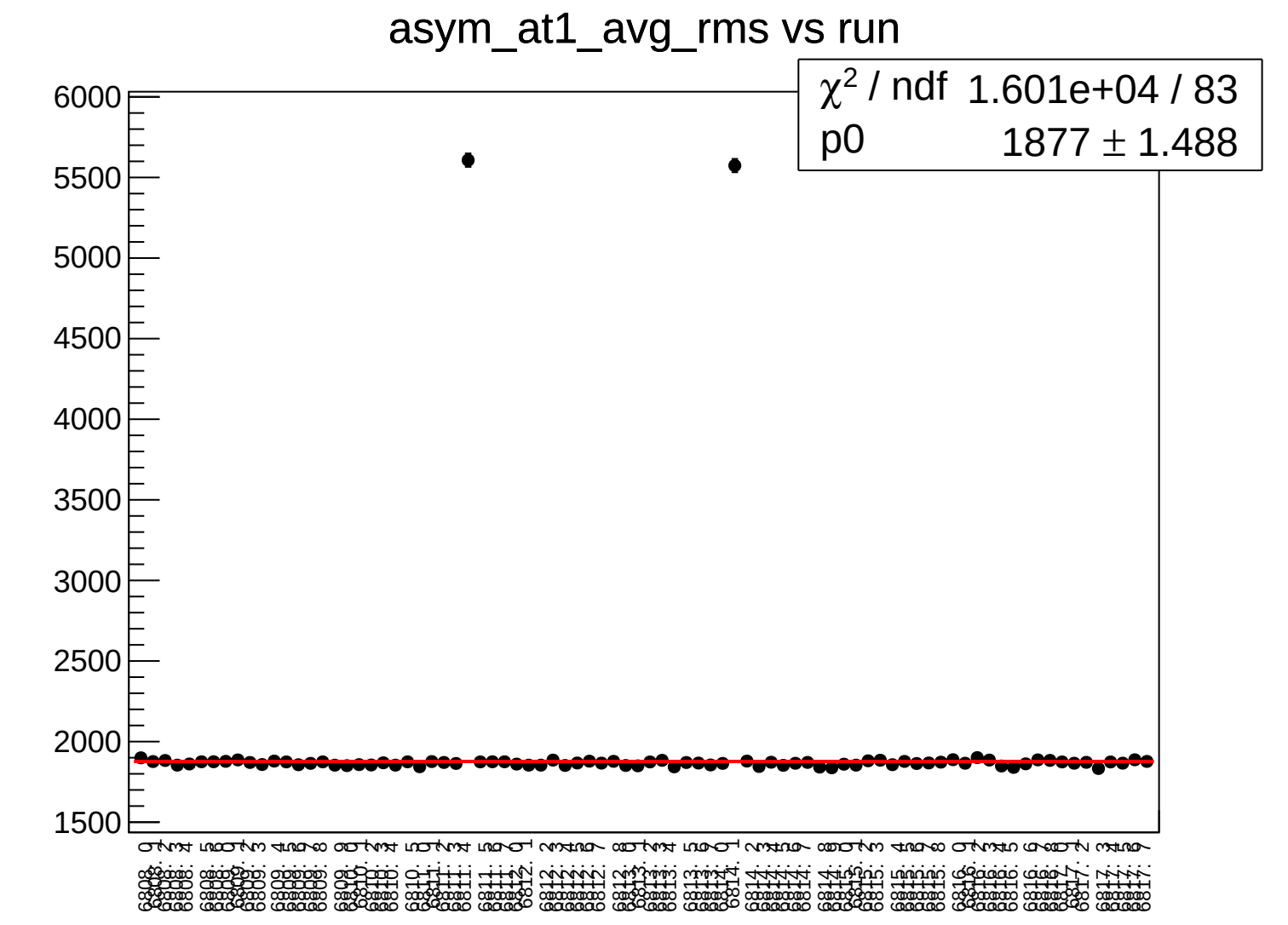

asym_at1_avg_correction_mean vs run
χ² / ndf 93.14 / 83
p0 398.2 ± 462.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 14.34
Std Dev 237.9
2
1
0
−1
−2

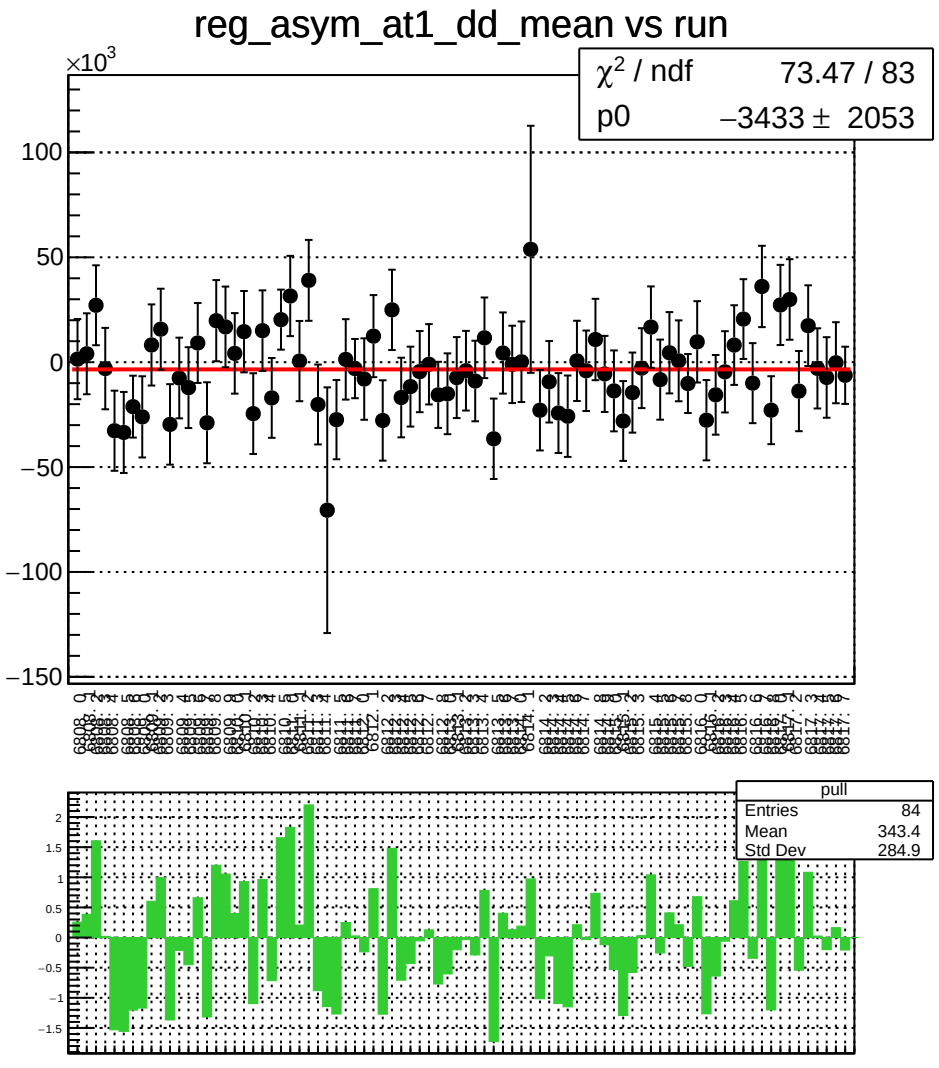

pull1D
Entries 84
Mean 0.001443
Std Dev 1.053
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

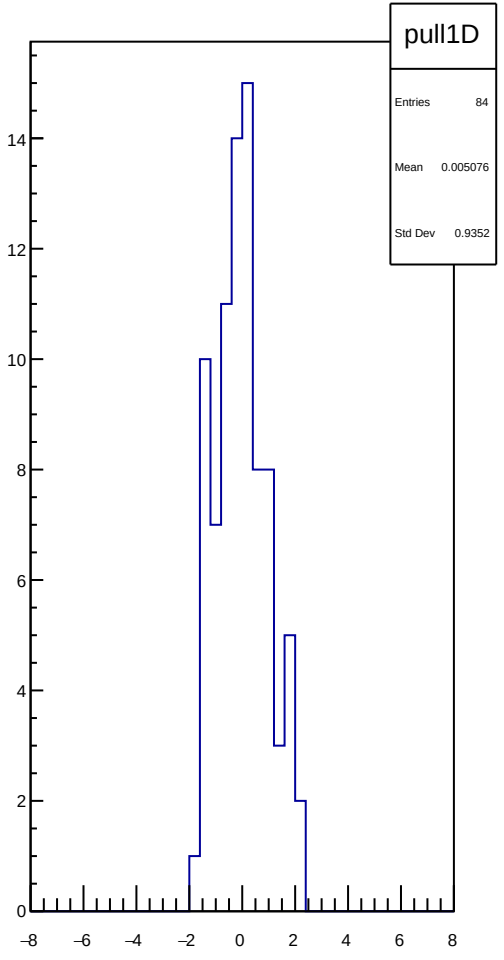

asym_at1_avg_correction_rms vs run
χ² / ndf 1.26e+04 / 83
p0 412.9 ± 0.3271
550
500
450
400
350
300
250

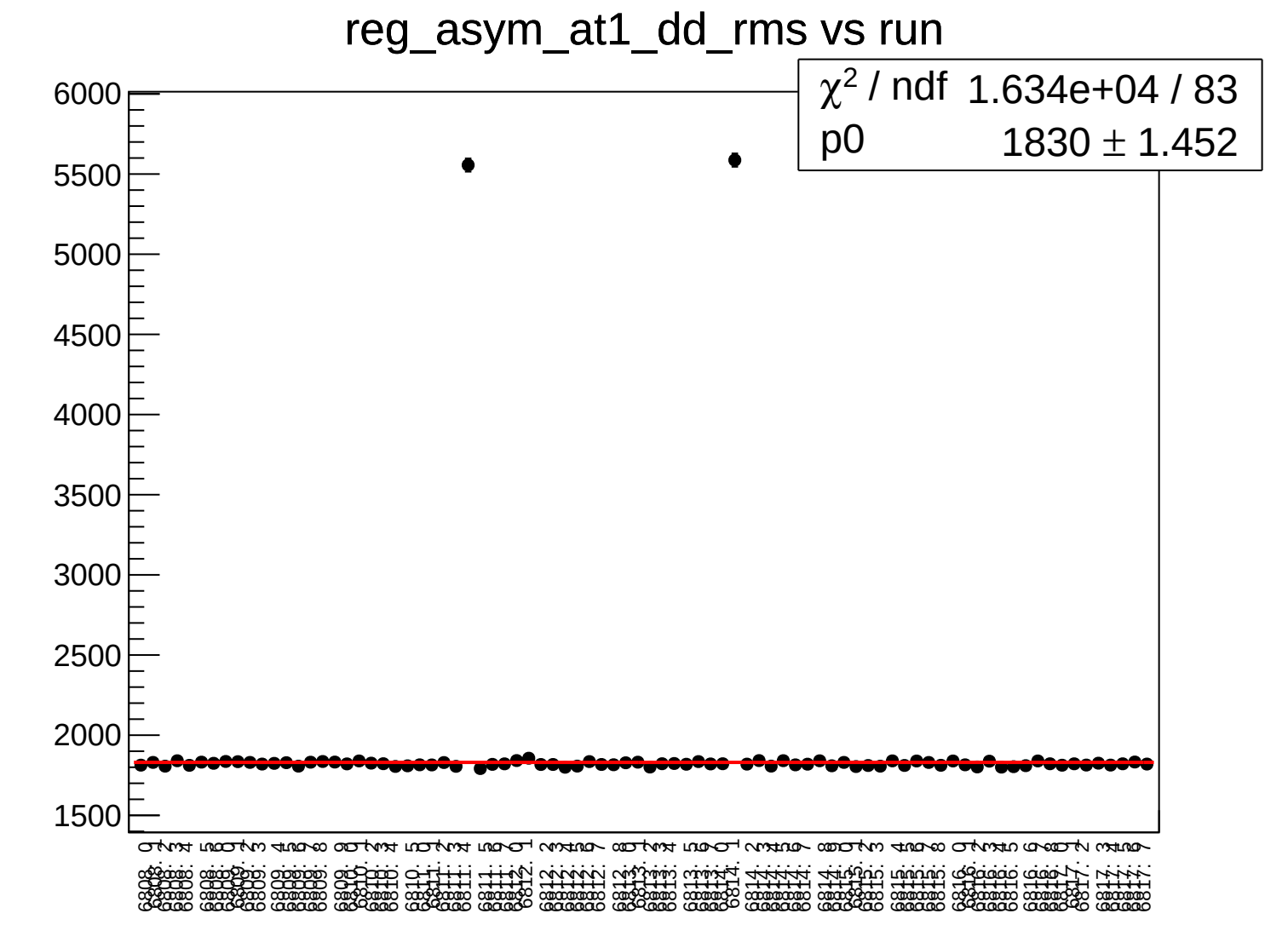

asym_at1_avg_mean vs run
×10^3
χ² / ndf 67.78 / 83
p0 421.2 ± 2105
pull
Entries 84
Mean 88.2
Std Dev 58.58

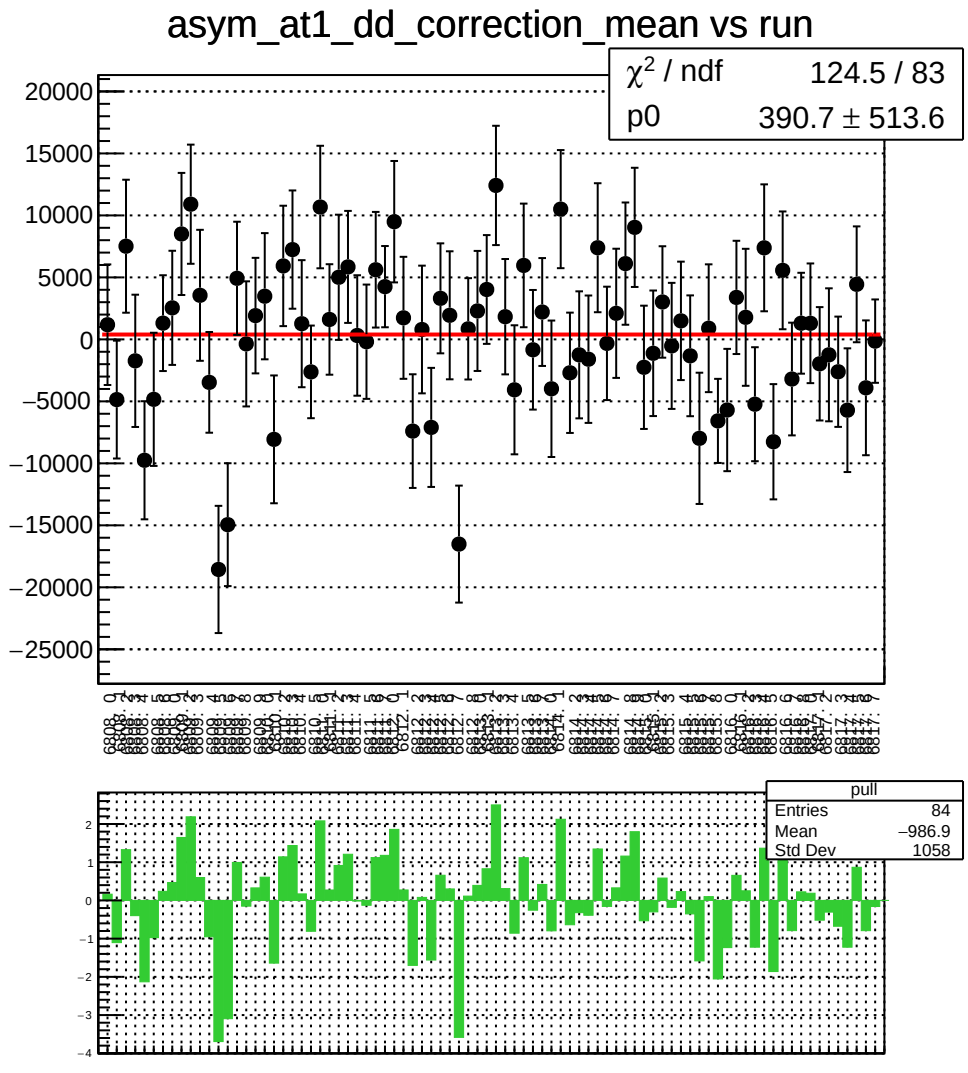

pull1D
Entries 84
Mean −0.01899
Std Dev 0.8981

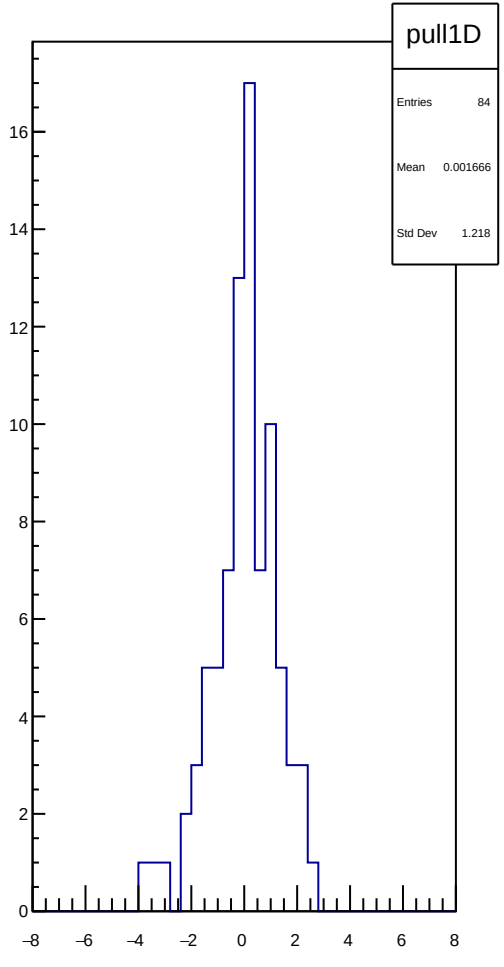

asym_at1_avg_rms vs run
χ² / ndf 1.601e+04 / 83
p0 1877 ± 1.488
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

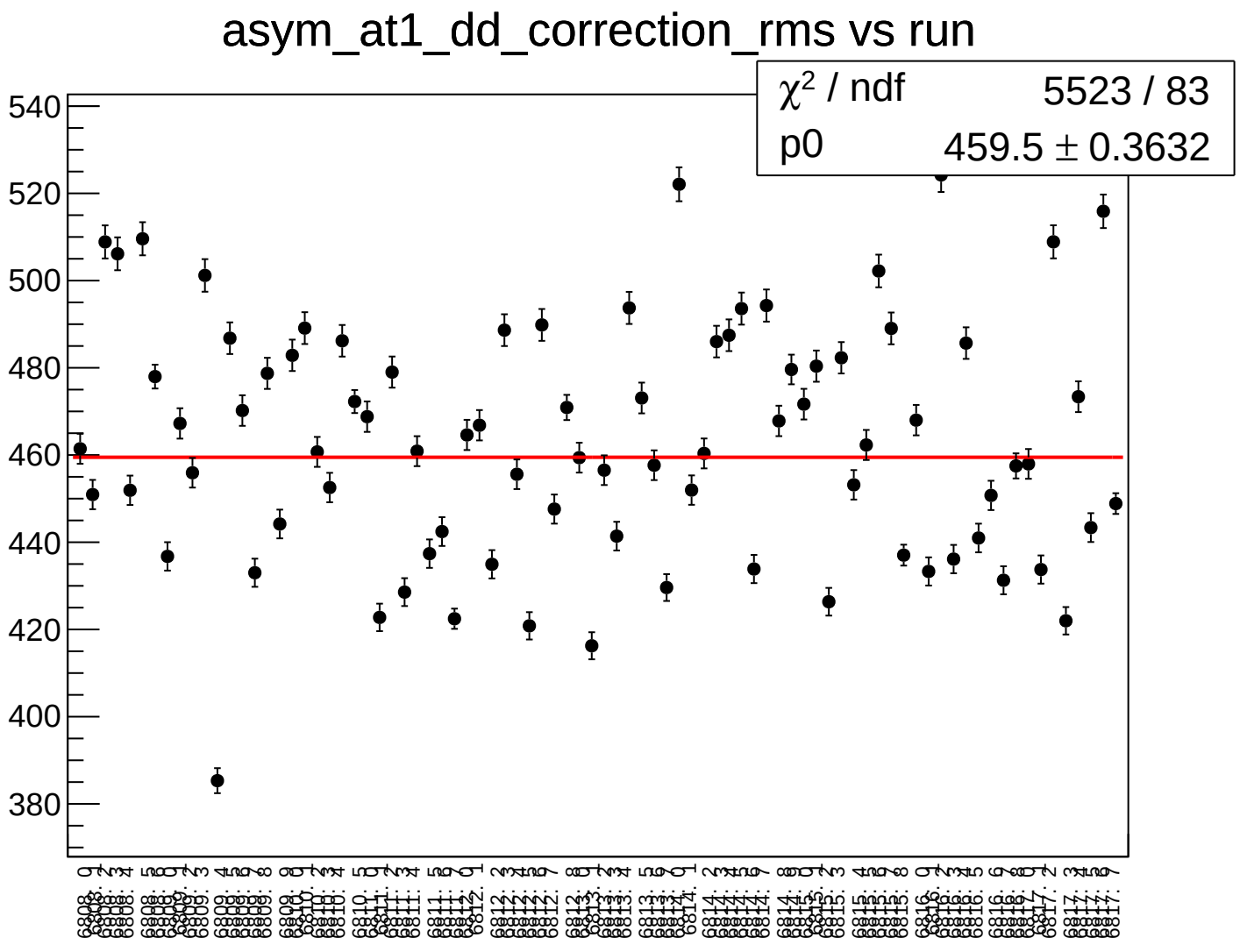

reg_asym_at1_dd_mean vs run
×10^3
χ^2 / ndf 73.47 / 83
p0 −3433 ± 2053
100
50
0
−50
−100
−150
pull
Entries 84
Mean 343.4
Std Dev 284.9
2
1.5
1
0.5
0
−0.5
−1
−1.5

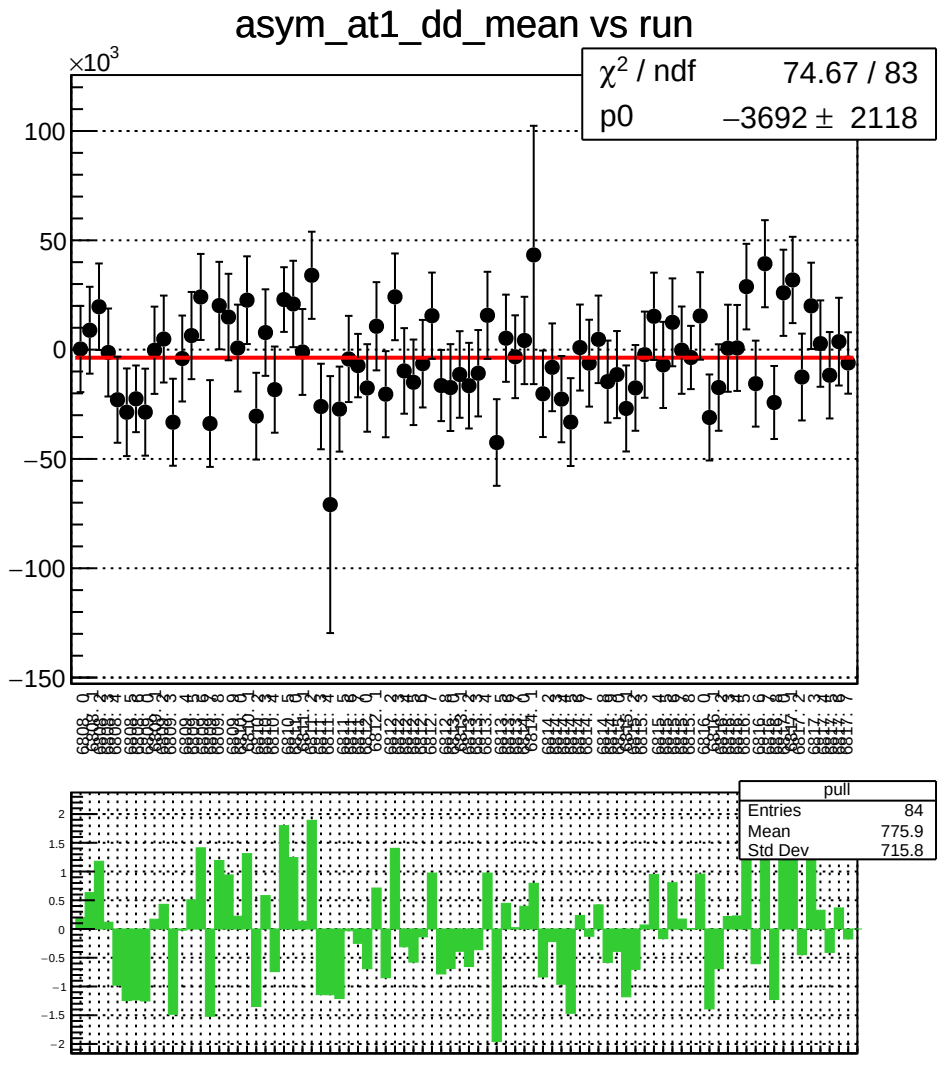

pull1D
Entries 84
Mean 0.005076
Std Dev 0.9352
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

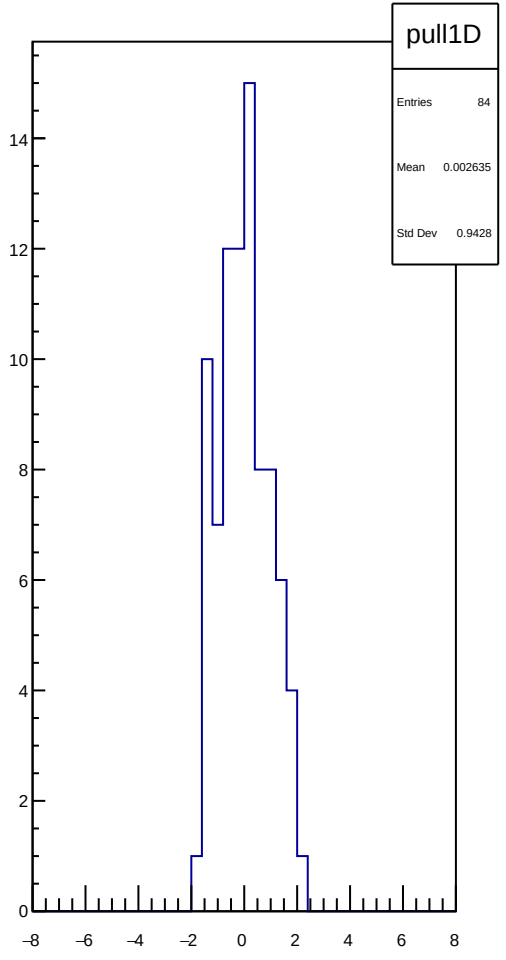

reg_asym_at1_dd_rms vs run
χ^2 / ndf 1.634e+04 / 83
p0 1830 ± 1.452
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

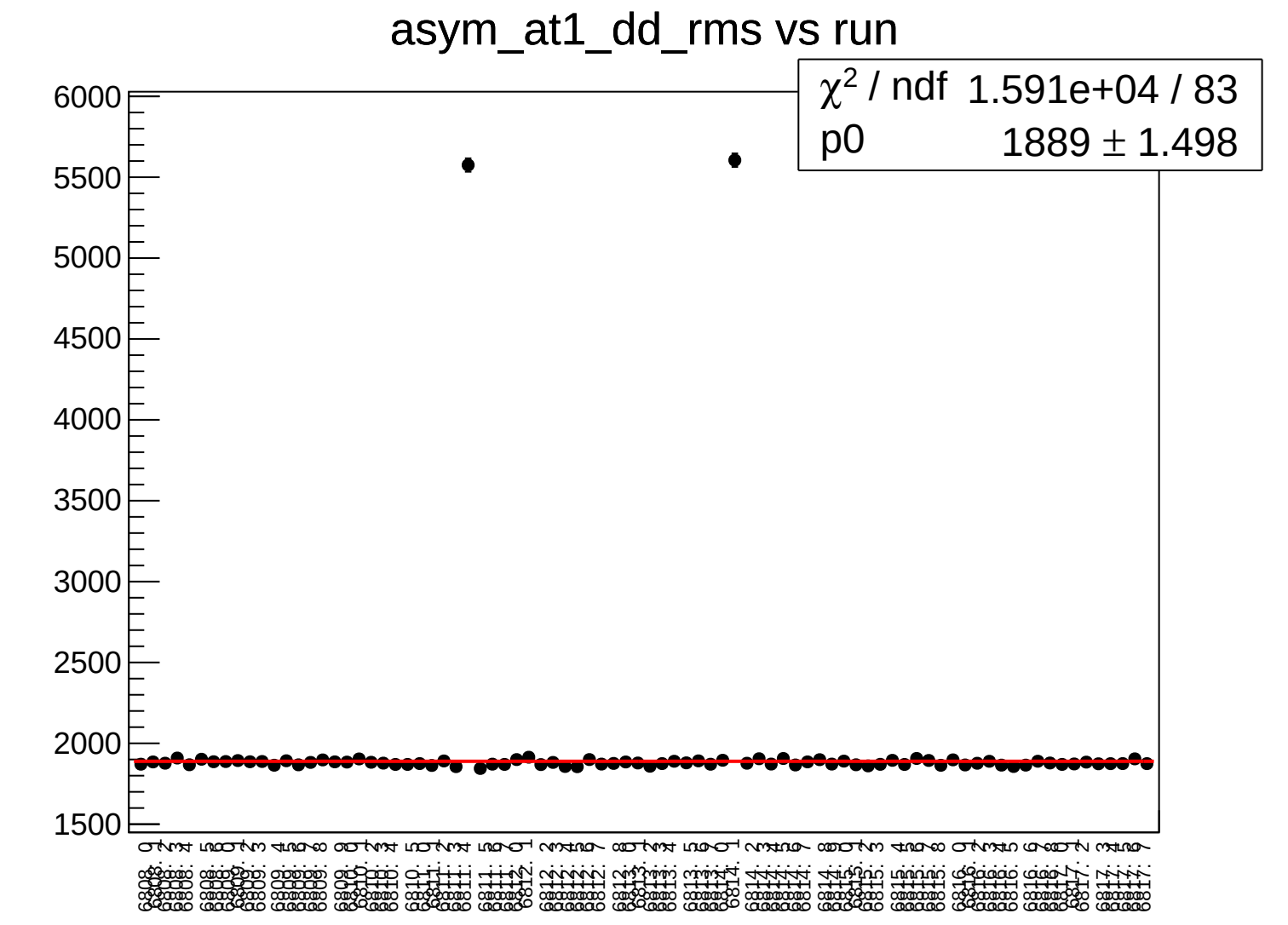

asym_at1_dd_correction_mean vs run
χ² / ndf 124.5 / 83
p0 390.7 ± 513.6
pull
Entries 84
Mean −986.9
Std Dev 1058

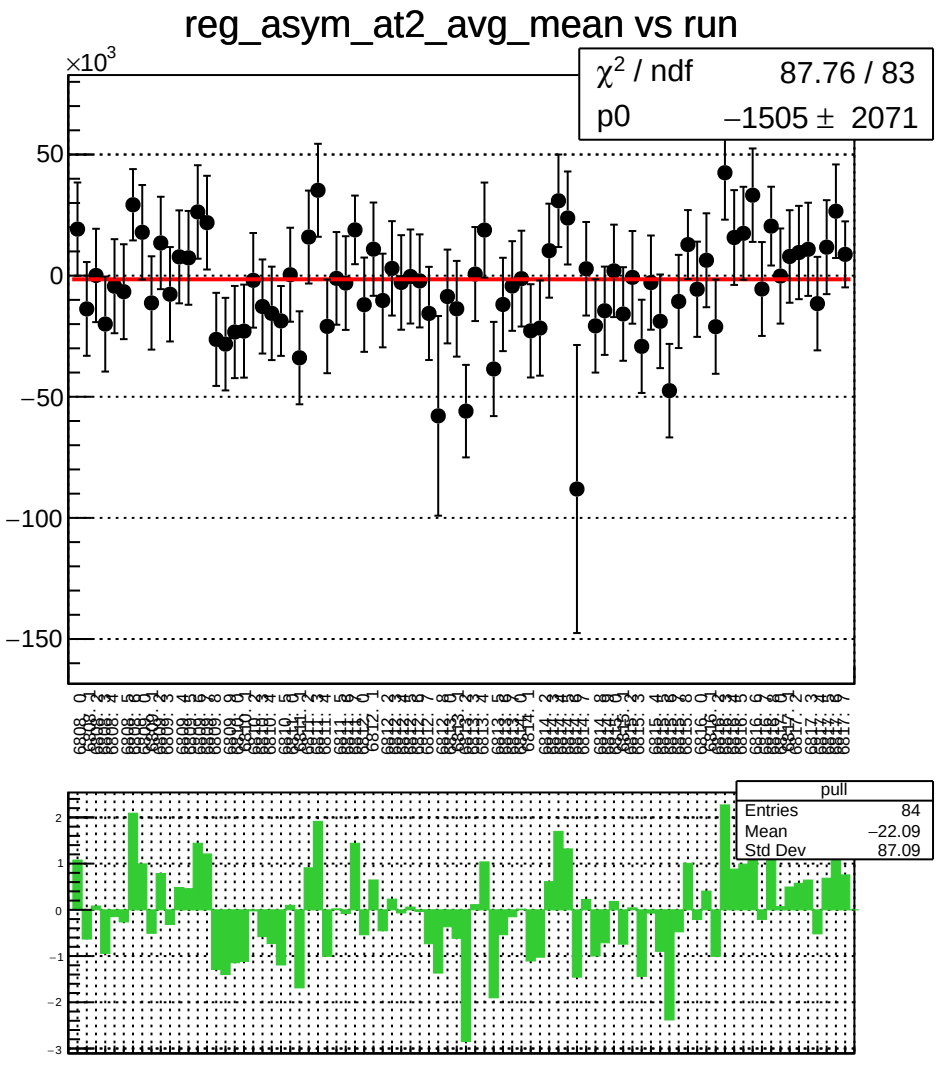

pull1D
Entries 84
Mean 0.001666
Std Dev 1.218

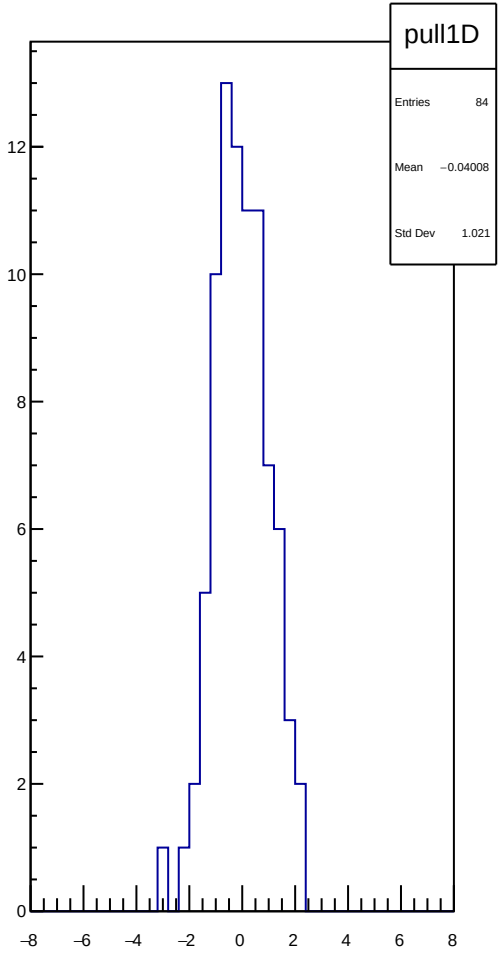

asym_at1_dd_correction_rms vs run
χ^2 / ndf 5523 / 83
p0 459.5 ± 0.3632
540
520
500
480
460
440
420
400
380

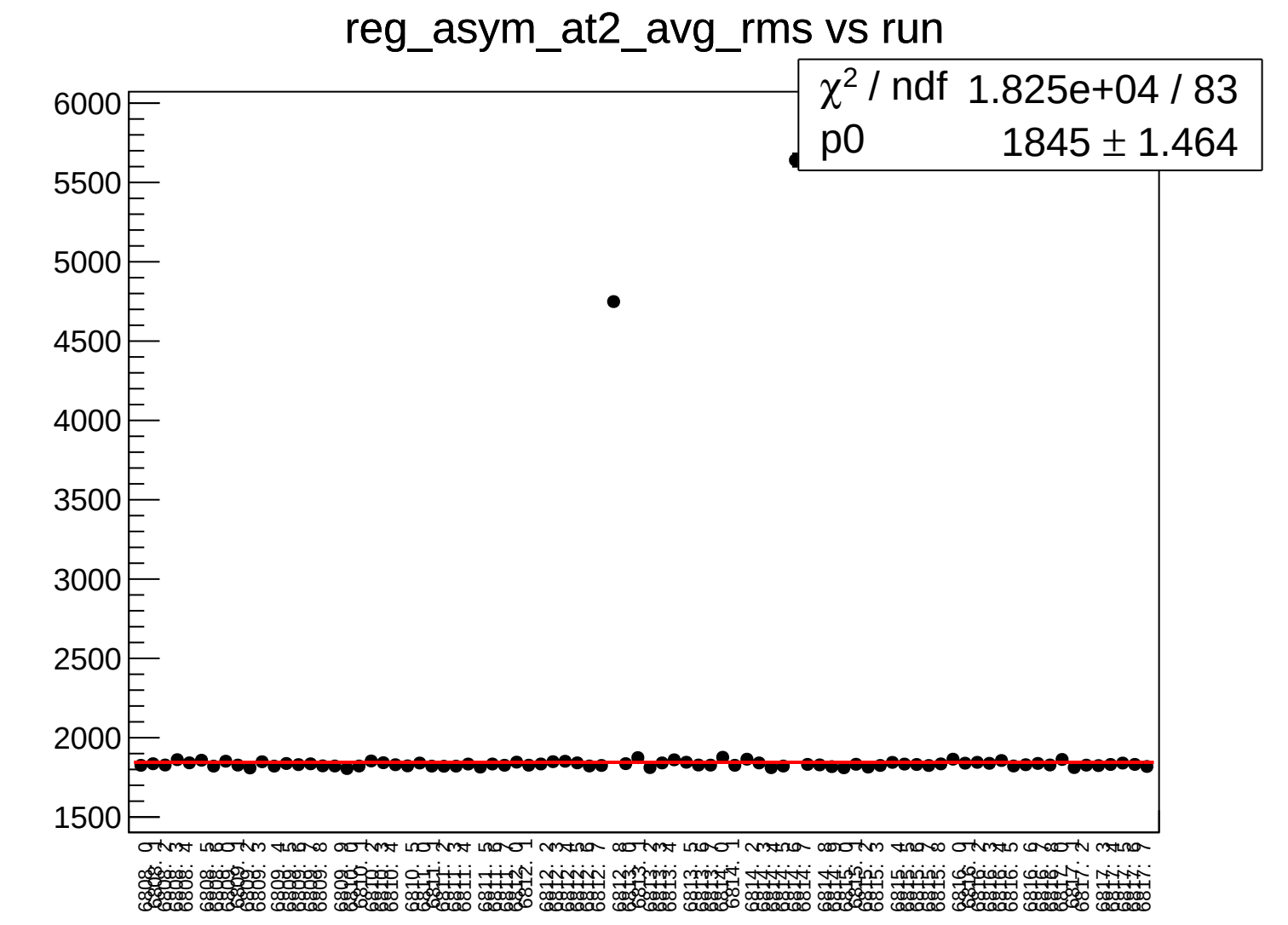

asym_at1_dd_mean vs run
×10^3
χ² / ndf 74.67 / 83
p0 −3692 ± 2118
100
50
0
−50
−100
−150
pull
Entries 84
Mean 775.9
Std Dev 715.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

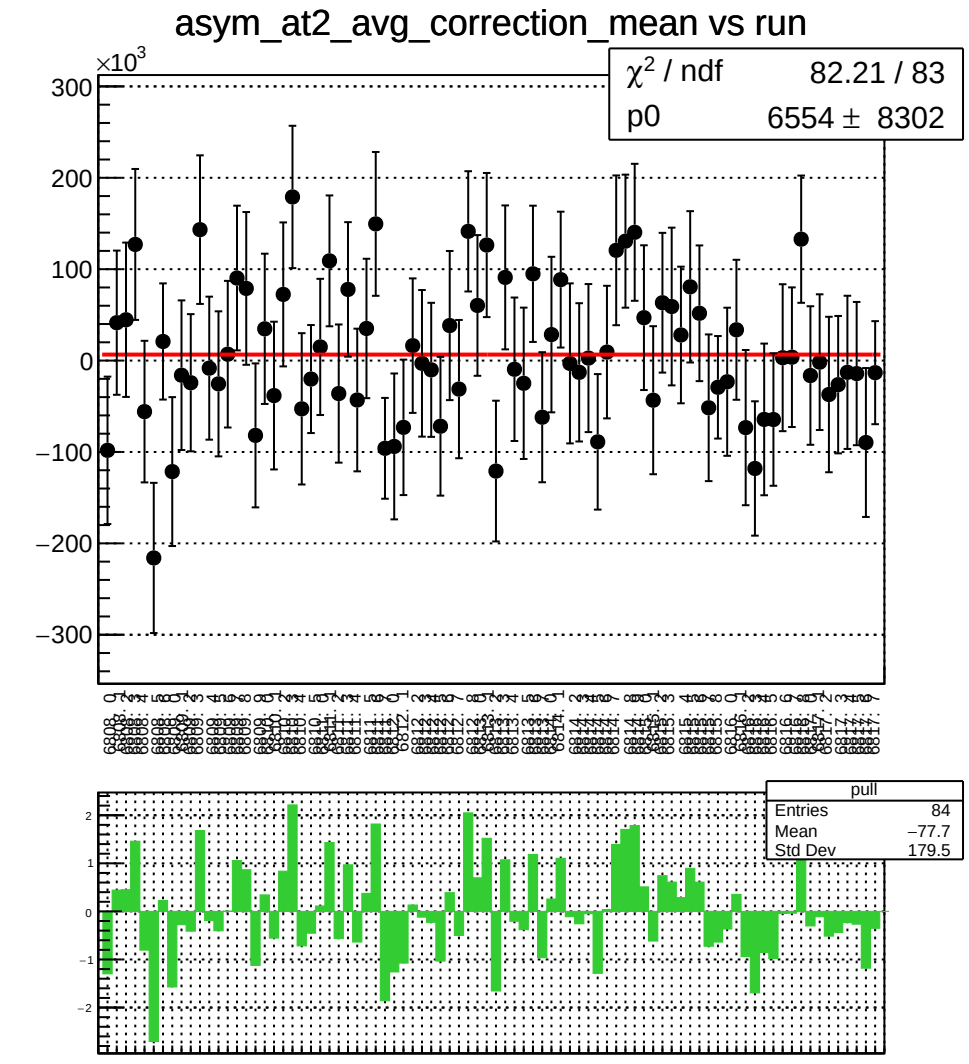

pull1D
Entries 84
Mean 0.002635
Std Dev 0.9428
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

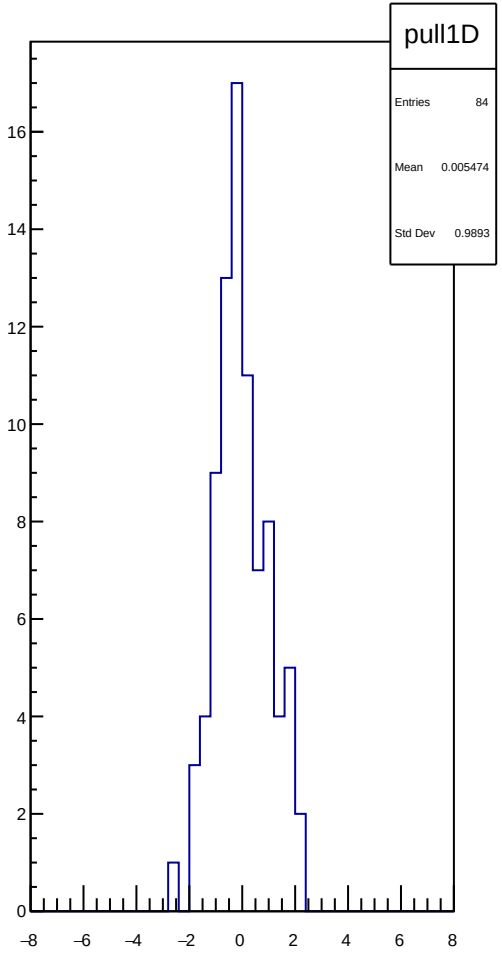

asym_at1_dd_rms vs run
χ² / ndf 1.591e+04 / 83
p0 1889 ± 1.498
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

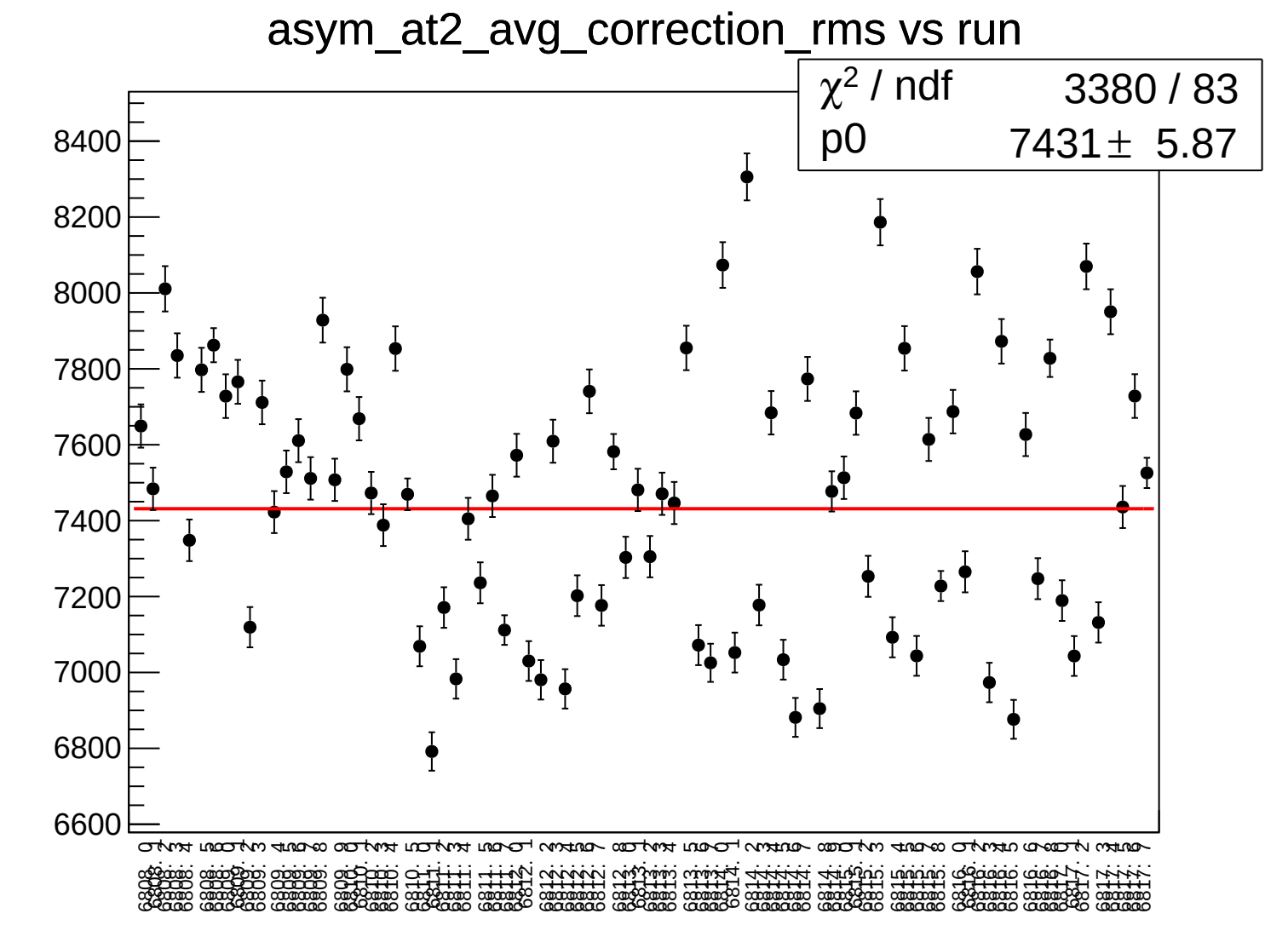

reg_asym_at2_avg_mean vs run
×10^3
χ² / ndf 87.76 / 83
p0 −1505 ± 2071
50
0
−50
−100
−150
pull
Entries 84
Mean −22.09
Std Dev 87.09
2
1
0
−1
−2
−3

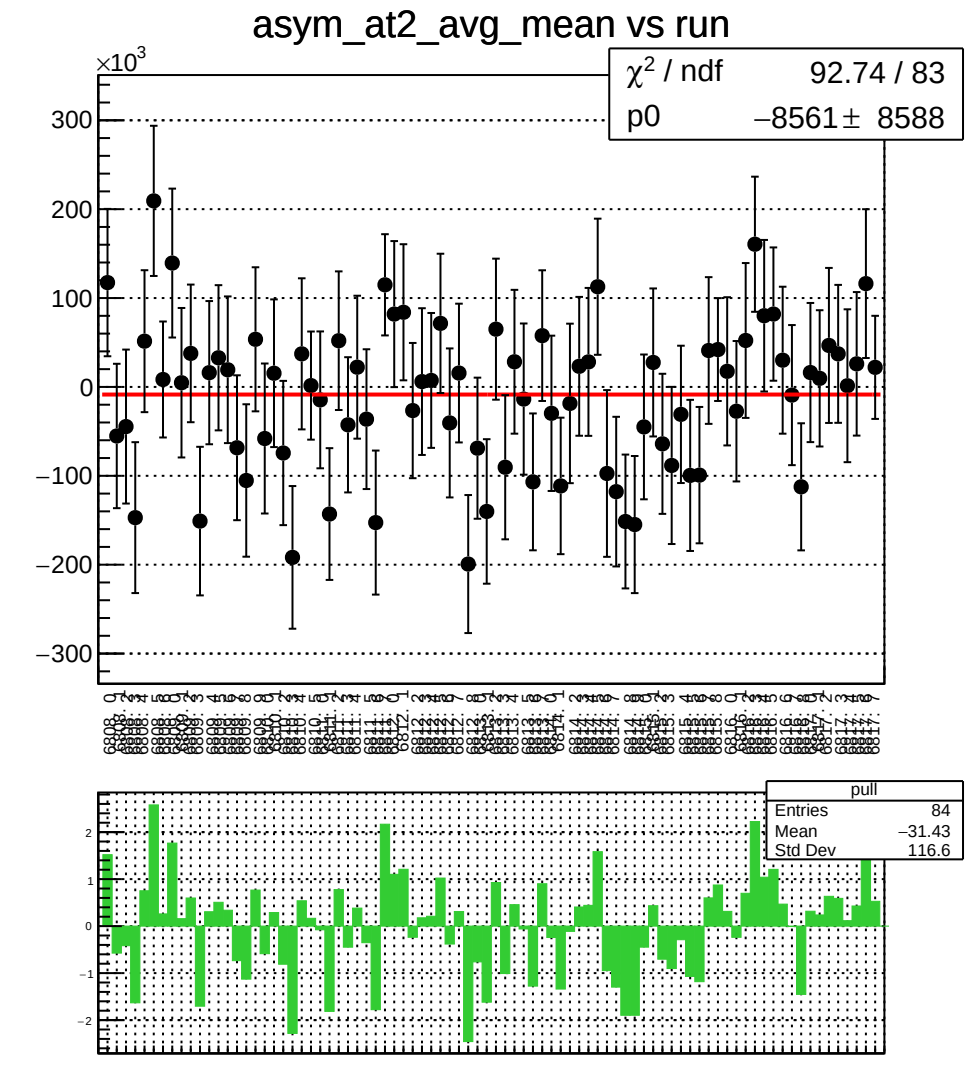

pull1D
Entries 84
Mean −0.04008
Std Dev 1.021
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

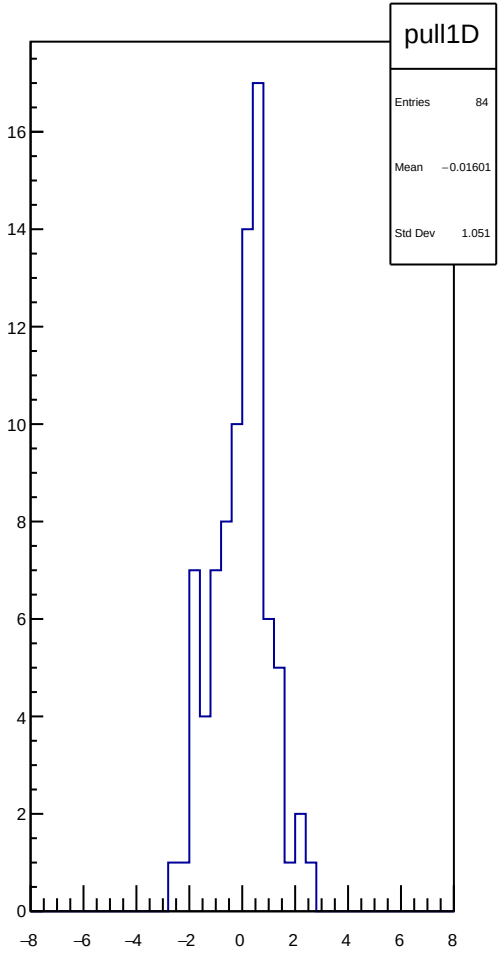

reg_asym_at2_avg_rms vs run
χ² / ndf 1.825e+04 / 83
p0 1845 ± 1.464
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

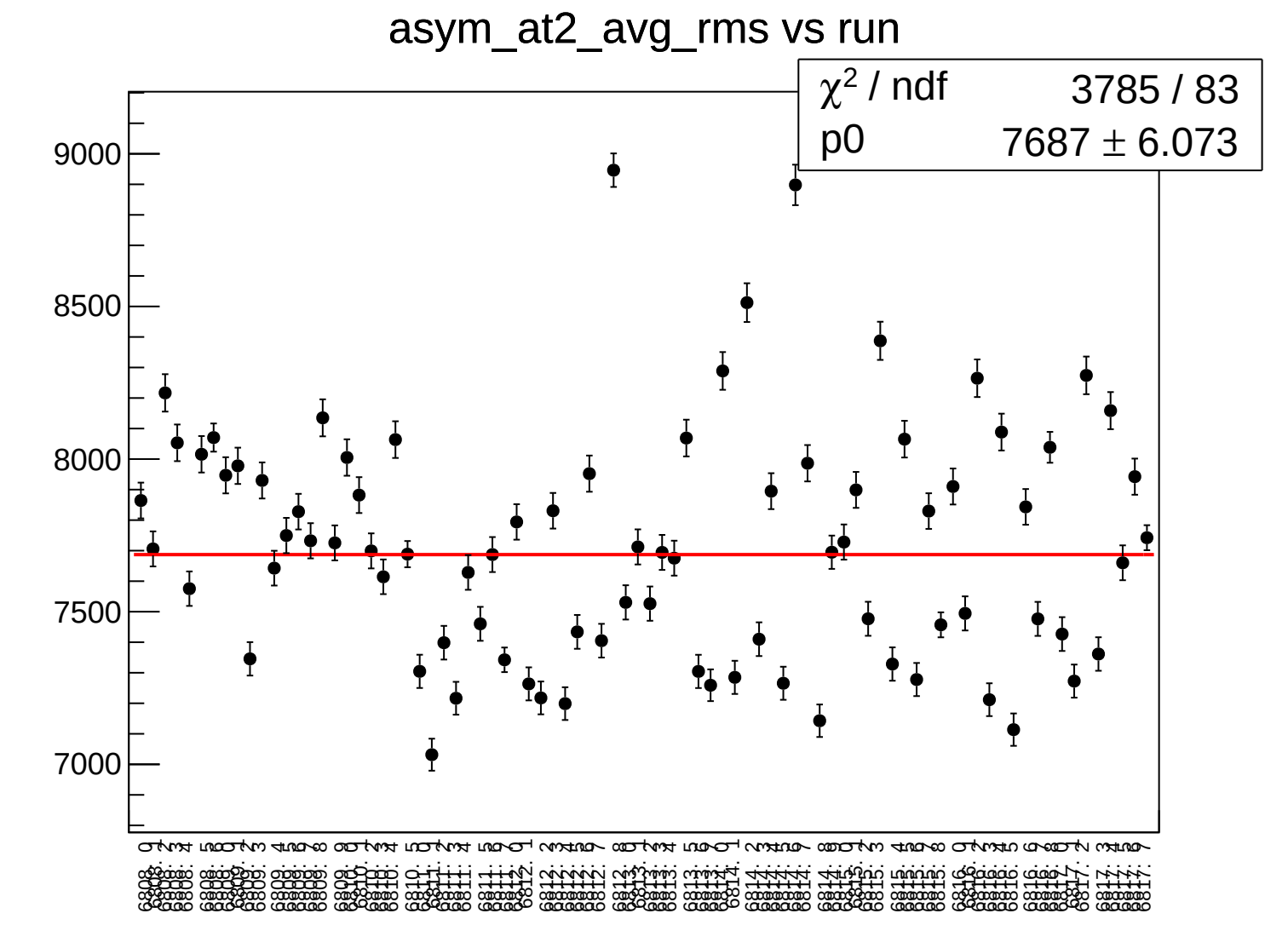

asym_at2_avg_correction_mean vs run
×10^3
χ^2 / ndf 82.21 / 83
p0 6554 ± 8302
pull
Entries 84
Mean −77.7
Std Dev 179.5

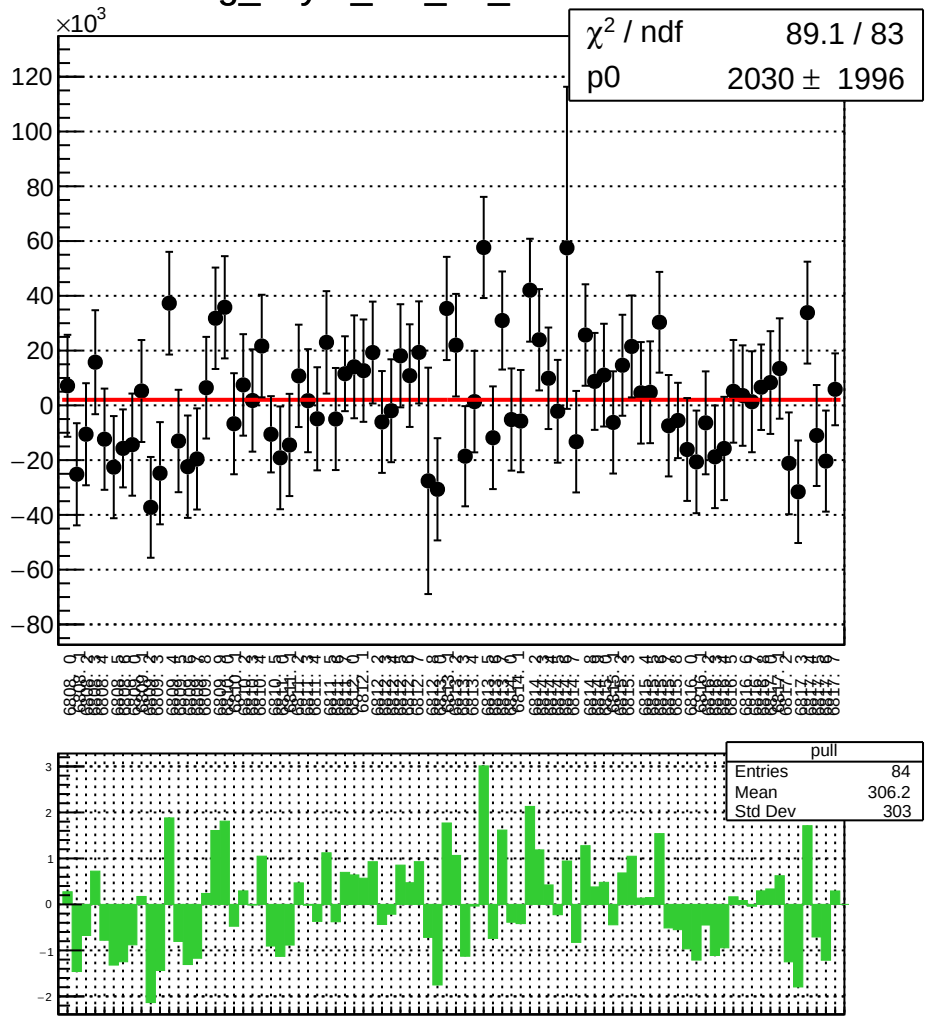

pull1D
Entries 84
Mean 0.005474
Std Dev 0.9893

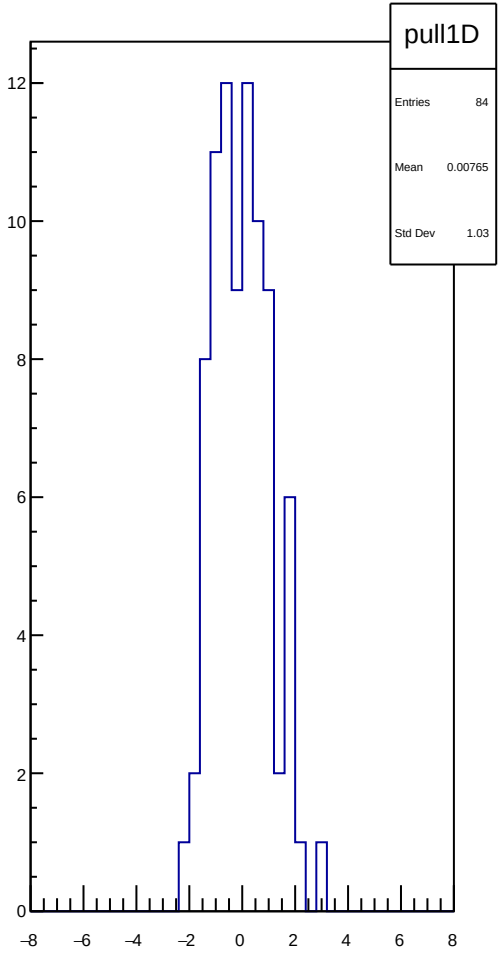

asym_at2_avg_correction_rms vs run
χ² / ndf 3380 / 83
p0 7431 ± 5.87
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600

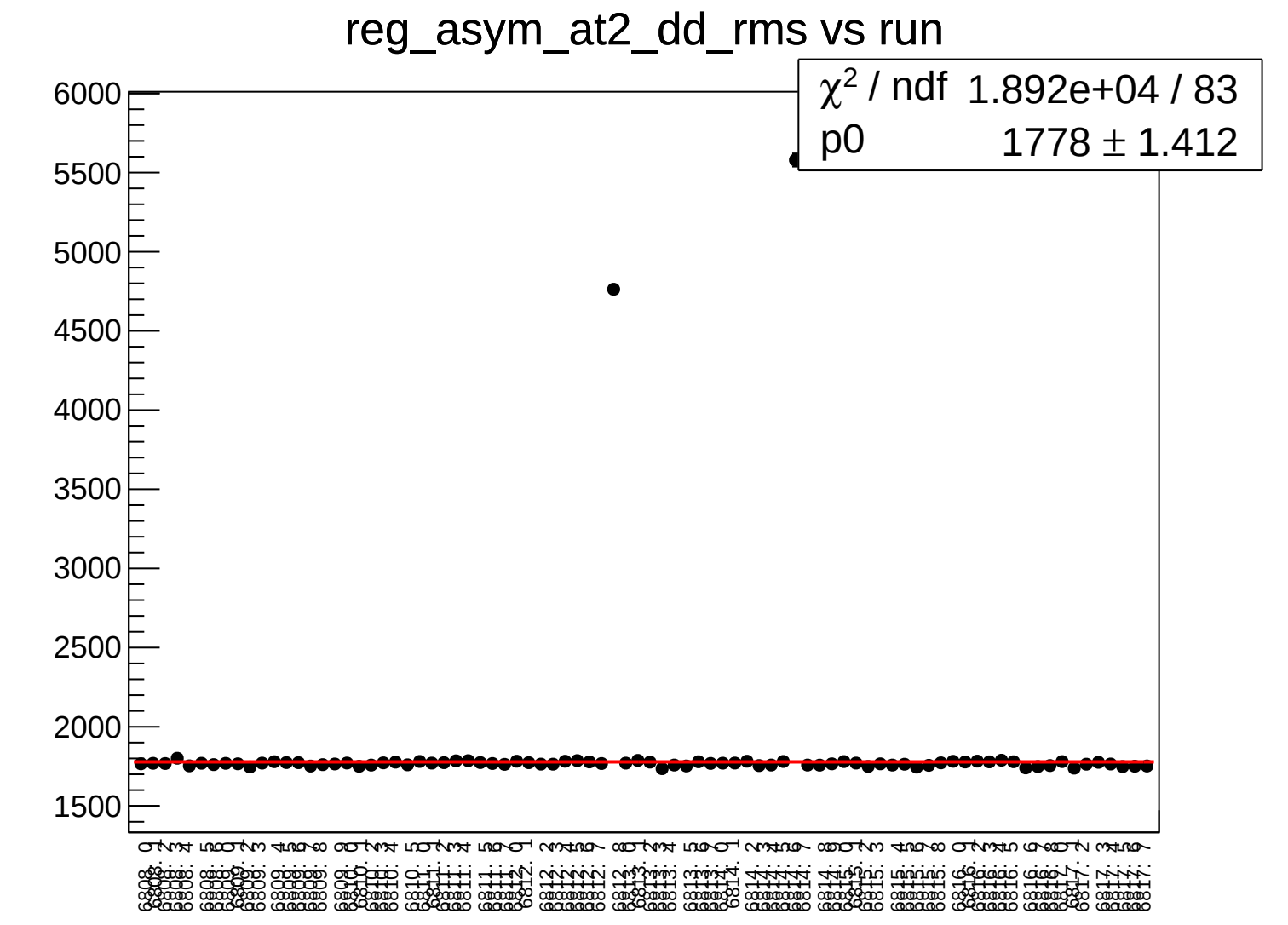

asym_at2_avg_mean vs run
×10^3
χ^2 / ndf 92.74 / 83
p0 −8561 ± 8588
pull
Entries 84
Mean −31.43
Std Dev 116.6

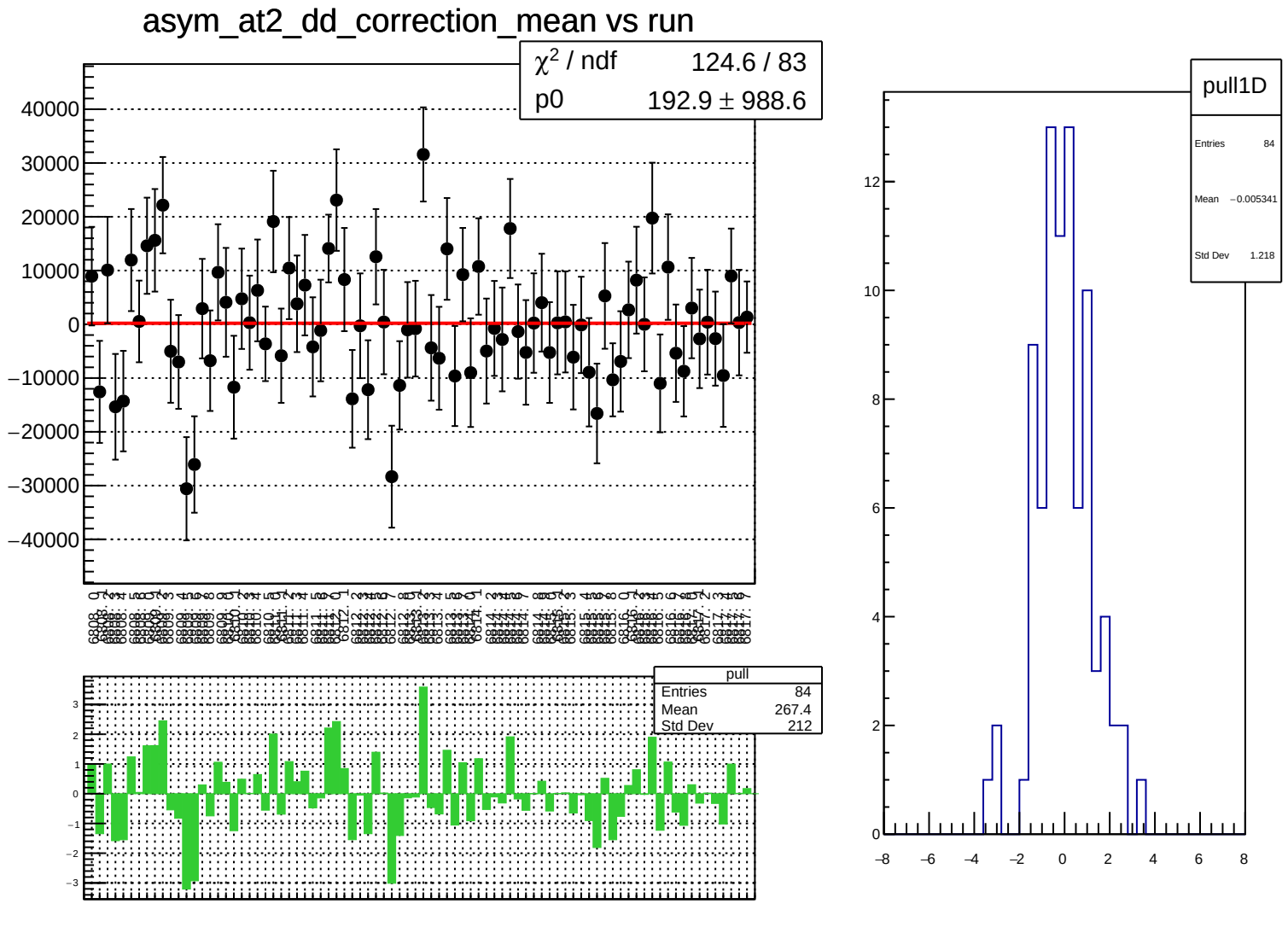

pull1D
Entries 84
Mean −0.01601
Std Dev 1.051

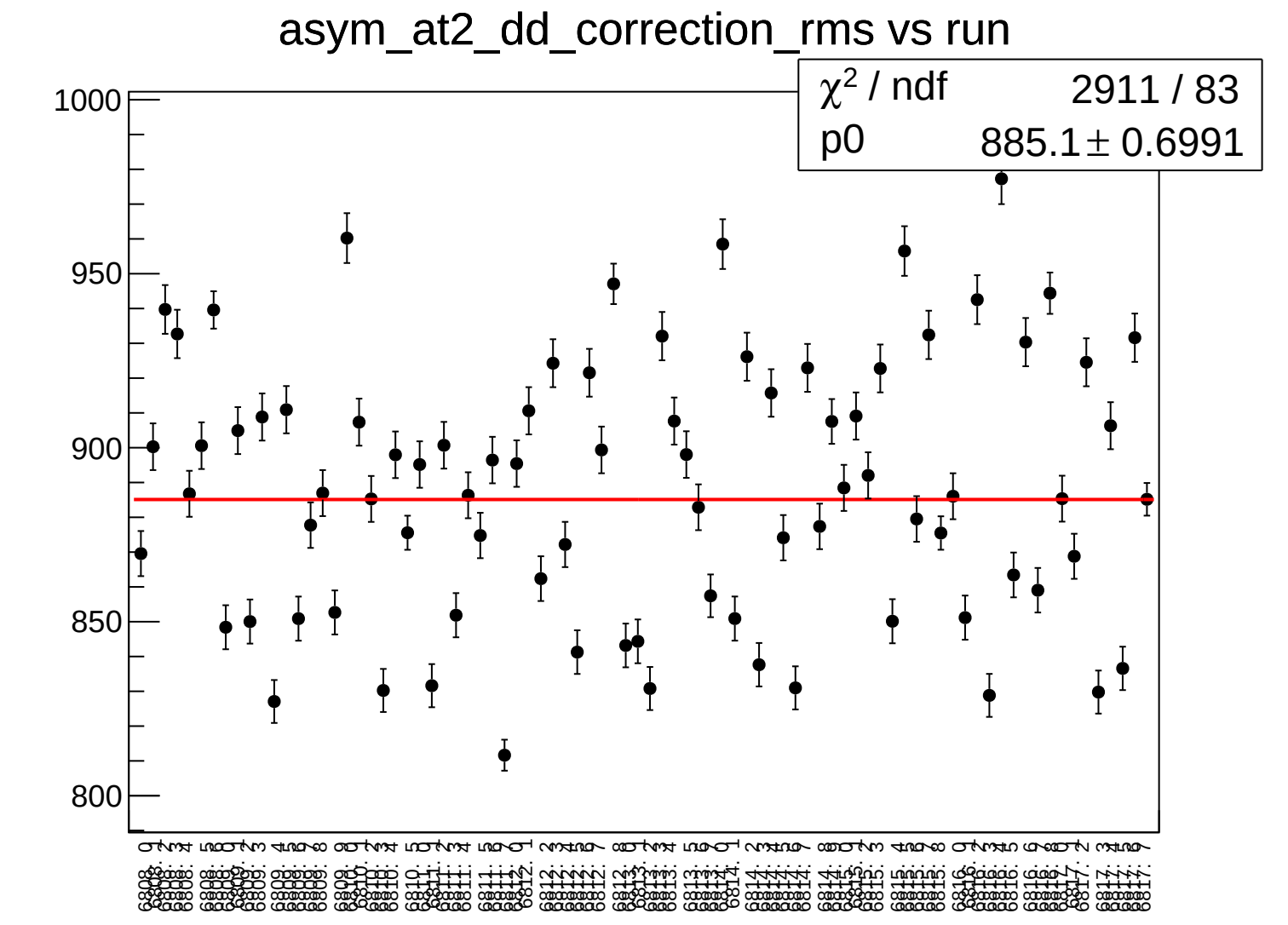

asym_at2_avg_rms vs run
χ^2 / ndf 3785 / 83
p0 7687 ± 6.073
9000
8500
8000
7500
7000

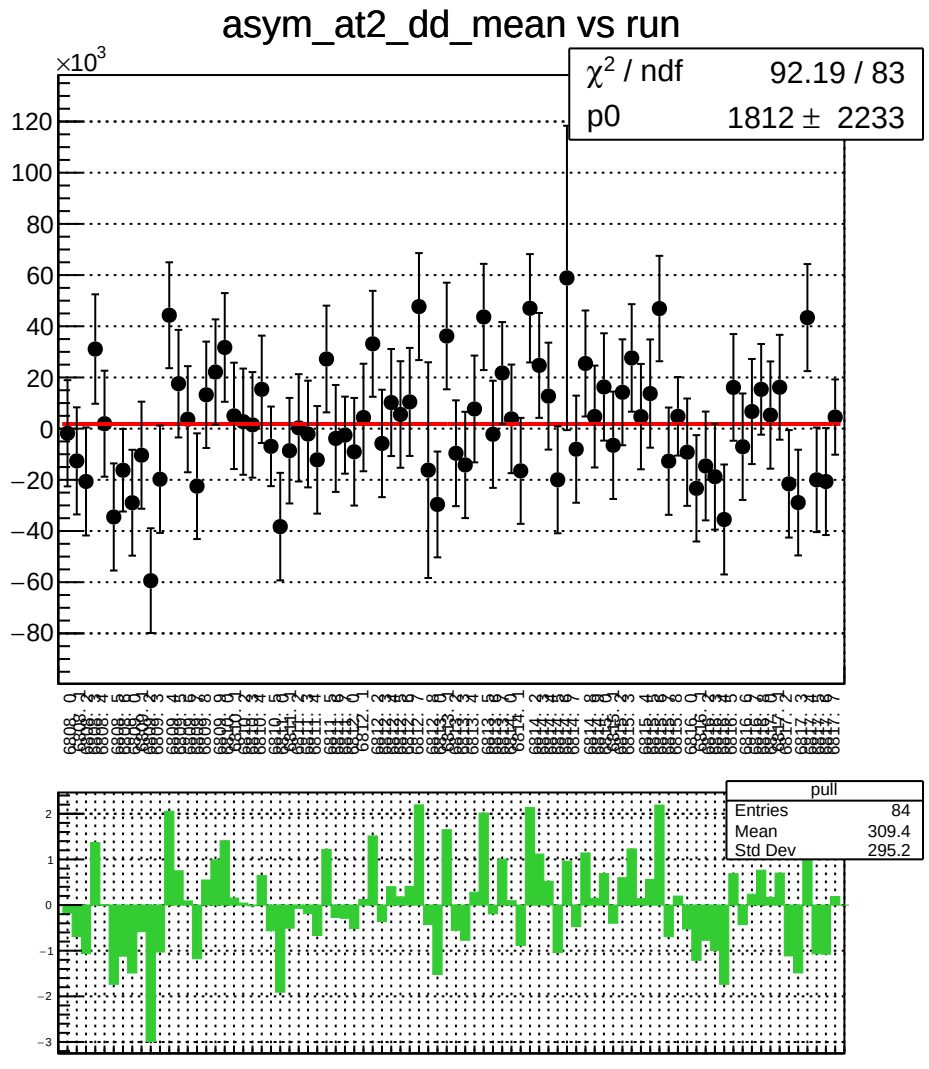

reg_asym_at2_dd_mean vs run
×10^3
χ² / ndf 89.1 / 83
p0 2030 ± 1996
pull
Entries 84
Mean 306.2
Std Dev 303

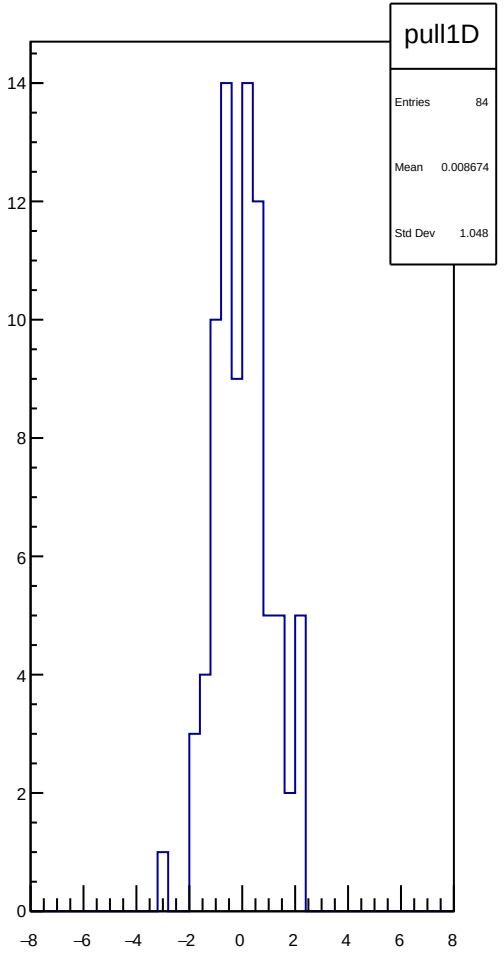

pull1D
Entries 84
Mean 0.00765
Std Dev 1.03

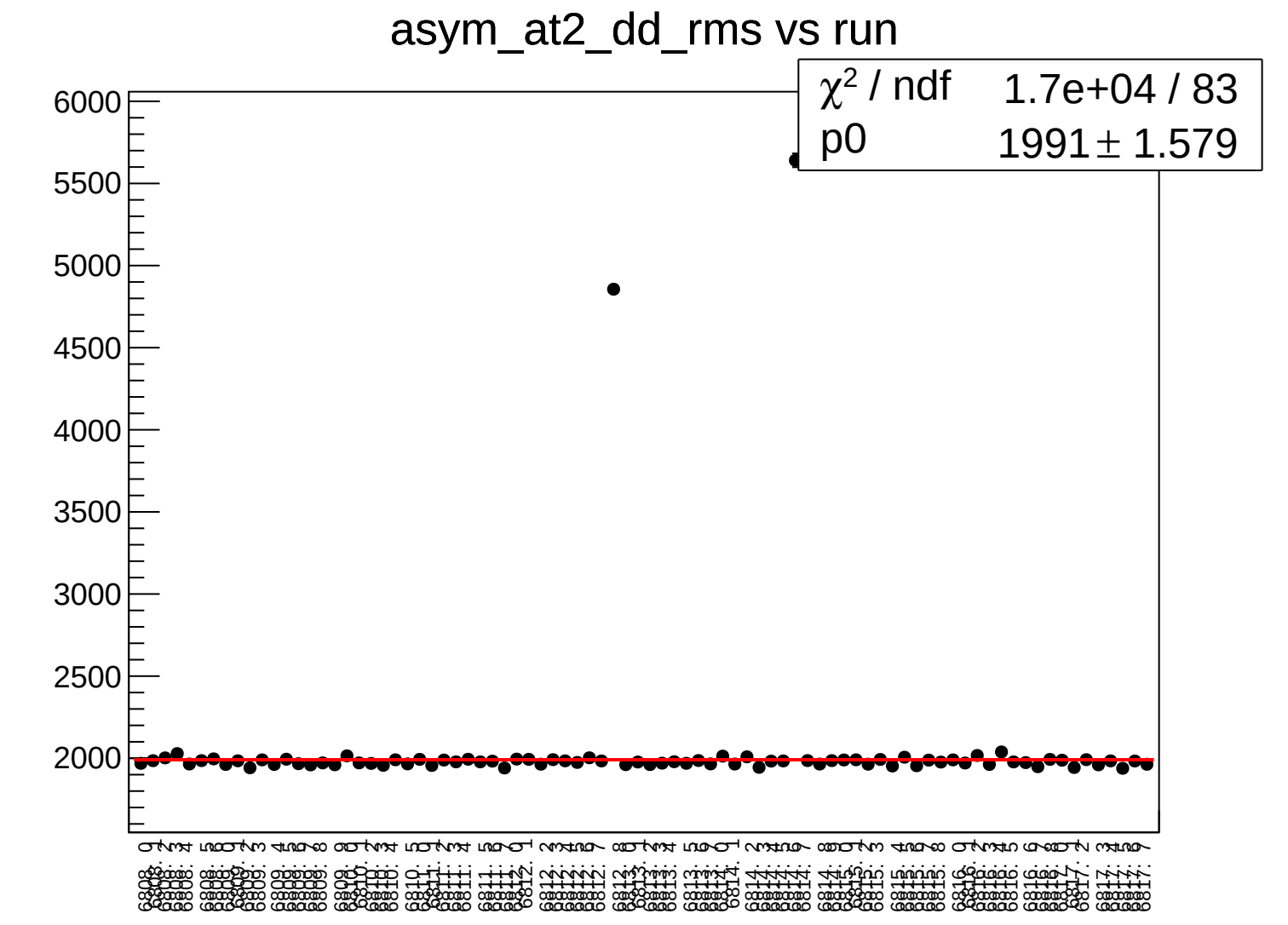

reg_asym_at2_dd_rms vs run
χ² / ndf 1.892e+04 / 83
p0 1778 ± 1.412
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

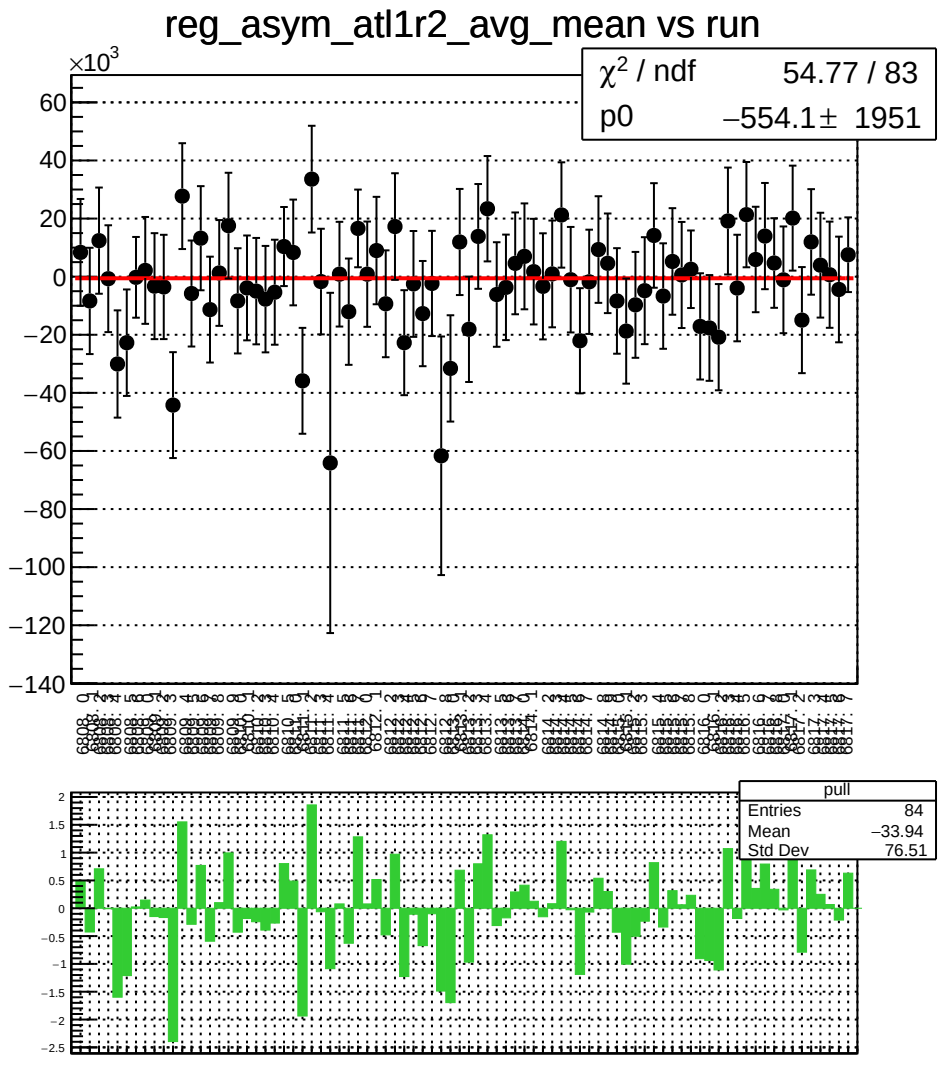

asym_at2_dd_correction_mean vs run
χ² / ndf 124.6 / 83
p0 192.9 ± 988.6
pull
Entries 84
Mean 267.4
Std Dev 212
pull1D
Entries 84
Mean −0.005341
Std Dev 1.218

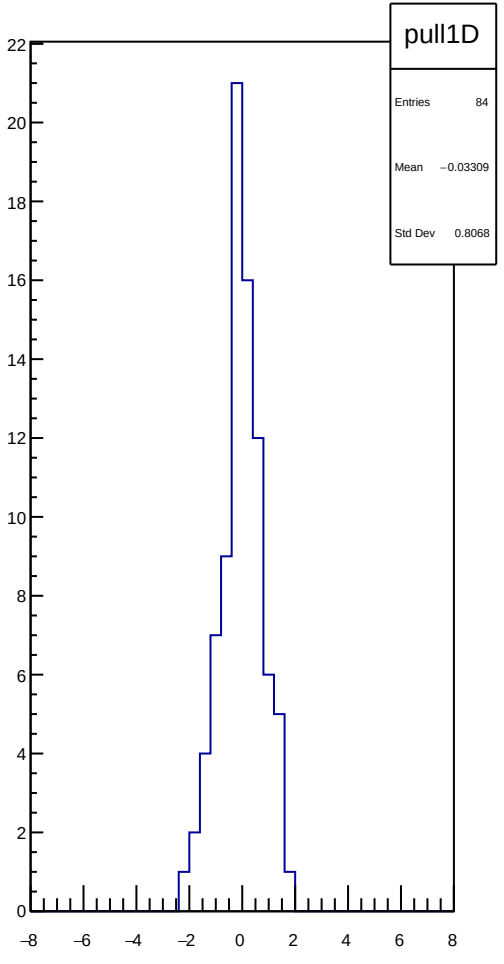

asym_at2_dd_correction_rms vs run
χ² / ndf 2911 / 83
p0 885.1 ± 0.6991
1000
950
900
850
800

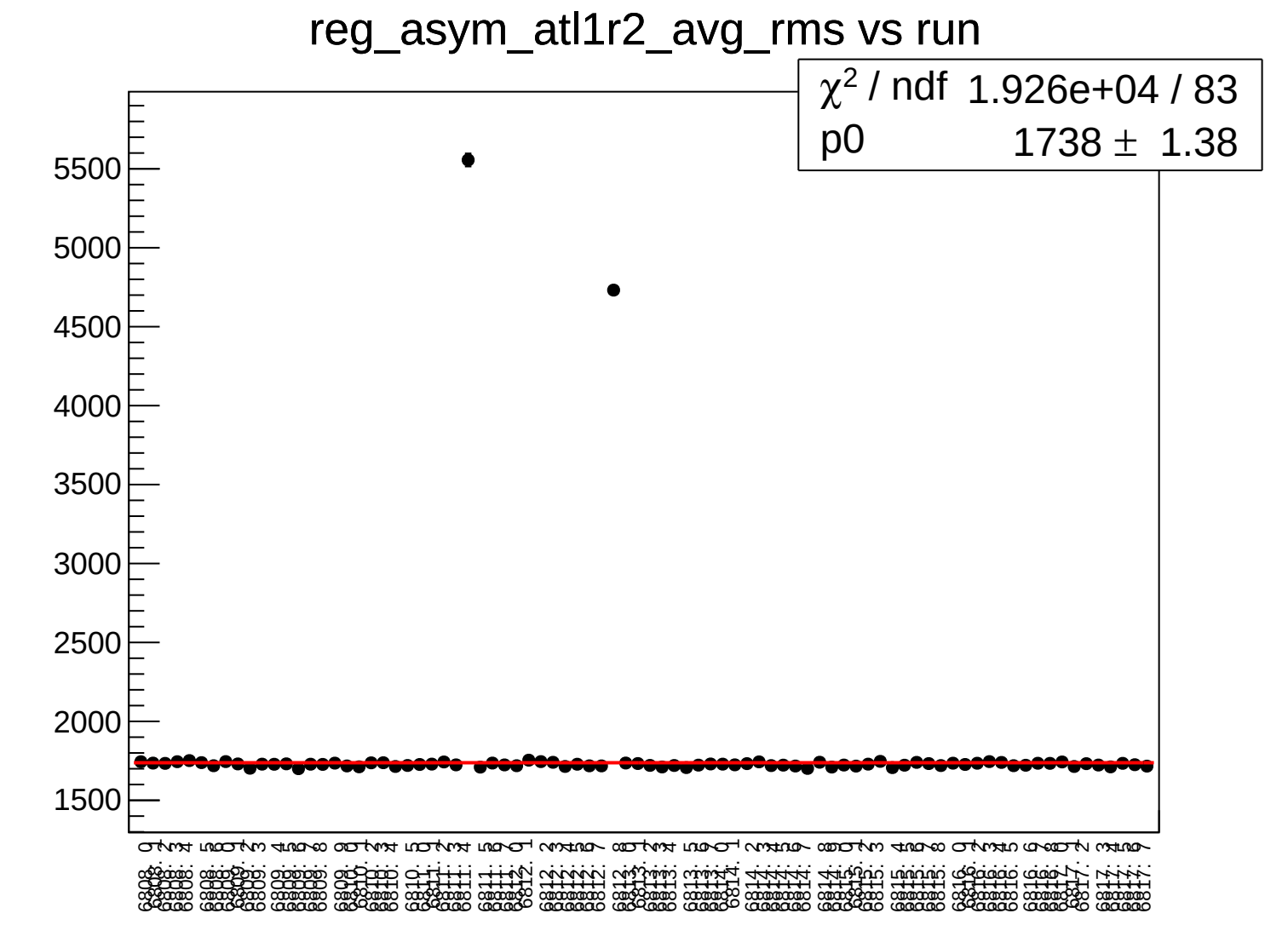

asym_at2_dd_mean vs run
×10^3
χ² / ndf 92.19 / 83
p0 1812 ± 2233
pull
Entries 84
Mean 309.4
Std Dev 295.2

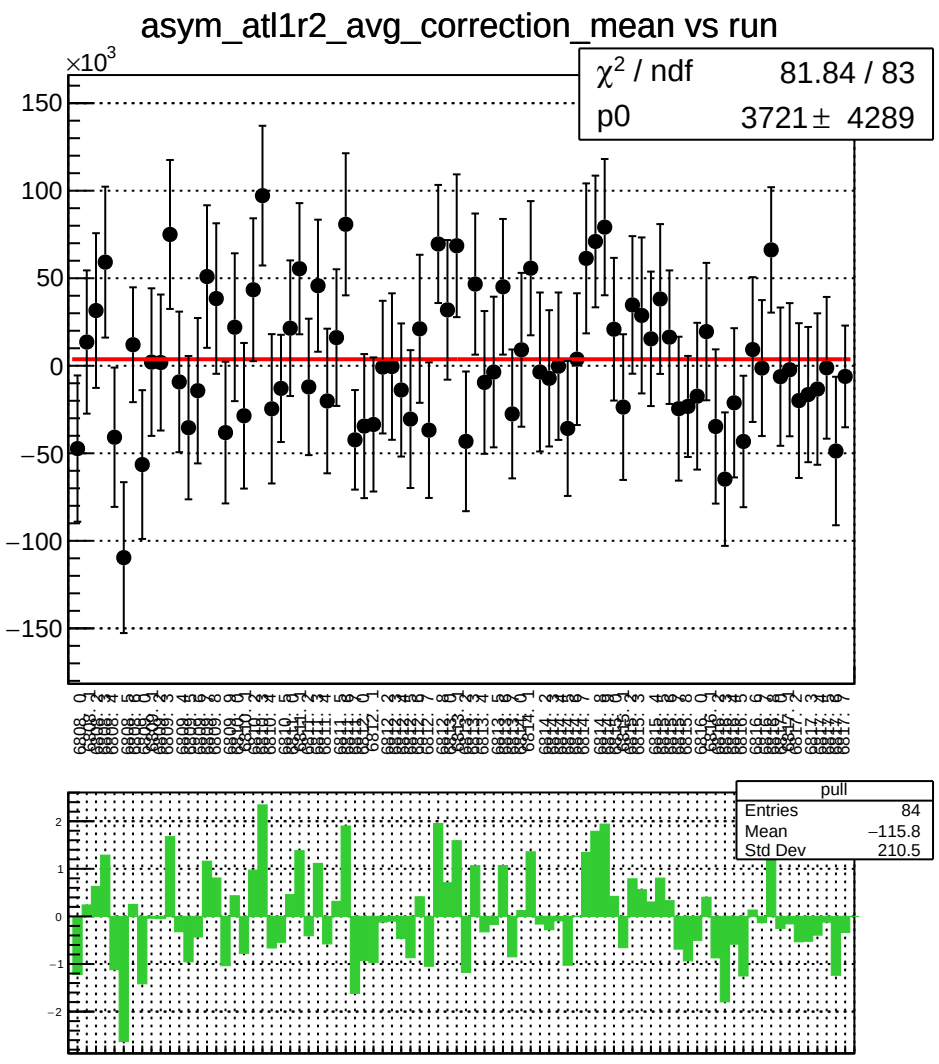

pull1D
Entries 84
Mean 0.008674
Std Dev 1.048

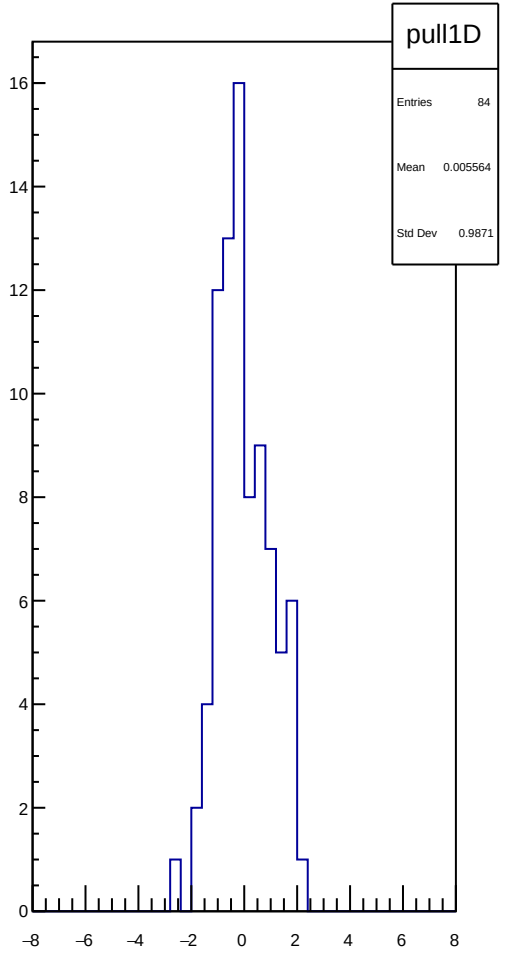

asym_at2_dd_rms vs run
χ² / ndf 1.7e+04 / 83
p0 1991 ± 1.579
6000
5500
5000
4500
4000
3500
3000
2500
2000

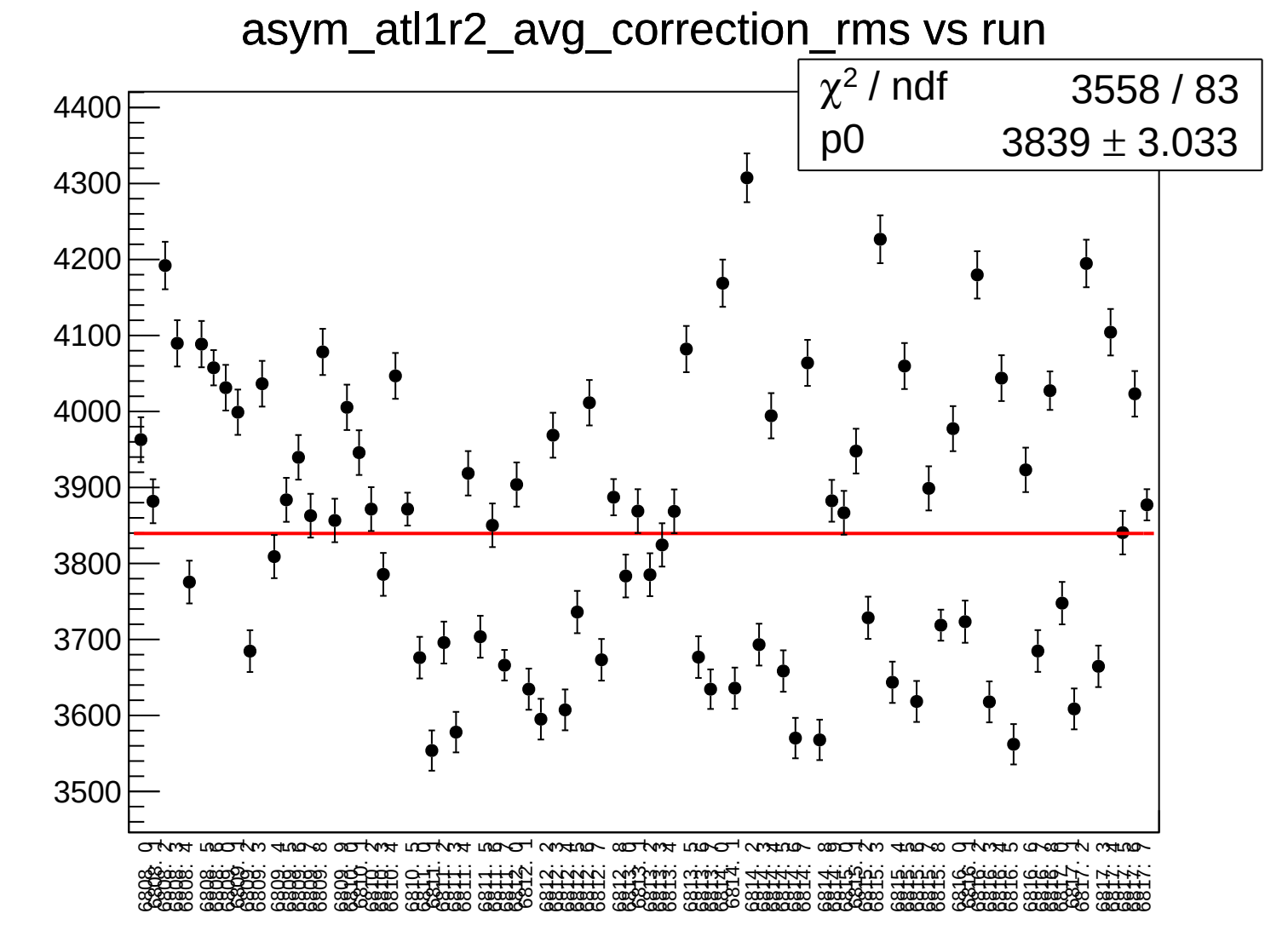

reg_asym_atl1r2_avg_mean vs run
χ² / ndf 54.77 / 83
p0 −554.1± 1951
×10³
pull
Entries 84
Mean −33.94
Std Dev 76.51

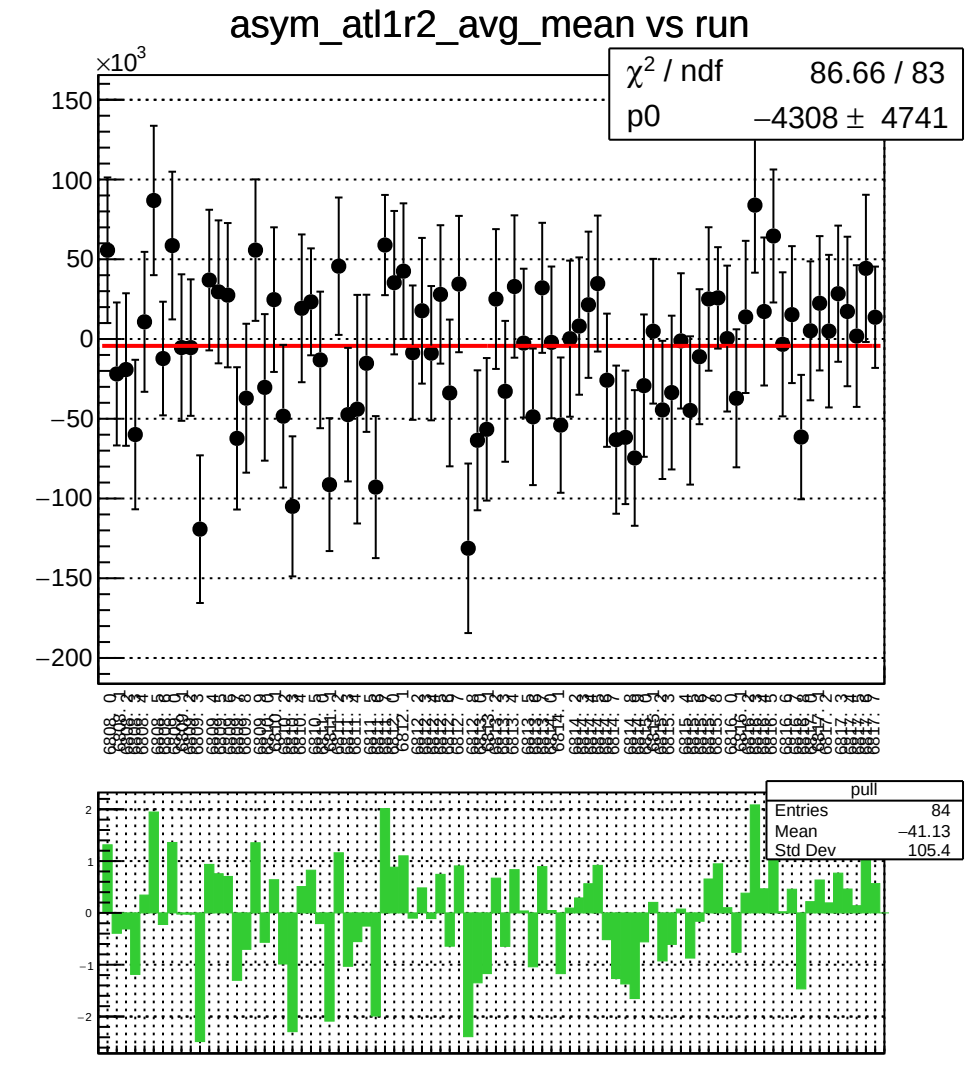

pull1D
Entries 84
Mean −0.03309
Std Dev 0.8068

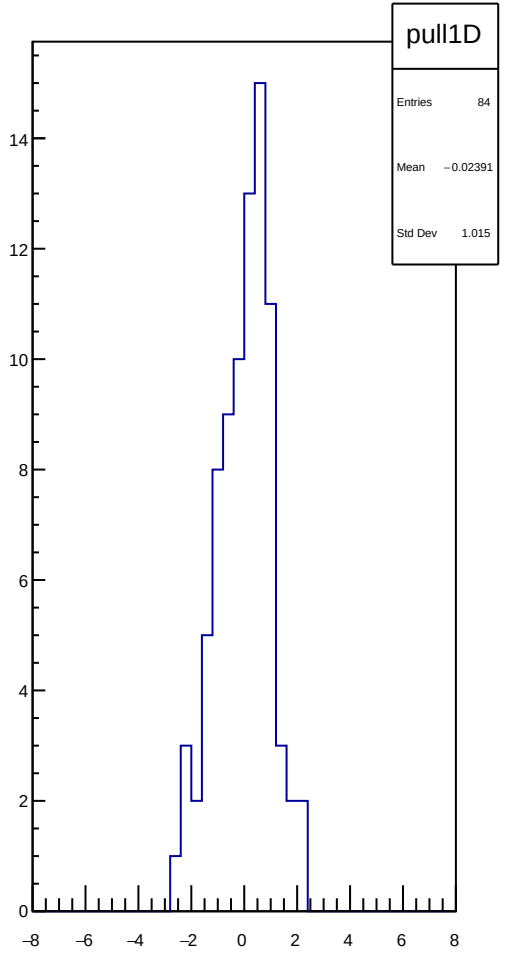

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 1.926e+04 / 83
p0 1738 ± 1.38
5500
5000
4500
4000
3500
3000
2500
2000
1500

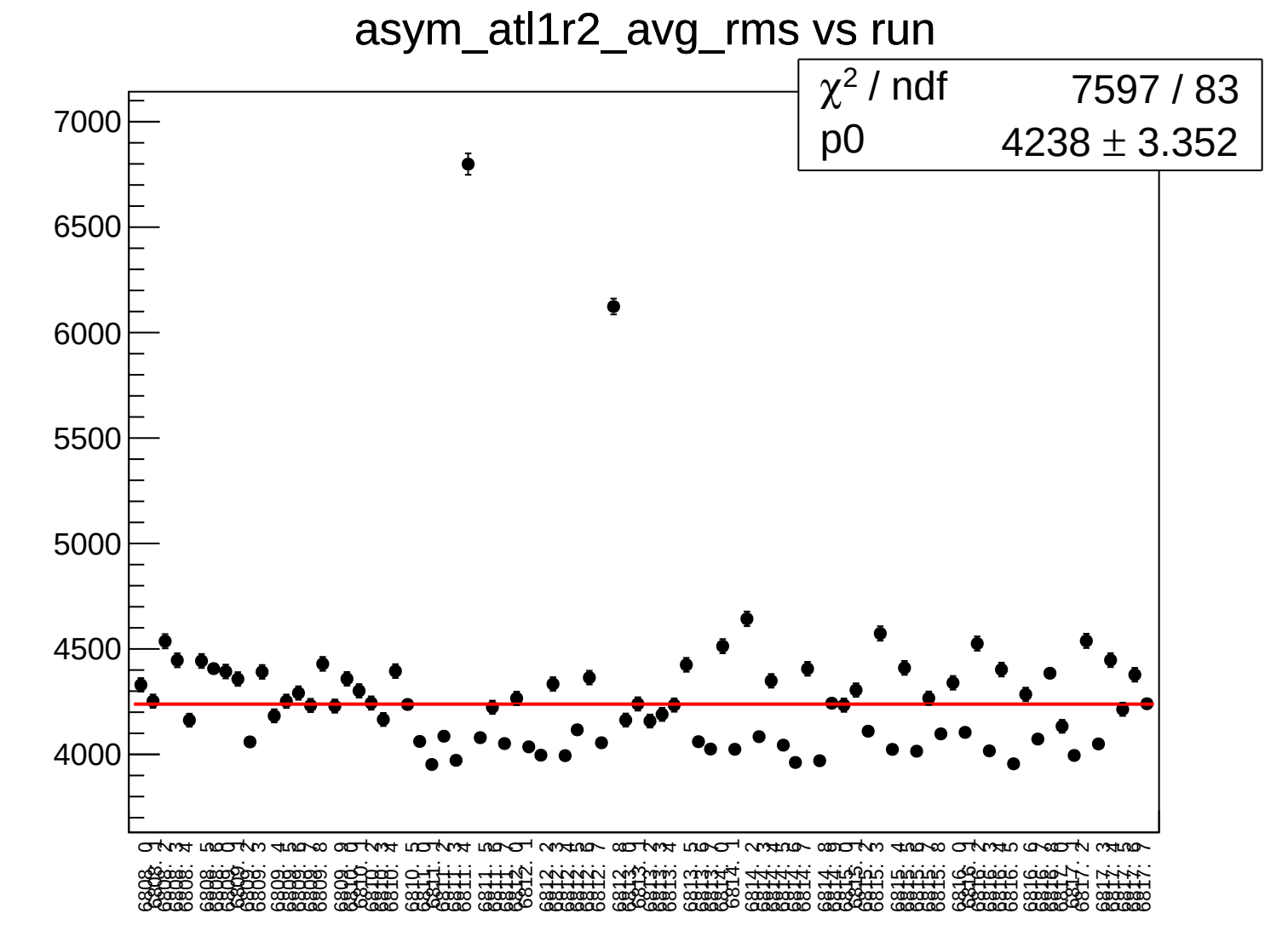

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 81.84 / 83
p0 3721 ± 4289
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −115.8
Std Dev 210.5
2
1
0
−1
−2

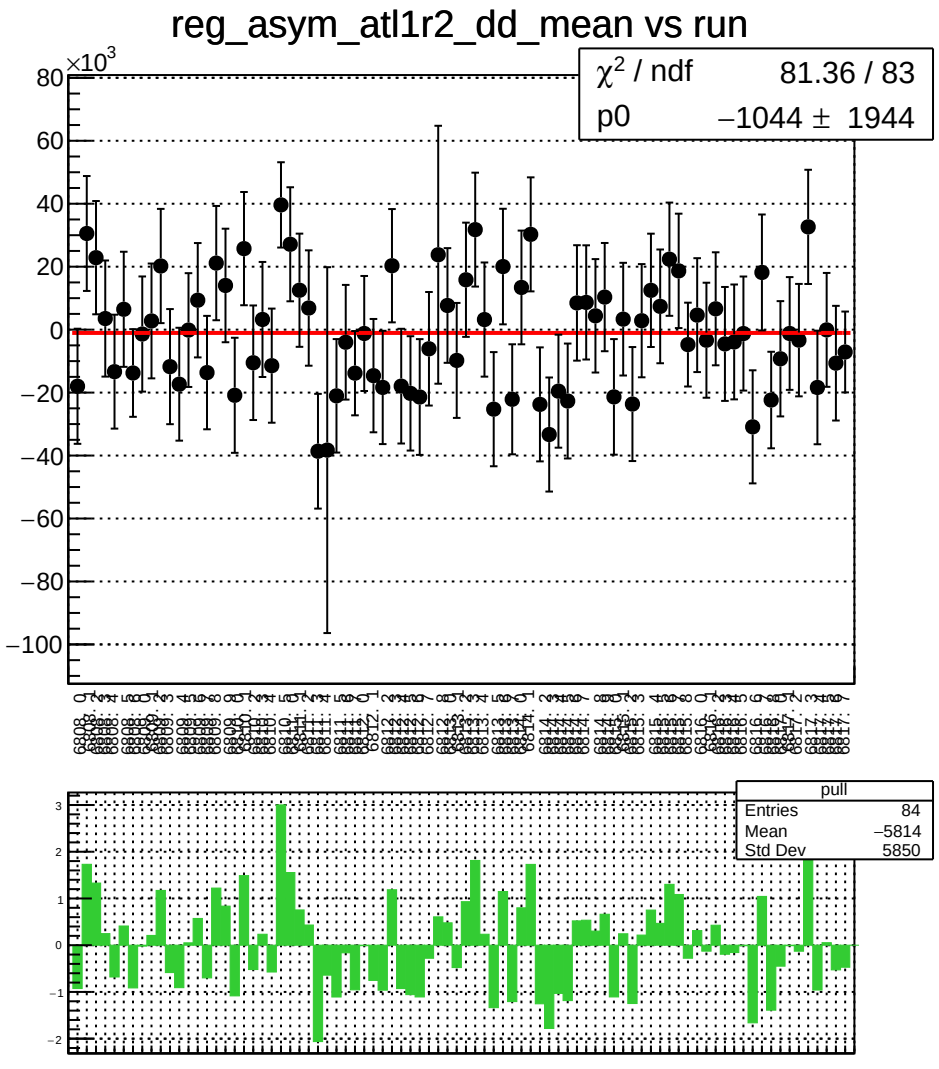

pull1D
Entries 84
Mean 0.005564
Std Dev 0.9871
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

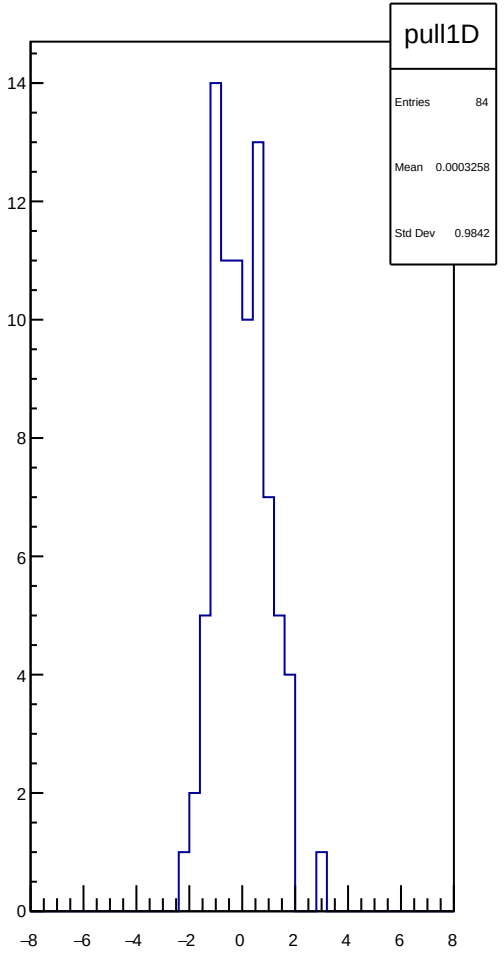

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 3558 / 83
p0 3839 ± 3.033
4400
4300
4200
4100
4000
3900
3800
3700
3600
3500

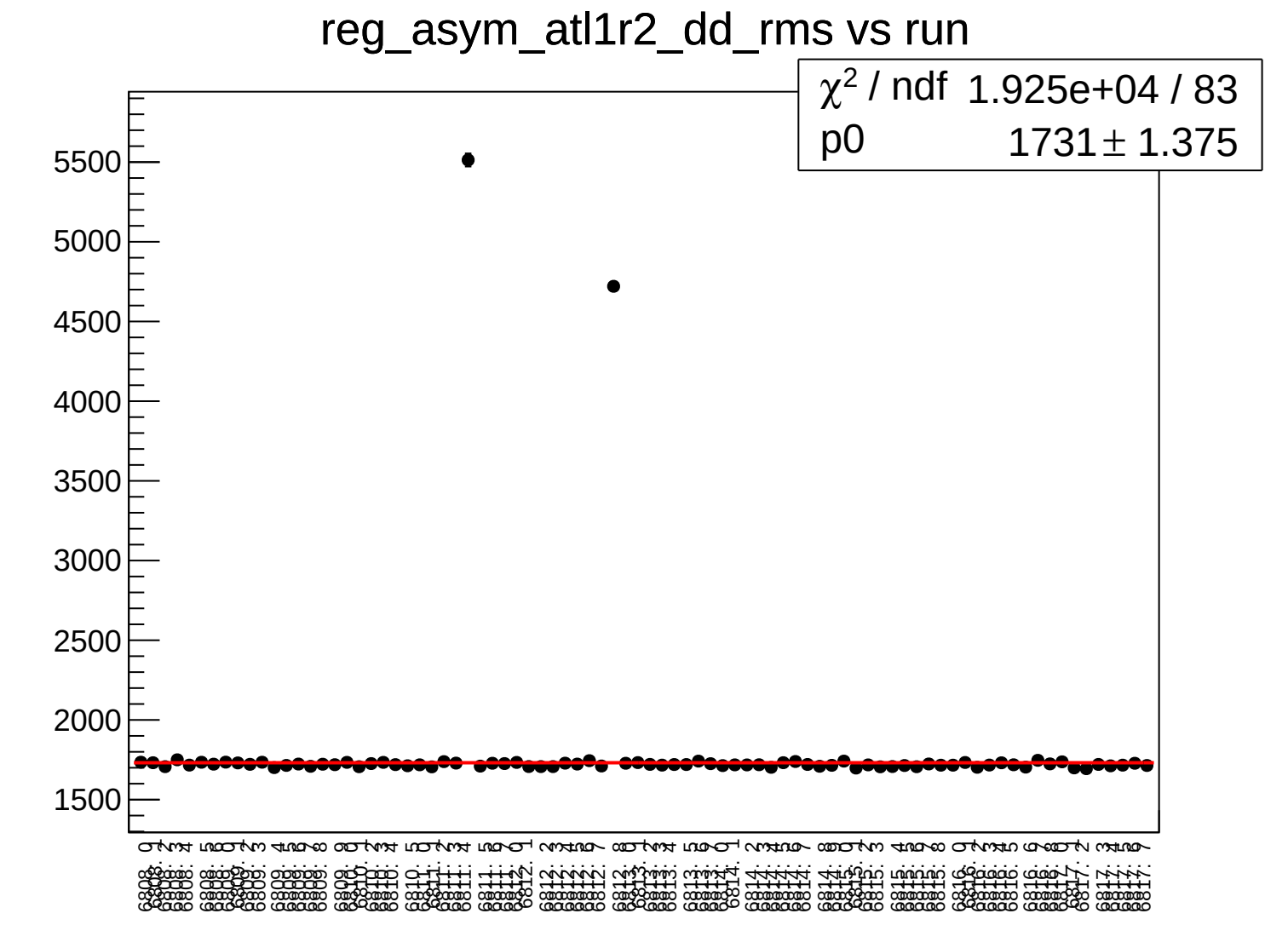

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 86.66 / 83
p0 −4308 ± 4741
150
100
50
0
−50
−100
−150
−200
pull
Entries 84
Mean −41.13
Std Dev 105.4
2
1
0
−1
−2

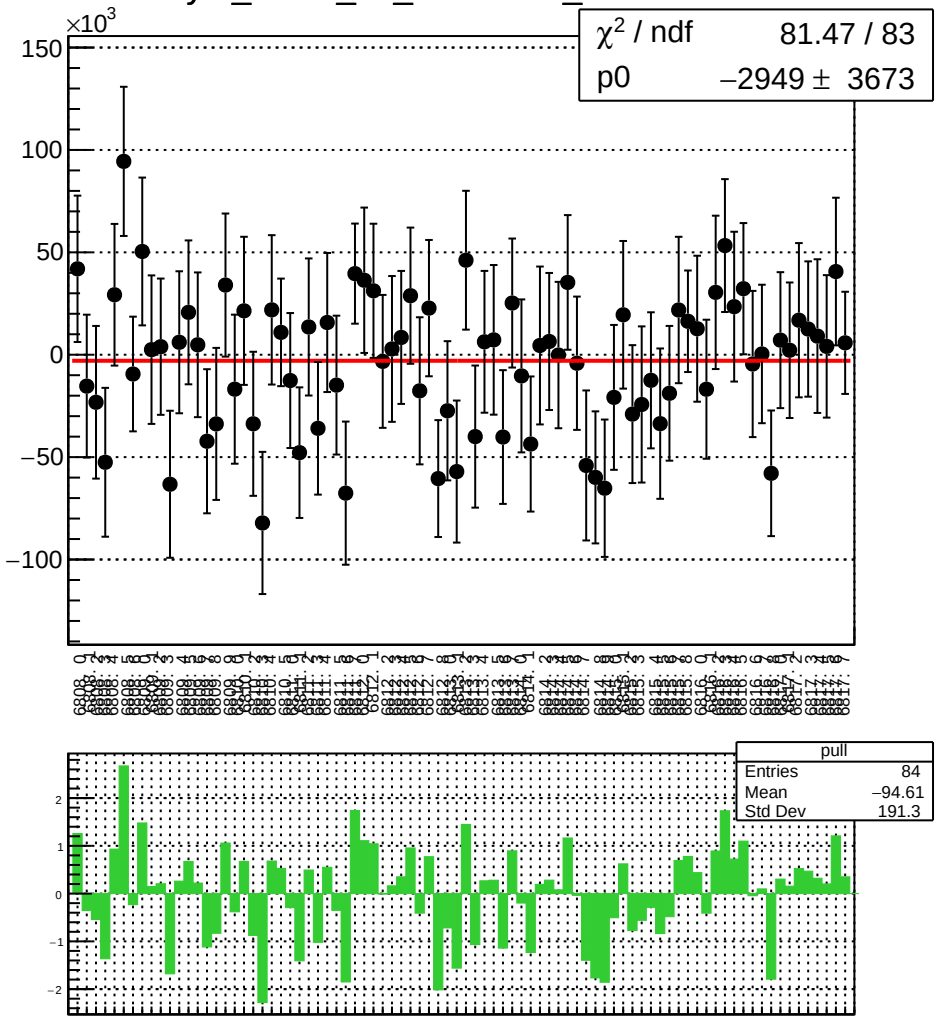

pull1D
Entries 84
Mean −0.02391
Std Dev 1.015
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

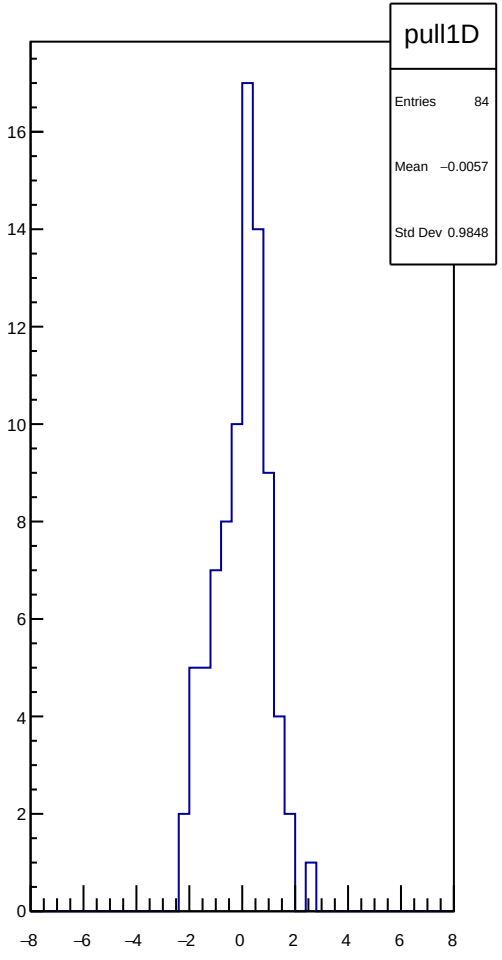

asym_atl1r2_avg_rms vs run
χ^2 / ndf 7597 / 83
p0 4238 ± 3.352
7000
6500
6000
5500
5000
4500
4000

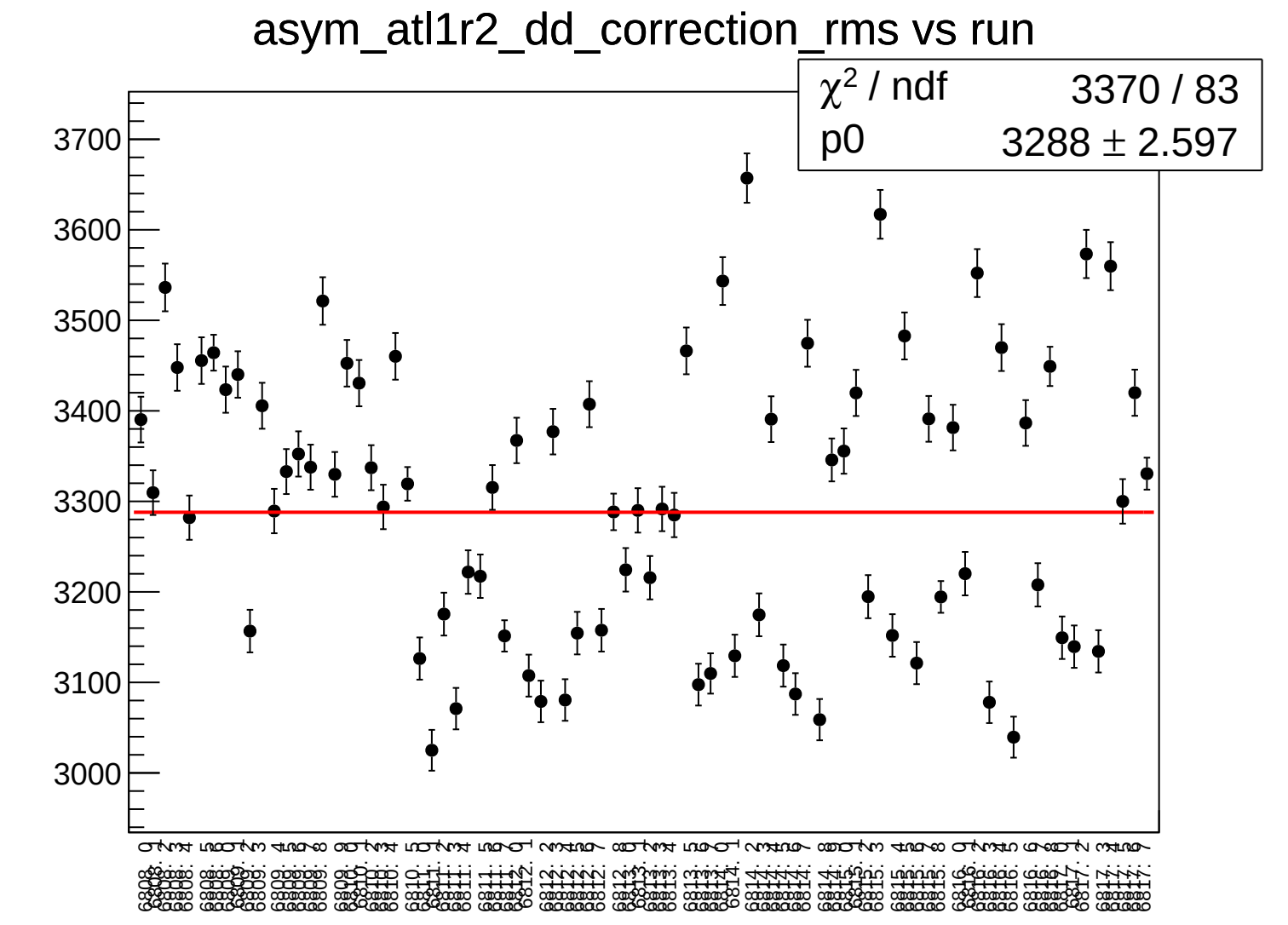

reg_asym_atl1r2_dd_mean vs run
χ² / ndf 81.36 / 83
p0 −1044 ± 1944
×10³
pull
Entries 84
Mean −5814
Std Dev 5850

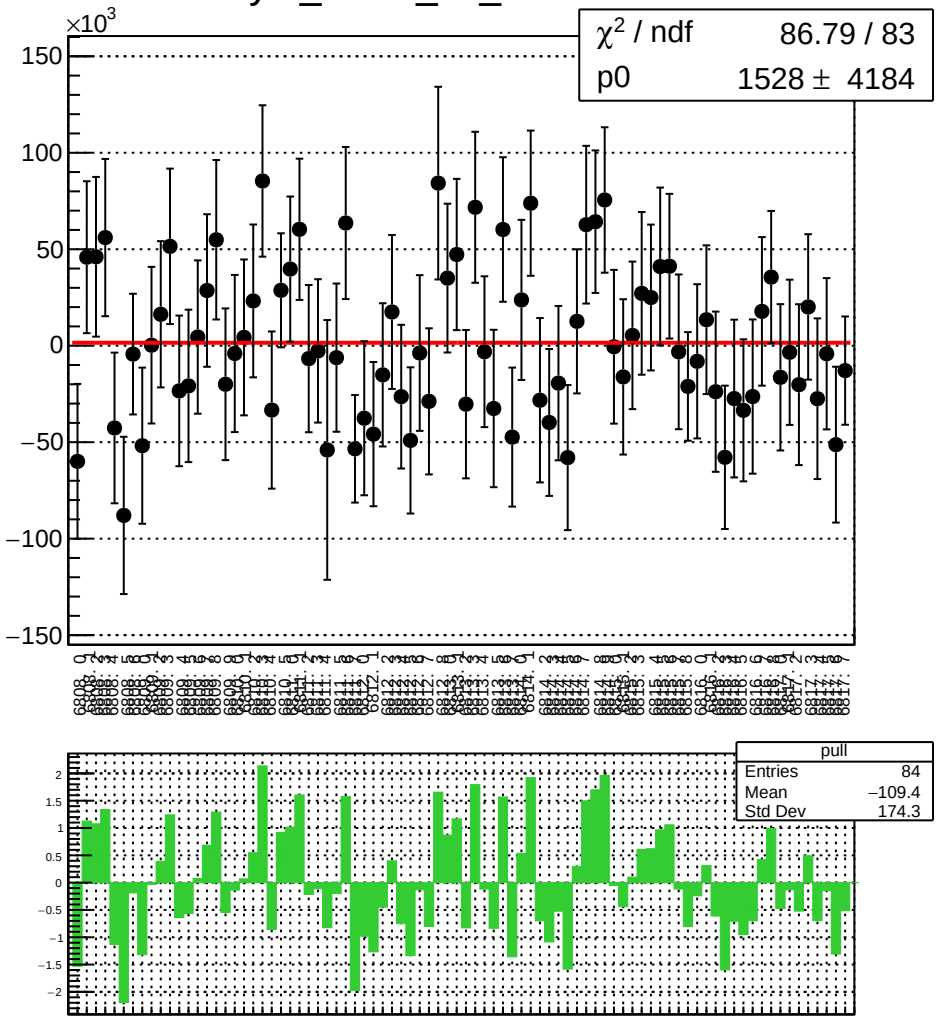

pull1D
Entries 84
Mean 0.0003258
Std Dev 0.9842

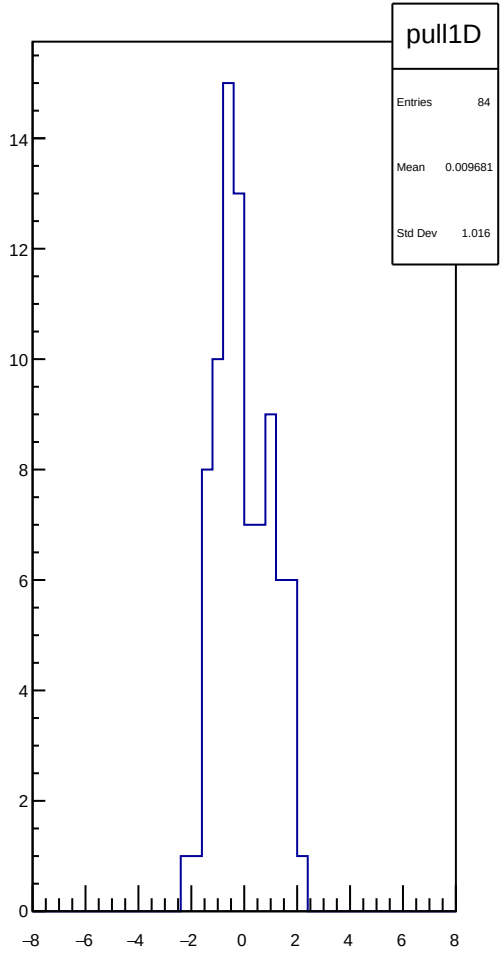

reg_asym_atl1r2_dd_rms vs run
χ^2 / ndf 1.925e+04 / 83
p0 1731 ± 1.375
5500
5000
4500
4000
3500
3000
2500
2000
1500

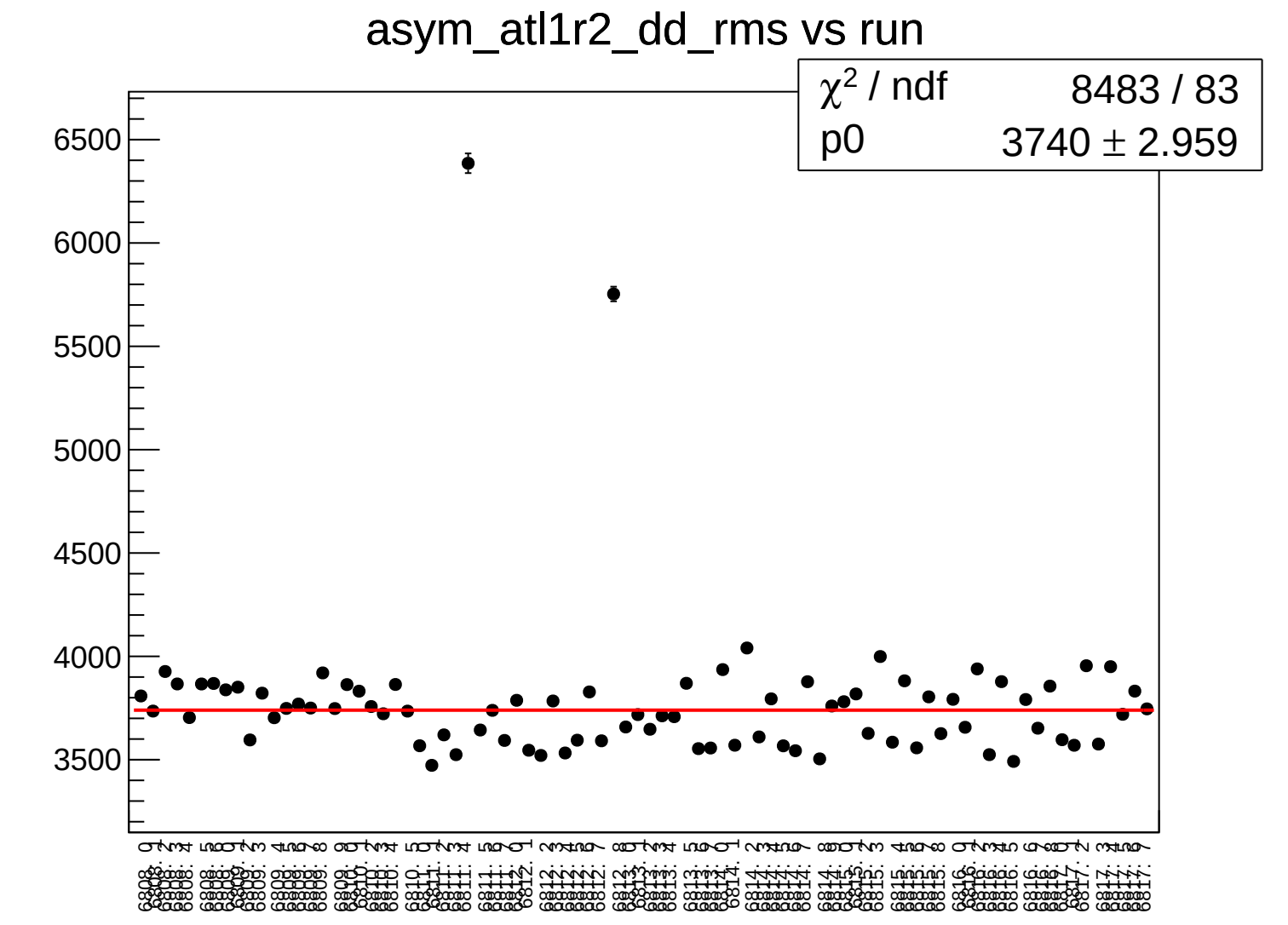

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 81.47 / 83
p0 −2949 ± 3673
150
100
50
0
−50
−100
pull
Entries 84
Mean −94.61
Std Dev 191.3
2
1
0
−1
−2

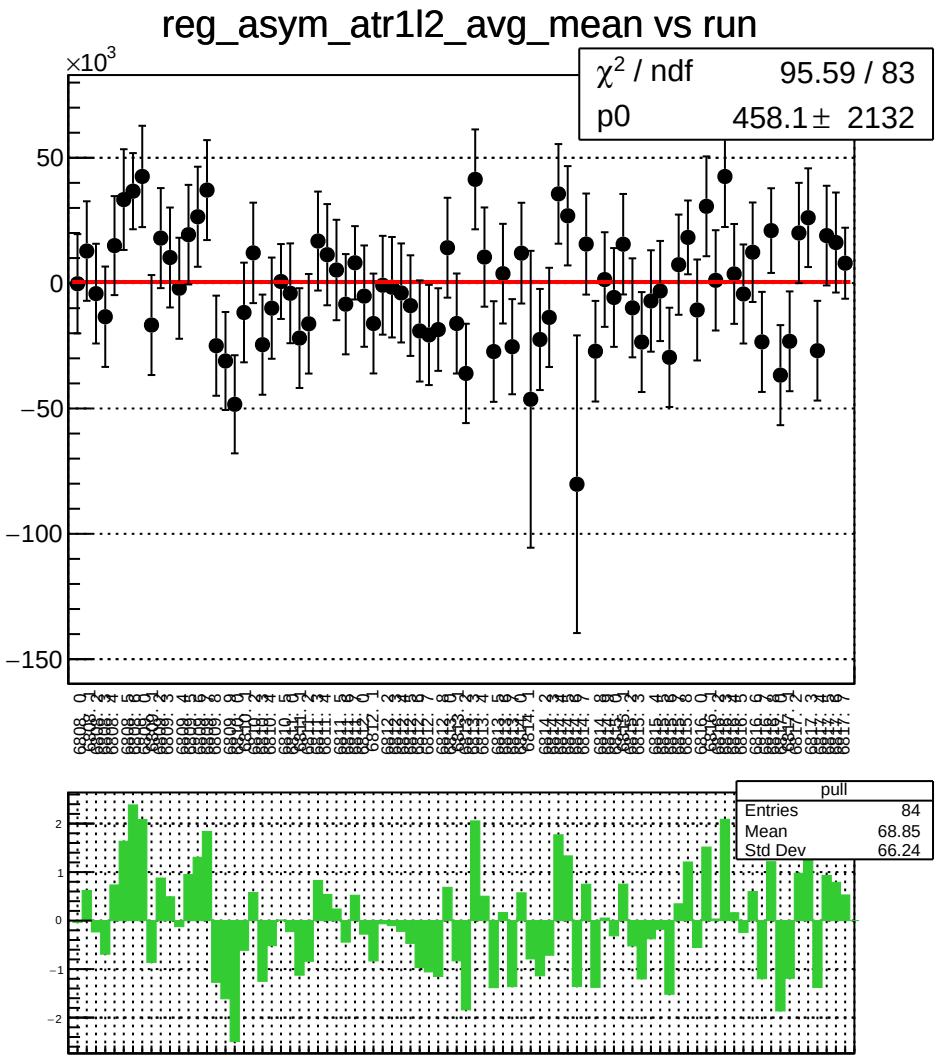

pull1D
Entries 84
Mean −0.0057
Std Dev 0.9848
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

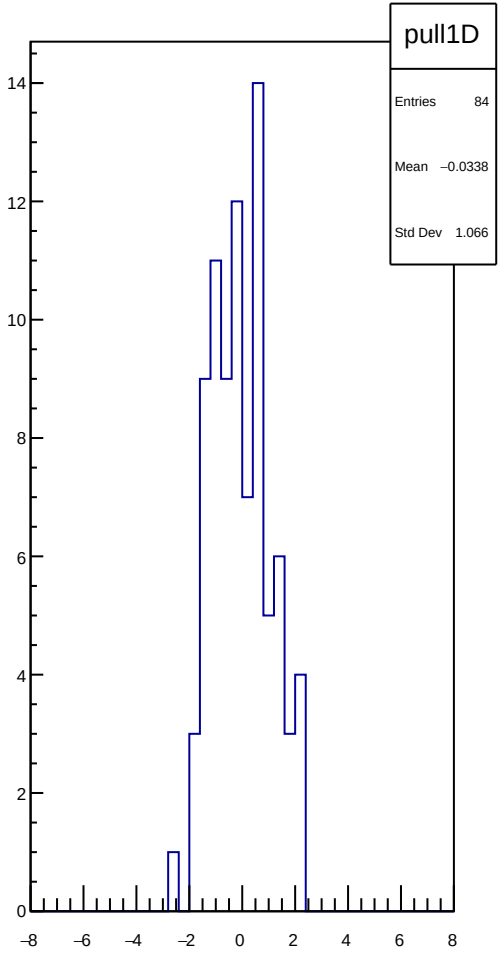

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 3370 / 83
p0 3288 ± 2.597
3700
3600
3500
3400
3300
3200
3100
3000

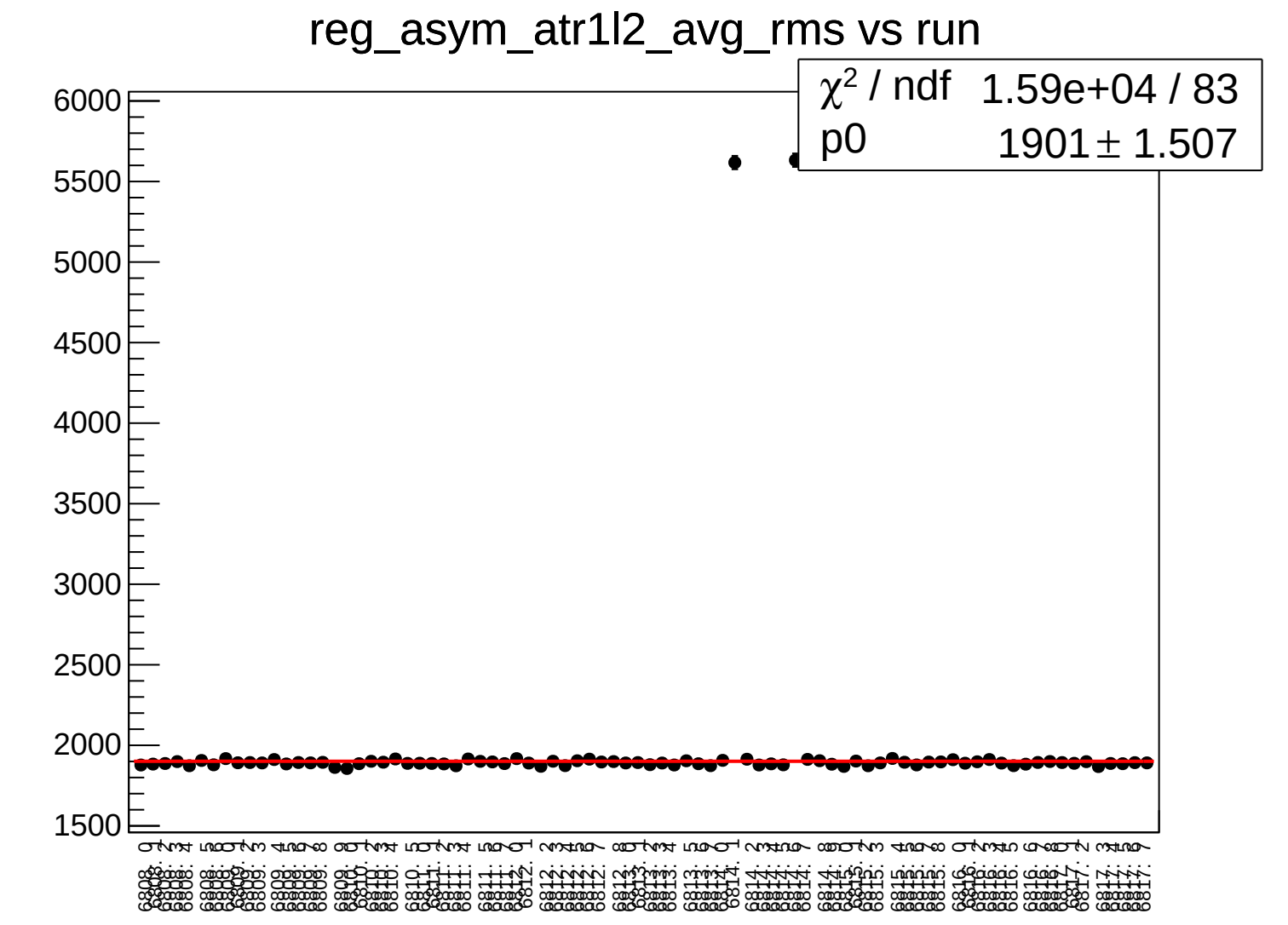

asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 86.79 / 83
p0 1528 ± 4184
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −109.4
Std Dev 174.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

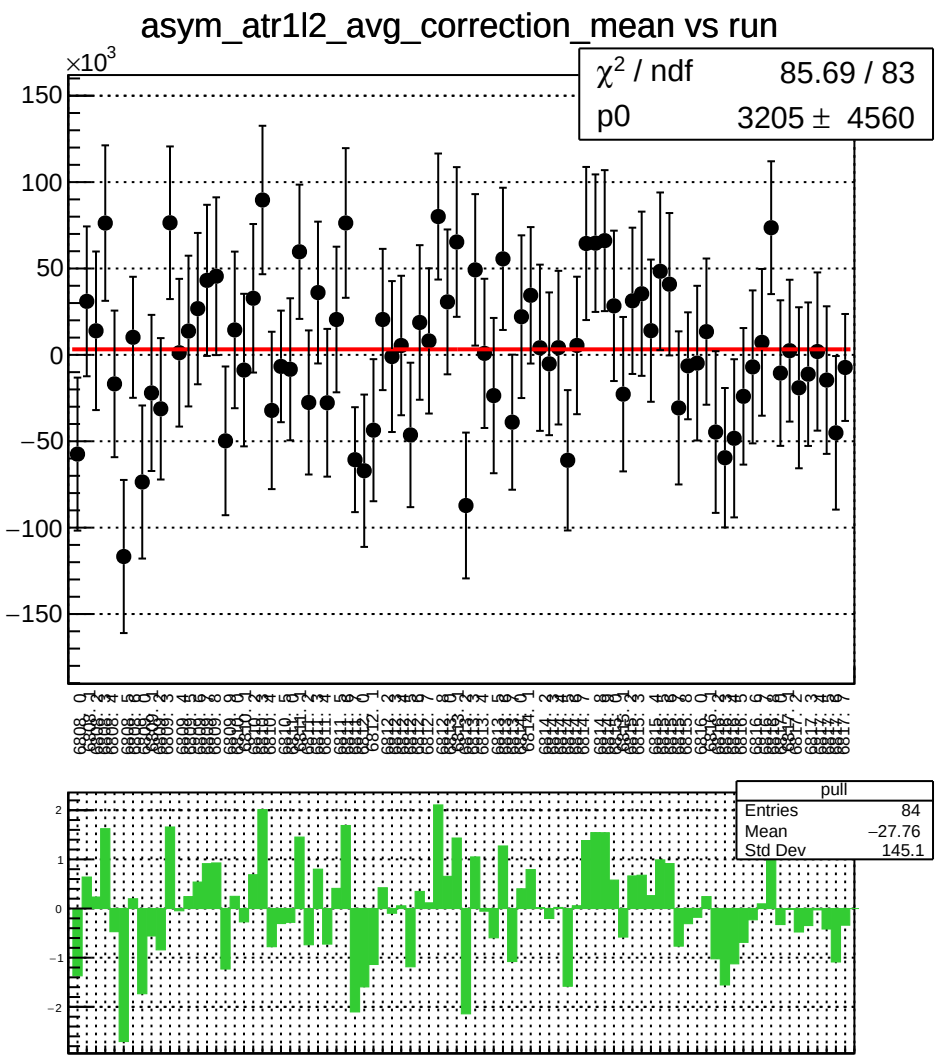

pull1D
Entries 84
Mean 0.009681
Std Dev 1.016
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

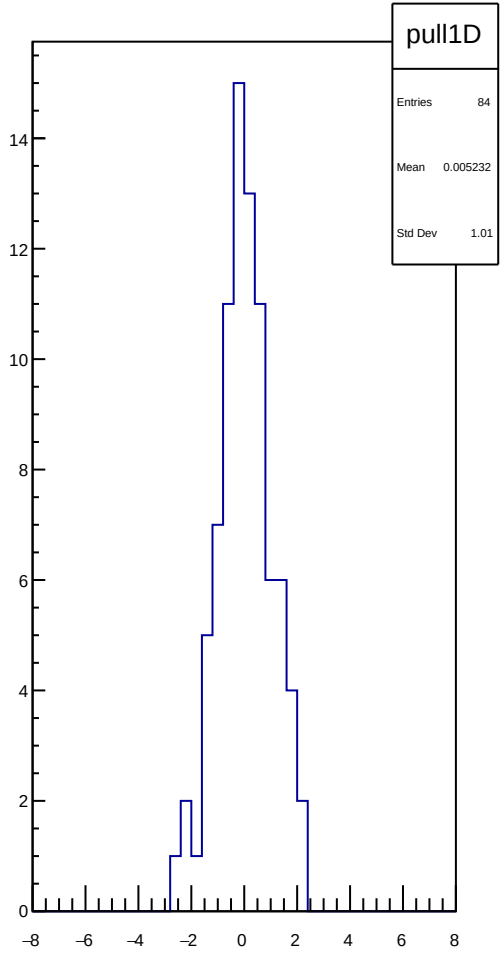

asym_atl1r2_dd_rms vs run
χ² / ndf 8483 / 83
p0 3740 ± 2.959
6500
6000
5500
5000
4500
4000
3500

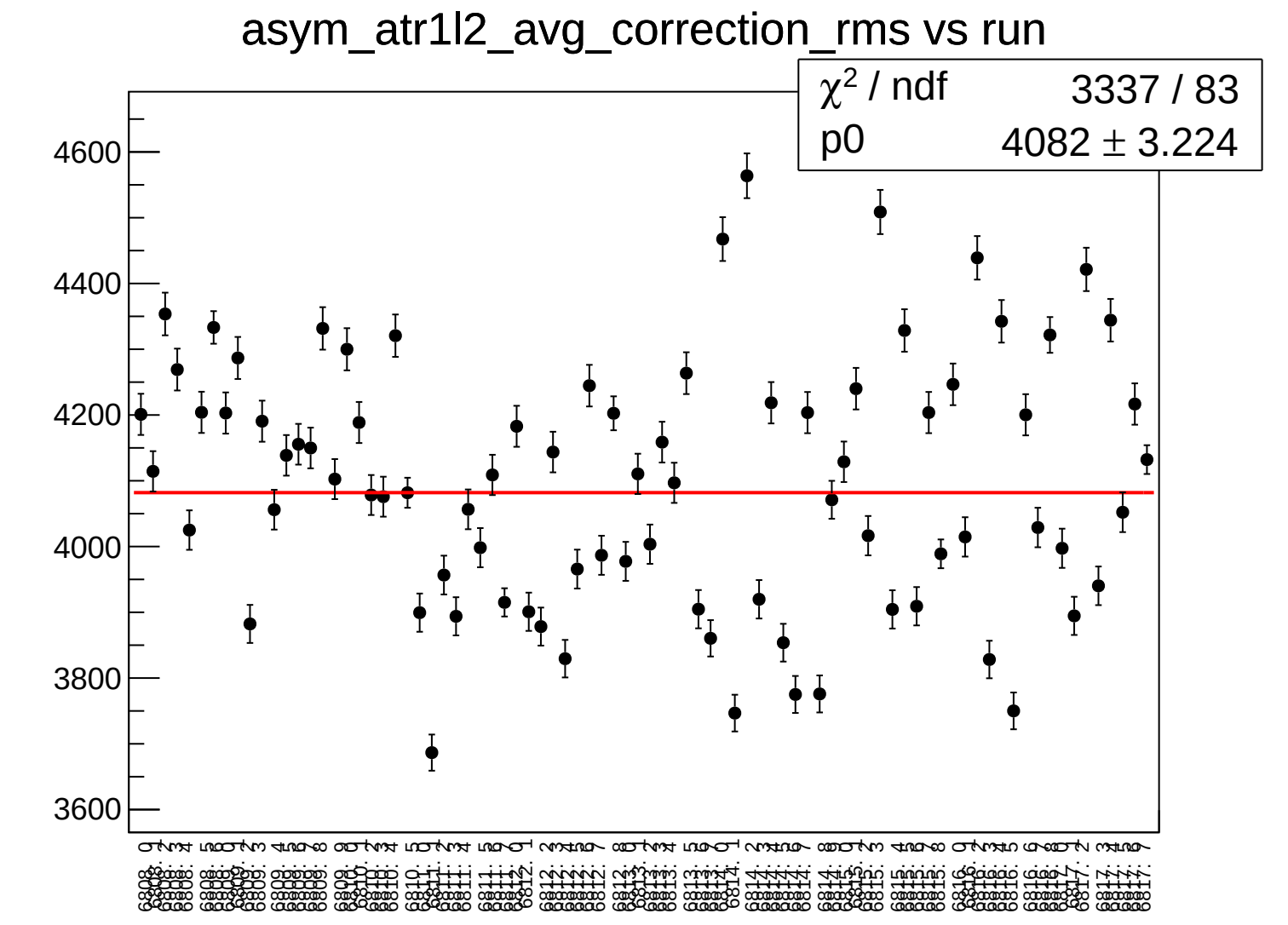

reg_asym_atr1l2_avg_mean vs run
×10^3
χ^2 / ndf 95.59 / 83
p0 458.1 ± 2132
50
0
−50
−100
−150
pull
Entries 84
Mean 68.85
Std Dev 66.24
2
1
0
−1
−2

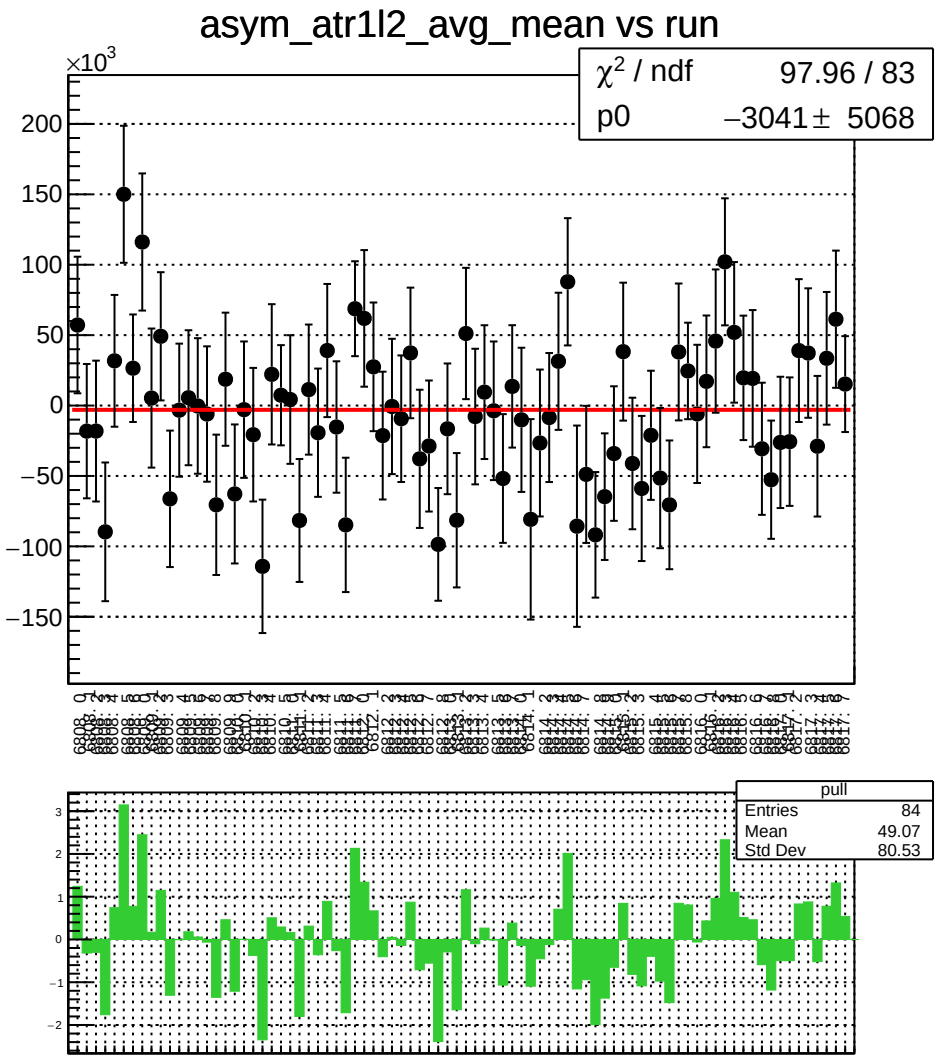

pull1D
Entries 84
Mean −0.0338
Std Dev 1.066
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

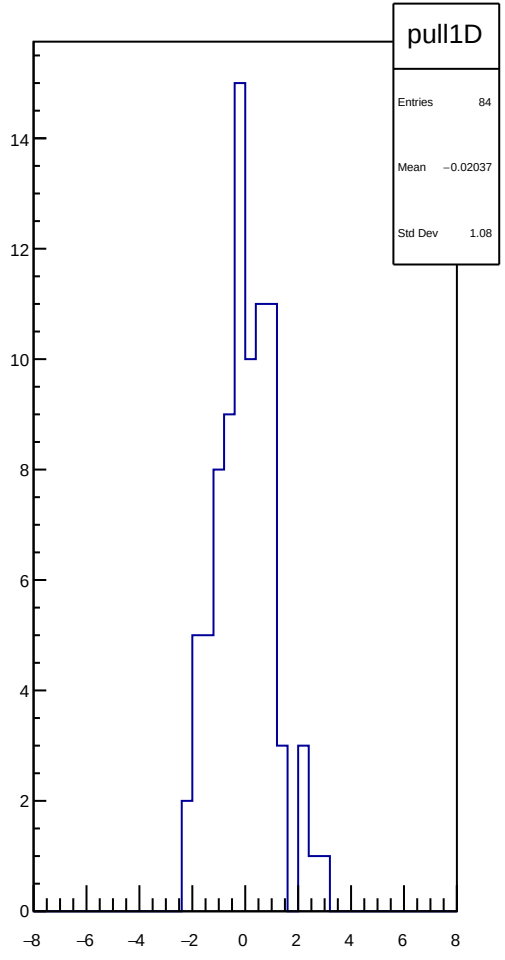

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 1.59e+04 / 83
p0 1901 ± 1.507
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

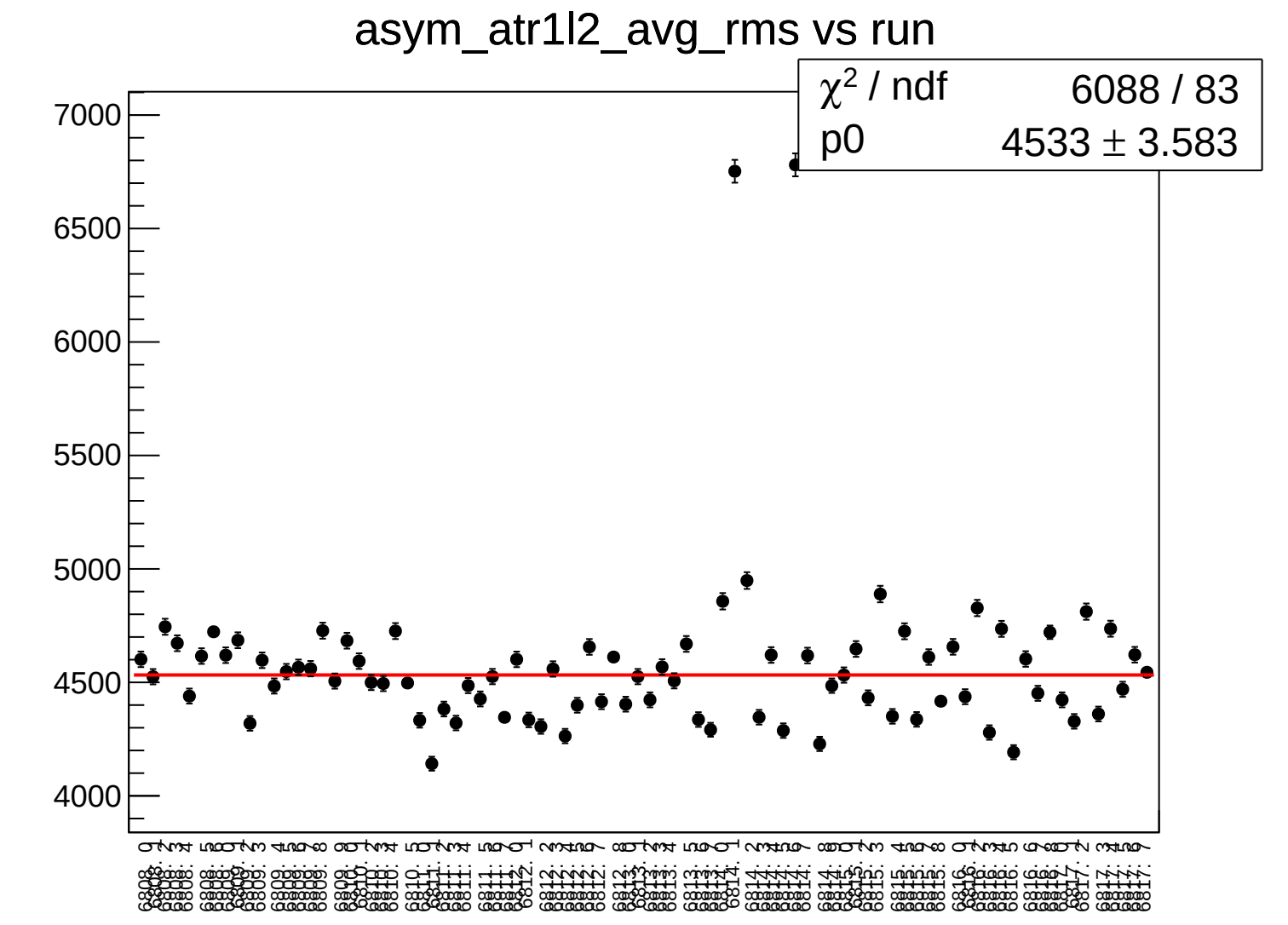

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 85.69 / 83
p0 3205 ± 4560
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −27.76
Std Dev 145.1
2
1
0
−1
−2

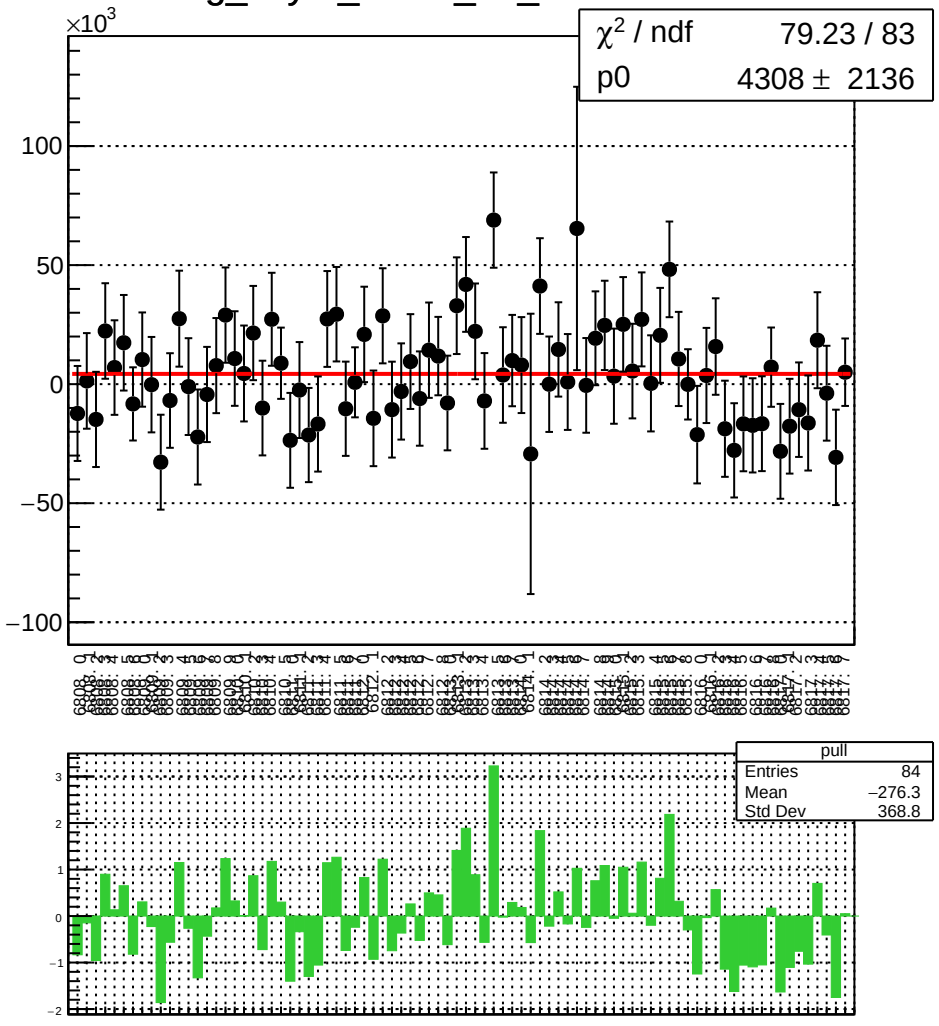

pull1D
Entries 84
Mean 0.005232
Std Dev 1.01
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

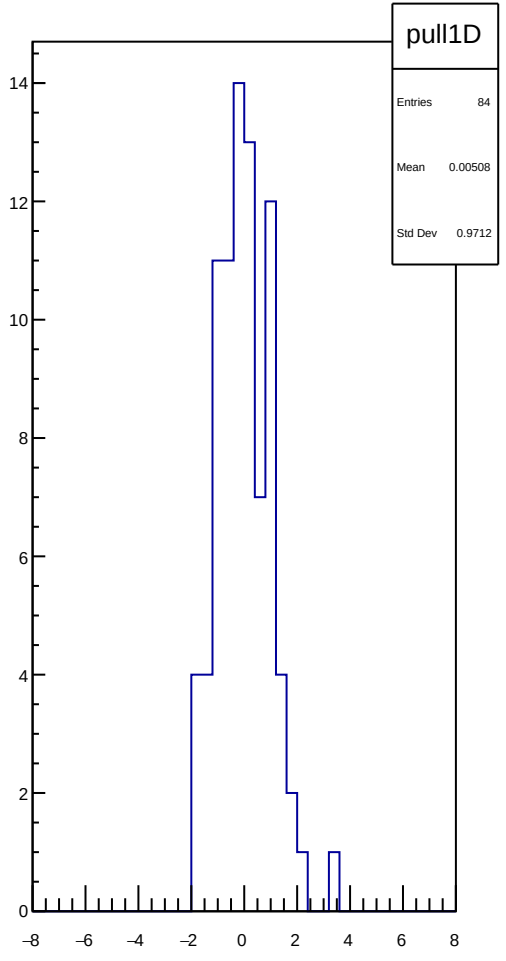

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 3337 / 83
p0 4082 ± 3.224
4600
4400
4200
4000
3800
3600

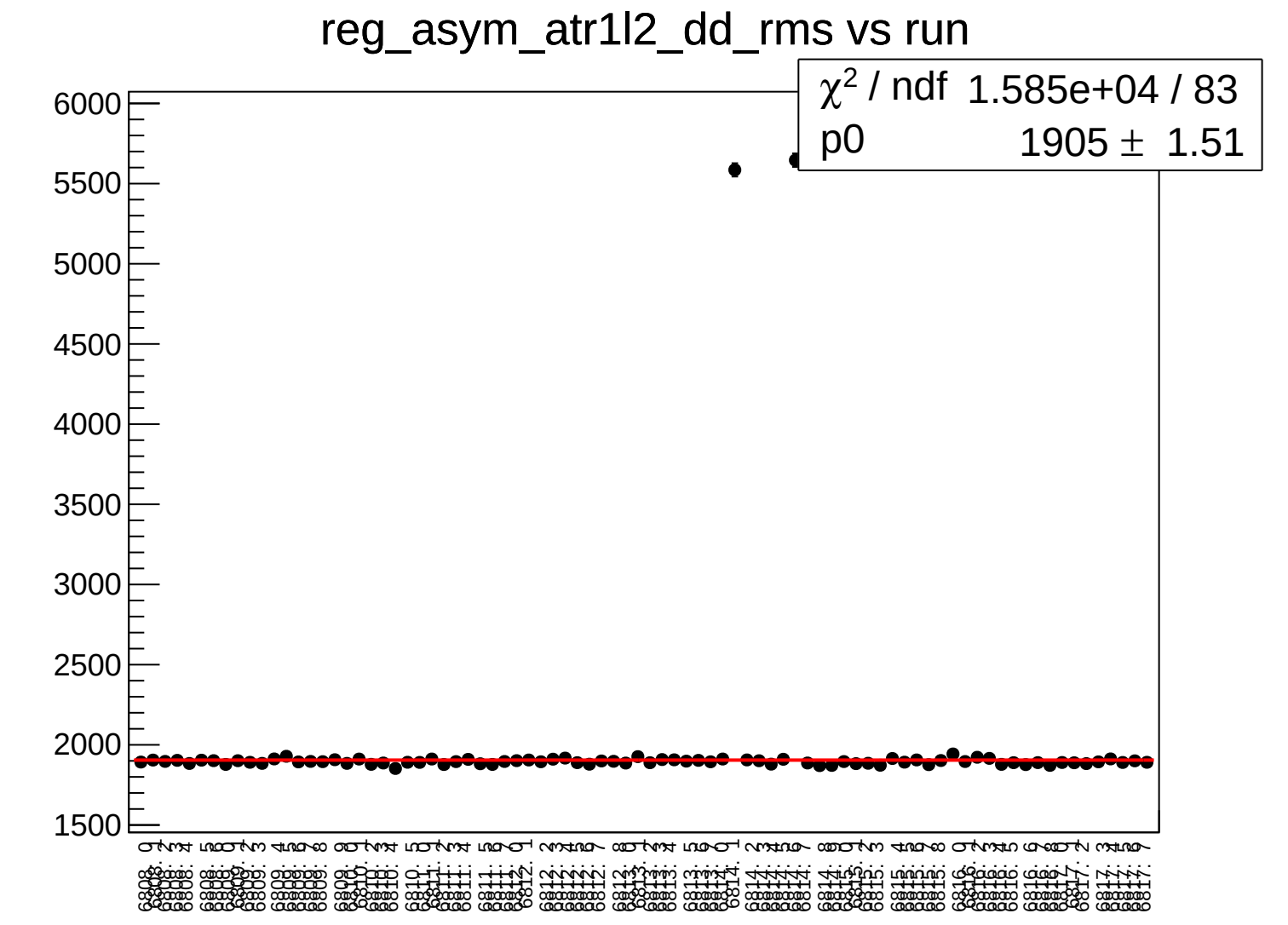

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 97.96 / 83
p0 −3041 ± 5068
200
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean 49.07
Std Dev 80.53
3
2
1
0
−1
−2

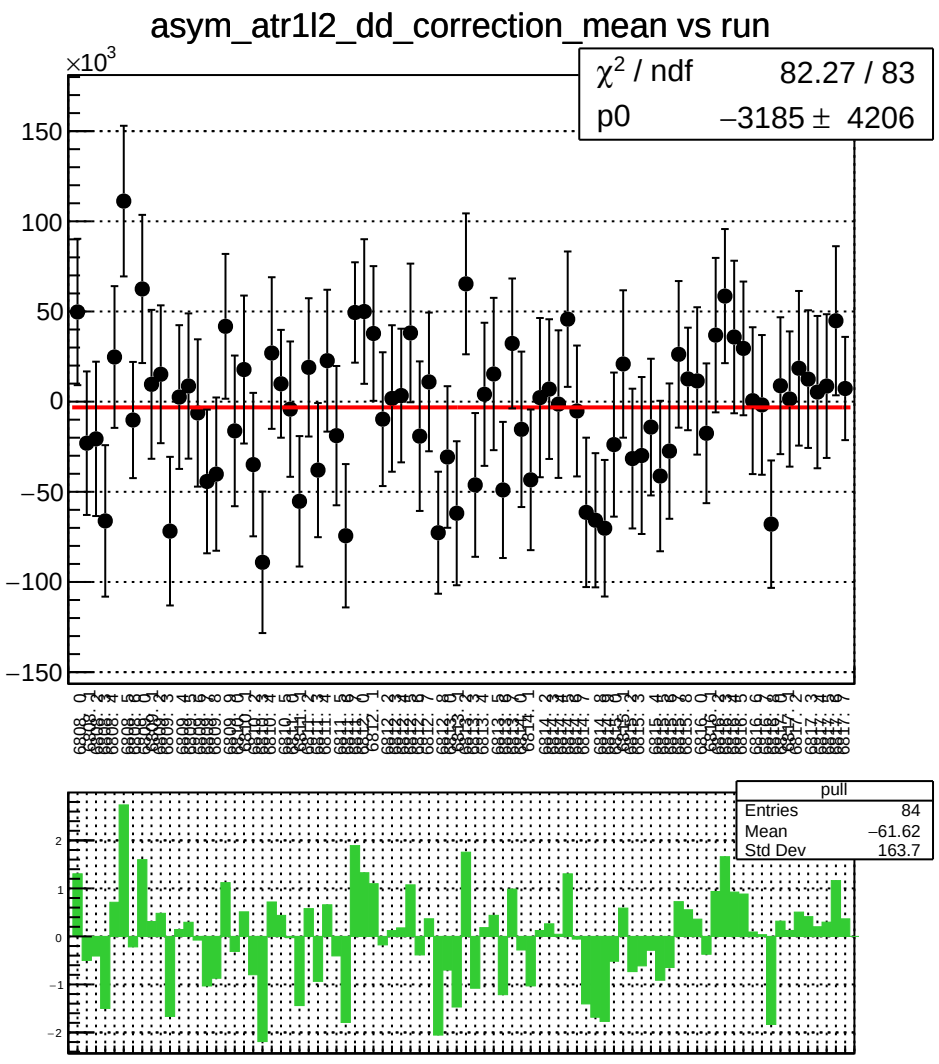

pull1D
Entries 84
Mean −0.02037
Std Dev 1.08
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

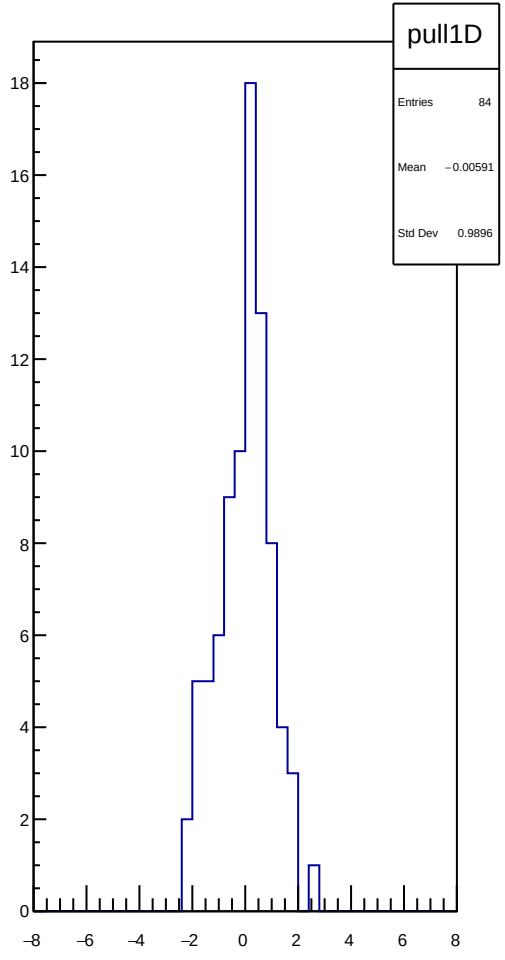

asym_atr1l2_avg_rms vs run
χ^2 / ndf 6088 / 83
p0 4533 ± 3.583
7000
6500
6000
5500
5000
4500
4000

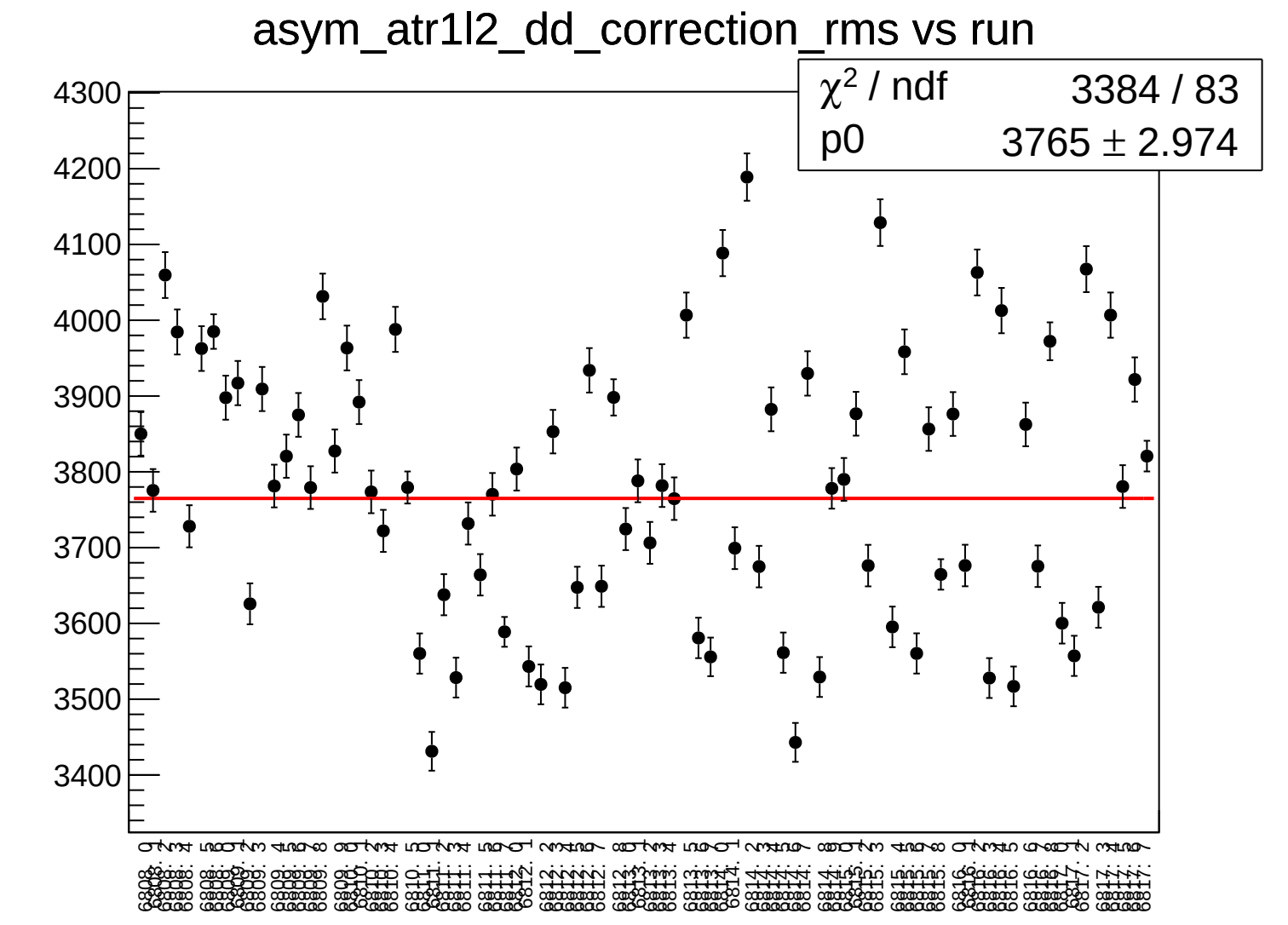

reg_asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 79.23 / 83
p0 4308 ± 2136
100
50
0
−50
−100
pull
Entries 84
Mean −276.3
Std Dev 368.8
3
2
1
0
−1
−2

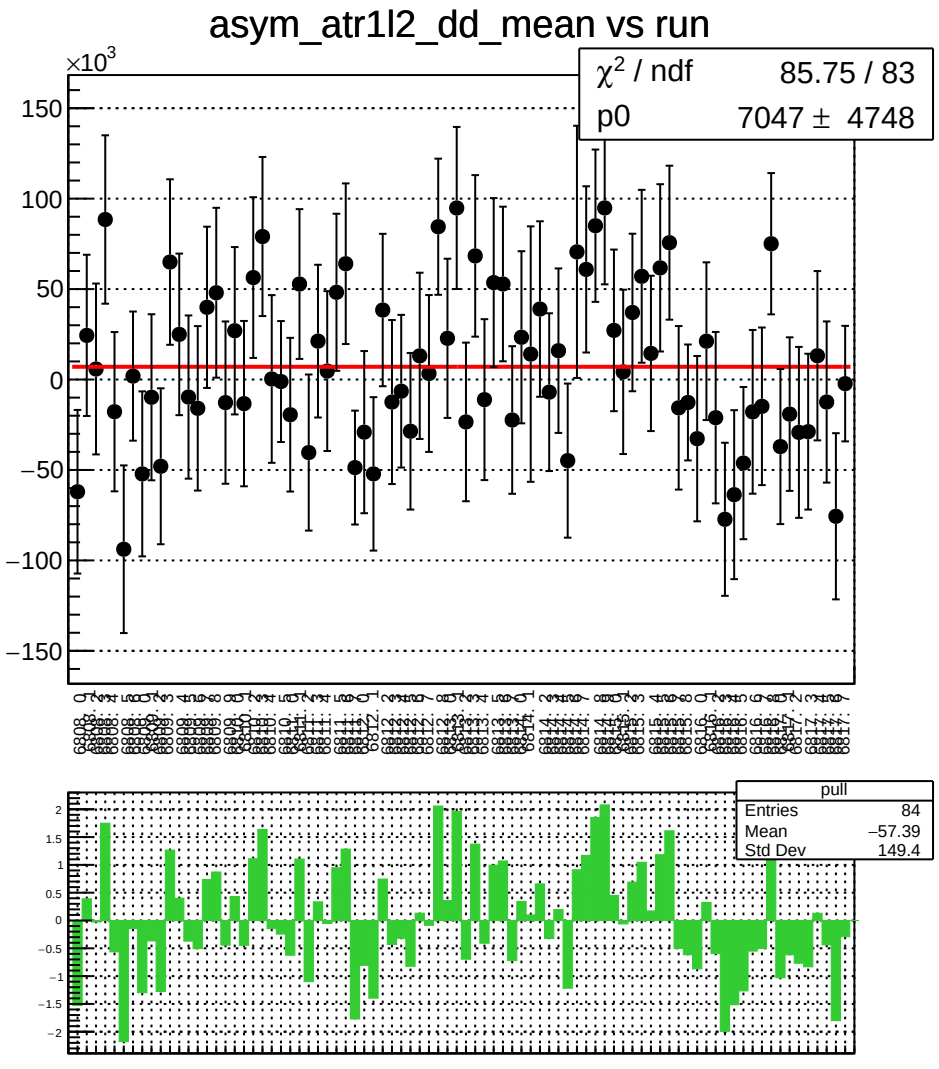

pull1D
Entries 84
Mean 0.00508
Std Dev 0.9712
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

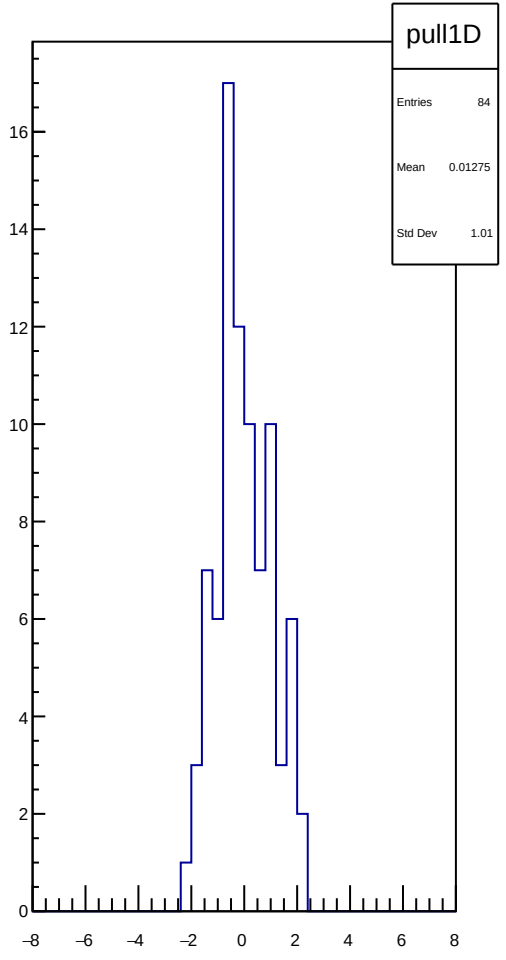

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 1.585e+04 / 83
p0 1905 ± 1.51
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

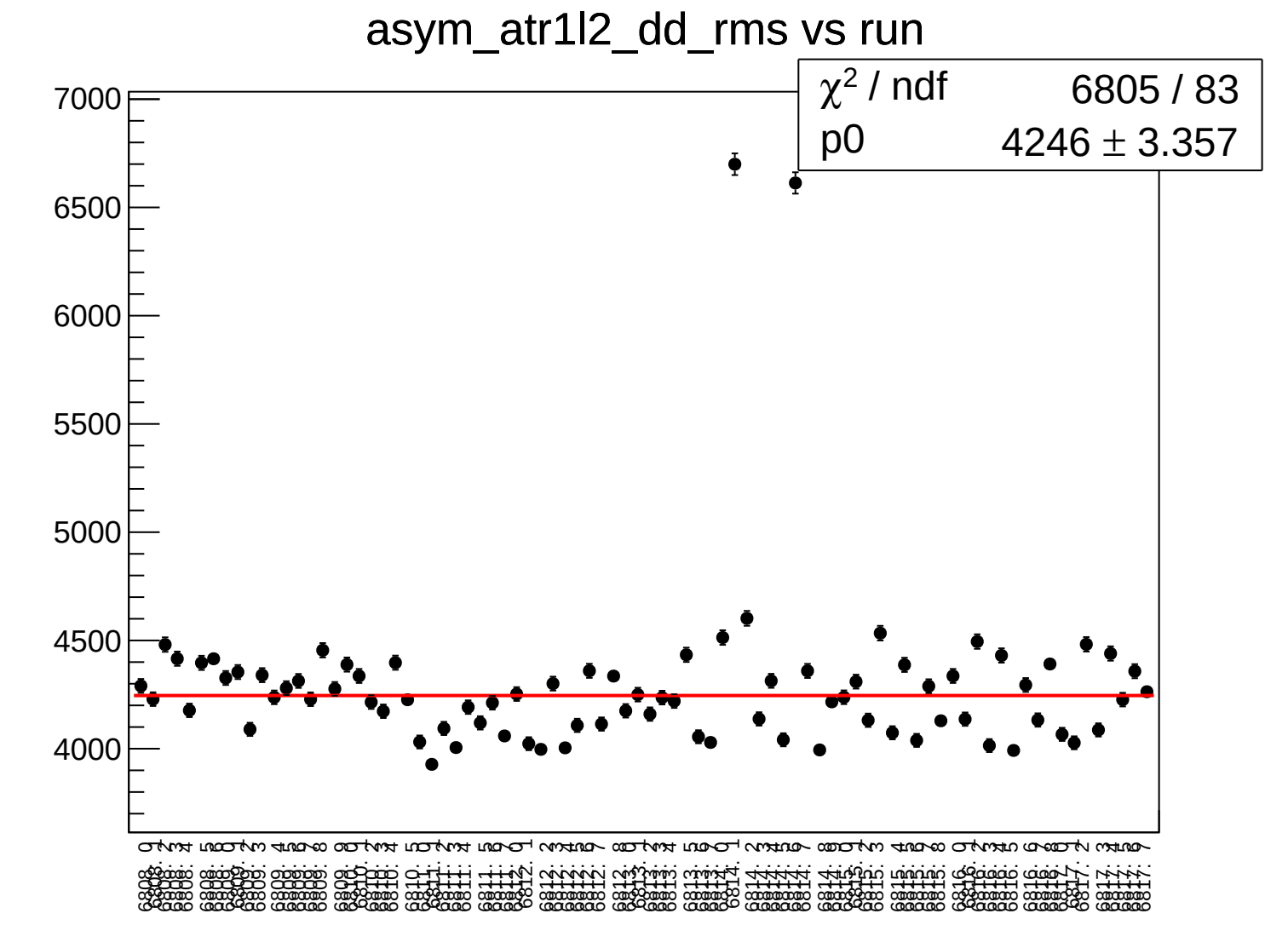

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 82.27 / 83
p0 −3185 ± 4206
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −61.62
Std Dev 163.7
2
1
0
−1
−2

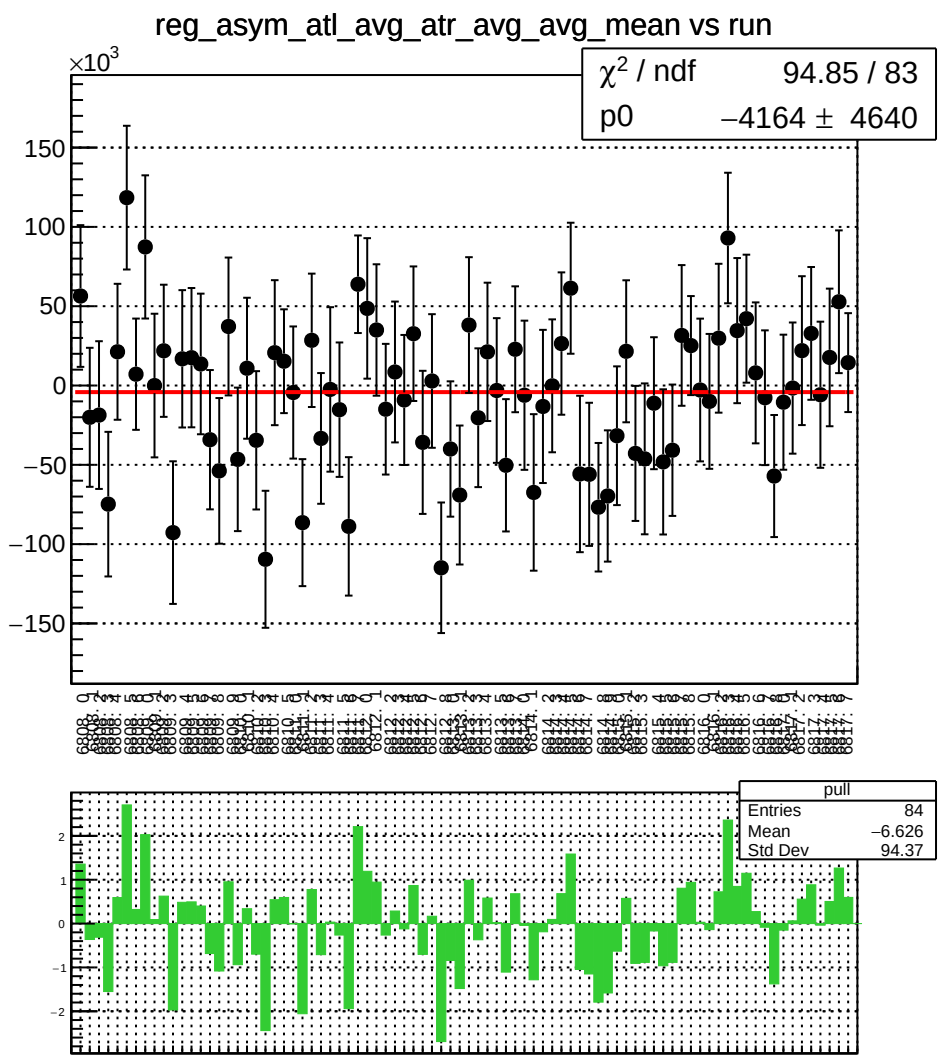

pull1D
Entries 84
Mean −0.00591
Std Dev 0.9896
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

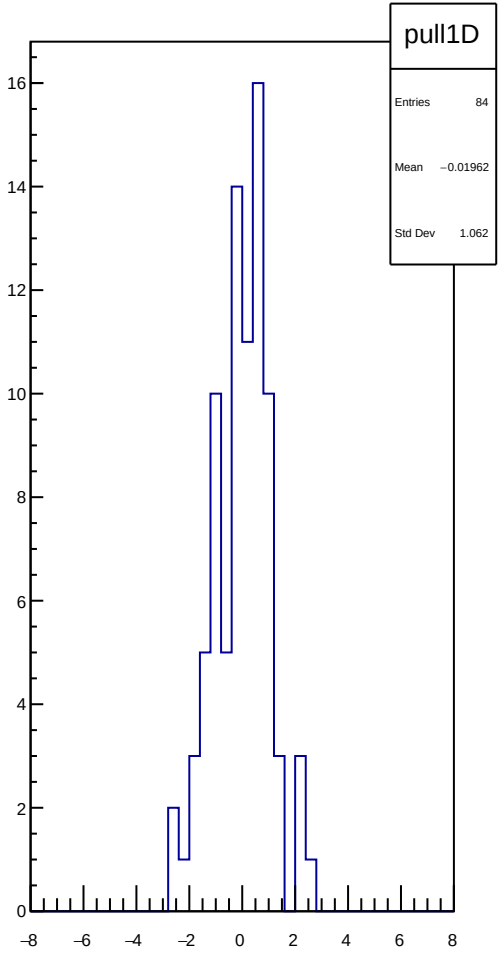

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 3384 / 83
p0 3765 ± 2.974
4300
4200
4100
4000
3900
3800
3700
3600
3500
3400

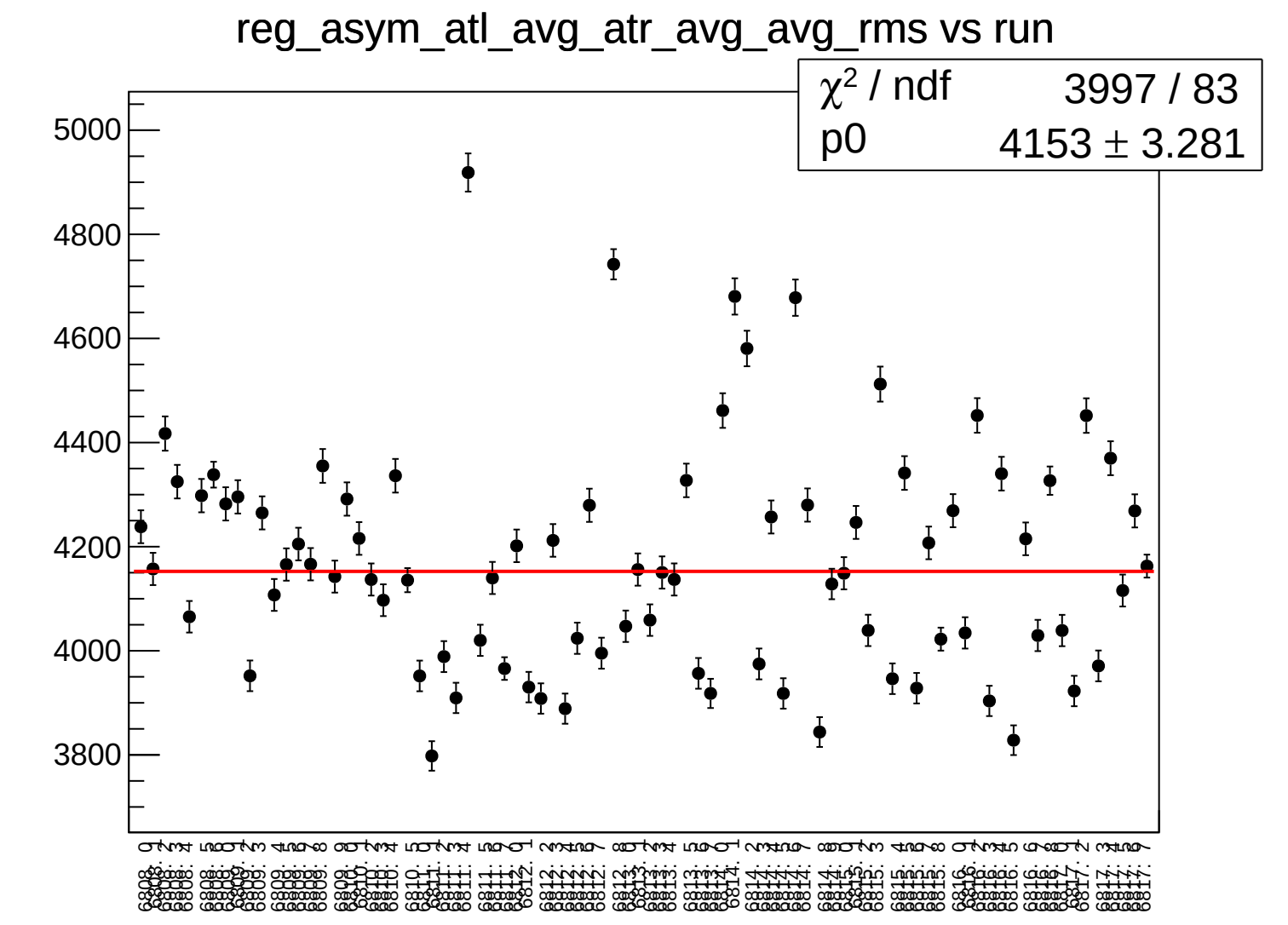

asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 85.75 / 83
p0 7047 ± 4748
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −57.39
Std Dev 149.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

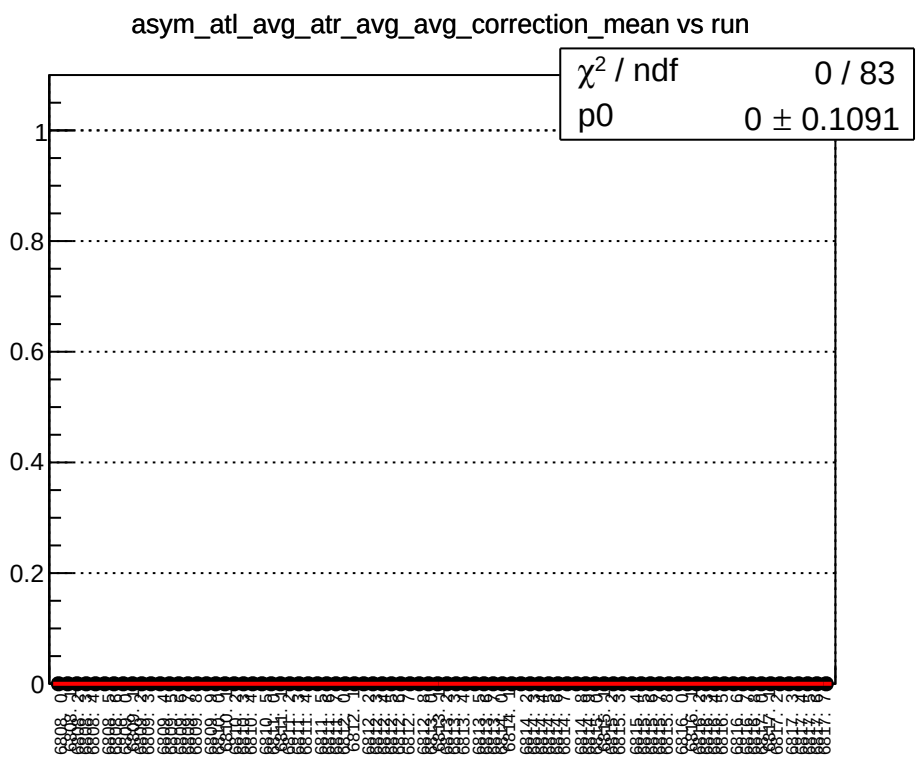

pull1D
Entries 84
Mean 0.01275
Std Dev 1.01
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

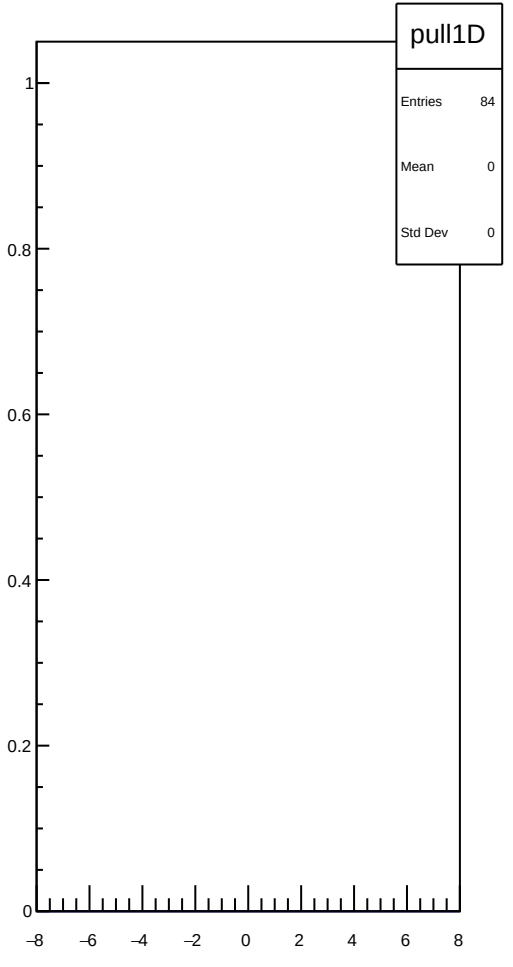

asym_atr1l2_dd_rms vs run
χ^2 / ndf 6805 / 83
p0 4246 ± 3.357
7000
6500
6000
5500
5000
4500
4000

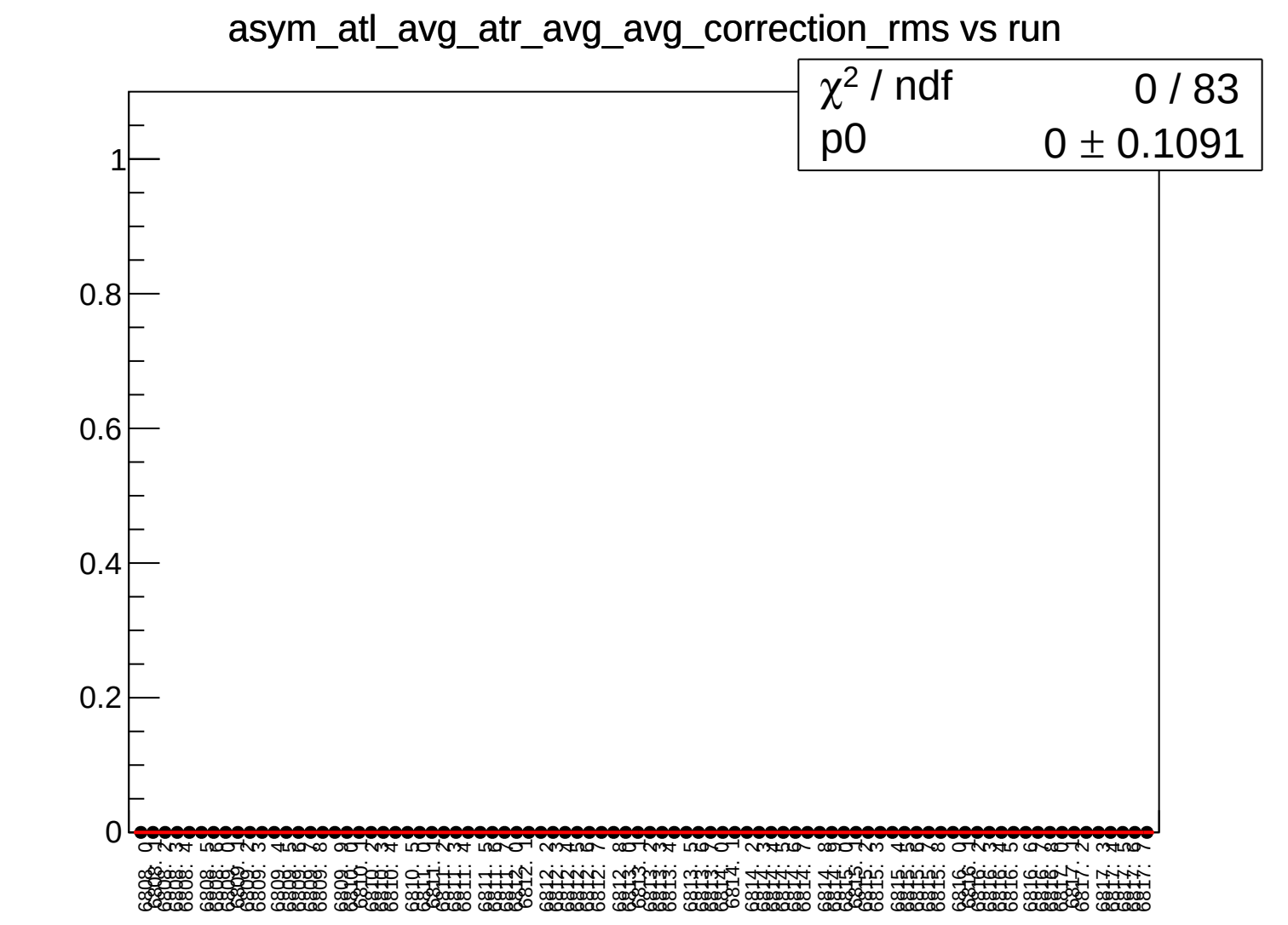

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 94.85 / 83
p0 −4164 ± 4640
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −6.626
Std Dev 94.37
2
1
0
−1
−2

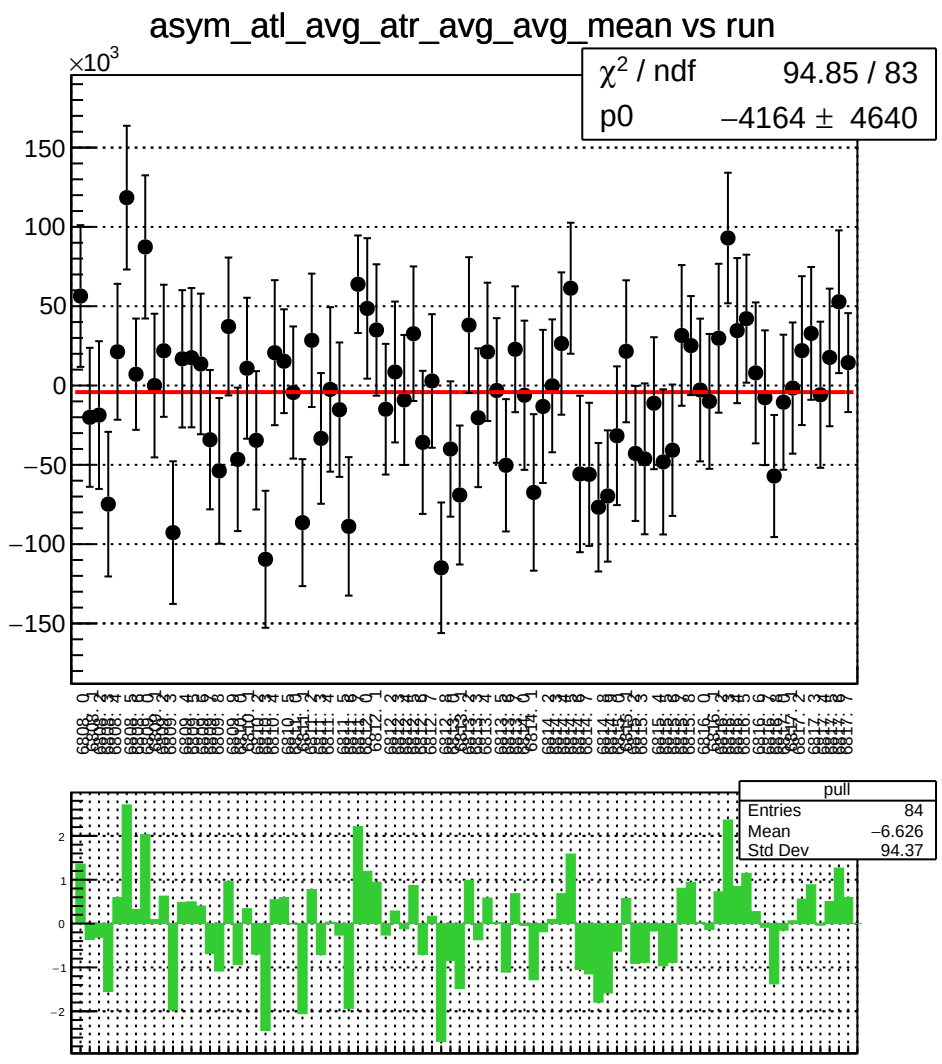

pull1D
Entries 84
Mean −0.01962
Std Dev 1.062
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

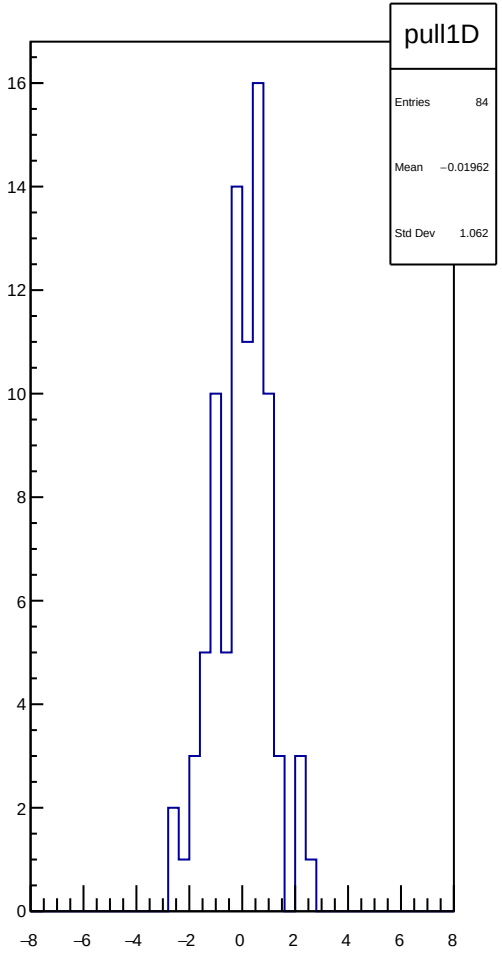

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 3997 / 83
p0 4153 ± 3.281
5000
4800
4600
4400
4200
4000
3800

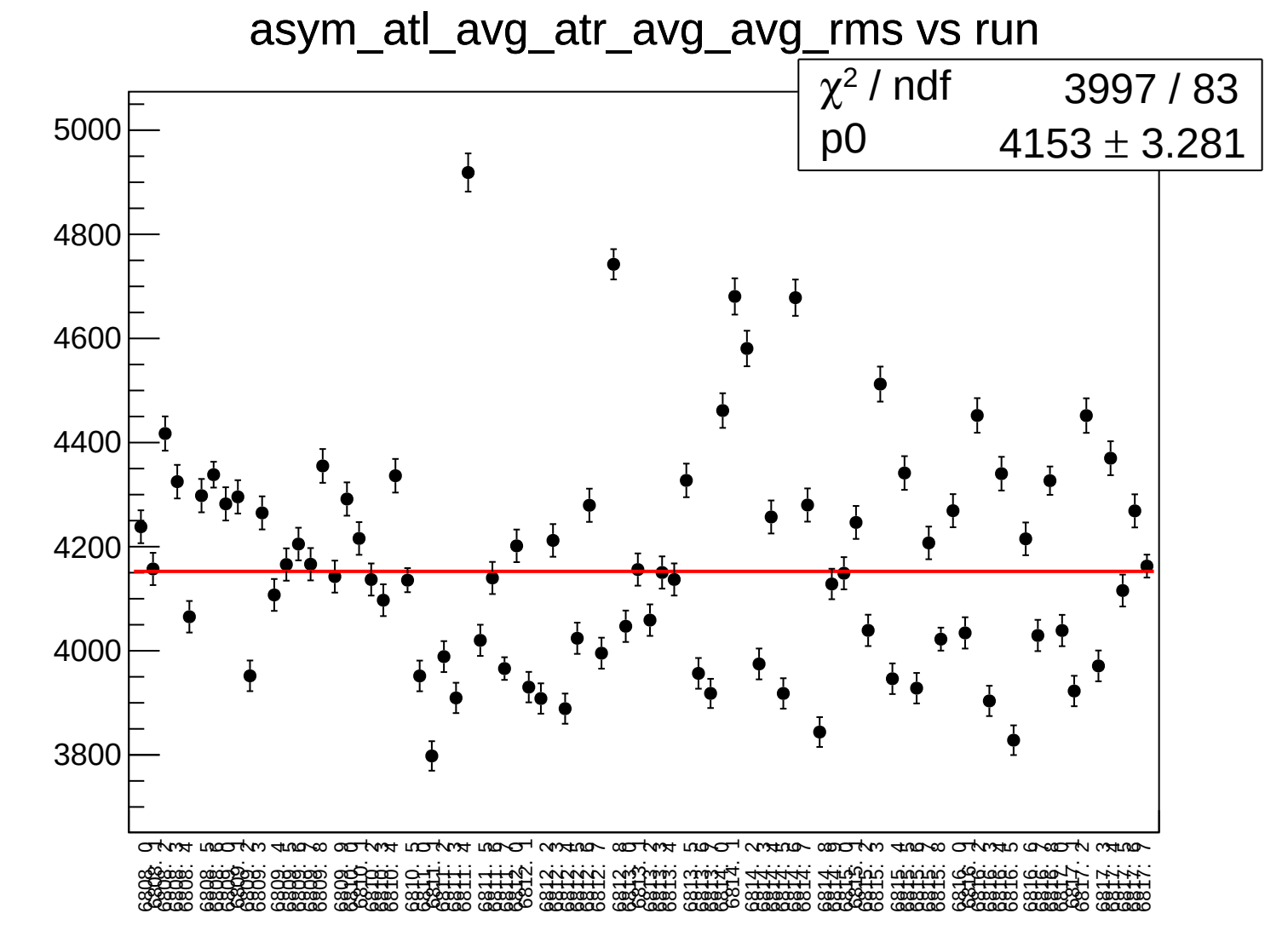

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0

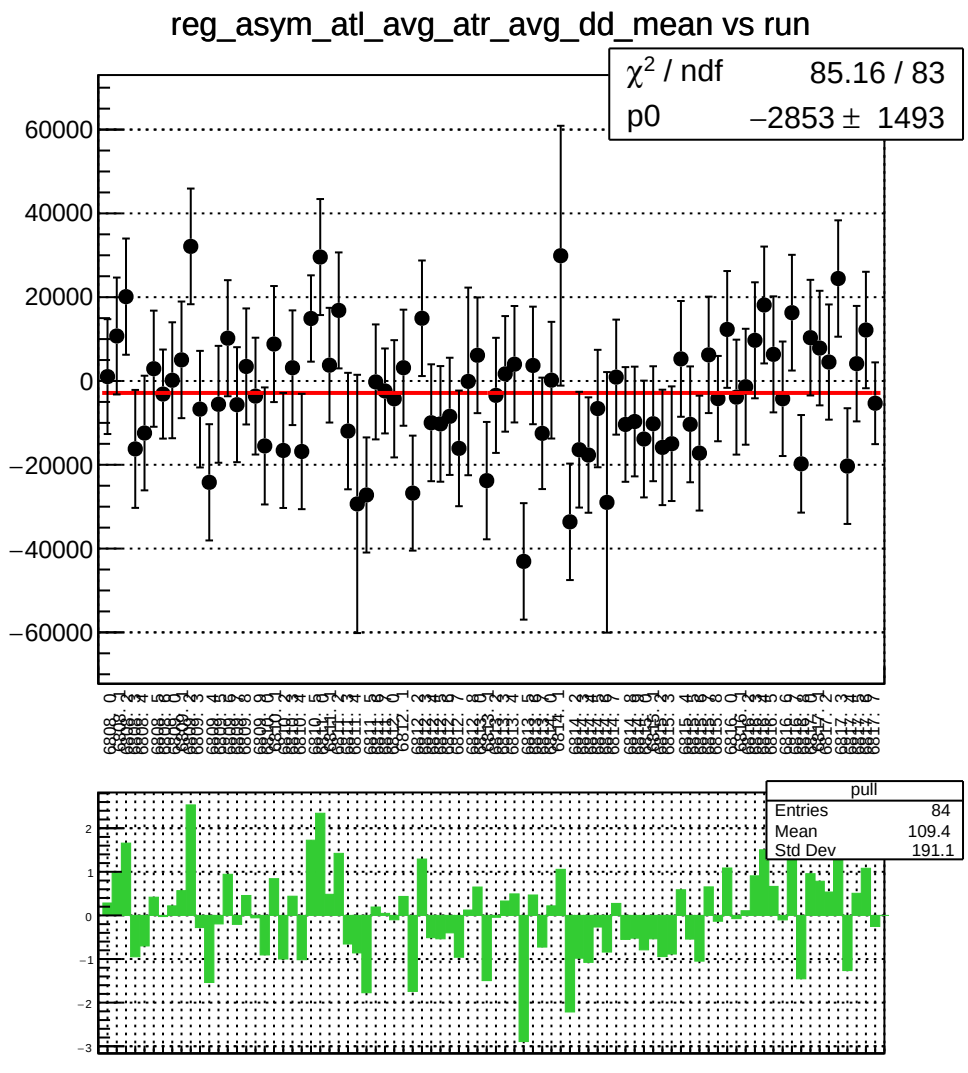

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

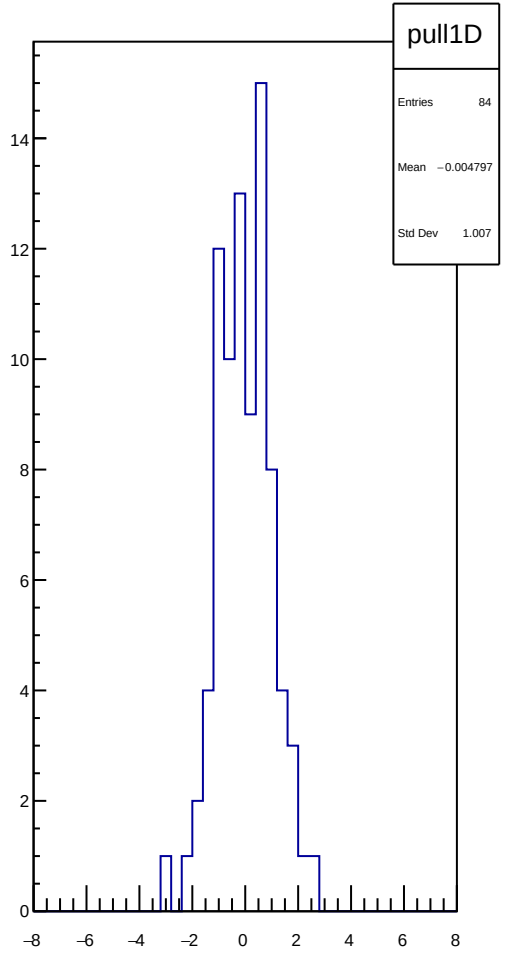

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0


asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 94.85 / 83
p0 −4164 ± 4640
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −6.626
Std Dev 94.37
2
1
0
−1
−2


pull1D
Entries 84
Mean −0.01962
Std Dev 1.062
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 3997 / 83
p0 4153 ± 3.281
5000
4800
4600
4400
4200
4000
3800


reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 85.16 / 83
p0 −2853 ± 1493
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 84
Mean 109.4
Std Dev 191.1
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean −0.004797
Std Dev 1.007
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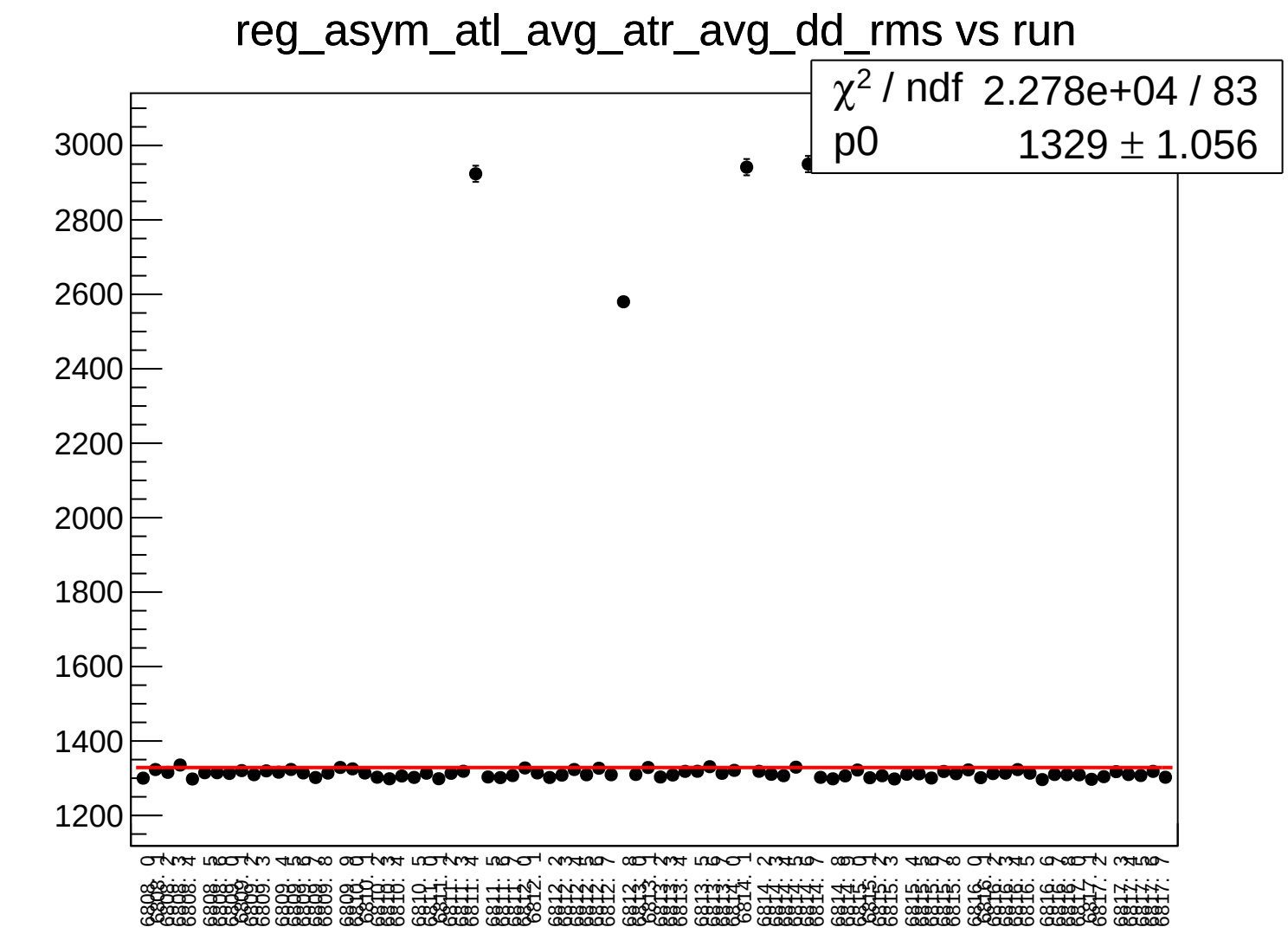
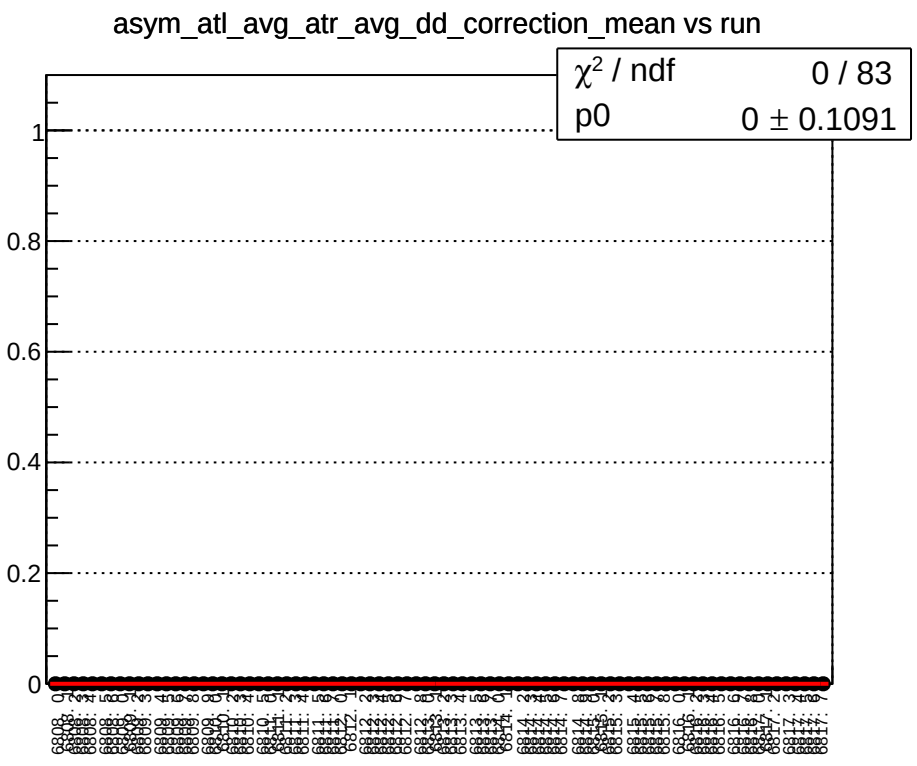
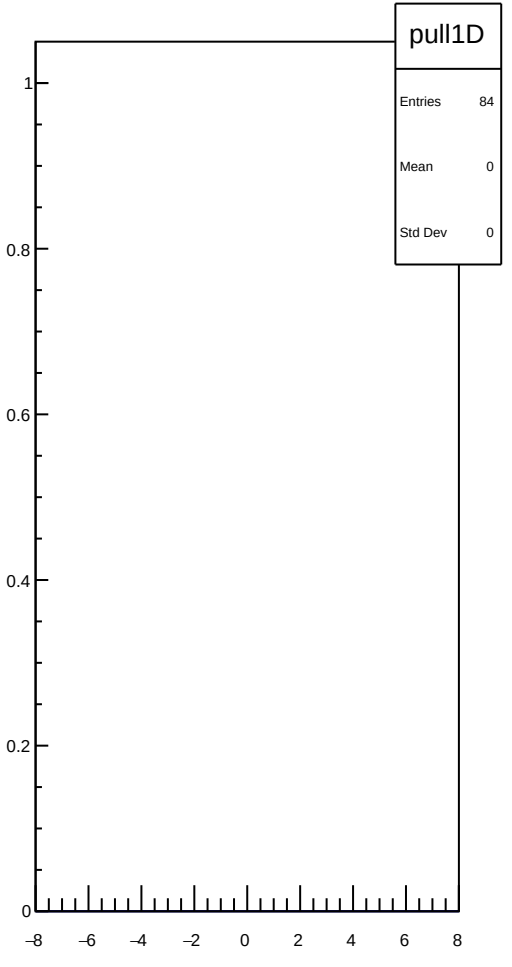
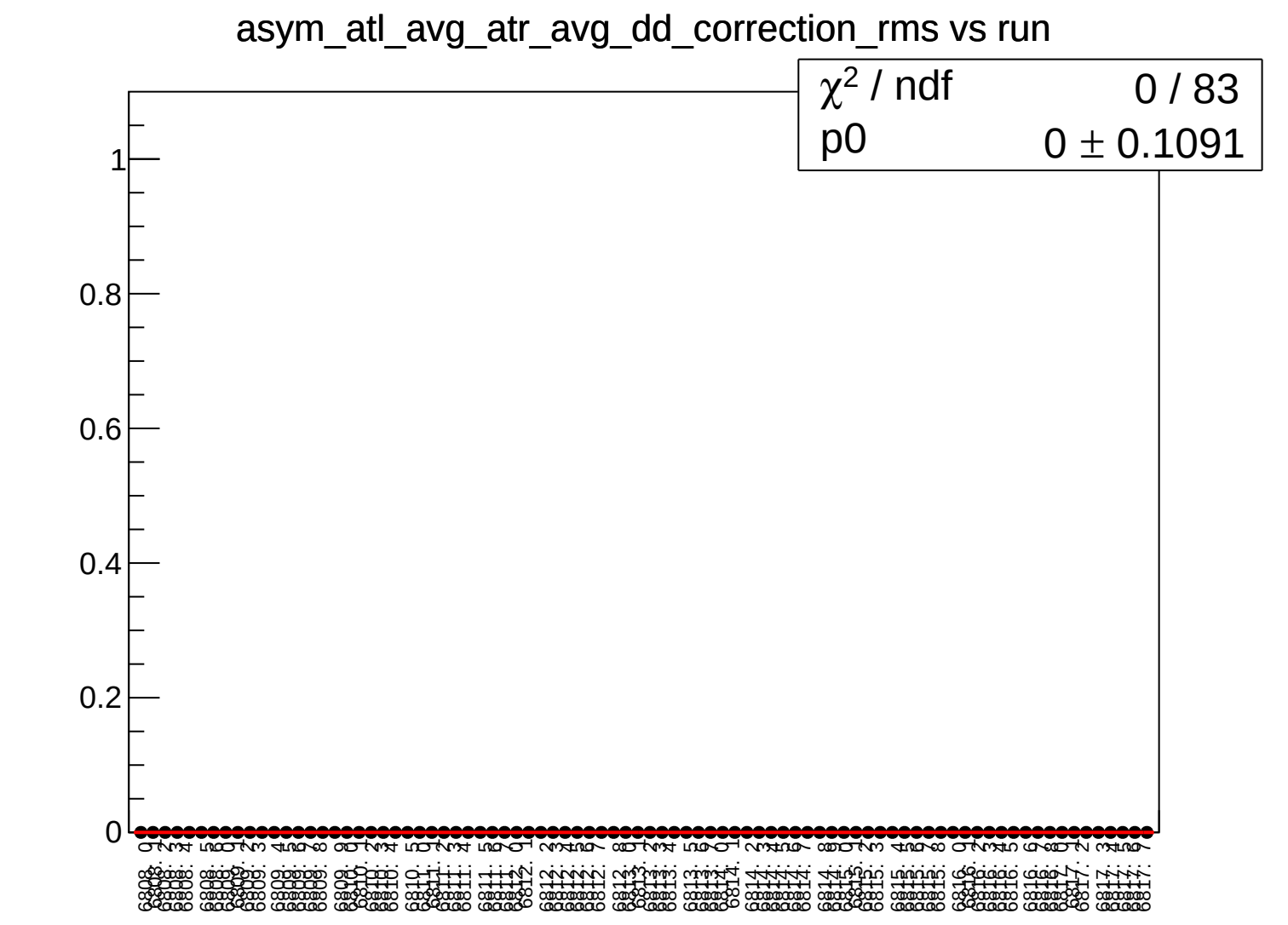
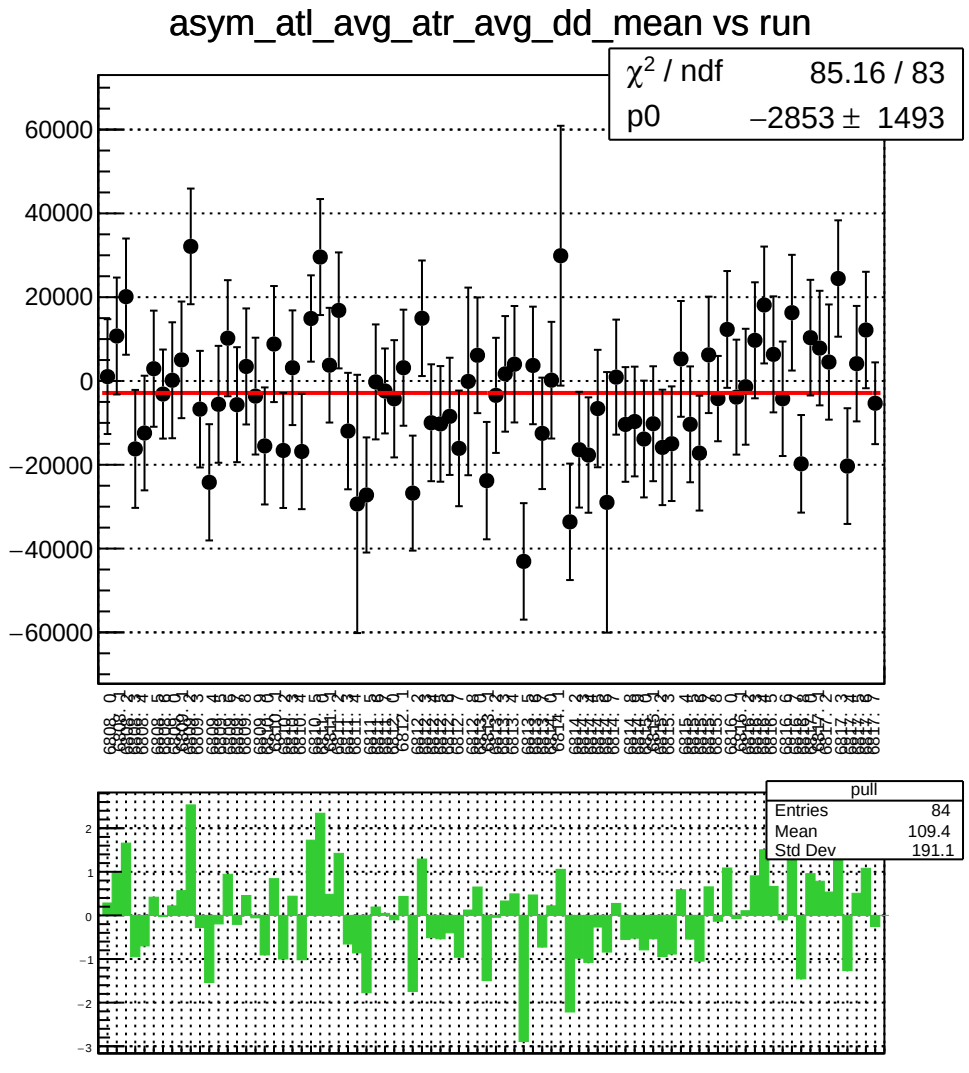
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

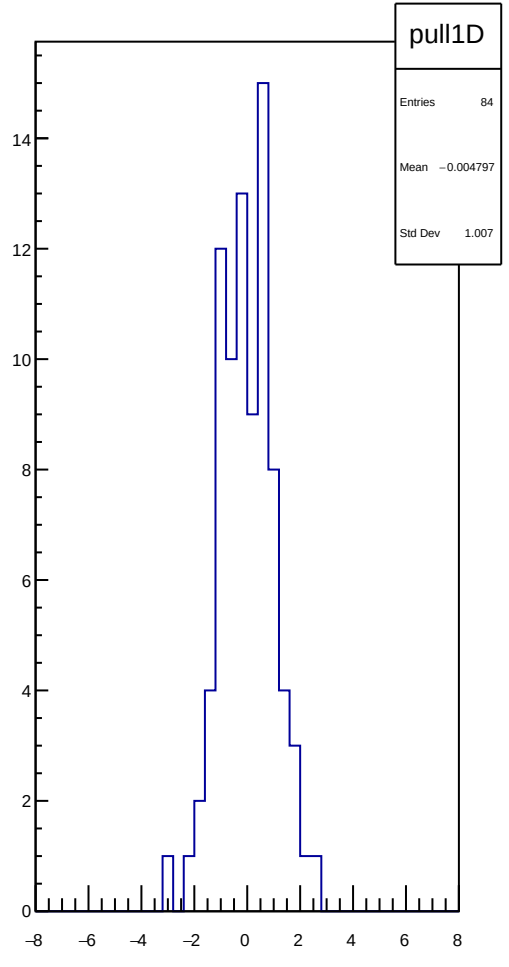

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.278e+04 / 83
p0 1329 ± 1.056
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200


asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0


pull1D
Entries 84
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 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0


asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 85.16 / 83
p0 −2853 ± 1493
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 84
Mean 109.4
Std Dev 191.1
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean −0.004797
Std Dev 1.007
14
12
10
8
6
4
2
0
−8
−6
−4
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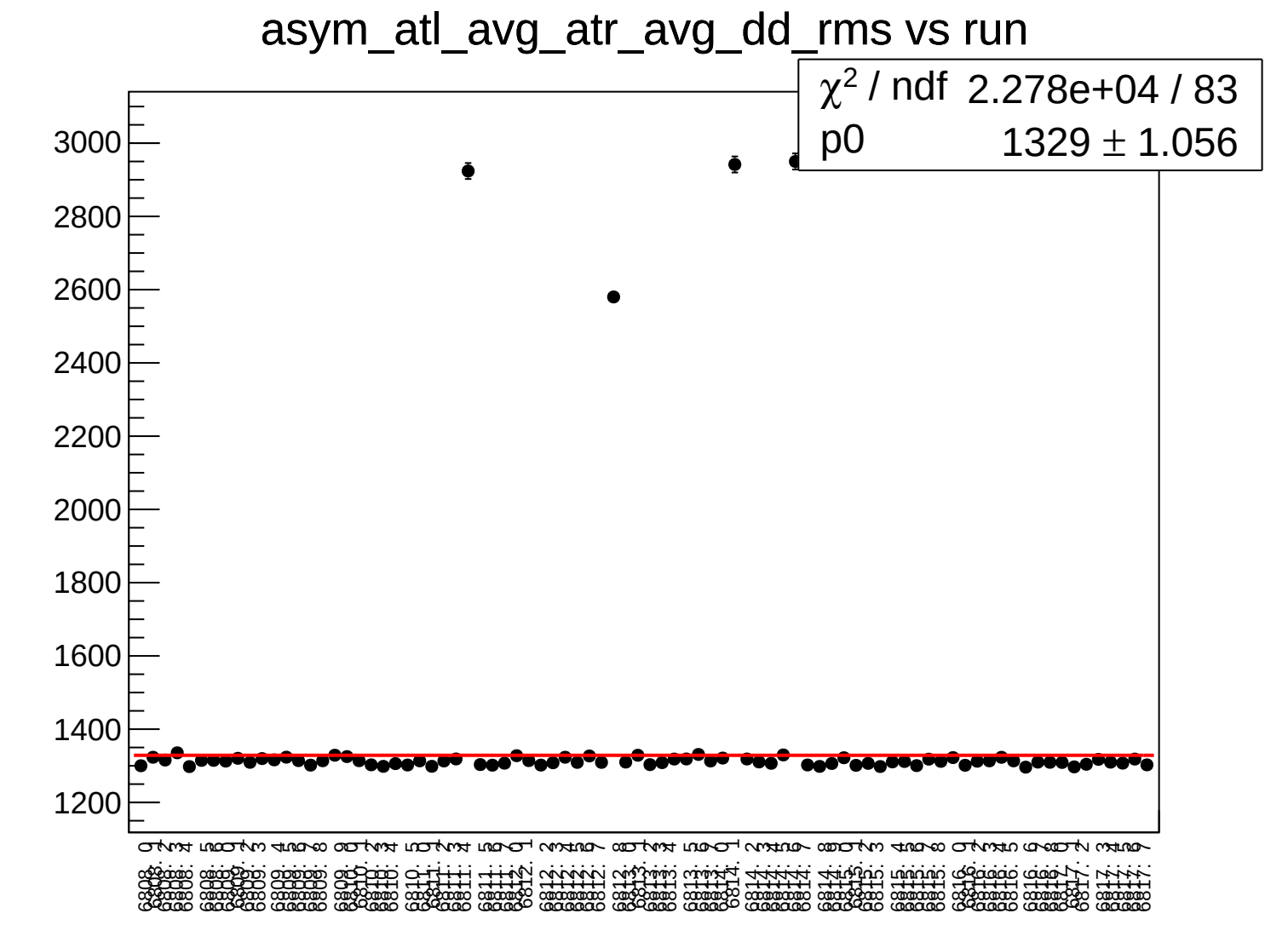
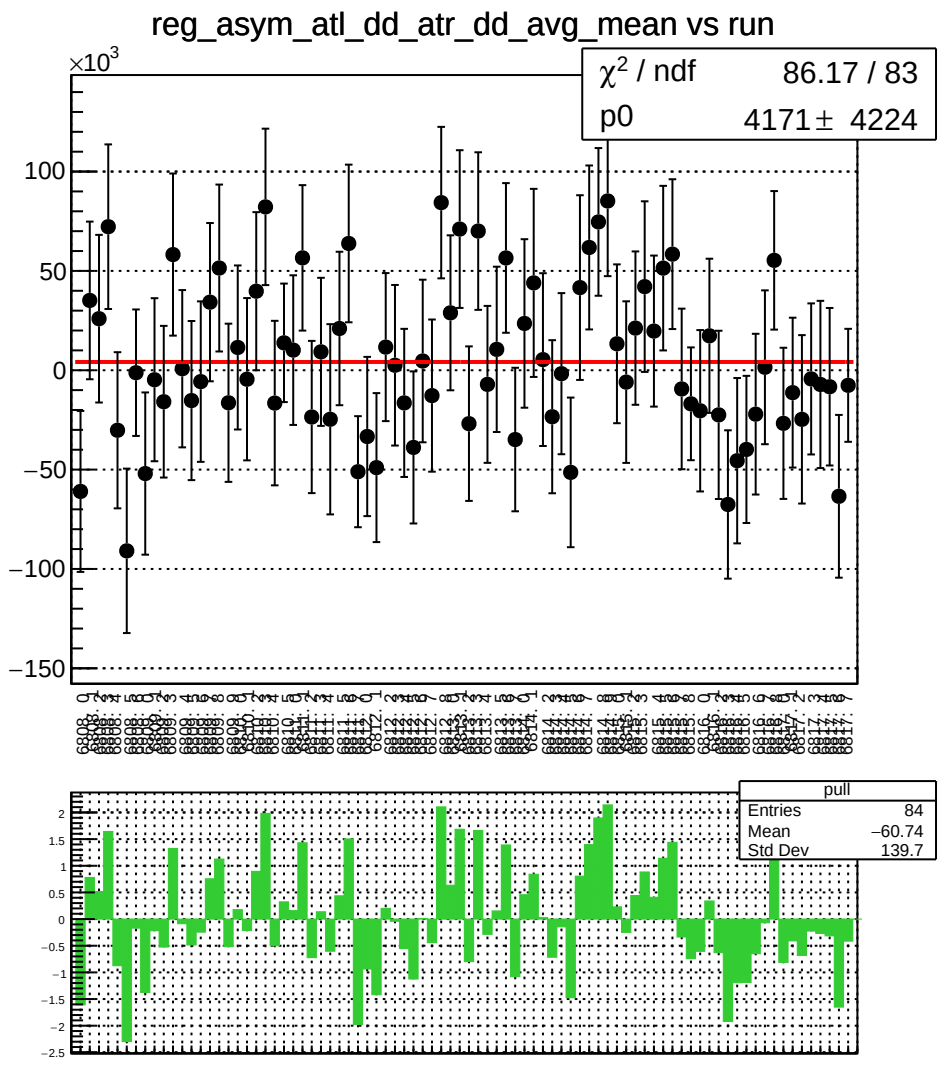
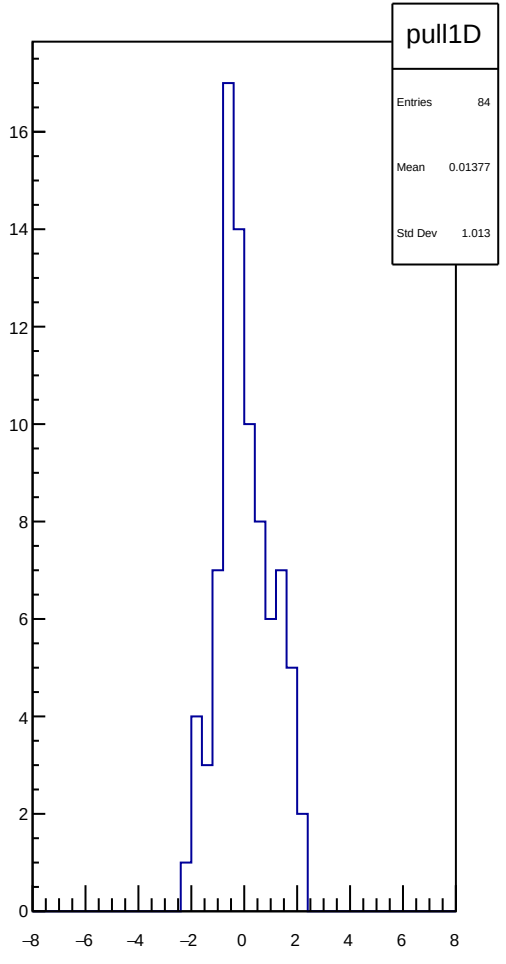
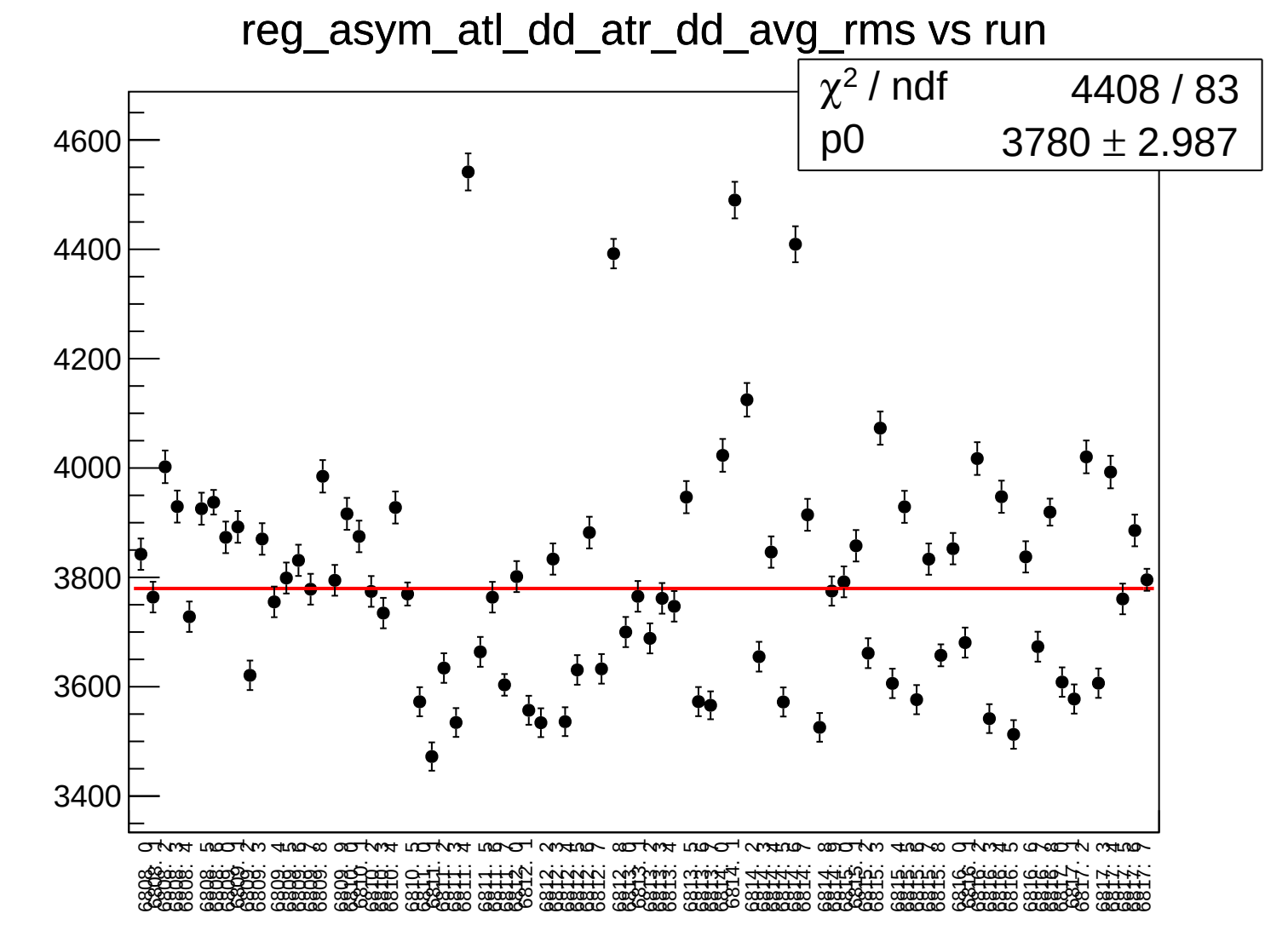
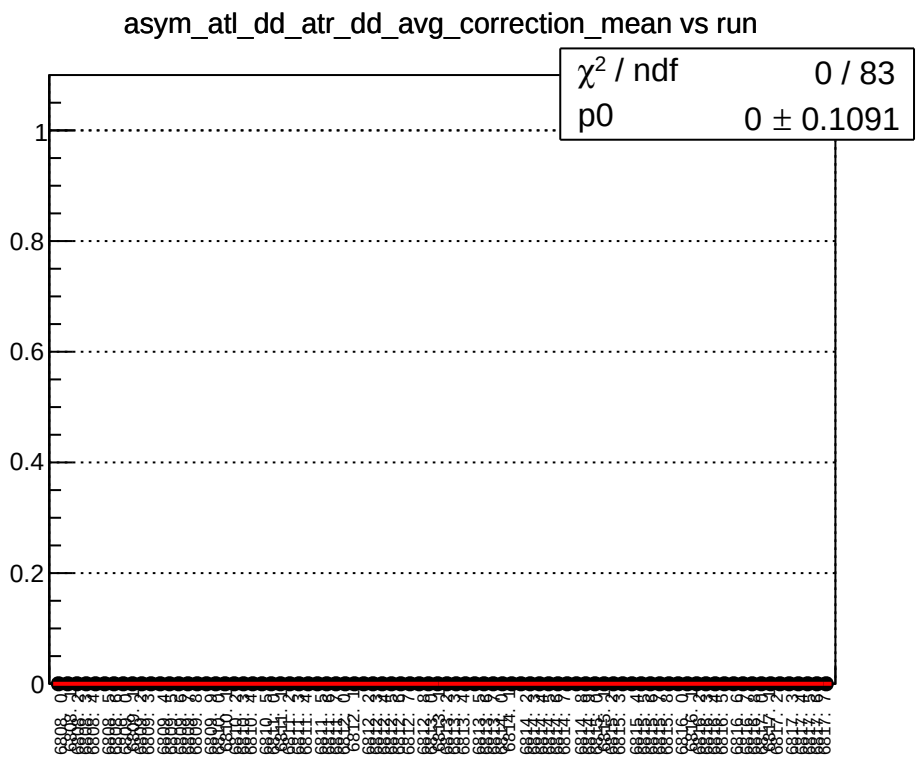
2
4
6
8

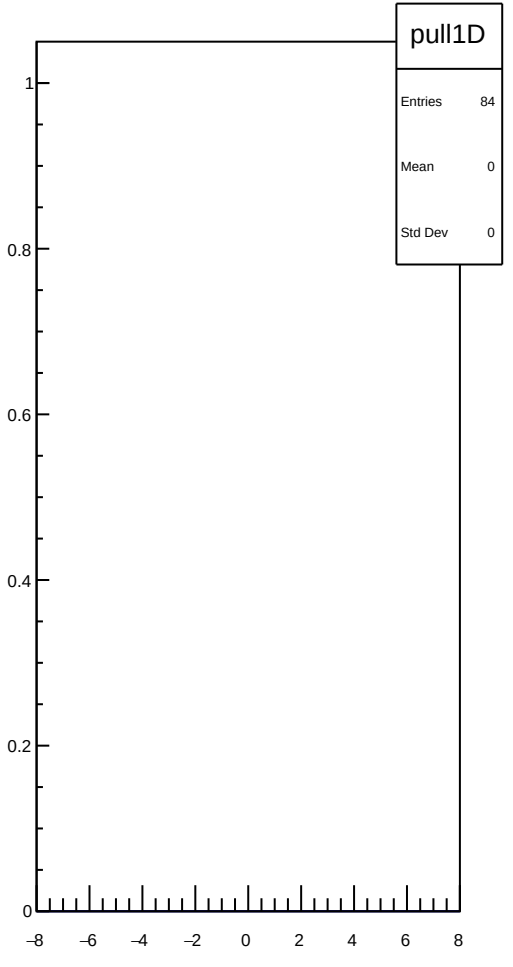

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.278e+04 / 83
p0 1329 ± 1.056
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

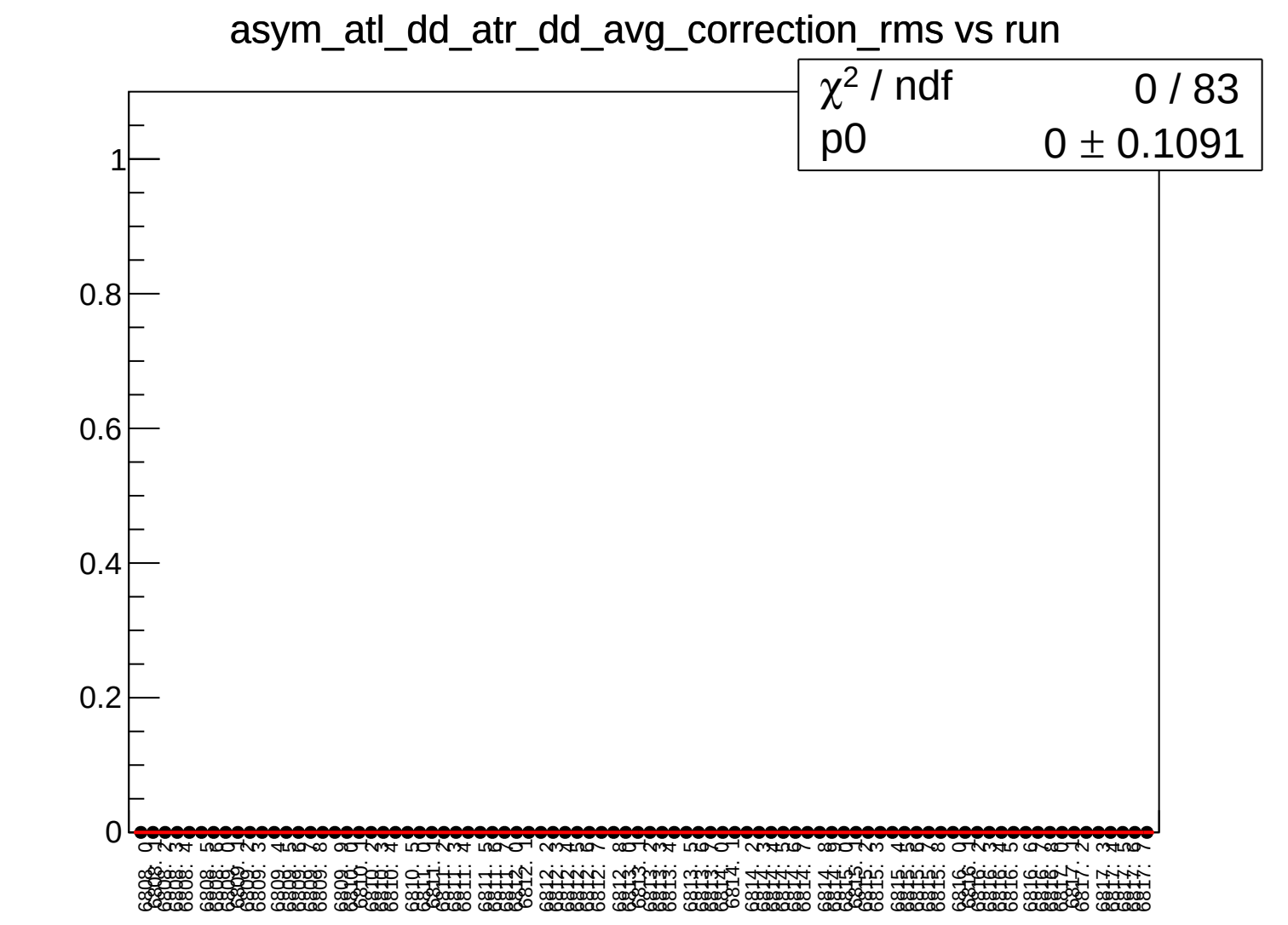

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ^2 / ndf 86.17 / 83
p0 4171 ± 4224
100
50
0
−50
−100
−150
pull
Entries 84
Mean −60.74
Std Dev 139.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

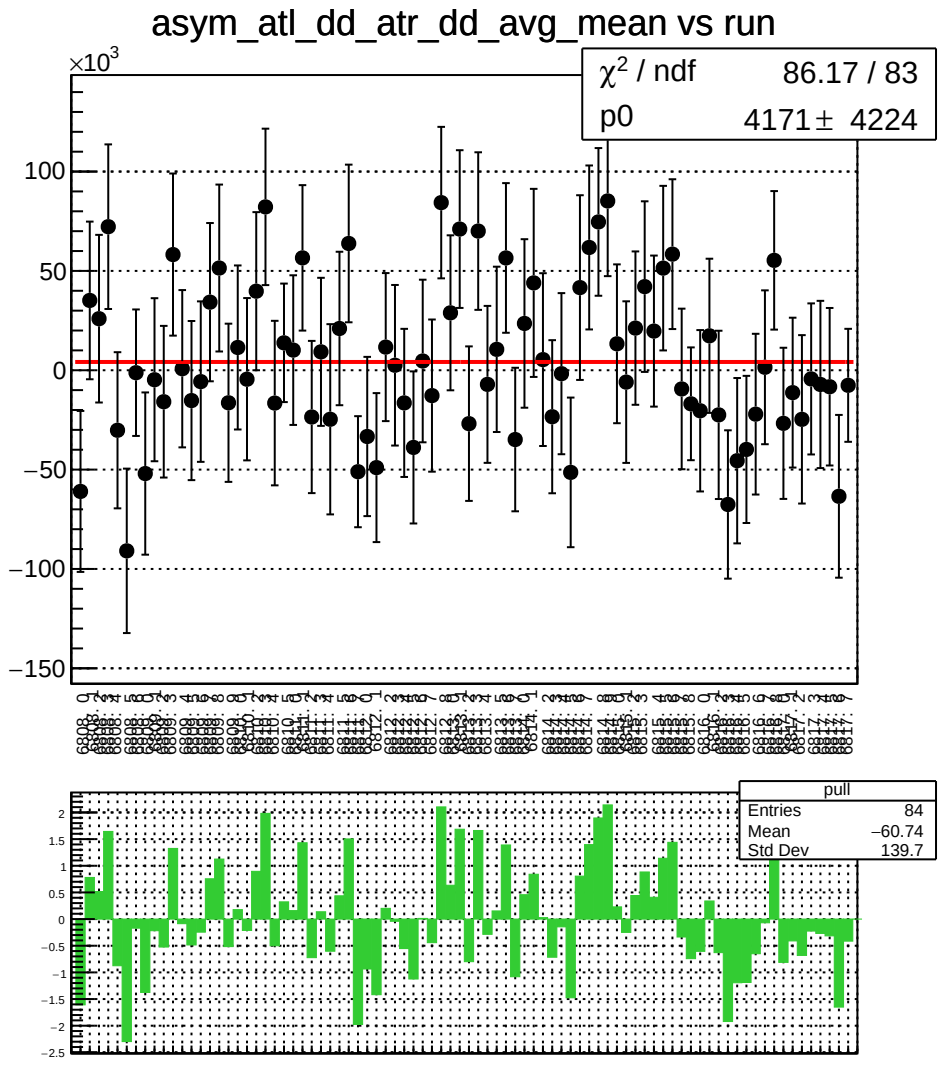

pull1D
Entries 84
Mean 0.01377
Std Dev 1.013
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

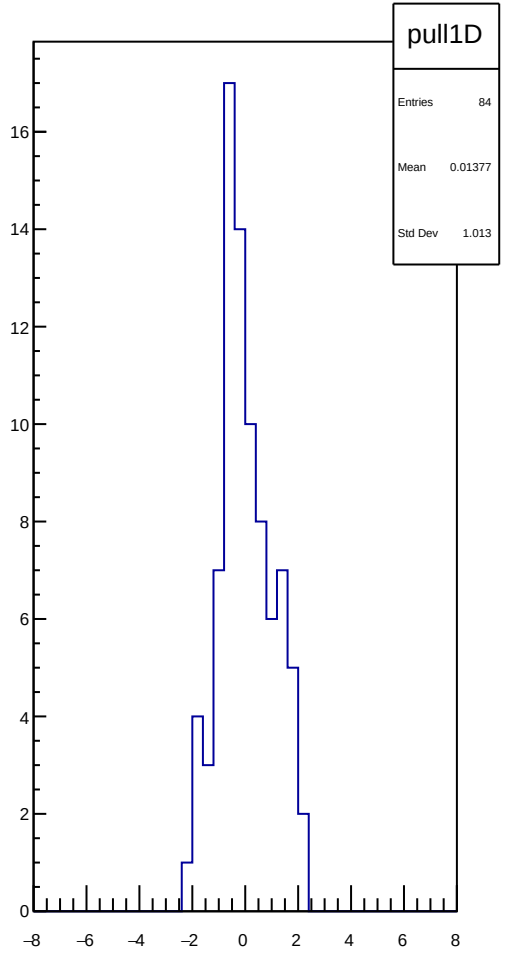

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 4408 / 83
p0 3780 ± 2.987
4600
4400
4200
4000
3800
3600
3400


asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0


pull1D
Entries 84
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 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0


asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 86.17 / 83
p0 4171 ± 4224
100
50
0
−50
−100
−150
pull
Entries 84
Mean −60.74
Std Dev 139.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5


pull1D
Entries 84
Mean 0.01377
Std Dev 1.013
16
14
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10
8
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4
2
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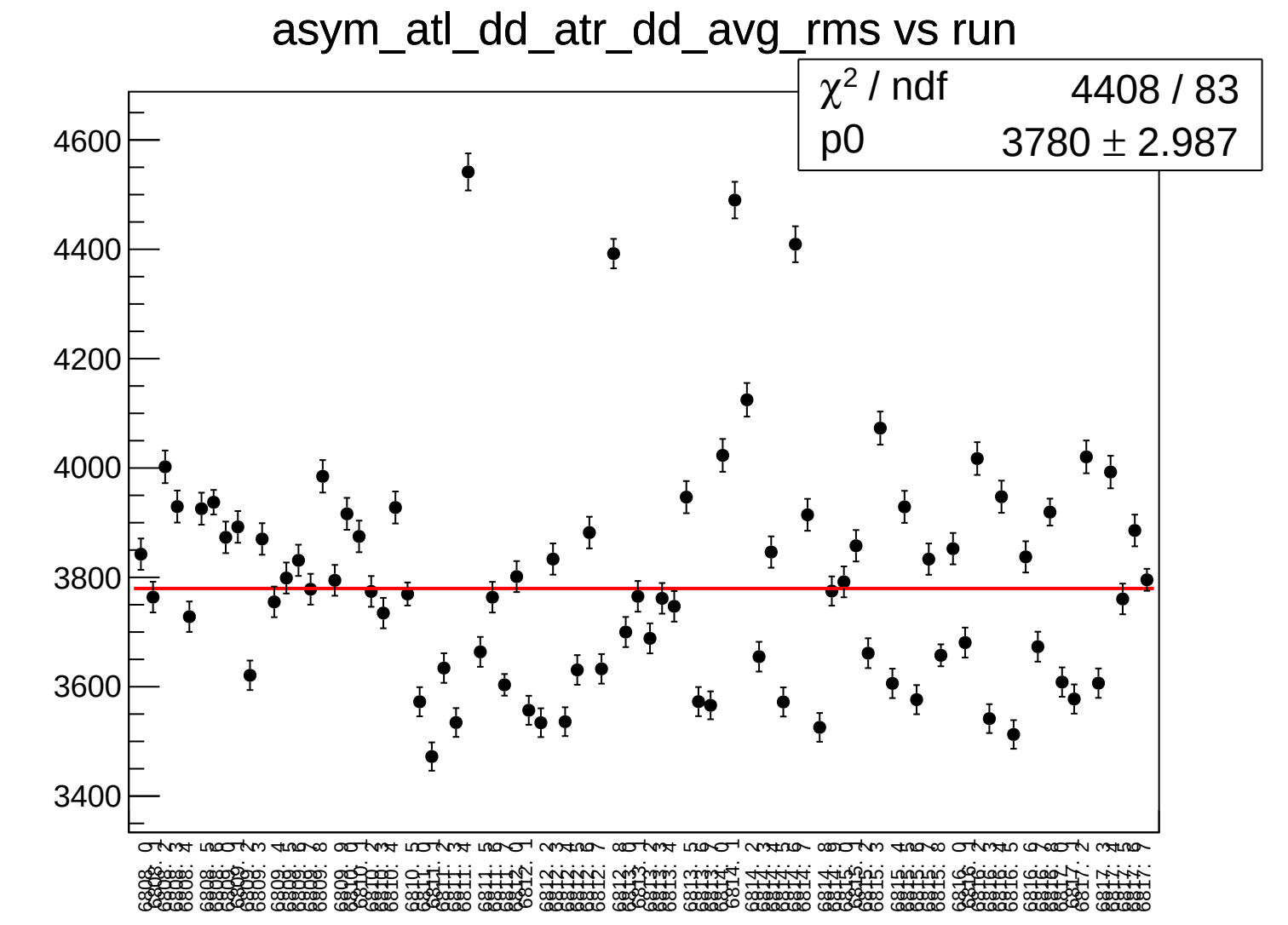
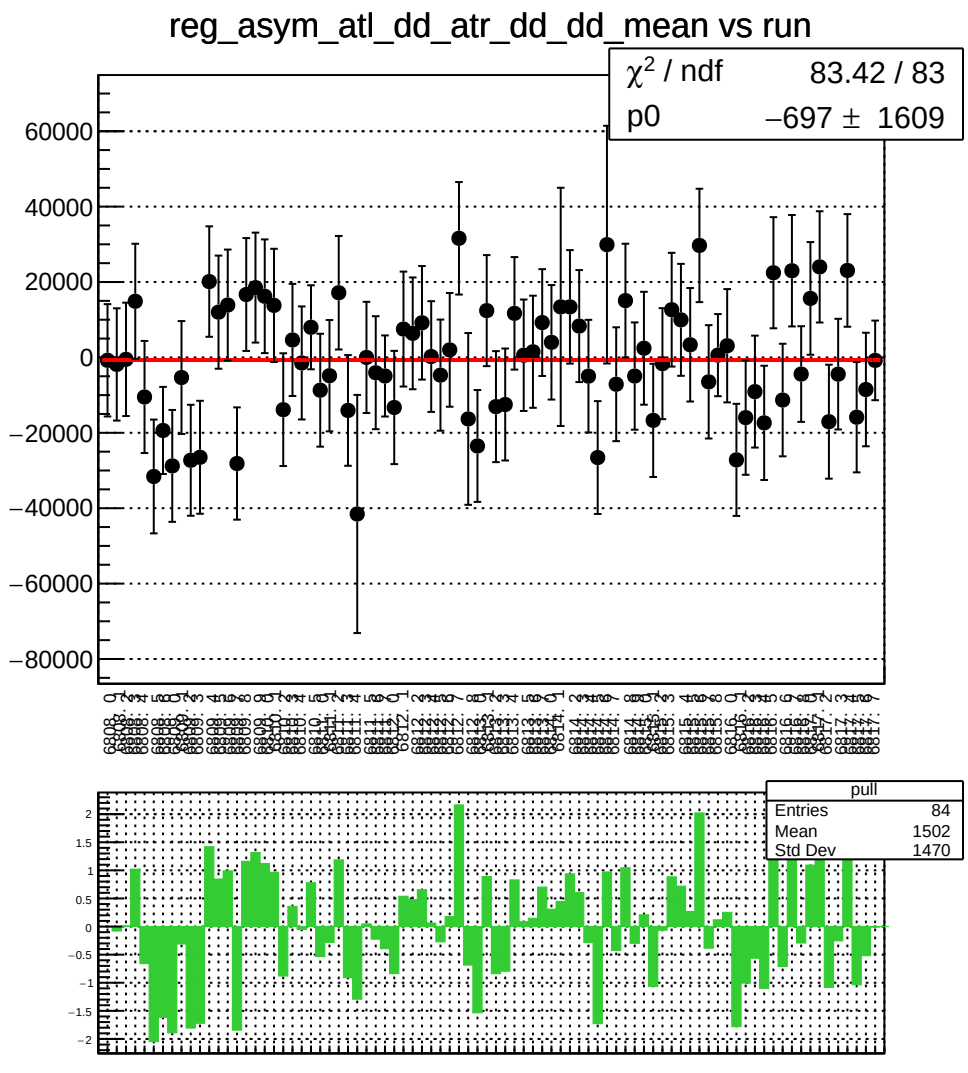
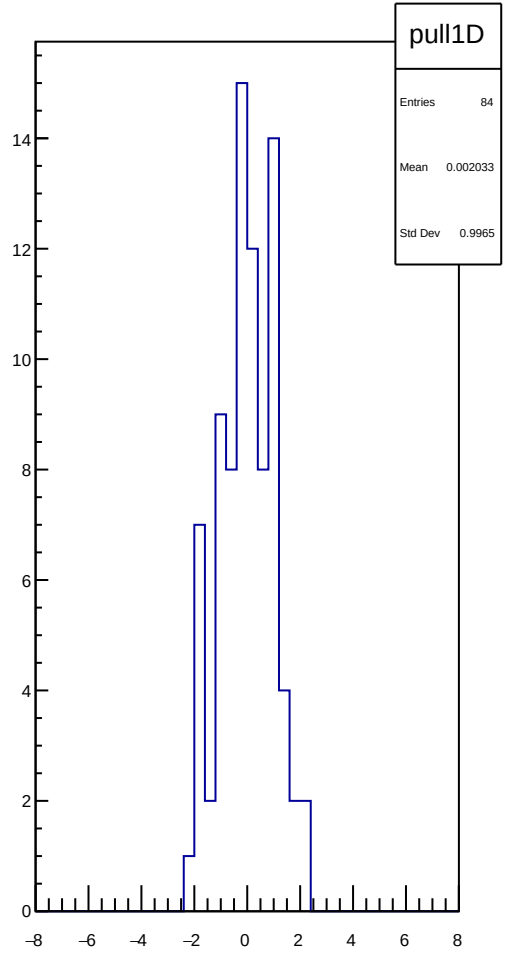
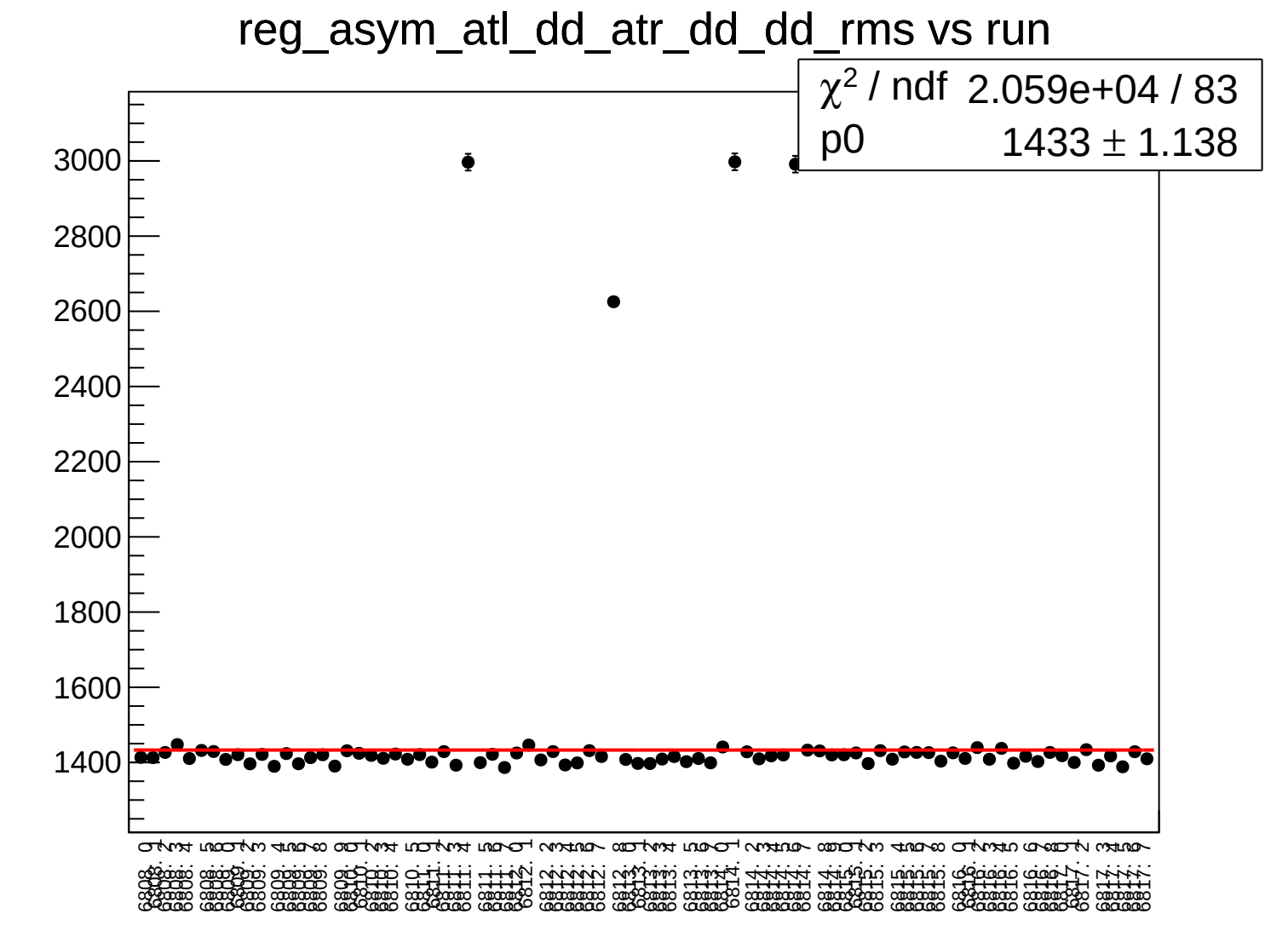
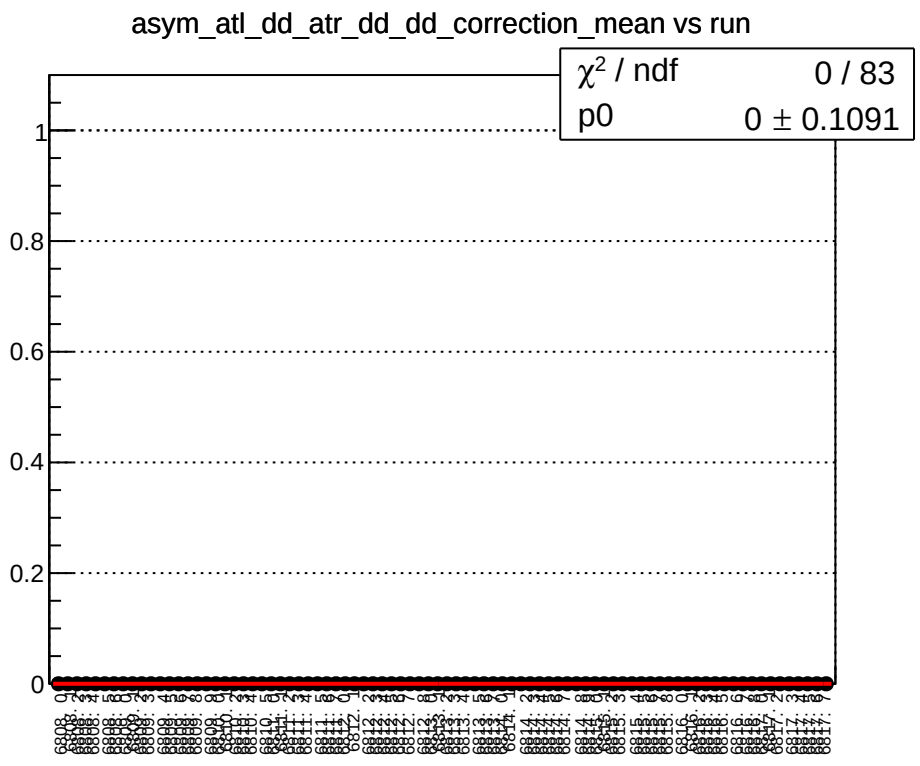
−8
−6
−4
−2
0
2
4
6
8

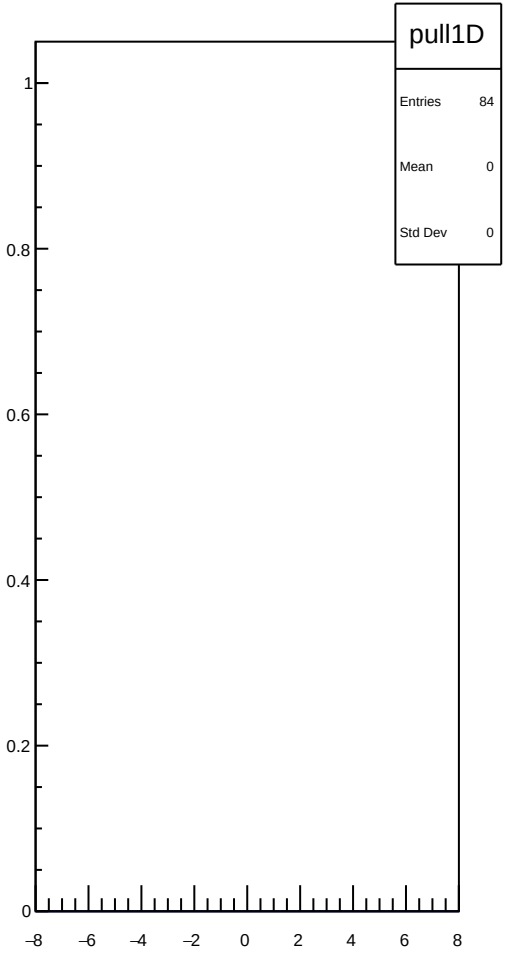

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 4408 / 83
p0 3780 ± 2.987
4600
4400
4200
4000
3800
3600
3400

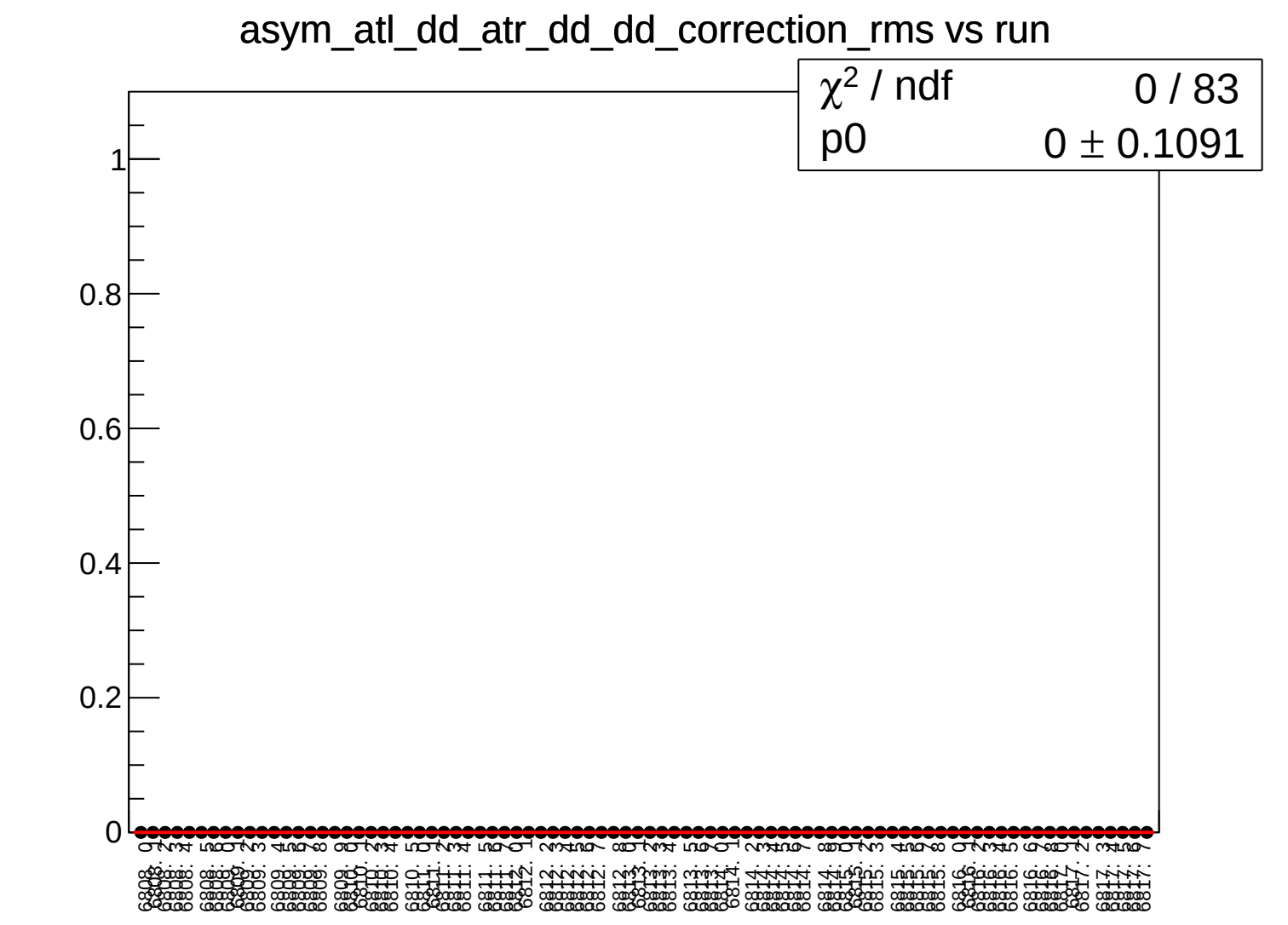

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 83.42 / 83
p0 −697 ± 1609
pull
Entries 84
Mean 1502
Std Dev 1470

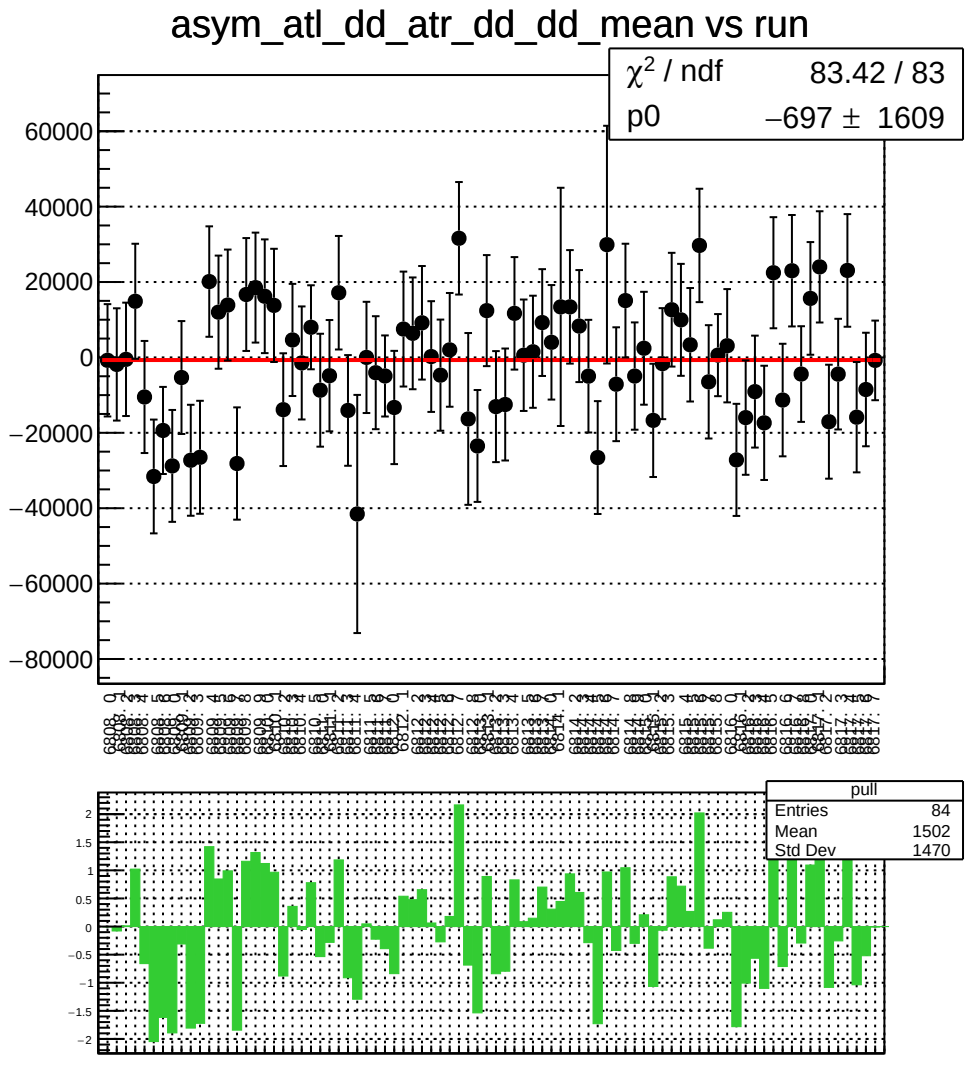

pull1D
Entries 84
Mean 0.002033
Std Dev 0.9965

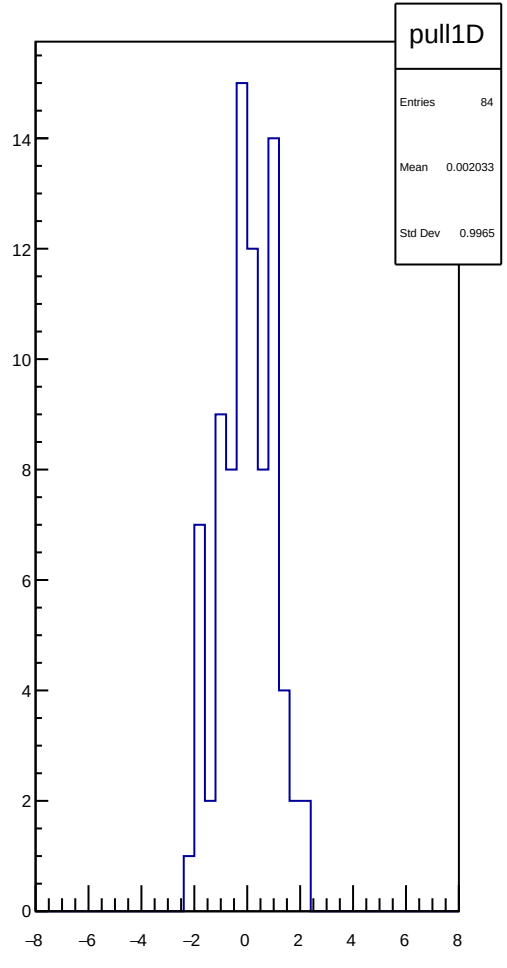

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 2.059e+04 / 83
p0 1433 ± 1.138
3000
2800
2600
2400
2200
2000
1800
1600
1400

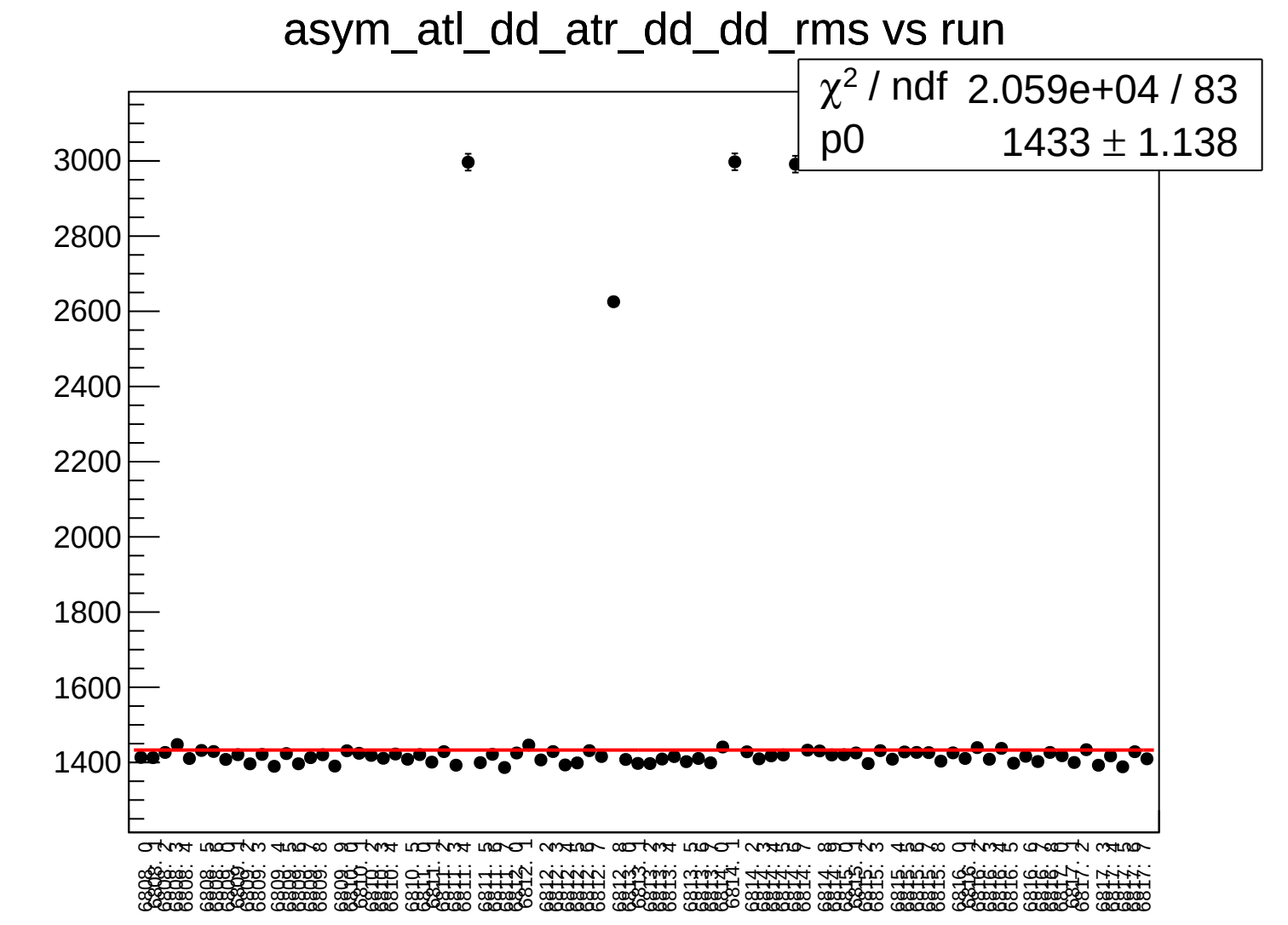

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 0 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0

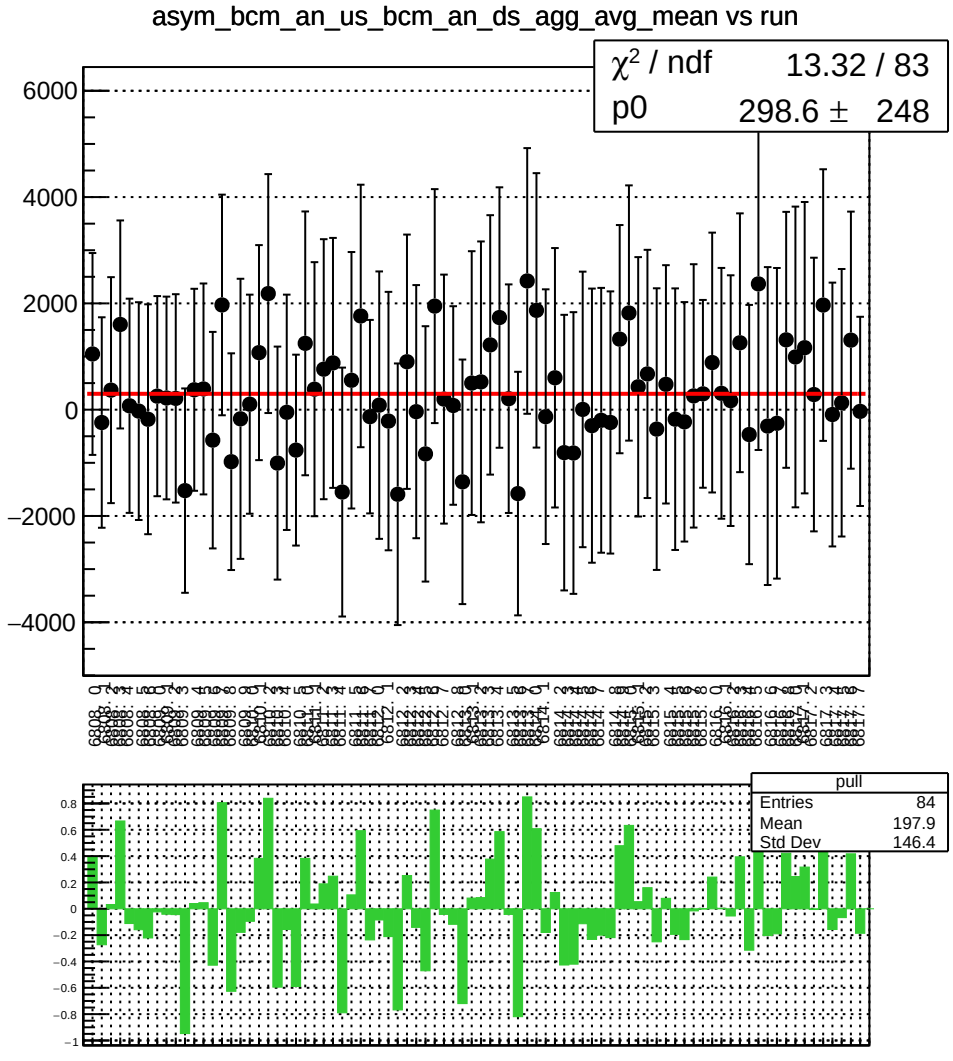

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

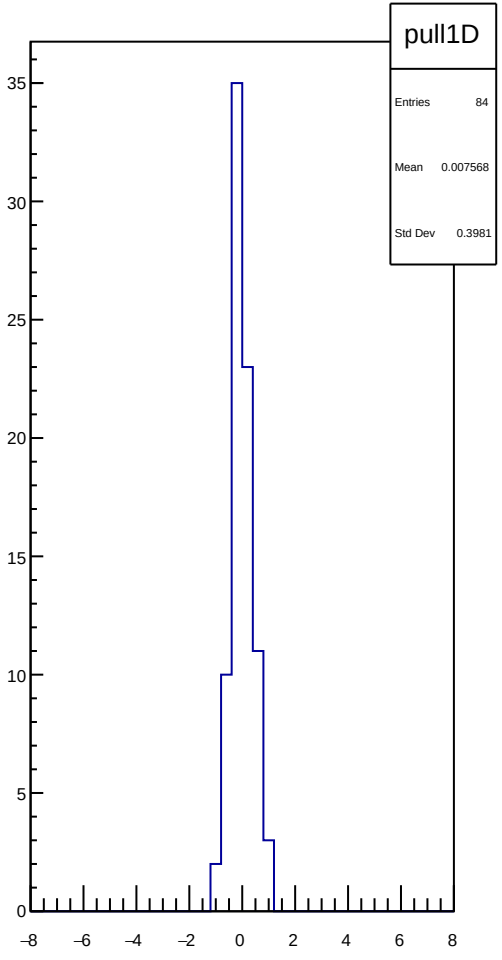

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 83
p0 0 ± 0.1091
1
0.8
0.6
0.4
0.2
0

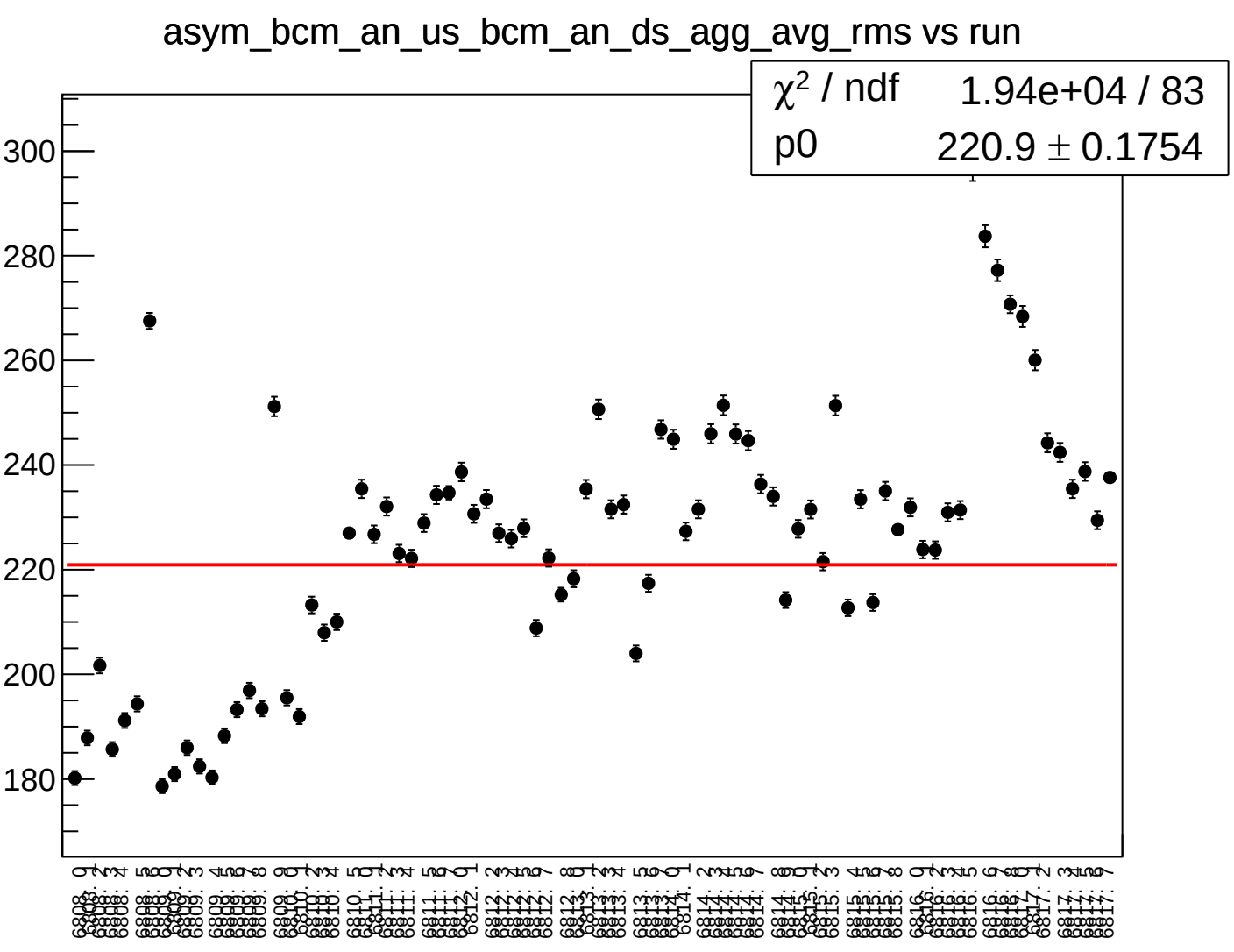

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 83.42 / 83
p0 −697 ± 1609
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 84
Mean 1502
Std Dev 1470
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

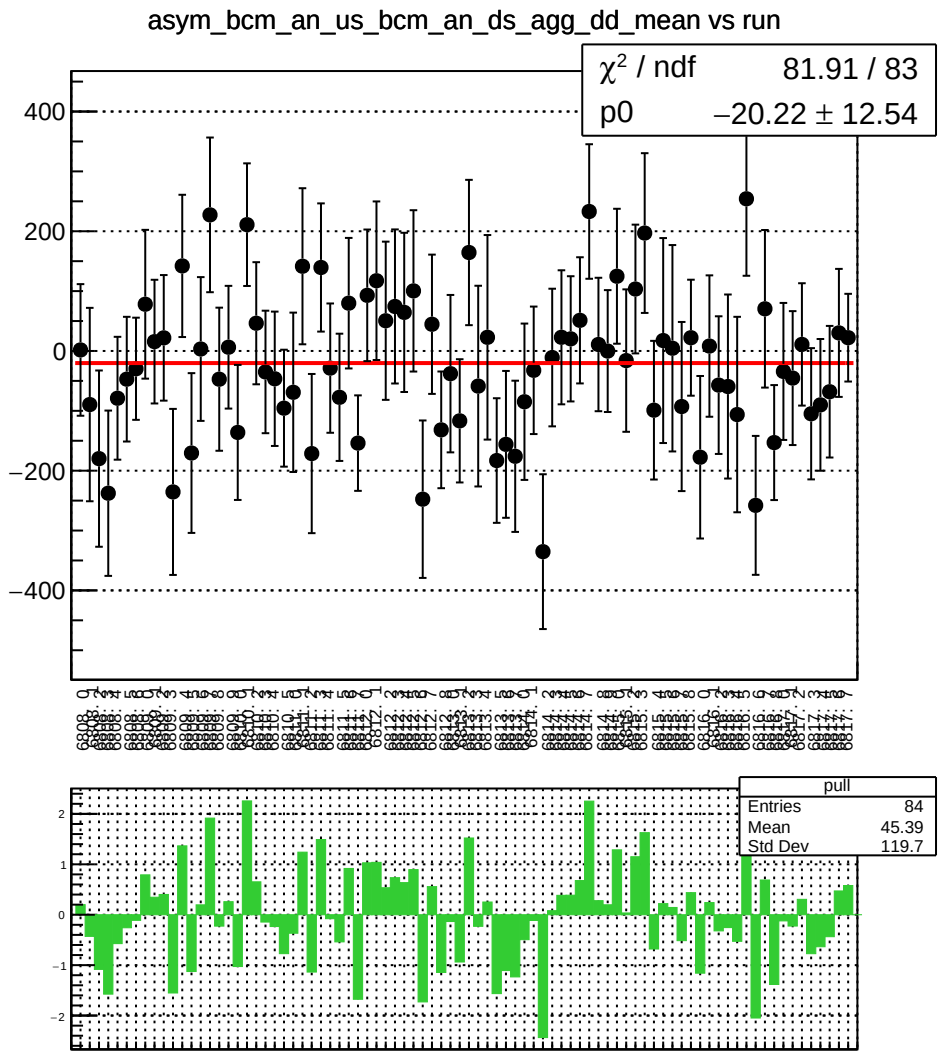

pull1D
Entries 84
Mean 0.002033
Std Dev 0.9965
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

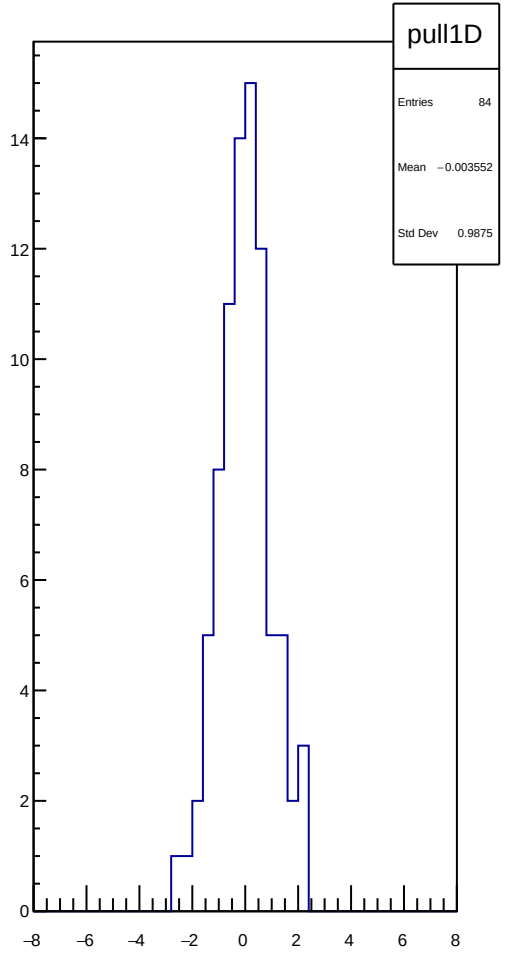

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 2.059e+04 / 83
p0 1433 ± 1.138
3000
2800
2600
2400
2200
2000
1800
1600
1400

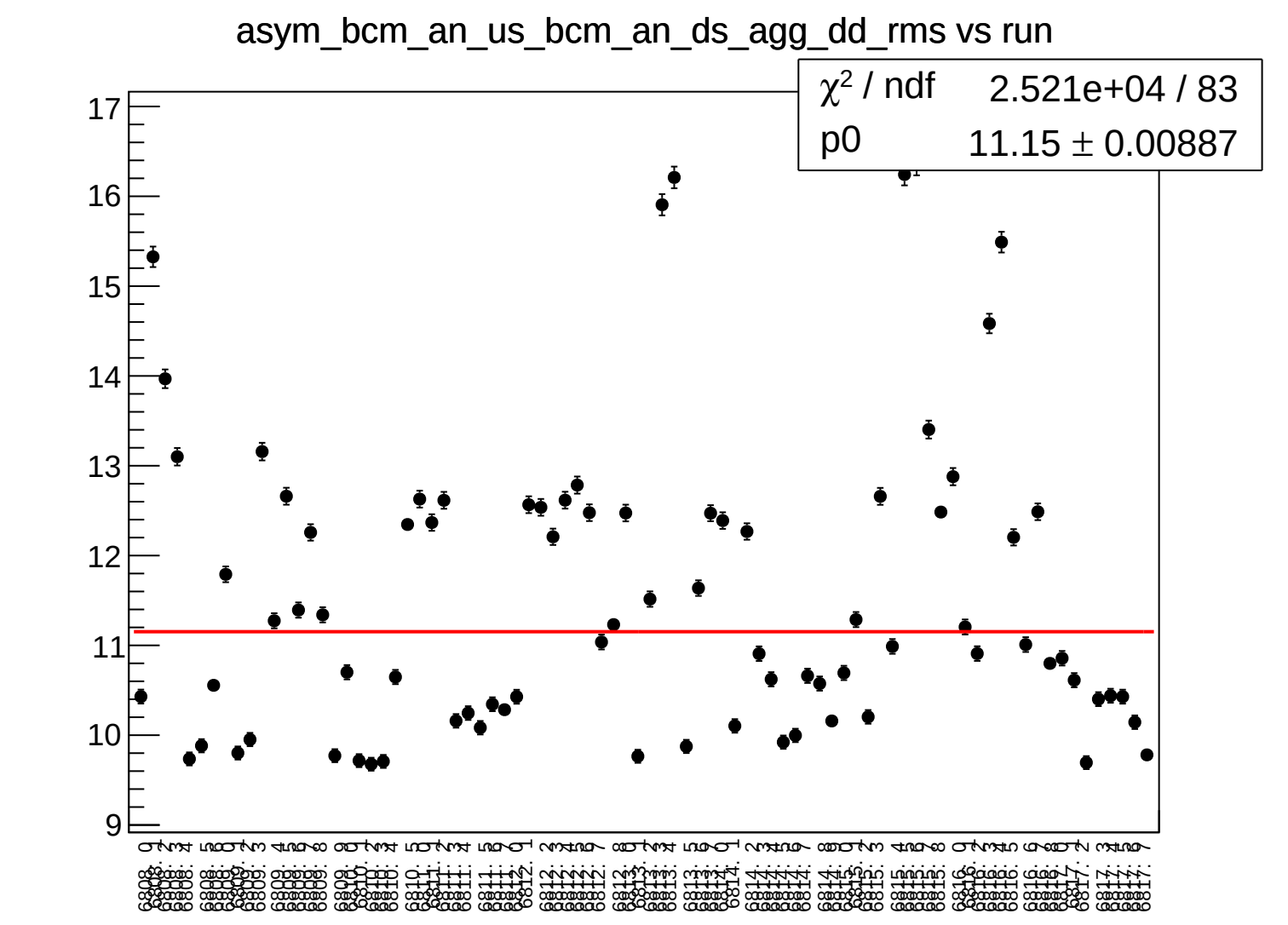

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 13.32 / 83
p0 298.6 ± 248
pull
Entries 84
Mean 197.9
Std Dev 146.4

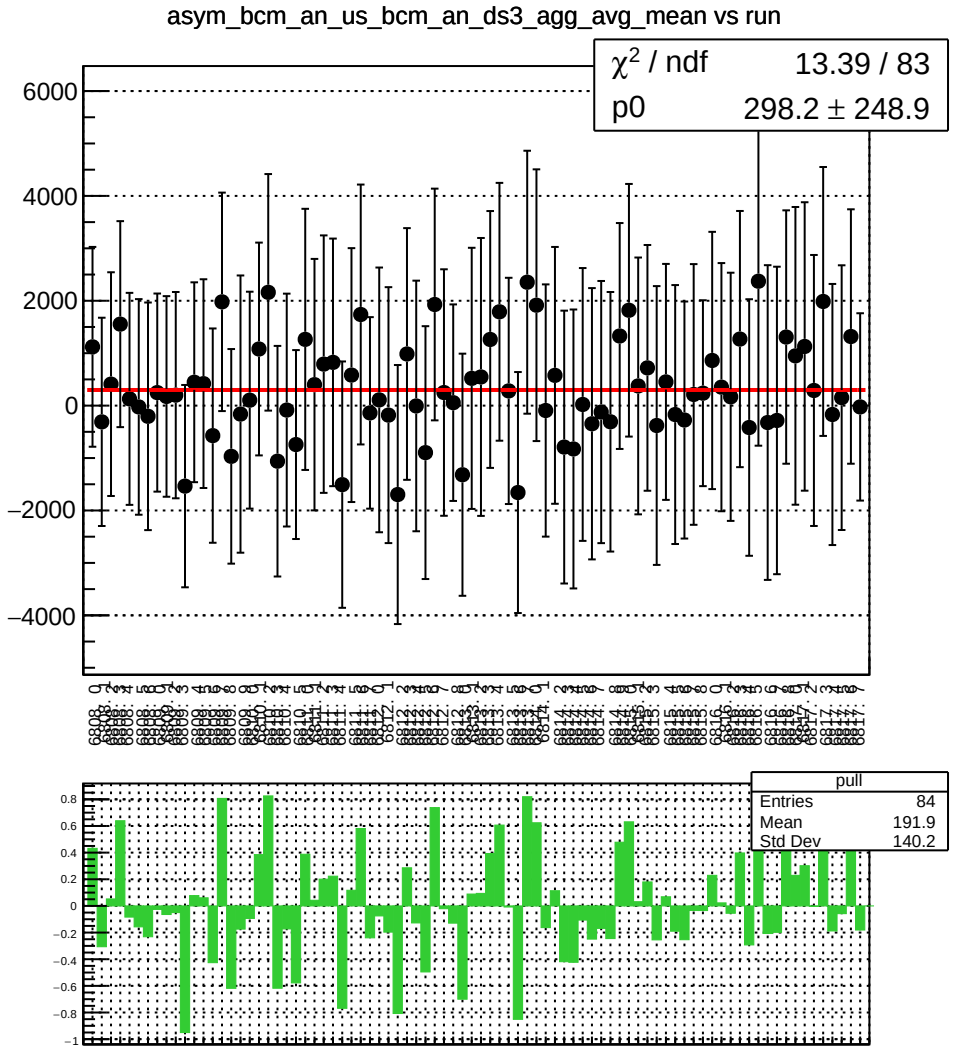

pull1D
Entries 84
Mean 0.007568
Std Dev 0.3981

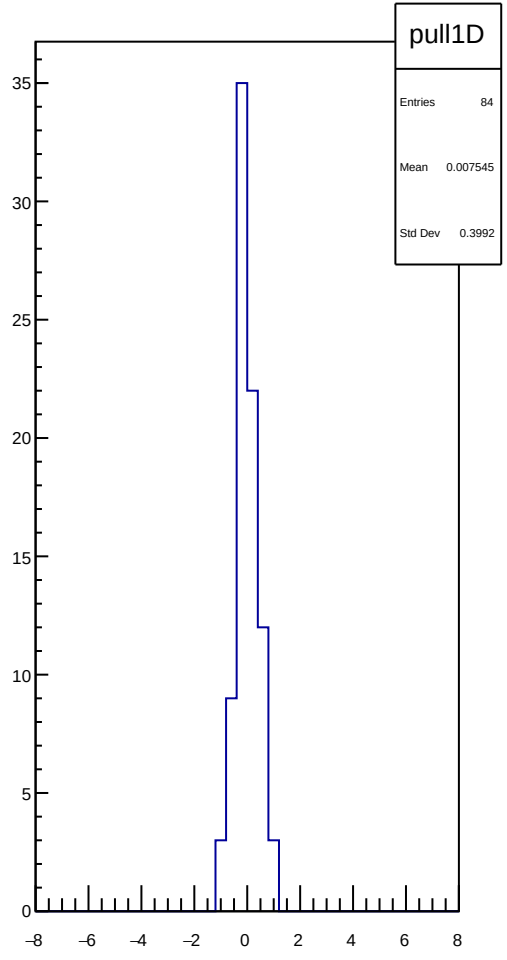

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.94e+04 / 83
p0 220.9 ± 0.1754
300
280
260
240
220
200
180

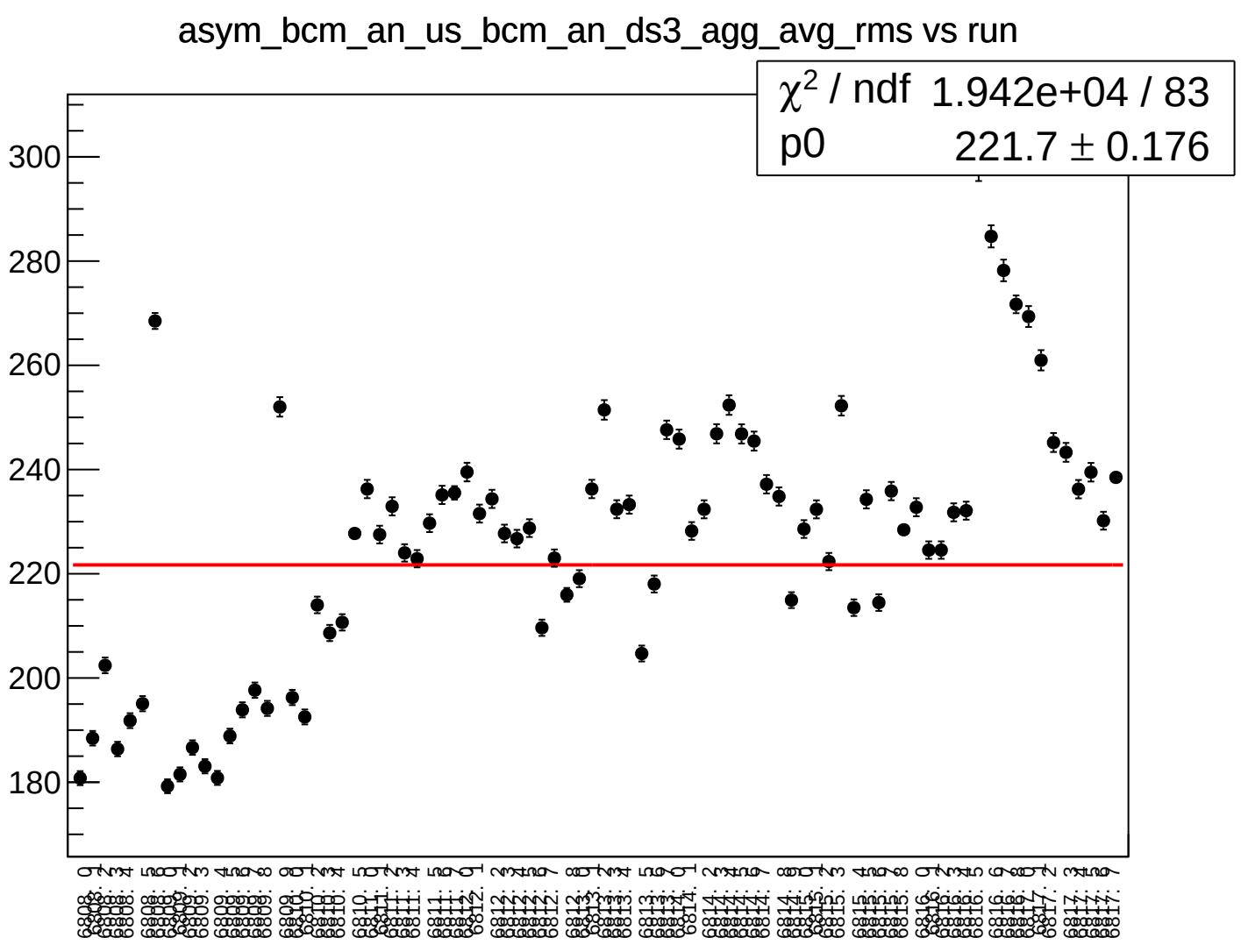

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.91 / 83
p0 −20.22 ± 12.54
400
200
0
−200
−400
pull
Entries 84
Mean 45.39
Std Dev 119.7
2
1
0
−1
−2

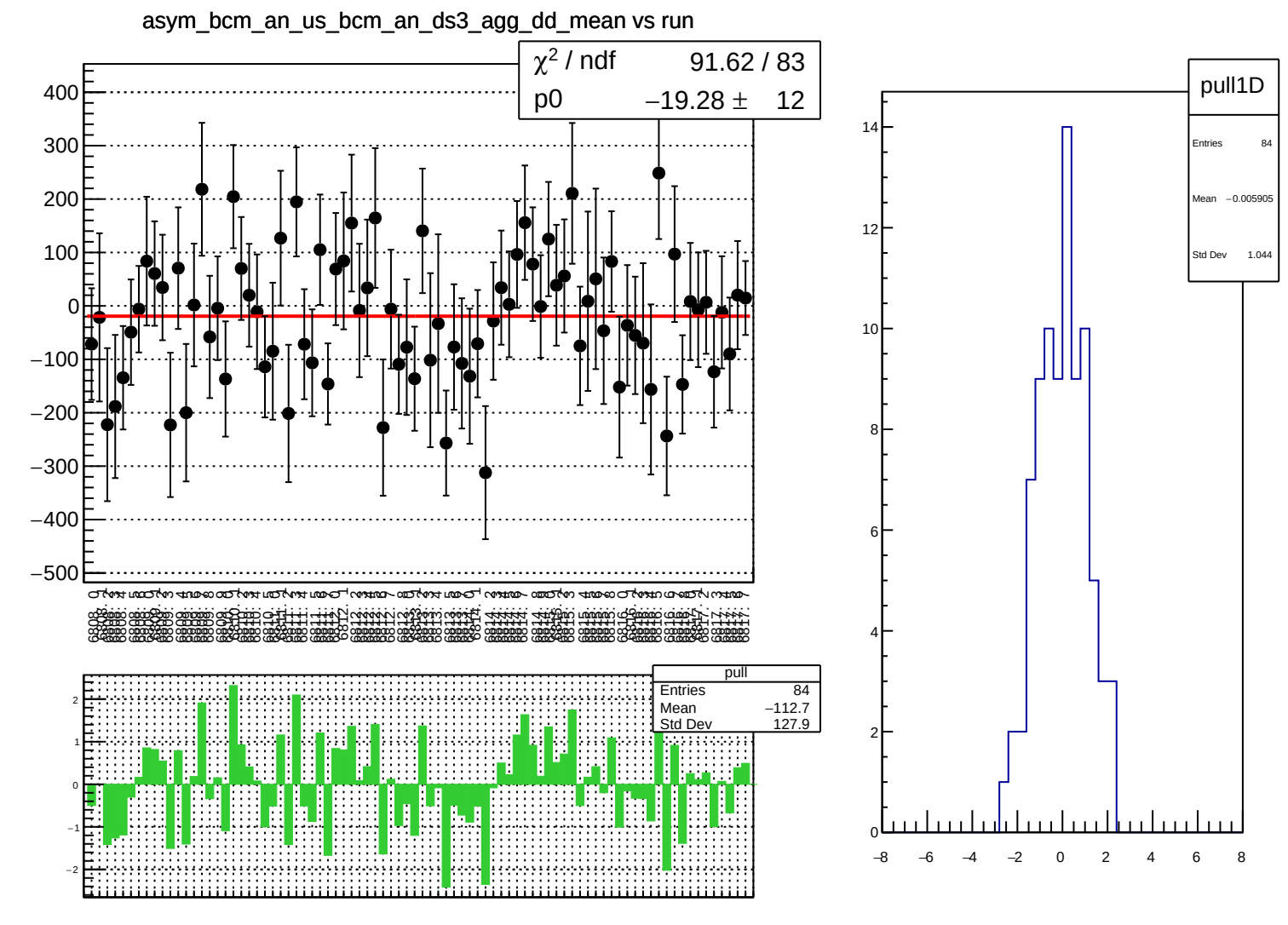

pull1D
Entries 84
Mean −0.003552
Std Dev 0.9875
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

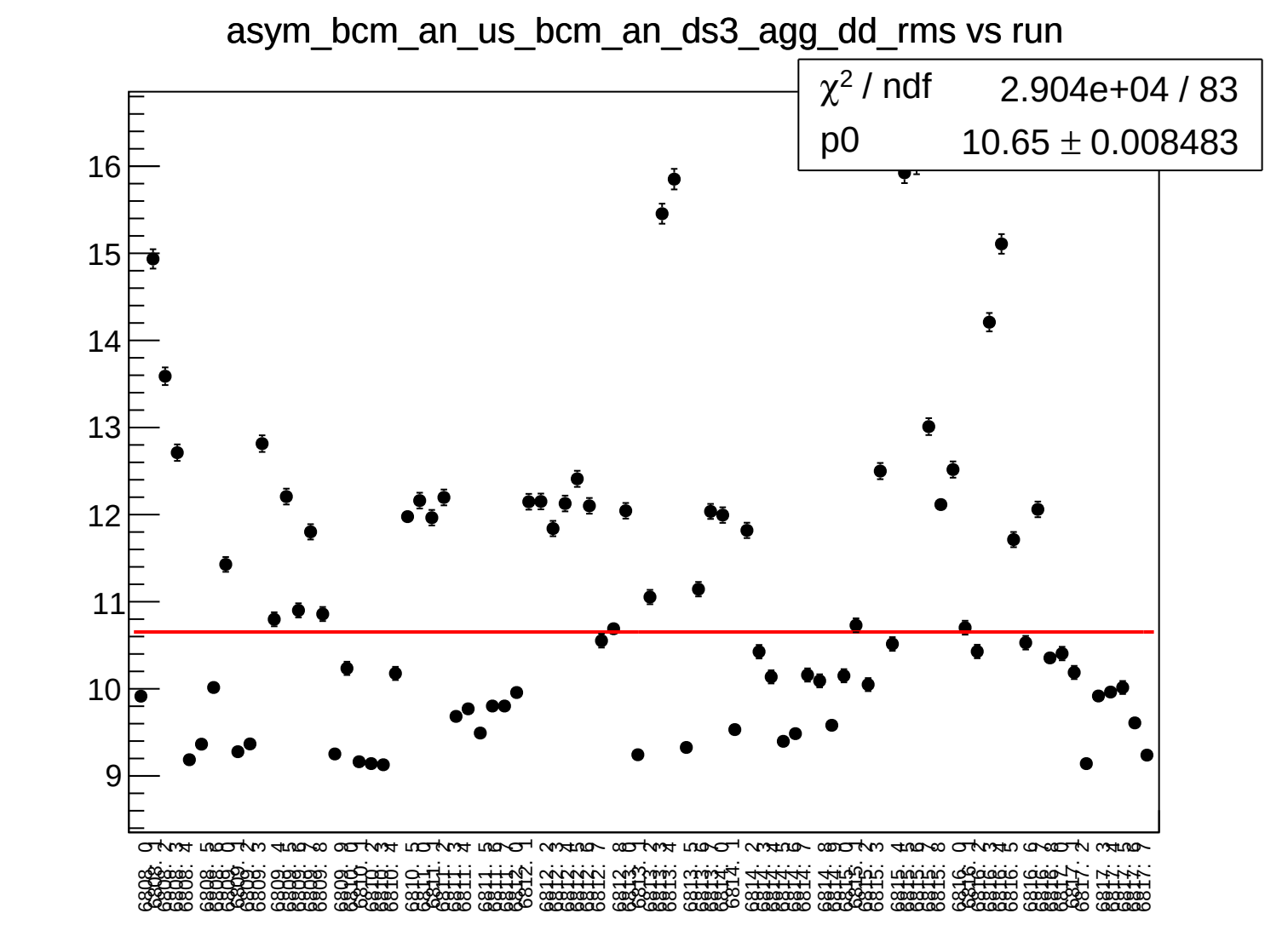

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.521e+04 / 83
p0 11.15 ± 0.00887
17
16
15
14
13
12
11
10
9

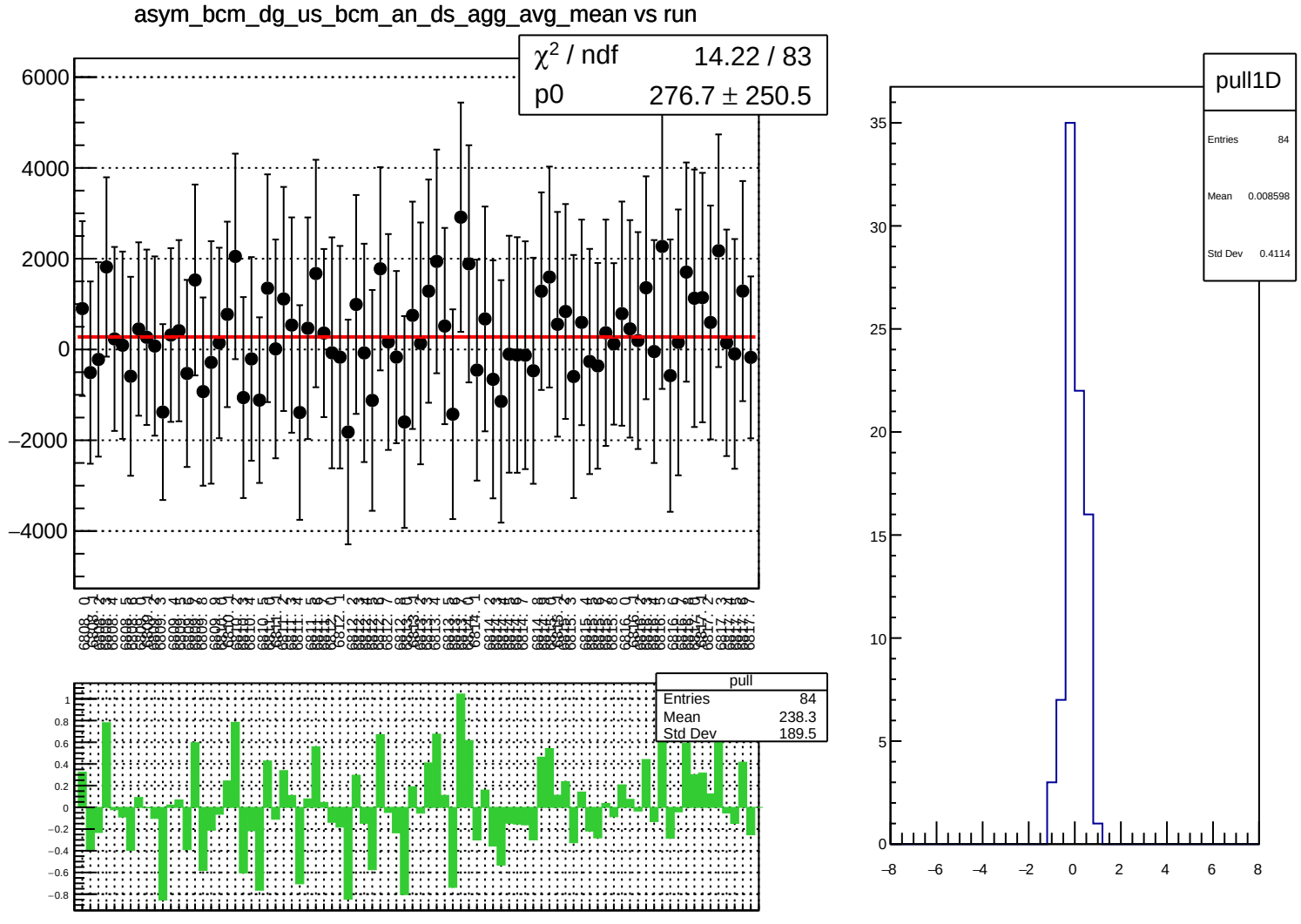

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 13.39 / 83
p0 298.2 ± 248.9
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 191.9
Std Dev 140.2
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

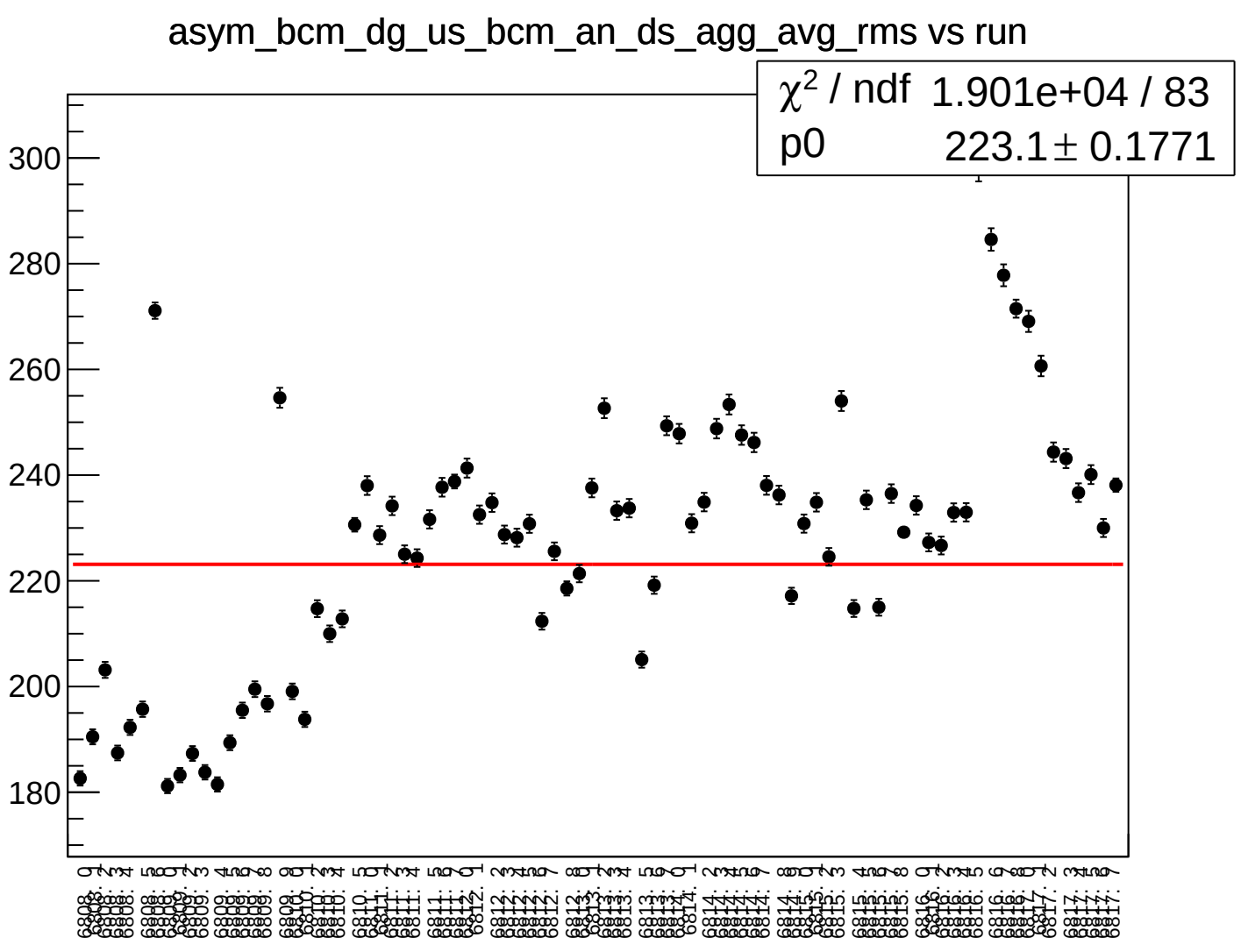

pull1D
Entries 84
Mean 0.007545
Std Dev 0.3992
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

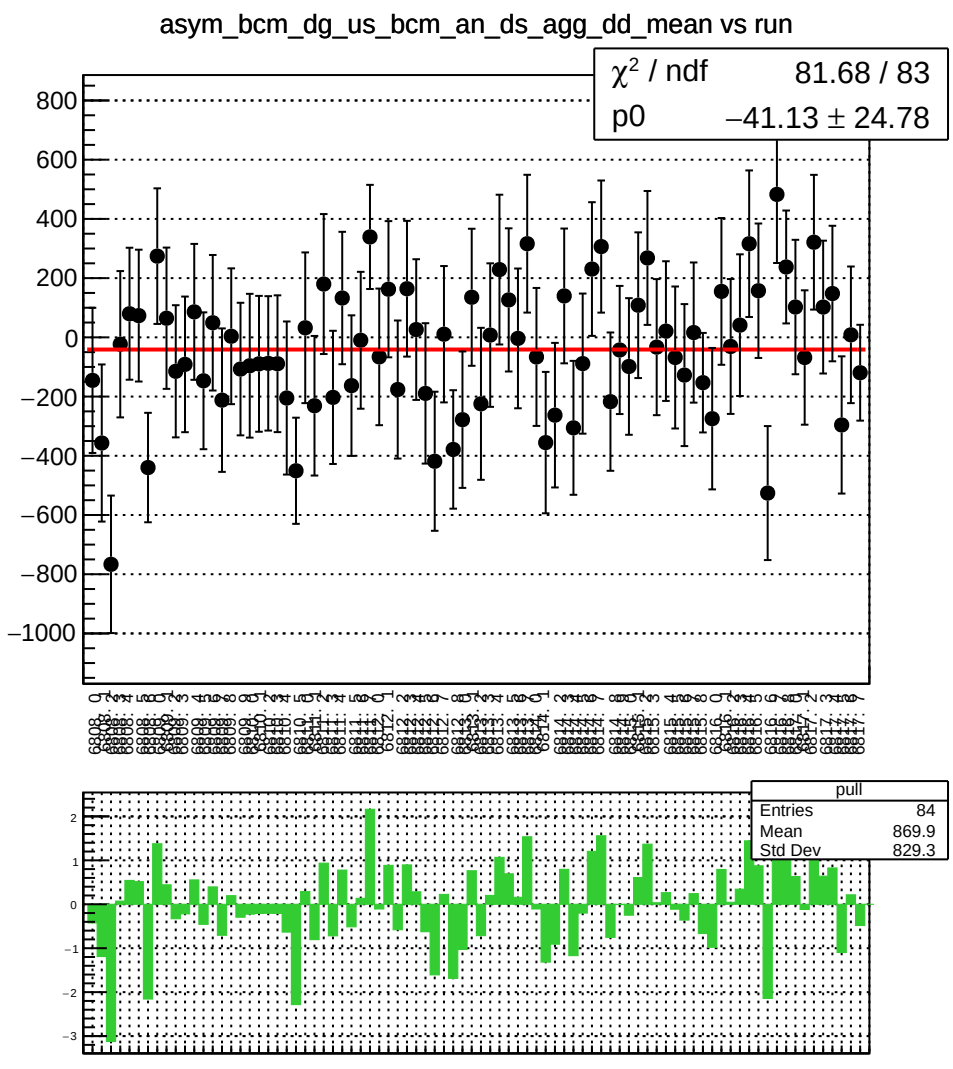

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.942e+04 / 83
p0 221.7 ± 0.176
300
280
260
240
220
200
180

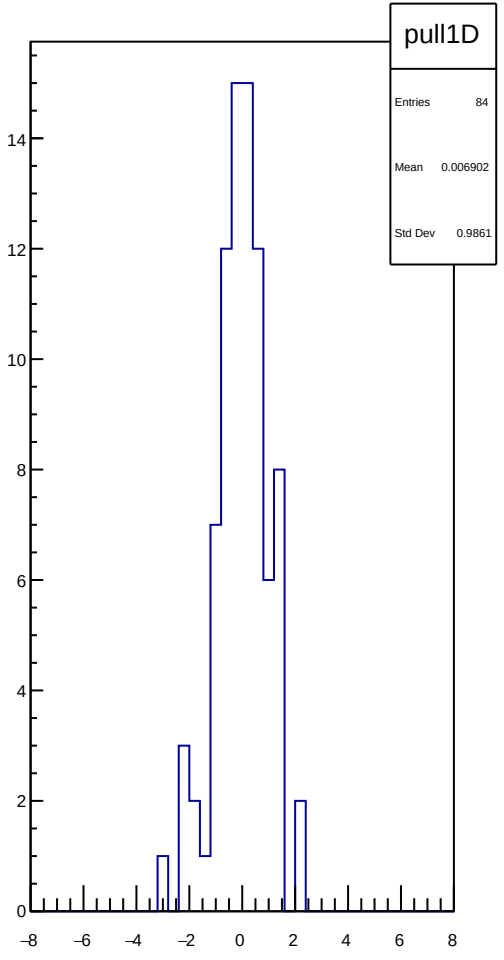

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 91.62 / 83
p0 −19.28 ± 12
pull
Entries 84
Mean −112.7
Std Dev 127.9
pull1D
Entries 84
Mean −0.005905
Std Dev 1.044

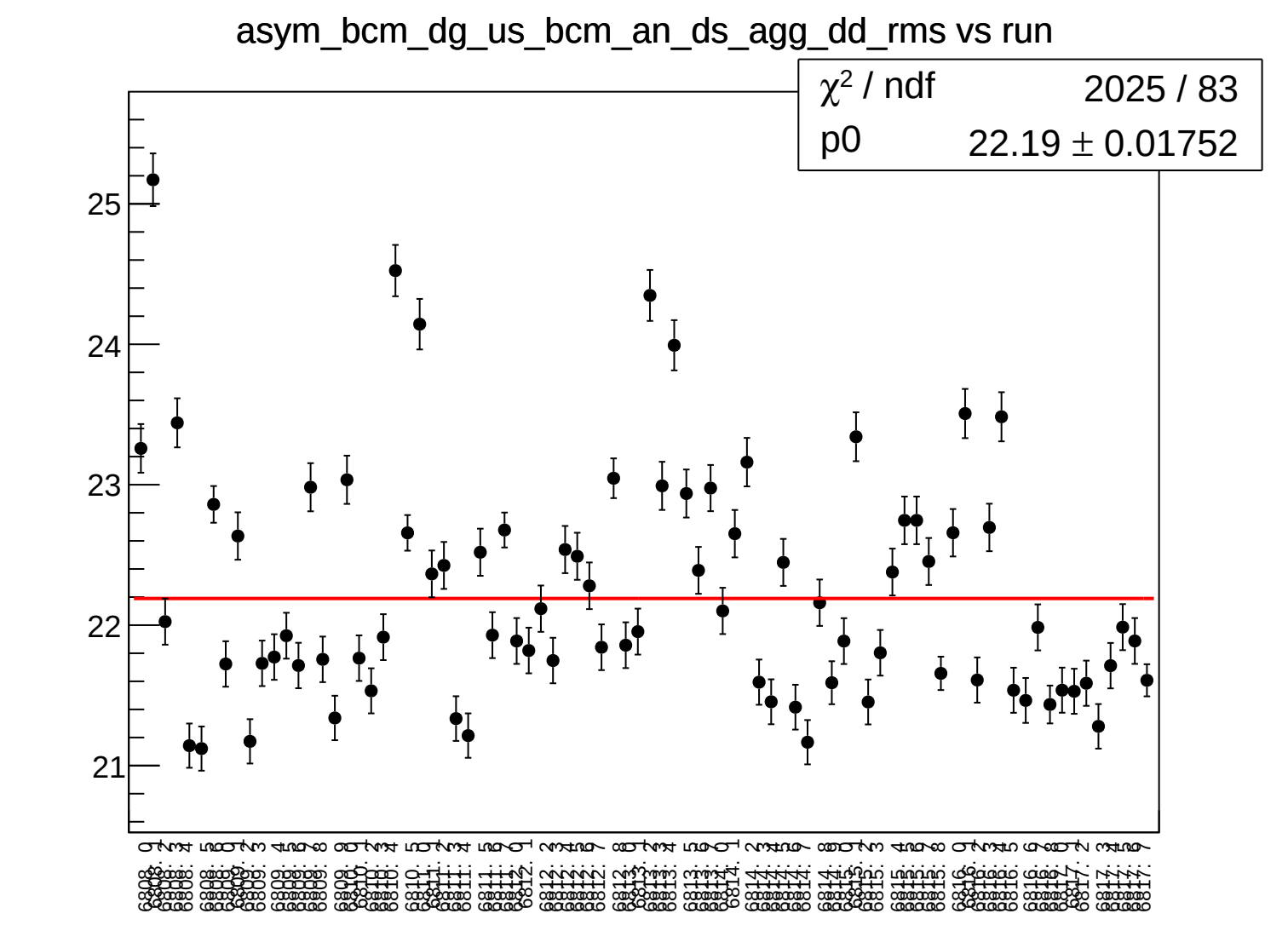

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.904e+04 / 83
p0 10.65 ± 0.008483
16
15
14
13
12
11
10
9

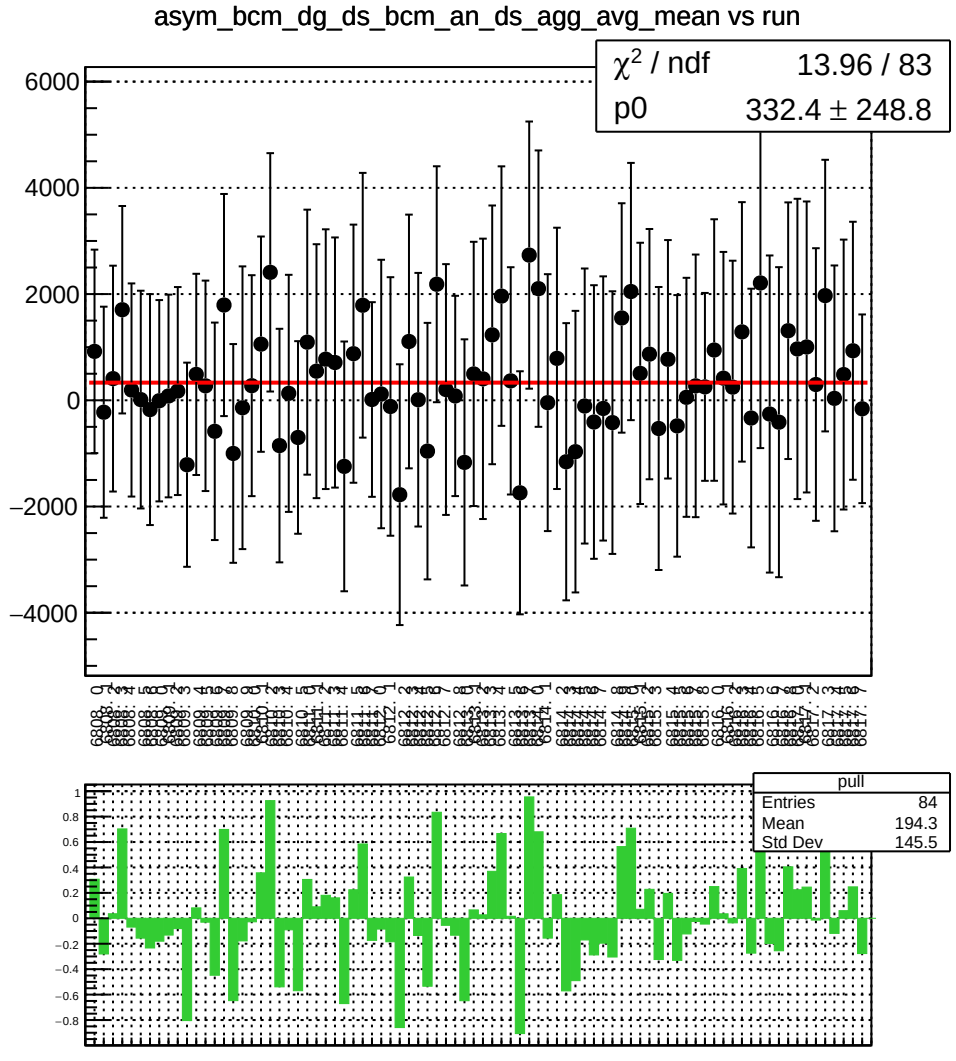

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.22 / 83
p0 276.7 ± 250.5
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 238.3
Std Dev 189.5
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 84
Mean 0.008598
Std Dev 0.4114
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

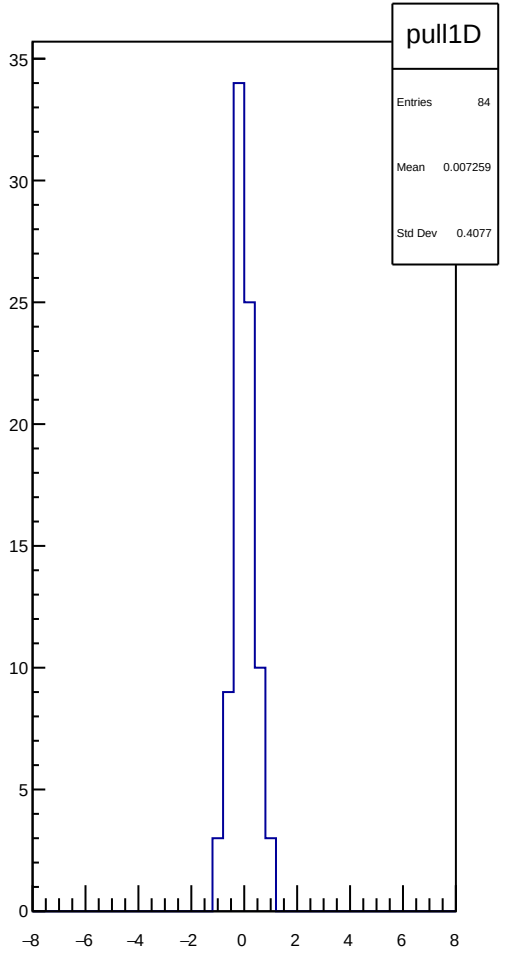

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.901e+04 / 83
p0 223.1 ± 0.1771
300
280
260
240
220
200
180

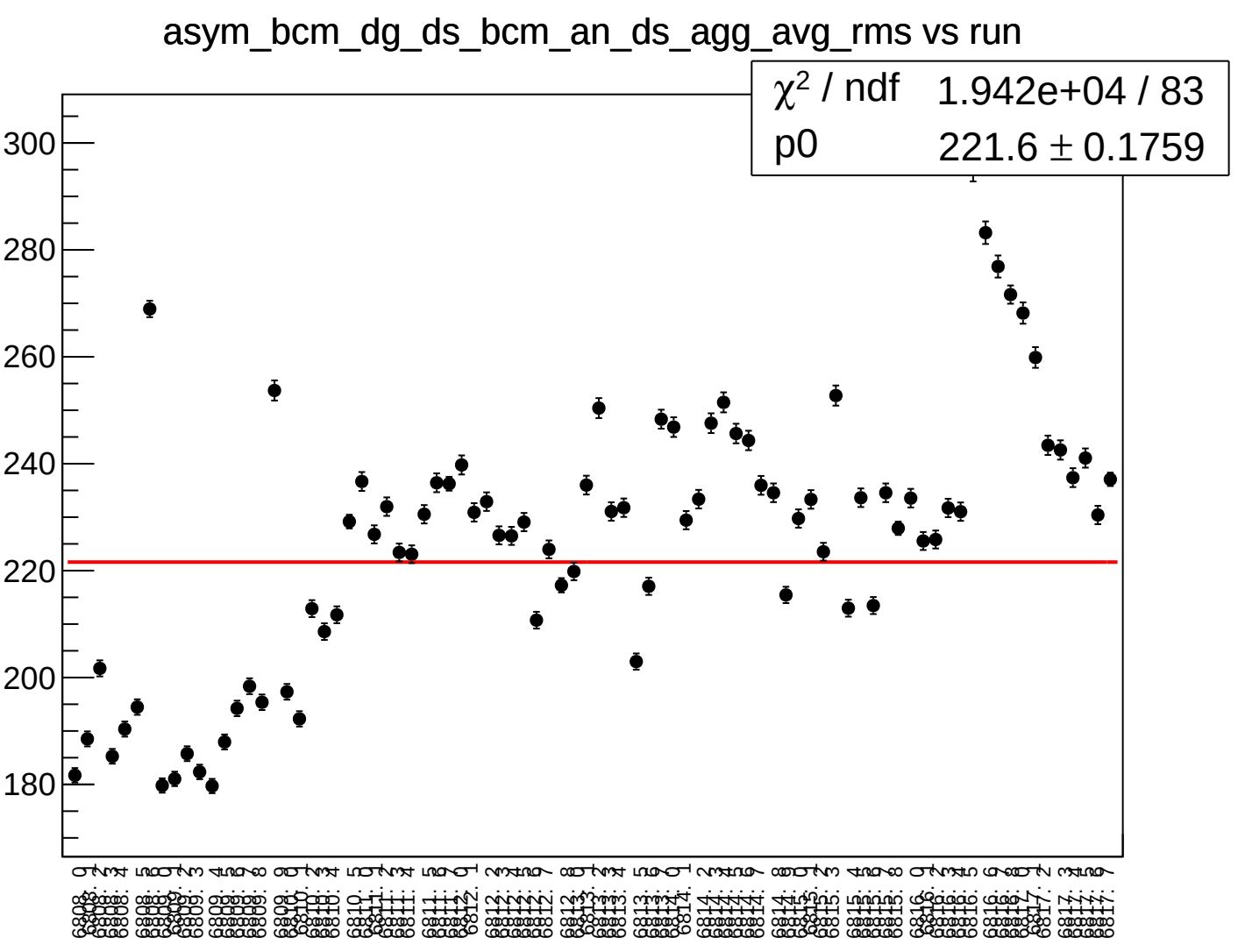

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.68 / 83
p0 −41.13 ± 24.78
pull
Entries 84
Mean 869.9
Std Dev 829.3

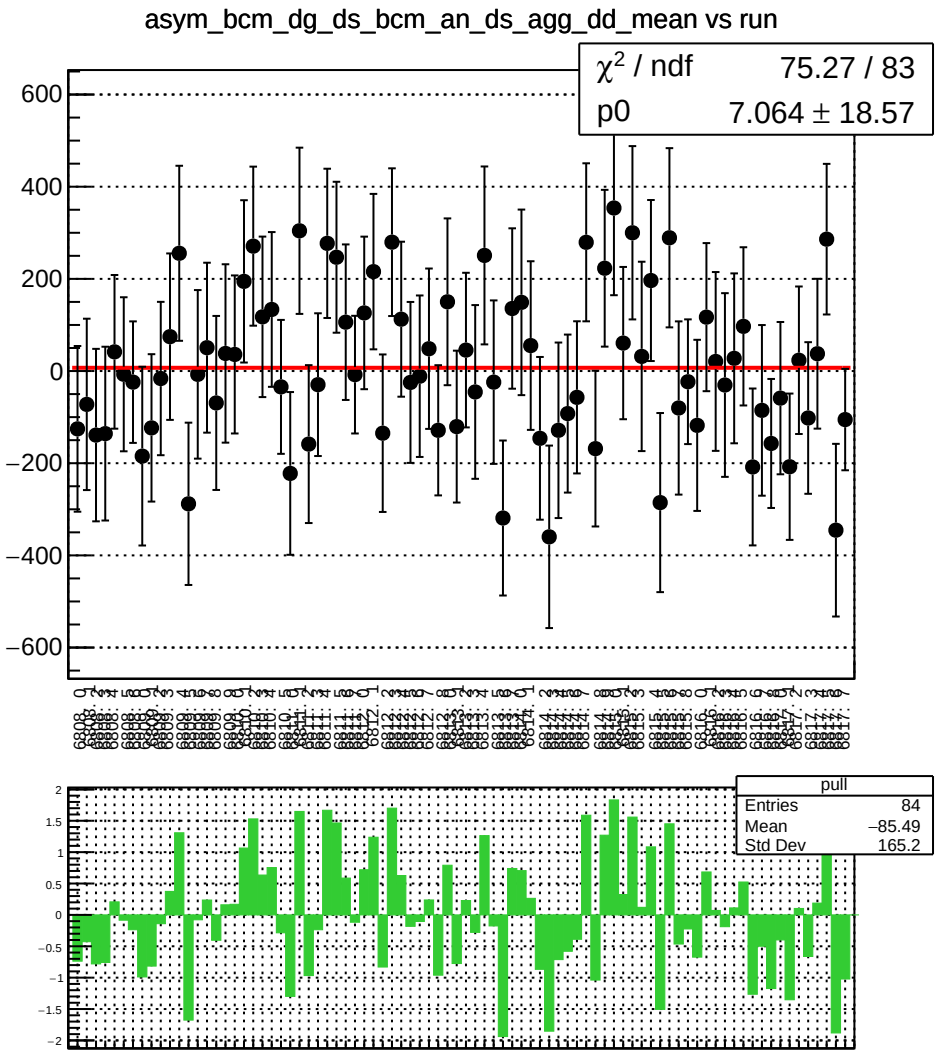

pull1D
Entries 84
Mean 0.006902
Std Dev 0.9861

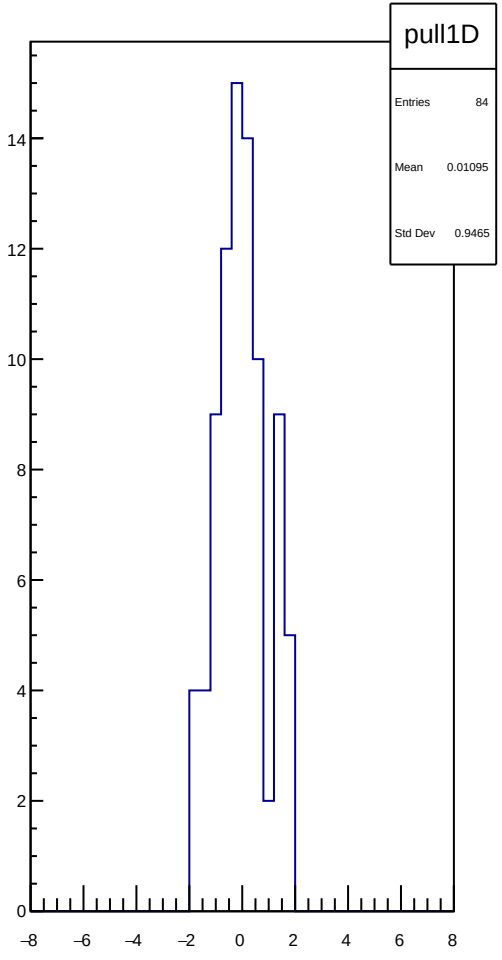

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2025 / 83
p0 22.19 ± 0.01752
25
24
23
22
21

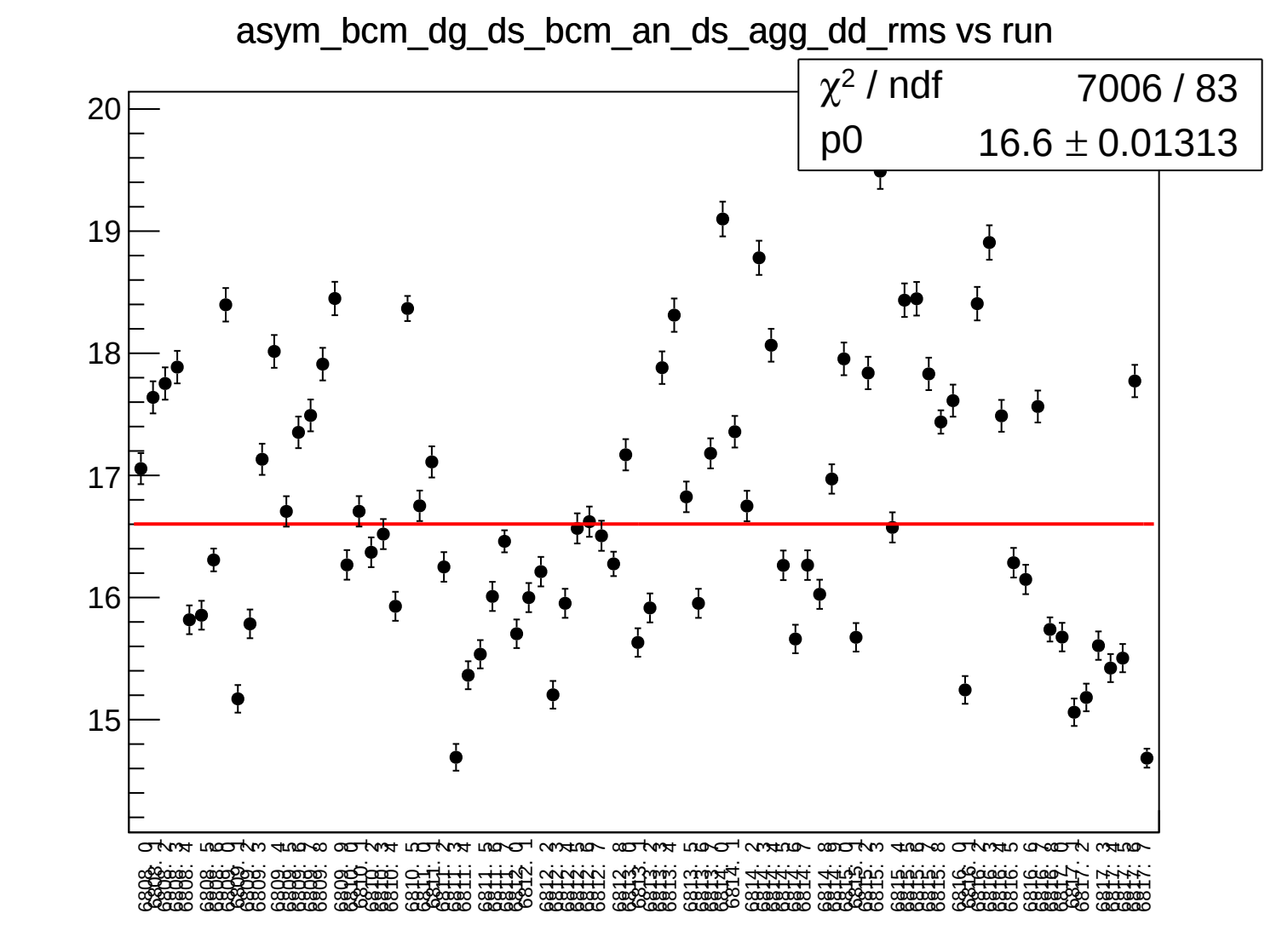

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 13.96 / 83
p0 332.4 ± 248.8
pull
Entries 84
Mean 194.3
Std Dev 145.5

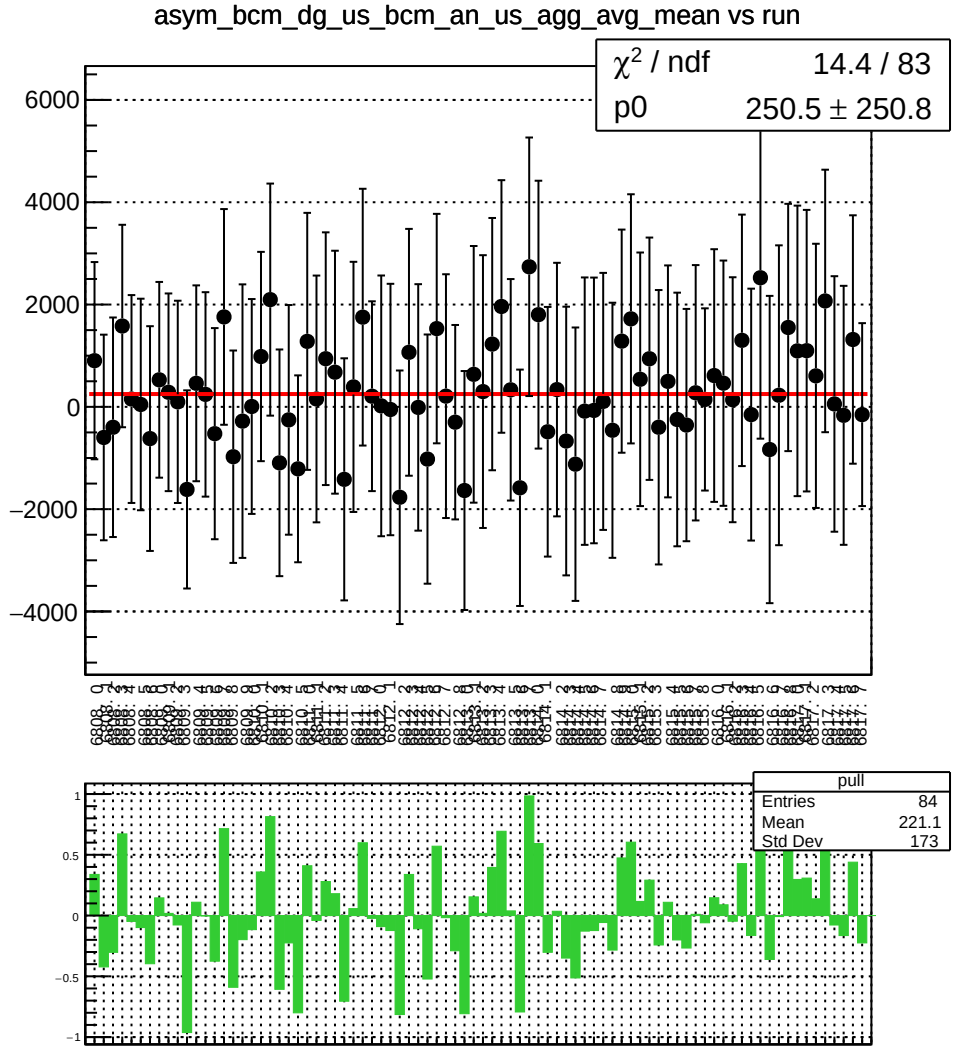

pull1D
Entries 84
Mean 0.007259
Std Dev 0.4077

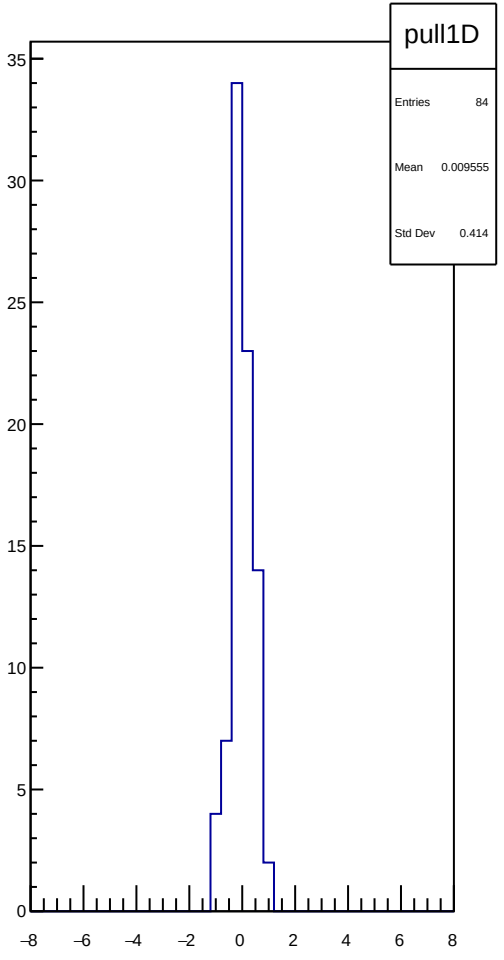

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.942e+04 / 83
p0 221.6 ± 0.1759
300
280
260
240
220
200
180

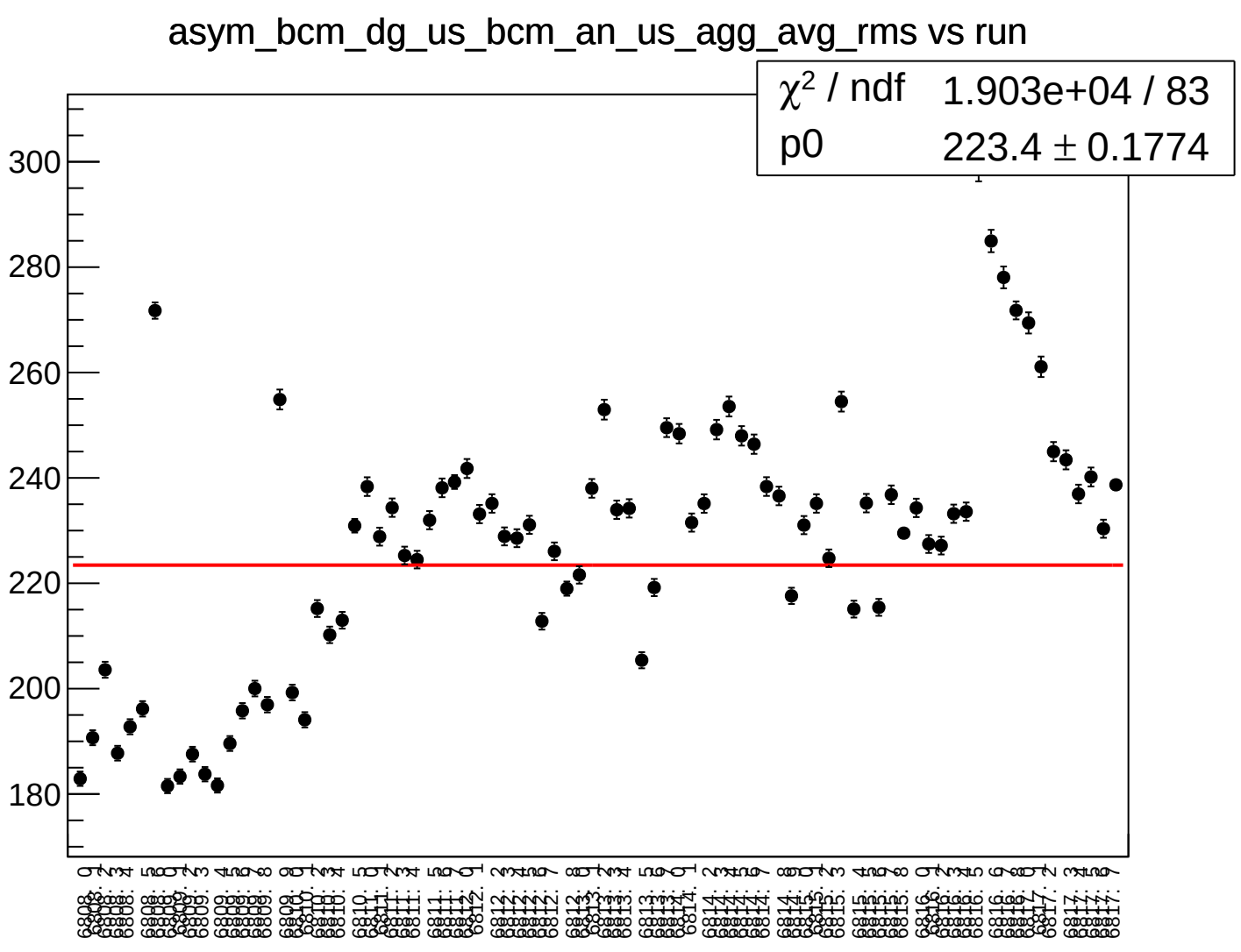

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.27 / 83
p0 7.064 ± 18.57
pull
Entries 84
Mean −85.49
Std Dev 165.2

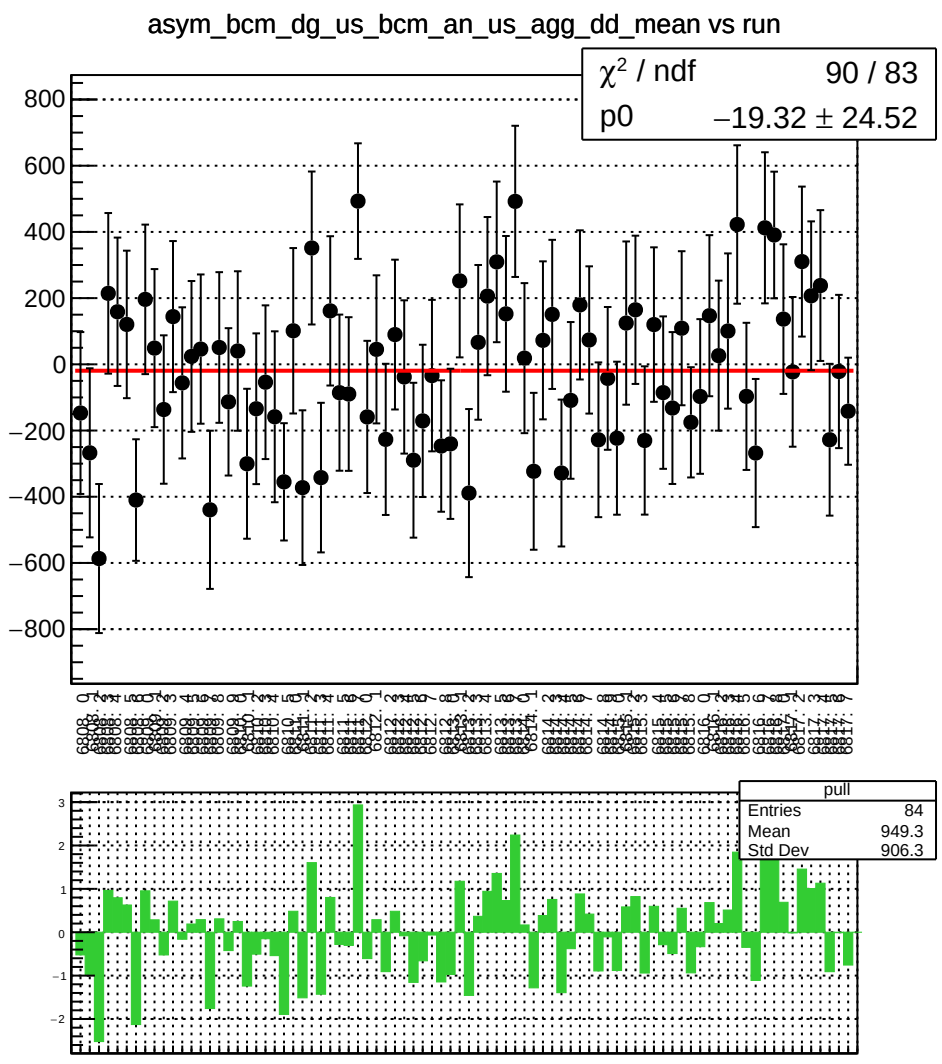

pull1D
Entries 84
Mean 0.01095
Std Dev 0.9465

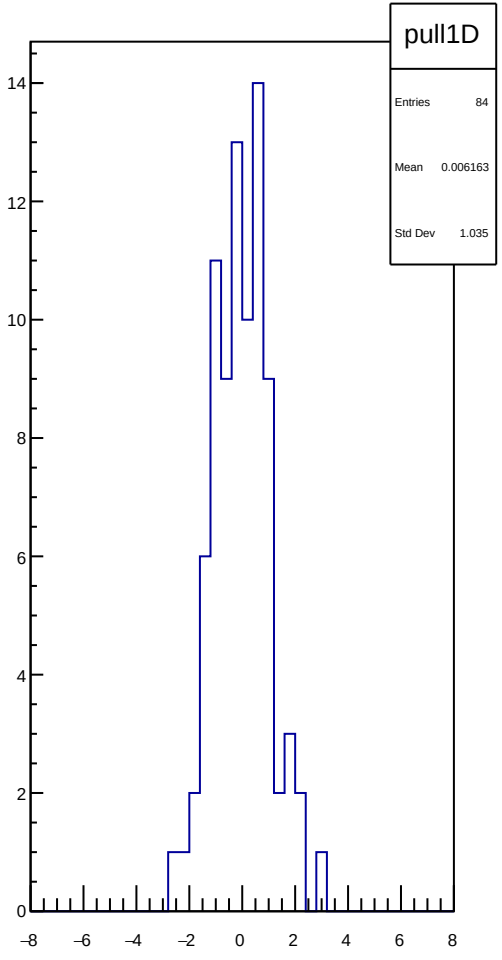

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 7006 / 83
p0 16.6 ± 0.01313
20
19
18
17
16
15

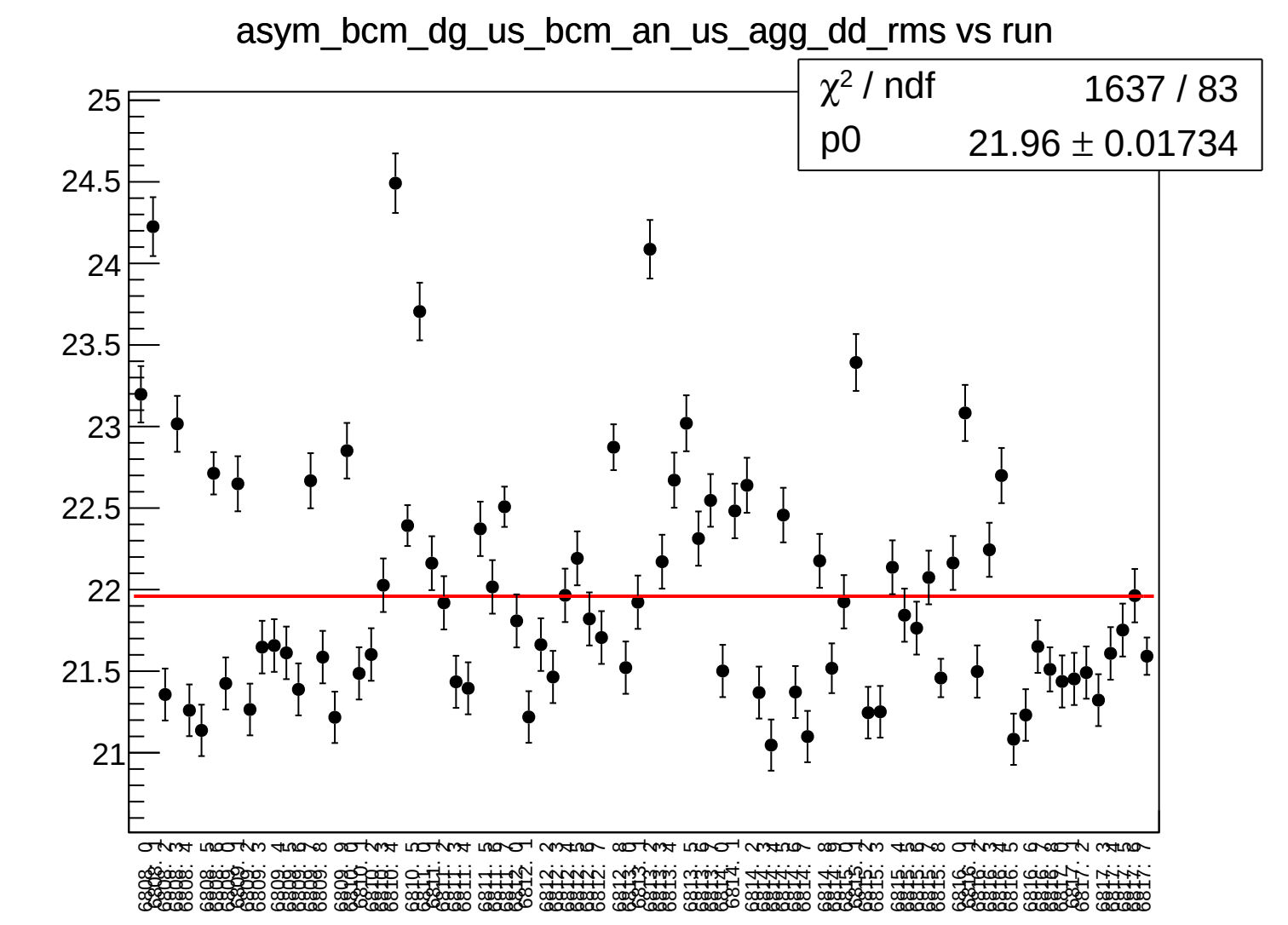

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.4 / 83
p0 250.5 ± 250.8
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 221.1
Std Dev 173
1
0.5
0
−0.5
−1

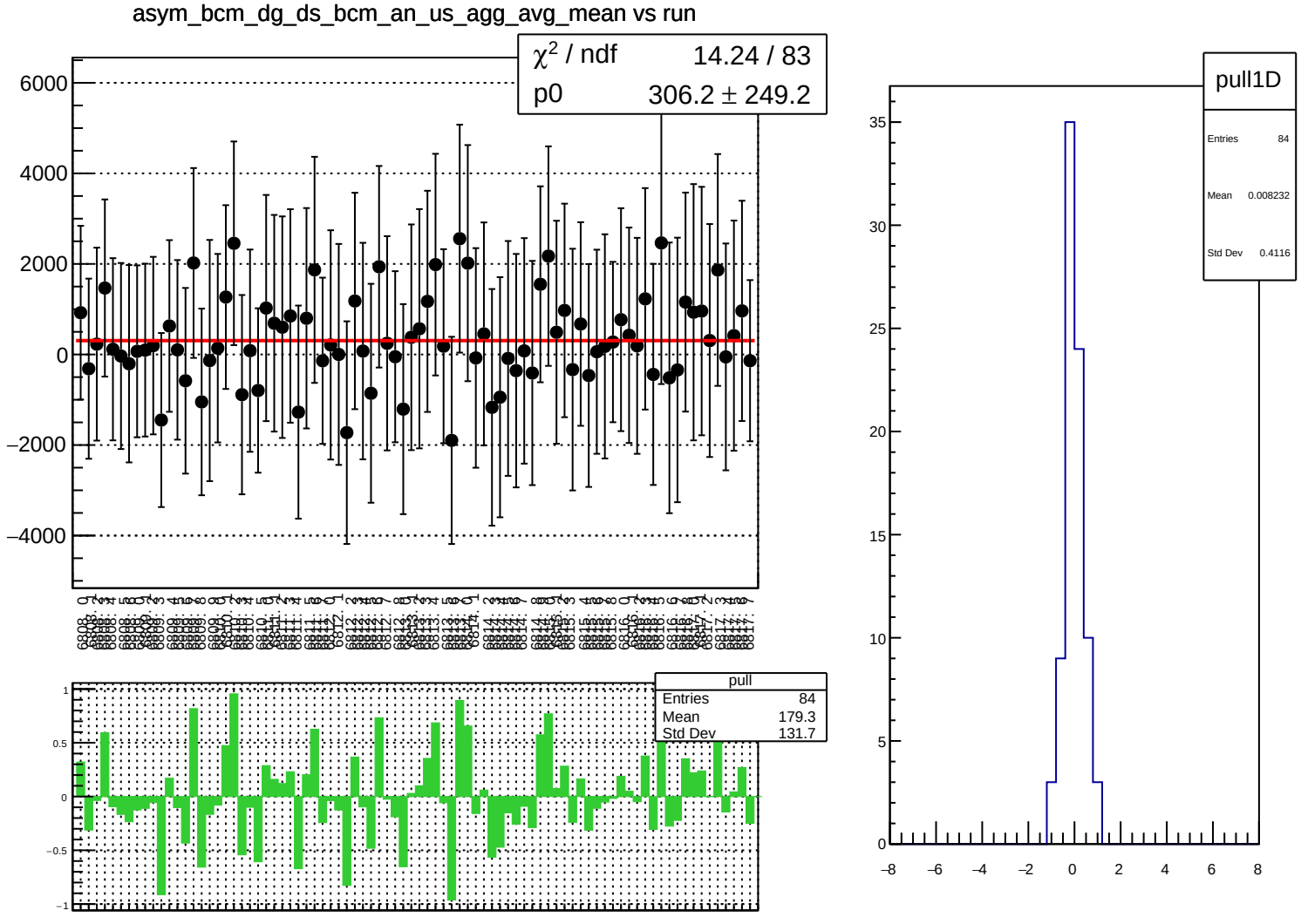

pull1D
Entries 84
Mean 0.009555
Std Dev 0.414
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

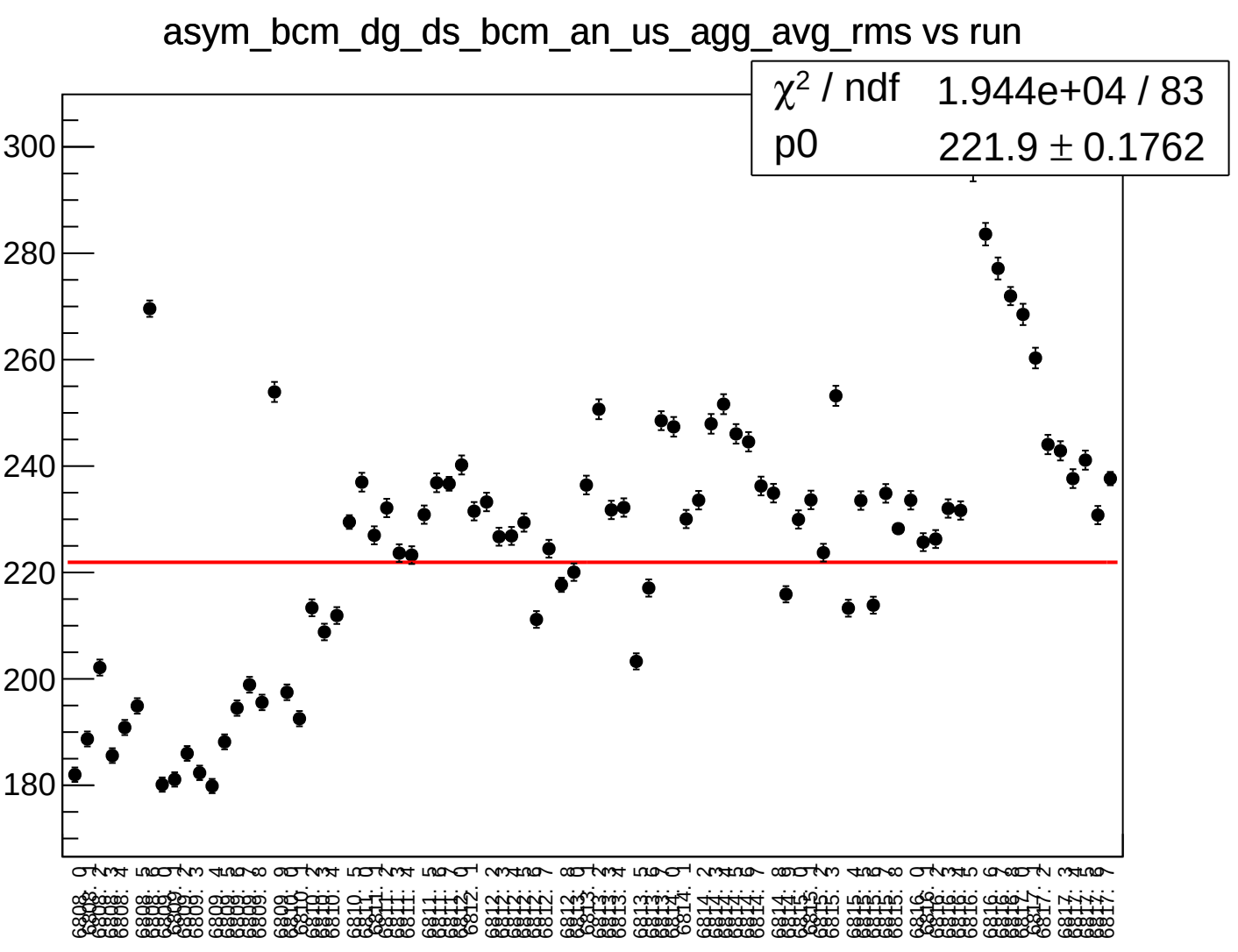

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.903e+04 / 83
p0 223.4 ± 0.1774
300
280
260
240
220
200
180

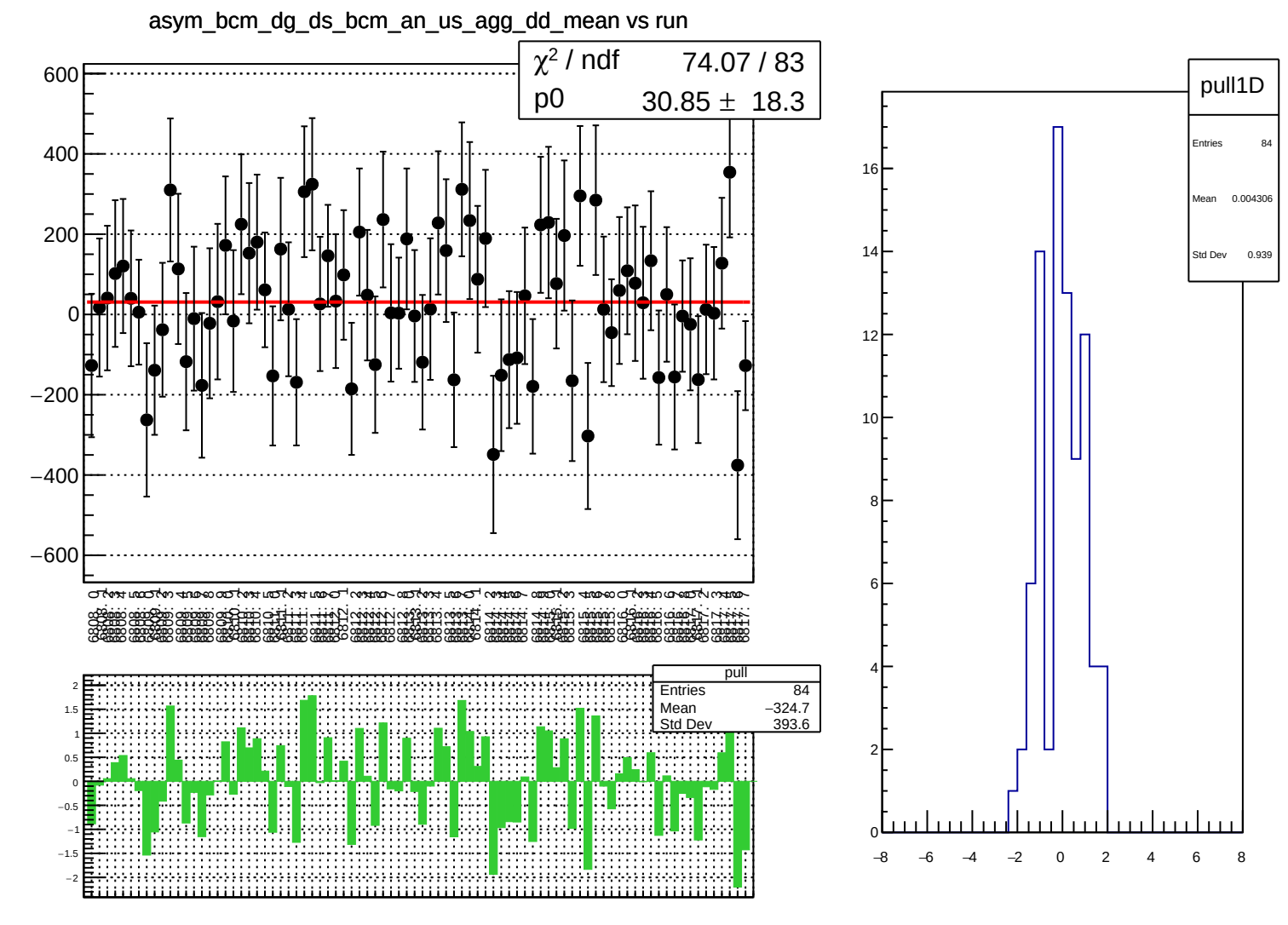

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 90 / 83
p0 −19.32 ± 24.52
pull
Entries 84
Mean 949.3
Std Dev 906.3

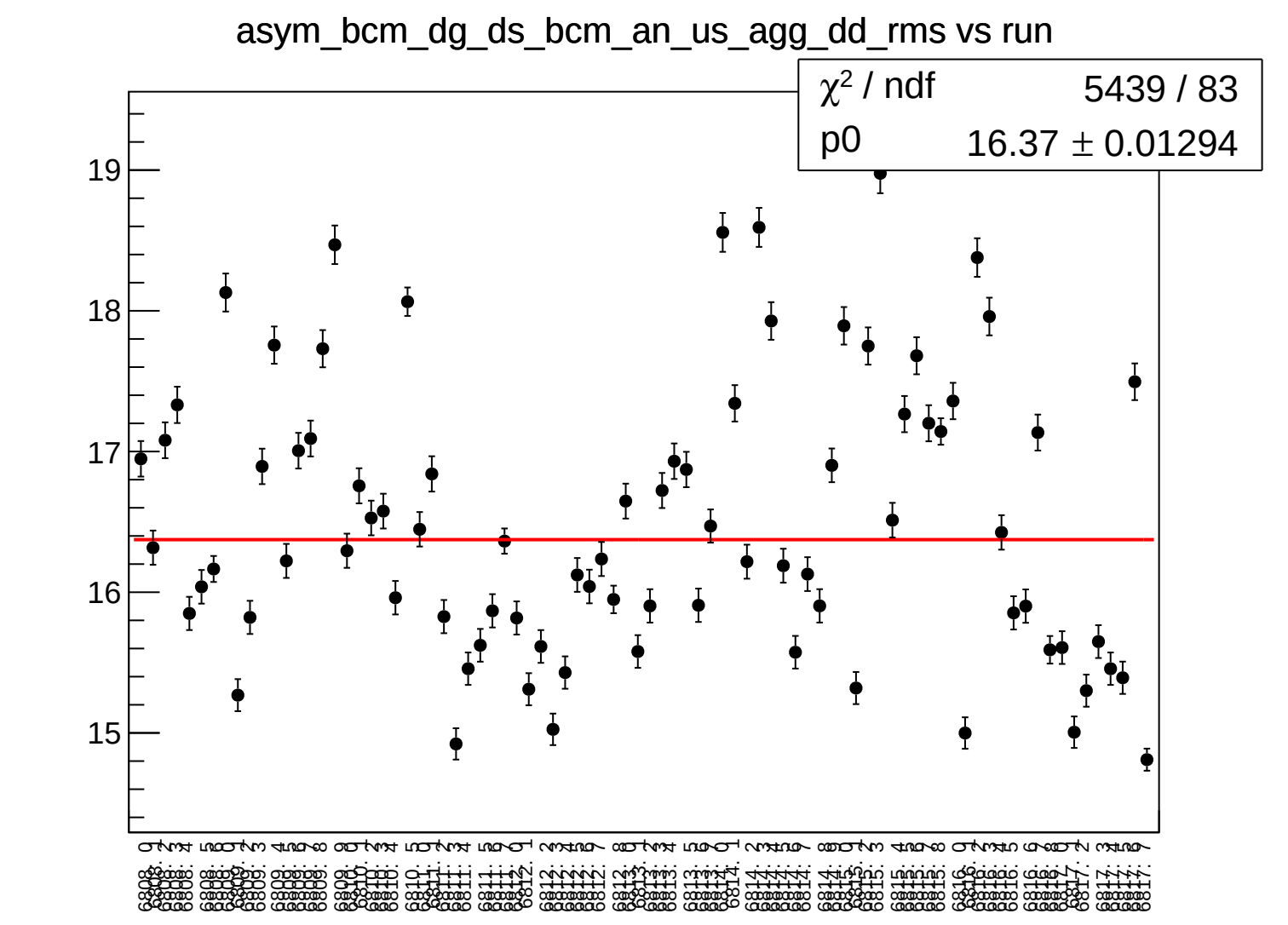

pull1D
Entries 84
Mean 0.006163
Std Dev 1.035

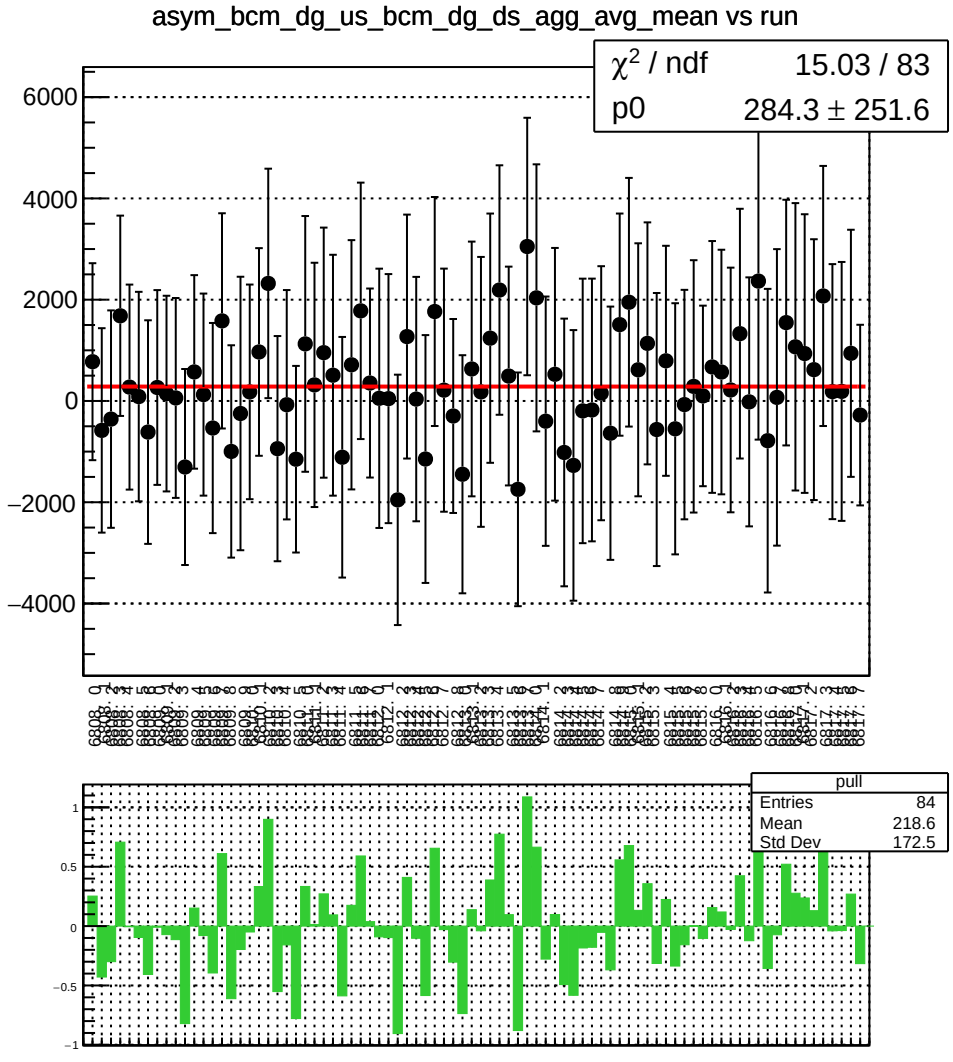

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1637 / 83
p0 21.96 ± 0.01734
25
24.5
24
23.5
23
22.5
22
21.5
21

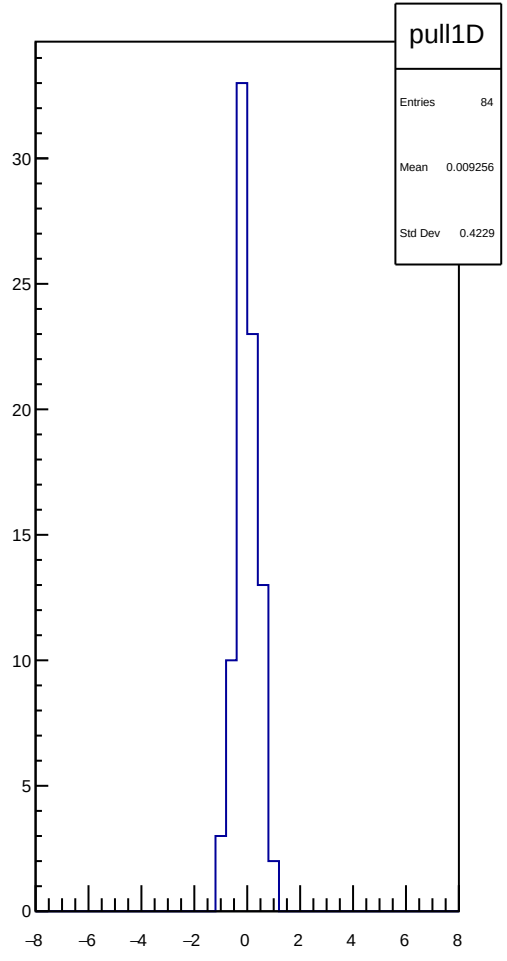

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.24 / 83
p0 306.2 ± 249.2
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 179.3
Std Dev 131.7
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean 0.008232
Std Dev 0.4116
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

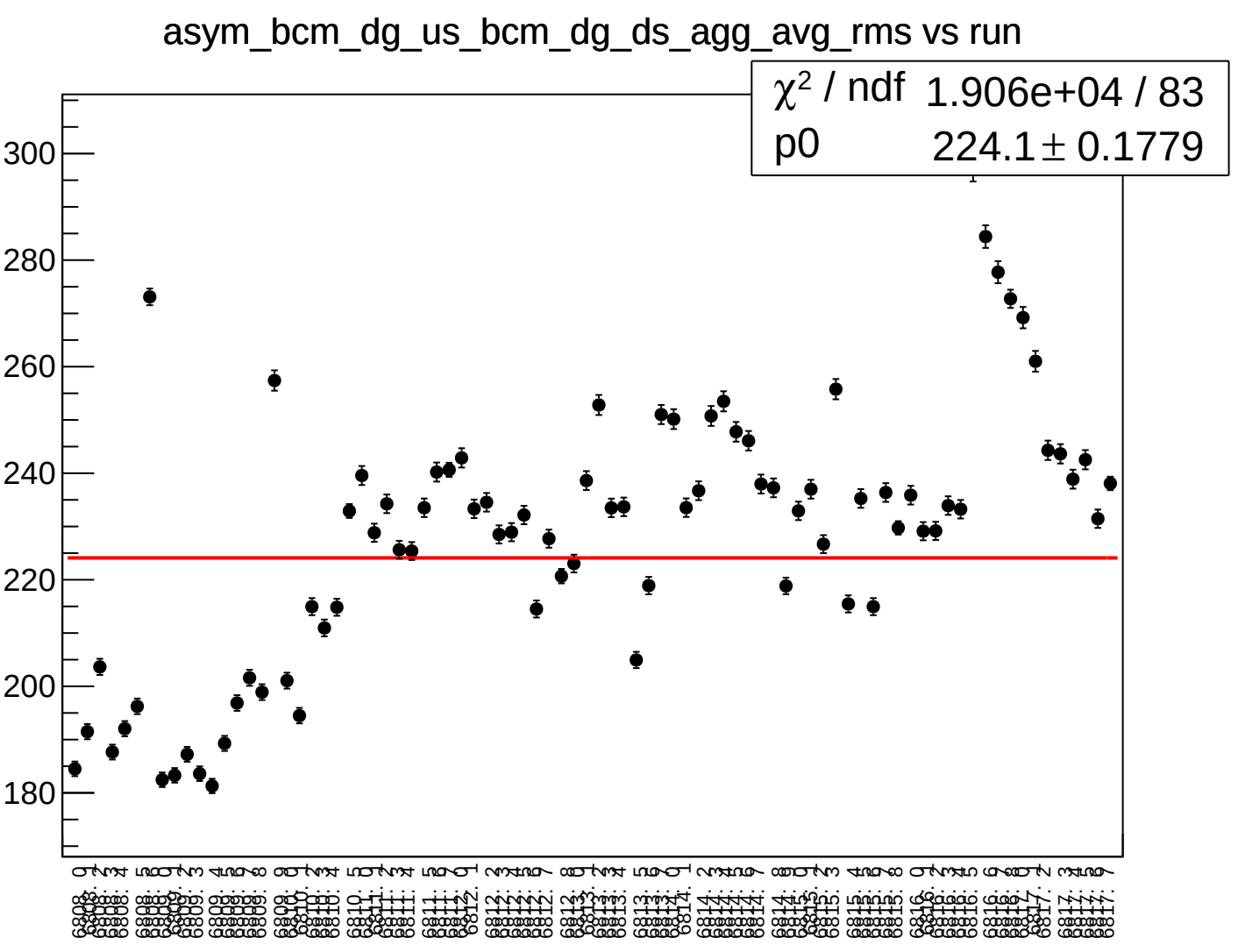

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.944e+04 / 83
p0 221.9 ± 0.1762
300
280
260
240
220
200
180

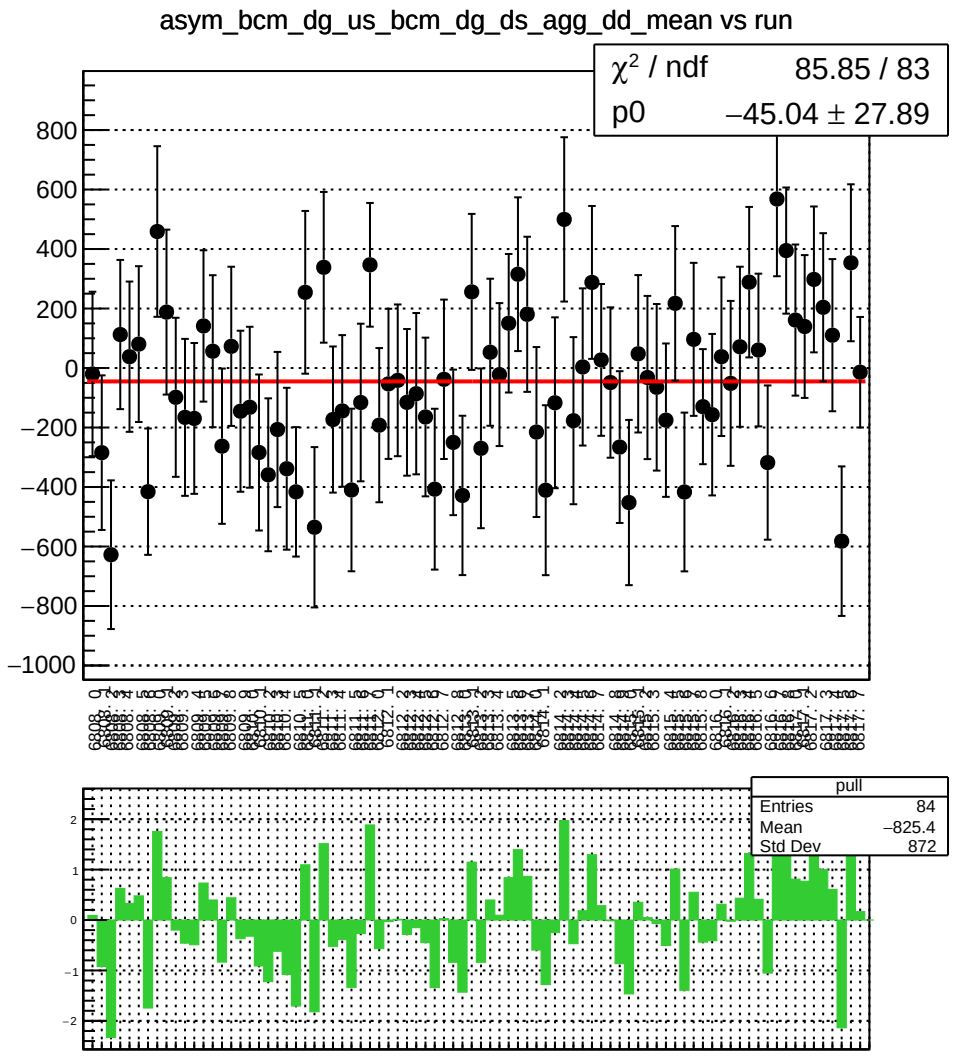

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 74.07 / 83
p0 30.85 ± 18.3
pull
Entries 84
Mean −324.7
Std Dev 393.6
pull1D
Entries 84
Mean 0.004306
Std Dev 0.939

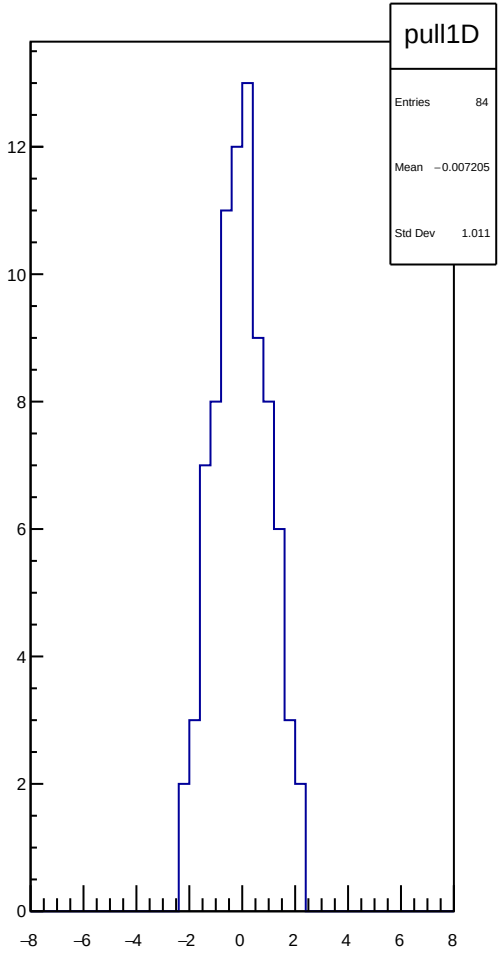

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5439 / 83
p0 16.37 ± 0.01294
19
18
17
16
15

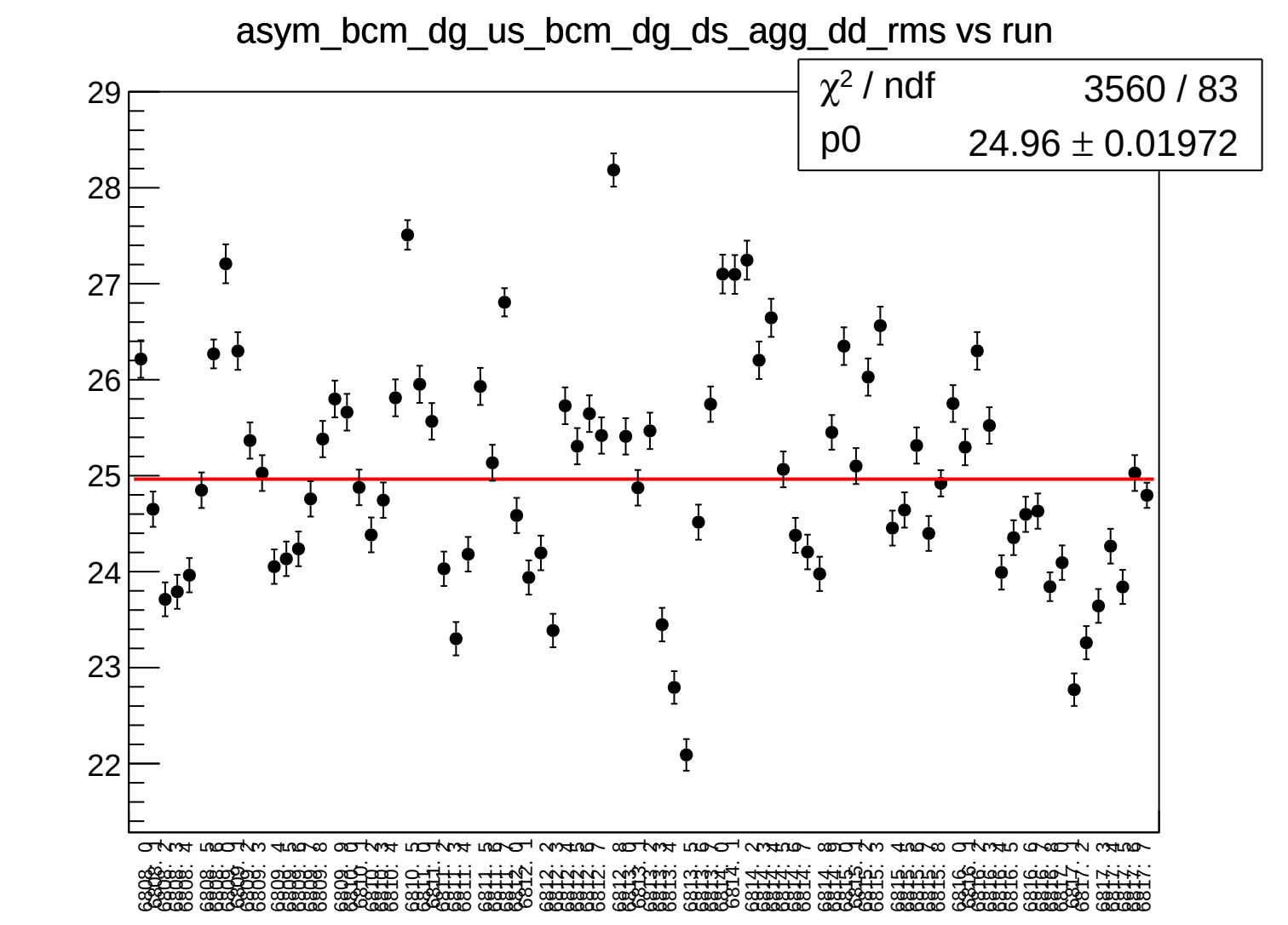

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.03 / 83
p0 284.3 ± 251.6
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 218.6
Std Dev 172.5
1
0.5
0
−0.5
−1

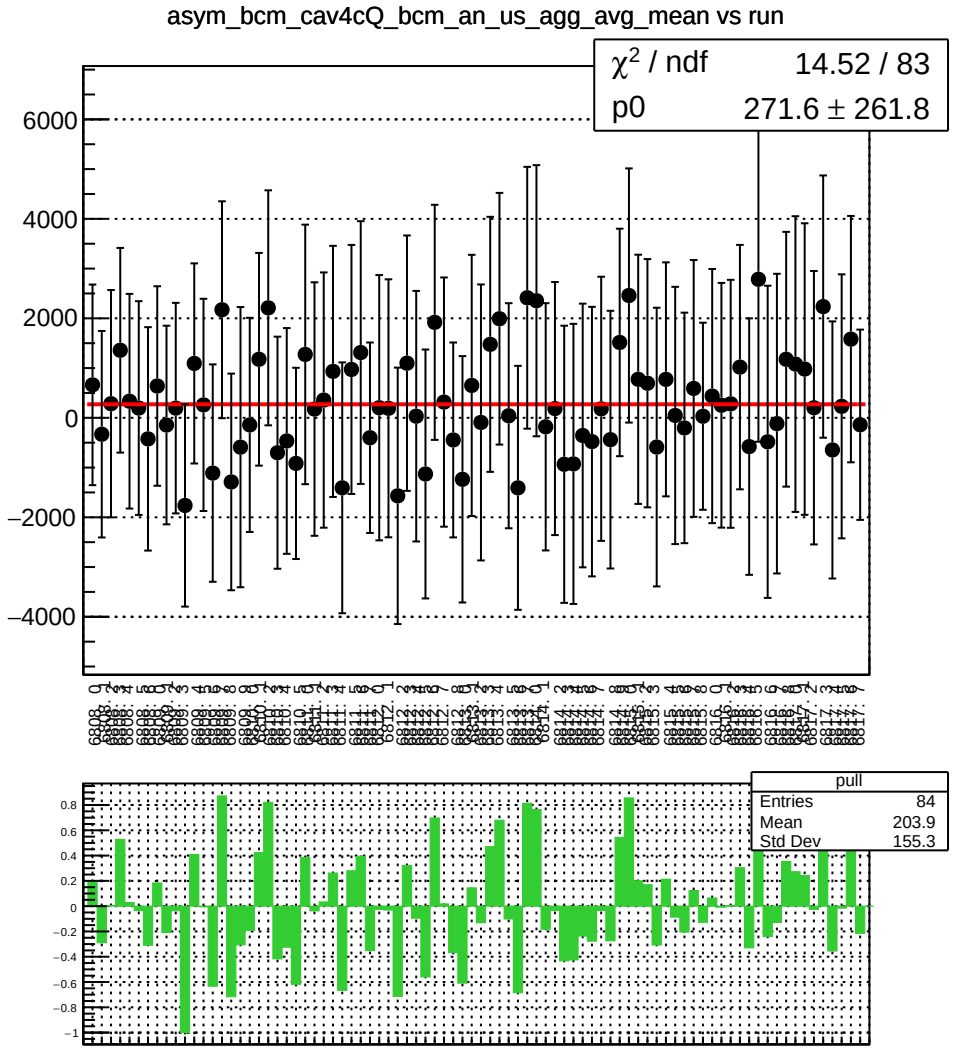

pull1D
Entries 84
Mean 0.009256
Std Dev 0.4229
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

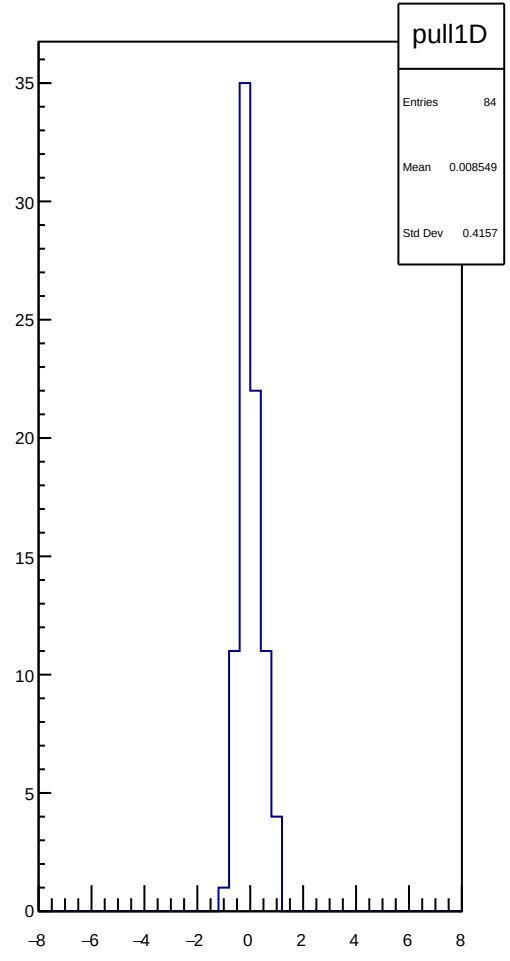

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.906e+04 / 83
p0 224.1 ± 0.1779
300
280
260
240
220
200
180

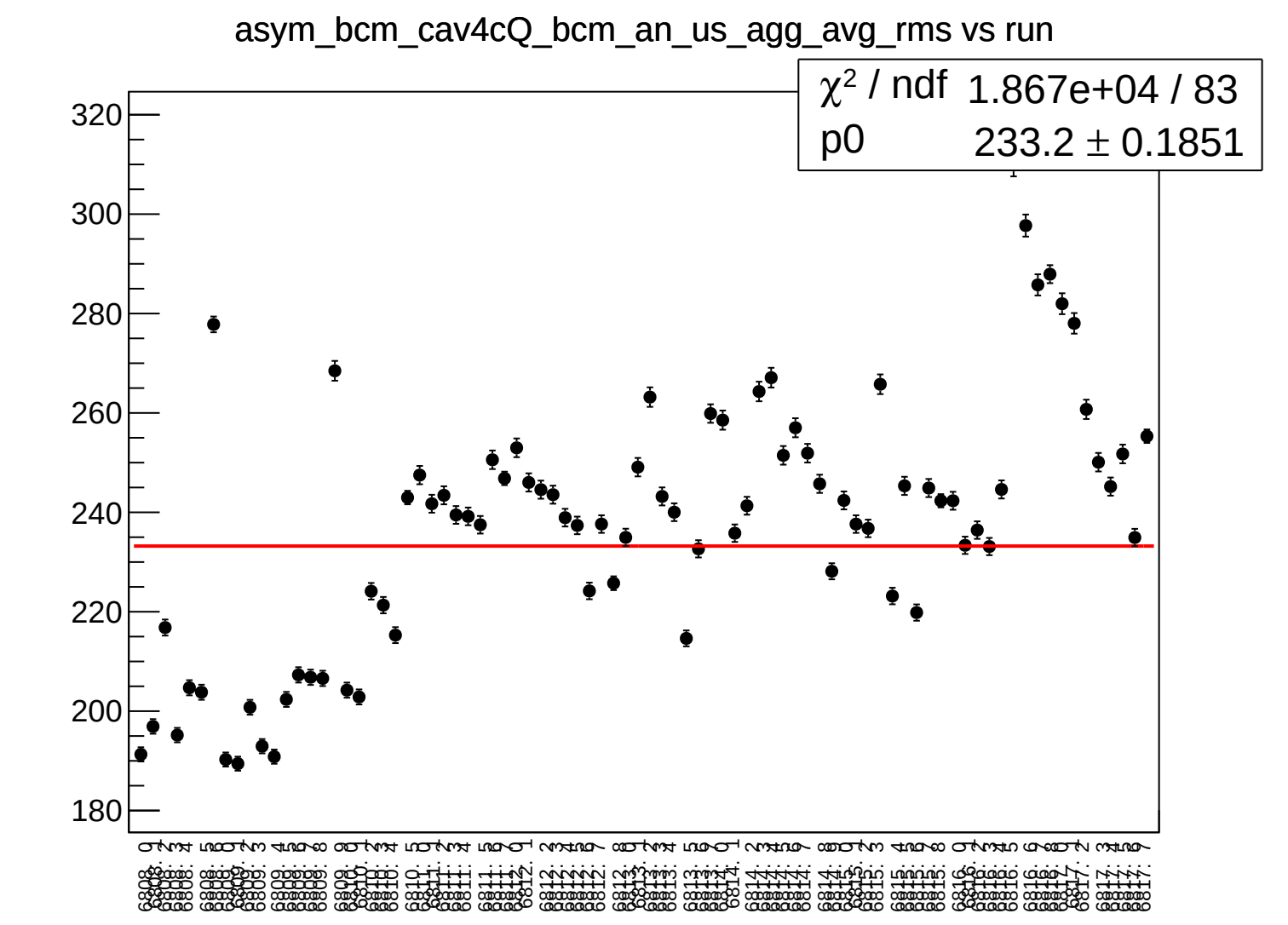

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 85.85 / 83
p0 −45.04 ± 27.89
pull
Entries 84
Mean −825.4
Std Dev 872

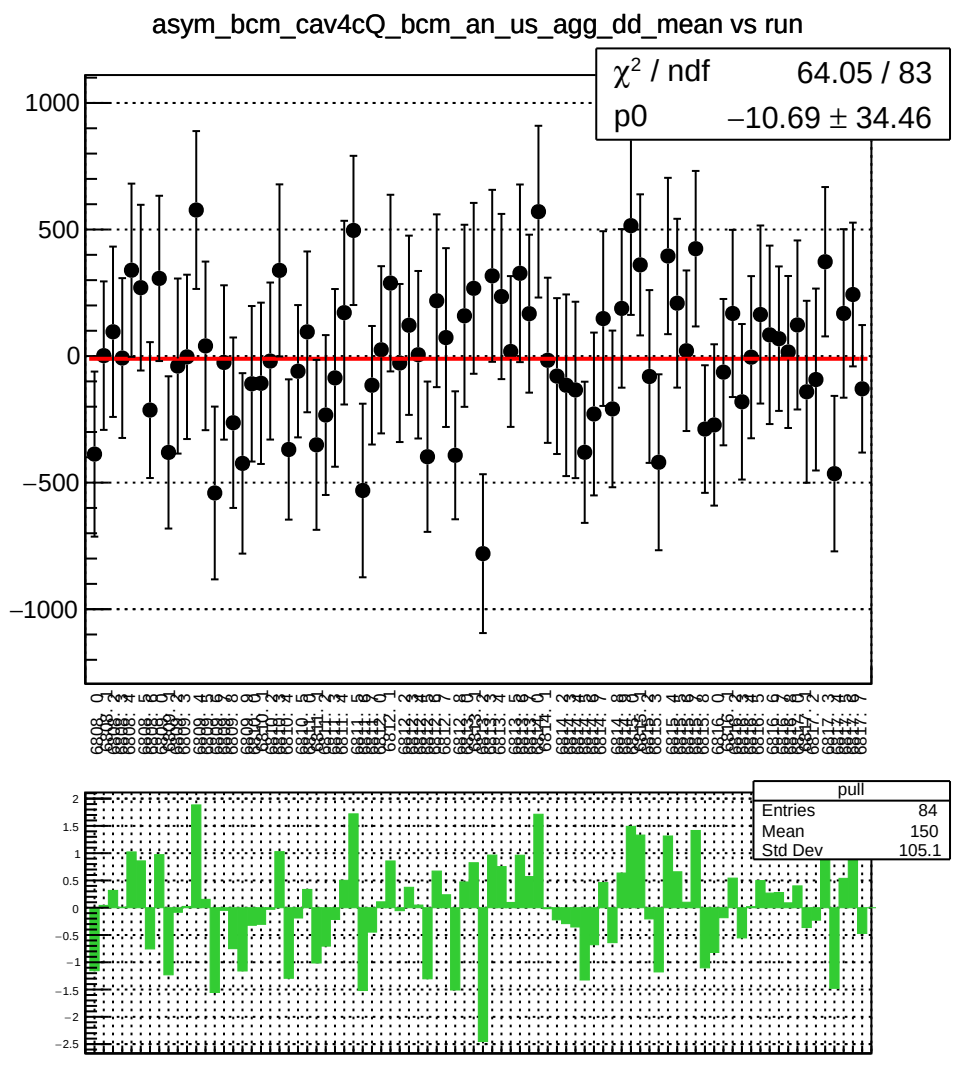

pull1D
Entries 84
Mean −0.007205
Std Dev 1.011

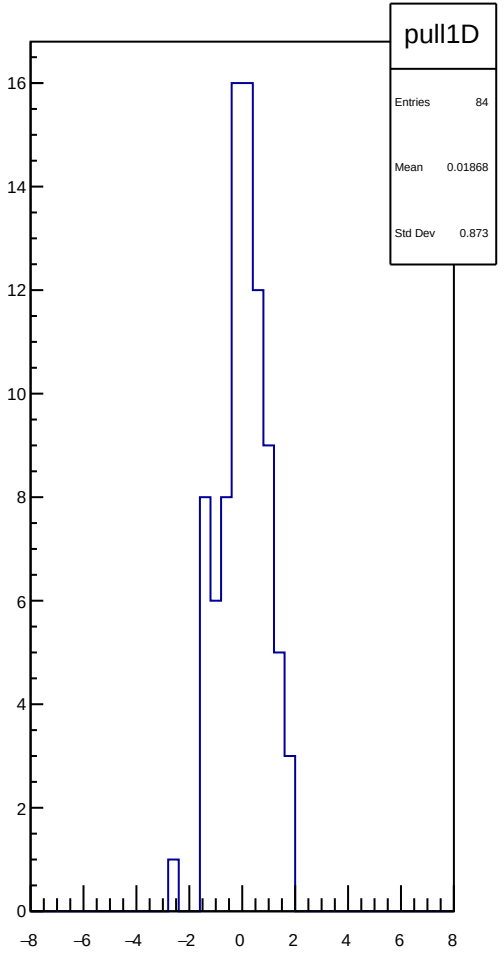

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3560 / 83
p0 24.96 ± 0.01972
29
28
27
26
25
24
23
22

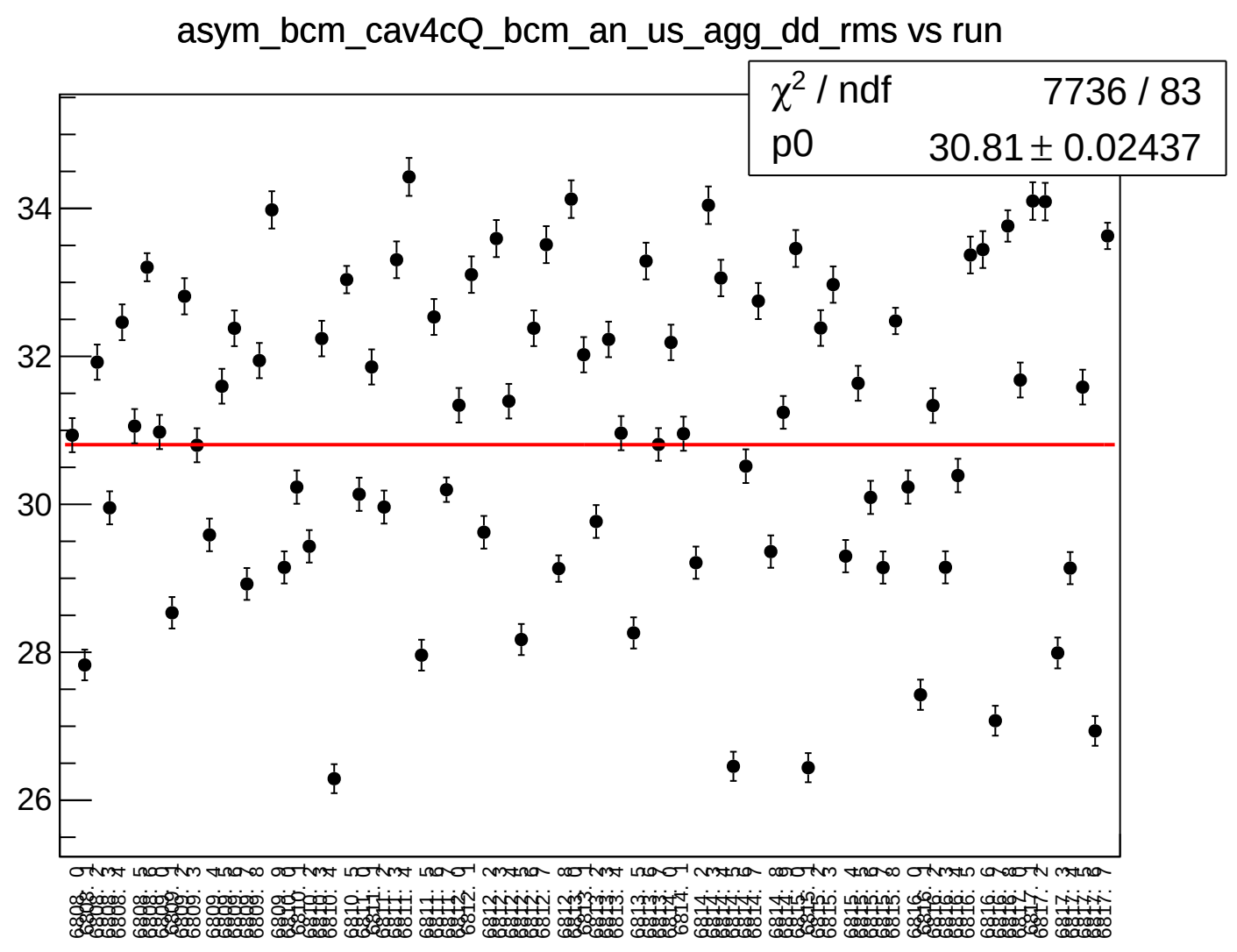

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.52 / 83
p0 271.6 ± 261.8
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 203.9
Std Dev 155.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

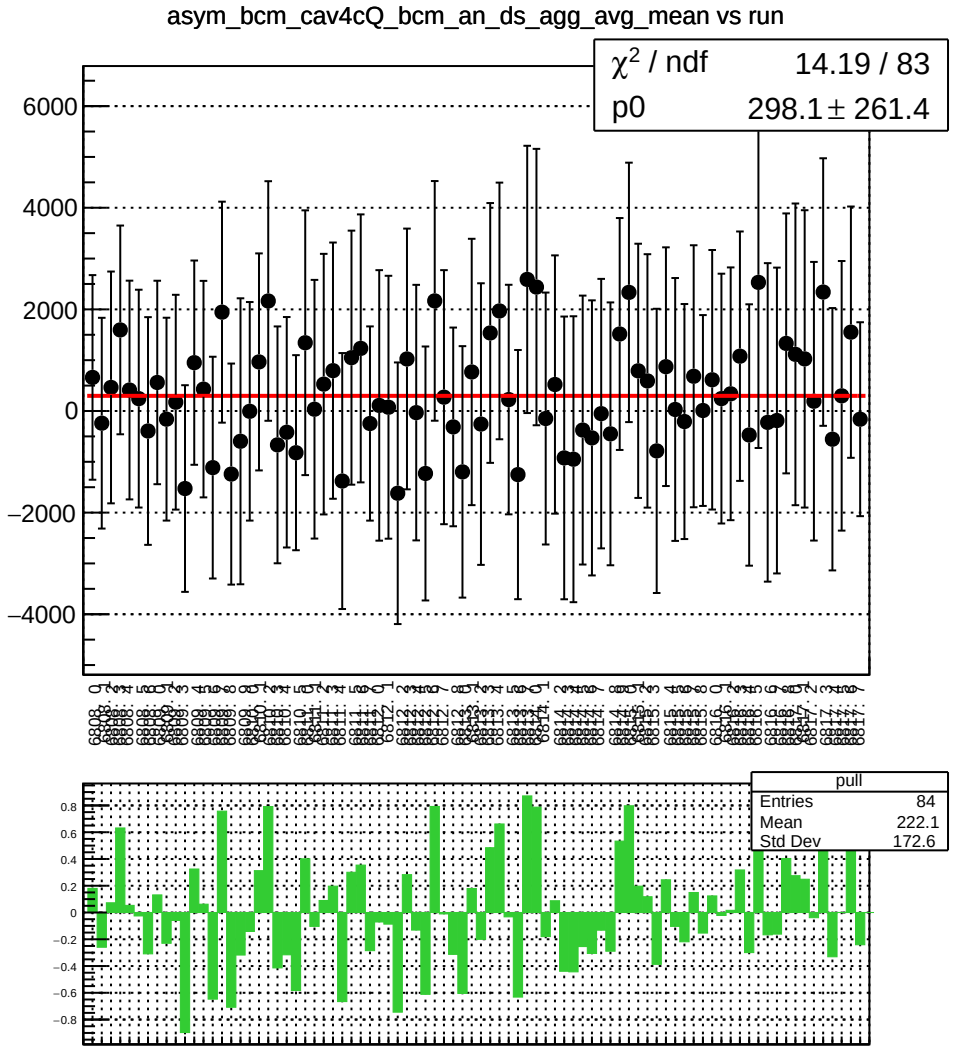

pull1D
Entries 84
Mean 0.008549
Std Dev 0.4157
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

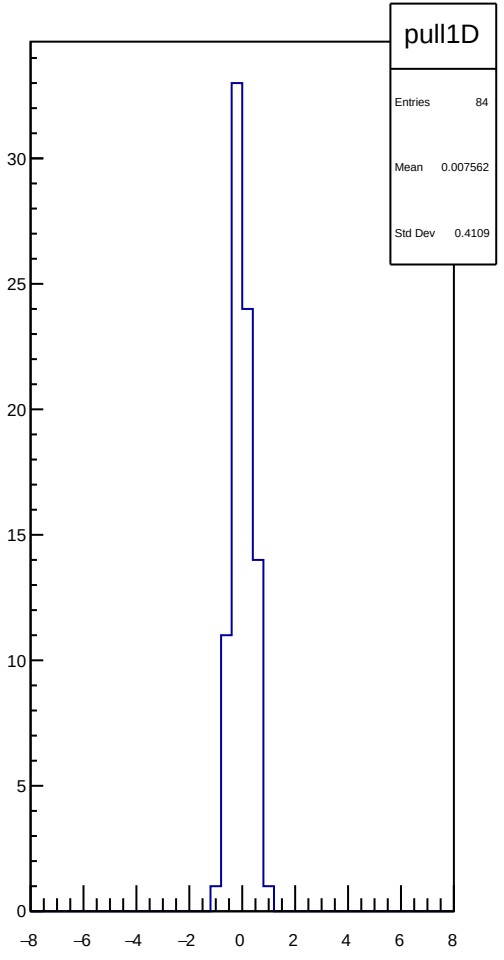

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.867e+04 / 83
p0 233.2 ± 0.1851
320
300
280
260
240
220
200
180

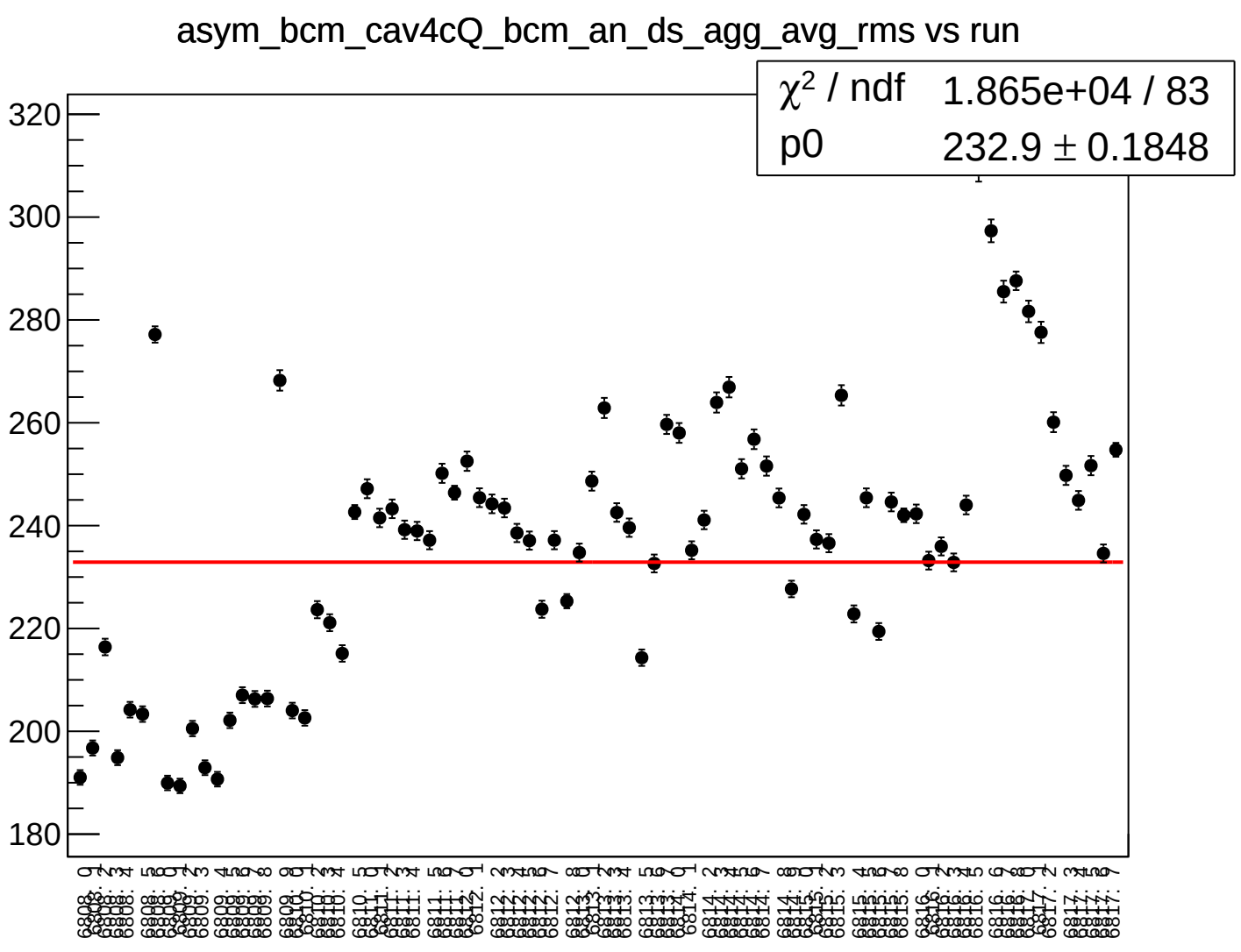

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 64.05 / 83
p0 −10.69 ± 34.46
1000
500
0
−500
−1000
pull
Entries 84
Mean 150
Std Dev 105.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

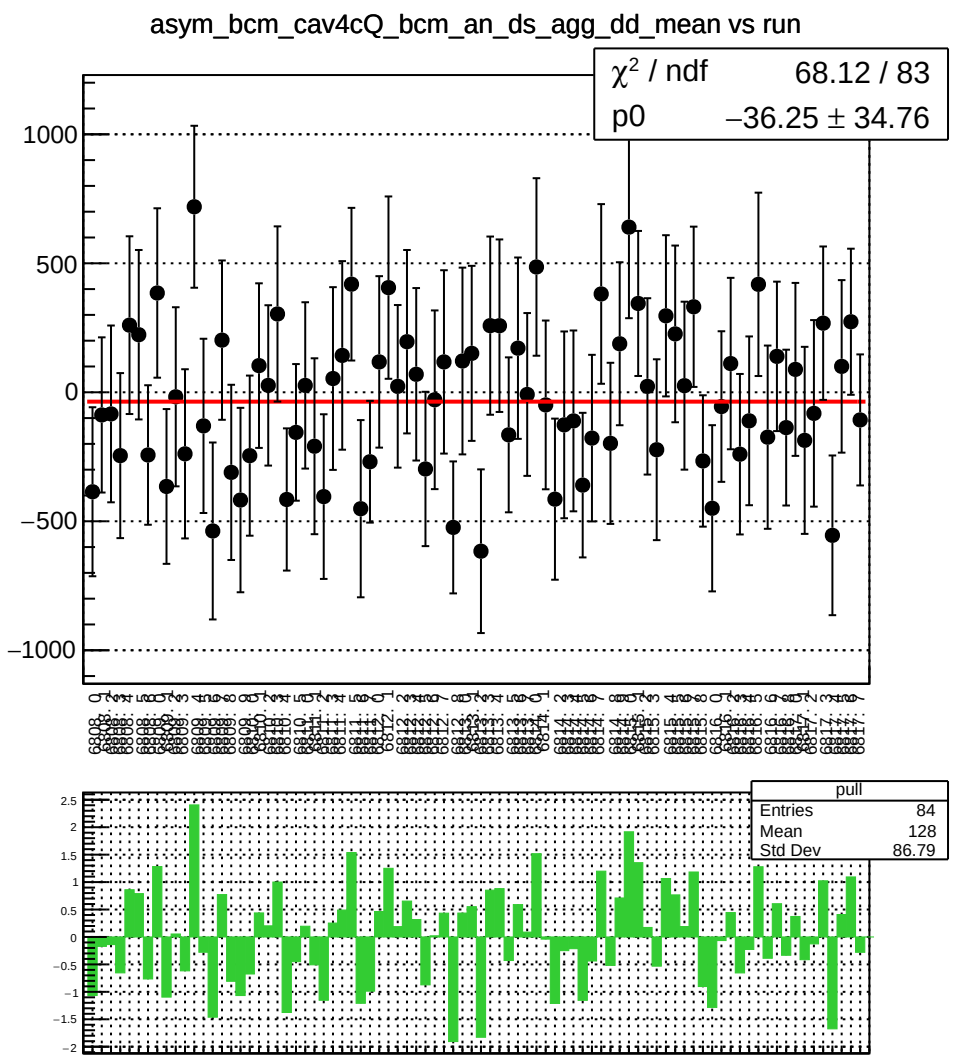

pull1D
Entries 84
Mean 0.01868
Std Dev 0.873
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

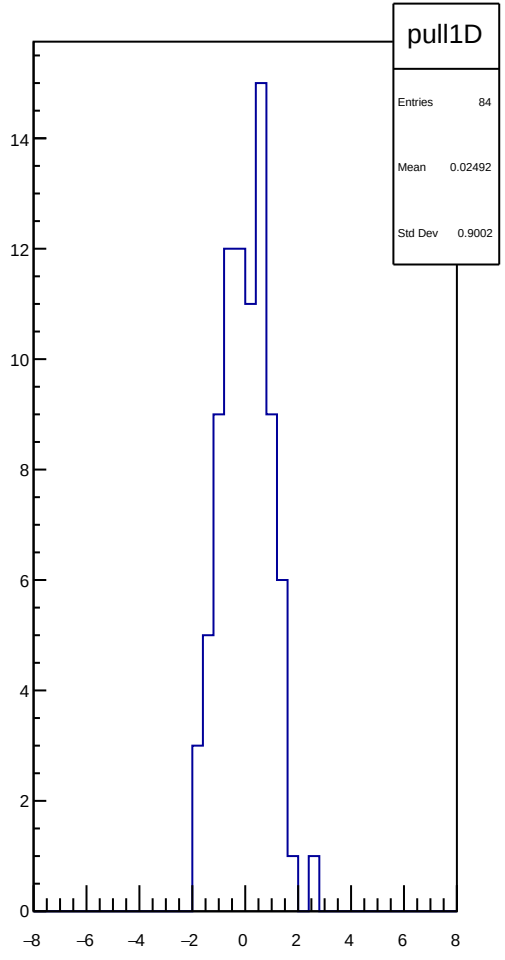

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 7736 / 83
p0 30.81 ± 0.02437
34
32
30
28
26

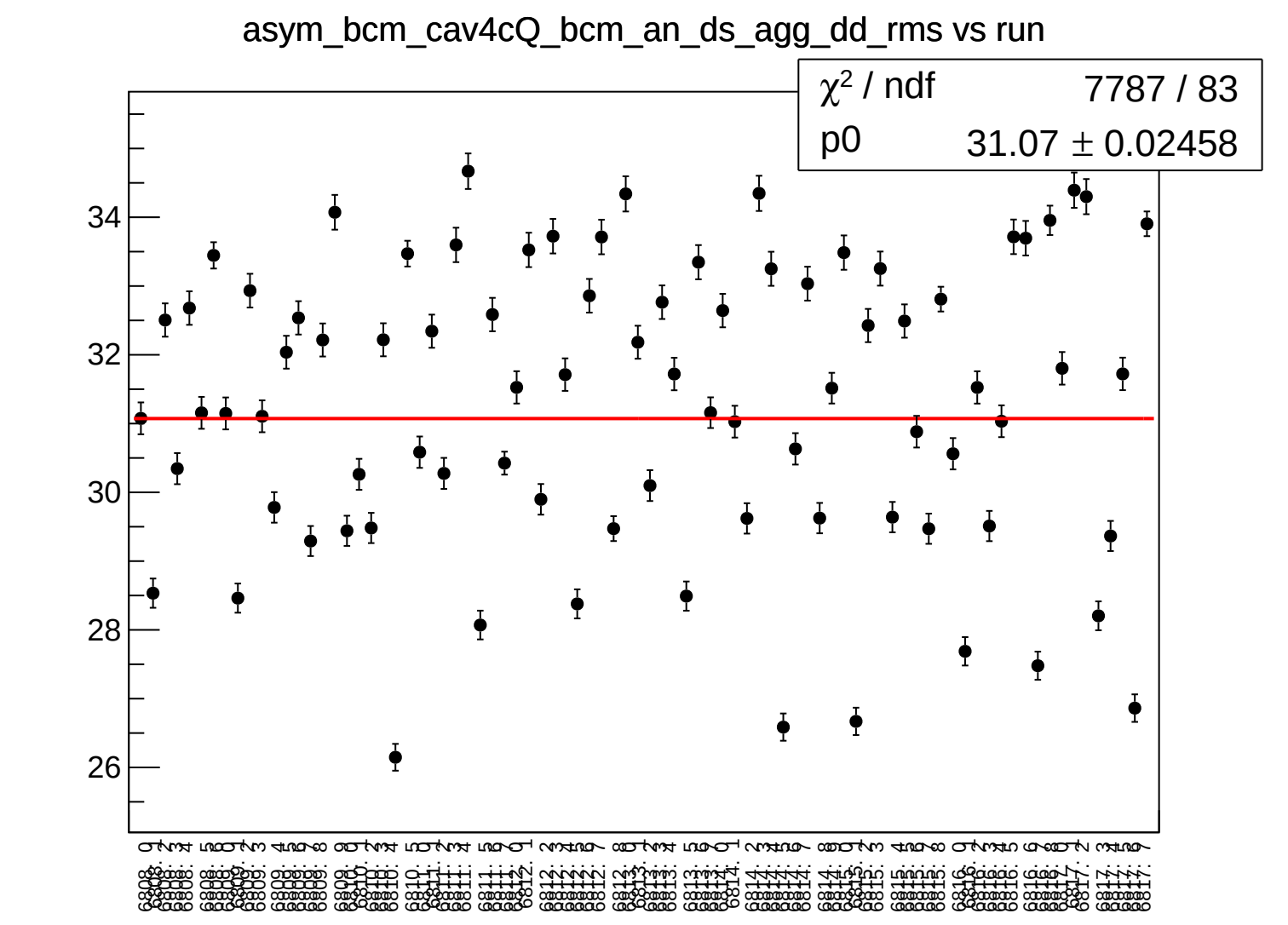

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.19 / 83
p0 298.1 ± 261.4
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 222.1
Std Dev 172.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

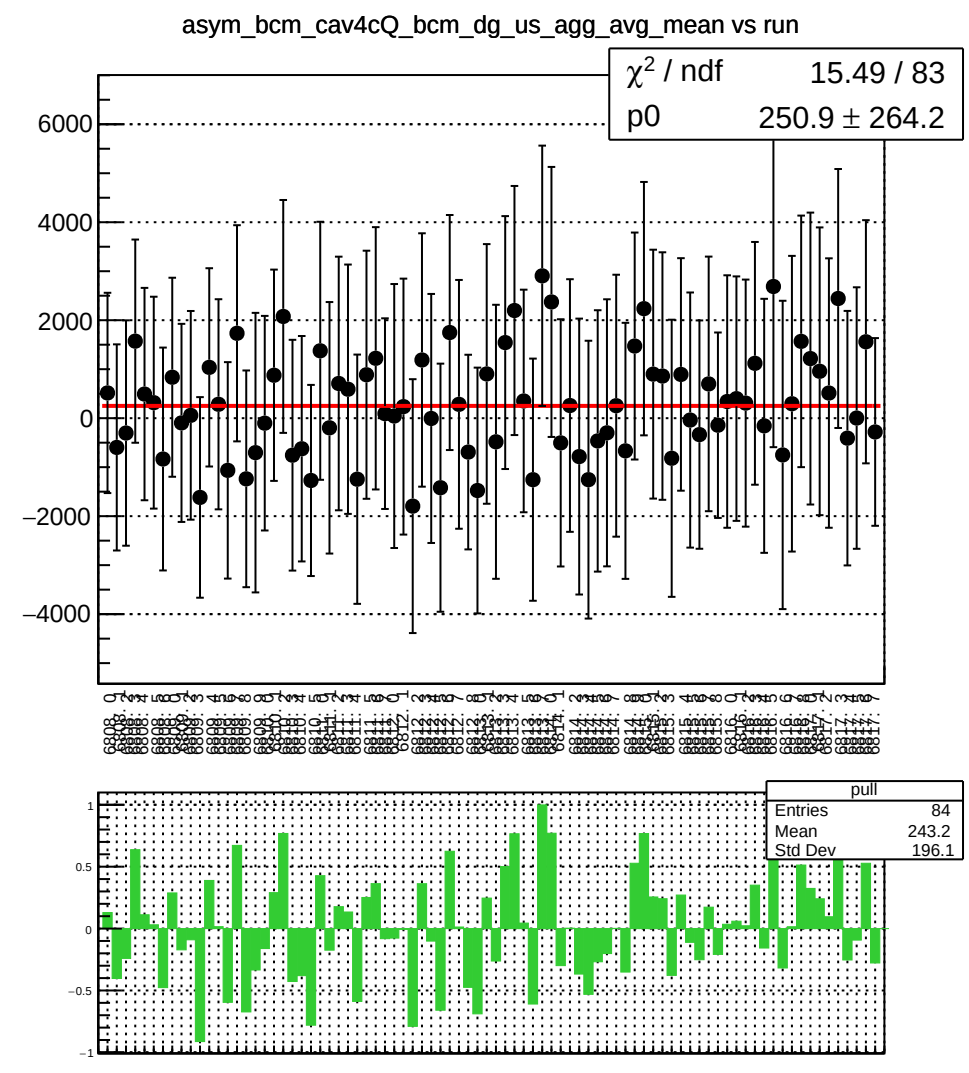

pull1D
Entries 84
Mean 0.007562
Std Dev 0.4109
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

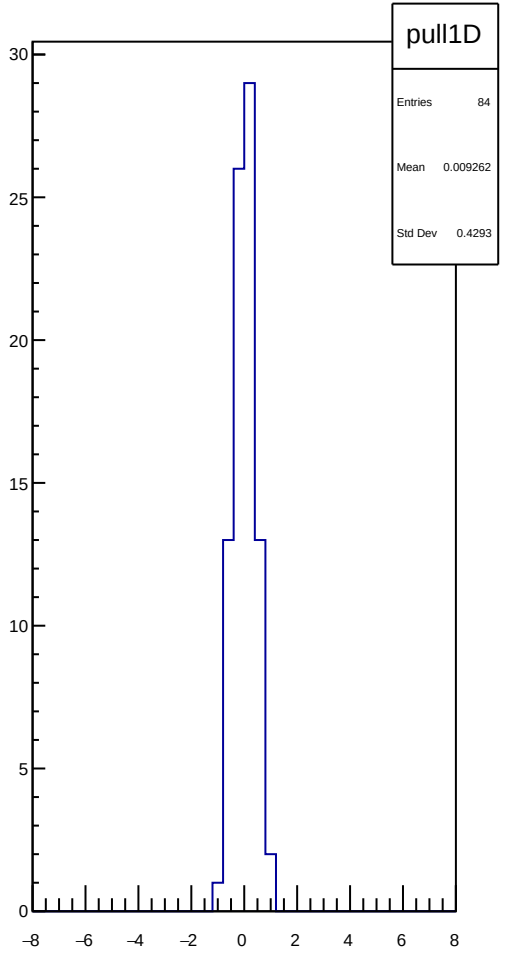

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.865e+04 / 83
p0 232.9 ± 0.1848
320
300
280
260
240
220
200
180

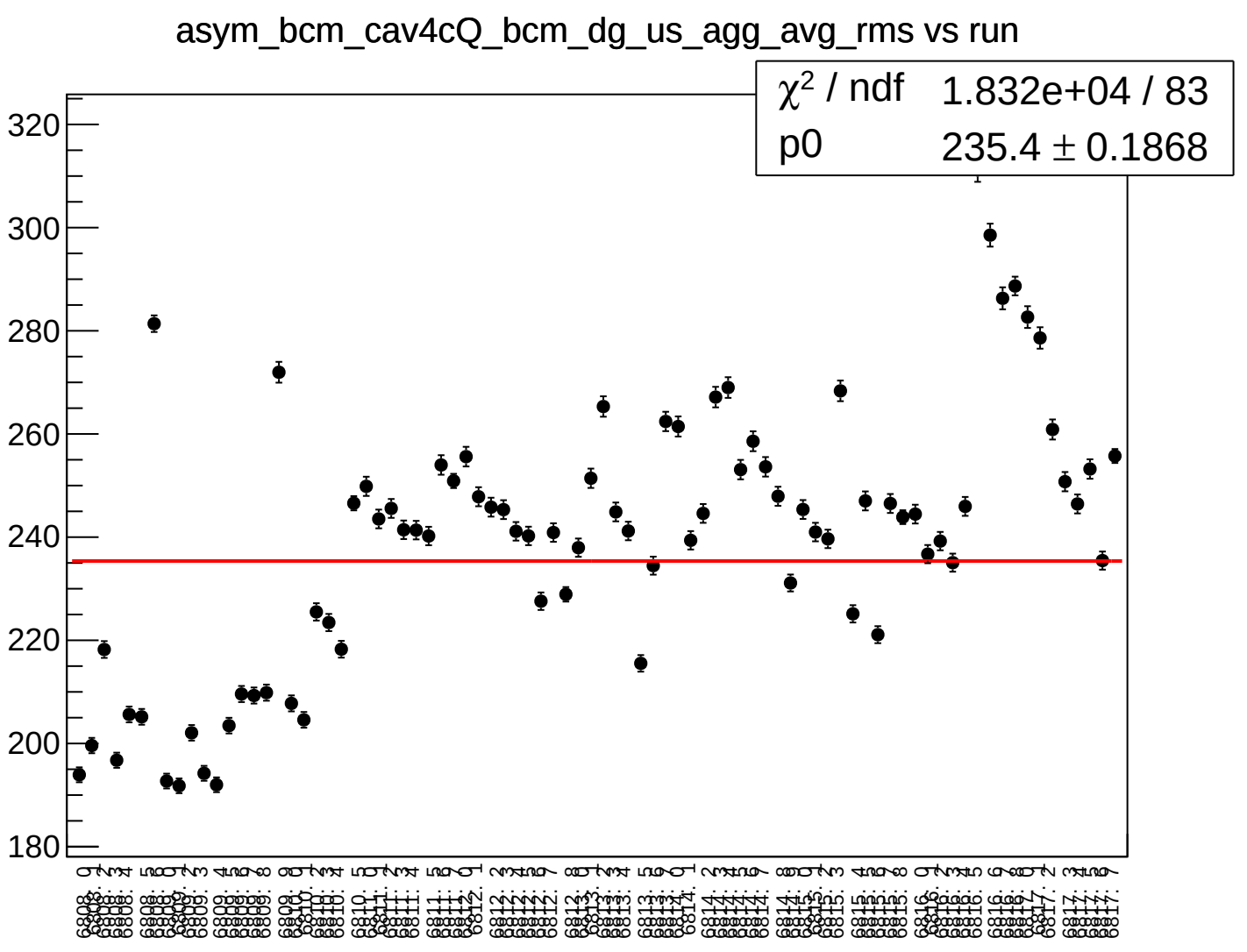

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.12 / 83
p0 −36.25 ± 34.76
1000
500
0
−500
−1000
pull
Entries 84
Mean 128
Std Dev 86.79
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

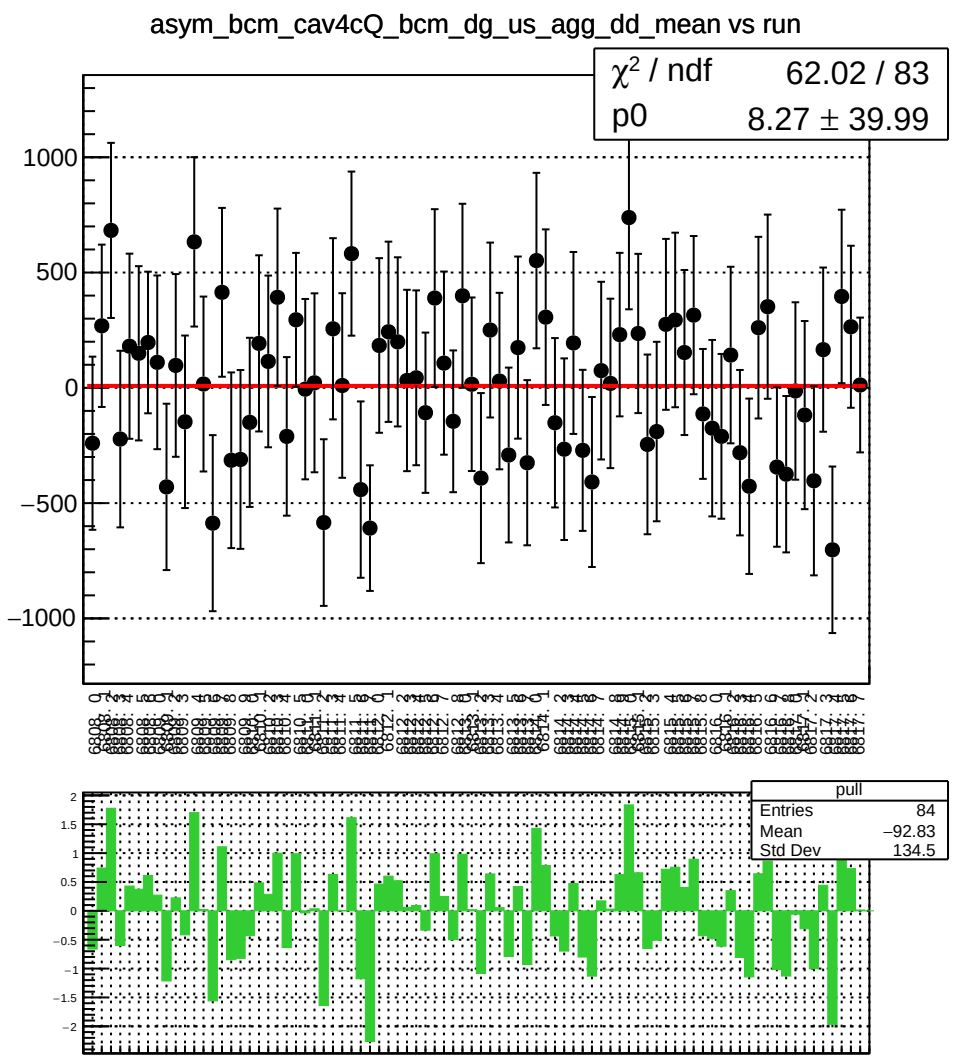

pull1D
Entries 84
Mean 0.02492
Std Dev 0.9002
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

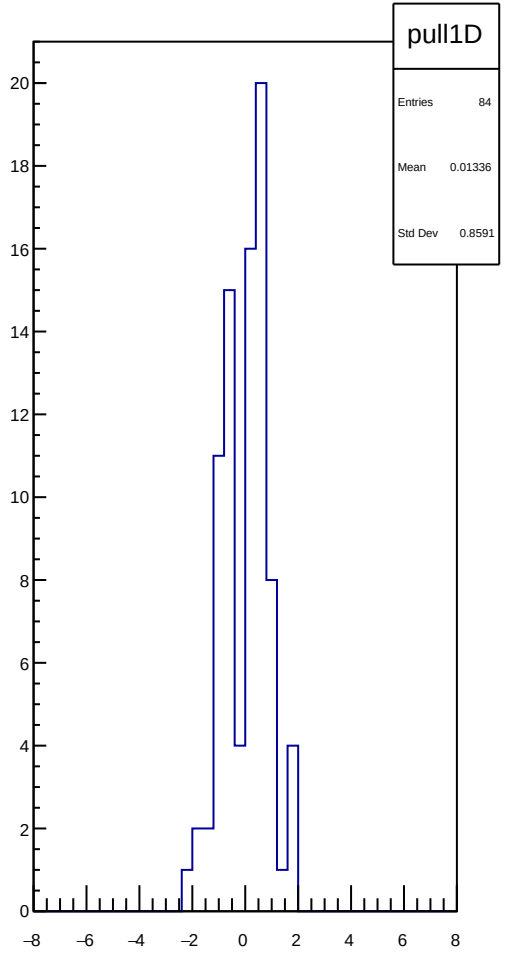

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 7787 / 83
p0 31.07 ± 0.02458
34
32
30
28
26

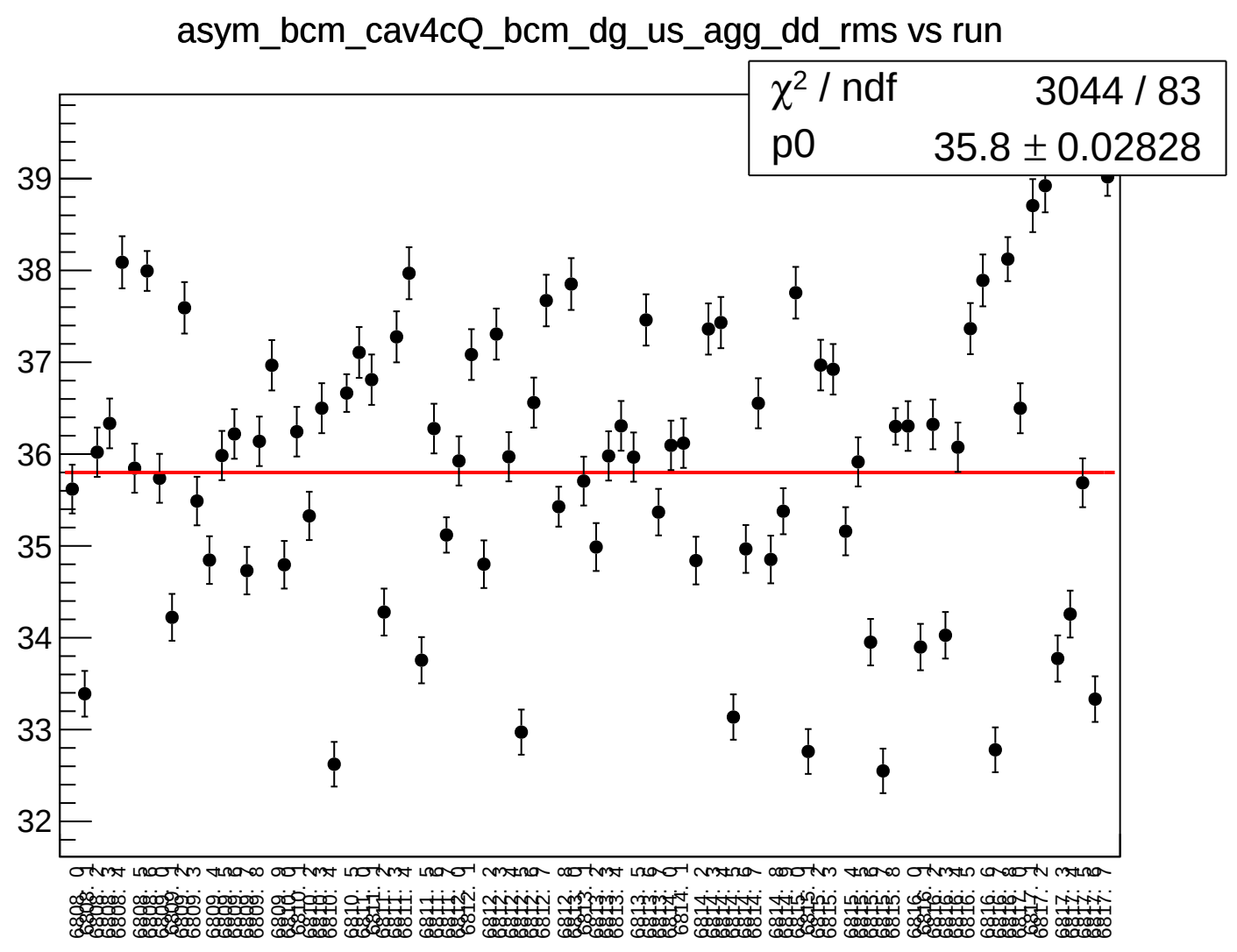

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 15.49 / 83
p0 250.9 ± 264.2
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 243.2
Std Dev 196.1
1
0.5
0
−0.5
−1

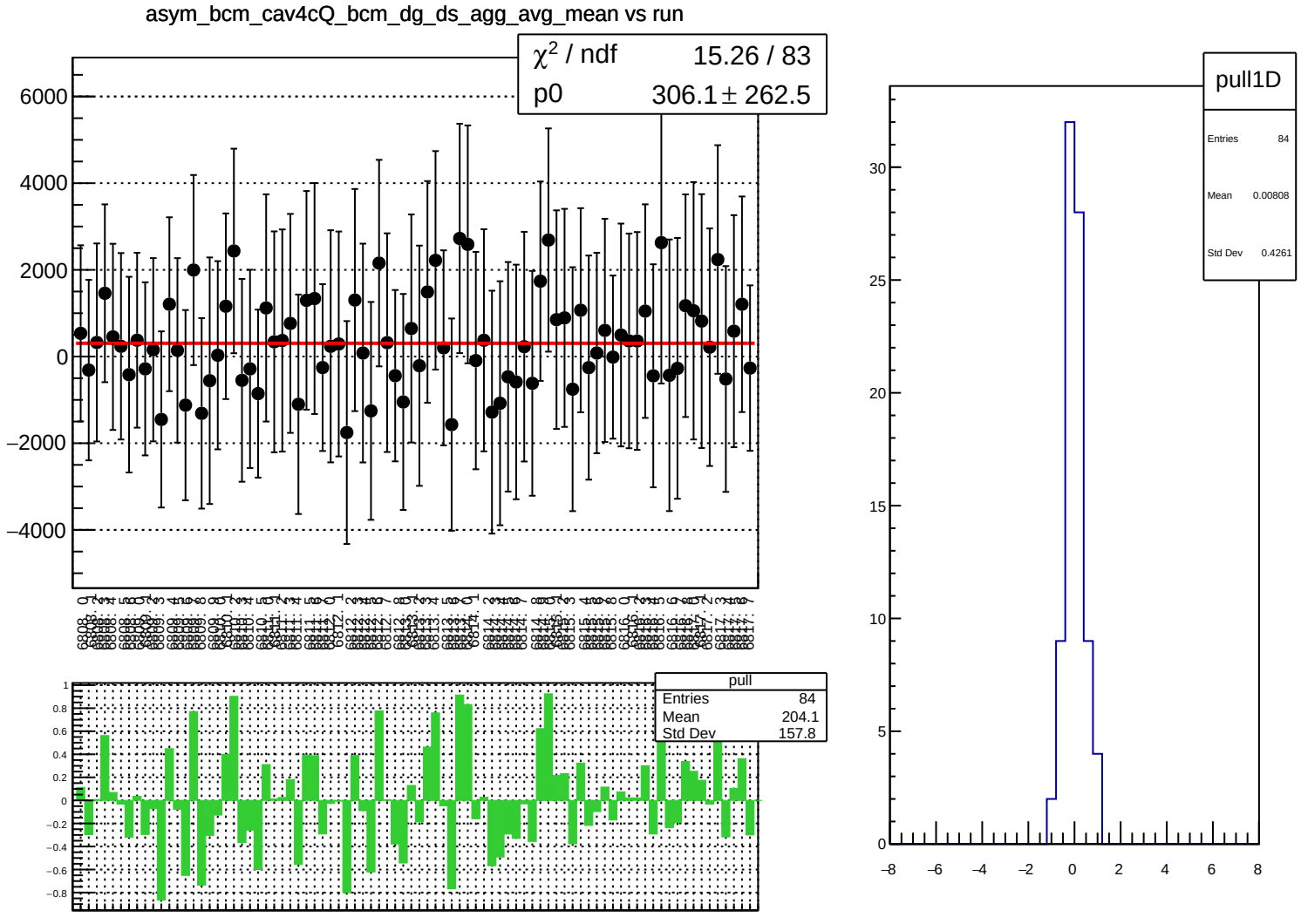

pull1D
Entries 84
Mean 0.009262
Std Dev 0.4293
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

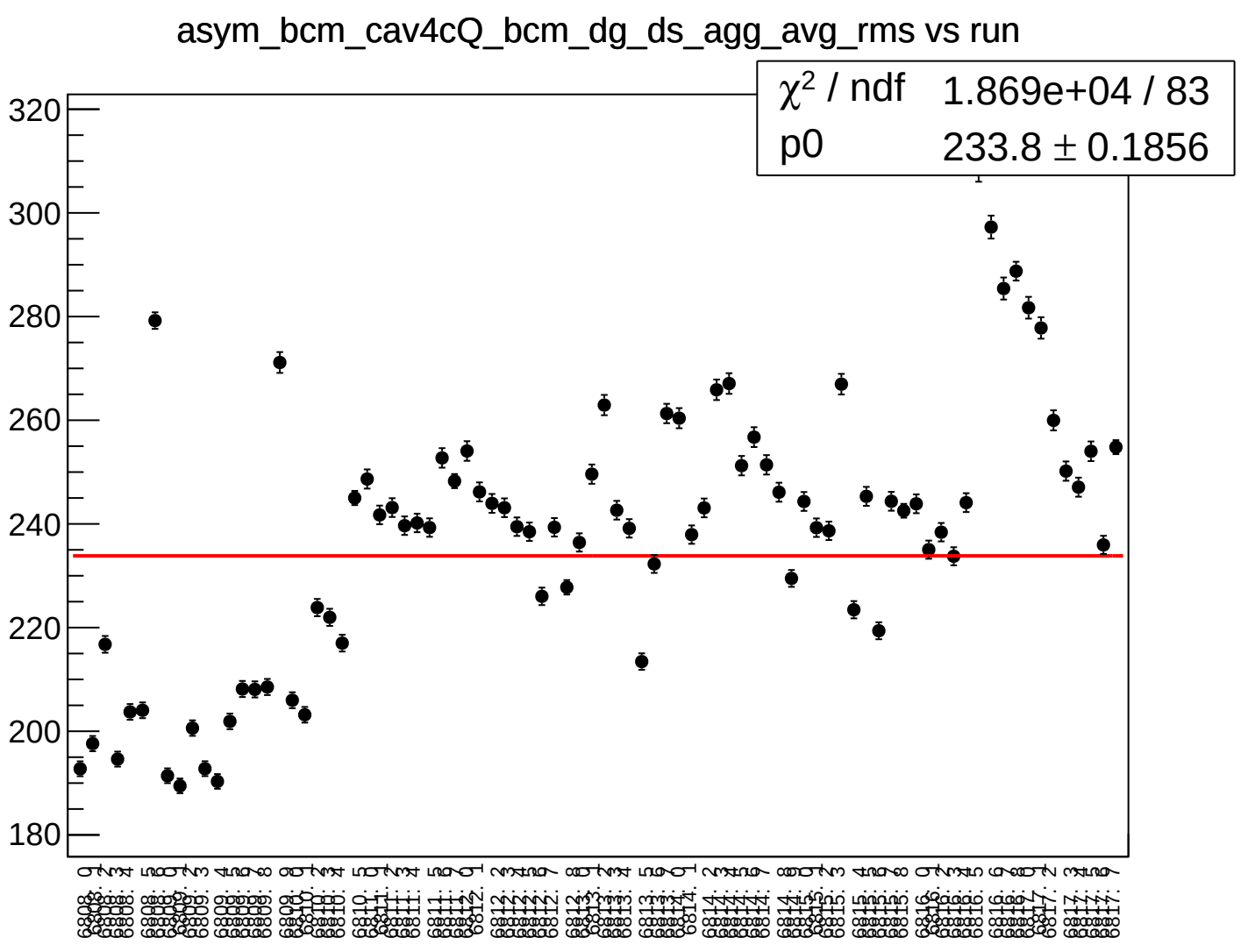

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.832e+04 / 83
p0 235.4 ± 0.1868
320
300
280
260
240
220
200
180

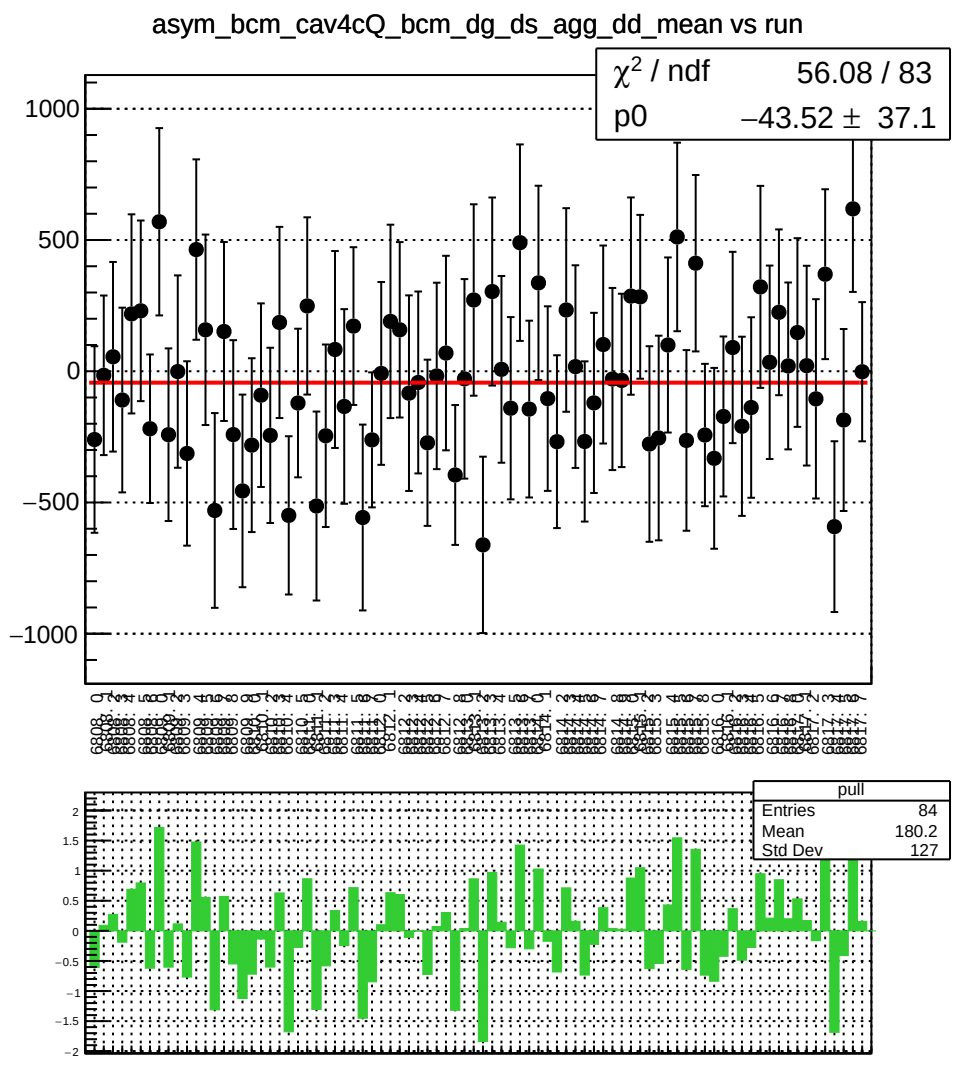

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 62.02 / 83
p0 8.27 ± 39.99
1000
500
0
−500
−1000
pull
Entries 84
Mean −92.83
Std Dev 134.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

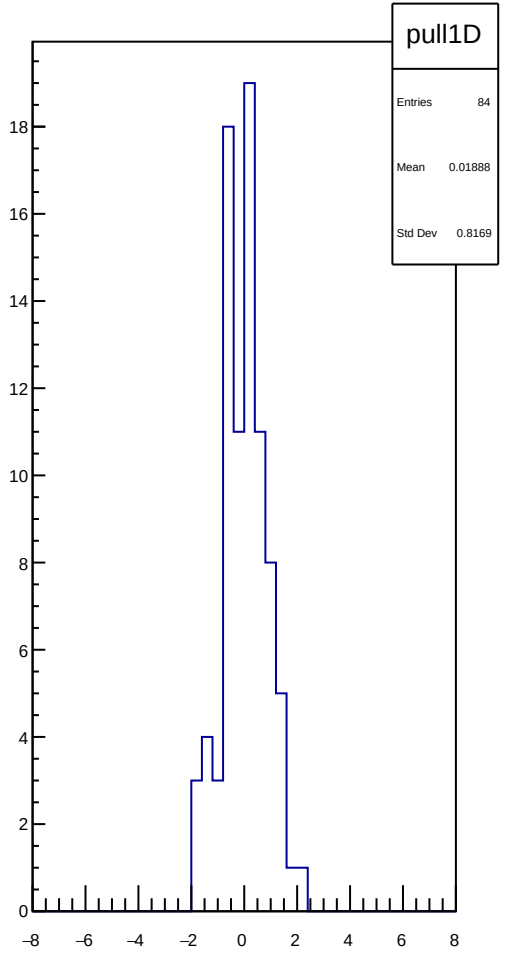

pull1D
Entries 84
Mean 0.01336
Std Dev 0.8591
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

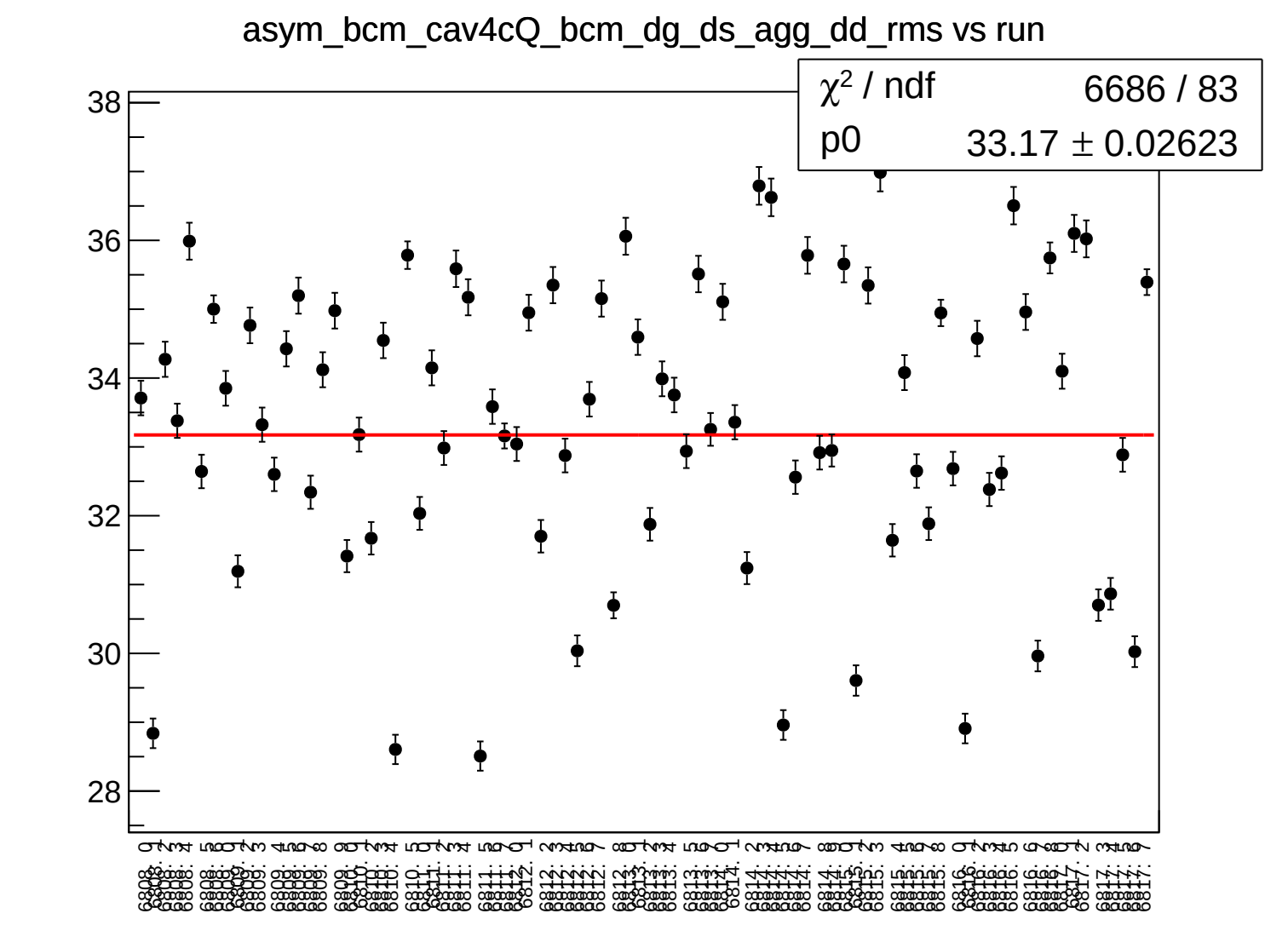

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 3044 / 83
p0 35.8 ± 0.02828
39
38
37
36
35
34
33
32

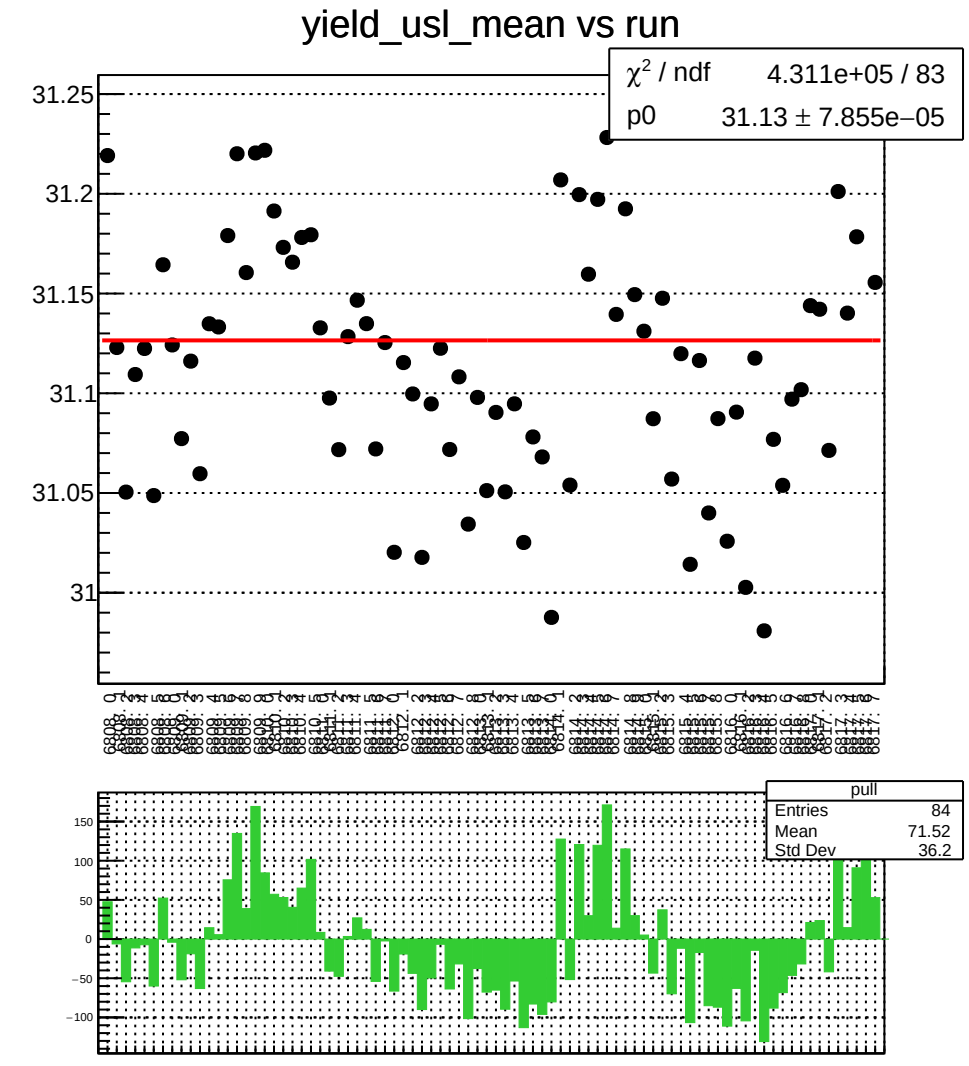

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.26 / 83
p0 306.1 ± 262.5
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 204.1
Std Dev 157.8
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 84
Mean 0.00808
Std Dev 0.4261
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

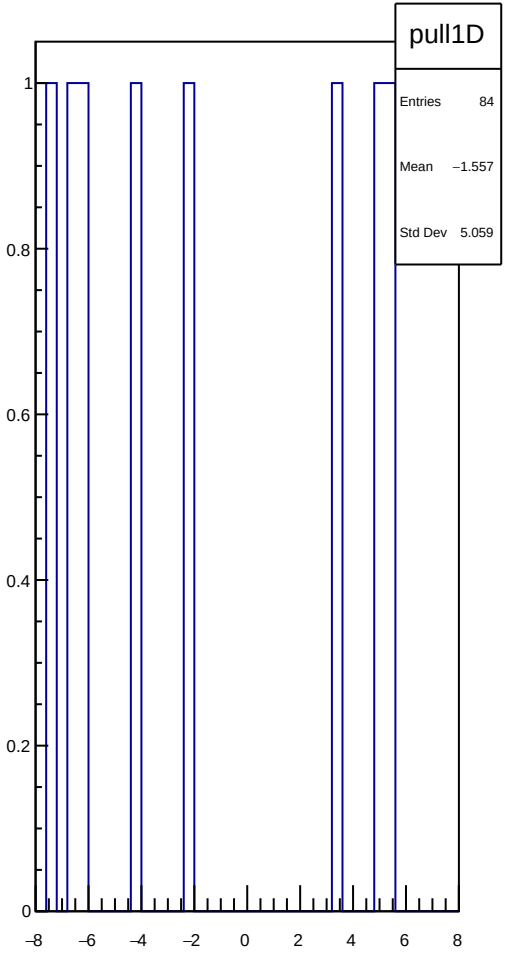

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.869e+04 / 83
p0 233.8 ± 0.1856
320
300
280
260
240
220
200
180

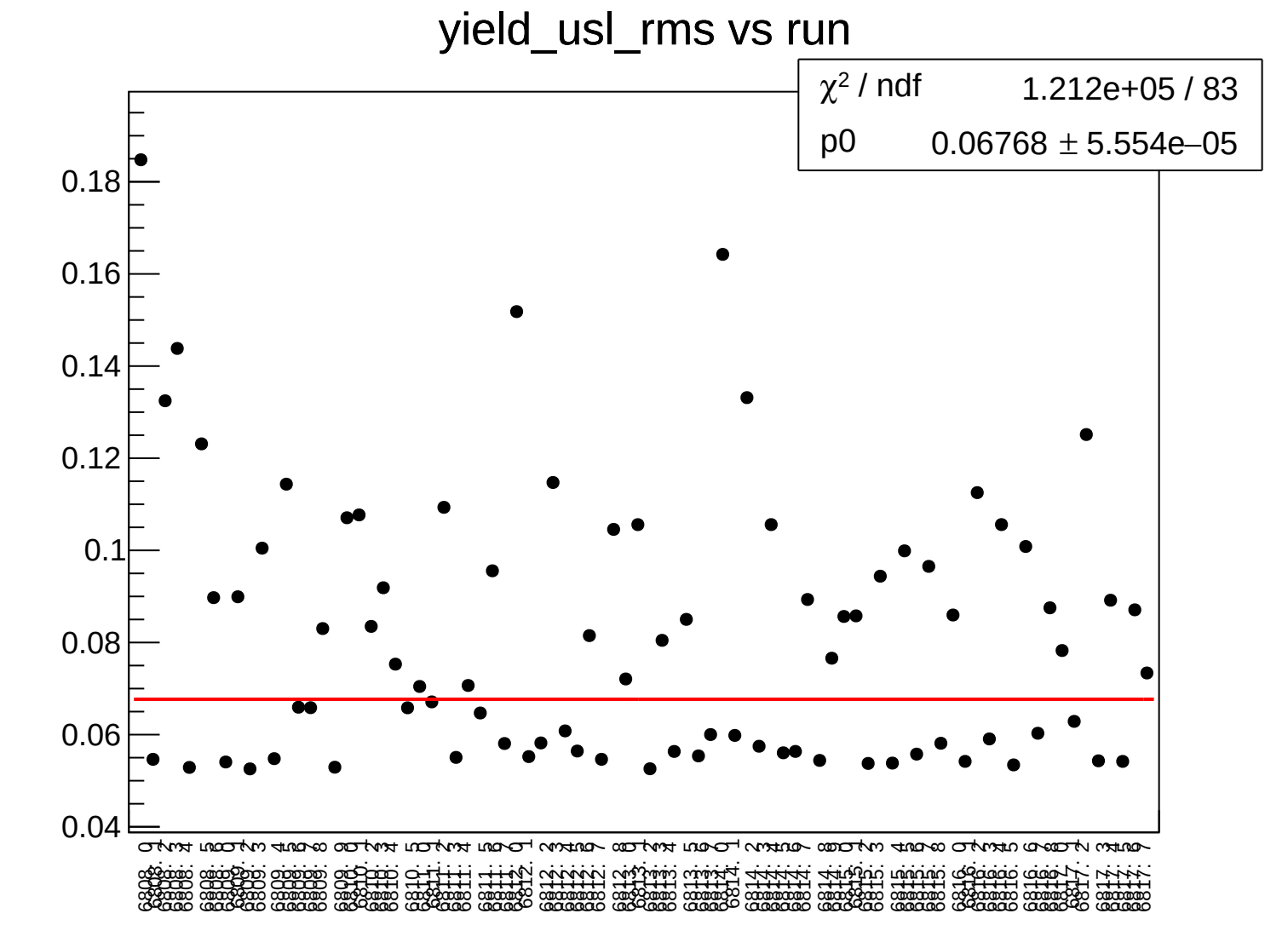

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 56.08 / 83
p0 −43.52 ± 37.1
1000
500
0
−500
−1000
pull
Entries 84
Mean 180.2
Std Dev 127
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

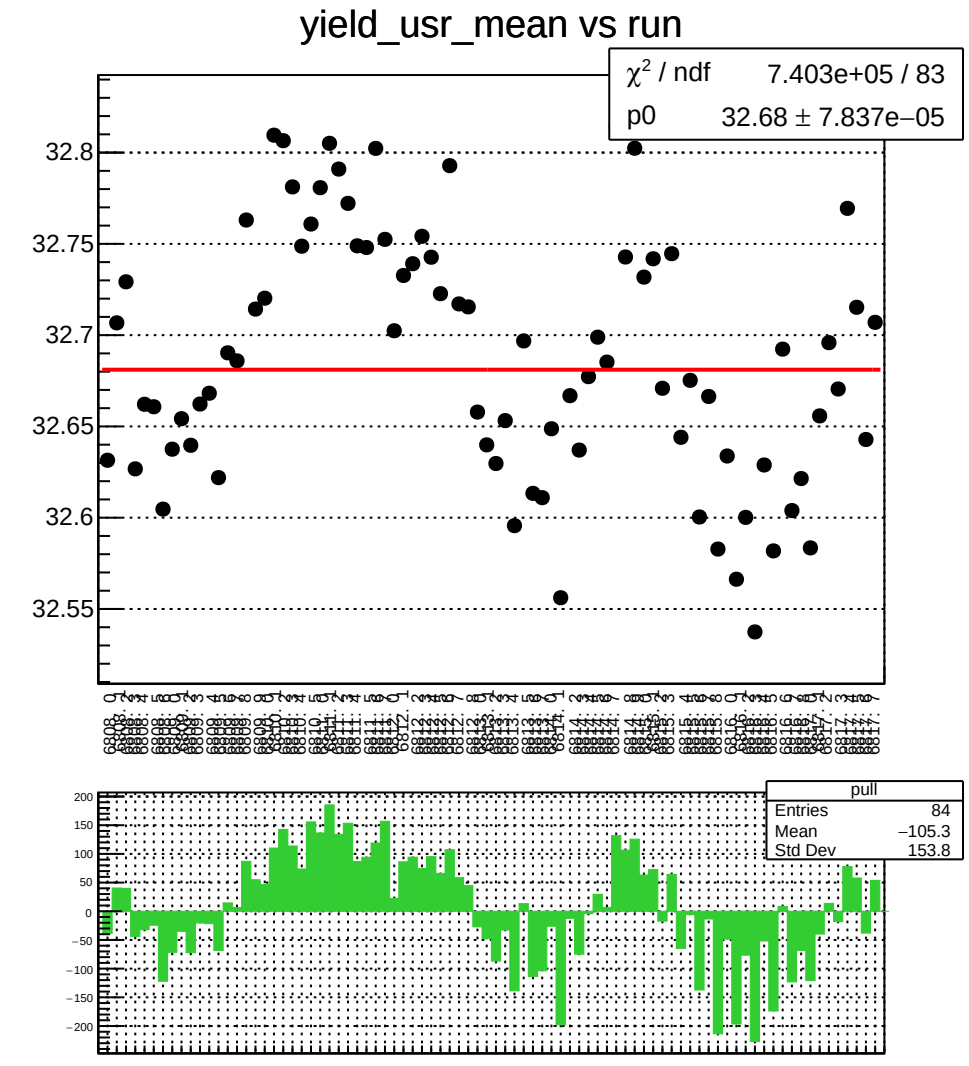

pull1D
Entries 84
Mean 0.01888
Std Dev 0.8169
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

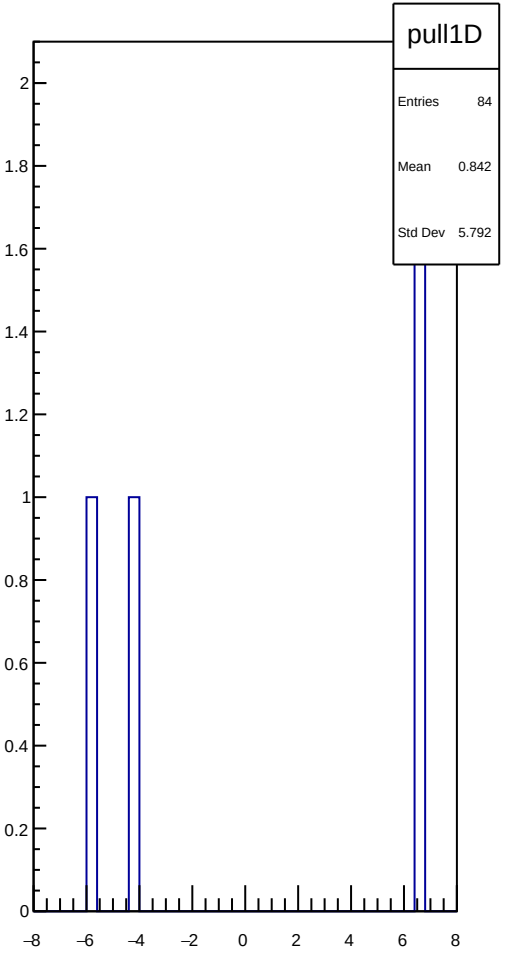

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 6686 / 83
p0 33.17 ± 0.02623
38
36
34
32
30
28

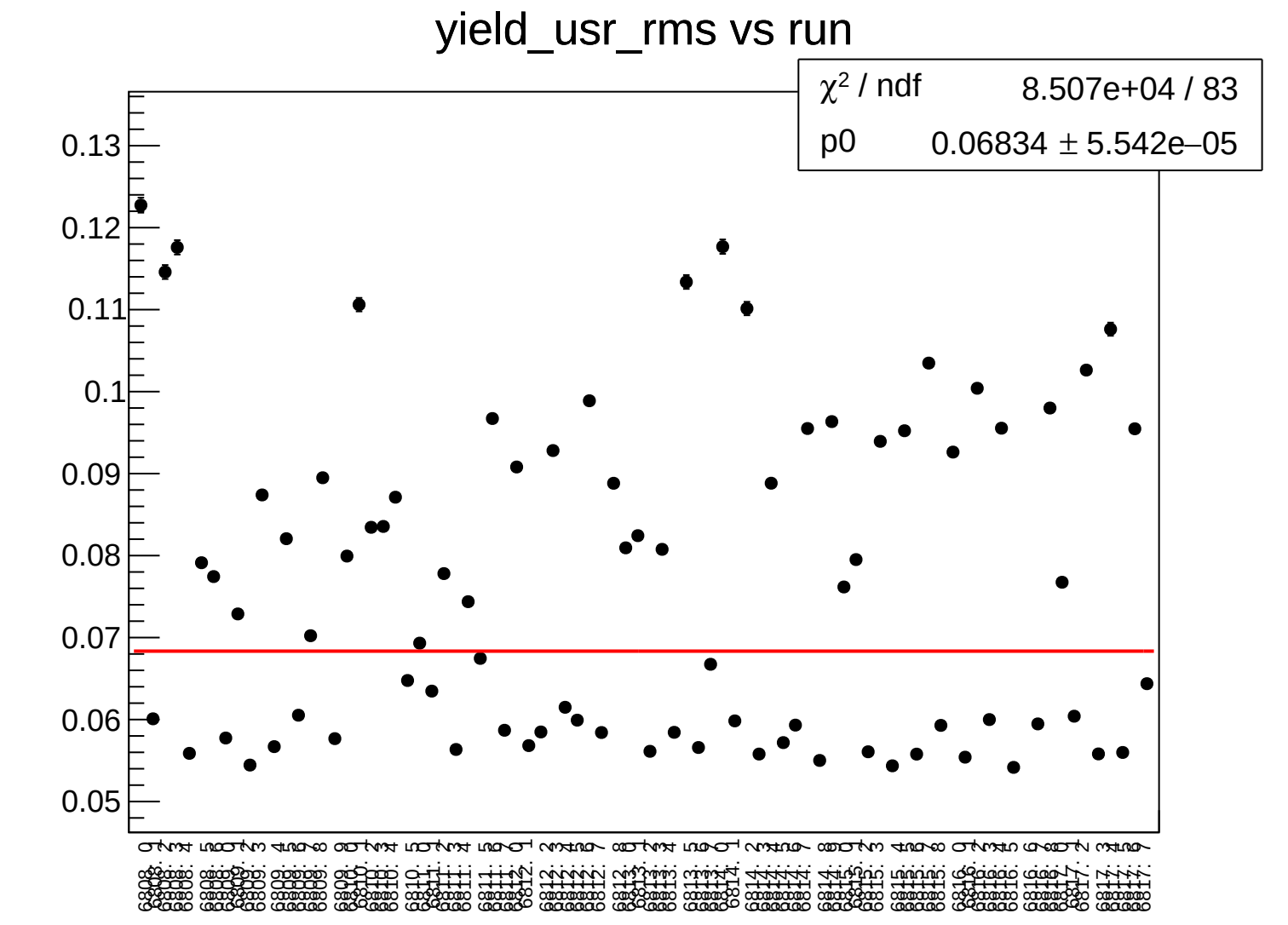

yield_usl_mean vs run
χ² / ndf 4.311e+05 / 83
p0 31.13 ± 7.855e−05
31.25
31.2
31.15
31.1
31.05
31
pull
Entries 84
Mean 71.52
Std Dev 36.2
150
100
50
0
−50
−100

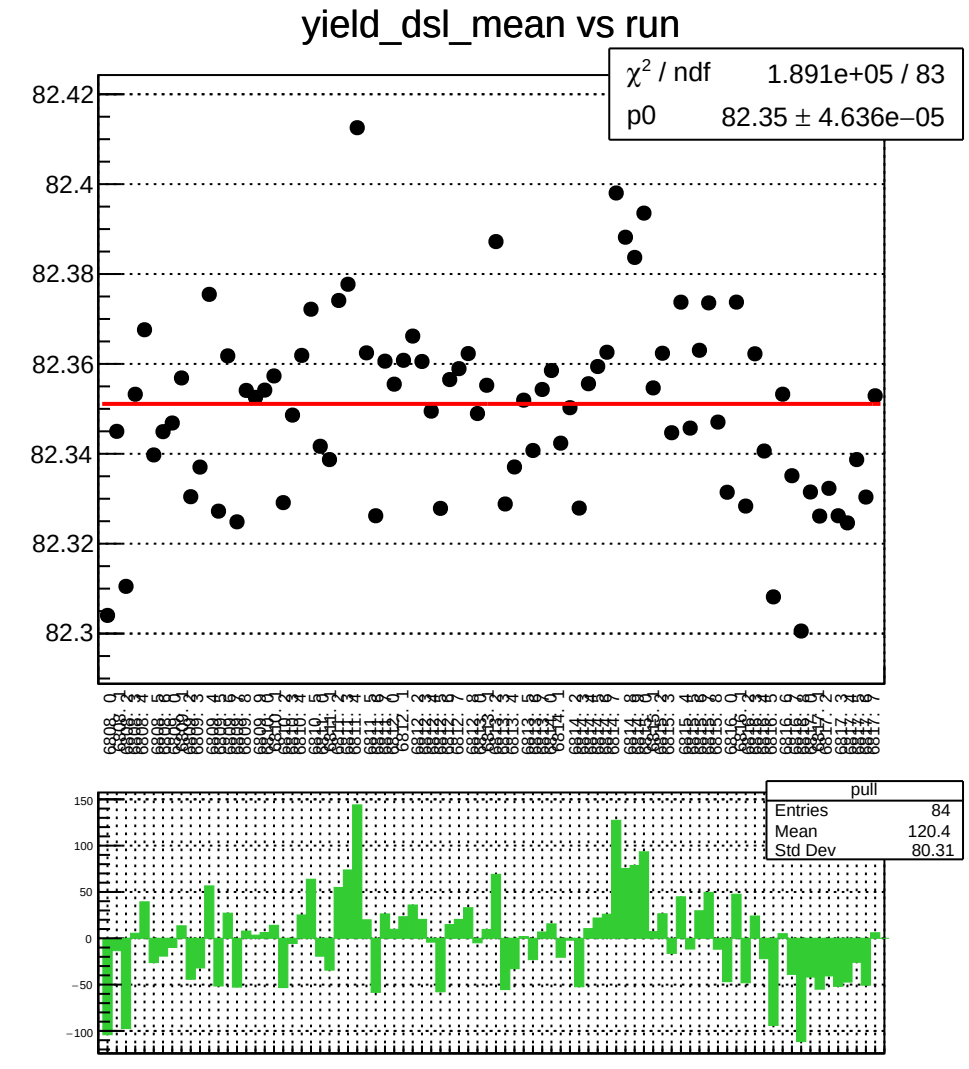

pull1D
Entries 84
Mean −1.557
Std Dev 5.059
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

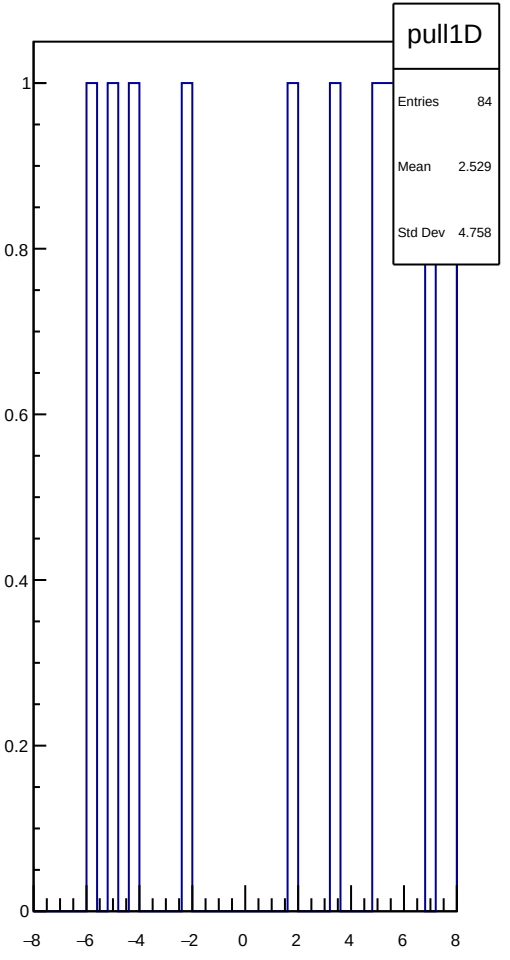

yield_usl_rms vs run
χ² / ndf 1.212e+05 / 83
p0 0.06768 ± 5.554e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

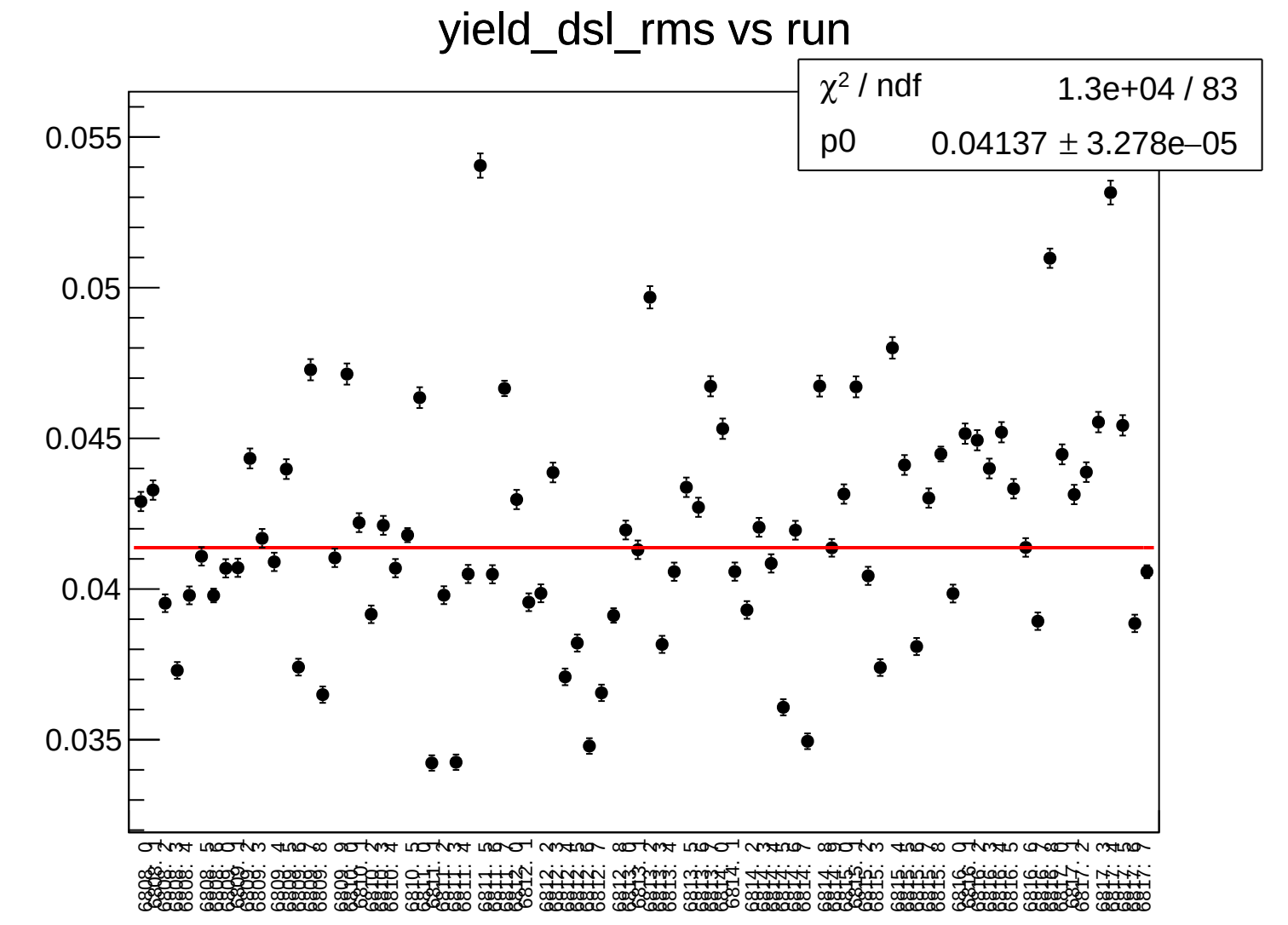

yield_usr_mean vs run
χ² / ndf 7.403e+05 / 83
p0 32.68 ± 7.837e−05
32.8
32.75
32.7
32.65
32.6
32.55
pull
Entries 84
Mean −105.3
Std Dev 153.8
200
150
100
50
0
−50
−100
−150
−200

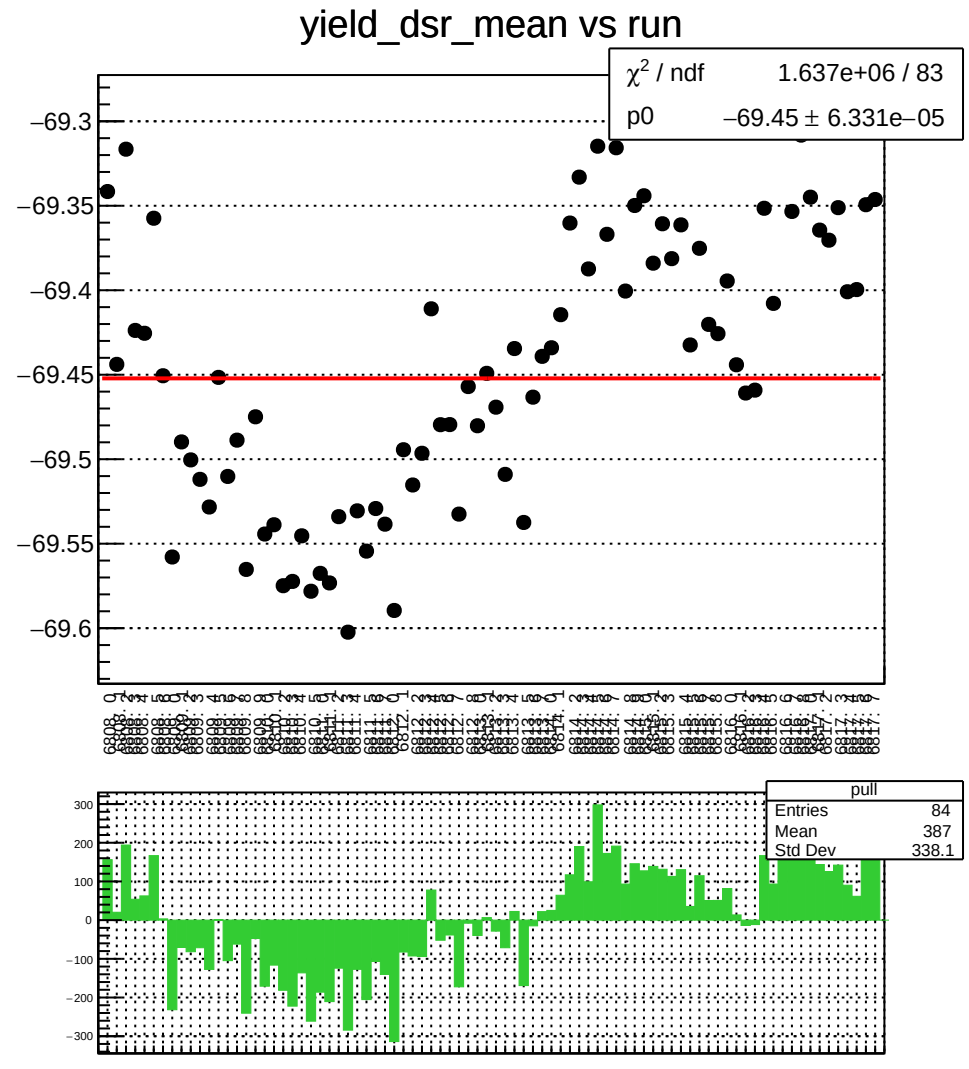

pull1D
Entries 84
Mean 0.842
Std Dev 5.792
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

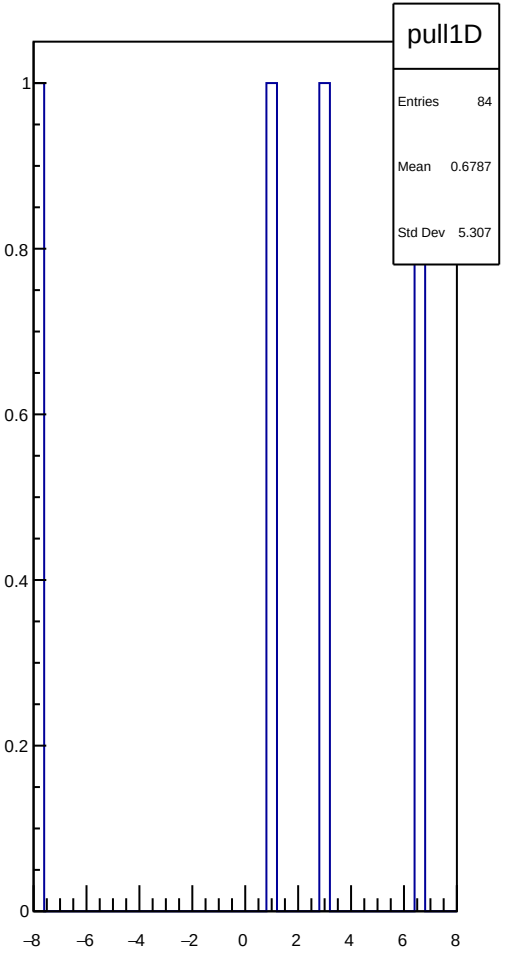

yield_usr_rms vs run
χ² / ndf 8.507e+04 / 83
p0 0.06834 ± 5.542e−05
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05

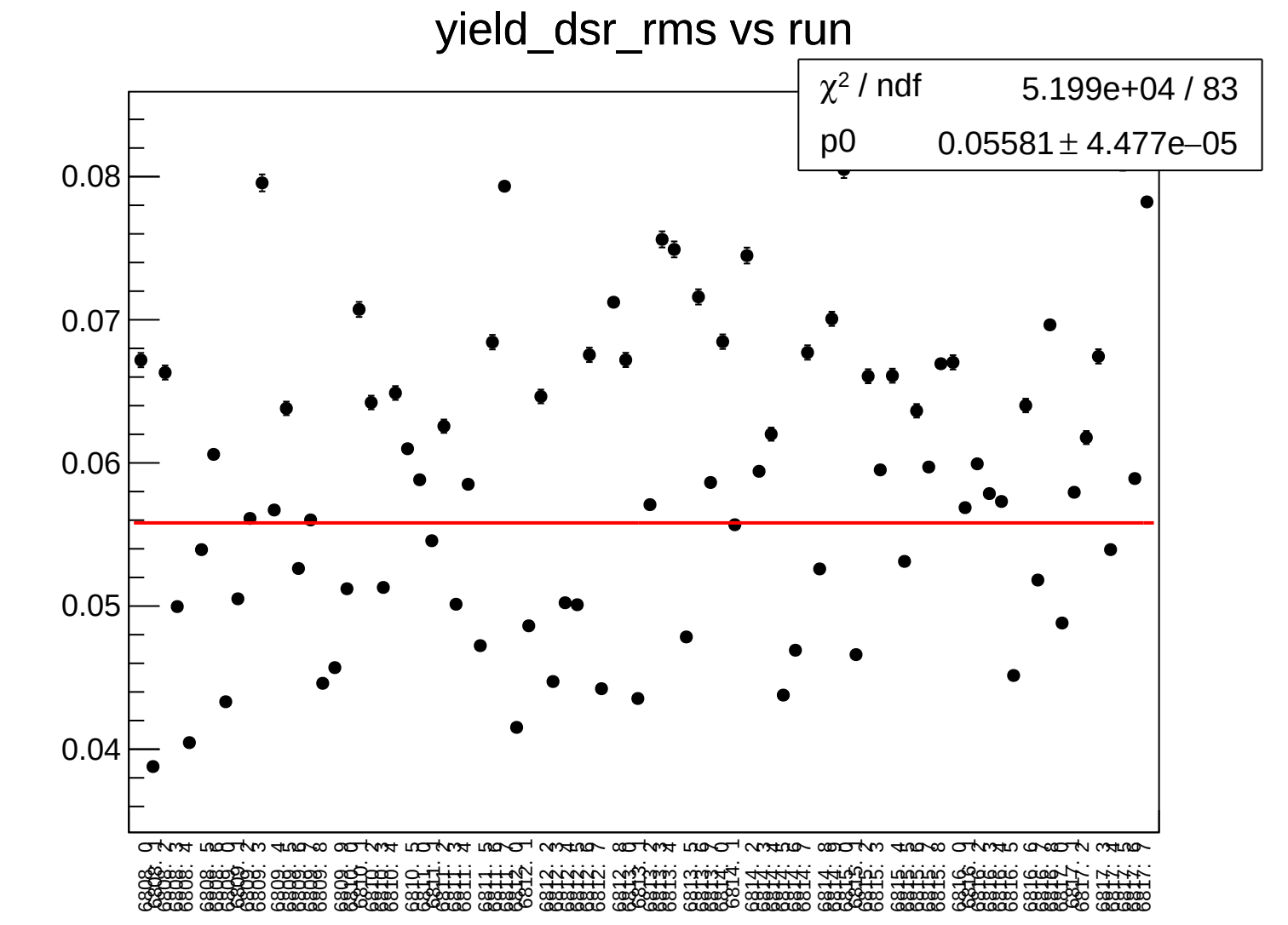

yield_dsl_mean vs run
χ² / ndf 1.891e+05 / 83
p0 82.35 ± 4.636e−05
82.42
82.4
82.38
82.36
82.34
82.32
82.3
pull
Entries 84
Mean 120.4
Std Dev 80.31
150
100
50
0
−50
−100

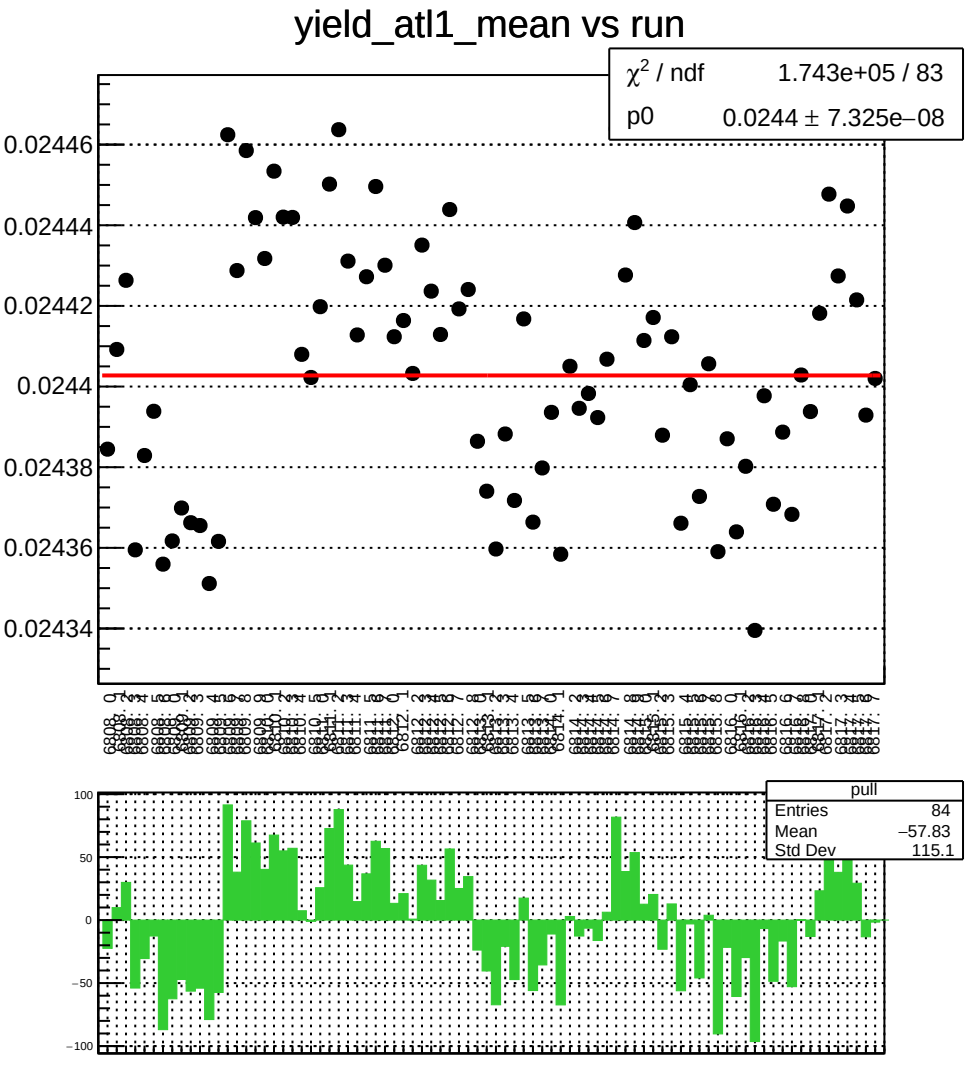

pull1D
Entries 84
Mean 2.529
Std Dev 4.758
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

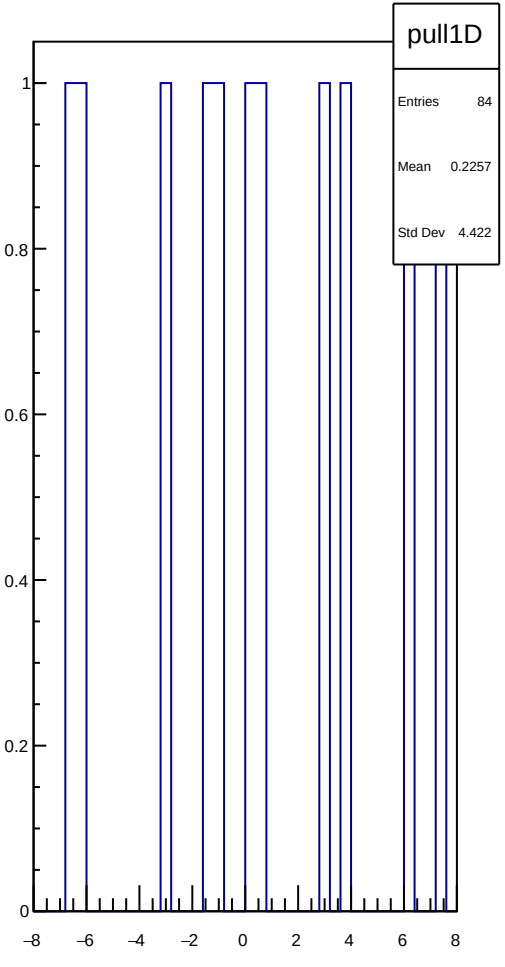

yield_dsl_rms vs run
χ² / ndf 1.3e+04 / 83
p0 0.04137 ± 3.278e–05
0.055
0.05
0.045
0.04
0.035

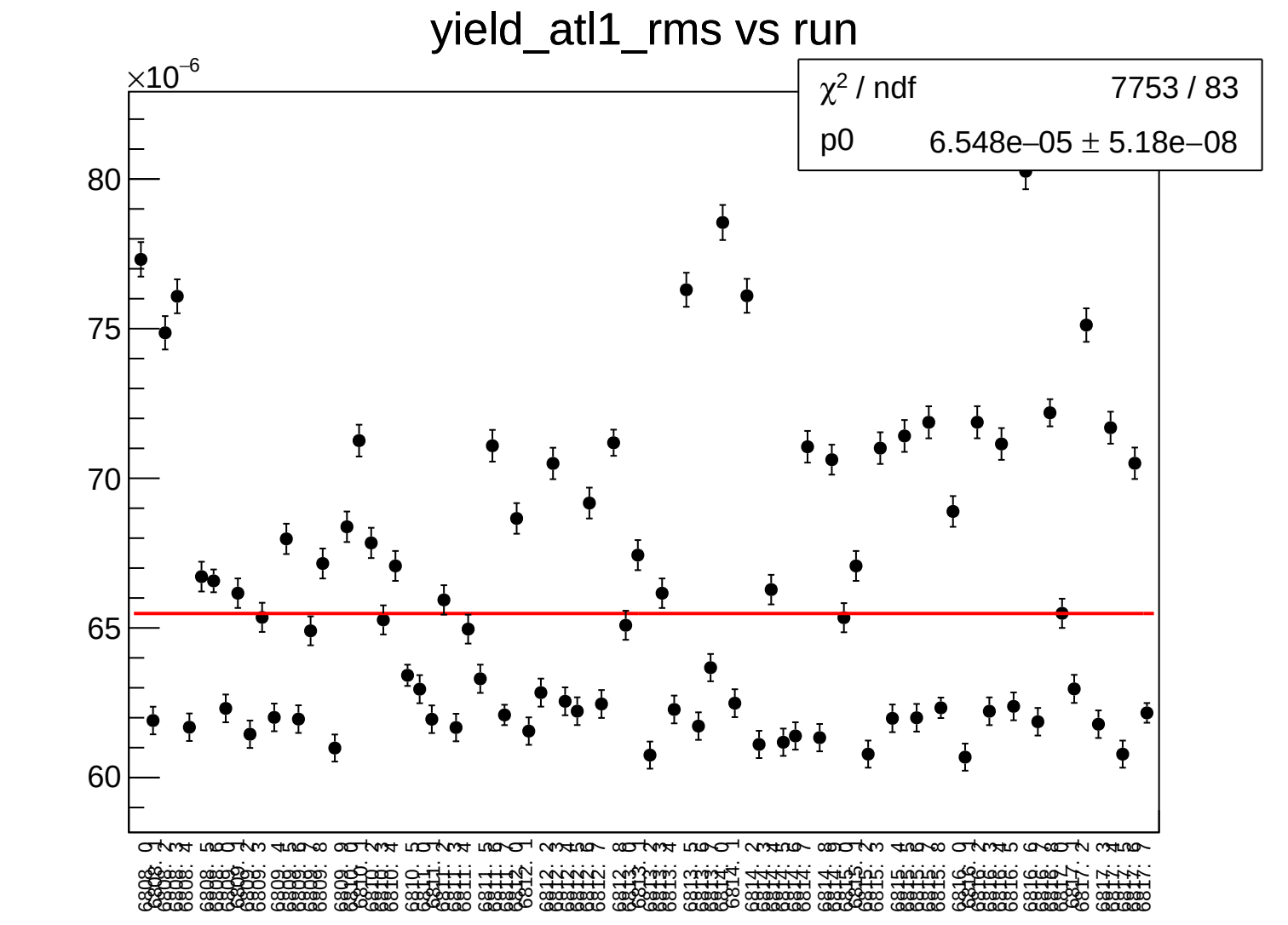

yield_dsr_mean vs run
χ² / ndf 1.637e+06 / 83
p0 −69.45 ± 6.331e−05
−69.3
−69.35
−69.4
−69.45
−69.5
−69.55
−69.6
pull
Entries 84
Mean 387
Std Dev 338.1
300
200
100
0
−100
−200
−300

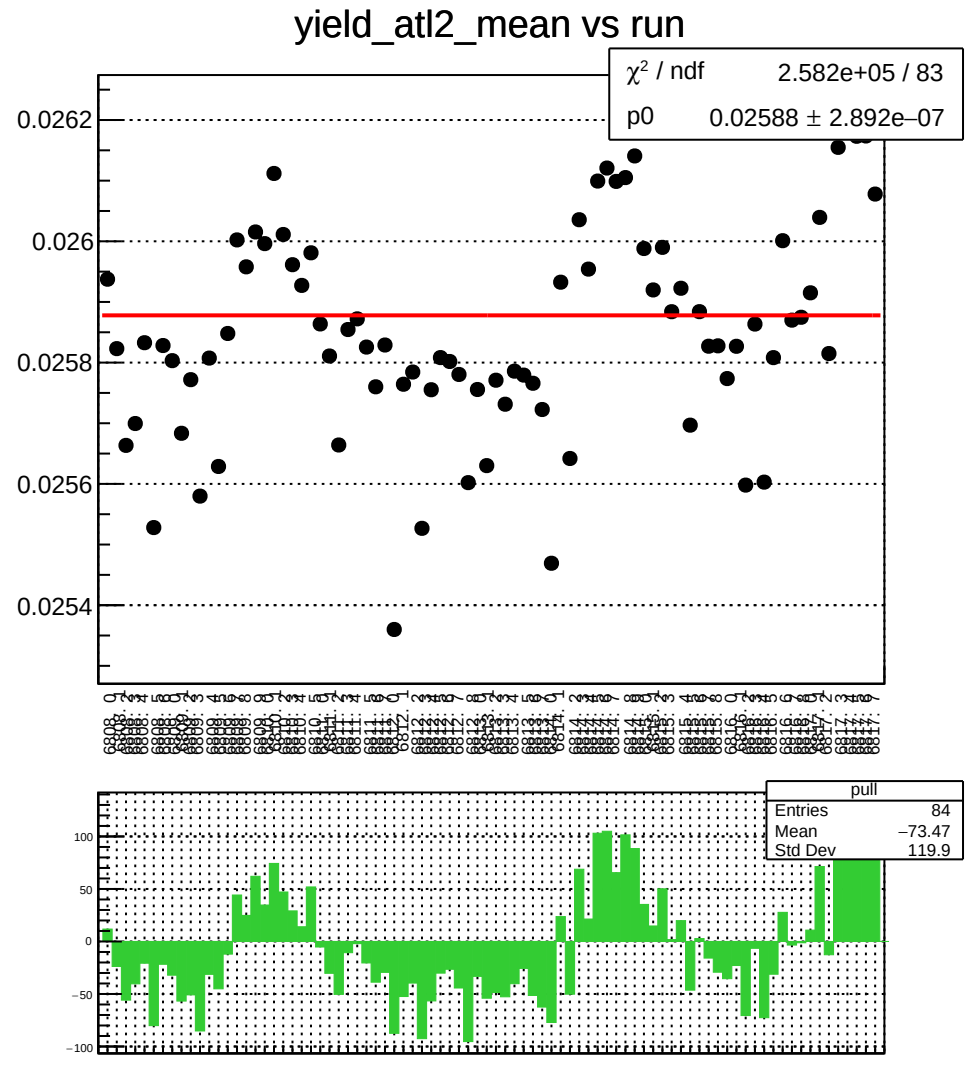

pull1D
Entries 84
Mean 0.6787
Std Dev 5.307
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

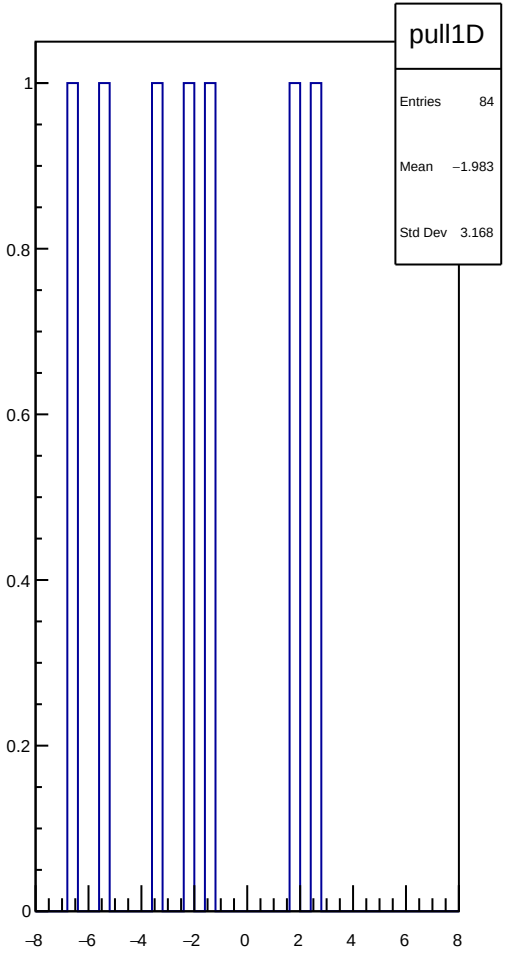

yield_dsr_rms vs run
χ² / ndf 5.199e+04 / 83
p0 0.05581 ± 4.477e–05
0.08
0.07
0.06
0.05
0.04

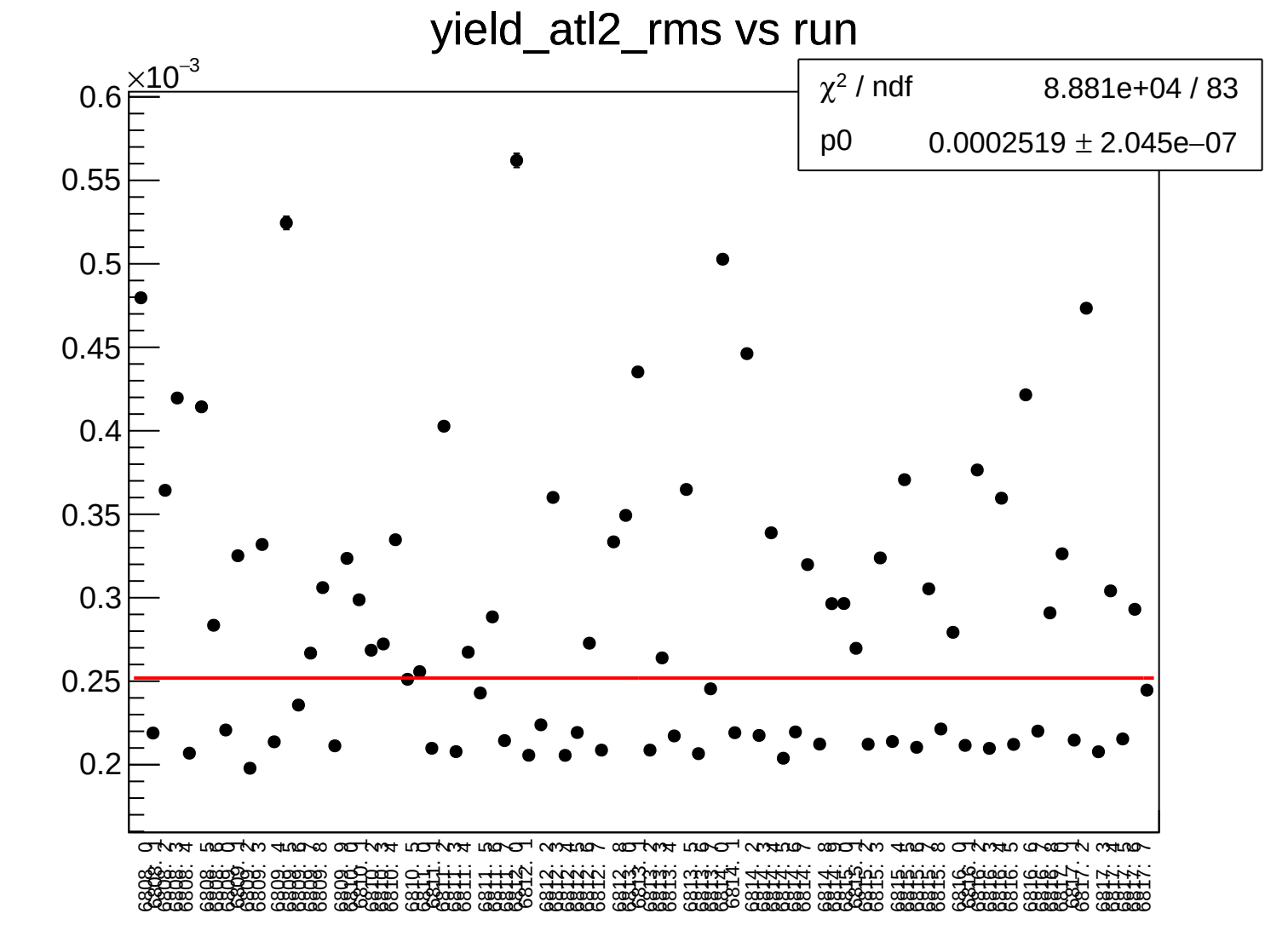

yield_atl1_mean vs run
χ² / ndf 1.743e+05 / 83
p0 0.0244 ± 7.325e−08
0.02446
0.02444
0.02442
0.0244
0.02438
0.02436
0.02434
pull
Entries 84
Mean −57.83
Std Dev 115.1
100
50
0
−50
−100

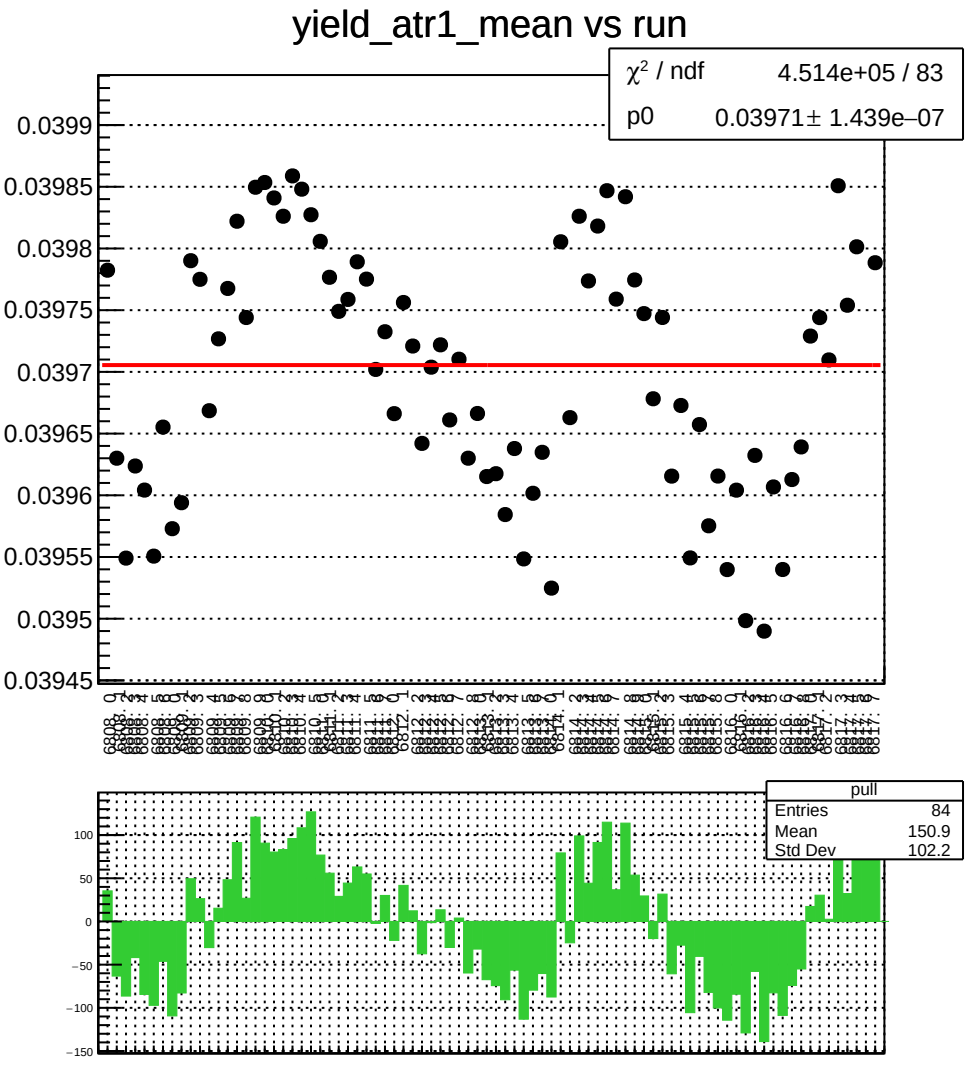

pull1D
Entries 84
Mean 0.2257
Std Dev 4.422
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

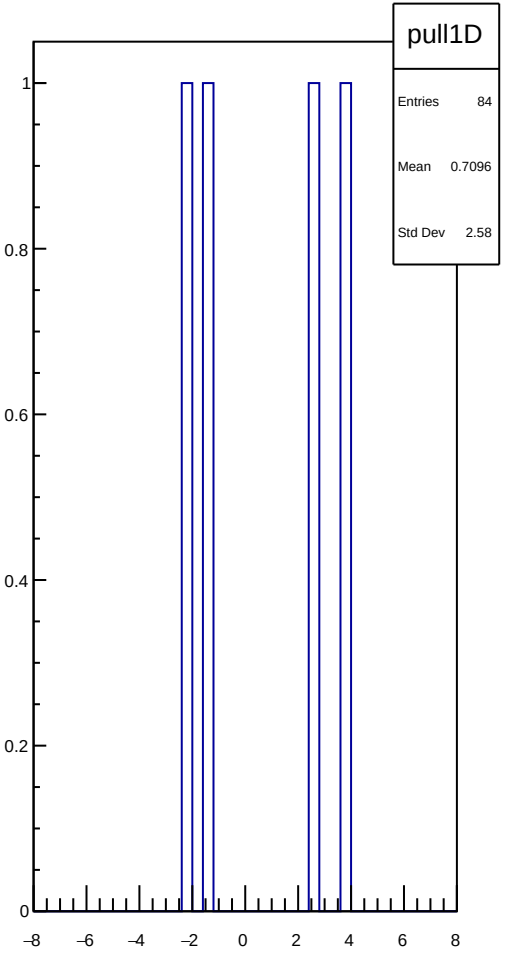

yield_atl1_rms vs run
×10⁻⁶
χ² / ndf 7753 / 83
p0 6.548e−05 ± 5.18e−08
80
75
70
65
60

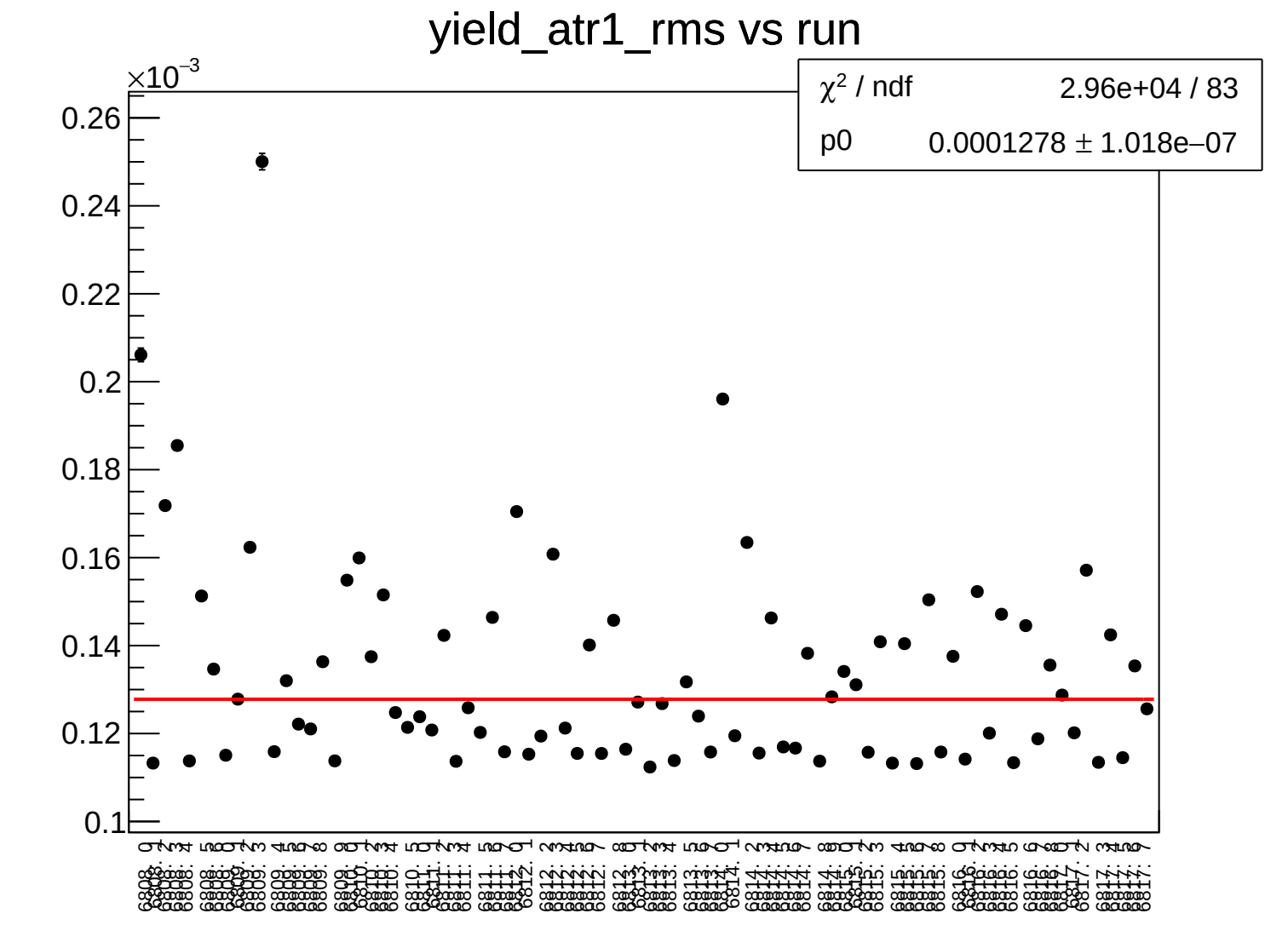

yield_atl2_mean vs run
χ² / ndf 2.582e+05 / 83
p0 0.02588 ± 2.892e–07
0.0262
0.026
0.0258
0.0256
0.0254
pull
Entries 84
Mean –73.47
Std Dev 119.9
100
50
0
–50
–100

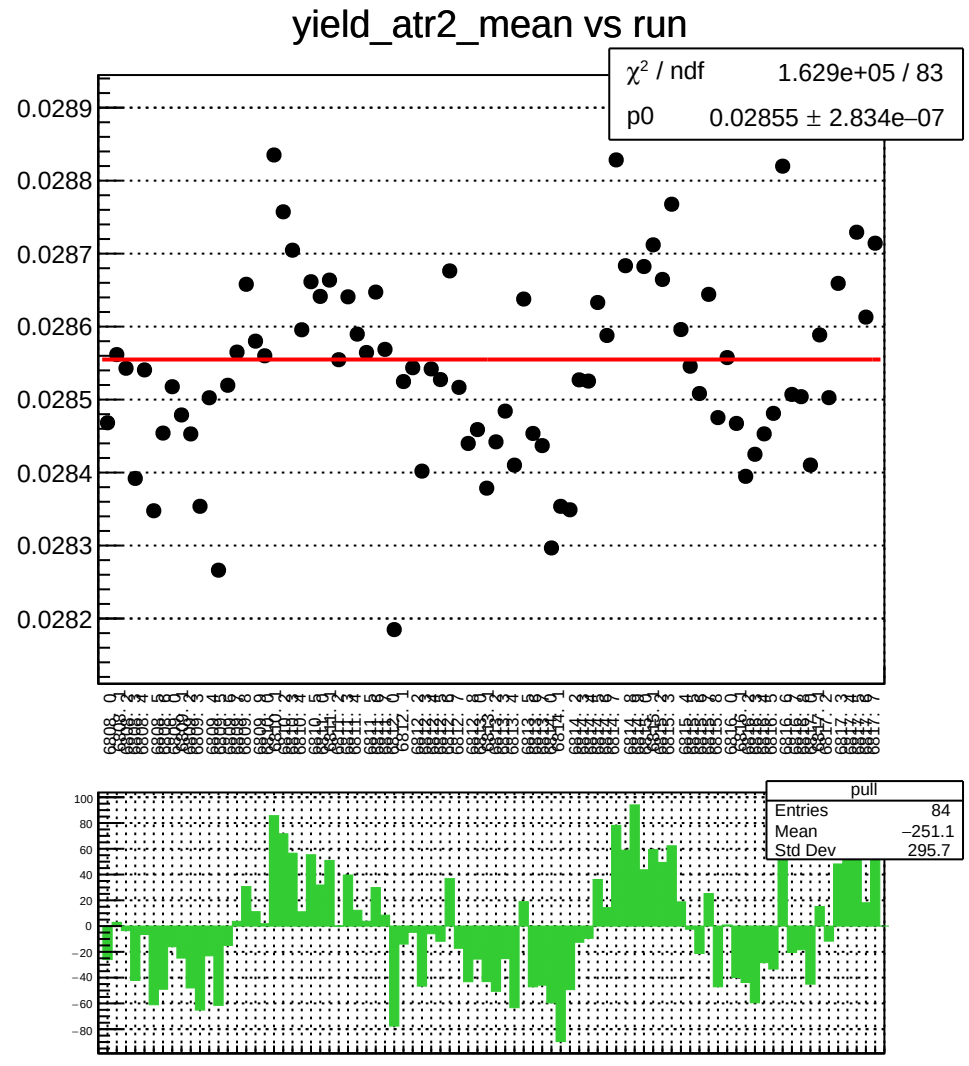

pull1D
Entries 84
Mean –1.983
Std Dev 3.168
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

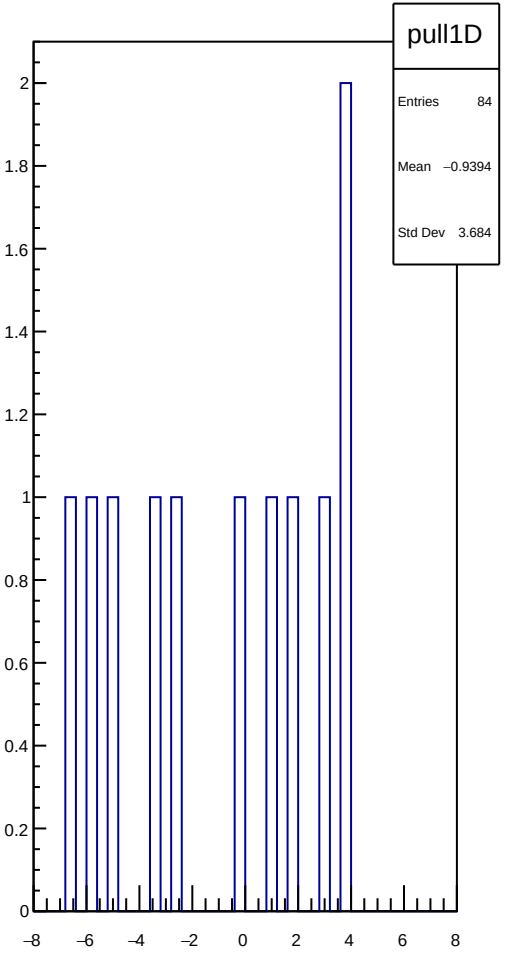

yield_atl2_rms vs run
×10⁻³
χ² / ndf 8.881e+04 / 83
p0 0.0002519 ± 2.045e−07
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2

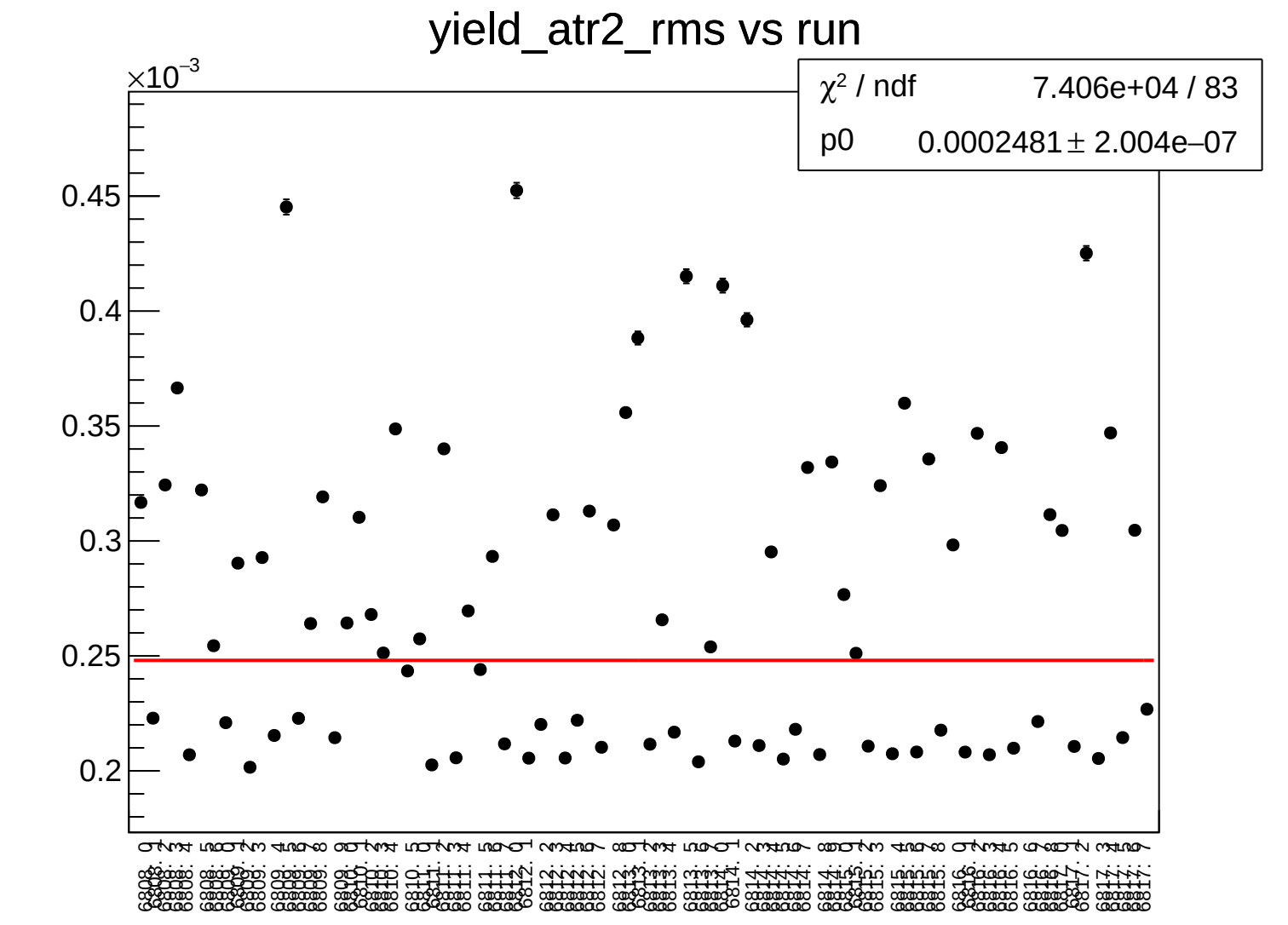

yield_atr1_mean vs run
χ² / ndf 4.514e+05 / 83
p0 0.03971± 1.439e–07
0.0399
0.03985
0.0398
0.03975
0.0397
0.03965
0.0396
0.03955
0.0395
0.03945
pull
Entries 84
Mean 150.9
Std Dev 102.2
100
50
0
–50
–100
–150

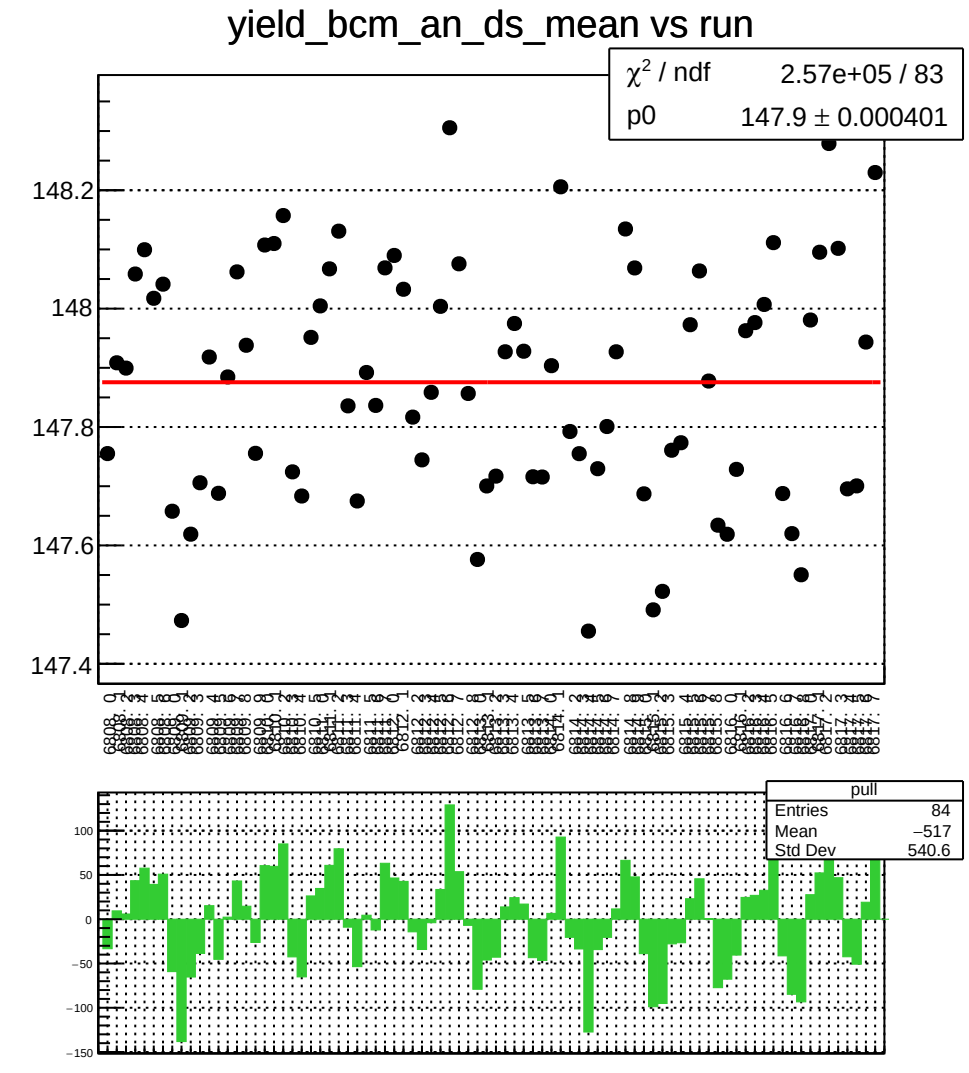

pull1D
Entries 84
Mean 0.7096
Std Dev 2.58
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

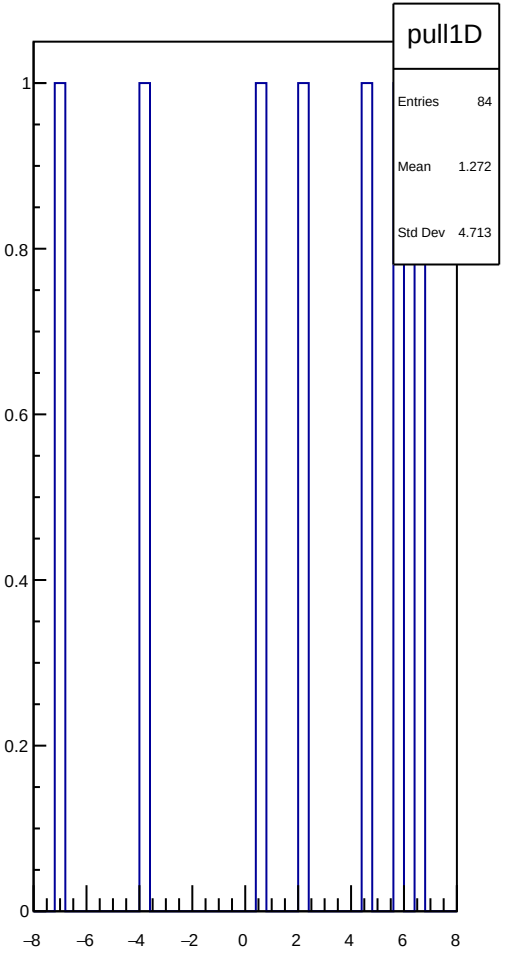

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.96e+04 / 83
p0 0.0001278 ± 1.018e−07
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1

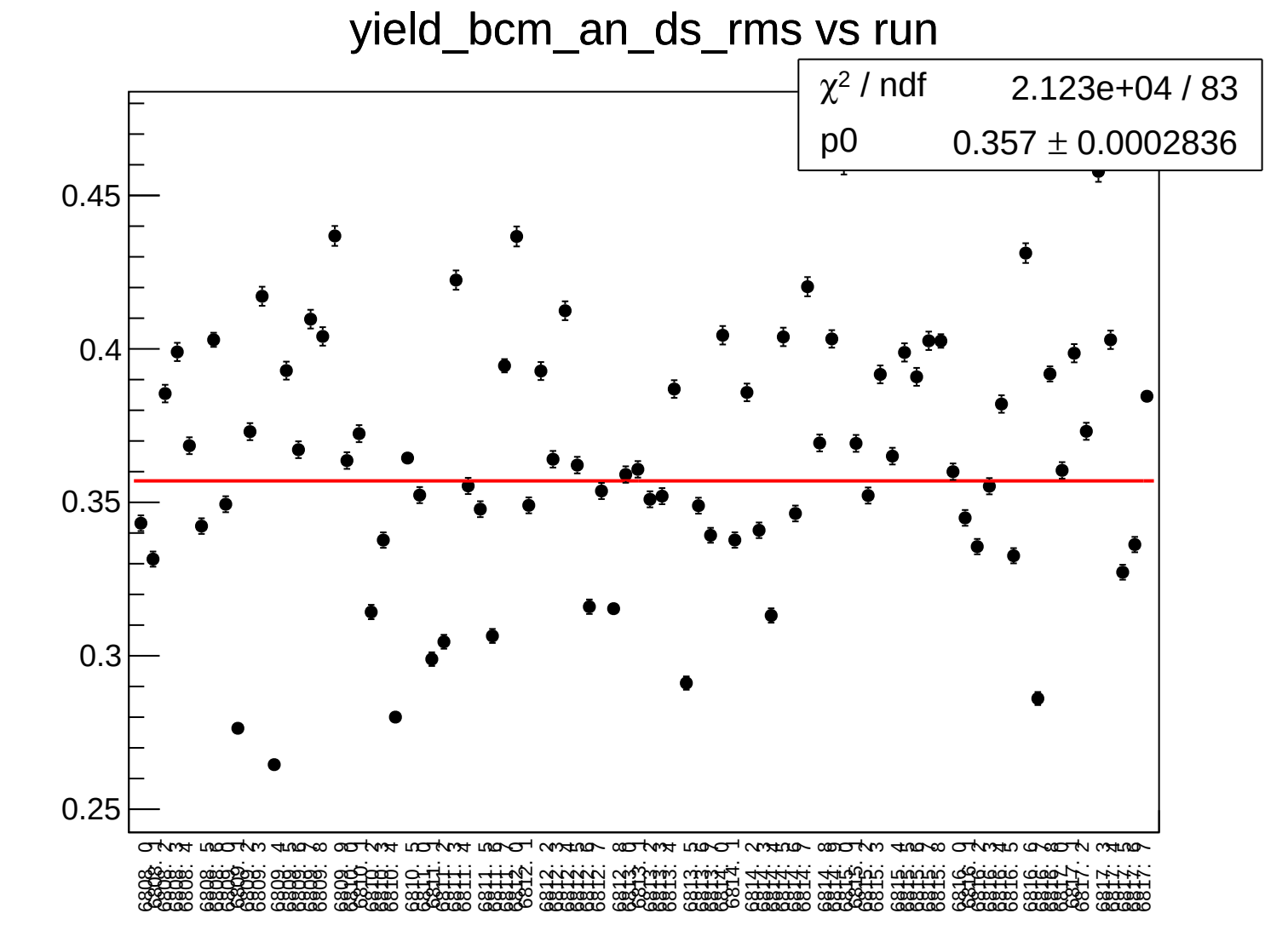

yield_atr2_mean vs run
χ² / ndf 1.629e+05 / 83
p0 0.02855 ± 2.834e−07
0.0289
0.0288
0.0287
0.0286
0.0285
0.0284
0.0283
0.0282
pull
Entries 84
Mean −251.1
Std Dev 295.7
100
80
60
40
20
0
−20
−40
−60
−80

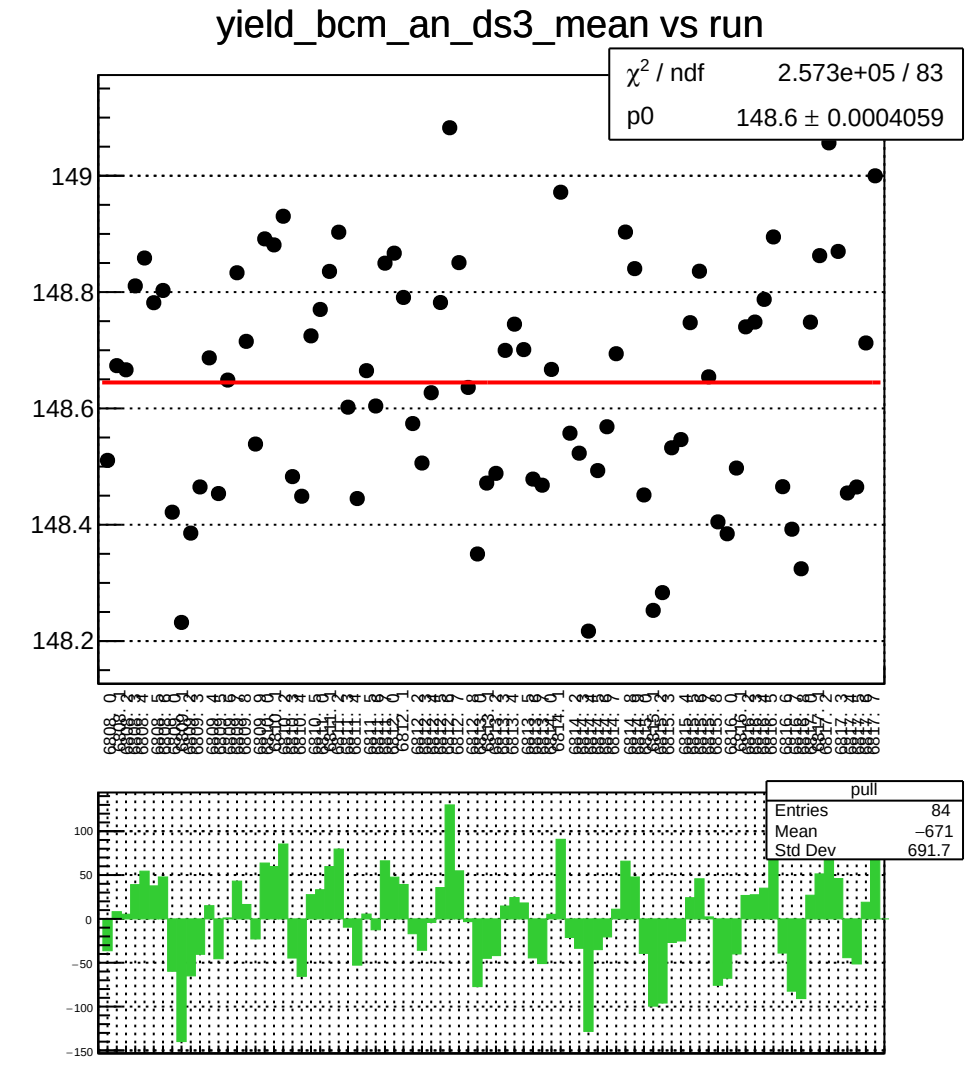

pull1D
Entries 84
Mean −0.9394
Std Dev 3.684
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

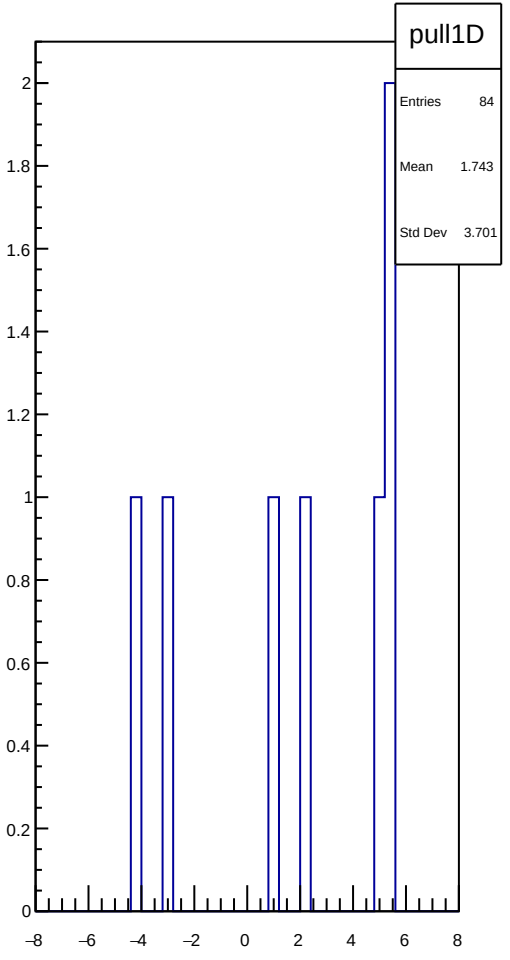

yield_atr2_rms vs run
×10⁻³
χ² / ndf 7.406e+04 / 83
p0 0.0002481 ± 2.004e−07
0.45
0.4
0.35
0.3
0.25
0.2

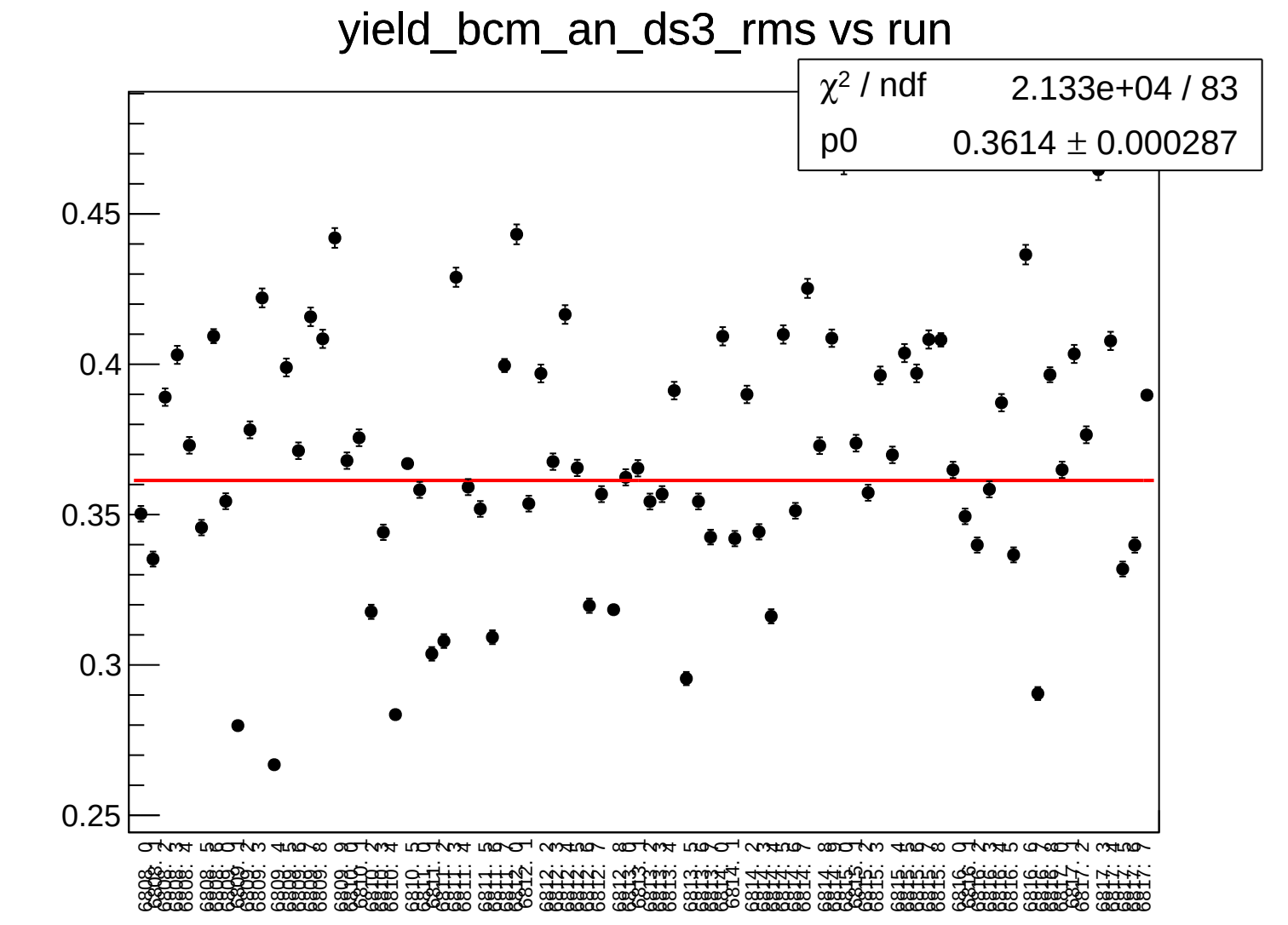

yield_bcm_an_ds_mean vs run
χ² / ndf 2.57e+05 / 83
p0 147.9 ± 0.000401
148.2
148
147.8
147.6
147.4
pull
Entries 84
Mean −517
Std Dev 540.6
100
50
0
−50
−100
−150

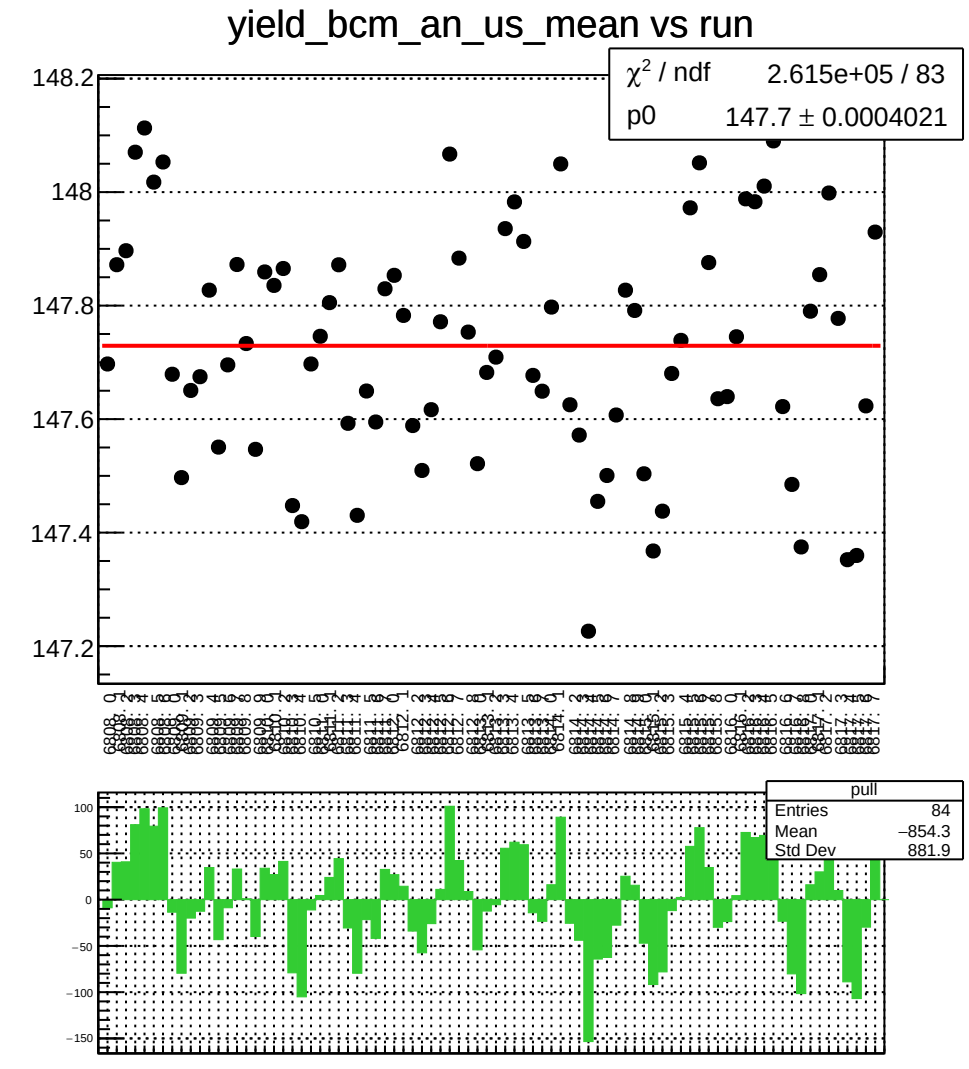

pull1D
Entries 84
Mean 1.272
Std Dev 4.713
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

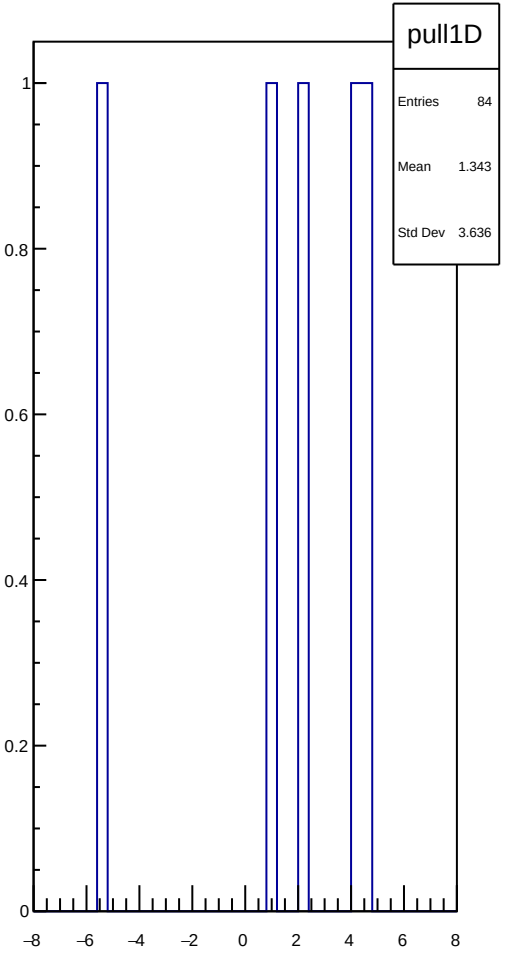

yield_bcm_an_ds_rms vs run
χ² / ndf 2.123e+04 / 83
p0 0.357 ± 0.0002836
0.45
0.4
0.35
0.3
0.25

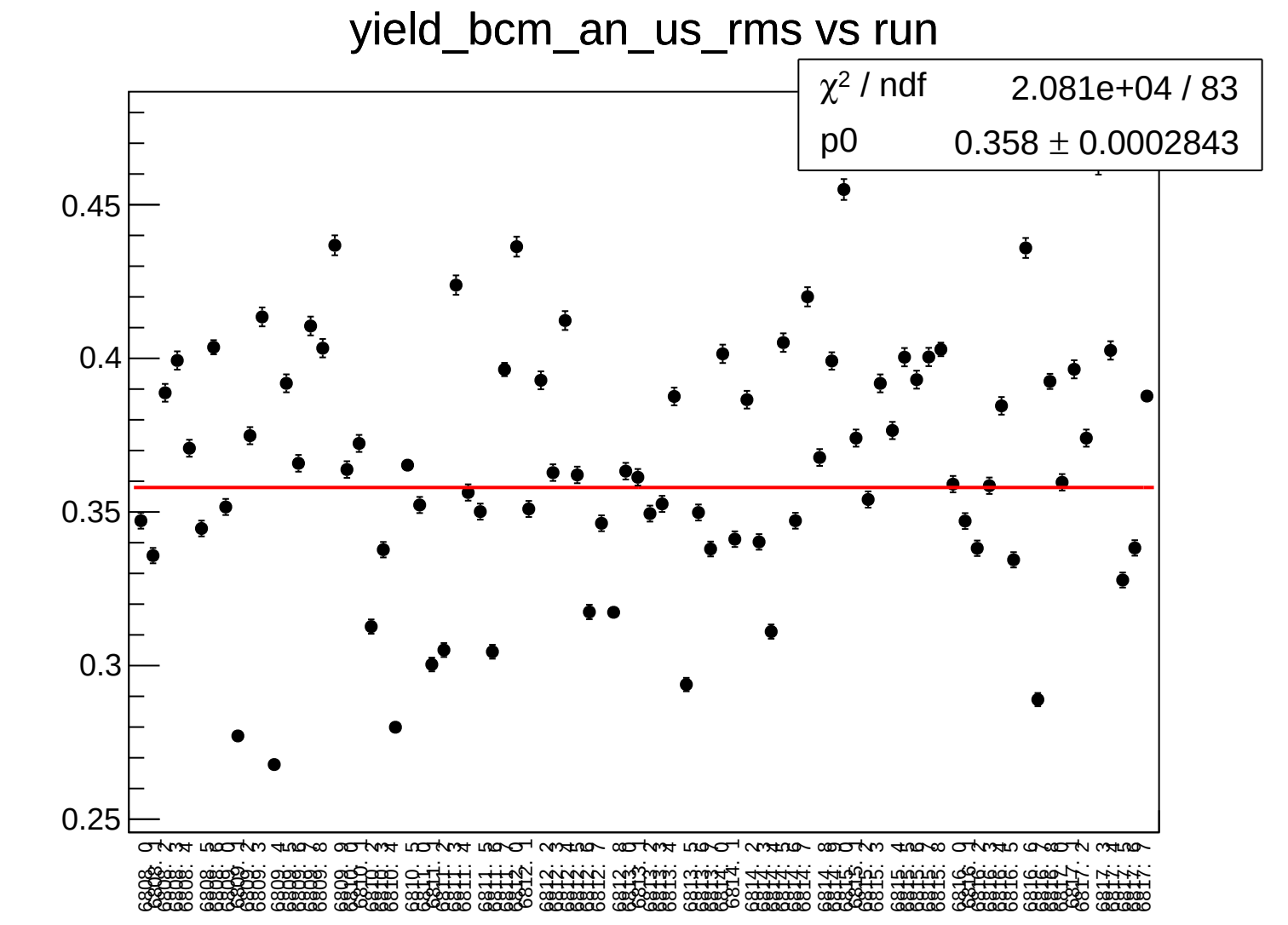

yield_bcm_an_ds3_mean vs run
χ² / ndf 2.573e+05 / 83
p0 148.6 ± 0.0004059
149
148.8
148.6
148.4
148.2
pull
Entries 84
Mean −671
Std Dev 691.7
100
50
0
−50
−100
−150

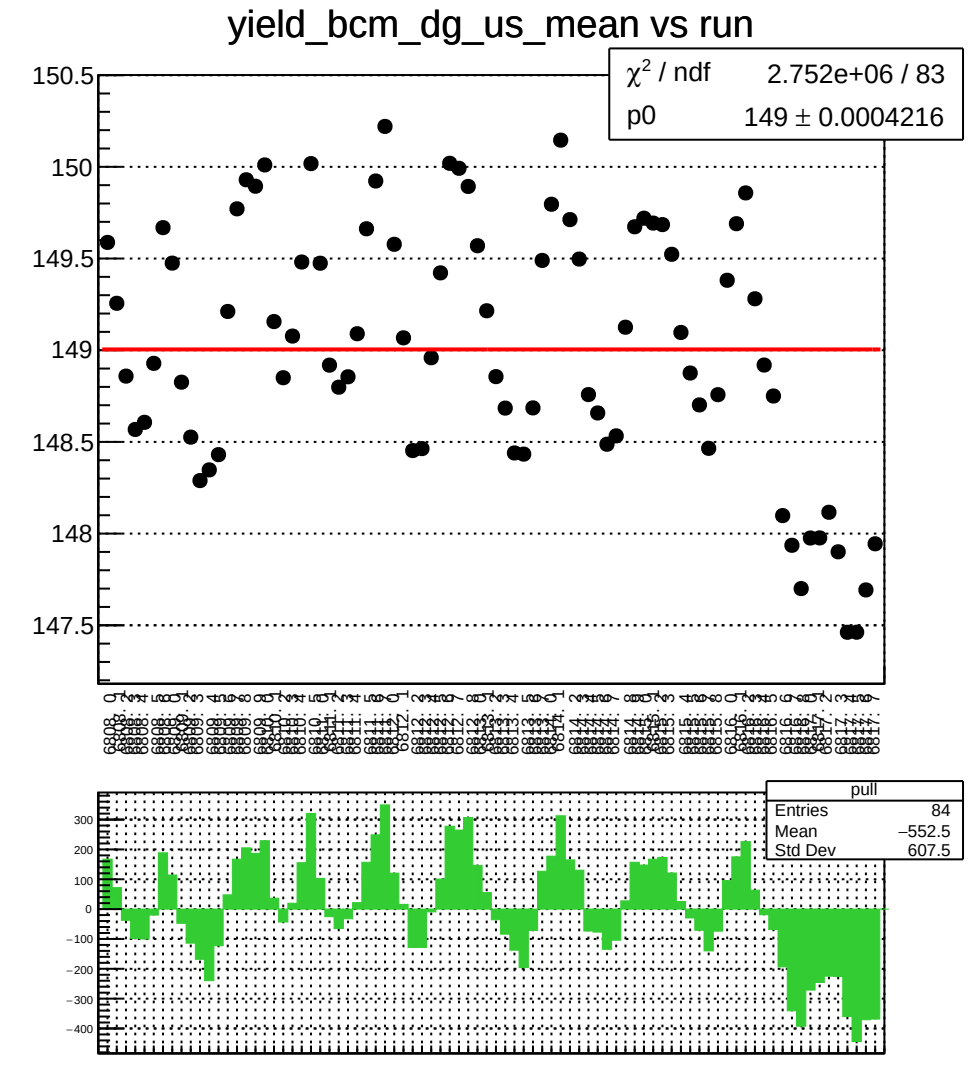

pull1D
Entries 84
Mean 1.743
Std Dev 3.701
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

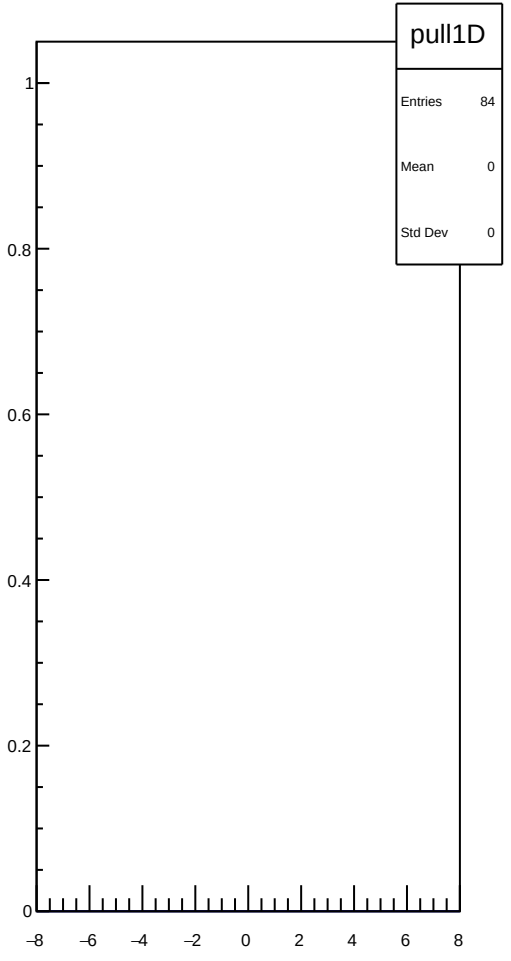

yield_bcm_an_ds3_rms vs run
χ² / ndf 2.133e+04 / 83
p0 0.3614 ± 0.000287
0.45
0.4
0.35
0.3
0.25

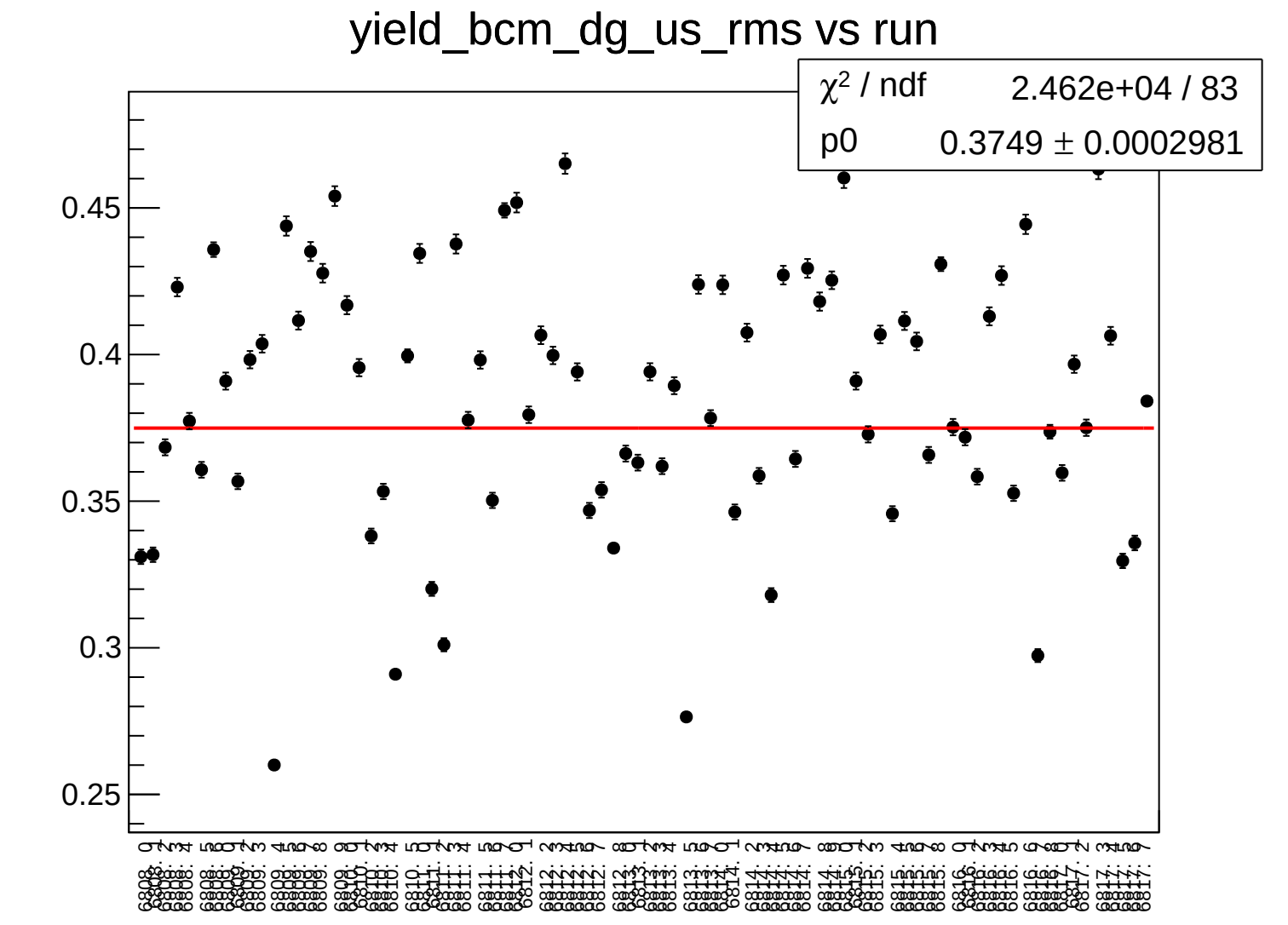

yield_bcm_an_us_mean vs run
χ² / ndf 2.615e+05 / 83
p0 147.7 ± 0.0004021
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 84
Mean −854.3
Std Dev 881.9
100
50
0
−50
−100
−150

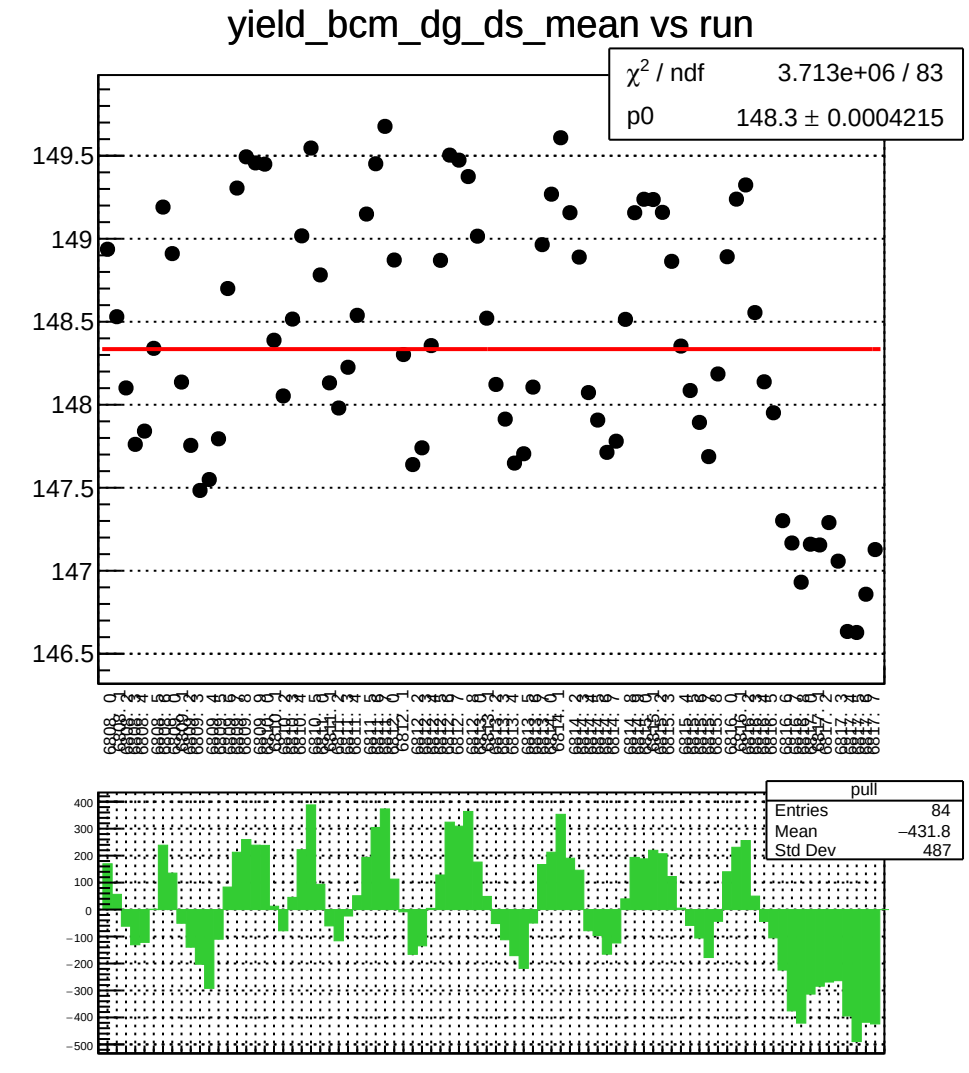

pull1D
Entries 84
Mean 1.343
Std Dev 3.636
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

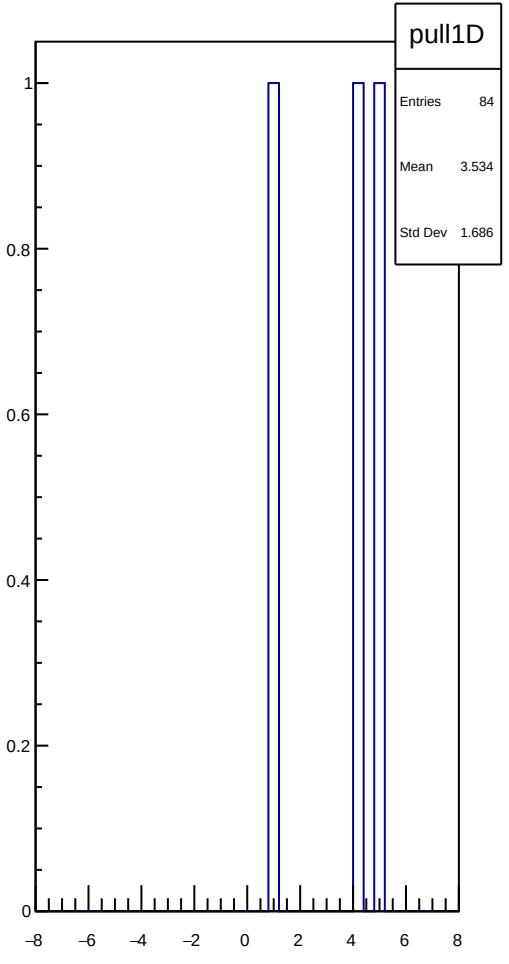

yield_bcm_an_us_rms vs run
χ² / ndf 2.081e+04 / 83
p0 0.358 ± 0.0002843
0.45
0.4
0.35
0.3
0.25

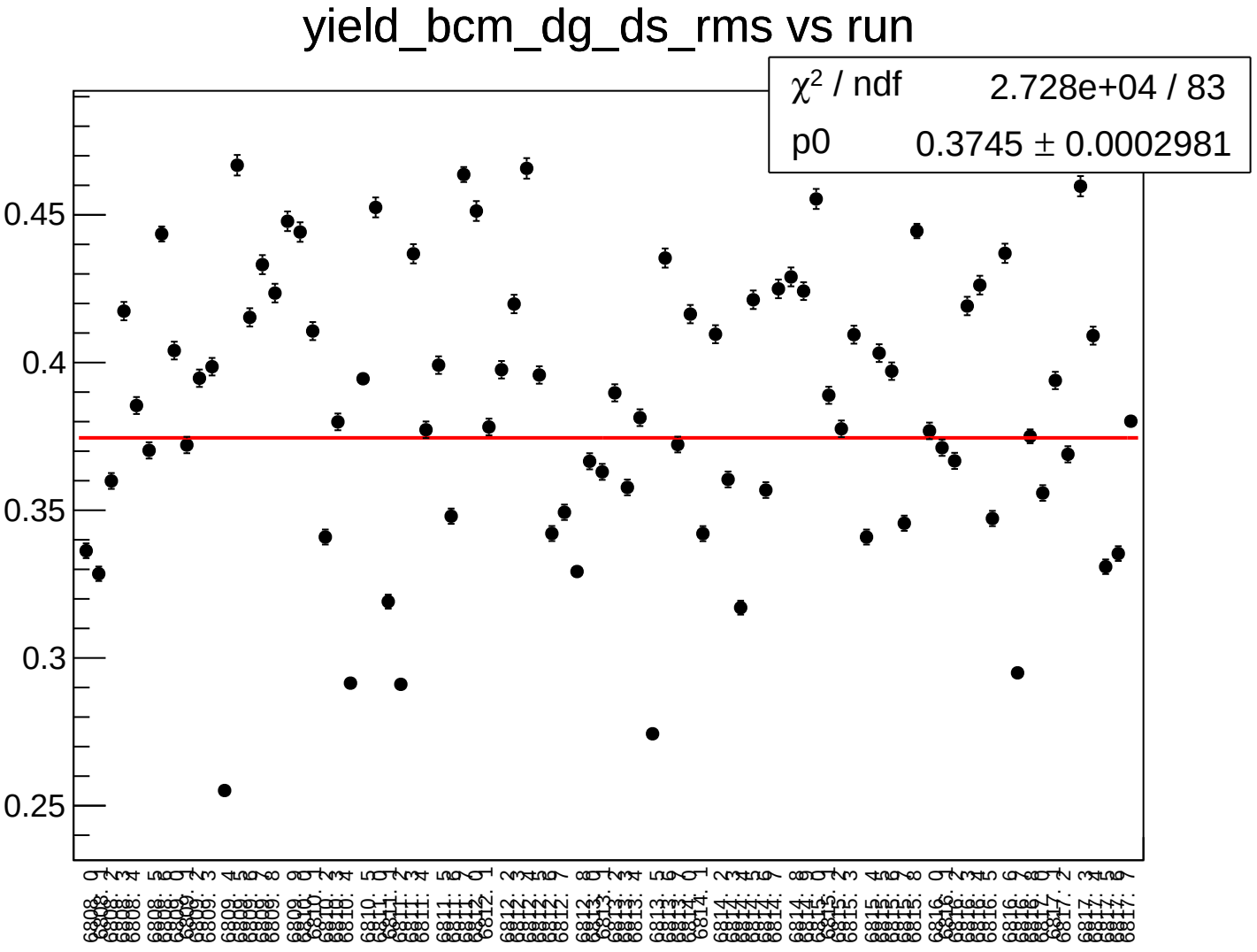

yield_bcm_dg_us_mean vs run
χ² / ndf 2.752e+06 / 83
p0 149 ± 0.0004216
150.5
150
149.5
149
148.5
148
147.5
pull
Entries 84
Mean −552.5
Std Dev 607.5
300
200
100
0
−100
−200
−300
−400

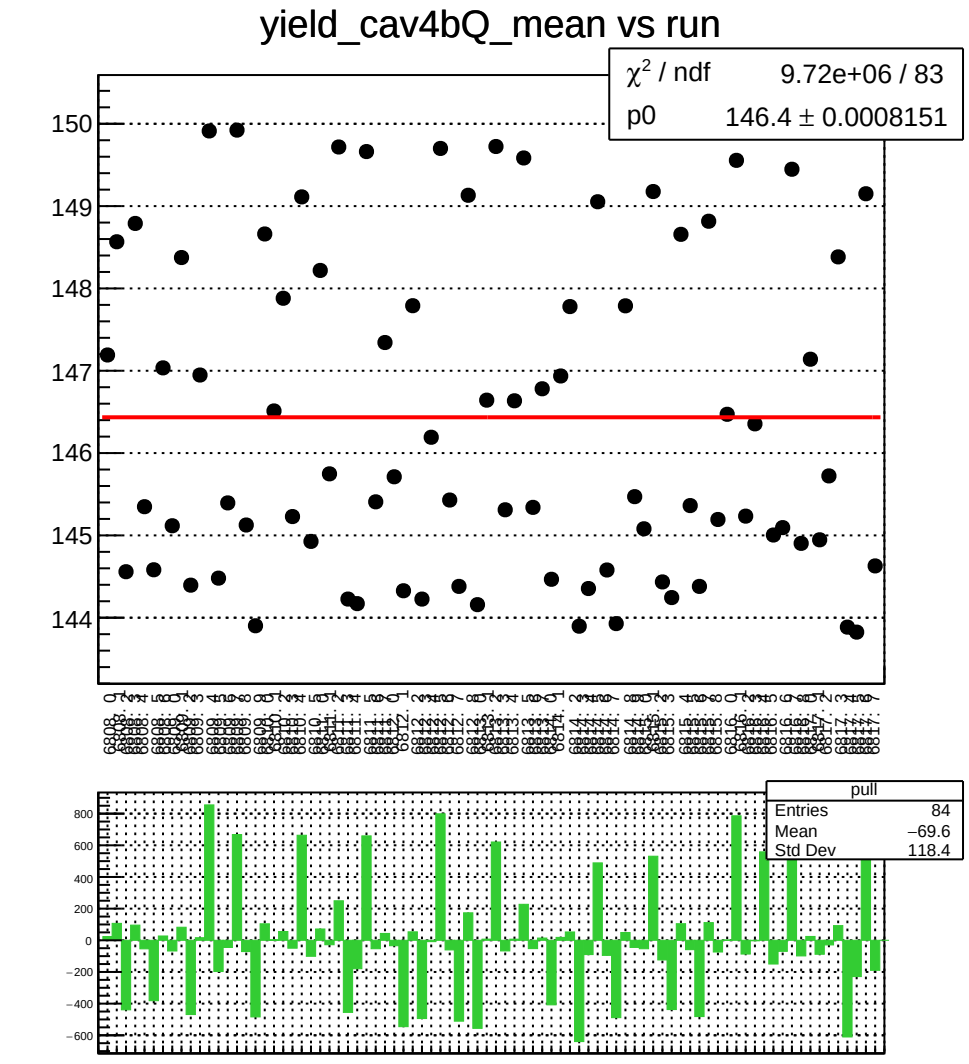

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

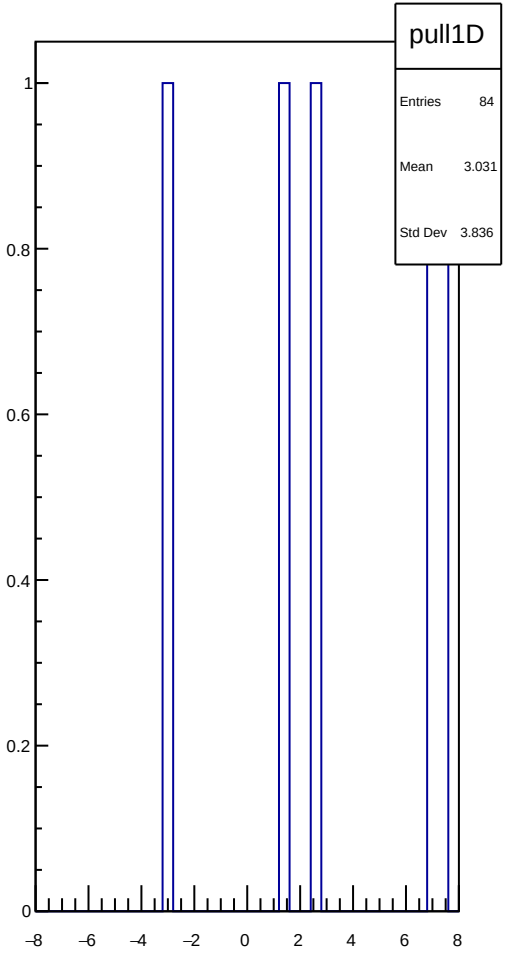

yield_bcm_dg_us_rms vs run
χ² / ndf 2.462e+04 / 83
p0 0.3749 ± 0.0002981
0.45
0.4
0.35
0.3
0.25

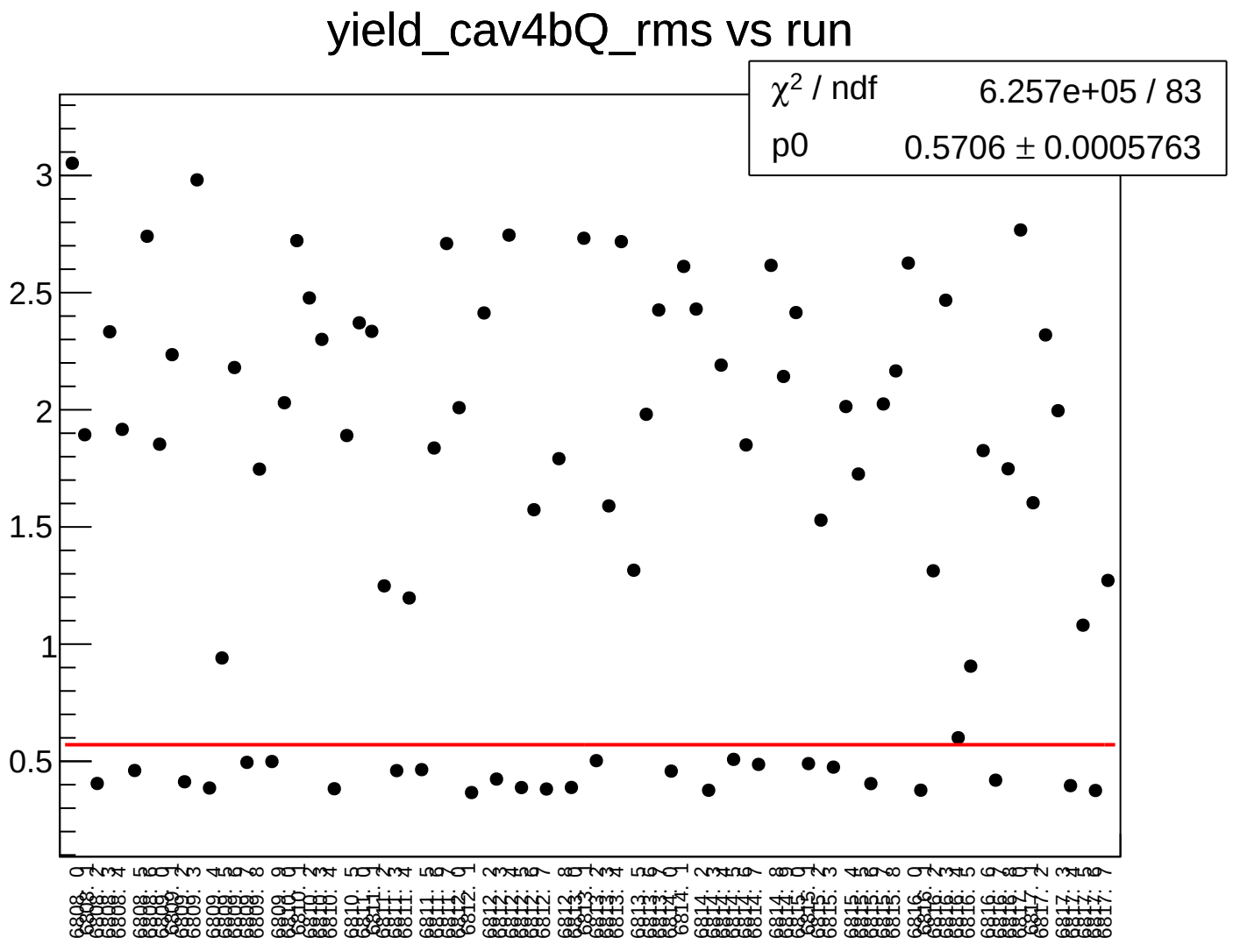

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.713e+06 / 83
p0 148.3 ± 0.0004215
149.5
149
148.5
148
147.5
147
146.5
pull
Entries 84
Mean −431.8
Std Dev 487
400
300
200
100
0
−100
−200
−300
−400
−500

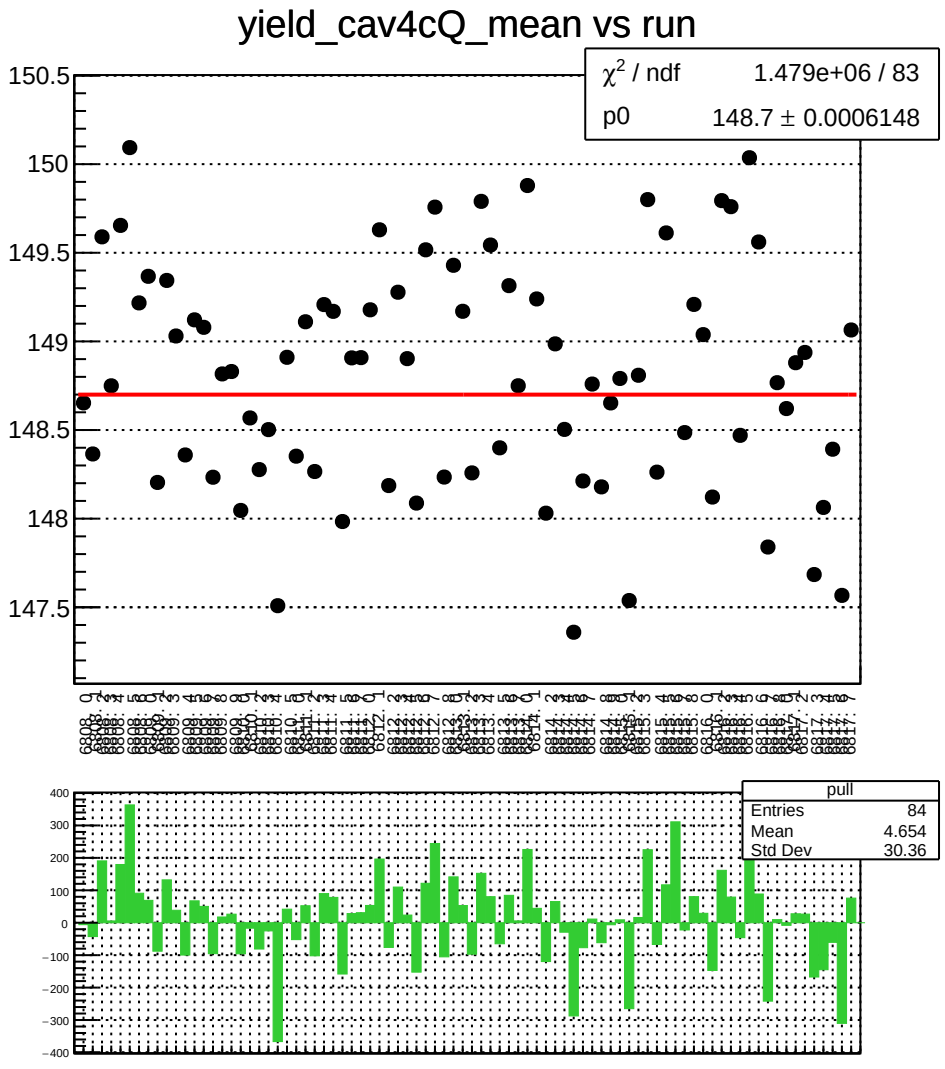

pull1D
Entries 84
Mean 3.534
Std Dev 1.686
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

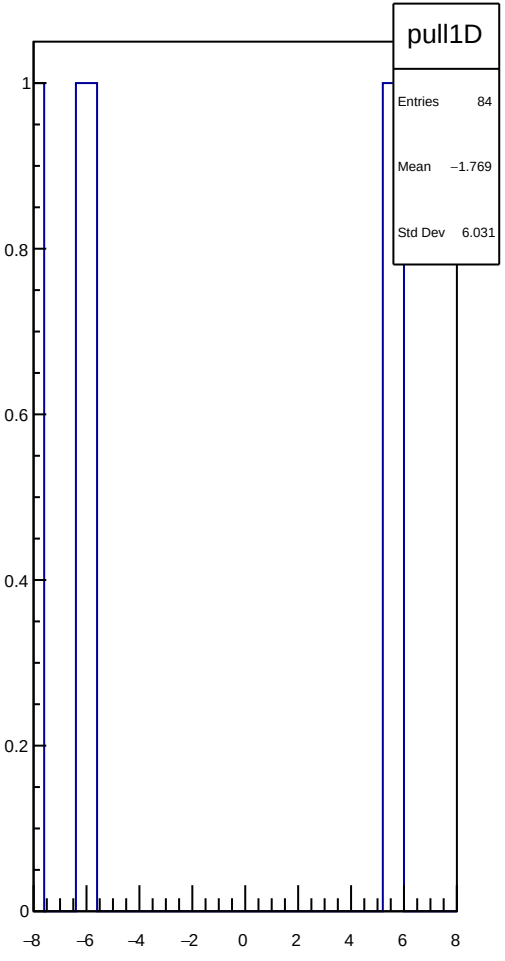

yield_bcm_dg_ds_rms vs run
χ² / ndf 2.728e+04 / 83
p0 0.3745 ± 0.0002981
0.45
0.4
0.35
0.3
0.25

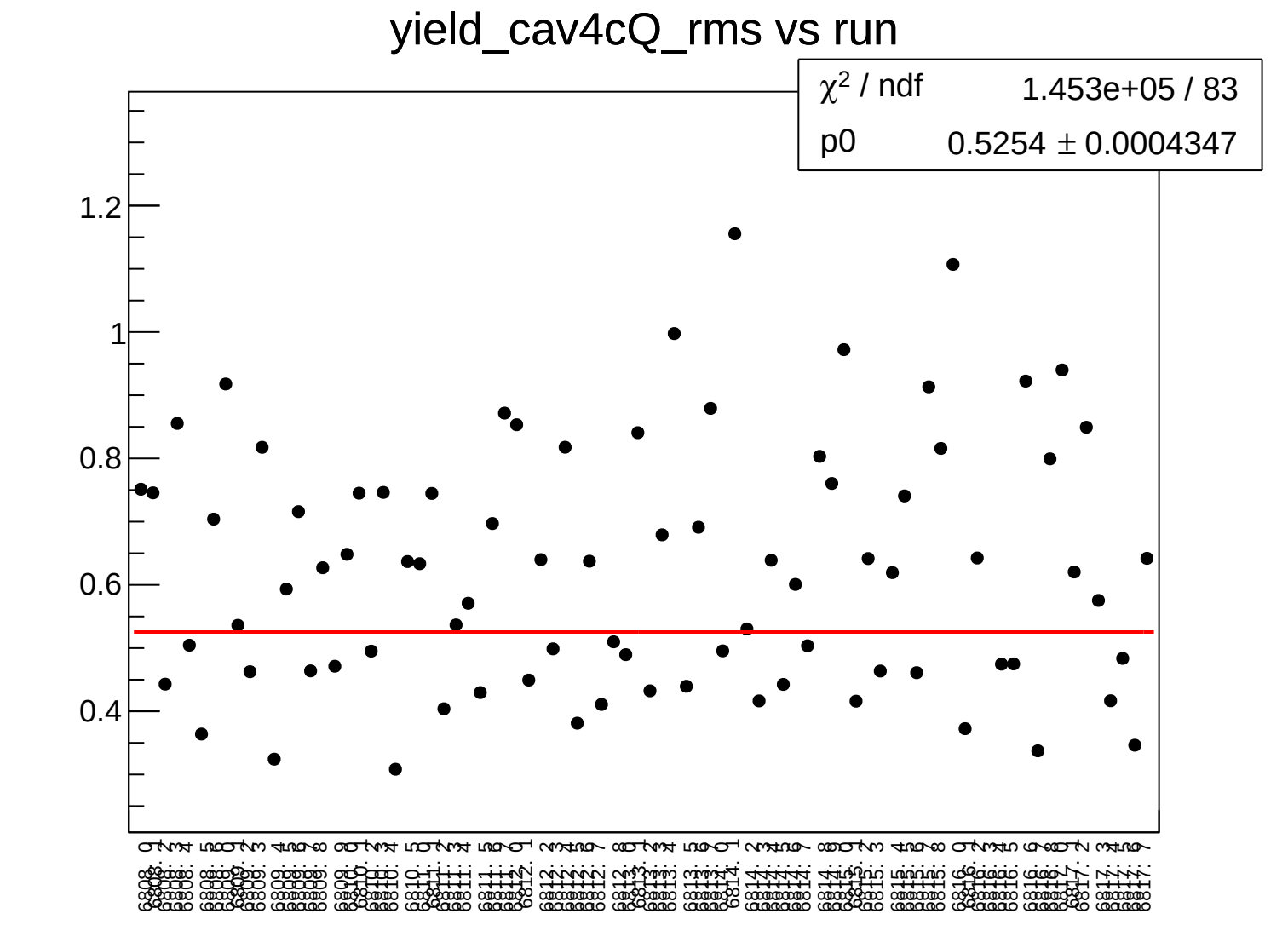

yield_cav4bQ_mean vs run
χ² / ndf 9.72e+06 / 83
p0 146.4 ± 0.0008151
150
149
148
147
146
145
144
pull
Entries 84
Mean −69.6
Std Dev 118.4
800
600
400
200
0
−200
−400
−600

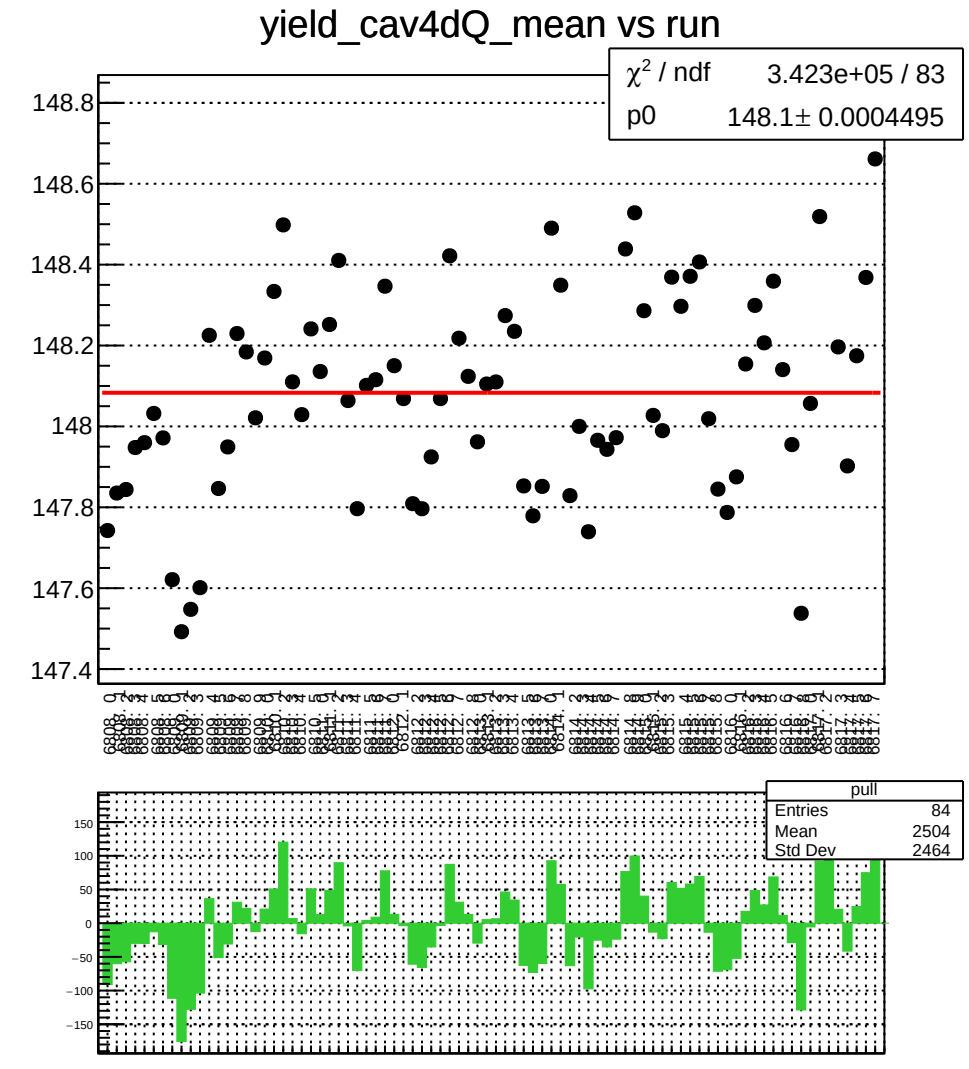

pull1D
Entries 84
Mean 3.031
Std Dev 3.836
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

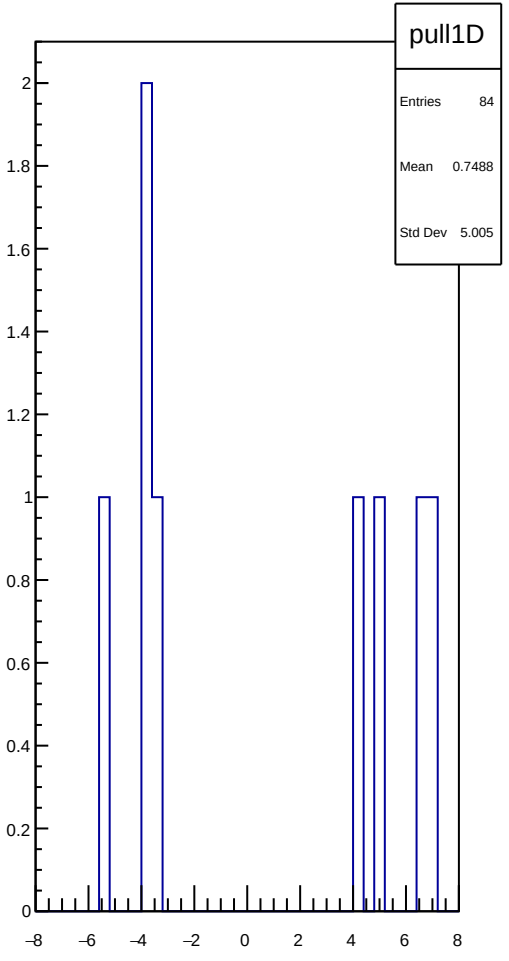

yield_cav4bQ_rms vs run
χ² / ndf 6.257e+05 / 83
p0 0.5706 ± 0.0005763
3
2.5
2
1.5
1
0.5

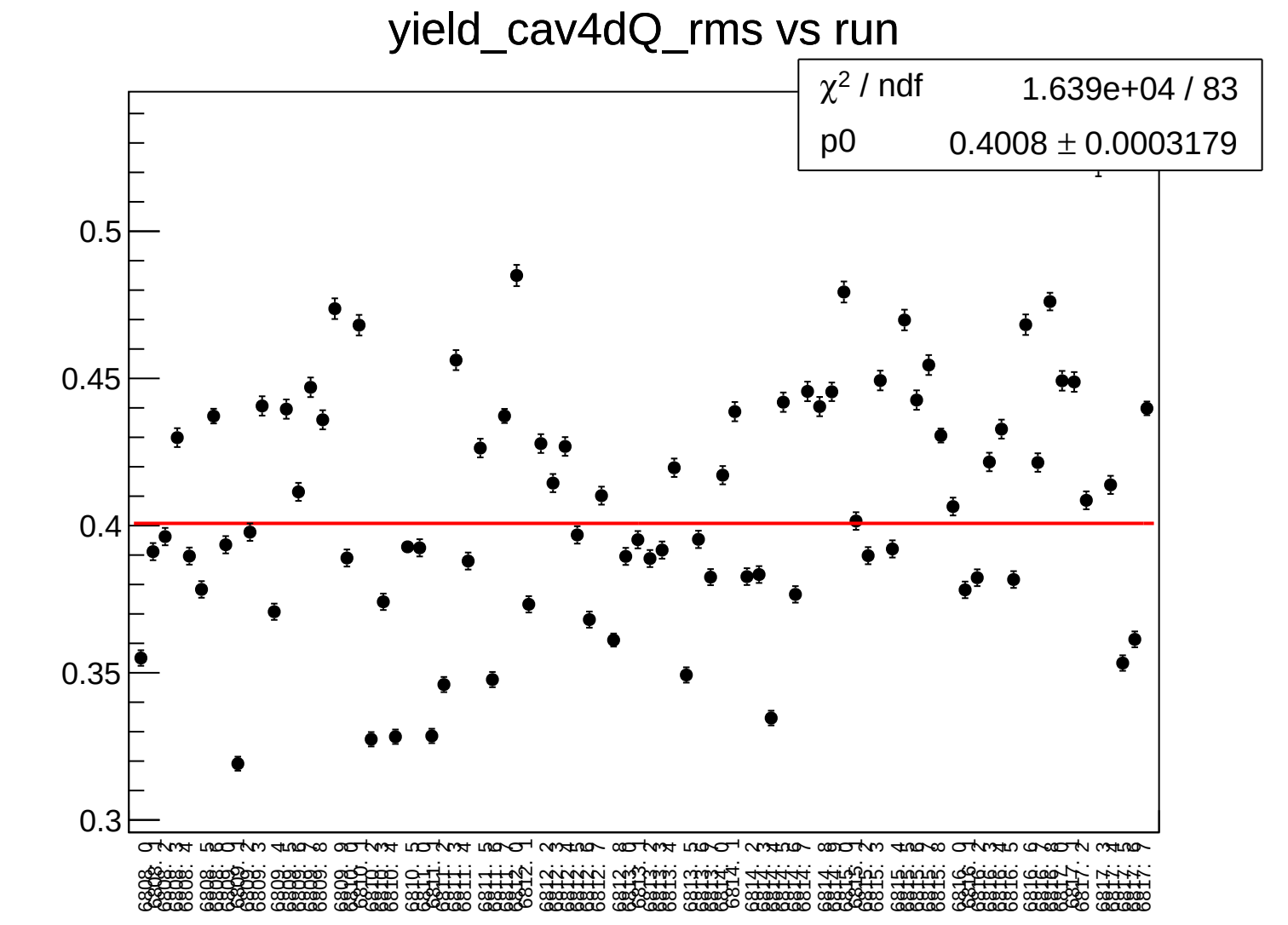

yield_cav4cQ_mean vs run
χ² / ndf 1.479e+06 / 83
p0 148.7 ± 0.0006148
150.5
150
149.5
149
148.5
148
147.5
pull
Entries 84
Mean 4.654
Std Dev 30.36
400
300
200
100
0
−100
−200
−300
−400

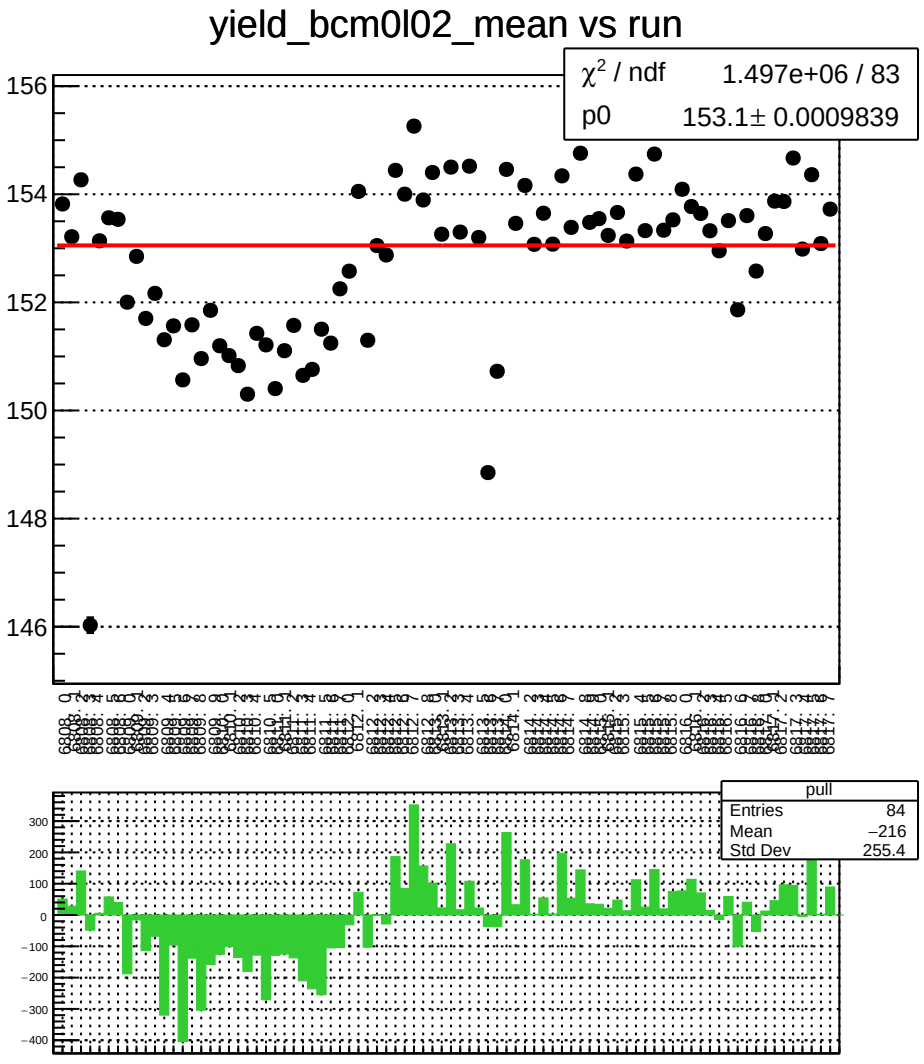

pull1D
Entries 84
Mean −1.769
Std Dev 6.031
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

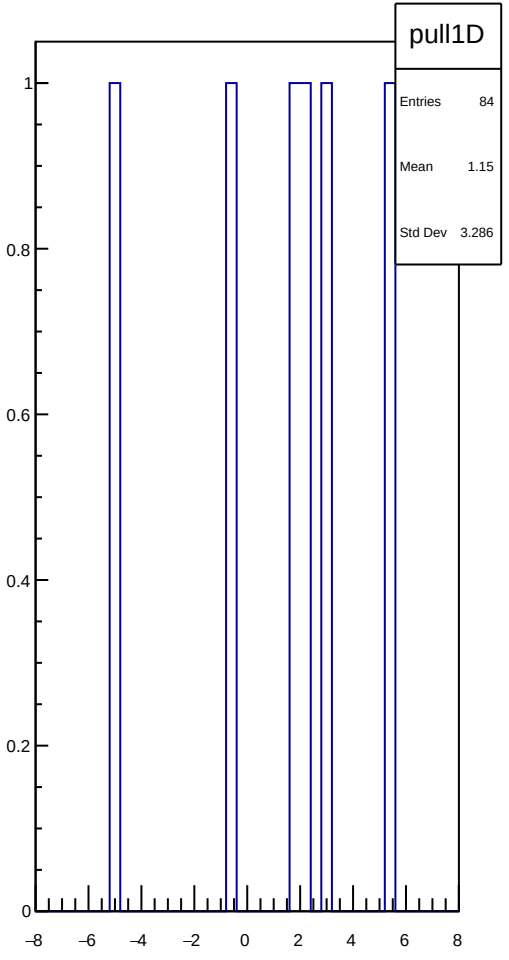

yield_cav4cQ_rms vs run
χ² / ndf 1.453e+05 / 83
p0 0.5254 ± 0.0004347
1.2
1
0.8
0.6
0.4

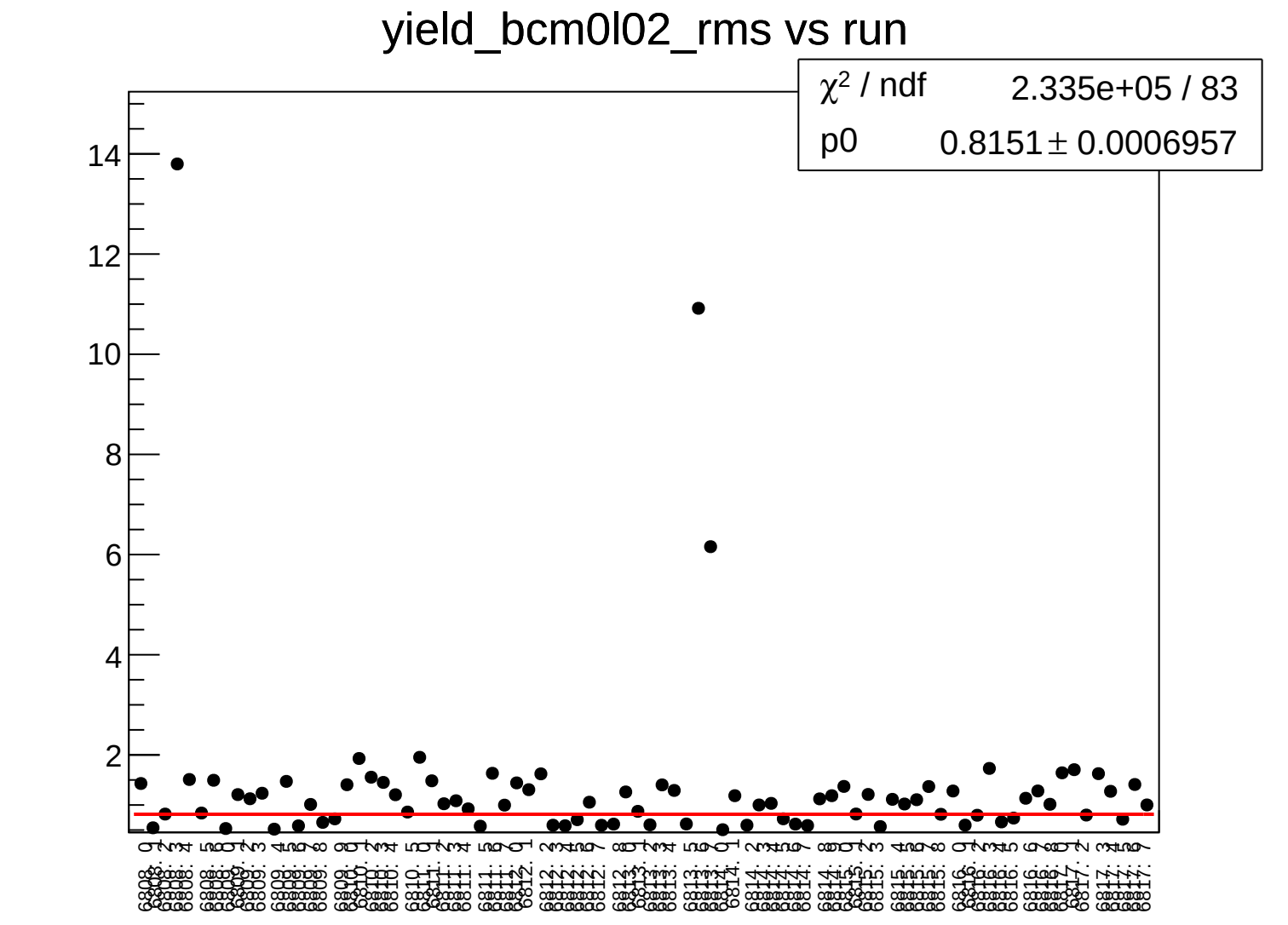

yield_cav4dQ_mean vs run
χ² / ndf 3.423e+05 / 83
p0 148.1± 0.0004495
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
pull
Entries 84
Mean 2504
Std Dev 2464
150
100
50
0
−50
−100
−150

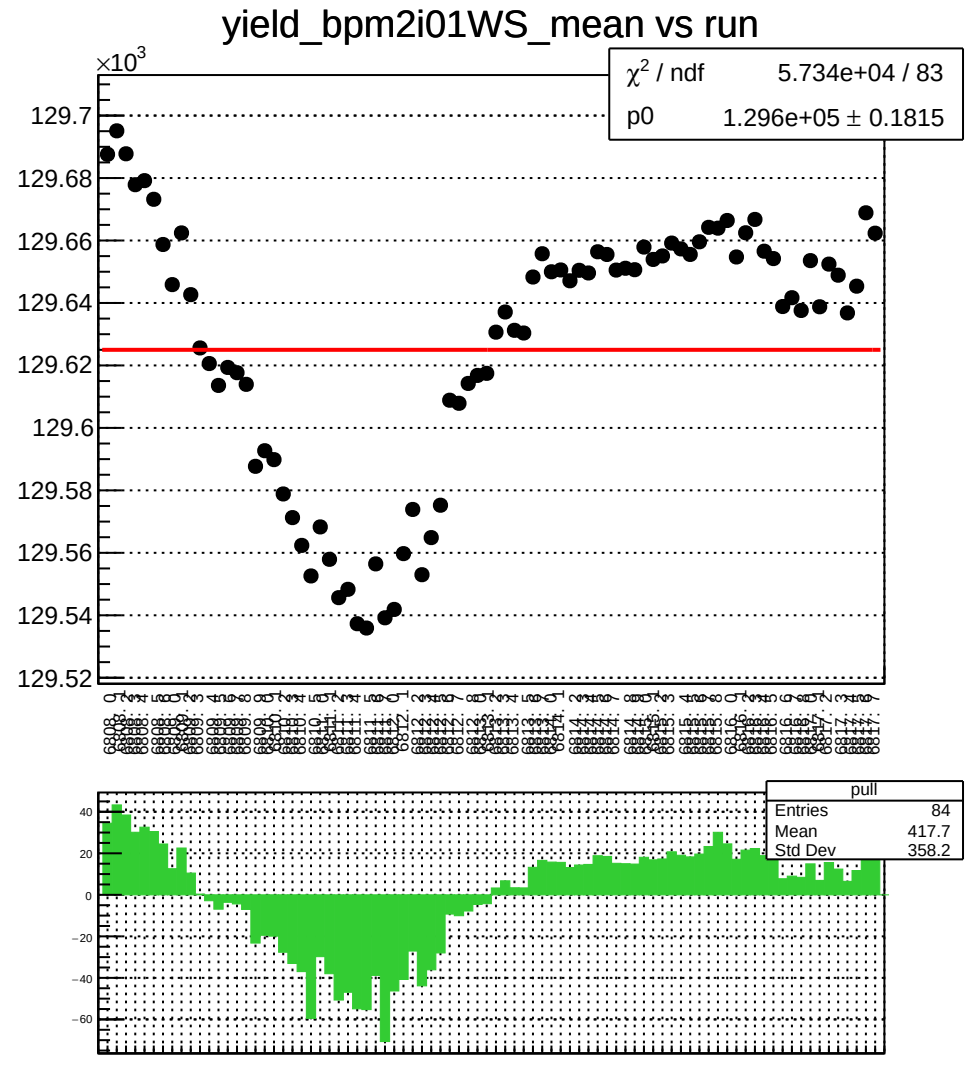

pull1D
Entries 84
Mean 0.7488
Std Dev 5.005
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

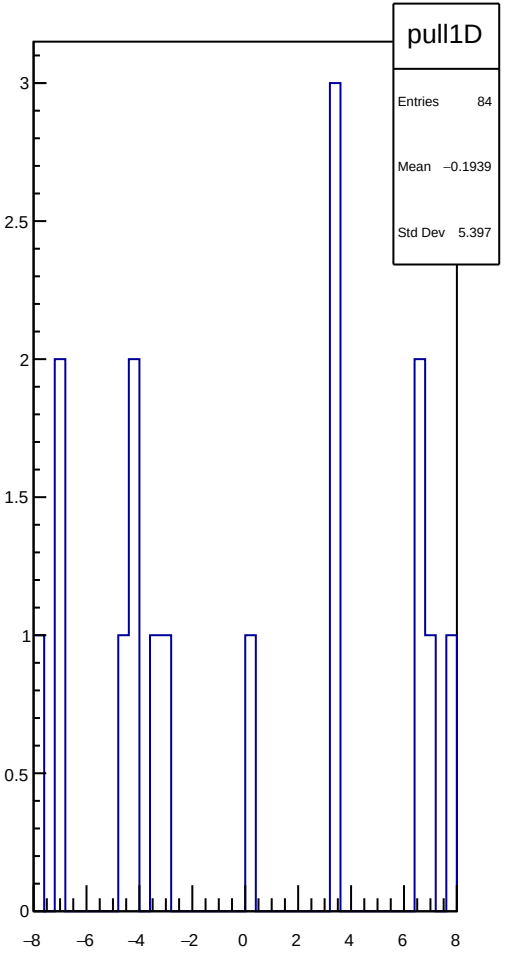

yield_cav4dQ_rms vs run
χ² / ndf 1.639e+04 / 83
p0 0.4008 ± 0.0003179
0.5
0.45
0.4
0.35
0.3

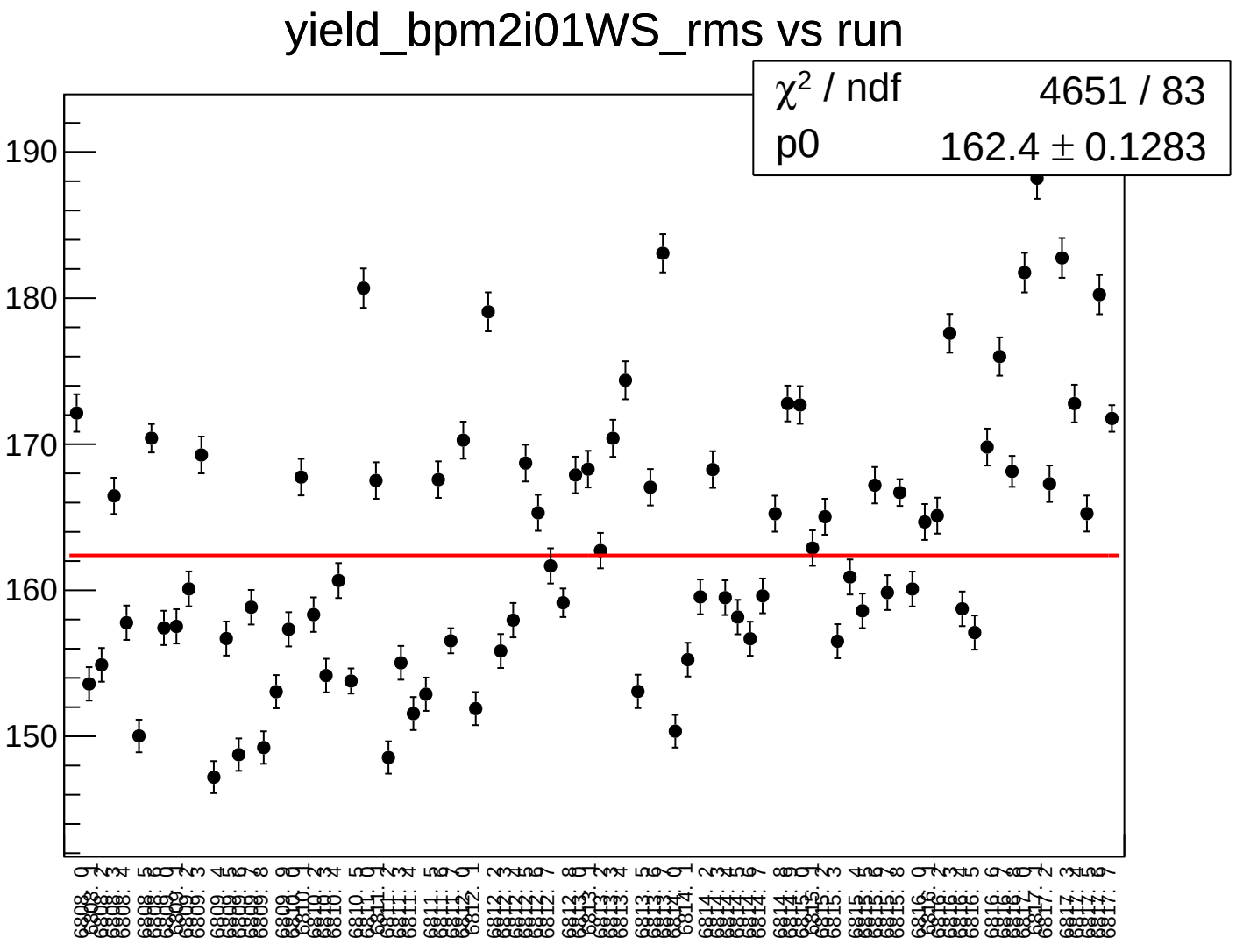

yield_bcm0l02_mean vs run
χ² / ndf 1.497e+06 / 83
p0 153.1± 0.0009839
156
154
152
150
148
146
pull
Entries 84
Mean −216
Std Dev 255.4
300
200
100
0
−100
−200
−300
−400

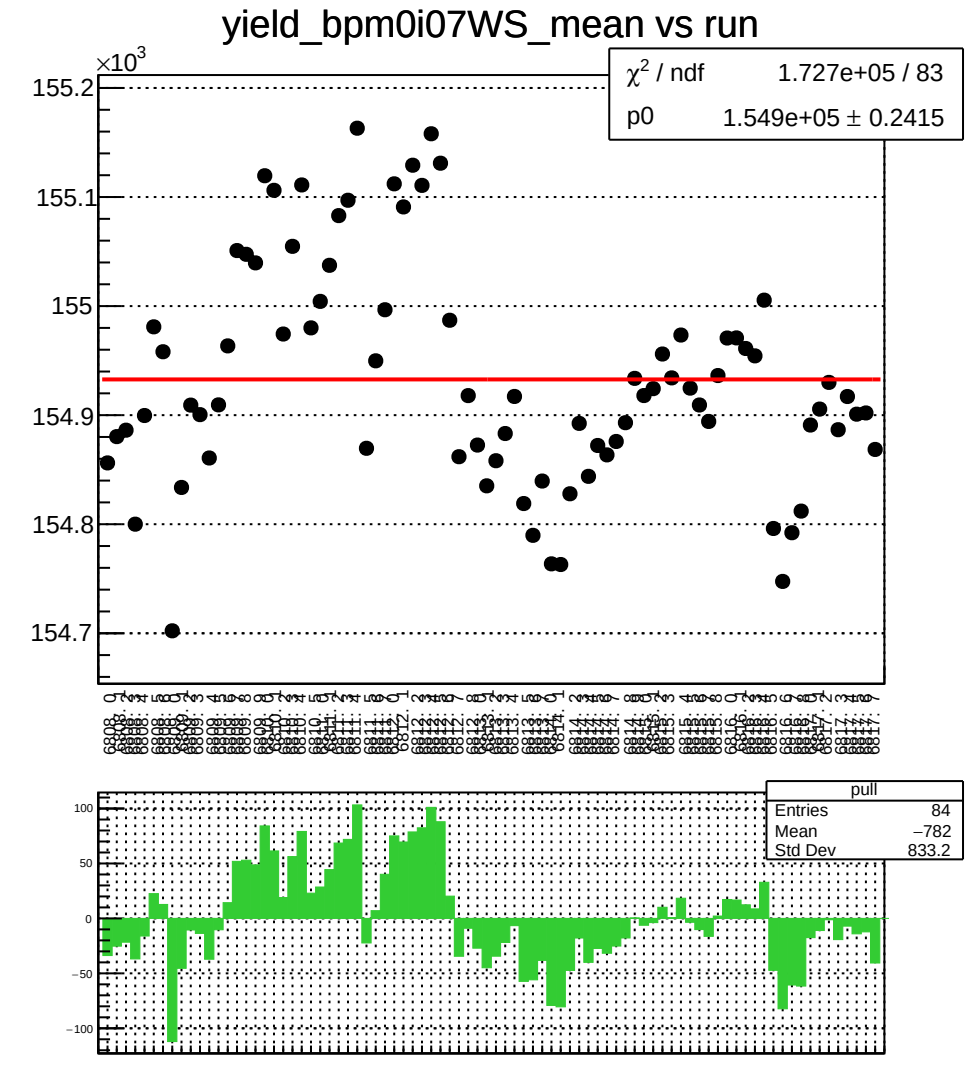

pull1D
Entries 84
Mean 1.15
Std Dev 3.286
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

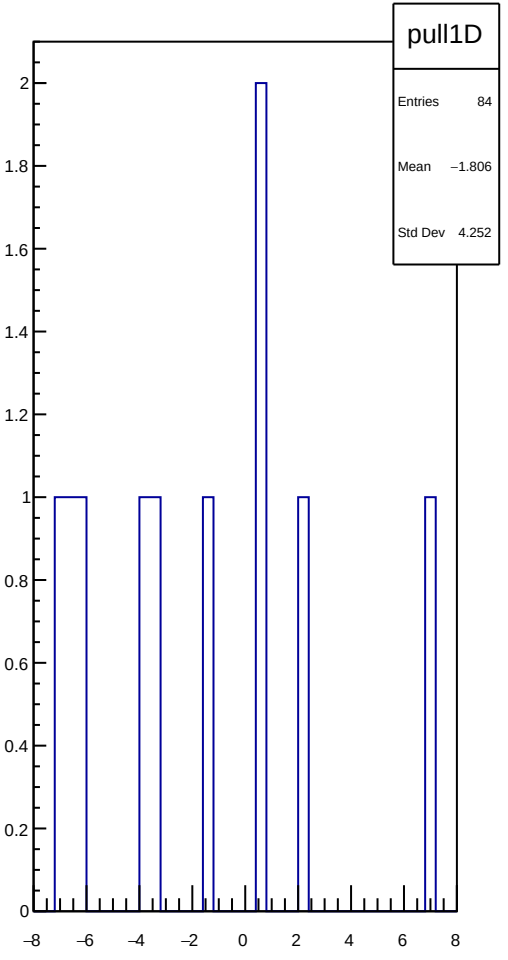

yield_bcm0l02_rms vs run
χ^2 / ndf 2.335e+05 / 83
p0 0.8151 ± 0.0006957
14
12
10
8
6
4
2

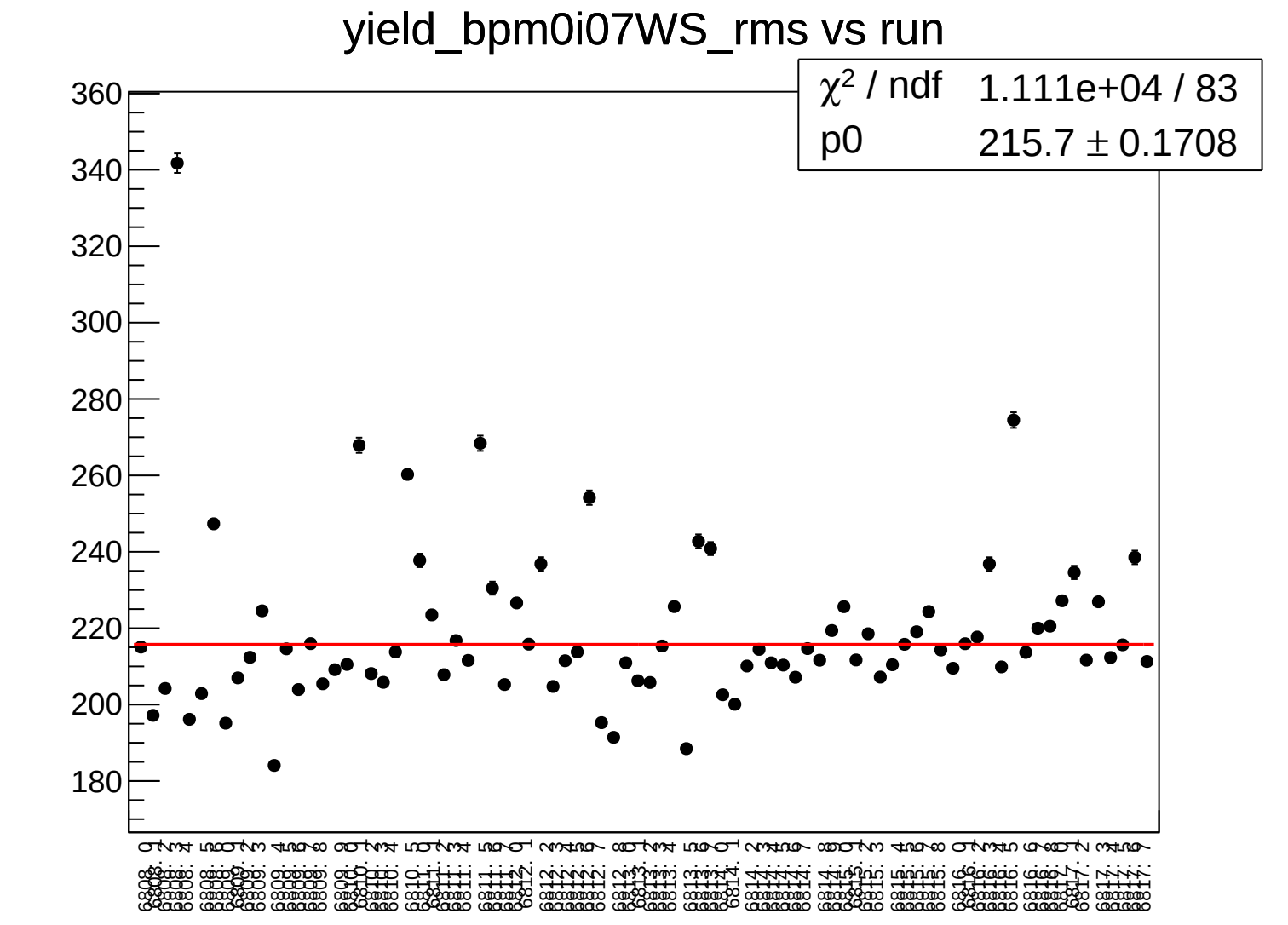

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 5.734e+04 / 83
p0 1.296e+05 ± 0.1815
129.7
129.68
129.66
129.64
129.62
129.6
129.58
129.56
129.54
129.52
pull
Entries 84
Mean 417.7
Std Dev 358.2
40
20
0
−20
−40
−60

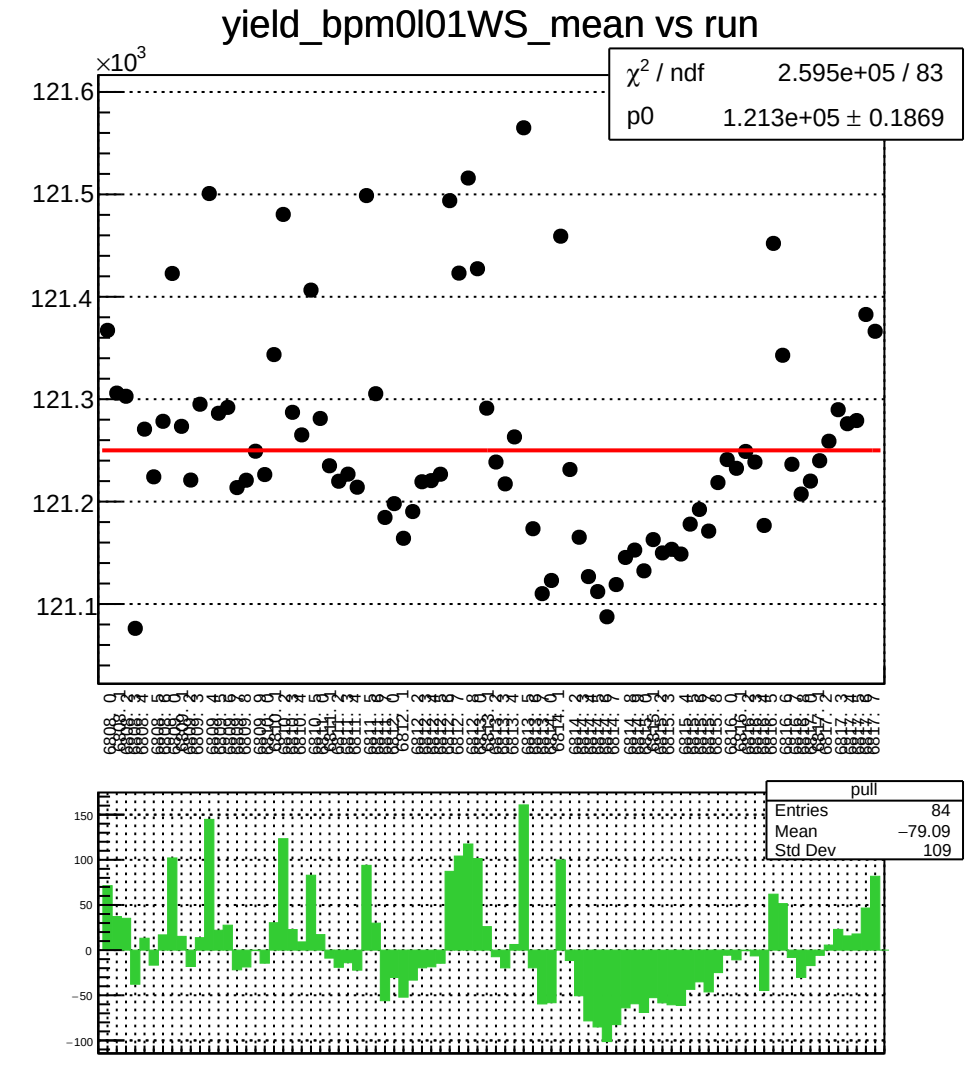

pull1D
Entries 84
Mean −0.1939
Std Dev 5.397
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

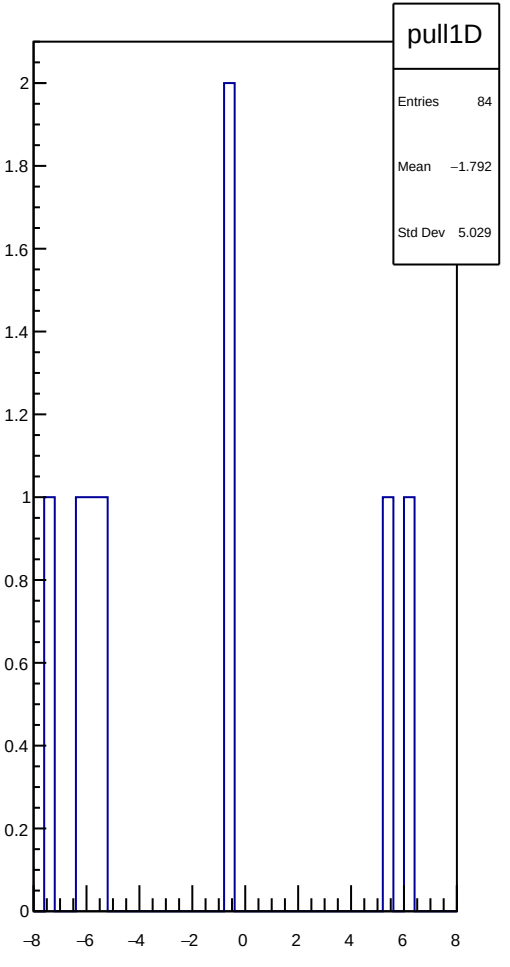

yield_bpm2i01WS_rms vs run
χ² / ndf 4651 / 83
p0 162.4 ± 0.1283
190
180
170
160
150

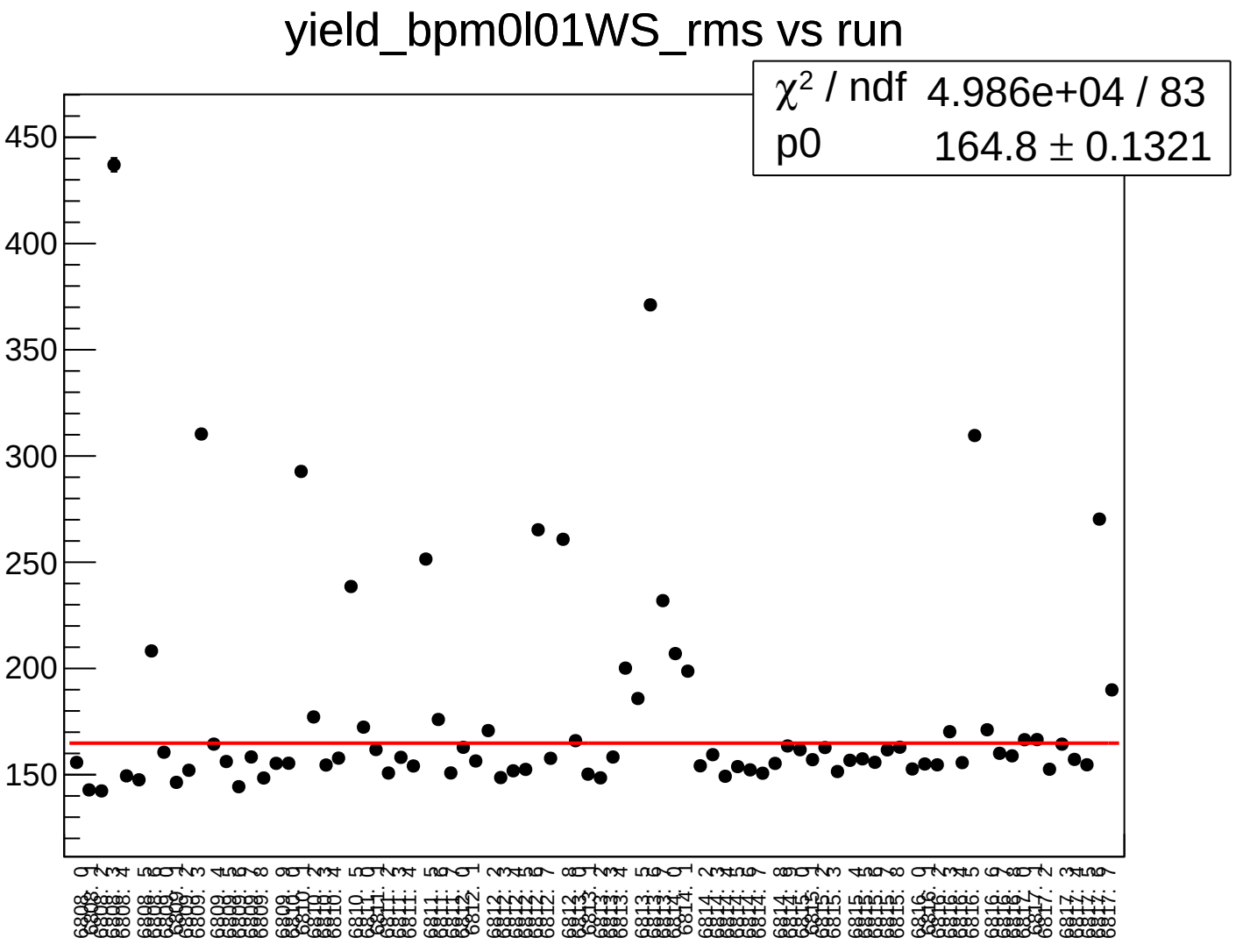

yield_bpm0i07WS_mean vs run
×10^3
155.2
155.1
155
154.9
154.8
154.7
χ² / ndf 1.727e+05 / 83
p0 1.549e+05 ± 0.2415
pull
Entries 84
Mean −782
Std Dev 833.2
100
50
0
−50
−100

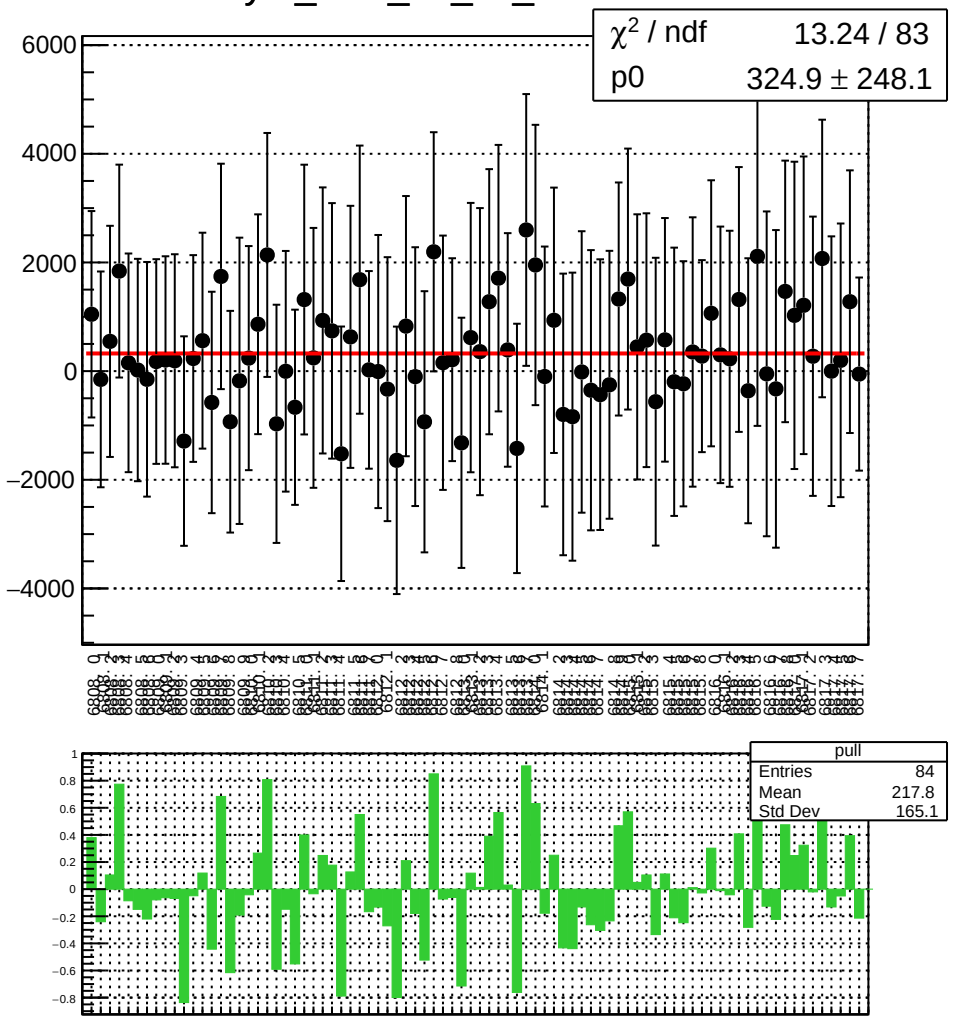

pull1D
Entries 84
Mean −1.806
Std Dev 4.252
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

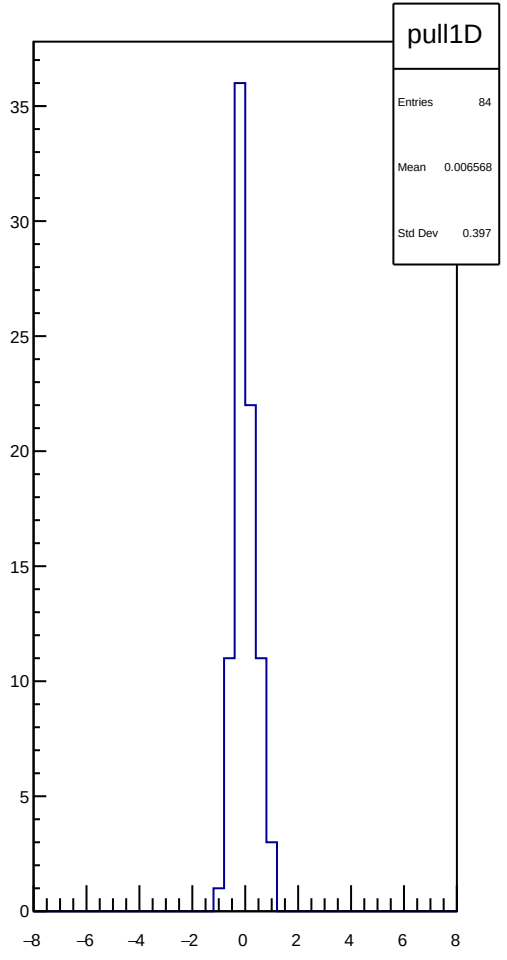

yield_bpm0i07WS_rms vs run
χ^2 / ndf 1.111e+04 / 83
p0 215.7 ± 0.1708
360
340
320
300
280
260
240
220
200
180

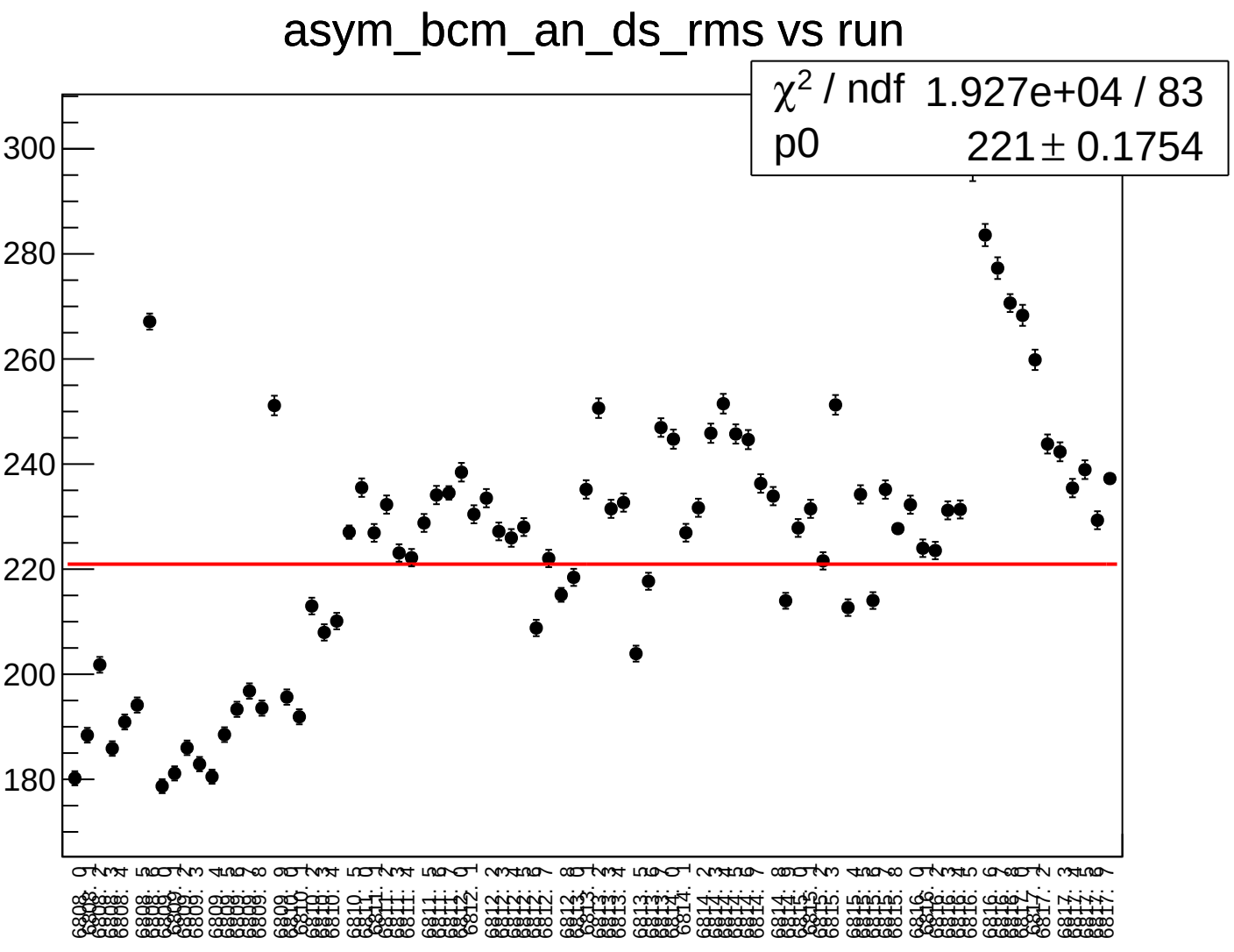

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.595e+05 / 83
p0 1.213e+05 ± 0.1869
121.6
121.5
121.4
121.3
121.2
121.1
pull
Entries 84
Mean −79.09
Std Dev 109
150
100
50
0
−50
−100

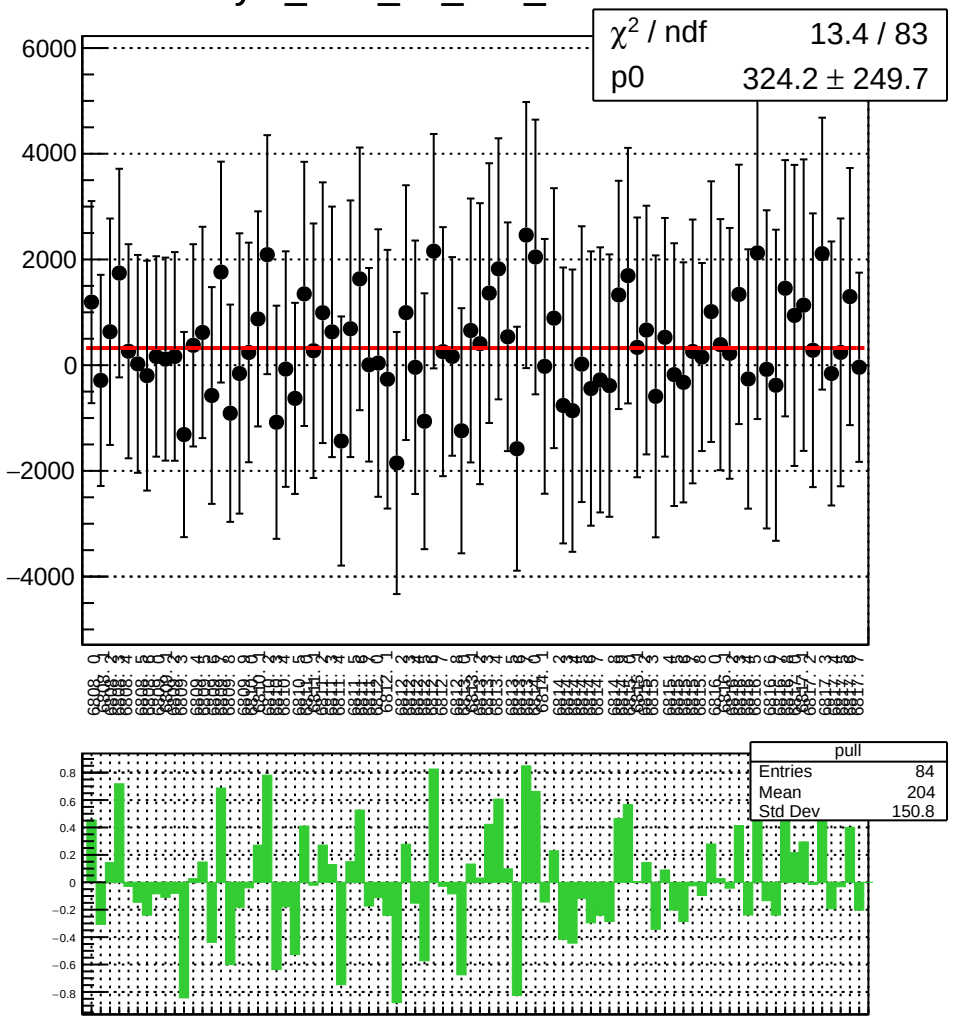

pull1D
Entries 84
Mean −1.792
Std Dev 5.029
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

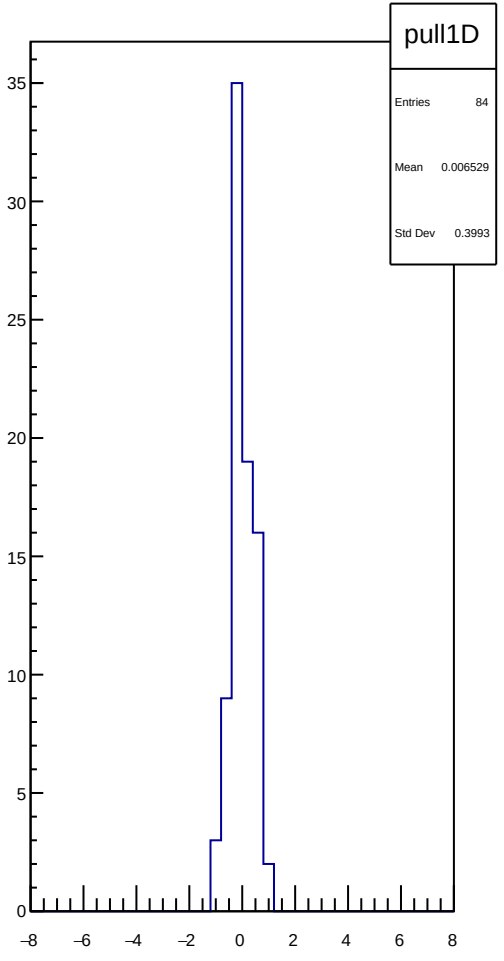

yield_bpm0l01WS_rms vs run
χ² / ndf 4.986e+04 / 83
p0 164.8 ± 0.1321
450
400
350
300
250
200
150

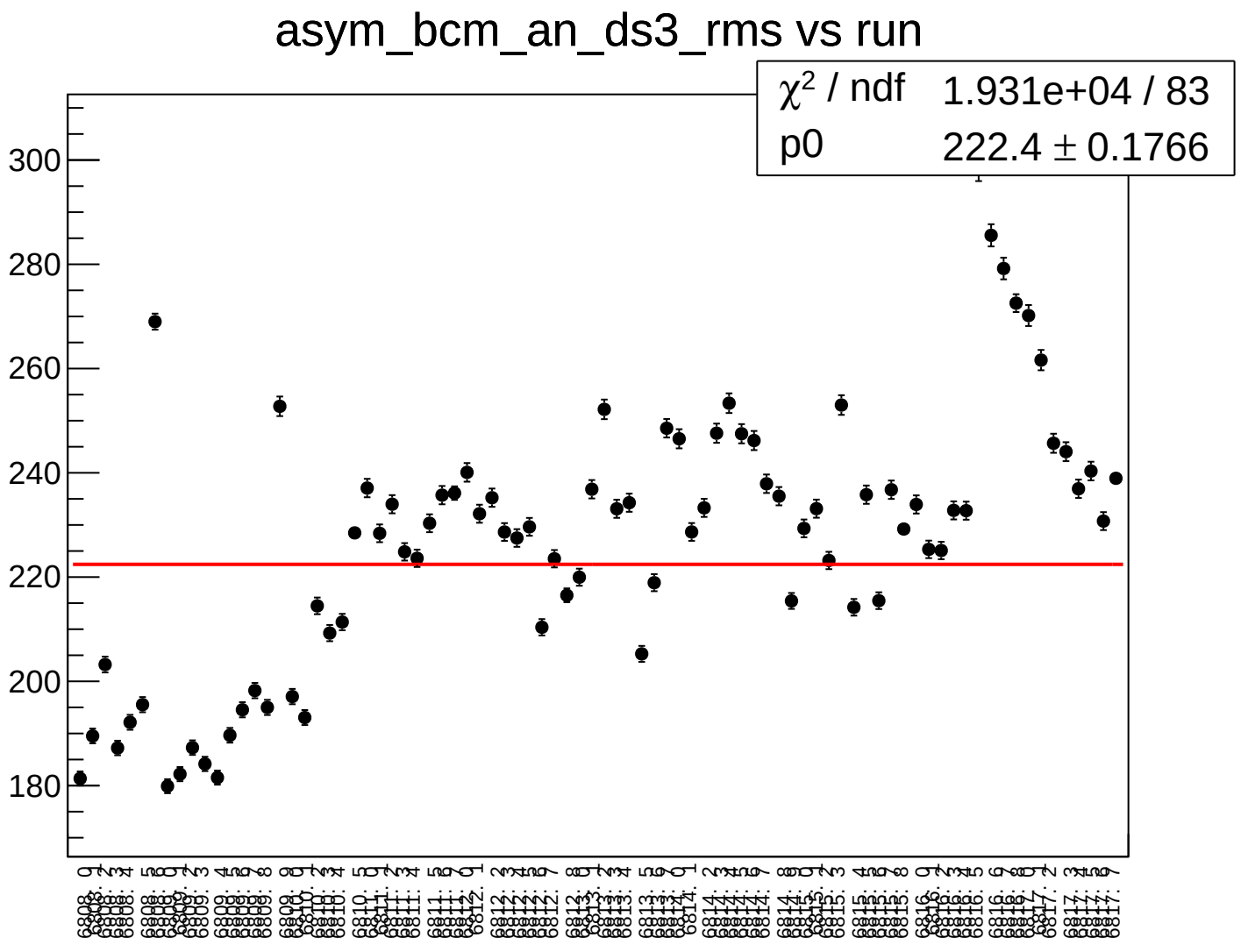

asym_bcm_an_ds_mean vs run
χ² / ndf 13.24 / 83
p0 324.9 ± 248.1
pull
Entries 84
Mean 217.8
Std Dev 165.1

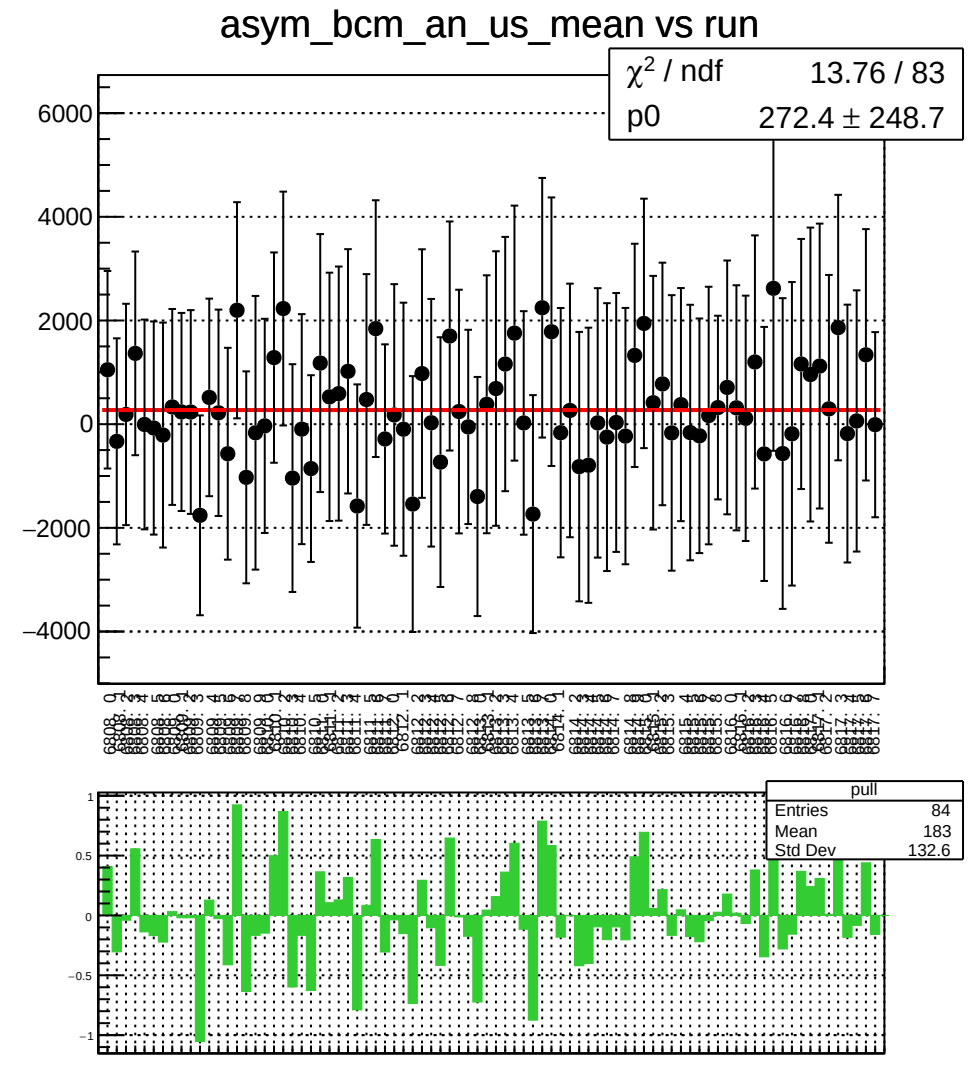

pull1D
Entries 84
Mean 0.006568
Std Dev 0.397

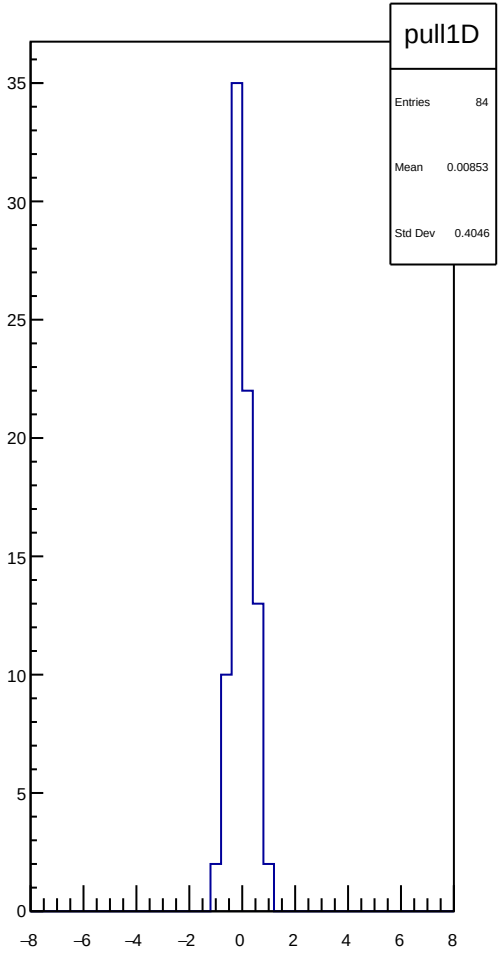

asym_bcm_an_ds_rms vs run
χ² / ndf 1.927e+04 / 83
p0 221 ± 0.1754
300
280
260
240
220
200
180

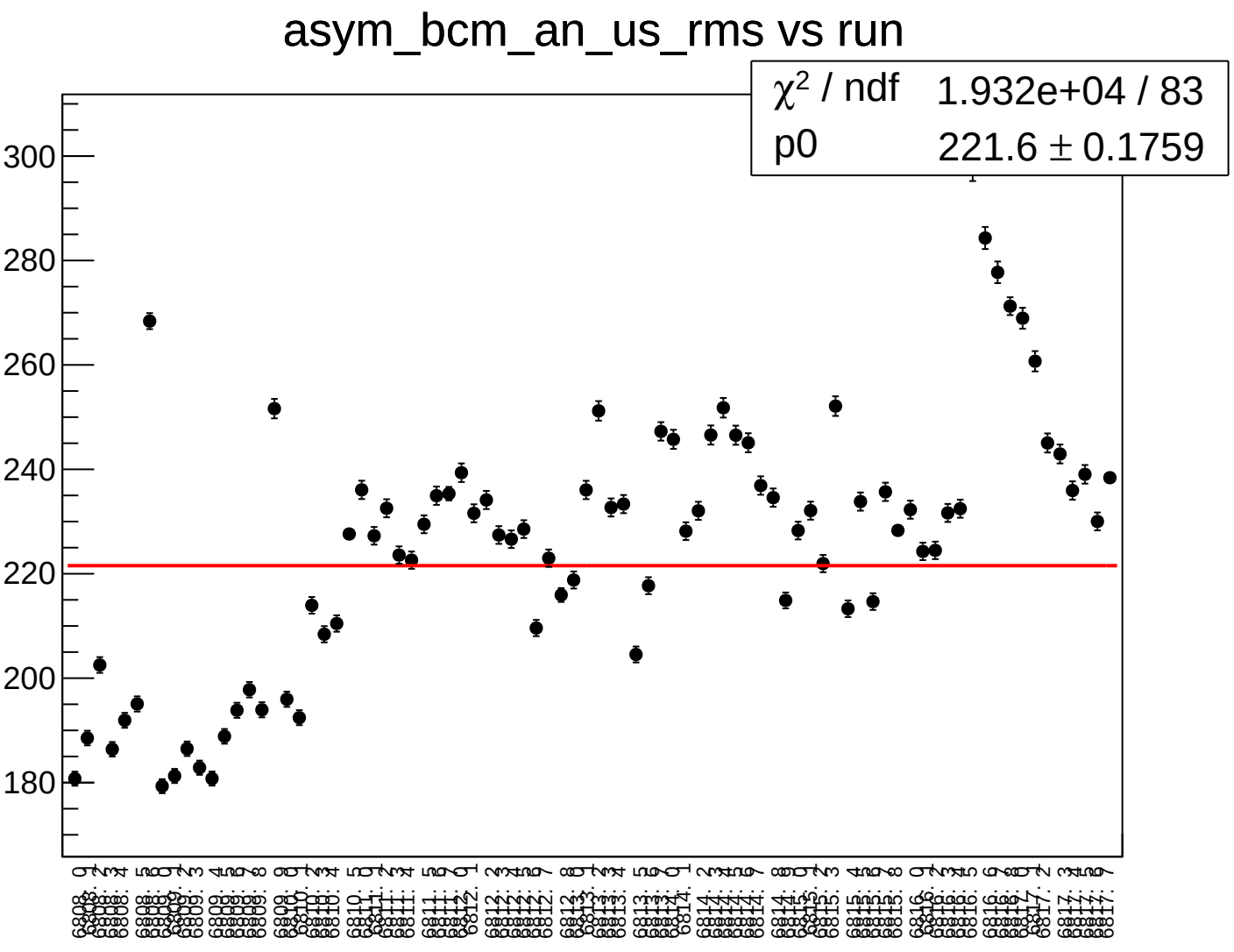

asym_bcm_an_ds3_mean vs run
χ² / ndf 13.4 / 83
p0 324.2 ± 249.7
pull
Entries 84
Mean 204
Std Dev 150.8

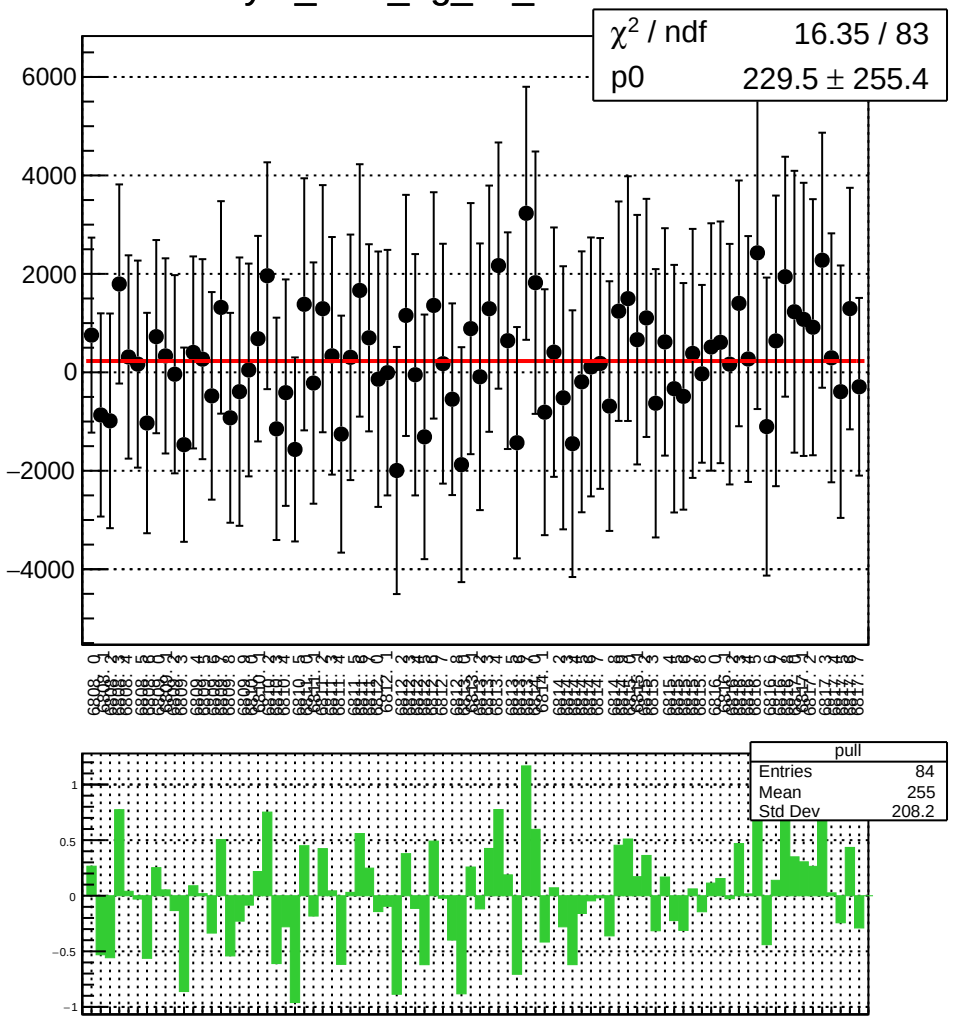

pull1D
Entries 84
Mean 0.006529
Std Dev 0.3993

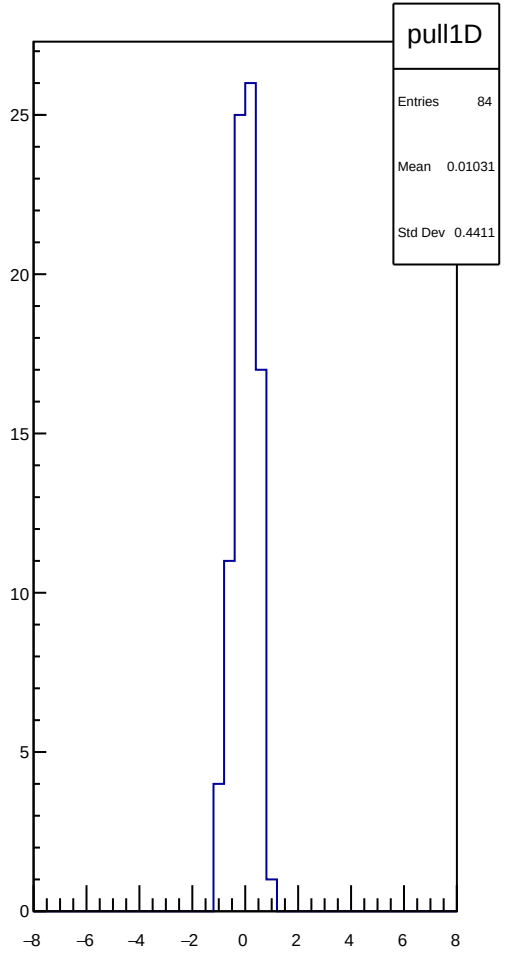

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.931e+04 / 83
p0 222.4 ± 0.1766
300
280
260
240
220
200
180

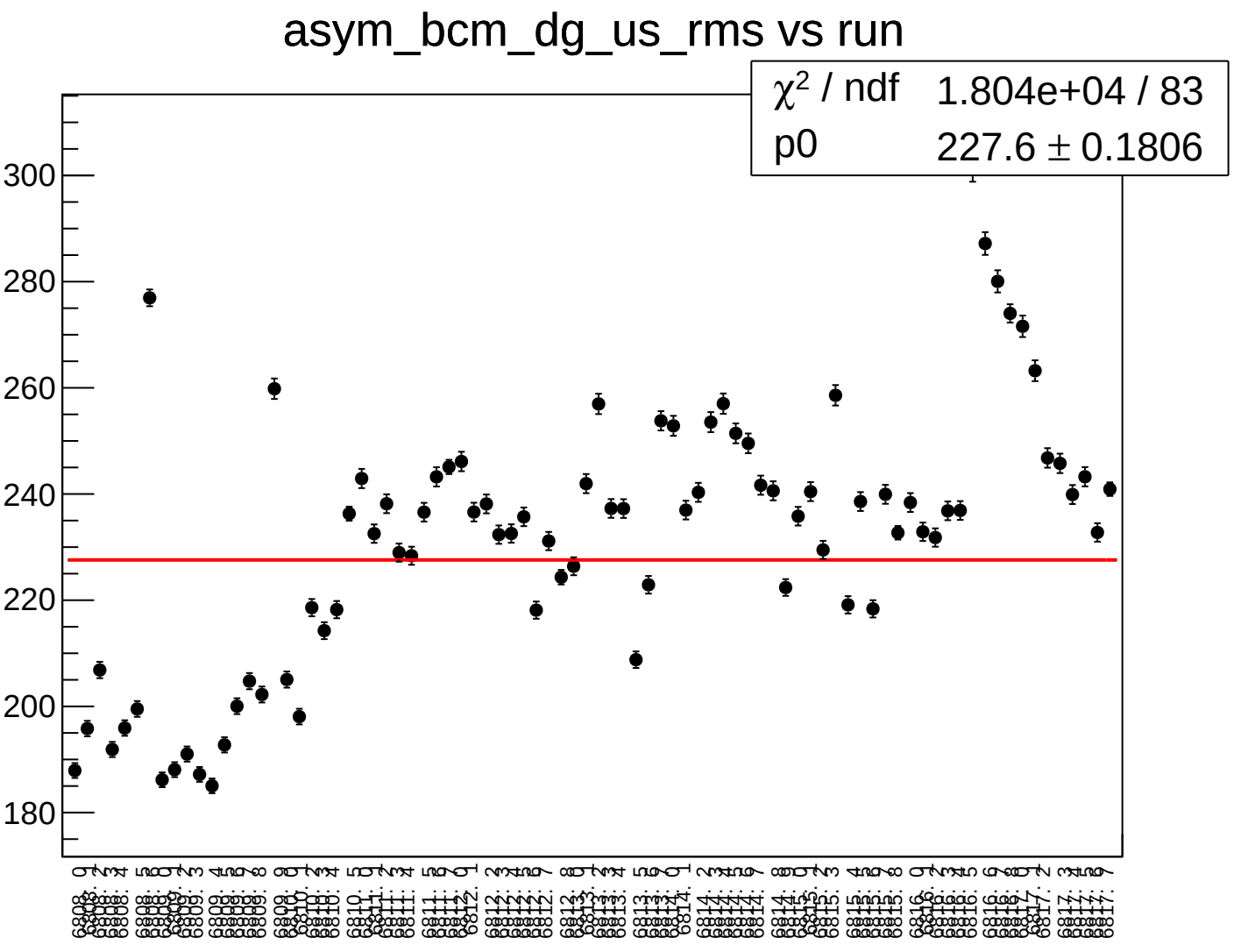

asym_bcm_an_us_mean vs run
χ² / ndf 13.76 / 83
p0 272.4 ± 248.7
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 183
Std Dev 132.6
1
0.5
0
−0.5
−1

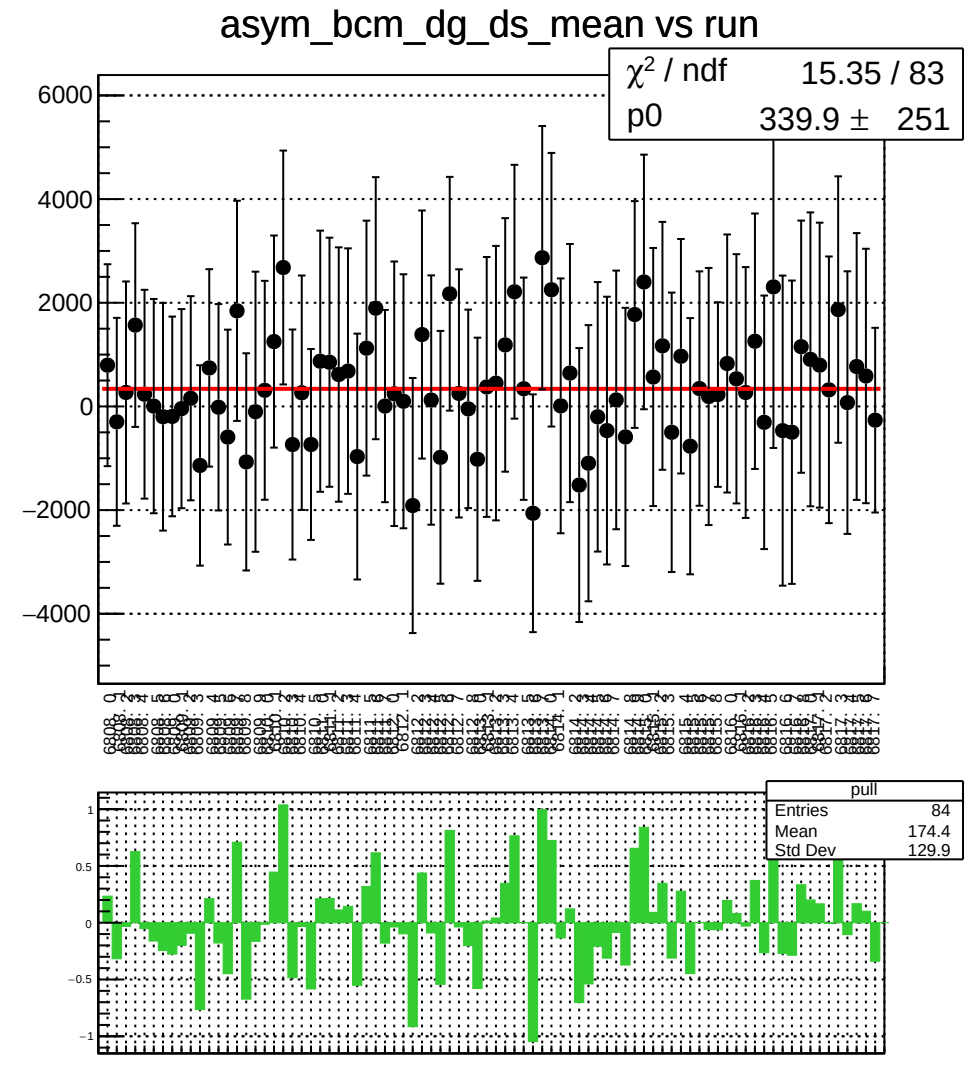

pull1D
Entries 84
Mean 0.00853
Std Dev 0.4046
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

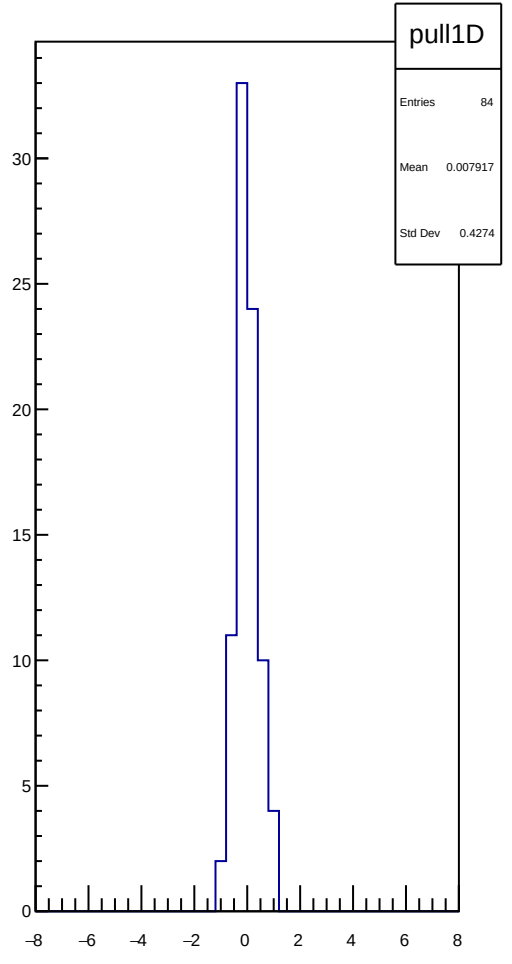

asym_bcm_an_us_rms vs run
χ² / ndf 1.932e+04 / 83
p0 221.6 ± 0.1759
300
280
260
240
220
200
180

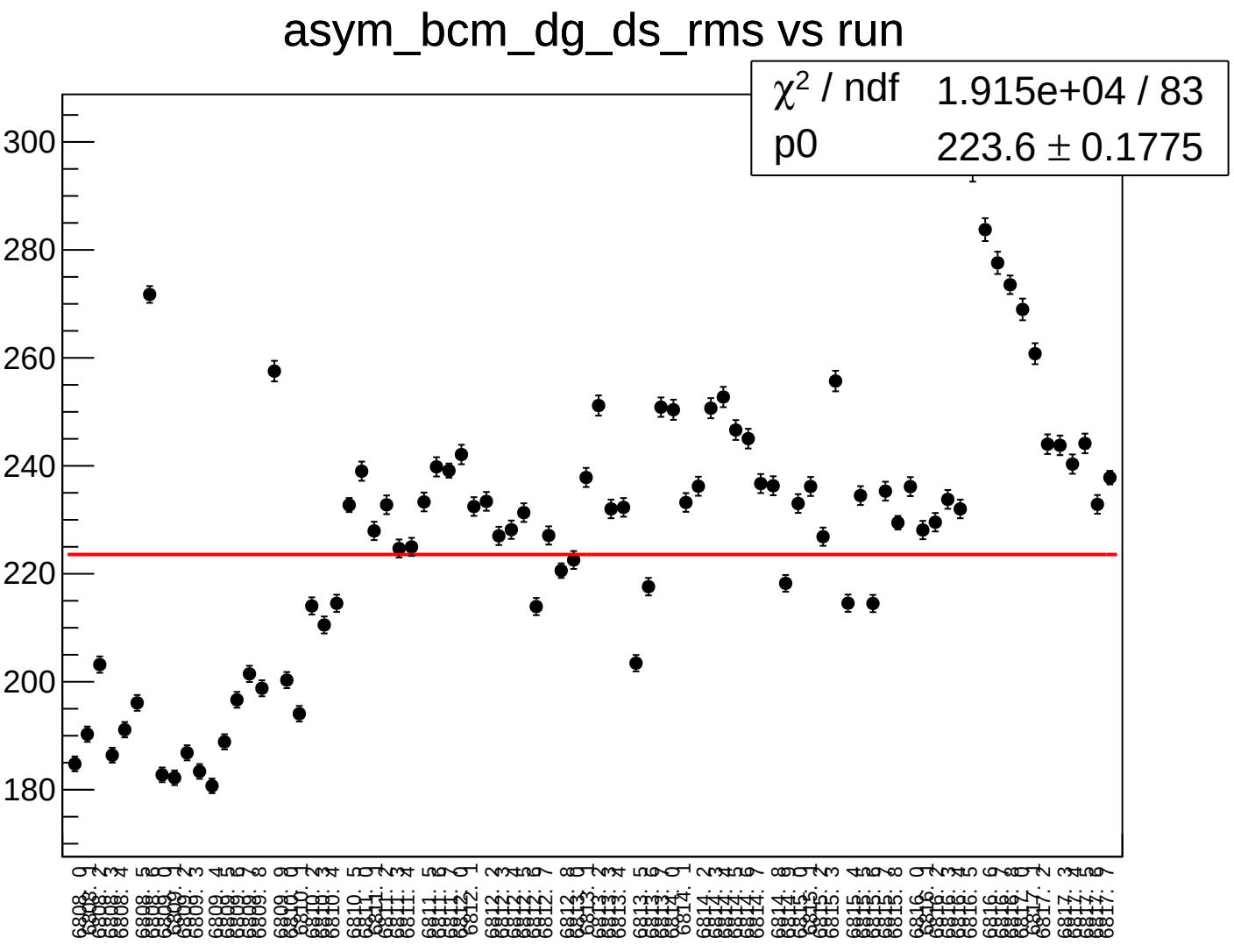

asym_bcm_dg_us_mean vs run
χ² / ndf 16.35 / 83
p0 229.5 ± 255.4
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 255
Std Dev 208.2
1
0.5
0
−0.5
−1

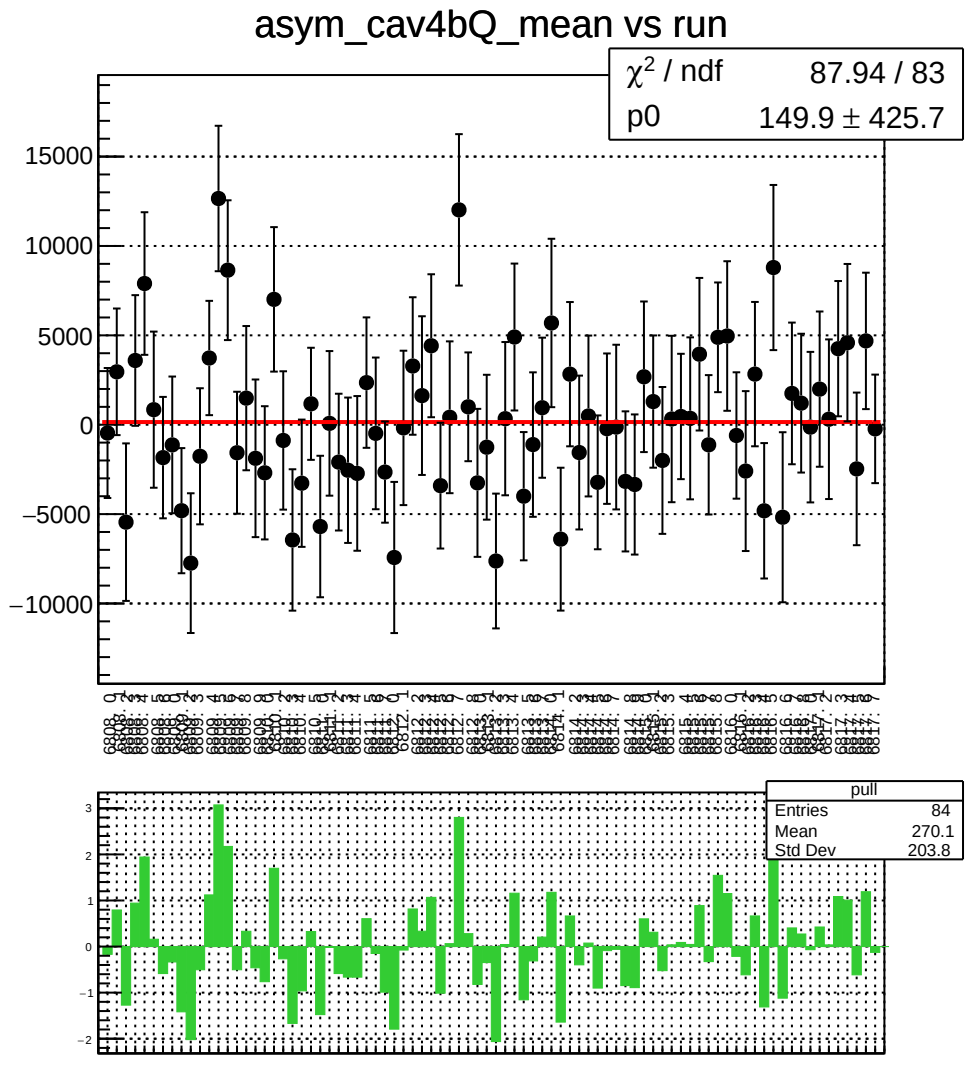

pull1D
Entries 84
Mean 0.01031
Std Dev 0.4411
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

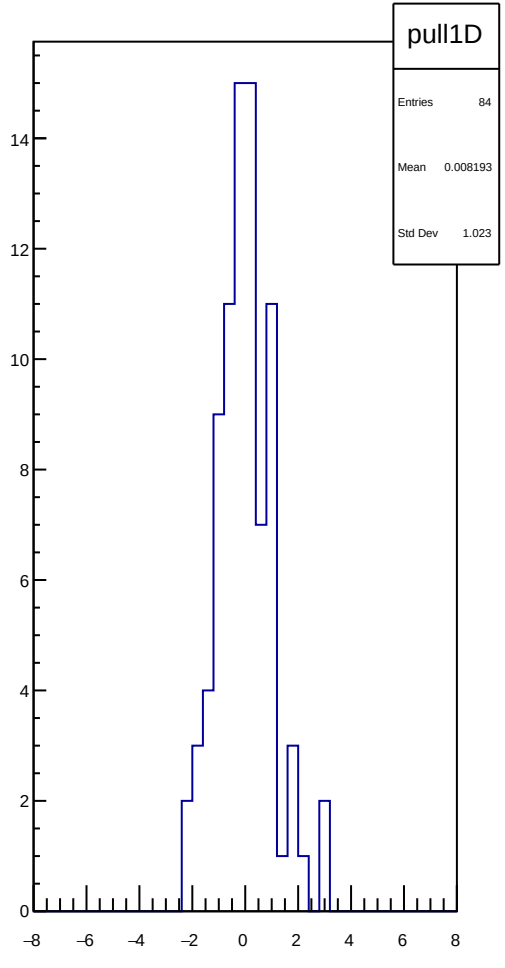

asym_bcm_dg_us_rms vs run
χ² / ndf 1.804e+04 / 83
p0 227.6 ± 0.1806
300
280
260
240
220
200
180

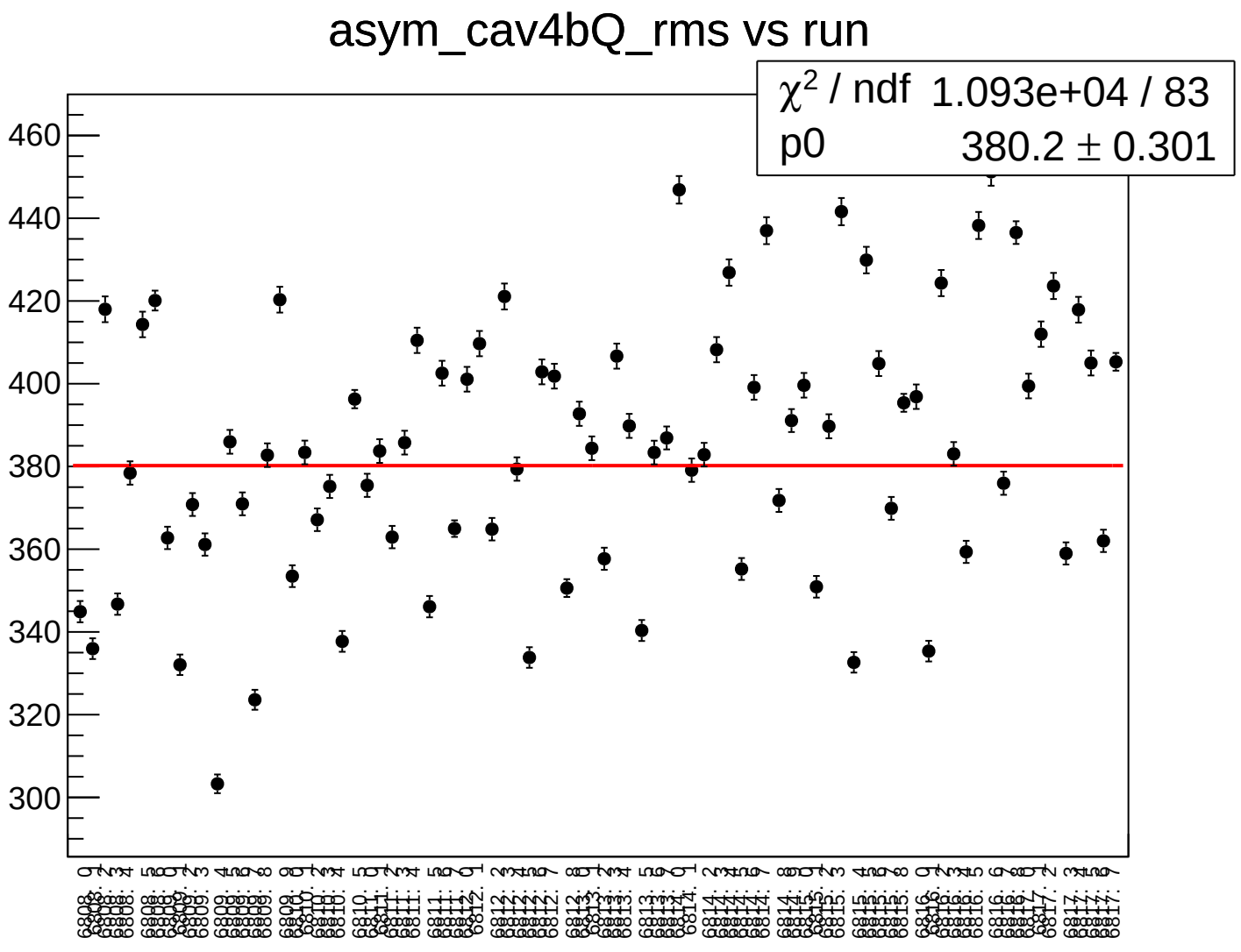

asym_bcm_dg_ds_mean vs run
χ² / ndf 15.35 / 83
p0 339.9 ± 251
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 174.4
Std Dev 129.9
1
0.5
0
−0.5
−1

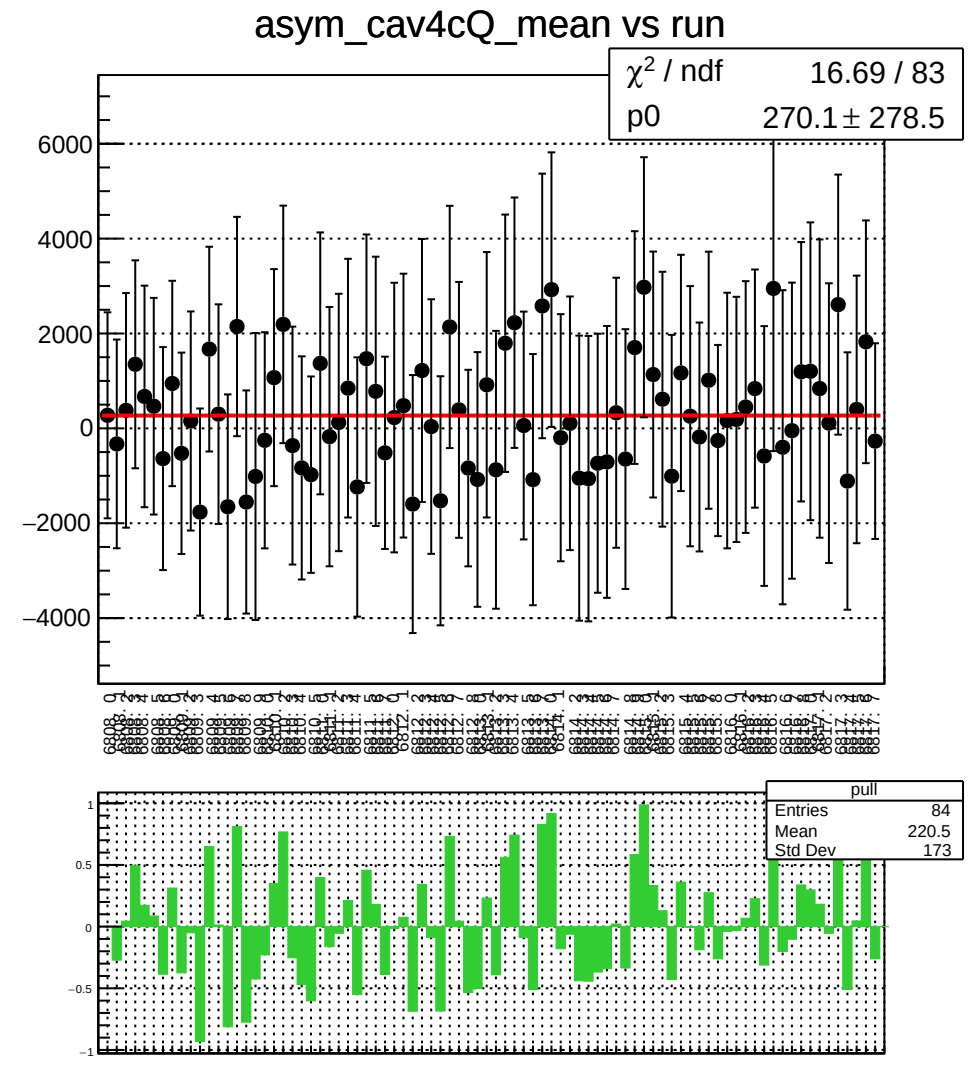

pull1D
Entries 84
Mean 0.007917
Std Dev 0.4274
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

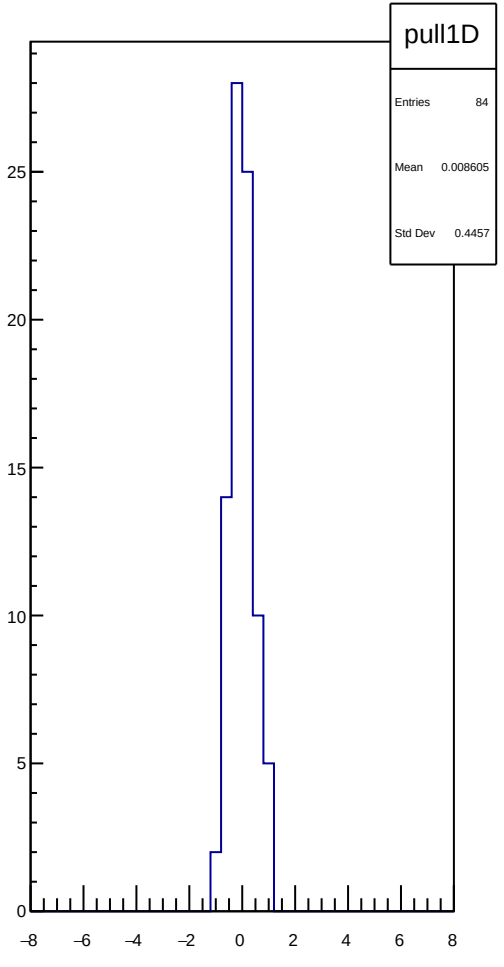

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.915e+04 / 83
p0 223.6 ± 0.1775
300
280
260
240
220
200
180

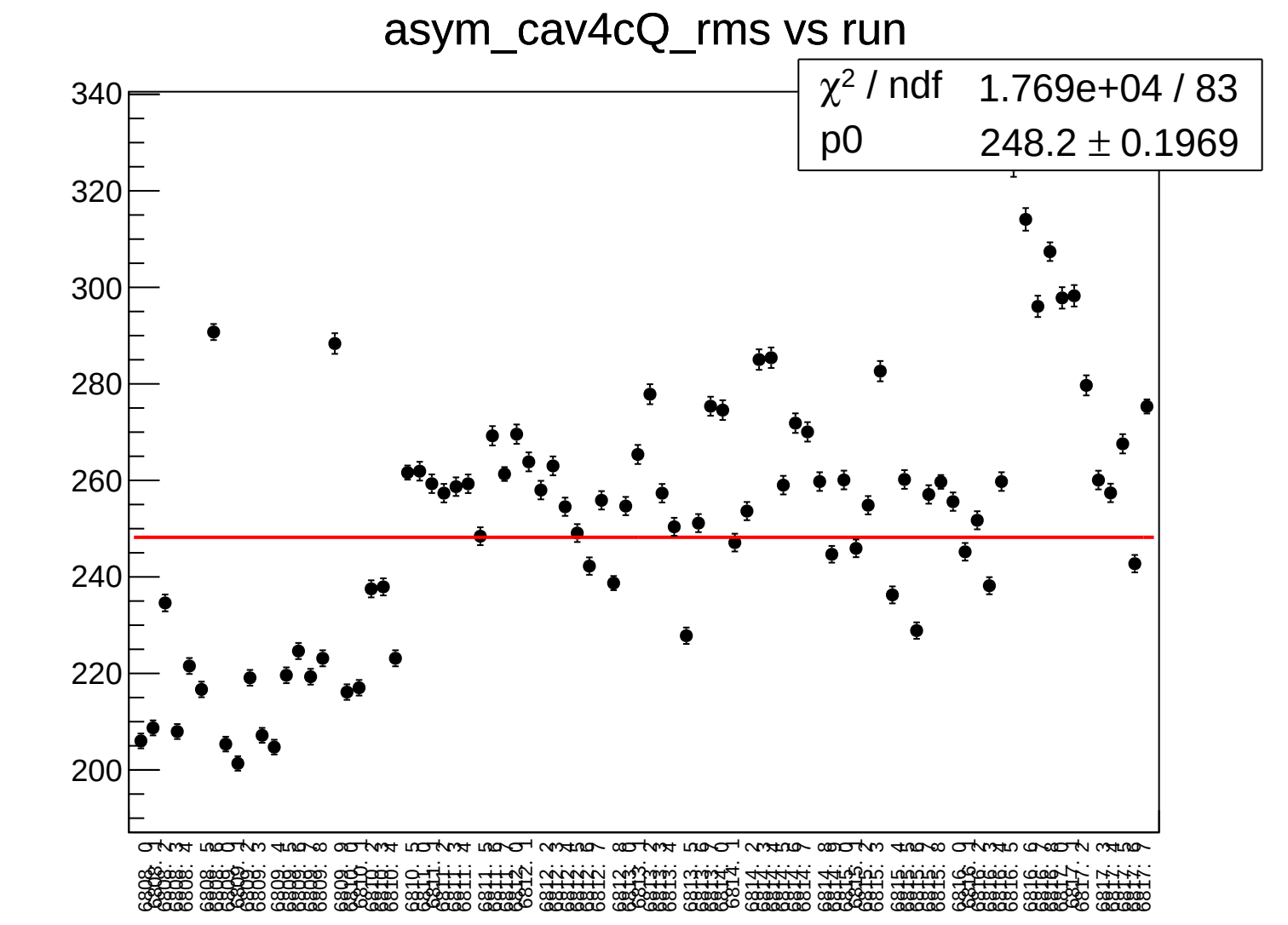

asym_cav4bQ_mean vs run
χ² / ndf 87.94 / 83
p0 149.9 ± 425.7
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 270.1
Std Dev 203.8
3
2
1
0
−1
−2

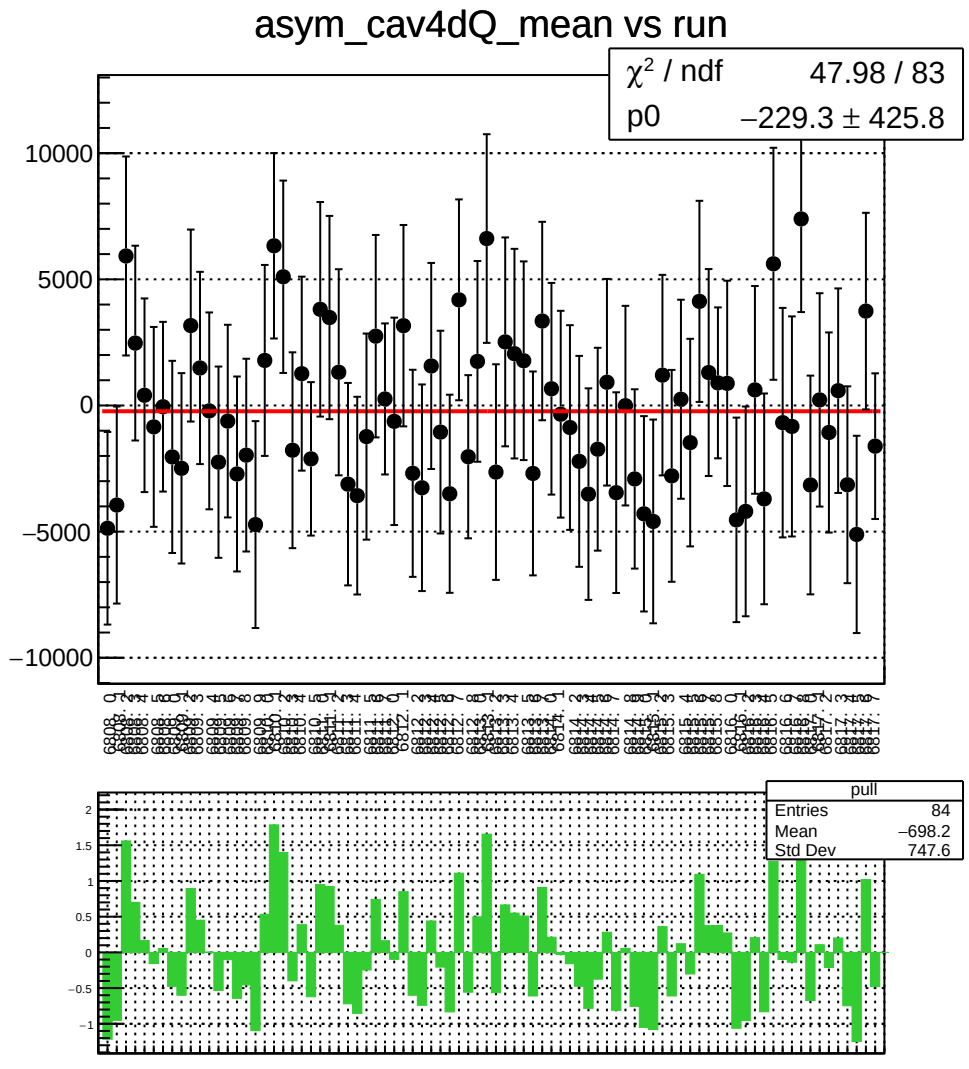

pull1D
Entries 84
Mean 0.008193
Std Dev 1.023
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

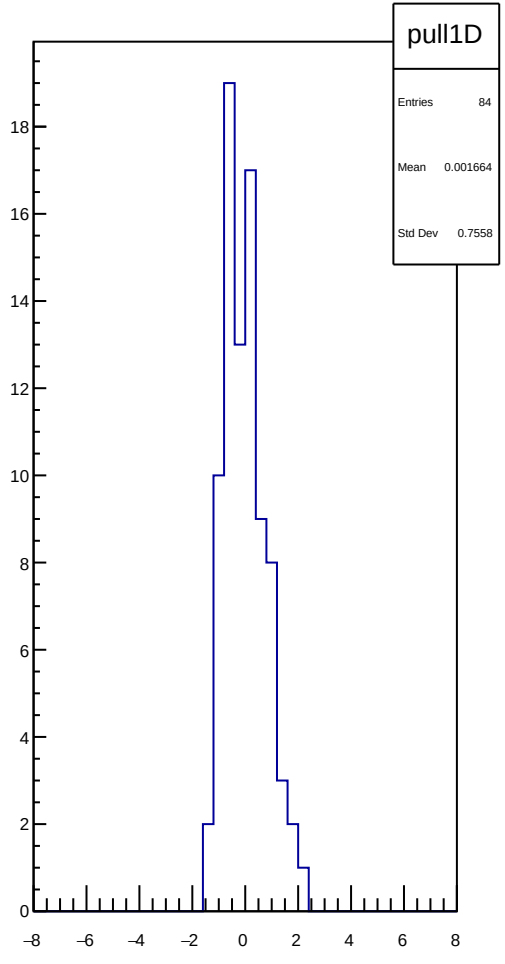

asym_cav4bQ_rms vs run
χ² / ndf 1.093e+04 / 83
p0 380.2 ± 0.301
460
440
420
400
380
360
340
320
300

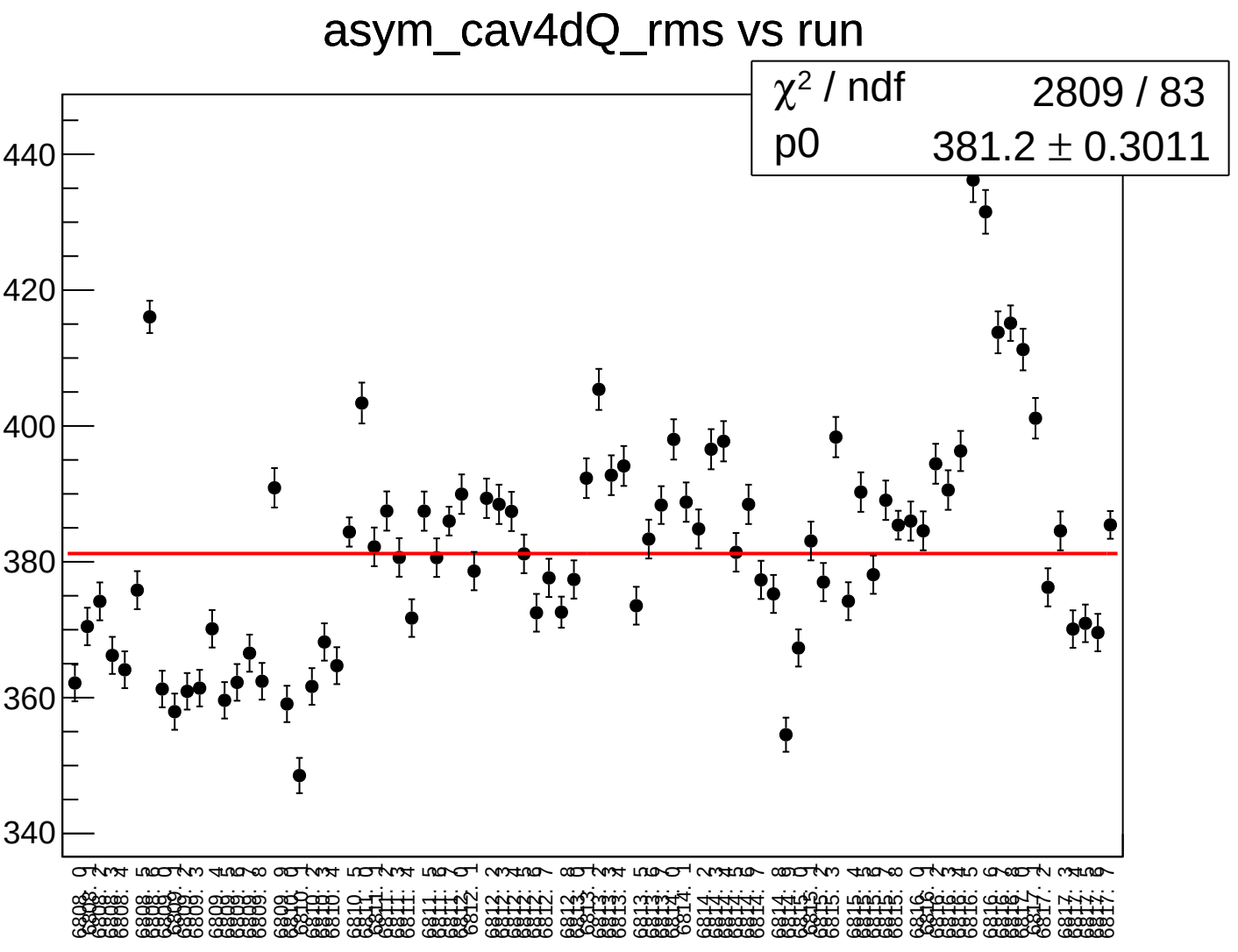

asym_cav4cQ_mean vs run
χ² / ndf 16.69 / 83
p0 270.1 ± 278.5
6000
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 220.5
Std Dev 173
1
0.5
0
−0.5
−1

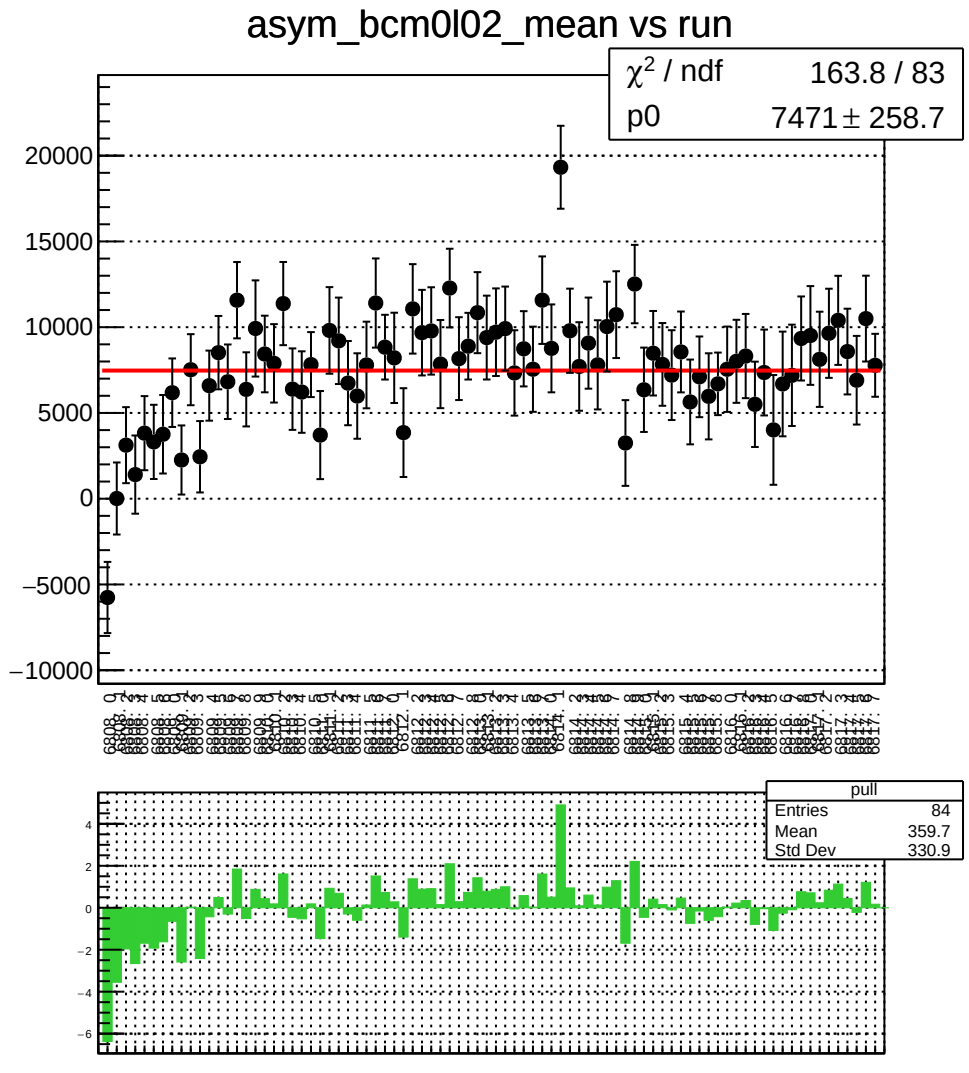

pull1D
Entries 84
Mean 0.008605
Std Dev 0.4457
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

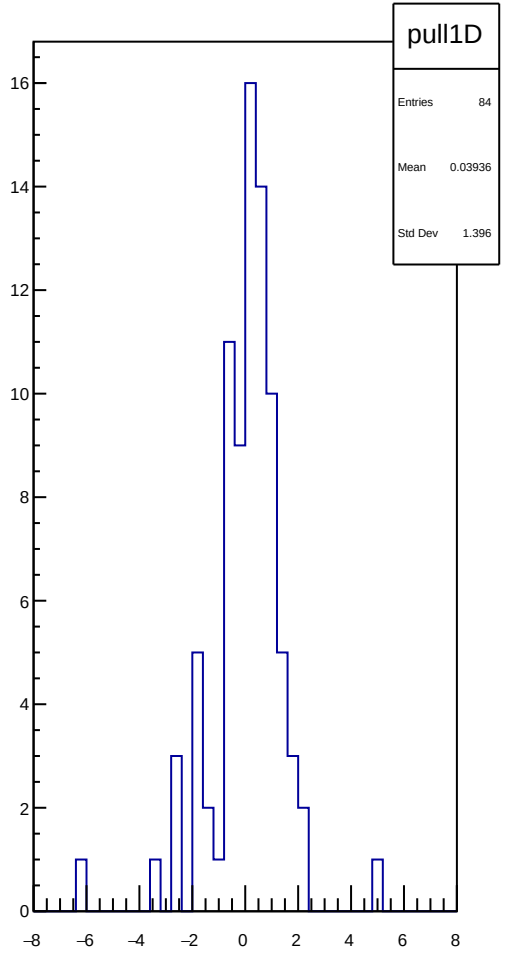

asym_cav4cQ_rms vs run
χ² / ndf 1.769e+04 / 83
p0 248.2 ± 0.1969
340
320
300
280
260
240
220
200

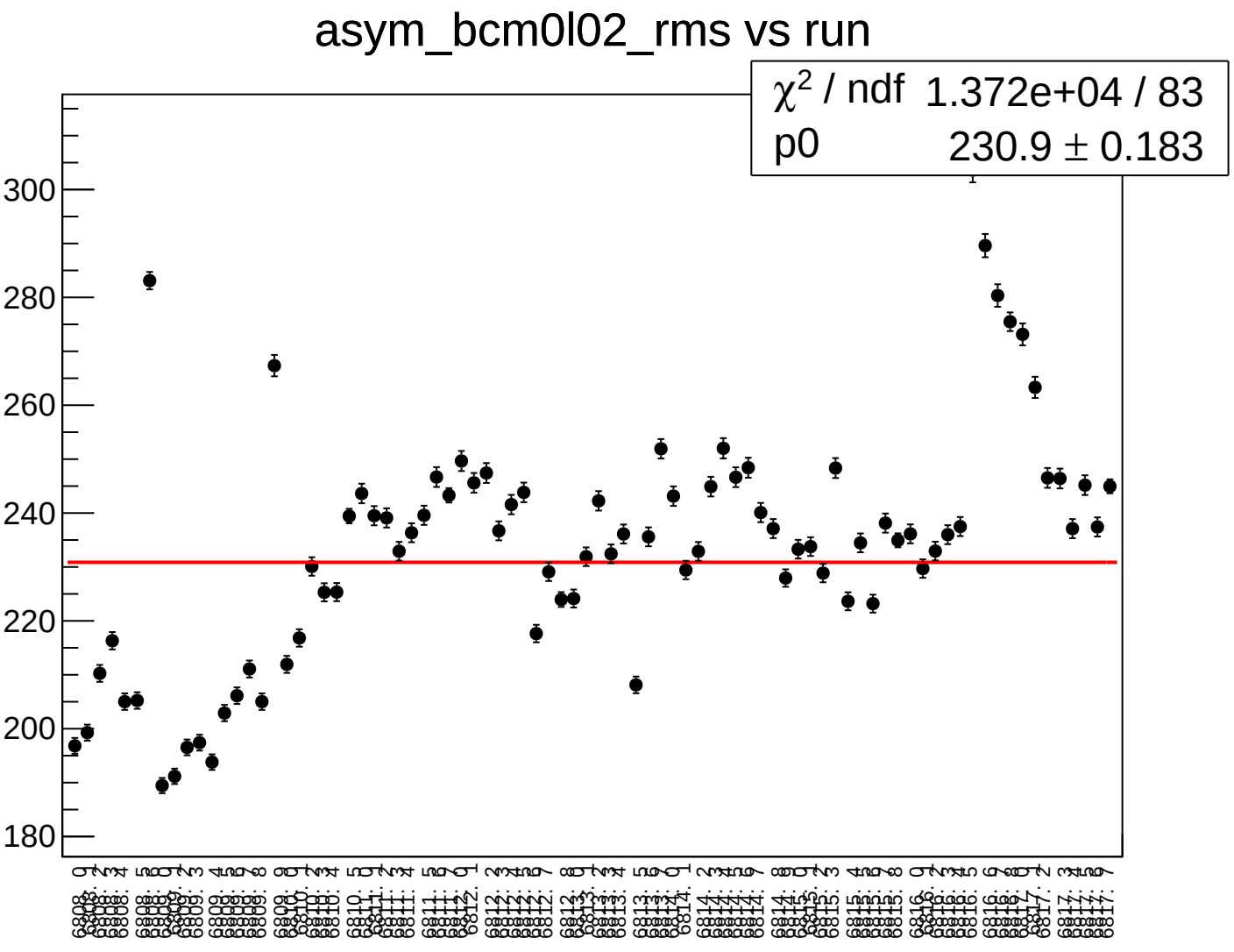

asym_cav4dQ_mean vs run
χ² / ndf 47.98 / 83
p0 −229.3 ± 425.8
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −698.2
Std Dev 747.6
2
1.5
1
0.5
0
−0.5
−1

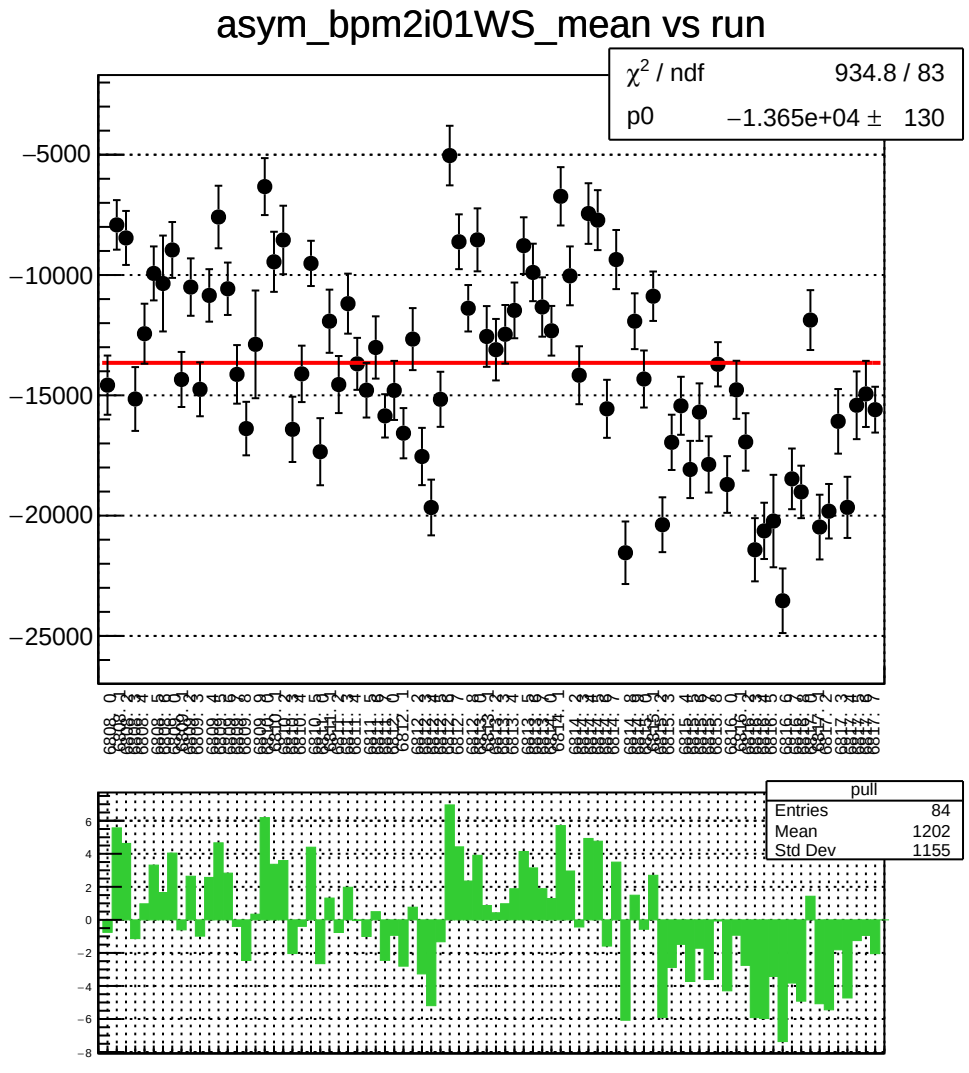

pull1D
Entries 84
Mean 0.001664
Std Dev 0.7558
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

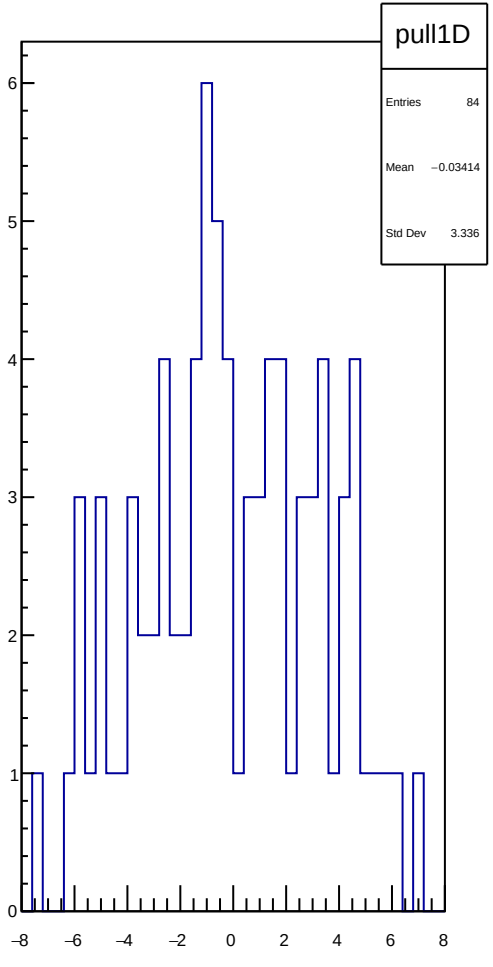

asym_cav4dQ_rms vs run
χ² / ndf 2809 / 83
p0 381.2 ± 0.3011
440
420
400
380
360
340

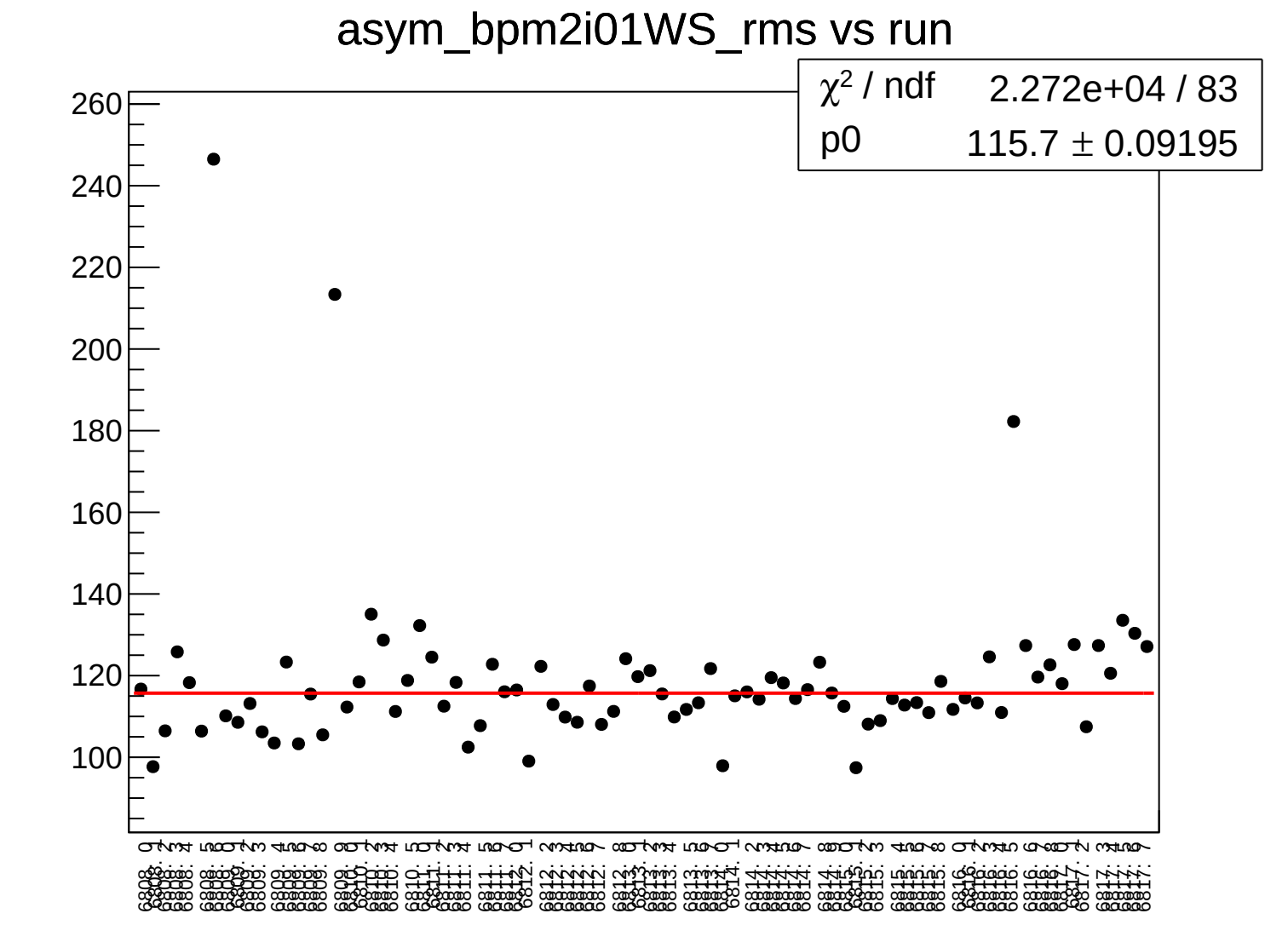

asym_bcm0l02_mean vs run
χ² / ndf 163.8 / 83
p0 7471 ± 258.7
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 359.7
Std Dev 330.9
4
2
0
−2
−4
−6

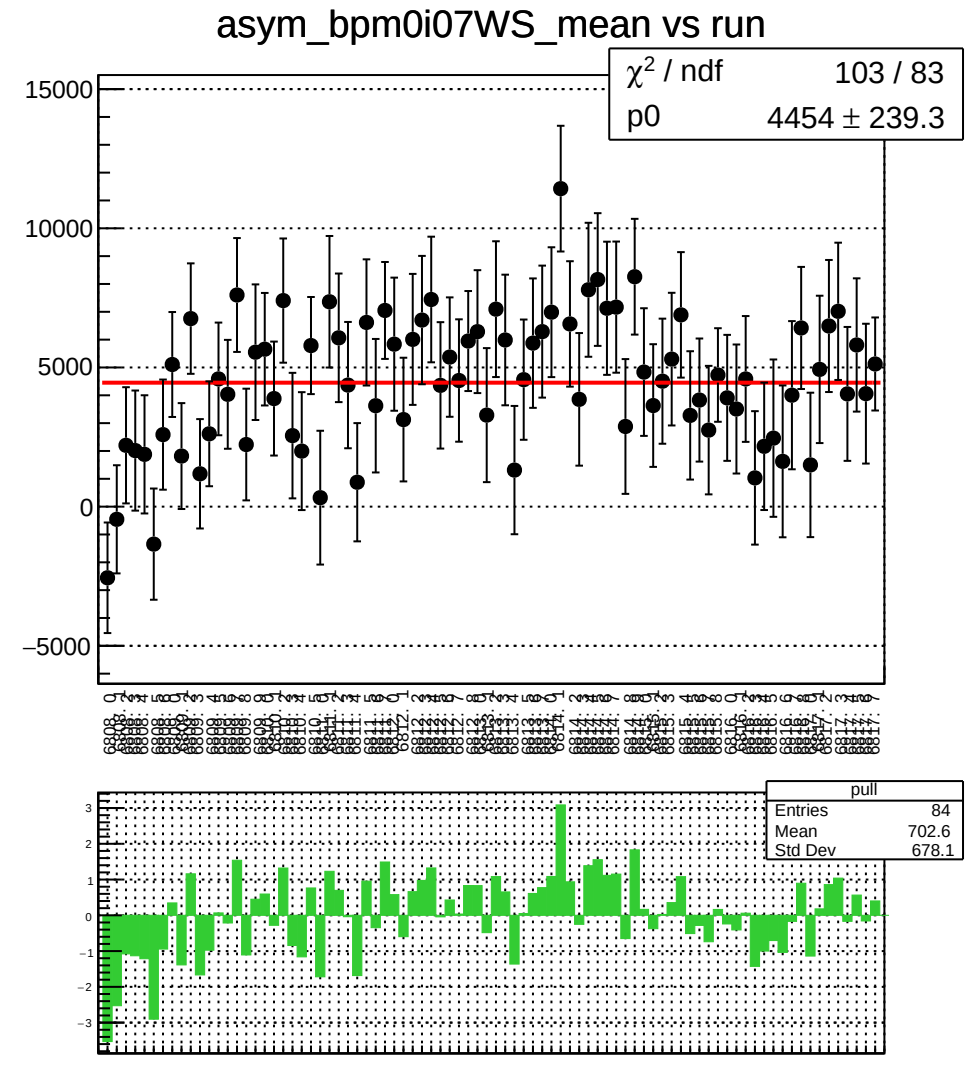

pull1D
Entries 84
Mean 0.03936
Std Dev 1.396
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

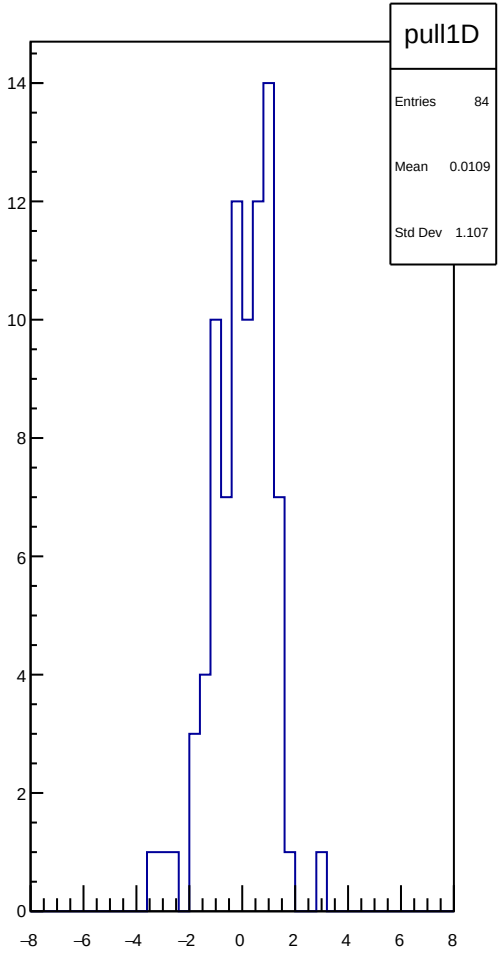

asym_bcm0l02_rms vs run
χ^2 / ndf 1.372e+04 / 83
p0 230.9 ± 0.183
300
280
260
240
220
200
180

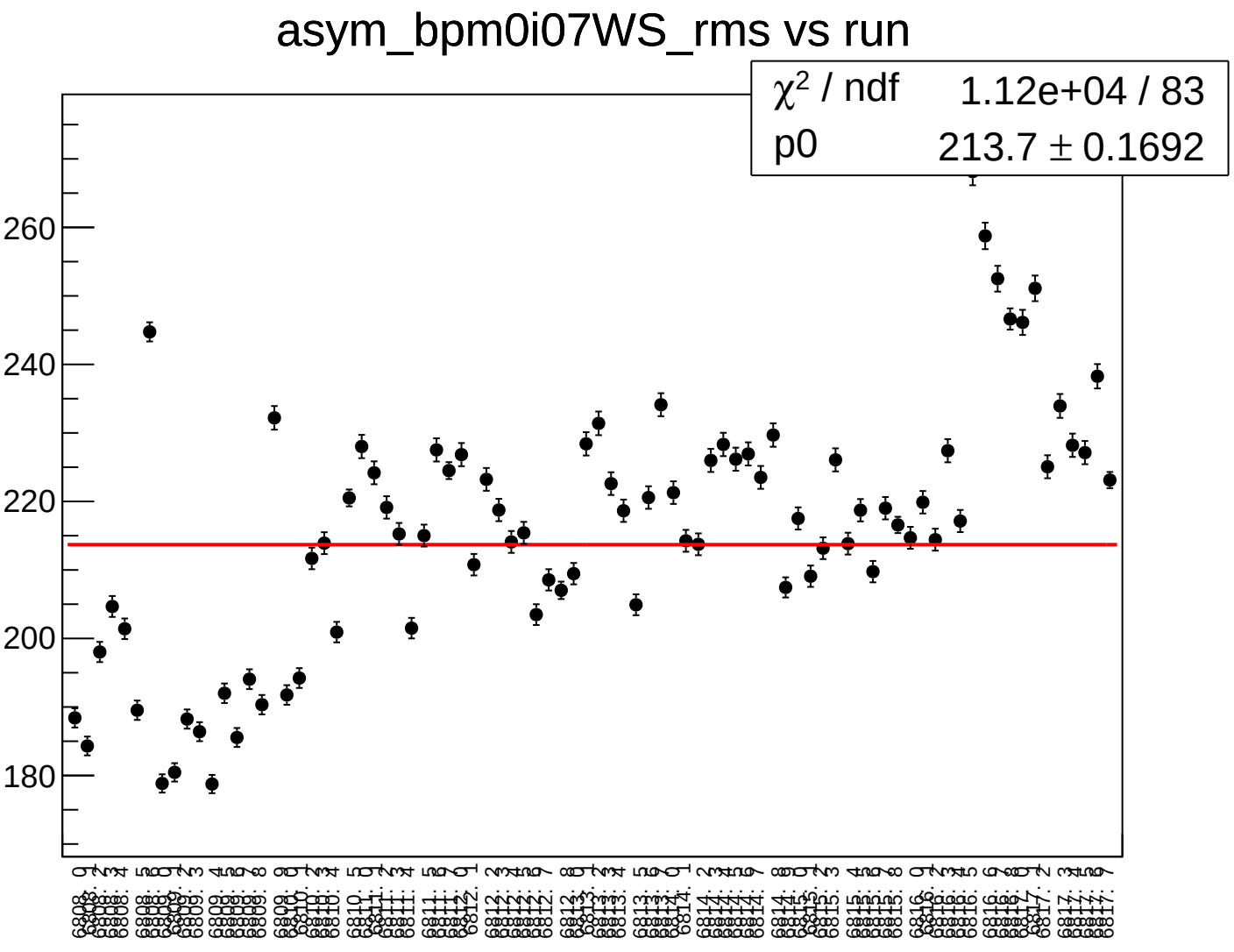

asym_bpm2i01WS_mean vs run
χ² / ndf 934.8 / 83
p0 −1.365e+04 ± 130
−5000
−10000
−15000
−20000
−25000
pull
Entries 84
Mean 1202
Std Dev 1155
6
4
2
0
−2
−4
−6
−8

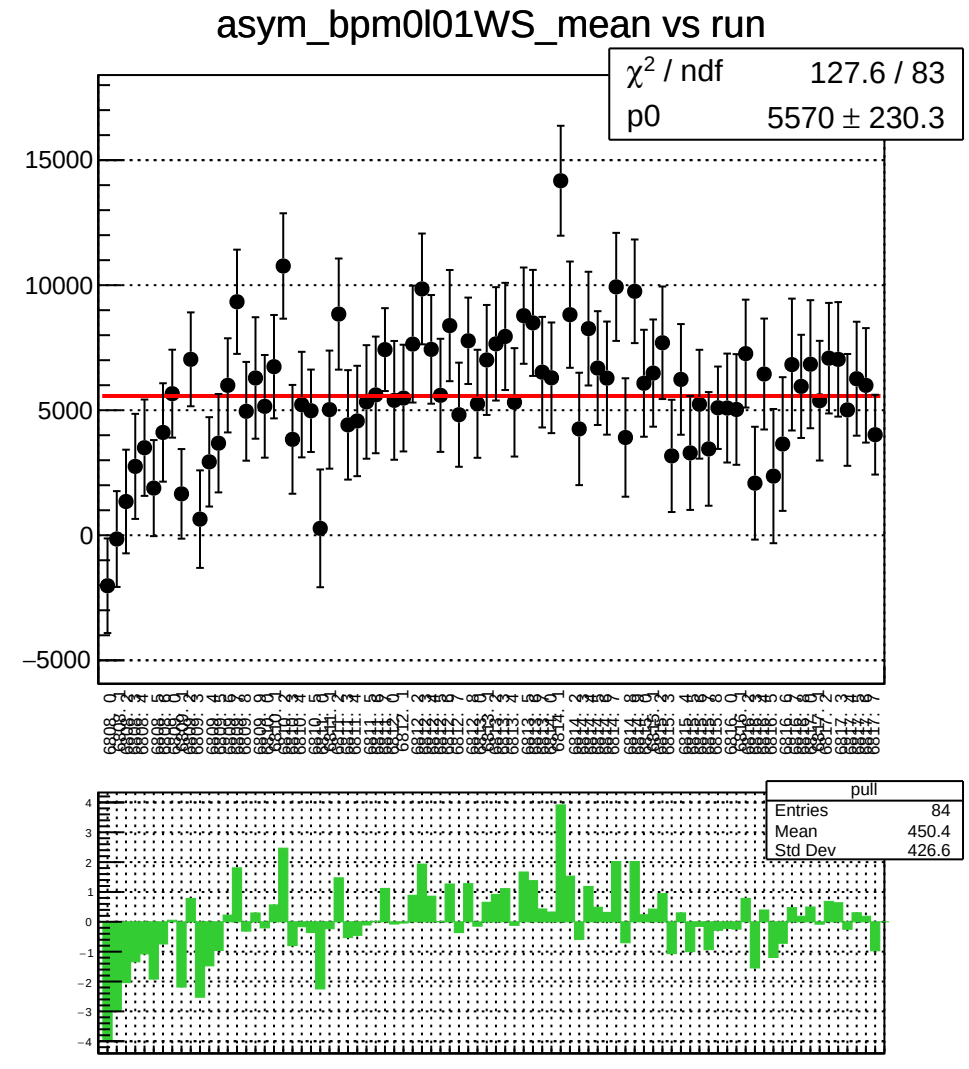

pull1D
Entries 84
Mean −0.03414
Std Dev 3.336
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

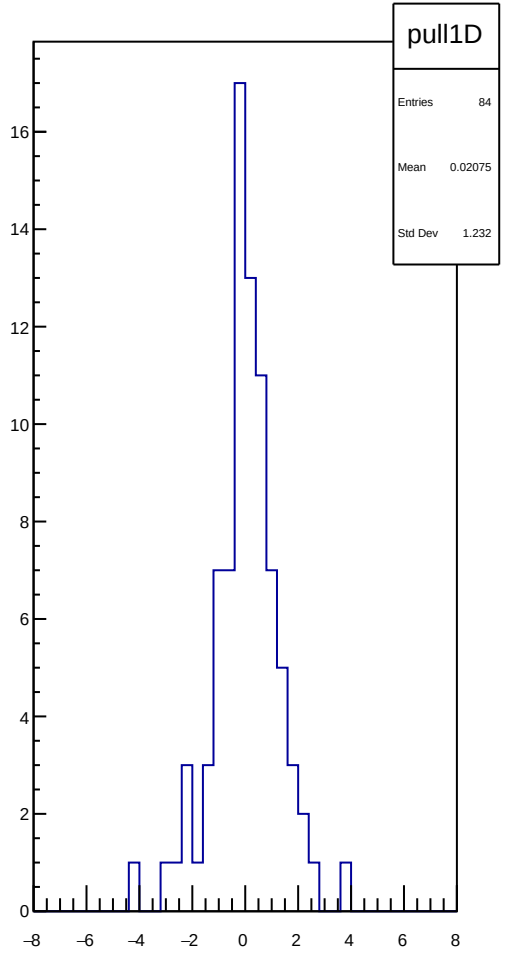

asym_bpm2i01WS_rms vs run
χ^2 / ndf 2.272e+04 / 83
p0 115.7 ± 0.09195
260
240
220
200
180
160
140
120
100

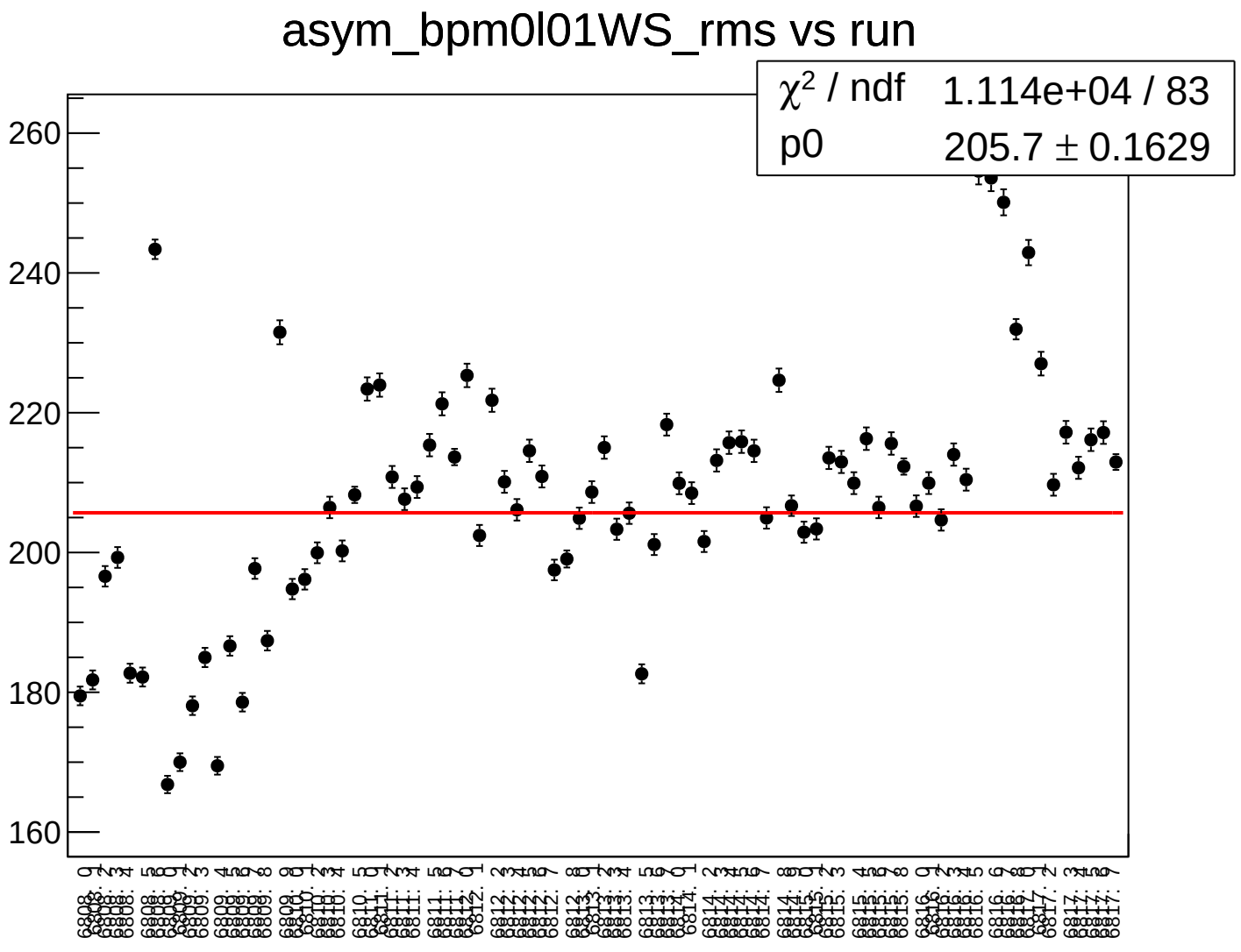

asym_bpm0i07WS_mean vs run
χ² / ndf 103 / 83
p0 4454 ± 239.3
15000
10000
5000
0
−5000
pull
Entries 84
Mean 702.6
Std Dev 678.1
3
2
1
0
−1
−2
−3

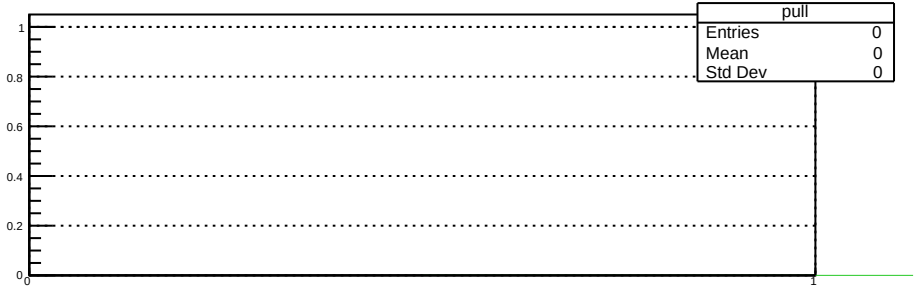

pull1D
Entries 84
Mean 0.0109
Std Dev 1.107
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

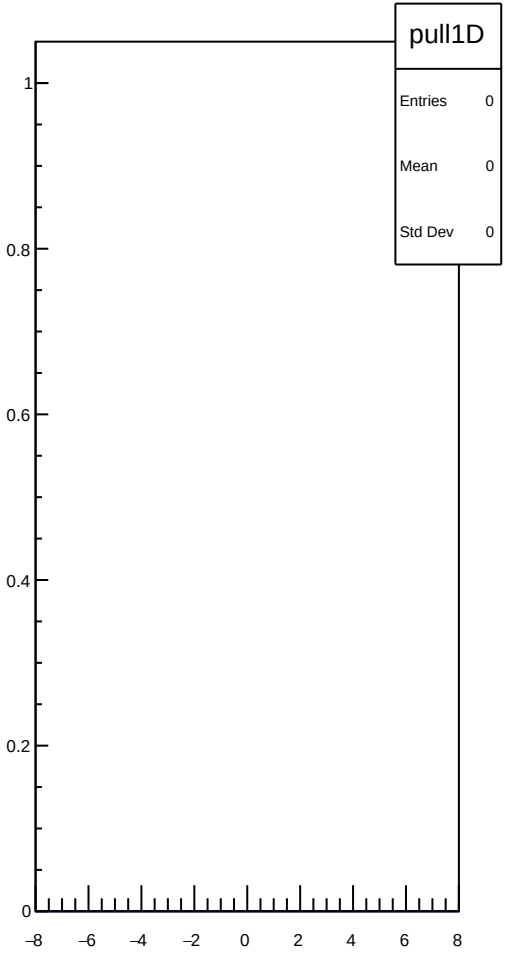

asym_bpm0i07WS_rms vs run
χ² / ndf 1.12e+04 / 83
p0 213.7 ± 0.1692
260
240
220
200
180

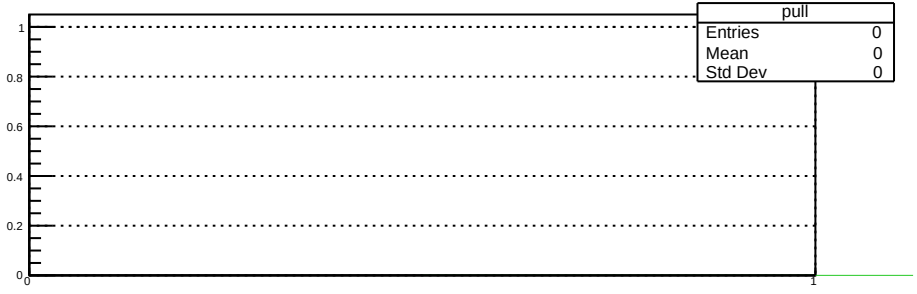

asym_bpm0l01WS_mean vs run
χ² / ndf 127.6 / 83
p0 5570 ± 230.3
15000
10000
5000
0
−5000
pull
Entries 84
Mean 450.4
Std Dev 426.6
4
3
2
1
0
−1
−2
−3
−4

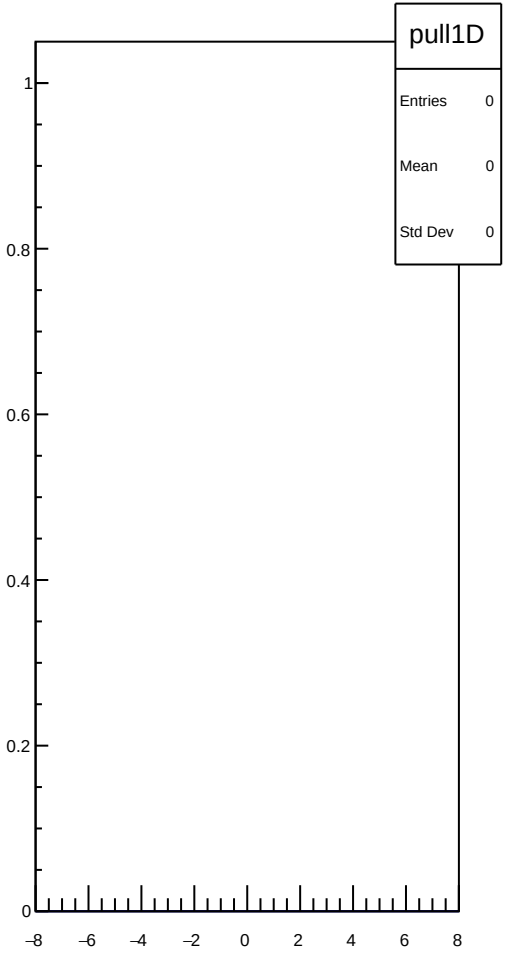

pull1D
Entries 84
Mean 0.02075
Std Dev 1.232
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

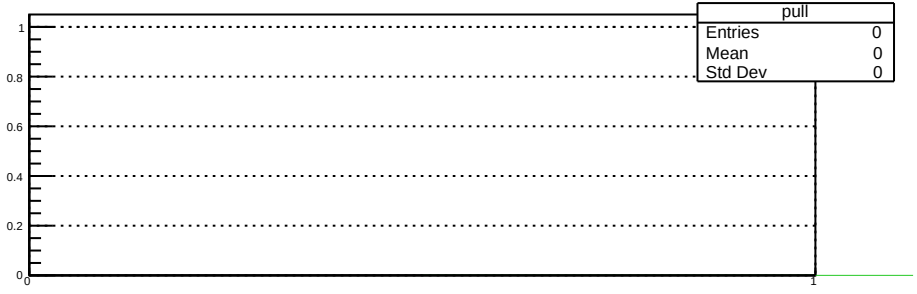

asym_bpm0l01WS_rms vs run
χ^2 / ndf 1.114e+04 / 83
p0 205.7 ± 0.1629
260
240
220
200
180
160

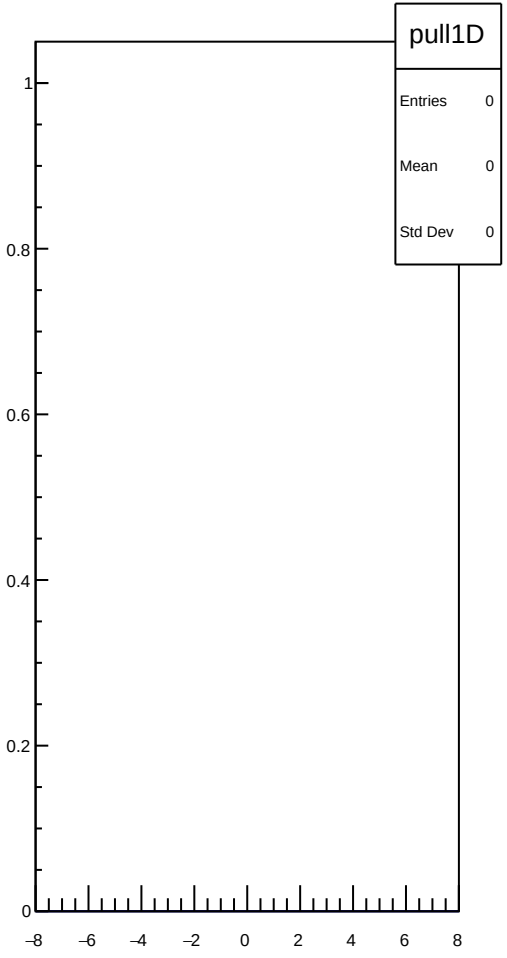

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

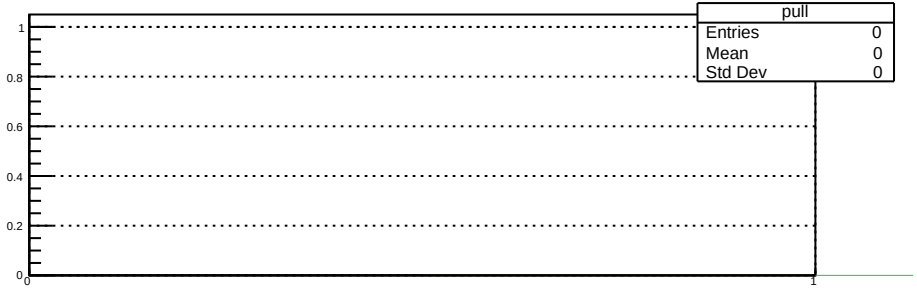

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

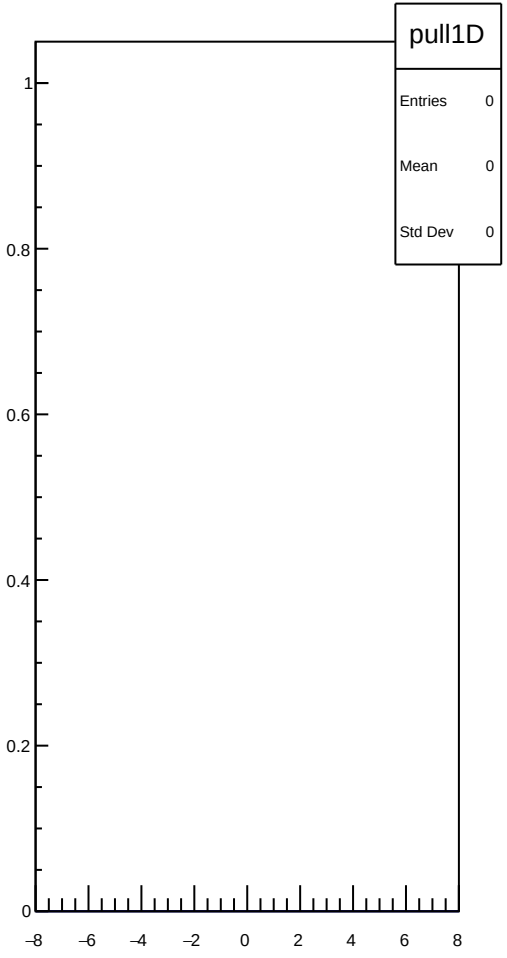

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

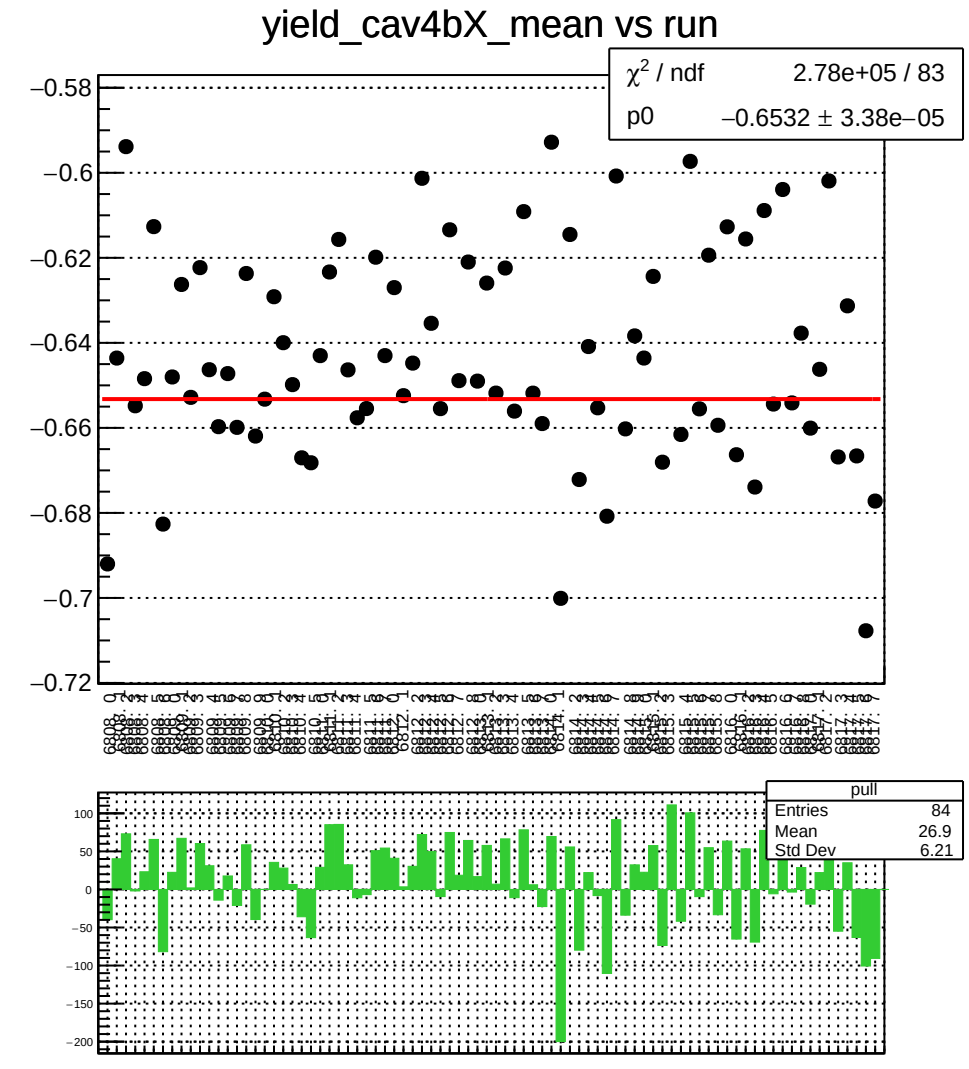

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

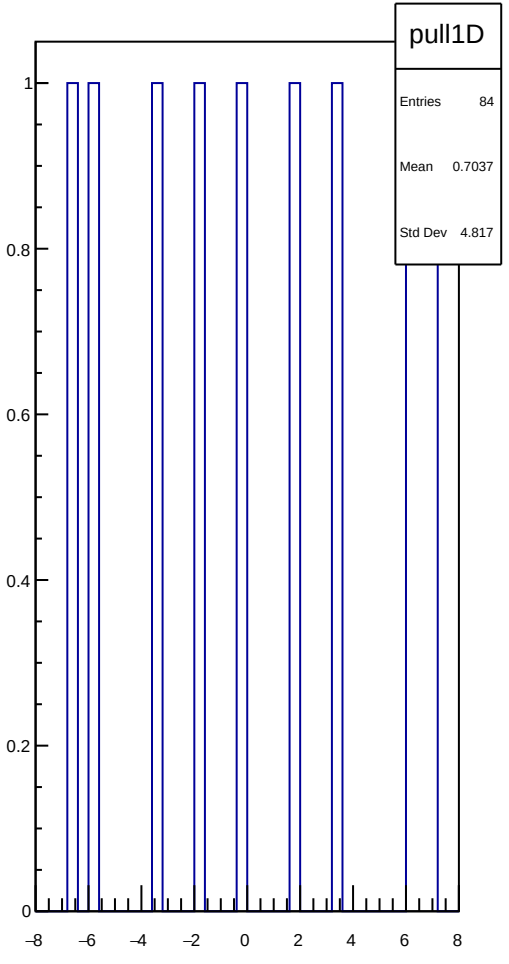

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

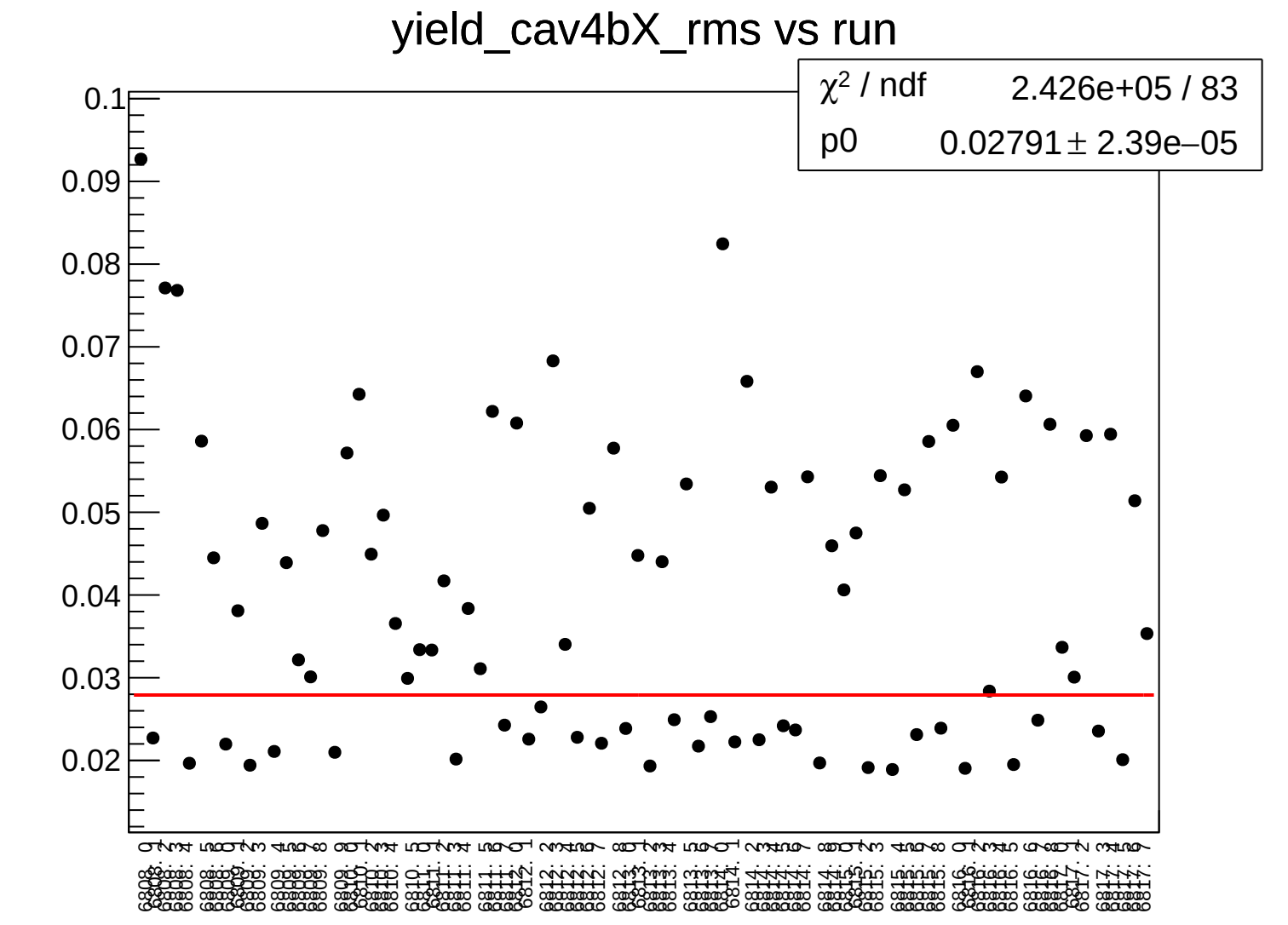

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

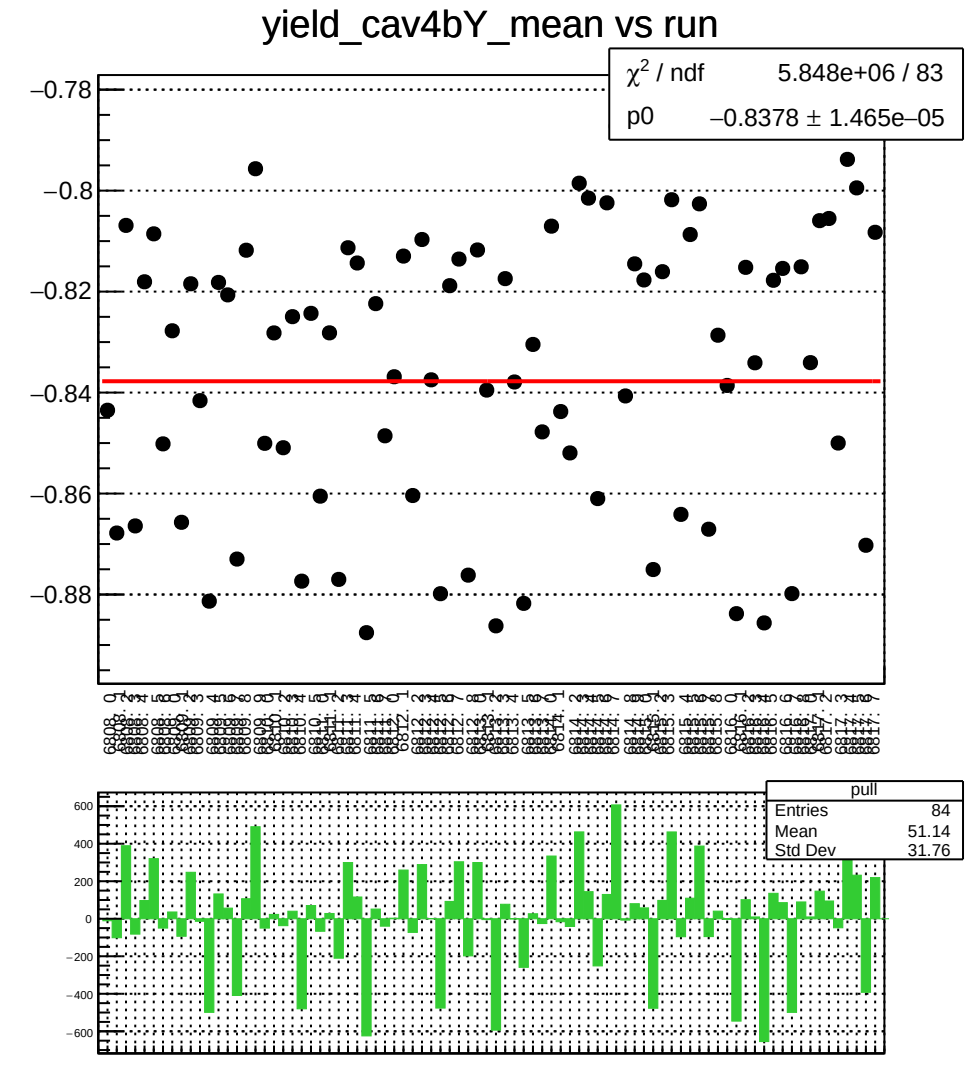

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

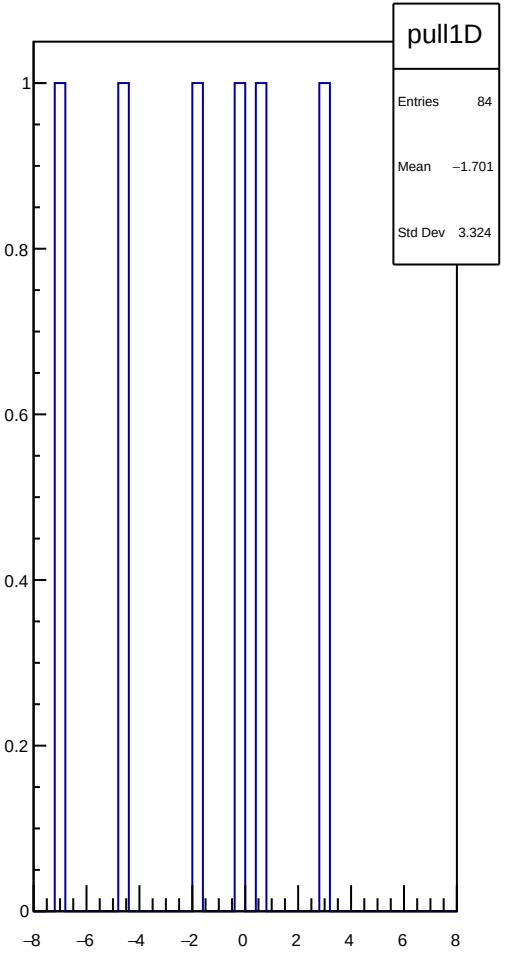

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

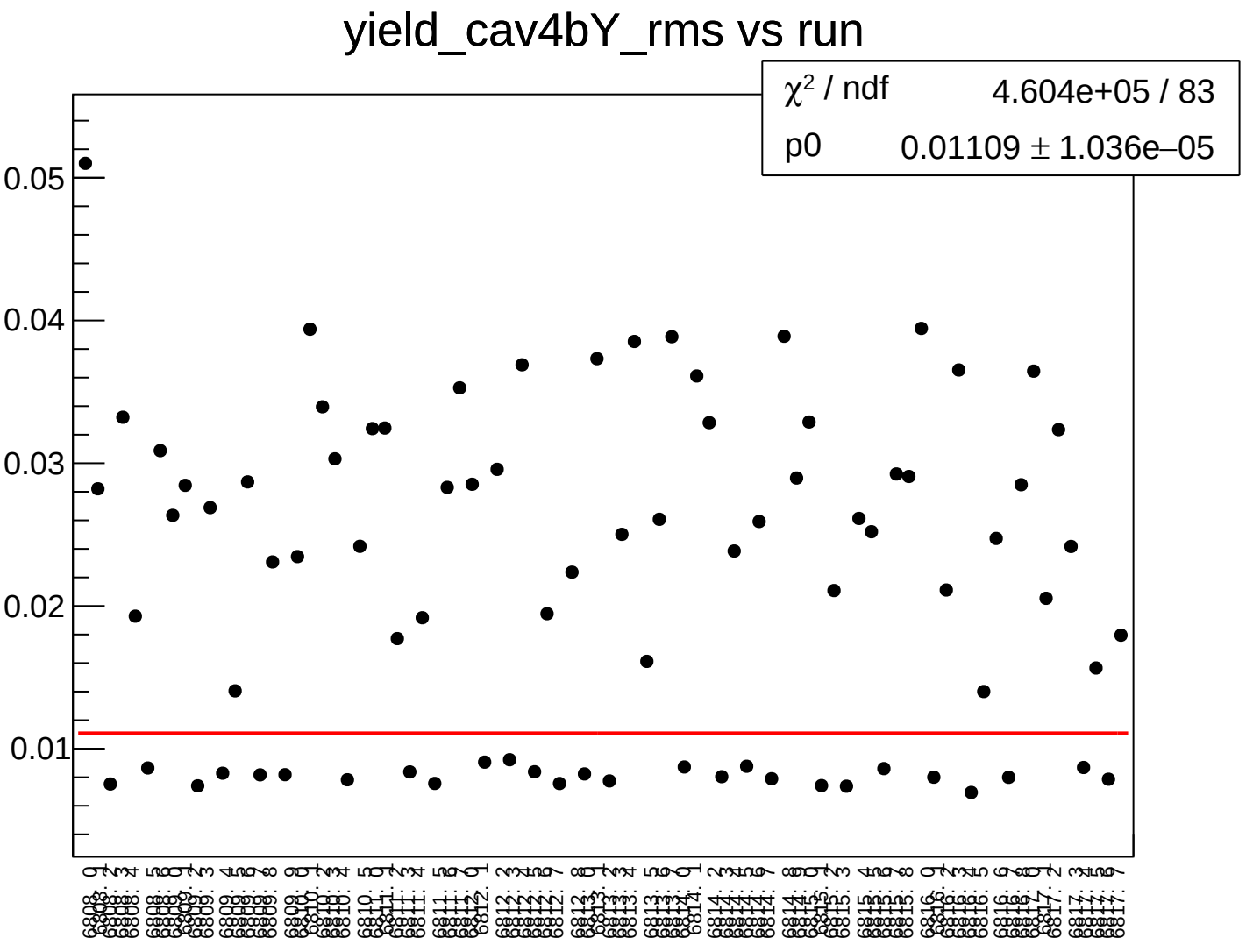

yield_cav4bX_mean vs run
χ² / ndf 2.78e+05 / 83
p0 −0.6532 ± 3.38e−05
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
pull
Entries 84
Mean 26.9
Std Dev 6.21
100
50
0
−50
−100
−150
−200

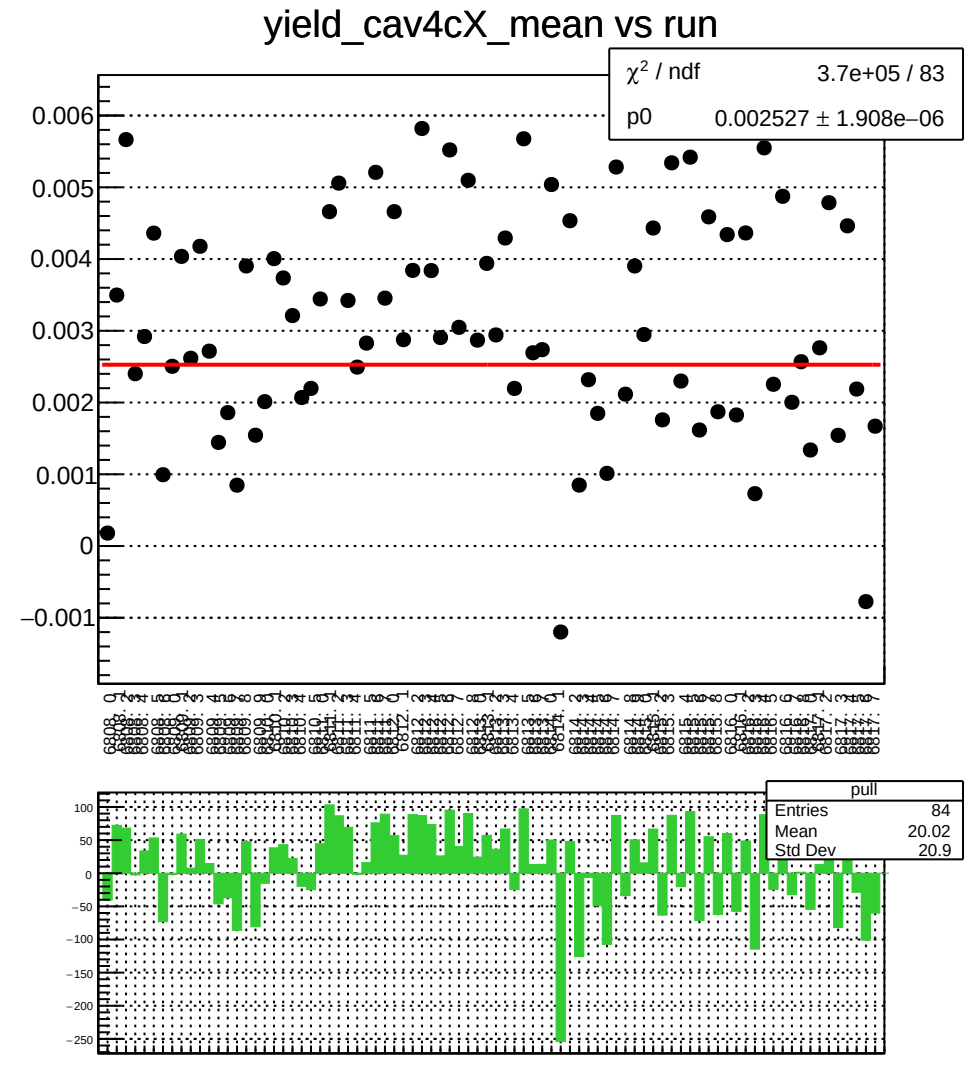

pull1D
Entries 84
Mean 0.7037
Std Dev 4.817
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

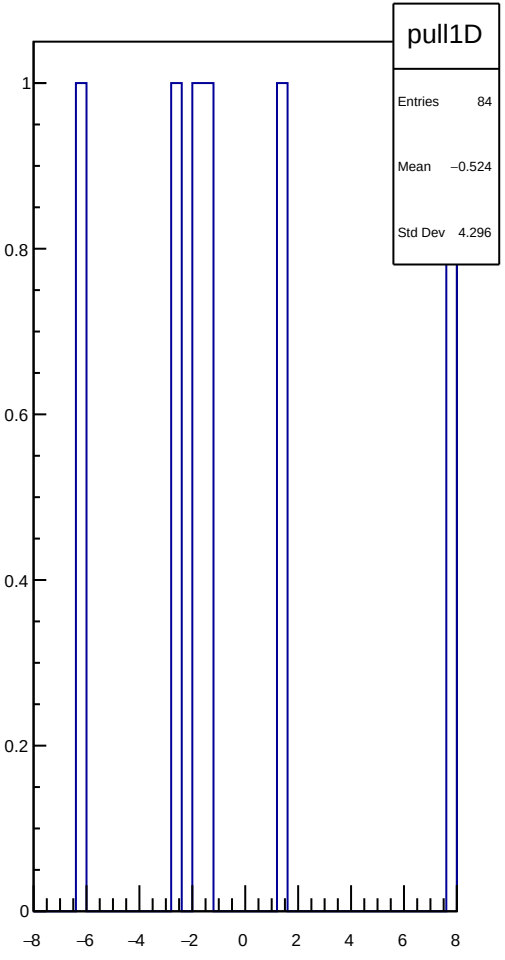

yield_cav4bX_rms vs run
χ^2 / ndf 2.426e+05 / 83
p0 0.02791 ± 2.39e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

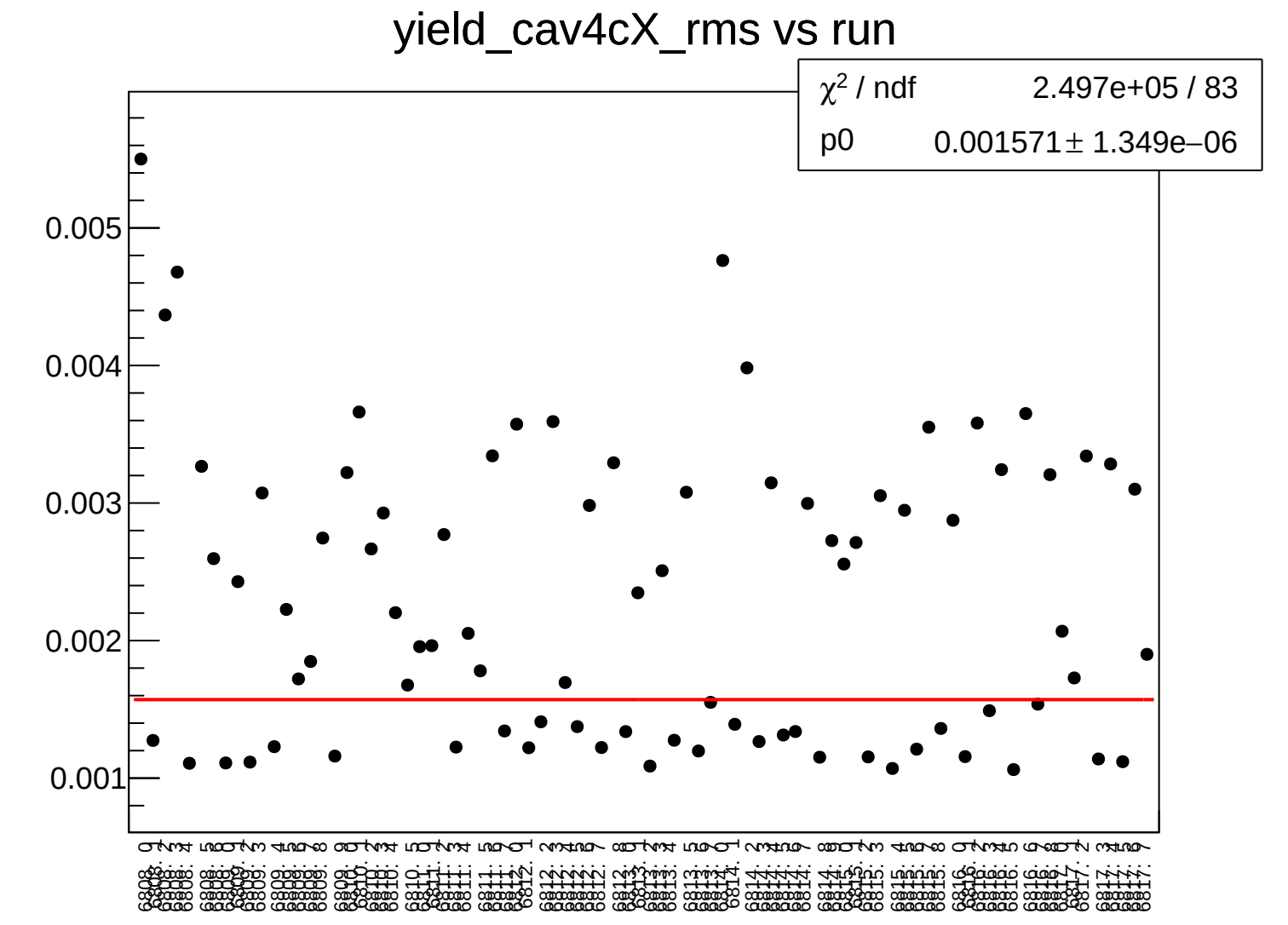

yield_cav4bY_mean vs run
χ² / ndf 5.848e+06 / 83
p0 −0.8378 ± 1.465e−05
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
pull
Entries 84
Mean 51.14
Std Dev 31.76
600
400
200
0
−200
−400
−600

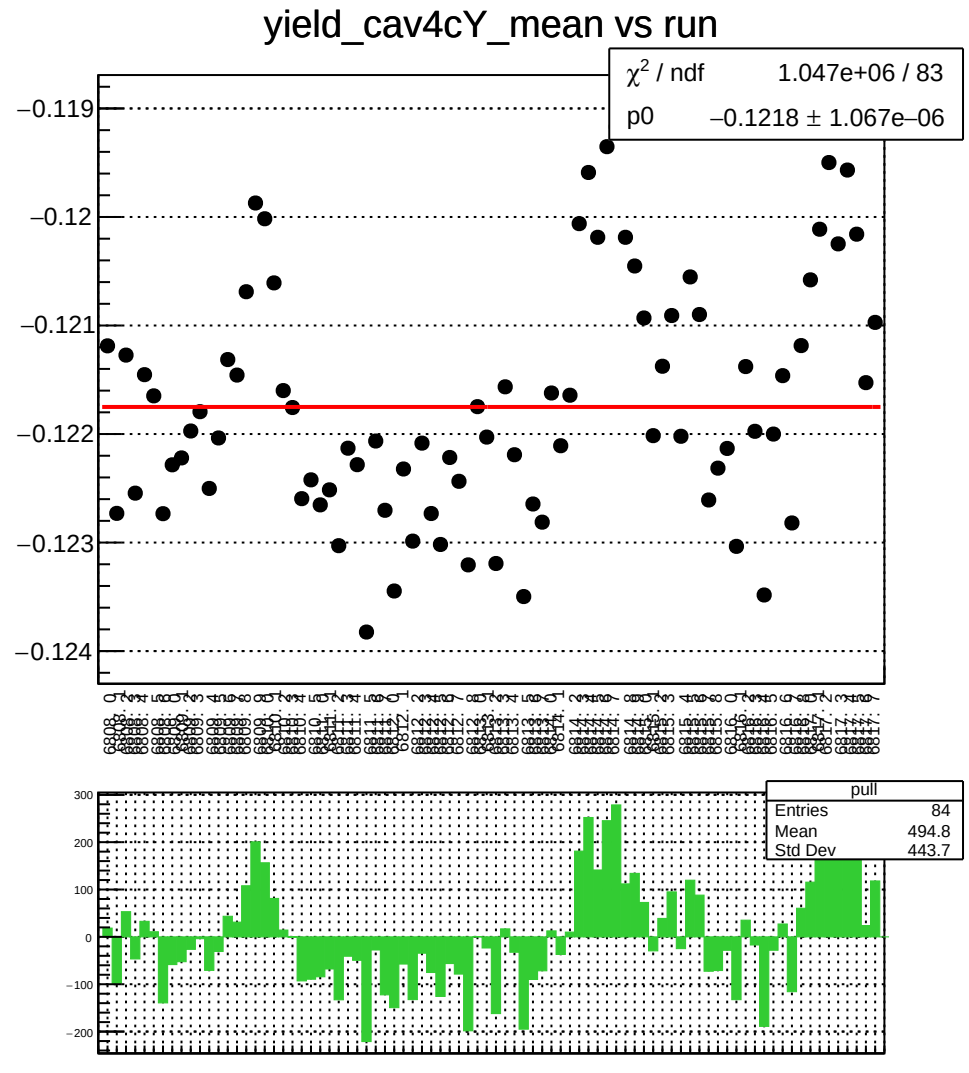

pull1D
Entries 84
Mean −1.701
Std Dev 3.324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

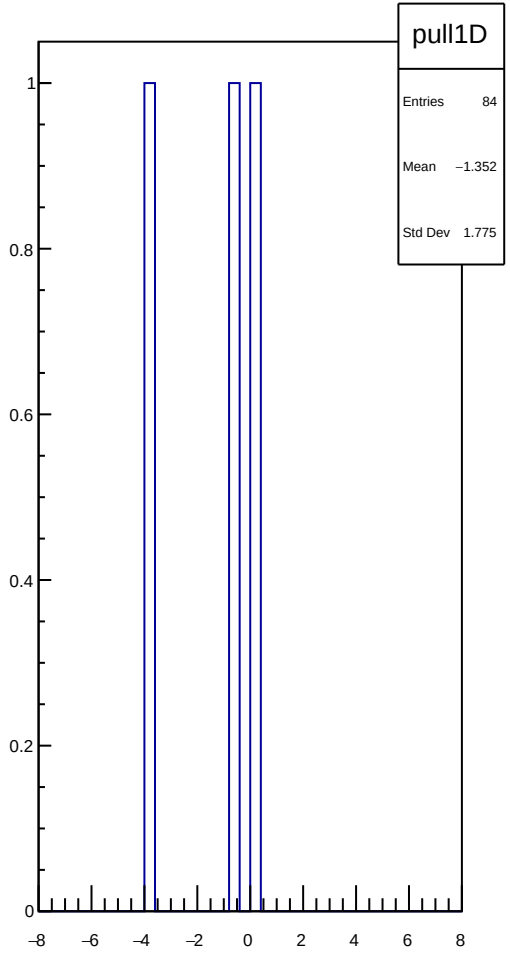

yield_cav4bY_rms vs run
χ² / ndf 4.604e+05 / 83
p0 0.01109 ± 1.036e–05
0.05
0.04
0.03
0.02
0.01

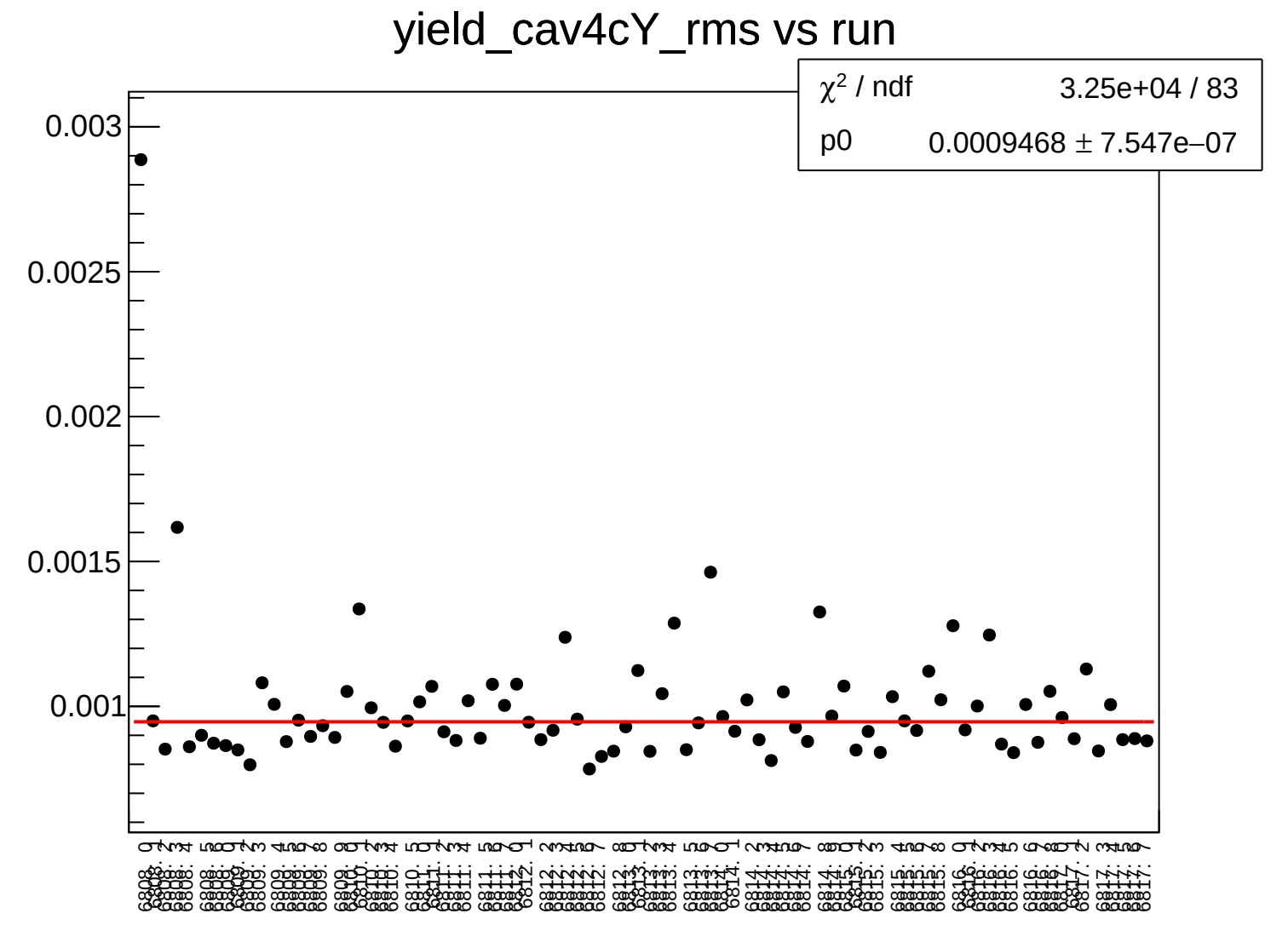

yield_cav4cX_mean vs run
χ² / ndf 3.7e+05 / 83
p0 0.002527 ± 1.908e−06
0.006
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 84
Mean 20.02
Std Dev 20.9
100
50
0
−50
−100
−150
−200
−250

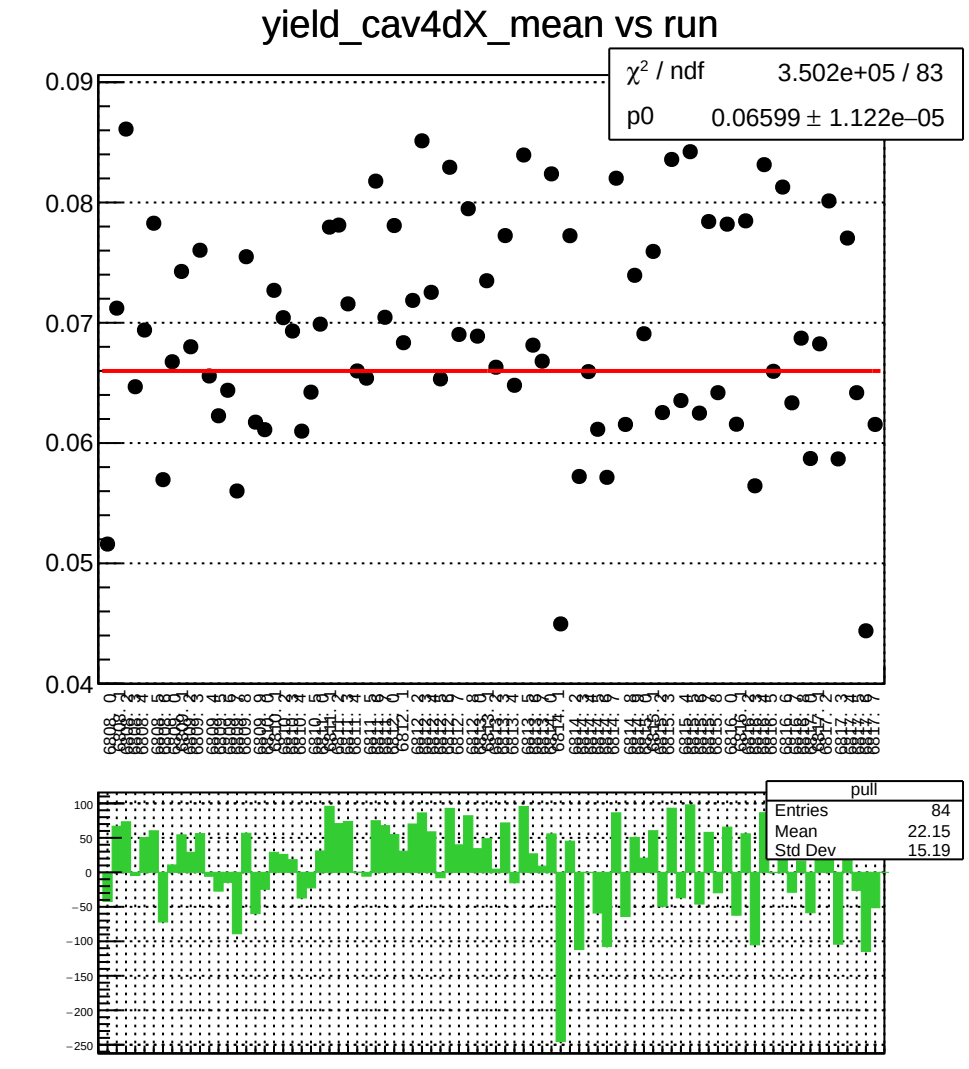

pull1D
Entries 84
Mean −0.524
Std Dev 4.296
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

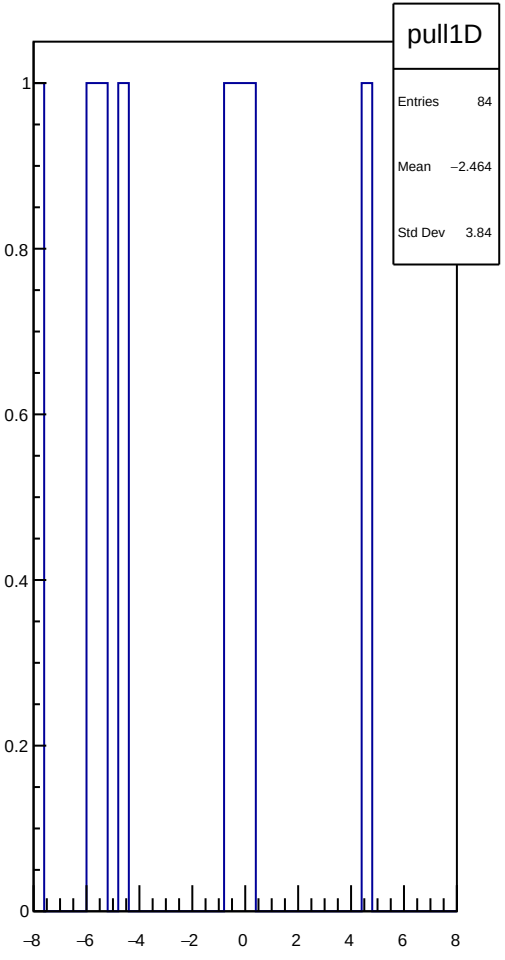

yield_cav4cX_rms vs run
χ² / ndf 2.497e+05 / 83
p0 0.001571 ± 1.349e−06
0.005
0.004
0.003
0.002
0.001

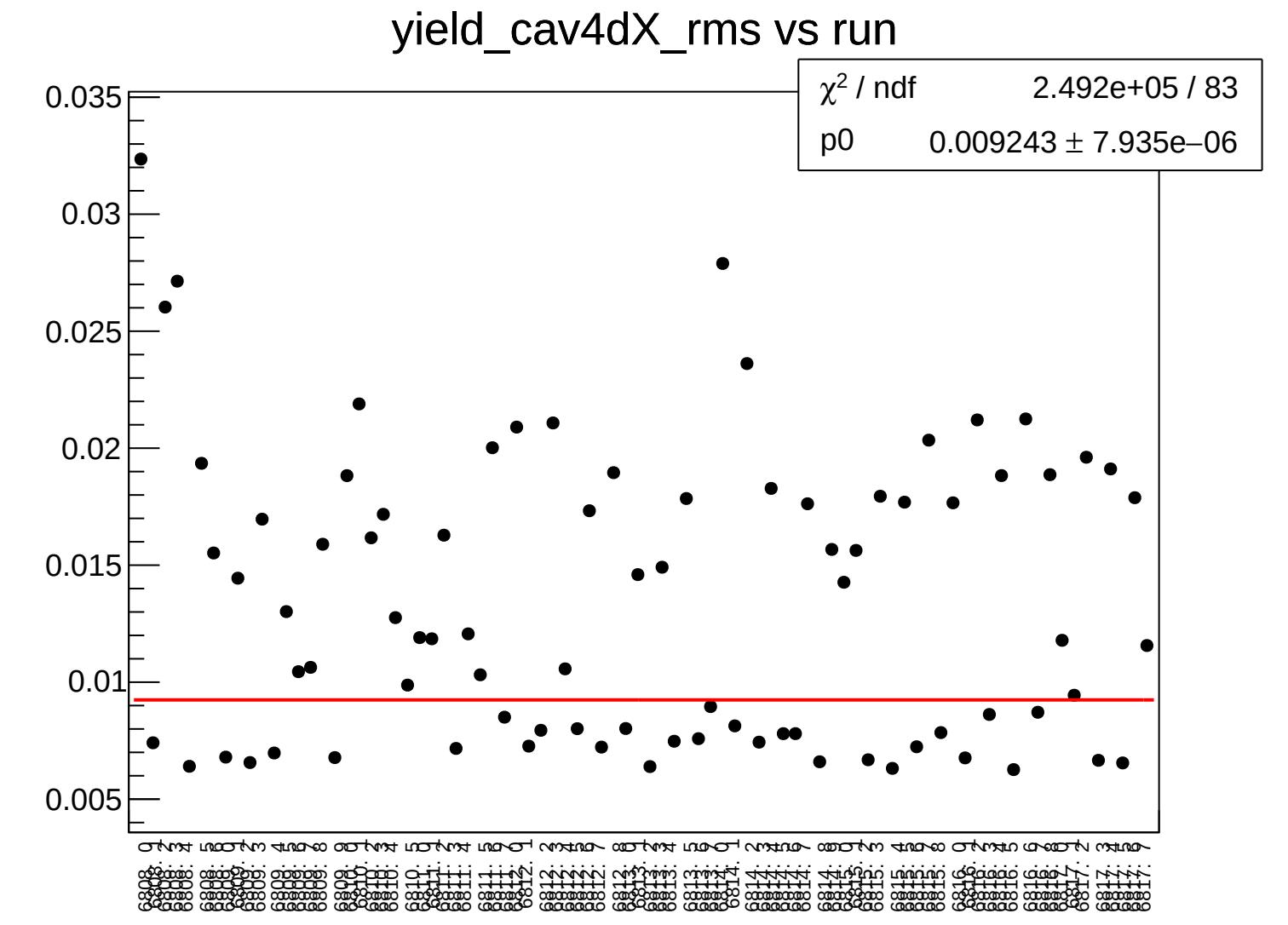

yield_cav4cY_mean vs run
χ² / ndf 1.047e+06 / 83
p0 −0.1218 ± 1.067e−06
−0.119
−0.12
−0.121
−0.122
−0.123
−0.124
pull
Entries 84
Mean 494.8
Std Dev 443.7
300
200
100
0
−100
−200

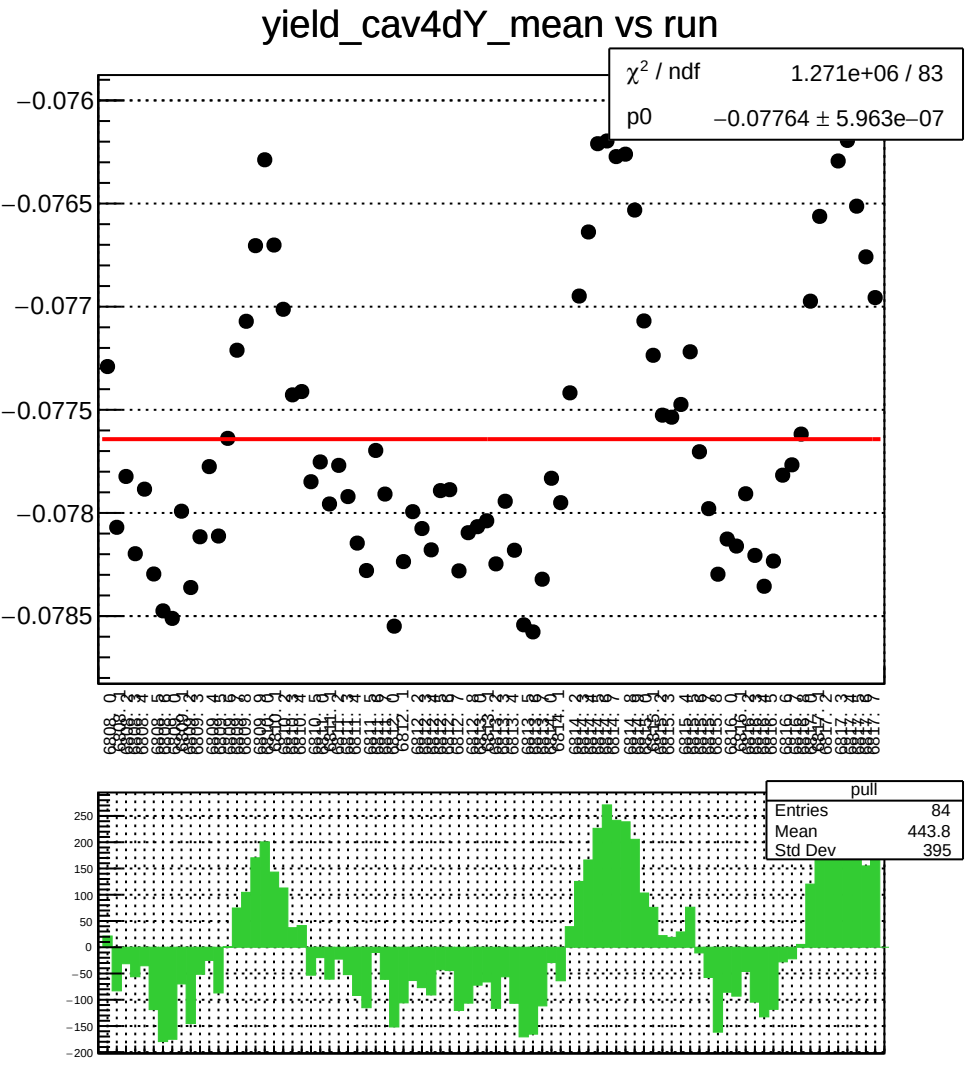

pull1D
Entries 84
Mean −1.352
Std Dev 1.775
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

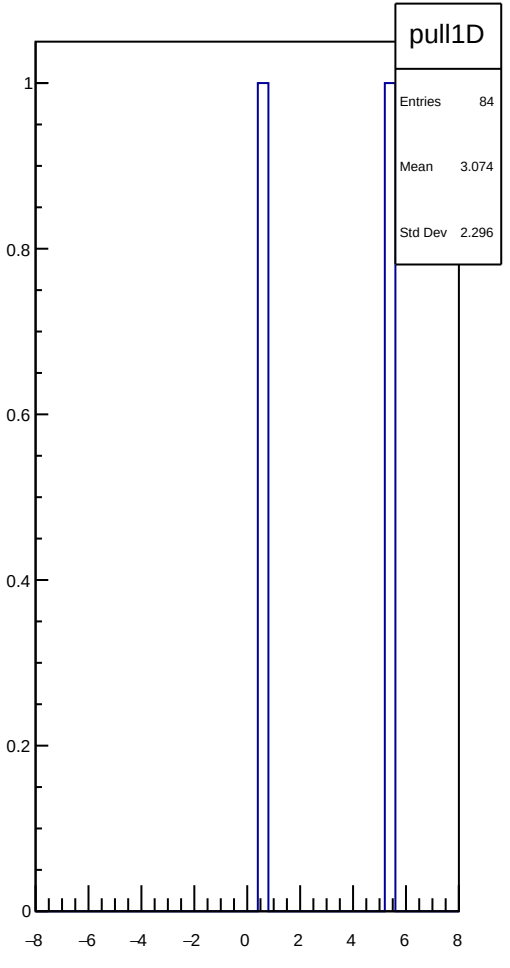

yield_cav4cY_rms vs run
χ² / ndf 3.25e+04 / 83
p0 0.0009468 ± 7.547e−07
0.003
0.0025
0.002
0.0015
0.001

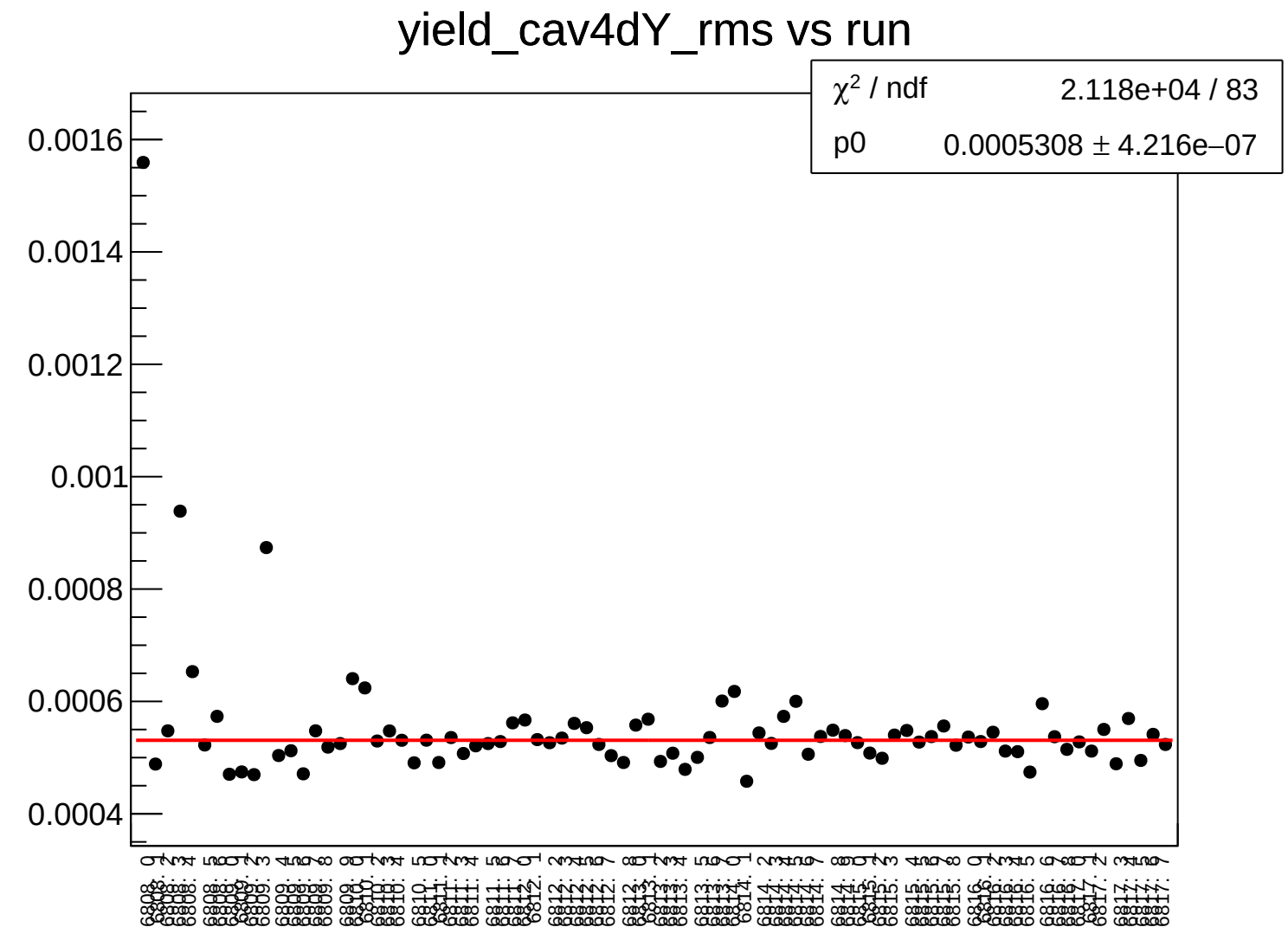

yield_cav4dX_mean vs run
χ² / ndf 3.502e+05 / 83
p0 0.06599 ± 1.122e−05
0.09
0.08
0.07
0.06
0.05
0.04
pull
Entries 84
Mean 22.15
Std Dev 15.19
100
50
0
−50
−100
−150
−200
−250

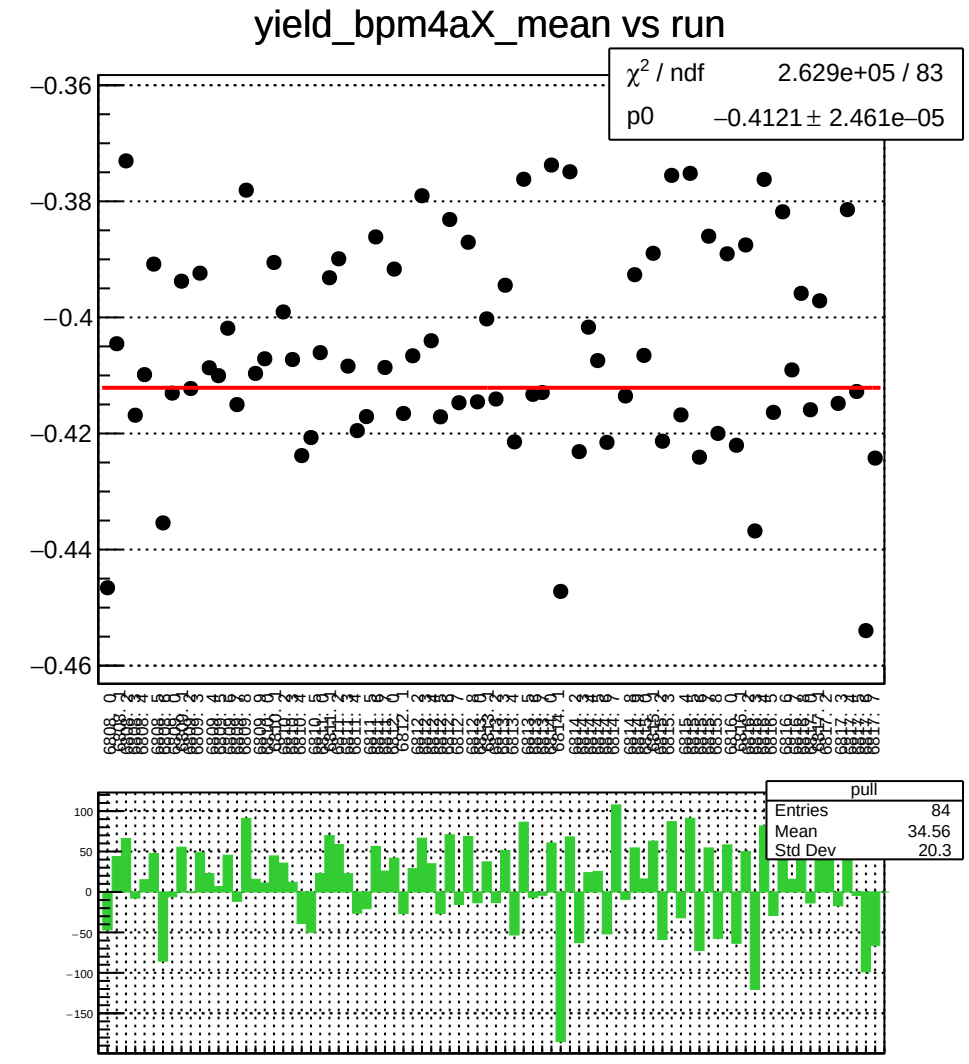

pull1D
Entries 84
Mean −2.464
Std Dev 3.84
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

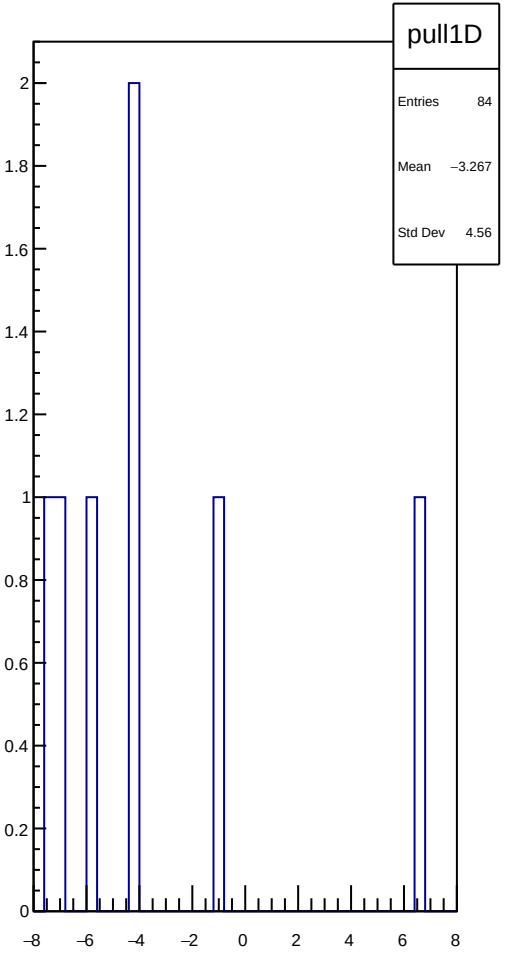

yield_cav4dX_rms vs run
χ² / ndf 2.492e+05 / 83
p0 0.009243 ± 7.935e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

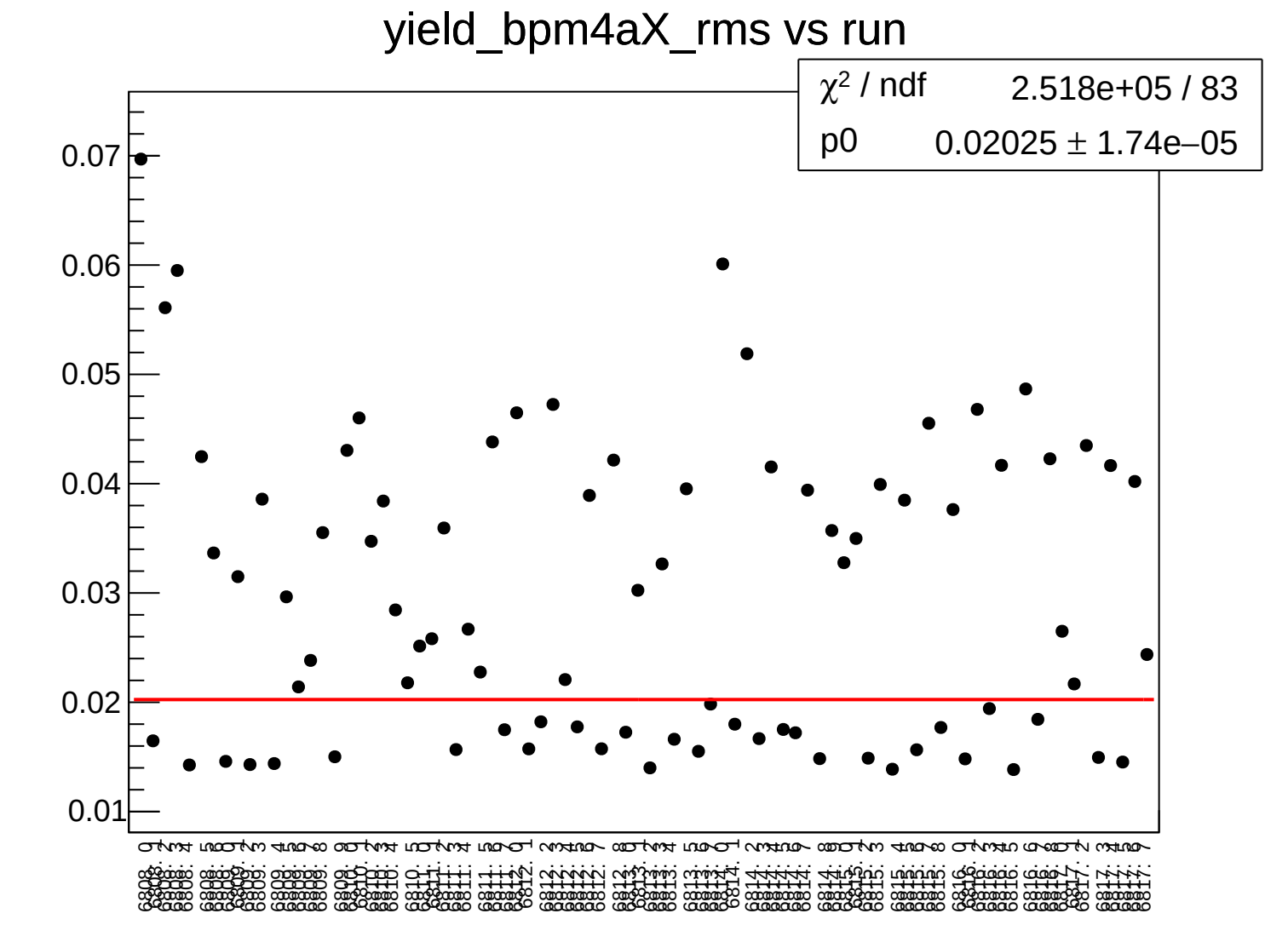

yield_cav4dY_mean vs run
χ² / ndf 1.271e+06 / 83
p0 −0.07764 ± 5.963e−07
−0.076
−0.0765
−0.077
−0.0775
−0.078
−0.0785
pull
Entries 84
Mean 443.8
Std Dev 395
250
200
150
100
50
0
−50
−100
−150
−200

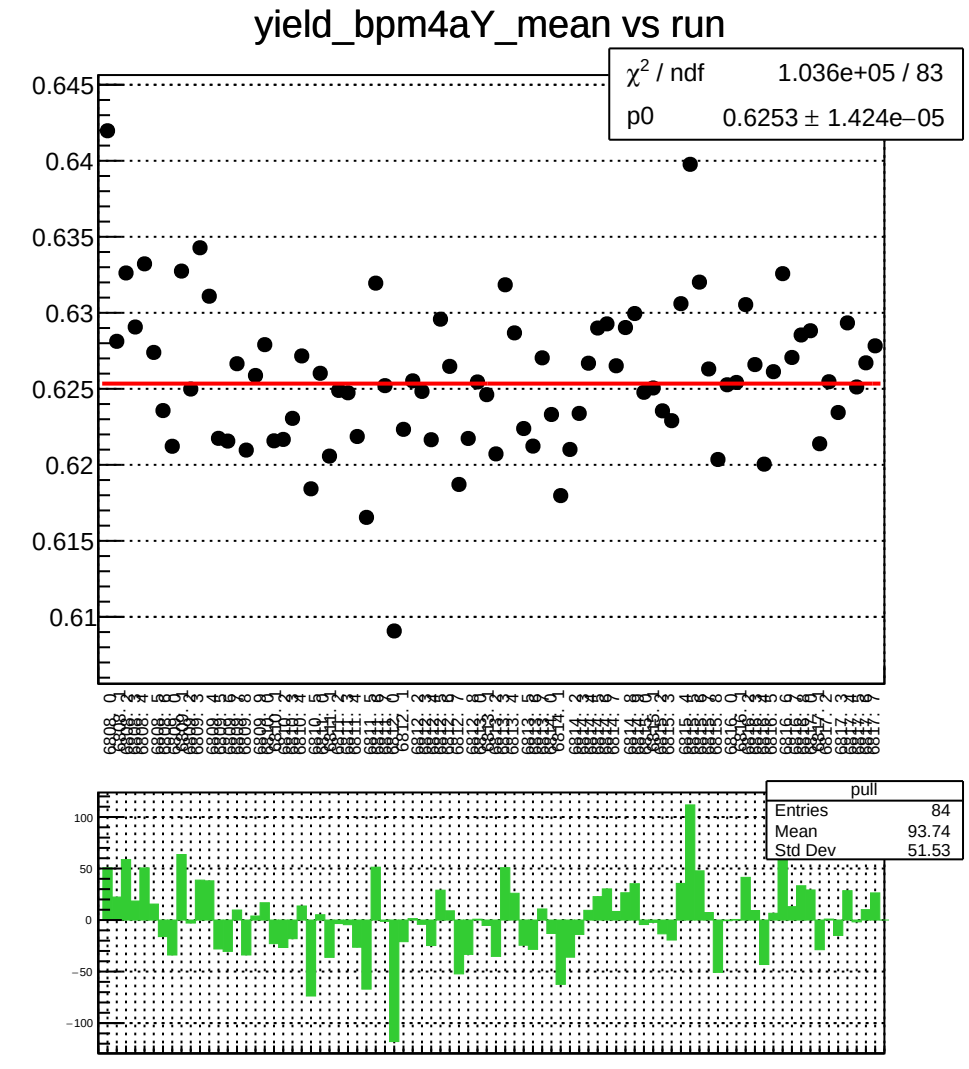

pull1D
Entries 84
Mean 3.074
Std Dev 2.296
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

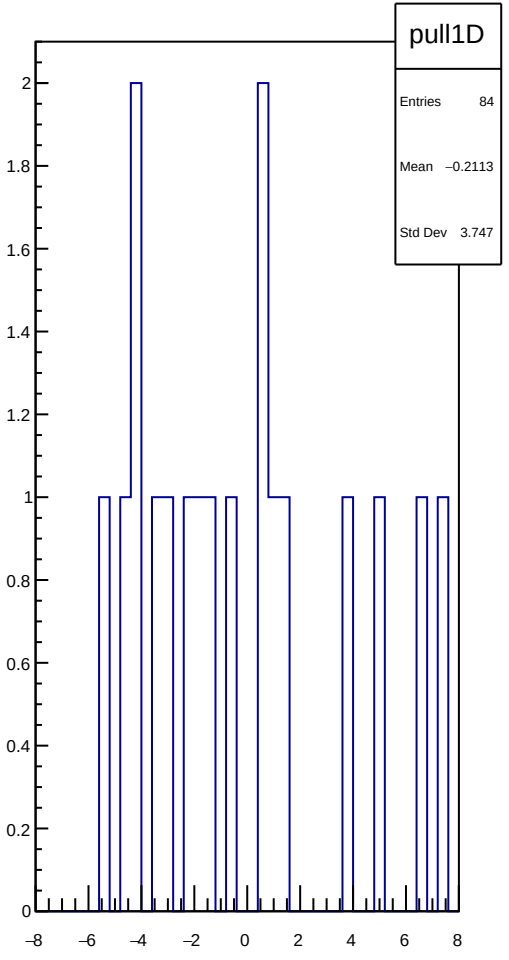

yield_cav4dY_rms vs run
χ² / ndf 2.118e+04 / 83
p0 0.0005308 ± 4.216e−07
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

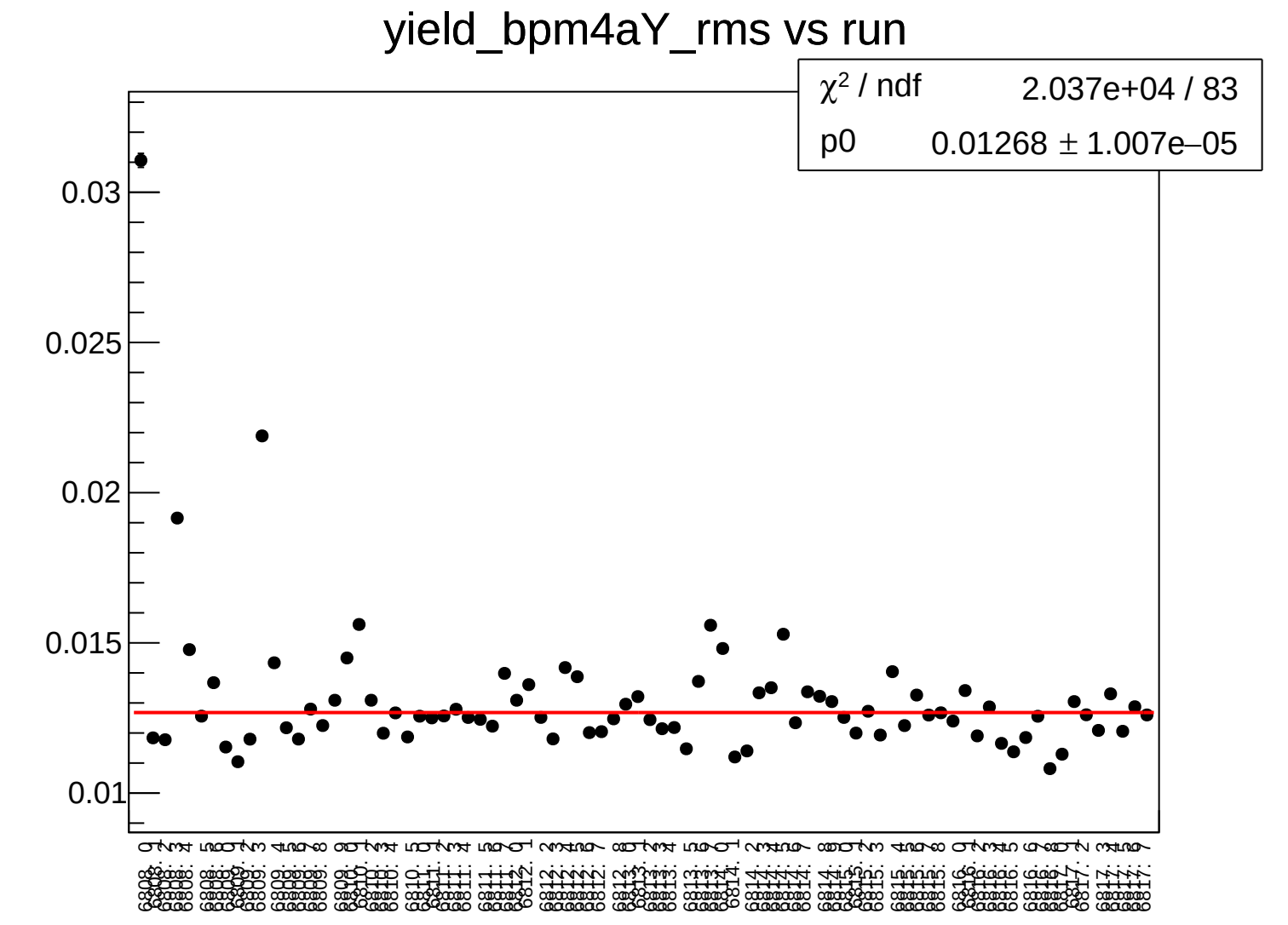

yield_bpm4aX_mean vs run
χ² / ndf 2.629e+05 / 83
p0 −0.4121 ± 2.461e−05
−0.36
−0.38
−0.4
−0.42
−0.44
−0.46
pull
Entries 84
Mean 34.56
Std Dev 20.3
100
50
0
−50
−100
−150

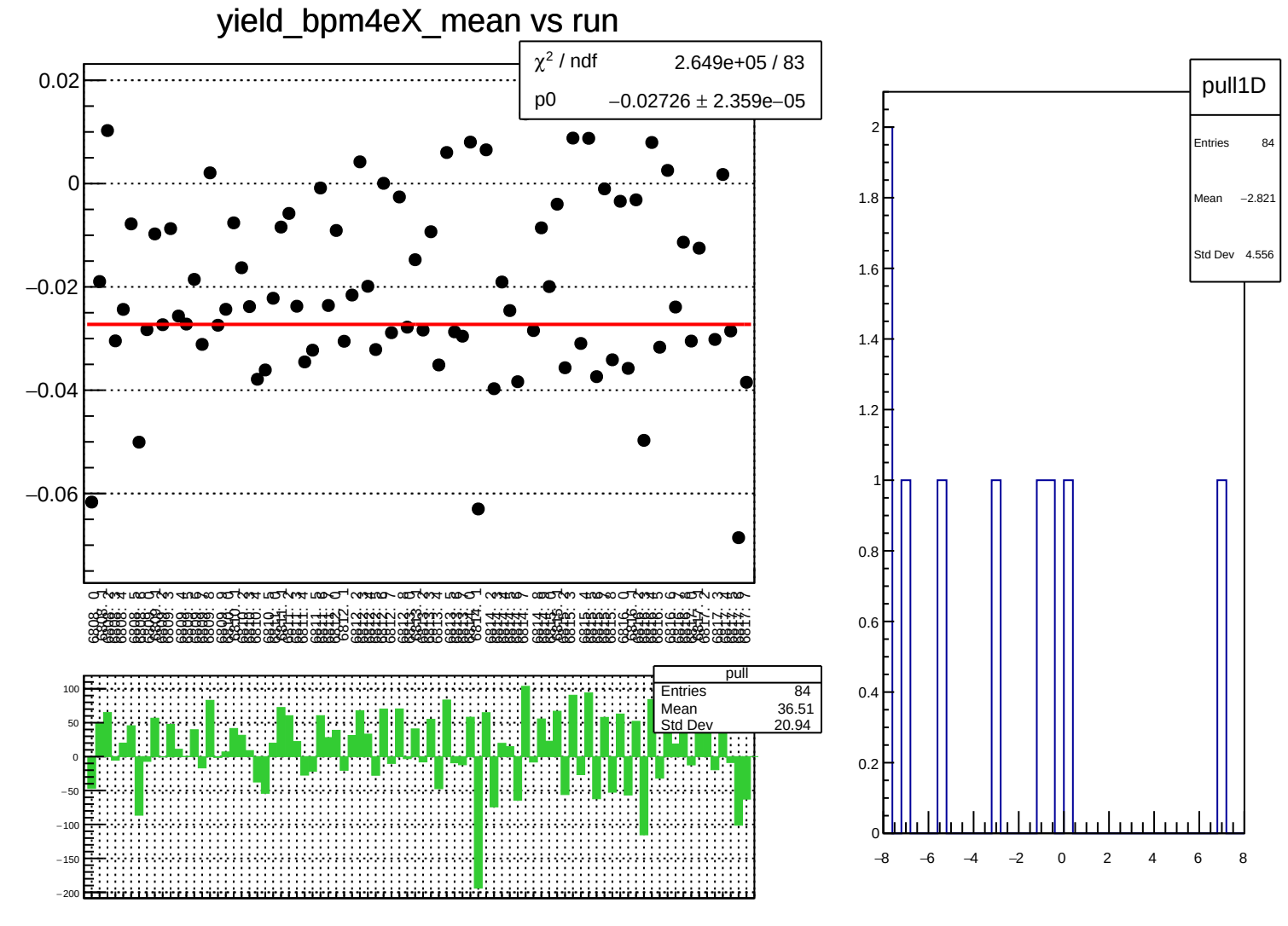

pull1D
Entries 84
Mean −3.267
Std Dev 4.56
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

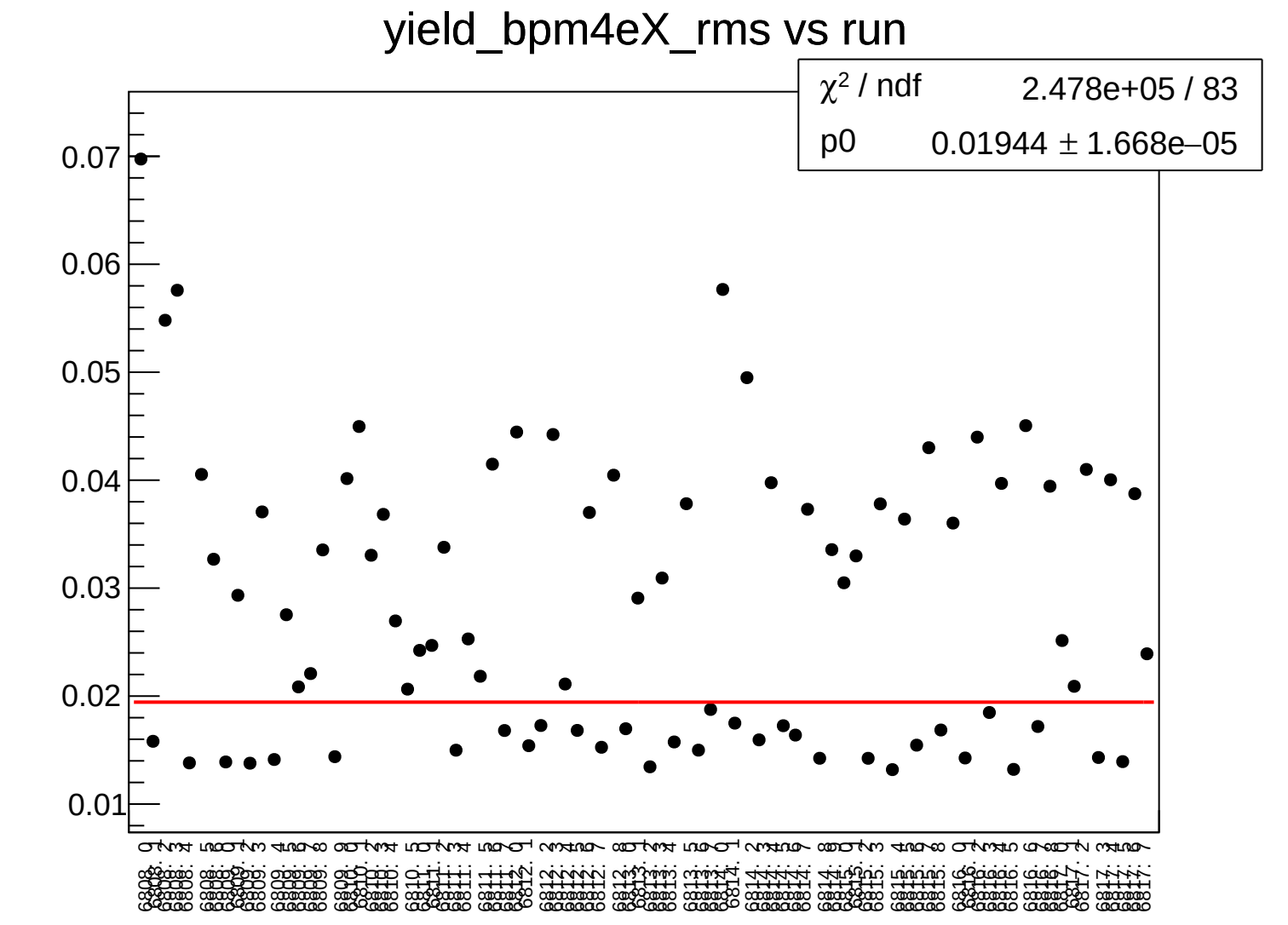

yield_bpm4aX_rms vs run
χ² / ndf 2.518e+05 / 83
p0 0.02025 ± 1.74e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

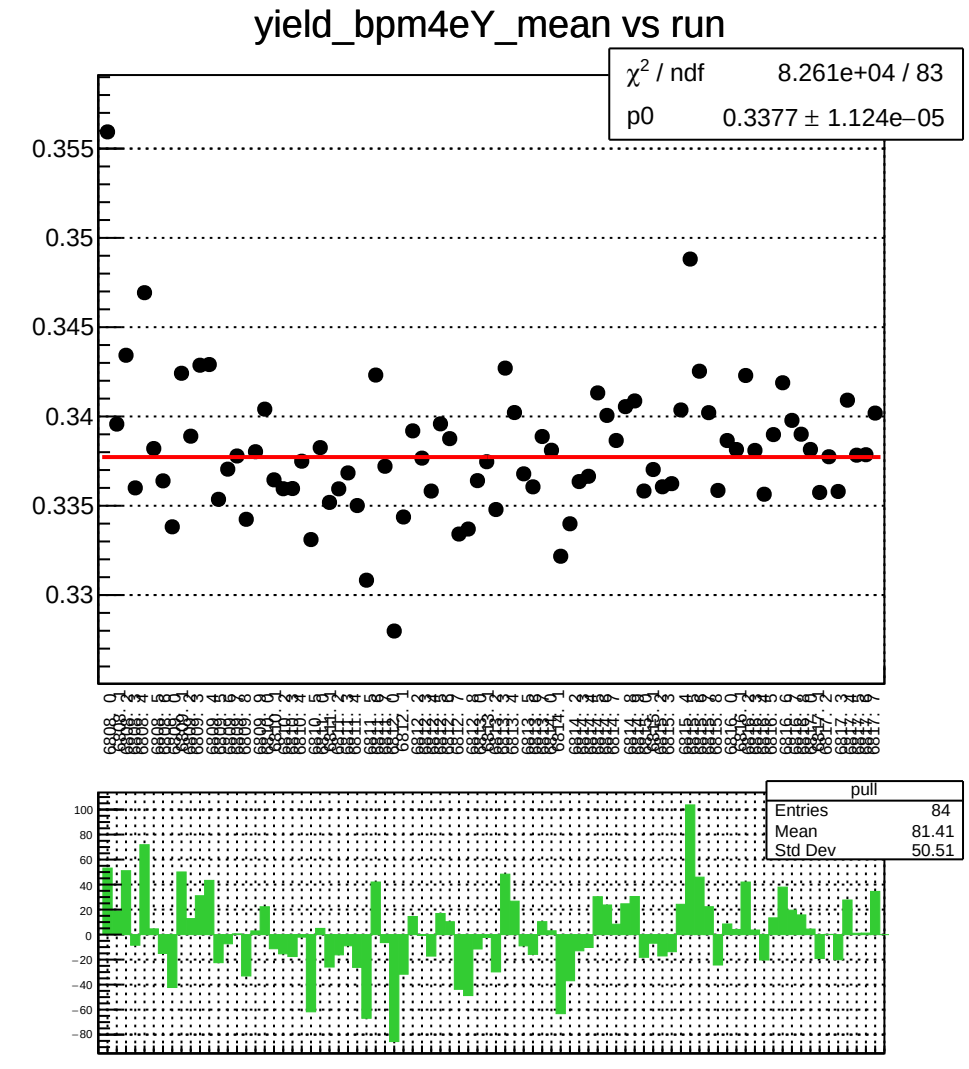

yield_bpm4aY_mean vs run
χ² / ndf 1.036e+05 / 83
p0 0.6253 ± 1.424e−05
0.645
0.64
0.635
0.63
0.625
0.62
0.615
0.61
pull
Entries 84
Mean 93.74
Std Dev 51.53
100
50
0
−50
−100

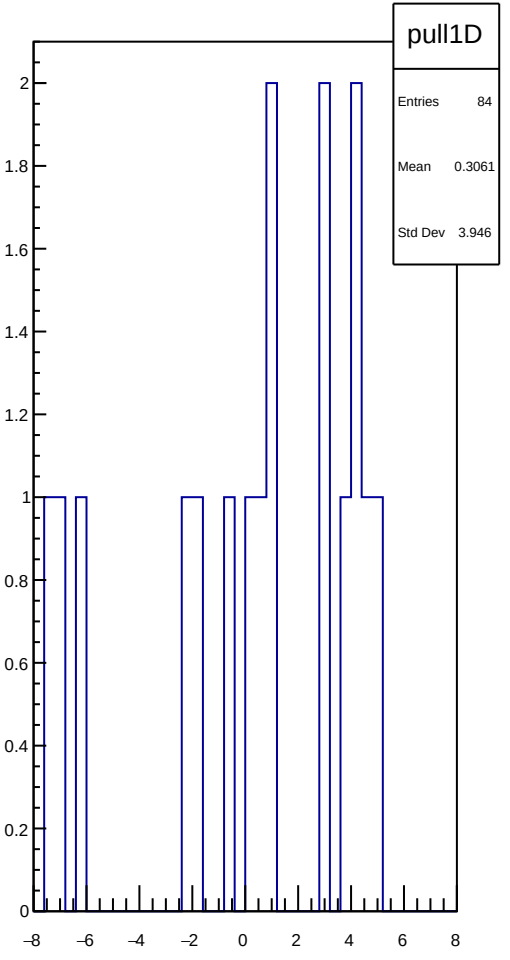

pull1D
Entries 84
Mean −0.2113
Std Dev 3.747
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

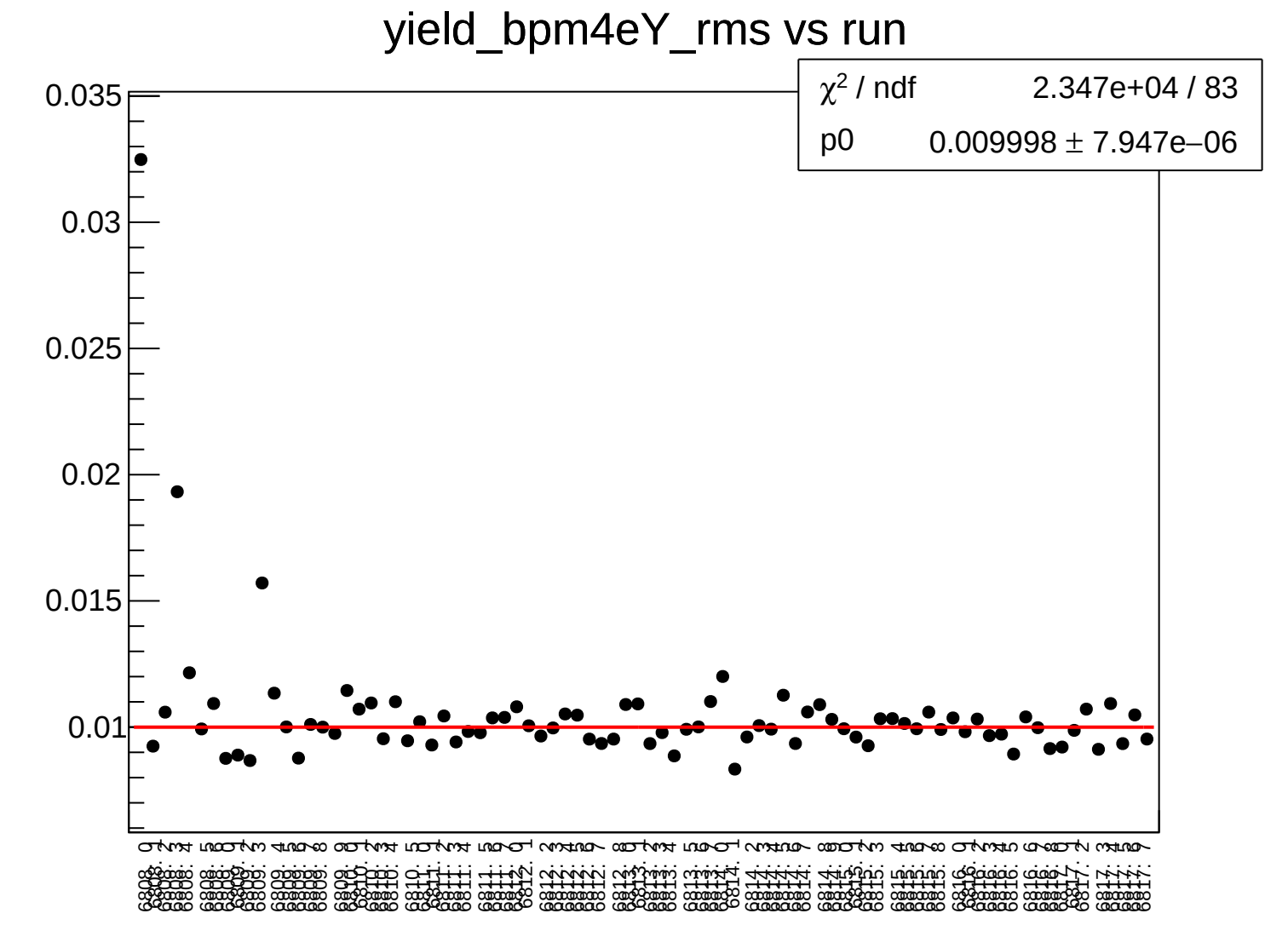

yield_bpm4aY_rms vs run
χ² / ndf 2.037e+04 / 83
p0 0.01268 ± 1.007e–05
0.03
0.025
0.02
0.015
0.01

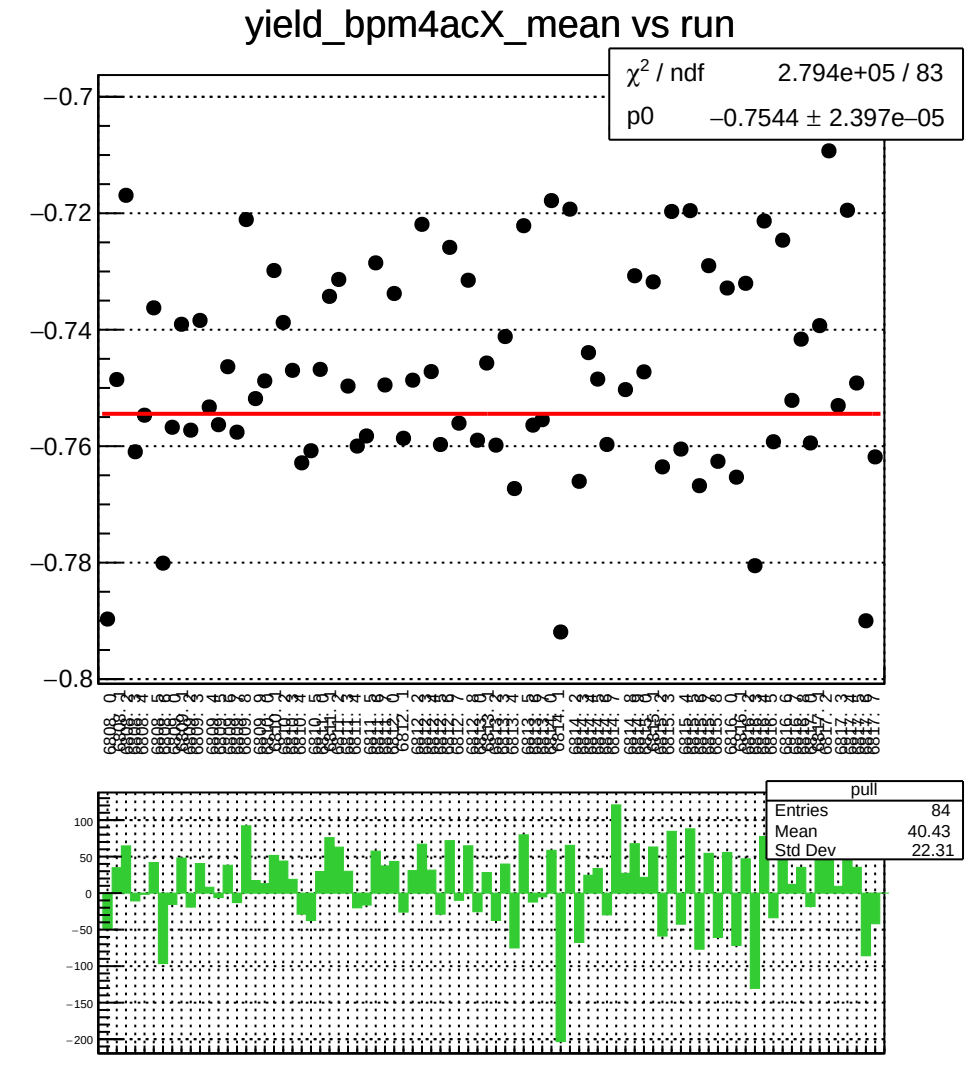

yield_bpm4eX_mean vs run
χ² / ndf 2.649e+05 / 83
p0 −0.02726 ± 2.359e−05
0.02
0
−0.02
−0.04
−0.06
pull
Entries 84
Mean 36.51
Std Dev 20.94
100
50
0
−50
−100
−150
−200
pull1D
Entries 84
Mean −2.821
Std Dev 4.556
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

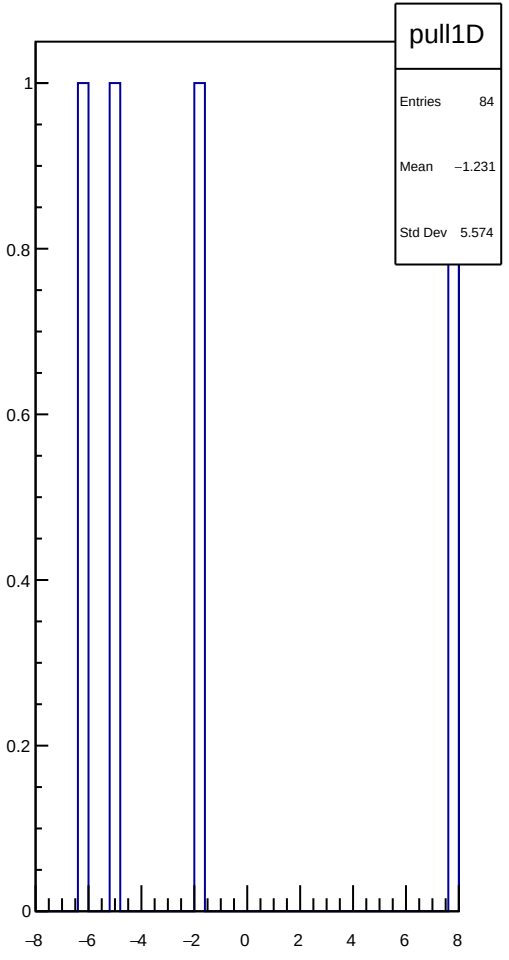

yield_bpm4eX_rms vs run
χ² / ndf 2.478e+05 / 83
p0 0.01944 ± 1.668e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

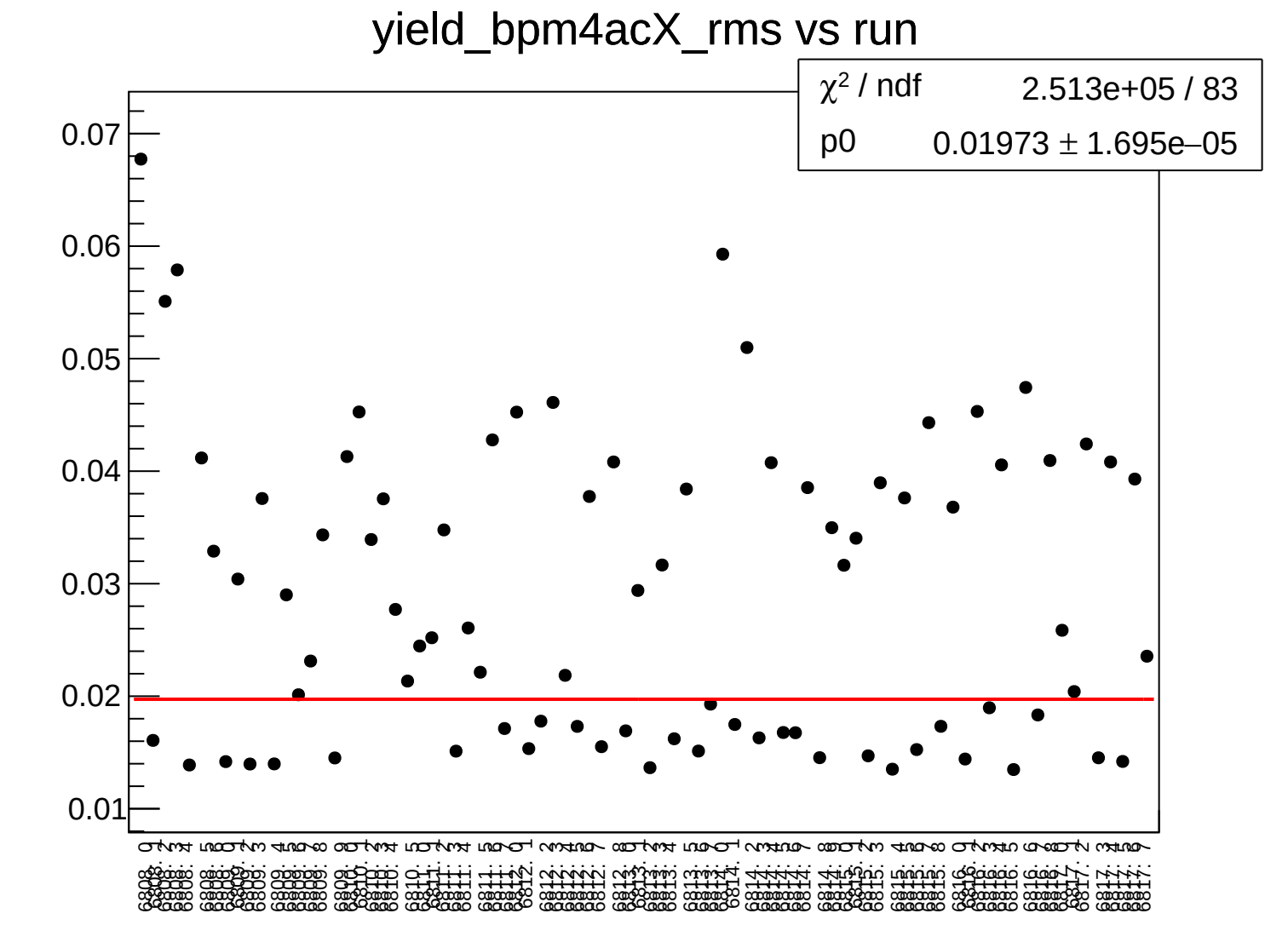

yield_bpm4eY_mean vs run
χ² / ndf 8.261e+04 / 83
p0 0.3377 ± 1.124e−05
0.355
0.35
0.345
0.34
0.335
0.33
pull
Entries 84
Mean 81.41
Std Dev 50.51
100
80
60
40
20
0
−20
−40
−60
−80

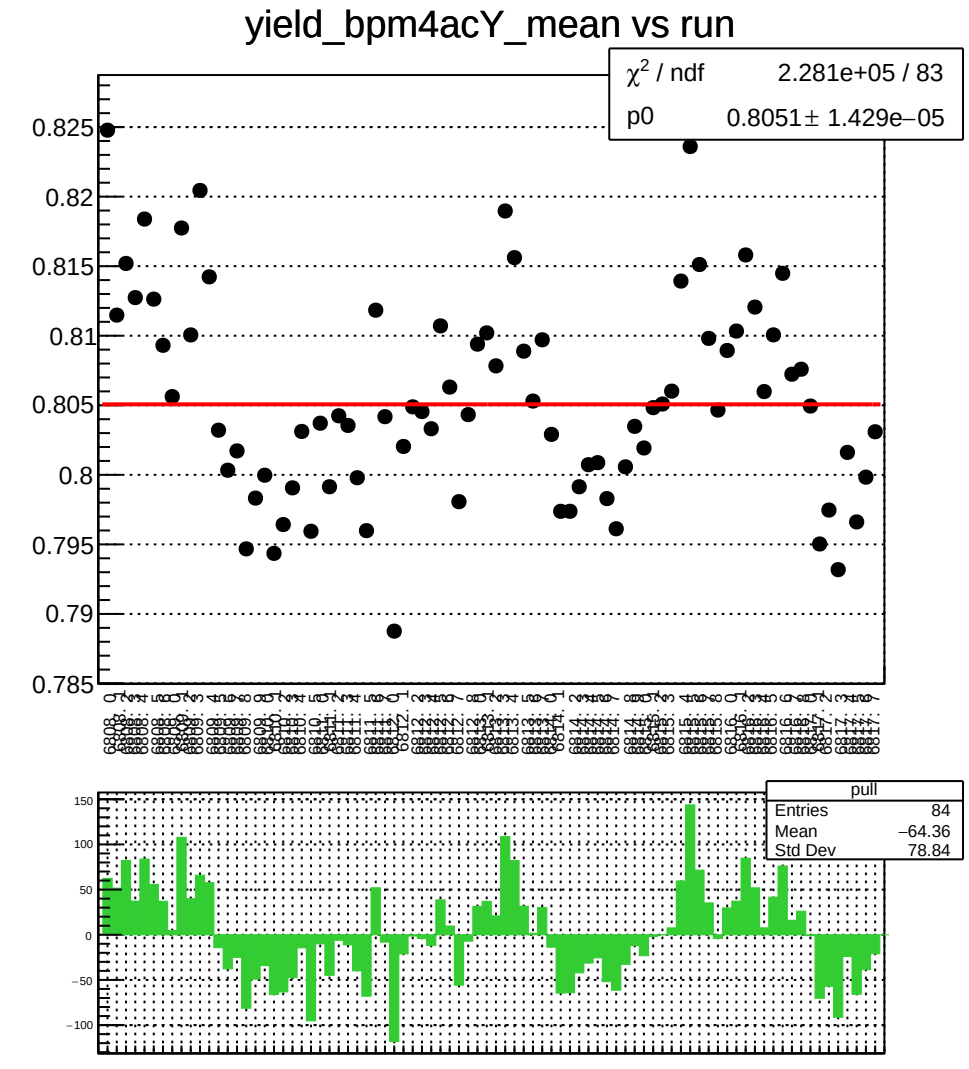

pull1D
Entries 84
Mean 0.3061
Std Dev 3.946
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

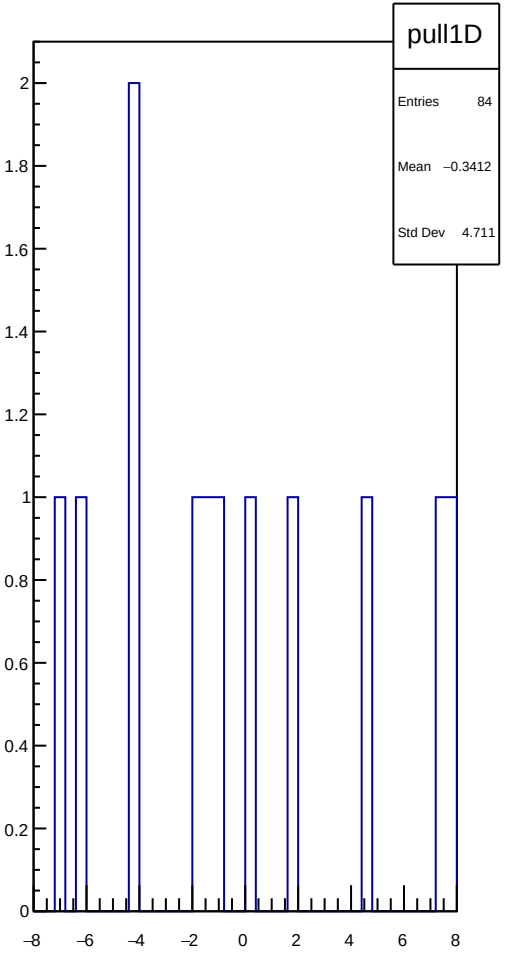

yield_bpm4eY_rms vs run
χ² / ndf 2.347e+04 / 83
p0 0.009998 ± 7.947e−06
0.035
0.03
0.025
0.02
0.015
0.01

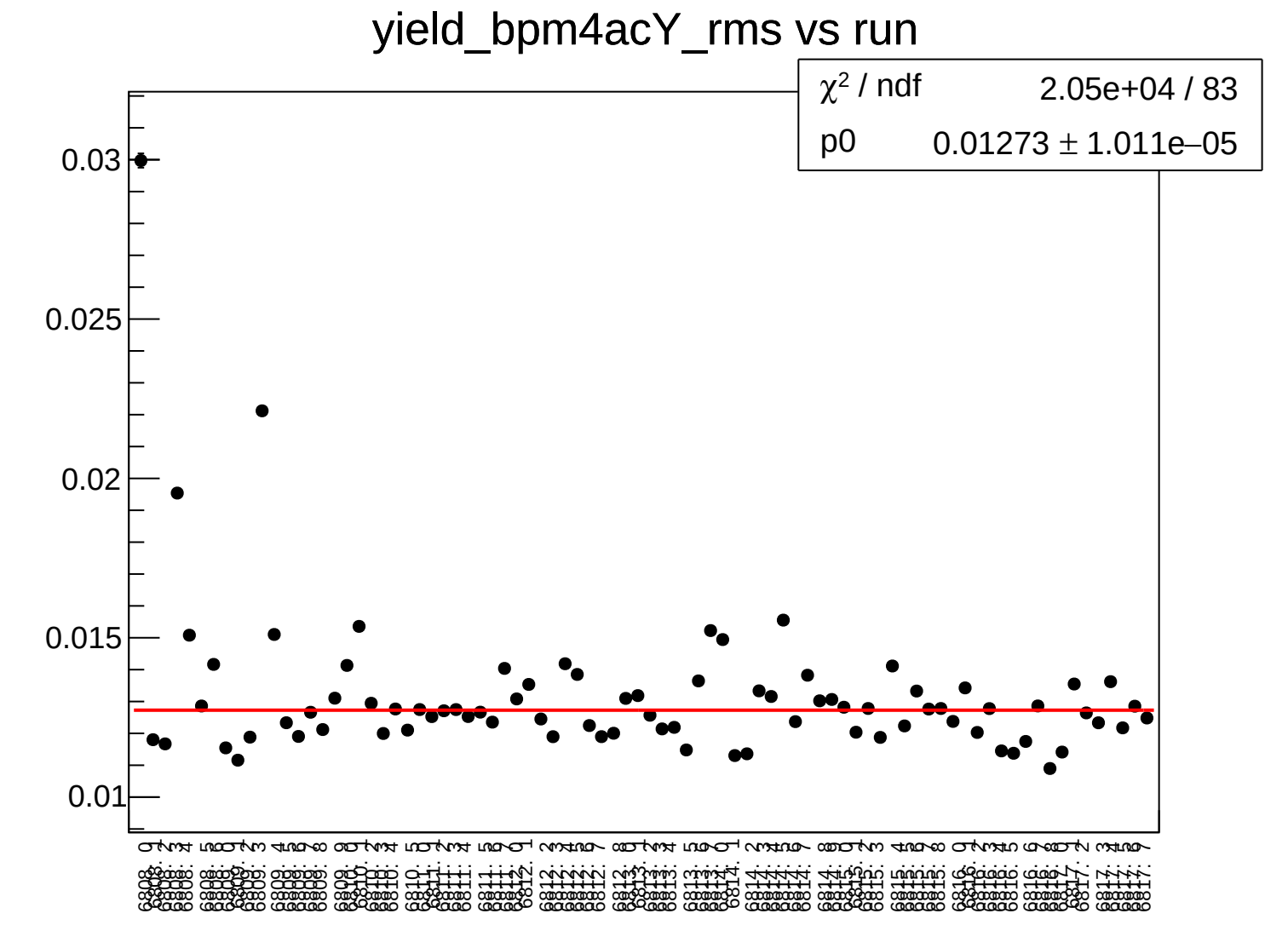

yield_bpm4acX_mean vs run
χ² / ndf 2.794e+05 / 83
p0 −0.7544 ± 2.397e−05
−0.7
−0.72
−0.74
−0.76
−0.78
−0.8
pull
Entries 84
Mean 40.43
Std Dev 22.31
100
50
0
−50
−100
−150
−200

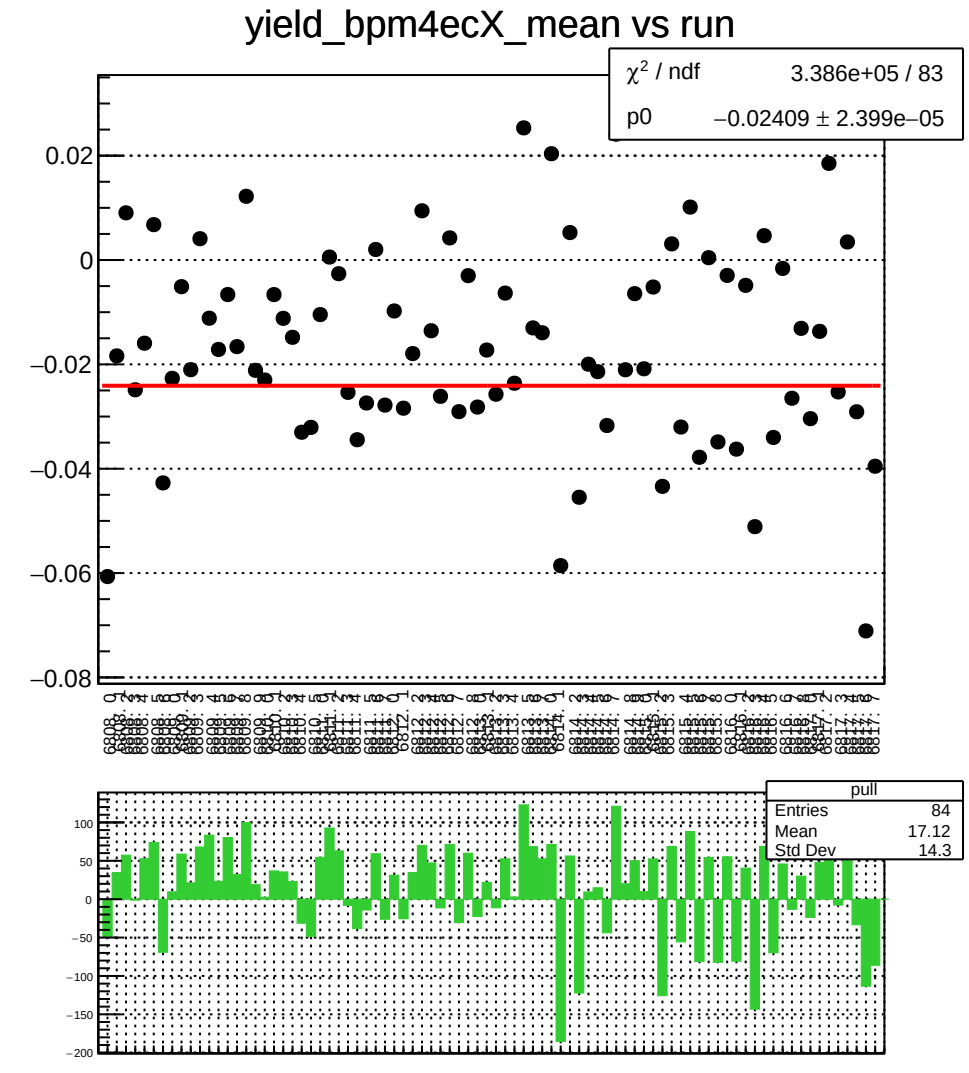

pull1D
Entries 84
Mean −1.231
Std Dev 5.574
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

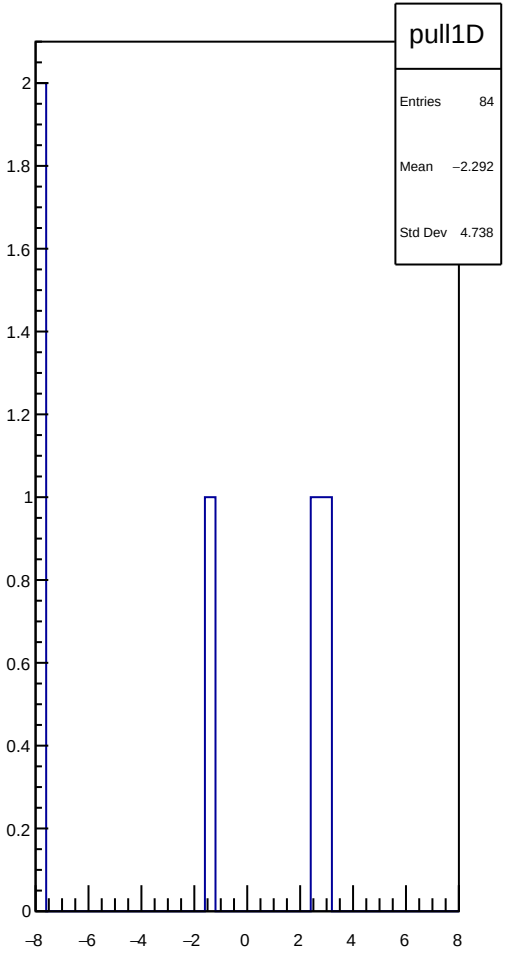

yield_bpm4acX_rms vs run
χ² / ndf 2.513e+05 / 83
p0 0.01973 ± 1.695e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

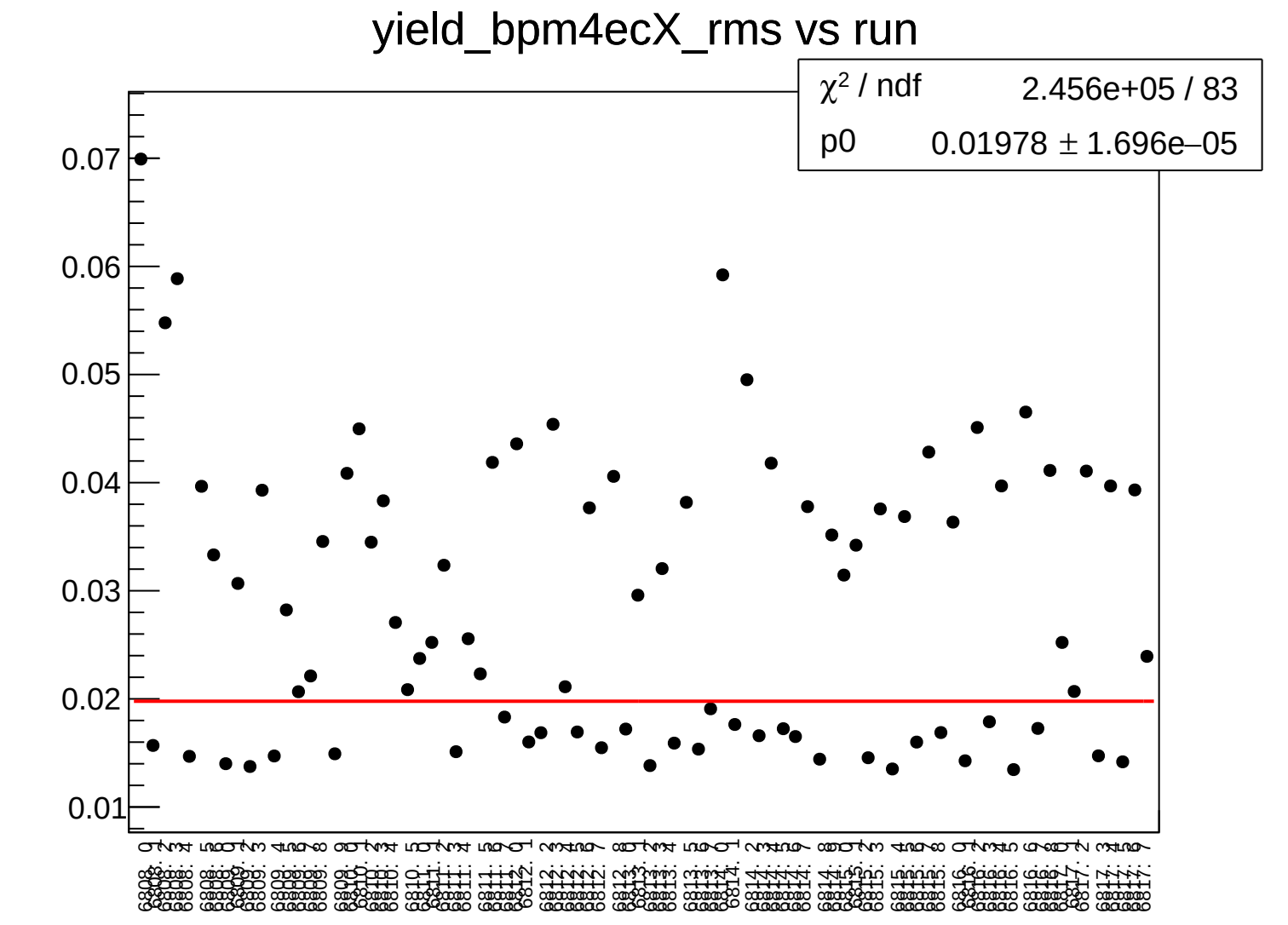

yield_bpm4acY_mean vs run
χ² / ndf 2.281e+05 / 83
p0 0.8051 ± 1.429e−05
0.825
0.82
0.815
0.81
0.805
0.8
0.795
0.79
0.785
pull
Entries 84
Mean −64.36
Std Dev 78.84
150
100
50
0
−50
−100

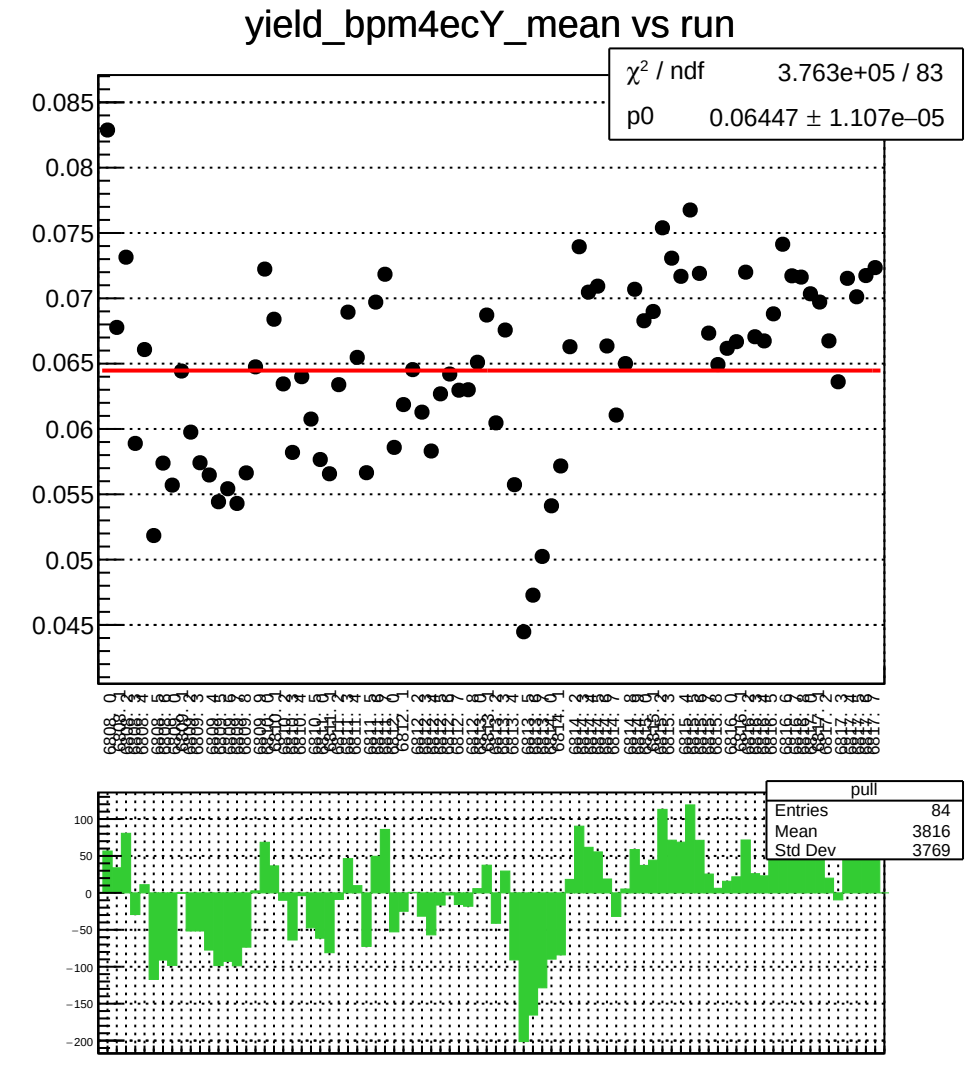

pull1D
Entries 84
Mean −0.3412
Std Dev 4.711
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

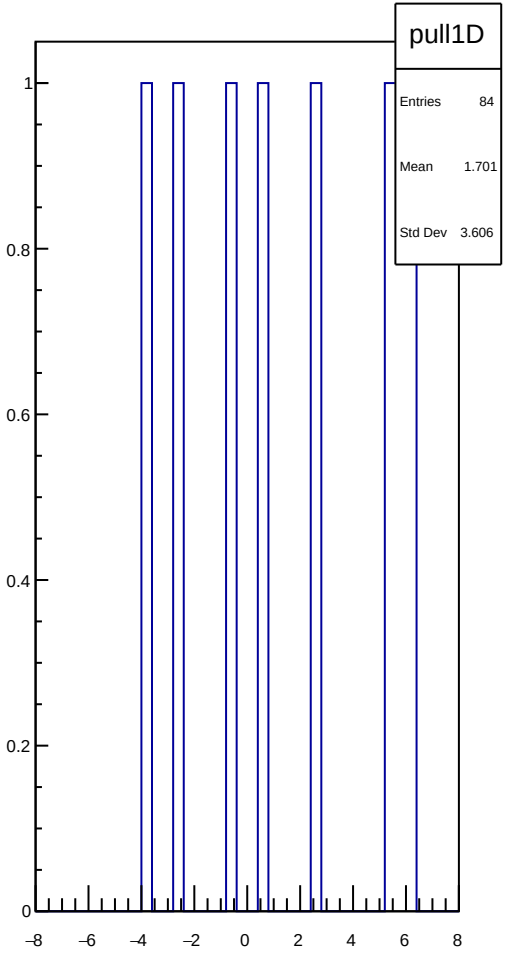

yield_bpm4acY_rms vs run
χ² / ndf 2.05e+04 / 83
p0 0.01273 ± 1.011e−05
0.03
0.025
0.02
0.015
0.01

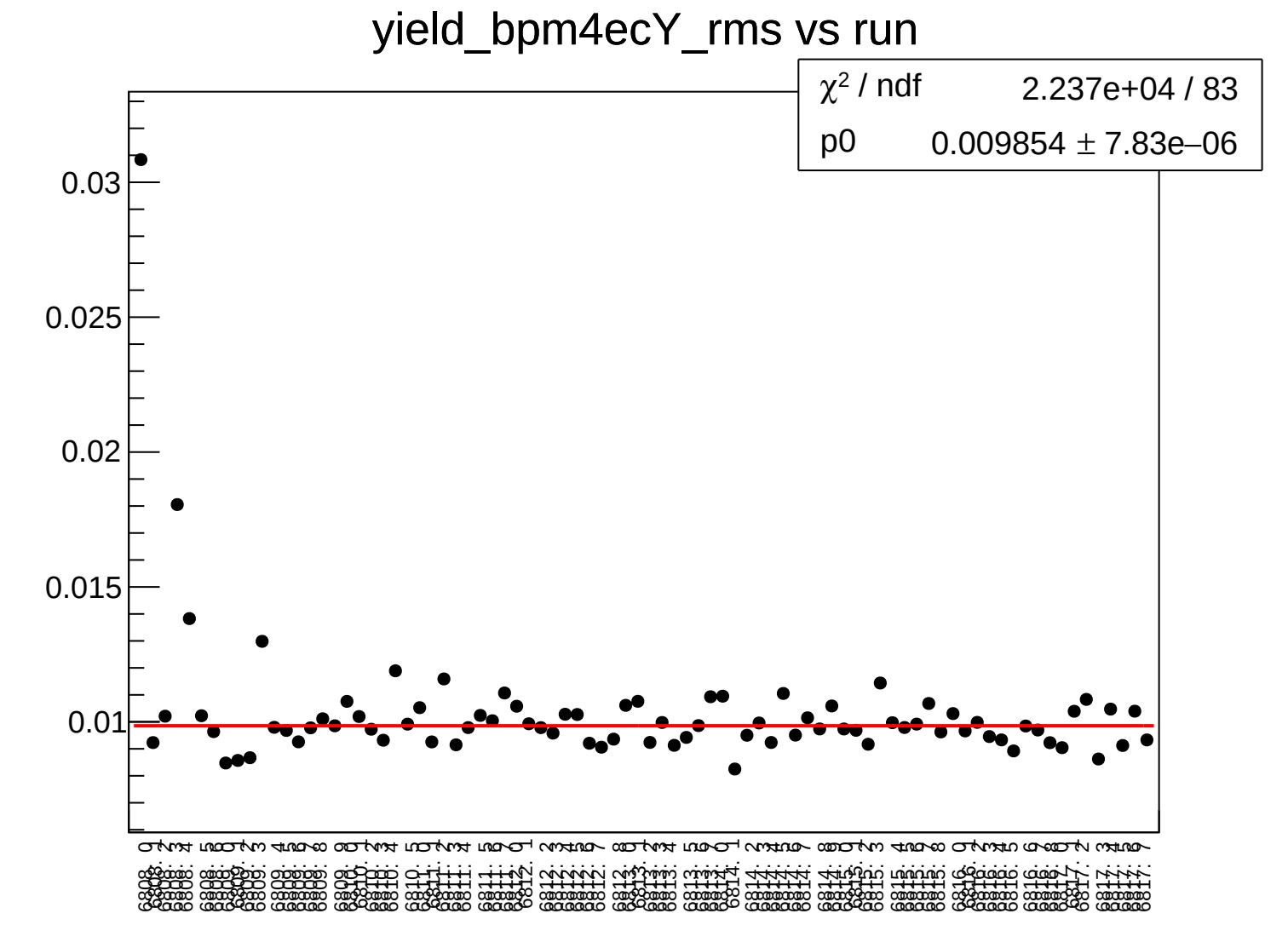

yield_bpm4ecX_mean vs run
χ² / ndf 3.386e+05 / 83
p0 −0.02409 ± 2.399e−05
0.02
0
−0.02
−0.04
−0.06
−0.08
pull
Entries 84
Mean 17.12
Std Dev 14.3
100
50
0
−50
−100
−150
−200

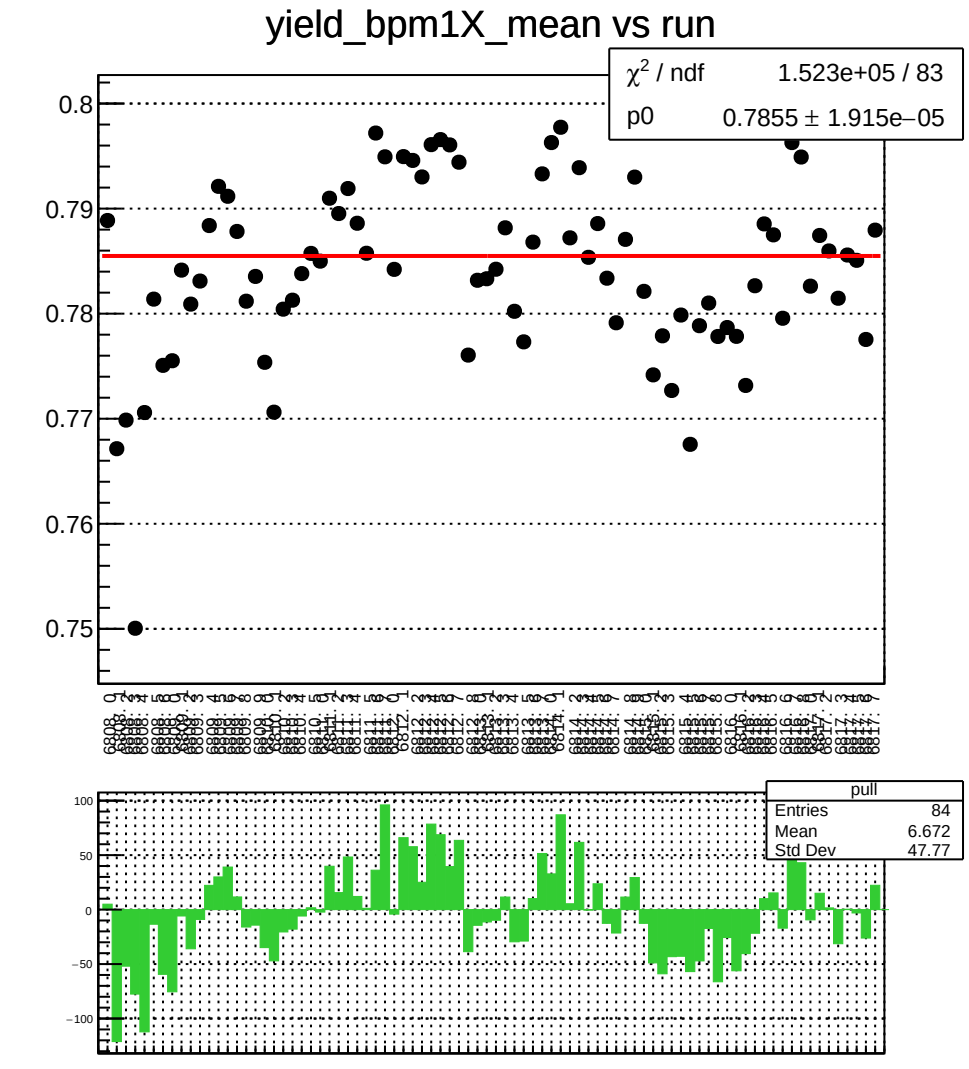

pull1D
Entries 84
Mean −2.292
Std Dev 4.738
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

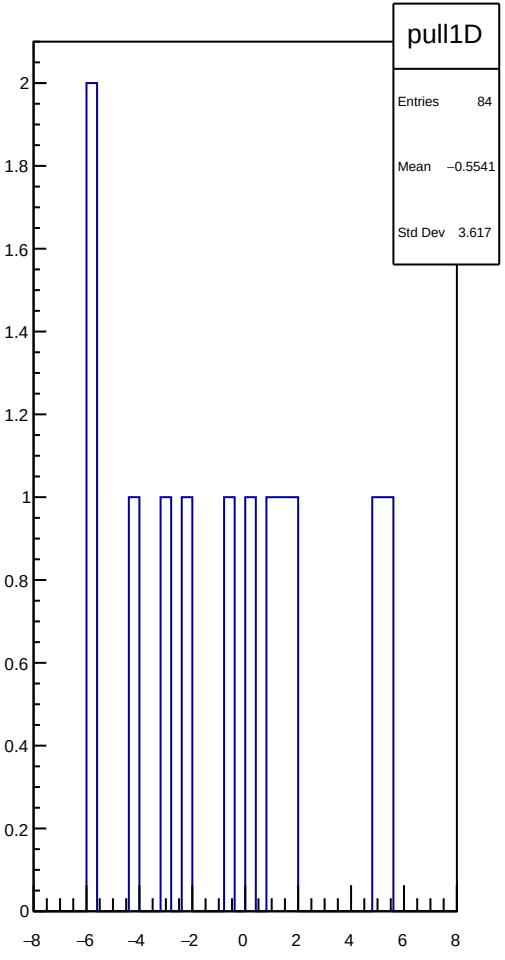

yield_bpm4ecX_rms vs run
χ² / ndf 2.456e+05 / 83
p0 0.01978 ± 1.696e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

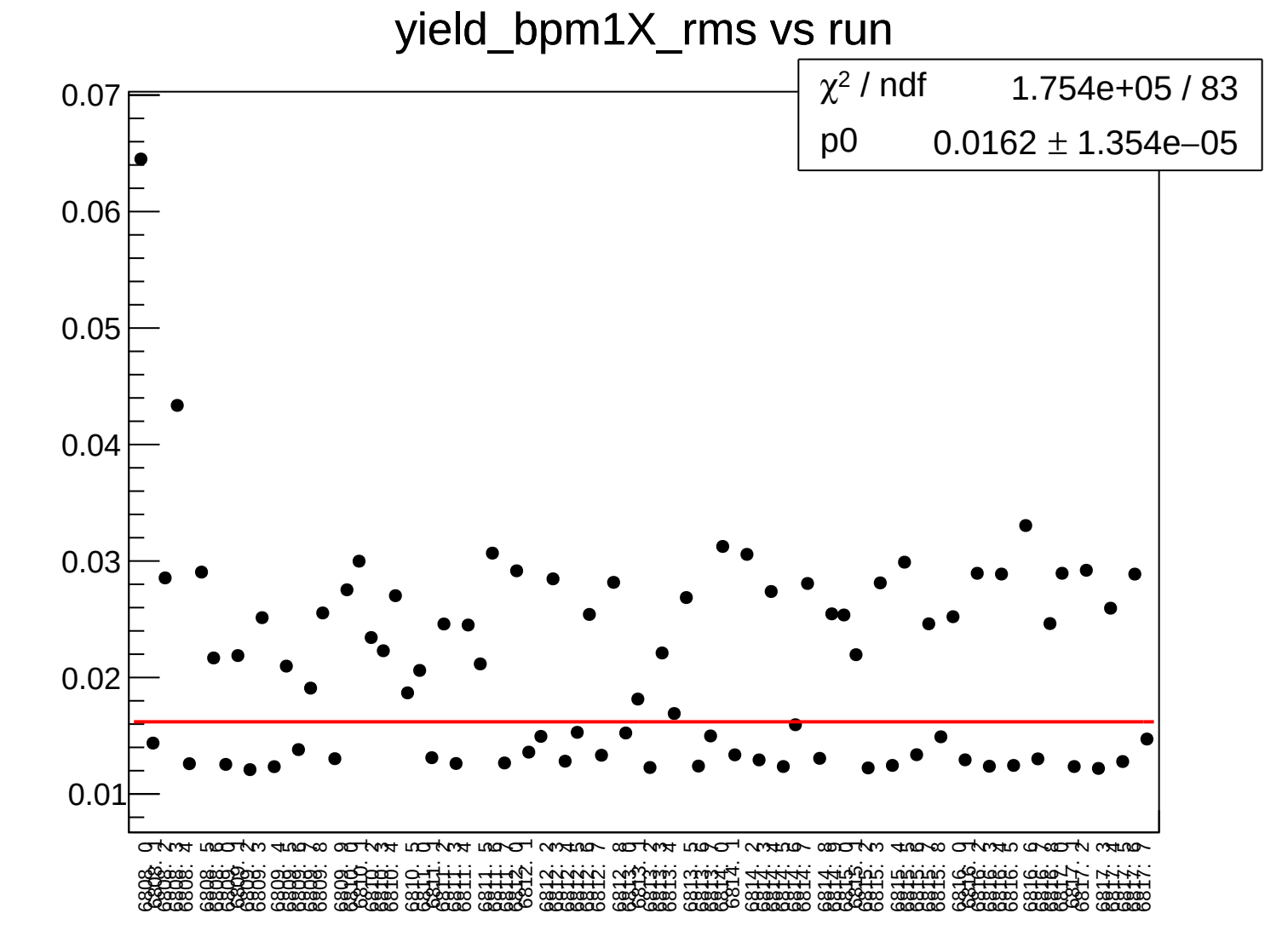

yield_bpm4ecY_mean vs run
χ² / ndf 3.763e+05 / 83
p0 0.06447 ± 1.107e−05
pull
Entries 84
Mean 3816
Std Dev 3769

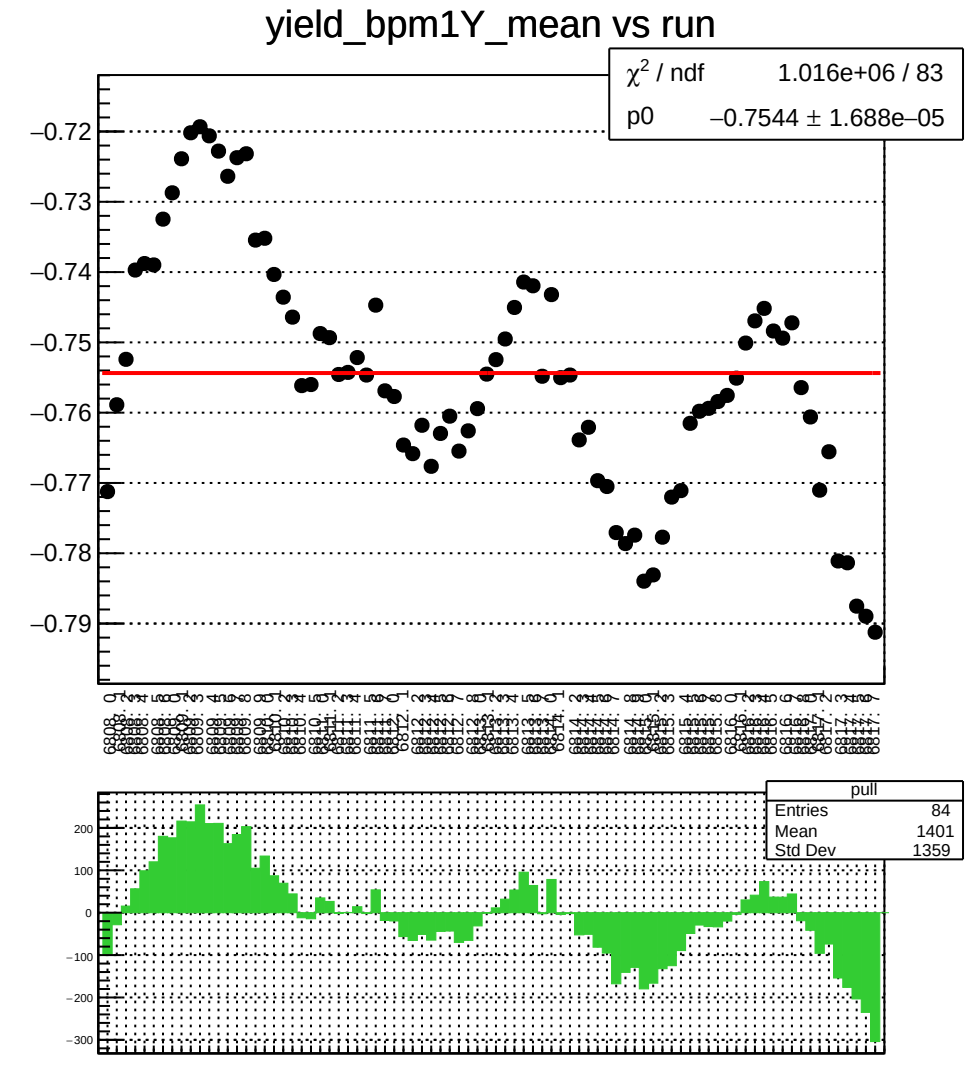

pull1D
Entries 84
Mean 1.701
Std Dev 3.606

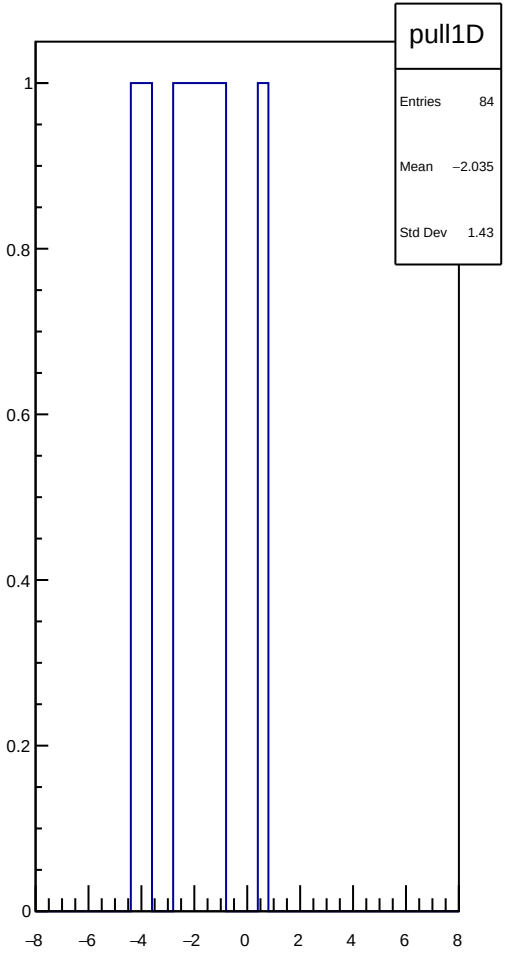

yield_bpm4ecY_rms vs run
χ² / ndf 2.237e+04 / 83
p0 0.009854 ± 7.83e−06
0.03
0.025
0.02
0.015
0.01

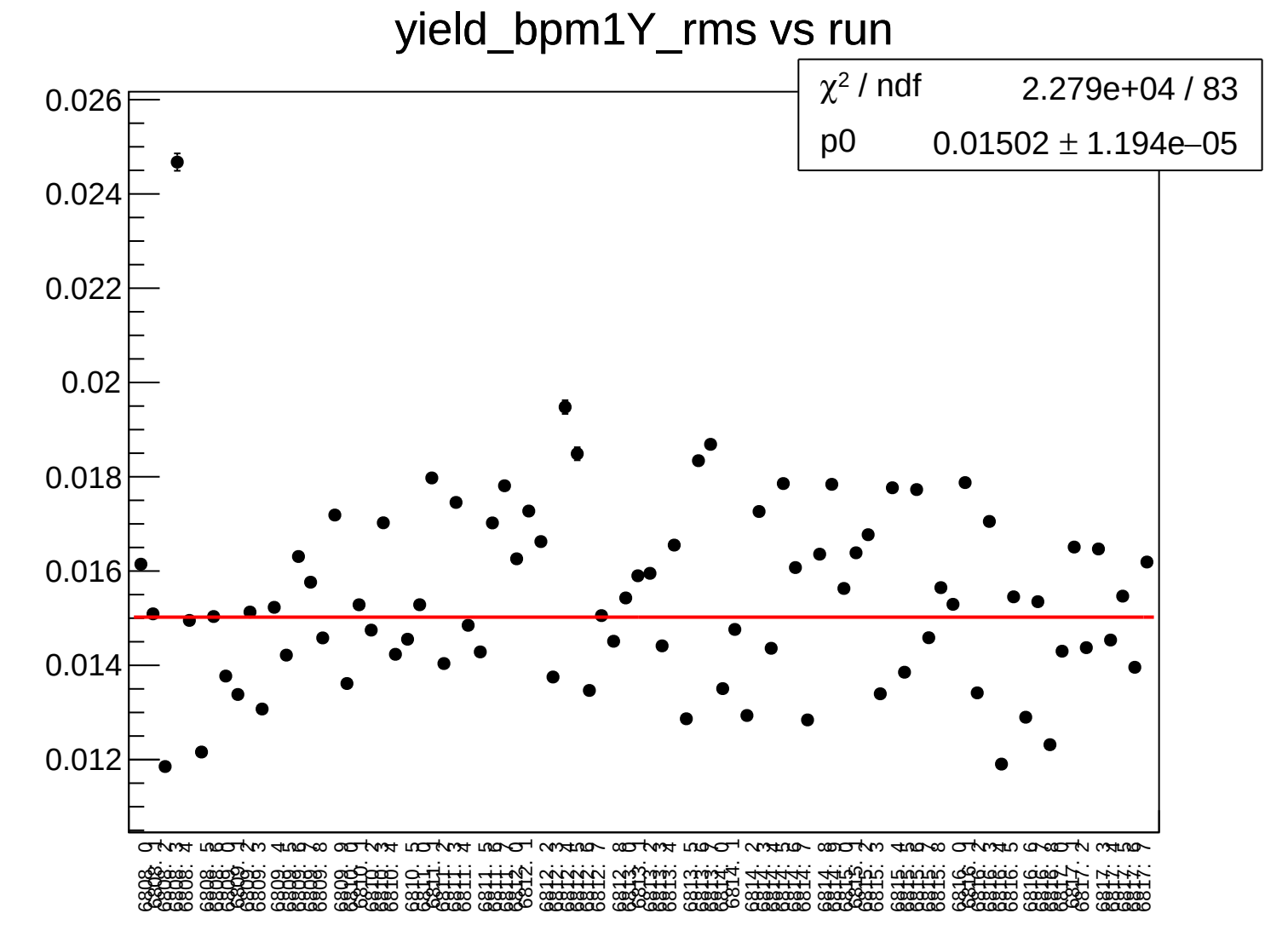

yield_bpm1X_mean vs run
χ² / ndf 1.523e+05 / 83
p0 0.7855 ± 1.915e−05
0.8
0.79
0.78
0.77
0.76
0.75
pull
Entries 84
Mean 6.672
Std Dev 47.77
100
50
0
−50
−100

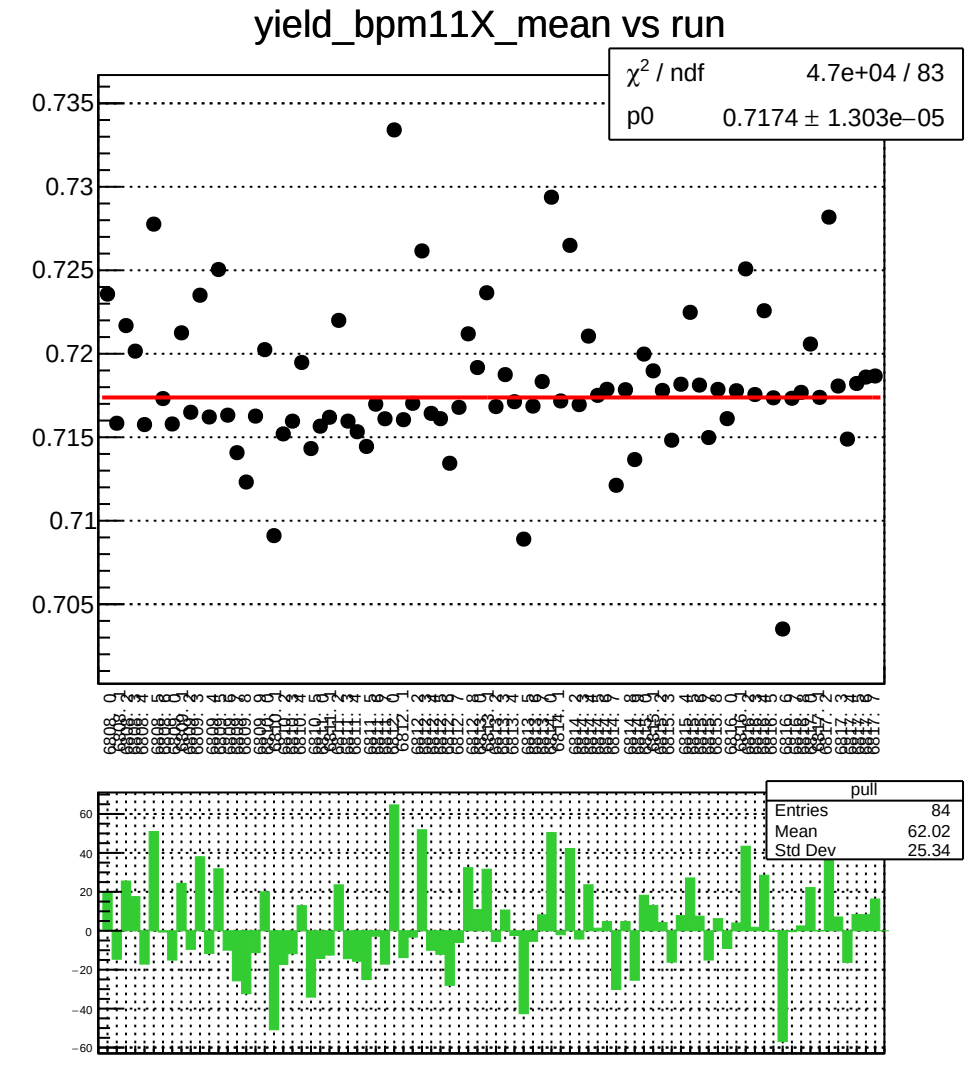

pull1D
Entries 84
Mean −0.5541
Std Dev 3.617
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

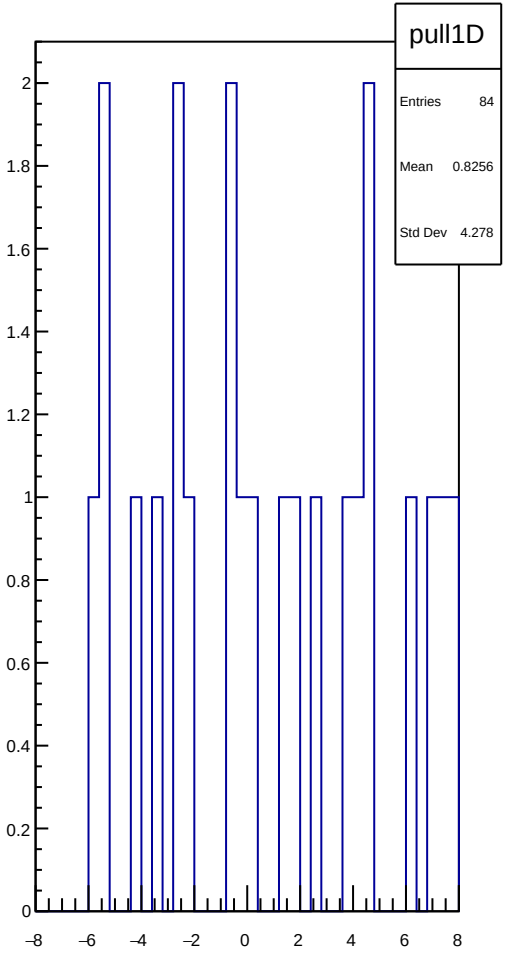

yield_bpm1X_rms vs run
χ² / ndf 1.754e+05 / 83
p0 0.0162 ± 1.354e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

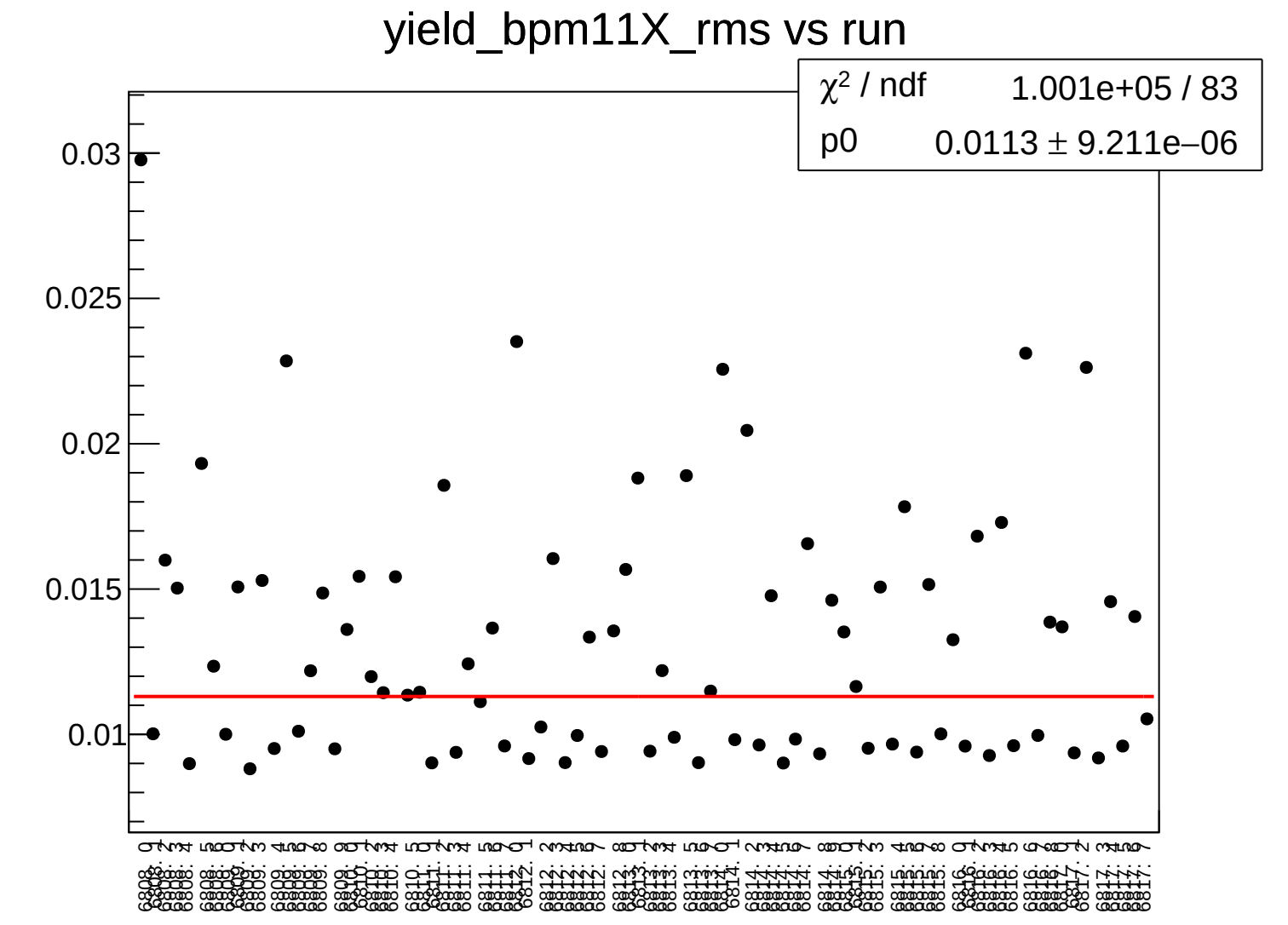

yield_bpm1Y_mean vs run
χ² / ndf 1.016e+06 / 83
p0 −0.7544 ± 1.688e−05
−0.72
−0.73
−0.74
−0.75
−0.76
−0.77
−0.78
−0.79
pull
Entries 84
Mean 1401
Std Dev 1359
200
100
0
−100
−200
−300

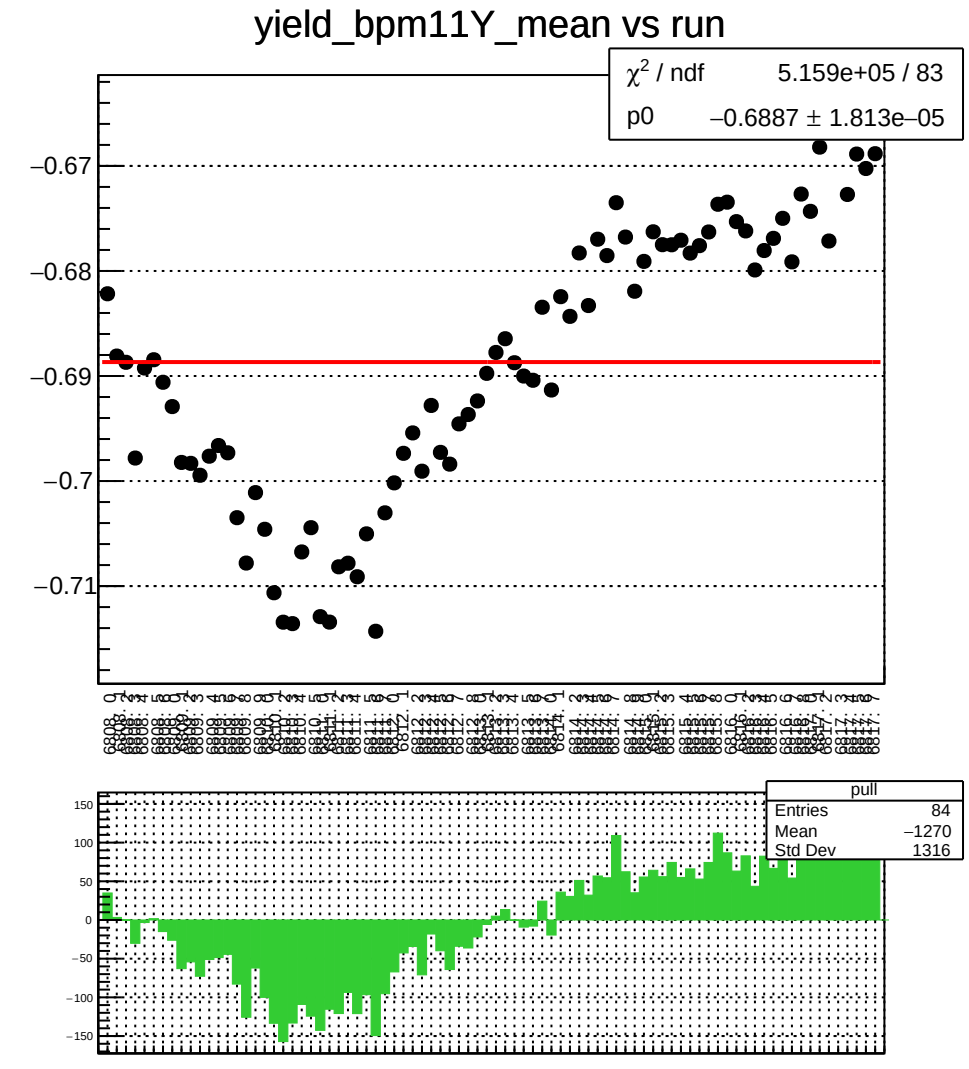

pull1D
Entries 84
Mean −2.035
Std Dev 1.43
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

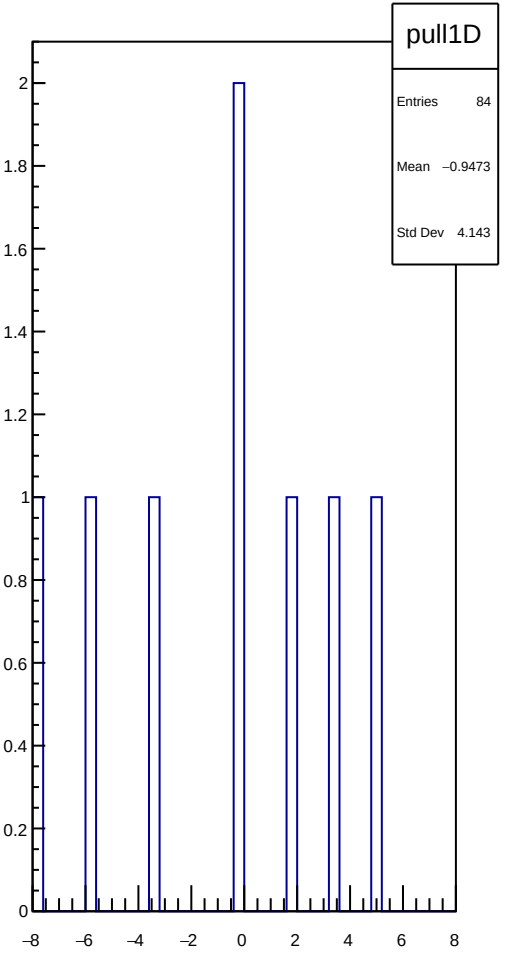

yield_bpm1Y_rms vs run
χ² / ndf 2.279e+04 / 83
p0 0.01502 ± 1.194e–05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

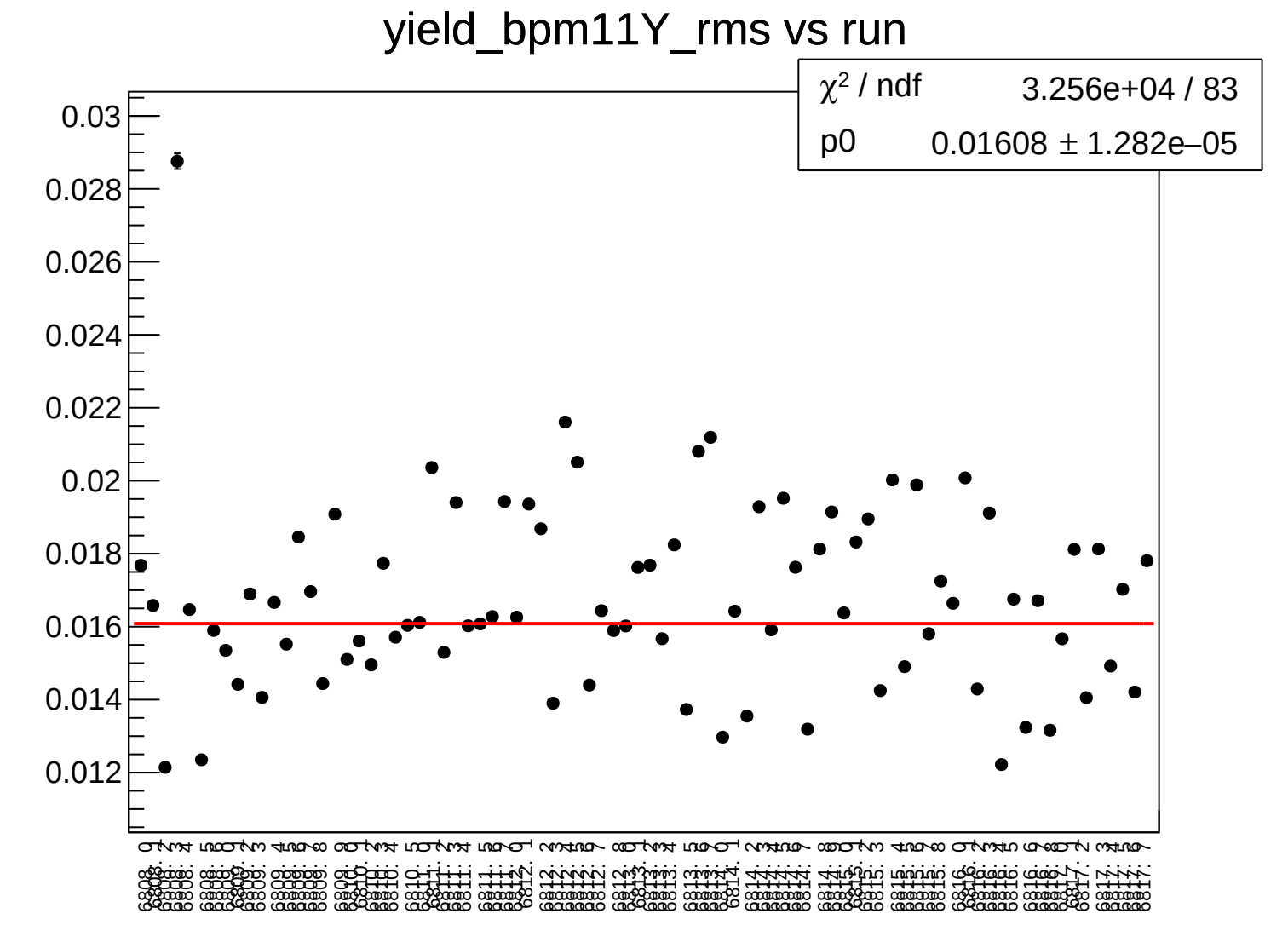

yield_bpm11X_mean vs run
χ² / ndf 4.7e+04 / 83
p0 0.7174 ± 1.303e−05
0.735
0.73
0.725
0.72
0.715
0.71
0.705
pull
Entries 84
Mean 62.02
Std Dev 25.34
60
40
20
0
−20
−40
−60

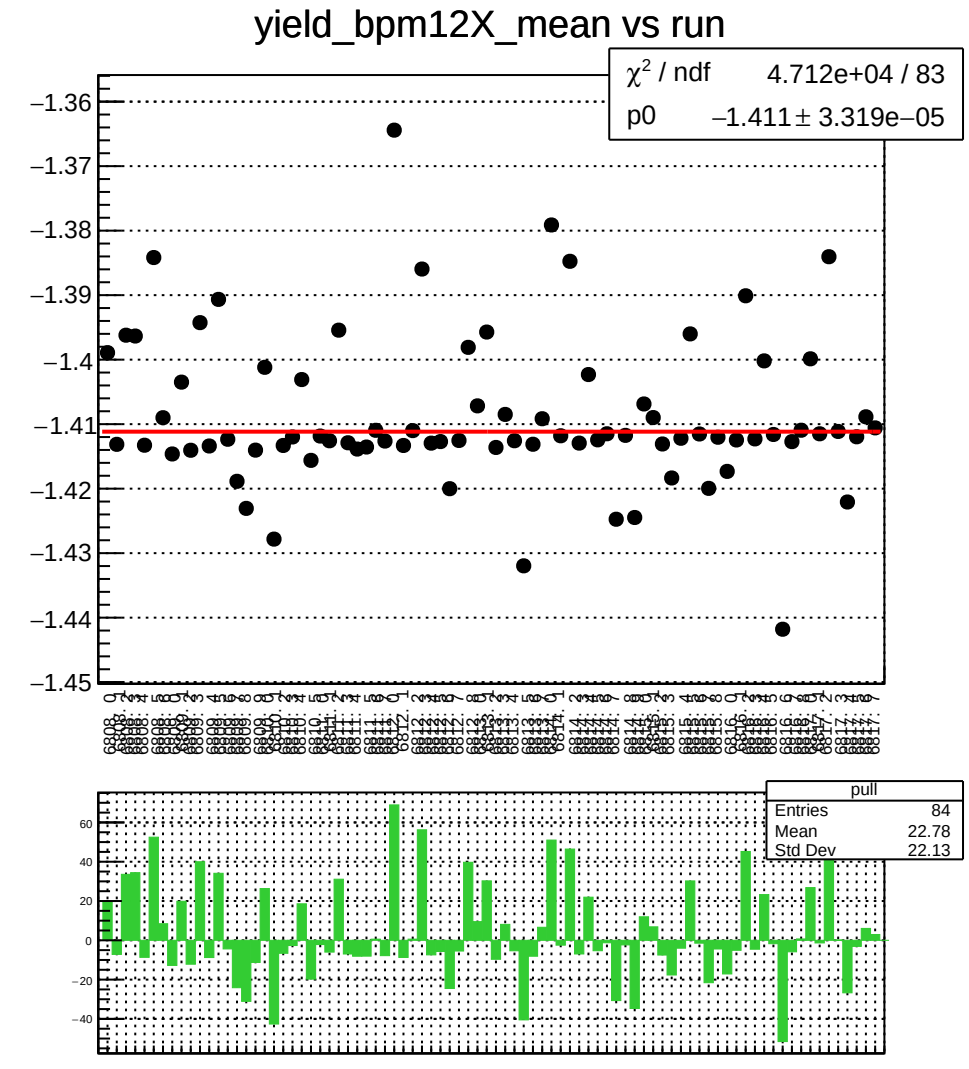

pull1D
Entries 84
Mean 0.8256
Std Dev 4.278
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

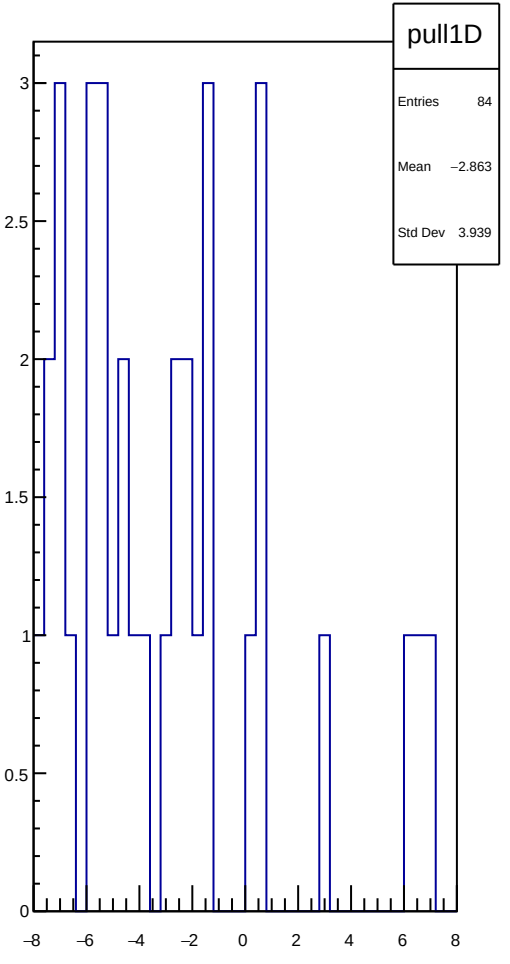

yield_bpm11X_rms vs run
χ² / ndf 1.001e+05 / 83
p0 0.0113 ± 9.211e−06
0.03
0.025
0.02
0.015
0.01

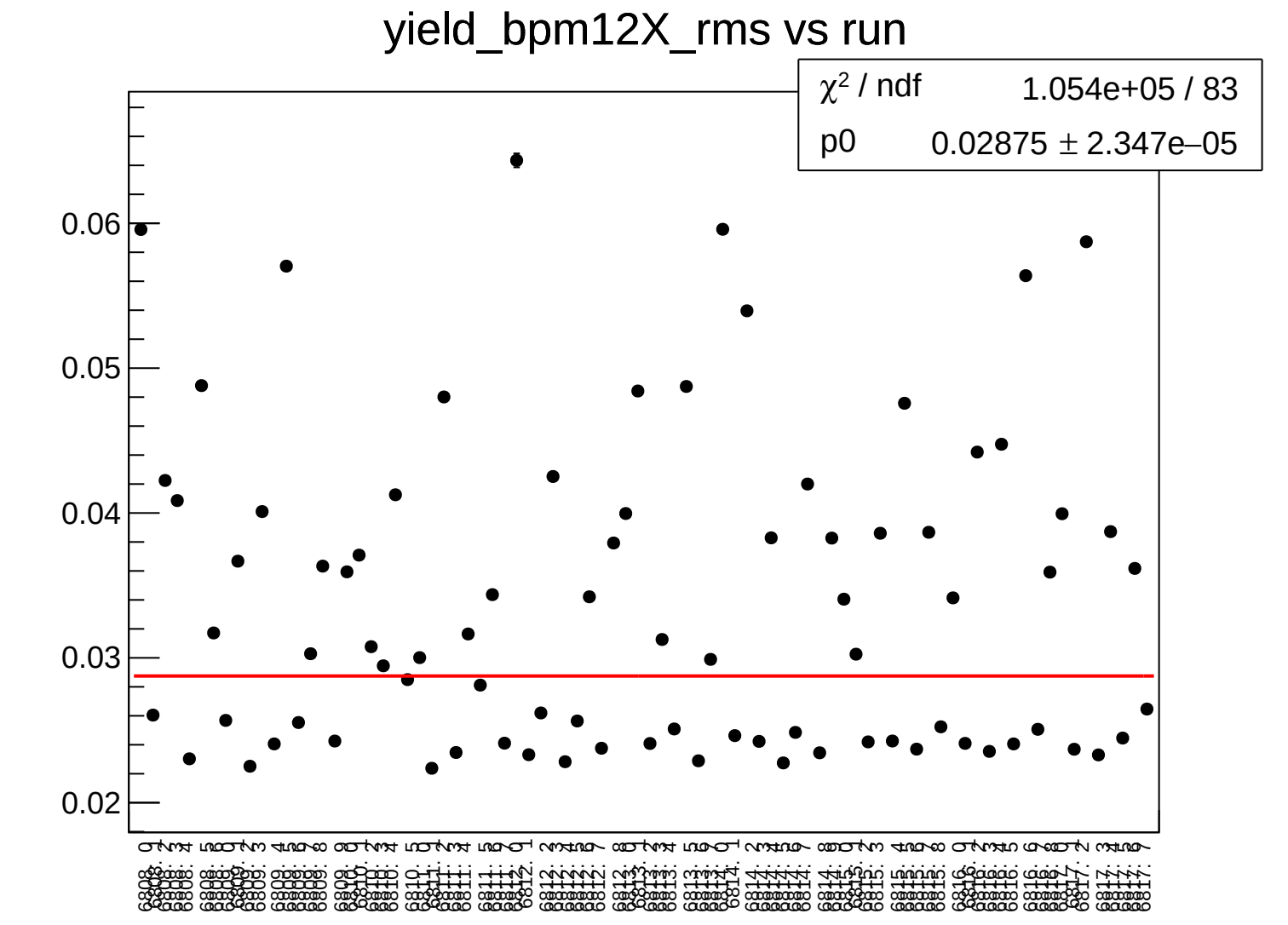

yield_bpm11Y_mean vs run
χ² / ndf 5.159e+05 / 83
p0 −0.6887 ± 1.813e−05
−0.67
−0.68
−0.69
−0.7
−0.71
pull
Entries 84
Mean −1270
Std Dev 1316
150
100
50
0
−50
−100
−150

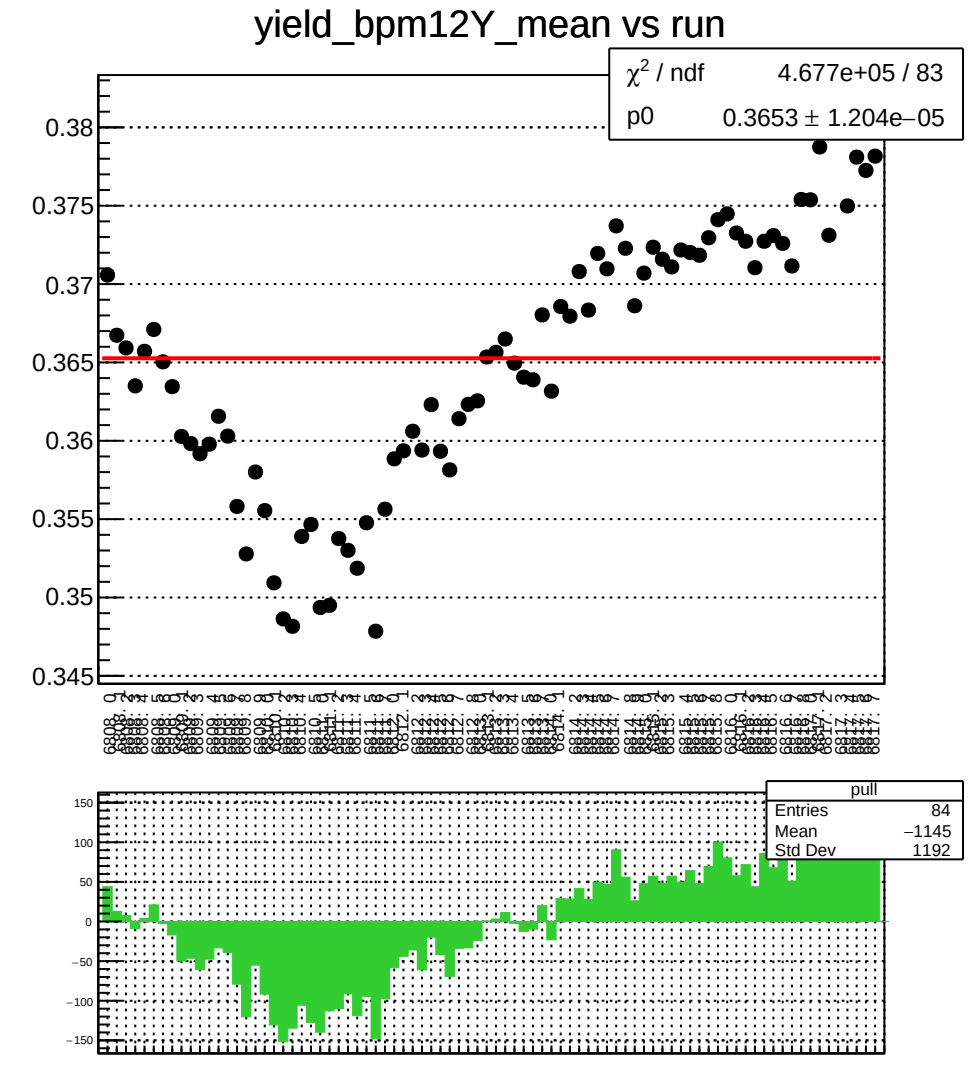

pull1D
Entries 84
Mean −0.9473
Std Dev 4.143
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

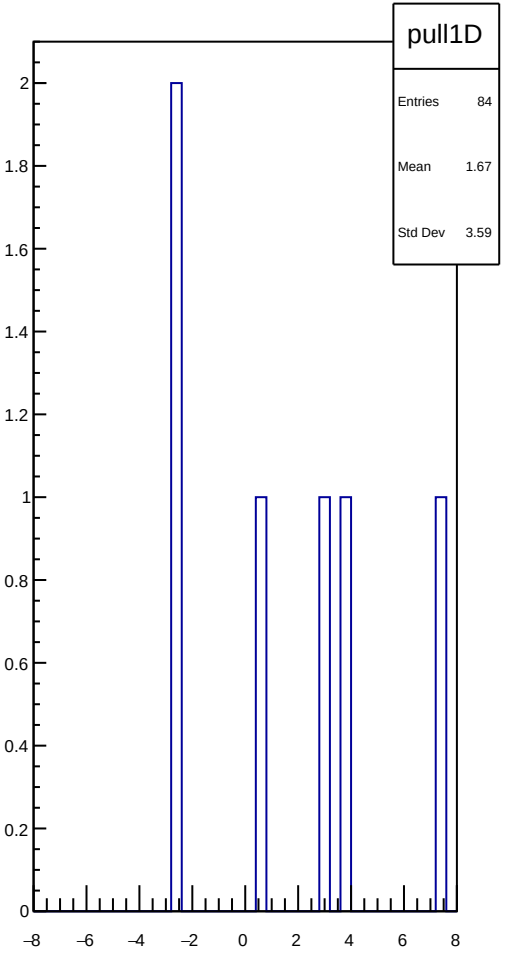

yield_bpm11Y_rms vs run
χ² / ndf 3.256e+04 / 83
p0 0.01608 ± 1.282e−05
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

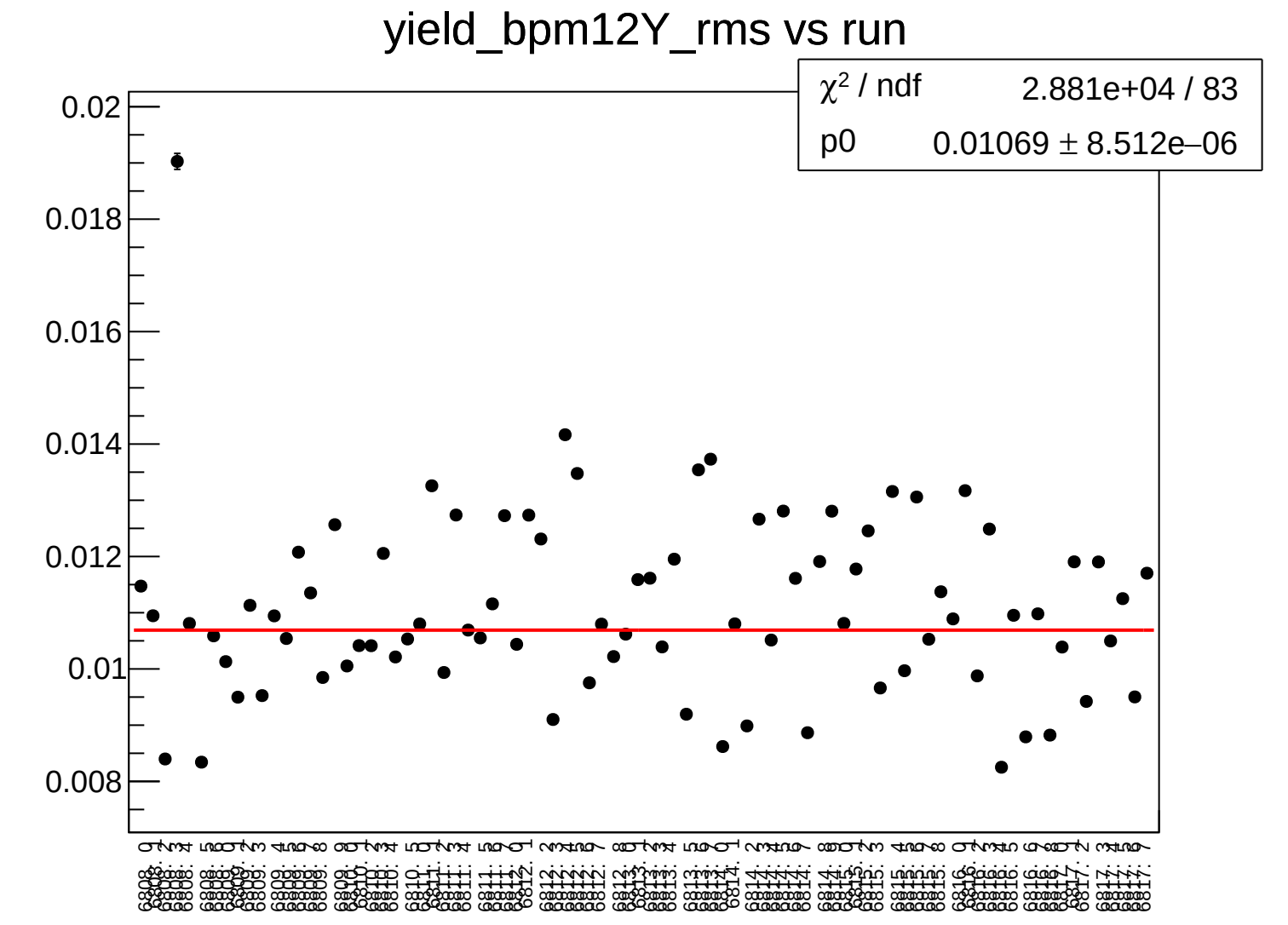

yield_bpm12X_mean vs run
χ² / ndf 4.712e+04 / 83
p0 −1.411 ± 3.319e−05
−1.36
−1.37
−1.38
−1.39
−1.4
−1.41
−1.42
−1.43
−1.44
−1.45
pull
Entries 84
Mean 22.78
Std Dev 22.13
60
40
20
0
−20
−40

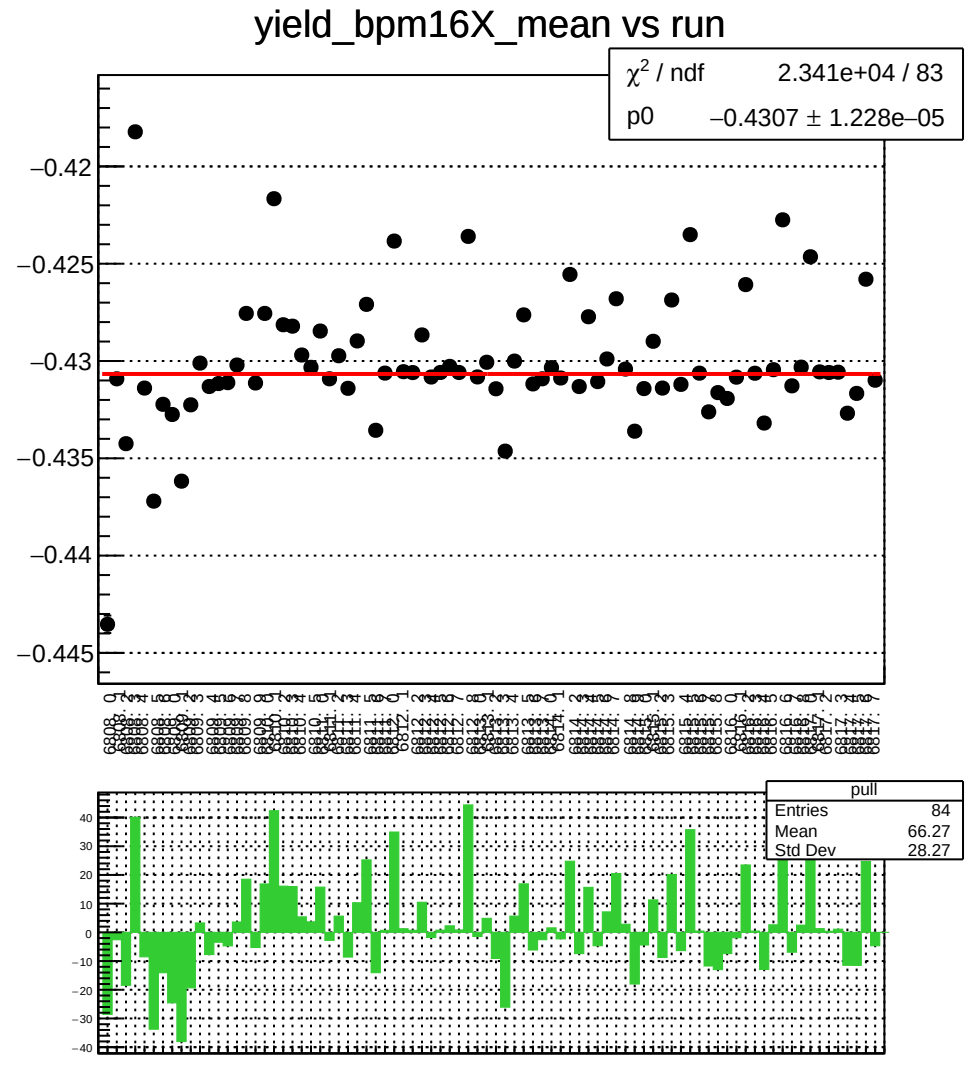

pull1D
Entries 84
Mean −2.863
Std Dev 3.939
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

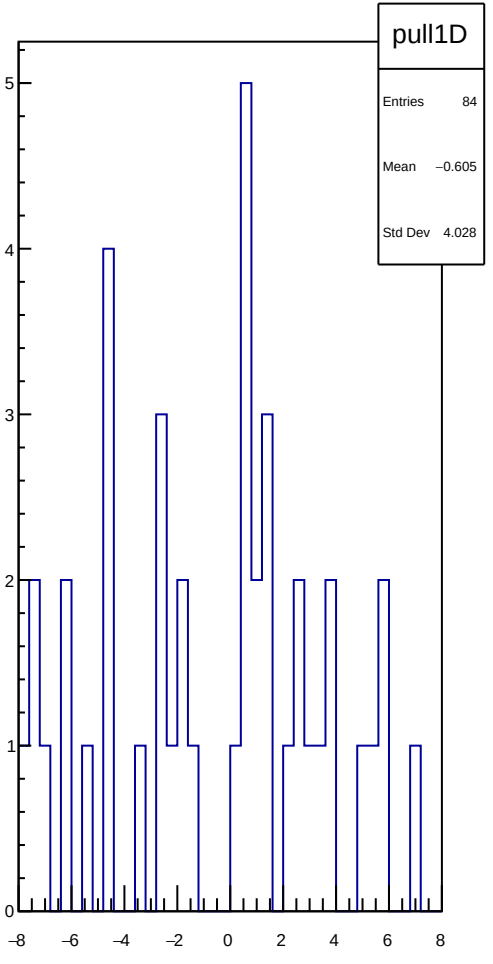

yield_bpm12X_rms vs run
χ² / ndf 1.054e+05 / 83
p0 0.02875 ± 2.347e–05
0.06
0.05
0.04
0.03
0.02

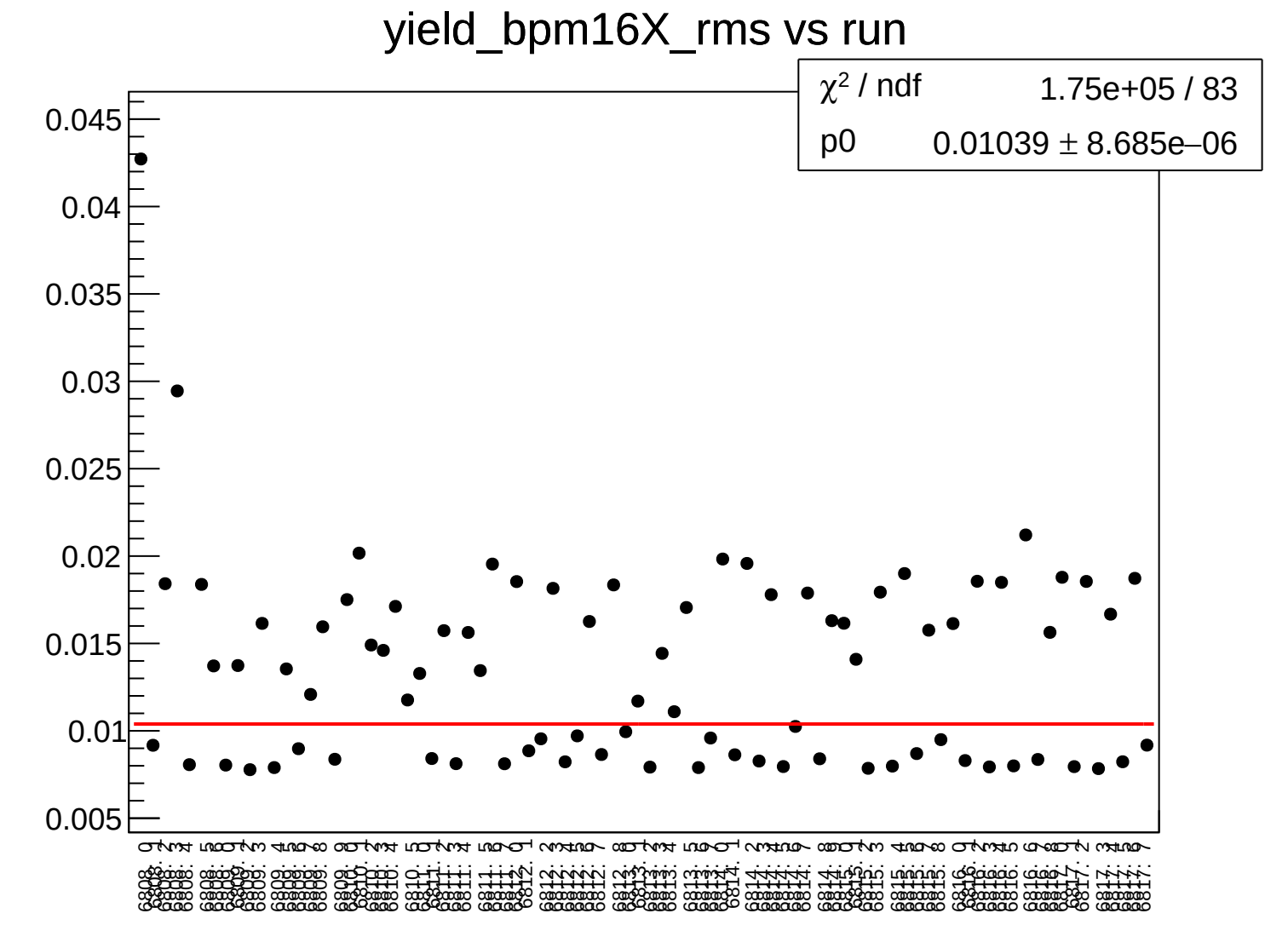

yield_bpm12Y_mean vs run
χ² / ndf 4.677e+05 / 83
p0 0.3653 ± 1.204e−05
0.38
0.375
0.37
0.365
0.36
0.355
0.35
0.345
pull
Entries 84
Mean −1145
Std Dev 1192
150
100
50
0
−50
−100
−150

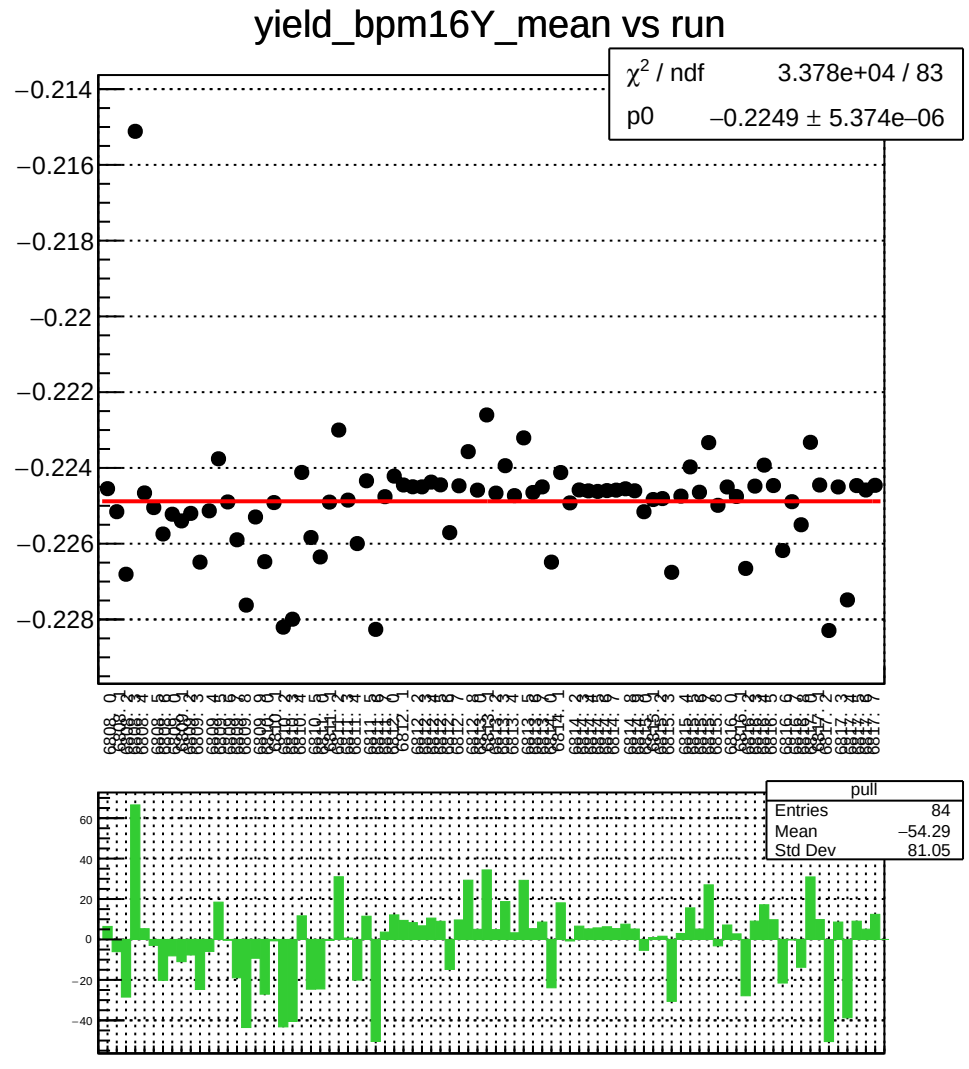

pull1D
Entries 84
Mean 1.67
Std Dev 3.59
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

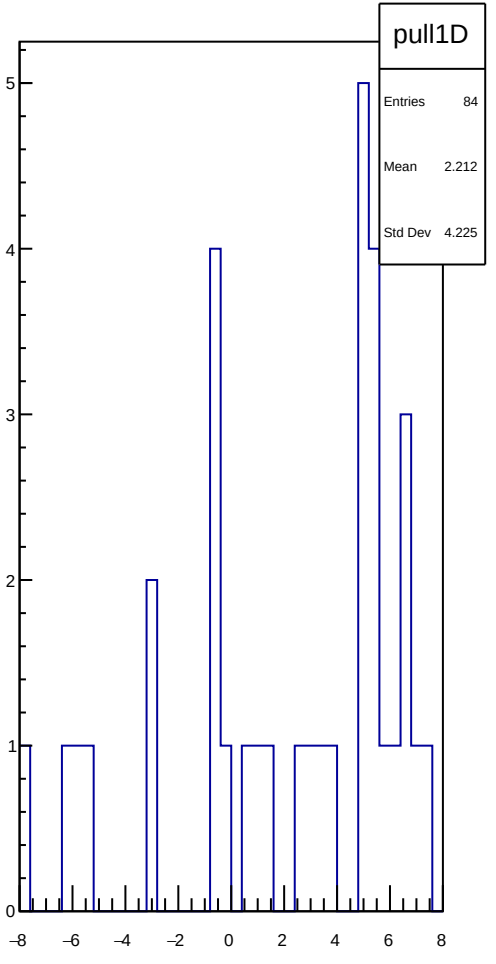

yield_bpm12Y_rms vs run
χ² / ndf 2.881e+04 / 83
p0 0.01069 ± 8.512e–06
0.02
0.018
0.016
0.014
0.012
0.01
0.008

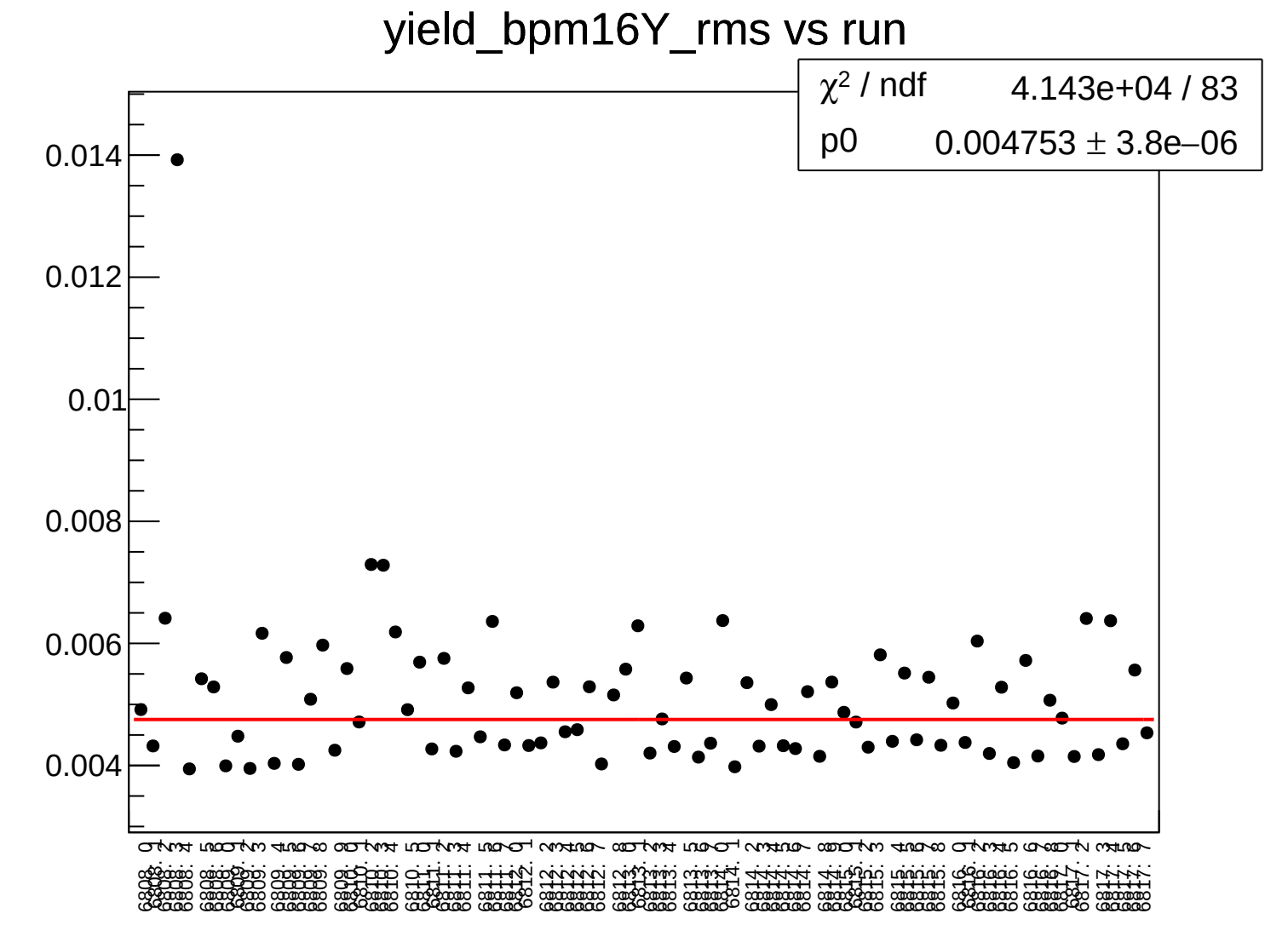

yield_bpm16X_mean vs run
χ² / ndf 2.341e+04 / 83
p0 −0.4307 ± 1.228e−05
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
pull
Entries 84
Mean 66.27
Std Dev 28.27
40
30
20
10
0
−10
−20
−30
−40

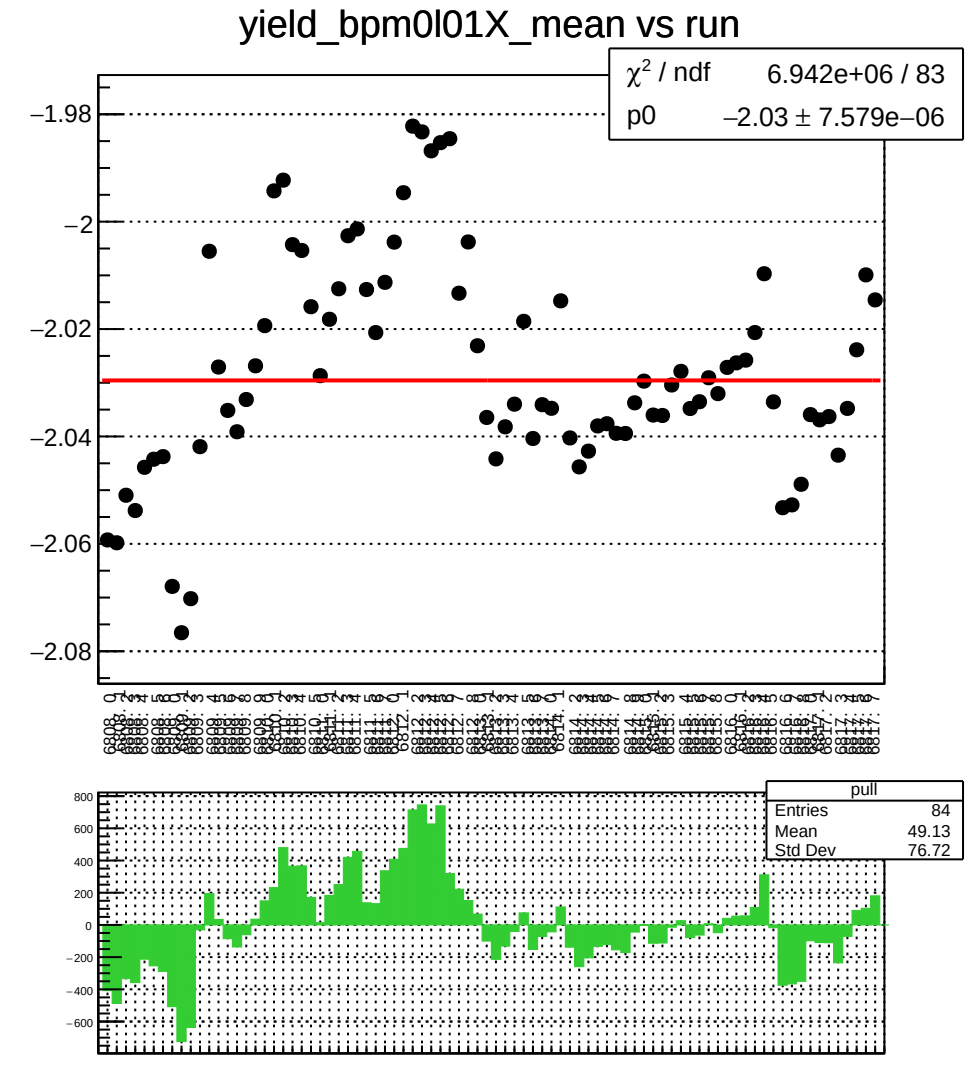

pull1D
Entries 84
Mean −0.605
Std Dev 4.028
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

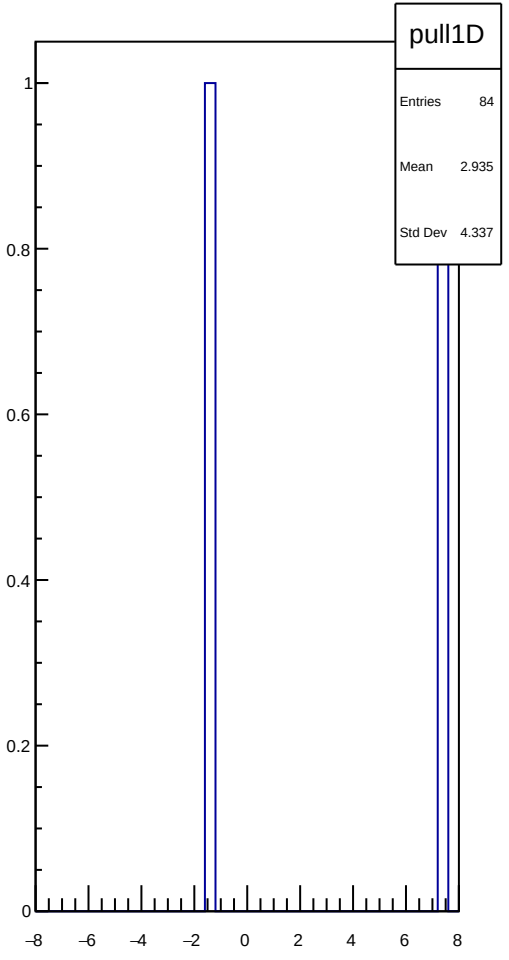

yield_bpm16X_rms vs run
χ² / ndf 1.75e+05 / 83
p0 0.01039 ± 8.685e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

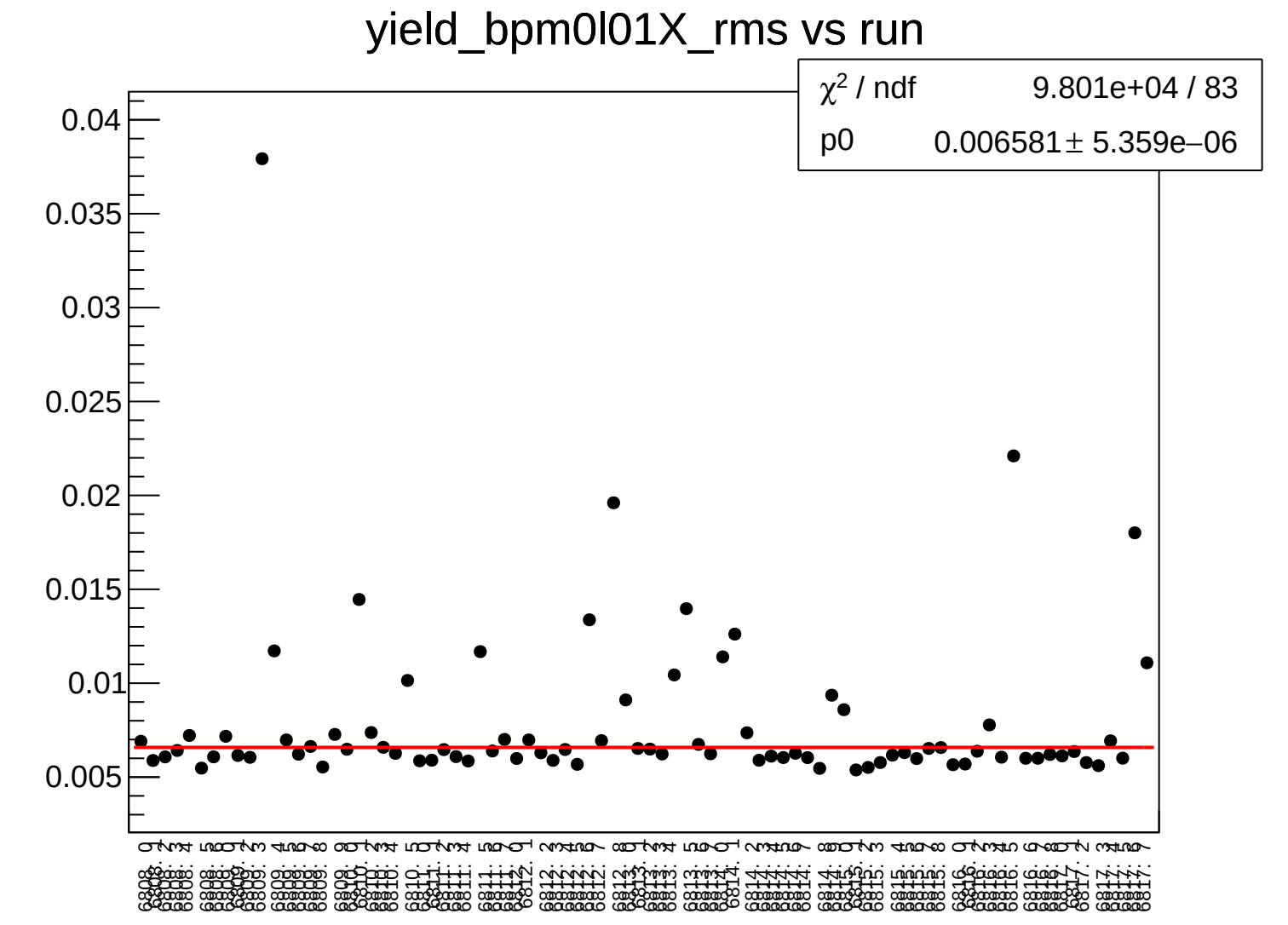

yield_bpm16Y_mean vs run
χ² / ndf 3.378e+04 / 83
p0 −0.2249 ± 5.374e−06
−0.214
−0.216
−0.218
−0.22
−0.222
−0.224
−0.226
−0.228
pull
Entries 84
Mean −54.29
Std Dev 81.05
60
40
20
0
−20
−40

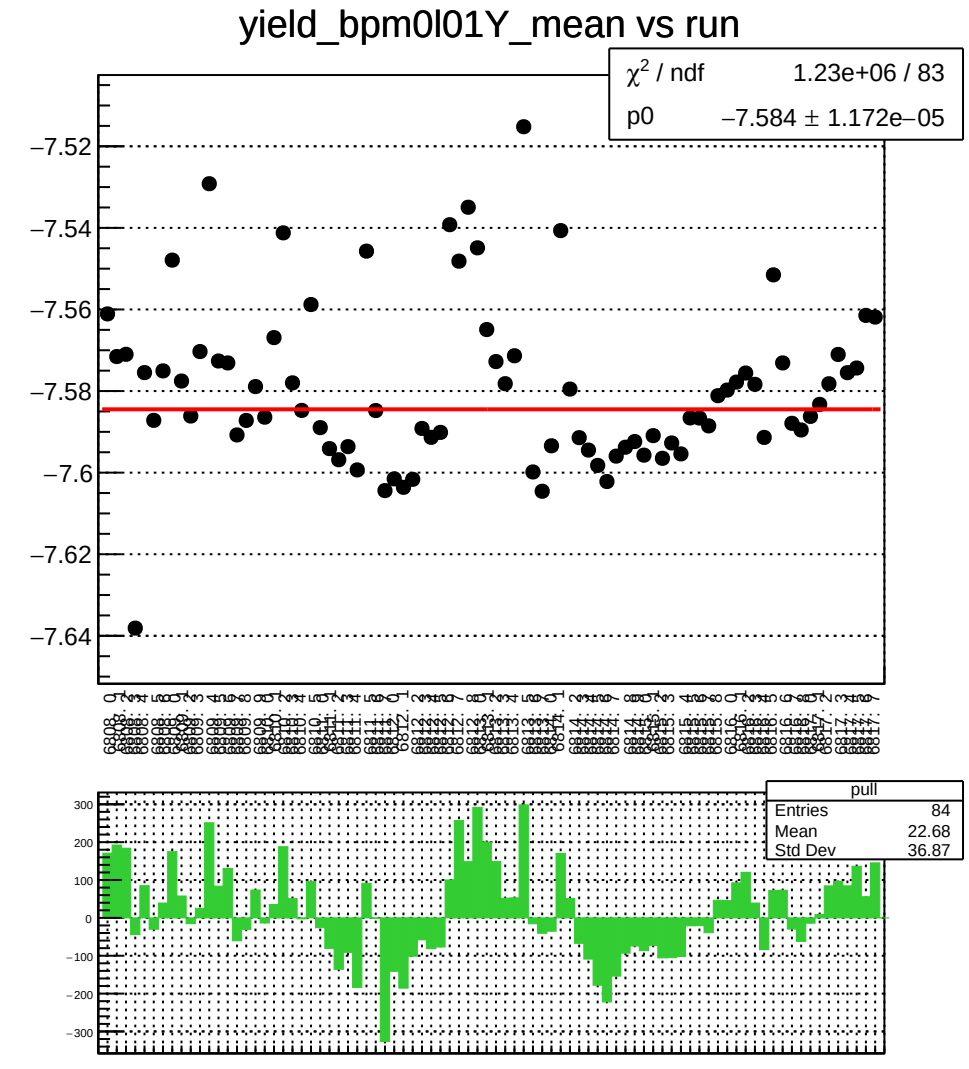

pull1D
Entries 84
Mean 2.212
Std Dev 4.225
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

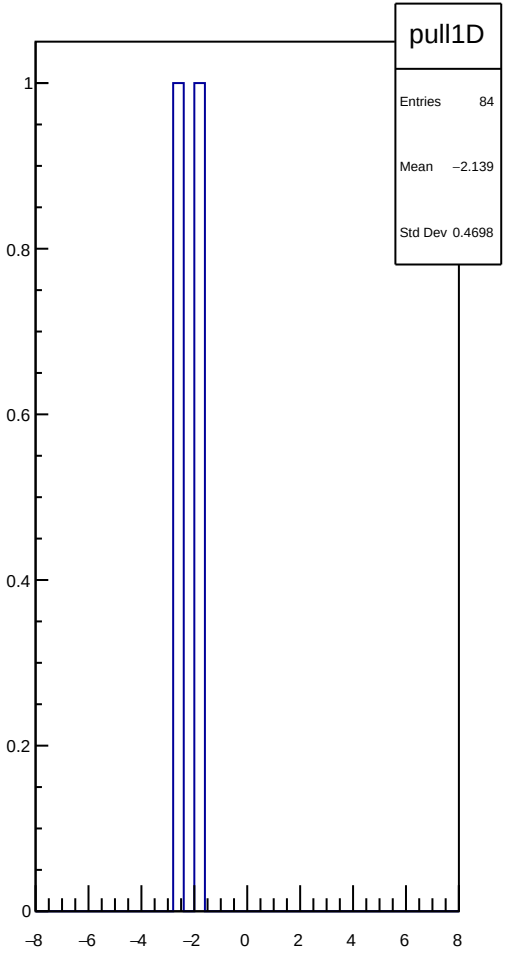

yield_bpm16Y_rms vs run
χ² / ndf 4.143e+04 / 83
p0 0.004753 ± 3.8e–06
0.014
0.012
0.01
0.008
0.006
0.004

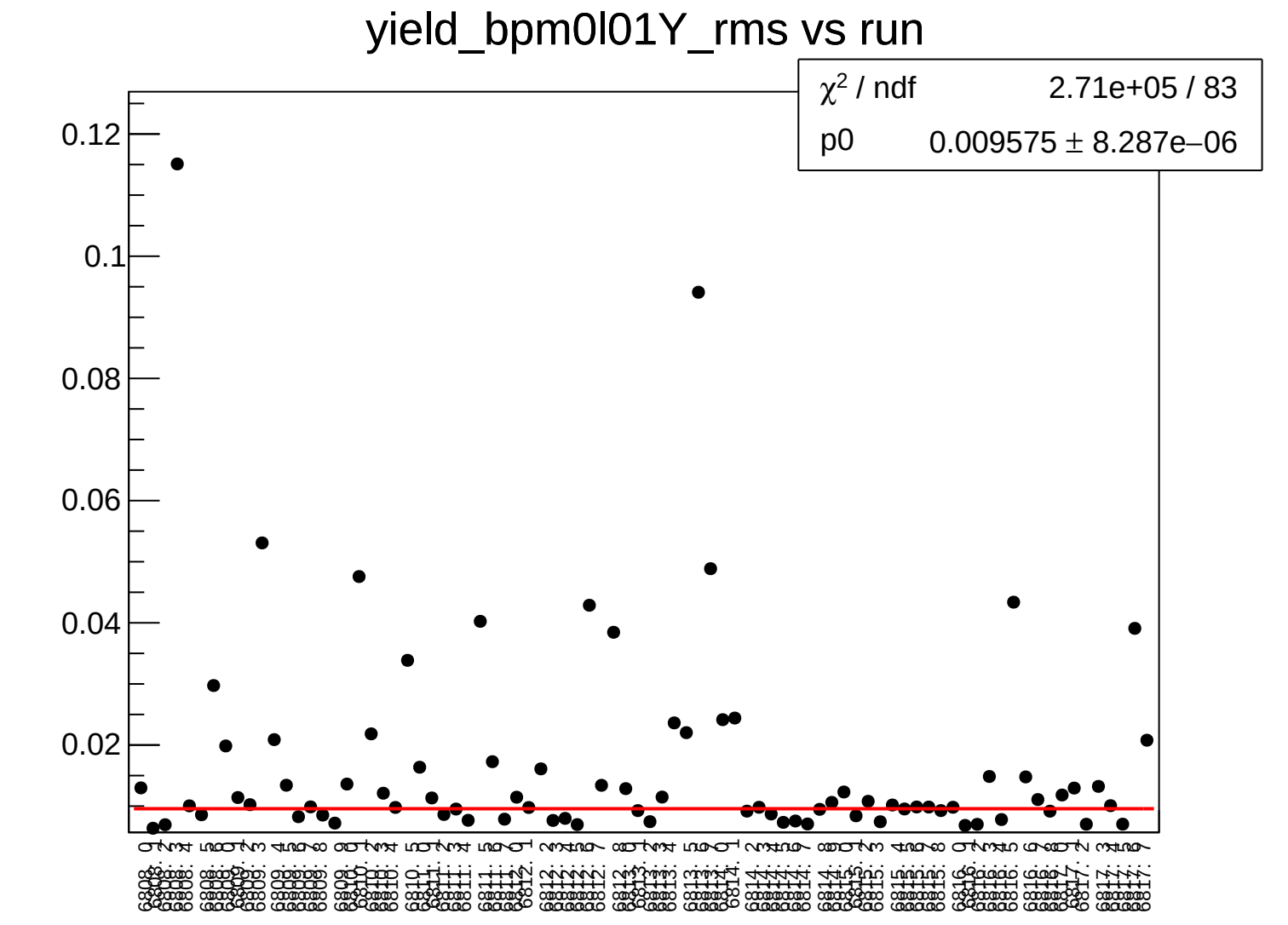

yield_bpm0l01X_mean vs run
χ² / ndf 6.942e+06 / 83
p0 −2.03 ± 7.579e−06
−1.98
−2
−2.02
−2.04
−2.06
−2.08
pull
Entries 84
Mean 49.13
Std Dev 76.72
800
600
400
200
0
−200
−400
−600

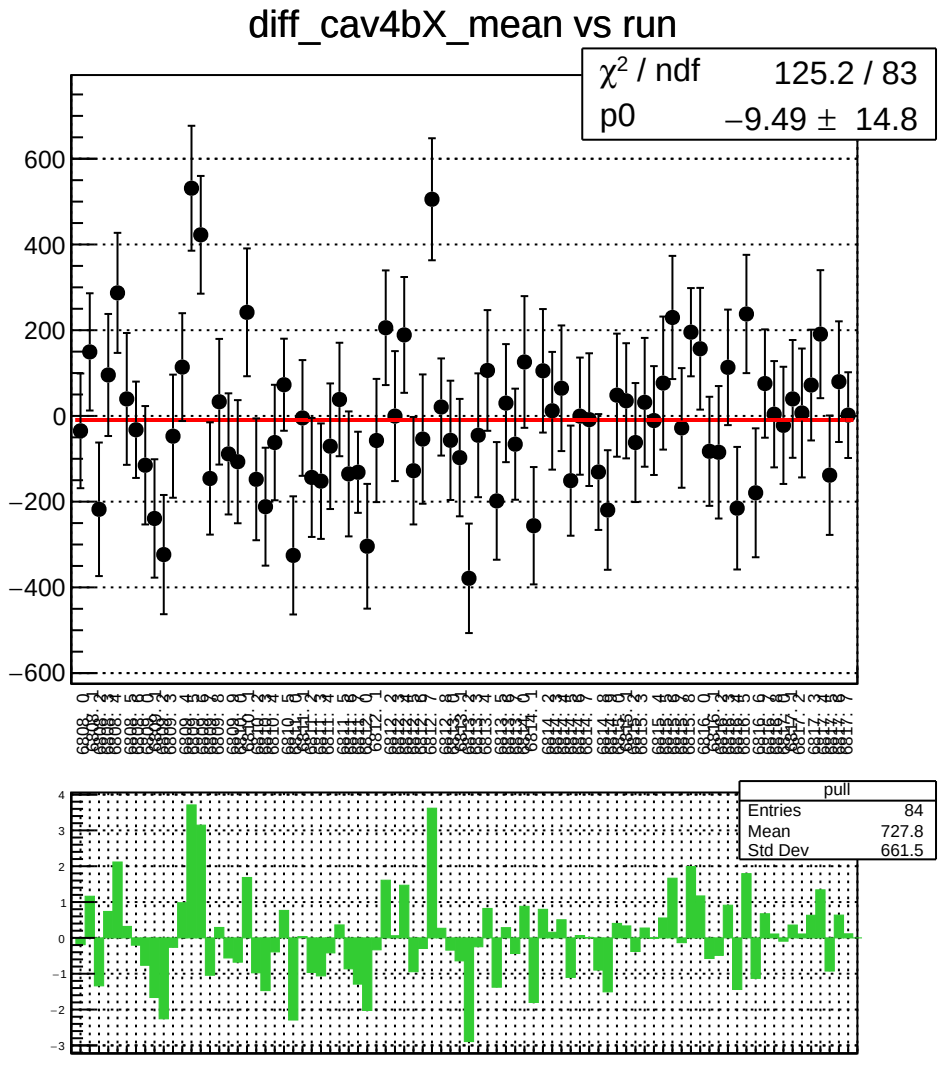

pull1D
Entries 84
Mean 2.935
Std Dev 4.337
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

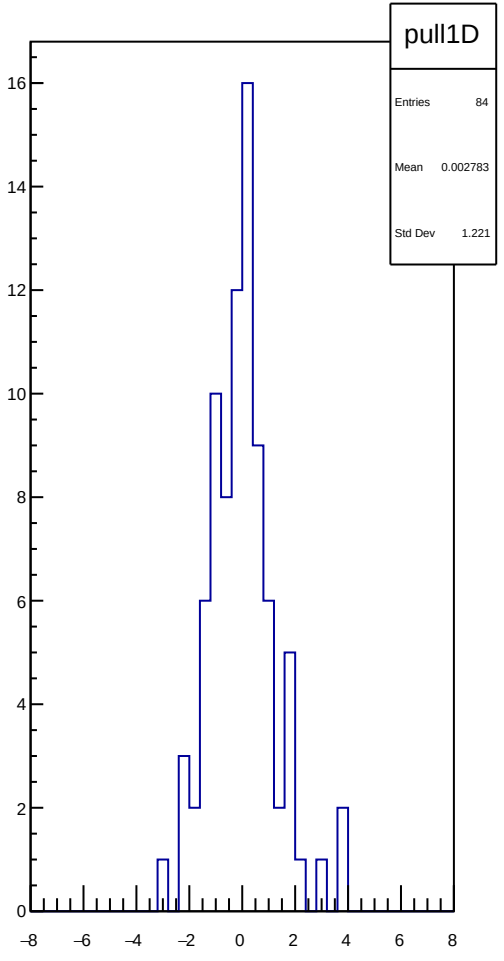

yield_bpm0l01X_rms vs run
χ^2 / ndf 9.801e+04 / 83
p0 0.006581 ± 5.359e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

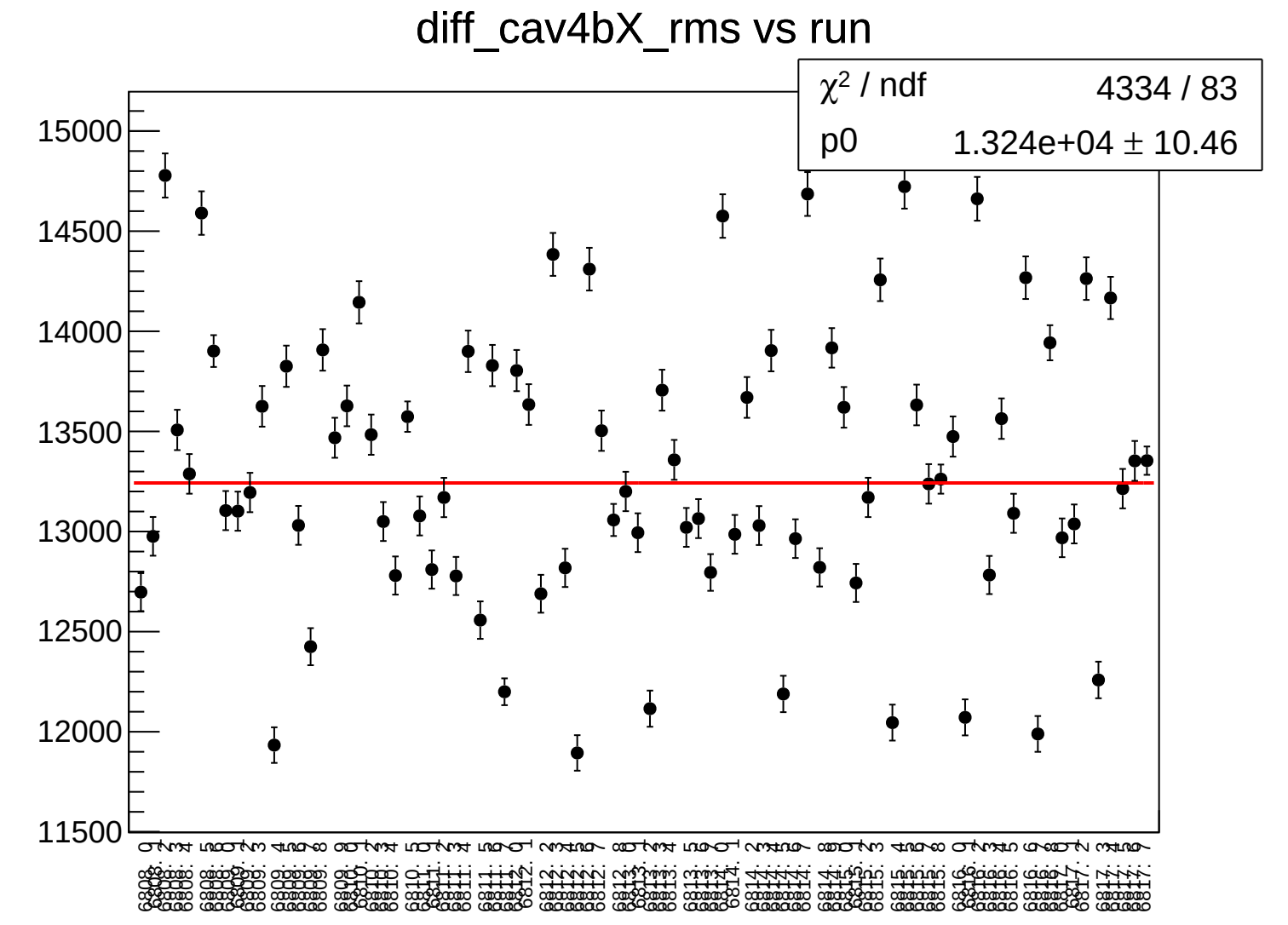

yield_bpm0l01Y_mean vs run
χ² / ndf 1.23e+06 / 83
p0 −7.584 ± 1.172e−05
−7.52
−7.54
−7.56
−7.58
−7.6
−7.62
−7.64
pull
Entries 84
Mean 22.68
Std Dev 36.87
300
200
100
0
−100
−200
−300

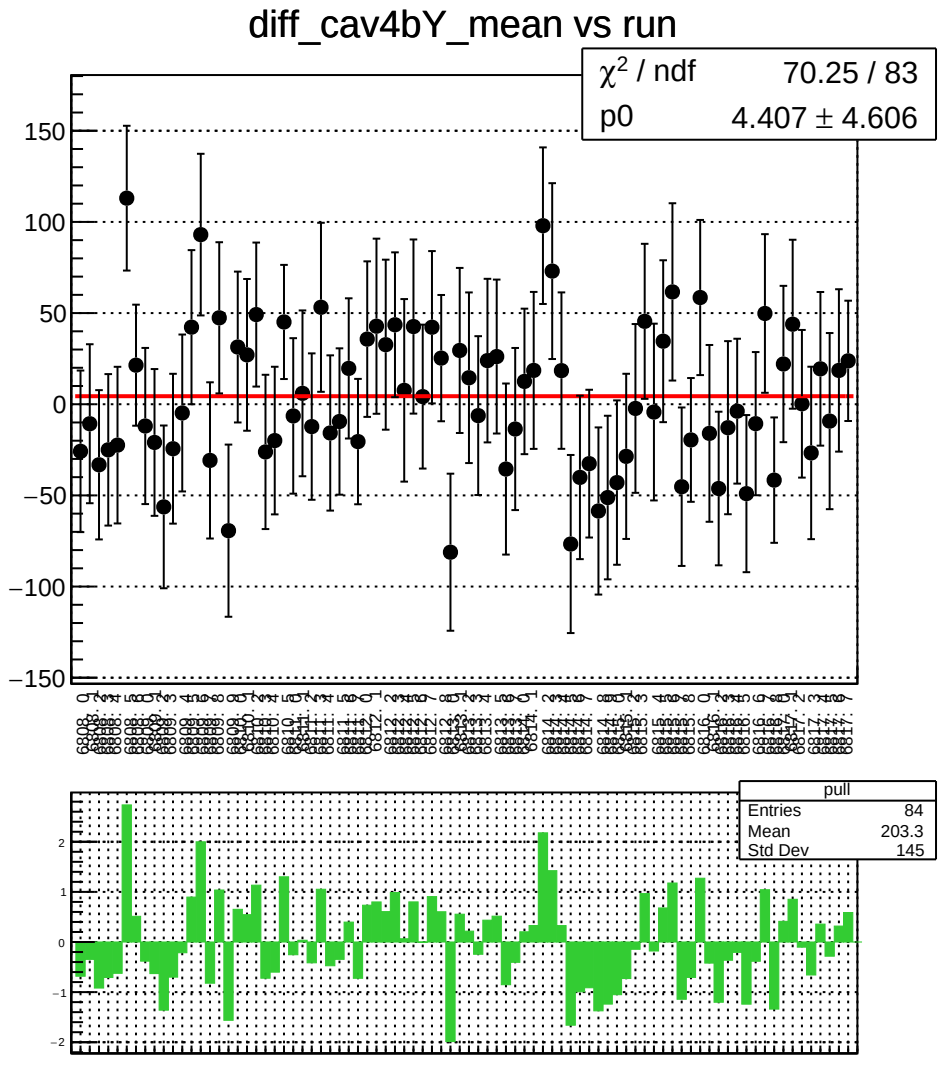

pull1D
Entries 84
Mean −2.139
Std Dev 0.4698
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

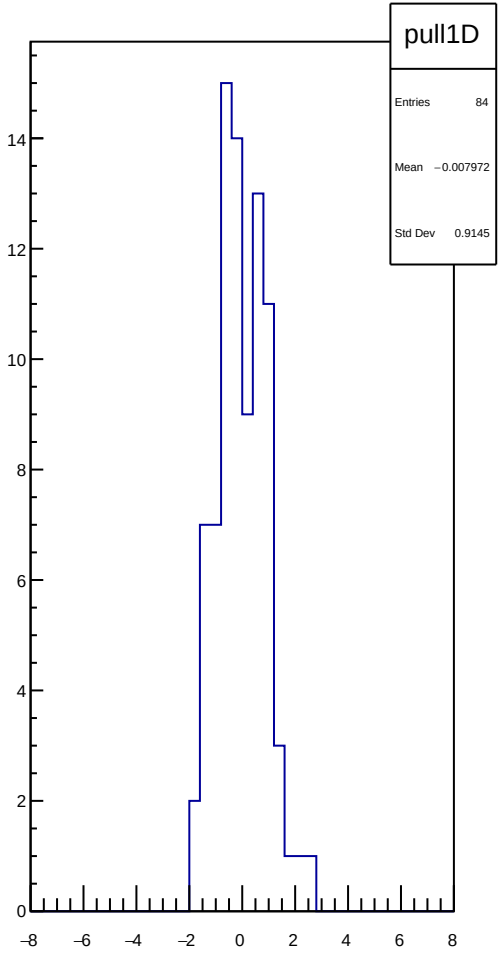

yield_bpm0l01Y_rms vs run
χ² / ndf 2.71e+05 / 83
p0 0.009575 ± 8.287e−06
0.12
0.1
0.08
0.06
0.04
0.02

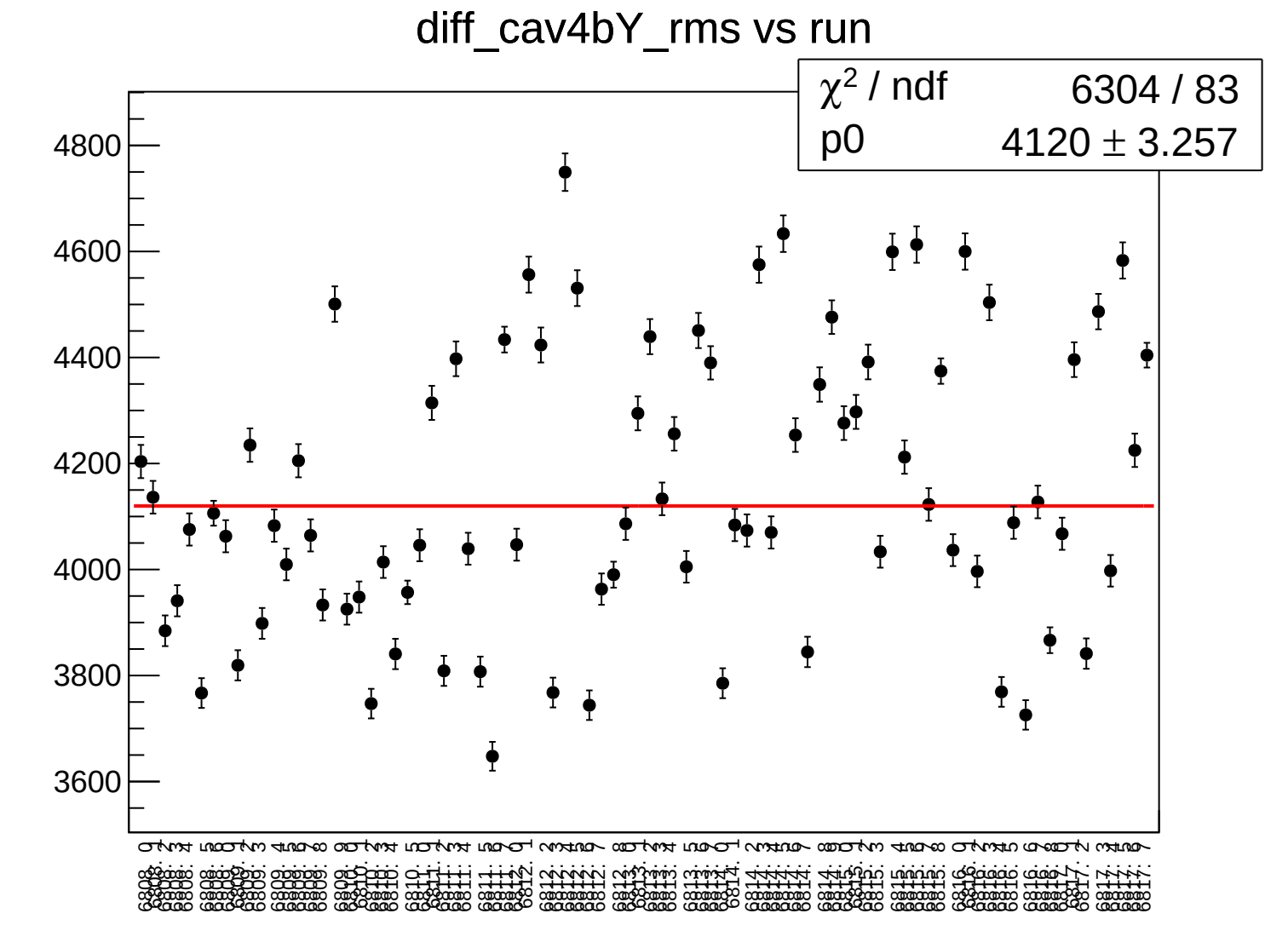

diff_cav4bX_mean vs run
χ² / ndf 125.2 / 83
p0 −9.49 ± 14.8
pull
Entries 84
Mean 727.8
Std Dev 661.5

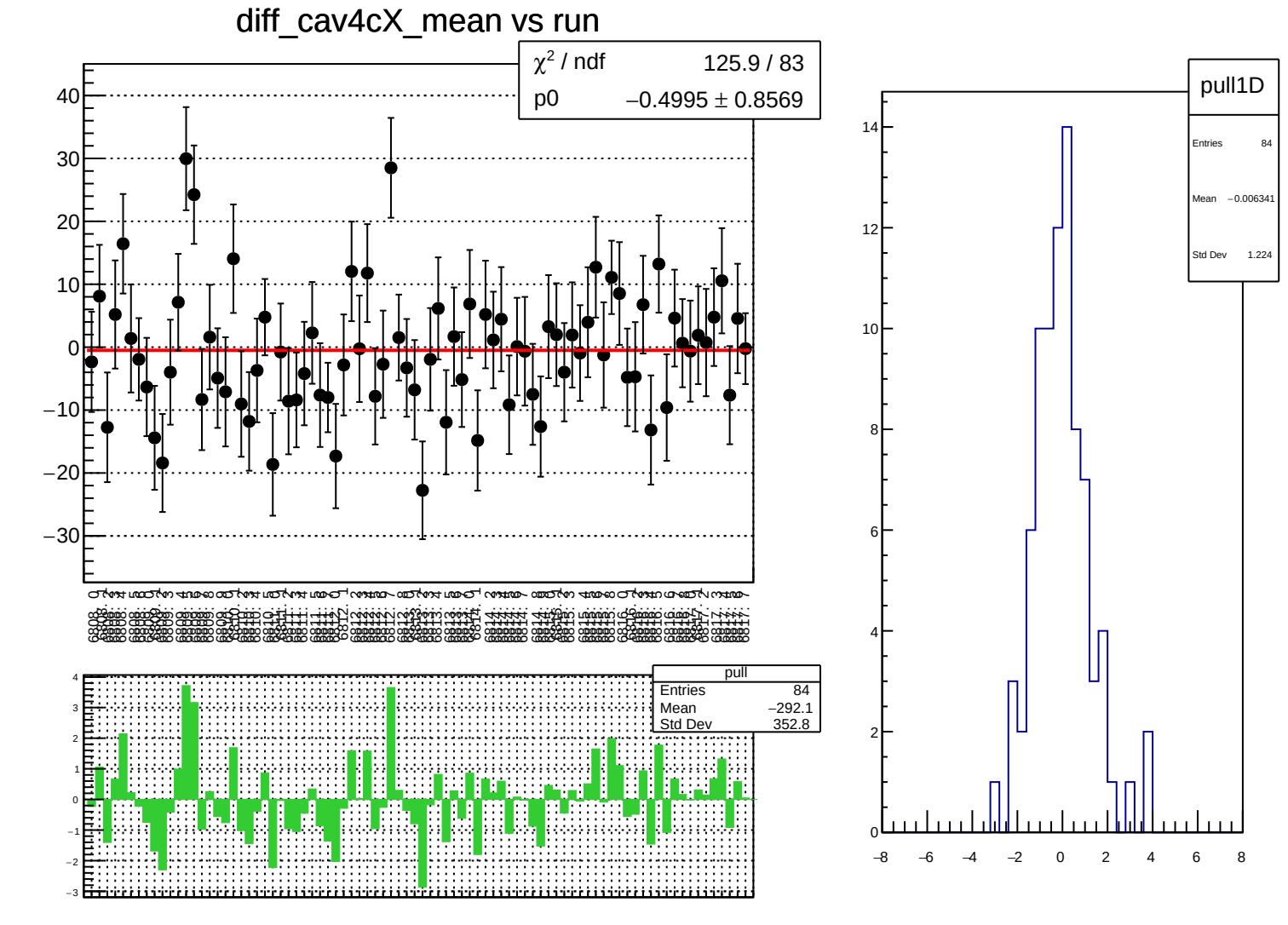

pull1D
Entries 84
Mean 0.002783
Std Dev 1.221

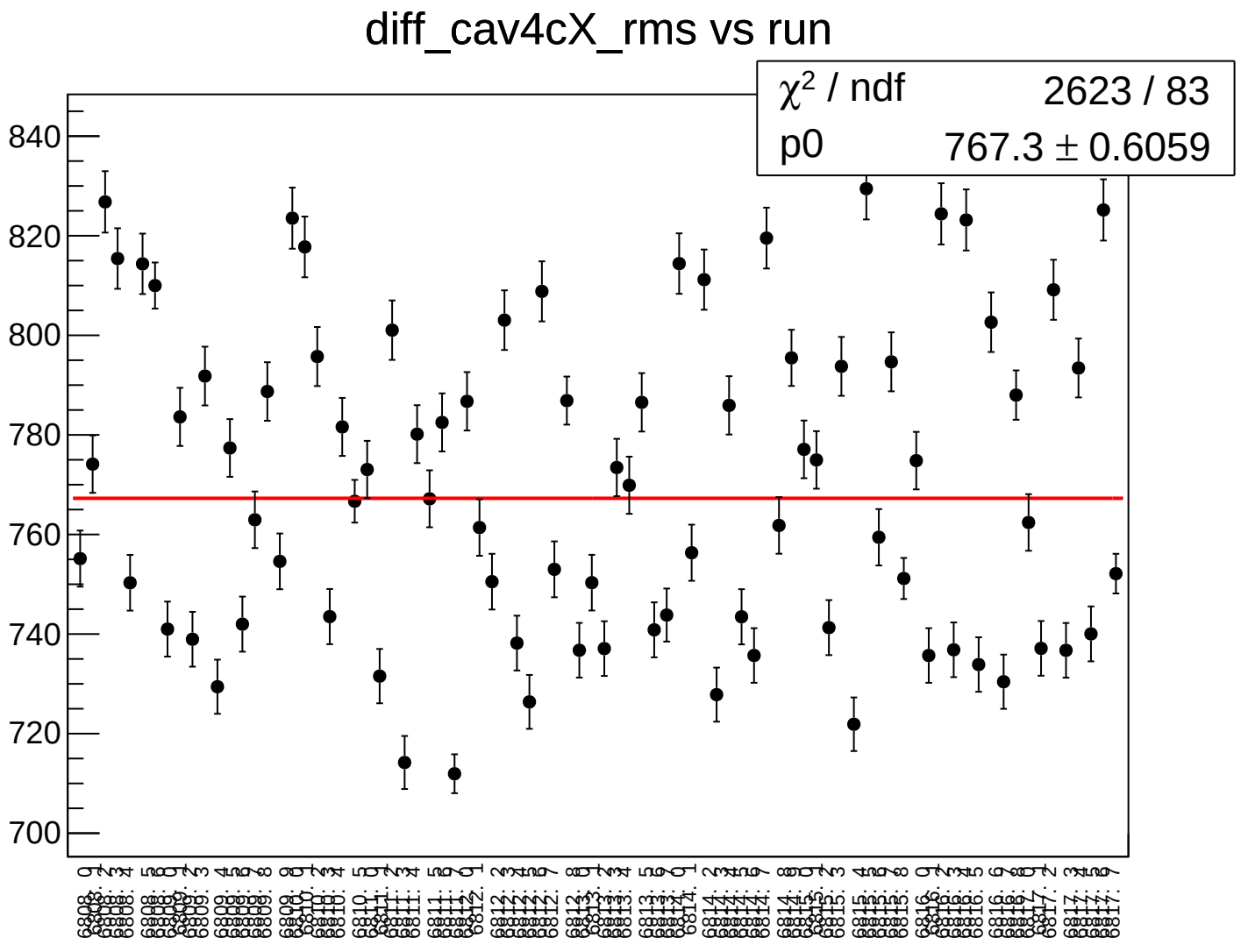

diff_cav4bX_rms vs run
χ² / ndf 4334 / 83
p0 1.324e+04 ± 10.46
15000
14500
14000
13500
13000
12500
12000
11500

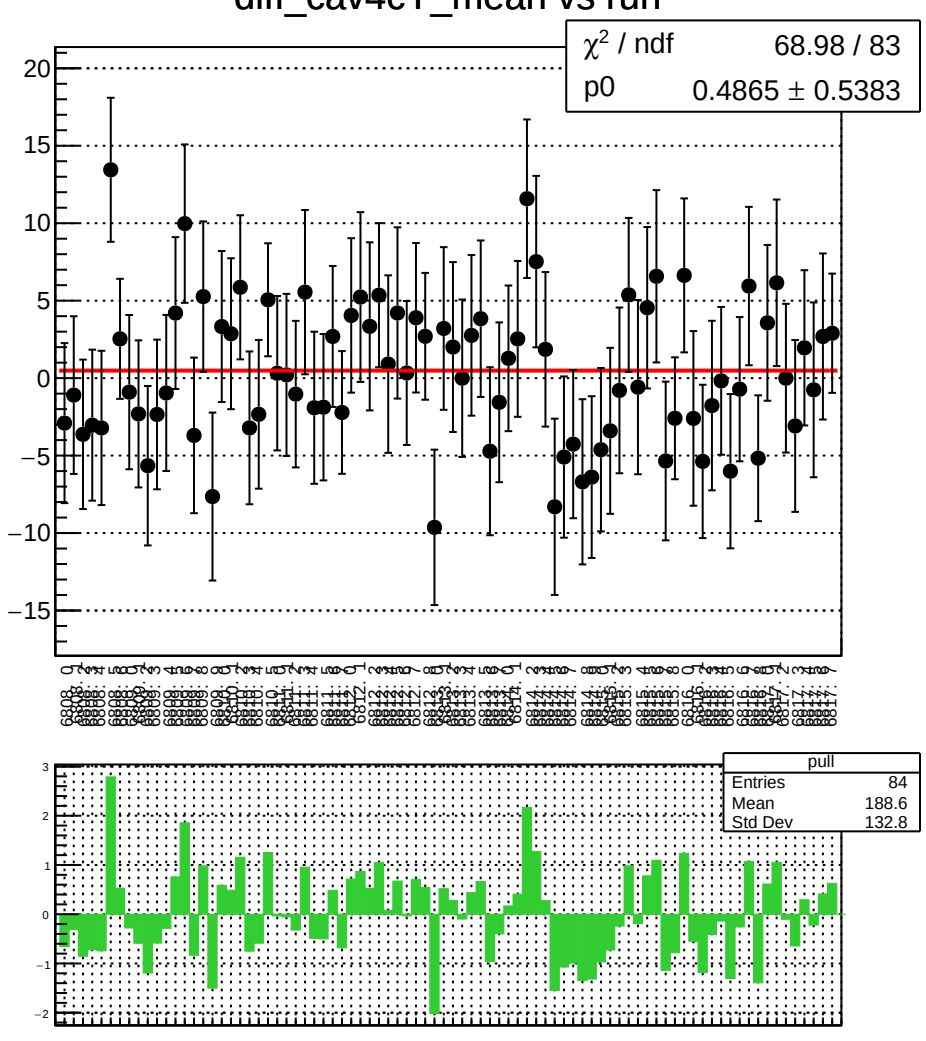

diff_cav4bY_mean vs run
χ^2 / ndf 70.25 / 83
p0 4.407 ± 4.606
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean 203.3
Std Dev 145
2
1
0
−1
−2

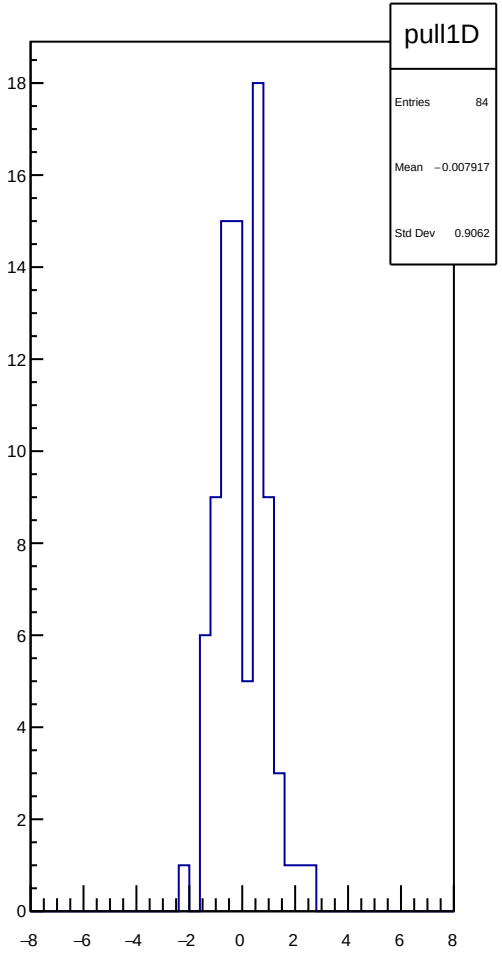

pull1D
Entries 84
Mean −0.007972
Std Dev 0.9145
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

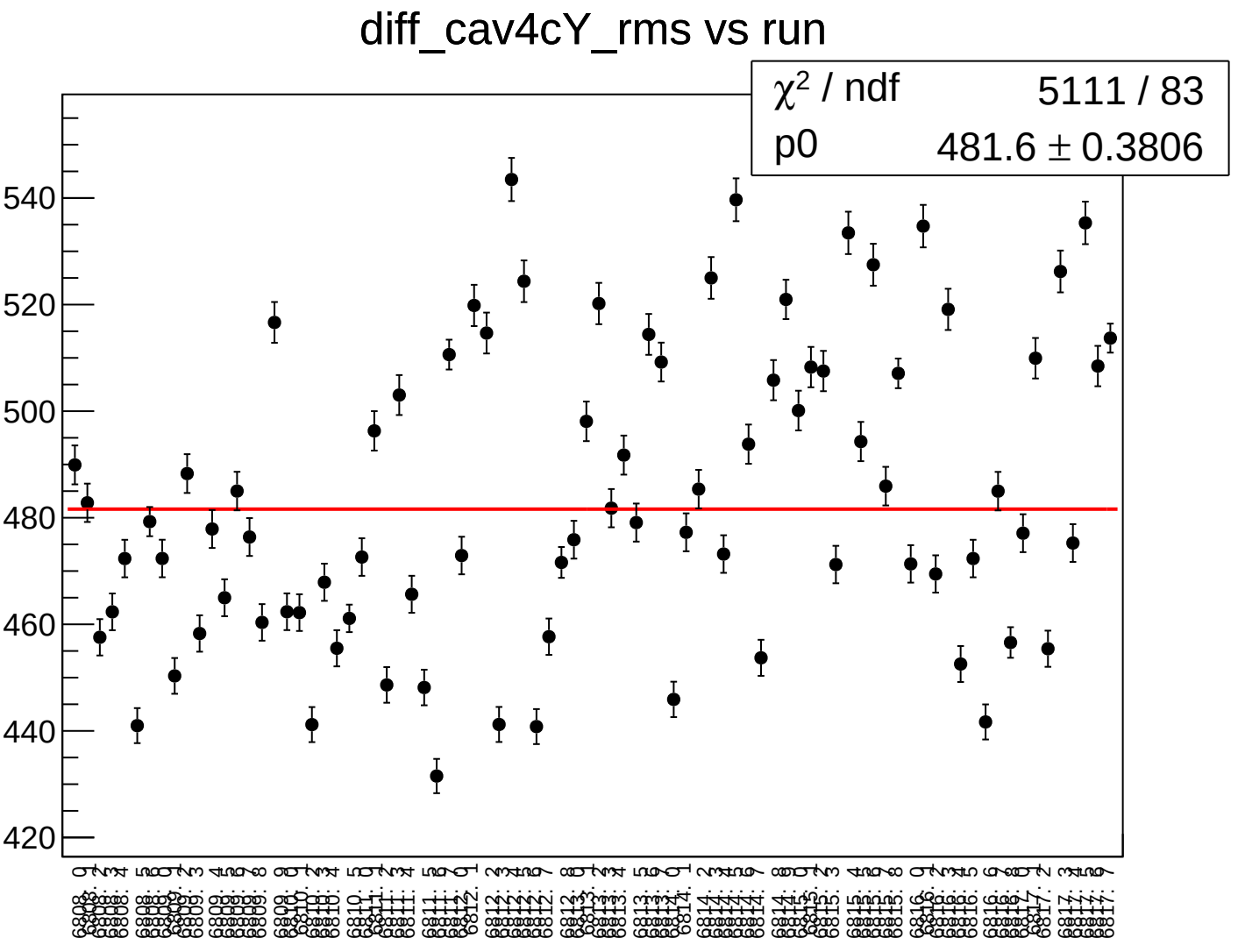

diff_cav4bY_rms vs run
χ² / ndf 6304 / 83
p0 4120 ± 3.257
4800
4600
4400
4200
4000
3800
3600

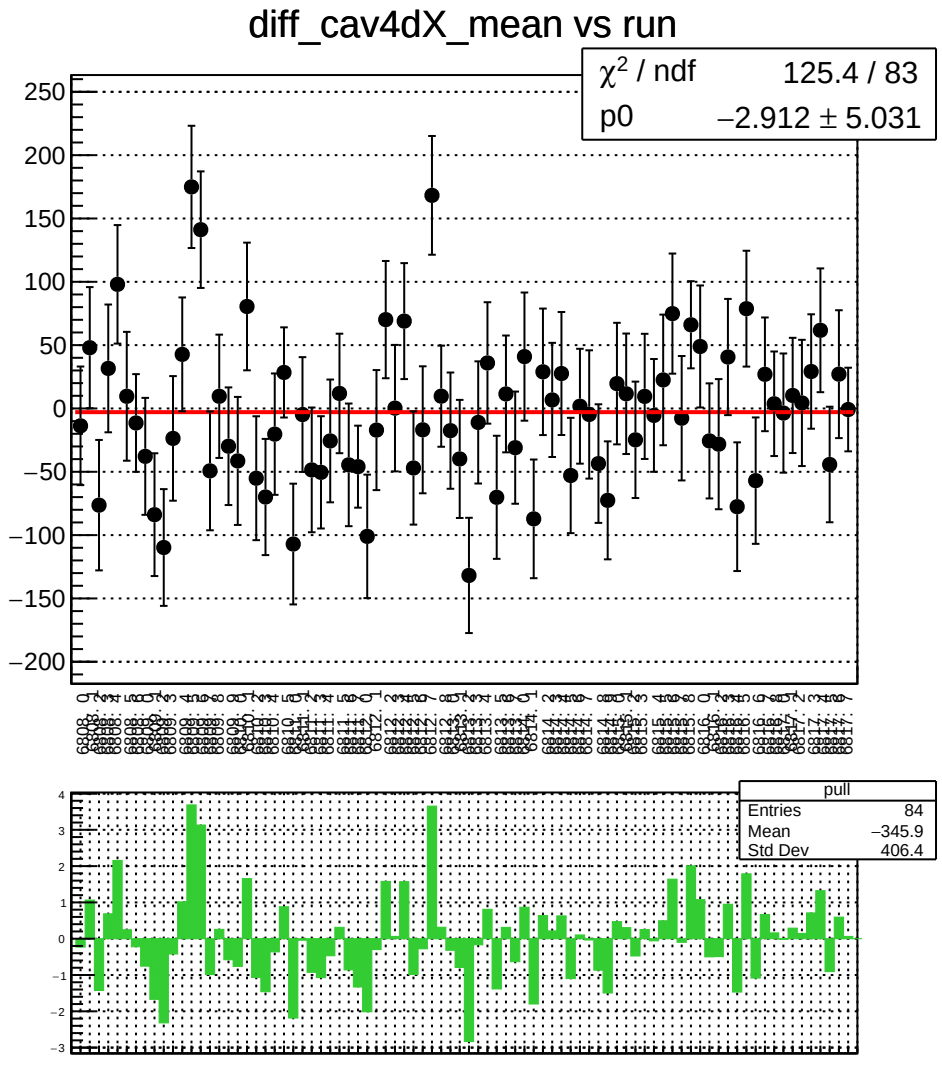

diff_cav4cX_mean vs run
χ² / ndf 125.9 / 83
p0 −0.4995 ± 0.8569
pull
Entries 84
Mean −292.1
Std Dev 352.8
pull1D
Entries 84
Mean −0.006341
Std Dev 1.224

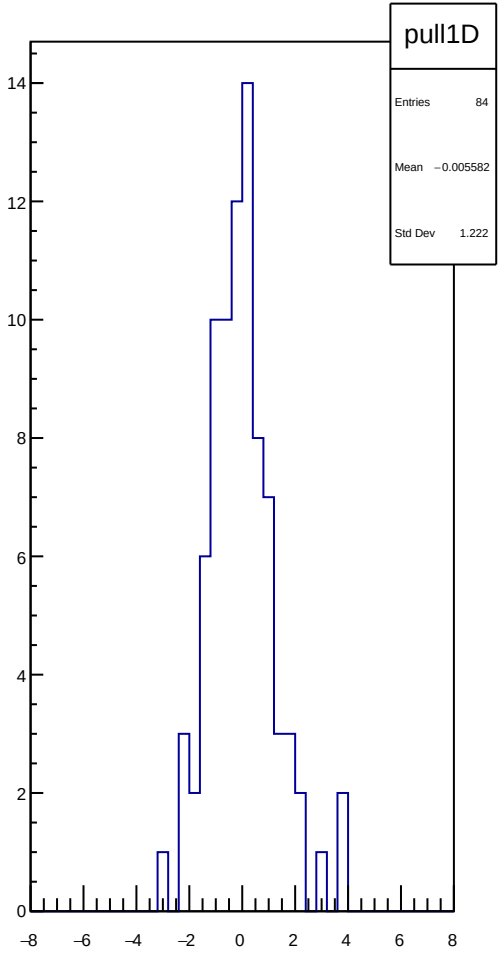

diff_cav4cX_rms vs run
χ² / ndf 2623 / 83
p0 767.3 ± 0.6059
840
820
800
780
760
740
720
700

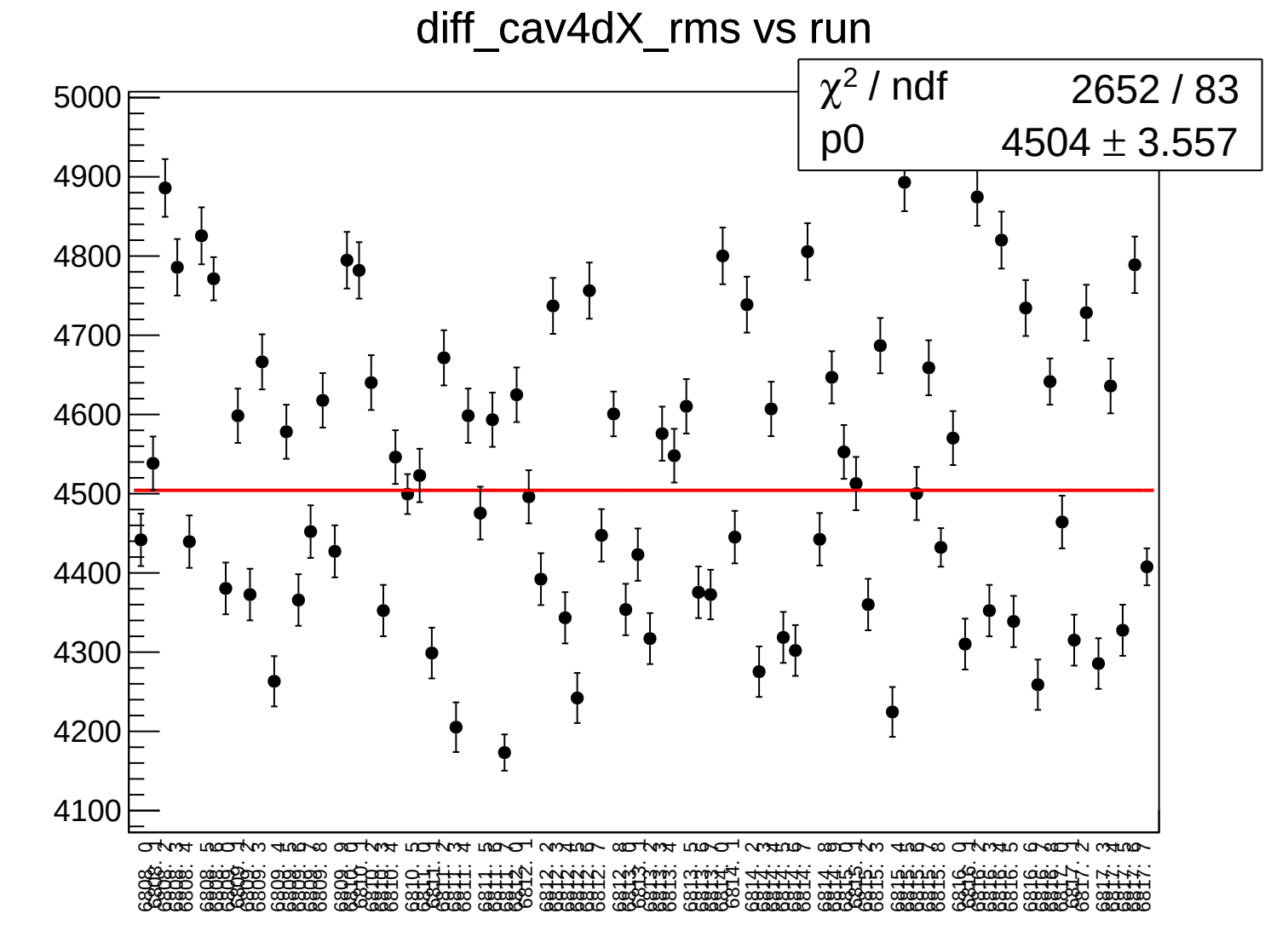

diff_cav4cY_mean vs run
χ² / ndf 68.98 / 83
p0 0.4865 ± 0.5383
pull
Entries 84
Mean 188.6
Std Dev 132.8

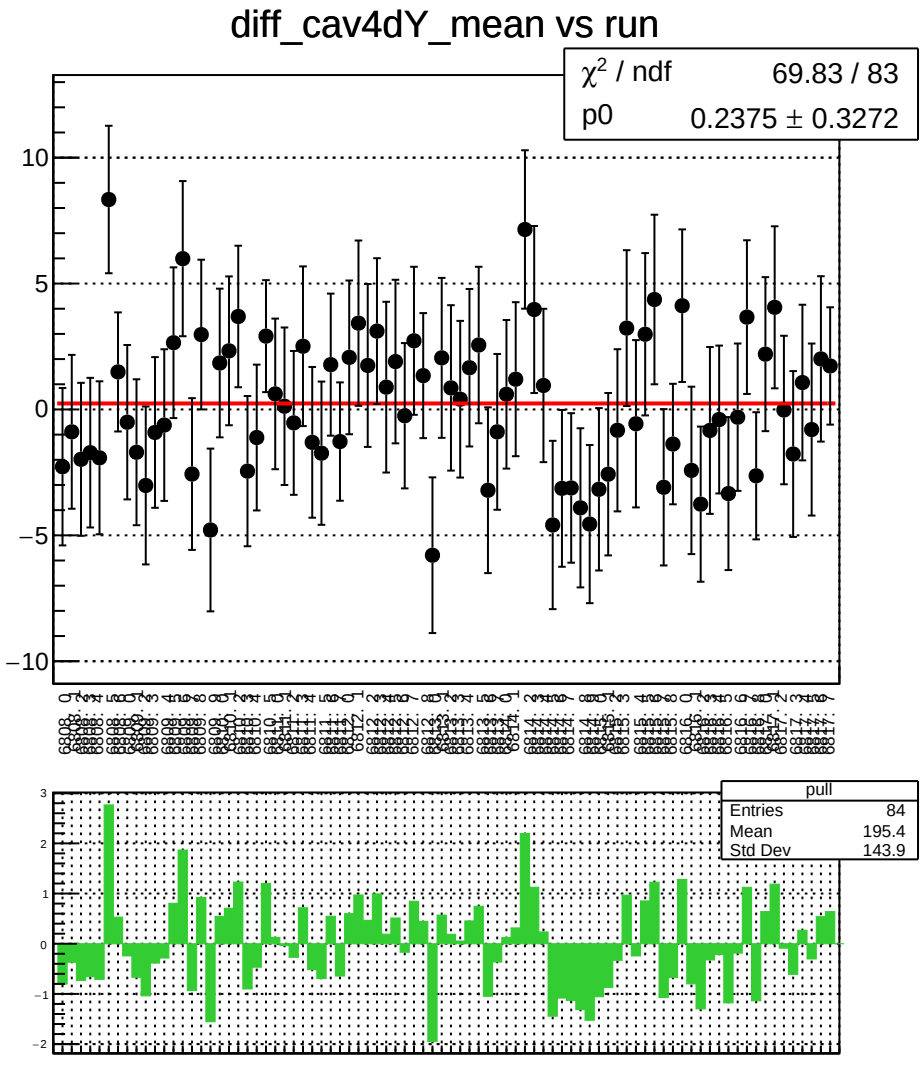

pull1D
Entries 84
Mean −0.007917
Std Dev 0.9062

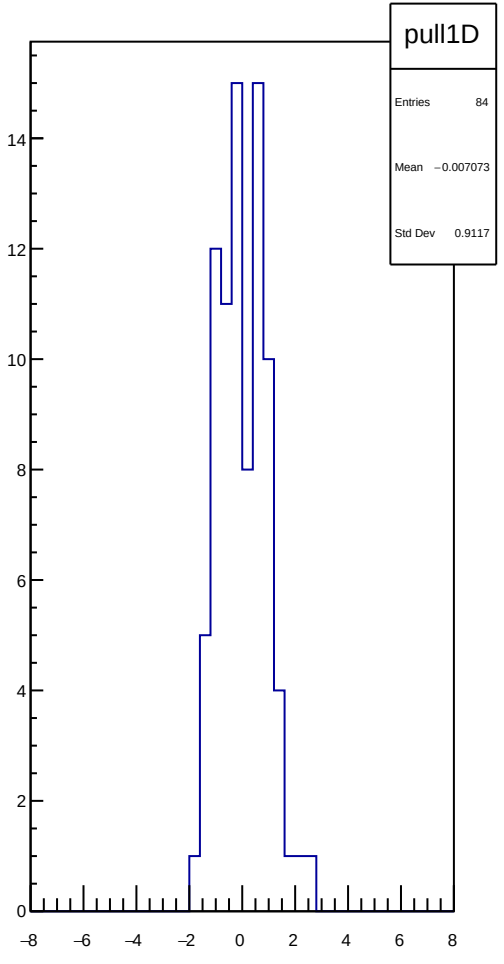

diff_cav4cY_rms vs run
χ² / ndf 5111 / 83
p0 481.6 ± 0.3806
540
520
500
480
460
440
420

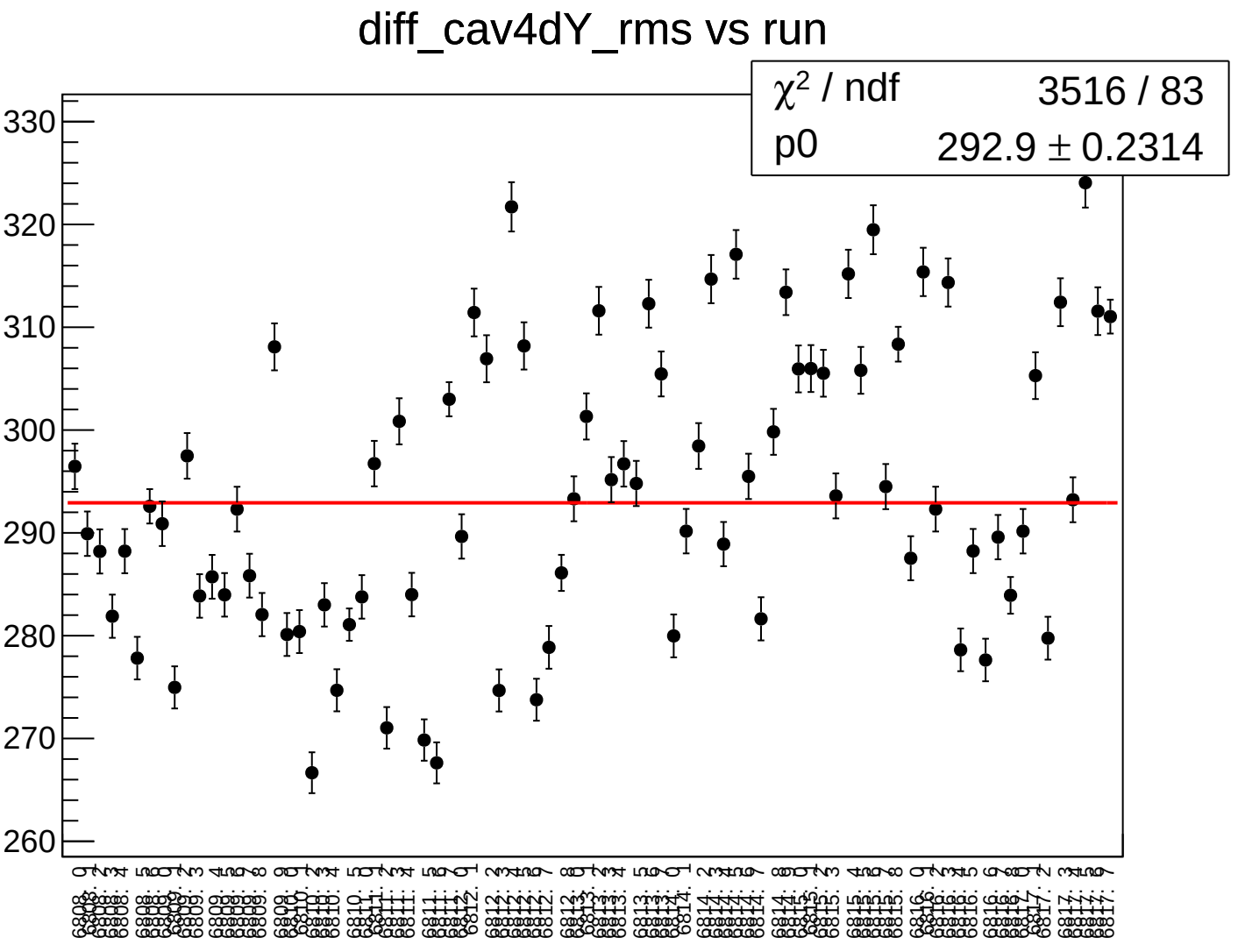

diff_cav4dX_mean vs run
χ^2 / ndf 125.4 / 83
p0 −2.912 ± 5.031
pull
Entries 84
Mean −345.9
Std Dev 406.4

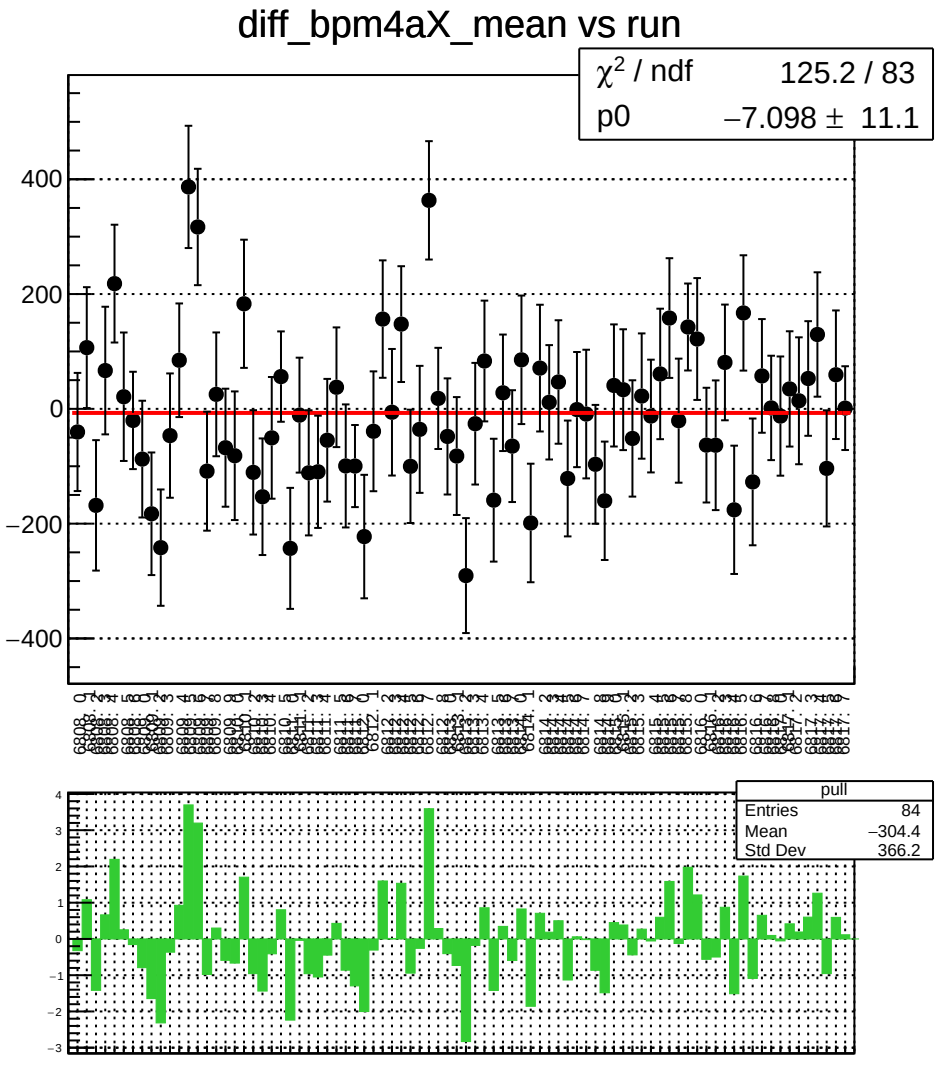

pull1D
Entries 84
Mean −0.005582
Std Dev 1.222

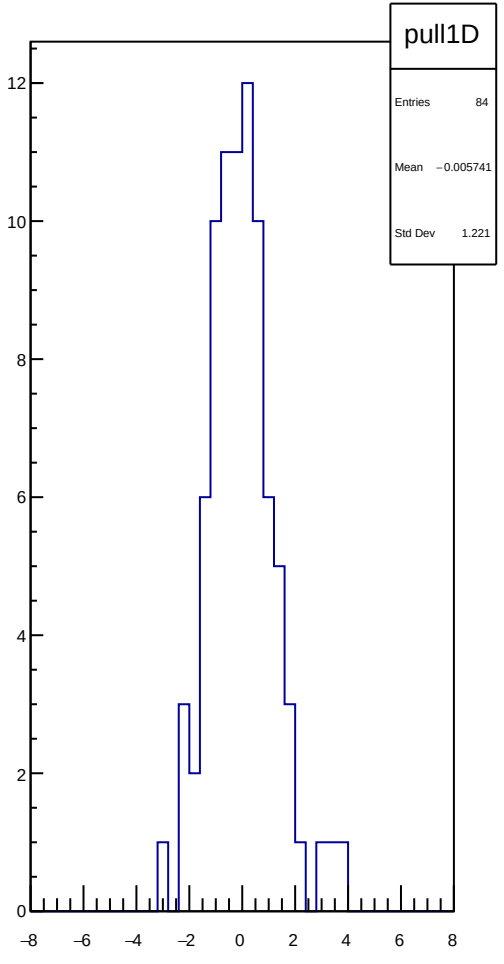

diff_cav4dX_rms vs run
χ² / ndf 2652 / 83
p0 4504 ± 3.557
5000
4900
4800
4700
4600
4500
4400
4300
4200
4100

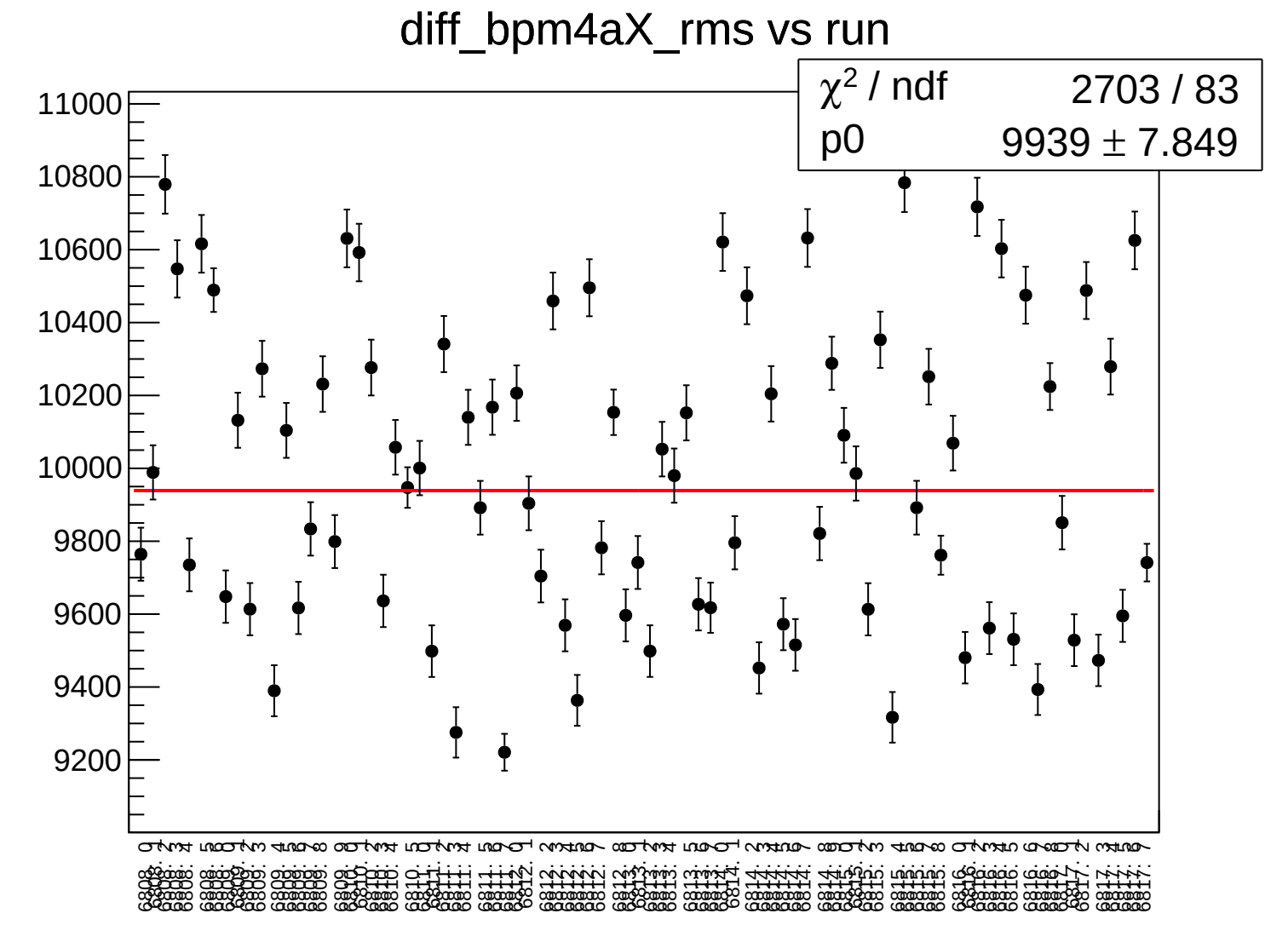

diff_cav4dY_mean vs run
χ² / ndf 69.83 / 83
p0 0.2375 ± 0.3272
pull
Entries 84
Mean 195.4
Std Dev 143.9

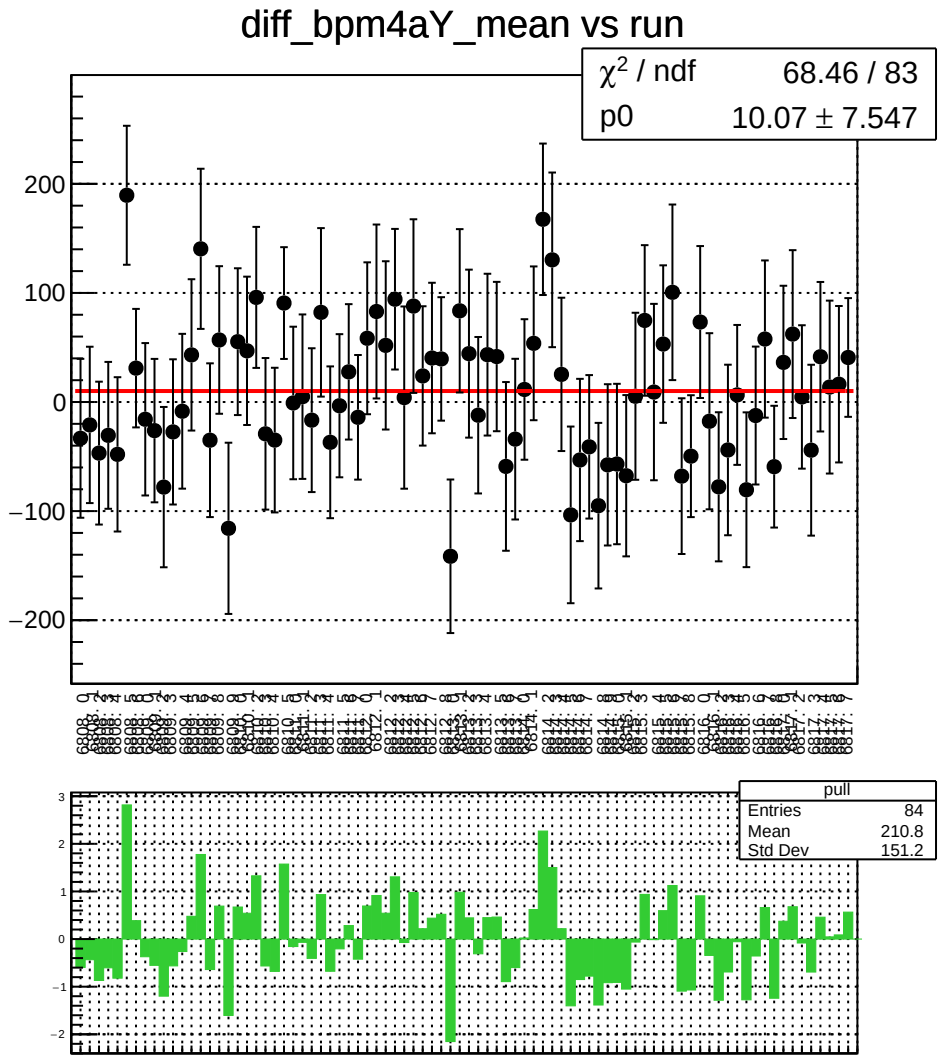

pull1D
Entries 84
Mean −0.007073
Std Dev 0.9117

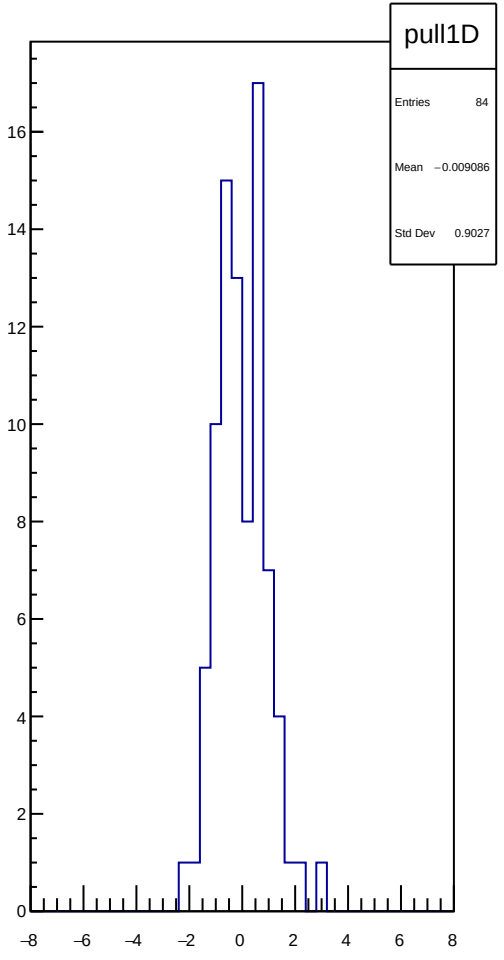

diff_cav4dY_rms vs run
χ² / ndf 3516 / 83
p0 292.9 ± 0.2314
330
320
310
300
290
280
270
260

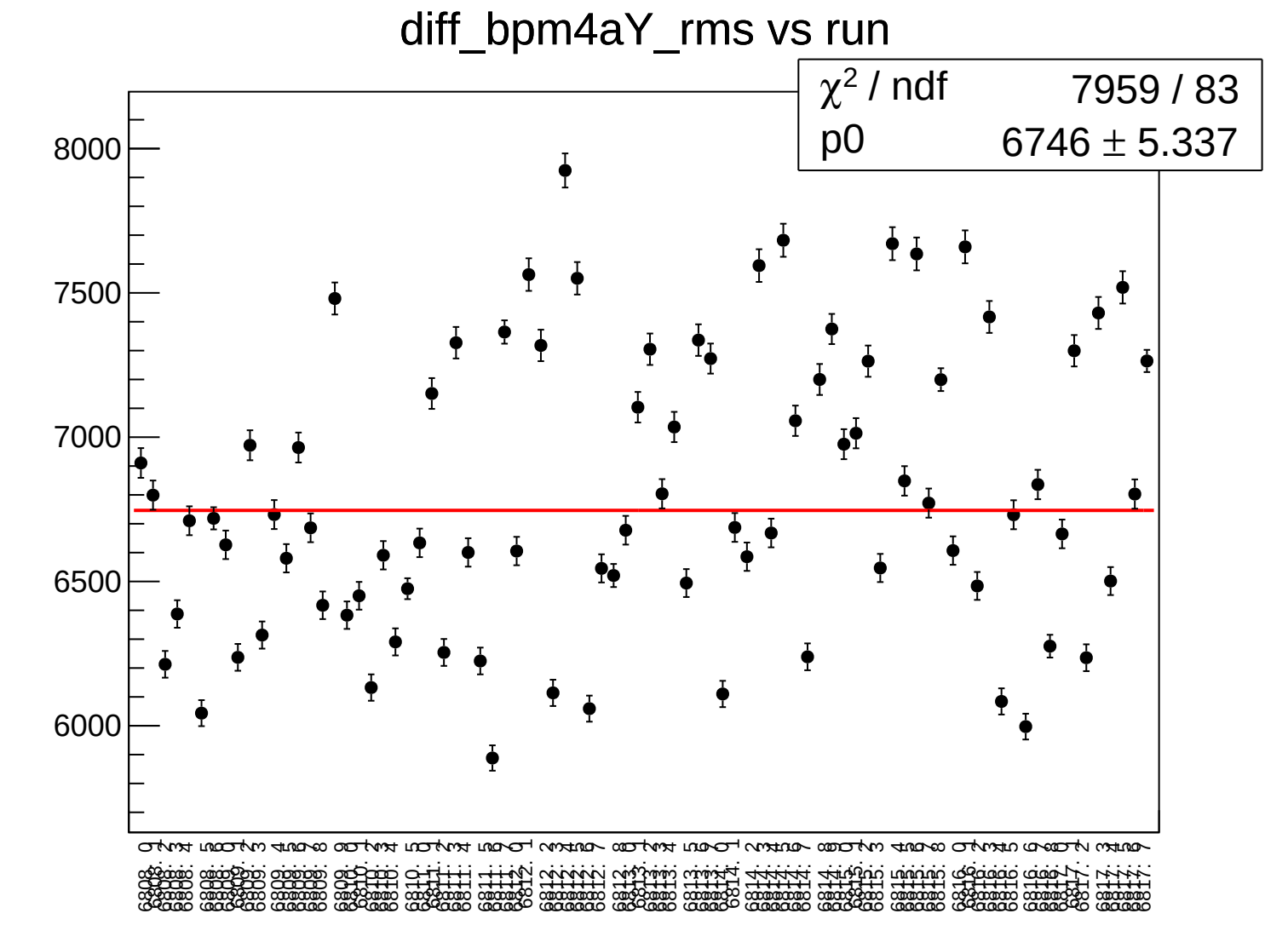

diff_bpm4aX_mean vs run
χ² / ndf 125.2 / 83
p0 −7.098 ± 11.1
400
200
0
−200
−400
pull
Entries 84
Mean −304.4
Std Dev 366.2
4
3
2
1
0
−1
−2
−3

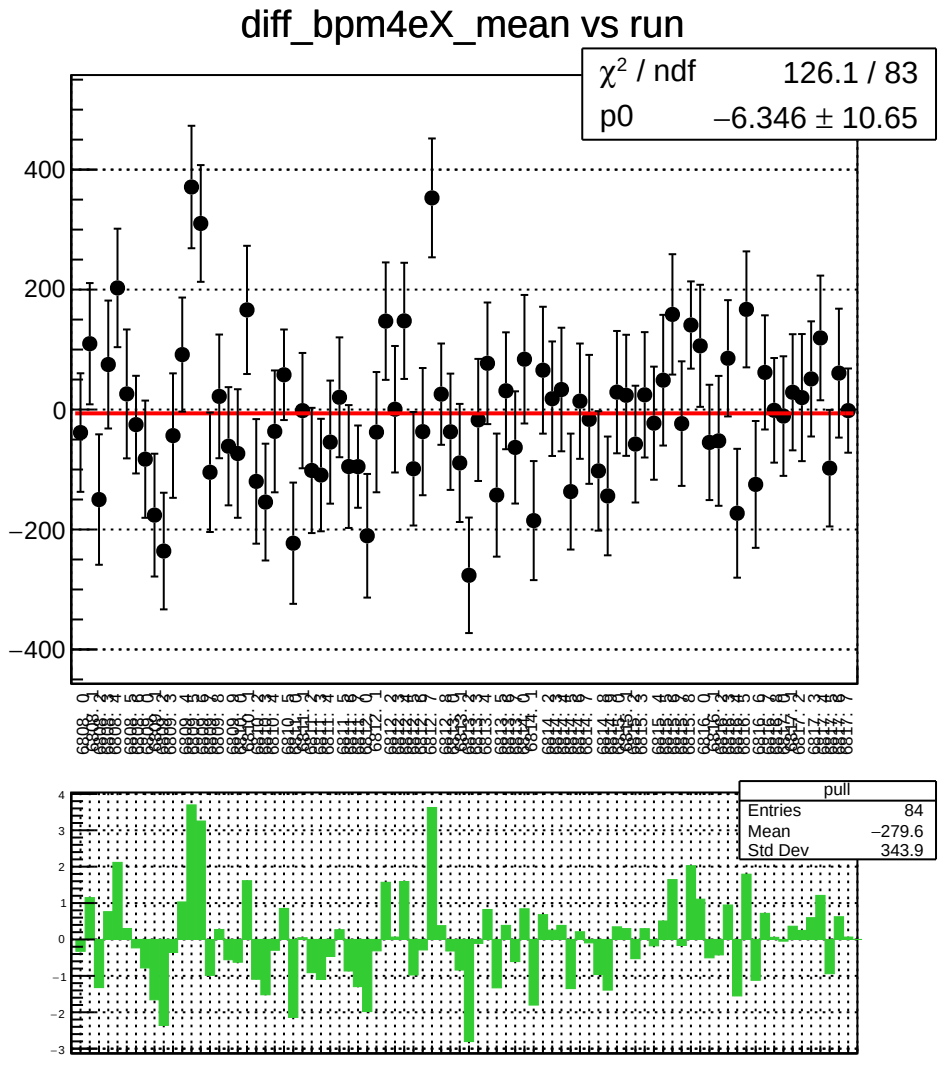

pull1D
Entries 84
Mean −0.005741
Std Dev 1.221
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

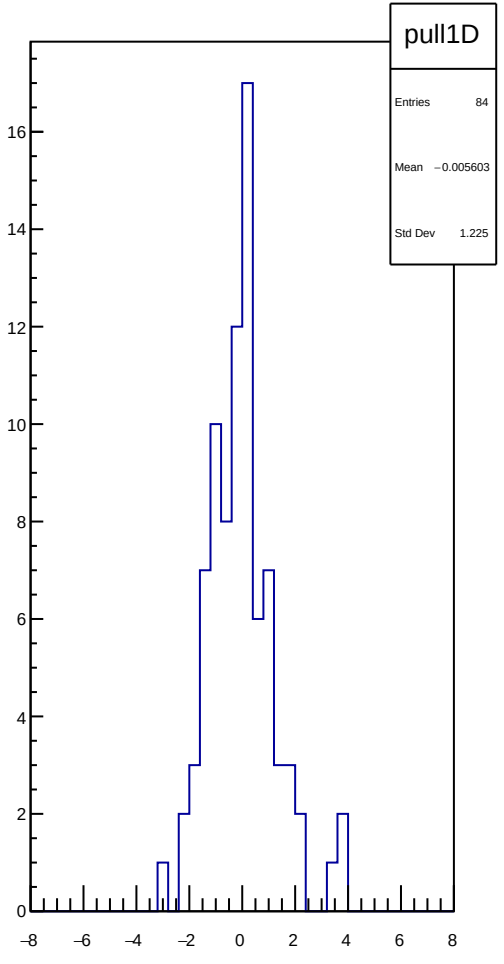

diff_bpm4aX_rms vs run
χ^2 / ndf 2703 / 83
p0 9939 ± 7.849
11000
10800
10600
10400
10200
10000
9800
9600
9400
9200


diff_bpm4aY_mean vs run
χ^2 / ndf 68.46 / 83
p0 10.07 ± 7.547
200
100
0
−100
−200
pull
Entries 84
Mean 210.8
Std Dev 151.2
3
2
1
0
−1
−2


pull1D
Entries 84
Mean −0.009086
Std Dev 0.9027
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


diff_bpm4aY_rms vs run
χ² / ndf 7959 / 83
p0 6746 ± 5.337
8000
7500
7000
6500
6000


diff_bpm4eX_mean vs run
χ^2 / ndf 126.1 / 83
p0 −6.346 ± 10.65
400
200
0
−200
−400
pull
Entries 84
Mean −279.6
Std Dev 343.9
4
3
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean −0.005603
Std Dev 1.225
16
14
12
10
8
6
4
2
0
−8
−6
−4
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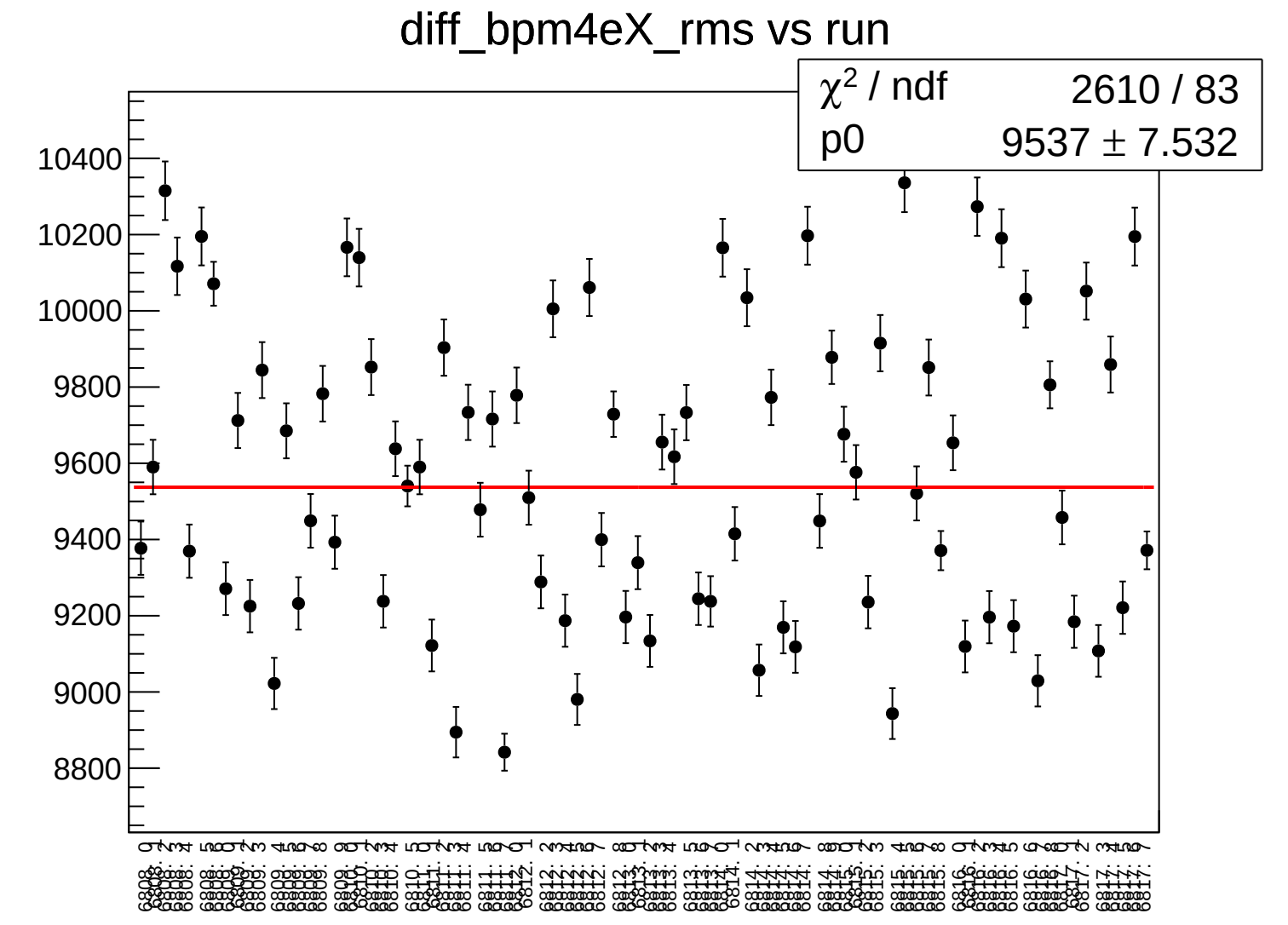
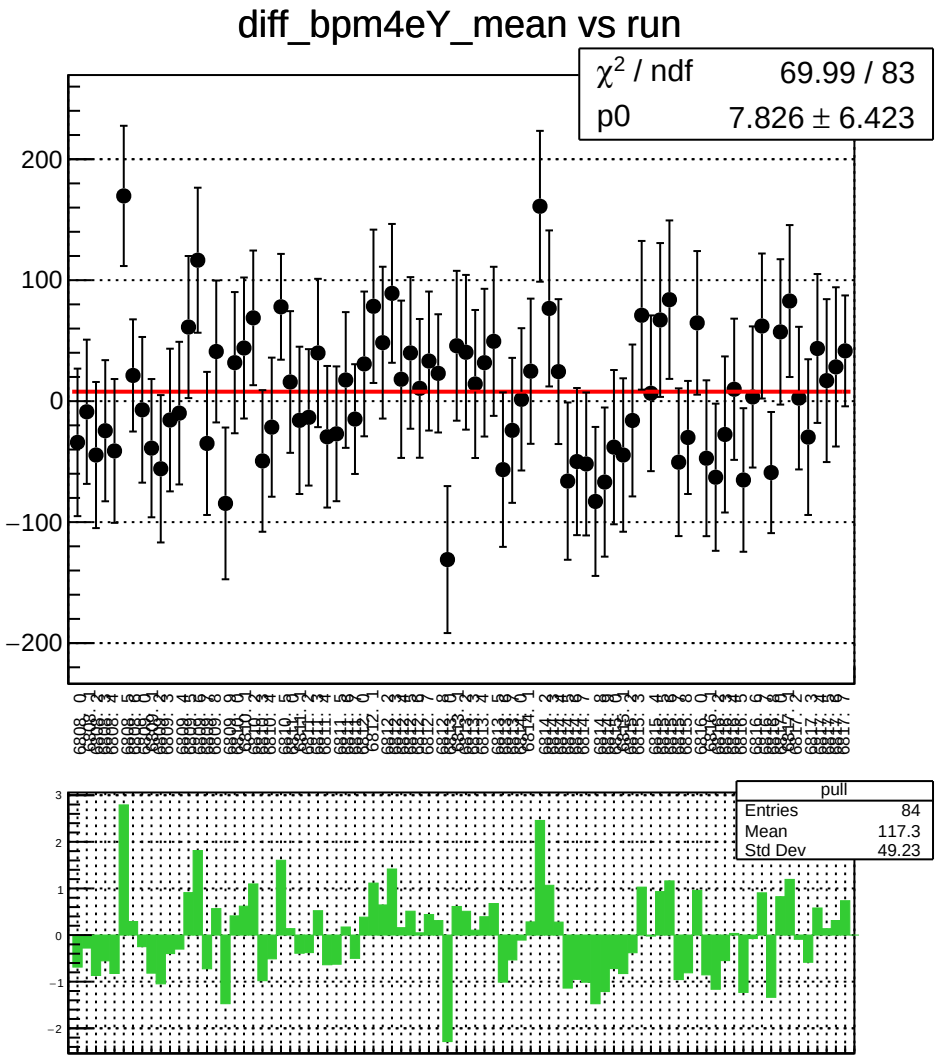
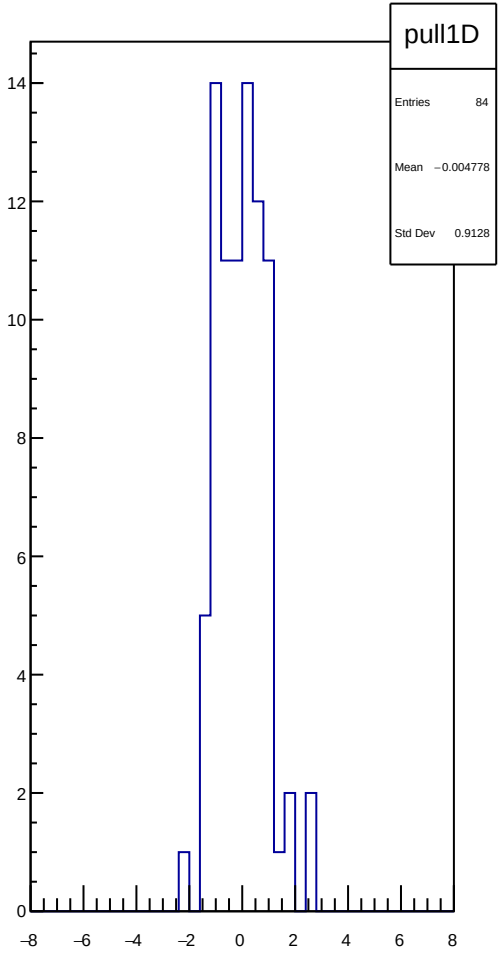
0
2
4
6
8


diff_bpm4eX_rms vs run
χ² / ndf 2610 / 83
p0 9537 ± 7.532
10400
10200
10000
9800
9600
9400
9200
9000
8800


diff_bpm4eY_mean vs run
χ² / ndf 69.99 / 83
p0 7.826 ± 6.423
200
100
0
−100
−200
pull
Entries 84
Mean 117.3
Std Dev 49.23
3
2
1
0
−1
−2


pull1D
Entries 84
Mean −0.004778
Std Dev 0.9128
14
12
10
8
6
4
2
0
−8
−6
−4
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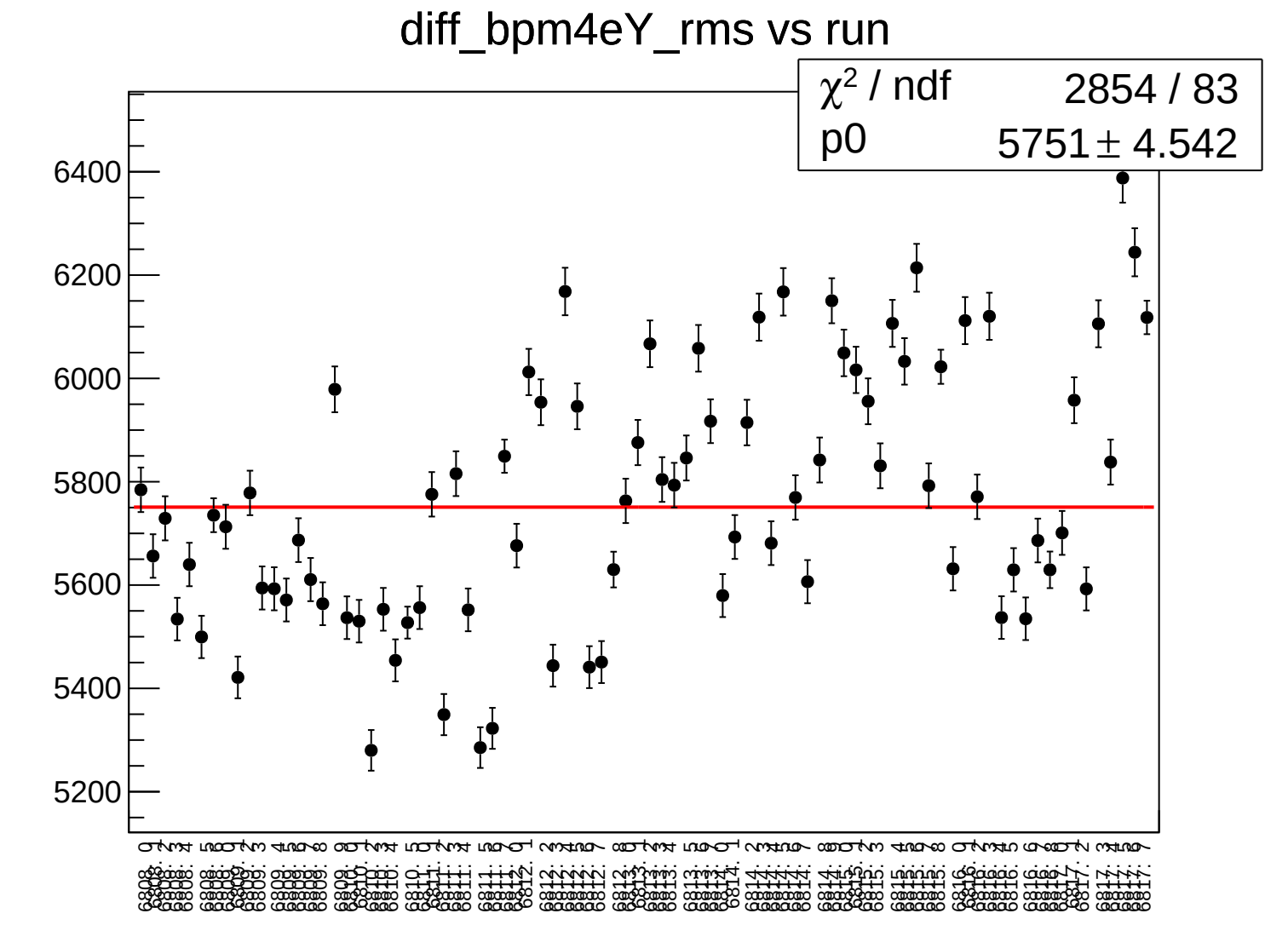
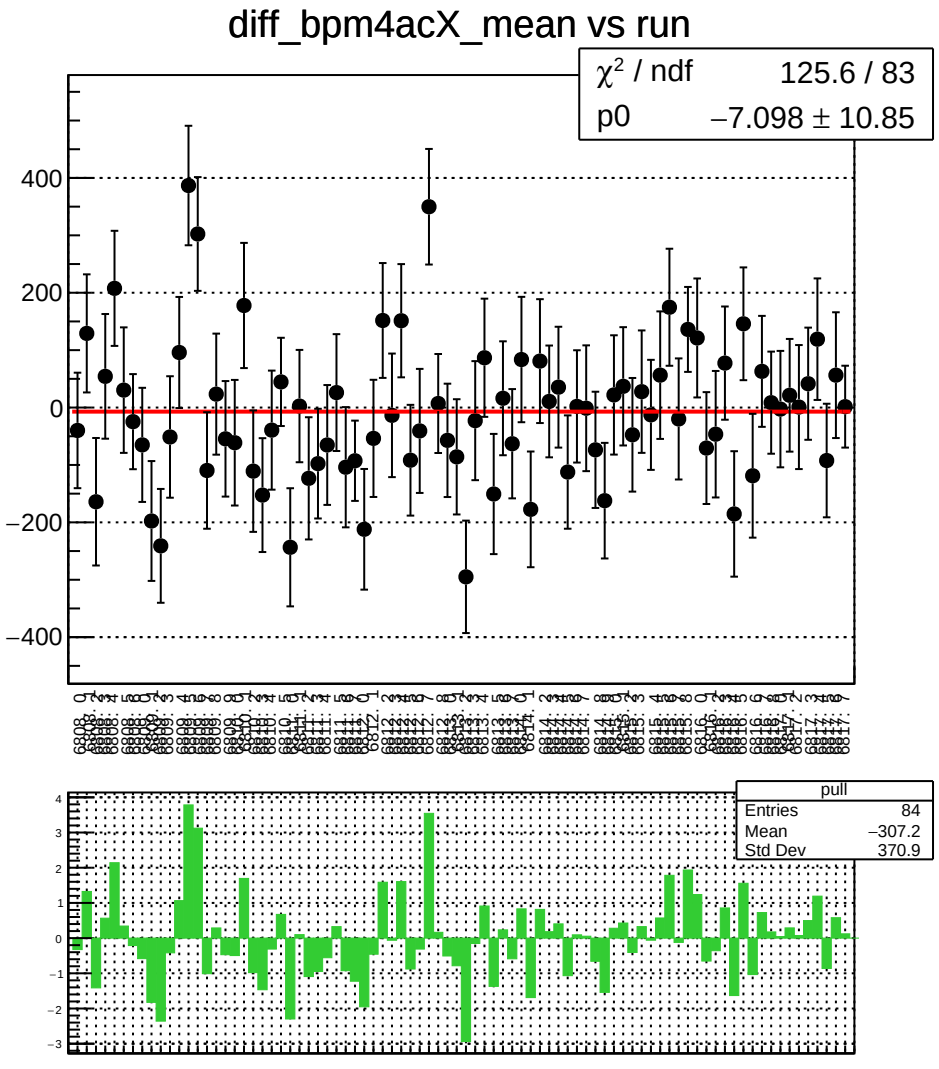
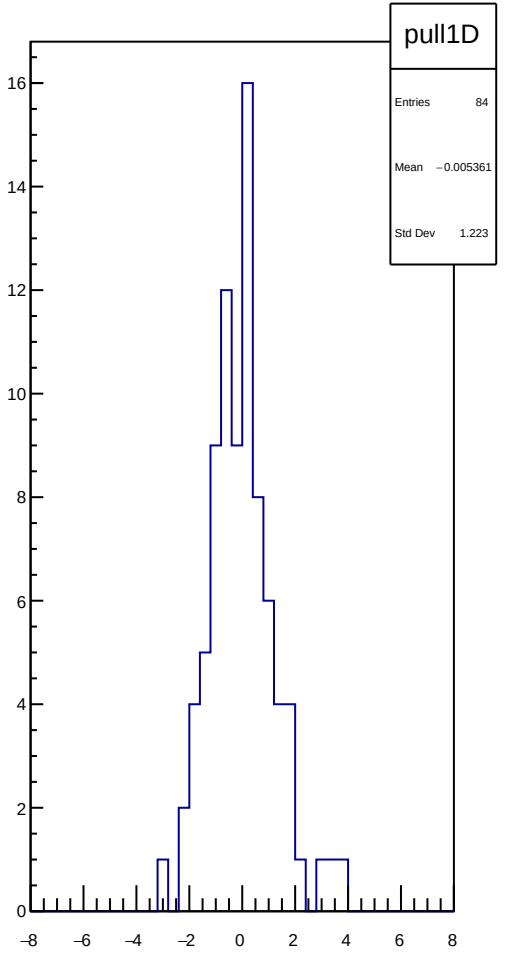
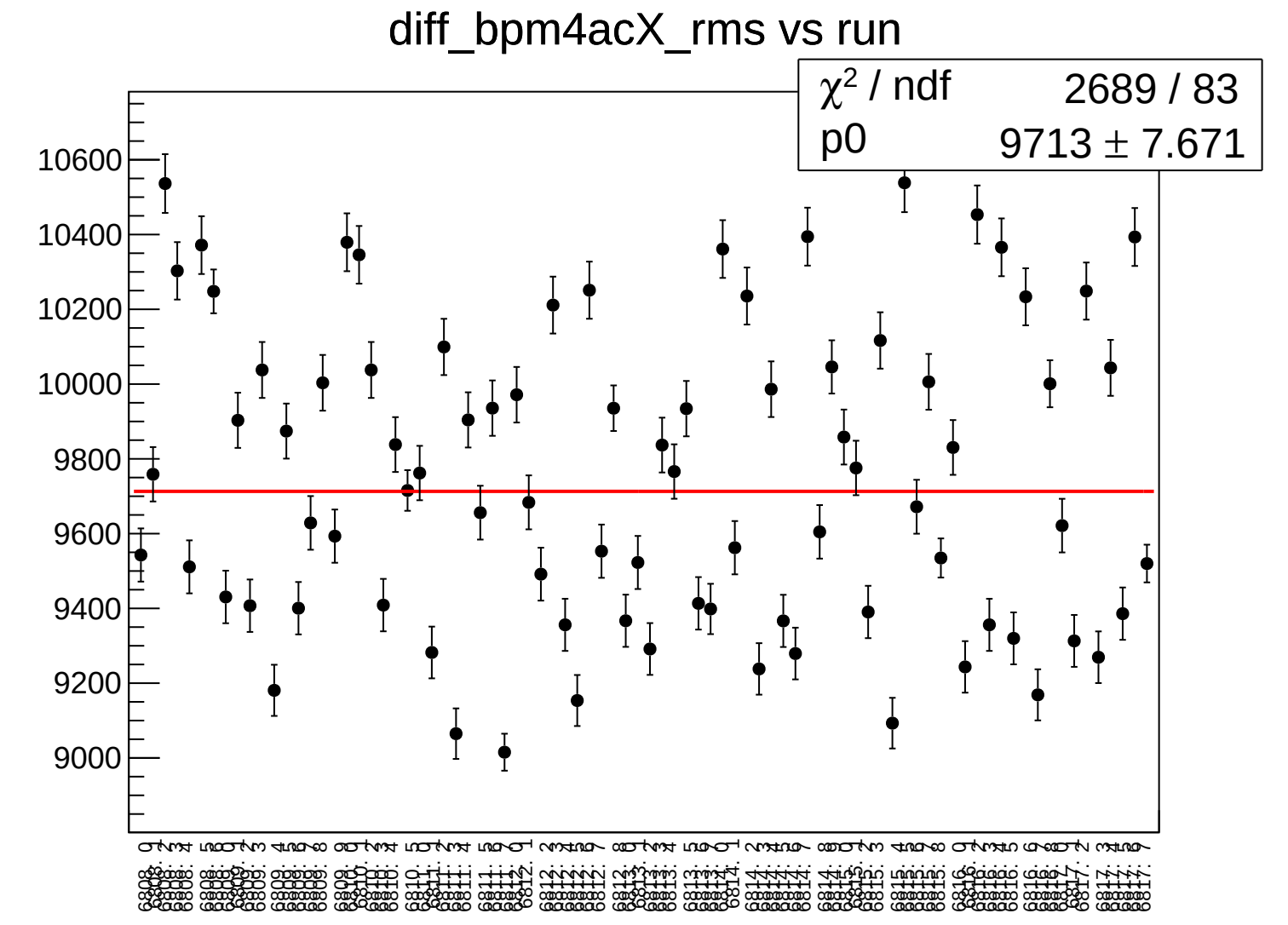
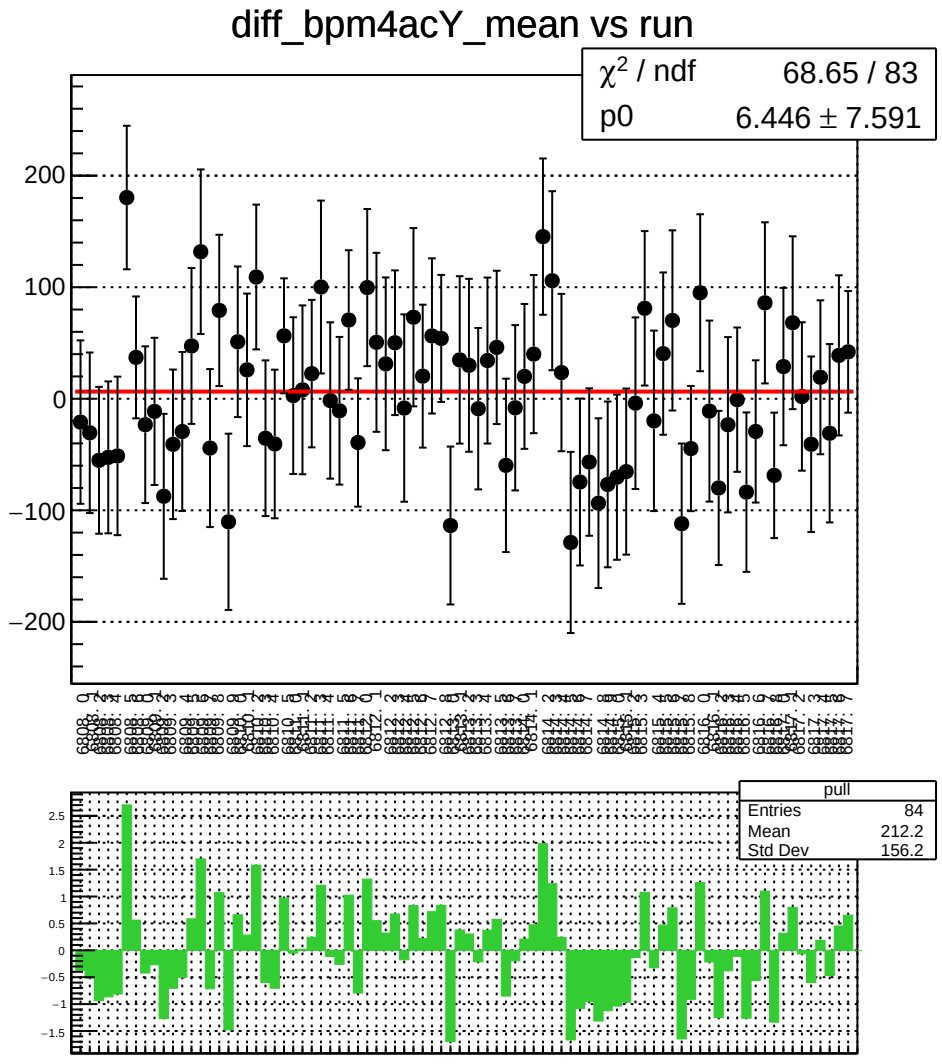
0
2
4
6
8

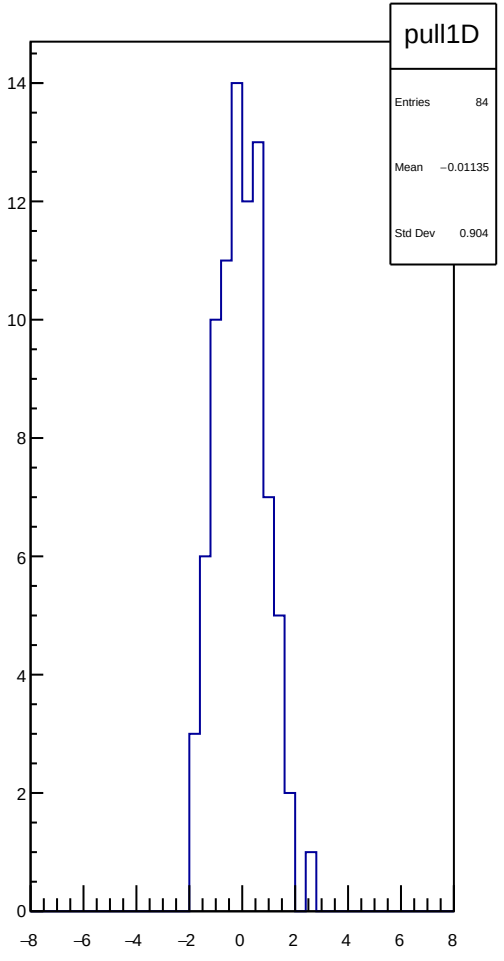

diff_bpm4eY_rms vs run
χ^2 / ndf 2854 / 83
p0 5751 ± 4.542
6400
6200
6000
5800
5600
5400
5200


diff_bpm4acX_mean vs run
χ² / ndf 125.6 / 83
p0 −7.098 ± 10.85
400
200
0
−200
−400
pull
Entries 84
Mean −307.2
Std Dev 370.9
4
3
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean −0.005361
Std Dev 1.223
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


diff_bpm4acX_rms vs run
χ² / ndf 2689 / 83
p0 9713 ± 7.671
10600
10400
10200
10000
9800
9600
9400
9200
9000


diff_bpm4acY_mean vs run
χ² / ndf 68.65 / 83
p0 6.446 ± 7.591
200
100
0
−100
−200
pull
Entries 84
Mean 212.2
Std Dev 156.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5


pull1D
Entries 84
Mean −0.01135
Std Dev 0.904
14
12
10
8
6
4
2
0
−8
−6
−4
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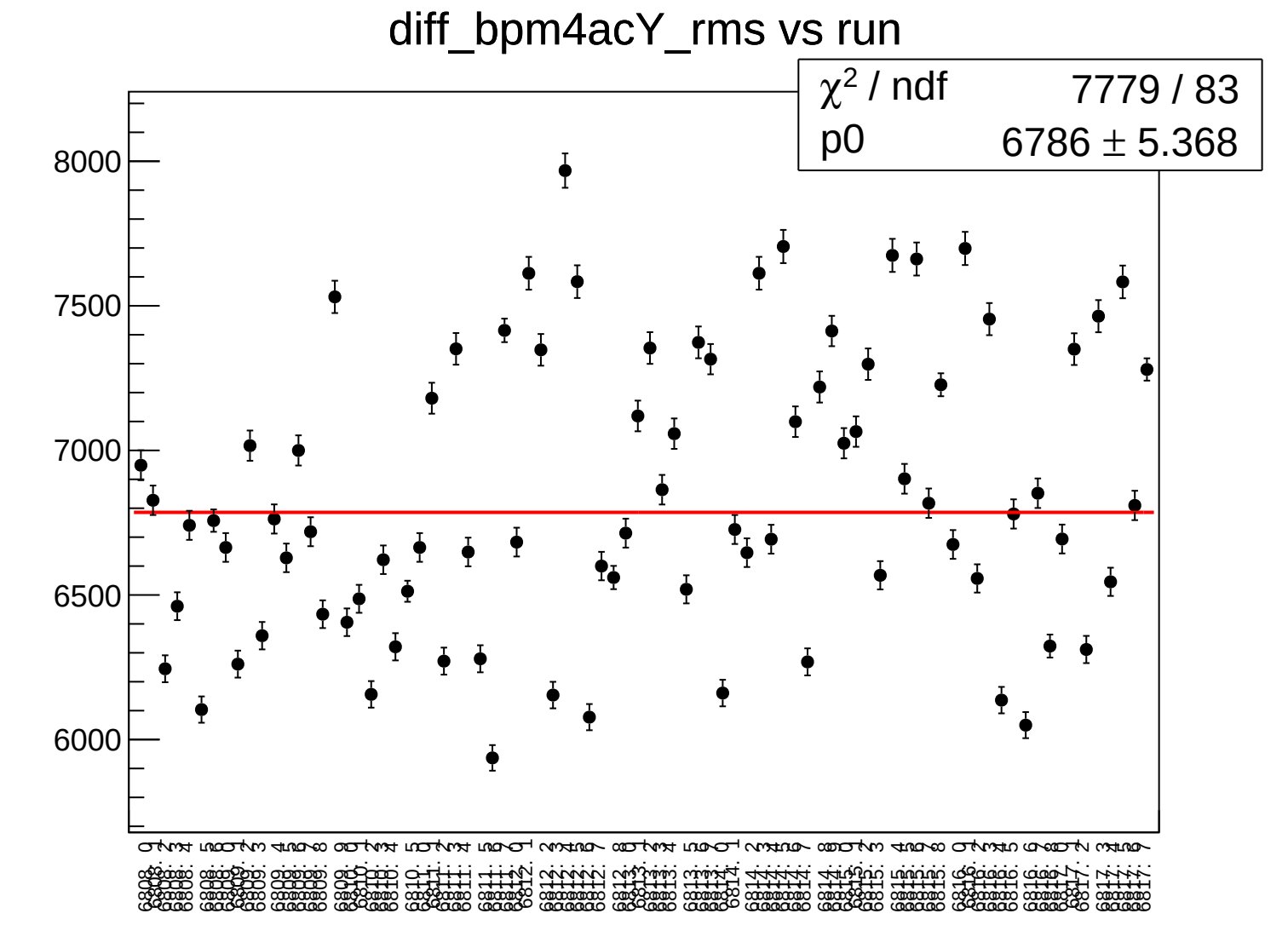
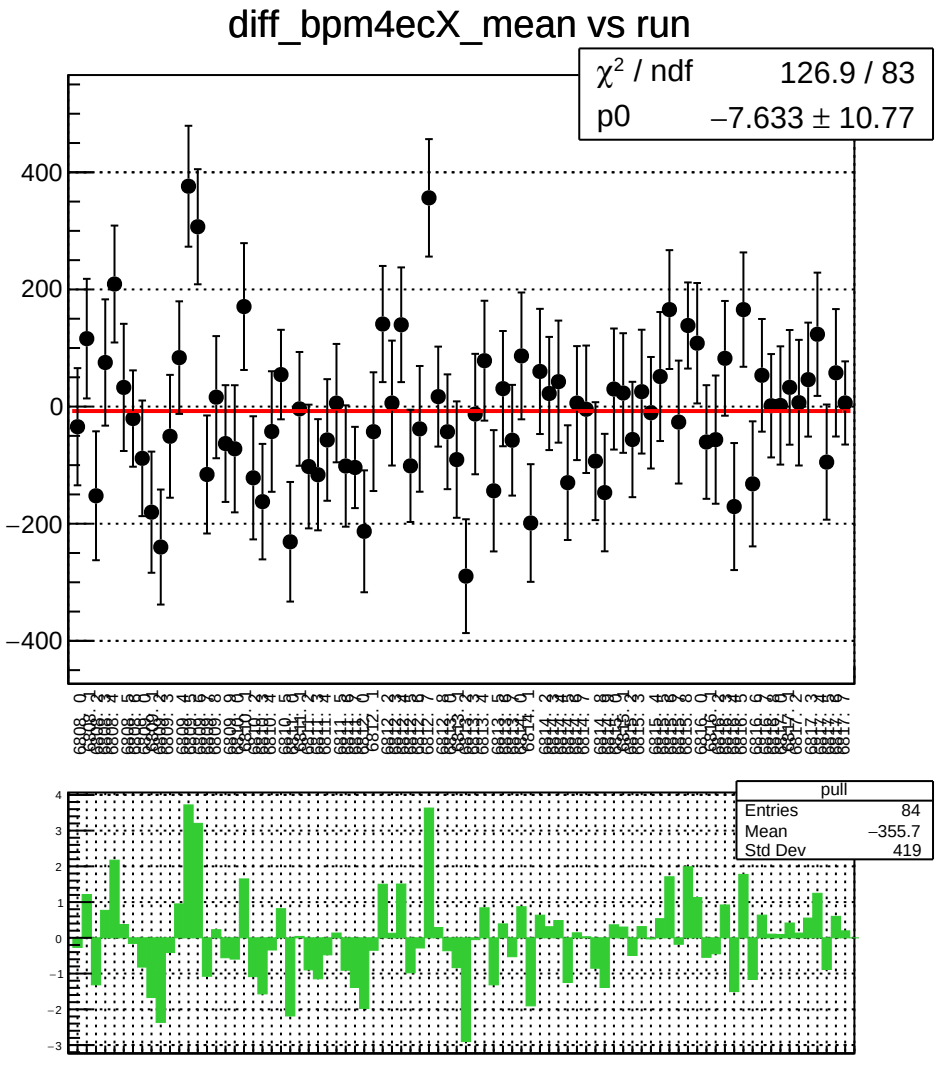
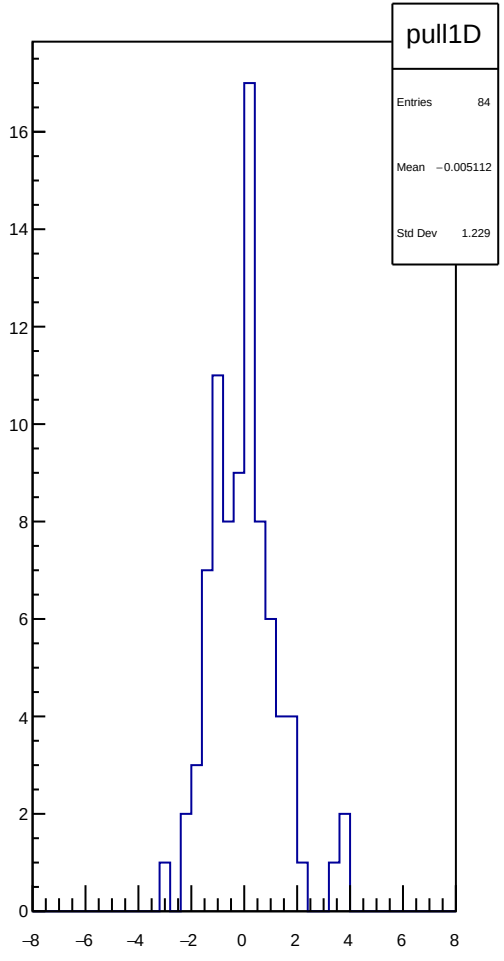
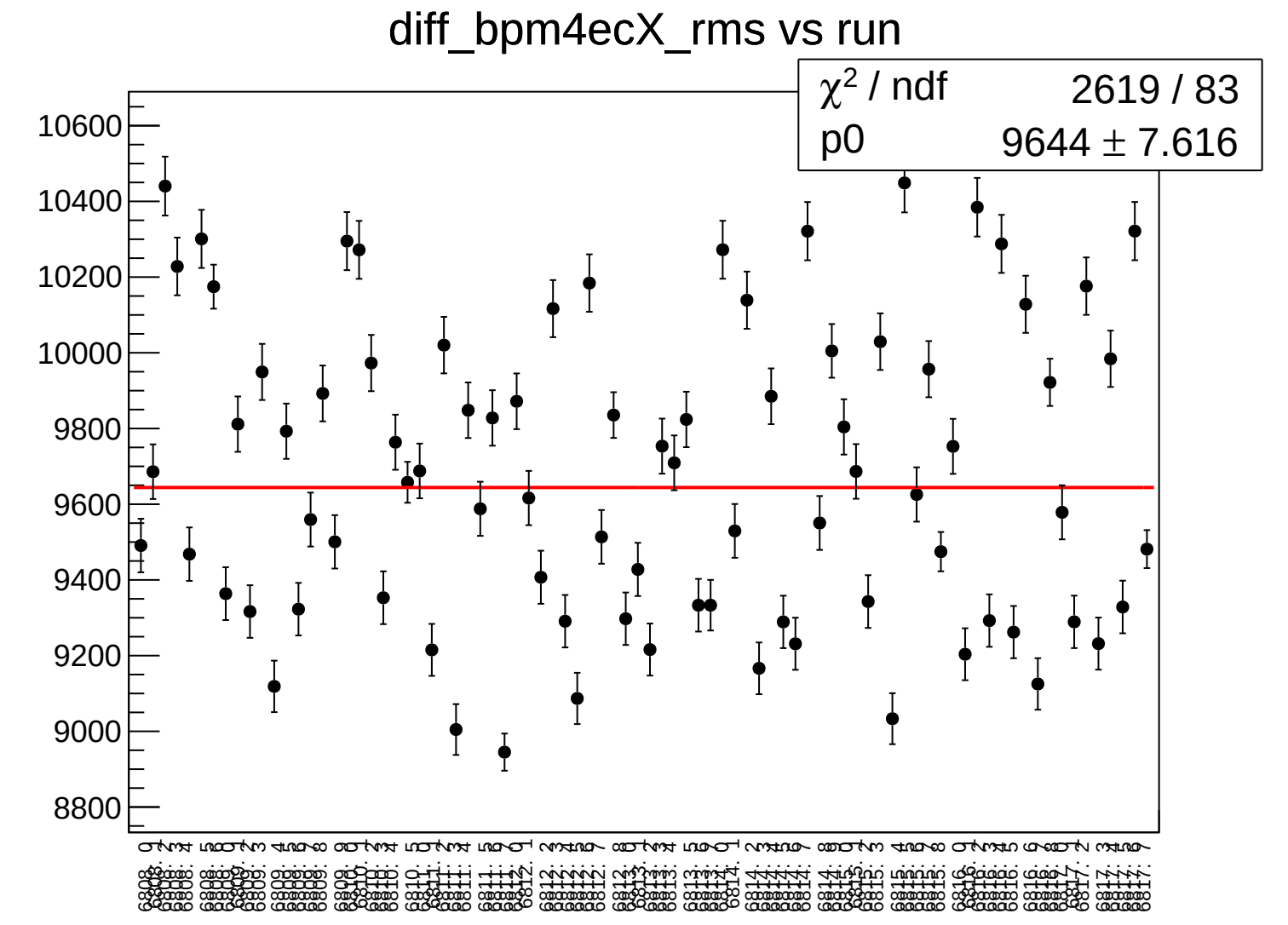
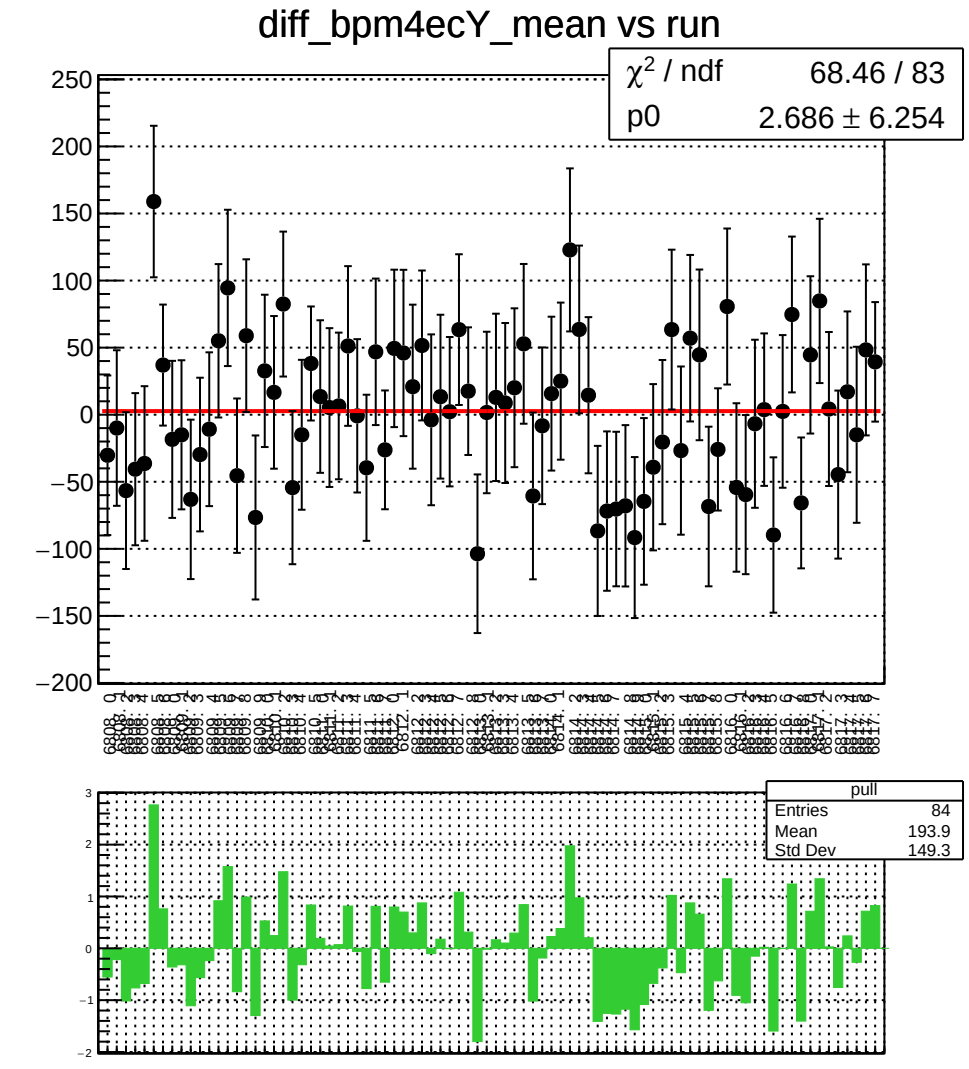
0
2
4
6
8

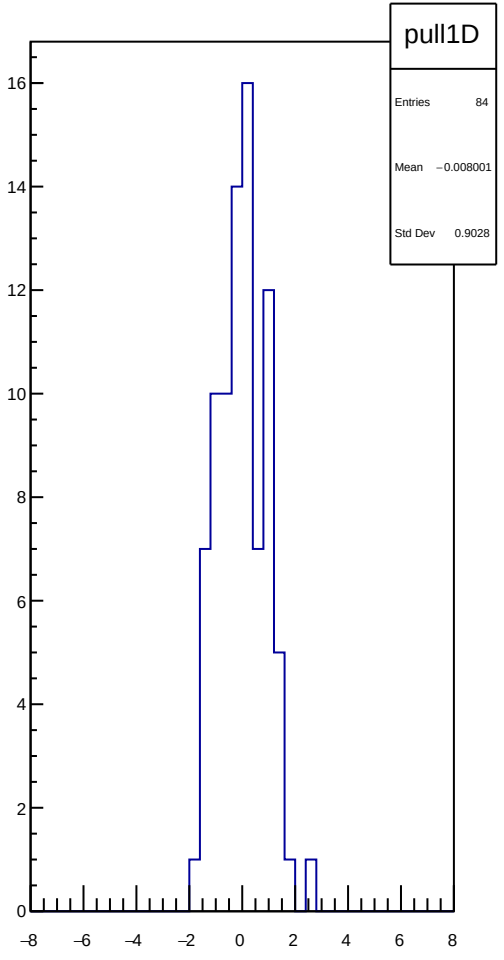

diff_bpm4acY_rms vs run
χ² / ndf 7779 / 83
p0 6786 ± 5.368
8000
7500
7000
6500
6000

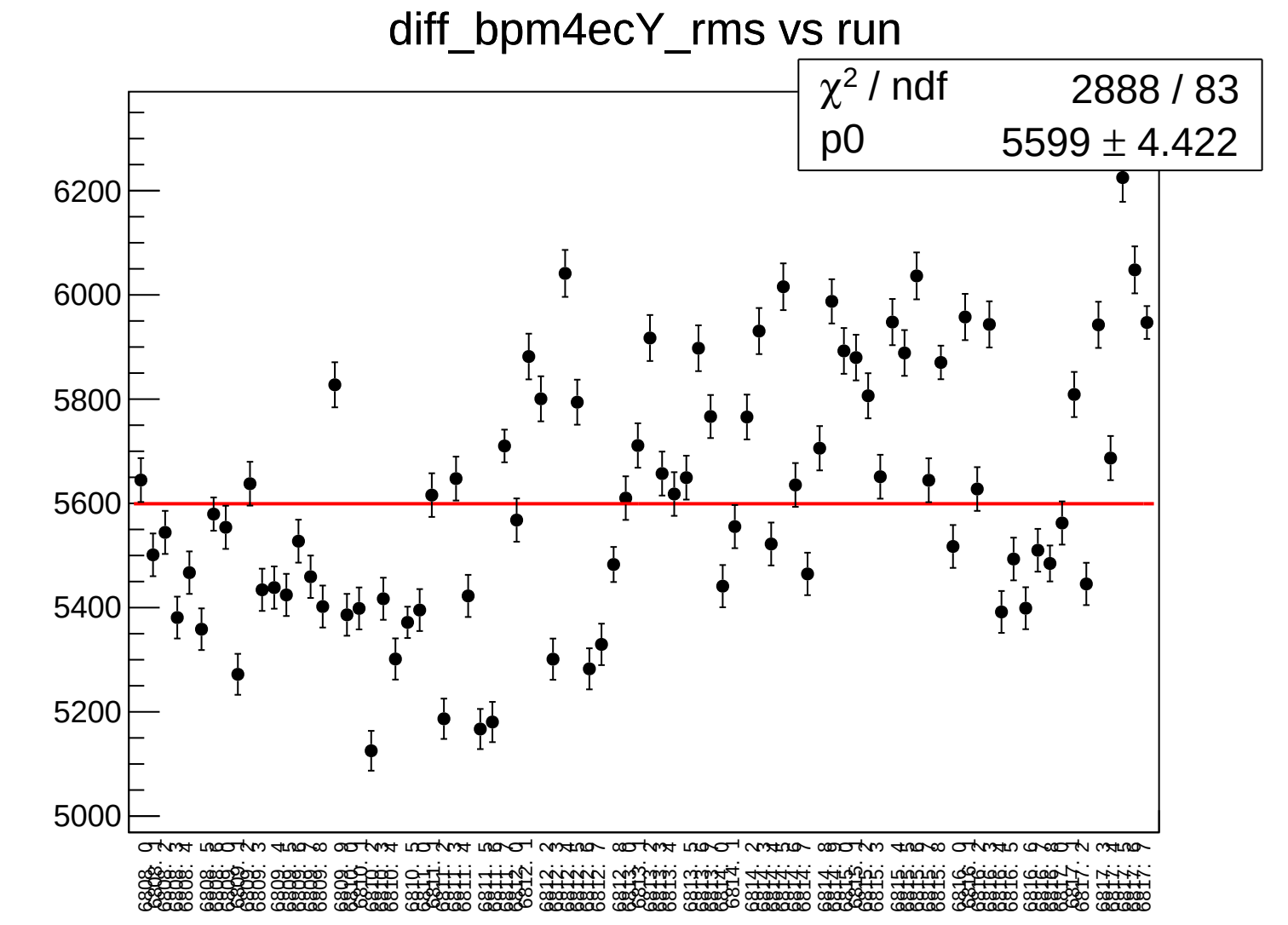

diff_bpm4ecX_mean vs run
χ² / ndf 126.9 / 83
p0 −7.633 ± 10.77
400
200
0
−200
−400
pull
Entries 84
Mean −355.7
Std Dev 419
4
3
2
1
0
−1
−2
−3

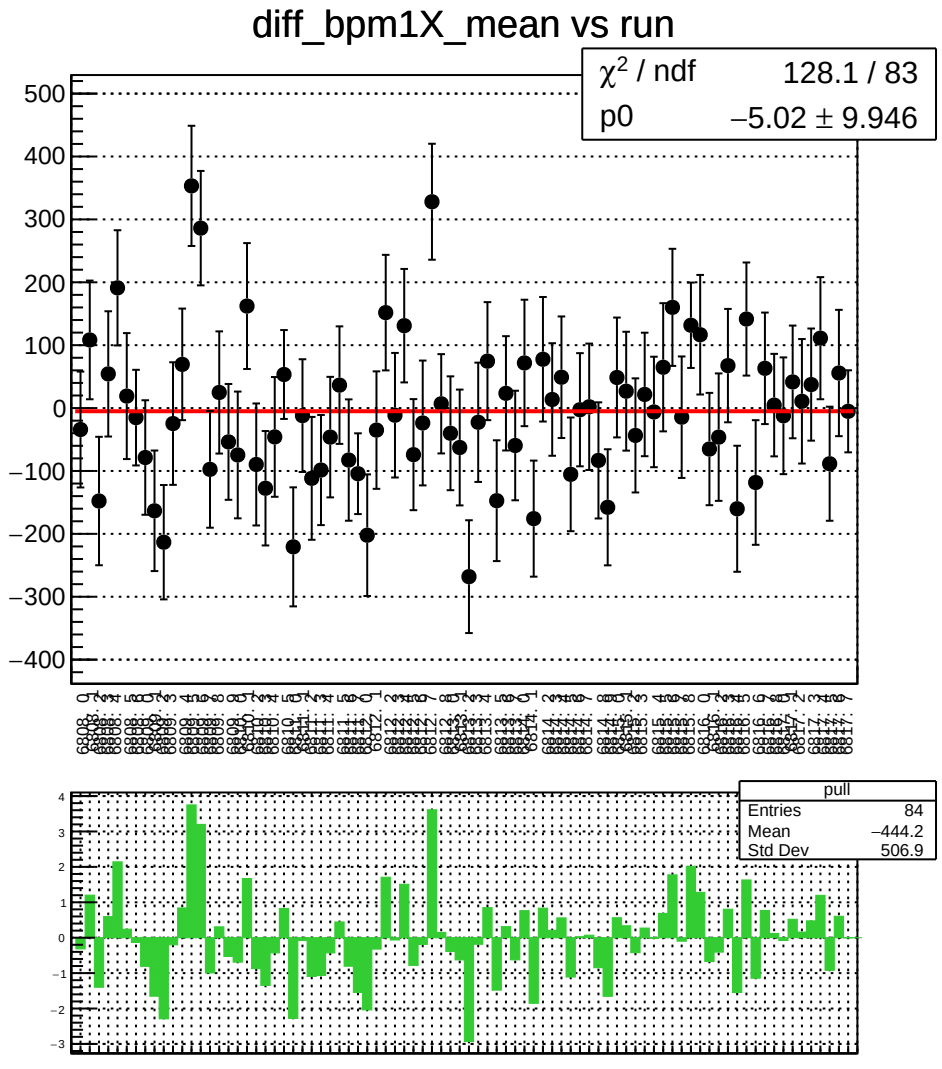

pull1D
Entries 84
Mean −0.005112
Std Dev 1.229
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

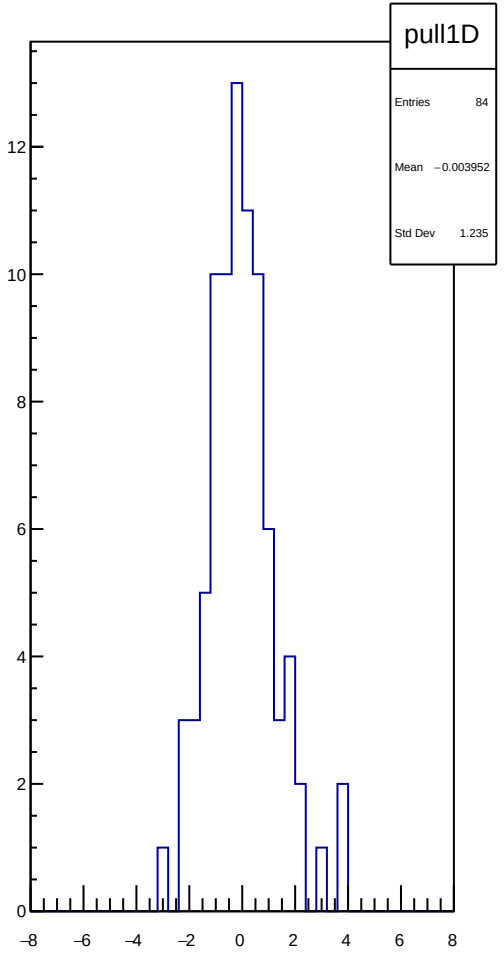

diff_bpm4ecX_rms vs run
χ^2 / ndf 2619 / 83
p0 9644 ± 7.616
10600
10400
10200
10000
9800
9600
9400
9200
9000
8800

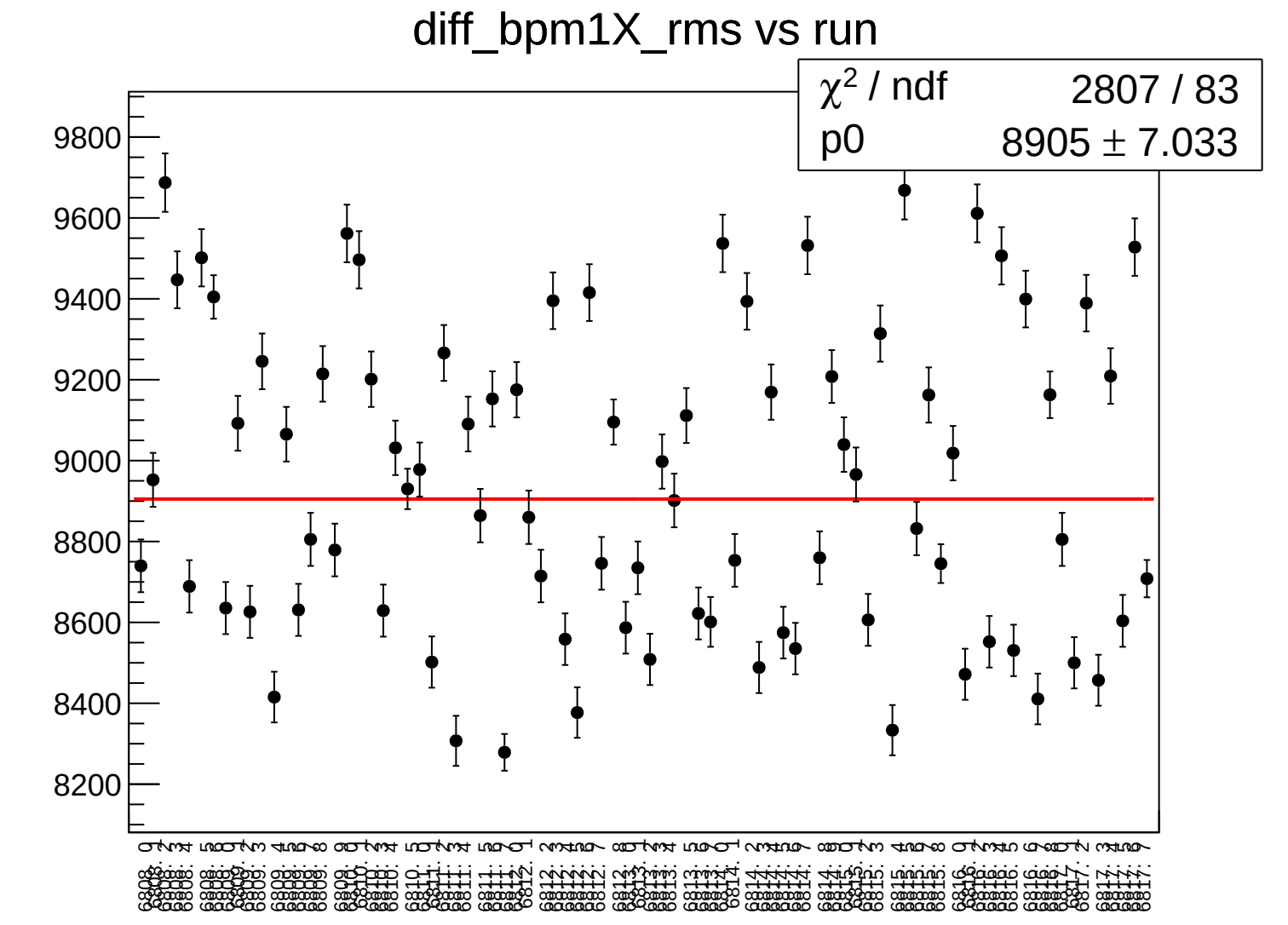

diff_bpm4ecY_mean vs run
χ² / ndf 68.46 / 83
p0 2.686 ± 6.254
pull
Entries 84
Mean 193.9
Std Dev 149.3

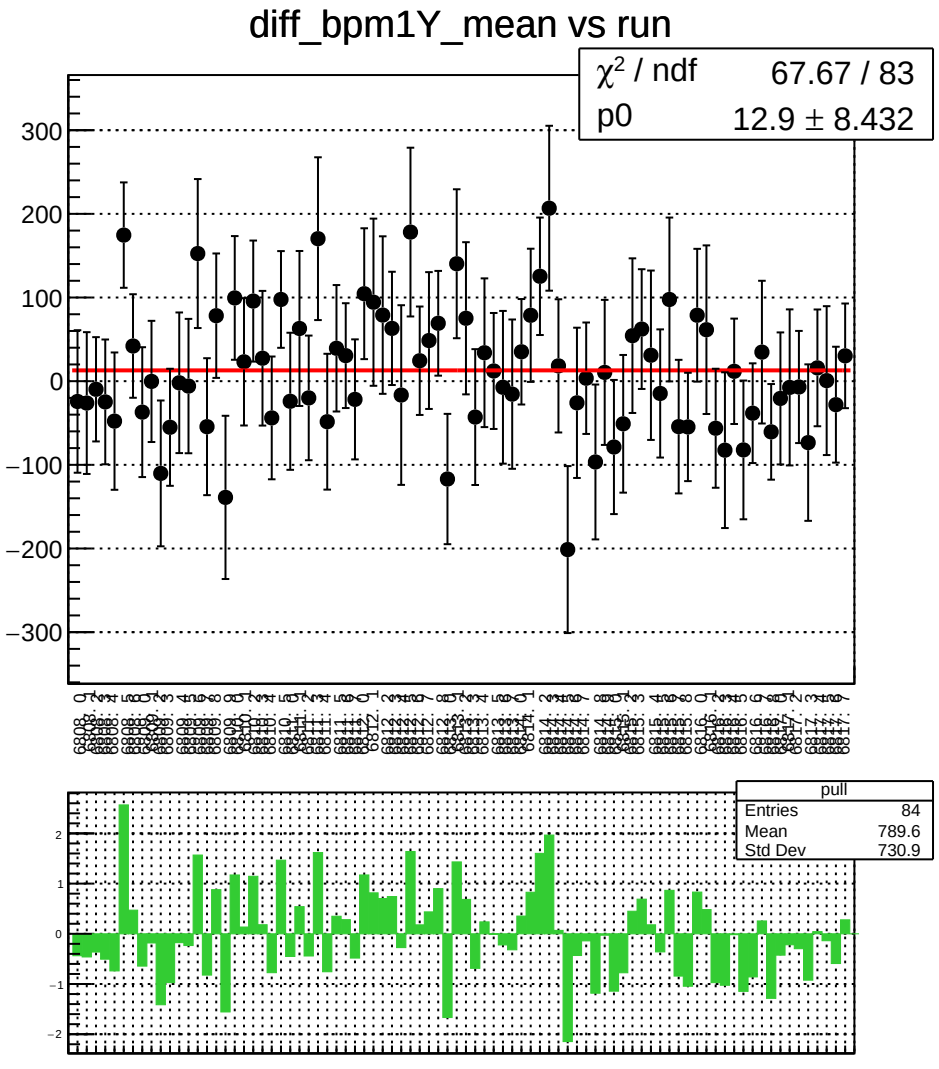

pull1D
Entries 84
Mean −0.008001
Std Dev 0.9028

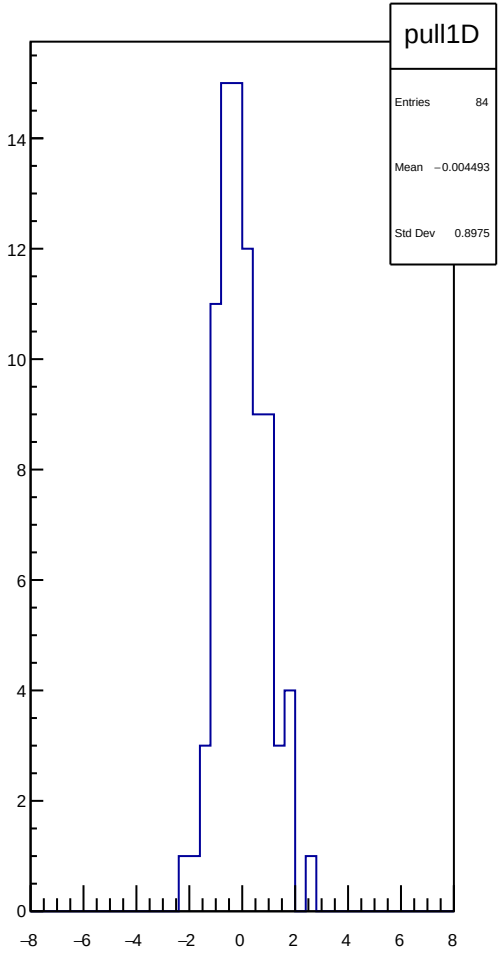

diff_bpm4ecY_rms vs run
χ² / ndf 2888 / 83
p0 5599 ± 4.422
6200
6000
5800
5600
5400
5200
5000

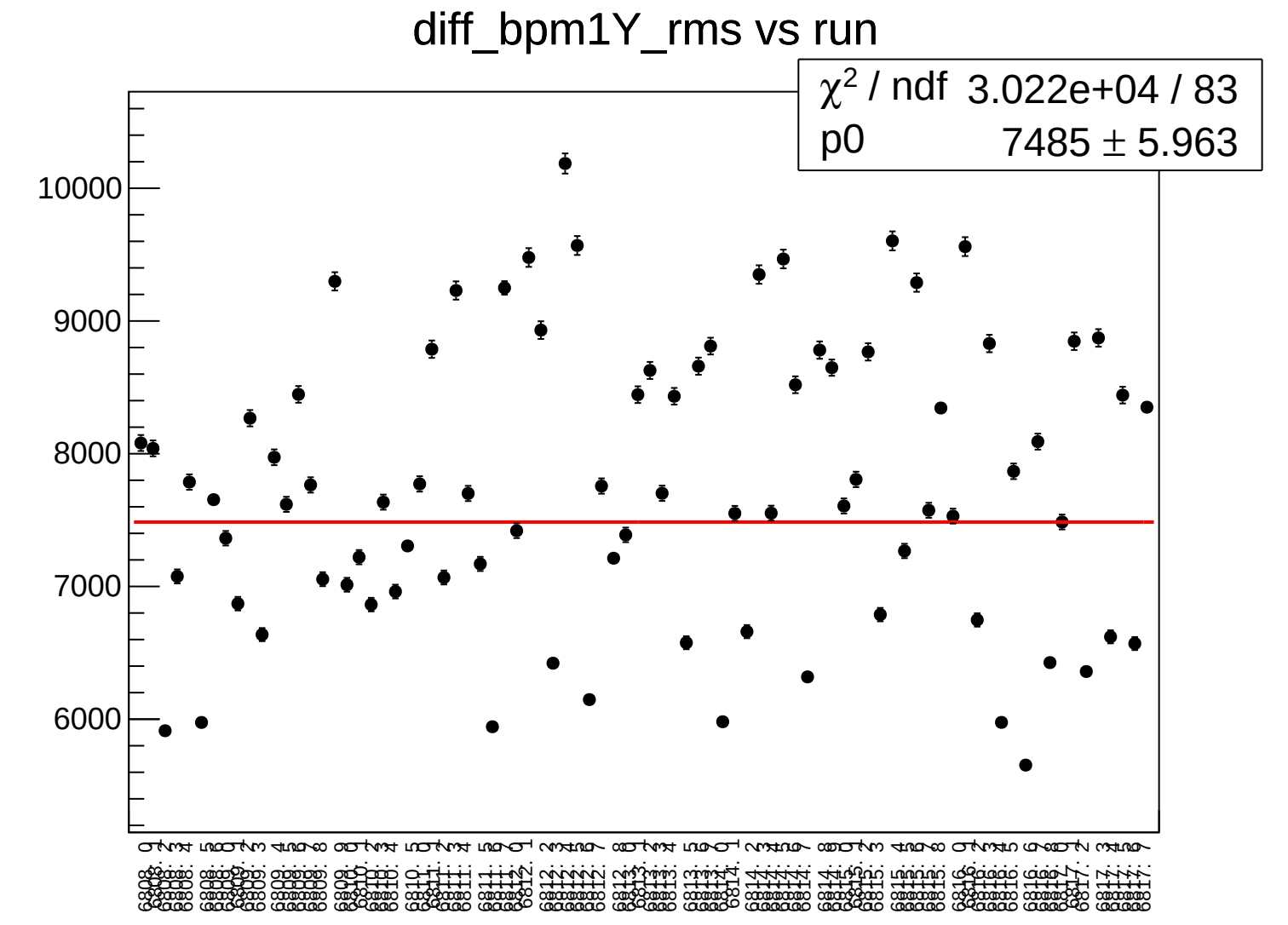

diff_bpm1X_mean vs run
χ² / ndf 128.1 / 83
p0 −5.02 ± 9.946
pull
Entries 84
Mean −444.2
Std Dev 506.9

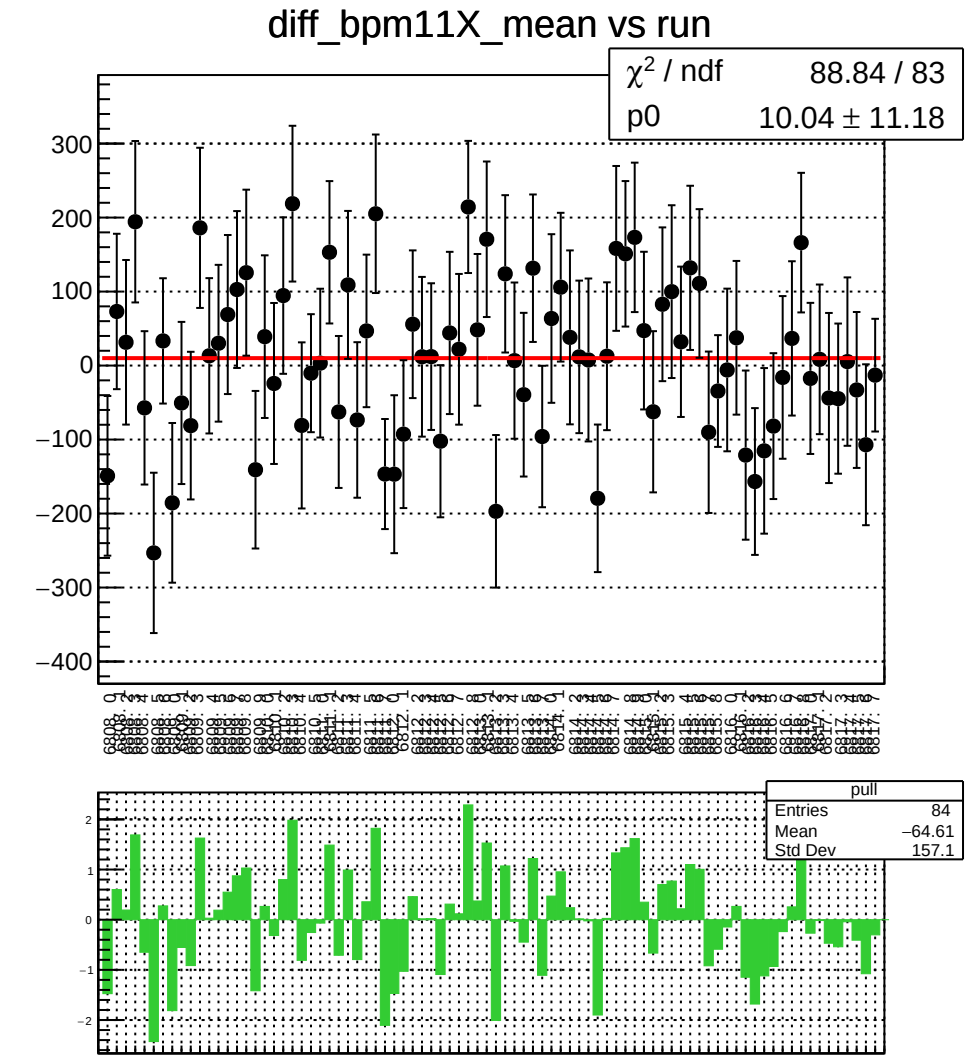

pull1D
Entries 84
Mean −0.003952
Std Dev 1.235

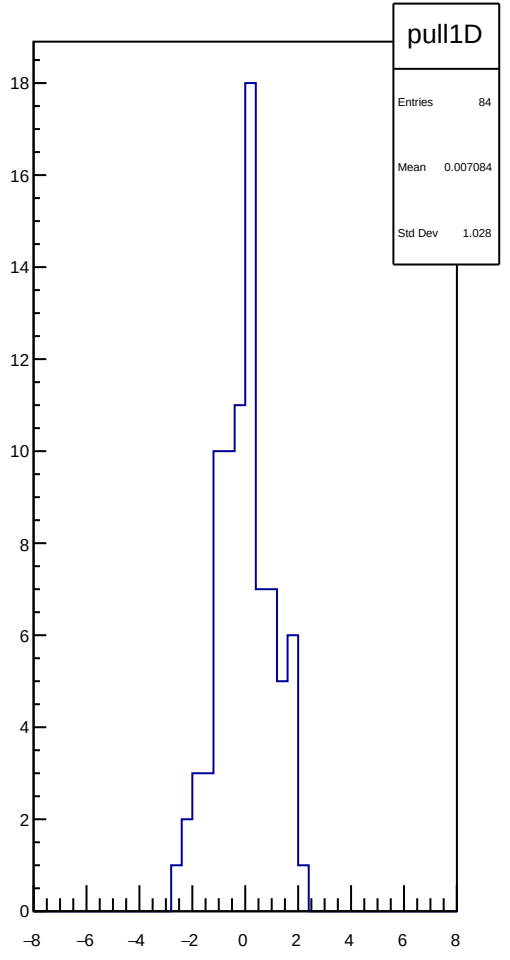

diff_bpm1X_rms vs run
χ^2 / ndf 2807 / 83
p0 8905 ± 7.033
9800
9600
9400
9200
9000
8800
8600
8400
8200

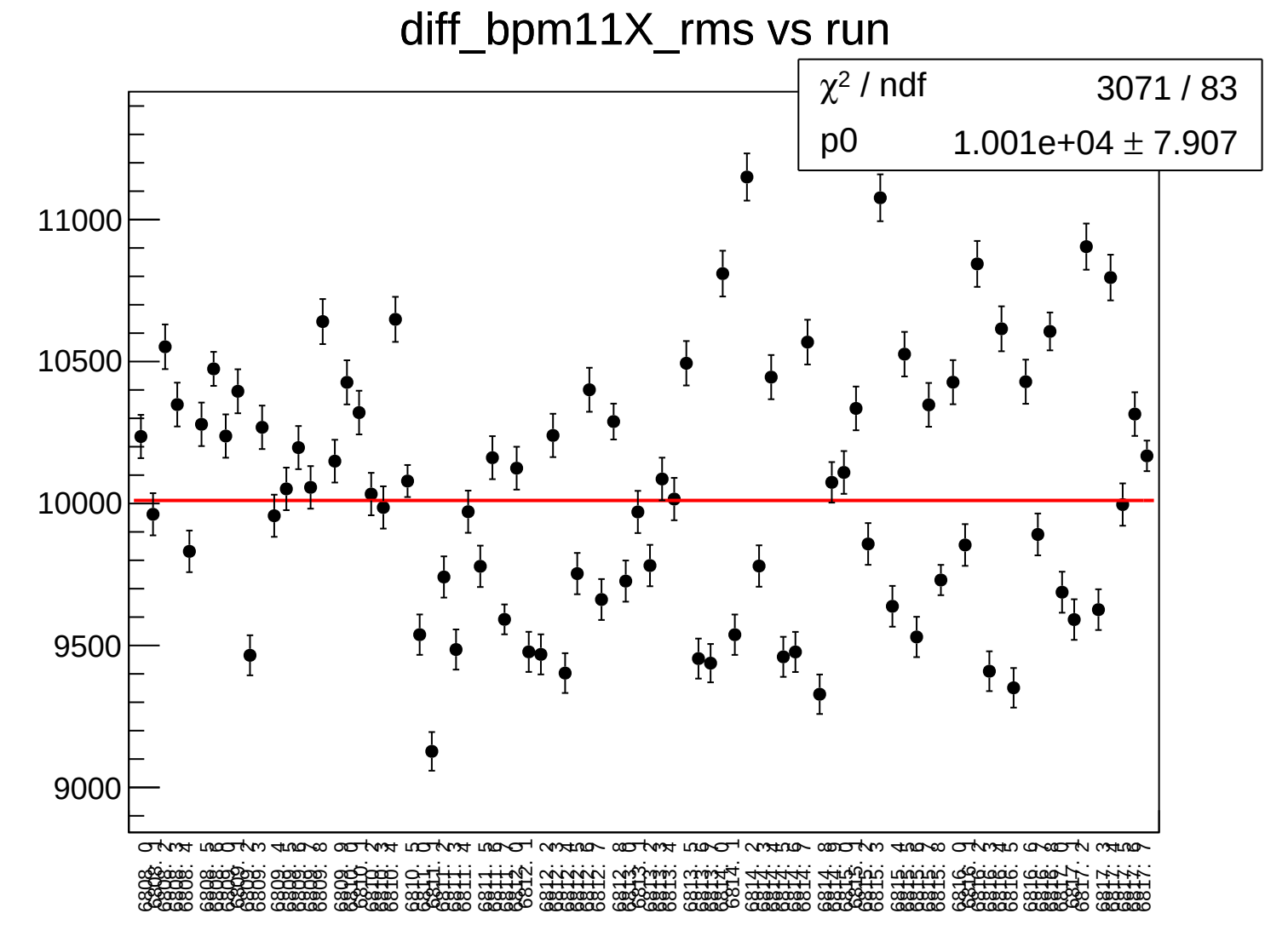

diff_bpm1Y_mean vs run
χ² / ndf 67.67 / 83
p0 12.9 ± 8.432
300
200
100
0
−100
−200
−300
pull
Entries 84
Mean 789.6
Std Dev 730.9
2
1
0
−1
−2

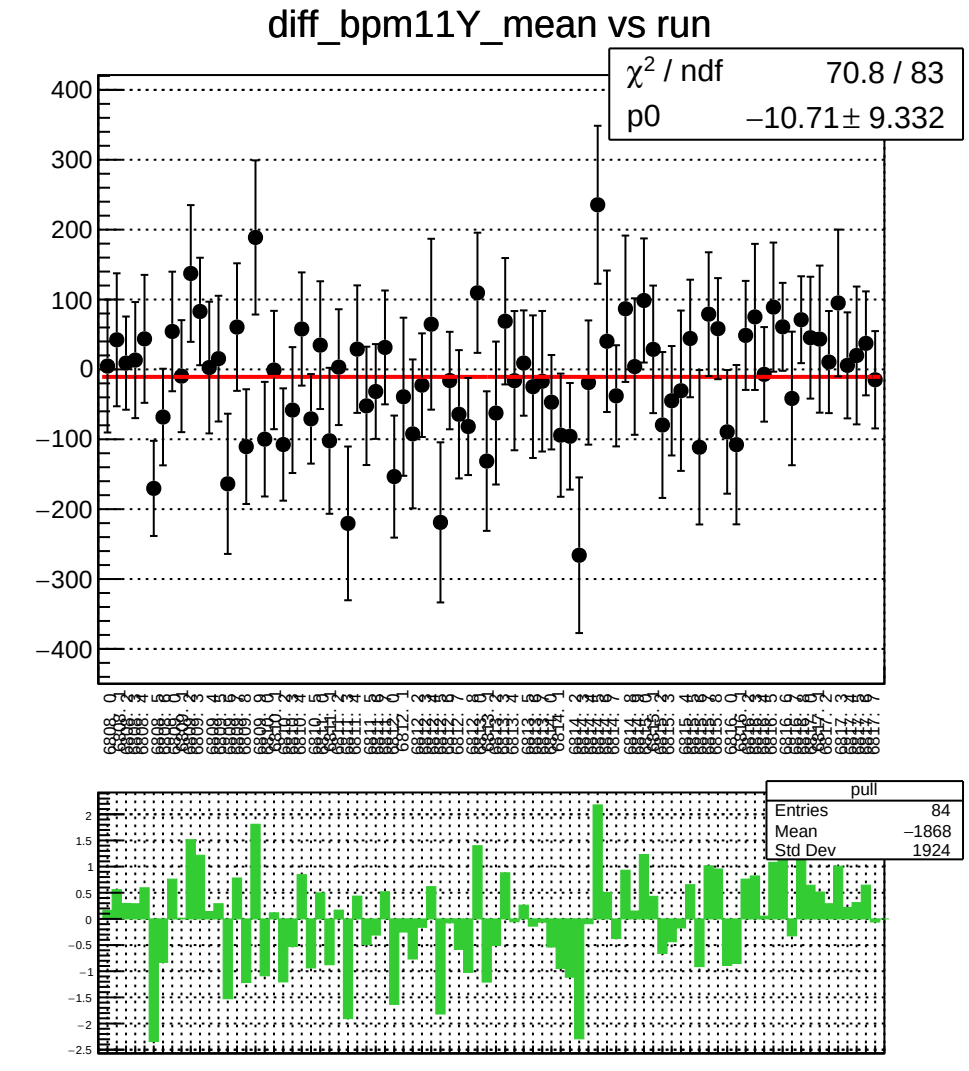

pull1D
Entries 84
Mean −0.004493
Std Dev 0.8975
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

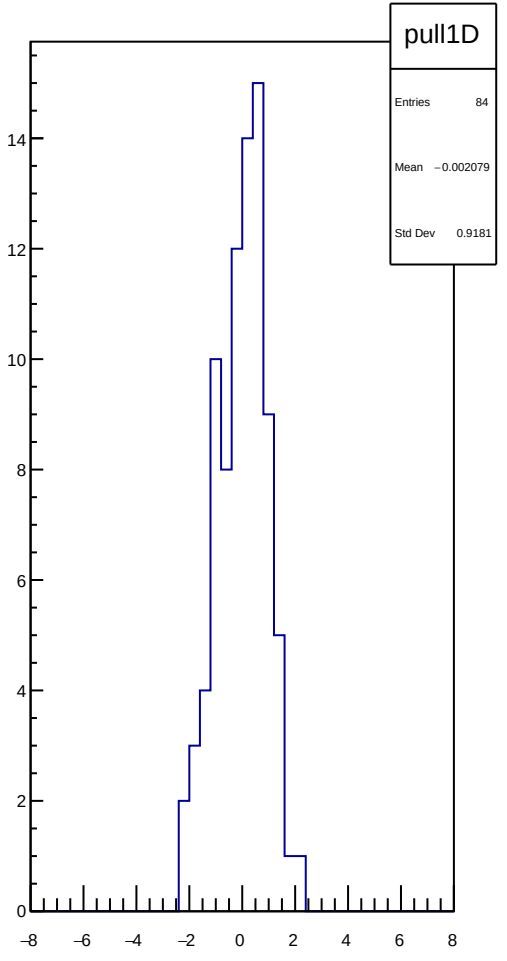

diff_bpm1Y_rms vs run
χ^2 / ndf 3.022e+04 / 83
p0 7485 ± 5.963
10000
9000
8000
7000
6000

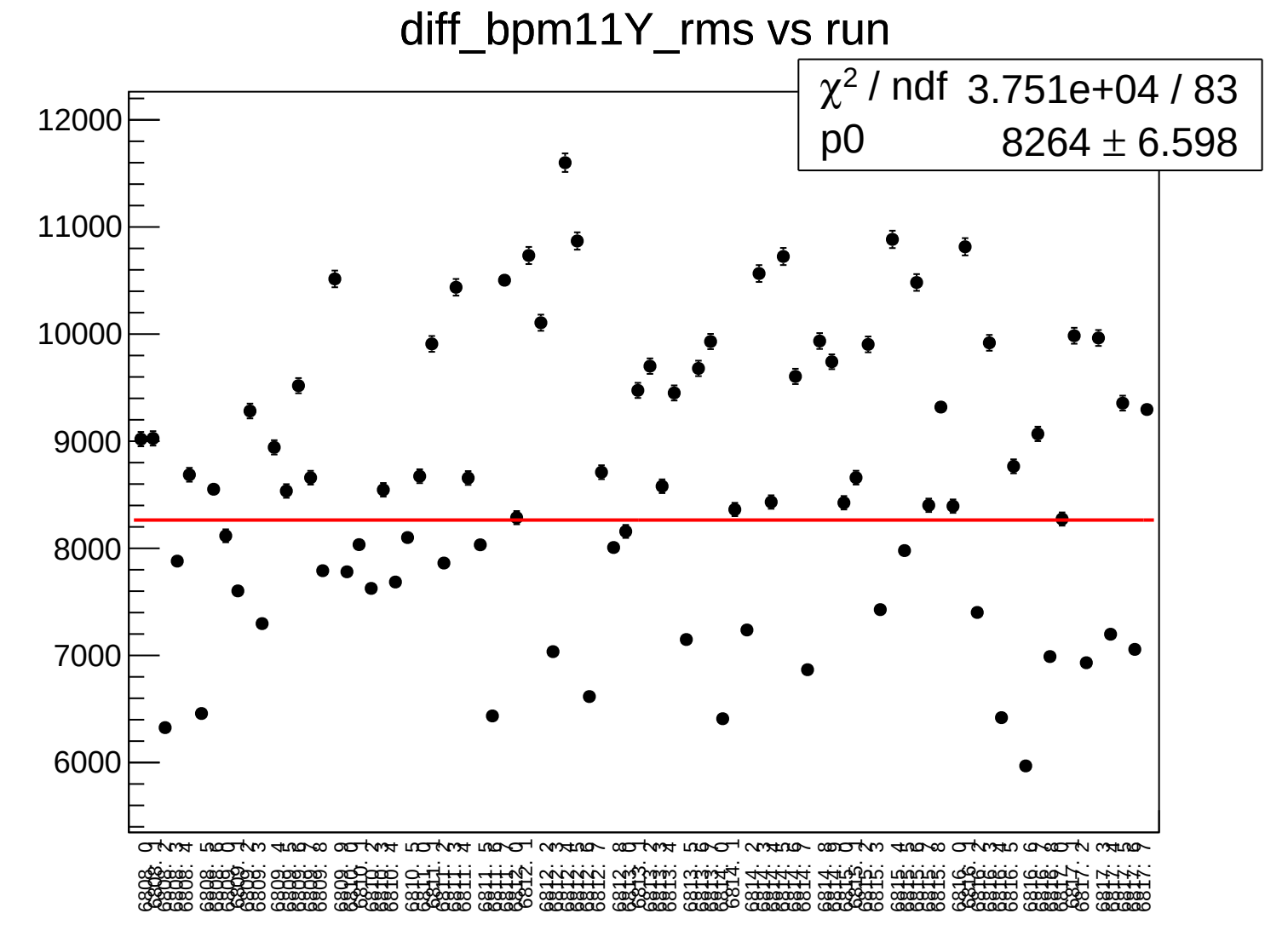

diff_bpm11X_mean vs run
χ² / ndf 88.84 / 83
p0 10.04 ± 11.18
pull
Entries 84
Mean −64.61
Std Dev 157.1

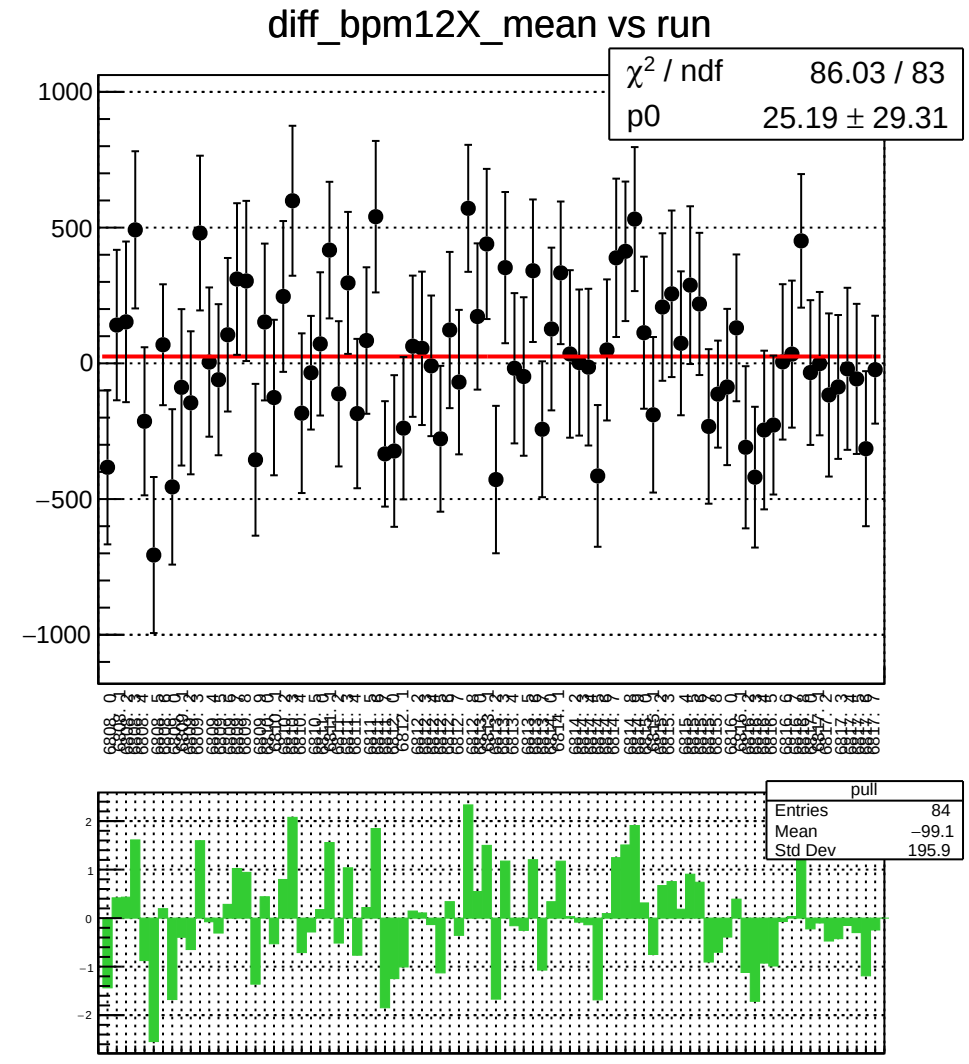

pull1D
Entries 84
Mean 0.007084
Std Dev 1.028

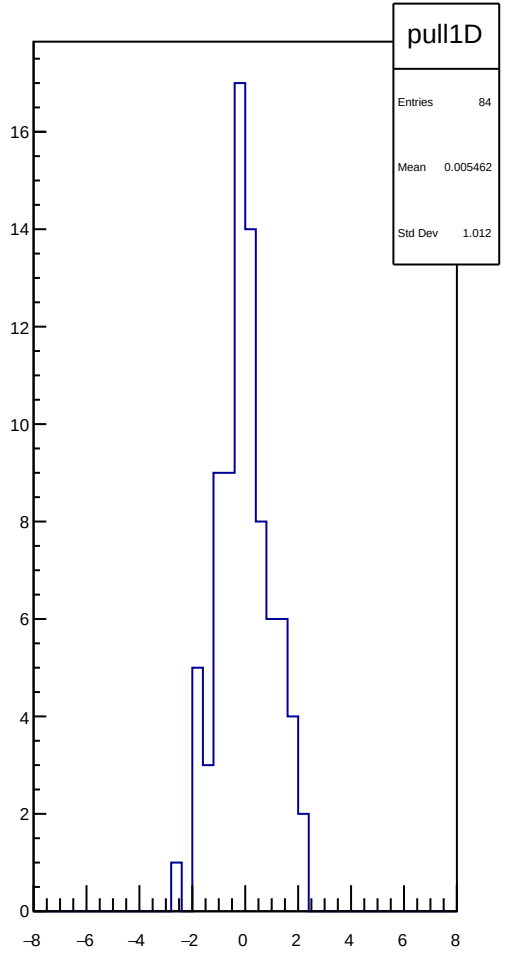

diff_bpm11X_rms vs run
χ² / ndf 3071 / 83
p0 1.001e+04 ± 7.907
11000
10500
10000
9500
9000

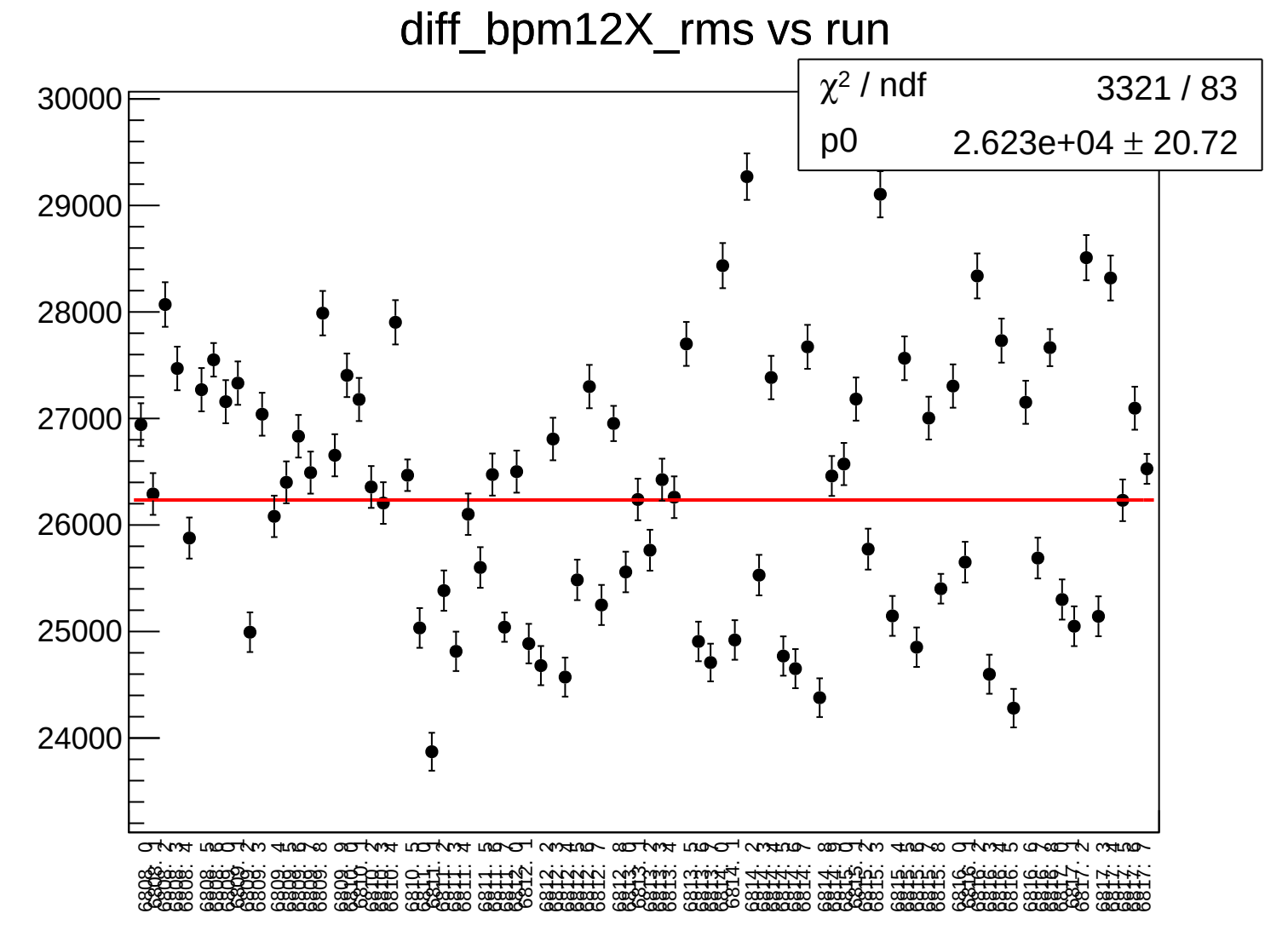

diff_bpm11Y_mean vs run
χ² / ndf 70.8 / 83
p0 −10.71± 9.332
pull
Entries 84
Mean −1868
Std Dev 1924

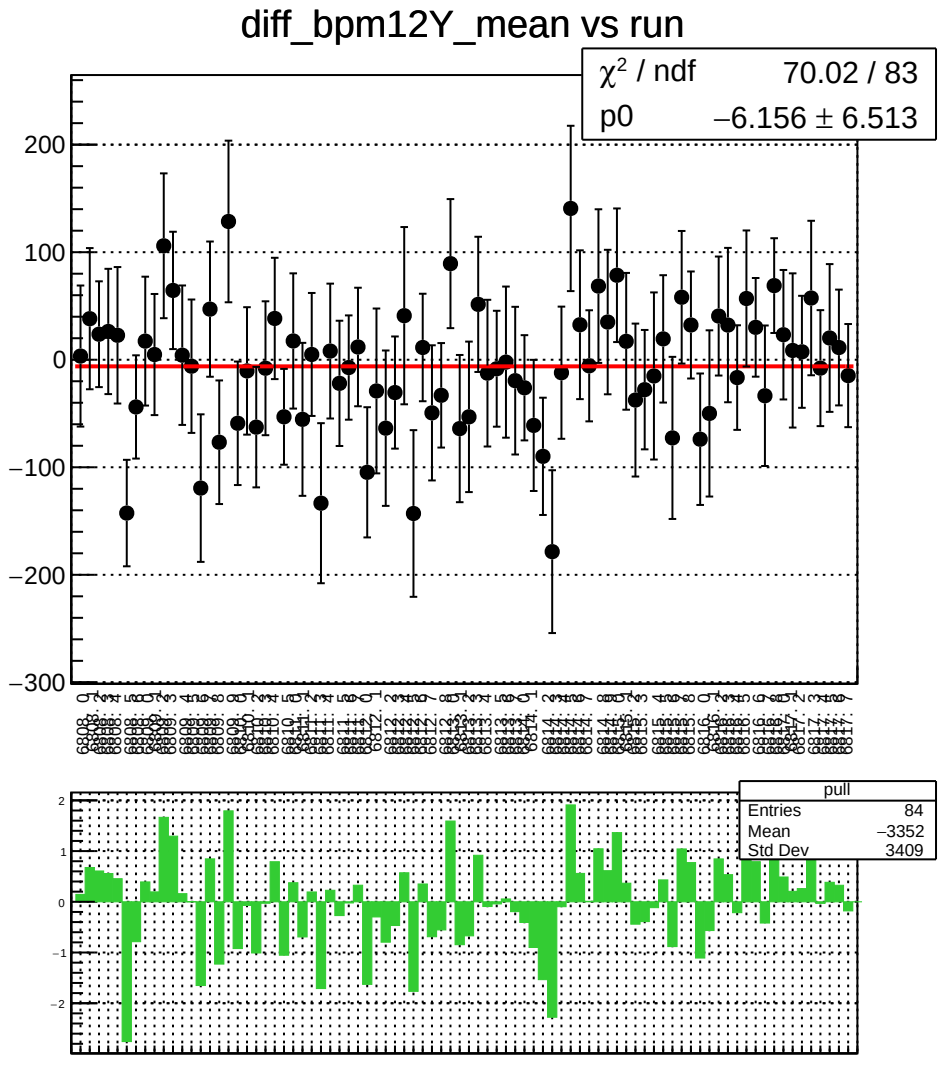

pull1D
Entries 84
Mean −0.002079
Std Dev 0.9181

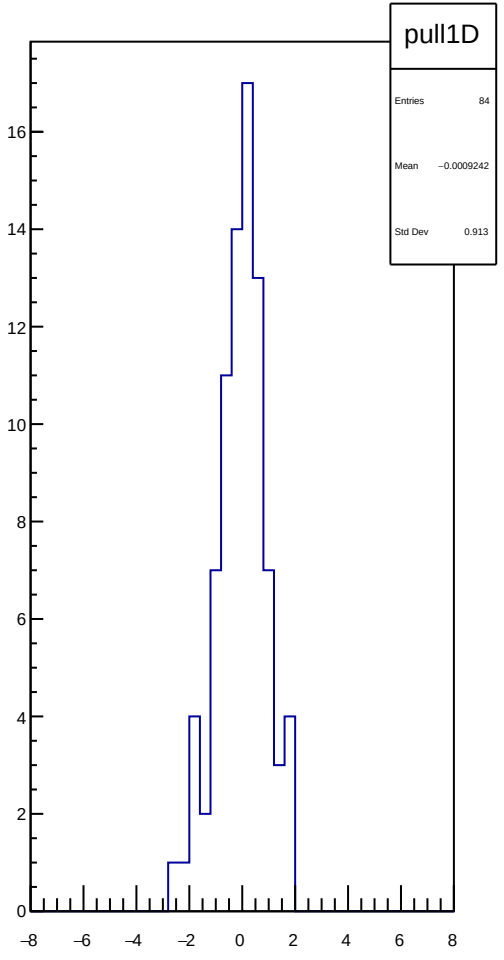

diff_bpm11Y_rms vs run
χ² / ndf 3.751e+04 / 83
p0 8264 ± 6.598
12000
11000
10000
9000
8000
7000
6000

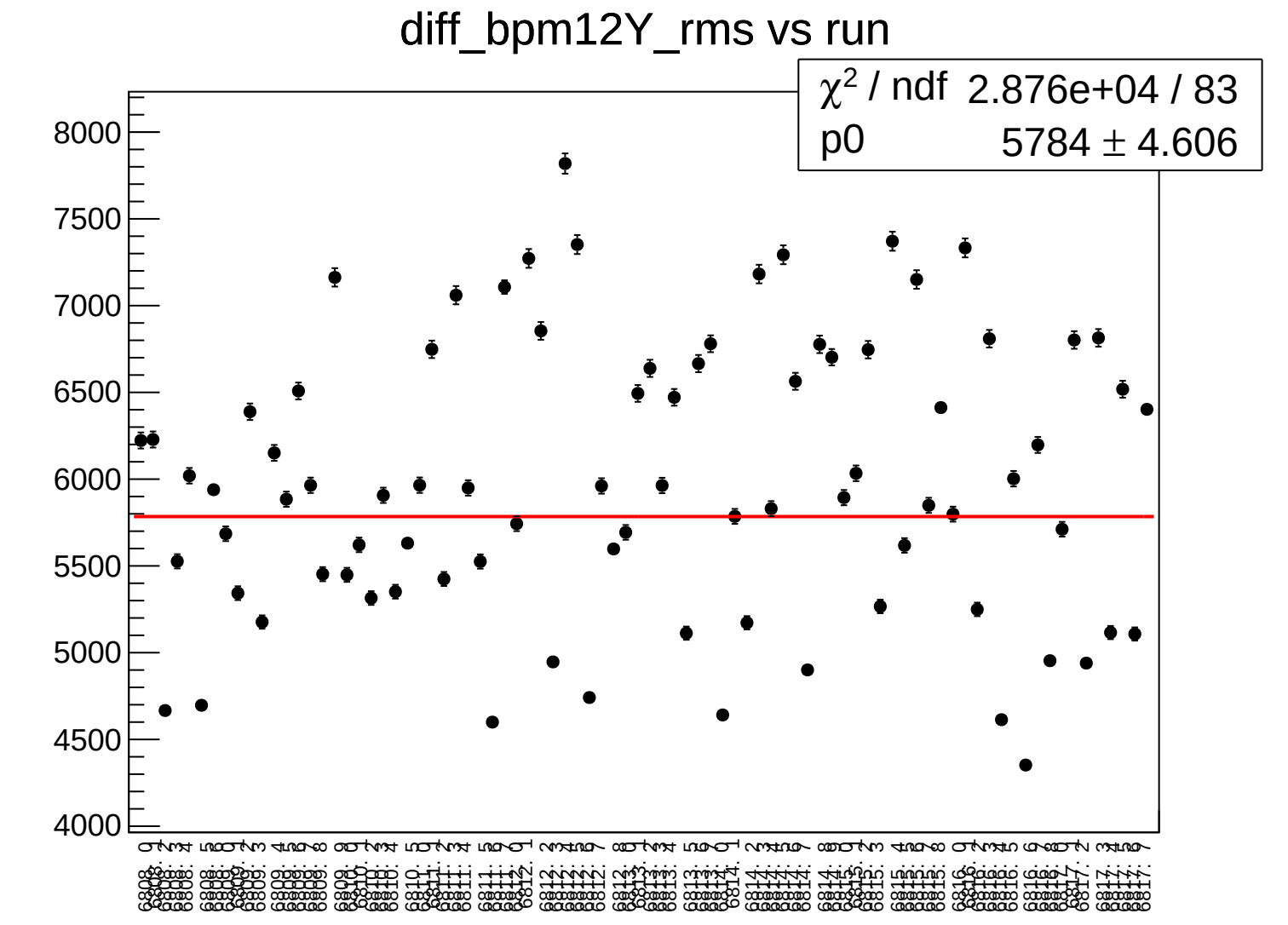

diff_bpm12X_mean vs run
χ² / ndf 86.03 / 83
p0 25.19 ± 29.31
1000
500
0
−500
−1000
pull
Entries 84
Mean −99.1
Std Dev 195.9
2
1
0
−1
−2

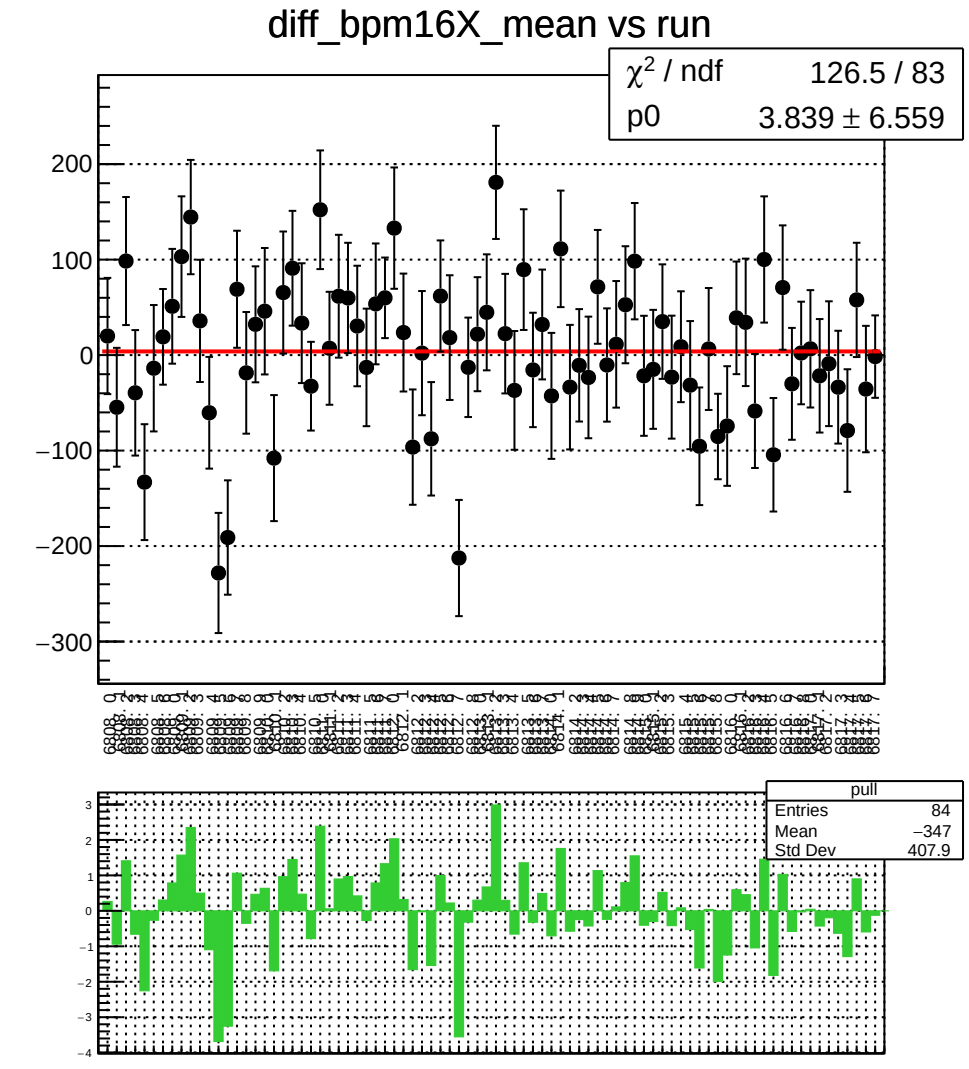

pull1D
Entries 84
Mean 0.005462
Std Dev 1.012
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

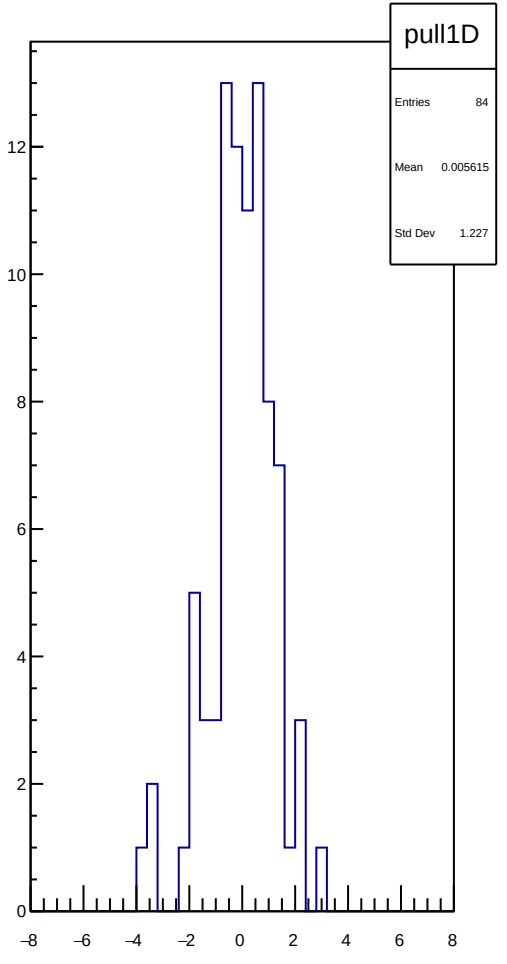

diff_bpm12X_rms vs run
χ² / ndf 3321 / 83
p0 2.623e+04 ± 20.72
30000
29000
28000
27000
26000
25000
24000

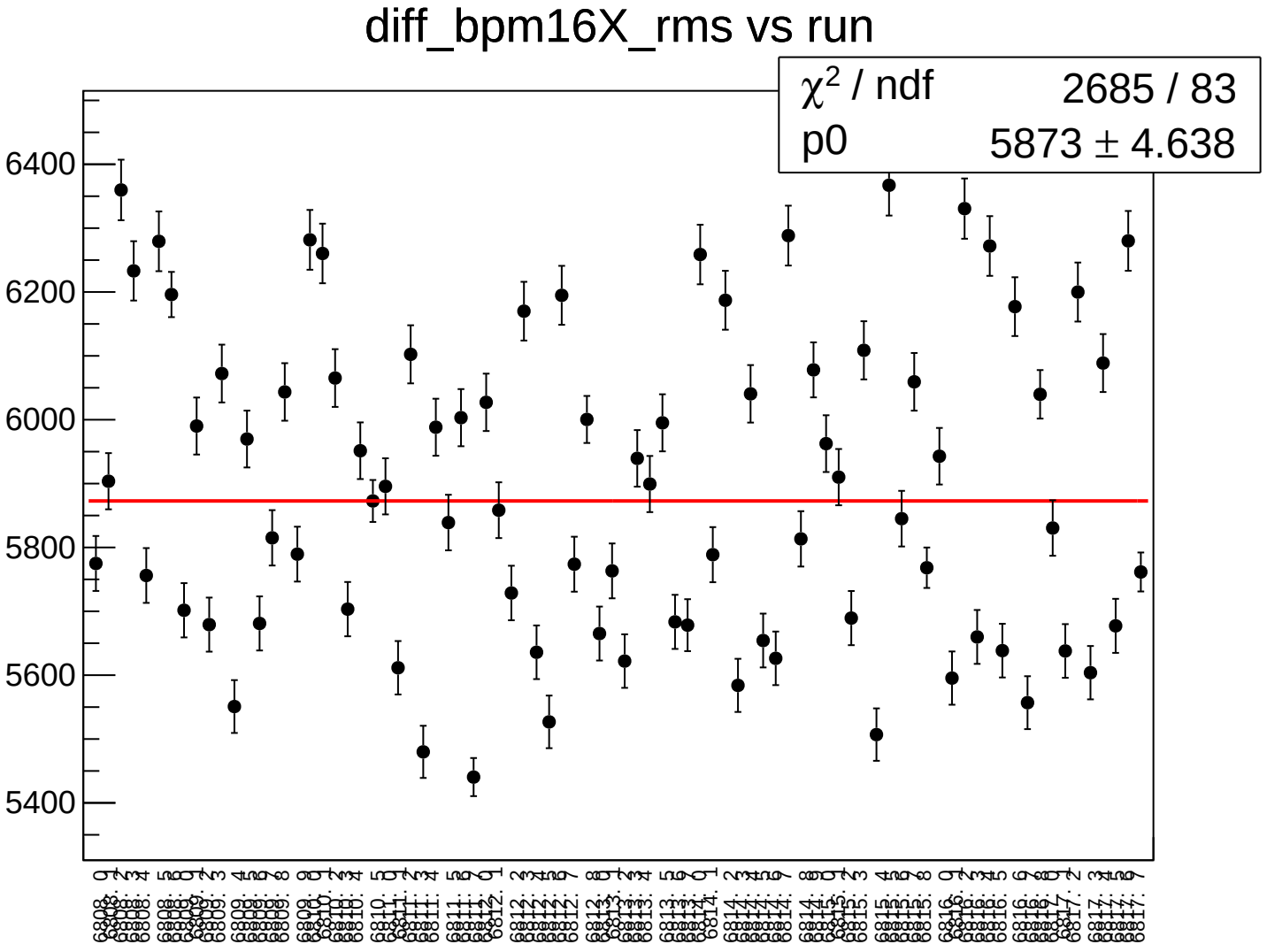

diff_bpm12Y_mean vs run
χ² / ndf 70.02 / 83
p0 −6.156 ± 6.513
pull
Entries 84
Mean −3352
Std Dev 3409

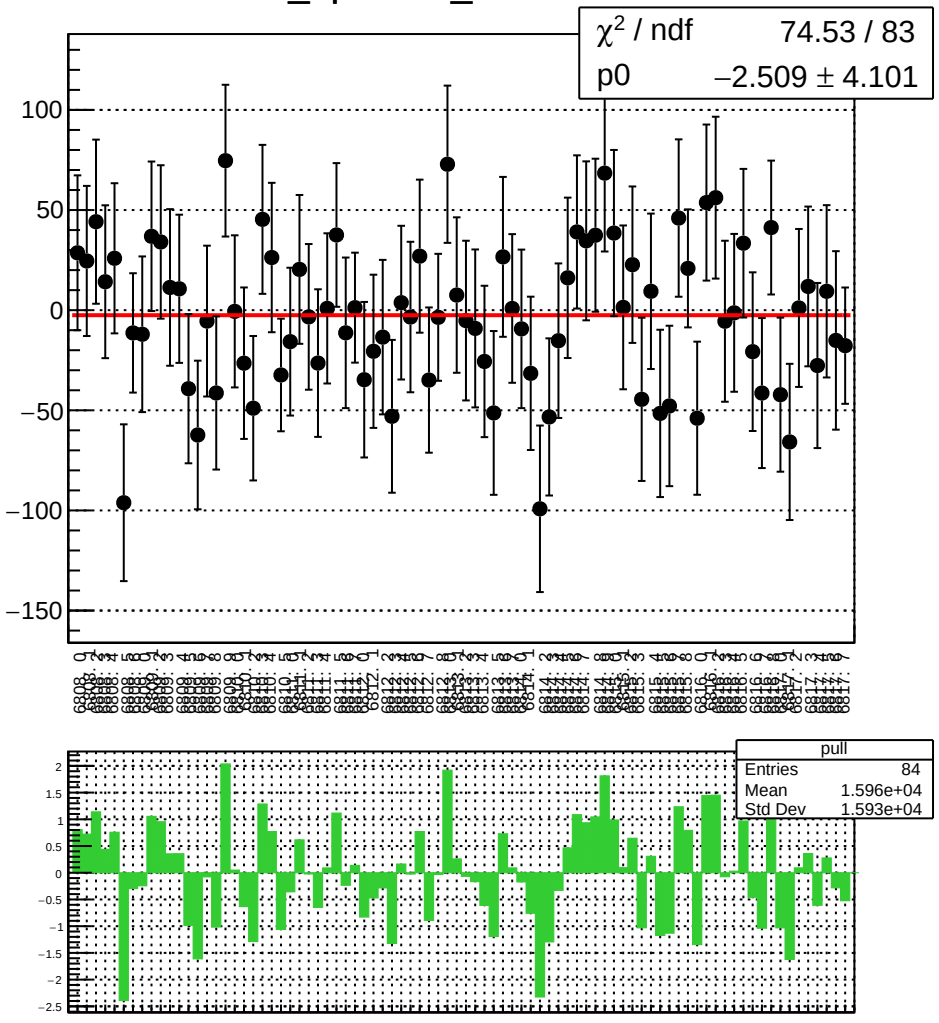

pull1D
Entries 84
Mean −0.0009242
Std Dev 0.913

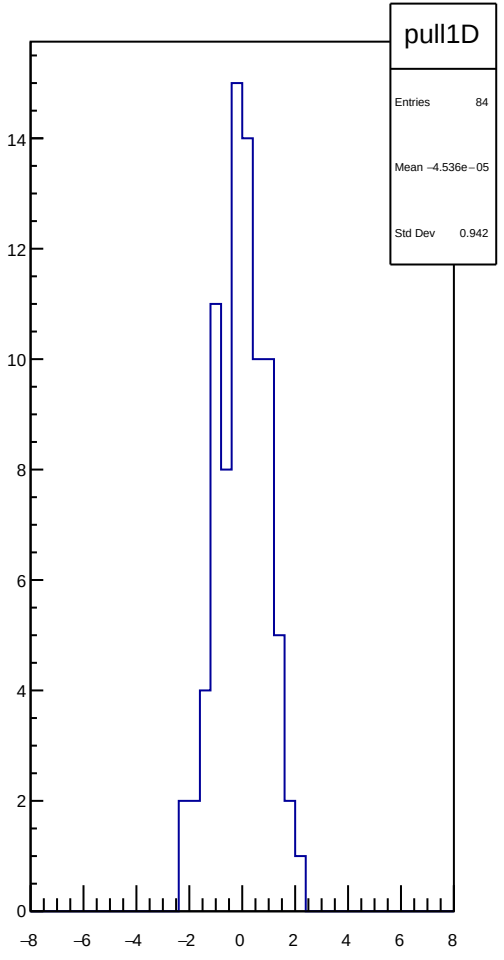

diff_bpm12Y_rms vs run
χ² / ndf 2.876e+04 / 83
p0 5784 ± 4.606
8000
7500
7000
6500
6000
5500
5000
4500
4000

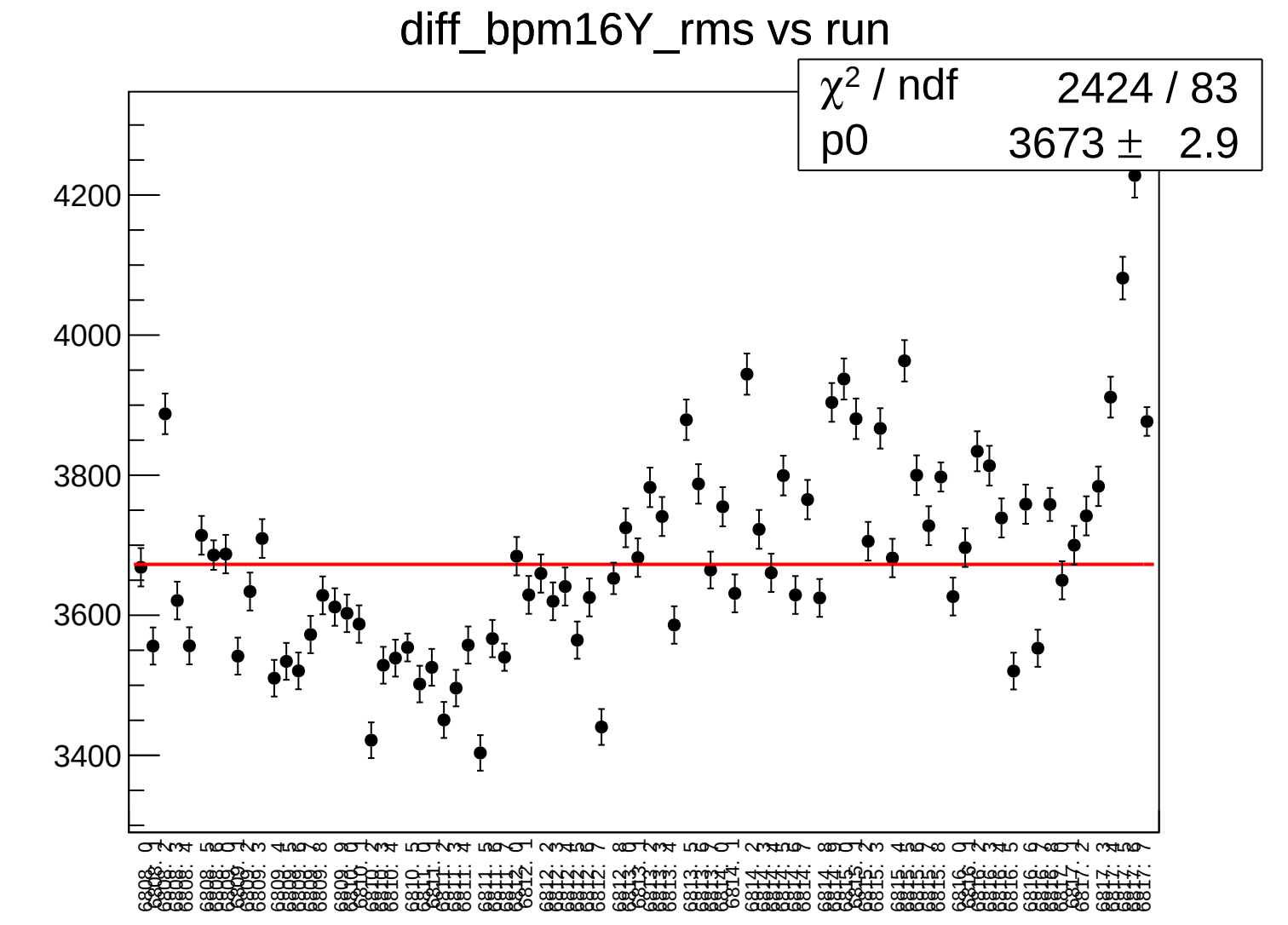

diff_bpm16X_mean vs run
χ² / ndf 126.5 / 83
p0 3.839 ± 6.559
pull
Entries 84
Mean −347
Std Dev 407.9

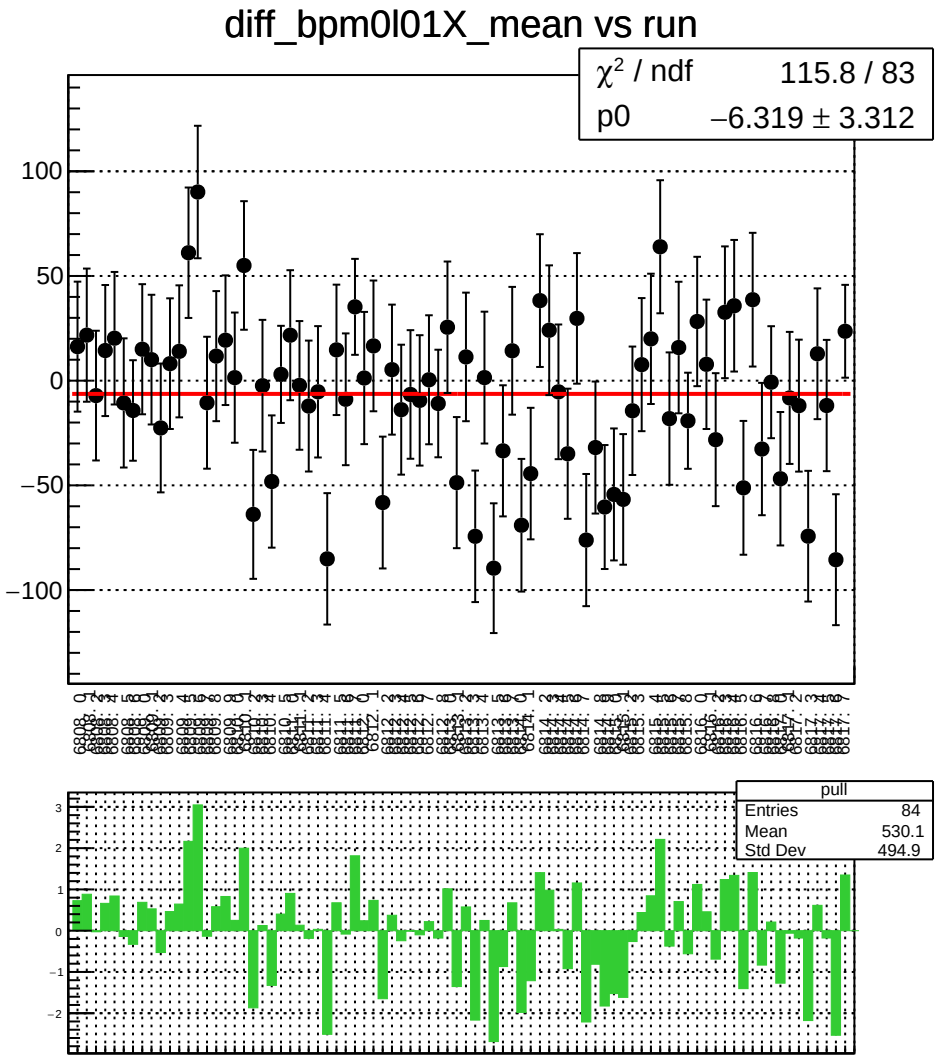

pull1D
Entries 84
Mean 0.005615
Std Dev 1.227

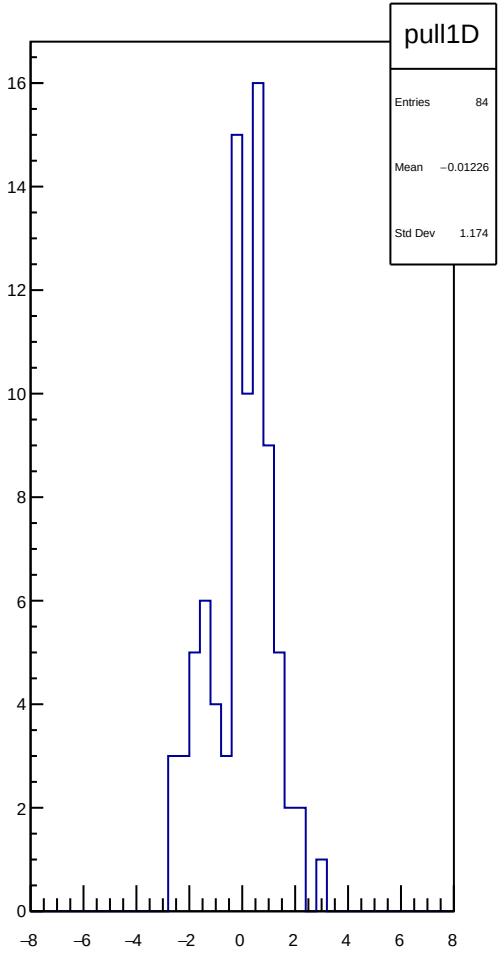

diff_bpm16X_rms vs run
χ² / ndf 2685 / 83
p0 5873 ± 4.638
6400
6200
6000
5800
5600
5400

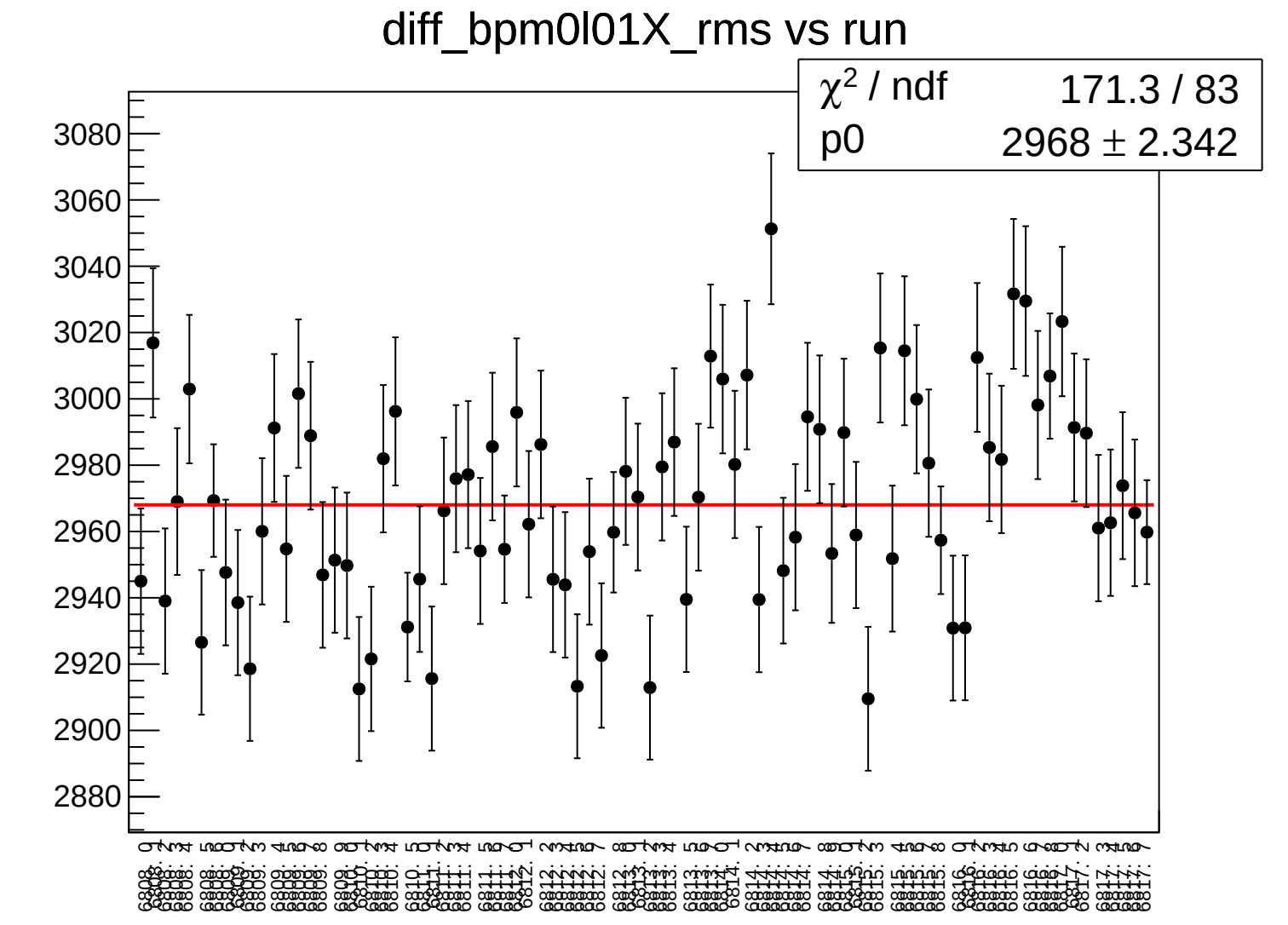

diff_bpm16Y_mean vs run
χ² / ndf 74.53 / 83
p0 −2.509 ± 4.101
pull
Entries 84
Mean 1.596e+04
Std Dev 1.593e+04

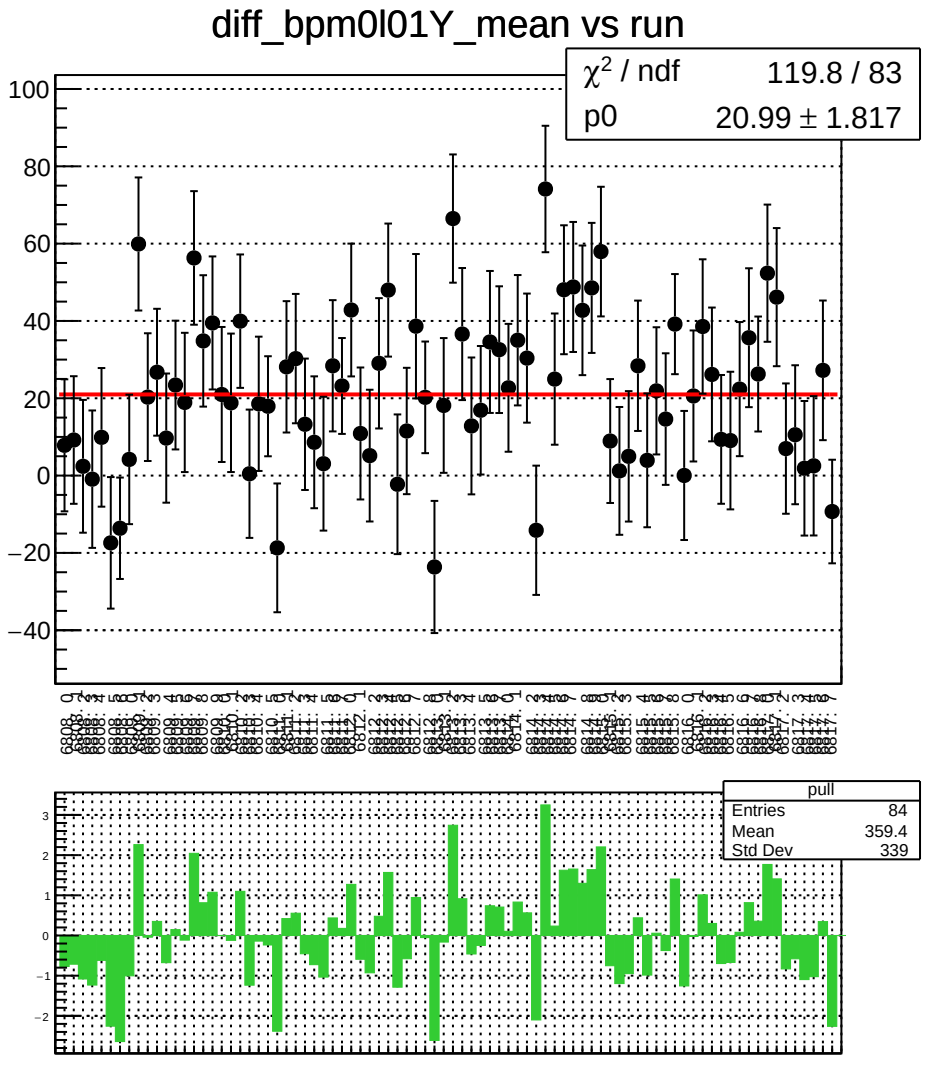

pull1D
Entries 84
Mean −4.536e−05
Std Dev 0.942

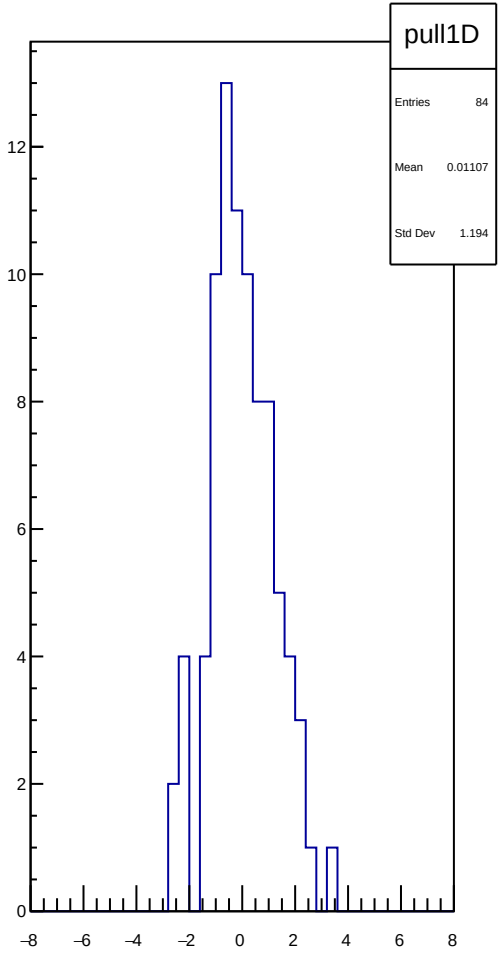

diff_bpm16Y_rms vs run
χ² / ndf 2424 / 83
p0 3673 ± 2.9
4200
4000
3800
3600
3400

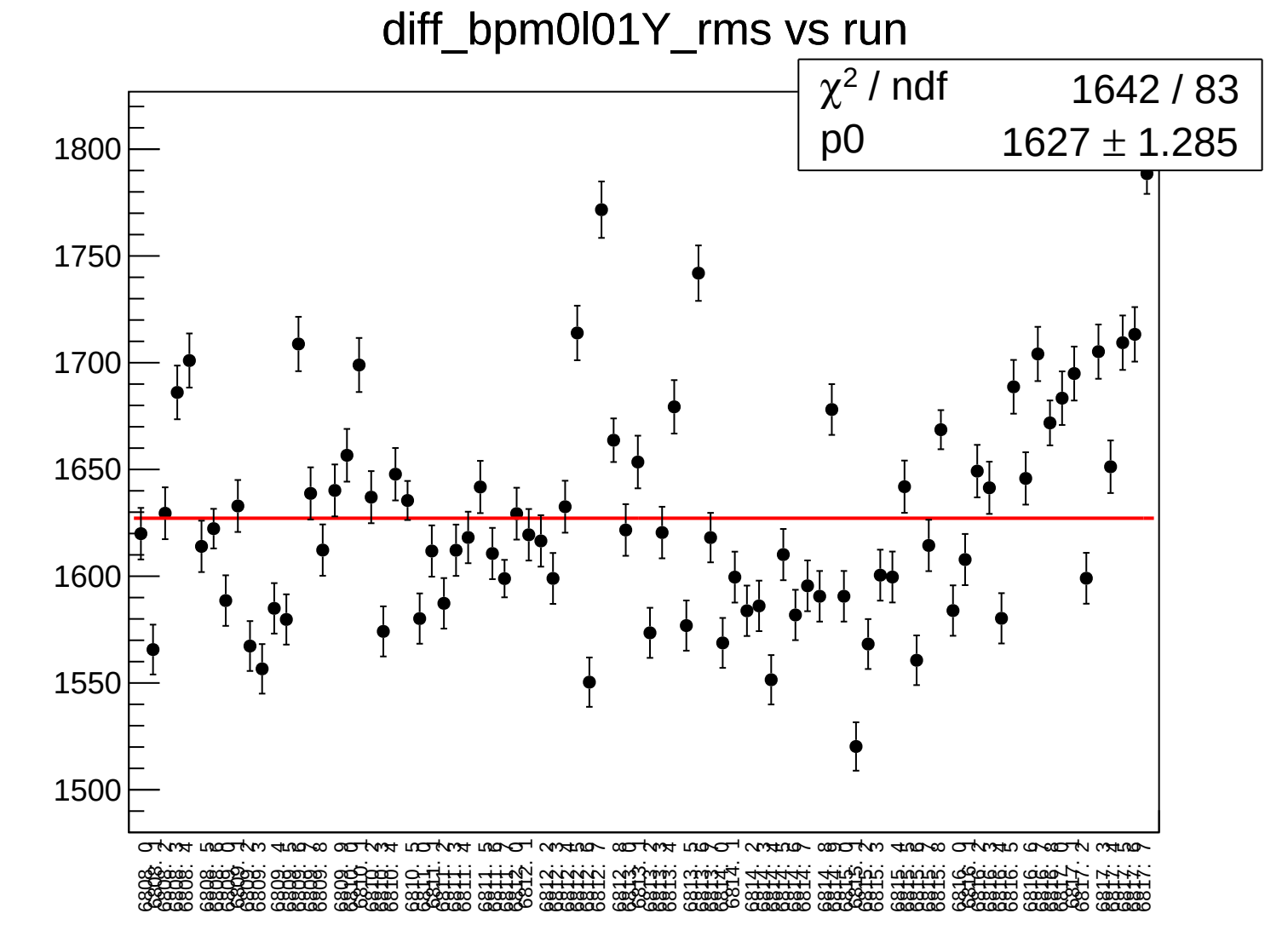

diff_bpm0l01X_mean vs run
χ² / ndf 115.8 / 83
p0 −6.319 ± 3.312
100
50
0
−50
−100
pull
Entries 84
Mean 530.1
Std Dev 494.9
3
2
1
0
−1
−2

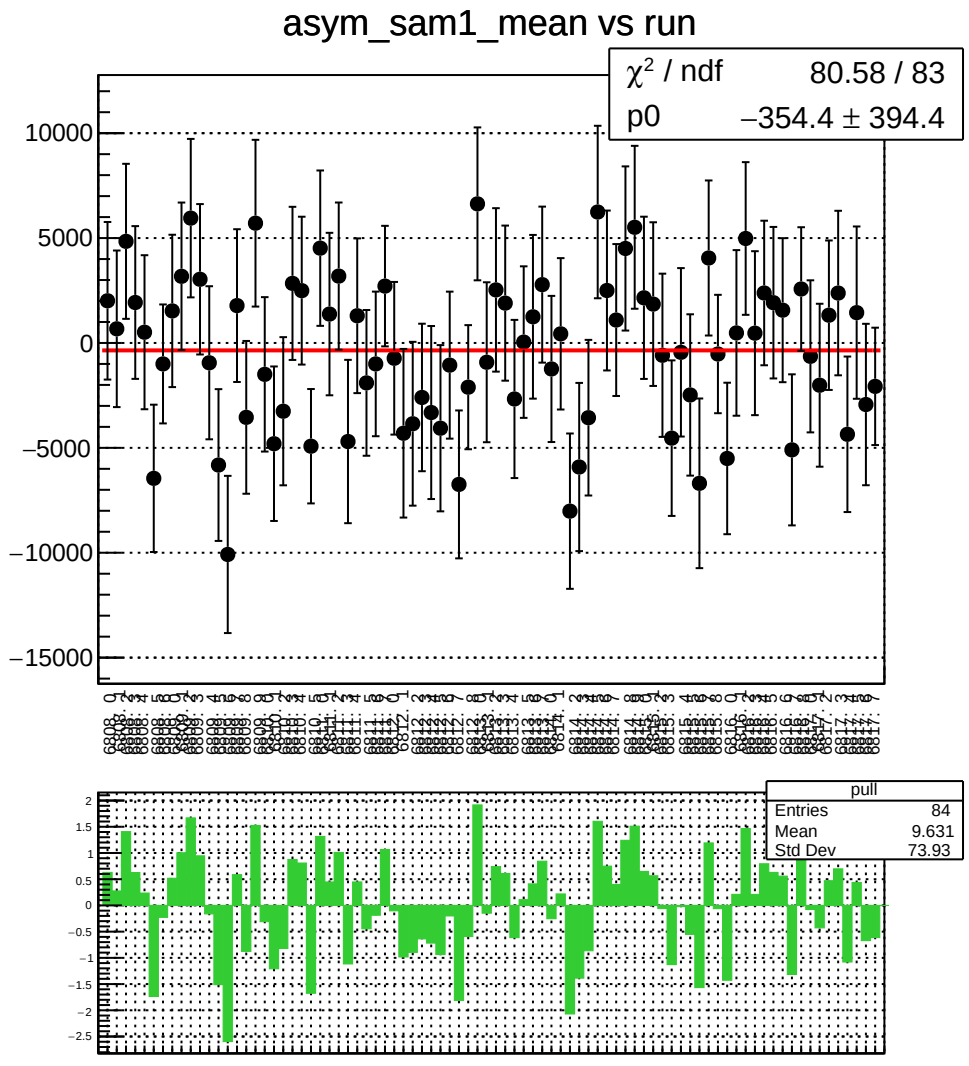

pull1D
Entries 84
Mean −0.01226
Std Dev 1.174
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

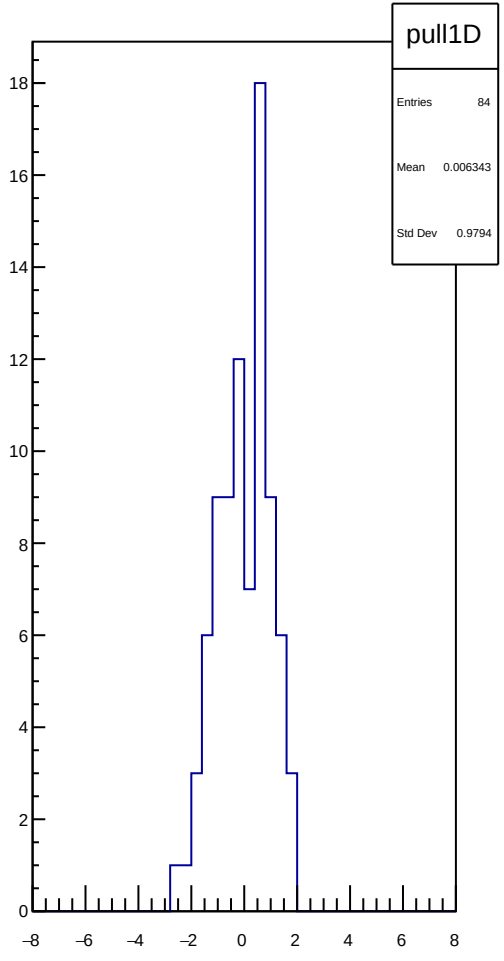

diff_bpm0l01X_rms vs run
χ^2 / ndf 171.3 / 83
p0 2968 ± 2.342
3080
3060
3040
3020
3000
2980
2960
2940
2920
2900
2880

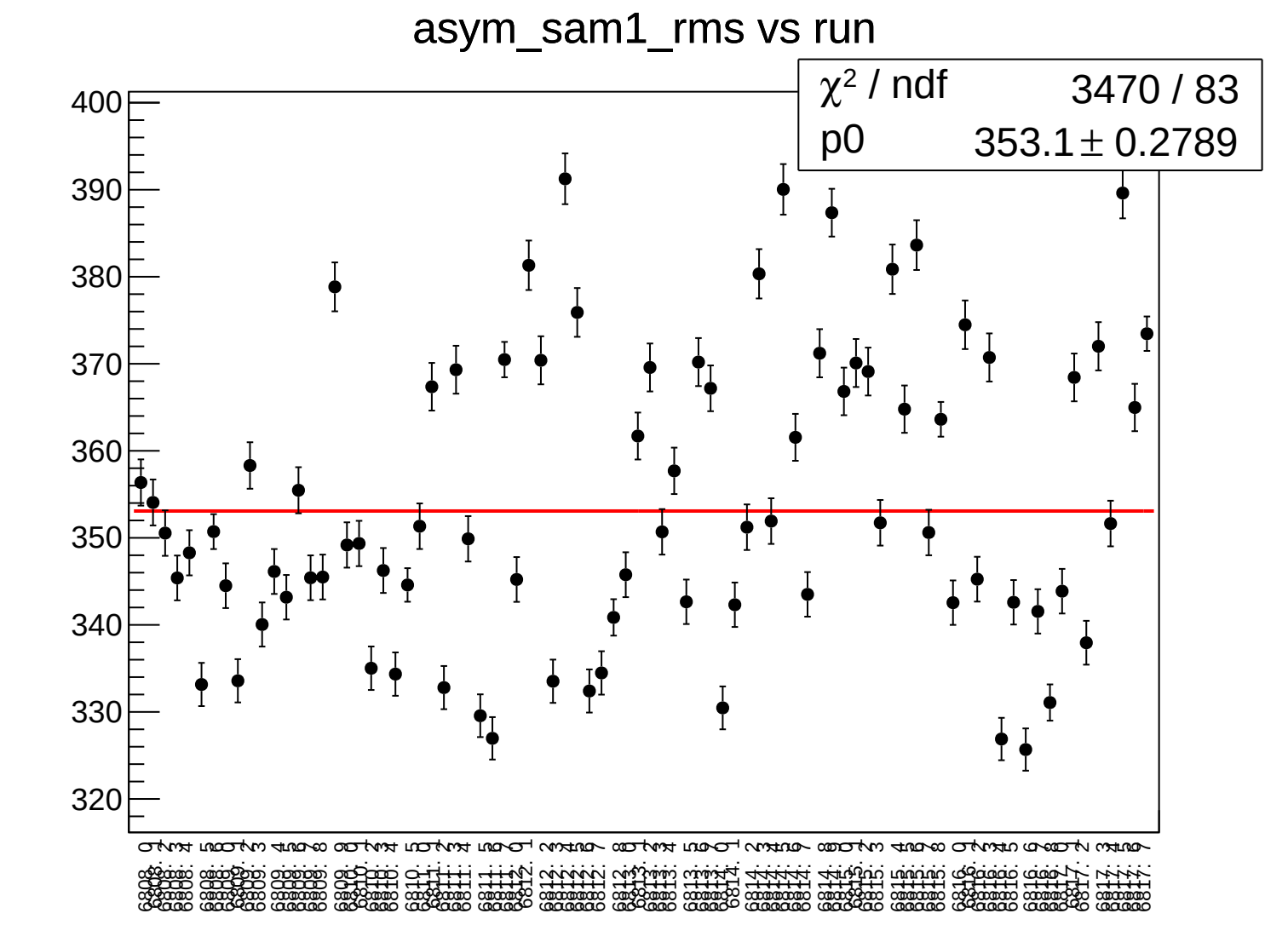

diff_bpm0l01Y_mean vs run
χ^2 / ndf 119.8 / 83
p0 20.99 ± 1.817
pull
Entries 84
Mean 359.4
Std Dev 339

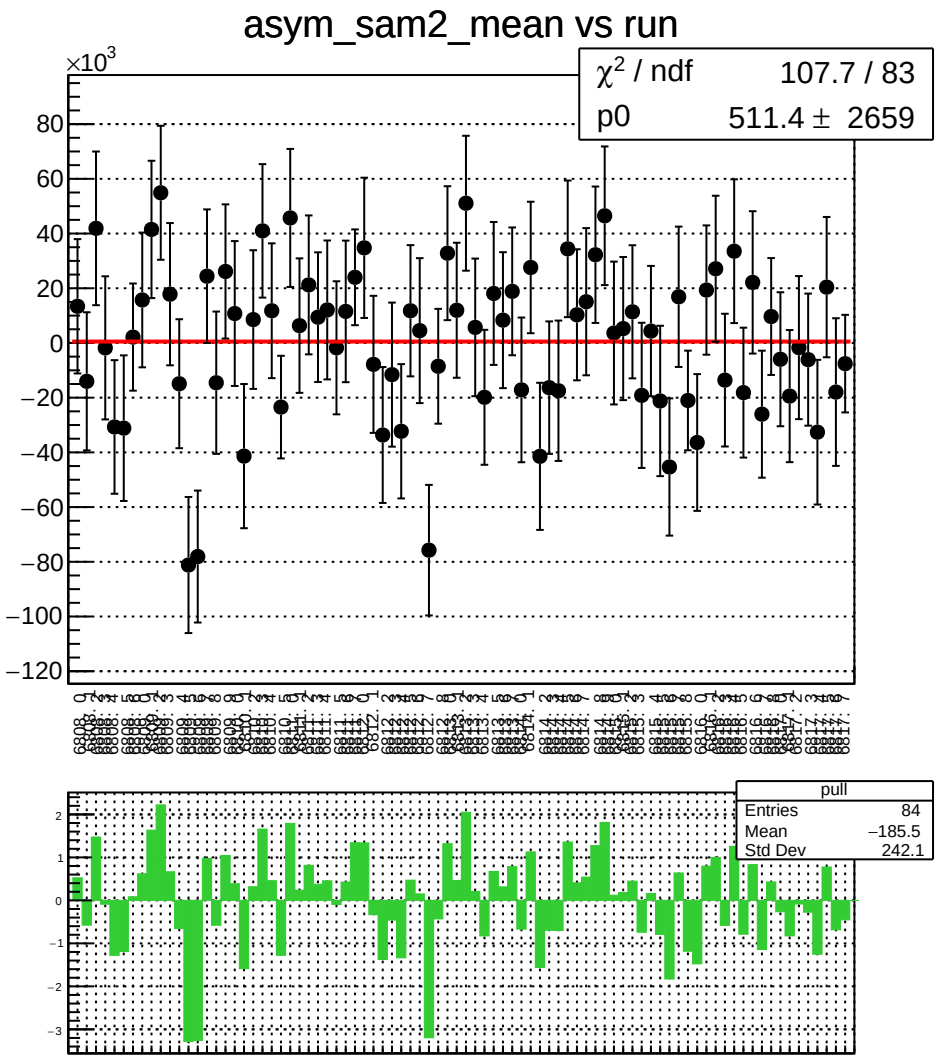

pull1D
Entries 84
Mean 0.01107
Std Dev 1.194

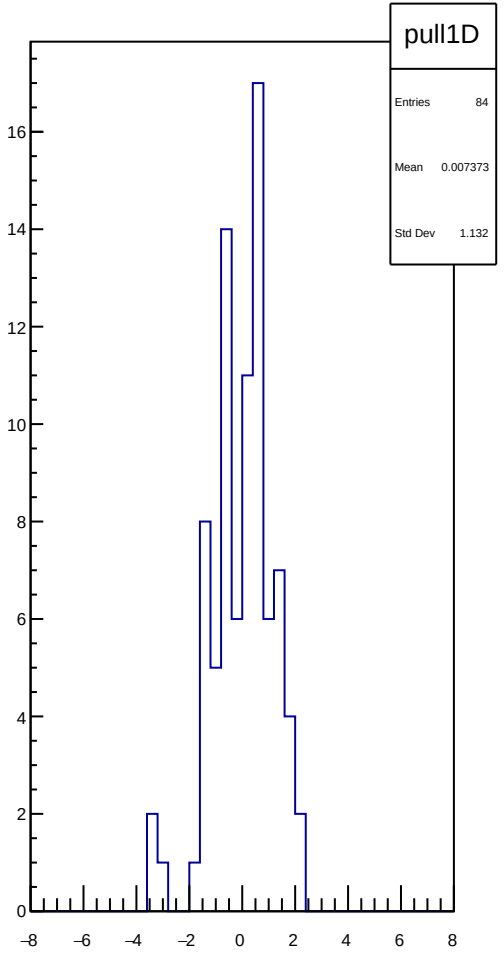

diff_bpm0l01Y_rms vs run
χ² / ndf 1642 / 83
p0 1627 ± 1.285
1800
1750
1700
1650
1600
1550
1500

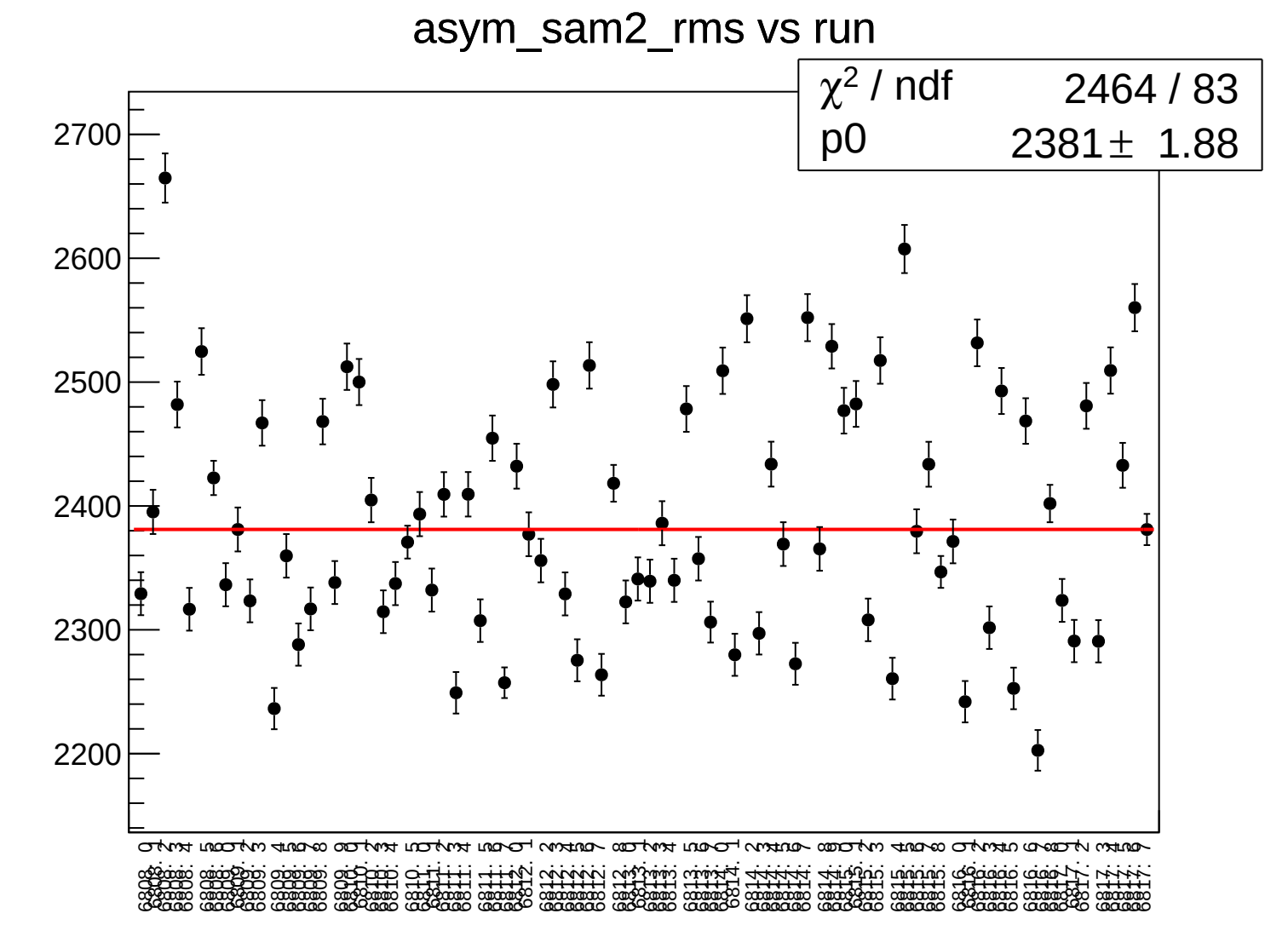

asym_sam1_mean vs run
χ² / ndf 80.58 / 83
p0 −354.4 ± 394.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 9.631
Std Dev 73.93
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

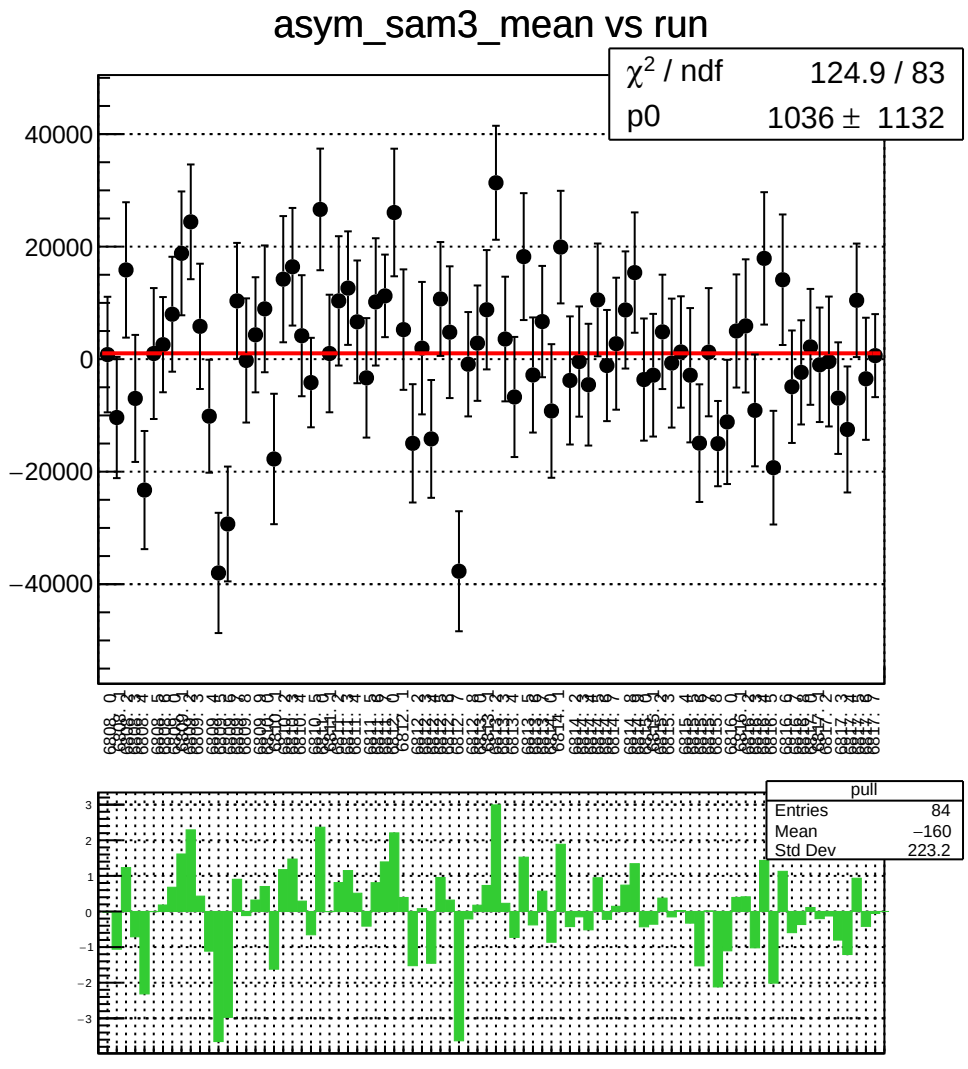

pull1D
Entries 84
Mean 0.006343
Std Dev 0.9794
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

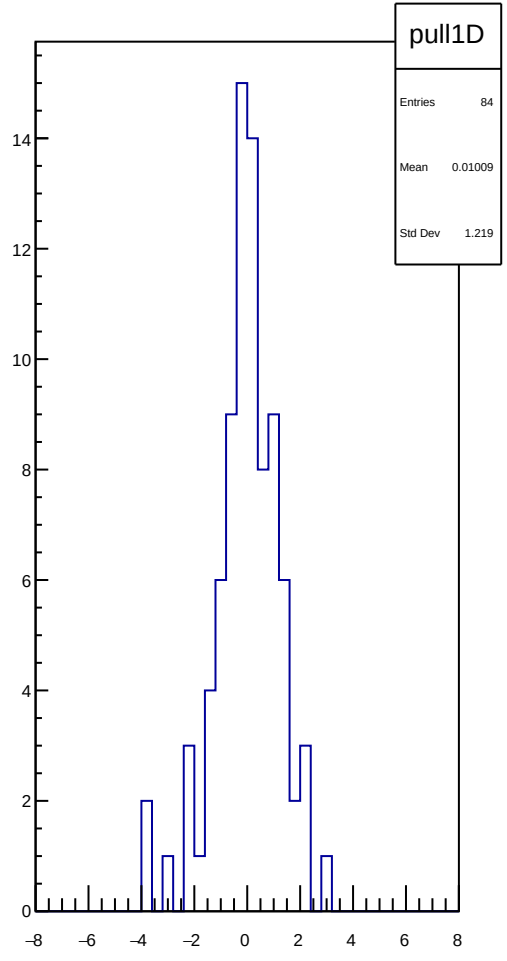

asym_sam1_rms vs run
χ² / ndf 3470 / 83
p0 353.1 ± 0.2789
400
390
380
370
360
350
340
330
320

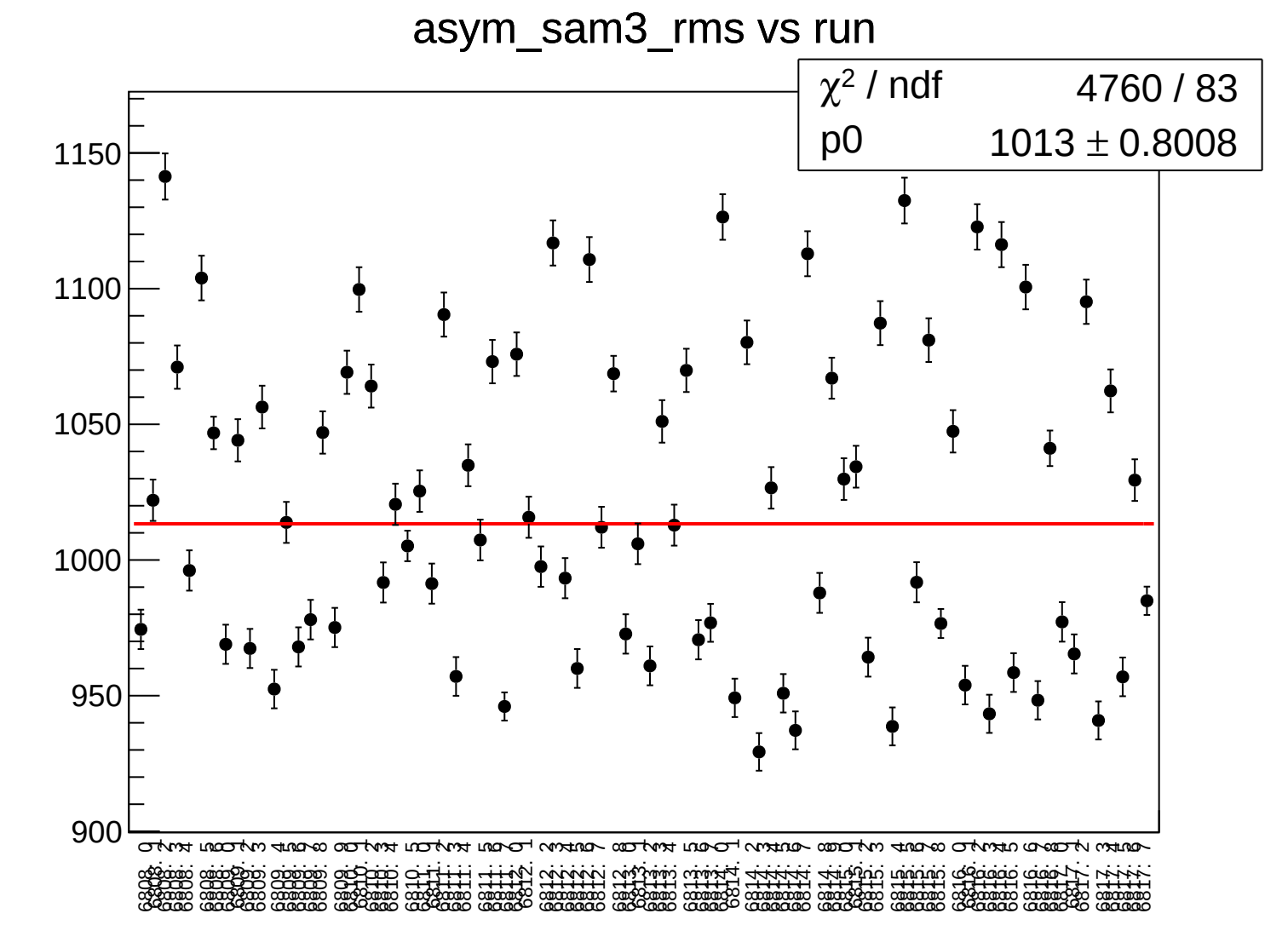

asym_sam2_mean vs run
×10^3
χ^2 / ndf 107.7 / 83
p0 511.4 ± 2659
pull
Entries 84
Mean −185.5
Std Dev 242.1

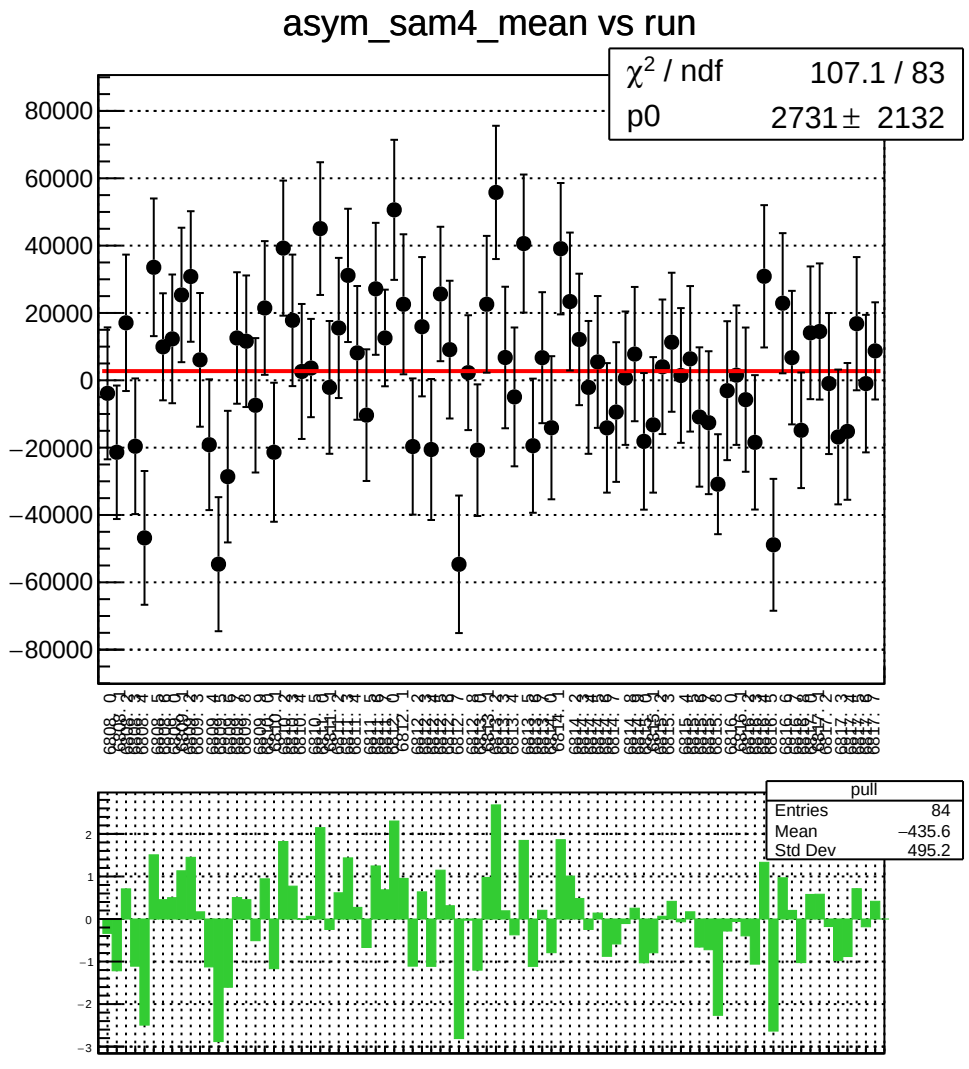

pull1D
Entries 84
Mean 0.007373
Std Dev 1.132

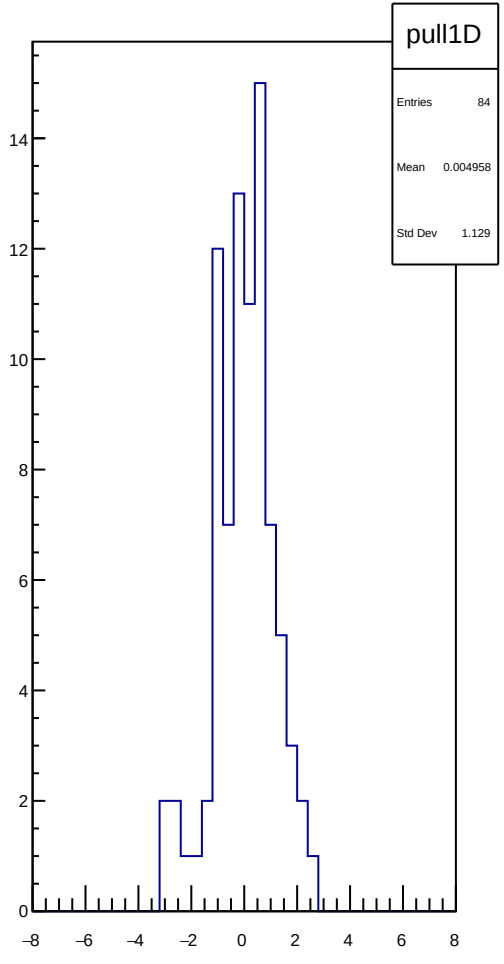

asym_sam2_rms vs run
χ² / ndf 2464 / 83
p0 2381 ± 1.88
2700
2600
2500
2400
2300
2200

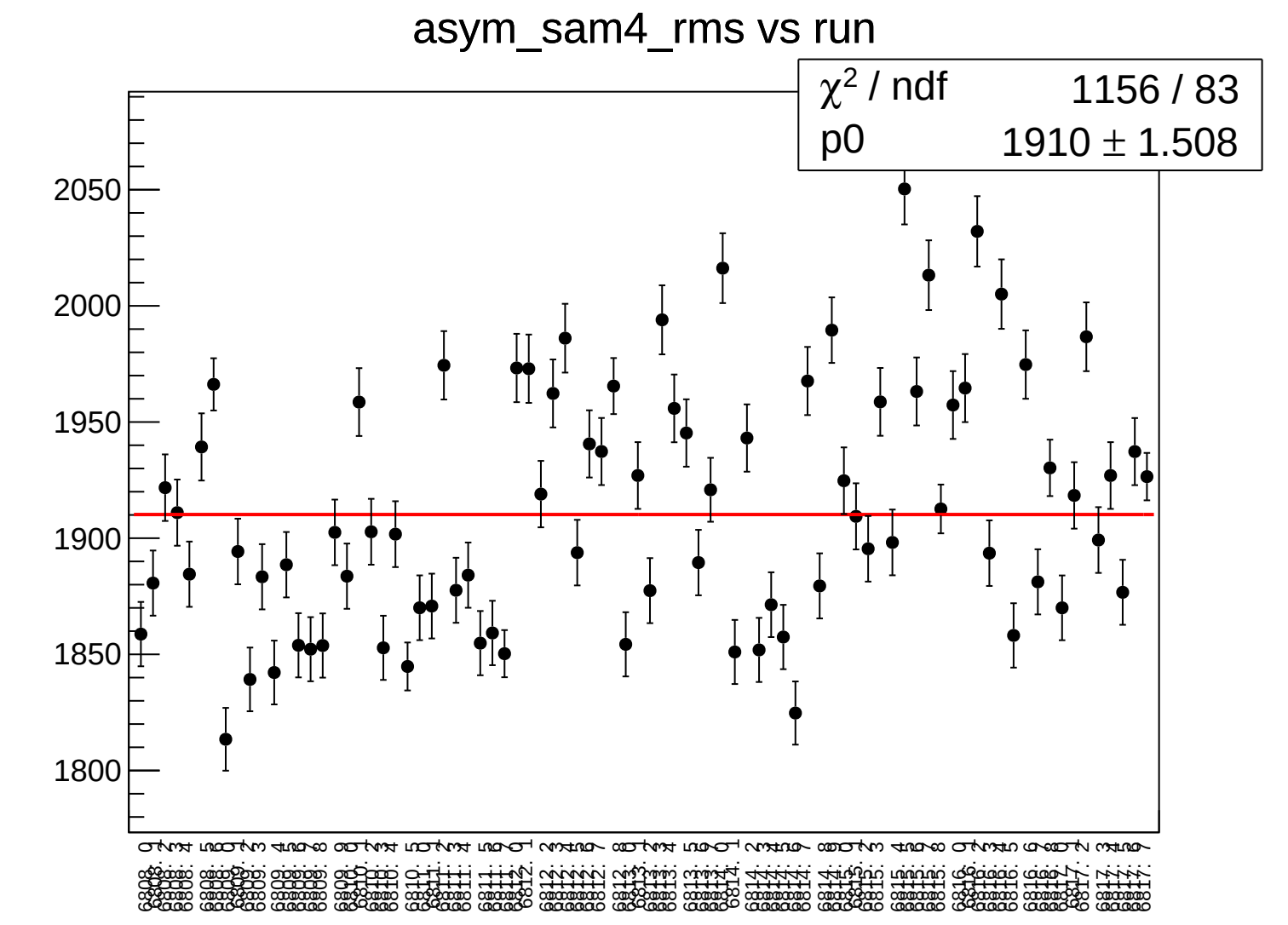

asym_sam3_mean vs run
χ² / ndf 124.9 / 83
p0 1036 ± 1132
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −160
Std Dev 223.2
3
2
1
0
−1
−2
−3

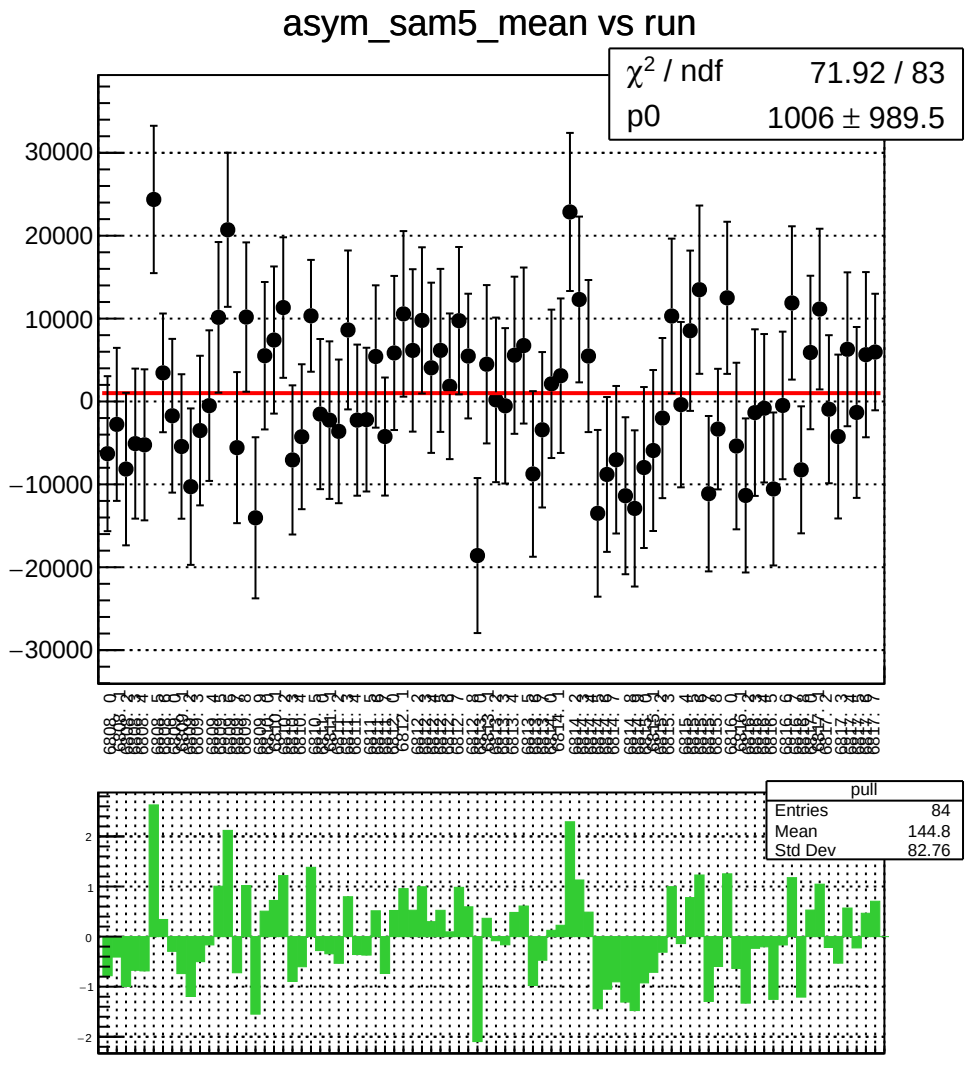

pull1D
Entries 84
Mean 0.01009
Std Dev 1.219
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

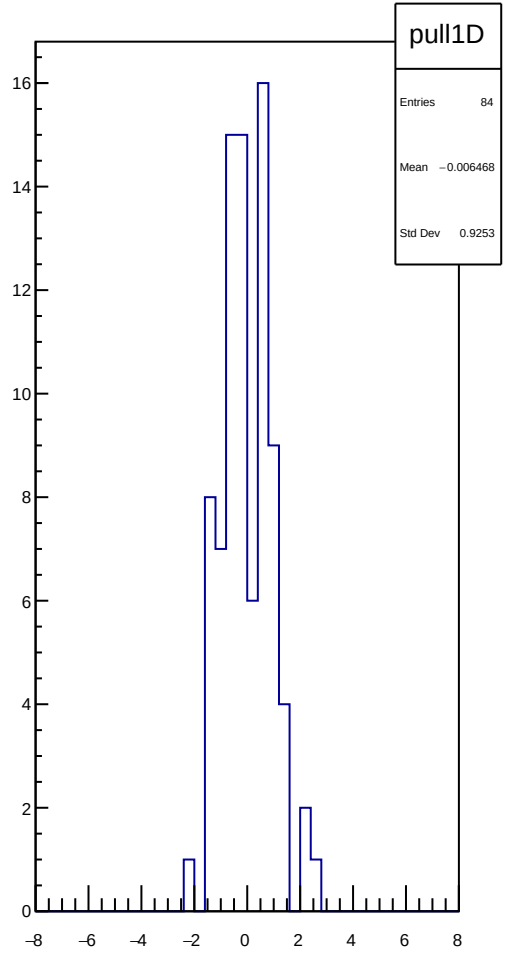

asym_sam3_rms vs run
χ² / ndf 4760 / 83
p0 1013 ± 0.8008
1150
1100
1050
1000
950
900

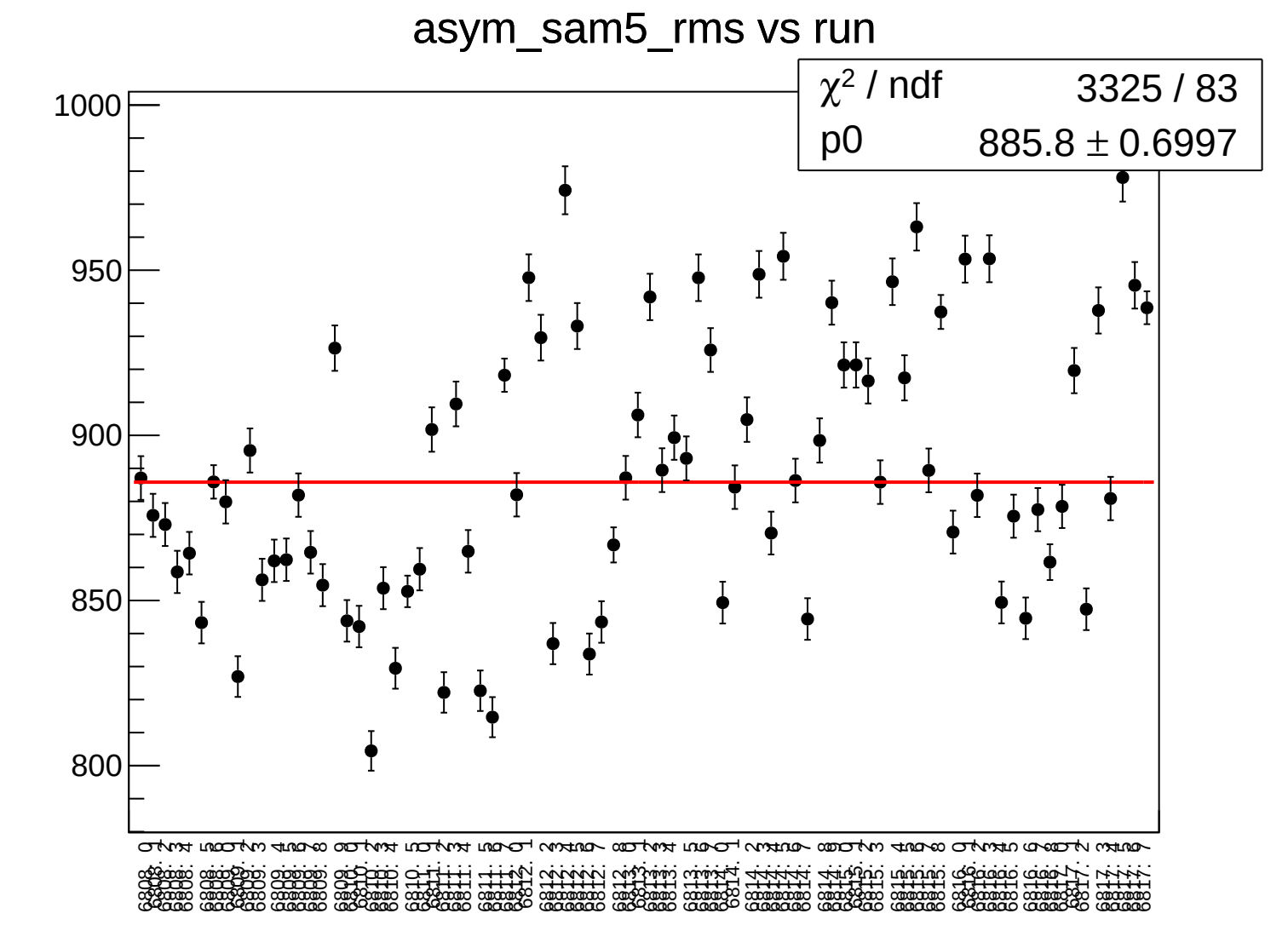

asym_sam4_mean vs run
χ² / ndf 107.1 / 83
p0 2731 ± 2132
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 84
Mean −435.6
Std Dev 495.2
2
1
0
−1
−2
−3

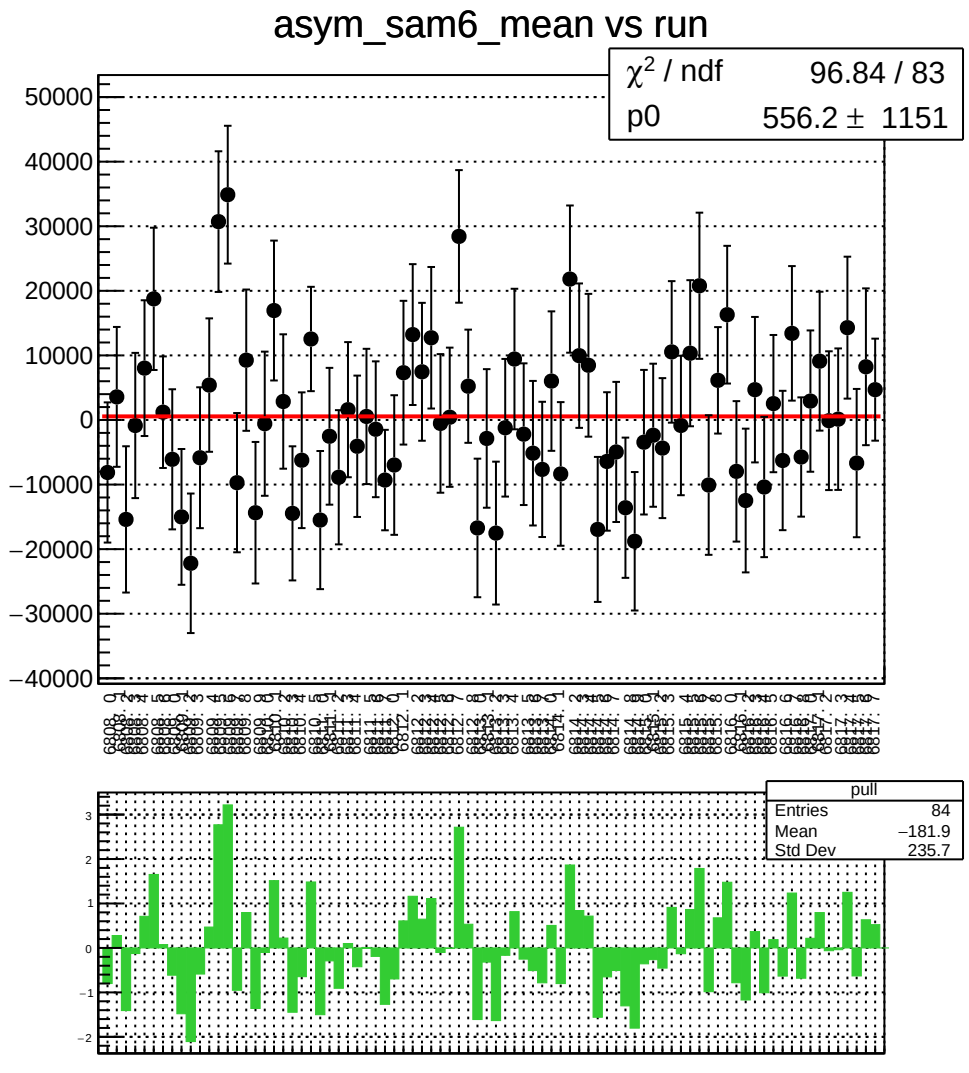

pull1D
Entries 84
Mean 0.004958
Std Dev 1.129
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

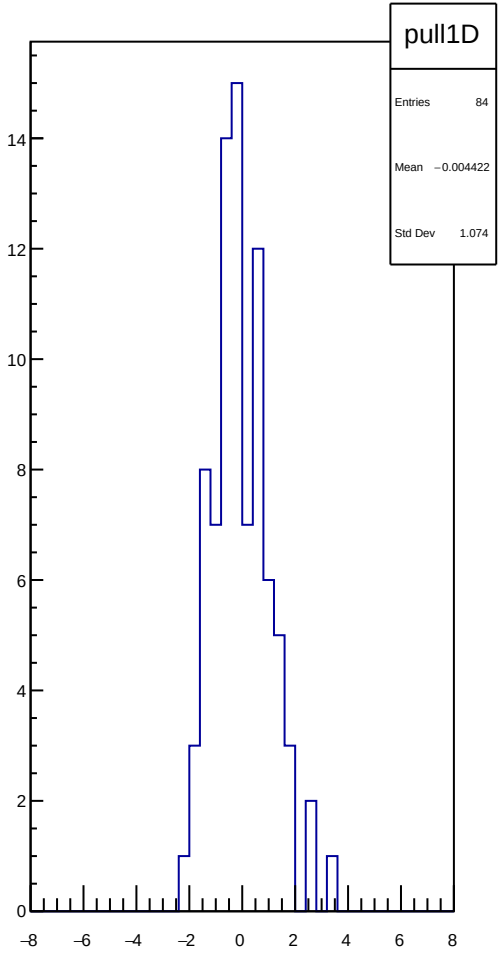

asym_sam4_rms vs run
χ^2 / ndf 1156 / 83
p0 1910 ± 1.508
2050
2000
1950
1900
1850
1800

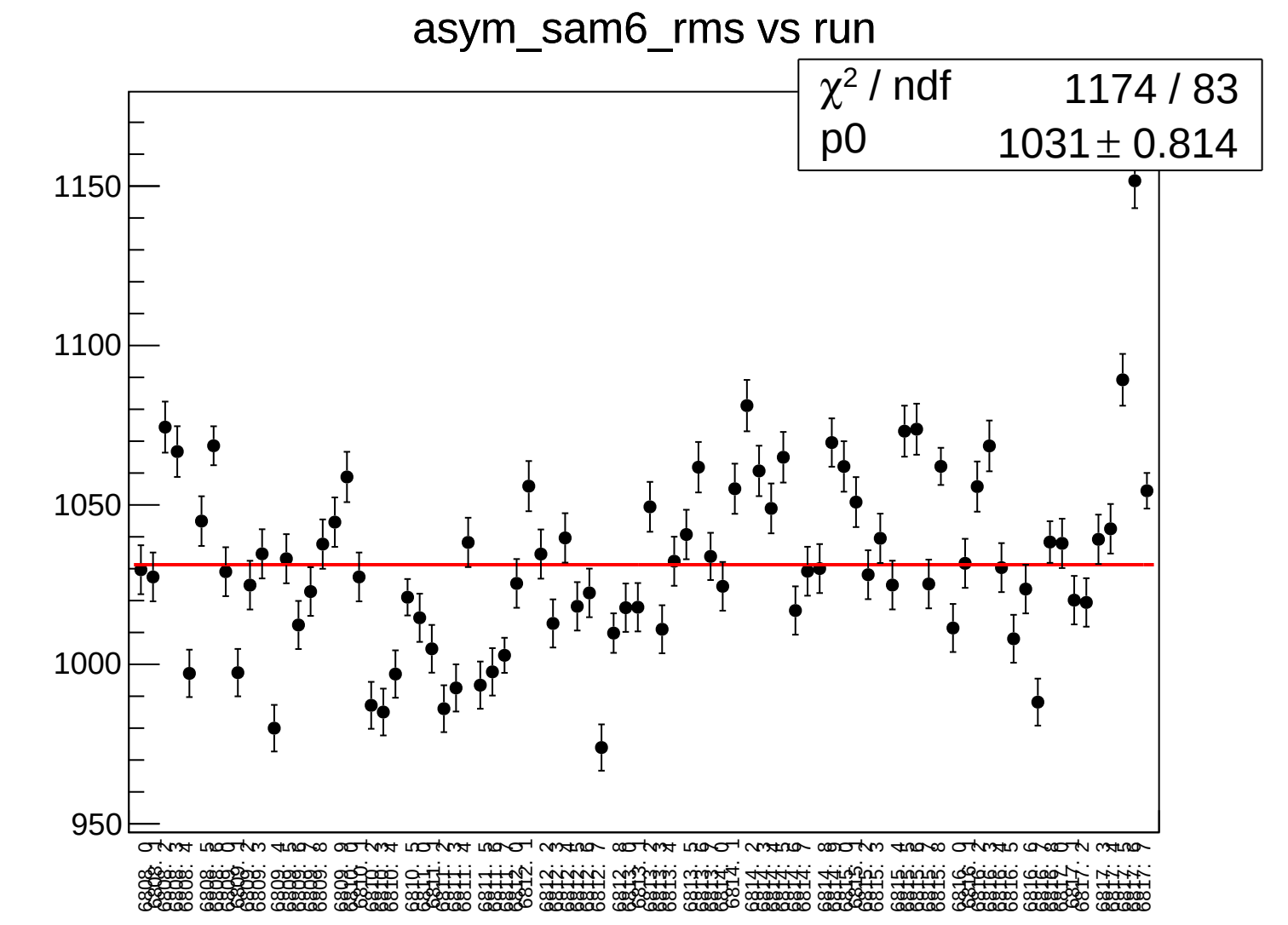

asym_sam5_mean vs run
χ² / ndf 71.92 / 83
p0 1006 ± 989.5
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean 144.8
Std Dev 82.76
2
1
0
−1
−2

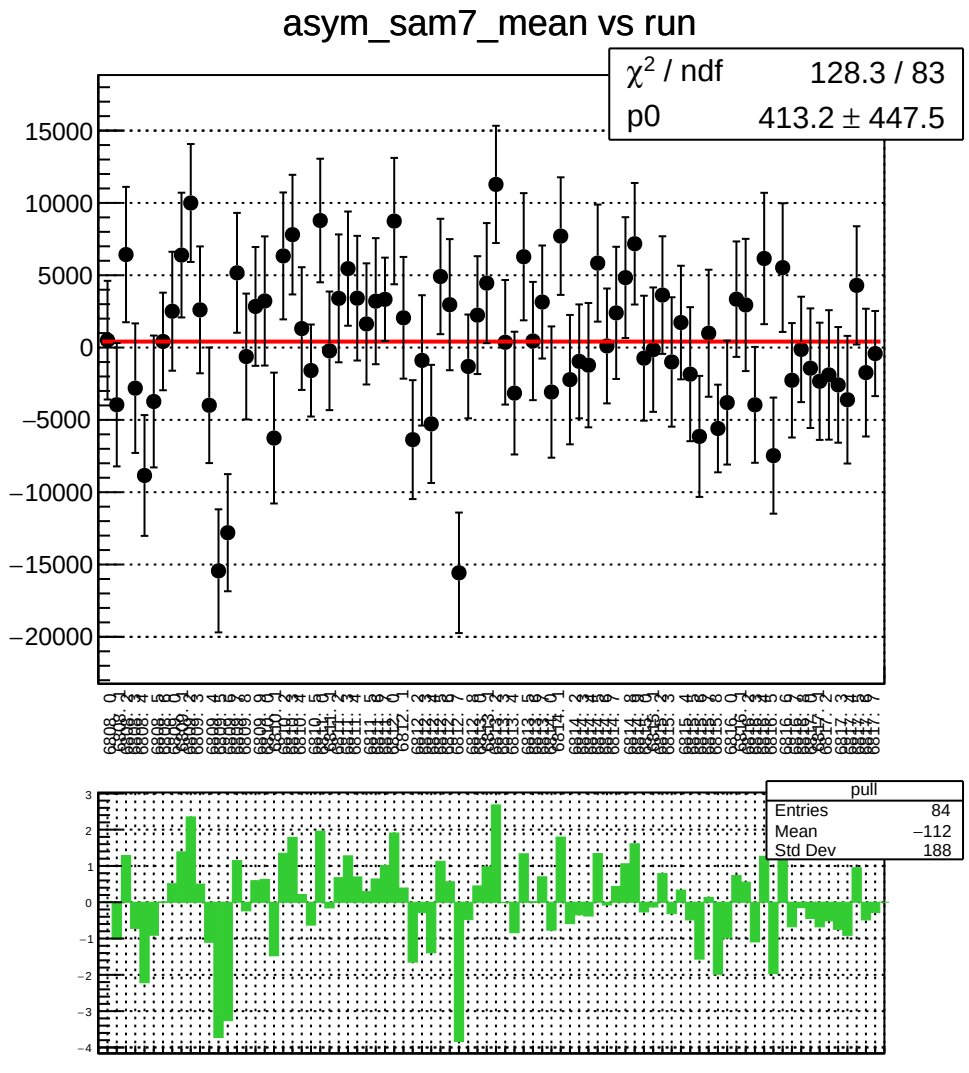

pull1D
Entries 84
Mean −0.006468
Std Dev 0.9253
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

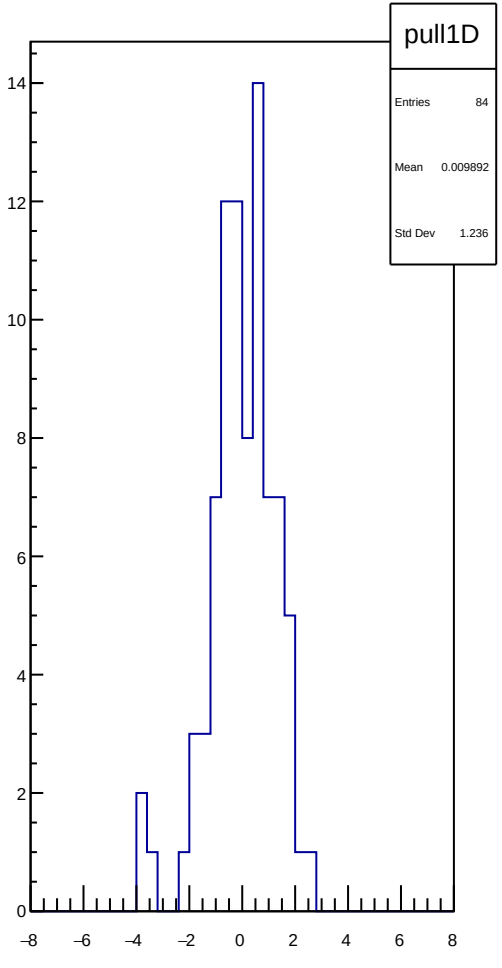

asym_sam5_rms vs run
χ² / ndf 3325 / 83
p0 885.8 ± 0.6997
1000
950
900
850
800

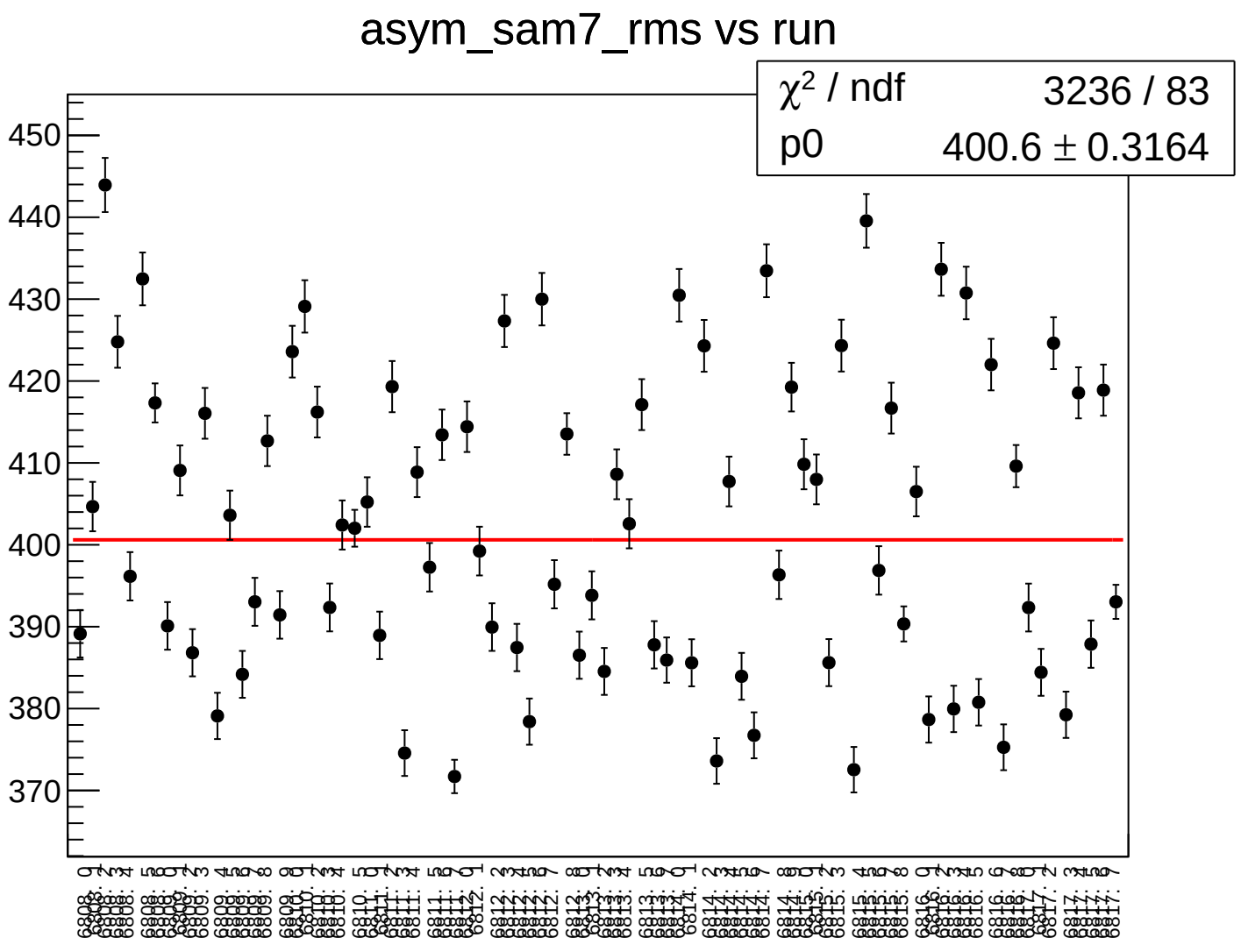

asym_sam6_mean vs run
χ² / ndf 96.84 / 83
p0 556.2 ± 1151
pull
Entries 84
Mean −181.9
Std Dev 235.7

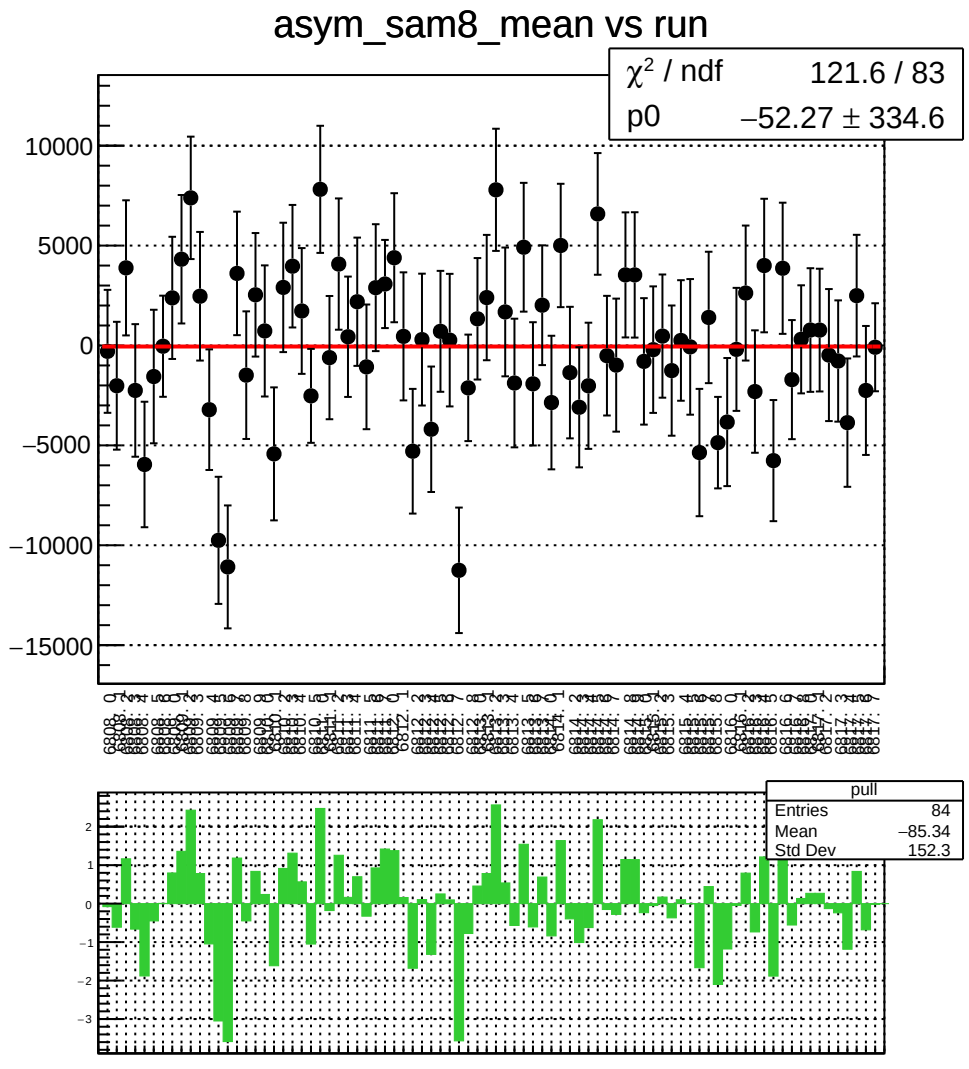

pull1D
Entries 84
Mean −0.004422
Std Dev 1.074

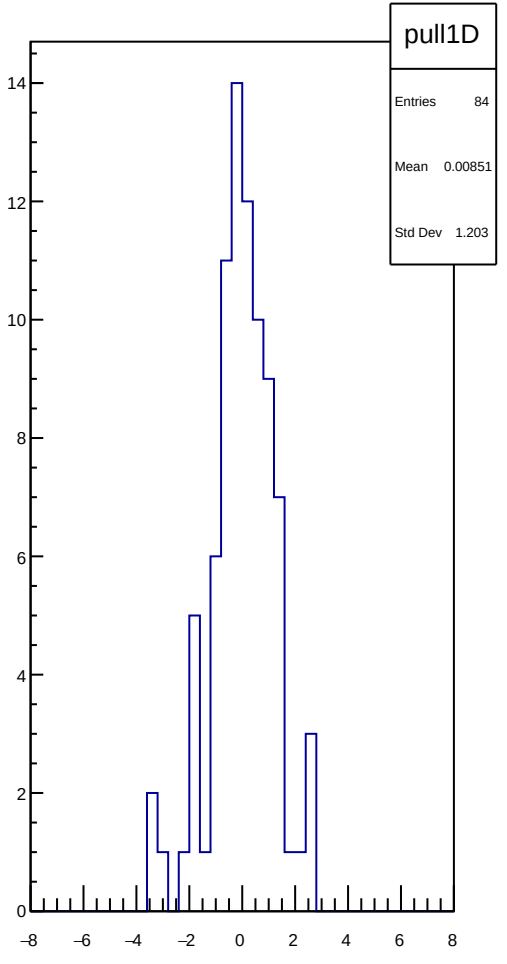

asym_sam6_rms vs run
χ^2 / ndf 1174 / 83
p0 1031 ± 0.814
1150
1100
1050
1000
950

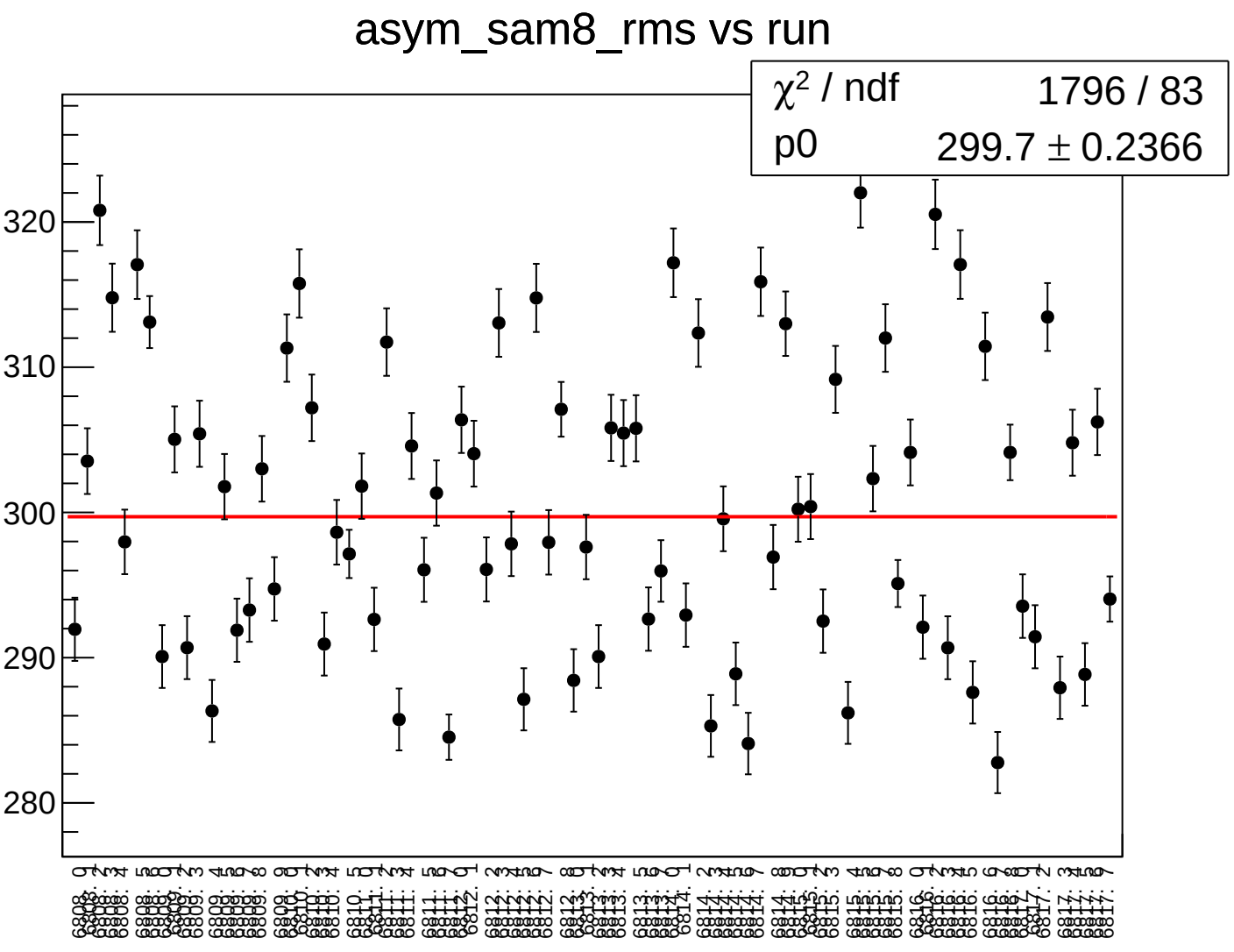

asym_sam7_mean vs run
χ² / ndf 128.3 / 83
p0 413.2 ± 447.5
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 84
Mean −112
Std Dev 188
3
2
1
0
−1
−2
−3
−4

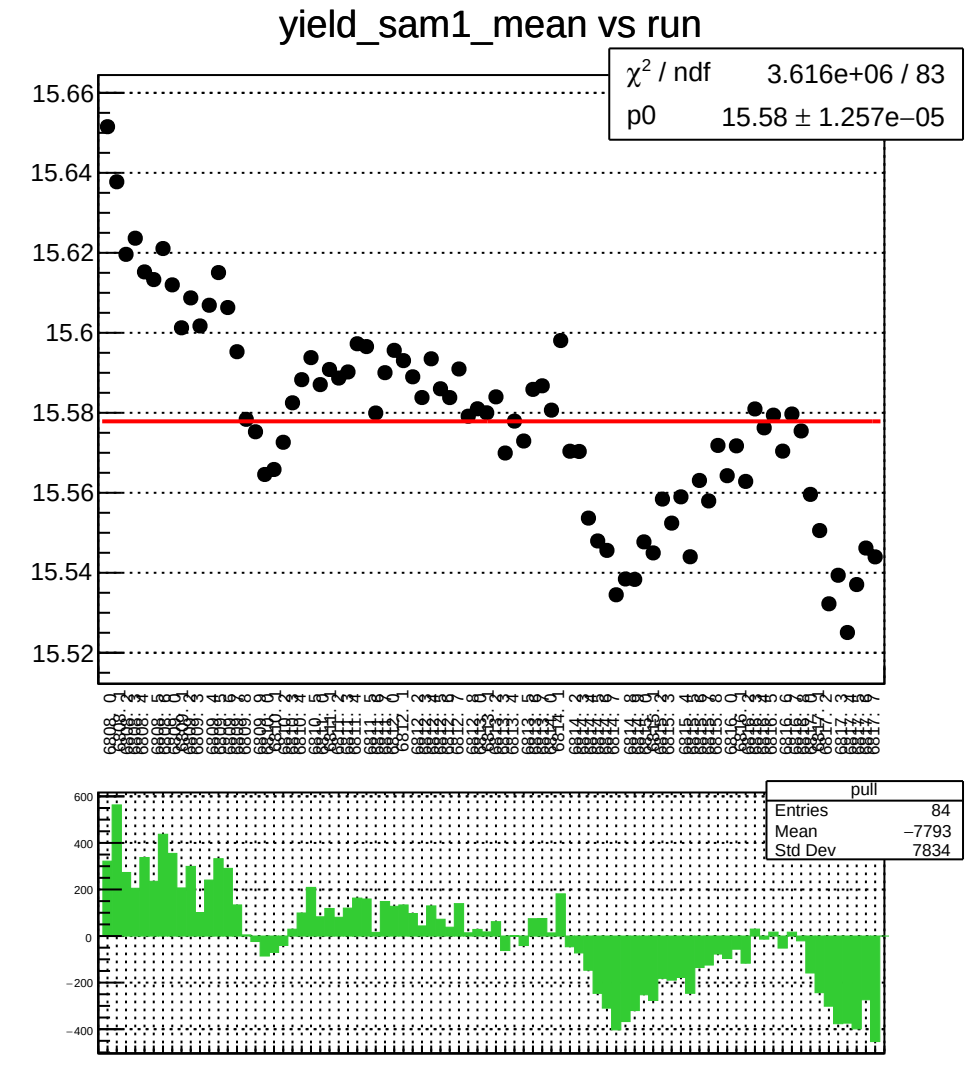

pull1D
Entries 84
Mean 0.009892
Std Dev 1.236
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

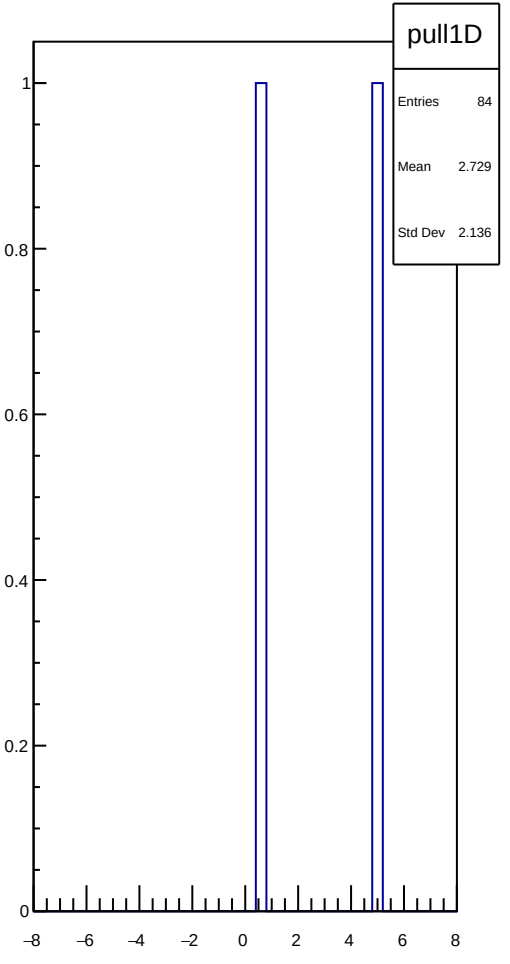

asym_sam7_rms vs run
χ² / ndf 3236 / 83
p0 400.6 ± 0.3164
450
440
430
420
410
400
390
380
370

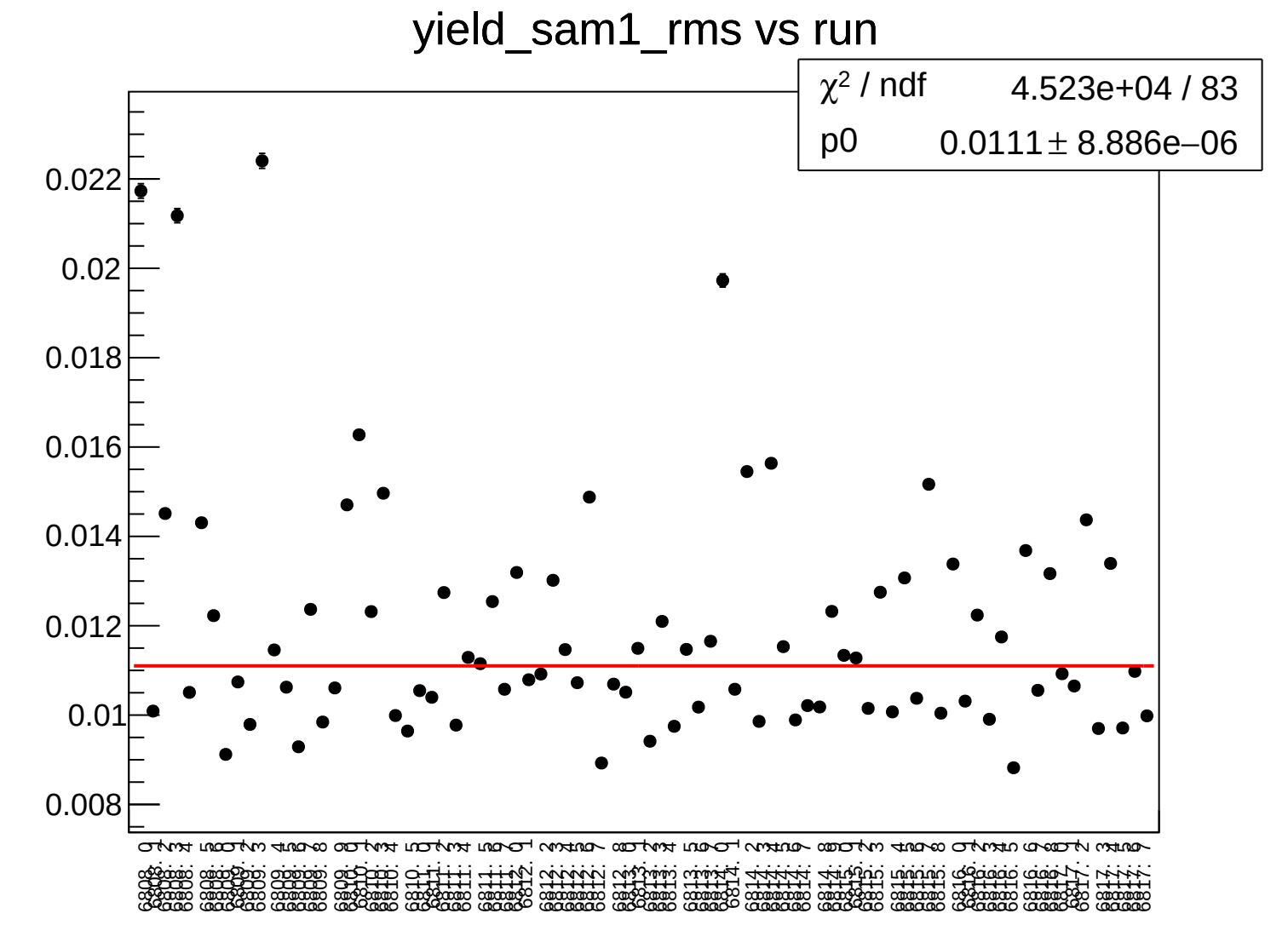

asym_sam8_mean vs run
χ² / ndf 121.6 / 83
p0 −52.27 ± 334.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −85.34
Std Dev 152.3
2
1
0
−1
−2
−3

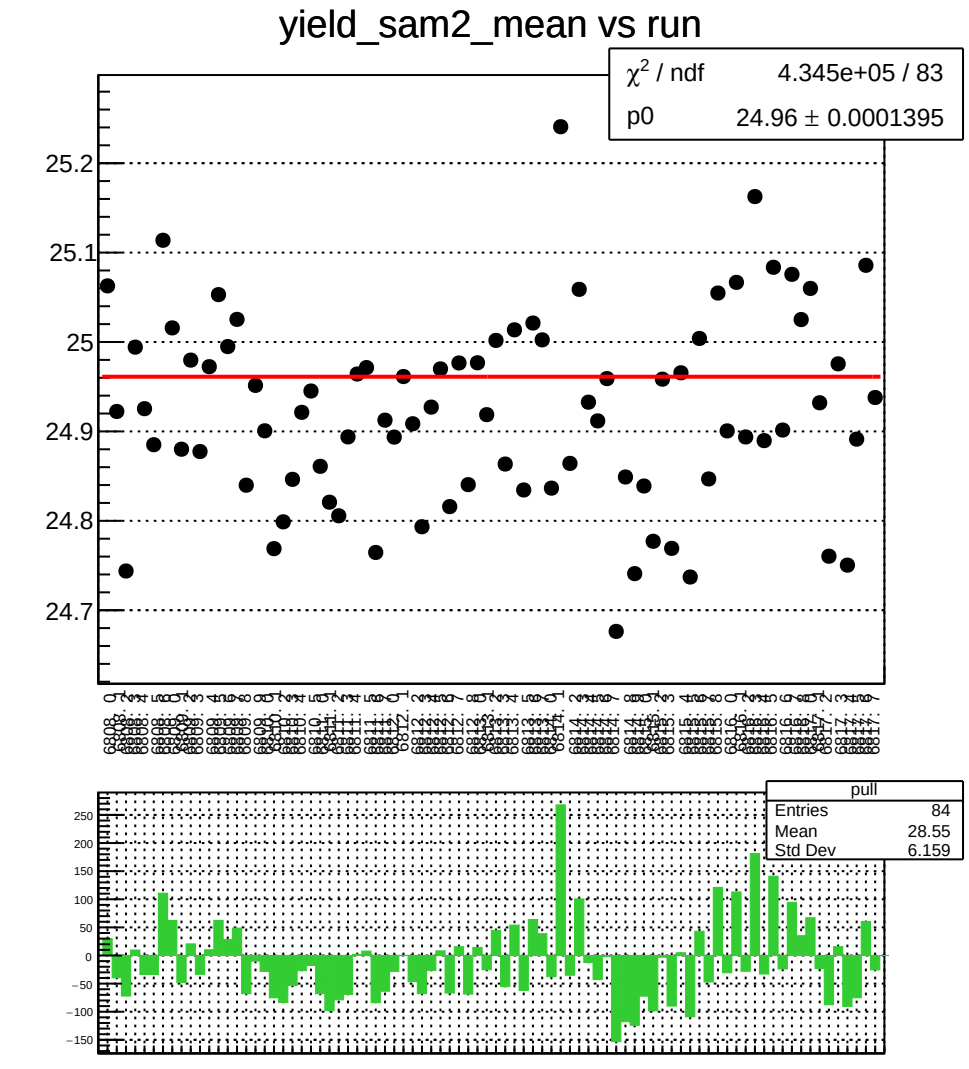

pull1D
Entries 84
Mean 0.00851
Std Dev 1.203
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

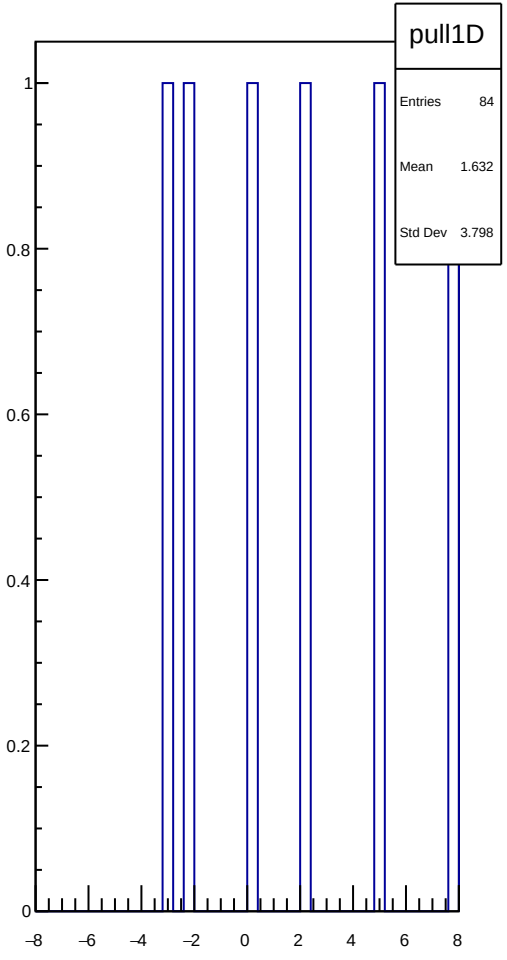

asym_sam8_rms vs run
χ² / ndf 1796 / 83
p0 299.7 ± 0.2366
320
310
300
290
280

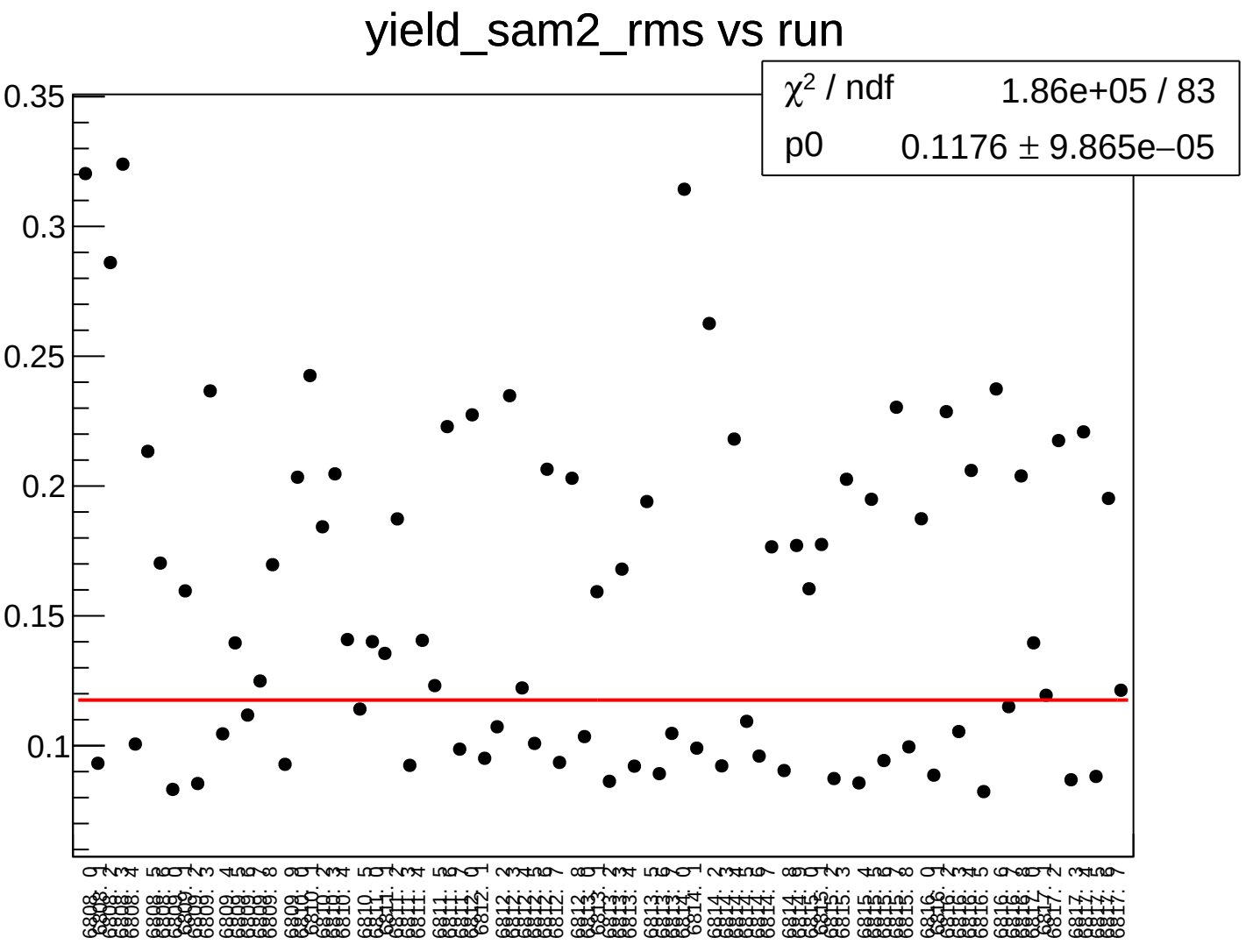

yield_sam1_mean vs run
χ² / ndf 3.616e+06 / 83
p0 15.58 ± 1.257e−05
15.66
15.64
15.62
15.6
15.58
15.56
15.54
15.52
pull
Entries 84
Mean −7793
Std Dev 7834
600
400
200
0
−200
−400

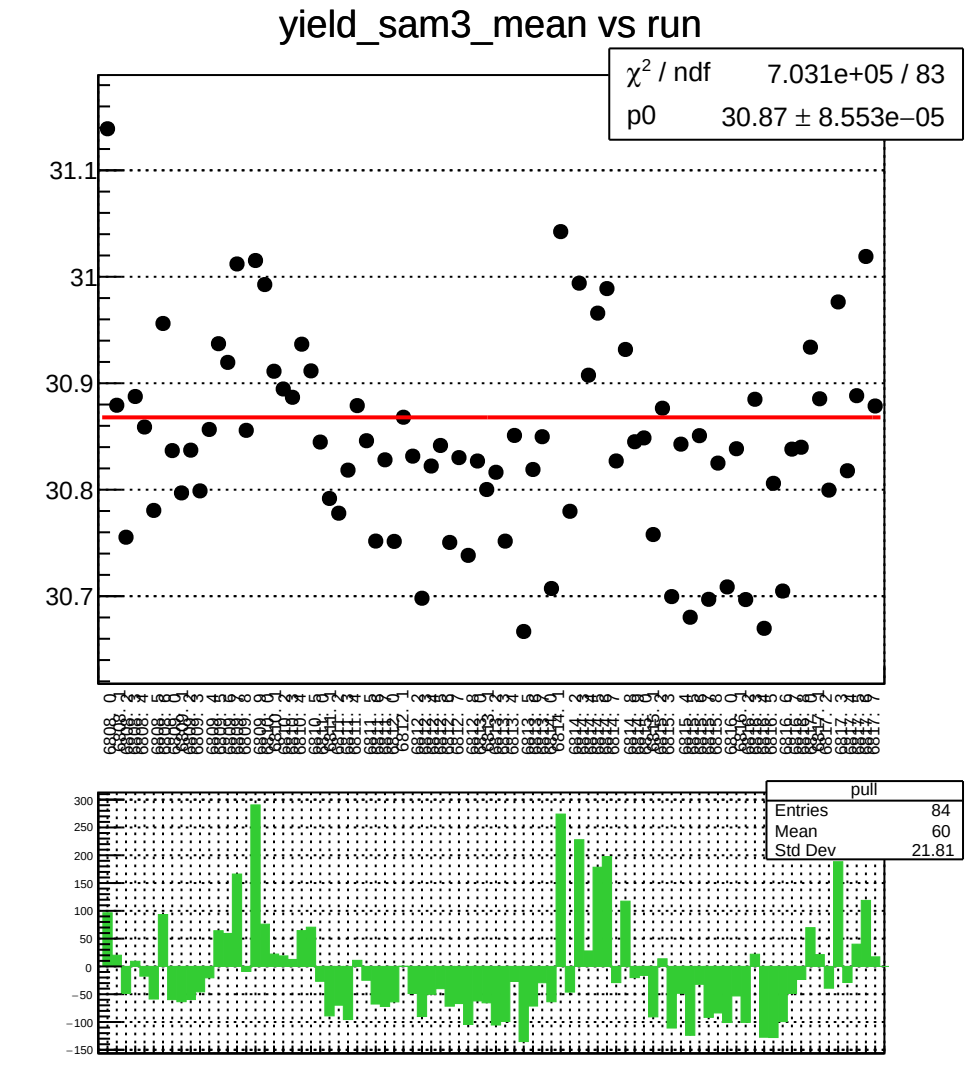

pull1D
Entries 84
Mean 2.729
Std Dev 2.136
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

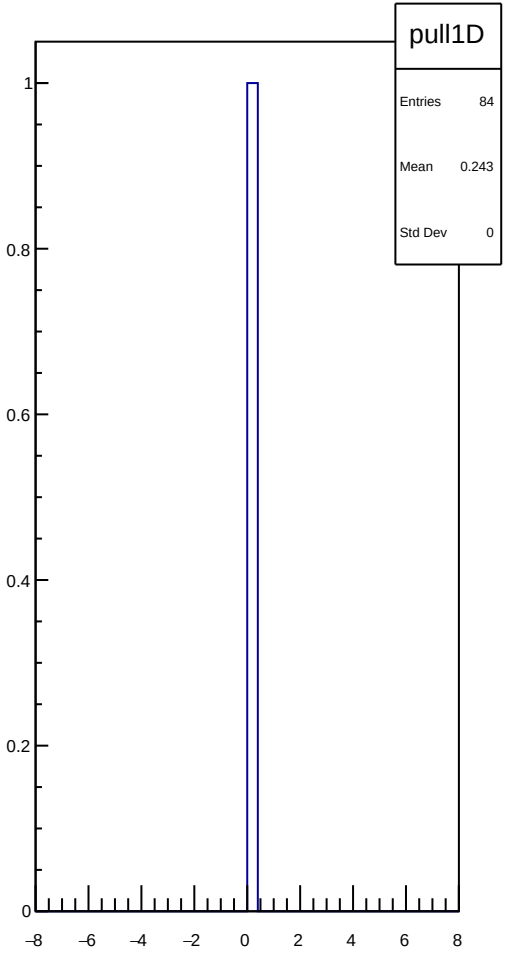

yield_sam1_rms vs run
χ² / ndf 4.523e+04 / 83
p0 0.0111 ± 8.886e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

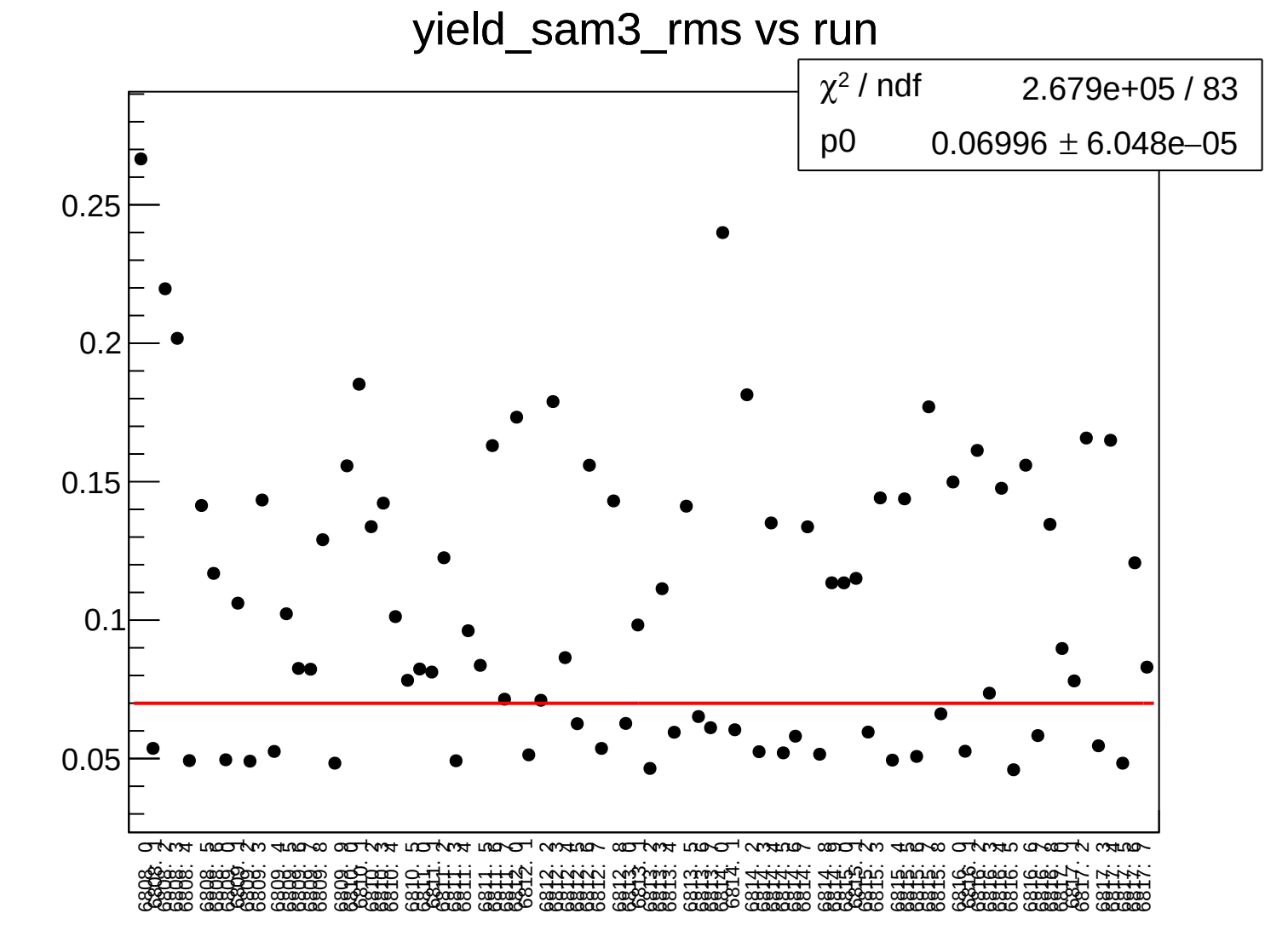

yield_sam2_mean vs run
χ² / ndf 4.345e+05 / 83
p0 24.96 ± 0.0001395
25.2
25.1
25
24.9
24.8
24.7
pull
Entries 84
Mean 28.55
Std Dev 6.159
250
200
150
100
50
0
−50
−100
−150

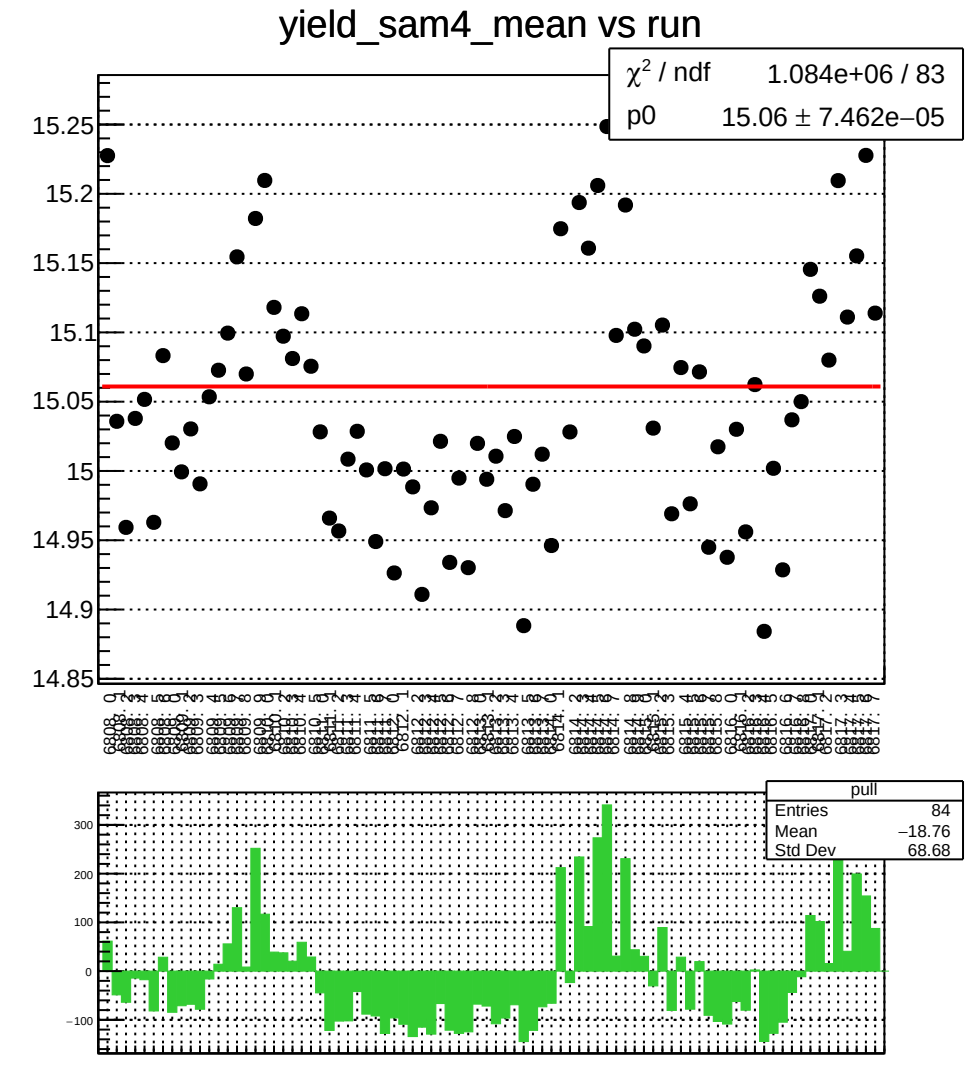

pull1D
Entries 84
Mean 1.632
Std Dev 3.798
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

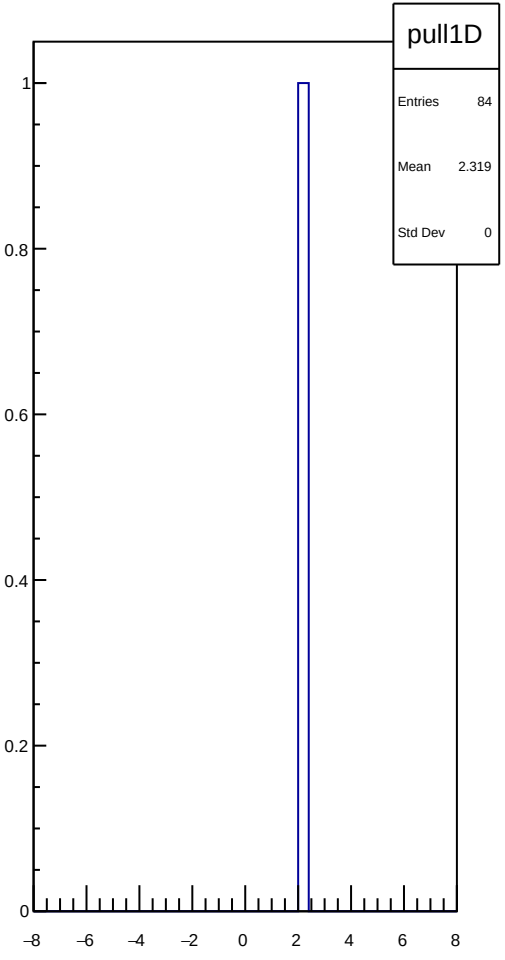

yield_sam2_rms vs run
χ² / ndf 1.86e+05 / 83
p0 0.1176 ± 9.865e−05
0.35
0.3
0.25
0.2
0.15
0.1

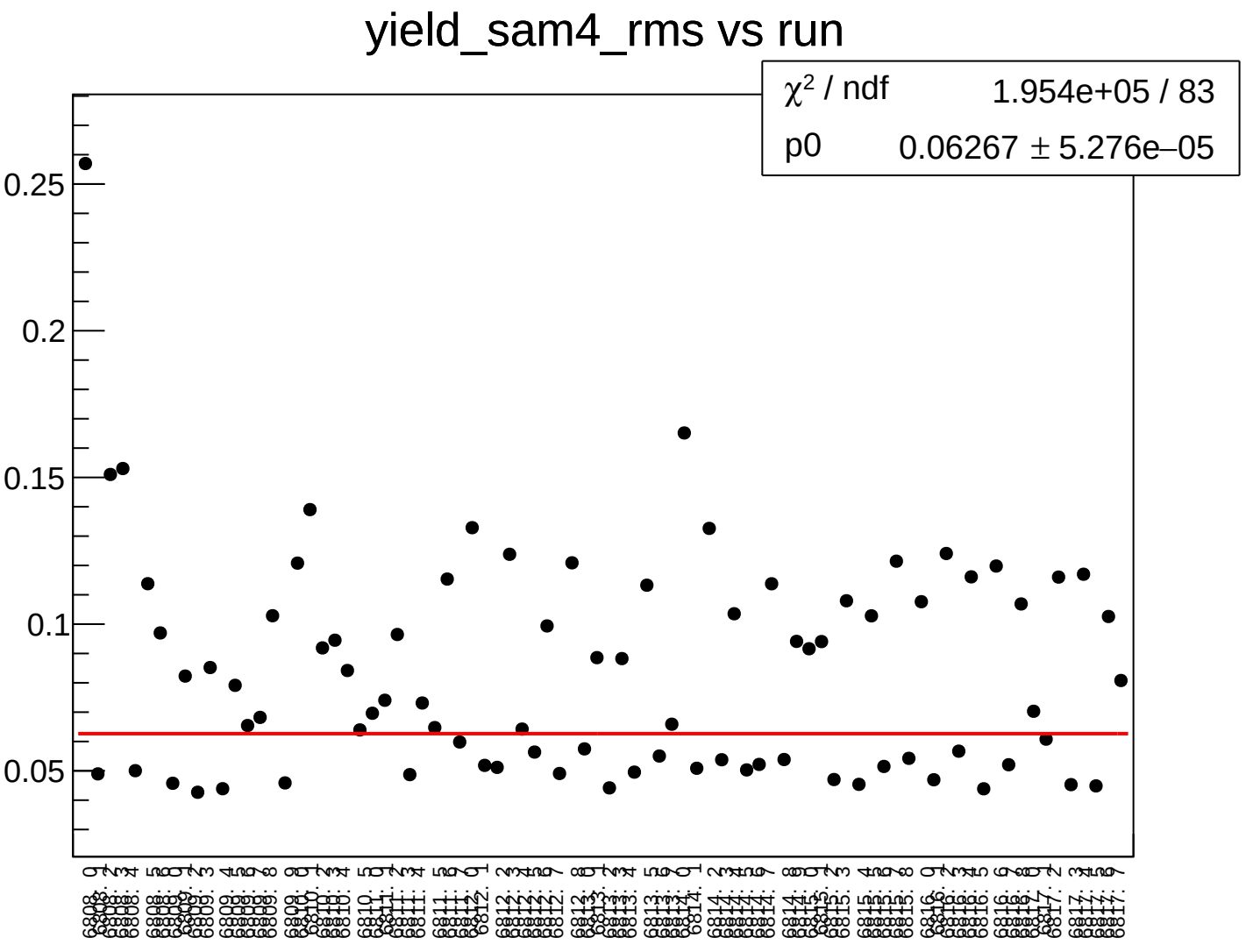

yield_sam3_mean vs run
χ² / ndf 7.031e+05 / 83
p0 30.87 ± 8.553e−05
31.1
31
30.9
30.8
30.7
pull
Entries 84
Mean 60
Std Dev 21.81
300
250
200
150
100
50
0
−50
−100
−150

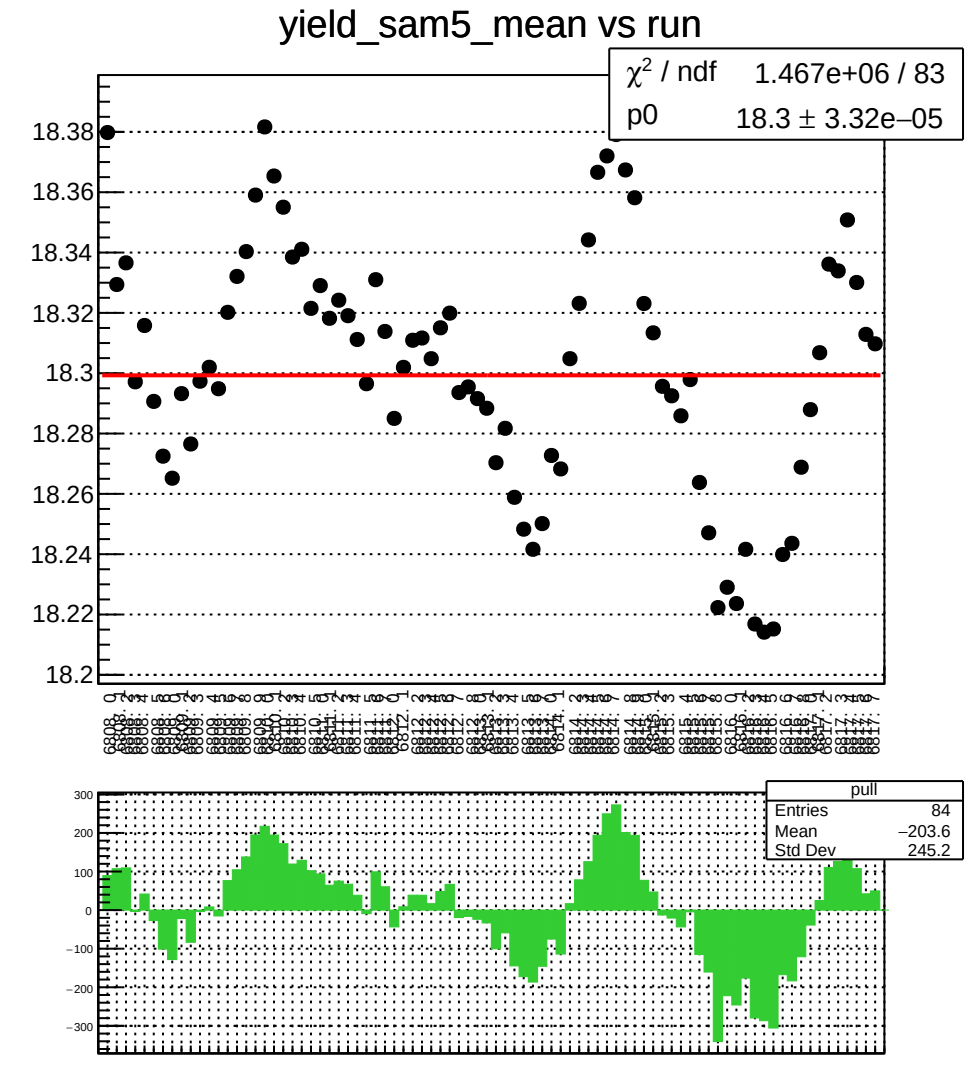

pull1D
Entries 84
Mean 0.243
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

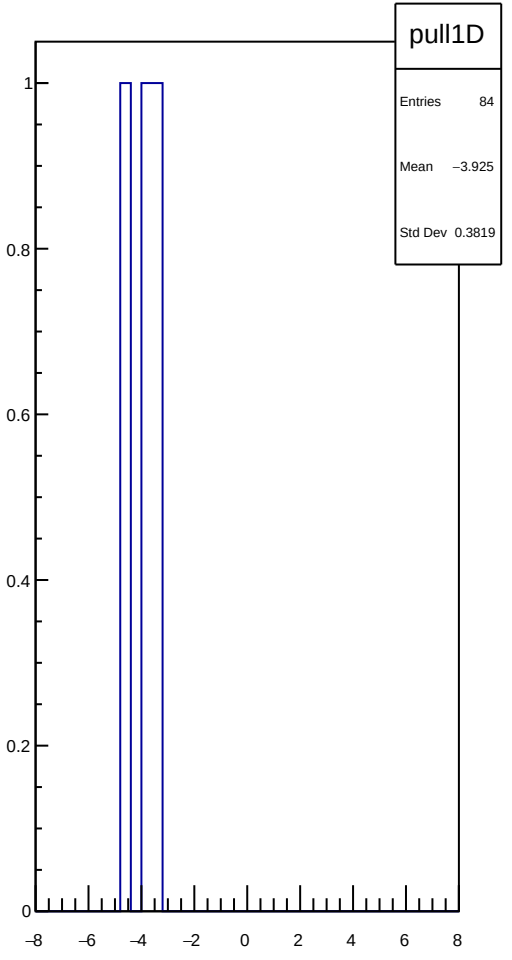

yield_sam3_rms vs run
χ² / ndf 2.679e+05 / 83
p0 0.06996 ± 6.048e−05
0.25
0.2
0.15
0.1
0.05

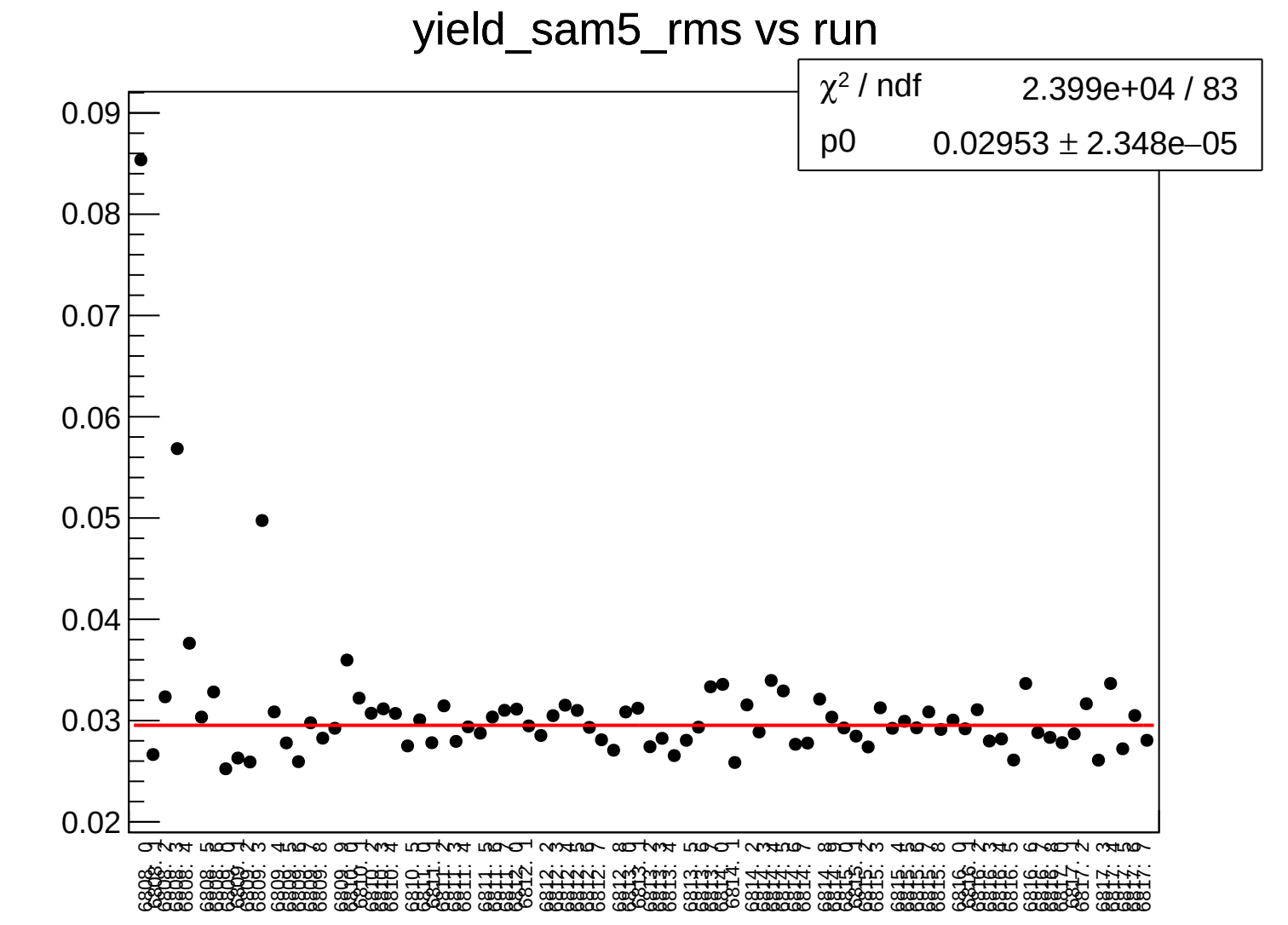

yield_sam4_mean vs run
χ² / ndf 1.084e+06 / 83
p0 15.06 ± 7.462e−05
15.25
15.2
15.15
15.1
15.05
15
14.95
14.9
14.85
pull
Entries 84
Mean −18.76
Std Dev 68.68
300
200
100
0
−100

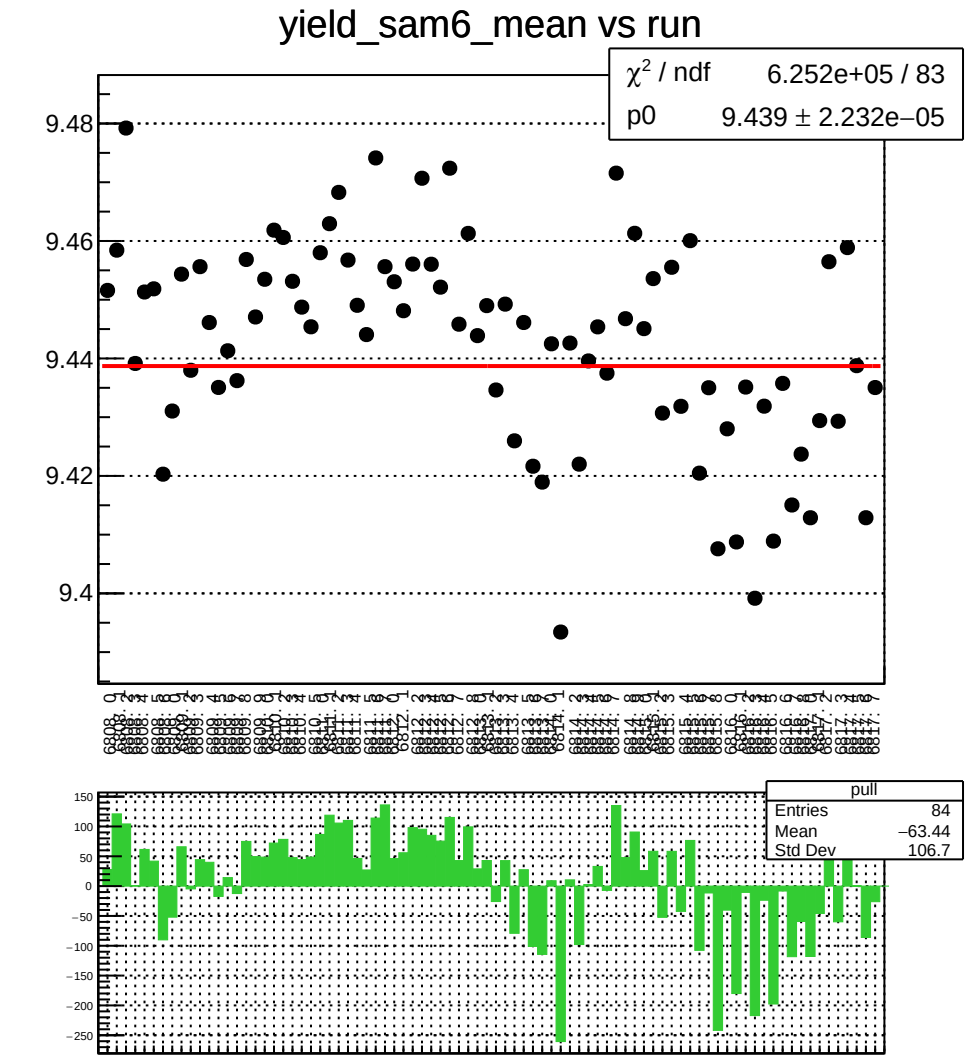

pull1D
Entries 84
Mean 2.319
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

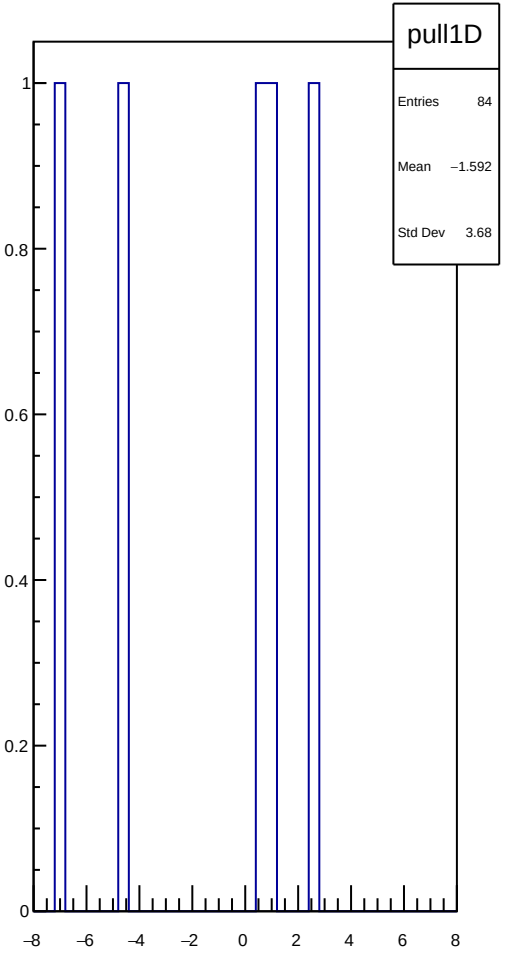

yield_sam4_rms vs run
χ² / ndf 1.954e+05 / 83
p0 0.06267 ± 5.276e−05
0.25
0.2
0.15
0.1
0.05

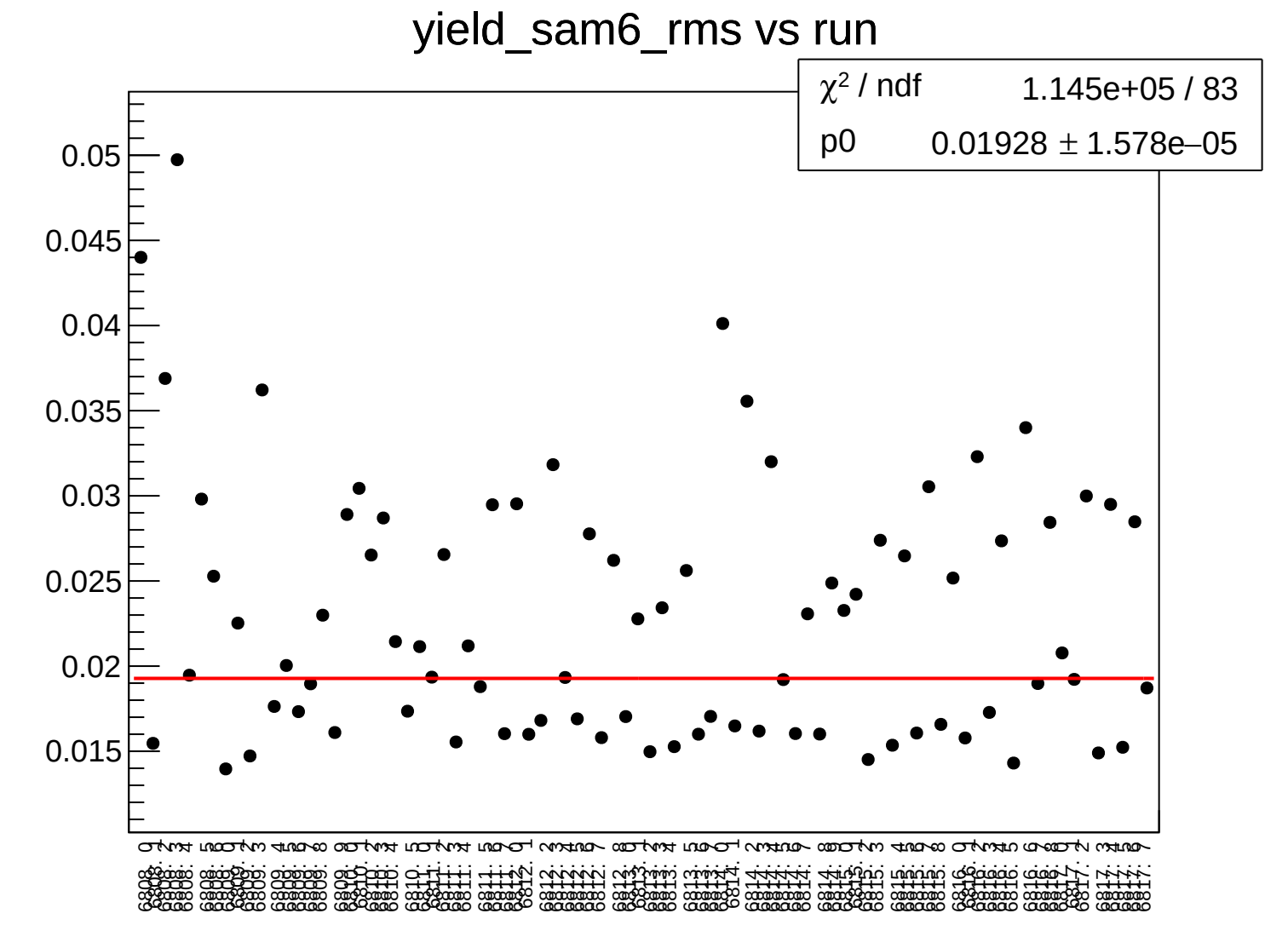

yield_sam5_mean vs run
χ² / ndf 1.467e+06 / 83
p0 18.3 ± 3.32e−05
18.38
18.36
18.34
18.32
18.3
18.28
18.26
18.24
18.22
18.2
pull
Entries 84
Mean −203.6
Std Dev 245.2
300
200
100
0
−100
−200
−300

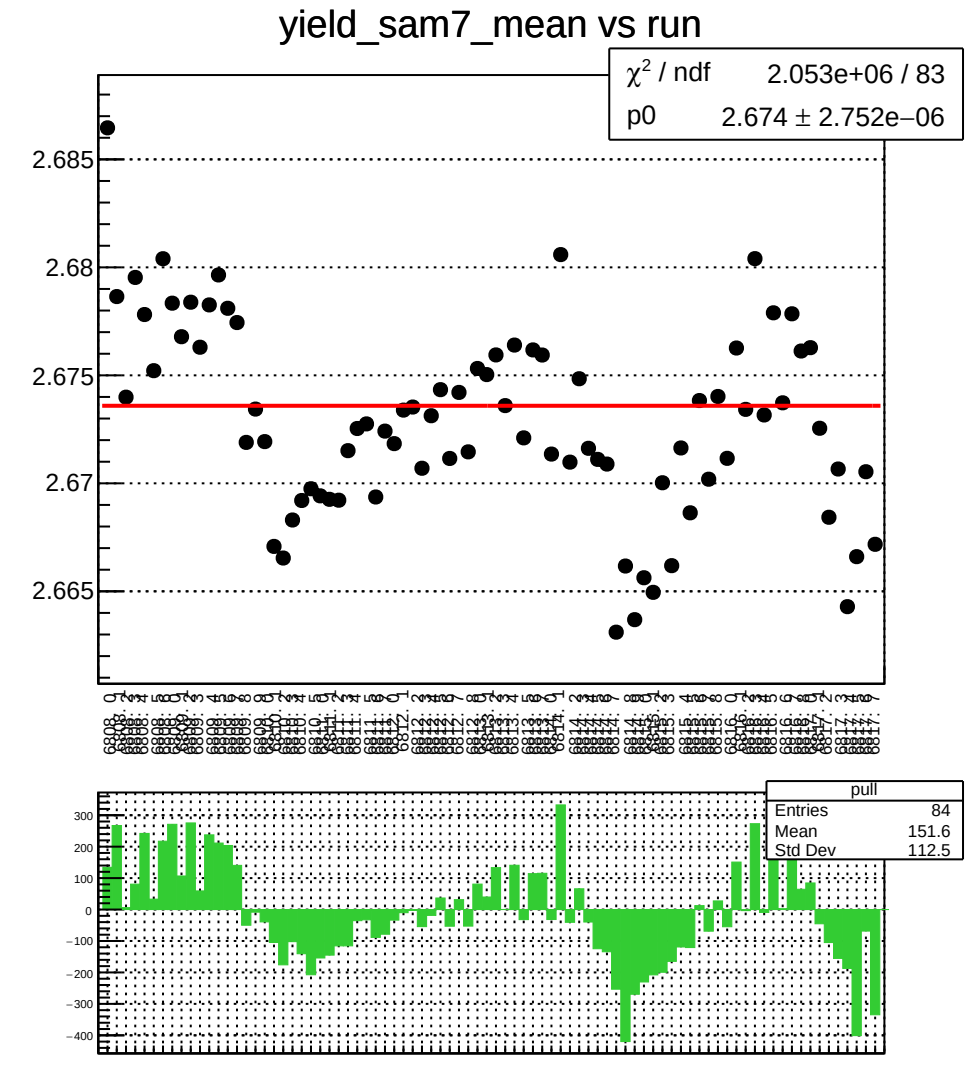

pull1D
Entries 84
Mean −3.925
Std Dev 0.3819
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

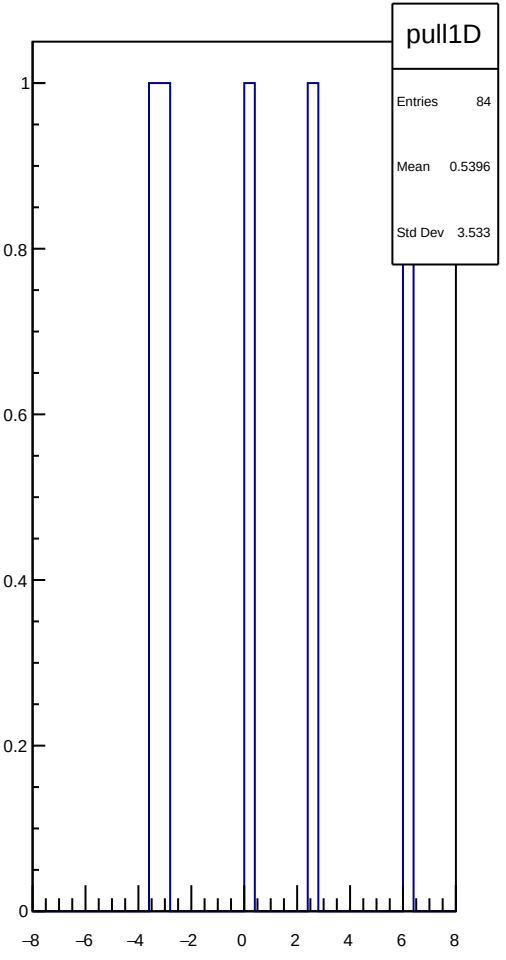

yield_sam5_rms vs run
χ² / ndf 2.399e+04 / 83
p0 0.02953 ± 2.348e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

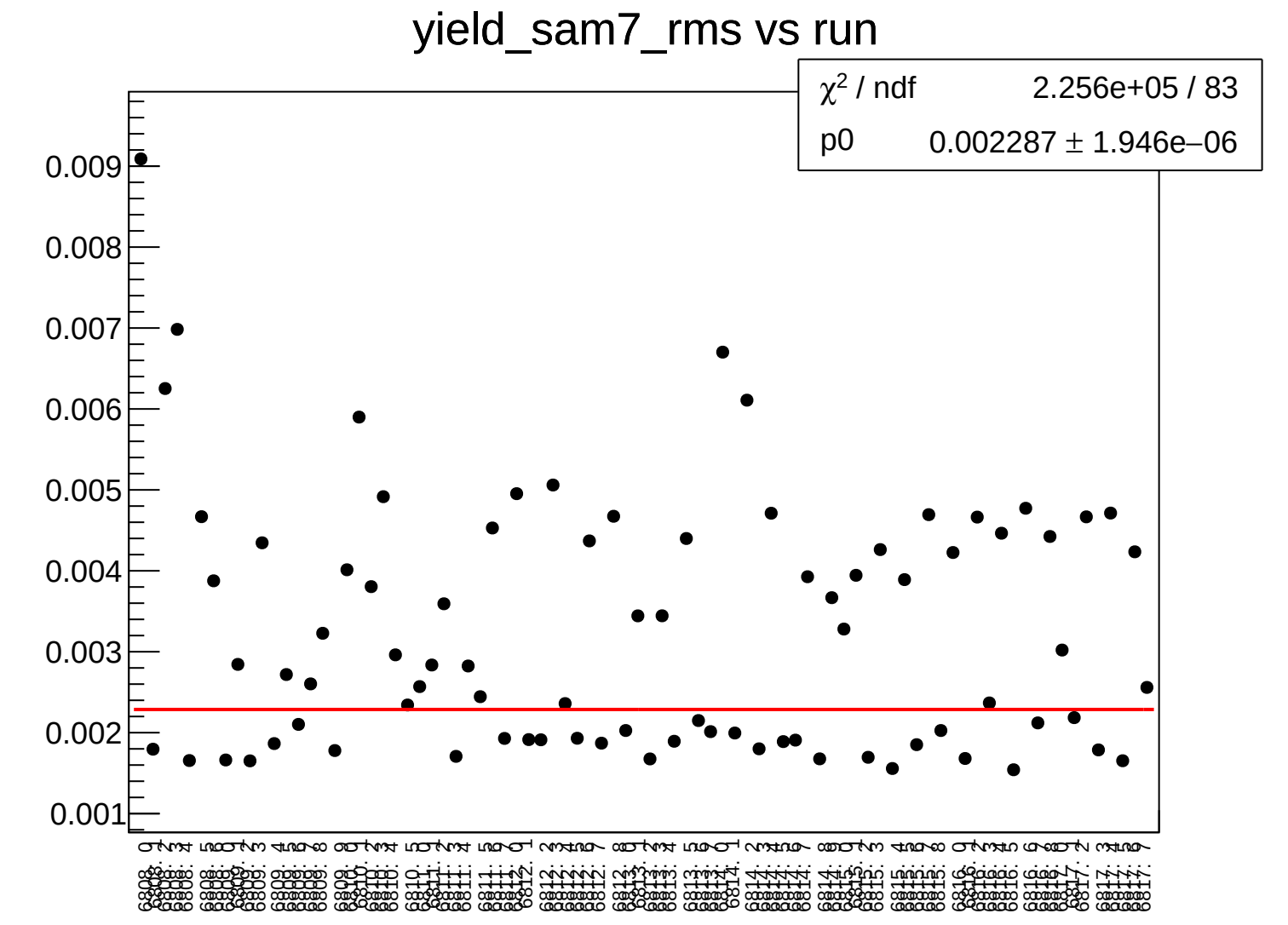

yield_sam6_mean vs run
χ² / ndf 6.252e+05 / 83
p0 9.439 ± 2.232e−05
9.48
9.46
9.44
9.42
9.4
pull
Entries 84
Mean −63.44
Std Dev 106.7
150
100
50
0
−50
−100
−150
−200
−250

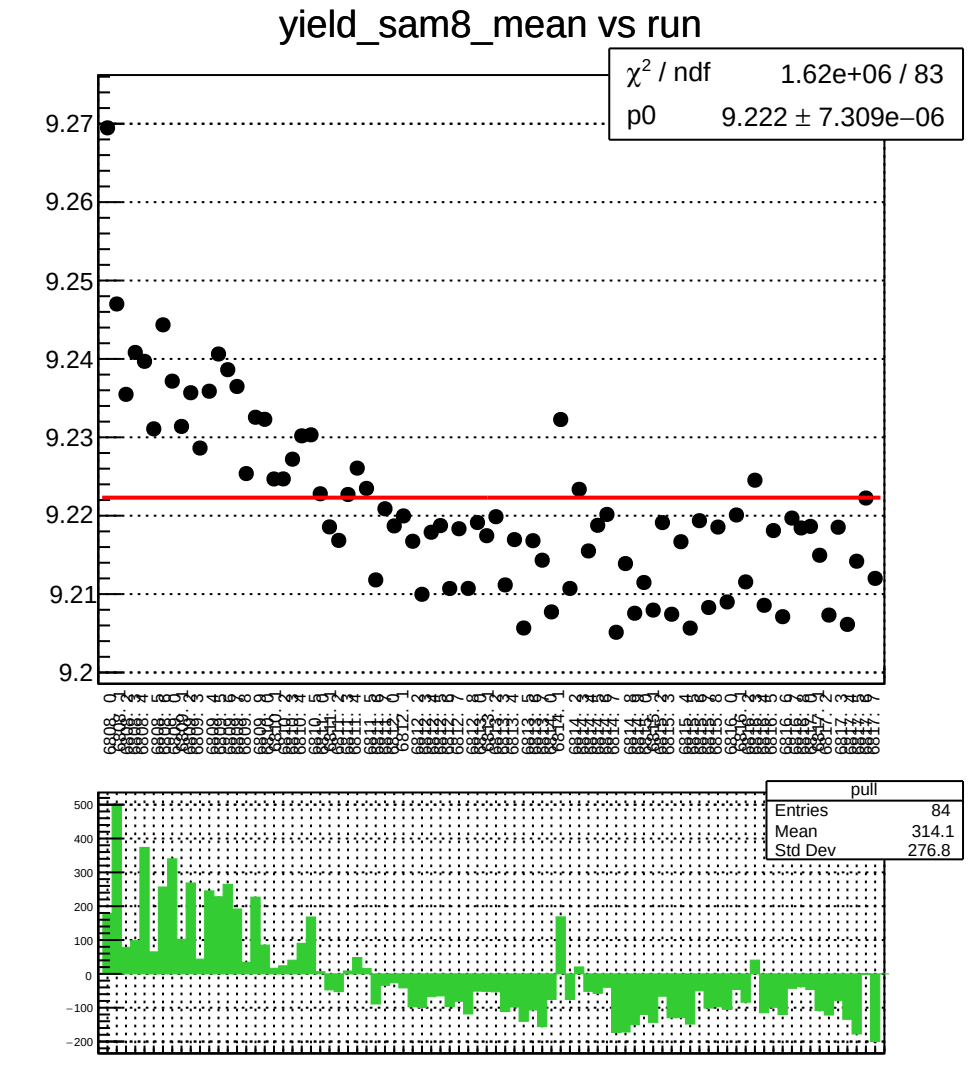

pull1D
Entries 84
Mean −1.592
Std Dev 3.68
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

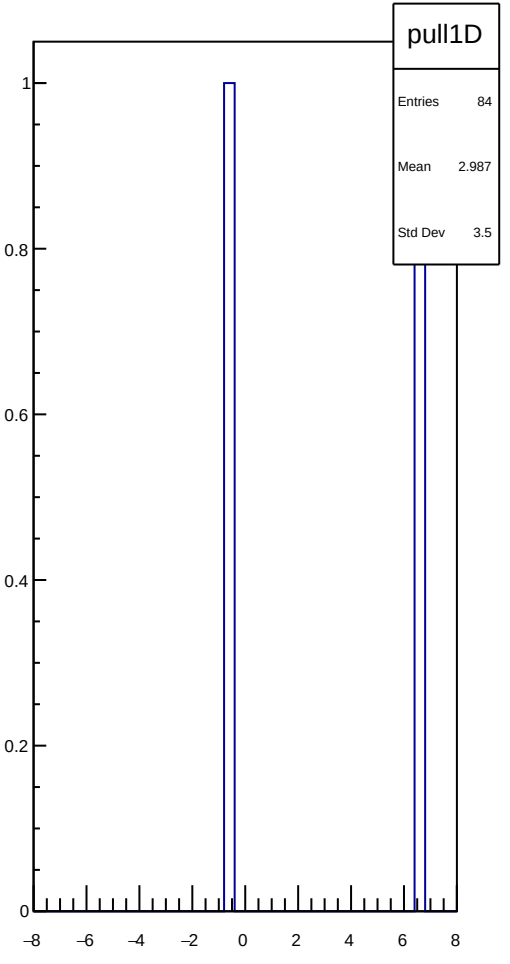

yield_sam6_rms vs run
χ² / ndf 1.145e+05 / 83
p0 0.01928 ± 1.578e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

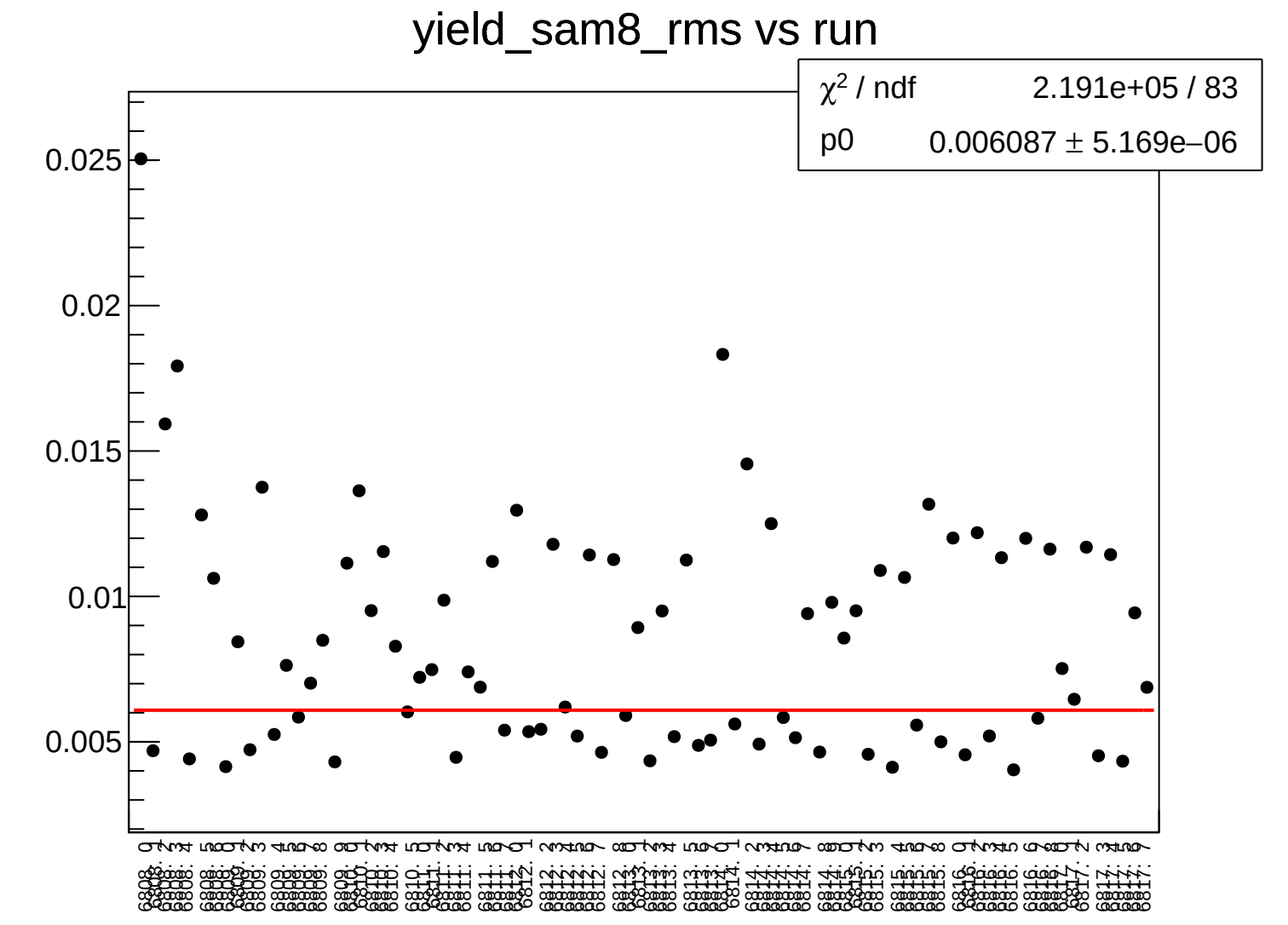

yield_sam7_mean vs run
χ² / ndf 2.053e+06 / 83
p0 2.674 ± 2.752e−06
2.685
2.68
2.675
2.67
2.665
pull
Entries 84
Mean 151.6
Std Dev 112.5
300
200
100
0
−100
−200
−300
−400

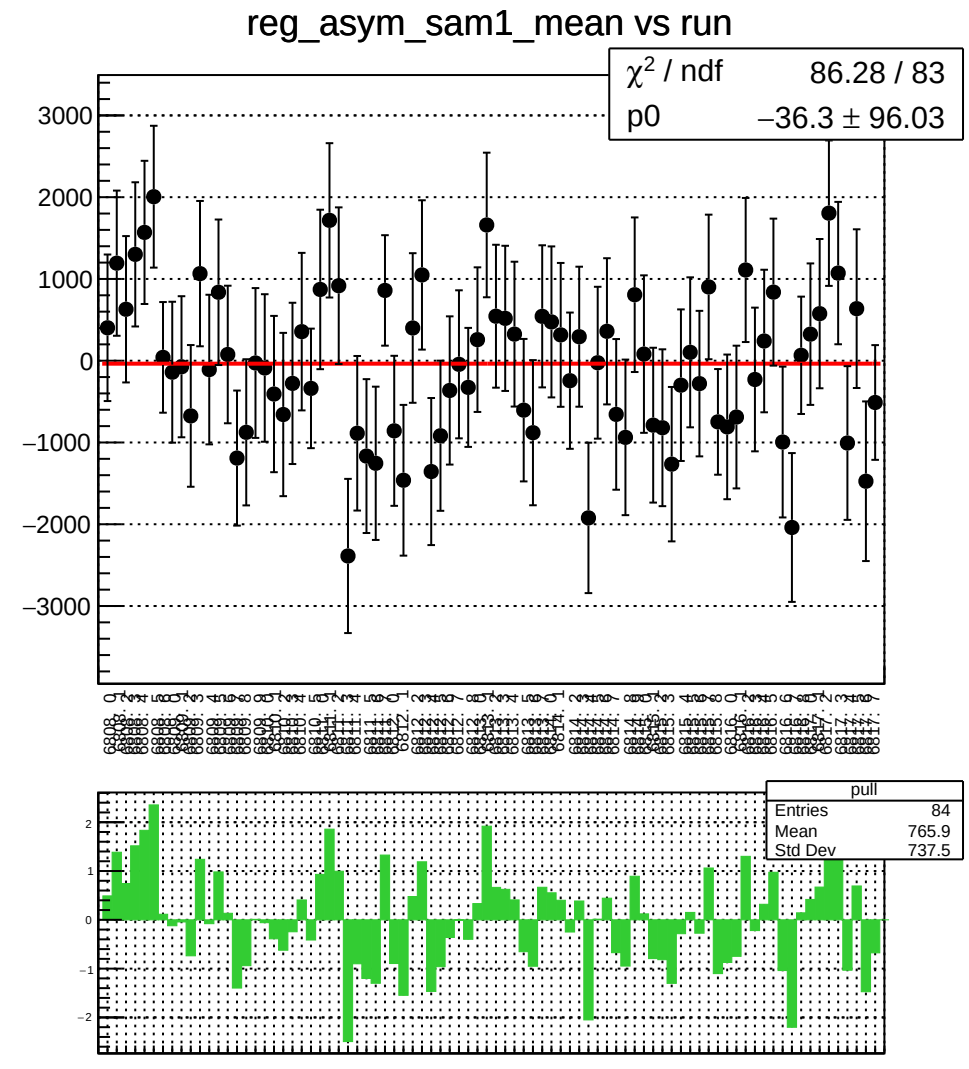

pull1D
Entries 84
Mean 0.5396
Std Dev 3.533
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

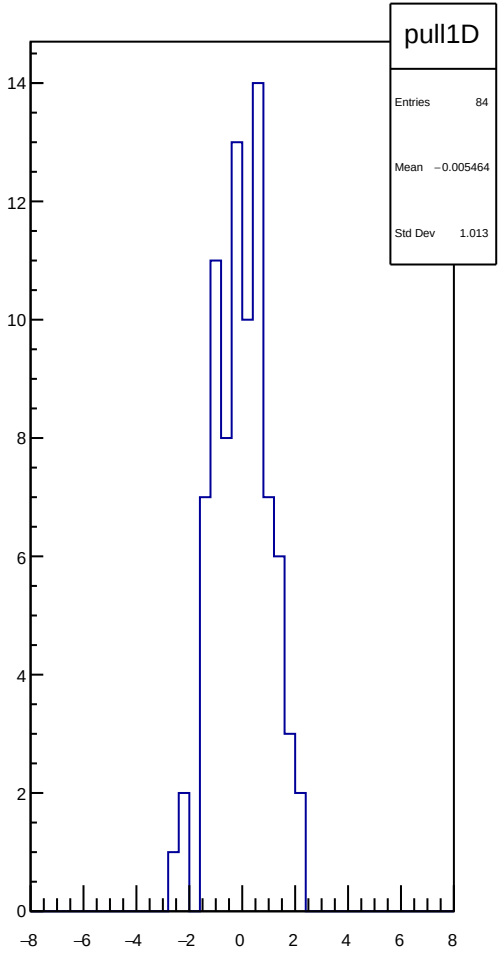

yield_sam7_rms vs run
χ² / ndf 2.256e+05 / 83
p0 0.002287 ± 1.946e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

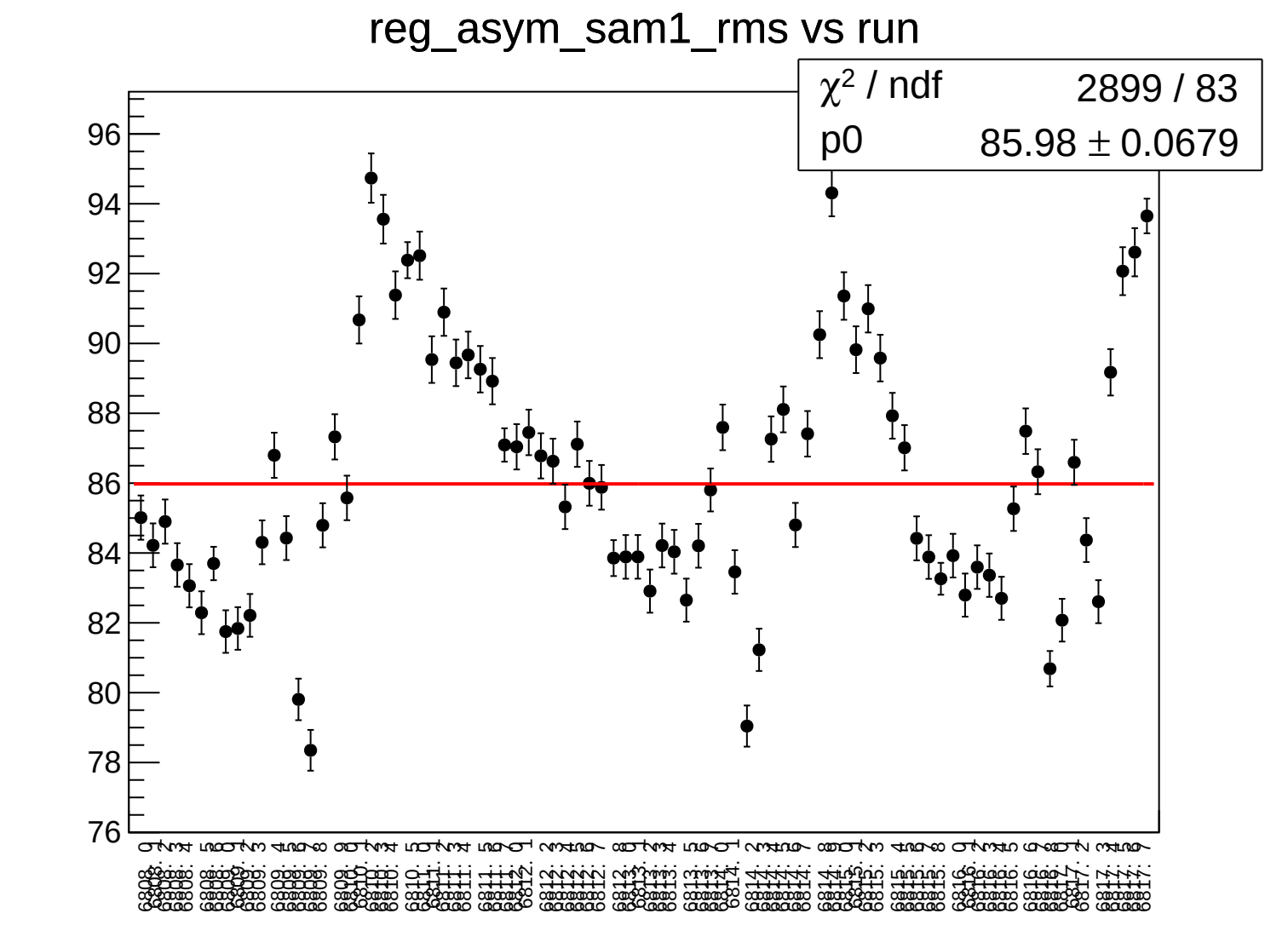

yield_sam8_mean vs run
χ² / ndf 1.62e+06 / 83
p0 9.222 ± 7.309e−06
9.27
9.26
9.25
9.24
9.23
9.22
9.21
9.2
pull
Entries 84
Mean 314.1
Std Dev 276.8
500
400
300
200
100
0
−100
−200

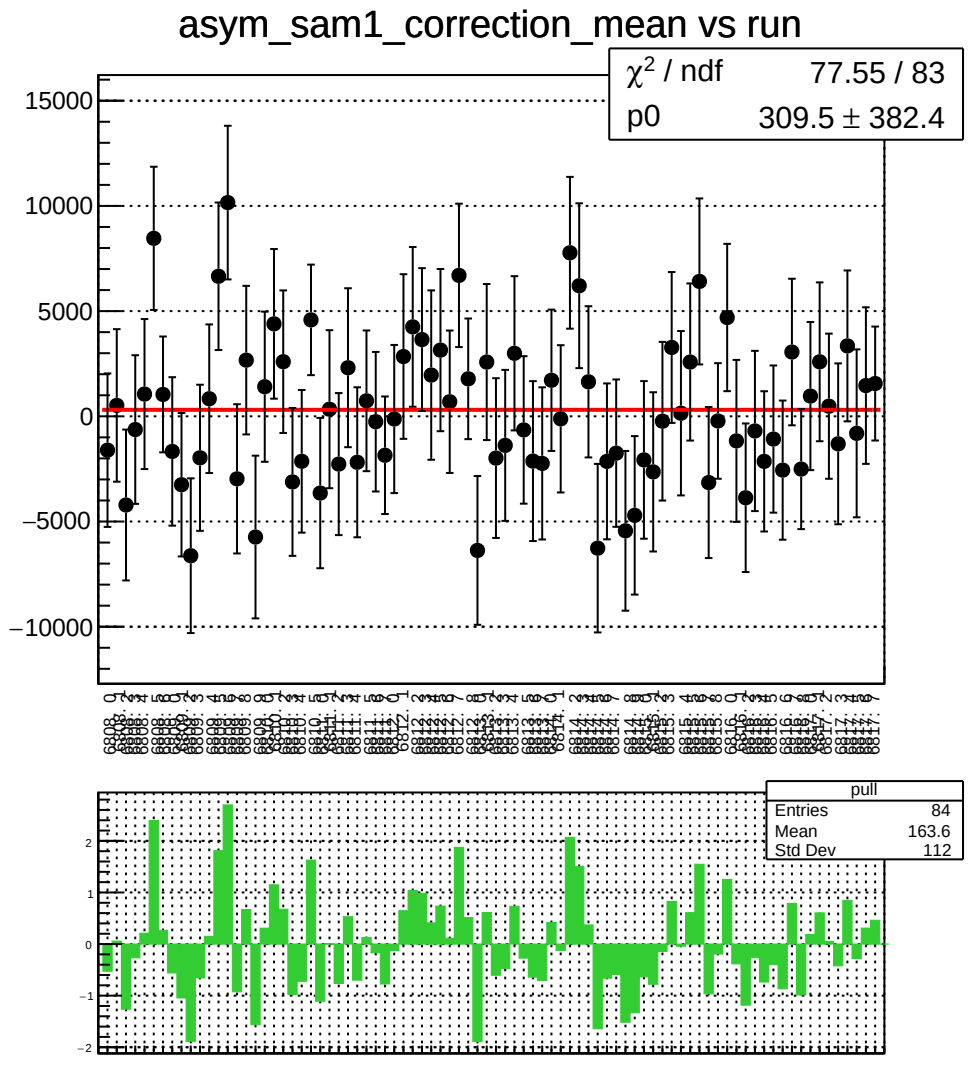

pull1D
Entries 84
Mean 2.987
Std Dev 3.5
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

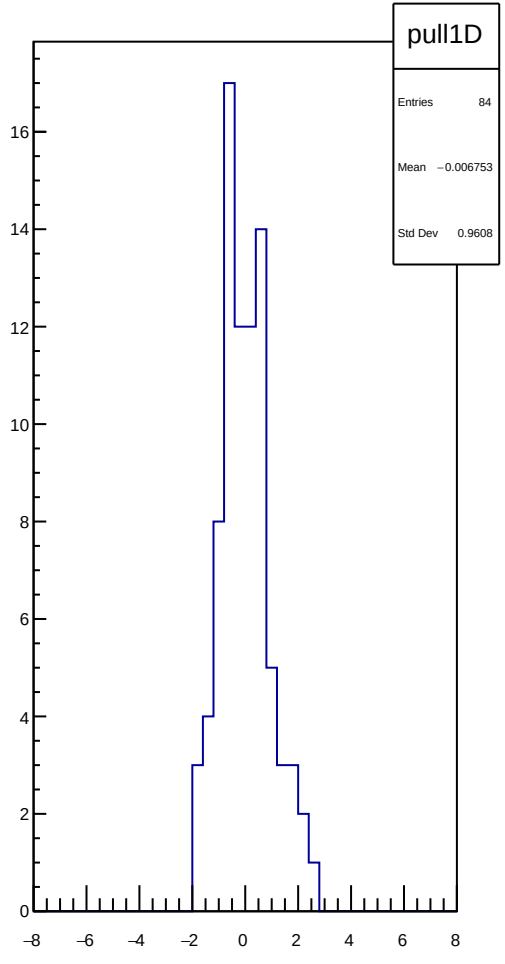

yield_sam8_rms vs run
χ² / ndf 2.191e+05 / 83
p0 0.006087 ± 5.169e−06
0.025
0.02
0.015
0.01
0.005

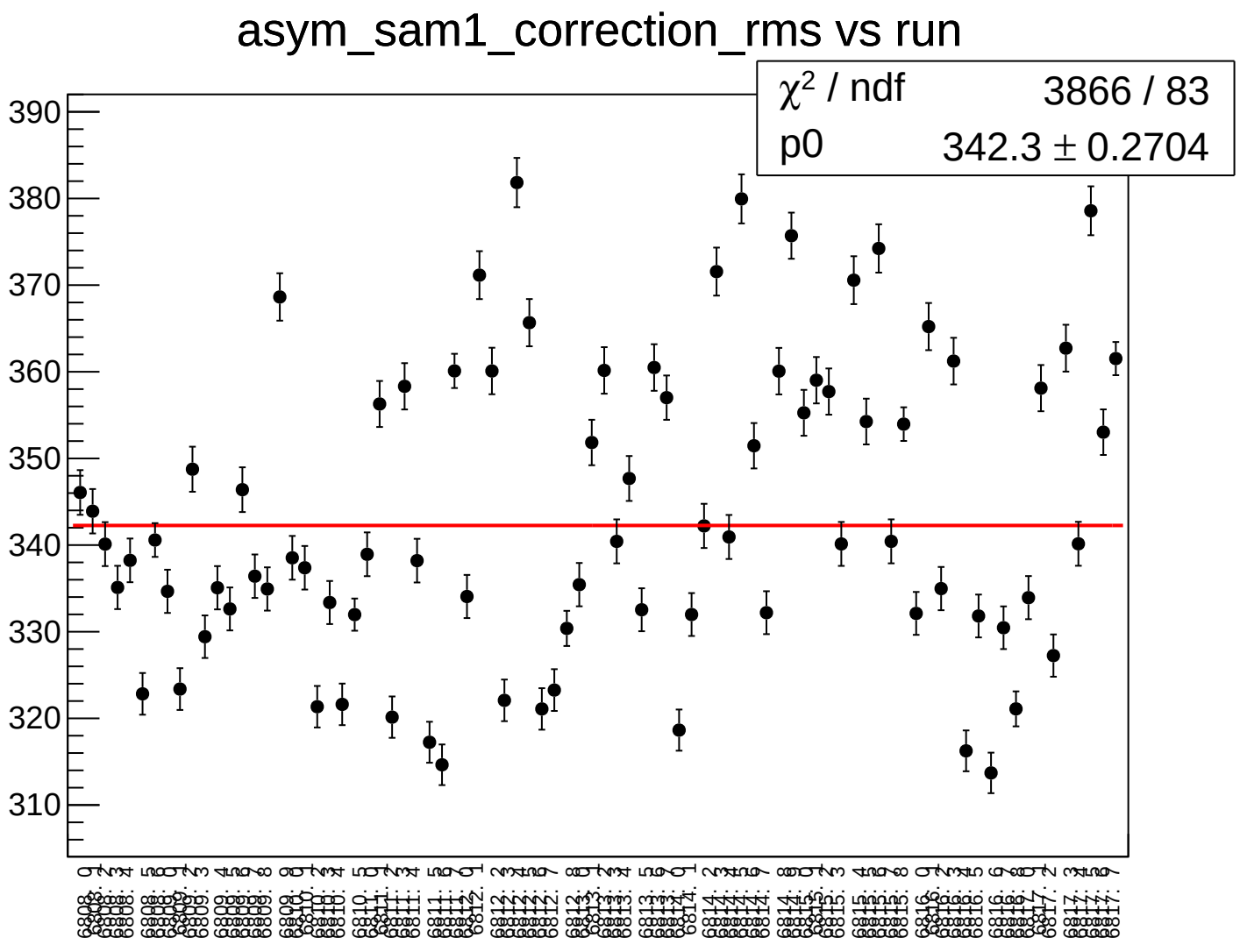

reg_asym_sam1_mean vs run
χ² / ndf 86.28 / 83
p0 −36.3 ± 96.03
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 84
Mean 765.9
Std Dev 737.5
2
1
0
−1
−2

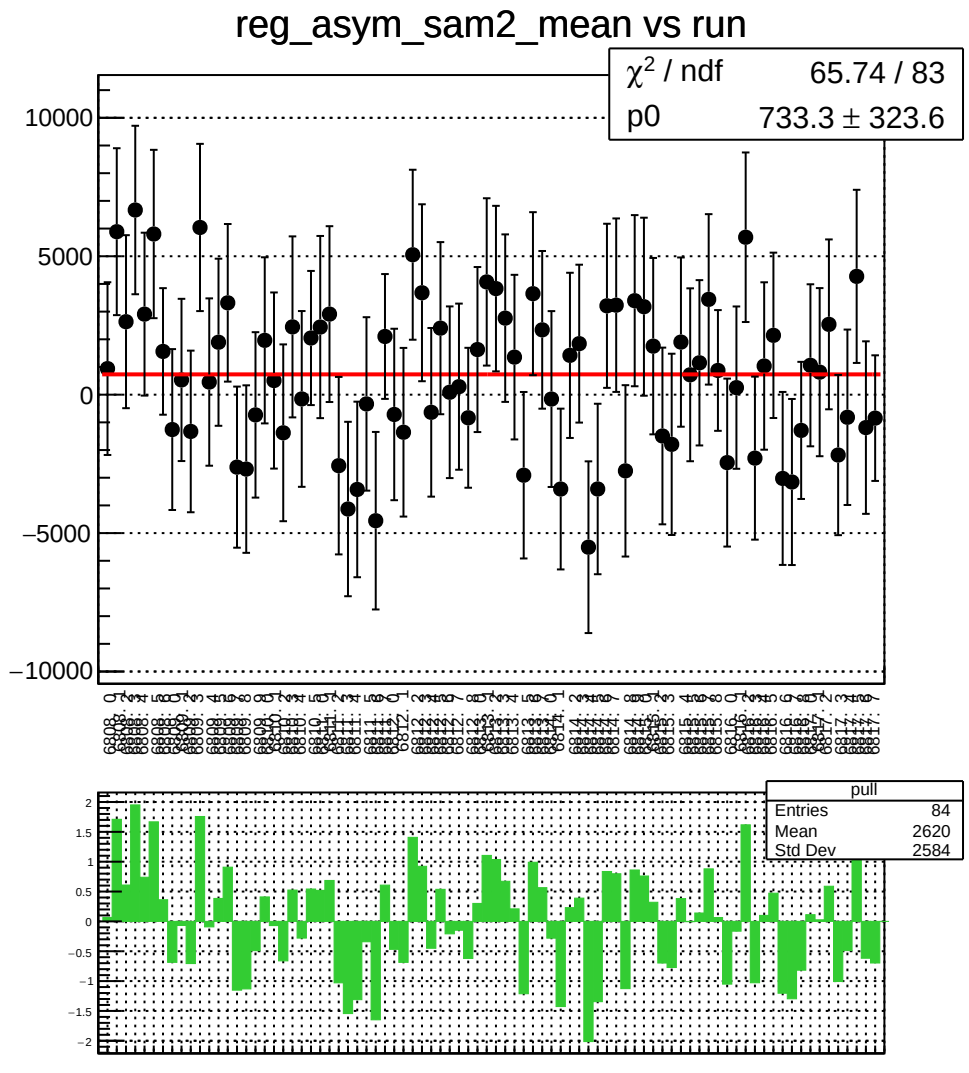

pull1D
Entries 84
Mean −0.005464
Std Dev 1.013
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

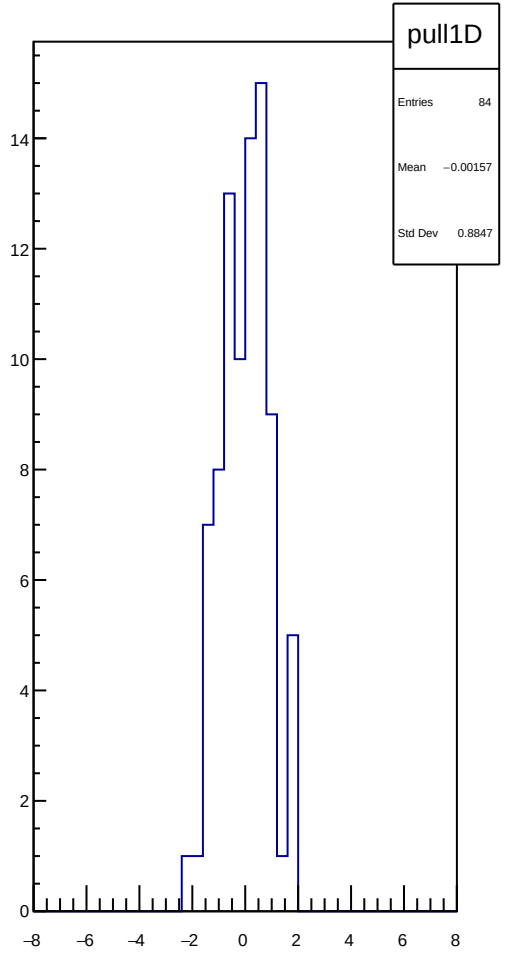

reg_asym_sam1_rms vs run
χ² / ndf 2899 / 83
p0 85.98 ± 0.0679
96
94
92
90
88
86
84
82
80
78
76

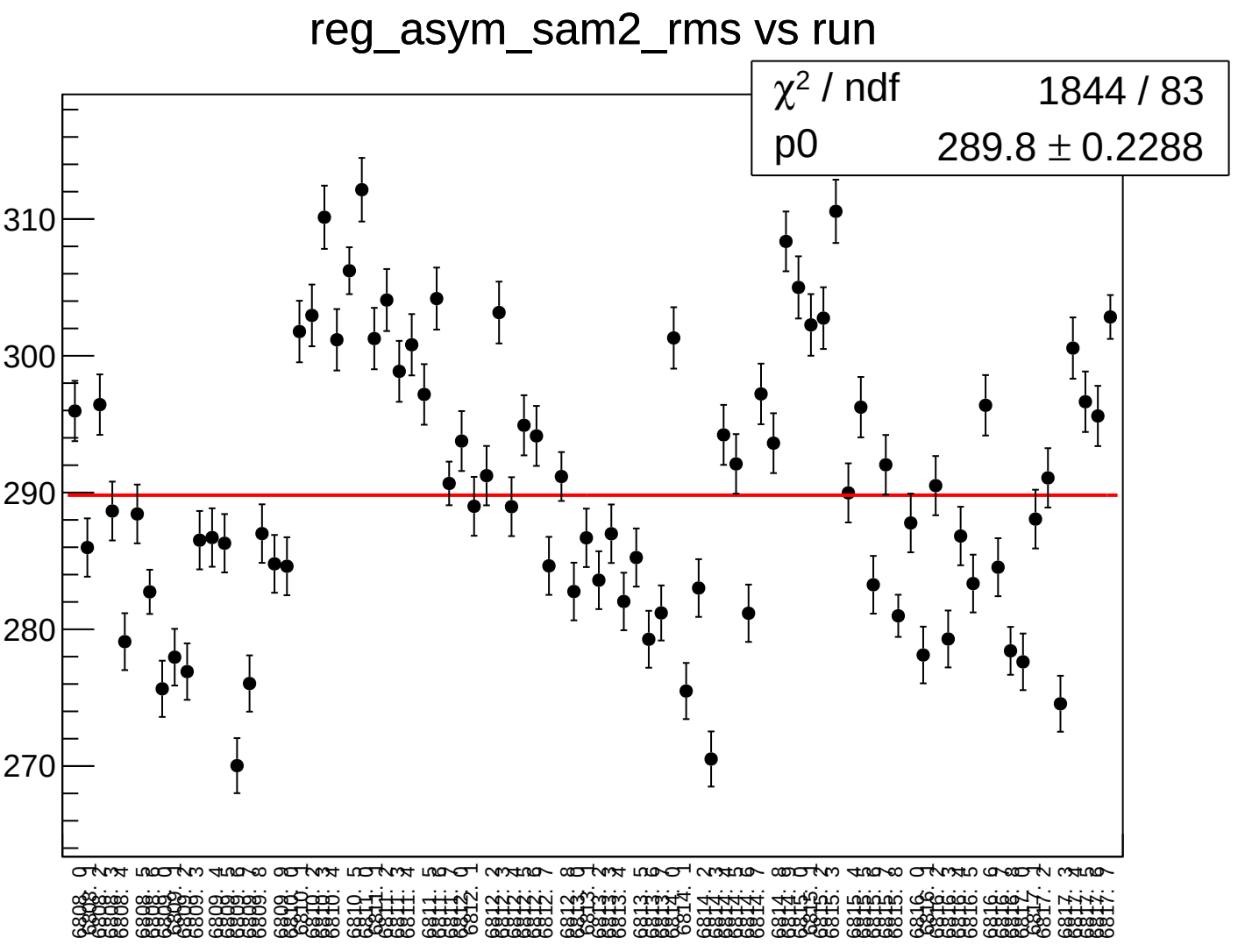

asym_sam1_correction_mean vs run
χ² / ndf 77.55 / 83
p0 309.5 ± 382.4
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 163.6
Std Dev 112
2
1
0
−1
−2

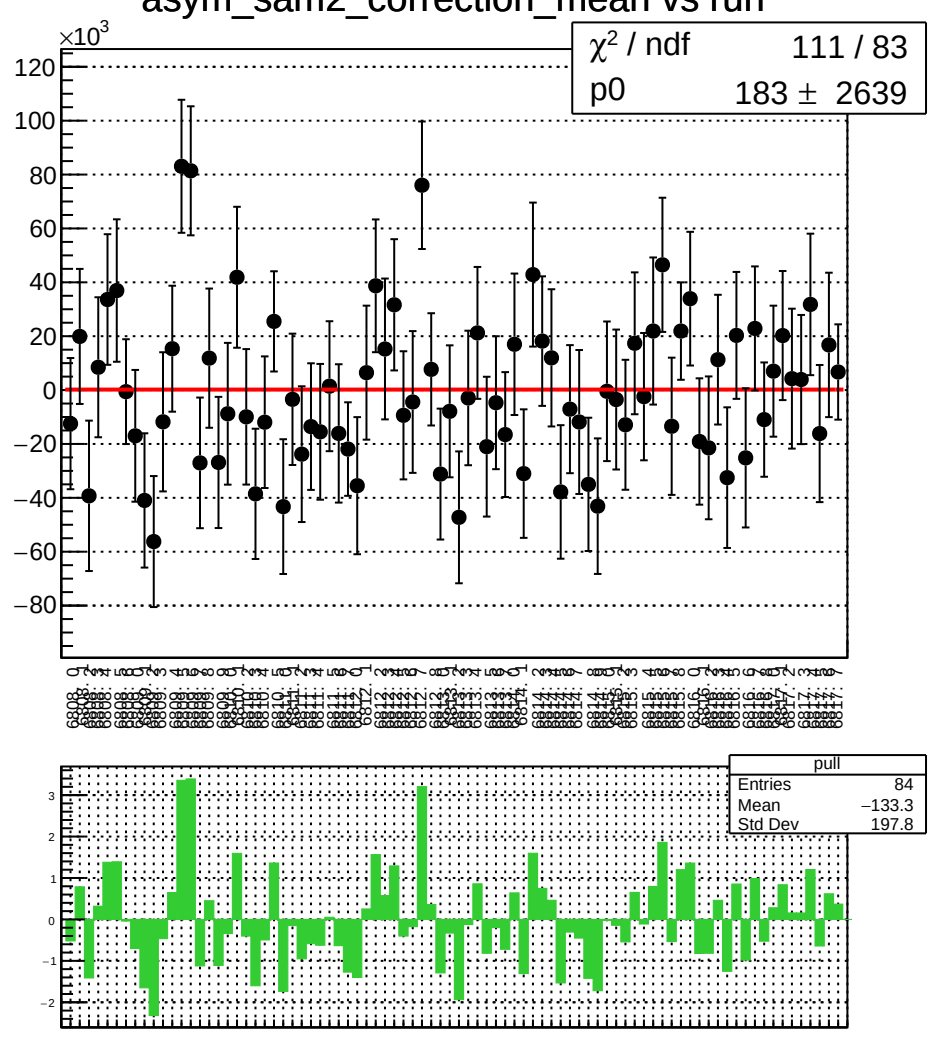

pull1D
Entries 84
Mean −0.006753
Std Dev 0.9608
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

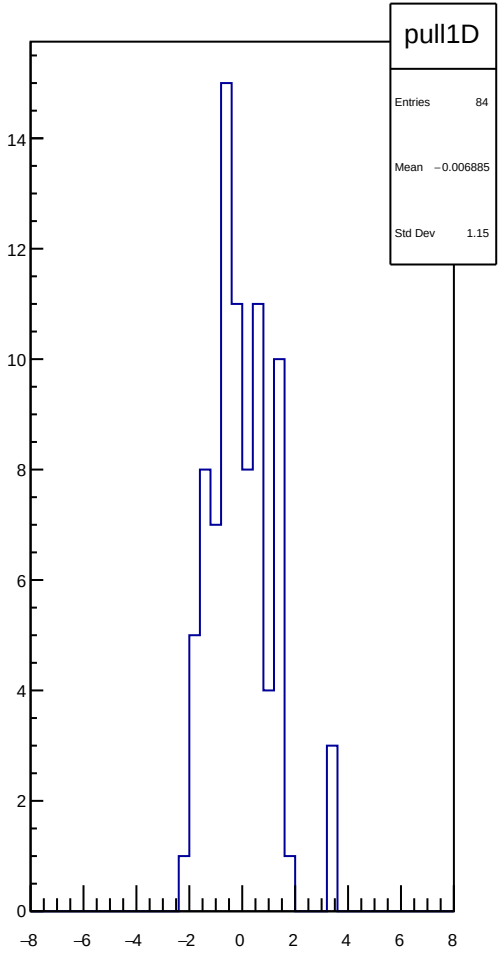

asym_sam1_correction_rms vs run
χ² / ndf 3866 / 83
p0 342.3 ± 0.2704
390
380
370
360
350
340
330
320
310

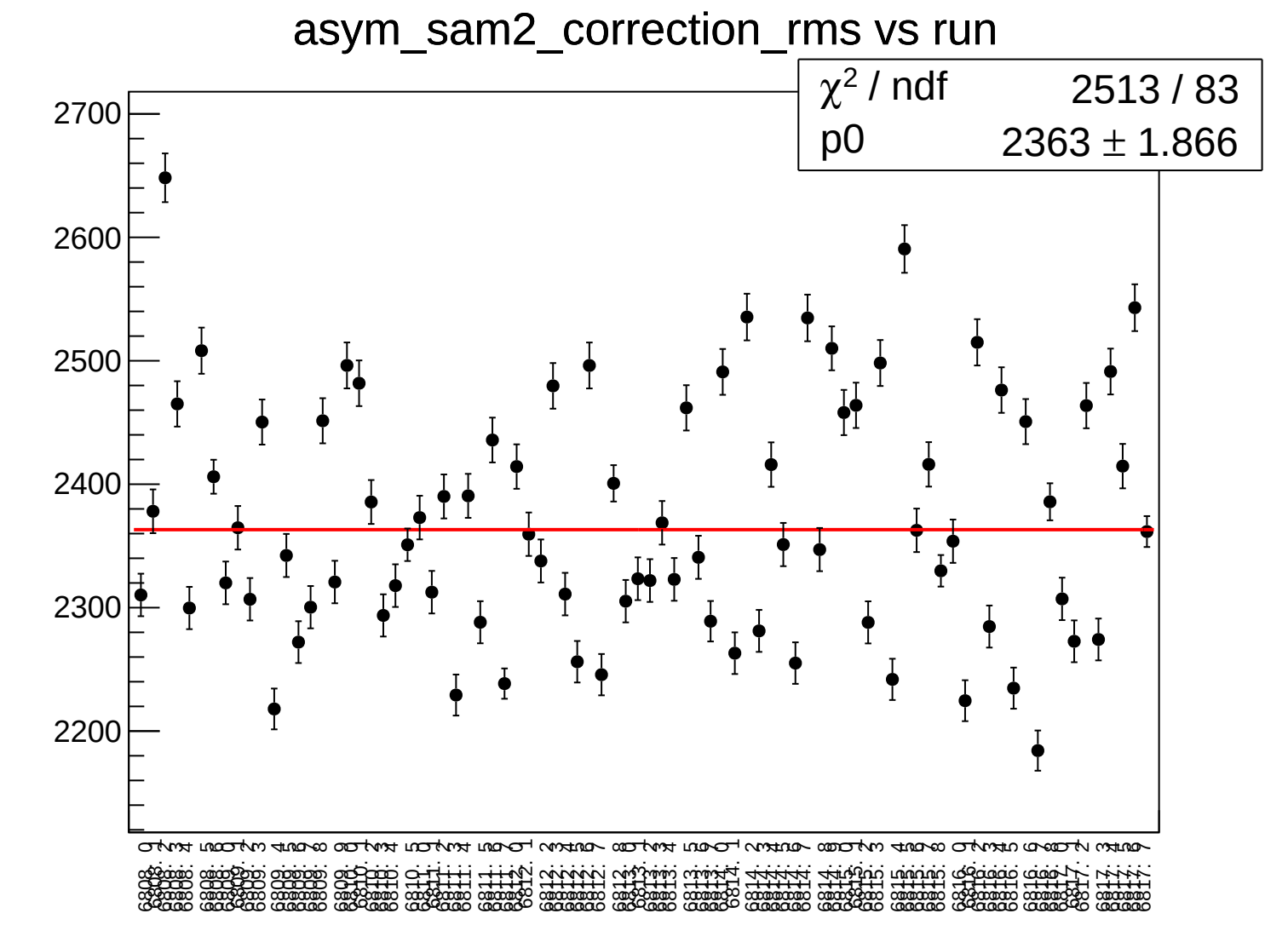

reg_asym_sam2_mean vs run
χ² / ndf 65.74 / 83
p0 733.3 ± 323.6
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 2620
Std Dev 2584
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

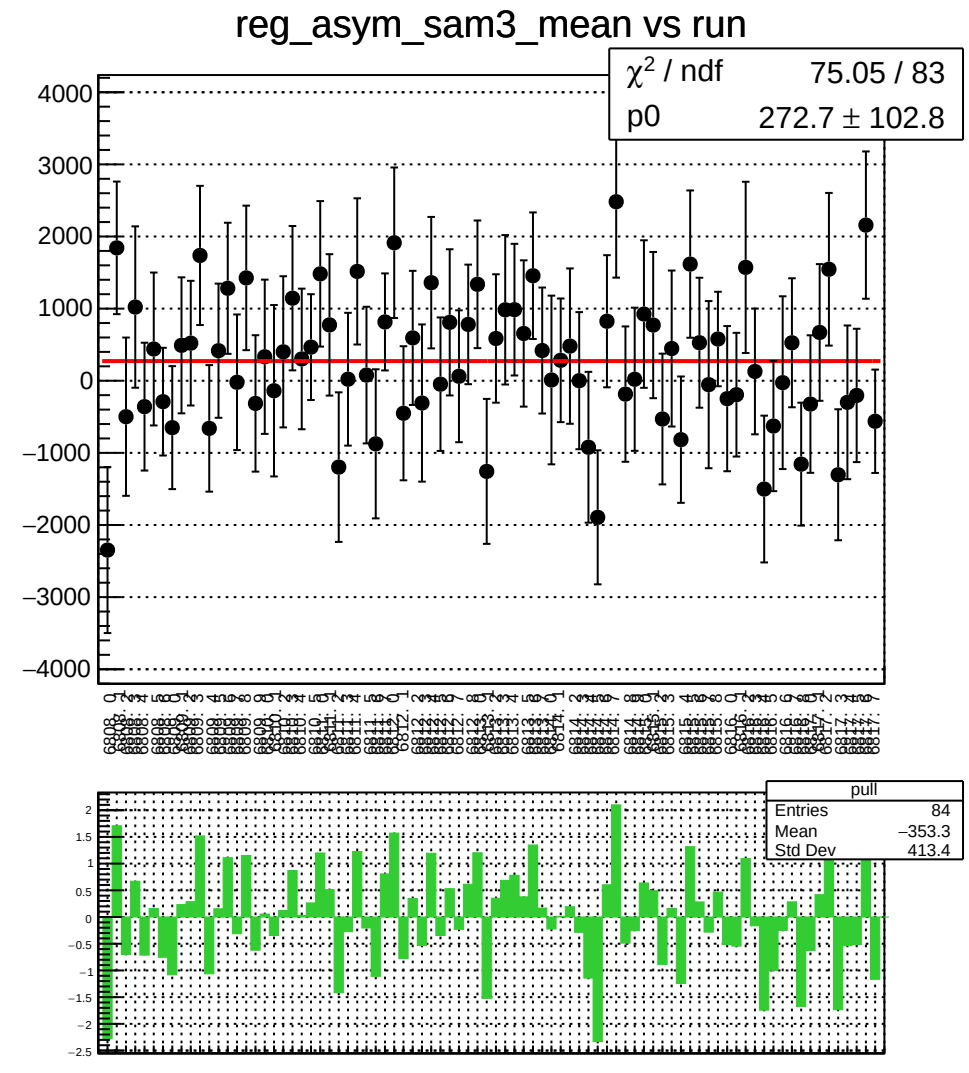

pull1D
Entries 84
Mean −0.00157
Std Dev 0.8847
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

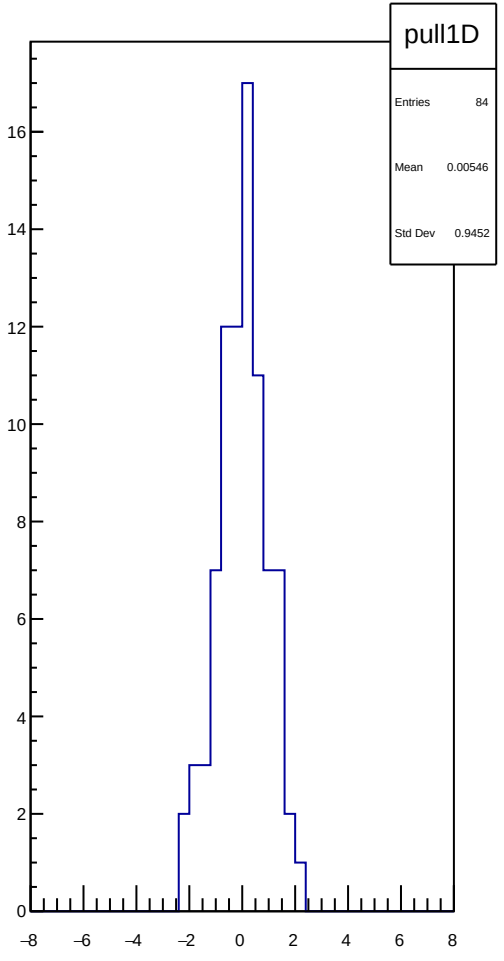

reg_asym_sam2_rms vs run
χ² / ndf 1844 / 83
p0 289.8 ± 0.2288
310
300
290
280
270

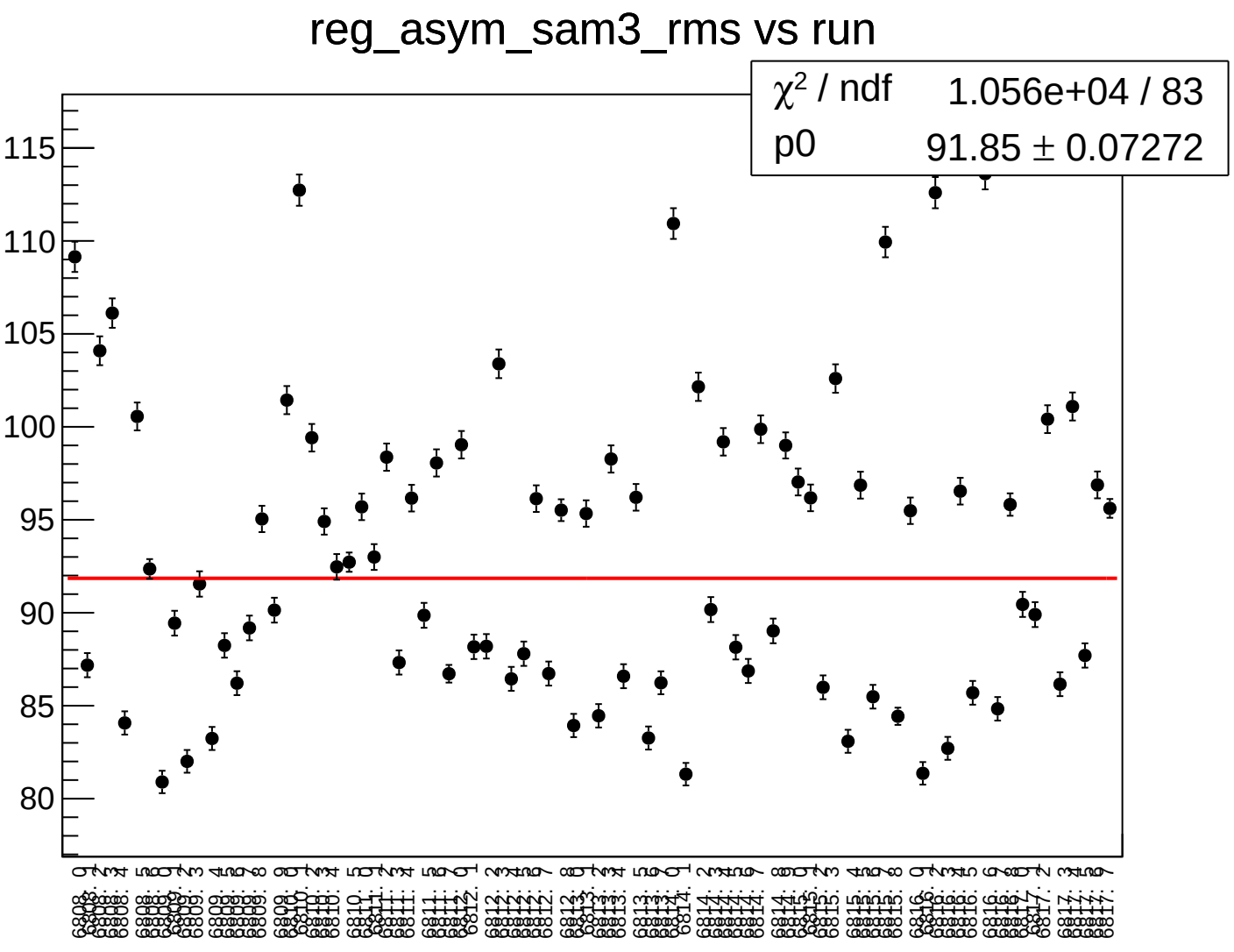

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 111 / 83
p0 183 ± 2639
pull
Entries 84
Mean −133.3
Std Dev 197.8

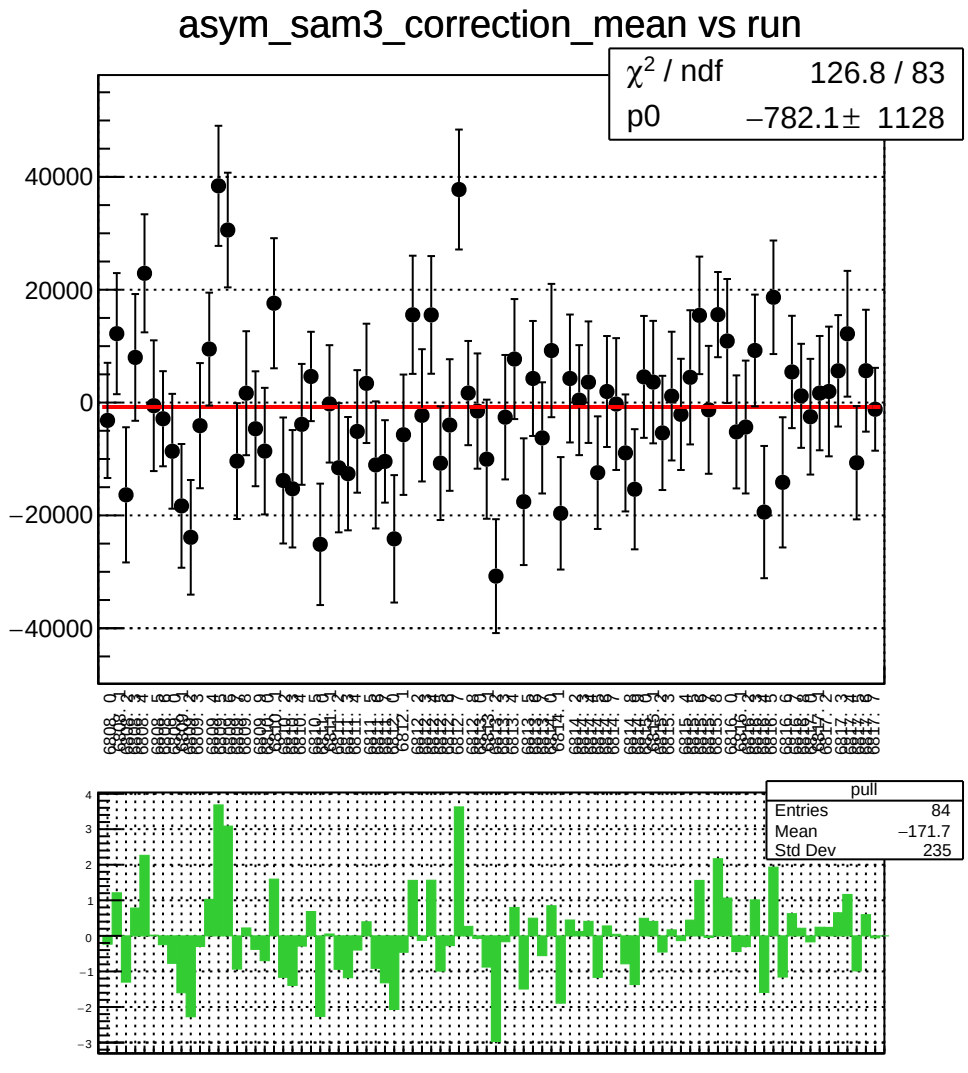

pull1D
Entries 84
Mean −0.006885
Std Dev 1.15

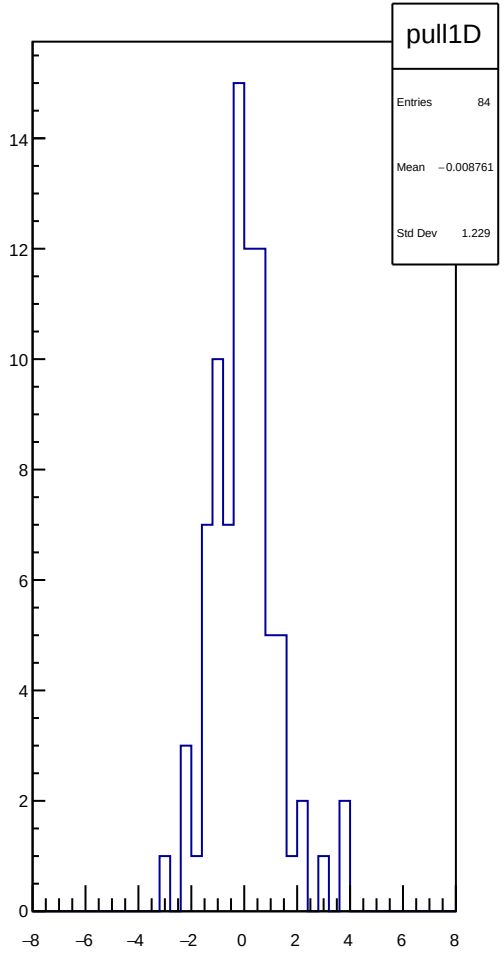

asym_sam2_correction_rms vs run
χ² / ndf 2513 / 83
p0 2363 ± 1.866
2700
2600
2500
2400
2300
2200

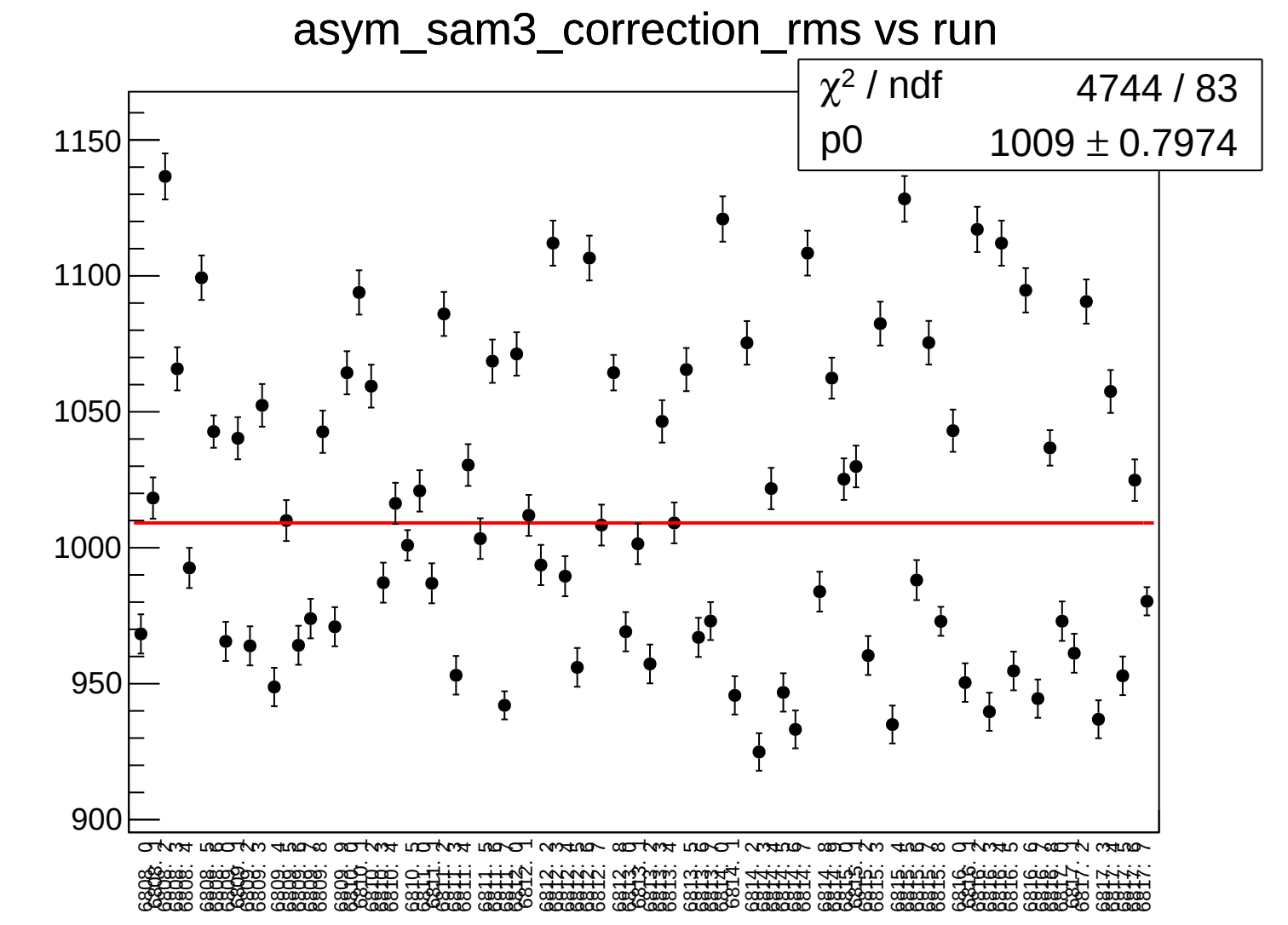

reg_asym_sam3_mean vs run
χ² / ndf 75.05 / 83
p0 272.7 ± 102.8
pull
Entries 84
Mean −353.3
Std Dev 413.4

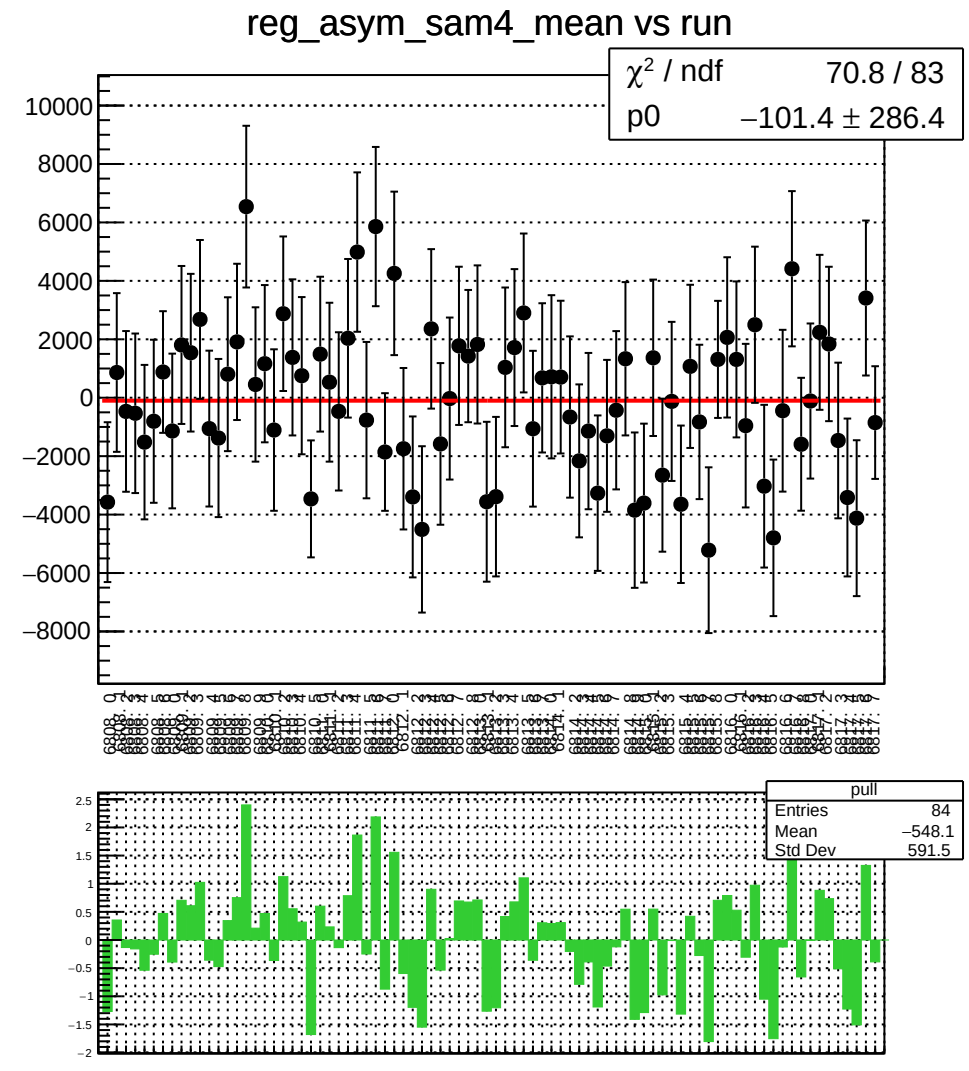

pull1D
Entries 84
Mean 0.00546
Std Dev 0.9452

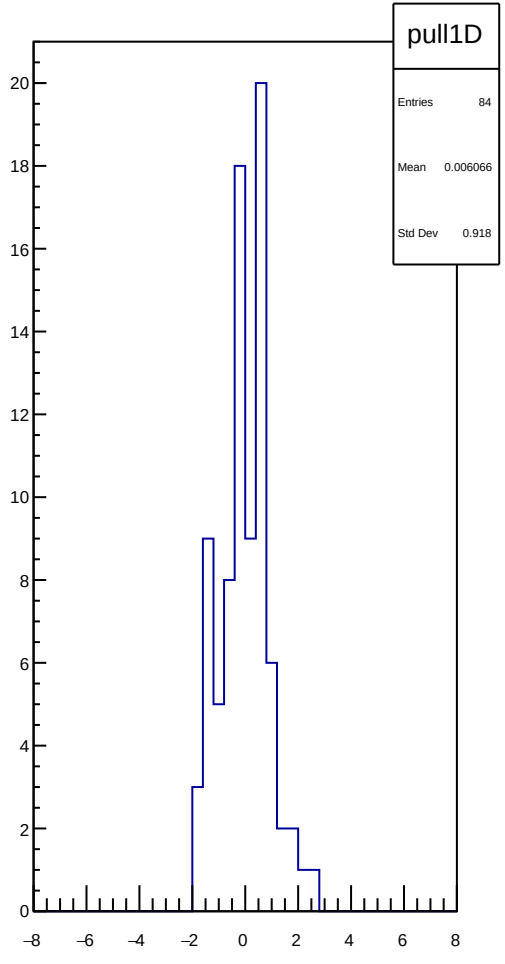

reg_asym_sam3_rms vs run
χ² / ndf 1.056e+04 / 83
p0 91.85 ± 0.07272
115
110
105
100
95
90
85
80

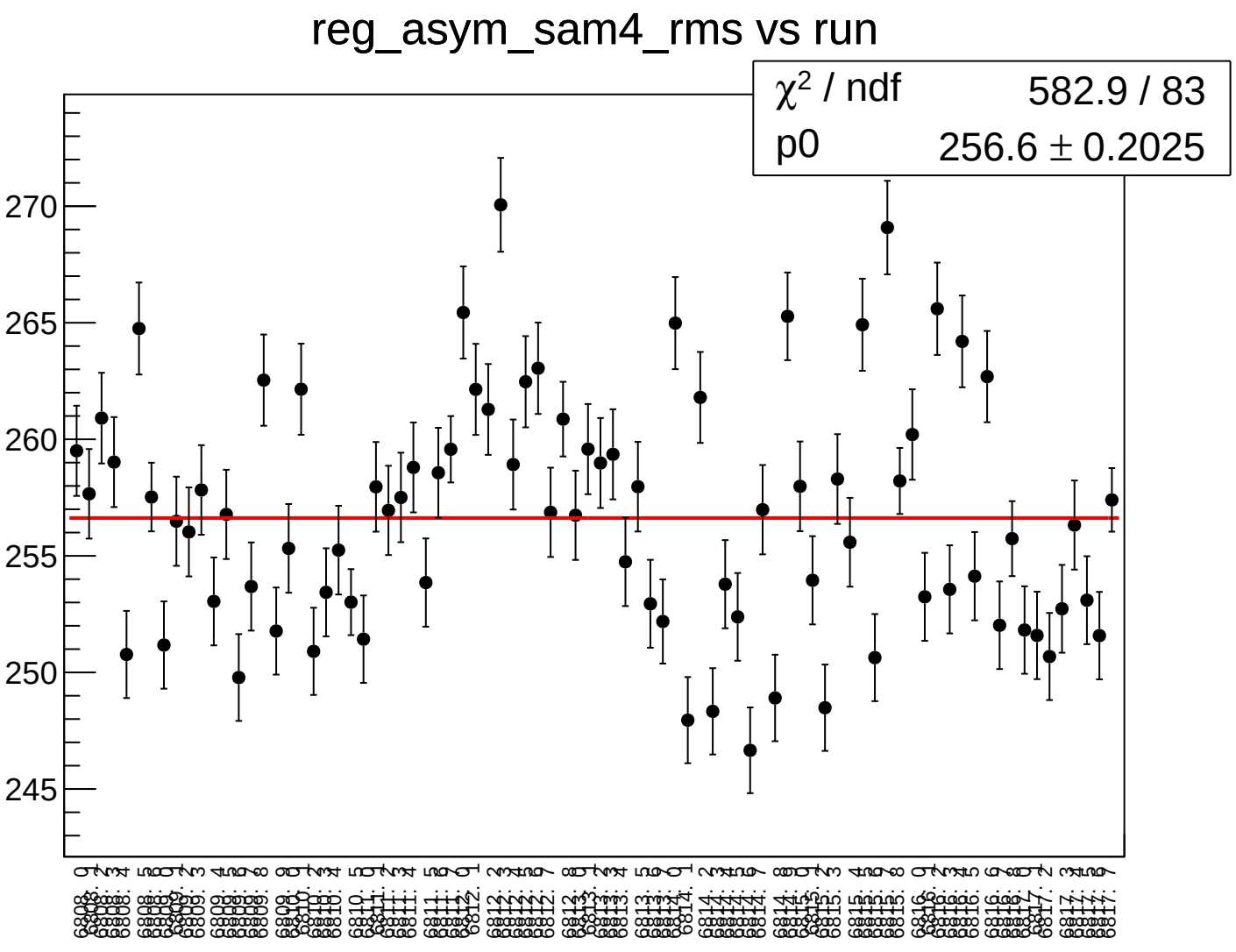

asym_sam3_correction_mean vs run
χ² / ndf 126.8 / 83
p0 −782.1± 1128
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −171.7
Std Dev 235
4
3
2
1
0
−1
−2
−3

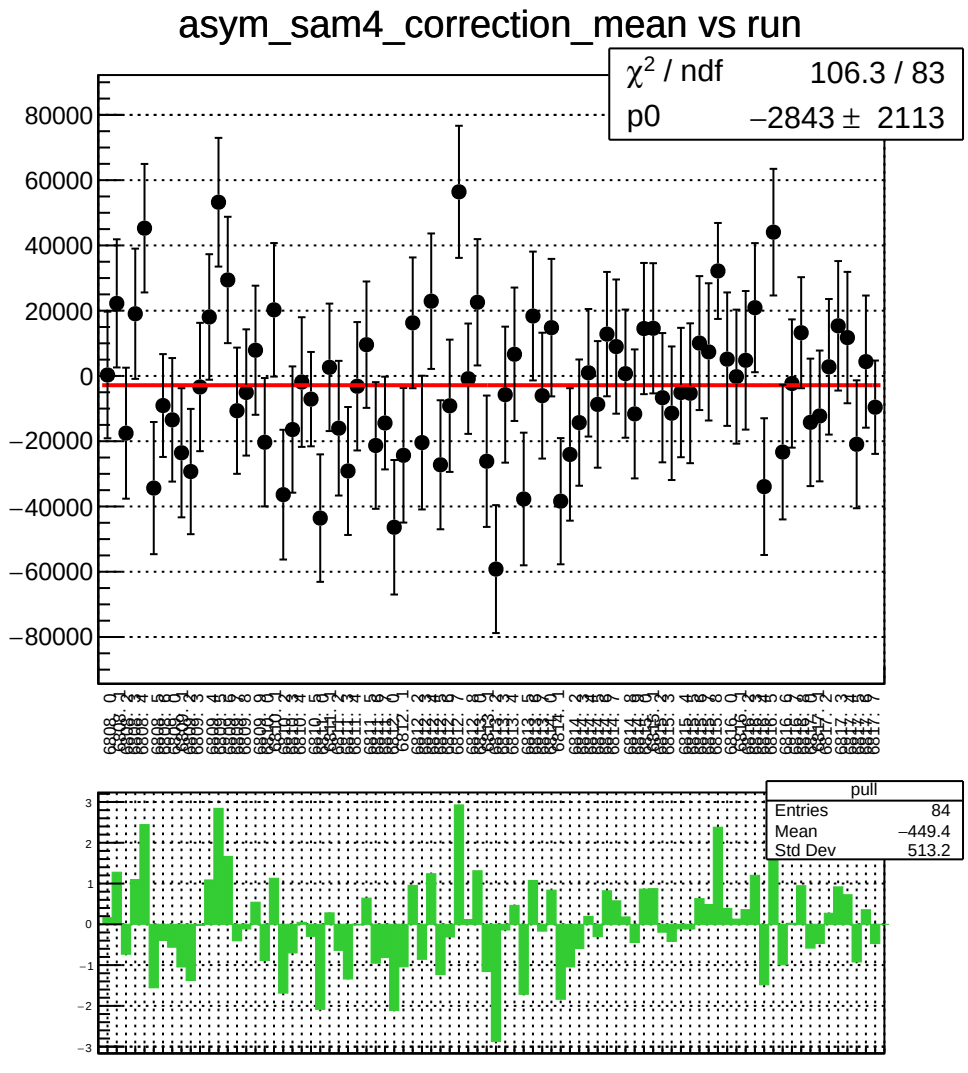

pull1D
Entries 84
Mean −0.008761
Std Dev 1.229
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

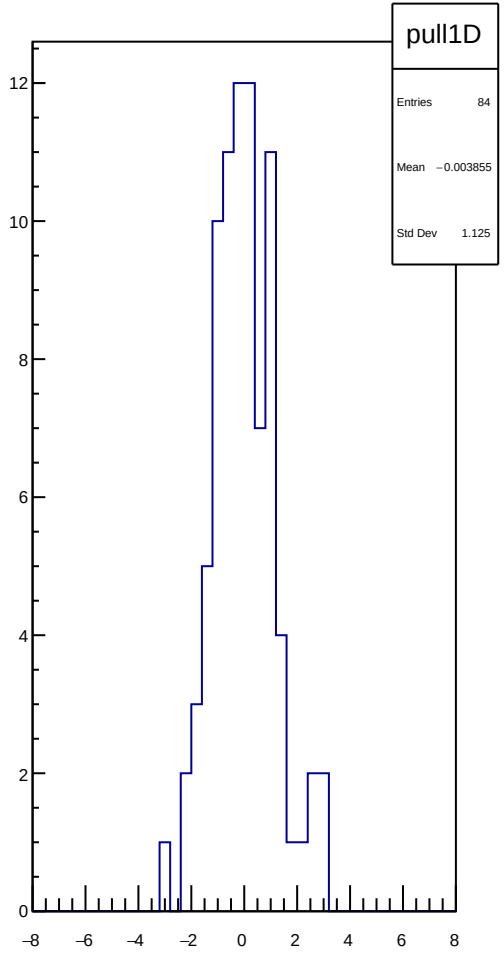

asym_sam3_correction_rms vs run
χ^2 / ndf 4744 / 83
p0 1009 ± 0.7974
1150
1100
1050
1000
950
900

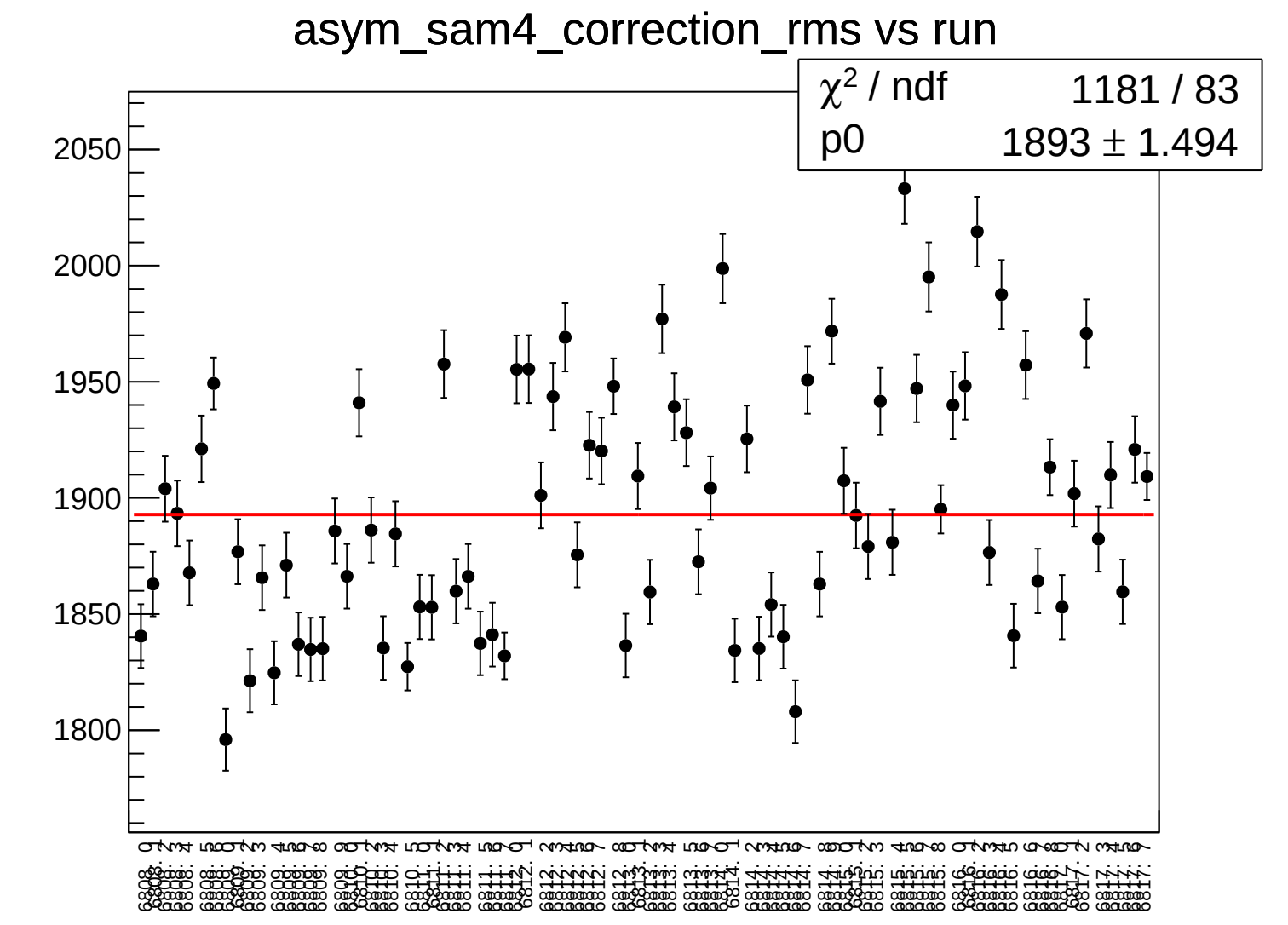

reg_asym_sam4_mean vs run
χ² / ndf 70.8 / 83
p0 −101.4 ± 286.4
pull
Entries 84
Mean −548.1
Std Dev 591.5

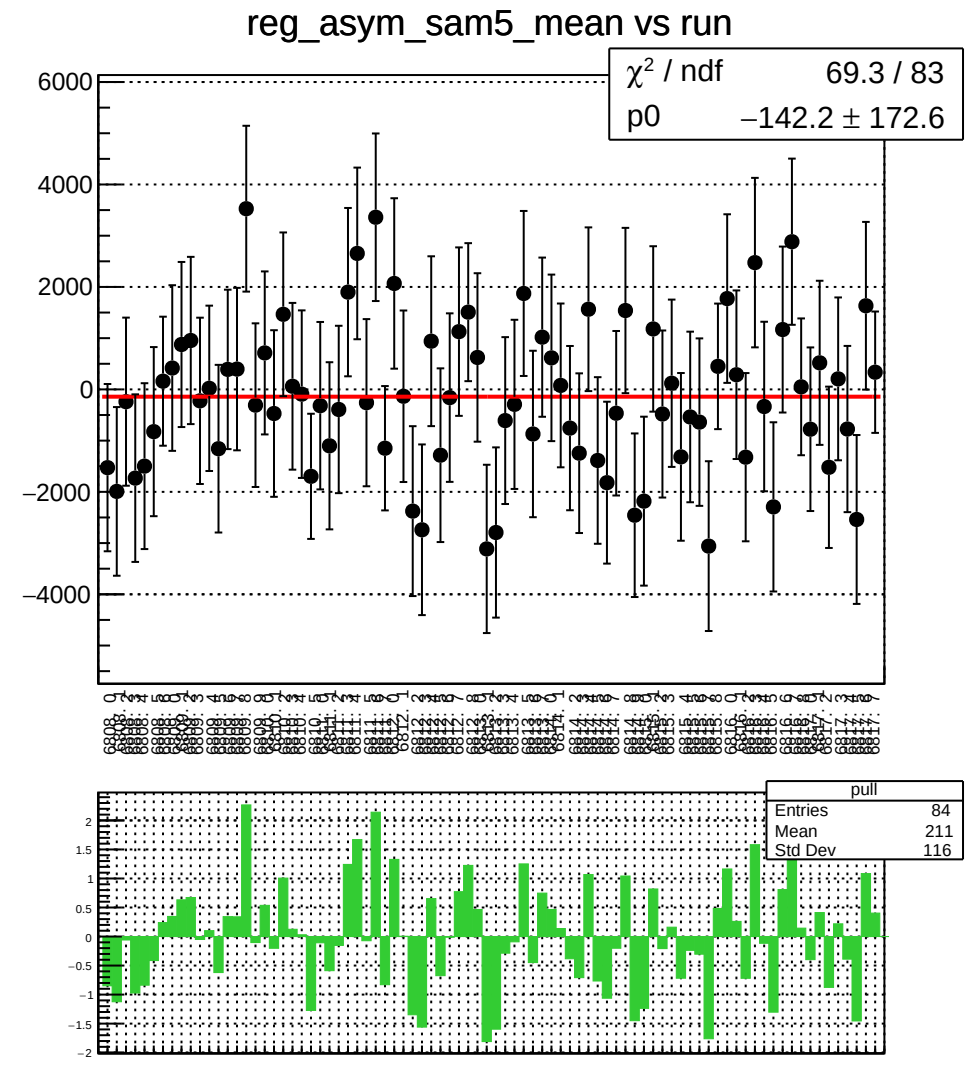

pull1D
Entries 84
Mean 0.006066
Std Dev 0.918

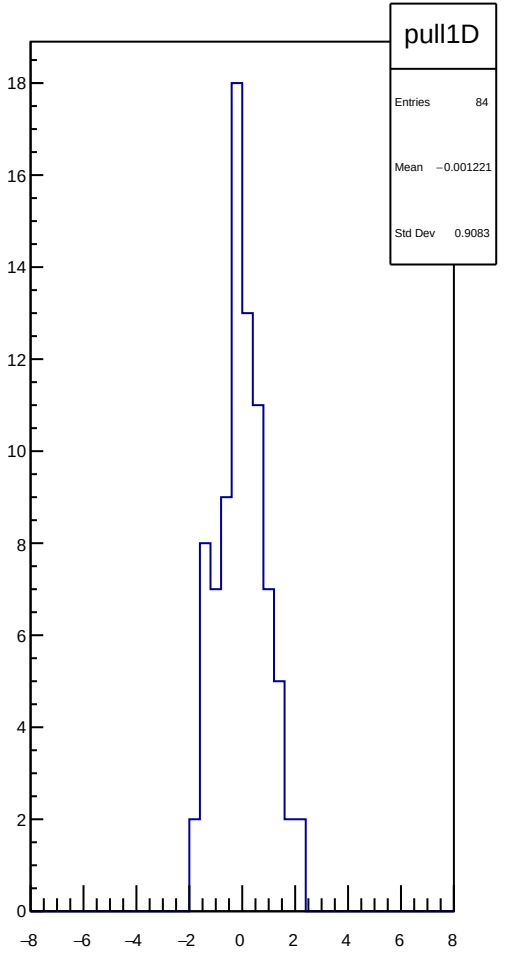

reg_asym_sam4_rms vs run
χ² / ndf 582.9 / 83
p0 256.6 ± 0.2025
270
265
260
255
250
245

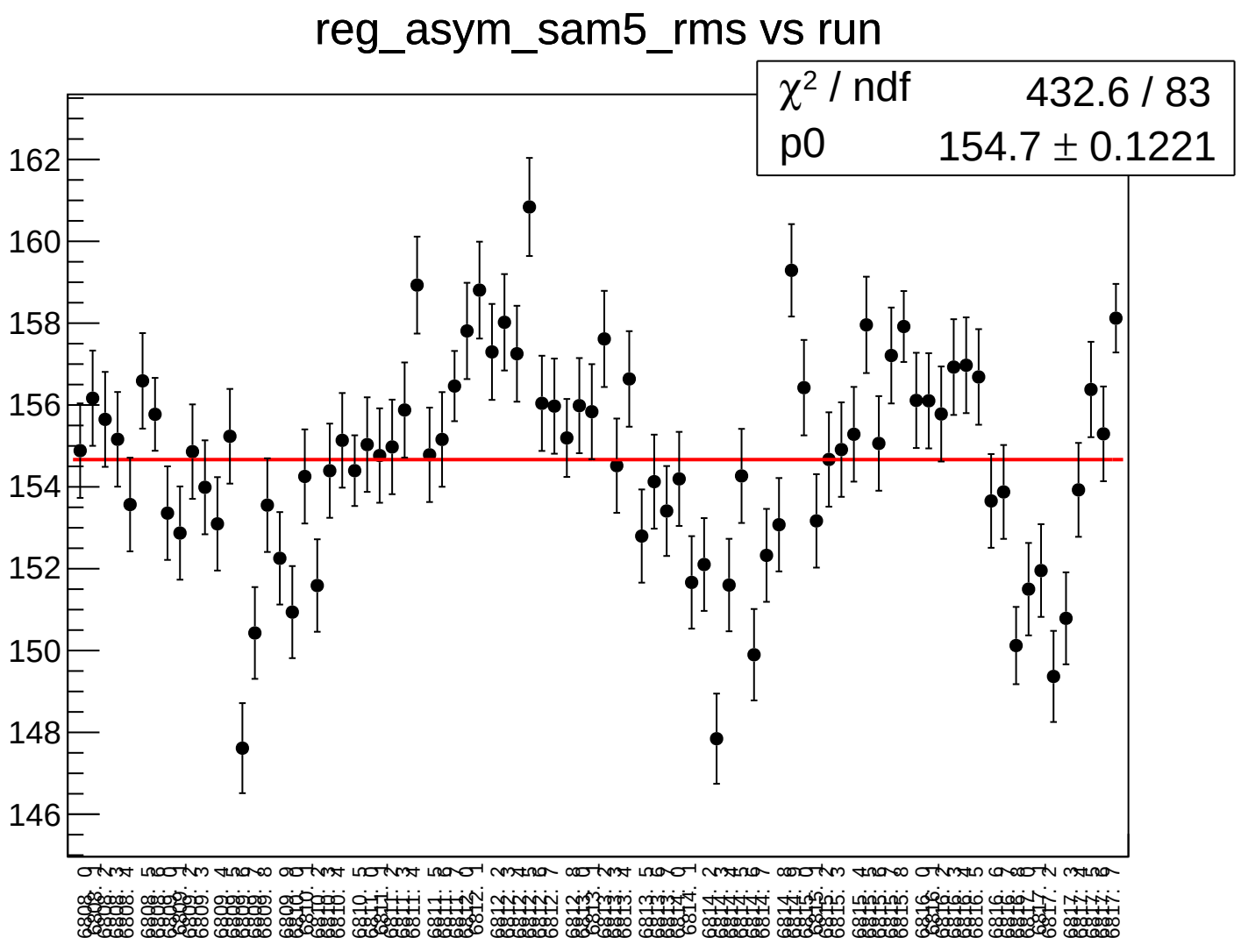

asym_sam4_correction_mean vs run
χ² / ndf 106.3 / 83
p0 −2843 ± 2113
pull
Entries 84
Mean −449.4
Std Dev 513.2

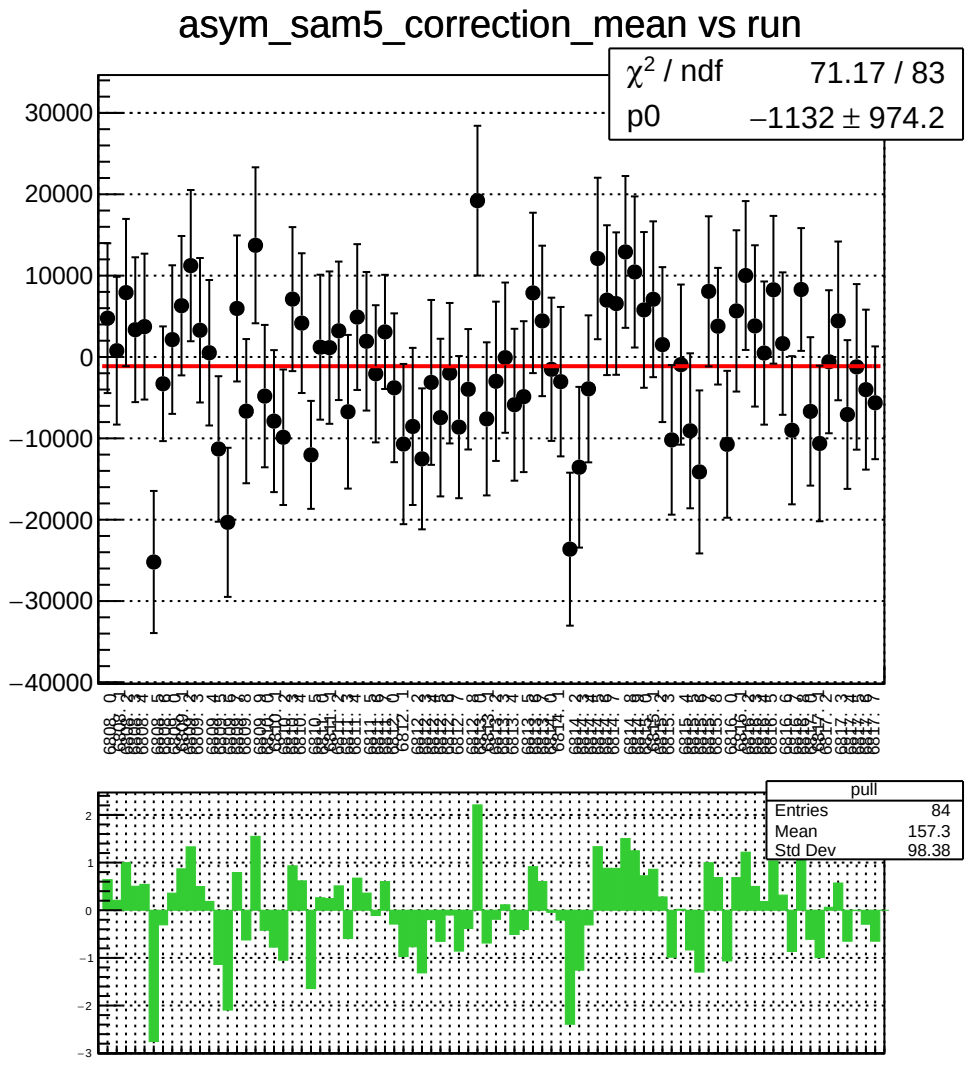

pull1D
Entries 84
Mean −0.003855
Std Dev 1.125

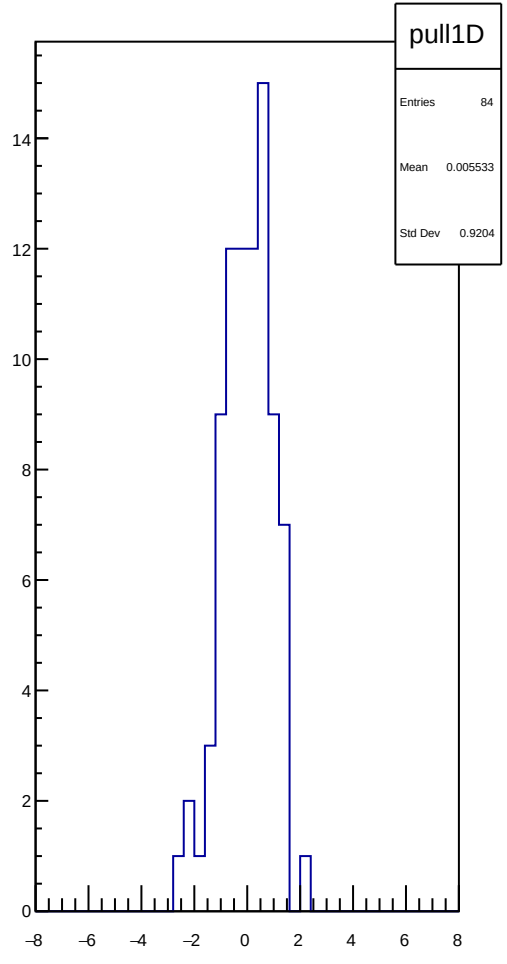

asym_sam4_correction_rms vs run
χ^2 / ndf 1181 / 83
p0 1893 ± 1.494
2050
2000
1950
1900
1850
1800

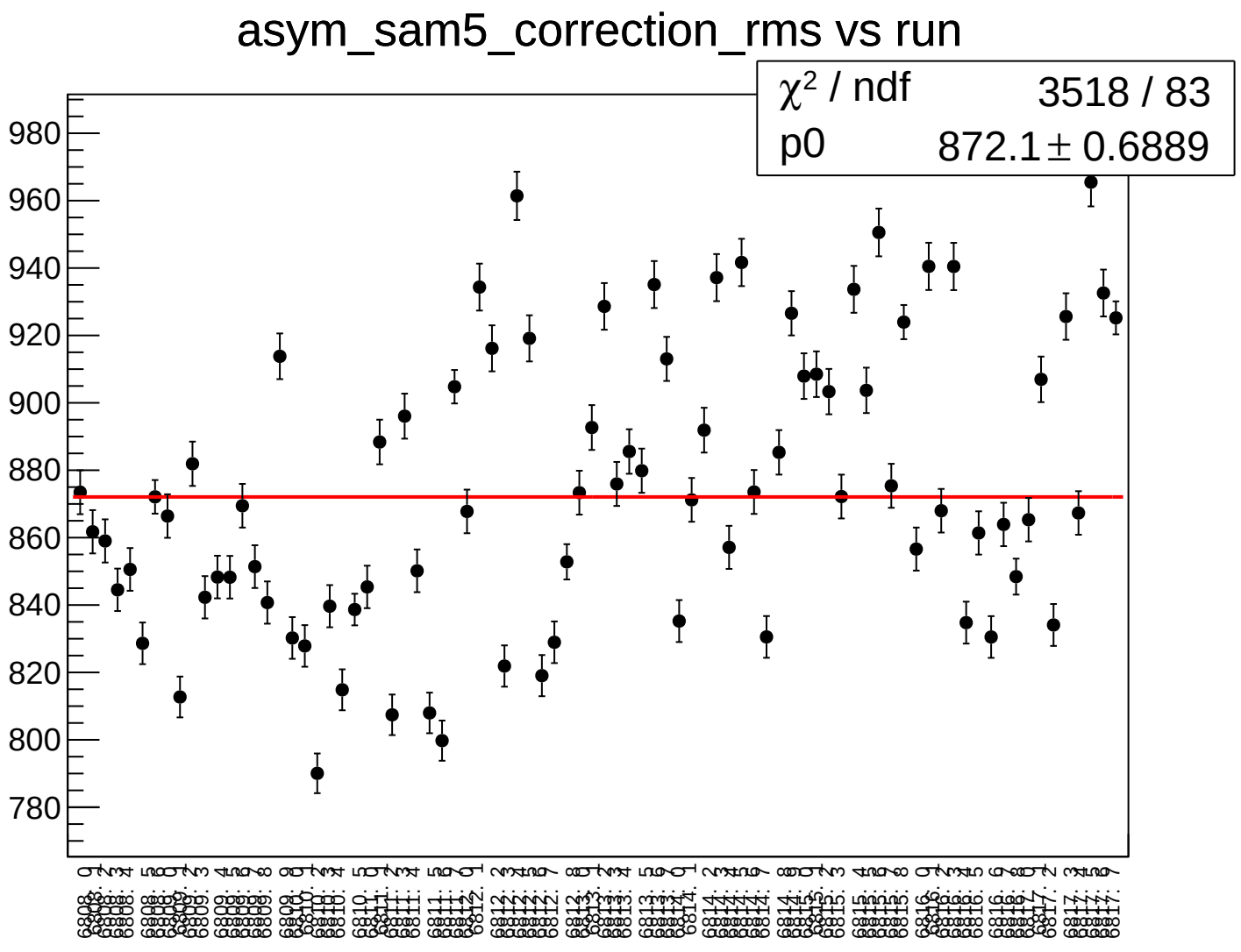

reg_asym_sam5_mean vs run
χ² / ndf 69.3 / 83
p0 −142.2 ± 172.6
pull
Entries 84
Mean 211
Std Dev 116

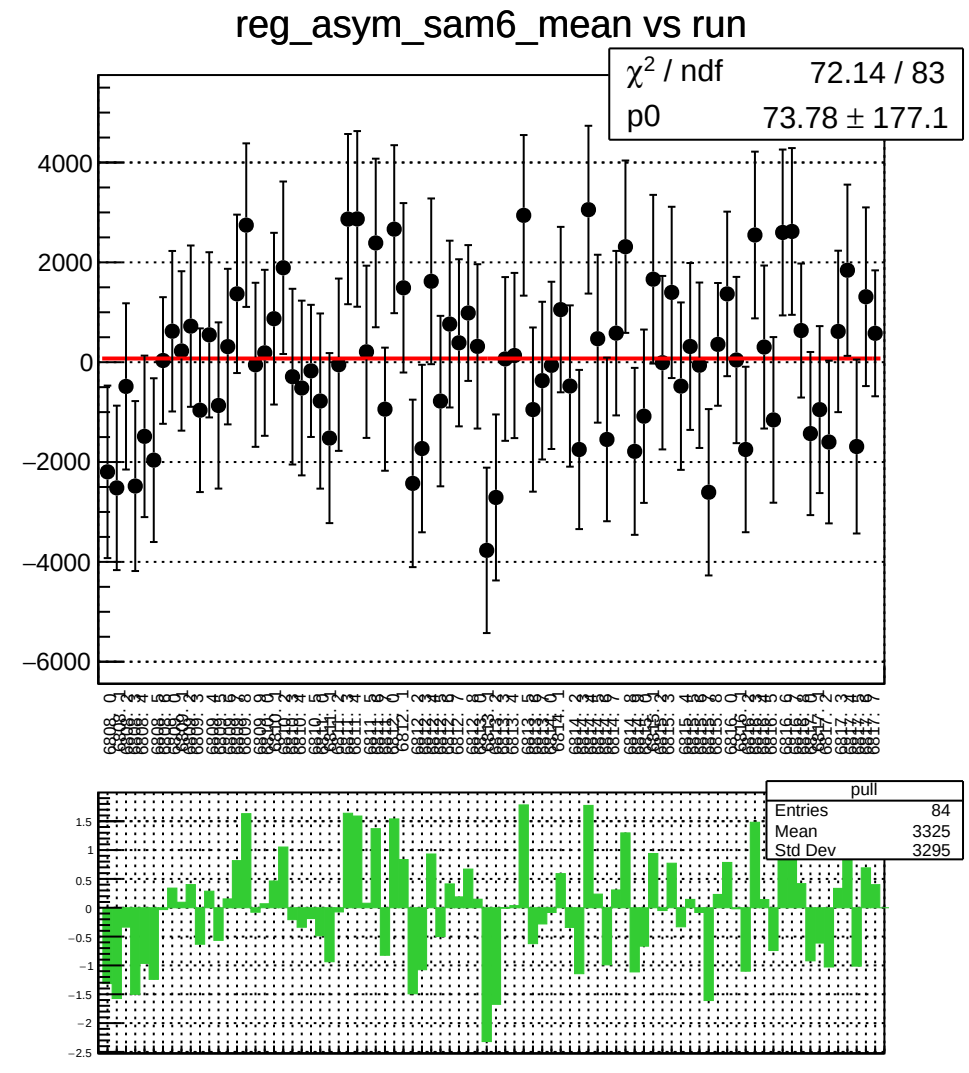

pull1D
Entries 84
Mean −0.001221
Std Dev 0.9083

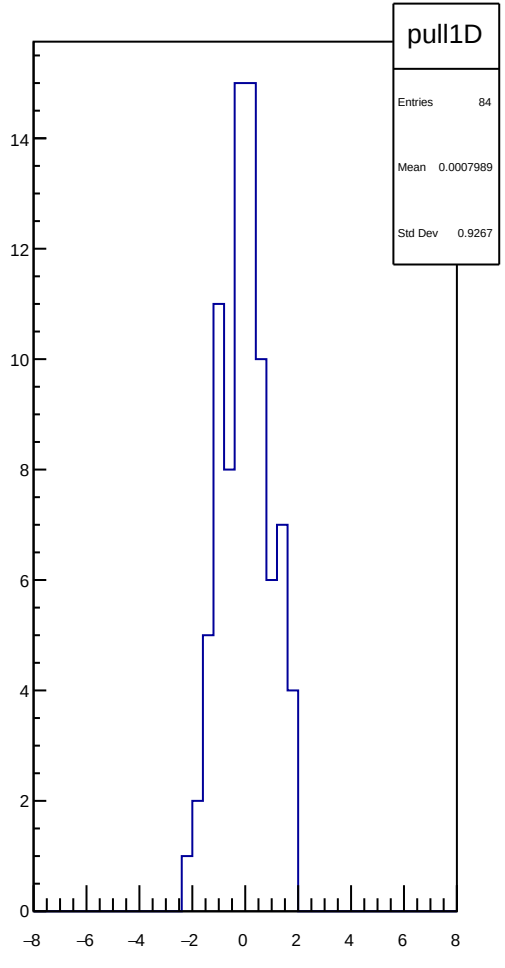

reg_asym_sam5_rms vs run
χ² / ndf 432.6 / 83
p0 154.7 ± 0.1221
162
160
158
156
154
152
150
148
146

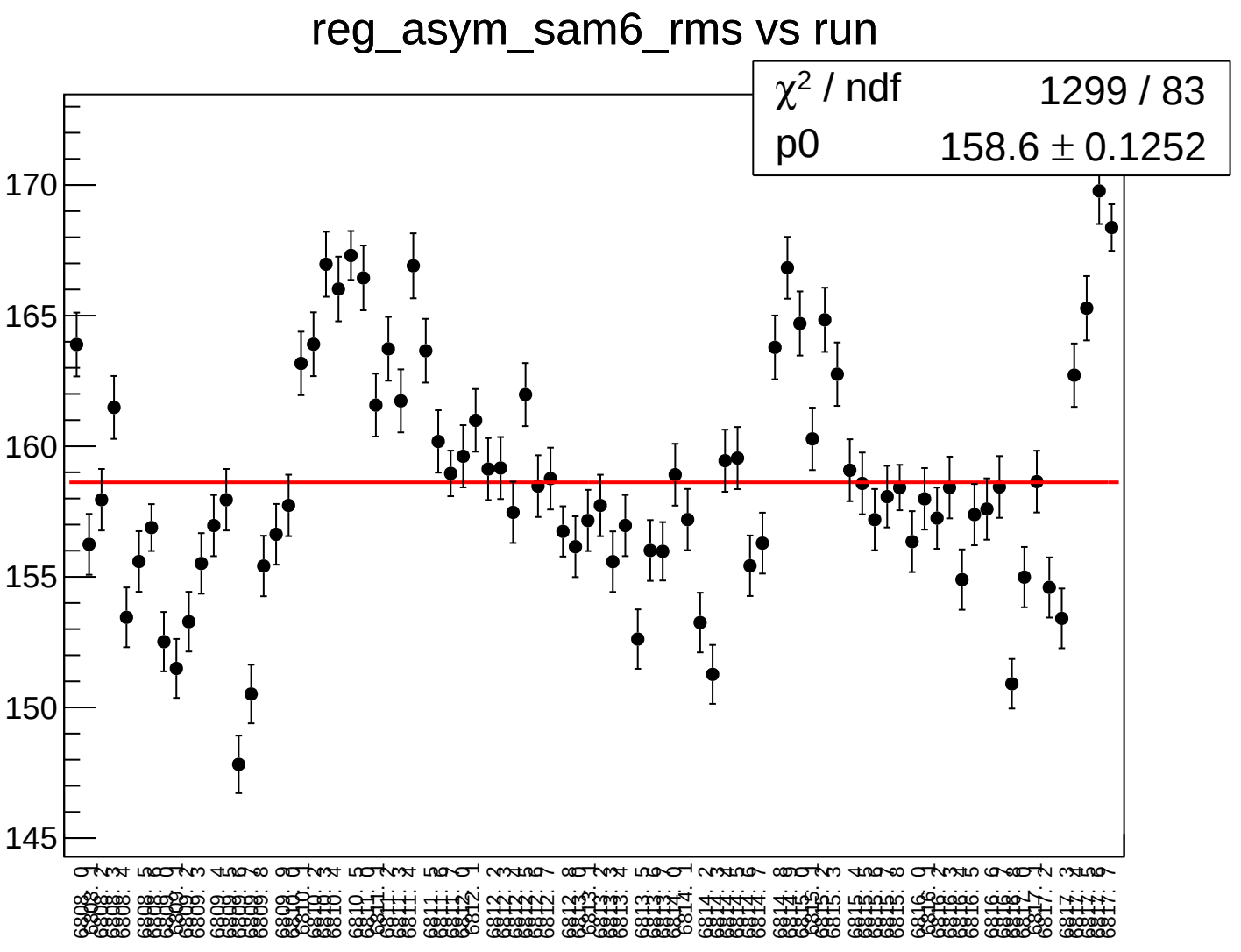

asym_sam5_correction_mean vs run
χ² / ndf 71.17 / 83
p0 −1132 ± 974.2
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 84
Mean 157.3
Std Dev 98.38
2
1
0
−1
−2
−3

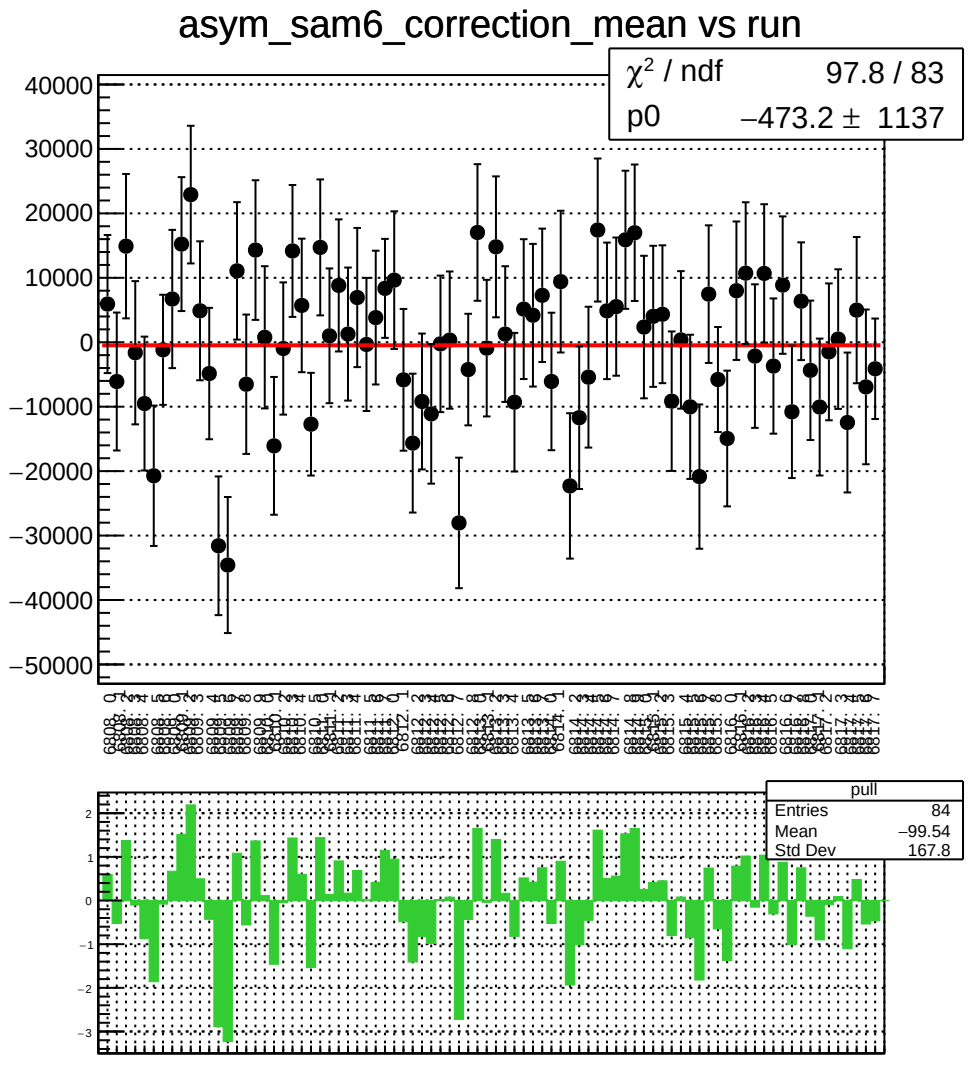

pull1D
Entries 84
Mean 0.005533
Std Dev 0.9204
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

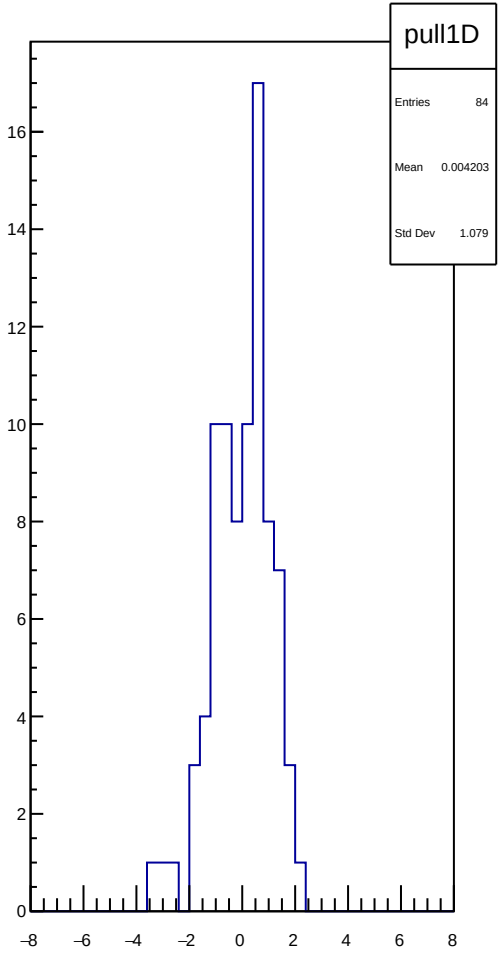

asym_sam5_correction_rms vs run
χ² / ndf 3518 / 83
p0 872.1 ± 0.6889
980
960
940
920
900
880
860
840
820
800
780

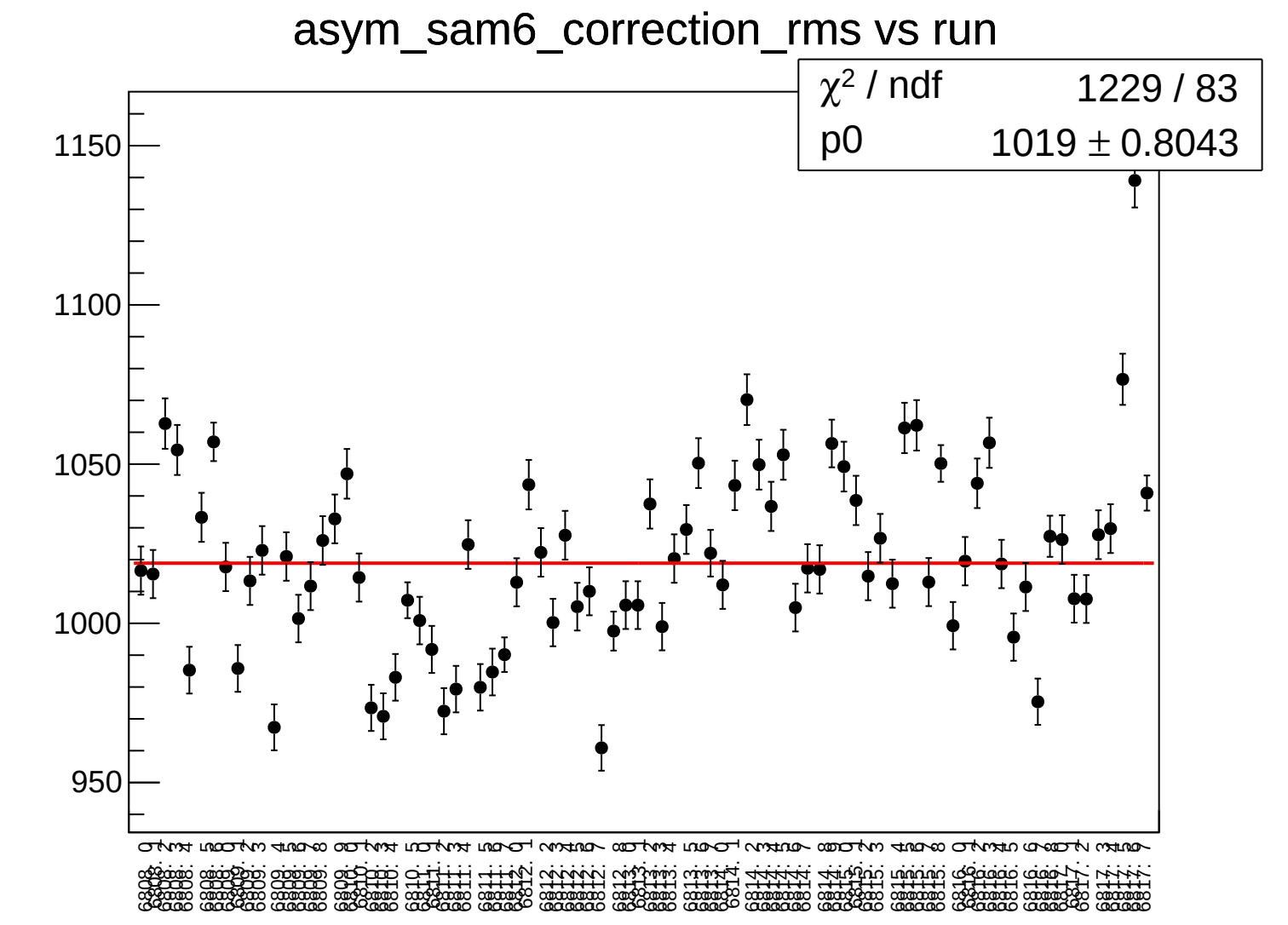

reg_asym_sam6_mean vs run
χ² / ndf 72.14 / 83
p0 73.78 ± 177.1
4000
2000
0
−2000
−4000
−6000
pull
Entries 84
Mean 3325
Std Dev 3295
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

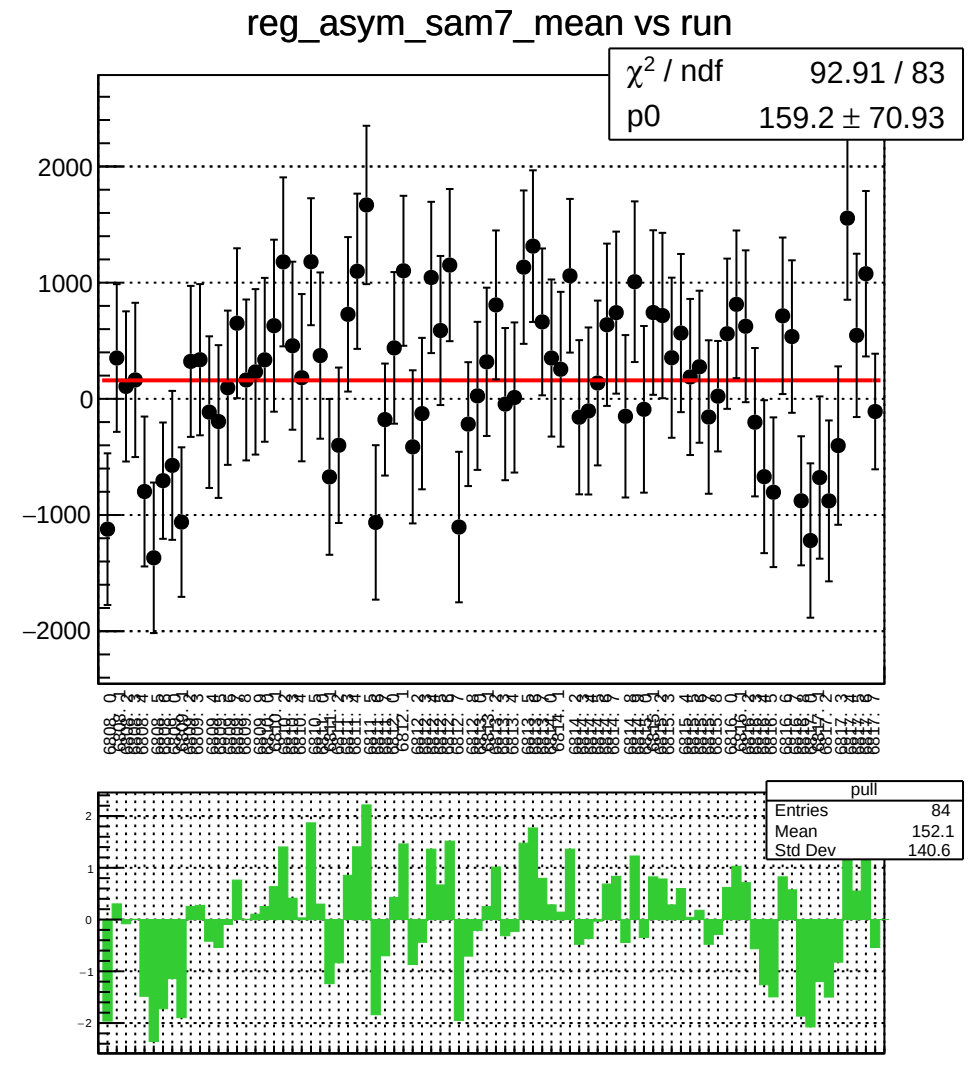

pull1D
Entries 84
Mean 0.0007989
Std Dev 0.9267
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

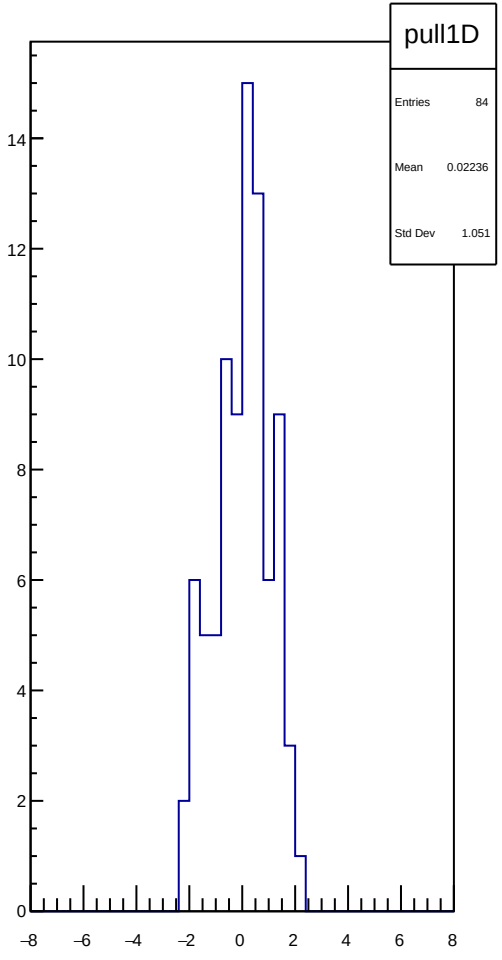

reg_asym_sam6_rms vs run
χ² / ndf 1299 / 83
p0 158.6 ± 0.1252
170
165
160
155
150
145

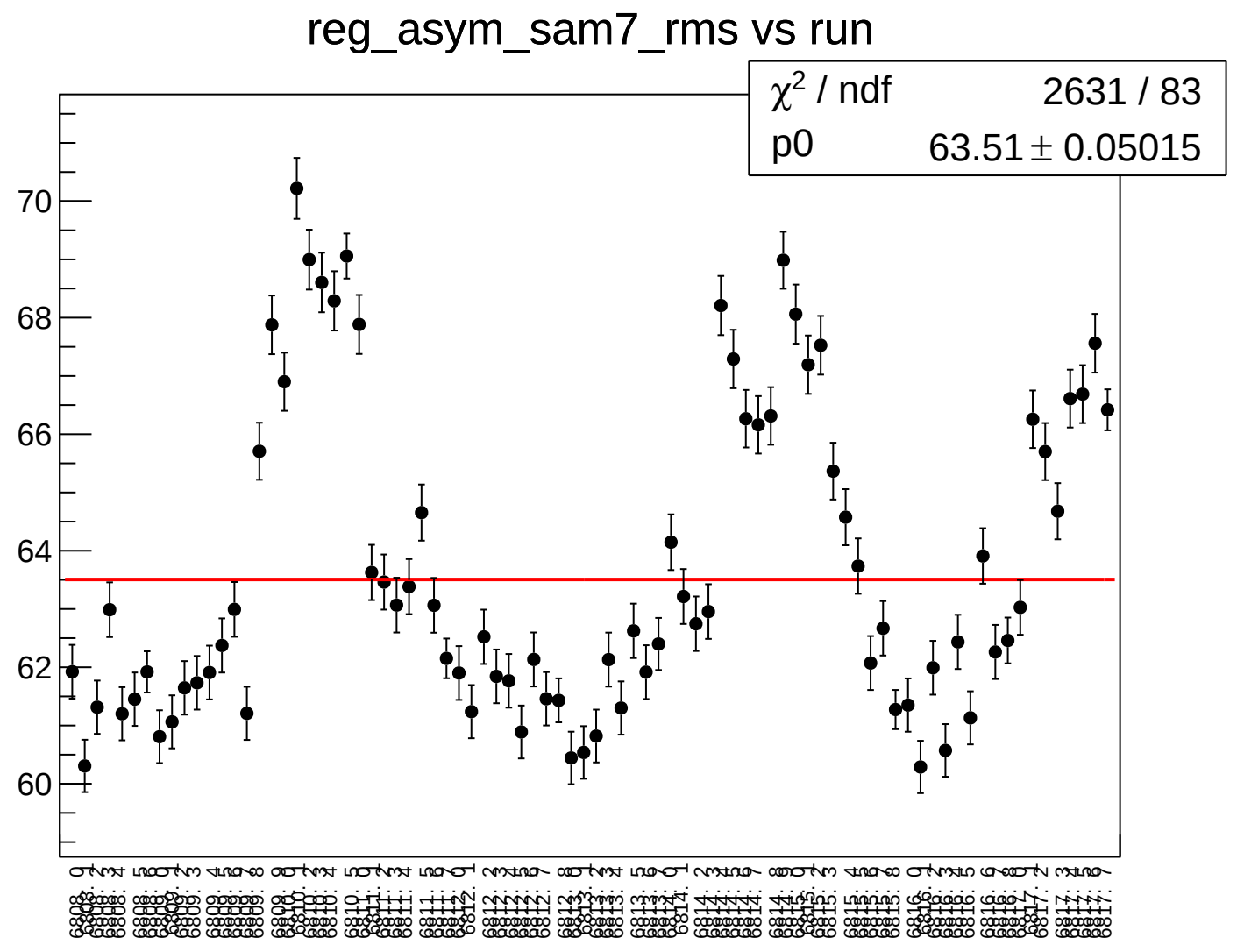

asym_sam6_correction_mean vs run
χ² / ndf 97.8 / 83
p0 −473.2 ± 1137
pull
Entries 84
Mean −99.54
Std Dev 167.8

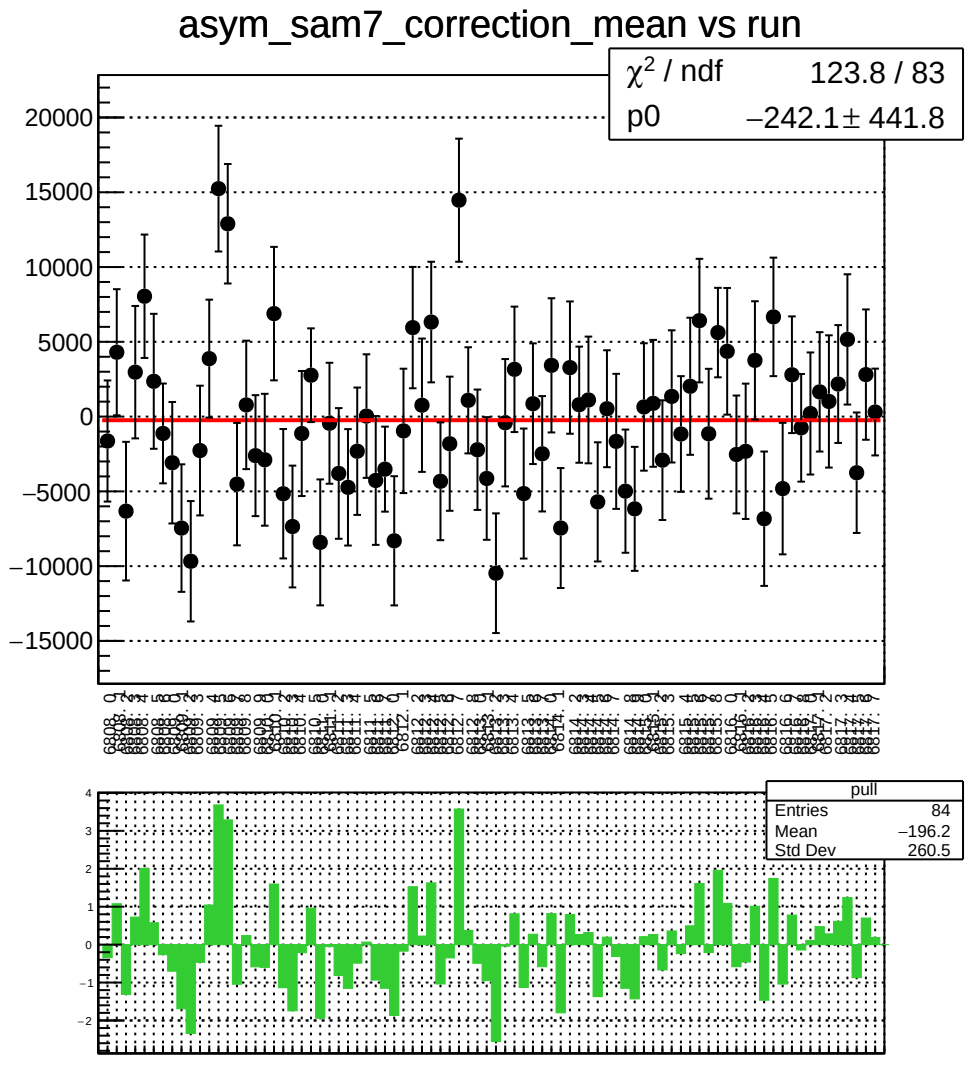

pull1D
Entries 84
Mean 0.004203
Std Dev 1.079

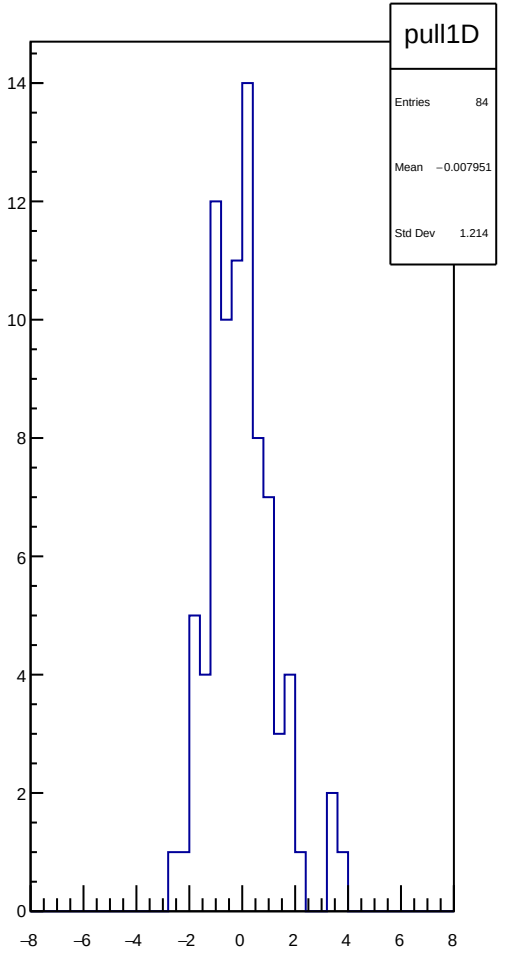

asym_sam6_correction_rms vs run
χ² / ndf 1229 / 83
p0 1019 ± 0.8043
1150
1100
1050
1000
950


reg_asym_sam7_mean vs run
χ^2 / ndf 92.91 / 83
p0 159.2 ± 70.93
2000
1000
0
−1000
−2000
pull
Entries 84
Mean 152.1
Std Dev 140.6
2
1
0
−1
−2

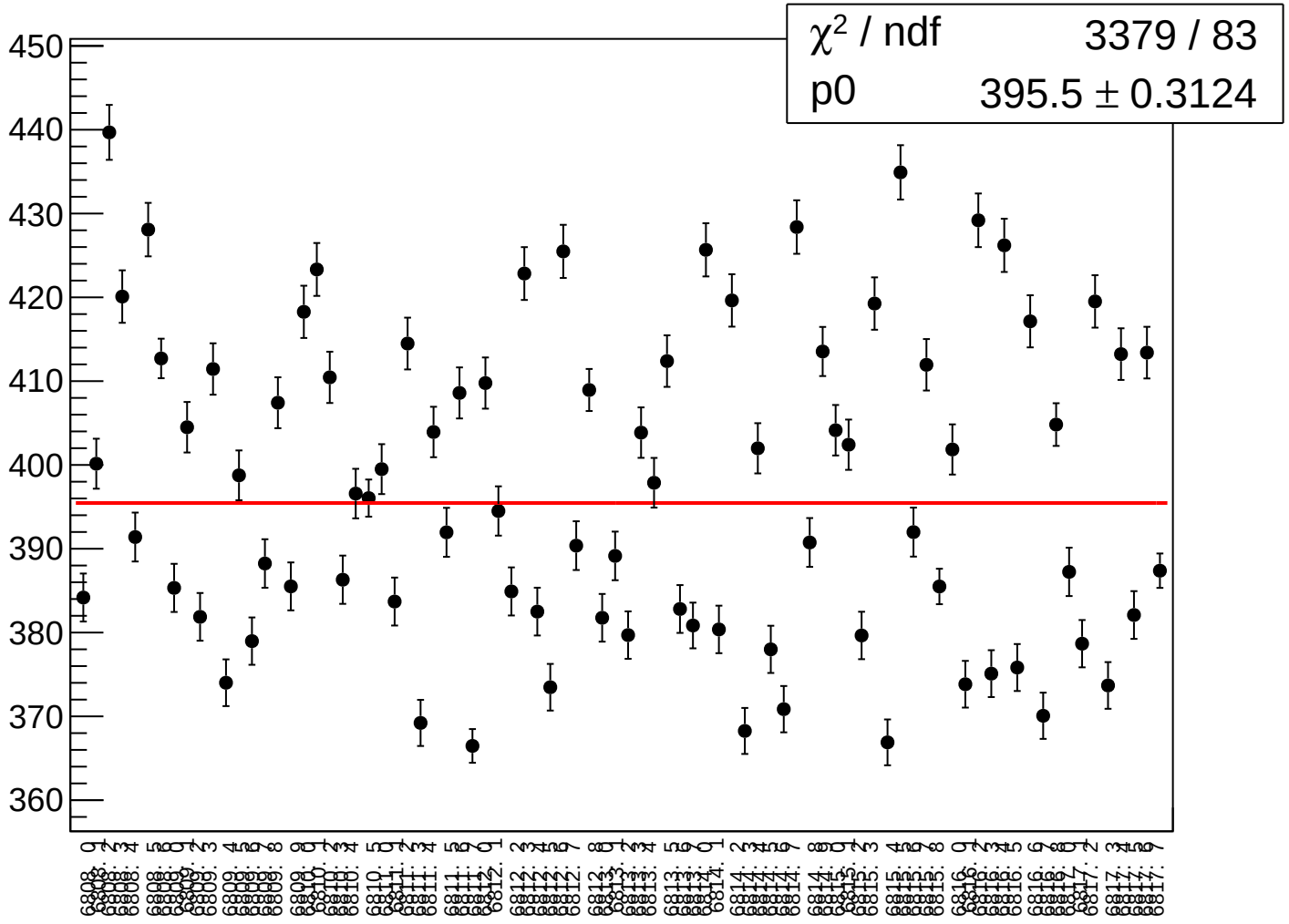

pull1D
Entries 84
Mean 0.02236
Std Dev 1.051
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

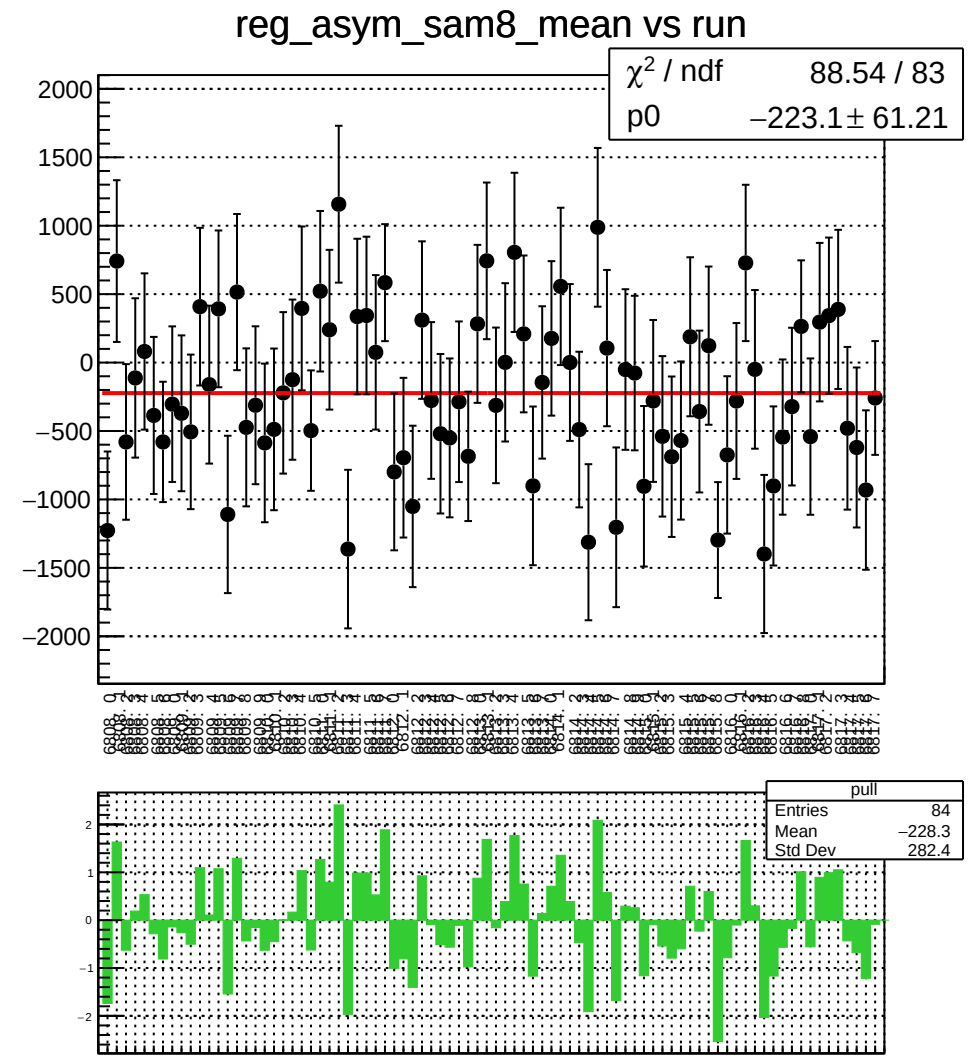

reg_asym_sam7_rms vs run
χ^2 / ndf 2631 / 83
p0 63.51 ± 0.05015
70
68
66
64
62
60

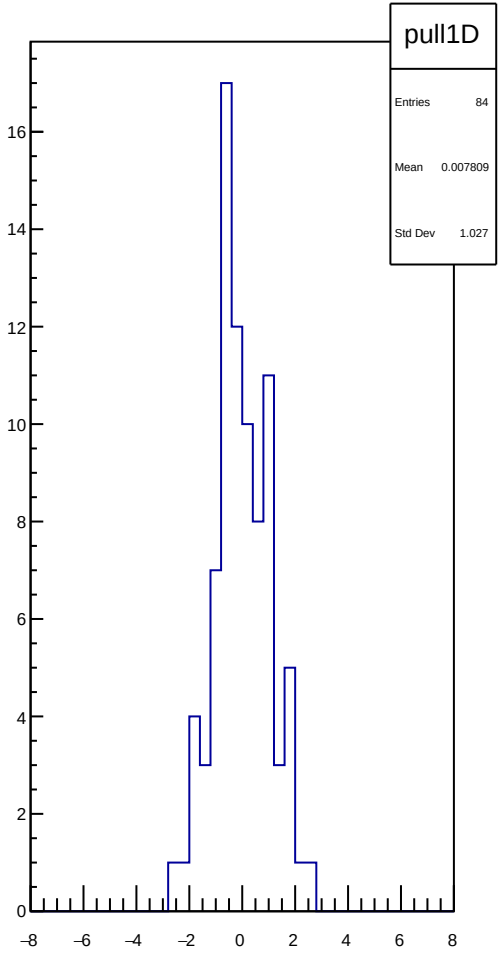

asym_sam7_correction_mean vs run
χ² / ndf 123.8 / 83
p0 −242.1± 441.8
pull
Entries 84
Mean −196.2
Std Dev 260.5

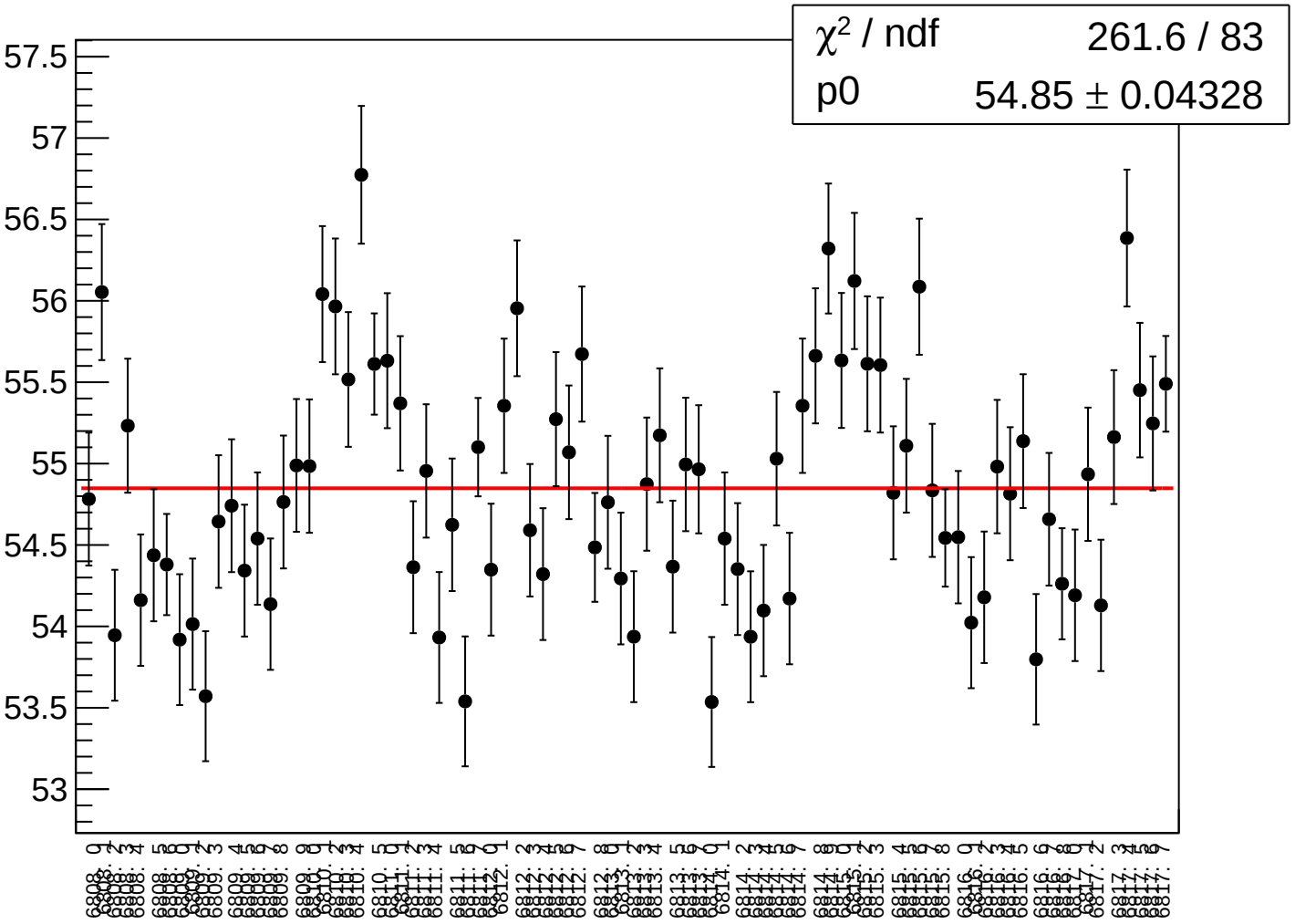

pull1D
Entries 84
Mean −0.007951
Std Dev 1.214

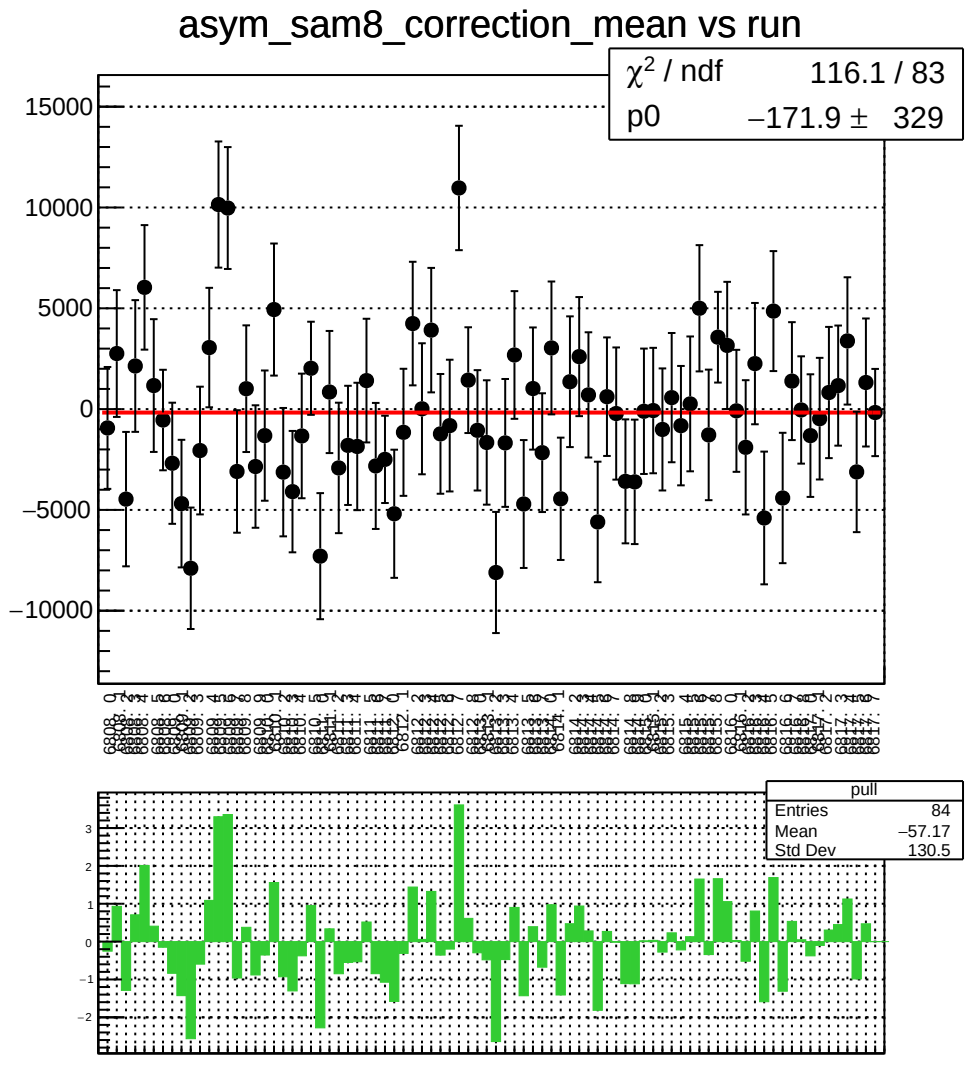
asym_sam7_correction_rms vs run

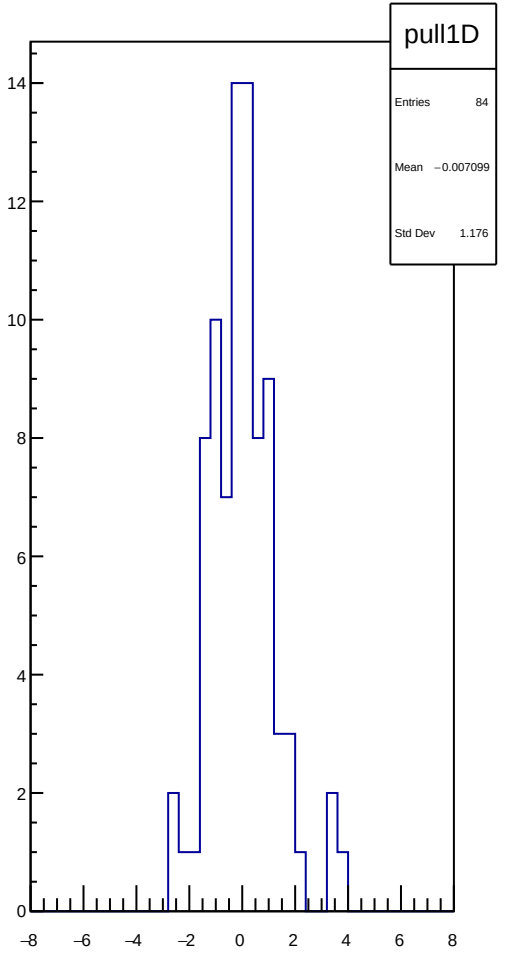


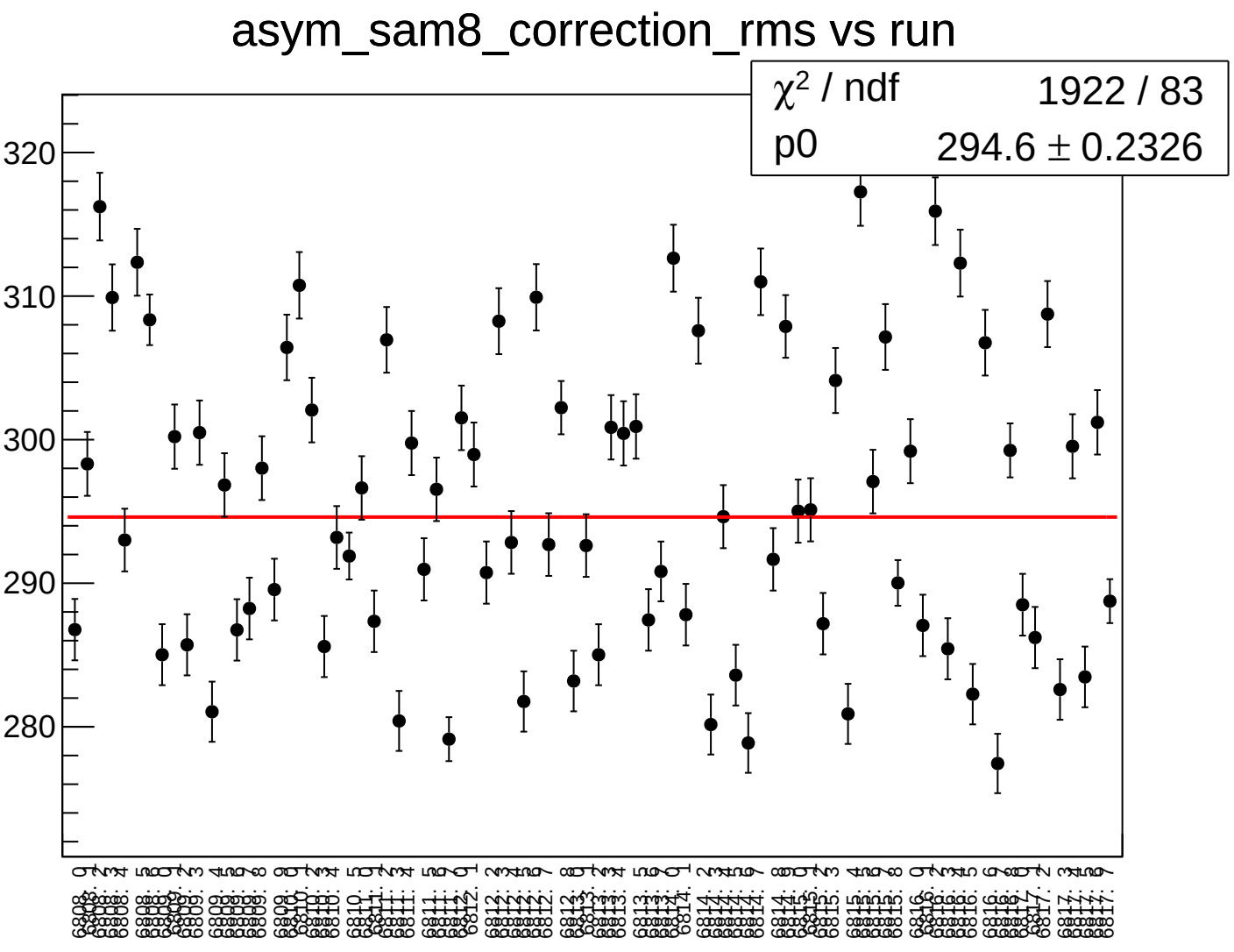

reg_asym_sam8_mean vs run
χ² / ndf 88.54 / 83
p0 −223.1 ± 61.21
pull
Entries 84
Mean −228.3
Std Dev 282.4

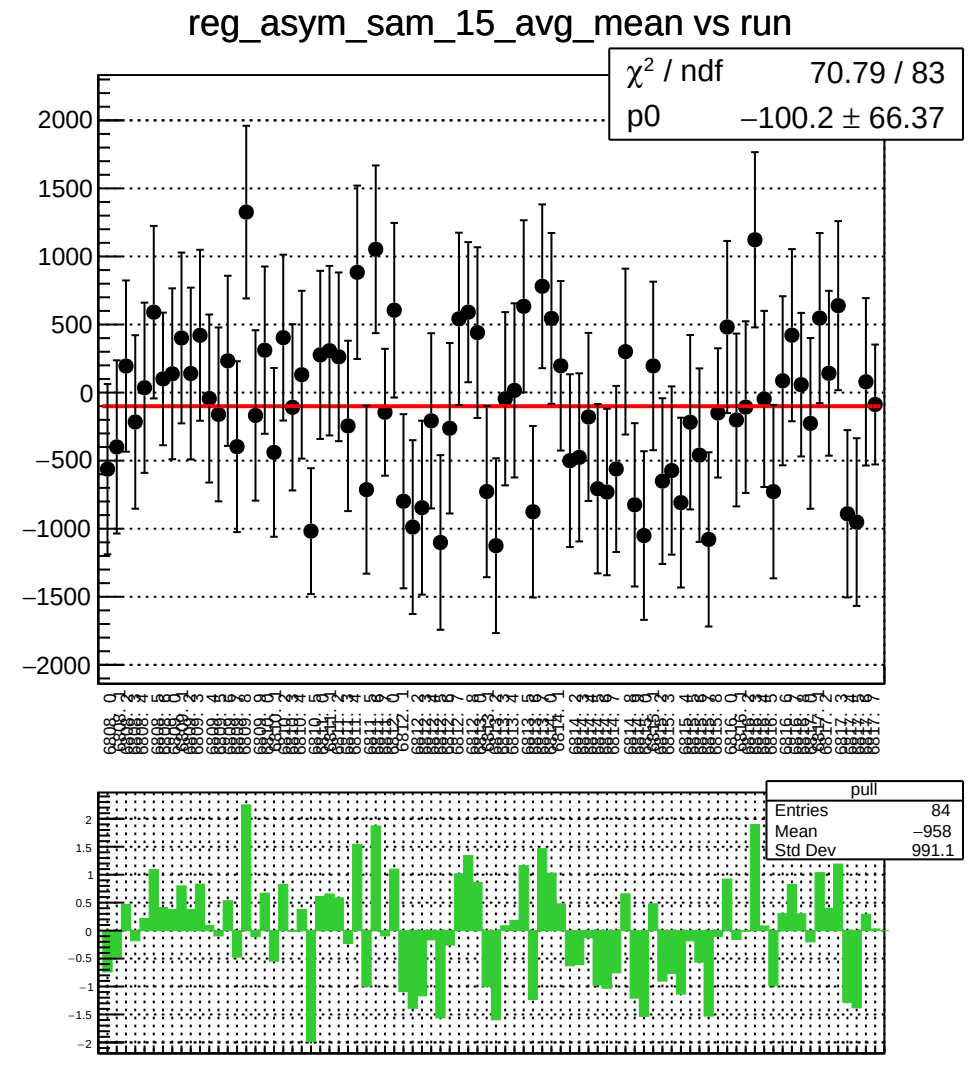

pull1D
Entries 84
Mean 0.007809
Std Dev 1.027

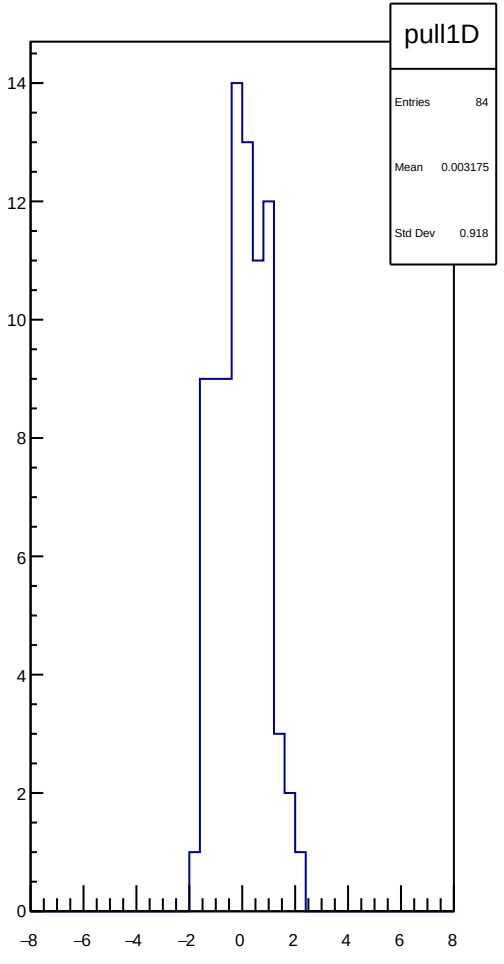

reg_asym_sam8_rms vs run
χ² / ndf 261.6 / 83
p0 54.85 ± 0.04328
57.5
57
56.5
56
55.5
55
54.5
54
53.5
53

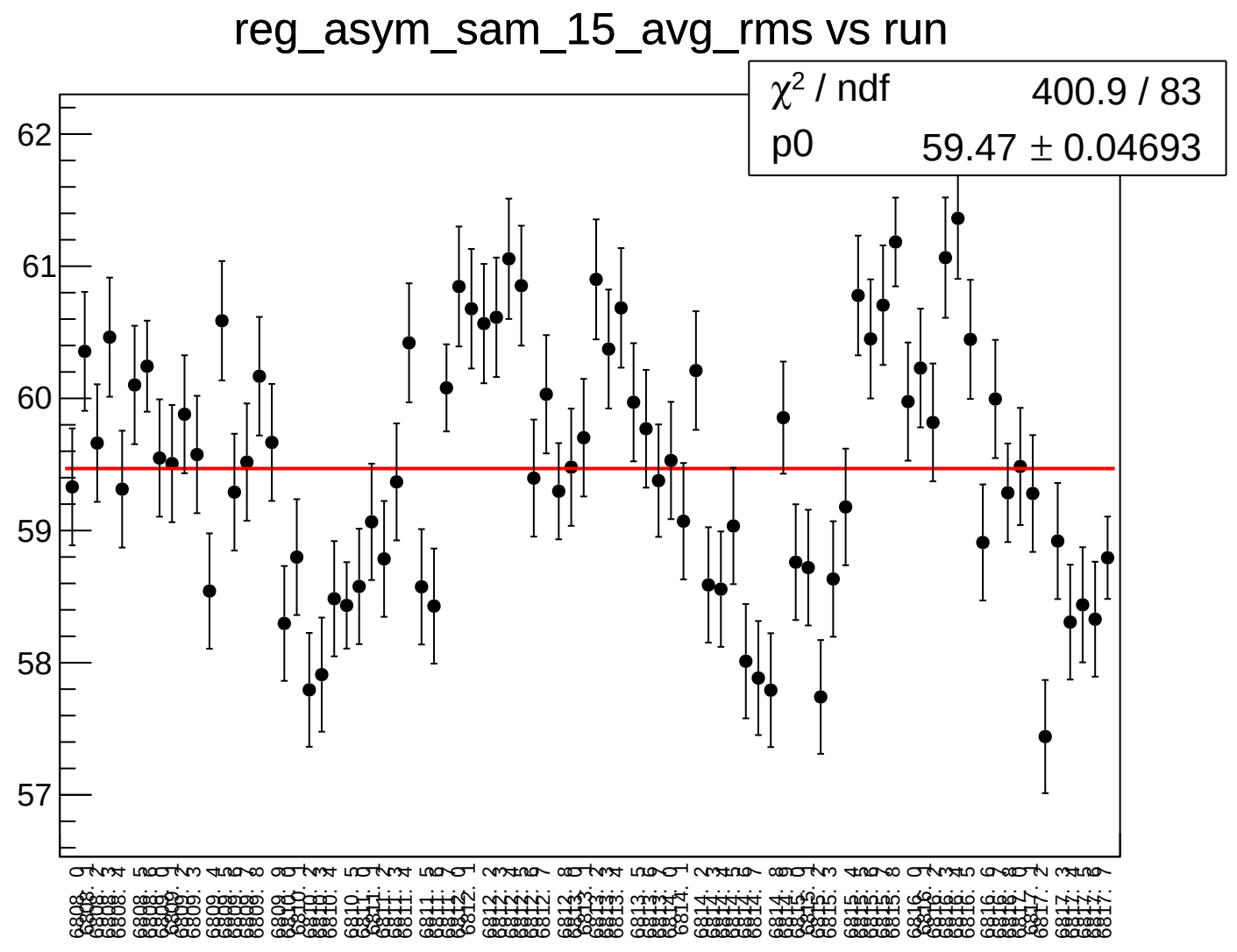

asym_sam8_correction_mean vs run
χ² / ndf 116.1 / 83
p0 −171.9 ± 329
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −57.17
Std Dev 130.5
3
2
1
0
−1
−2

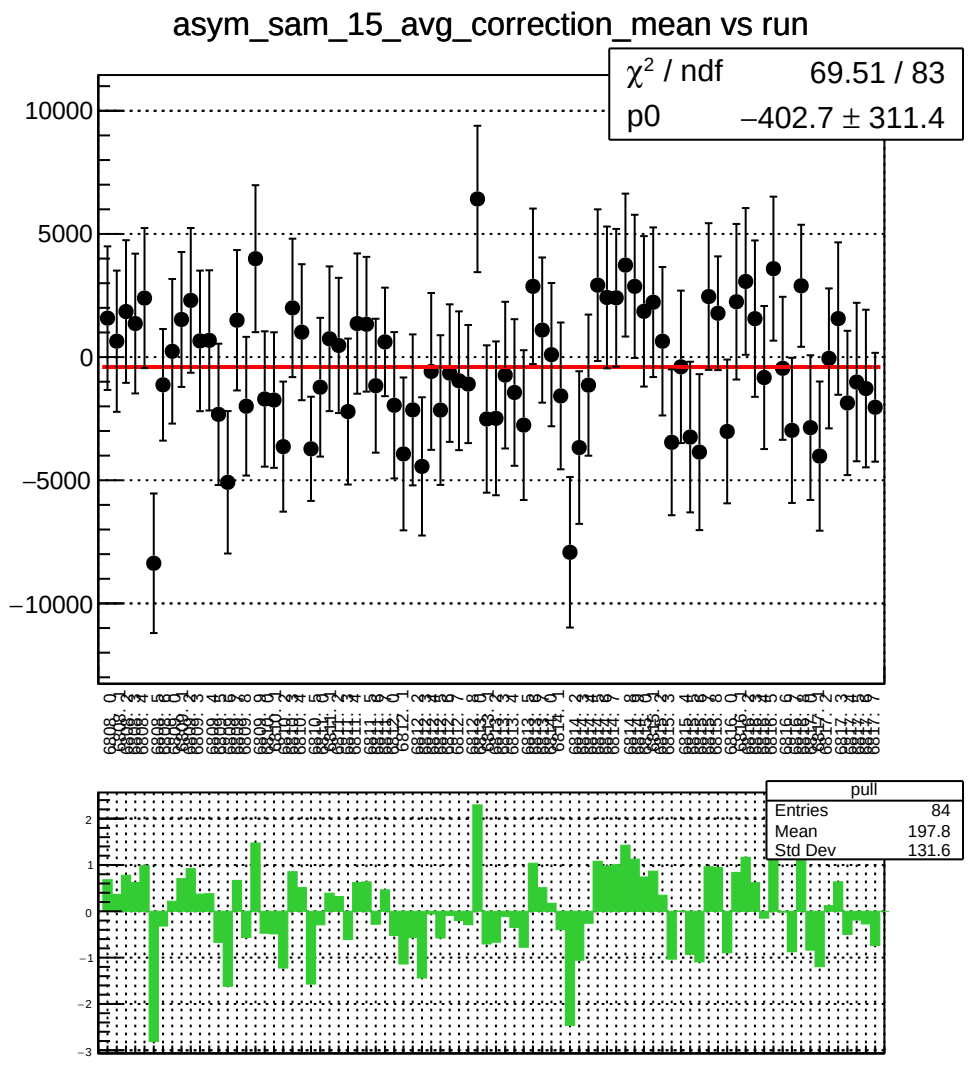

pull1D
Entries 84
Mean −0.007099
Std Dev 1.176
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

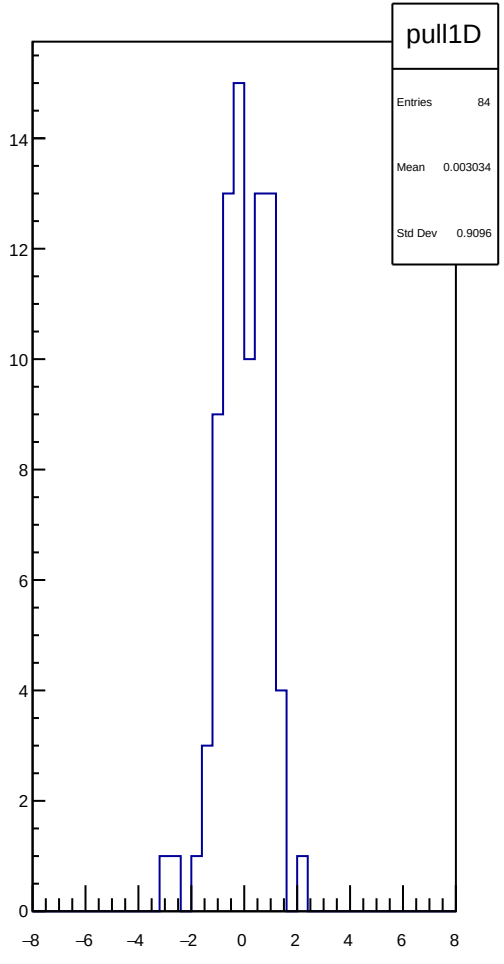

asym_sam8_correction_rms vs run
χ² / ndf 1922 / 83
p0 294.6 ± 0.2326
320
310
300
290
280

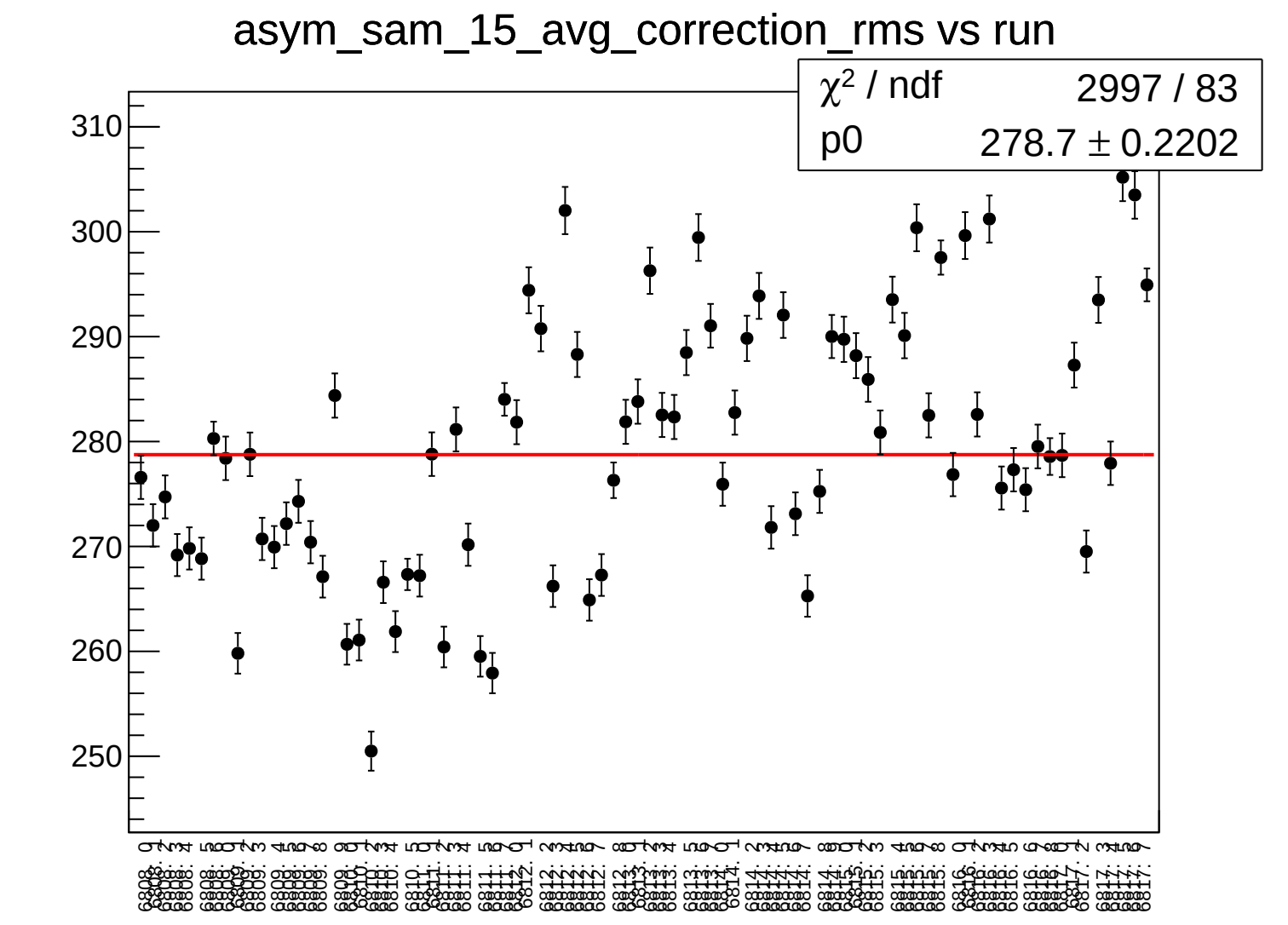

reg_asym_sam_15_avg_mean vs run
χ² / ndf 70.79 / 83
p0 −100.2 ± 66.37
pull
Entries 84
Mean −958
Std Dev 991.1

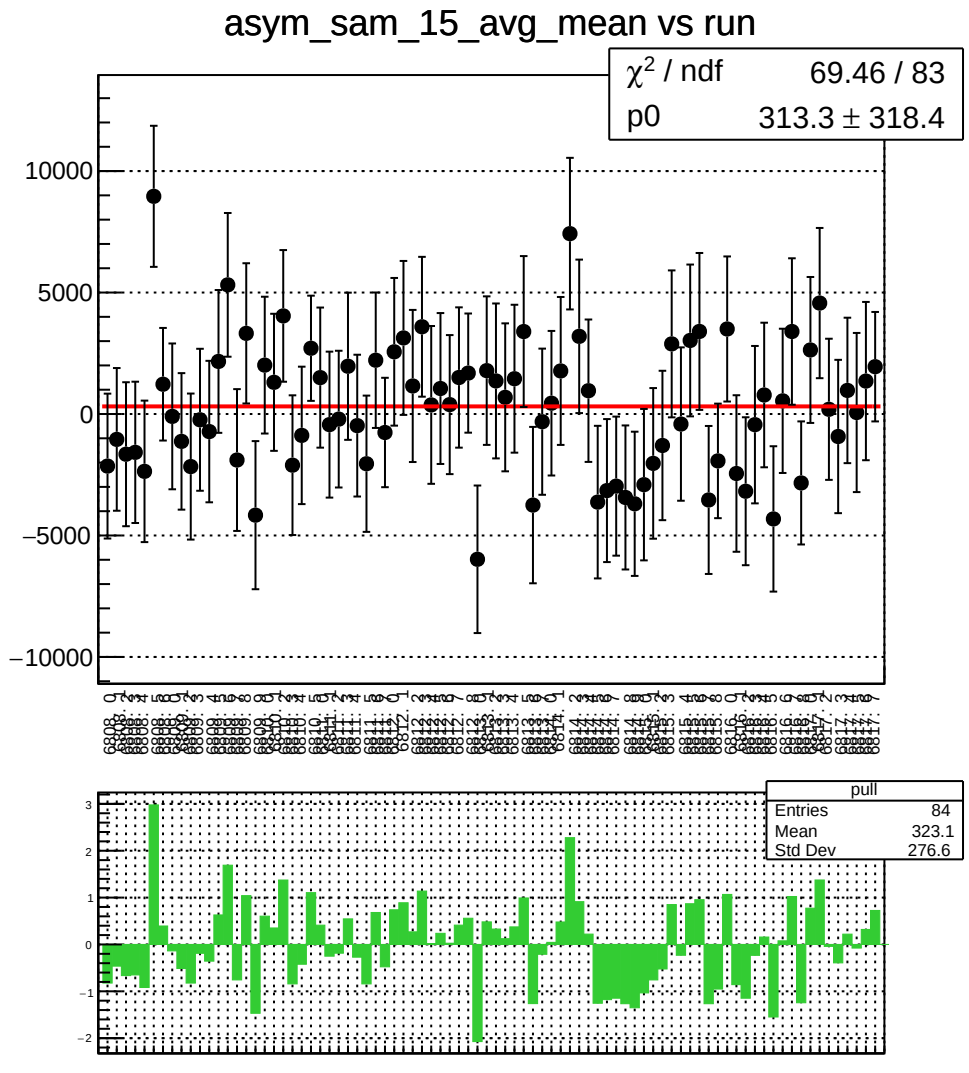

pull1D
Entries 84
Mean 0.003175
Std Dev 0.918

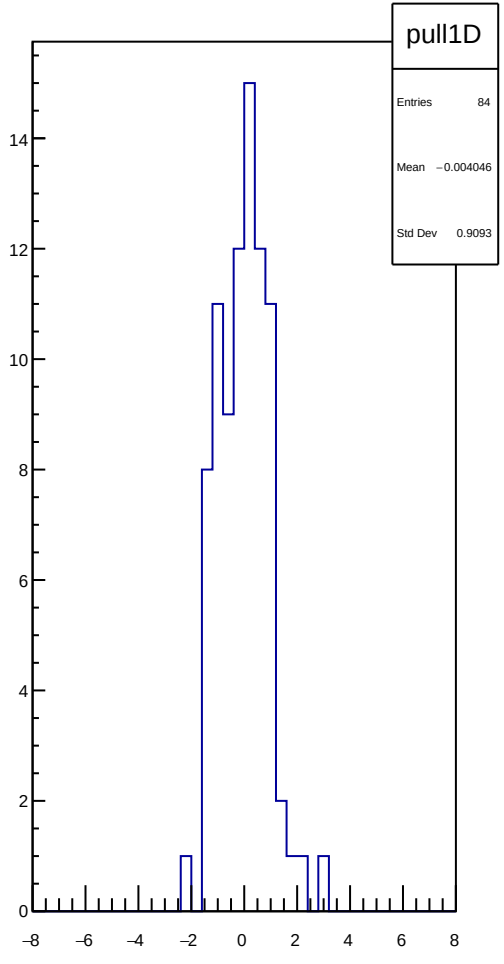

reg_asym_sam_15_avg_rms vs run
χ² / ndf 400.9 / 83
p0 59.47 ± 0.04693
62
61
60
59
58
57

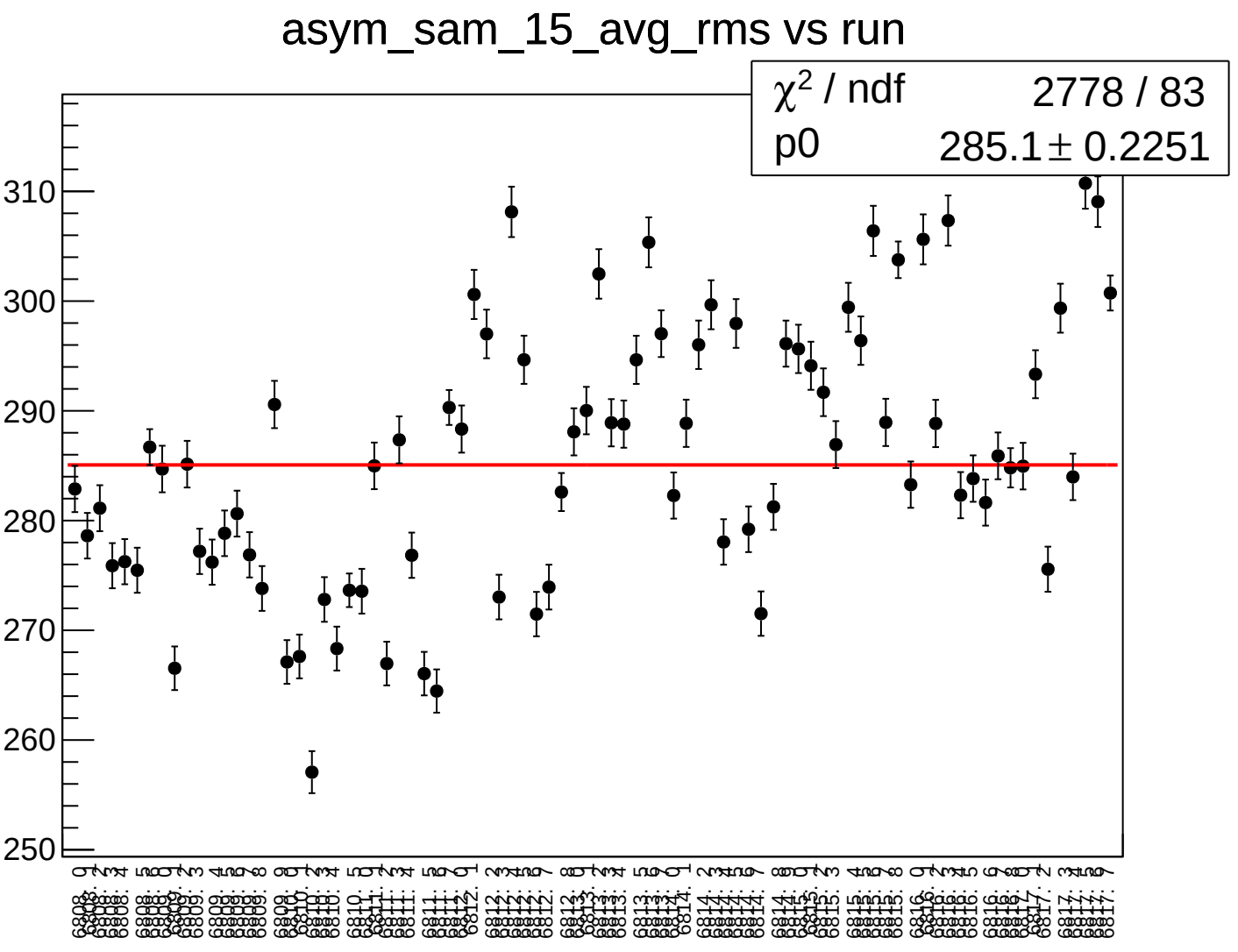

asym_sam_15_avg_correction_mean vs run
χ² / ndf 69.51 / 83
p0 −402.7 ± 311.4
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 197.8
Std Dev 131.6
2
1
0
−1
−2
−3

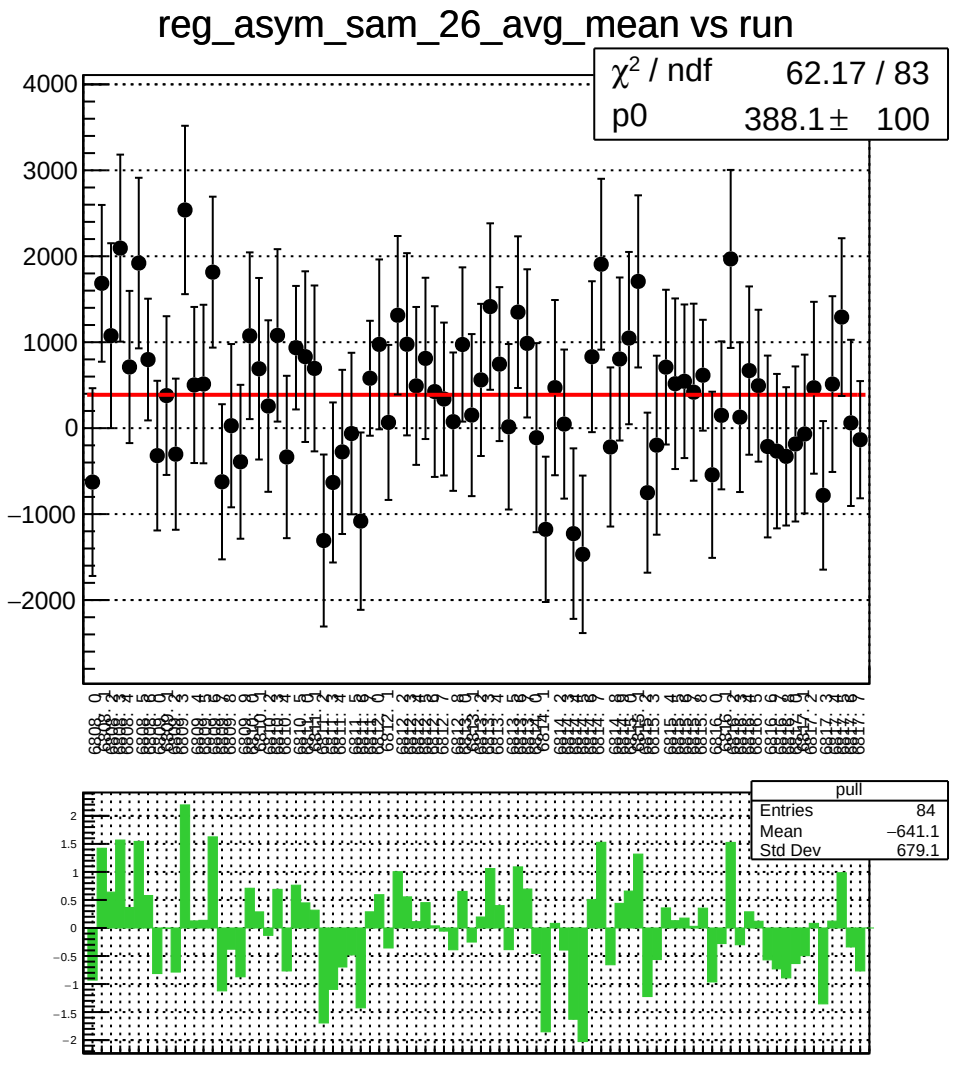

pull1D
Entries 84
Mean 0.003034
Std Dev 0.9096
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

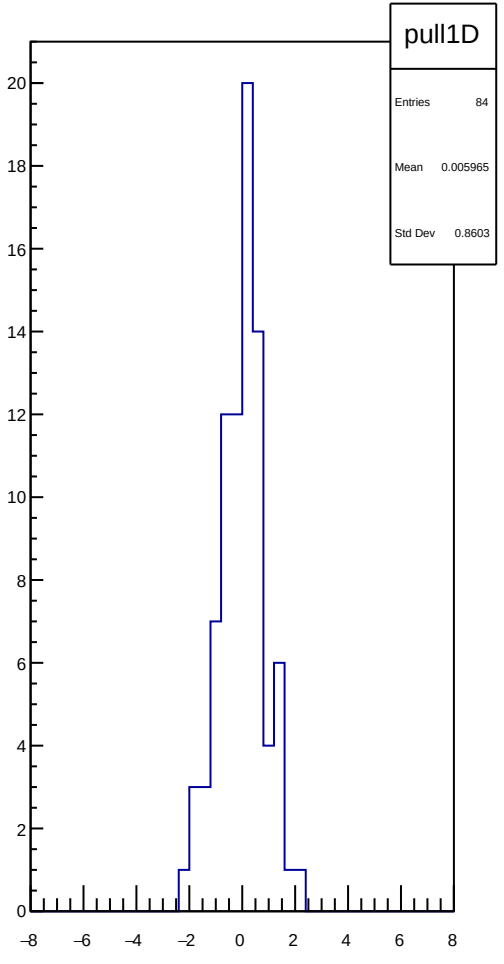

asym_sam_15_avg_correction_rms vs run
χ² / ndf 2997 / 83
p0 278.7 ± 0.2202
310
300
290
280
270
260
250

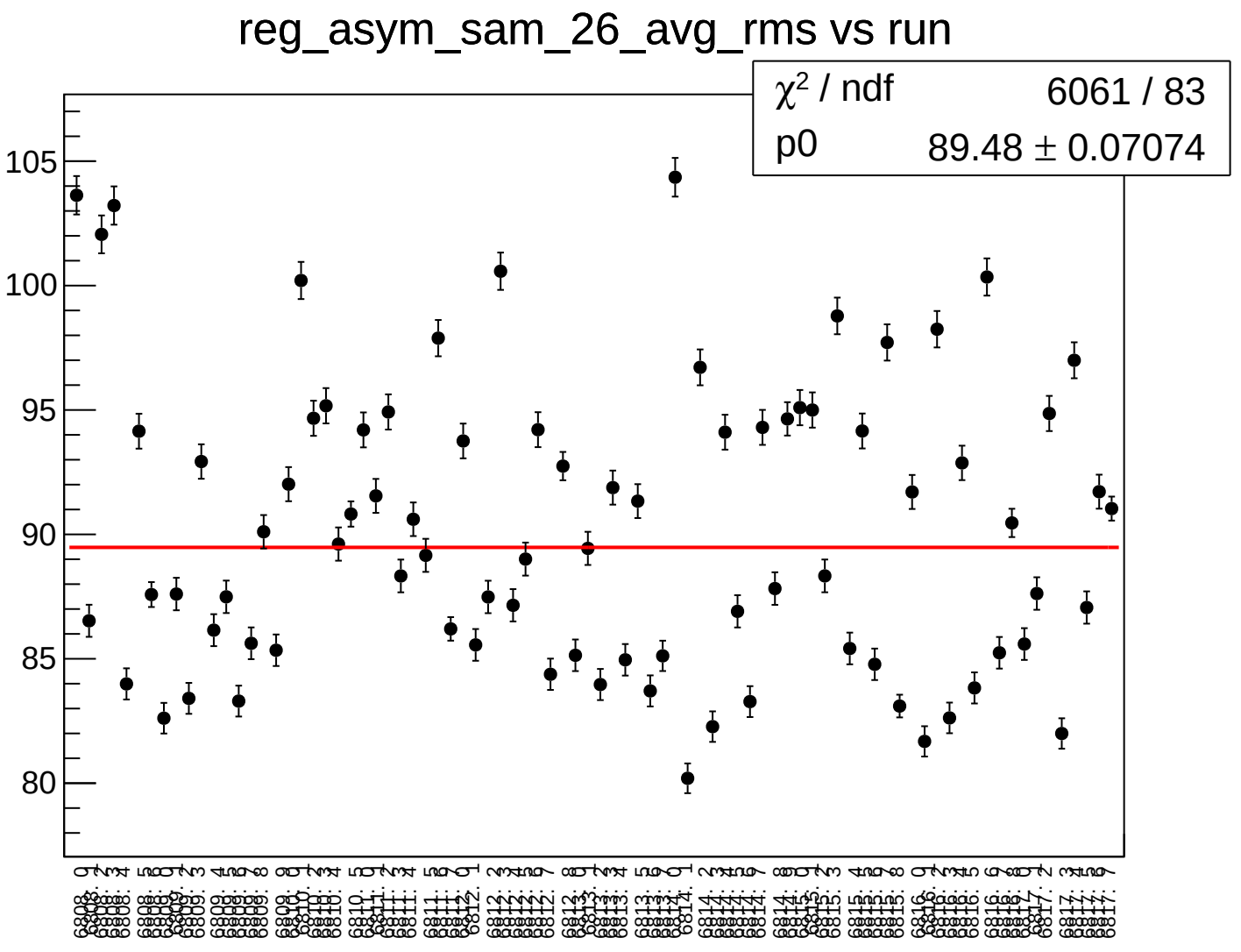

asym_sam_15_avg_mean vs run
χ^2 / ndf 69.46 / 83
p0 313.3 ± 318.4
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 323.1
Std Dev 276.6
3
2
1
0
−1
−2

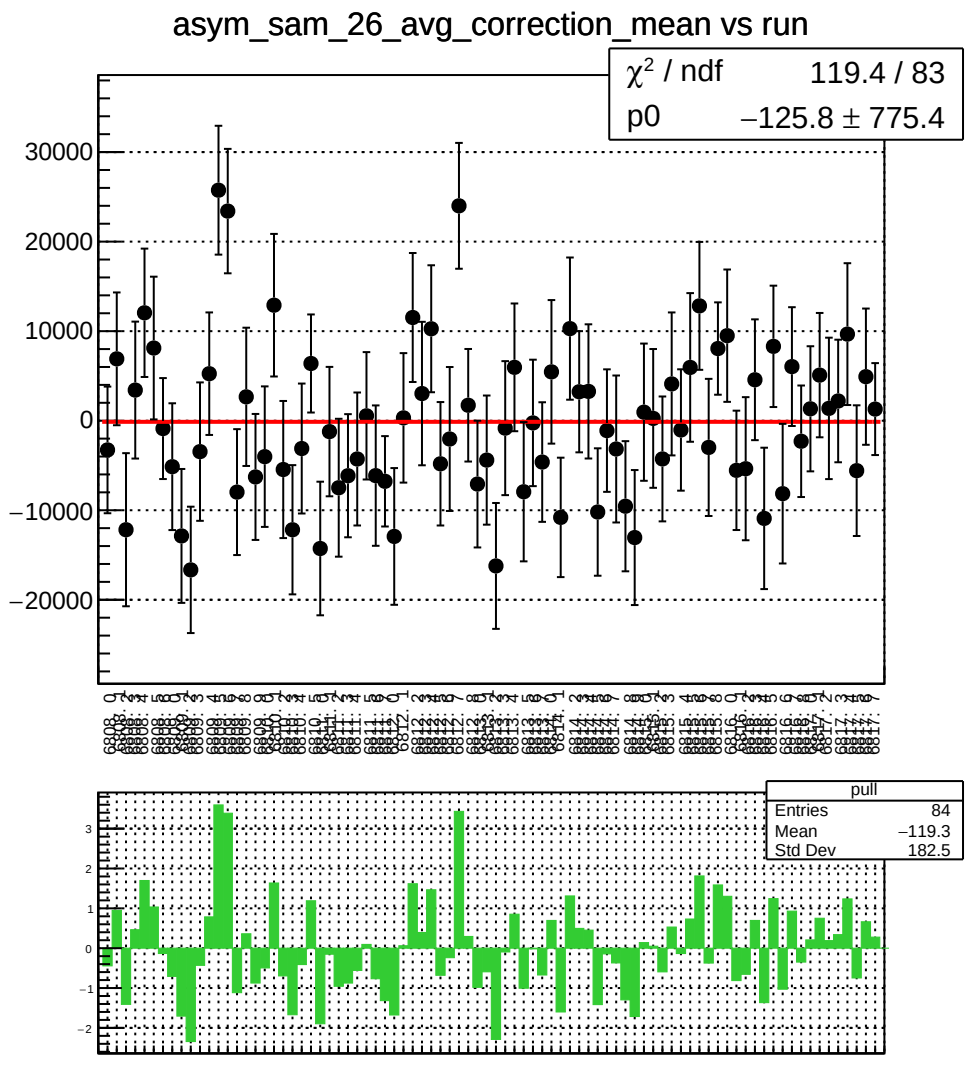

pull1D
Entries 84
Mean −0.004046
Std Dev 0.9093
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

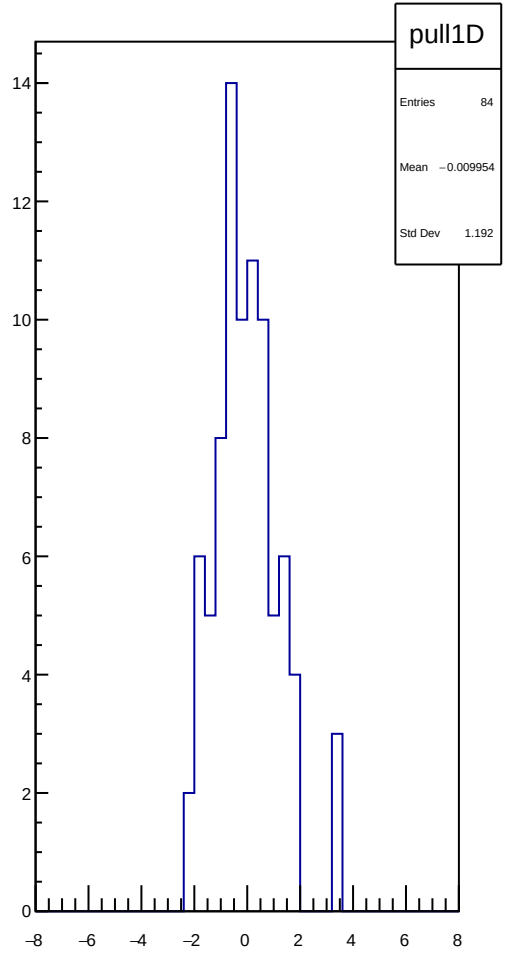

asym_sam_15_avg_rms vs run
χ^2 / ndf 2778 / 83
p0 285.1 ± 0.2251
310
300
290
280
270
260
250

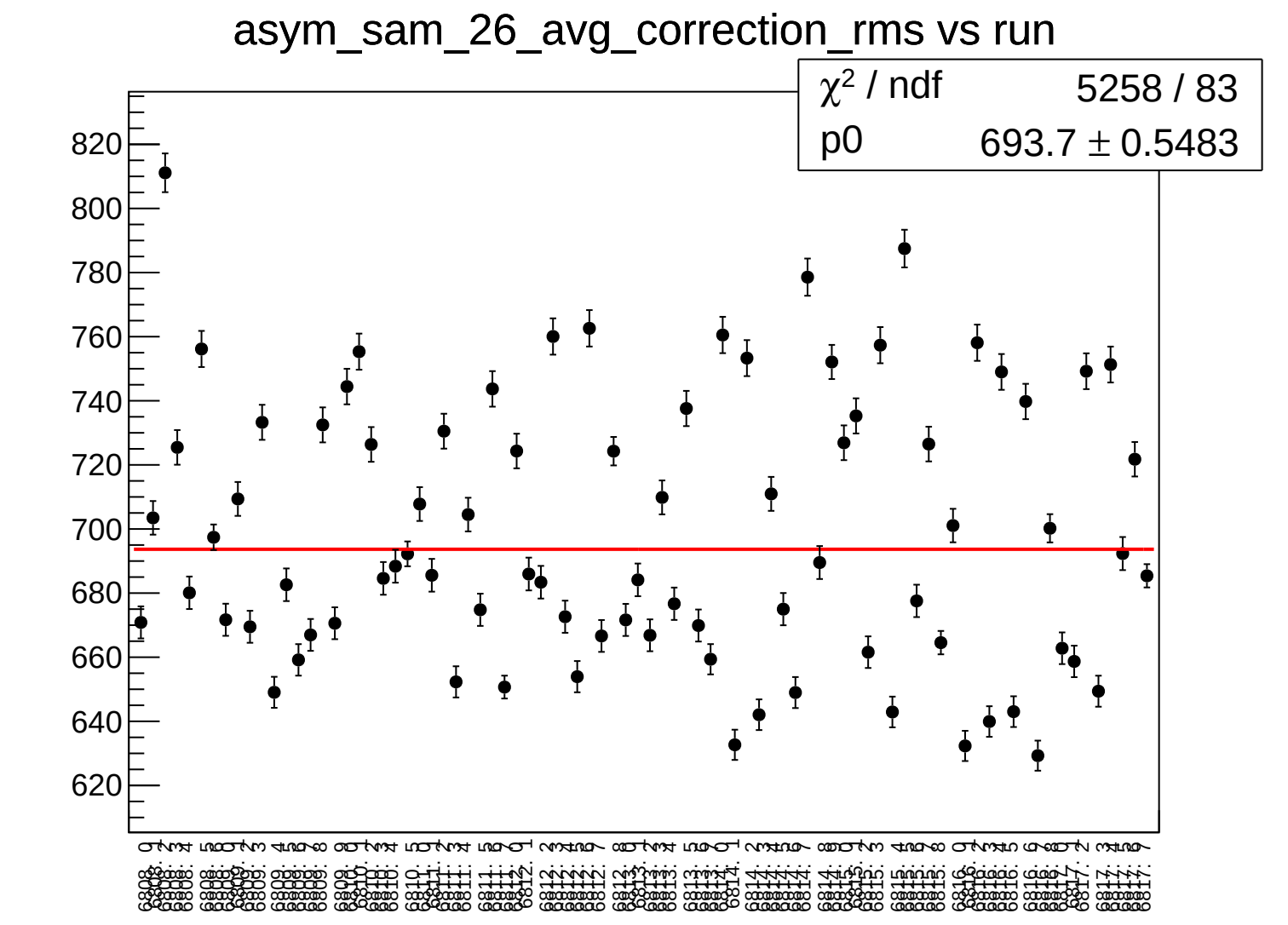

reg_asym_sam_26_avg_mean vs run
χ² / ndf 62.17 / 83
p0 388.1 ± 100
pull
Entries 84
Mean −641.1
Std Dev 679.1

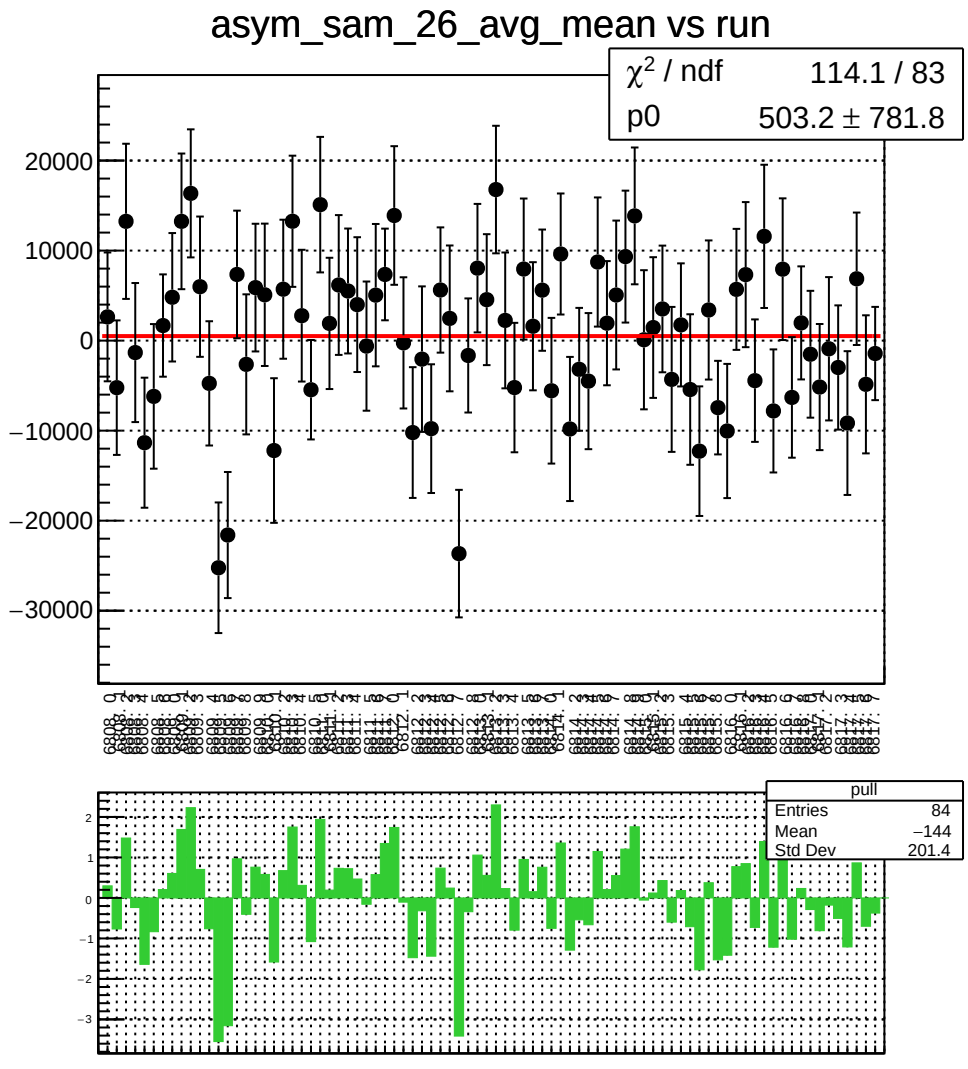

pull1D
Entries 84
Mean 0.005965
Std Dev 0.8603

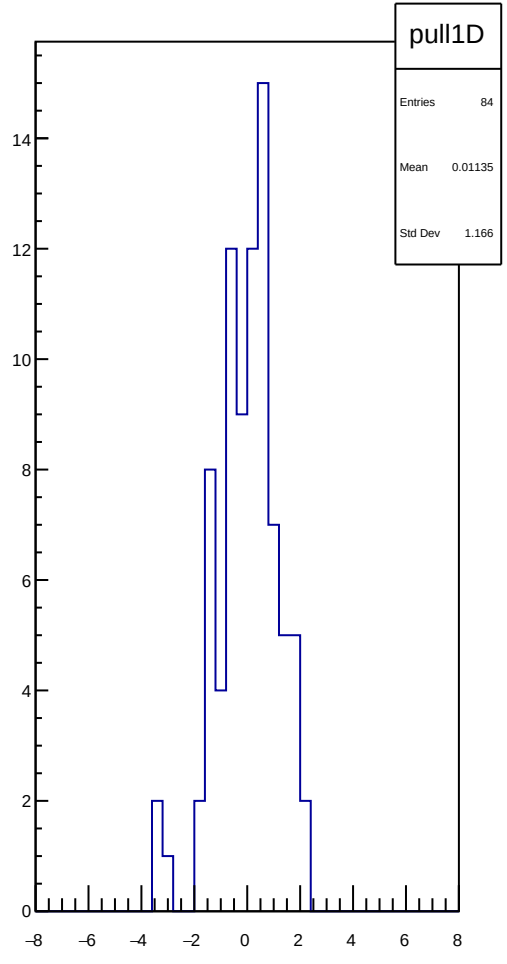

reg_asym_sam_26_avg_rms vs run
χ² / ndf 6061 / 83
p0 89.48 ± 0.07074
105
100
95
90
85
80

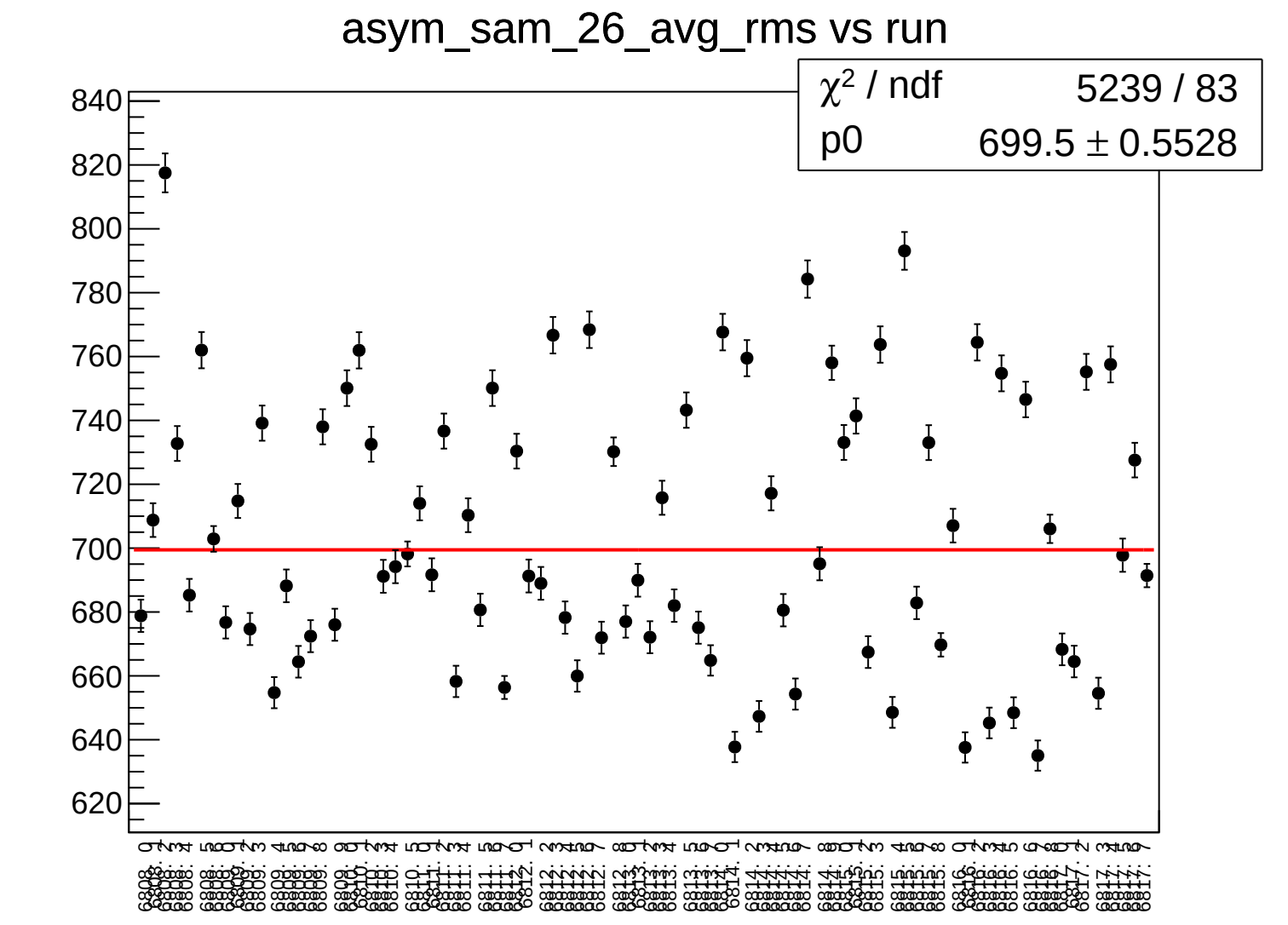

asym_sam_26_avg_correction_mean vs run
χ² / ndf 119.4 / 83
p0 −125.8 ± 775.4
30000
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −119.3
Std Dev 182.5
3
2
1
0
−1
−2

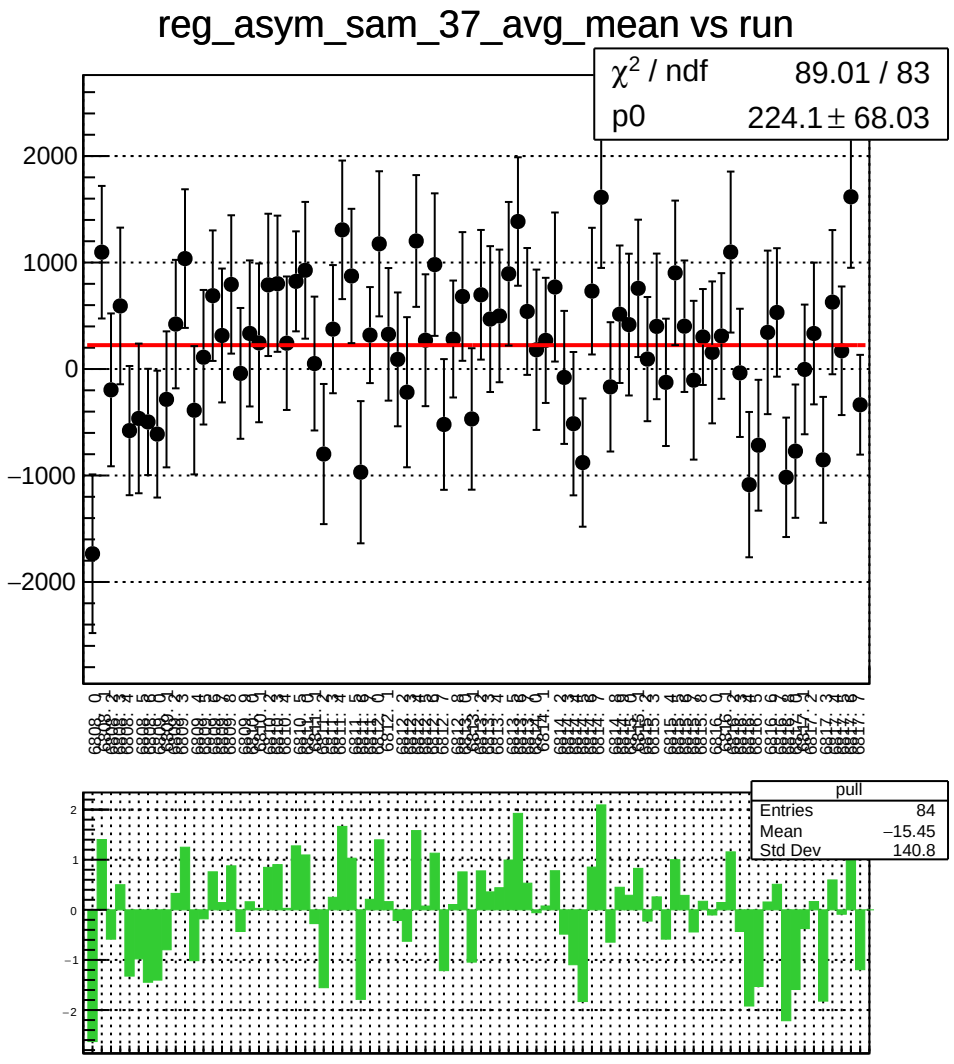

pull1D
Entries 84
Mean −0.009954
Std Dev 1.192
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

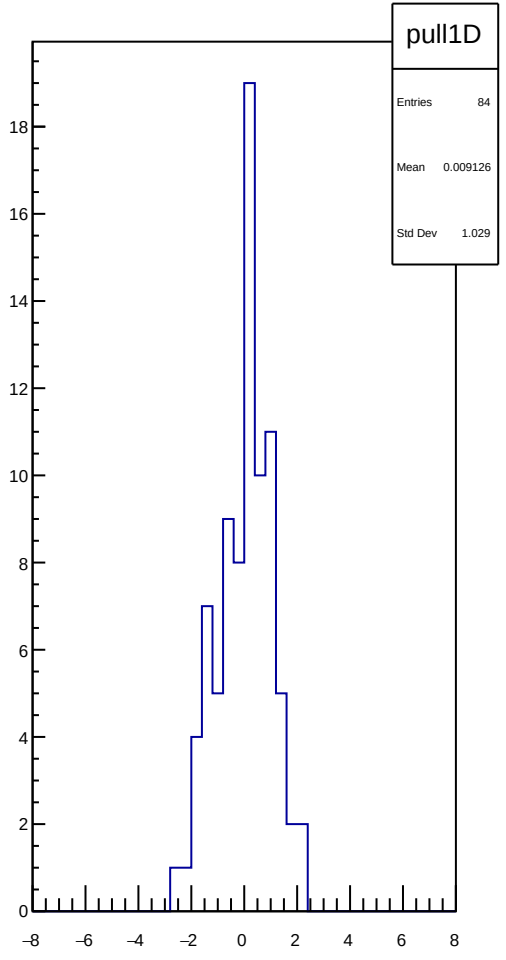

asym_sam_26_avg_correction_rms vs run
χ² / ndf 5258 / 83
p0 693.7 ± 0.5483
820
800
780
760
740
720
700
680
660
640
620

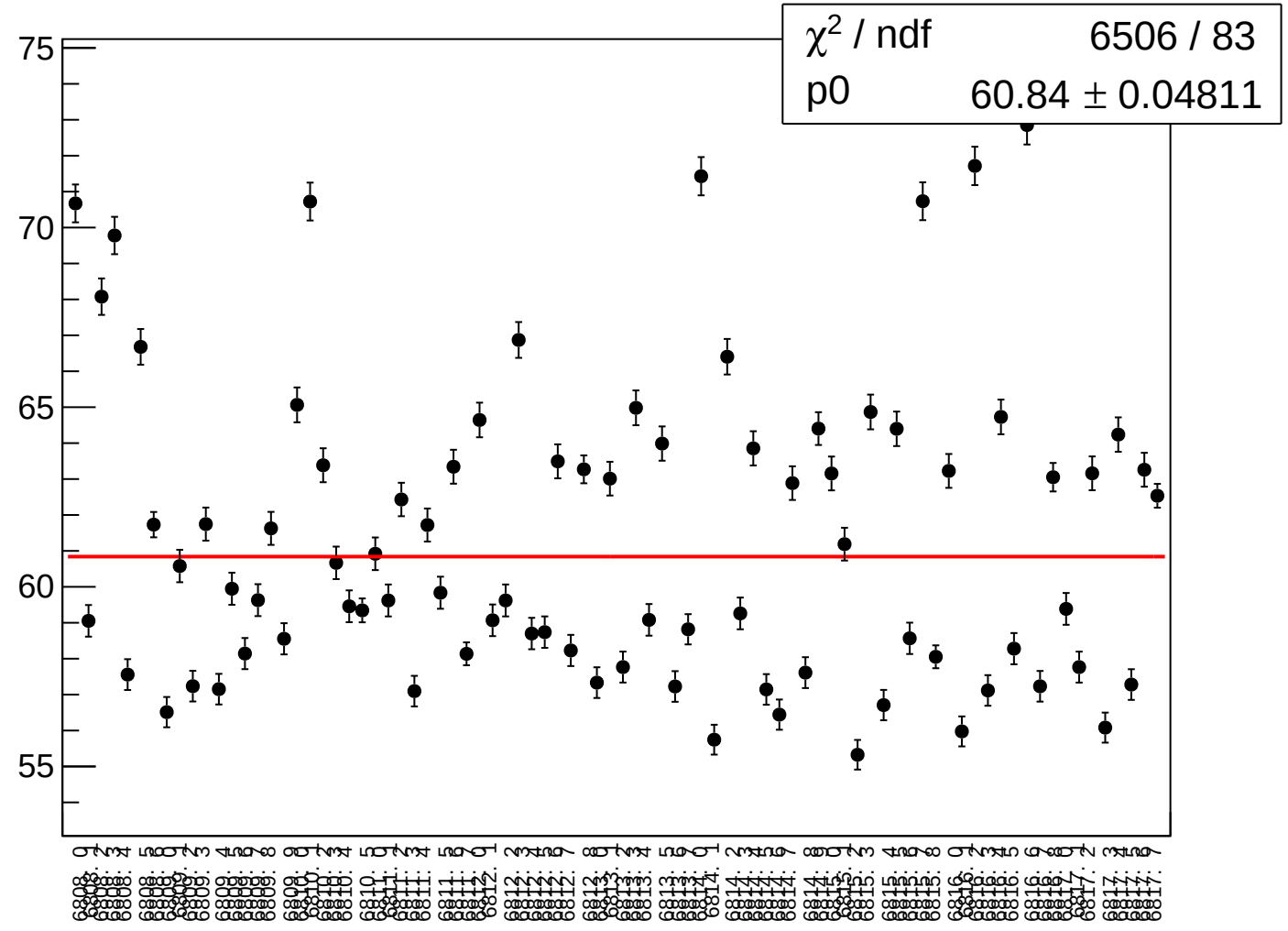

asym_sam_26_avg_mean vs run
χ² / ndf 114.1 / 83
p0 503.2 ± 781.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −144
Std Dev 201.4
2
1
0
−1
−2
−3

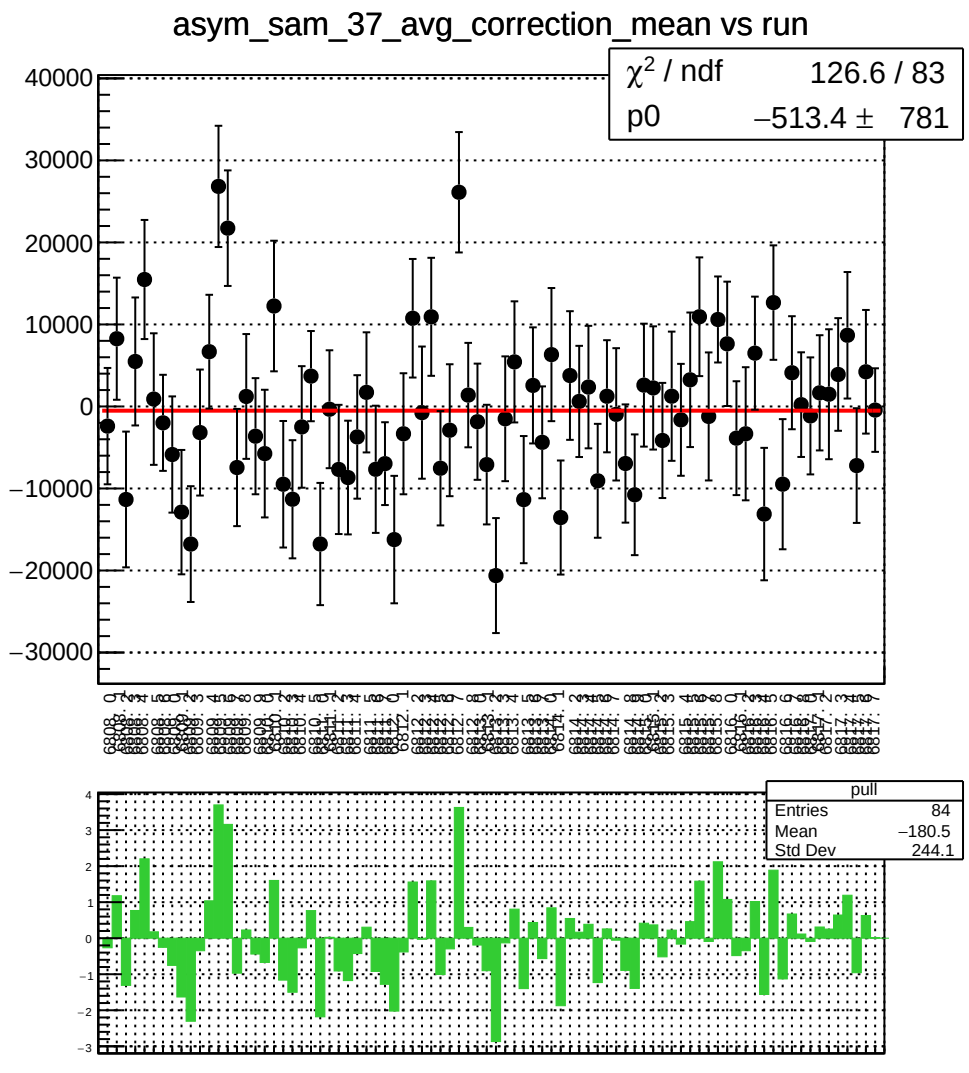

pull1D
Entries 84
Mean 0.01135
Std Dev 1.166
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

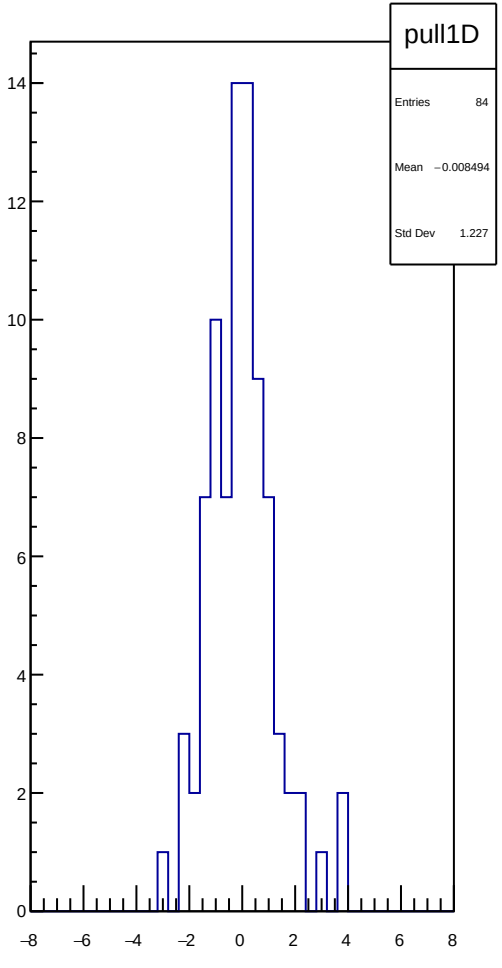

asym_sam_26_avg_rms vs run
χ² / ndf 5239 / 83
p0 699.5 ± 0.5528
840
820
800
780
760
740
720
700
680
660
640
620

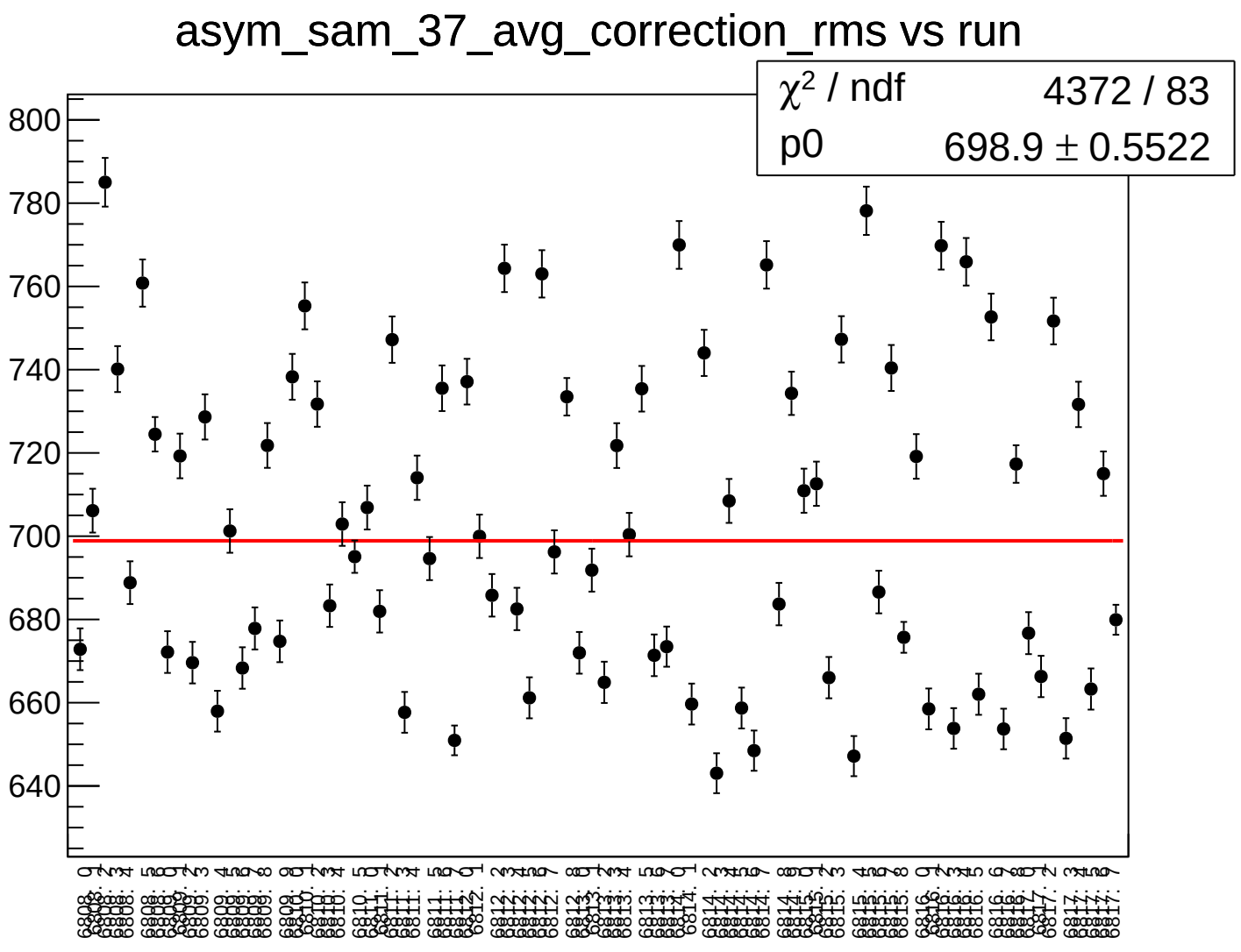

reg_asym_sam_37_avg_mean vs run
χ² / ndf 89.01 / 83
p0 224.1 ± 68.03
2000
1000
0
−1000
−2000
pull
Entries 84
Mean −15.45
Std Dev 140.8
2
1
0
−1
−2

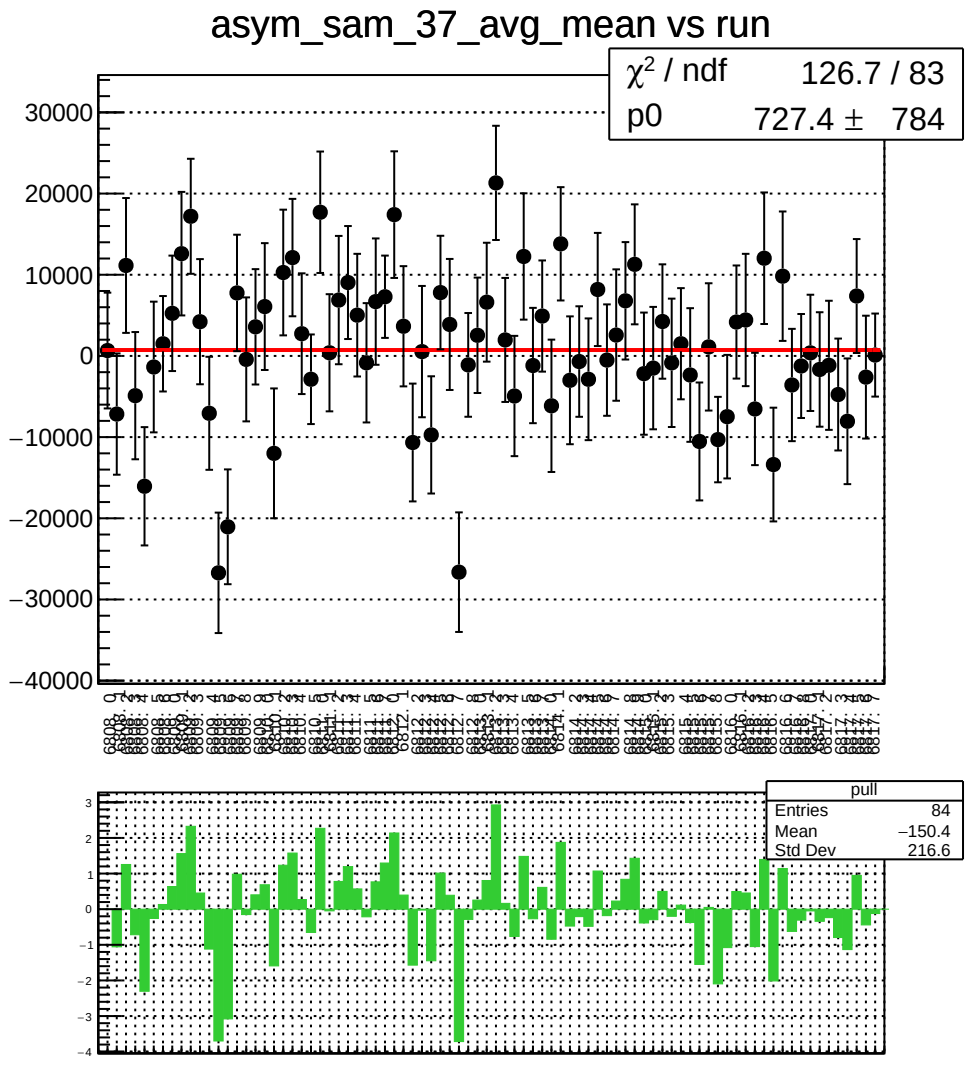

pull1D
Entries 84
Mean 0.009126
Std Dev 1.029
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

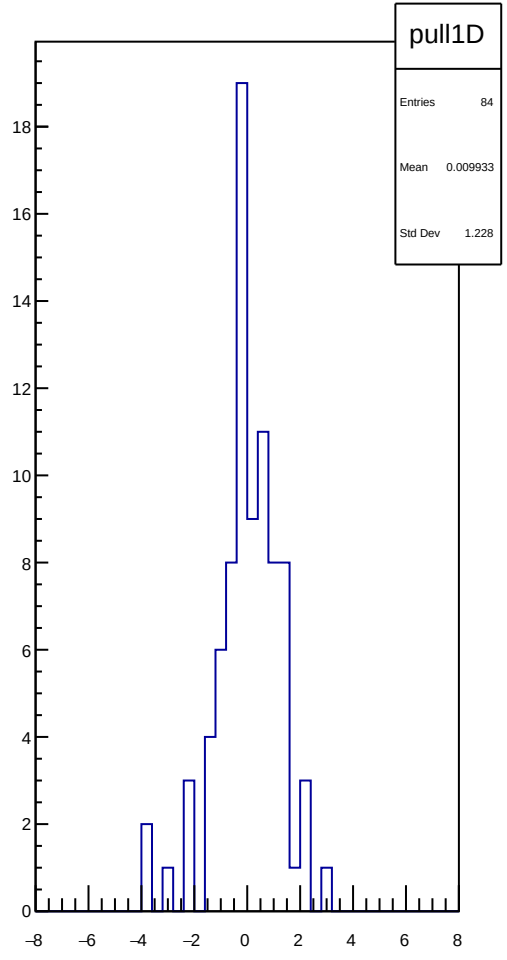

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 6506 / 83
p0 60.84 ± 0.04811
75
70
65
60
55

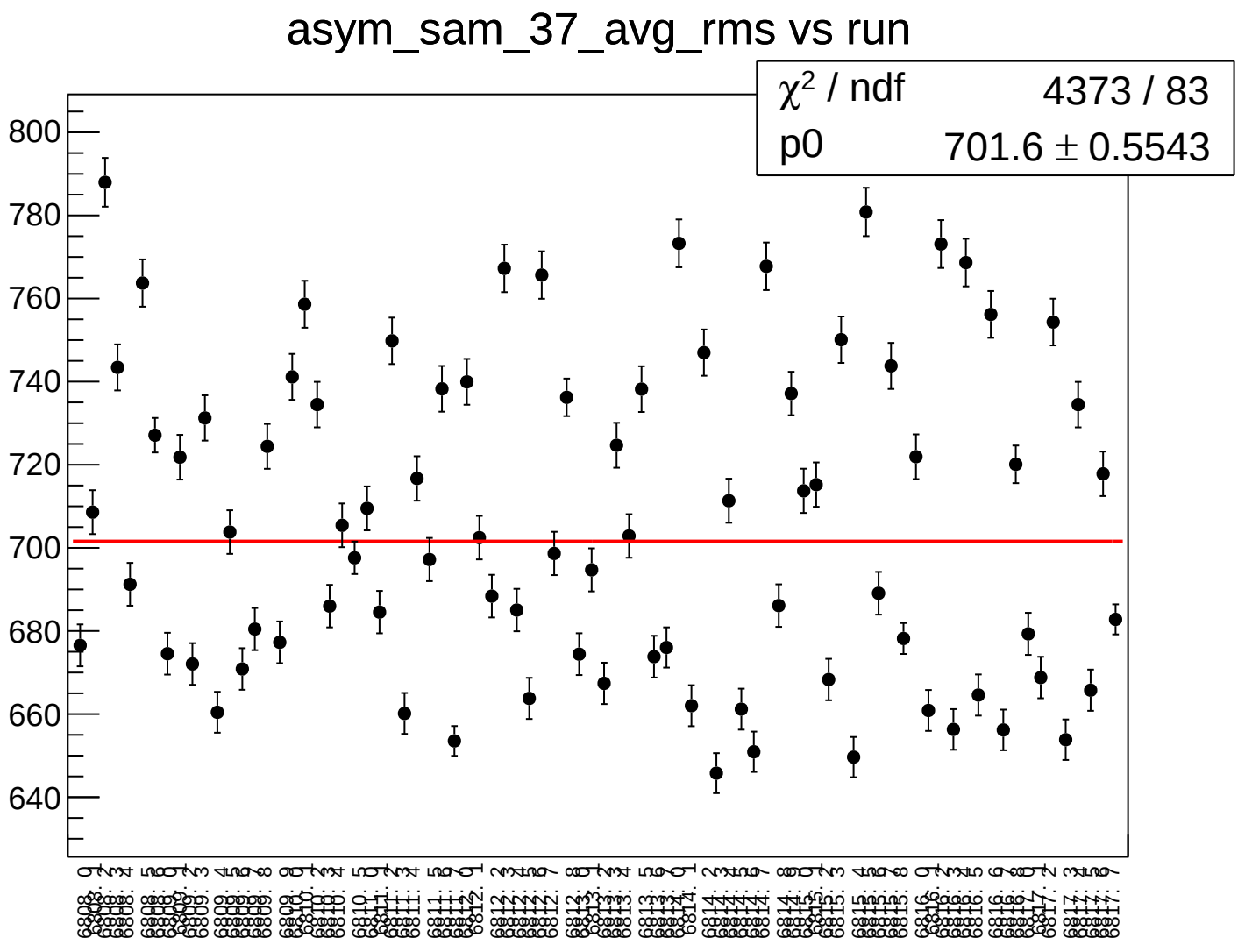

asym_sam_37_avg_correction_mean vs run
χ² / ndf 126.6 / 83
p0 −513.4 ± 781
pull
Entries 84
Mean −180.5
Std Dev 244.1

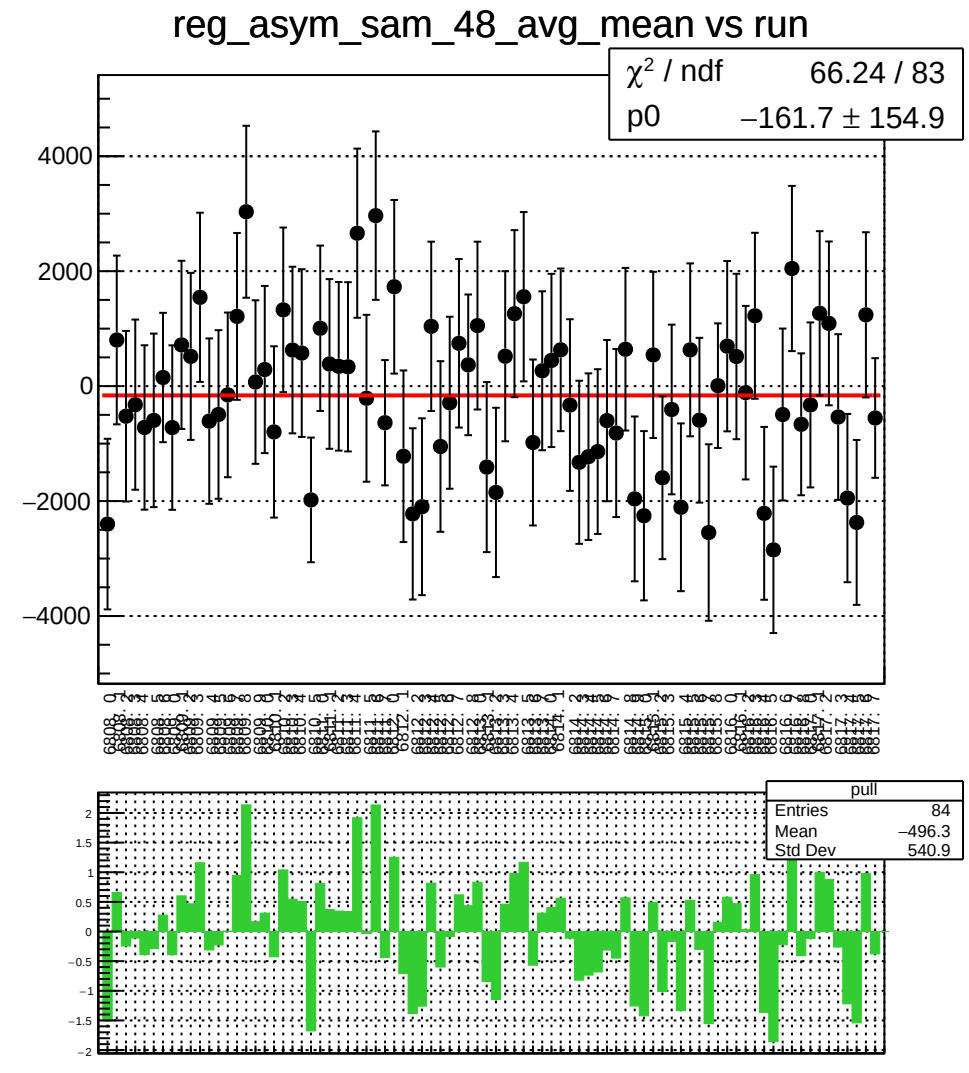

pull1D
Entries 84
Mean −0.008494
Std Dev 1.227

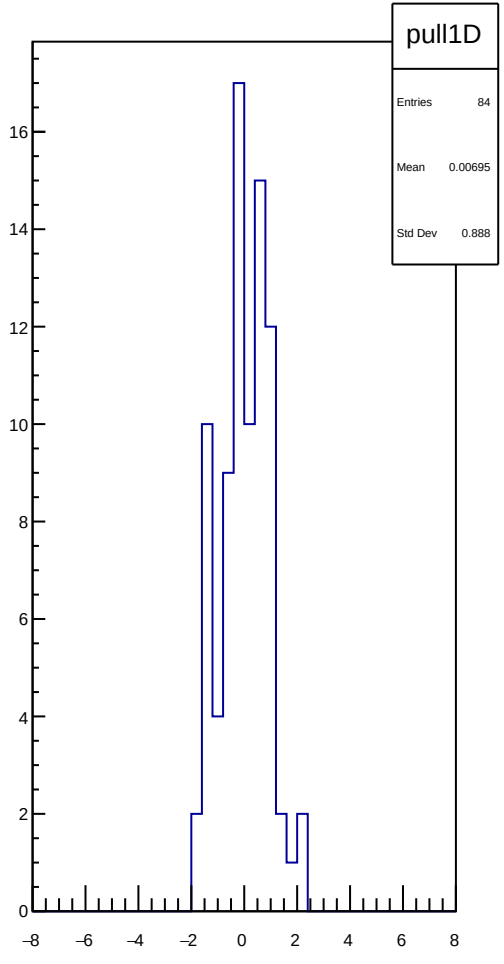

asym_sam_37_avg_correction_rms vs run
χ² / ndf 4372 / 83
p0 698.9 ± 0.5522
800
780
760
740
720
700
680
660
640

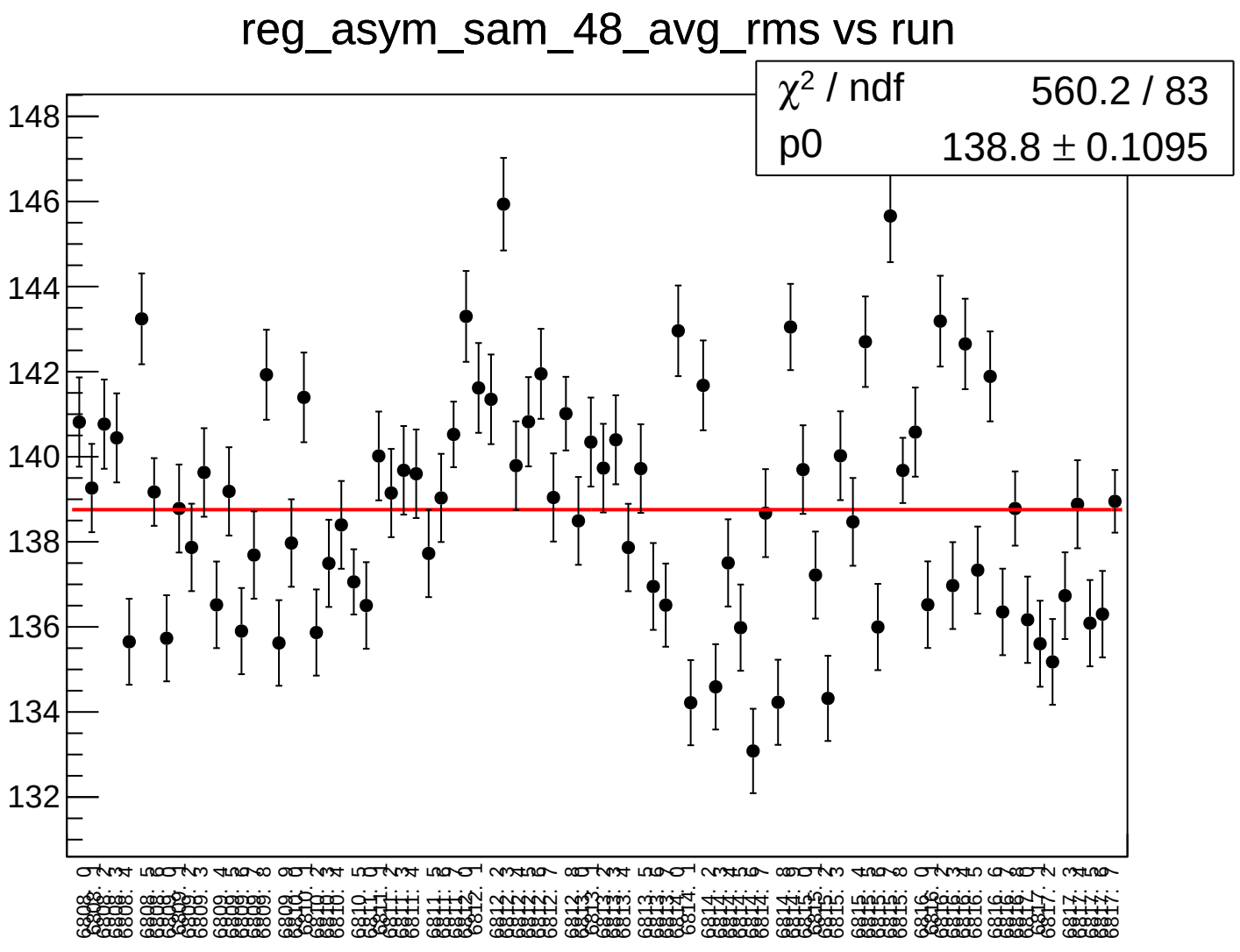

asym_sam_37_avg_mean vs run
χ² / ndf 126.7 / 83
p0 727.4 ± 784
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 84
Mean −150.4
Std Dev 216.6
3
2
1
0
−1
−2
−3
−4

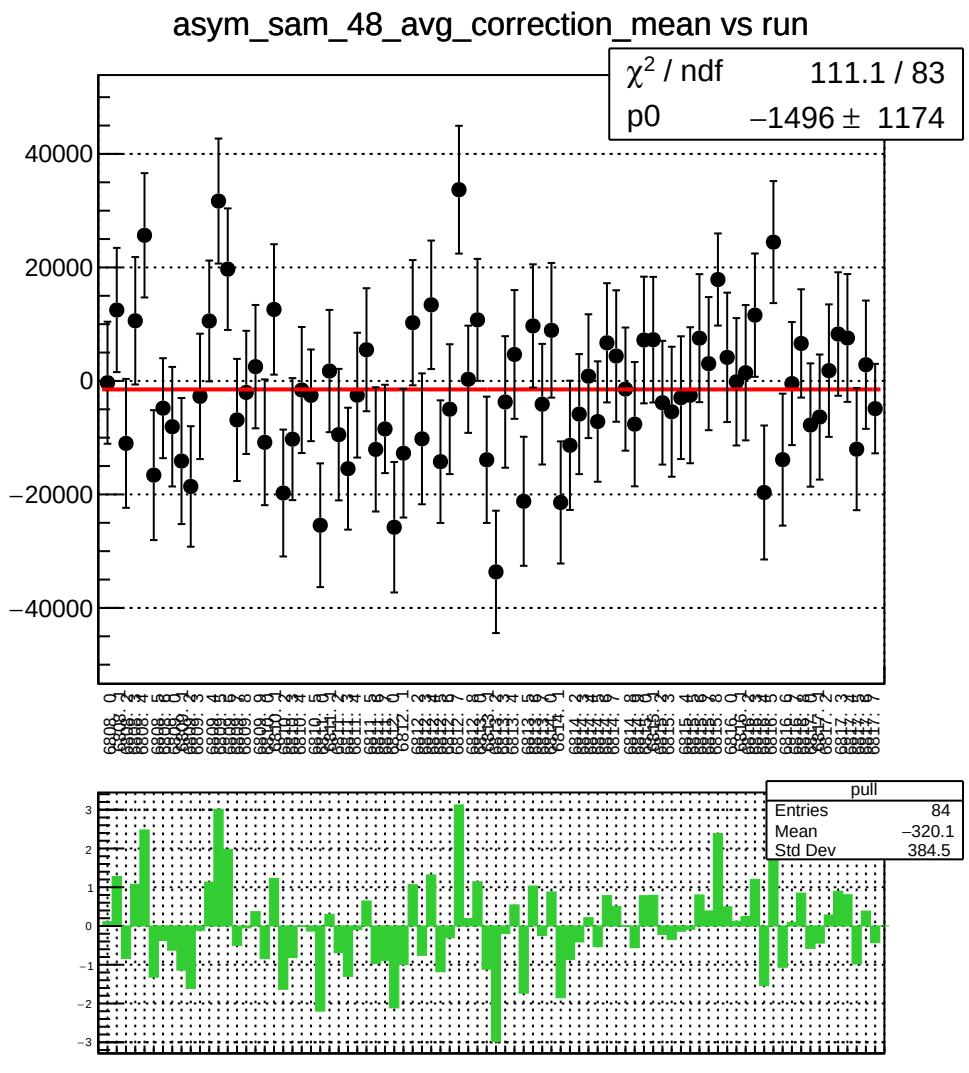

pull1D
Entries 84
Mean 0.009933
Std Dev 1.228
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

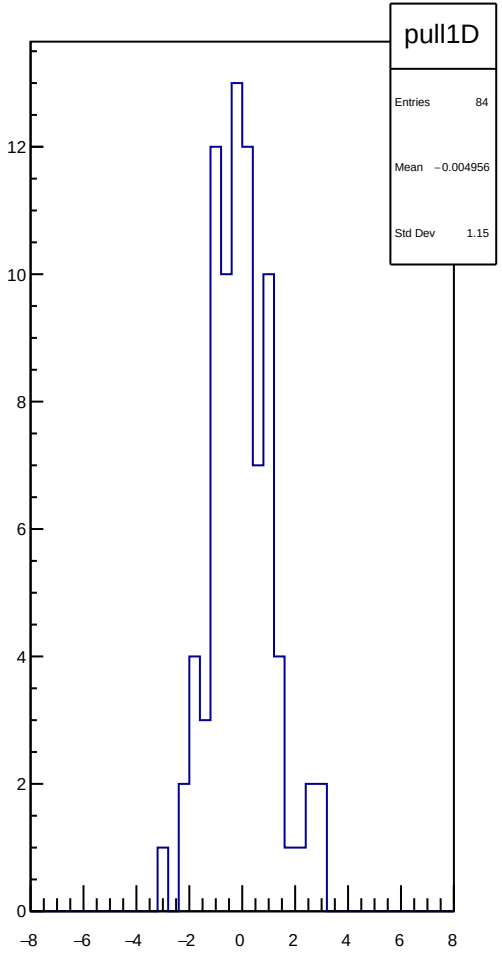

asym_sam_37_avg_rms vs run
χ² / ndf 4373 / 83
p0 701.6 ± 0.5543
800
780
760
740
720
700
680
660
640

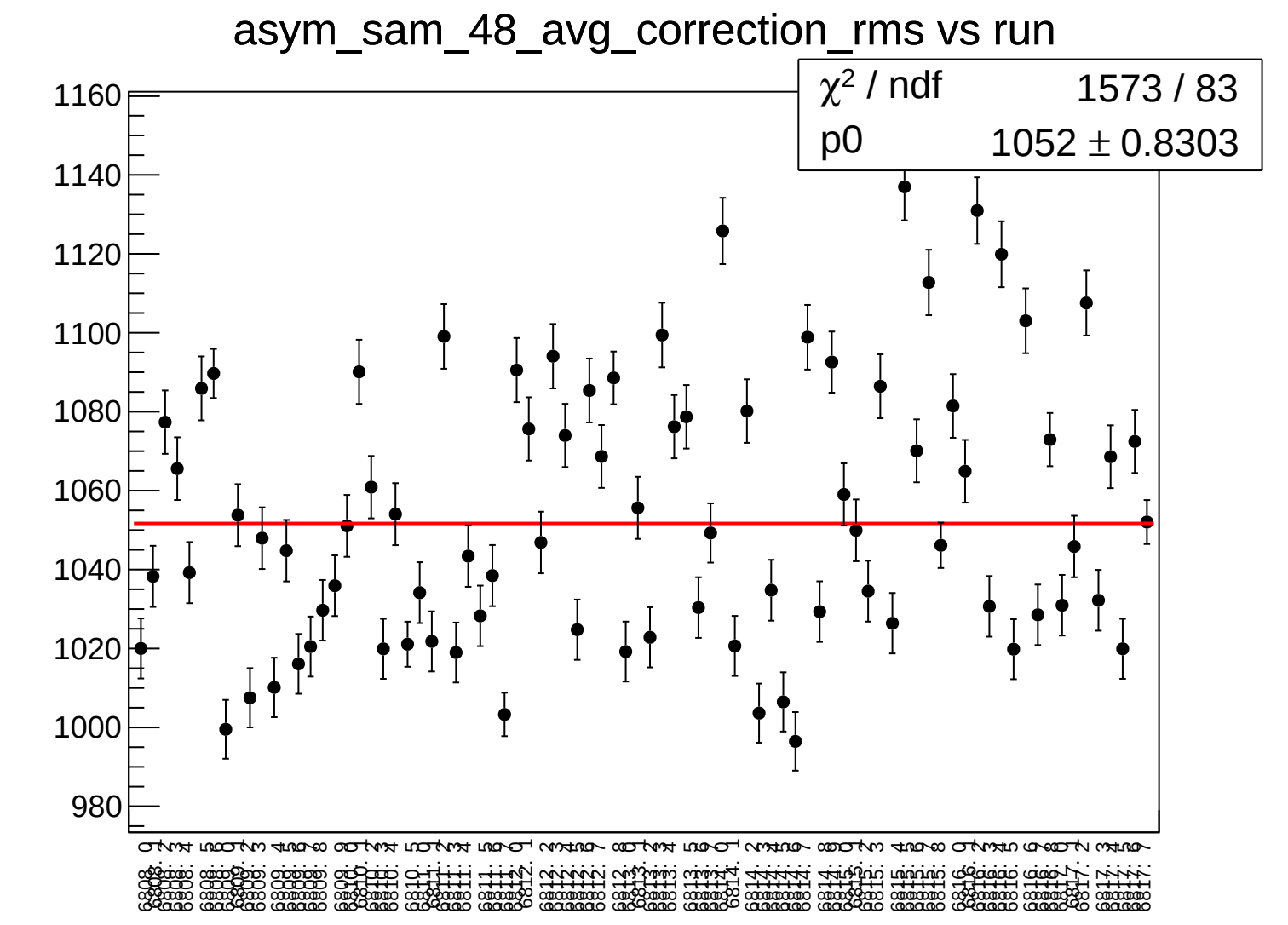

reg_asym_sam_48_avg_mean vs run
χ² / ndf 66.24 / 83
p0 −161.7 ± 154.9
4000
2000
0
−2000
−4000
pull
Entries 84
Mean −496.3
Std Dev 540.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

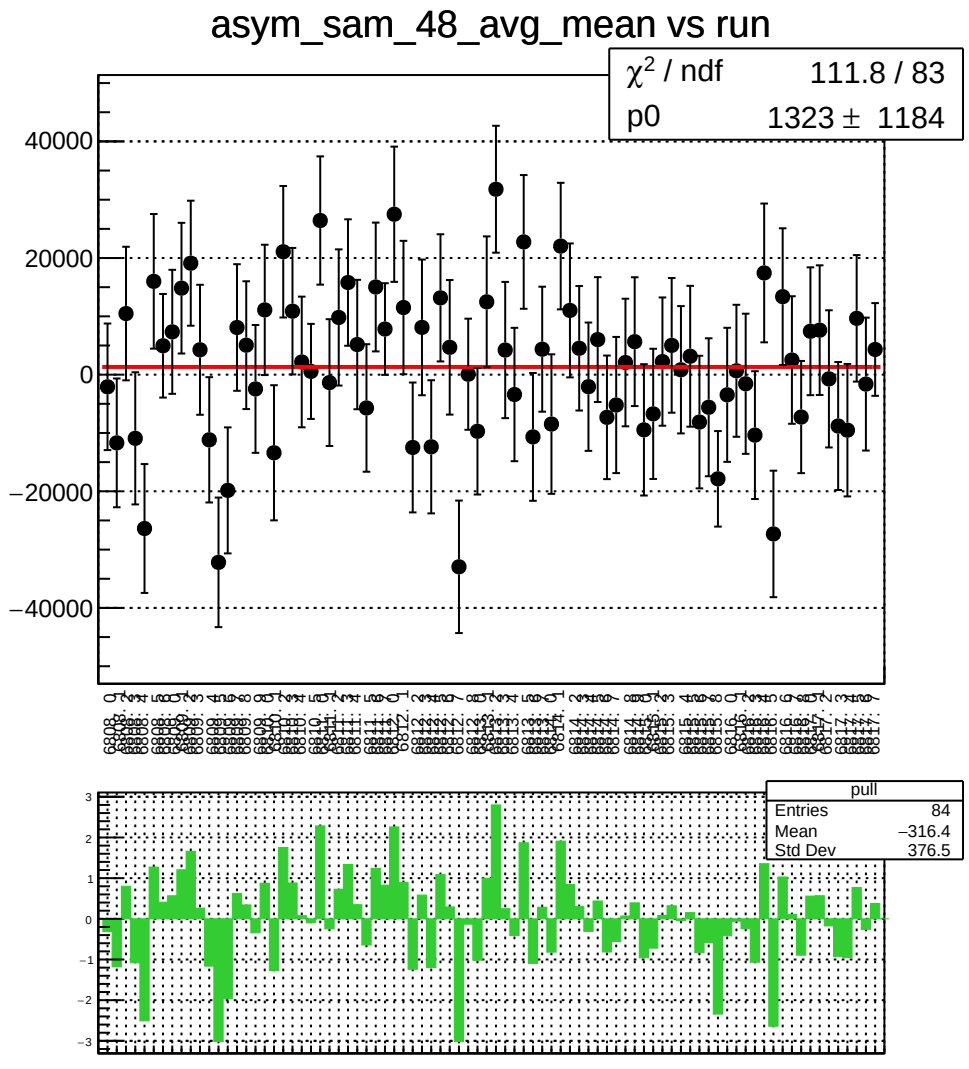

pull1D
Entries 84
Mean 0.00695
Std Dev 0.888
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

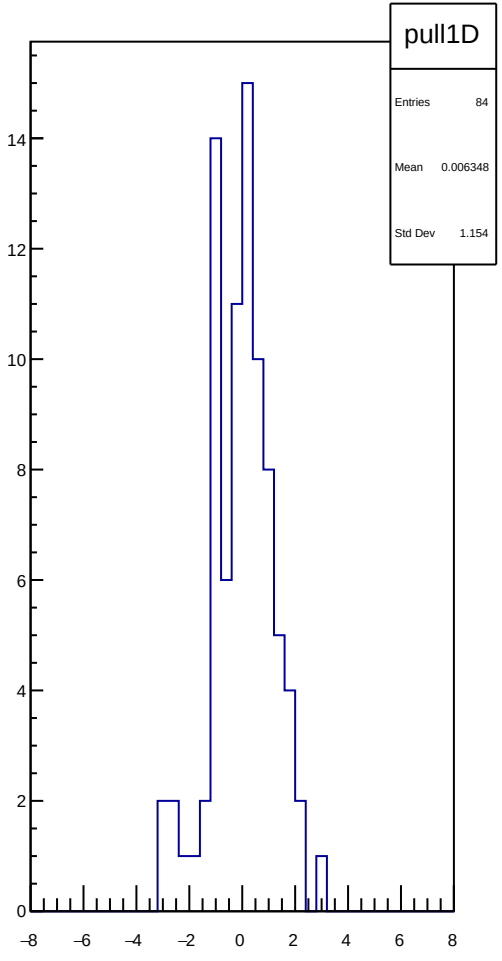

reg_asym_sam_48_avg_rms vs run
χ² / ndf 560.2 / 83
p0 138.8 ± 0.1095
148
146
144
142
140
138
136
134
132

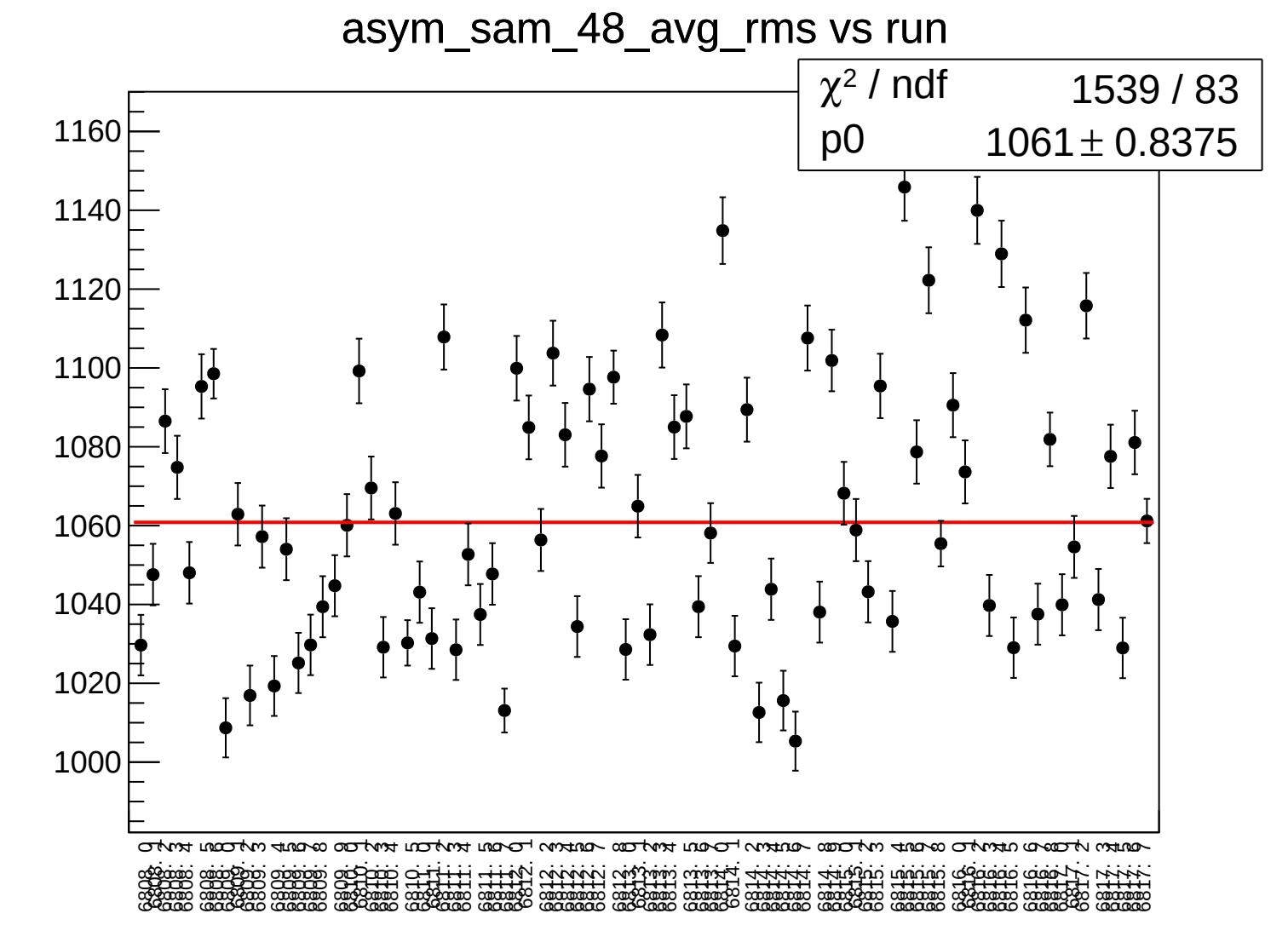

asym_sam_48_avg_correction_mean vs run
χ² / ndf 111.1 / 83
p0 −1496 ± 1174
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −320.1
Std Dev 384.5
3
2
1
0
−1
−2
−3

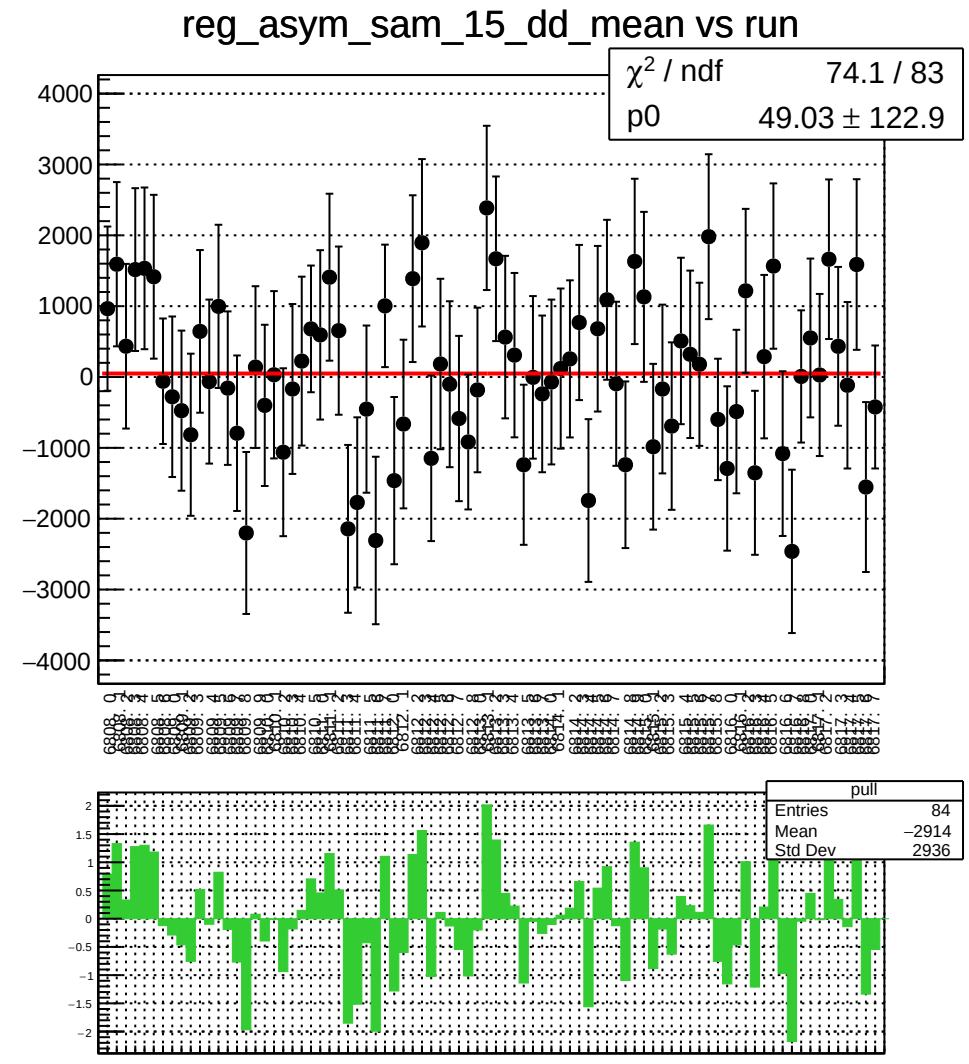

pull1D
Entries 84
Mean −0.004956
Std Dev 1.15
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

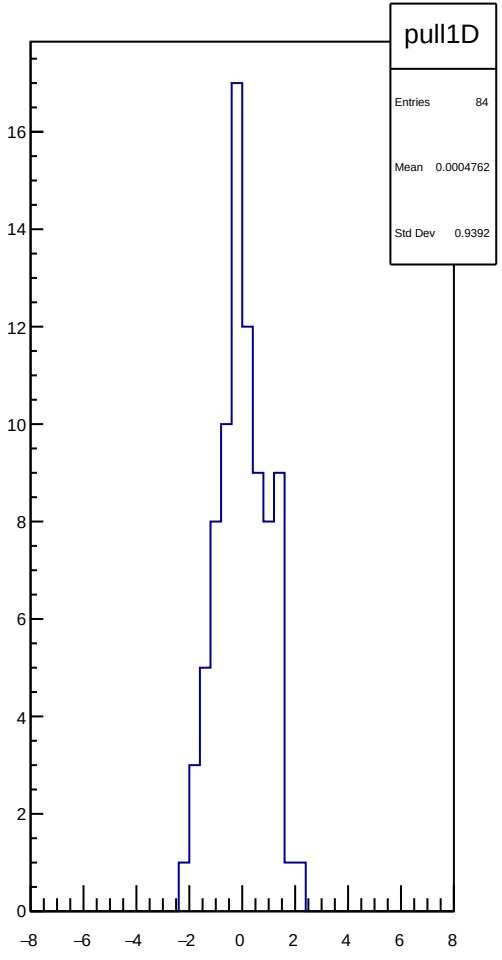

asym_sam_48_avg_correction_rms vs run
χ² / ndf 1573 / 83
p0 1052 ± 0.8303
1160
1140
1120
1100
1080
1060
1040
1020
1000
980

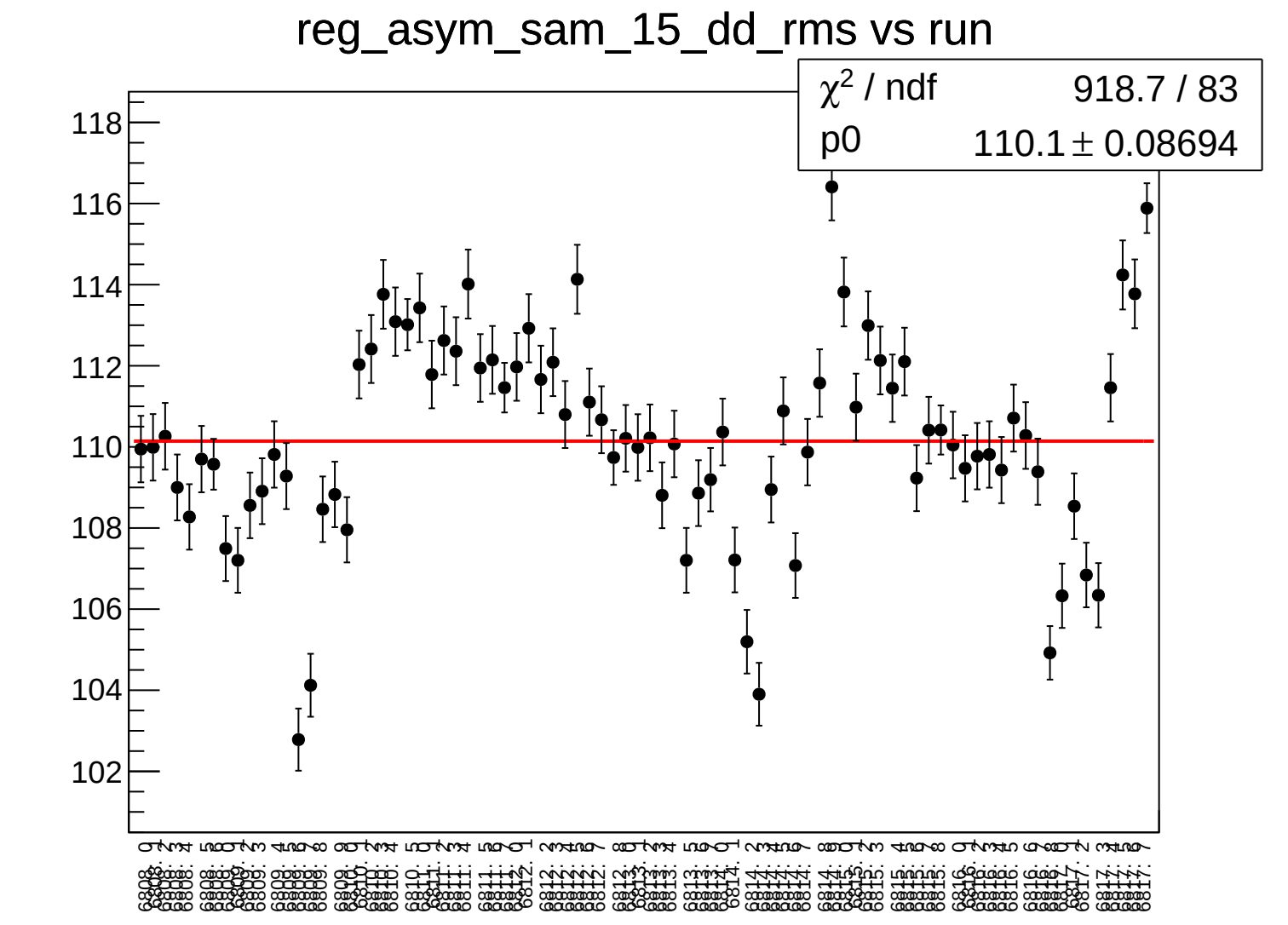

asym_sam_48_avg_mean vs run
χ² / ndf 111.8 / 83
p0 1323 ± 1184
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −316.4
Std Dev 376.5
3
2
1
0
−1
−2
−3

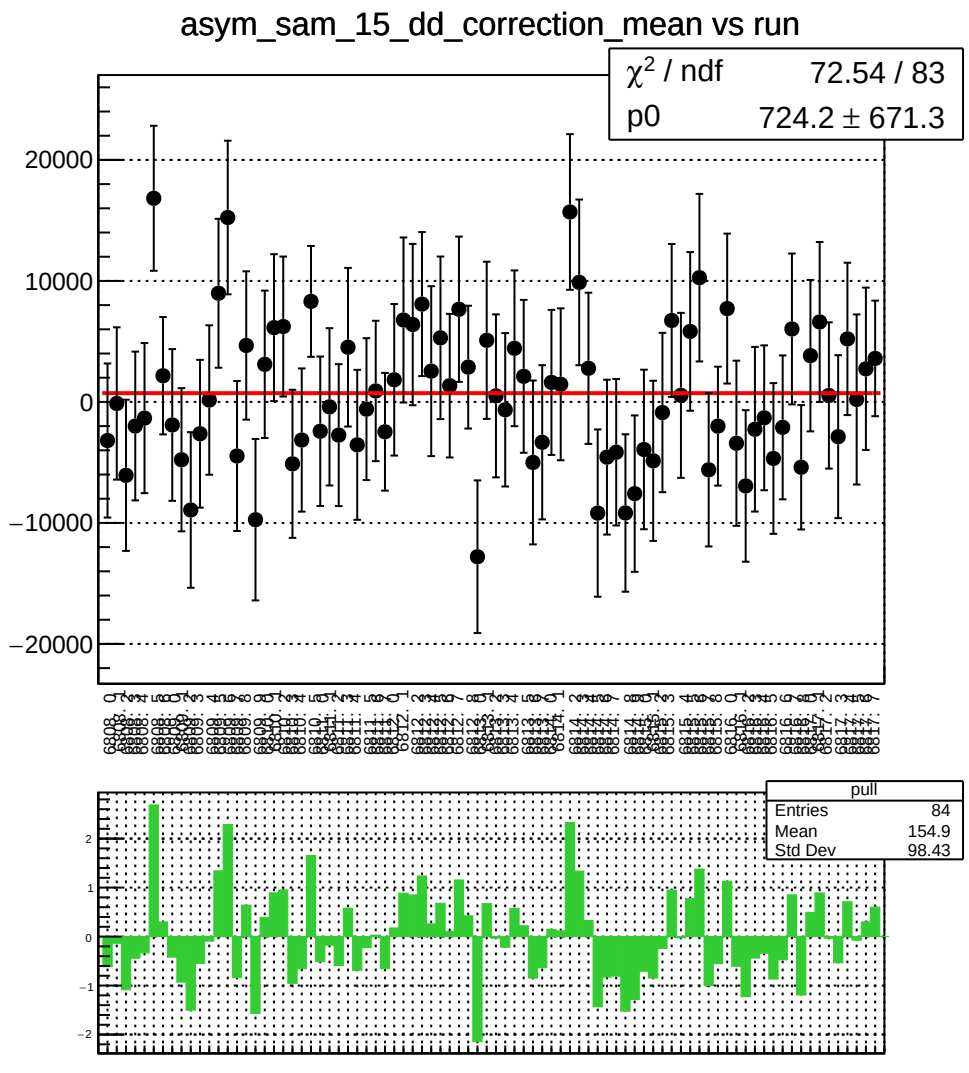

pull1D
Entries 84
Mean 0.006348
Std Dev 1.154
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

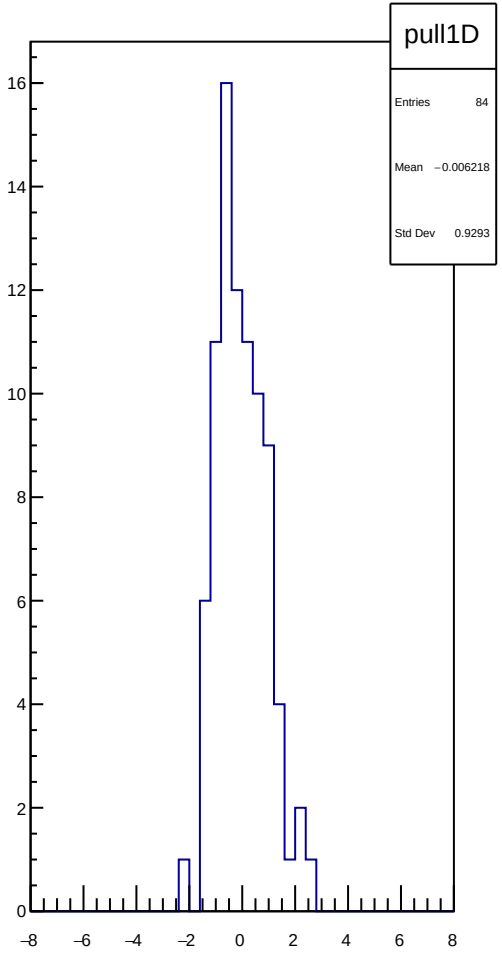

asym_sam_48_avg_rms vs run
χ² / ndf 1539 / 83
p0 1061 ± 0.8375
1160
1140
1120
1100
1080
1060
1040
1020
1000

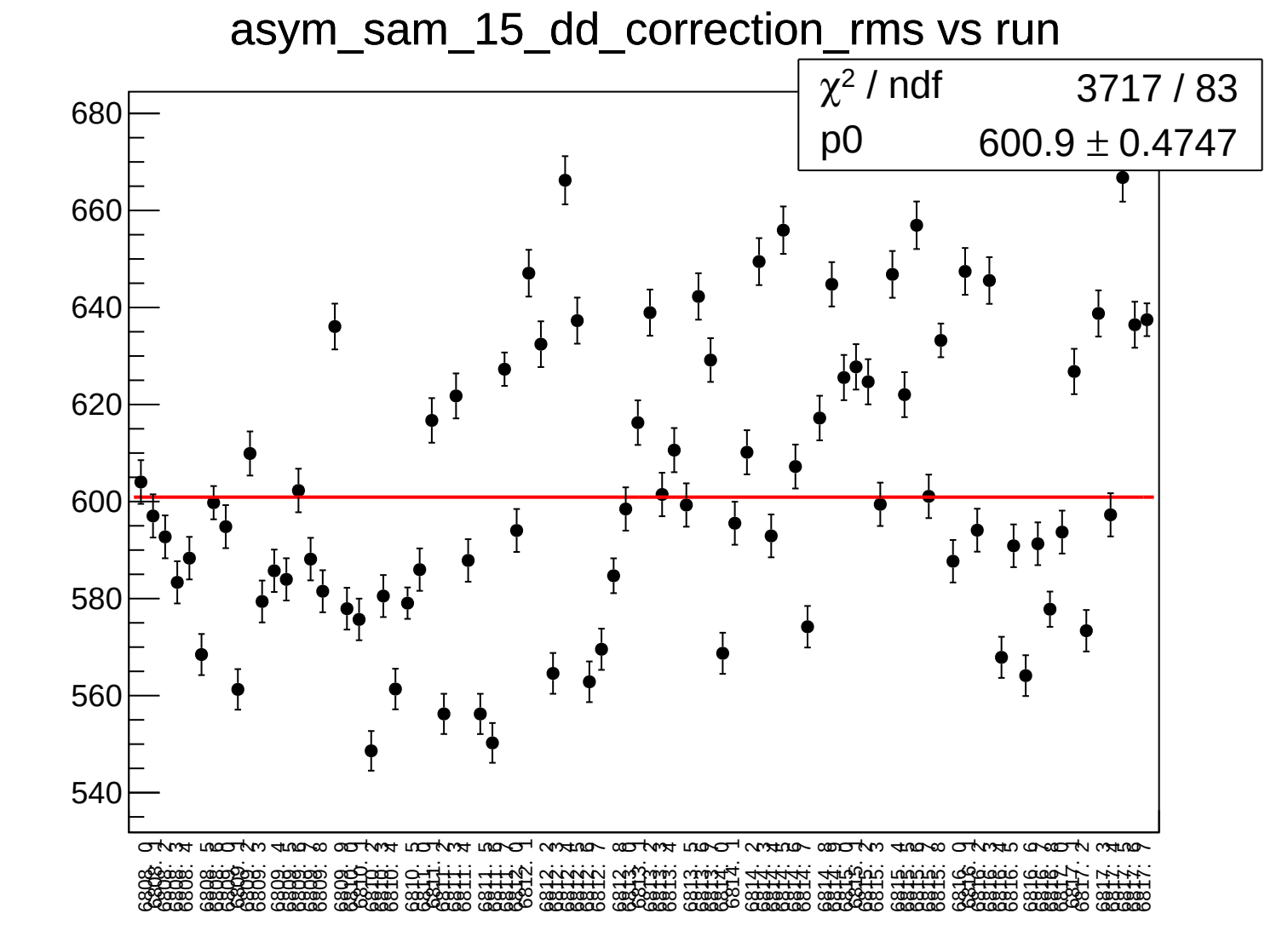

reg_asym_sam_15_dd_mean vs run
χ² / ndf 74.1 / 83
p0 49.03 ± 122.9
pull
Entries 84
Mean −2914
Std Dev 2936

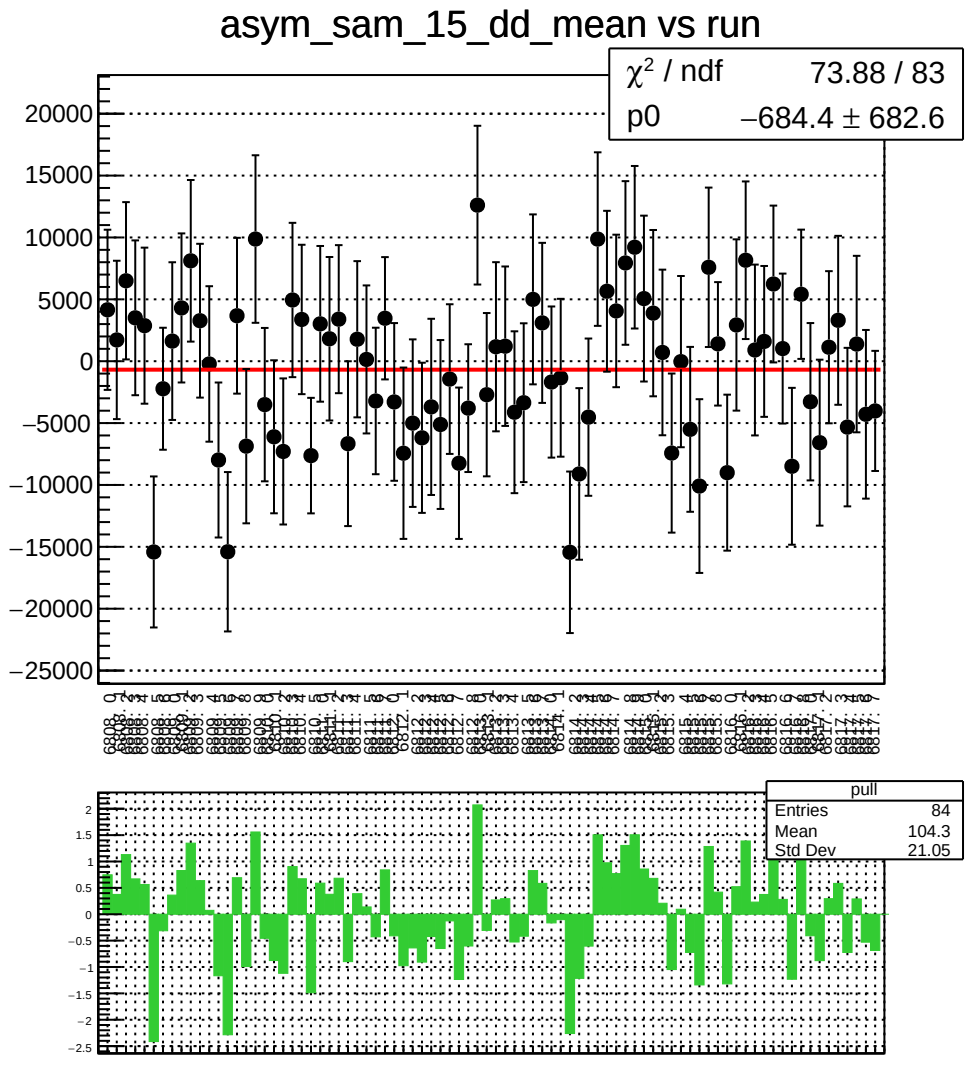

pull1D
Entries 84
Mean 0.0004762
Std Dev 0.9392

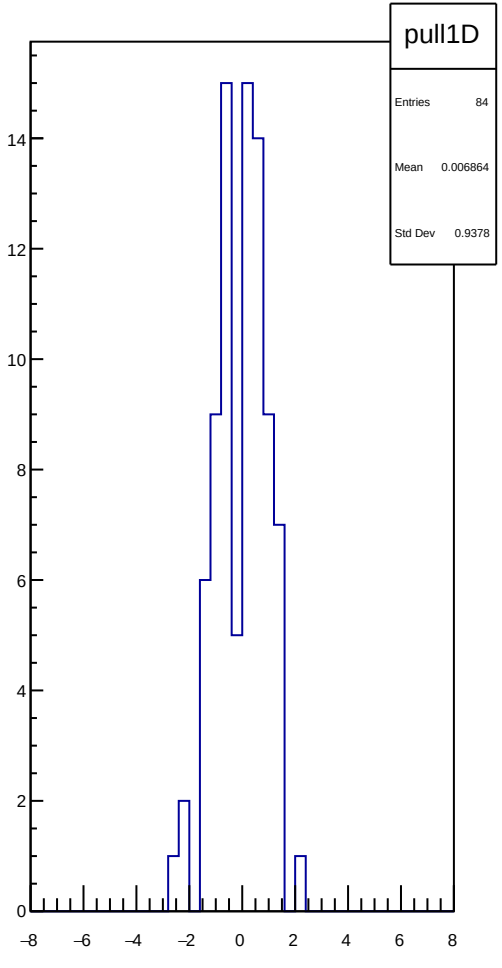

reg_asym_sam_15_dd_rms vs run
χ^2 / ndf 918.7 / 83
p0 110.1 ± 0.08694
118
116
114
112
110
108
106
104
102

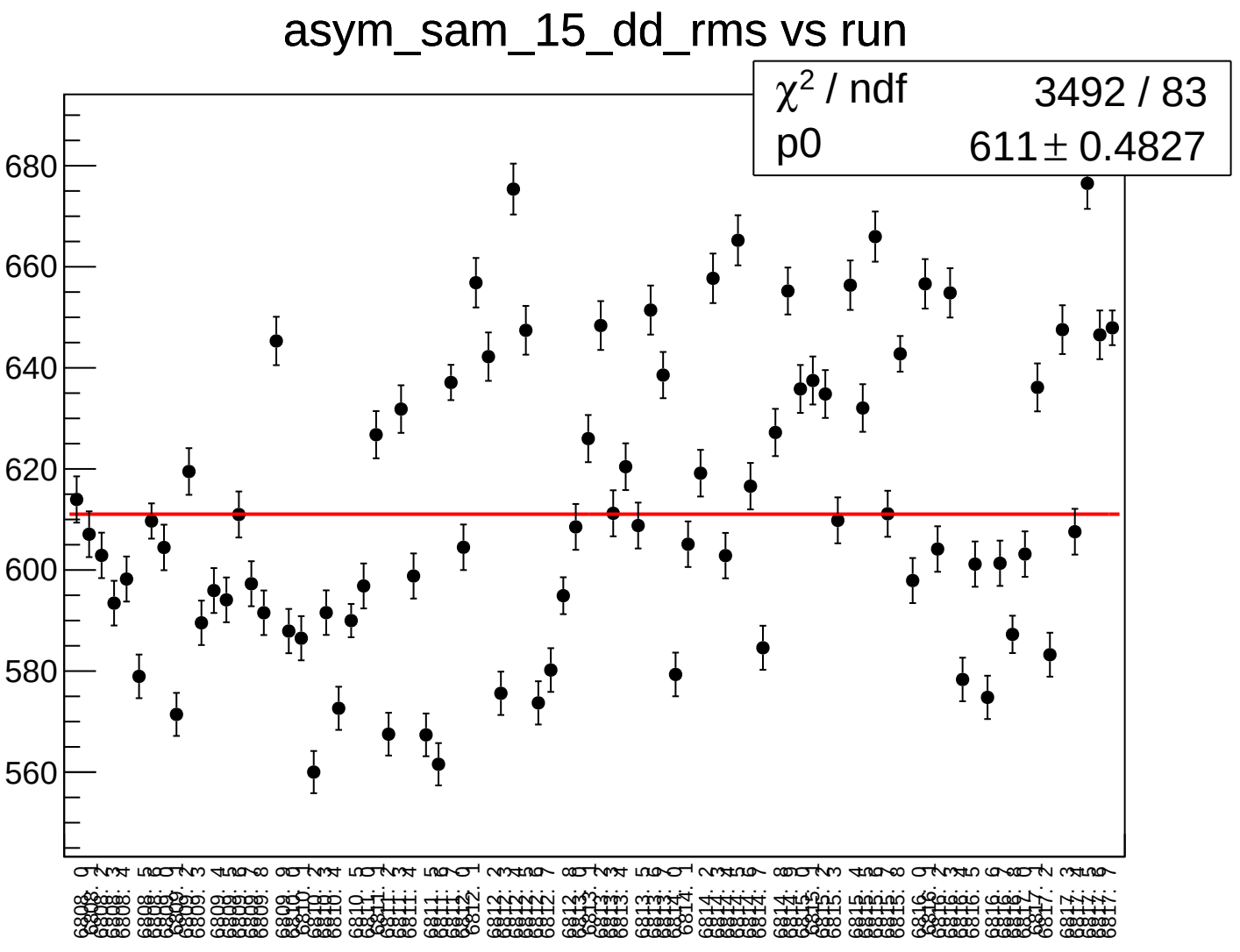

asym_sam_15_dd_correction_mean vs run
χ² / ndf 72.54 / 83
p0 724.2 ± 671.3
20000
10000
0
−10000
−20000
pull
Entries 84
Mean 154.9
Std Dev 98.43
2
1
0
−1
−2

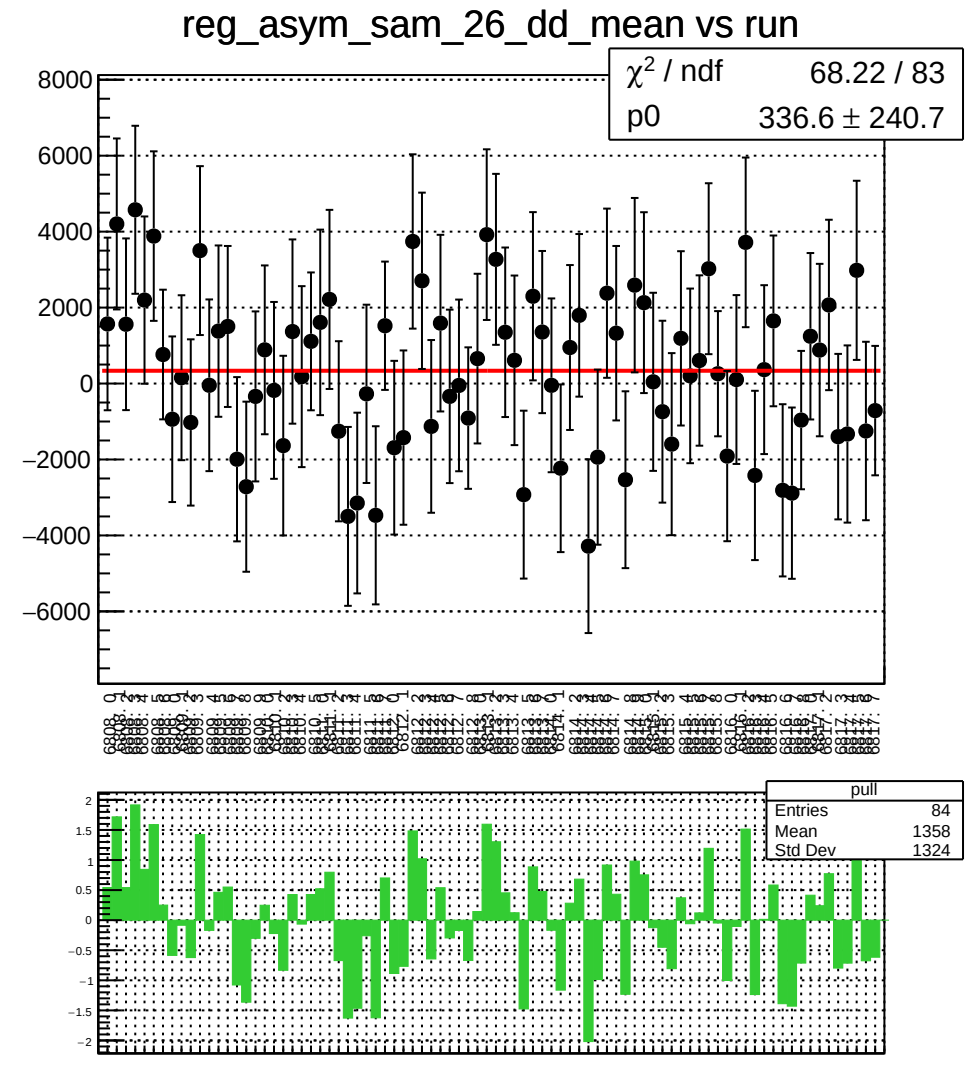

pull1D
Entries 84
Mean −0.006218
Std Dev 0.9293
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

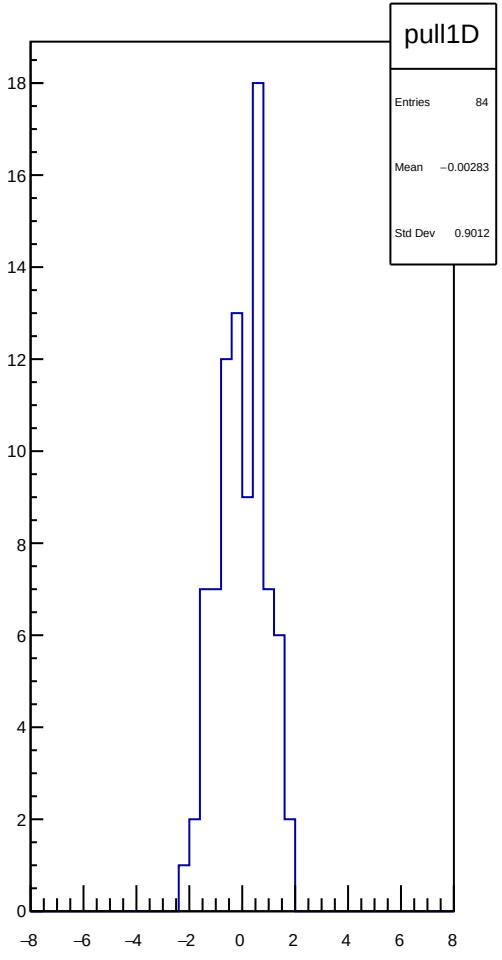

asym_sam_15_dd_correction_rms vs run
χ² / ndf 3717 / 83
p0 600.9 ± 0.4747
680
660
640
620
600
580
560
540

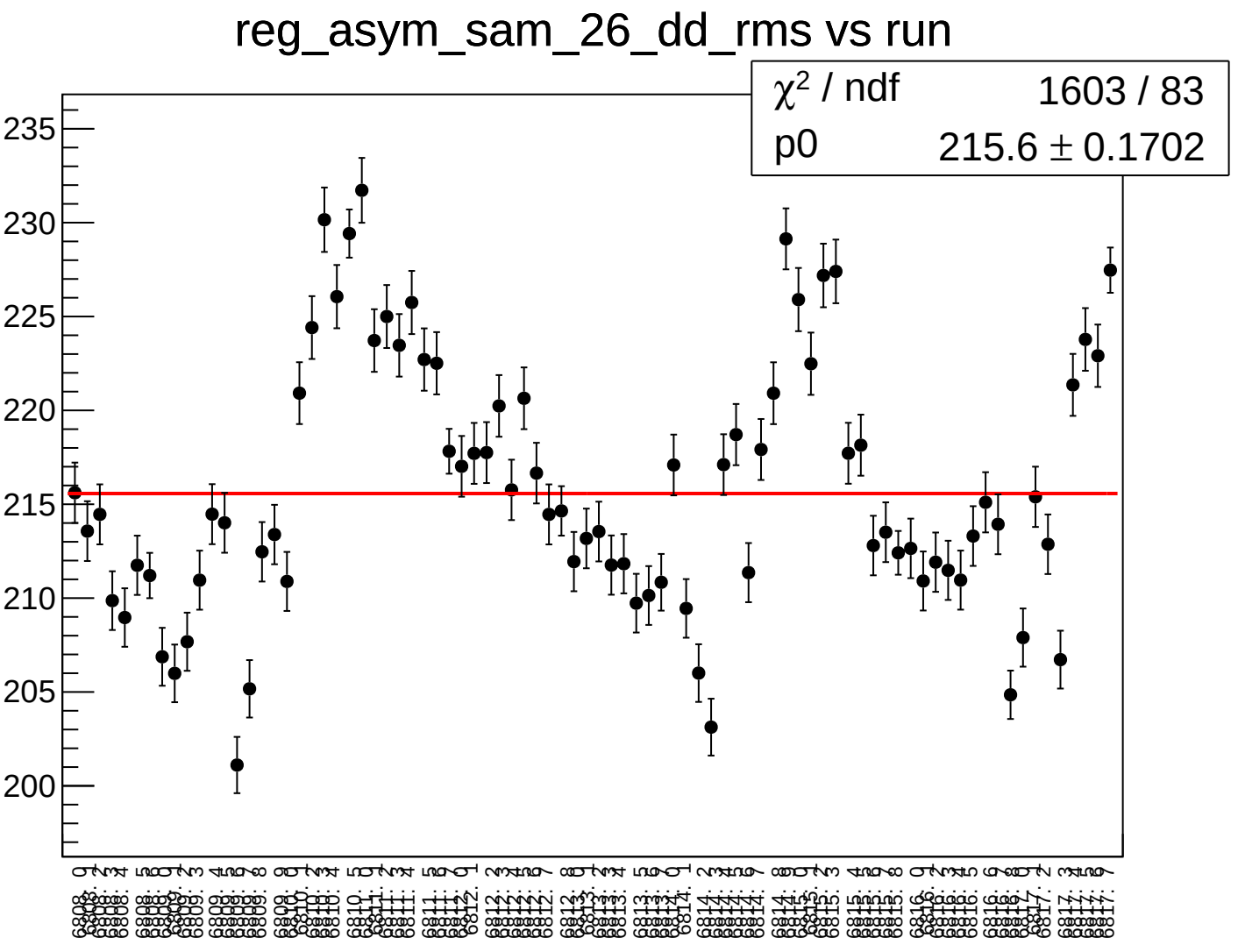

asym_sam_15_dd_mean vs run
χ² / ndf 73.88 / 83
p0 −684.4 ± 682.6
pull
Entries 84
Mean 104.3
Std Dev 21.05

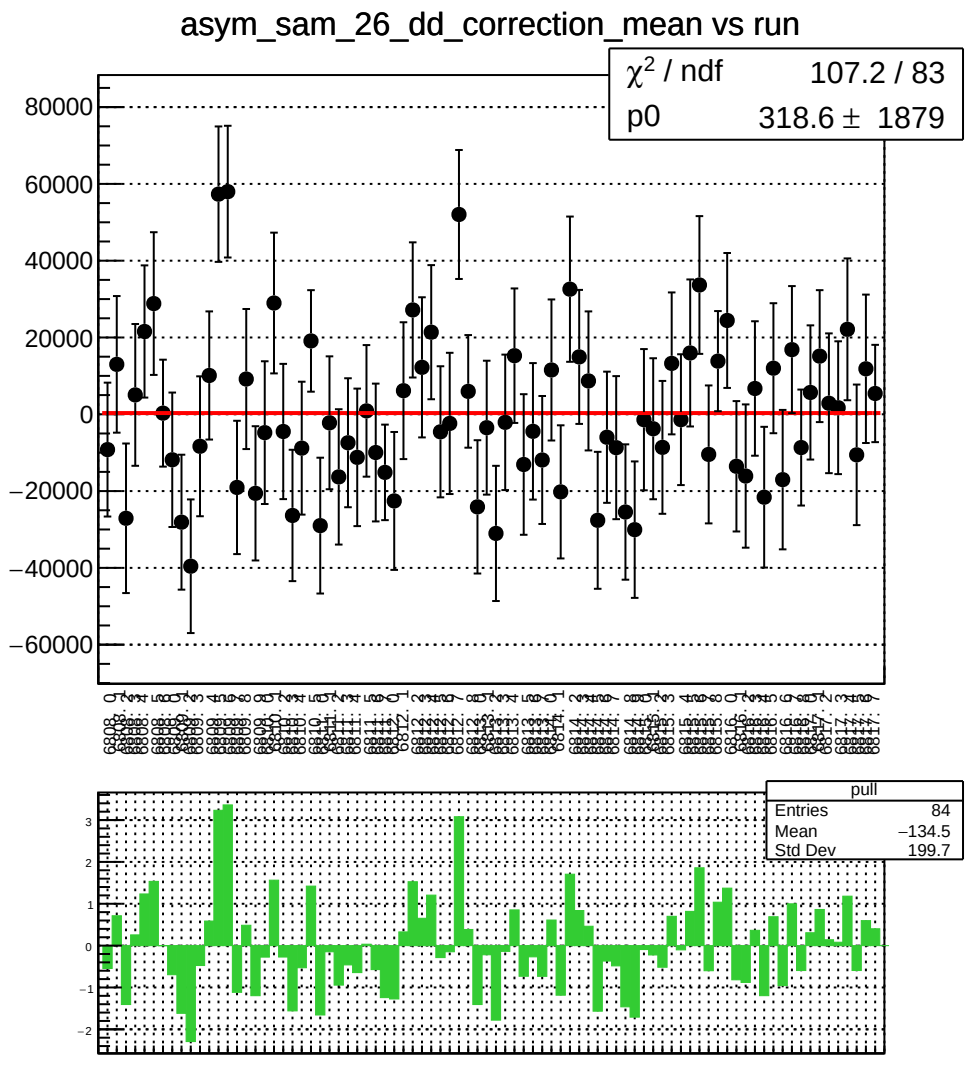

pull1D
Entries 84
Mean 0.006864
Std Dev 0.9378

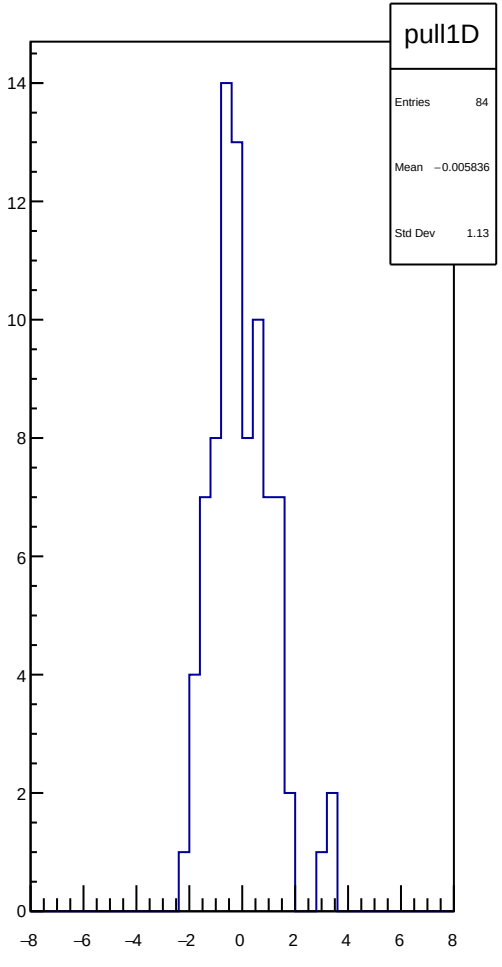

asym_sam_15_dd_rms vs run
χ^2 / ndf 3492 / 83
p0 611 ± 0.4827
680
660
640
620
600
580
560

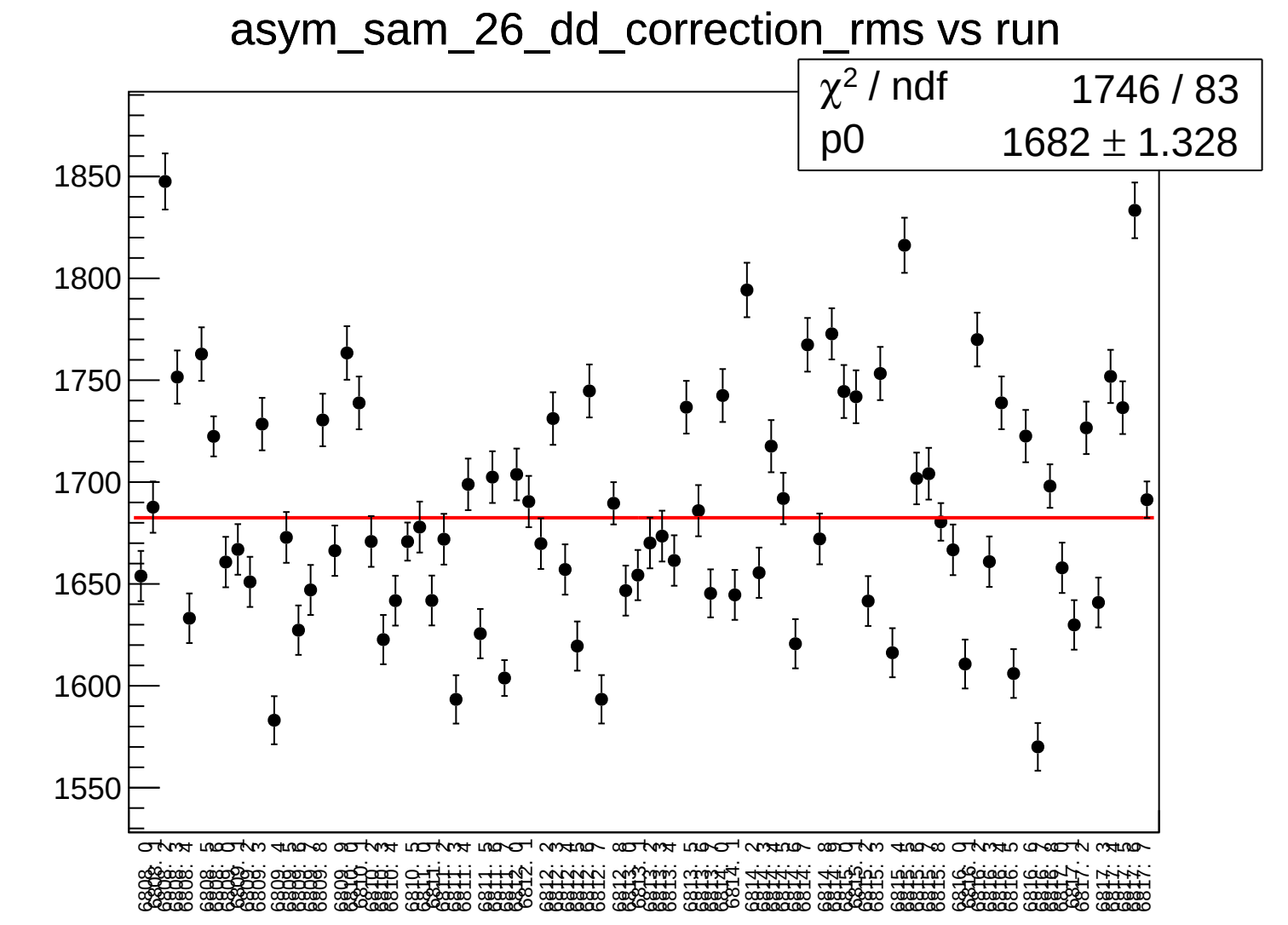

reg_asym_sam_26_dd_mean vs run
χ² / ndf 68.22 / 83
p0 336.6 ± 240.7
pull
Entries 84
Mean 1358
Std Dev 1324

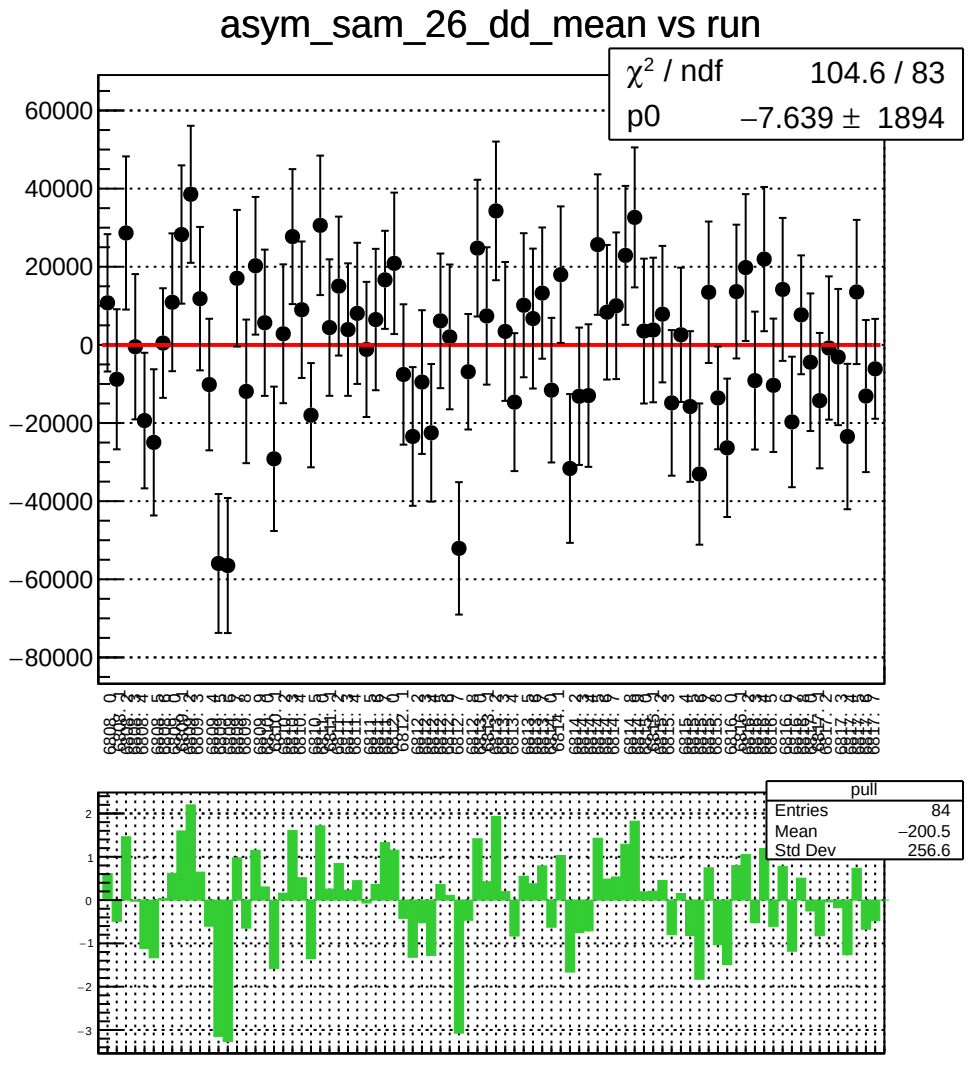

pull1D
Entries 84
Mean −0.00283
Std Dev 0.9012

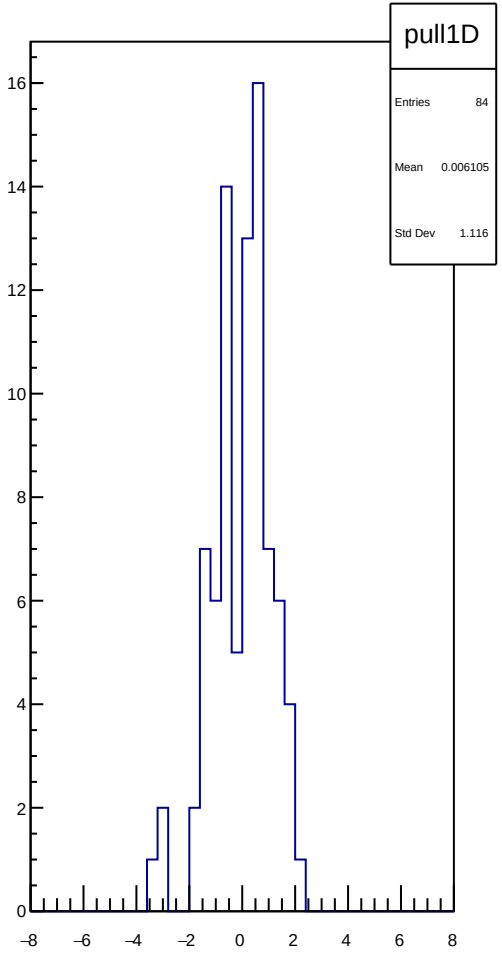

reg_asym_sam_26_dd_rms vs run
χ² / ndf 1603 / 83
p0 215.6 ± 0.1702
235
230
225
220
215
210
205
200

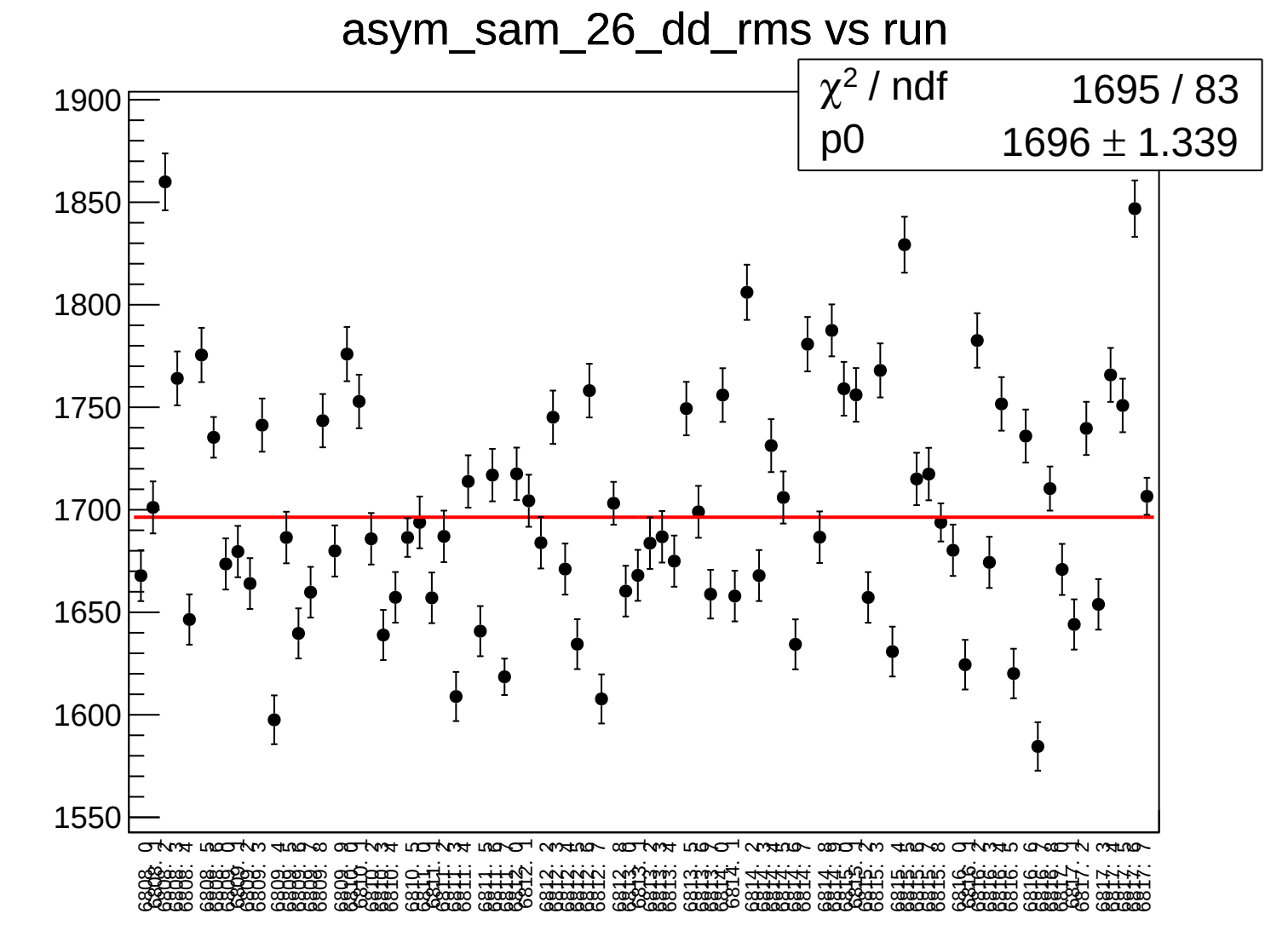

asym_sam_26_dd_correction_mean vs run
χ² / ndf 107.2 / 83
p0 318.6 ± 1879
pull
Entries 84
Mean −134.5
Std Dev 199.7

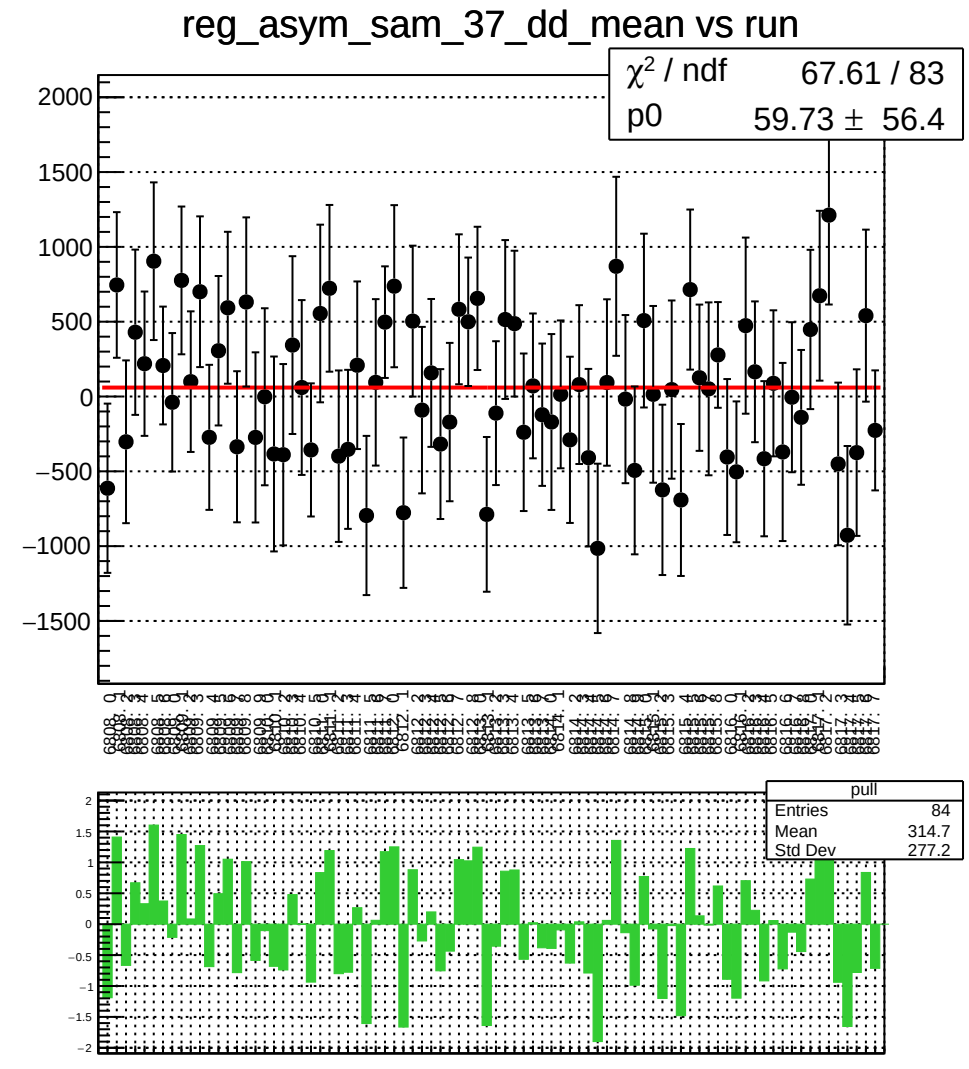

pull1D
Entries 84
Mean −0.005836
Std Dev 1.13

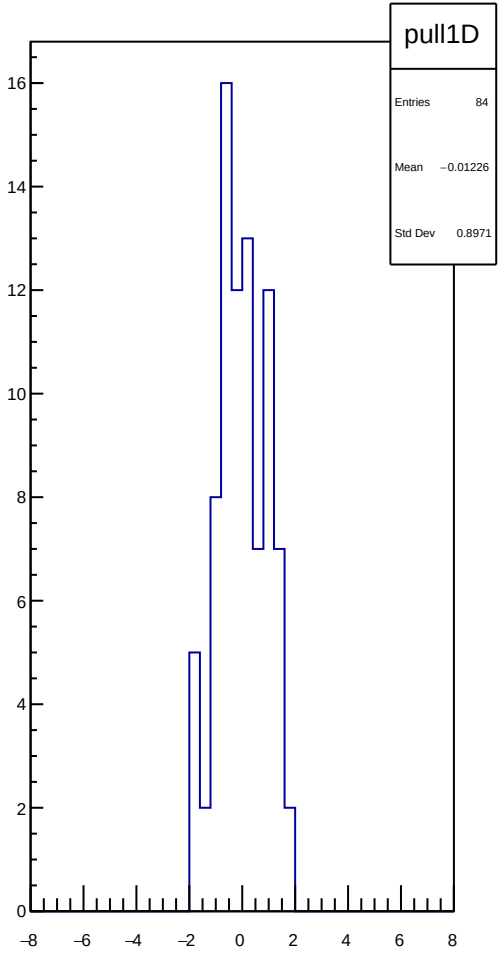

asym_sam_26_dd_correction_rms vs run
χ² / ndf 1746 / 83
p0 1682 ± 1.328
1850
1800
1750
1700
1650
1600
1550

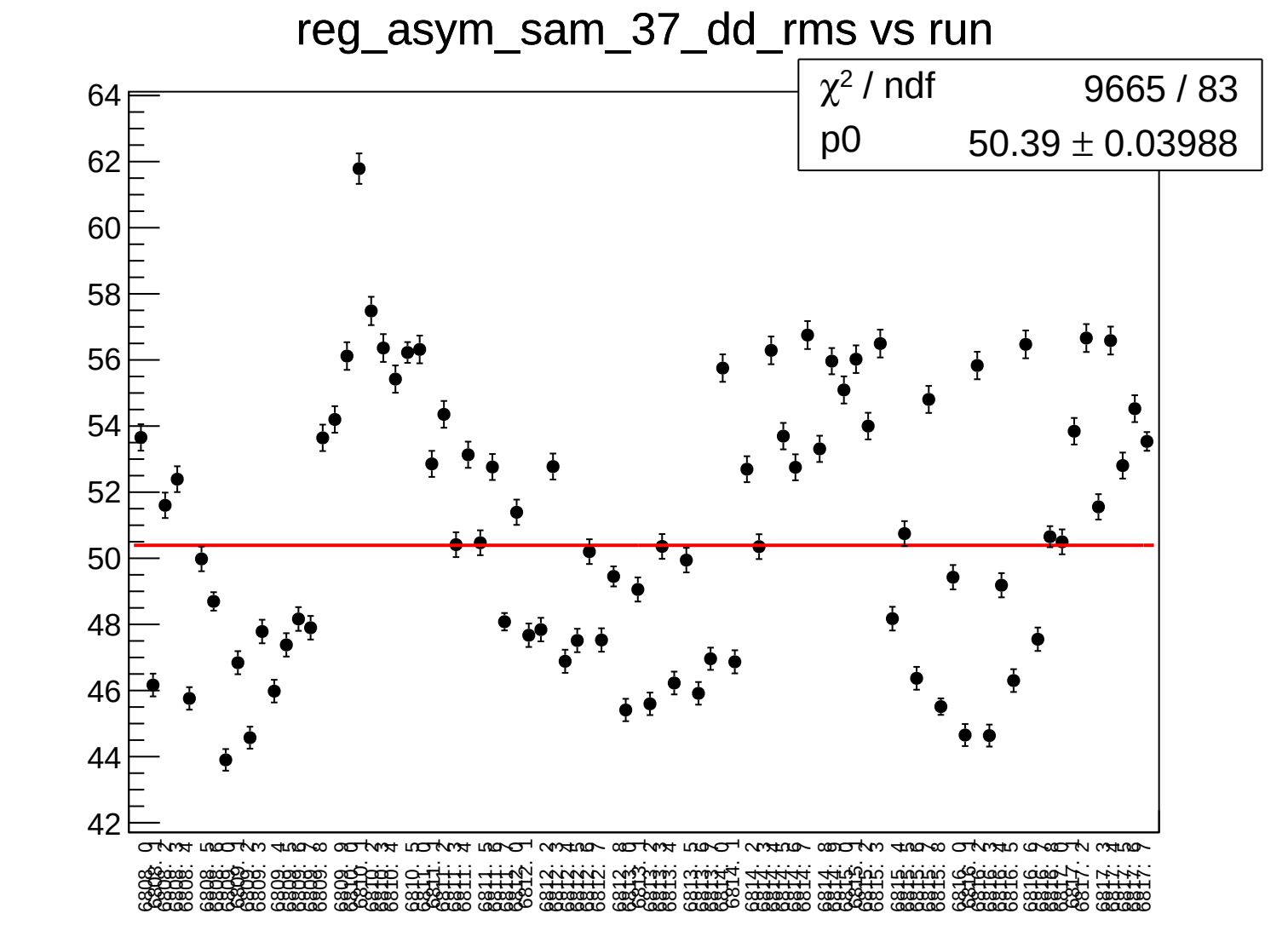

asym_sam_26_dd_mean vs run
χ² / ndf 104.6 / 83
p0 −7.639 ± 1894
pull
Entries 84
Mean −200.5
Std Dev 256.6

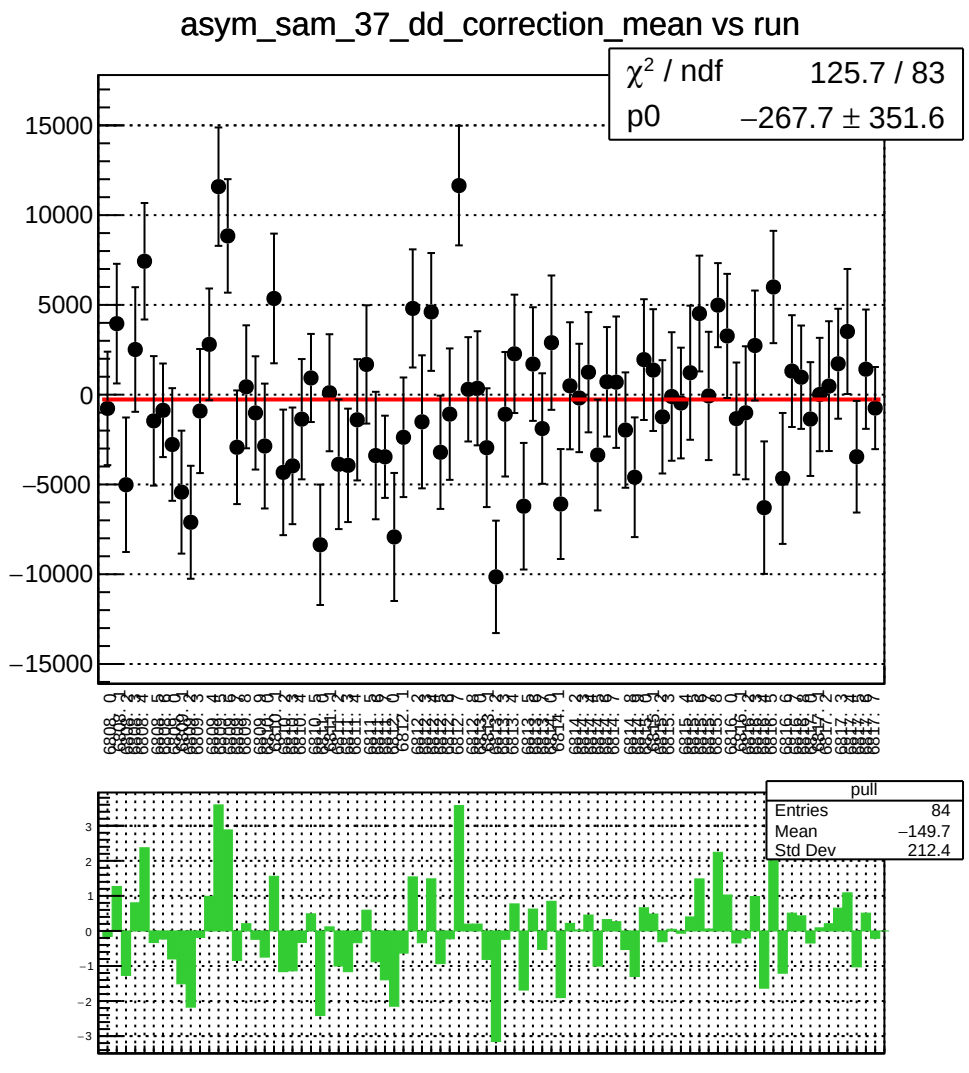

pull1D
Entries 84
Mean 0.006105
Std Dev 1.116

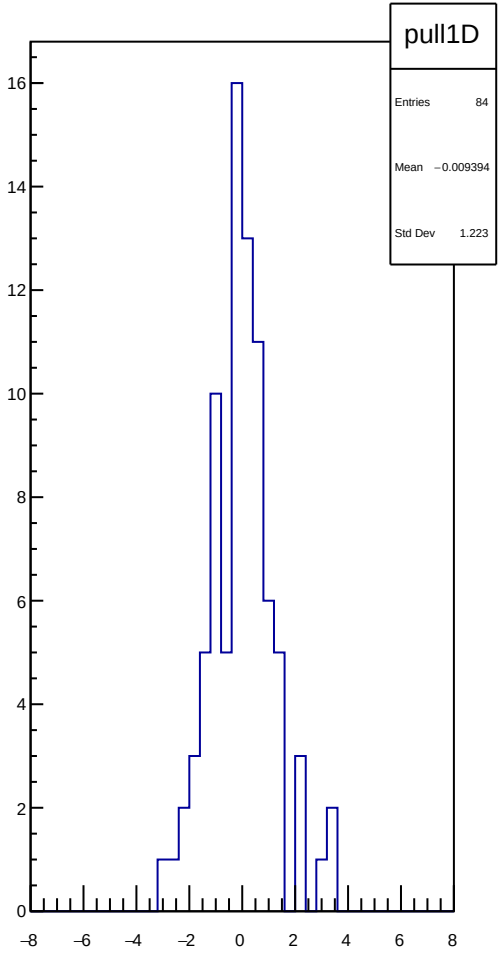

asym_sam_26_dd_rms vs run
χ² / ndf 1695 / 83
p0 1696 ± 1.339
1900
1850
1800
1750
1700
1650
1600
1550

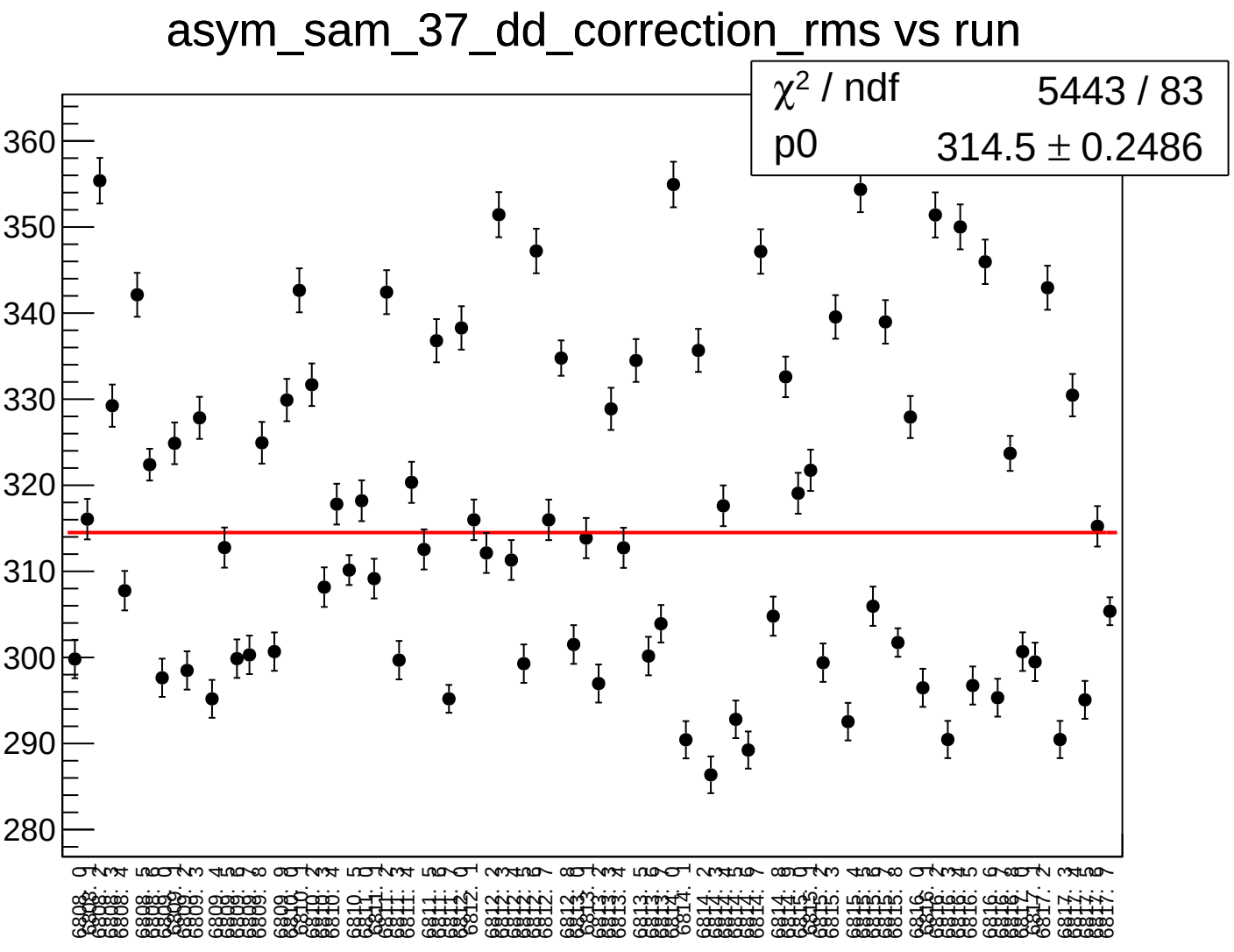

reg_asym_sam_37_dd_mean vs run
χ² / ndf 67.61 / 83
p0 59.73 ± 56.4
pull
Entries 84
Mean 314.7
Std Dev 277.2

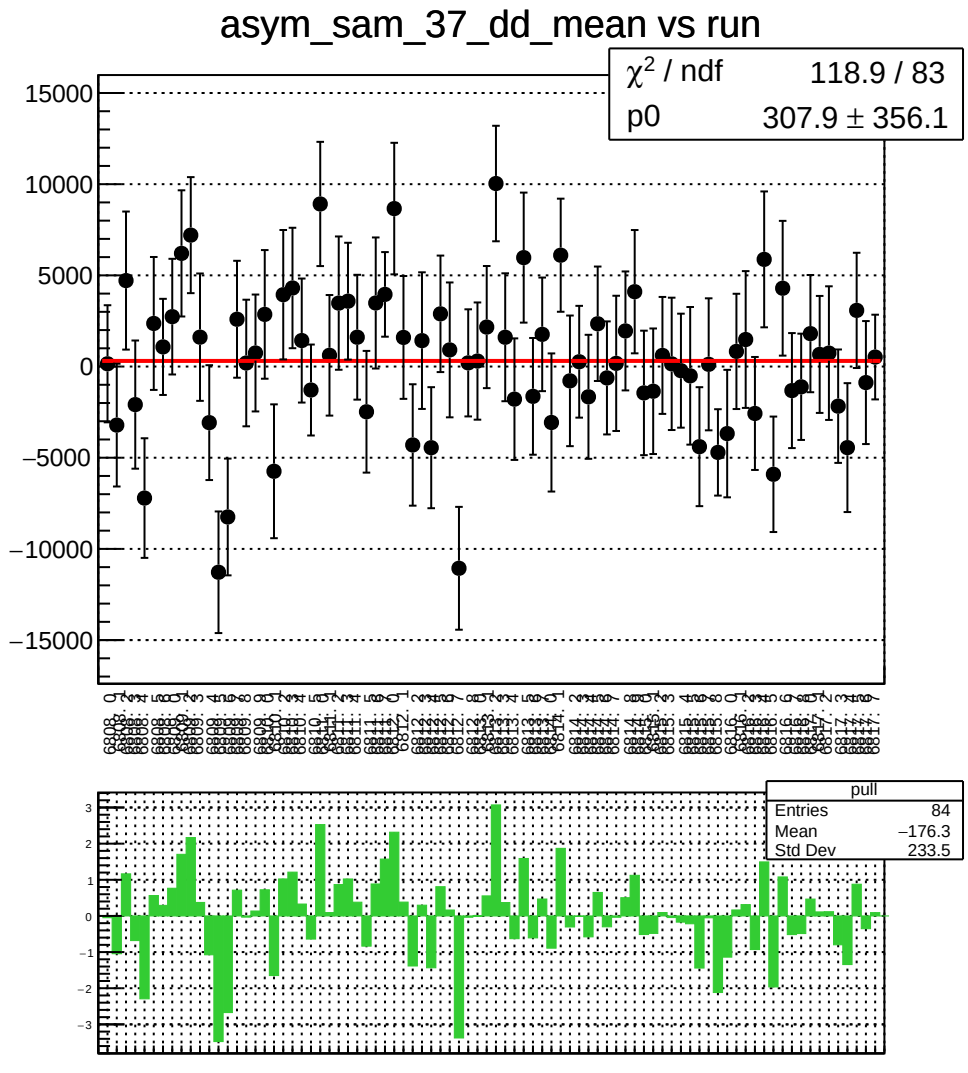

pull1D
Entries 84
Mean −0.01226
Std Dev 0.8971

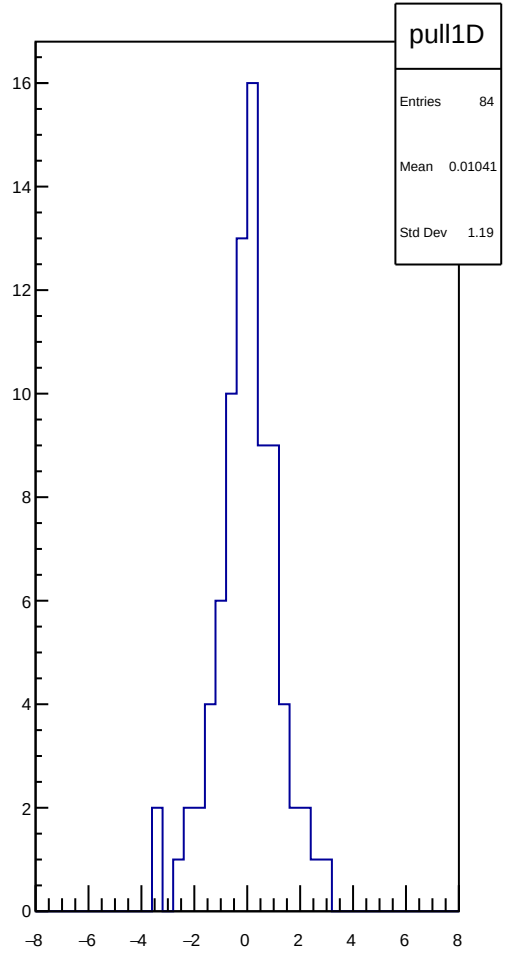

reg_asym_sam_37_dd_rms vs run
χ^2 / ndf 9665 / 83
p0 50.39 ± 0.03988
64
62
60
58
56
54
52
50
48
46
44
42

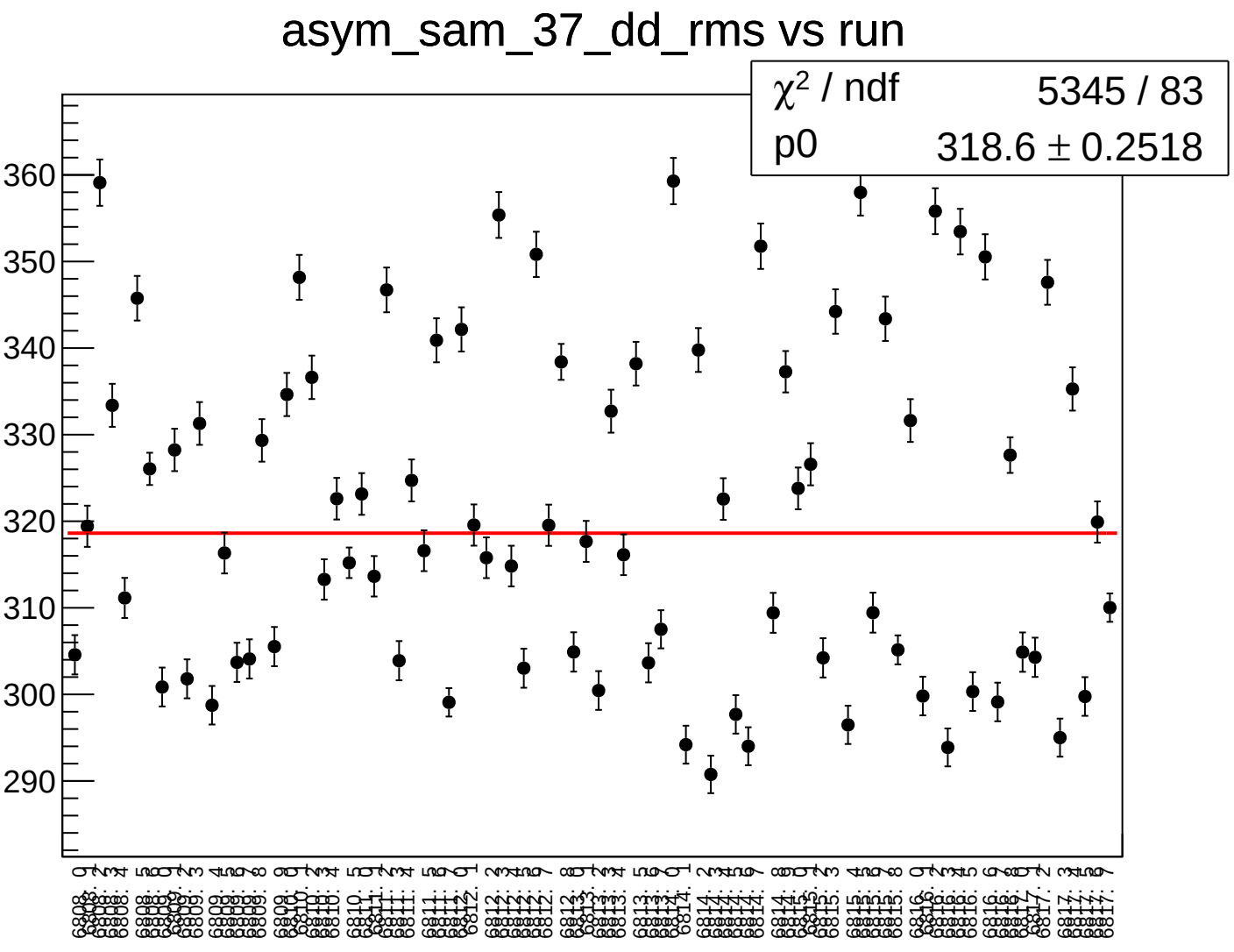

asym_sam_37_dd_correction_mean vs run
χ² / ndf 125.7 / 83
p0 −267.7 ± 351.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −149.7
Std Dev 212.4
3
2
1
0
−1
−2
−3

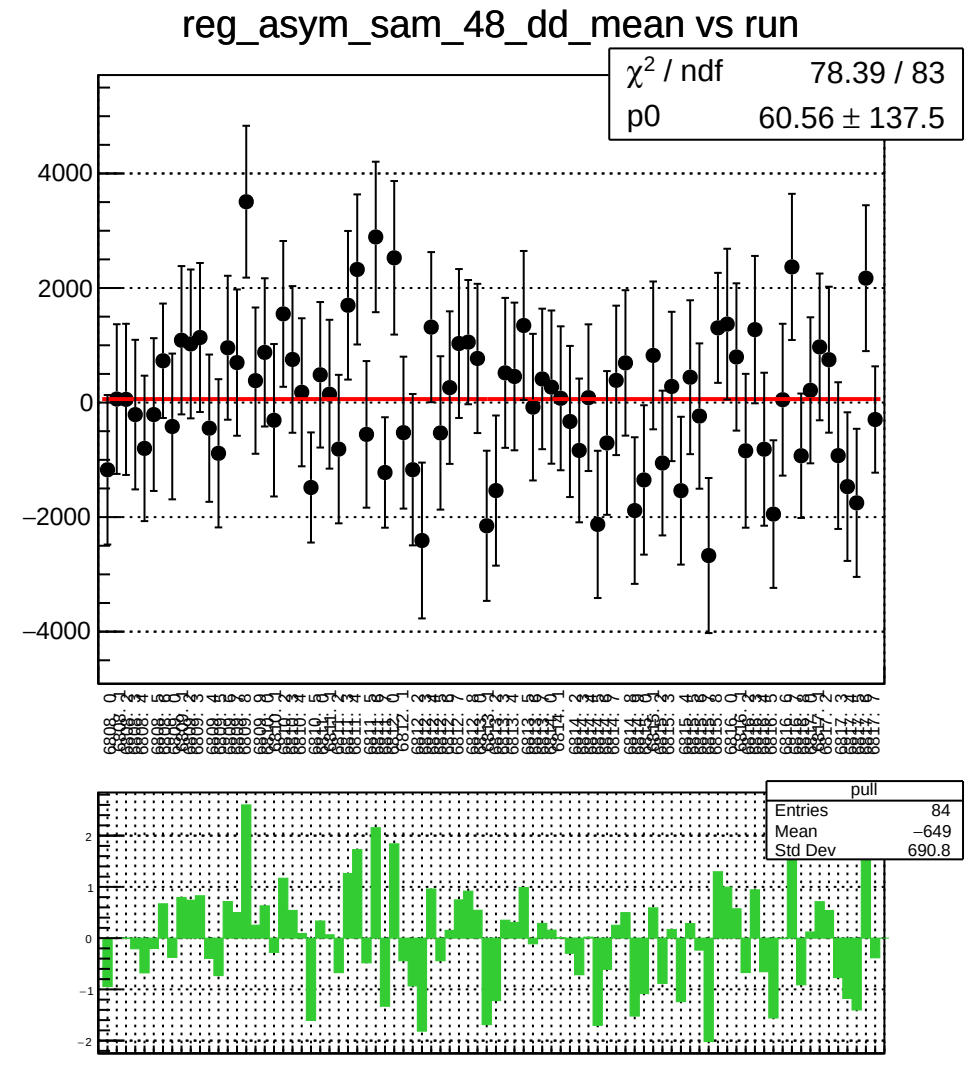

pull1D
Entries 84
Mean −0.009394
Std Dev 1.223
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

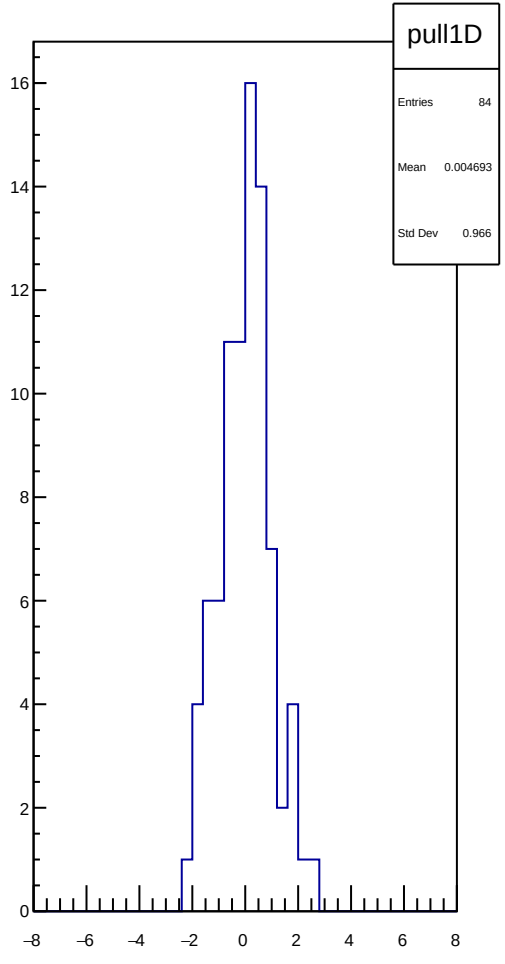

asym_sam_37_dd_correction_rms vs run
χ² / ndf 5443 / 83
p0 314.5 ± 0.2486
360
350
340
330
320
310
300
290
280

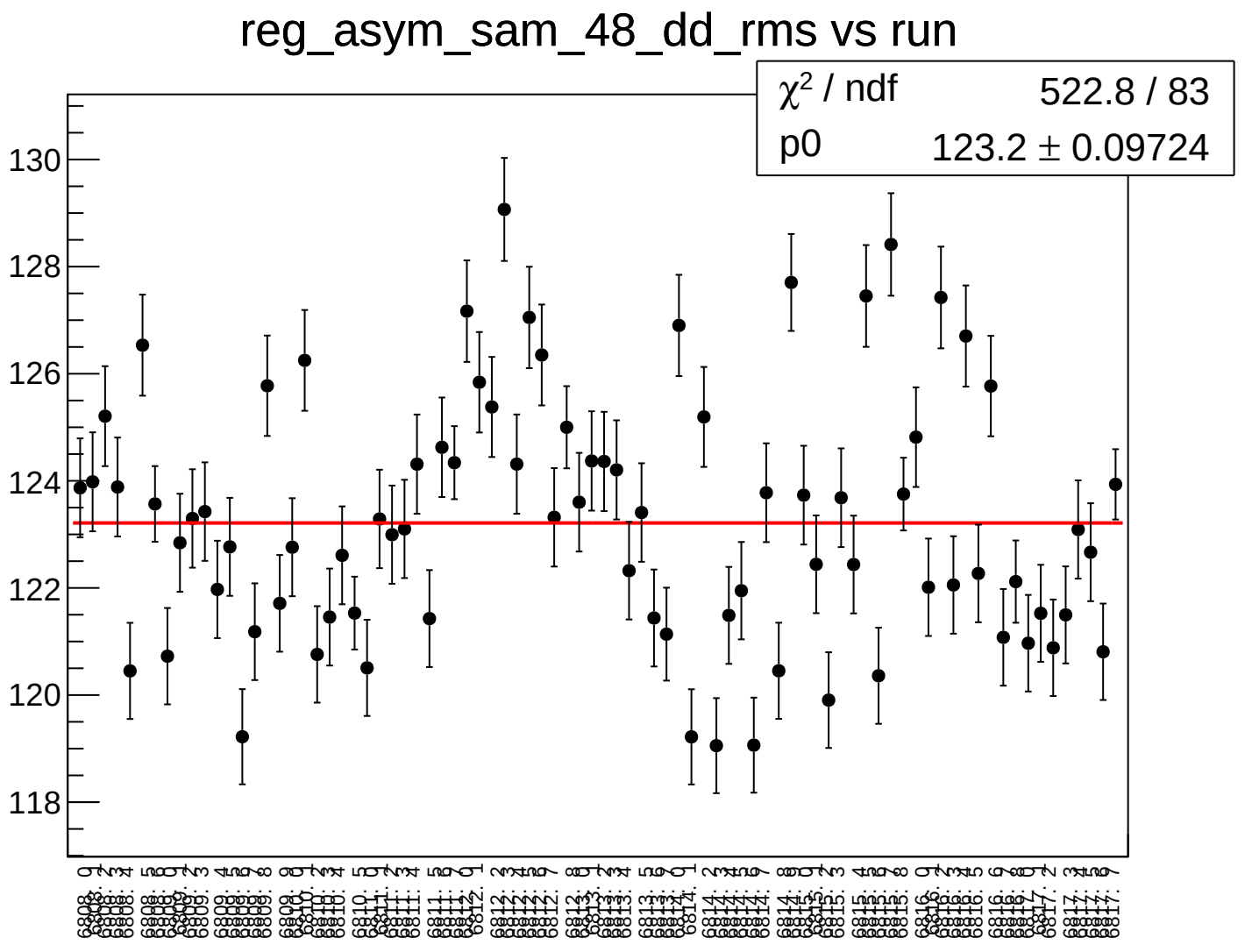

asym_sam_37_dd_mean vs run
χ² / ndf 118.9 / 83
p0 307.9 ± 356.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −176.3
Std Dev 233.5
3
2
1
0
−1
−2
−3

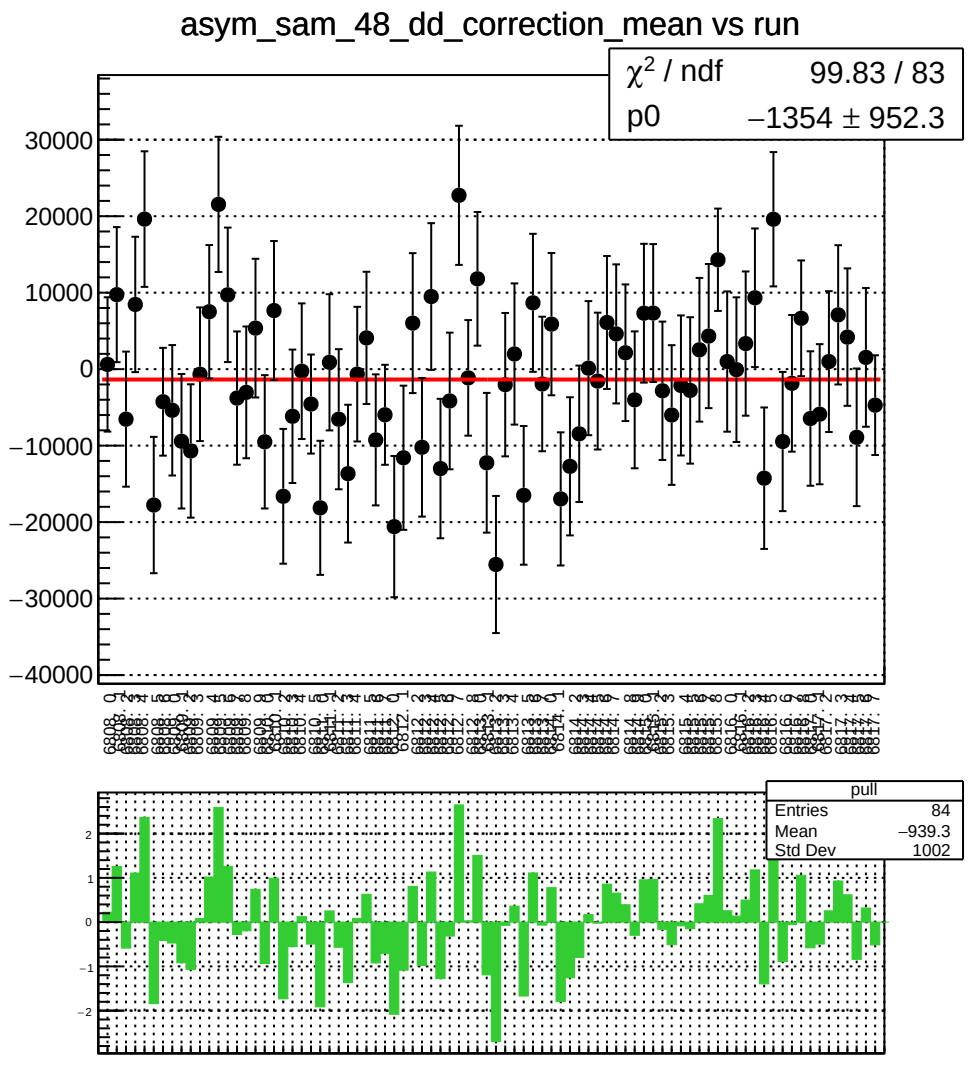

pull1D
Entries 84
Mean 0.01041
Std Dev 1.19
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

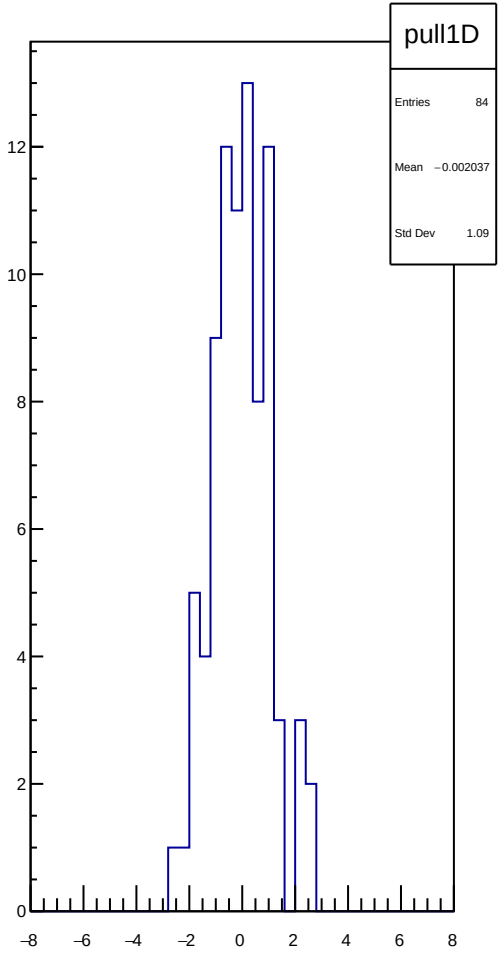

asym_sam_37_dd_rms vs run
χ² / ndf 5345 / 83
p0 318.6 ± 0.2518
360
350
340
330
320
310
300
290

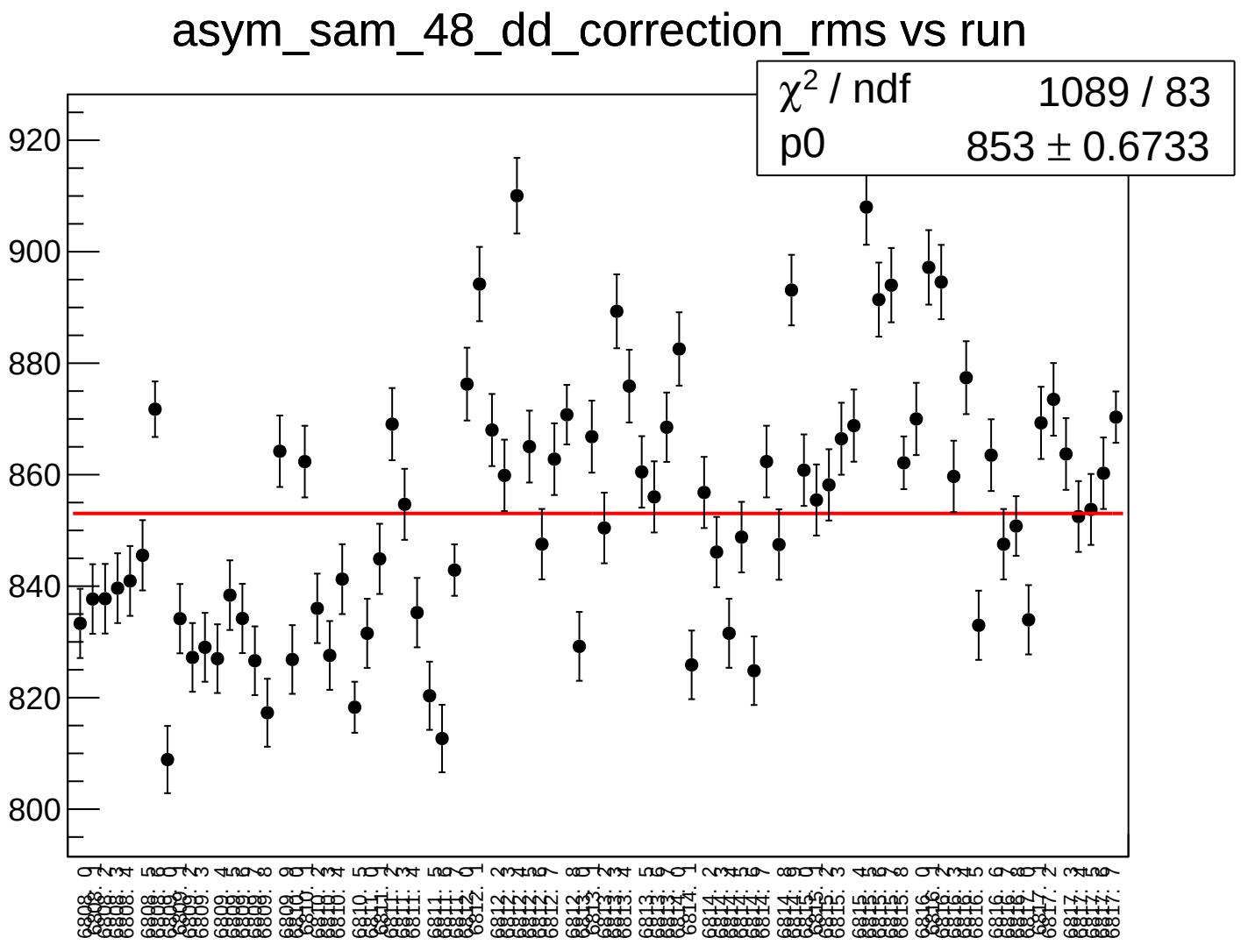

reg_asym_sam_48_dd_mean vs run
χ² / ndf 78.39 / 83
p0 60.56 ± 137.5
4000
2000
0
−2000
−4000
pull
Entries 84
Mean −649
Std Dev 690.8
2
1
0
−1
−2

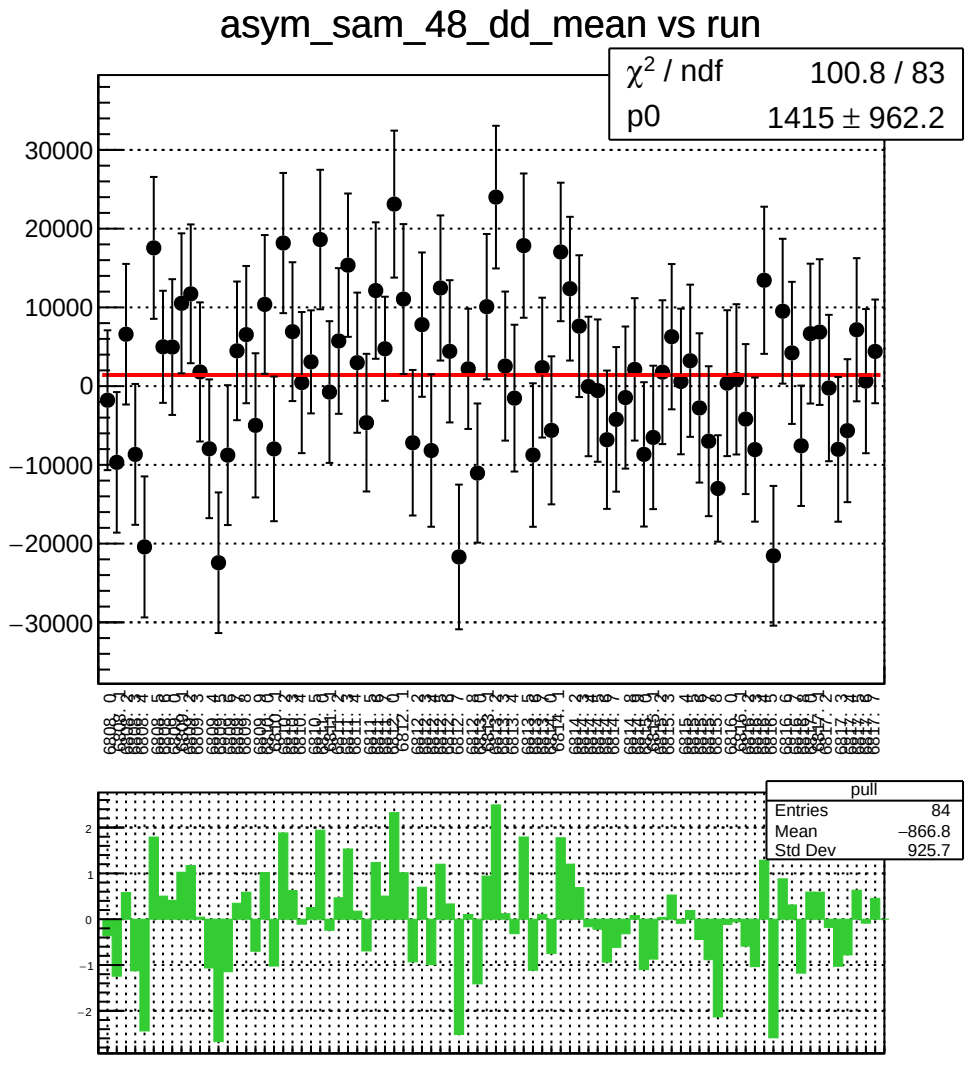

pull1D
Entries 84
Mean 0.004693
Std Dev 0.966
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

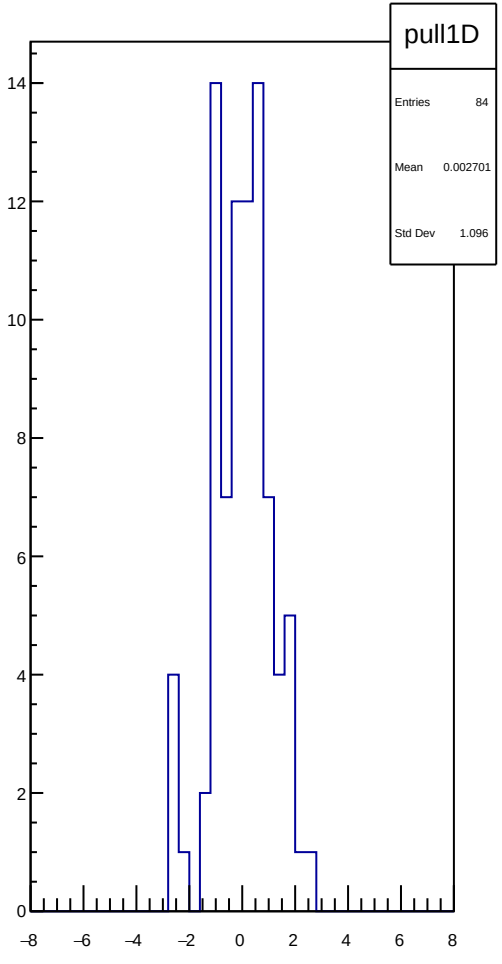

reg_asym_sam_48_dd_rms vs run
χ^2 / ndf 522.8 / 83
p0 123.2 ± 0.09724
130
128
126
124
122
120
118

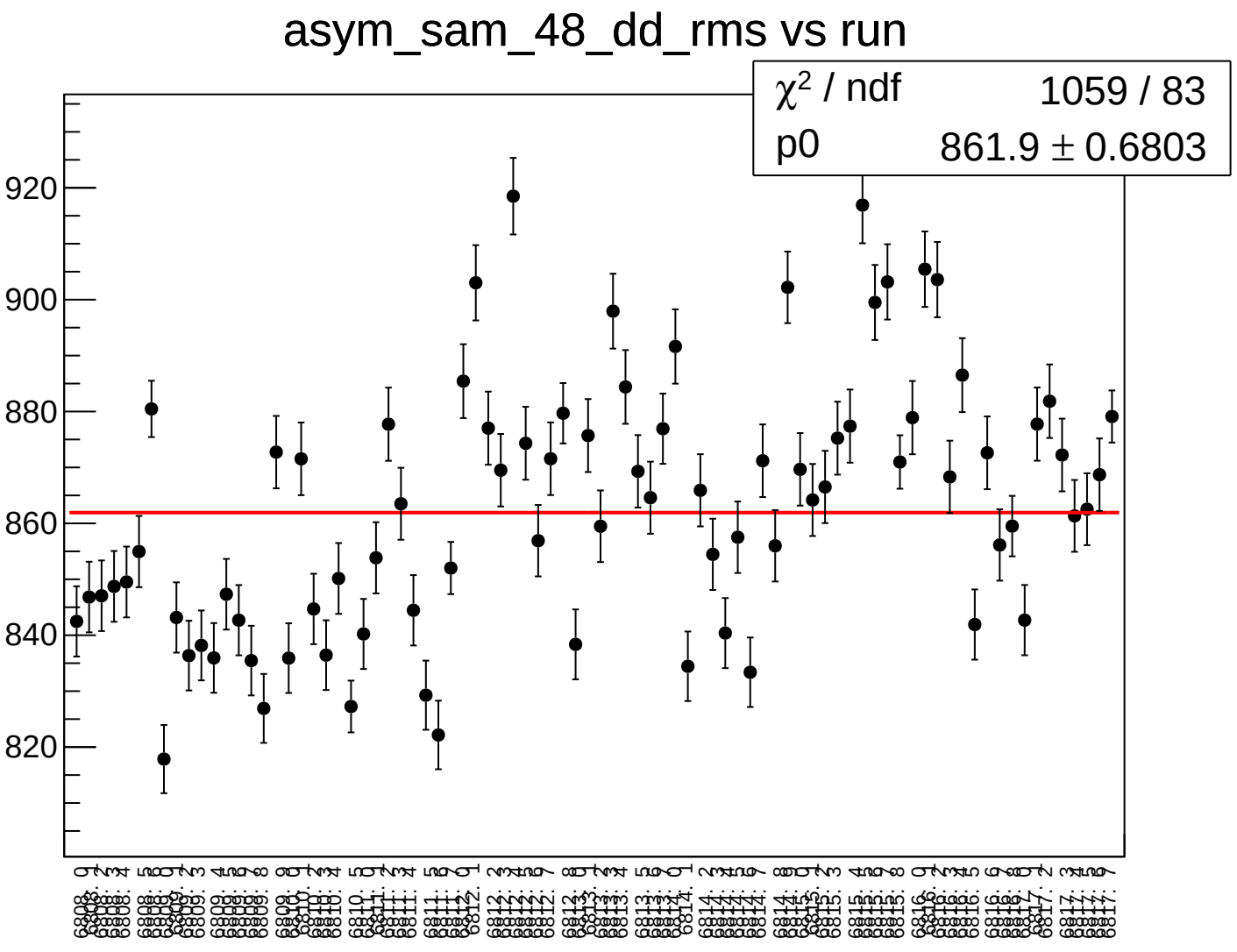

asym_sam_48_dd_correction_mean vs run
χ² / ndf 99.83 / 83
p0 −1354 ± 952.3
pull
Entries 84
Mean −939.3
Std Dev 1002

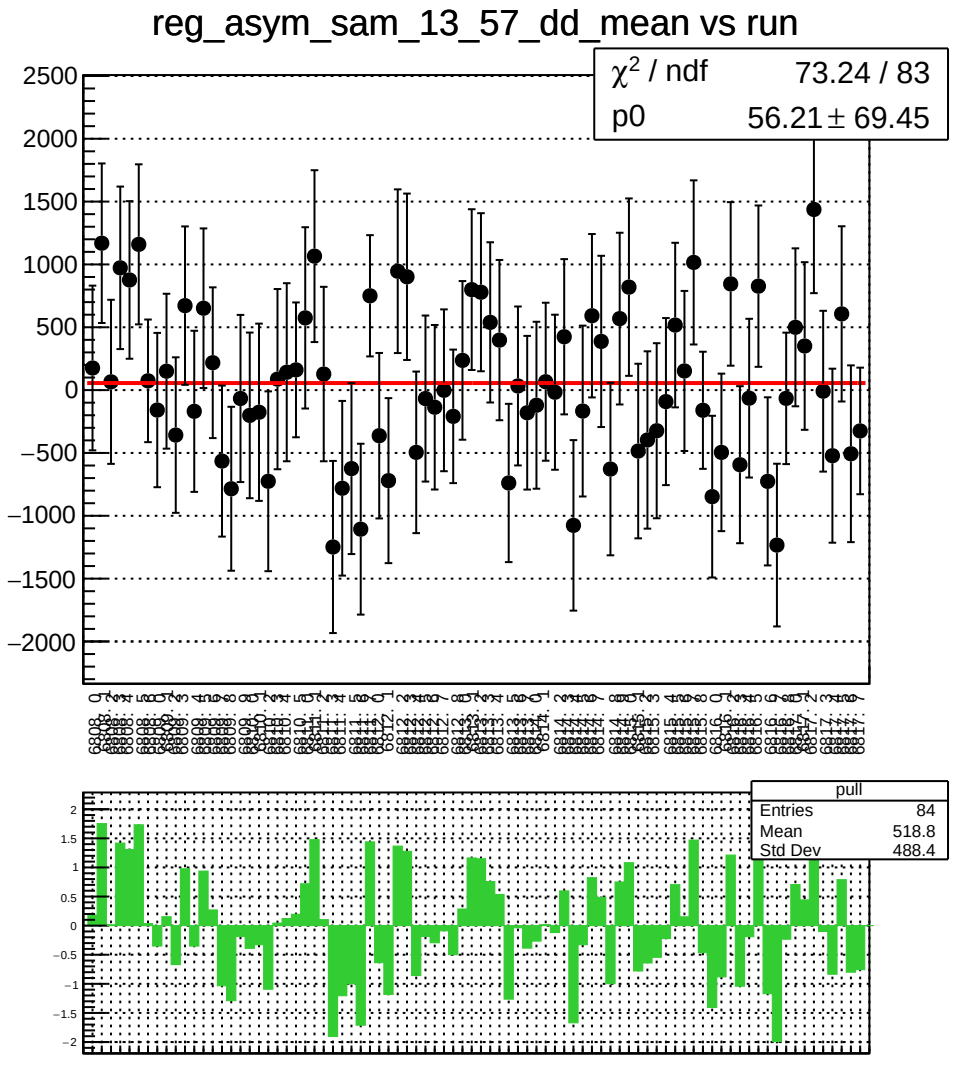

pull1D
Entries 84
Mean −0.002037
Std Dev 1.09

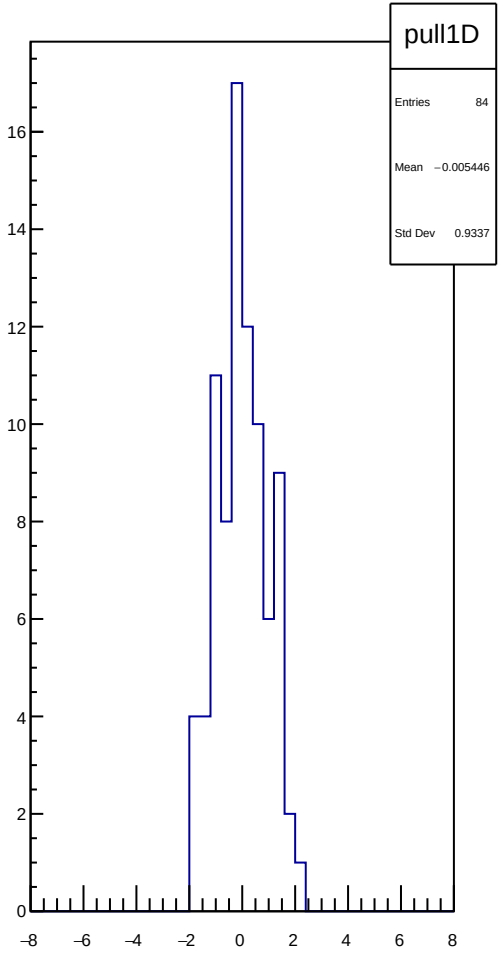

asym_sam_48_dd_correction_rms vs run
χ² / ndf 1089 / 83
p0 853 ± 0.6733
920
900
880
860
840
820
800

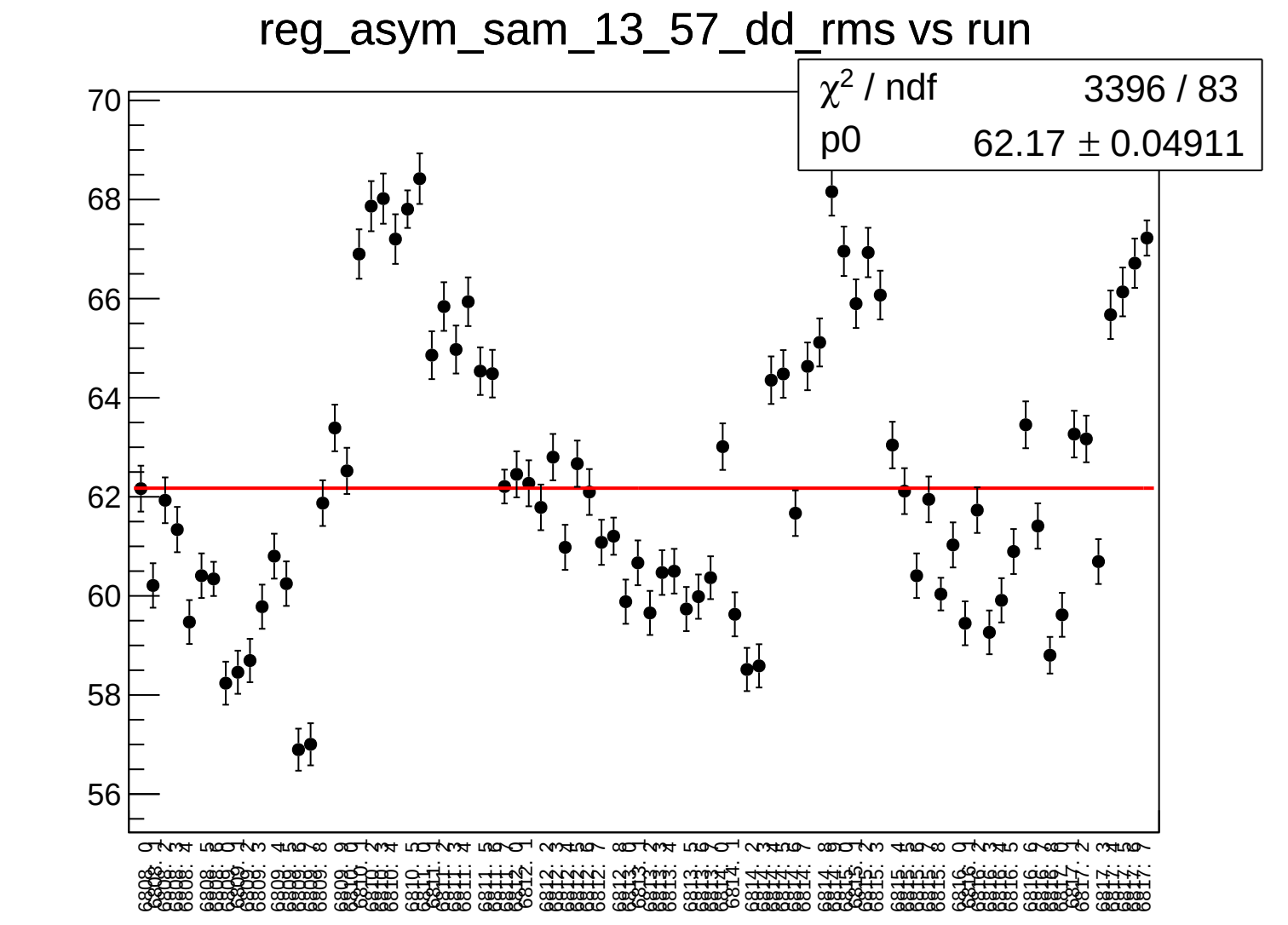

asym_sam_48_dd_mean vs run
χ² / ndf 100.8 / 83
p0 1415 ± 962.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −866.8
Std Dev 925.7
2
1
0
−1
−2

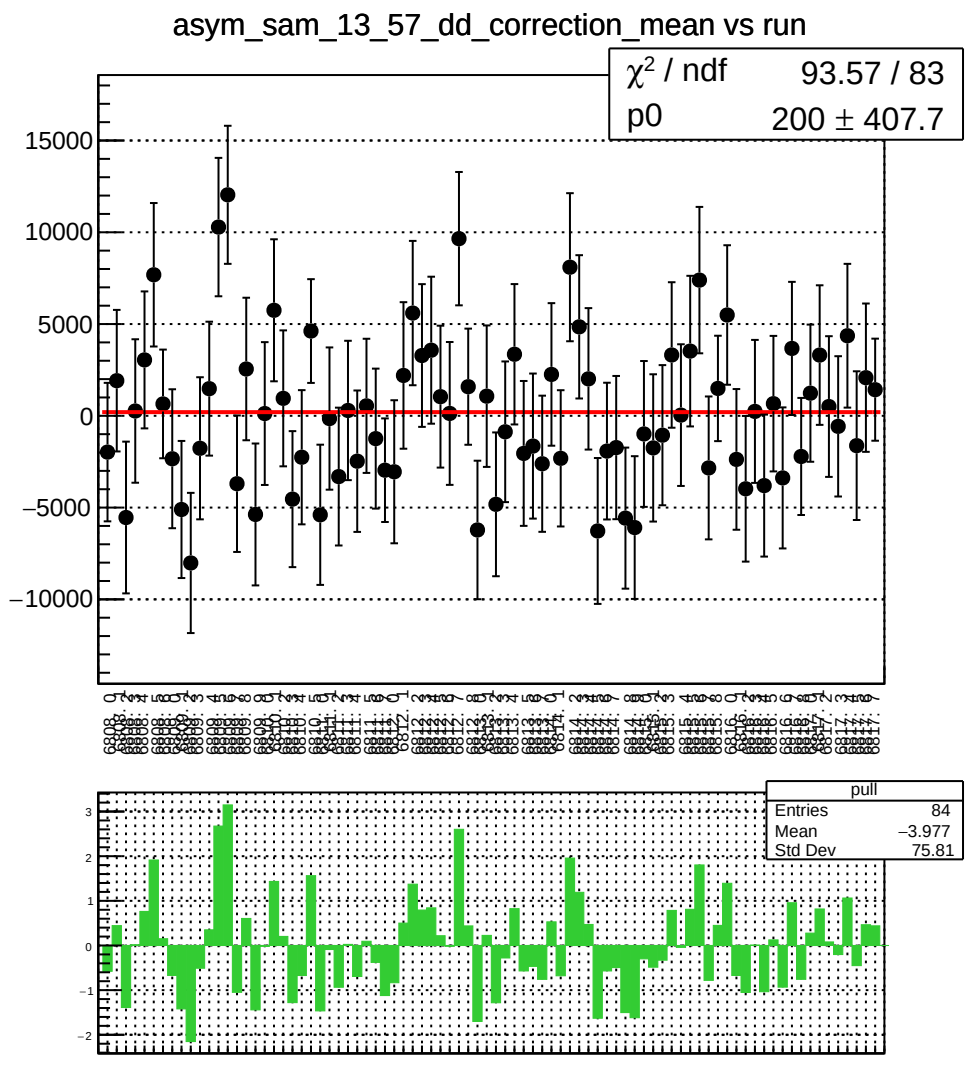

pull1D
Entries 84
Mean 0.002701
Std Dev 1.096
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

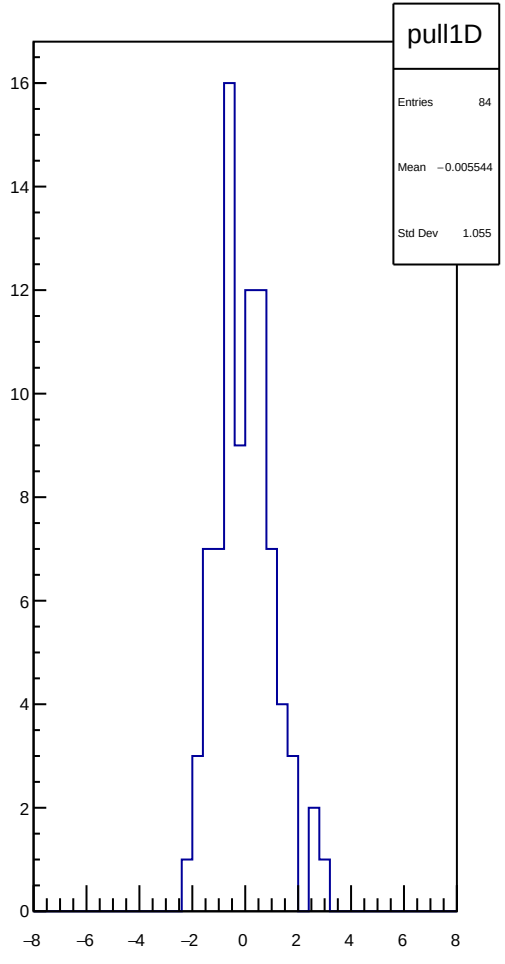

asym_sam_48_dd_rms vs run
χ² / ndf 1059 / 83
p0 861.9 ± 0.6803
920
900
880
860
840
820

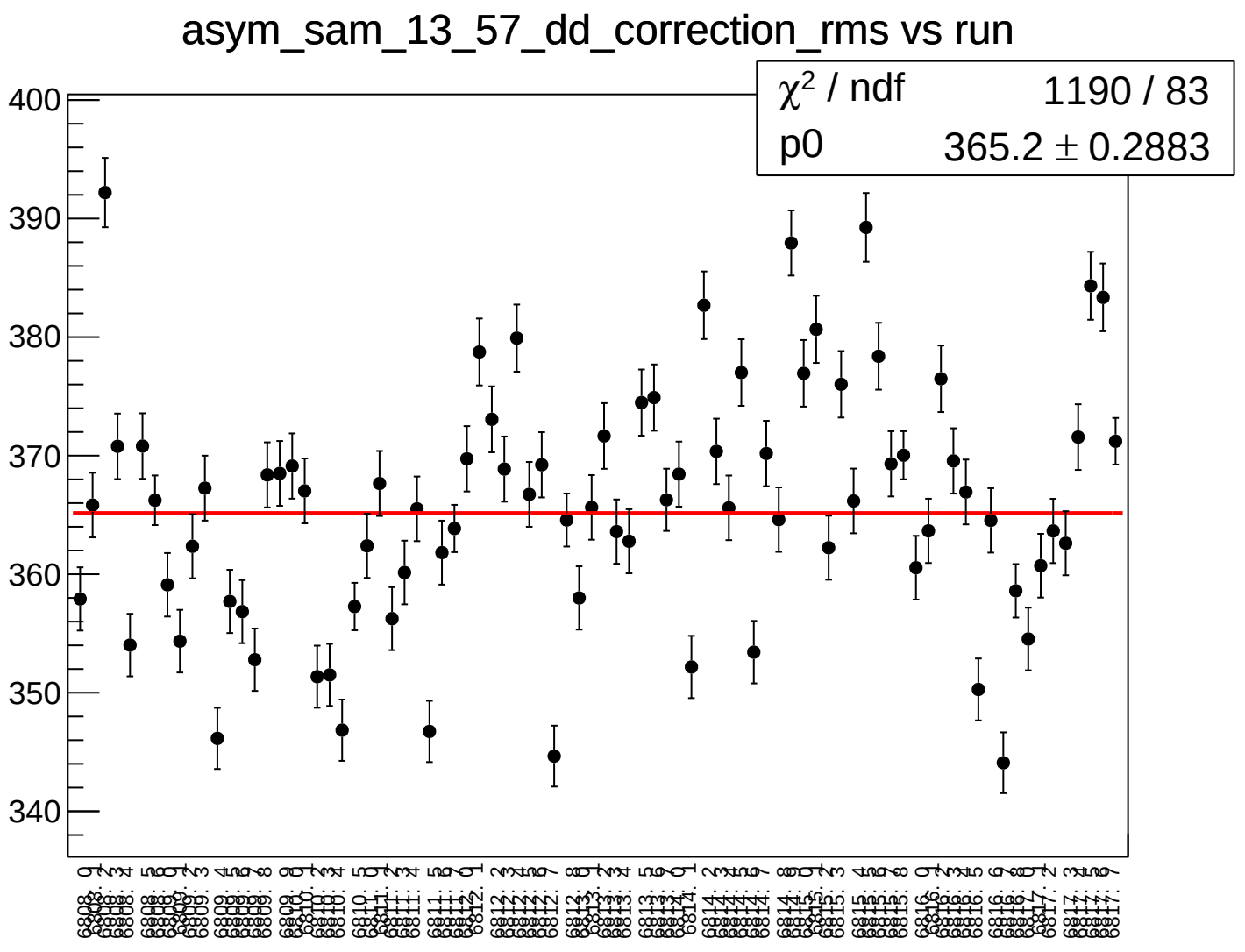

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 73.24 / 83
p0 56.21 ± 69.45
pull
Entries 84
Mean 518.8
Std Dev 488.4

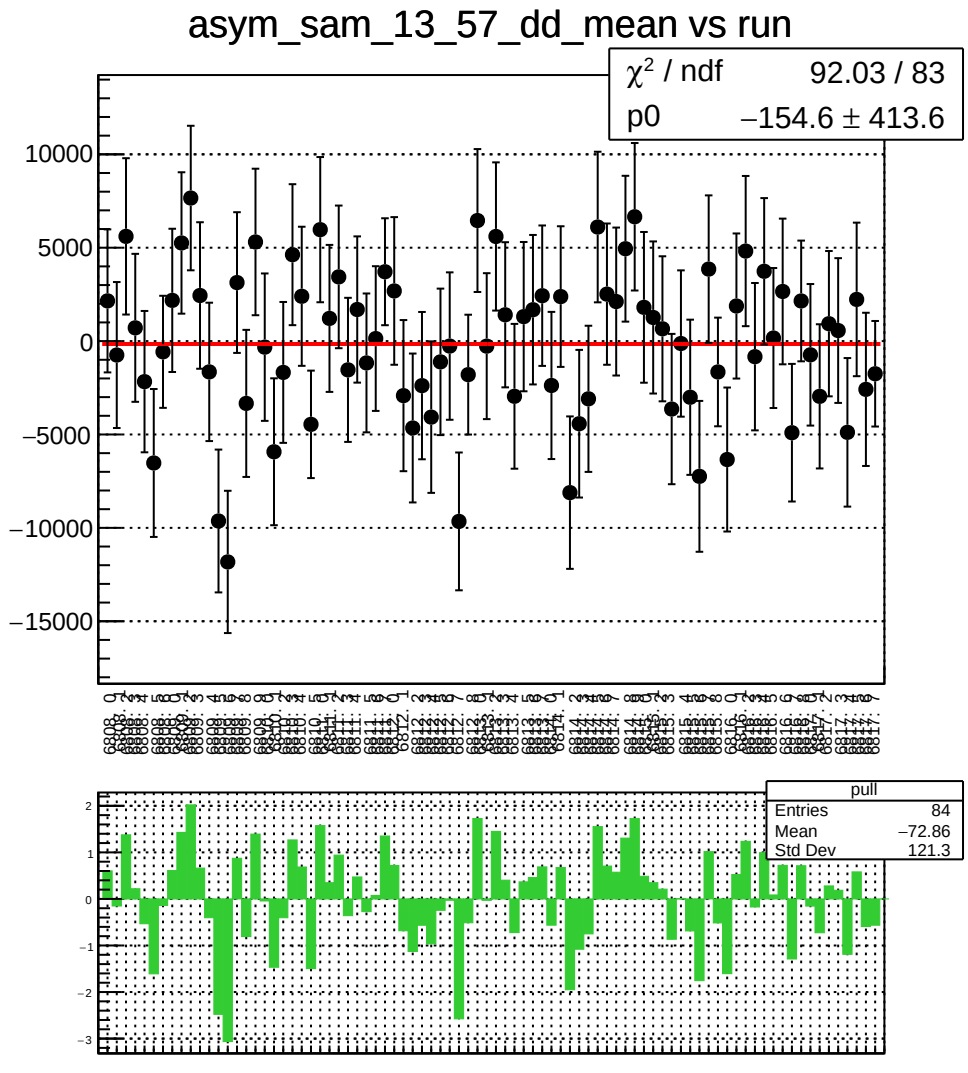

pull1D
Entries 84
Mean −0.005446
Std Dev 0.9337

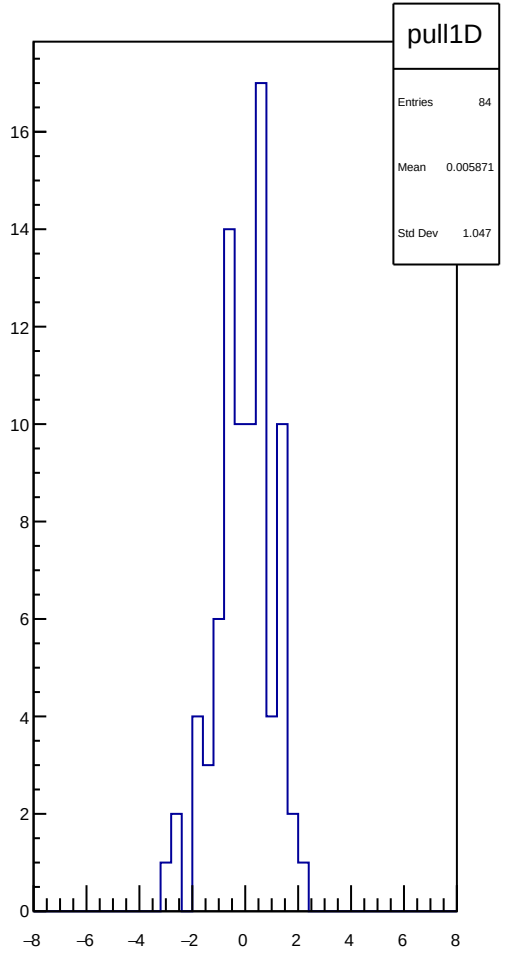

reg_asym_sam_13_57_dd_rms vs run
χ^2 / ndf 3396 / 83
p0 62.17 ± 0.04911
70
68
66
64
62
60
58
56

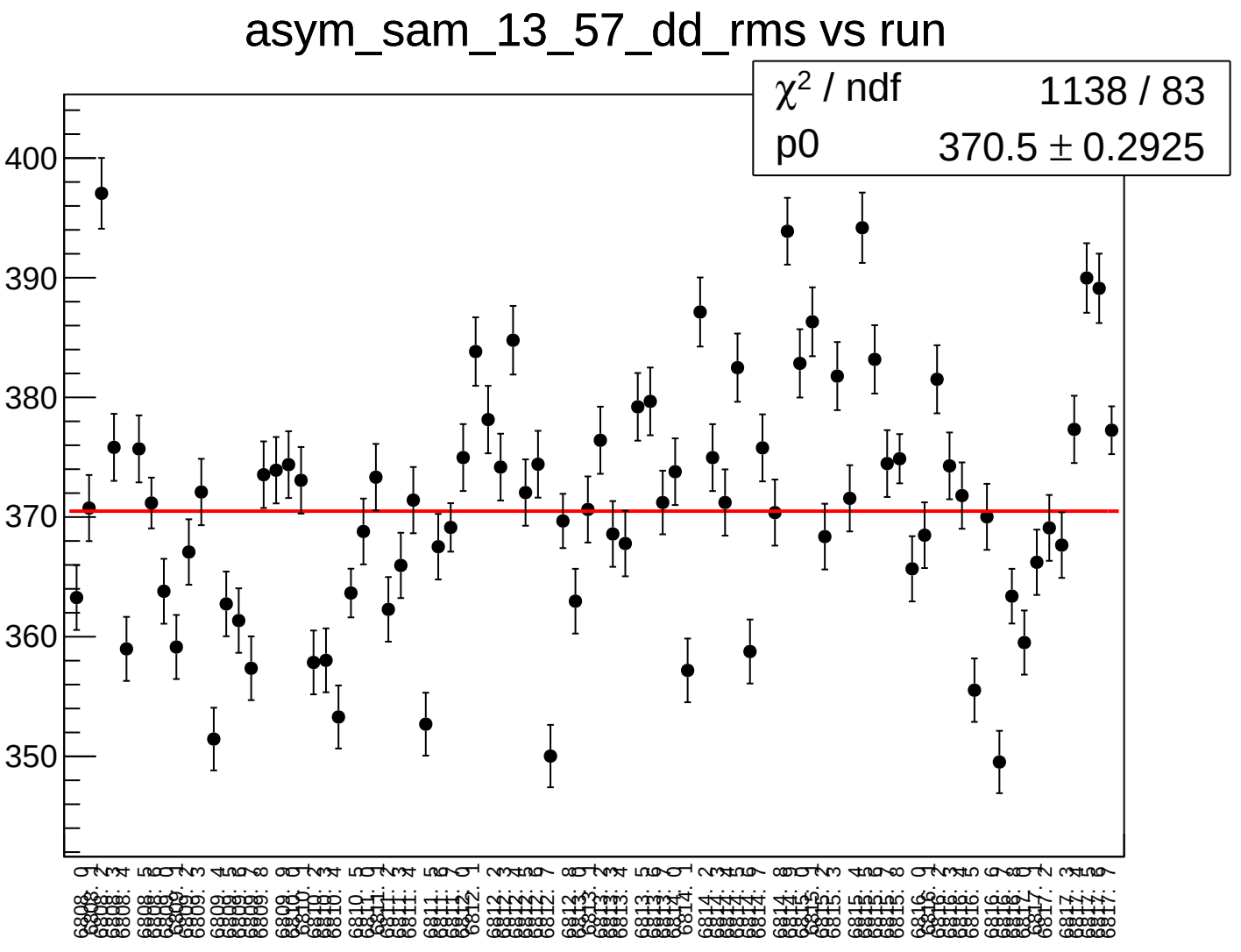

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 93.57 / 83
p0 200 ± 407.7
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −3.977
Std Dev 75.81
3
2
1
0
−1
−2

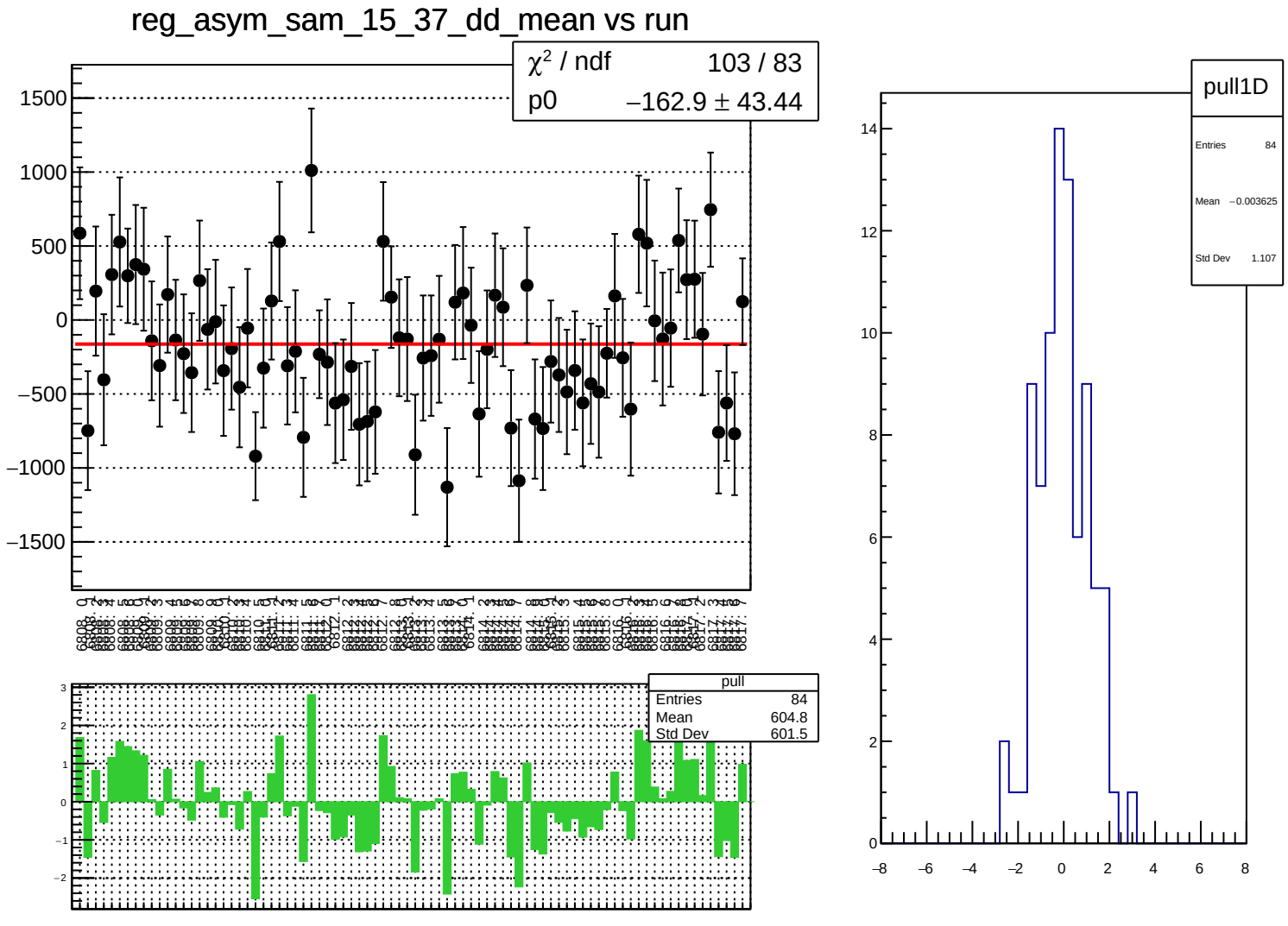

pull1D
Entries 84
Mean −0.005544
Std Dev 1.055
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

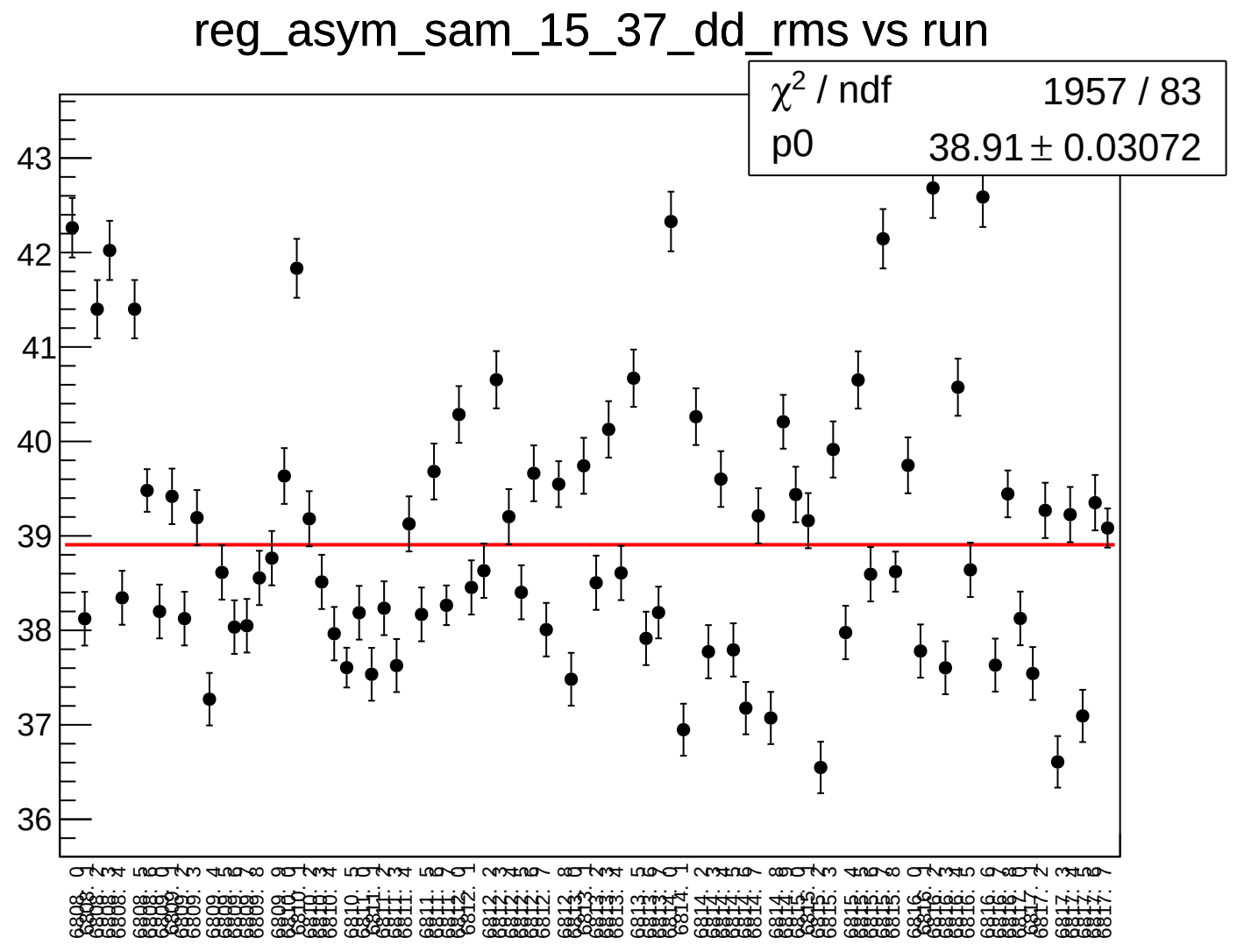

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 1190 / 83
p0 365.2 ± 0.2883
400
390
380
370
360
350
340

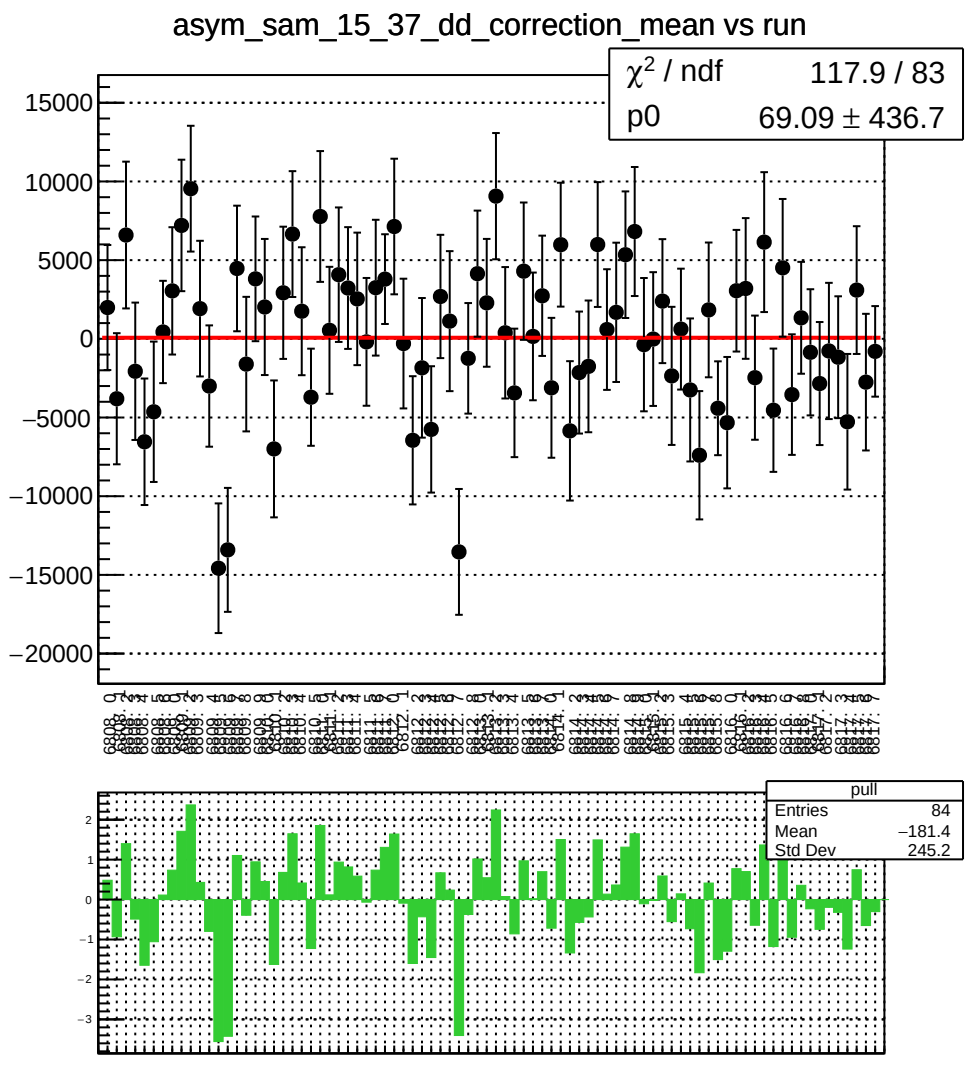

asym_sam_13_57_dd_mean vs run
χ² / ndf 92.03 / 83
p0 −154.6 ± 413.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −72.86
Std Dev 121.3
2
1
0
−1
−2
−3

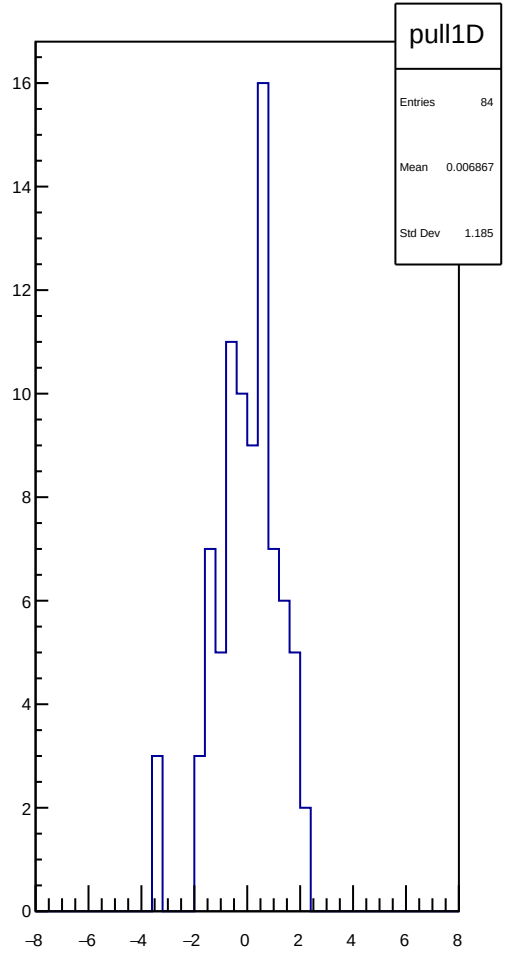

pull1D
Entries 84
Mean 0.005871
Std Dev 1.047
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

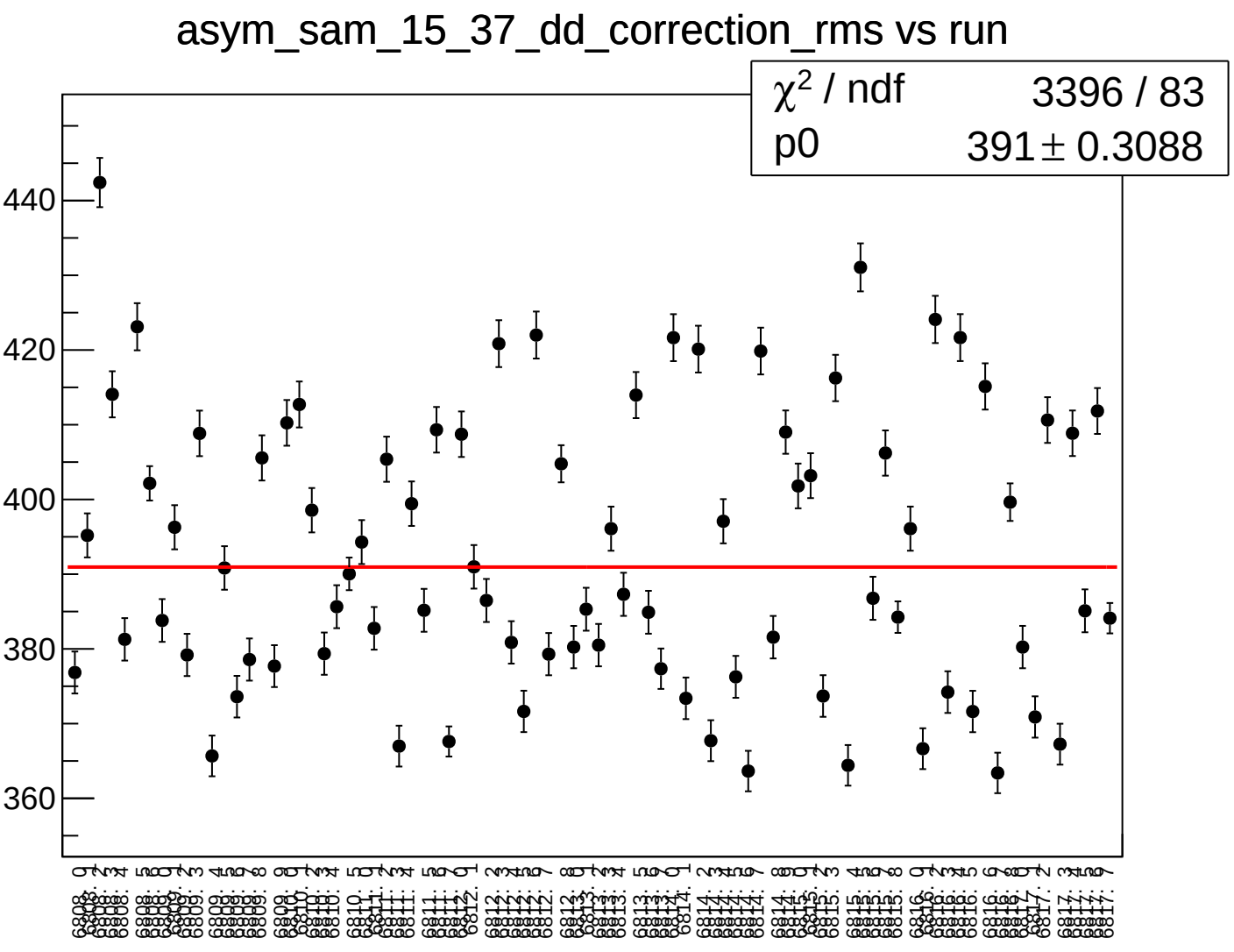

asym_sam_13_57_dd_rms vs run
χ² / ndf 1138 / 83
p0 370.5 ± 0.2925
400
390
380
370
360
350

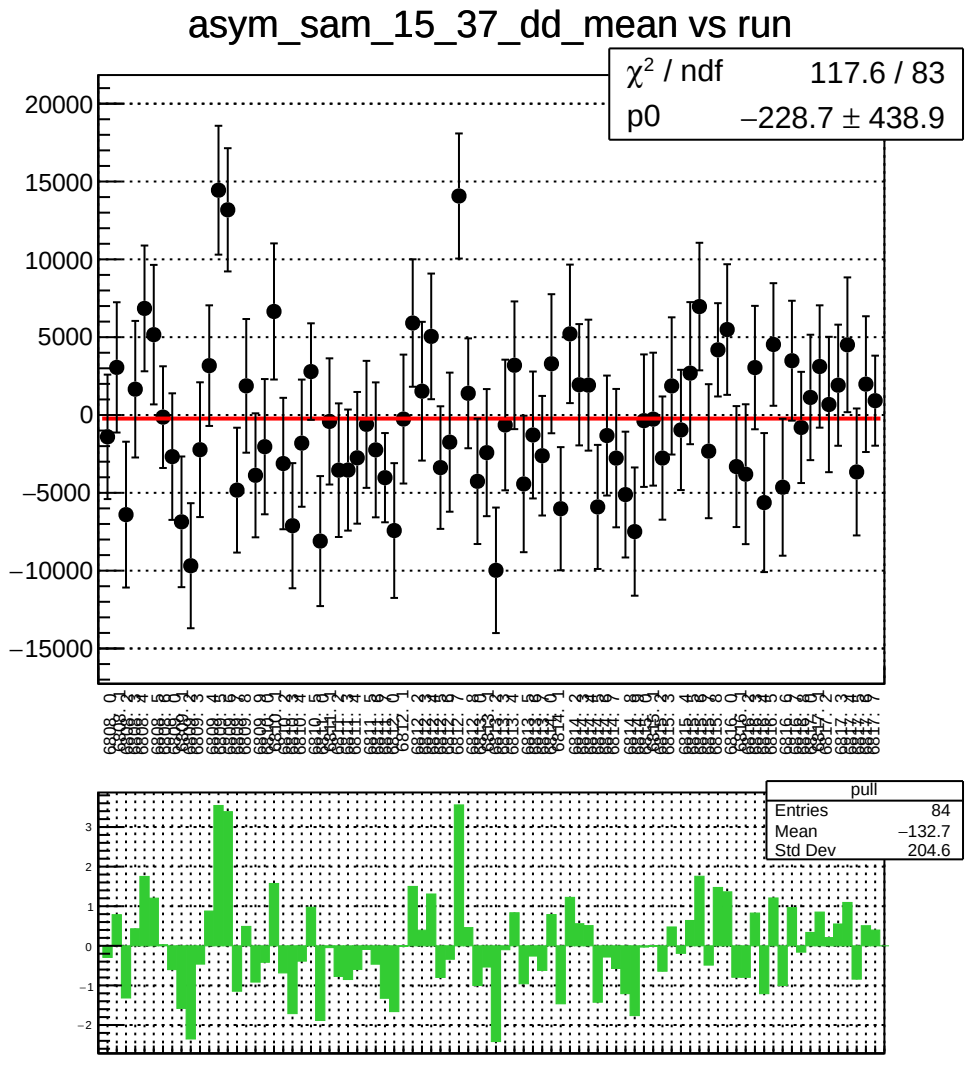

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 103 / 83
p0 −162.9 ± 43.44
1500
1000
500
0
−500
−1000
−1500
pull
Entries 84
Mean 604.8
Std Dev 601.5
3
2
1
0
−1
−2
pull1D
Entries 84
Mean −0.003625
Std Dev 1.107
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

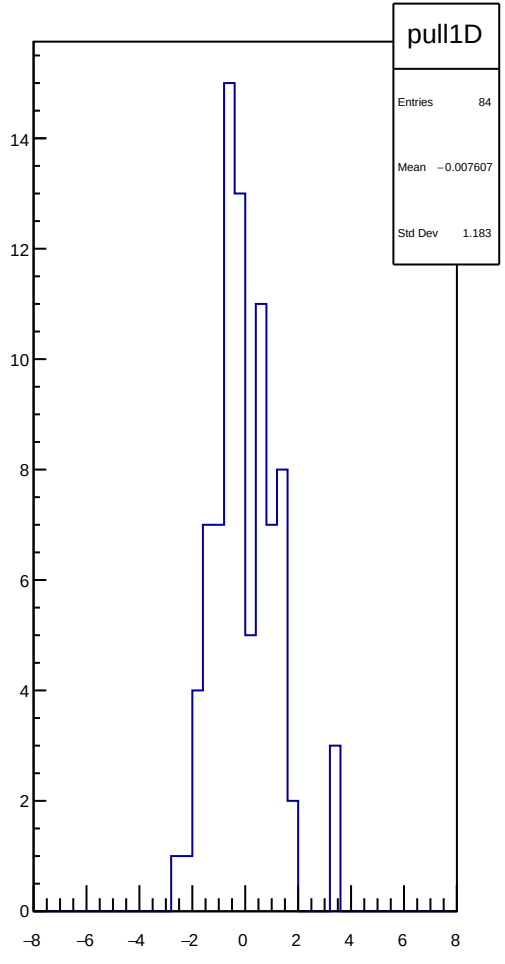

reg_asym_sam_15_37_dd_rms vs run
χ^2 / ndf 1957 / 83
p0 38.91 ± 0.03072
43
42
41
40
39
38
37
36

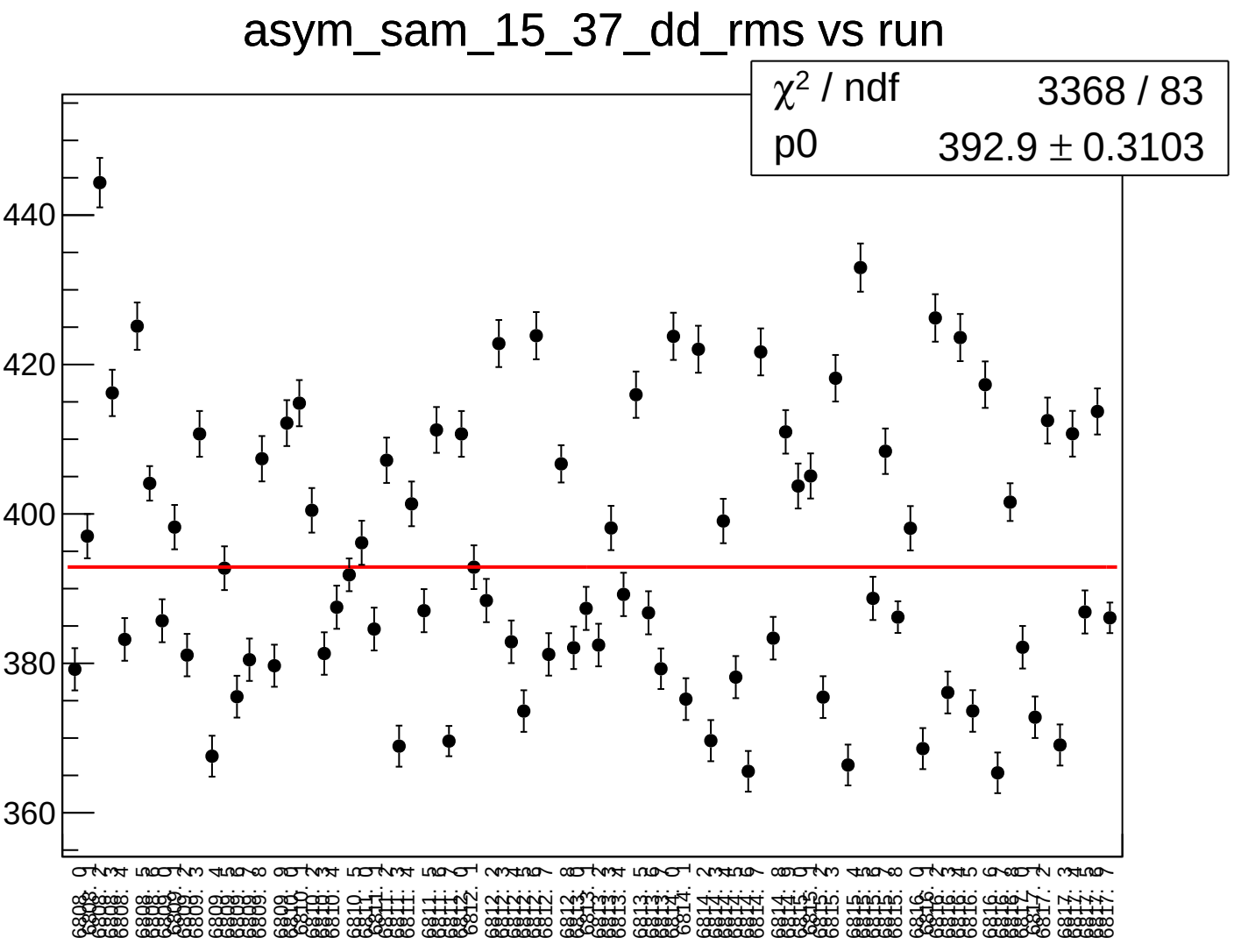

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 117.9 / 83
p0 69.09 ± 436.7
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 84
Mean −181.4
Std Dev 245.2
2
1
0
−1
−2
−3

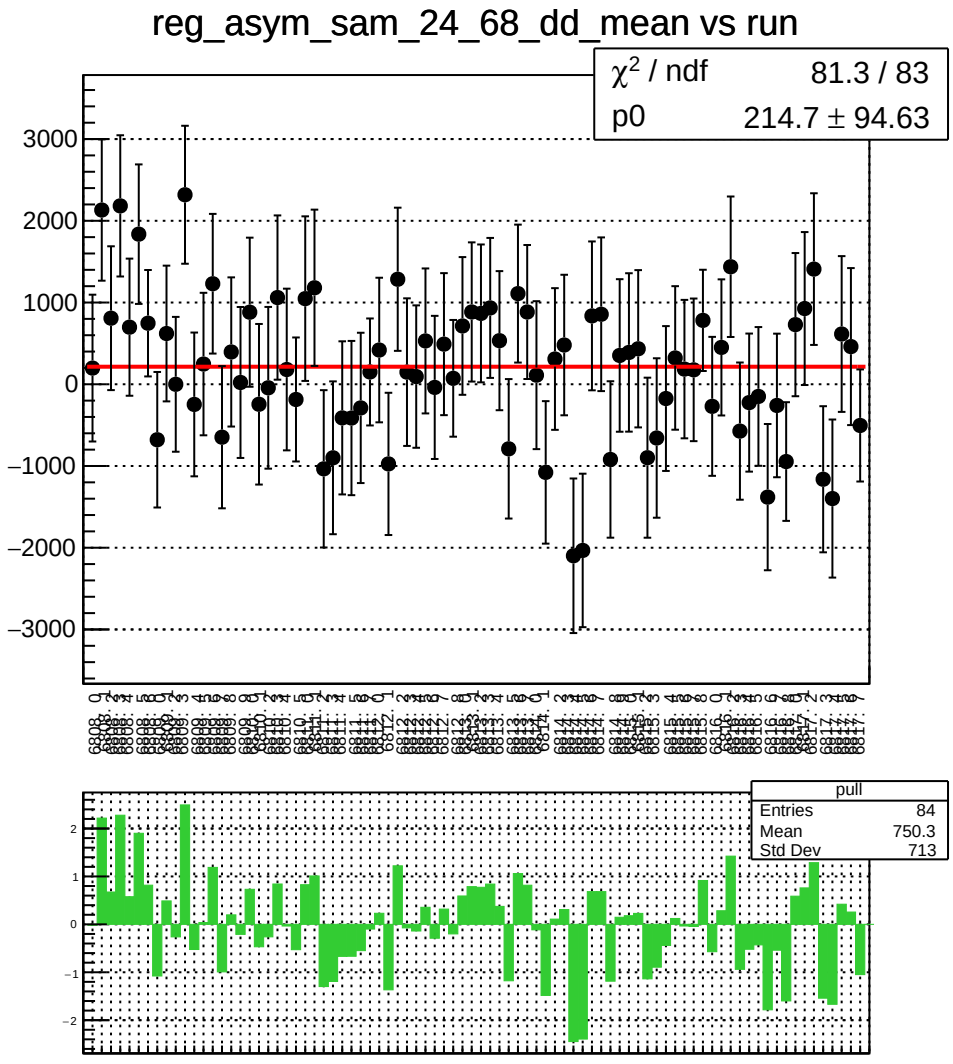

pull1D
Entries 84
Mean 0.006867
Std Dev 1.185
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

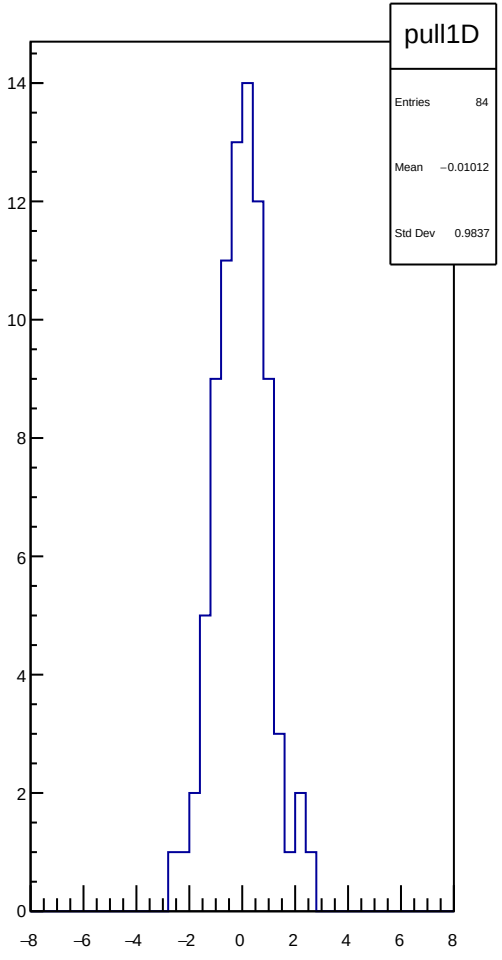

asym_sam_15_37_dd_correction_rms vs run
χ^2 / ndf 3396 / 83
p0 391 ± 0.3088
440
420
400
380
360

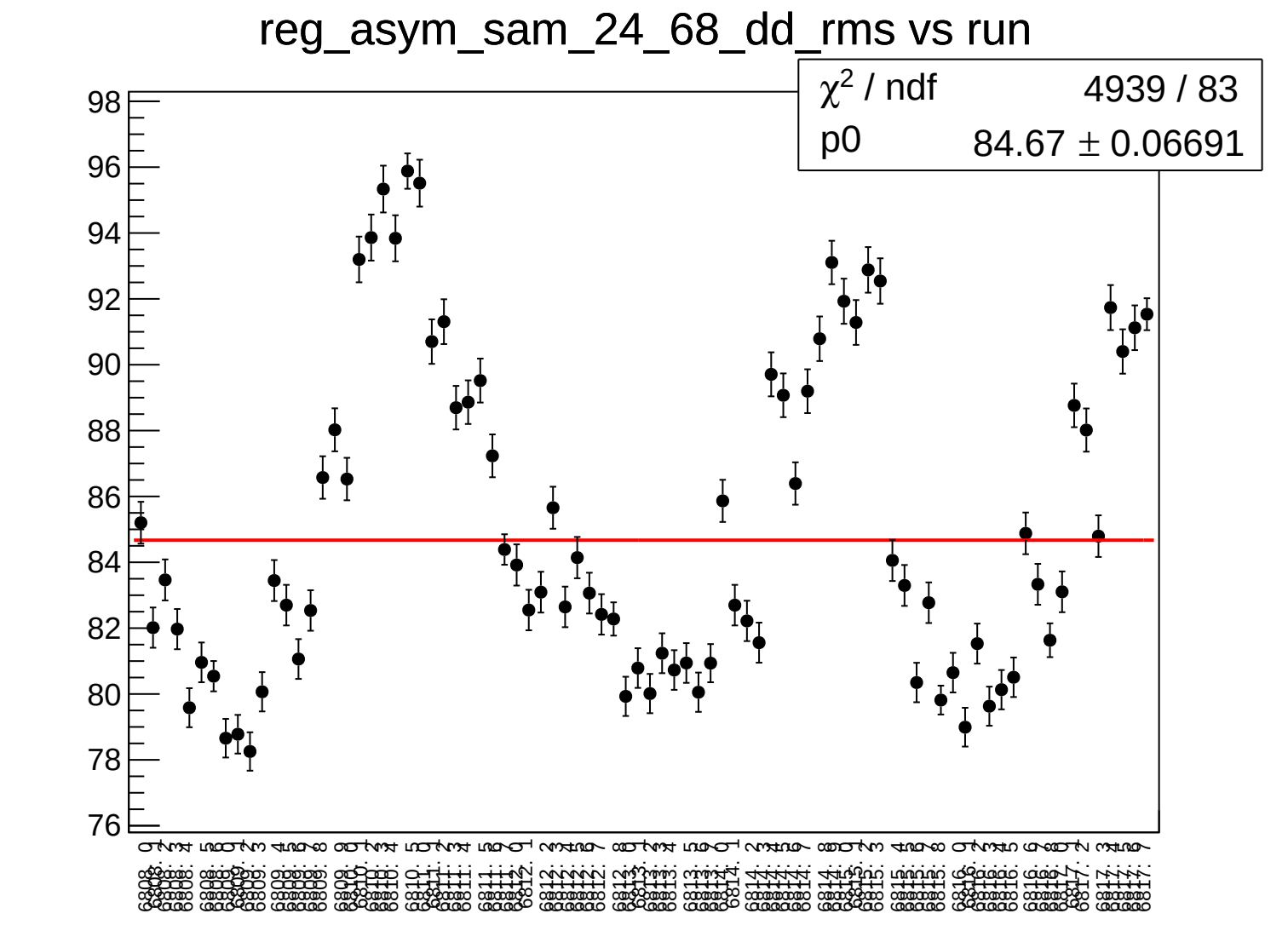

asym_sam_15_37_dd_mean vs run
χ² / ndf 117.6 / 83
p0 −228.7 ± 438.9
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −132.7
Std Dev 204.6
3
2
1
0
−1
−2

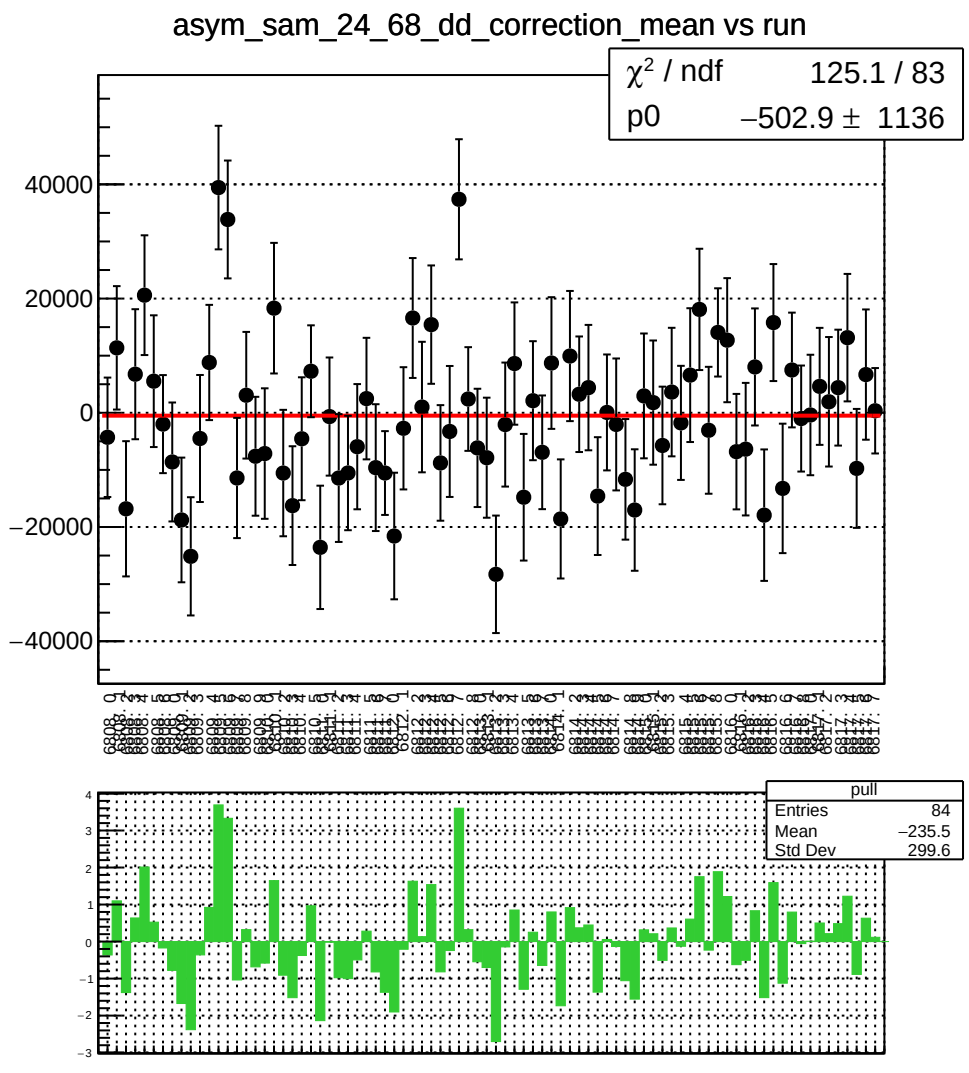

pull1D
Entries 84
Mean −0.007607
Std Dev 1.183
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

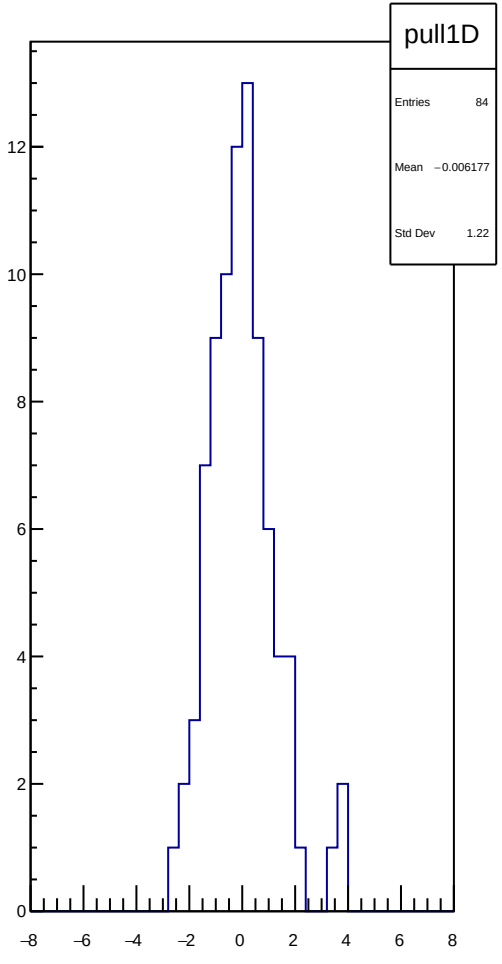

asym_sam_15_37_dd_rms vs run
χ^2 / ndf 3368 / 83
p0 392.9 ± 0.3103
440
420
400
380
360

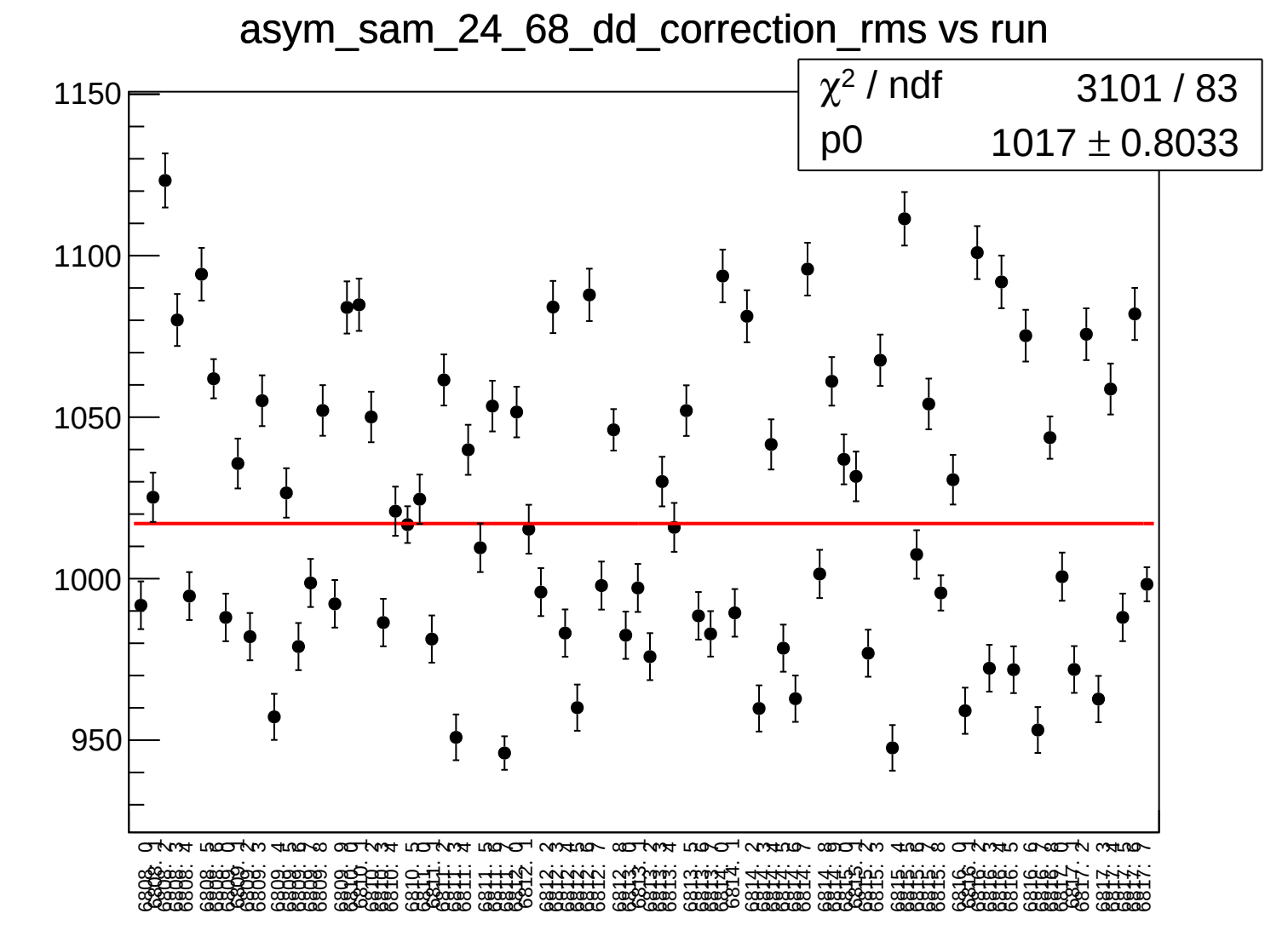

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 81.3 / 83
p0 214.7 ± 94.63
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 84
Mean 750.3
Std Dev 713
2
1
0
−1
−2

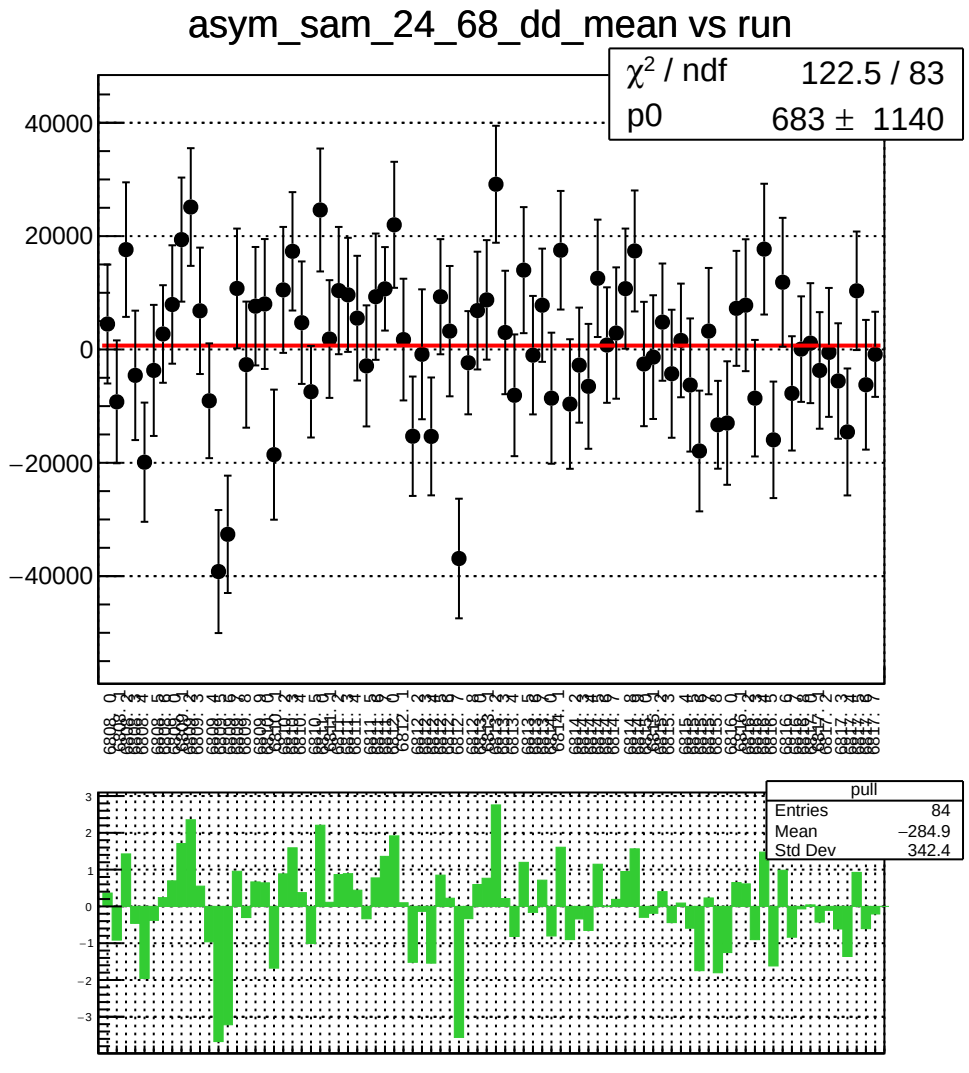

pull1D
Entries 84
Mean −0.01012
Std Dev 0.9837
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

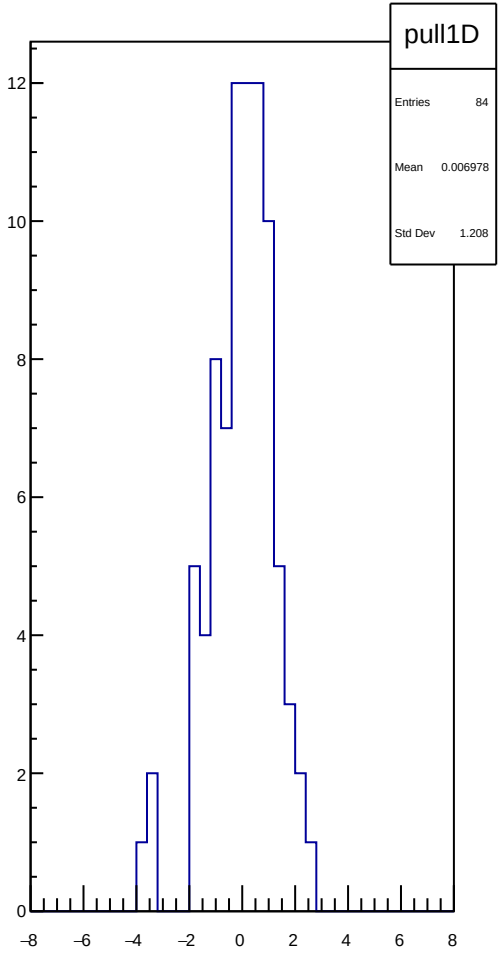

reg_asym_sam_24_68_dd_rms vs run
χ^2 / ndf 4939 / 83
p0 84.67 ± 0.06691
98
96
94
92
90
88
86
84
82
80
78
76

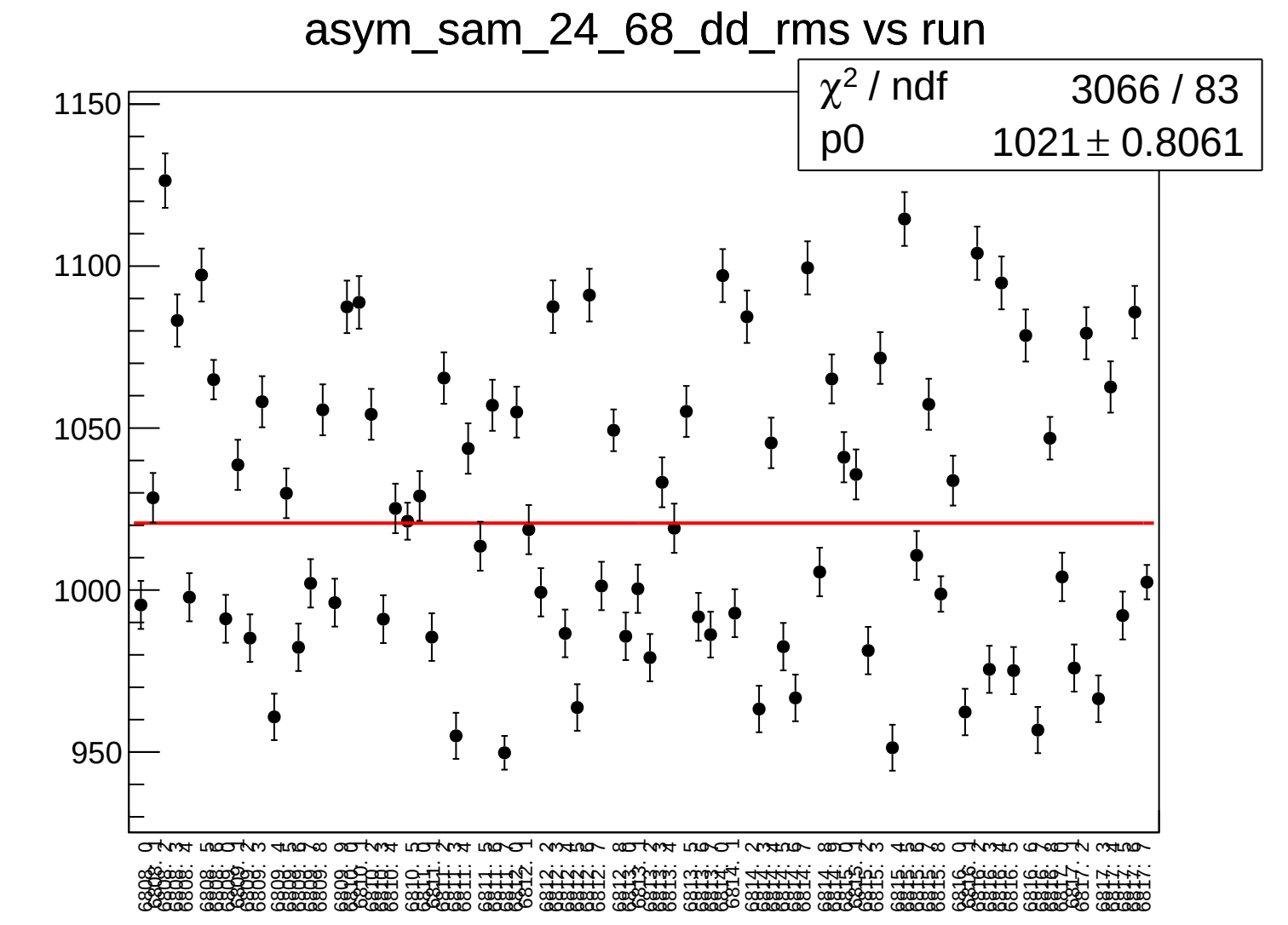

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 125.1 / 83
p0 −502.9 ± 1136
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −235.5
Std Dev 299.6
4
3
2
1
0
−1
−2
−3

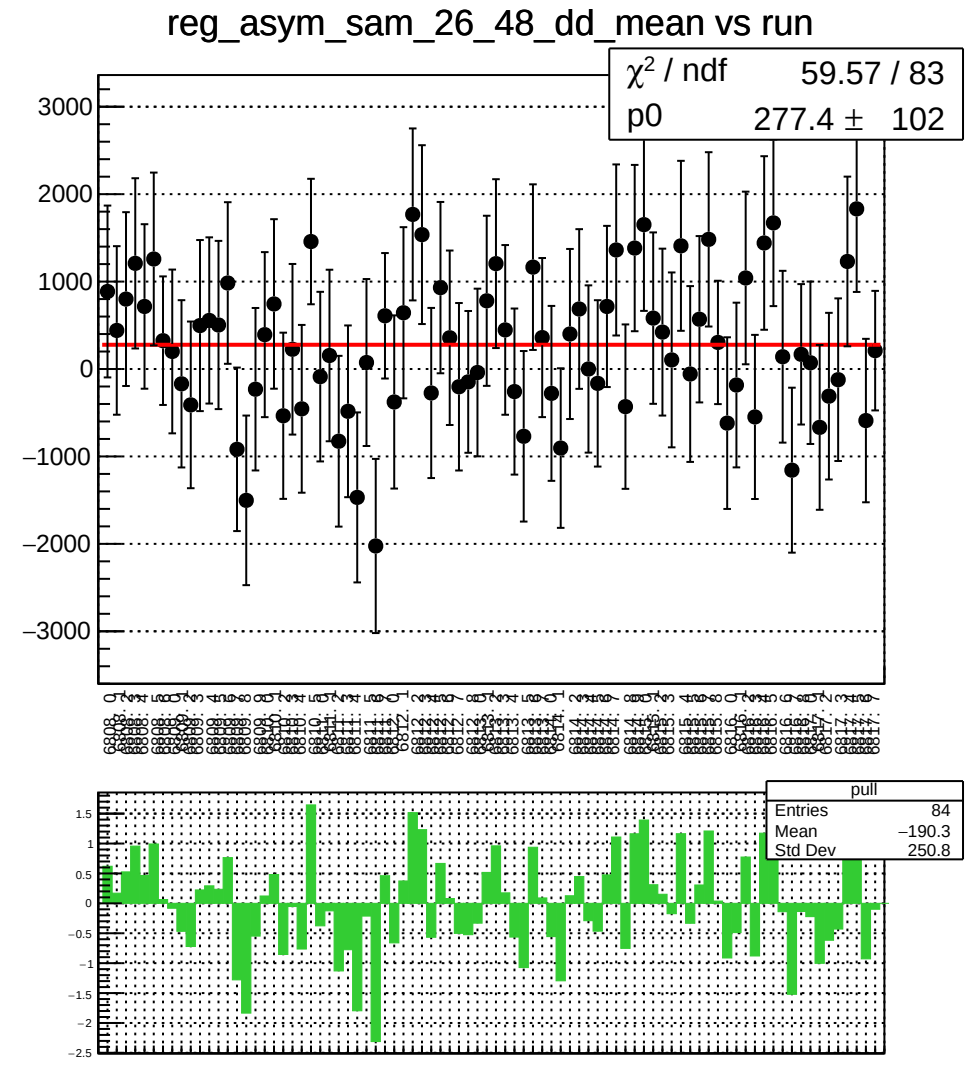

pull1D
Entries 84
Mean −0.006177
Std Dev 1.22
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

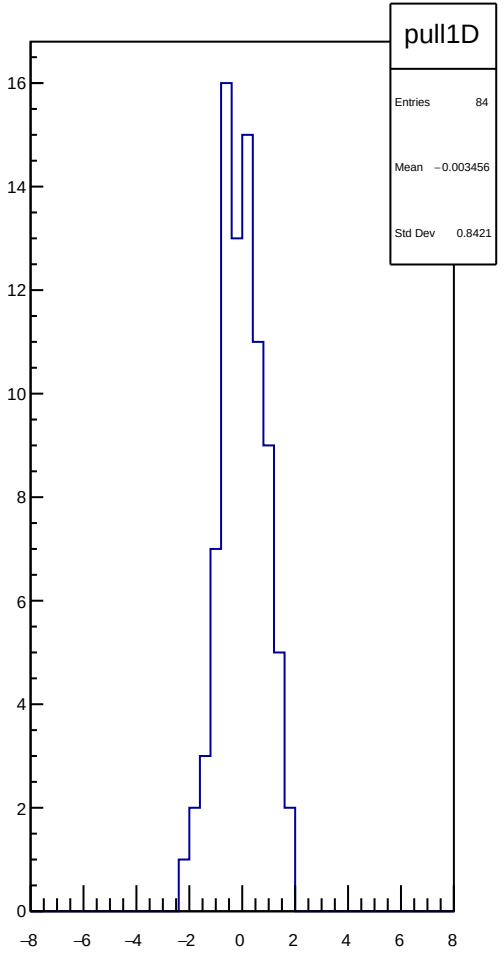

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 3101 / 83
p0 1017 ± 0.8033
1150
1100
1050
1000
950

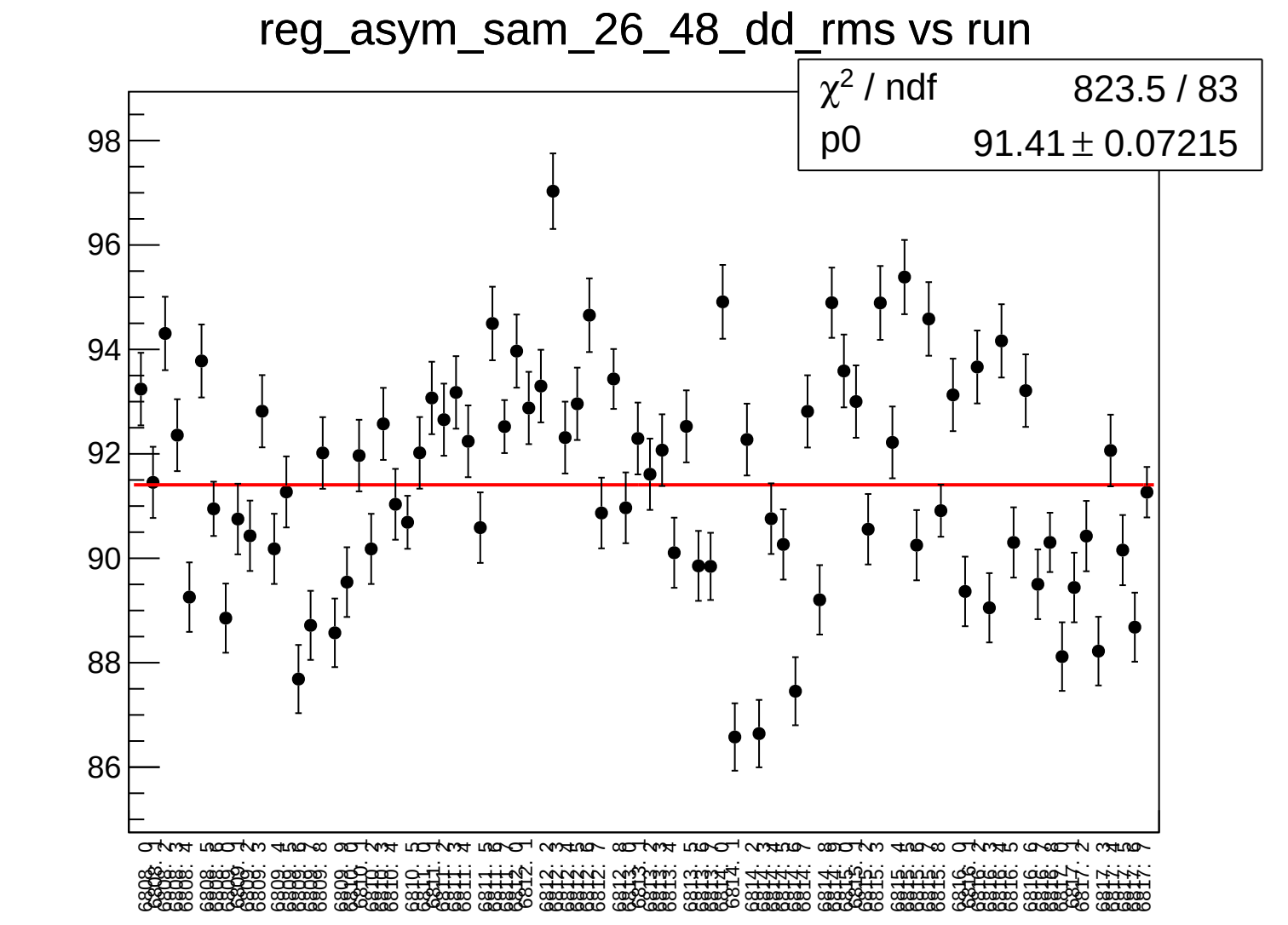

asym_sam_24_68_dd_mean vs run
χ² / ndf 122.5 / 83
p0 683 ± 1140
40000
20000
0
−20000
−40000
pull
Entries 84
Mean −284.9
Std Dev 342.4
3
2
1
0
−1
−2
−3

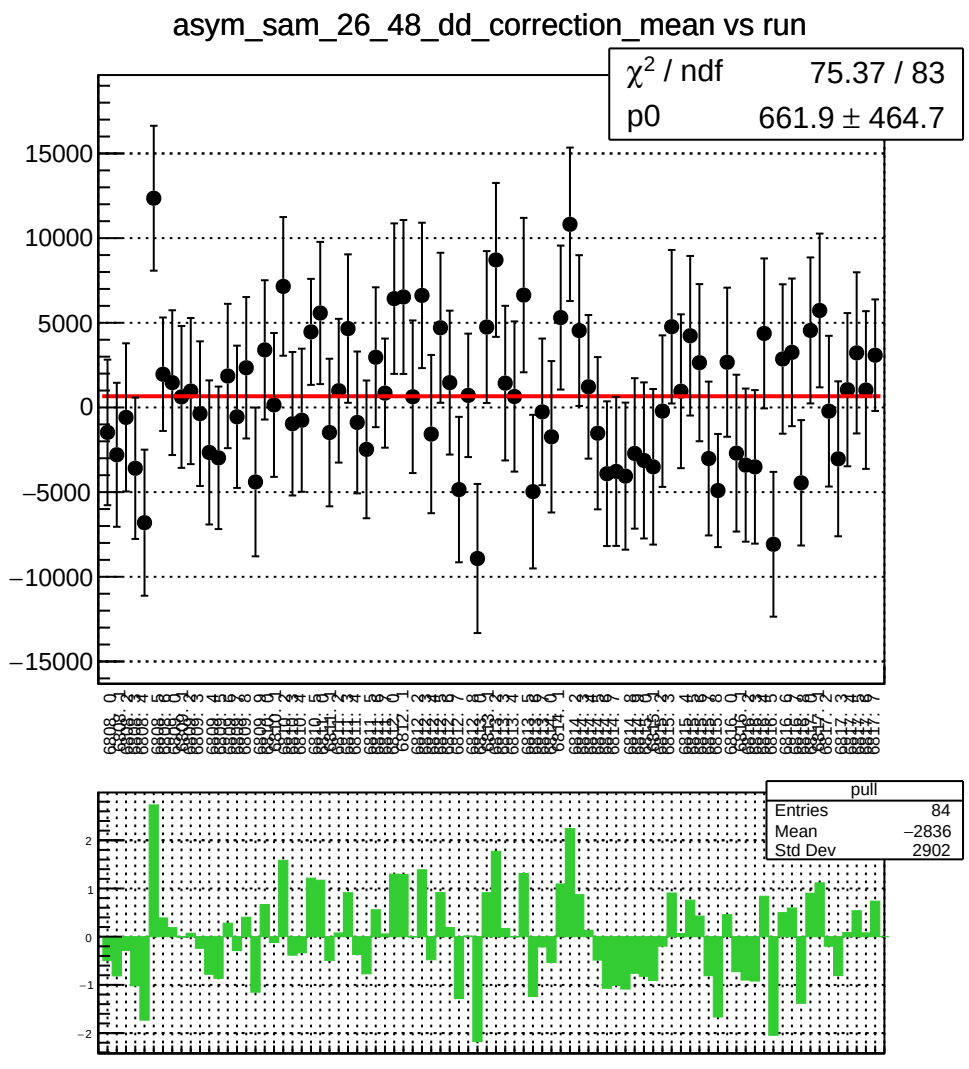

pull1D
Entries 84
Mean 0.006978
Std Dev 1.208
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

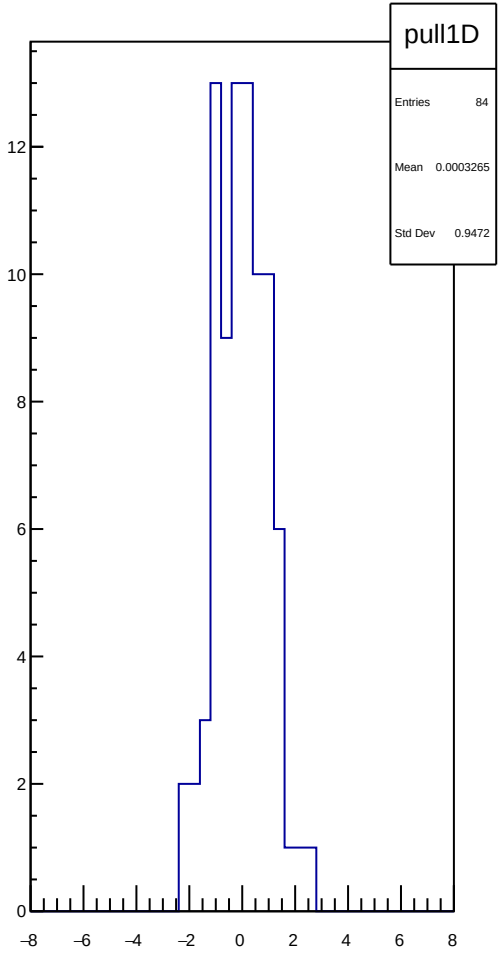

asym_sam_24_68_dd_rms vs run
χ^2 / ndf 3066 / 83
p0 1021 ± 0.8061
1150
1100
1050
1000
950

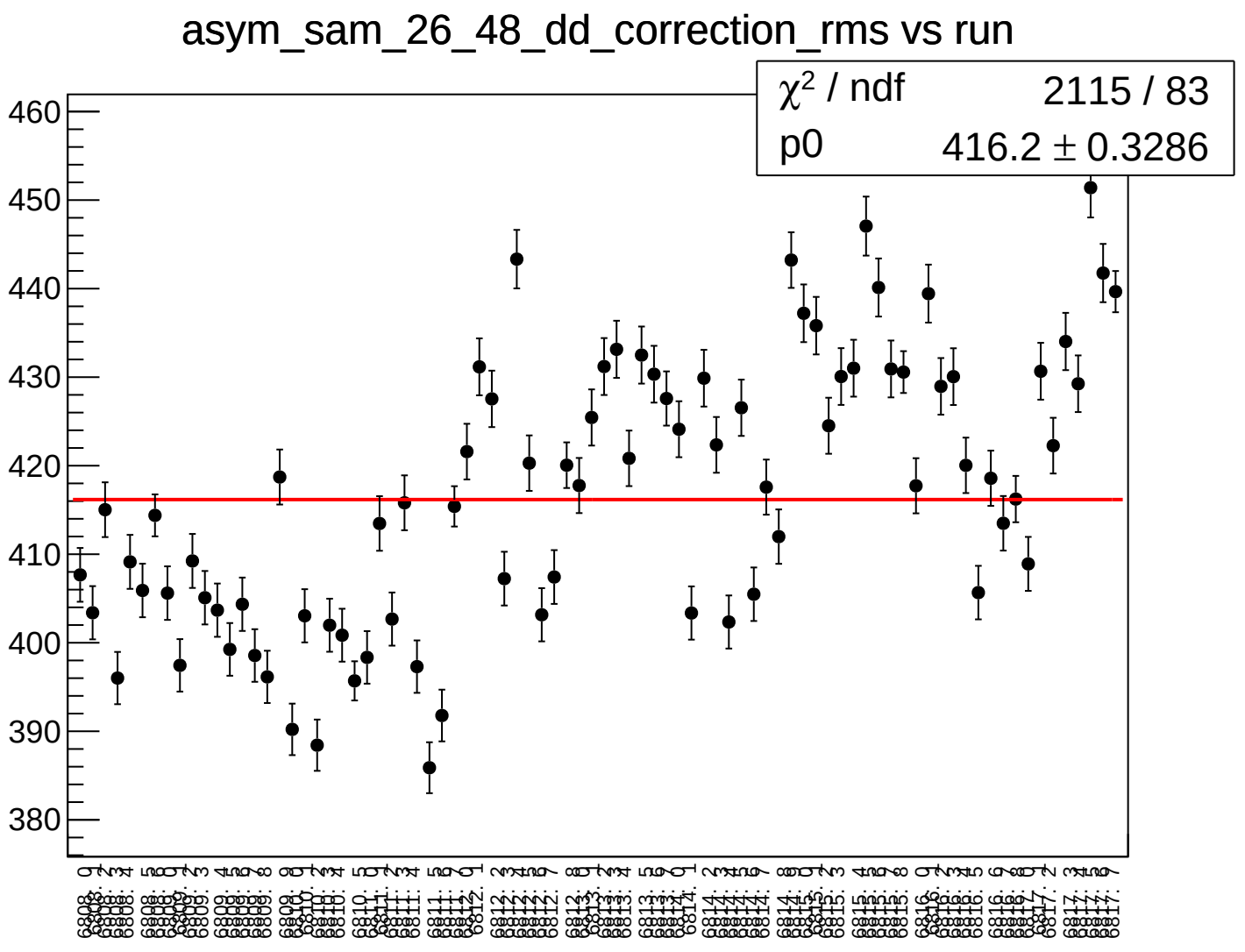

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 59.57 / 83
p0 277.4 ± 102
pull
Entries 84
Mean −190.3
Std Dev 250.8

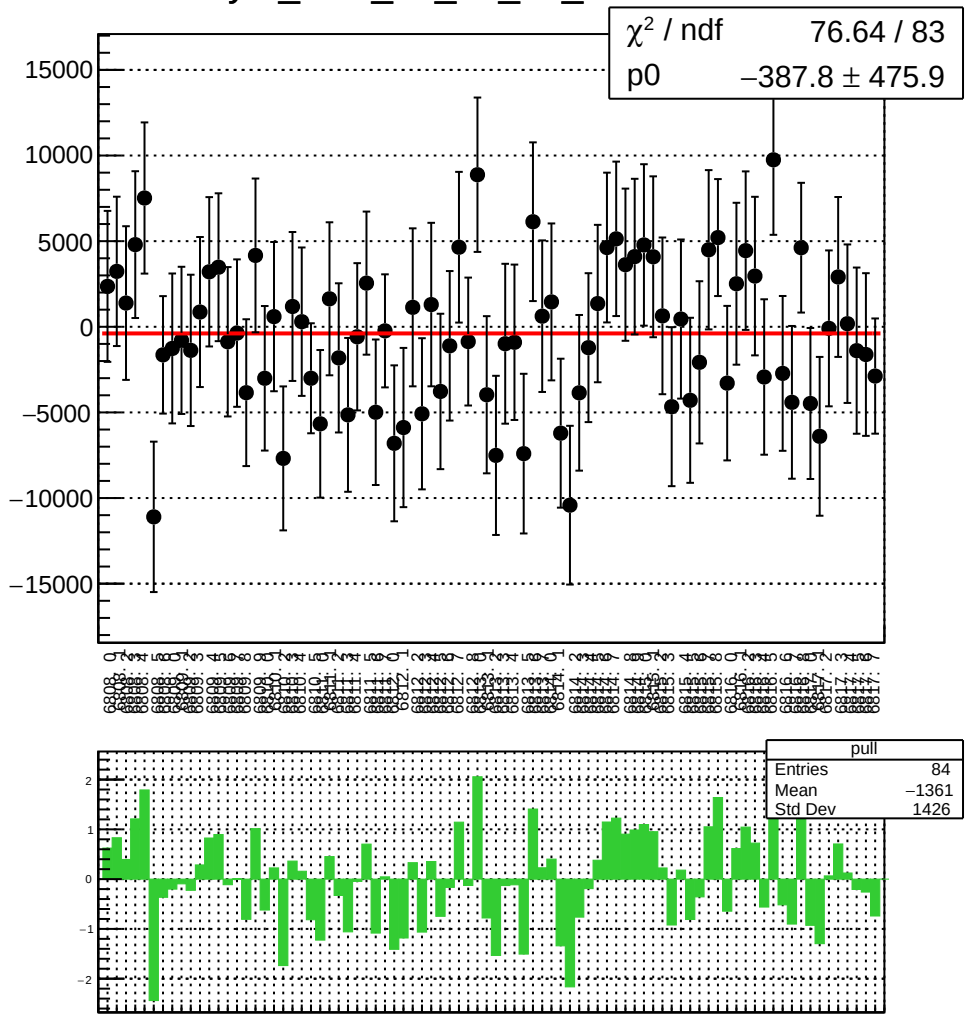

pull1D
Entries 84
Mean −0.003456
Std Dev 0.8421

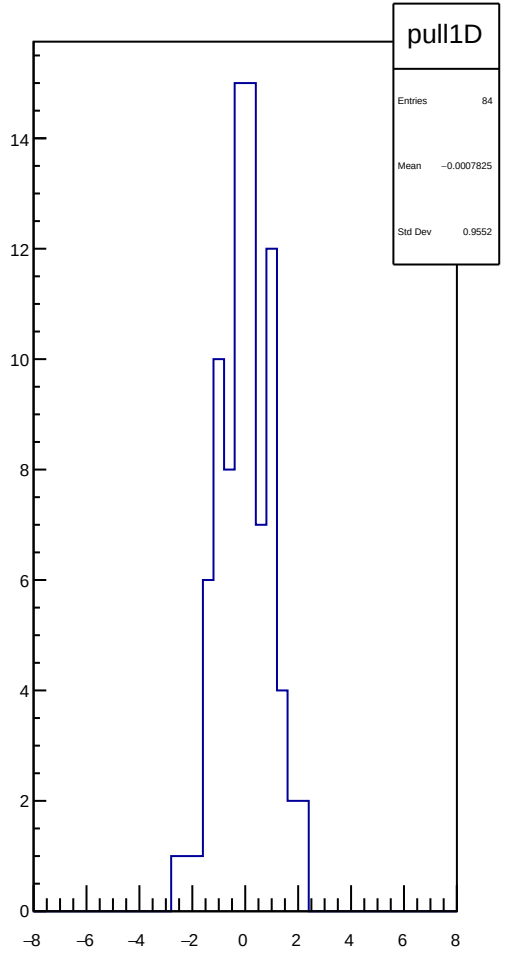

reg_asym_sam_26_48_dd_rms vs run
χ^2 / ndf 823.5 / 83
p0 91.41 ± 0.07215
98
96
94
92
90
88
86

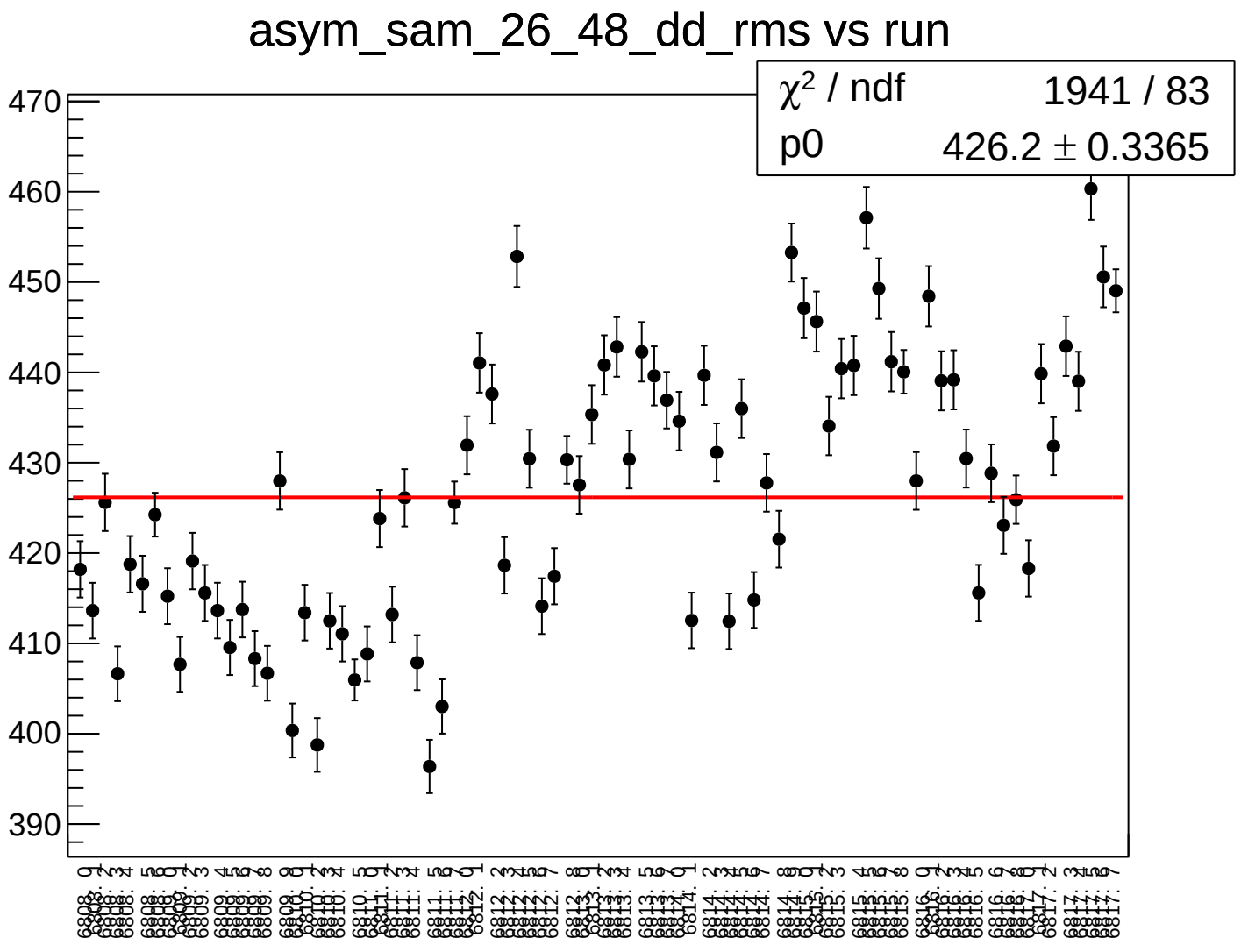

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 75.37 / 83
p0 661.9 ± 464.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −2836
Std Dev 2902
2
1
0
−1
−2

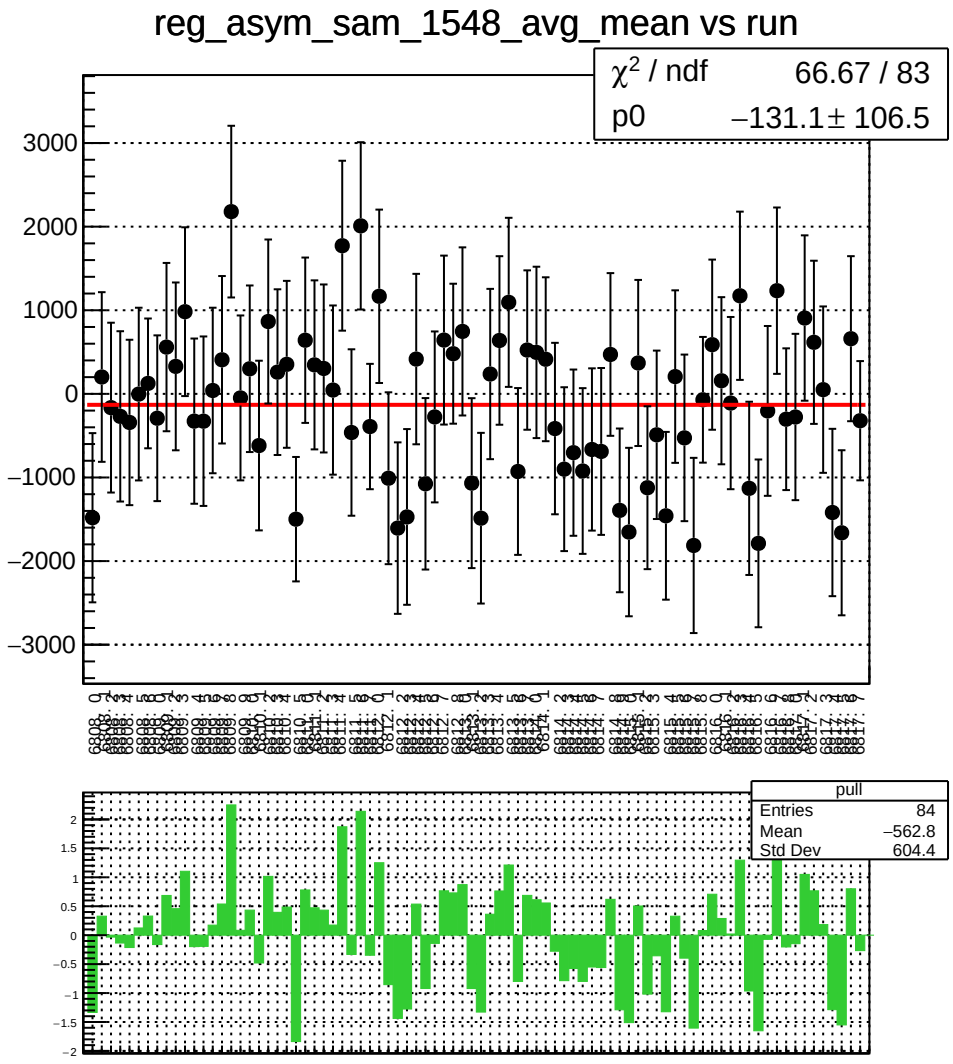

pull1D
Entries 84
Mean 0.0003265
Std Dev 0.9472
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

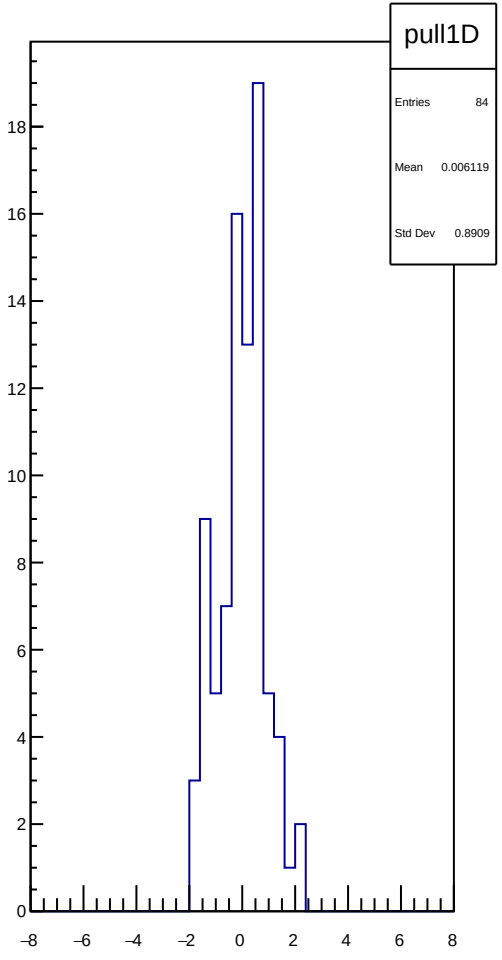

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 2115 / 83
p0 416.2 ± 0.3286
460
450
440
430
420
410
400
390
380

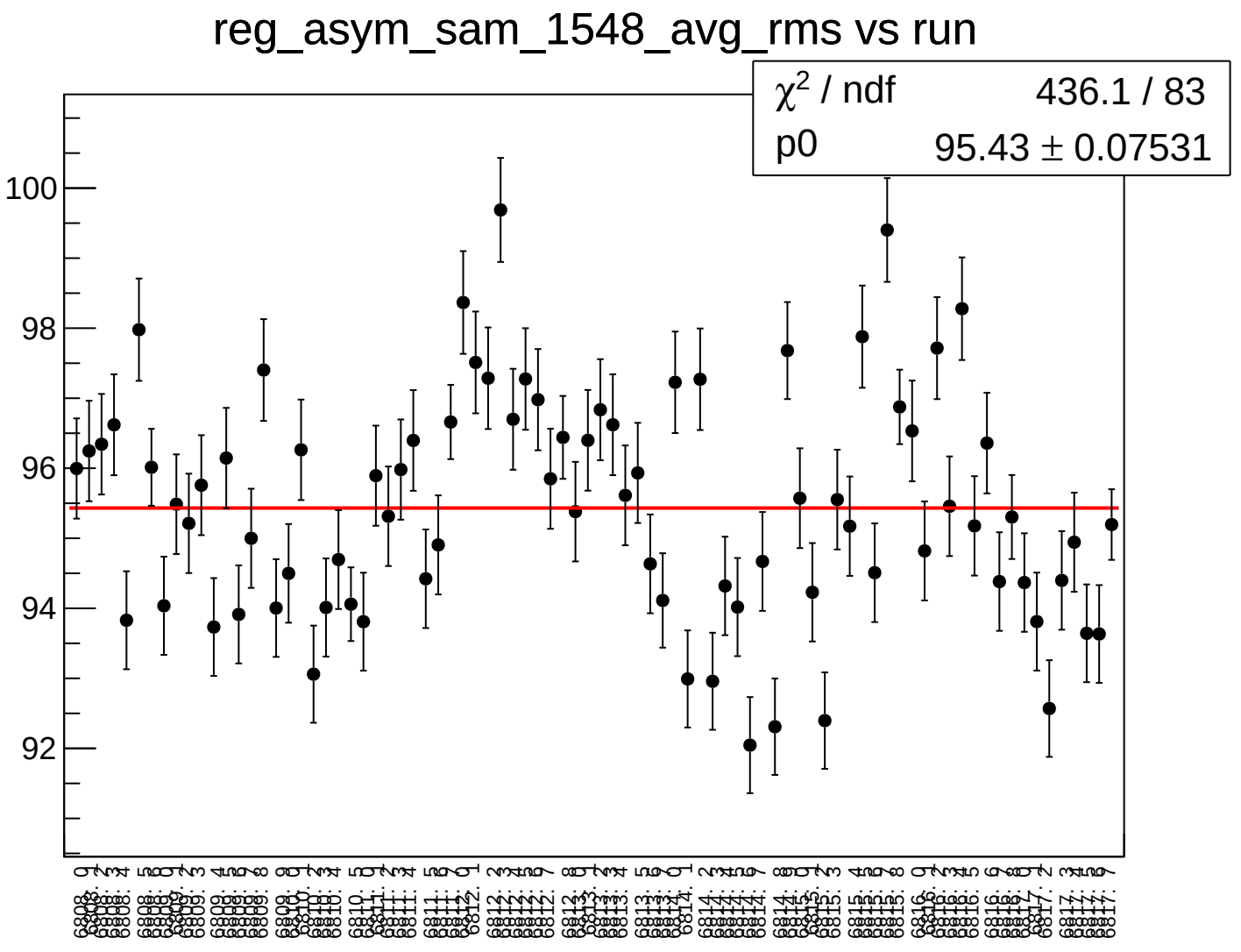

asym_sam_26_48_dd_mean vs run
χ² / ndf 76.64 / 83
p0 −387.8 ± 475.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −1361
Std Dev 1426
2
1
0
−1
−2

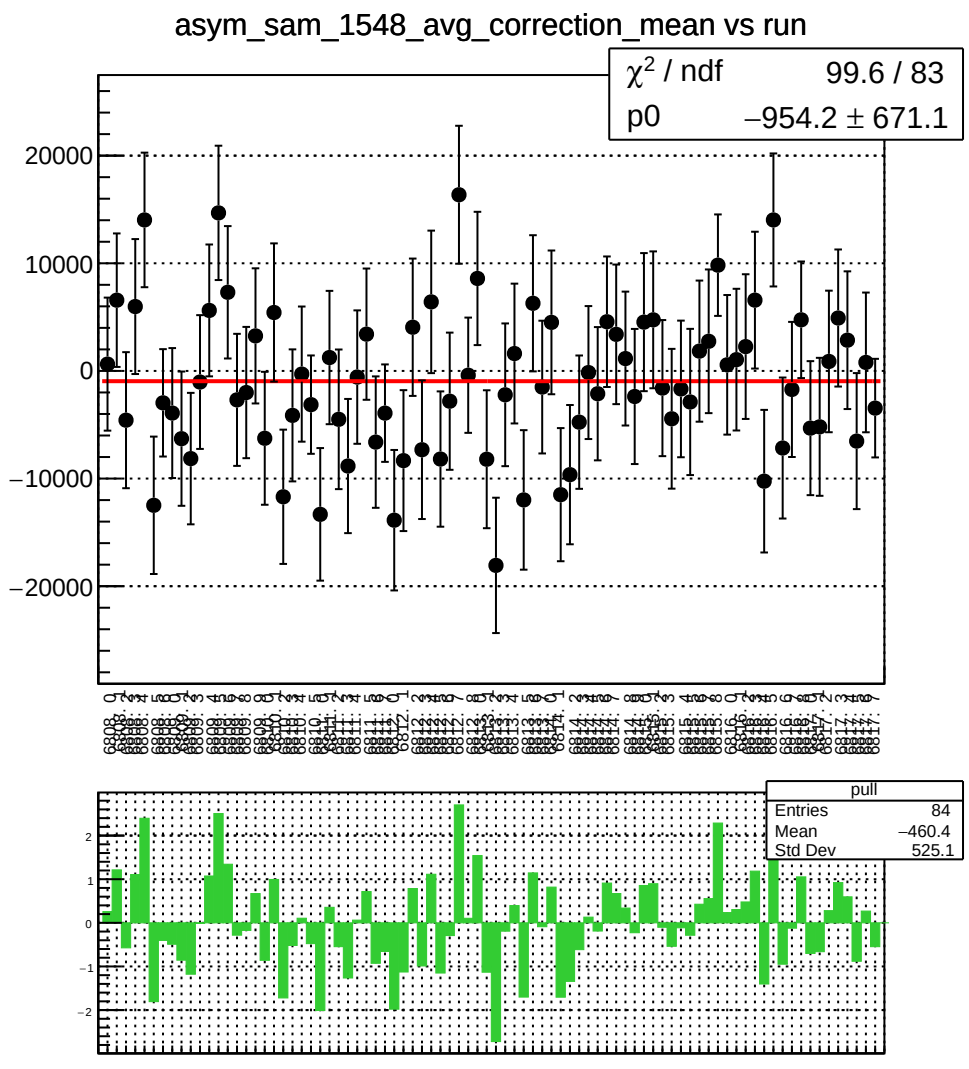

pull1D
Entries 84
Mean −0.0007825
Std Dev 0.9552
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

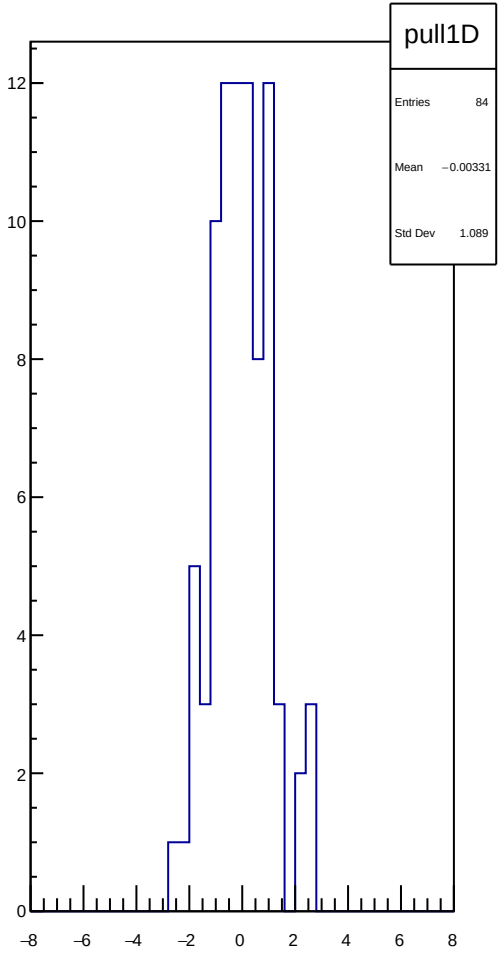

asym_sam_26_48_dd_rms vs run
χ² / ndf 1941 / 83
p0 426.2 ± 0.3365
470
460
450
440
430
420
410
400
390

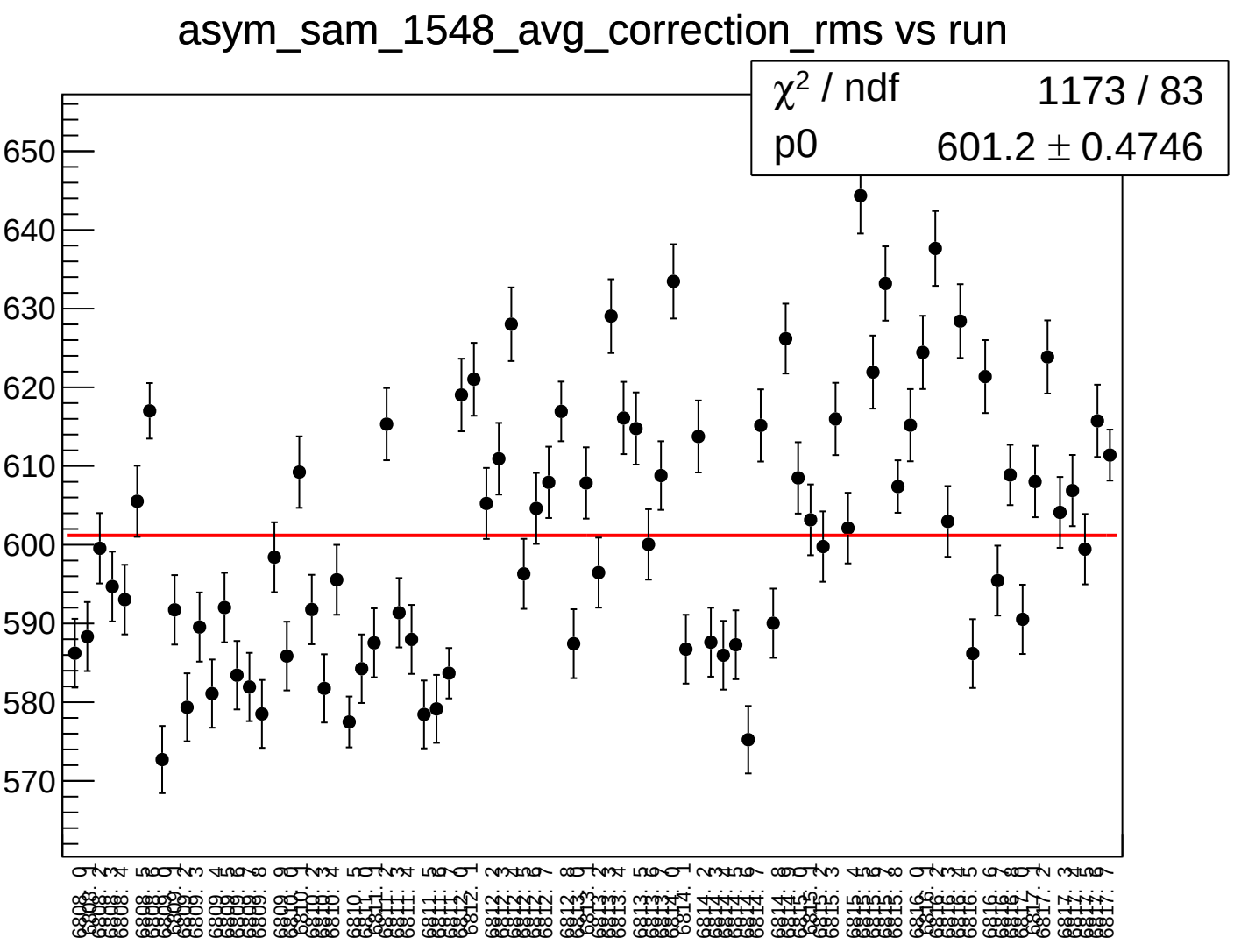

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 66.67 / 83
p0 −131.1± 106.5
pull
Entries 84
Mean −562.8
Std Dev 604.4

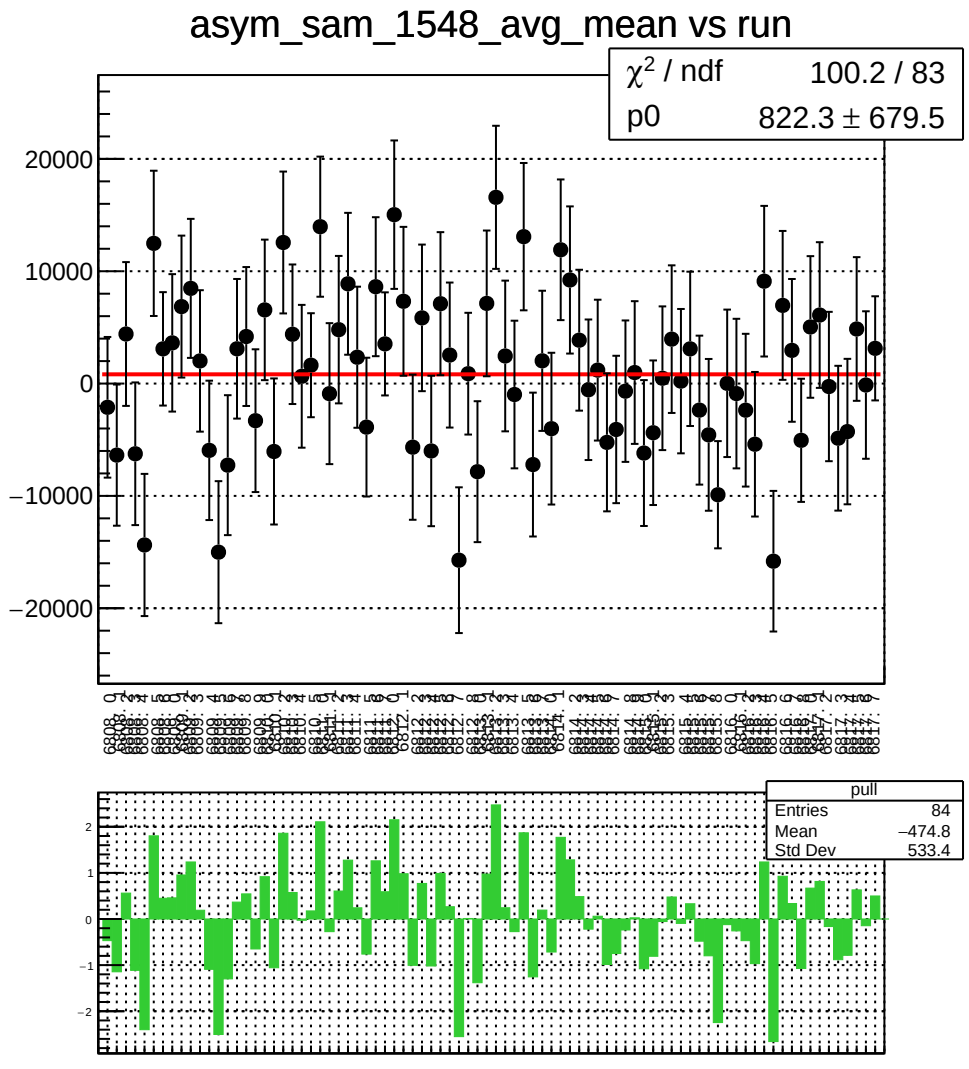

pull1D
Entries 84
Mean 0.006119
Std Dev 0.8909

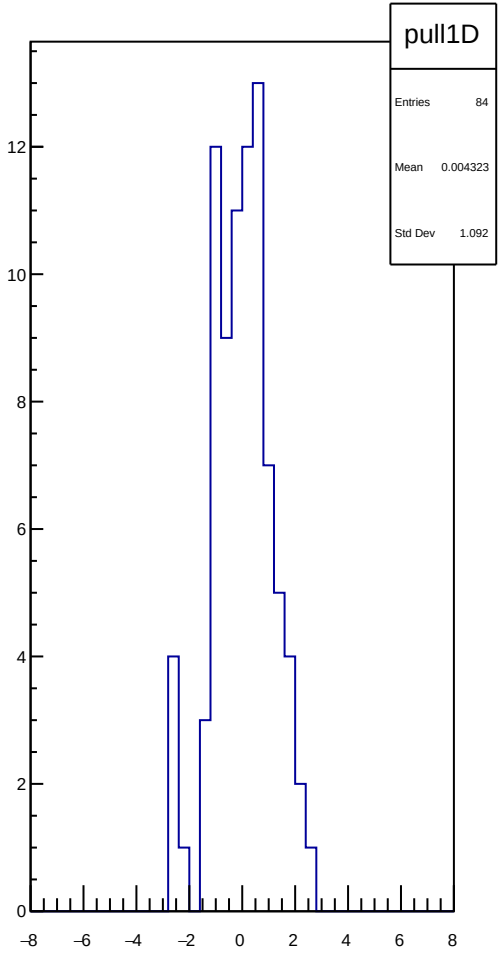

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 436.1 / 83
p0 95.43 ± 0.07531
100
98
96
94
92

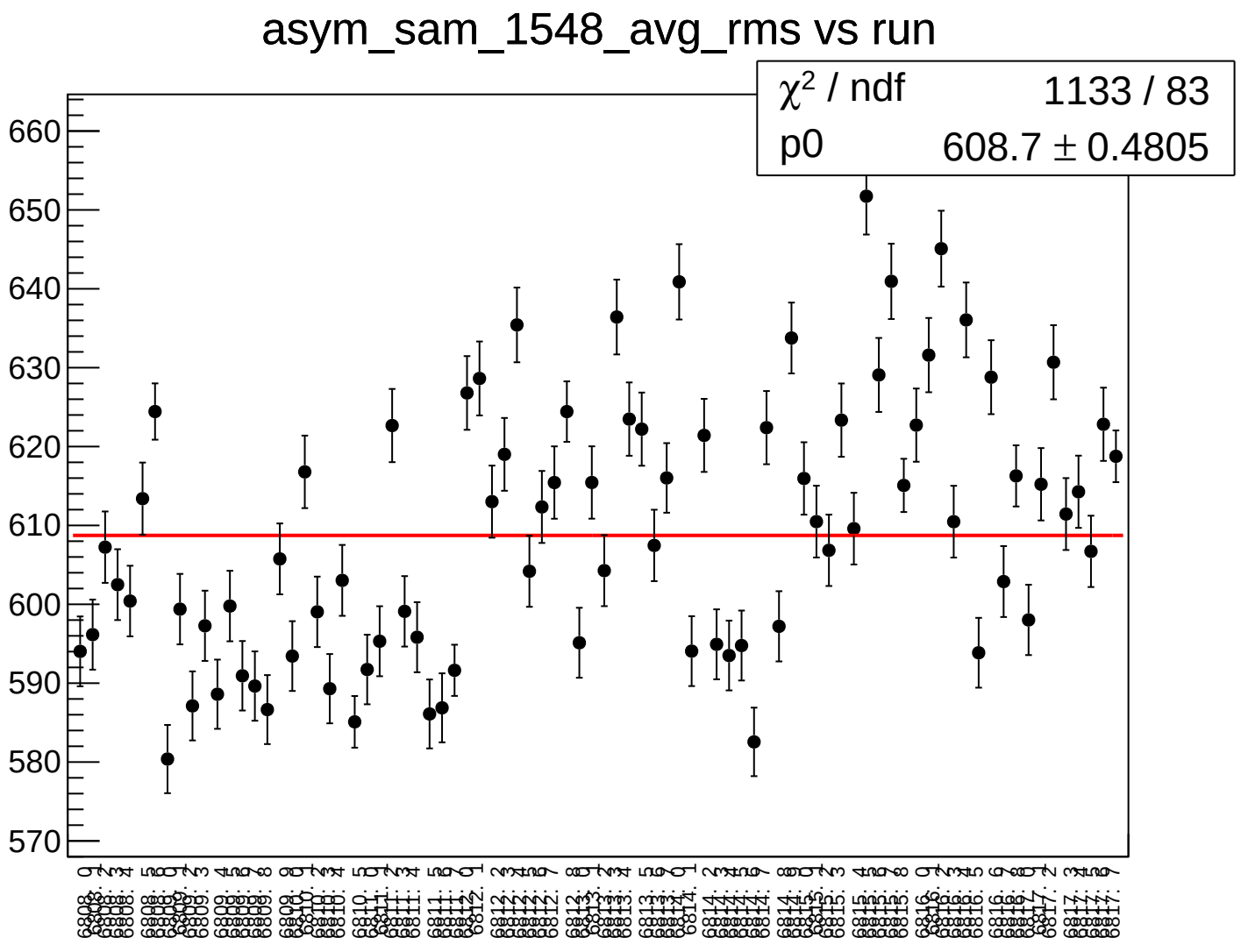

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 99.6 / 83
p0 −954.2 ± 671.1
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −460.4
Std Dev 525.1
2
1
0
−1
−2

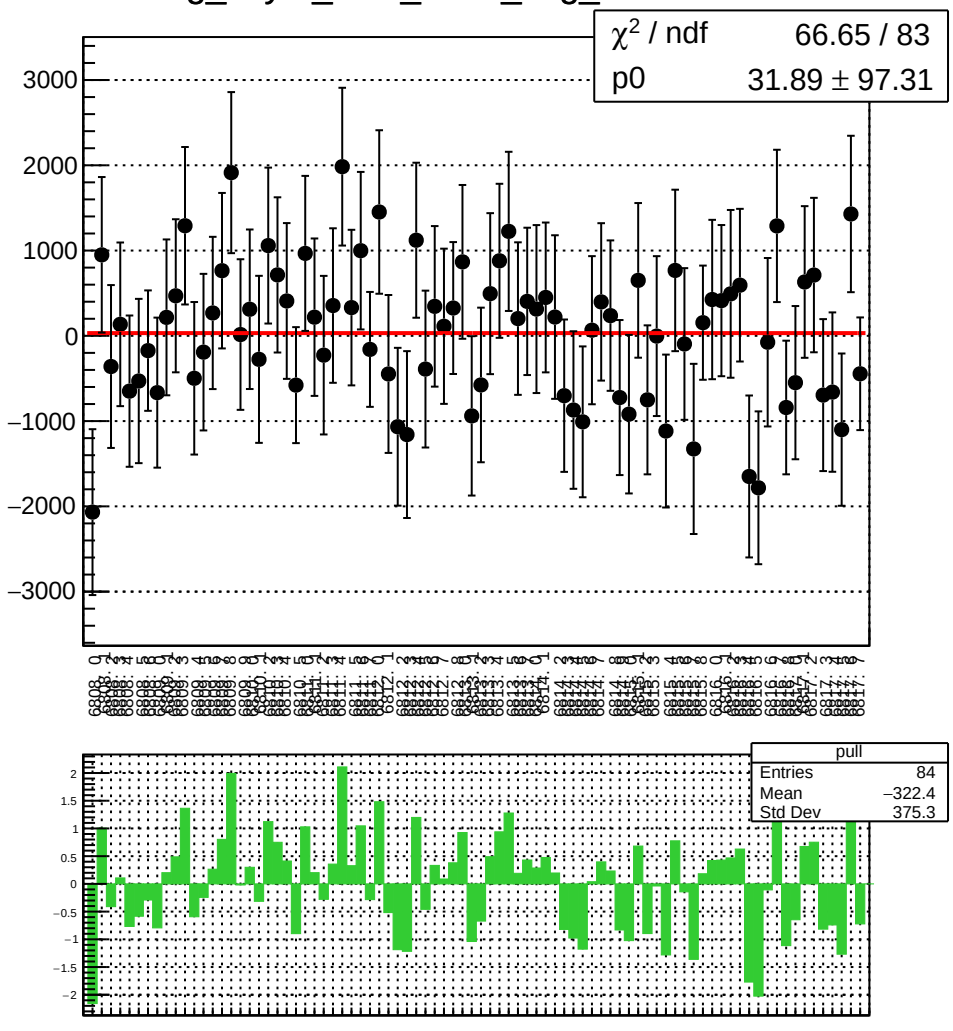

pull1D
Entries 84
Mean −0.00331
Std Dev 1.089
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

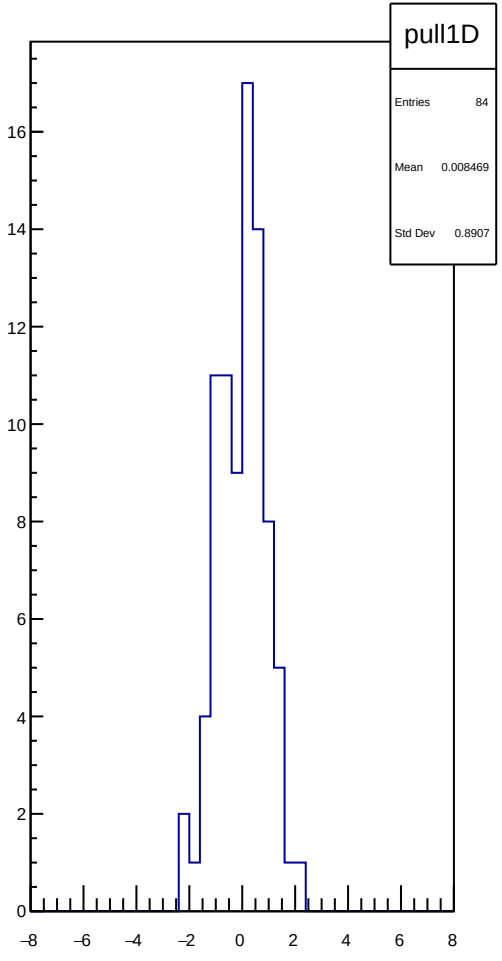

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 1173 / 83
p0 601.2 ± 0.4746
650
640
630
620
610
600
590
580
570

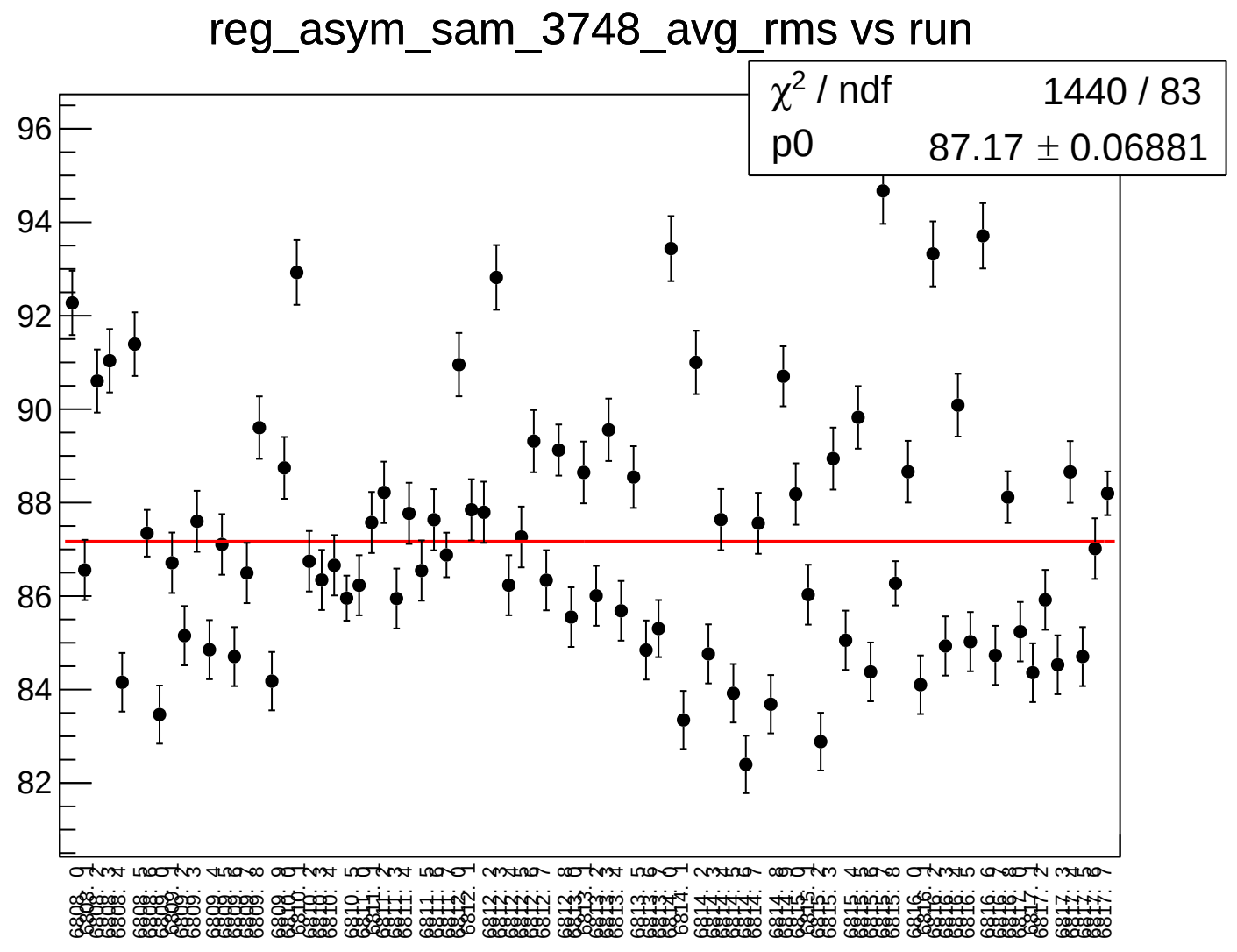

asym_sam_1548_avg_mean vs run
χ² / ndf 100.2 / 83
p0 822.3 ± 679.5
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −474.8
Std Dev 533.4
2
1
0
−1
−2

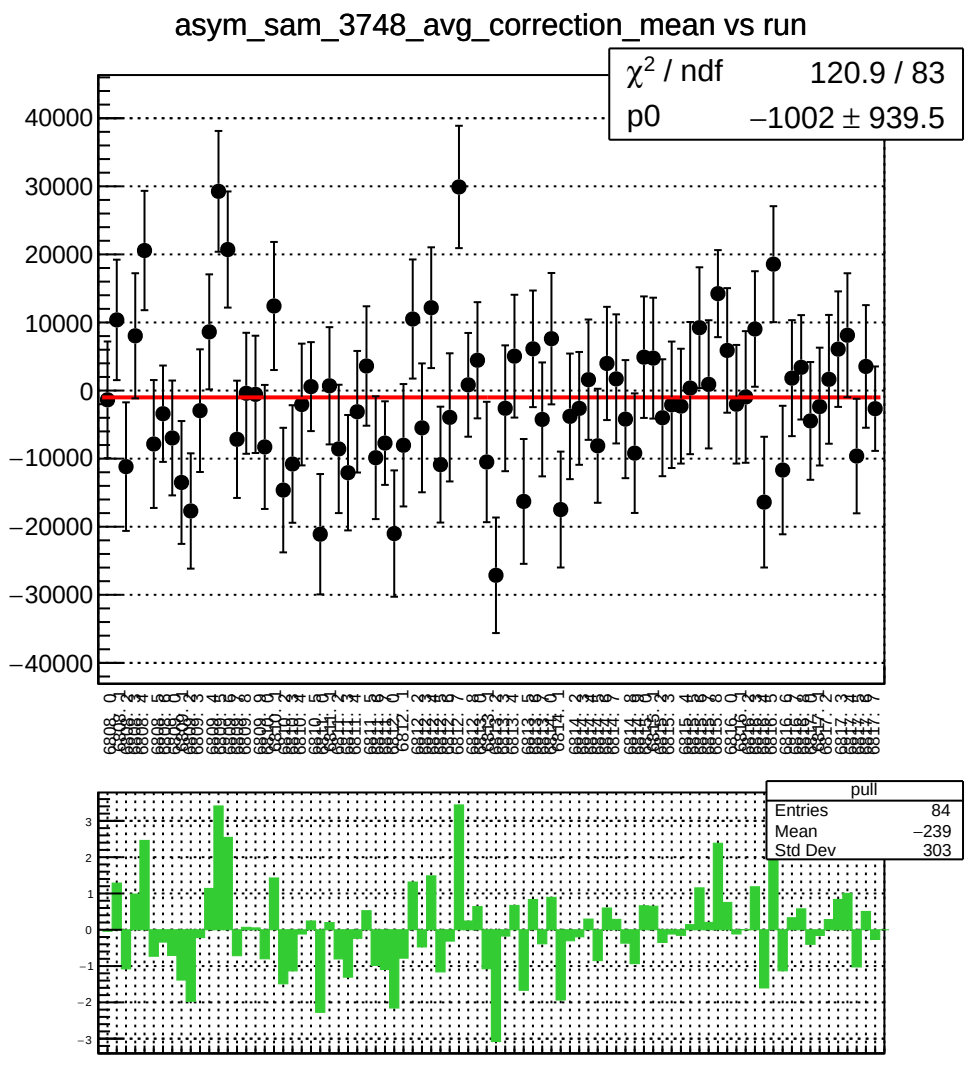

pull1D
Entries 84
Mean 0.004323
Std Dev 1.092
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

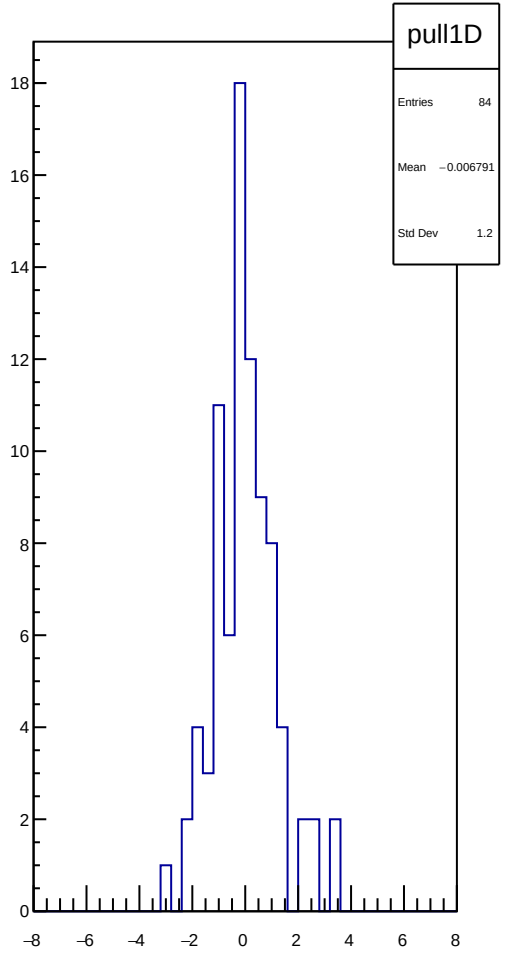

asym_sam_1548_avg_rms vs run
χ² / ndf 1133 / 83
p0 608.7 ± 0.4805
660
650
640
630
620
610
600
590
580
570

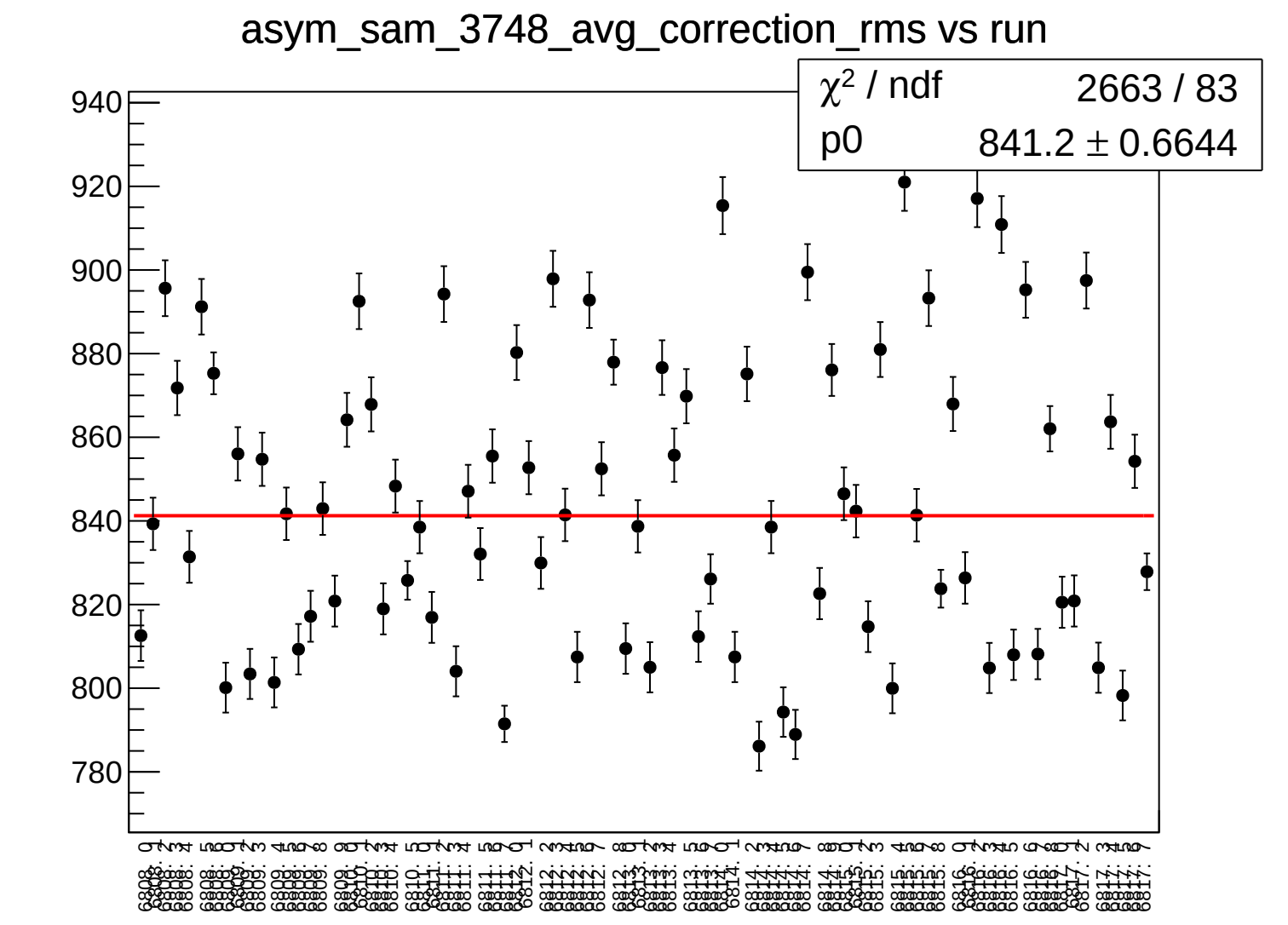

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 66.65 / 83
p0 31.89 ± 97.31
pull
Entries 84
Mean −322.4
Std Dev 375.3

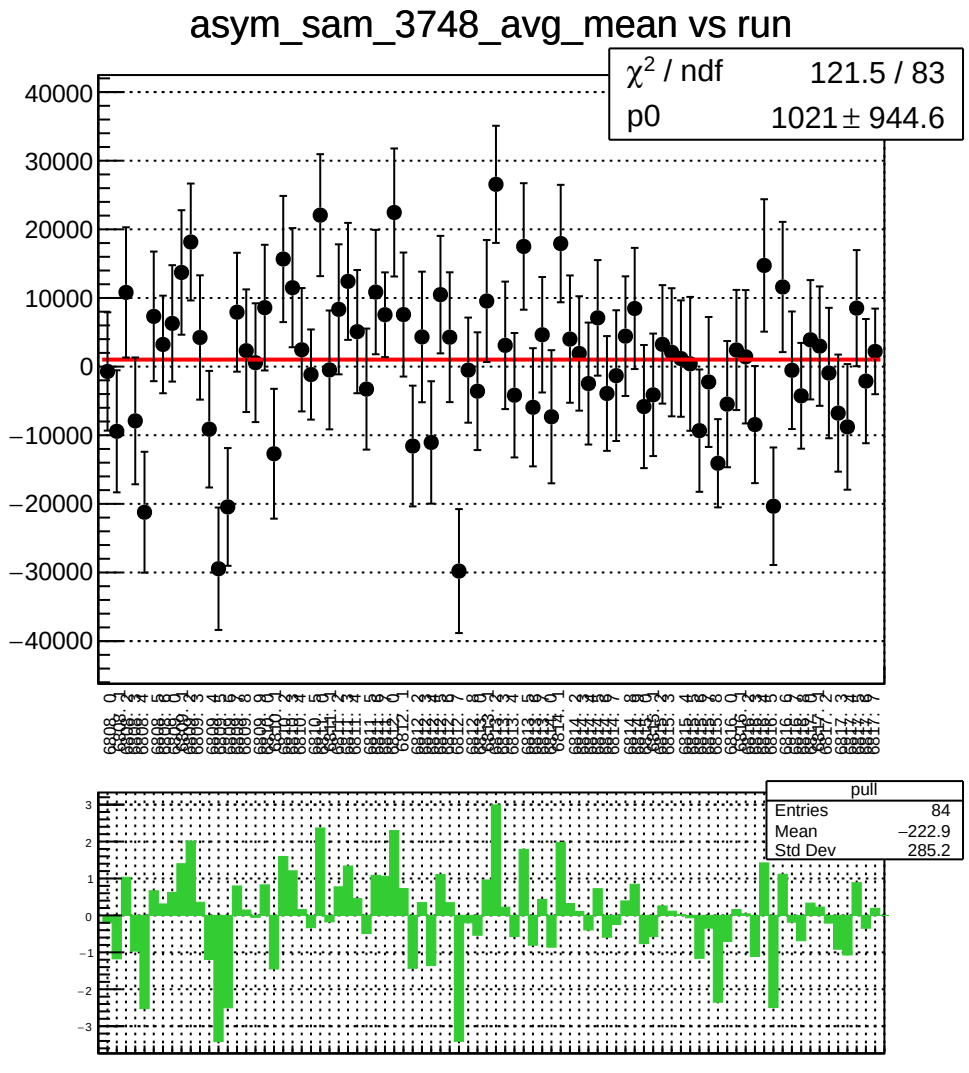

pull1D
Entries 84
Mean 0.008469
Std Dev 0.8907

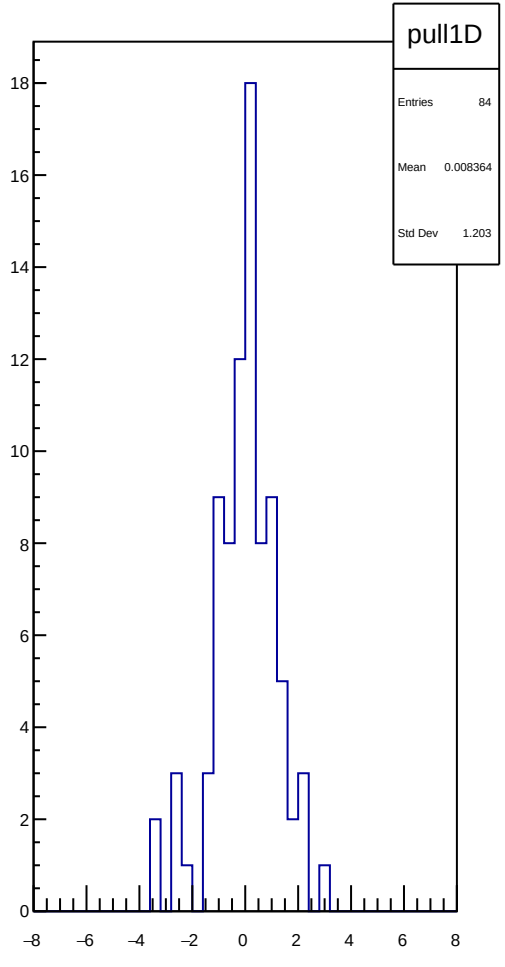

reg_asym_sam_3748_avg_rms vs run
χ^2 / ndf 1440 / 83
p0 87.17 ± 0.06881
96
94
92
90
88
86
84
82

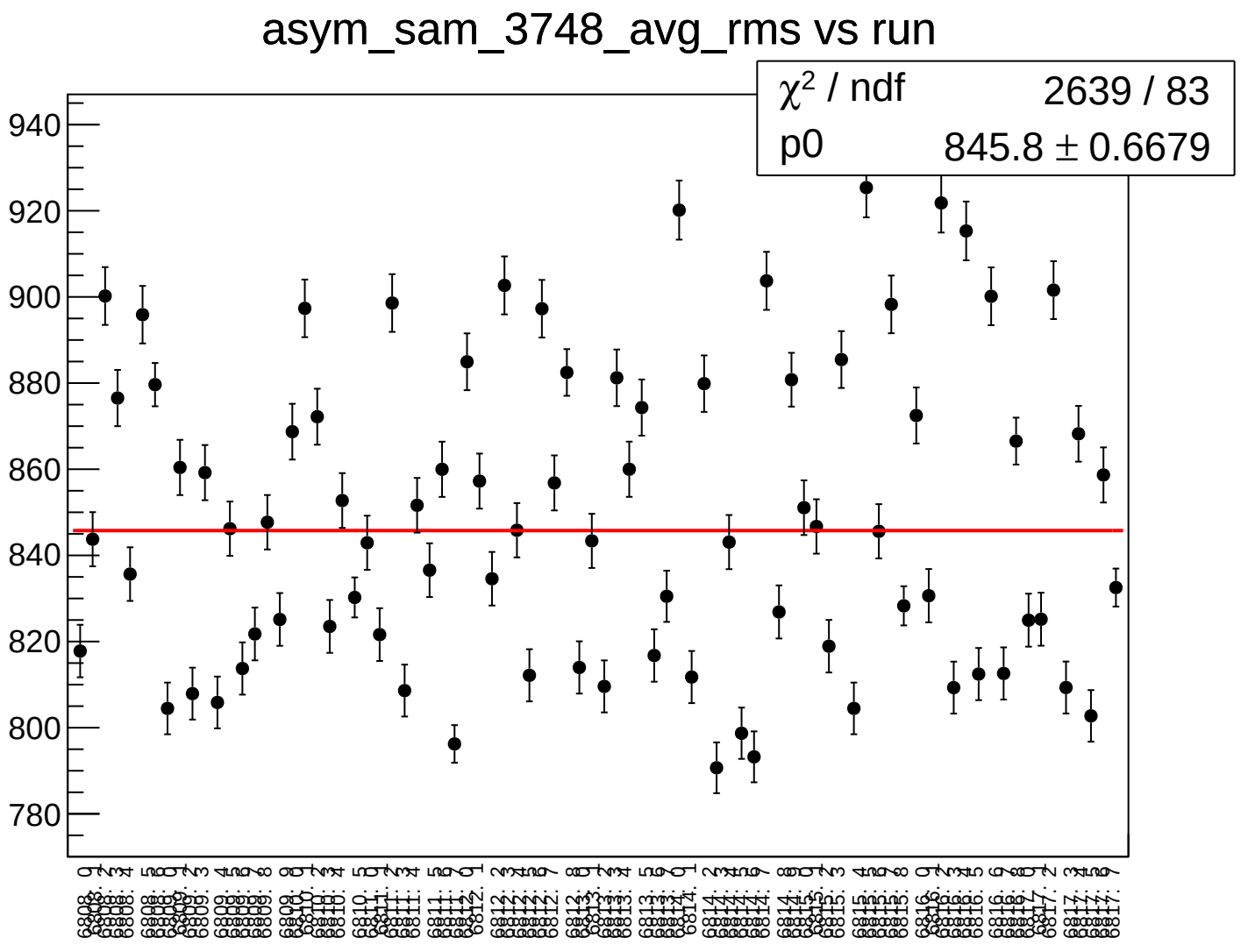

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 120.9 / 83
p0 −1002 ± 939.5
pull
Entries 84
Mean −239
Std Dev 303

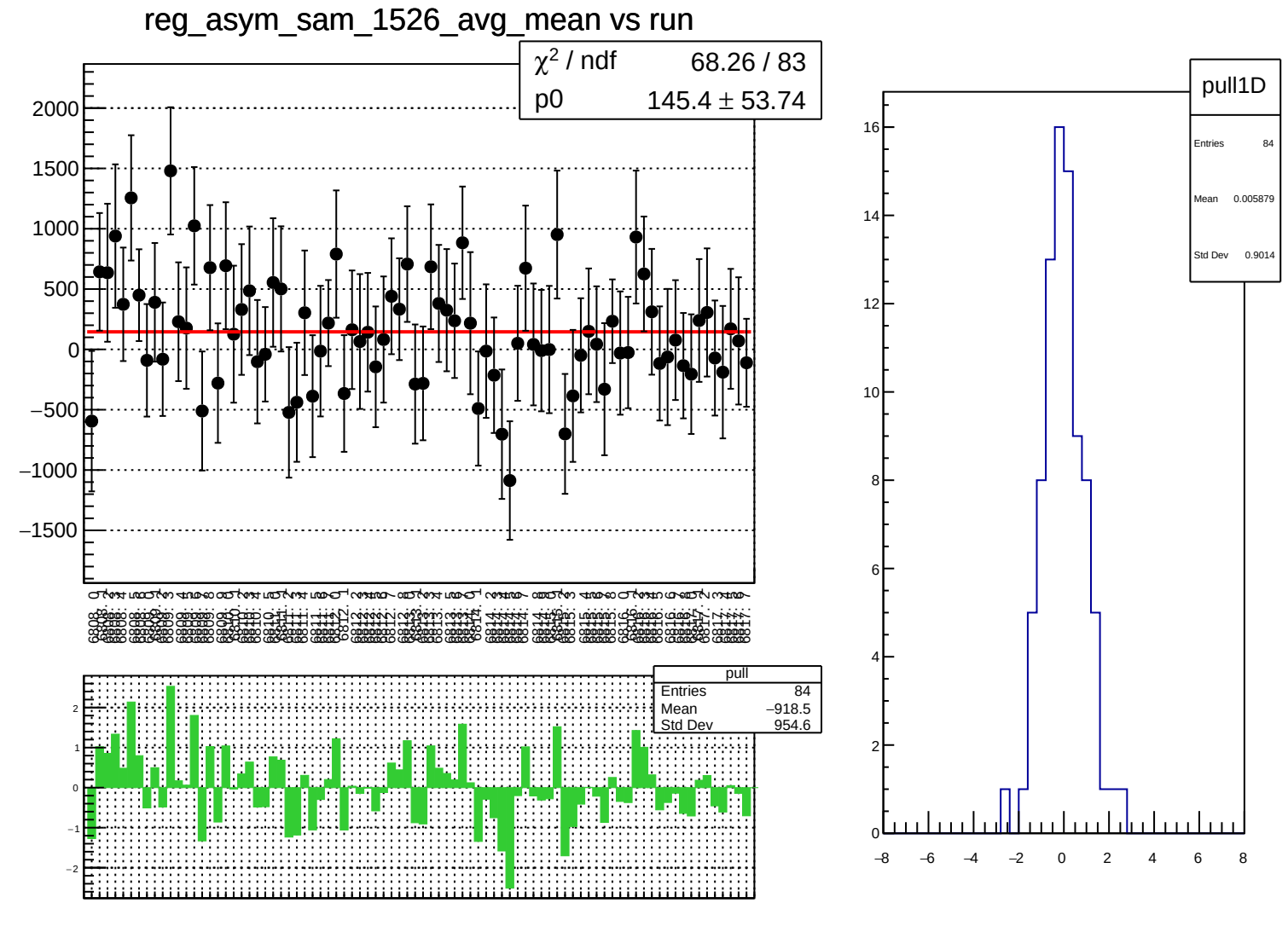

pull1D
Entries 84
Mean −0.006791
Std Dev 1.2

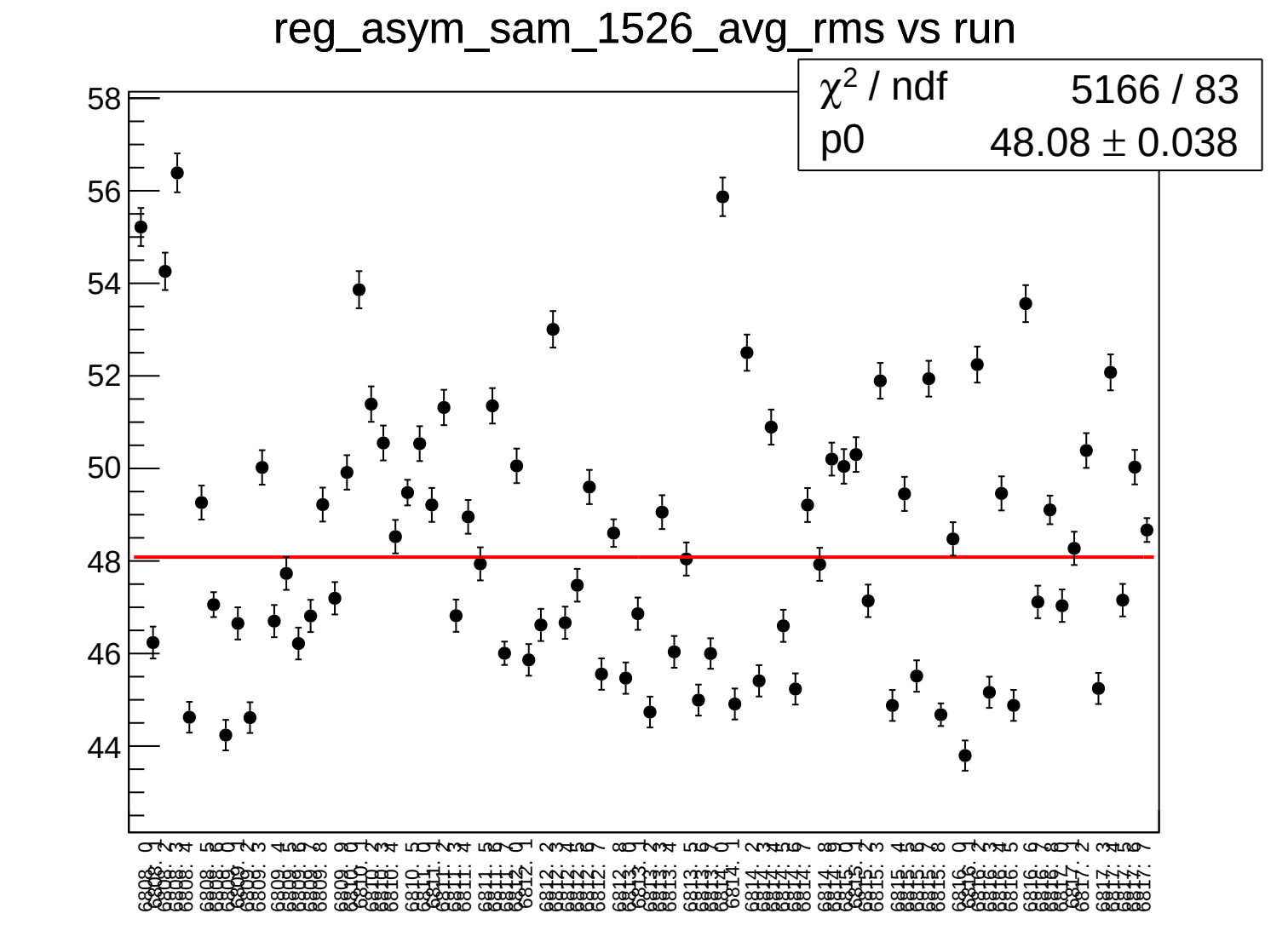

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 2663 / 83
p0 841.2 ± 0.6644
940
920
900
880
860
840
820
800
780

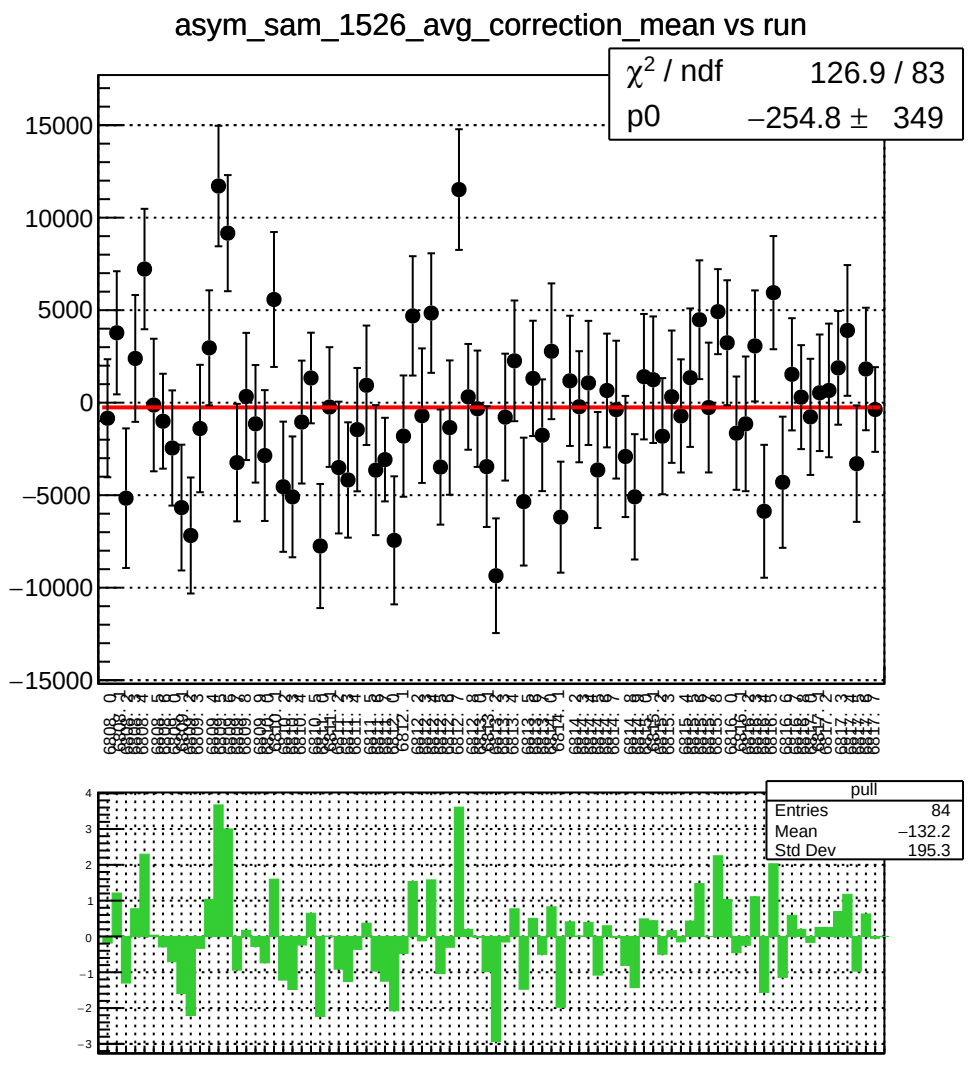

asym_sam_3748_avg_mean vs run
χ² / ndf 121.5 / 83
p0 1021 ± 944.6
pull
Entries 84
Mean −222.9
Std Dev 285.2

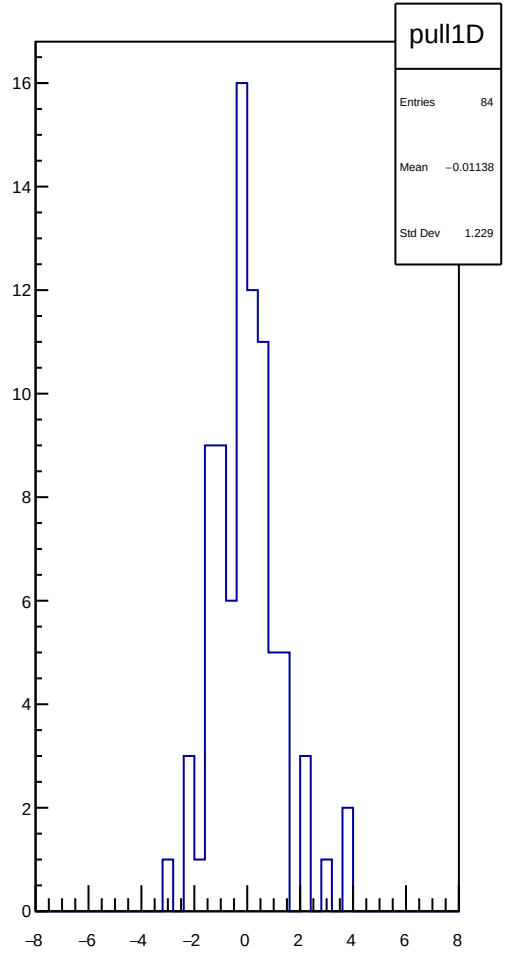

pull1D
Entries 84
Mean 0.008364
Std Dev 1.203

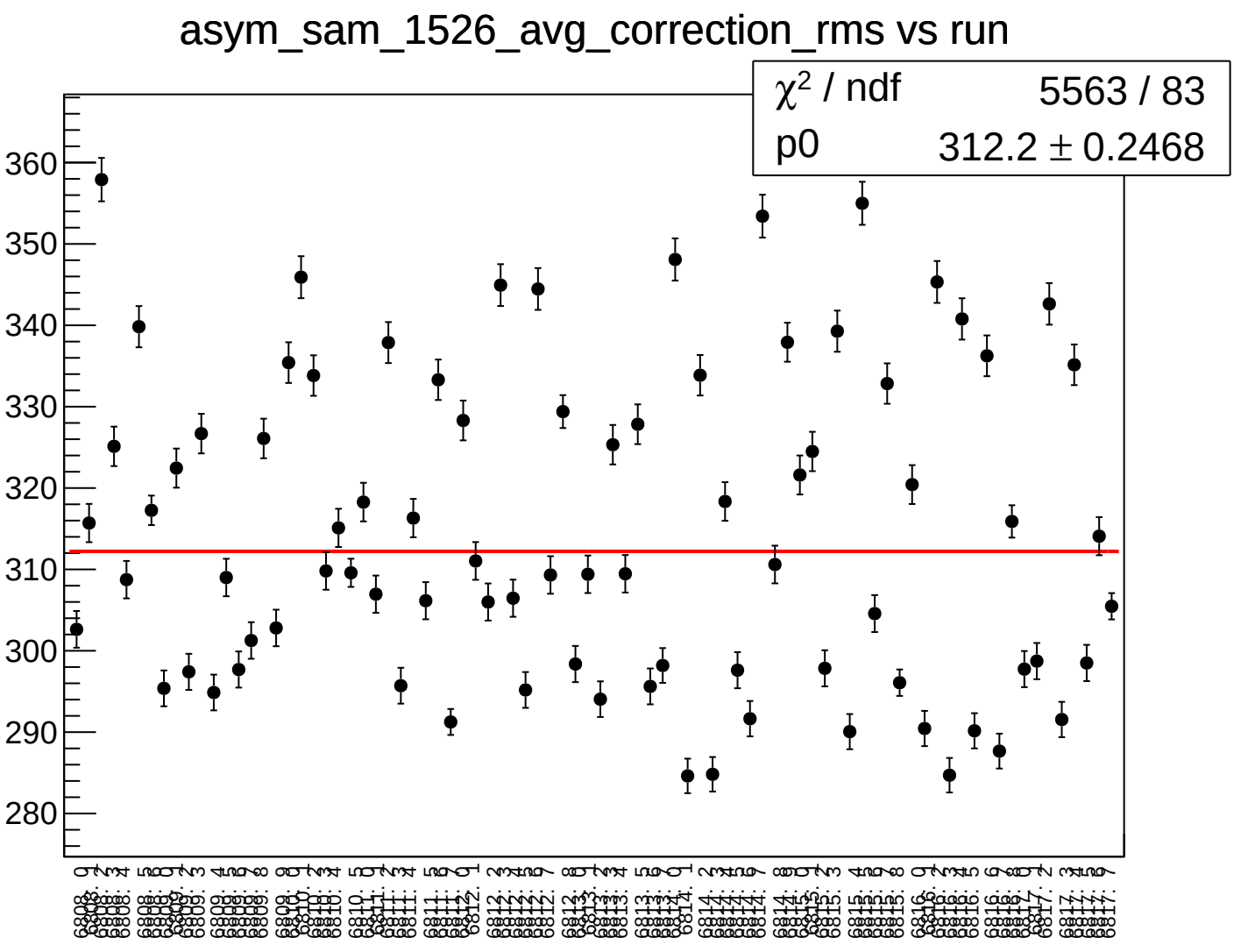

asym_sam_3748_avg_rms vs run
χ^2 / ndf 2639 / 83
p0 845.8 ± 0.6679
940
920
900
880
860
840
820
800
780

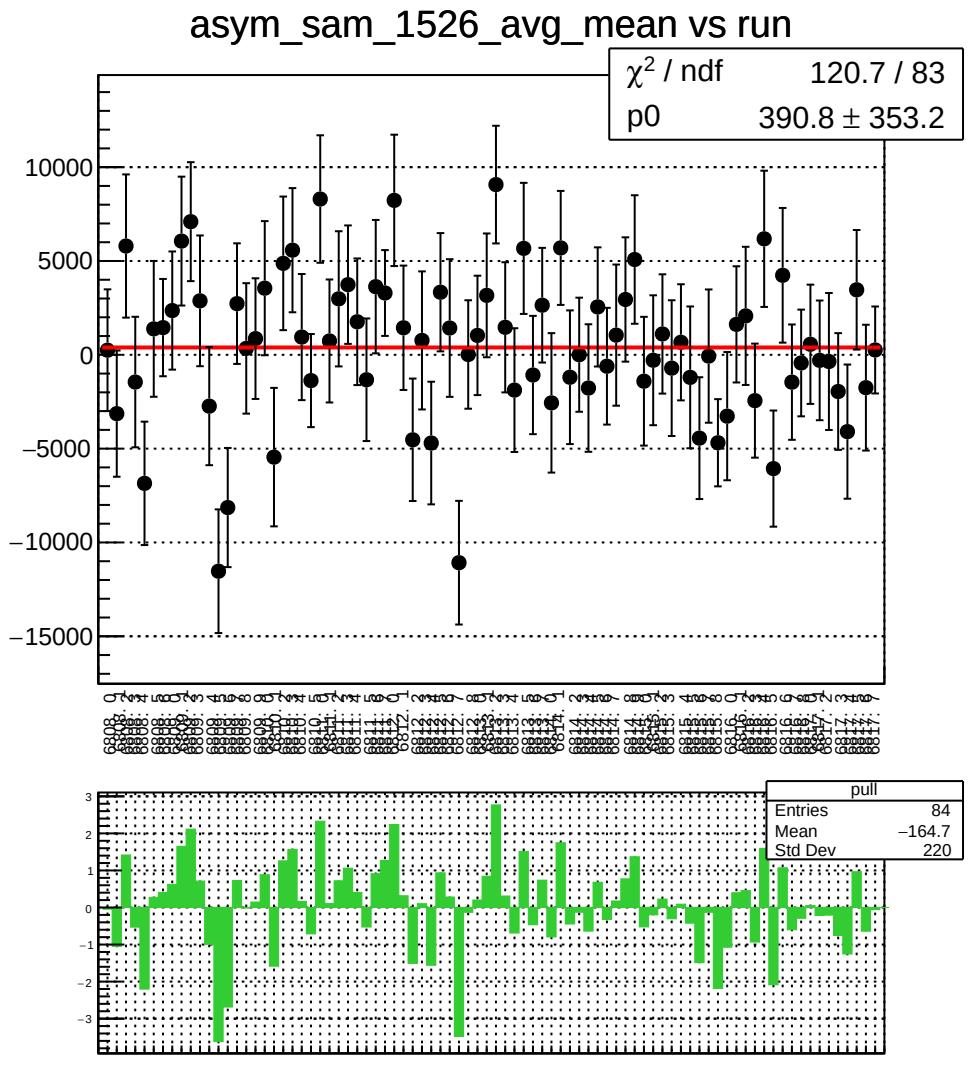

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 68.26 / 83
p0 145.4 ± 53.74
2000
1500
1000
500
0
−500
−1000
−1500
pull
Entries 84
Mean −918.5
Std Dev 954.6
2
1
0
−1
−2
pull1D
Entries 84
Mean 0.005879
Std Dev 0.9014
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

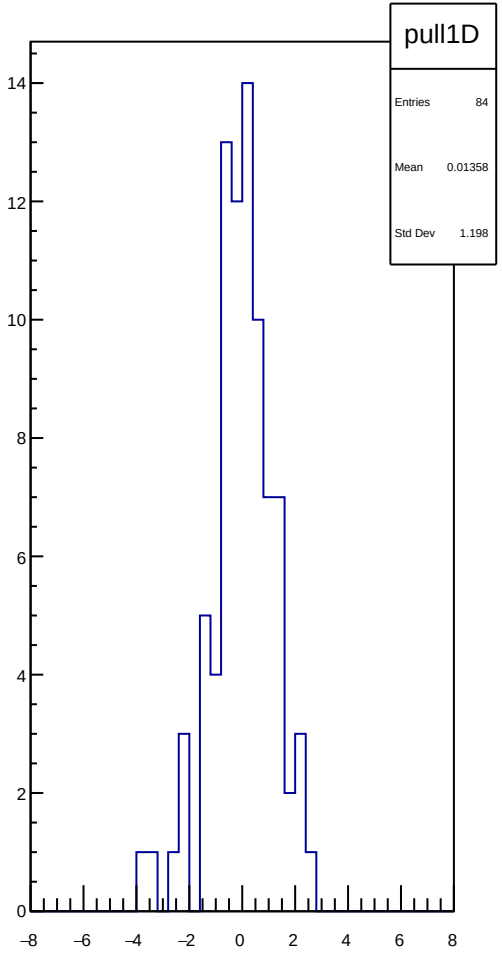

reg_asym_sam_1526_avg_rms vs run
χ² / ndf 5166 / 83
p0 48.08 ± 0.038
58
56
54
52
50
48
46
44

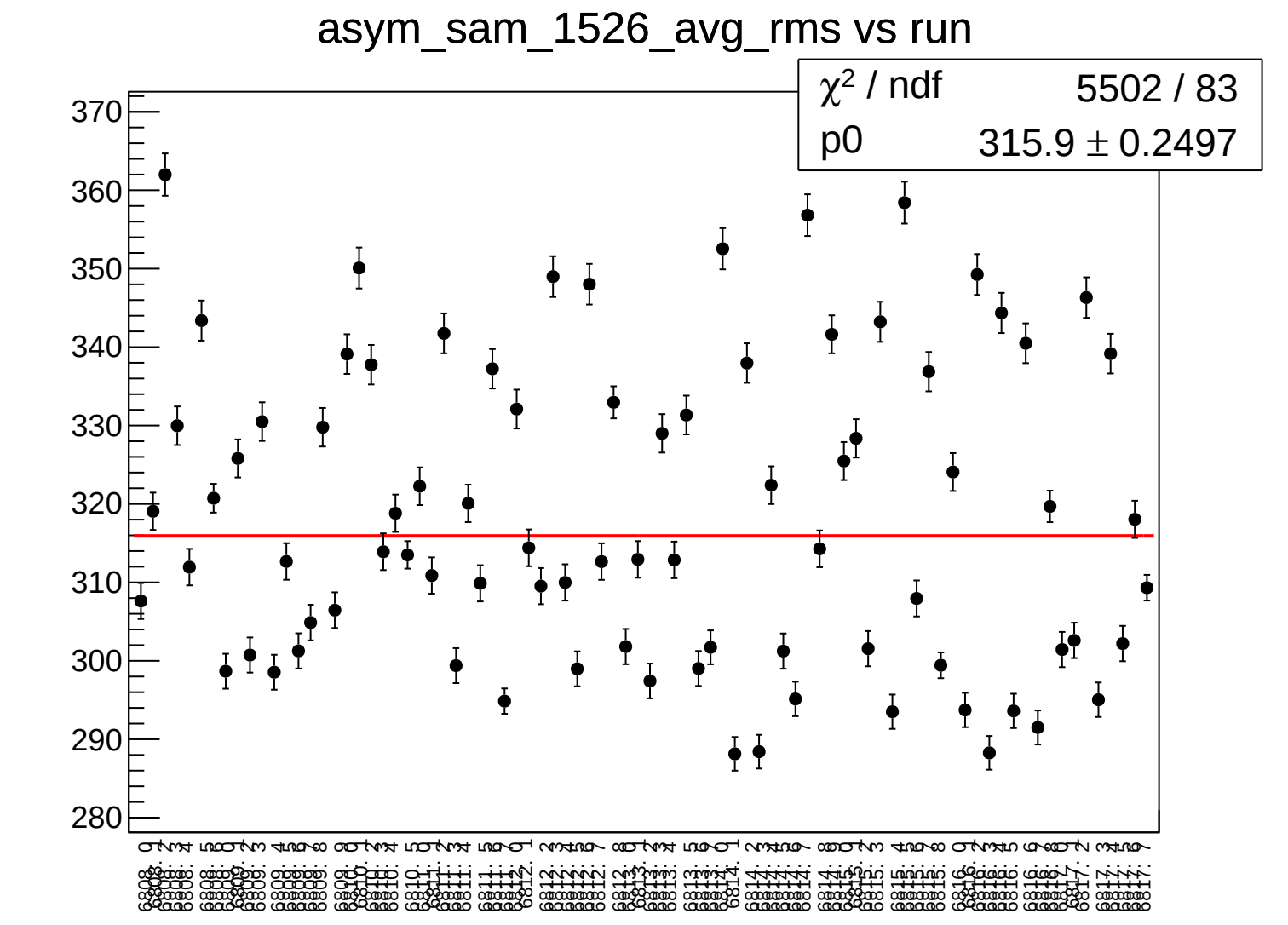

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 126.9 / 83
p0 −254.8 ± 349
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −132.2
Std Dev 195.3
4
3
2
1
0
−1
−2
−3

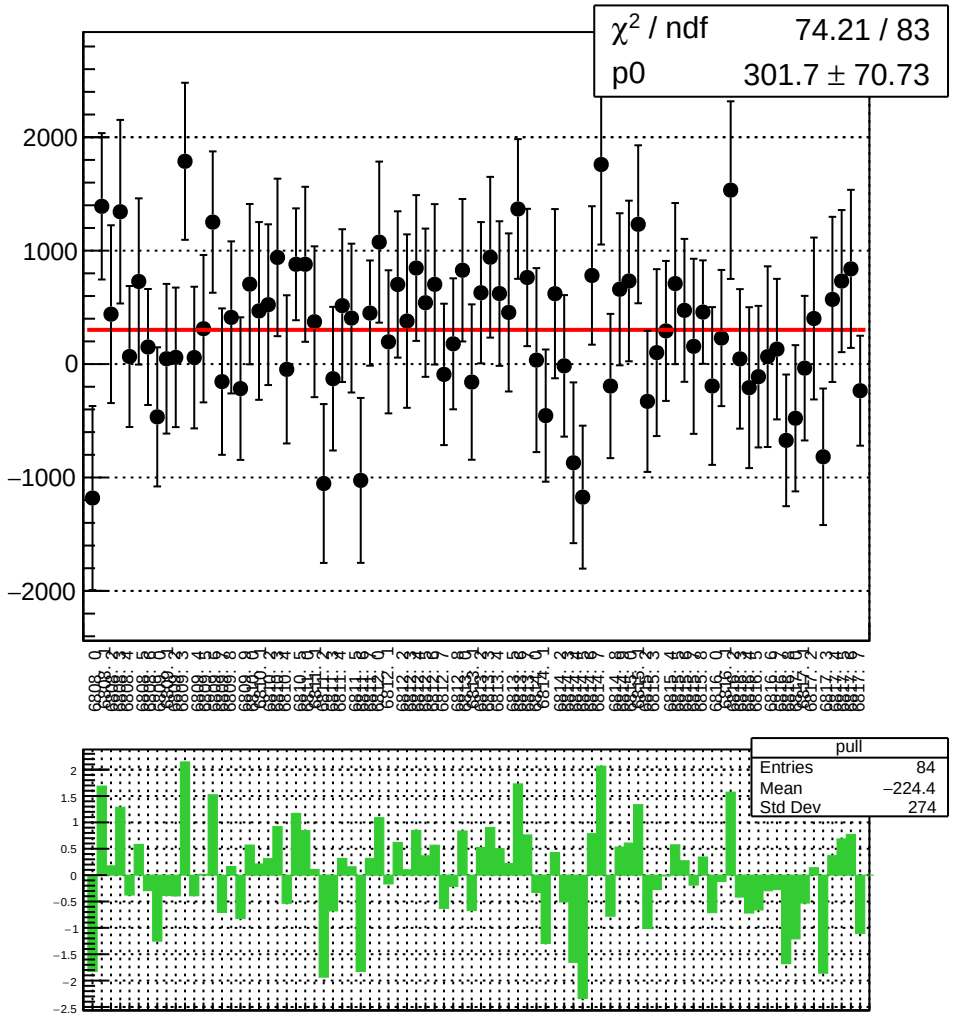

pull1D
Entries 84
Mean −0.01138
Std Dev 1.229
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

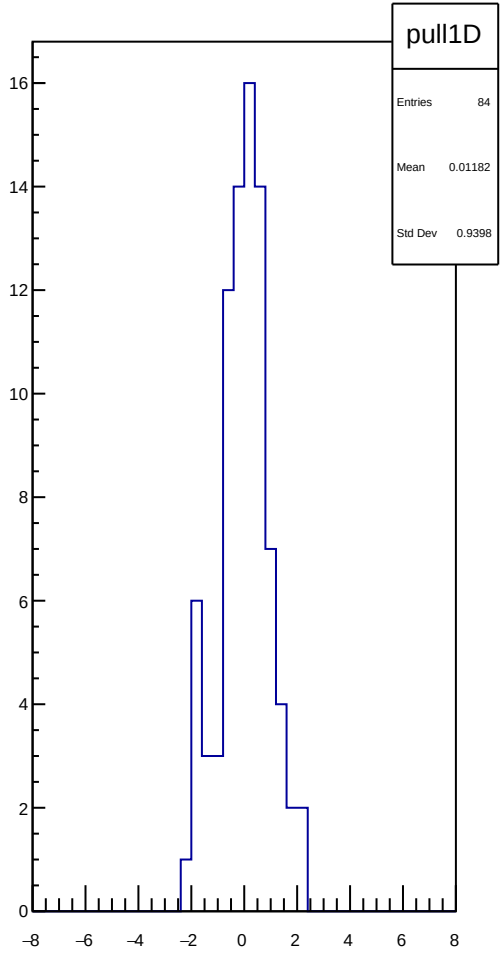

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 5563 / 83
p0 312.2 ± 0.2468
360
350
340
330
320
310
300
290
280

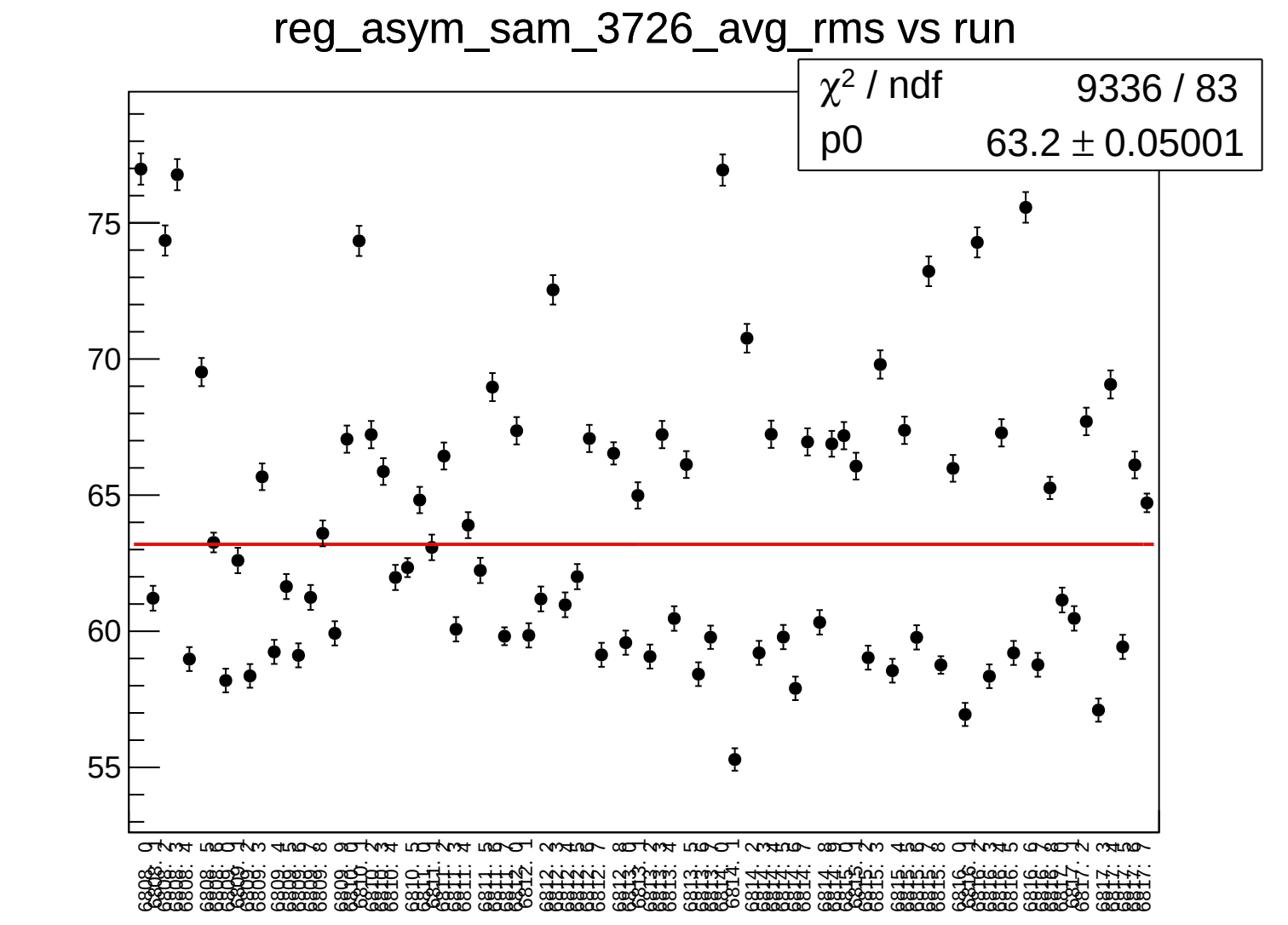

asym_sam_1526_avg_mean vs run
χ² / ndf 120.7 / 83
p0 390.8 ± 353.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −164.7
Std Dev 220
3
2
1
0
−1
−2
−3

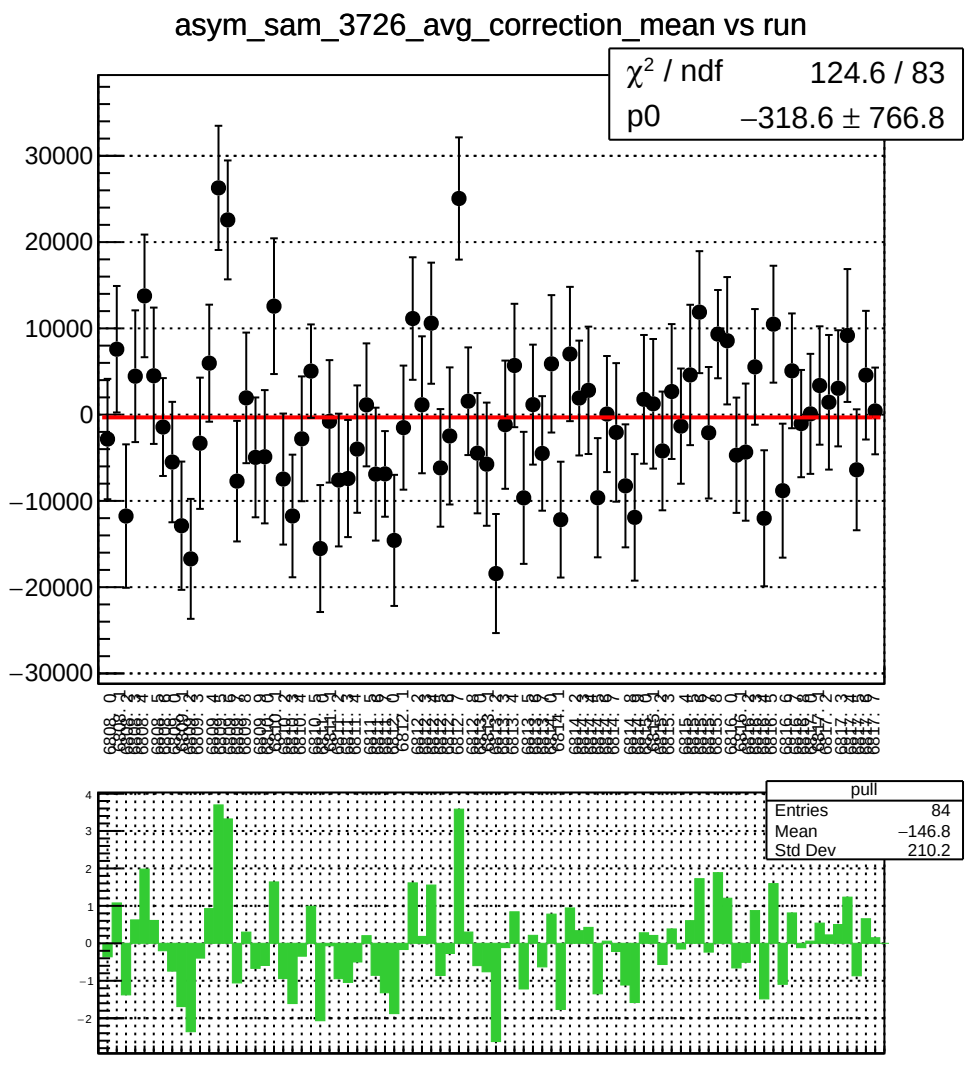

pull1D
Entries 84
Mean 0.01358
Std Dev 1.198
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

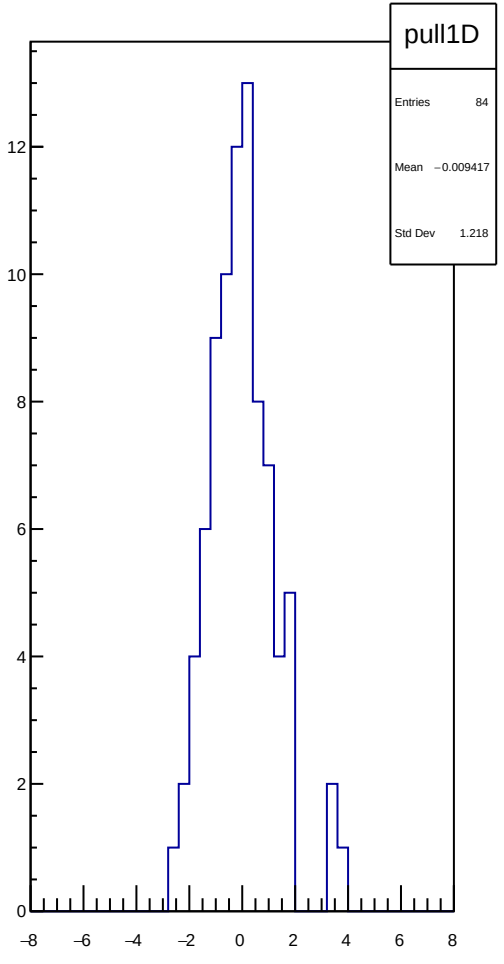

asym_sam_1526_avg_rms vs run
χ^2 / ndf 5502 / 83
p0 315.9 ± 0.2497
370
360
350
340
330
320
310
300
290
280

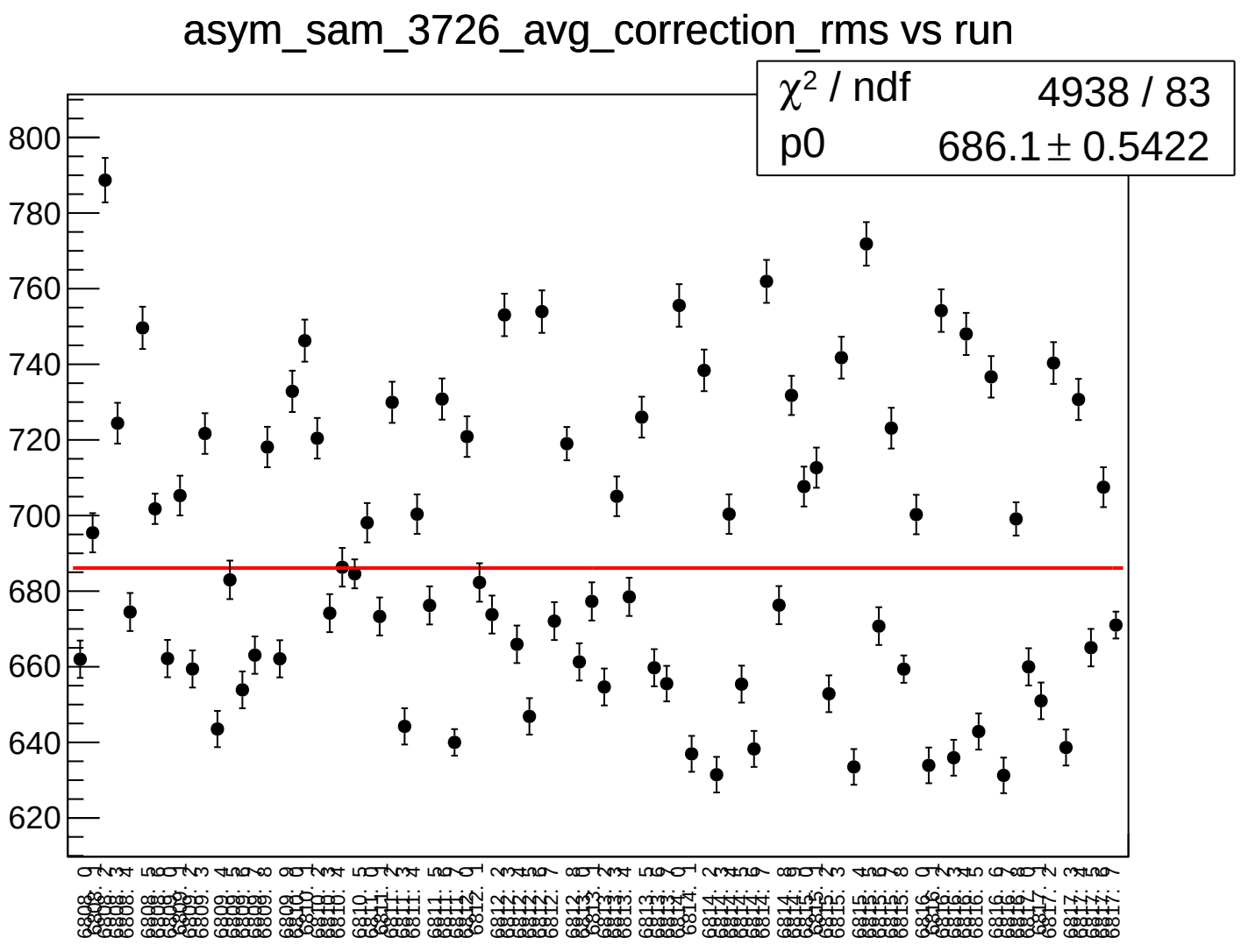

reg_asym_sam_3726_avg_mean vs run
χ^2 / ndf 74.21 / 83
p0 301.7 ± 70.73
2000
1000
0
−1000
−2000
pull
Entries 84
Mean −224.4
Std Dev 274
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

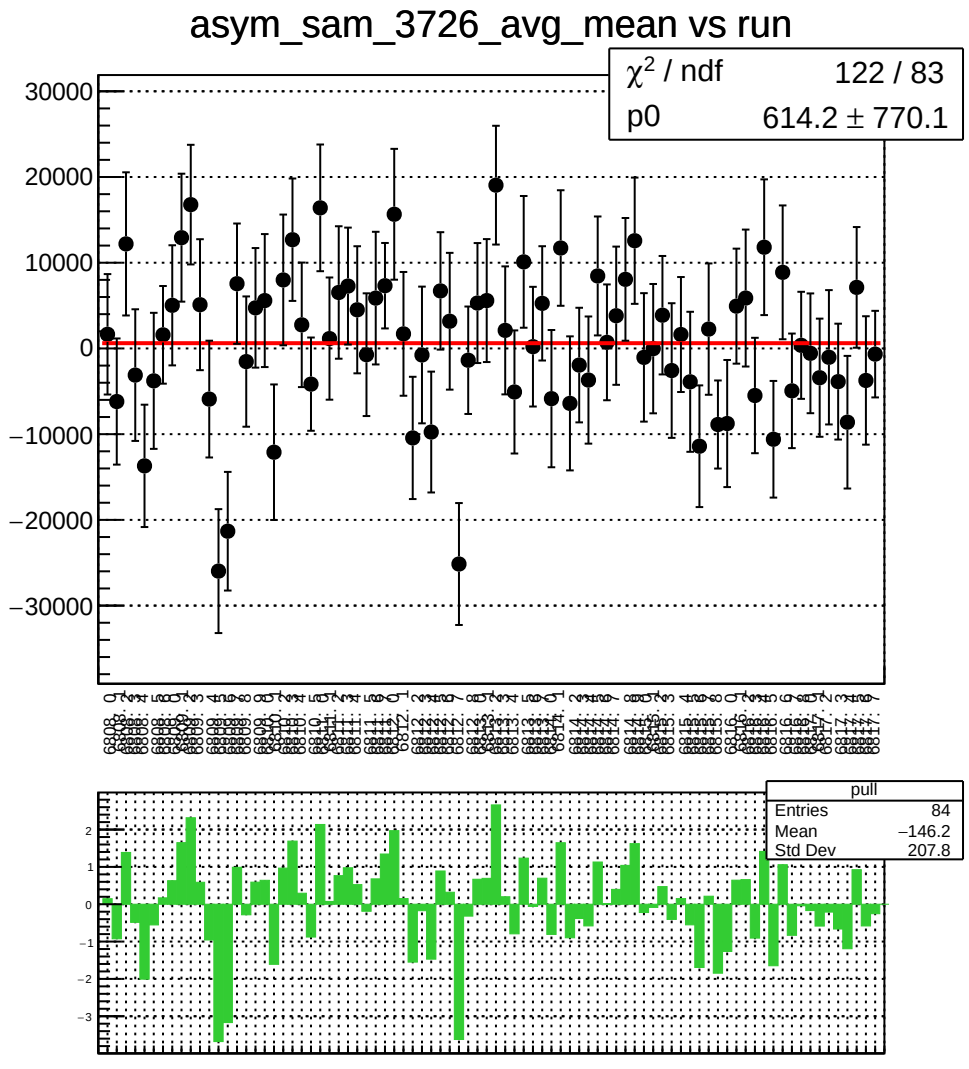

pull1D
Entries 84
Mean 0.01182
Std Dev 0.9398
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

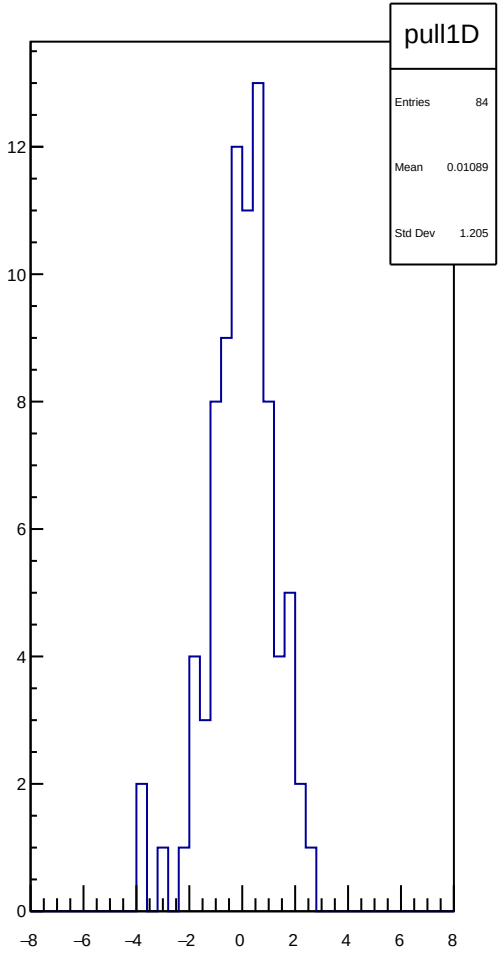

reg_asym_sam_3726_avg_rms vs run
χ^2 / ndf 9336 / 83
p0 63.2 ± 0.05001
75
70
65
60
55

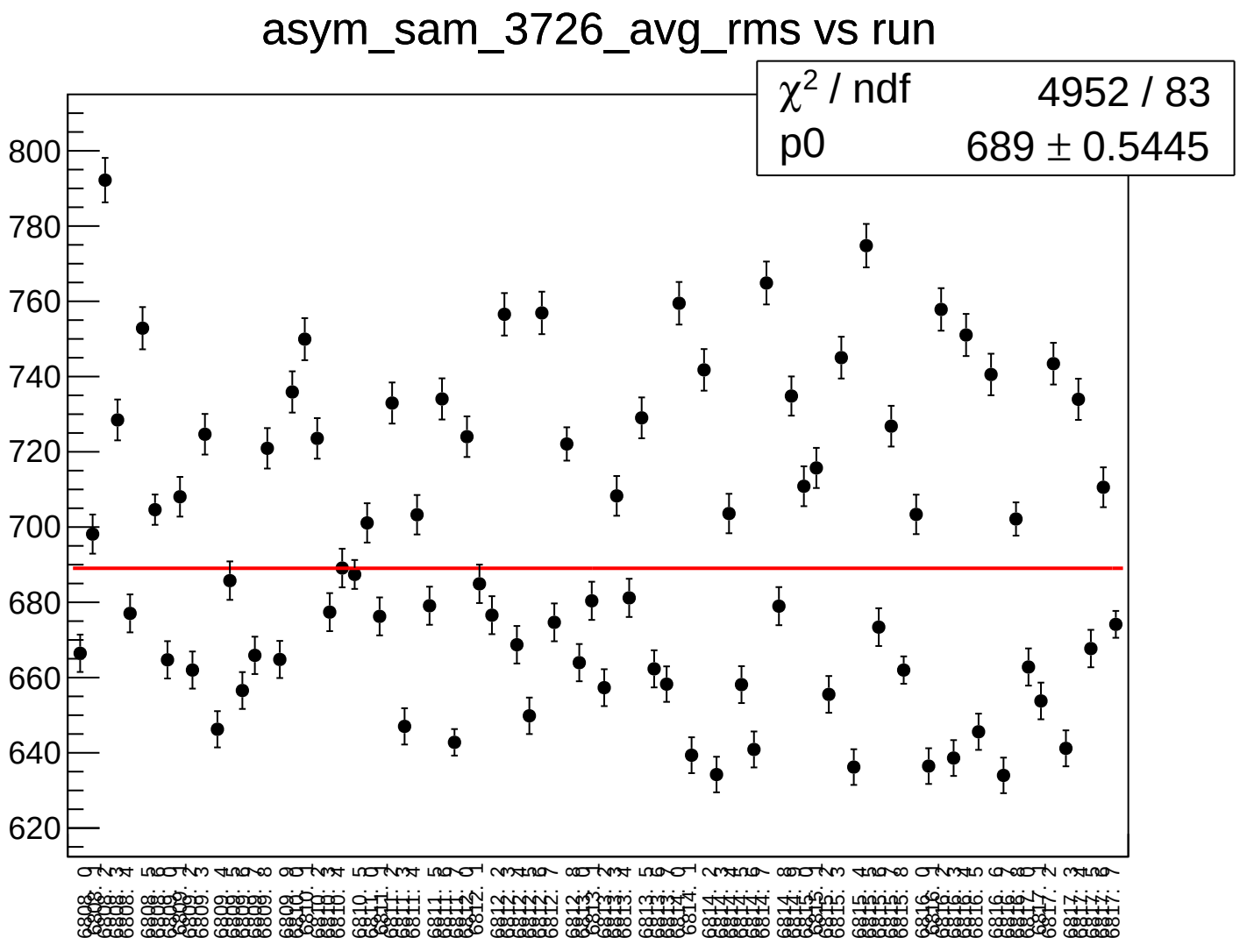

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 124.6 / 83
p0 −318.6 ± 766.8
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −146.8
Std Dev 210.2
4
3
2
1
0
−1
−2

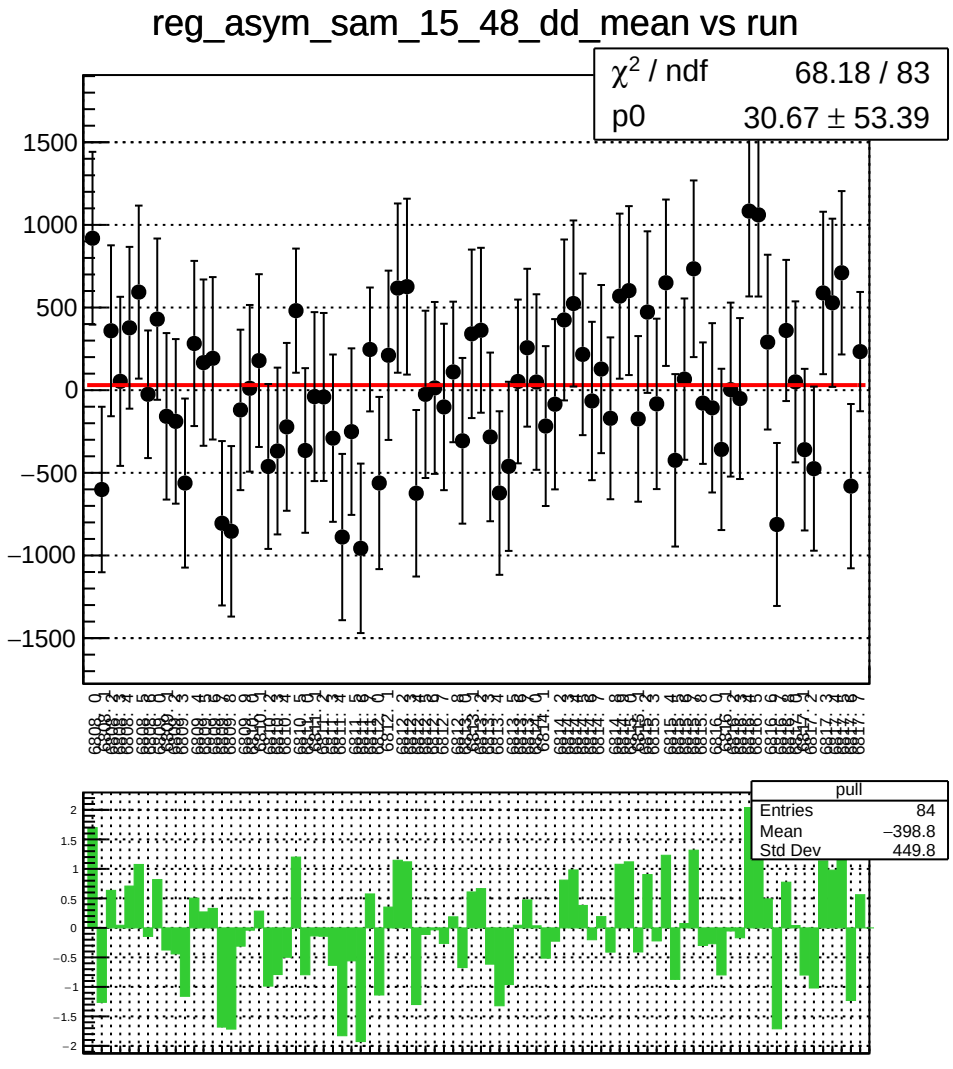

pull1D
Entries 84
Mean −0.009417
Std Dev 1.218
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

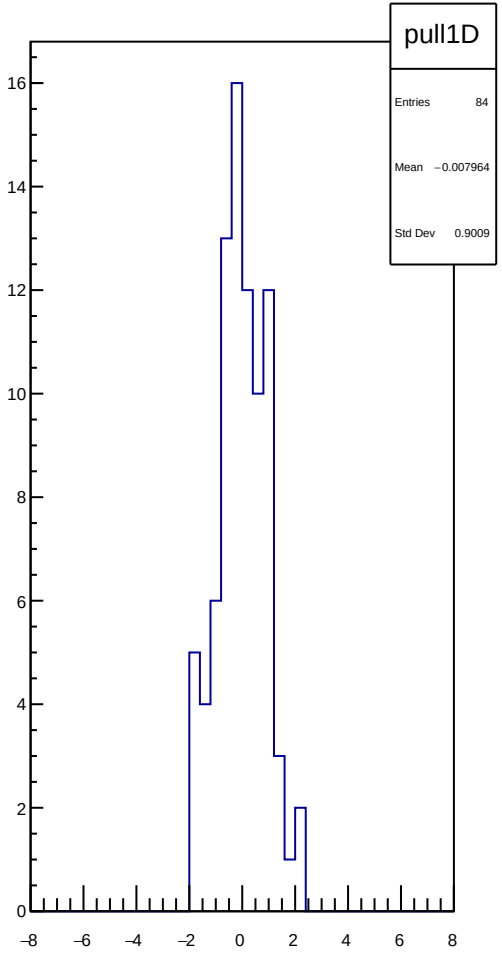

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 4938 / 83
p0 686.1 ± 0.5422
800
780
760
740
720
700
680
660
640
620

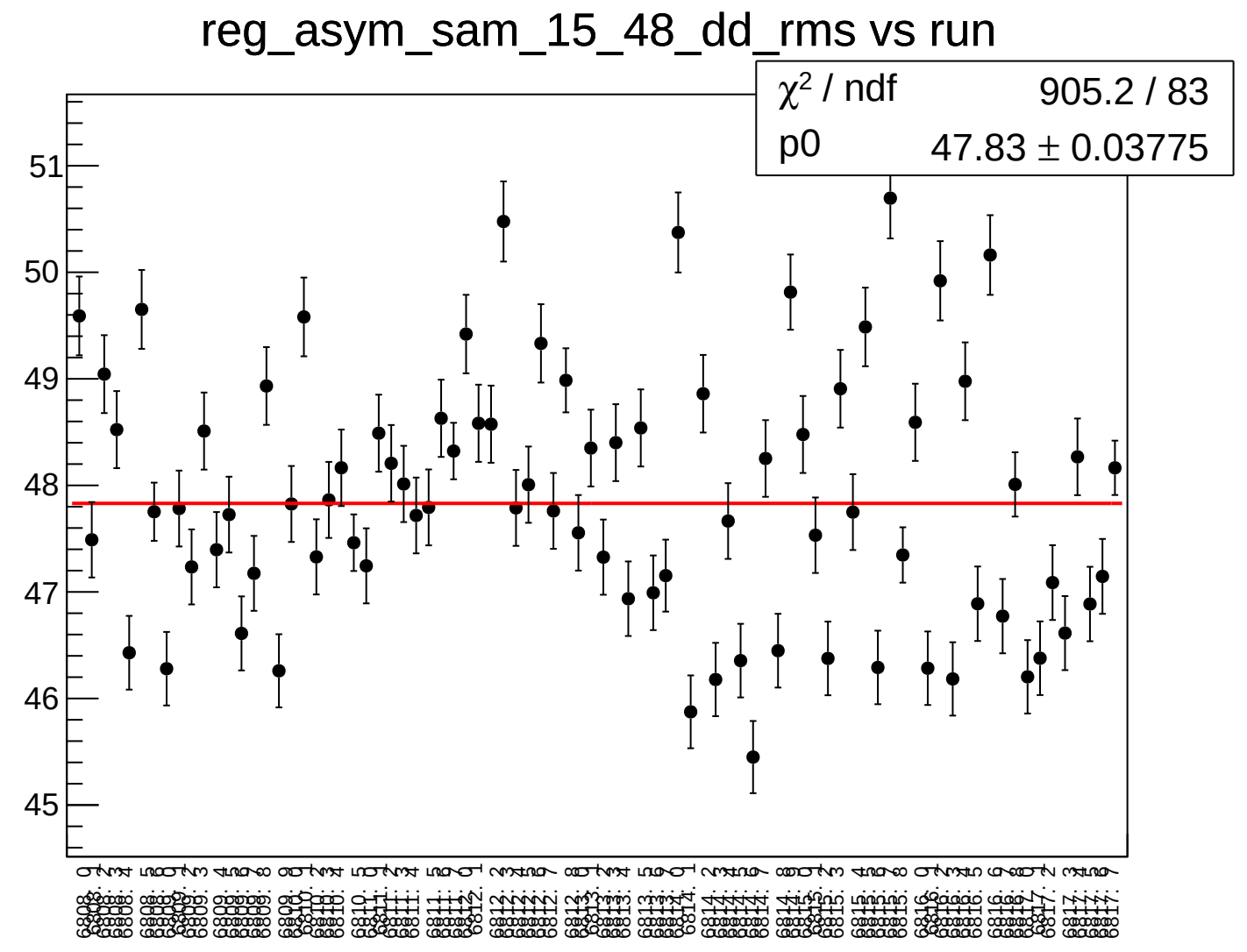

asym_sam_3726_avg_mean vs run
χ² / ndf 122 / 83
p0 614.2 ± 770.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −146.2
Std Dev 207.8
2
1
0
−1
−2
−3

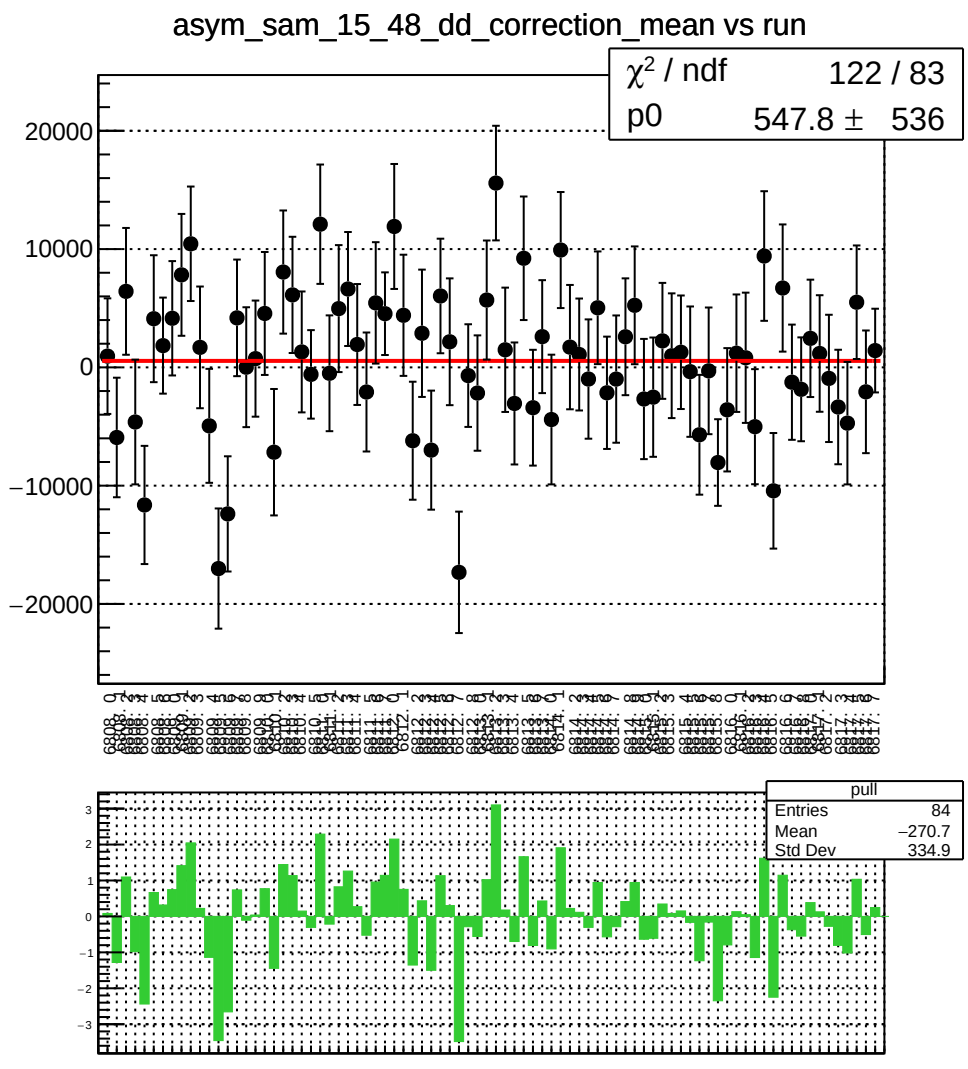

pull1D
Entries 84
Mean 0.01089
Std Dev 1.205
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

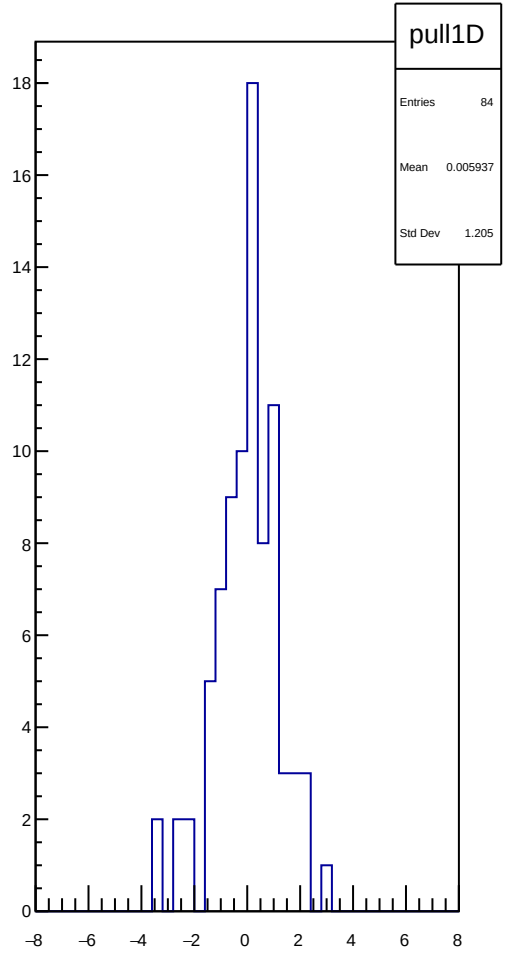

asym_sam_3726_avg_rms vs run
χ^2 / ndf 4952 / 83
p0 689 ± 0.5445
800
780
760
740
720
700
680
660
640
620

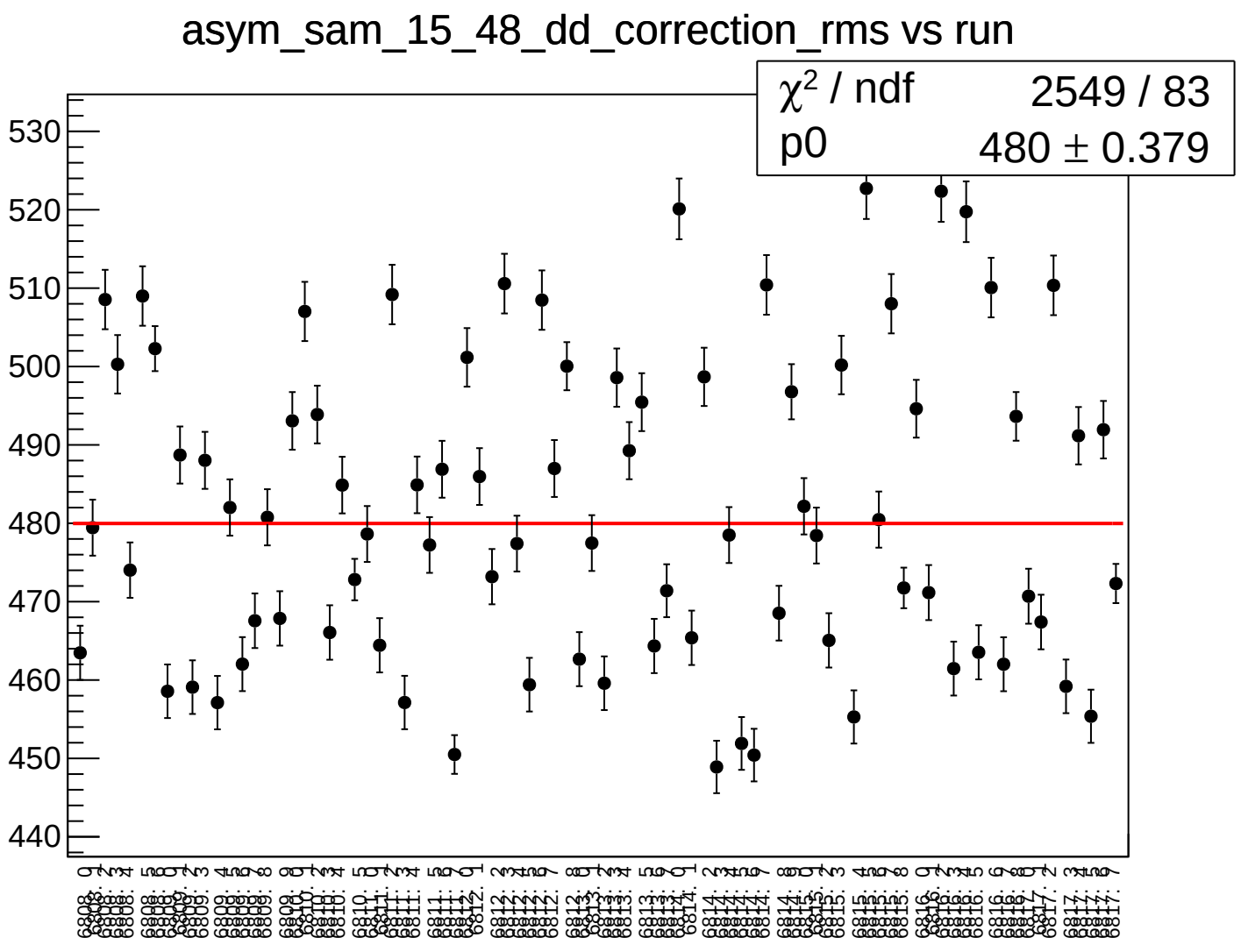

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 68.18 / 83
p0 30.67 ± 53.39
pull
Entries 84
Mean −398.8
Std Dev 449.8

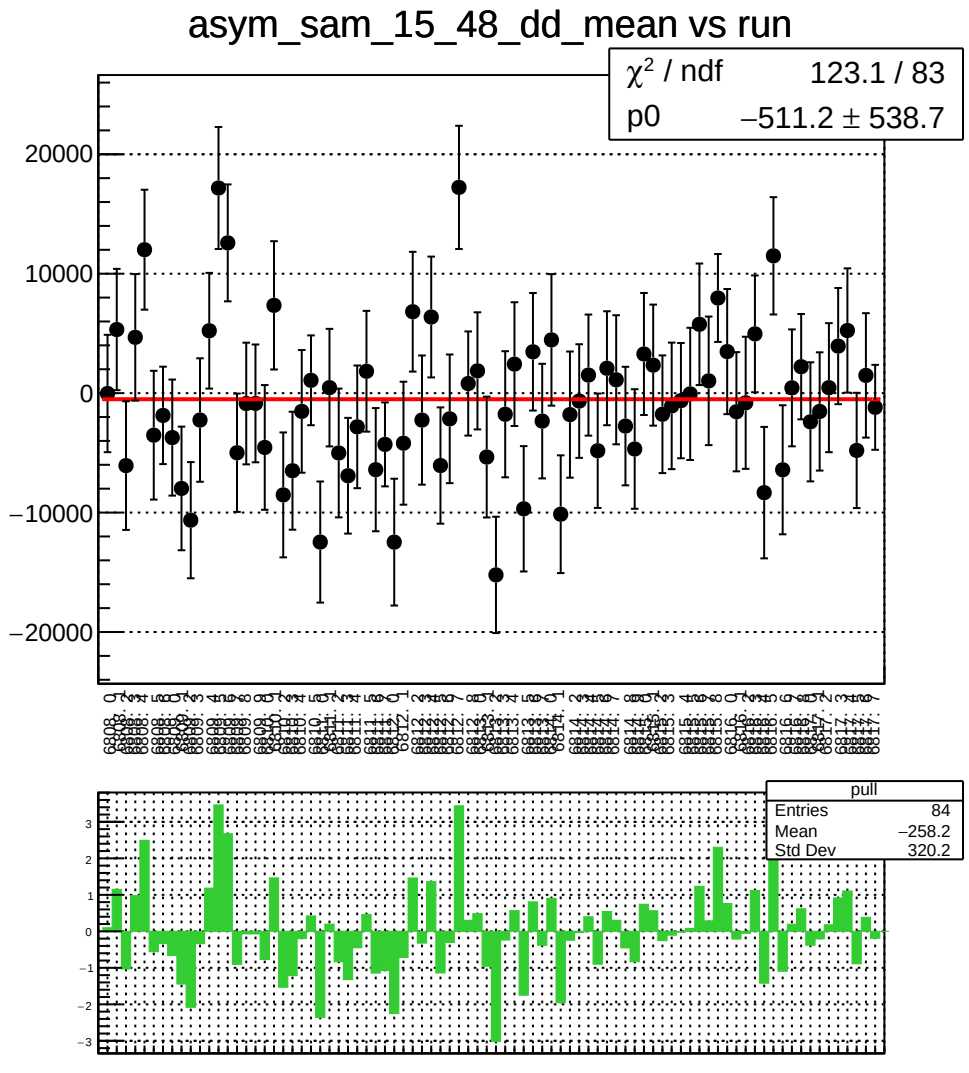

pull1D
Entries 84
Mean −0.007964
Std Dev 0.9009

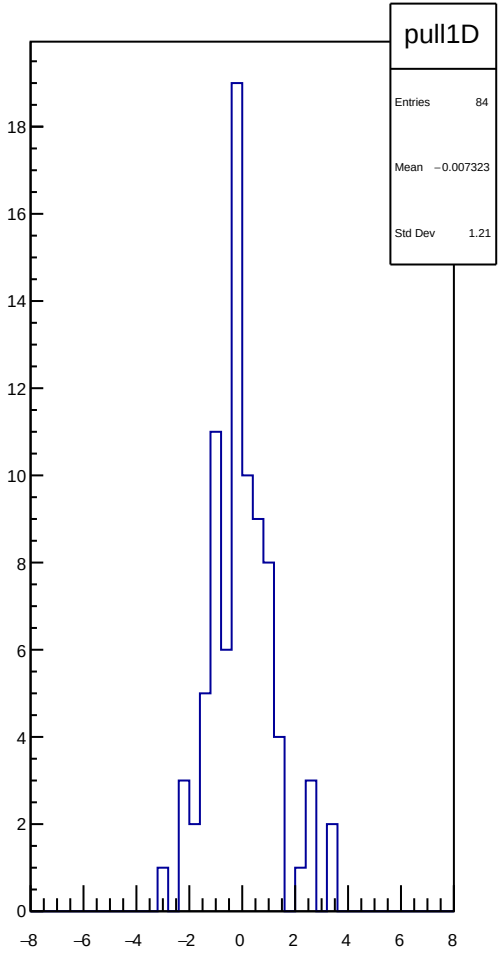

reg_asym_sam_15_48_dd_rms vs run
χ^2 / ndf 905.2 / 83
p0 47.83 ± 0.03775
51
50
49
48
47
46
45

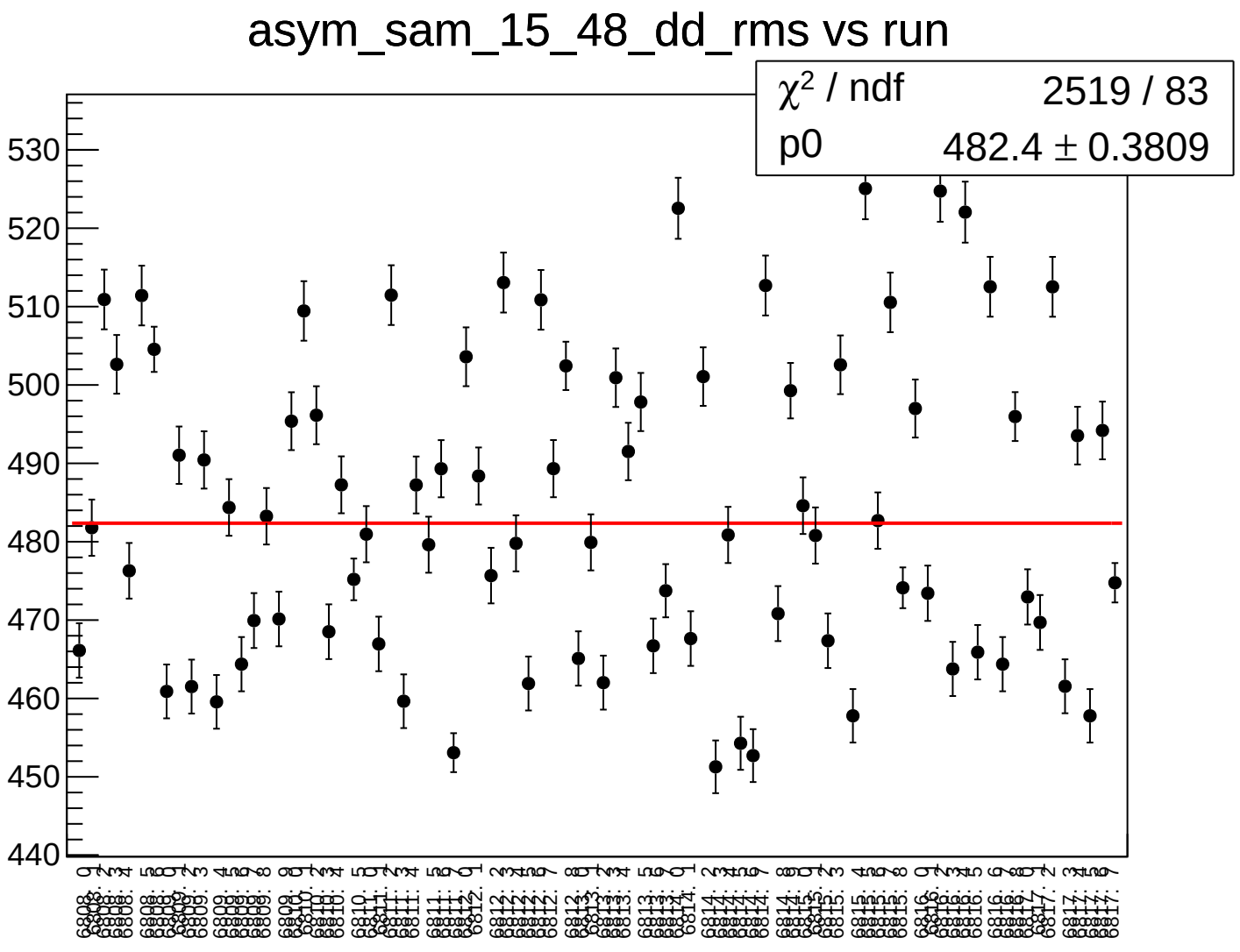

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 122 / 83
p0 547.8 ± 536
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −270.7
Std Dev 334.9
3
2
1
0
−1
−2
−3

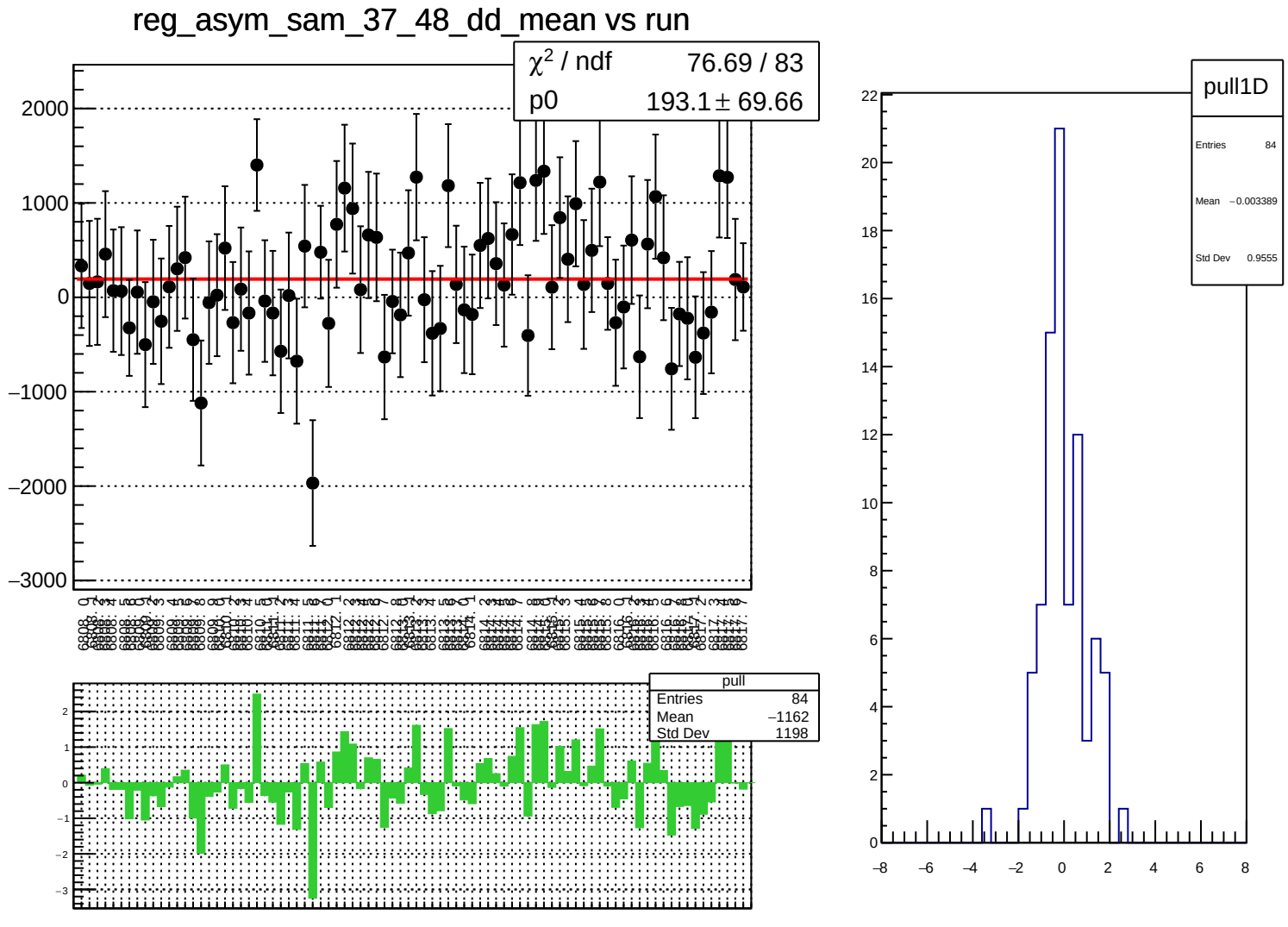

pull1D
Entries 84
Mean 0.005937
Std Dev 1.205
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

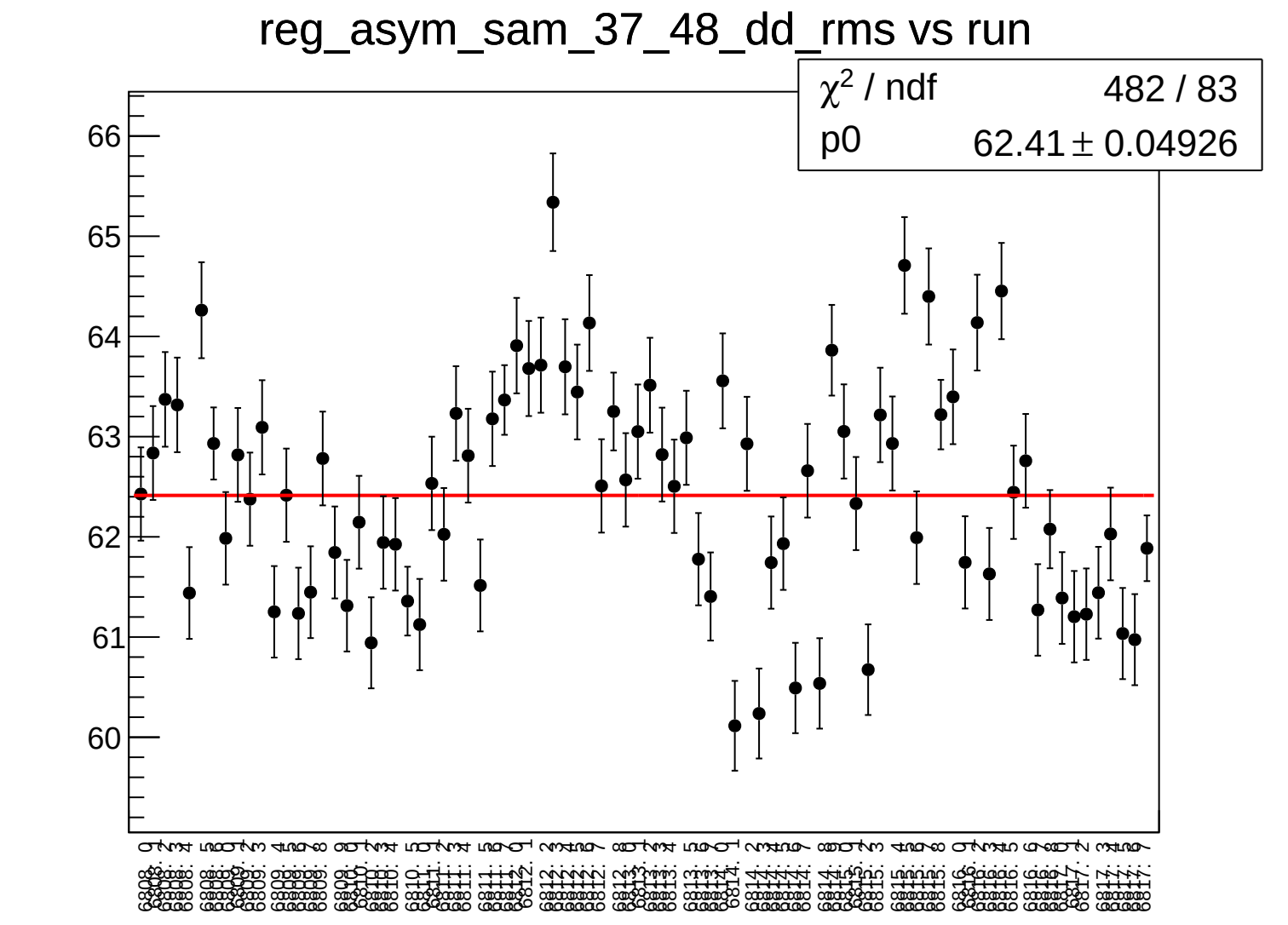

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 2549 / 83
p0 480 ± 0.379
530
520
510
500
490
480
470
460
450
440

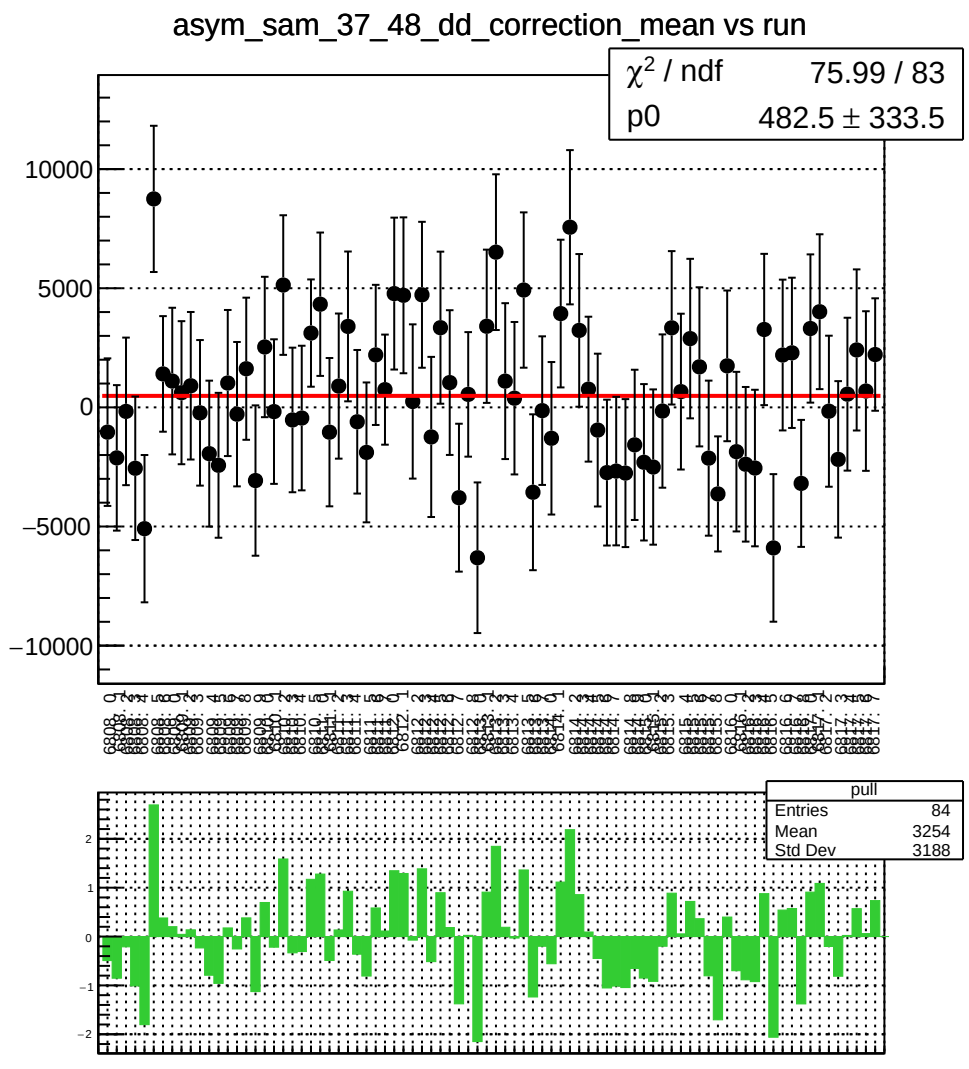

asym_sam_15_48_dd_mean vs run
χ² / ndf 123.1 / 83
p0 −511.2 ± 538.7
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −258.2
Std Dev 320.2
3
2
1
0
−1
−2
−3

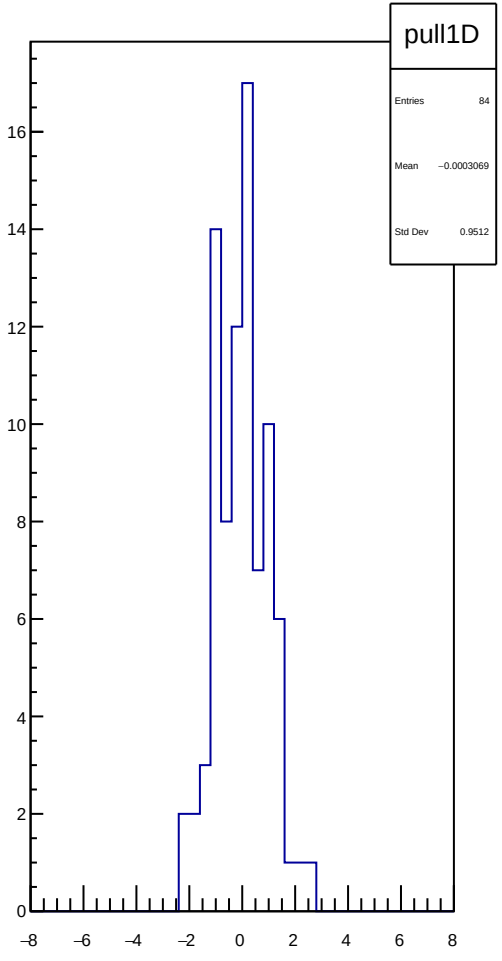

pull1D
Entries 84
Mean −0.007323
Std Dev 1.21
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

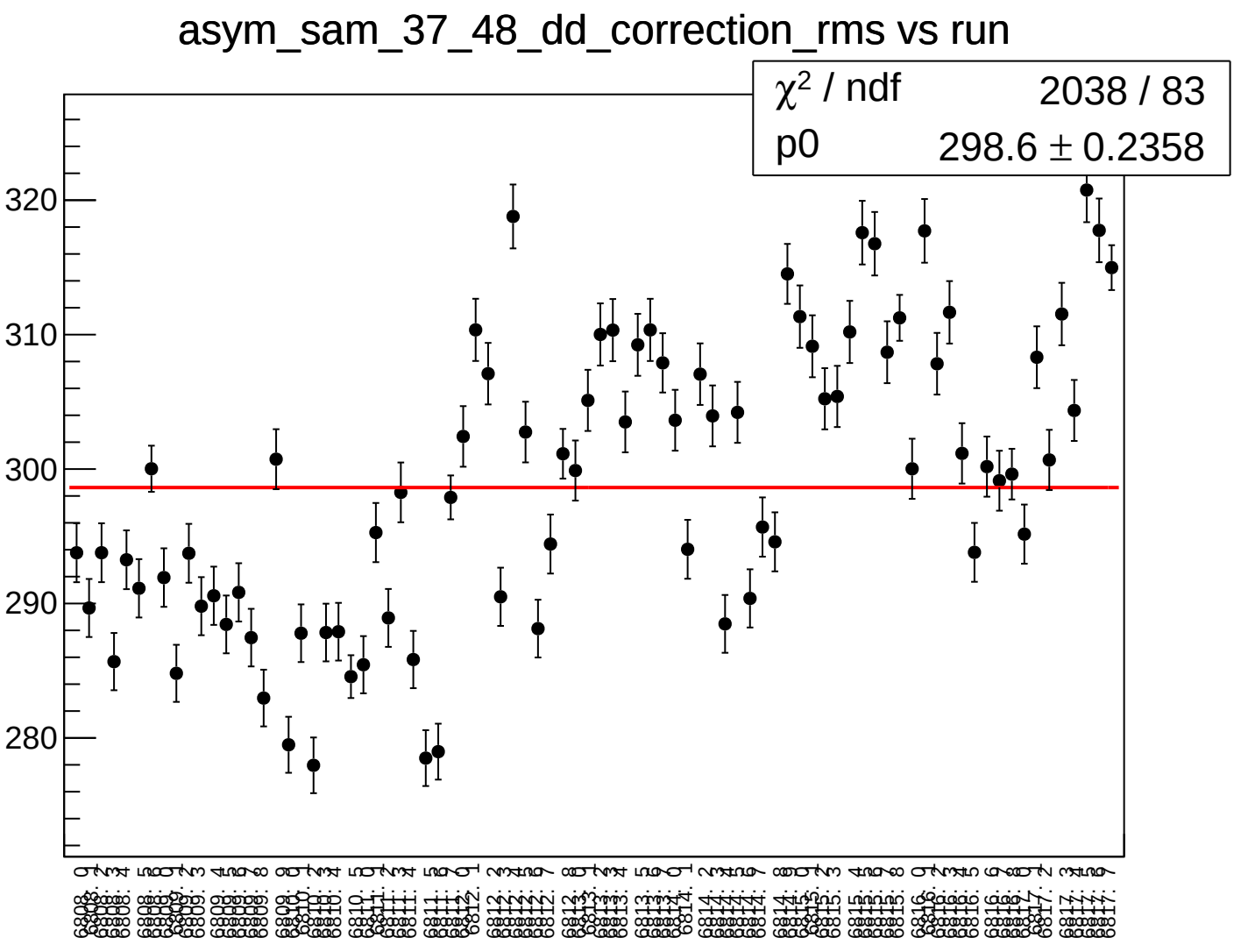

asym_sam_15_48_dd_rms vs run
χ^2 / ndf 2519 / 83
p0 482.4 ± 0.3809
530
520
510
500
490
480
470
460
450
440

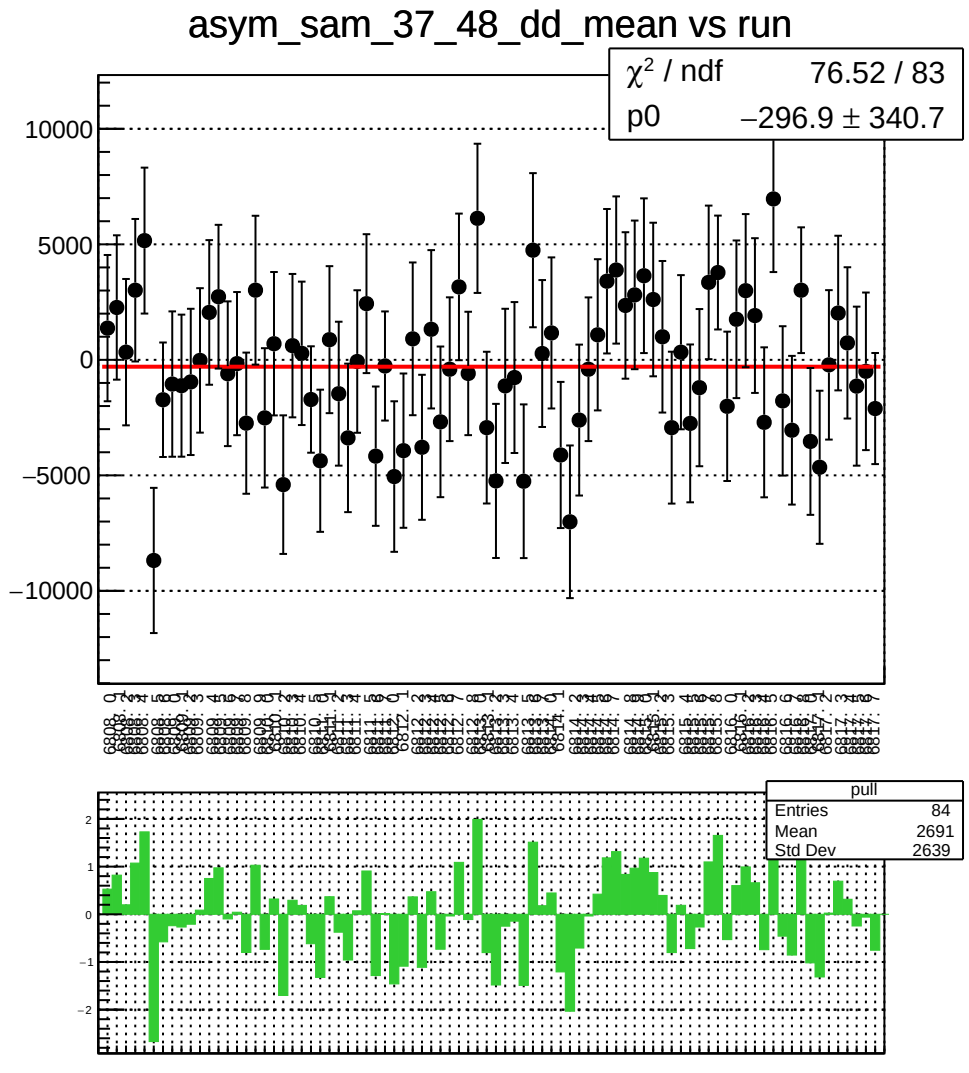

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 76.69 / 83
p0 193.1 ± 69.66
2000
1000
0
−1000
−2000
−3000
pull
Entries 84
Mean −1162
Std Dev 1198
2
1
0
−1
−2
−3
pull1D
Entries 84
Mean −0.003389
Std Dev 0.9555
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

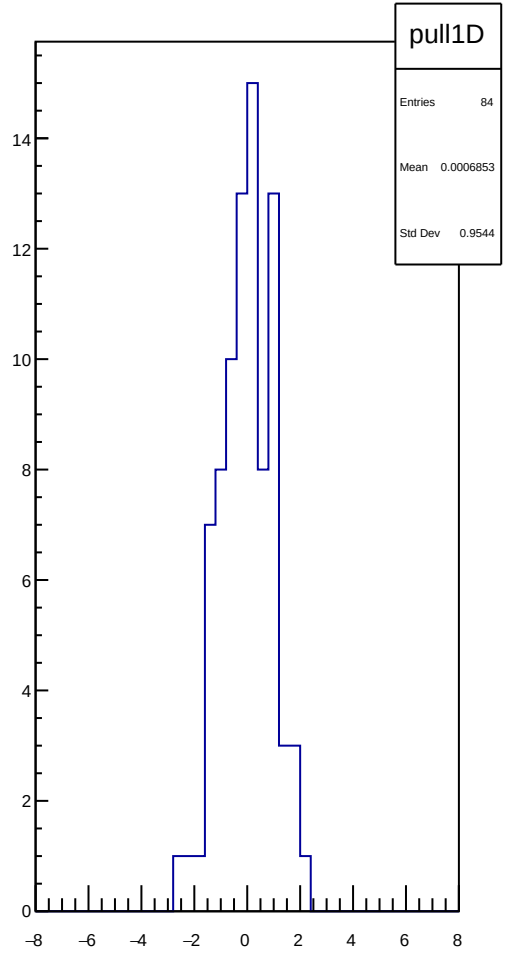

reg_asym_sam_37_48_dd_rms vs run
χ^2 / ndf 482 / 83
p0 62.41 ± 0.04926
66
65
64
63
62
61
60

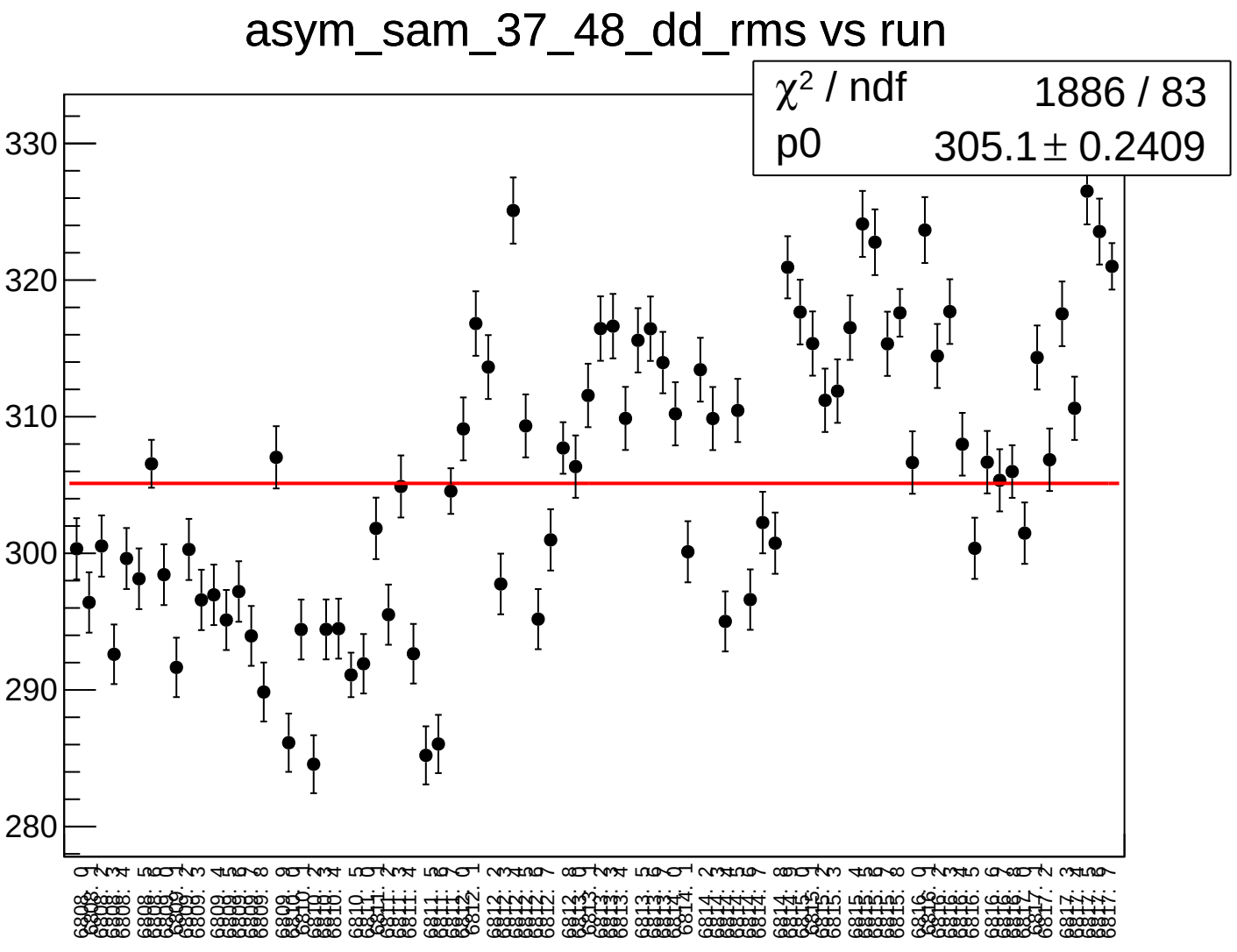

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 75.99 / 83
p0 482.5 ± 333.5
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 3254
Std Dev 3188
2
1
0
−1
−2

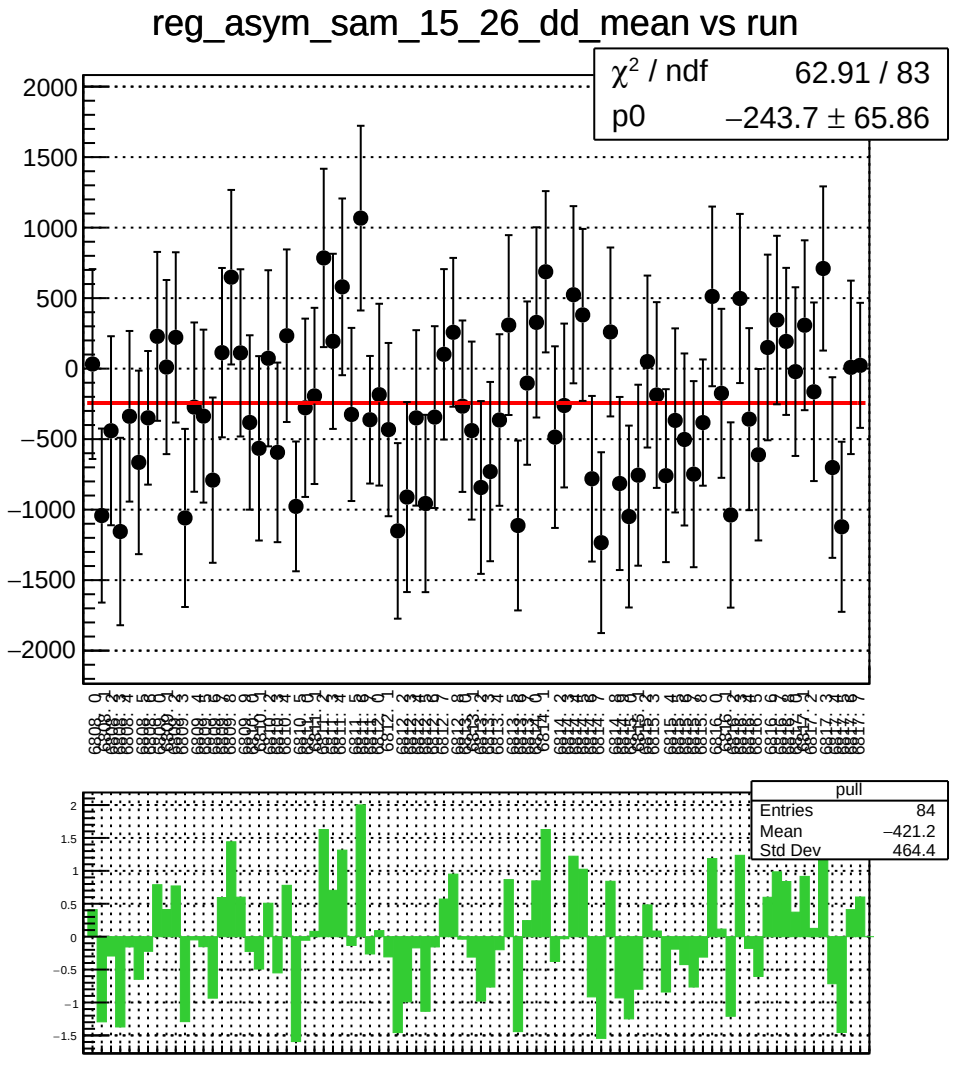

pull1D
Entries 84
Mean −0.0003069
Std Dev 0.9512
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

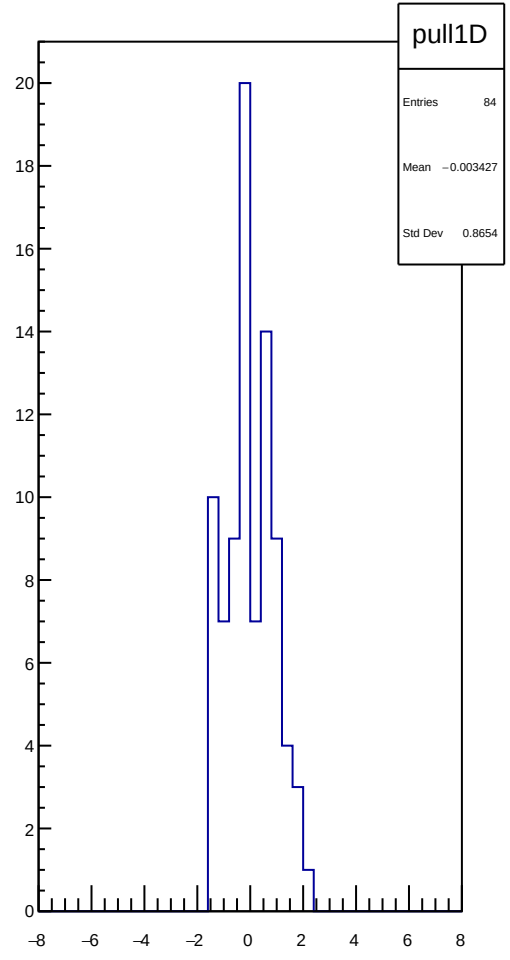

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 2038 / 83
p0 298.6 ± 0.2358
320
310
300
290
280

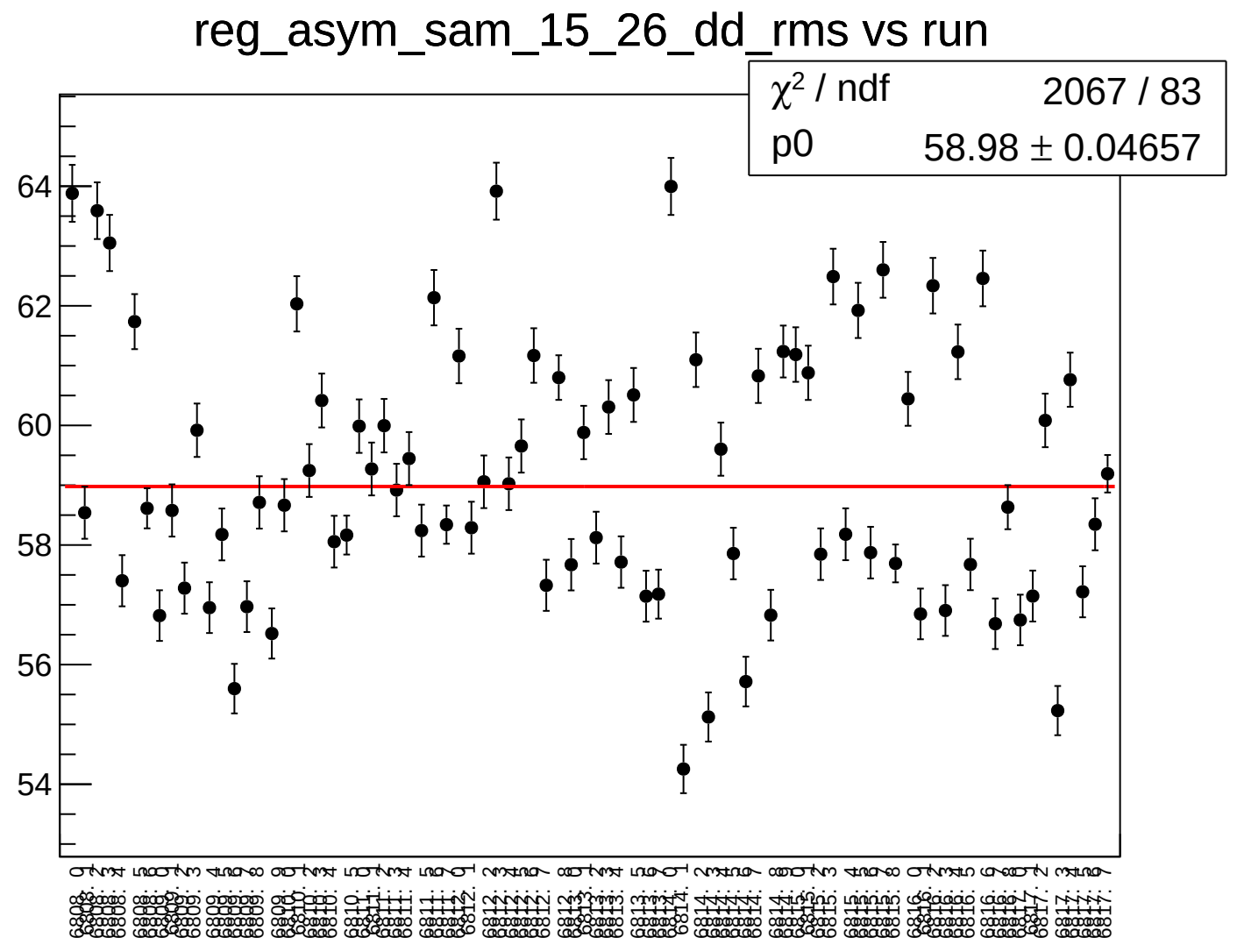

asym_sam_37_48_dd_mean vs run
χ² / ndf 76.52 / 83
p0 −296.9 ± 340.7
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 2691
Std Dev 2639
2
1
0
−1
−2

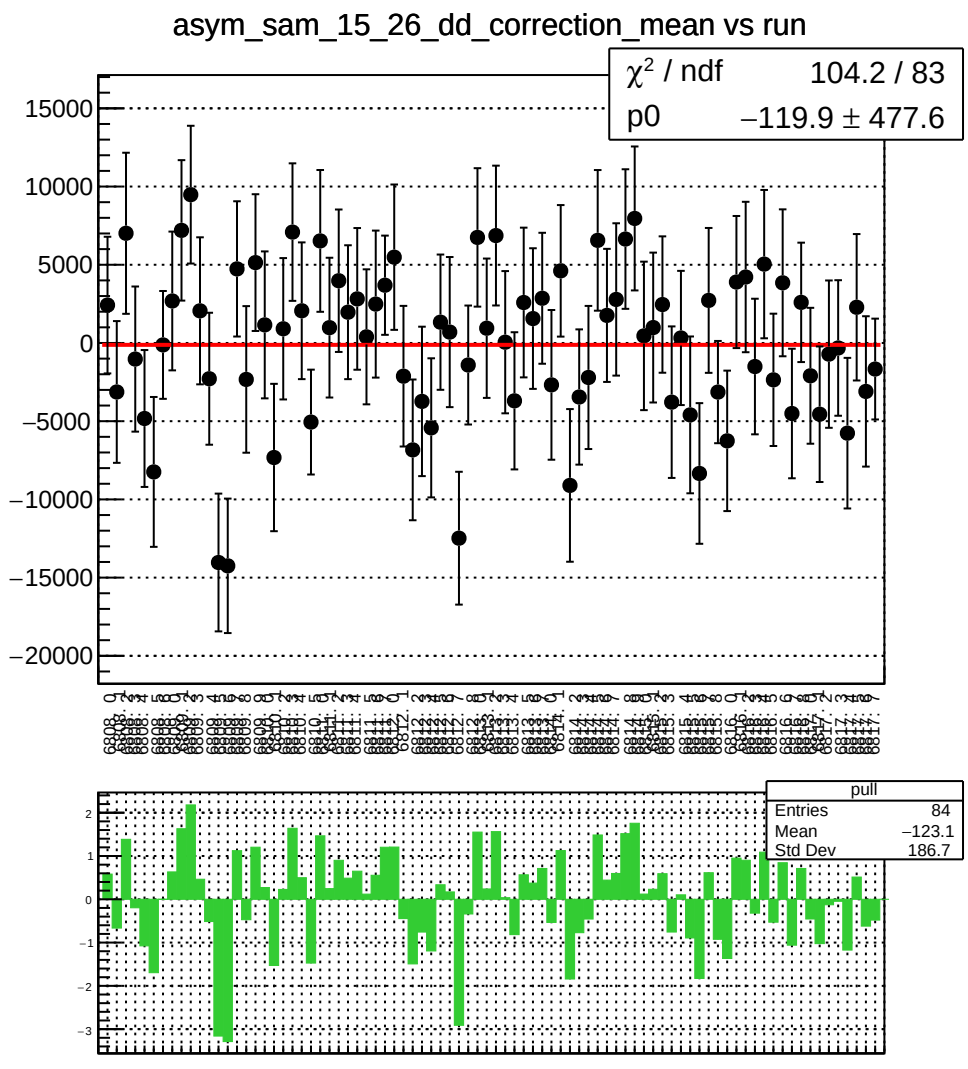

pull1D
Entries 84
Mean 0.0006853
Std Dev 0.9544
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

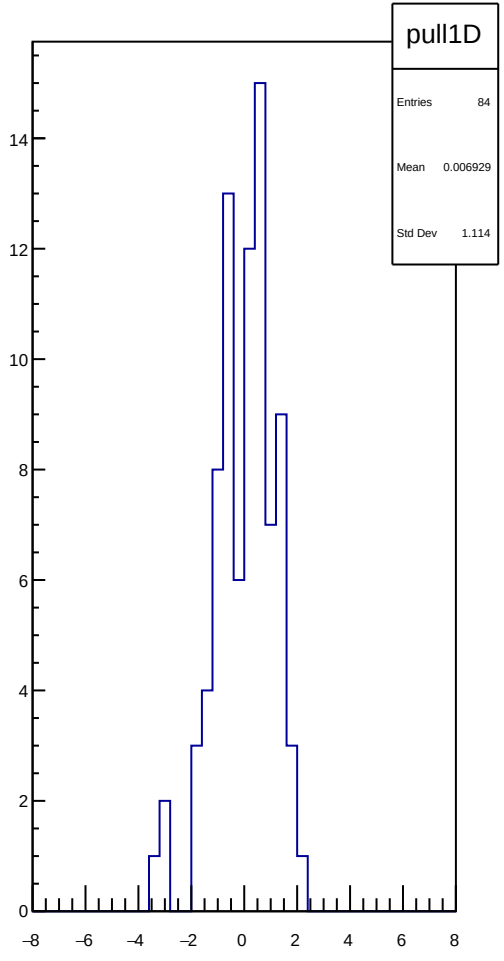

asym_sam_37_48_dd_rms vs run
χ² / ndf 1886 / 83
p0 305.1 ± 0.2409
330
320
310
300
290
280

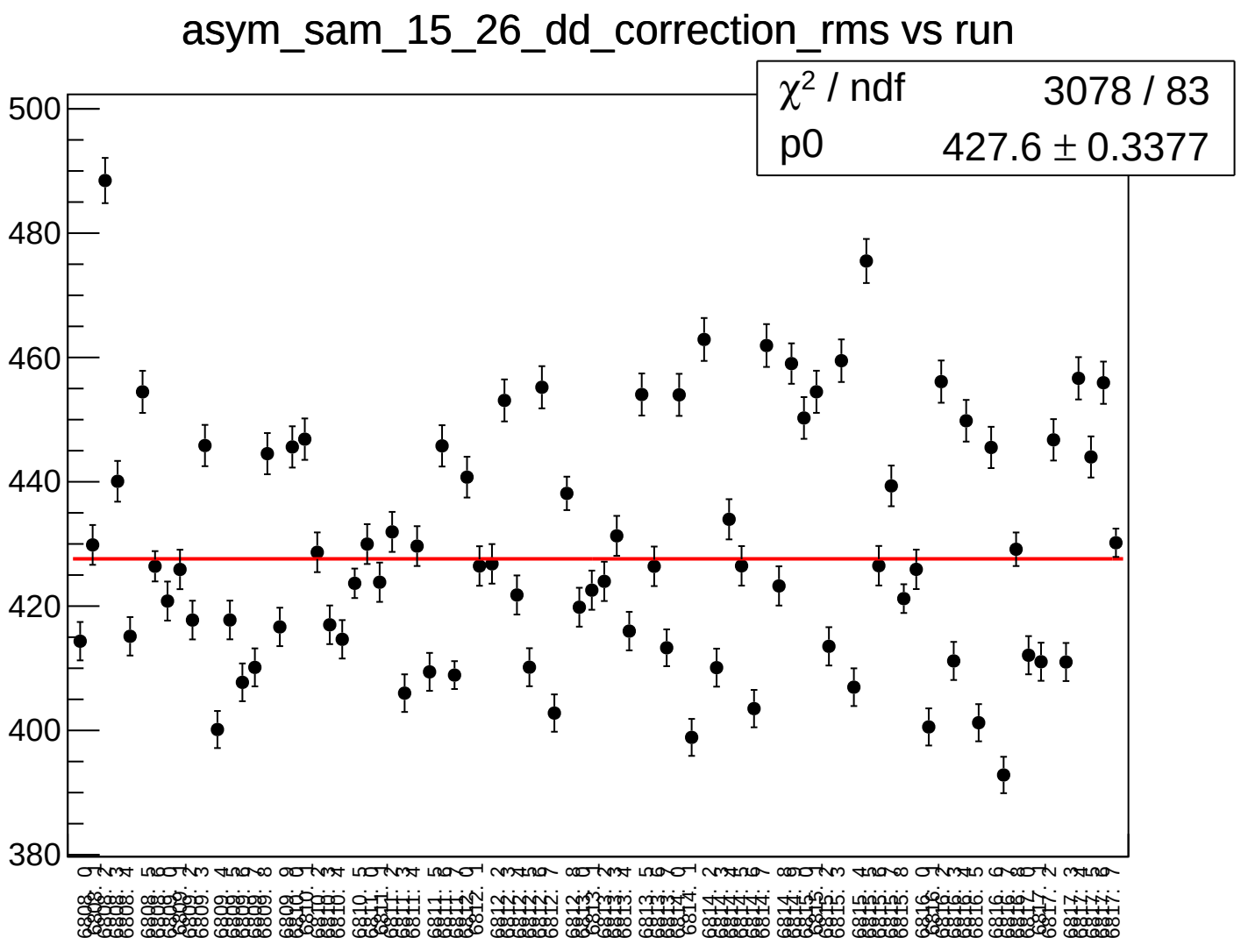

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 62.91 / 83
p0 −243.7 ± 65.86
pull
Entries 84
Mean −421.2
Std Dev 464.4

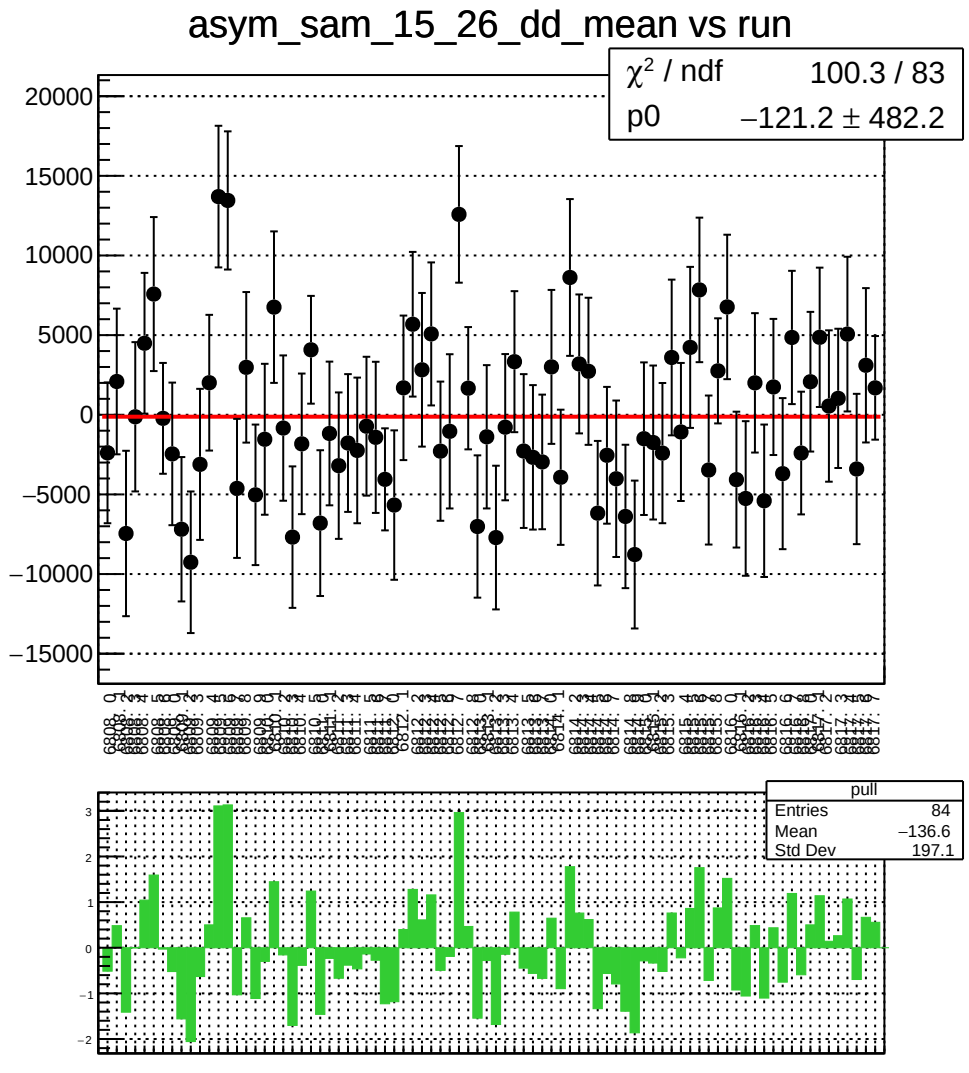

pull1D
Entries 84
Mean −0.003427
Std Dev 0.8654

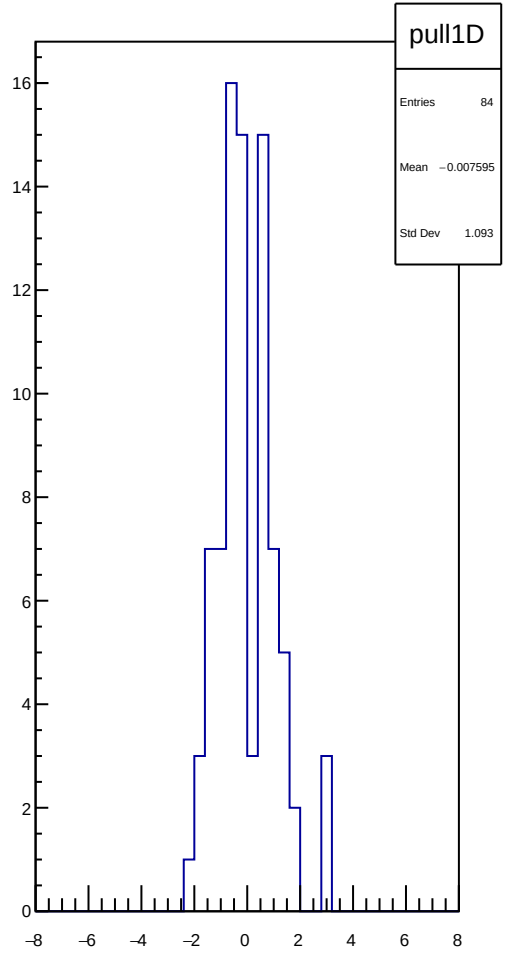

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 2067 / 83
p0 58.98 ± 0.04657
64
62
60
58
56
54

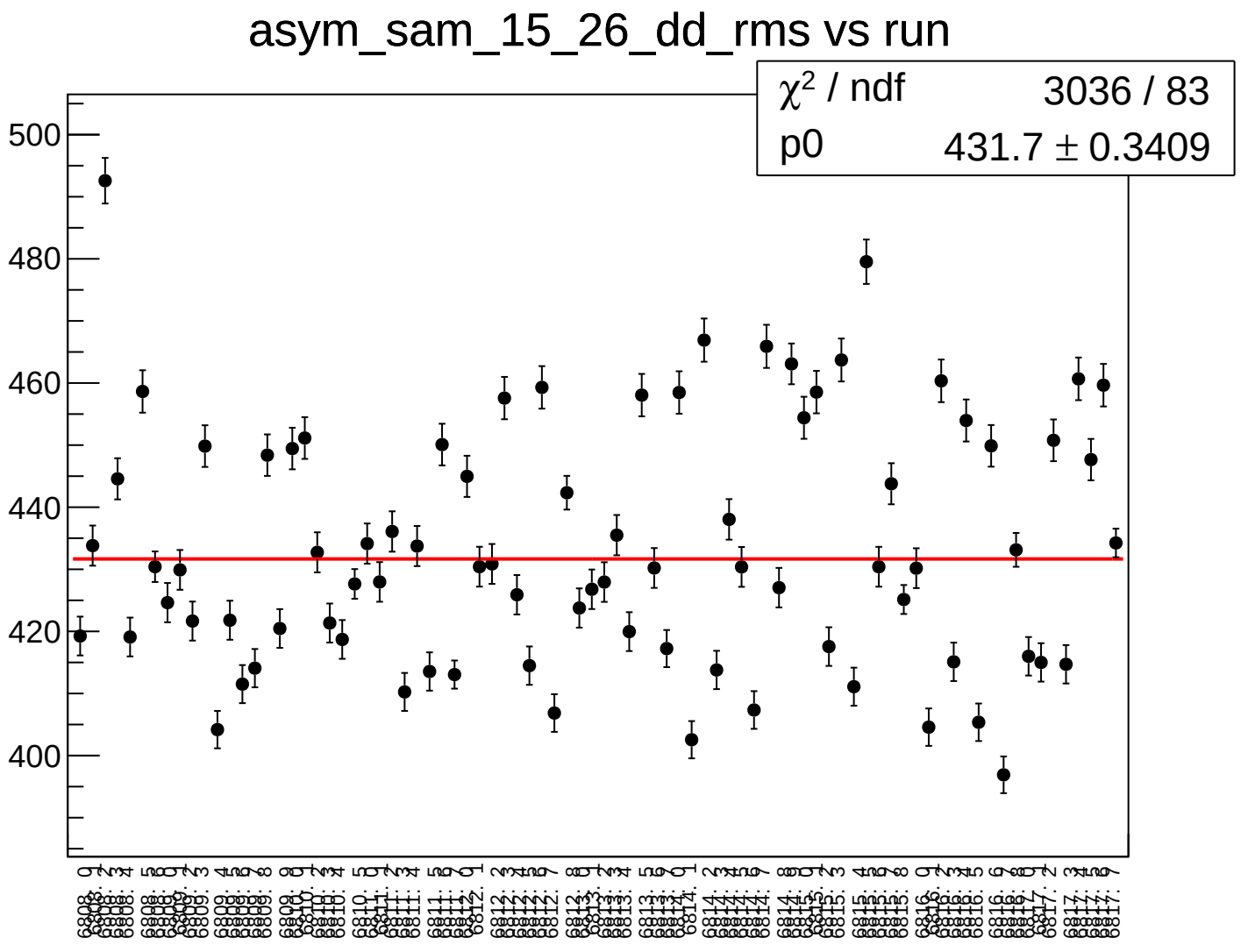

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 104.2 / 83
p0 −119.9 ± 477.6
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 84
Mean −123.1
Std Dev 186.7
2
1
0
−1
−2
−3

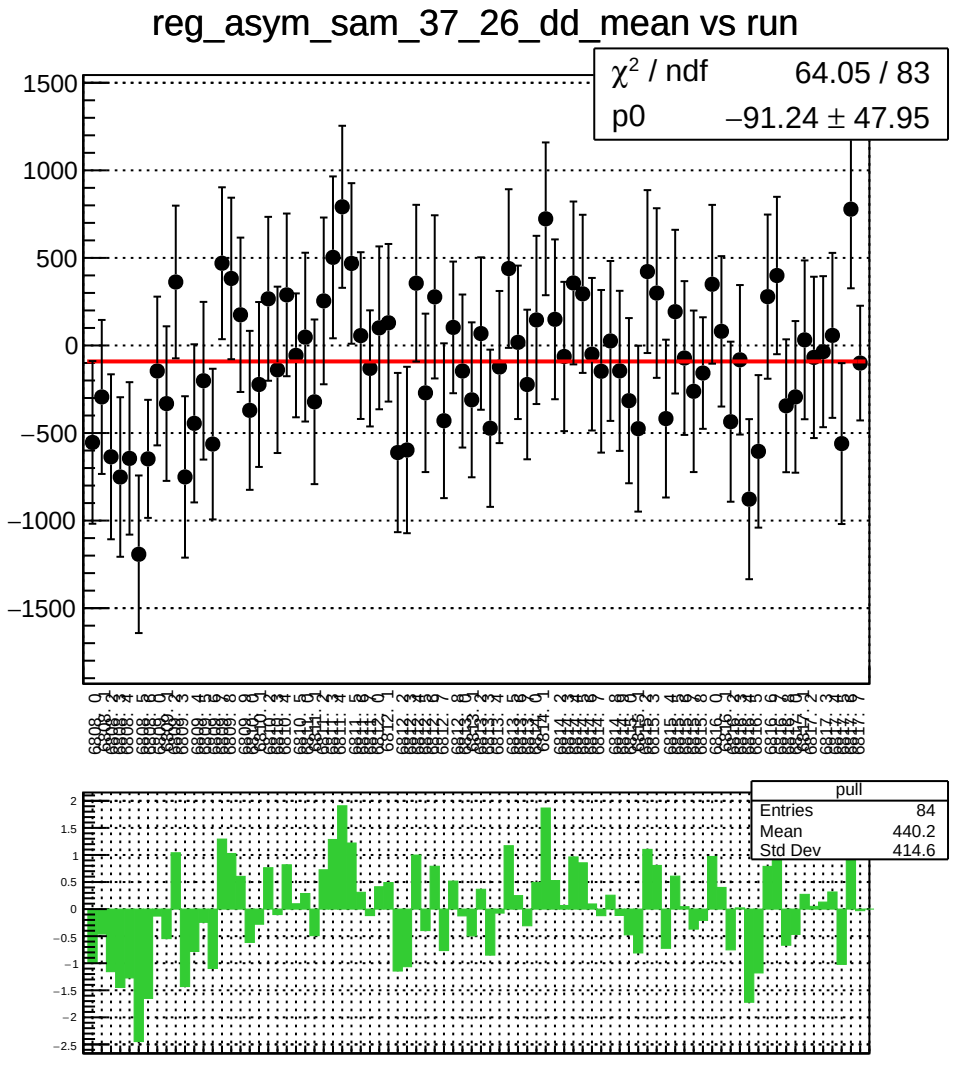

pull1D
Entries 84
Mean 0.006929
Std Dev 1.114
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

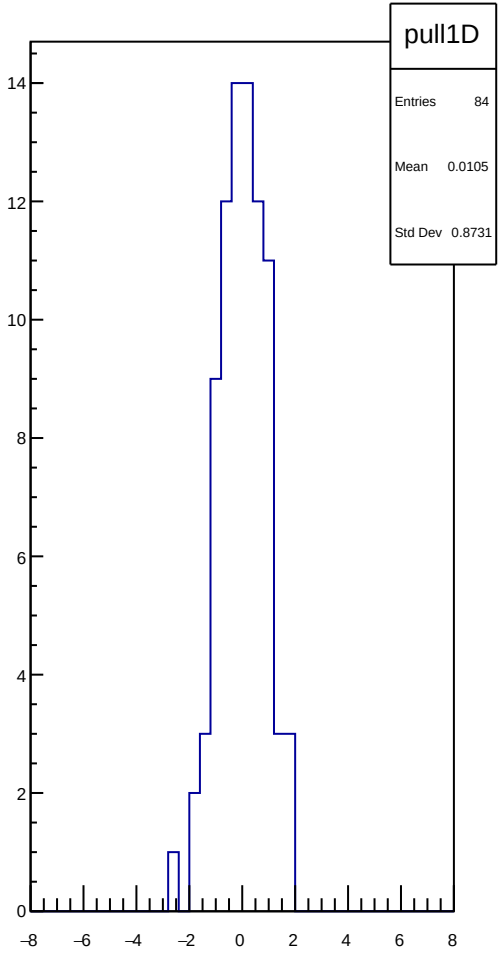

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 3078 / 83
p0 427.6 ± 0.3377
500
480
460
440
420
400
380

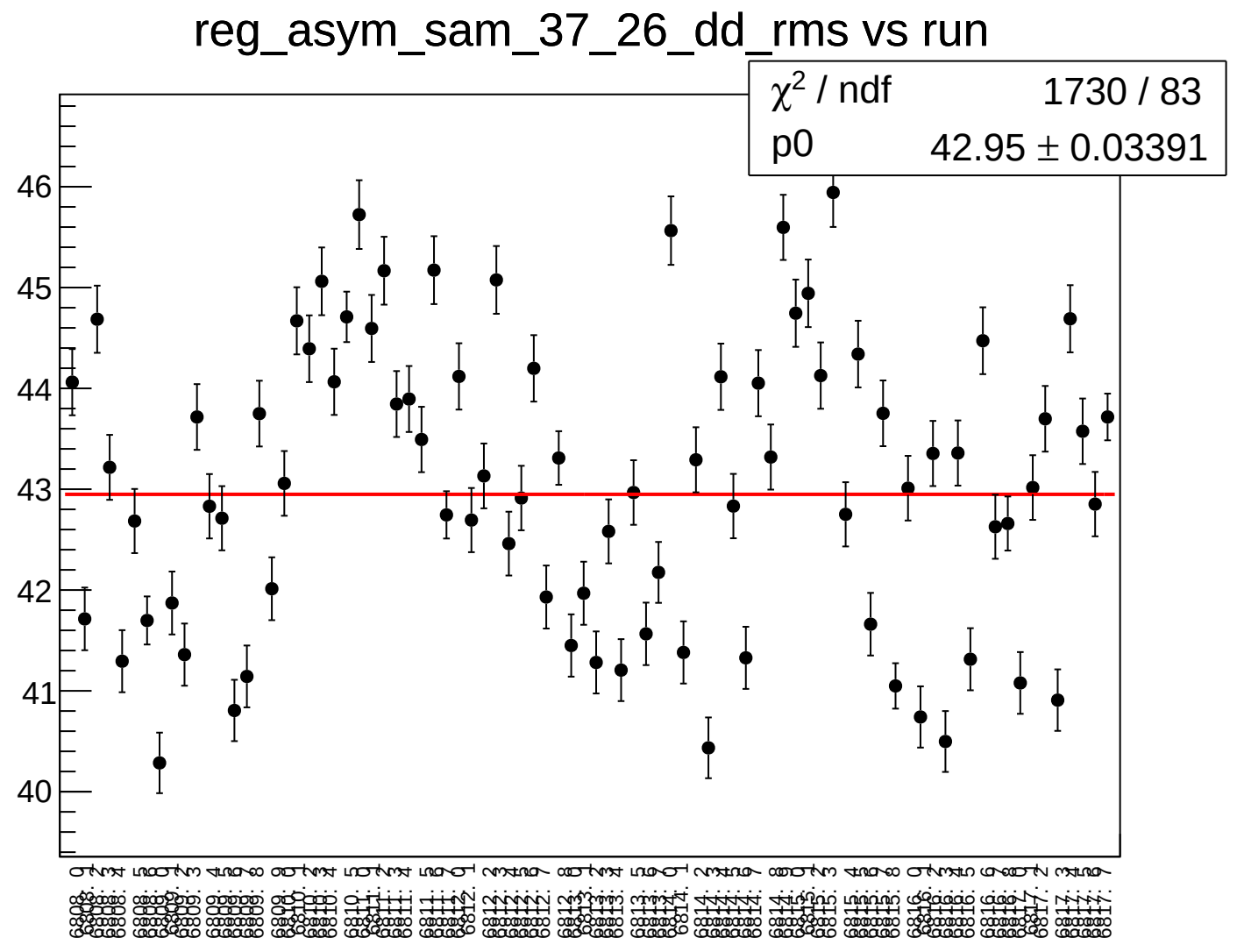

asym_sam_15_26_dd_mean vs run
χ² / ndf 100.3 / 83
p0 −121.2 ± 482.2
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −136.6
Std Dev 197.1
3
2
1
0
−1
−2

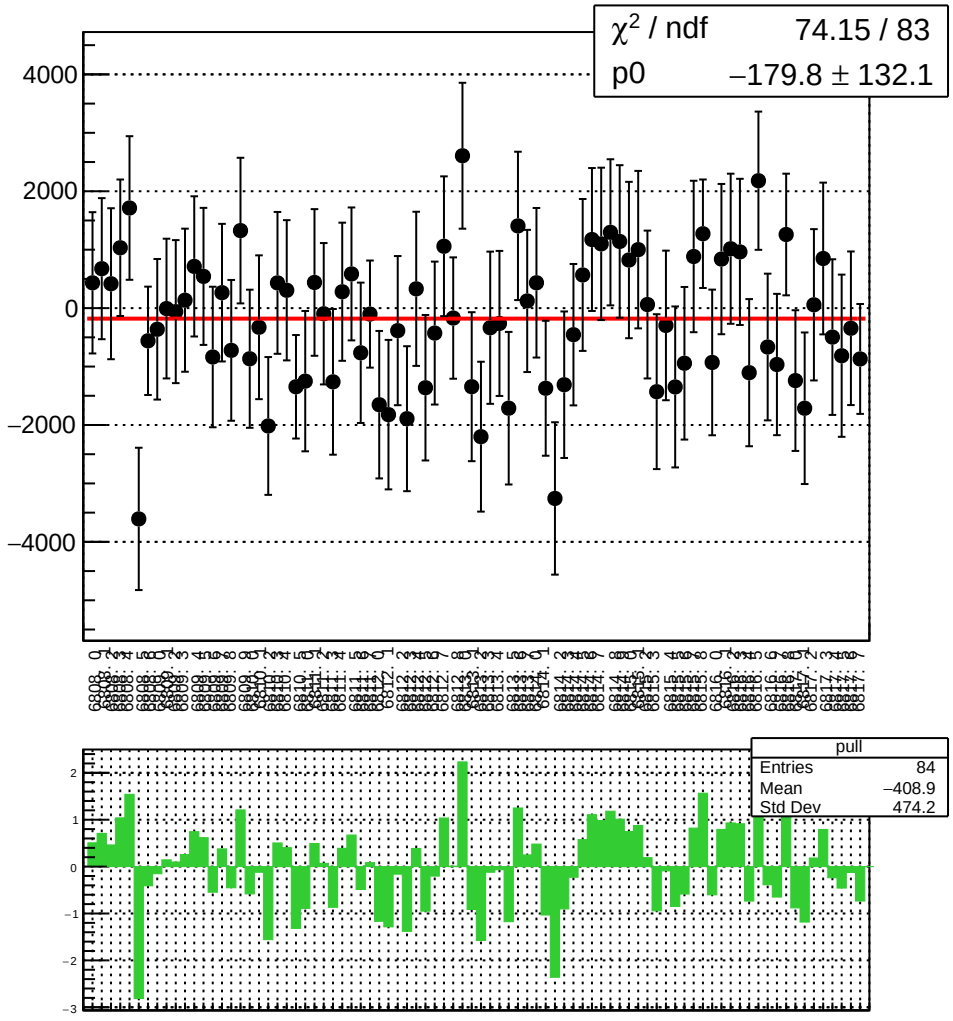

pull1D
Entries 84
Mean −0.007595
Std Dev 1.093
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

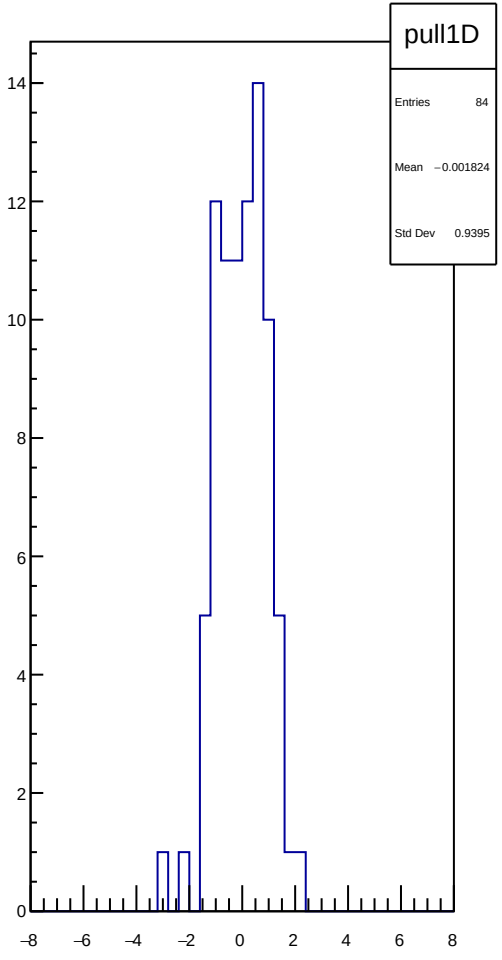

asym_sam_15_26_dd_rms vs run
χ² / ndf 3036 / 83
p0 431.7 ± 0.3409
500
480
460
440
420
400

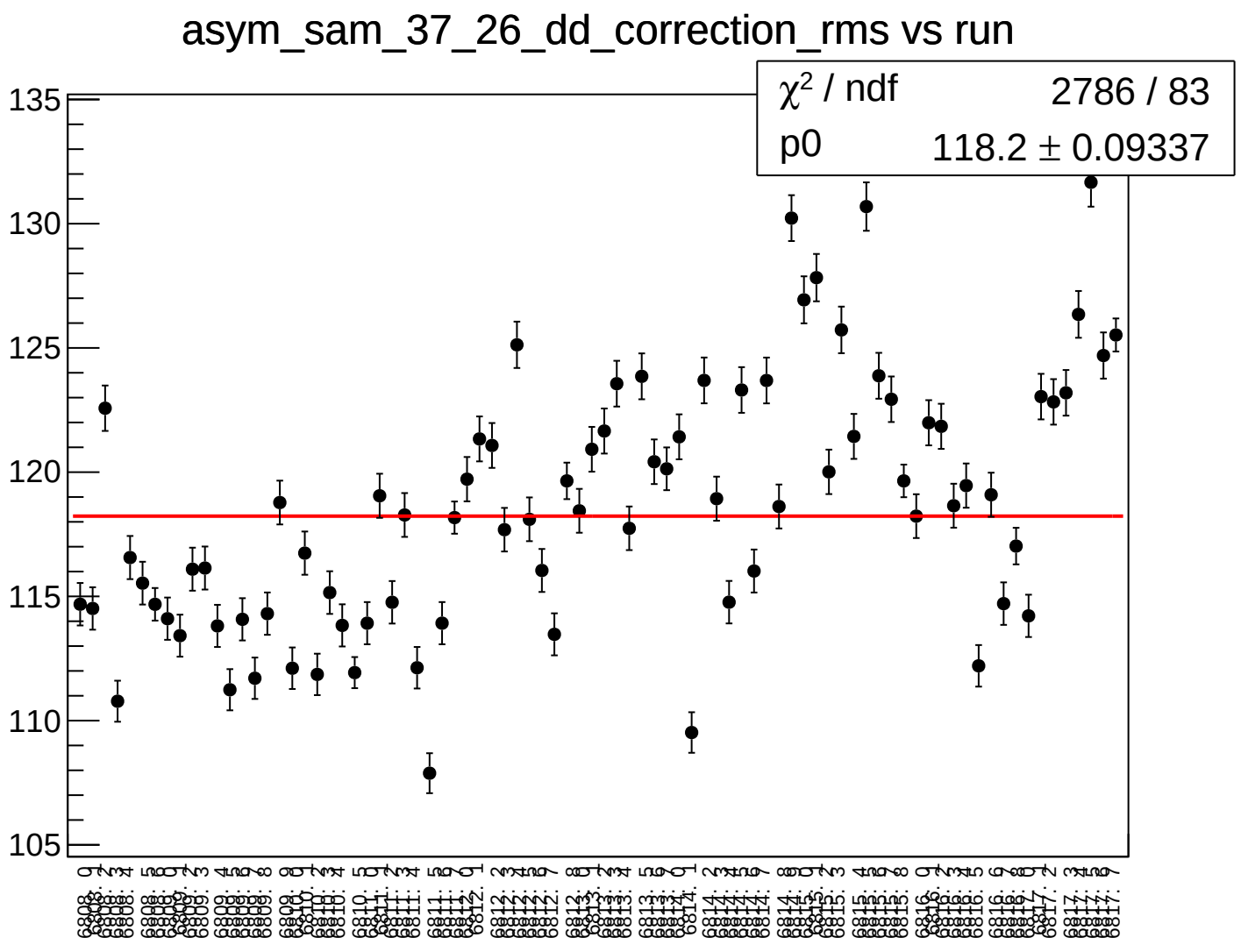

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 64.05 / 83
p0 −91.24 ± 47.95
pull
Entries 84
Mean 440.2
Std Dev 414.6

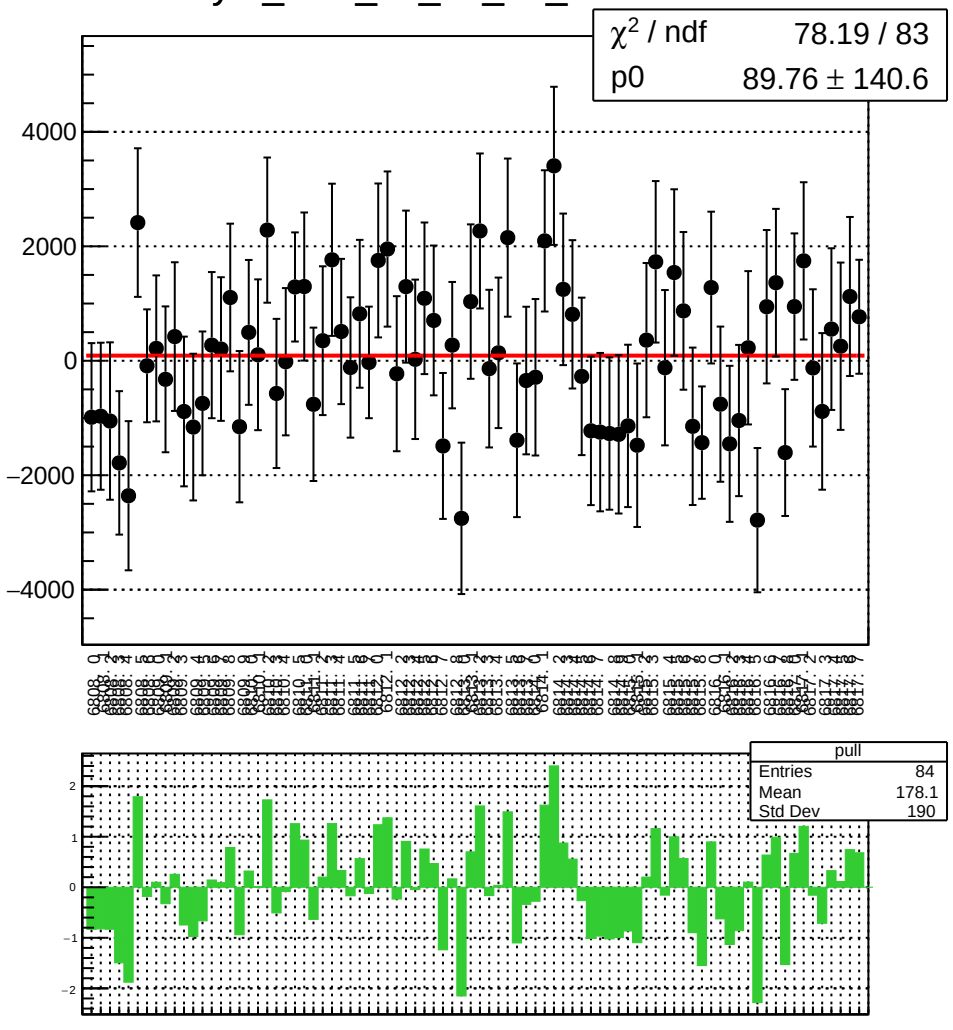

pull1D
Entries 84
Mean 0.0105
Std Dev 0.8731

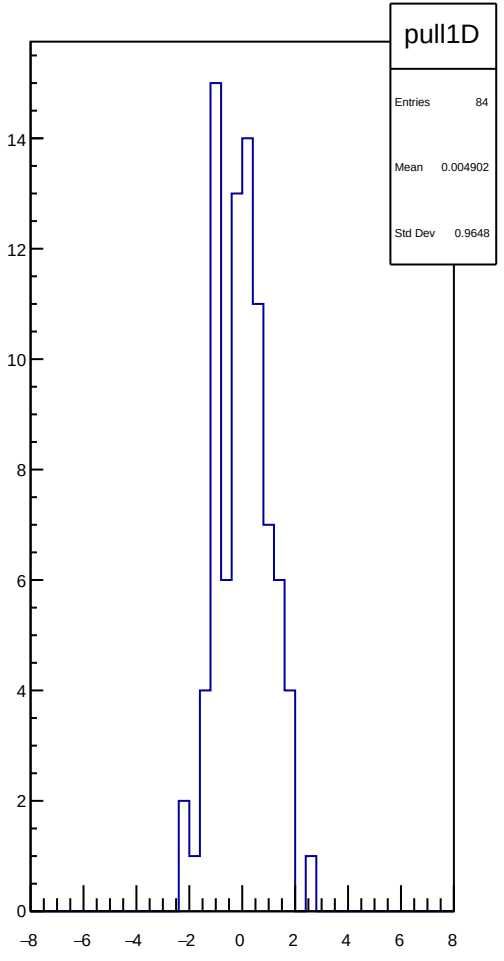

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 1730 / 83
p0 42.95 ± 0.03391
46
45
44
43
42
41
40

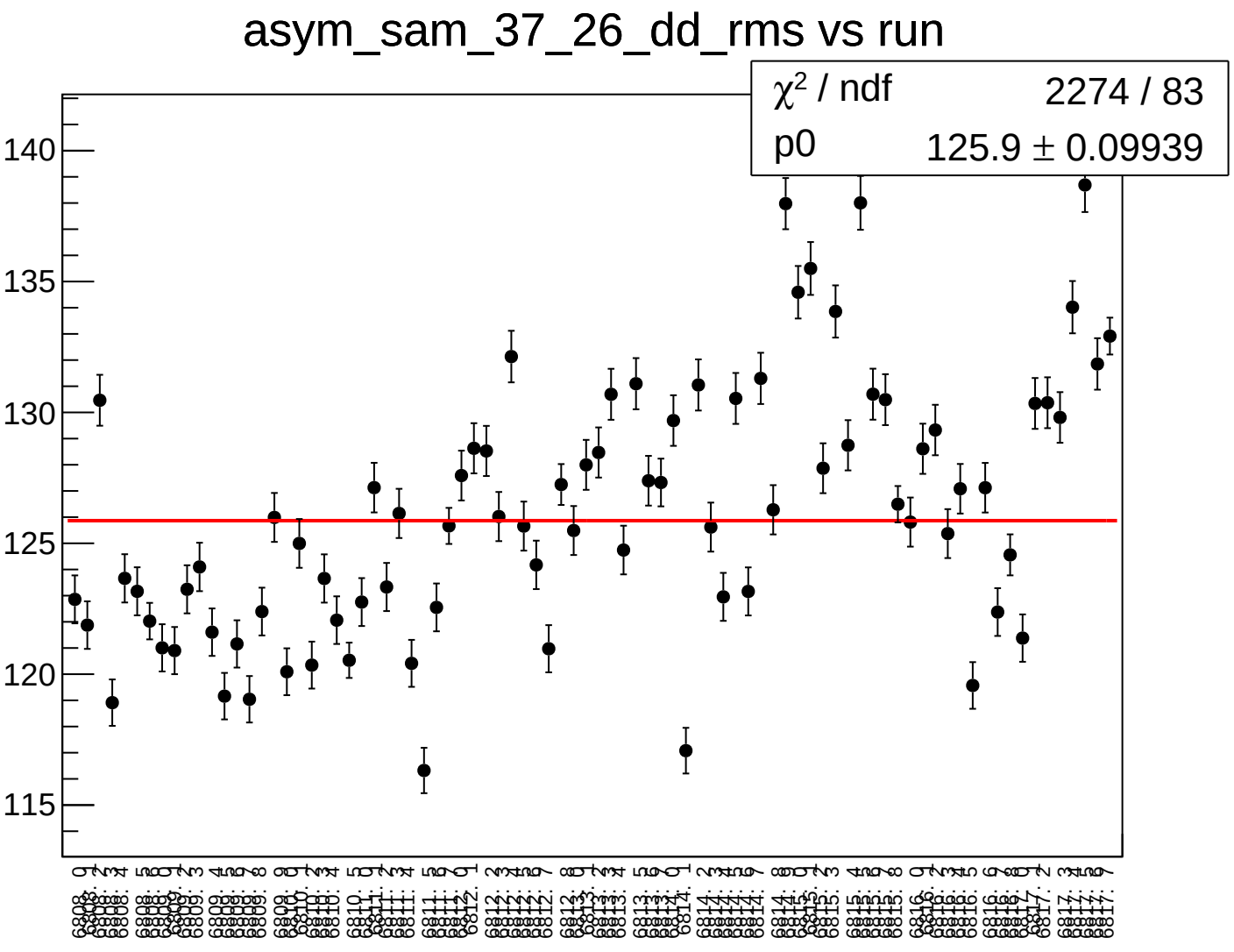

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 74.15 / 83
p0 −179.8 ± 132.1
4000
2000
0
−2000
−4000
pull
Entries 84
Mean −408.9
Std Dev 474.2
2
1
0
−1
−2
−3

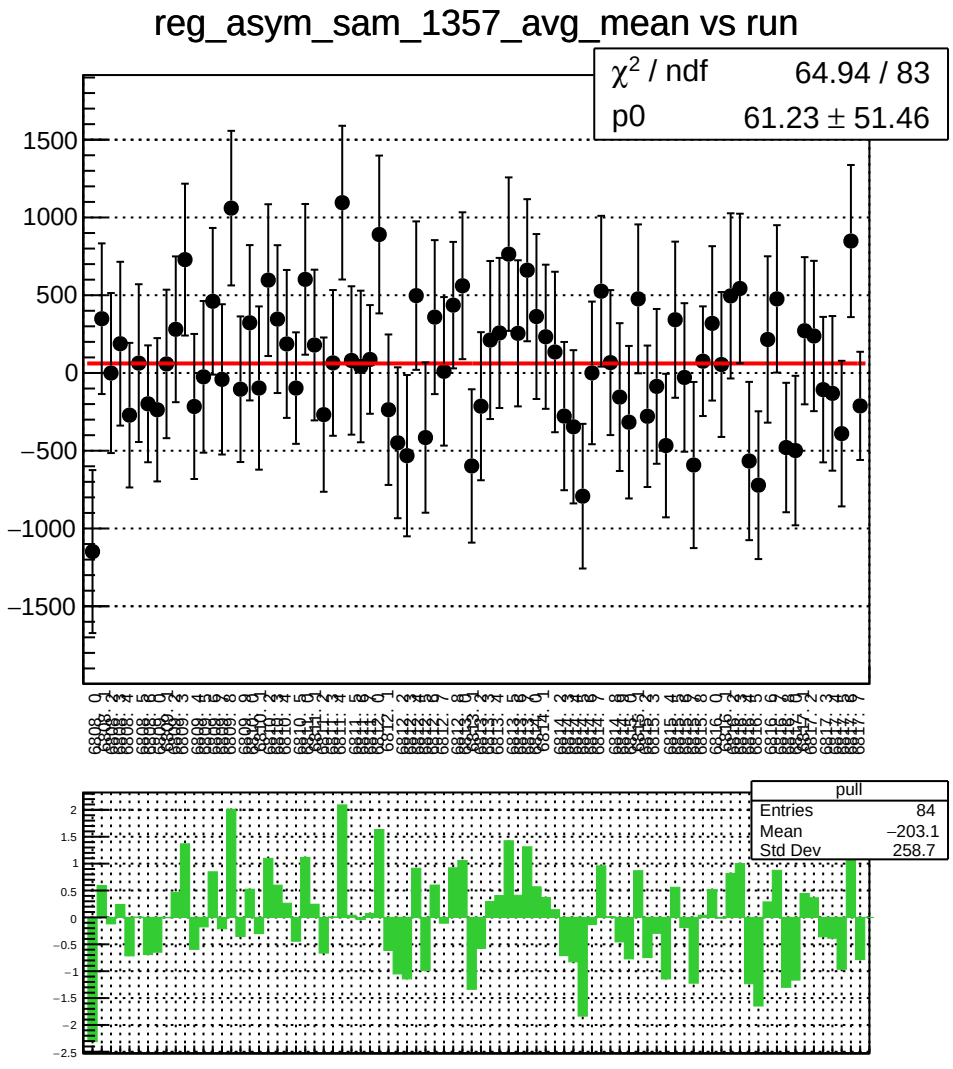

pull1D
Entries 84
Mean −0.001824
Std Dev 0.9395
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

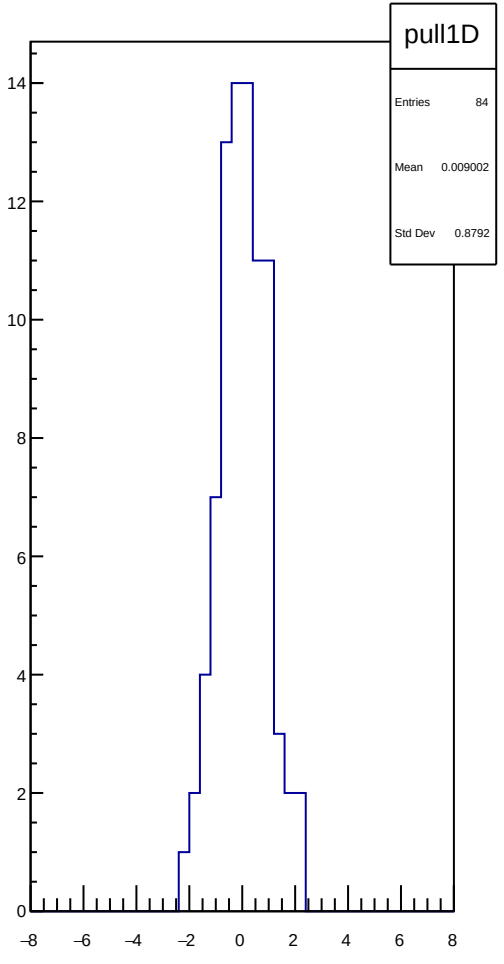

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 2786 / 83
p0 118.2 ± 0.09337
135
130
125
120
115
110
105

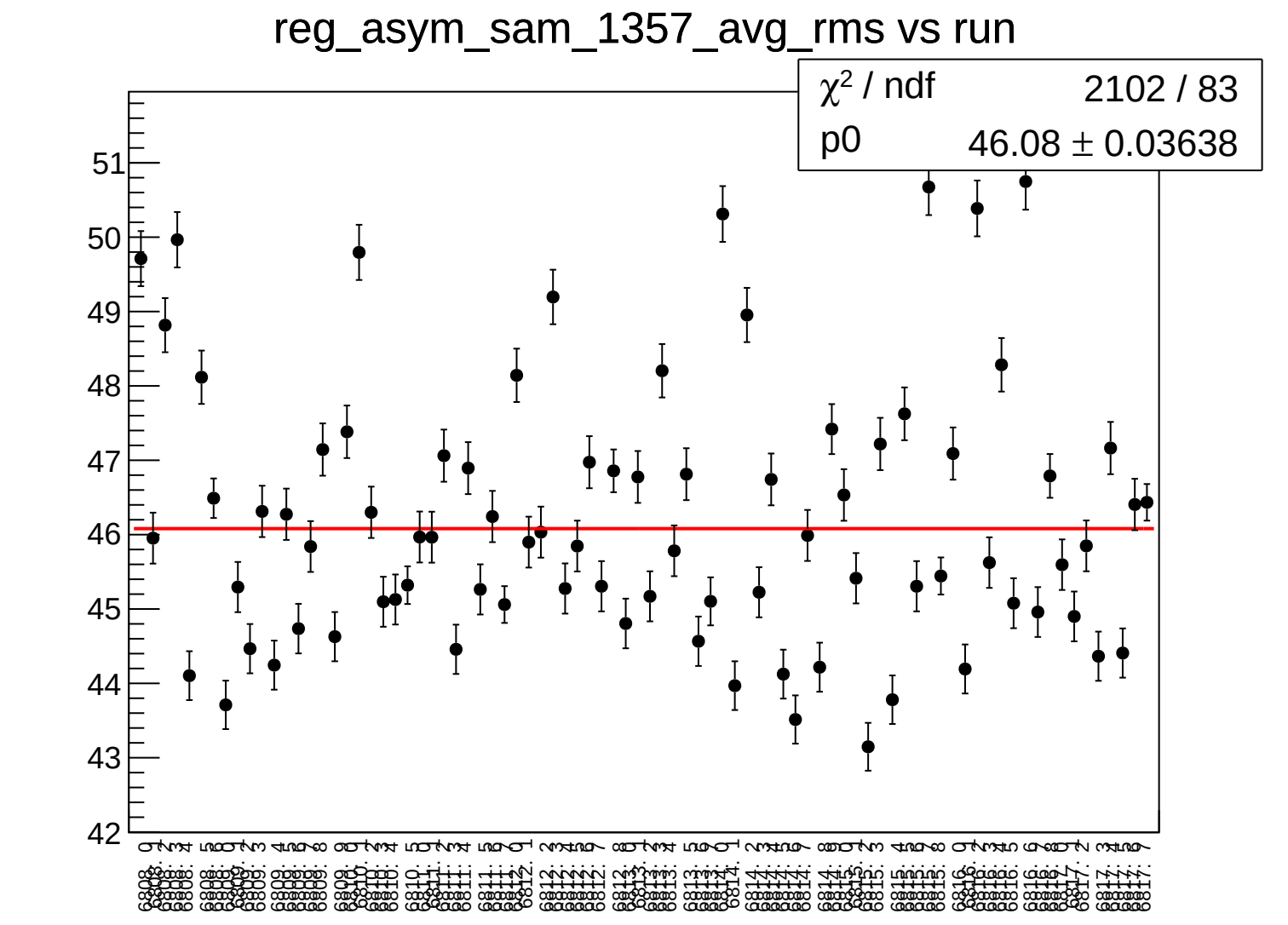

asym_sam_37_26_dd_mean vs run
χ² / ndf 78.19 / 83
p0 89.76 ± 140.6
4000
2000
0
−2000
−4000
pull
Entries 84
Mean 178.1
Std Dev 190
2
1
0
−1
−2

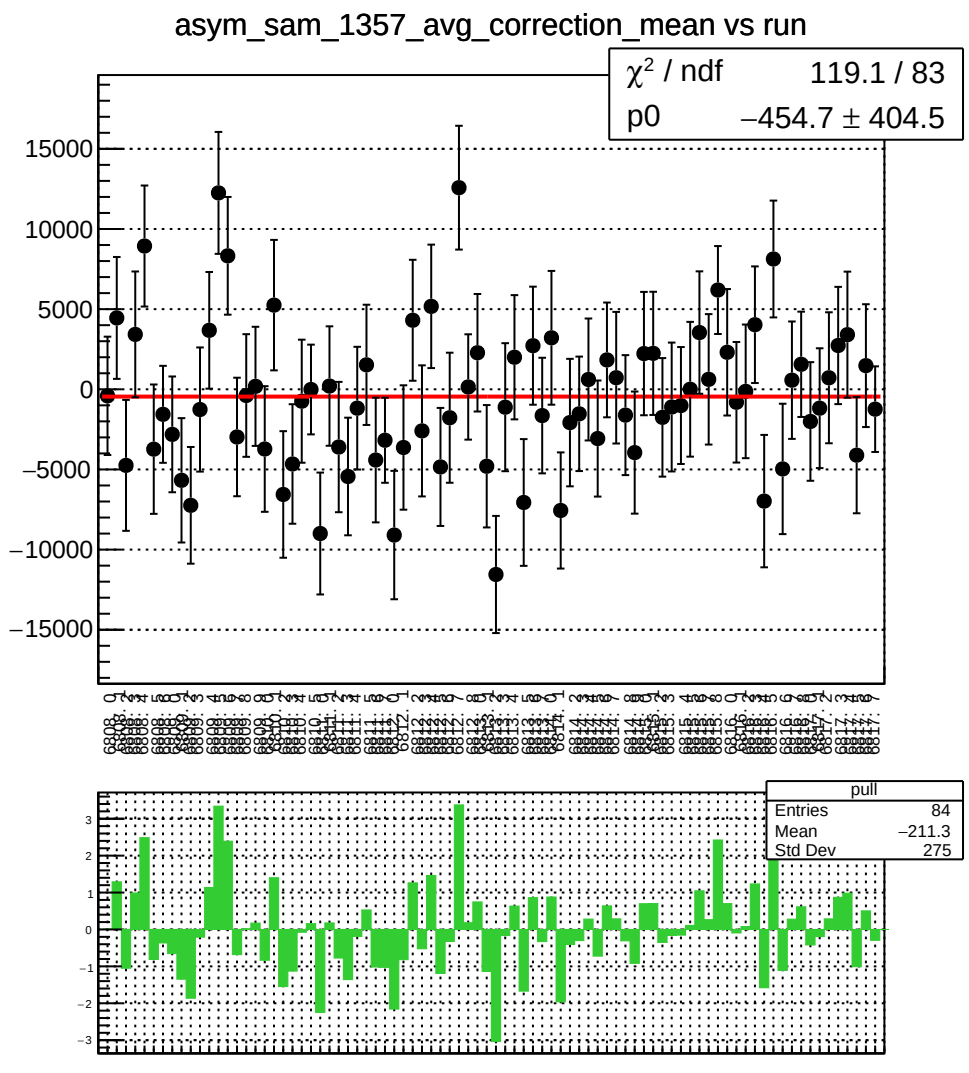

pull1D
Entries 84
Mean 0.004902
Std Dev 0.9648
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

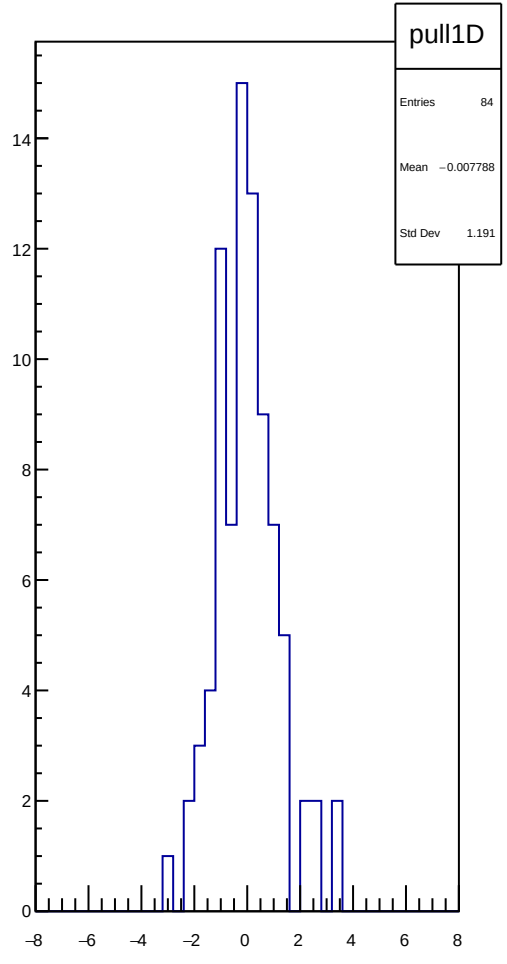

asym_sam_37_26_dd_rms vs run
χ² / ndf 2274 / 83
p0 125.9 ± 0.09939
140
135
130
125
120
115

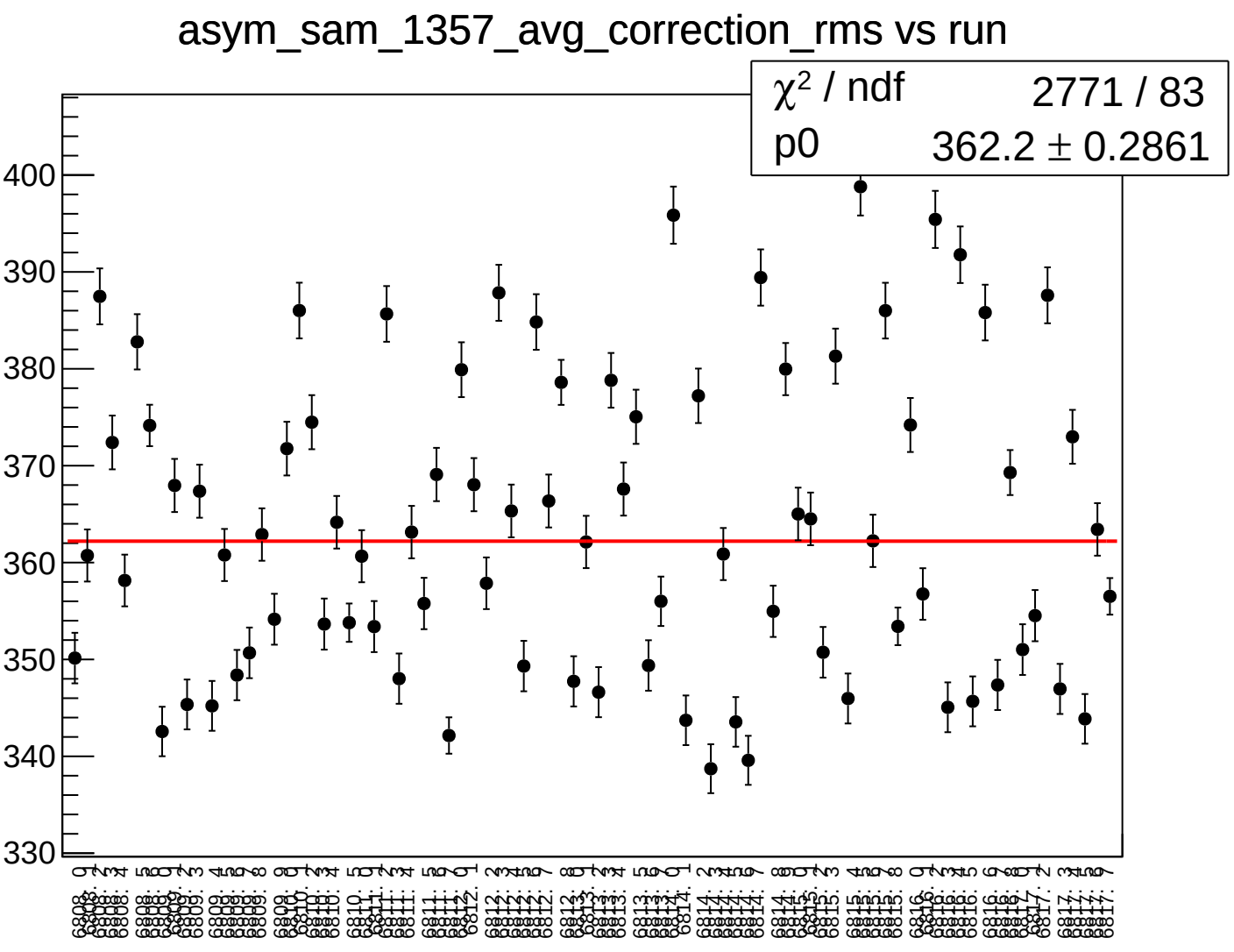

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 64.94 / 83
p0 61.23 ± 51.46
1500
1000
500
0
−500
−1000
−1500
pull
Entries 84
Mean −203.1
Std Dev 258.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

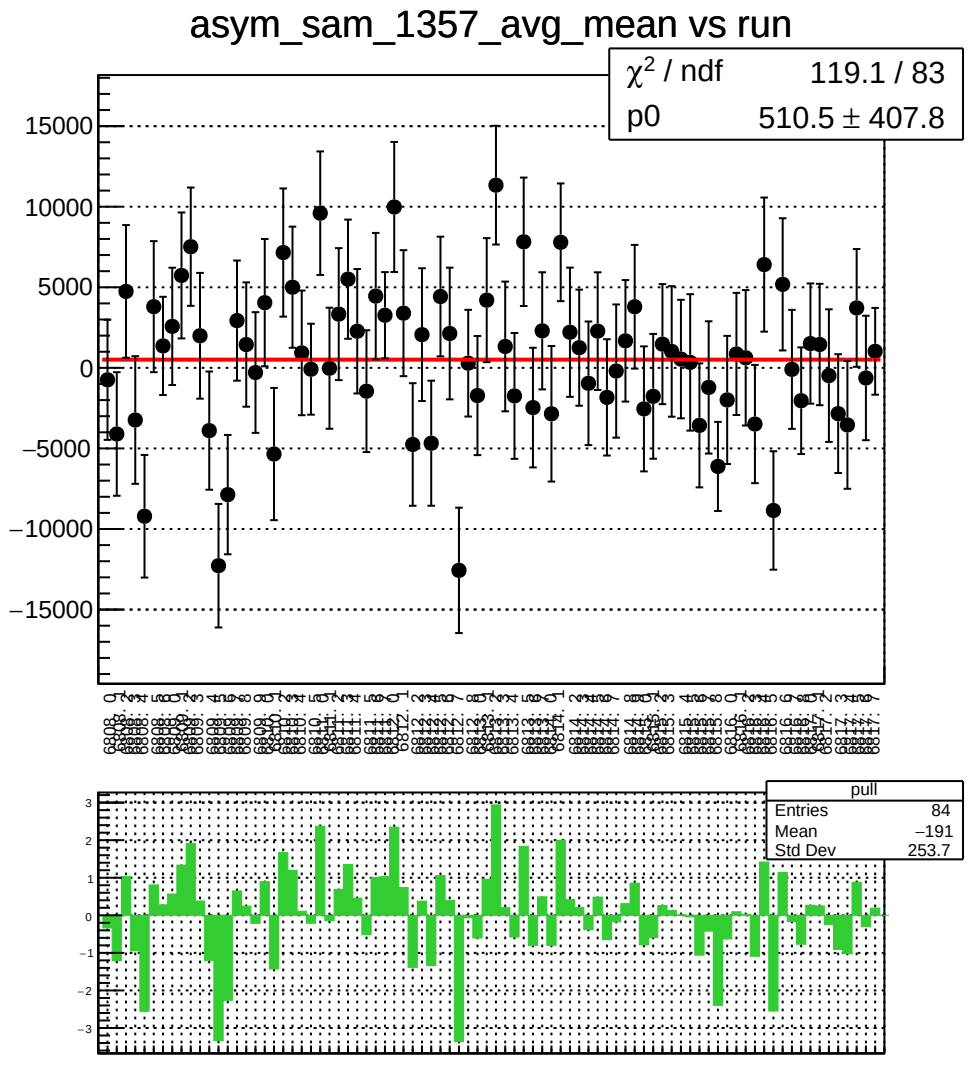

pull1D
Entries 84
Mean 0.009002
Std Dev 0.8792
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

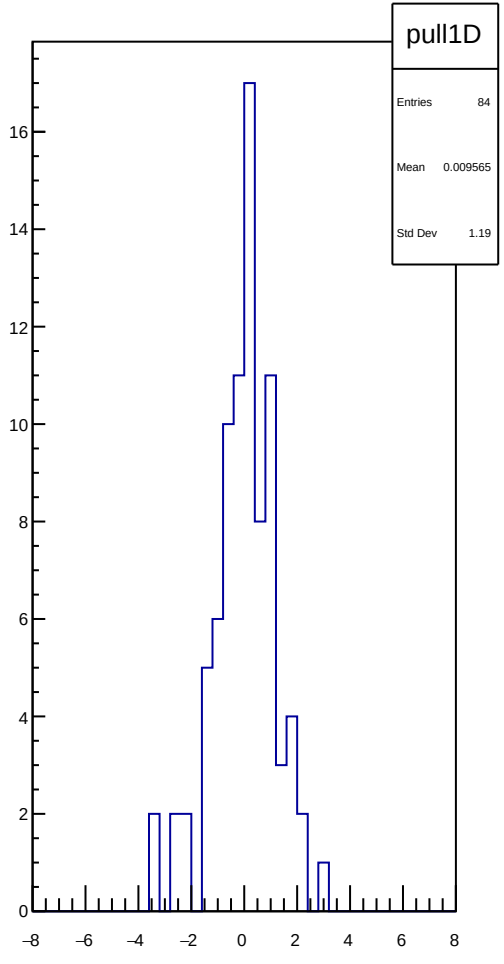

reg_asym_sam_1357_avg_rms vs run
χ^2 / ndf 2102 / 83
p0 46.08 ± 0.03638
51
50
49
48
47
46
45
44
43
42

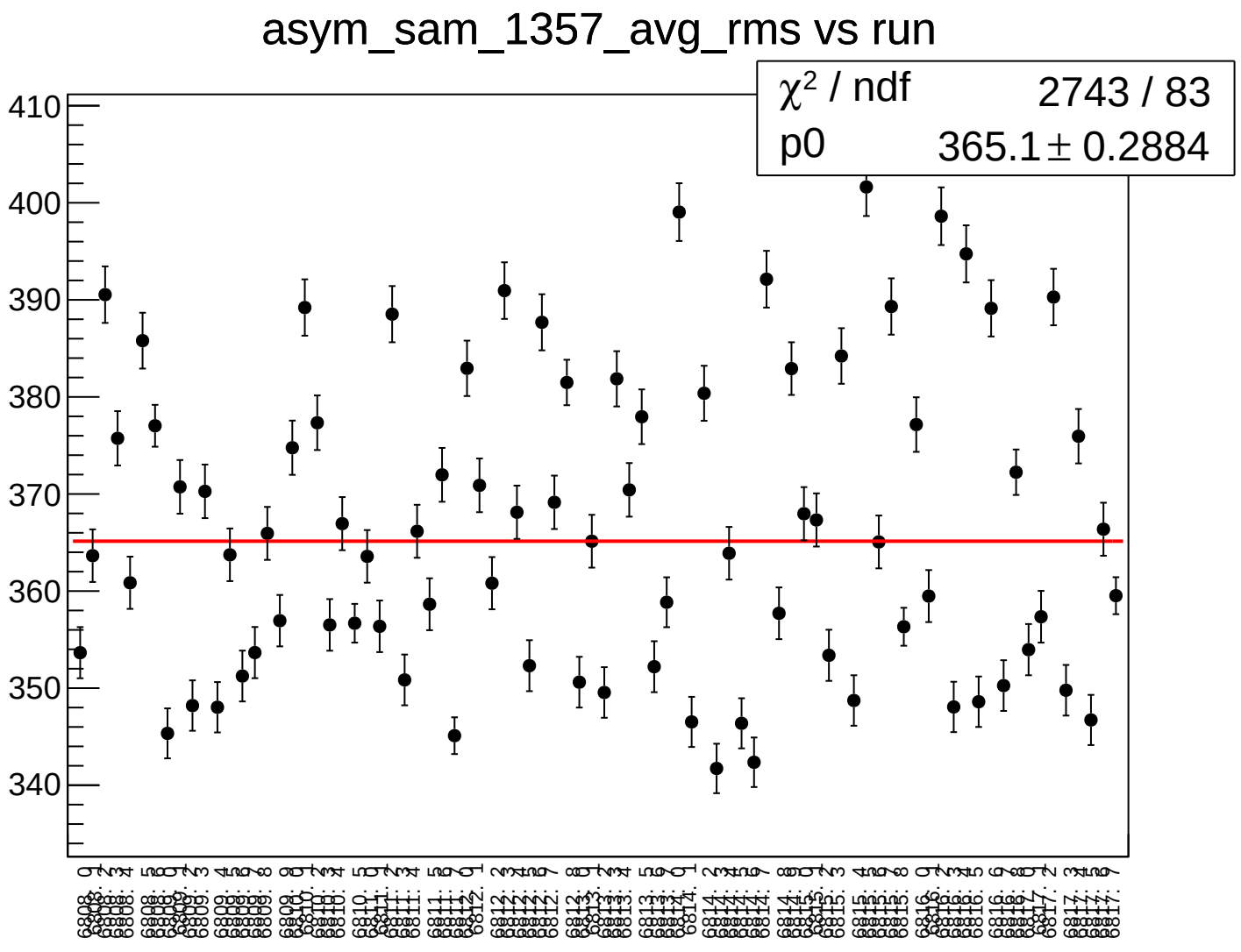

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 119.1 / 83
p0 −454.7 ± 404.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −211.3
Std Dev 275
3
2
1
0
−1
−2
−3

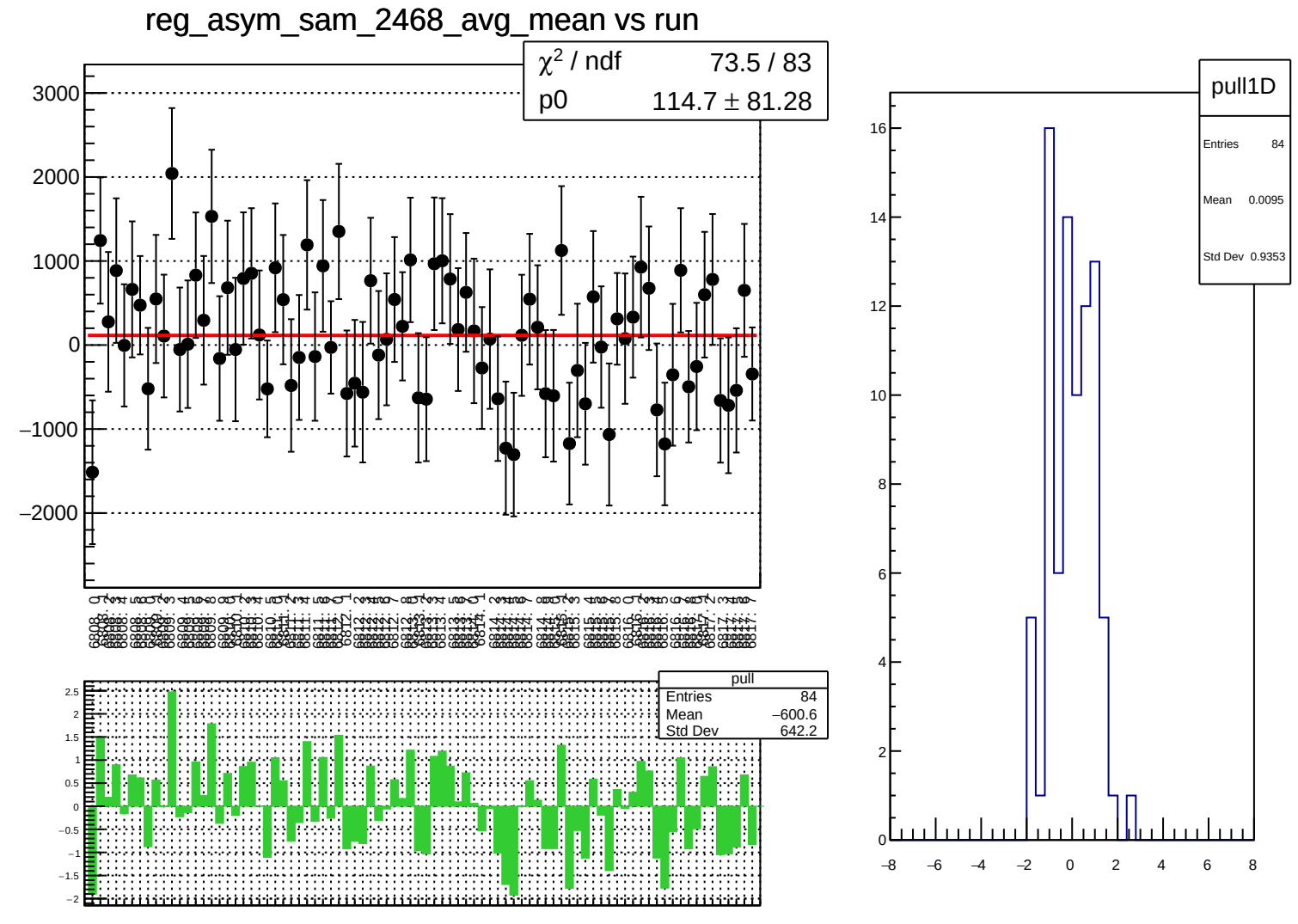

pull1D
Entries 84
Mean −0.007788
Std Dev 1.191
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

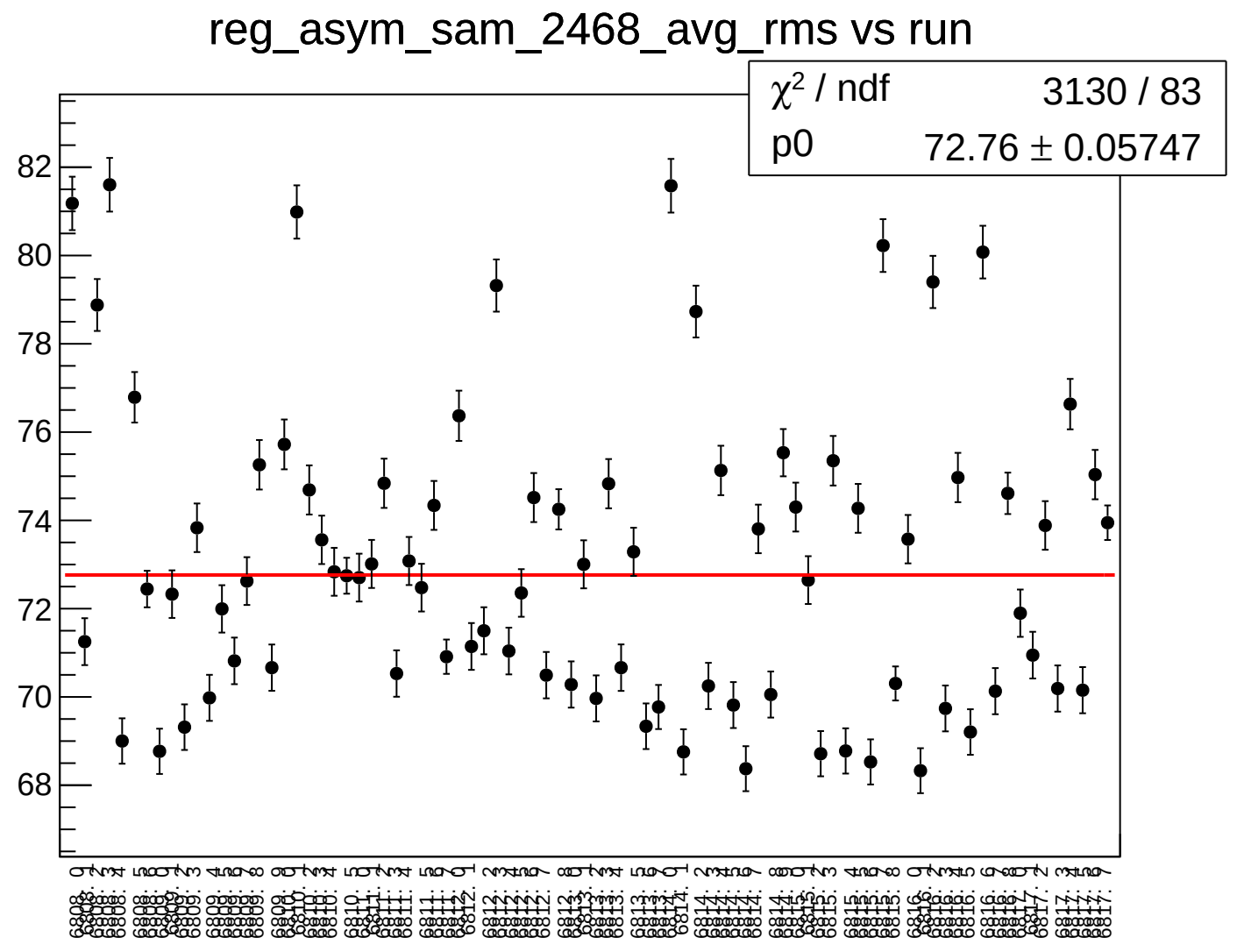

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 2771 / 83
p0 362.2 ± 0.2861
400
390
380
370
360
350
340
330

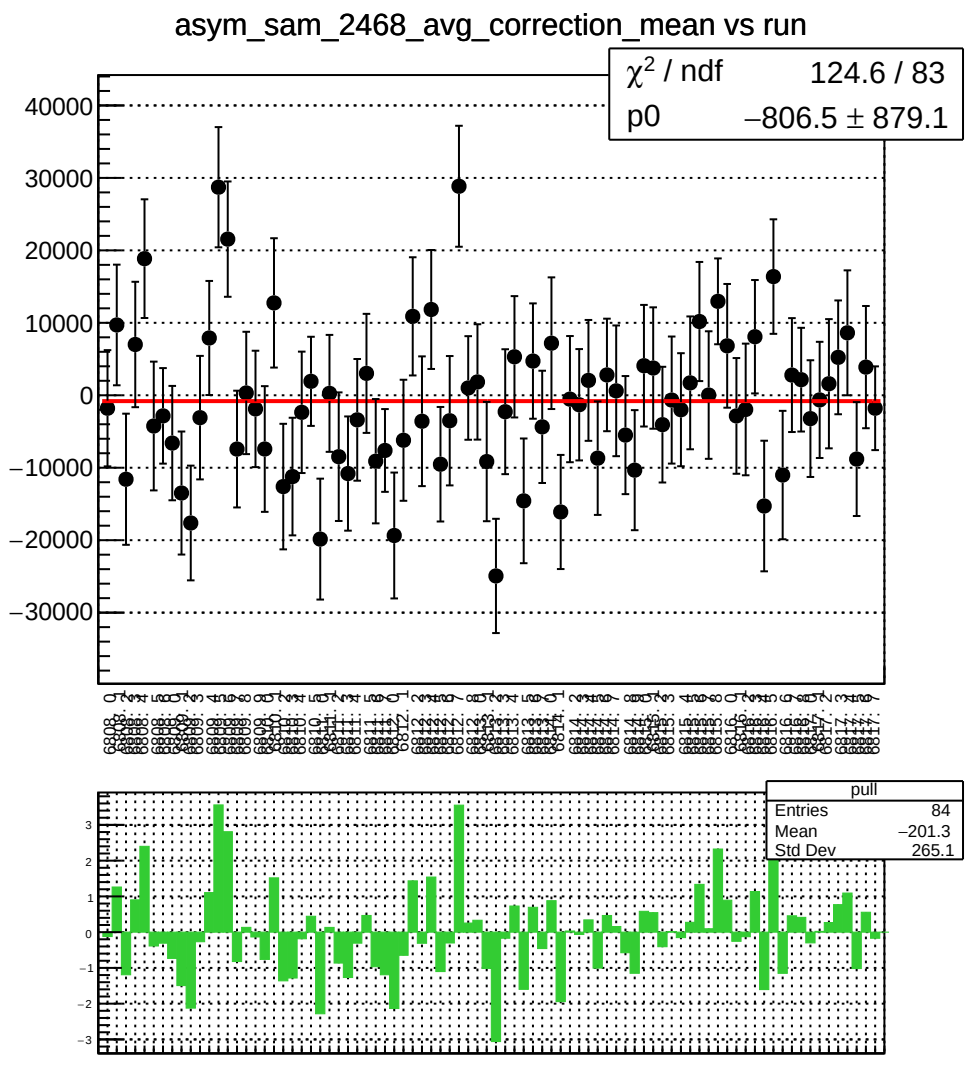

asym_sam_1357_avg_mean vs run
χ² / ndf 119.1 / 83
p0 510.5 ± 407.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean −191
Std Dev 253.7
3
2
1
0
−1
−2
−3

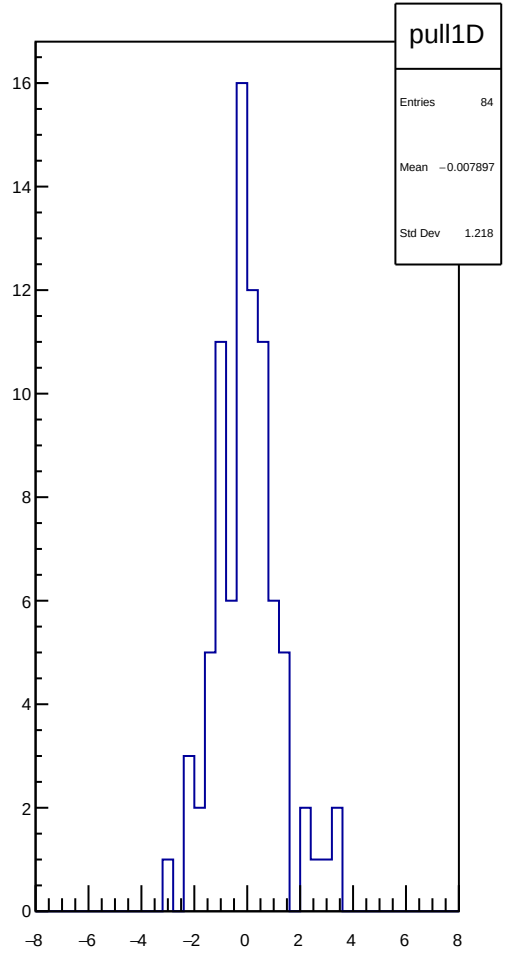

pull1D
Entries 84
Mean 0.009565
Std Dev 1.19
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

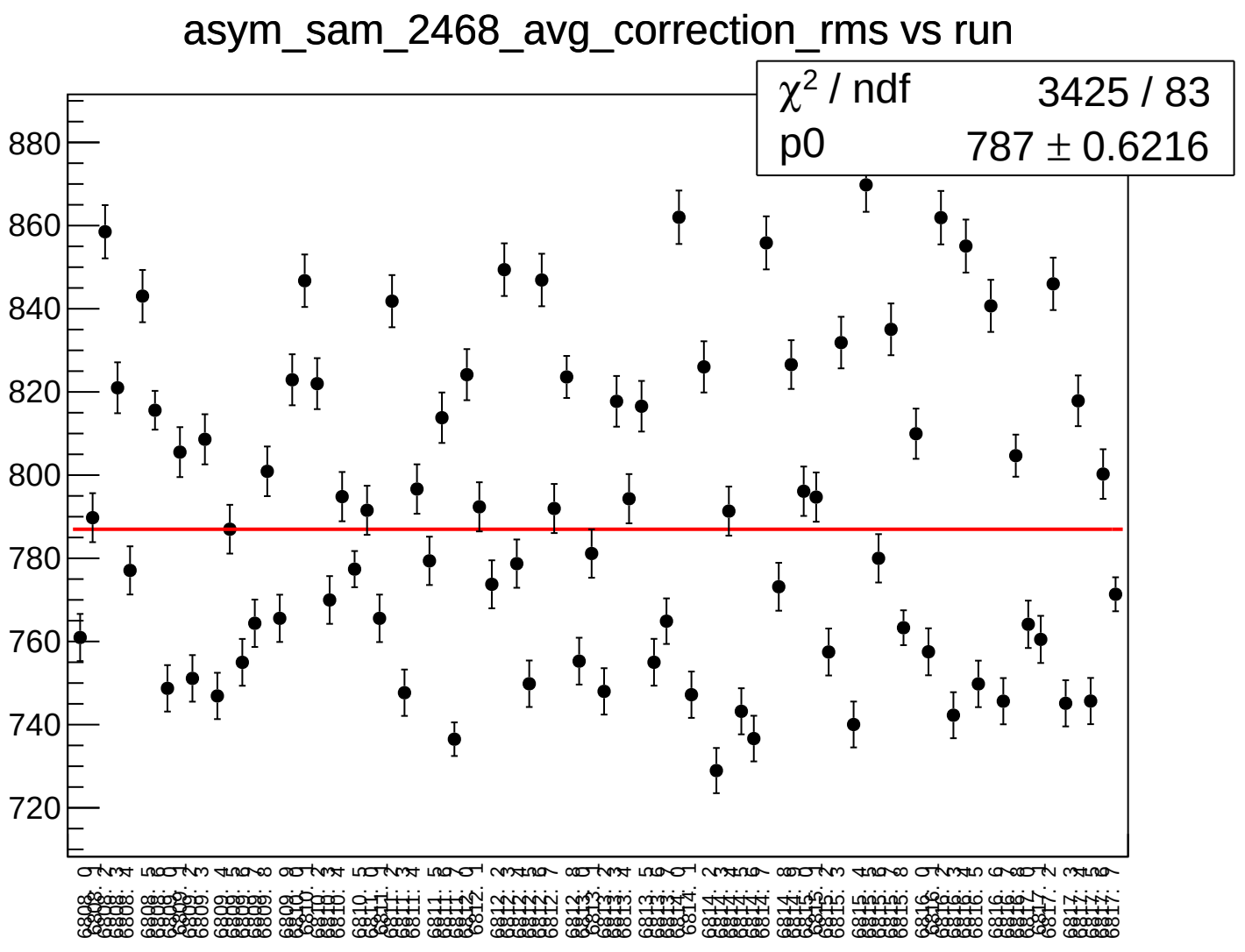

asym_sam_1357_avg_rms vs run
χ² / ndf 2743 / 83
p0 365.1 ± 0.2884
410
400
390
380
370
360
350
340

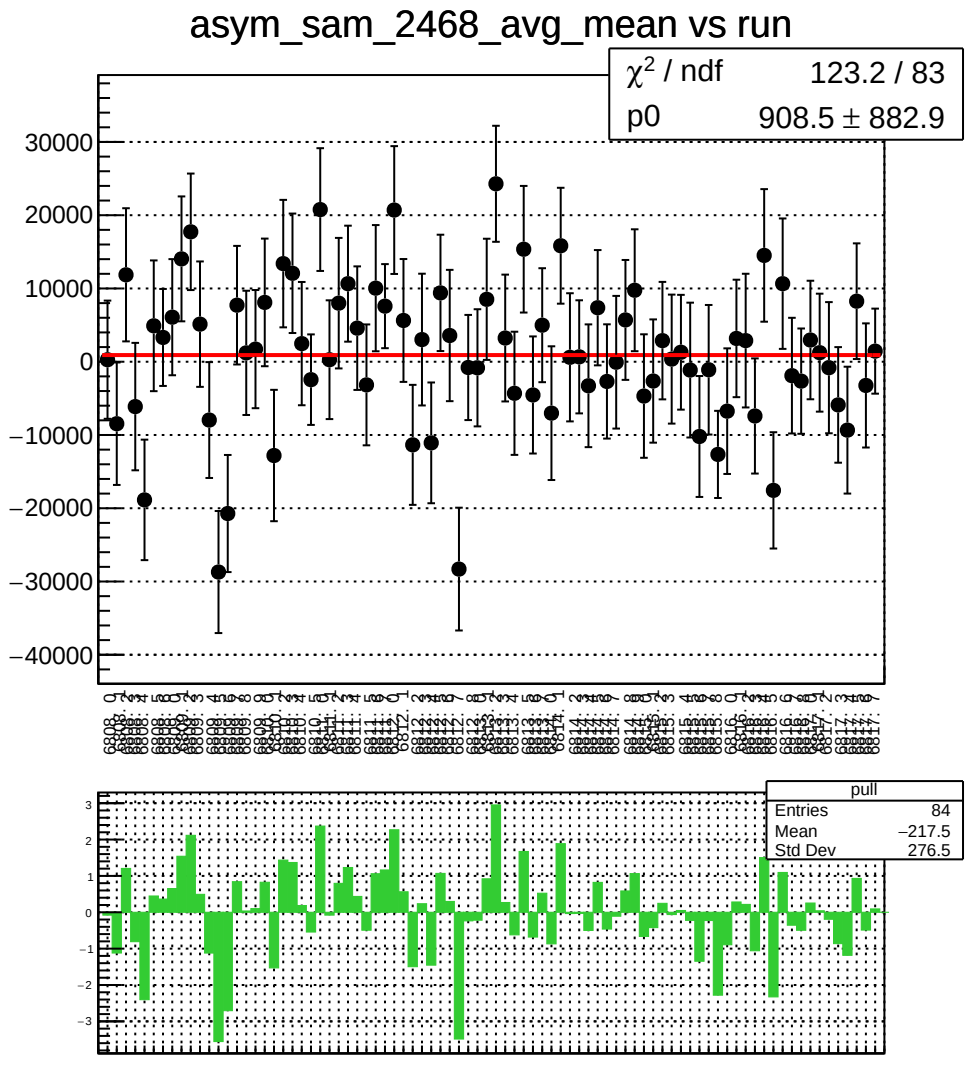

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 73.5 / 83
p0 114.7 ± 81.28
pull
Entries 84
Mean −600.6
Std Dev 642.2
pull1D
Entries 84
Mean 0.0095
Std Dev 0.9353

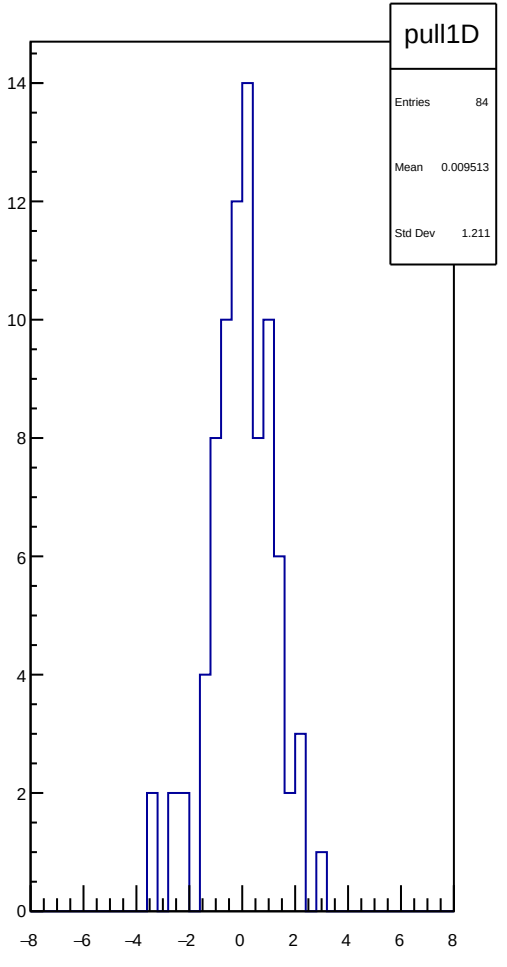

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 3130 / 83
p0 72.76 ± 0.05747
82
80
78
76
74
72
70
68

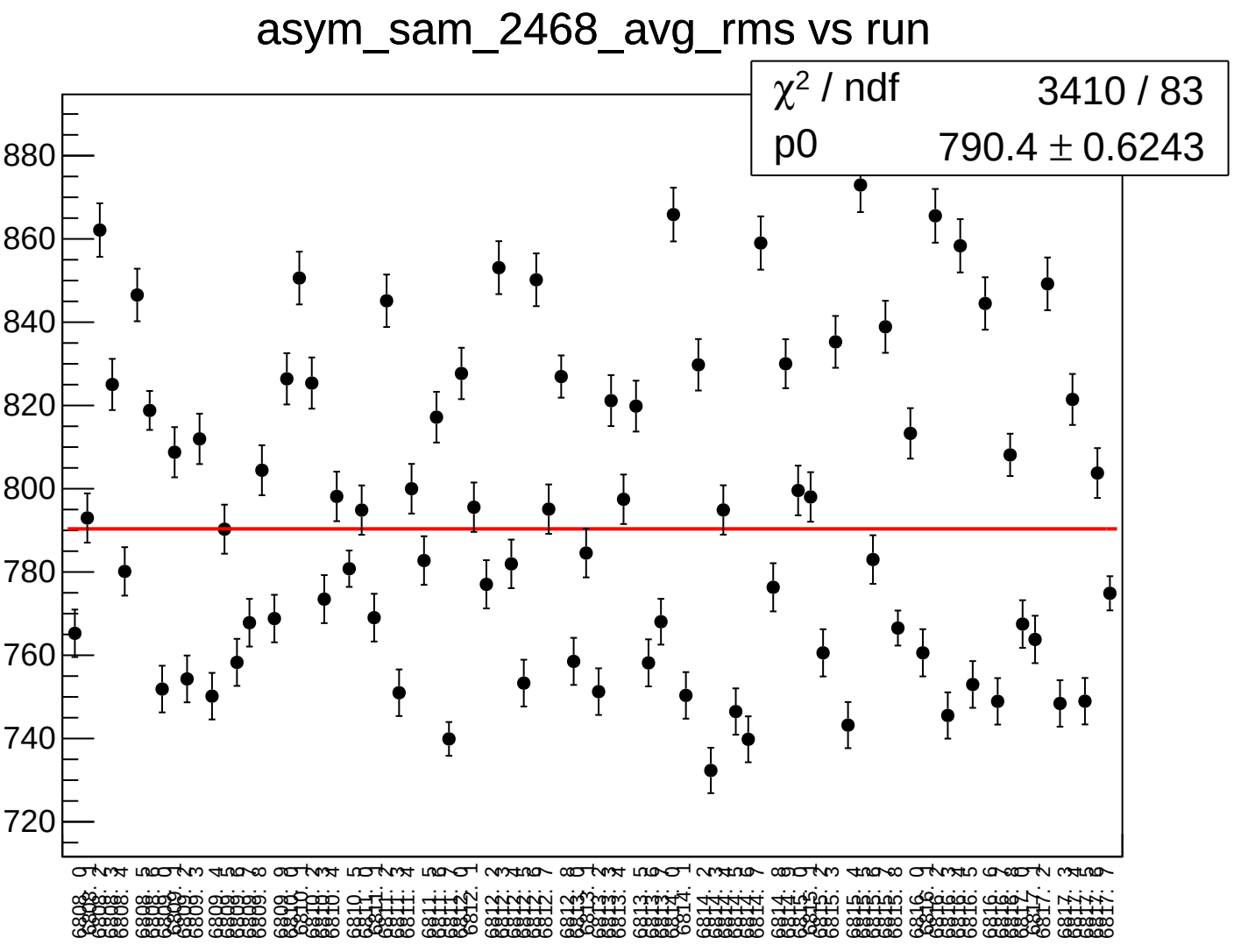

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 124.6 / 83
p0 −806.5 ± 879.1
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −201.3
Std Dev 265.1
3
2
1
0
−1
−2
−3

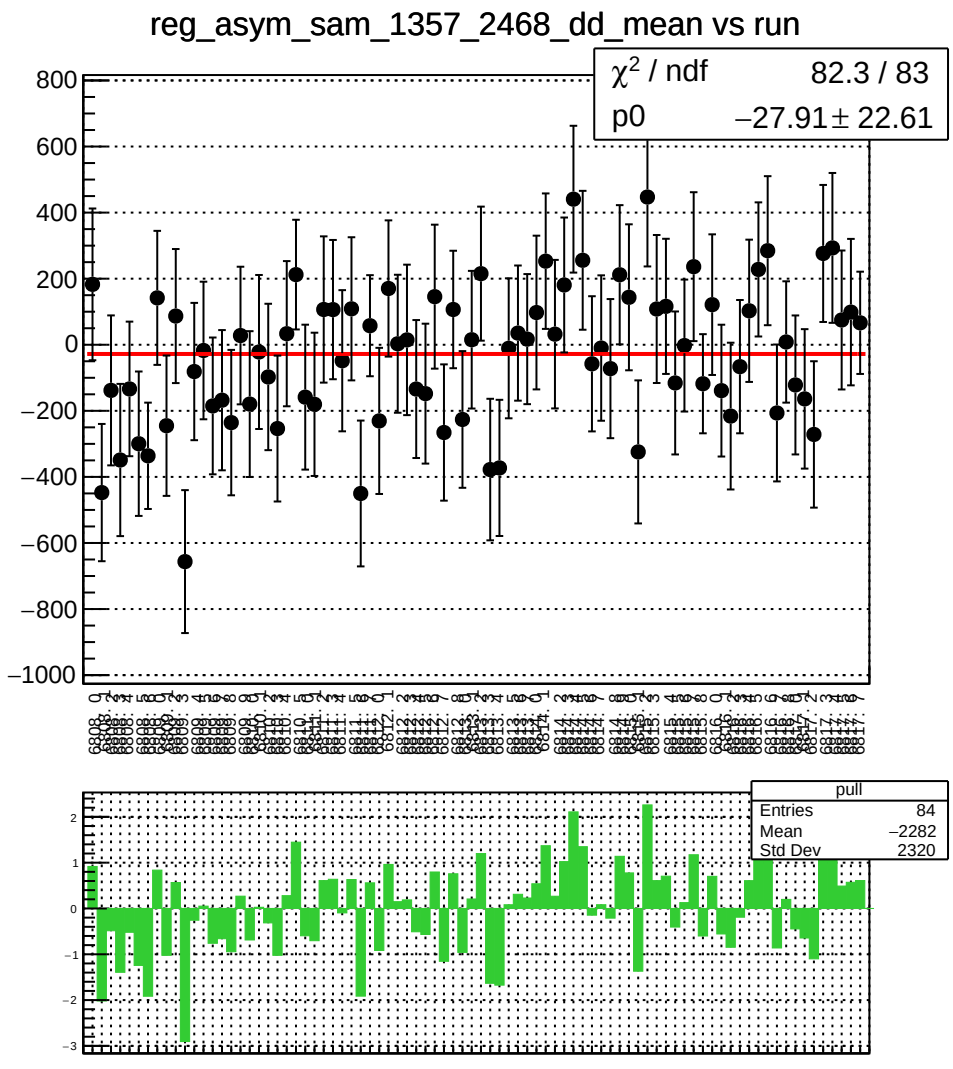

pull1D
Entries 84
Mean −0.007897
Std Dev 1.218
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

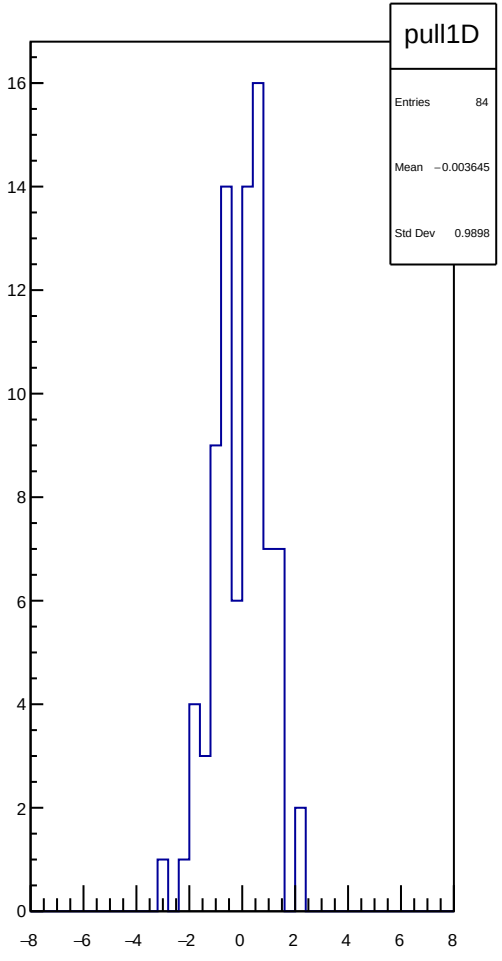

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 3425 / 83
p0 787 ± 0.6216
880
860
840
820
800
780
760
740
720

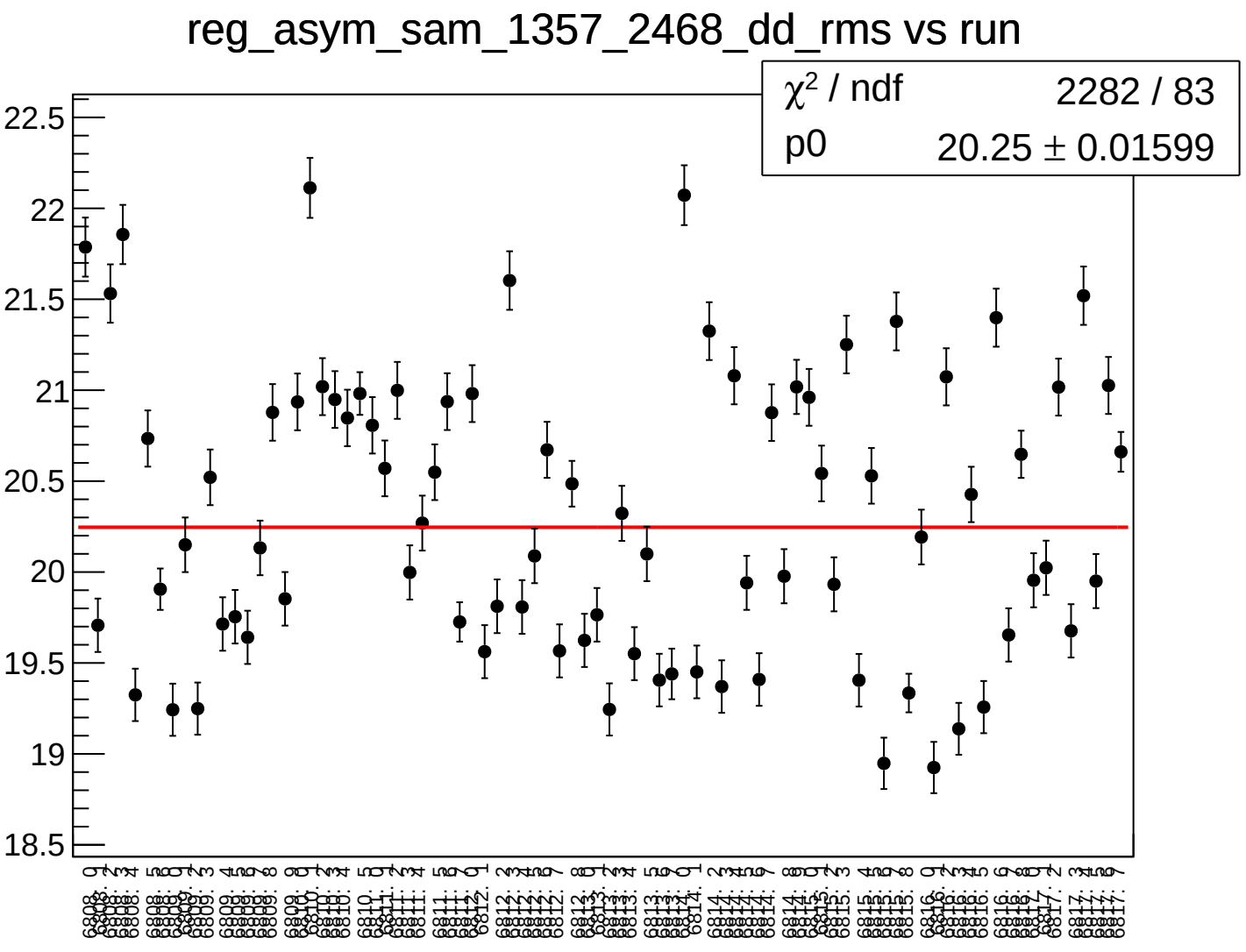

asym_sam_2468_avg_mean vs run
χ² / ndf 123.2 / 83
p0 908.5 ± 882.9
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 84
Mean −217.5
Std Dev 276.5
3
2
1
0
−1
−2
−3

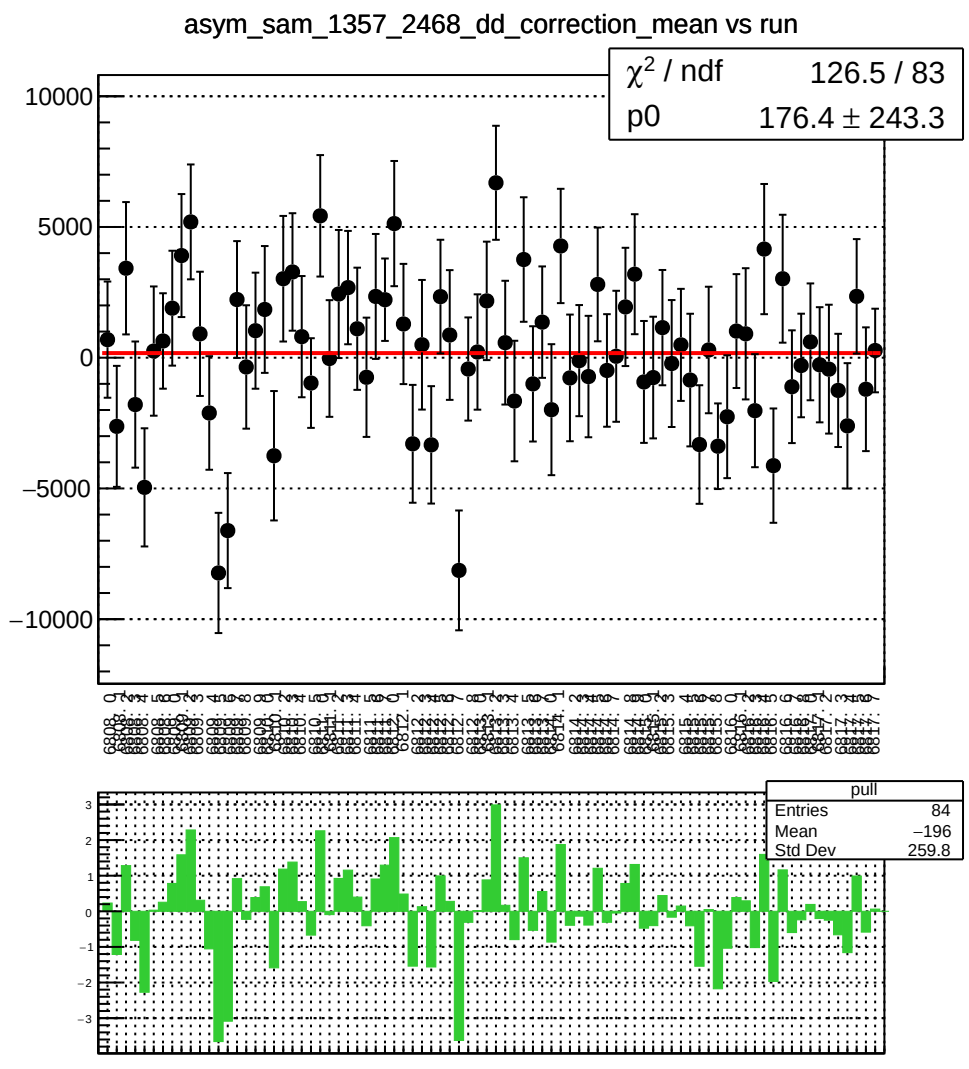

pull1D
Entries 84
Mean 0.009513
Std Dev 1.211
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

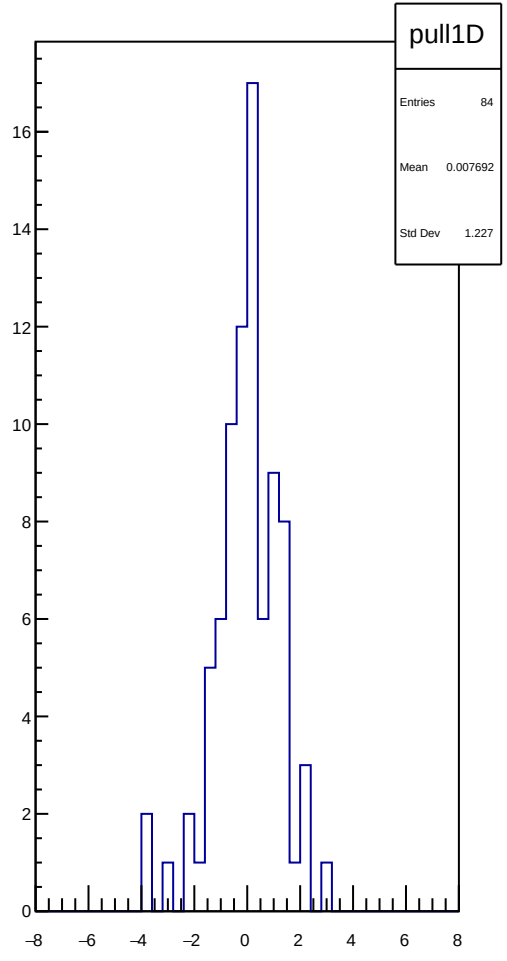

asym_sam_2468_avg_rms vs run
χ^2 / ndf 3410 / 83
p0 790.4 ± 0.6243
880
860
840
820
800
780
760
740
720

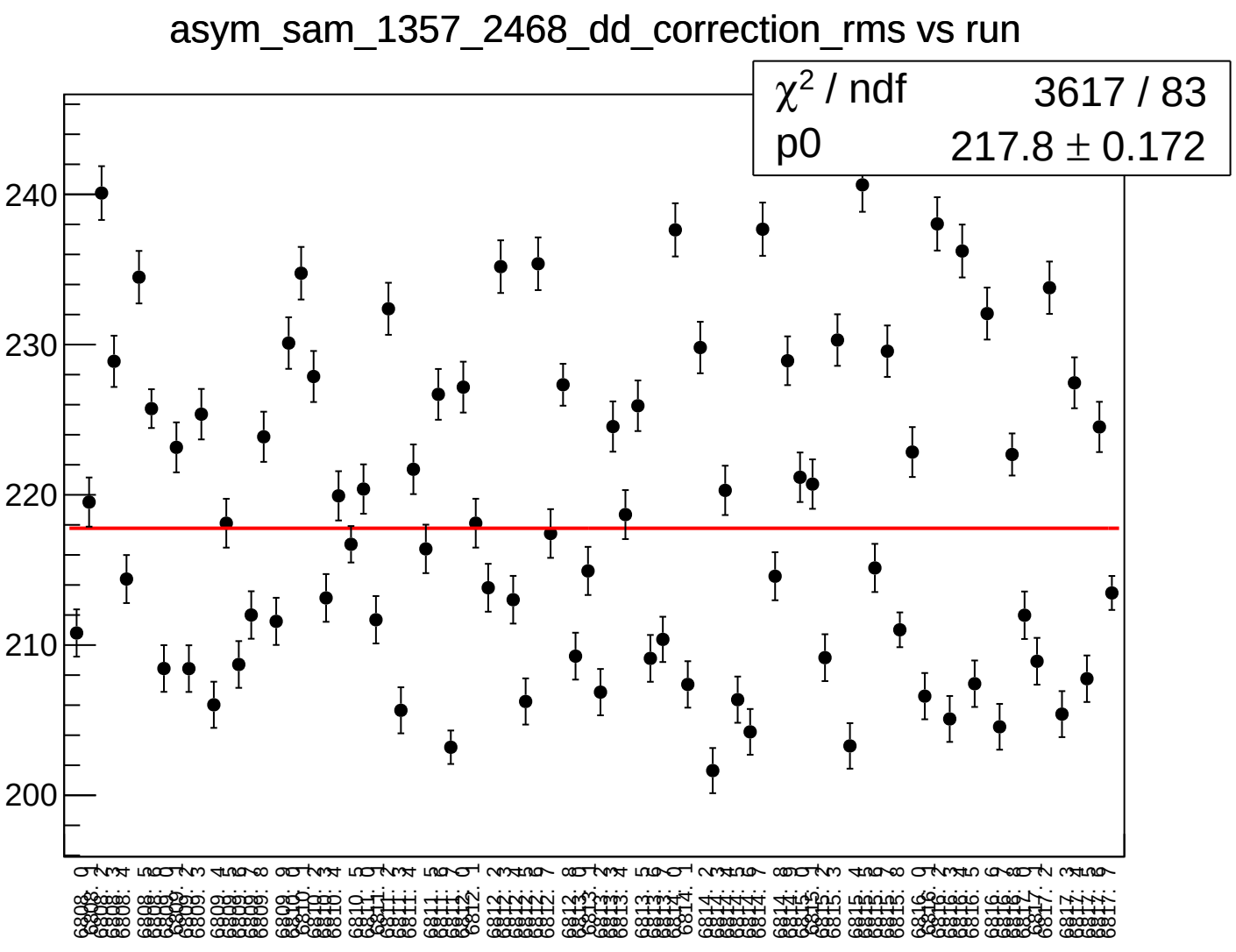

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 82.3 / 83
p0 −27.91 ± 22.61
pull
Entries 84
Mean −2282
Std Dev 2320

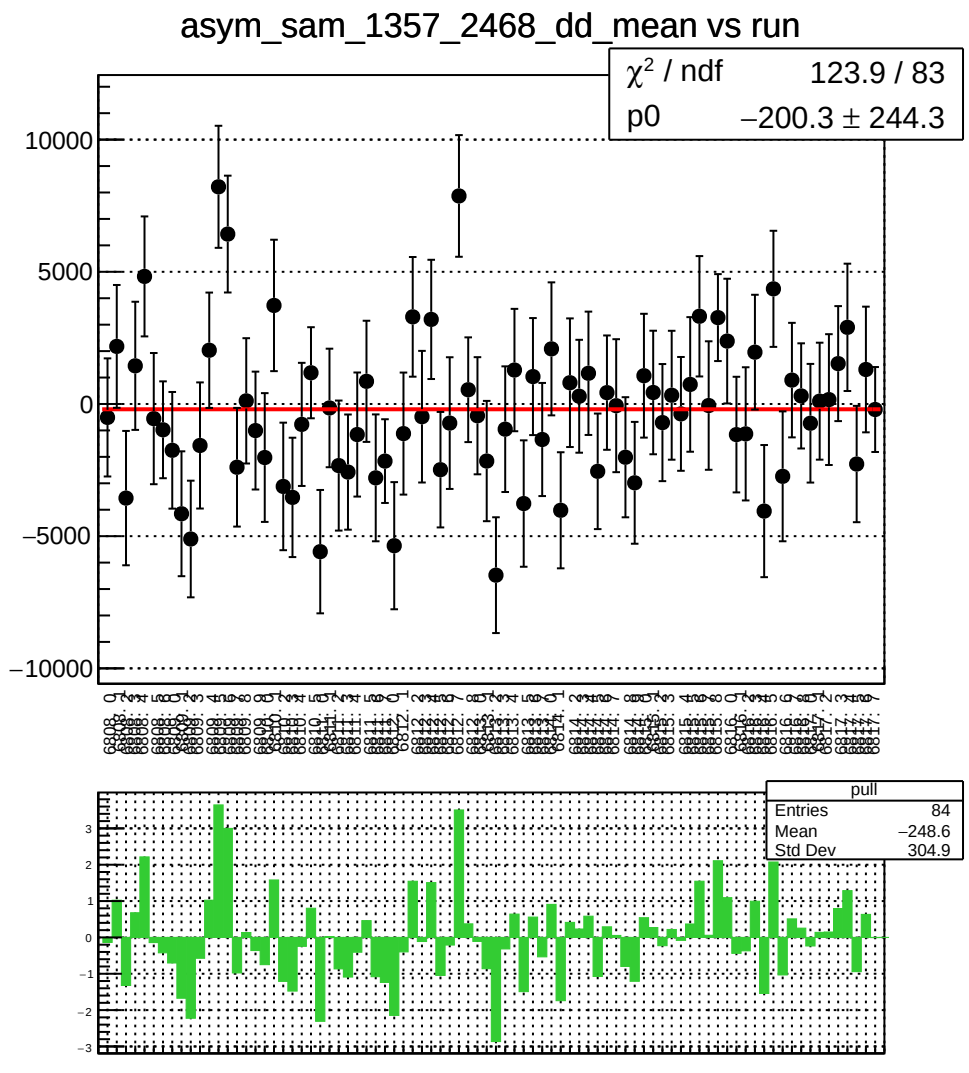

pull1D
Entries 84
Mean −0.003645
Std Dev 0.9898

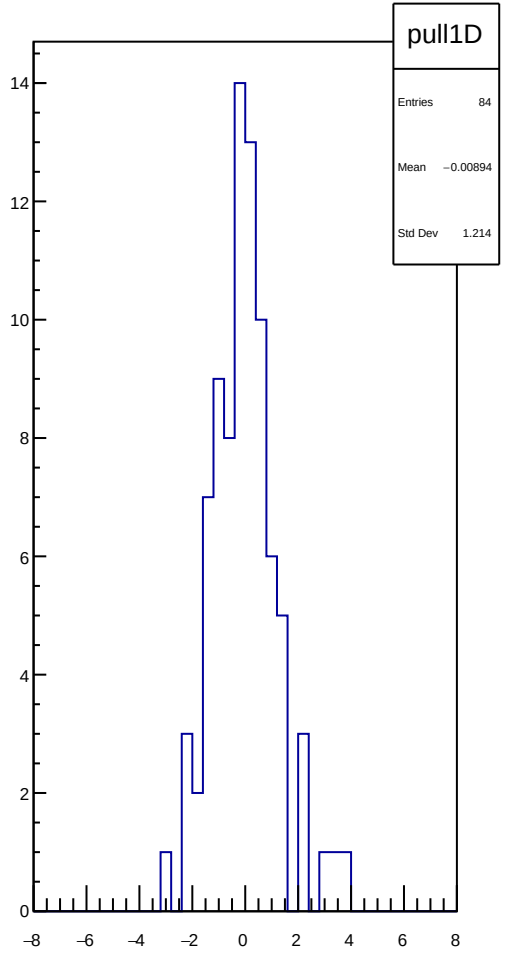

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 2282 / 83
p0 20.25 ± 0.01599
22.5
22
21.5
21
20.5
20
19.5
19
18.5

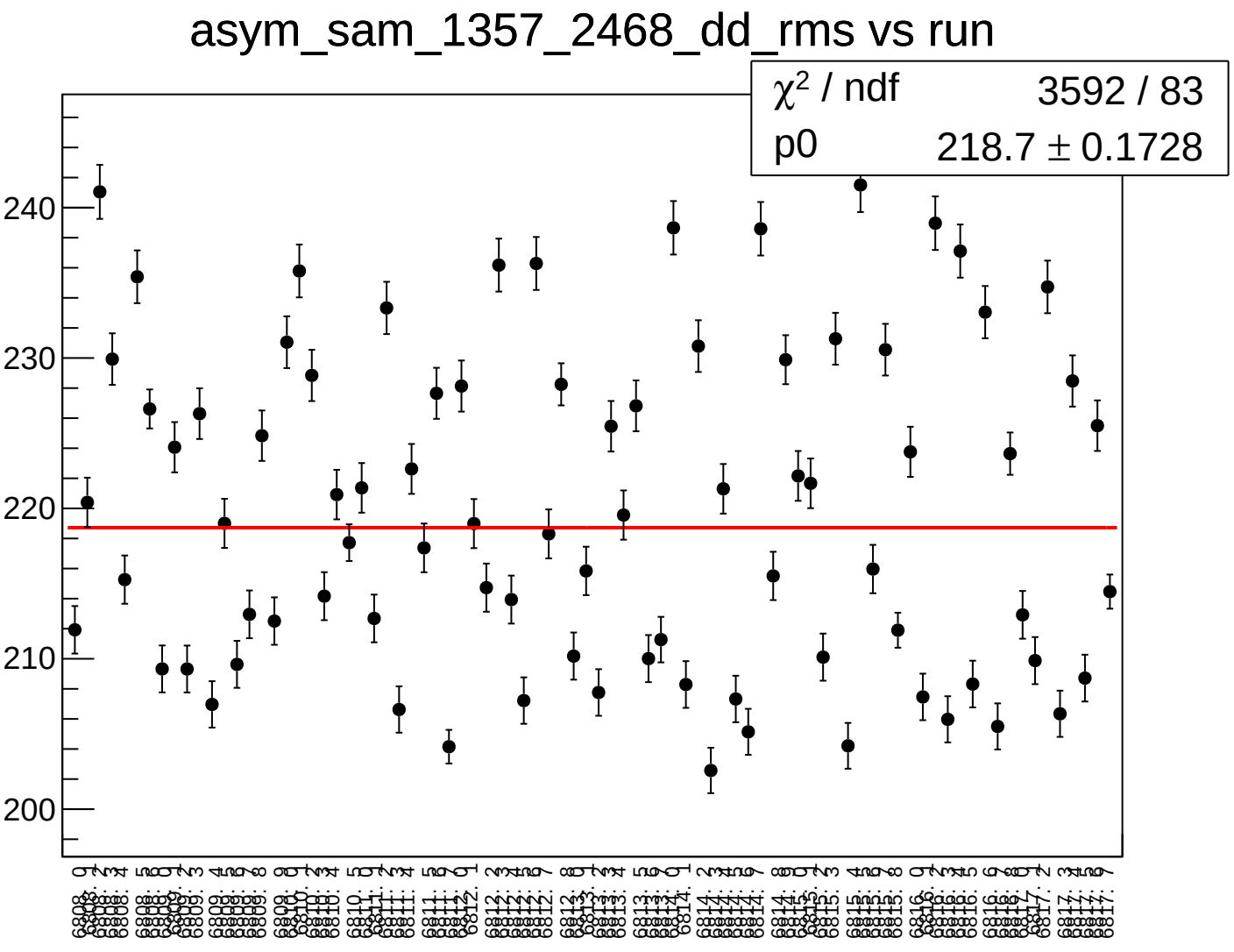

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 126.5 / 83
p0 176.4 ± 243.3
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −196
Std Dev 259.8
3
2
1
0
−1
−2
−3

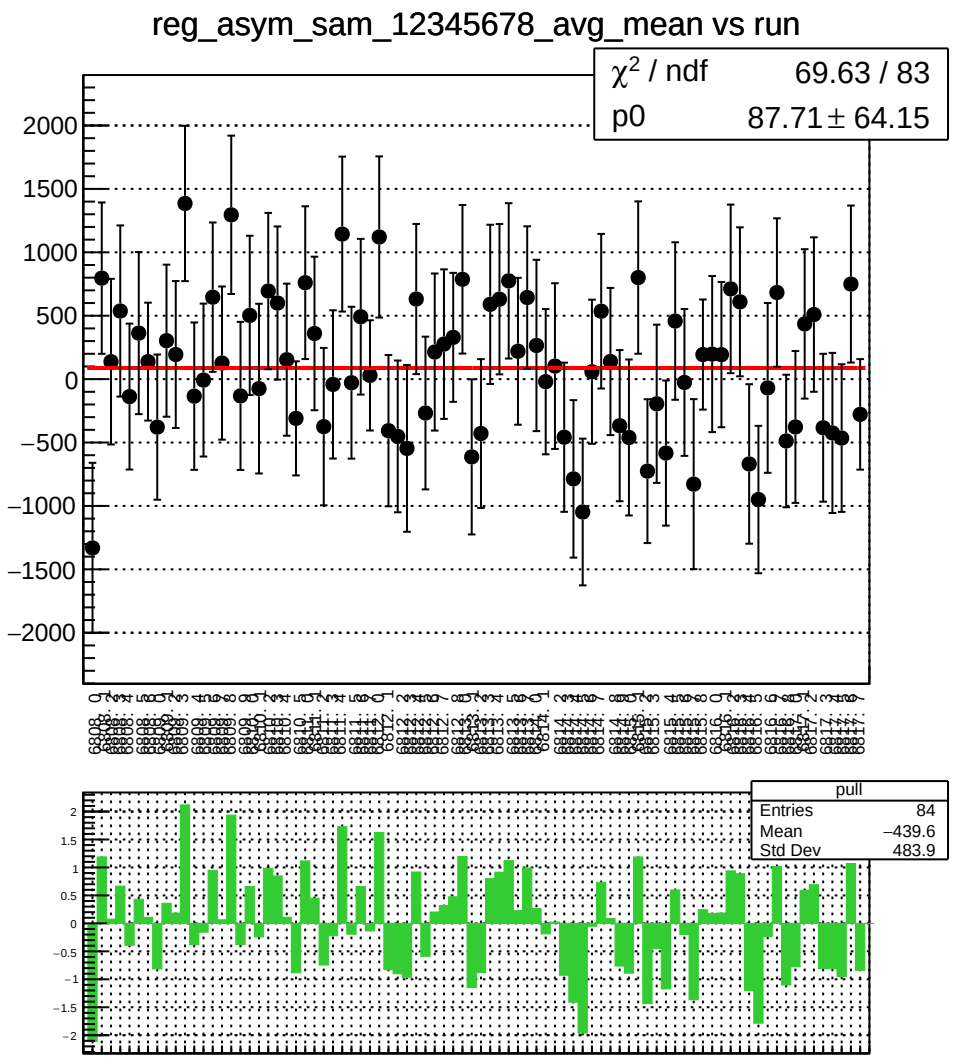

pull1D
Entries 84
Mean 0.007692
Std Dev 1.227
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

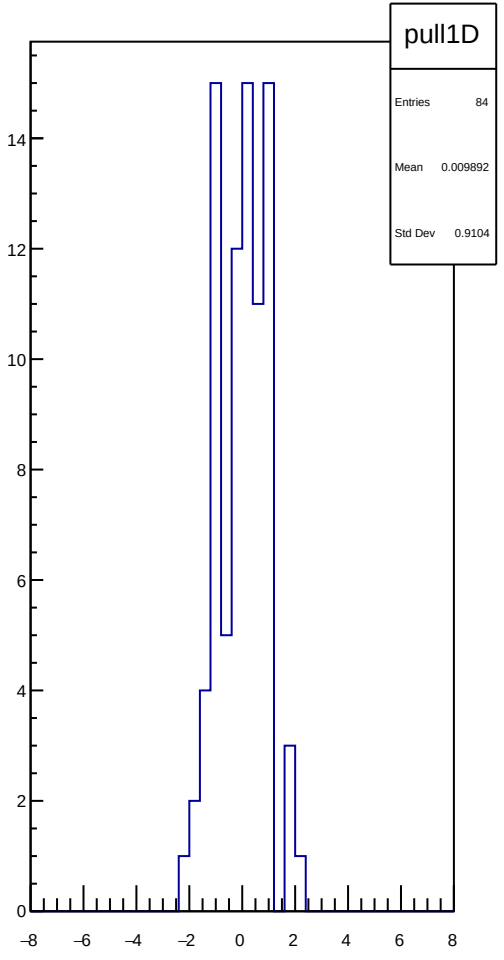

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 3617 / 83
p0 217.8 ± 0.172
240
230
220
210
200

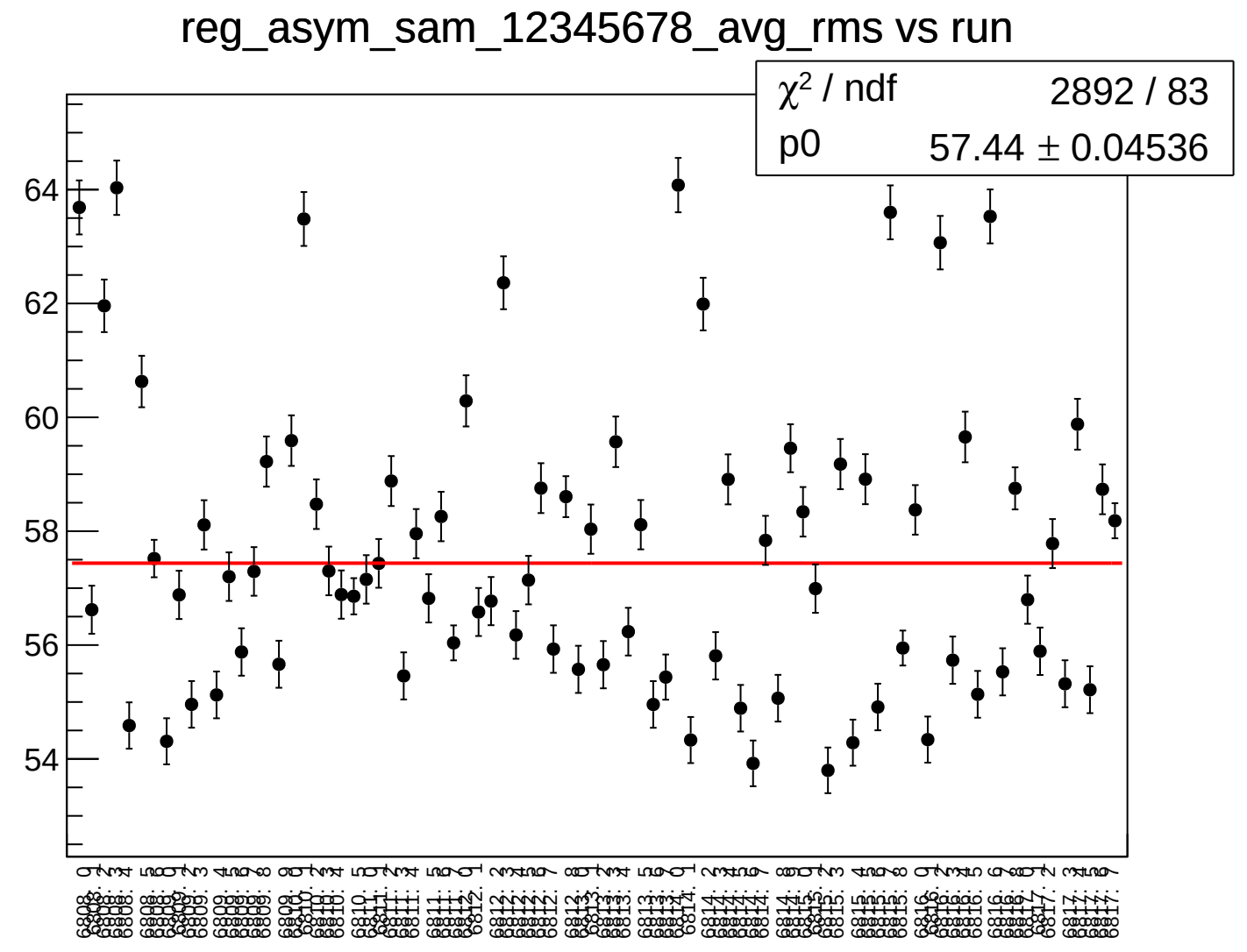

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 123.9 / 83
p0 −200.3 ± 244.3
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −248.6
Std Dev 304.9
3
2
1
0
−1
−2
−3

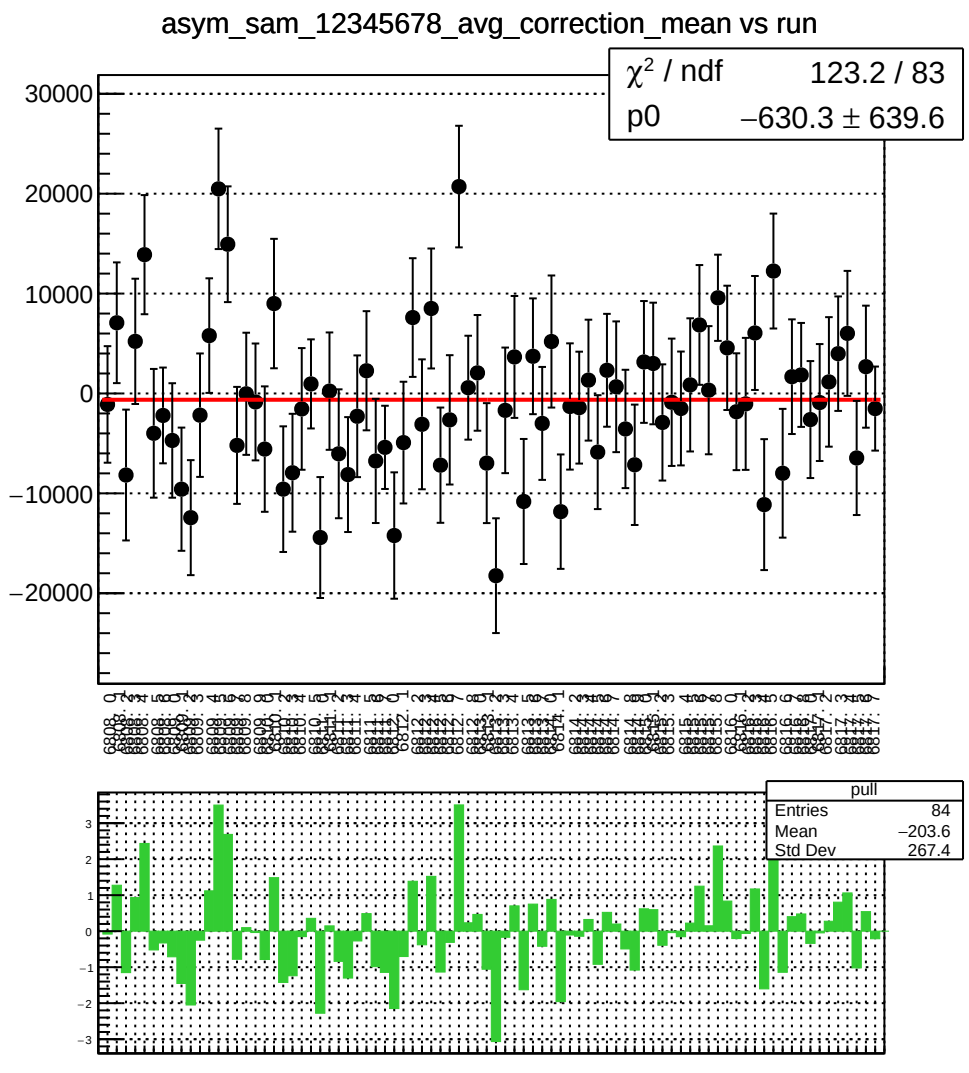

pull1D
Entries 84
Mean −0.00894
Std Dev 1.214
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

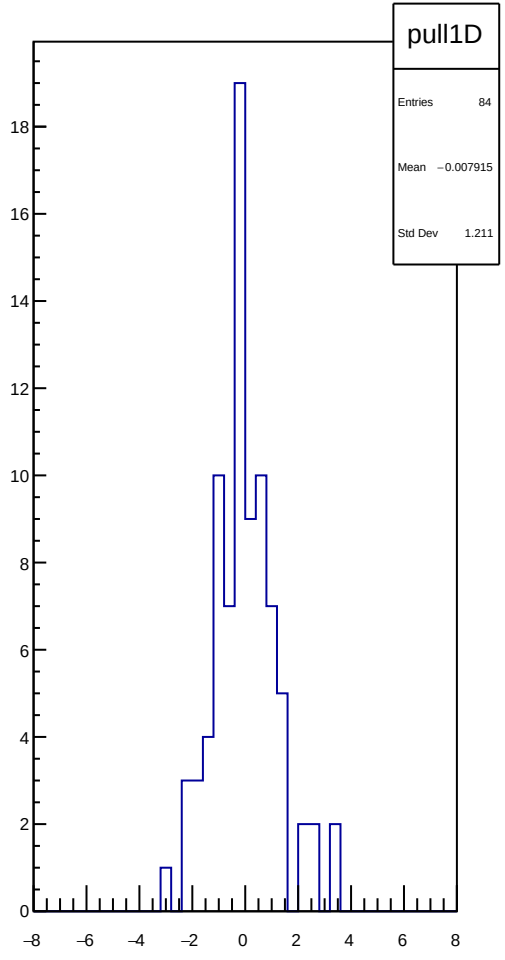

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 3592 / 83
p0 218.7 ± 0.1728
240
230
220
210
200

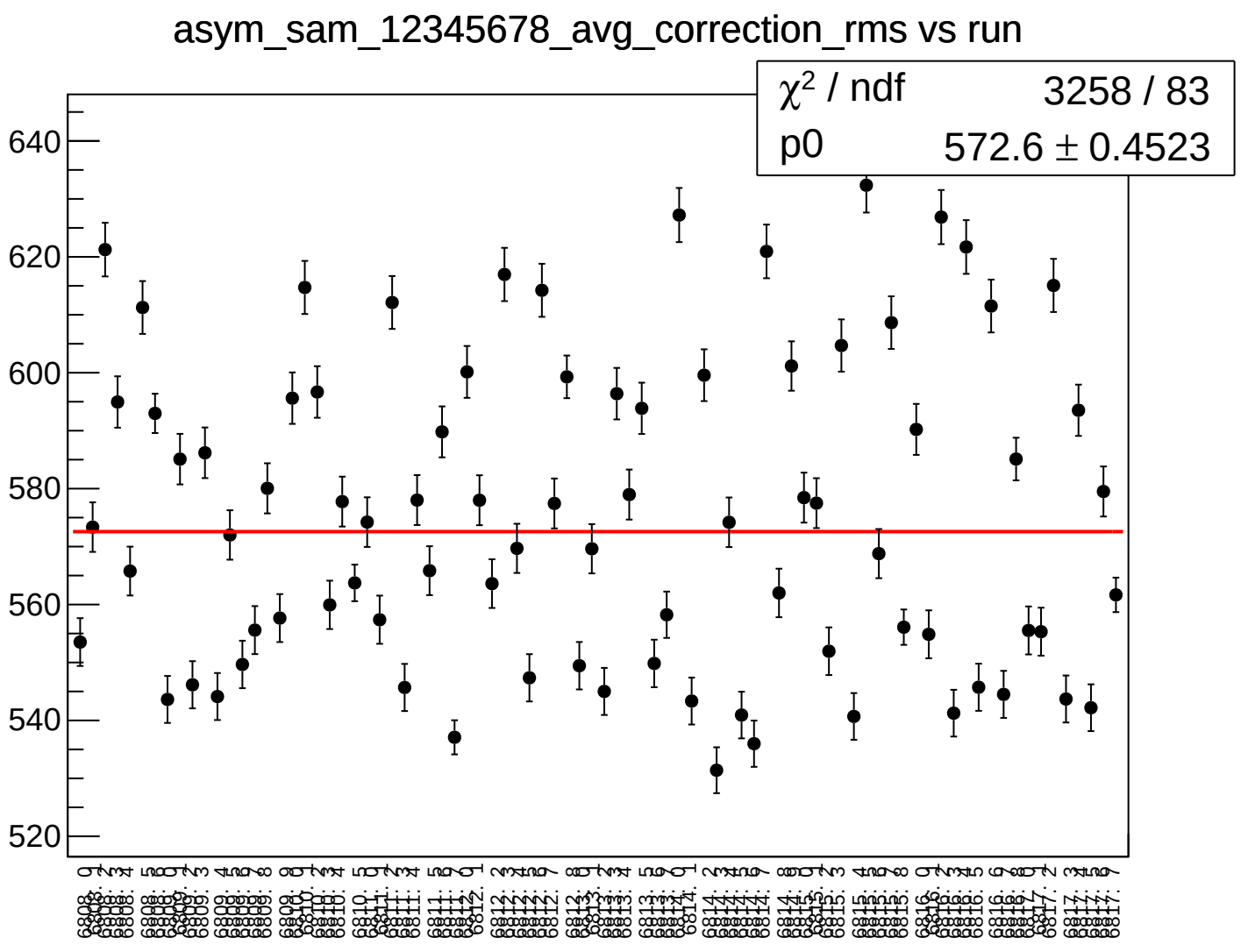

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 69.63 / 83
p0 87.71 ± 64.15
pull
Entries 84
Mean −439.6
Std Dev 483.9

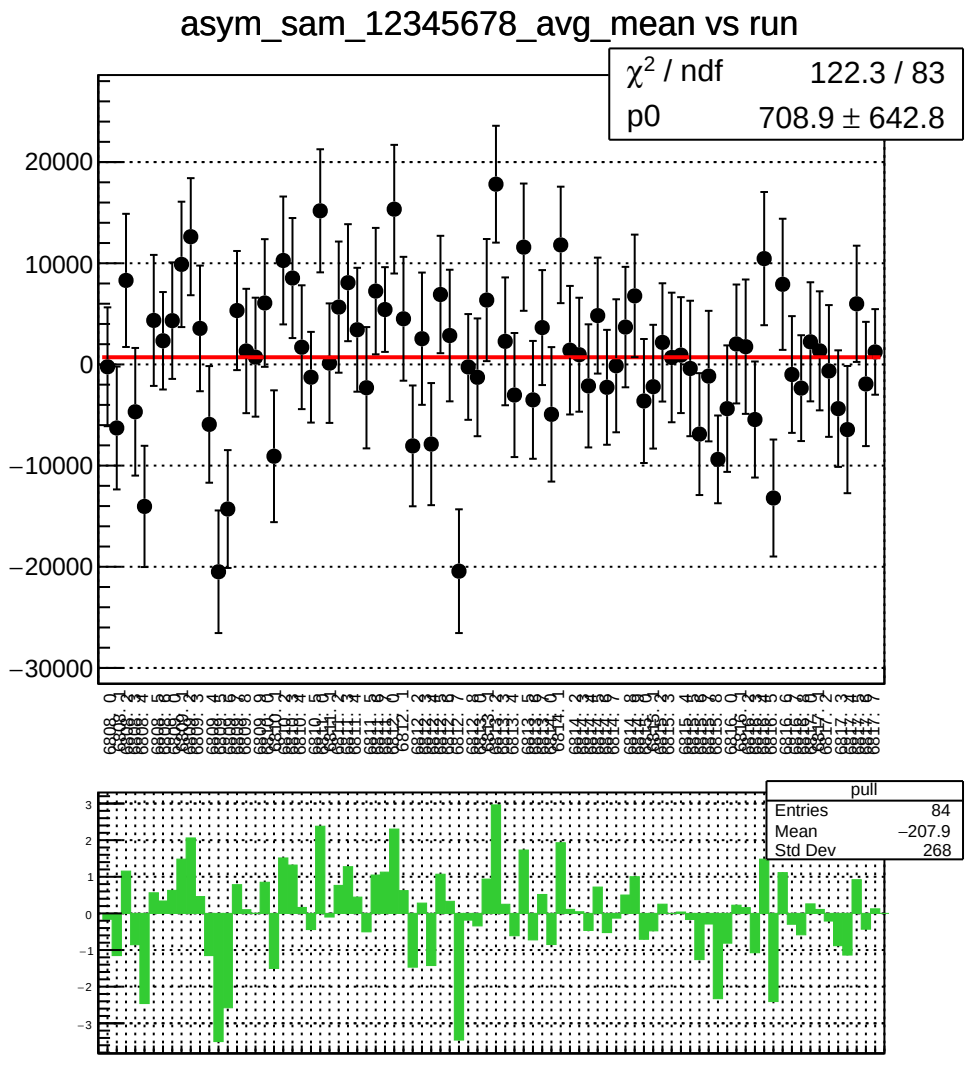

pull1D
Entries 84
Mean 0.009892
Std Dev 0.9104

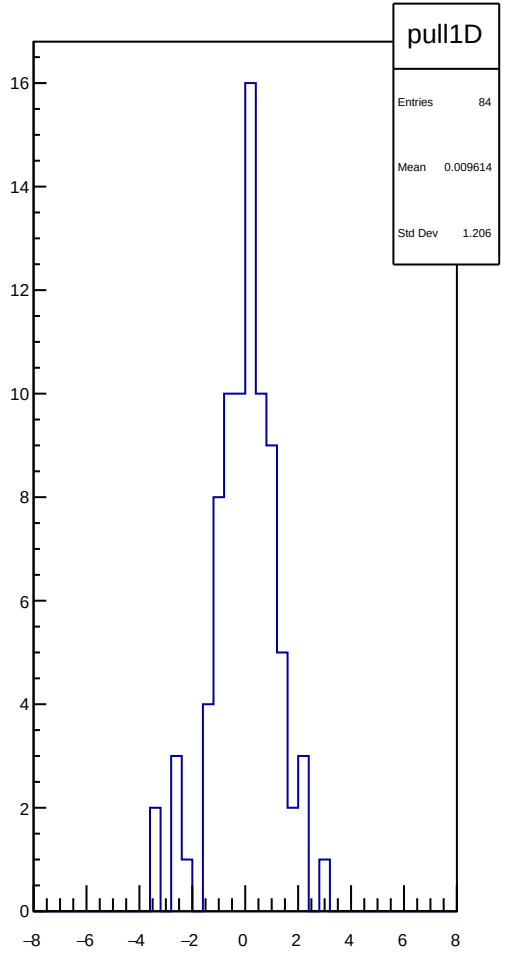

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 2892 / 83
p0 57.44 ± 0.04536
64
62
60
58
56
54

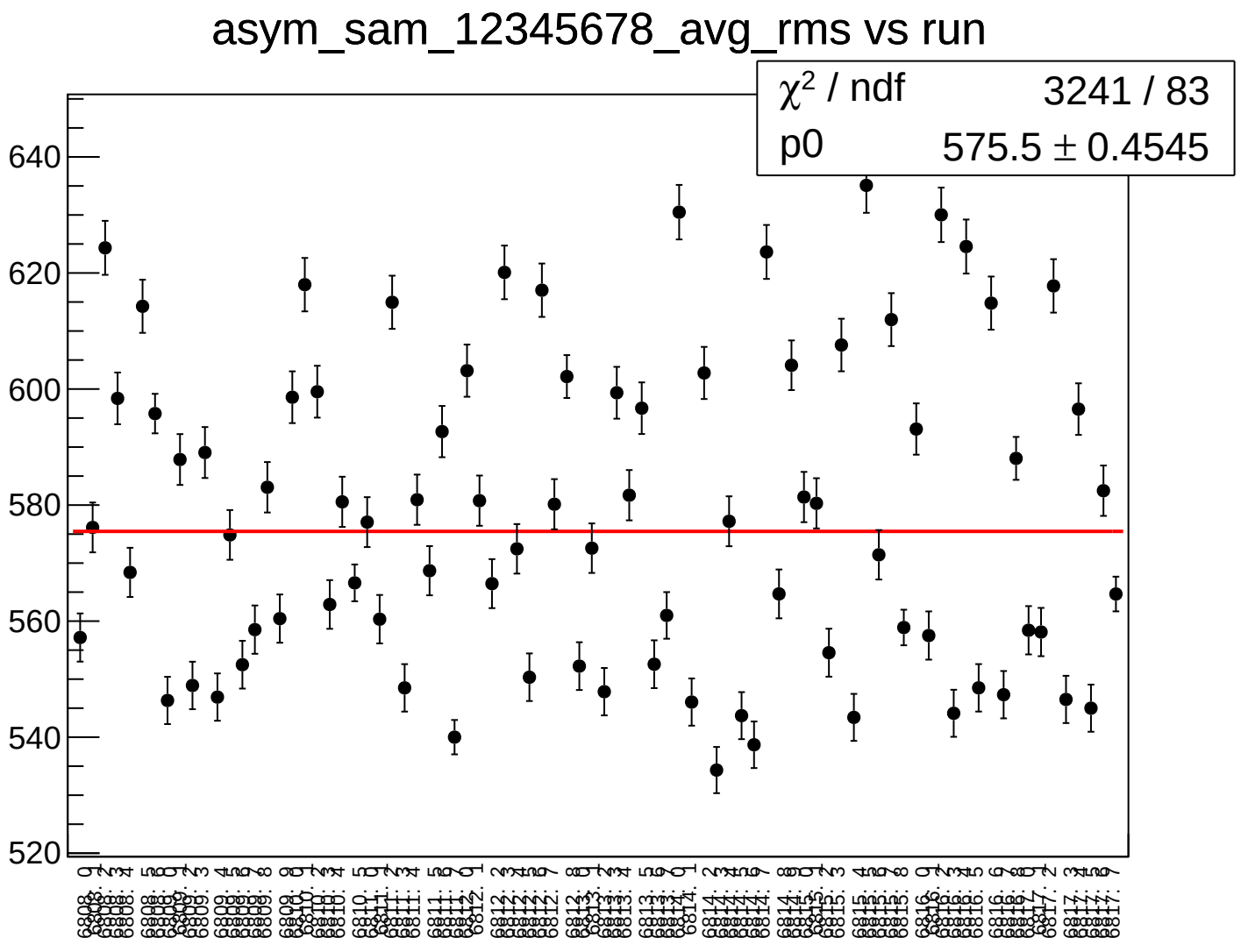

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 123.2 / 83
p0 −630.3 ± 639.6
30000
20000
10000
0
−10000
−20000
pull
Entries 84
Mean −203.6
Std Dev 267.4
3
2
1
0
−1
−2
−3

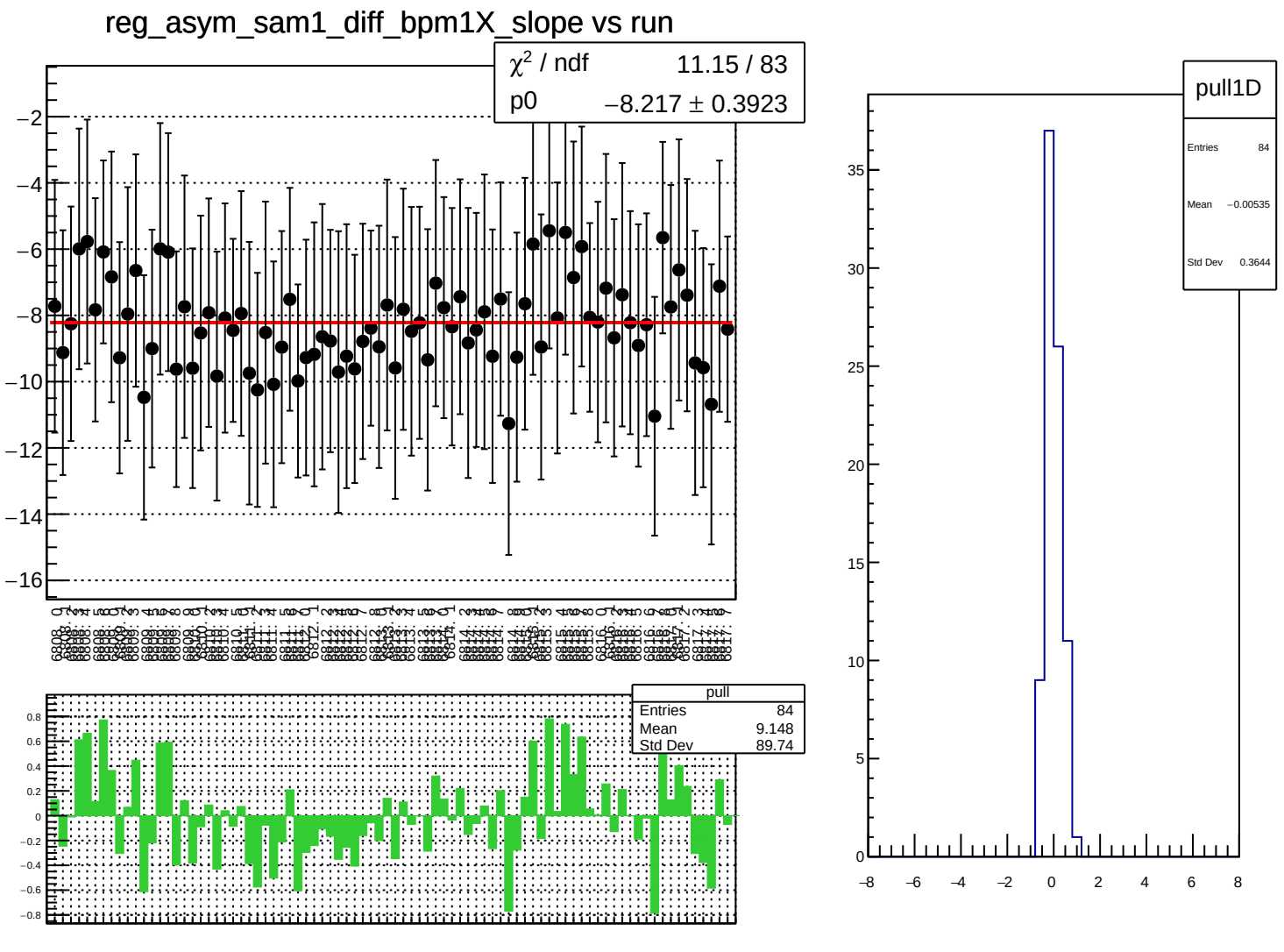

pull1D
Entries 84
Mean −0.007915
Std Dev 1.211
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

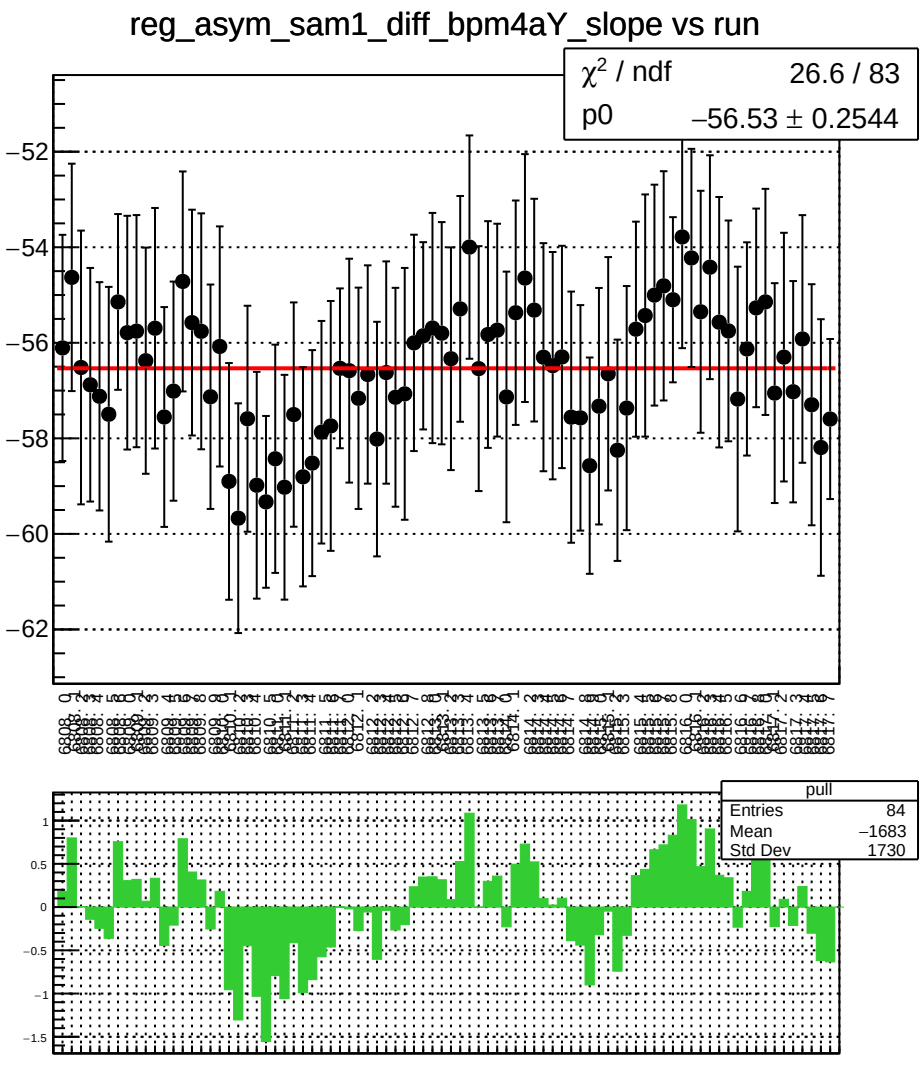

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 3258 / 83
p0 572.6 ± 0.4523
640
620
600
580
560
540
520

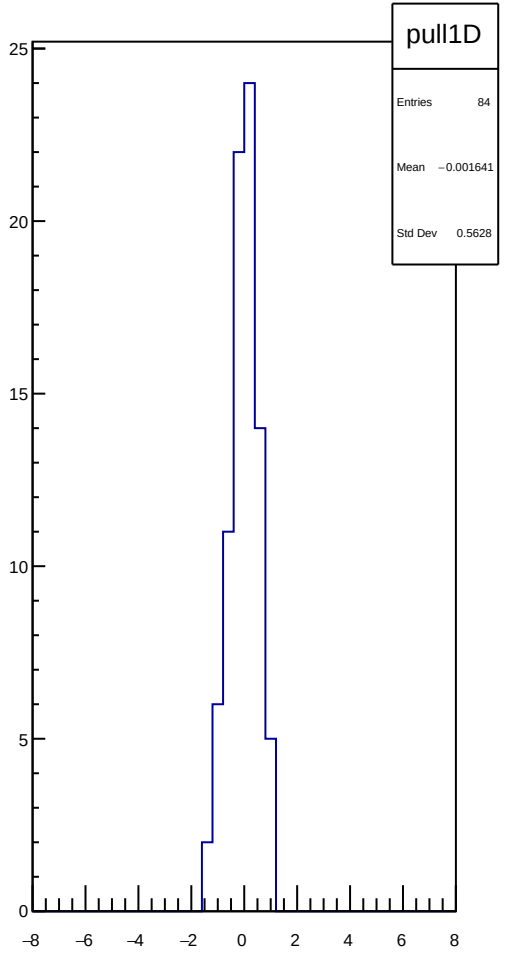

asym_sam_12345678_avg_mean vs run
χ² / ndf 122.3 / 83
p0 708.9 ± 642.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 84
Mean −207.9
Std Dev 268
3
2
1
0
−1
−2
−3

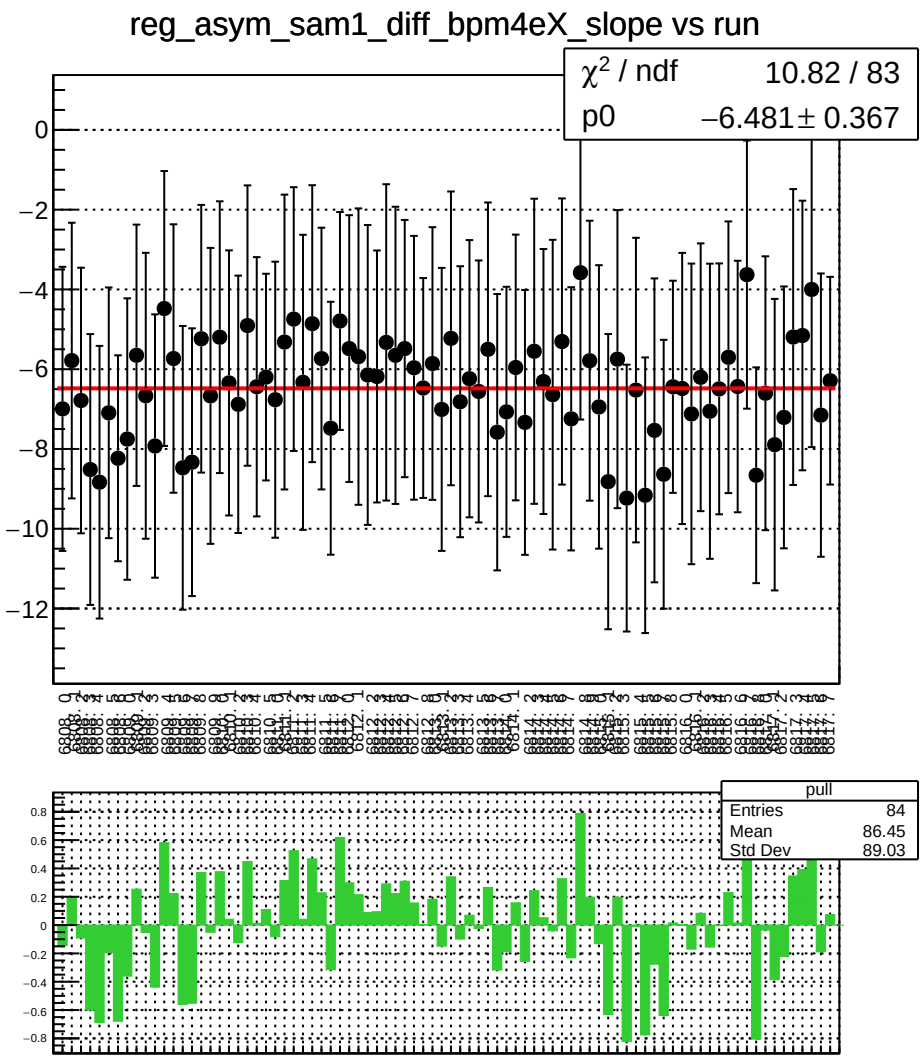

pull1D
Entries 84
Mean 0.009614
Std Dev 1.206
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

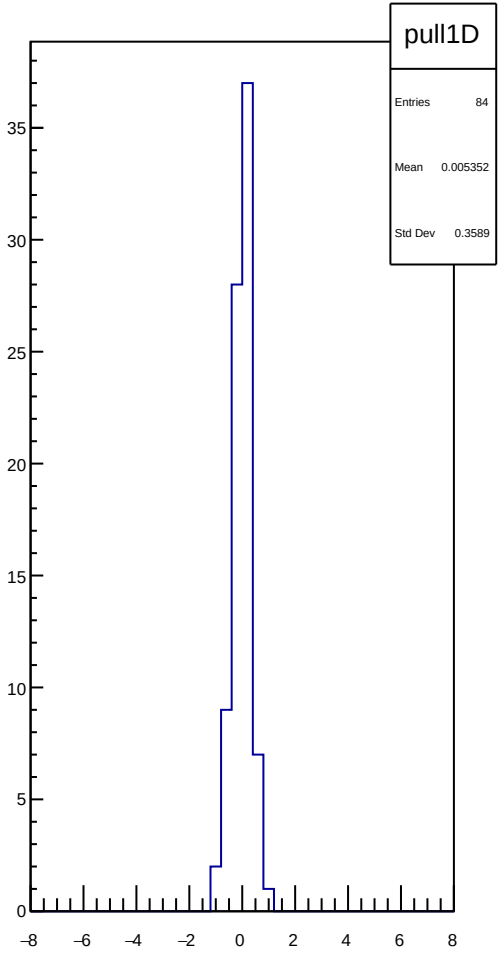

asym_sam_12345678_avg_rms vs run
χ² / ndf 3241 / 83
p0 575.5 ± 0.4545
640
620
600
580
560
540
520

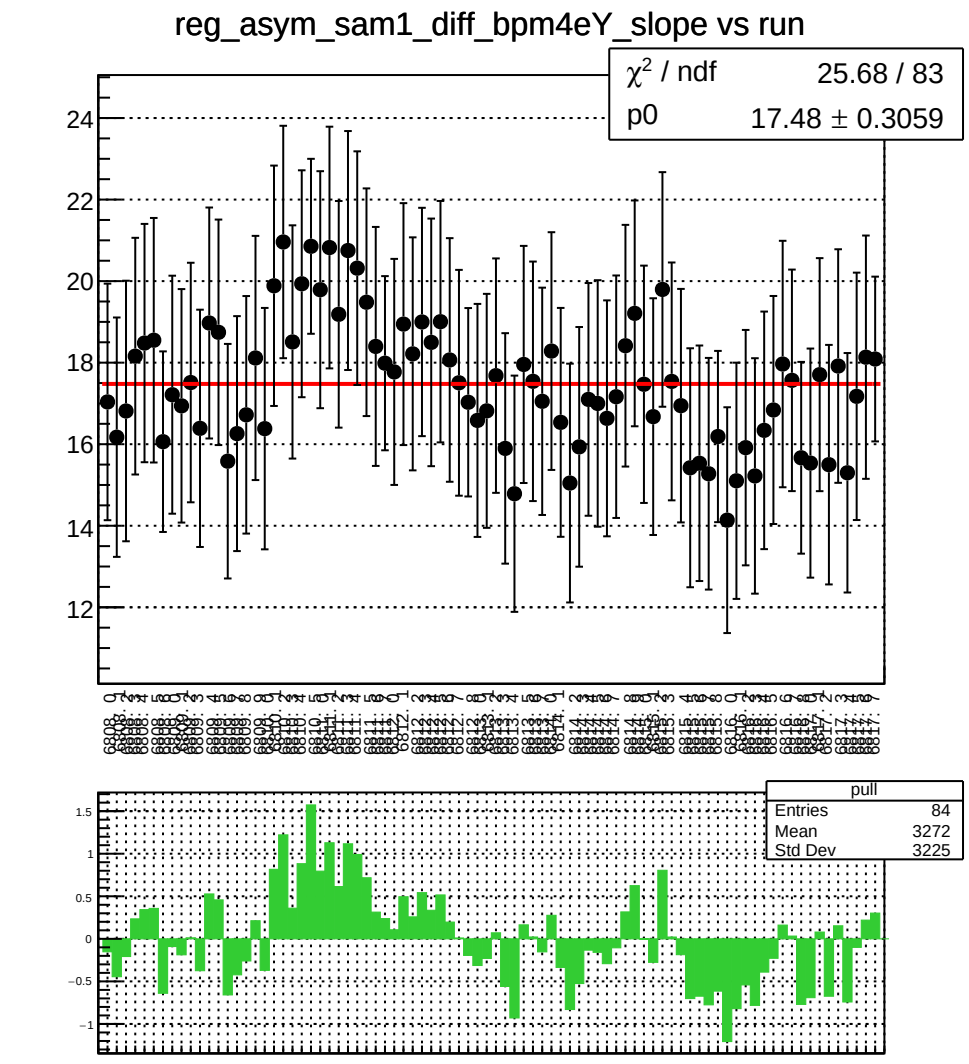

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 11.15 / 83
p0 −8.217 ± 0.3923
pull
Entries 84
Mean 9.148
Std Dev 89.74
pull1D
Entries 84
Mean −0.00535
Std Dev 0.3644

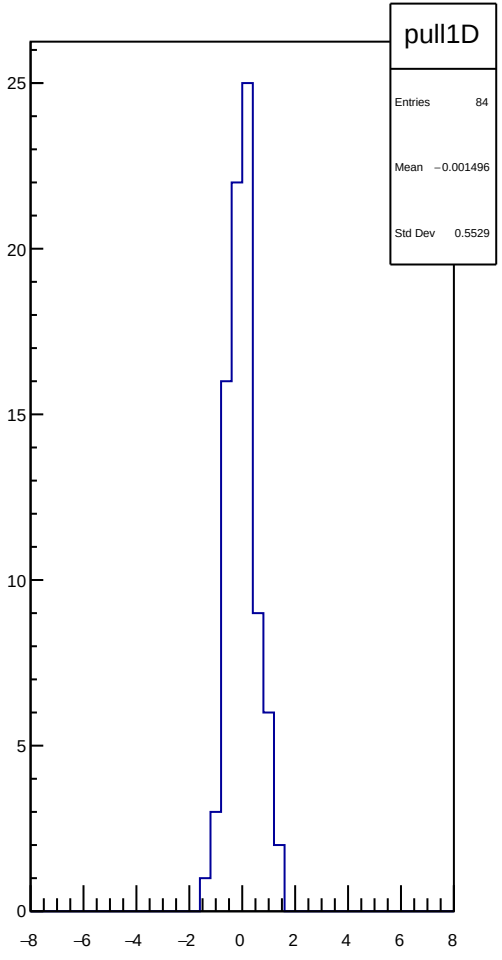

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 26.6 / 83
p0 −56.53 ± 0.2544
−52
−54
−56
−58
−60
−62
pull
Entries 84
Mean −1683
Std Dev 1730
1
0.5
0
−0.5
−1
−1.5

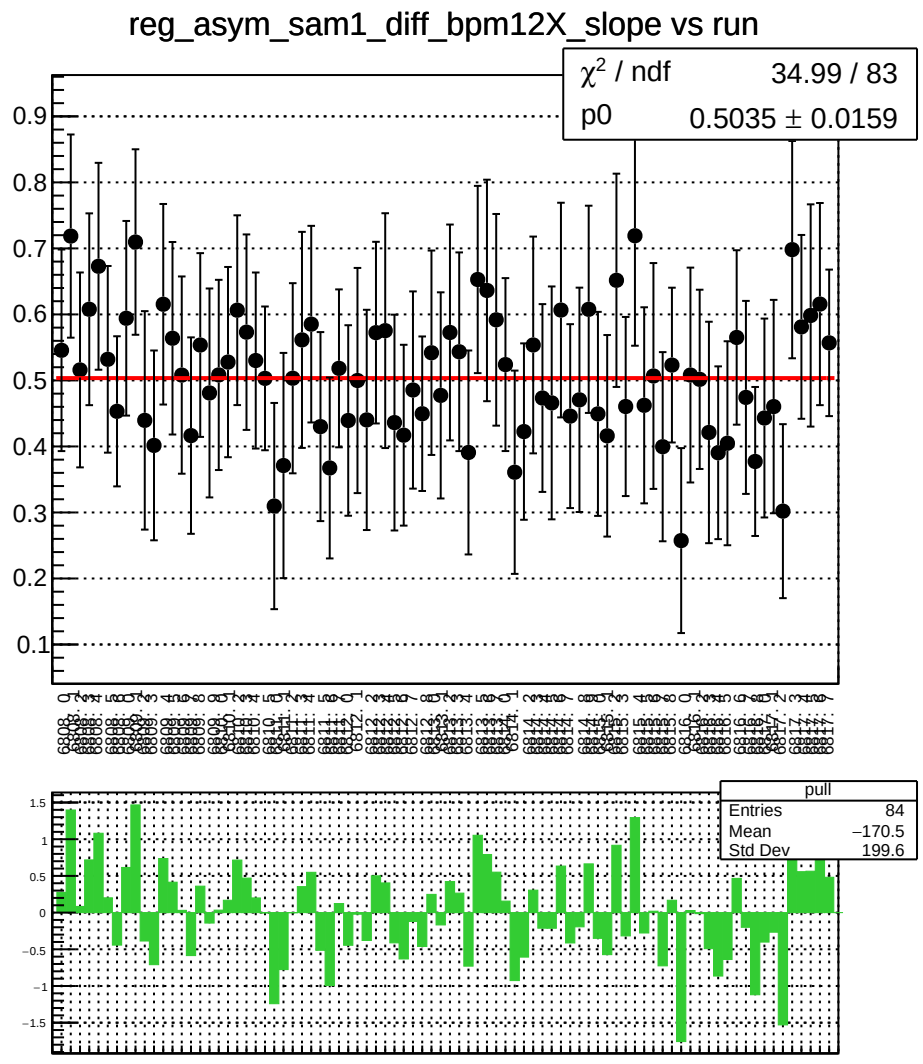

pull1D
Entries 84
Mean −0.001641
Std Dev 0.5628
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

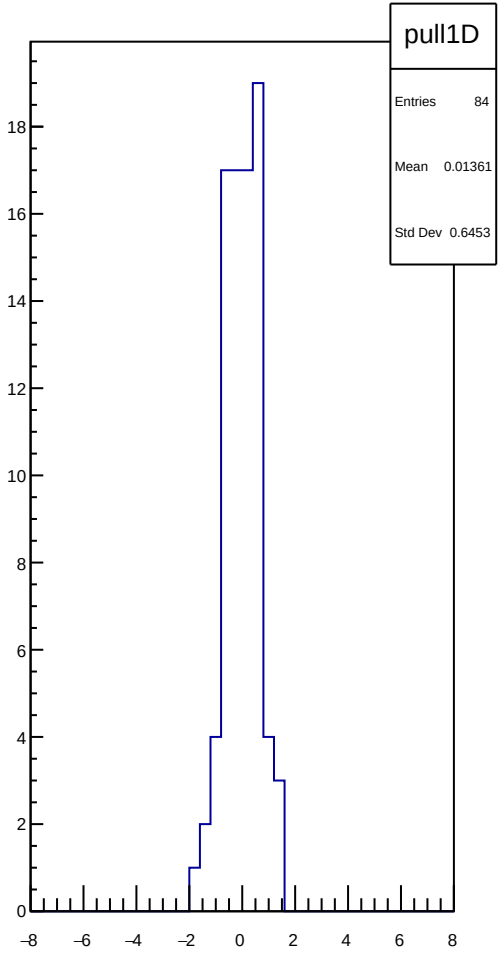

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 10.82 / 83
p0 −6.481 ± 0.367
pull
Entries 84
Mean 86.45
Std Dev 89.03

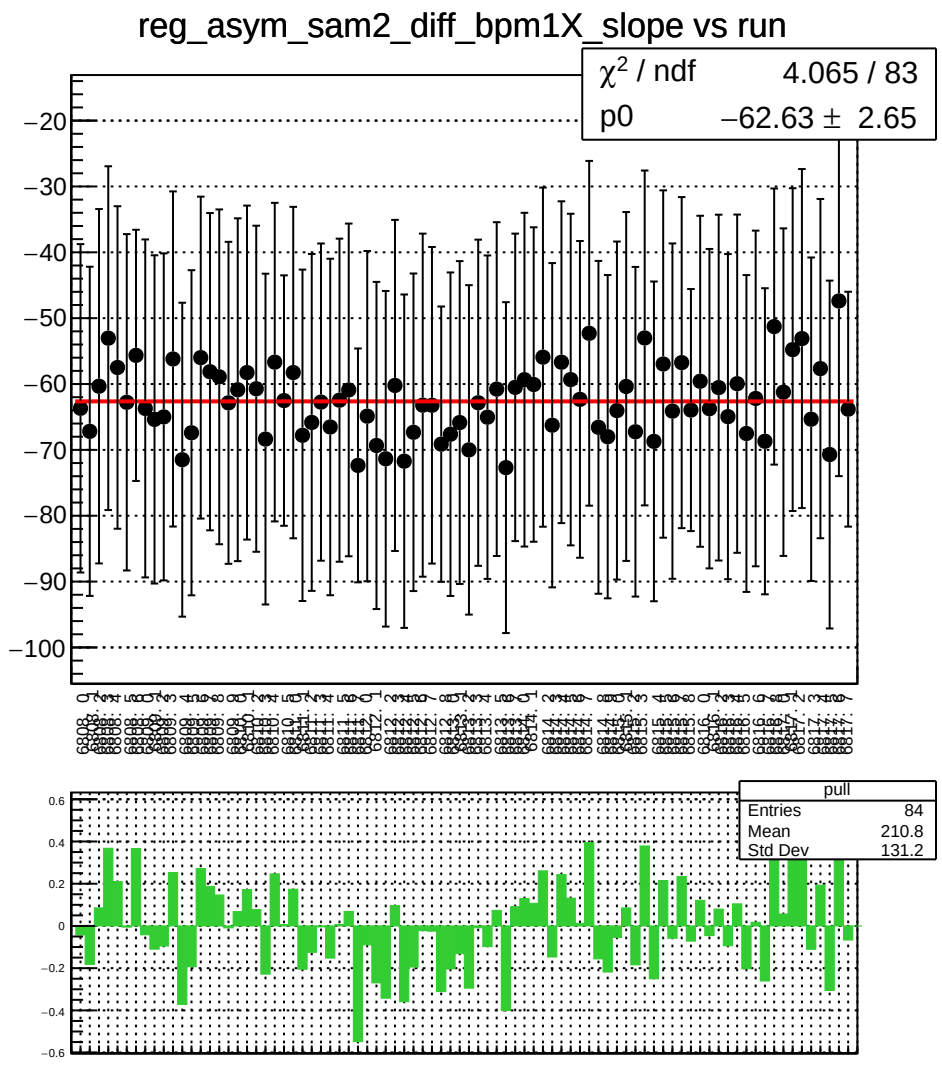

pull1D
Entries 84
Mean 0.005352
Std Dev 0.3589

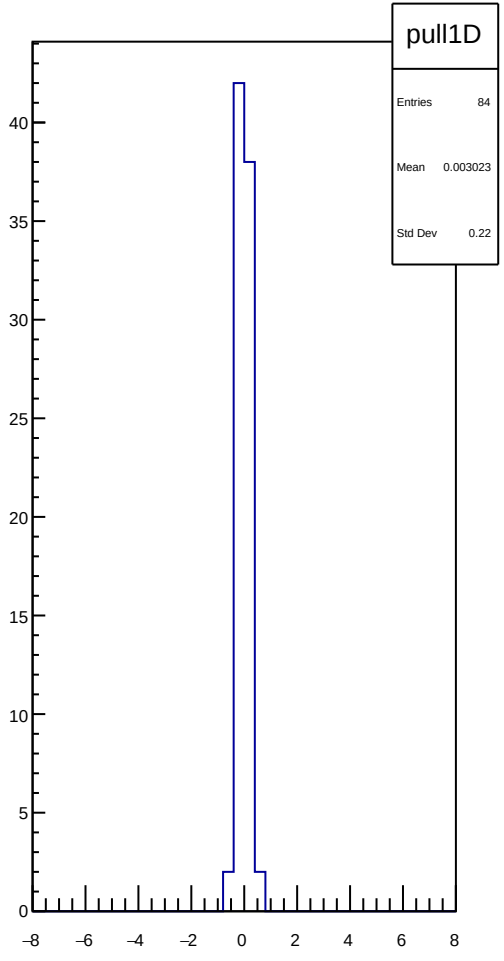

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 25.68 / 83
p0 17.48 ± 0.3059
pull
Entries 84
Mean 3272
Std Dev 3225

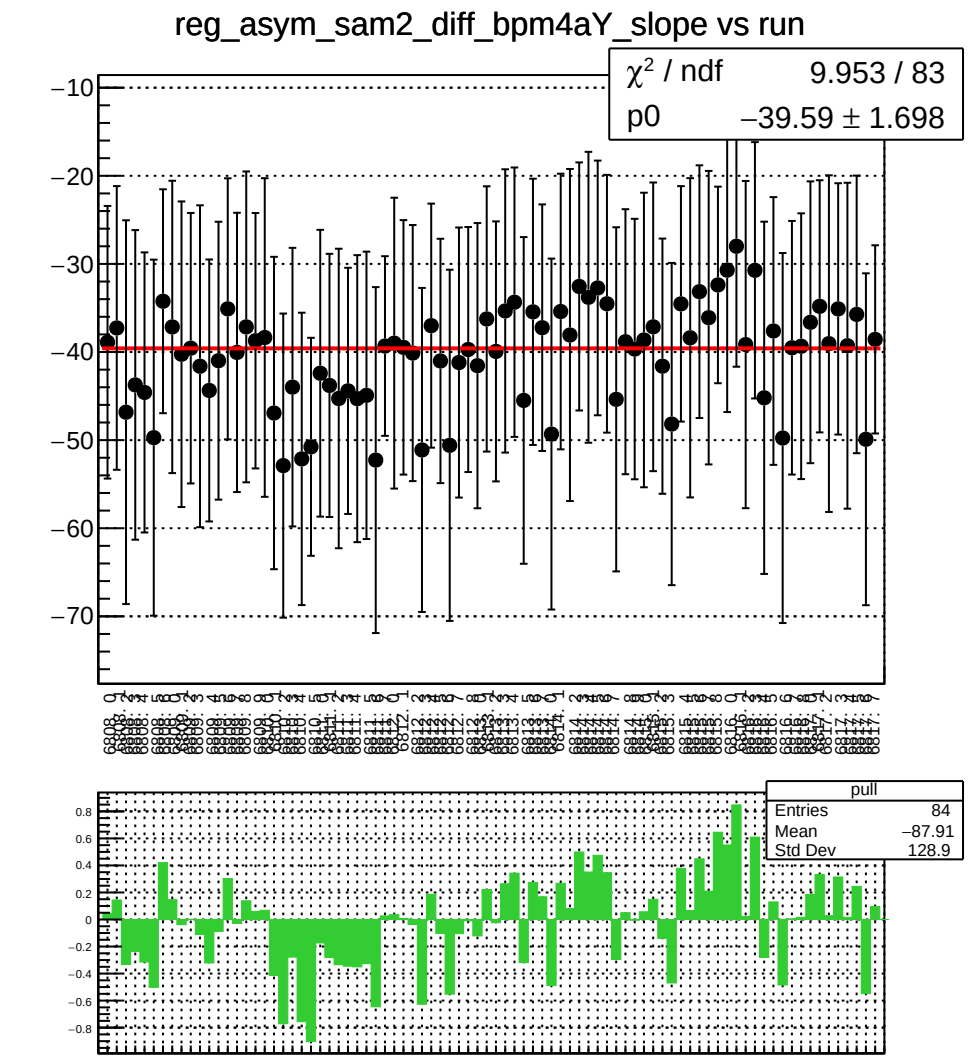

pull1D
Entries 84
Mean −0.001496
Std Dev 0.5529

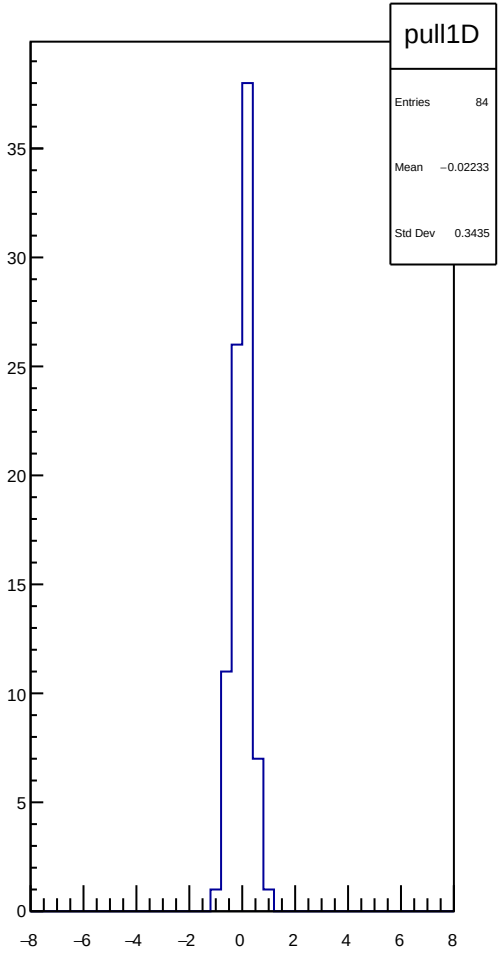

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 34.99 / 83
p0 0.5035 ± 0.0159
pull
Entries 84
Mean −170.5
Std Dev 199.6

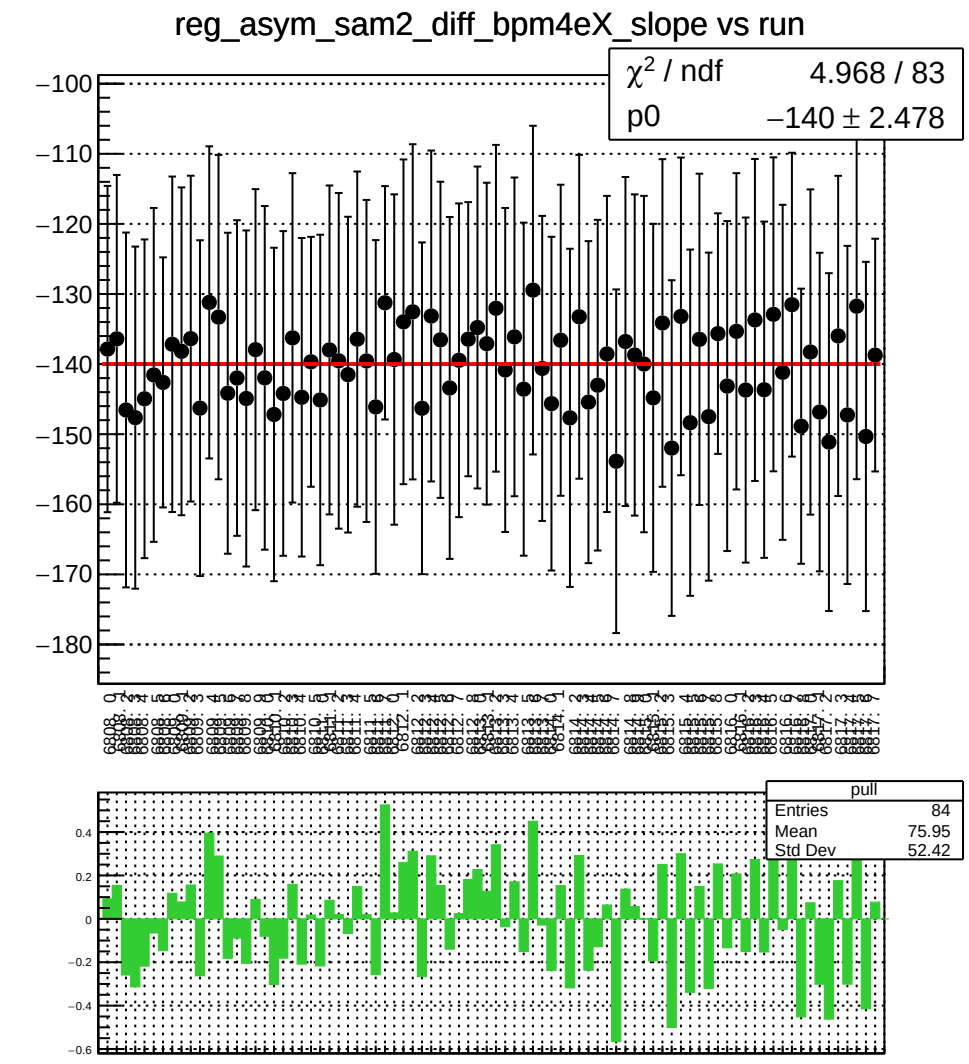

pull1D
Entries 84
Mean 0.01361
Std Dev 0.6453

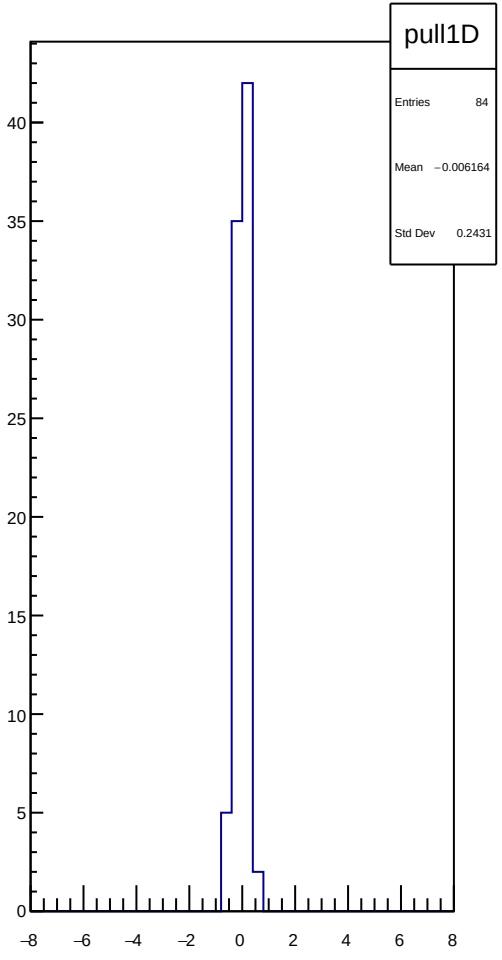

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 4.065 / 83
p0 −62.63 ± 2.65
pull
Entries 84
Mean 210.8
Std Dev 131.2

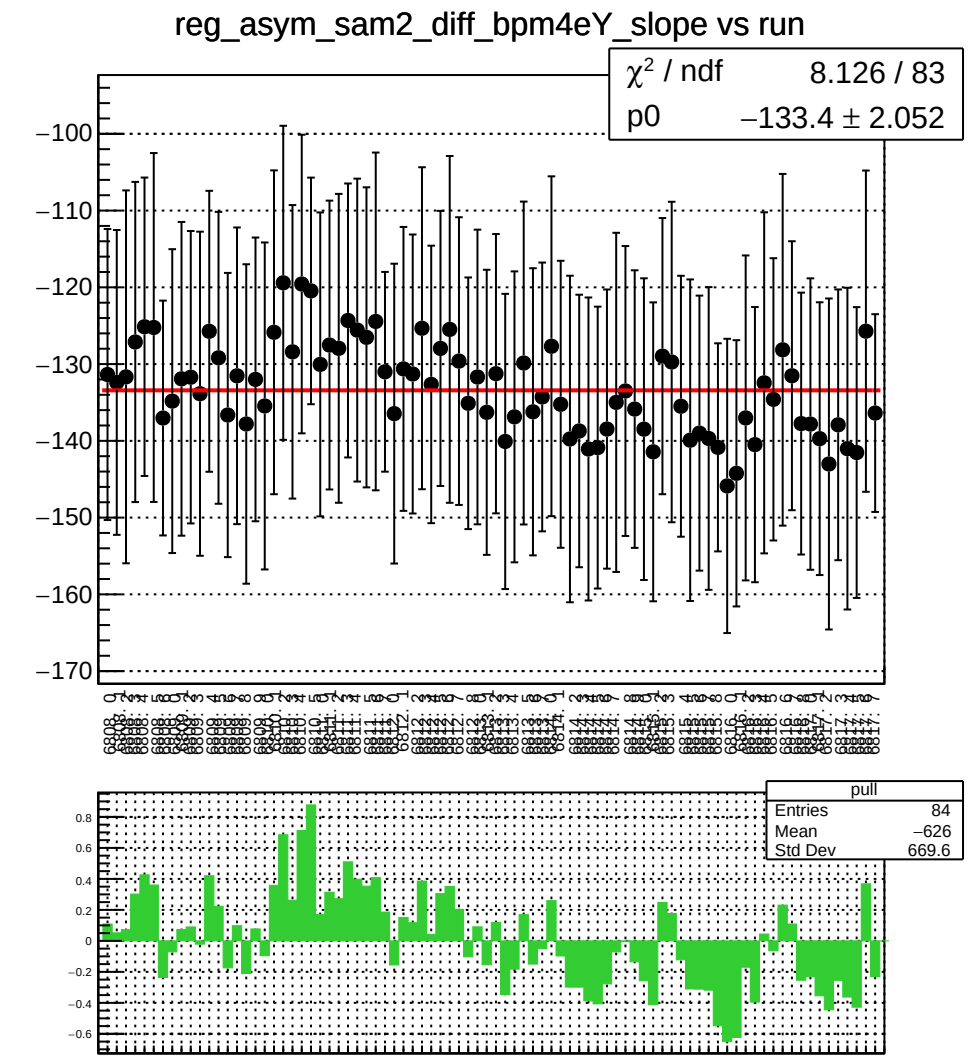

pull1D
Entries 84
Mean 0.003023
Std Dev 0.22

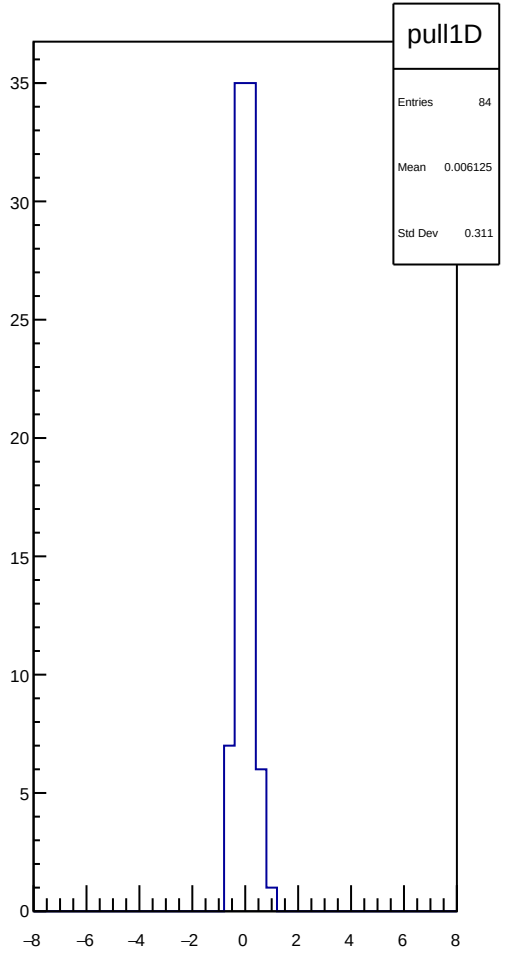

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 9.953 / 83
p0 −39.59 ± 1.698
pull
Entries 84
Mean −87.91
Std Dev 128.9

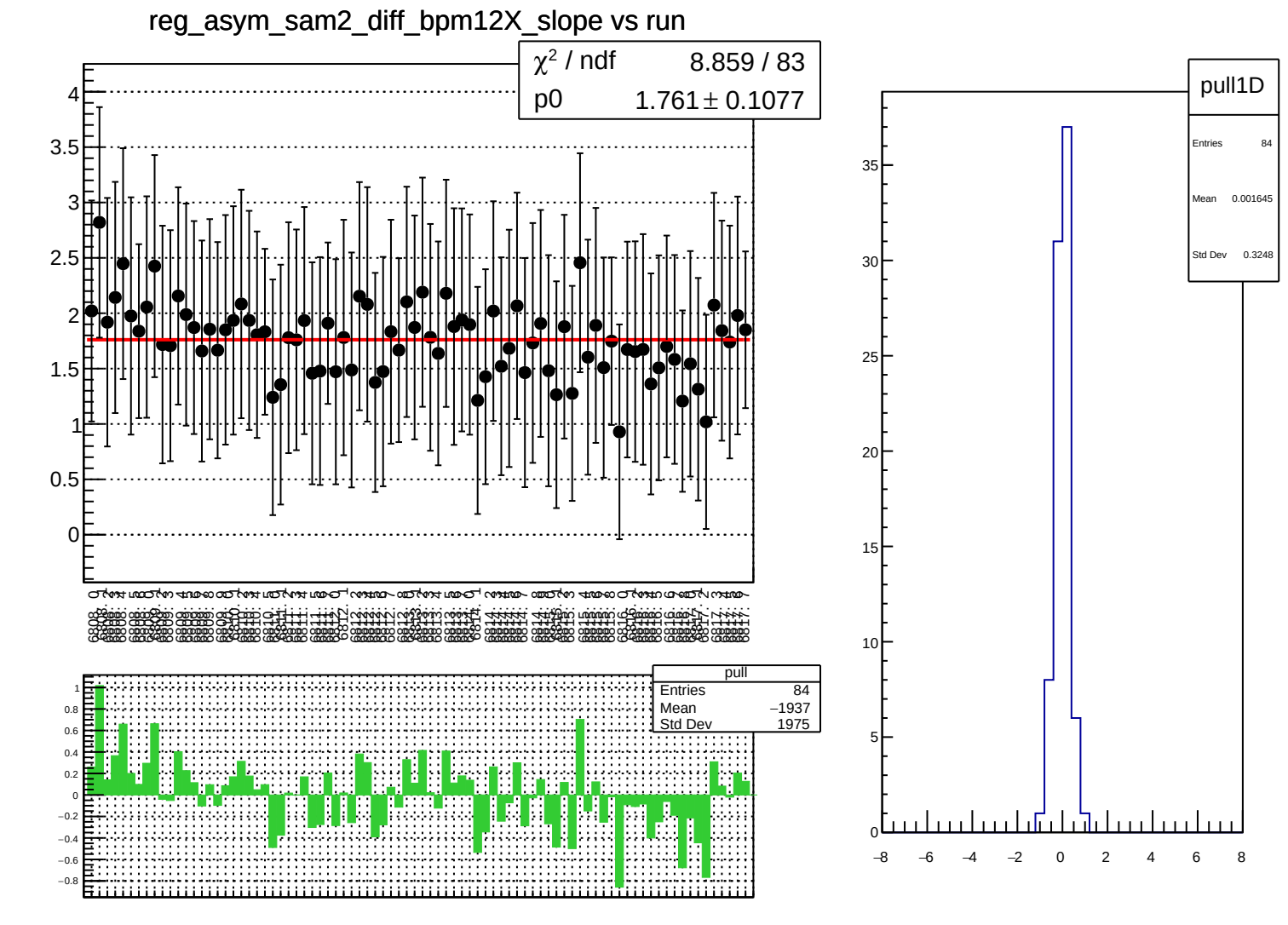

pull1D
Entries 84
Mean −0.02233
Std Dev 0.3435

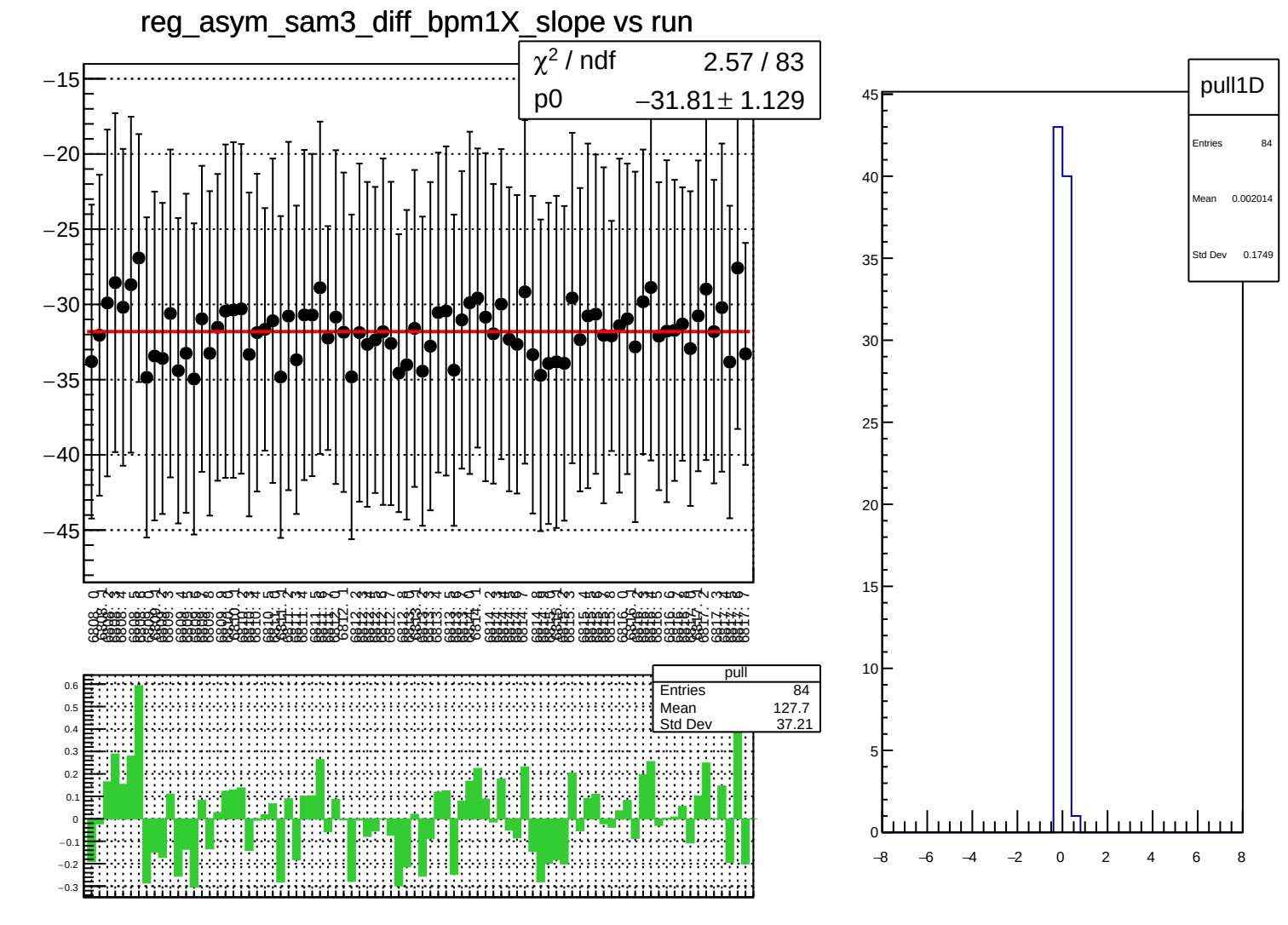

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 4.968 / 83
p0 −140 ± 2.478
pull
Entries 84
Mean 75.95
Std Dev 52.42

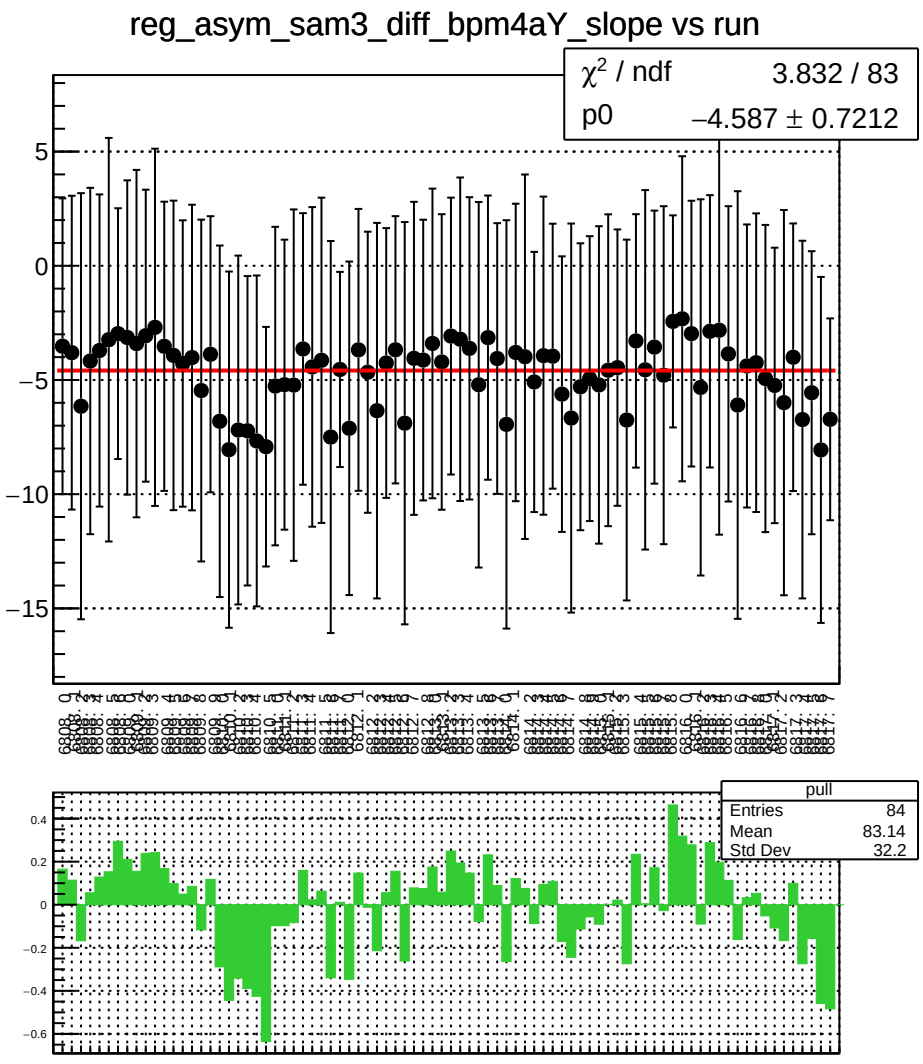

pull1D
Entries 84
Mean −0.006164
Std Dev 0.2431

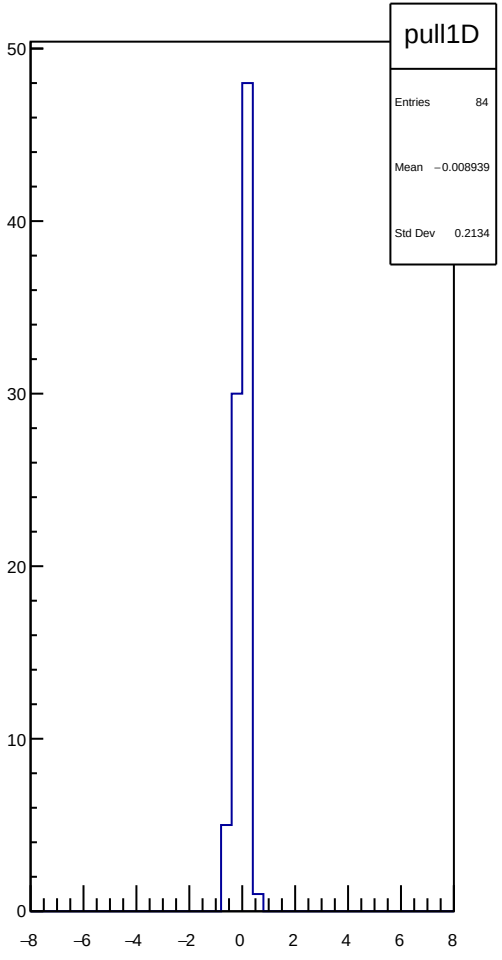

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 8.126 / 83
p0 −133.4 ± 2.052
pull
Entries 84
Mean −626
Std Dev 669.6

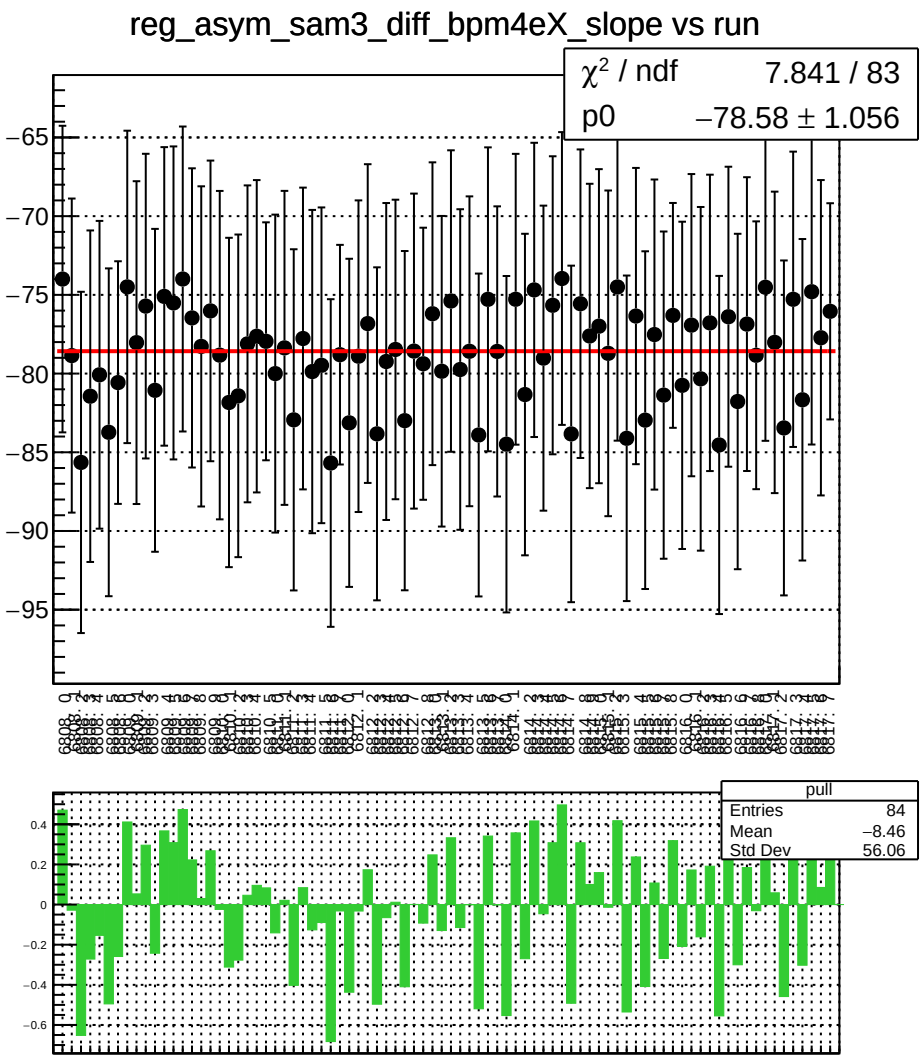

pull1D
Entries 84
Mean 0.006125
Std Dev 0.311

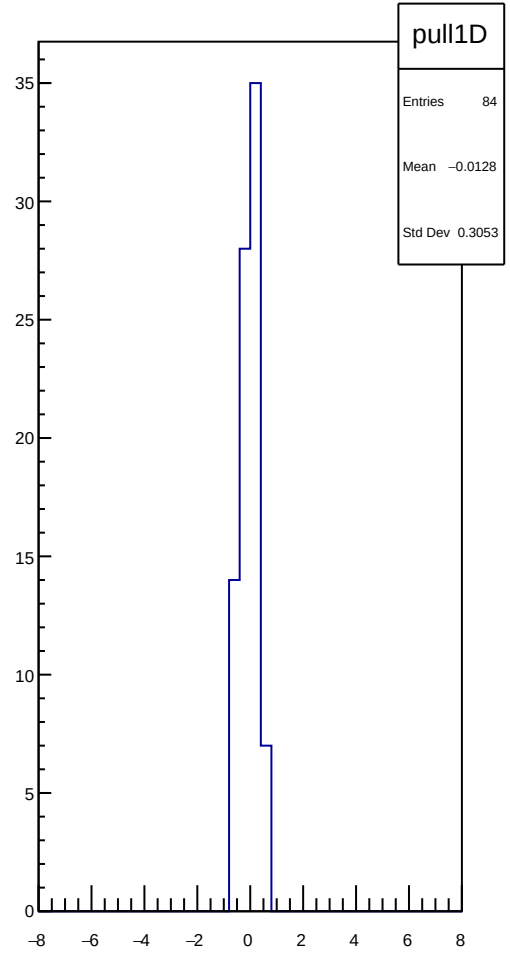

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 8.859 / 83
p0 1.761 ± 0.1077
pull
Entries 84
Mean −1937
Std Dev 1975
pull1D
Entries 84
Mean 0.001645
Std Dev 0.3248

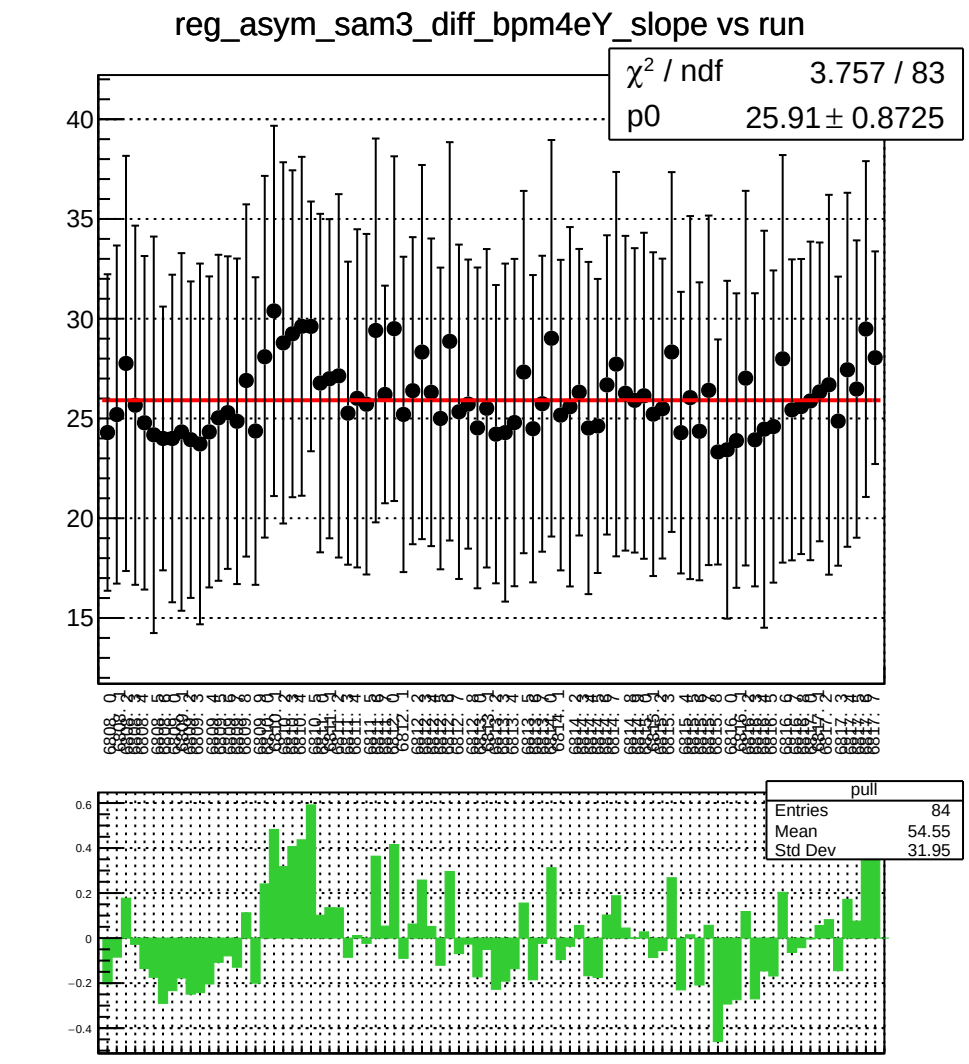

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 2.57 / 83
p0 −31.81 ± 1.129
pull
Entries 84
Mean 127.7
Std Dev 37.21
pull1D
Entries 84
Mean 0.002014
Std Dev 0.1749

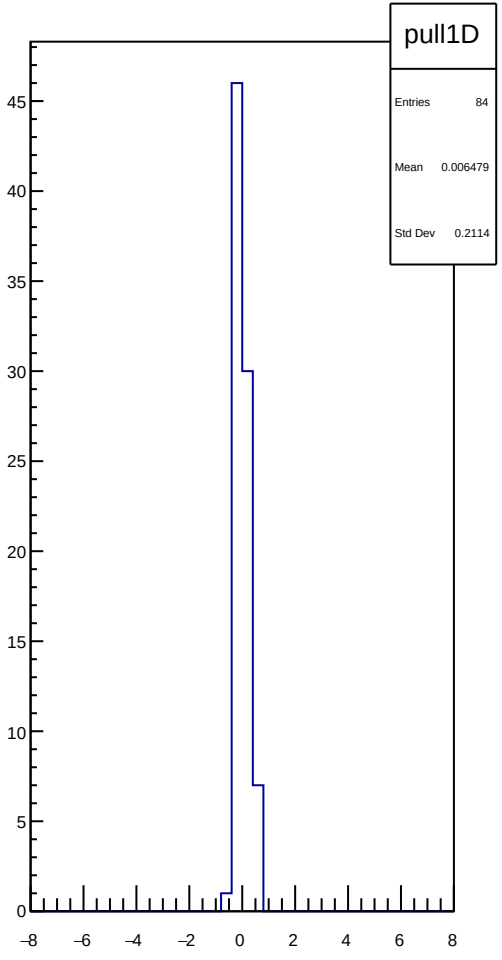

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 3.832 / 83
p0 −4.587 ± 0.7212
pull
Entries 84
Mean 83.14
Std Dev 32.2

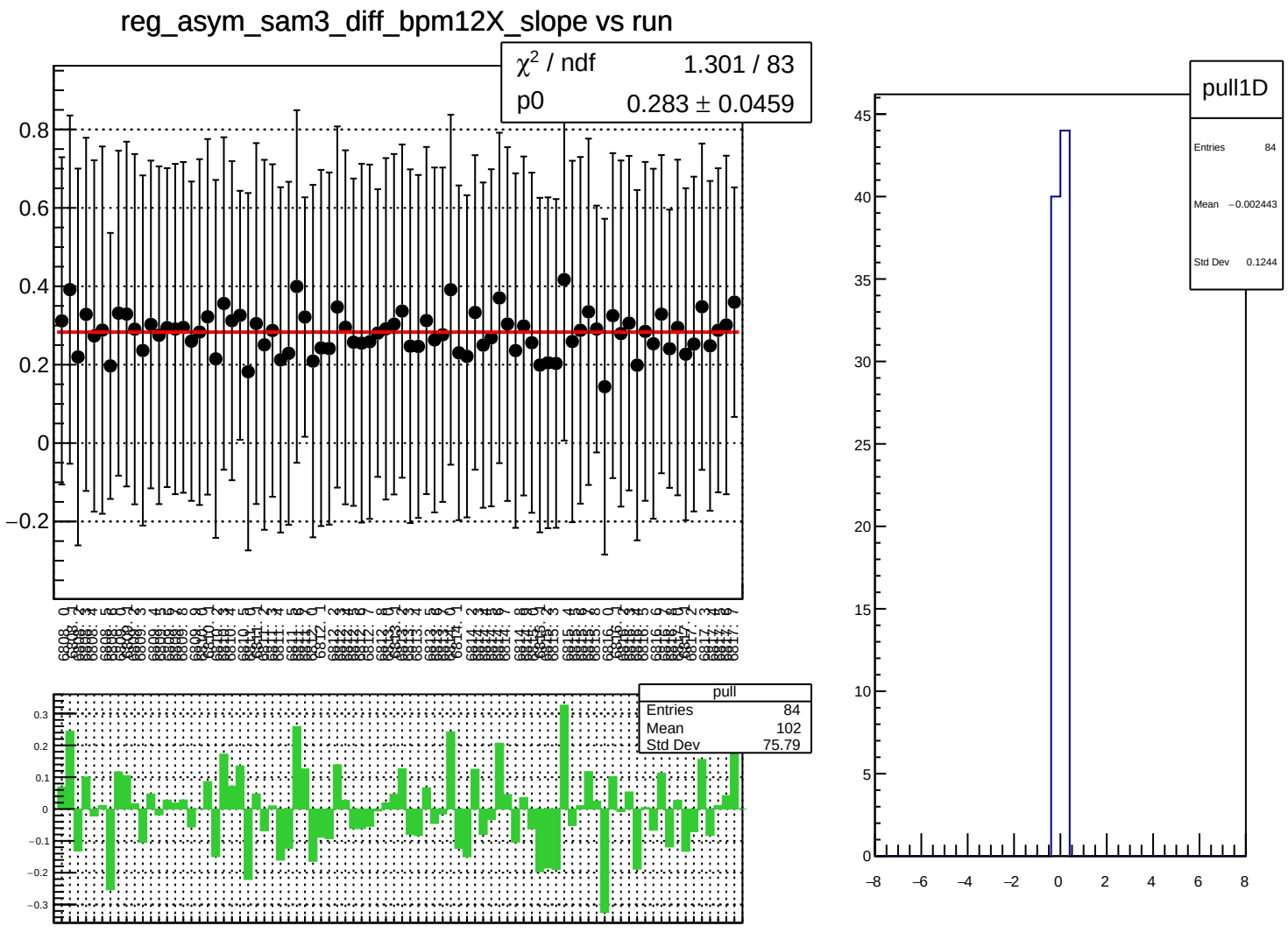

pull1D
Entries 84
Mean −0.008939
Std Dev 0.2134

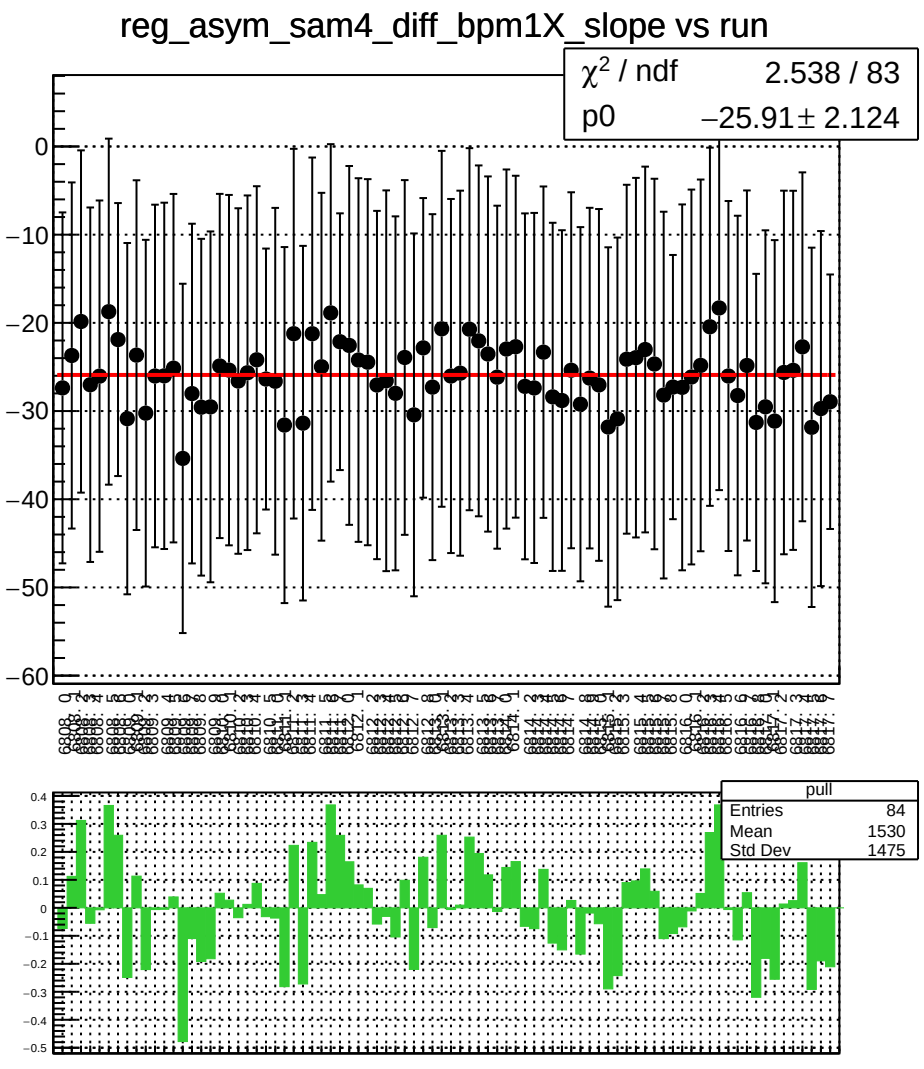

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 7.841 / 83
p0 −78.58 ± 1.056
pull
Entries 84
Mean −8.46
Std Dev 56.06

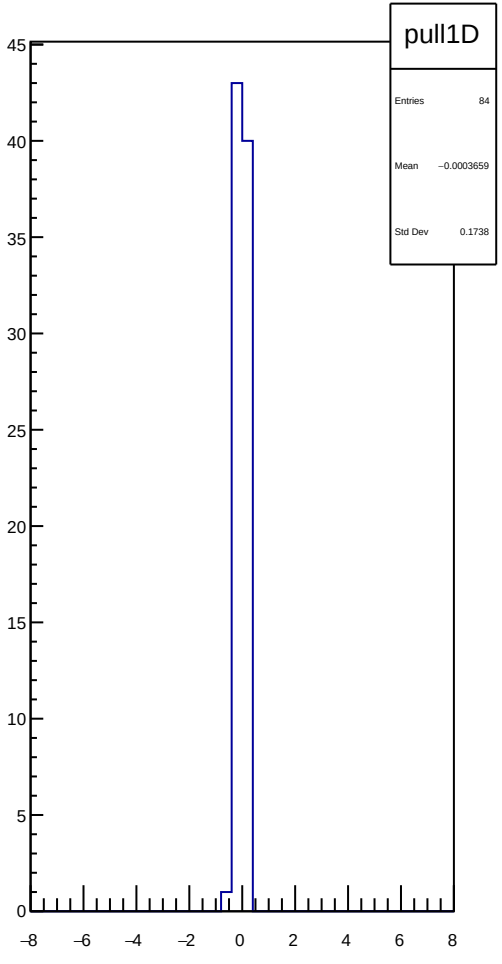

pull1D
Entries 84
Mean −0.0128
Std Dev 0.3053

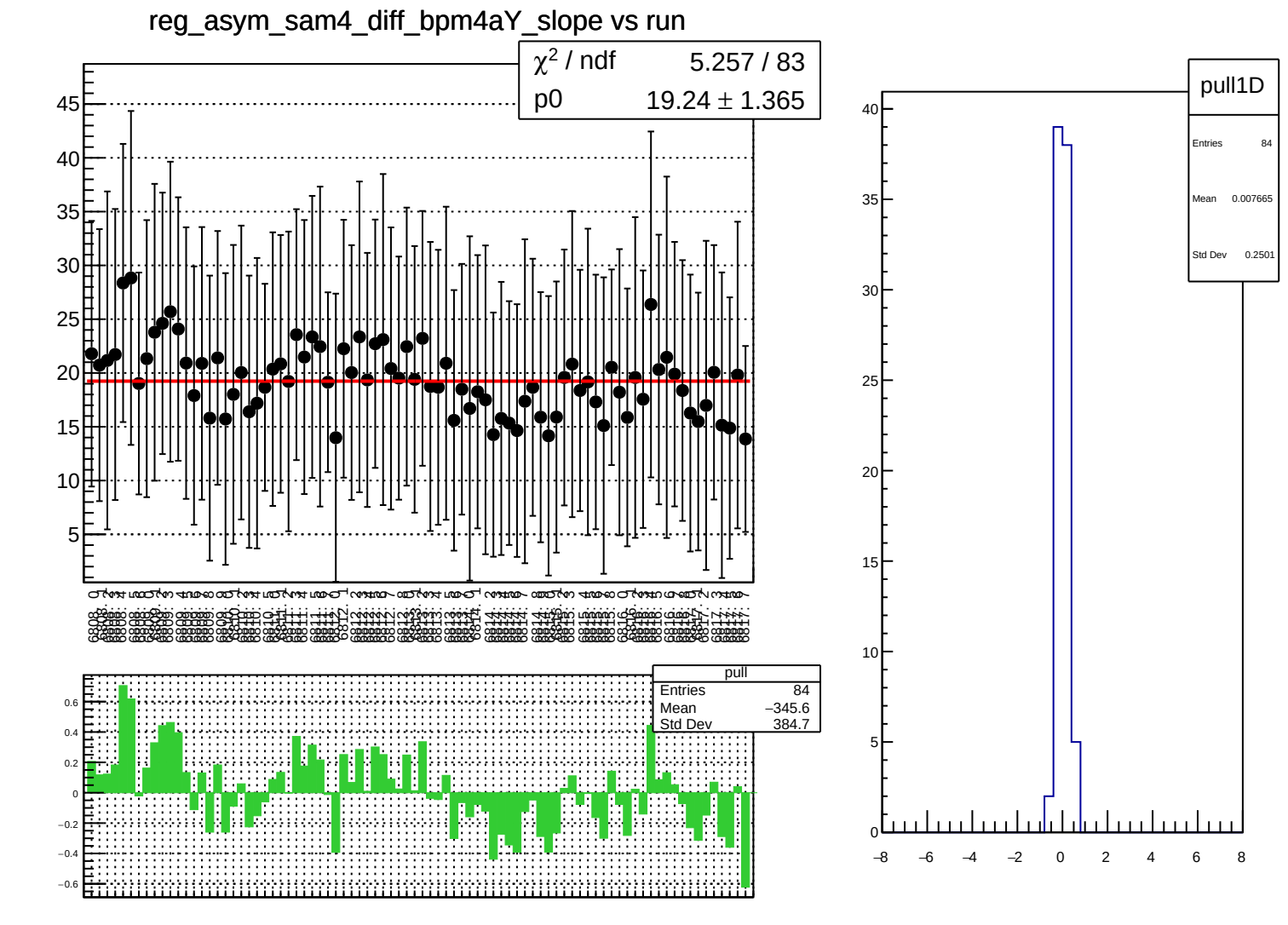

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 3.757 / 83
p0 25.91 ± 0.8725
pull
Entries 84
Mean 54.55
Std Dev 31.95

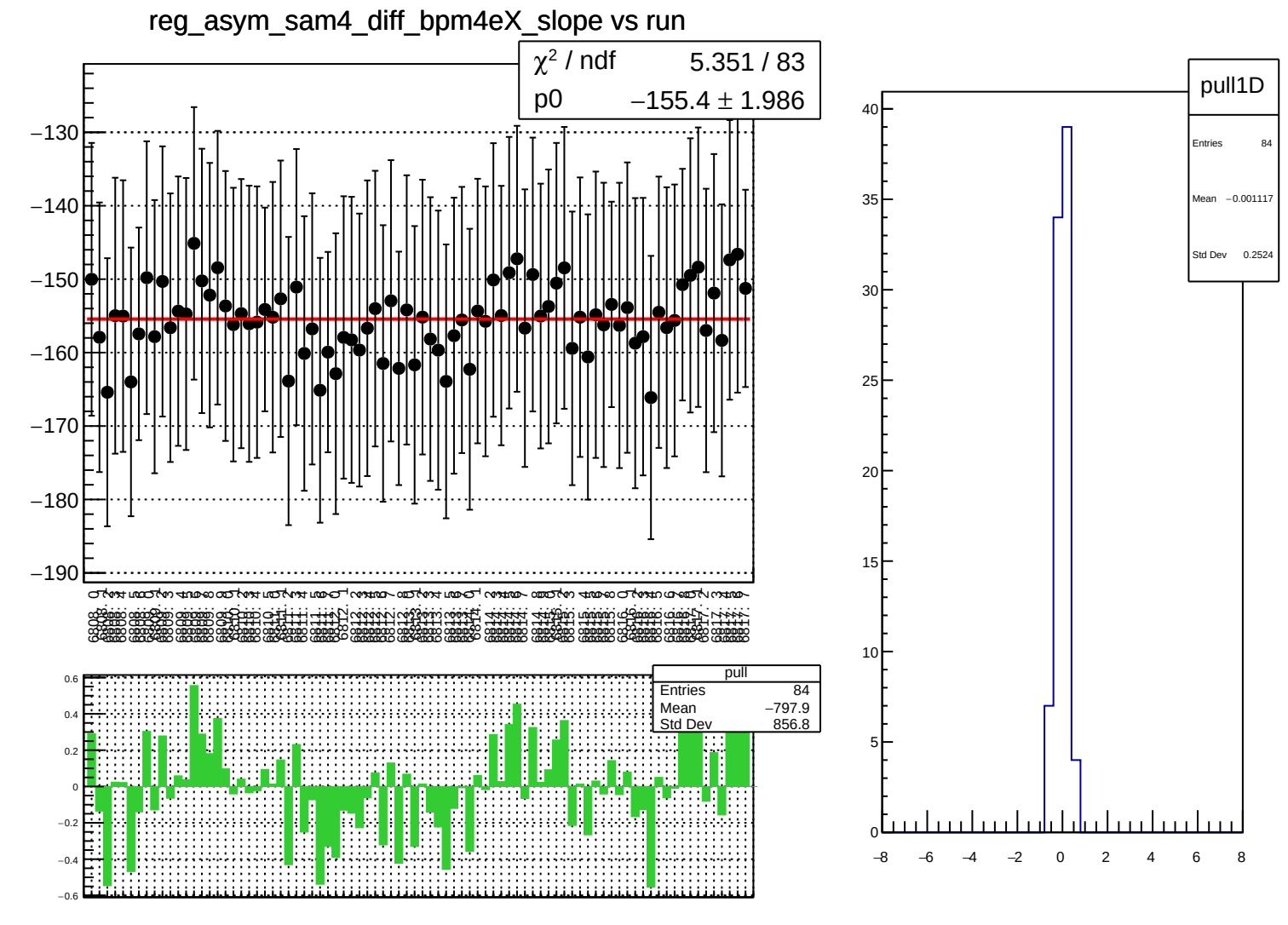

pull1D
Entries 84
Mean 0.006479
Std Dev 0.2114

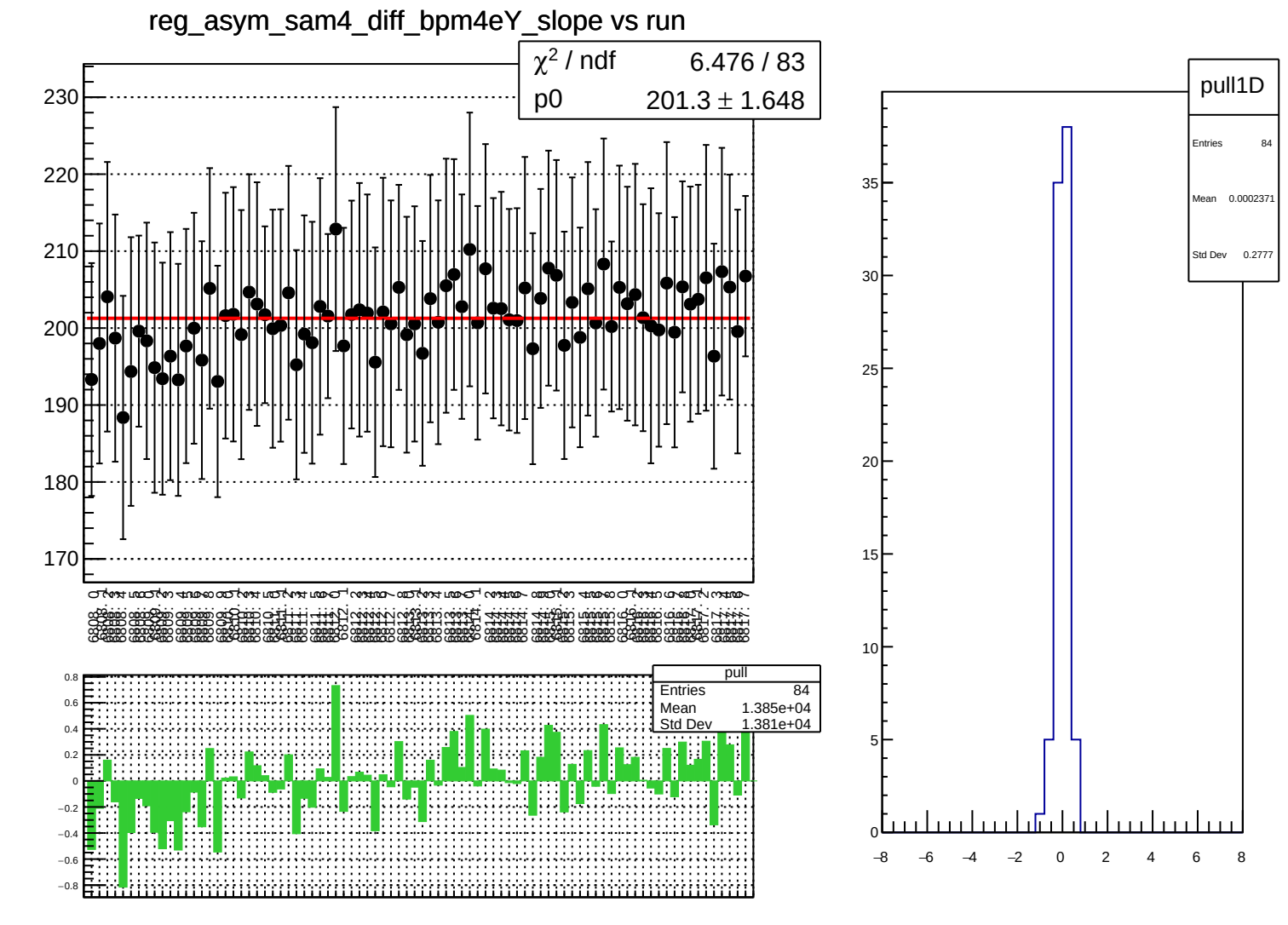

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 1.301 / 83
p0 0.283 ± 0.0459
pull
Entries 84
Mean 102
Std Dev 75.79
pull1D
Entries 84
Mean −0.002443
Std Dev 0.1244

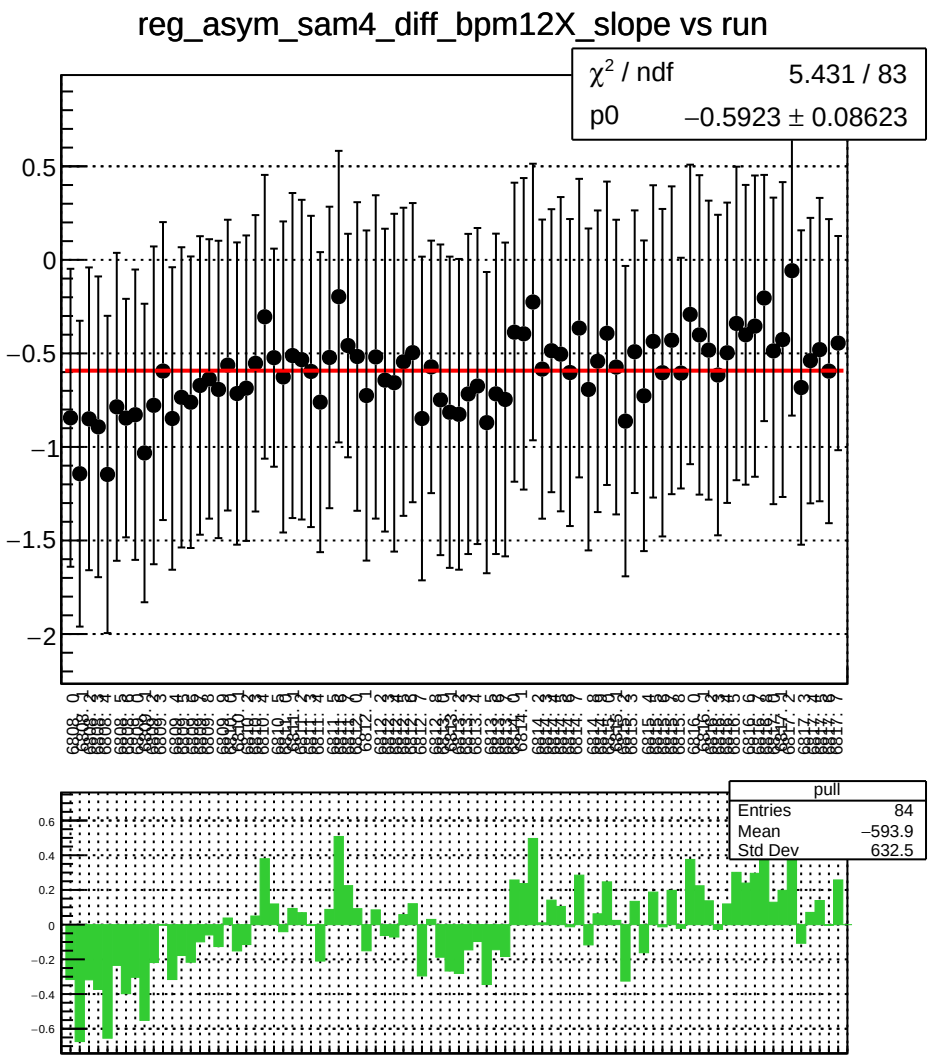

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 2.538 / 83
p0 −25.91 ± 2.124
pull
Entries 84
Mean 1530
Std Dev 1475

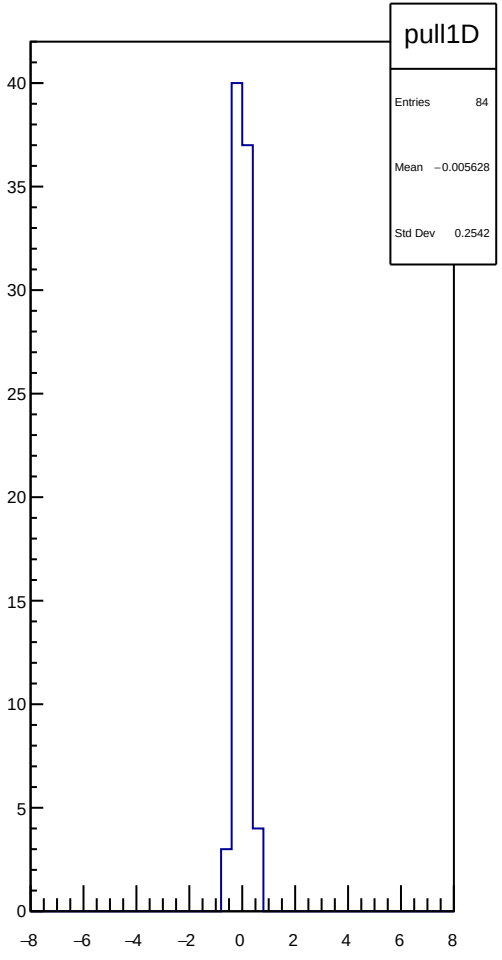

pull1D
Entries 84
Mean −0.0003659
Std Dev 0.1738

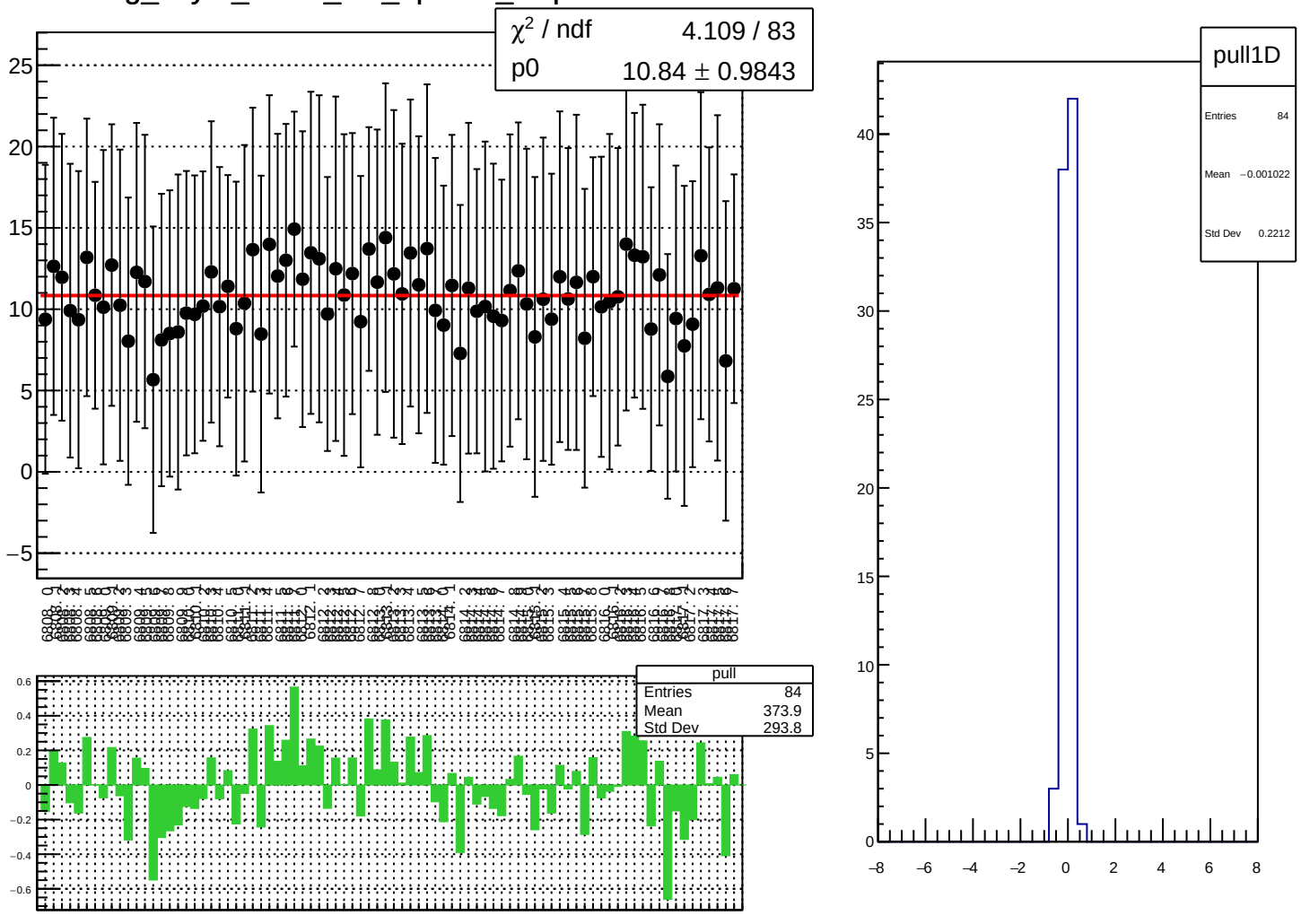

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 5.257 / 83
p0 19.24 ± 1.365
pull
Entries 84
Mean −345.6
Std Dev 384.7
pull1D
Entries 84
Mean 0.007665
Std Dev 0.2501

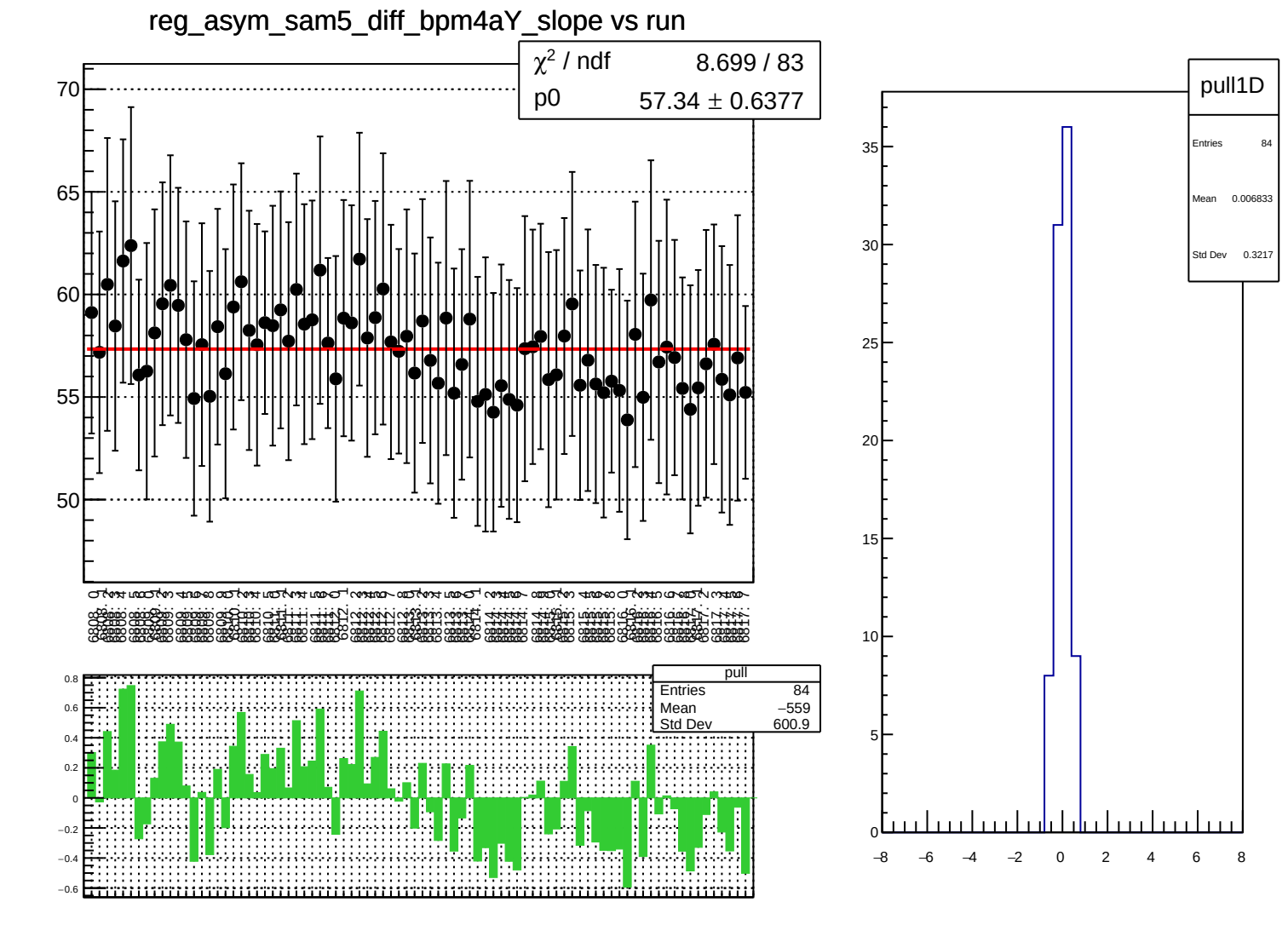

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 5.351 / 83
p0 −155.4 ± 1.986
−130
−140
−150
−160
−170
−180
−190
pull
Entries 84
Mean −797.9
Std Dev 856.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 84
Mean −0.001117
Std Dev 0.2524
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

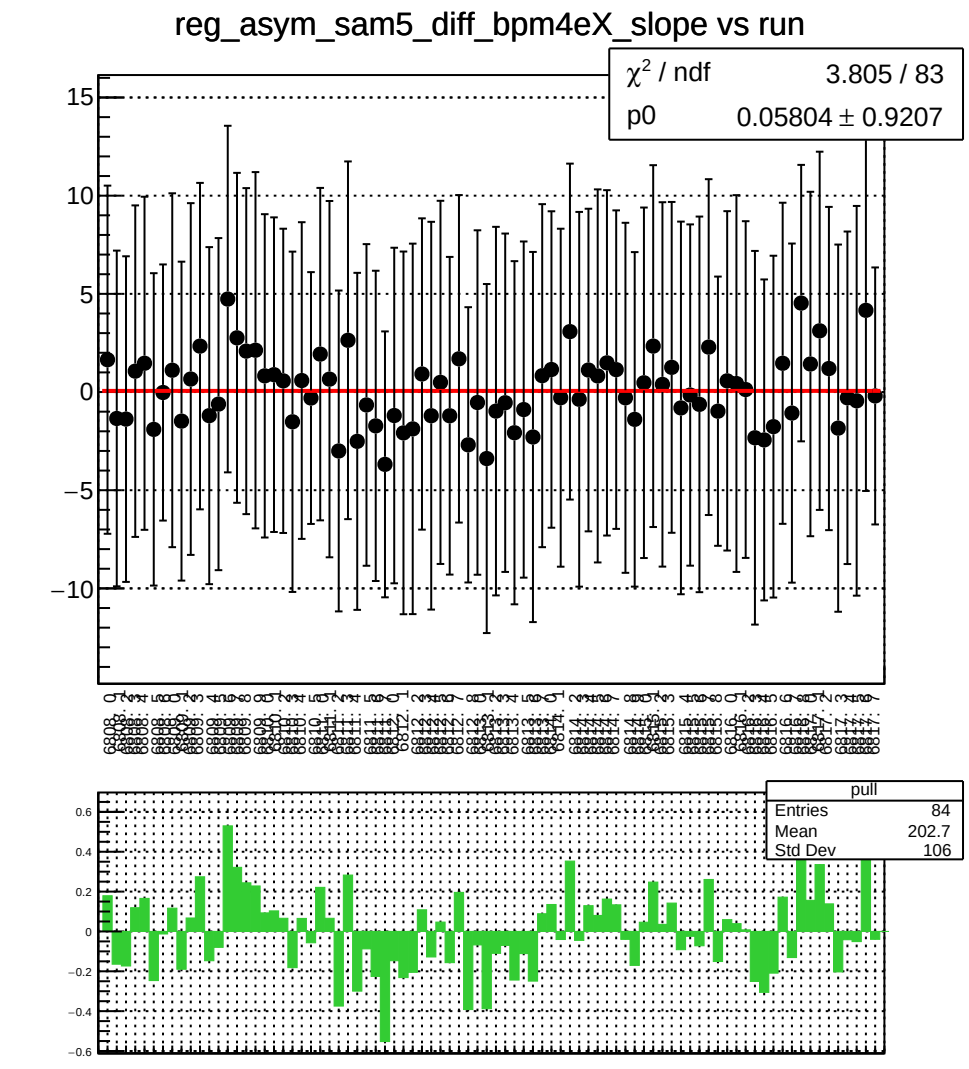

reg_asym_sam4_diff_bpm4eY_slope vs run
χ^2 / ndf 6.476 / 83
p0 201.3 ± 1.648
230
220
210
200
190
180
170
pull
Entries 84
Mean 1.385e+04
Std Dev 1.381e+04
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 84
Mean 0.0002371
Std Dev 0.2777
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

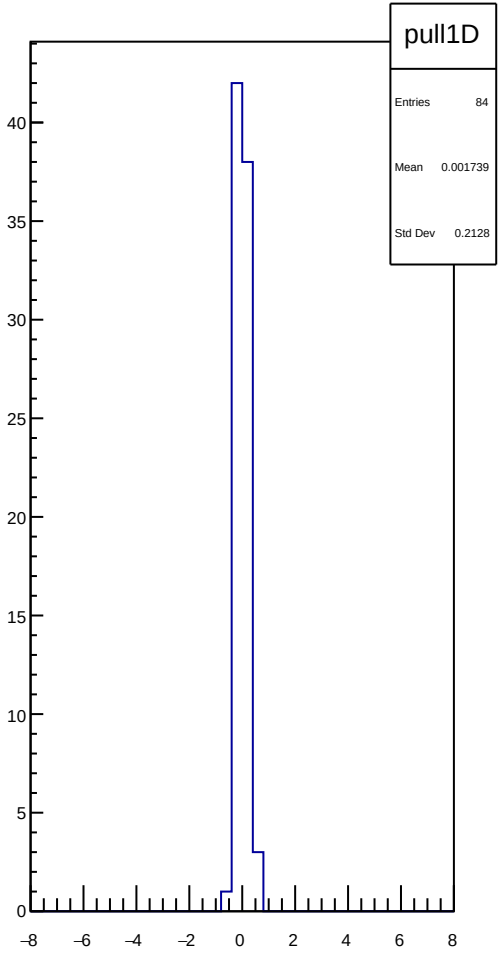

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 5.431 / 83
p0 −0.5923 ± 0.08623
pull
Entries 84
Mean −593.9
Std Dev 632.5

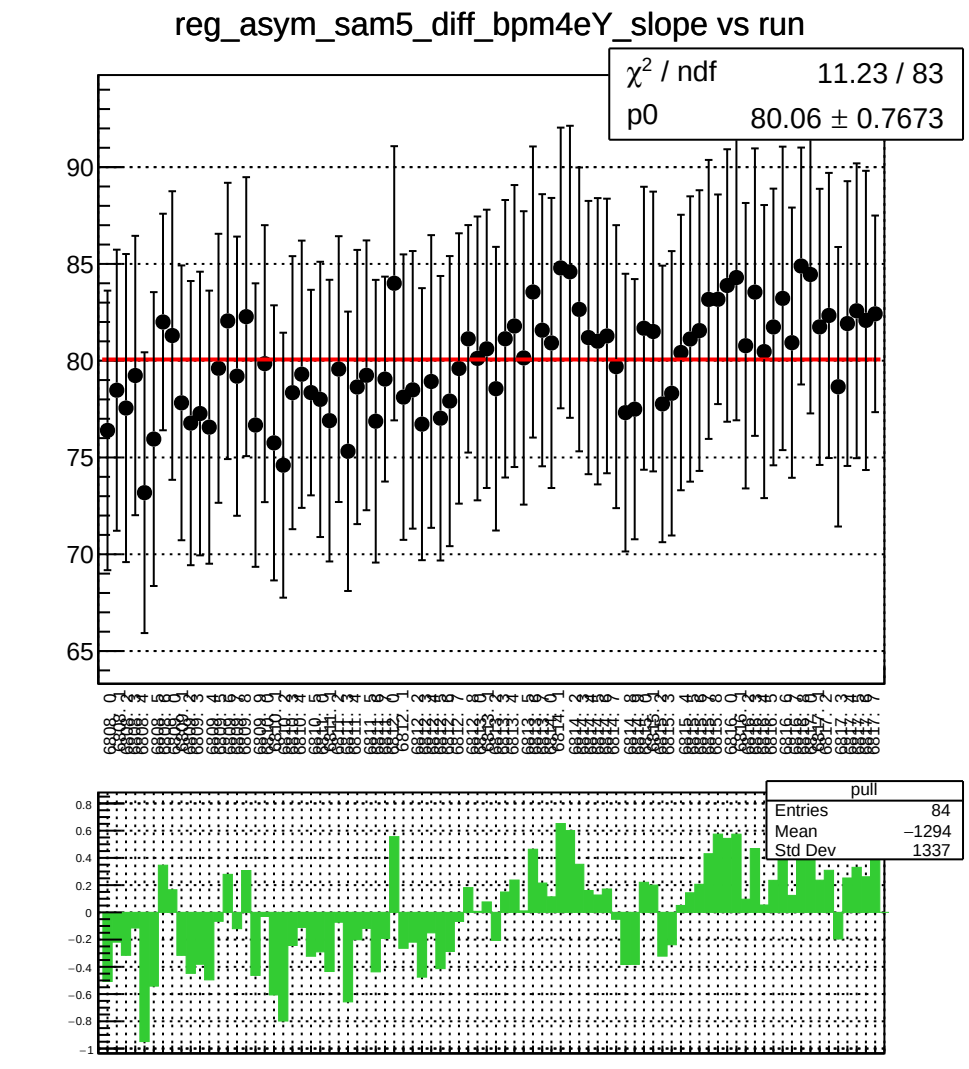

pull1D
Entries 84
Mean −0.005628
Std Dev 0.2542

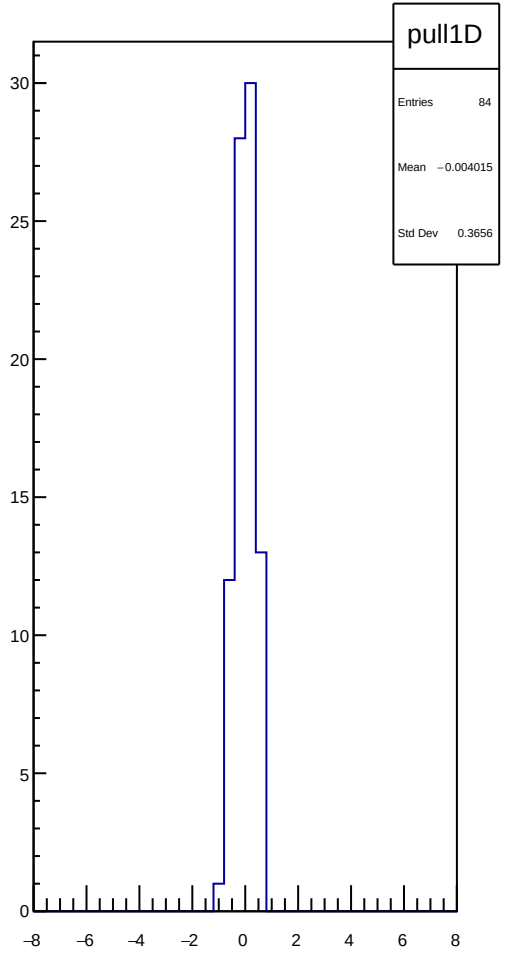

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 4.109 / 83
p0 10.84 ± 0.9843
pull
Entries 84
Mean 373.9
Std Dev 293.8
pull1D
Entries 84
Mean −0.001022
Std Dev 0.2212

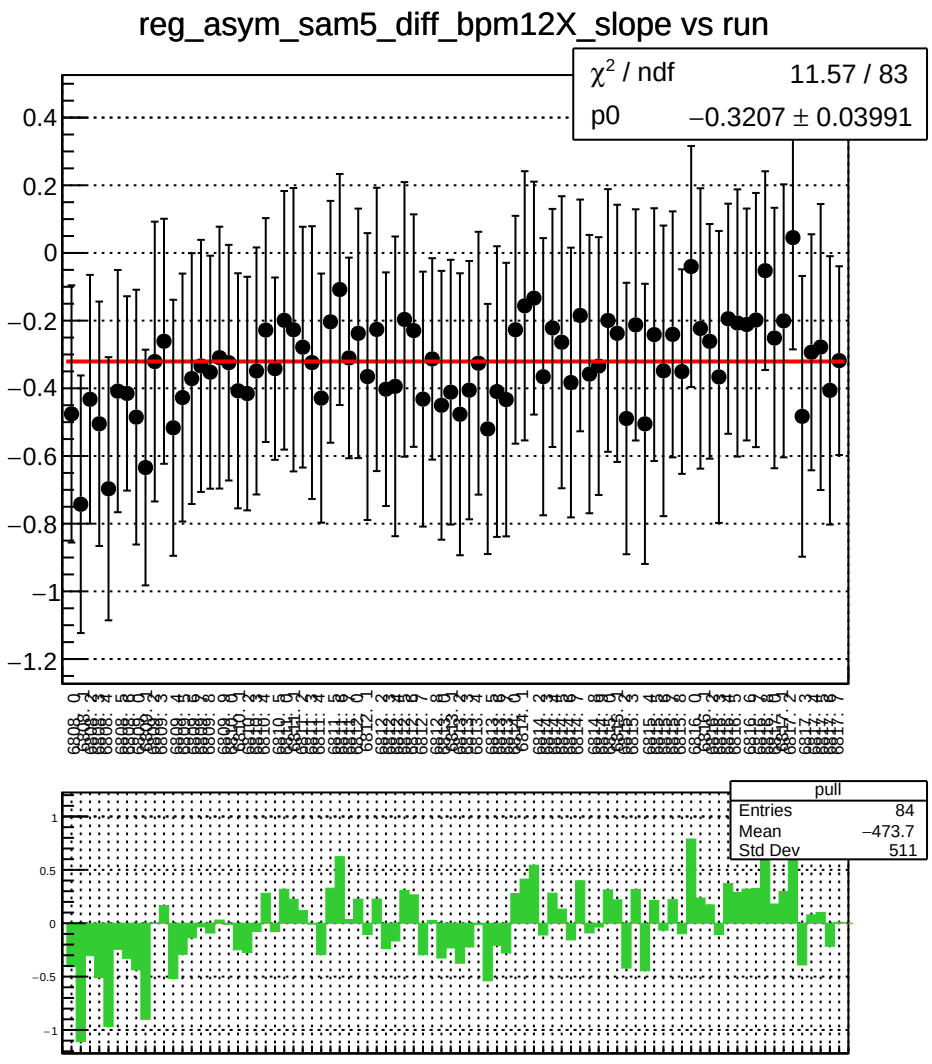

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 8.699 / 83
p0 57.34 ± 0.6377
pull
Entries 84
Mean −559
Std Dev 600.9
pull1D
Entries 84
Mean 0.006833
Std Dev 0.3217

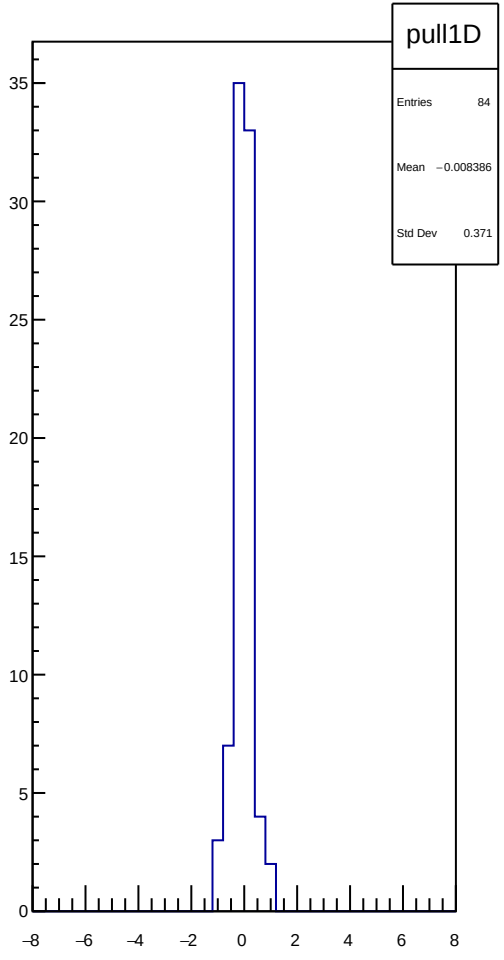

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 3.805 / 83
p0 0.05804 ± 0.9207
pull
Entries 84
Mean 202.7
Std Dev 106

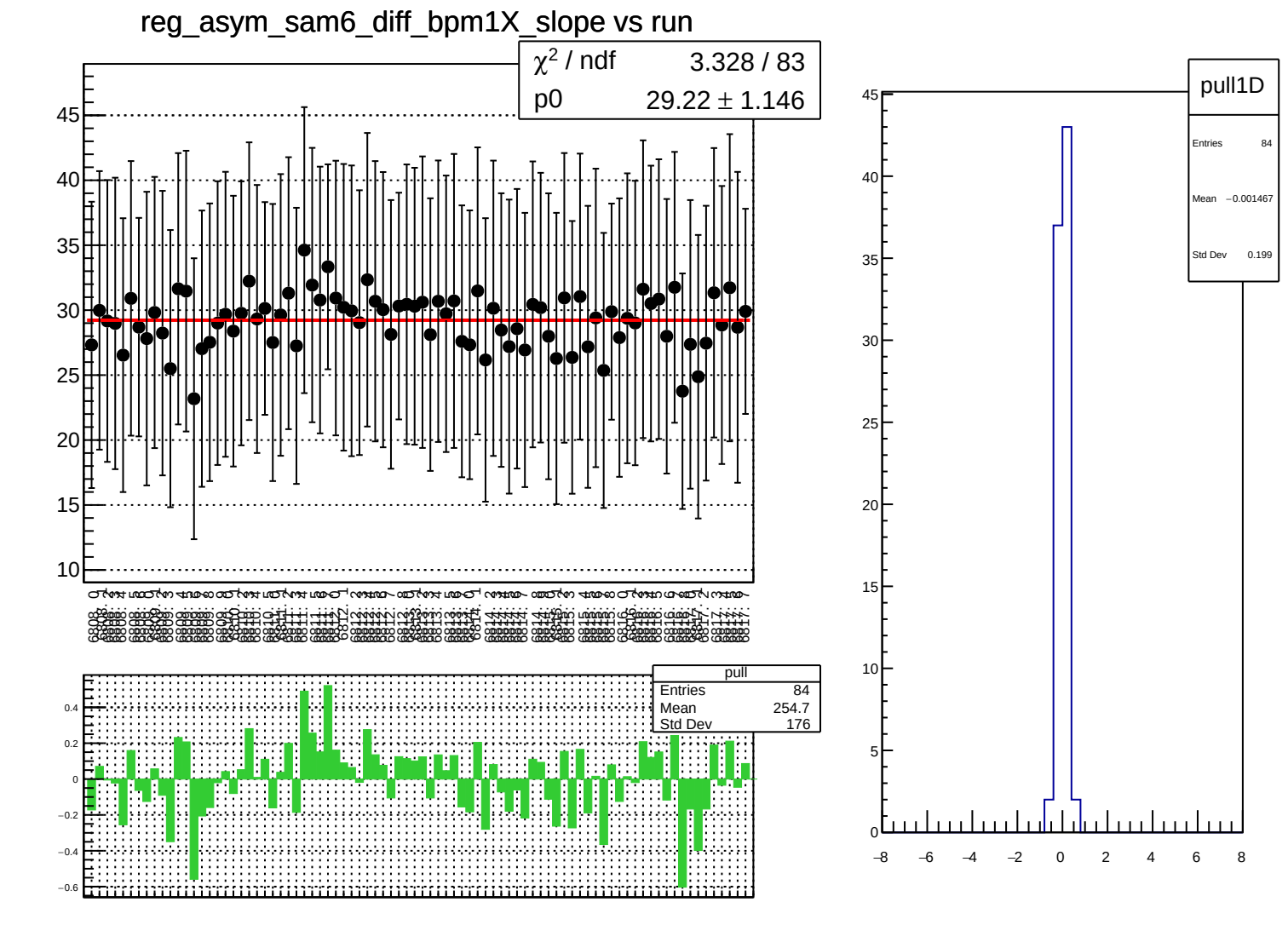

pull1D
Entries 84
Mean 0.001739
Std Dev 0.2128

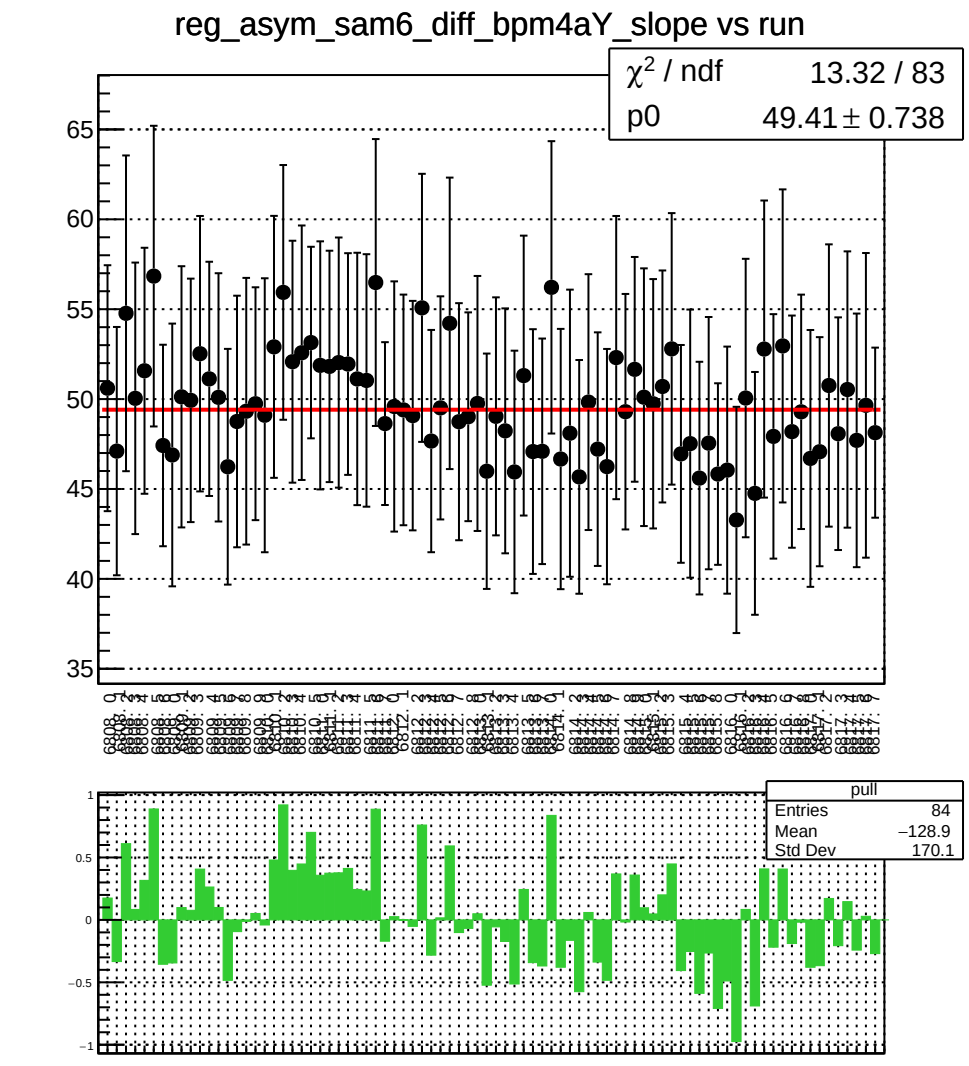

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 11.23 / 83
p0 80.06 ± 0.7673
90
85
80
75
70
65
pull
Entries 84
Mean −1294
Std Dev 1337
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

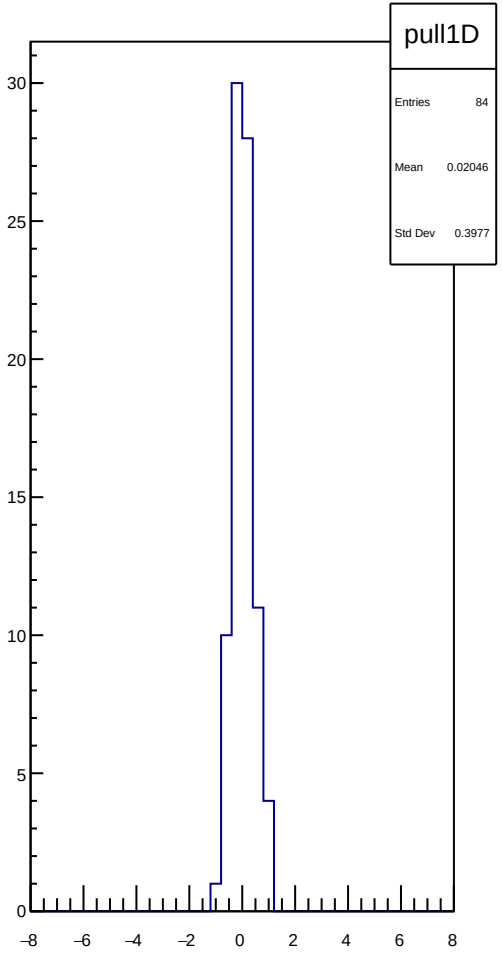

pull1D
Entries 84
Mean −0.004015
Std Dev 0.3656
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

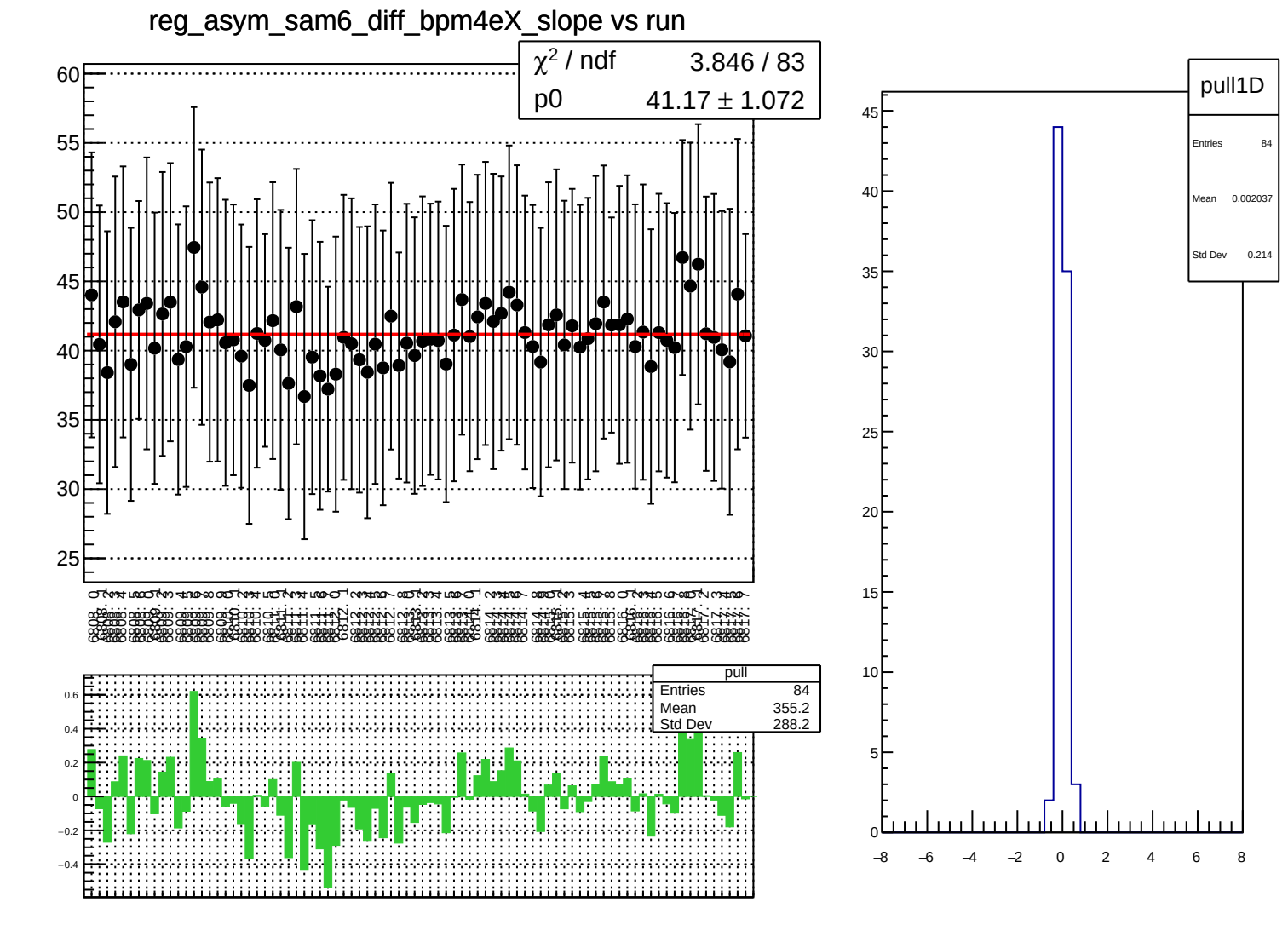

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 11.57 / 83
p0 −0.3207 ± 0.03991
pull
Entries 84
Mean −473.7
Std Dev 511

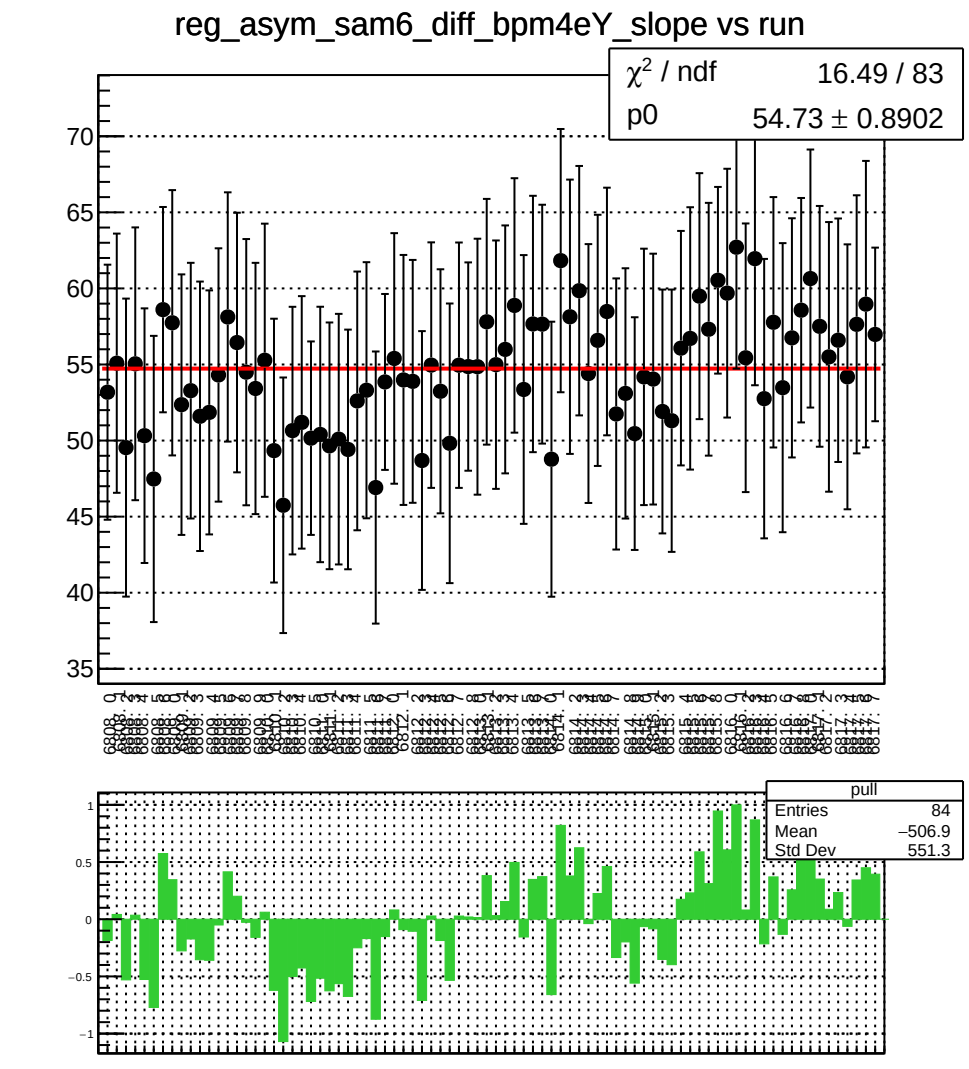

pull1D
Entries 84
Mean −0.008386
Std Dev 0.371

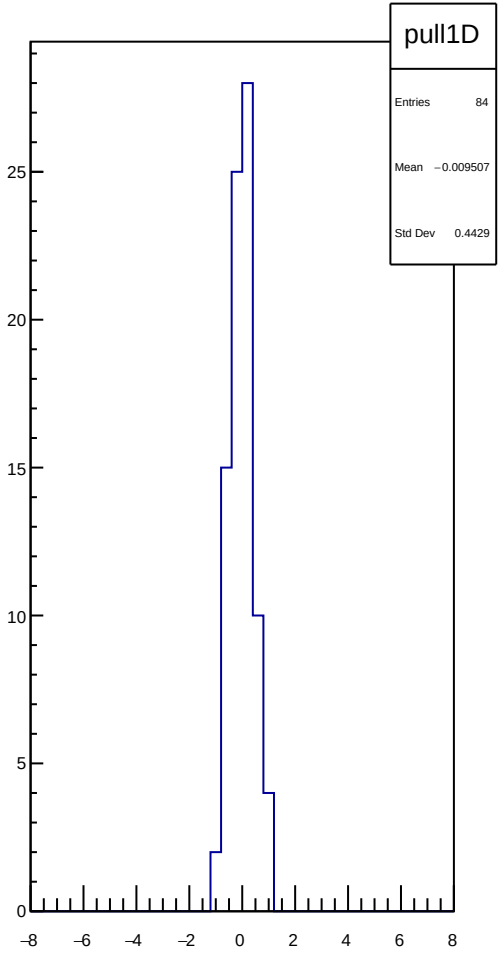

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 3.328 / 83
p0 29.22 ± 1.146
pull
Entries 84
Mean 254.7
Std Dev 176
pull1D
Entries 84
Mean −0.001467
Std Dev 0.199

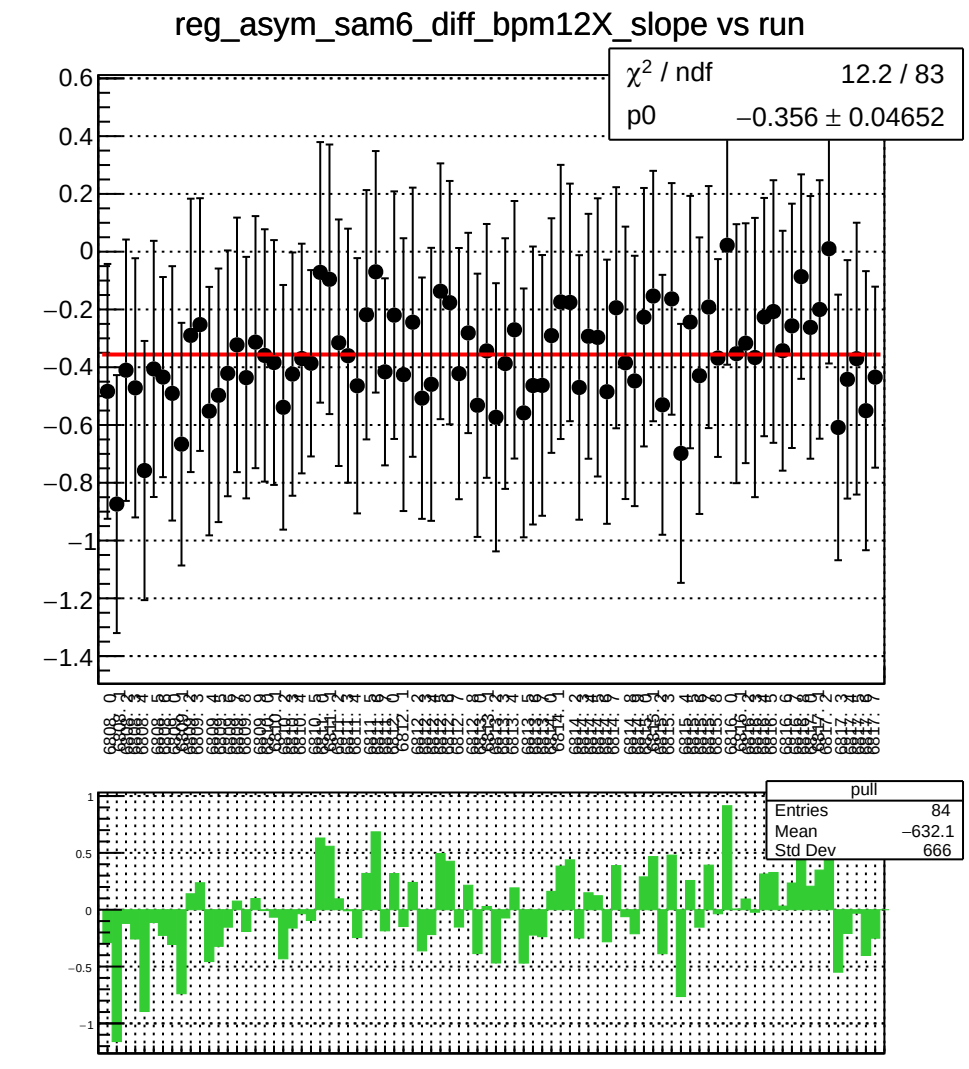

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 13.32 / 83
p0 49.41 ± 0.738
pull
Entries 84
Mean −128.9
Std Dev 170.1

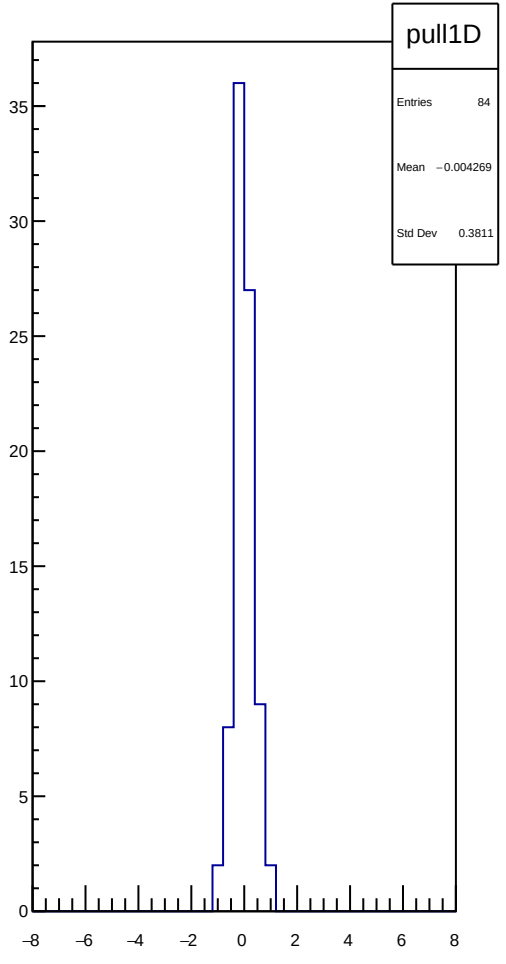

pull1D
Entries 84
Mean 0.02046
Std Dev 0.3977

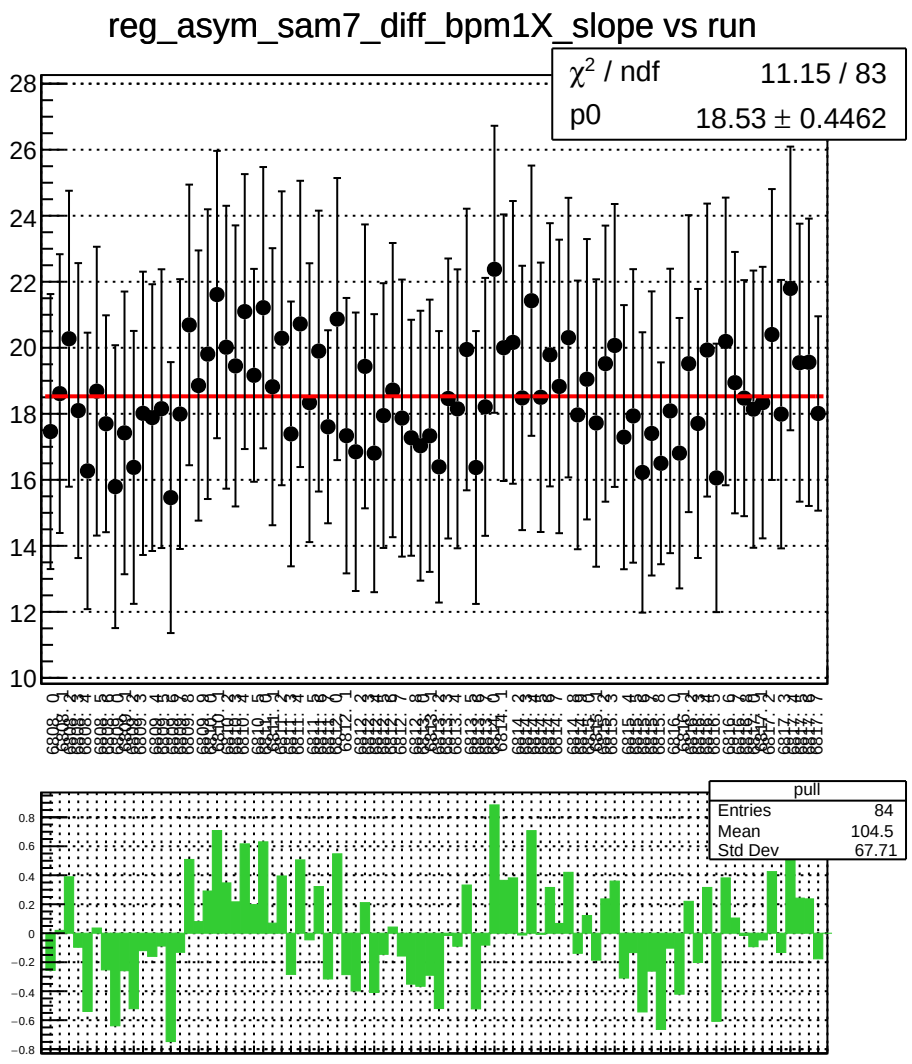

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 3.846 / 83
p0 41.17 ± 1.072
pull
Entries 84
Mean 355.2
Std Dev 288.2
pull1D
Entries 84
Mean 0.002037
Std Dev 0.214

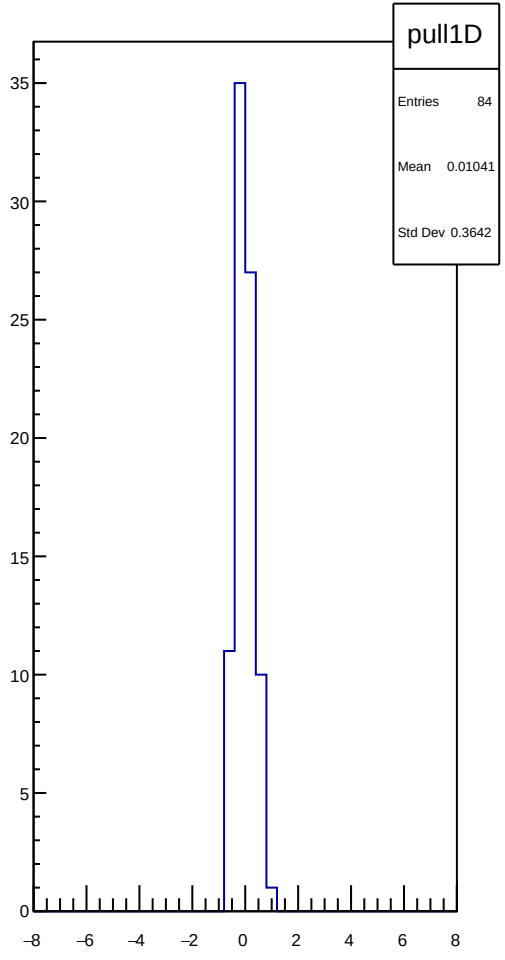

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 16.49 / 83
p0 54.73 ± 0.8902
pull
Entries 84
Mean −506.9
Std Dev 551.3

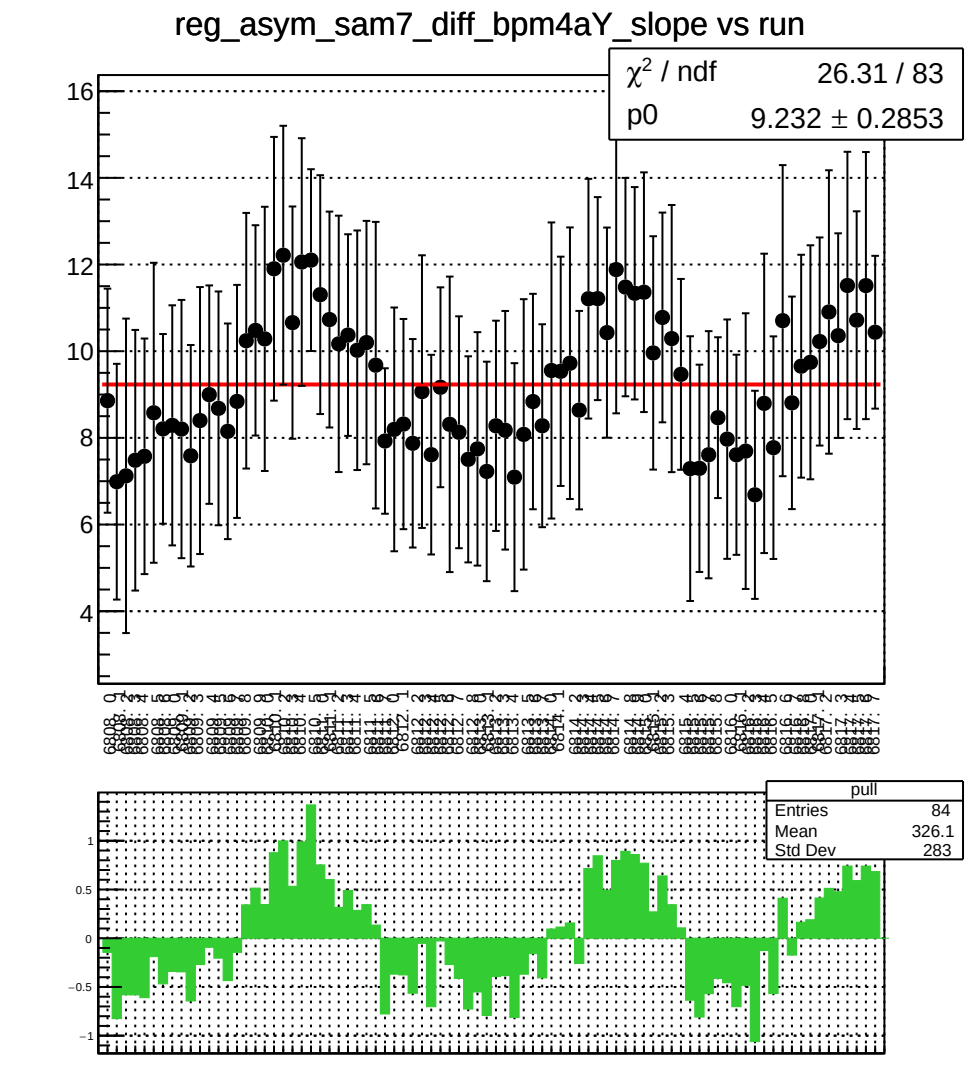

pull1D
Entries 84
Mean −0.009507
Std Dev 0.4429

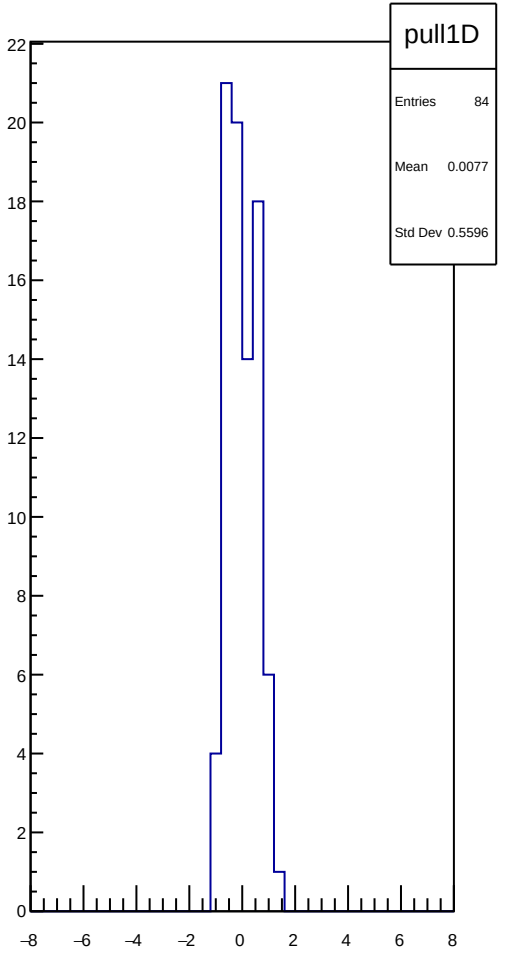

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 12.2 / 83
p0 −0.356 ± 0.04652
pull
Entries 84
Mean −632.1
Std Dev 666

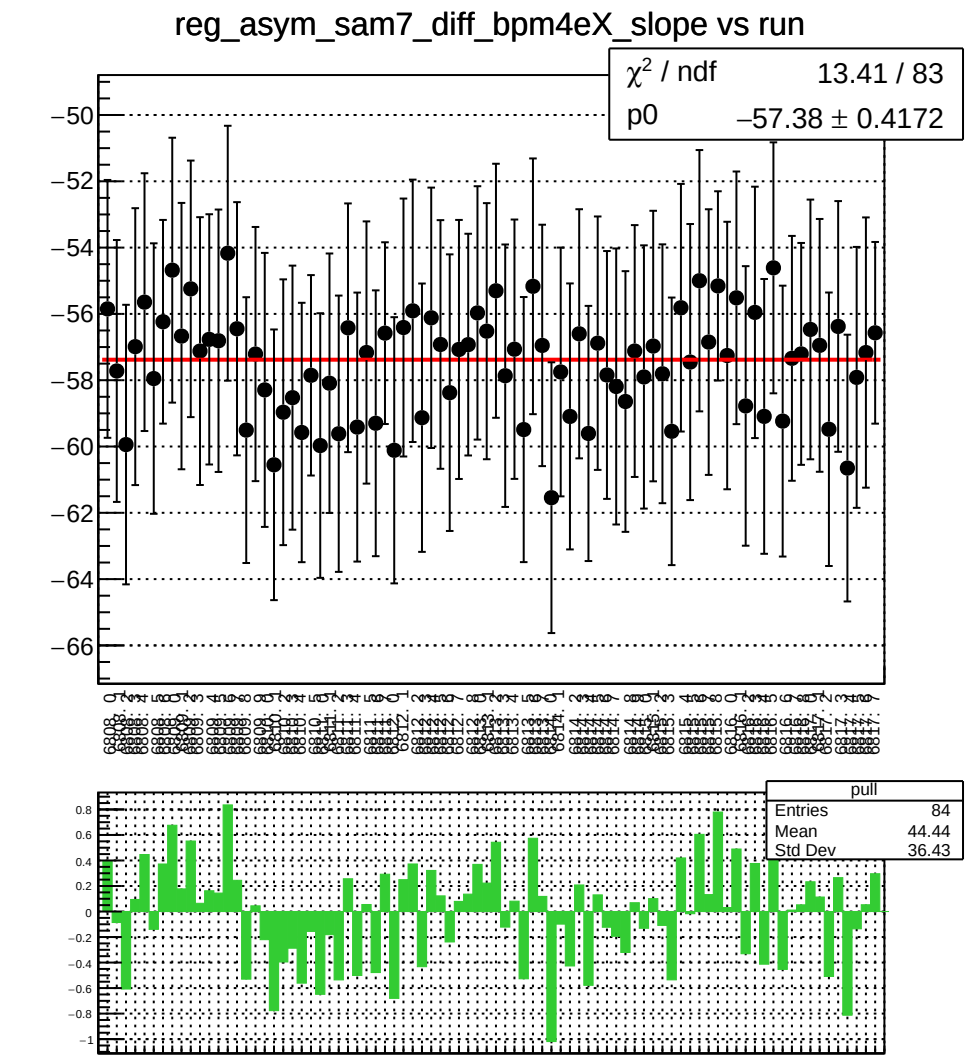

pull1D
Entries 84
Mean −0.004269
Std Dev 0.3811

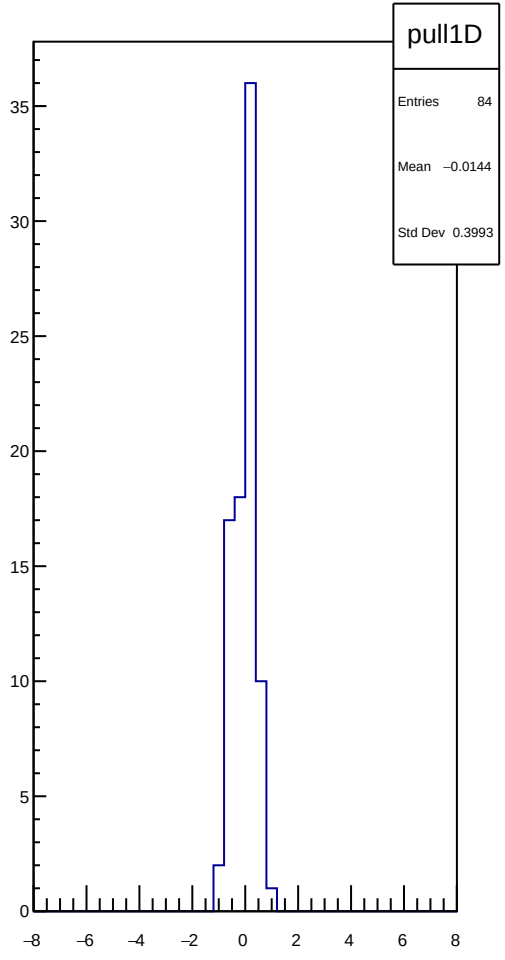

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 11.15 / 83
p0 18.53 ± 0.4462
pull
Entries 84
Mean 104.5
Std Dev 67.71

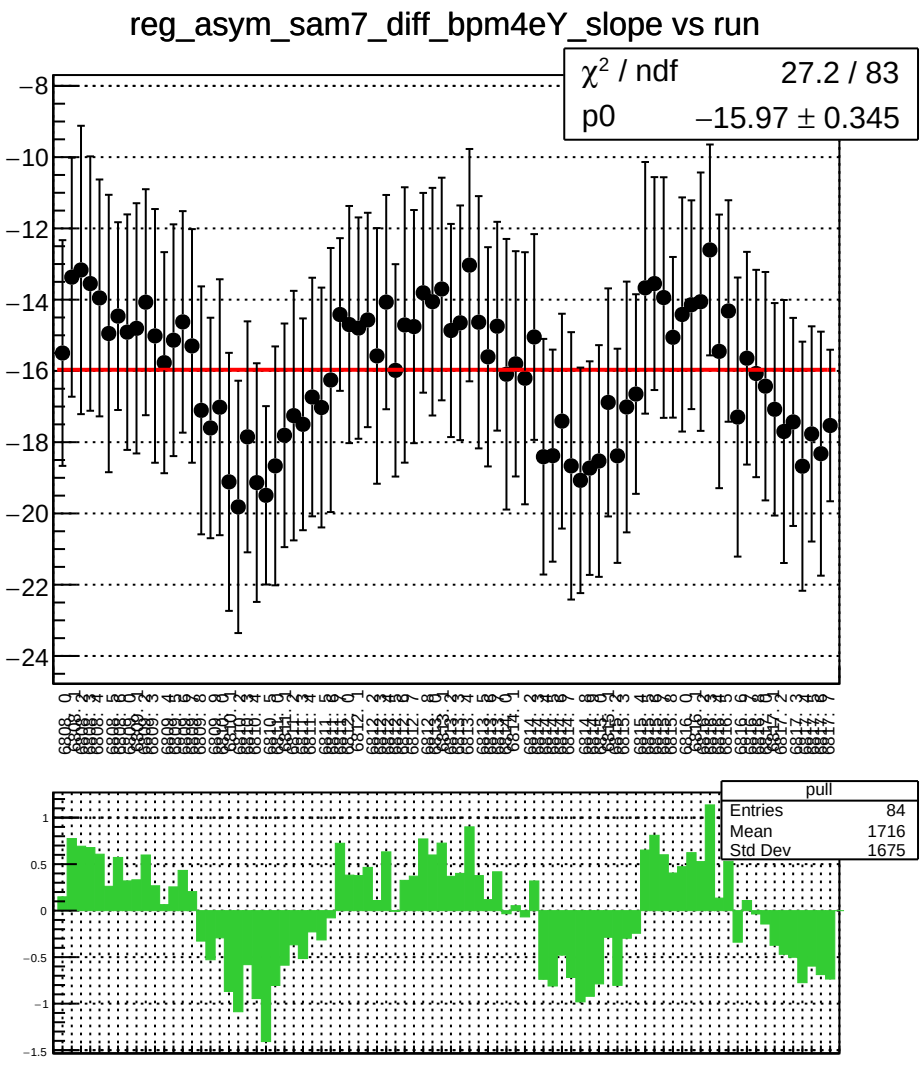

pull1D
Entries 84
Mean 0.01041
Std Dev 0.3642

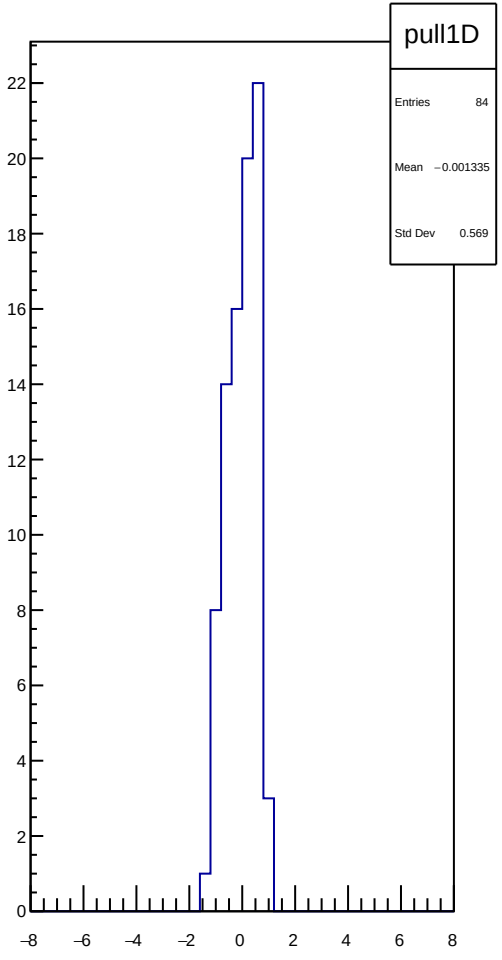

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 26.31 / 83
p0 9.232 ± 0.2853
pull
Entries 84
Mean 326.1
Std Dev 283

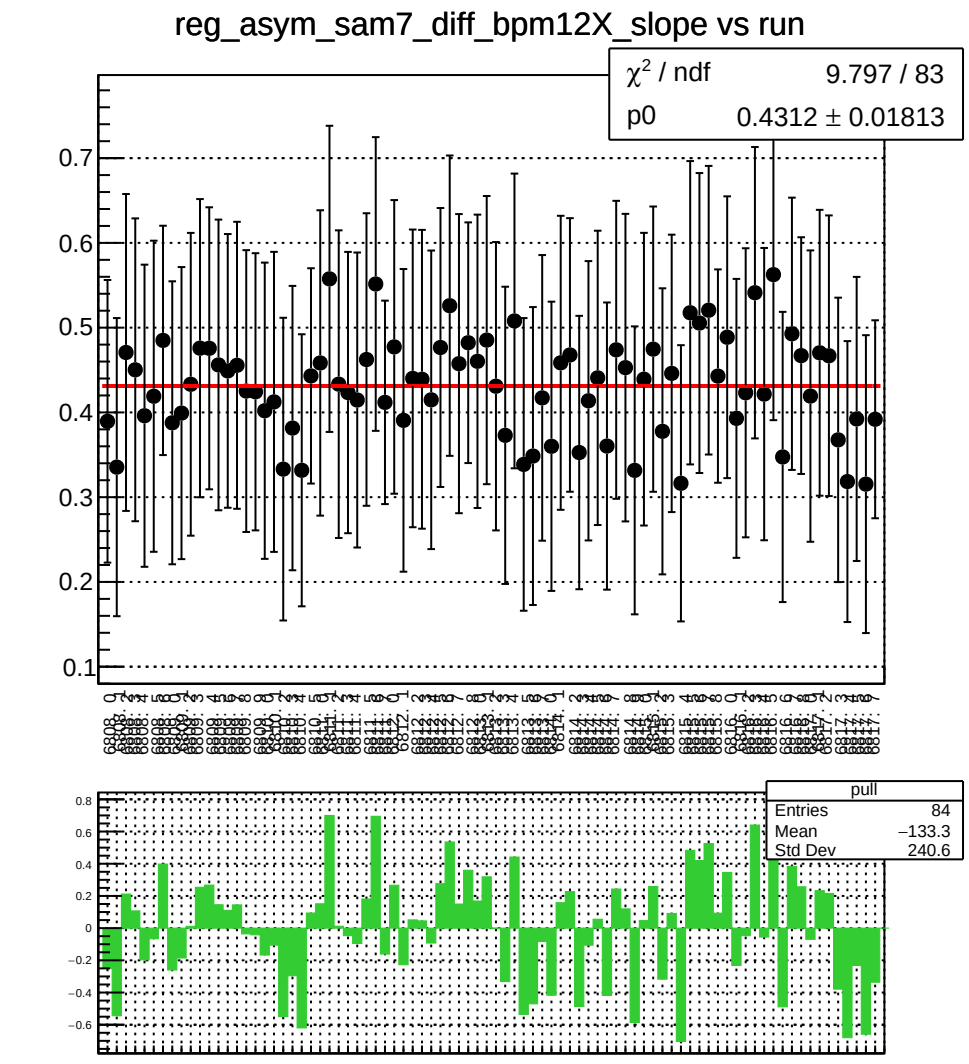

pull1D
Entries 84
Mean 0.0077
Std Dev 0.5596

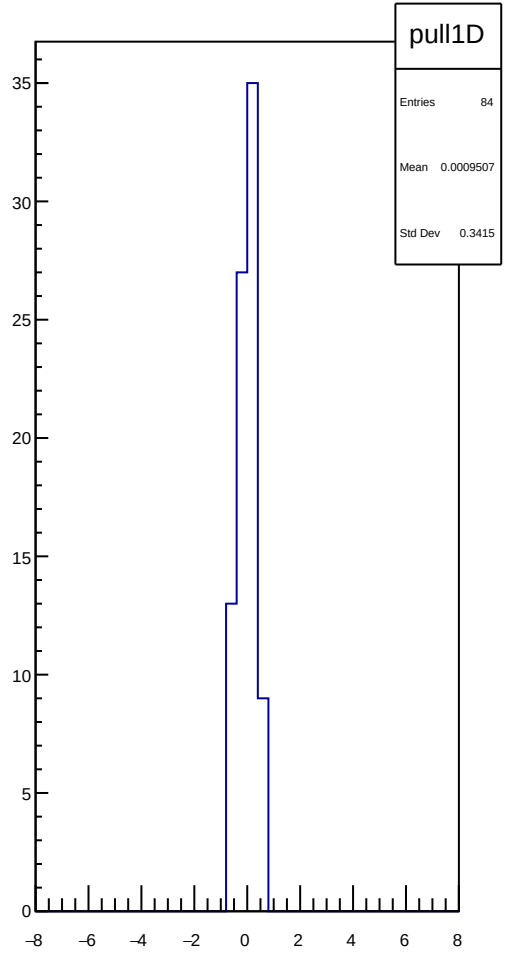

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 13.41 / 83
p0 −57.38 ± 0.4172
pull
Entries 84
Mean 44.44
Std Dev 36.43

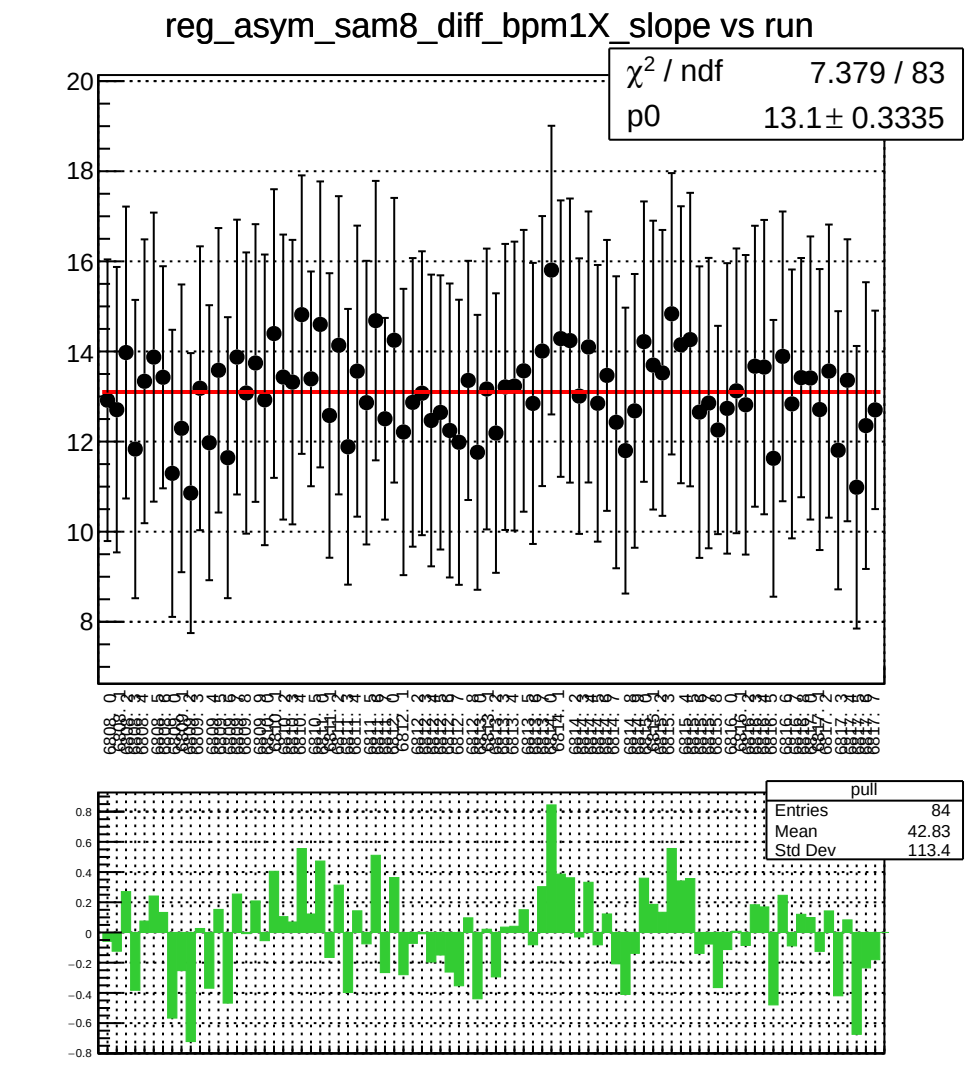

pull1D
Entries 84
Mean −0.0144
Std Dev 0.3993

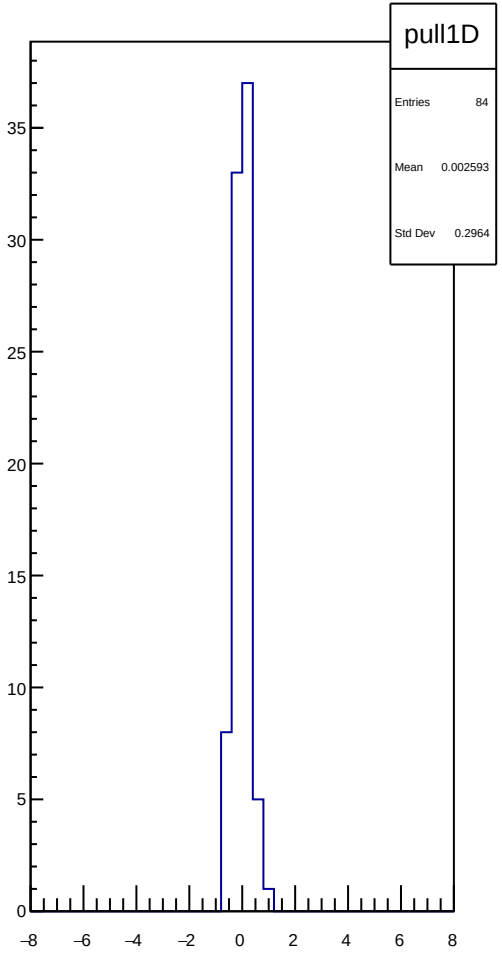

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 27.2 / 83
p0 −15.97 ± 0.345
pull
Entries 84
Mean 1716
Std Dev 1675

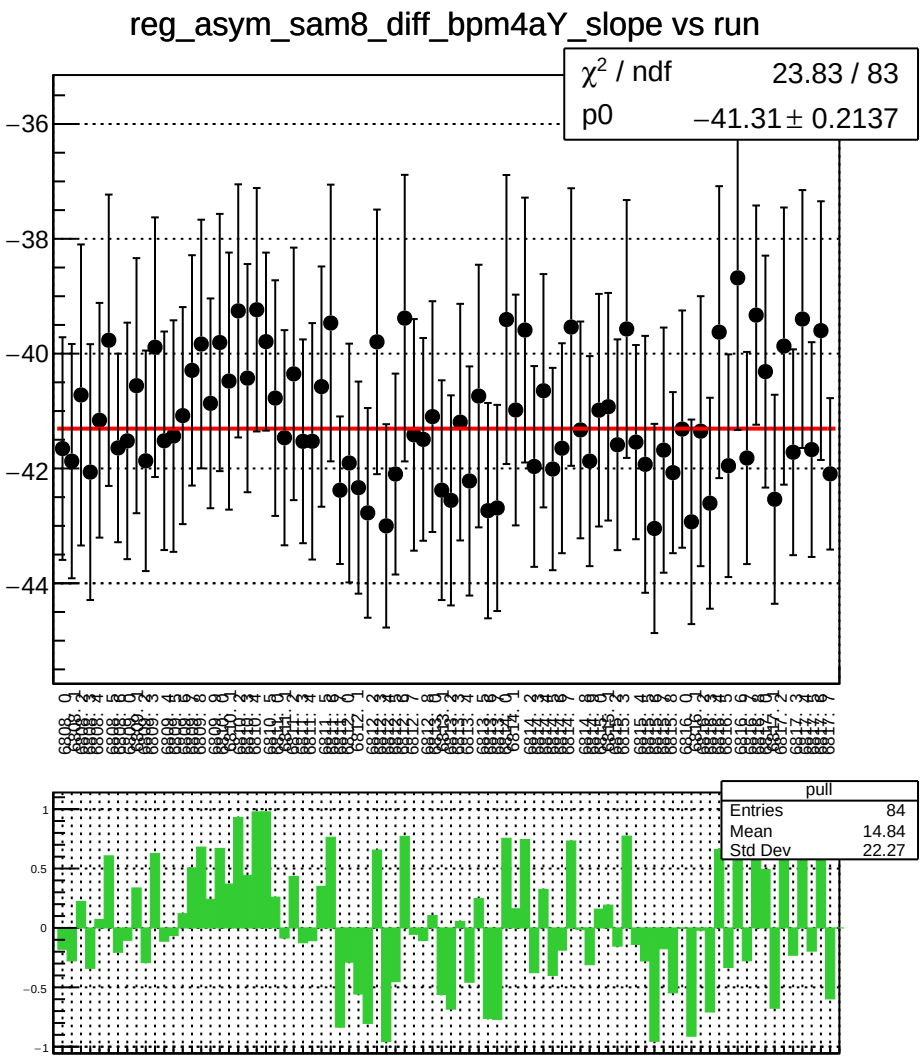

pull1D
Entries 84
Mean −0.001335
Std Dev 0.569

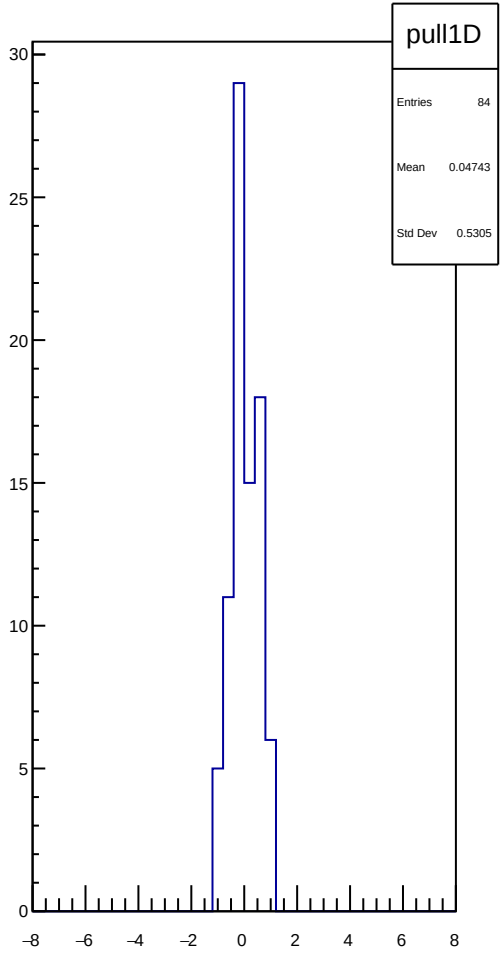

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 9.797 / 83
p0 0.4312 ± 0.01813
pull
Entries 84
Mean −133.3
Std Dev 240.6

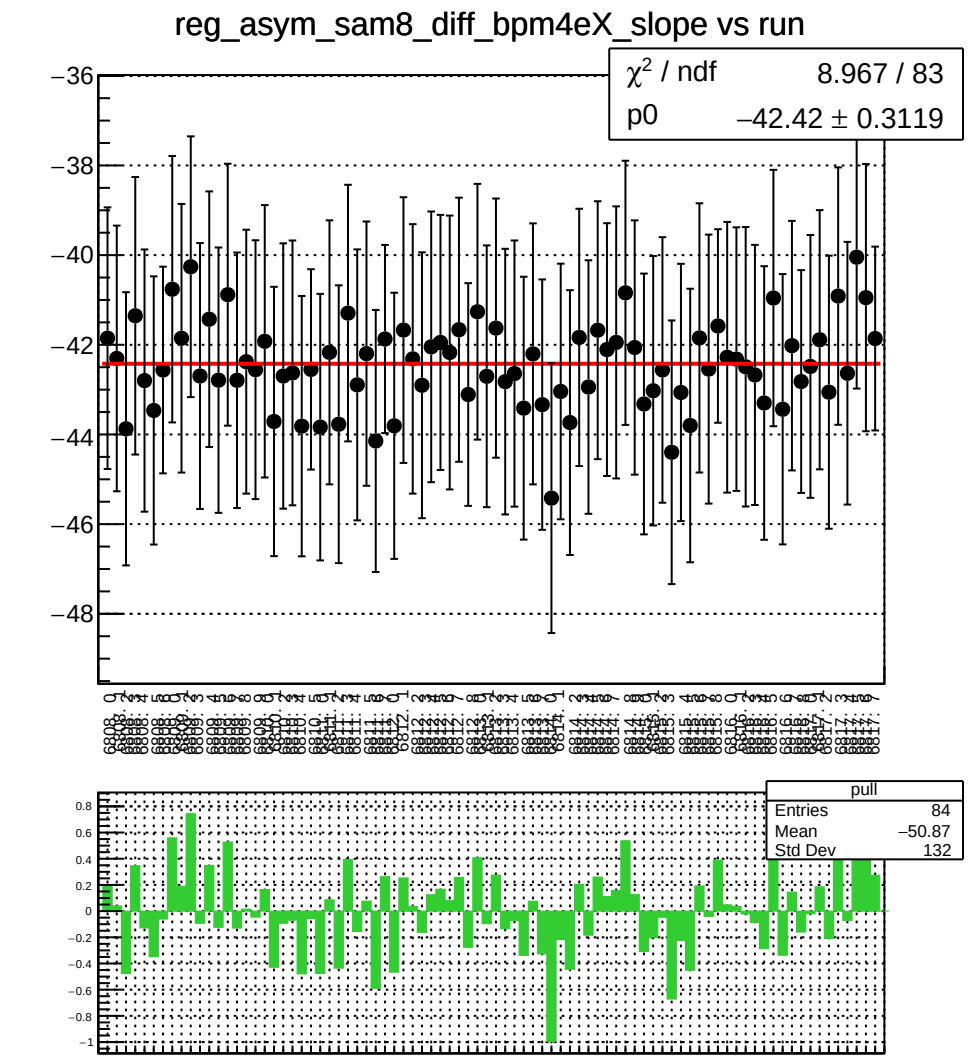

pull1D
Entries 84
Mean 0.0009507
Std Dev 0.3415

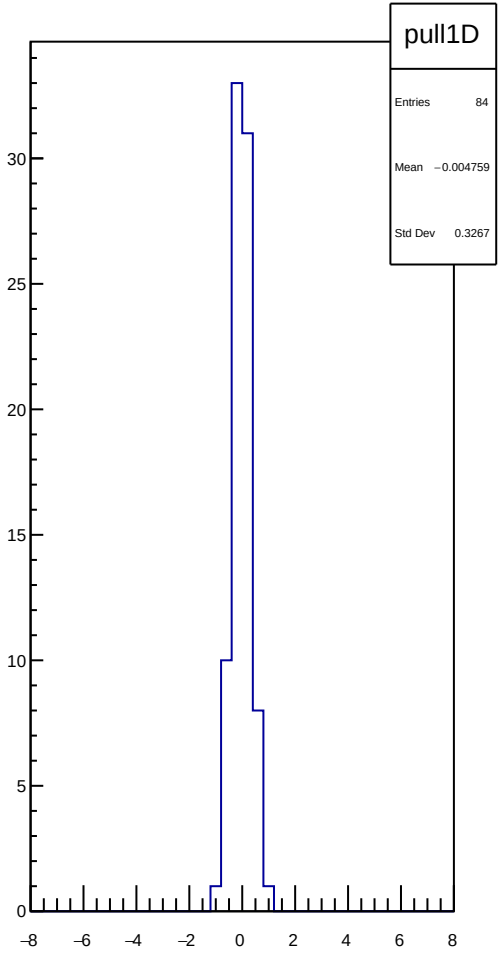

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 7.379 / 83
p0 13.1 ± 0.3335
pull
Entries 84
Mean 42.83
Std Dev 113.4

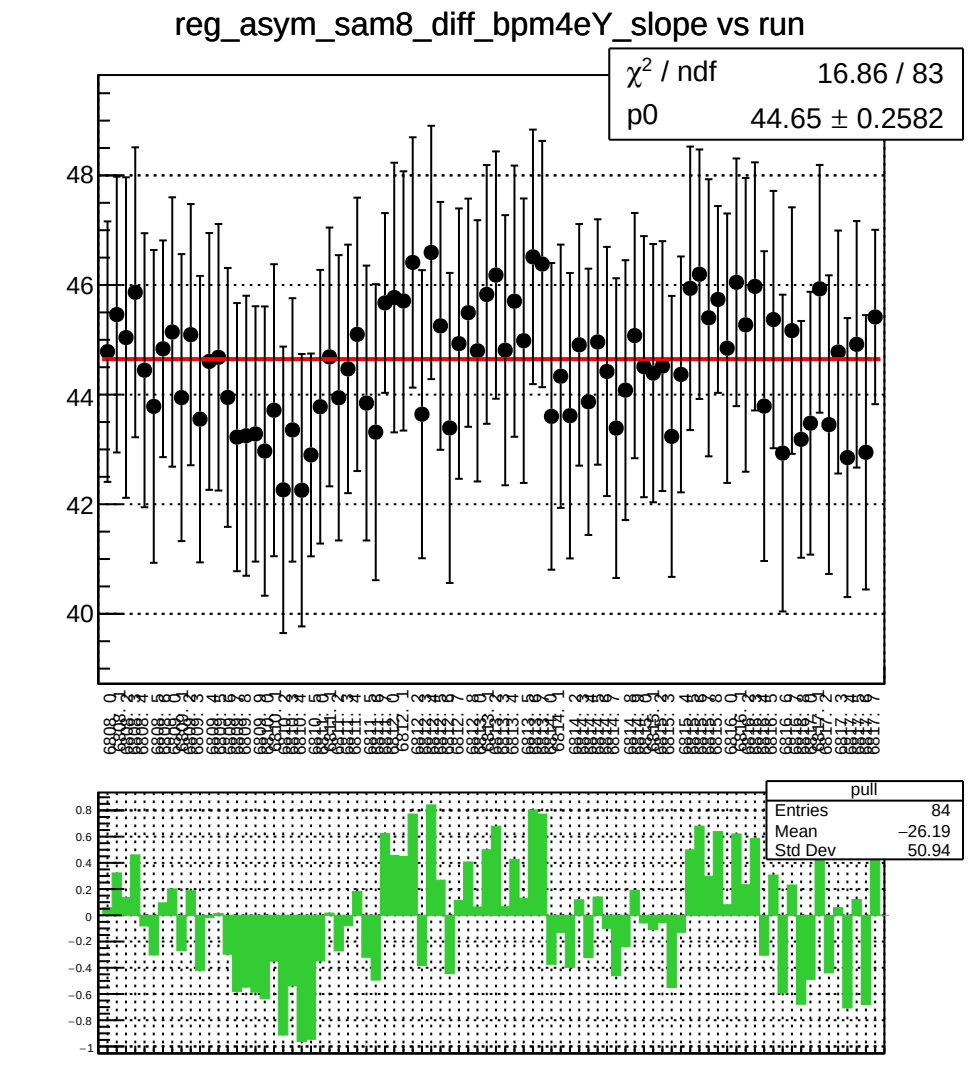

pull1D
Entries 84
Mean 0.002593
Std Dev 0.2964

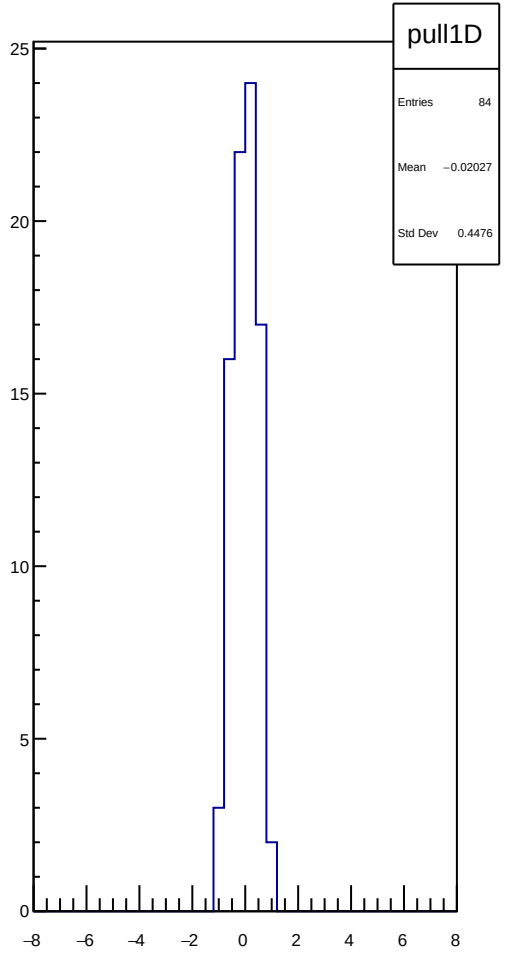

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 23.83 / 83
p0 −41.31 ± 0.2137
−36
−38
−40
−42
−44
pull
Entries 84
Mean 14.84
Std Dev 22.27
1
0.5
0
−0.5
−1

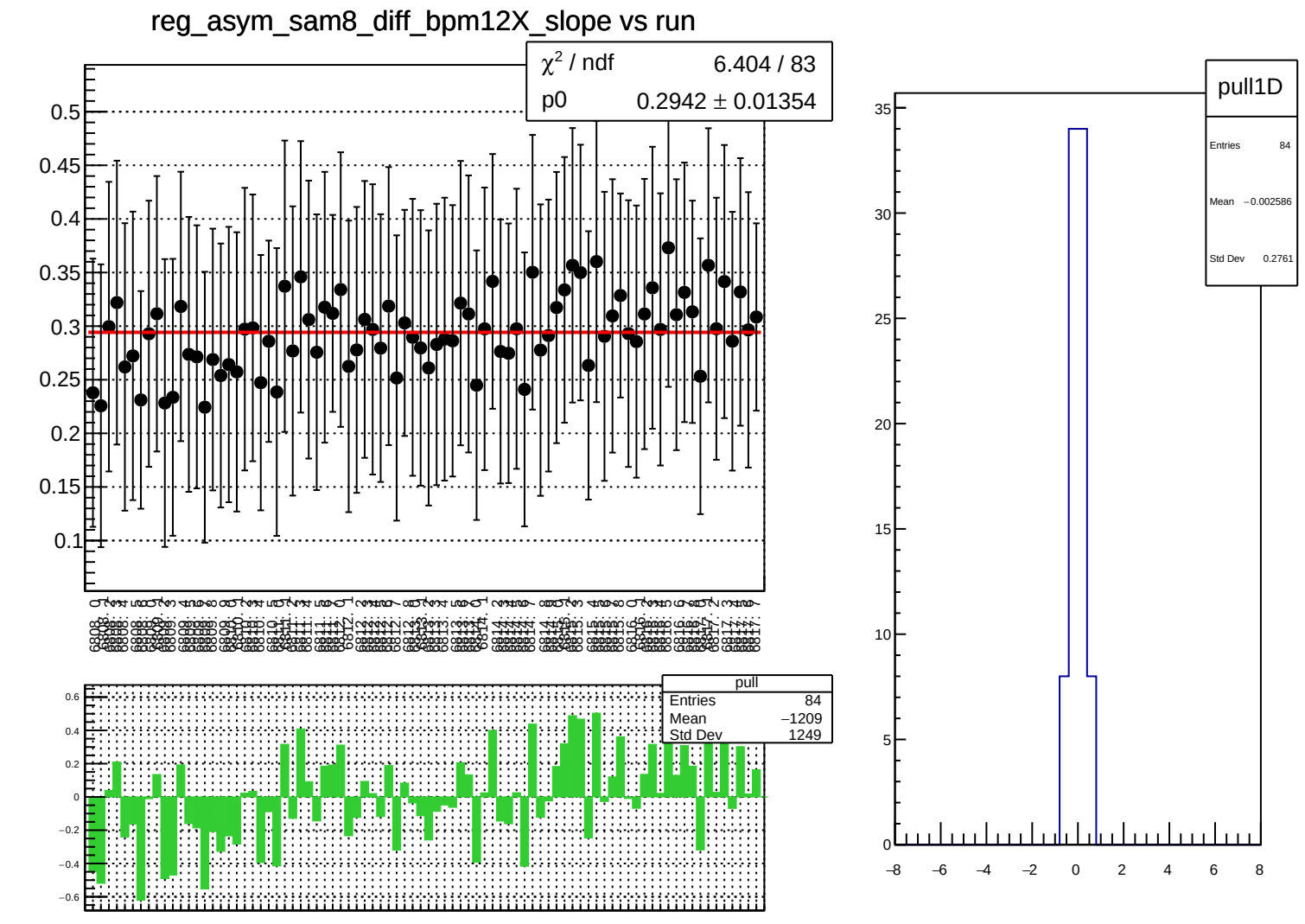

pull1D
Entries 84
Mean 0.04743
Std Dev 0.5305
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

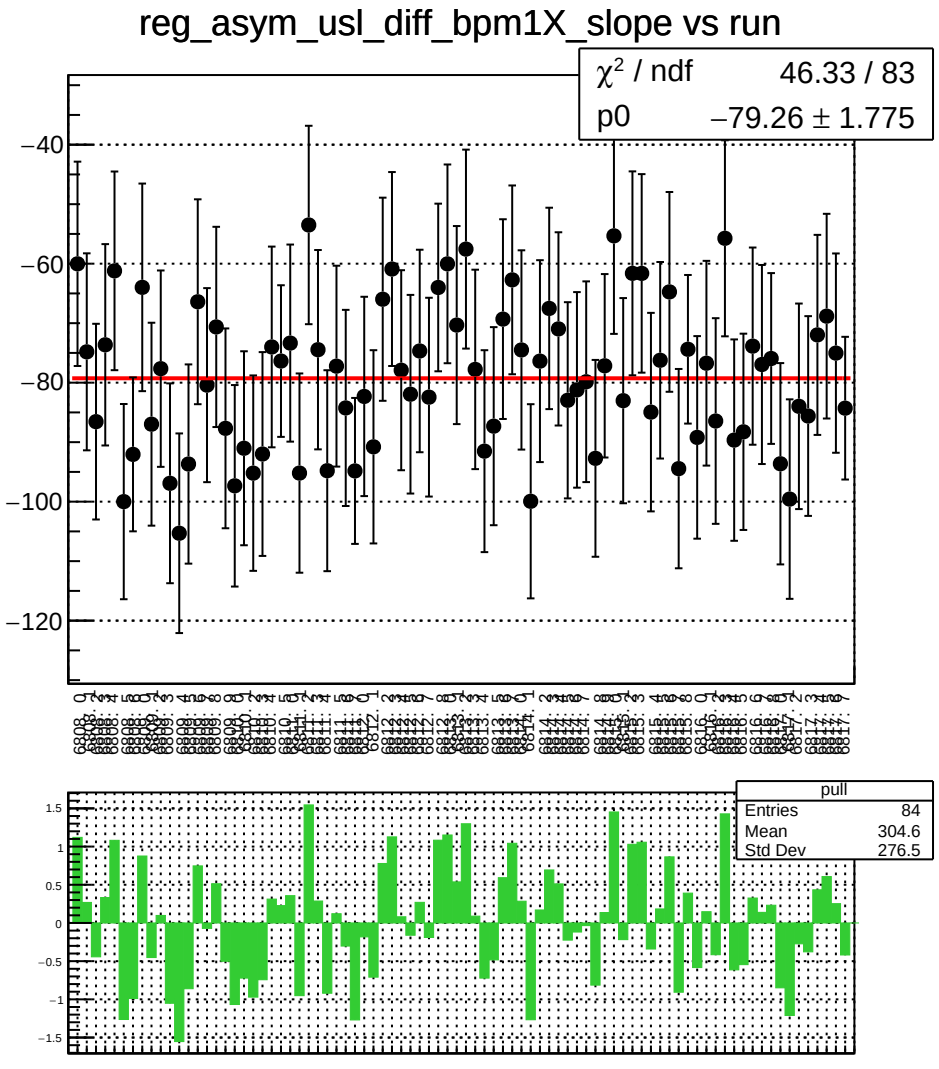

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 8.967 / 83
p0 −42.42 ± 0.3119
pull
Entries 84
Mean −50.87
Std Dev 132

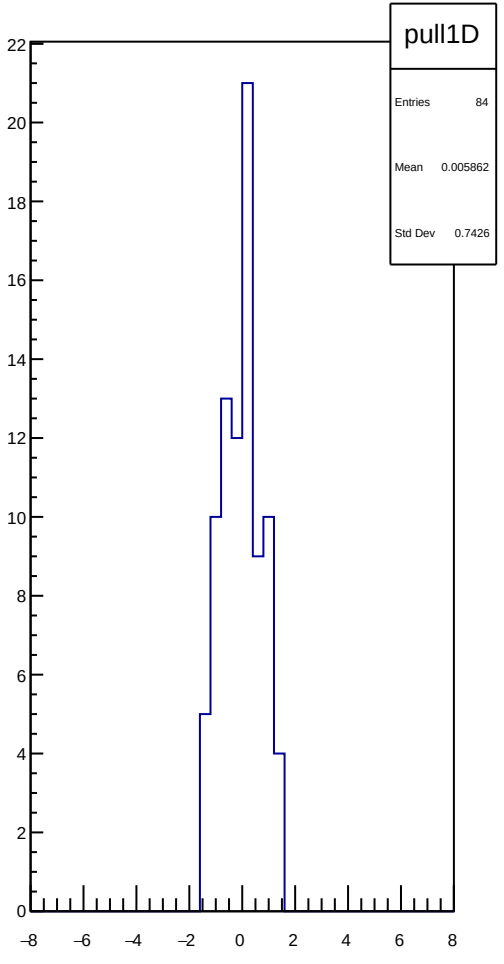

pull1D
Entries 84
Mean −0.004759
Std Dev 0.3267

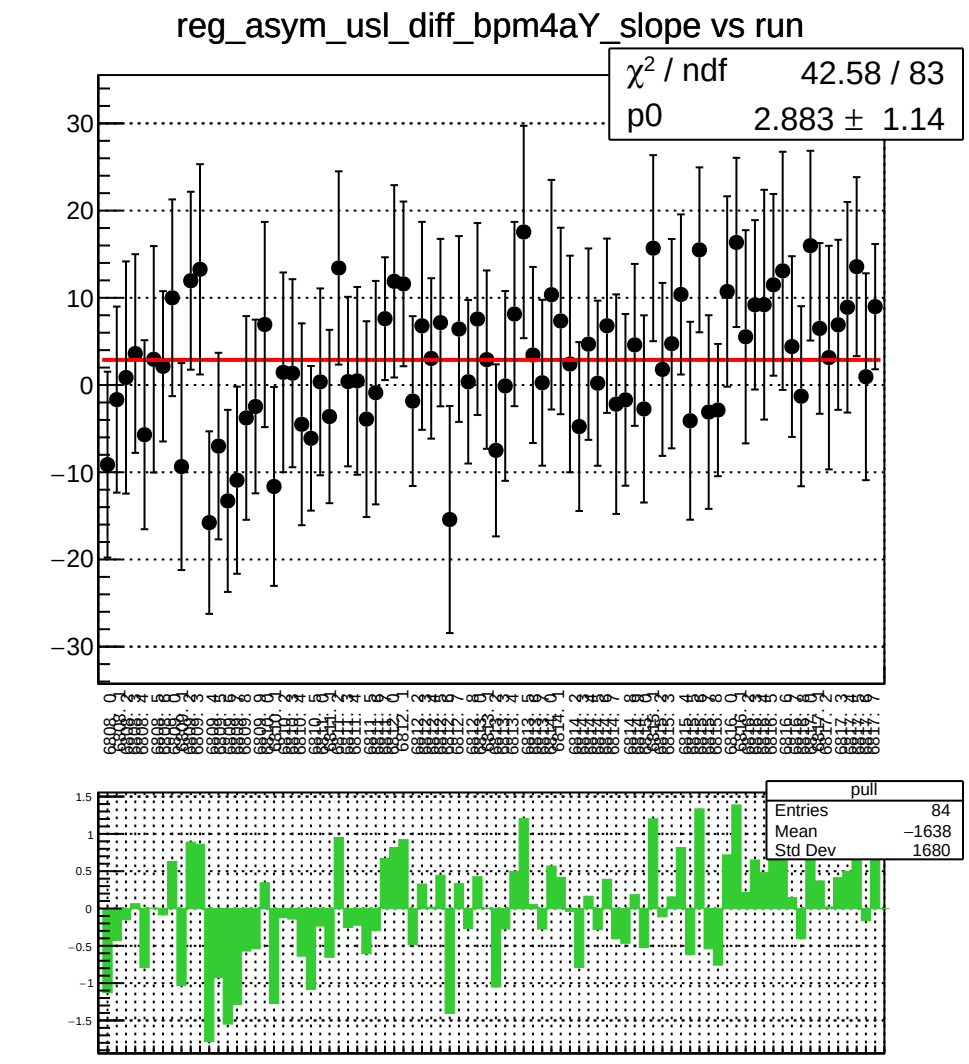

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 16.86 / 83
p0 44.65 ± 0.2582
48
46
44
42
40
pull
Entries 84
Mean −26.19
Std Dev 50.94
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

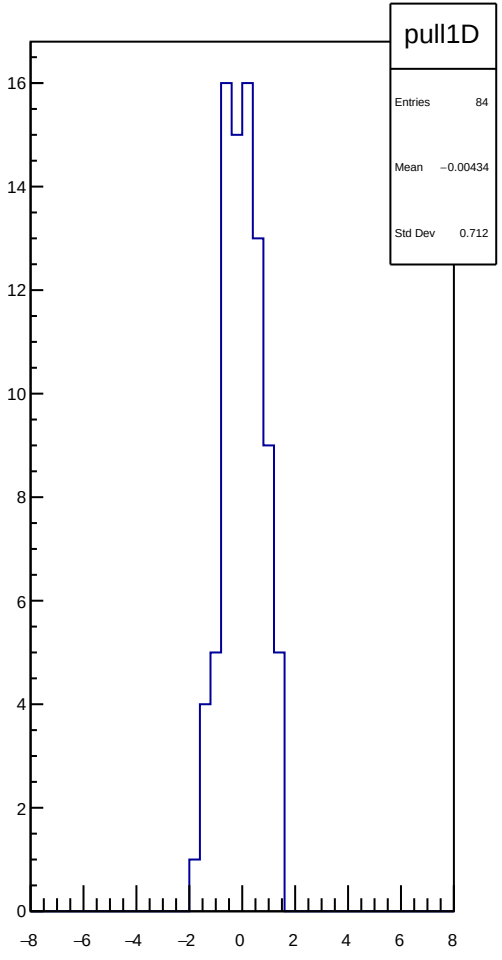

pull1D
Entries 84
Mean −0.02027
Std Dev 0.4476
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

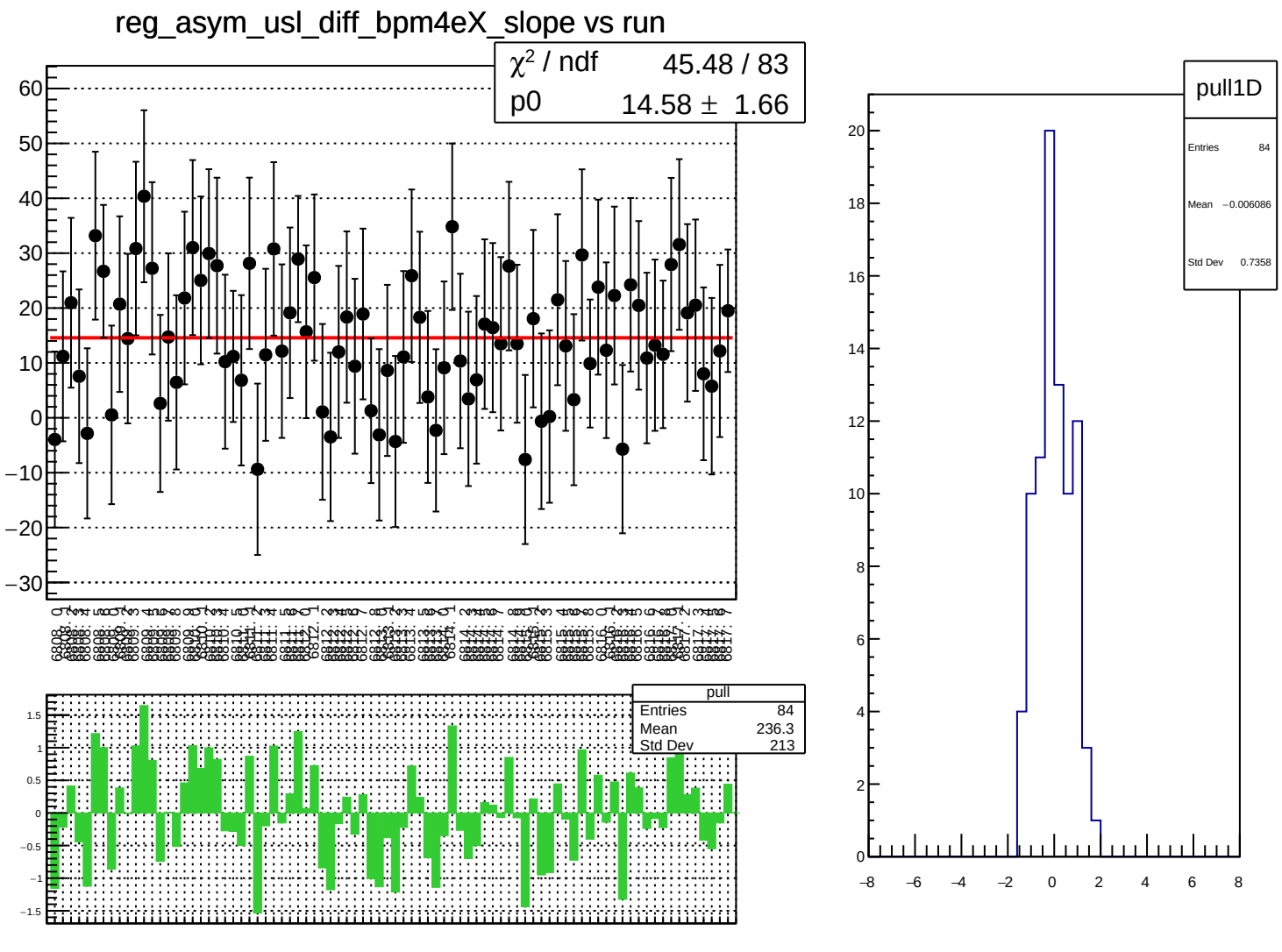

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 6.404 / 83
p0 0.2942 ± 0.01354
pull
Entries 84
Mean −1209
Std Dev 1249
pull1D
Entries 84
Mean −0.002586
Std Dev 0.2761

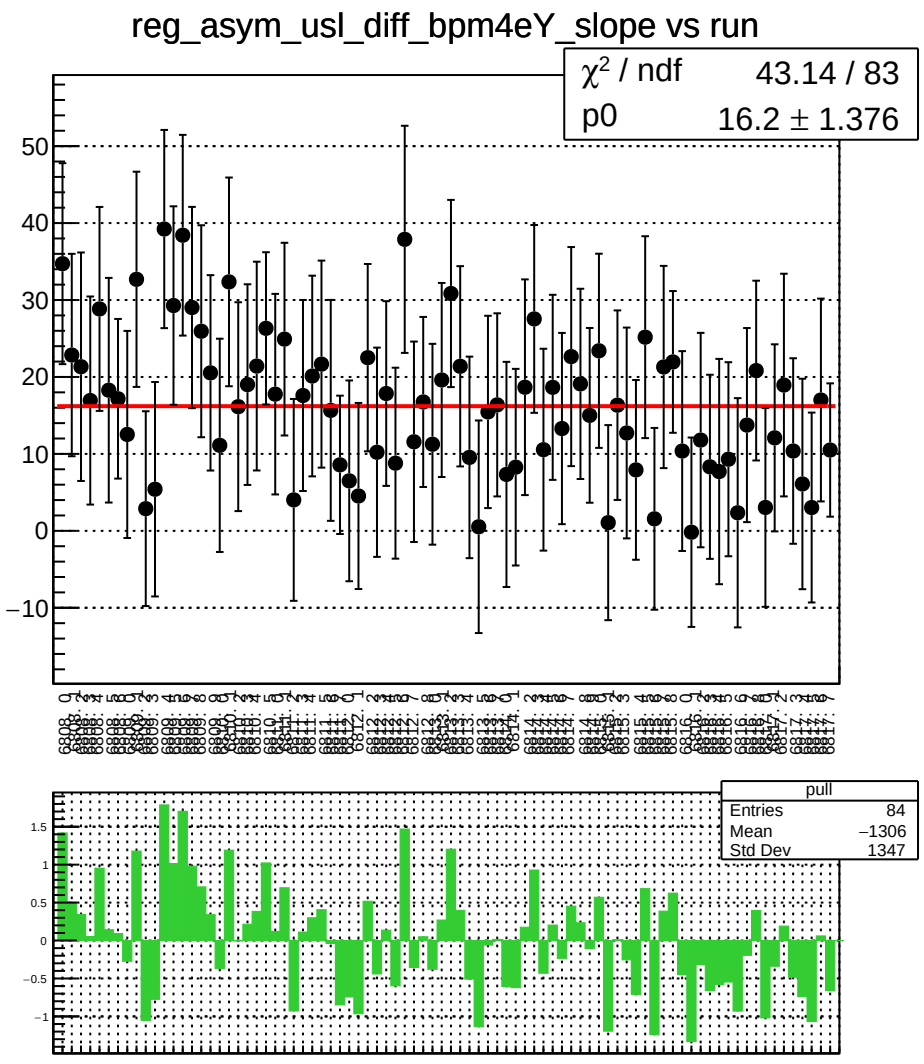

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 46.33 / 83
p0 −79.26 ± 1.775
−40
−60
−80
−100
−120
pull
Entries 84
Mean 304.6
Std Dev 276.5
1.5
1
0.5
0
−0.5
−1
−1.5

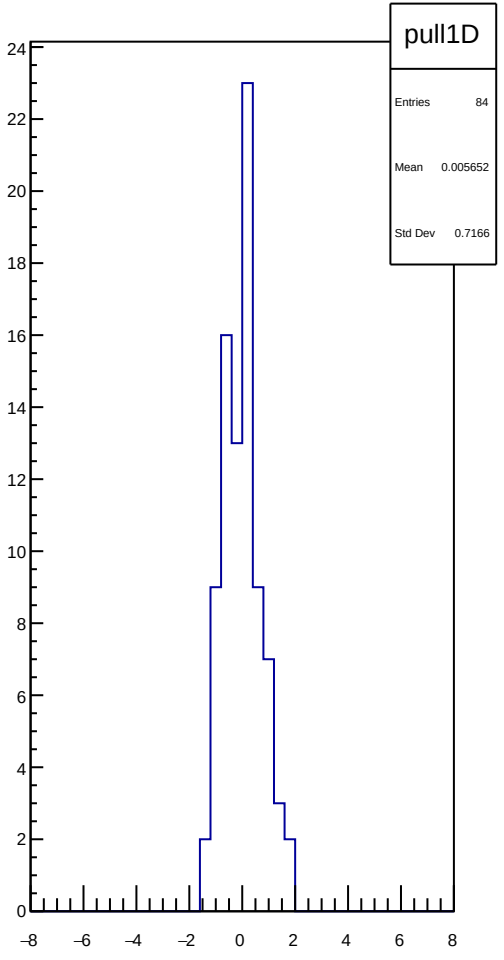

pull1D
Entries 84
Mean 0.005862
Std Dev 0.7426
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

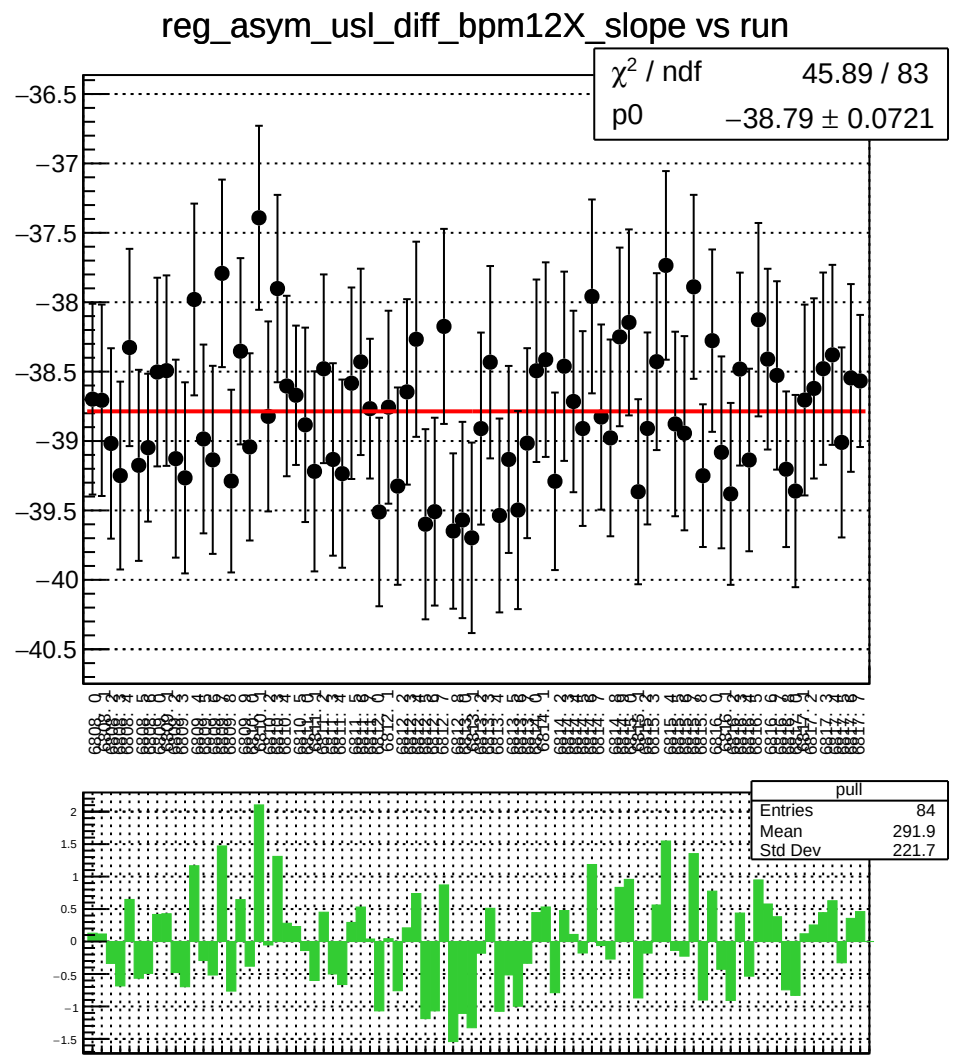

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 42.58 / 83
p0 2.883 ± 1.14
pull
Entries 84
Mean −1638
Std Dev 1680

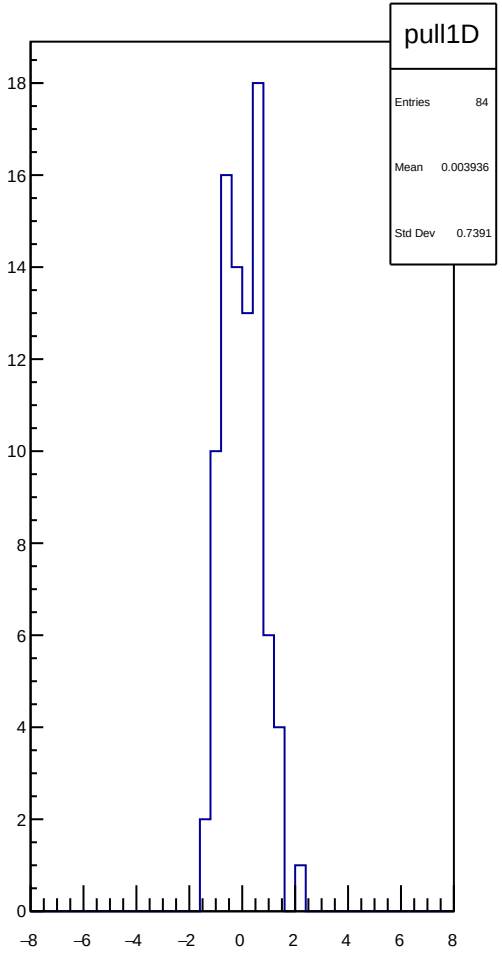

pull1D
Entries 84
Mean −0.00434
Std Dev 0.712

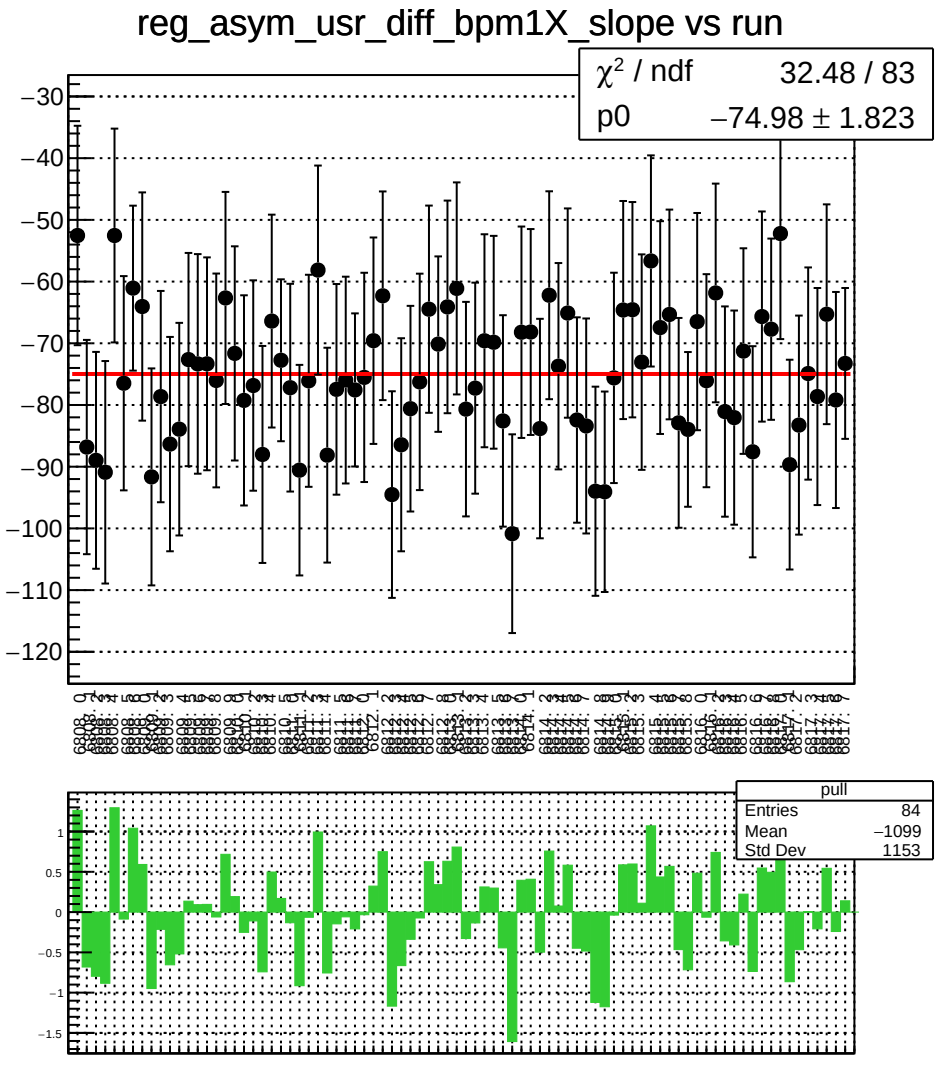

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 45.48 / 83
p0 14.58 ± 1.66
pull
Entries 84
Mean 236.3
Std Dev 213
pull1D
Entries 84
Mean −0.006086
Std Dev 0.7358

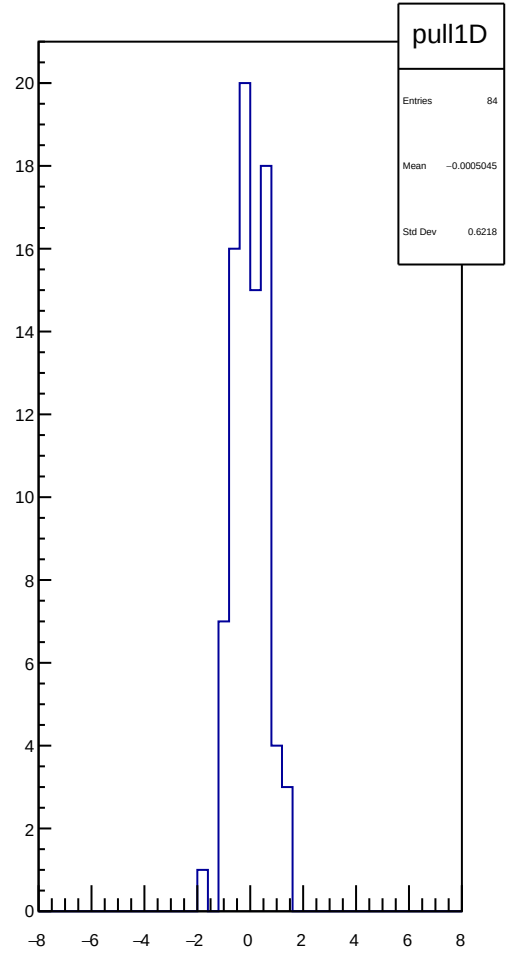

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 43.14 / 83
p0 16.2 ± 1.376
pull
Entries 84
Mean −1306
Std Dev 1347

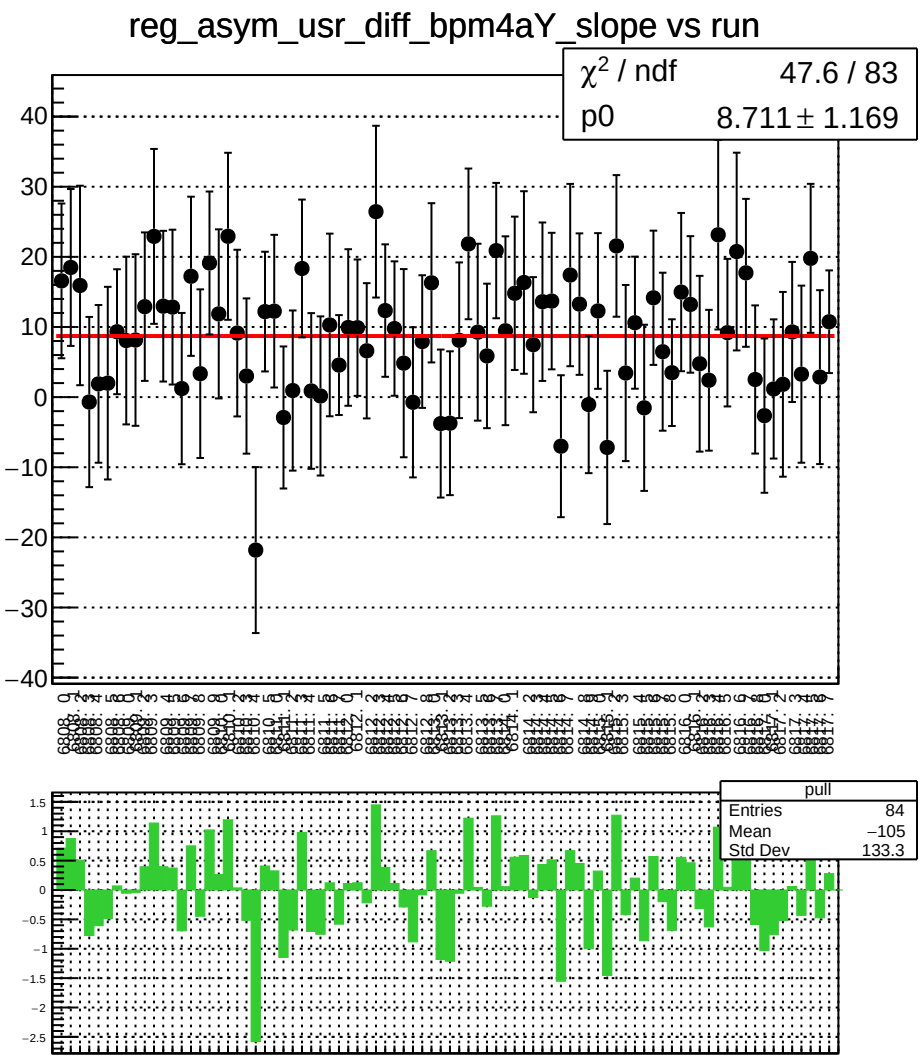

pull1D
Entries 84
Mean 0.005652
Std Dev 0.7166

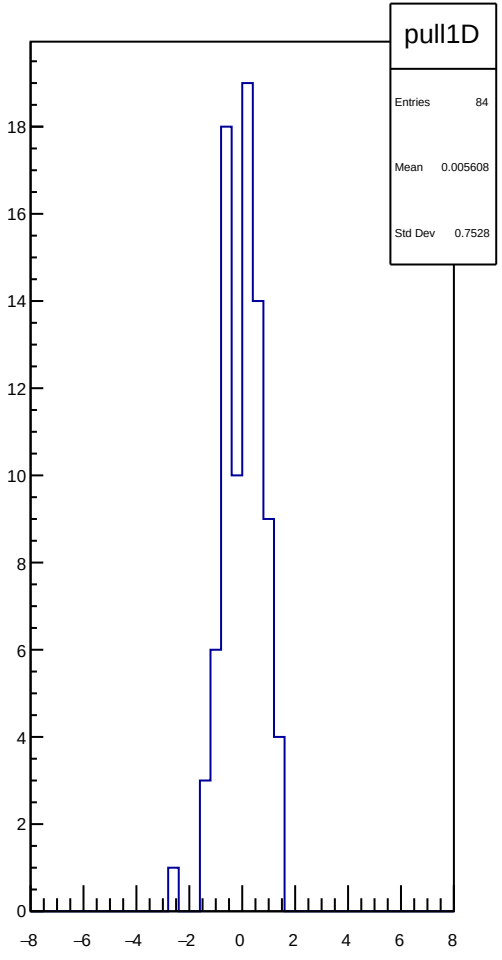

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 45.89 / 83
p0 −38.79 ± 0.0721
pull
Entries 84
Mean 291.9
Std Dev 221.7

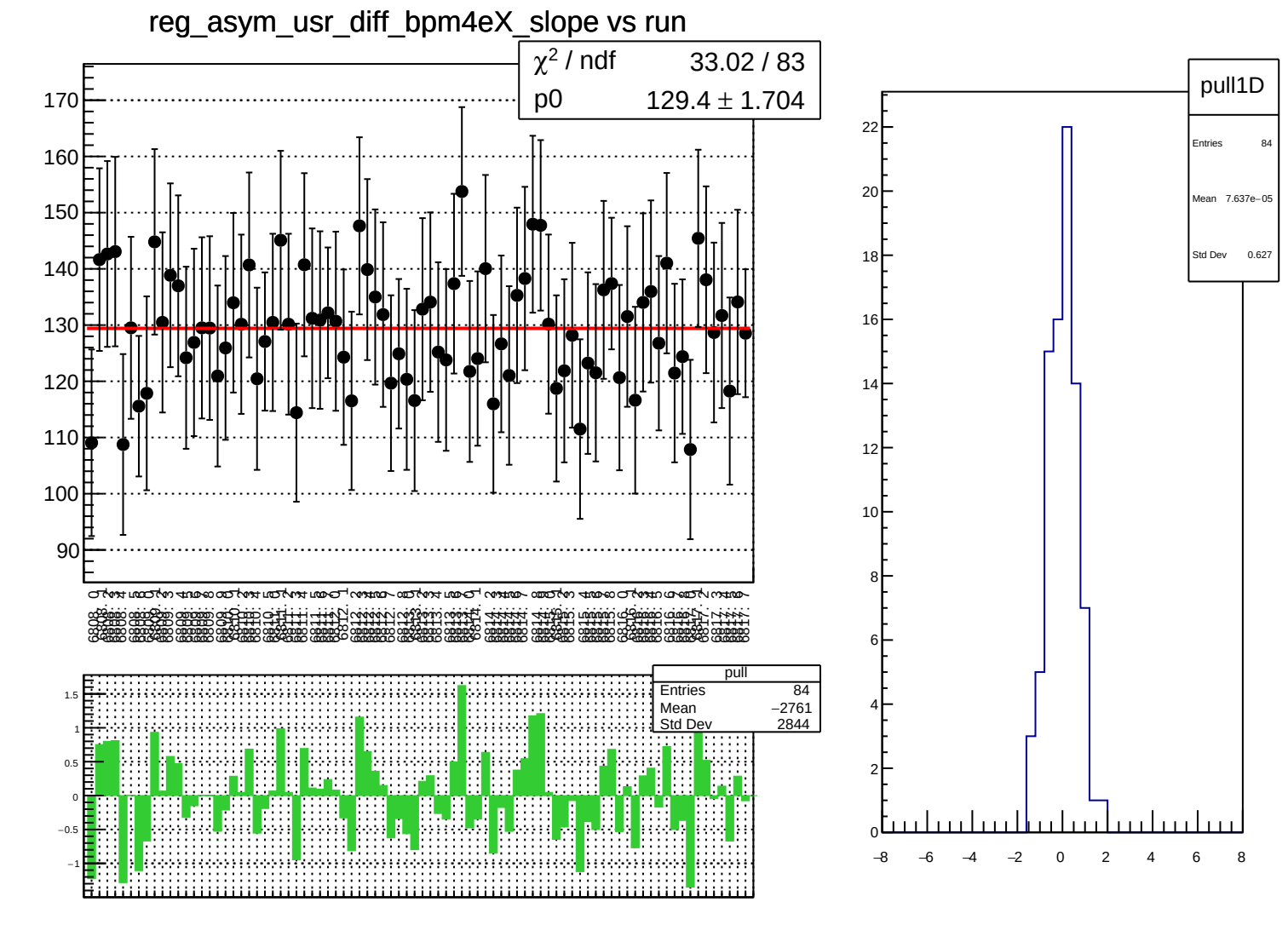

pull1D
Entries 84
Mean 0.003936
Std Dev 0.7391

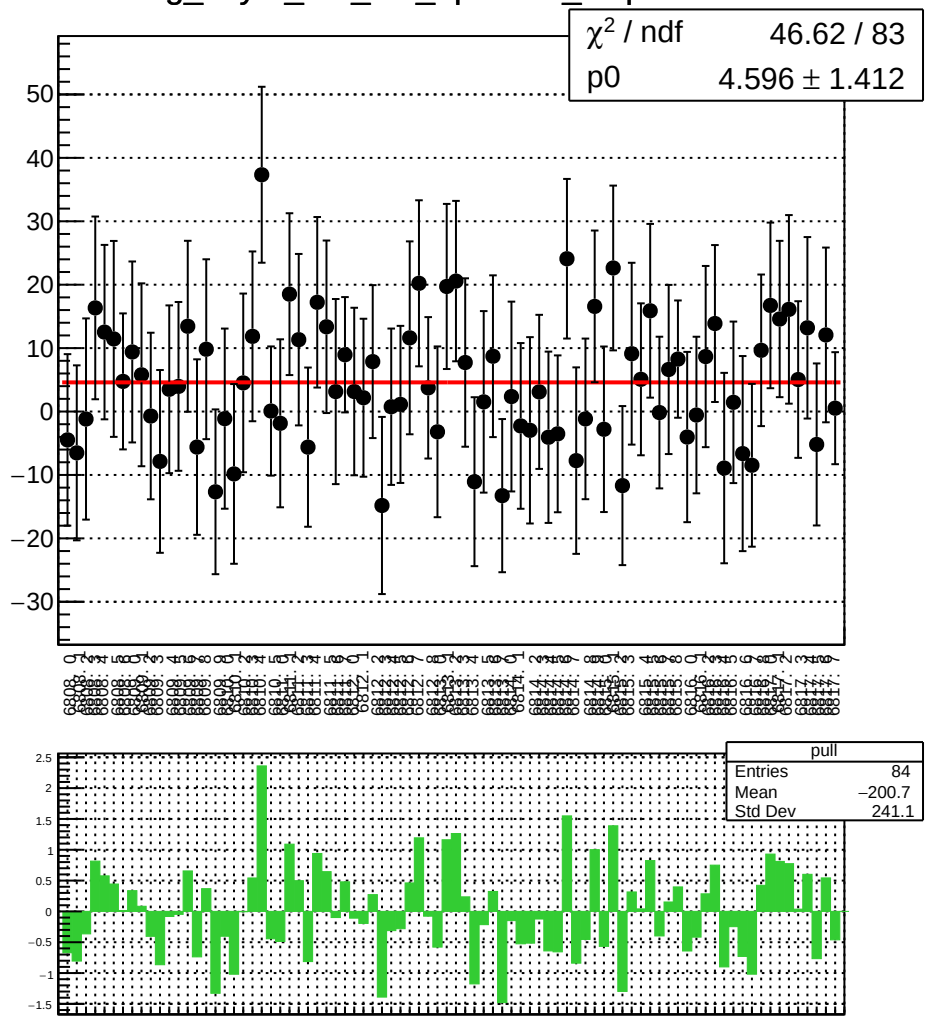

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 32.48 / 83
p0 −74.98 ± 1.823
pull
Entries 84
Mean −1099
Std Dev 1153

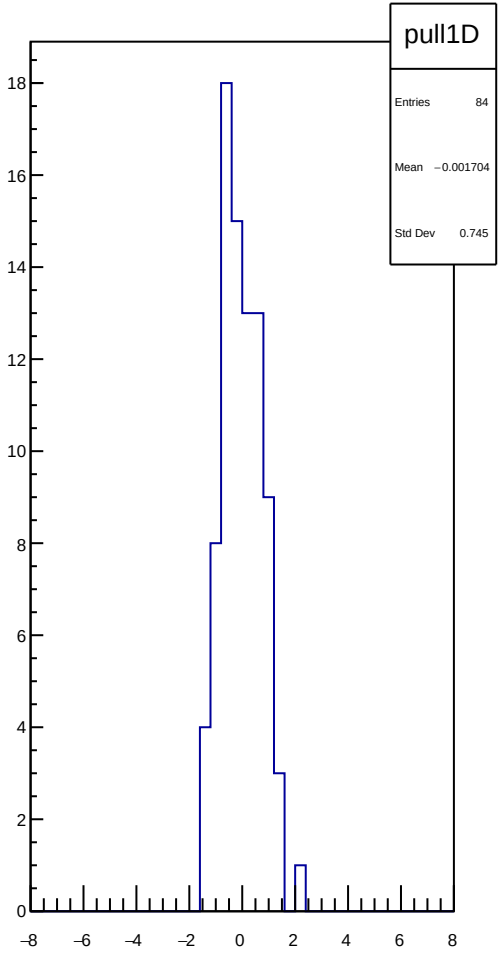

pull1D
Entries 84
Mean −0.0005045
Std Dev 0.6218

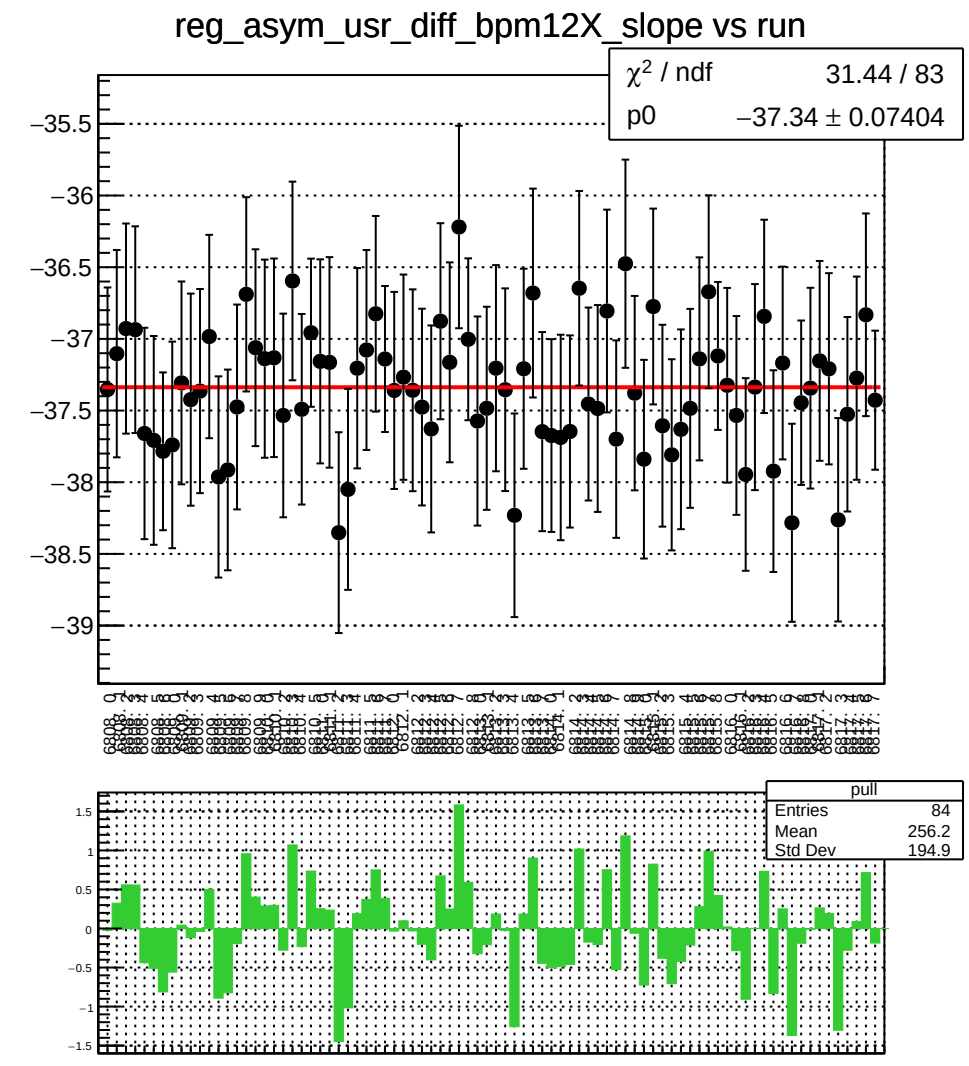

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 47.6 / 83
p0 8.711 ± 1.169
pull
Entries 84
Mean −105
Std Dev 133.3

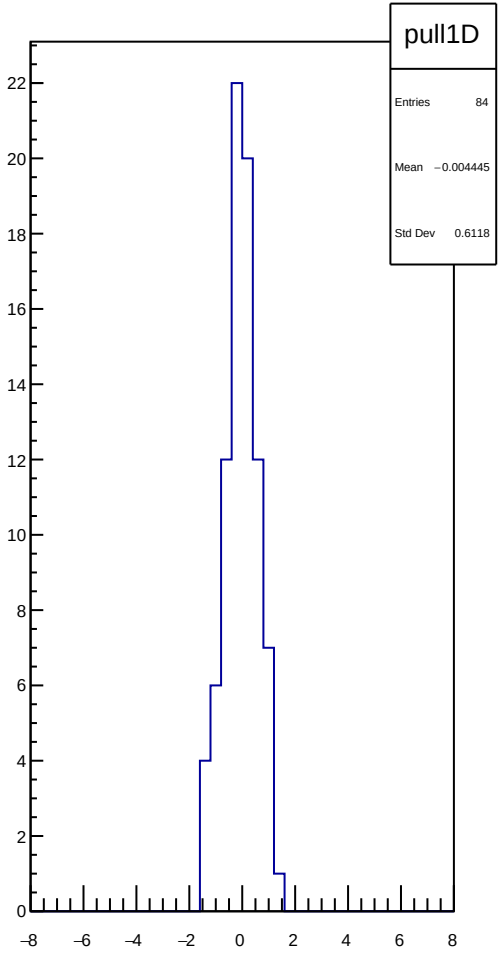

pull1D
Entries 84
Mean 0.005608
Std Dev 0.7528

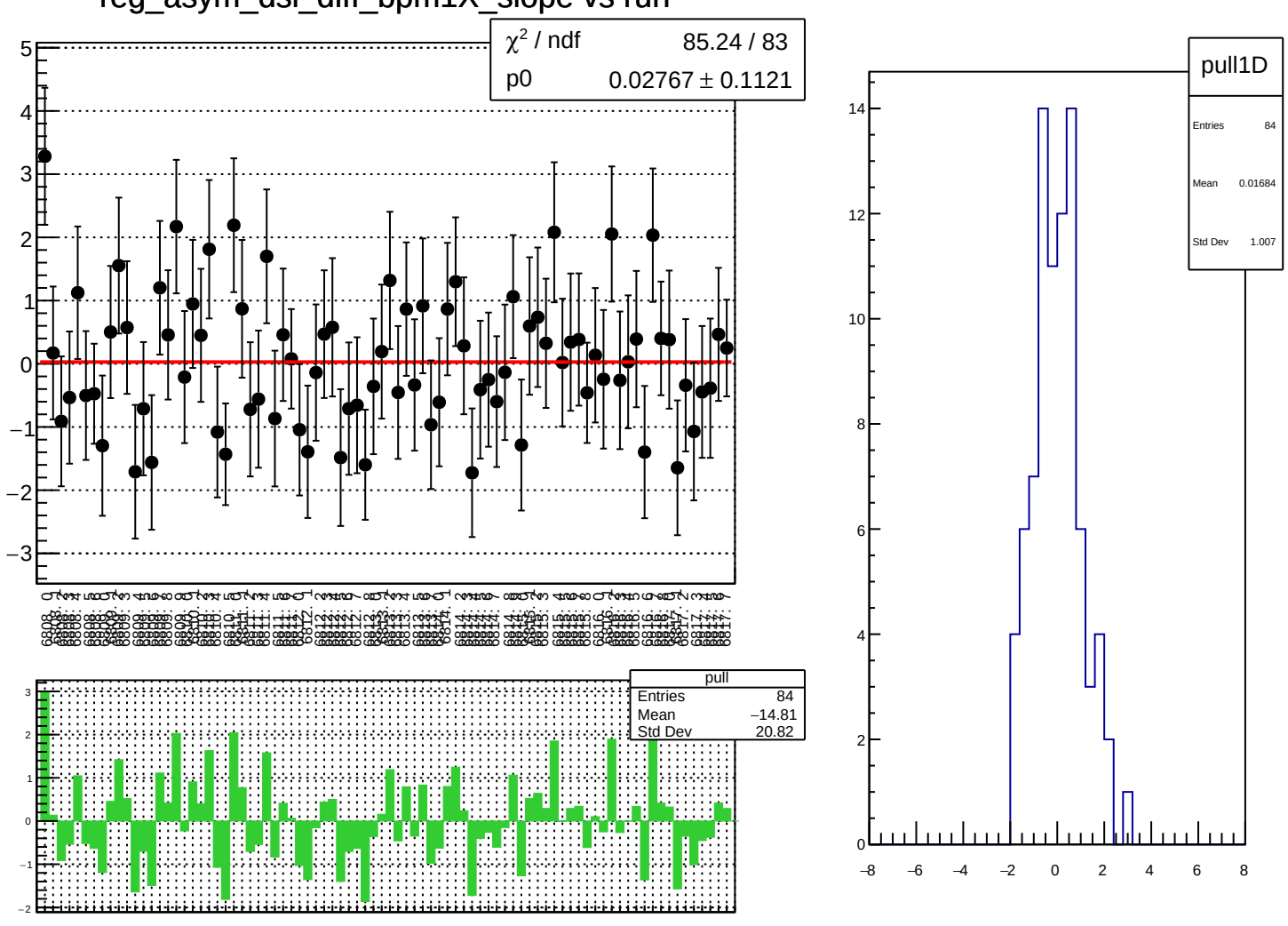

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 33.02 / 83
p0 129.4 ± 1.704
pull
Entries 84
Mean −2761
Std Dev 2844
pull1D
Entries 84
Mean 7.637e−05
Std Dev 0.627

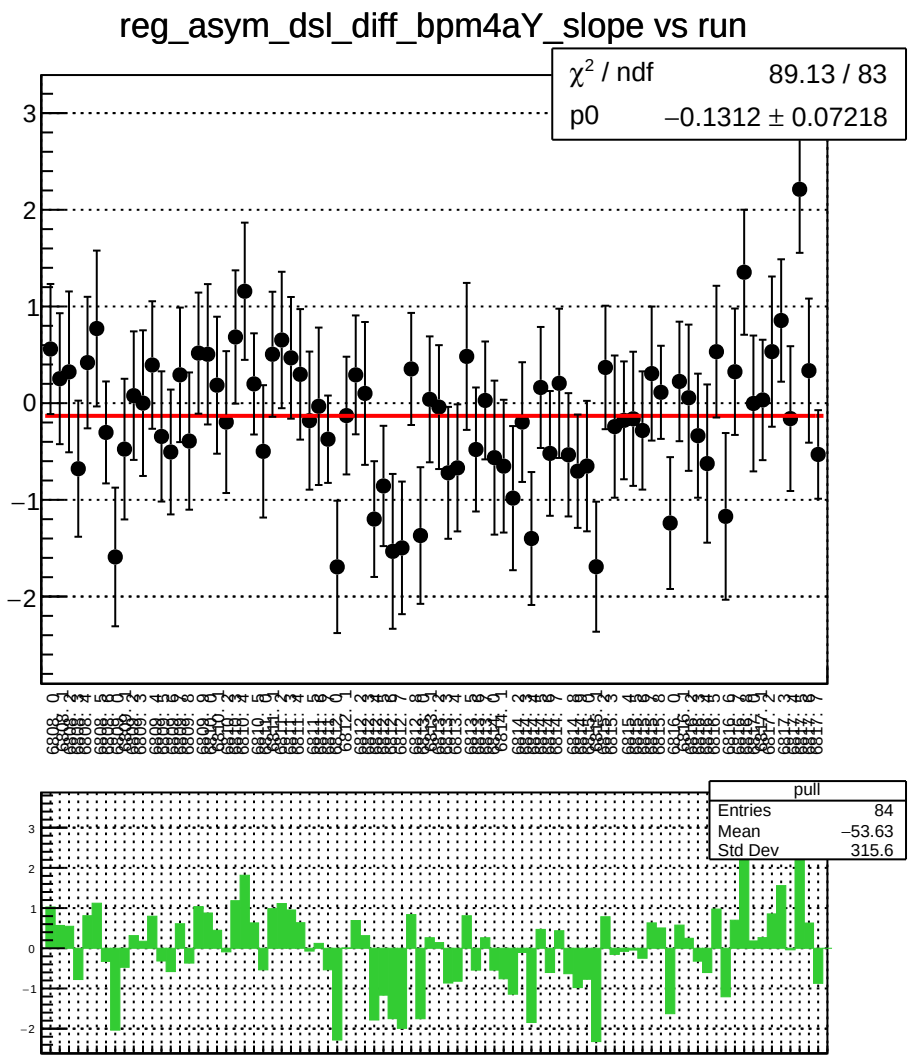

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 46.62 / 83
p0 4.596 ± 1.412
pull
Entries 84
Mean −200.7
Std Dev 241.1

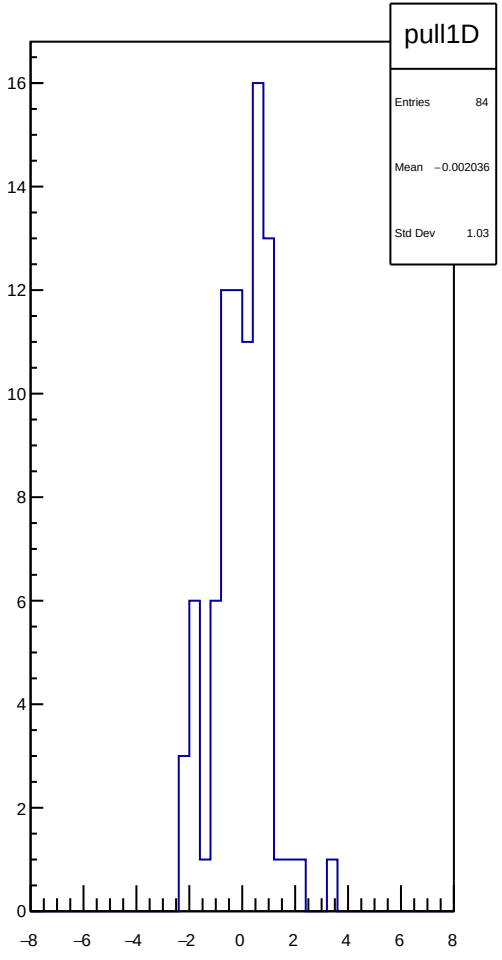

pull1D
Entries 84
Mean −0.001704
Std Dev 0.745

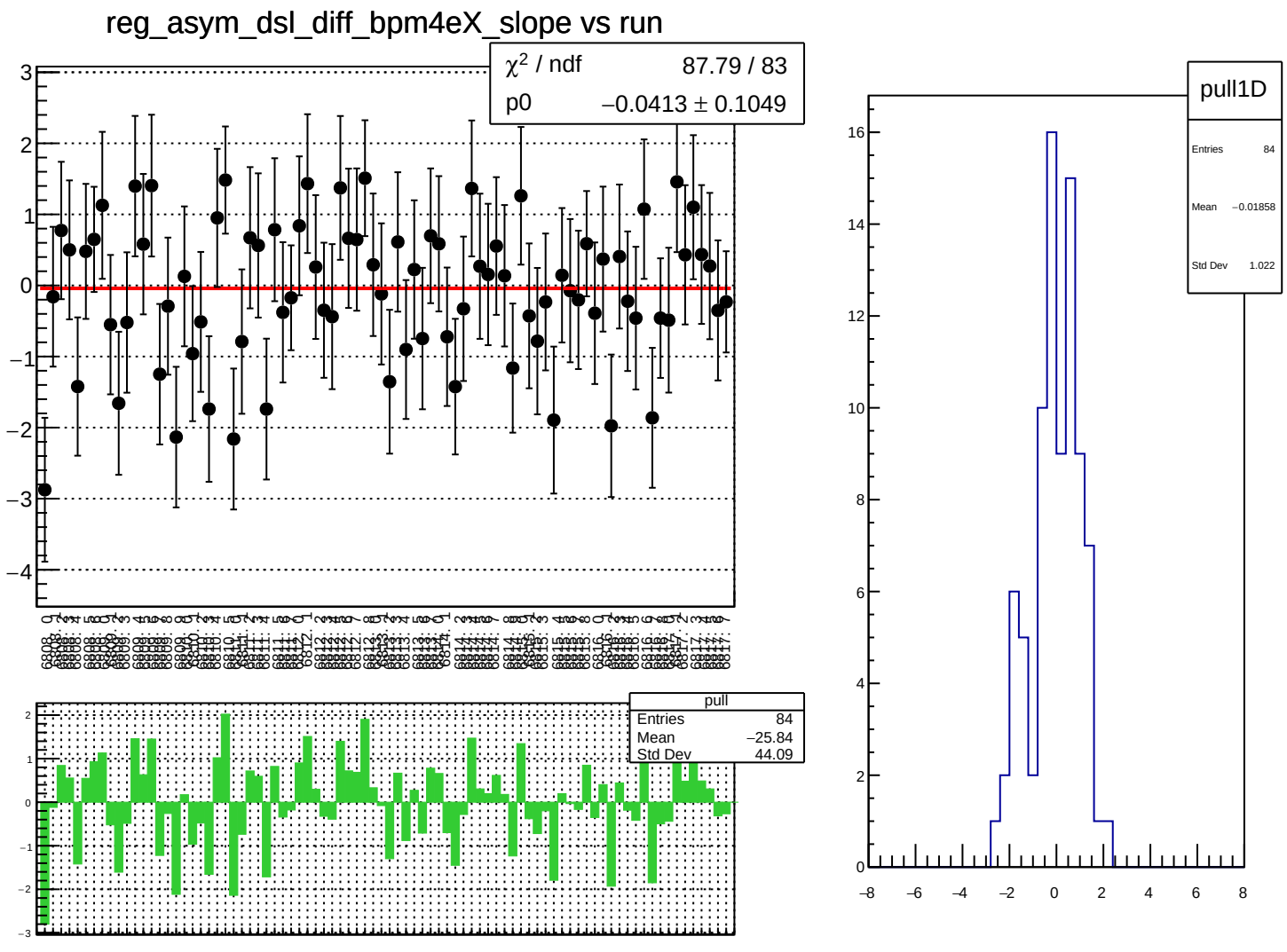

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 31.44 / 83
p0 −37.34 ± 0.07404
pull
Entries 84
Mean 256.2
Std Dev 194.9

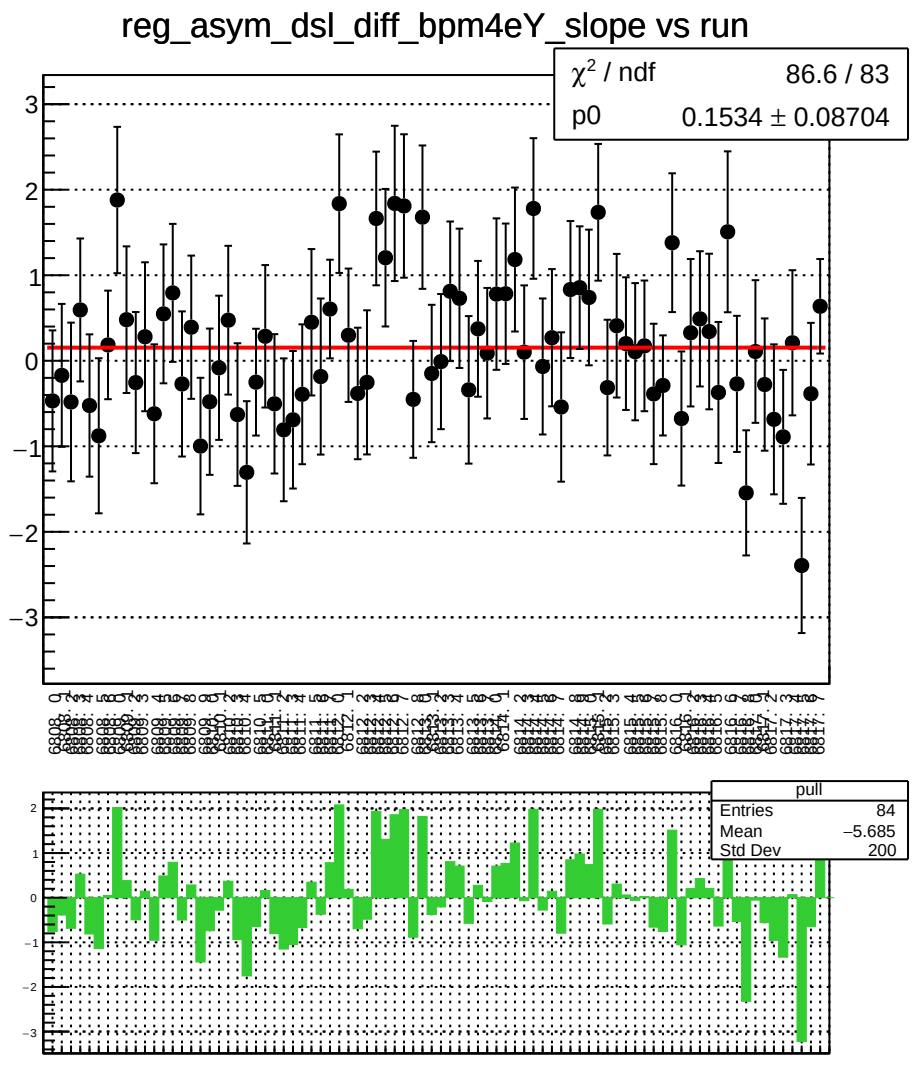

pull1D
Entries 84
Mean −0.004445
Std Dev 0.6118

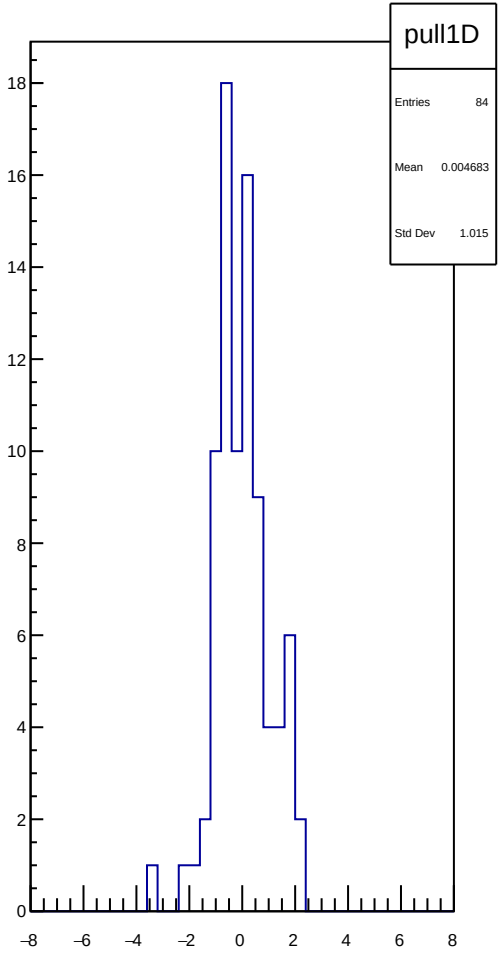

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 85.24 / 83
p0 0.02767 ± 0.1121
pull
Entries 84
Mean −14.81
Std Dev 20.82
pull1D
Entries 84
Mean 0.01684
Std Dev 1.007

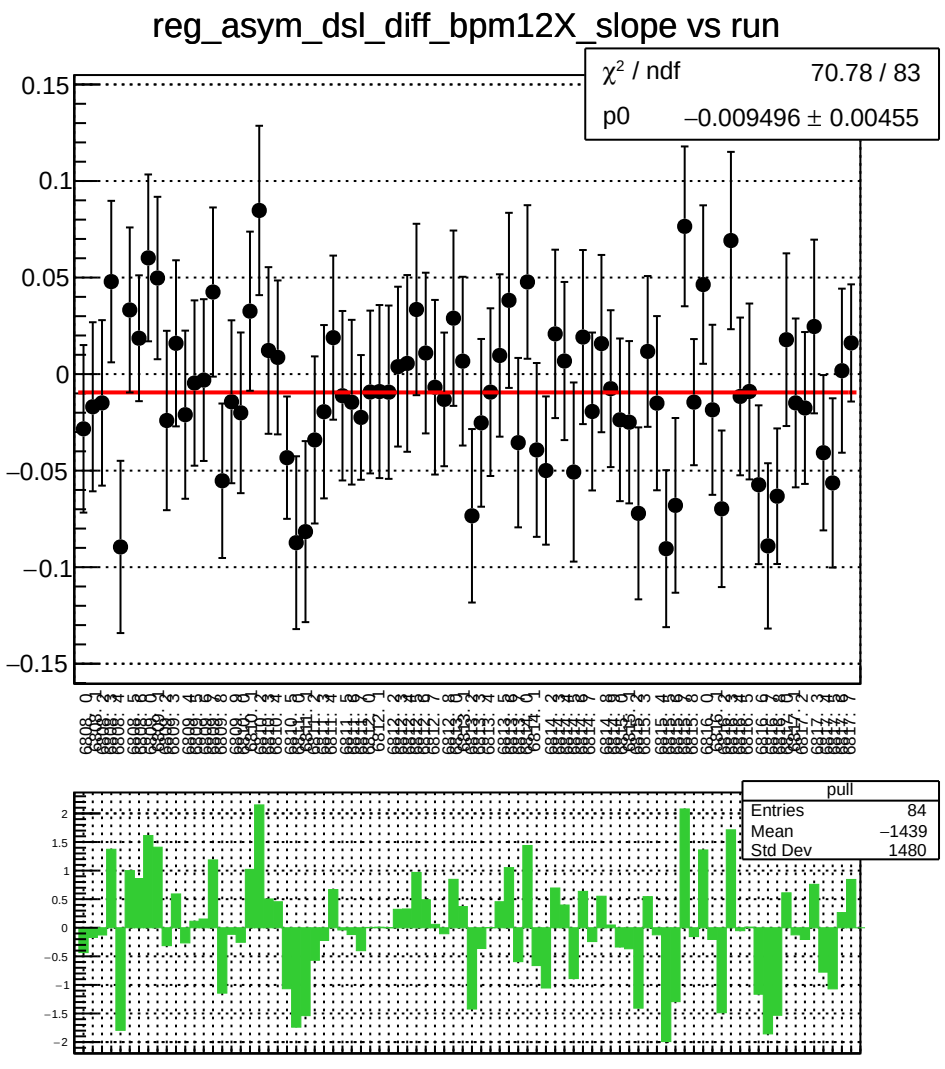

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 89.13 / 83
p0 −0.1312 ± 0.07218
pull
Entries 84
Mean −53.63
Std Dev 315.6

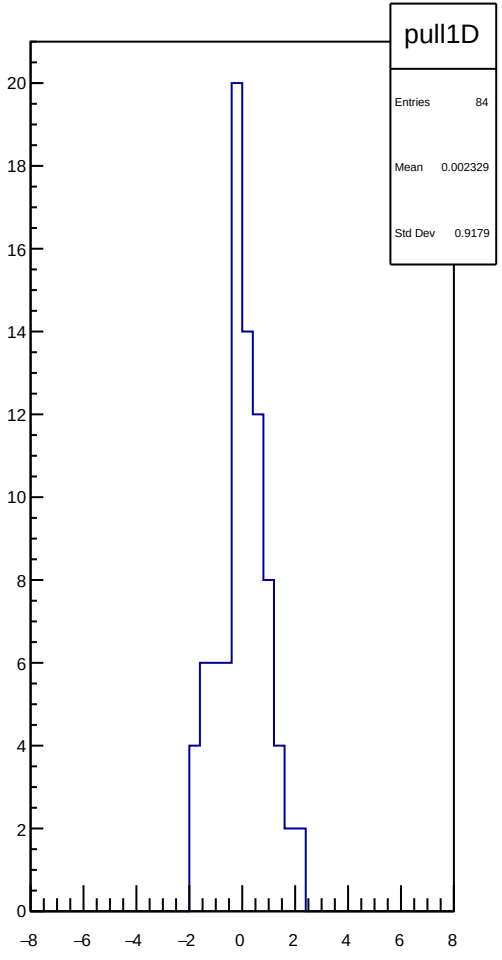

pull1D
Entries 84
Mean −0.002036
Std Dev 1.03

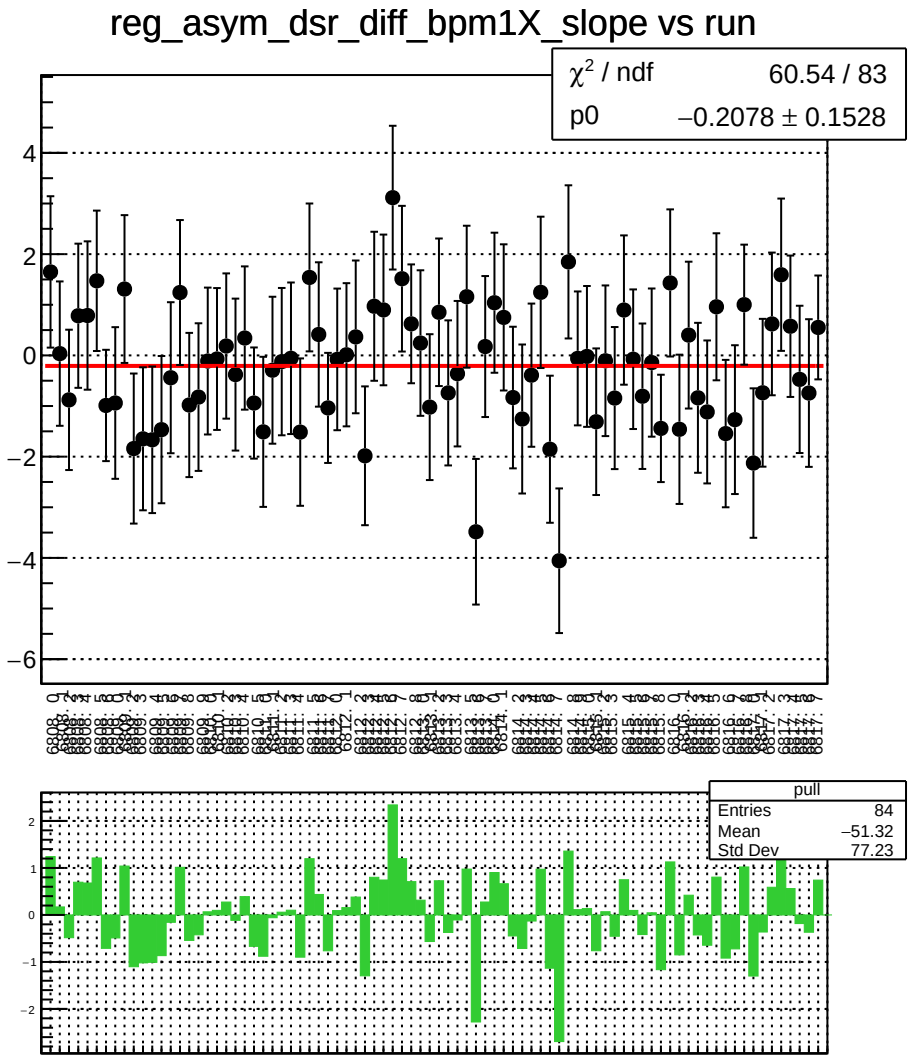

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 87.79 / 83
p0 −0.0413 ± 0.1049
pull
Entries 84
Mean −25.84
Std Dev 44.09
pull1D
Entries 84
Mean −0.01858
Std Dev 1.022

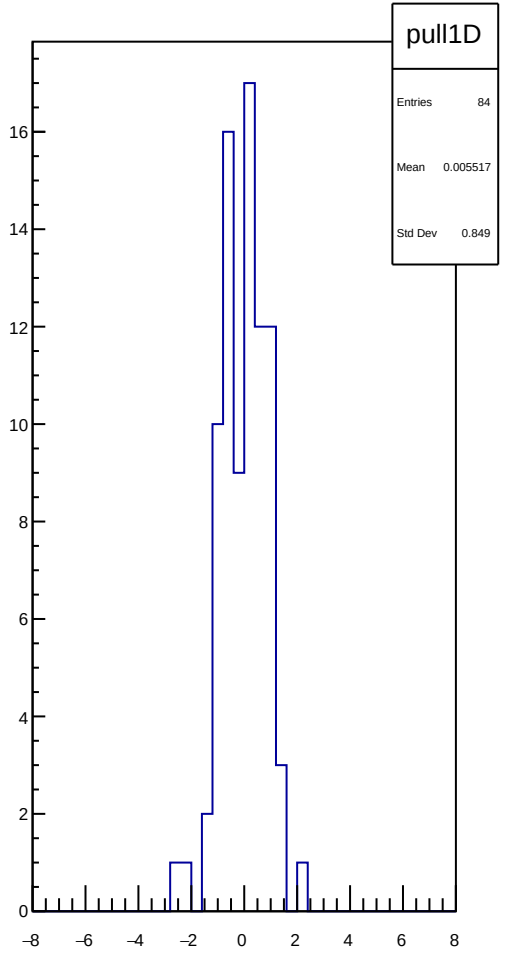

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 86.6 / 83
p0 0.1534 ± 0.08704
pull
Entries 84
Mean −5.685
Std Dev 200

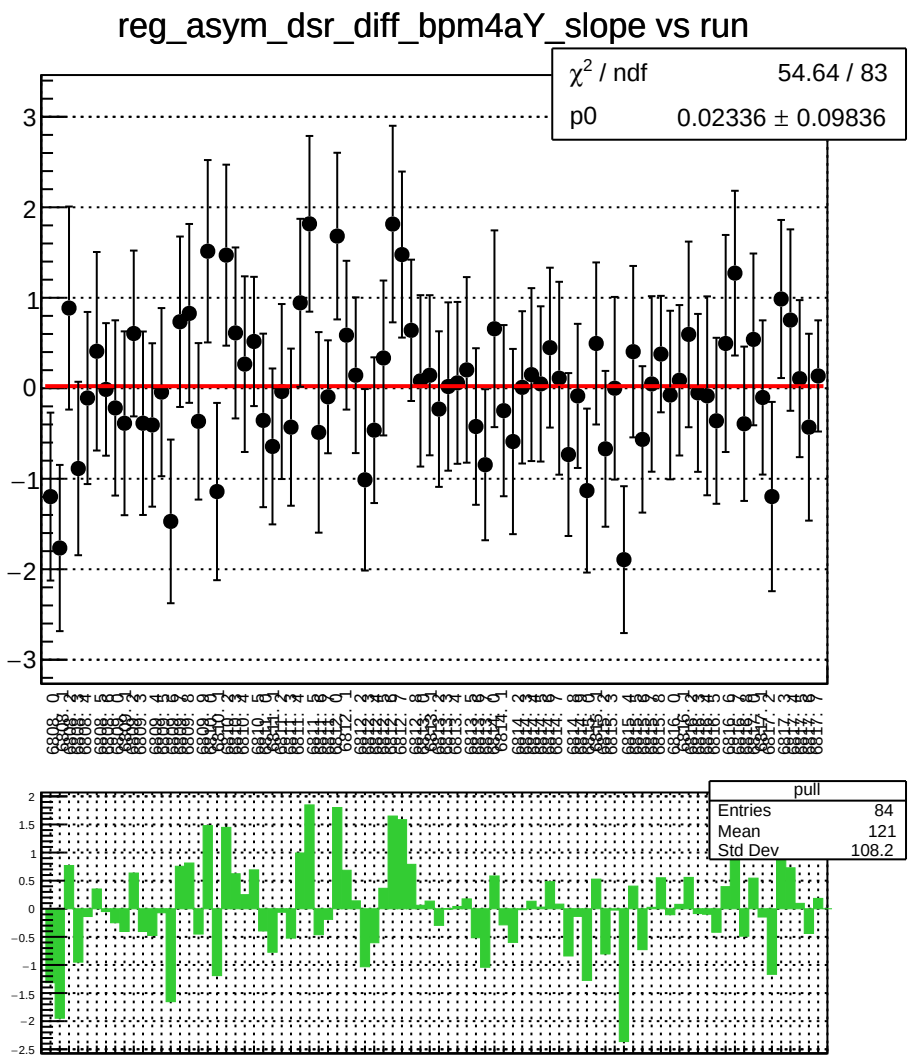

pull1D
Entries 84
Mean 0.004683
Std Dev 1.015

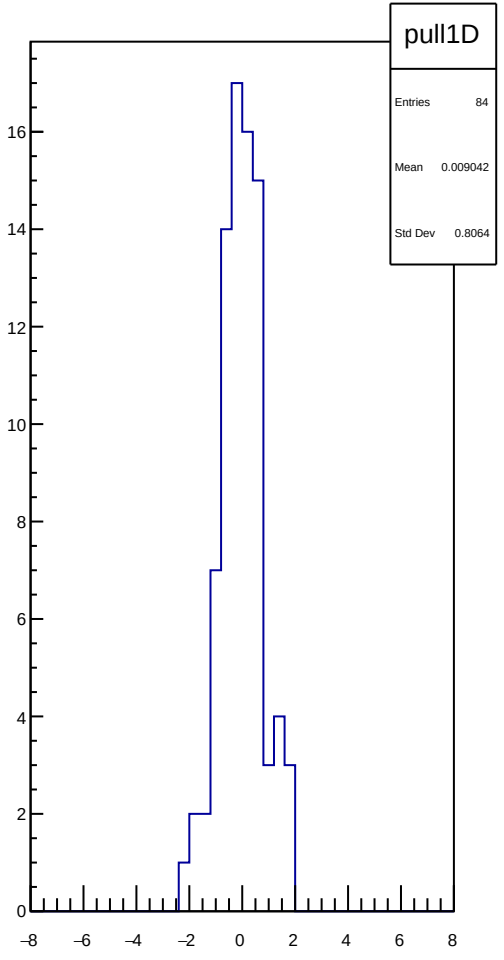

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 70.78 / 83
p0 −0.009496 ± 0.00455
pull
Entries 84
Mean −1439
Std Dev 1480

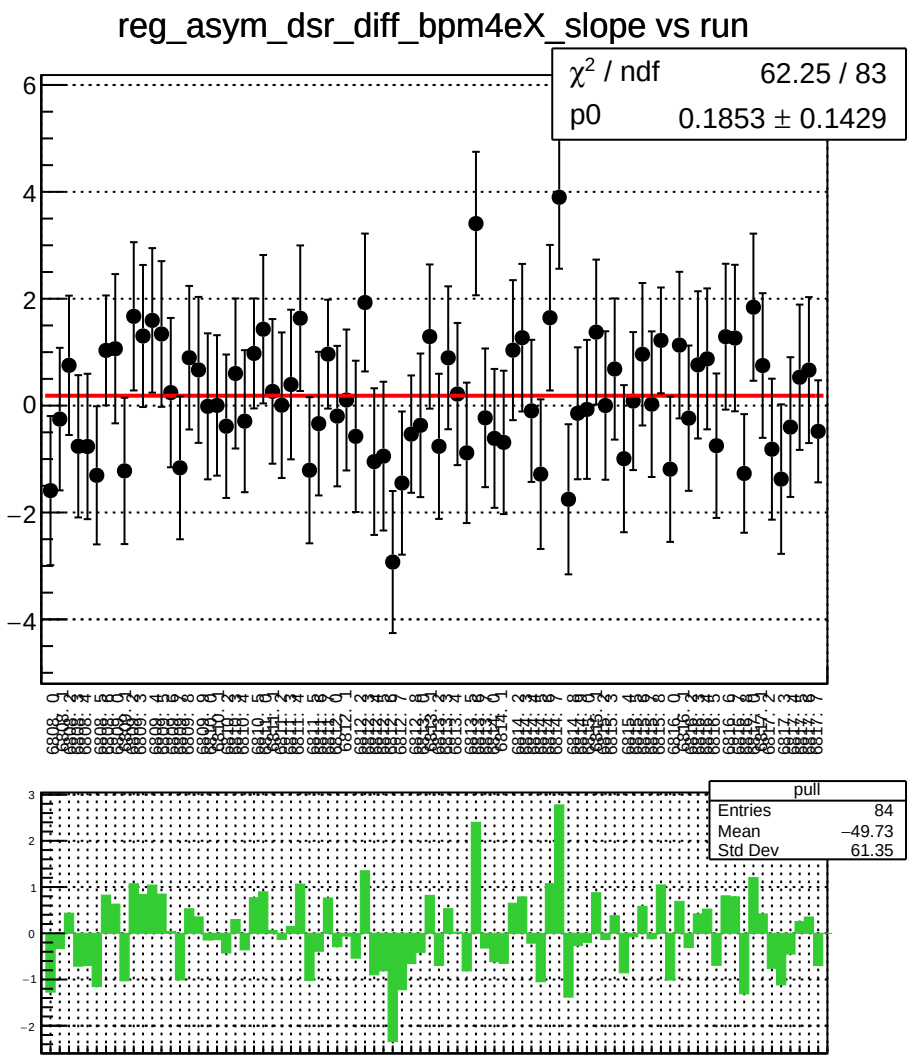

pull1D
Entries 84
Mean 0.002329
Std Dev 0.9179

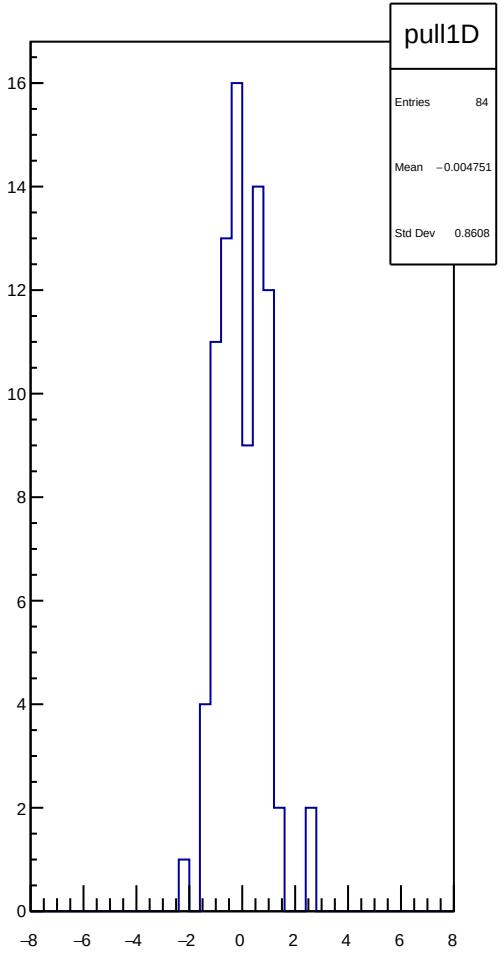

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 60.54 / 83
p0 −0.2078 ± 0.1528
pull
Entries 84
Mean −51.32
Std Dev 77.23

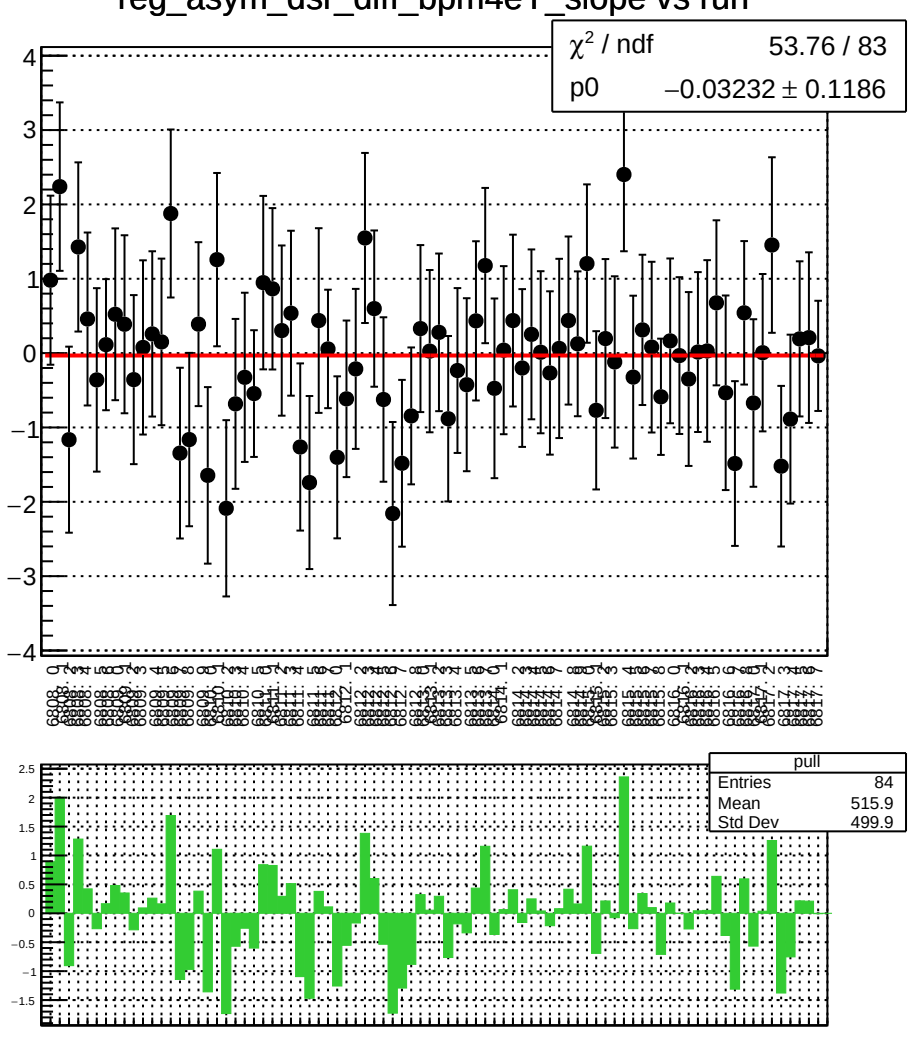

pull1D
Entries 84
Mean 0.005517
Std Dev 0.849

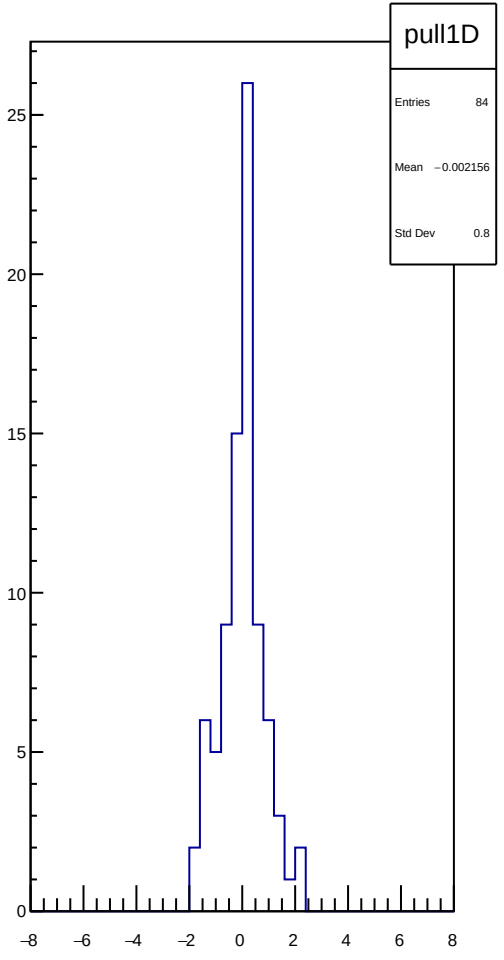

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 54.64 / 83
p0 0.02336 ± 0.09836
pull
Entries 84
Mean 121
Std Dev 108.2

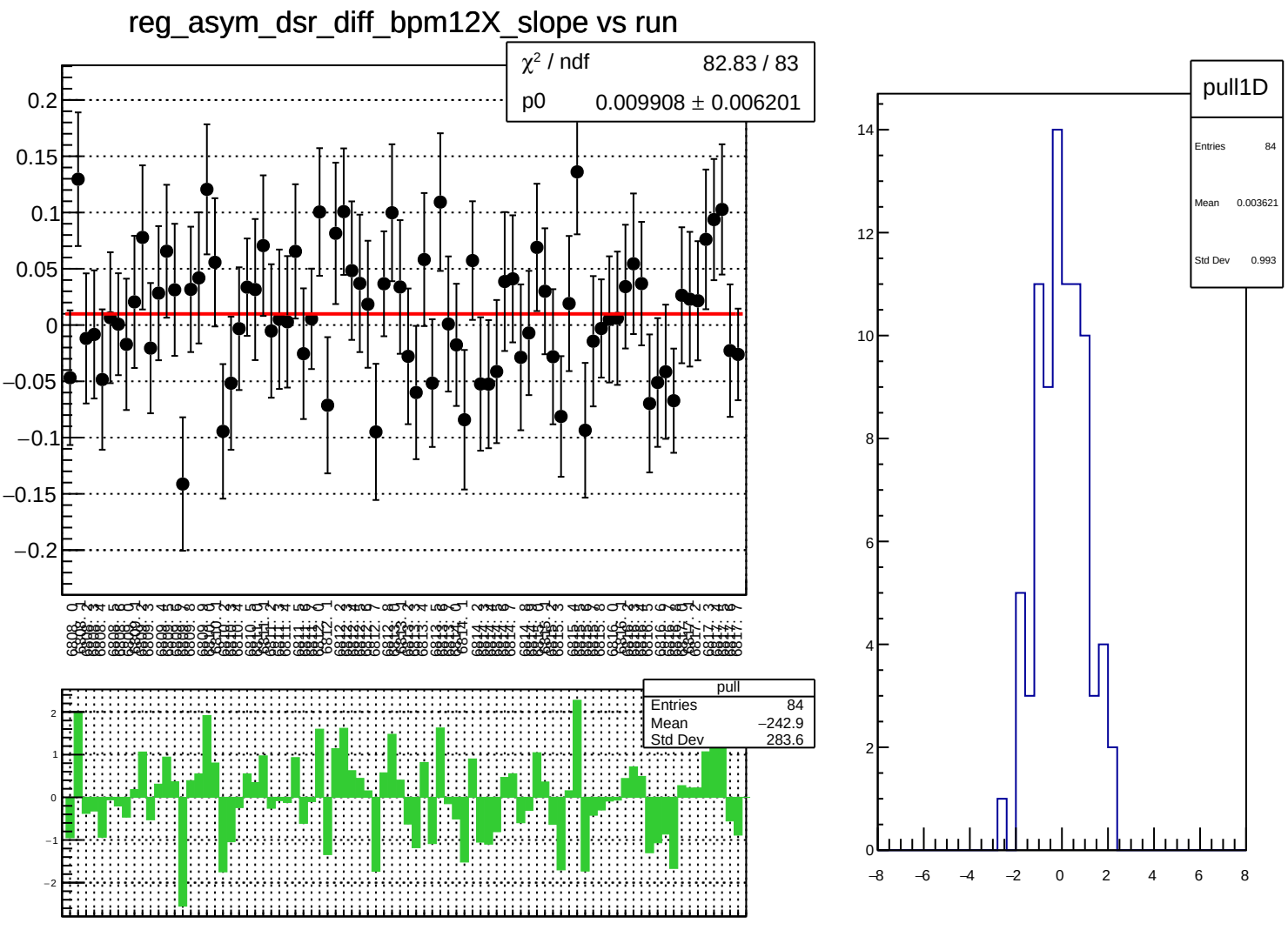

pull1D
Entries 84
Mean 0.009042
Std Dev 0.8064

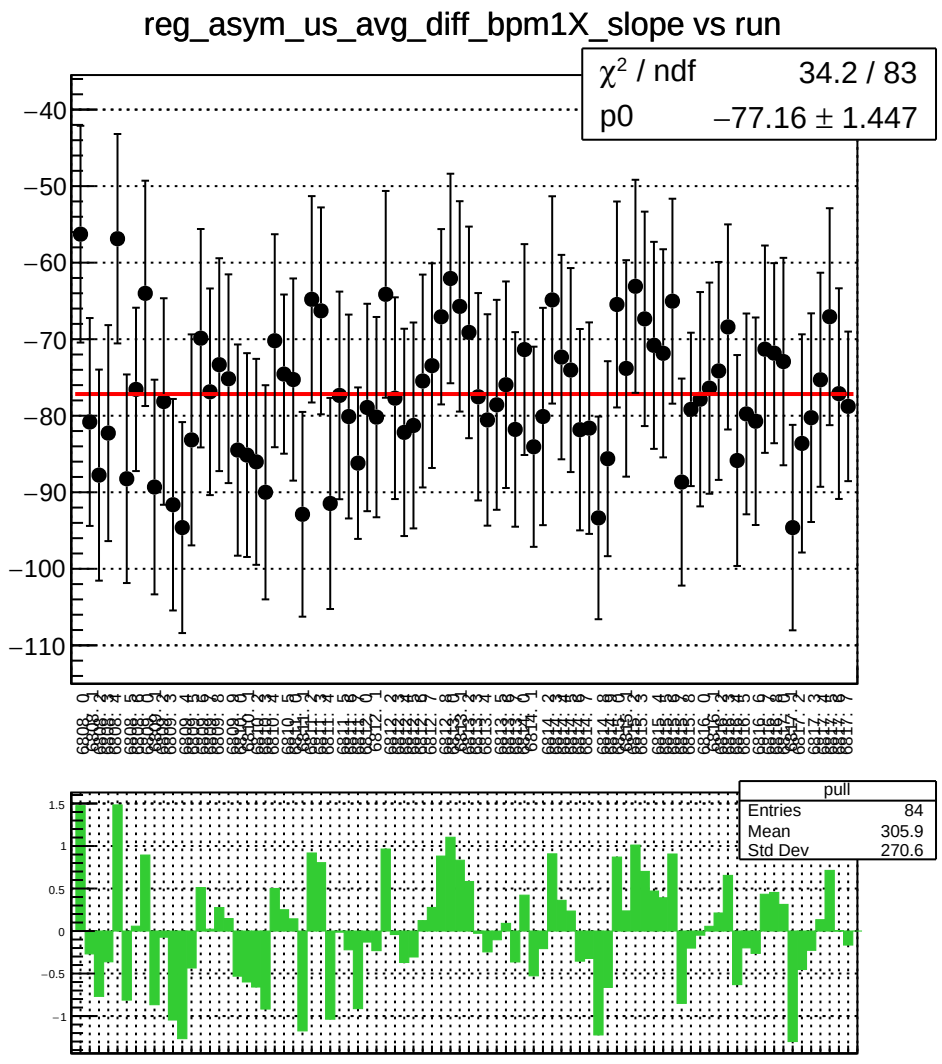

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 62.25 / 83
p0 0.1853 ± 0.1429
pull
Entries 84
Mean −49.73
Std Dev 61.35

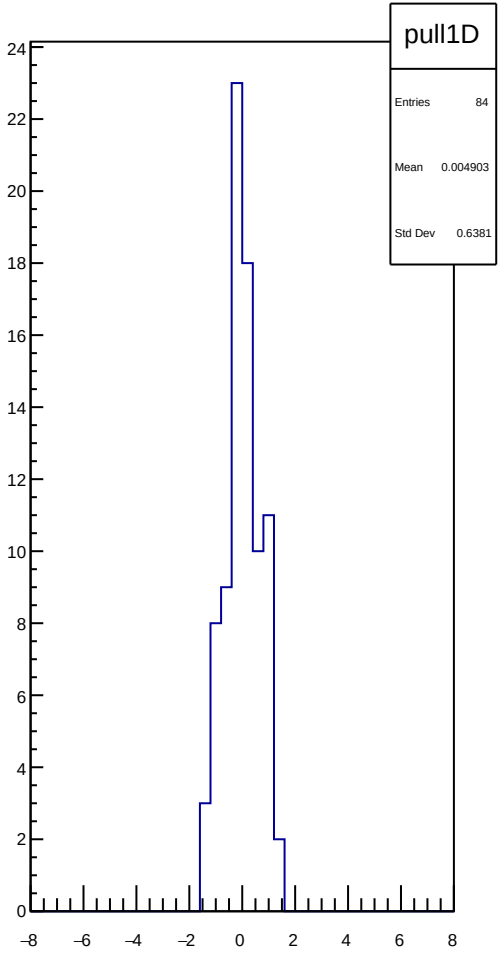

pull1D
Entries 84
Mean −0.004751
Std Dev 0.8608

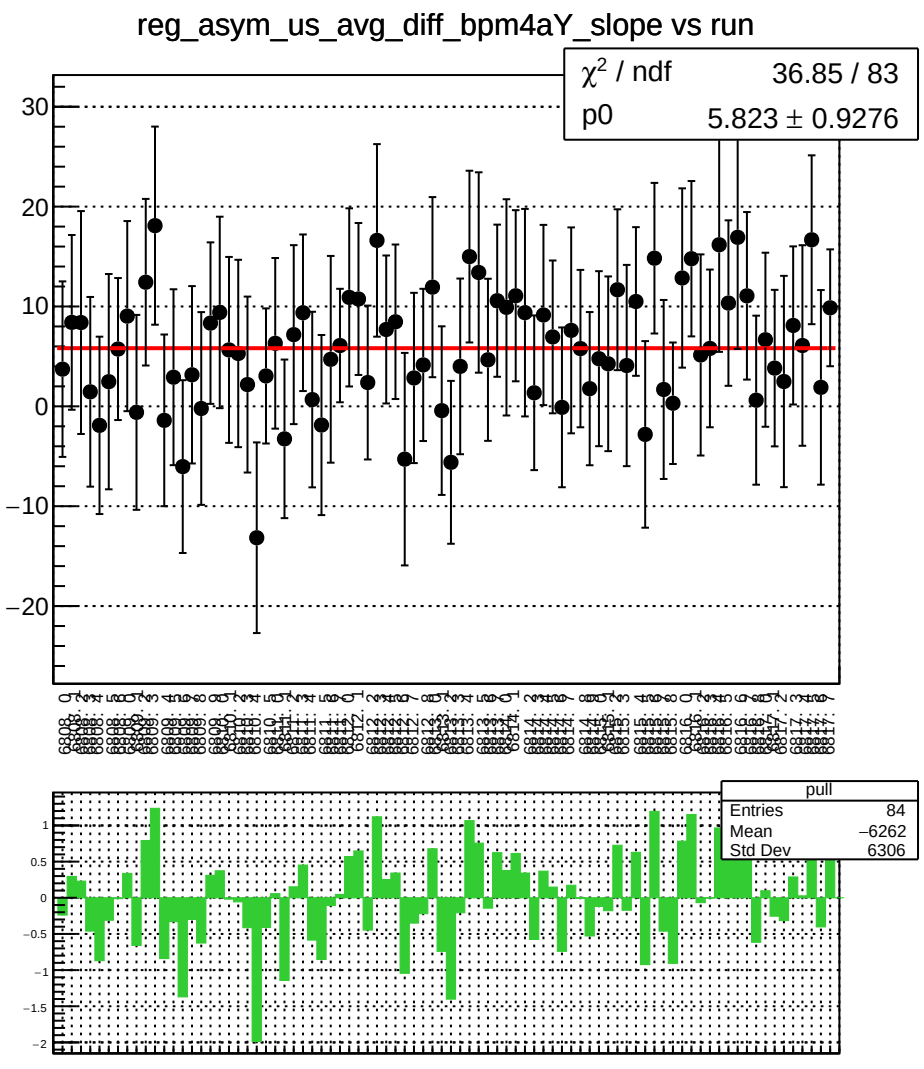

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 53.76 / 83
p0 −0.03232 ± 0.1186
pull
Entries 84
Mean 515.9
Std Dev 499.9

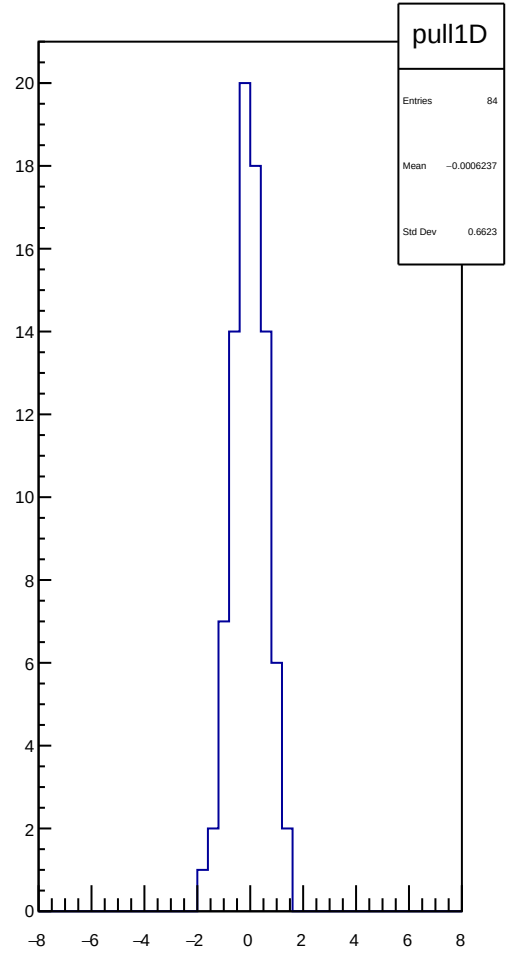

pull1D
Entries 84
Mean −0.002156
Std Dev 0.8

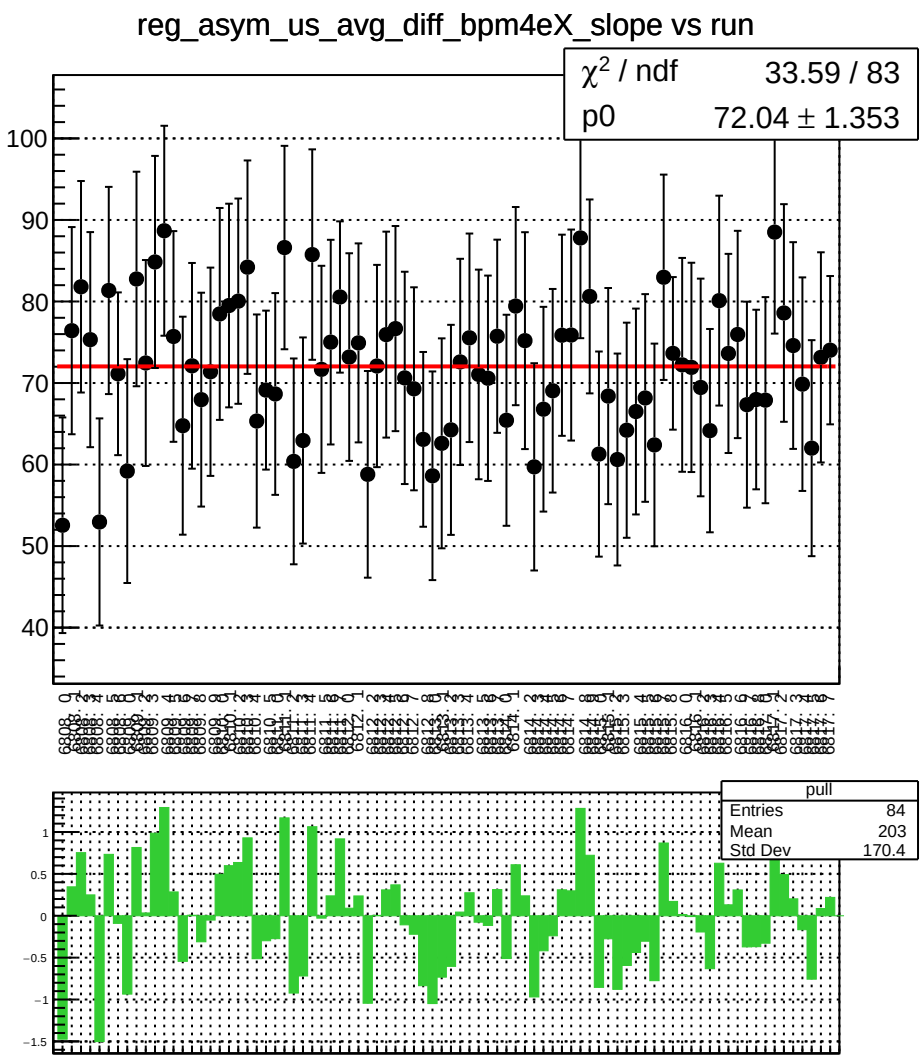

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 82.83 / 83
p0 0.009908 ± 0.006201
pull
Entries 84
Mean −242.9
Std Dev 283.6
pull1D
Entries 84
Mean 0.003621
Std Dev 0.993

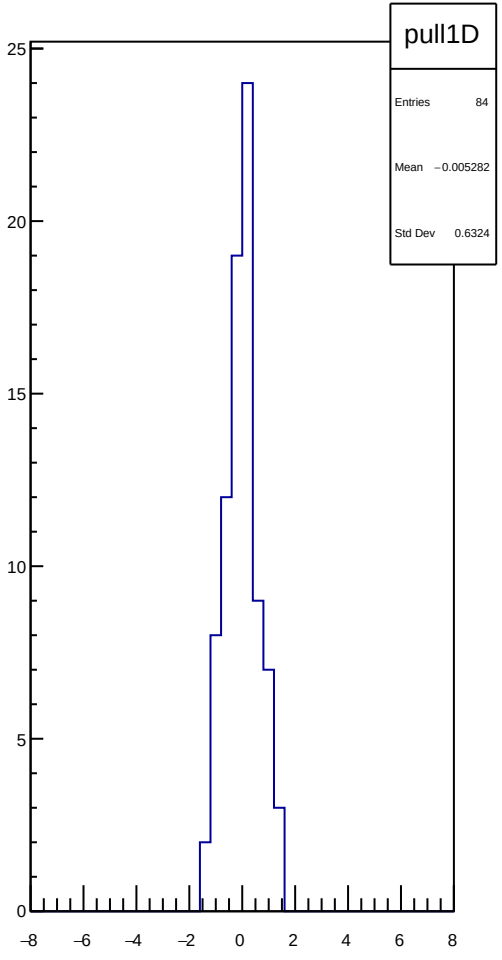

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 34.2 / 83
p0 −77.16 ± 1.447
pull
Entries 84
Mean 305.9
Std Dev 270.6

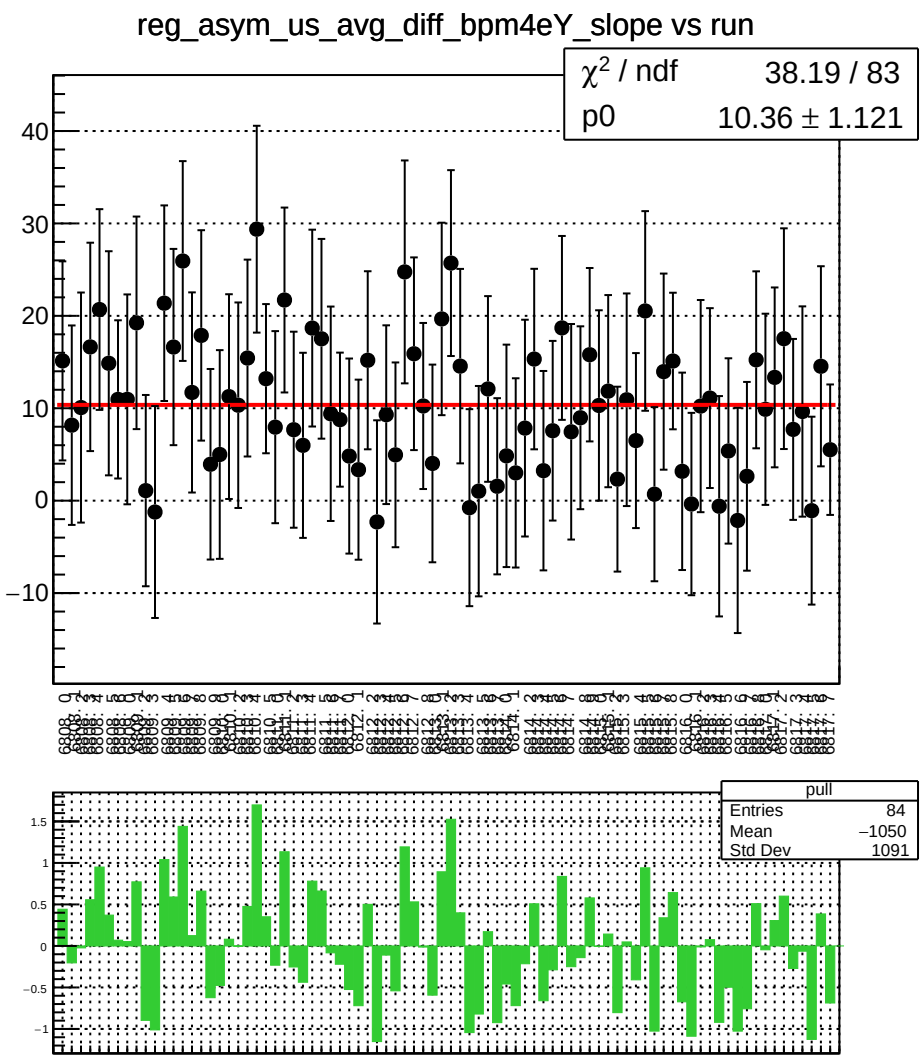

pull1D
Entries 84
Mean 0.004903
Std Dev 0.6381

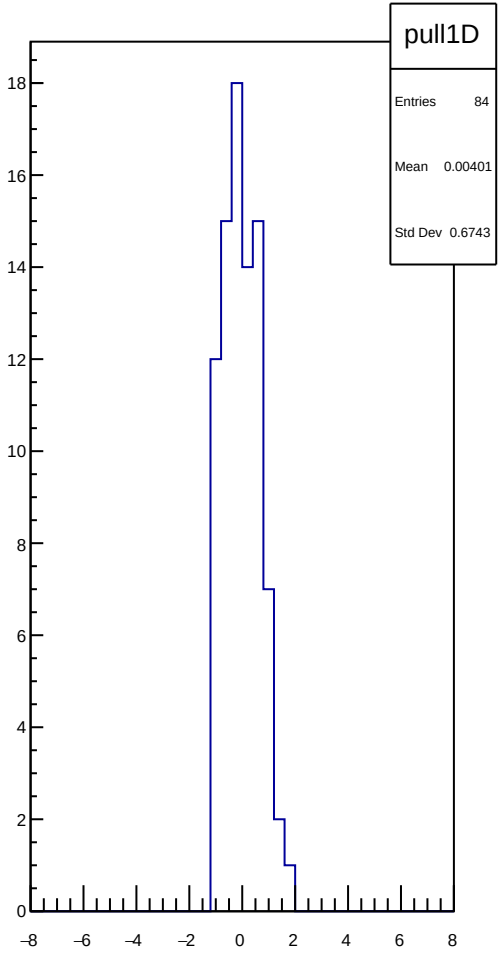

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 36.85 / 83
p0 5.823 ± 0.9276
pull
Entries 84
Mean −6262
Std Dev 6306

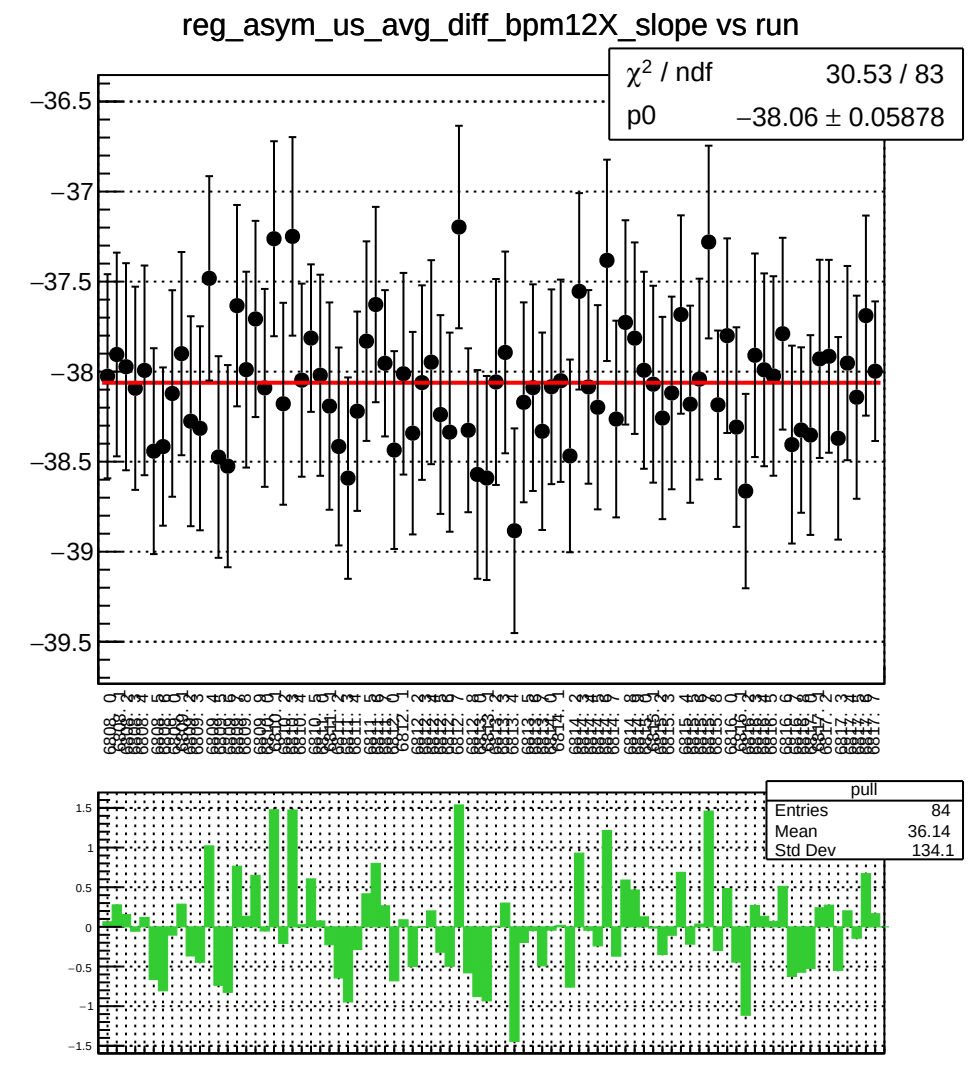

pull1D
Entries 84
Mean −0.0006237
Std Dev 0.6623

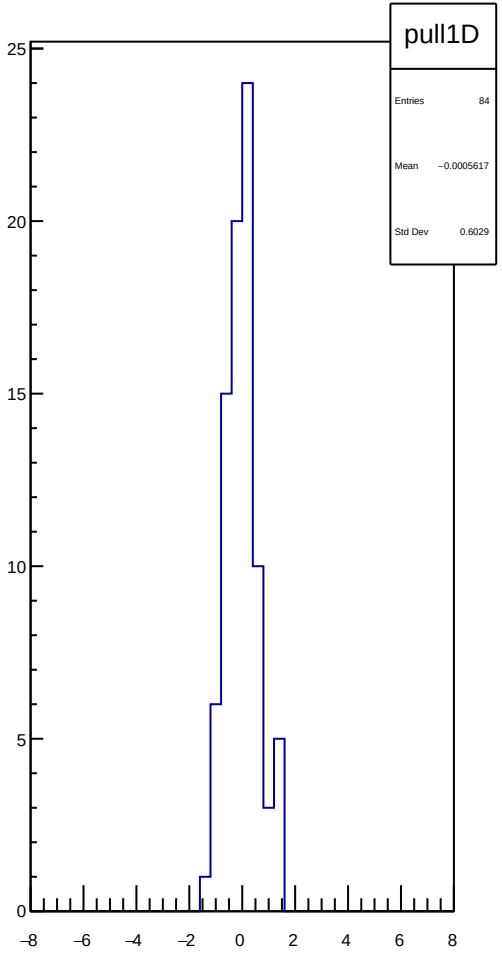

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 33.59 / 83
p0 72.04 ± 1.353
pull
Entries 84
Mean 203
Std Dev 170.4

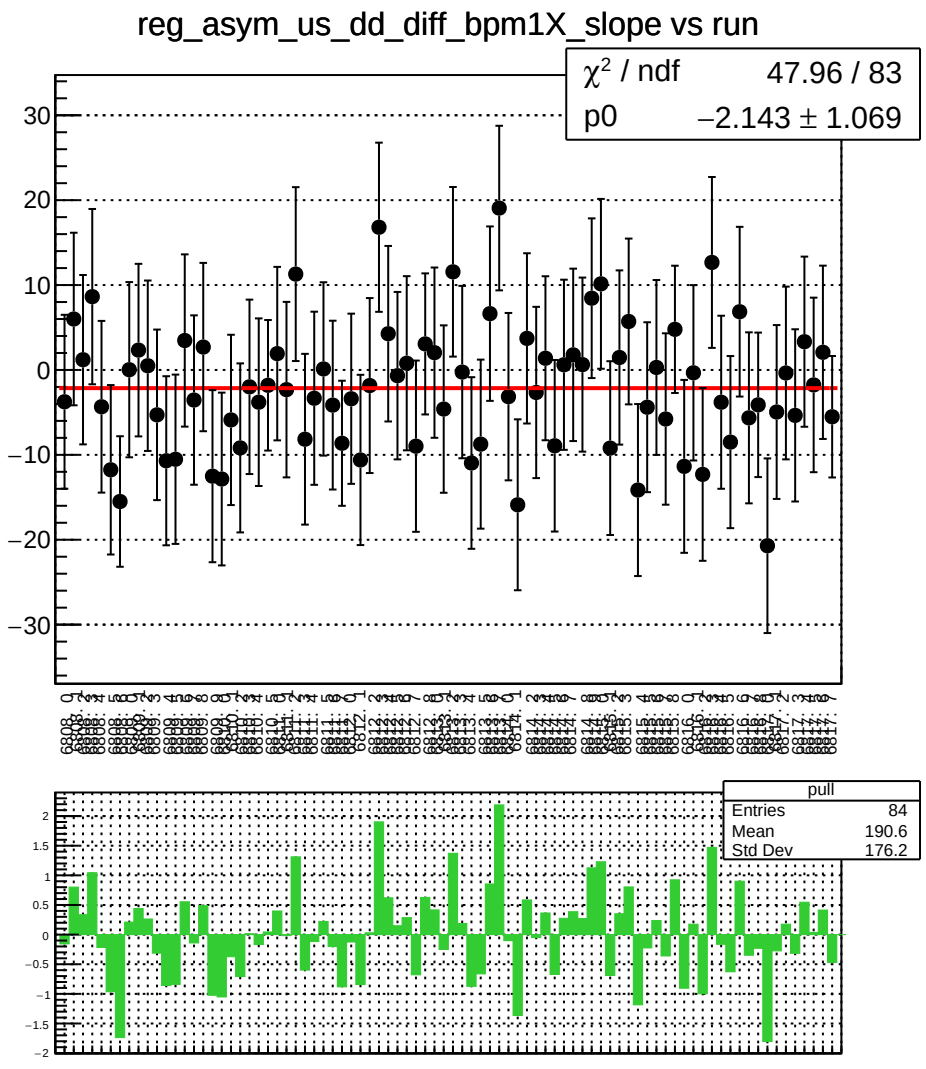

pull1D
Entries 84
Mean −0.005282
Std Dev 0.6324

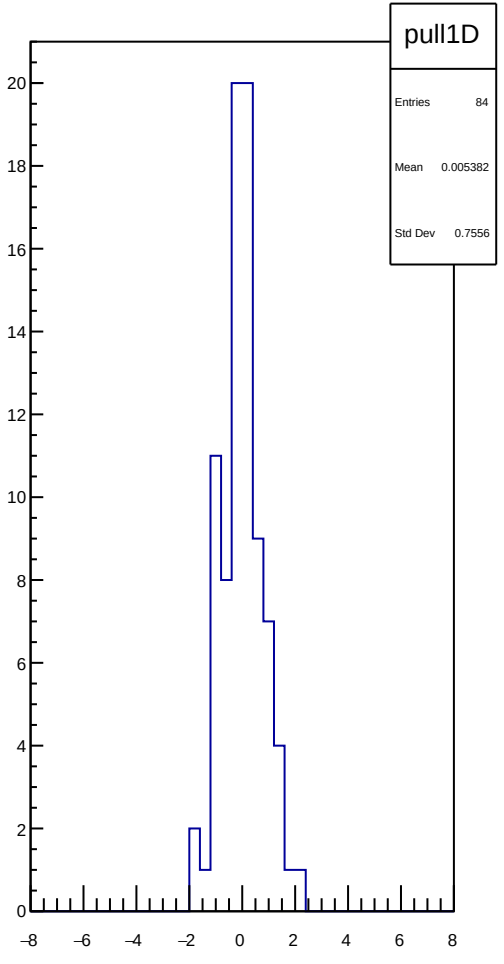

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 38.19 / 83
p0 10.36 ± 1.121
pull
Entries 84
Mean −1050
Std Dev 1091

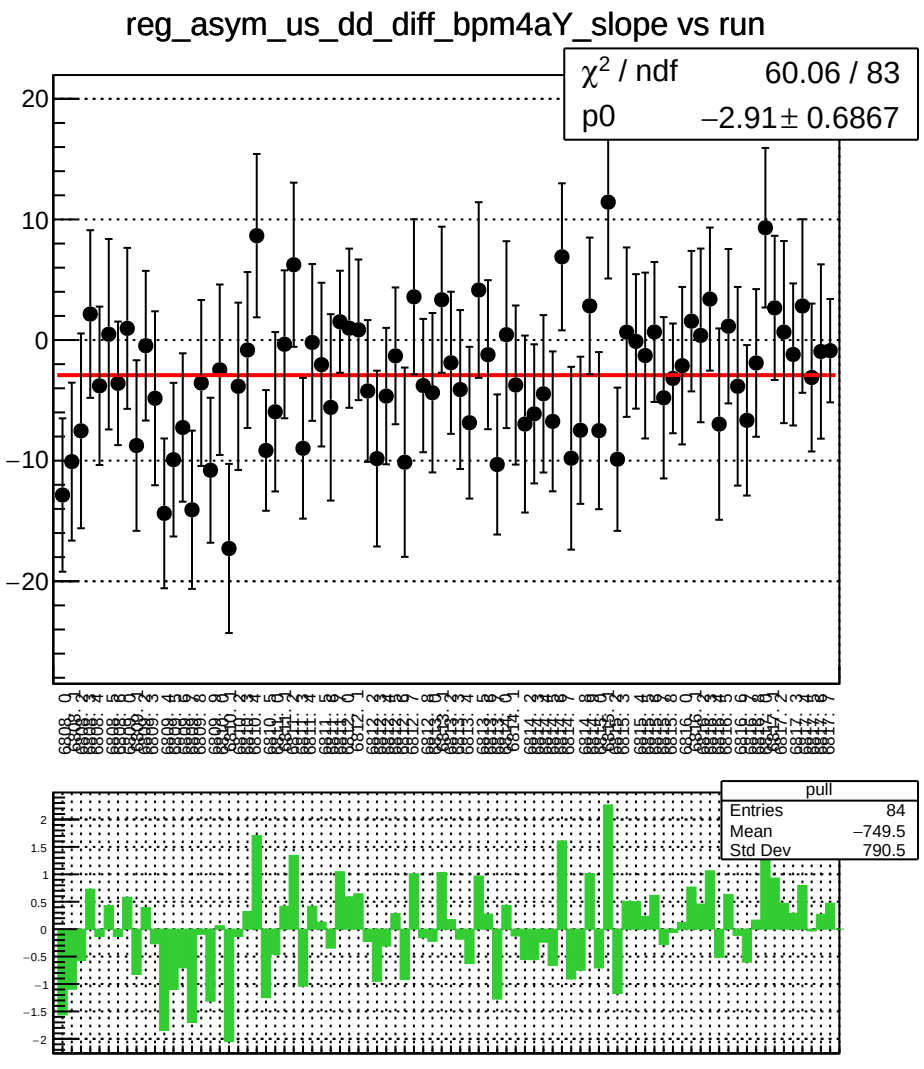

pull1D
Entries 84
Mean 0.00401
Std Dev 0.6743

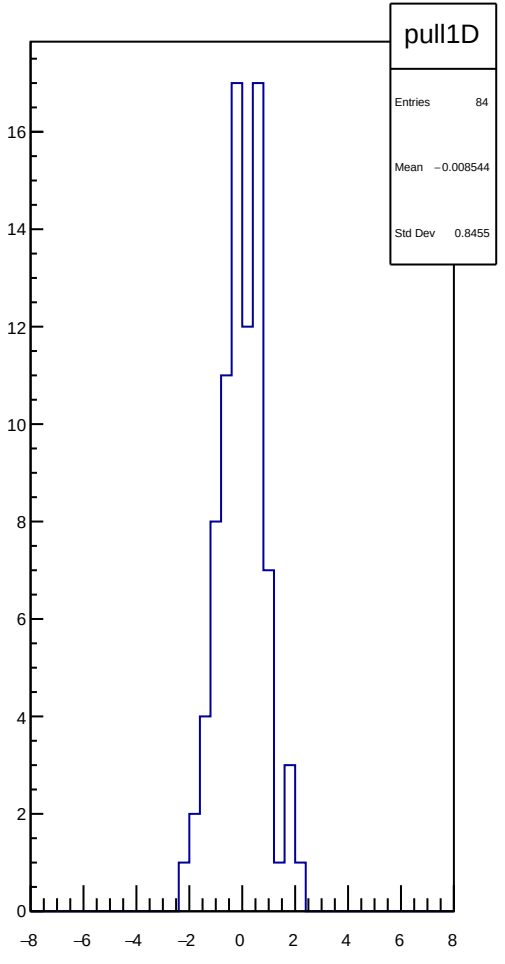

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 30.53 / 83
p0 −38.06 ± 0.05878
pull
Entries 84
Mean 36.14
Std Dev 134.1

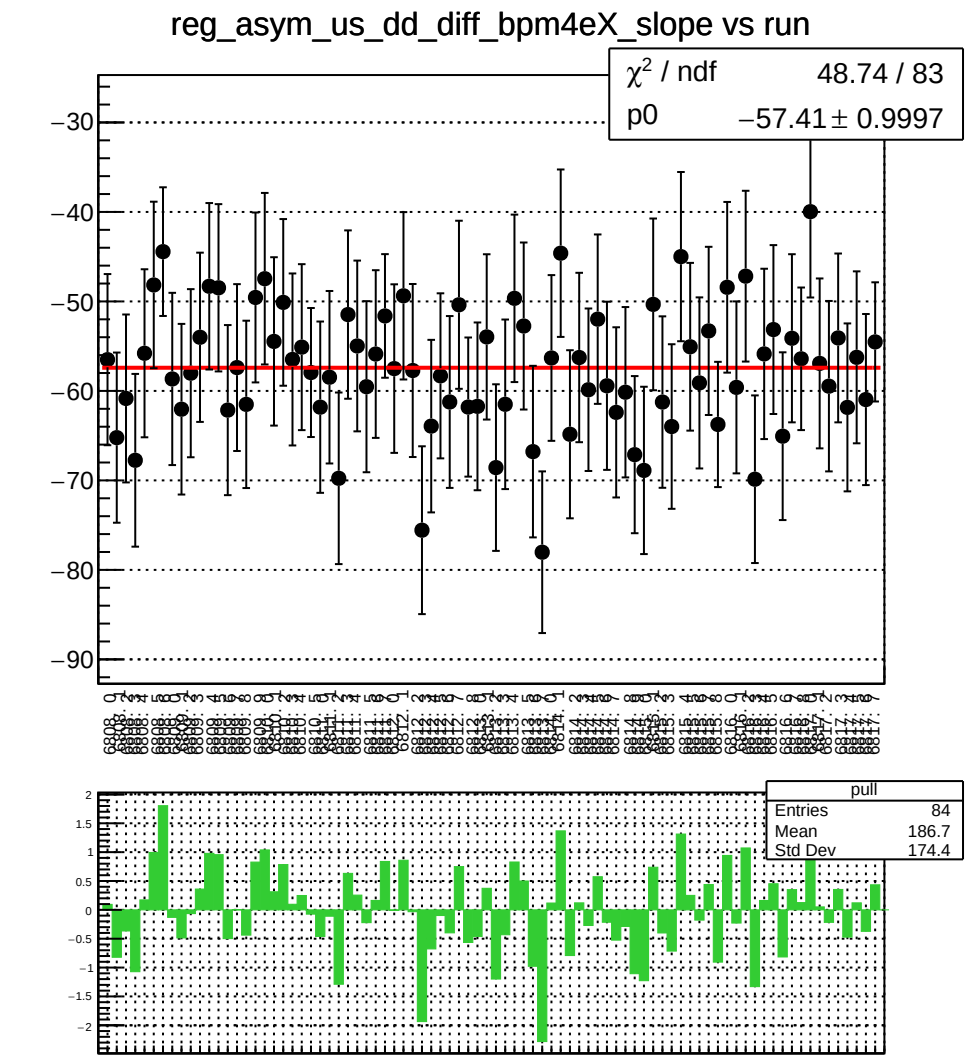

pull1D
Entries 84
Mean −0.0005617
Std Dev 0.6029

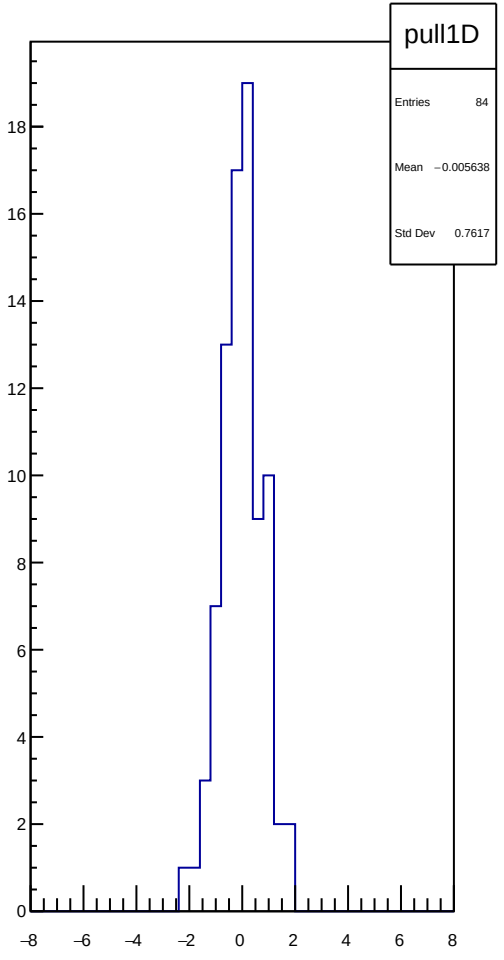

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 47.96 / 83
p0 −2.143 ± 1.069
pull
Entries 84
Mean 190.6
Std Dev 176.2

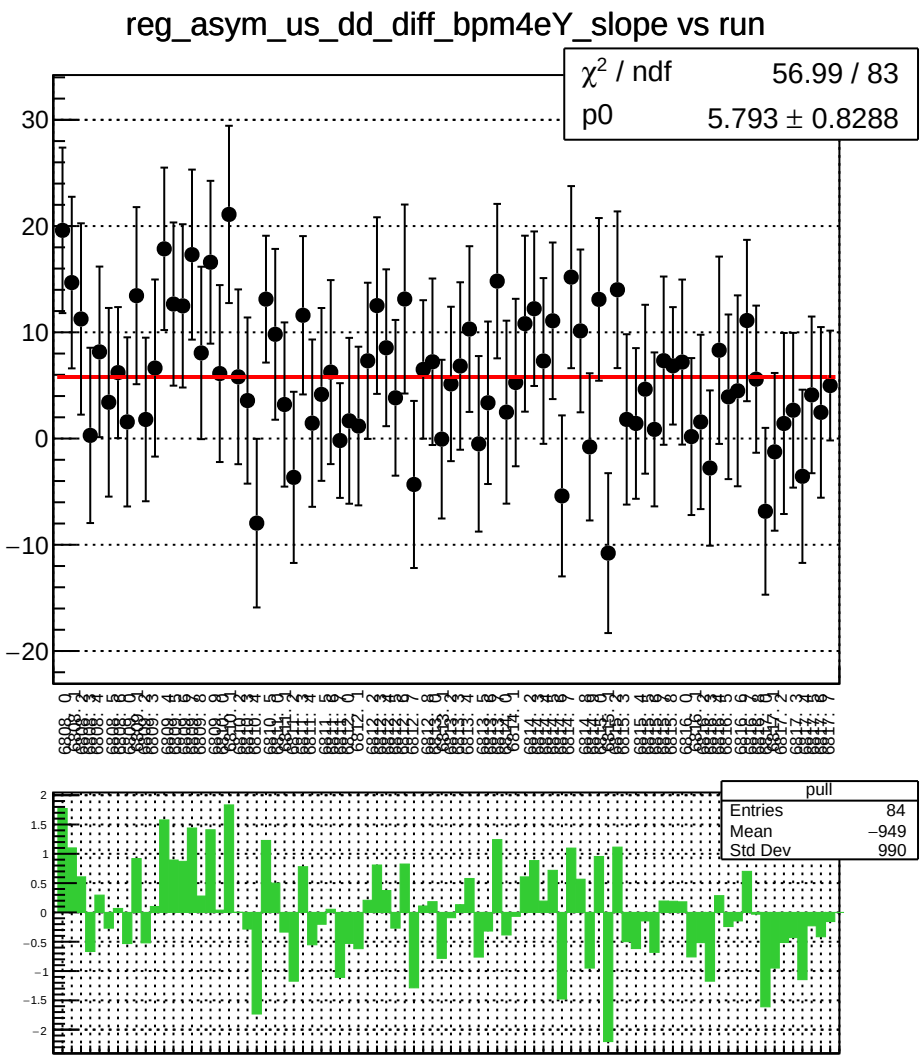

pull1D
Entries 84
Mean 0.005382
Std Dev 0.7556

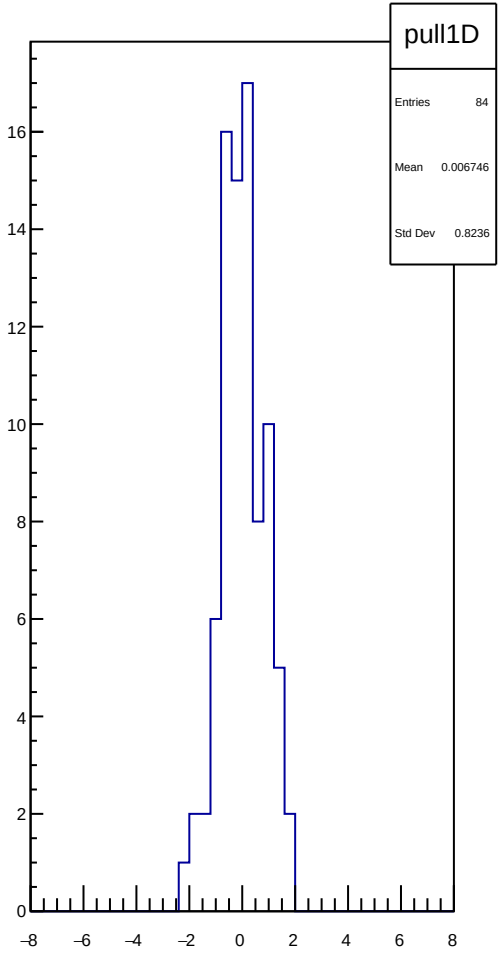

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 60.06 / 83
p0 −2.91 ± 0.6867
pull
Entries 84
Mean −749.5
Std Dev 790.5

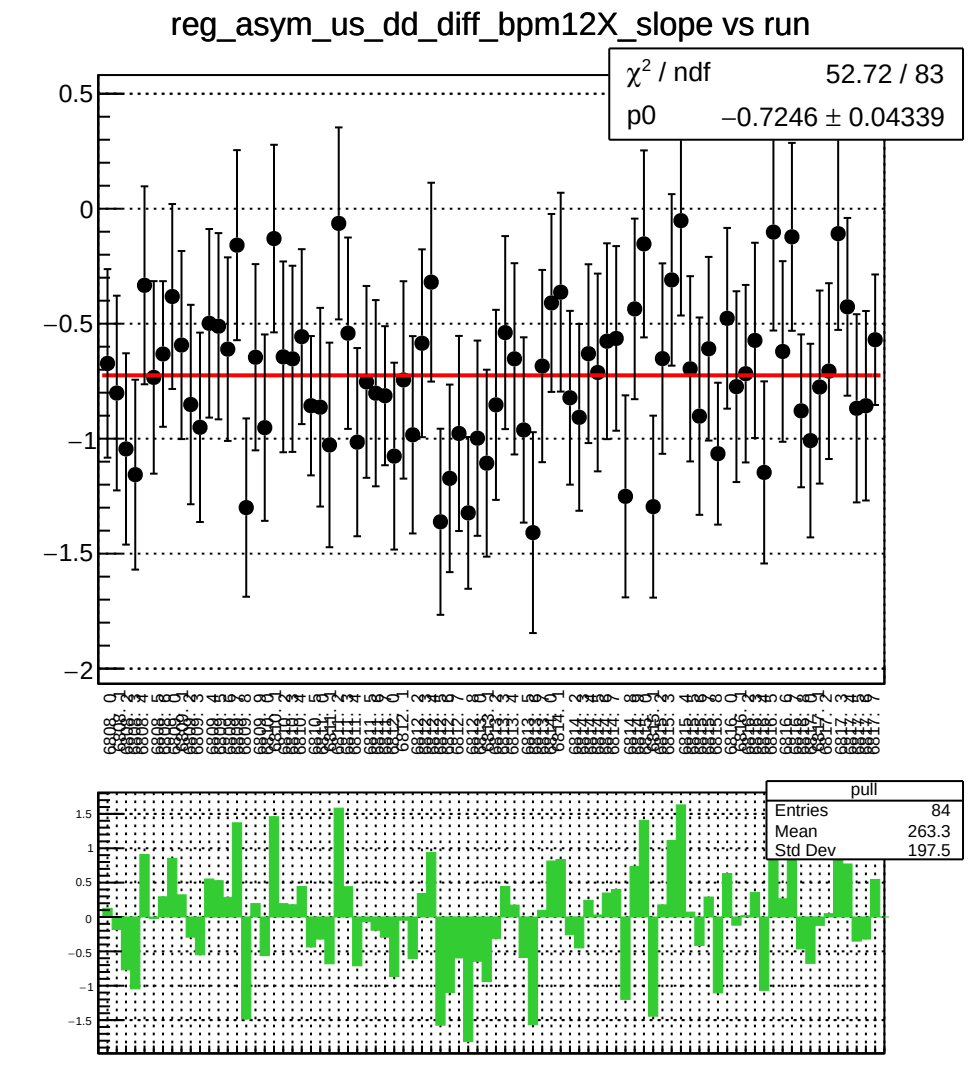

pull1D
Entries 84
Mean −0.008544
Std Dev 0.8455

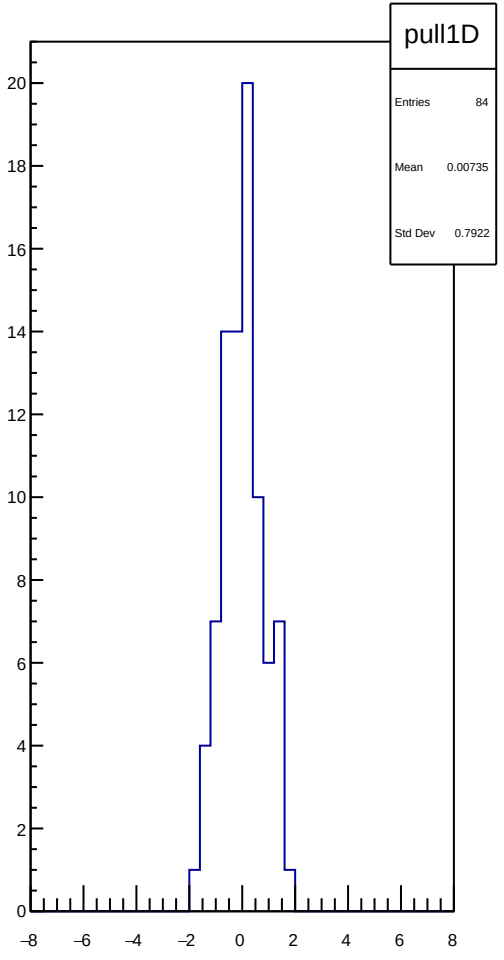

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 48.74 / 83
p0 −57.41 ± 0.9997
pull
Entries 84
Mean 186.7
Std Dev 174.4

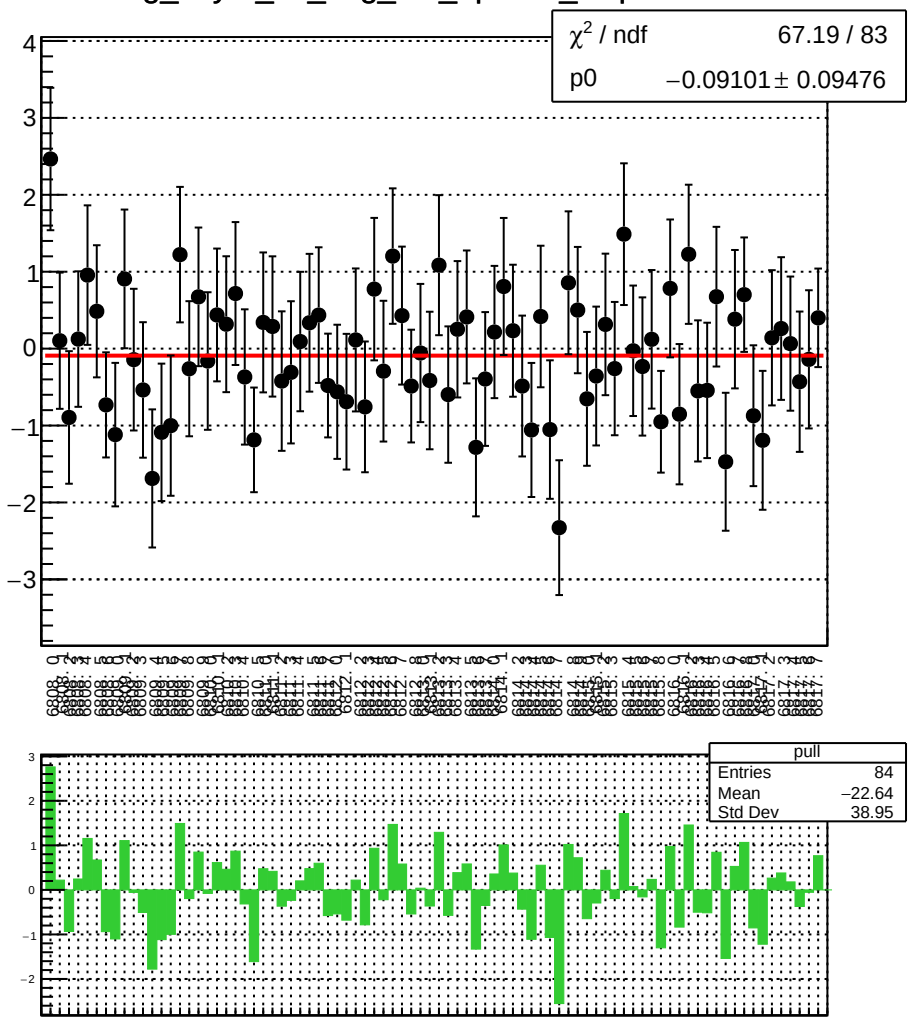

pull1D
Entries 84
Mean −0.005638
Std Dev 0.7617

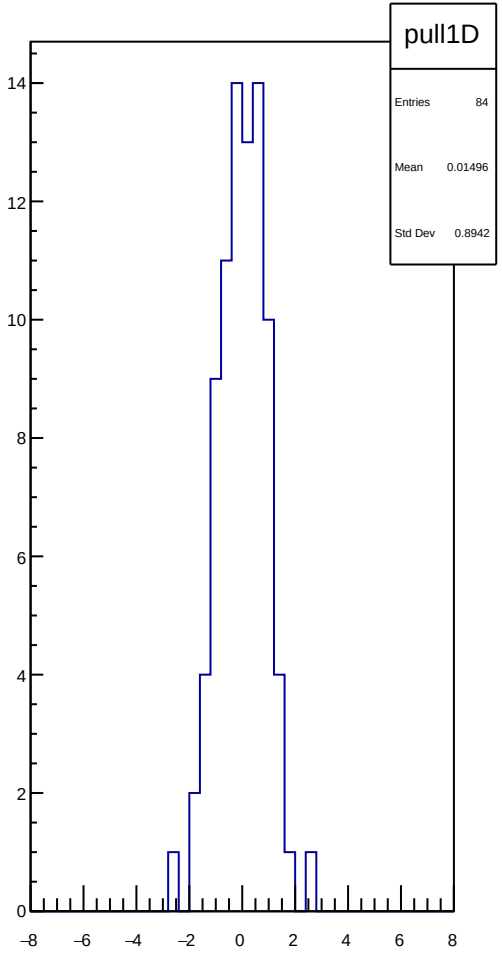

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 56.99 / 83
p0 5.793 ± 0.8288
pull
Entries 84
Mean −949
Std Dev 990

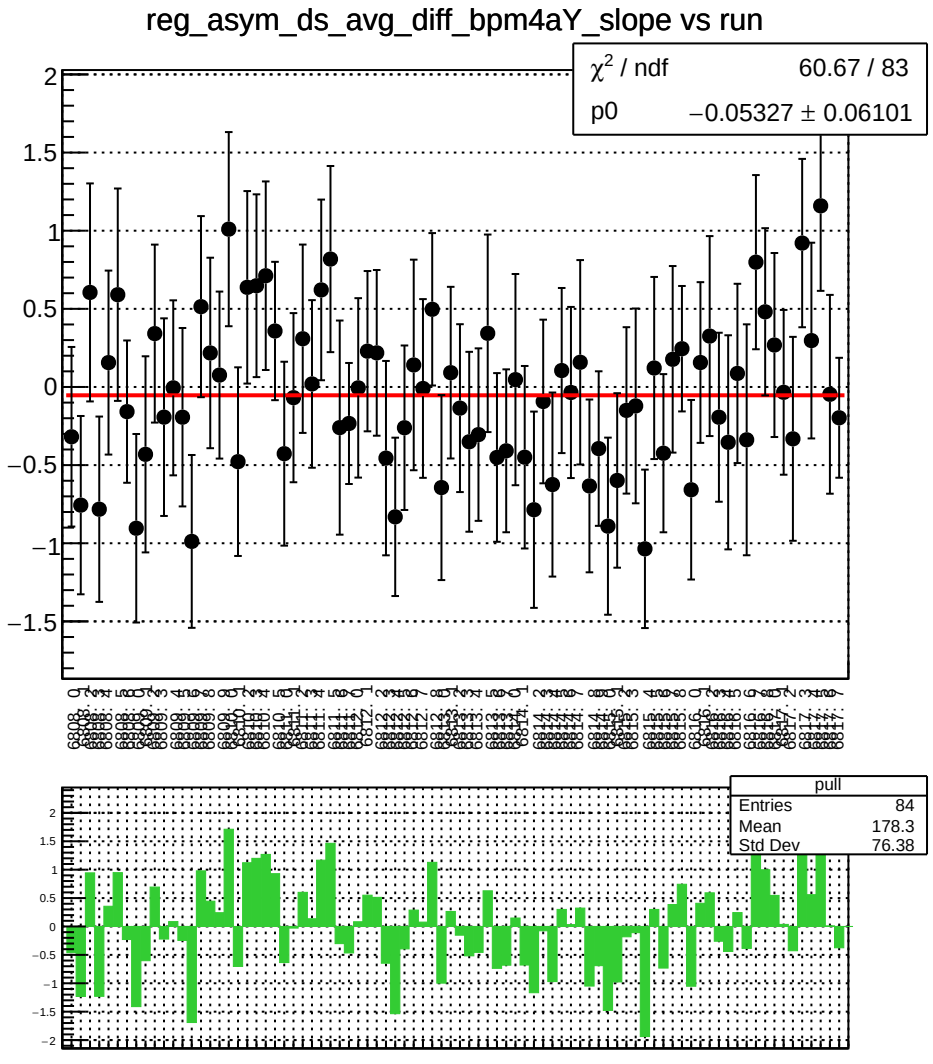

pull1D
Entries 84
Mean 0.006746
Std Dev 0.8236

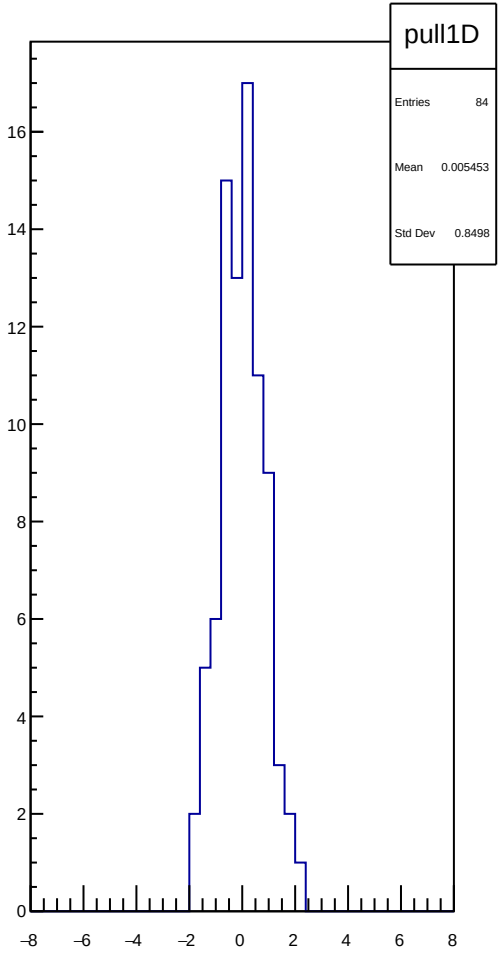

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 52.72 / 83
p0 −0.7246 ± 0.04339
pull
Entries 84
Mean 263.3
Std Dev 197.5

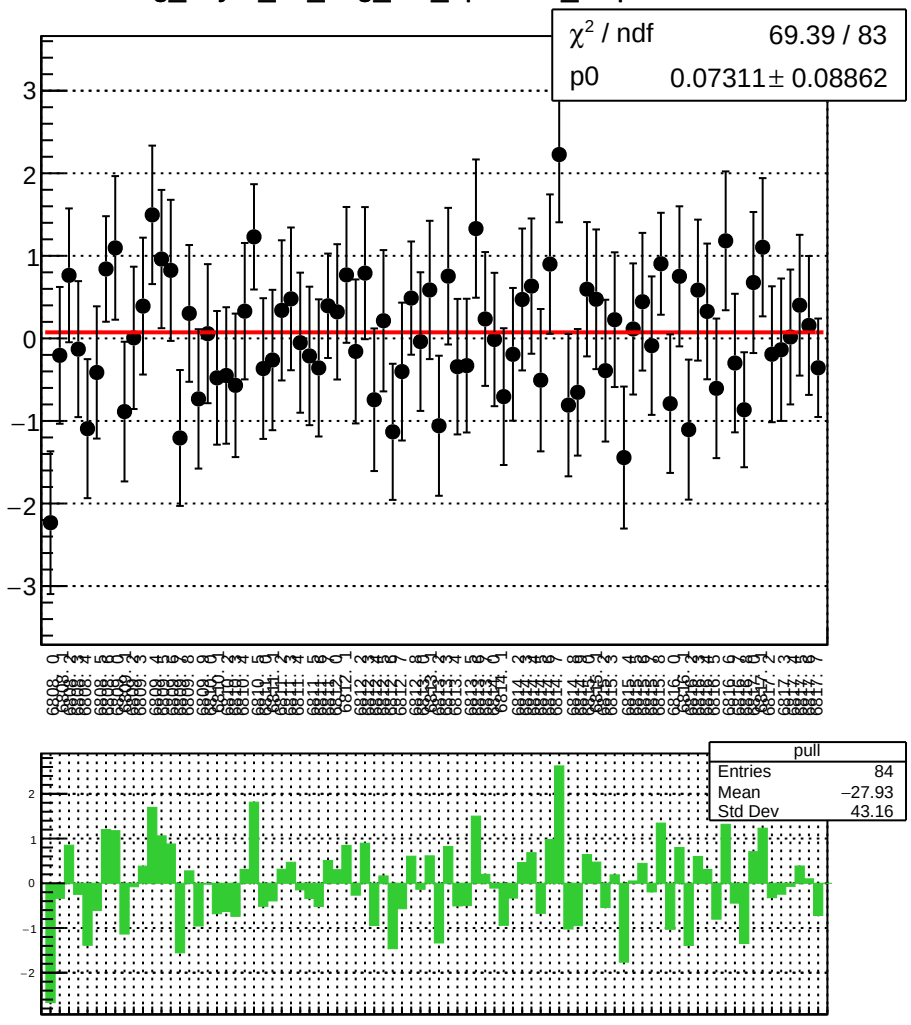

pull1D
Entries 84
Mean 0.00735
Std Dev 0.7922

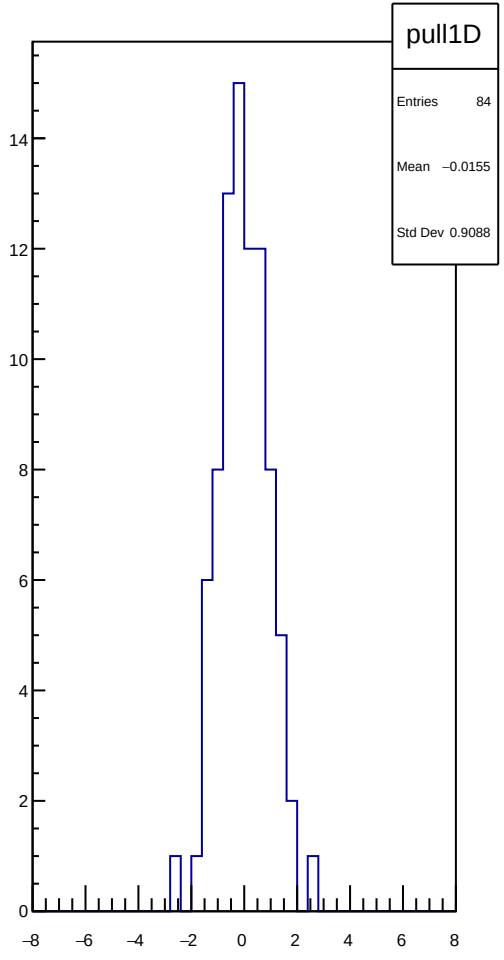

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 67.19 / 83
p0 −0.09101 ± 0.09476
pull
Entries 84
Mean −22.64
Std Dev 38.95

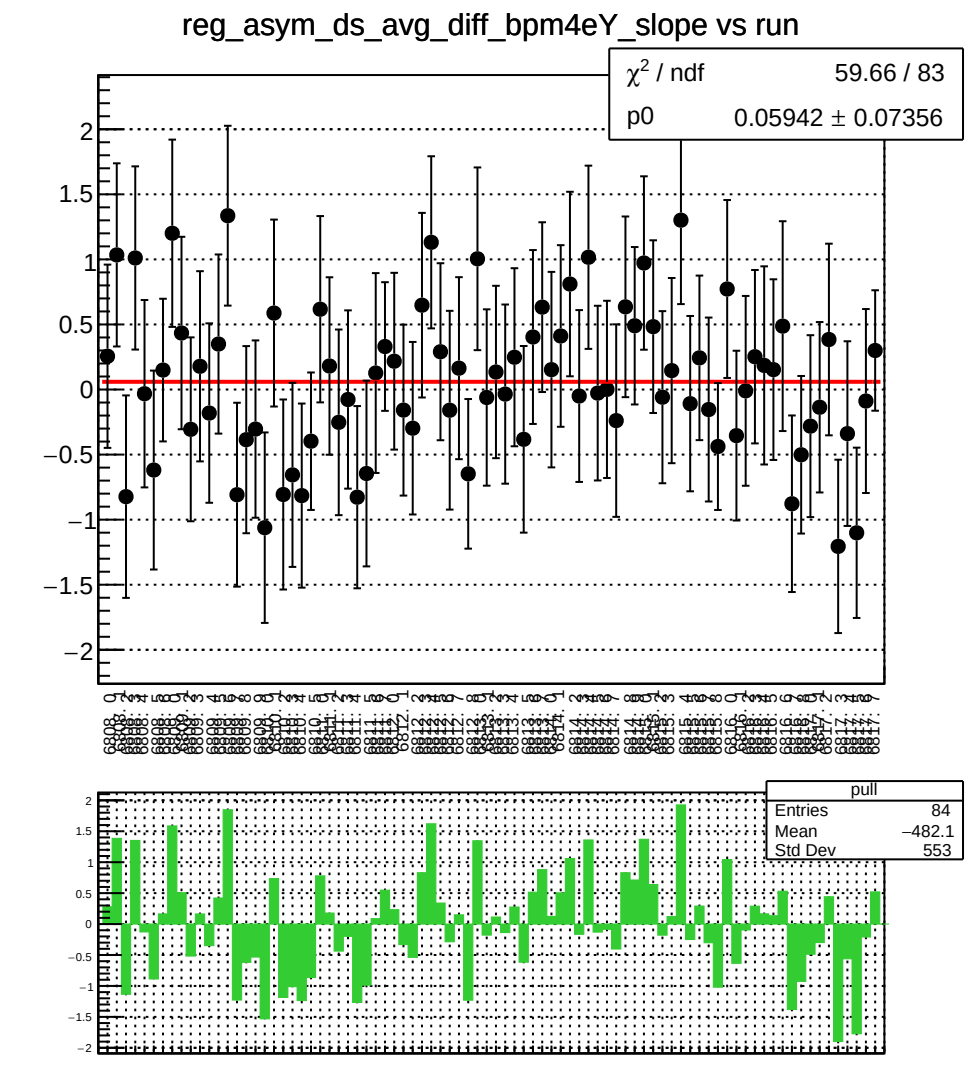

pull1D
Entries 84
Mean 0.01496
Std Dev 0.8942

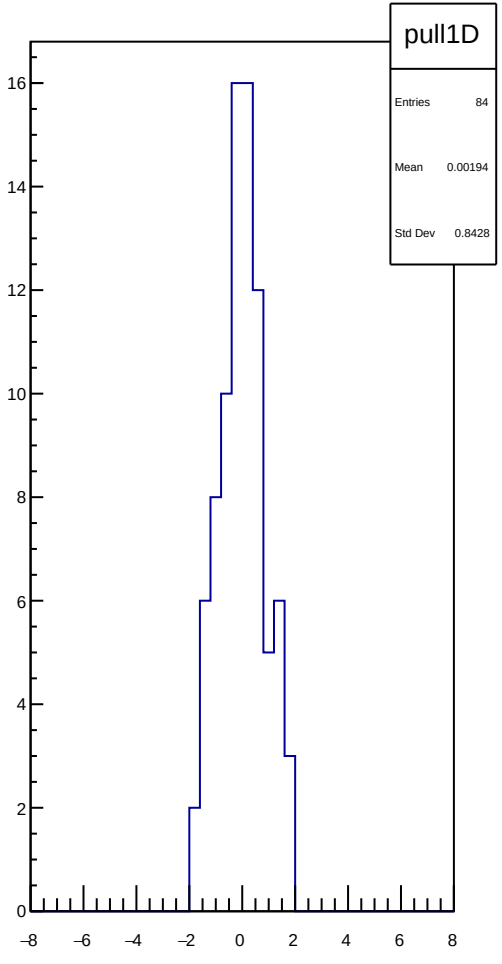

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 60.67 / 83
p0 −0.05327 ± 0.06101
pull
Entries 84
Mean 178.3
Std Dev 76.38

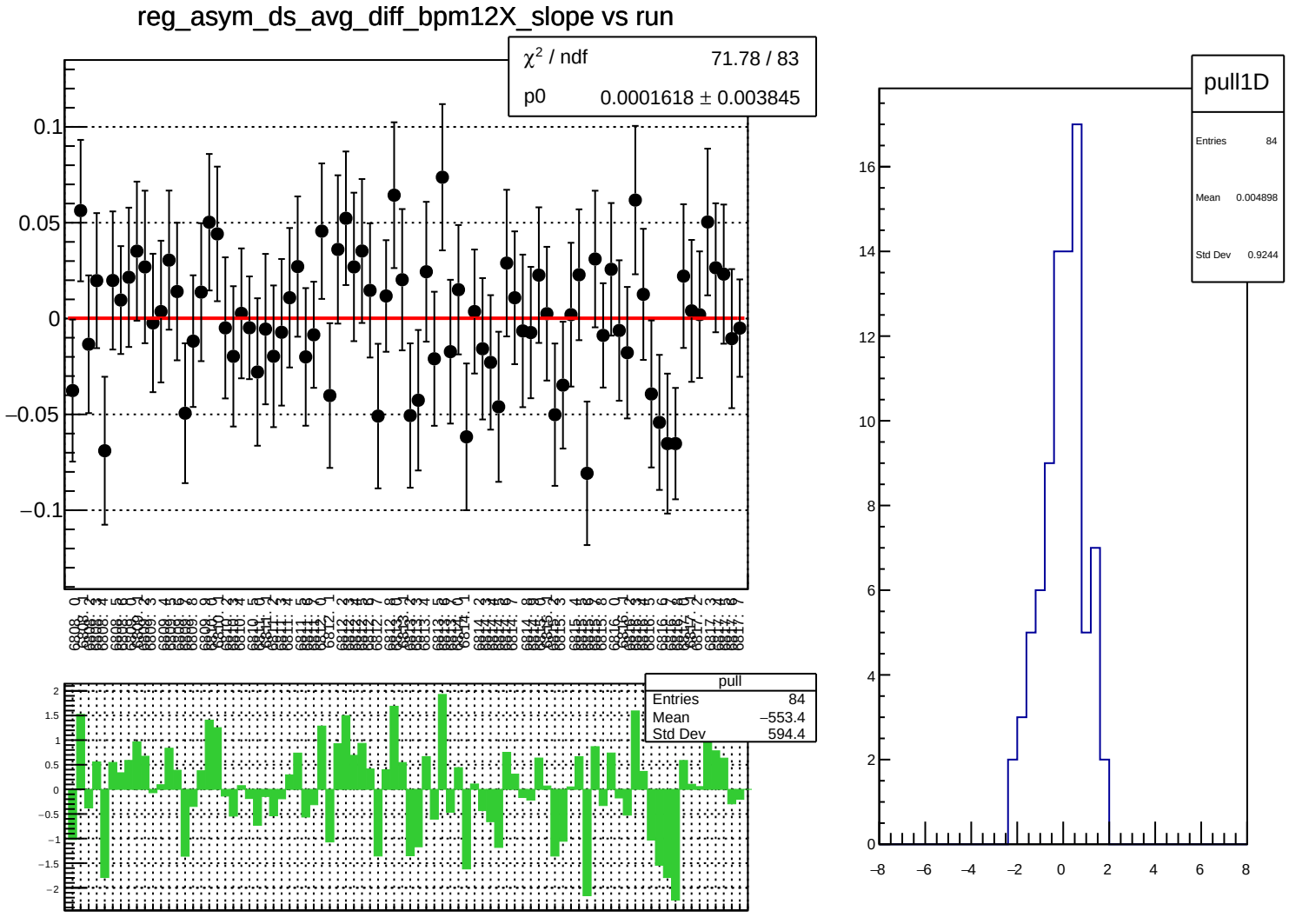

pull1D
Entries 84
Mean 0.005453
Std Dev 0.8498

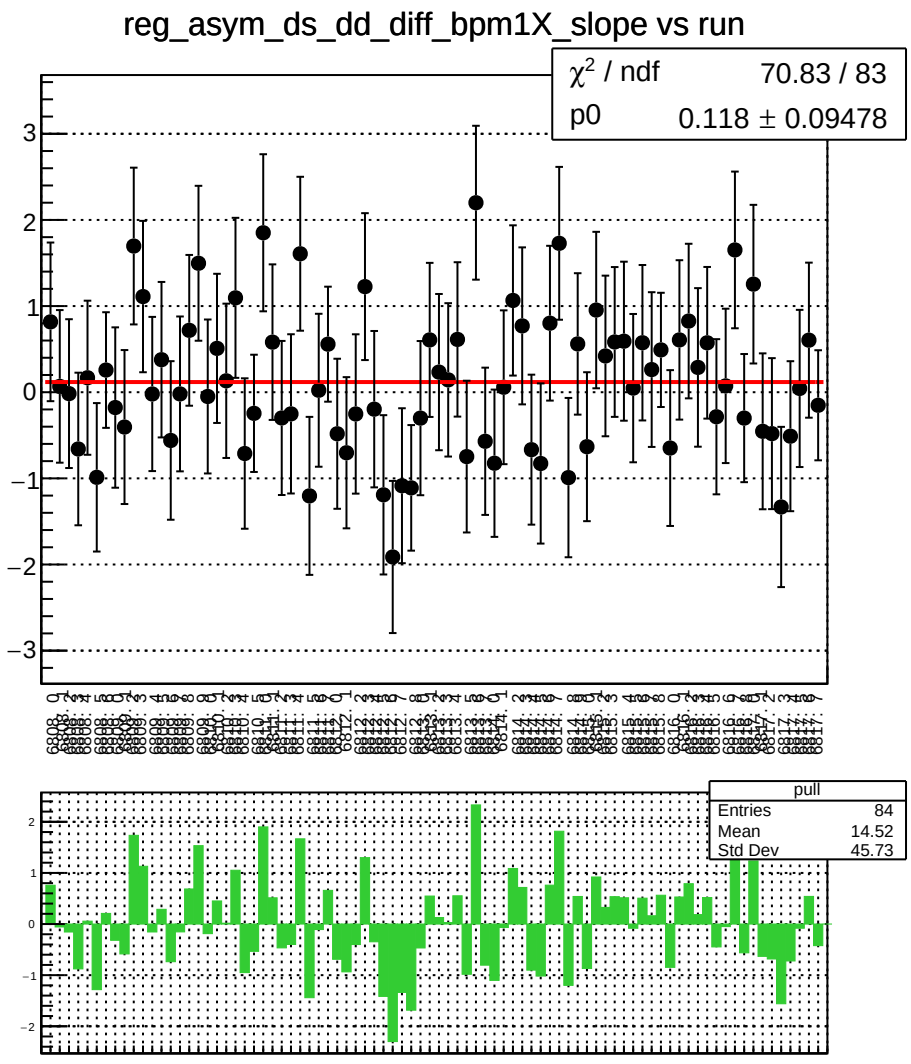

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 69.39 / 83
p0 0.07311 ± 0.08862
pull
Entries 84
Mean −27.93
Std Dev 43.16

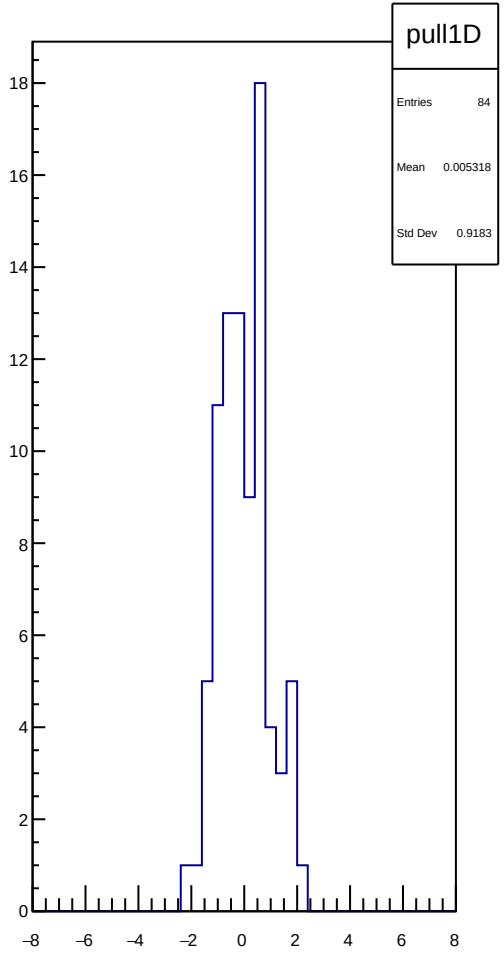

pull1D
Entries 84
Mean −0.0155
Std Dev 0.9088

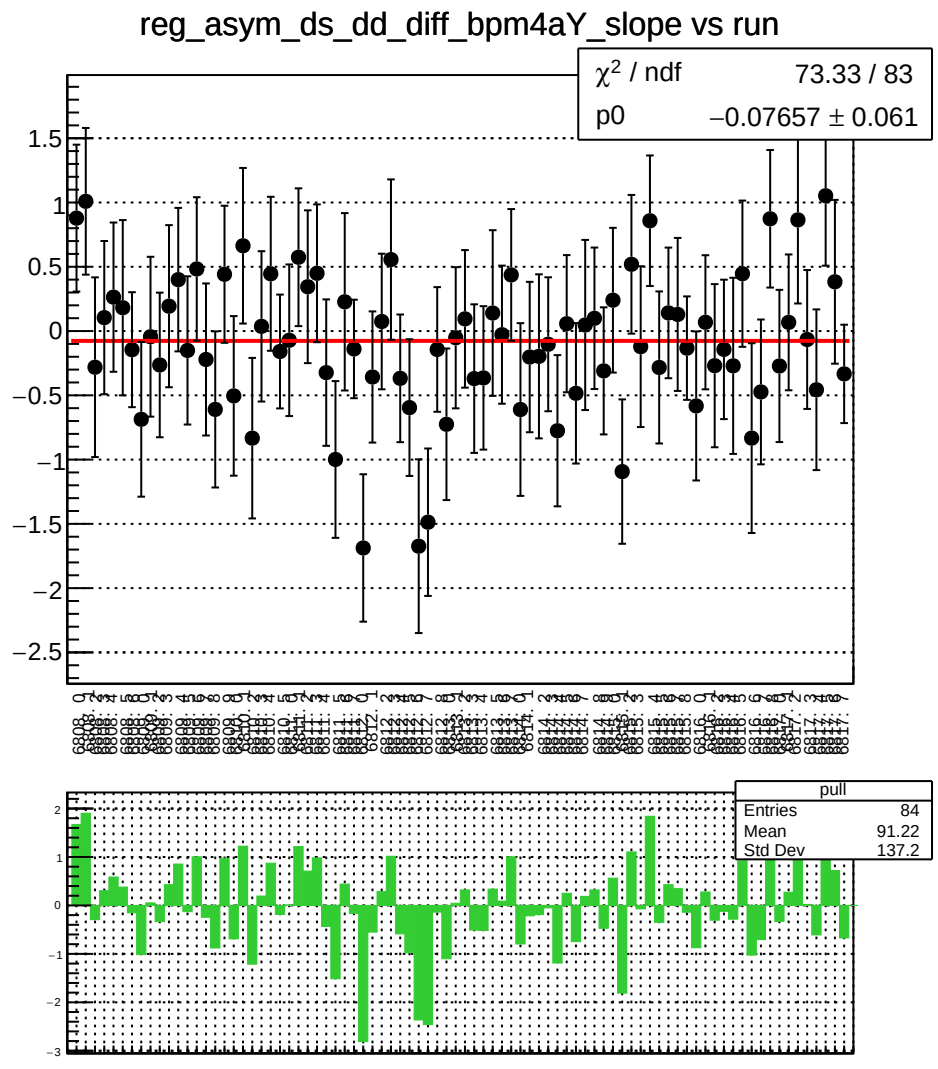

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 59.66 / 83
p0 0.05942 ± 0.07356
pull
Entries 84
Mean −482.1
Std Dev 553

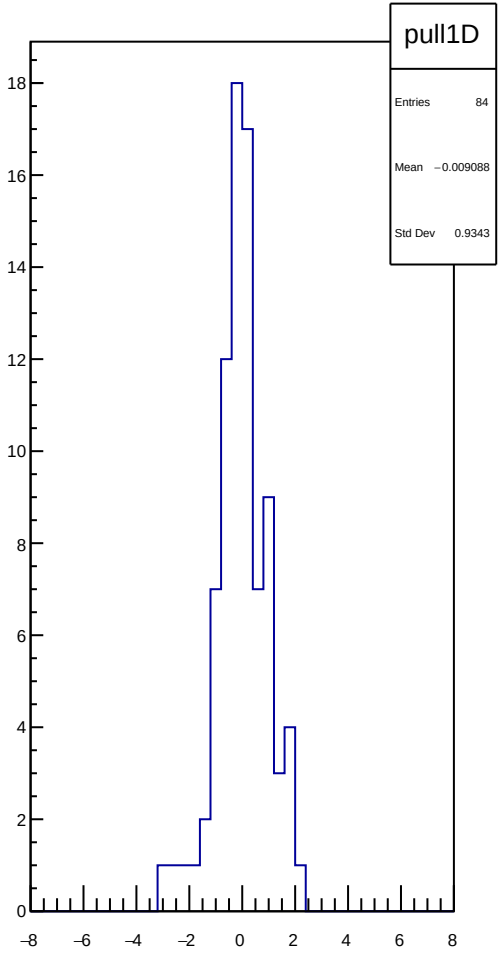

pull1D
Entries 84
Mean 0.00194
Std Dev 0.8428

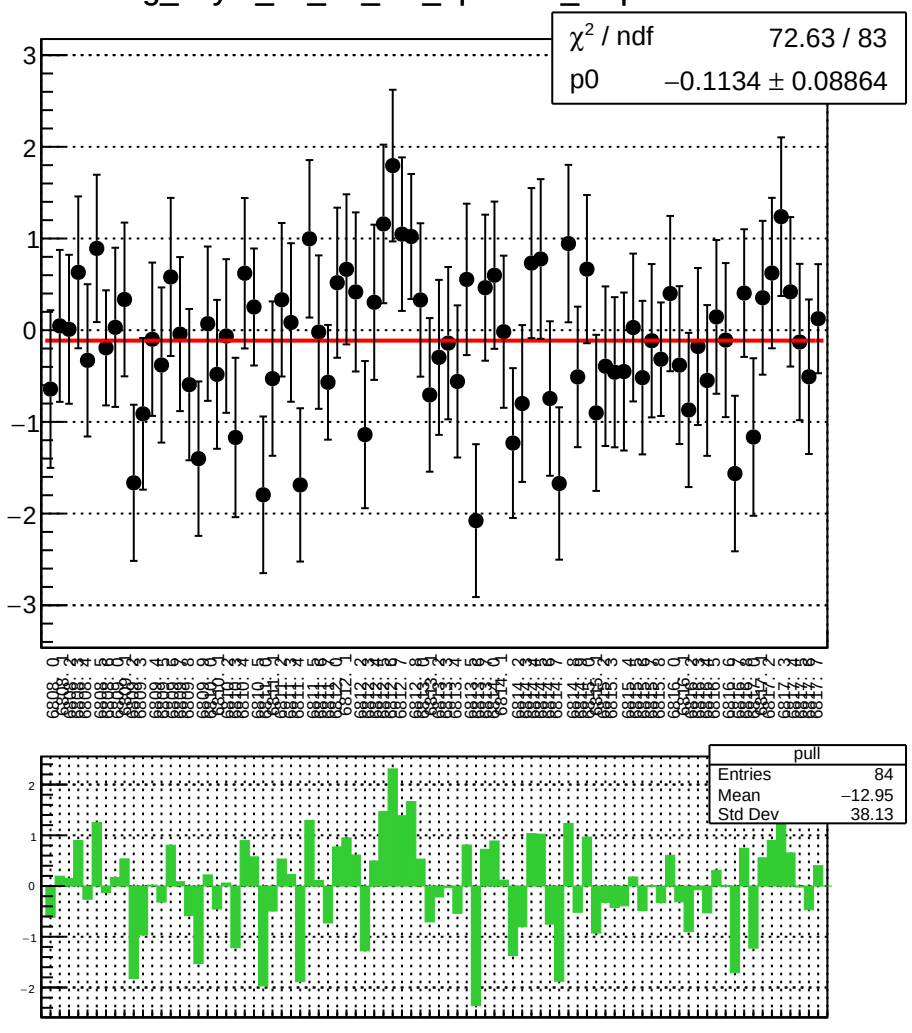

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 71.78 / 83
p0 0.0001618 ± 0.003845
0.1
0.05
0
−0.05
−0.1
pull
Entries 84
Mean −553.4
Std Dev 594.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 84
Mean 0.004898
Std Dev 0.9244
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

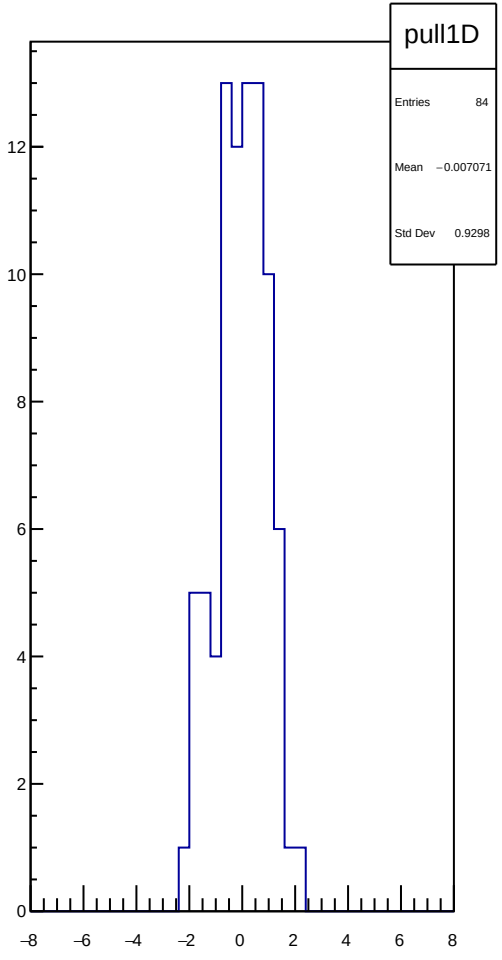

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 70.83 / 83
p0 0.118 ± 0.09478
pull
Entries 84
Mean 14.52
Std Dev 45.73

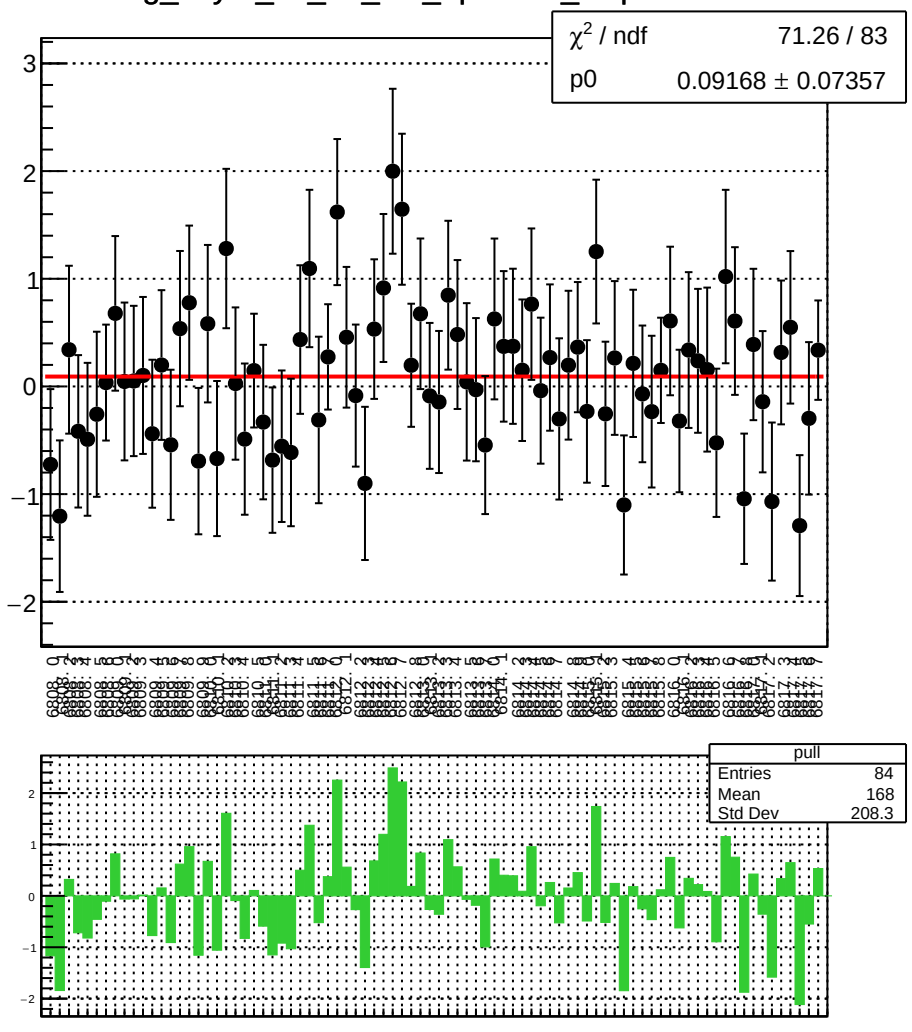

pull1D
Entries 84
Mean 0.005318
Std Dev 0.9183

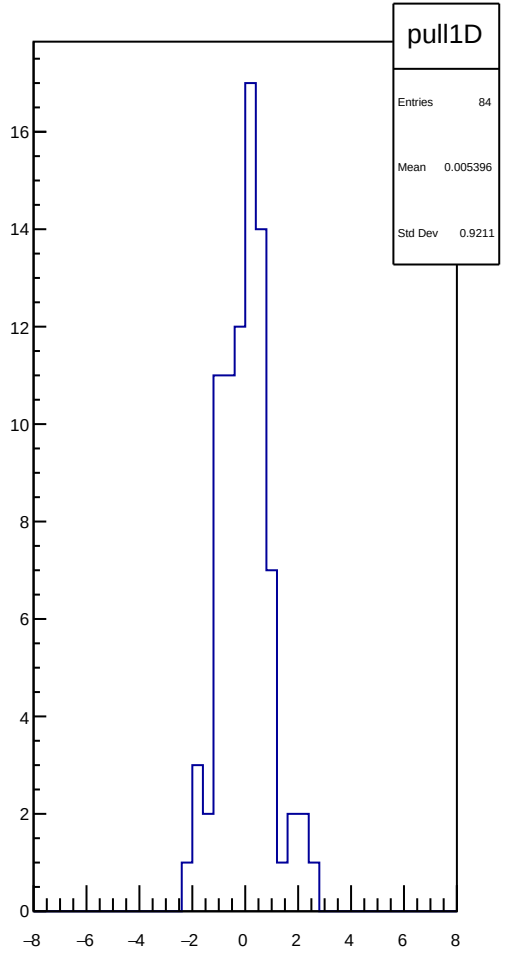

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 73.33 / 83
p0 −0.07657 ± 0.061
pull
Entries 84
Mean 91.22
Std Dev 137.2

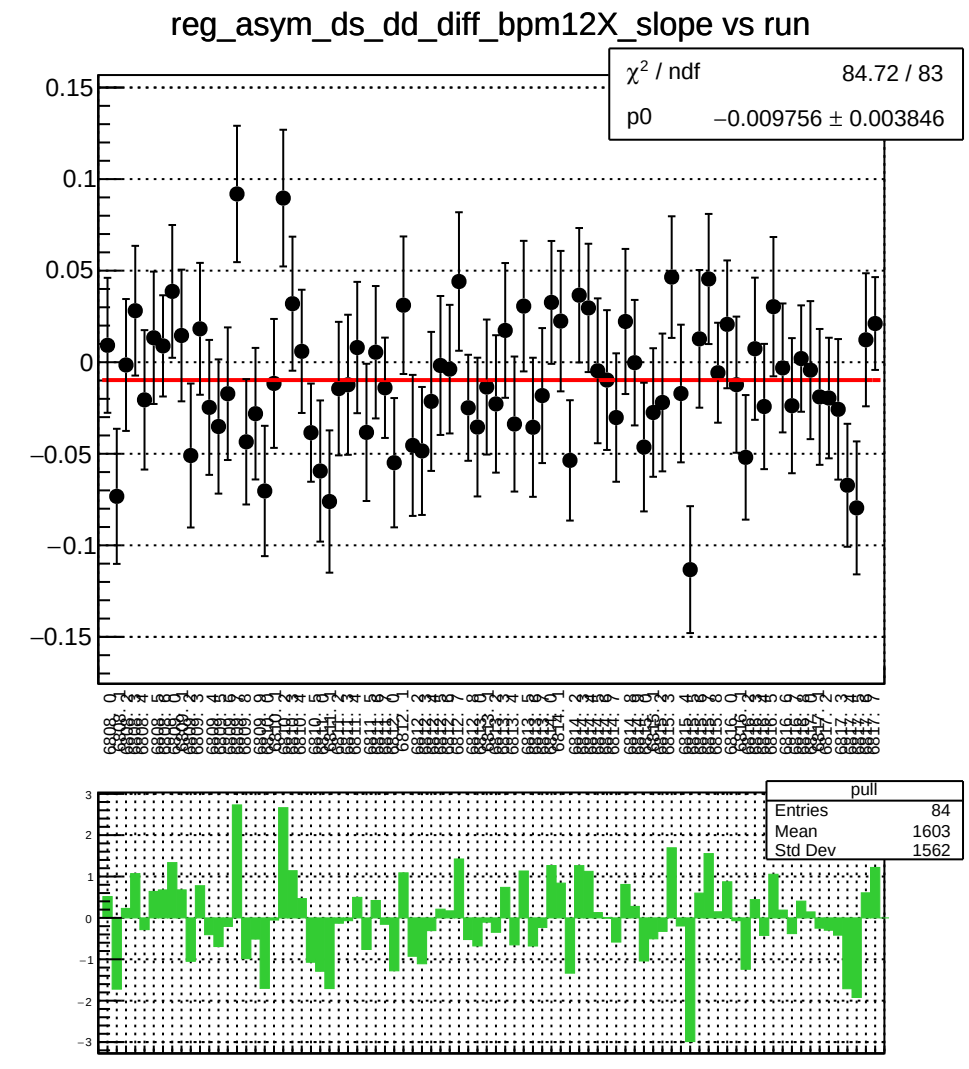

pull1D
Entries 84
Mean −0.009088
Std Dev 0.9343

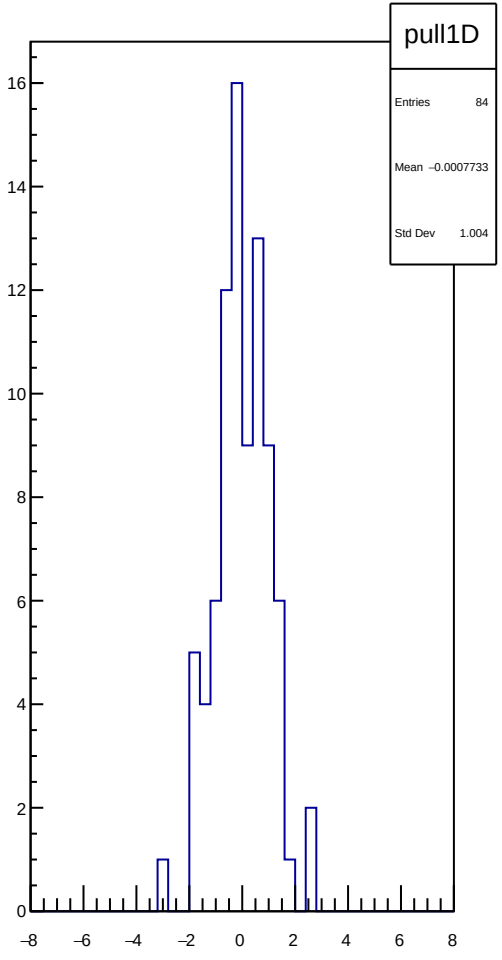

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 72.63 / 83
p0 −0.1134 ± 0.08864
pull
Entries 84
Mean −12.95
Std Dev 38.13

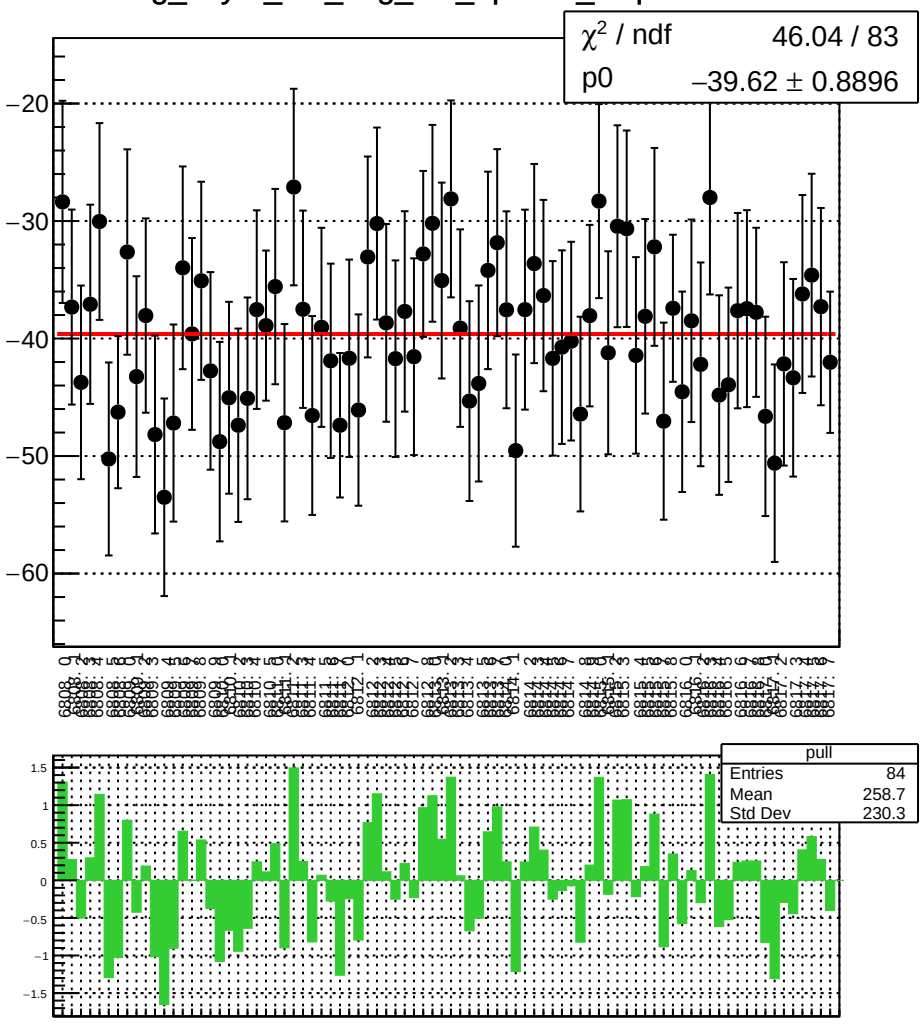

pull1D
Entries 84
Mean −0.007071
Std Dev 0.9298

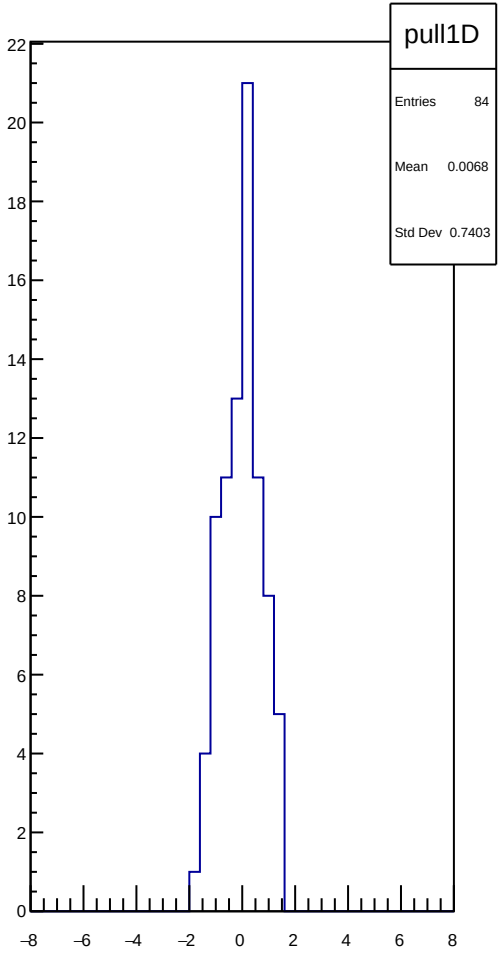

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 71.26 / 83
p0 0.09168 ± 0.07357
pull
Entries 84
Mean 168
Std Dev 208.3

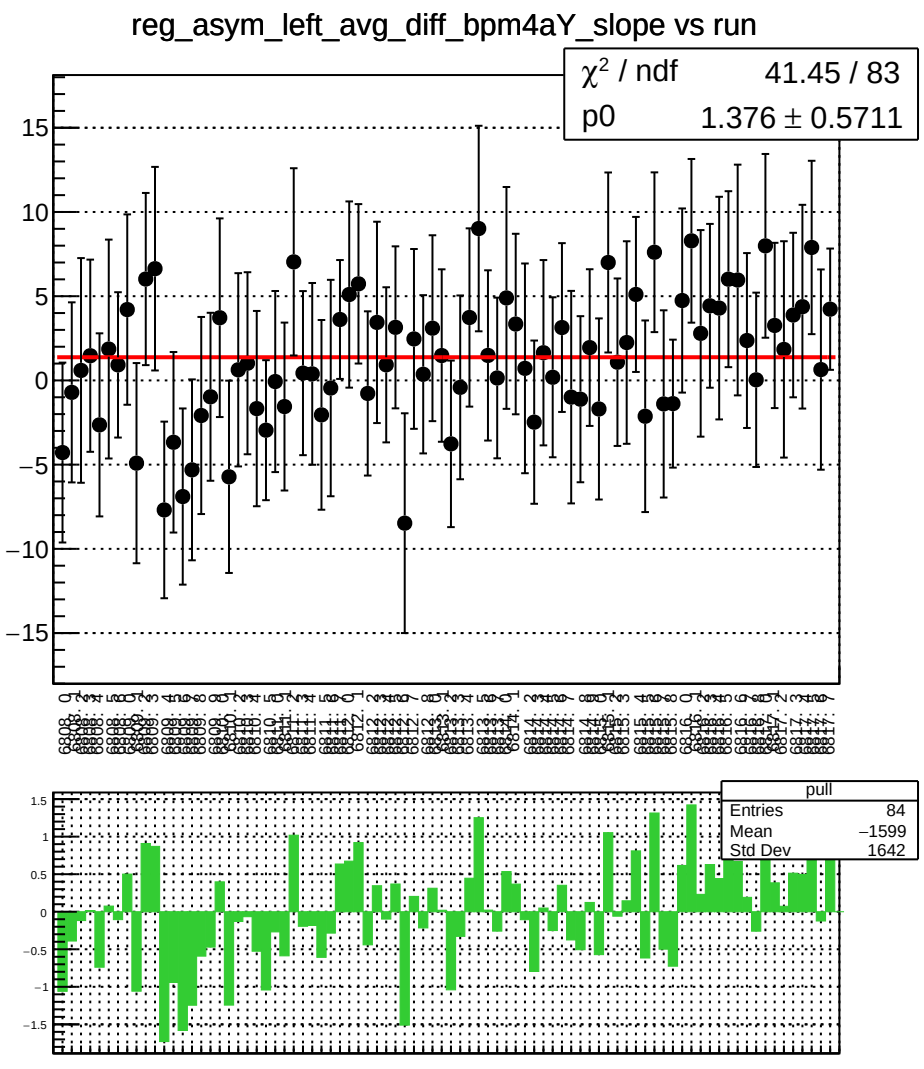

pull1D
Entries 84
Mean 0.005396
Std Dev 0.9211

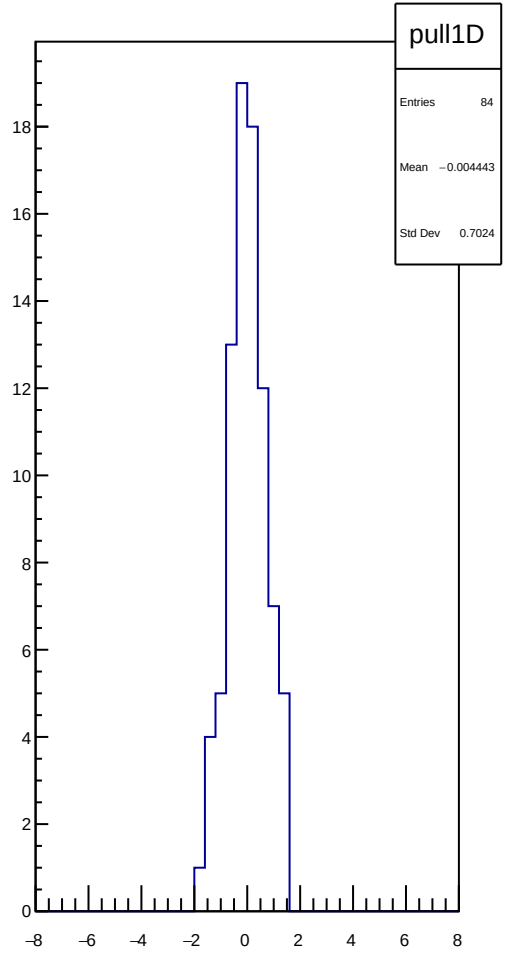

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 84.72 / 83
p0 −0.009756 ± 0.003846
pull
Entries 84
Mean 1603
Std Dev 1562

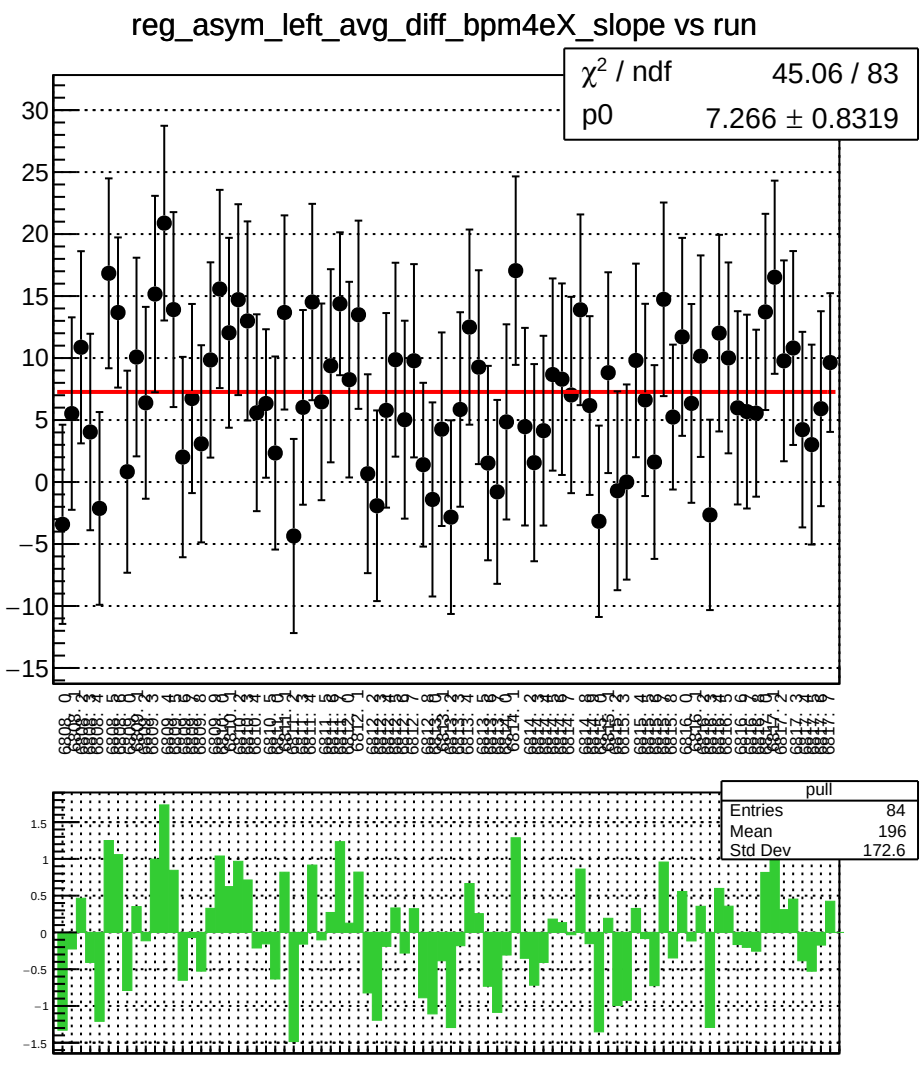

pull1D
Entries 84
Mean −0.0007733
Std Dev 1.004

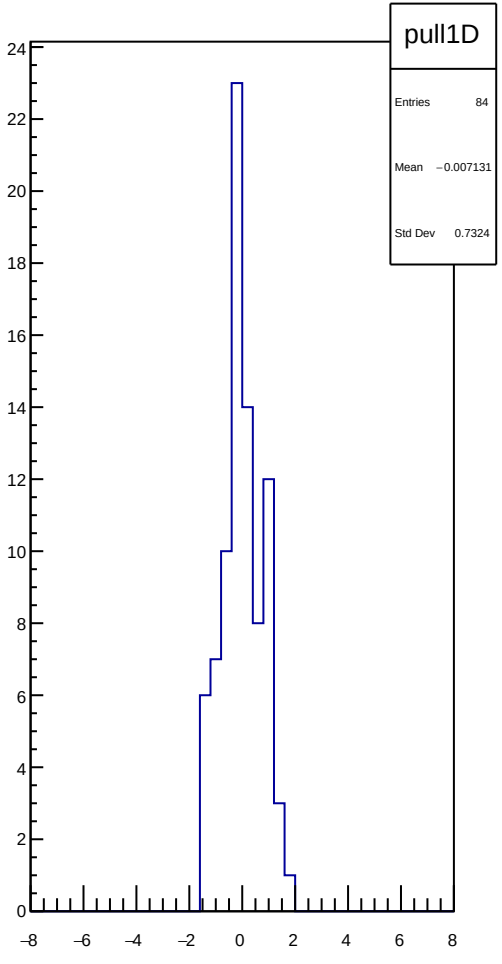

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 46.04 / 83
p0 −39.62 ± 0.8896
pull
Entries 84
Mean 258.7
Std Dev 230.3

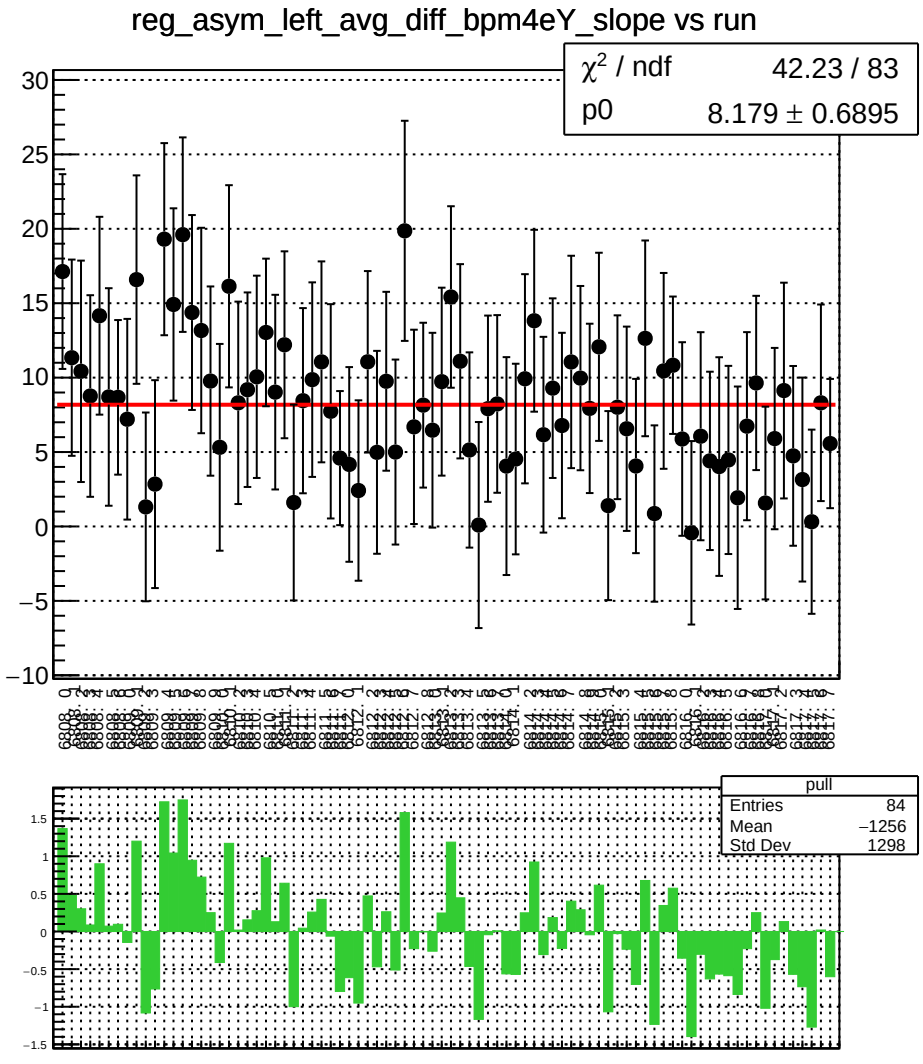

pull1D
Entries 84
Mean 0.0068
Std Dev 0.7403

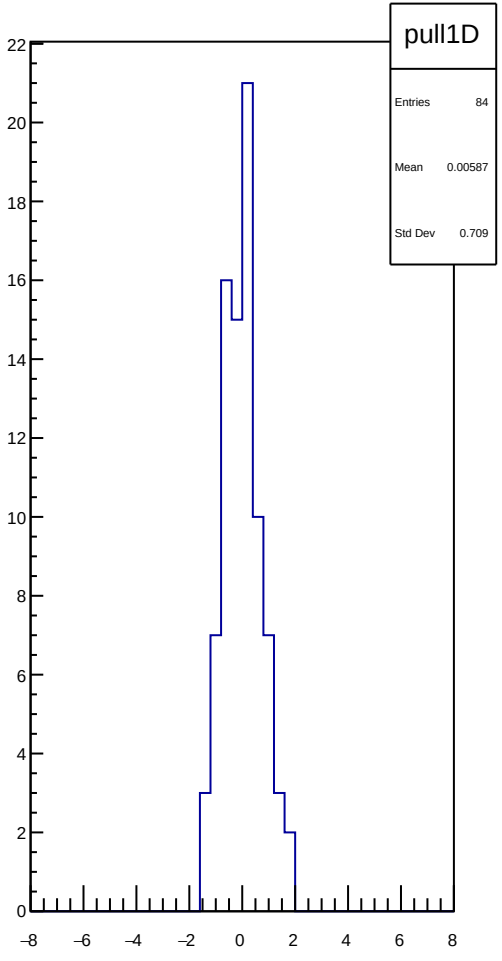

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 41.45 / 83
p0 1.376 ± 0.5711
pull
Entries 84
Mean −1599
Std Dev 1642

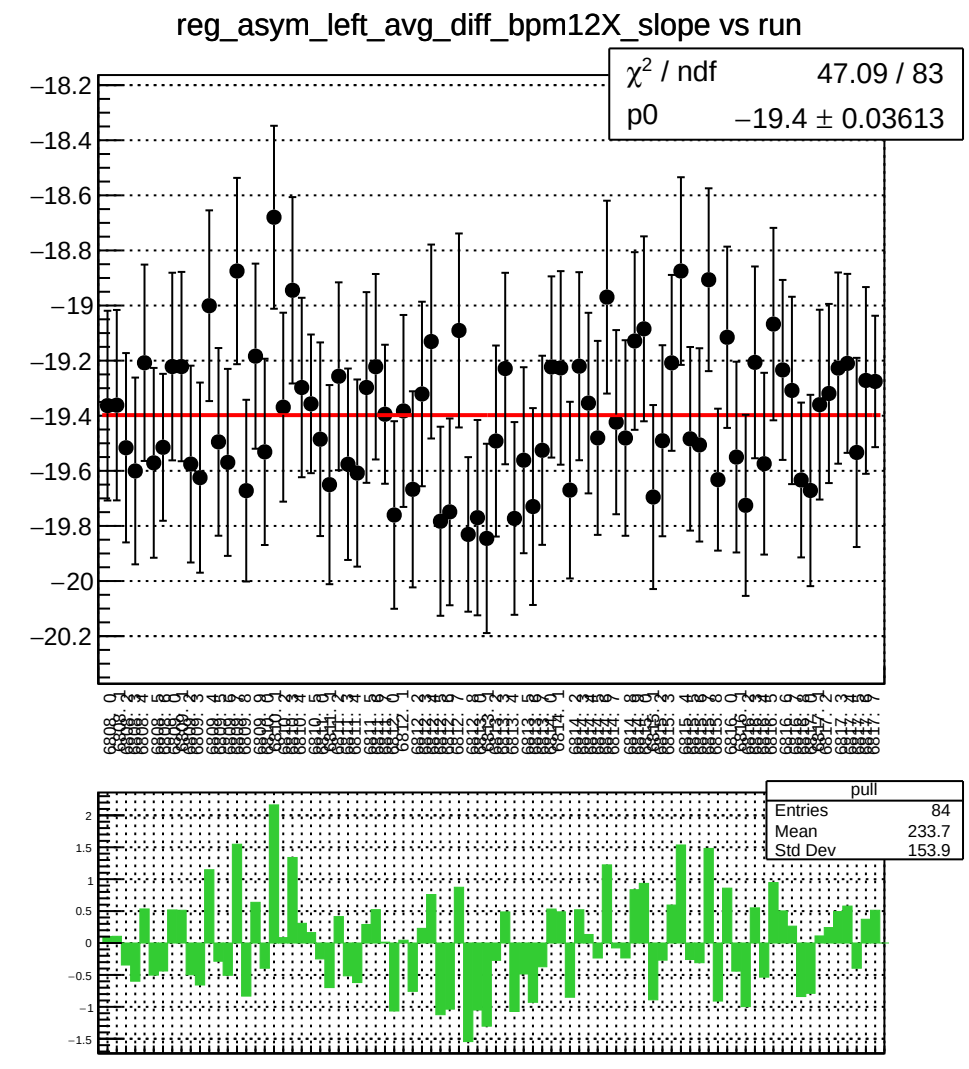

pull1D
Entries 84
Mean −0.004443
Std Dev 0.7024

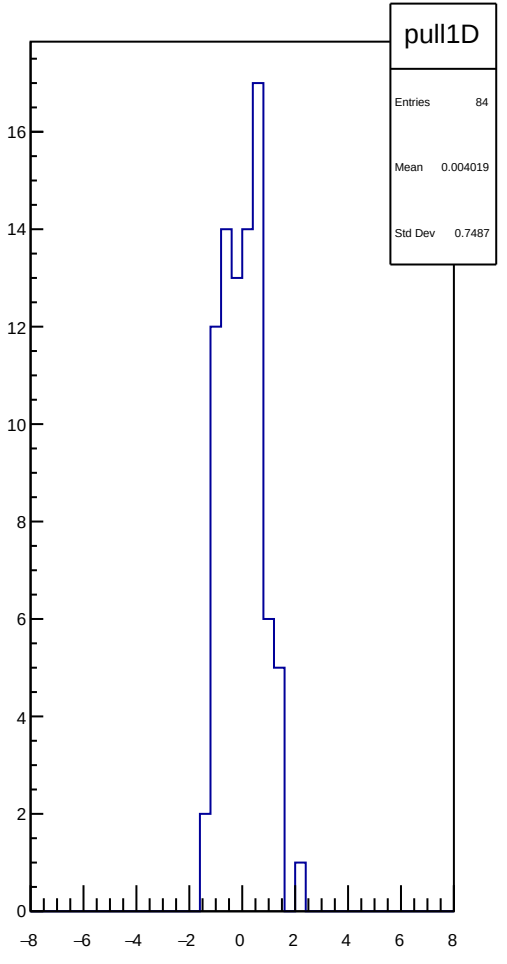

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 45.06 / 83
p0 7.266 ± 0.8319
pull
Entries 84
Mean 196
Std Dev 172.6

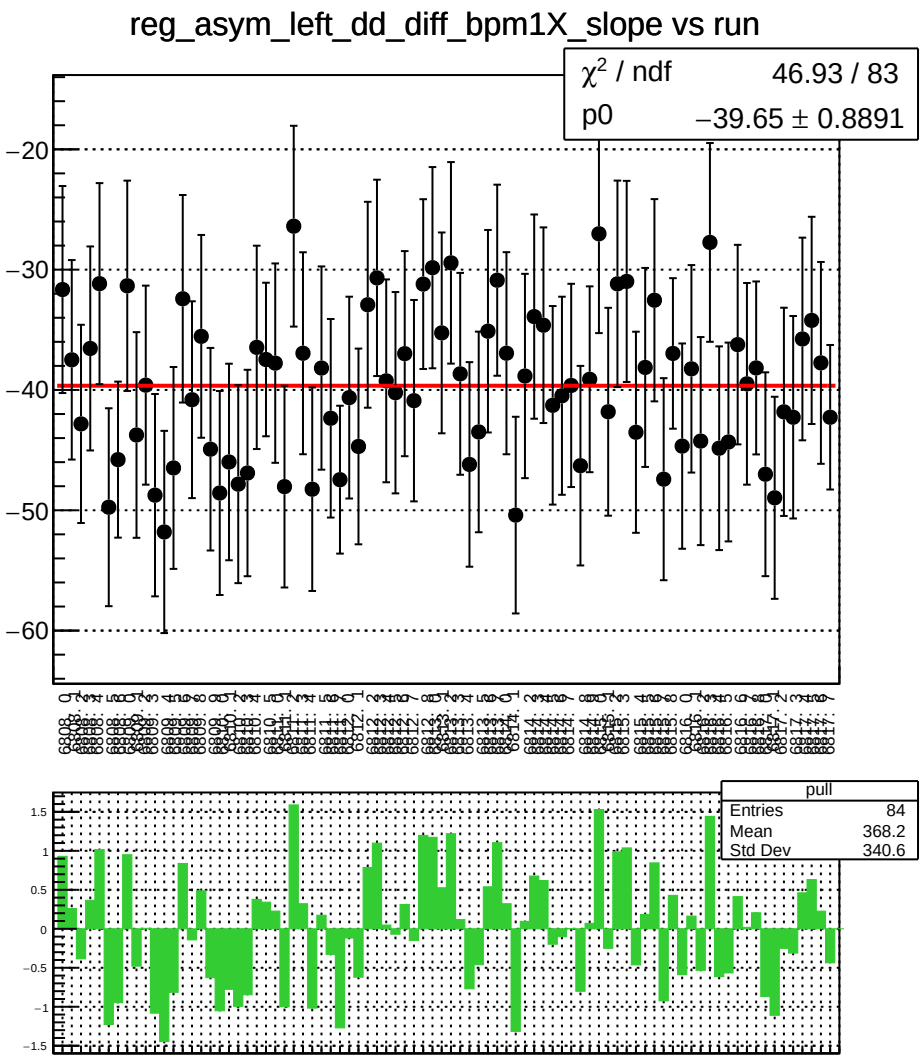

pull1D
Entries 84
Mean −0.007131
Std Dev 0.7324

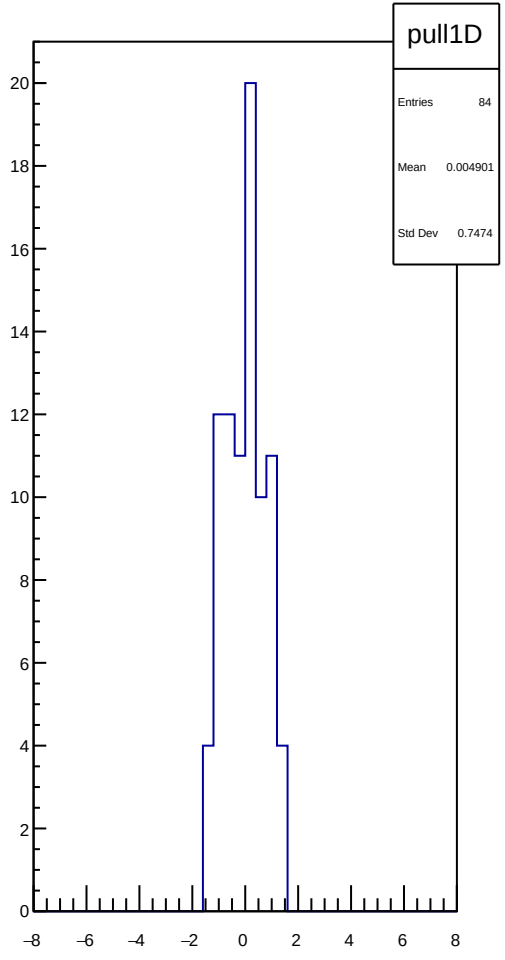

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 42.23 / 83
p0 8.179 ± 0.6895
pull
Entries 84
Mean −1256
Std Dev 1298

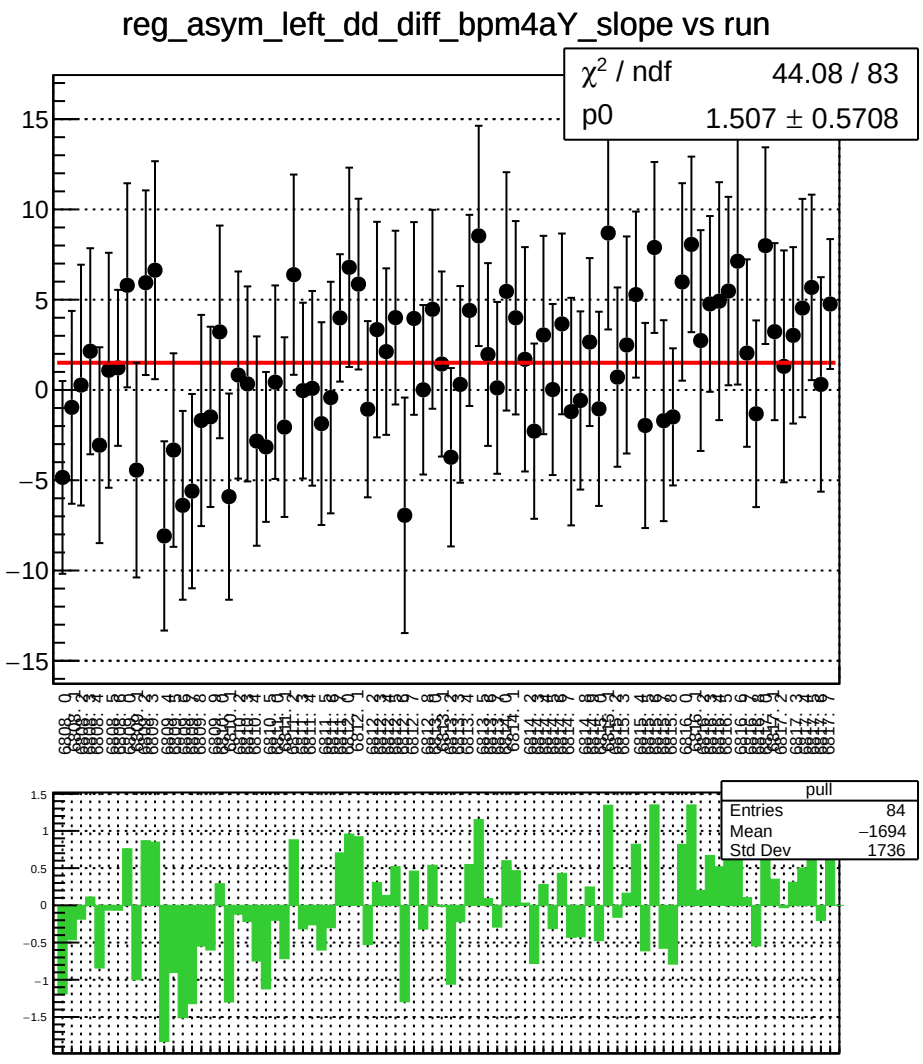

pull1D
Entries 84
Mean 0.00587
Std Dev 0.709

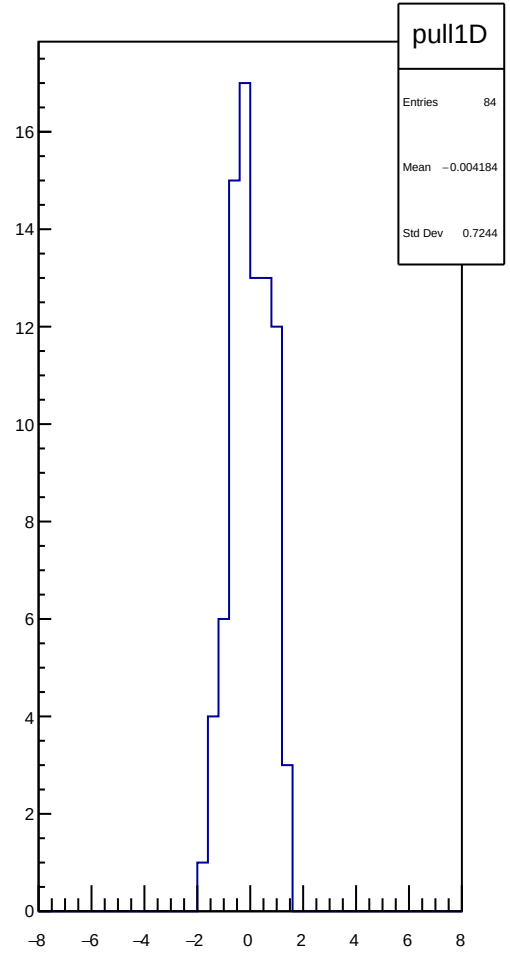

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 47.09 / 83
p0 −19.4 ± 0.03613
−18.2
−18.4
−18.6
−18.8
−19
−19.2
−19.4
−19.6
−19.8
−20
−20.2
pull
Entries 84
Mean 233.7
Std Dev 153.9
2
1.5
1
0.5
0
−0.5
−1
−1.5

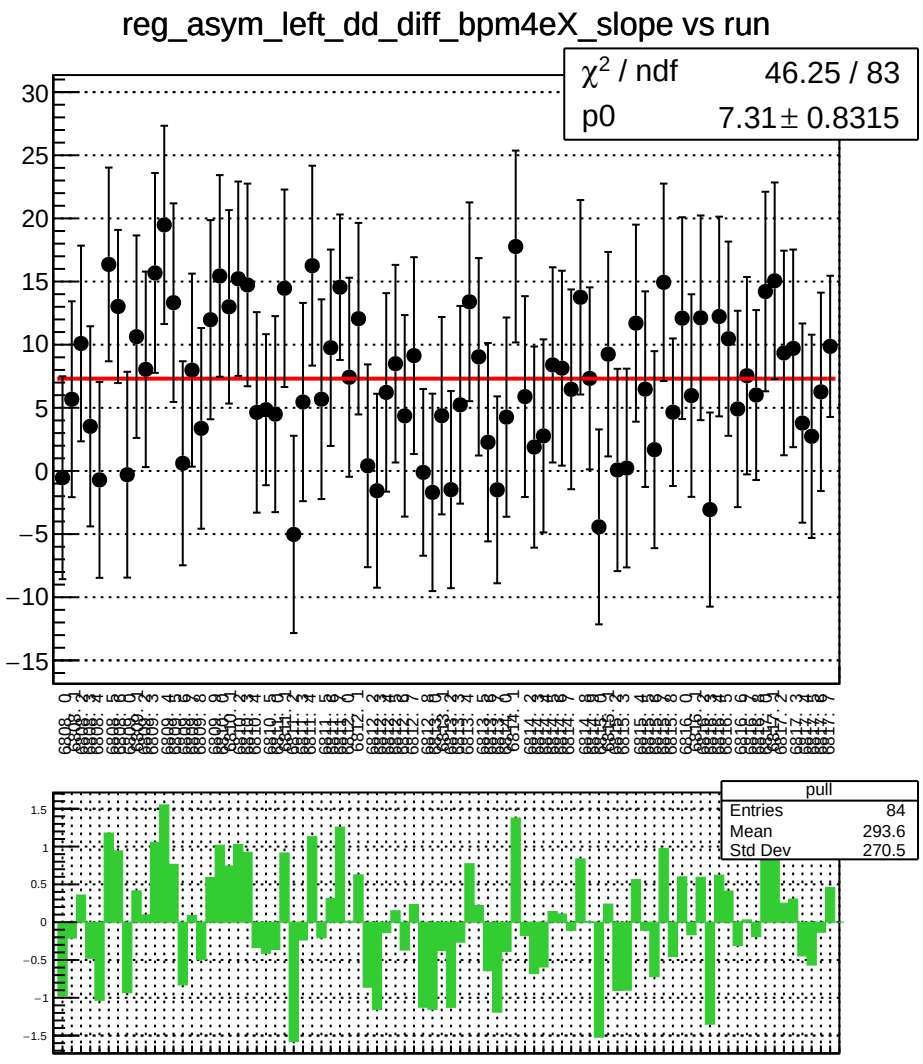

pull1D
Entries 84
Mean 0.004019
Std Dev 0.7487
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

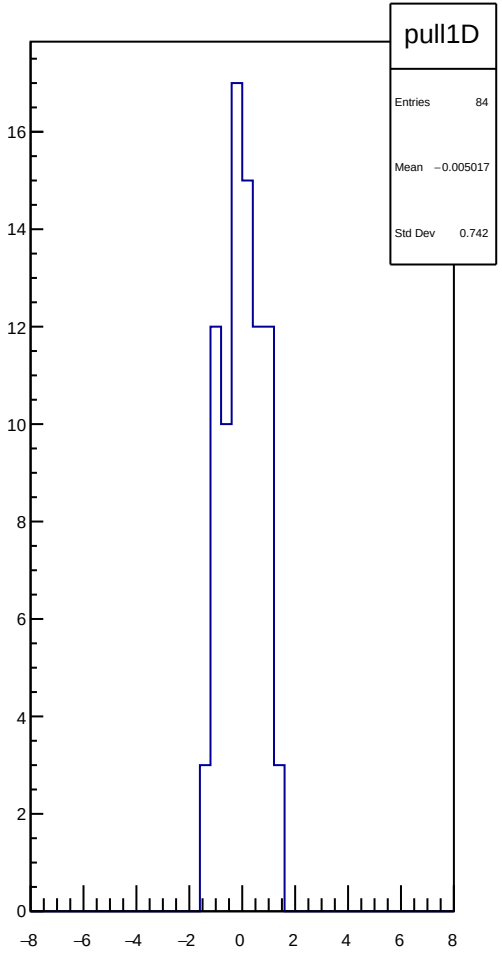

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 46.93 / 83
p0 −39.65 ± 0.8891
pull
Entries 84
Mean 368.2
Std Dev 340.6

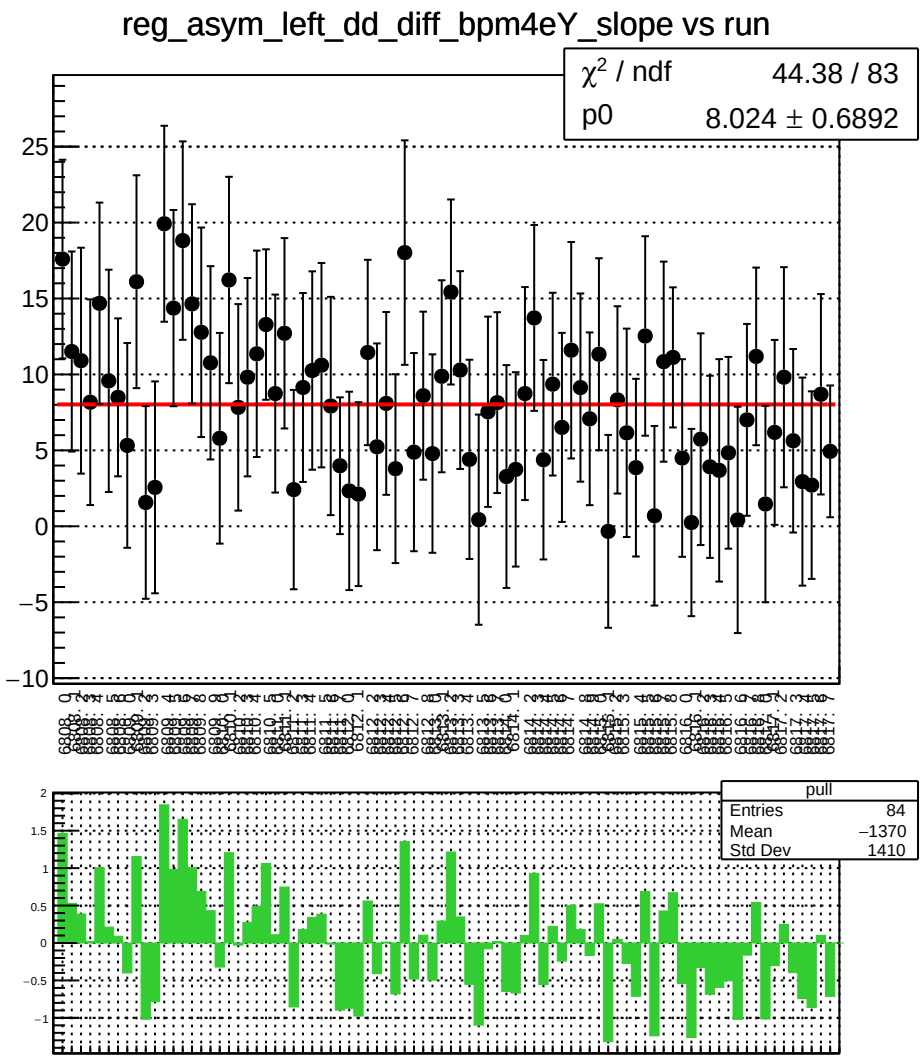

pull1D
Entries 84
Mean 0.004901
Std Dev 0.7474

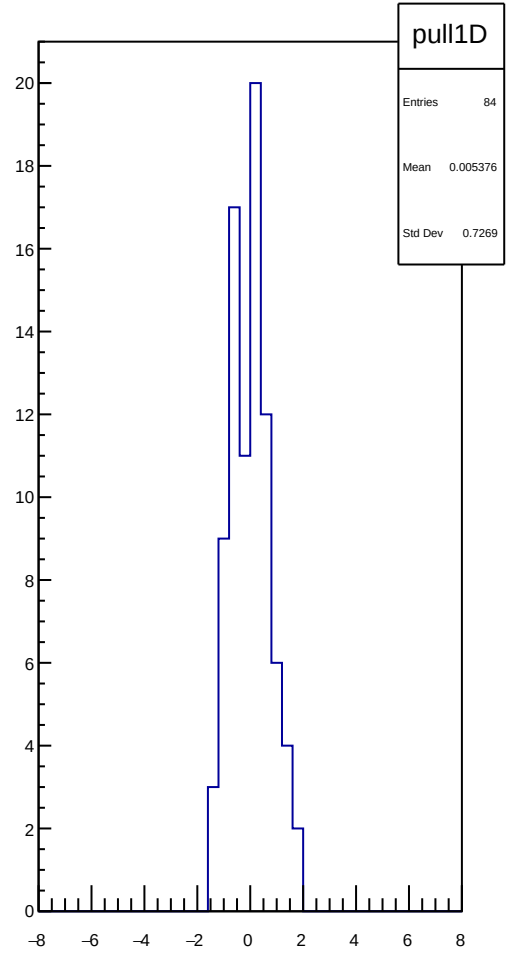

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 44.08 / 83
p0 1.507 ± 0.5708
pull
Entries 84
Mean −1694
Std Dev 1736

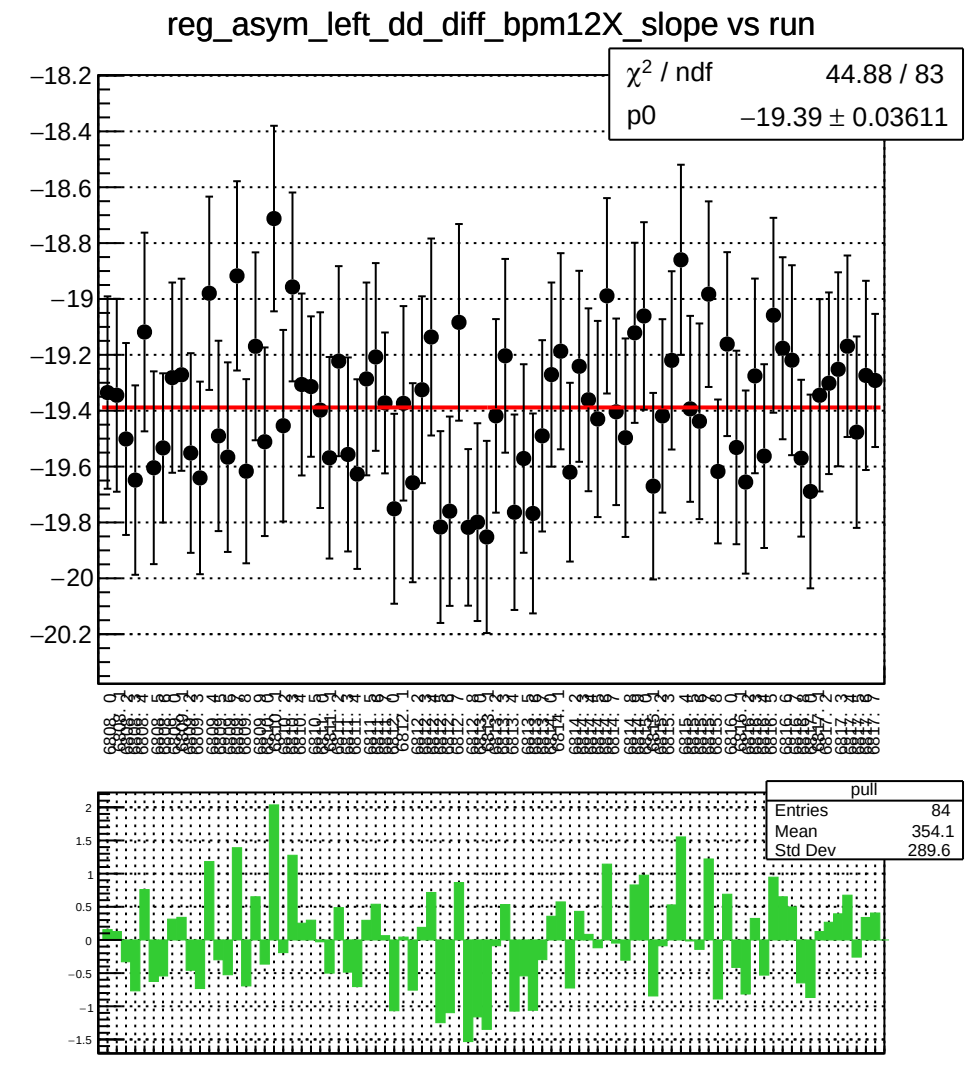

pull1D
Entries 84
Mean −0.004184
Std Dev 0.7244

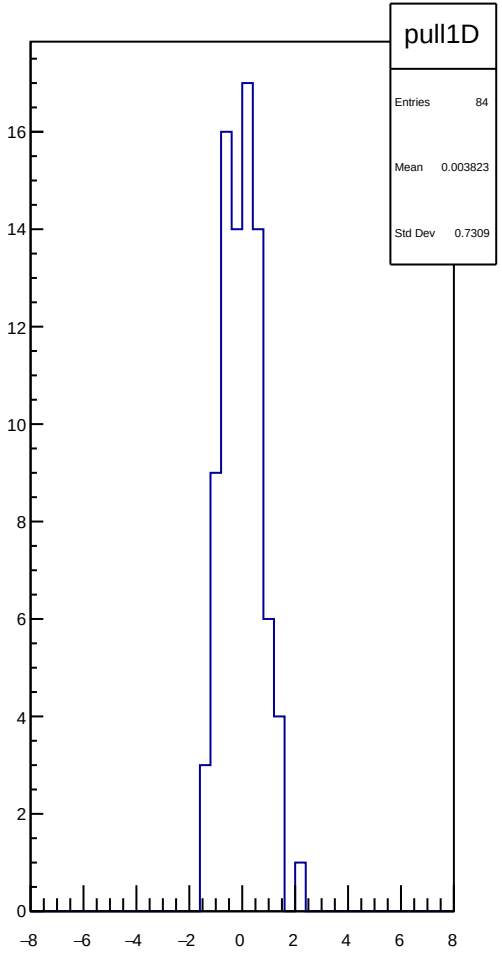

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 46.25 / 83
p0 7.31 ± 0.8315
pull
Entries 84
Mean 293.6
Std Dev 270.5

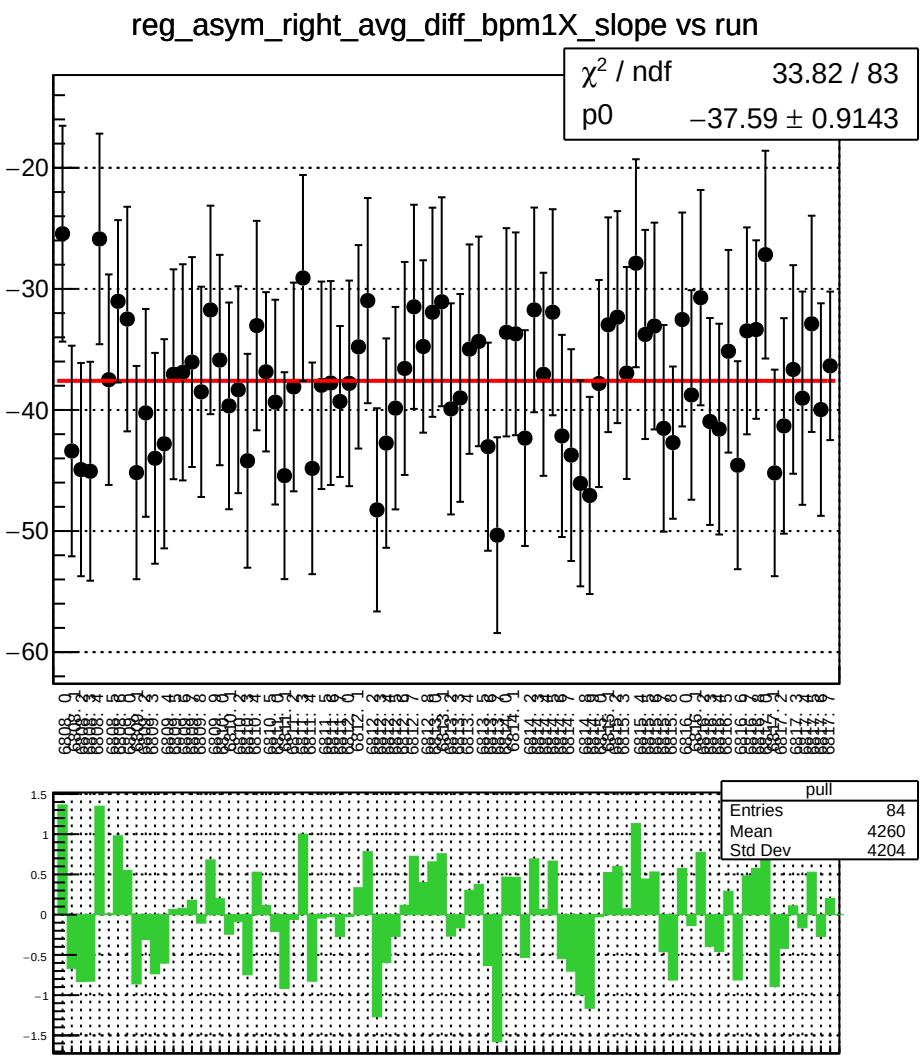

pull1D
Entries 84
Mean −0.005017
Std Dev 0.742

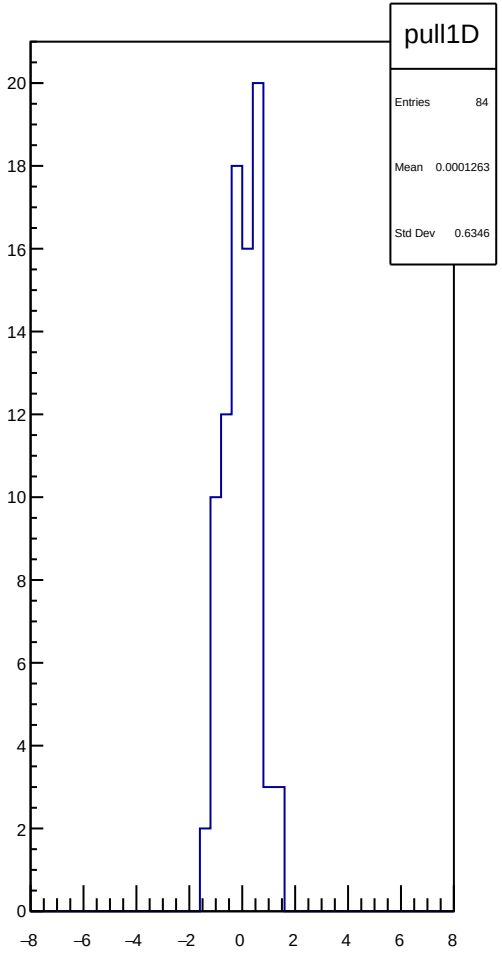

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 44.38 / 83
p0 8.024 ± 0.6892
pull
Entries 84
Mean −1370
Std Dev 1410

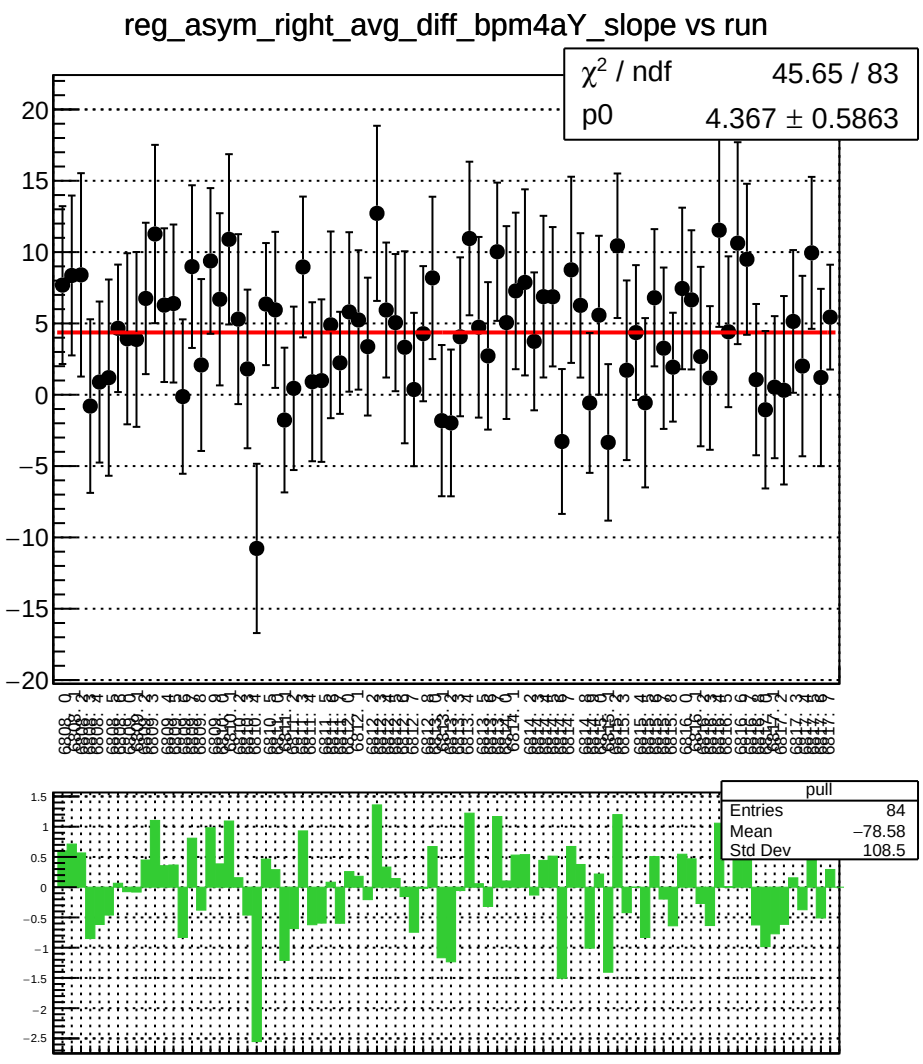

pull1D
Entries 84
Mean 0.005376
Std Dev 0.7269

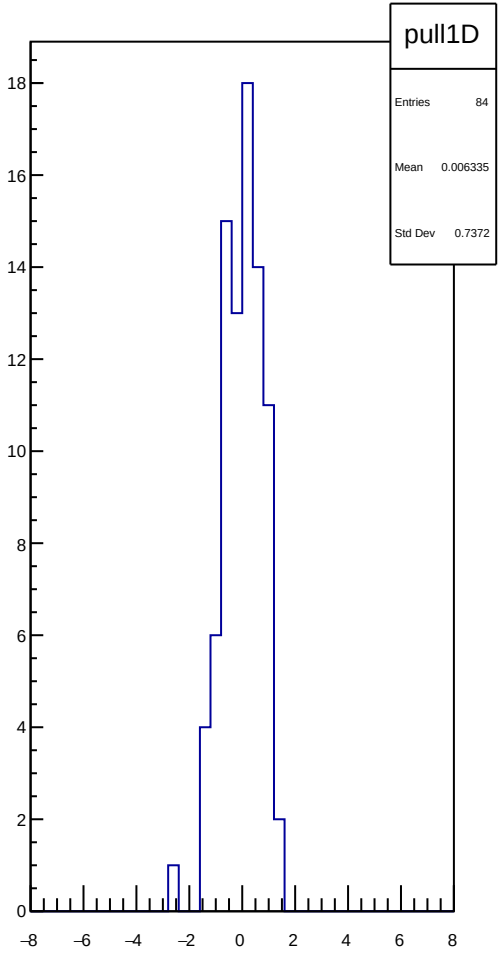

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 44.88 / 83
p0 −19.39 ± 0.03611
pull
Entries 84
Mean 354.1
Std Dev 289.6

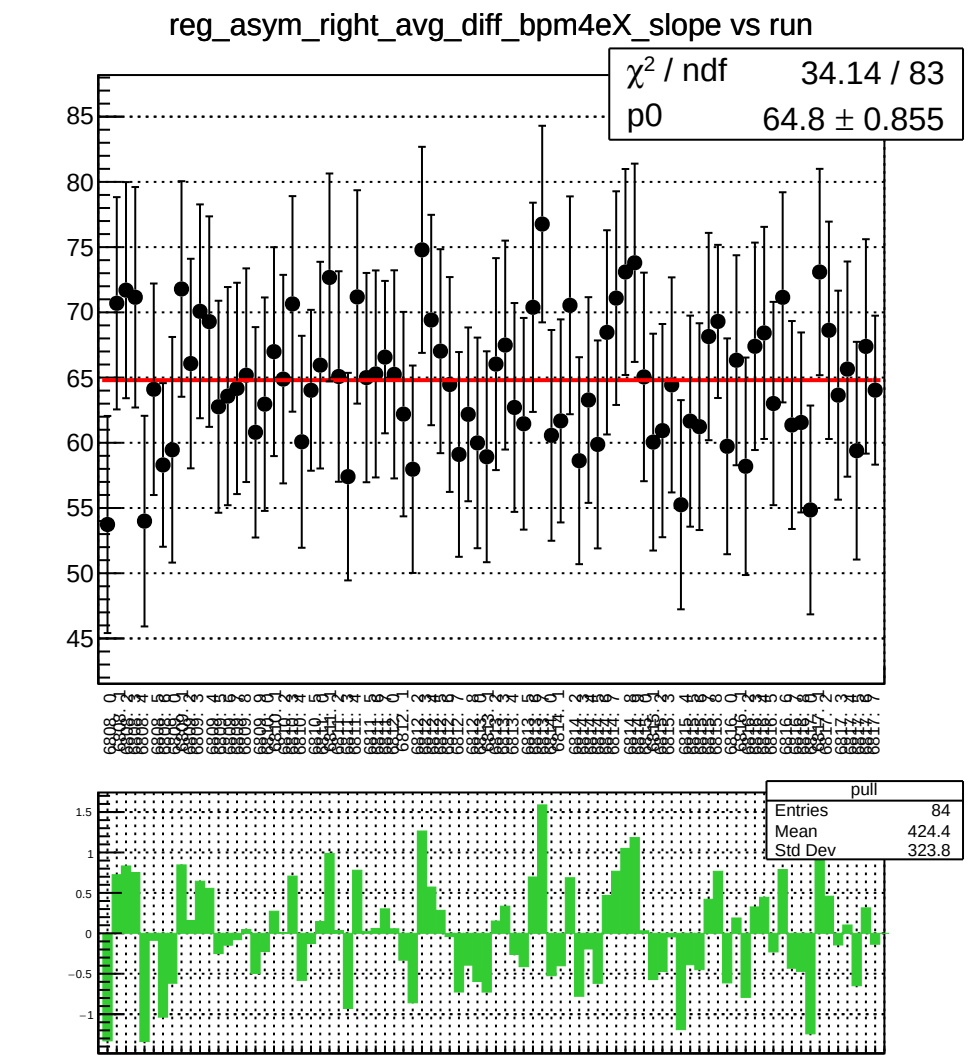

pull1D
Entries 84
Mean 0.003823
Std Dev 0.7309

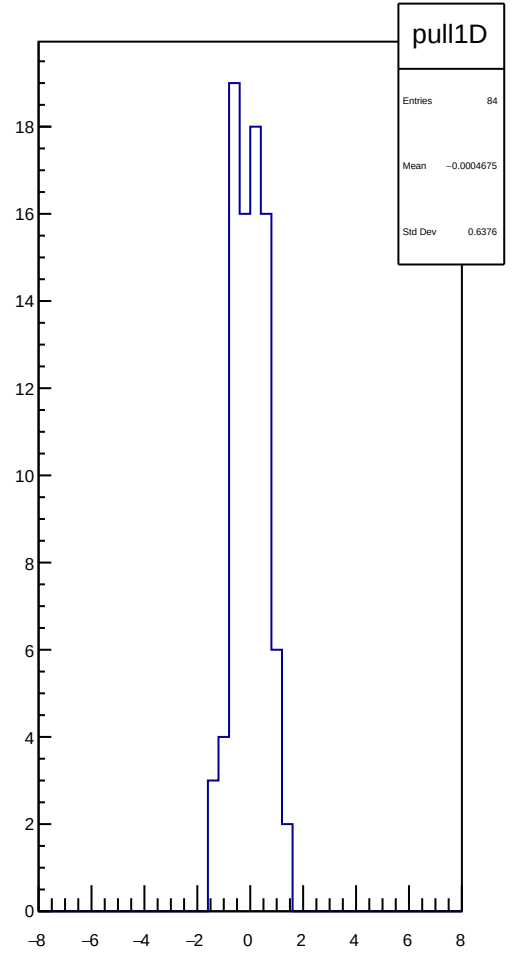

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 33.82 / 83
p0 −37.59 ± 0.9143
pull
Entries 84
Mean 4260
Std Dev 4204

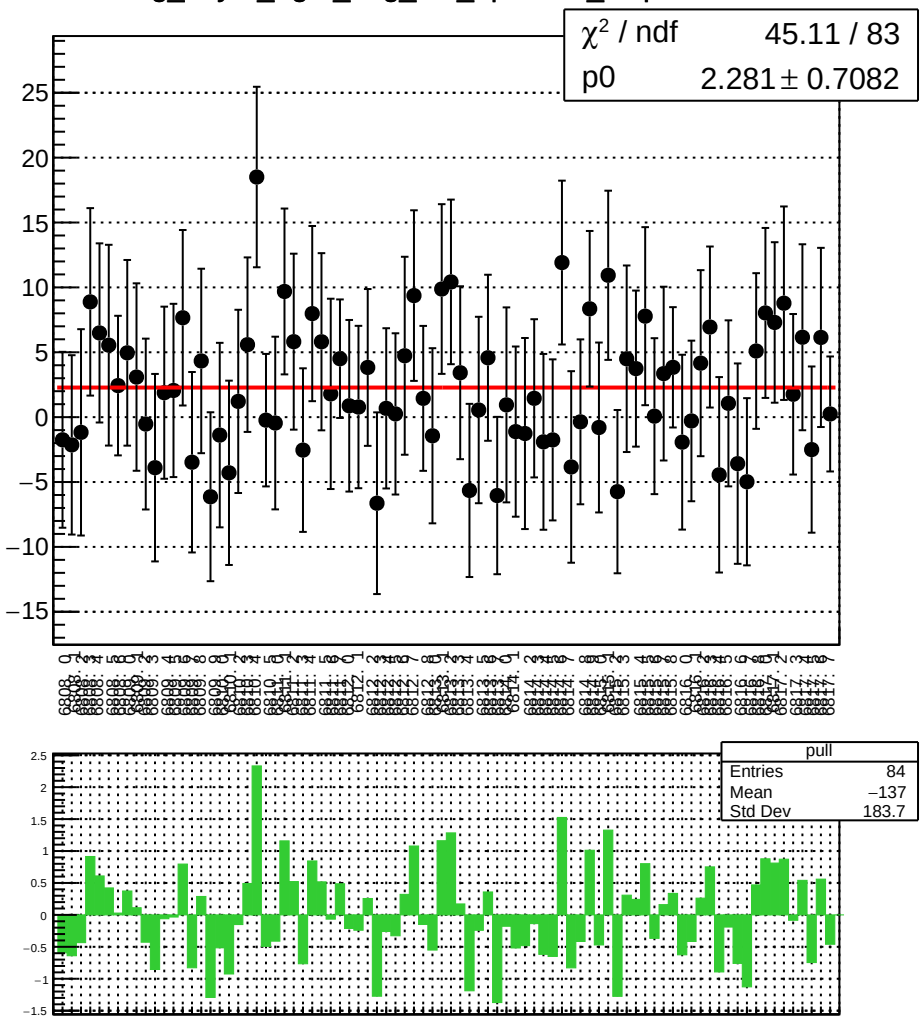

pull1D
Entries 84
Mean 0.0001263
Std Dev 0.6346

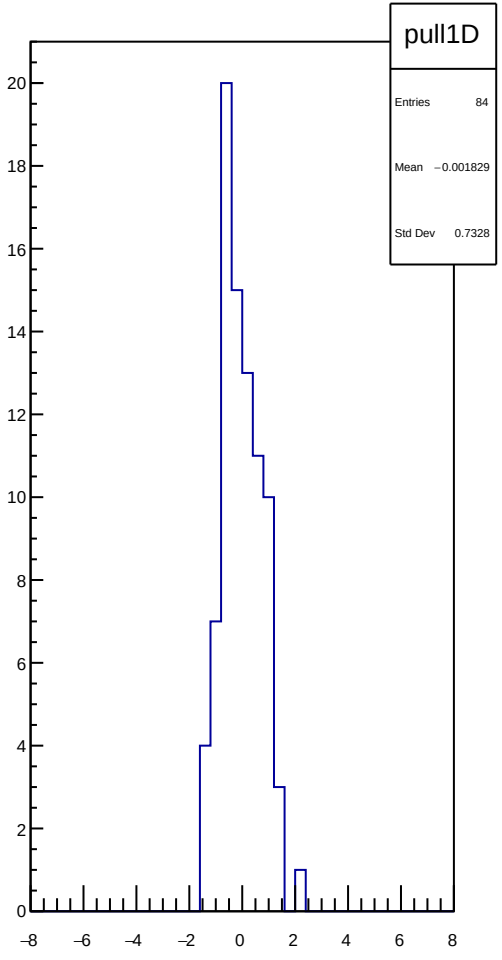

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 45.65 / 83
p0 4.367 ± 0.5863
pull
Entries 84
Mean −78.58
Std Dev 108.5

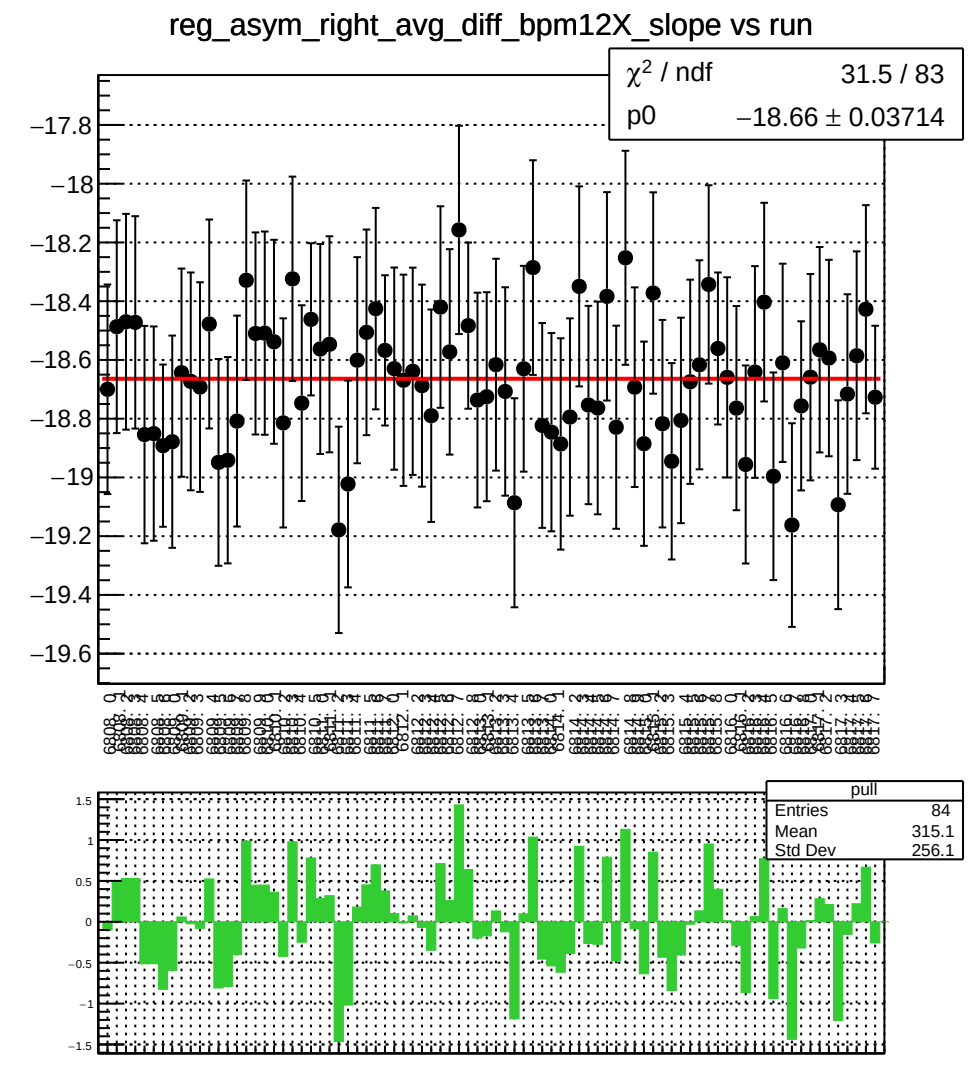

pull1D
Entries 84
Mean 0.006335
Std Dev 0.7372

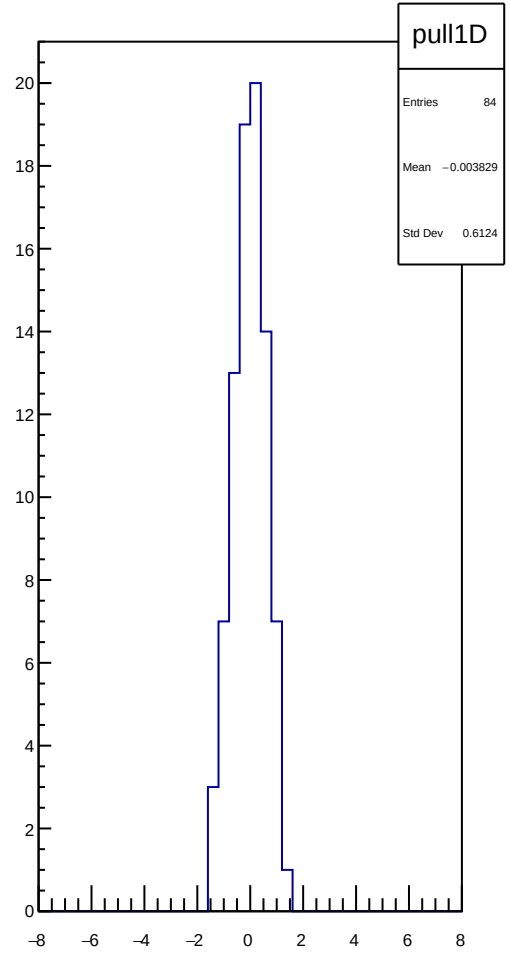

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 34.14 / 83
p0 64.8 ± 0.855
pull
Entries 84
Mean 424.4
Std Dev 323.8

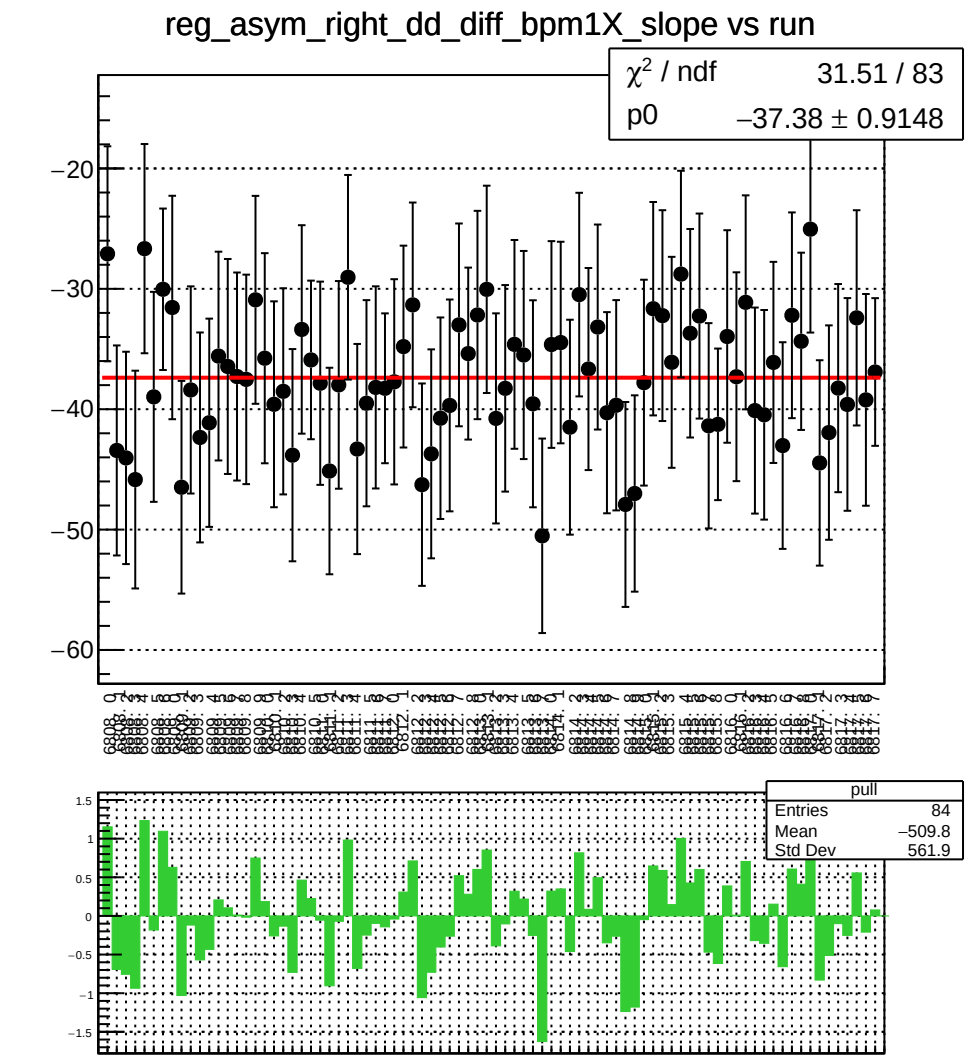

pull1D
Entries 84
Mean −0.0004675
Std Dev 0.6376

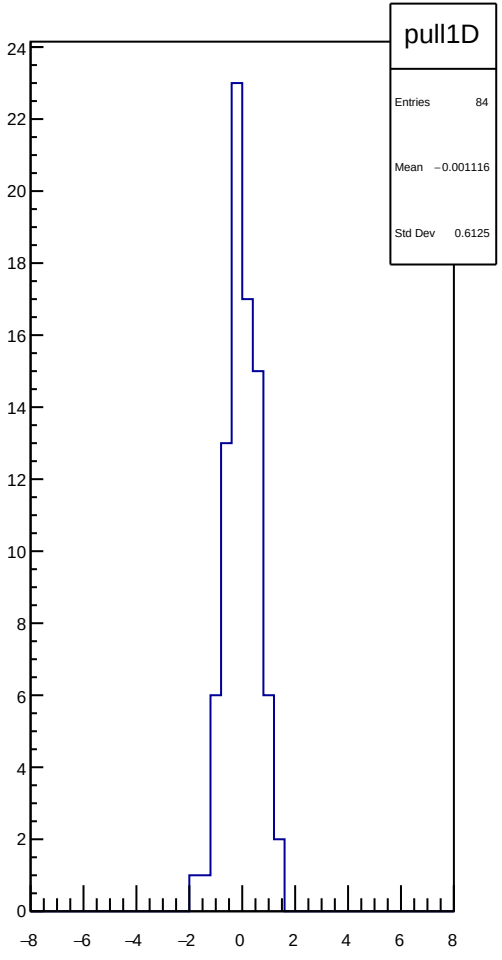

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 45.11 / 83
p0 2.281 ± 0.7082
pull
Entries 84
Mean −137
Std Dev 183.7

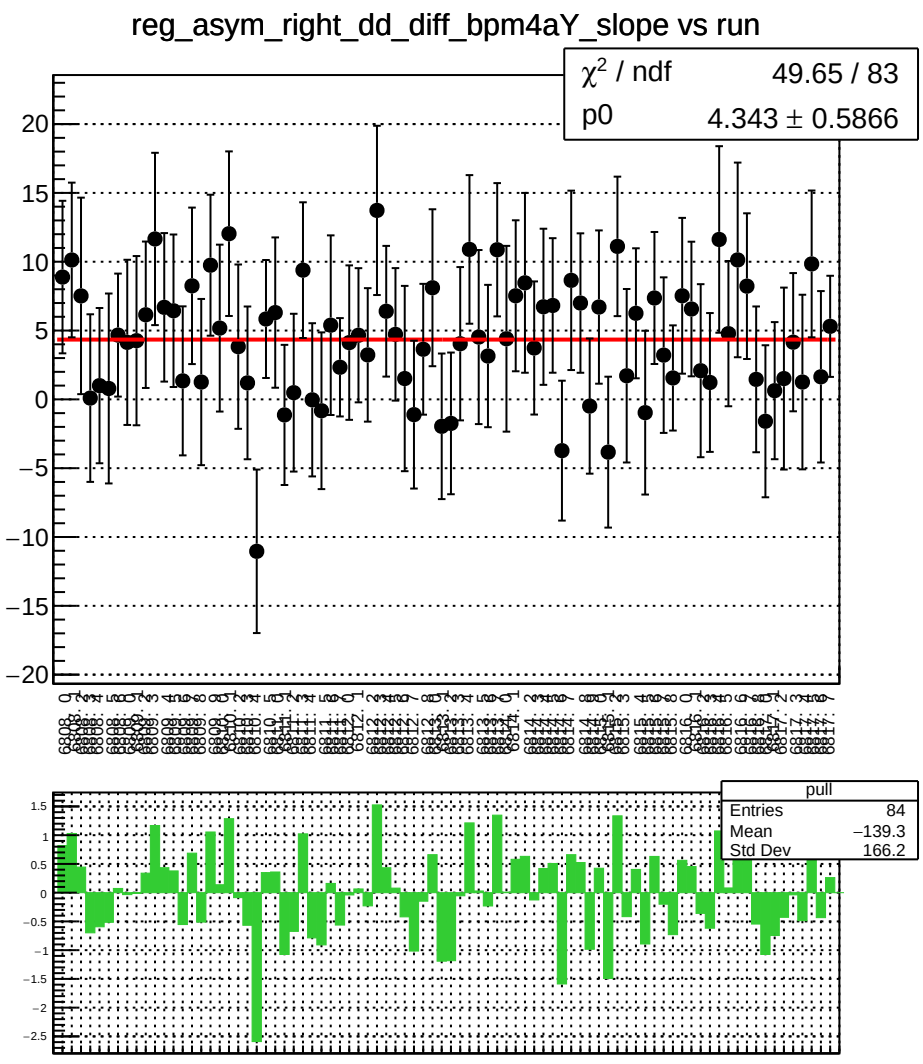

pull1D
Entries 84
Mean −0.001829
Std Dev 0.7328

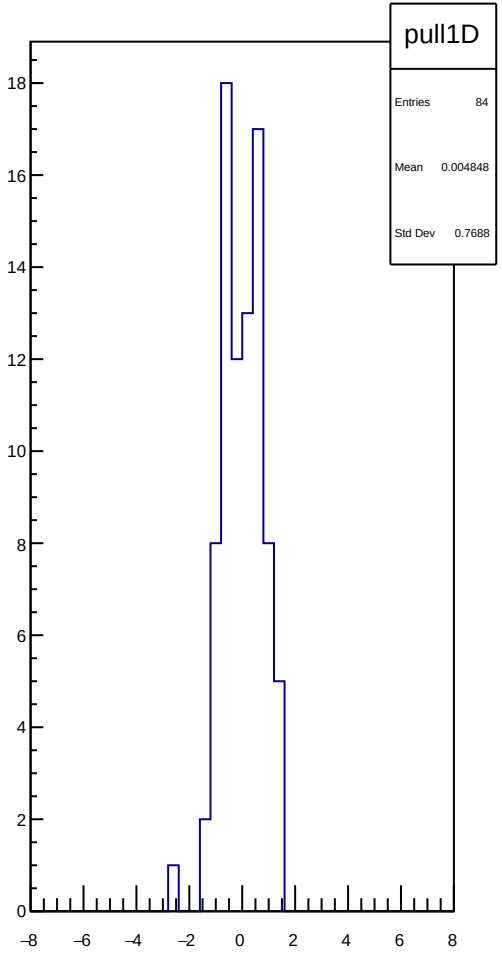

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 31.5 / 83
p0 −18.66 ± 0.03714
pull
Entries 84
Mean 315.1
Std Dev 256.1

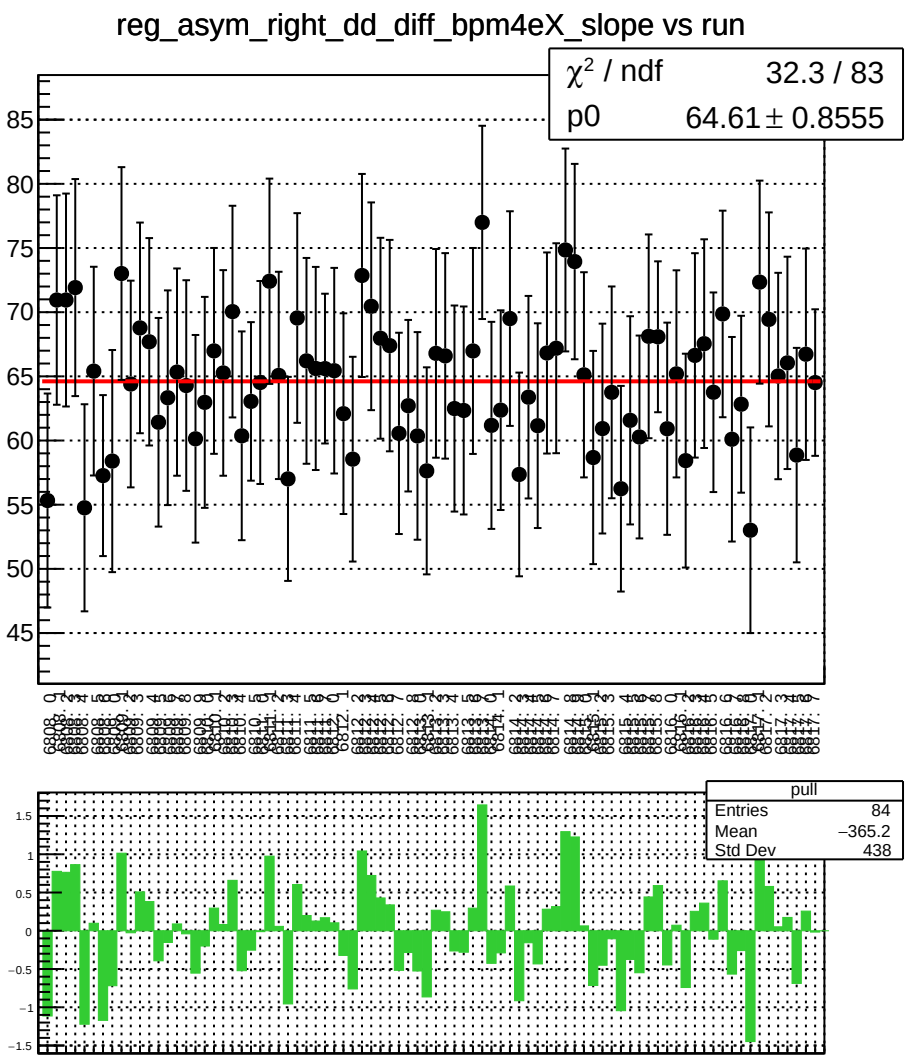

pull1D
Entries 84
Mean −0.003829
Std Dev 0.6124

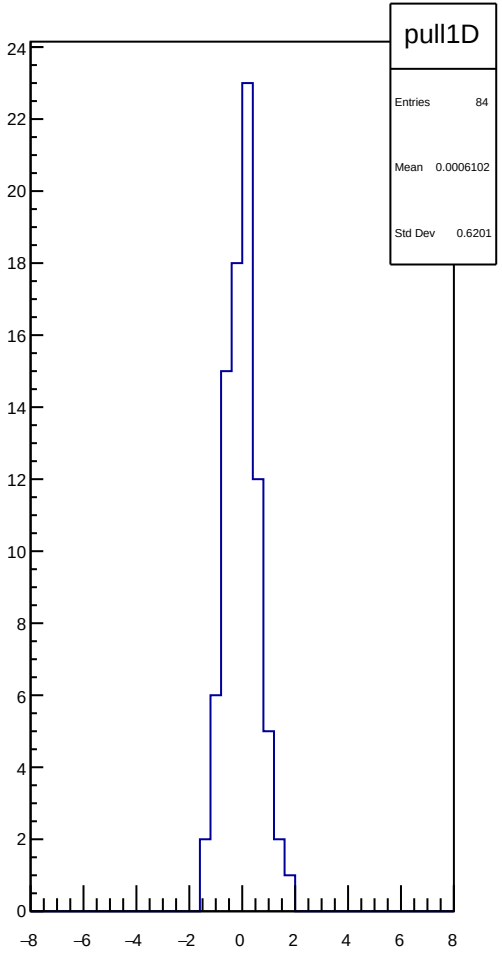

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 31.51 / 83
p0 −37.38 ± 0.9148
pull
Entries 84
Mean −509.8
Std Dev 561.9

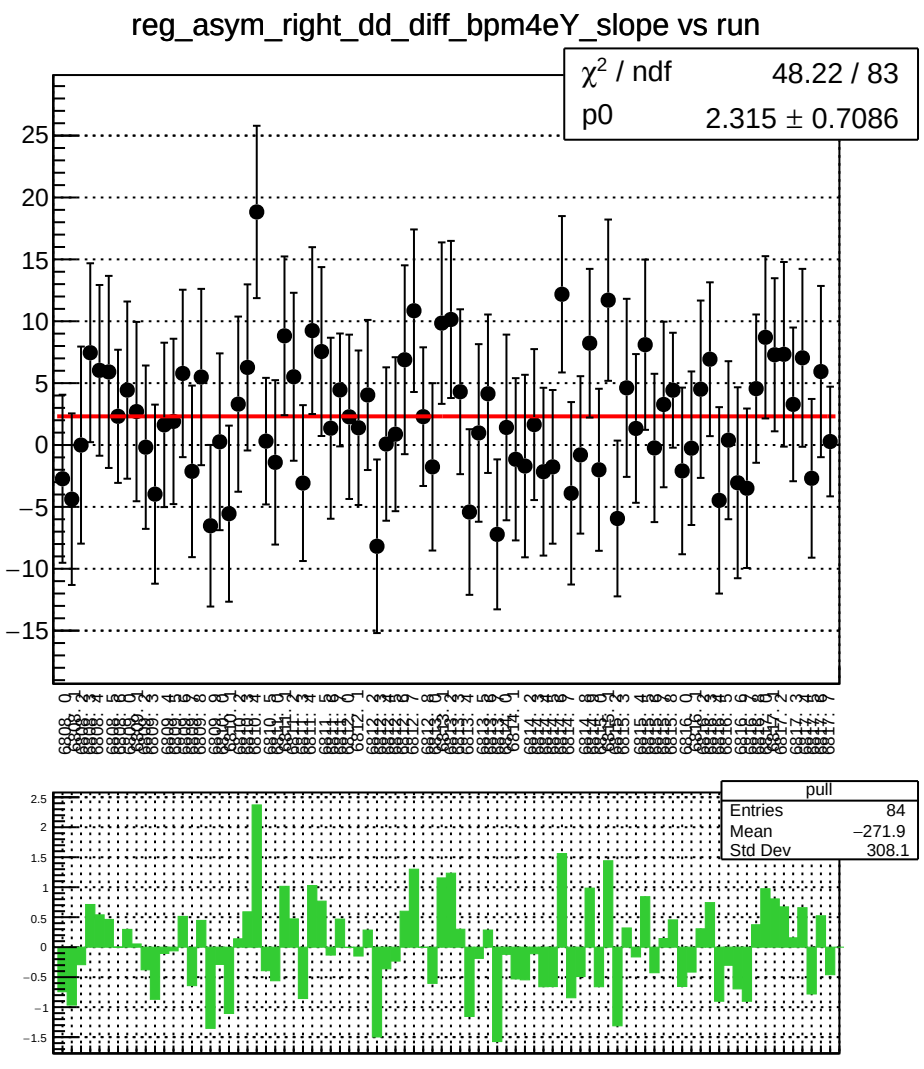

pull1D
Entries 84
Mean −0.001116
Std Dev 0.6125

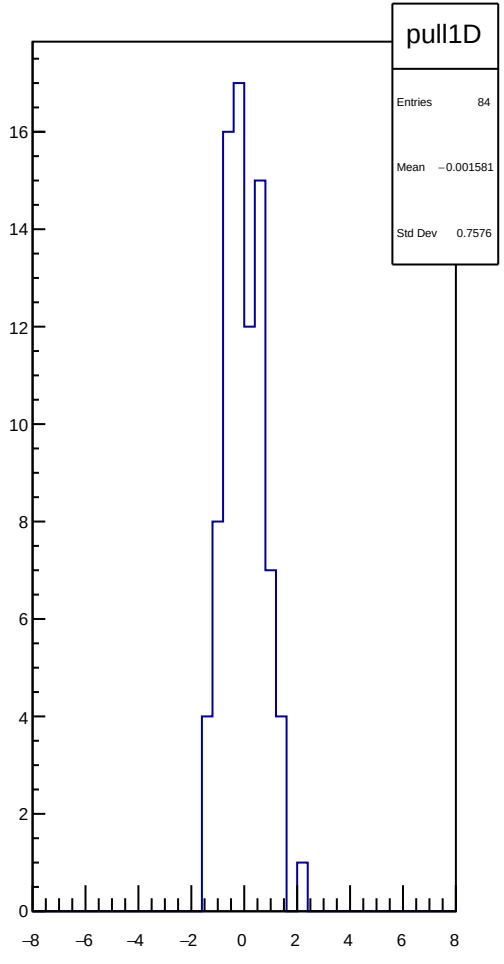

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 49.65 / 83
p0 4.343 ± 0.5866
pull
Entries 84
Mean −139.3
Std Dev 166.2

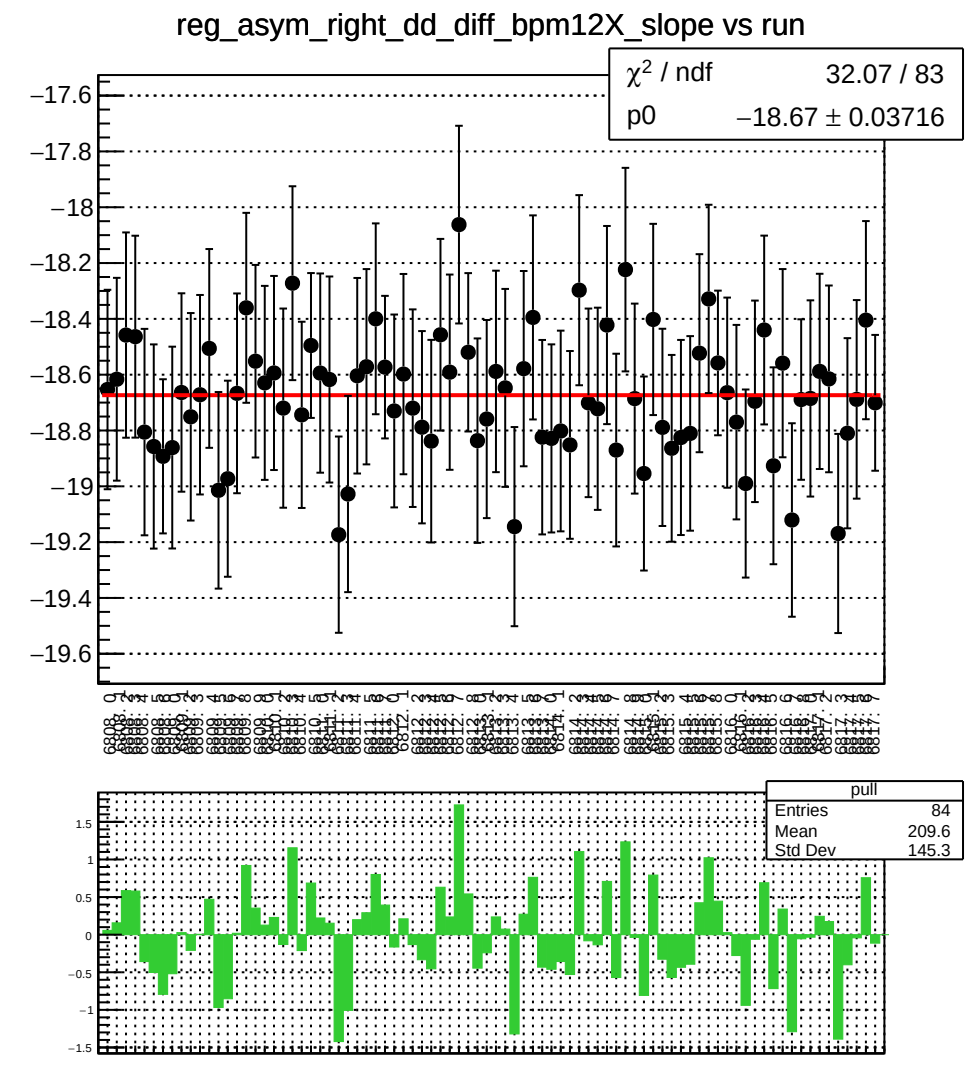

pull1D
Entries 84
Mean 0.004848
Std Dev 0.7688

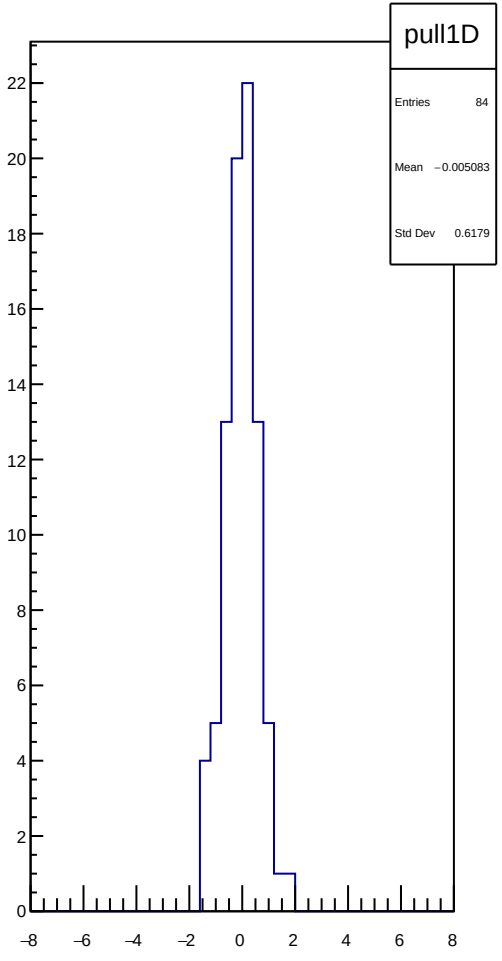

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 32.3 / 83
p0 64.61 ± 0.8555
pull
Entries 84
Mean −365.2
Std Dev 438

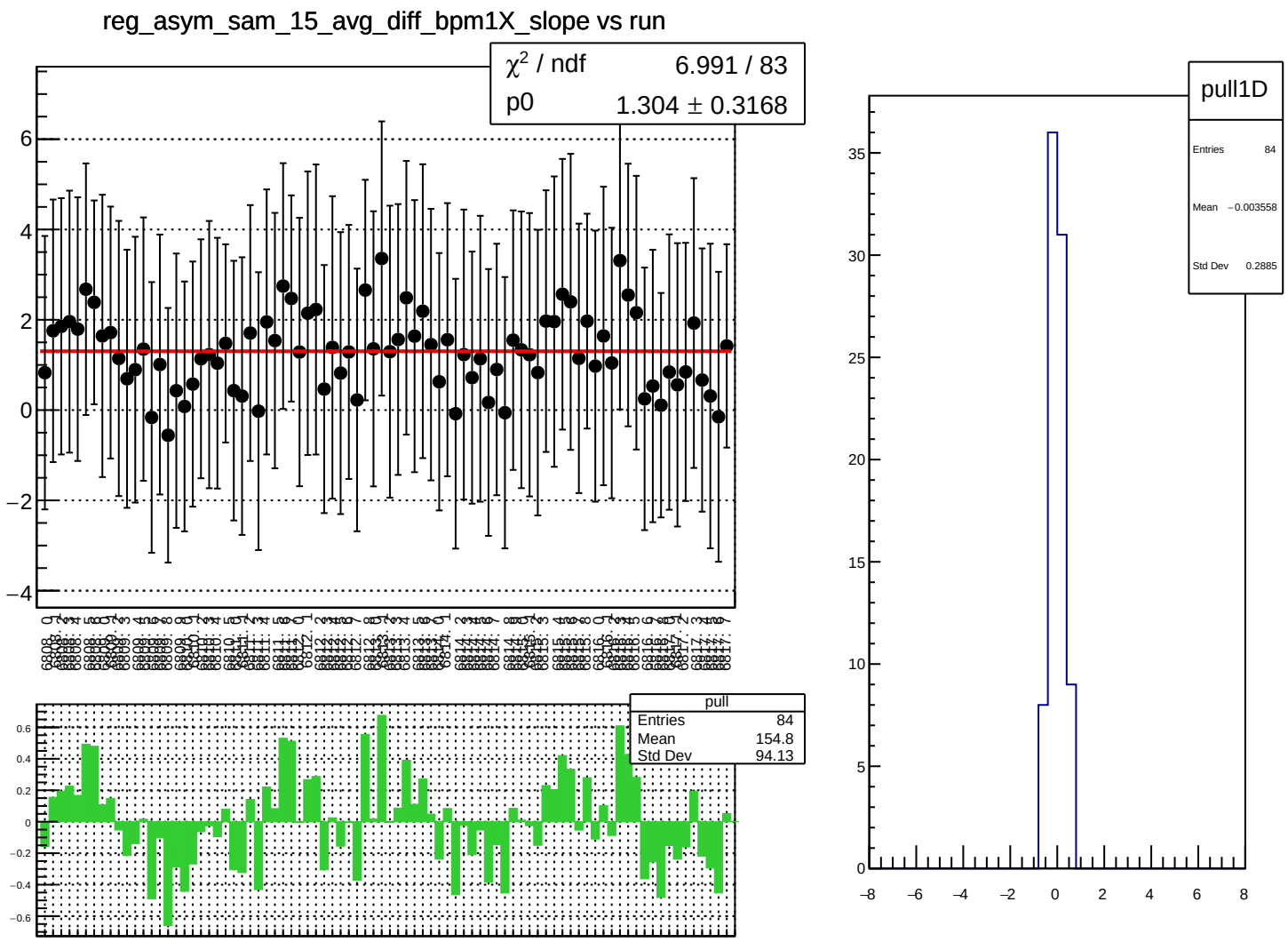

pull1D
Entries 84
Mean 0.0006102
Std Dev 0.6201

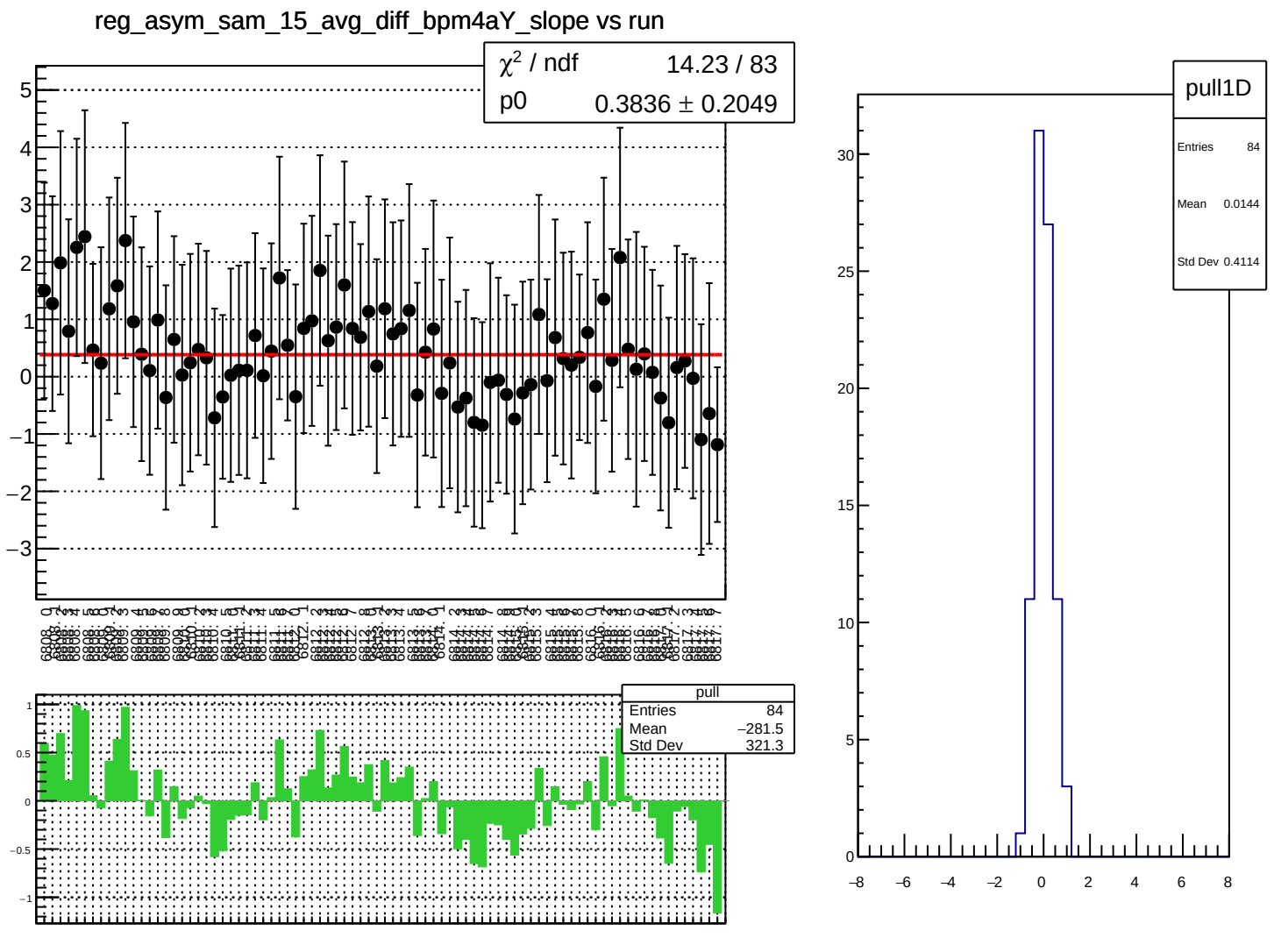

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 48.22 / 83
p0 2.315 ± 0.7086
pull
Entries 84
Mean −271.9
Std Dev 308.1

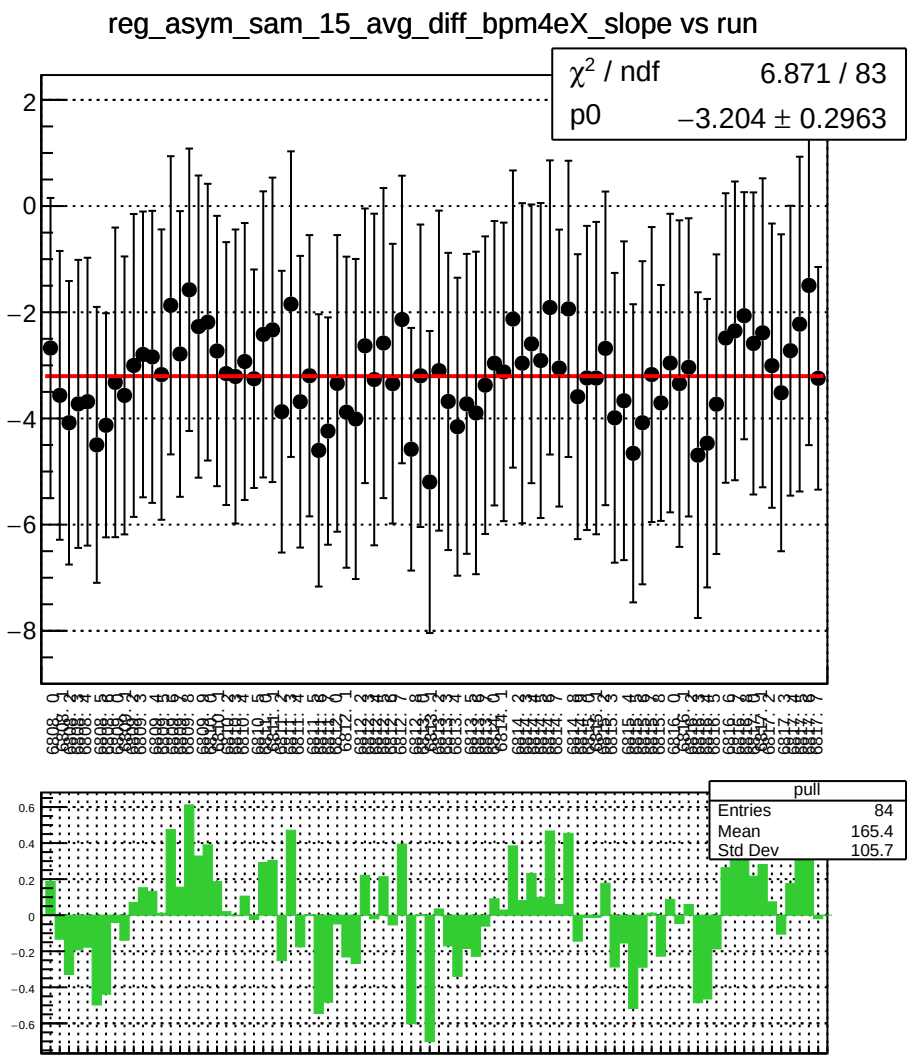

pull1D
Entries 84
Mean −0.001581
Std Dev 0.7576

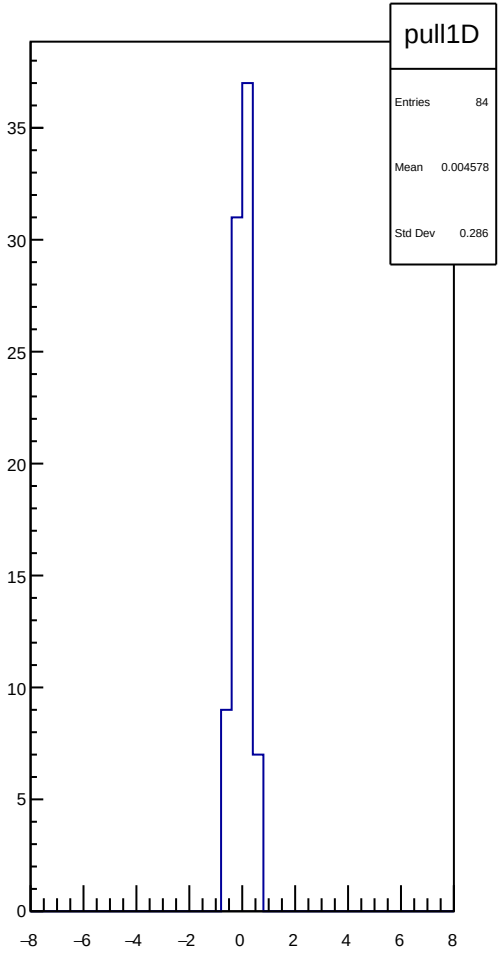

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 32.07 / 83
p0 −18.67 ± 0.03716
pull
Entries 84
Mean 209.6
Std Dev 145.3

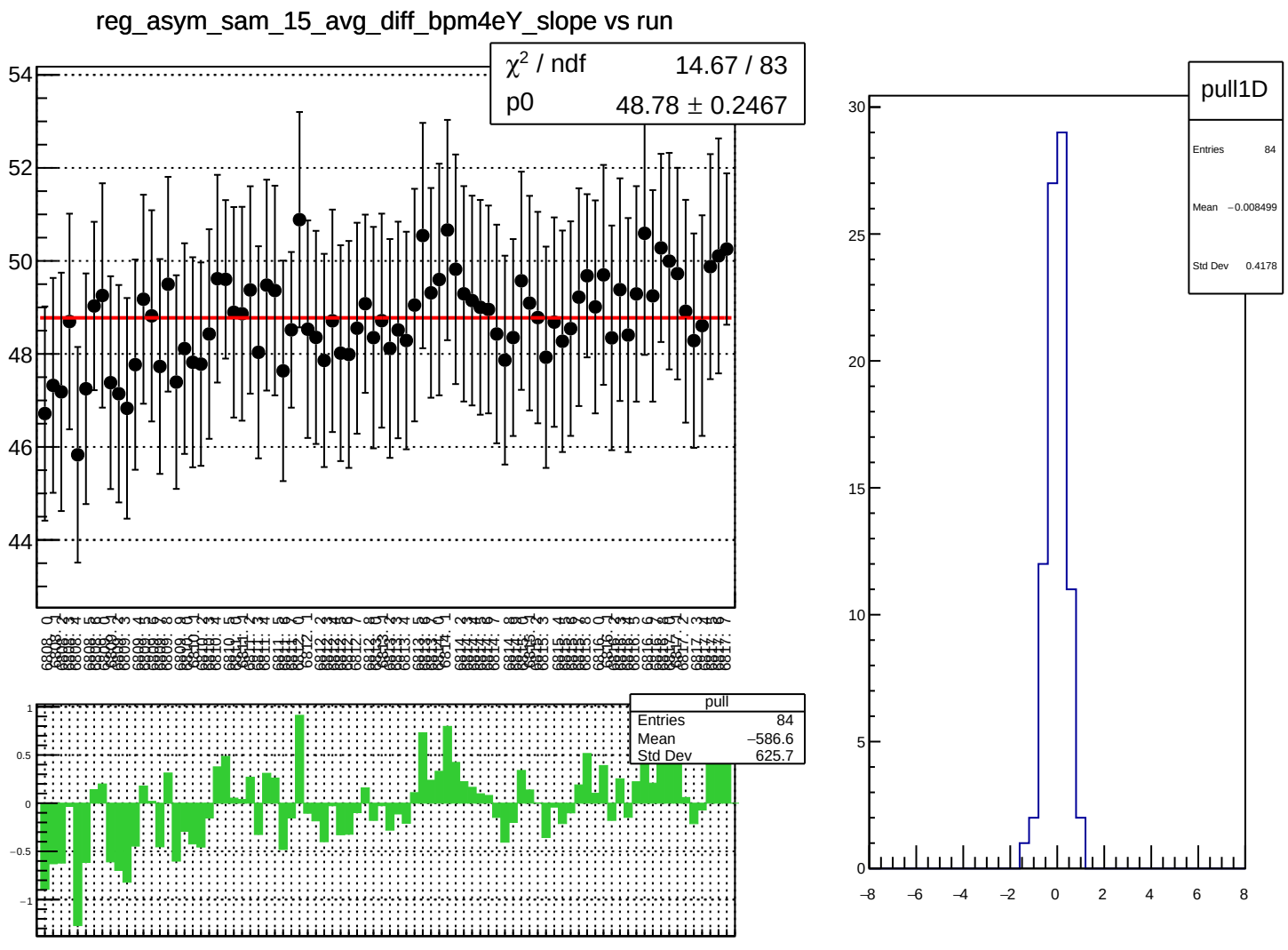

pull1D
Entries 84
Mean −0.005083
Std Dev 0.6179

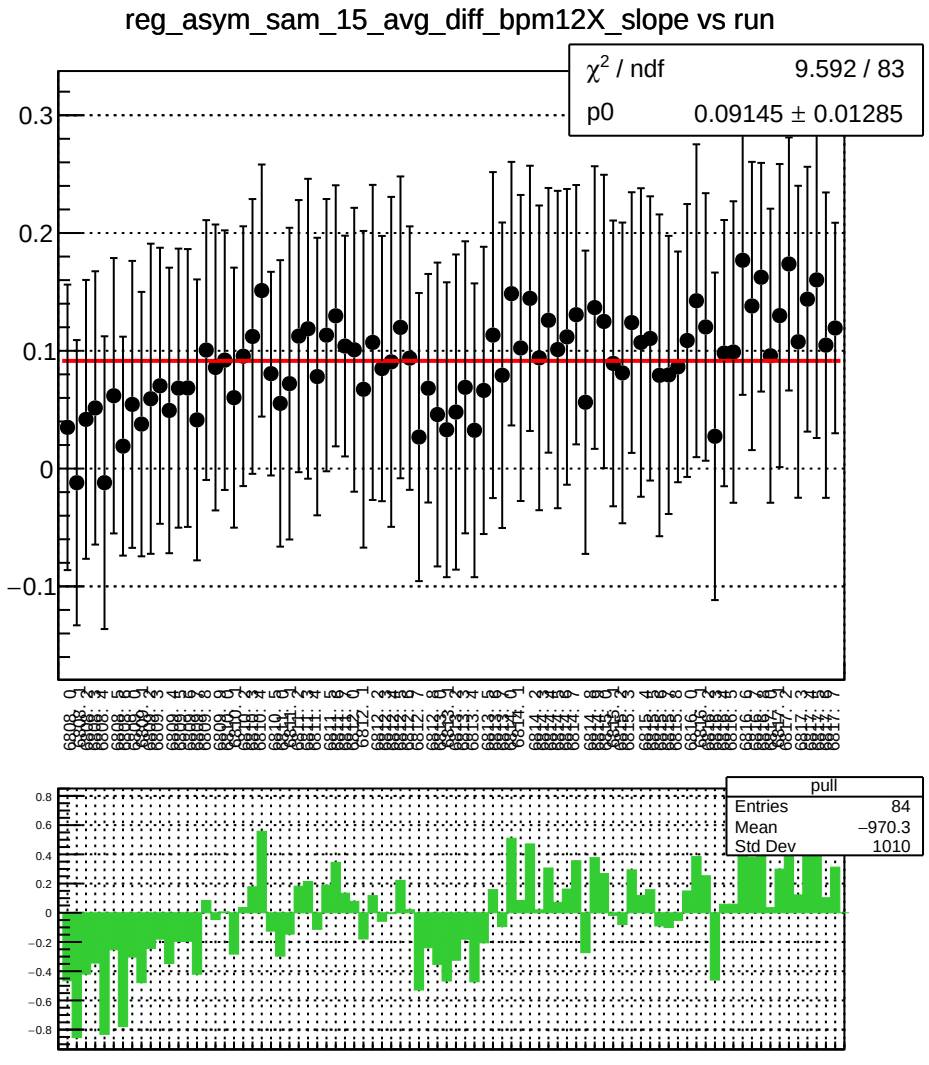

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 6.991 / 83
p0 1.304 ± 0.3168
pull
Entries 84
Mean 154.8
Std Dev 94.13
pull1D
Entries 84
Mean −0.003558
Std Dev 0.2885

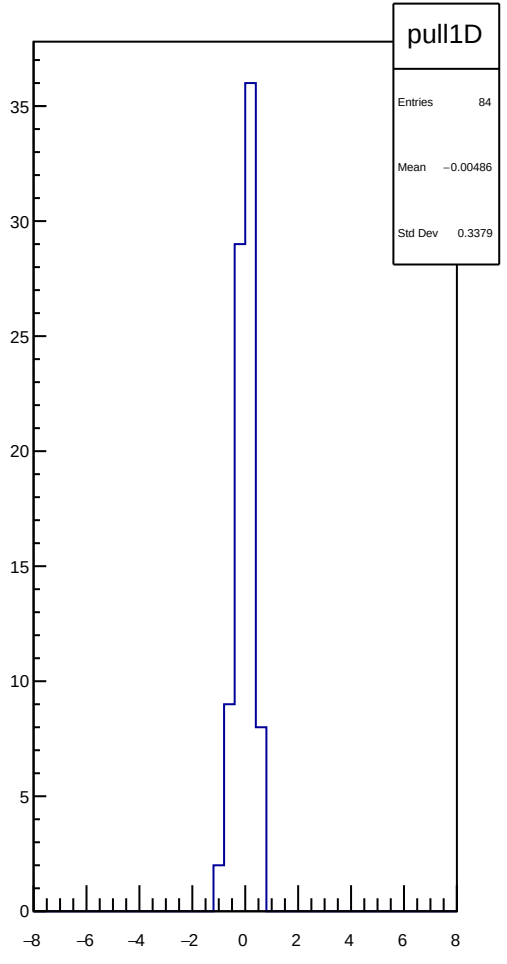

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 14.23 / 83
p0 0.3836 ± 0.2049
pull
Entries 84
Mean −281.5
Std Dev 321.3
pull1D
Entries 84
Mean 0.0144
Std Dev 0.4114

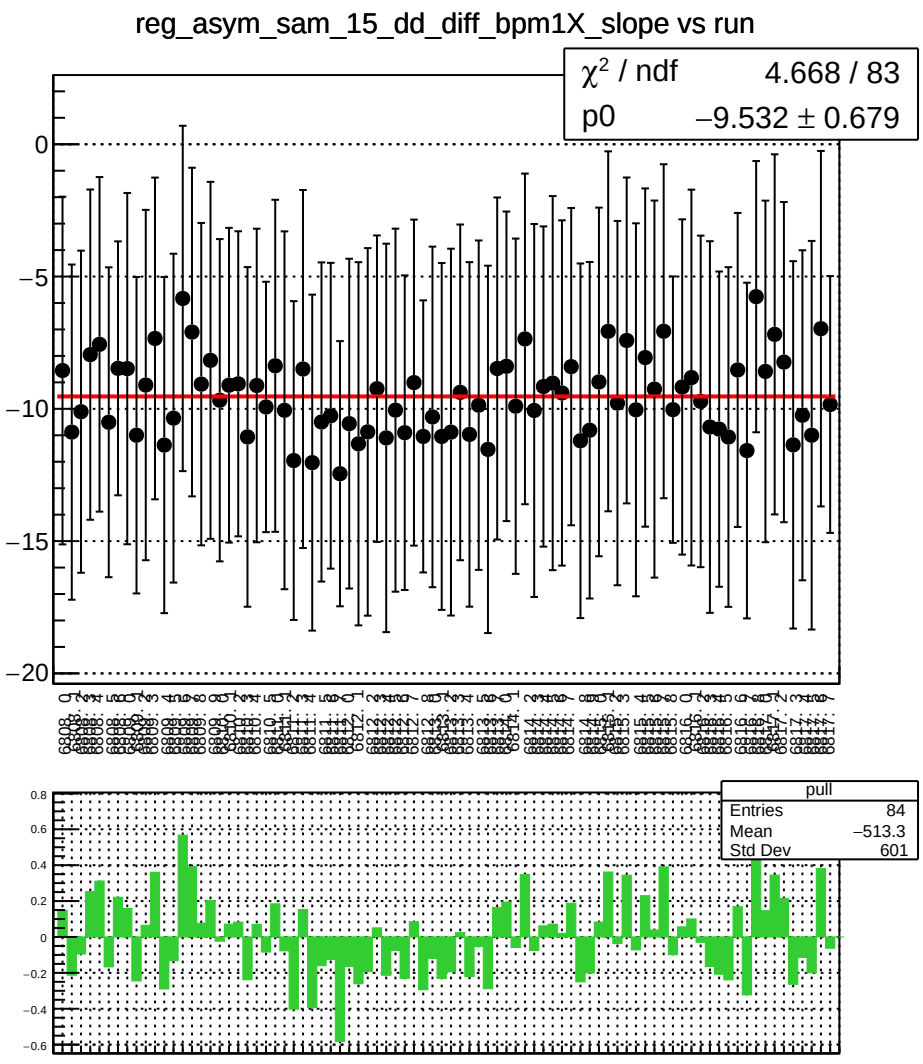

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.871 / 83
p0 −3.204 ± 0.2963
pull
Entries 84
Mean 165.4
Std Dev 105.7

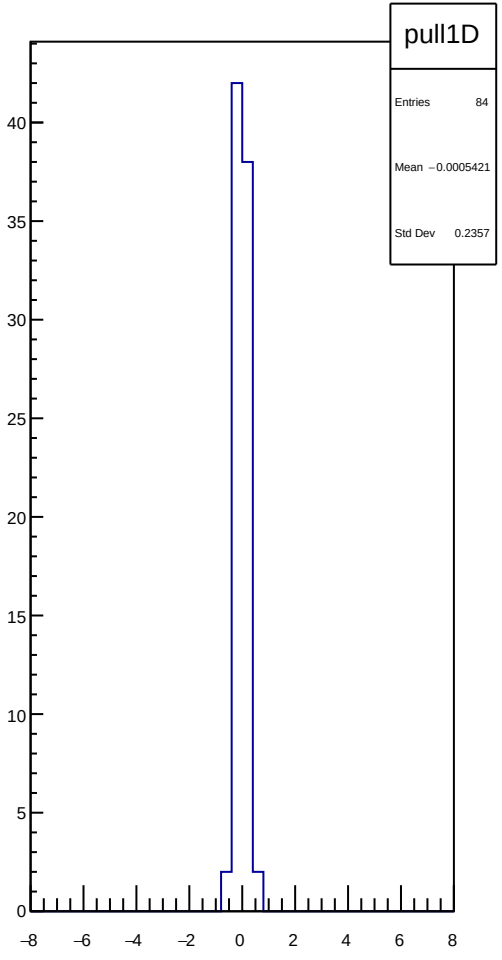

pull1D
Entries 84
Mean 0.004578
Std Dev 0.286

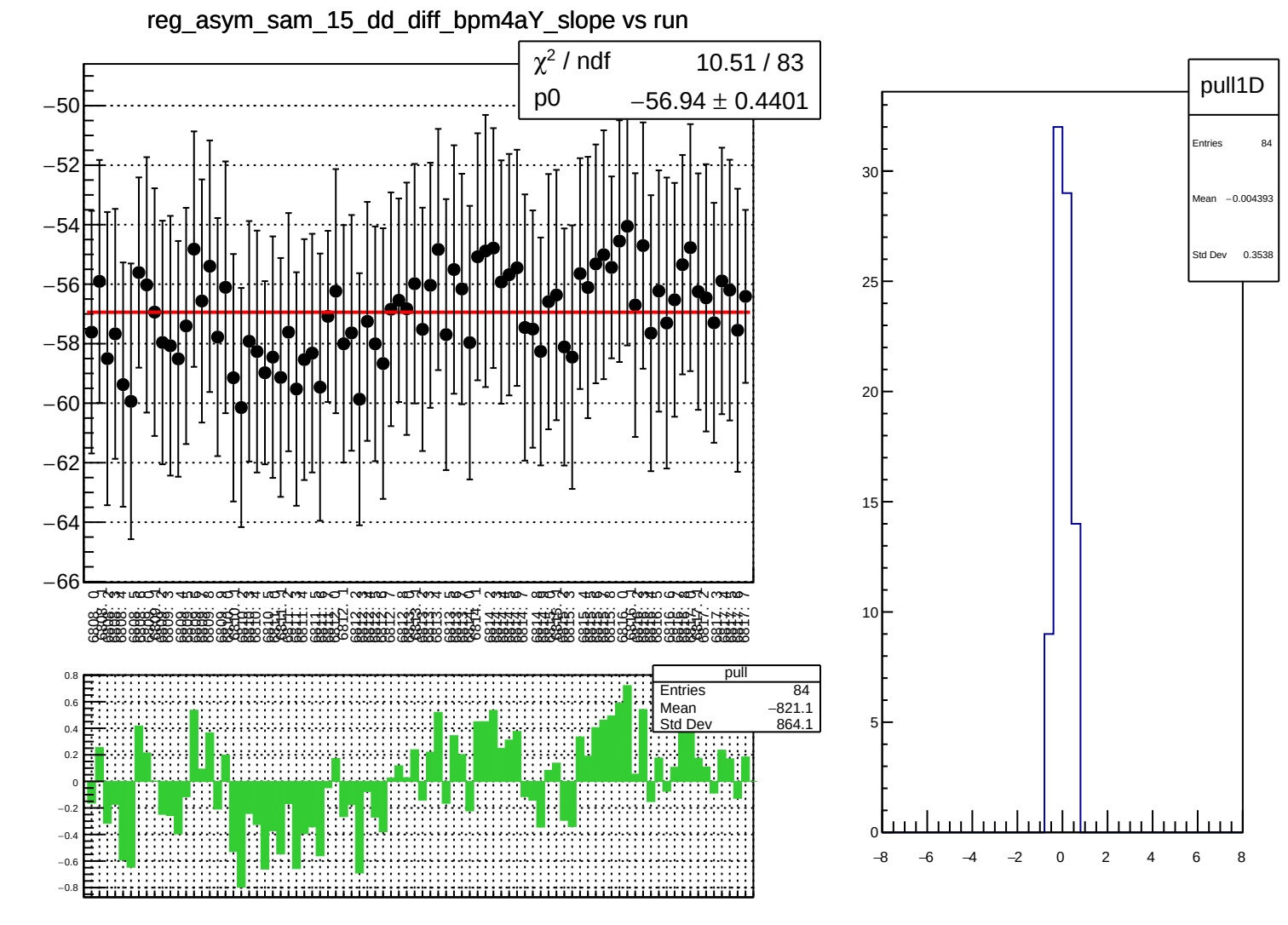

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.67 / 83
p0 48.78 ± 0.2467
54
52
50
48
46
44
pull
Entries 84
Mean −586.6
Std Dev 625.7
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.008499
Std Dev 0.4178
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

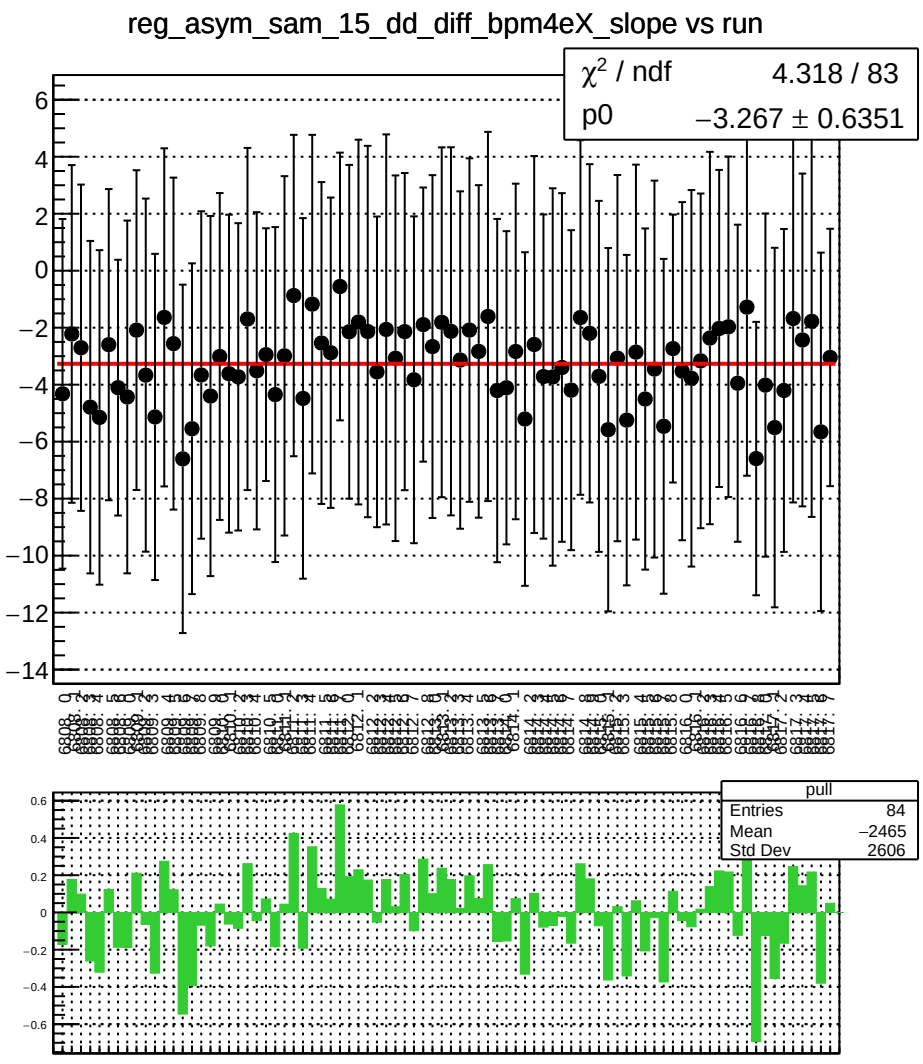

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 9.592 / 83
p0 0.09145 ± 0.01285
0.3
0.2
0.1
0
−0.1
pull
Entries 84
Mean −970.3
Std Dev 1010
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

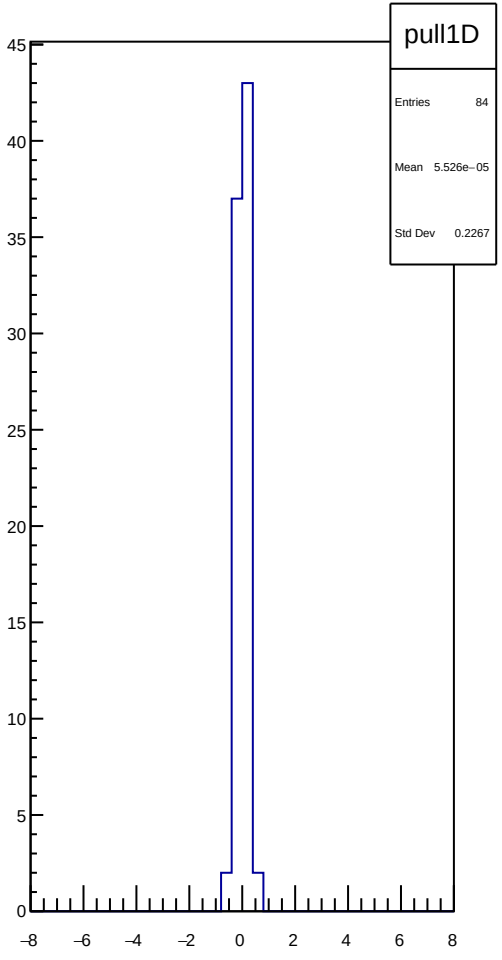

pull1D
Entries 84
Mean −0.00486
Std Dev 0.3379
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

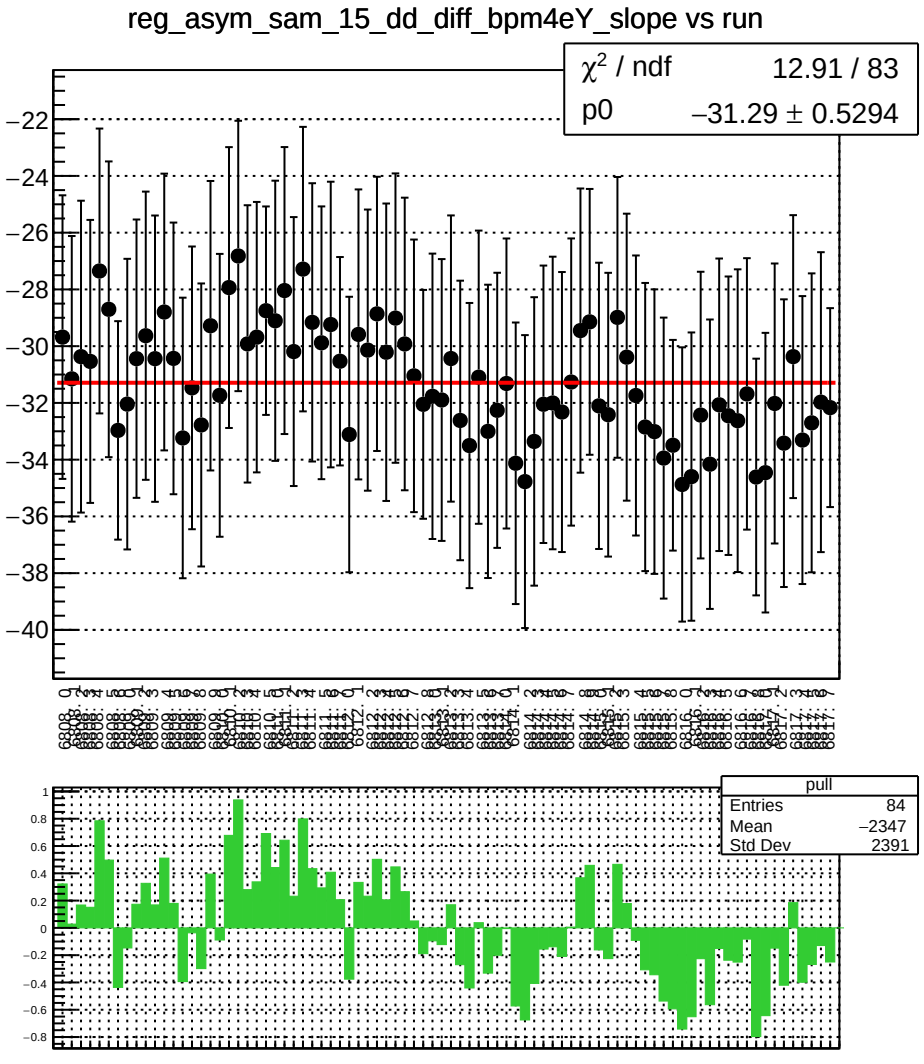

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 4.668 / 83
p0 −9.532 ± 0.679
pull
Entries 84
Mean −513.3
Std Dev 601

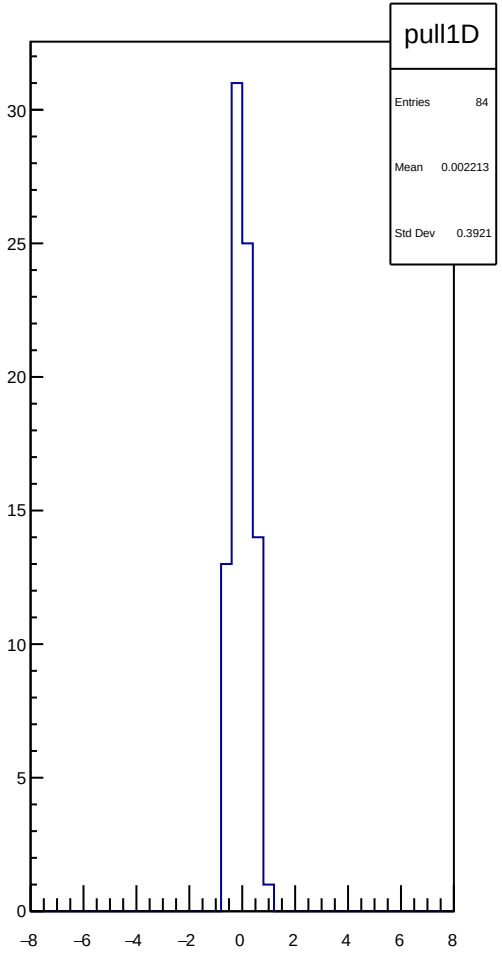

pull1D
Entries 84
Mean −0.0005421
Std Dev 0.2357

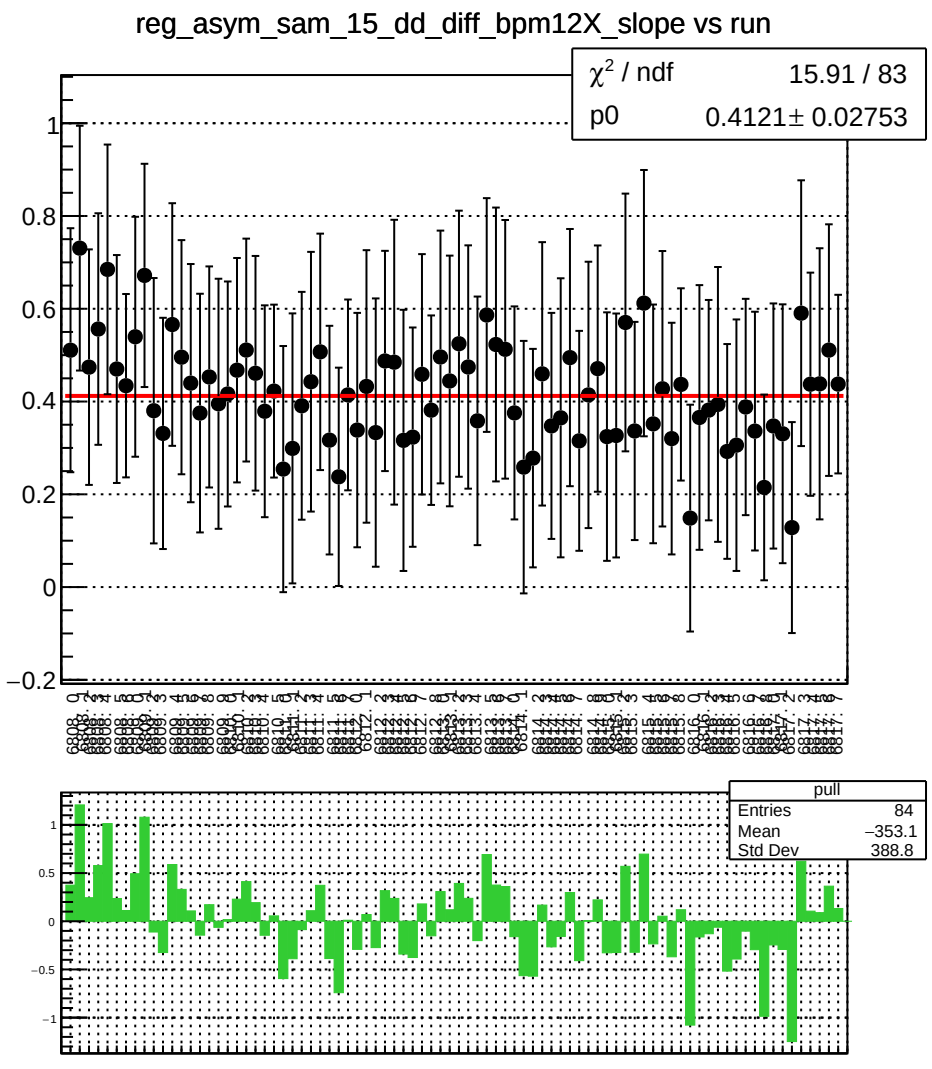

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.51 / 83
p0 −56.94 ± 0.4401
pull
Entries 84
Mean −821.1
Std Dev 864.1
pull1D
Entries 84
Mean −0.004393
Std Dev 0.3538

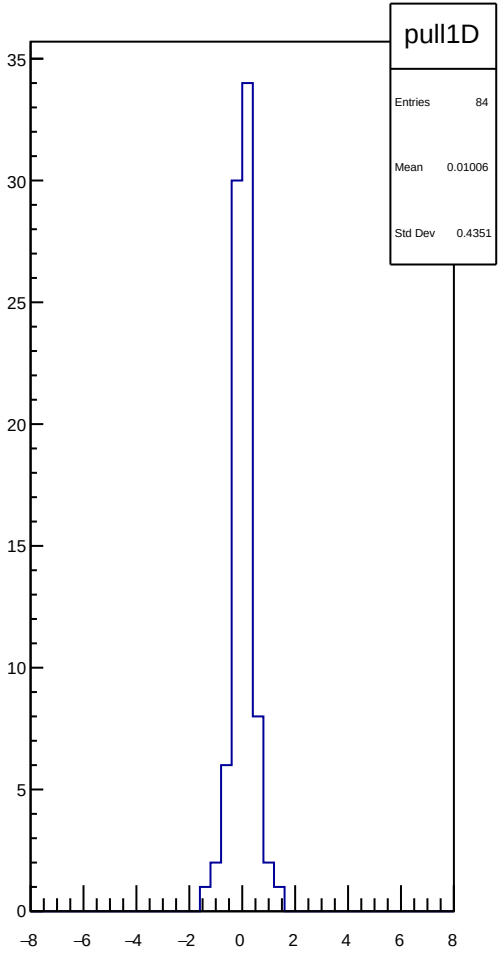

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.318 / 83
p0 −3.267 ± 0.6351
pull
Entries 84
Mean −2465
Std Dev 2606

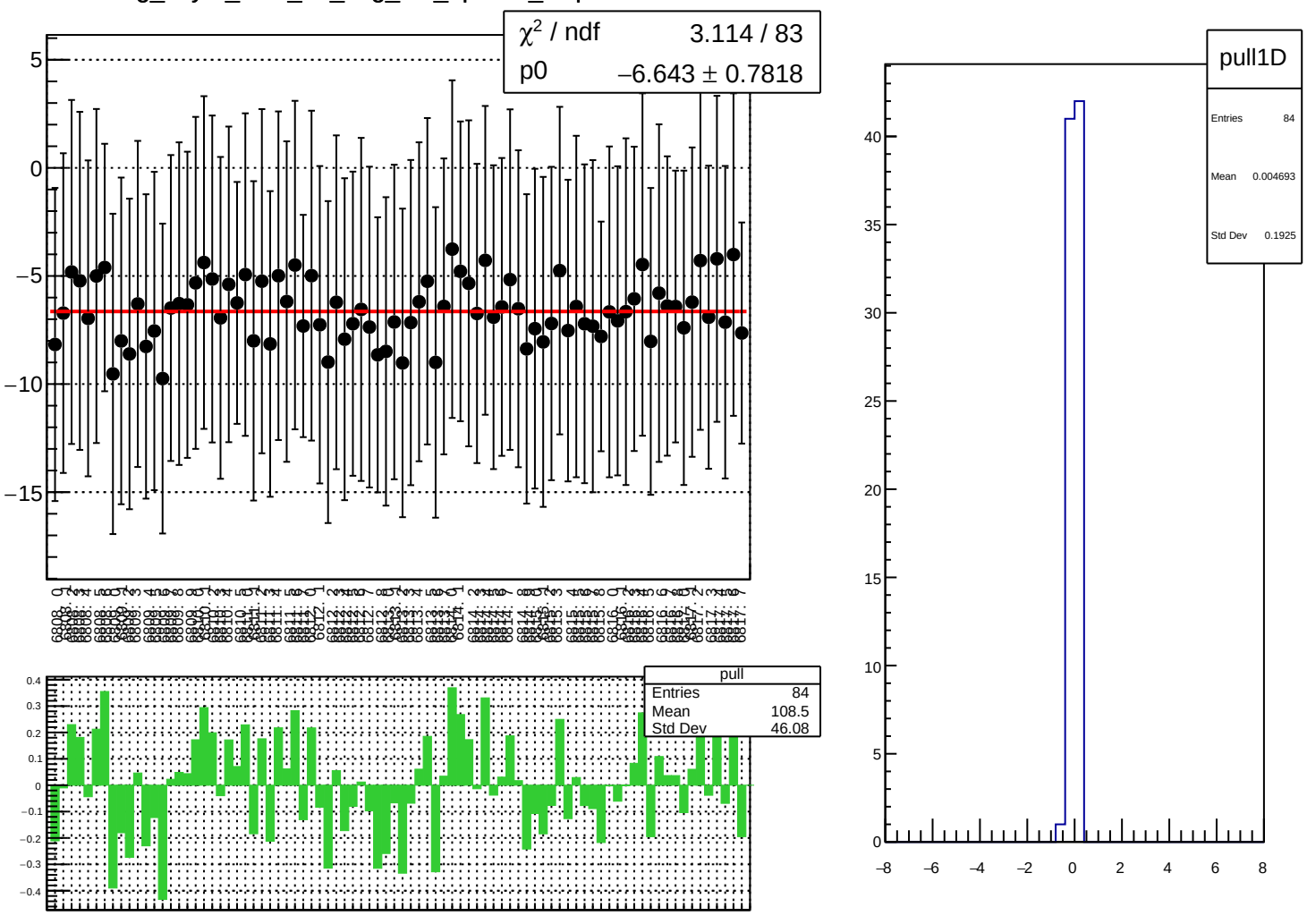

pull1D
Entries 84
Mean 5.526e−05
Std Dev 0.2267

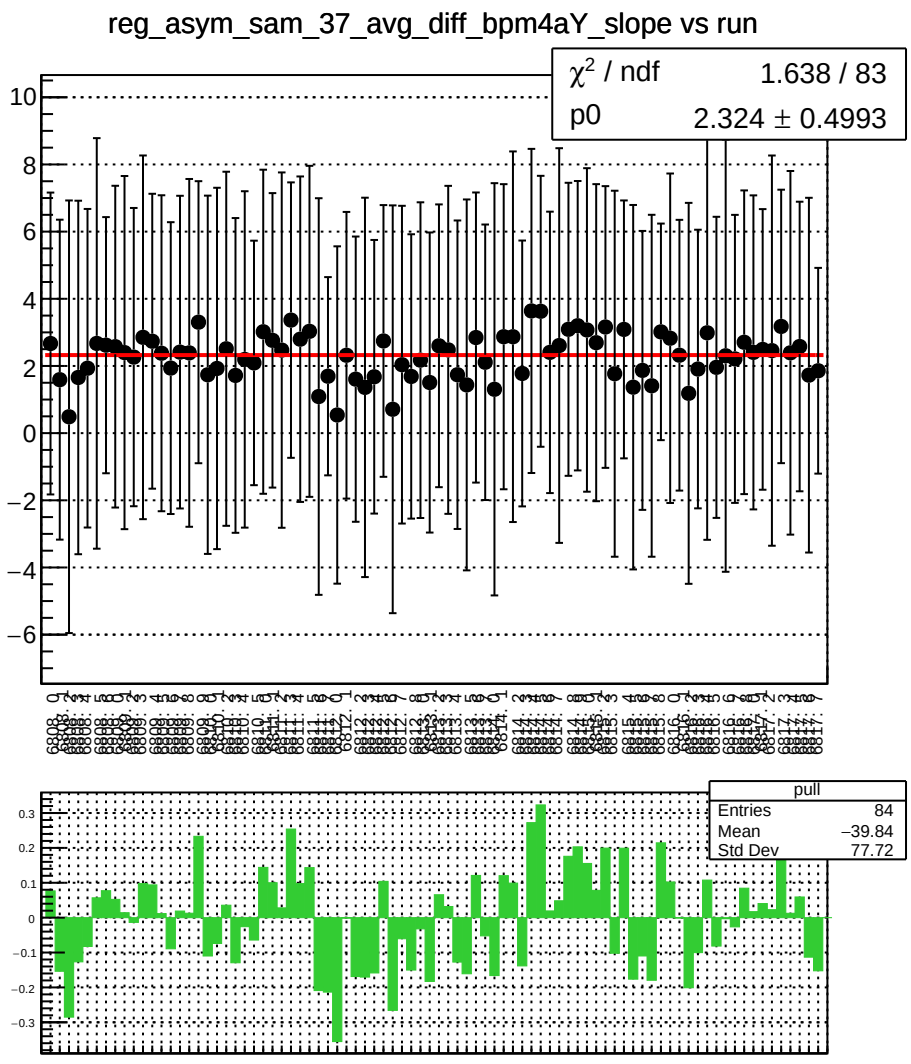

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 12.91 / 83
p0 −31.29 ± 0.5294
pull
Entries 84
Mean −2347
Std Dev 2391

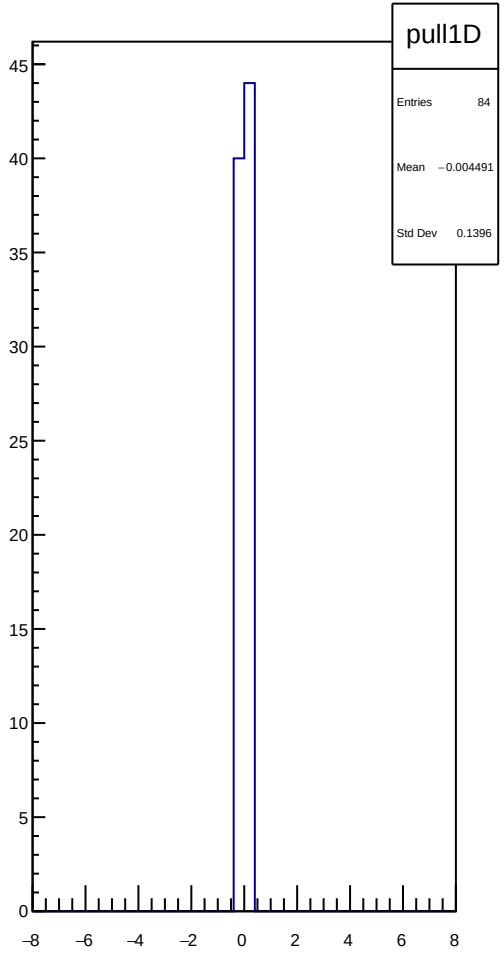

pull1D
Entries 84
Mean 0.002213
Std Dev 0.3921

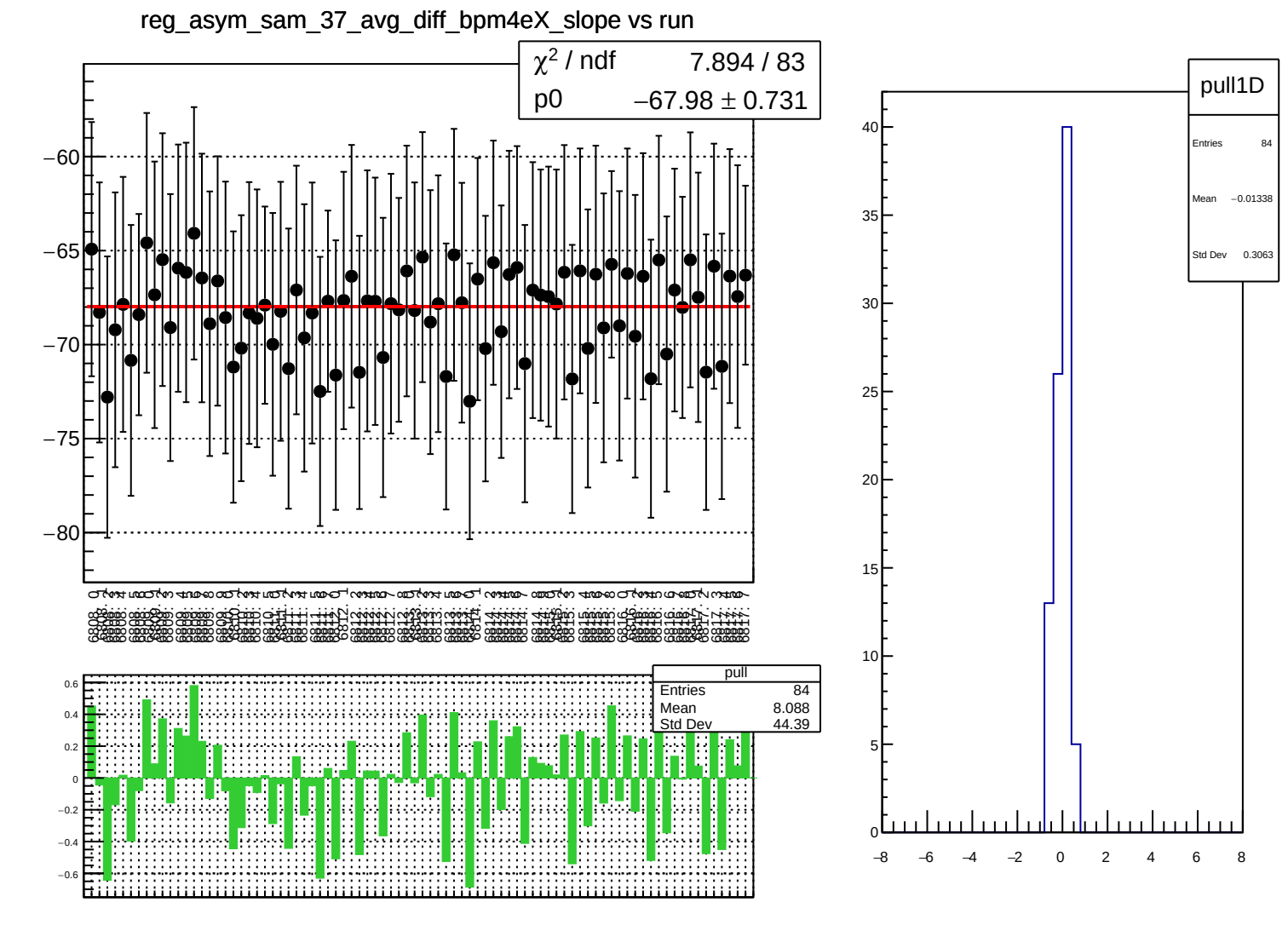

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 15.91 / 83
p0 0.4121± 0.02753
pull
Entries 84
Mean −353.1
Std Dev 388.8

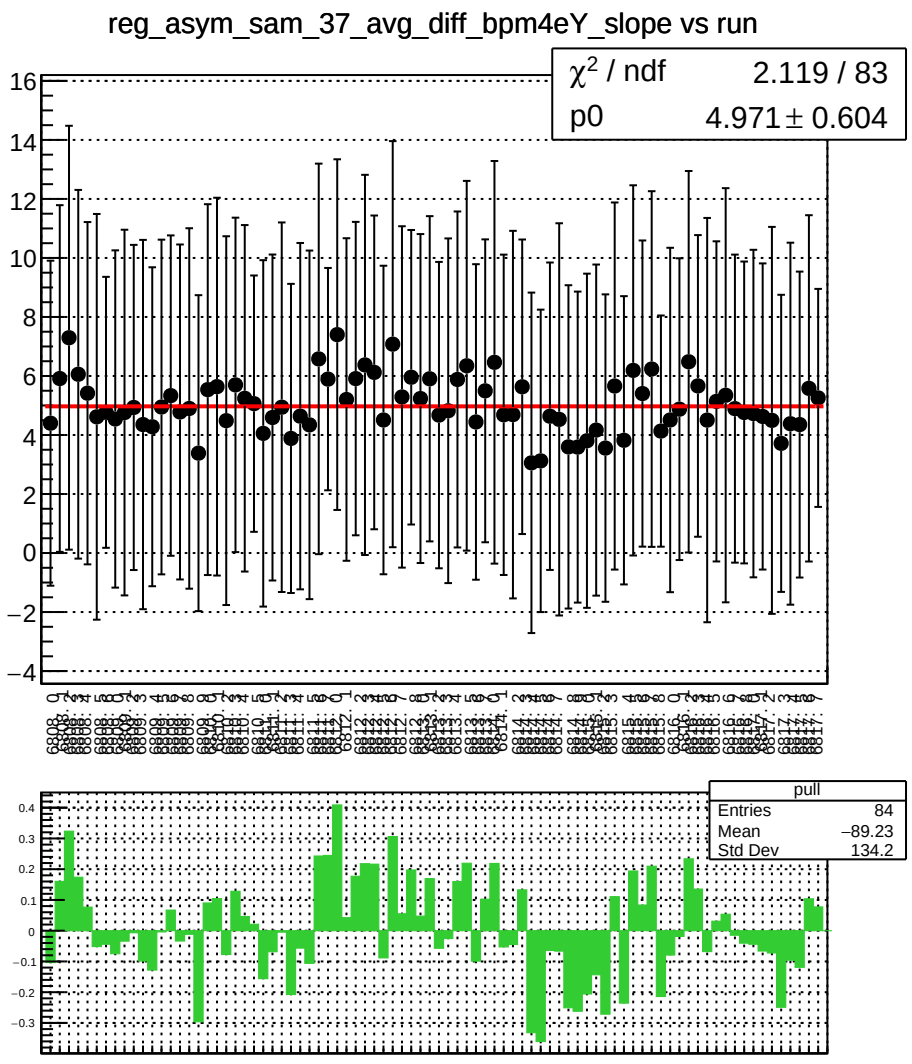

pull1D
Entries 84
Mean 0.01006
Std Dev 0.4351

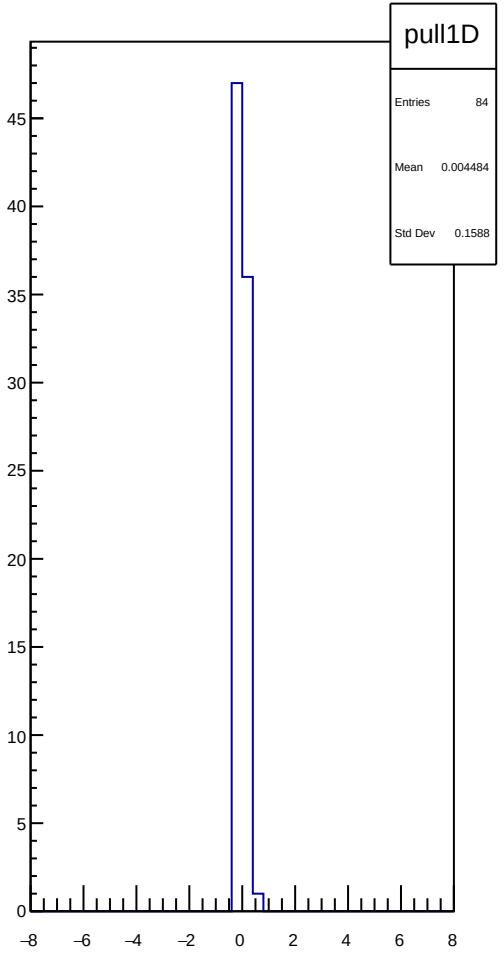

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 3.114 / 83
p0 −6.643 ± 0.7818
pull
Entries 84
Mean 108.5
Std Dev 46.08
pull1D
Entries 84
Mean 0.004693
Std Dev 0.1925

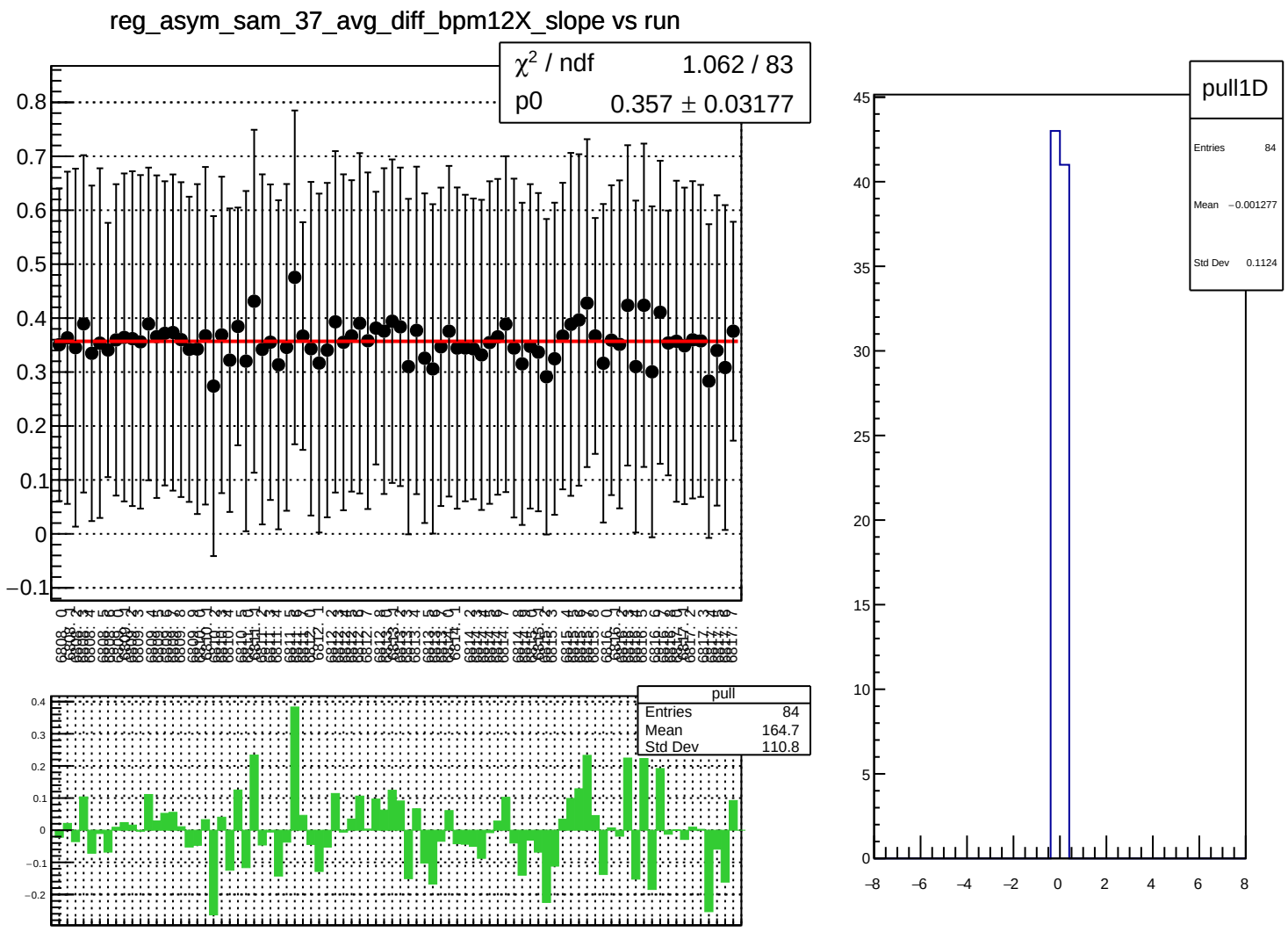

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.638 / 83
p0 2.324 ± 0.4993
pull
Entries 84
Mean −39.84
Std Dev 77.72

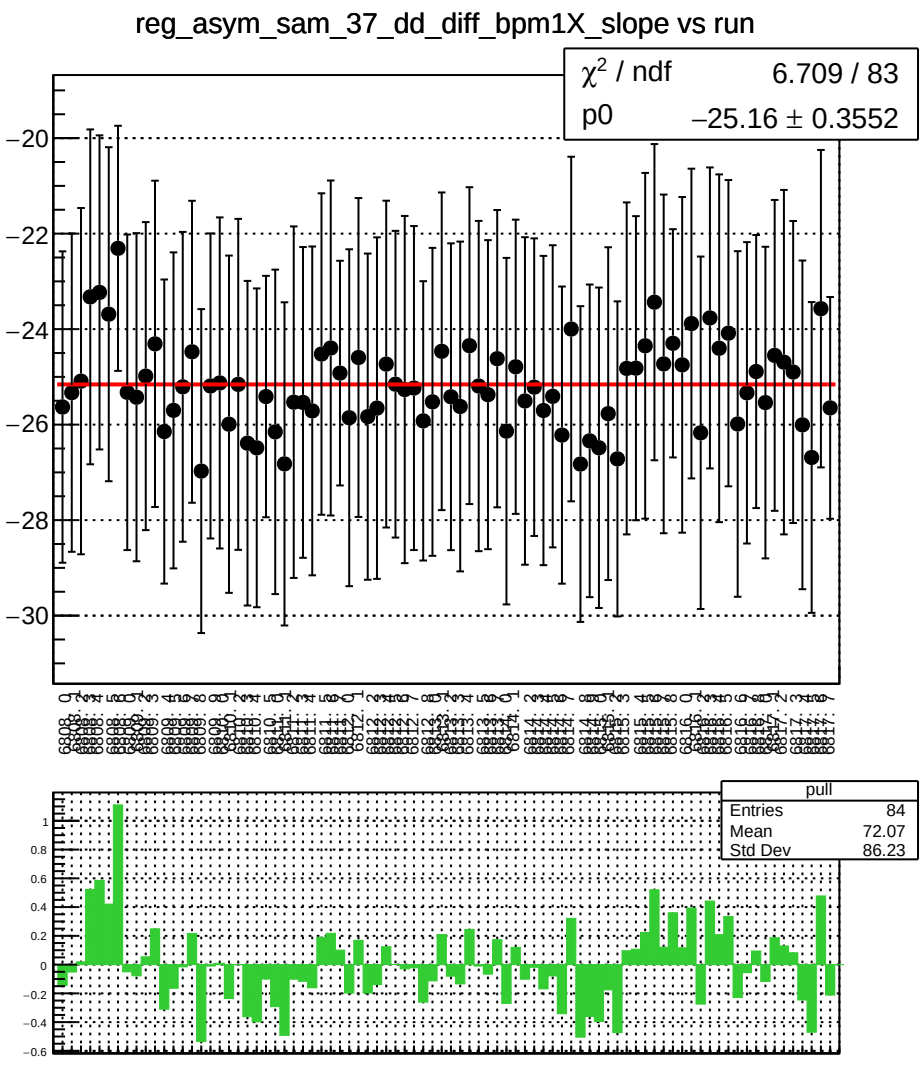

pull1D
Entries 84
Mean −0.004491
Std Dev 0.1396

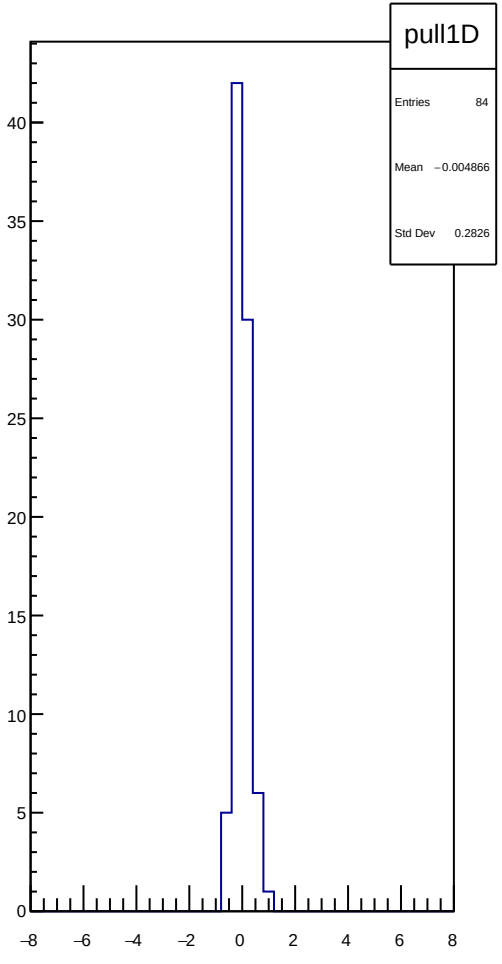

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.894 / 83
p0 −67.98 ± 0.731
−60
−65
−70
−75
−80
pull
Entries 84
Mean 8.088
Std Dev 44.39
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 84
Mean −0.01338
Std Dev 0.3063
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

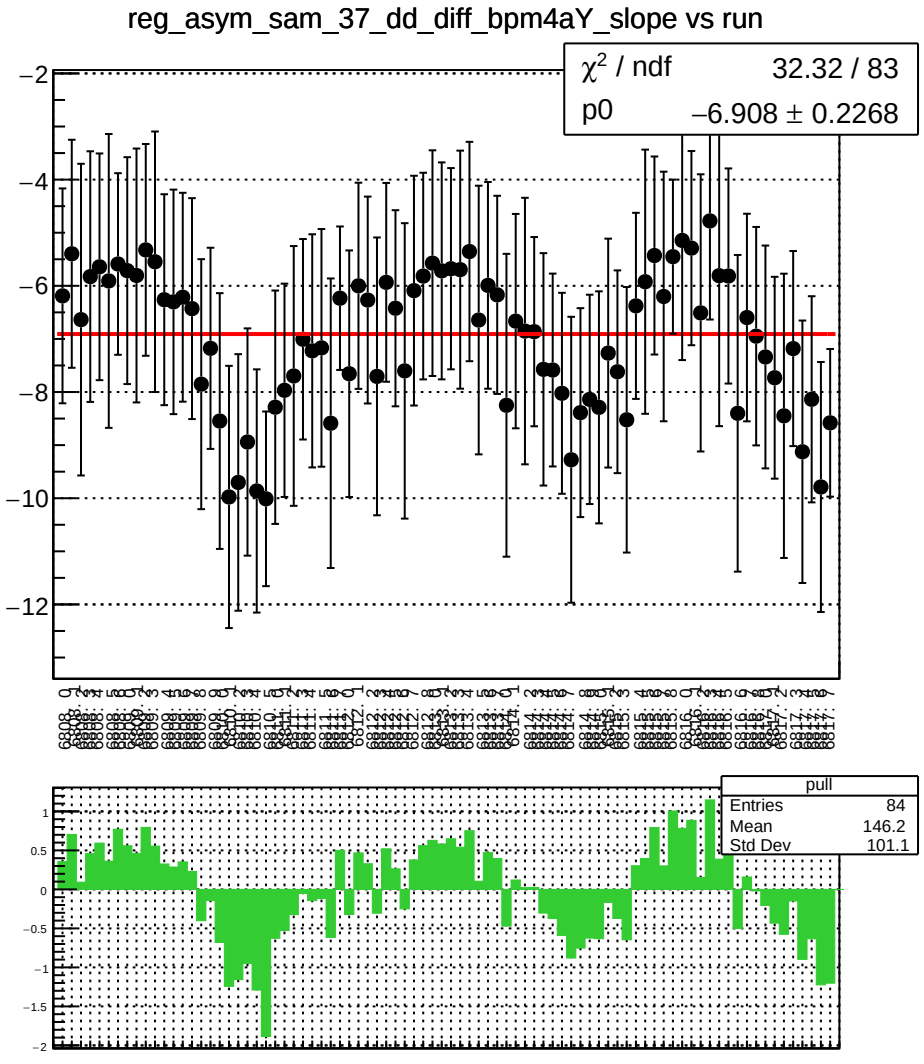

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.119 / 83
p0 4.971 ± 0.604
pull
Entries 84
Mean −89.23
Std Dev 134.2

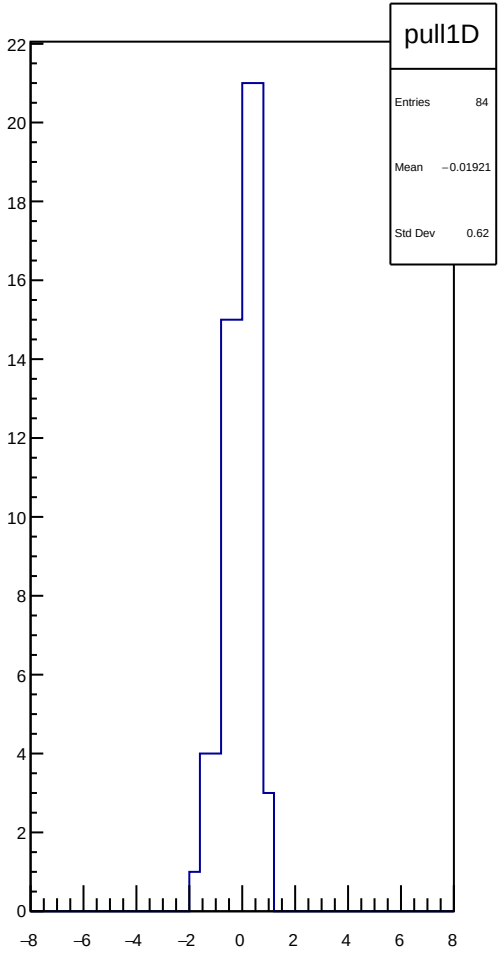

pull1D
Entries 84
Mean 0.004484
Std Dev 0.1588

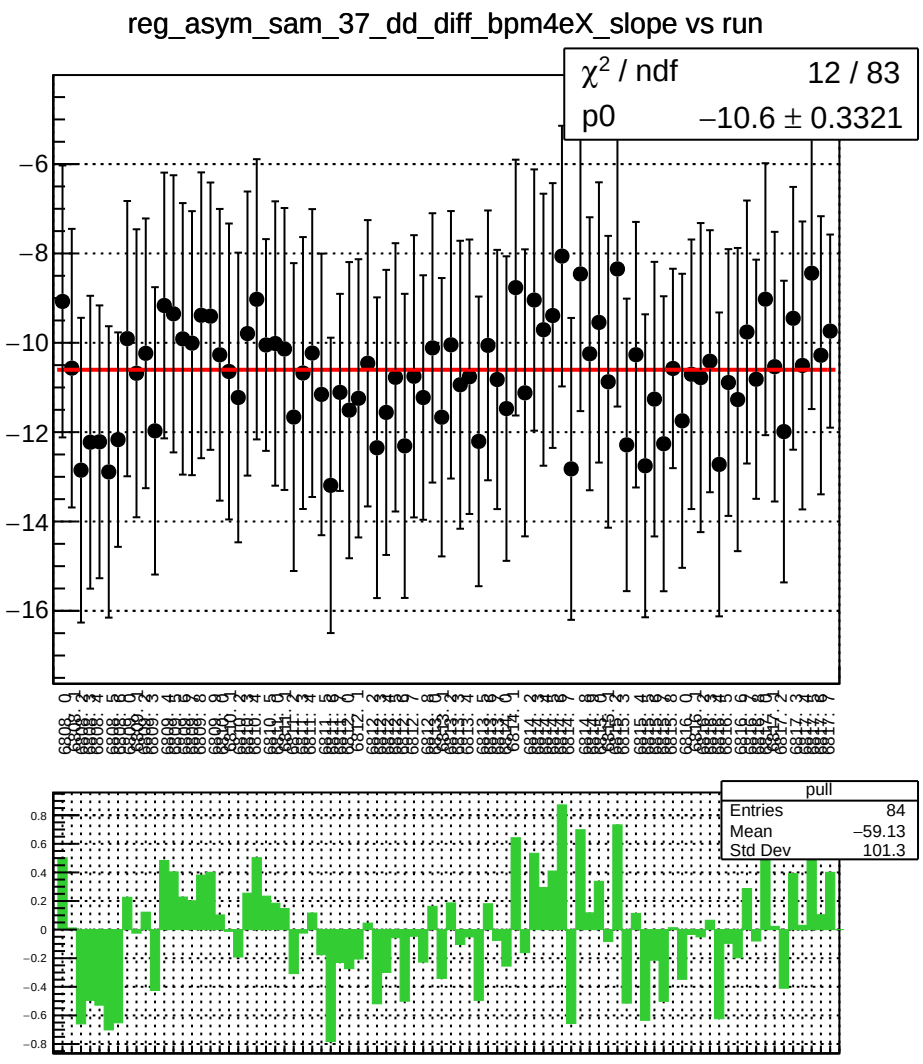

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 1.062 / 83
p0 0.357 ± 0.03177
pull
Entries 84
Mean 164.7
Std Dev 110.8
pull1D
Entries 84
Mean −0.001277
Std Dev 0.1124

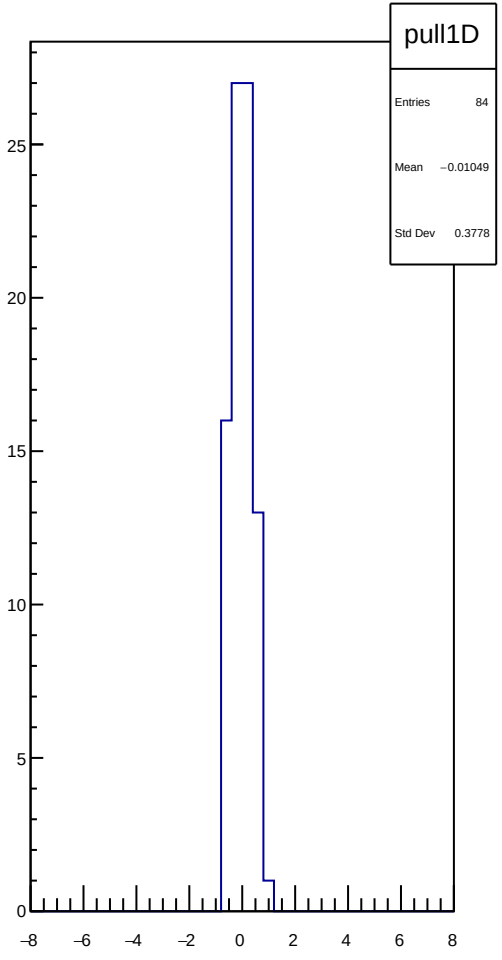

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 6.709 / 83
p0 −25.16 ± 0.3552
pull
Entries 84
Mean 72.07
Std Dev 86.23

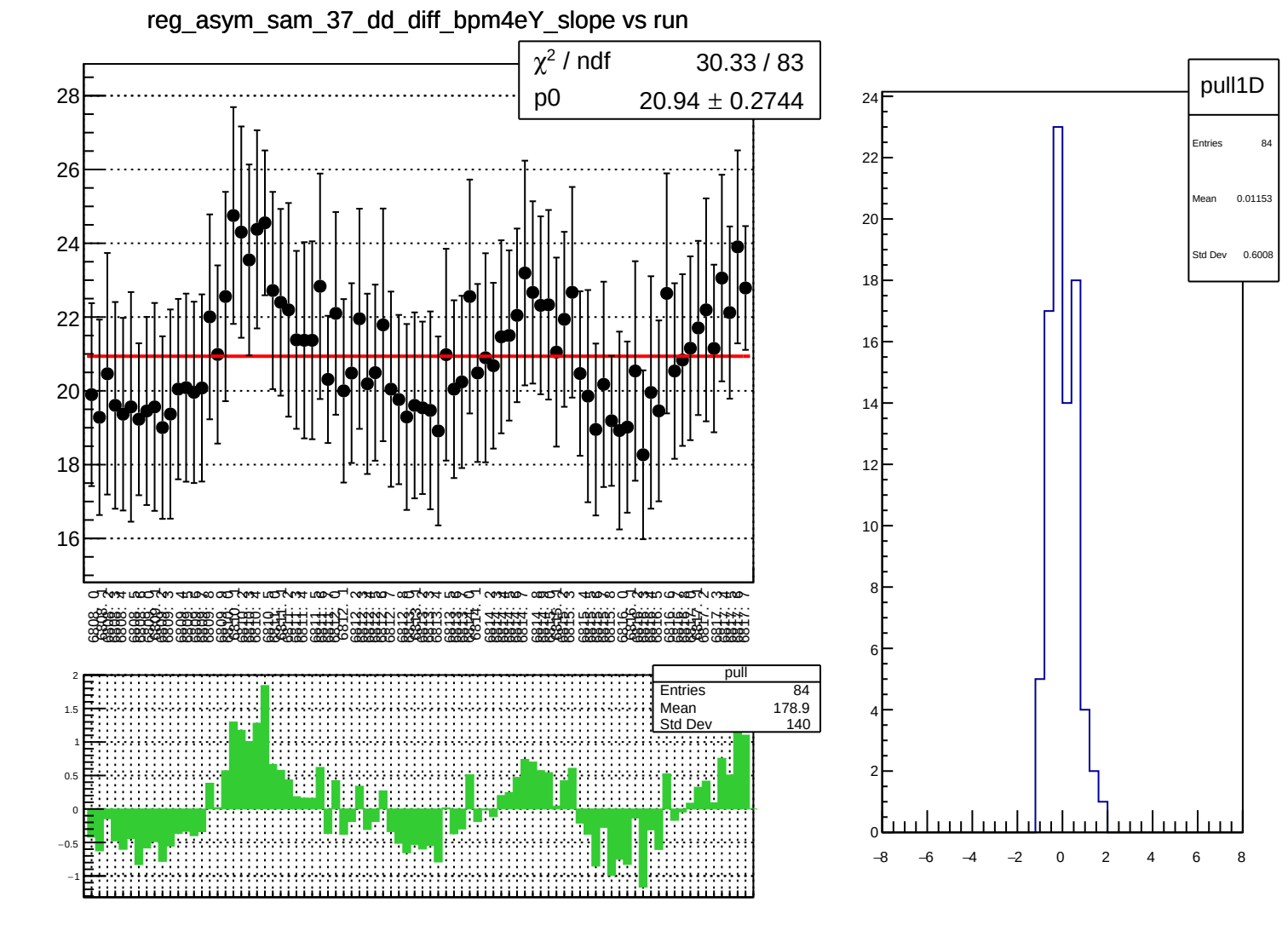

pull1D
Entries 84
Mean −0.004866
Std Dev 0.2826

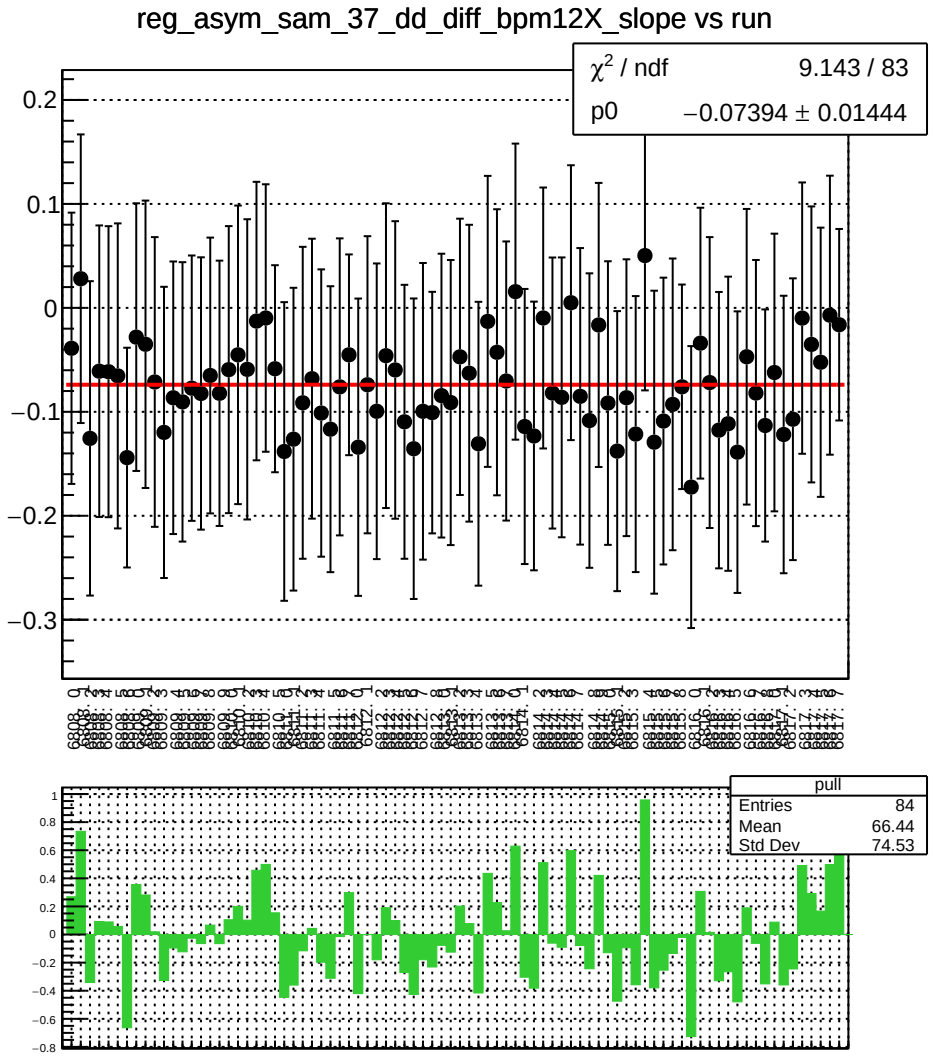

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 32.32 / 83
p0 −6.908 ± 0.2268
pull
Entries 84
Mean 146.2
Std Dev 101.1

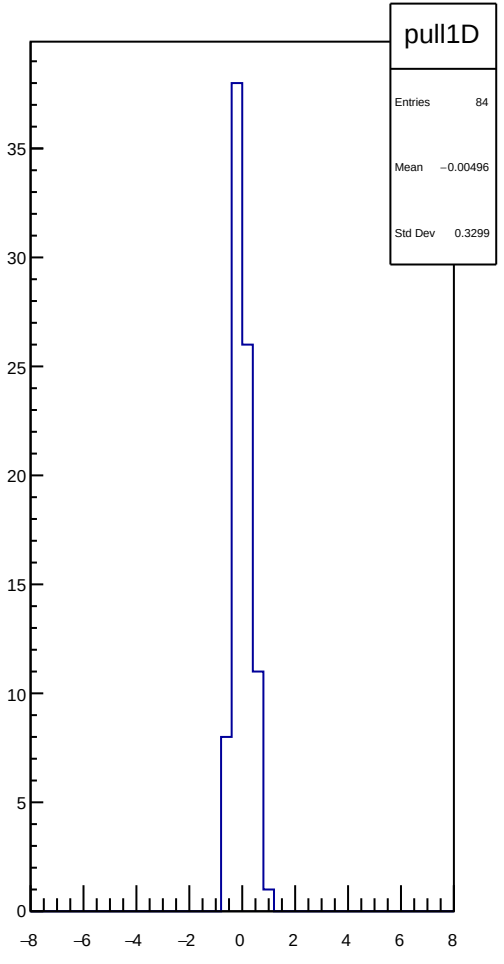

pull1D
Entries 84
Mean −0.01921
Std Dev 0.62

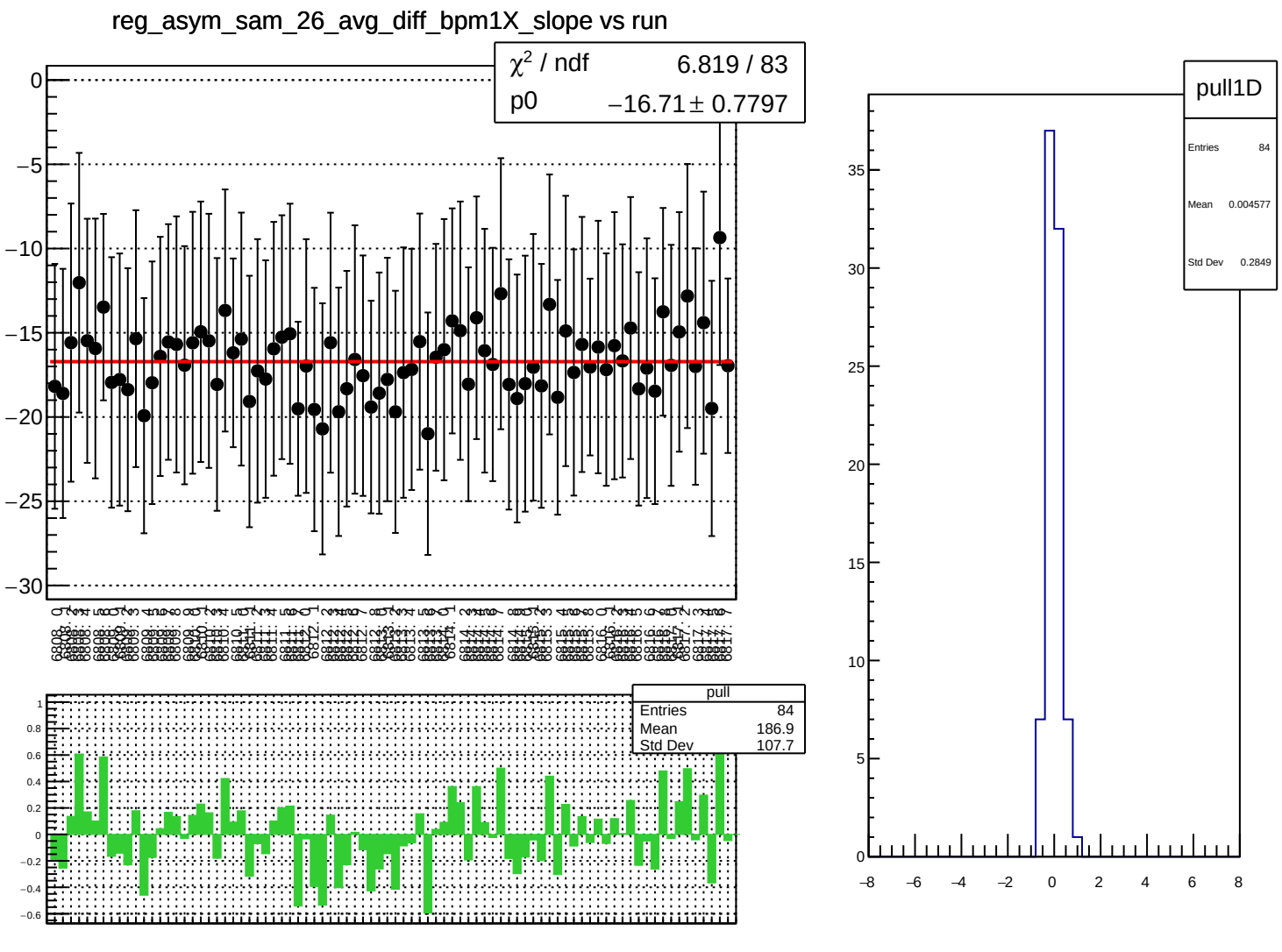

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 12 / 83
p0 −10.6 ± 0.3321
pull
Entries 84
Mean −59.13
Std Dev 101.3

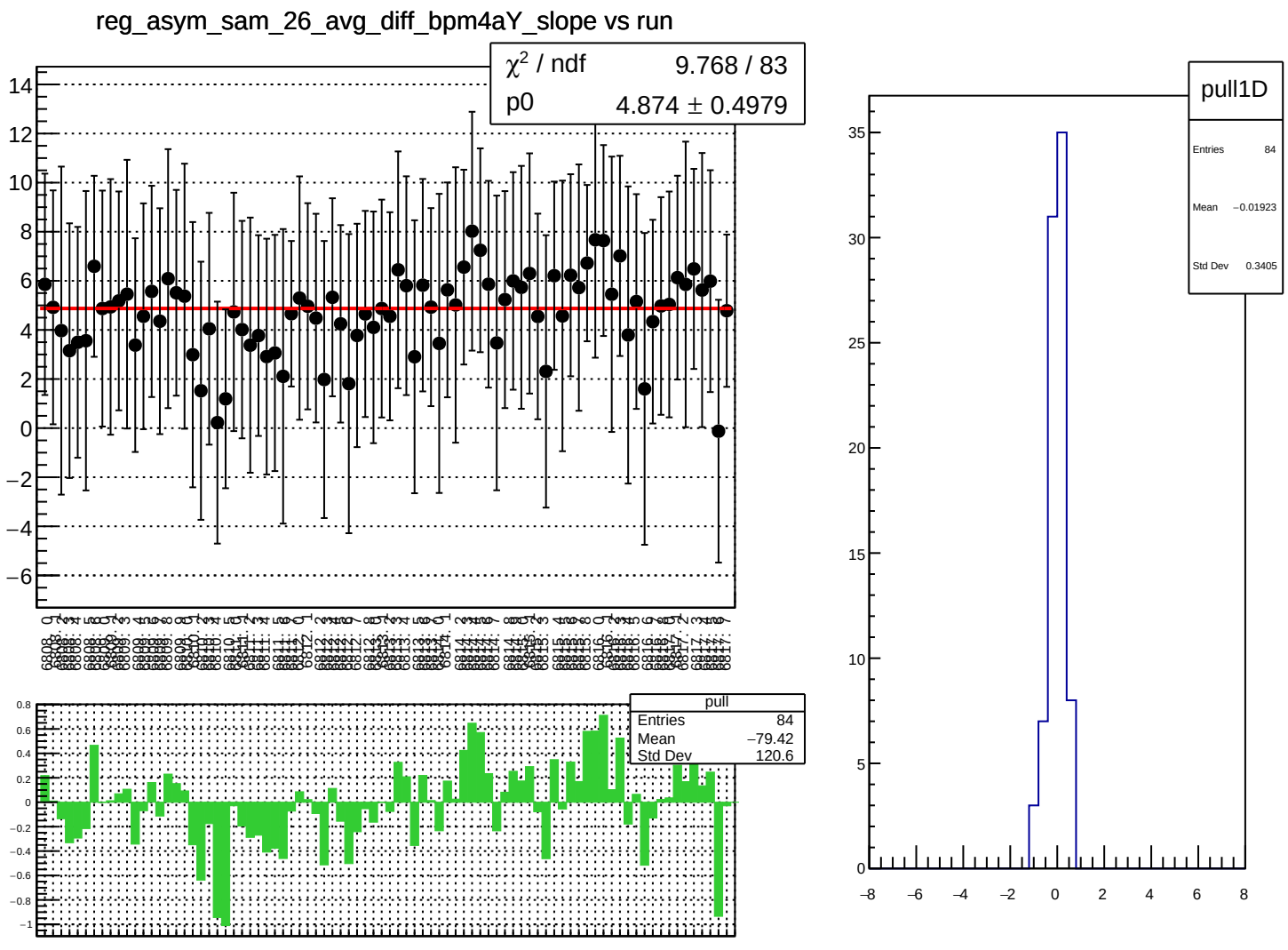

pull1D
Entries 84
Mean −0.01049
Std Dev 0.3778

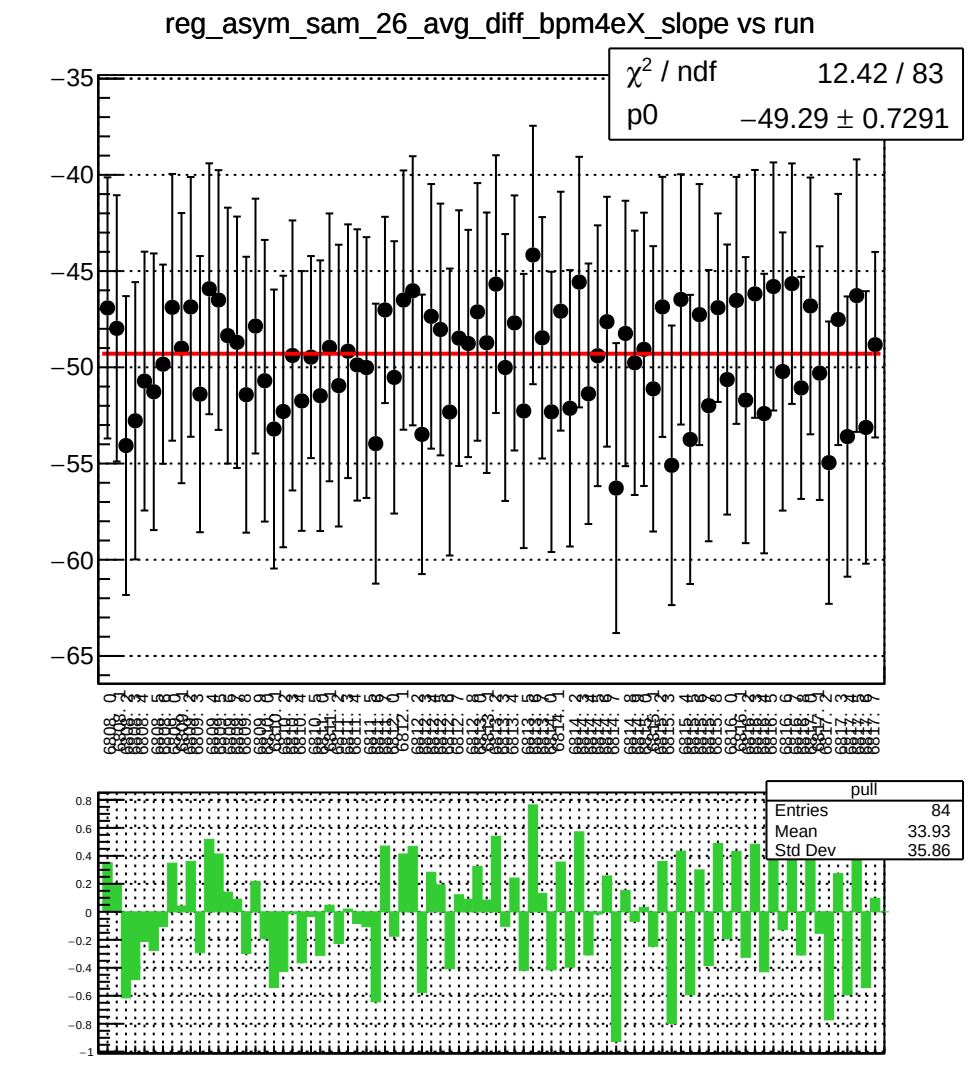

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 30.33 / 83
p0 20.94 ± 0.2744
pull
Entries 84
Mean 178.9
Std Dev 140
pull1D
Entries 84
Mean 0.01153
Std Dev 0.6008

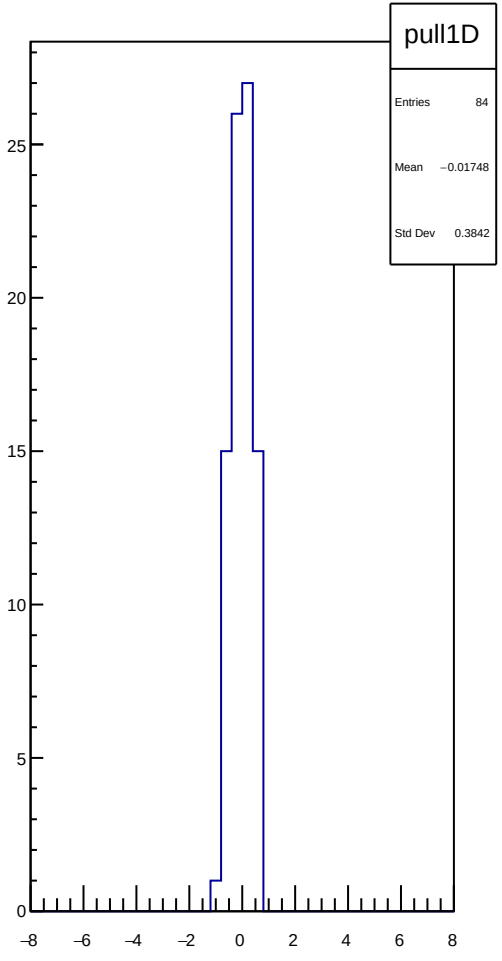

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 9.143 / 83
p0 −0.07394 ± 0.01444
pull
Entries 84
Mean 66.44
Std Dev 74.53

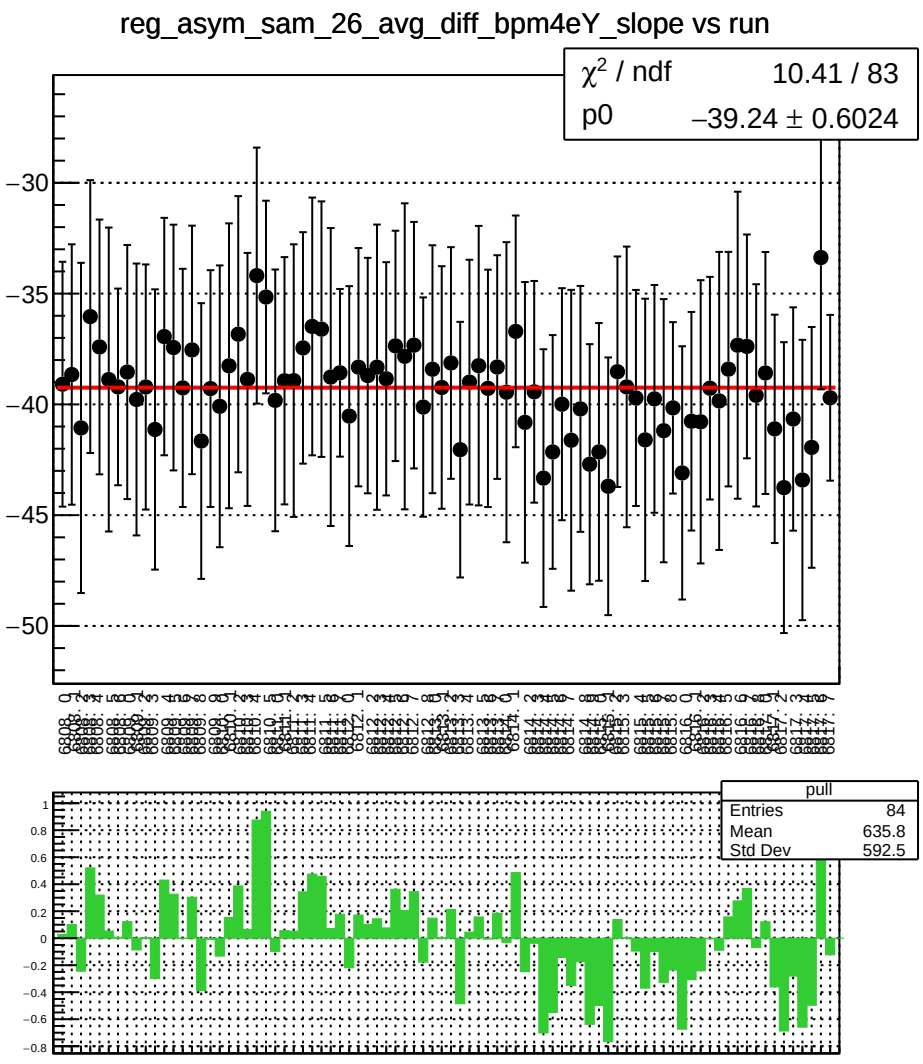

pull1D
Entries 84
Mean −0.00496
Std Dev 0.3299

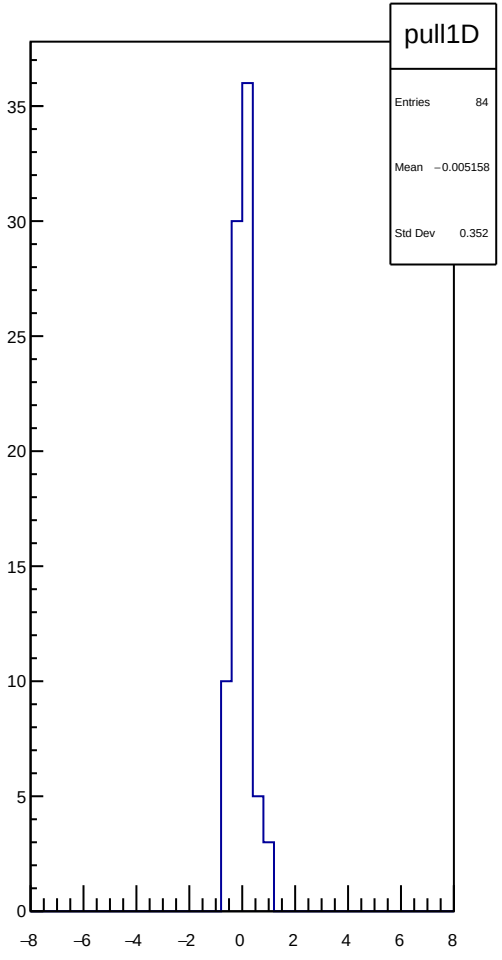

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 6.819 / 83
p0 −16.71 ± 0.7797
pull
Entries 84
Mean 186.9
Std Dev 107.7
pull1D
Entries 84
Mean 0.004577
Std Dev 0.2849

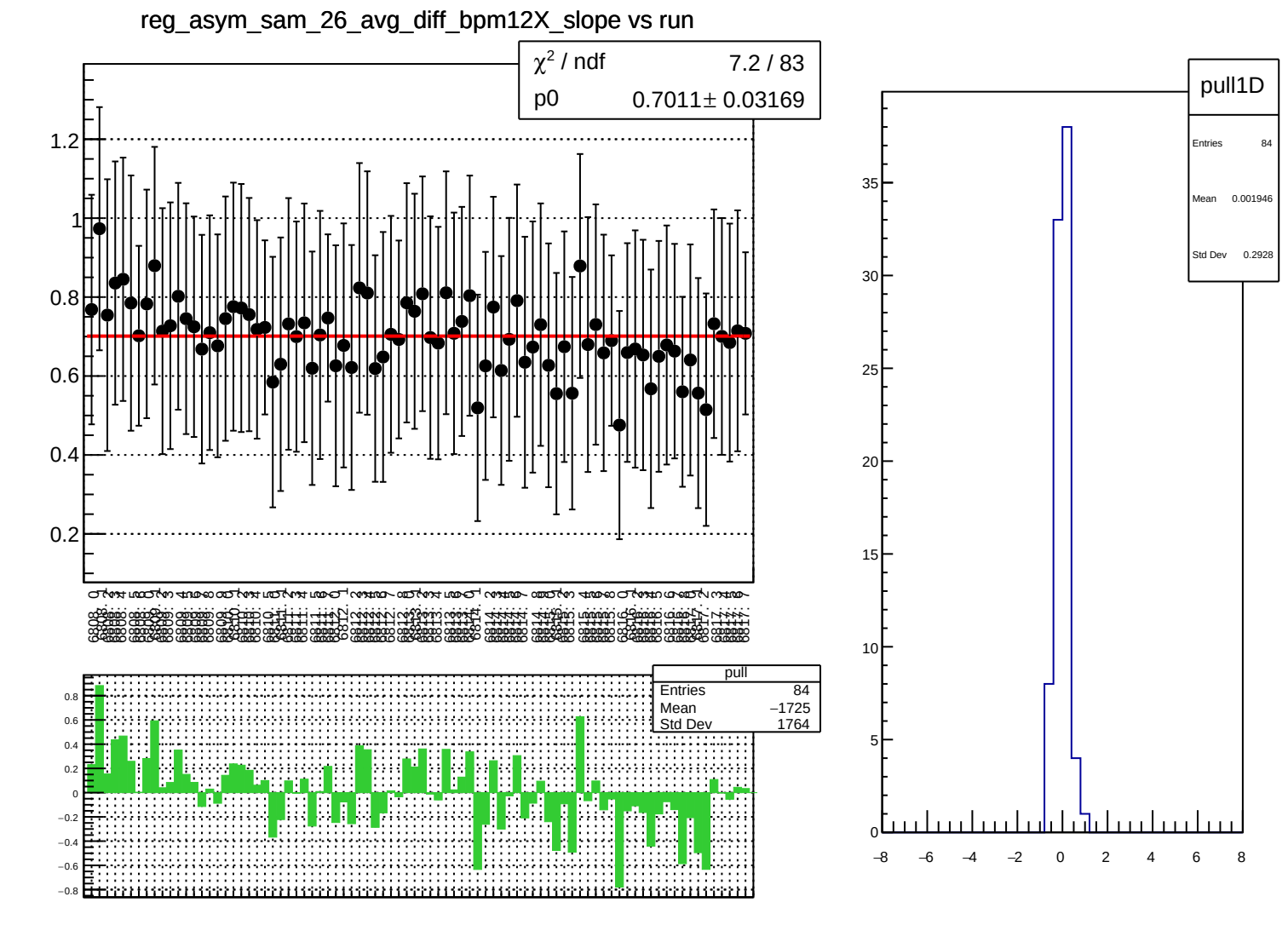

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.768 / 83
p0 4.874 ± 0.4979
pull
Entries 84
Mean −79.42
Std Dev 120.6
pull1D
Entries 84
Mean −0.01923
Std Dev 0.3405

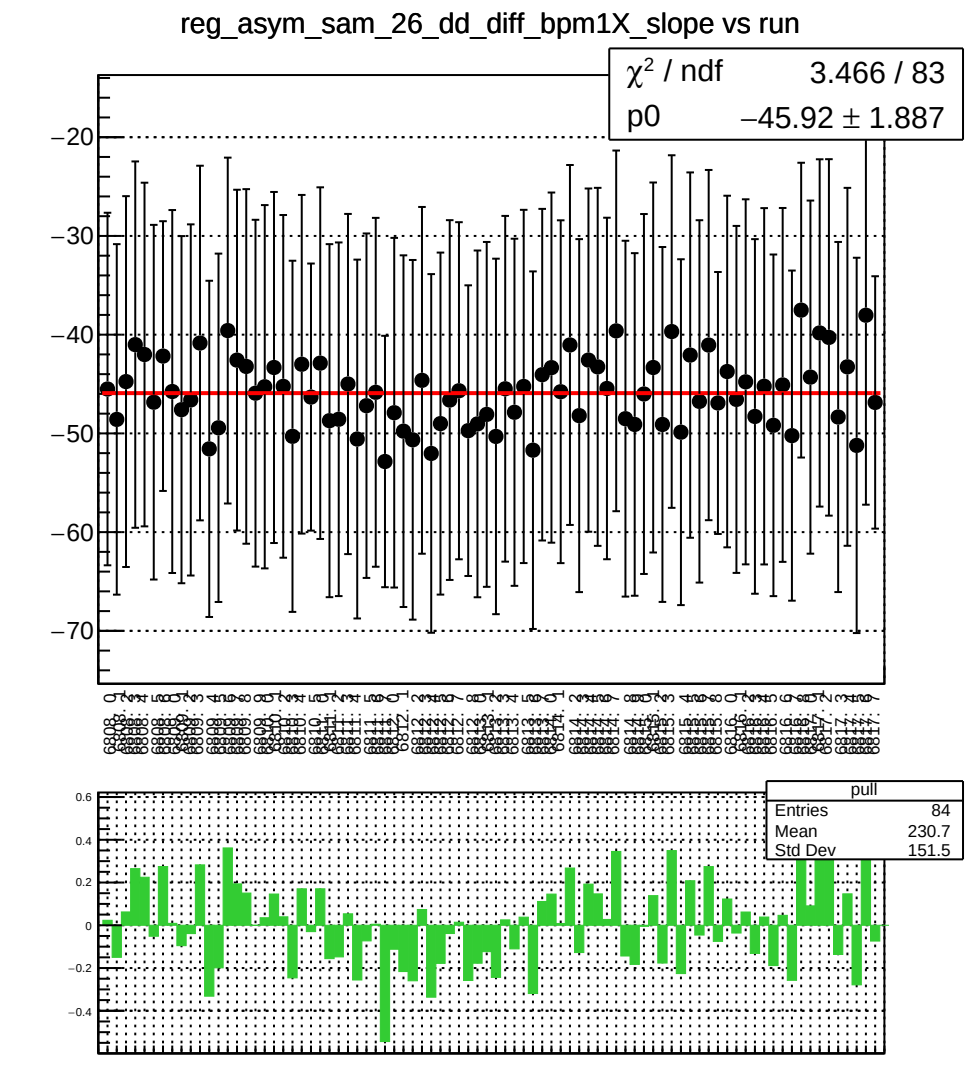

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.42 / 83
p0 −49.29 ± 0.7291
pull
Entries 84
Mean 33.93
Std Dev 35.86

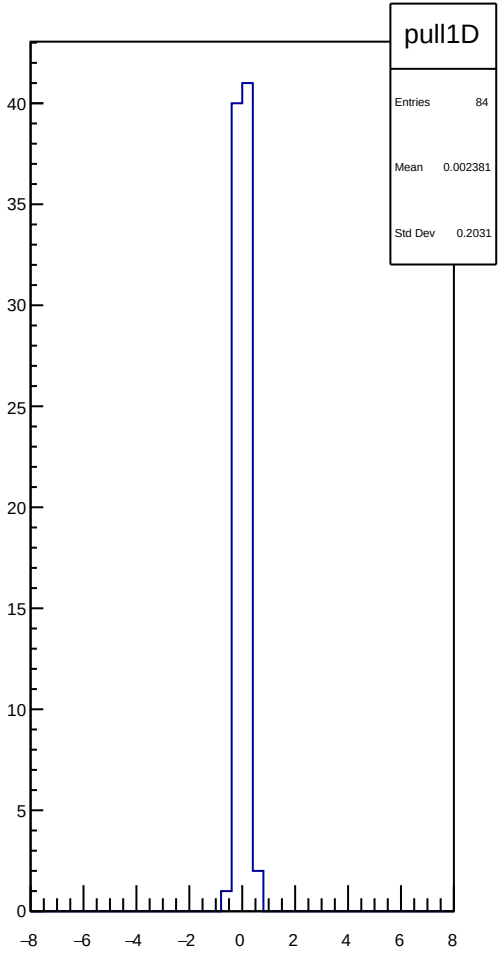

pull1D
Entries 84
Mean −0.01748
Std Dev 0.3842

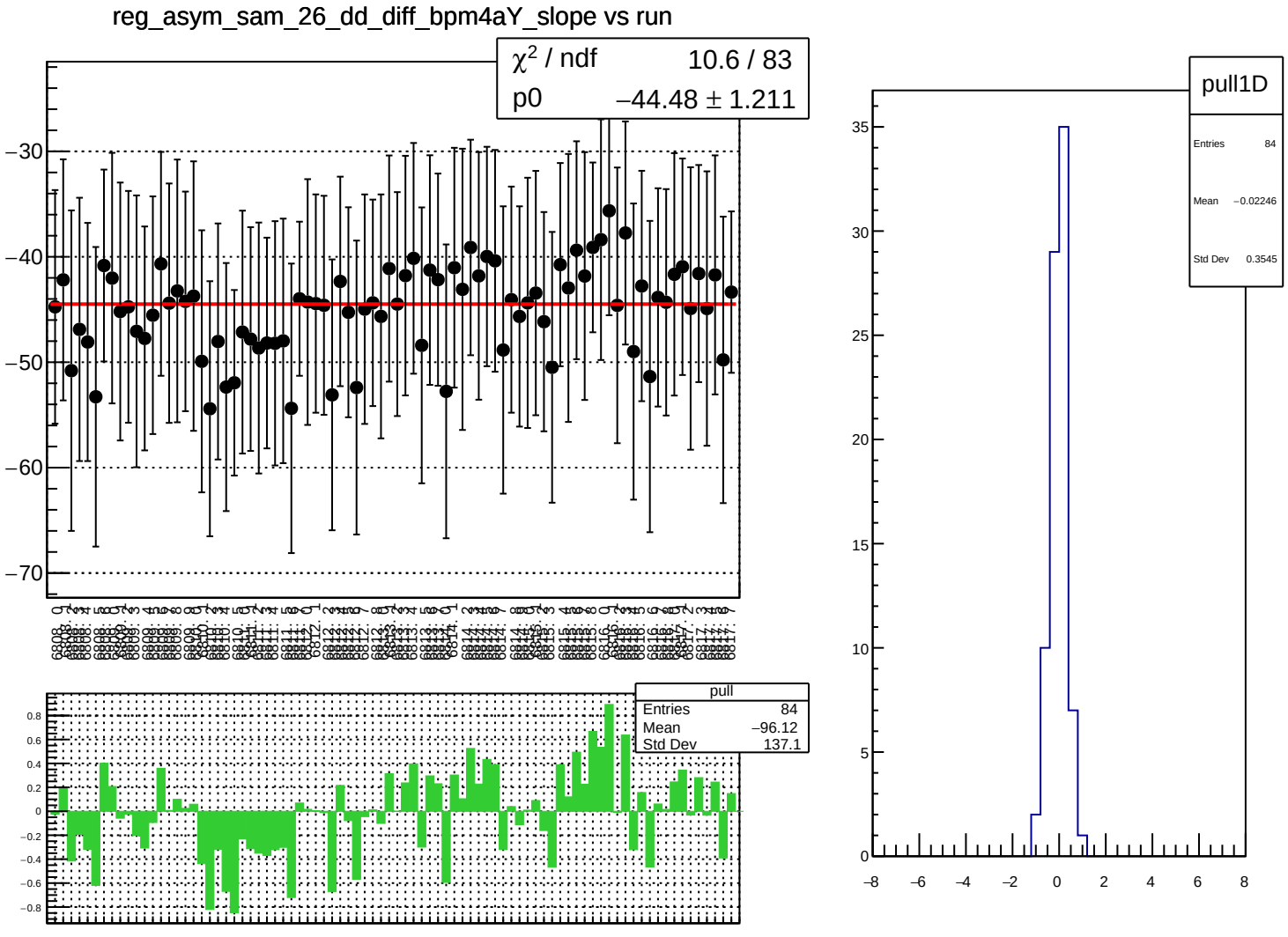

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.41 / 83
p0 −39.24 ± 0.6024
pull
Entries 84
Mean 635.8
Std Dev 592.5

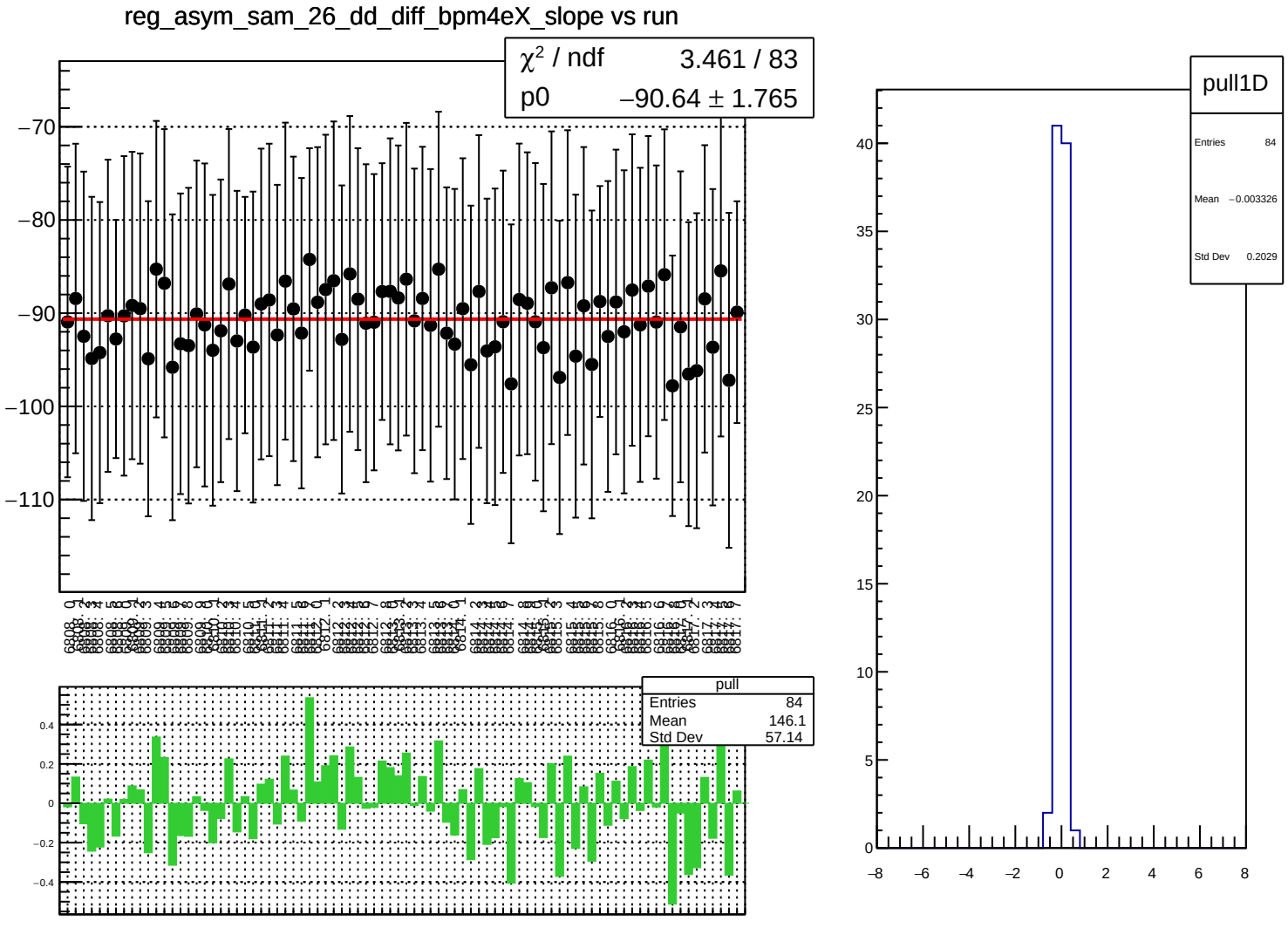

pull1D
Entries 84
Mean −0.005158
Std Dev 0.352

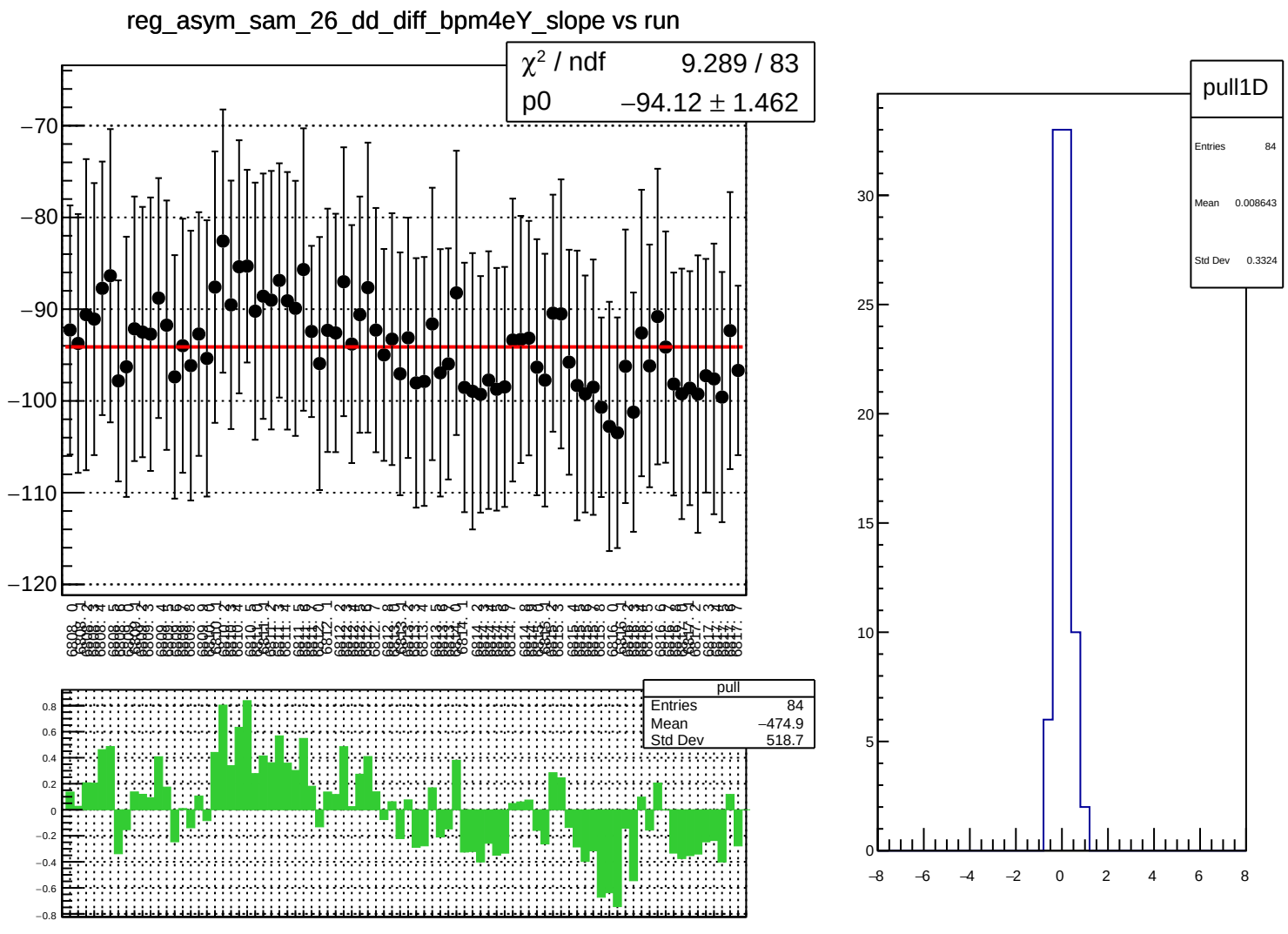

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 7.2 / 83
p0 0.7011± 0.03169
pull
Entries 84
Mean −1725
Std Dev 1764
pull1D
Entries 84
Mean 0.001946
Std Dev 0.2928

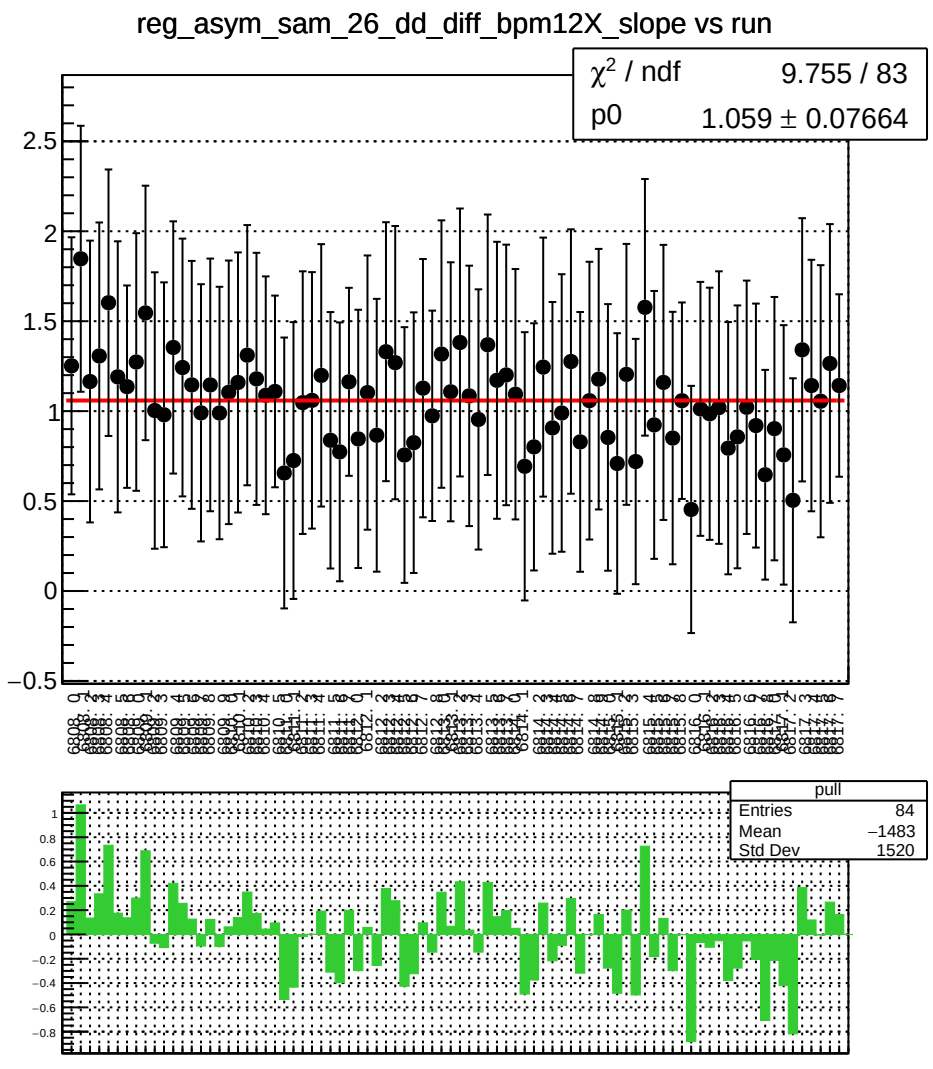

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 3.466 / 83
p0 −45.92 ± 1.887
pull
Entries 84
Mean 230.7
Std Dev 151.5

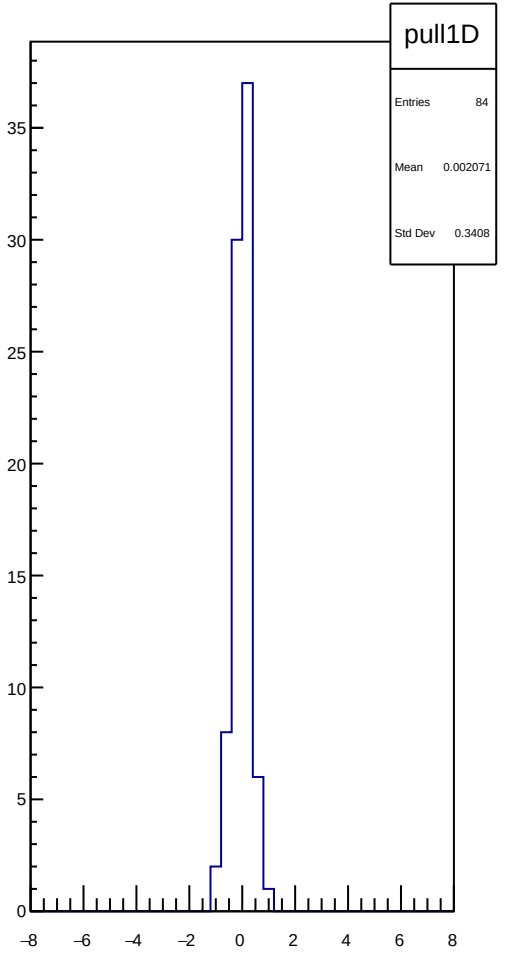

pull1D
Entries 84
Mean 0.002381
Std Dev 0.2031

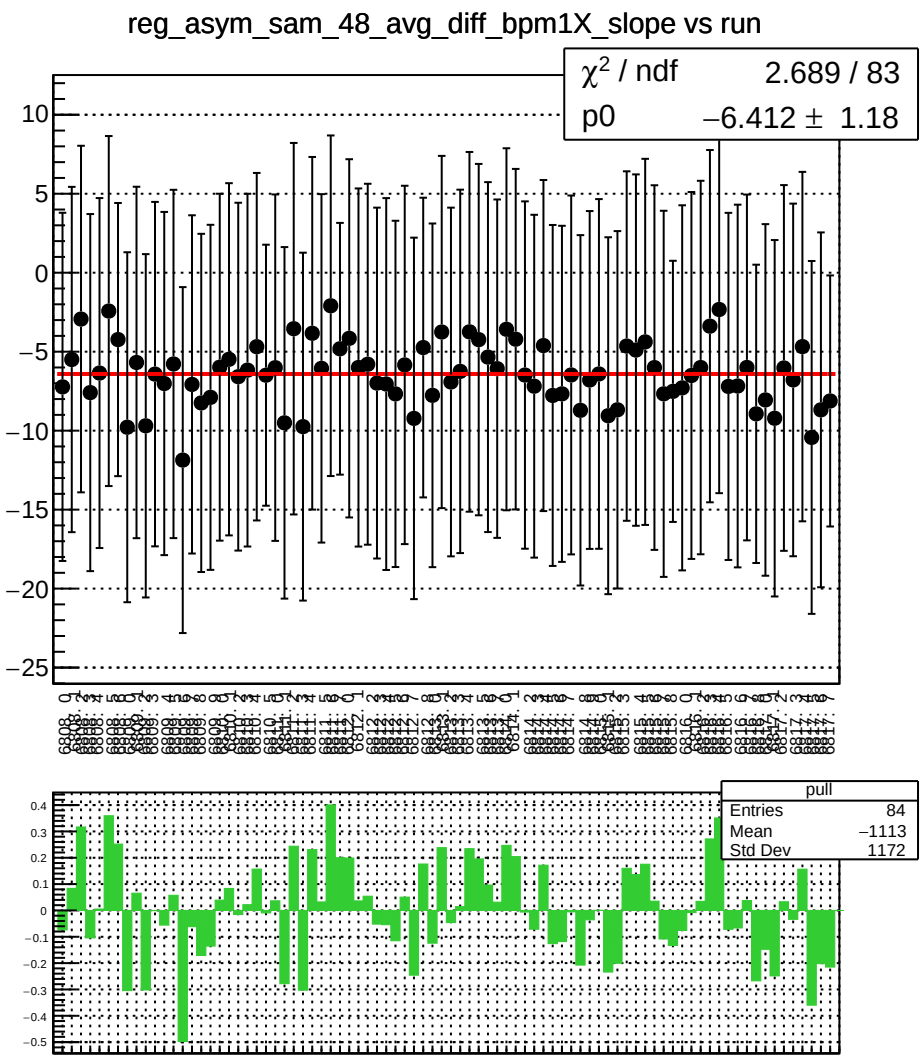

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.6 / 83
p0 −44.48 ± 1.211
−30
−40
−50
−60
−70
pull
Entries 84
Mean −96.12
Std Dev 137.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 84
Mean −0.02246
Std Dev 0.3545
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

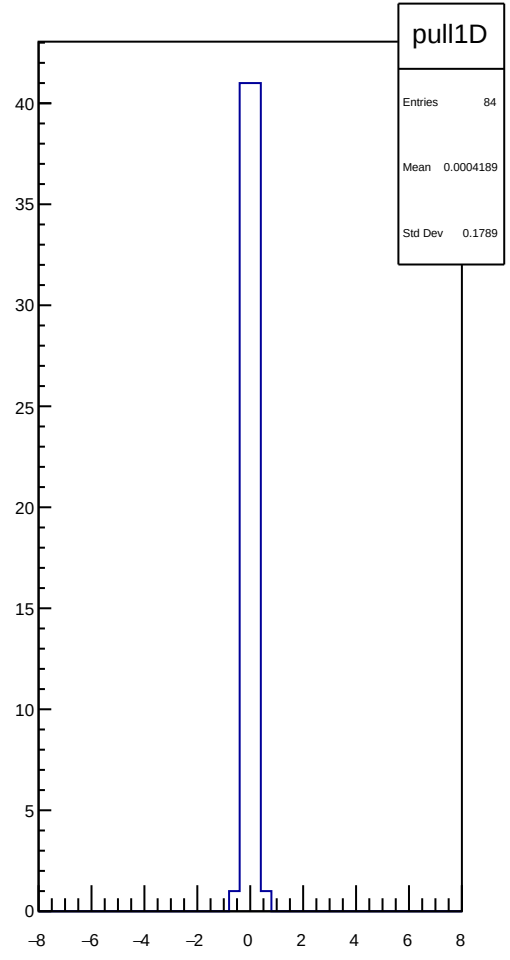

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.461 / 83
p0 −90.64 ± 1.765
−70
−80
−90
−100
−110
pull
Entries 84
Mean 146.1
Std Dev 57.14
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 84
Mean −0.003326
Std Dev 0.2029
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

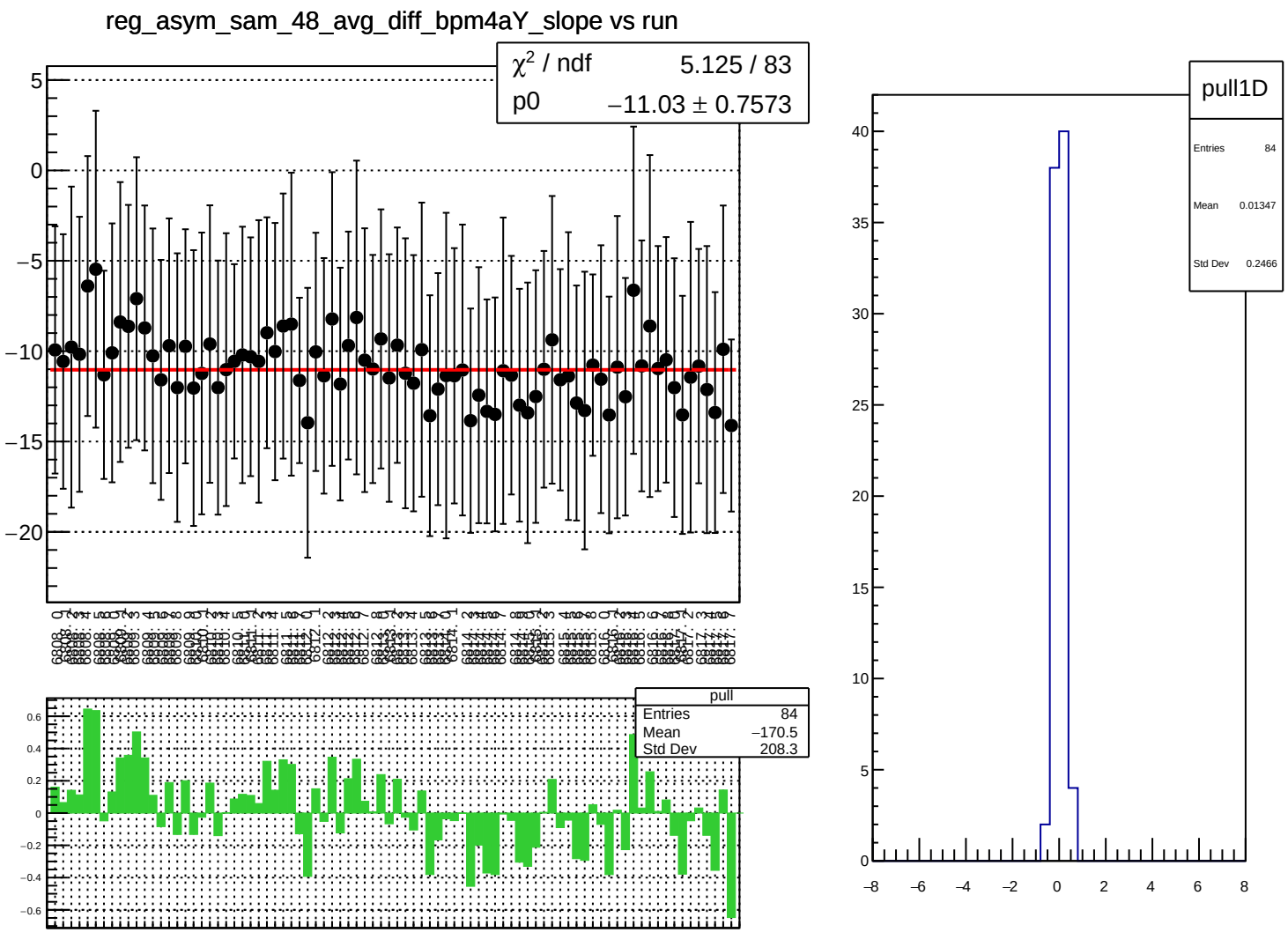

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 9.289 / 83
p0 −94.12 ± 1.462
pull
Entries 84
Mean −474.9
Std Dev 518.7
pull1D
Entries 84
Mean 0.008643
Std Dev 0.3324

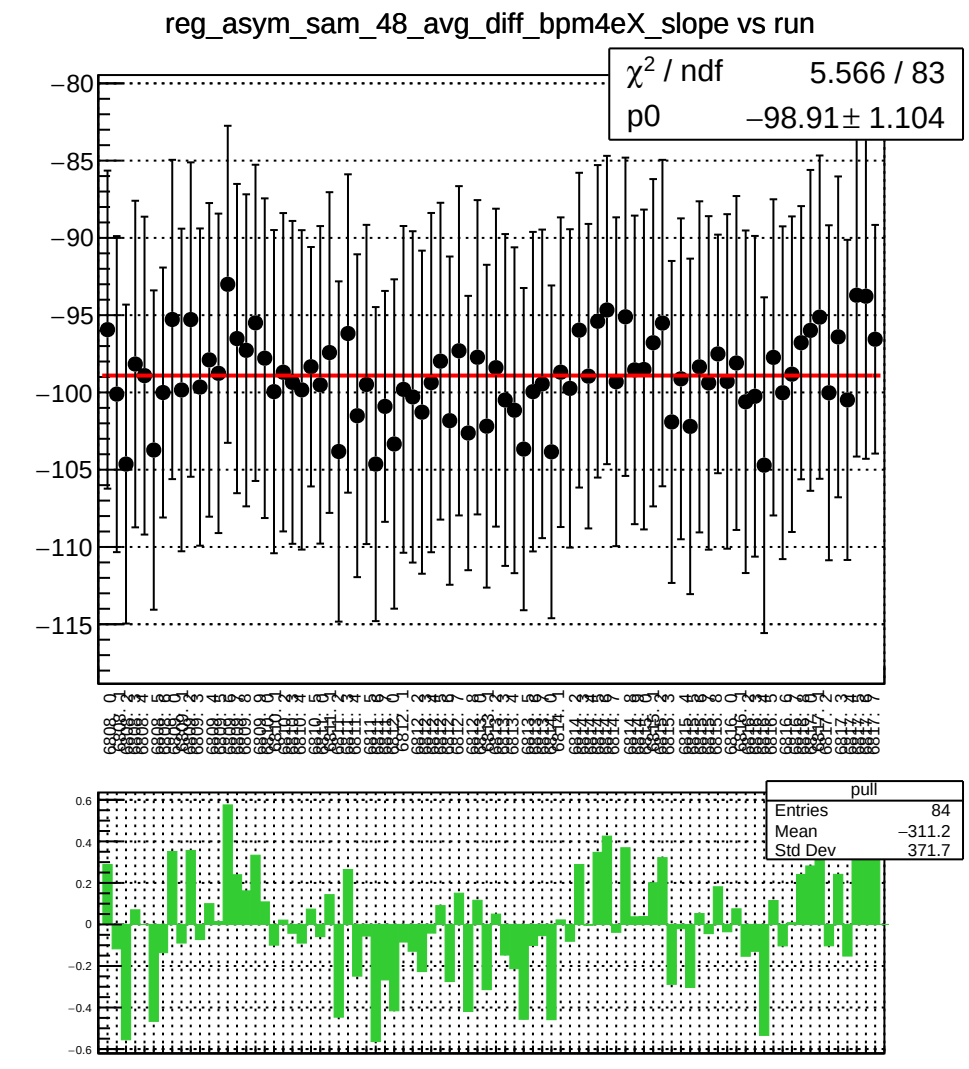

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 9.755 / 83
p0 1.059 ± 0.07664
pull
Entries 84
Mean −1483
Std Dev 1520

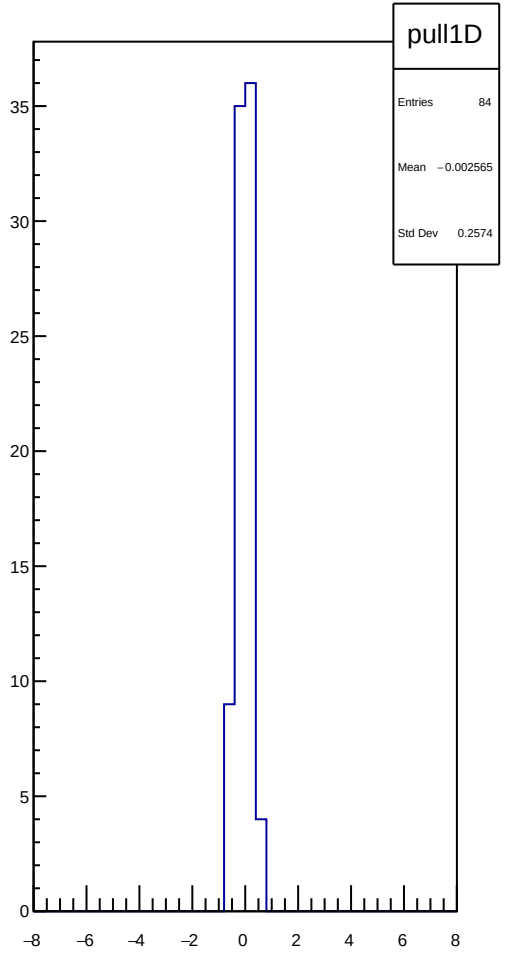

pull1D
Entries 84
Mean 0.002071
Std Dev 0.3408

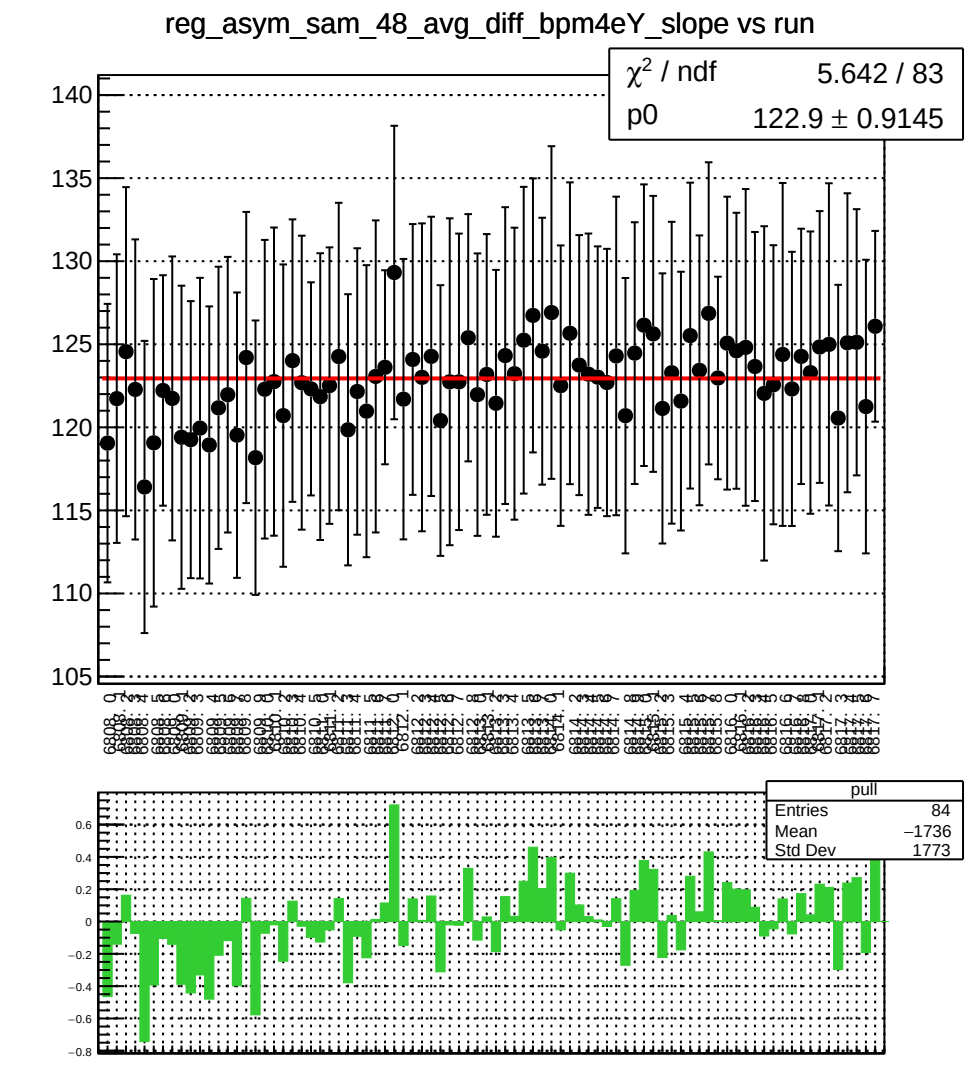

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 2.689 / 83
p0 −6.412 ± 1.18
pull
Entries 84
Mean −1113
Std Dev 1172

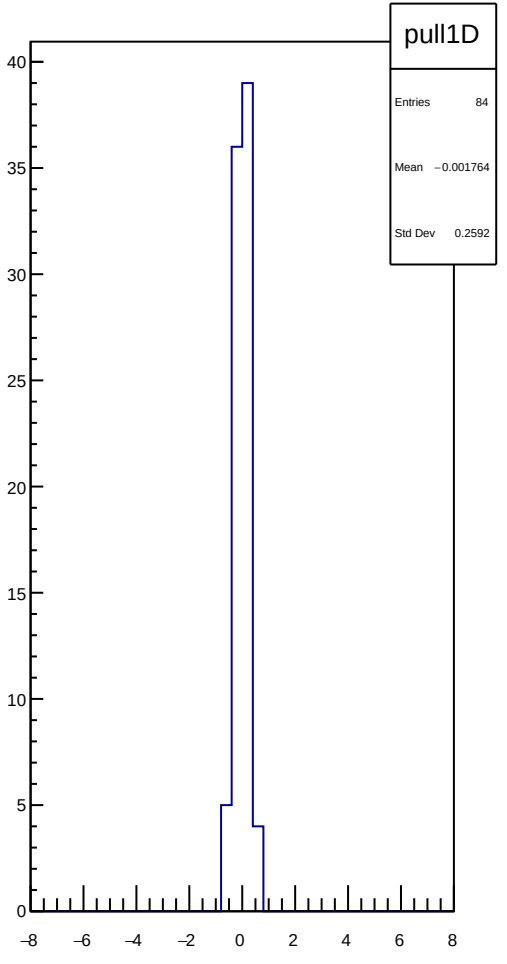

pull1D
Entries 84
Mean 0.0004189
Std Dev 0.1789

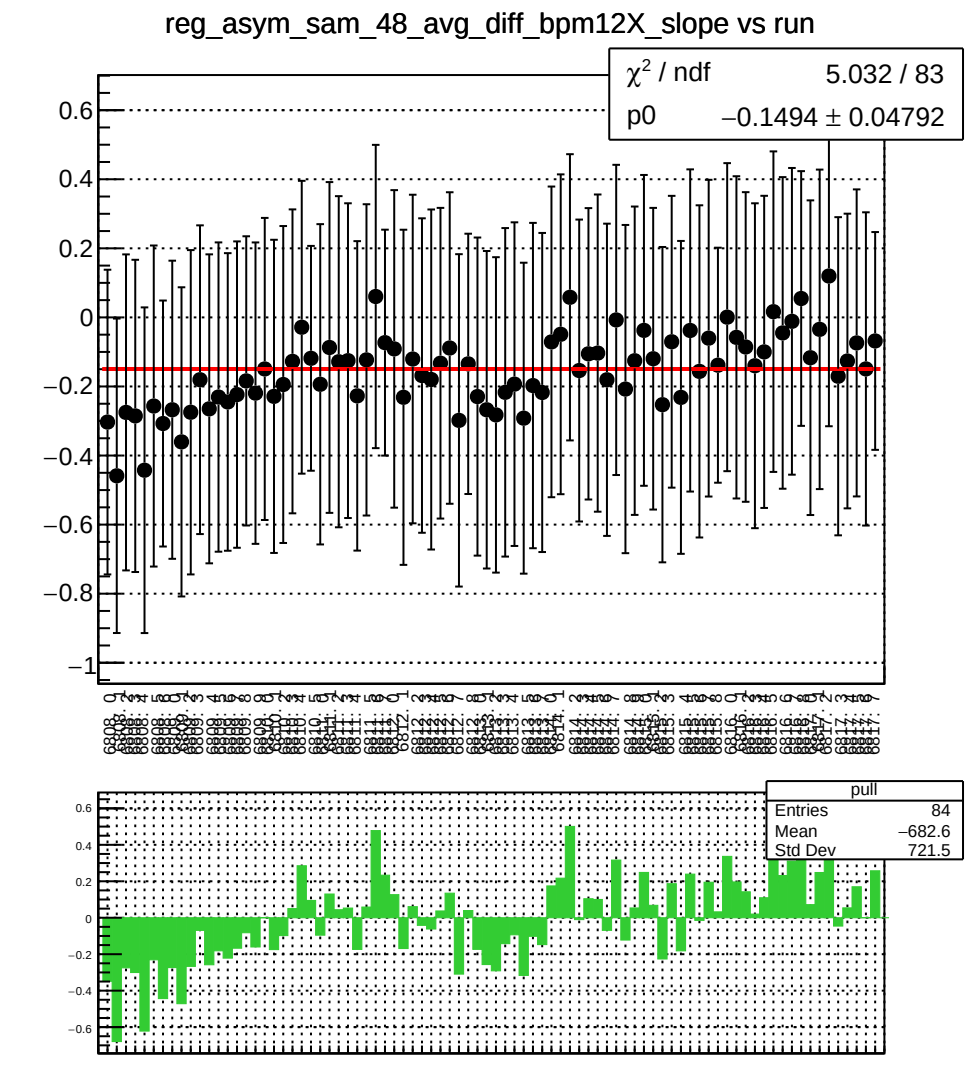

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.125 / 83
p0 −11.03 ± 0.7573
pull
Entries 84
Mean −170.5
Std Dev 208.3
pull1D
Entries 84
Mean 0.01347
Std Dev 0.2466

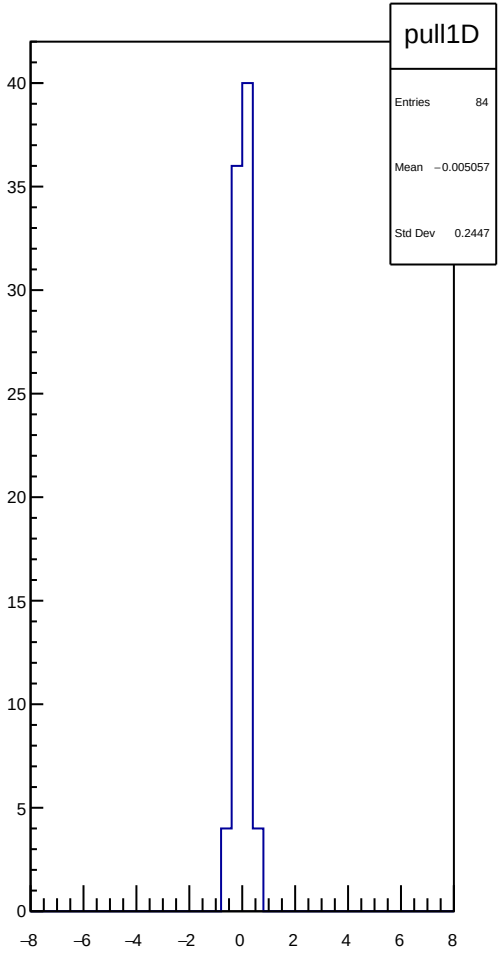

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 5.566 / 83
p0 −98.91 ± 1.104
pull
Entries 84
Mean −311.2
Std Dev 371.7

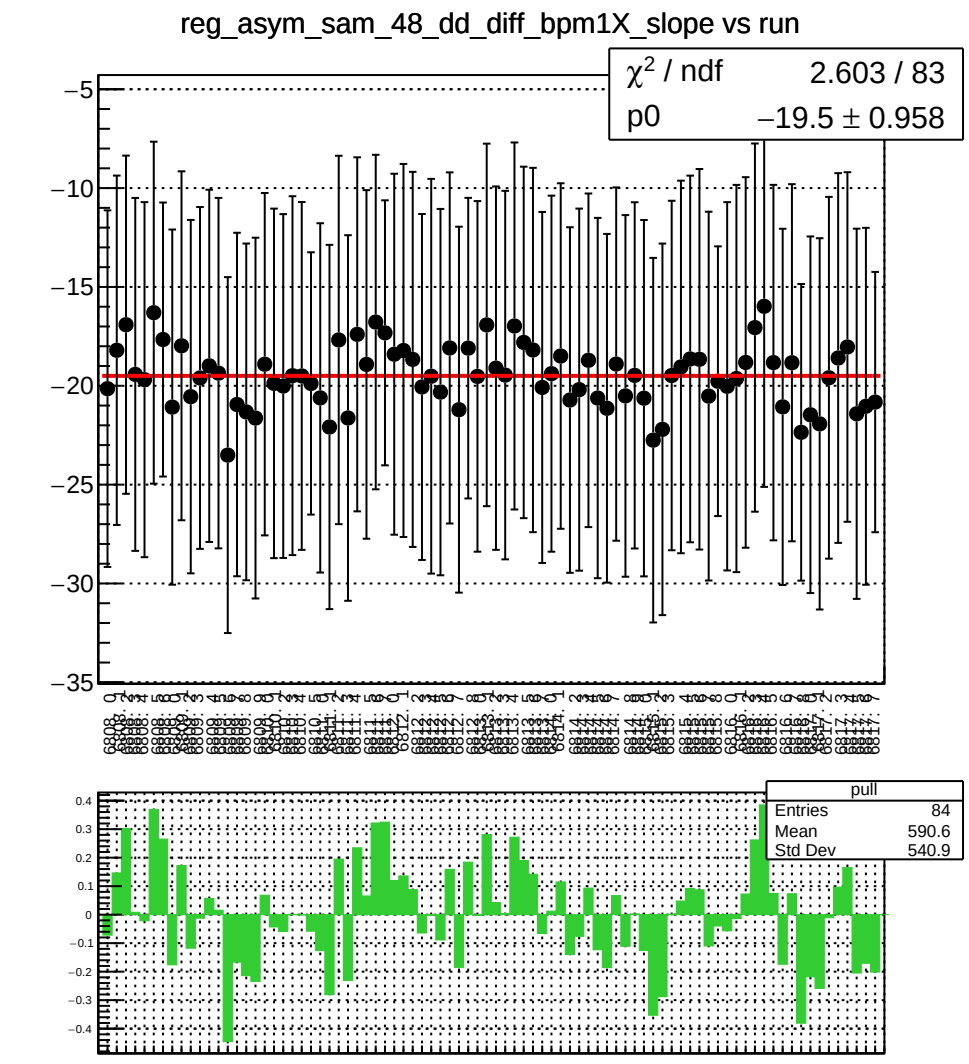

pull1D
Entries 84
Mean −0.002565
Std Dev 0.2574

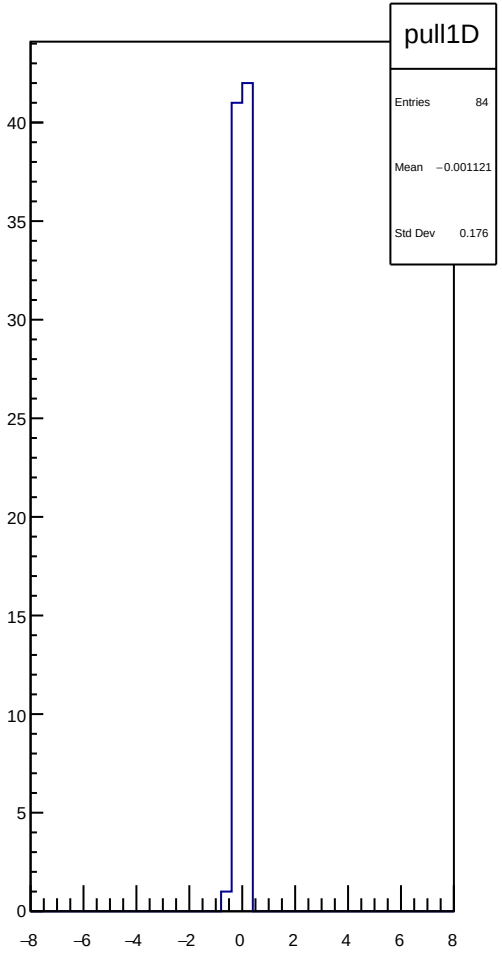

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.642 / 83
p0 122.9 ± 0.9145
140
135
130
125
120
115
110
105
pull
Entries 84
Mean −1736
Std Dev 1773
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

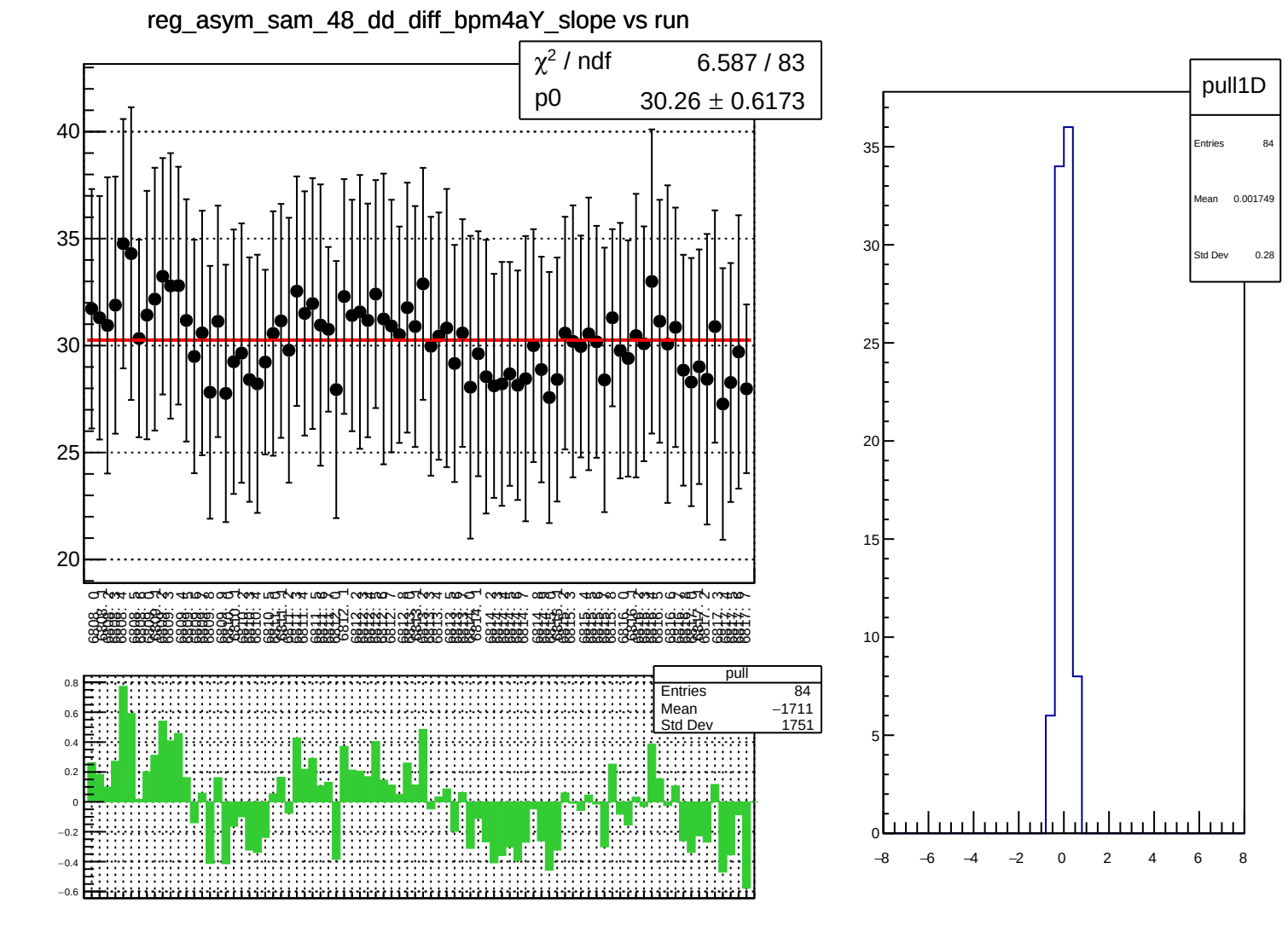

pull1D
Entries 84
Mean −0.001764
Std Dev 0.2592
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

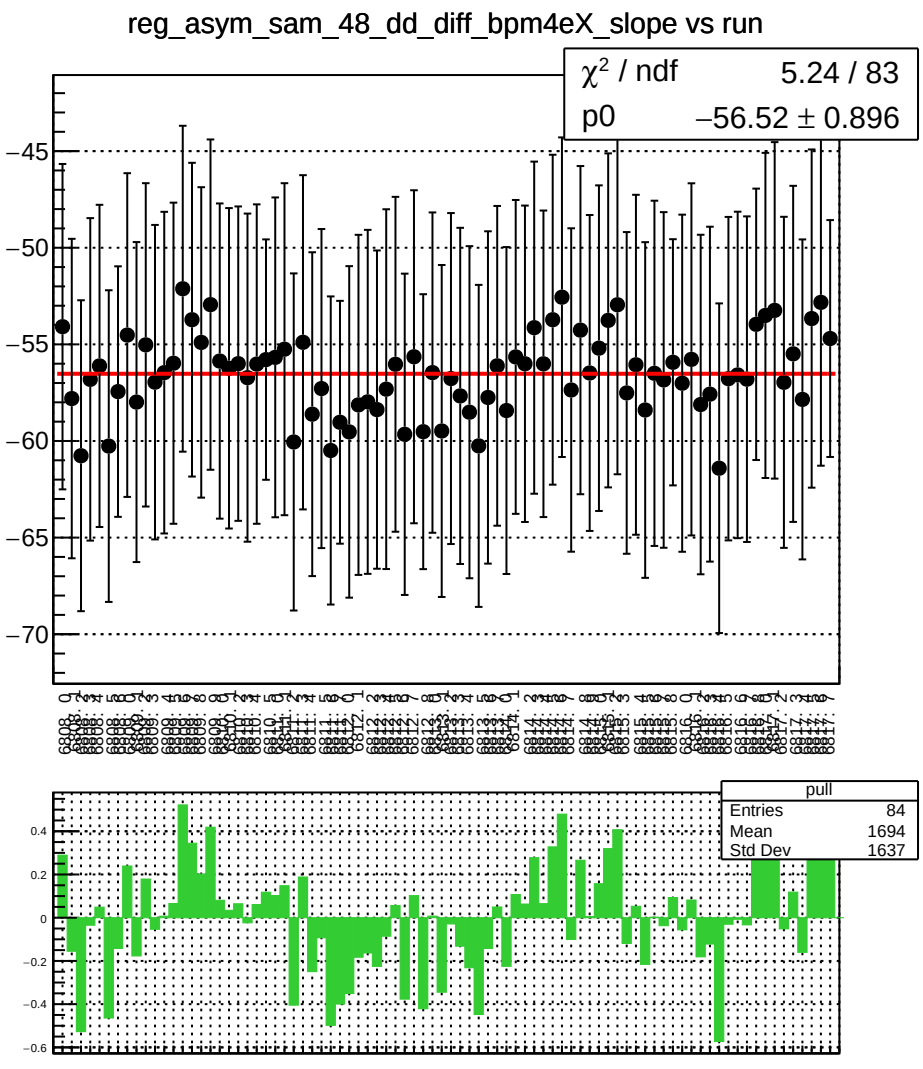

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 5.032 / 83
p0 −0.1494 ± 0.04792
pull
Entries 84
Mean −682.6
Std Dev 721.5

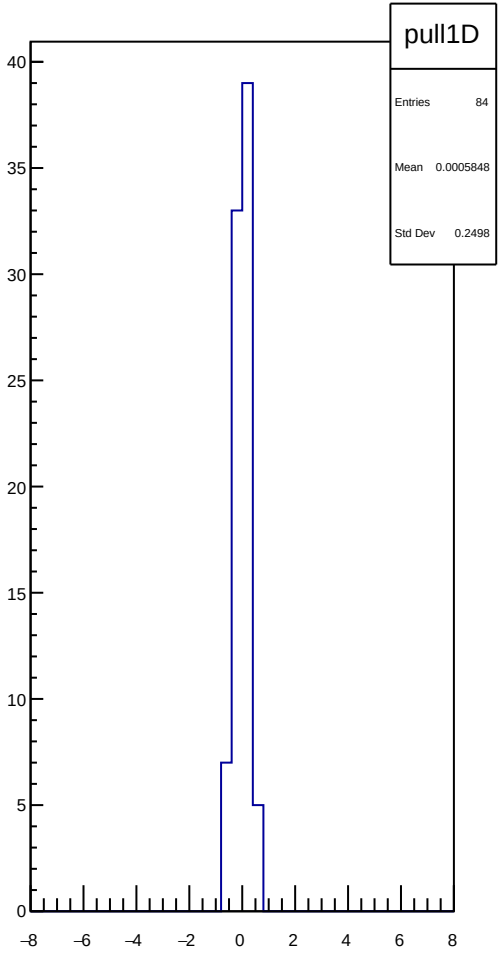

pull1D
Entries 84
Mean −0.005057
Std Dev 0.2447

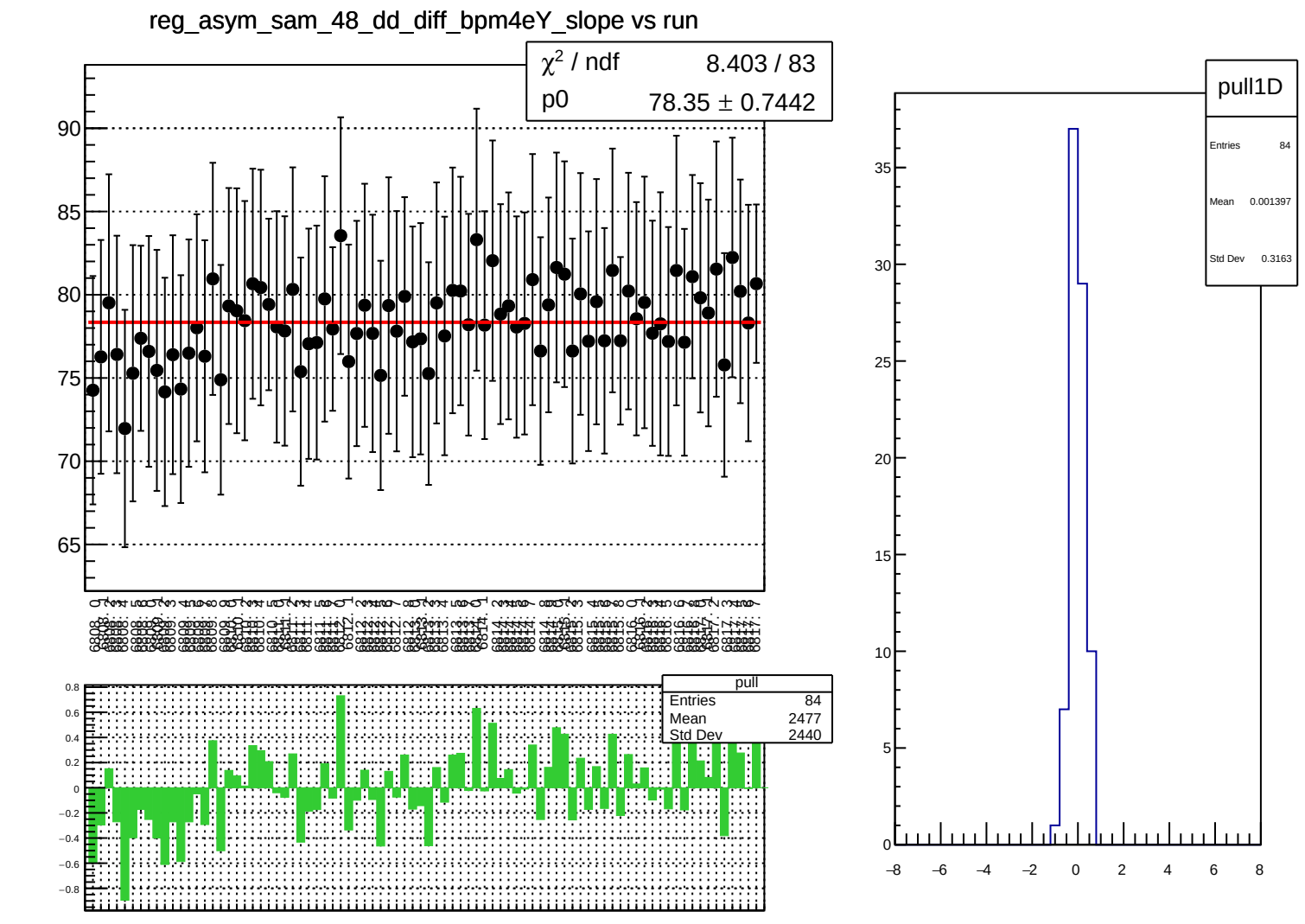

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 2.603 / 83
p0 −19.5 ± 0.958
pull
Entries 84
Mean 590.6
Std Dev 540.9

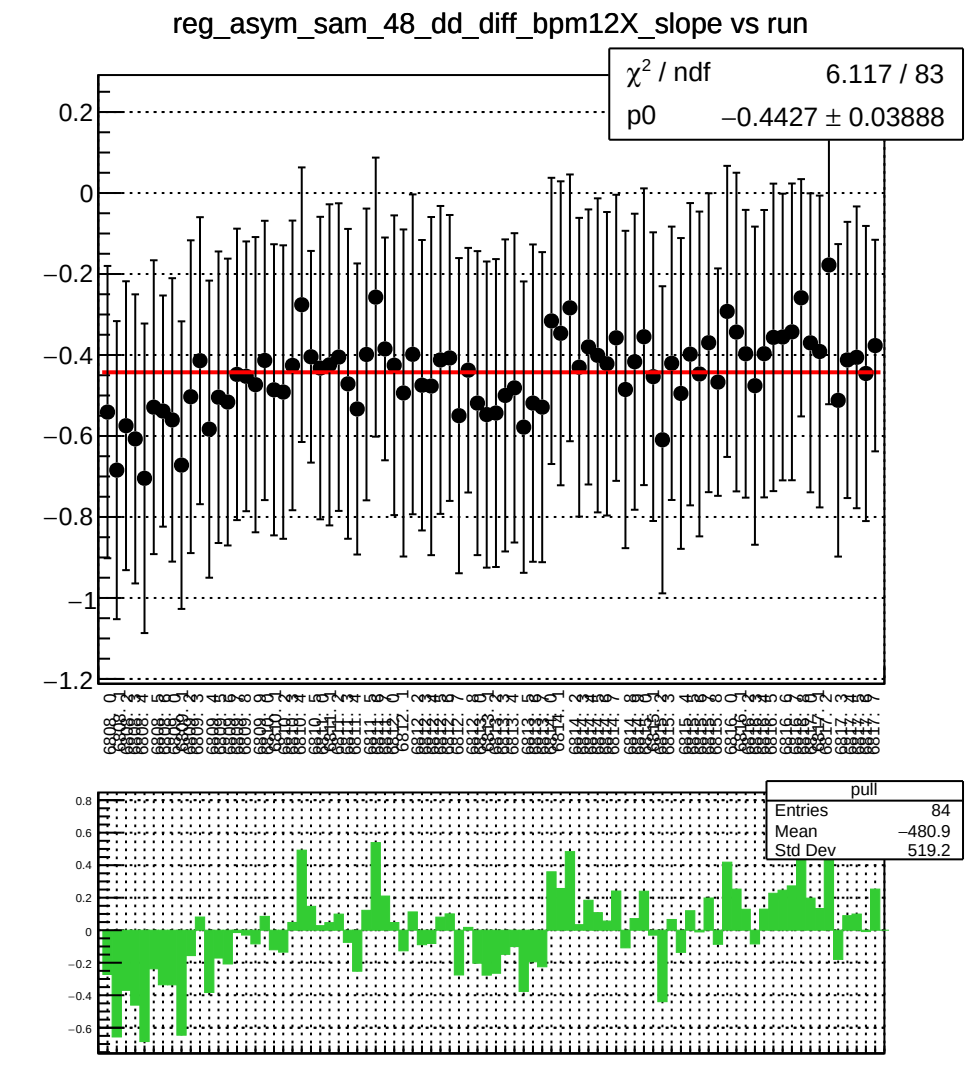

pull1D
Entries 84
Mean −0.001121
Std Dev 0.176

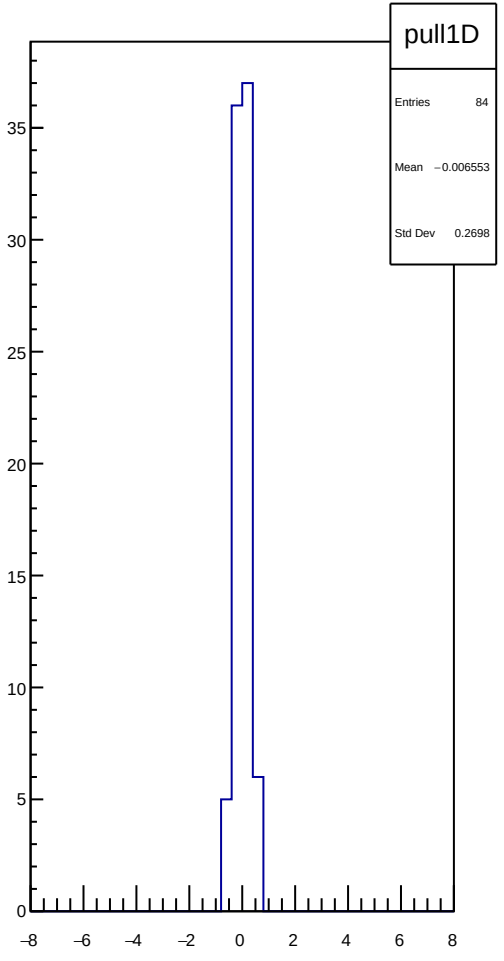

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.587 / 83
p0 30.26 ± 0.6173
pull
Entries 84
Mean −1711
Std Dev 1751
pull1D
Entries 84
Mean 0.001749
Std Dev 0.28

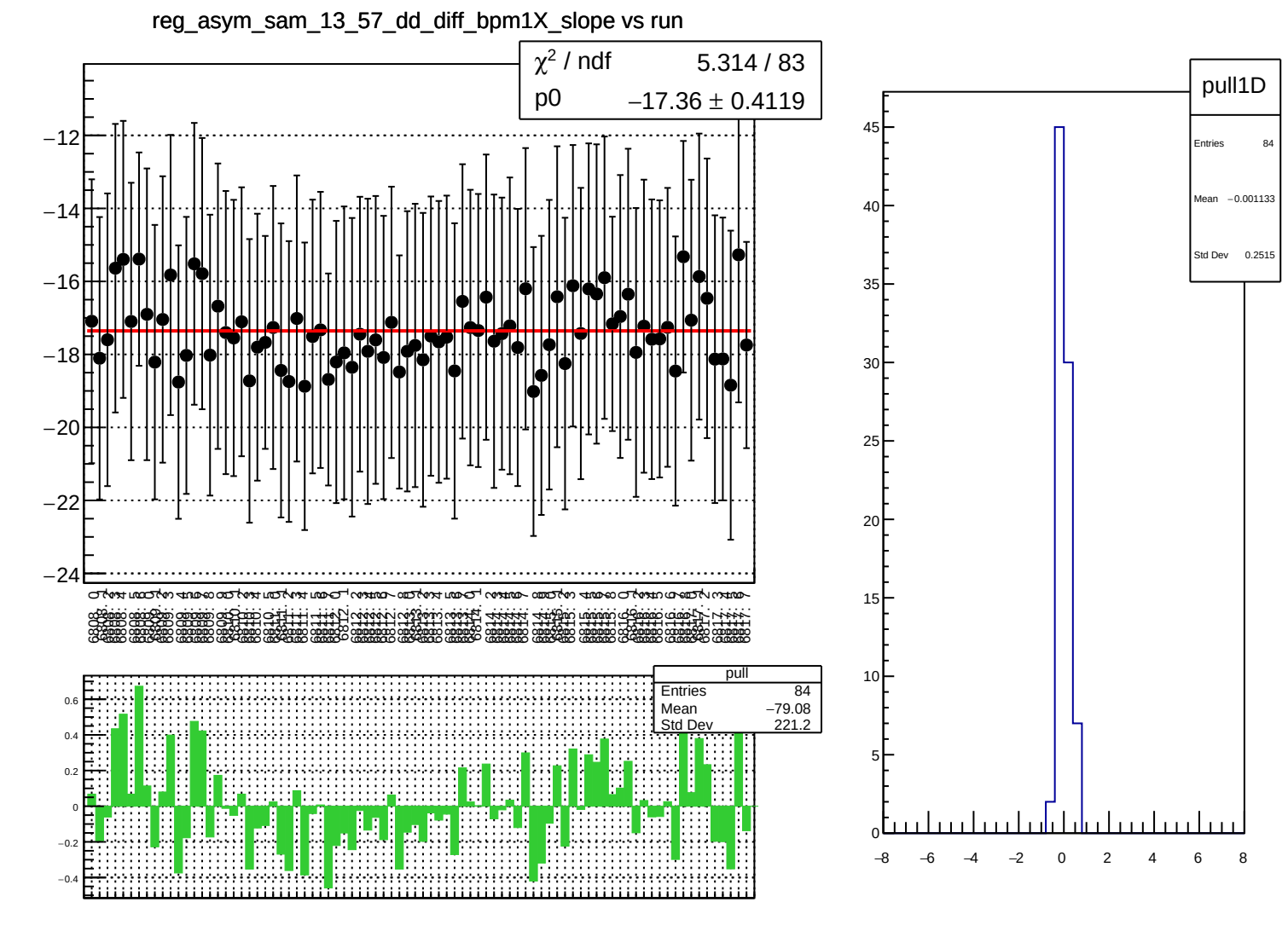

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.24 / 83
p0 −56.52 ± 0.896
−45
−50
−55
−60
−65
−70
pull
Entries 84
Mean 1694
Std Dev 1637
0.4
0.2
0
−0.2
−0.4
−0.6

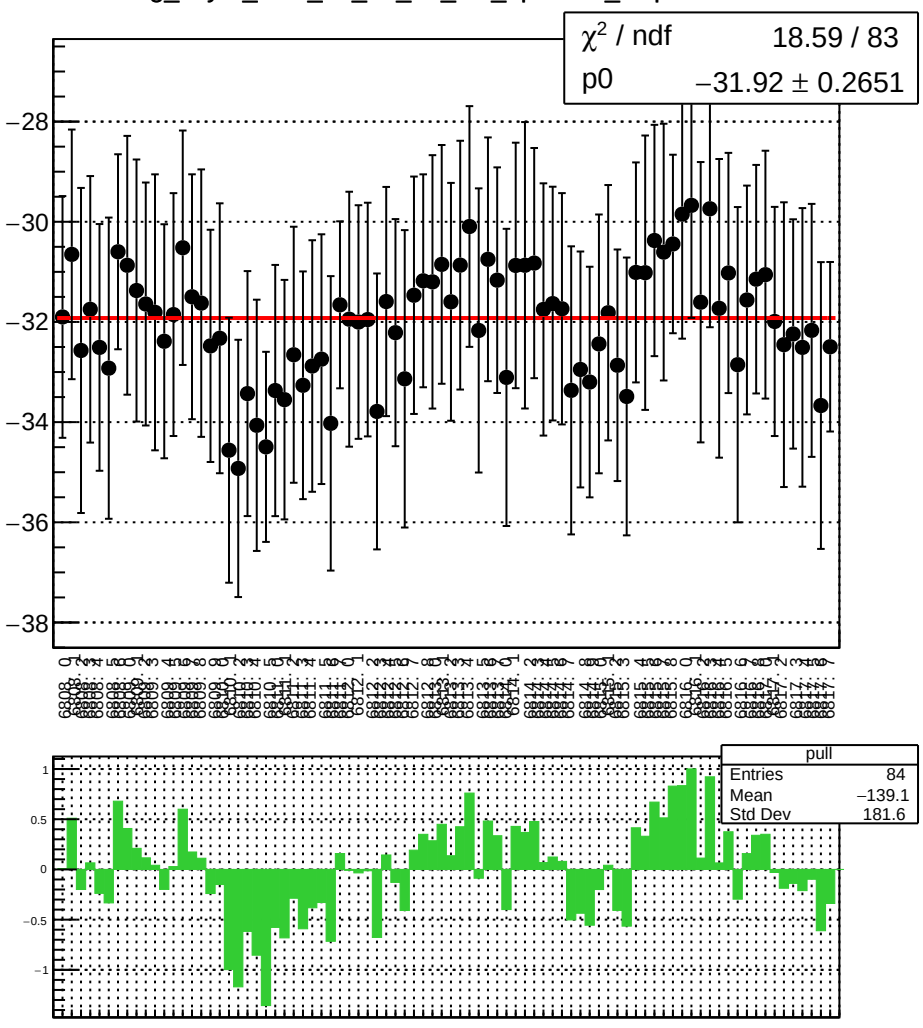

pull1D
Entries 84
Mean 0.0005848
Std Dev 0.2498
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

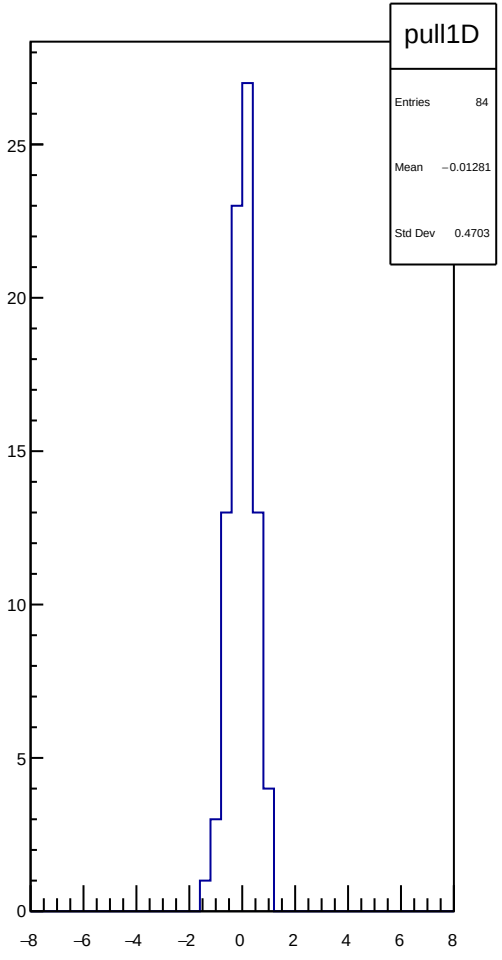

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 8.403 / 83
p0 78.35 ± 0.7442
pull
Entries 84
Mean 2477
Std Dev 2440
pull1D
Entries 84
Mean 0.001397
Std Dev 0.3163

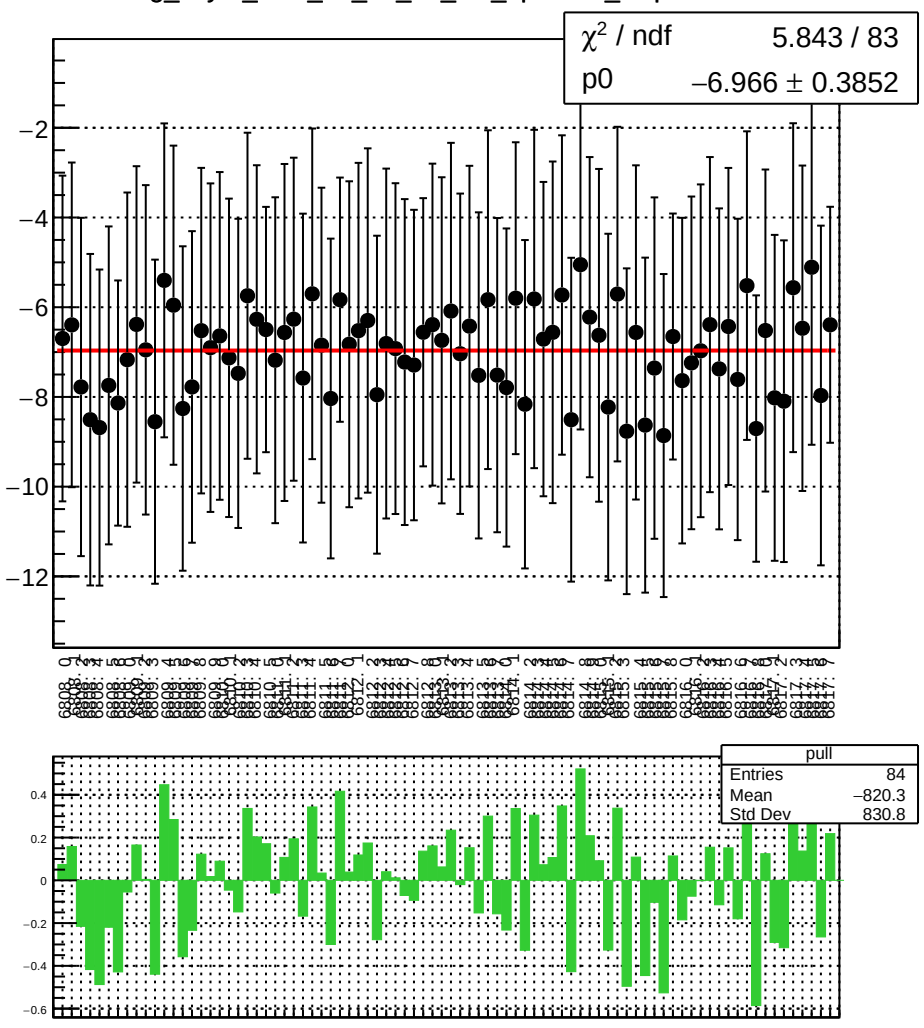

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 6.117 / 83
p0 −0.4427 ± 0.03888
pull
Entries 84
Mean −480.9
Std Dev 519.2

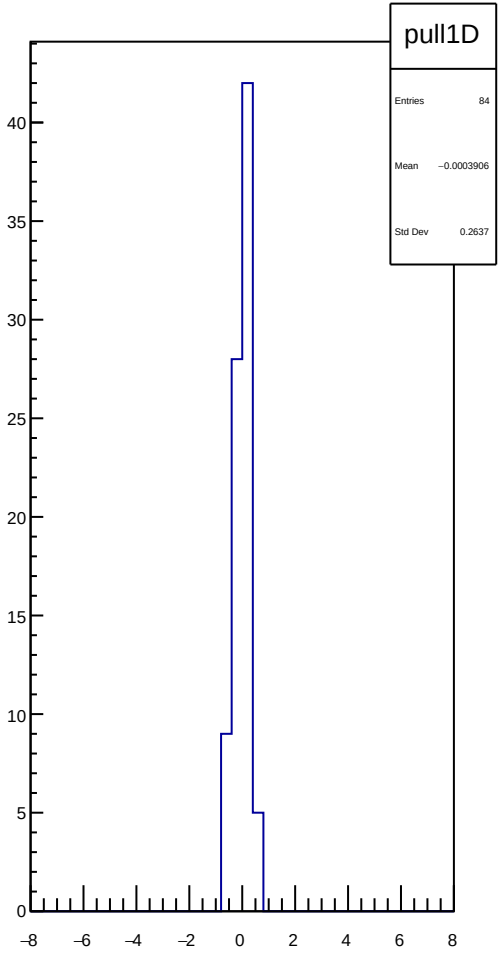

pull1D
Entries 84
Mean −0.006553
Std Dev 0.2698

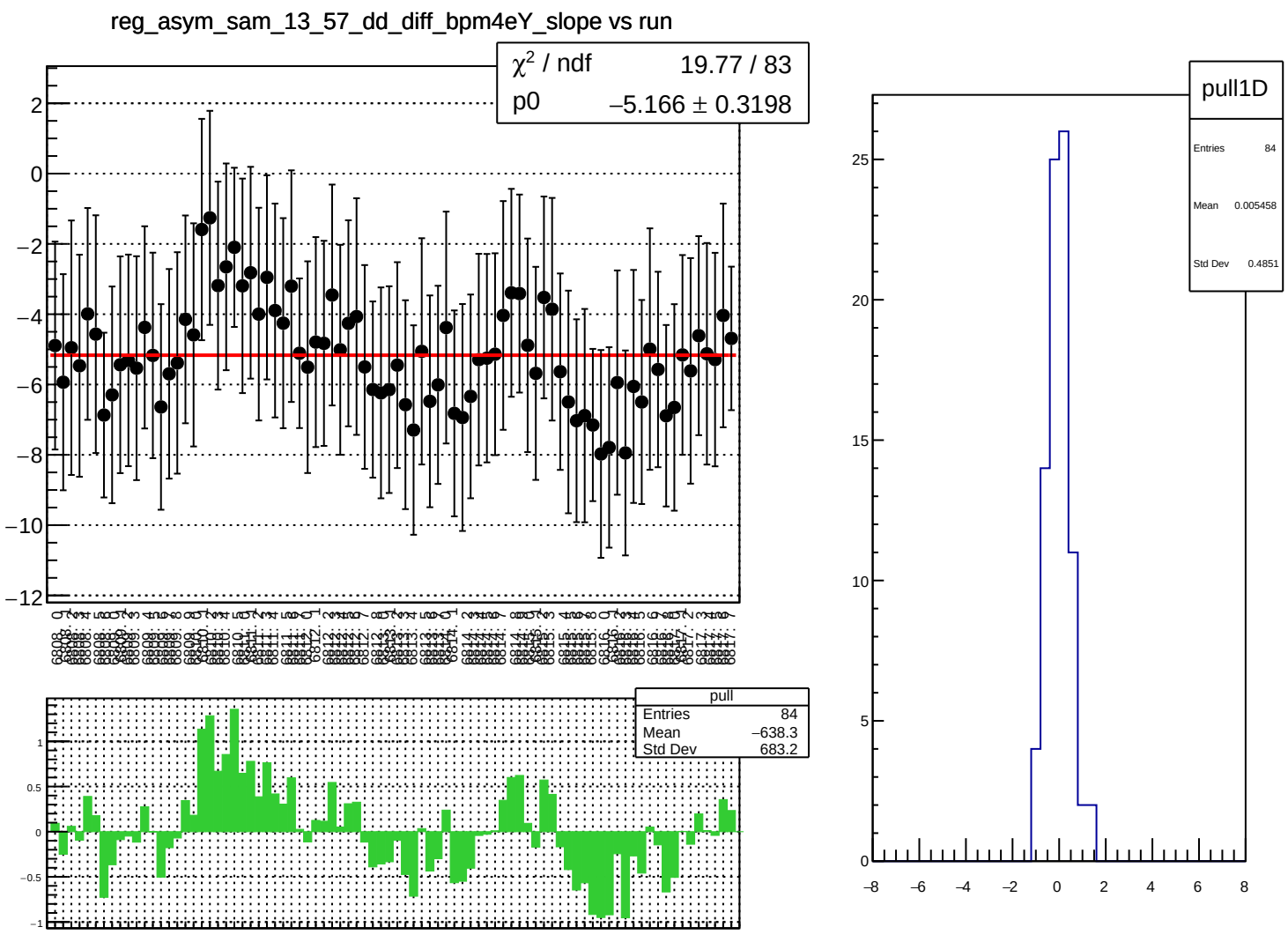

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 5.314 / 83
p0 −17.36 ± 0.4119
pull
Entries 84
Mean −79.08
Std Dev 221.2
pull1D
Entries 84
Mean −0.001133
Std Dev 0.2515

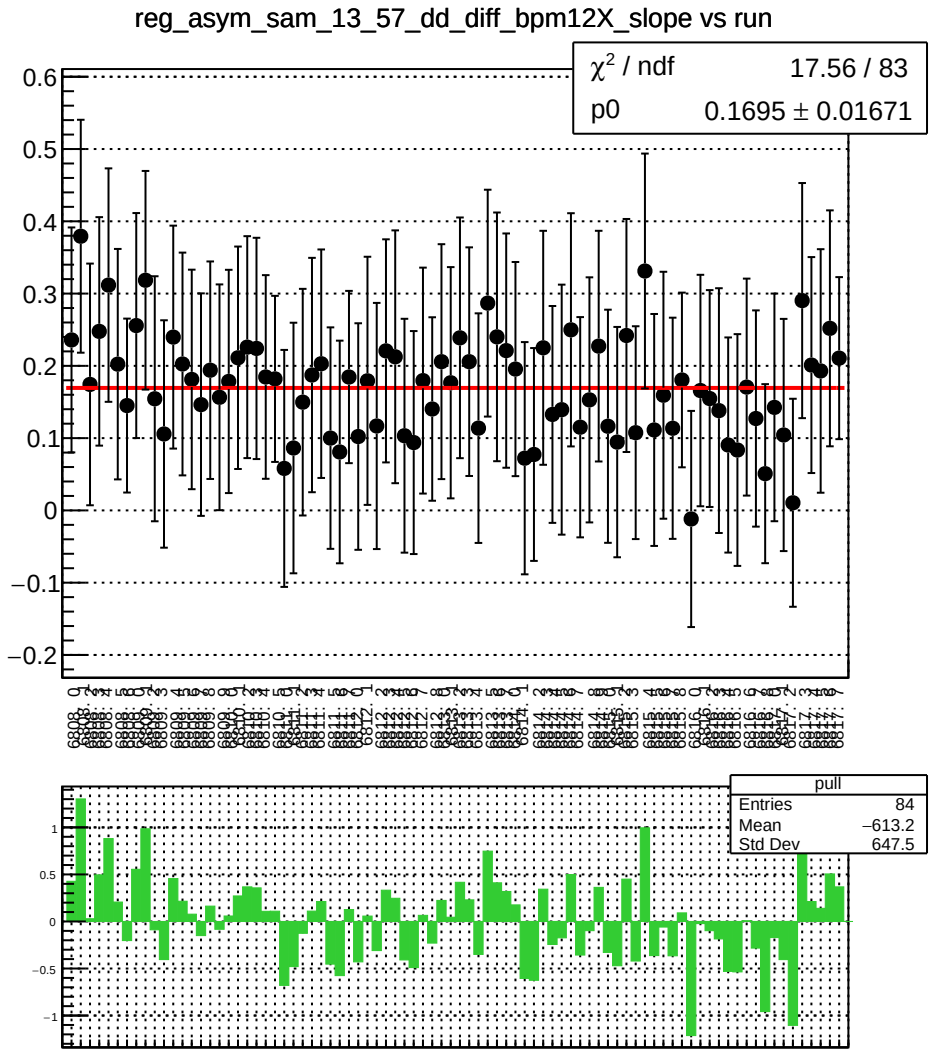

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.59 / 83
p0 −31.92 ± 0.2651
pull
Entries 84
Mean −139.1
Std Dev 181.6

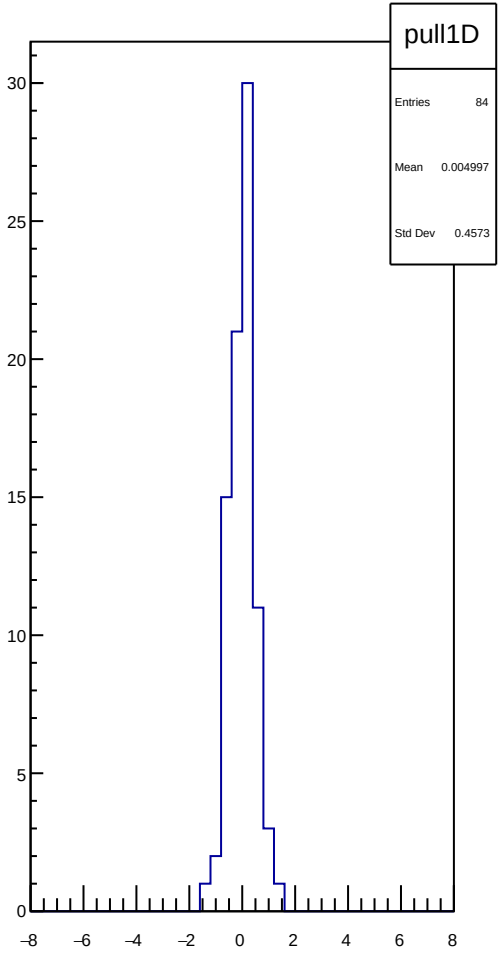

pull1D
Entries 84
Mean −0.01281
Std Dev 0.4703

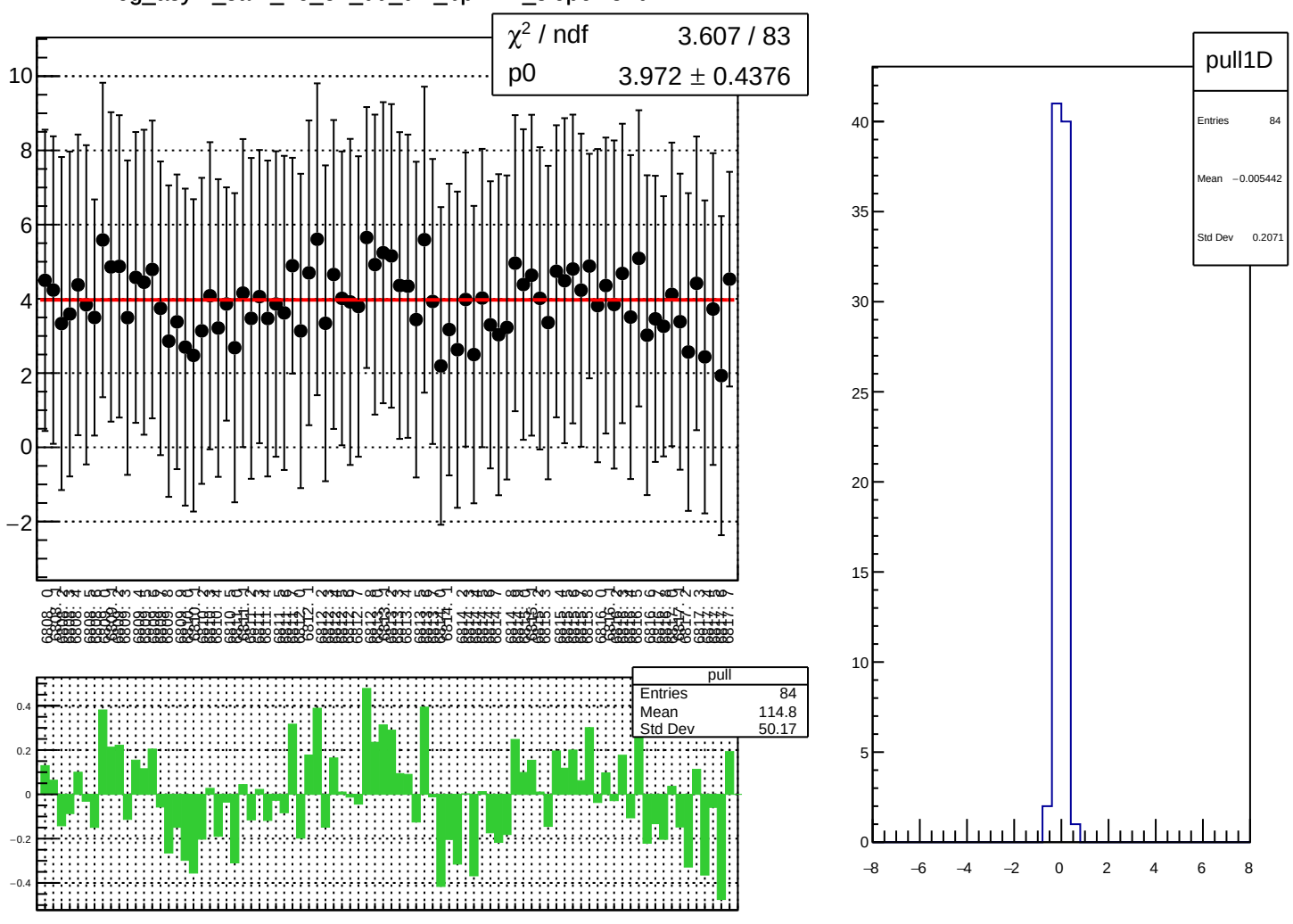

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.843 / 83
p0 −6.966 ± 0.3852
pull
Entries 84
Mean −820.3
Std Dev 830.8

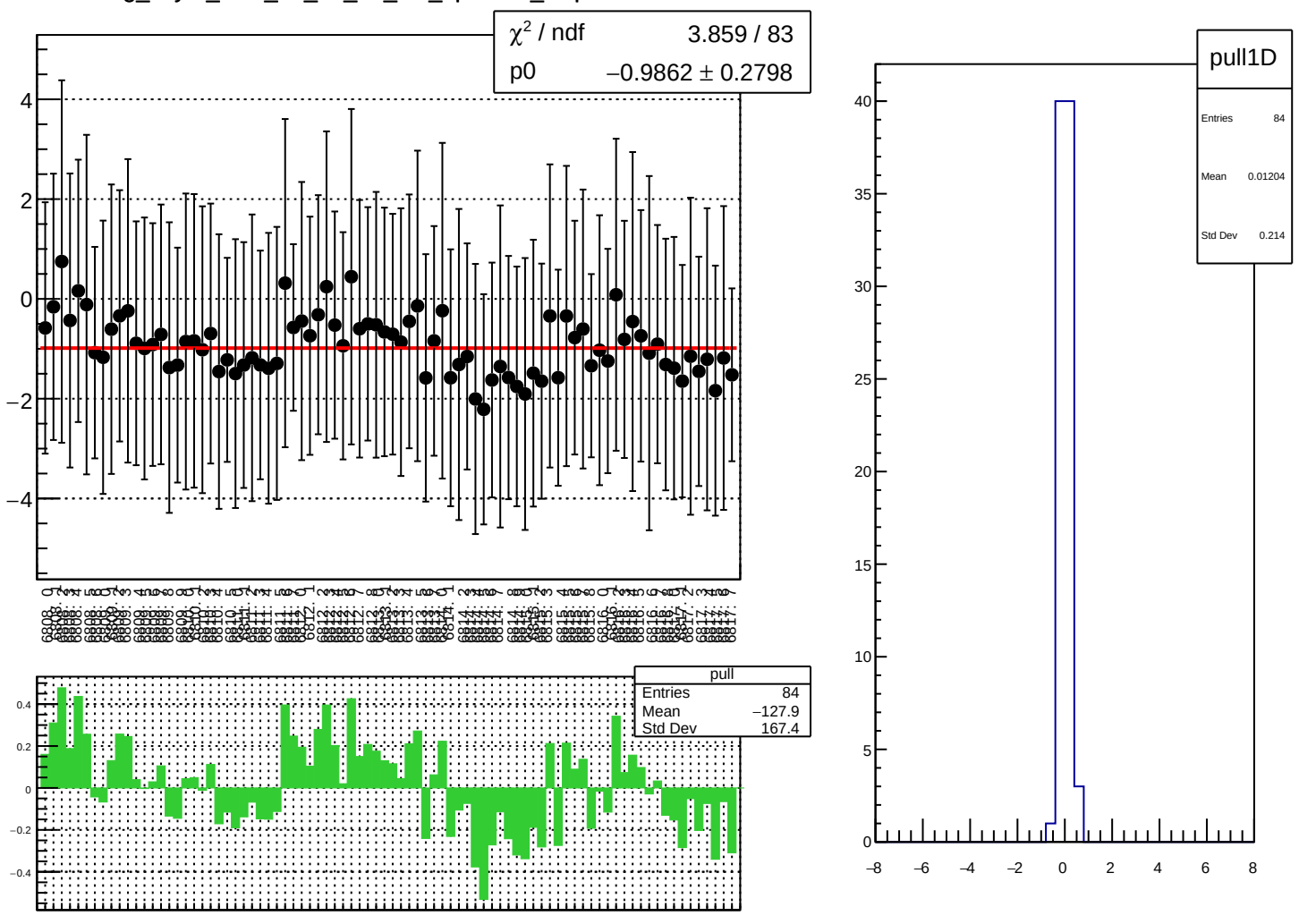

pull1D
Entries 84
Mean −0.0003906
Std Dev 0.2637

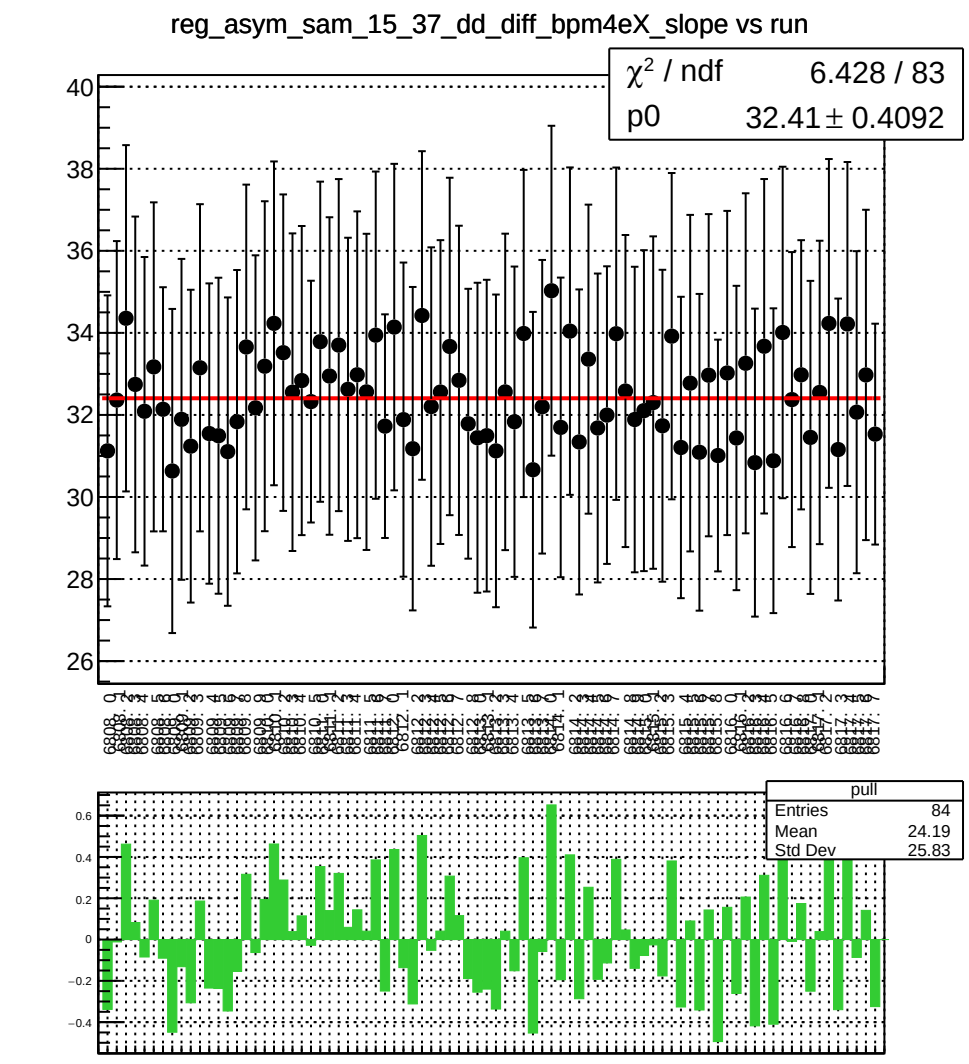

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 19.77 / 83
p0 −5.166 ± 0.3198
pull
Entries 84
Mean −638.3
Std Dev 683.2
pull1D
Entries 84
Mean 0.005458
Std Dev 0.4851

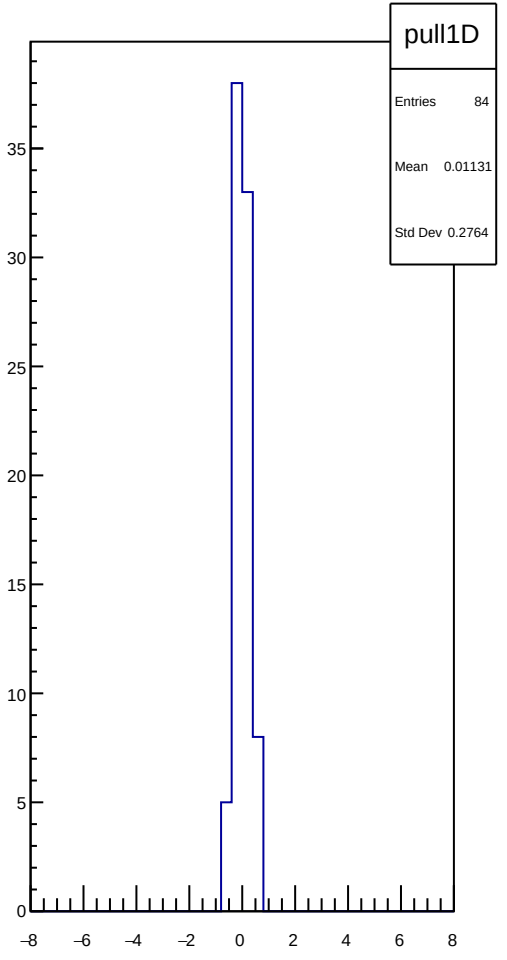

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 17.56 / 83
p0 0.1695 ± 0.01671
pull
Entries 84
Mean −613.2
Std Dev 647.5

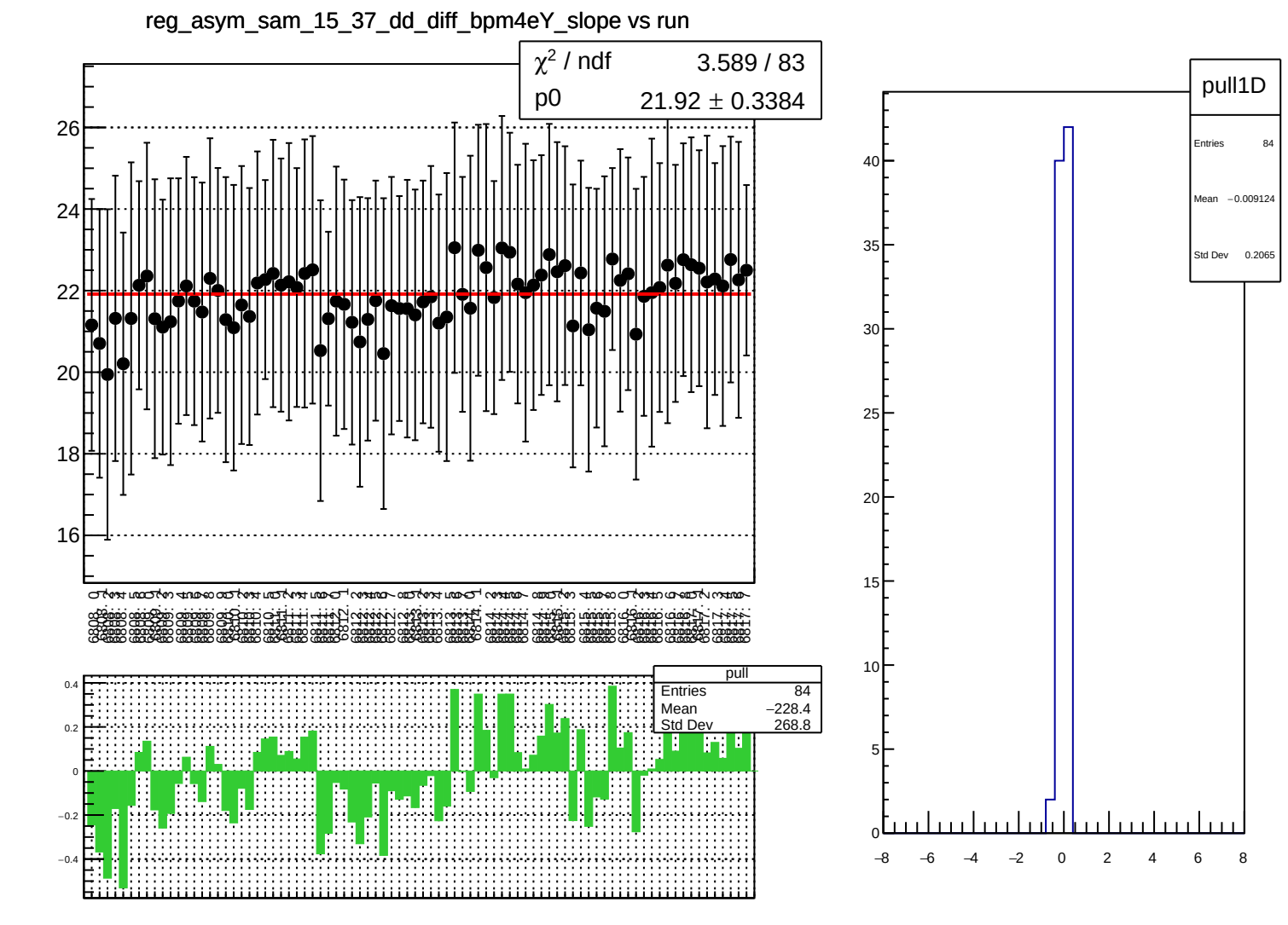

pull1D
Entries 84
Mean 0.004997
Std Dev 0.4573

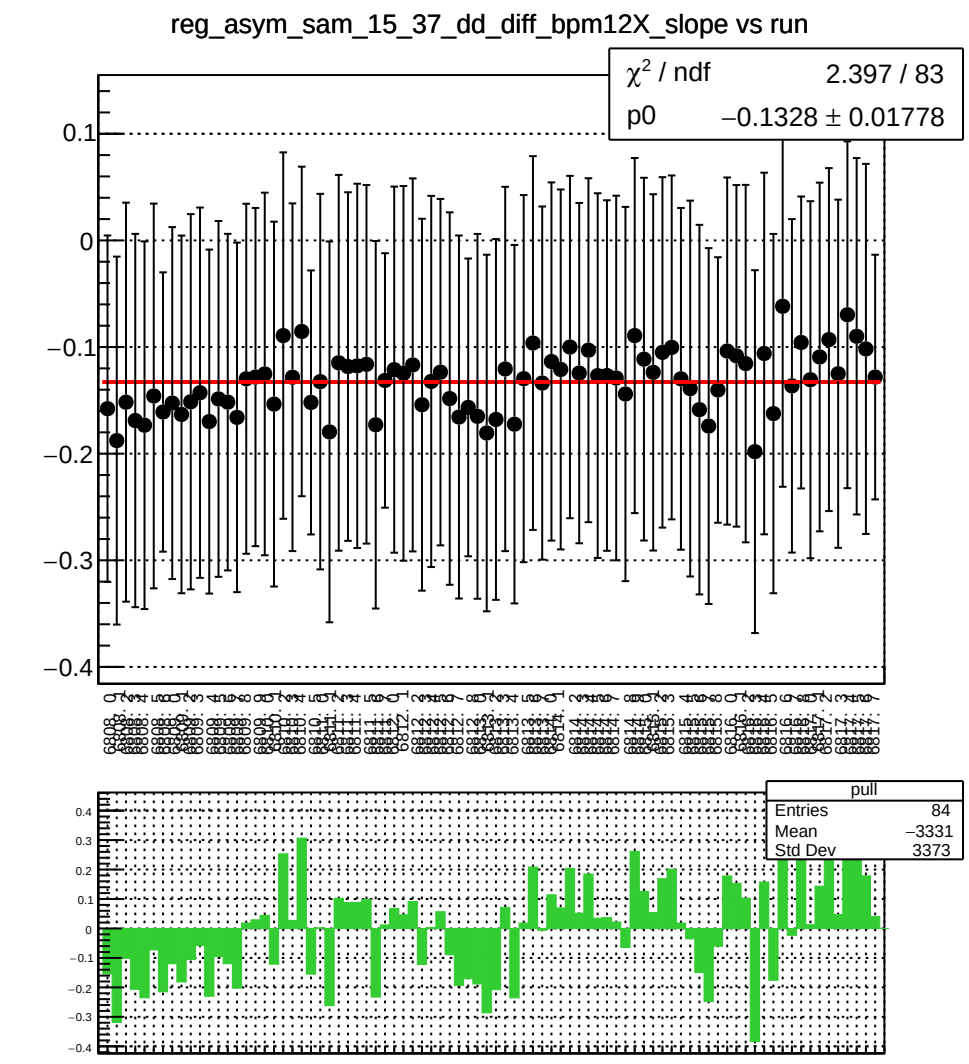

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 3.607 / 83
p0 3.972 ± 0.4376
pull
Entries 84
Mean 114.8
Std Dev 50.17
pull1D
Entries 84
Mean −0.005442
Std Dev 0.2071

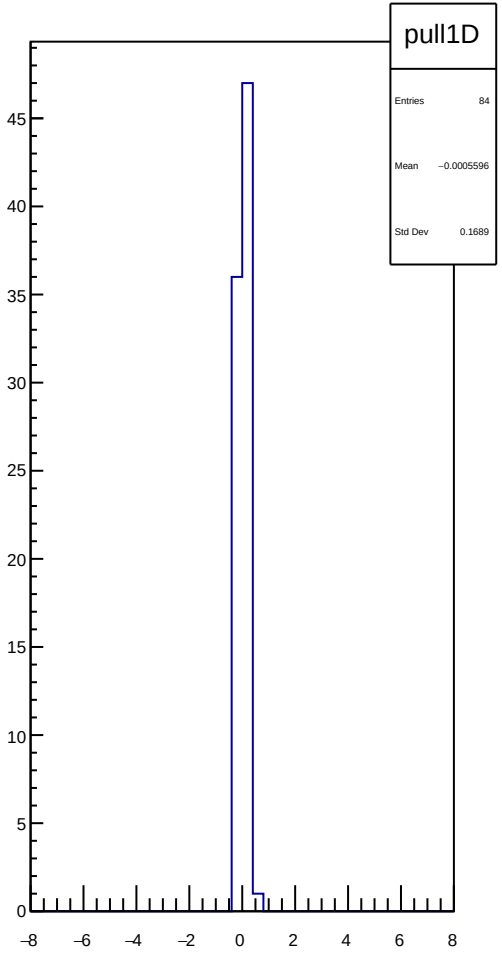

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.859 / 83
p0 −0.9862 ± 0.2798
pull
Entries 84
Mean −127.9
Std Dev 167.4
pull1D
Entries 84
Mean 0.01204
Std Dev 0.214

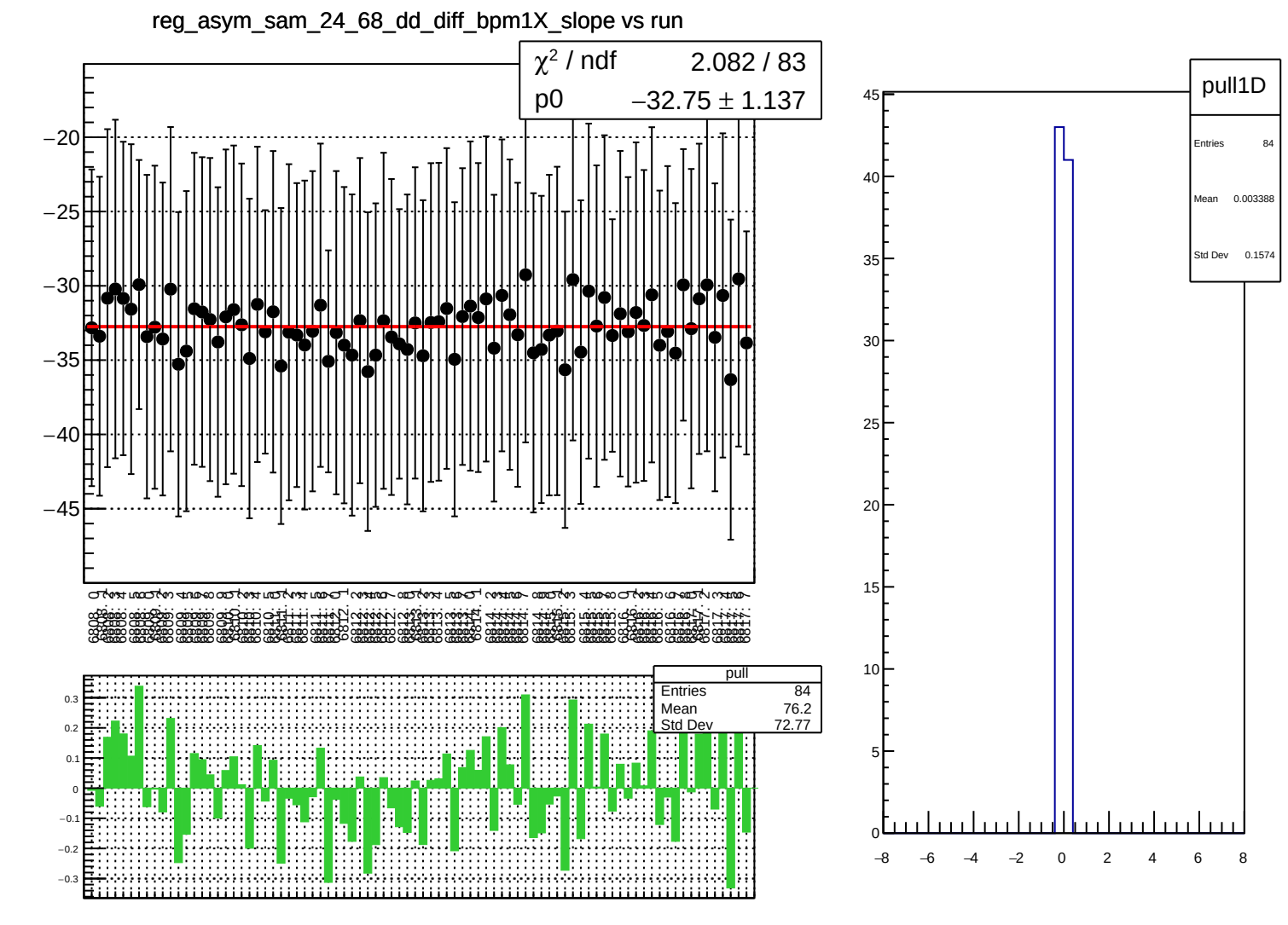

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 6.428 / 83
p0 32.41 ± 0.4092
pull
Entries 84
Mean 24.19
Std Dev 25.83

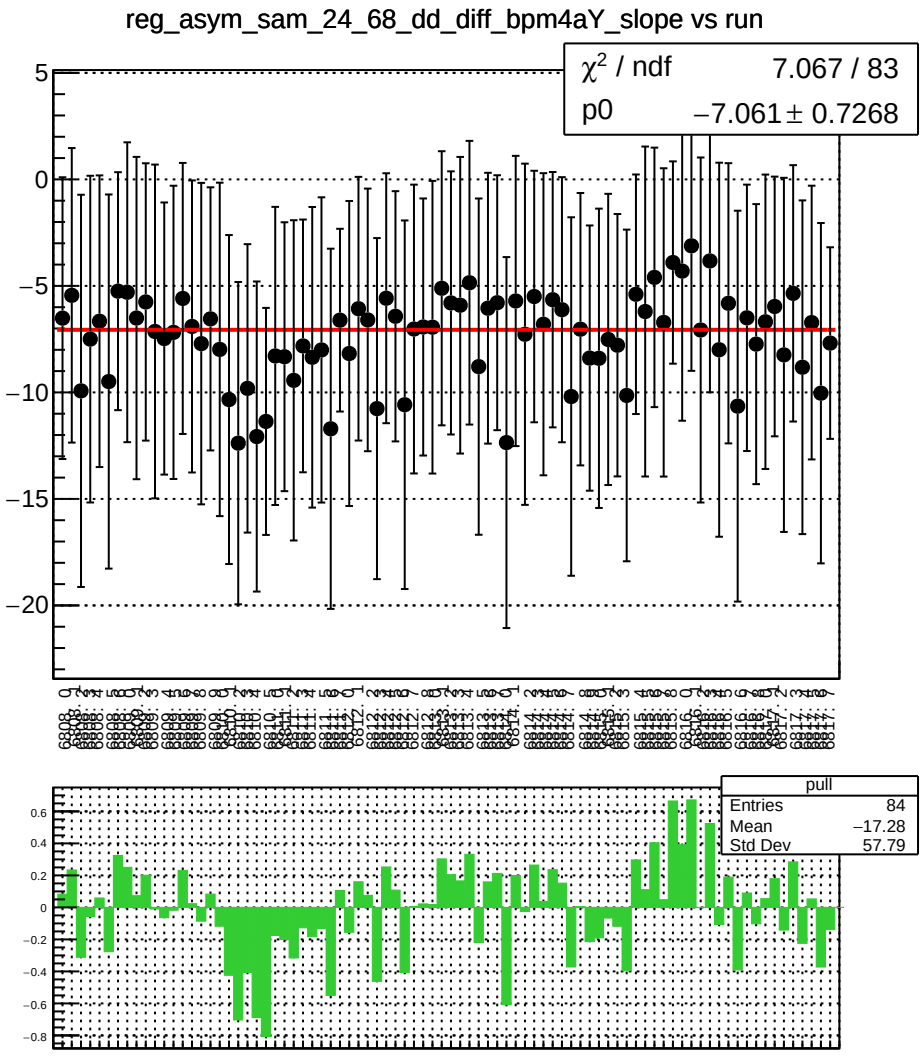

pull1D
Entries 84
Mean 0.01131
Std Dev 0.2764

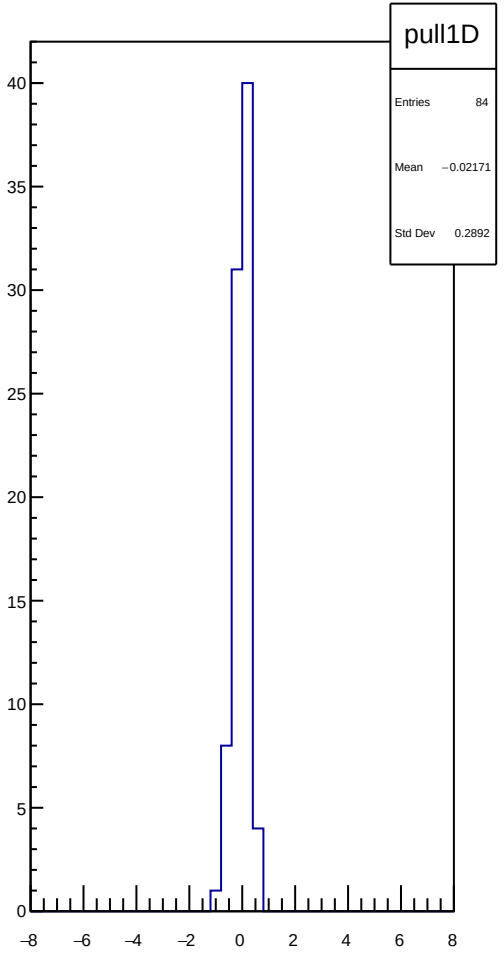

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.589 / 83
p0 21.92 ± 0.3384
pull
Entries 84
Mean −228.4
Std Dev 268.8
pull1D
Entries 84
Mean −0.009124
Std Dev 0.2065

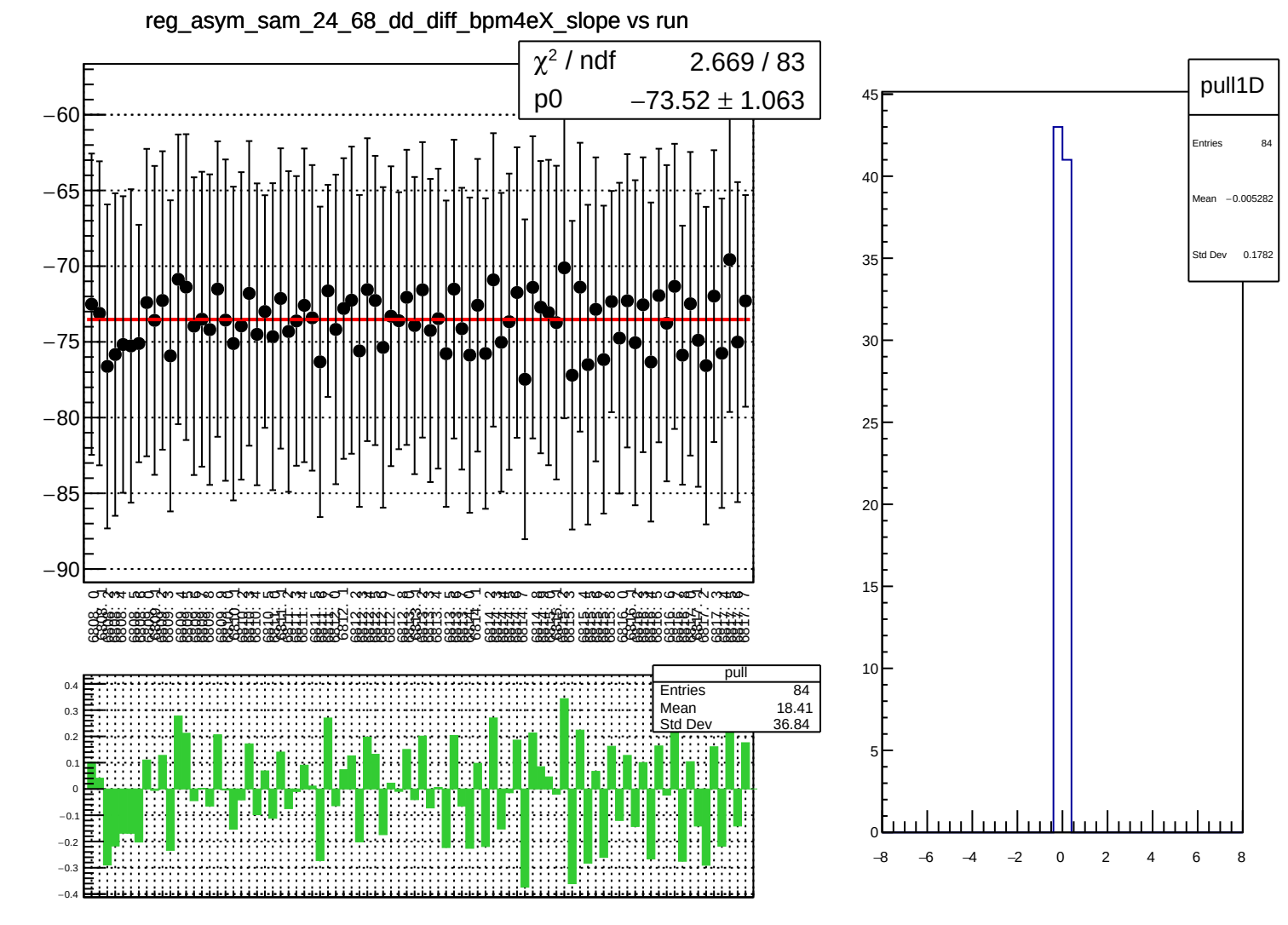

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 2.397 / 83
p0 −0.1328 ± 0.01778
pull
Entries 84
Mean −3331
Std Dev 3373

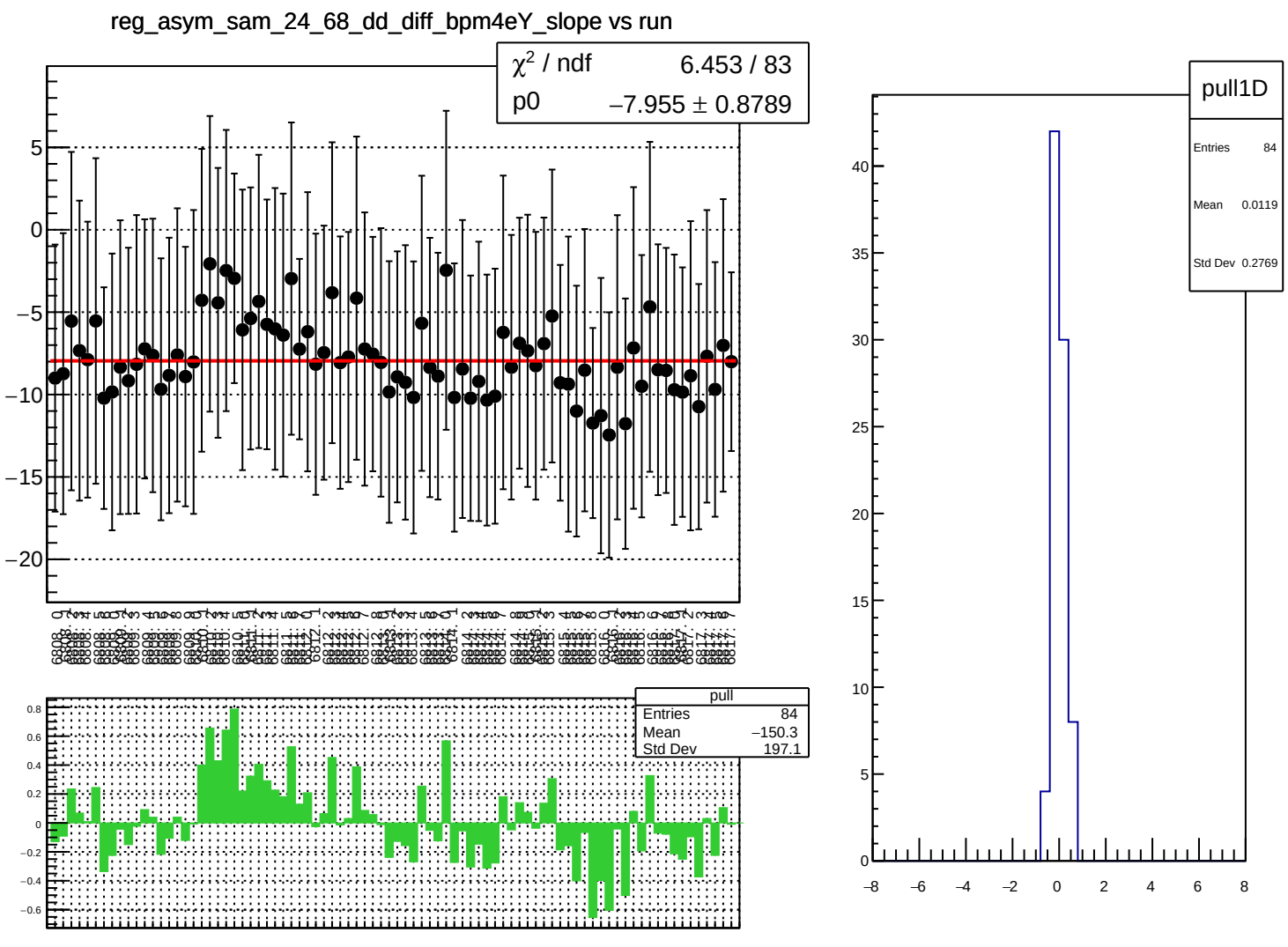

pull1D
Entries 84
Mean −0.0005596
Std Dev 0.1689

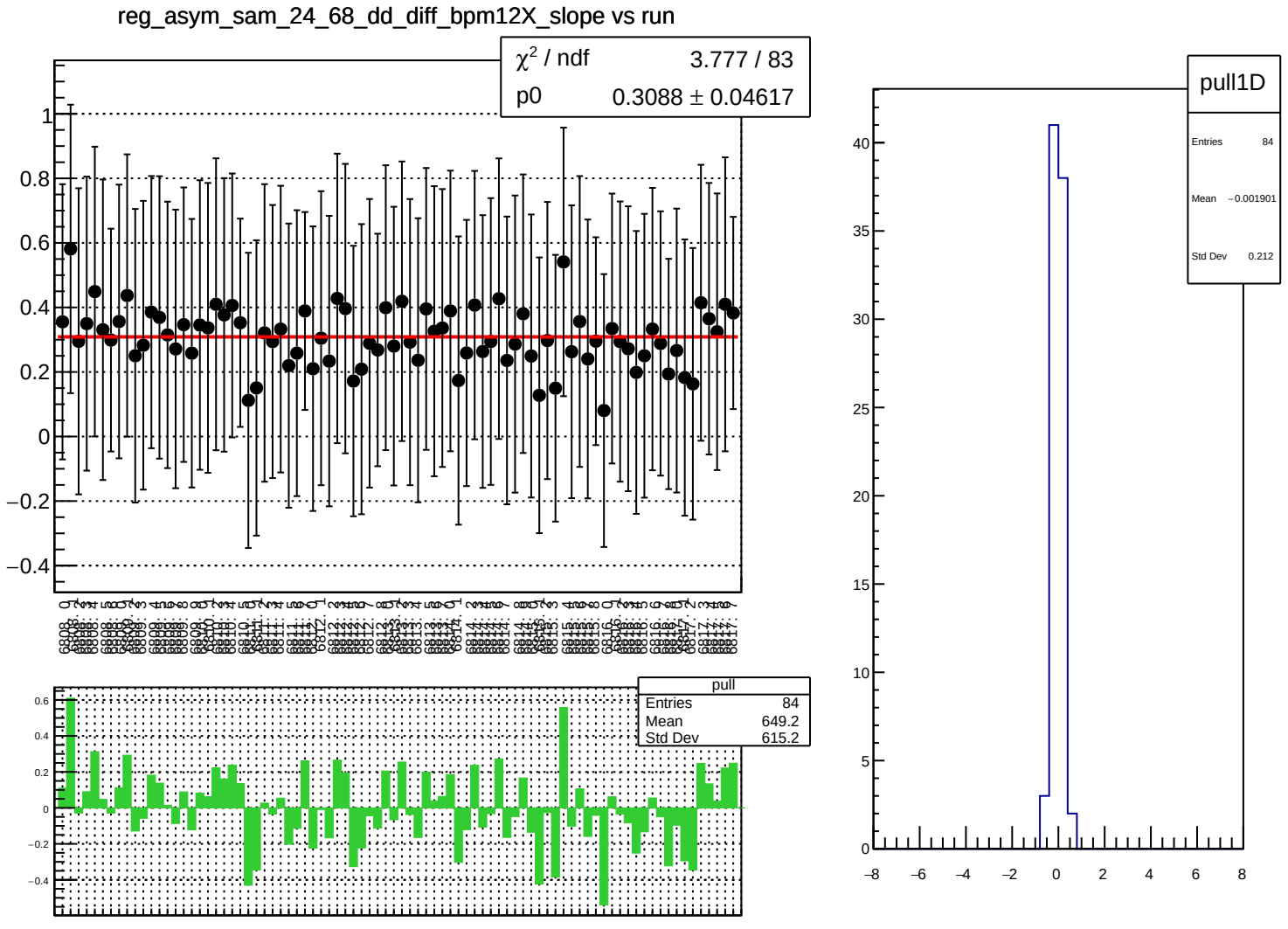

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 2.082 / 83
p0 −32.75 ± 1.137
pull
Entries 84
Mean 76.2
Std Dev 72.77
pull1D
Entries 84
Mean 0.003388
Std Dev 0.1574

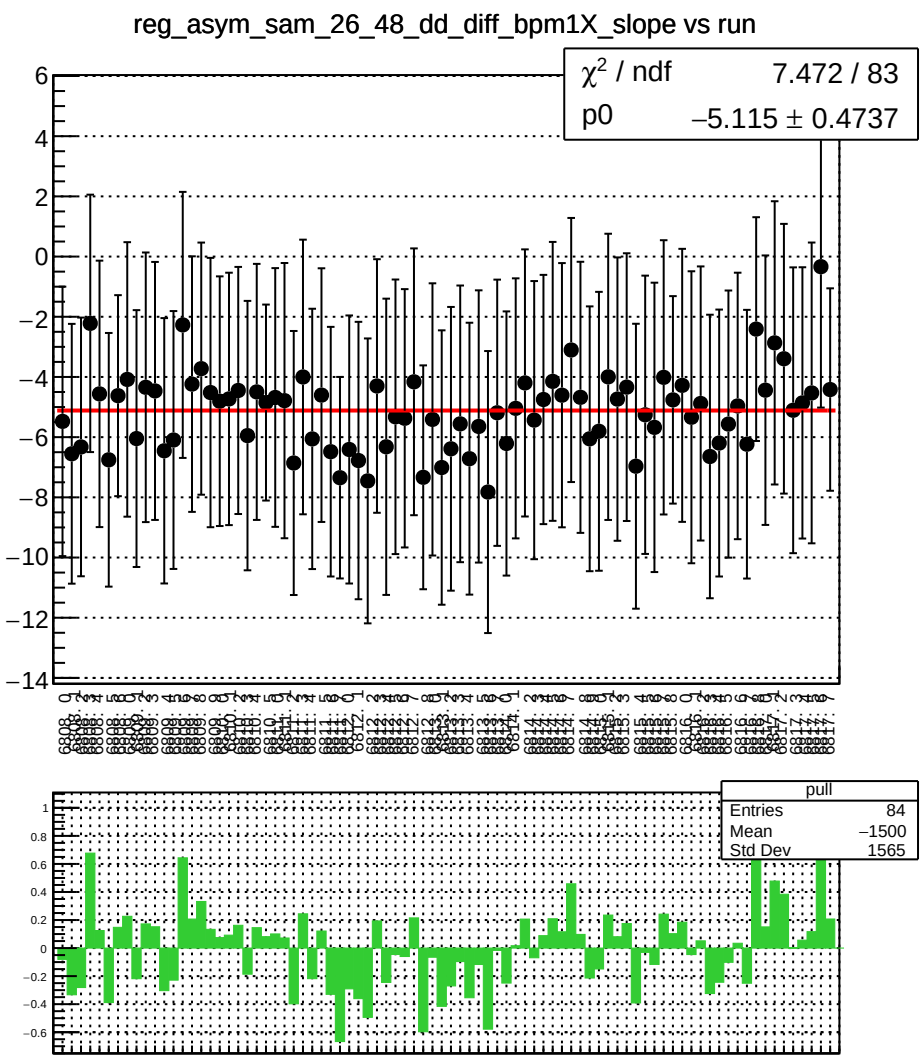

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.067 / 83
p0 −7.061 ± 0.7268
pull
Entries 84
Mean −17.28
Std Dev 57.79

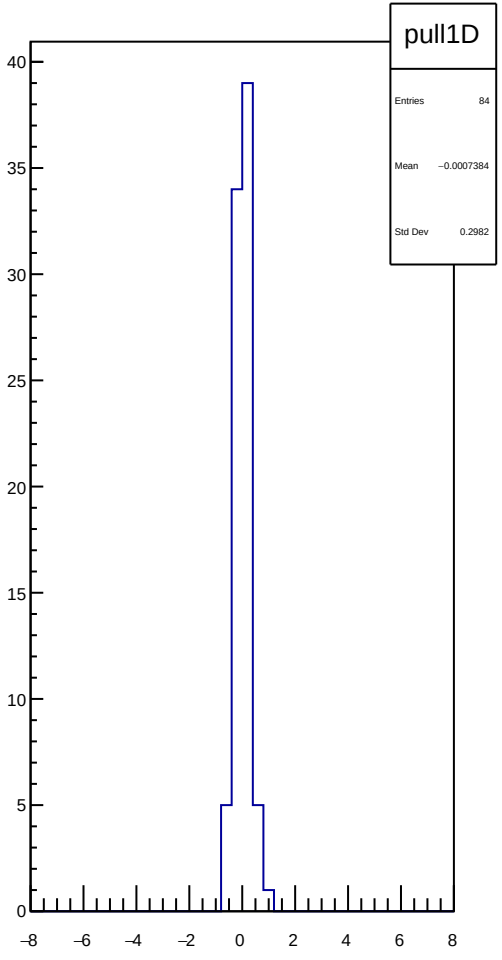

pull1D
Entries 84
Mean −0.02171
Std Dev 0.2892

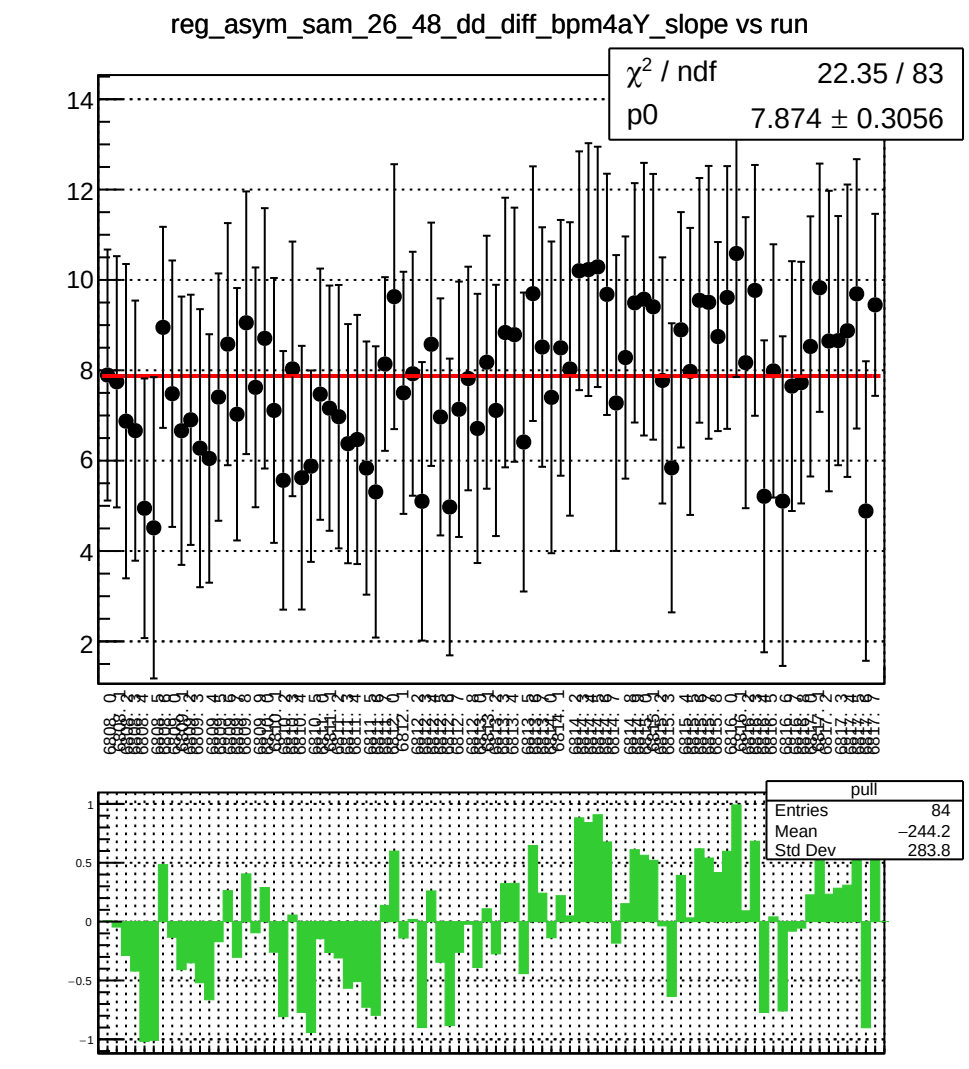

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.669 / 83
p0 −73.52 ± 1.063
pull
Entries 84
Mean 18.41
Std Dev 36.84
pull1D
Entries 84
Mean −0.005282
Std Dev 0.1782

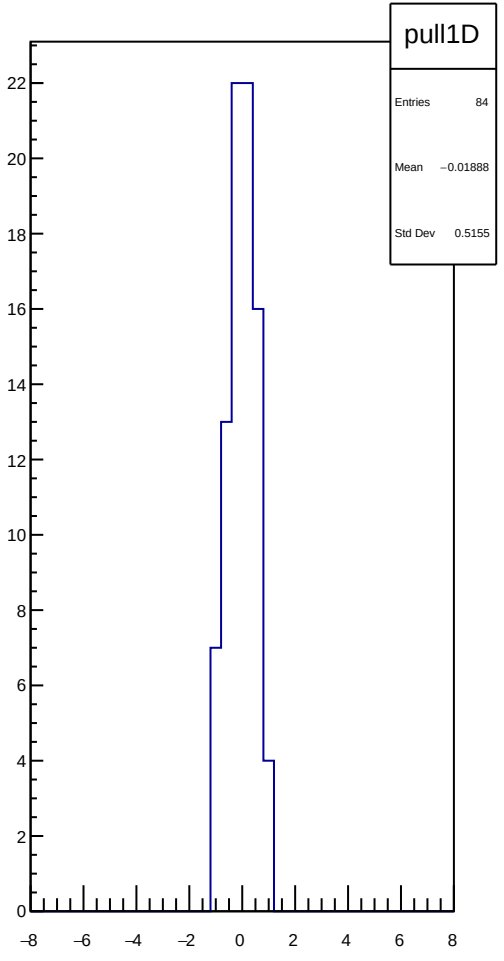

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.453 / 83
p0 −7.955 ± 0.8789
pull
Entries 84
Mean −150.3
Std Dev 197.1
pull1D
Entries 84
Mean 0.0119
Std Dev 0.2769

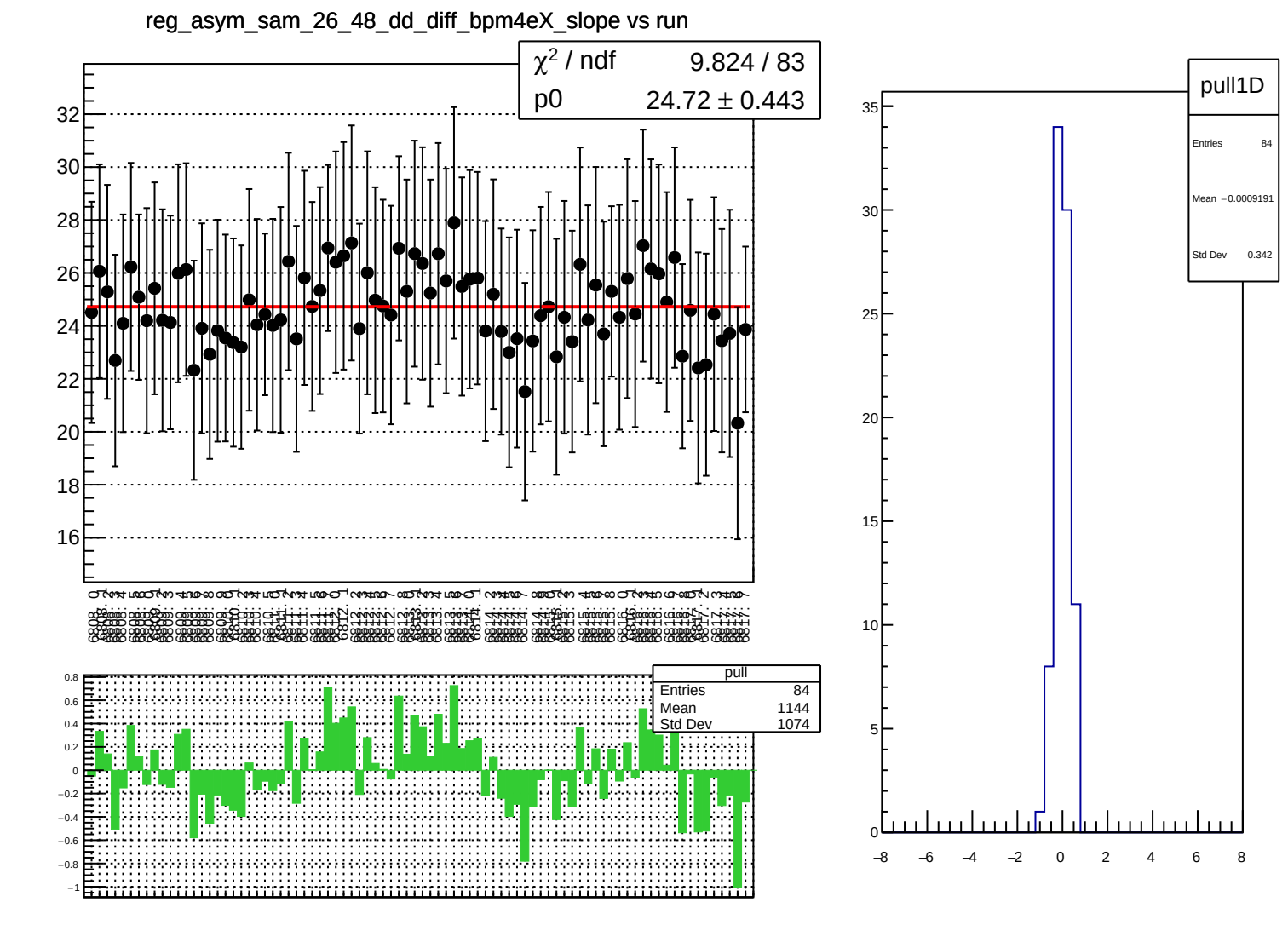

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 3.777 / 83
p0 0.3088 ± 0.04617
pull
Entries 84
Mean 649.2
Std Dev 615.2
pull1D
Entries 84
Mean −0.001901
Std Dev 0.212

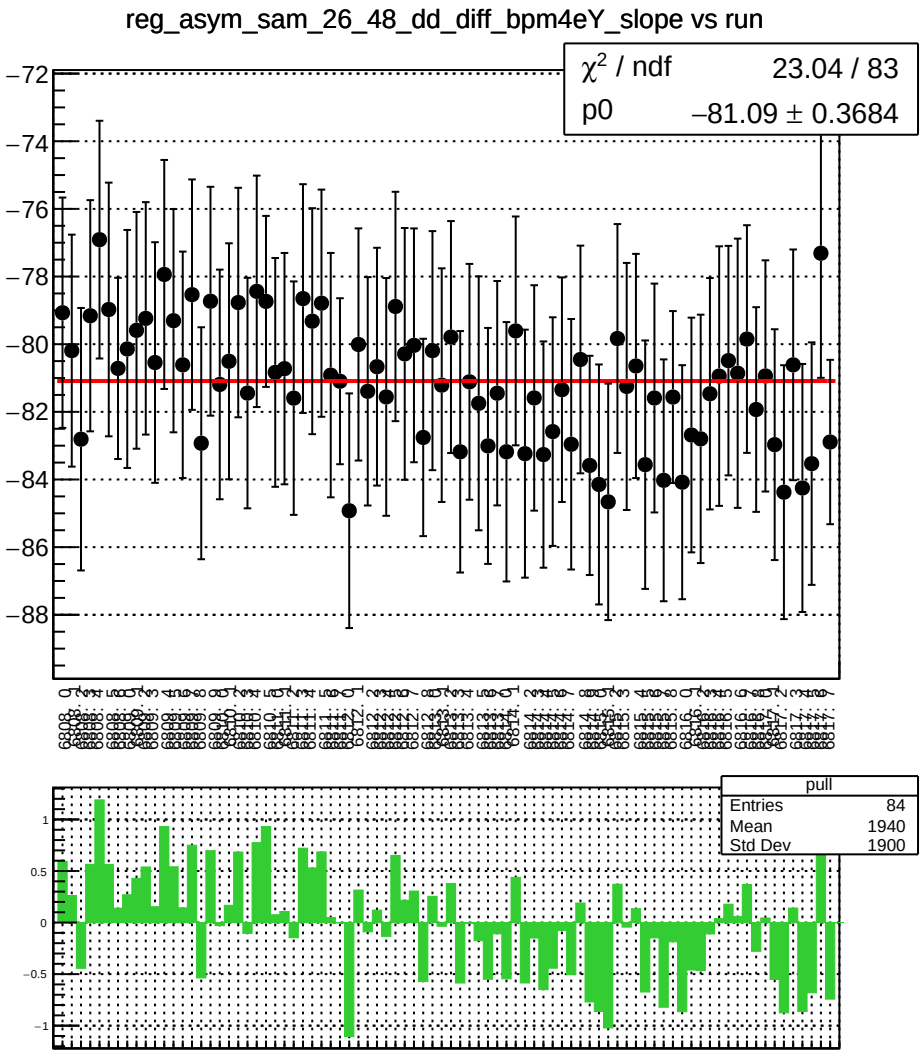

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 7.472 / 83
p0 −5.115 ± 0.4737
pull
Entries 84
Mean −1500
Std Dev 1565

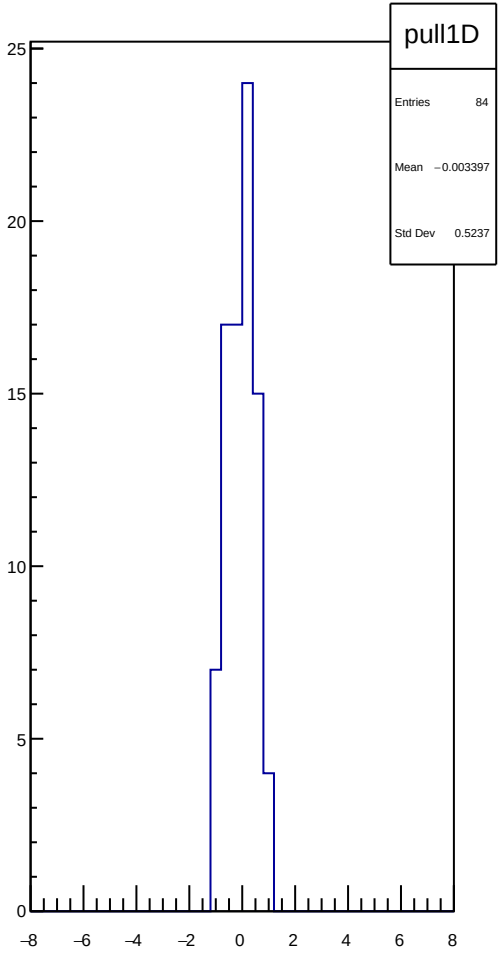

pull1D
Entries 84
Mean −0.0007384
Std Dev 0.2982

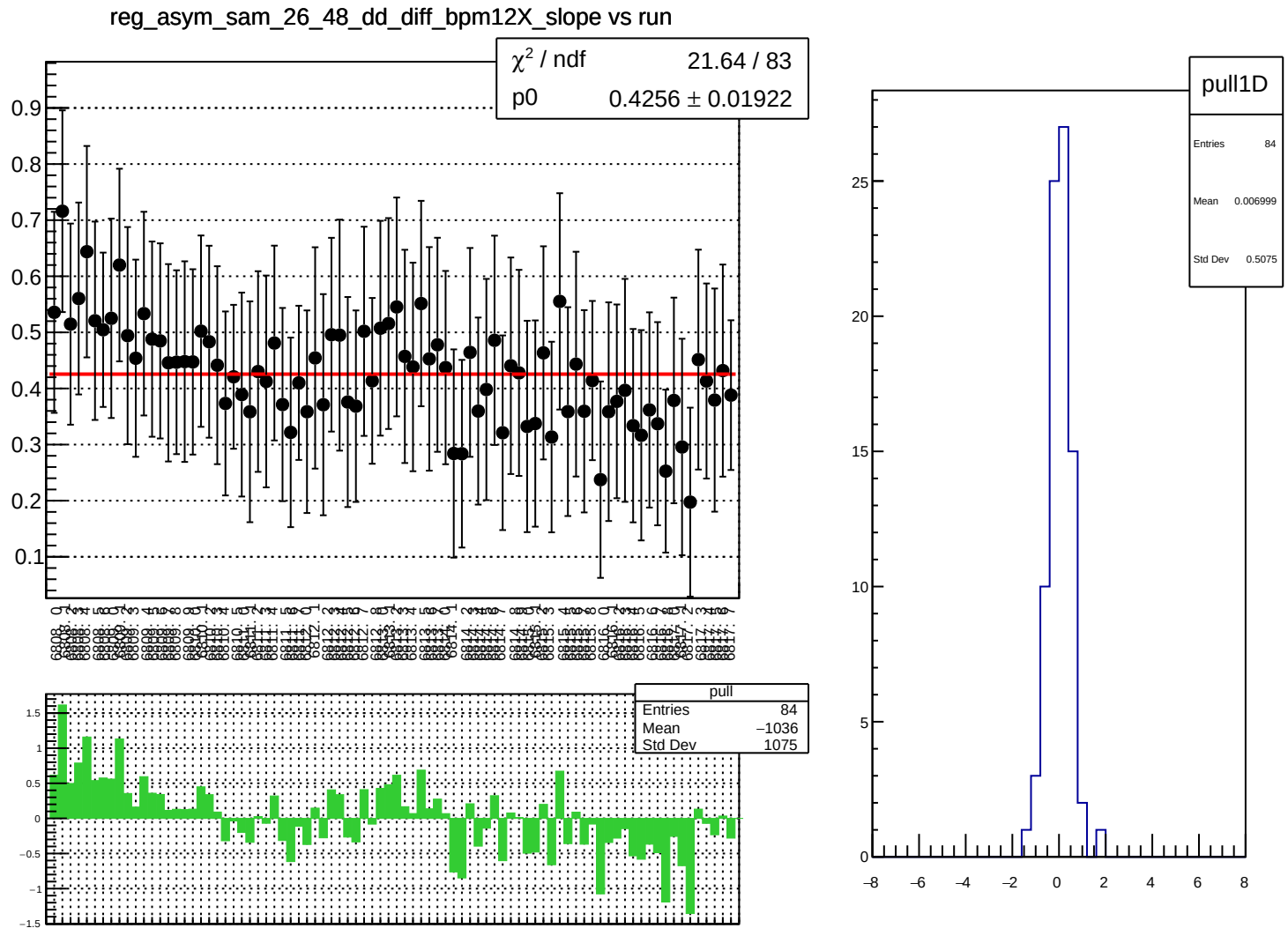

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 22.35 / 83
p0 7.874 ± 0.3056
pull
Entries 84
Mean −244.2
Std Dev 283.8

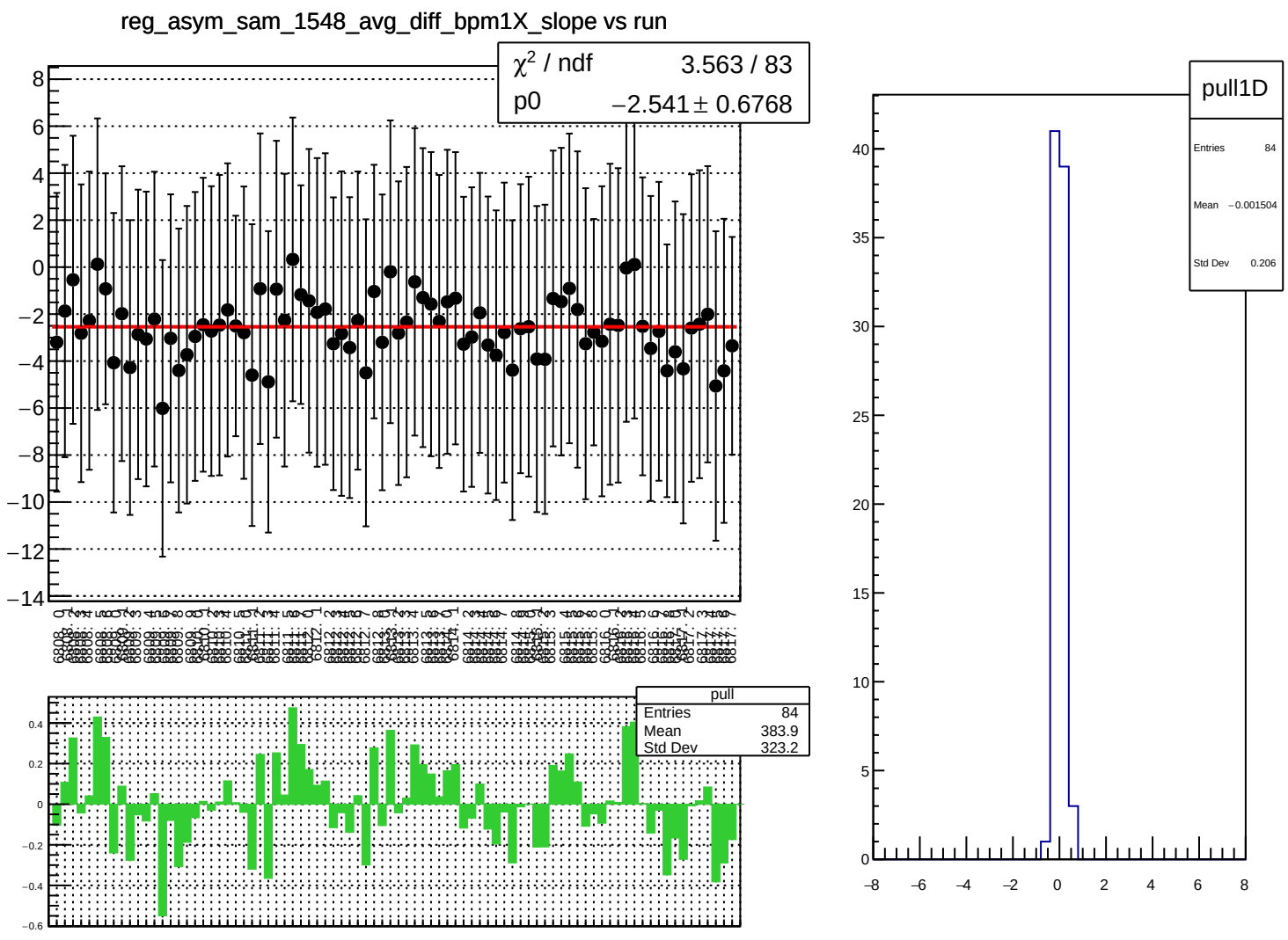

pull1D
Entries 84
Mean −0.01888
Std Dev 0.5155

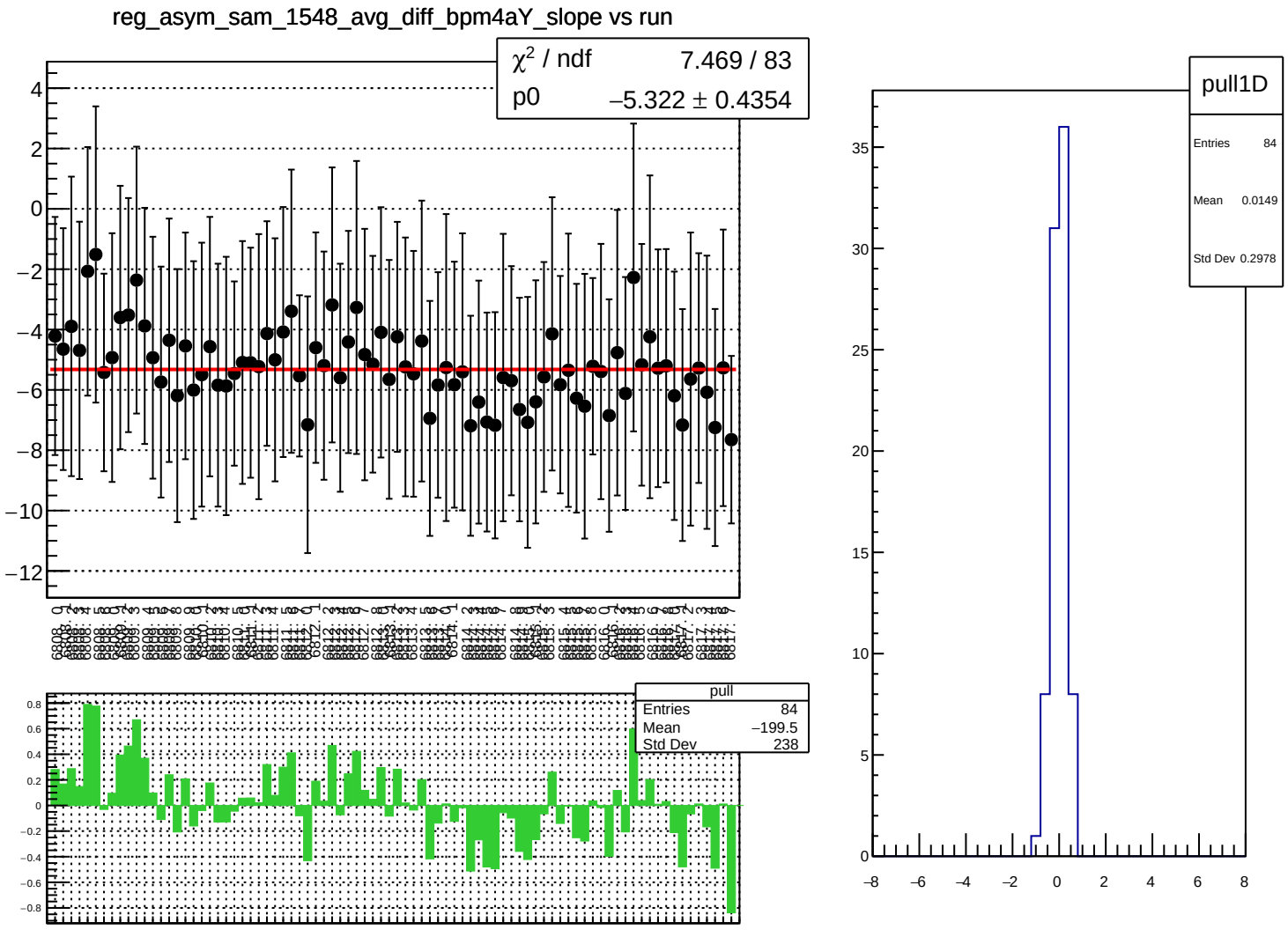

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 9.824 / 83
p0 24.72 ± 0.443
pull
Entries 84
Mean 1144
Std Dev 1074
pull1D
Entries 84
Mean −0.0009191
Std Dev 0.342

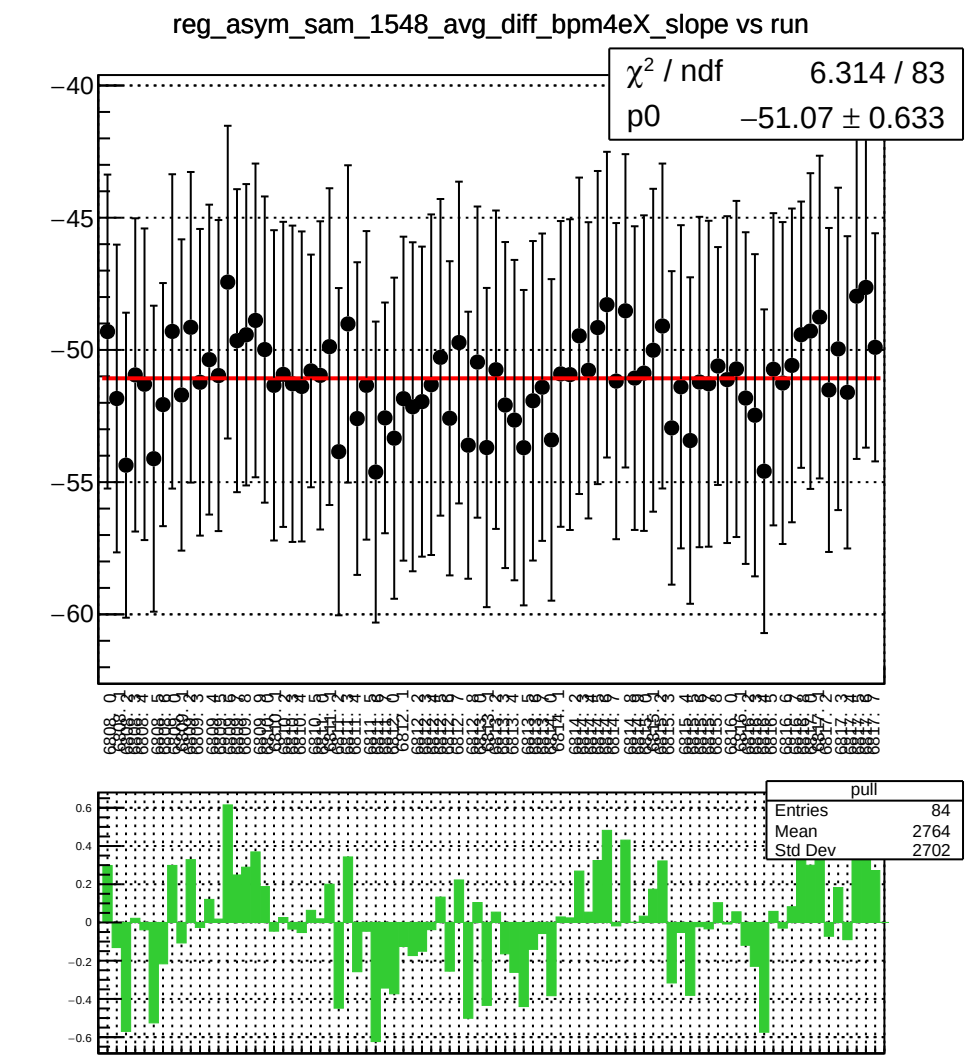

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 23.04 / 83
p0 −81.09 ± 0.3684
pull
Entries 84
Mean 1940
Std Dev 1900

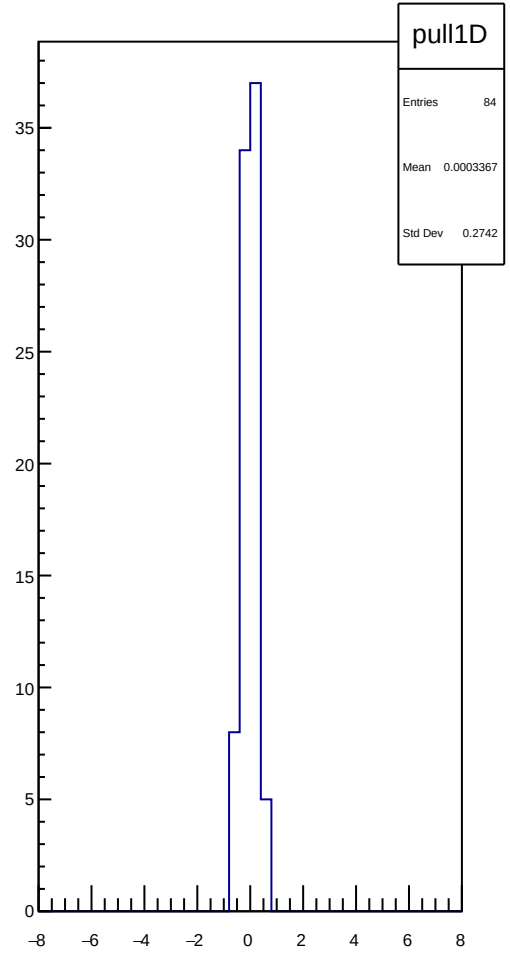

pull1D
Entries 84
Mean −0.003397
Std Dev 0.5237

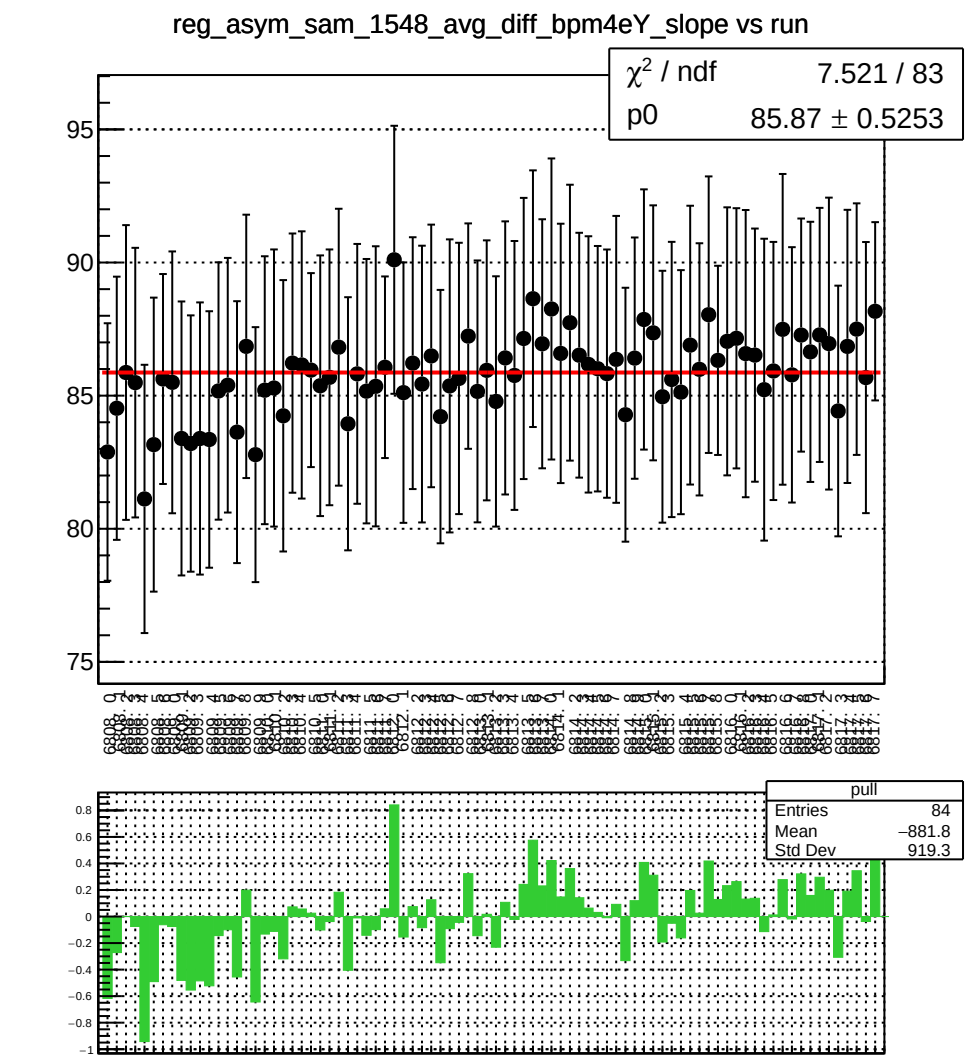

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 21.64 / 83
p0 0.4256 ± 0.01922
pull
Entries 84
Mean −1036
Std Dev 1075
pull1D
Entries 84
Mean 0.006999
Std Dev 0.5075

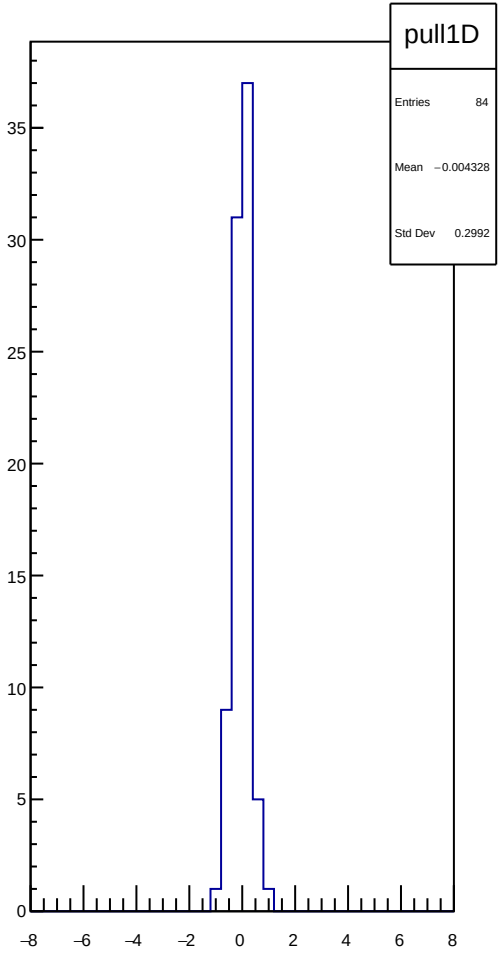

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 3.563 / 83
p0 −2.541 ± 0.6768
pull
Entries 84
Mean 383.9
Std Dev 323.2
pull1D
Entries 84
Mean −0.001504
Std Dev 0.206

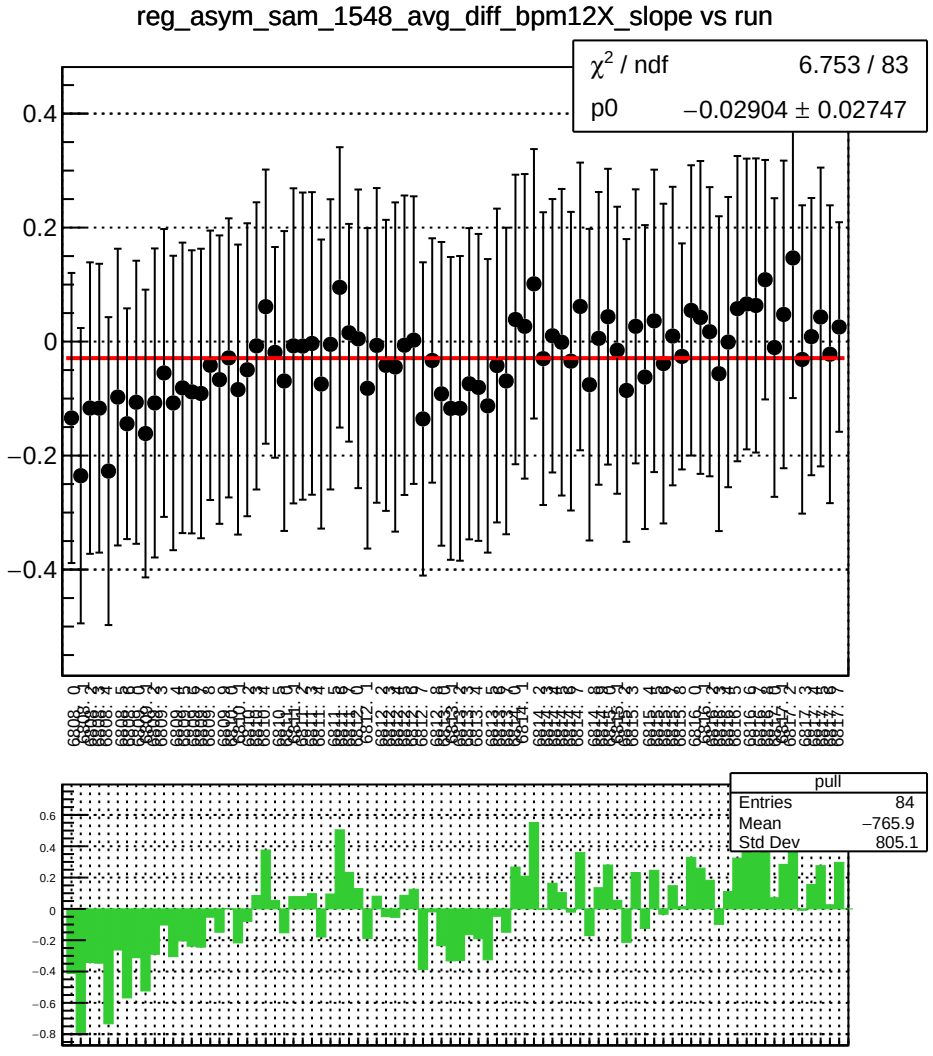

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.469 / 83
p0 −5.322 ± 0.4354
pull
Entries 84
Mean −199.5
Std Dev 238
pull1D
Entries 84
Mean 0.0149
Std Dev 0.2978

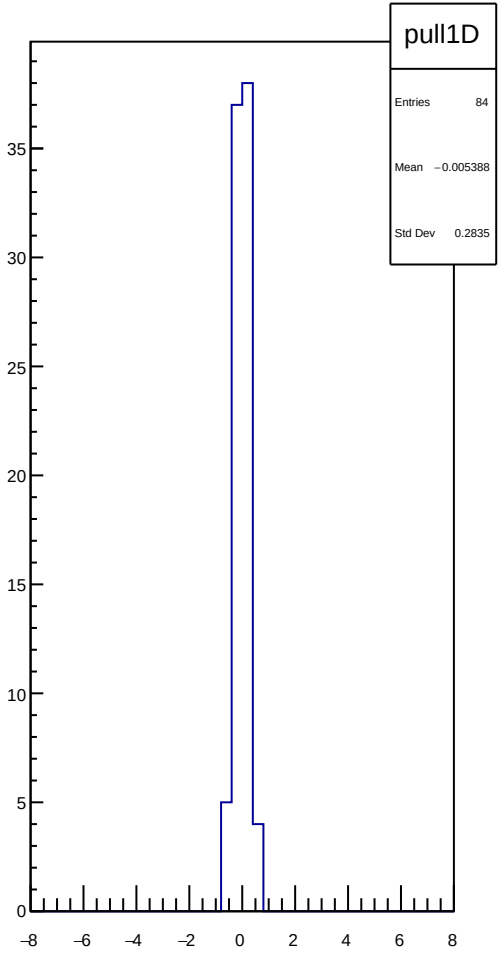

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.314 / 83
p0 −51.07 ± 0.633
−40
−45
−50
−55
−60
pull
Entries 84
Mean 2764
Std Dev 2702
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

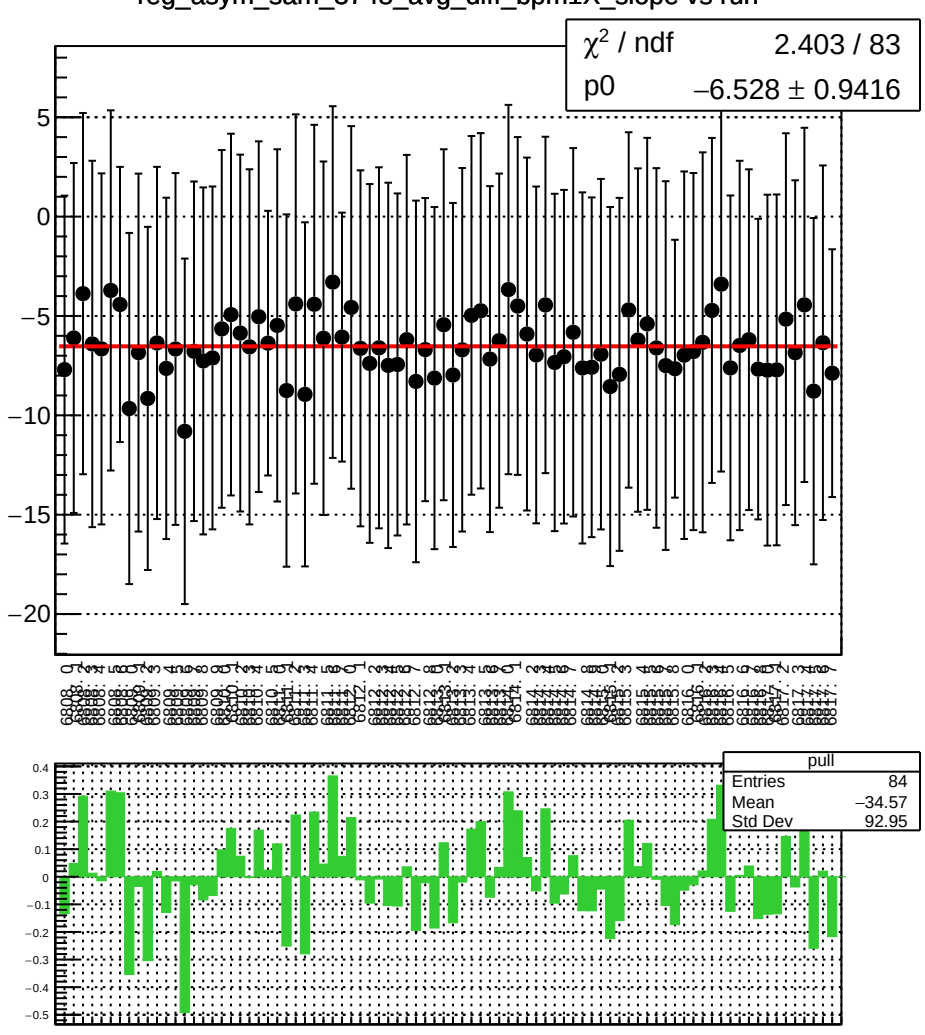

pull1D
Entries 84
Mean 0.0003367
Std Dev 0.2742
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

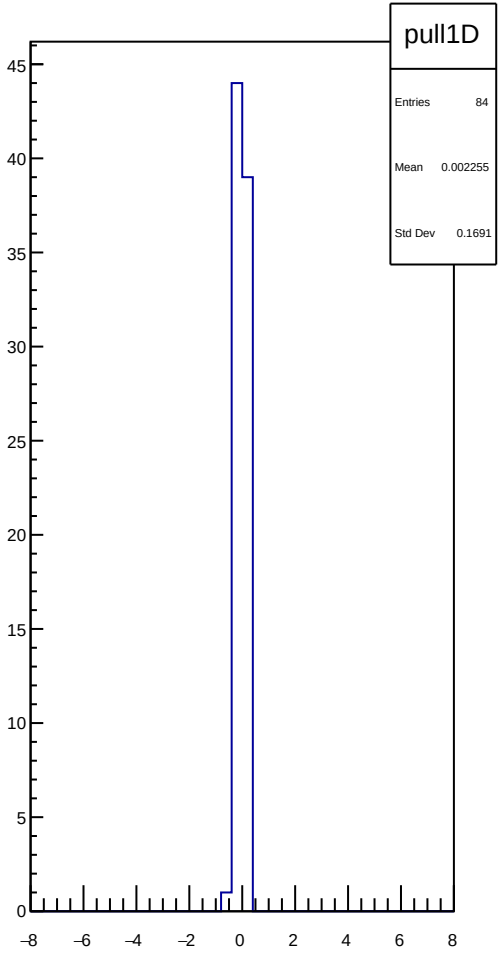

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.521 / 83
p0 85.87 ± 0.5253
95
90
85
80
75
pull
Entries 84
Mean −881.8
Std Dev 919.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

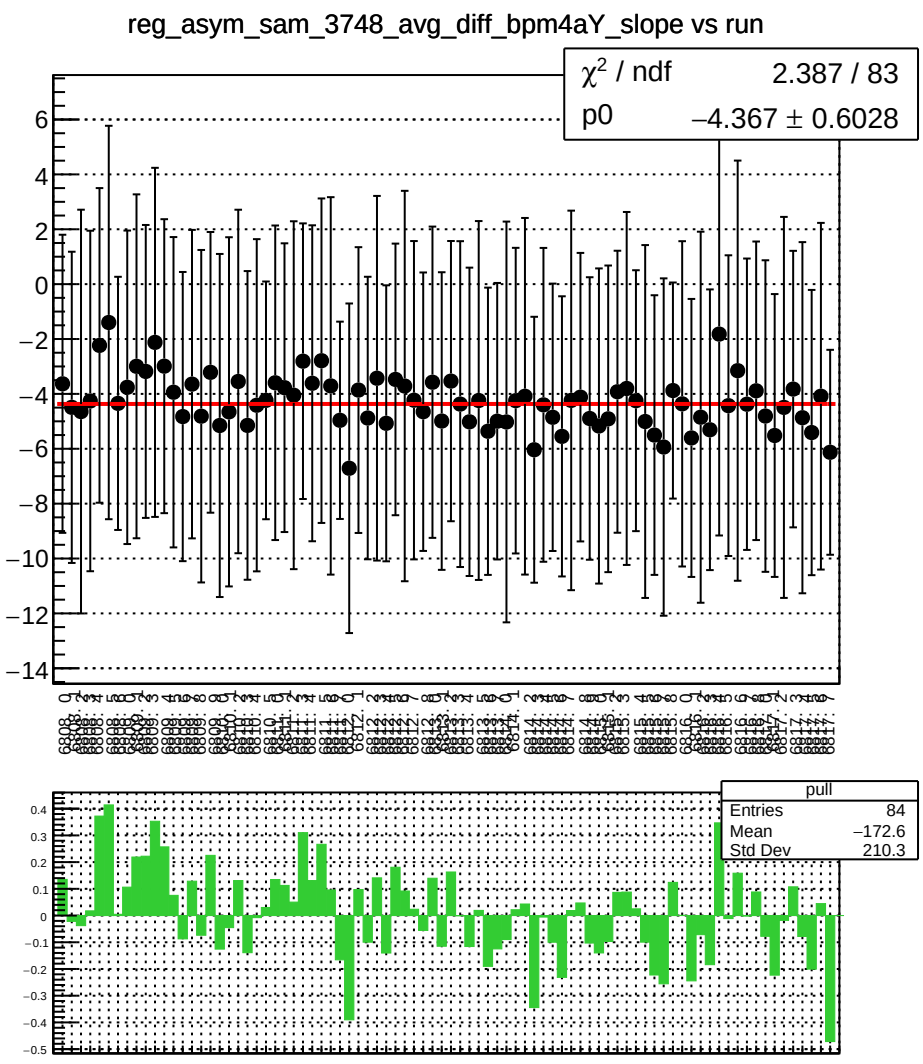

pull1D
Entries 84
Mean −0.004328
Std Dev 0.2992
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

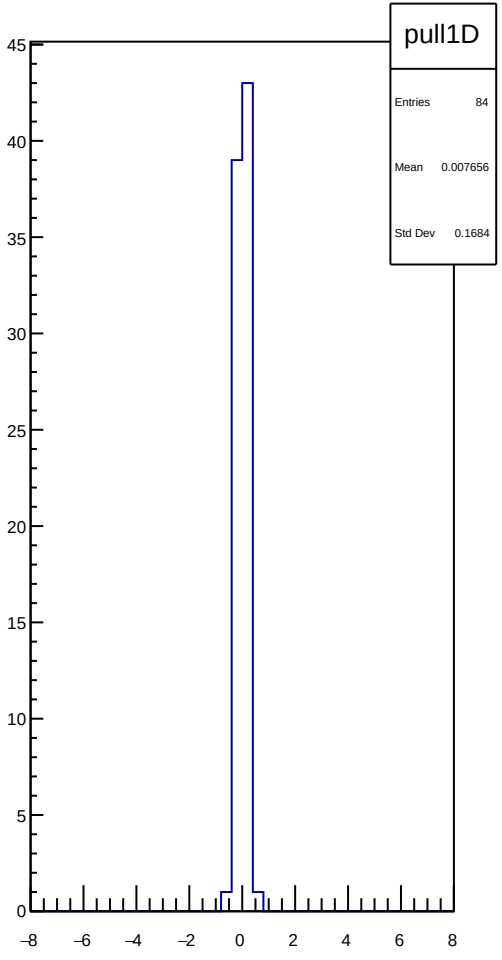

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 6.753 / 83
p0 −0.02904 ± 0.02747
pull
Entries 84
Mean −765.9
Std Dev 805.1

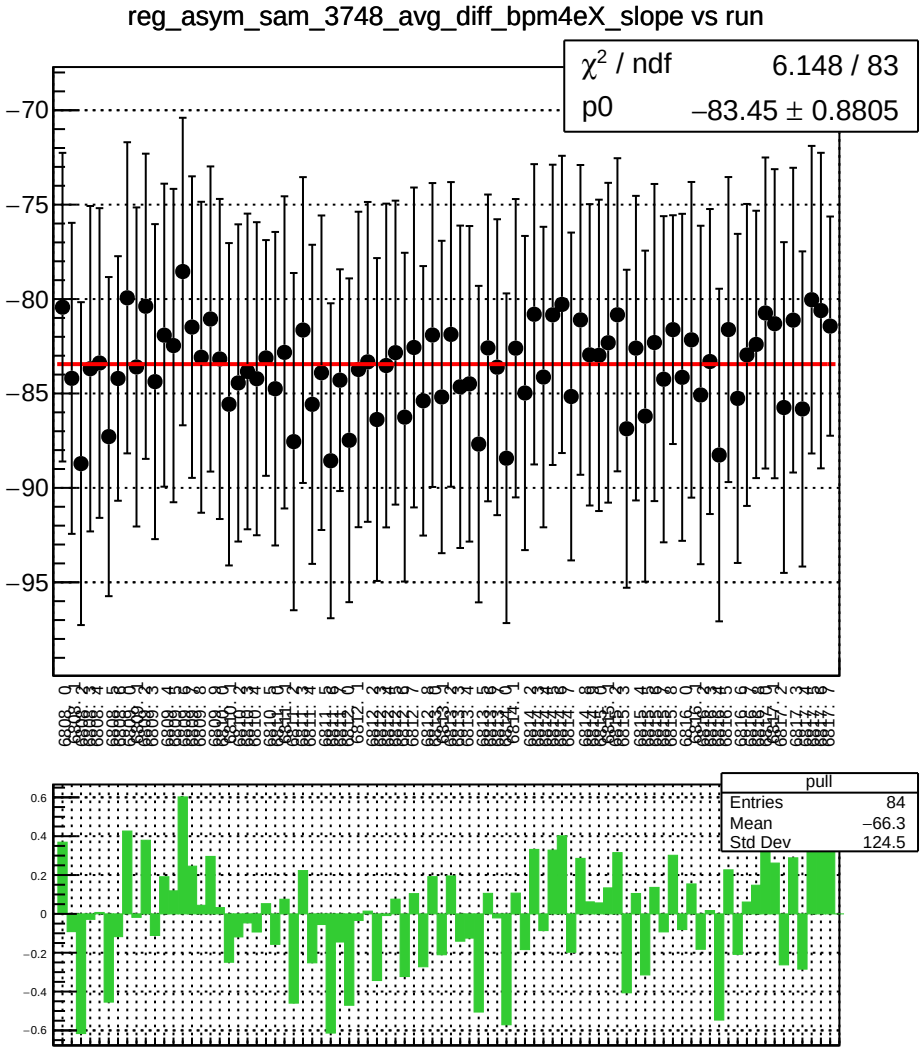

pull1D
Entries 84
Mean −0.005388
Std Dev 0.2835

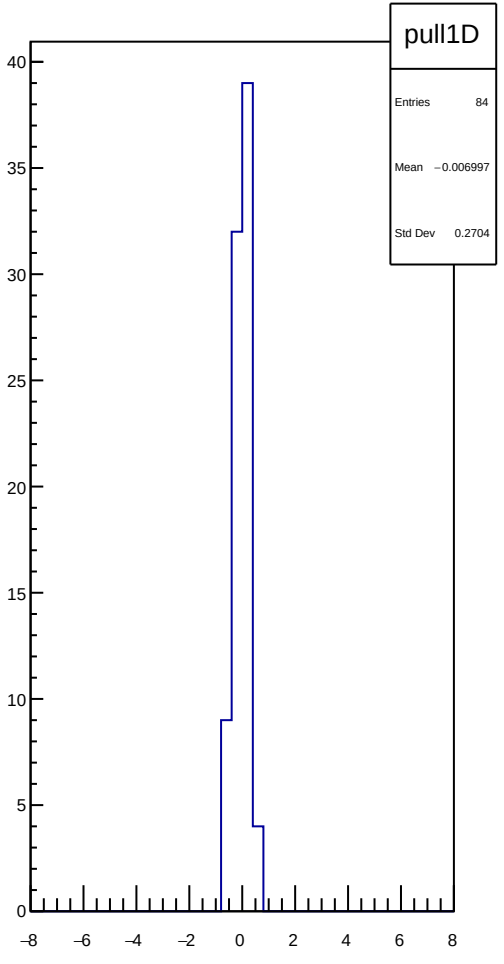

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 2.403 / 83
p0 −6.528 ± 0.9416
pull
Entries 84
Mean −34.57
Std Dev 92.95

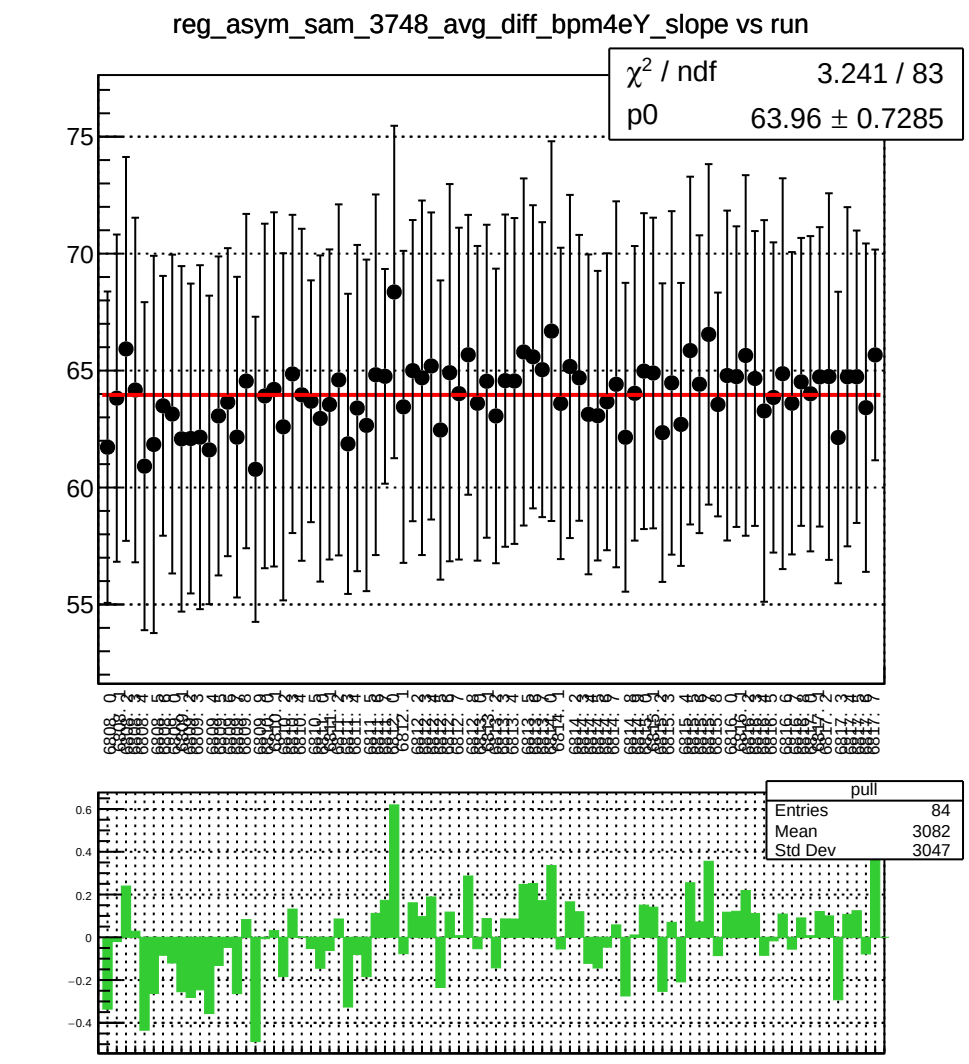

pull1D
Entries 84
Mean 0.002255
Std Dev 0.1691

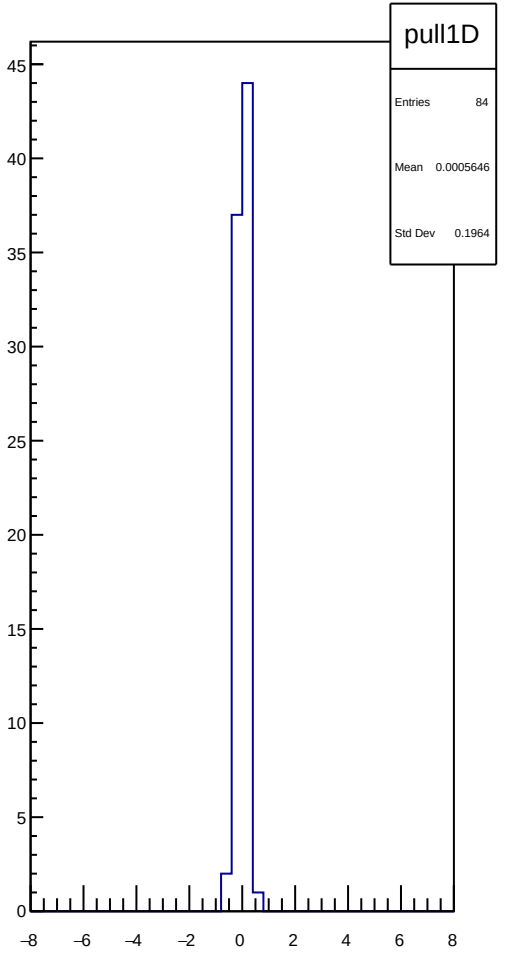

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.387 / 83
p0 −4.367 ± 0.6028
pull
Entries 84
Mean −172.6
Std Dev 210.3

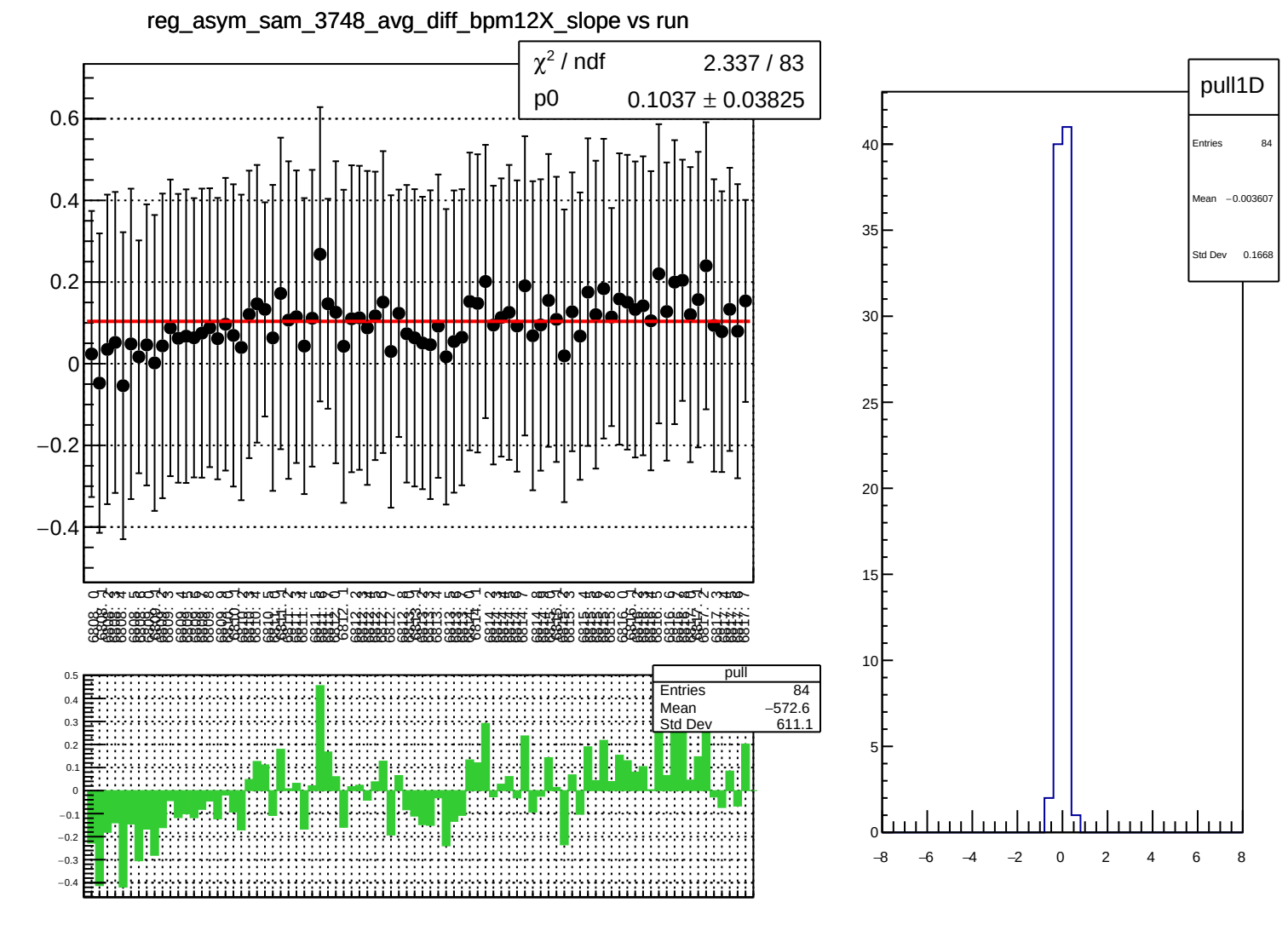

pull1D
Entries 84
Mean 0.007656
Std Dev 0.1684

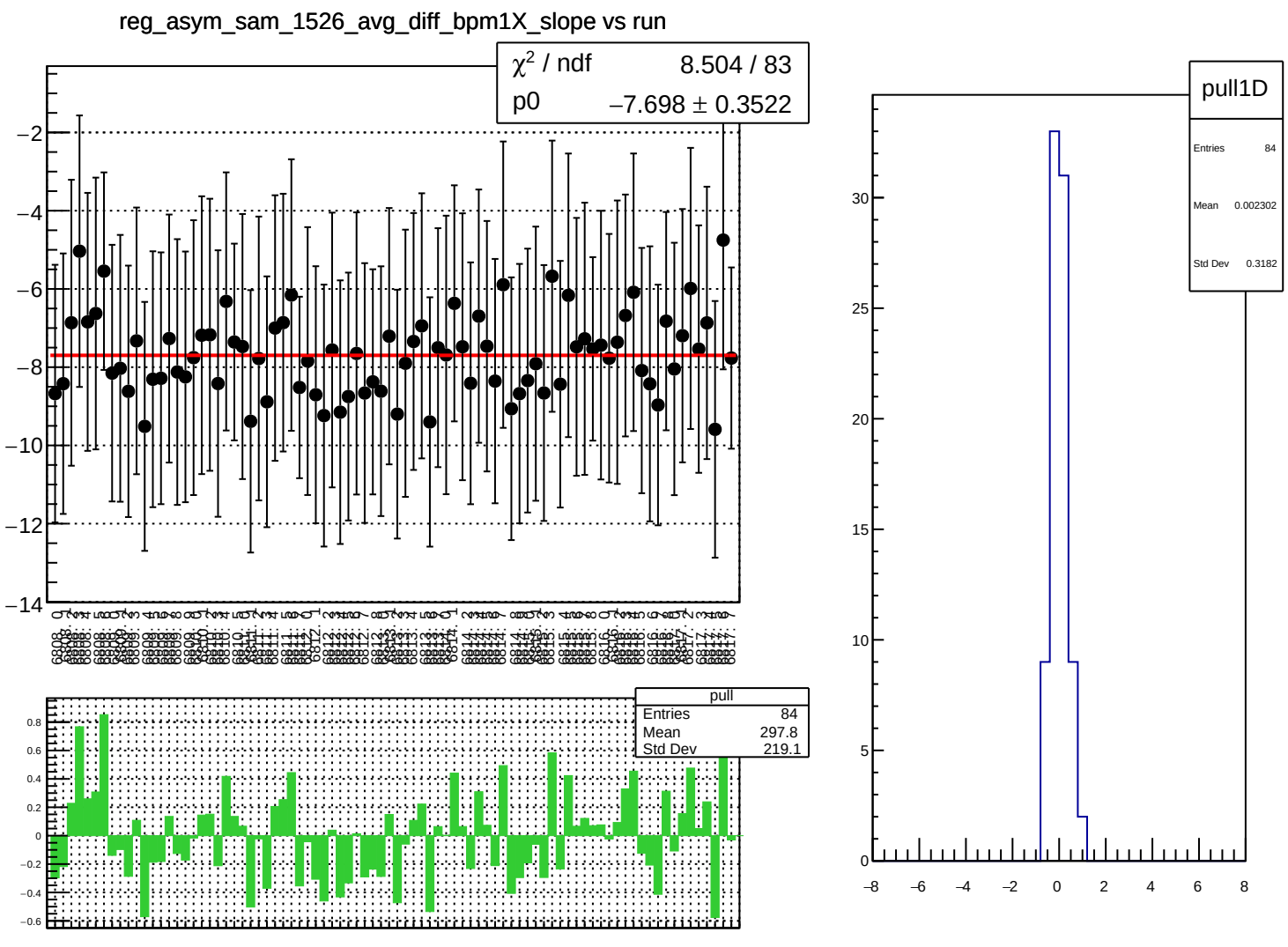

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.148 / 83
p0 −83.45 ± 0.8805
−70
−75
−80
−85
−90
−95
pull
Entries 84
Mean −66.3
Std Dev 124.5
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

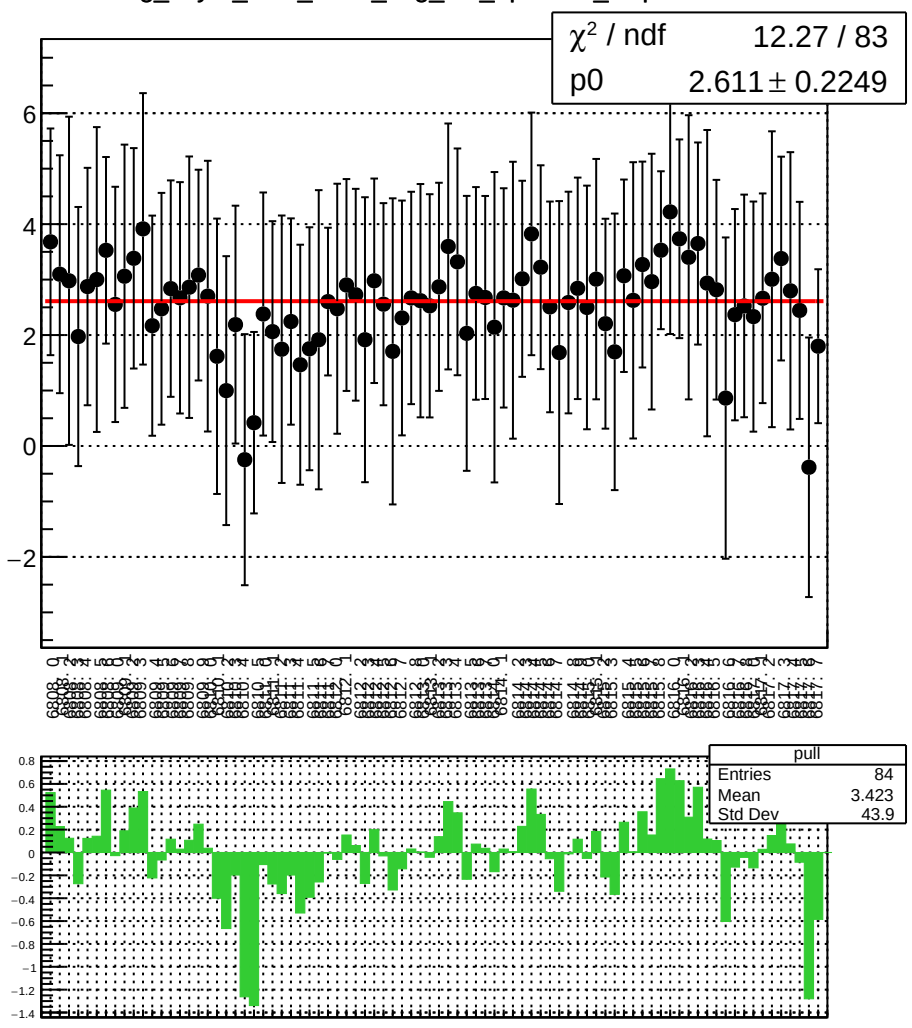

pull1D
Entries 84
Mean −0.006997
Std Dev 0.2704
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

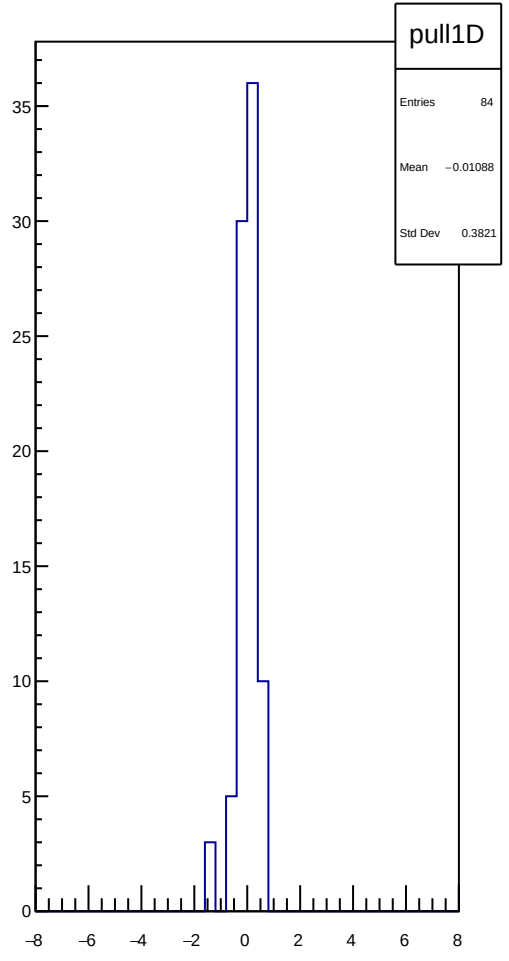

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.241 / 83
p0 63.96 ± 0.7285
pull
Entries 84
Mean 3082
Std Dev 3047

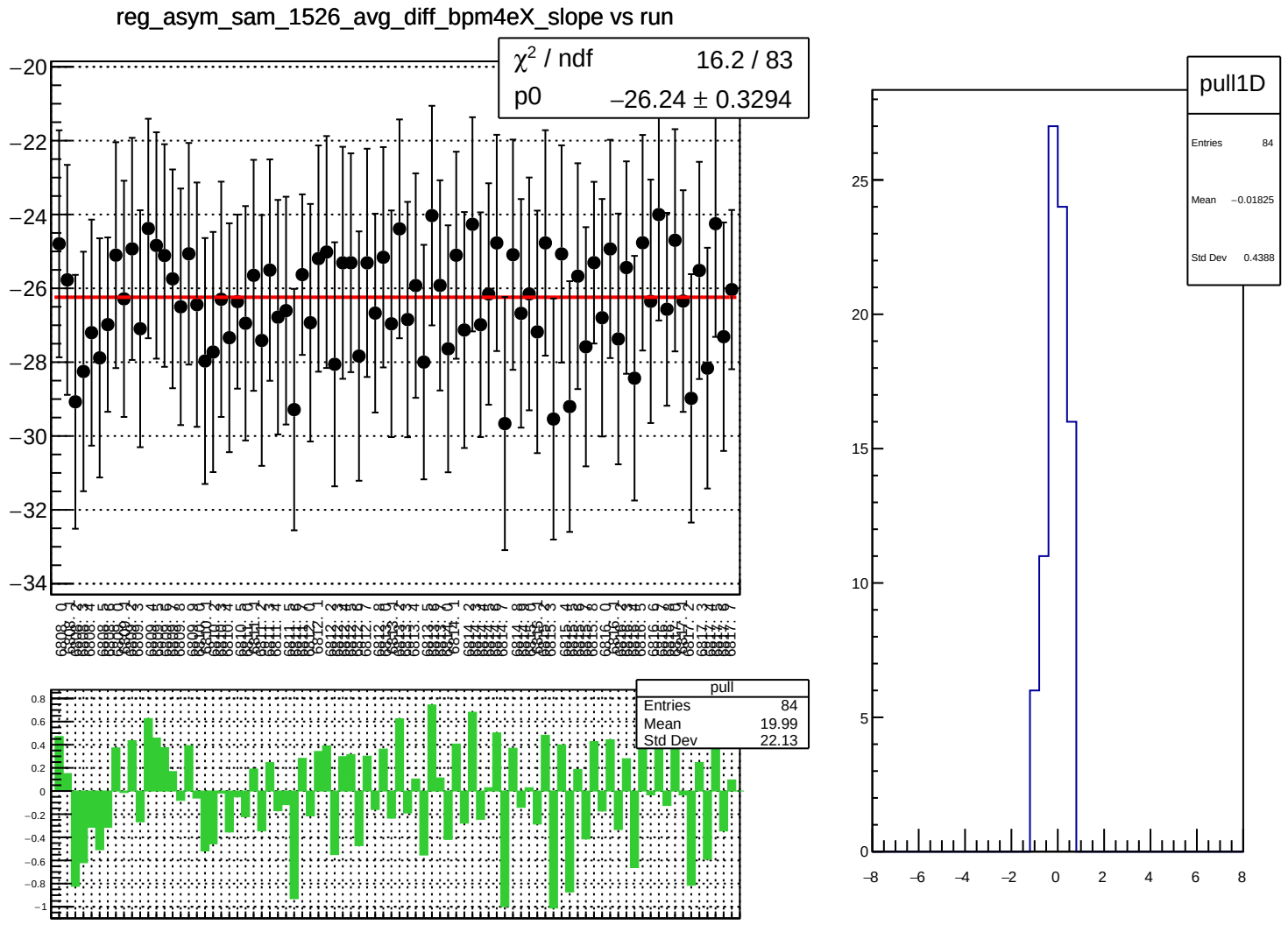

pull1D
Entries 84
Mean 0.0005646
Std Dev 0.1964

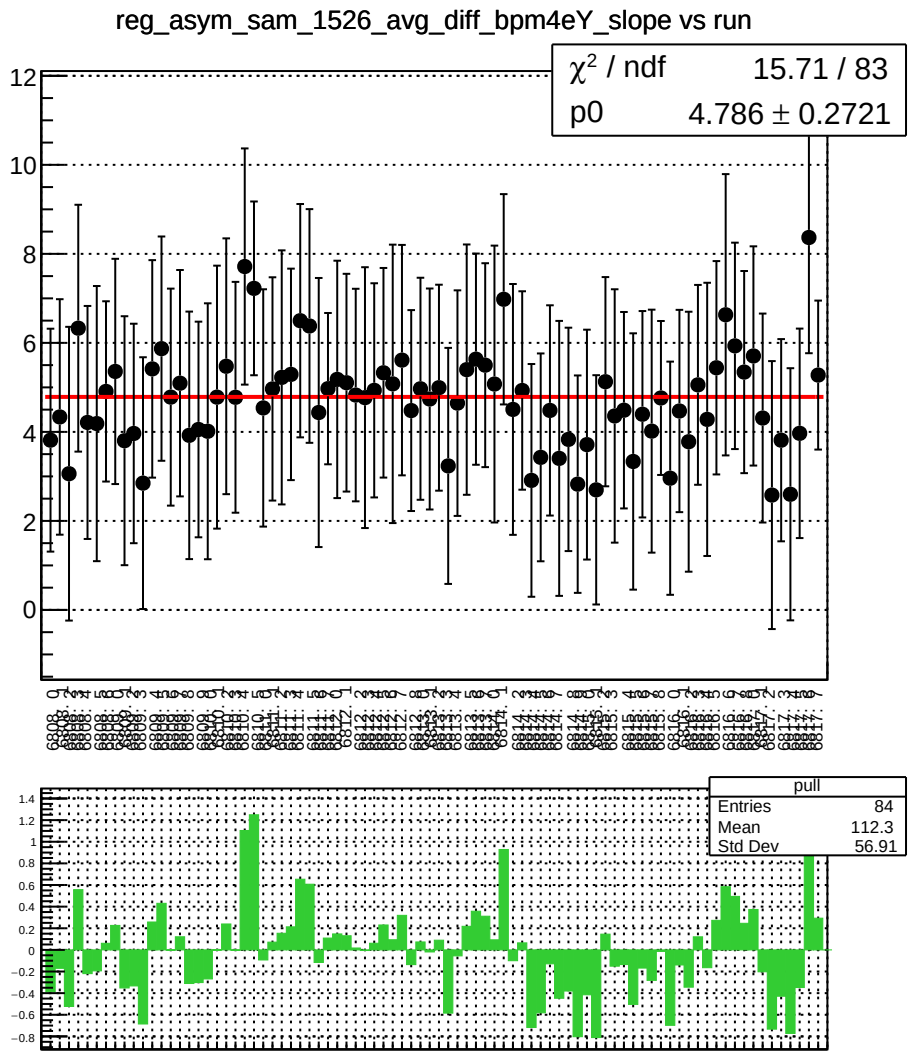

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 2.337 / 83
p0 0.1037 ± 0.03825
pull
Entries 84
Mean −572.6
Std Dev 611.1
pull1D
Entries 84
Mean −0.003607
Std Dev 0.1668

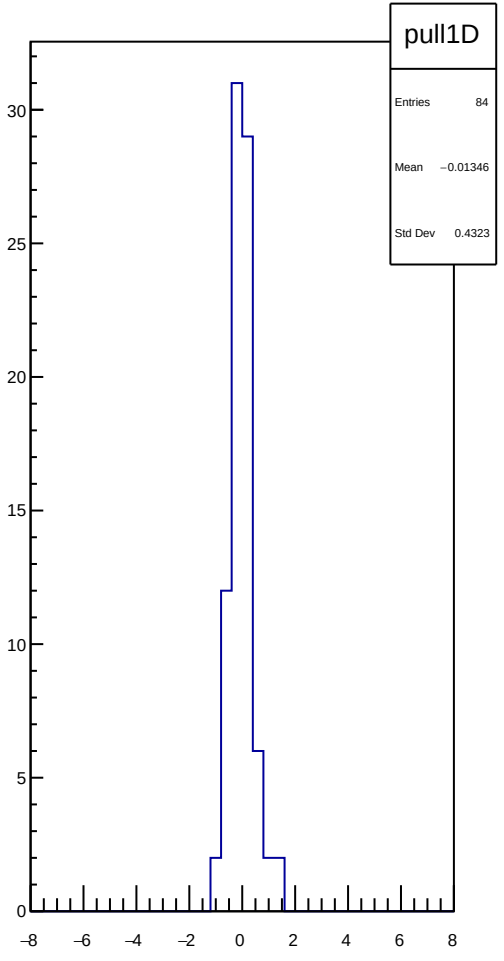

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 8.504 / 83
p0 −7.698 ± 0.3522
pull
Entries 84
Mean 297.8
Std Dev 219.1
pull1D
Entries 84
Mean 0.002302
Std Dev 0.3182

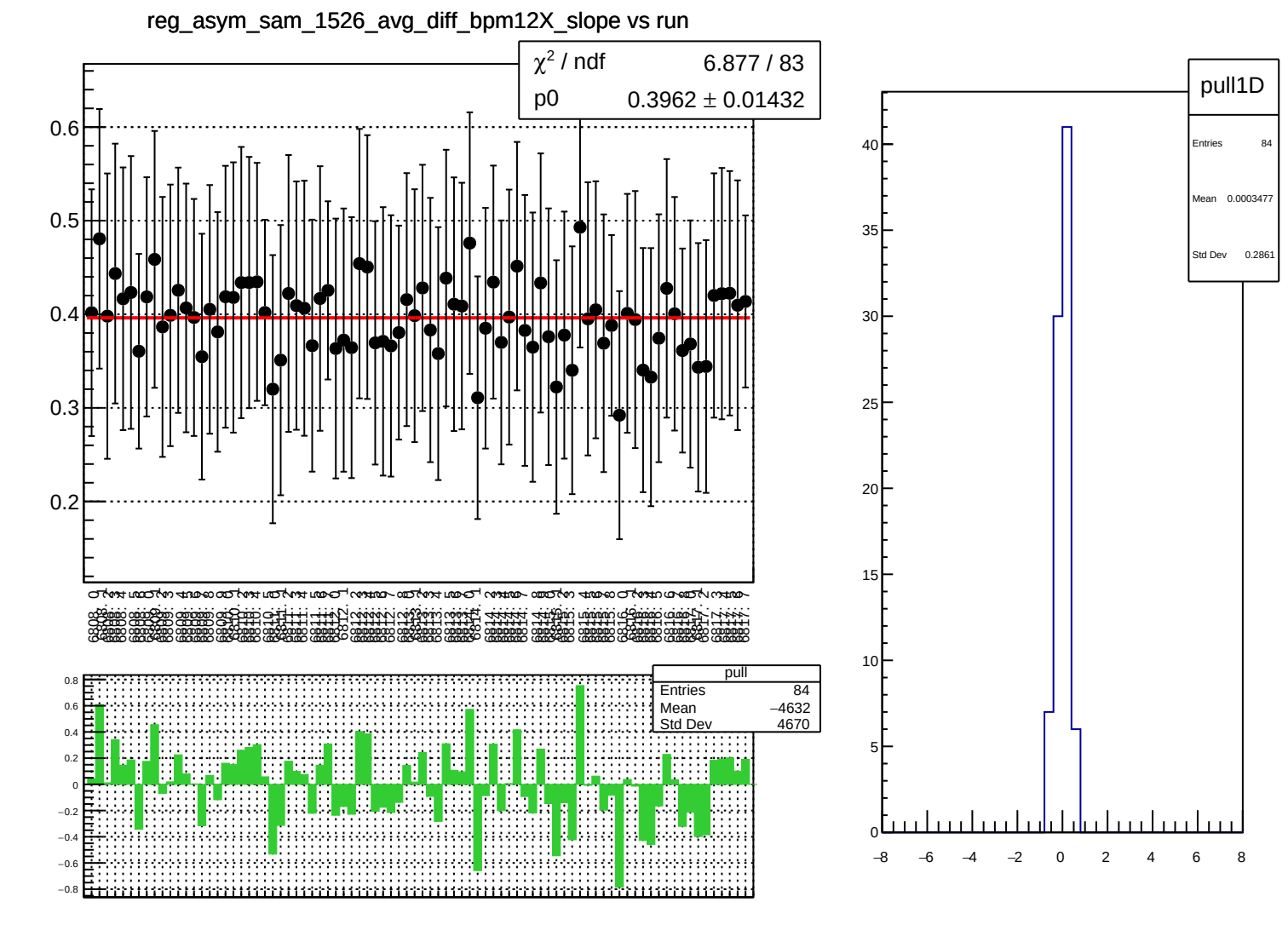

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 12.27 / 83
p0 2.611 ± 0.2249
pull
Entries 84
Mean 3.423
Std Dev 43.9

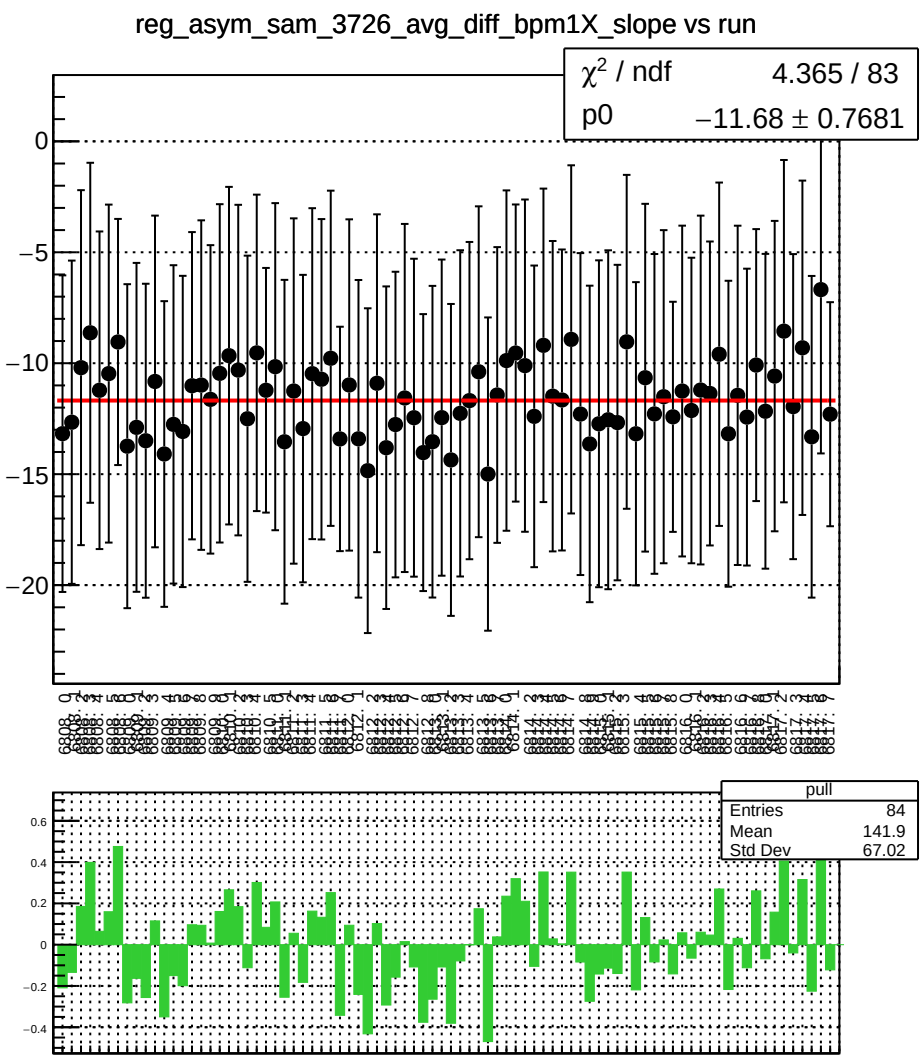

pull1D
Entries 84
Mean −0.01088
Std Dev 0.3821

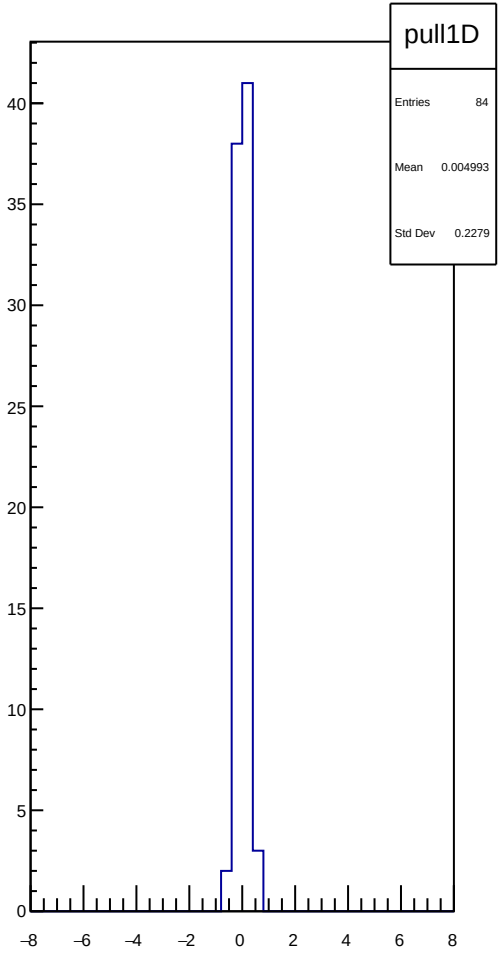

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 16.2 / 83
p0 −26.24 ± 0.3294
pull
Entries 84
Mean 19.99
Std Dev 22.13
pull1D
Entries 84
Mean −0.01825
Std Dev 0.4388

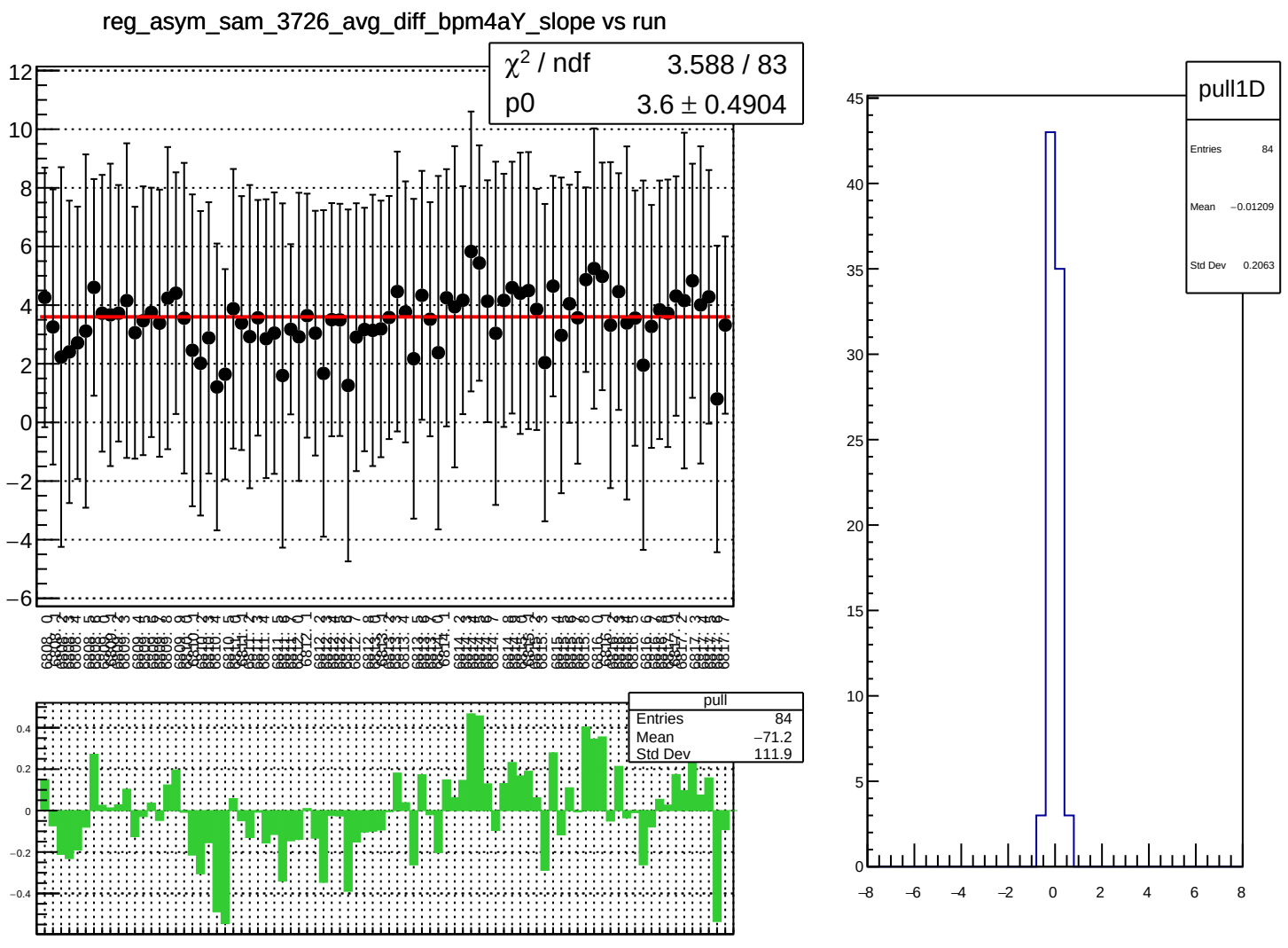

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 15.71 / 83
p0 4.786 ± 0.2721
pull
Entries 84
Mean 112.3
Std Dev 56.91

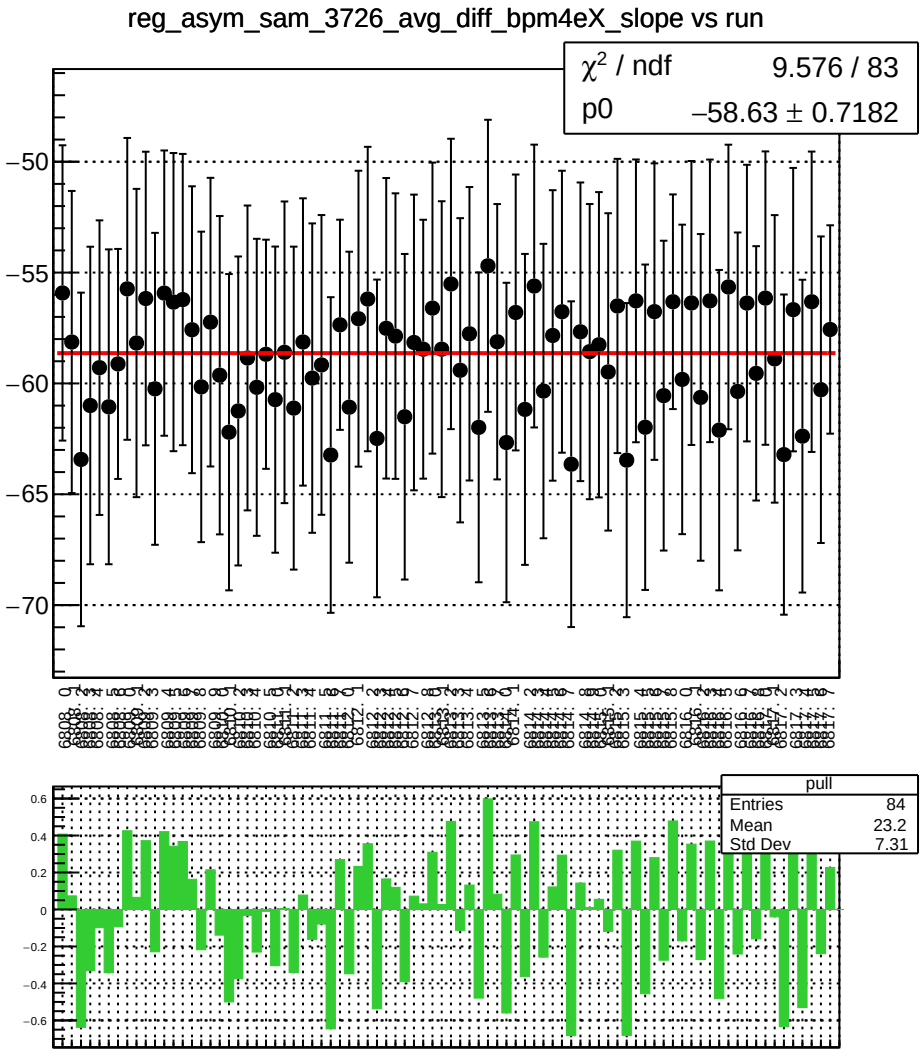

pull1D
Entries 84
Mean −0.01346
Std Dev 0.4323

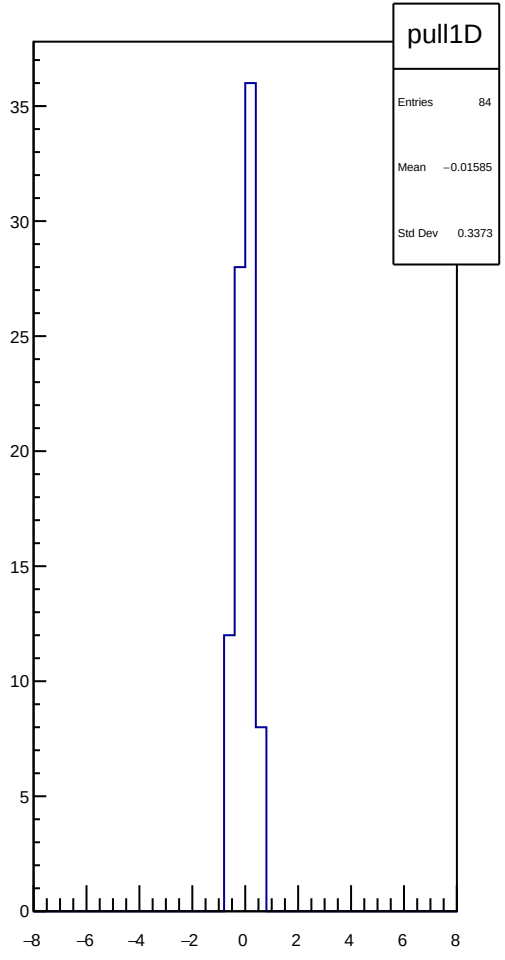

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 6.877 / 83
p0 0.3962 ± 0.01432
0.6
0.5
0.4
0.3
0.2
pull
Entries 84
Mean −4632
Std Dev 4670
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 84
Mean 0.0003477
Std Dev 0.2861
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

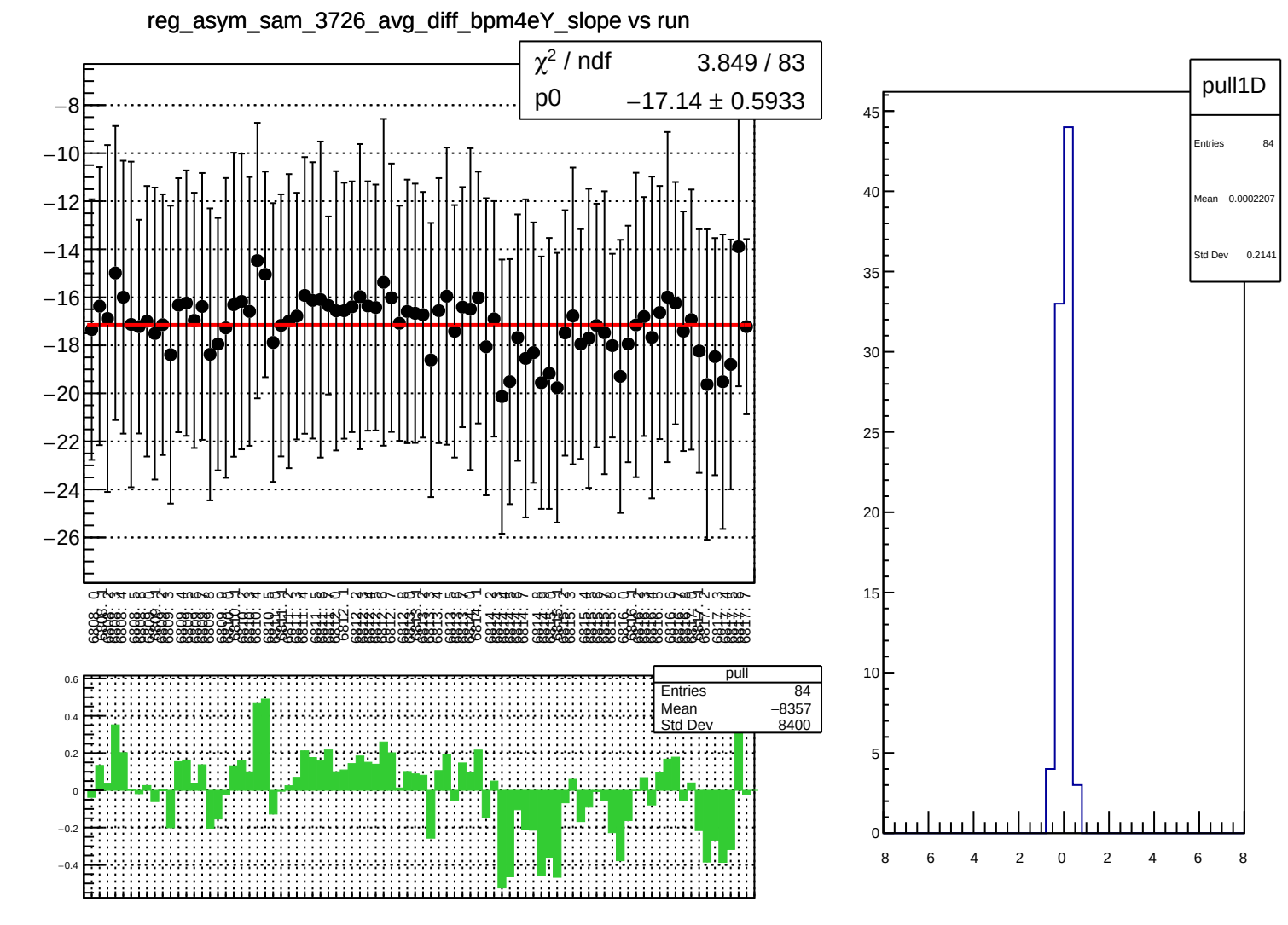

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 4.365 / 83
p0 −11.68 ± 0.7681
pull
Entries 84
Mean 141.9
Std Dev 67.02

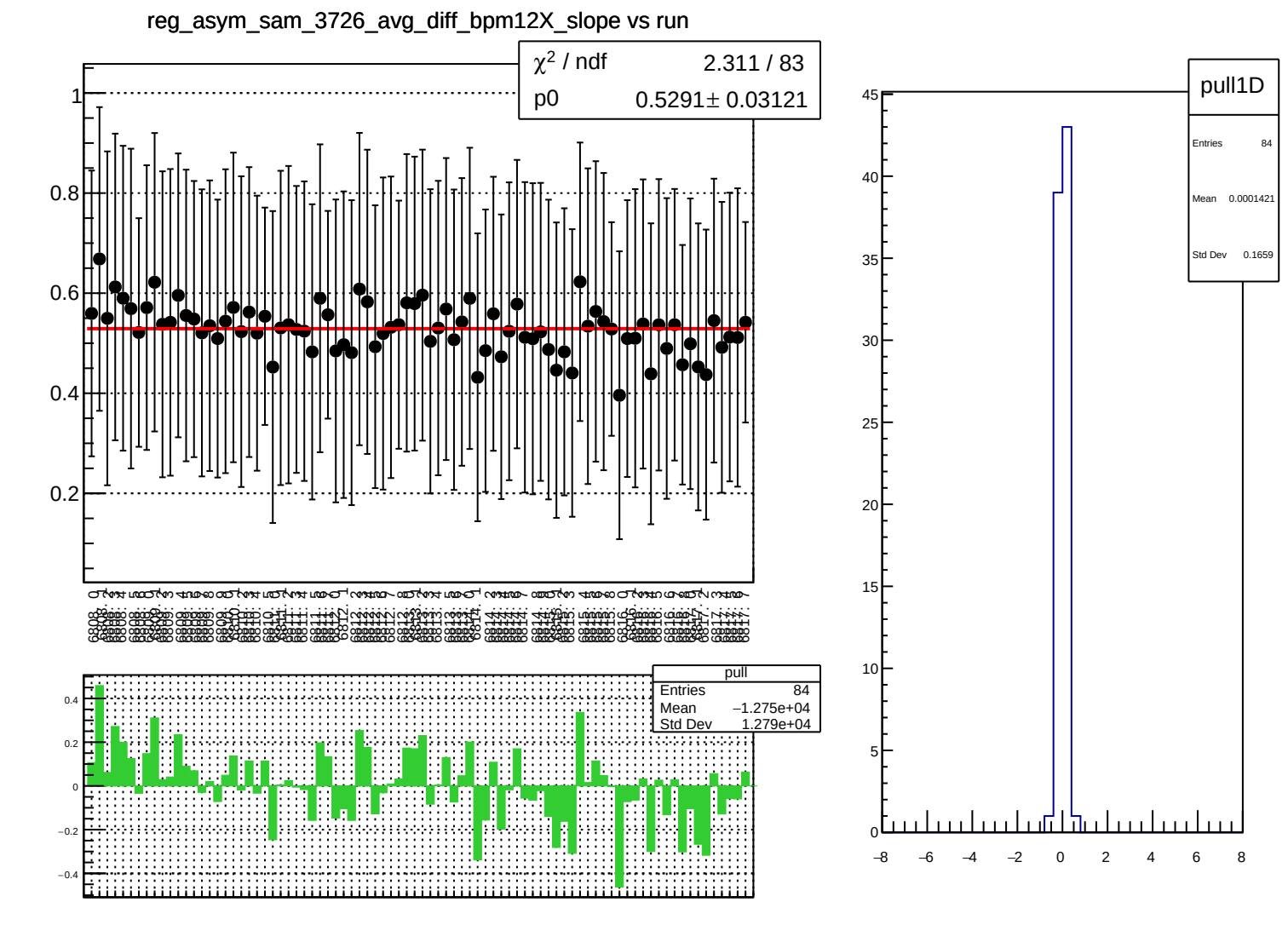

pull1D
Entries 84
Mean 0.004993
Std Dev 0.2279

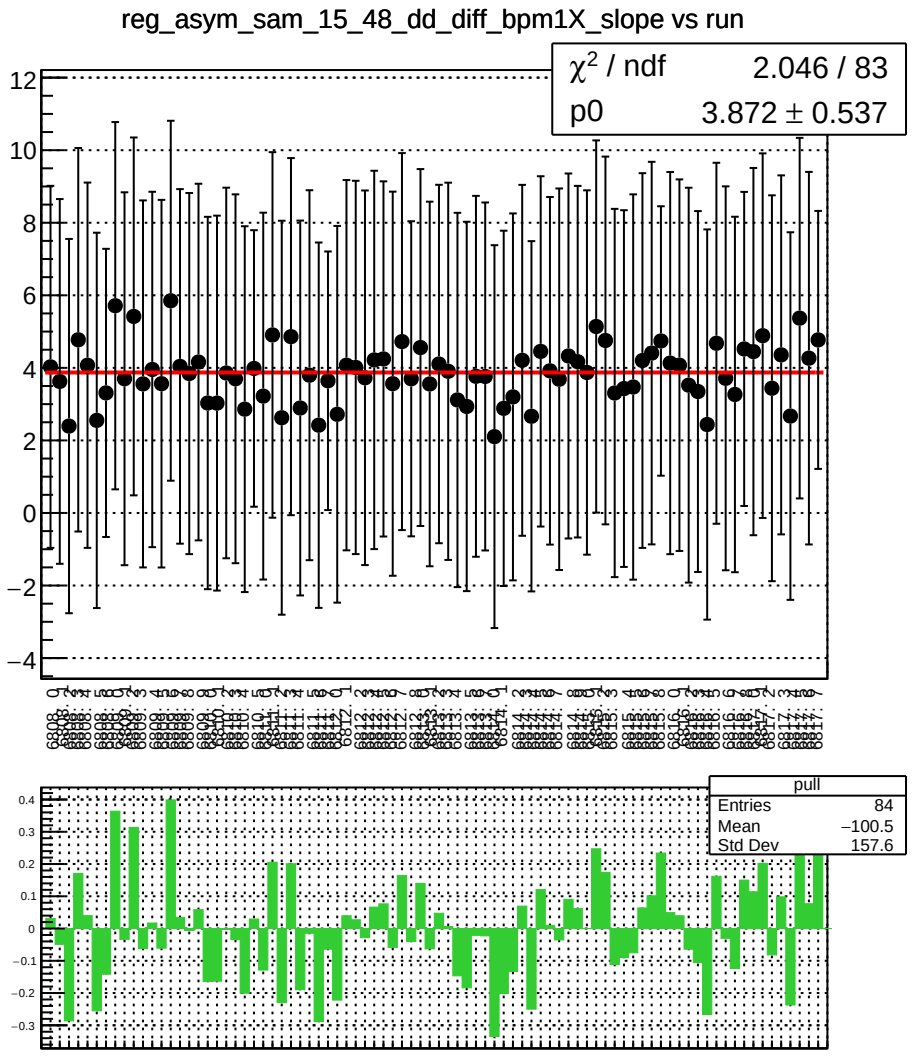

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.588 / 83
p0 3.6 ± 0.4904
pull
Entries 84
Mean −71.2
Std Dev 111.9
pull1D
Entries 84
Mean −0.01209
Std Dev 0.2063

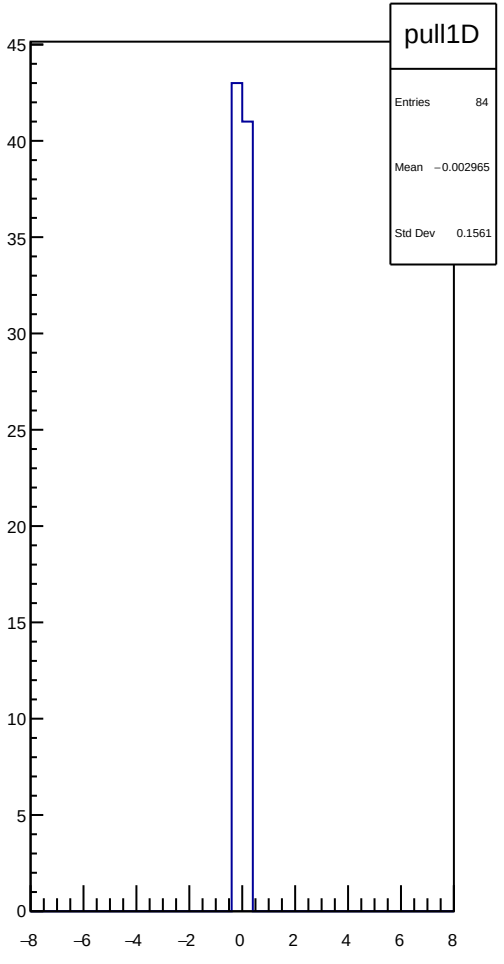

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.576 / 83
p0 −58.63 ± 0.7182
−50
−55
−60
−65
−70
pull
Entries 84
Mean 23.2
Std Dev 7.31
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

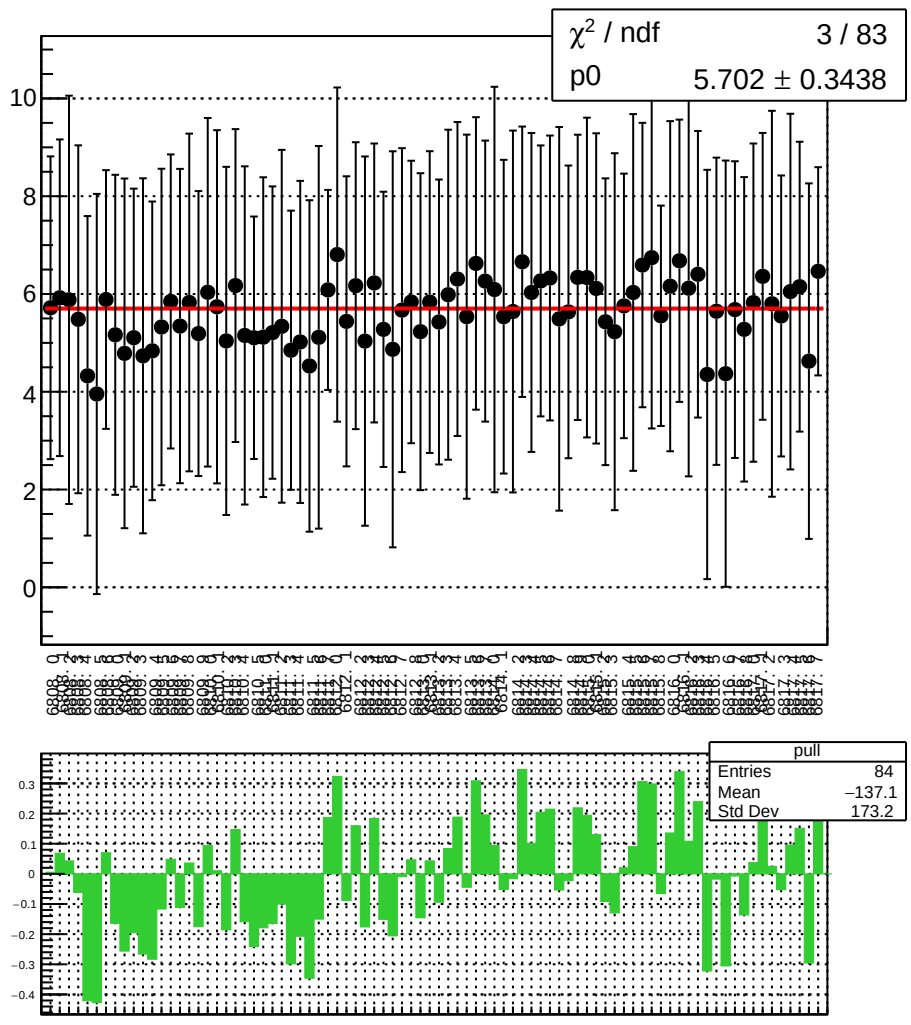

pull1D
Entries 84
Mean −0.01585
Std Dev 0.3373
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

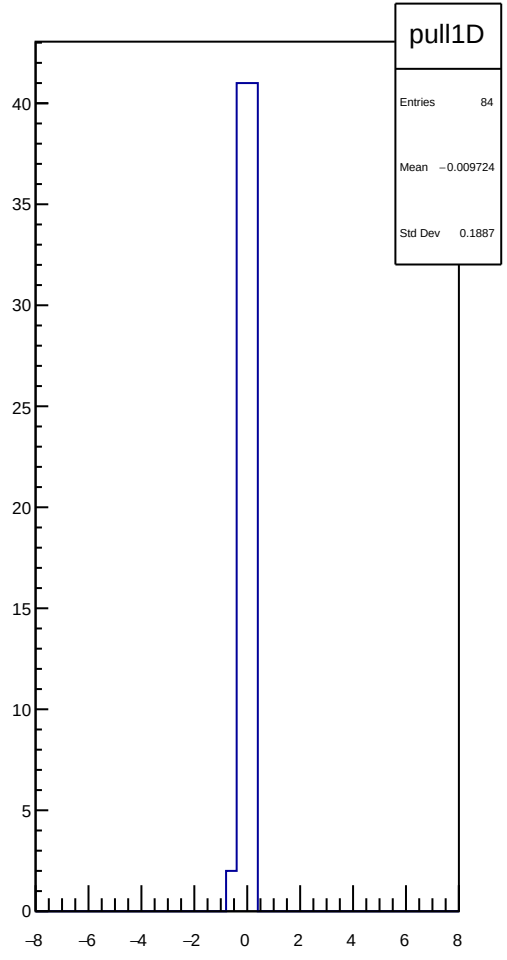

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.849 / 83
p0 −17.14 ± 0.5933
pull
Entries 84
Mean −8357
Std Dev 8400
pull1D
Entries 84
Mean 0.0002207
Std Dev 0.2141

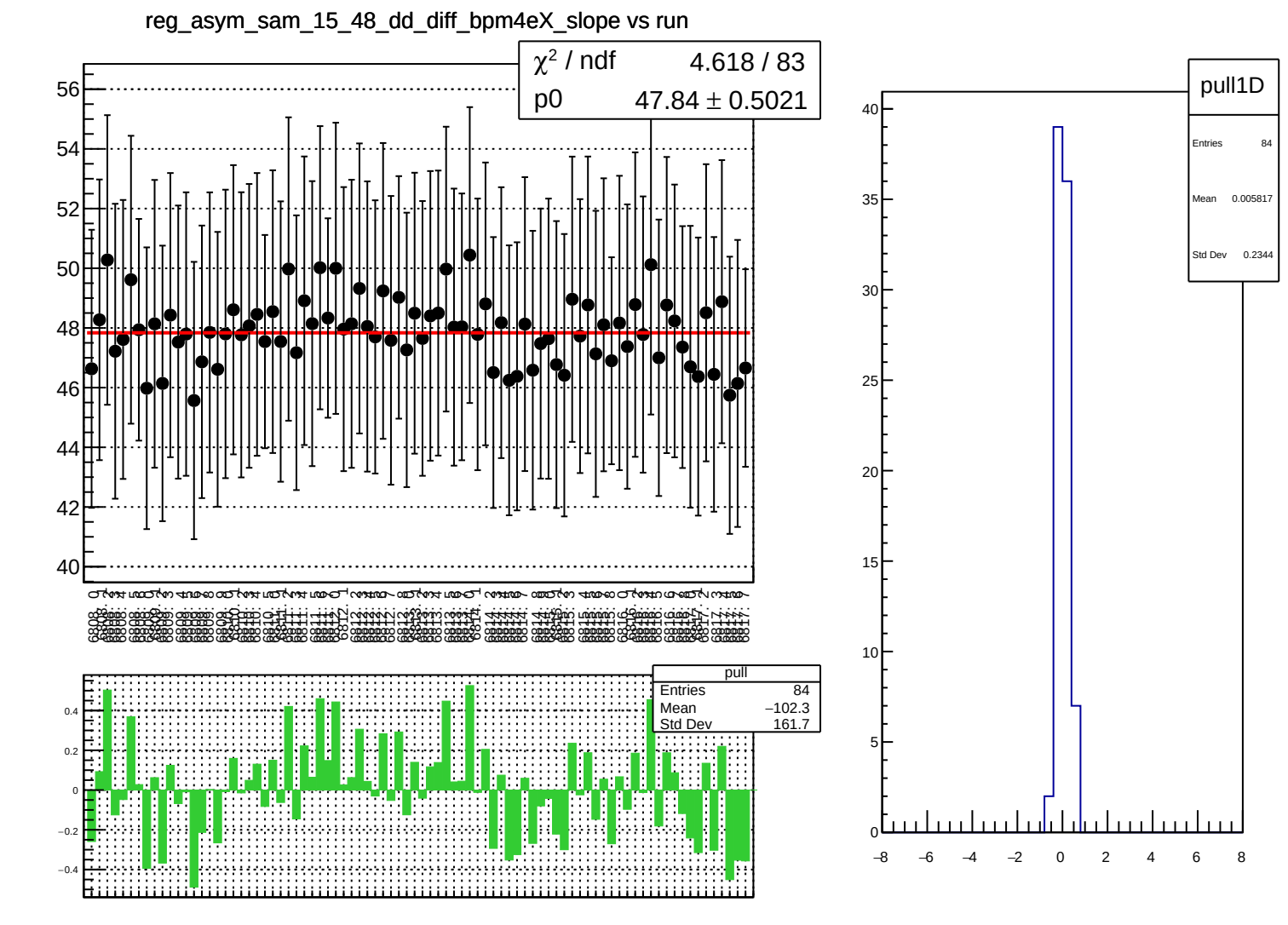

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 2.311 / 83
p0 0.5291± 0.03121
pull
Entries 84
Mean −1.275e+04
Std Dev 1.279e+04
pull1D
Entries 84
Mean 0.0001421
Std Dev 0.1659

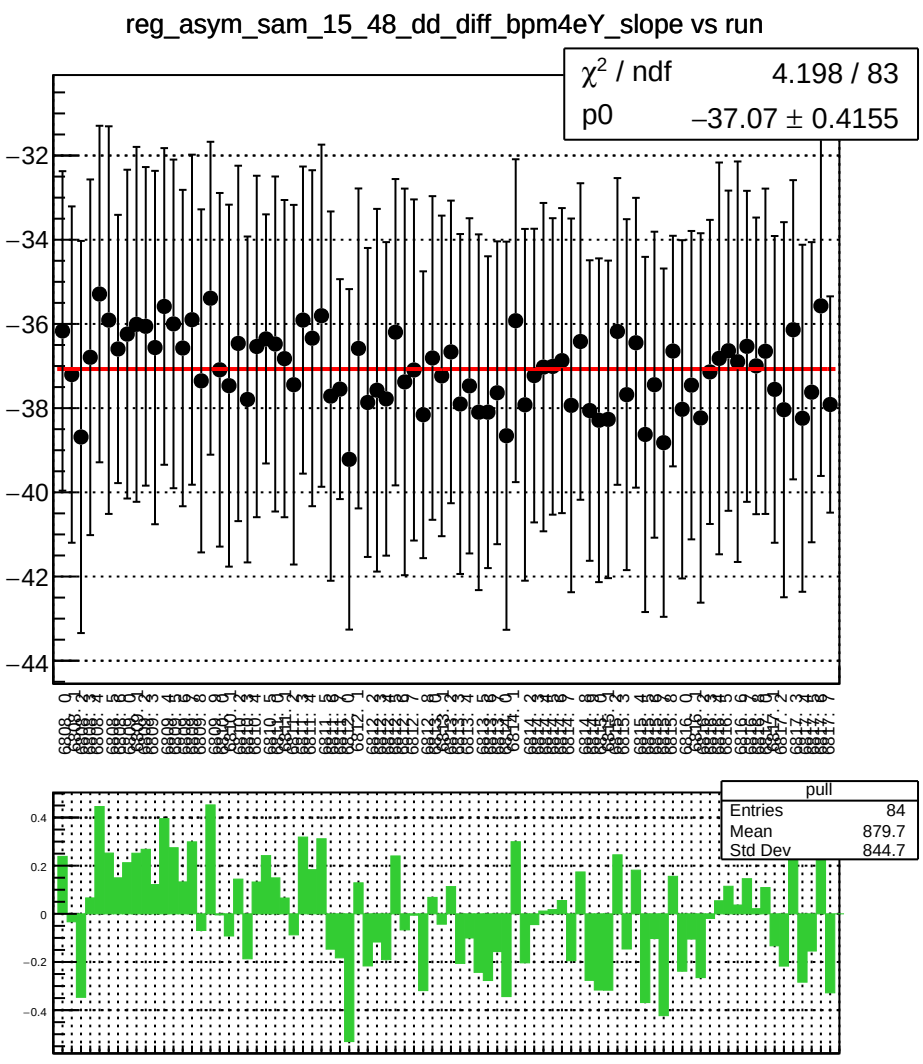

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 2.046 / 83
p0 3.872 ± 0.537
pull
Entries 84
Mean −100.5
Std Dev 157.6

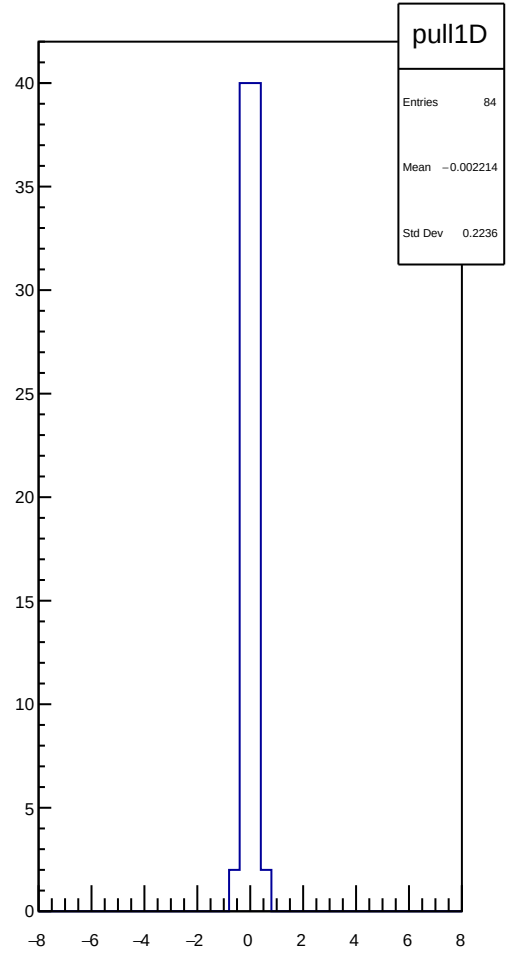

pull1D
Entries 84
Mean −0.002965
Std Dev 0.1561

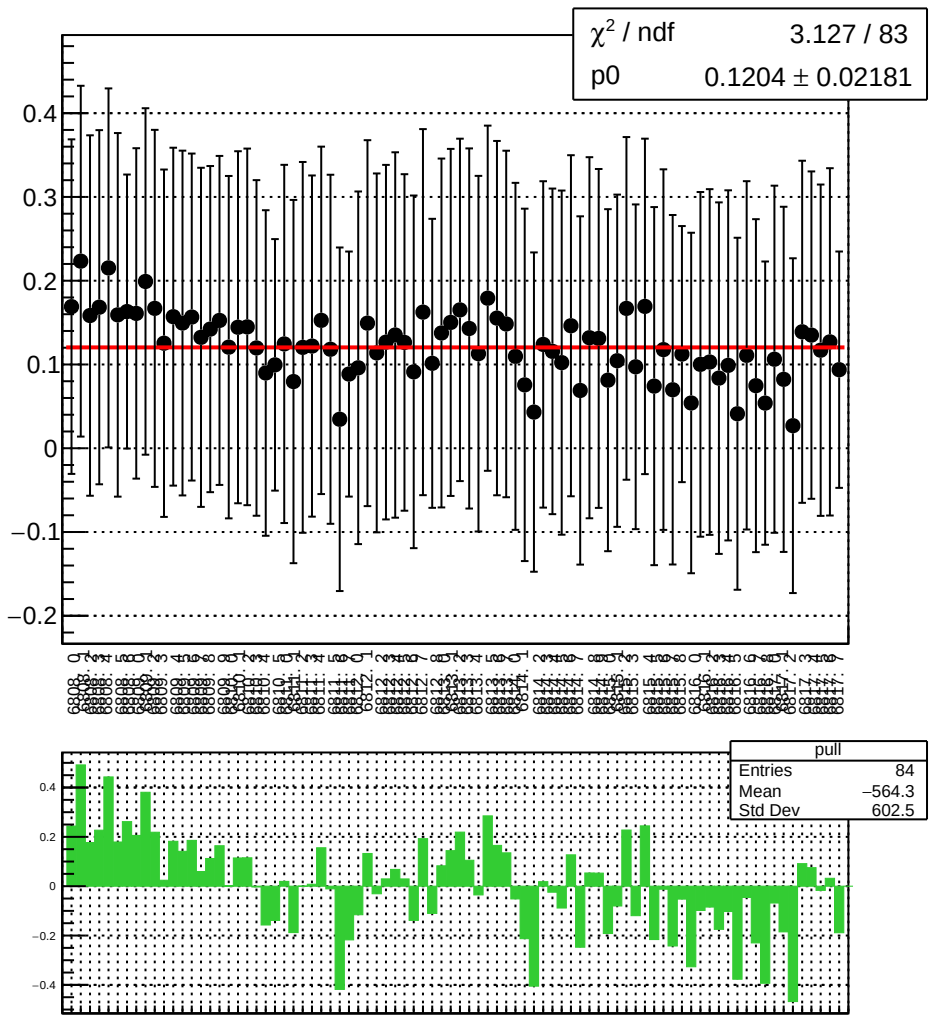

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 3 / 83
p0 5.702 ± 0.3438
pull
Entries 84
Mean −137.1
Std Dev 173.2

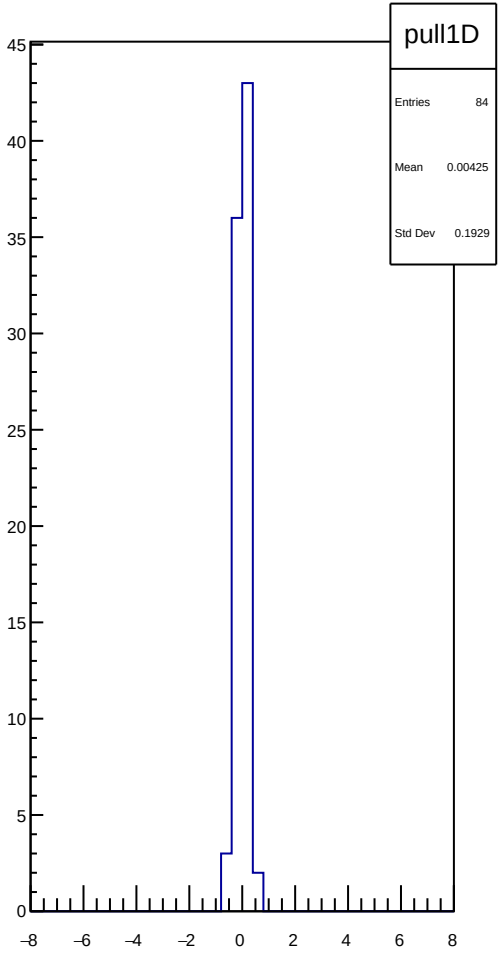

pull1D
Entries 84
Mean −0.009724
Std Dev 0.1887

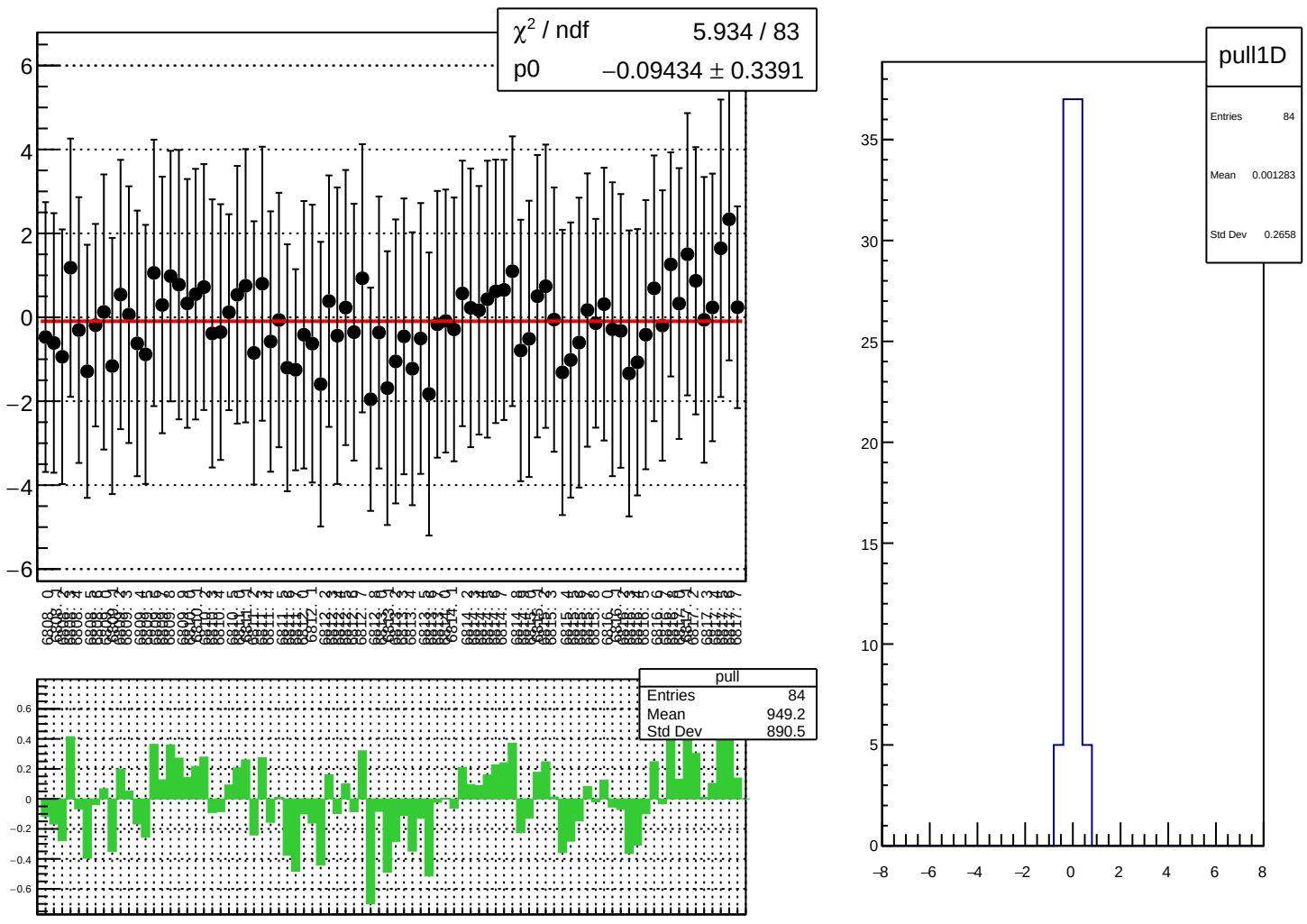

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.618 / 83
p0 47.84 ± 0.5021
pull
Entries 84
Mean −102.3
Std Dev 161.7
pull1D
Entries 84
Mean 0.005817
Std Dev 0.2344

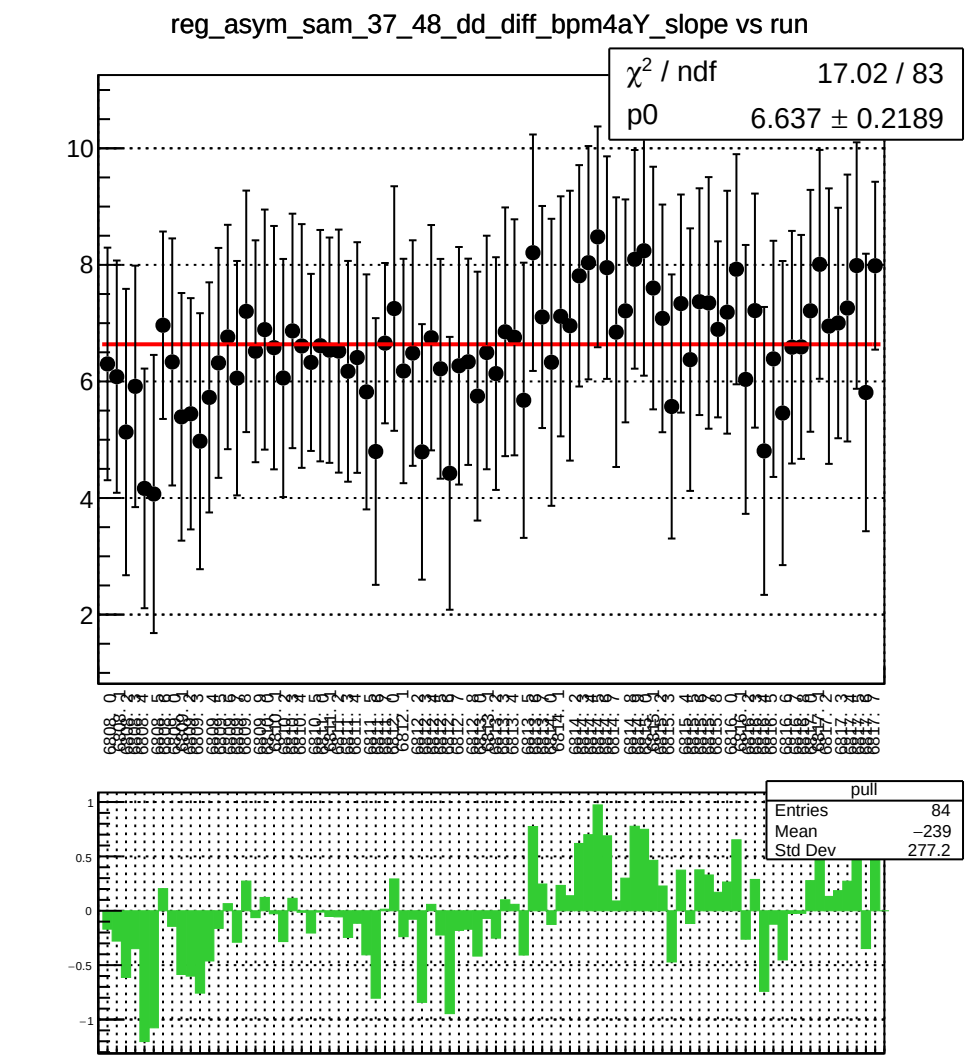

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.198 / 83
p0 −37.07 ± 0.4155
pull
Entries 84
Mean 879.7
Std Dev 844.7

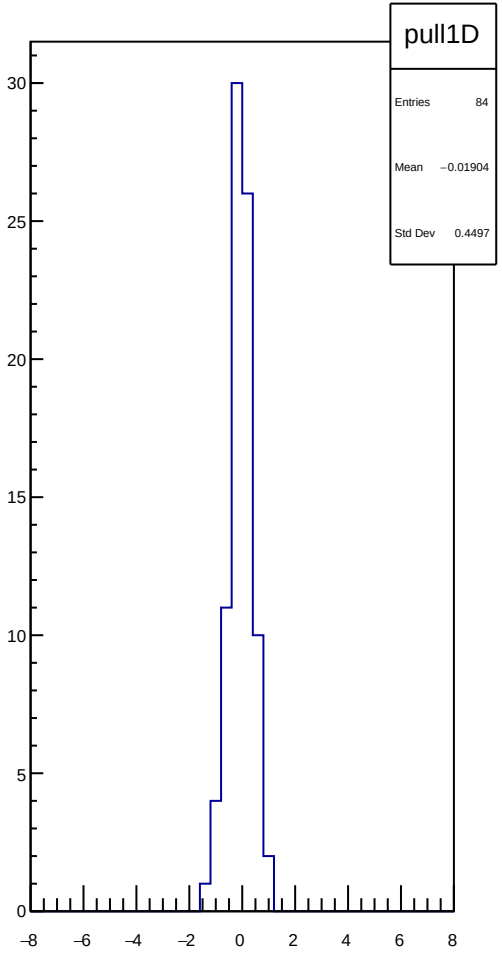

pull1D
Entries 84
Mean −0.002214
Std Dev 0.2236

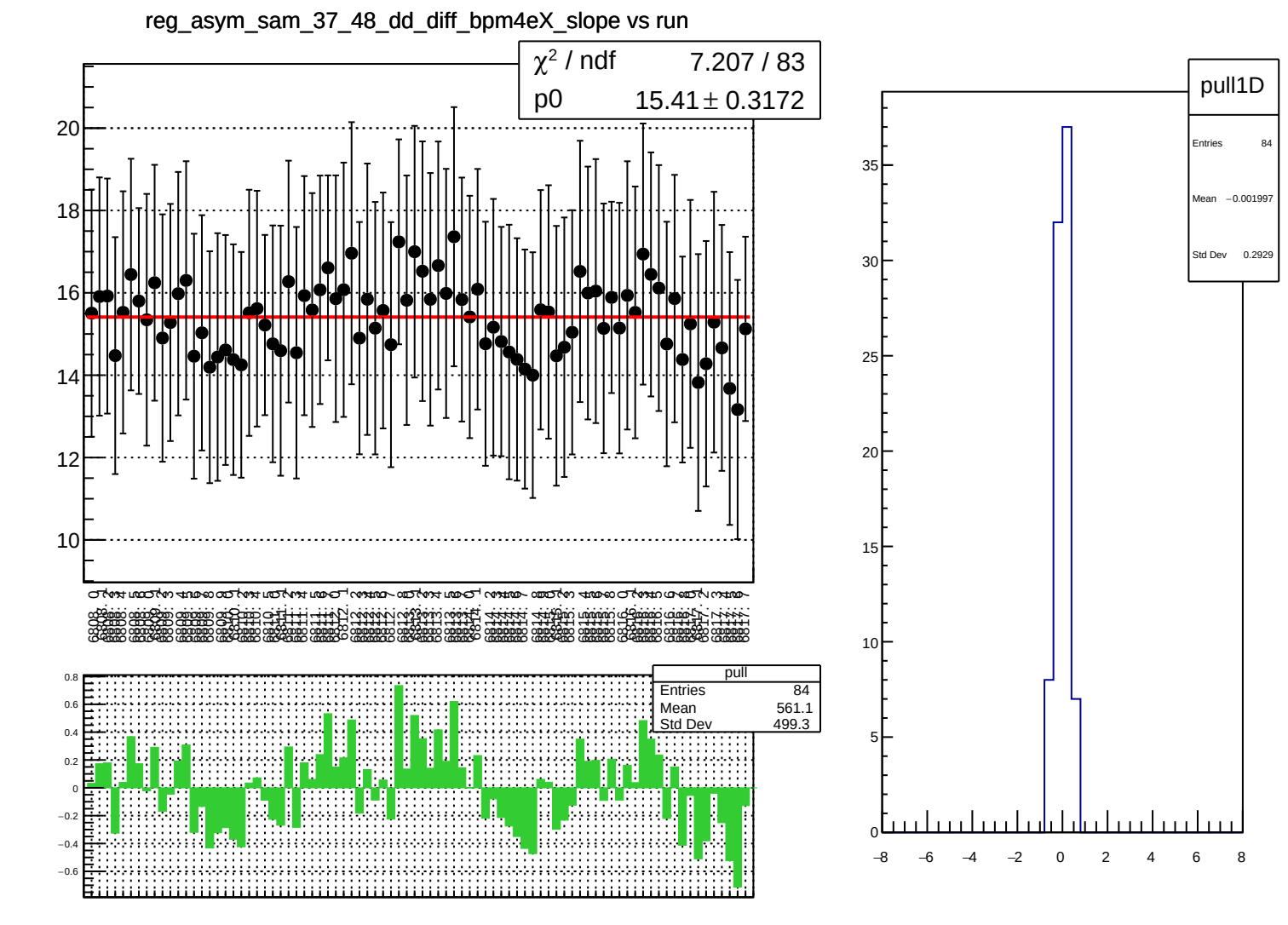

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 3.127 / 83
p0 0.1204 ± 0.02181
pull
Entries 84
Mean −564.3
Std Dev 602.5

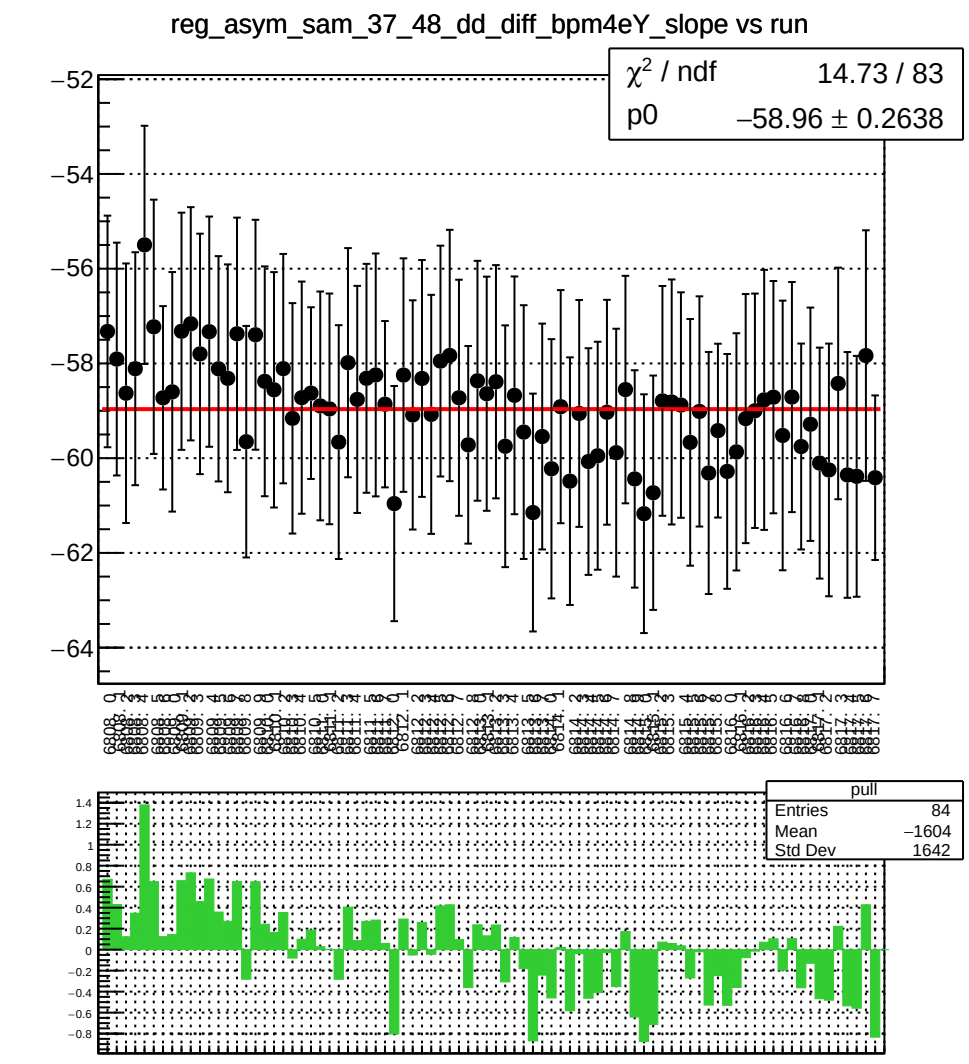

pull1D
Entries 84
Mean 0.00425
Std Dev 0.1929

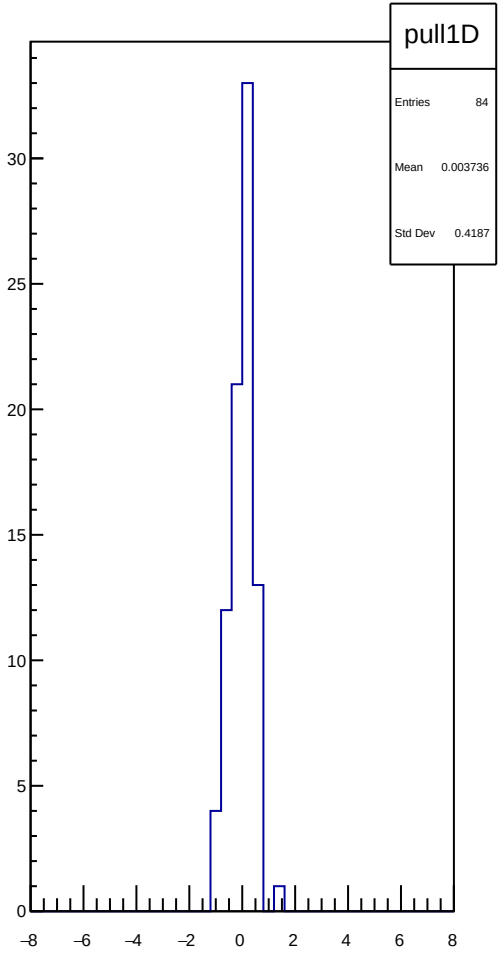

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 5.934 / 83
p0 −0.09434 ± 0.3391
pull
Entries 84
Mean 949.2
Std Dev 890.5
pull1D
Entries 84
Mean 0.001283
Std Dev 0.2658

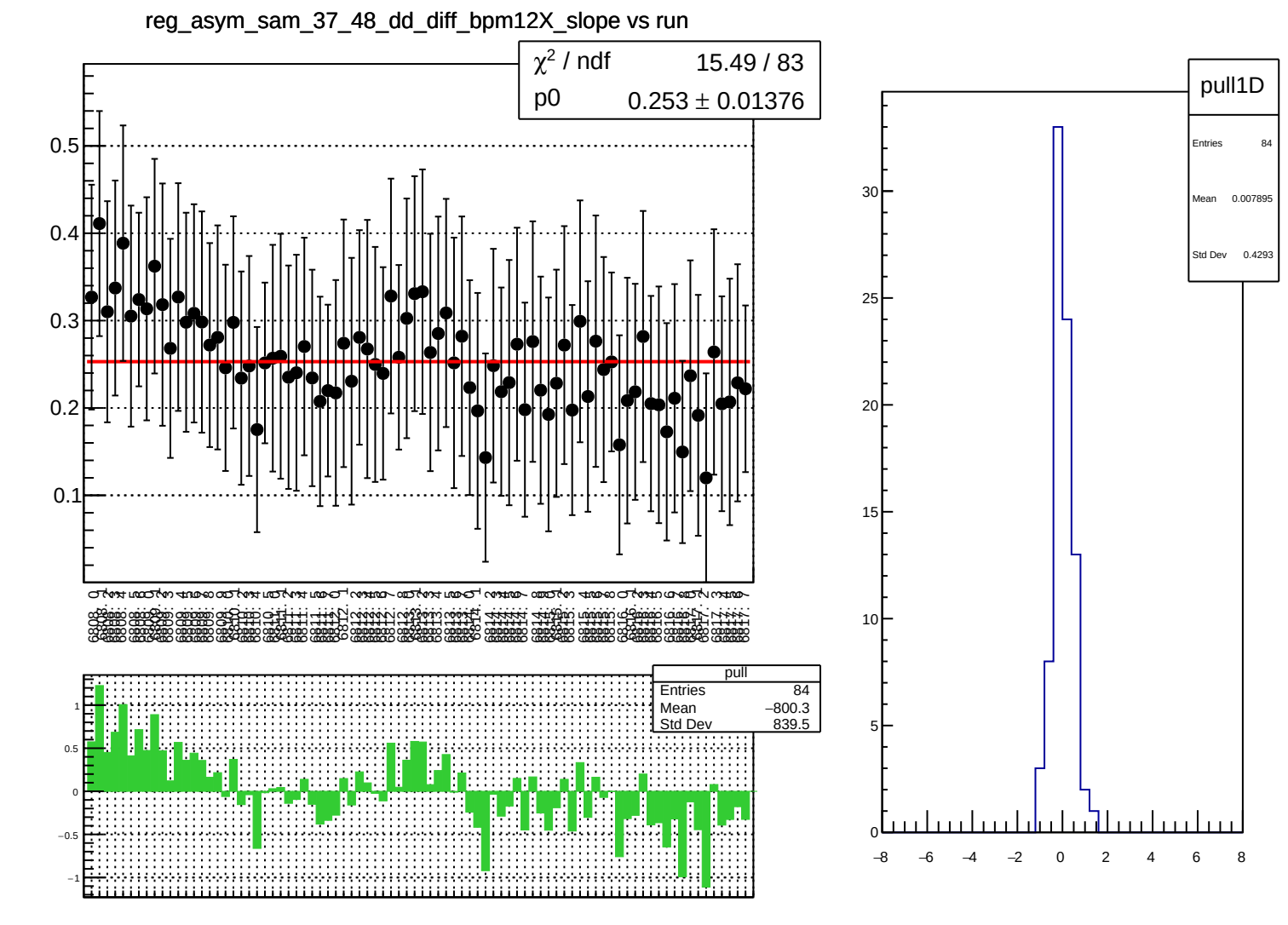

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 17.02 / 83
p0 6.637 ± 0.2189
pull
Entries 84
Mean −239
Std Dev 277.2

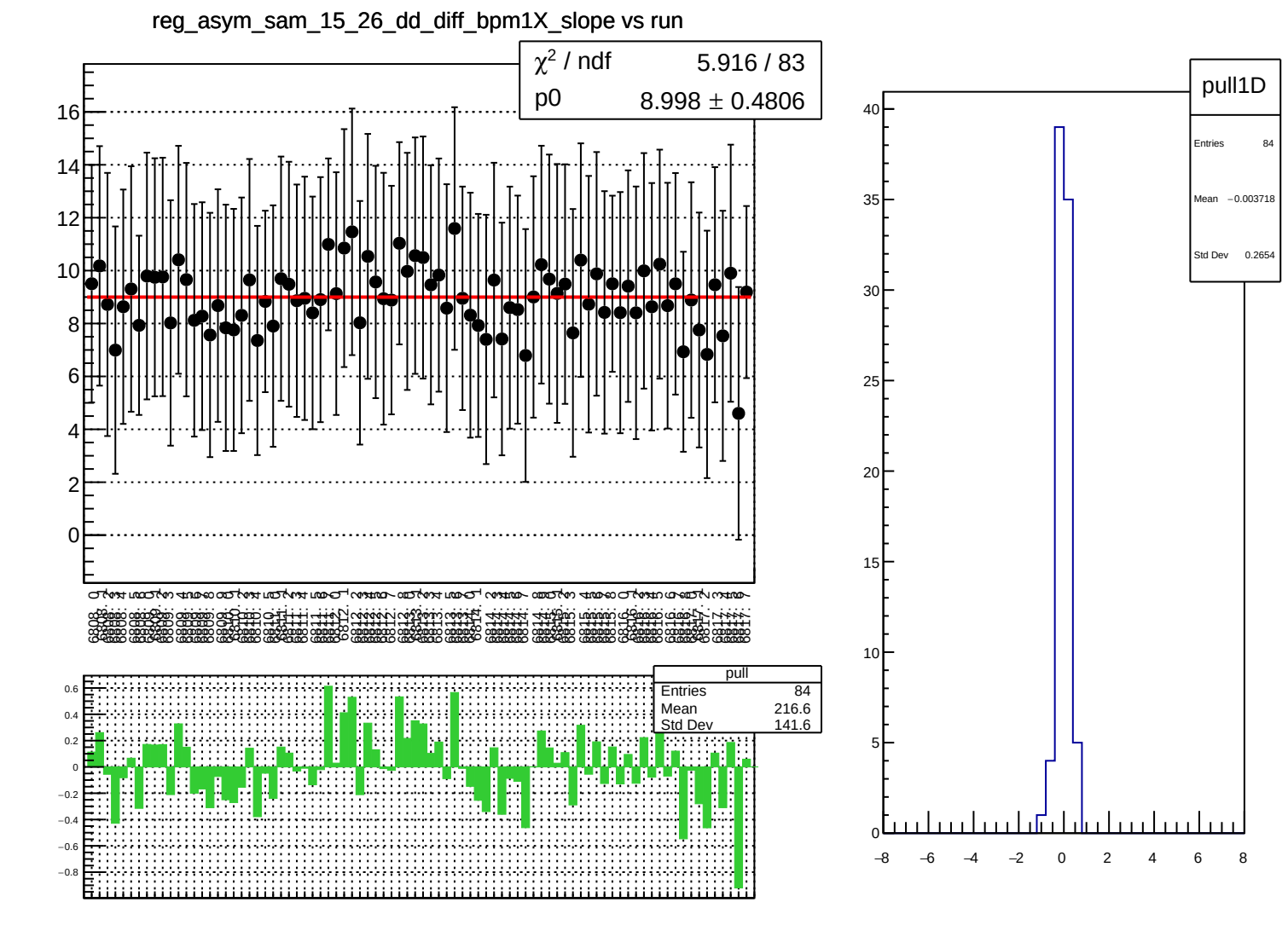

pull1D
Entries 84
Mean −0.01904
Std Dev 0.4497

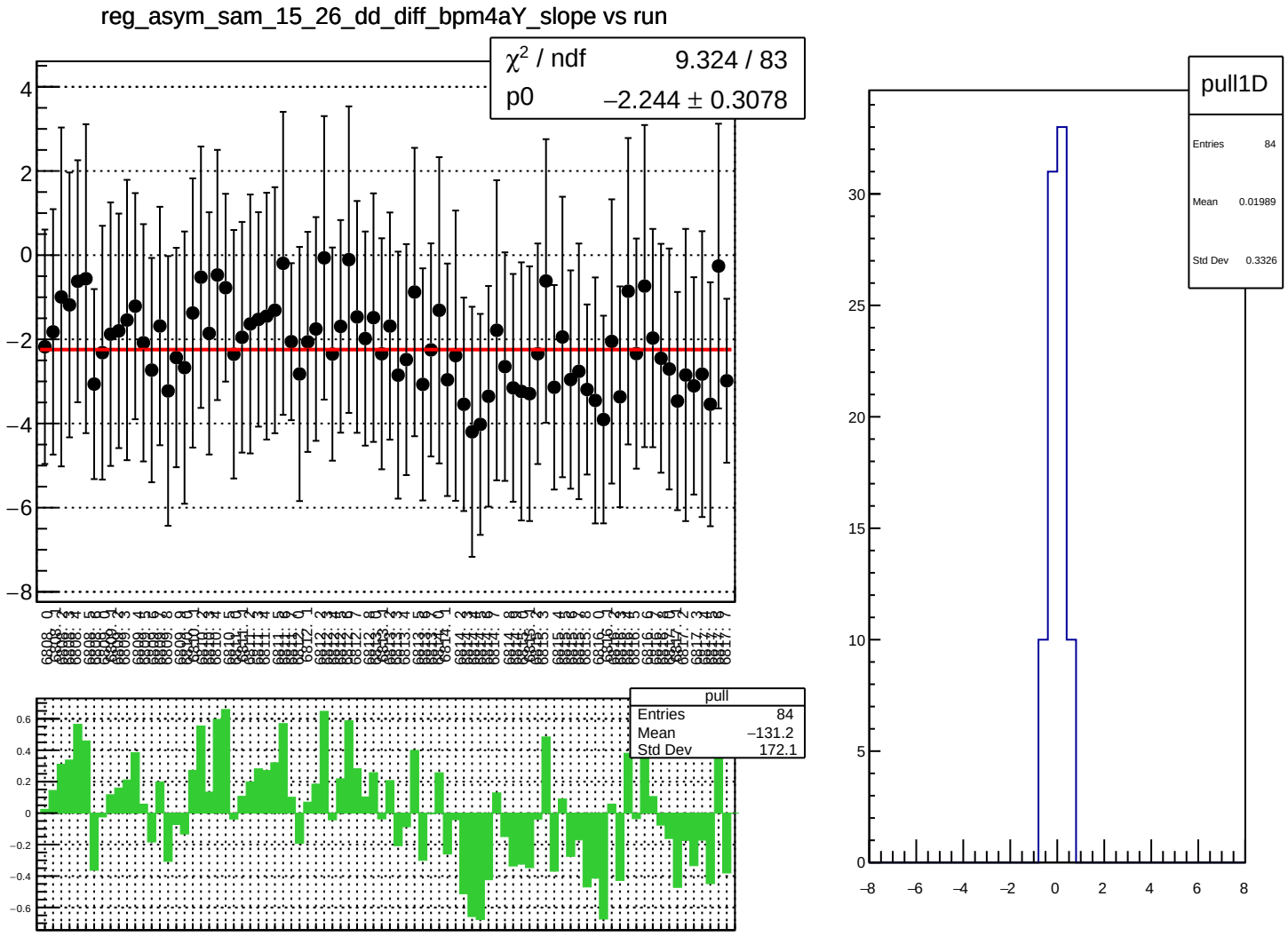

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 7.207 / 83
p0 15.41 ± 0.3172
pull
Entries 84
Mean 561.1
Std Dev 499.3
pull1D
Entries 84
Mean −0.001997
Std Dev 0.2929

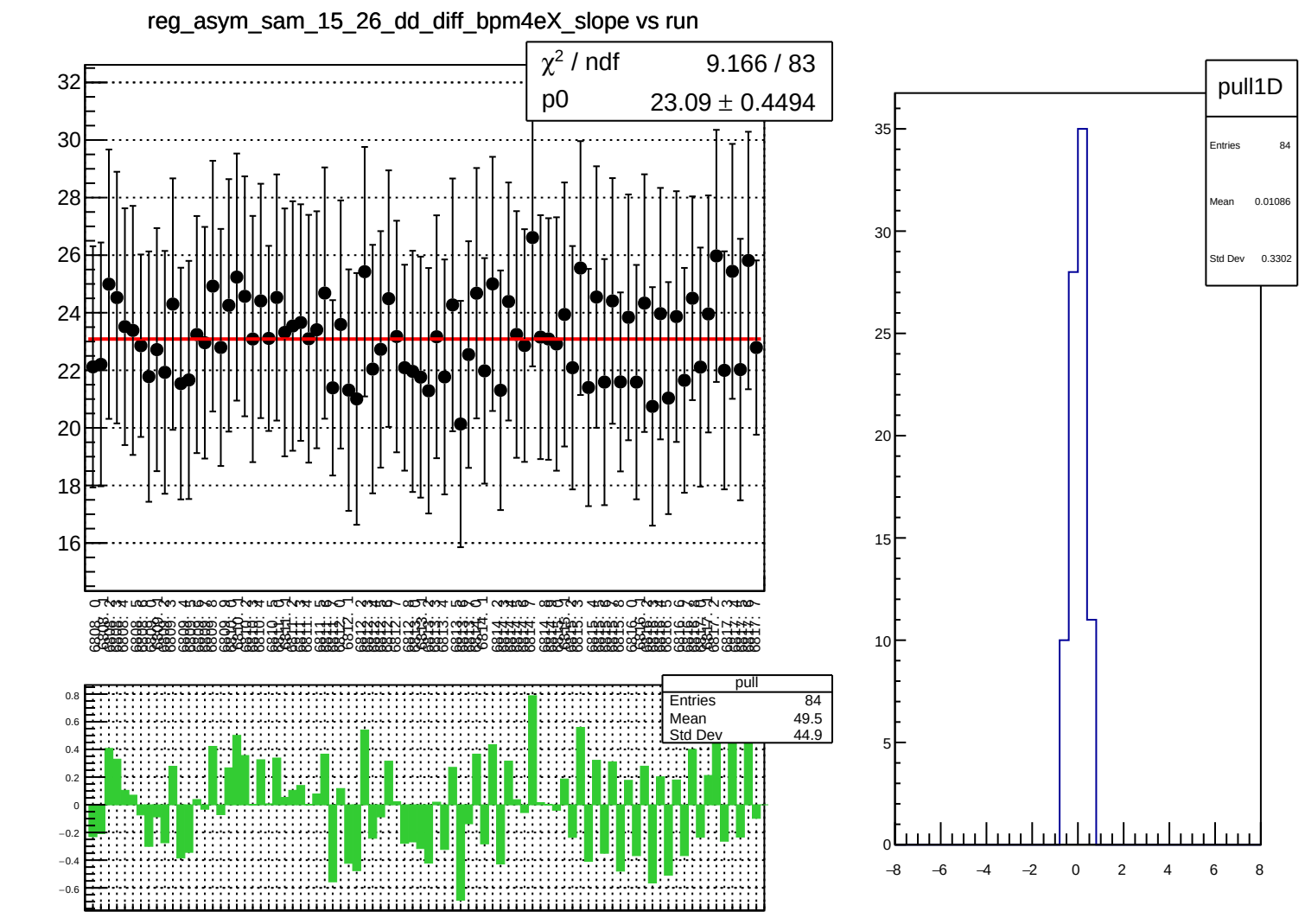

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.73 / 83
p0 −58.96 ± 0.2638
pull
Entries 84
Mean −1604
Std Dev 1642

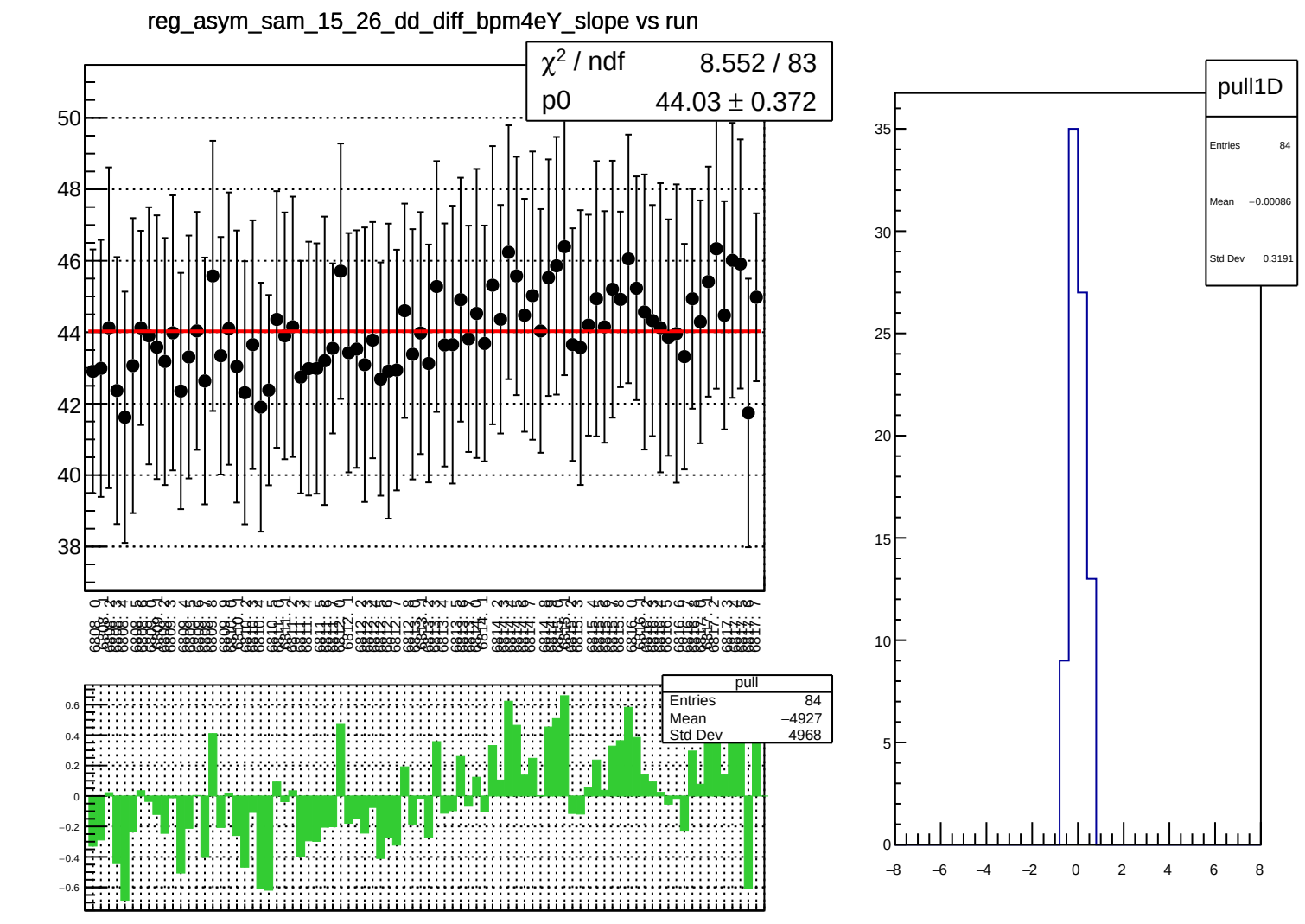

pull1D
Entries 84
Mean 0.003736
Std Dev 0.4187

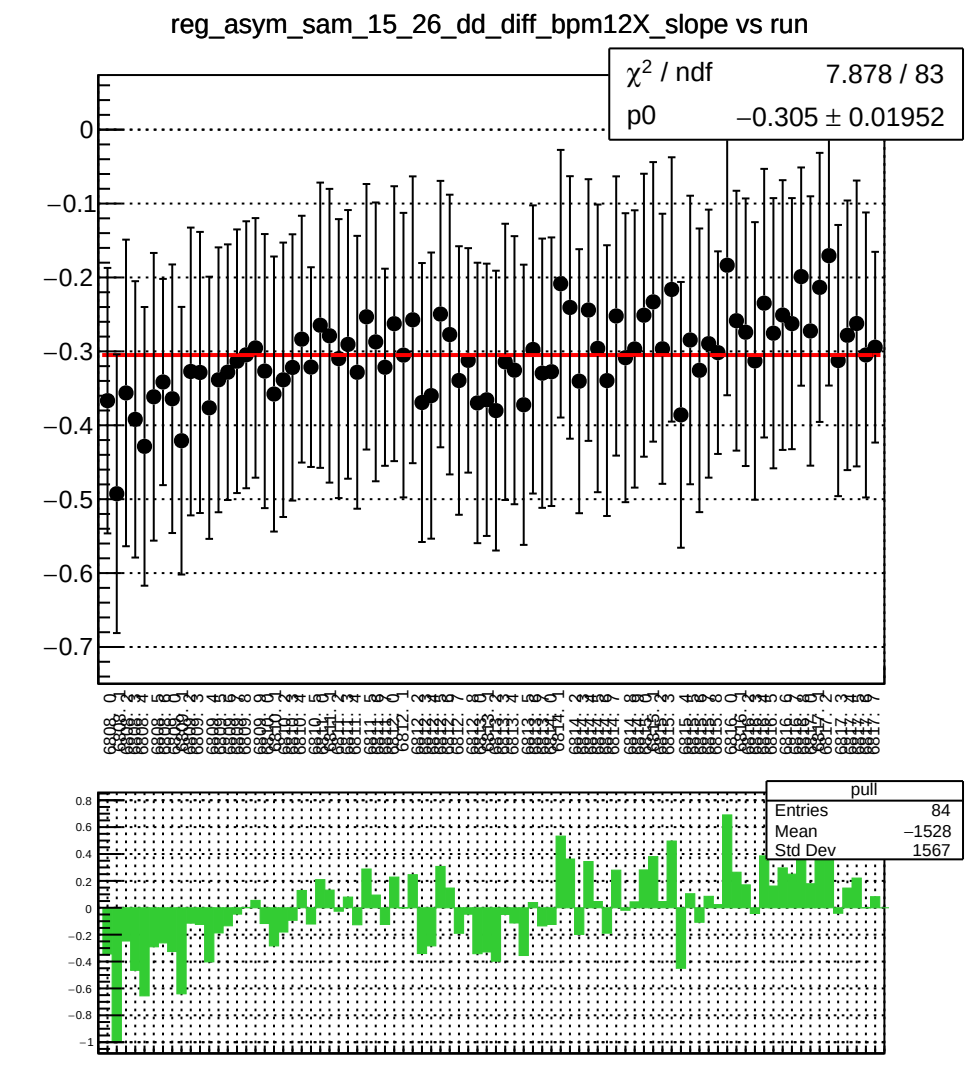

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 15.49 / 83
p0 0.253 ± 0.01376
pull
Entries 84
Mean −800.3
Std Dev 839.5
pull1D
Entries 84
Mean 0.007895
Std Dev 0.4293

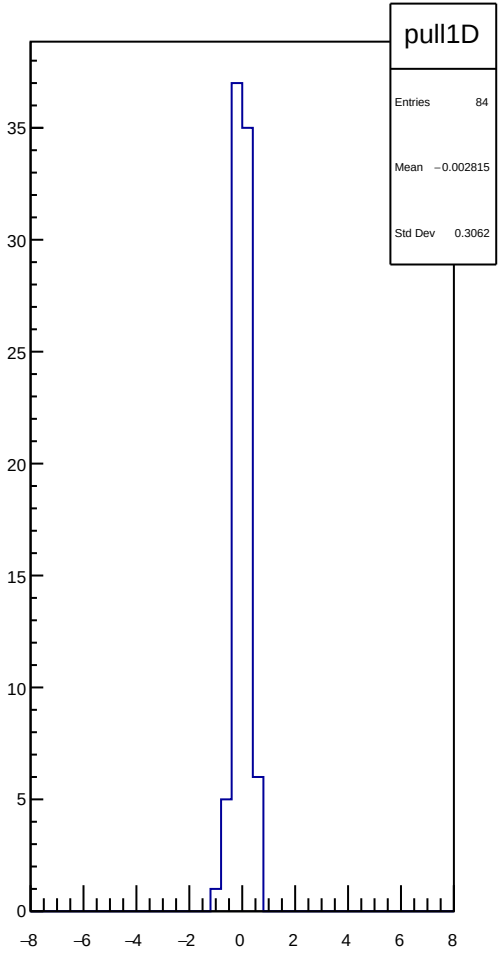

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 5.916 / 83
p0 8.998 ± 0.4806
pull
Entries 84
Mean 216.6
Std Dev 141.6
pull1D
Entries 84
Mean −0.003718
Std Dev 0.2654

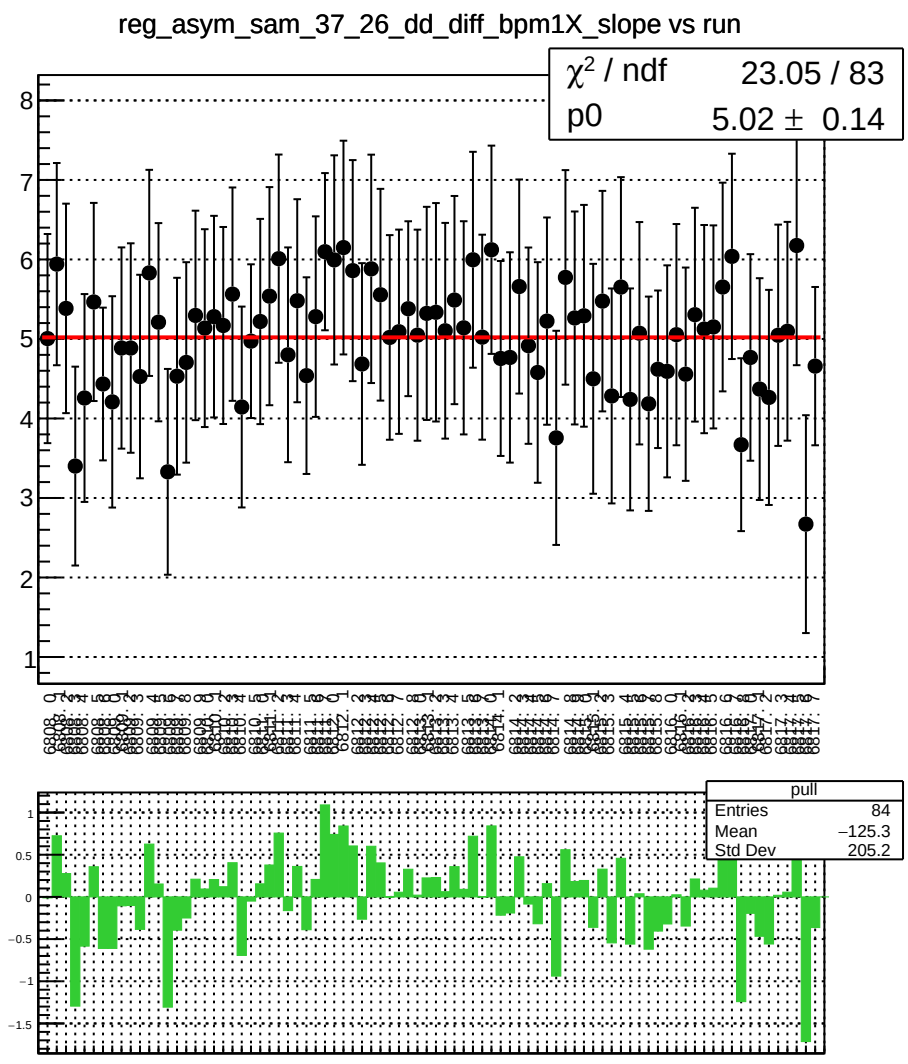

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 9.324 / 83
p0 −2.244 ± 0.3078
pull
Entries 84
Mean −131.2
Std Dev 172.1
pull1D
Entries 84
Mean 0.01989
Std Dev 0.3326

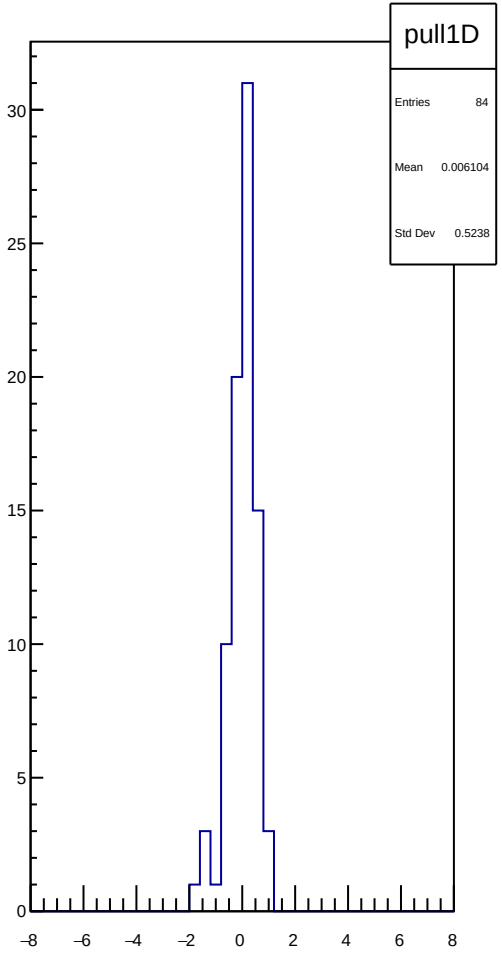

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 9.166 / 83
p0 23.09 ± 0.4494
pull
Entries 84
Mean 49.5
Std Dev 44.9
pull1D
Entries 84
Mean 0.01086
Std Dev 0.3302

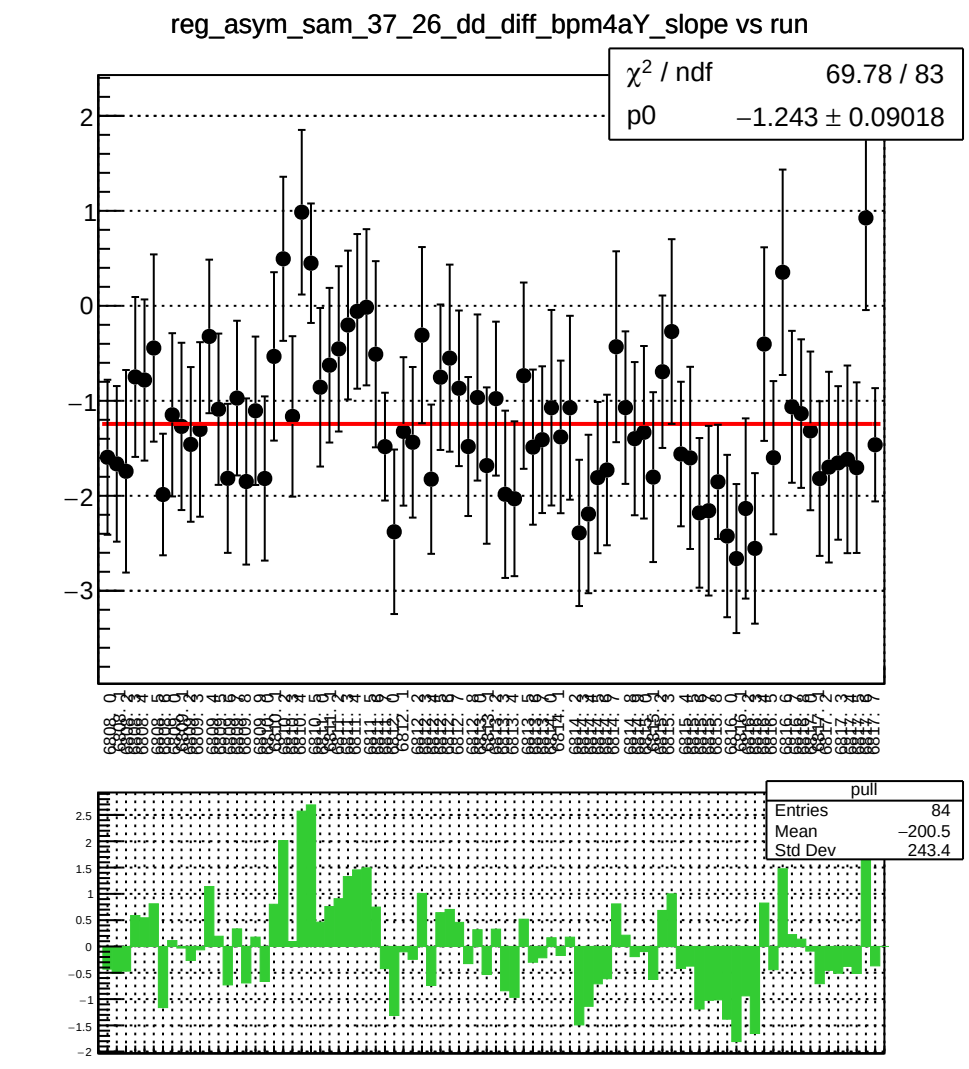

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 8.552 / 83
p0 44.03 ± 0.372
pull
Entries 84
Mean −4927
Std Dev 4968
pull1D
Entries 84
Mean −0.00086
Std Dev 0.3191

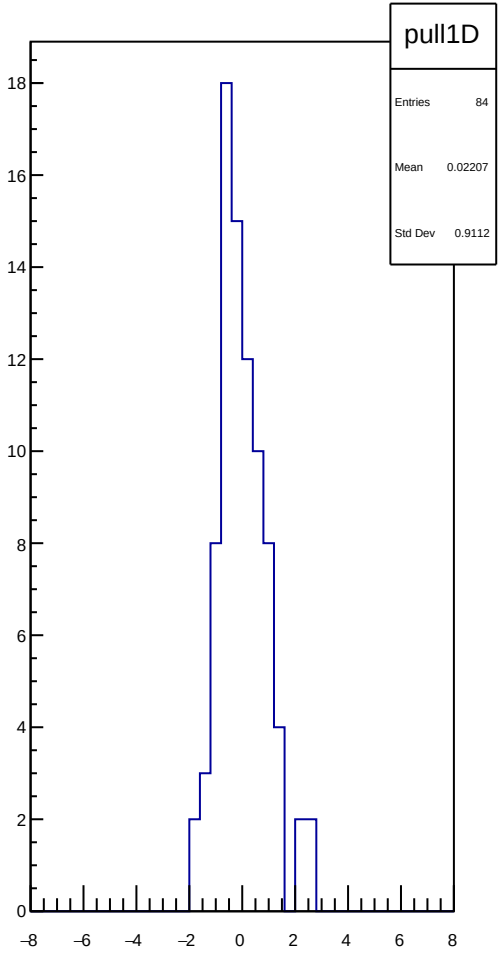

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 7.878 / 83
p0 −0.305 ± 0.01952
pull
Entries 84
Mean −1528
Std Dev 1567

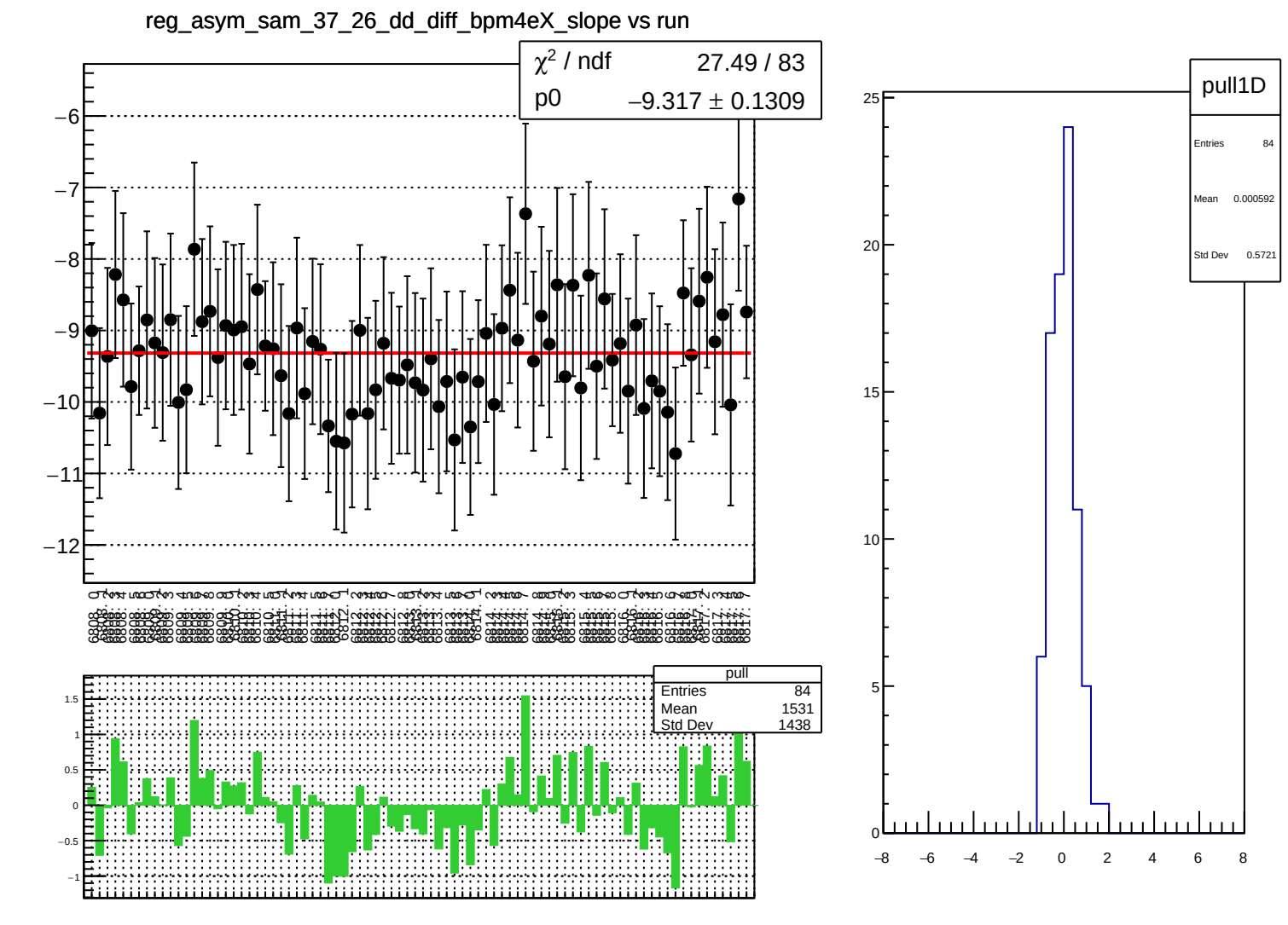

pull1D
Entries 84
Mean −0.002815
Std Dev 0.3062

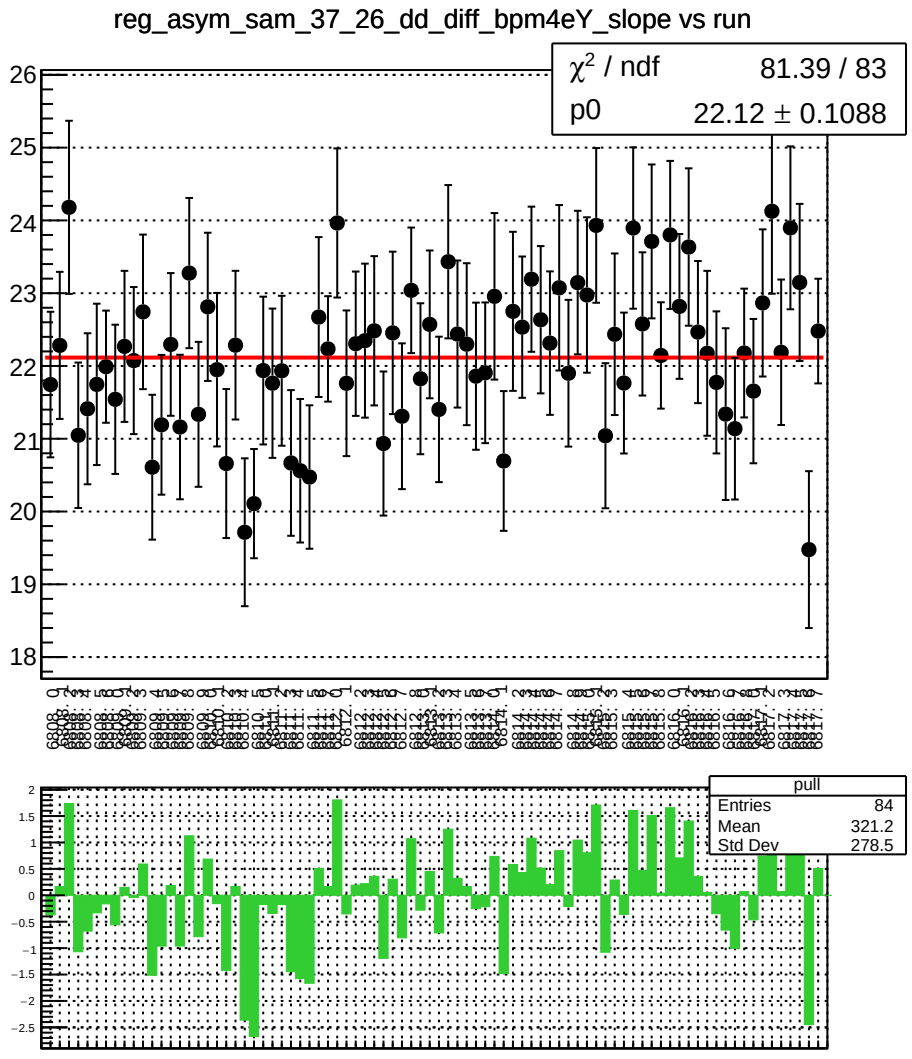

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 23.05 / 83
p0 5.02 ± 0.14
pull
Entries 84
Mean −125.3
Std Dev 205.2

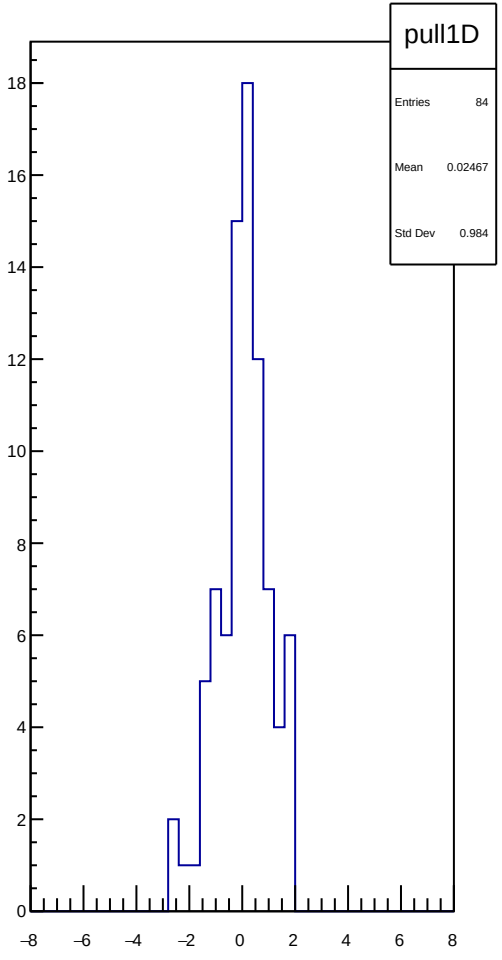

pull1D
Entries 84
Mean 0.006104
Std Dev 0.5238

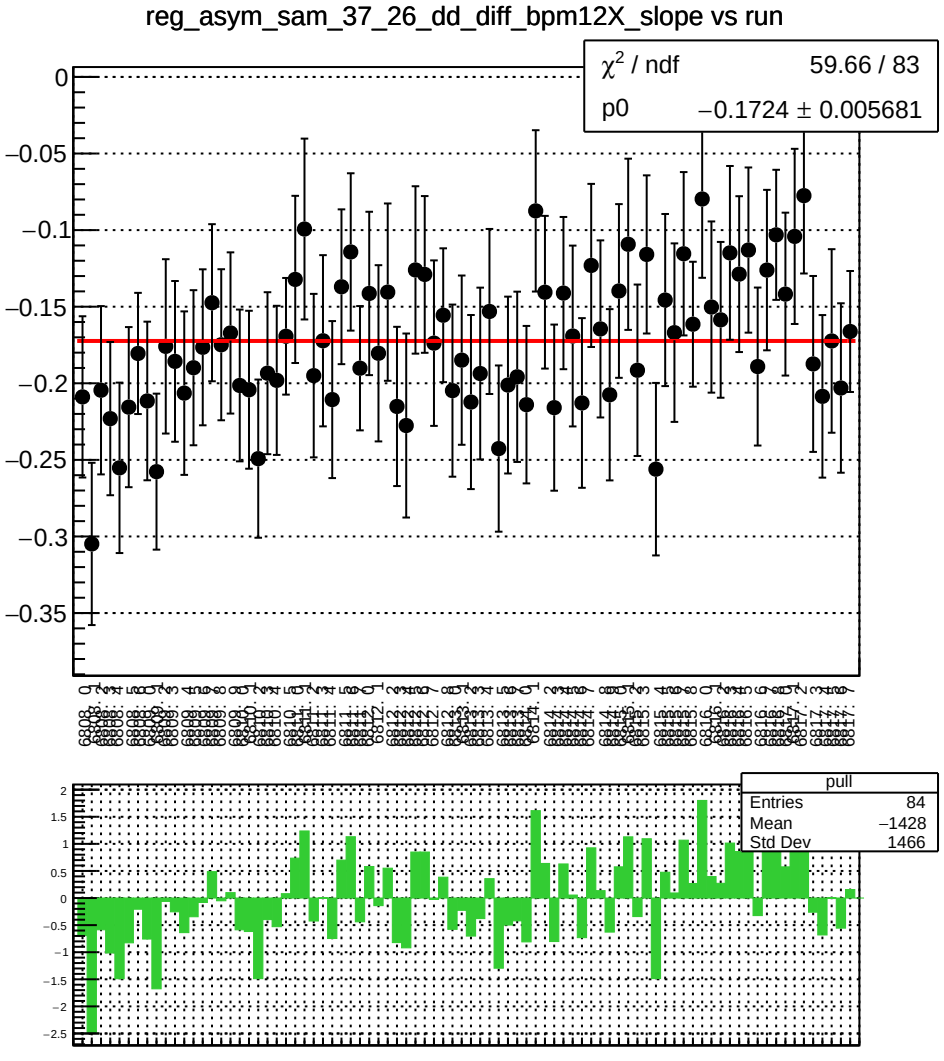

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 69.78 / 83
p0 −1.243 ± 0.09018
pull
Entries 84
Mean −200.5
Std Dev 243.4

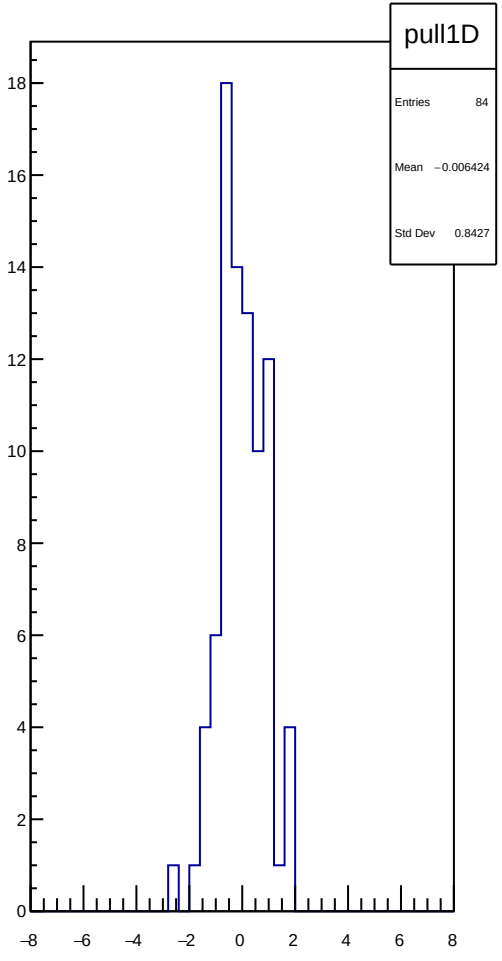

pull1D
Entries 84
Mean 0.02207
Std Dev 0.9112

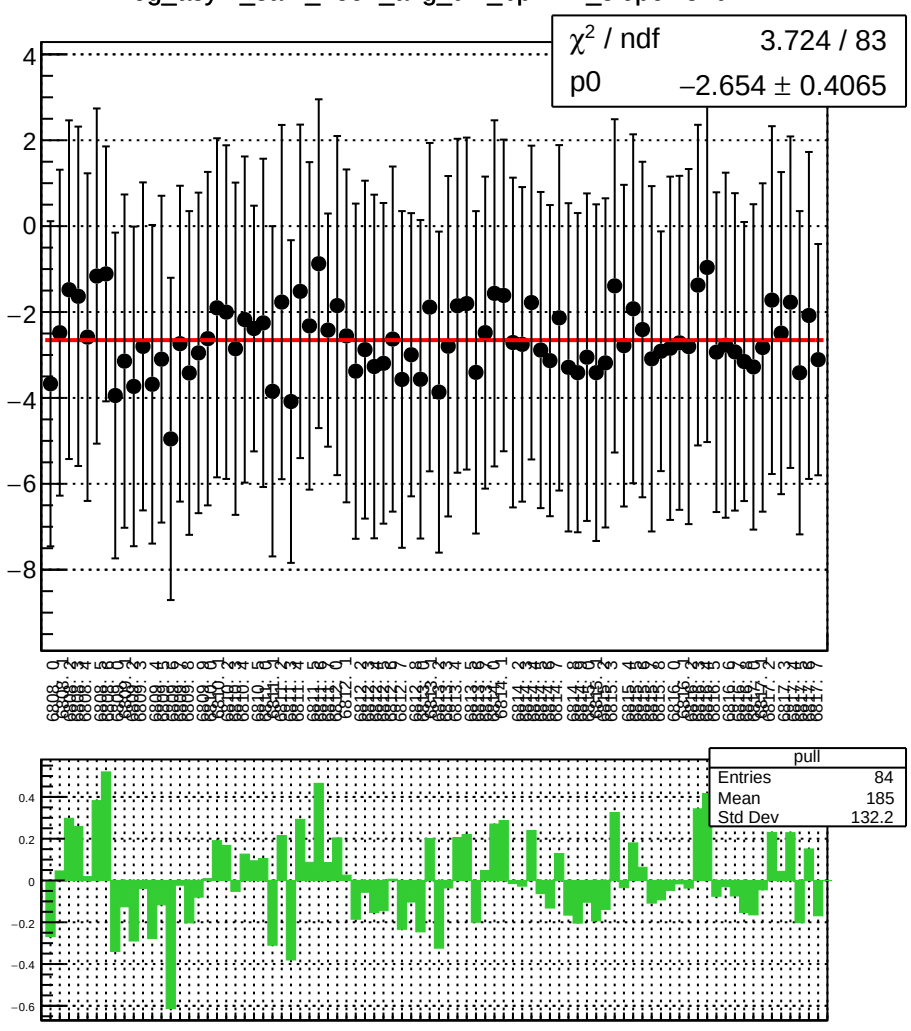

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 27.49 / 83
p0 −9.317 ± 0.1309
pull
Entries 84
Mean 1531
Std Dev 1438
pull1D
Entries 84
Mean 0.000592
Std Dev 0.5721

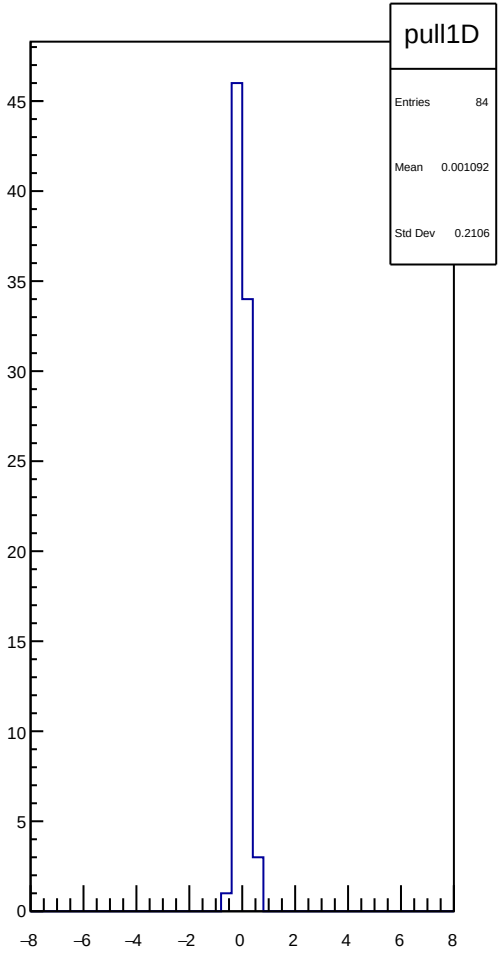

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 81.39 / 83
p0 22.12 ± 0.1088
pull
Entries 84
Mean 321.2
Std Dev 278.5

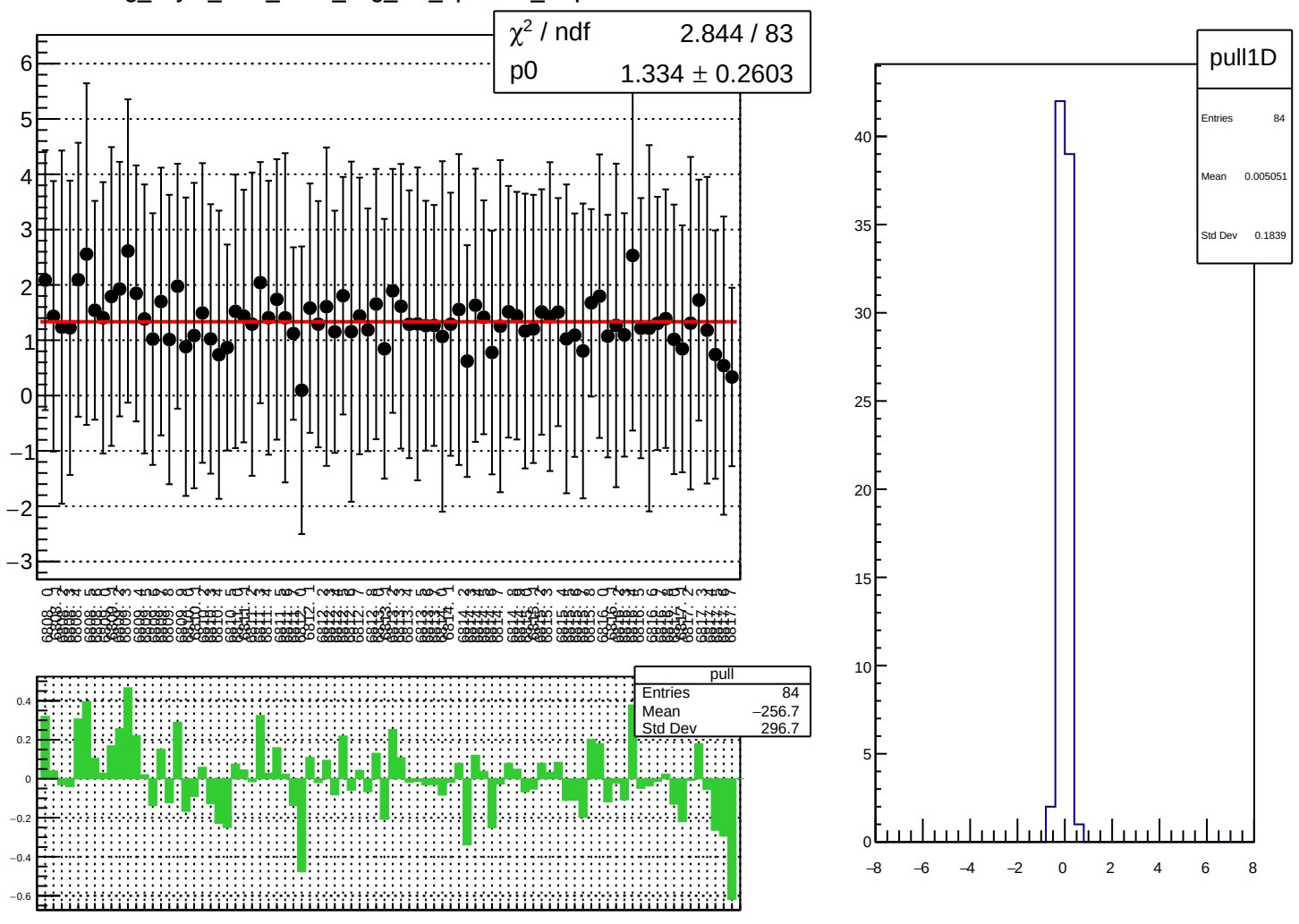

pull1D
Entries 84
Mean 0.02467
Std Dev 0.984

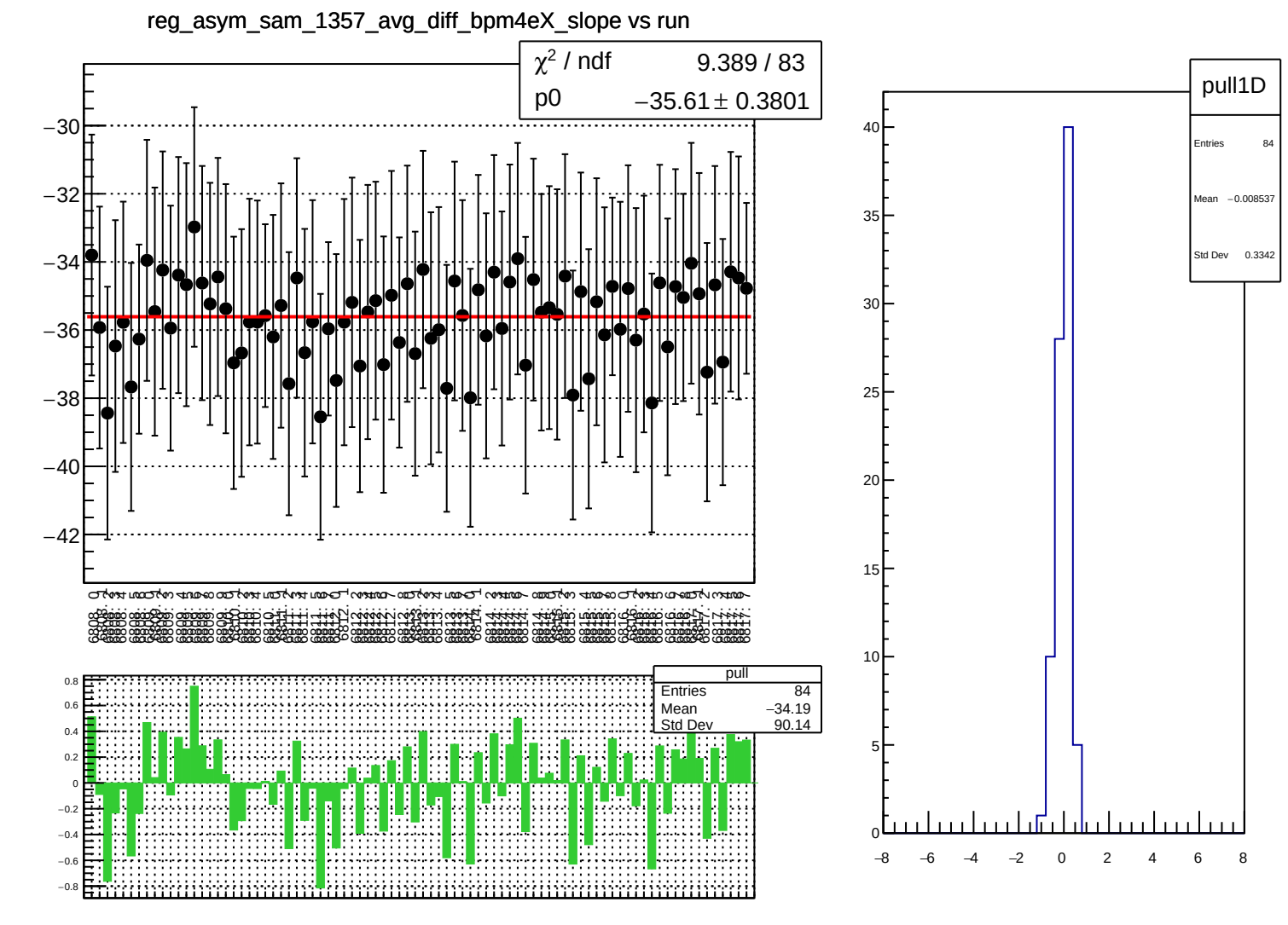

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 59.66 / 83
p0 −0.1724 ± 0.005681
pull
Entries 84
Mean −1428
Std Dev 1466

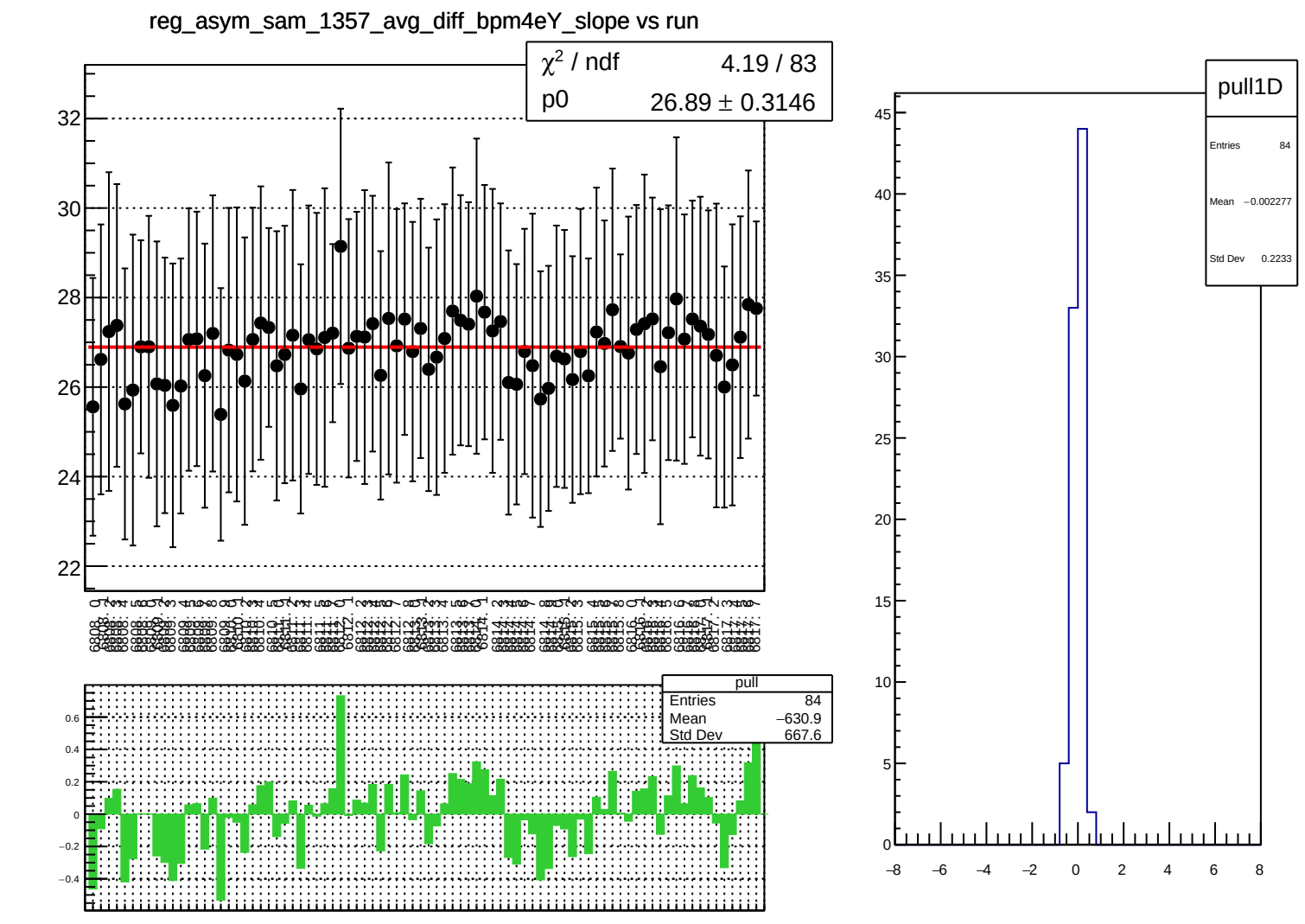

pull1D
Entries 84
Mean −0.006424
Std Dev 0.8427

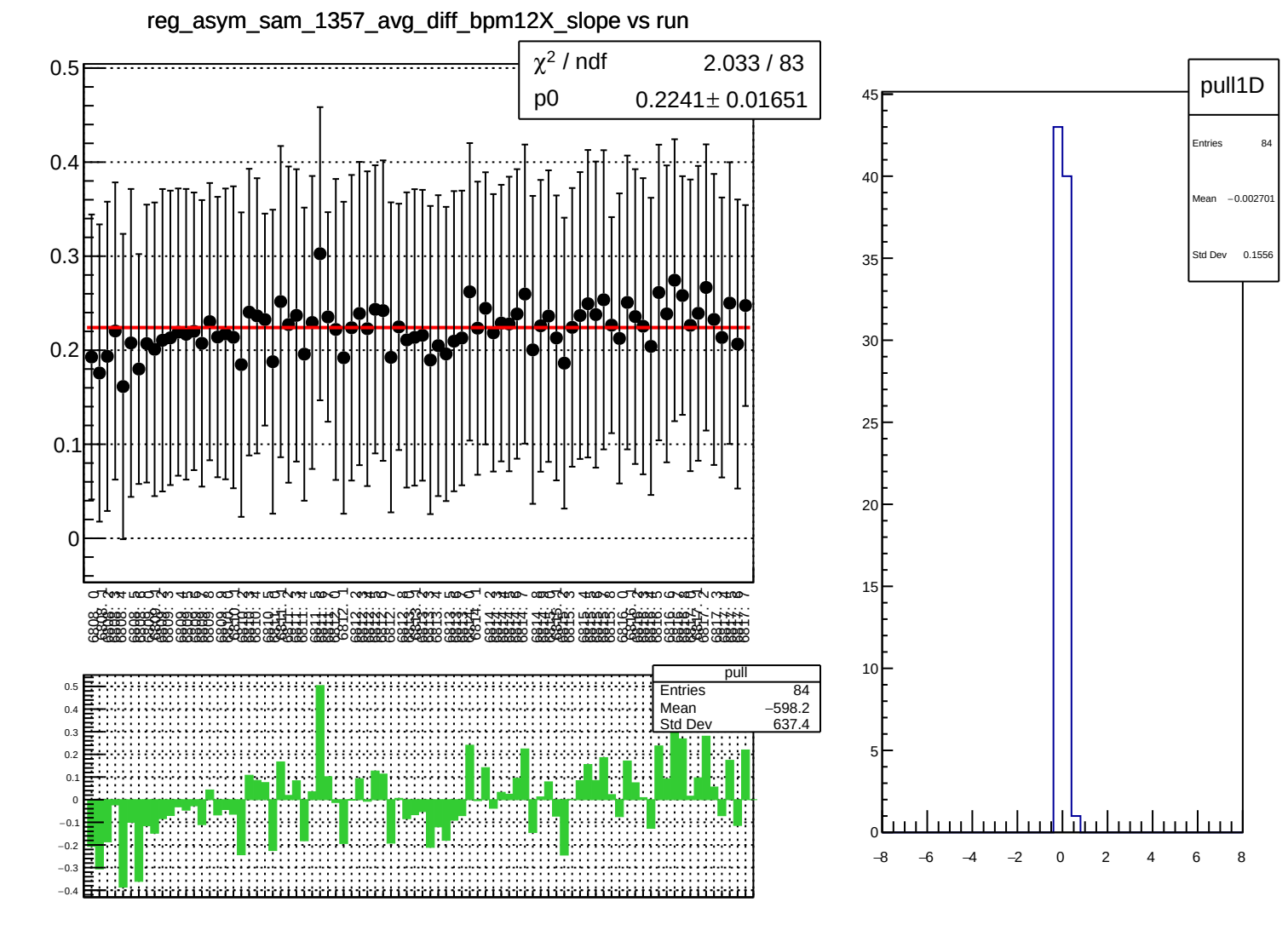

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 3.724 / 83
p0 −2.654 ± 0.4065
pull
Entries 84
Mean 185
Std Dev 132.2

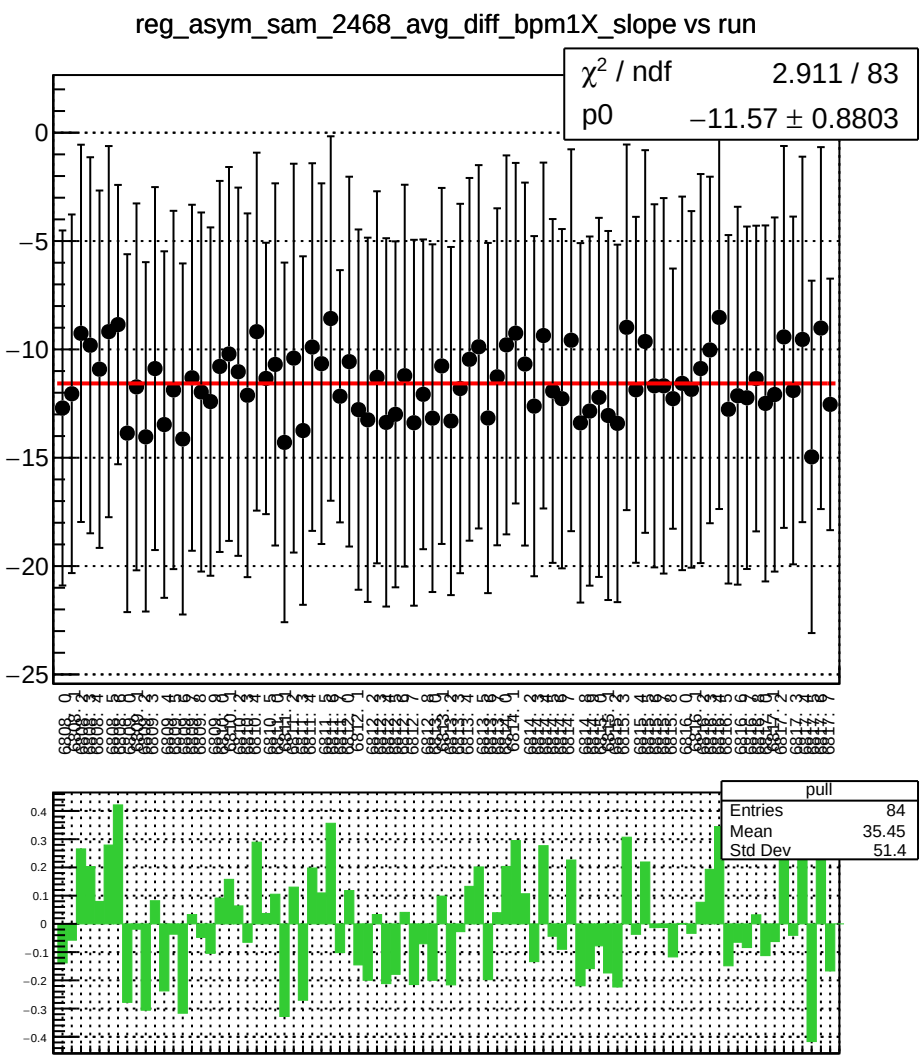

pull1D
Entries 84
Mean 0.001092
Std Dev 0.2106

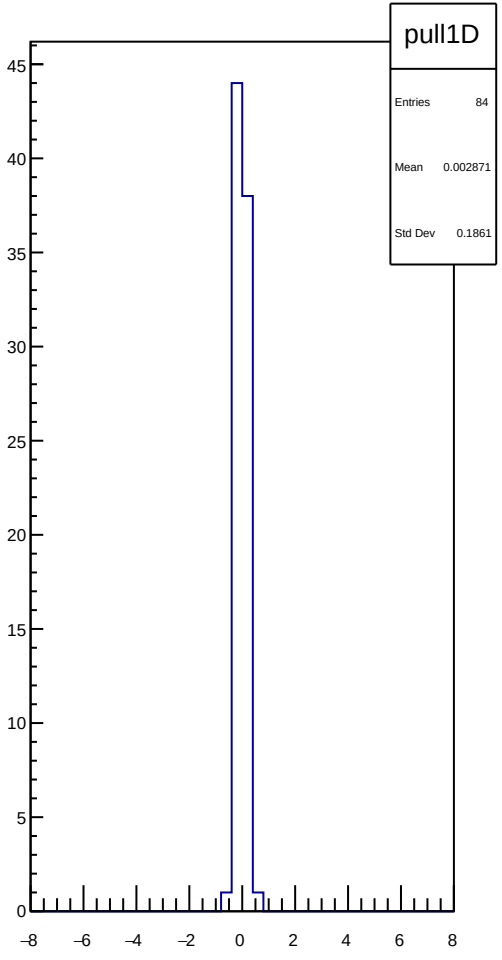

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.844 / 83
p0 1.334 ± 0.2603
pull
Entries 84
Mean −256.7
Std Dev 296.7
pull1D
Entries 84
Mean 0.005051
Std Dev 0.1839

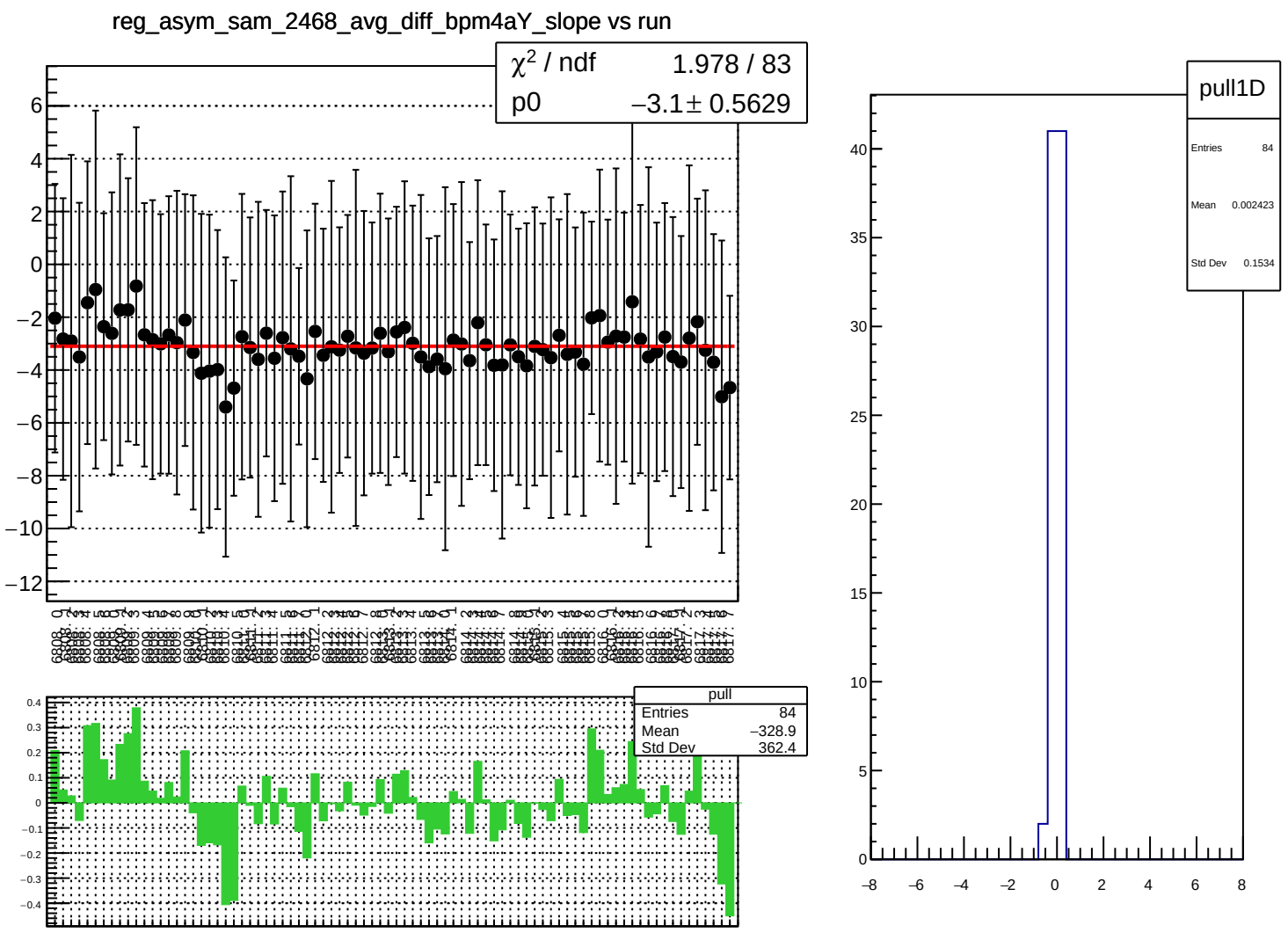

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.389 / 83
p0 −35.61 ± 0.3801
pull
Entries 84
Mean −34.19
Std Dev 90.14
pull1D
Entries 84
Mean −0.008537
Std Dev 0.3342

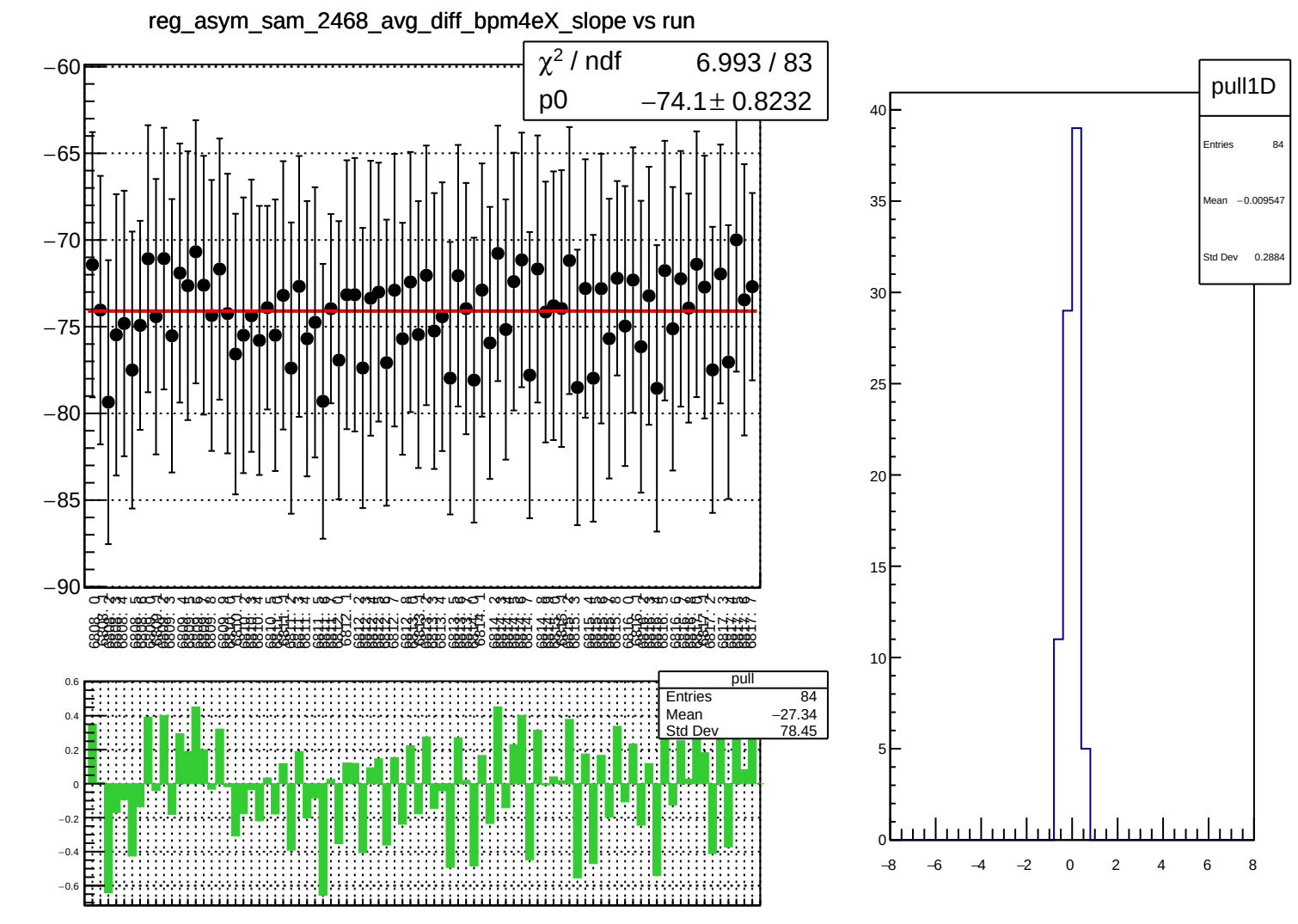

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.19 / 83
p0 26.89 ± 0.3146
pull
Entries 84
Mean −630.9
Std Dev 667.6
pull1D
Entries 84
Mean −0.002277
Std Dev 0.2233

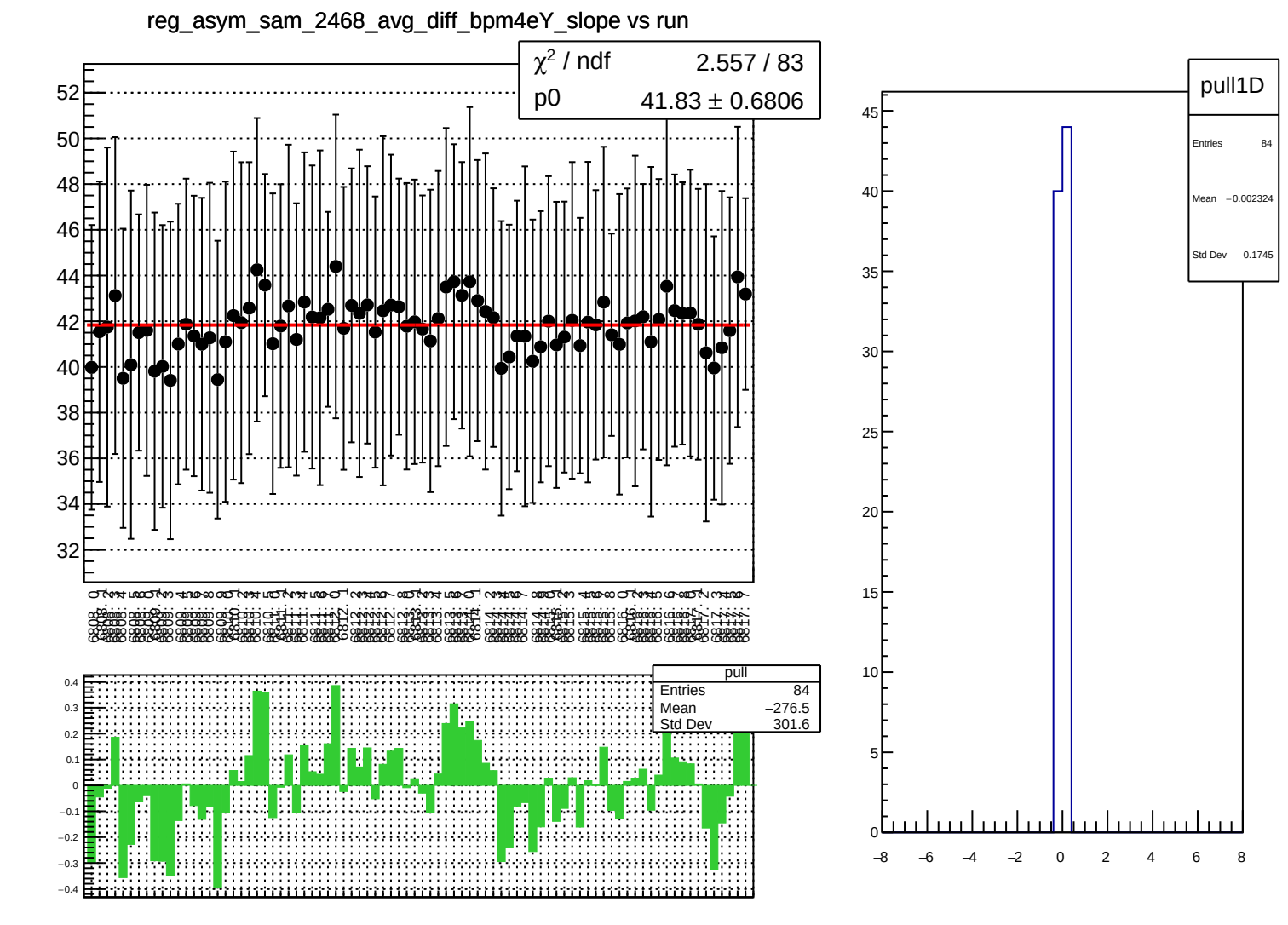

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 2.033 / 83
p0 0.2241± 0.01651
pull
Entries 84
Mean −598.2
Std Dev 637.4
pull1D
Entries 84
Mean −0.002701
Std Dev 0.1556

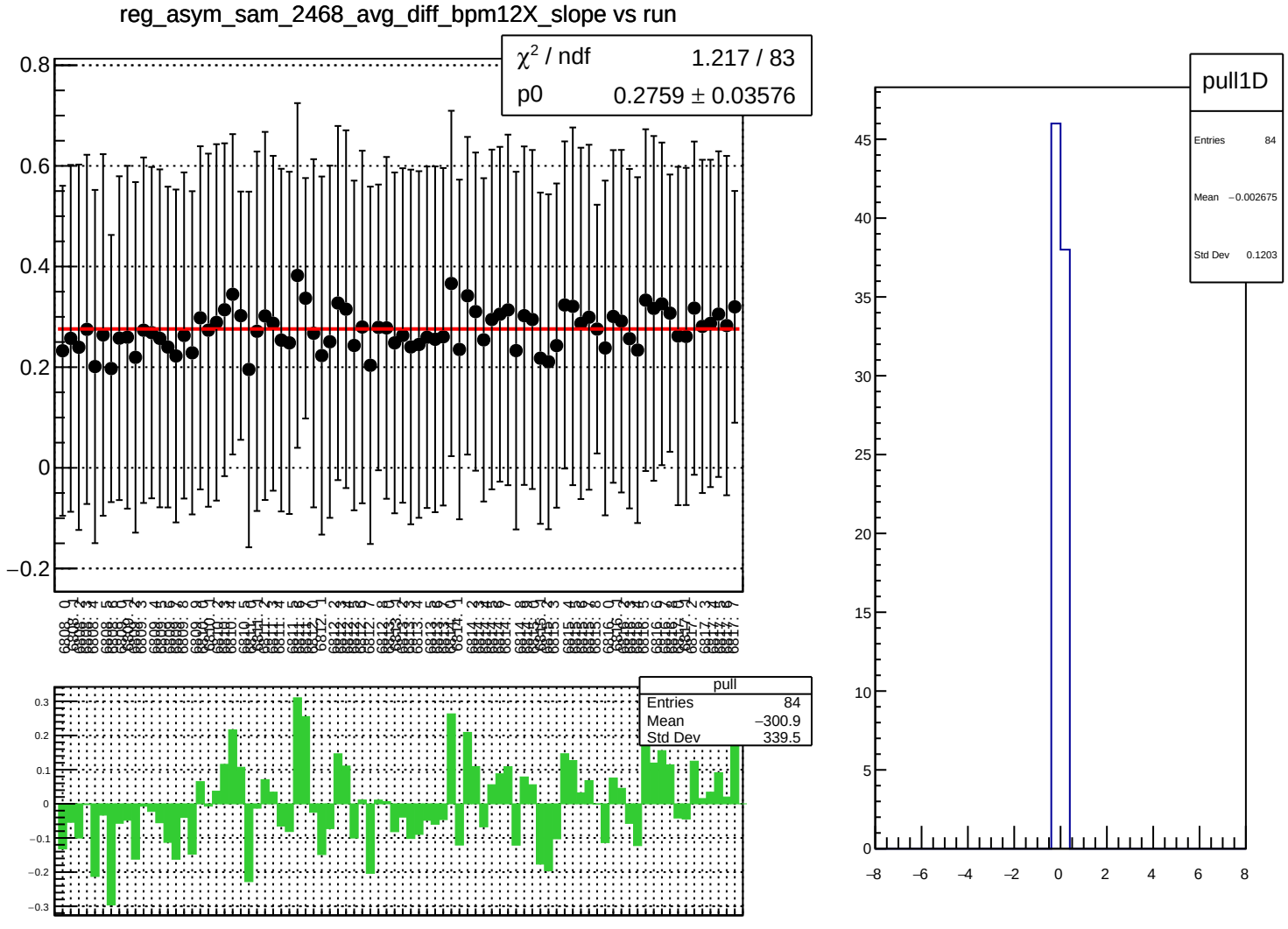

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 2.911 / 83
p0 −11.57 ± 0.8803
pull
Entries 84
Mean 35.45
Std Dev 51.4


pull1D
Entries 84
Mean 0.002871
Std Dev 0.1861

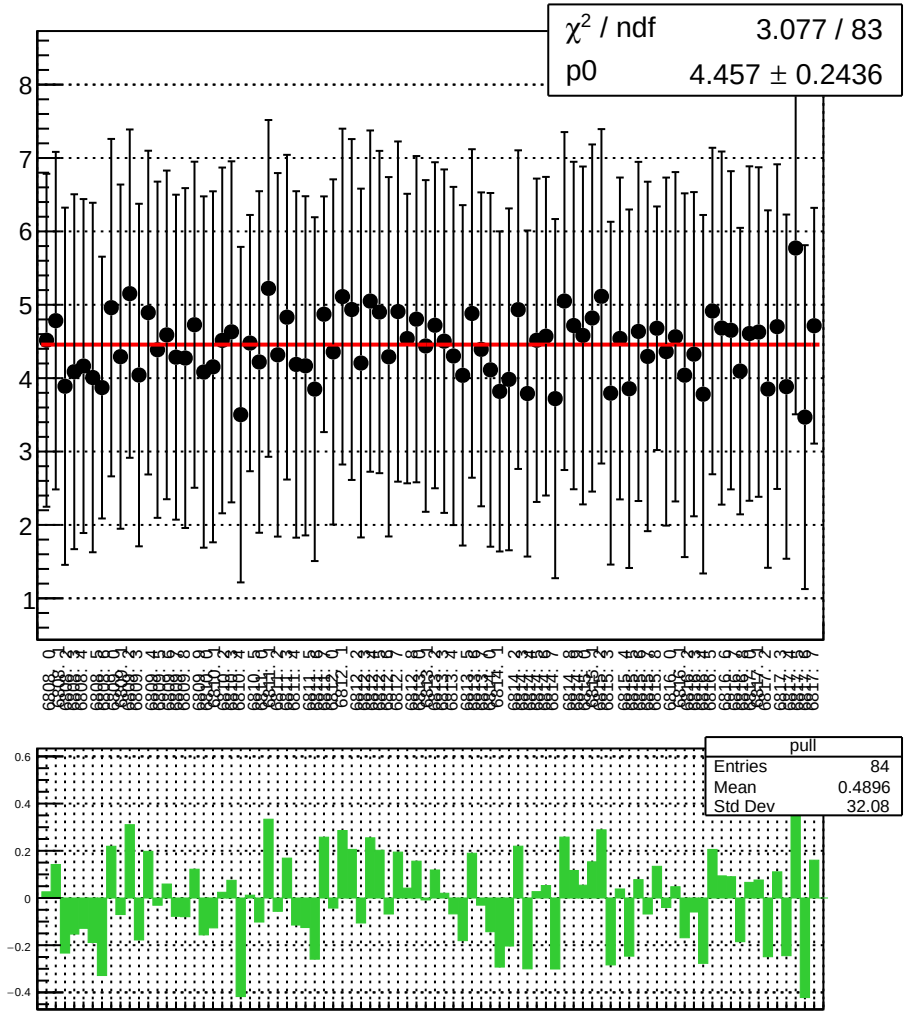

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.978 / 83
p0 −3.1 ± 0.5629
pull
Entries 84
Mean −328.9
Std Dev 362.4
pull1D
Entries 84
Mean 0.002423
Std Dev 0.1534

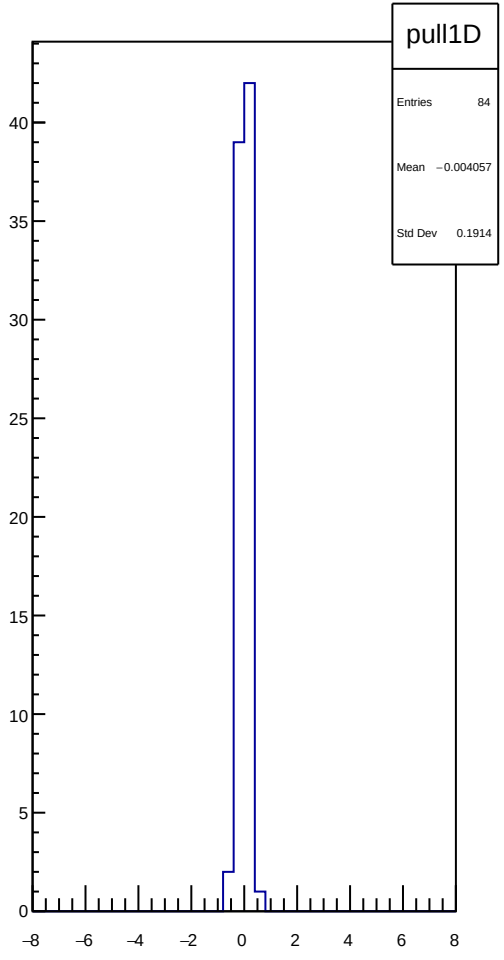

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 6.993 / 83
p0 −74.1 ± 0.8232
pull
Entries 84
Mean −27.34
Std Dev 78.45
pull1D
Entries 84
Mean −0.009547
Std Dev 0.2884

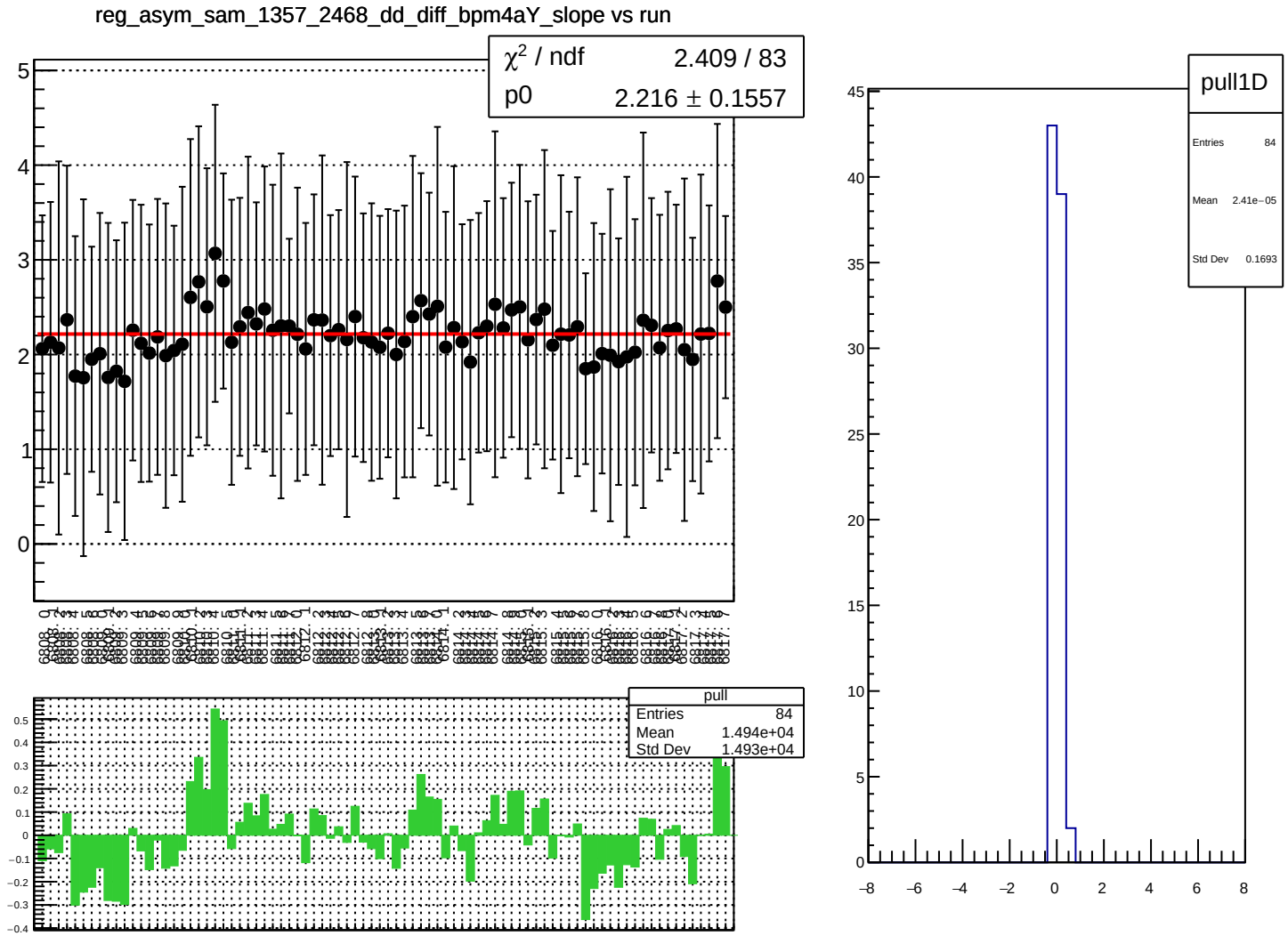

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.557 / 83
p0 41.83 ± 0.6806
pull
Entries 84
Mean −276.5
Std Dev 301.6
pull1D
Entries 84
Mean −0.002324
Std Dev 0.1745

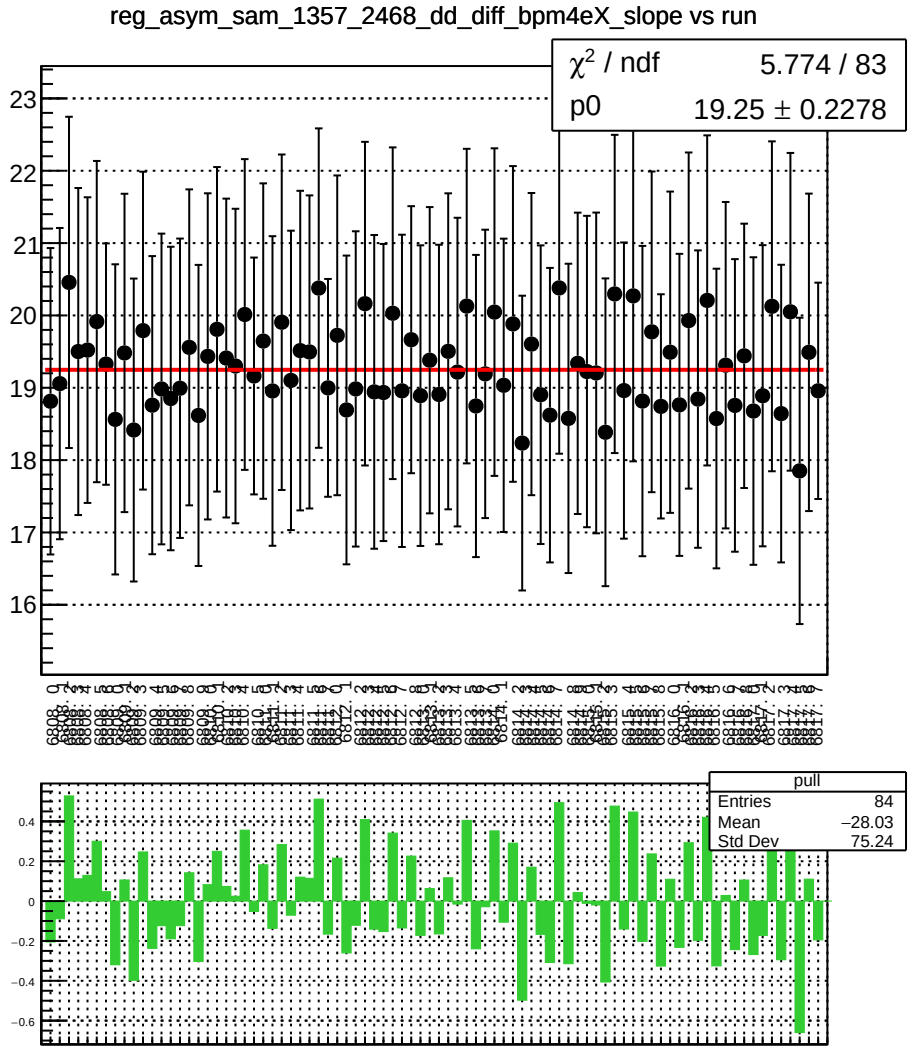

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 1.217 / 83
p0 0.2759 ± 0.03576
pull
Entries 84
Mean −300.9
Std Dev 339.5
pull1D
Entries 84
Mean −0.002675
Std Dev 0.1203

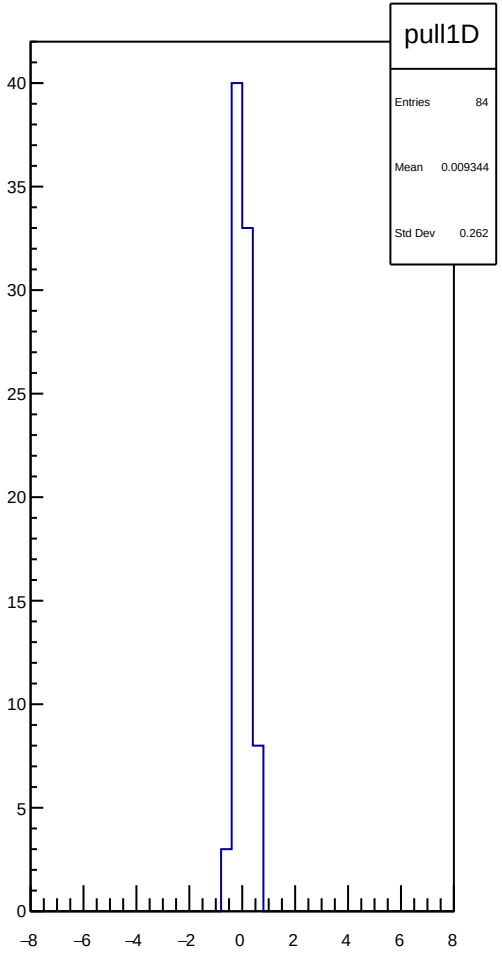
reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run

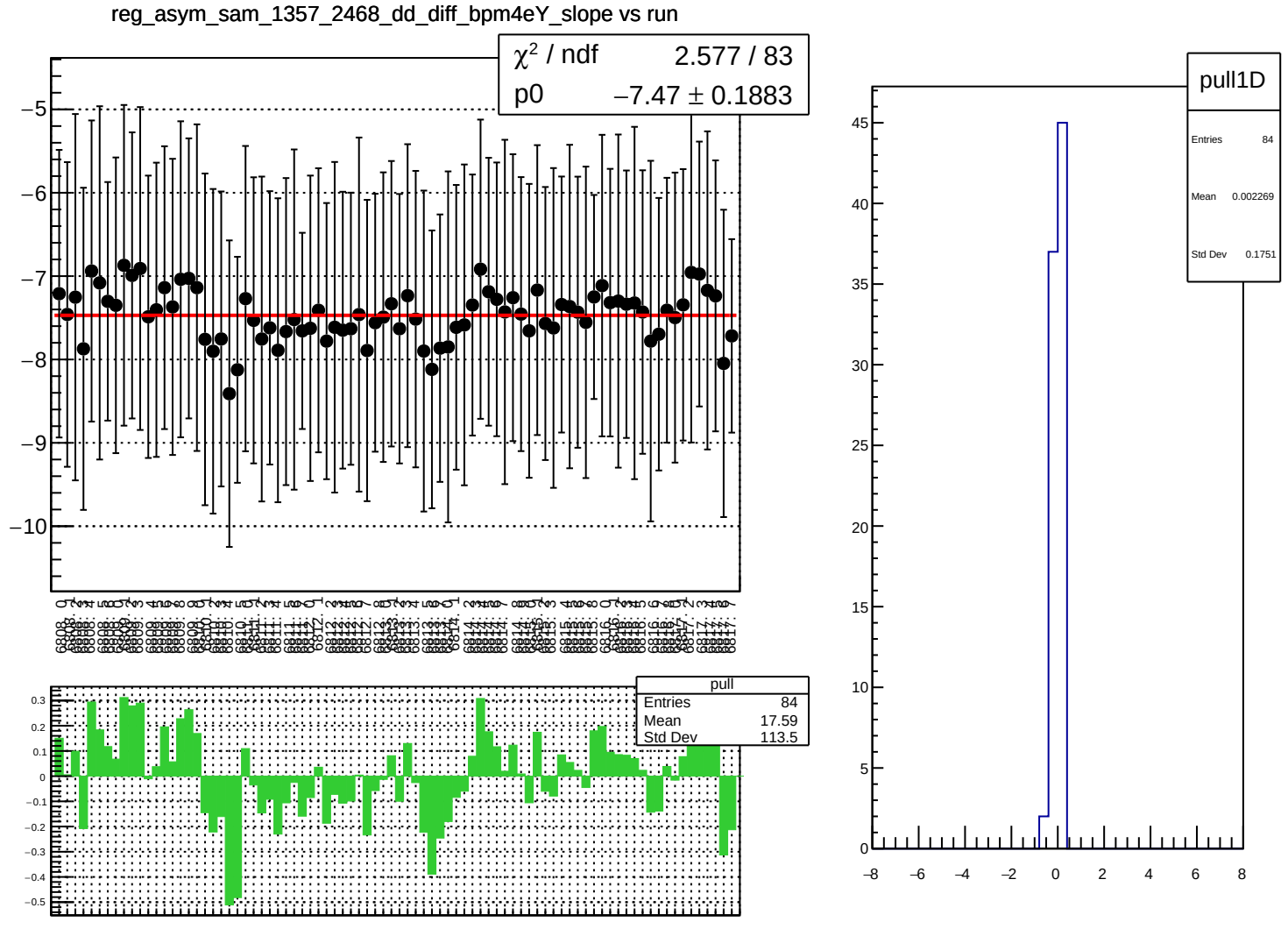


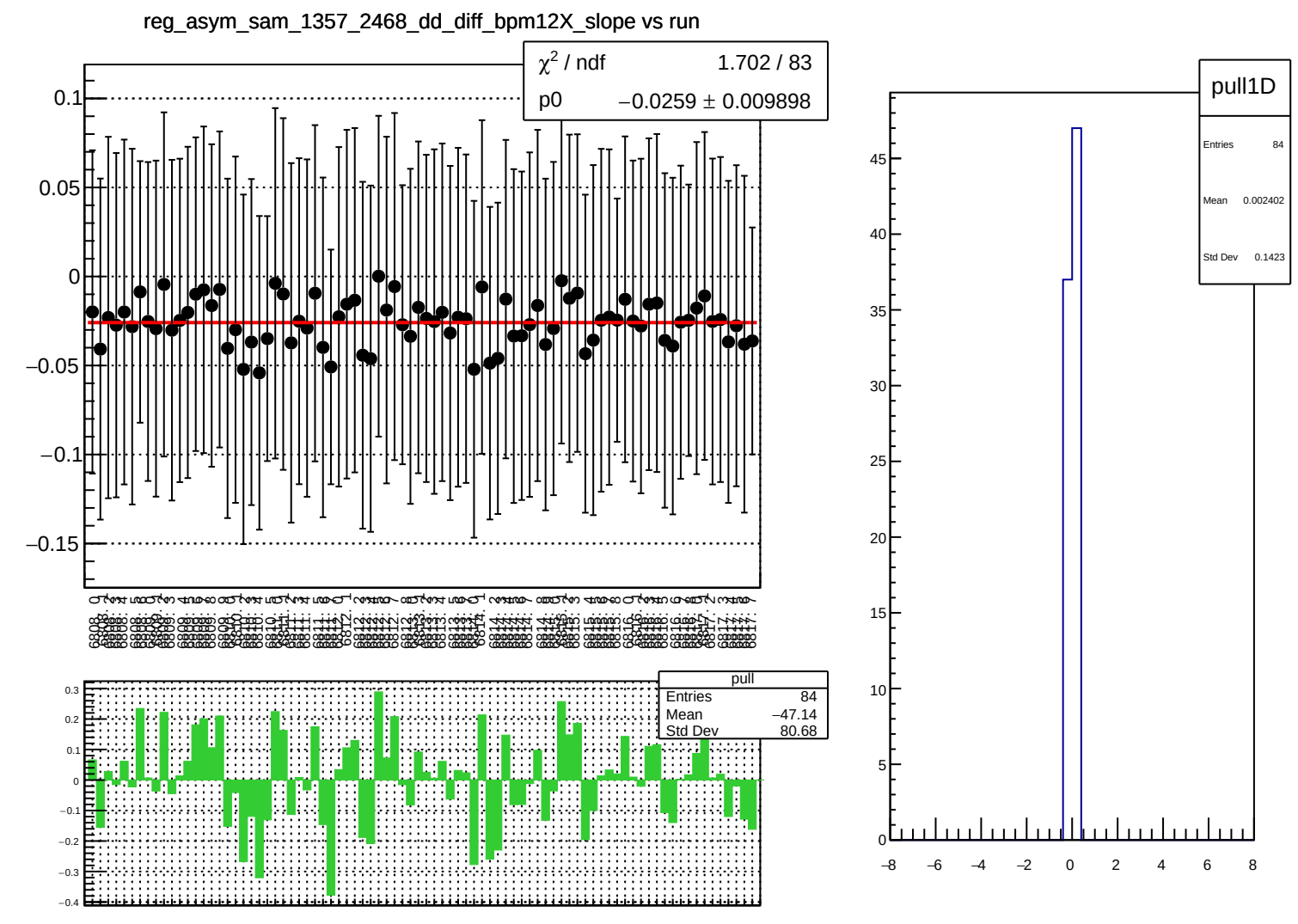


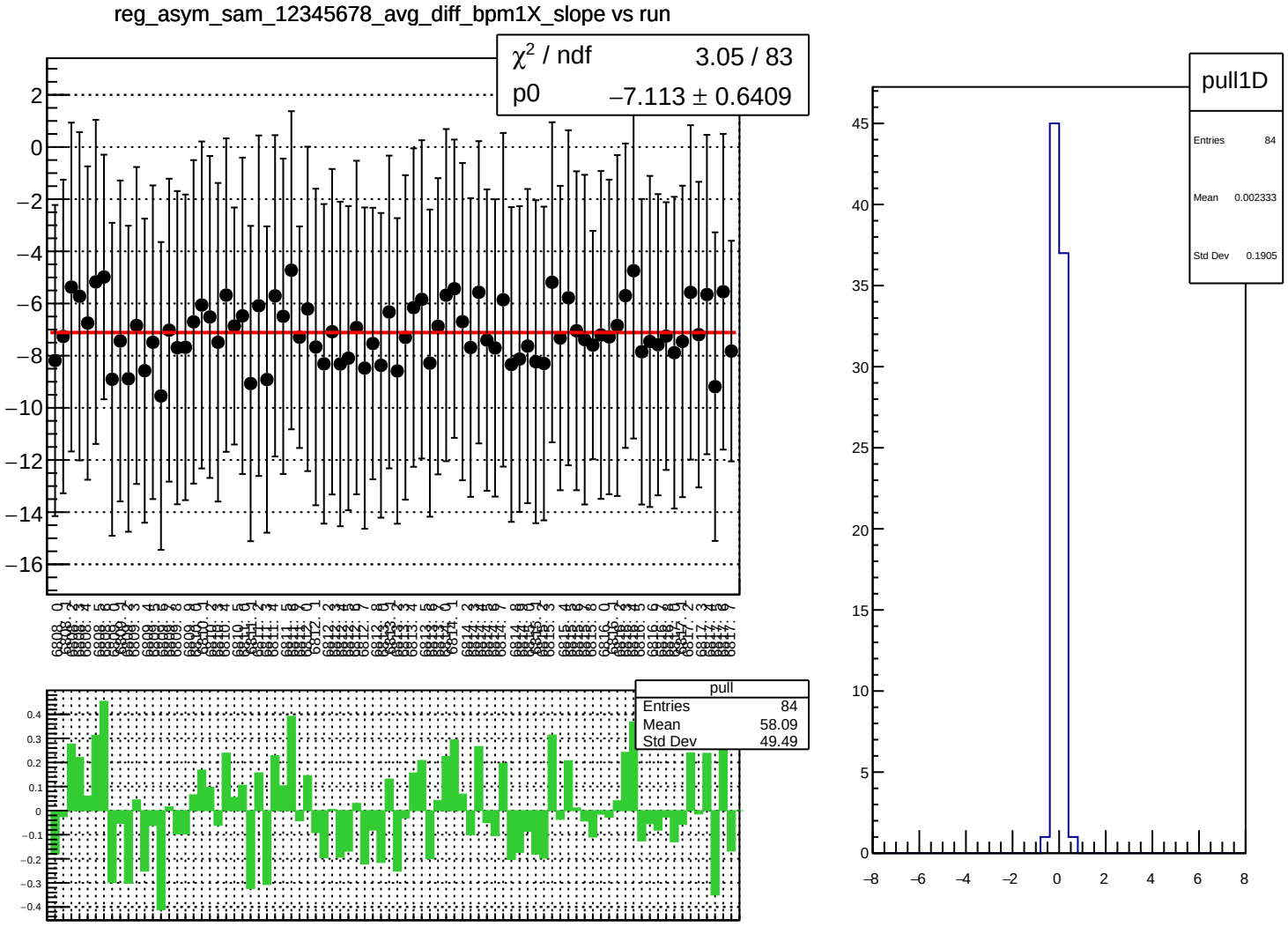

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.409 / 83
p0 2.216 ± 0.1557
pull
Entries 84
Mean 1.494e+04
Std Dev 1.493e+04
pull1D
Entries 84
Mean 2.41e−05
Std Dev 0.1693

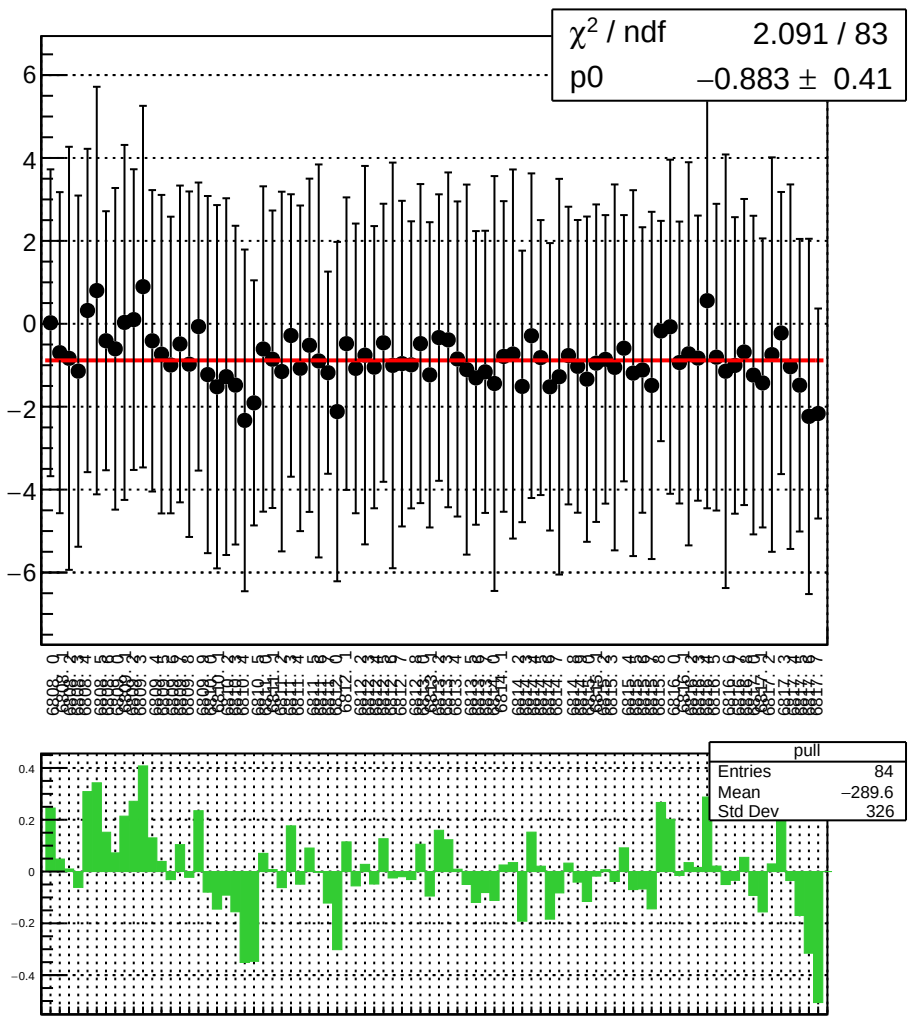

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.774 / 83
p0 19.25 ± 0.2278
pull
Entries 84
Mean −28.03
Std Dev 75.24

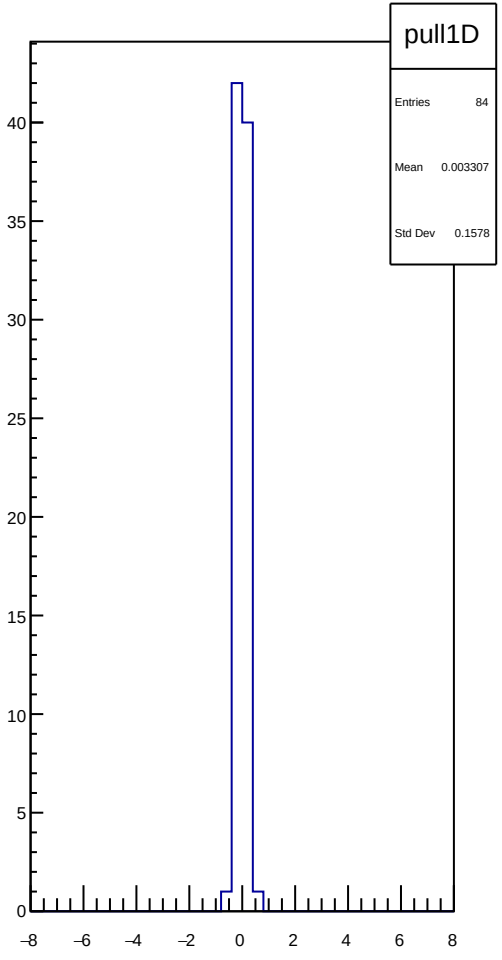

pull1D
Entries 84
Mean 0.009344
Std Dev 0.262

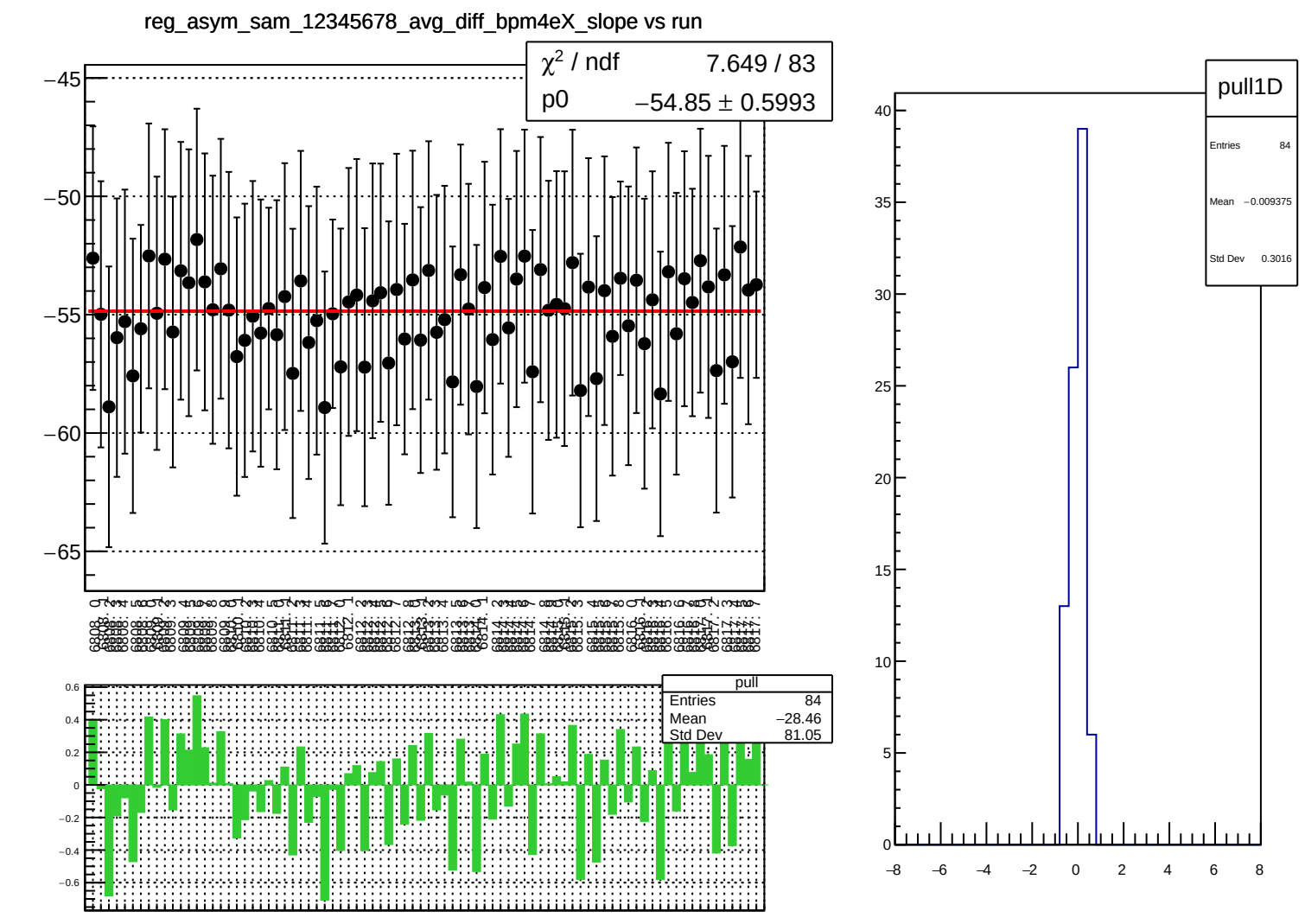

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.577 / 83
p0 −7.47 ± 0.1883
pull
Entries 84
Mean 17.59
Std Dev 113.5
pull1D
Entries 84
Mean 0.002269
Std Dev 0.1751

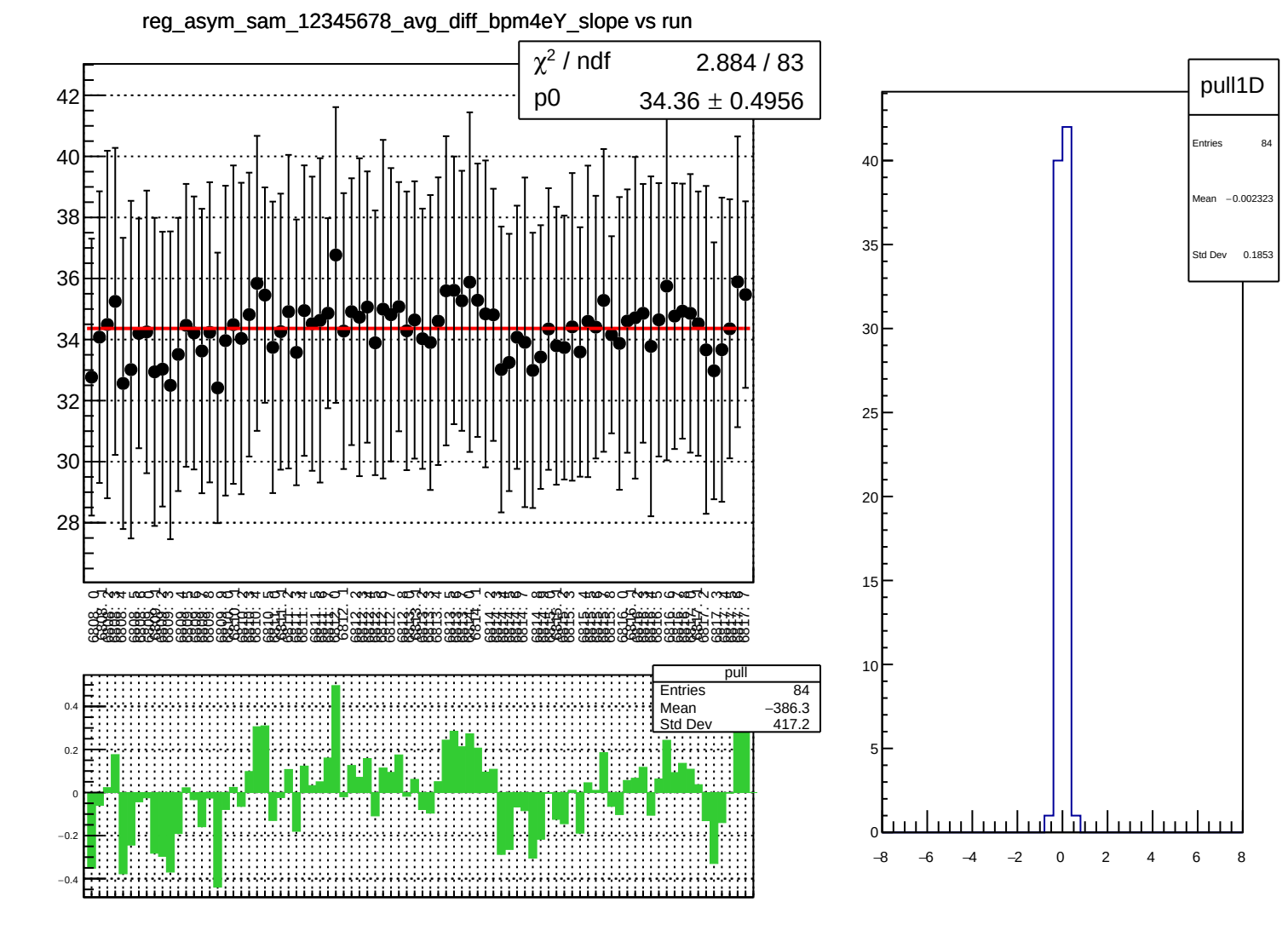

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 1.702 / 83
p0 −0.0259 ± 0.009898
0.1
0.05
0
−0.05
−0.1
−0.15
pull
Entries 84
Mean −47.14
Std Dev 80.68
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull1D
Entries 84
Mean 0.002402
Std Dev 0.1423
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

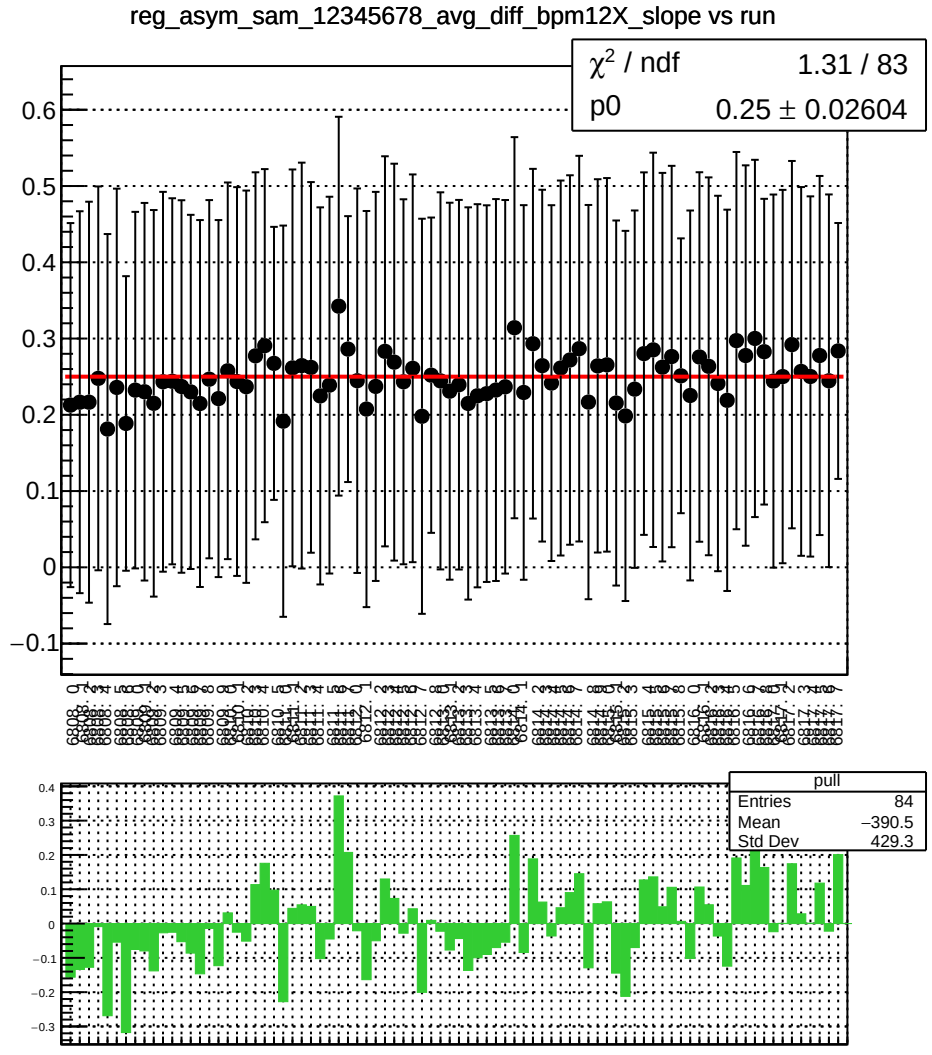

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 3.05 / 83
p0 −7.113 ± 0.6409
pull
Entries 84
Mean 58.09
Std Dev 49.49
pull1D
Entries 84
Mean 0.002333
Std Dev 0.1905

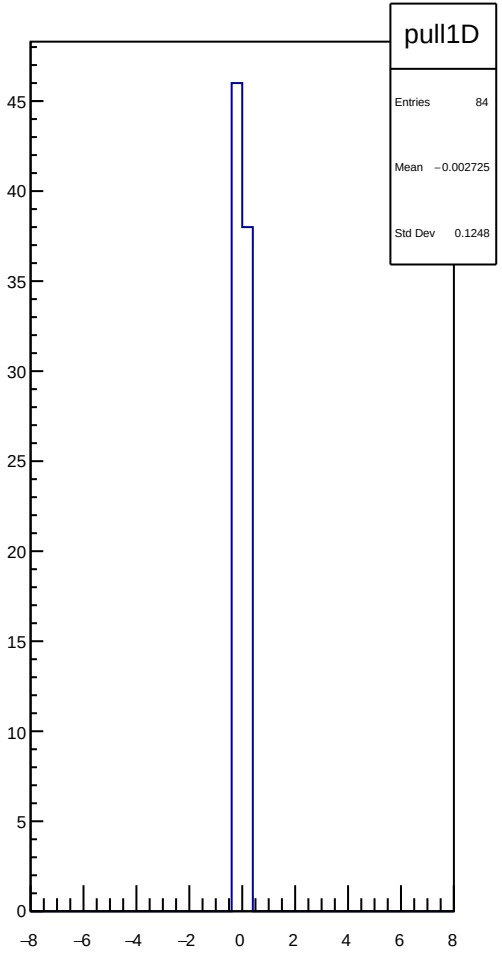

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.091 / 83
p0 −0.883 ± 0.41
pull
Entries 84
Mean −289.6
Std Dev 326

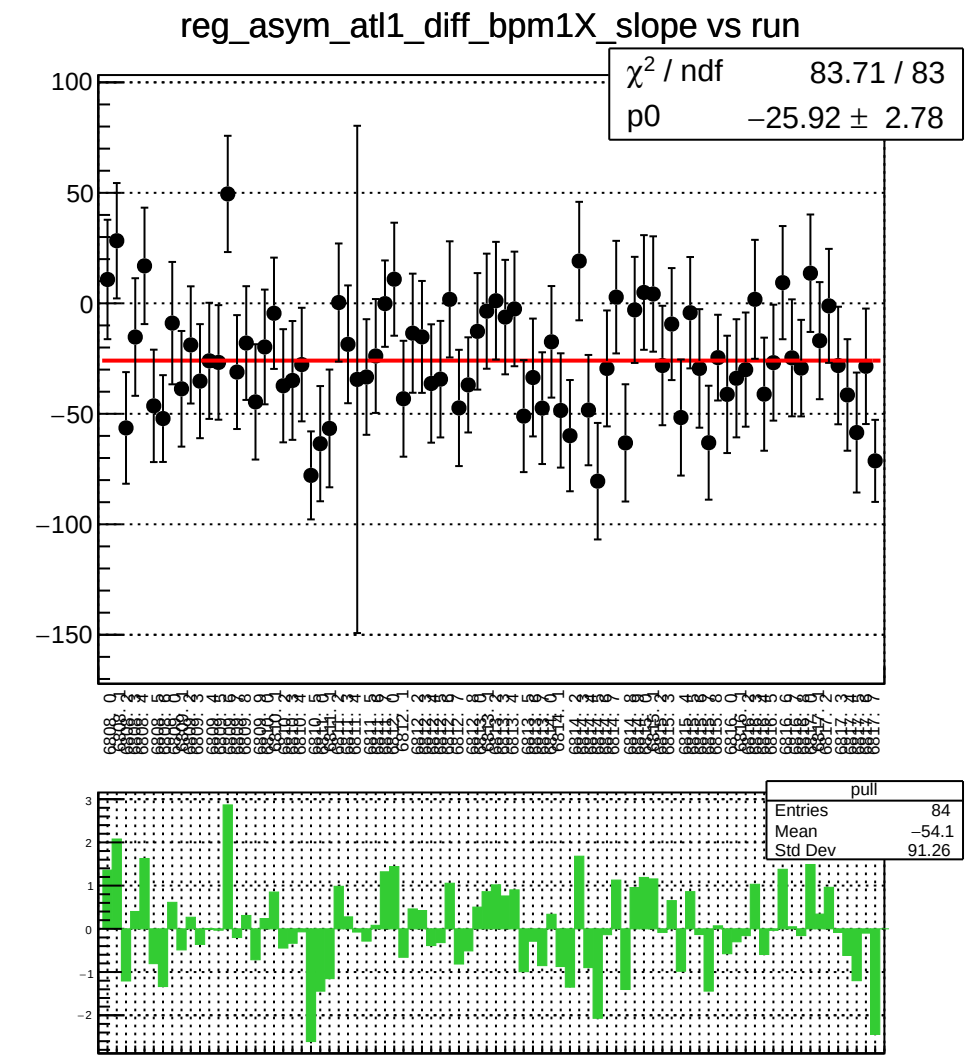

pull1D
Entries 84
Mean 0.003307
Std Dev 0.1578

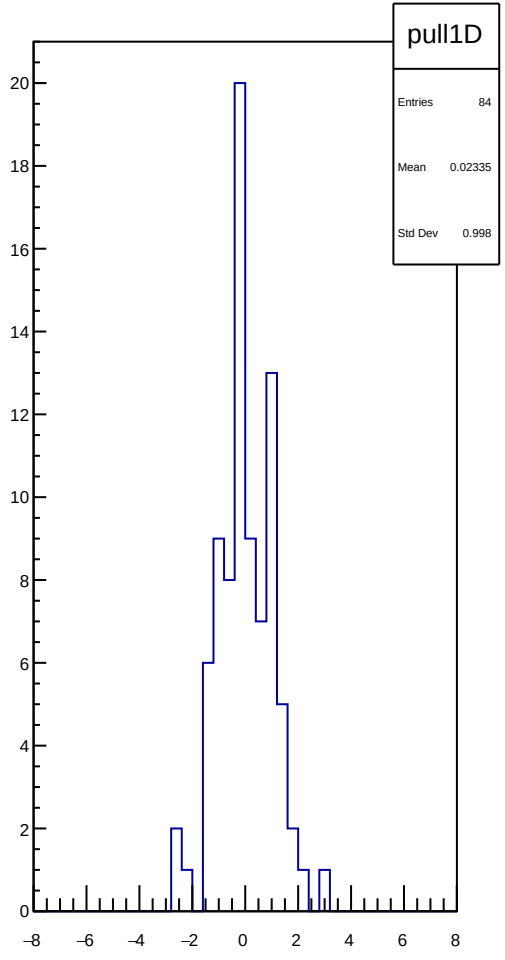

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 7.649 / 83
p0 −54.85 ± 0.5993
−45
−50
−55
−60
−65
pull
Entries 84
Mean −28.46
Std Dev 81.05
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 84
Mean −0.009375
Std Dev 0.3016
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

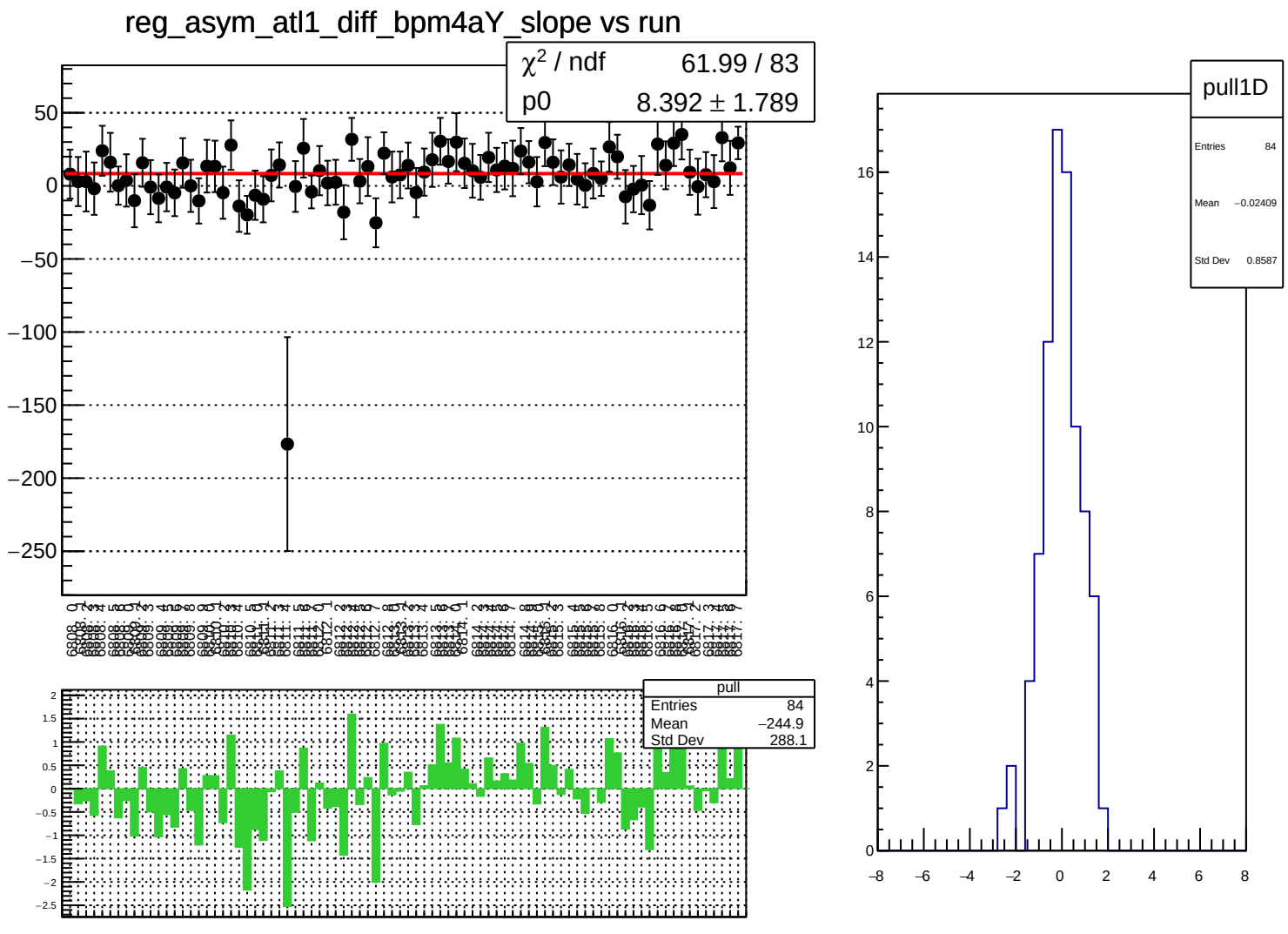

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.884 / 83
p0 34.36 ± 0.4956
pull
Entries 84
Mean −386.3
Std Dev 417.2
pull1D
Entries 84
Mean −0.002323
Std Dev 0.1853

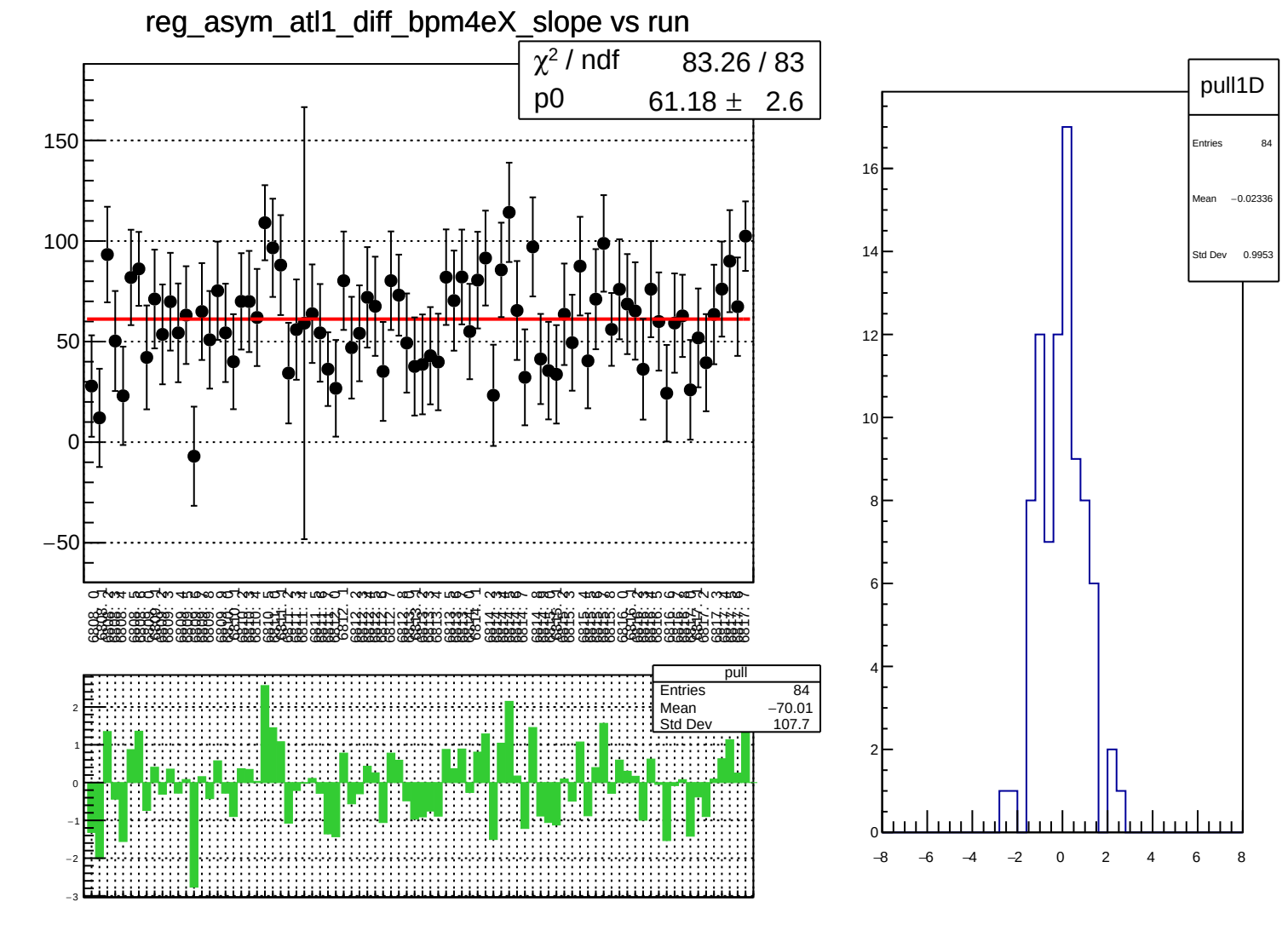

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 1.31 / 83
p0 0.25 ± 0.02604
pull
Entries 84
Mean −390.5
Std Dev 429.3

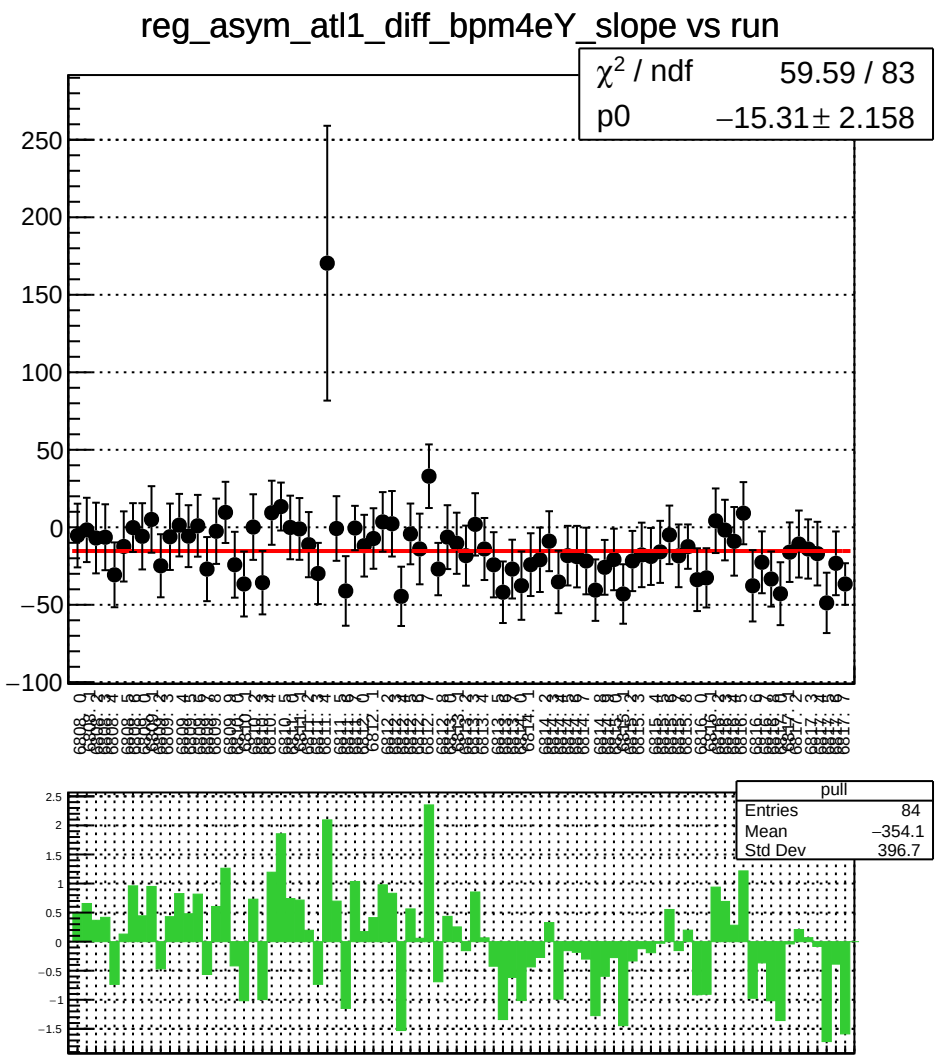

pull1D
Entries 84
Mean −0.002725
Std Dev 0.1248

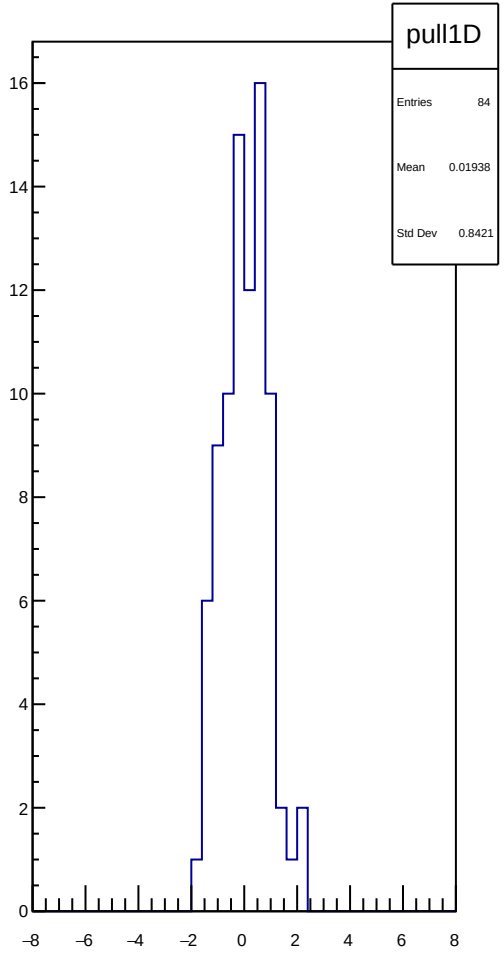

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 83.71 / 83
p0 −25.92 ± 2.78
pull
Entries 84
Mean −54.1
Std Dev 91.26

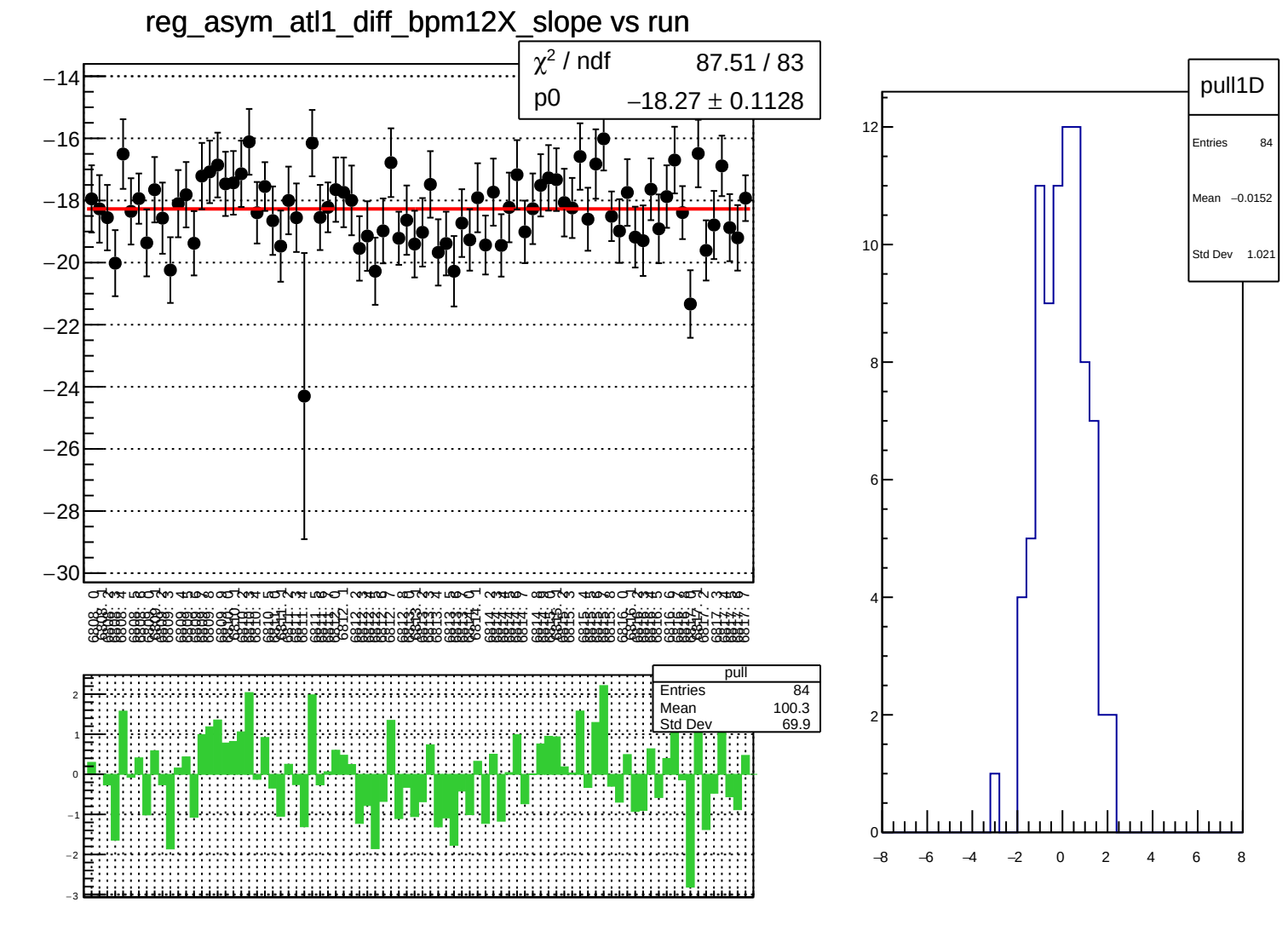

pull1D
Entries 84
Mean 0.02335
Std Dev 0.998

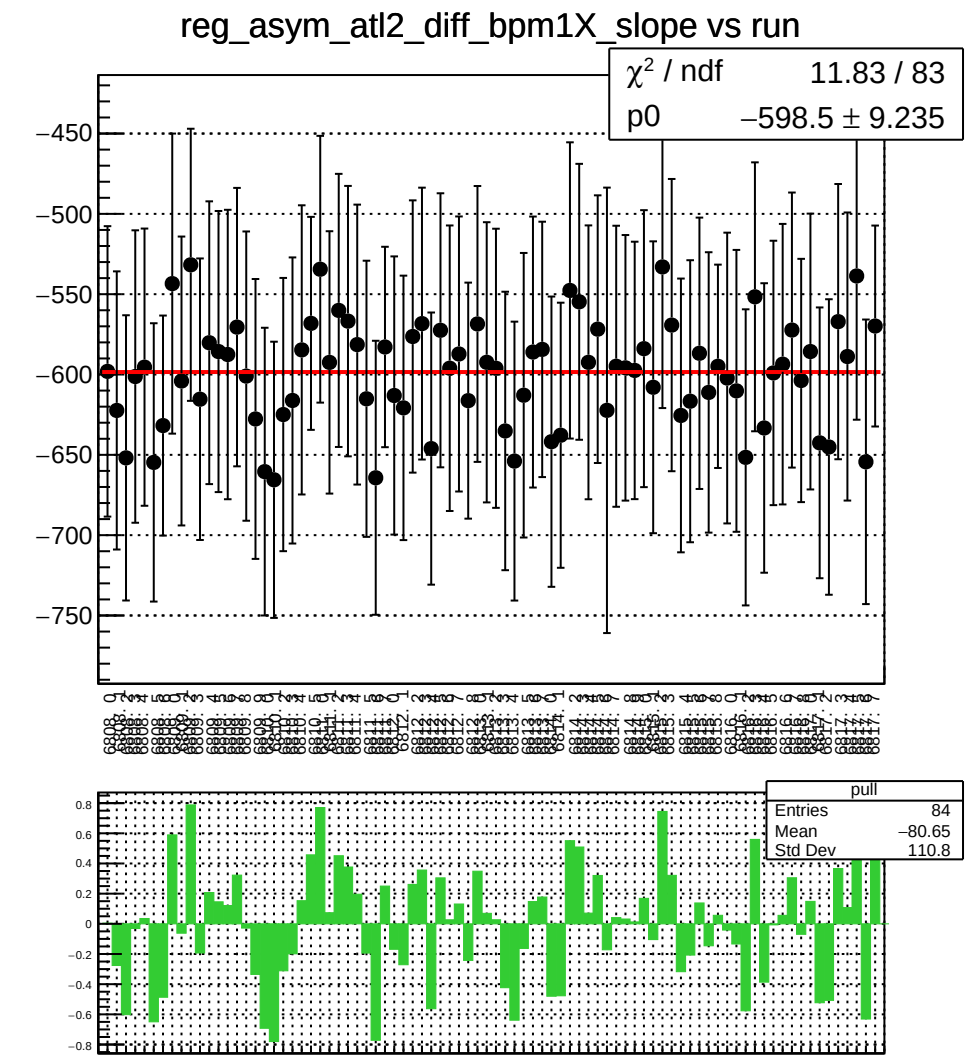

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 61.99 / 83
p0 8.392 ± 1.789
pull
Entries 84
Mean −244.9
Std Dev 288.1
pull1D
Entries 84
Mean −0.02409
Std Dev 0.8587

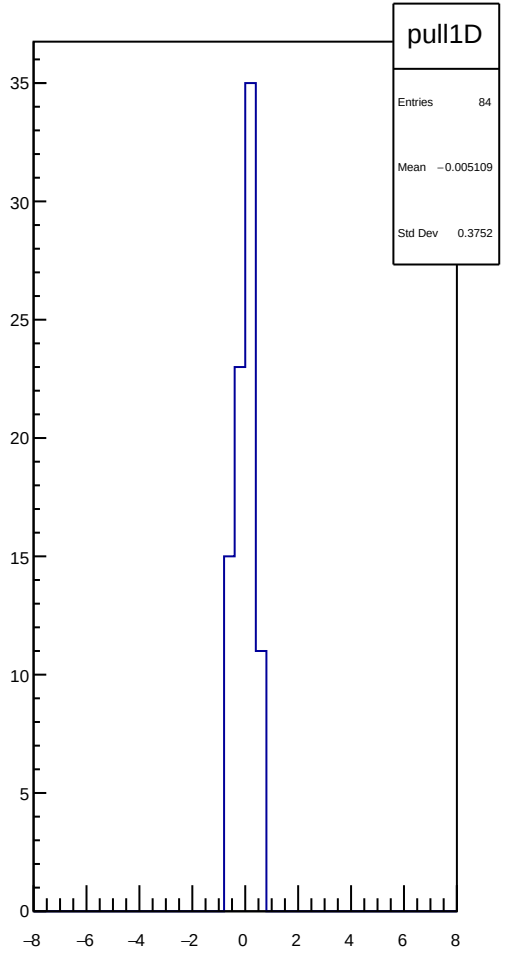

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 83.26 / 83
p0 61.18 ± 2.6
150
100
50
0
−50
pull
Entries 84
Mean −70.01
Std Dev 107.7
2
1
0
−1
−2
−3
pull1D
Entries 84
Mean −0.02336
Std Dev 0.9953
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

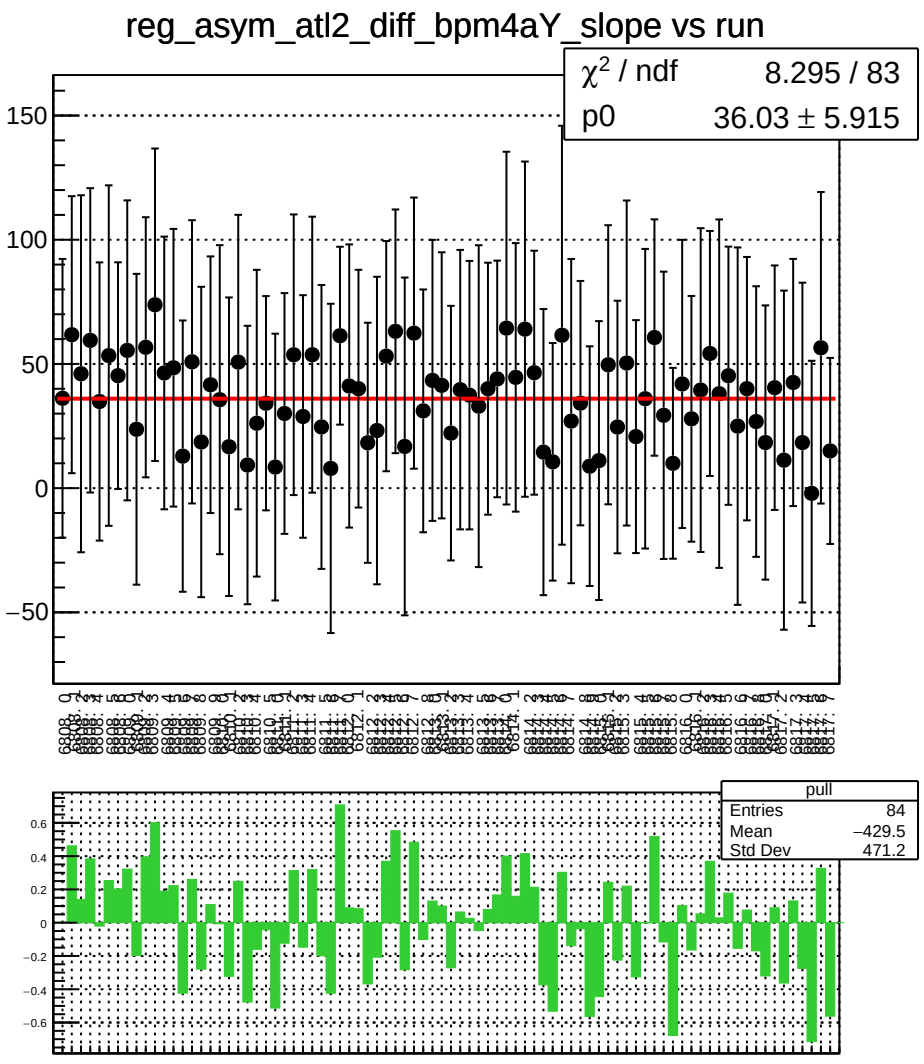

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 59.59 / 83
p0 −15.31 ± 2.158
250
200
150
100
50
0
−50
−100
pull
Entries 84
Mean −354.1
Std Dev 396.7
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

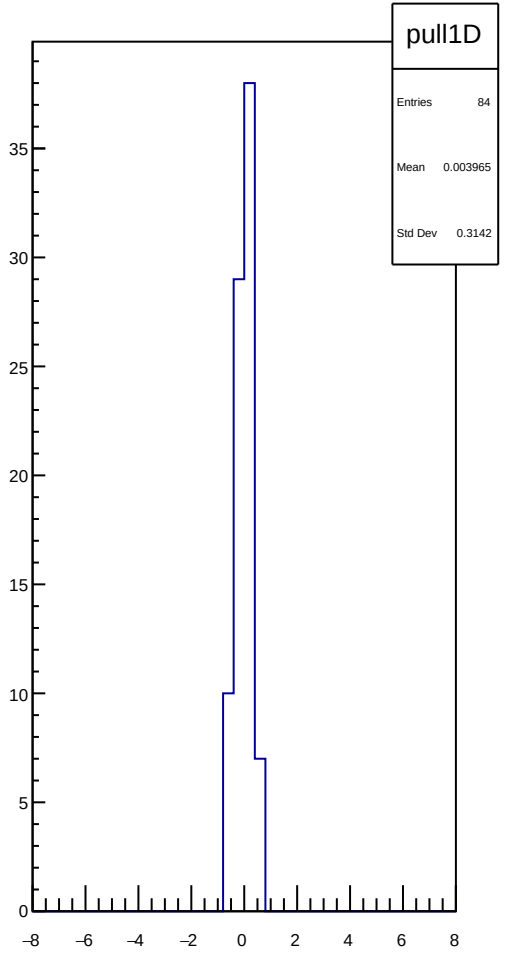

pull1D
Entries 84
Mean 0.01938
Std Dev 0.8421
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

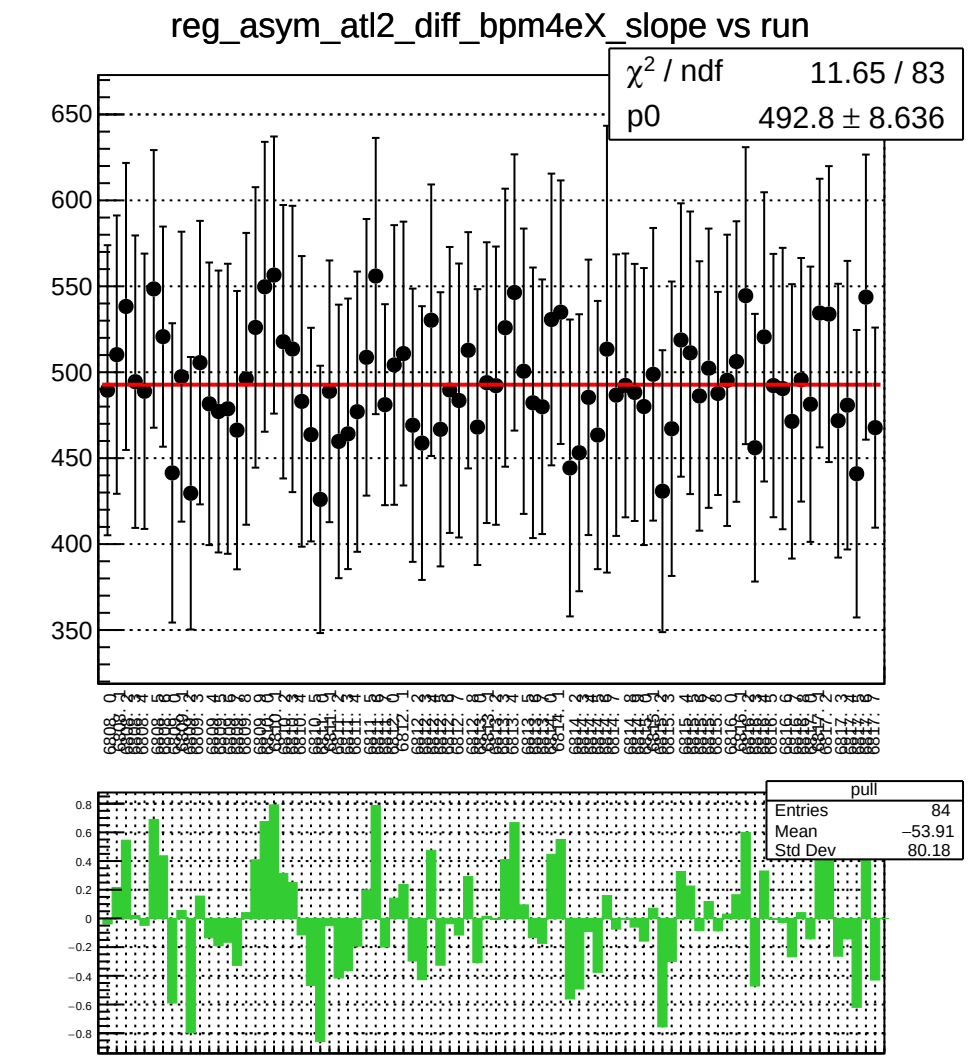

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 87.51 / 83
p0 −18.27 ± 0.1128
pull
Entries 84
Mean 100.3
Std Dev 69.9
pull1D
Entries 84
Mean −0.0152
Std Dev 1.021

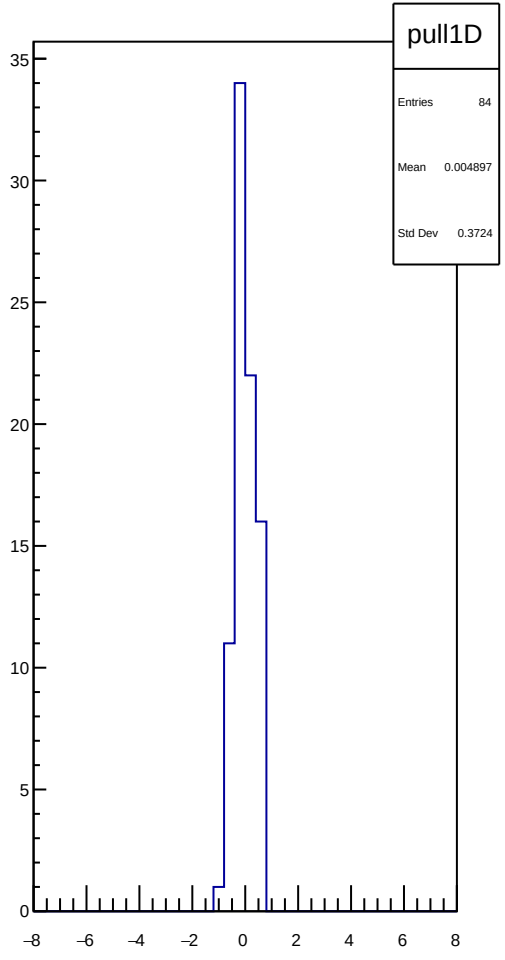

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 11.83 / 83
p0 −598.5 ± 9.235
−450
−500
−550
−600
−650
−700
−750
pull
Entries 84
Mean −80.65
Std Dev 110.8
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

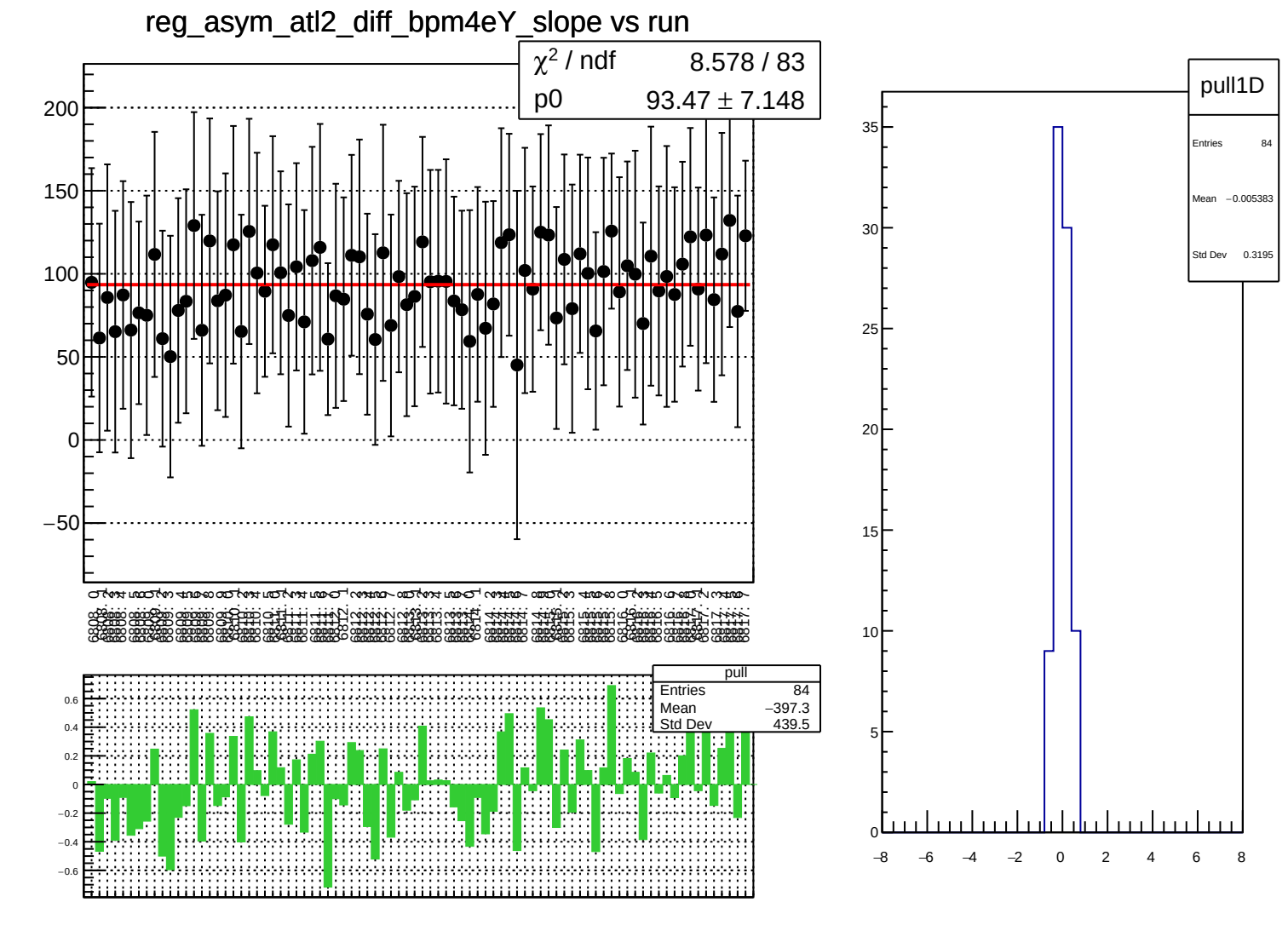

pull1D
Entries 84
Mean −0.005109
Std Dev 0.3752
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

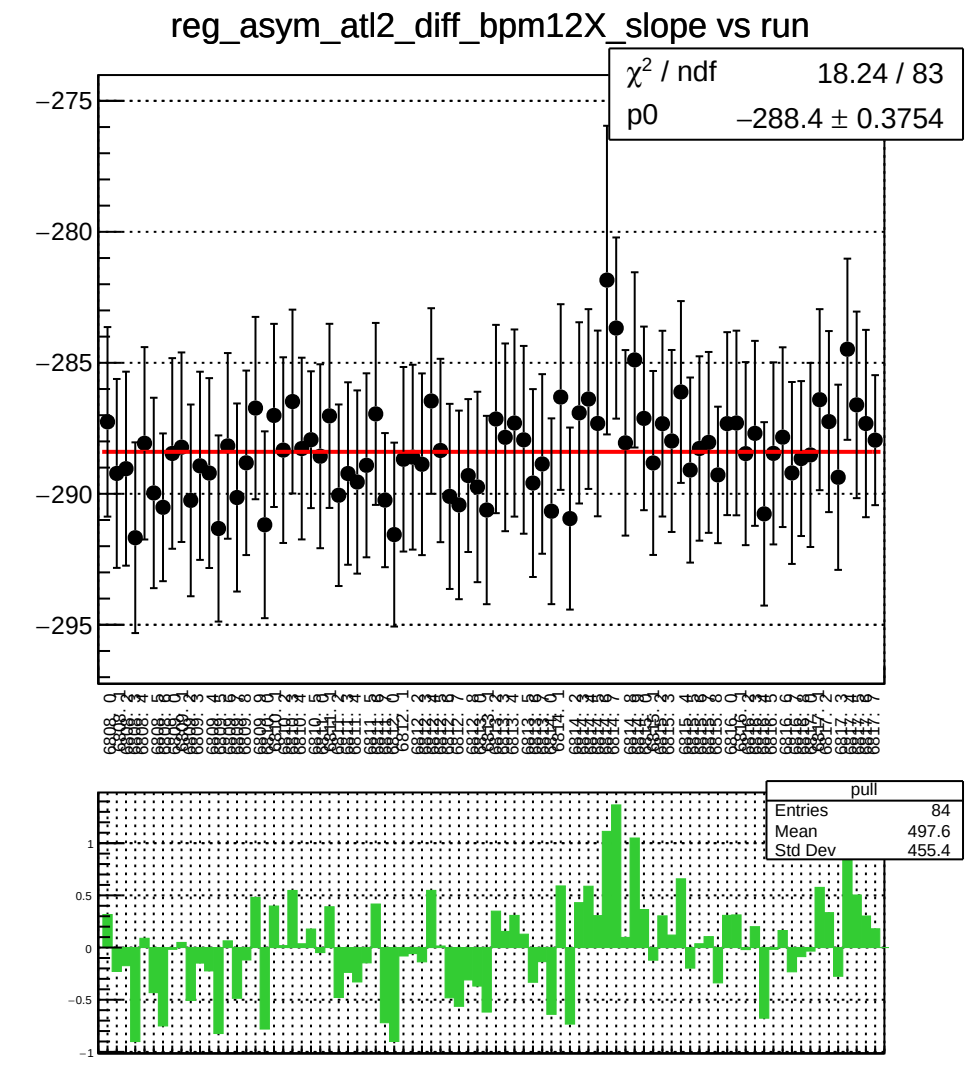

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 8.295 / 83
p0 36.03 ± 5.915
150
100
50
0
−50
pull
Entries 84
Mean −429.5
Std Dev 471.2
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

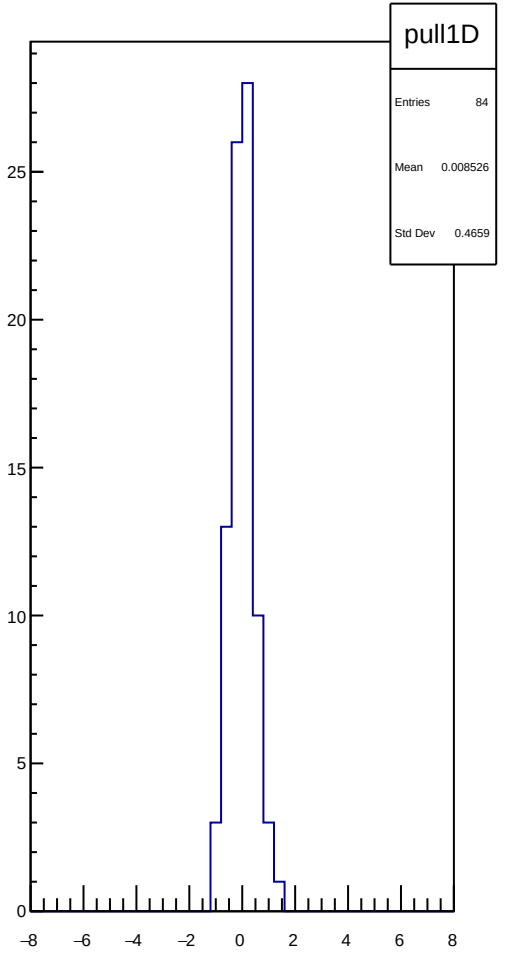

pull1D
Entries 84
Mean 0.003965
Std Dev 0.3142
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

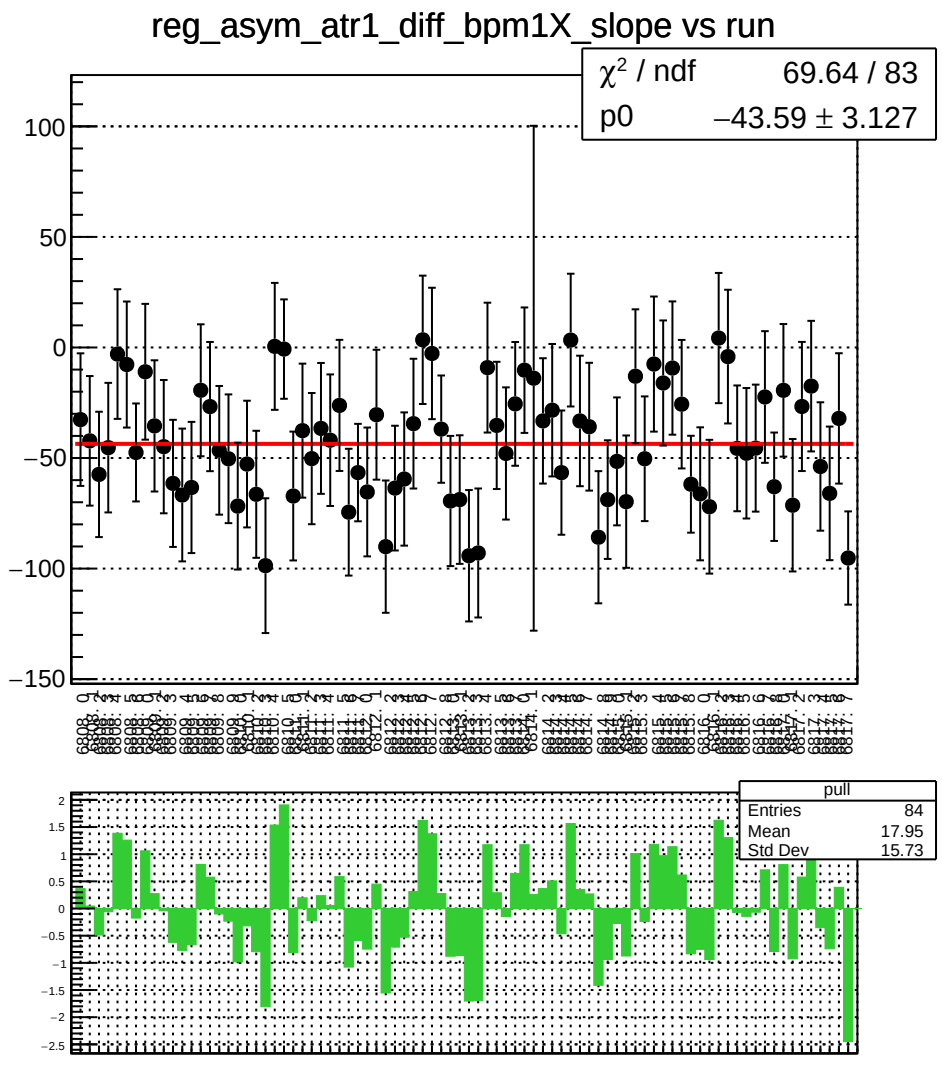

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 11.65 / 83
p0 492.8 ± 8.636
650
600
550
500
450
400
350
pull
Entries 84
Mean −53.91
Std Dev 80.18
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

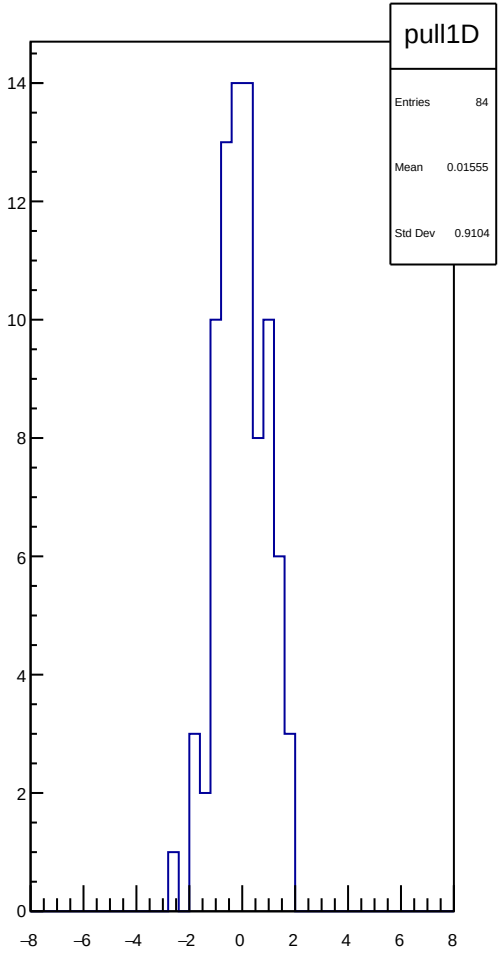

pull1D
Entries 84
Mean 0.004897
Std Dev 0.3724
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

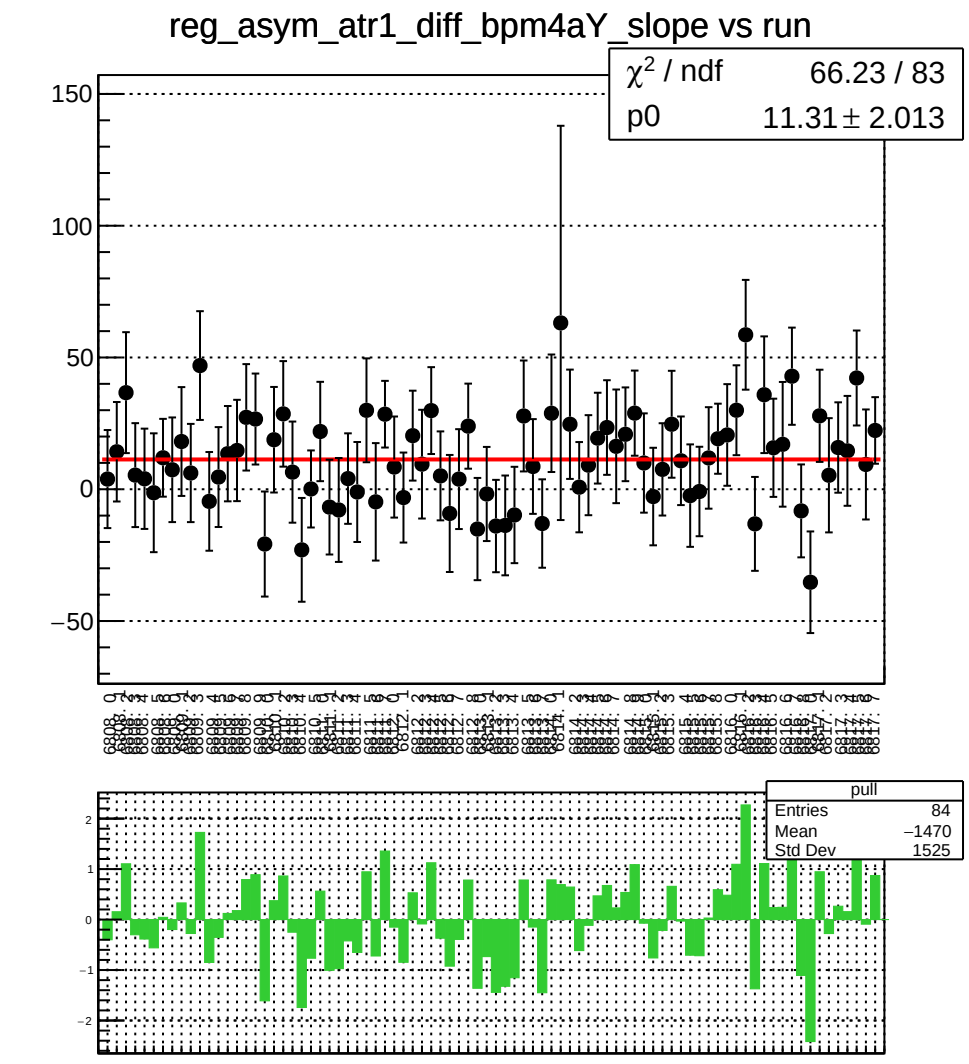

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 8.578 / 83
p0 93.47 ± 7.148
200
150
100
50
0
−50
pull
Entries 84
Mean −397.3
Std Dev 439.5
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 84
Mean −0.005383
Std Dev 0.3195
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

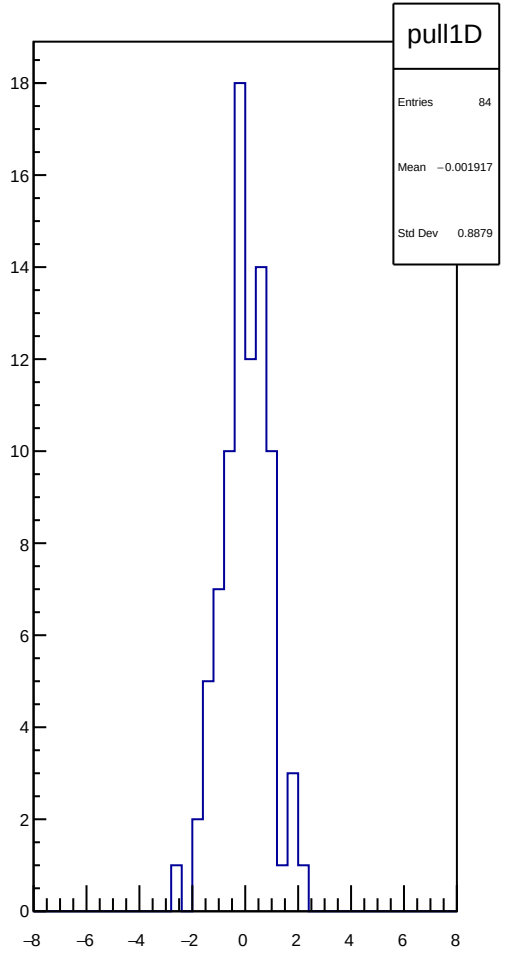

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 18.24 / 83
p0 −288.4 ± 0.3754
−275
−280
−285
−290
−295
pull
Entries 84
Mean 497.6
Std Dev 455.4
1
0.5
0
−0.5
−1

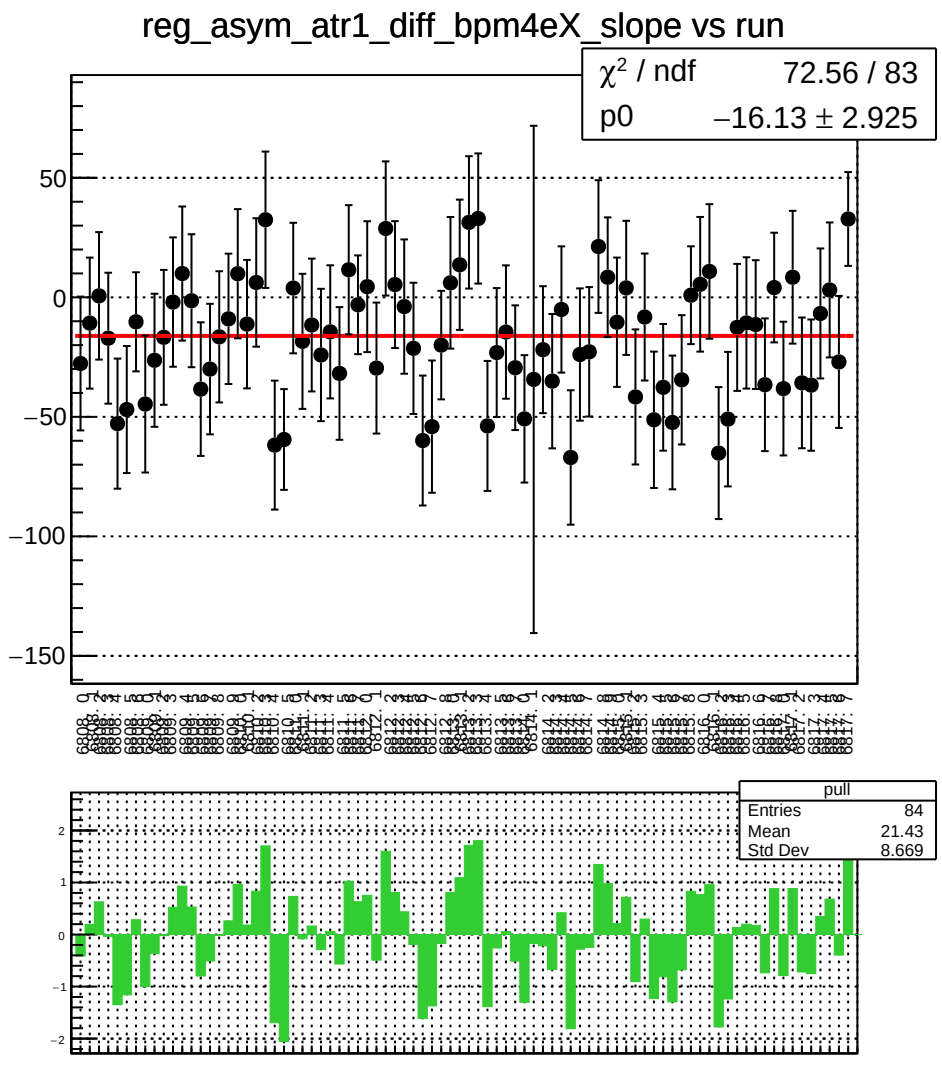

pull1D
Entries 84
Mean 0.008526
Std Dev 0.4659
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

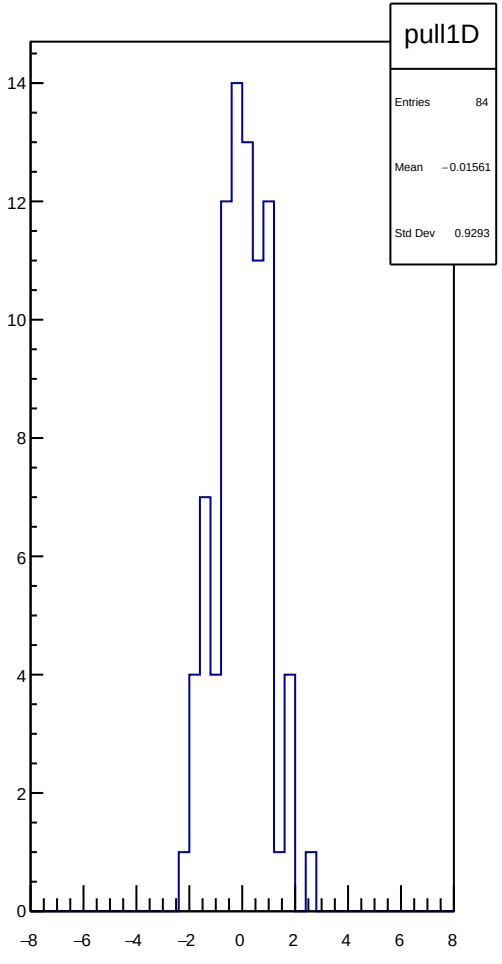

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 69.64 / 83
p0 −43.59 ± 3.127
pull
Entries 84
Mean 17.95
Std Dev 15.73

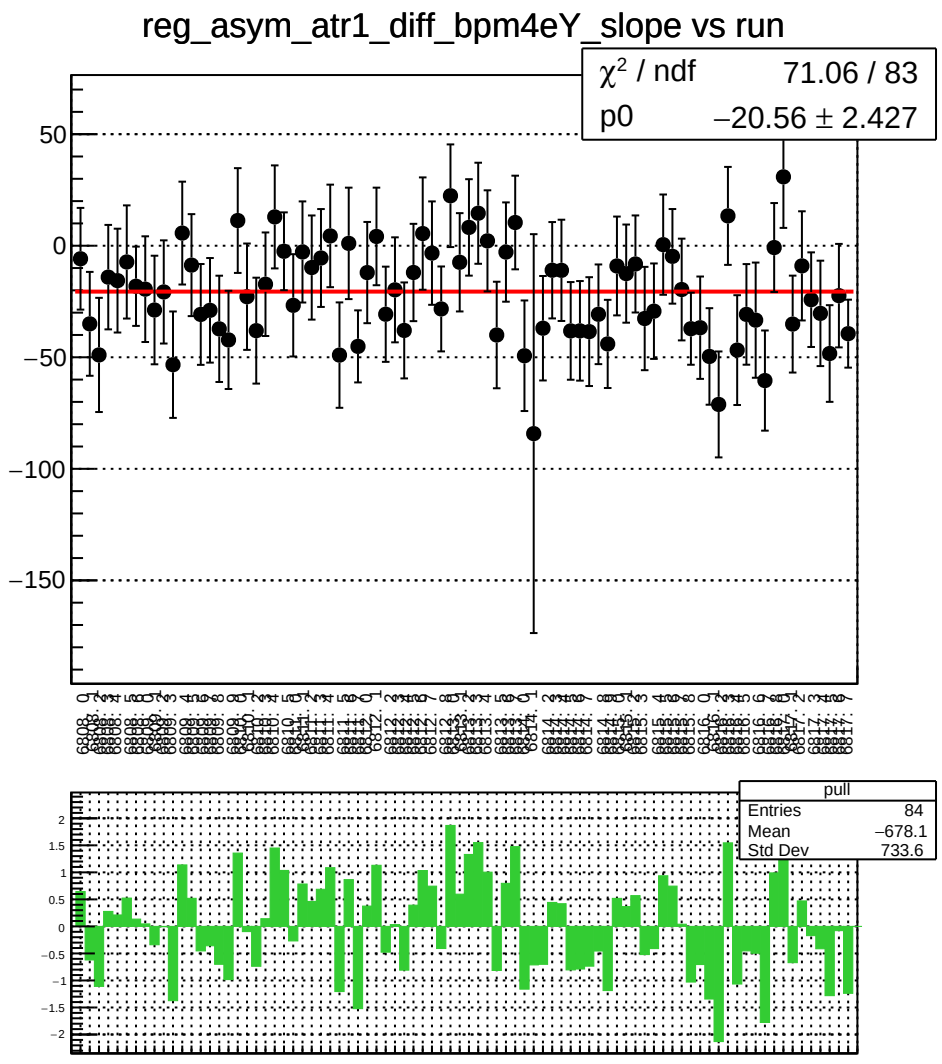

pull1D
Entries 84
Mean 0.01555
Std Dev 0.9104

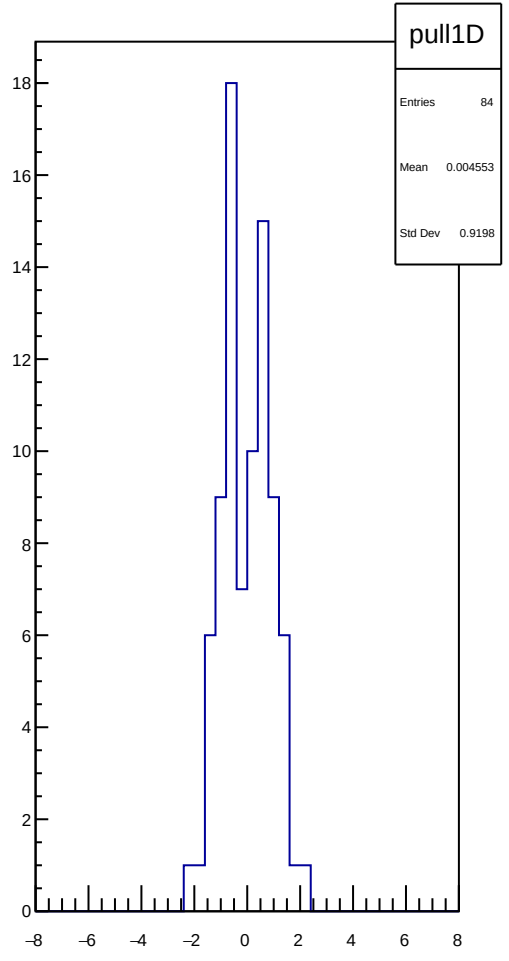

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 66.23 / 83
p0 11.31 ± 2.013
150
100
50
0
−50
pull
Entries 84
Mean −1470
Std Dev 1525
2
1
0
−1
−2

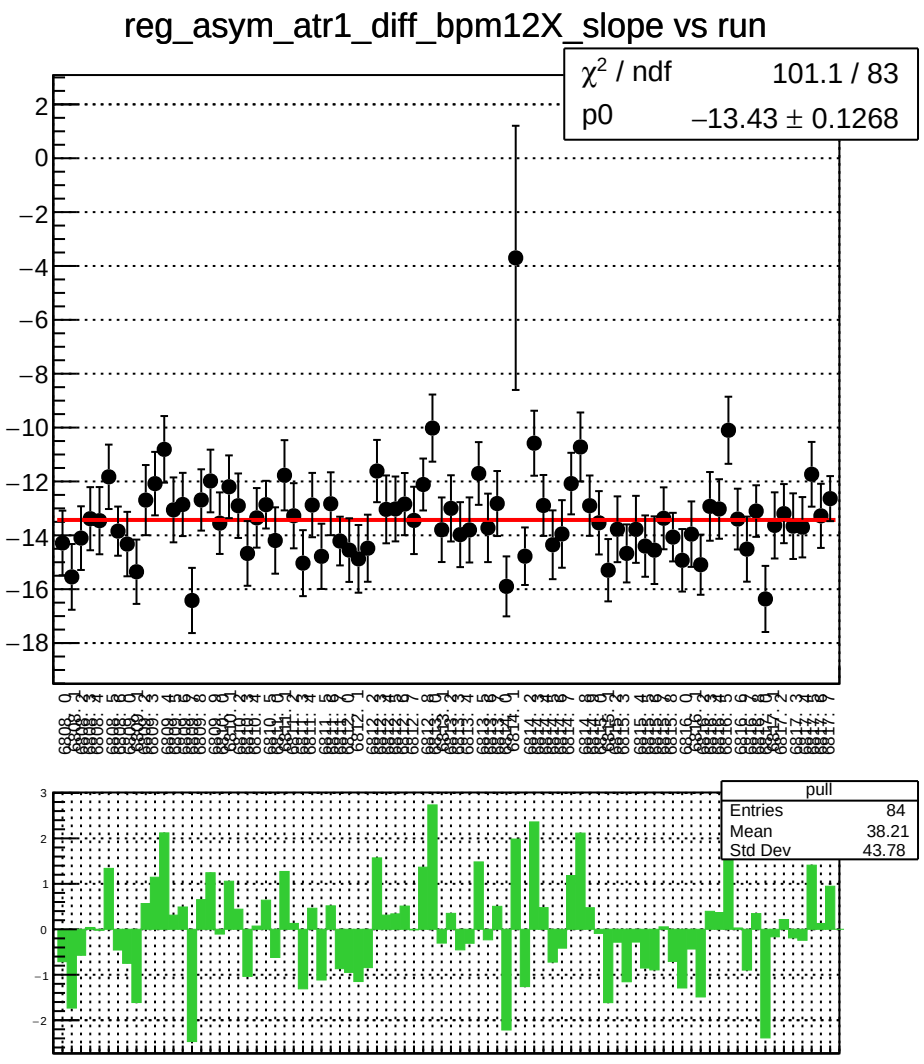

pull1D
Entries 84
Mean −0.001917
Std Dev 0.8879
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

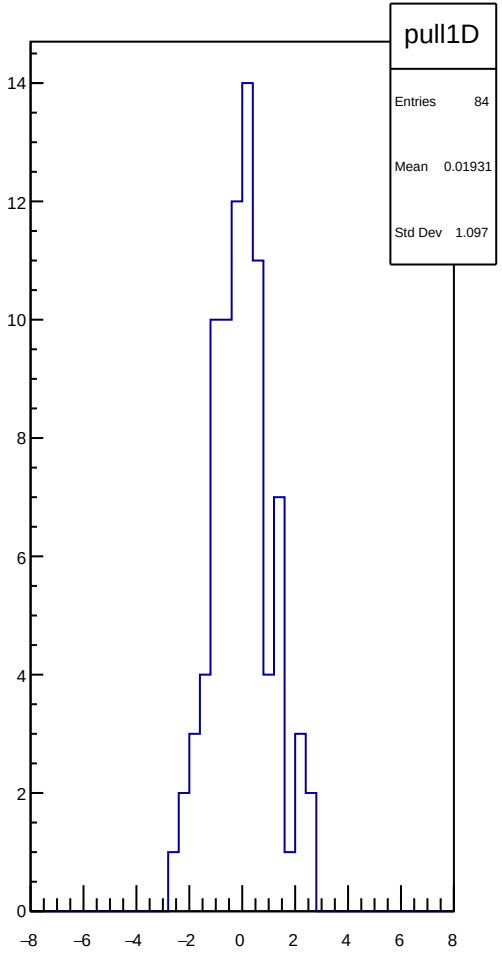

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 72.56 / 83
p0 −16.13 ± 2.925
50
0
−50
−100
−150
pull
Entries 84
Mean 21.43
Std Dev 8.669
2
1
0
−1
−2

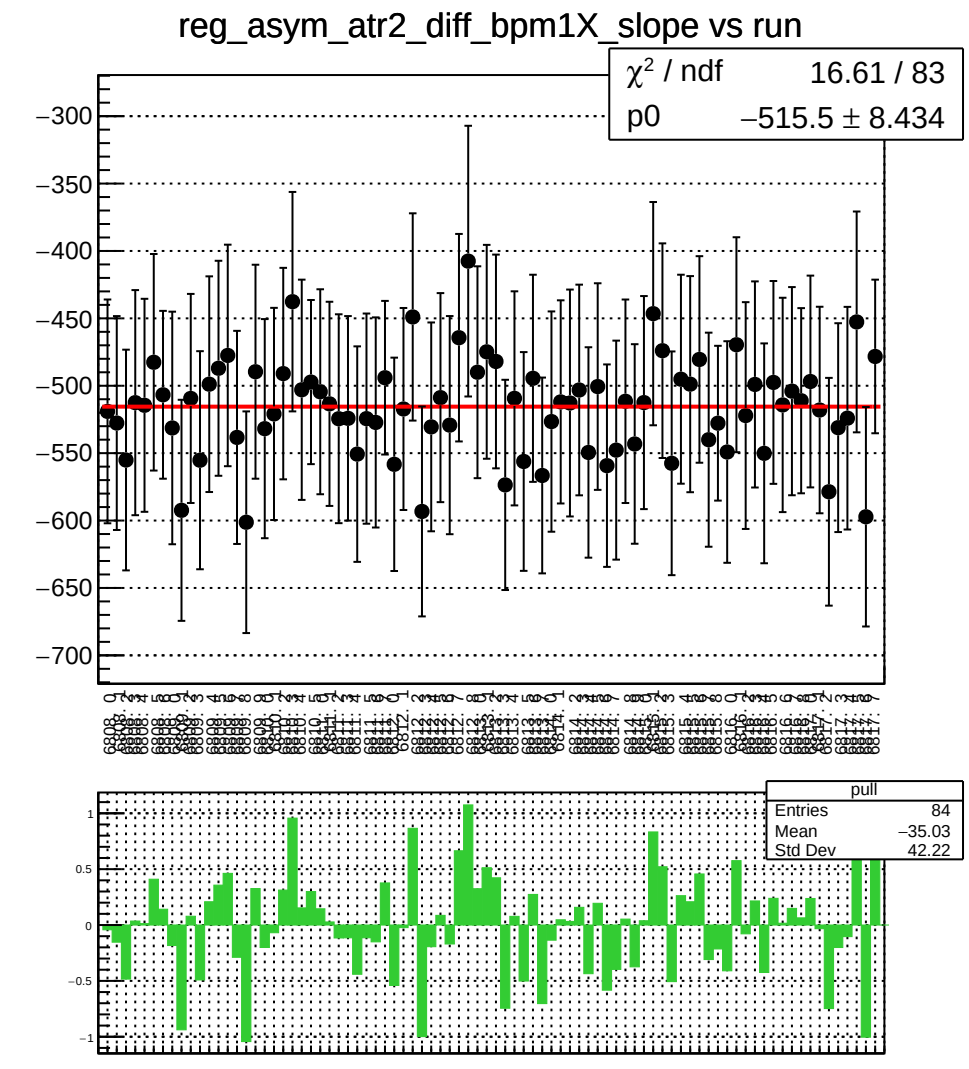

pull1D
Entries 84
Mean −0.01561
Std Dev 0.9293
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

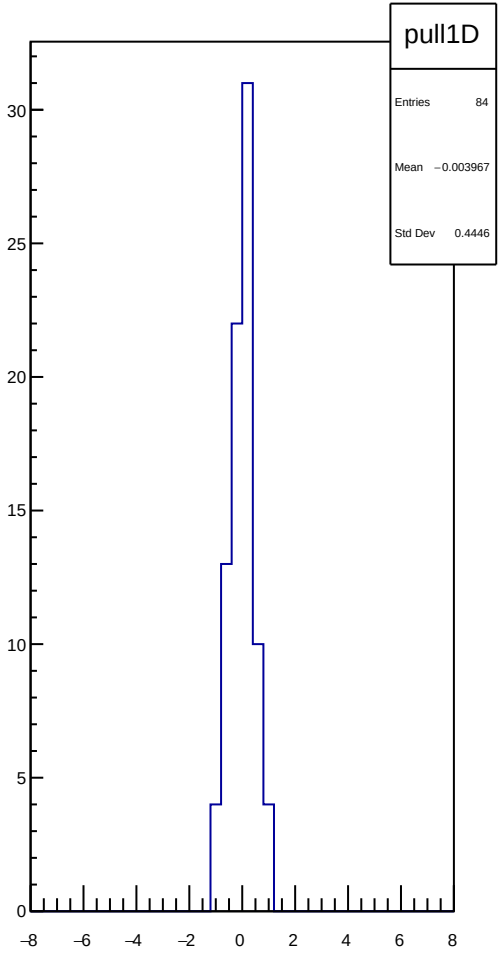

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 71.06 / 83
p0 −20.56 ± 2.427
50
0
−50
−100
−150
pull
Entries 84
Mean −678.1
Std Dev 733.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

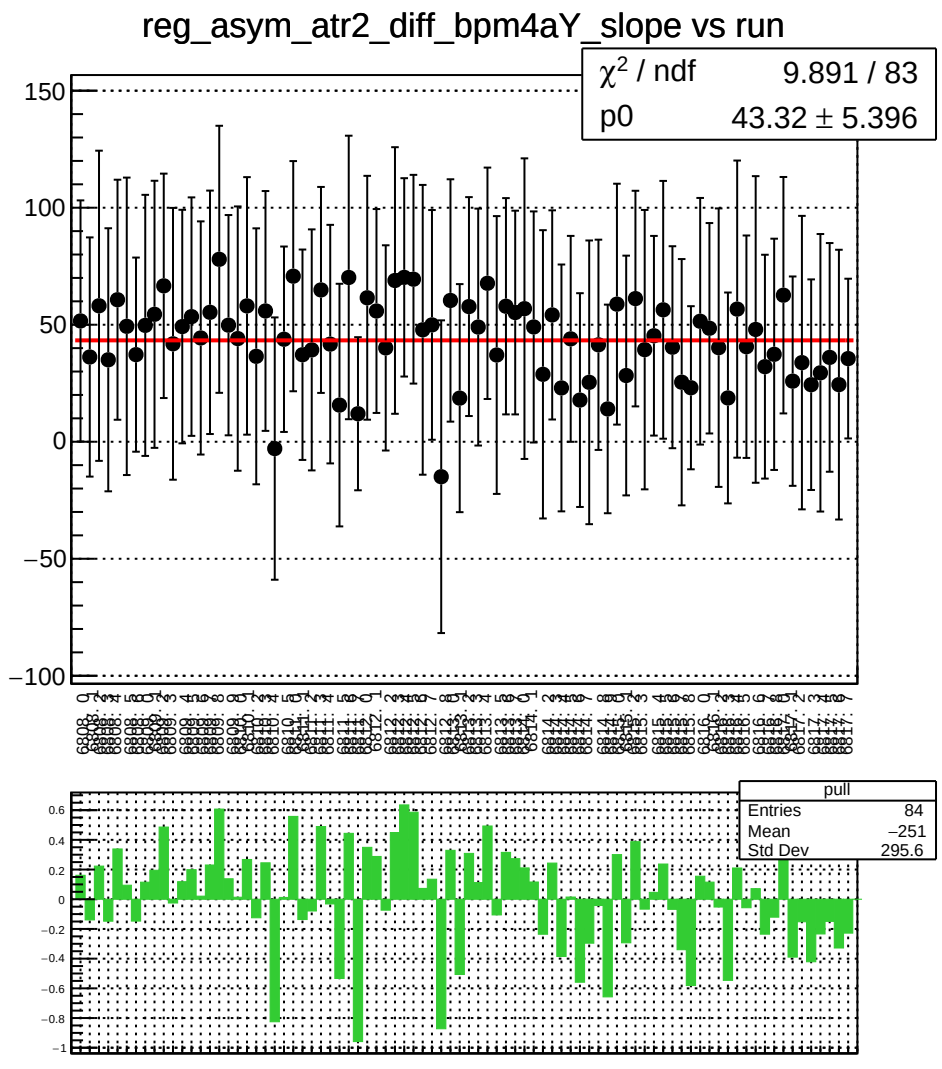

pull1D
Entries 84
Mean 0.004553
Std Dev 0.9198
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

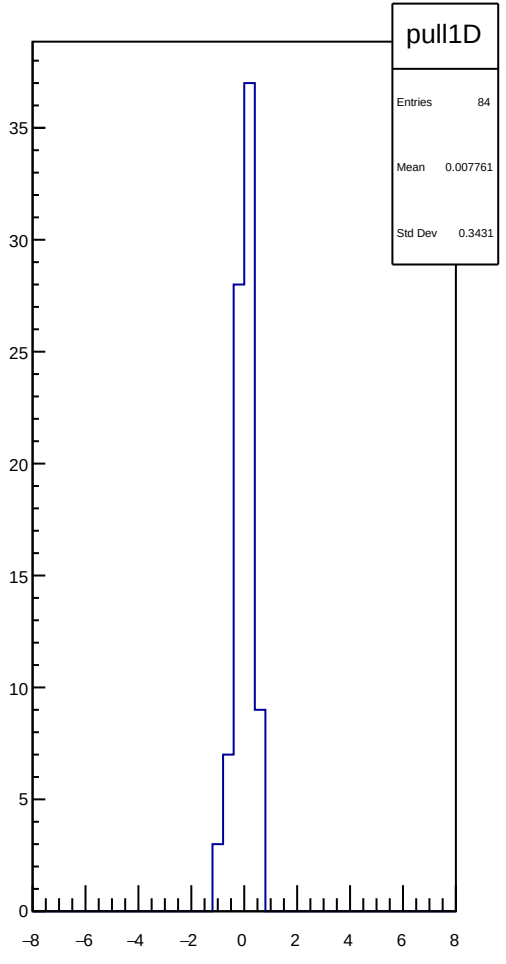

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 101.1 / 83
p0 −13.43 ± 0.1268
pull
Entries 84
Mean 38.21
Std Dev 43.78

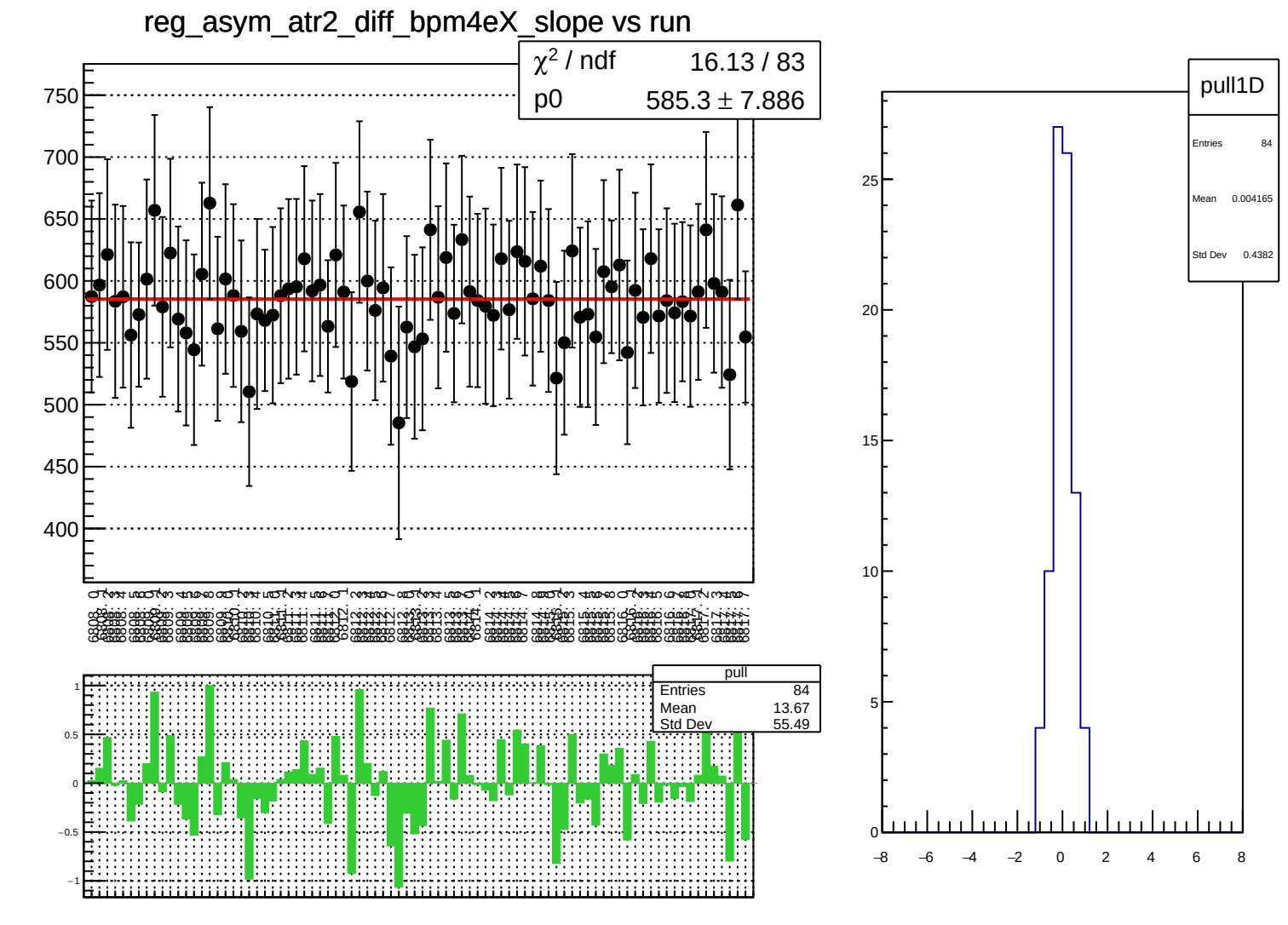

pull1D
Entries 84
Mean 0.01931
Std Dev 1.097

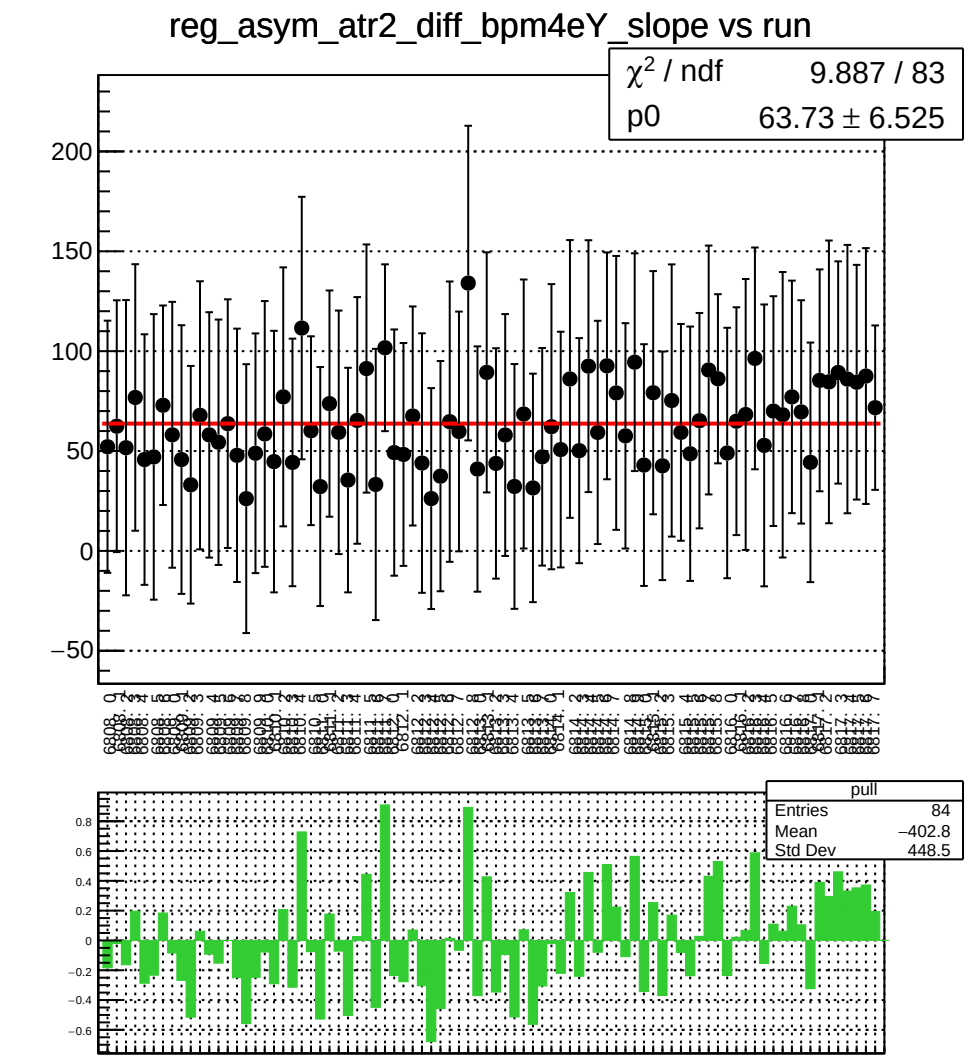

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 16.61 / 83
p0 −515.5 ± 8.434
pull
Entries 84
Mean −35.03
Std Dev 42.22

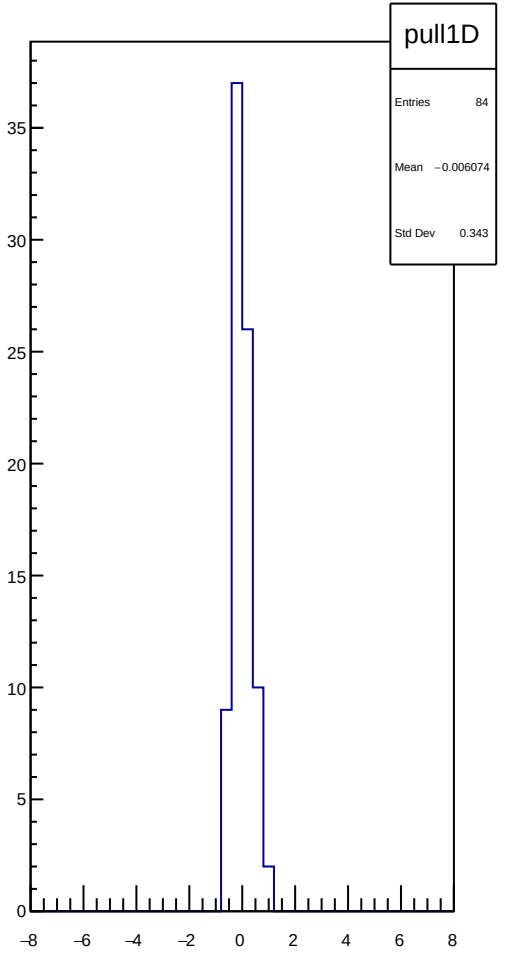

pull1D
Entries 84
Mean −0.003967
Std Dev 0.4446

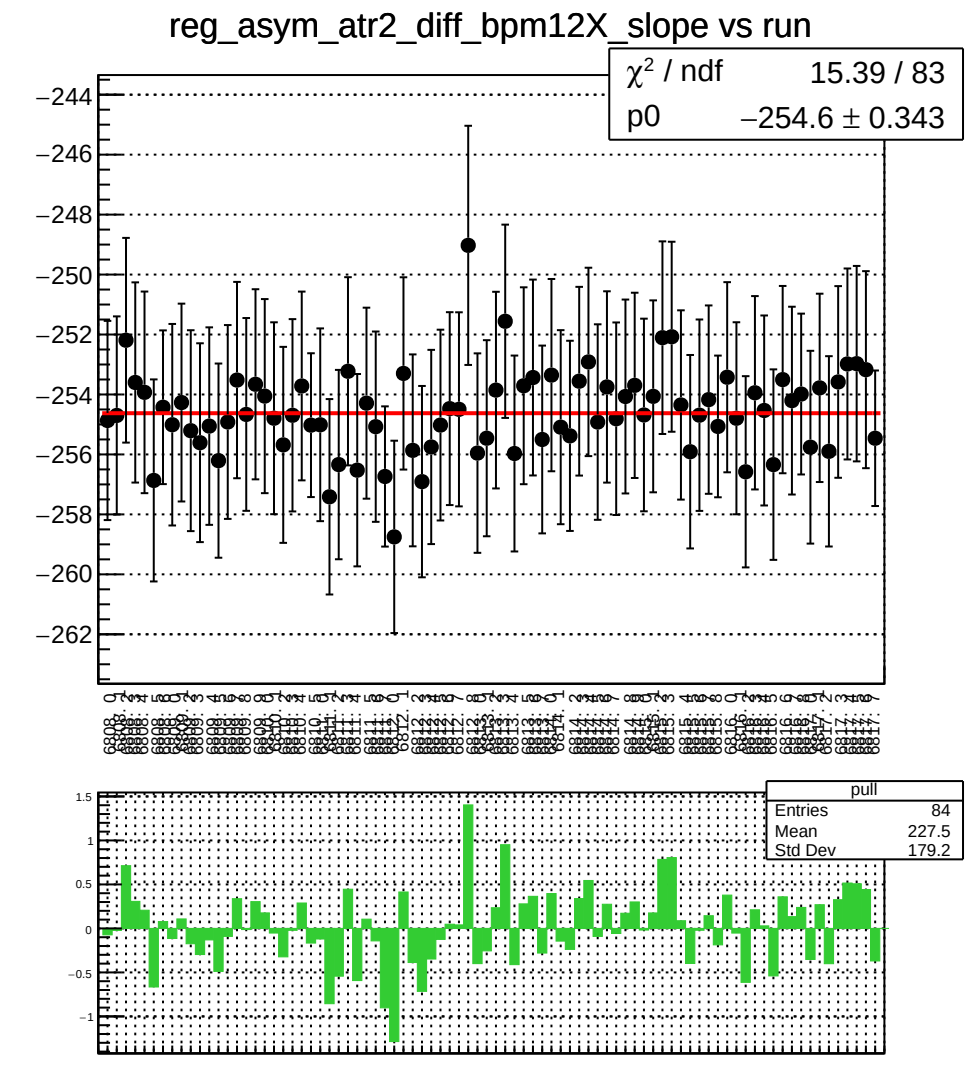

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 9.891 / 83
p0 43.32 ± 5.396
150
100
50
0
−50
−100
pull
Entries 84
Mean −251
Std Dev 295.6
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

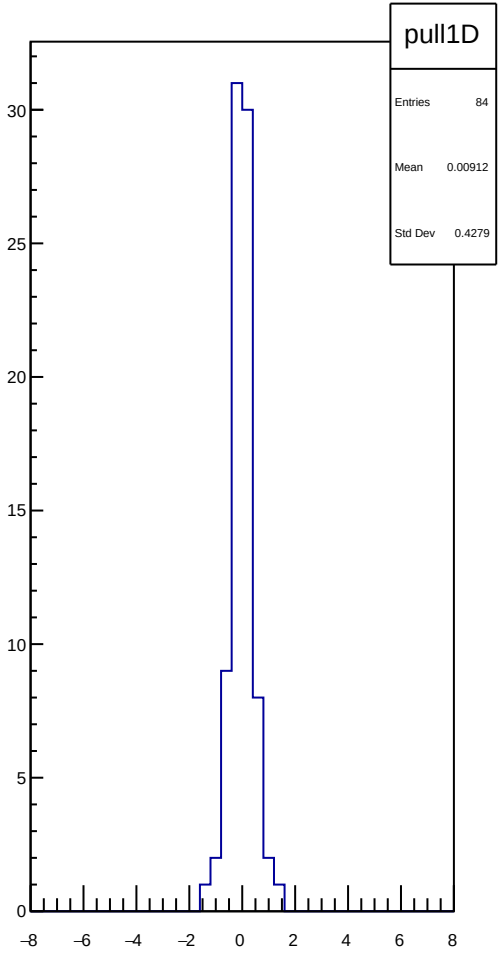

pull1D
Entries 84
Mean 0.007761
Std Dev 0.3431
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

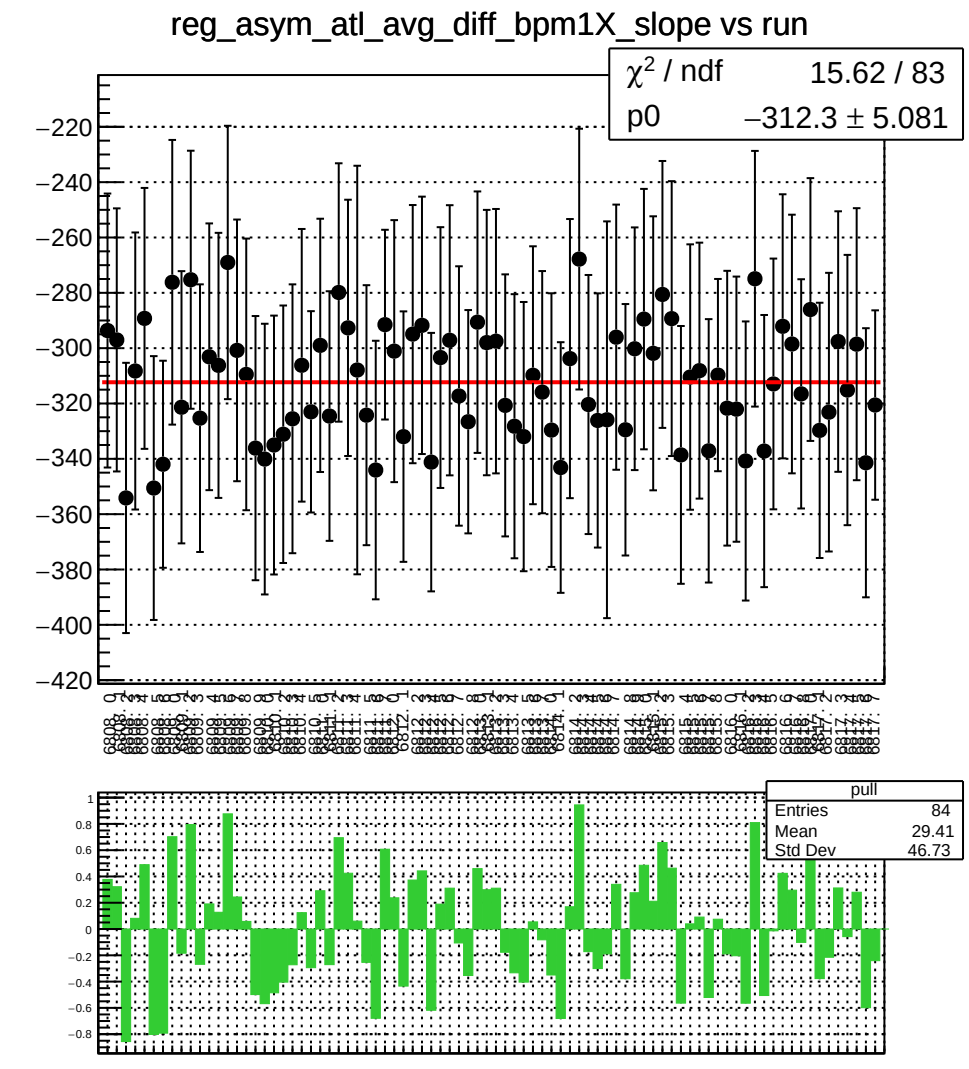

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 16.13 / 83
p0 585.3 ± 7.886
750
700
650
600
550
500
450
400
pull
Entries 84
Mean 13.67
Std Dev 55.49
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean 0.004165
Std Dev 0.4382
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

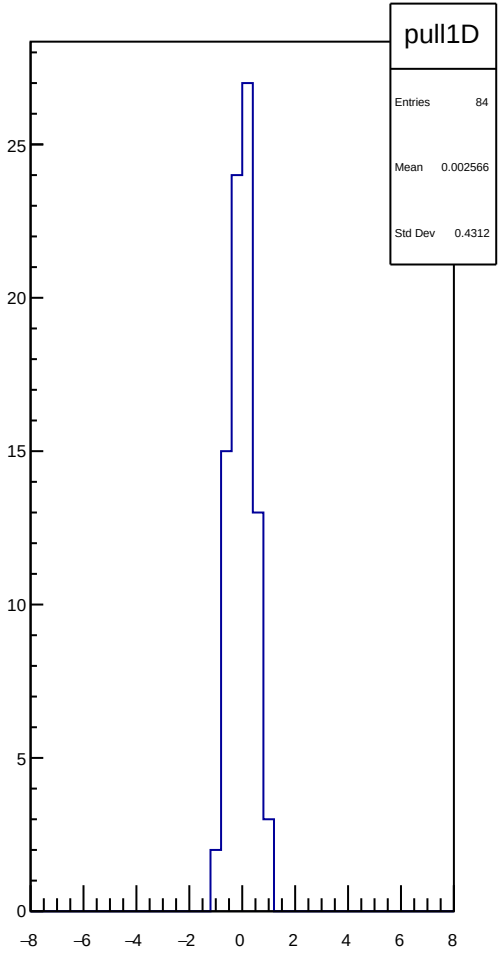

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 9.887 / 83
p0 63.73 ± 6.525
200
150
100
50
0
−50
pull
Entries 84
Mean −402.8
Std Dev 448.5
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

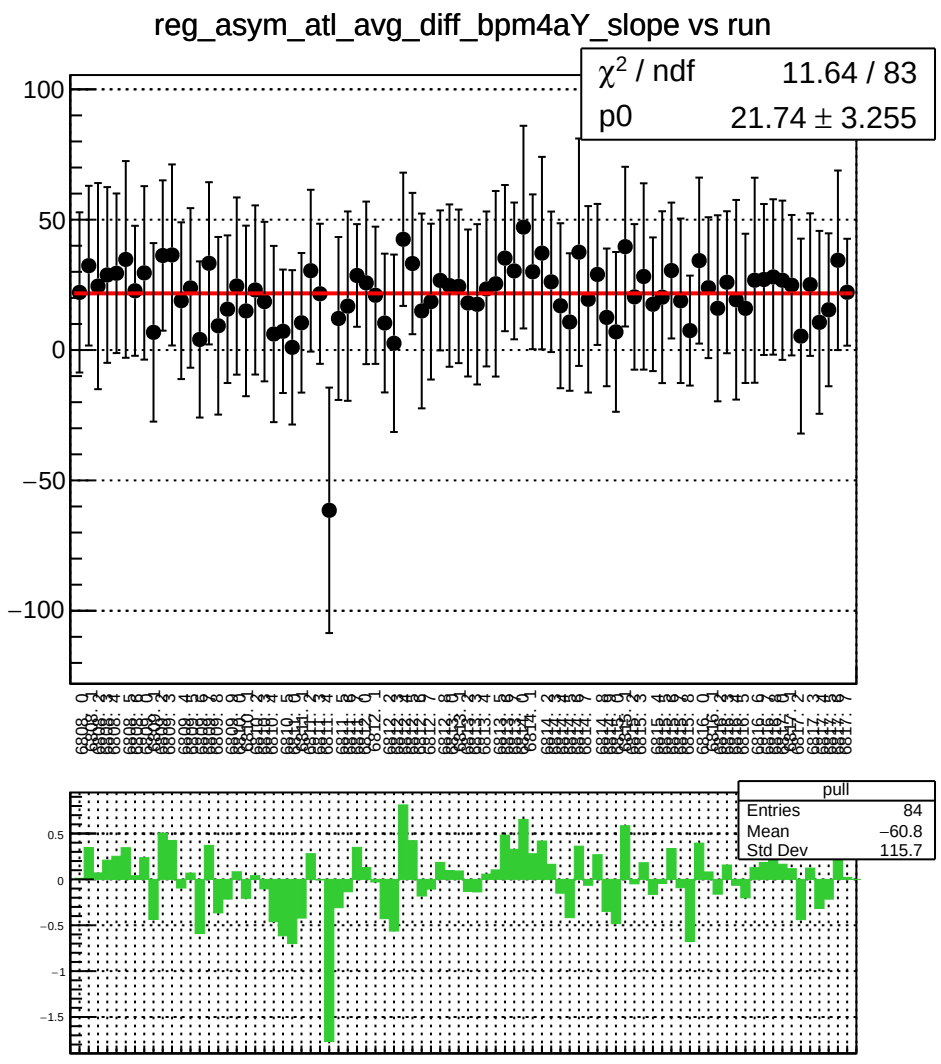

pull1D
Entries 84
Mean −0.006074
Std Dev 0.343
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

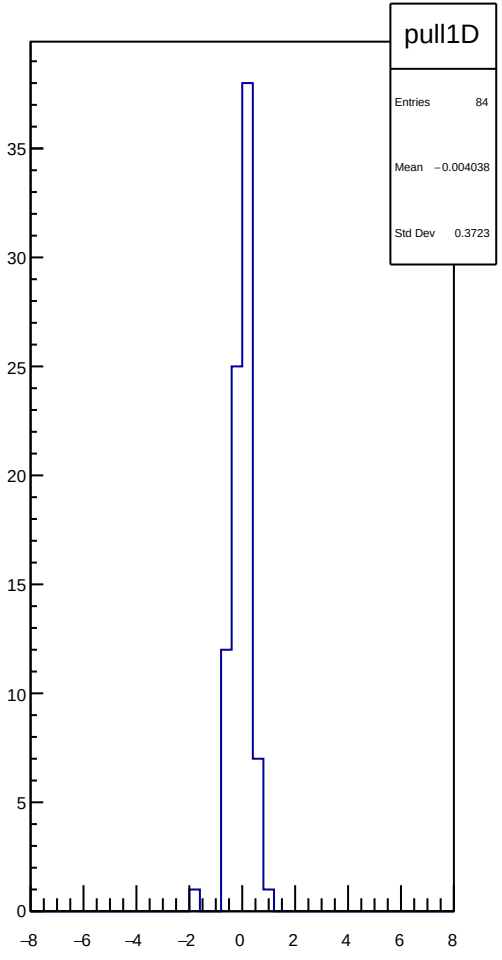

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 15.39 / 83
p0 −254.6 ± 0.343
pull
Entries 84
Mean 227.5
Std Dev 179.2

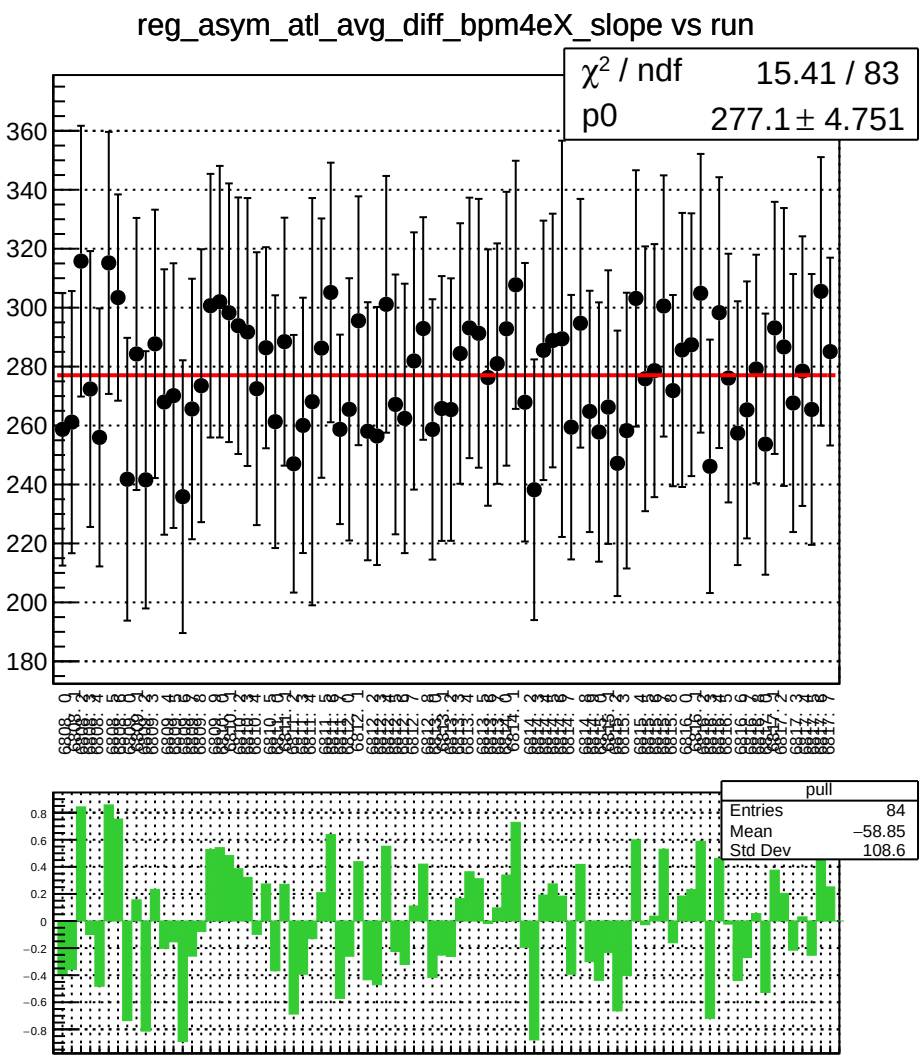

pull1D
Entries 84
Mean 0.00912
Std Dev 0.4279

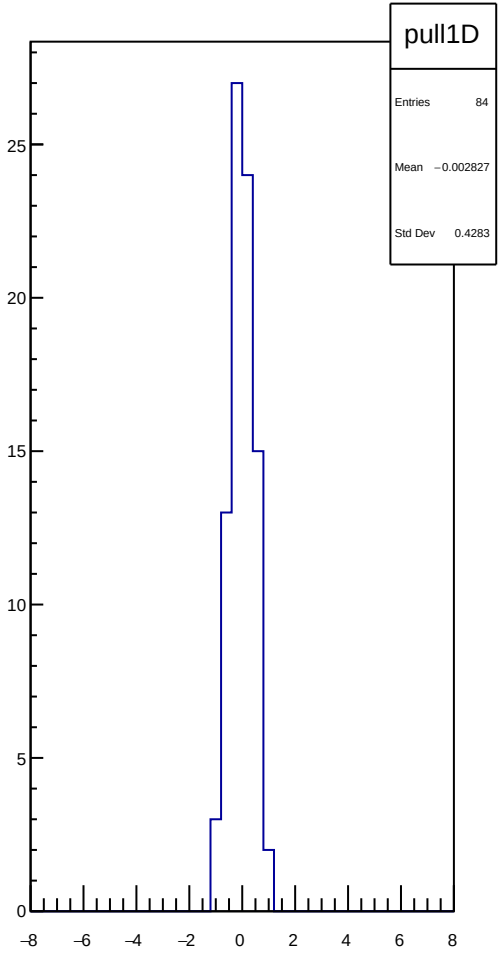

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 15.62 / 83
p0 −312.3 ± 5.081
pull
Entries 84
Mean 29.41
Std Dev 46.73

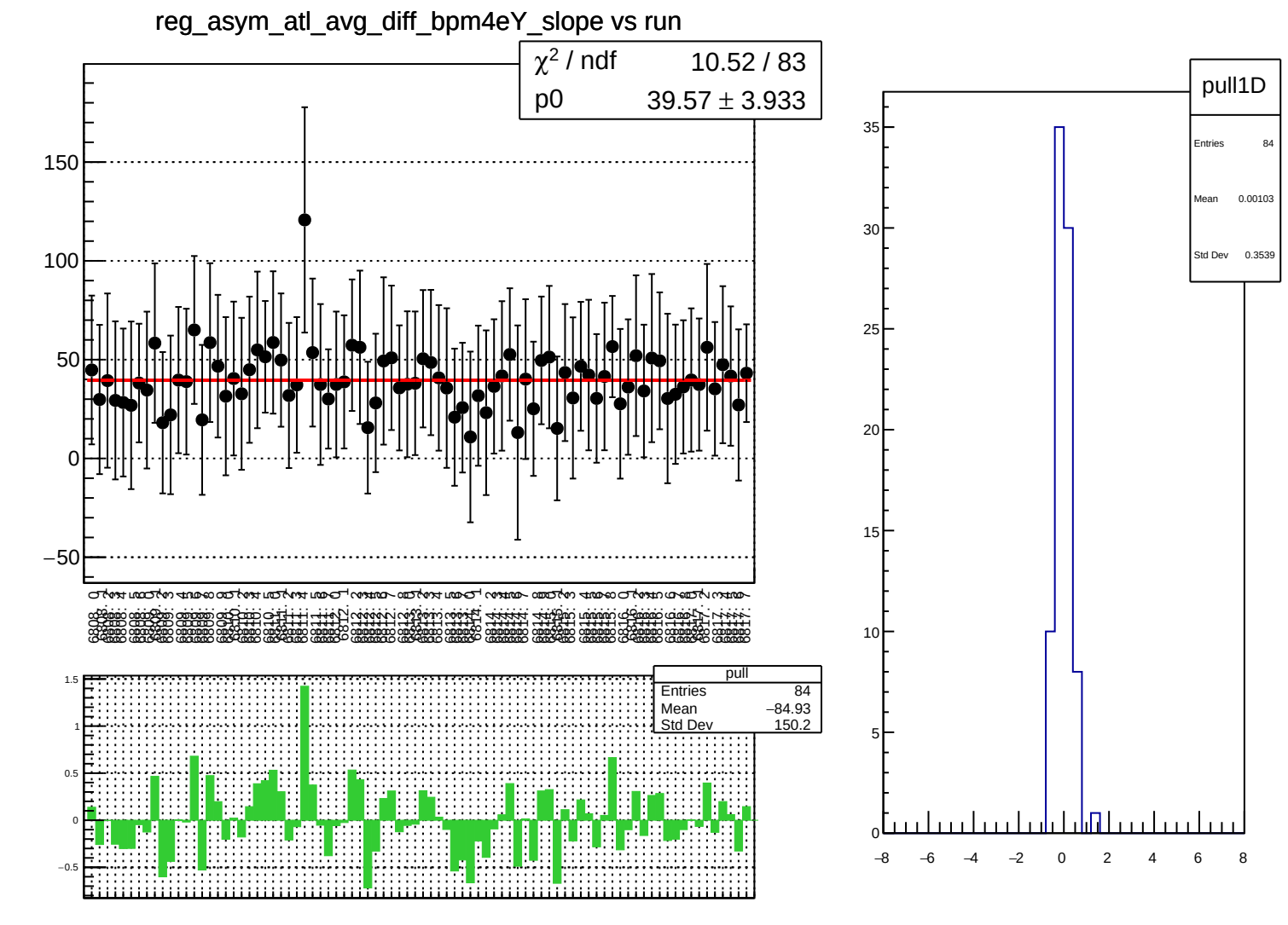

pull1D
Entries 84
Mean 0.002566
Std Dev 0.4312

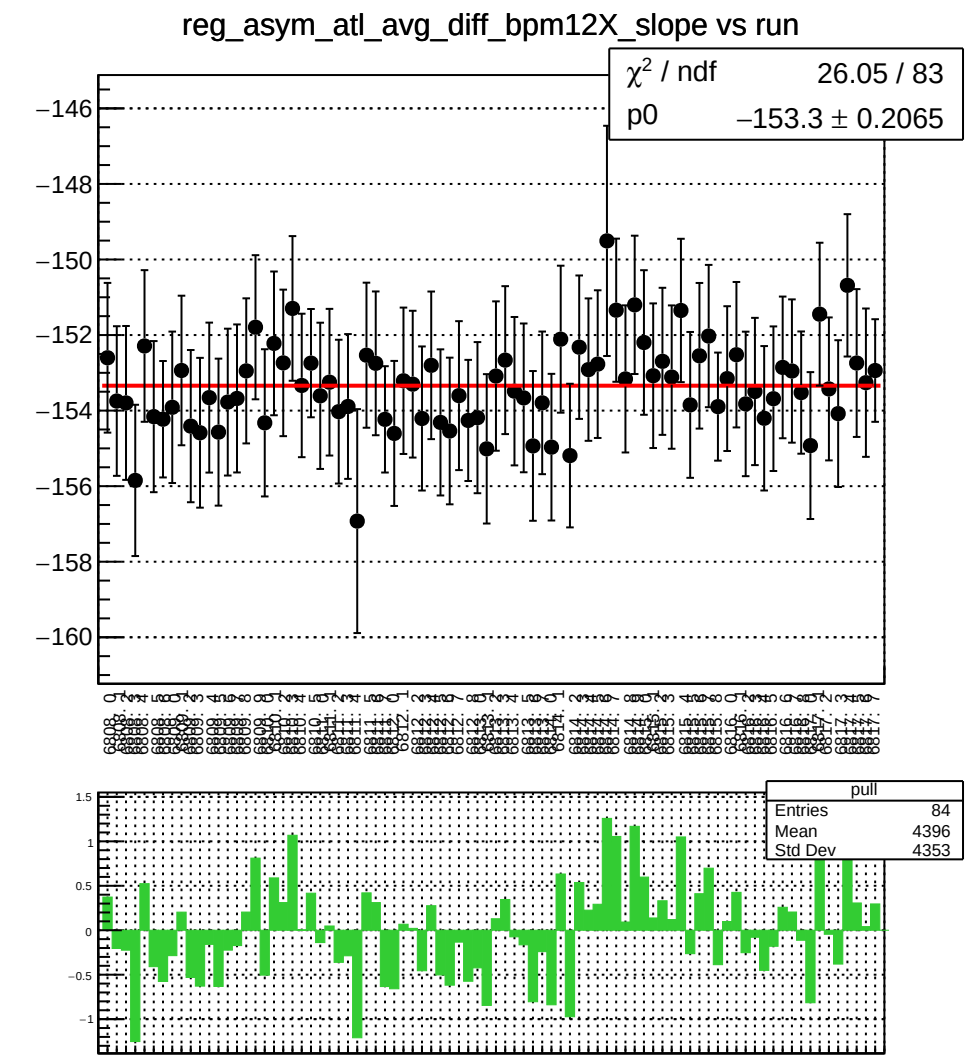

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 11.64 / 83
p0 21.74 ± 3.255
pull
Entries 84
Mean −60.8
Std Dev 115.7

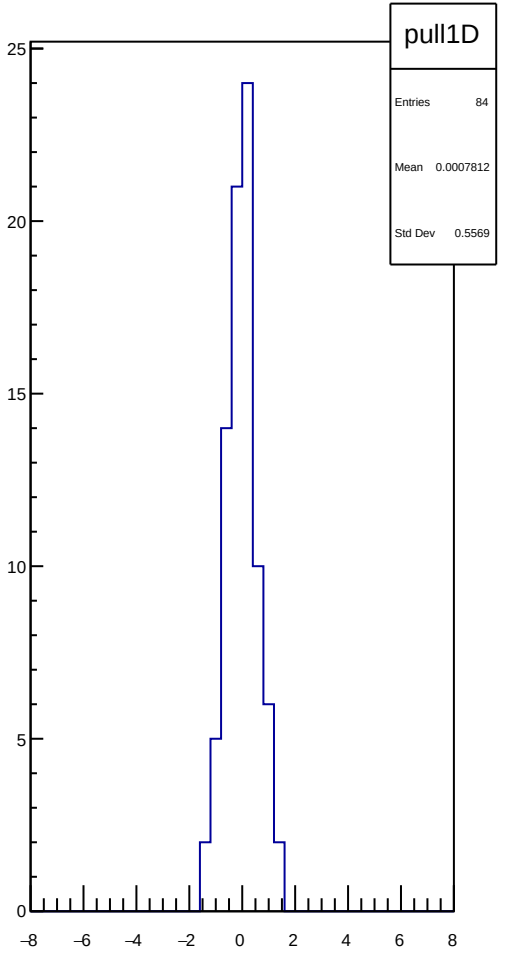

pull1D
Entries 84
Mean −0.004038
Std Dev 0.3723

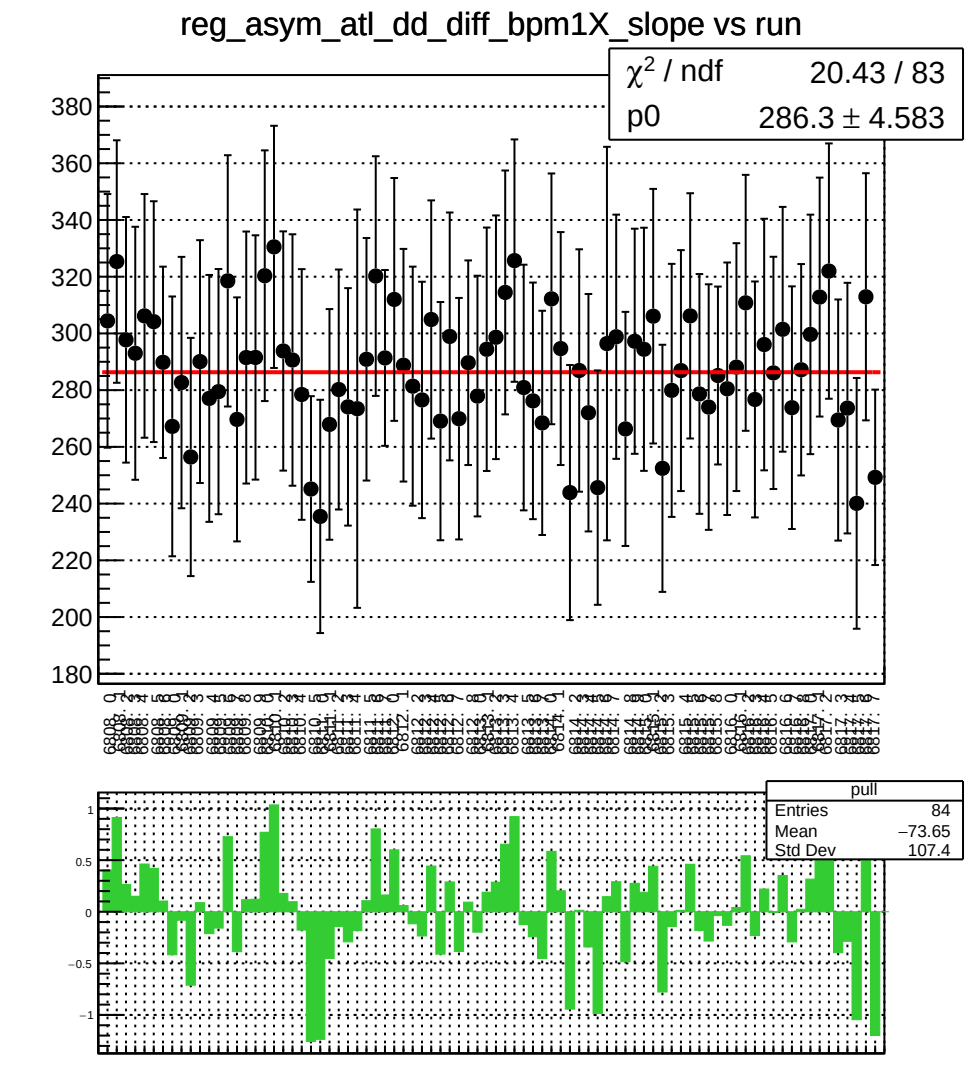

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 15.41 / 83
p0 277.1 ± 4.751
pull
Entries 84
Mean −58.85
Std Dev 108.6

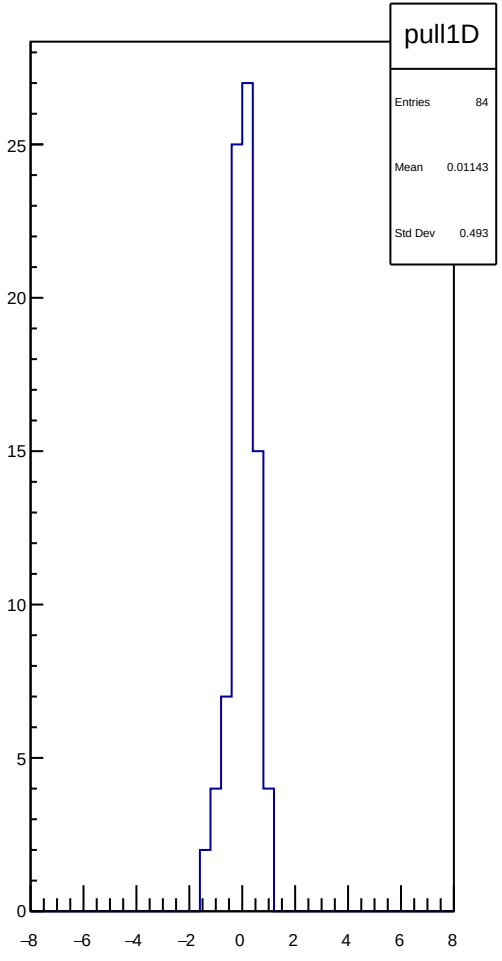

pull1D
Entries 84
Mean −0.002827
Std Dev 0.4283

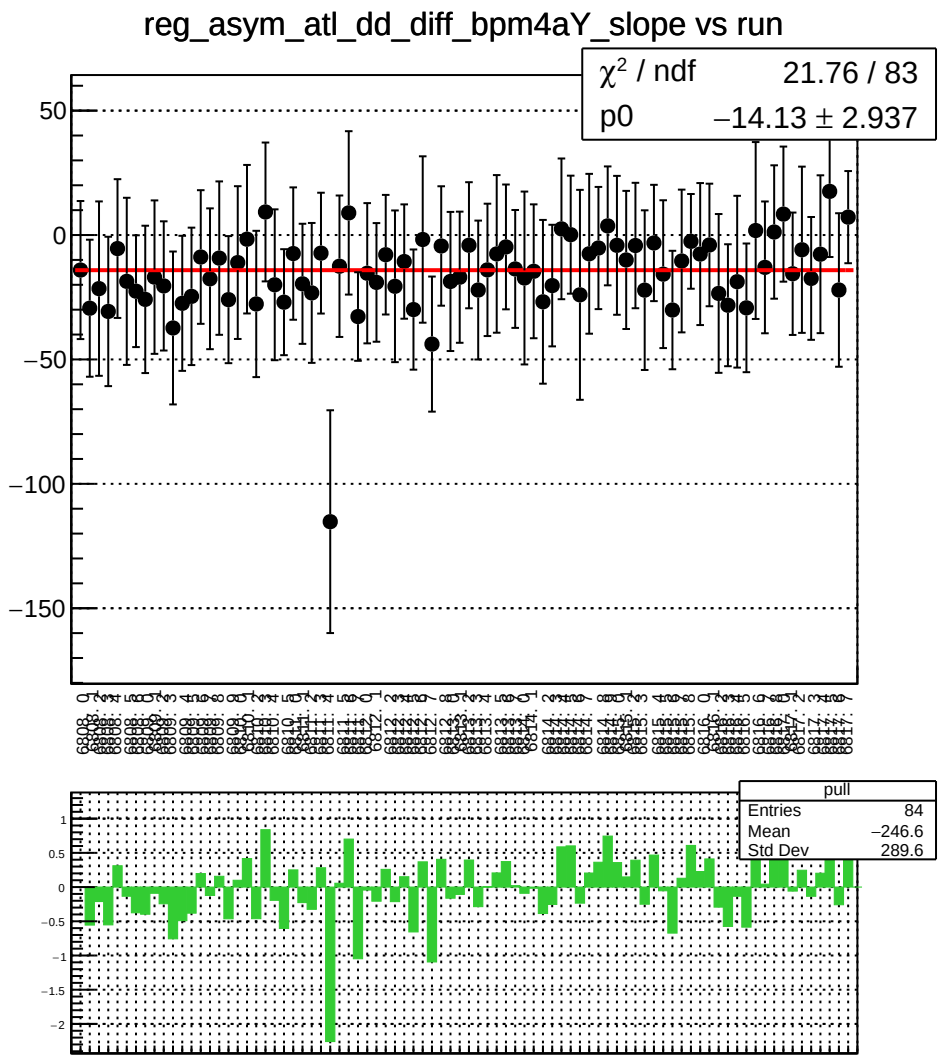

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.52 / 83
p0 39.57 ± 3.933
150
100
50
0
−50
pull
Entries 84
Mean −84.93
Std Dev 150.2
1.5
1
0.5
0
−0.5
pull1D
Entries 84
Mean 0.00103
Std Dev 0.3539
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

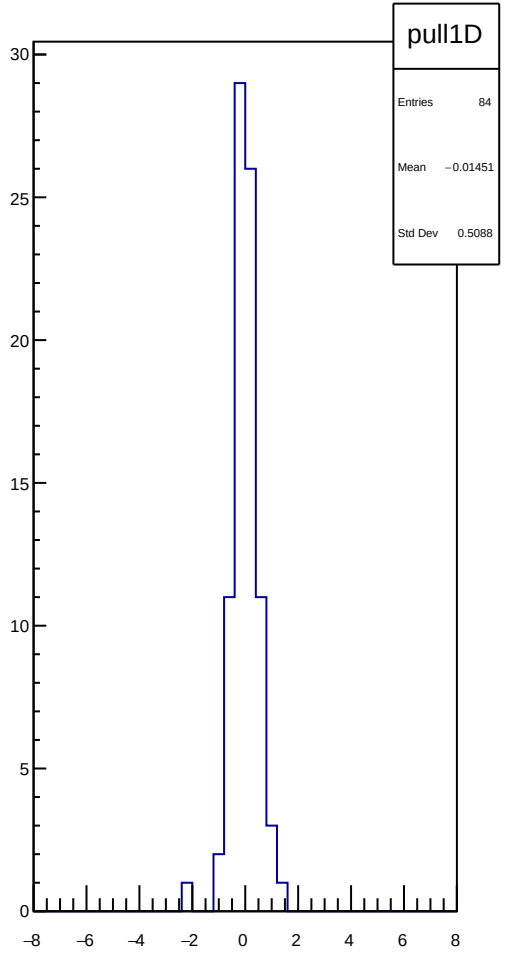

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 26.05 / 83
p0 −153.3 ± 0.2065
pull
Entries 84
Mean 4396
Std Dev 4353

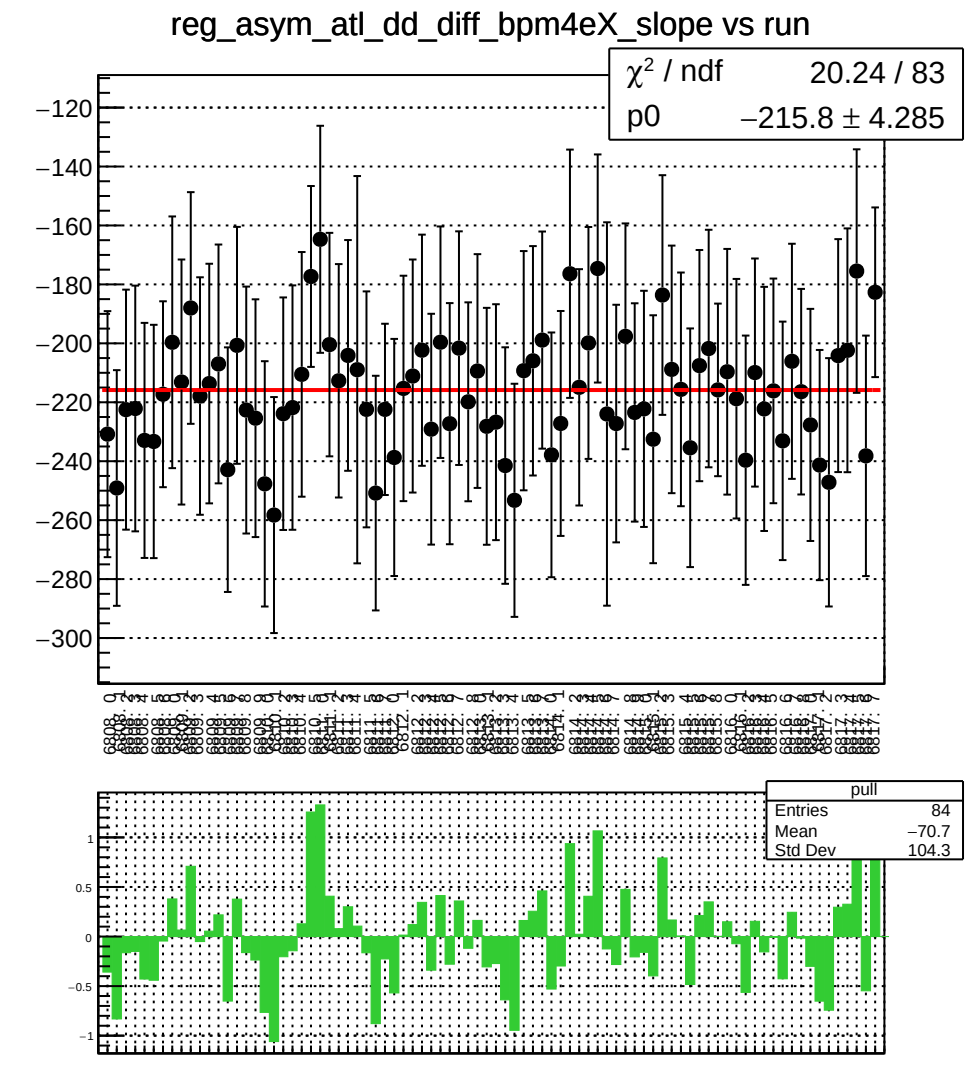

pull1D
Entries 84
Mean 0.0007812
Std Dev 0.5569

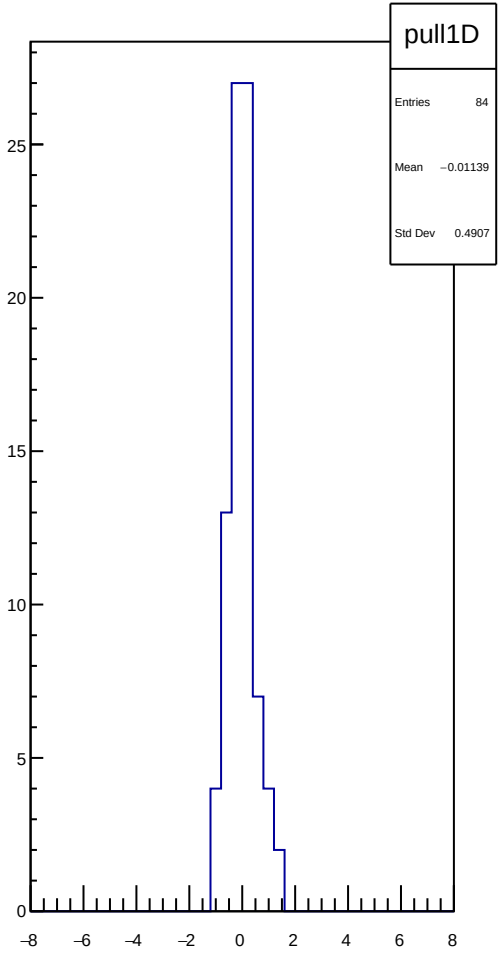

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 20.43 / 83
p0 286.3 ± 4.583
pull
Entries 84
Mean −73.65
Std Dev 107.4

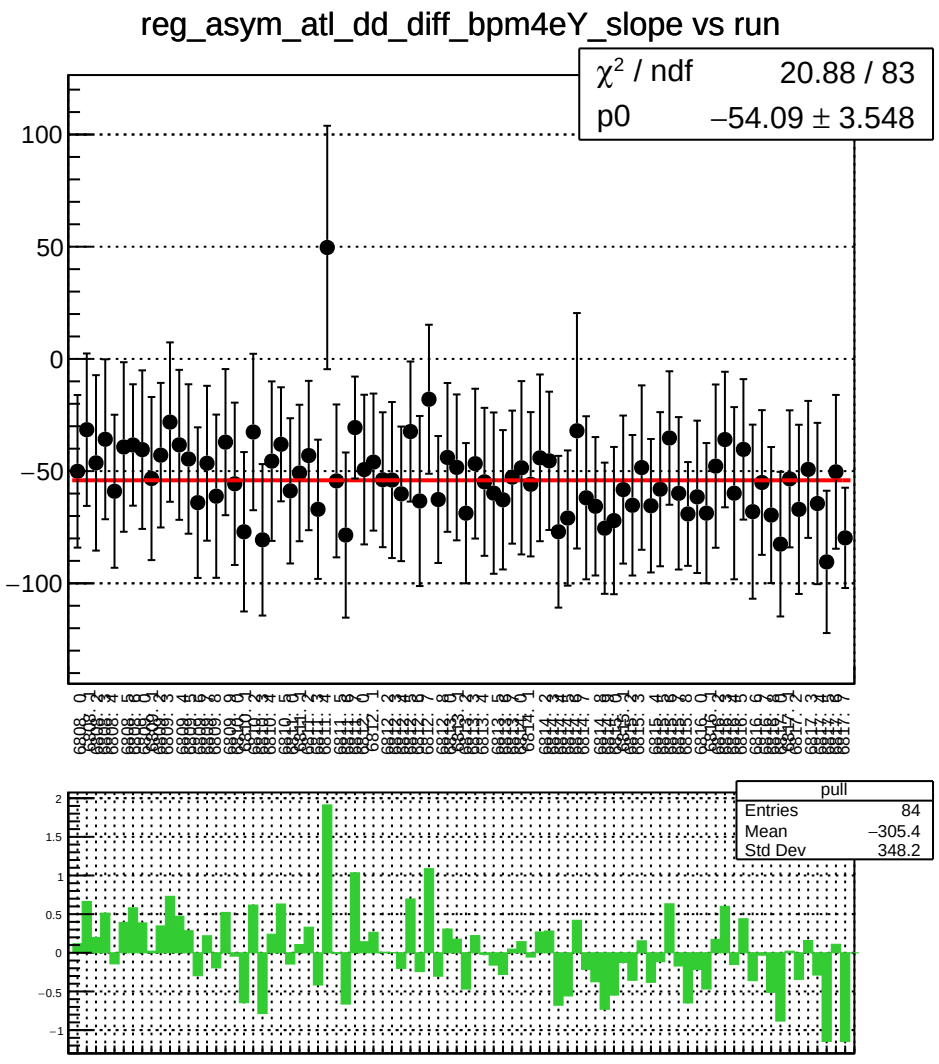

pull1D
Entries 84
Mean 0.01143
Std Dev 0.493

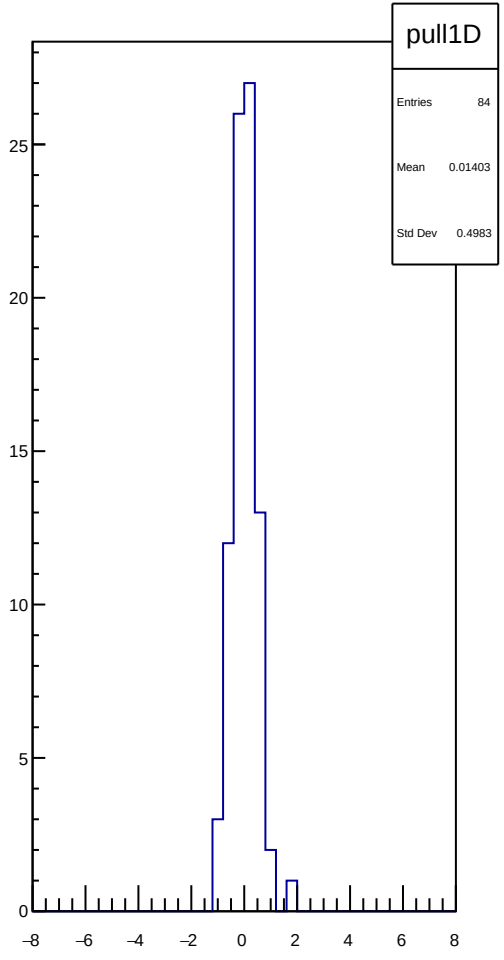

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 21.76 / 83
p0 −14.13 ± 2.937
50
0
−50
−100
−150
pull
Entries 84
Mean −246.6
Std Dev 289.6
1
0.5
0
−0.5
−1
−1.5
−2

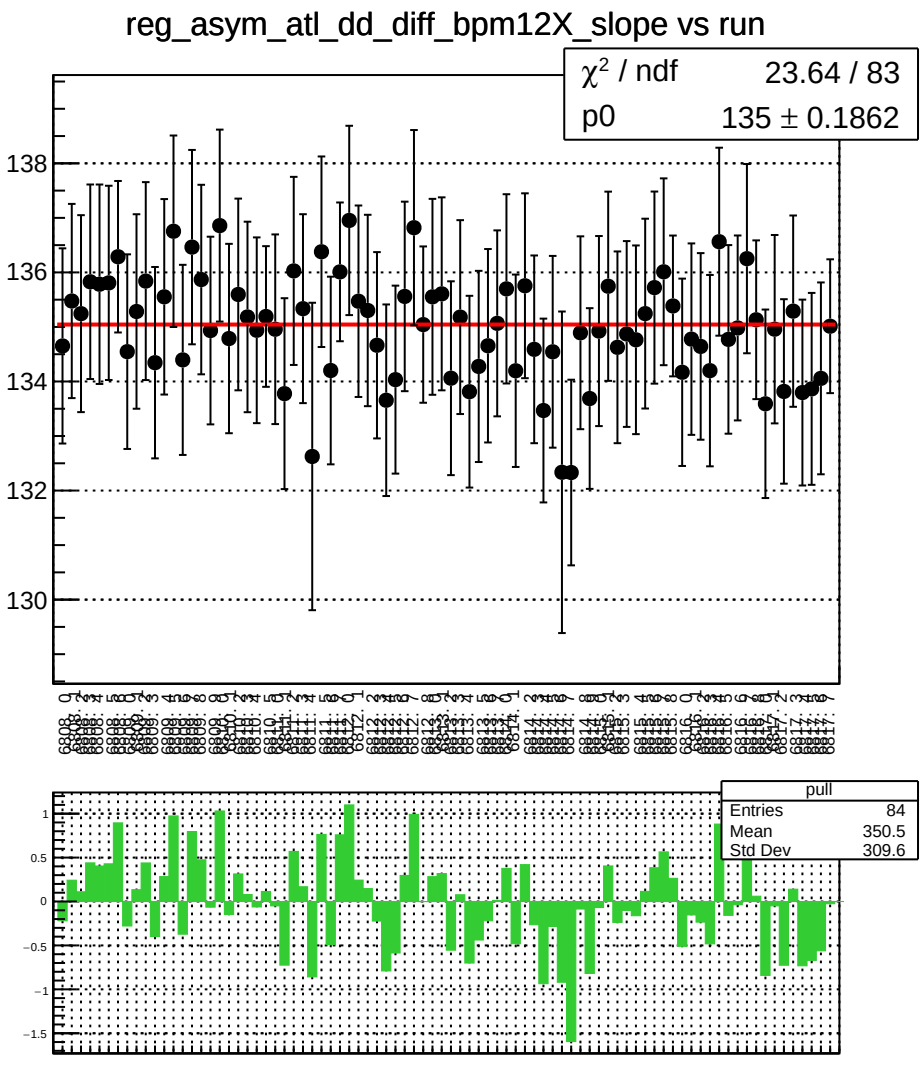

pull1D
Entries 84
Mean −0.01451
Std Dev 0.5088
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

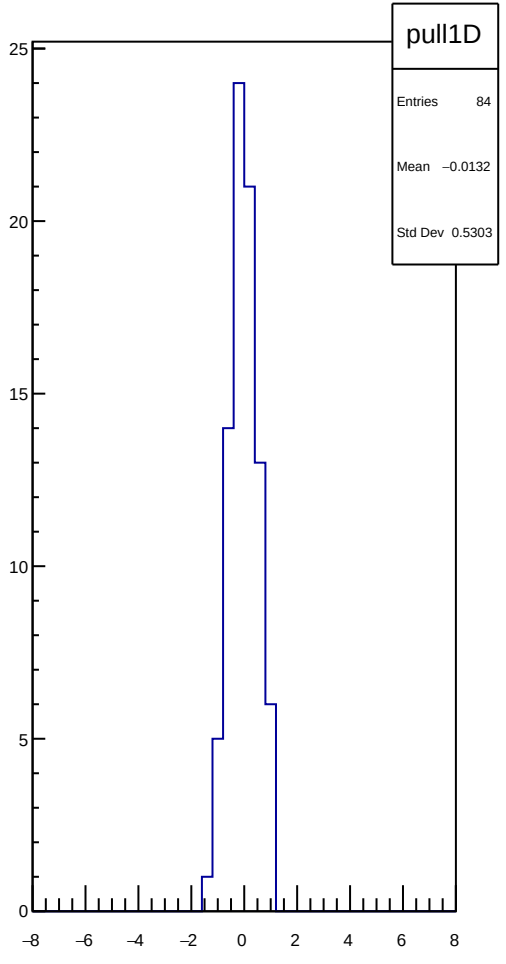

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 20.24 / 83
p0 −215.8 ± 4.285
pull
Entries 84
Mean −70.7
Std Dev 104.3

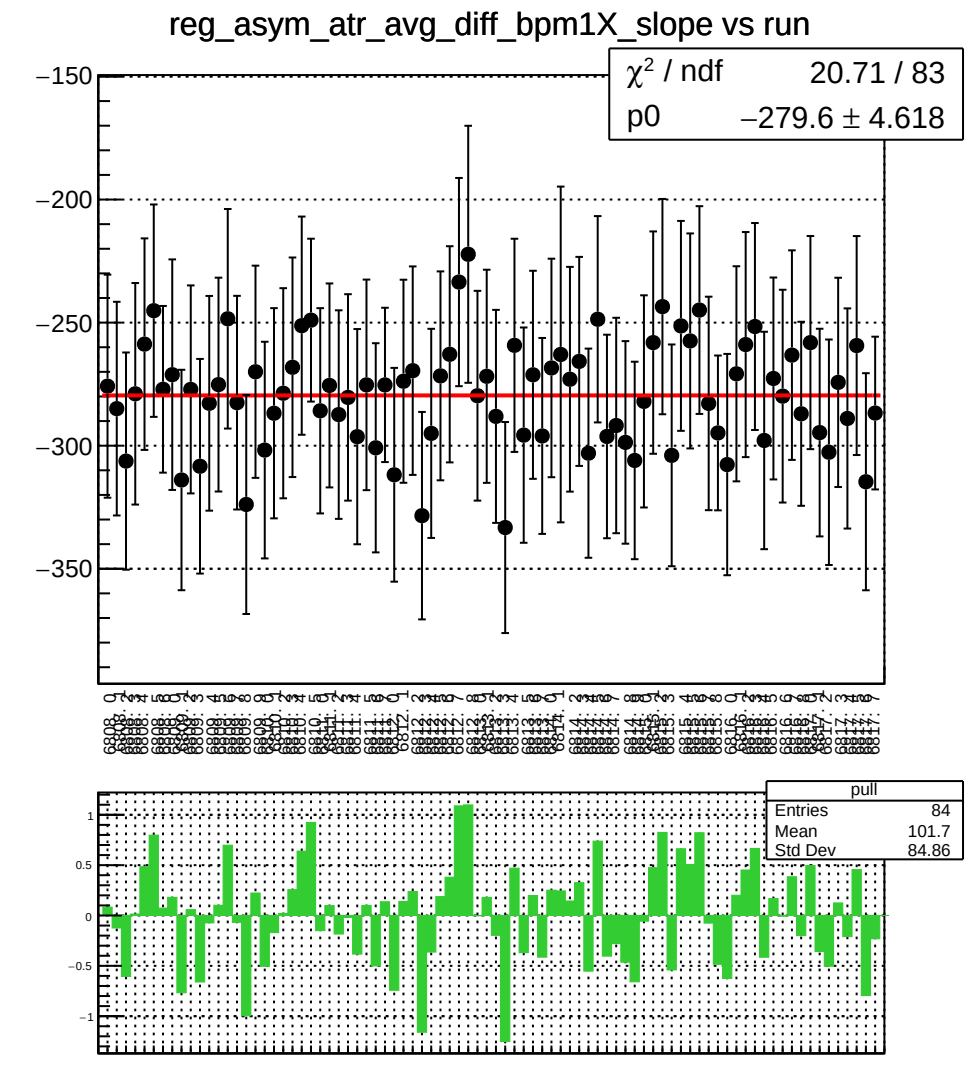

pull1D
Entries 84
Mean −0.01139
Std Dev 0.4907

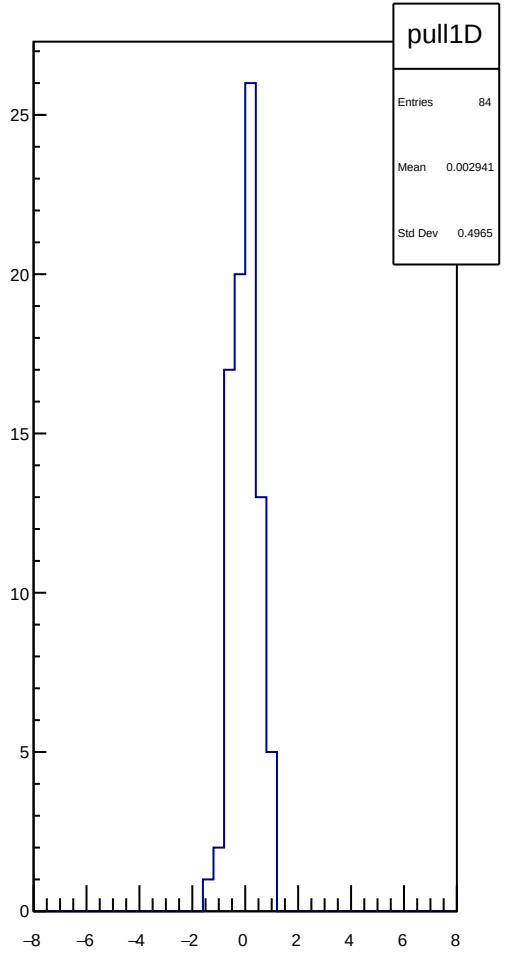

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 20.88 / 83
p0 −54.09 ± 3.548
100
50
0
−50
−100
pull
Entries 84
Mean −305.4
Std Dev 348.2
2
1.5
1
0.5
0
−0.5
−1

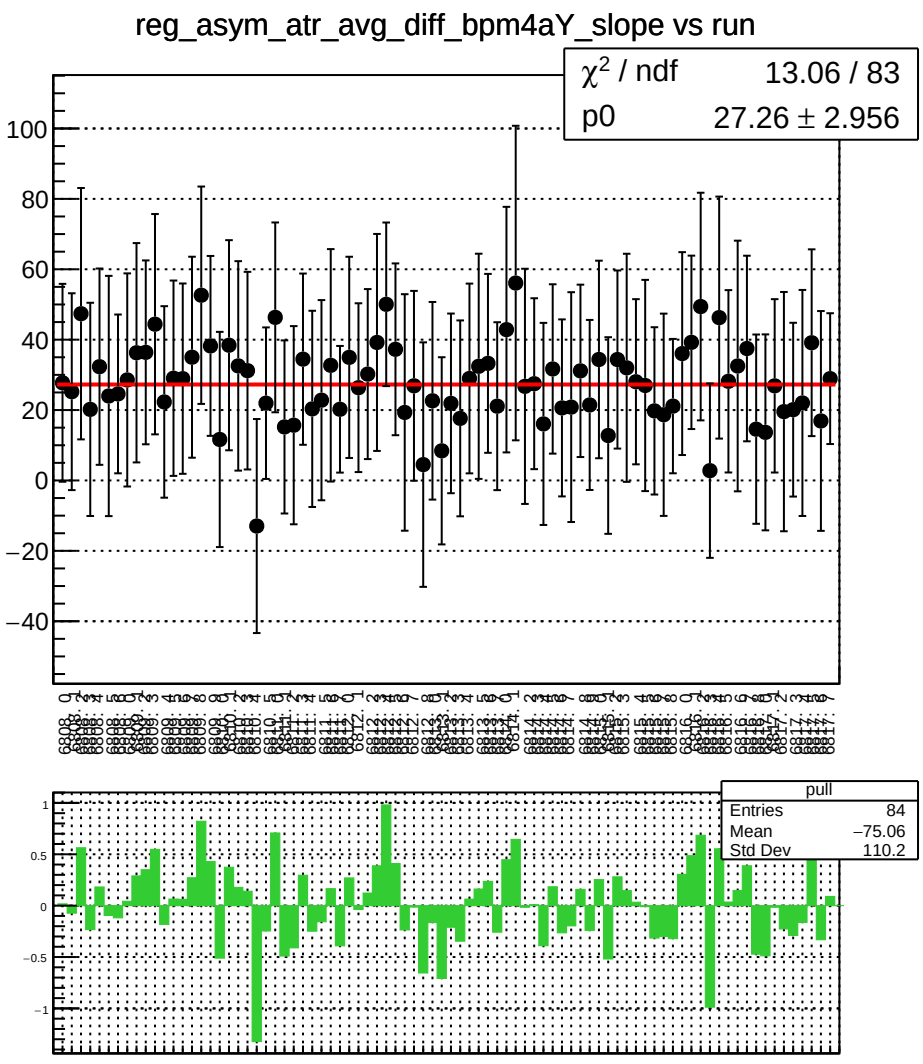

pull1D
Entries 84
Mean 0.01403
Std Dev 0.4983
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

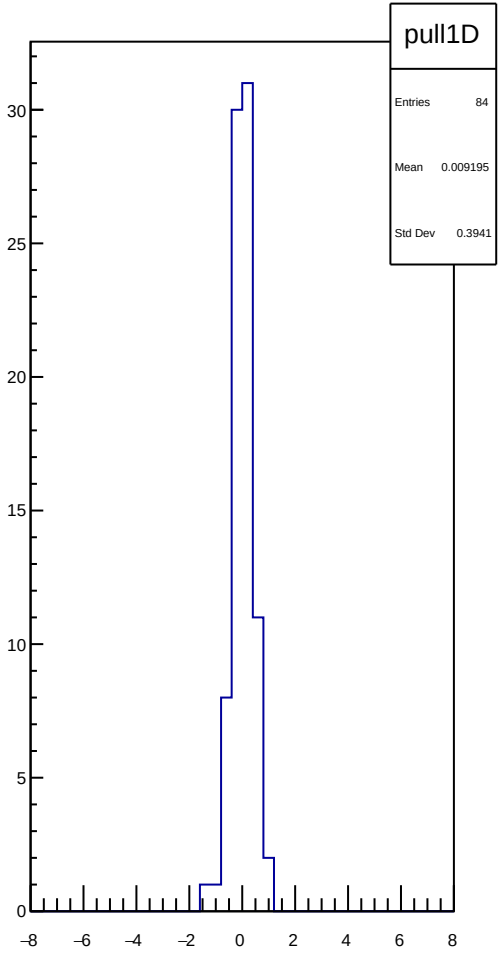

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 23.64 / 83
p0 135 ± 0.1862
138
136
134
132
130
pull
Entries 84
Mean 350.5
Std Dev 309.6
1
0.5
0
−0.5
−1
−1.5

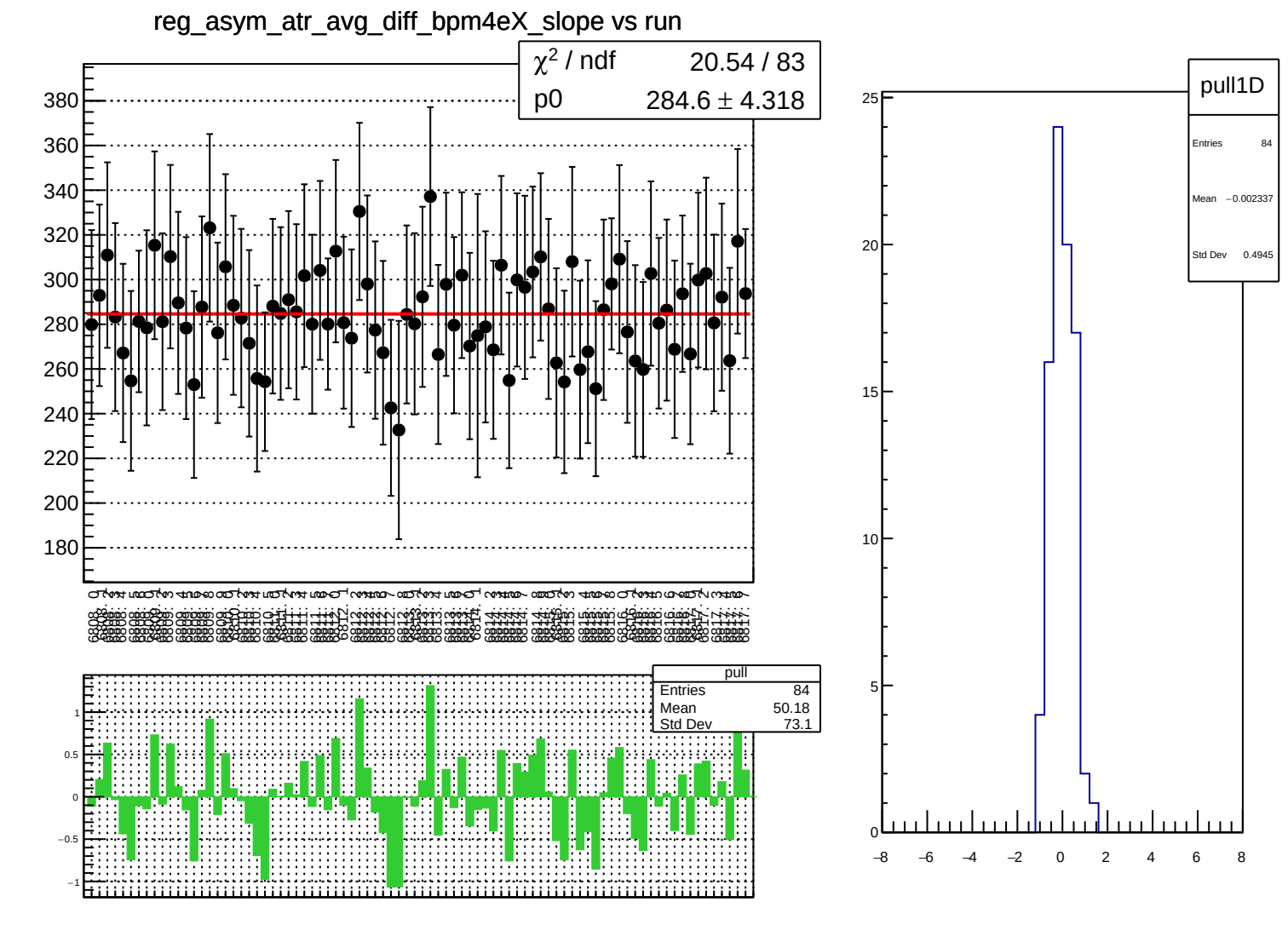

pull1D
Entries 84
Mean −0.0132
Std Dev 0.5303
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

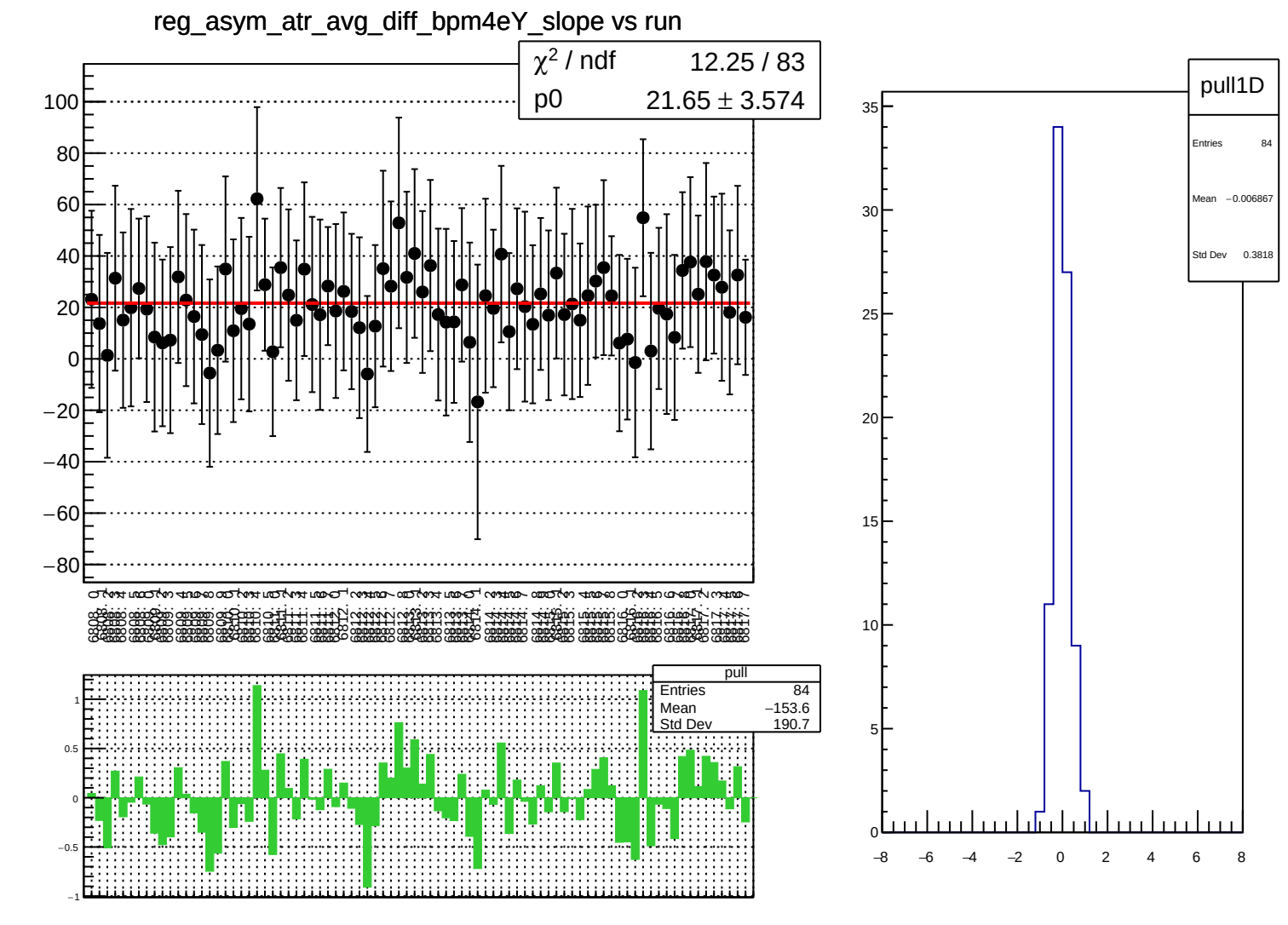

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 20.71 / 83
p0 −279.6 ± 4.618
−150
−200
−250
−300
−350
pull
Entries 84
Mean 101.7
Std Dev 84.86
1
0.5
0
−0.5
−1

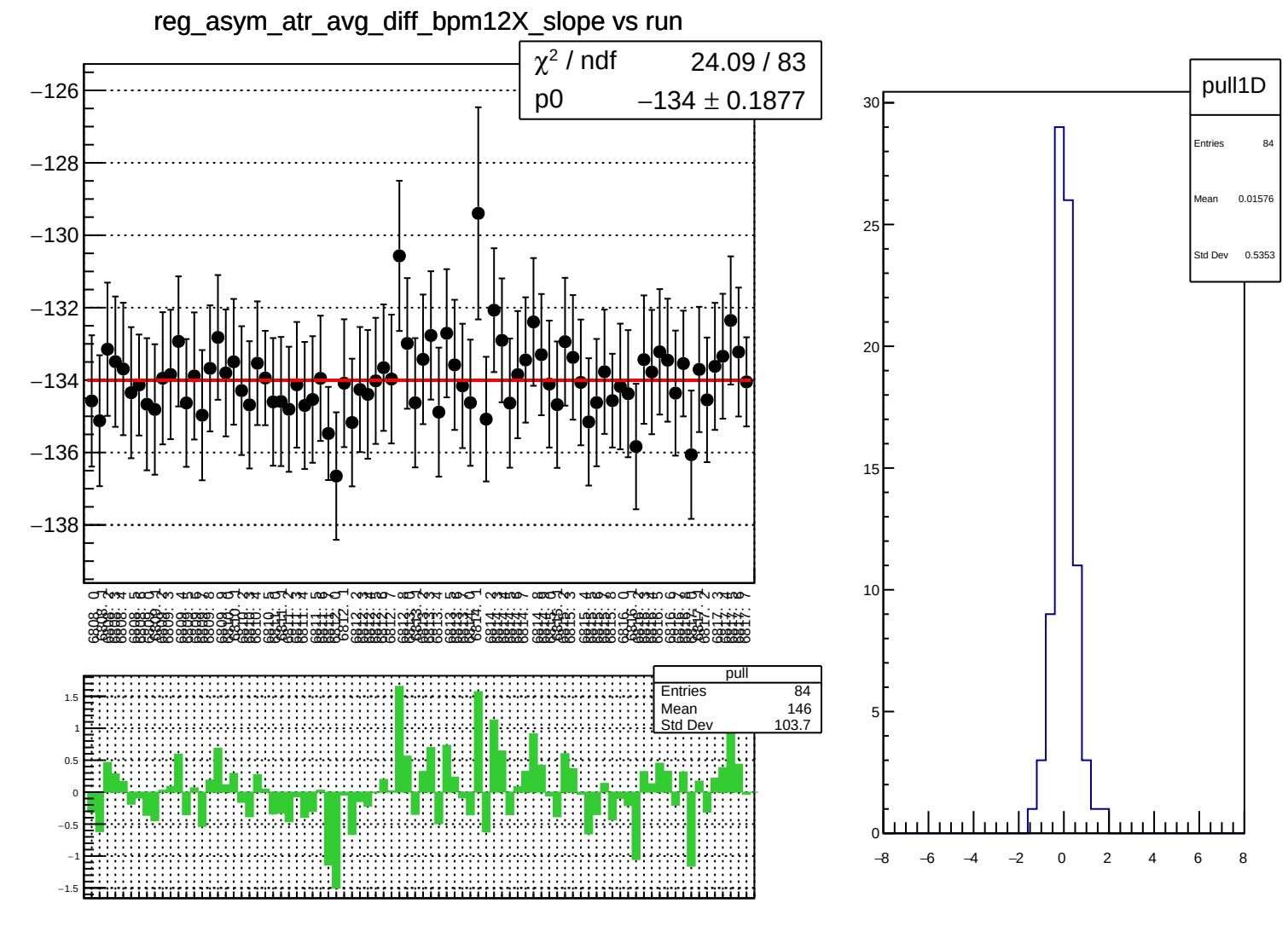

pull1D
Entries 84
Mean 0.002941
Std Dev 0.4965
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

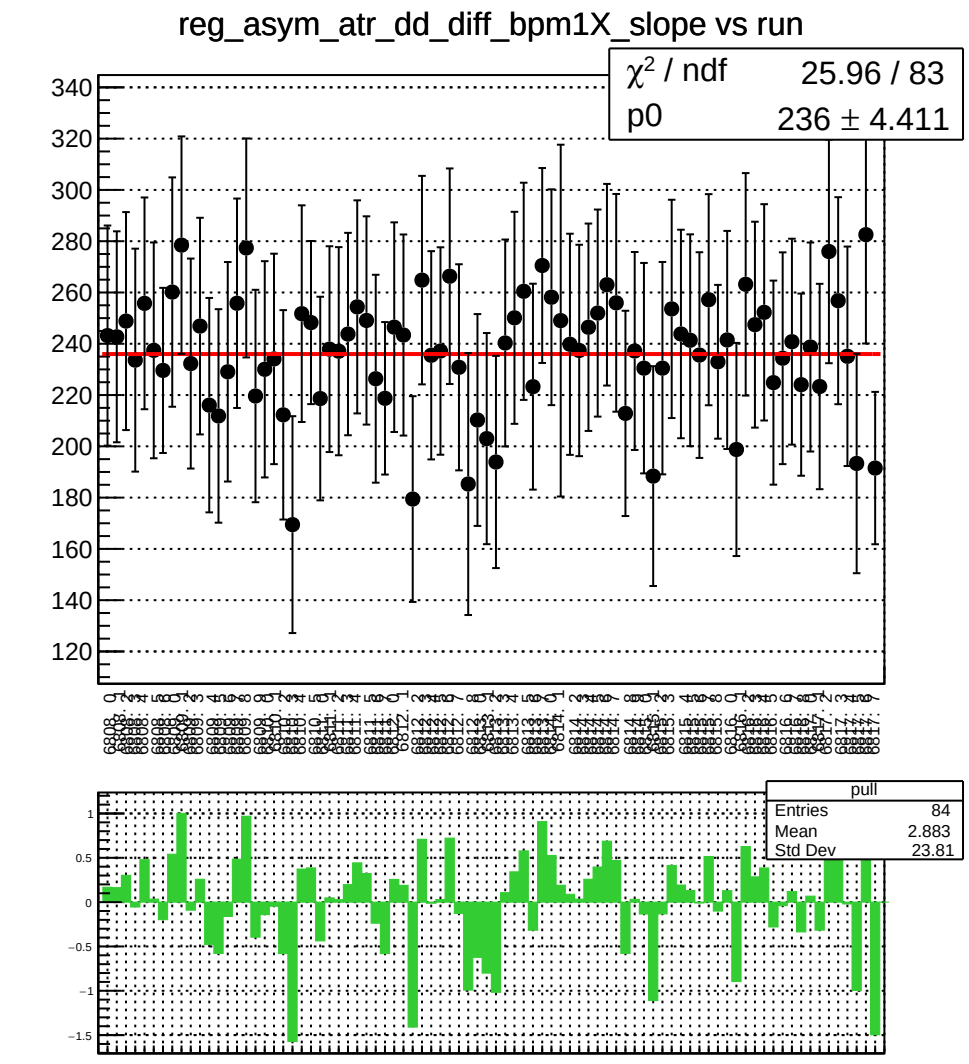

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.06 / 83
p0 27.26 ± 2.956
pull
Entries 84
Mean −75.06
Std Dev 110.2

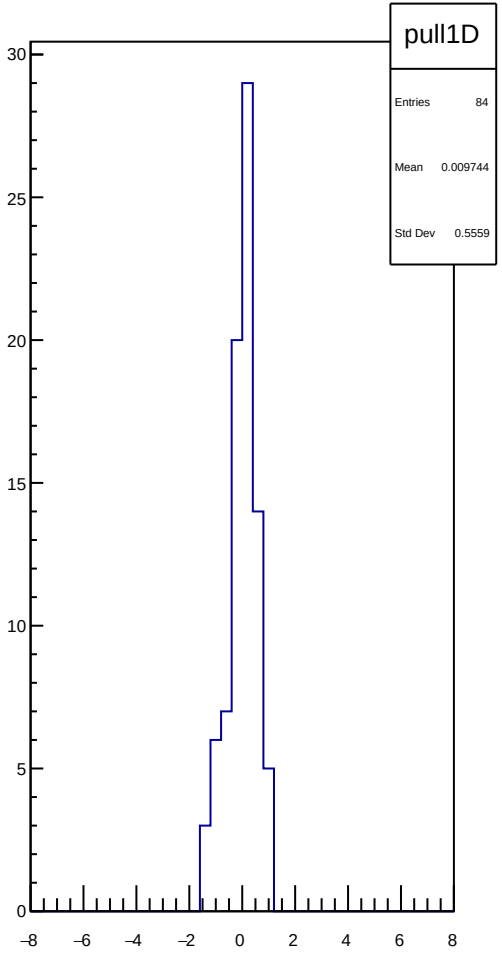

pull1D
Entries 84
Mean 0.009195
Std Dev 0.3941

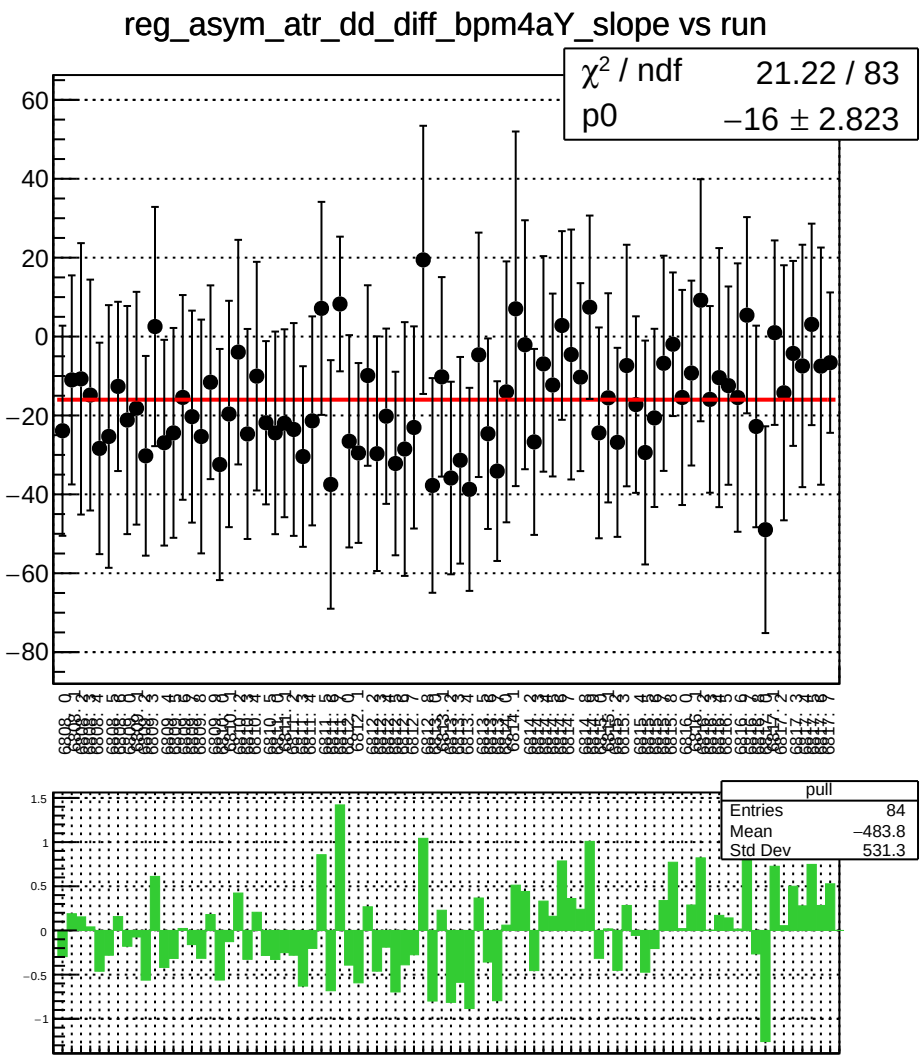

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 20.54 / 83
p0 284.6 ± 4.318
pull
Entries 84
Mean 50.18
Std Dev 73.1
pull1D
Entries 84
Mean −0.002337
Std Dev 0.4945

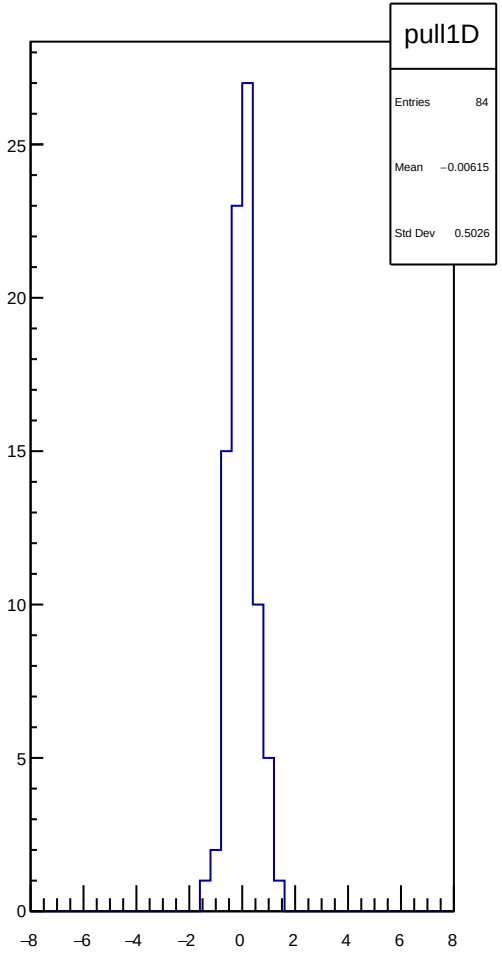

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 12.25 / 83
p0 21.65 ± 3.574
pull
Entries 84
Mean −153.6
Std Dev 190.7
pull1D
Entries 84
Mean −0.006867
Std Dev 0.3818

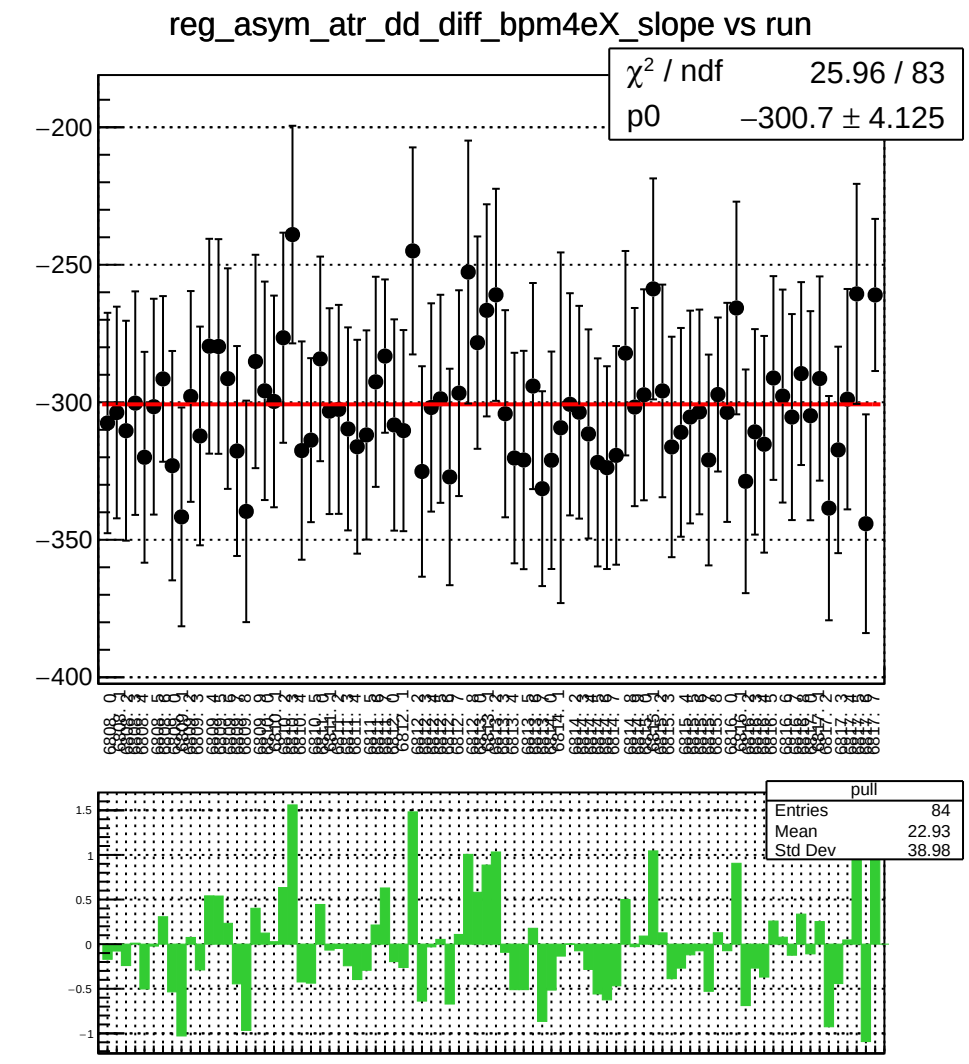

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 24.09 / 83
p0 −134 ± 0.1877
−126
−128
−130
−132
−134
−136
−138
pull
Entries 84
Mean 146
Std Dev 103.7
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 84
Mean 0.01576
Std Dev 0.5353
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

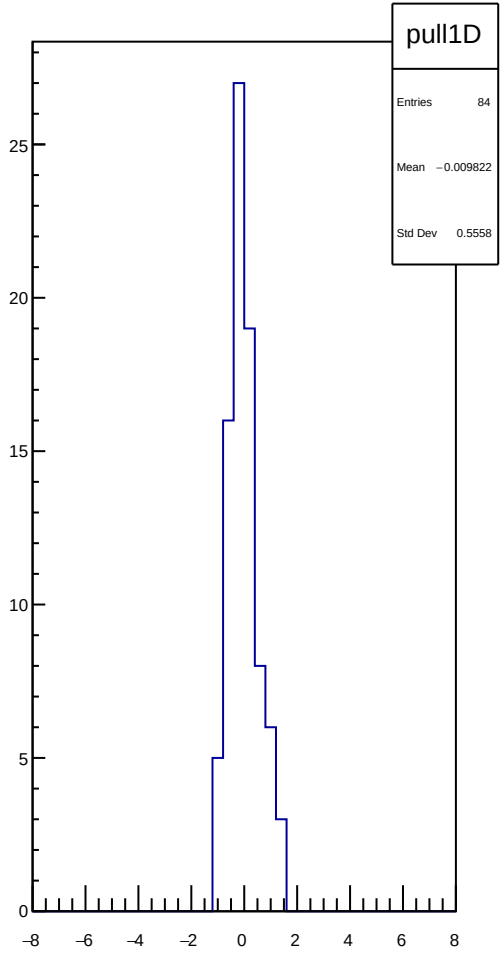

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 25.96 / 83
p0 236 ± 4.411
pull
Entries 84
Mean 2.883
Std Dev 23.81

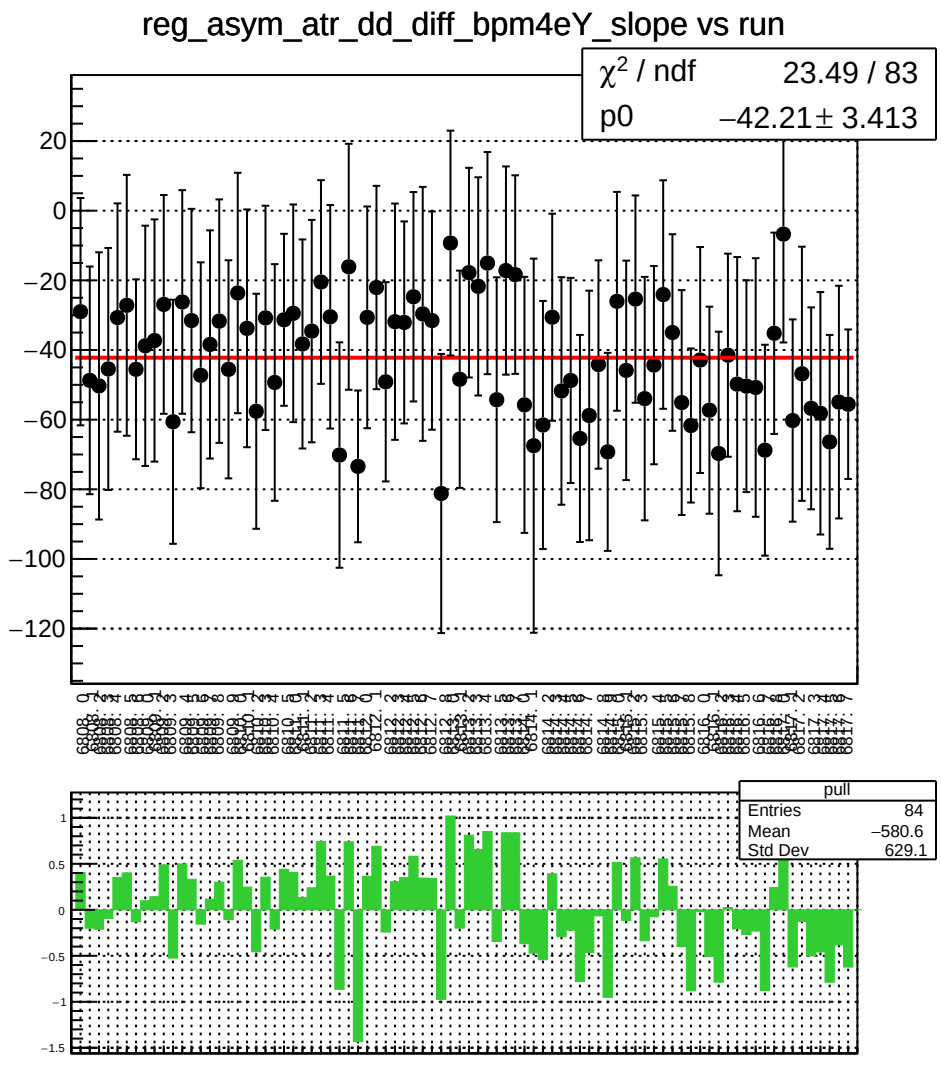

pull1D
Entries 84
Mean 0.009744
Std Dev 0.5559

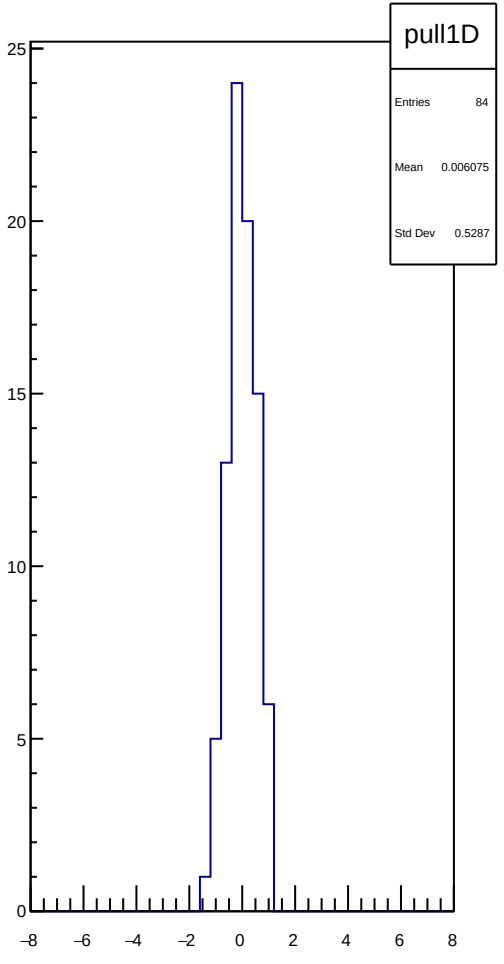

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 21.22 / 83
p0 −16 ± 2.823
pull
Entries 84
Mean −483.8
Std Dev 531.3

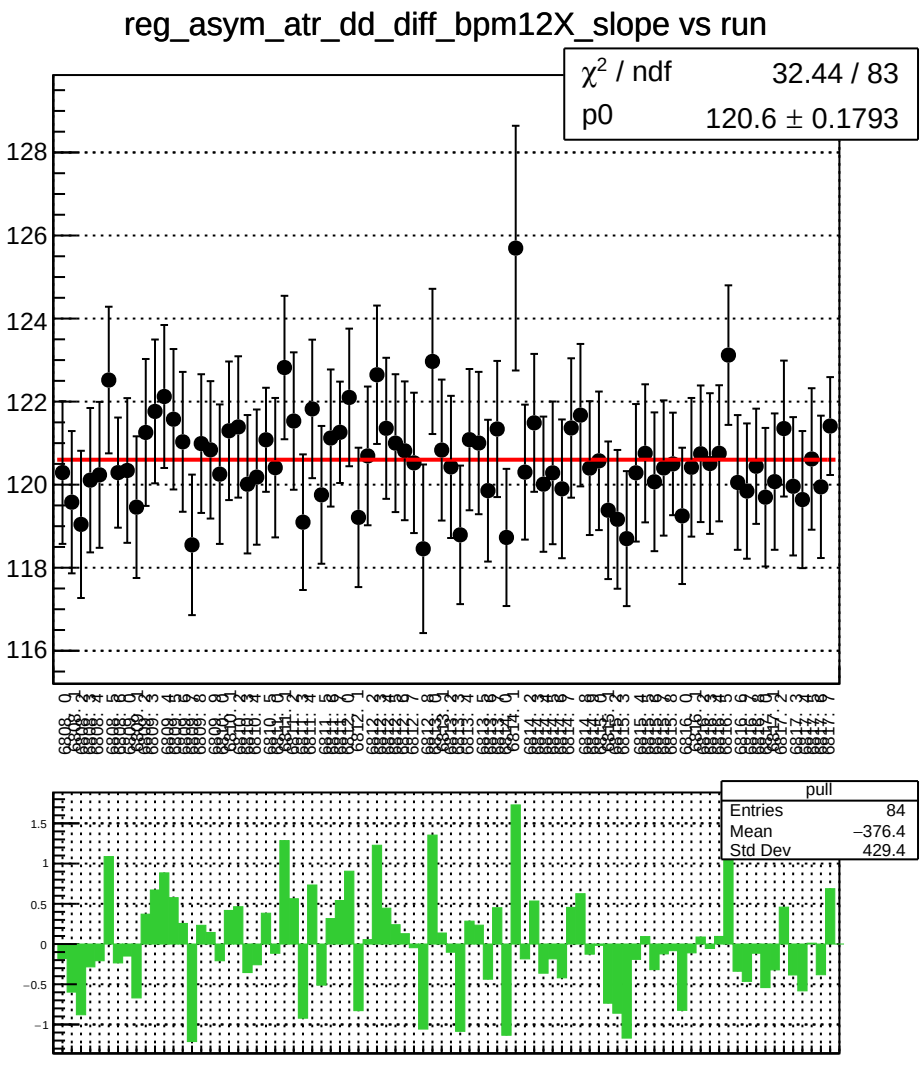

pull1D
Entries 84
Mean −0.00615
Std Dev 0.5026

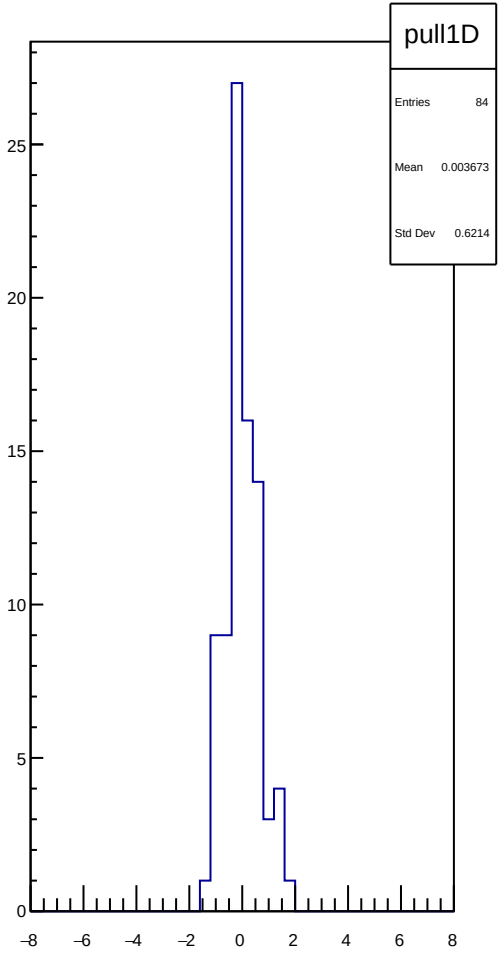

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 25.96 / 83
p0 −300.7 ± 4.125
−200
−250
−300
−350
−400
pull
Entries 84
Mean 22.93
Std Dev 38.98
1.5
1
0.5
0
−0.5
−1

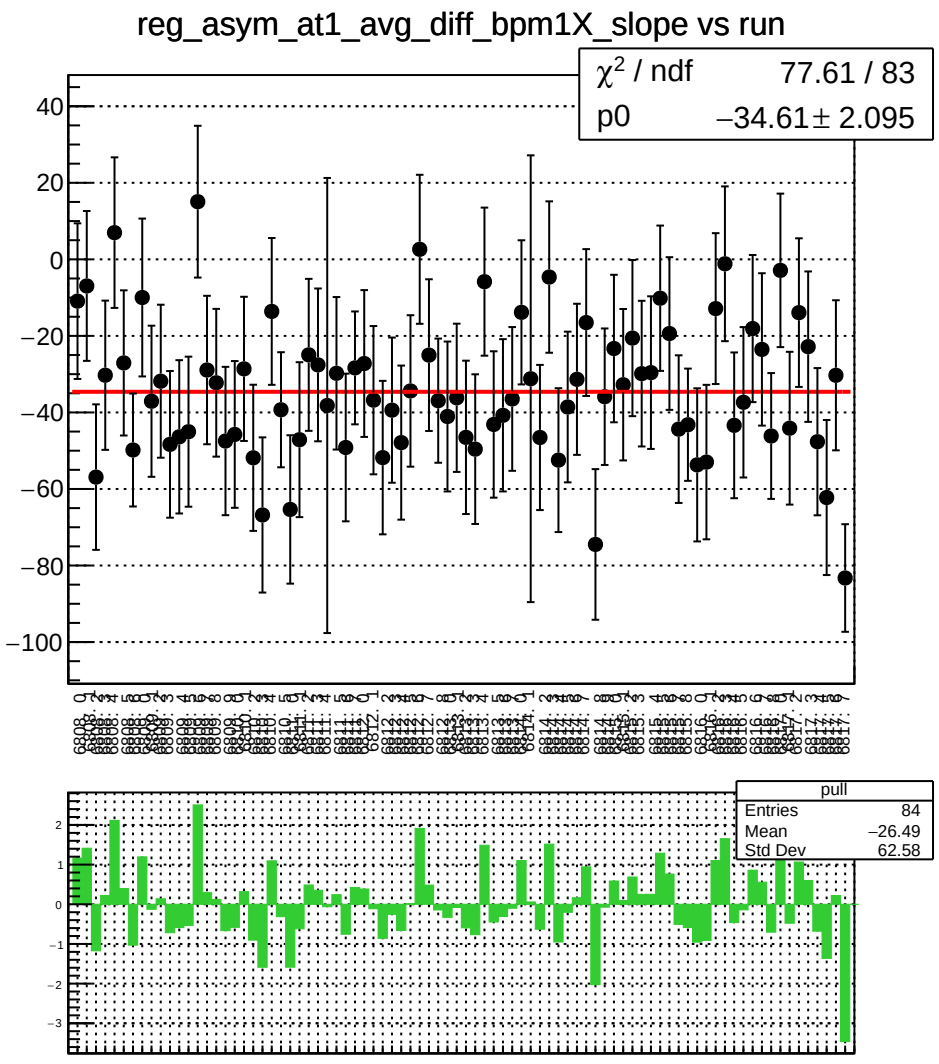

pull1D
Entries 84
Mean −0.009822
Std Dev 0.5558
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

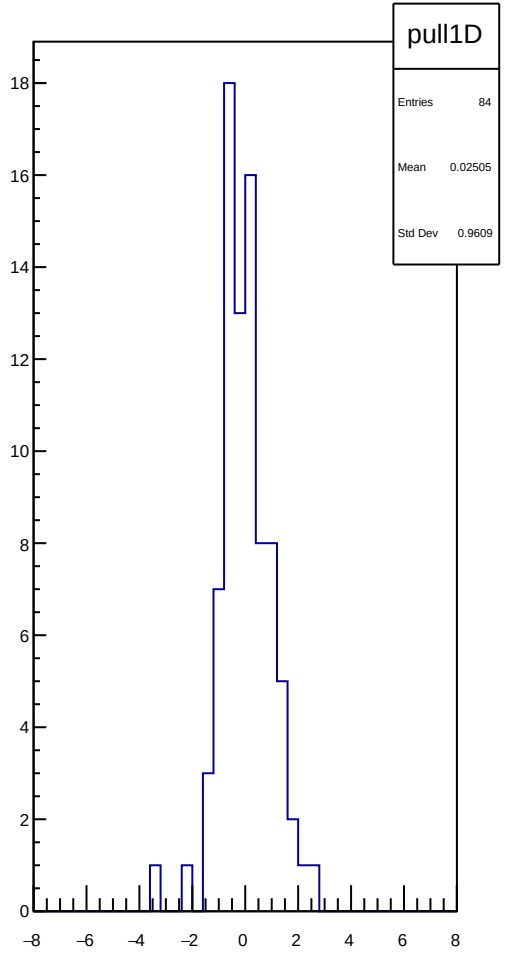

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 23.49 / 83
p0 −42.21 ± 3.413
pull
Entries 84
Mean −580.6
Std Dev 629.1

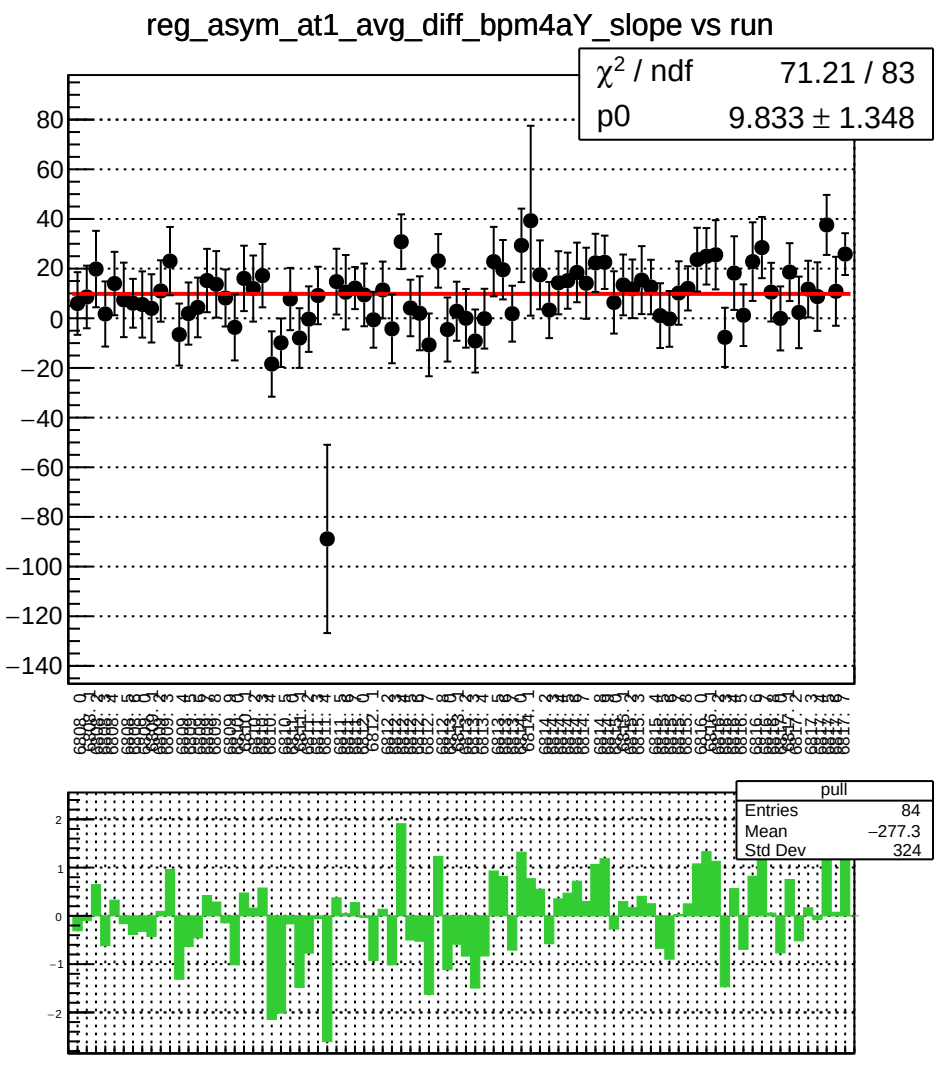

pull1D
Entries 84
Mean 0.006075
Std Dev 0.5287

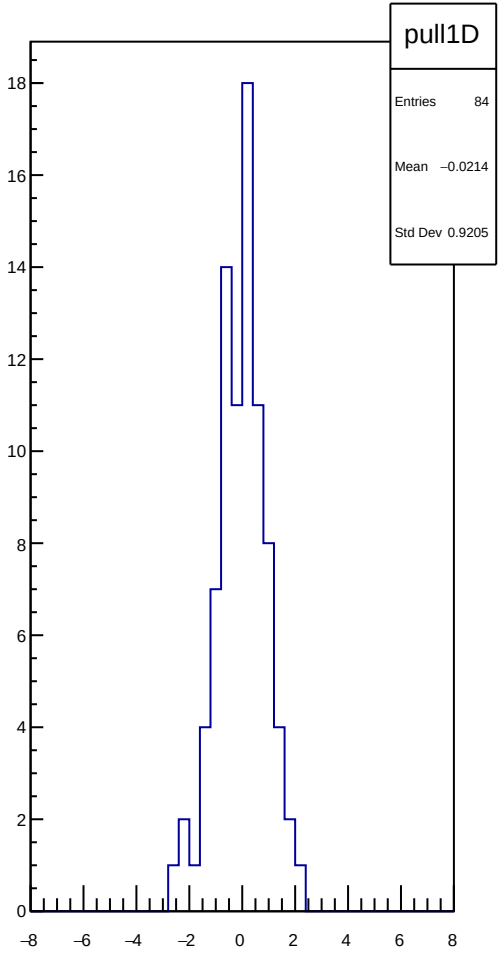

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 32.44 / 83
p0 120.6 ± 0.1793
128
126
124
122
120
118
116
pull
Entries 84
Mean −376.4
Std Dev 429.4
1.5
1
0.5
0
−0.5
−1

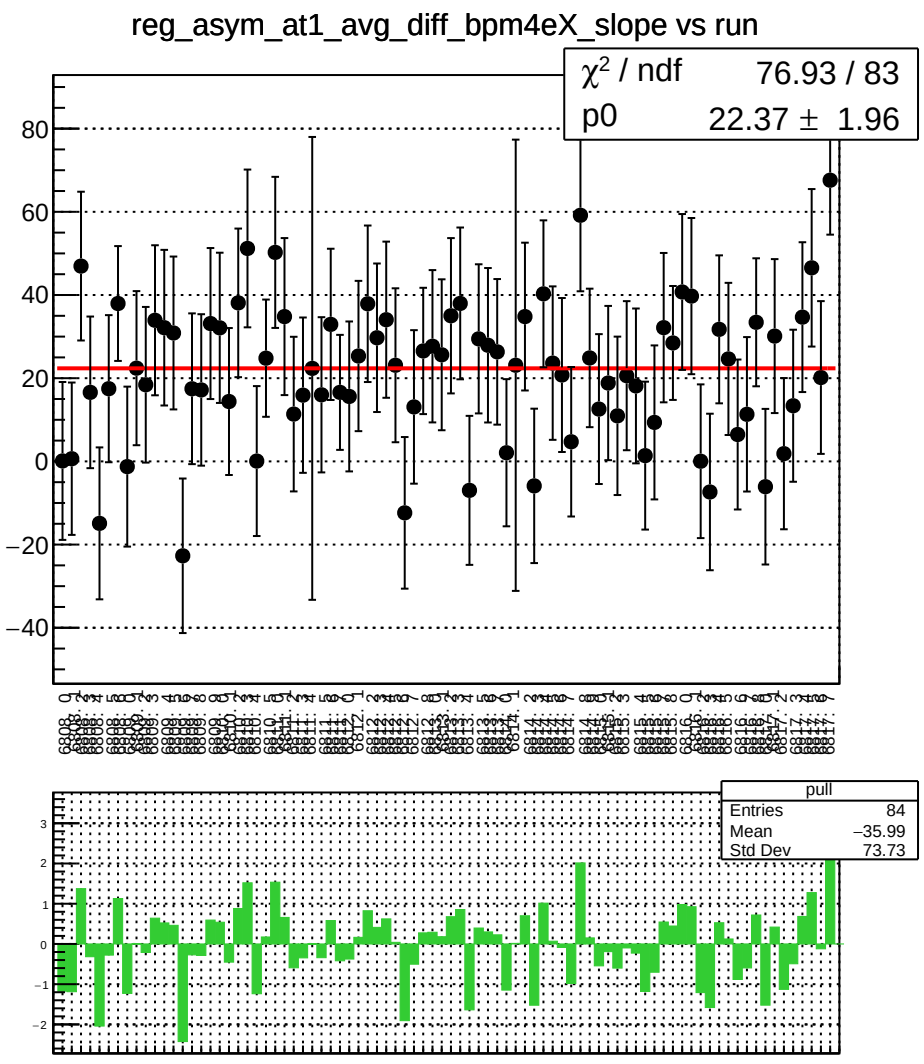

pull1D
Entries 84
Mean 0.003673
Std Dev 0.6214
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

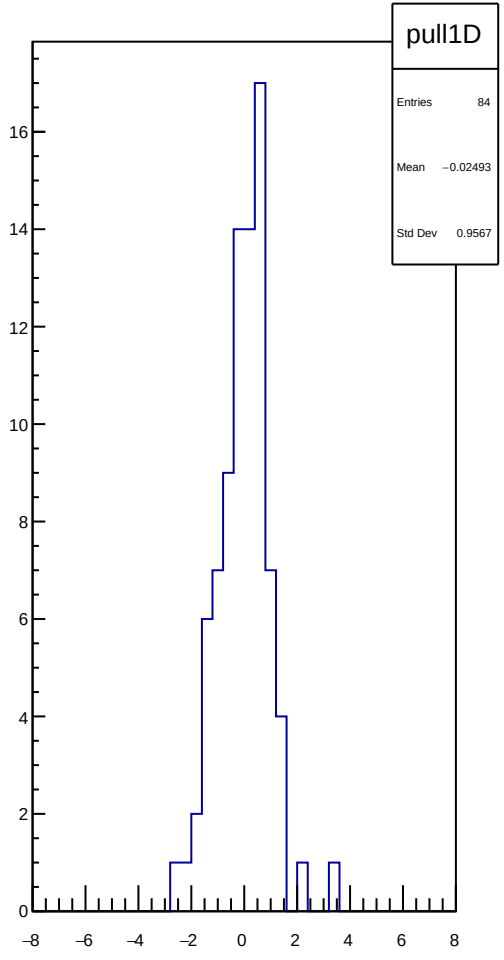

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 77.61 / 83
p0 −34.61 ± 2.095
pull
Entries 84
Mean −26.49
Std Dev 62.58

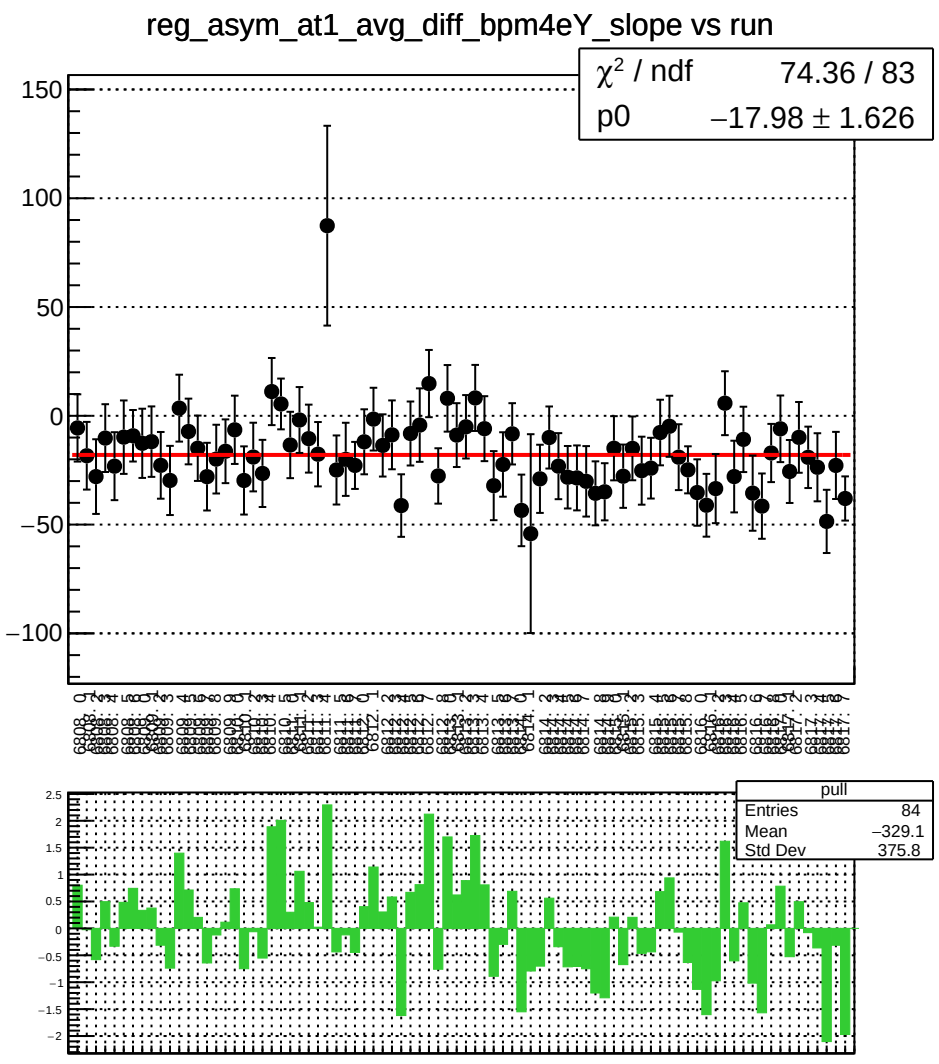

pull1D
Entries 84
Mean 0.02505
Std Dev 0.9609

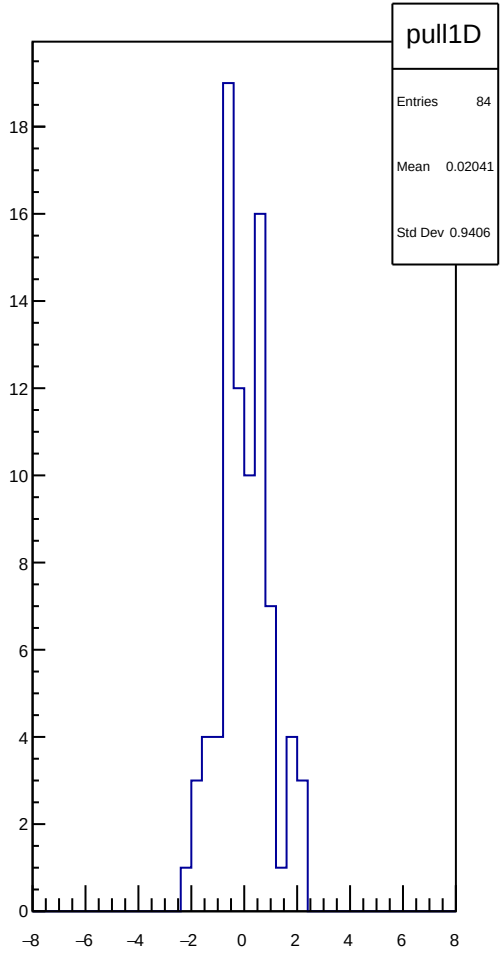

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 71.21 / 83
p0 9.833 ± 1.348
pull
Entries 84
Mean −277.3
Std Dev 324

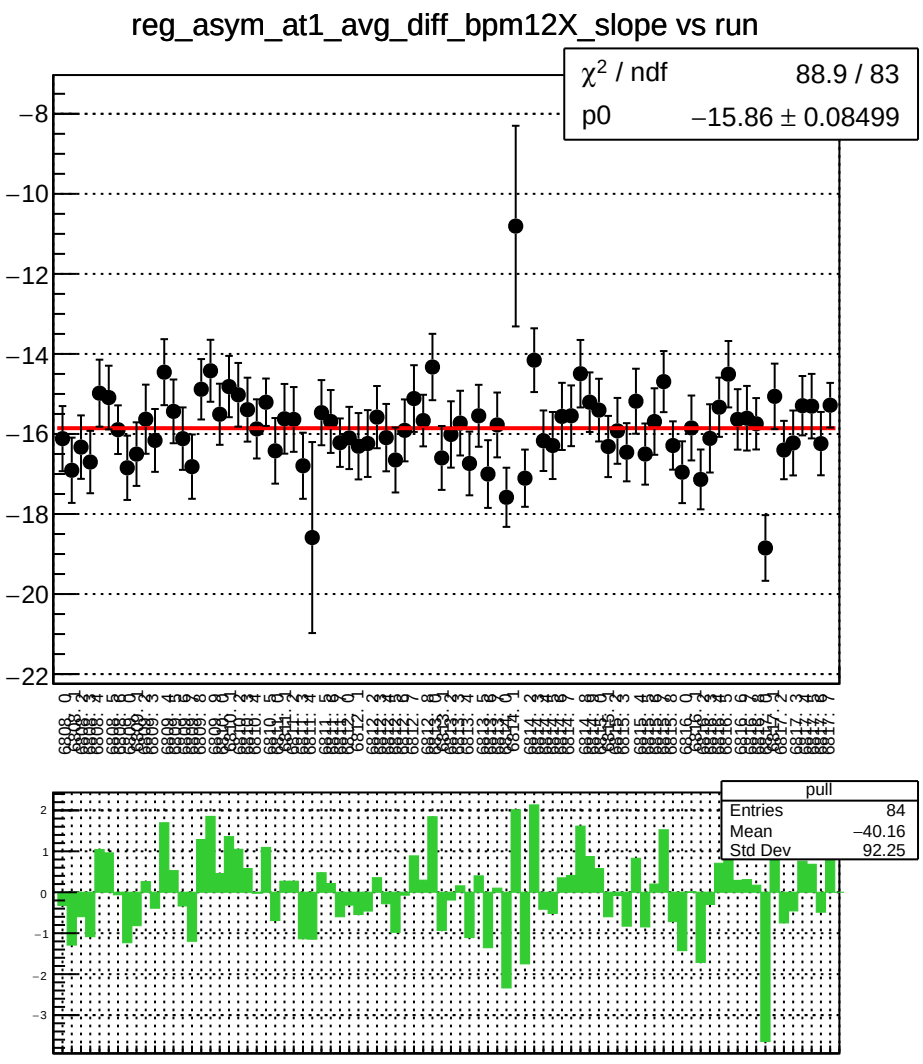

pull1D
Entries 84
Mean −0.0214
Std Dev 0.9205

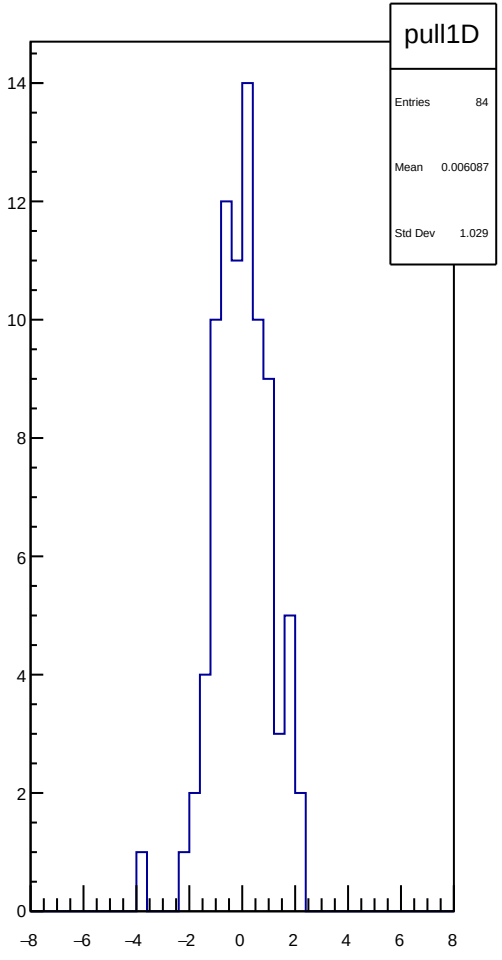

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 76.93 / 83
p0 22.37 ± 1.96
pull
Entries 84
Mean −35.99
Std Dev 73.73

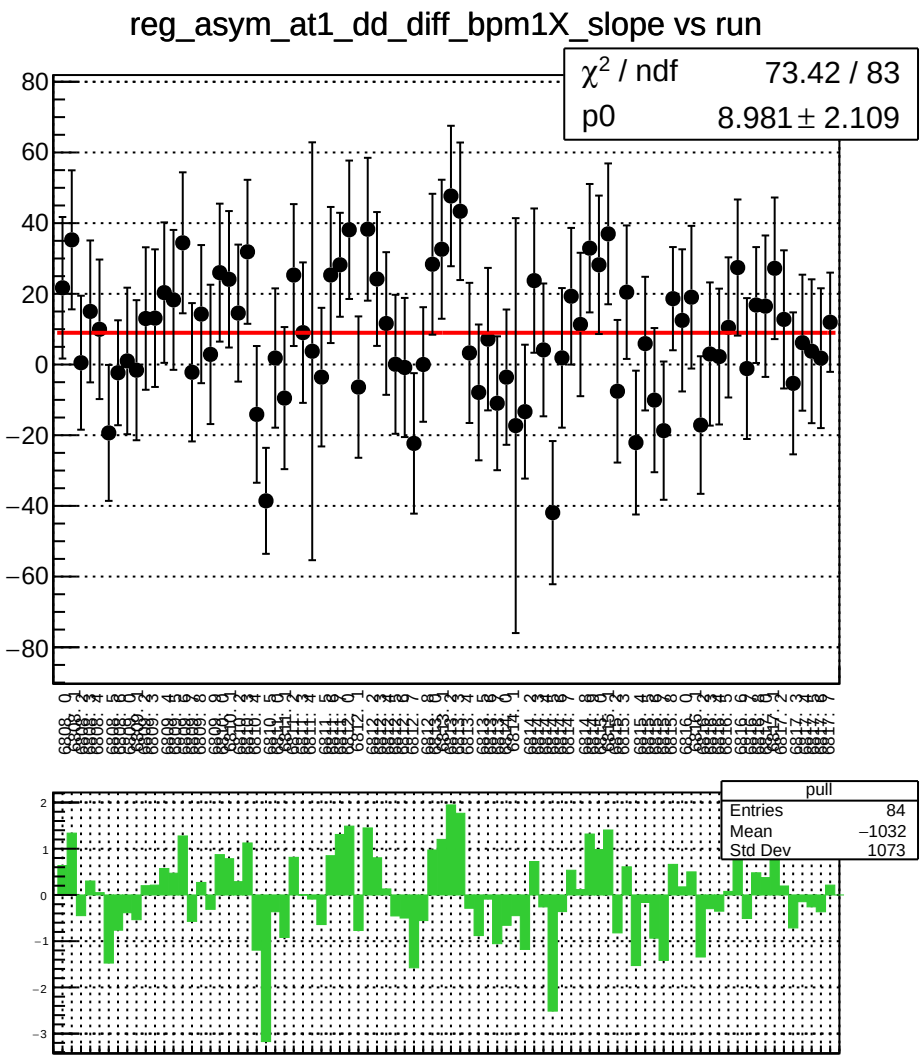

pull1D
Entries 84
Mean −0.02493
Std Dev 0.9567

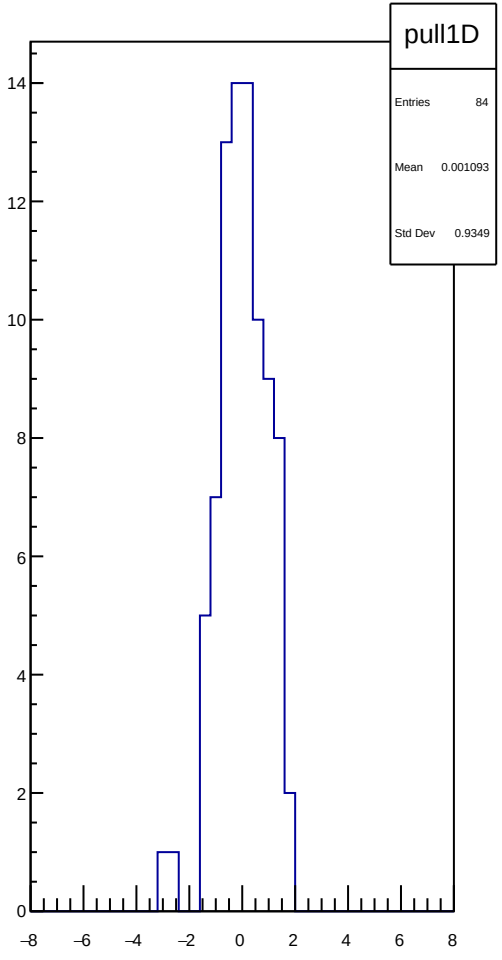

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 74.36 / 83
p0 −17.98 ± 1.626
150
100
50
0
−50
−100
pull
Entries 84
Mean −329.1
Std Dev 375.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

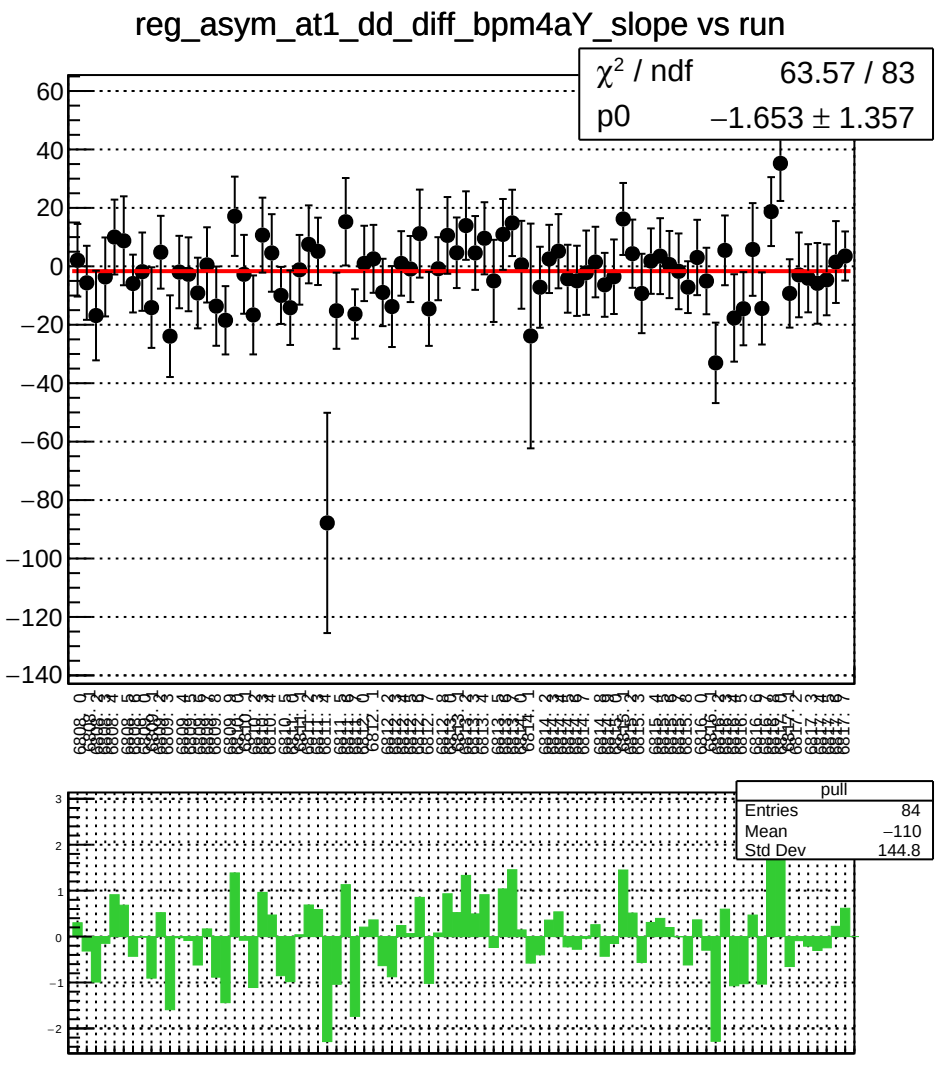

pull1D
Entries 84
Mean 0.02041
Std Dev 0.9406
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

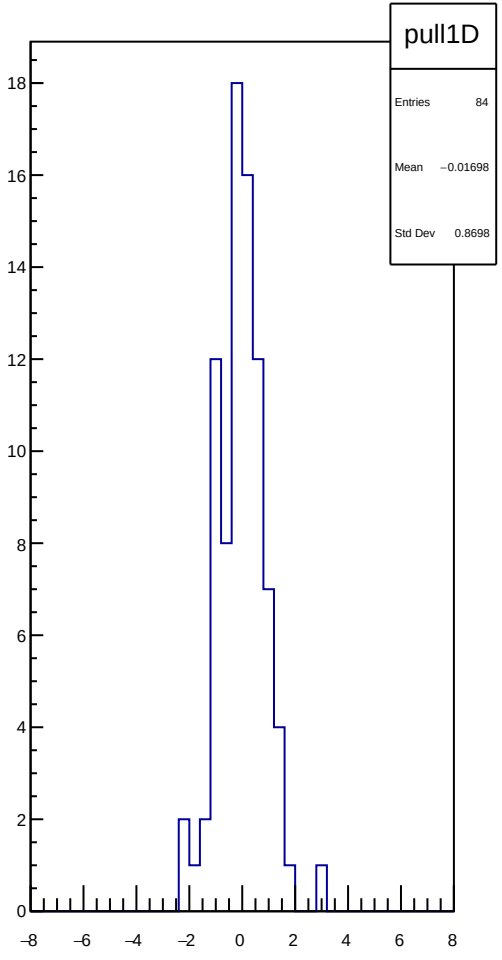

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 88.9 / 83
p0 −15.86 ± 0.08499
pull
Entries 84
Mean −40.16
Std Dev 92.25

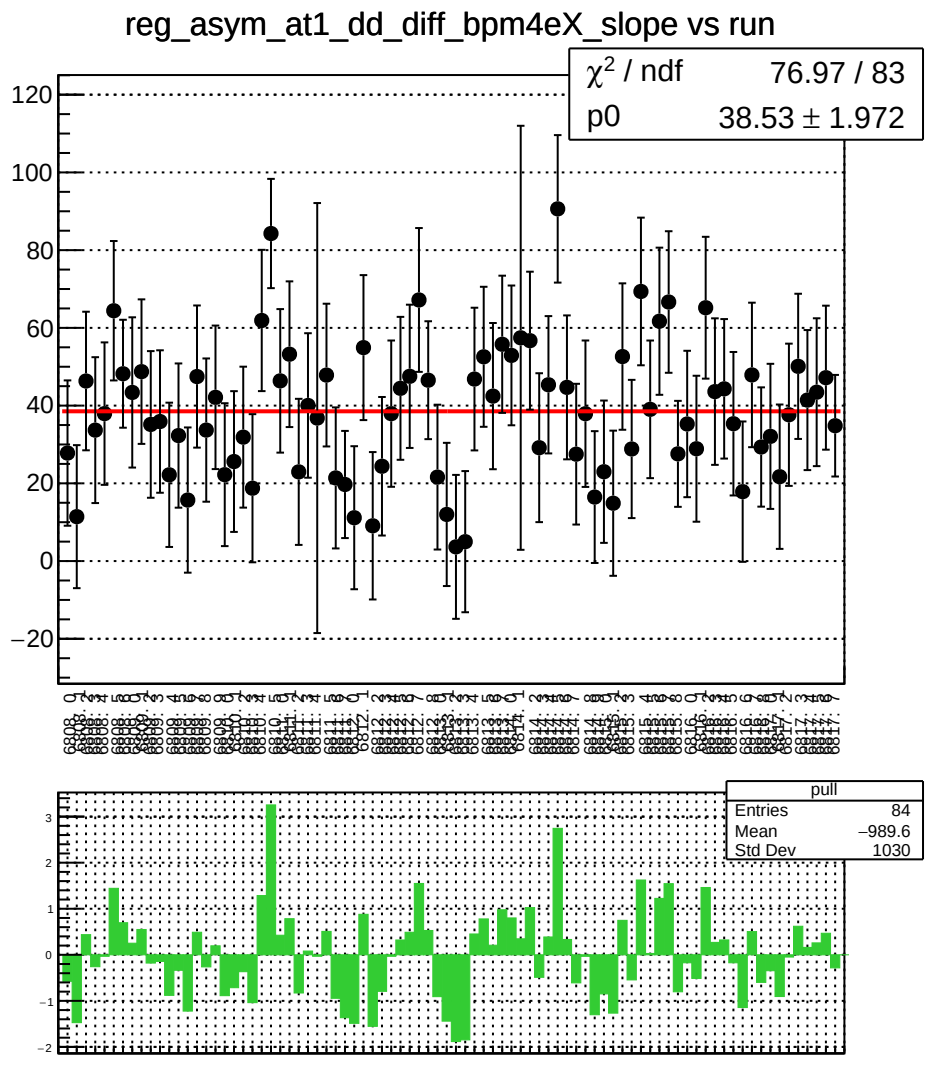

pull1D
Entries 84
Mean 0.006087
Std Dev 1.029

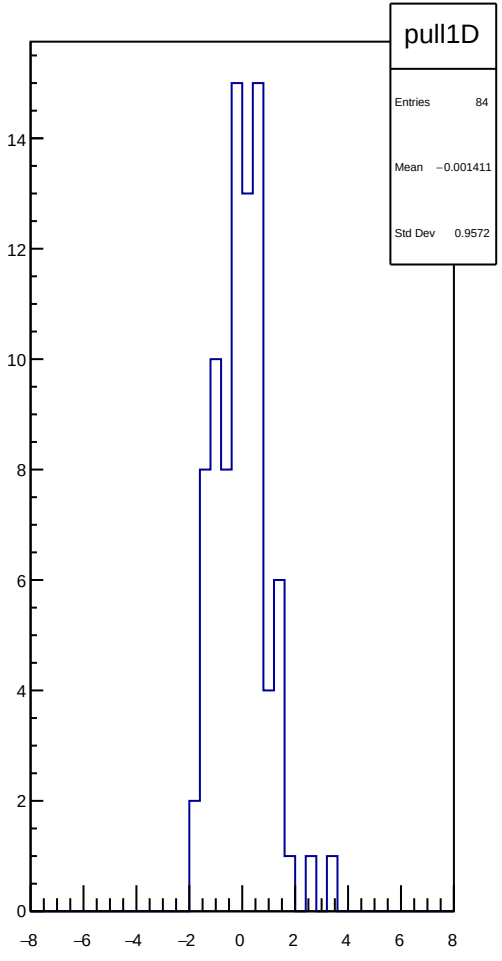

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 73.42 / 83
p0 8.981 ± 2.109
pull
Entries 84
Mean −1032
Std Dev 1073

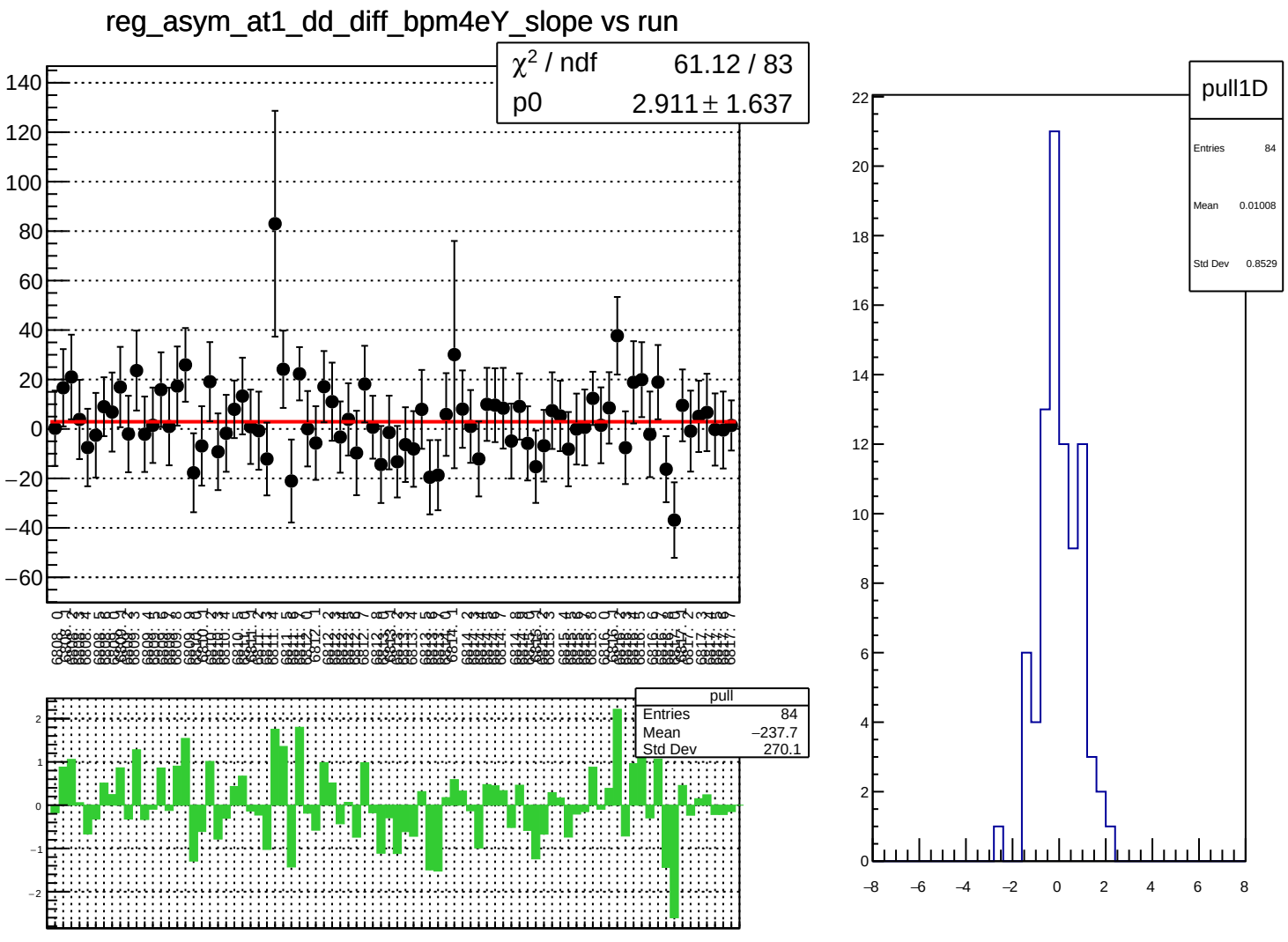

pull1D
Entries 84
Mean 0.001093
Std Dev 0.9349

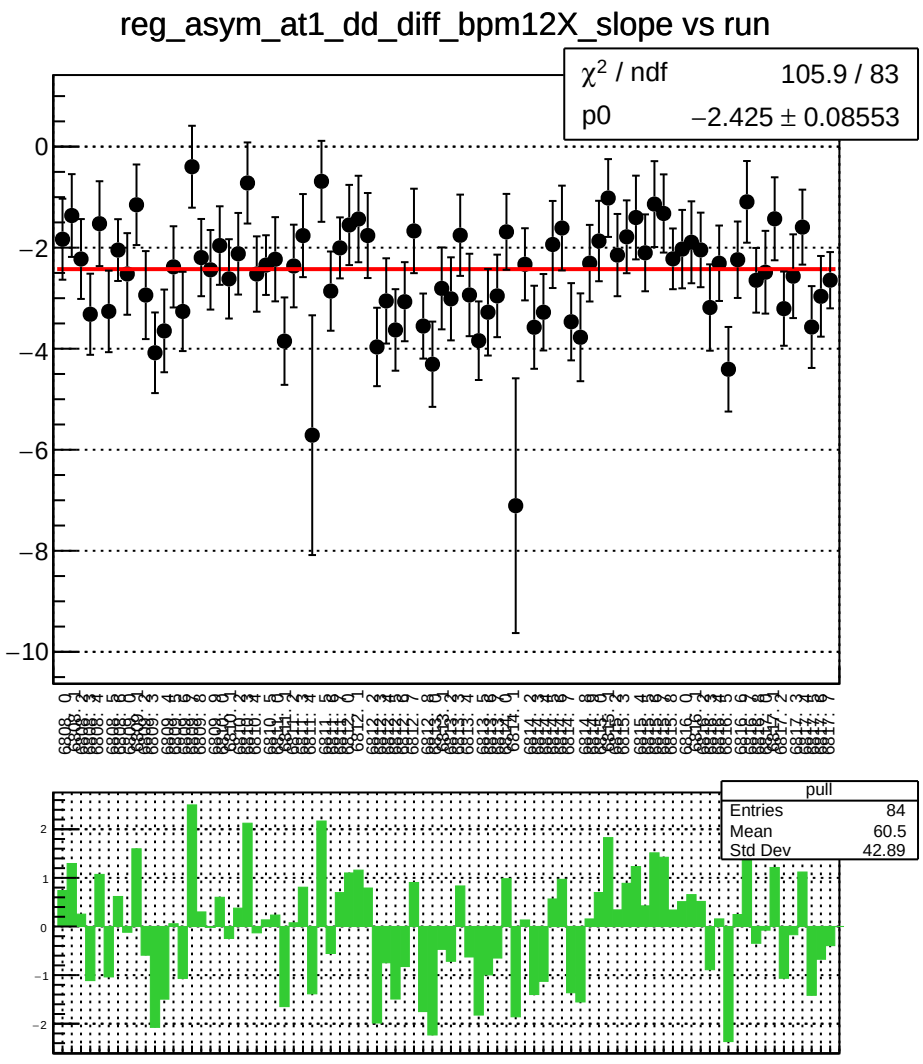

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 63.57 / 83
p0 −1.653 ± 1.357
pull
Entries 84
Mean −110
Std Dev 144.8

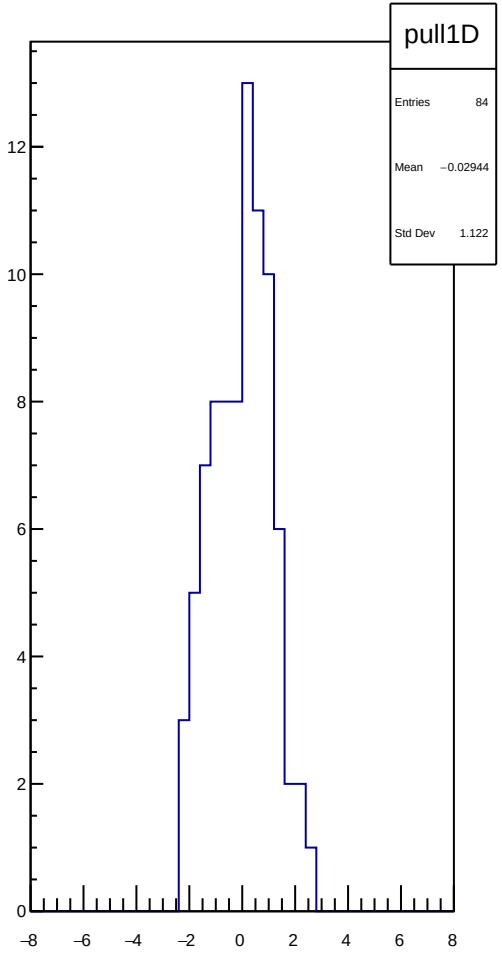

pull1D
Entries 84
Mean −0.01698
Std Dev 0.8698

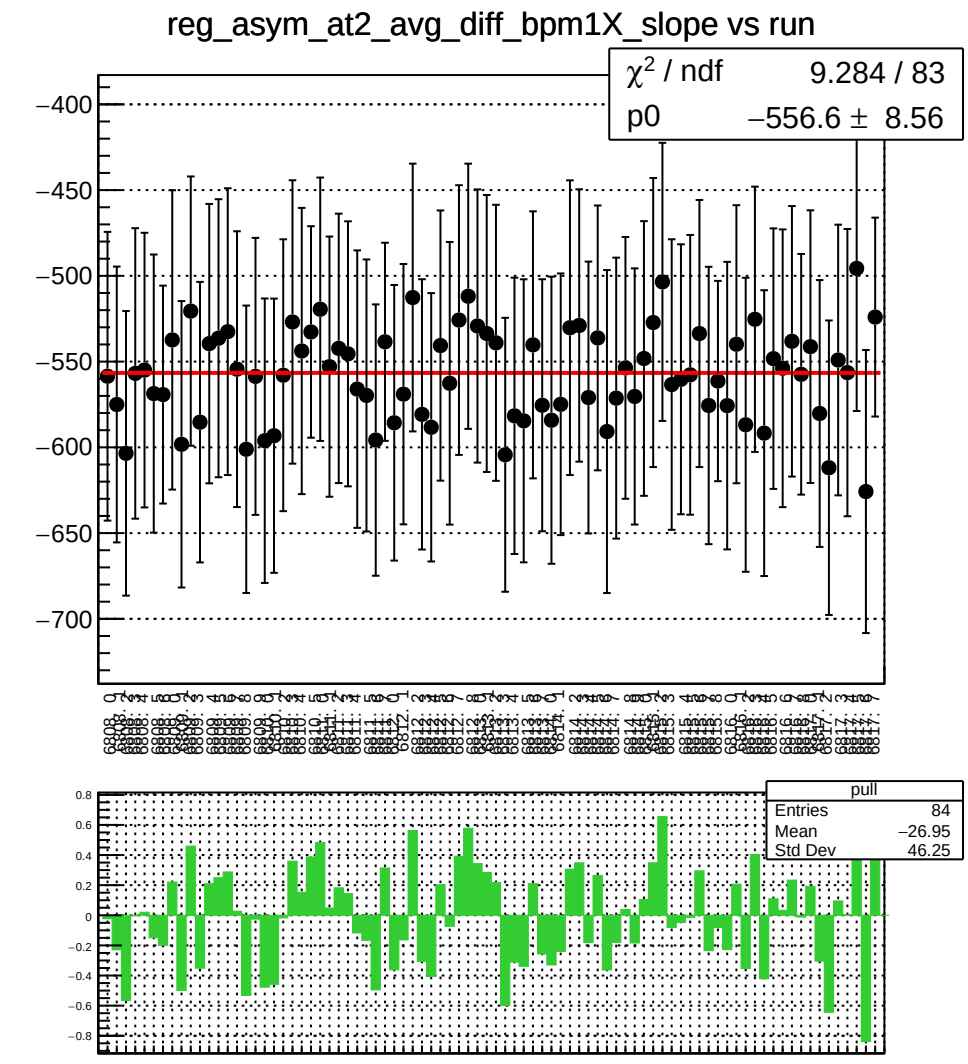

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 76.97 / 83
p0 38.53 ± 1.972
pull
Entries 84
Mean −989.6
Std Dev 1030

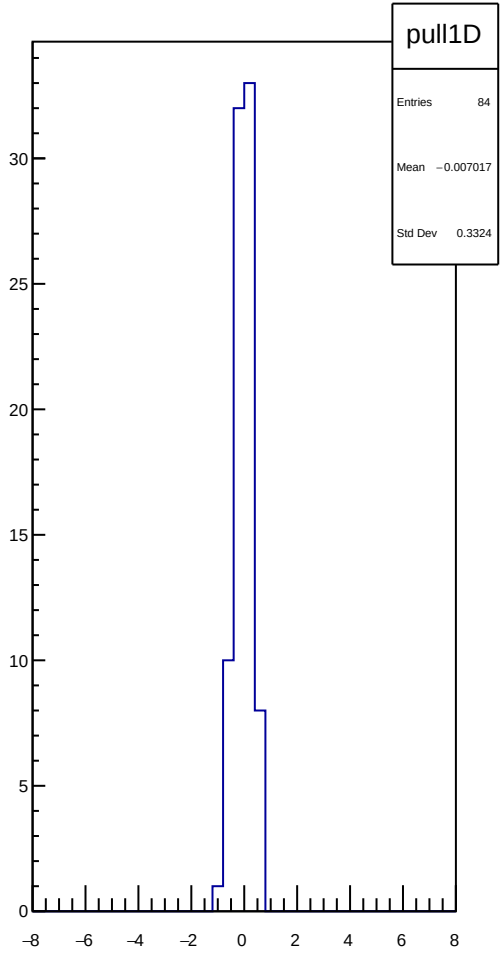

pull1D
Entries 84
Mean −0.001411
Std Dev 0.9572

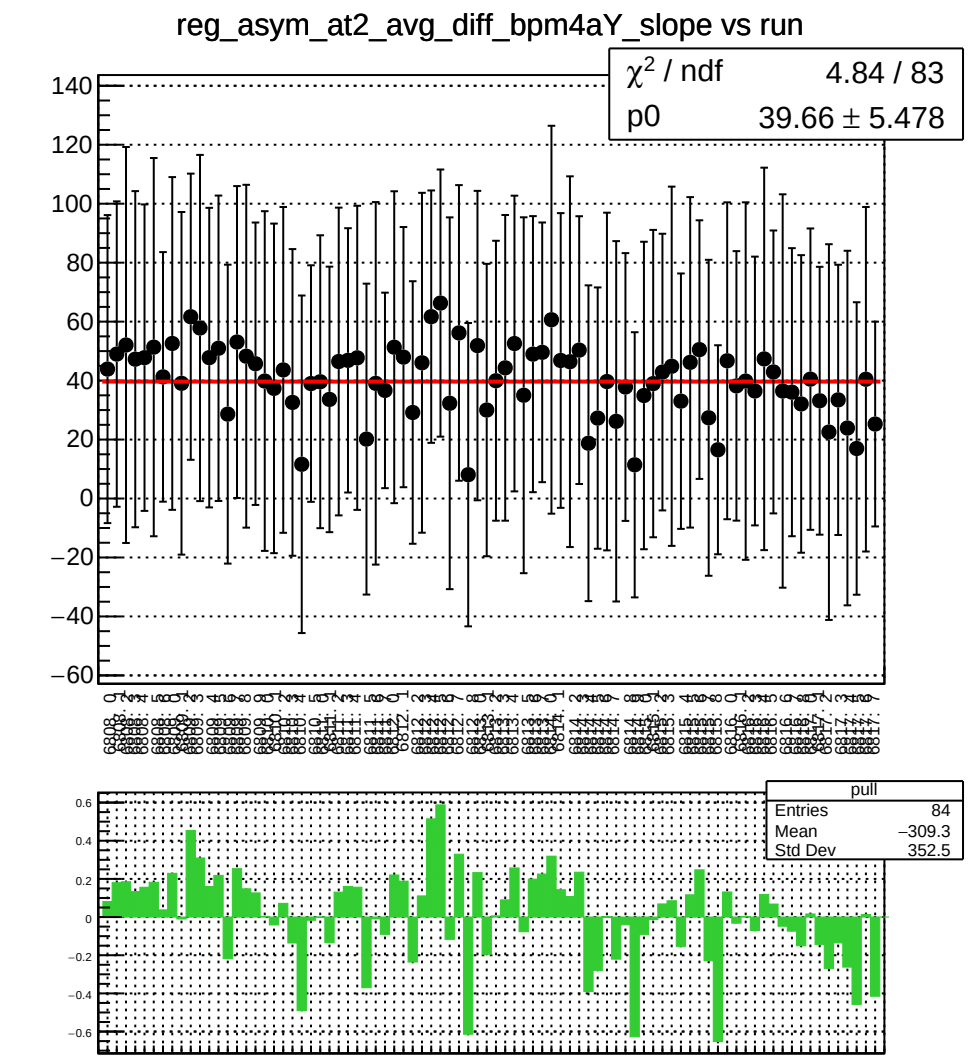

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 61.12 / 83
p0 2.911 ± 1.637
pull
Entries 84
Mean −237.7
Std Dev 270.1
pull1D
Entries 84
Mean 0.01008
Std Dev 0.8529

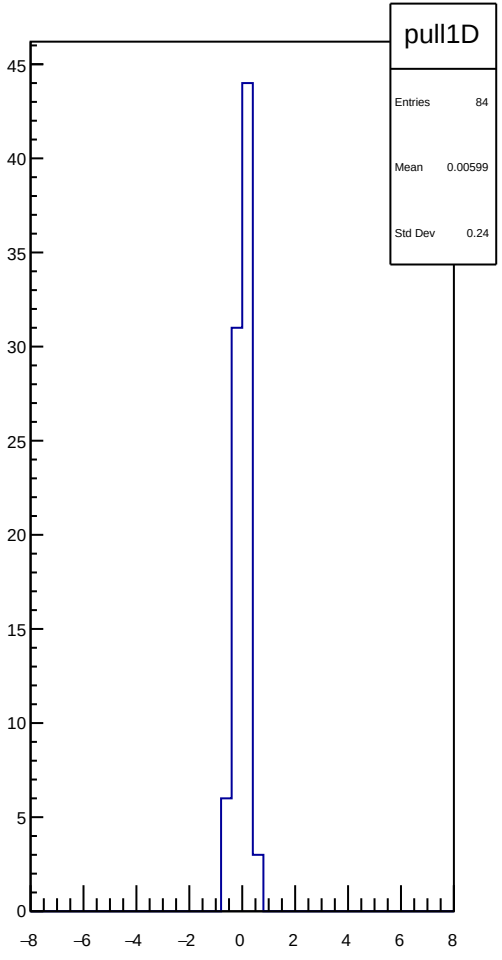

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 105.9 / 83
p0 −2.425 ± 0.08553
pull
Entries 84
Mean 60.5
Std Dev 42.89

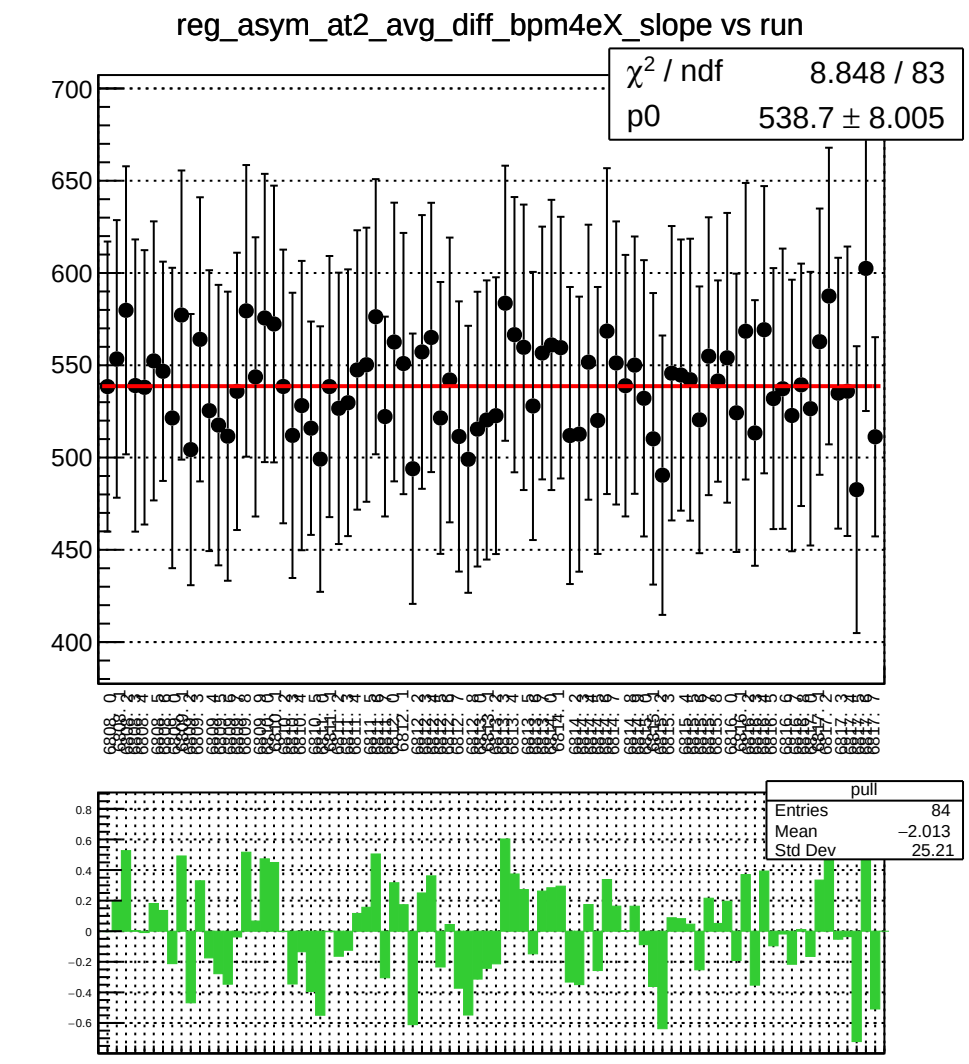

pull1D
Entries 84
Mean −0.02944
Std Dev 1.122

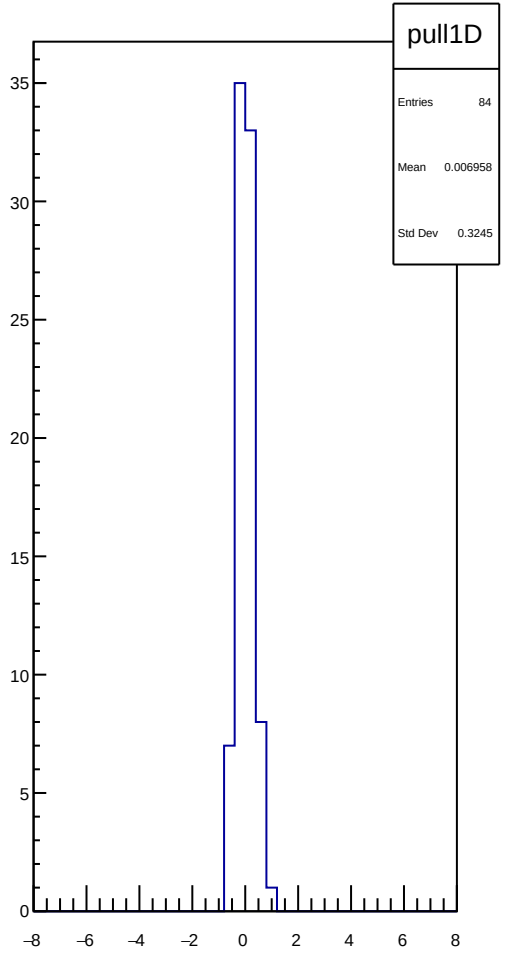

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 9.284 / 83
p0 −556.6 ± 8.56
−400
−450
−500
−550
−600
−650
−700
pull
Entries 84
Mean −26.95
Std Dev 46.25
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

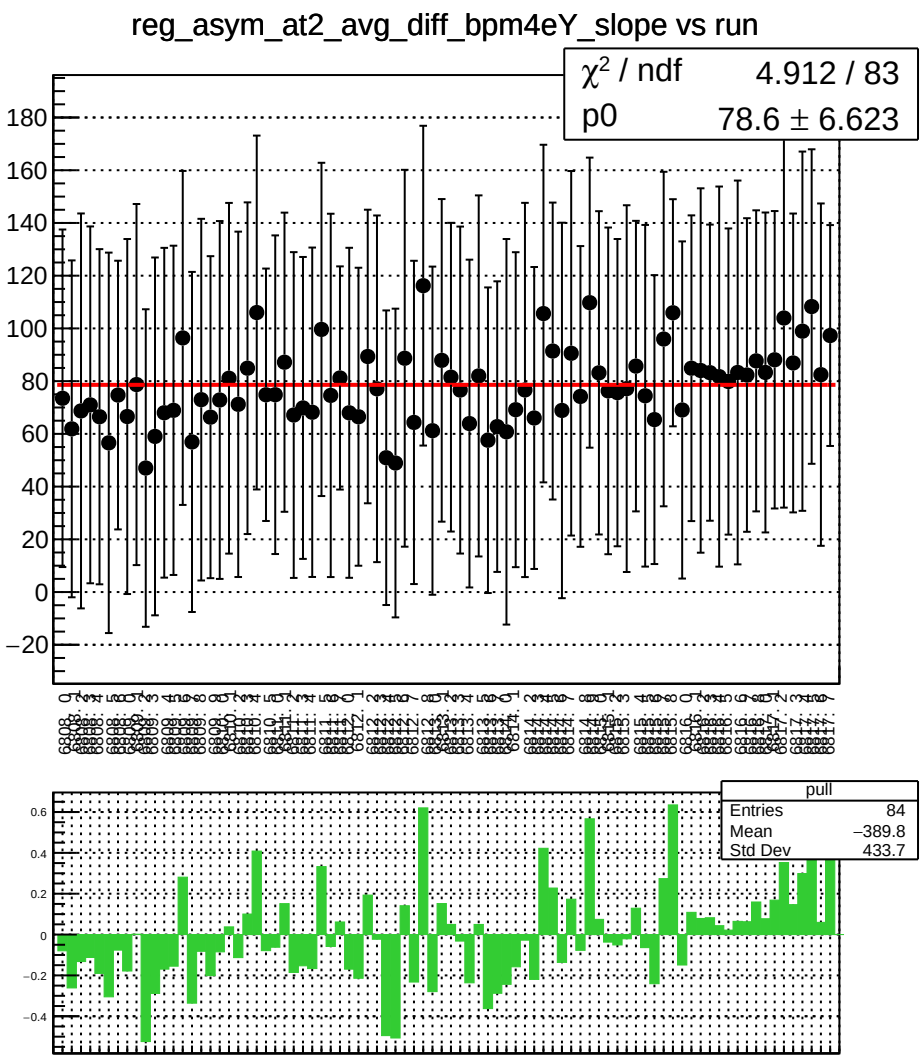

pull1D
Entries 84
Mean −0.007017
Std Dev 0.3324
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

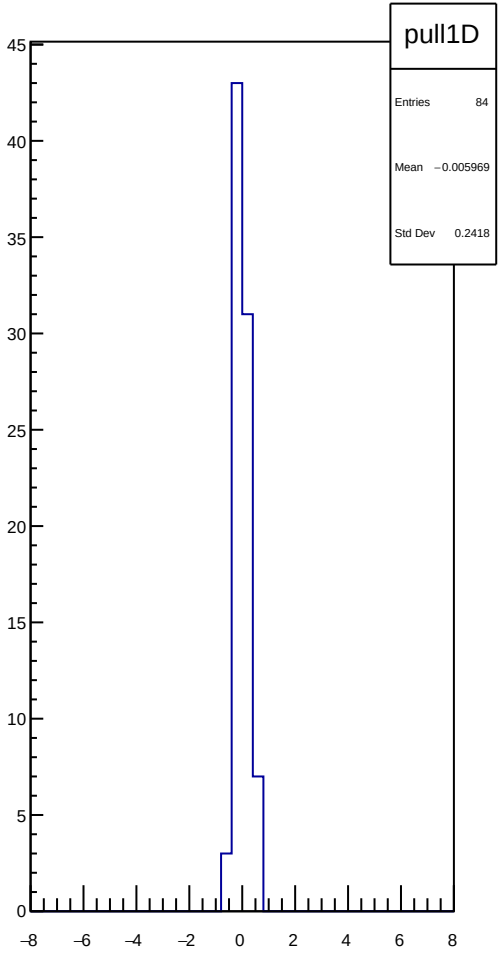

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.84 / 83
p0 39.66 ± 5.478
pull
Entries 84
Mean −309.3
Std Dev 352.5

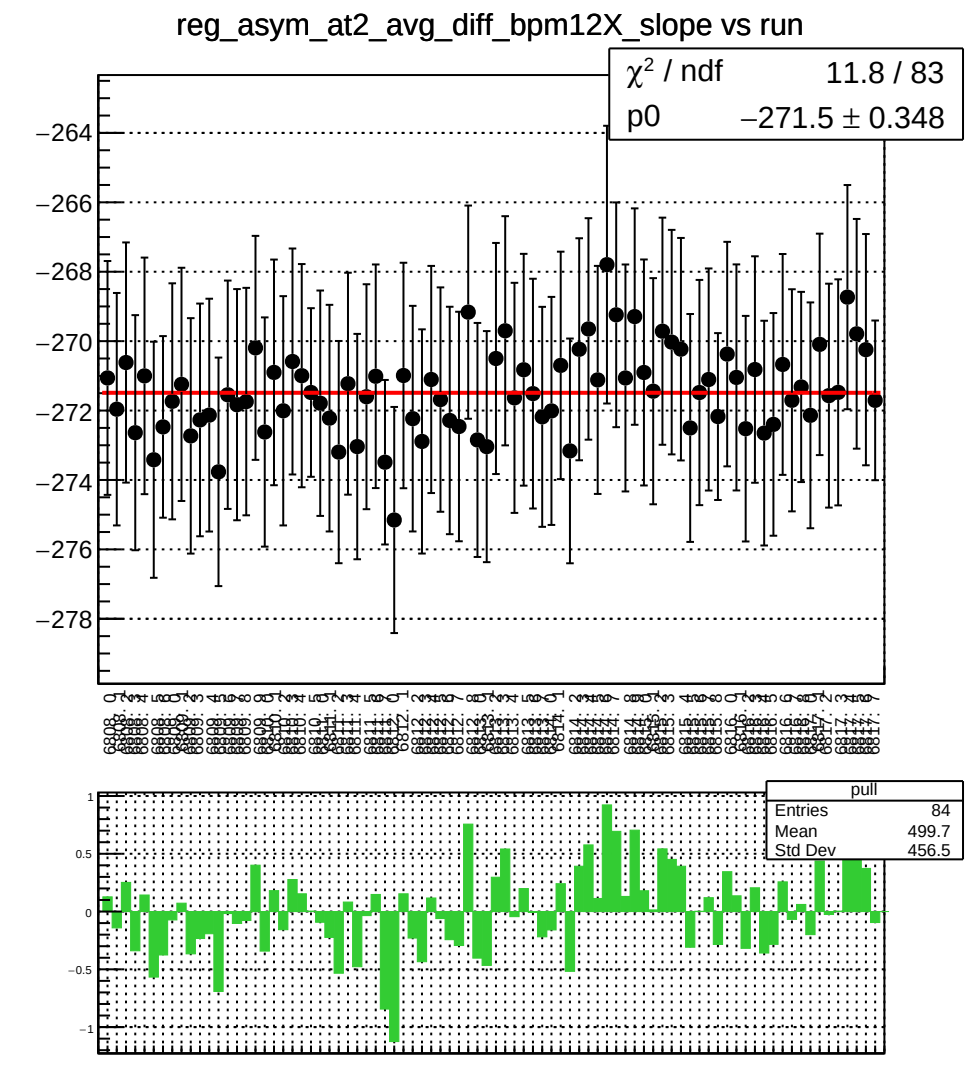

pull1D
Entries 84
Mean 0.00599
Std Dev 0.24

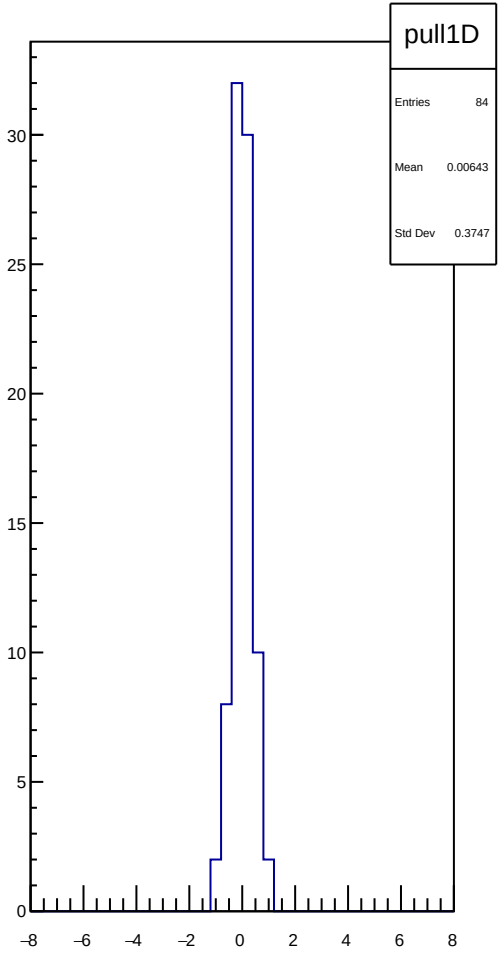

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.848 / 83
p0 538.7 ± 8.005
700
650
600
550
500
450
400
pull
Entries 84
Mean −2.013
Std Dev 25.21
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

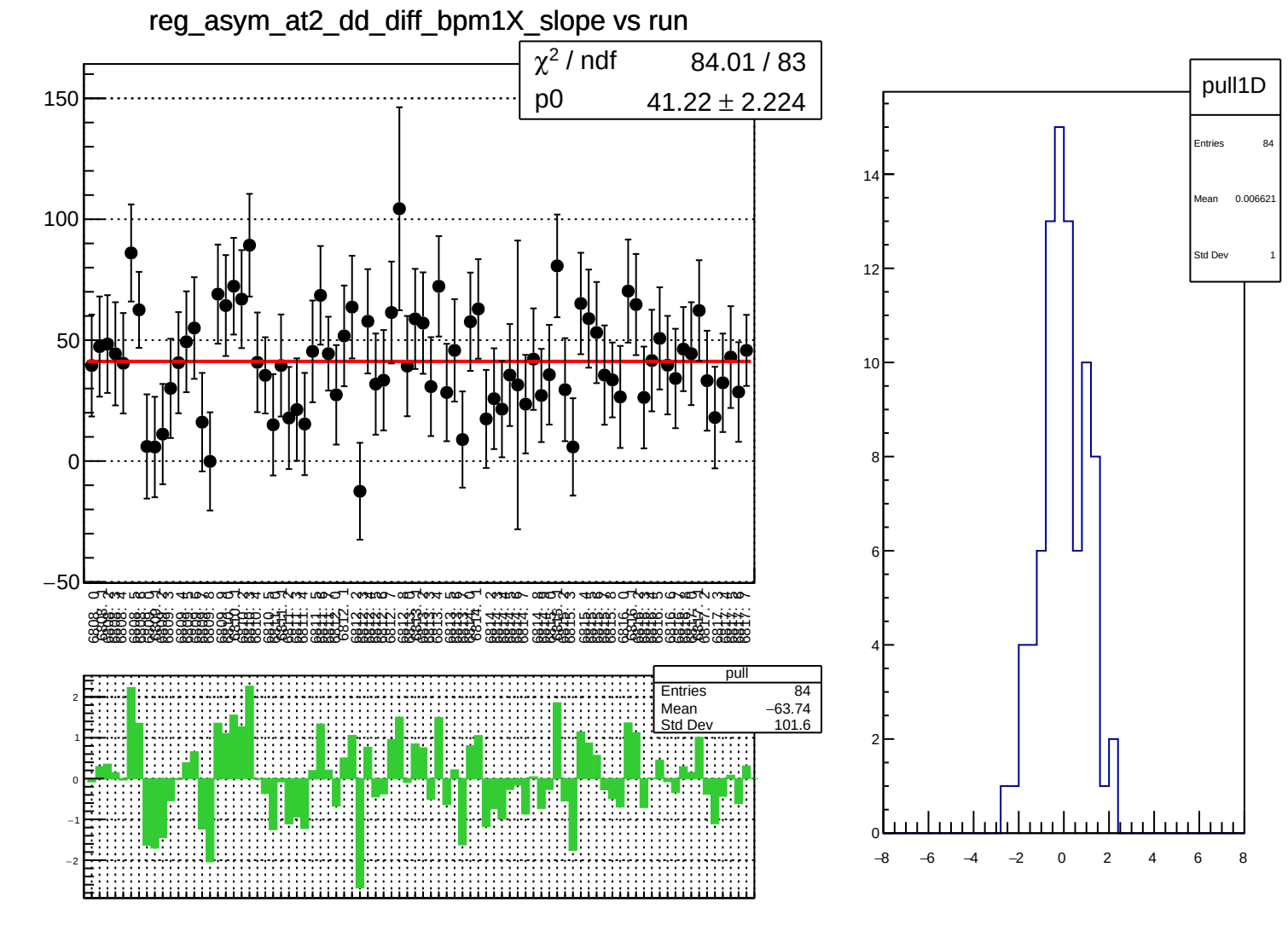

pull1D
Entries 84
Mean 0.006958
Std Dev 0.3245
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

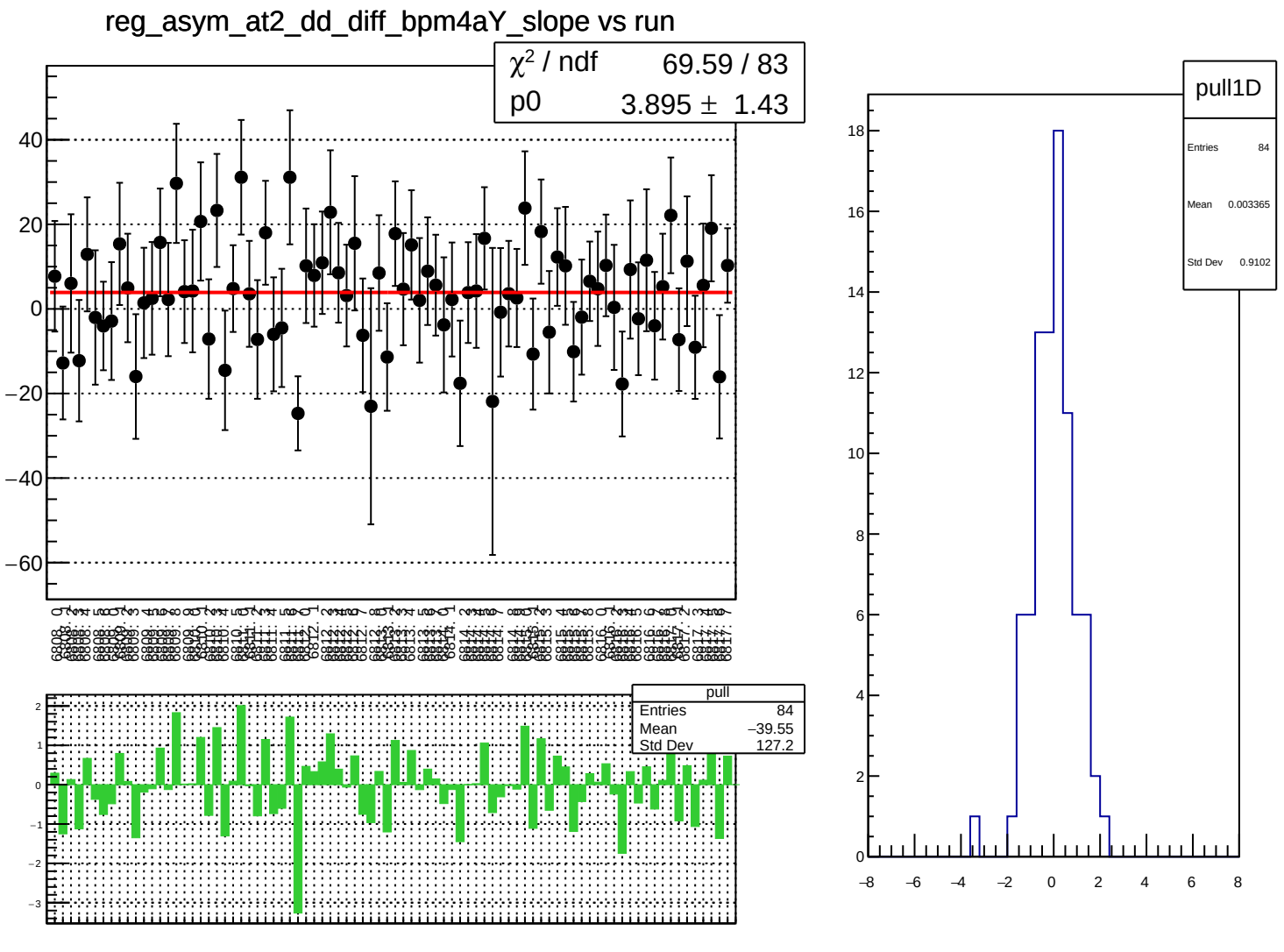

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.912 / 83
p0 78.6 ± 6.623
pull
Entries 84
Mean −389.8
Std Dev 433.7

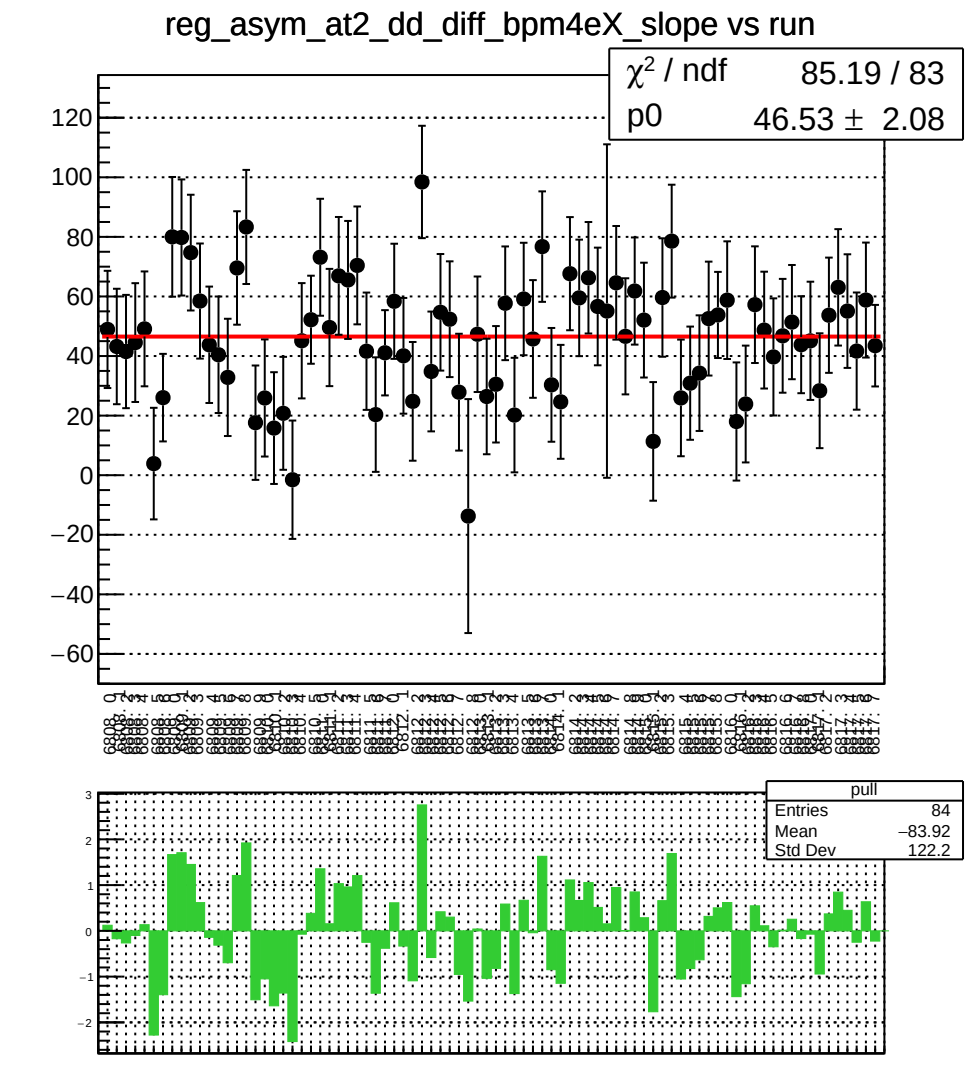

pull1D
Entries 84
Mean −0.005969
Std Dev 0.2418

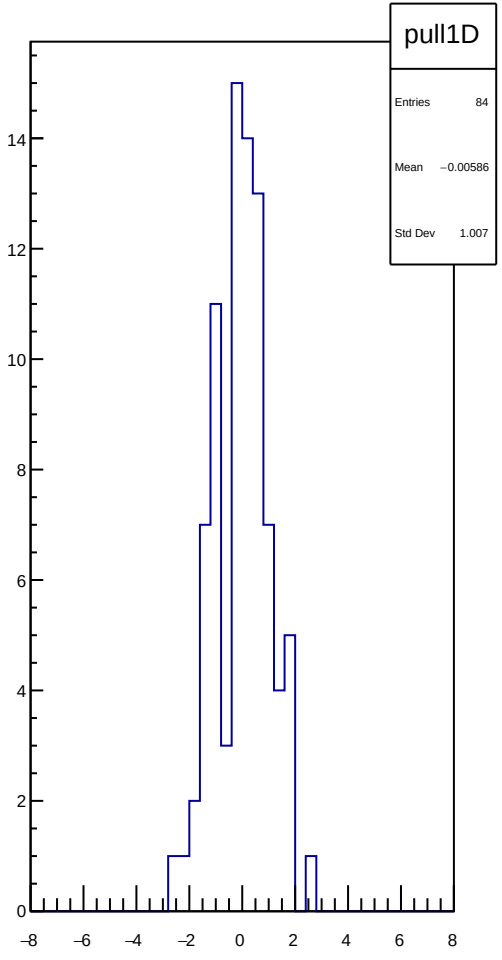

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 11.8 / 83
p0 −271.5 ± 0.348
−264
−266
−268
−270
−272
−274
−276
−278
pull
Entries 84
Mean 499.7
Std Dev 456.5
1
0.5
0
−0.5
−1

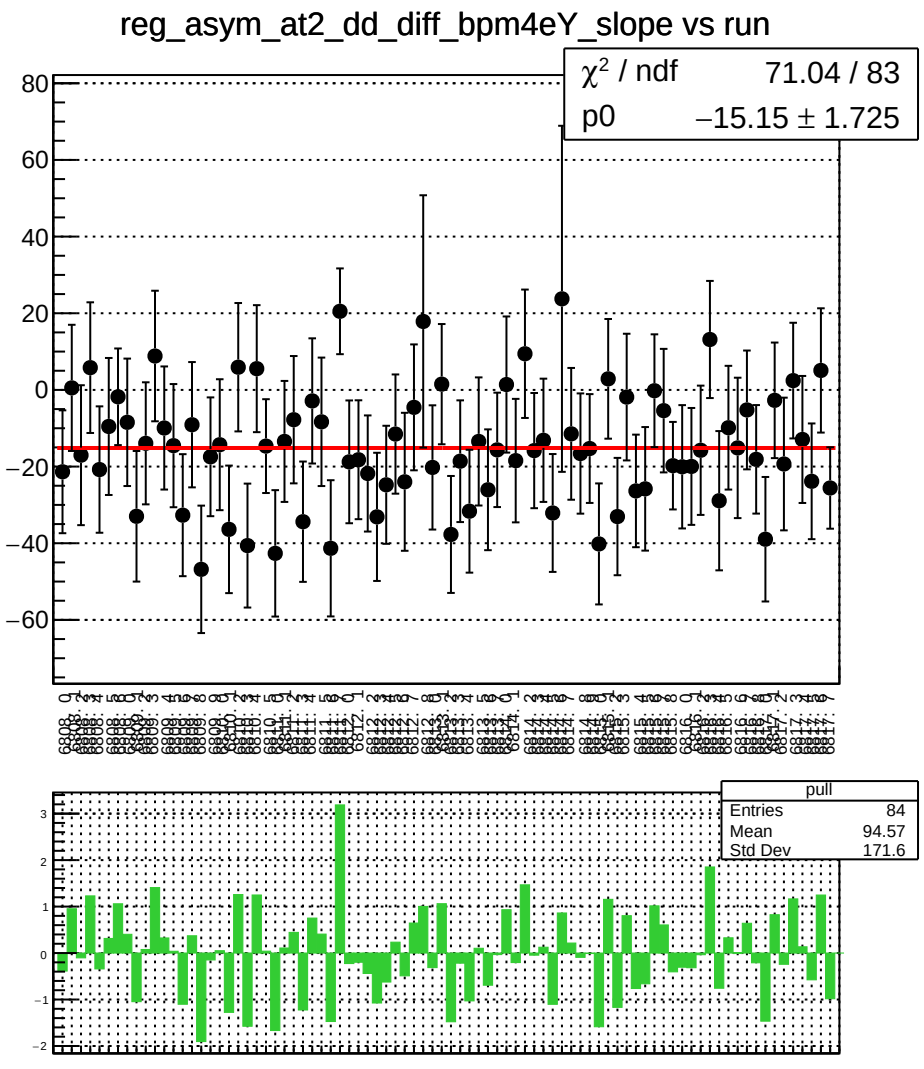

pull1D
Entries 84
Mean 0.00643
Std Dev 0.3747
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

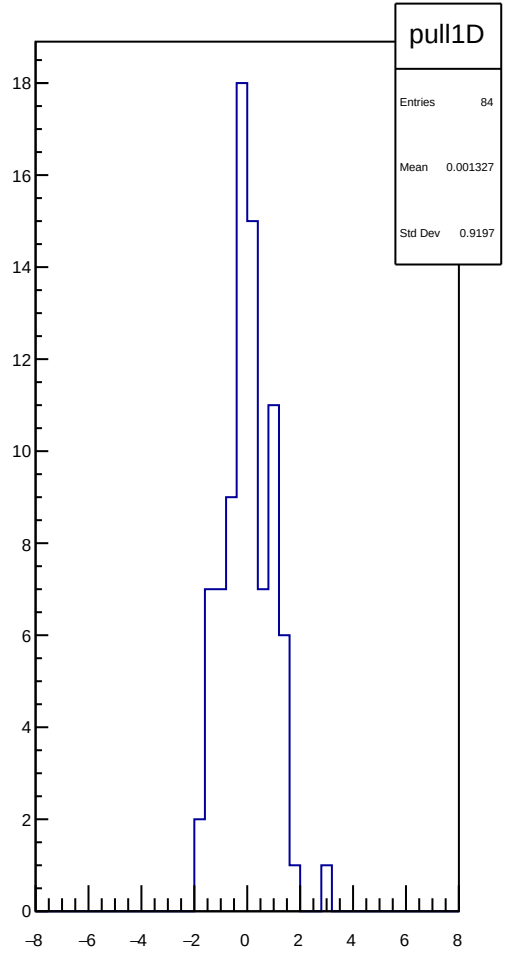

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 84.01 / 83
p0 41.22 ± 2.224
150
100
50
0
−50
pull
Entries 84
Mean −63.74
Std Dev 101.6
2
1
0
−1
−2
pull1D
Entries 84
Mean 0.006621
Std Dev 1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

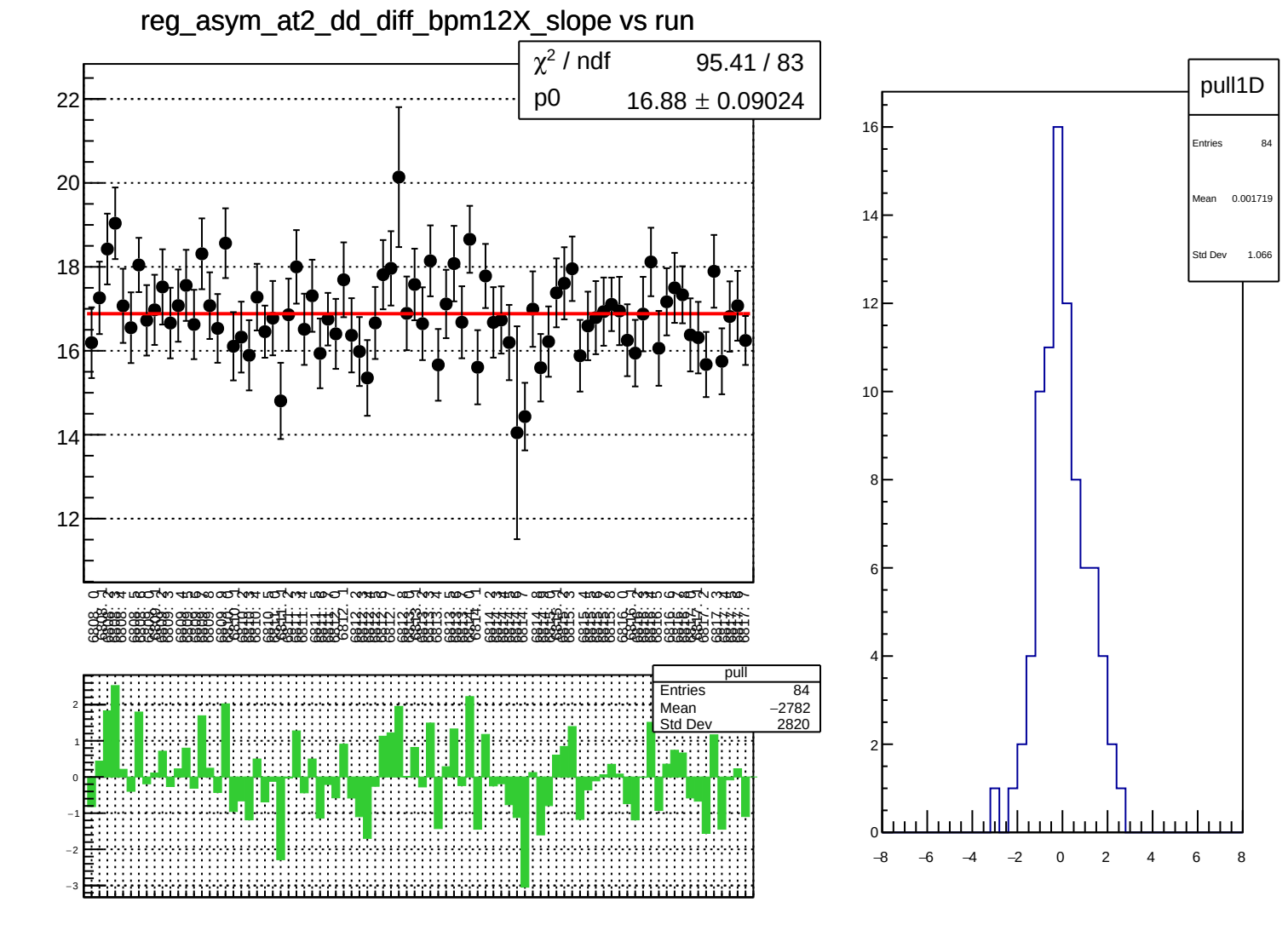

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 69.59 / 83
p0 3.895 ± 1.43
pull
Entries 84
Mean −39.55
Std Dev 127.2
pull1D
Entries 84
Mean 0.003365
Std Dev 0.9102

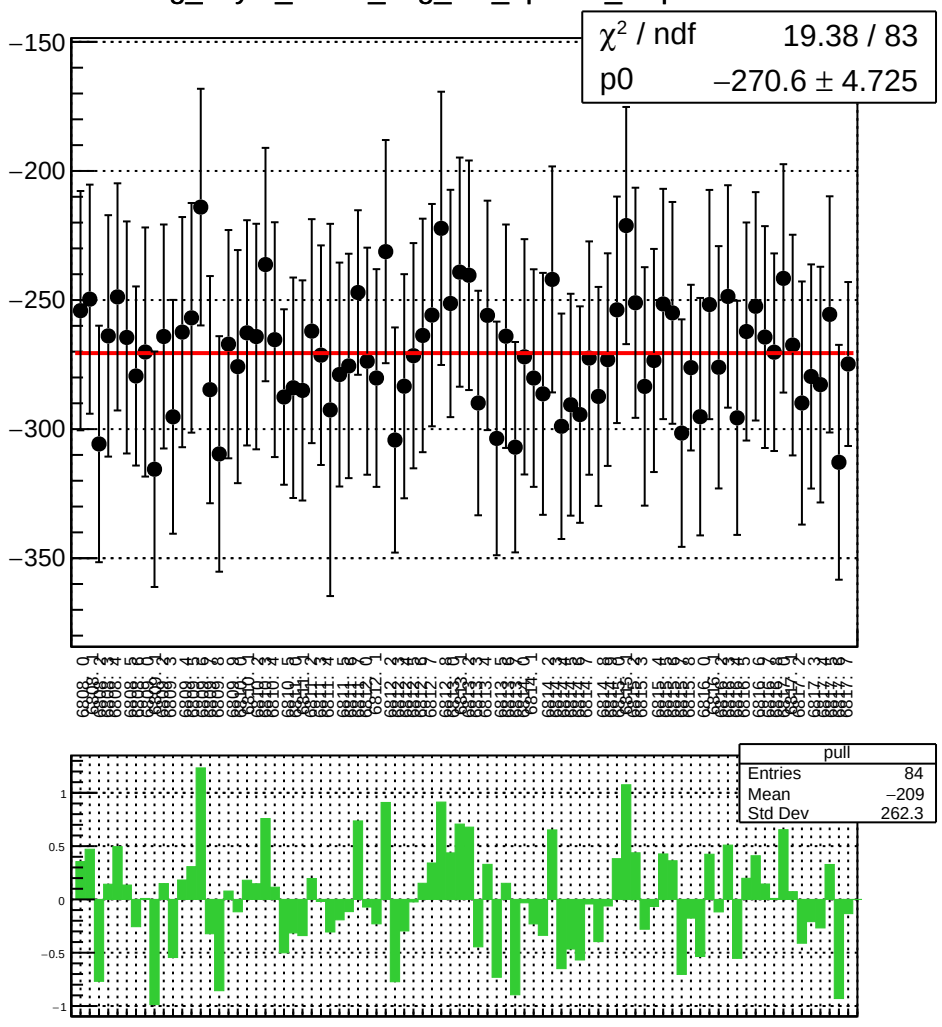

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 85.19 / 83
p0 46.53 ± 2.08
pull
Entries 84
Mean −83.92
Std Dev 122.2

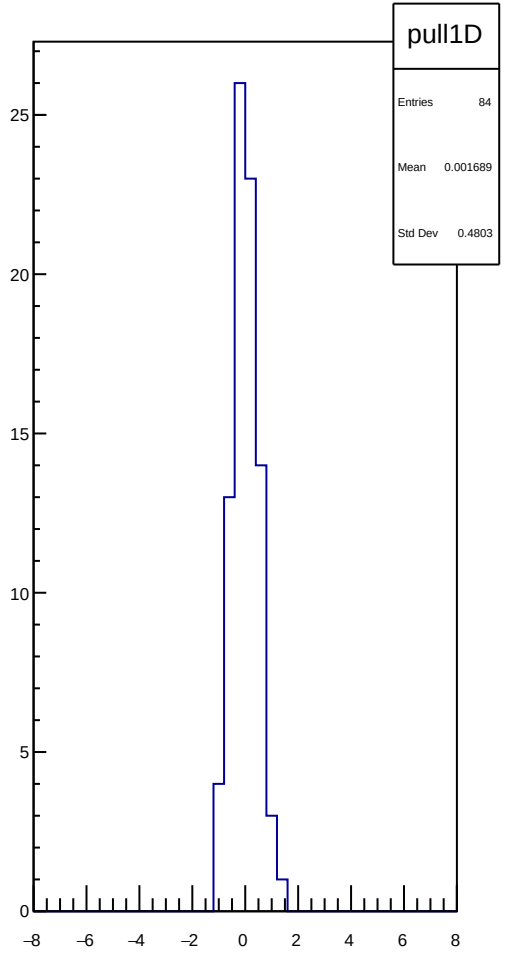

pull1D
Entries 84
Mean −0.00586
Std Dev 1.007

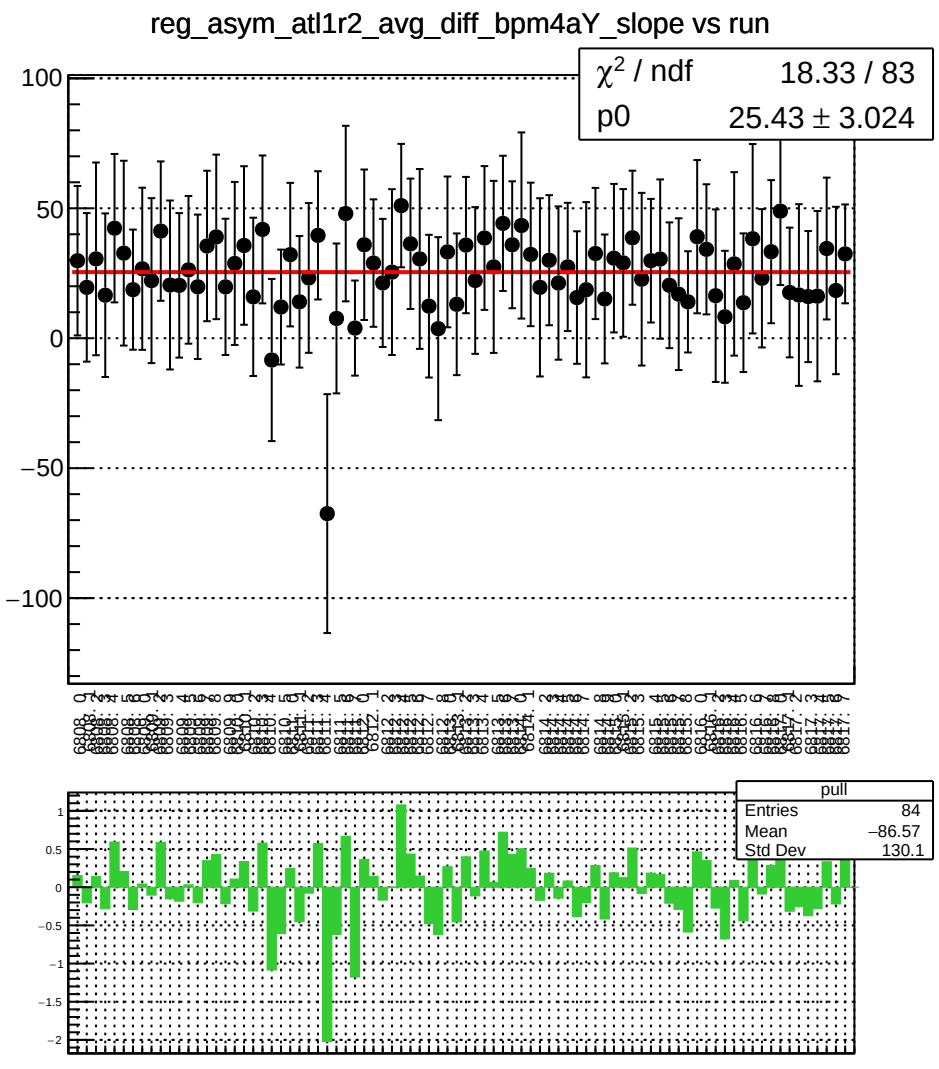

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 71.04 / 83
p0 −15.15 ± 1.725
pull
Entries 84
Mean 94.57
Std Dev 171.6

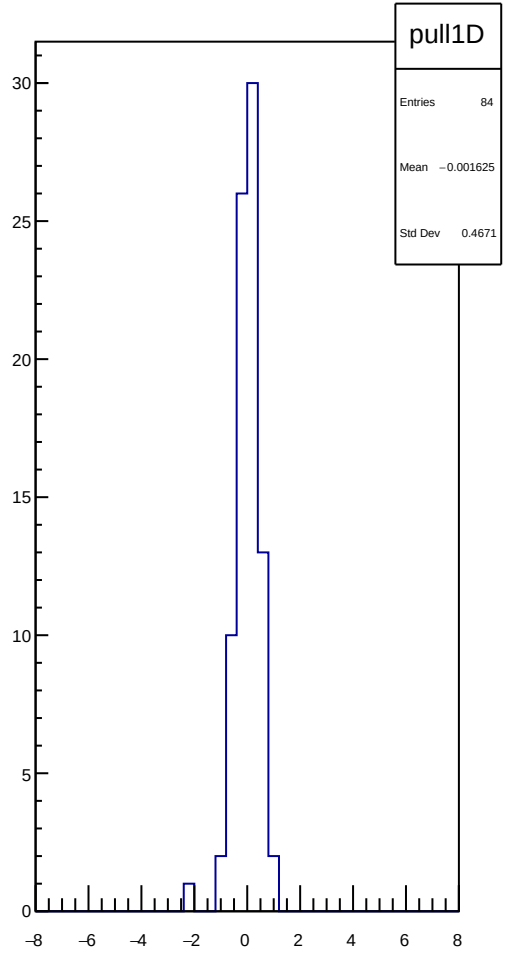

pull1D
Entries 84
Mean 0.001327
Std Dev 0.9197

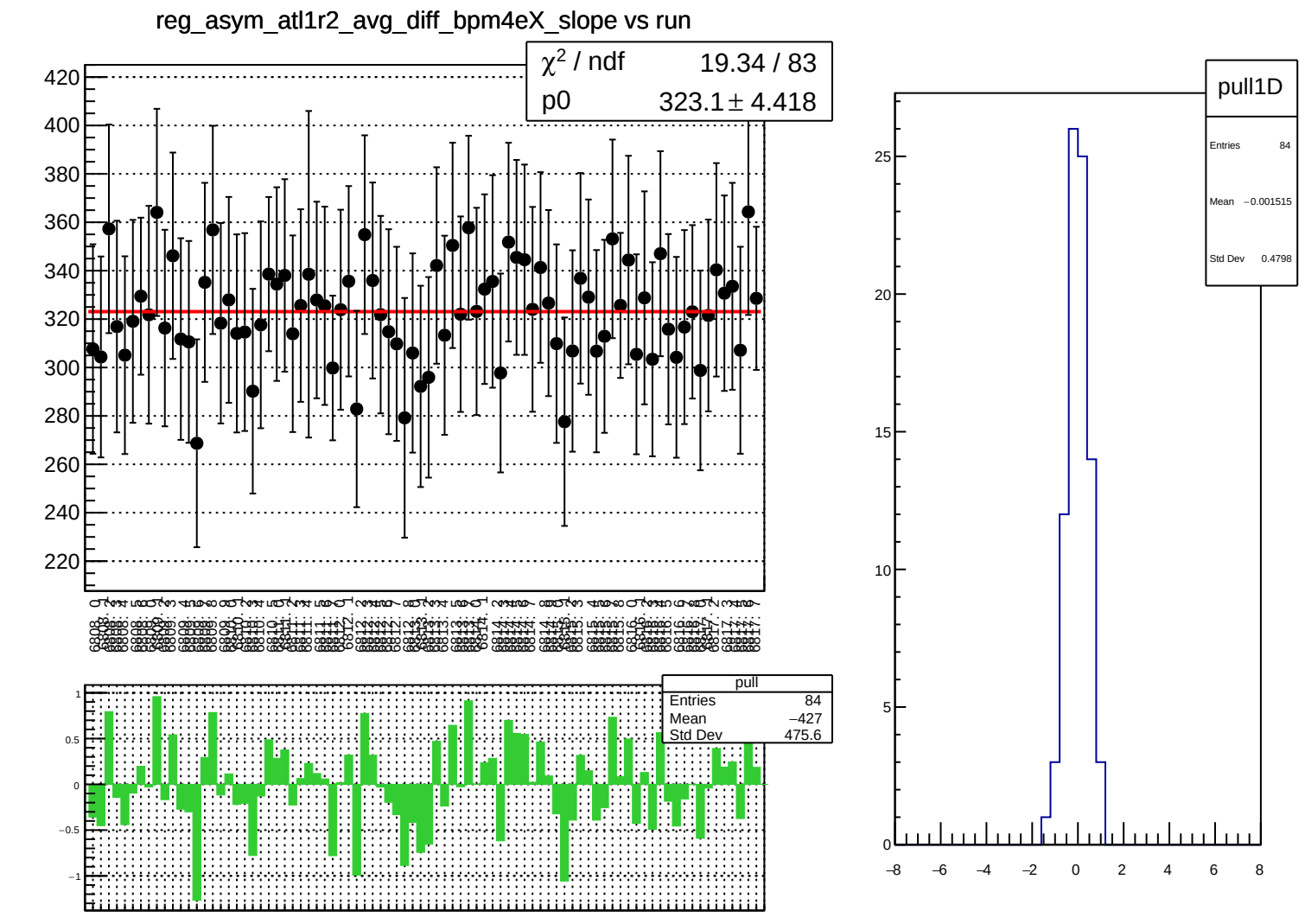

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 95.41 / 83
p0 16.88 ± 0.09024
pull
Entries 84
Mean −2782
Std Dev 2820
pull1D
Entries 84
Mean 0.001719
Std Dev 1.066

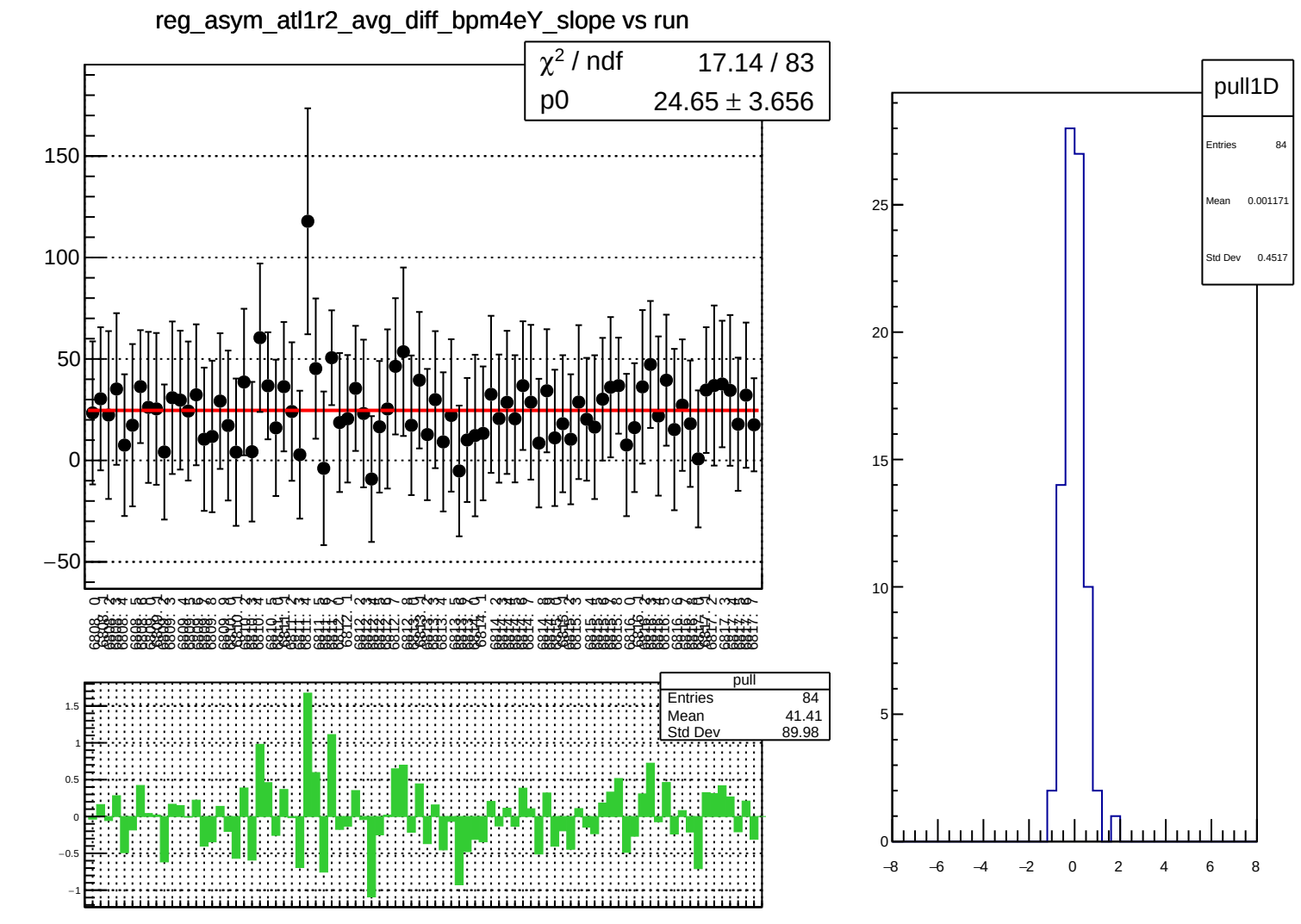

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 19.38 / 83
p0 −270.6 ± 4.725
−150
−200
−250
−300
−350
pull
Entries 84
Mean −209
Std Dev 262.3
1
0.5
0
−0.5
−1

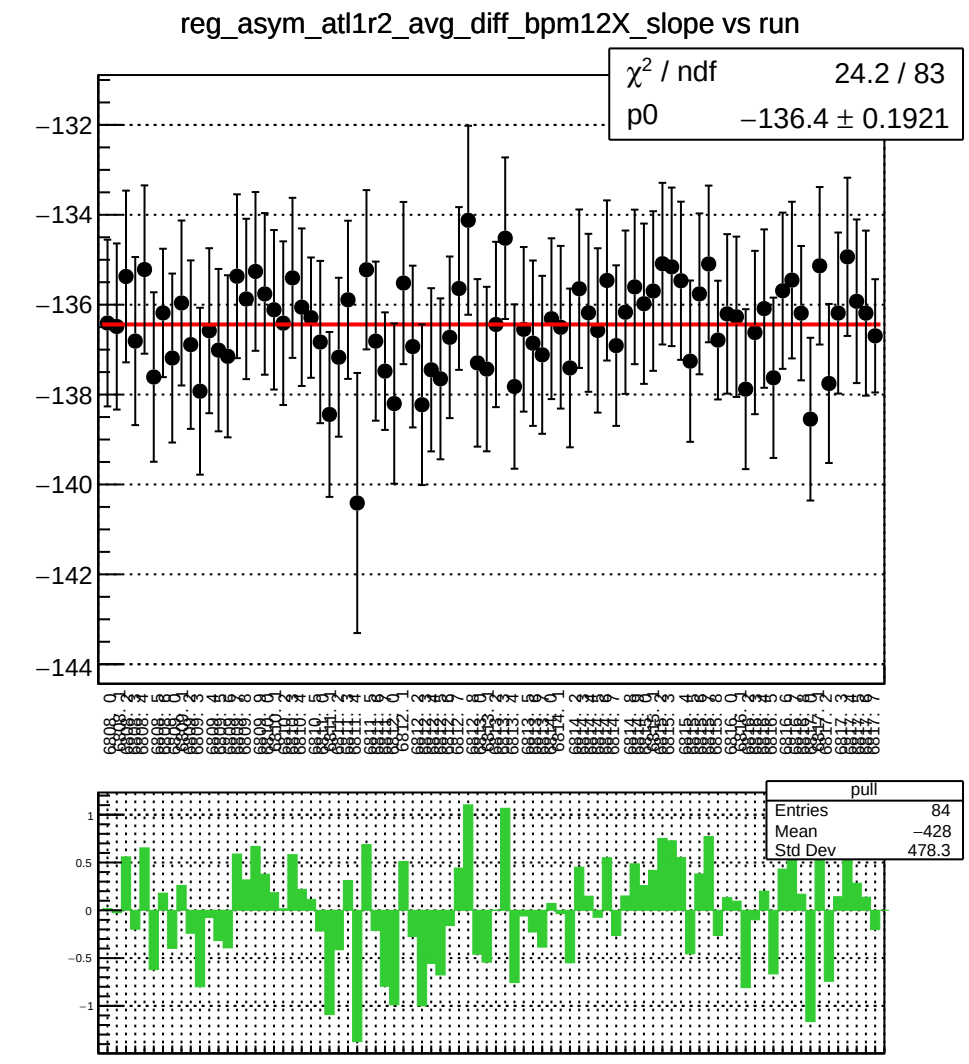

pull1D
Entries 84
Mean 0.001689
Std Dev 0.4803
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

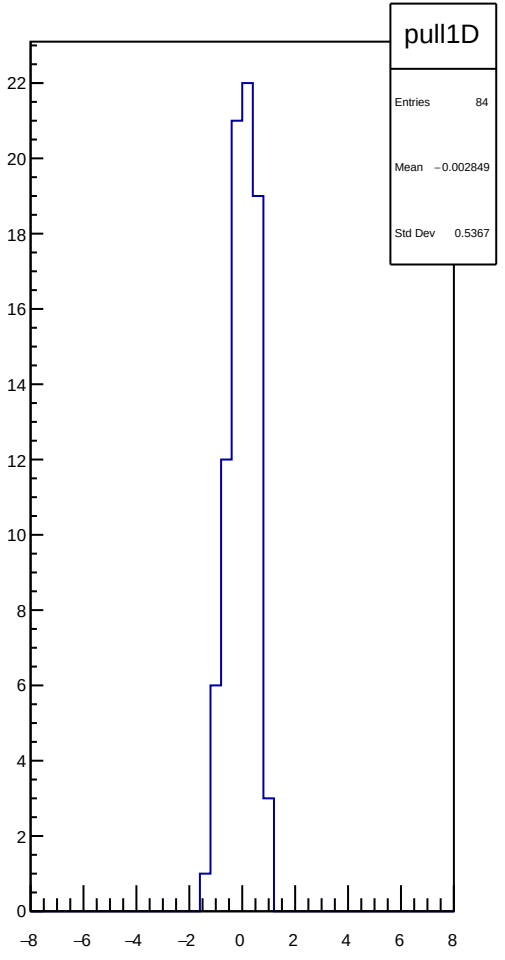

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 18.33 / 83
p0 25.43 ± 3.024
100
50
0
−50
−100
pull
Entries 84
Mean −86.57
Std Dev 130.1
1
0.5
0
−0.5
−1
−1.5
−2

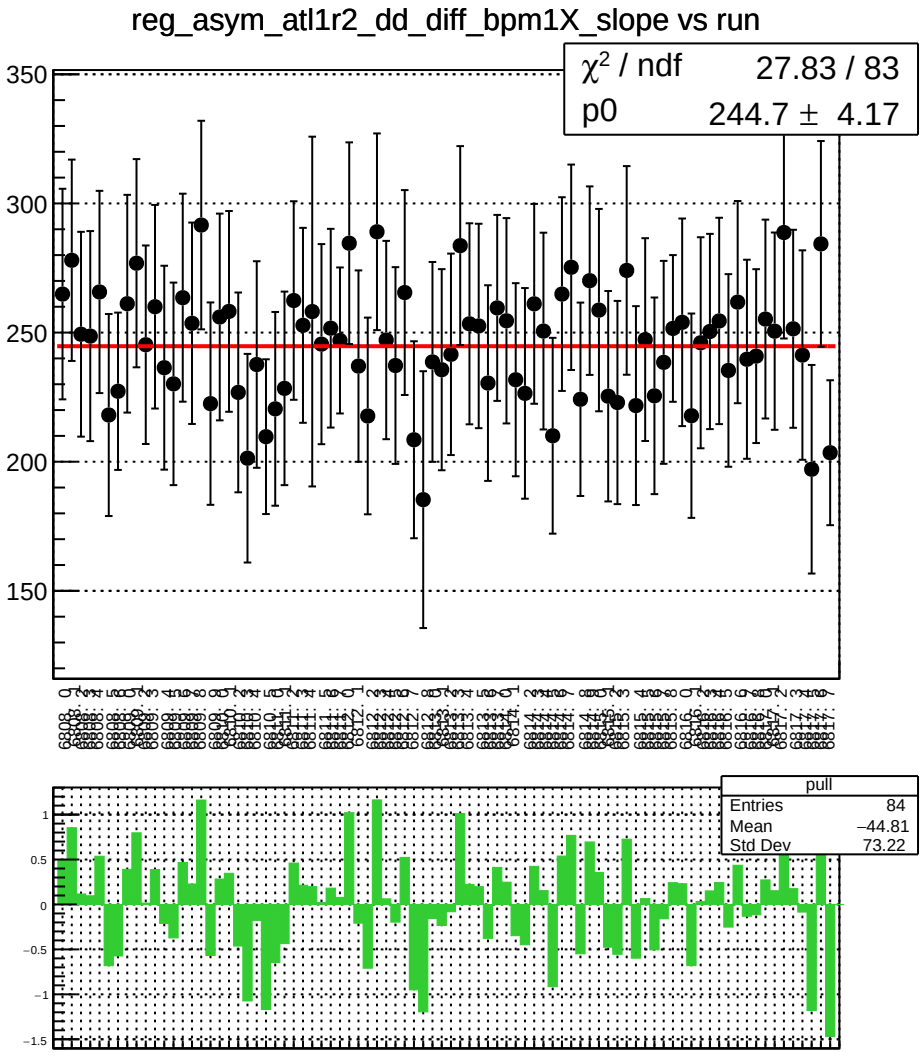

pull1D
Entries 84
Mean −0.001625
Std Dev 0.4671
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

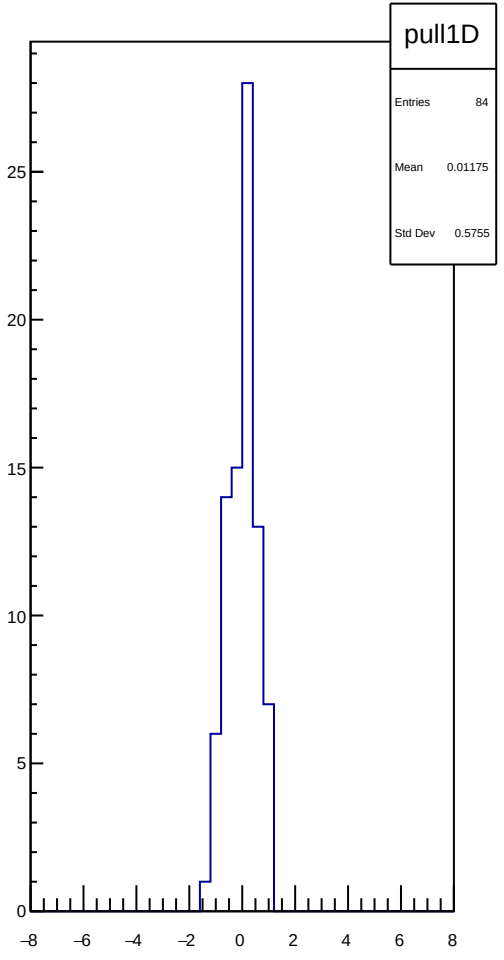

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 19.34 / 83
p0 323.1 ± 4.418
pull
Entries 84
Mean −427
Std Dev 475.6
pull1D
Entries 84
Mean −0.001515
Std Dev 0.4798

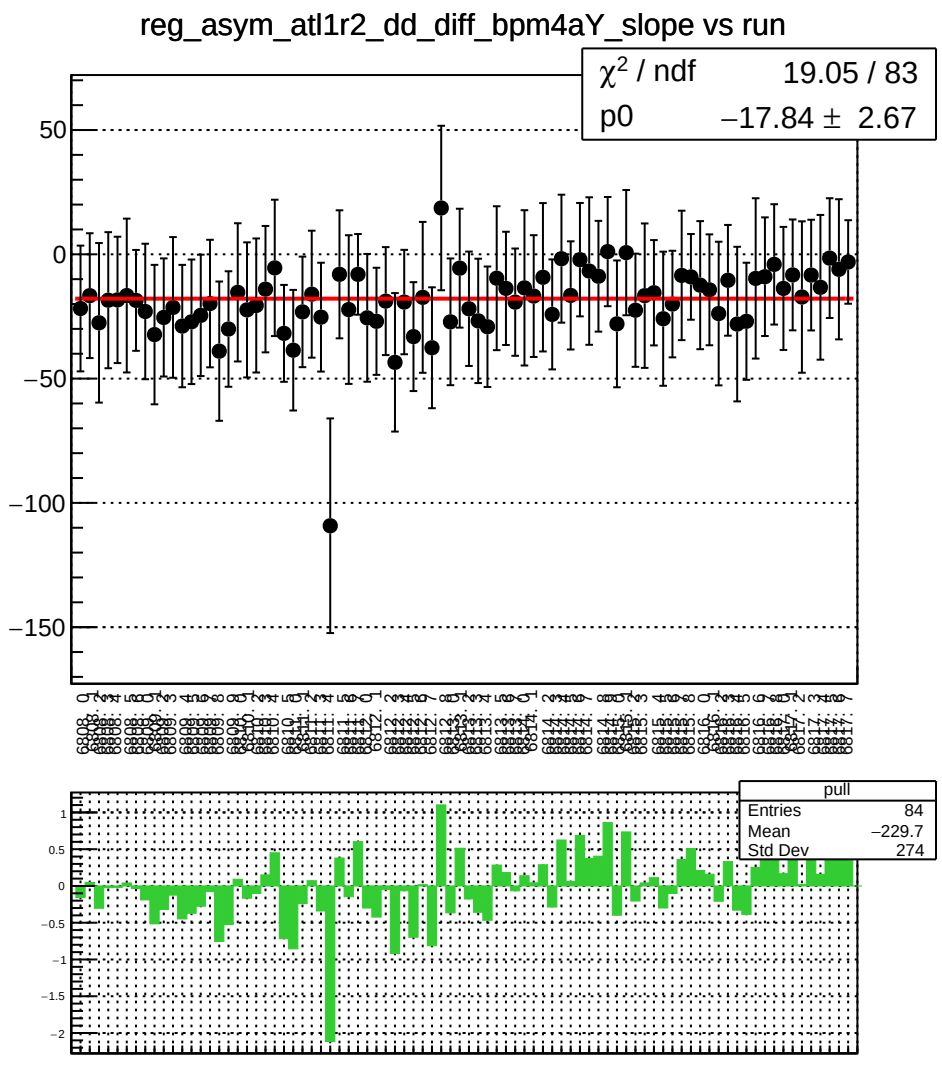

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 17.14 / 83
p0 24.65 ± 3.656
150
100
50
0
−50
pull
Entries 84
Mean 41.41
Std Dev 89.98
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean 0.001171
Std Dev 0.4517
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

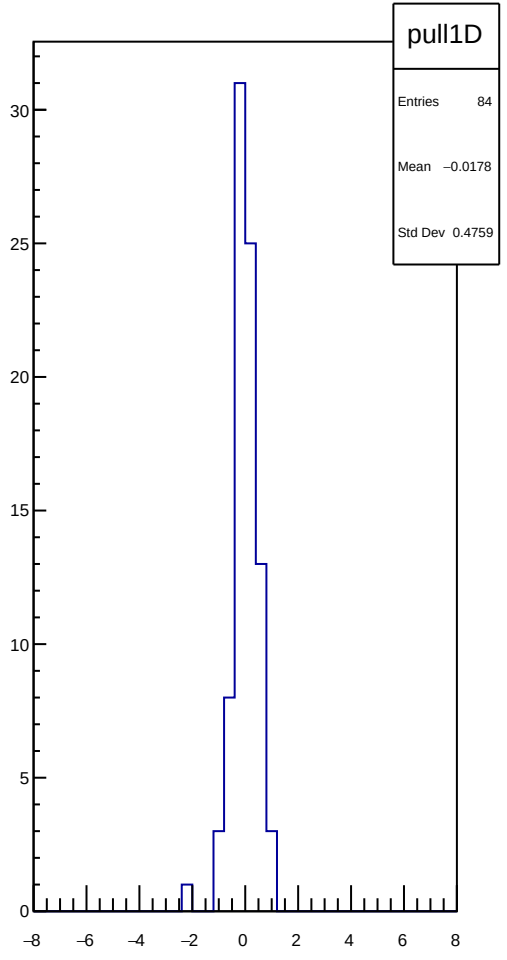

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 24.2 / 83
p0 −136.4 ± 0.1921
pull
Entries 84
Mean −428
Std Dev 478.3

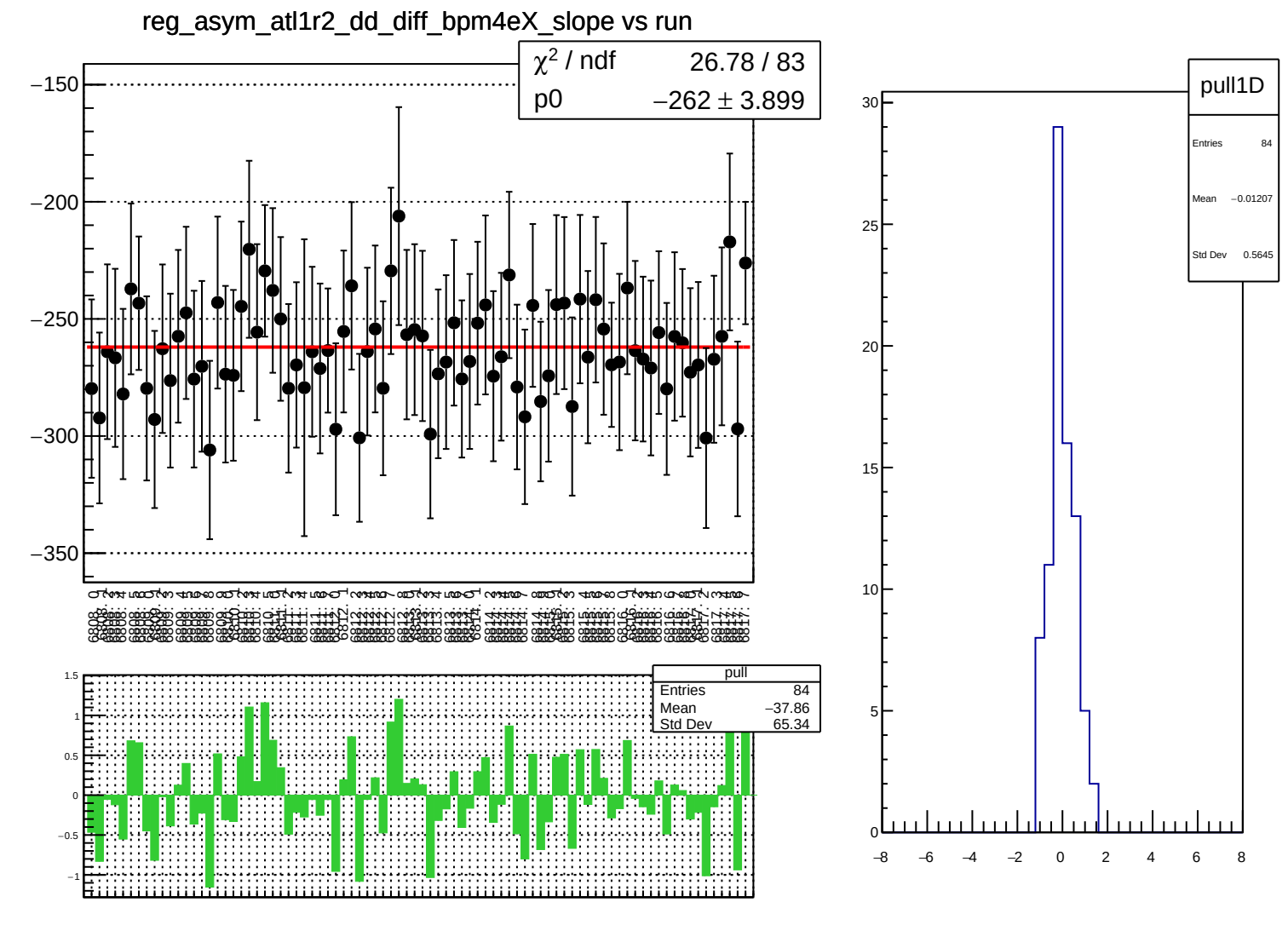

pull1D
Entries 84
Mean −0.002849
Std Dev 0.5367

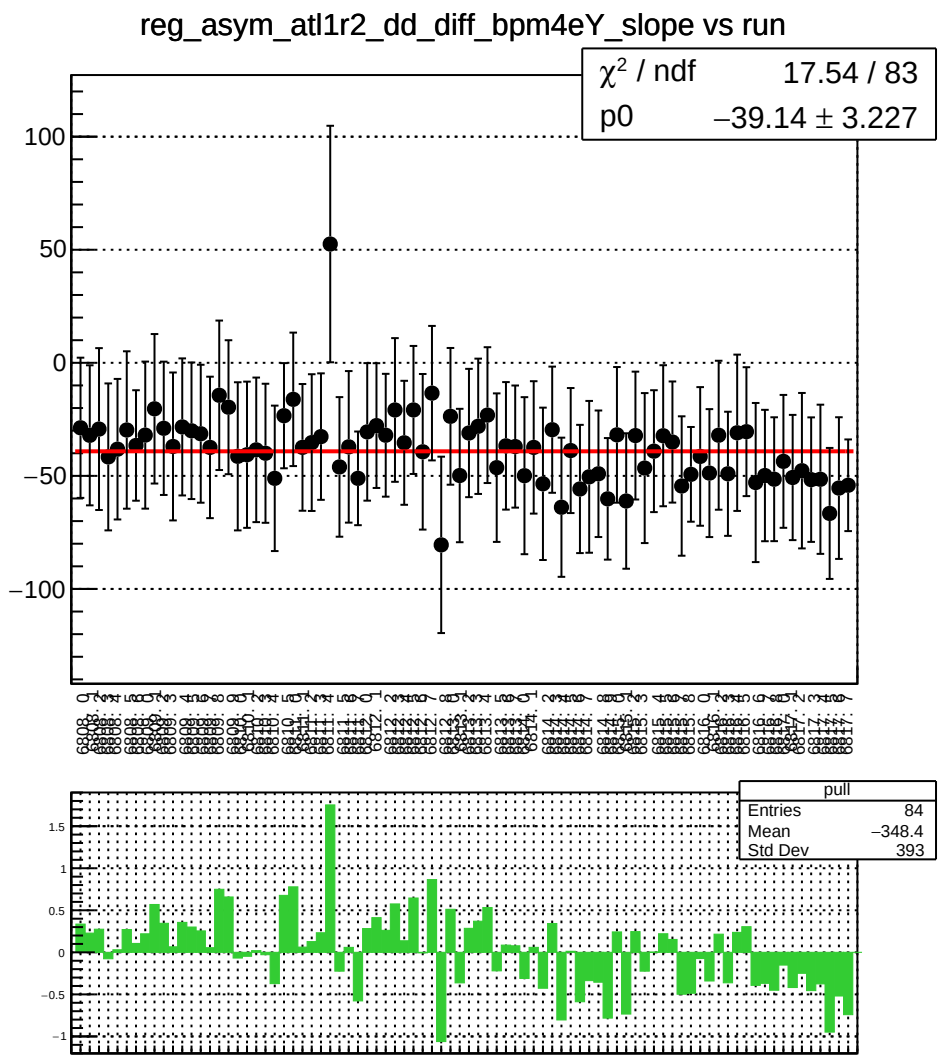

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 27.83 / 83
p0 244.7 ± 4.17
350
300
250
200
150
pull
Entries 84
Mean −44.81
Std Dev 73.22
1
0.5
0
−0.5
−1
−1.5

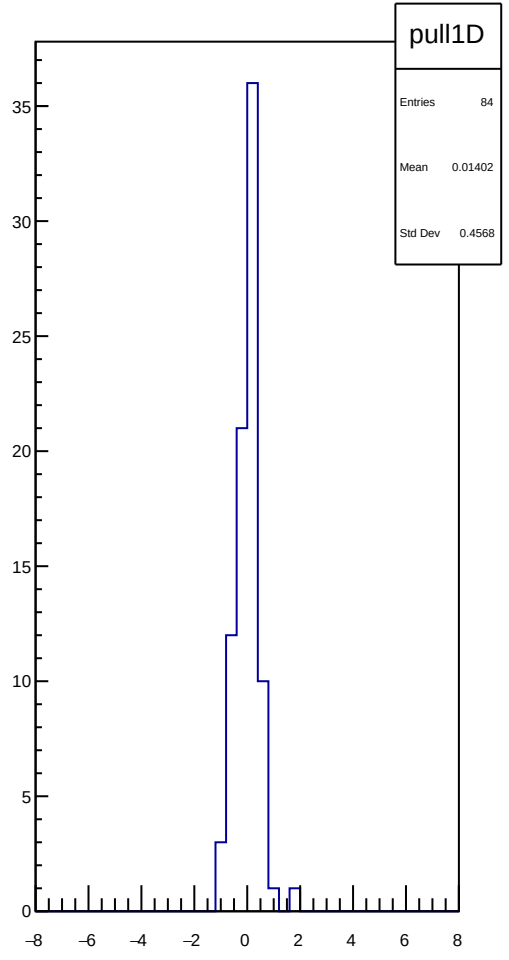

pull1D
Entries 84
Mean 0.01175
Std Dev 0.5755
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

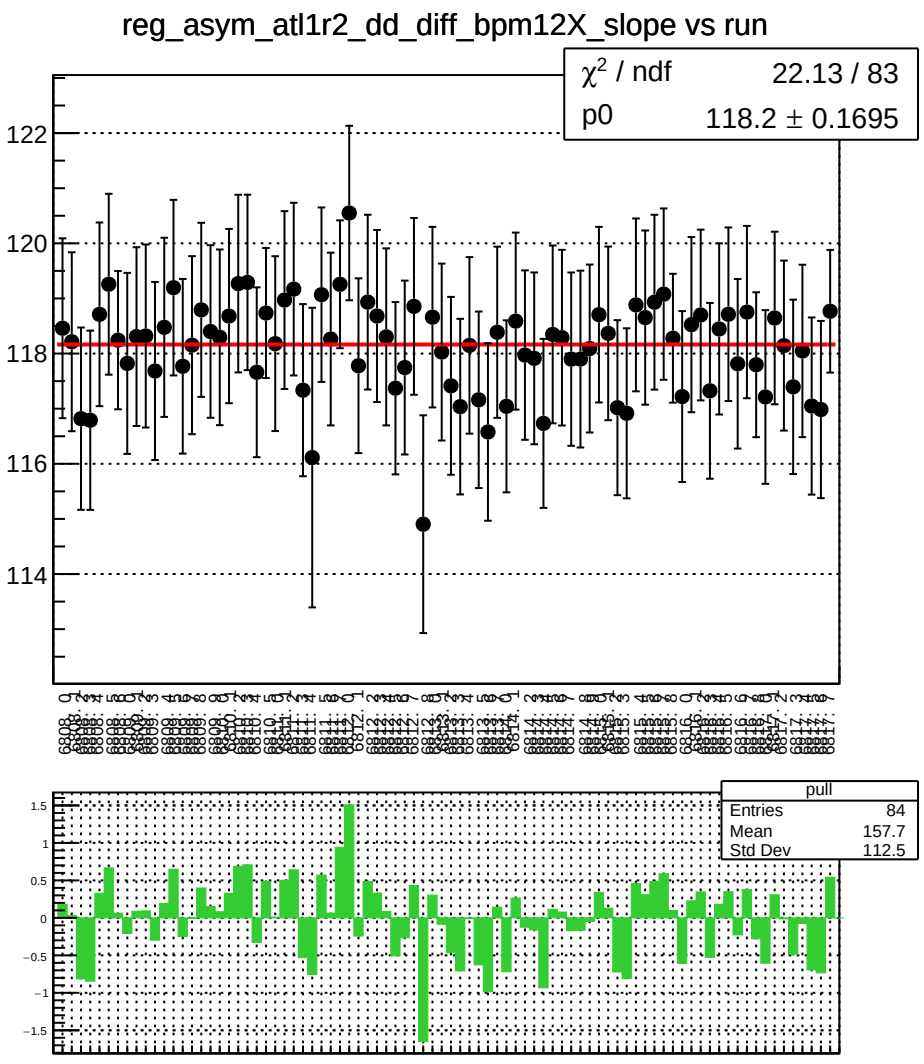

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 19.05 / 83
p0 −17.84 ± 2.67
50
0
−50
−100
−150
pull
Entries 84
Mean −229.7
Std Dev 274
1
0.5
0
−0.5
−1
−1.5
−2

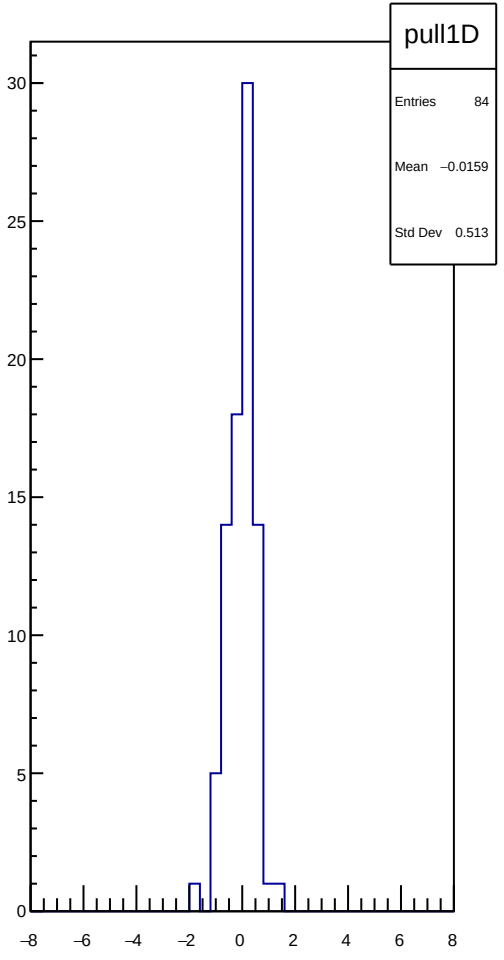

pull1D
Entries 84
Mean −0.0178
Std Dev 0.4759
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

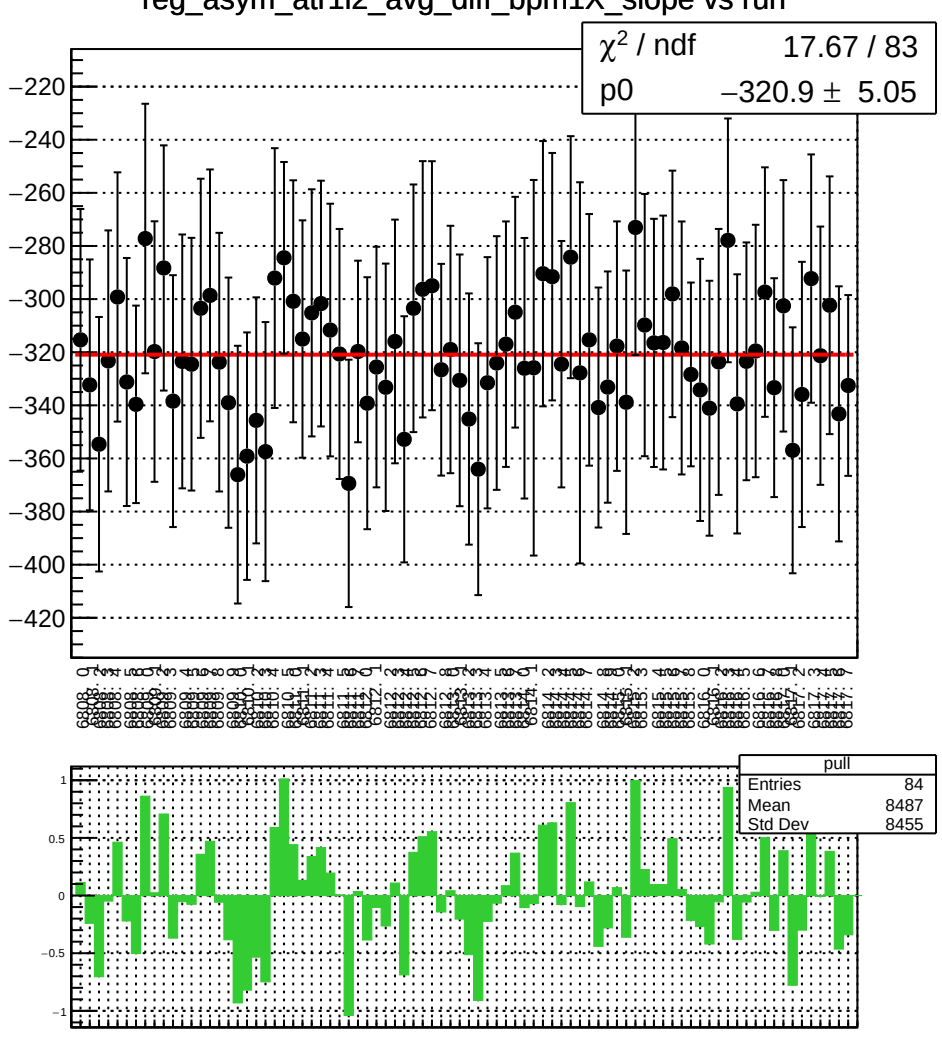

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 26.78 / 83
p0 −262 ± 3.899
−150
−200
−250
−300
−350
pull
Entries 84
Mean −37.86
Std Dev 65.34
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.01207
Std Dev 0.5645
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

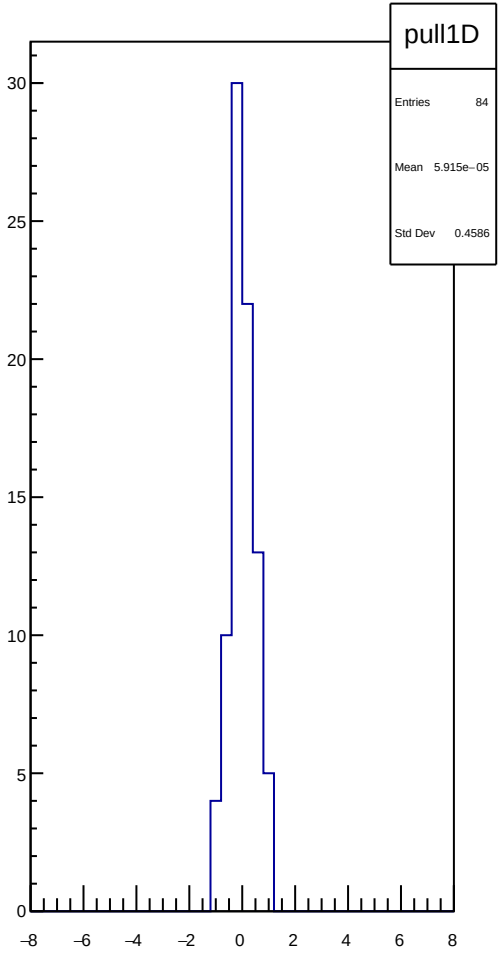

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 17.54 / 83
p0 −39.14 ± 3.227
100
50
0
−50
−100
pull
Entries 84
Mean −348.4
Std Dev 393
1.5
1
0.5
0
−0.5
−1

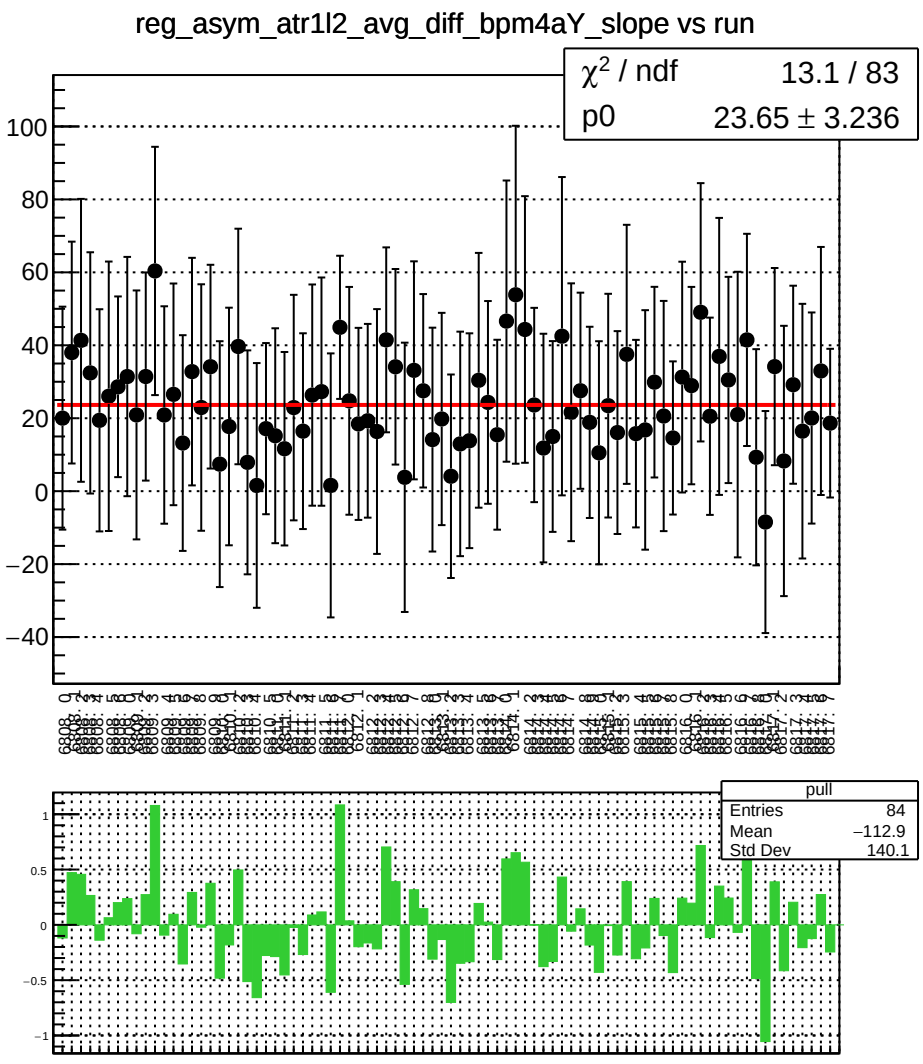

pull1D
Entries 84
Mean 0.01402
Std Dev 0.4568
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

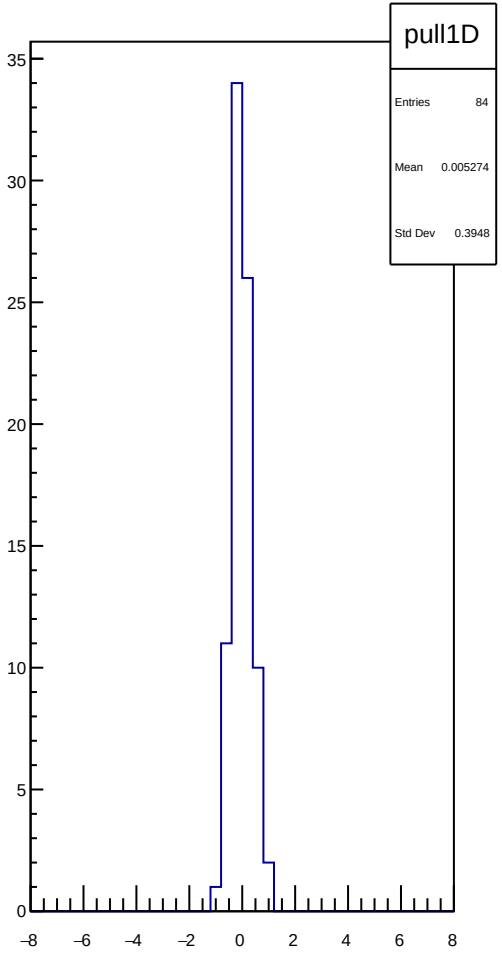

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 22.13 / 83
p0 118.2 ± 0.1695
122
120
118
116
114
pull
Entries 84
Mean 157.7
Std Dev 112.5
1.5
1
0.5
0
−0.5
−1
−1.5

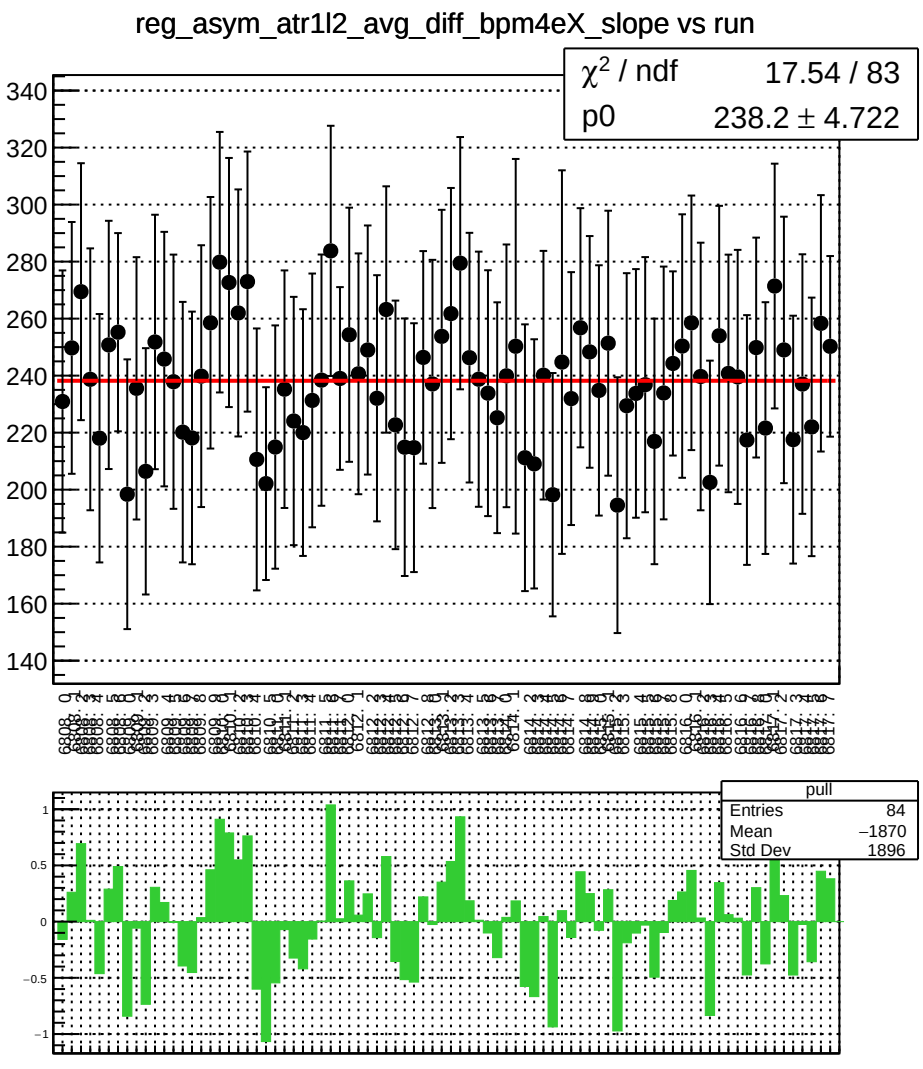

pull1D
Entries 84
Mean −0.0159
Std Dev 0.513
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

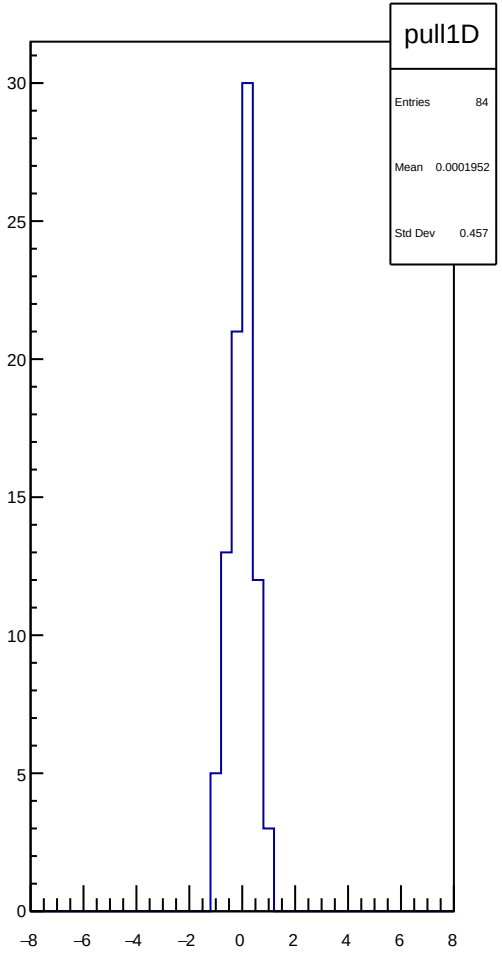

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 17.67 / 83
p0 −320.9 ± 5.05
pull
Entries 84
Mean 8487
Std Dev 8455

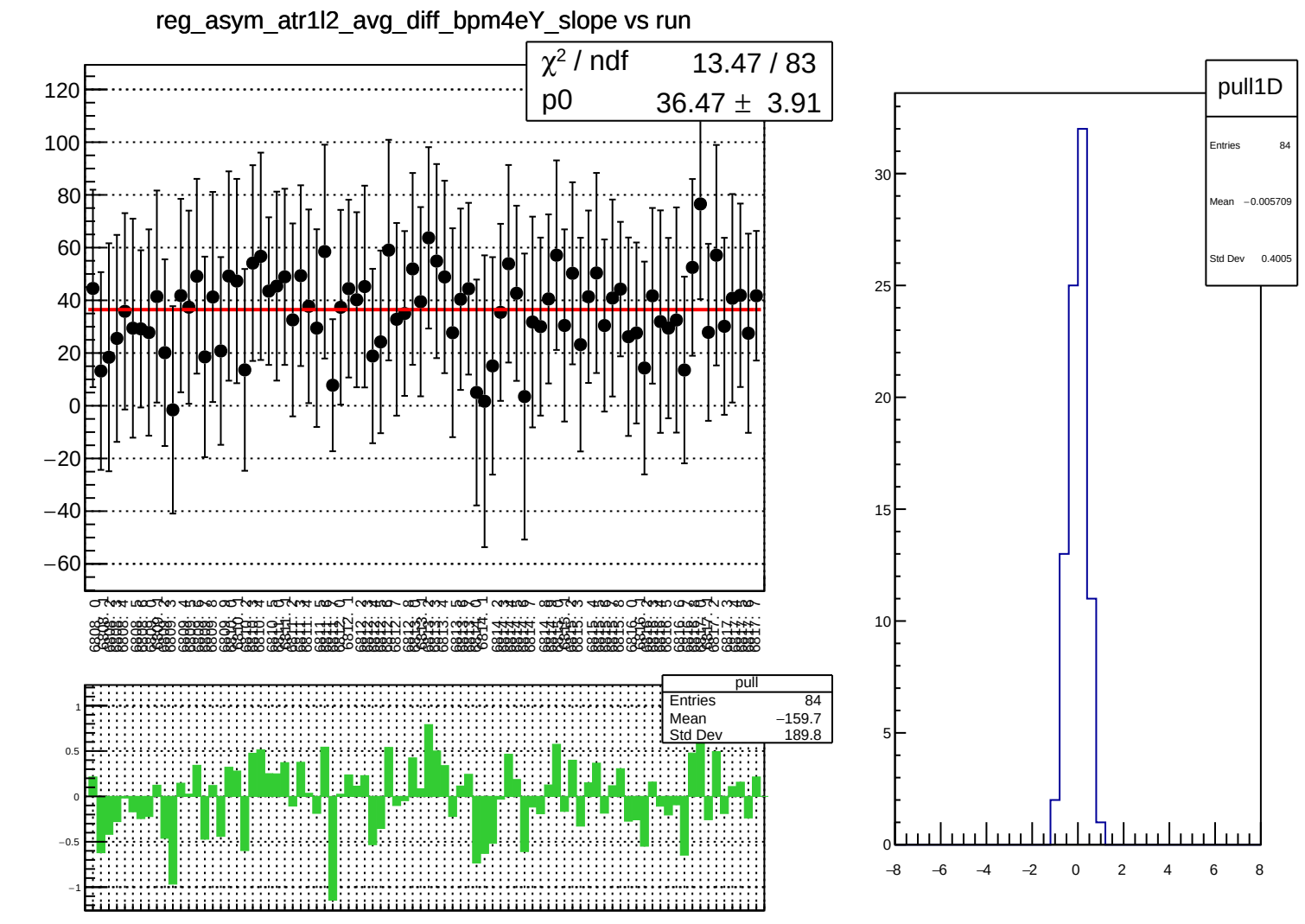

pull1D
Entries 84
Mean 5.915e−05
Std Dev 0.4586

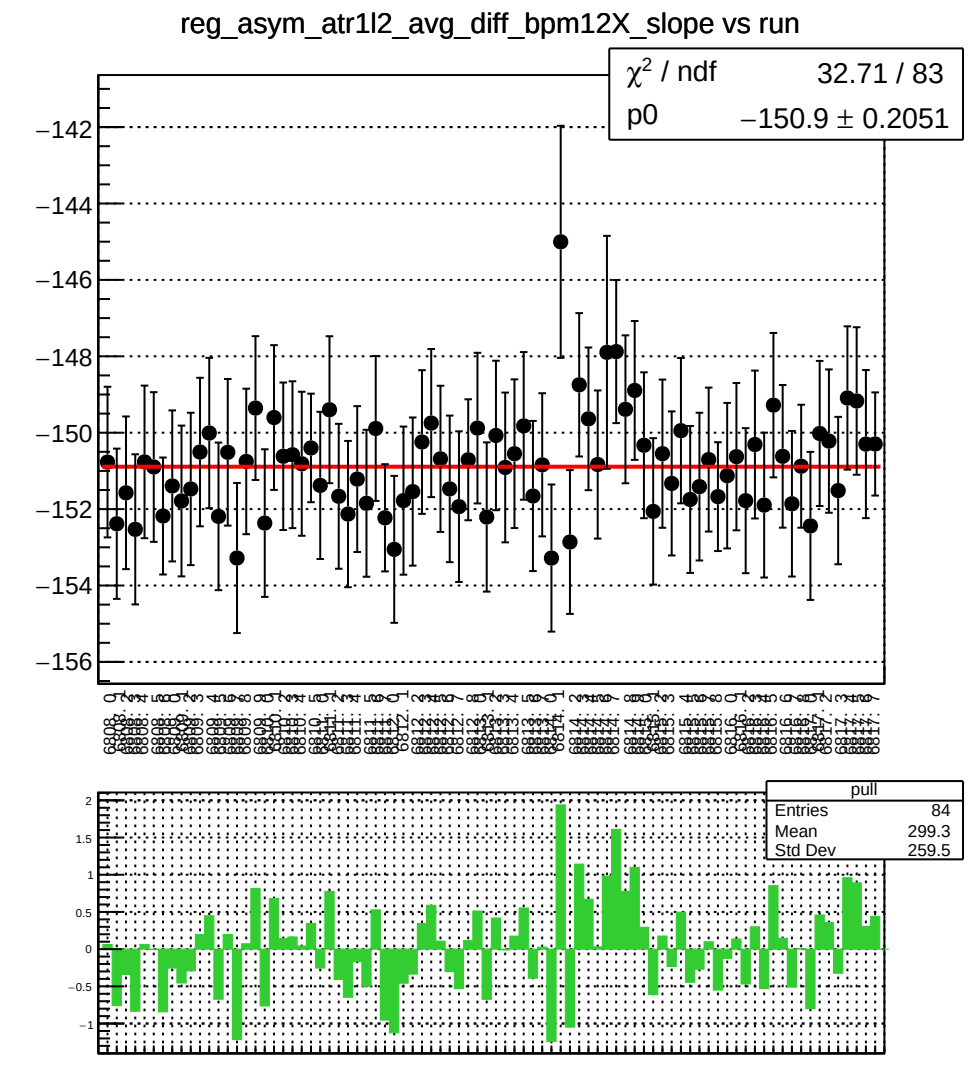

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.1 / 83
p0 23.65 ± 3.236
pull
Entries 84
Mean −112.9
Std Dev 140.1

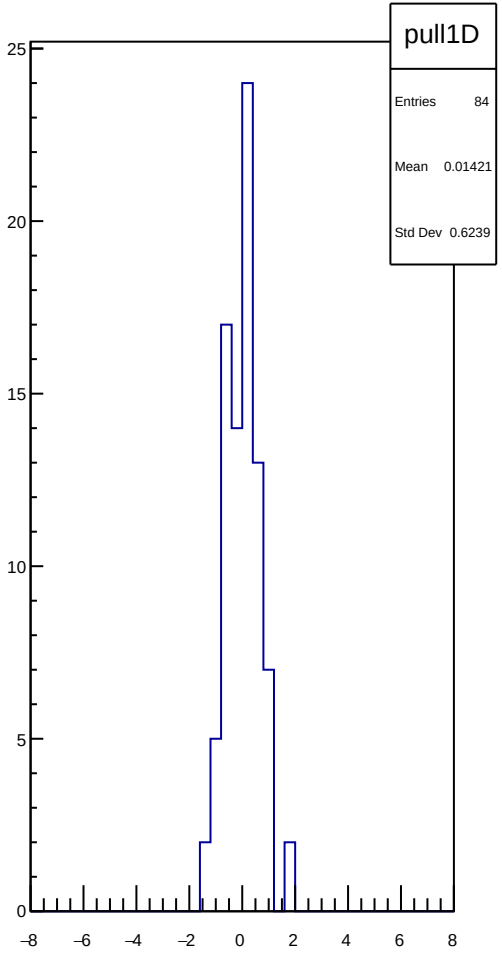

pull1D
Entries 84
Mean 0.005274
Std Dev 0.3948

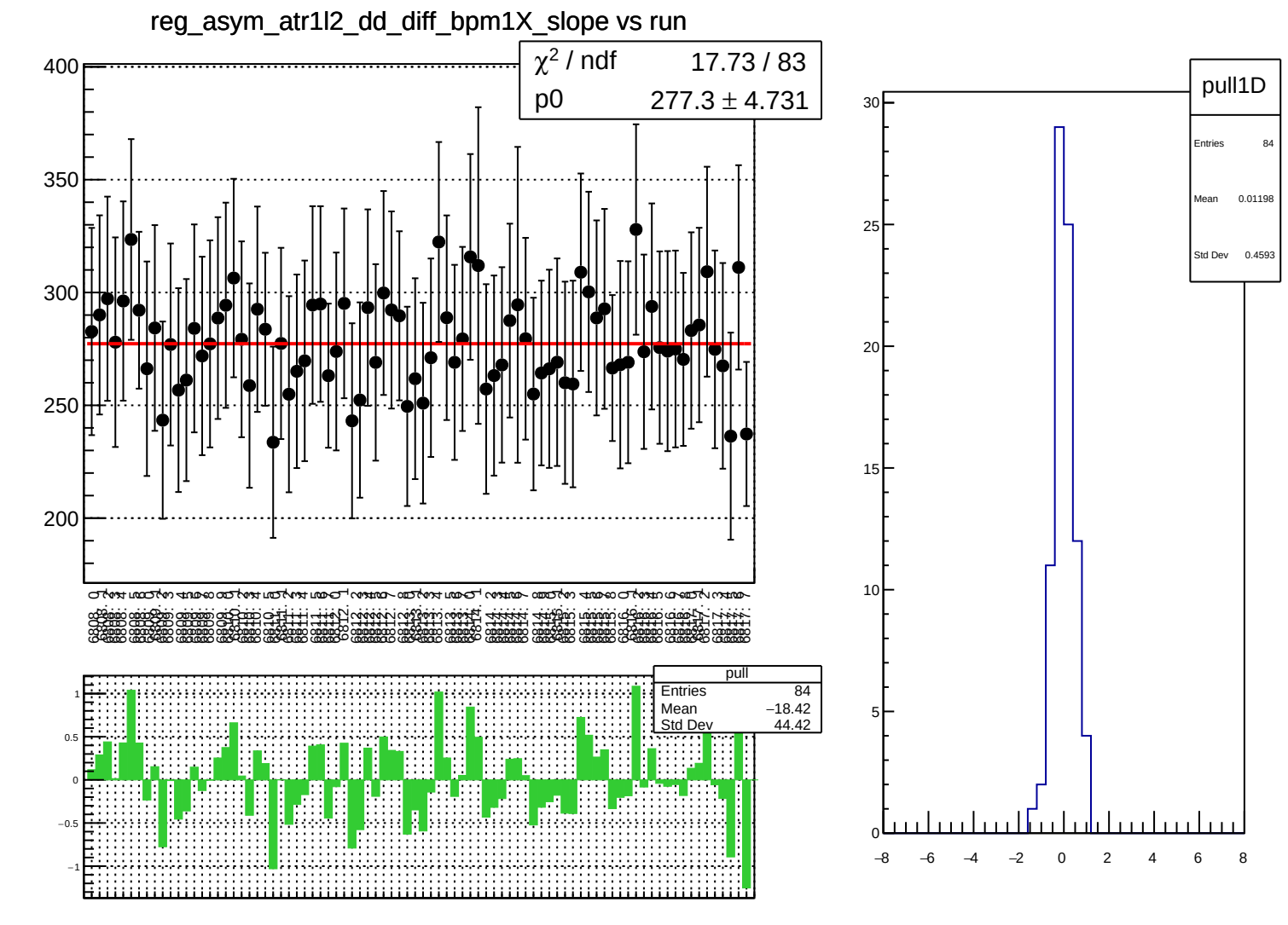

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 17.54 / 83
p0 238.2 ± 4.722
pull
Entries 84
Mean −1870
Std Dev 1896

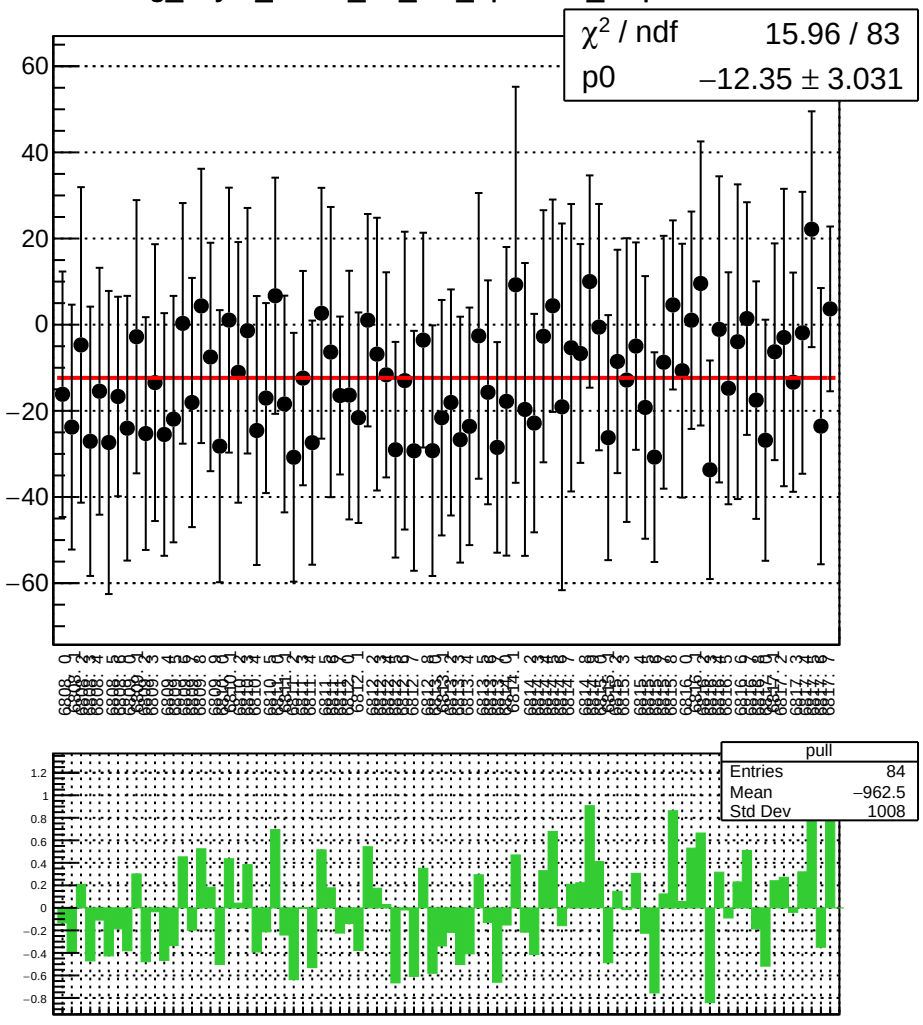

pull1D
Entries 84
Mean 0.0001952
Std Dev 0.457

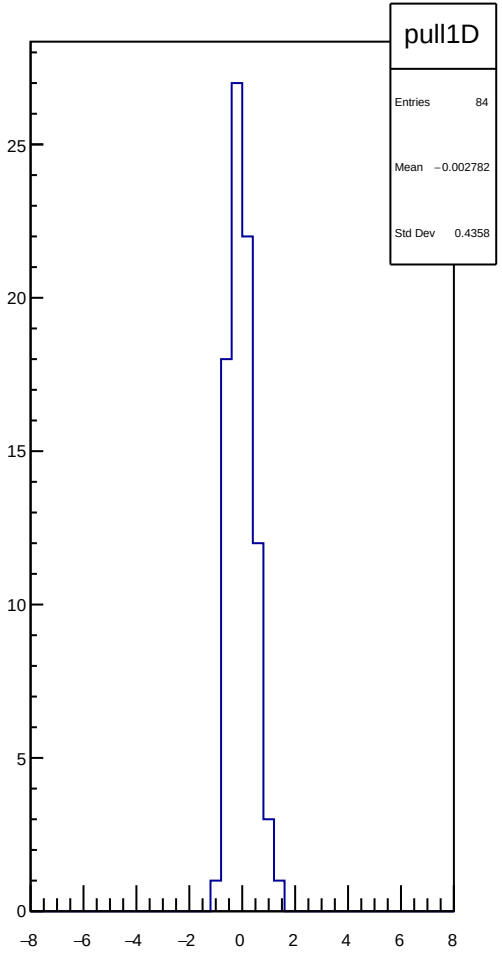

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 13.47 / 83
p0 36.47 ± 3.91
pull
Entries 84
Mean −159.7
Std Dev 189.8
pull1D
Entries 84
Mean −0.005709
Std Dev 0.4005

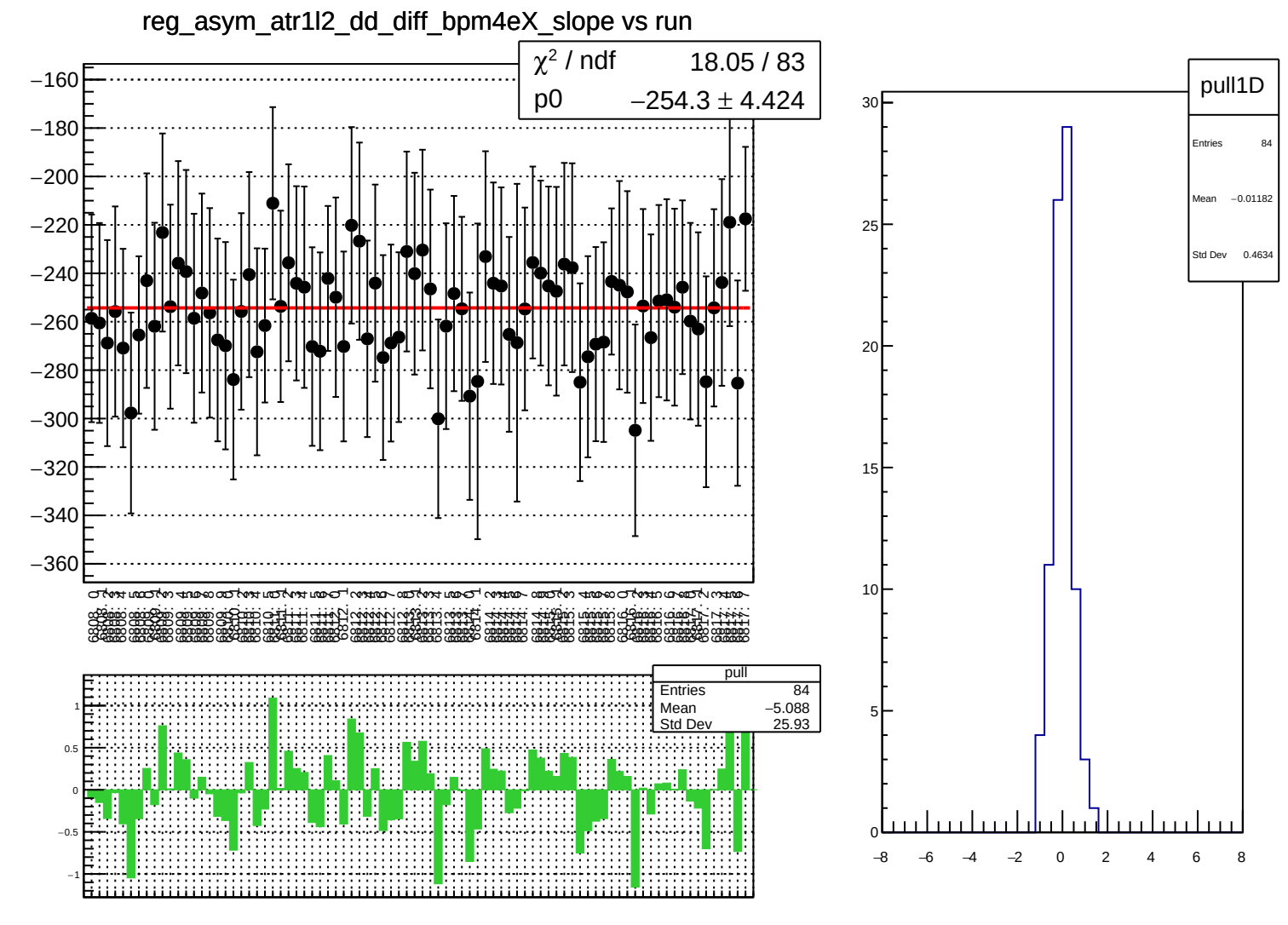

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 32.71 / 83
p0 −150.9 ± 0.2051
pull
Entries 84
Mean 299.3
Std Dev 259.5

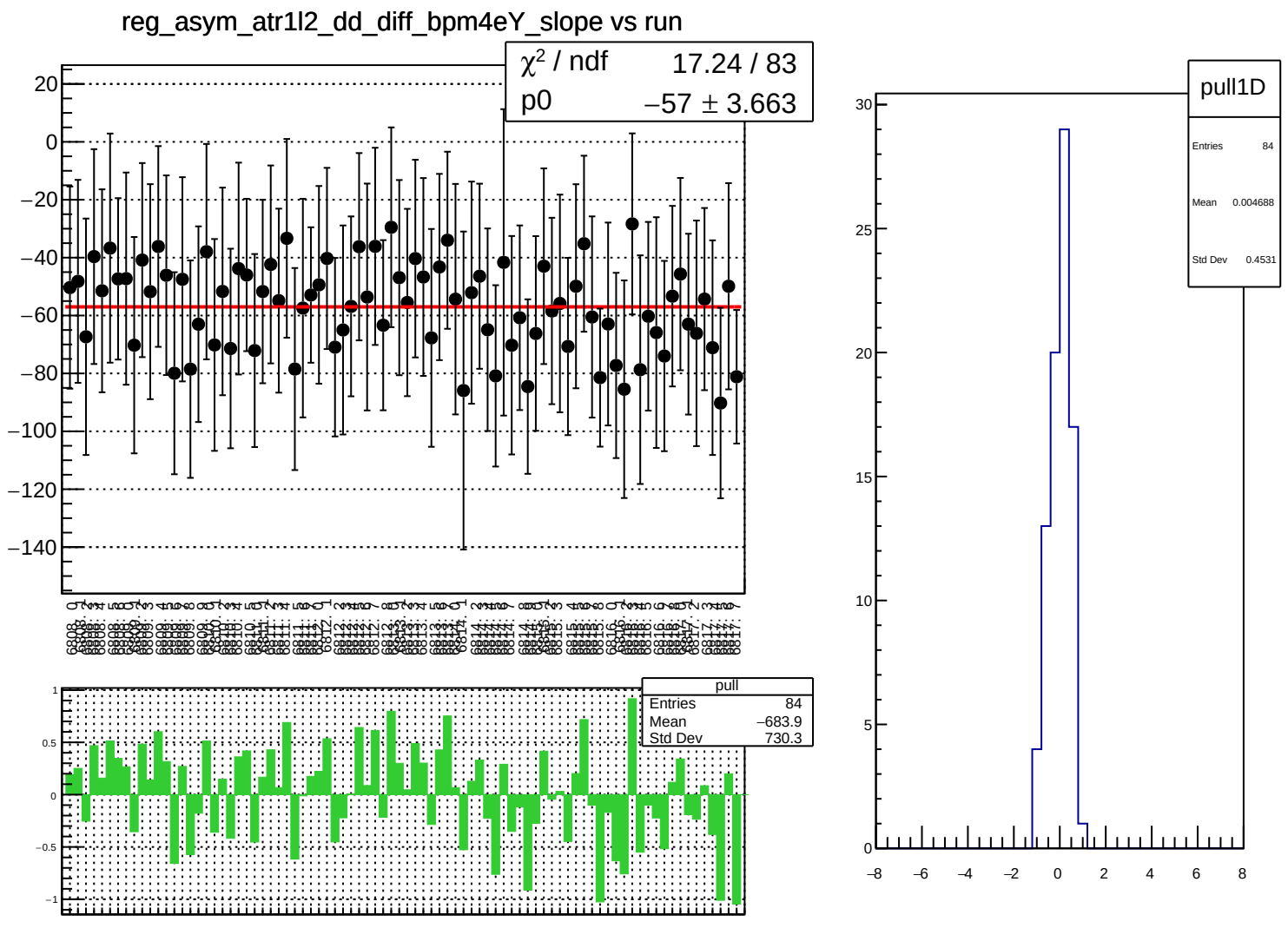

pull1D
Entries 84
Mean 0.01421
Std Dev 0.6239

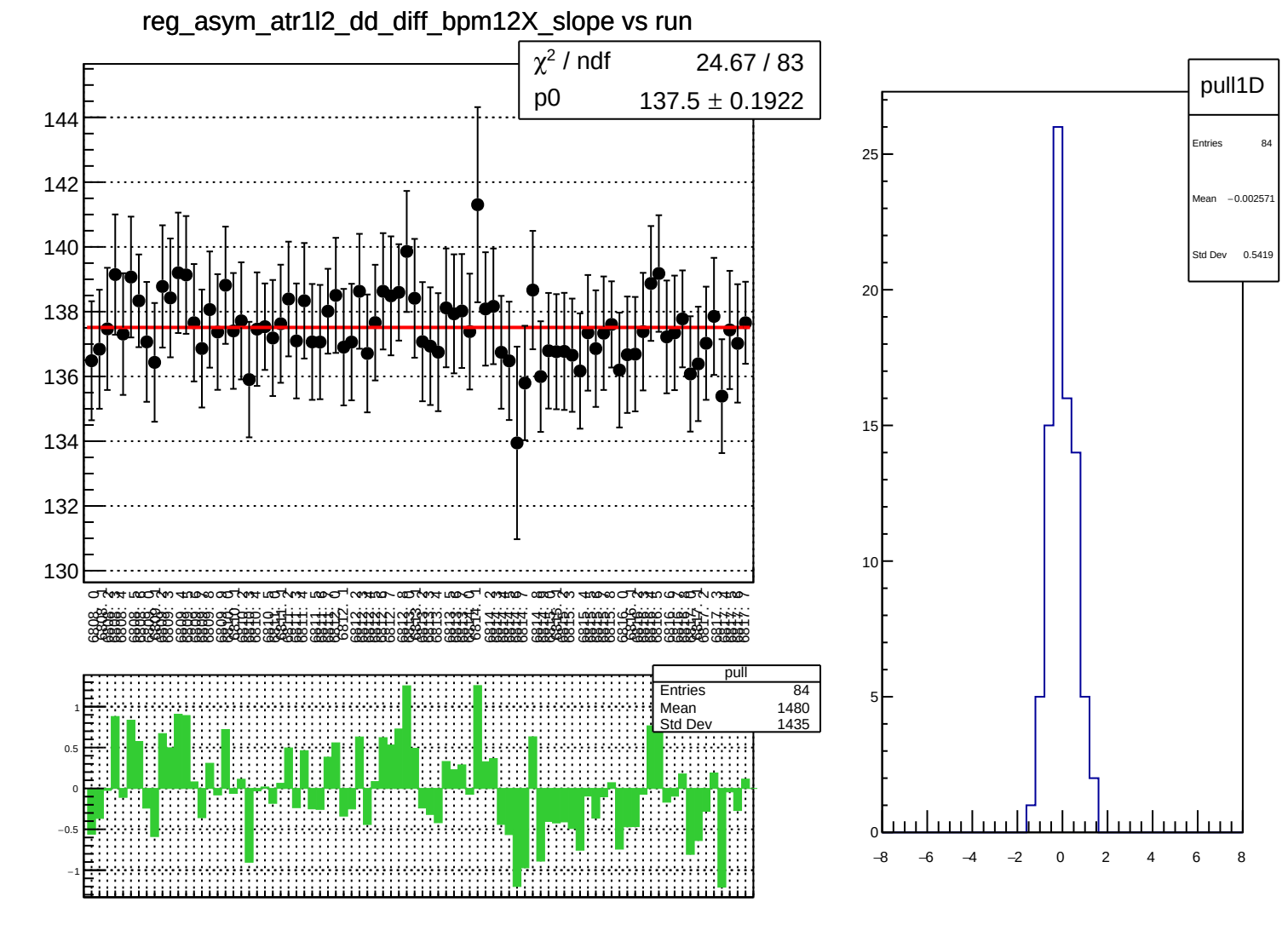

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 17.73 / 83
p0 277.3 ± 4.731
400
350
300
250
200
pull
Entries 84
Mean −18.42
Std Dev 44.42
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean 0.01198
Std Dev 0.4593
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

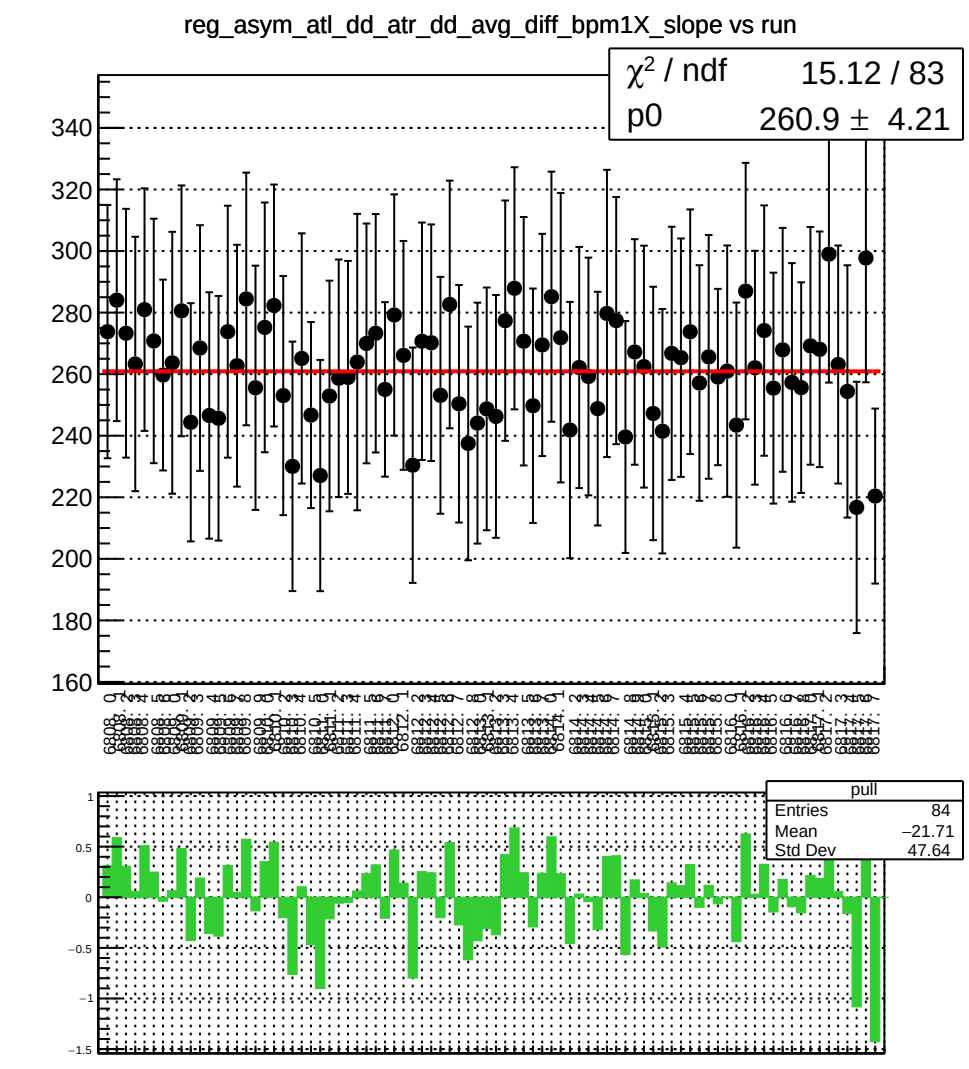

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 15.96 / 83
p0 −12.35 ± 3.031
pull
Entries 84
Mean −962.5
Std Dev 1008

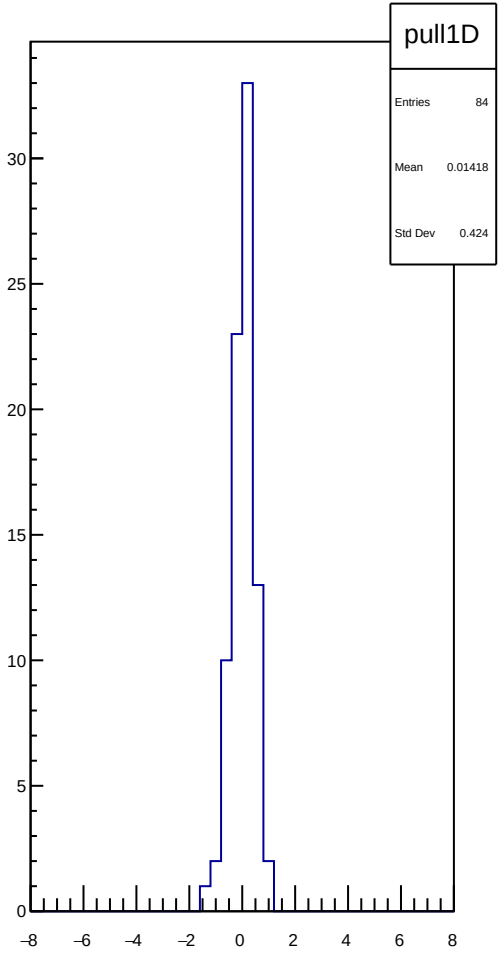

pull1D
Entries 84
Mean −0.002782
Std Dev 0.4358

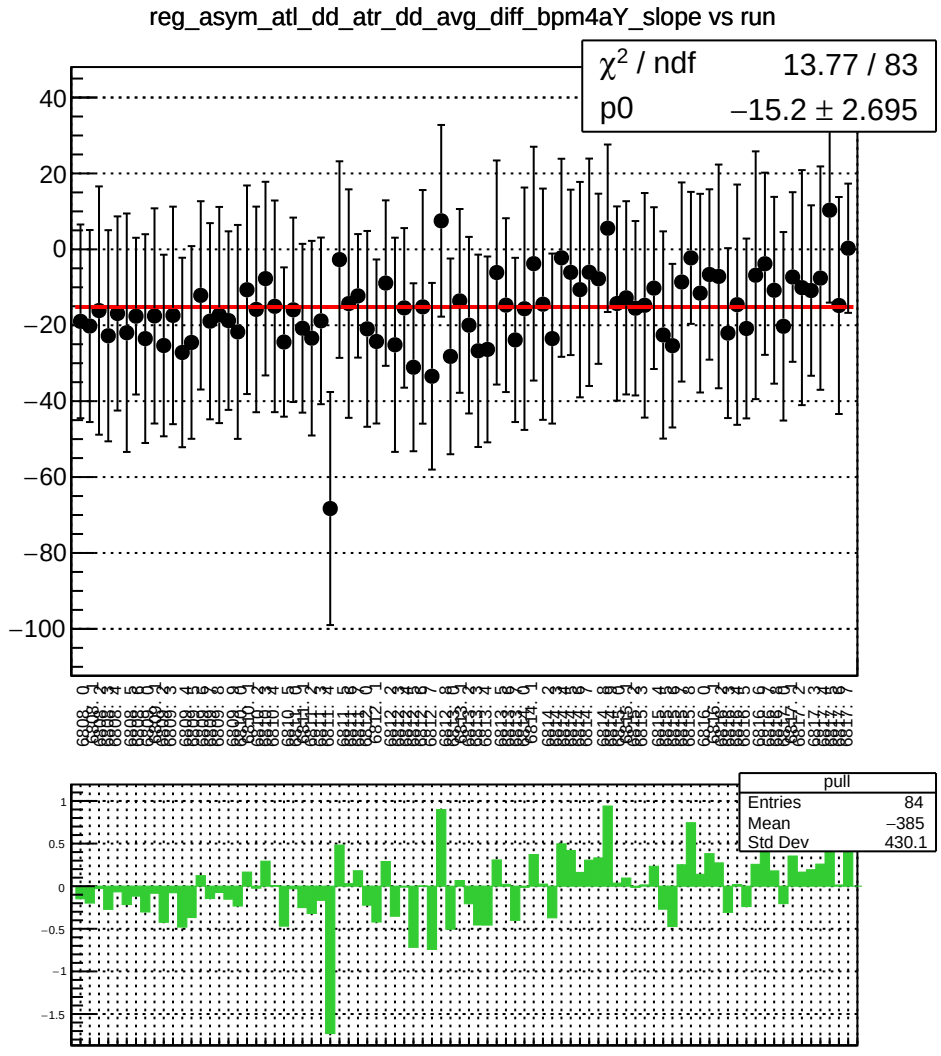

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.05 / 83
p0 −254.3 ± 4.424
pull
Entries 84
Mean −5.088
Std Dev 25.93
pull1D
Entries 84
Mean −0.01182
Std Dev 0.4634

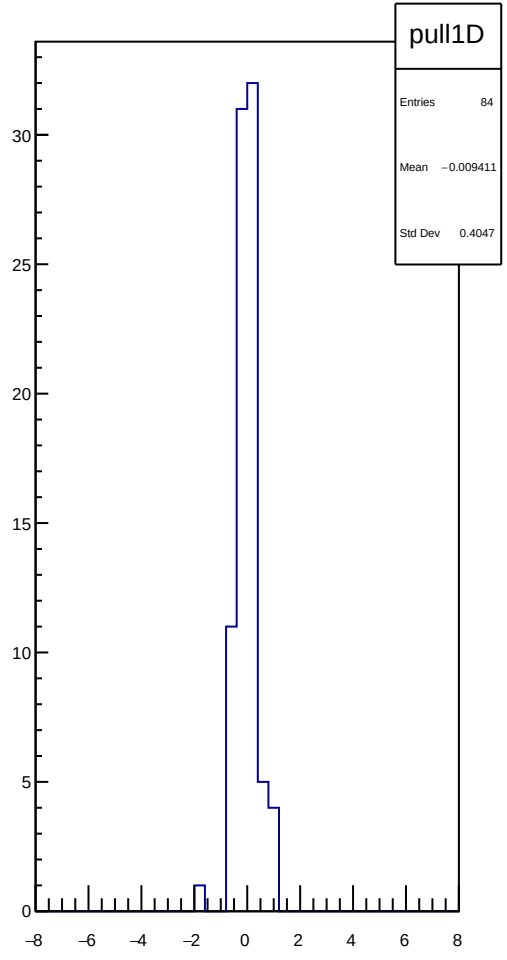

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 17.24 / 83
p0 −57 ± 3.663
pull
Entries 84
Mean −683.9
Std Dev 730.3
pull1D
Entries 84
Mean 0.004688
Std Dev 0.4531

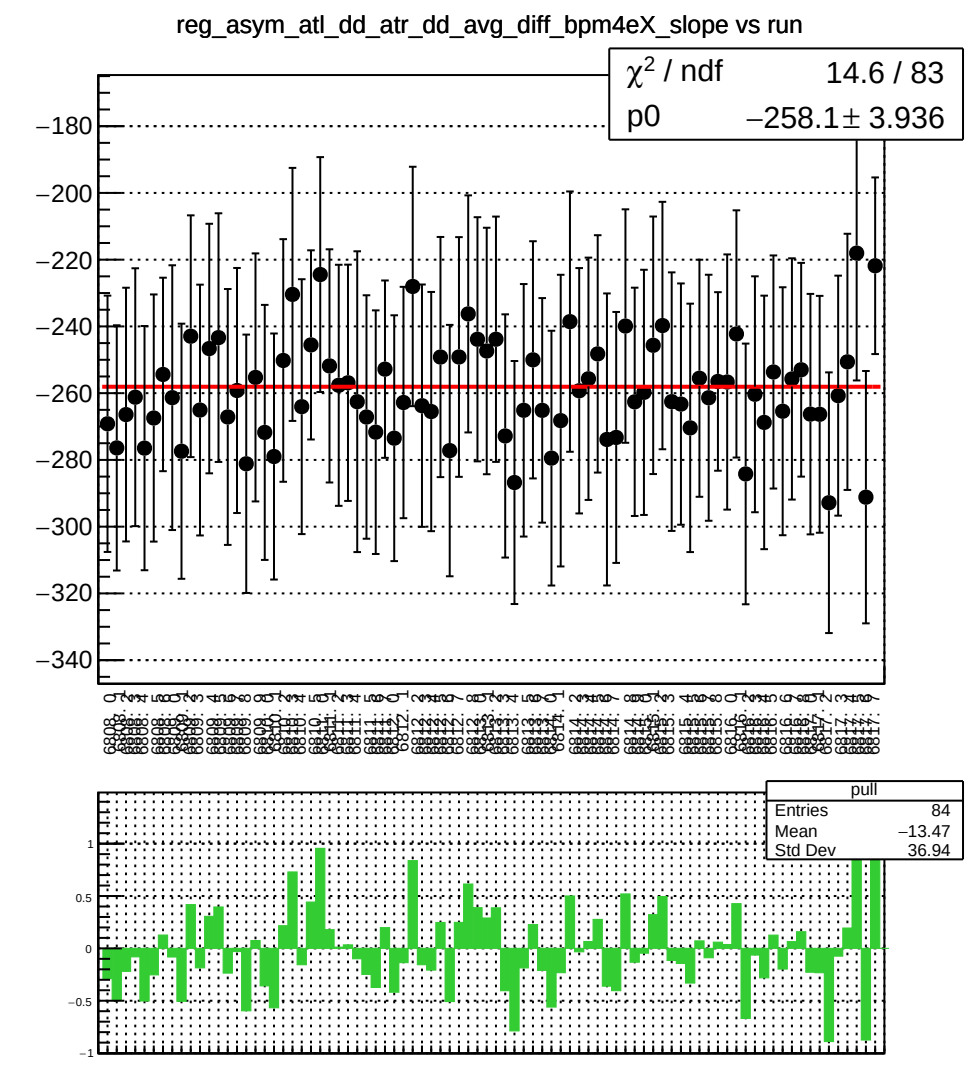

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 24.67 / 83
p0 137.5 ± 0.1922
144
142
140
138
136
134
132
130
pull
Entries 84
Mean 1480
Std Dev 1435
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.002571
Std Dev 0.5419
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

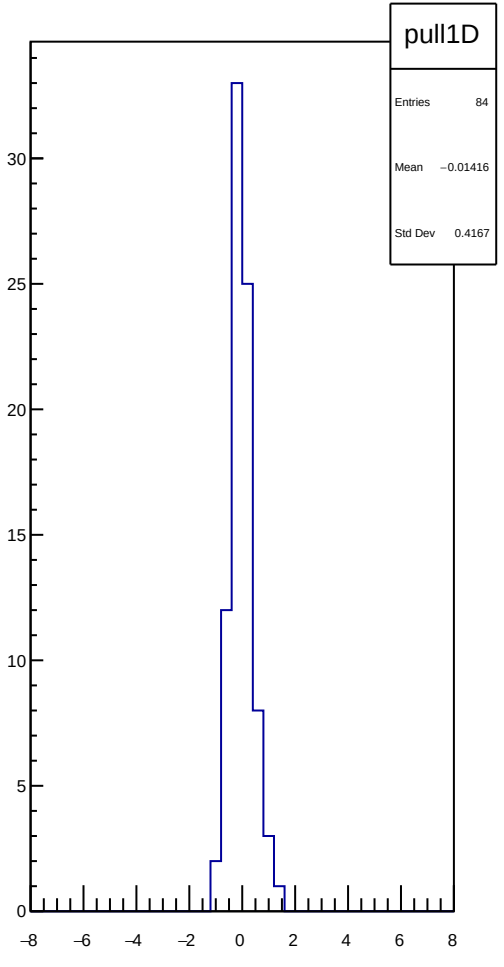

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 15.12 / 83
p0 260.9 ± 4.21
pull
Entries 84
Mean −21.71
Std Dev 47.64

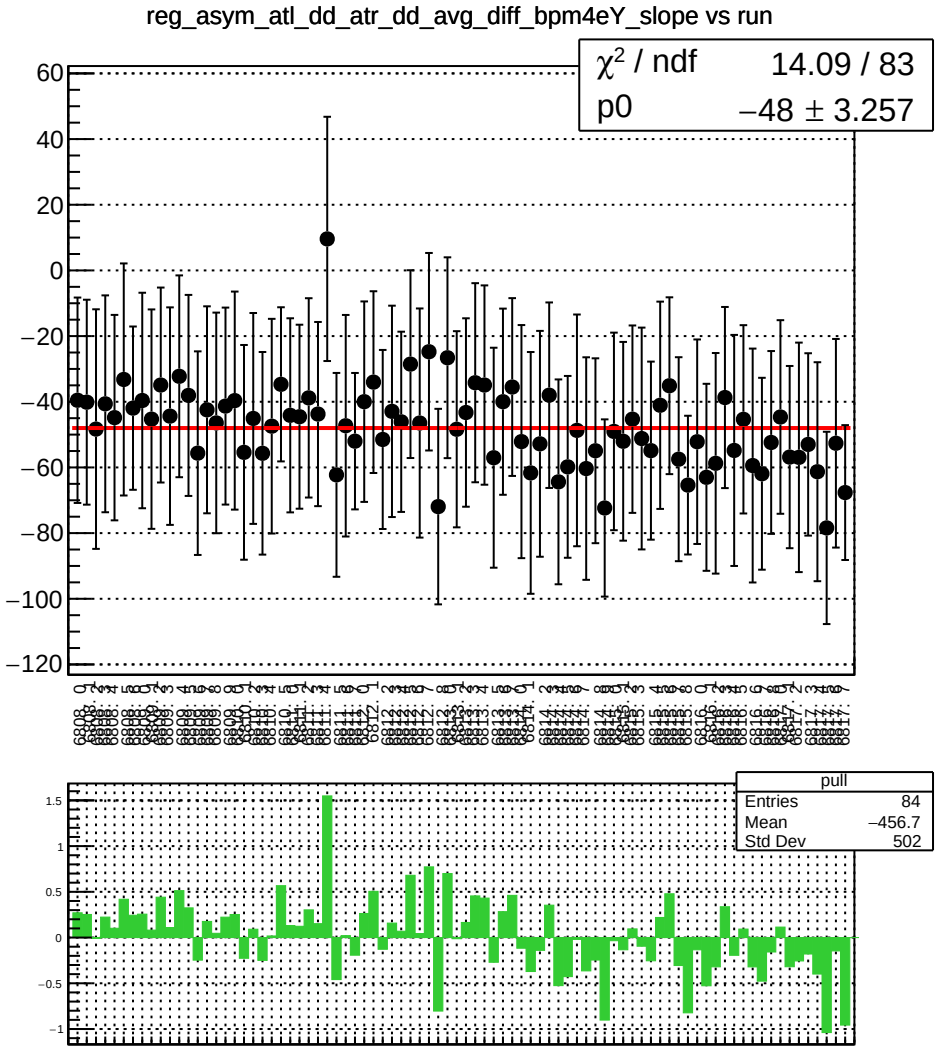

pull1D
Entries 84
Mean 0.01418
Std Dev 0.424

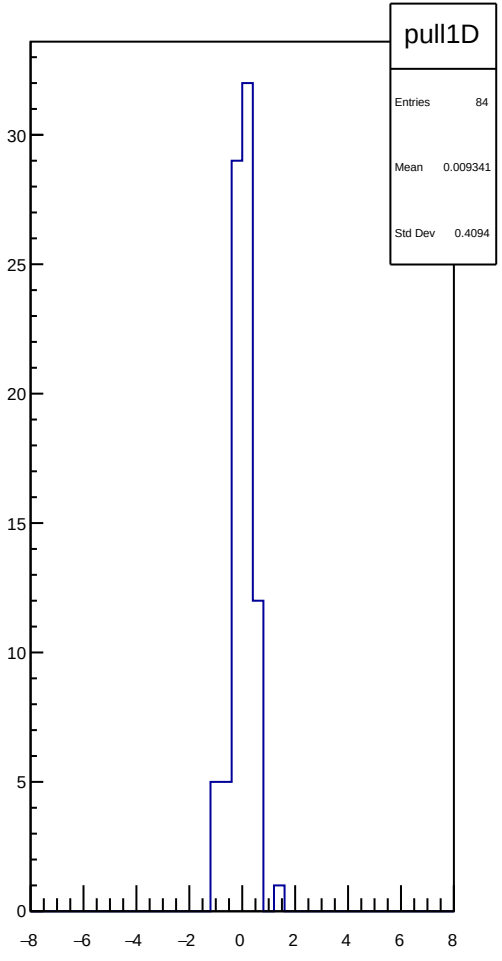

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.77 / 83
p0 −15.2 ± 2.695
pull
Entries 84
Mean −385
Std Dev 430.1

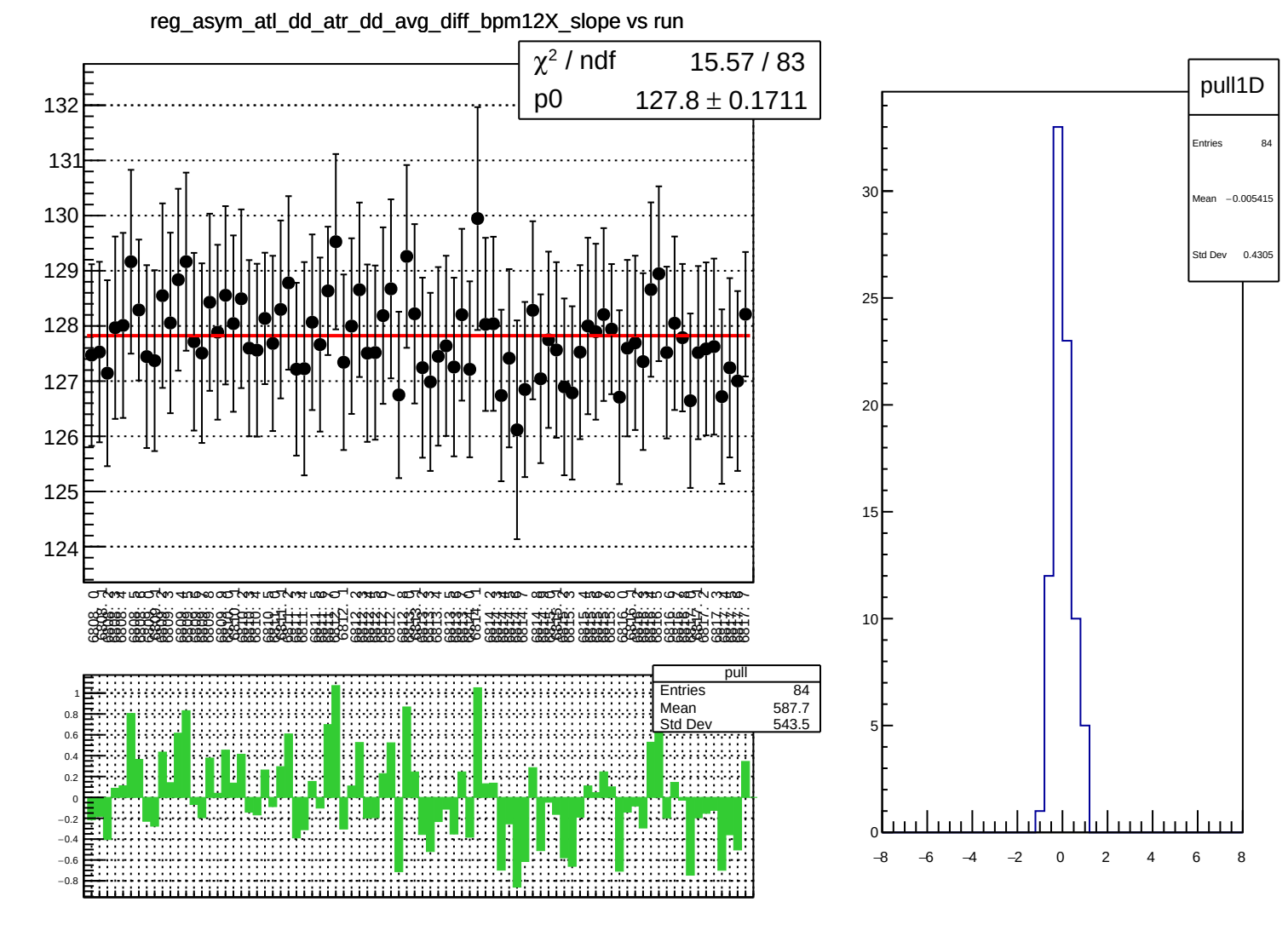

pull1D
Entries 84
Mean −0.009411
Std Dev 0.4047

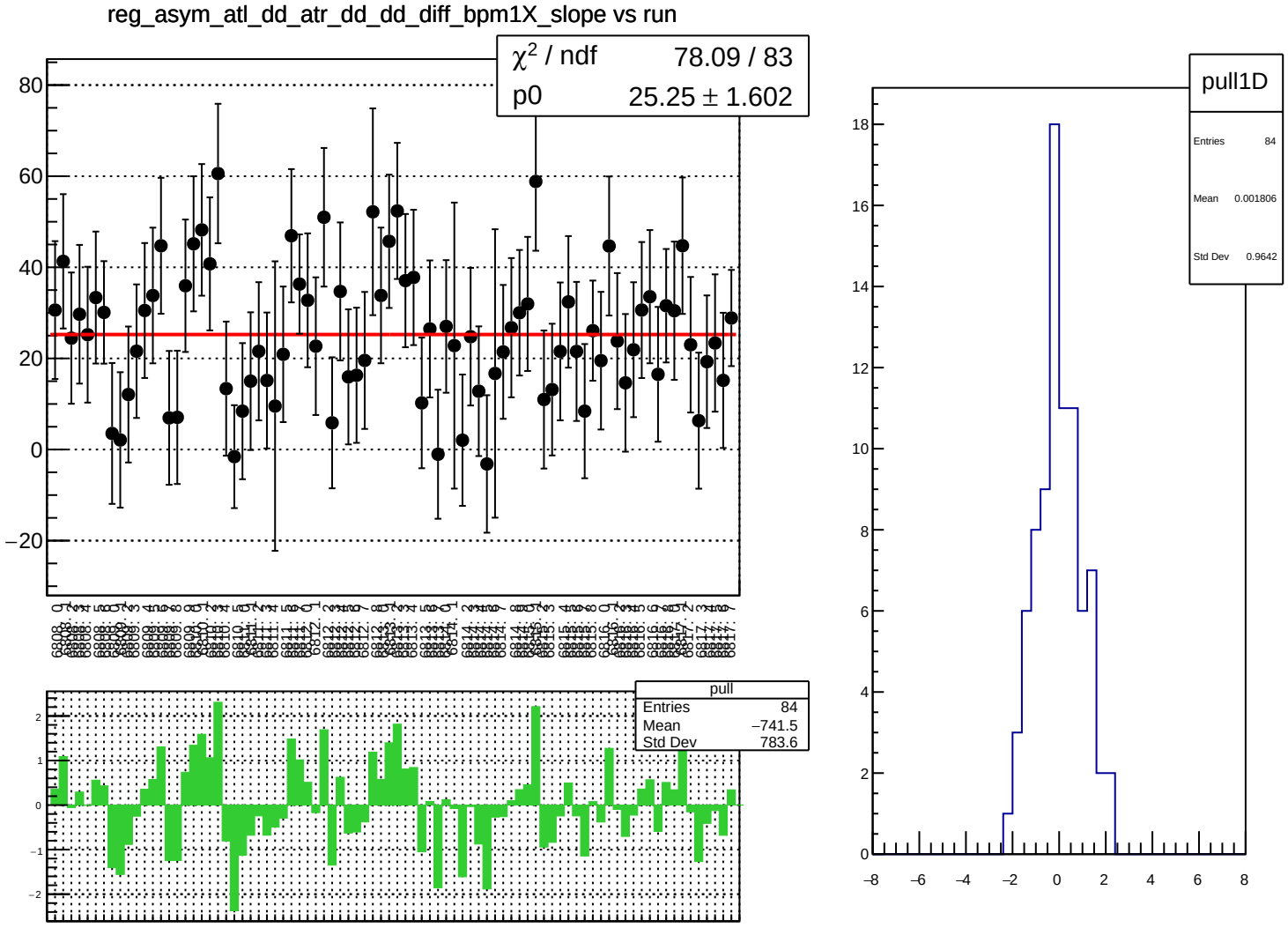

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.6 / 83
p0 −258.1± 3.936
−180
−200
−220
−240
−260
−280
−300
−320
−340
pull
Entries 84
Mean −13.47
Std Dev 36.94
1
0.5
0
−0.5
−1

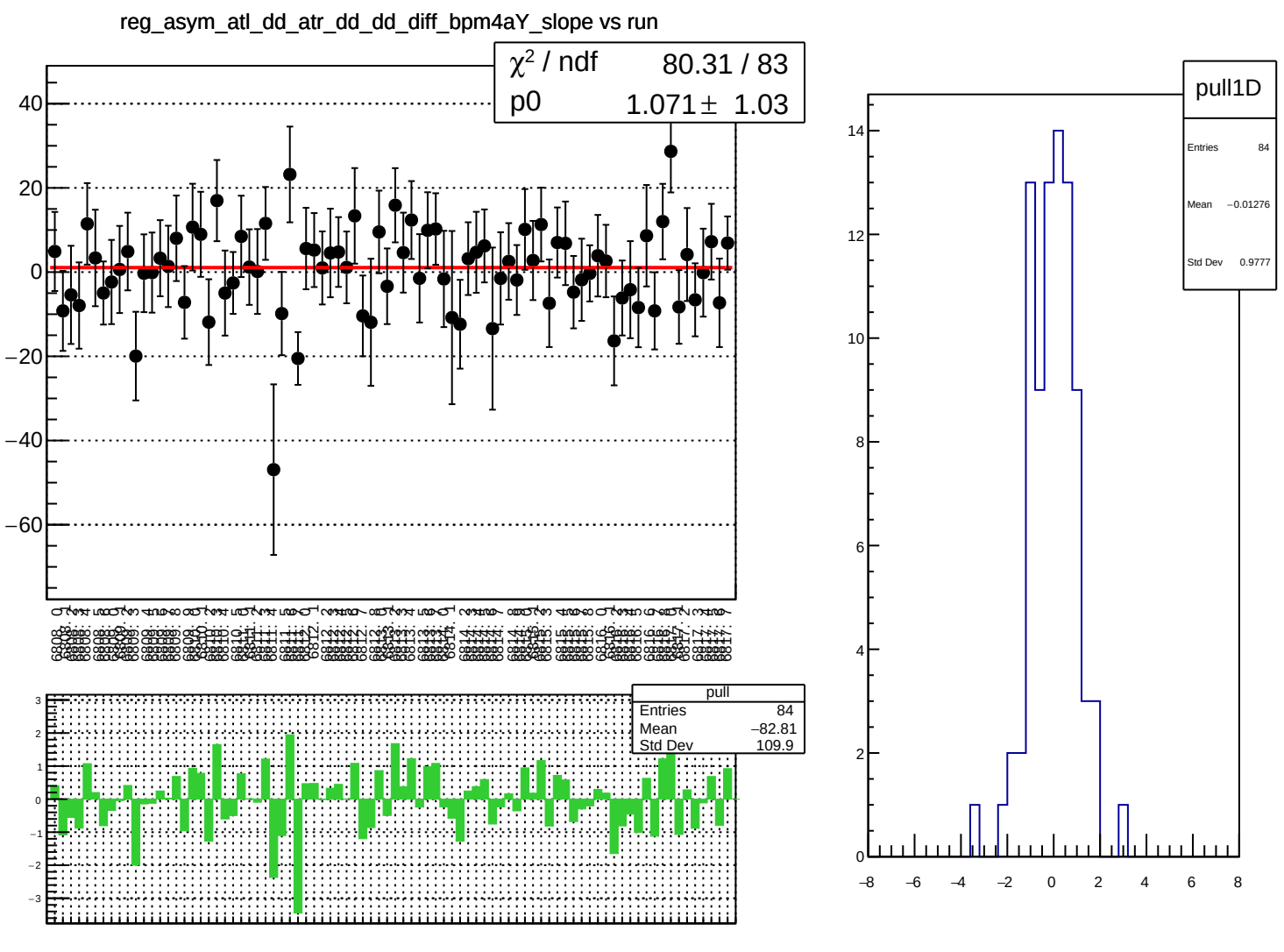

pull1D
Entries 84
Mean −0.01416
Std Dev 0.4167
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

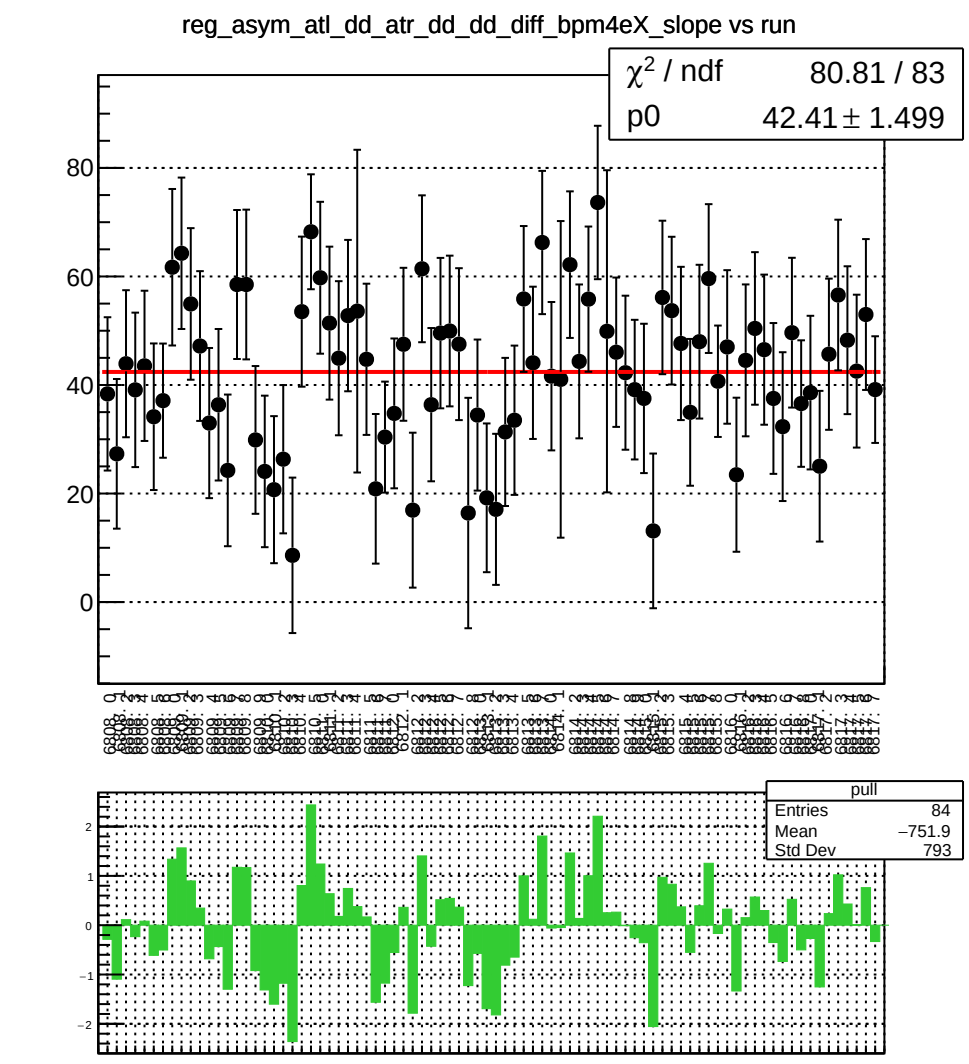

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.09 / 83
p0 −48 ± 3.257
pull
Entries 84
Mean −456.7
Std Dev 502

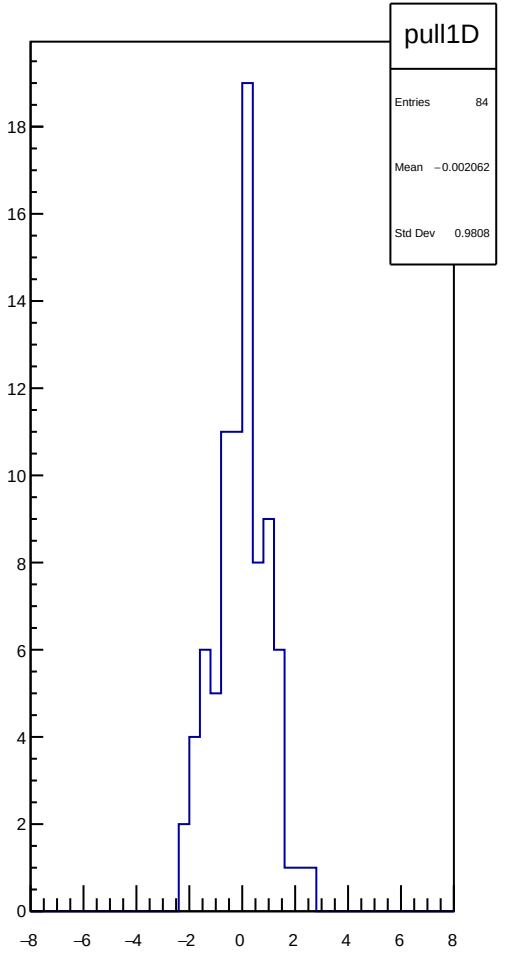

pull1D
Entries 84
Mean 0.009341
Std Dev 0.4094

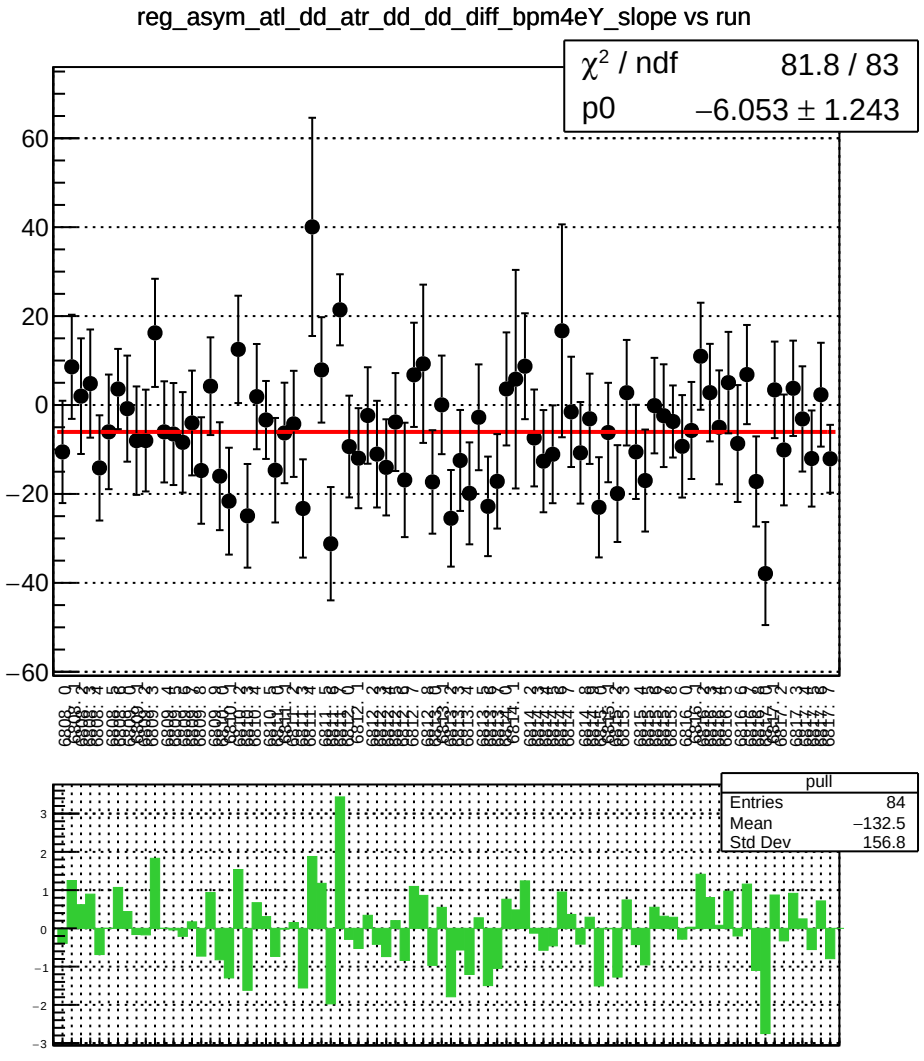

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 15.57 / 83
p0 127.8 ± 0.1711
pull
Entries 84
Mean 587.7
Std Dev 543.5
pull1D
Entries 84
Mean −0.005415
Std Dev 0.4305

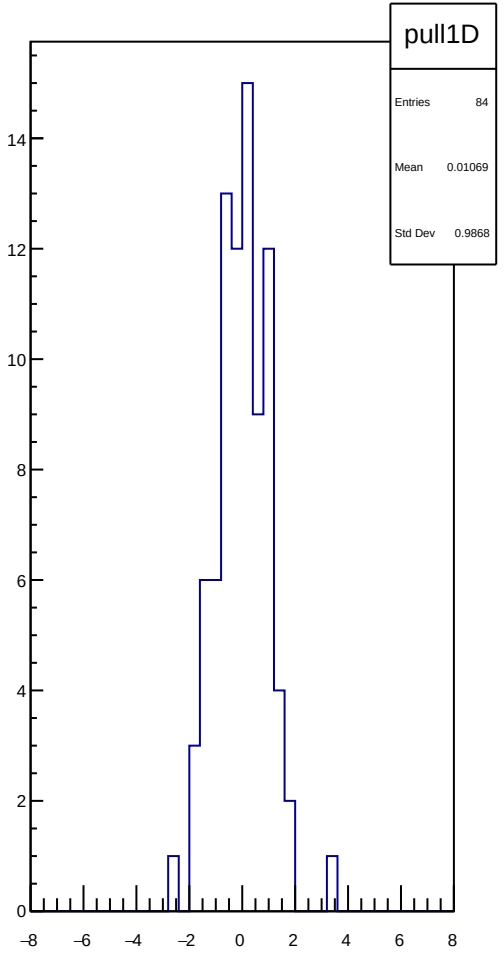

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 78.09 / 83
p0 25.25 ± 1.602
pull
Entries 84
Mean −741.5
Std Dev 783.6
pull1D
Entries 84
Mean 0.001806
Std Dev 0.9642

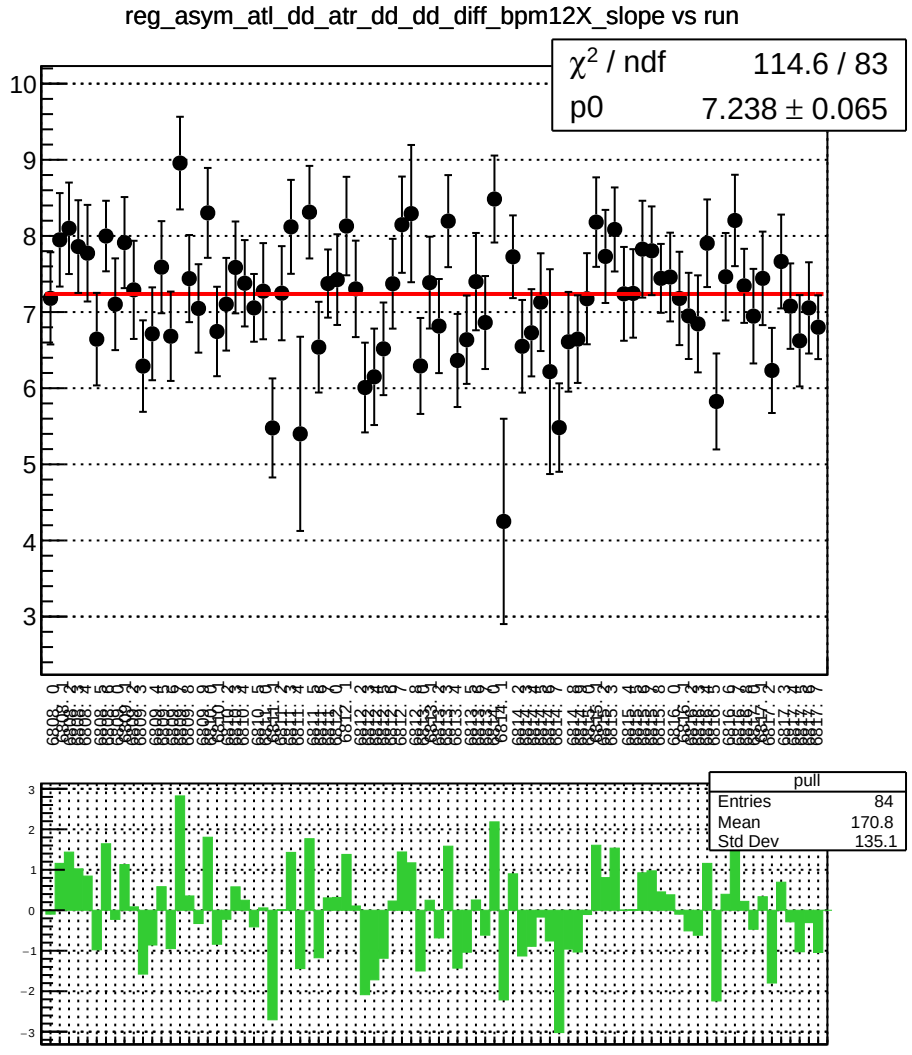

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 80.31 / 83
p0 1.071 ± 1.03
pull
Entries 84
Mean −82.81
Std Dev 109.9
pull1D
Entries 84
Mean −0.01276
Std Dev 0.9777

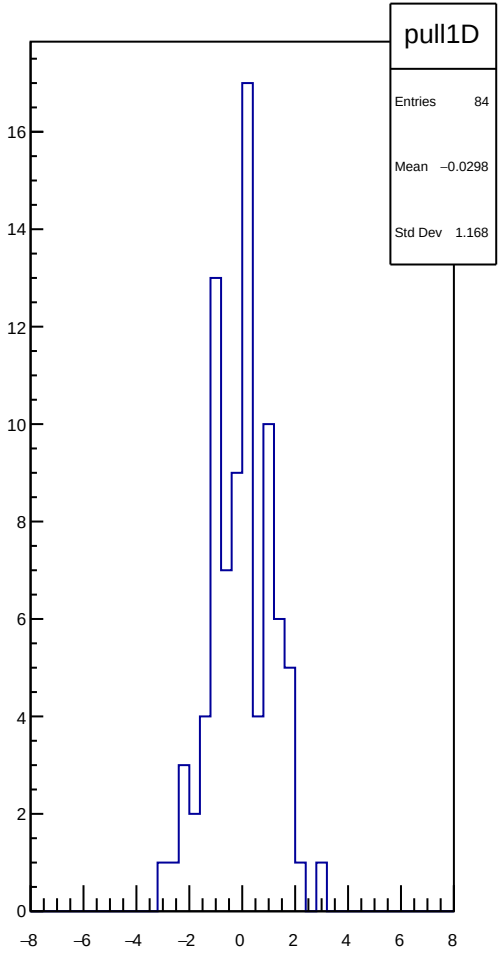

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 80.81 / 83
p0 42.41 ± 1.499
pull
Entries 84
Mean −751.9
Std Dev 793

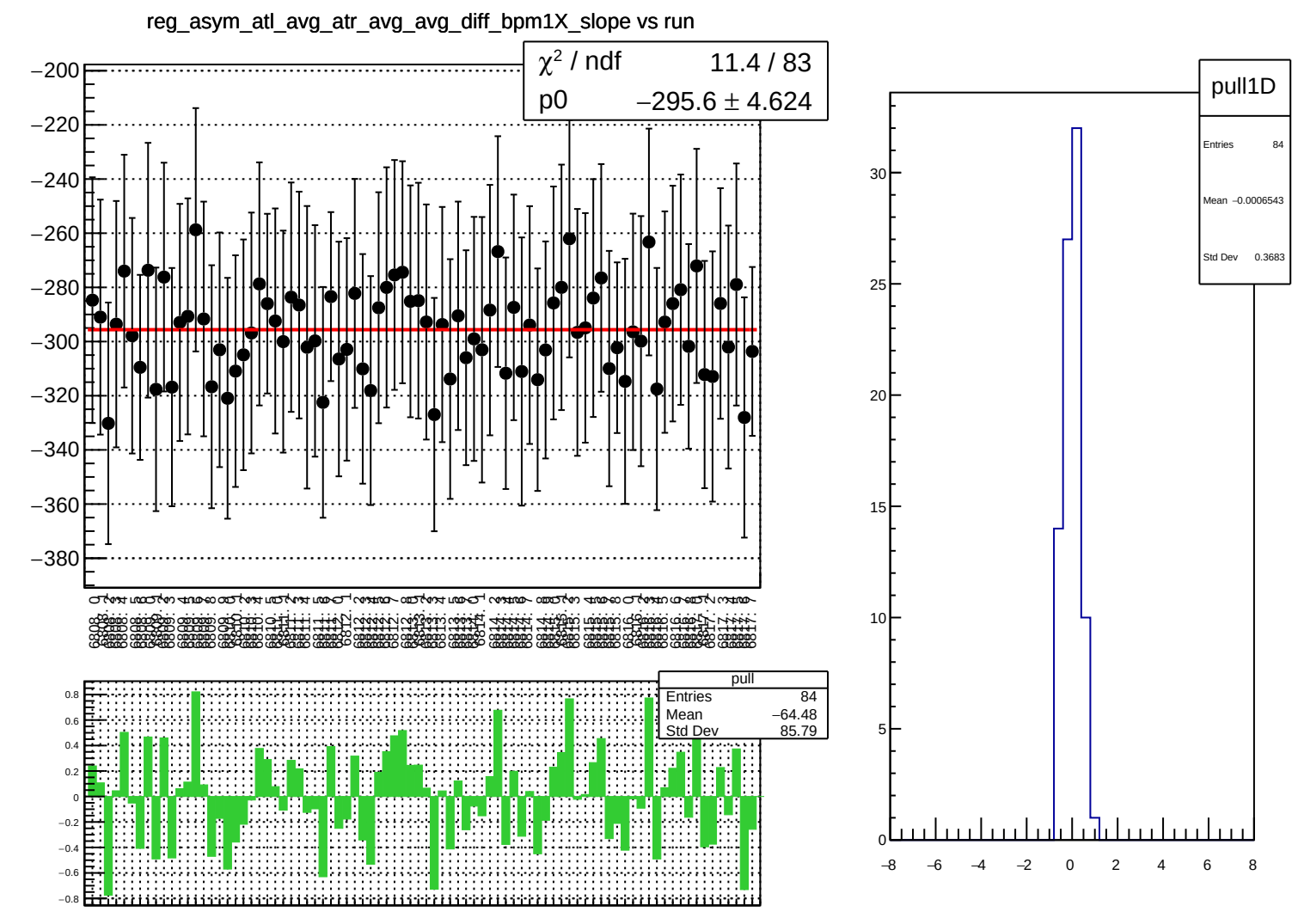

pull1D
Entries 84
Mean −0.002062
Std Dev 0.9808

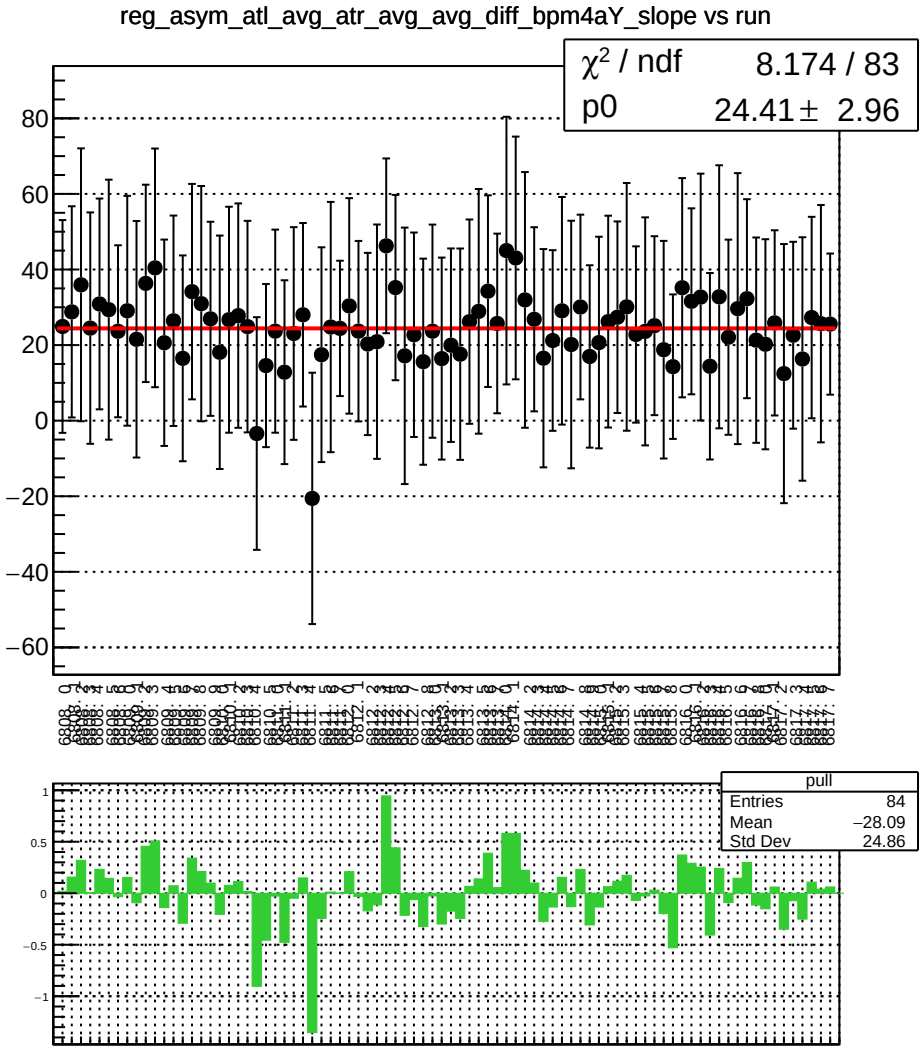

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 81.8 / 83
p0 −6.053 ± 1.243
pull
Entries 84
Mean −132.5
Std Dev 156.8

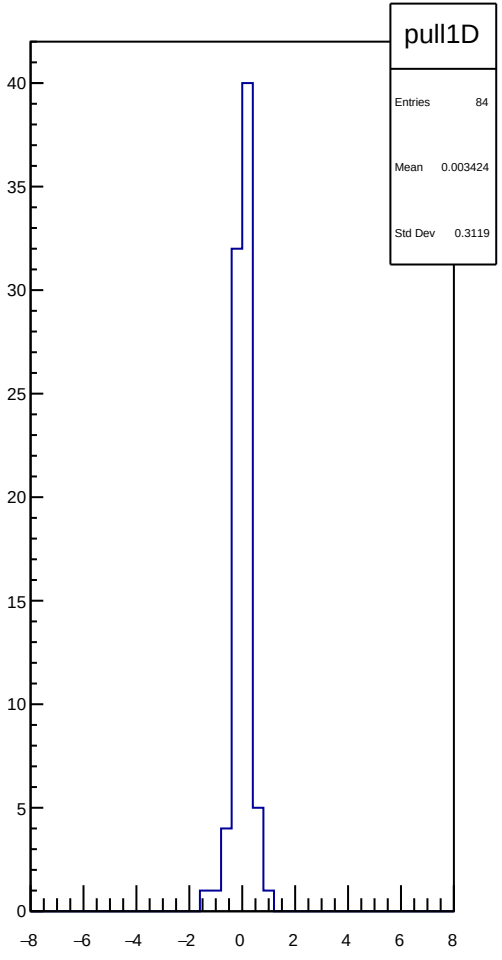

pull1D
Entries 84
Mean 0.01069
Std Dev 0.9868

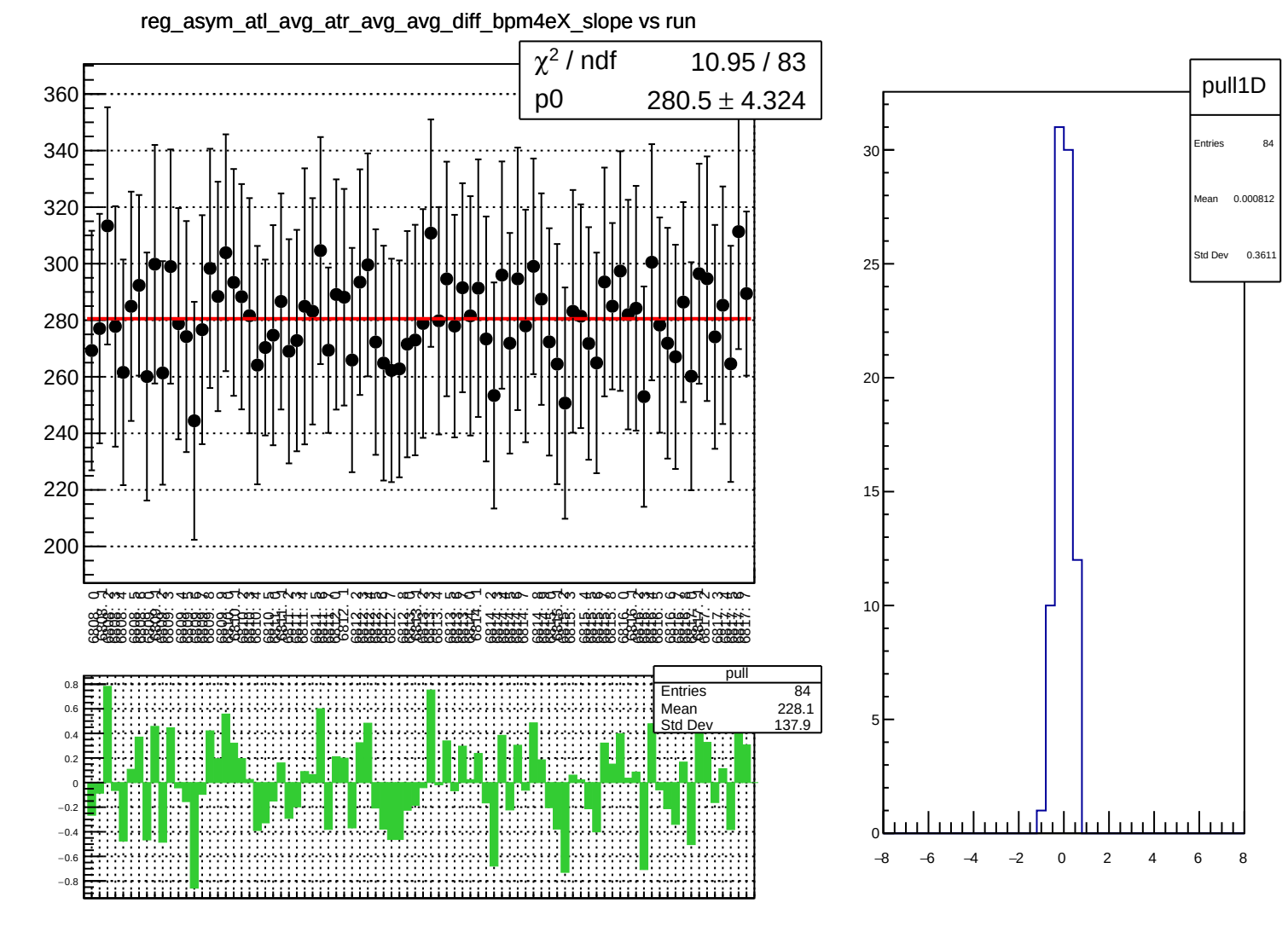

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 114.6 / 83
p0 7.238 ± 0.065
pull
Entries 84
Mean 170.8
Std Dev 135.1

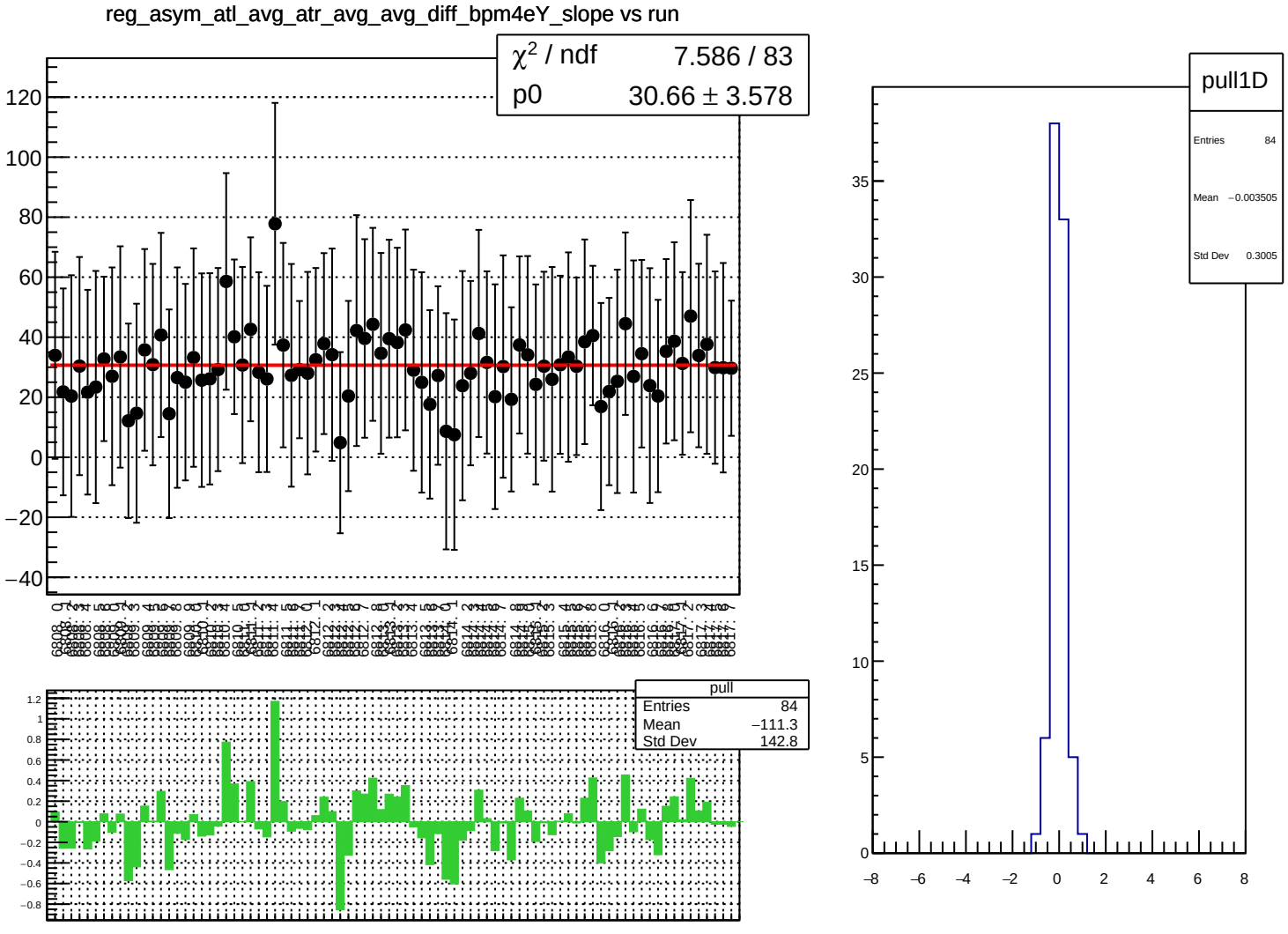

pull1D
Entries 84
Mean −0.0298
Std Dev 1.168

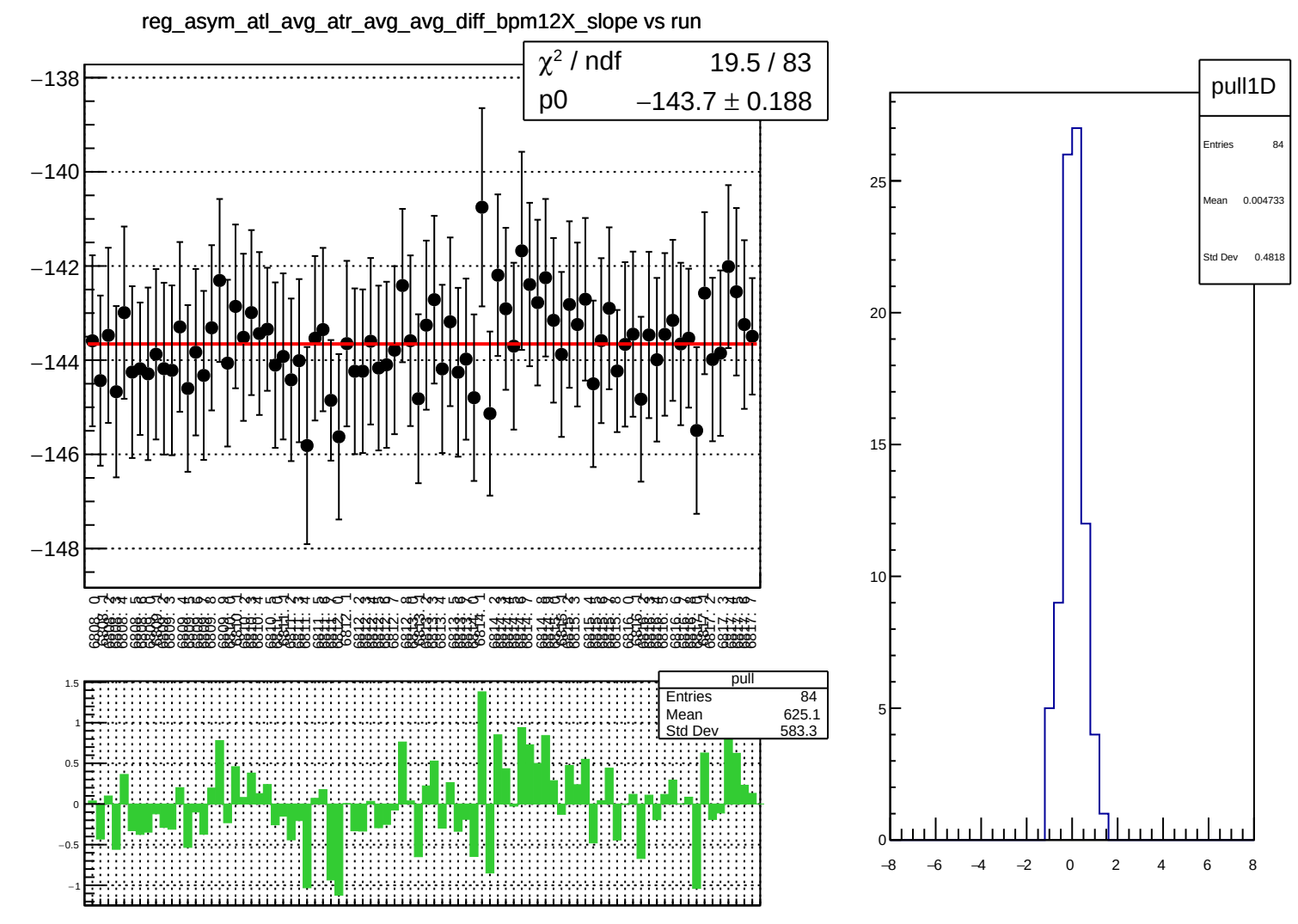

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 11.4 / 83
p0 −295.6 ± 4.624
pull
Entries 84
Mean −64.48
Std Dev 85.79
pull1D
Entries 84
Mean −0.0006543
Std Dev 0.3683

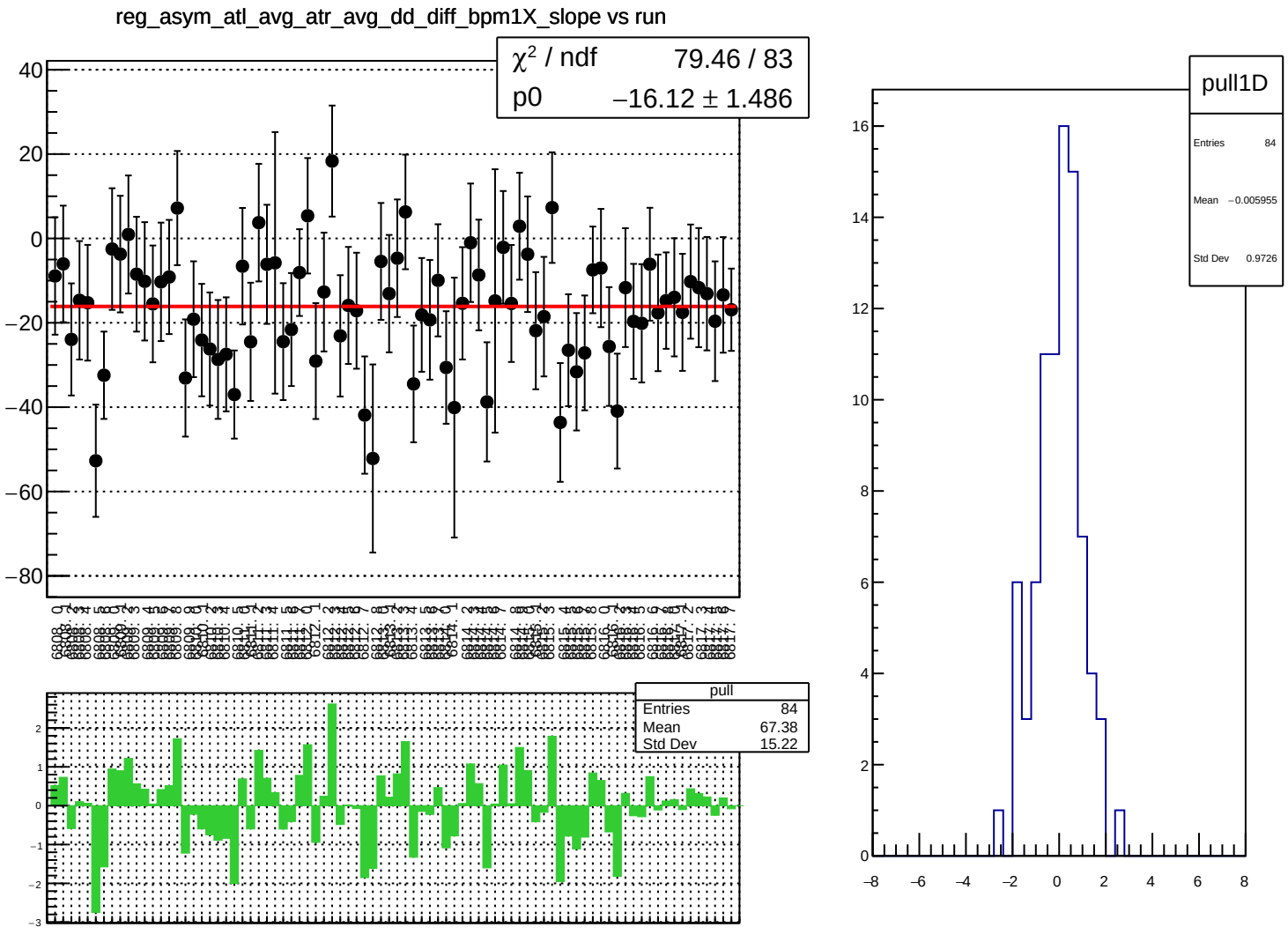

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.174 / 83
p0 24.41 ± 2.96
pull
Entries 84
Mean −28.09
Std Dev 24.86

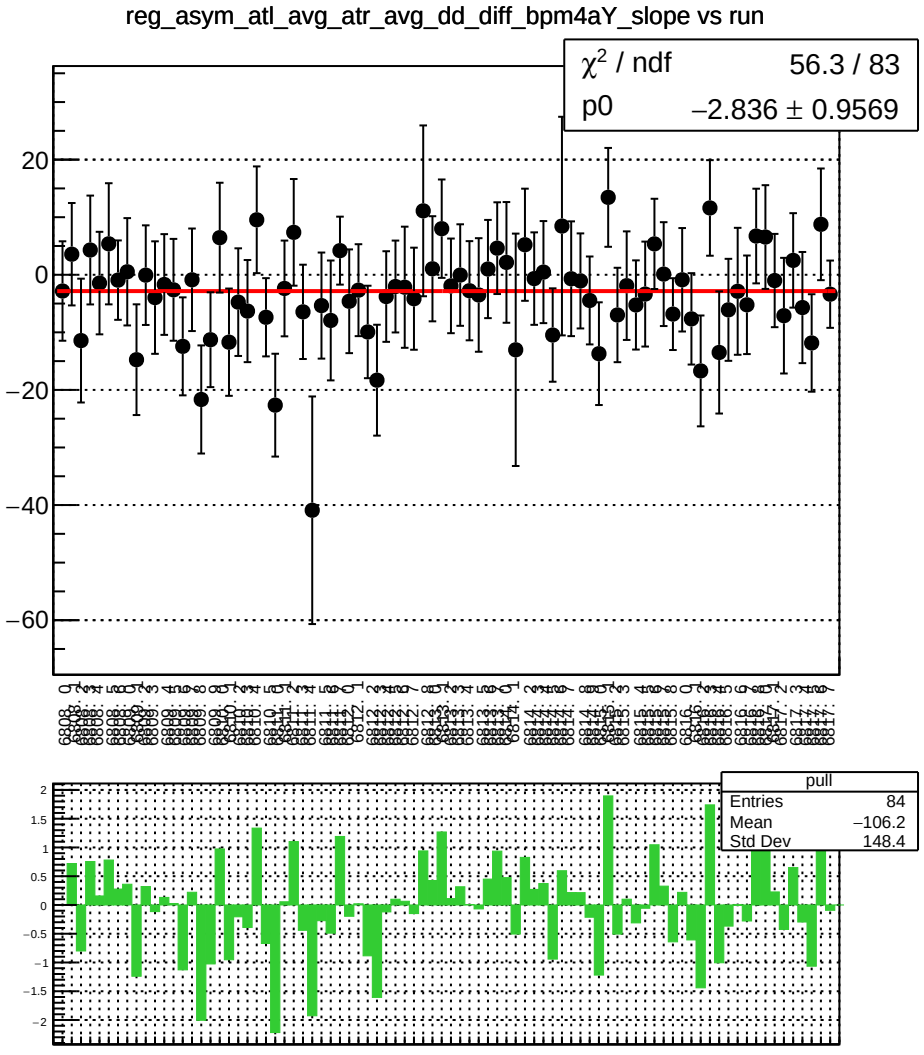

pull1D
Entries 84
Mean 0.003424
Std Dev 0.3119

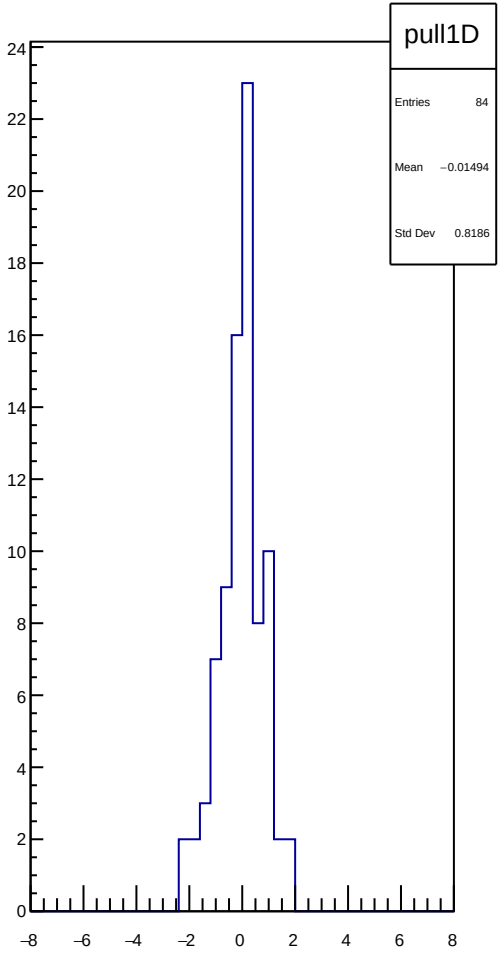

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 10.95 / 83
p0 280.5 ± 4.324
pull
Entries 84
Mean 228.1
Std Dev 137.9
pull1D
Entries 84
Mean 0.000812
Std Dev 0.3611

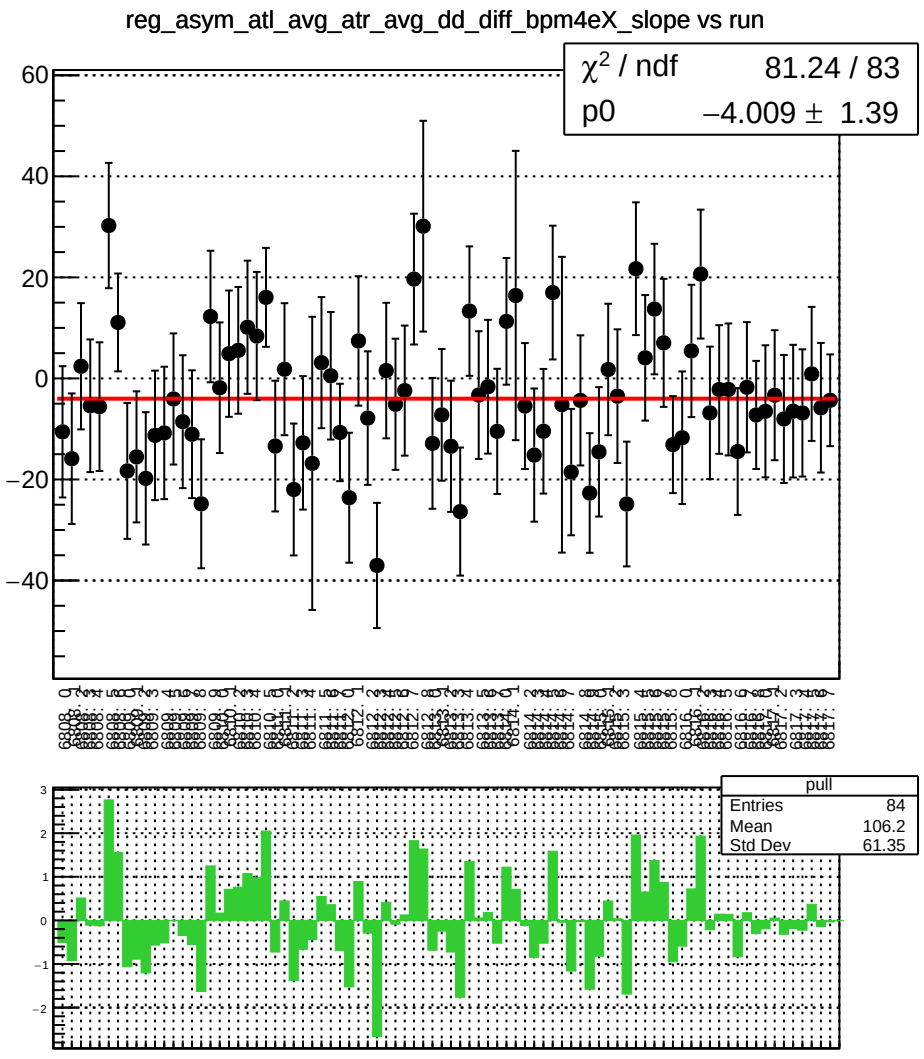

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.586 / 83
p0 30.66 ± 3.578
pull
Entries 84
Mean −111.3
Std Dev 142.8
pull1D
Entries 84
Mean −0.003505
Std Dev 0.3005

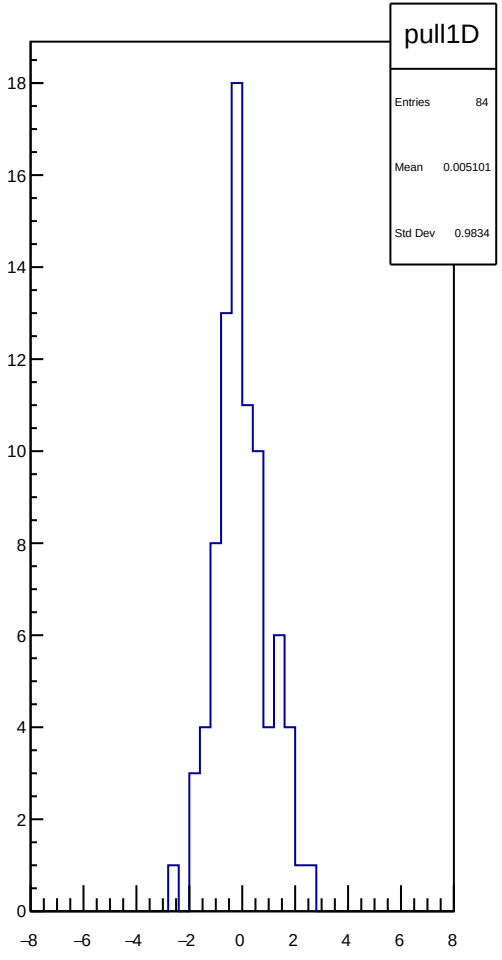

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 19.5 / 83
p0 −143.7 ± 0.188
pull
Entries 84
Mean 625.1
Std Dev 583.3
pull1D
Entries 84
Mean 0.004733
Std Dev 0.4818

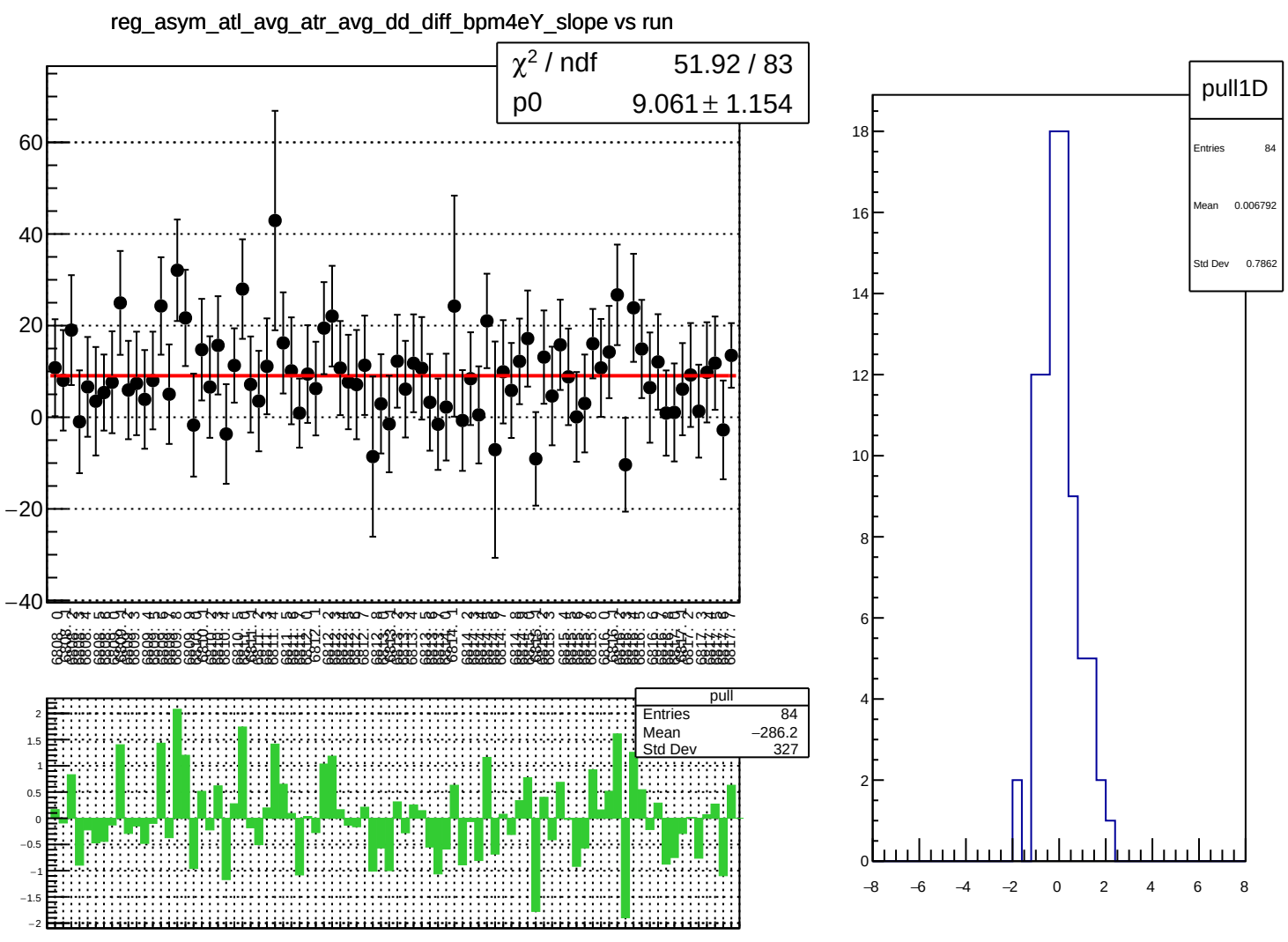

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 79.46 / 83
p0 −16.12 ± 1.486
pull
Entries 84
Mean 67.38
Std Dev 15.22
pull1D
Entries 84
Mean −0.005955
Std Dev 0.9726

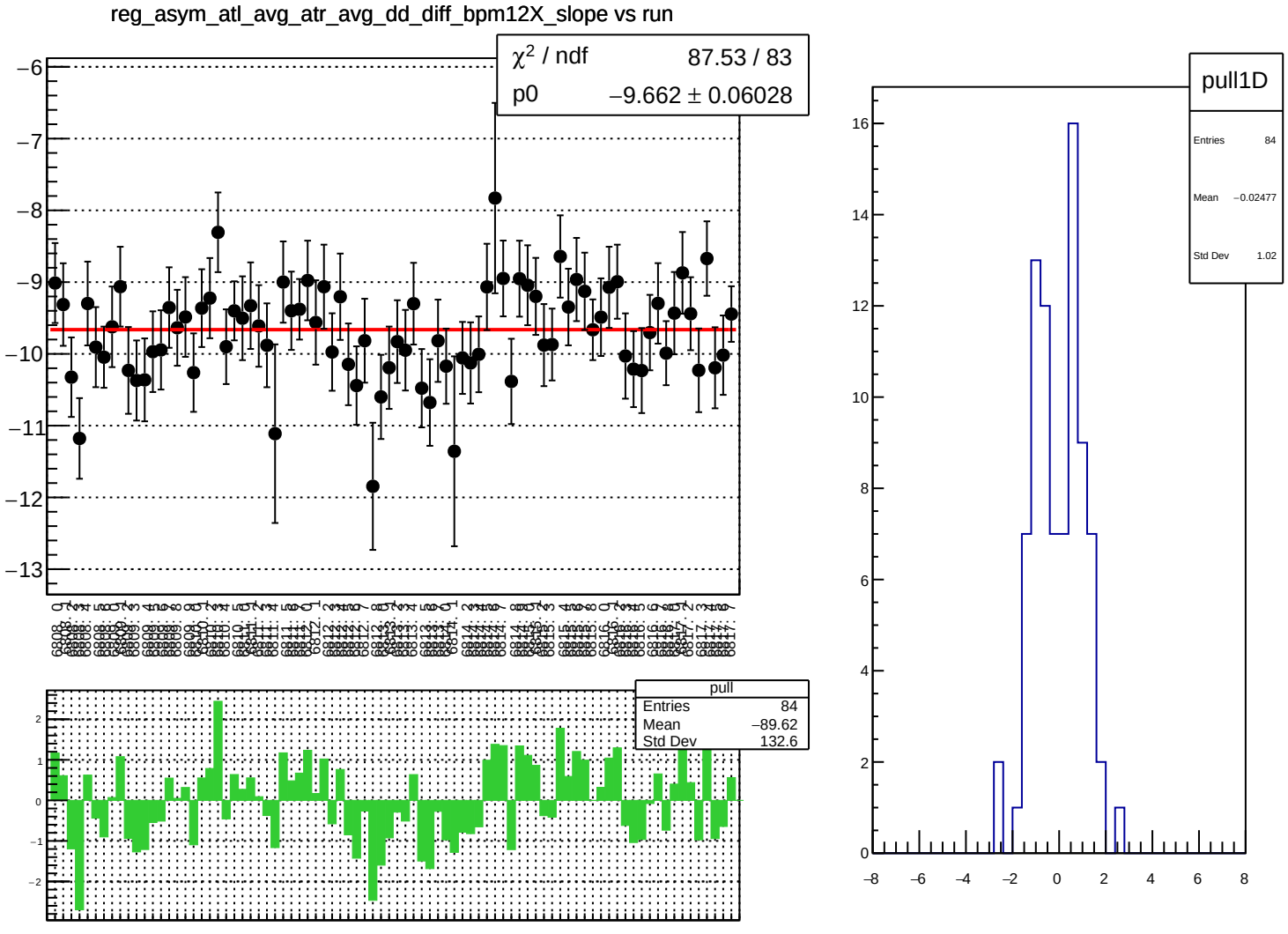

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 56.3 / 83
p0 −2.836 ± 0.9569
pull
Entries 84
Mean −106.2
Std Dev 148.4

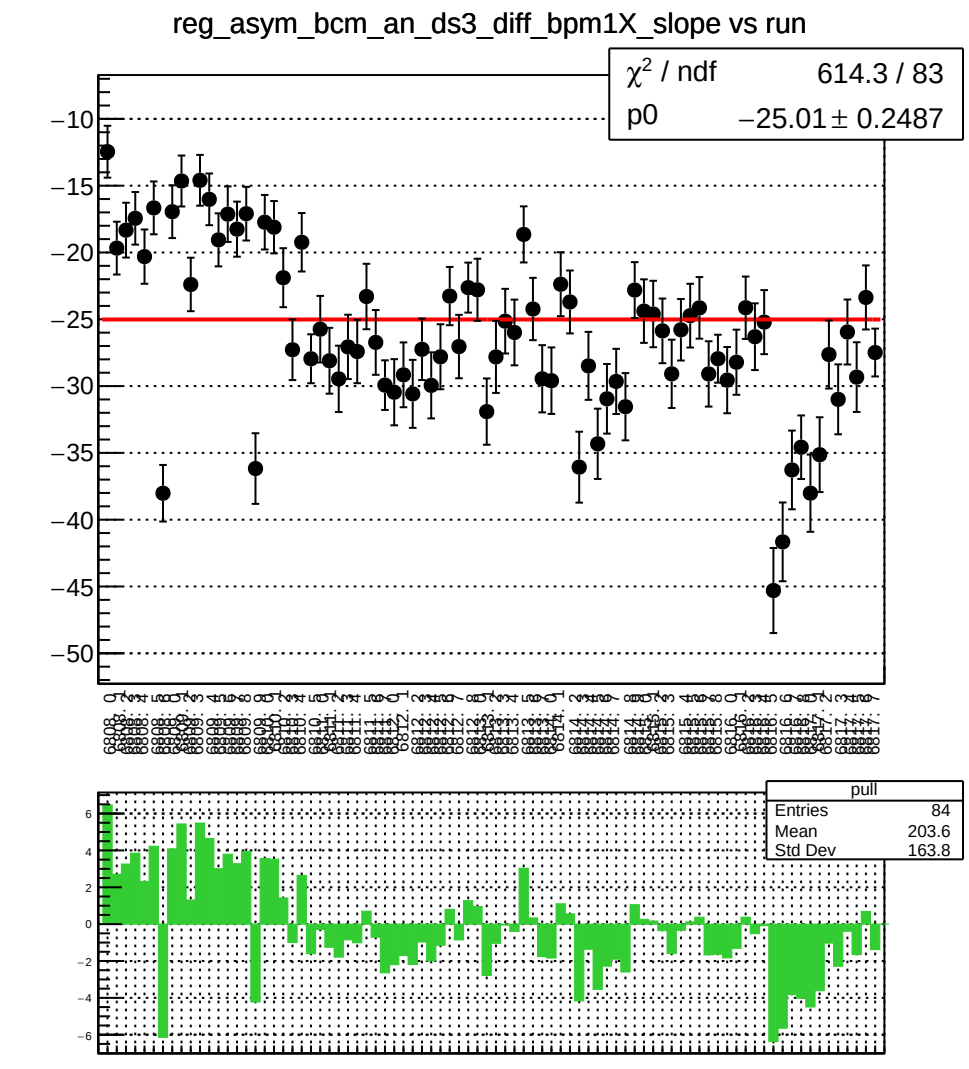

pull1D
Entries 84
Mean −0.01494
Std Dev 0.8186

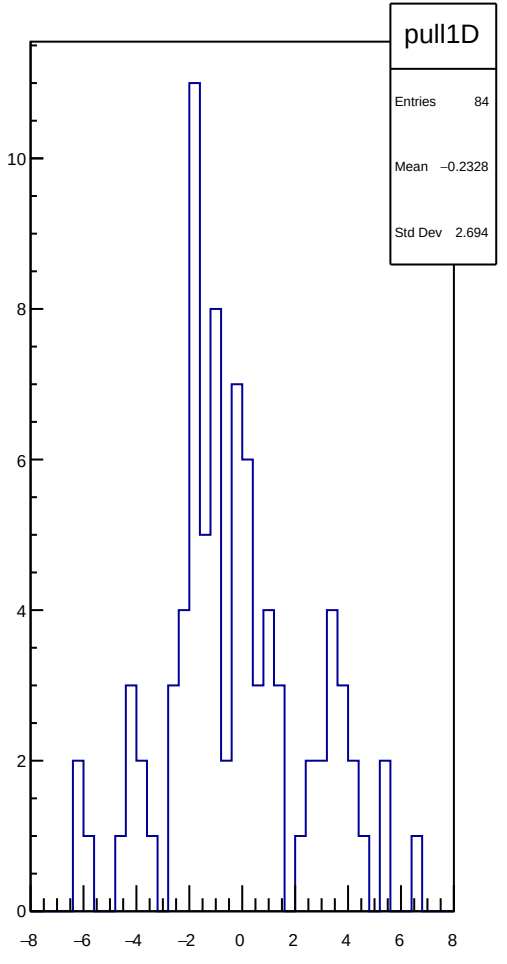

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 81.24 / 83
p0 −4.009 ± 1.39
pull
Entries 84
Mean 106.2
Std Dev 61.35

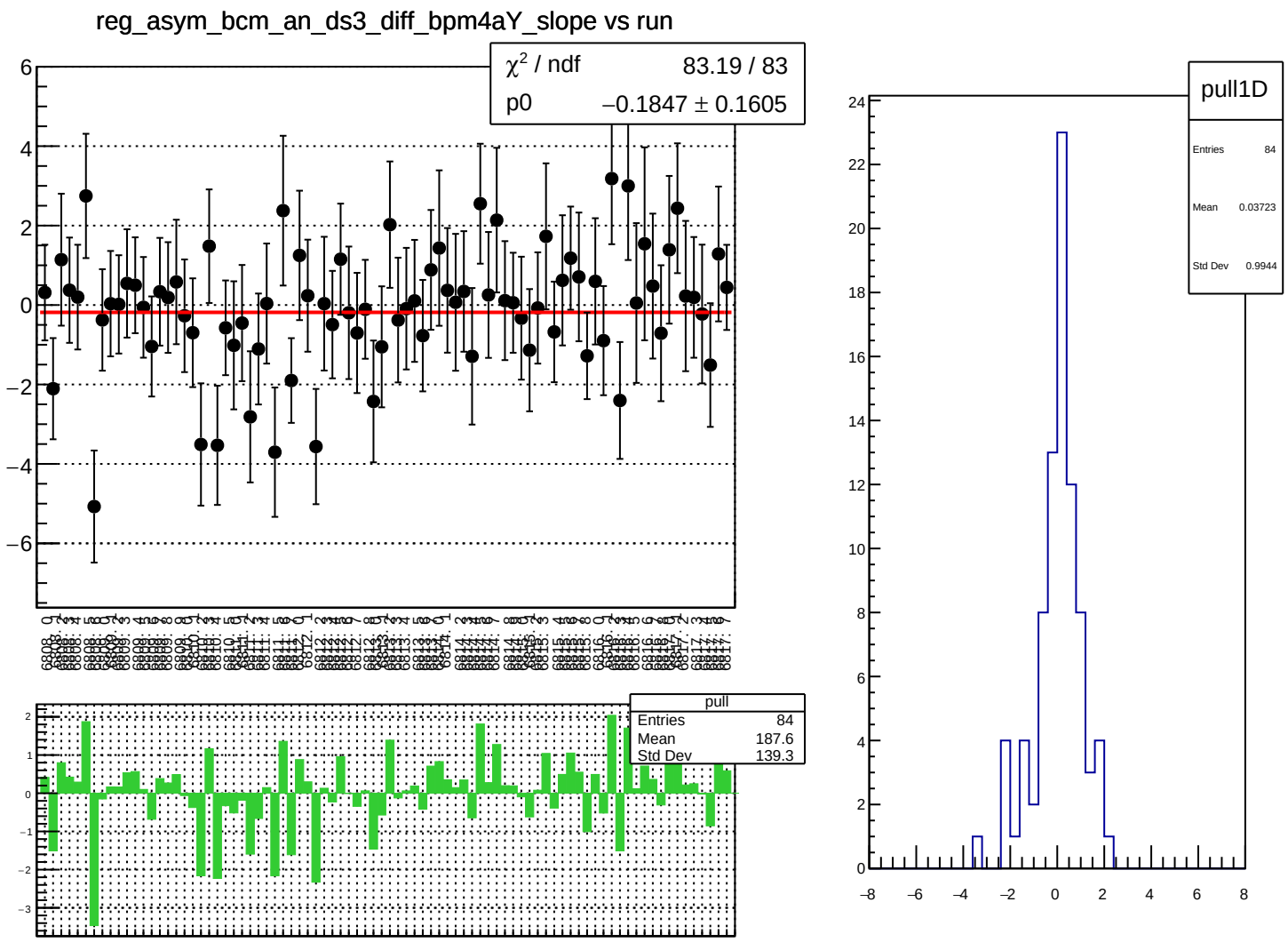

pull1D
Entries 84
Mean 0.005101
Std Dev 0.9834

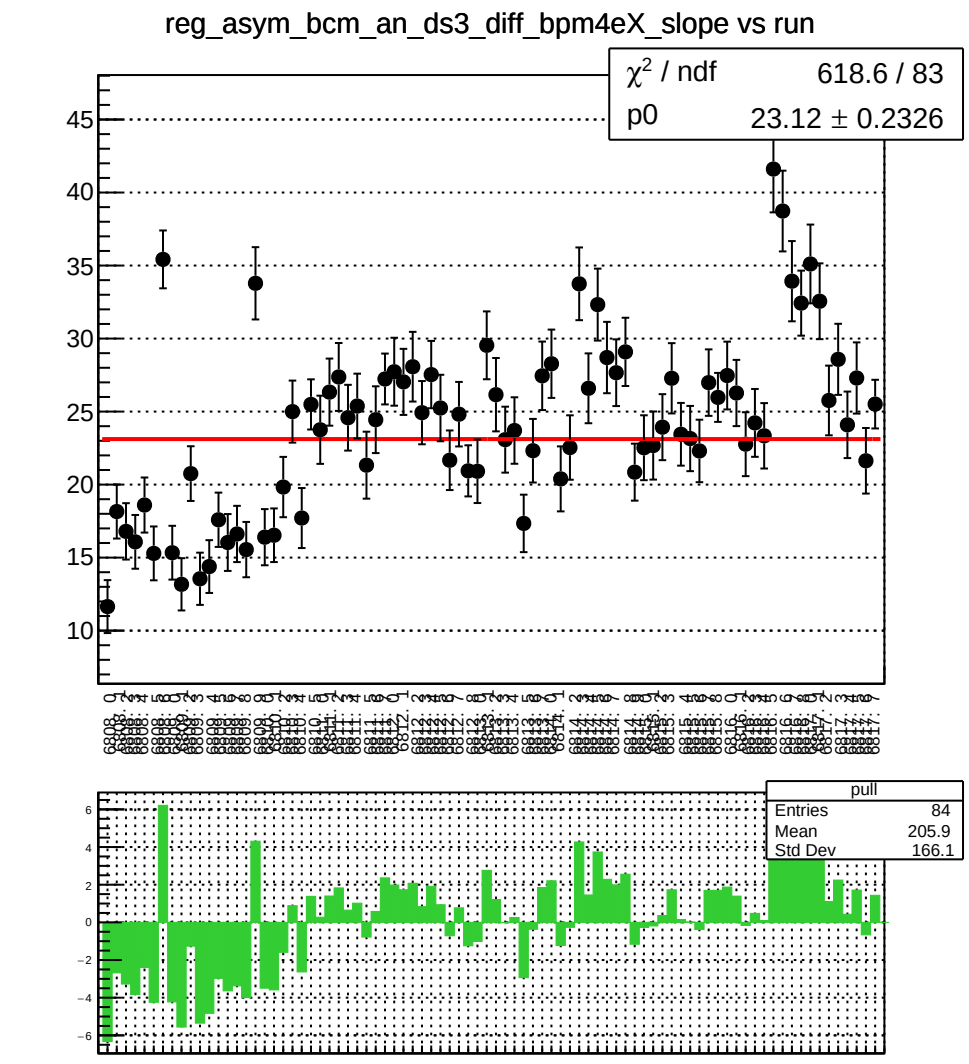

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 51.92 / 83
p0 9.061 ± 1.154
pull
Entries 84
Mean −286.2
Std Dev 327
pull1D
Entries 84
Mean 0.006792
Std Dev 0.7862

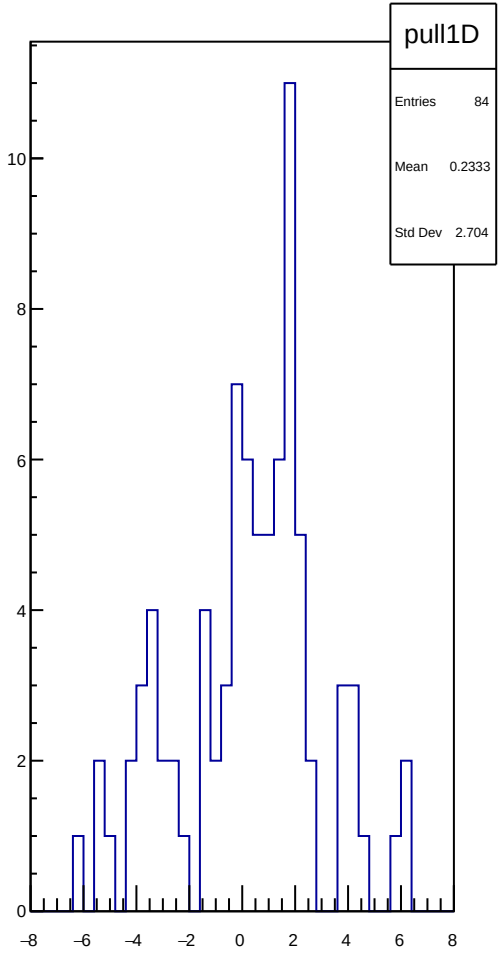

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 87.53 / 83
p0 −9.662 ± 0.06028
pull
Entries 84
Mean −89.62
Std Dev 132.6
pull1D
Entries 84
Mean −0.02477
Std Dev 1.02

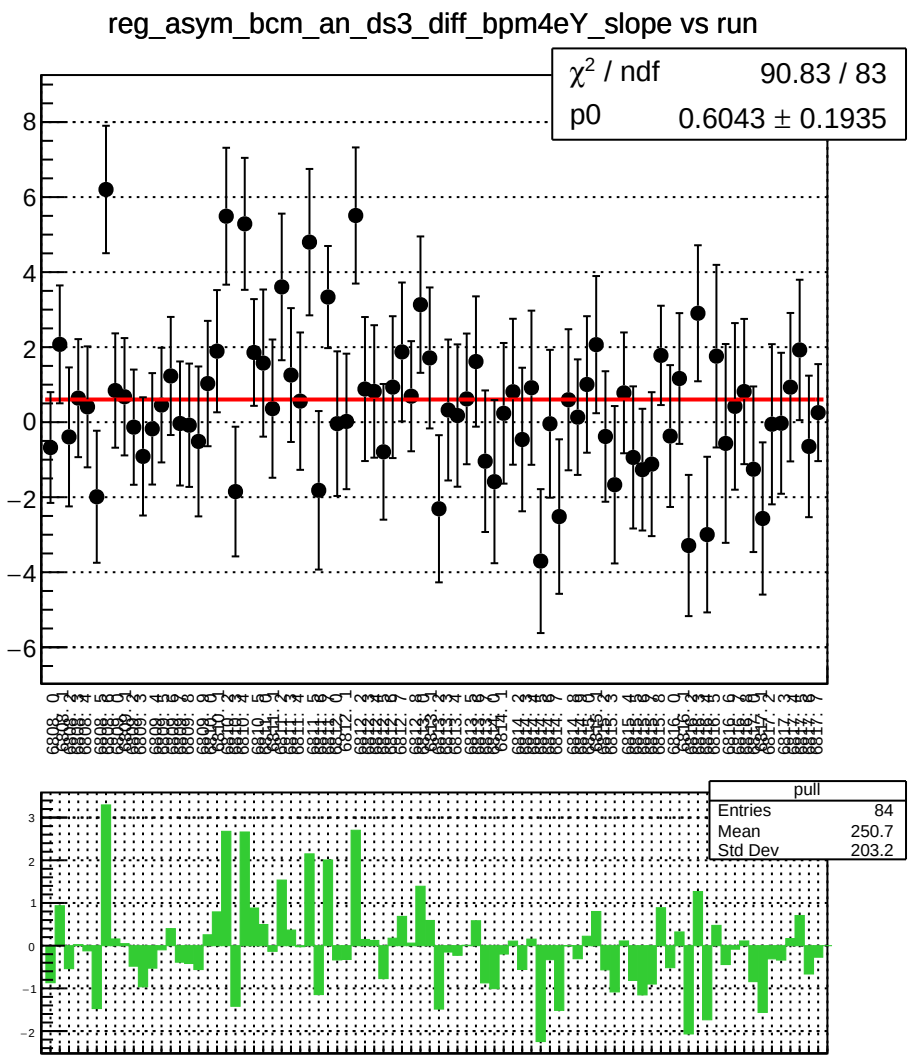

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 614.3 / 83
p0 −25.01 ± 0.2487
pull
Entries 84
Mean 203.6
Std Dev 163.8

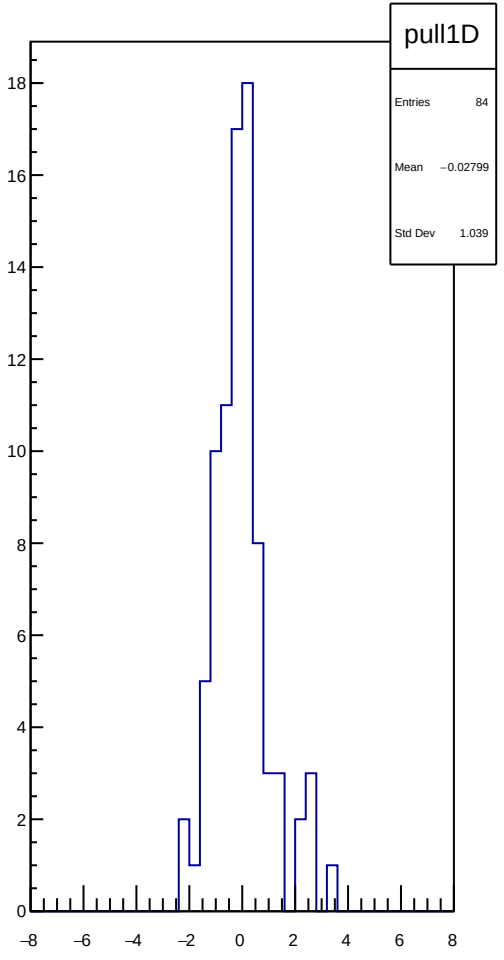

pull1D
Entries 84
Mean −0.2328
Std Dev 2.694

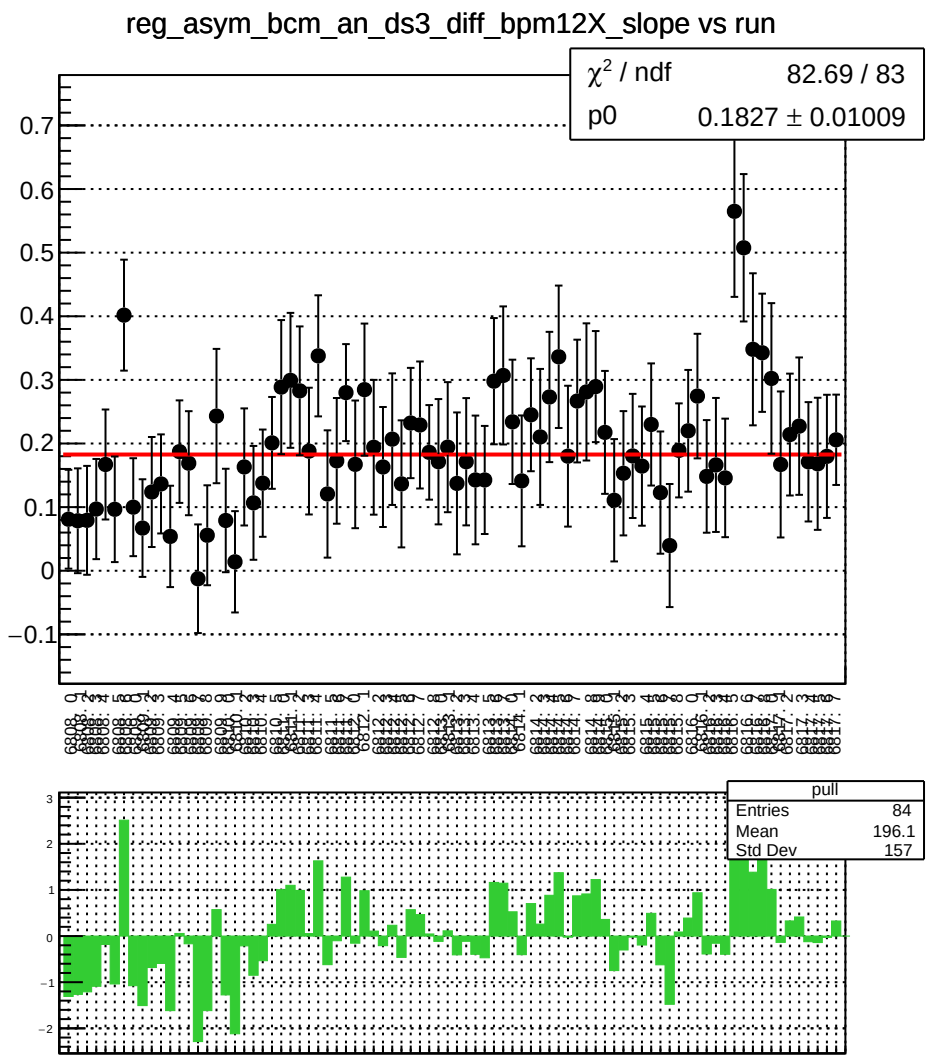

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 83.19 / 83
p0 −0.1847 ± 0.1605
pull
Entries 84
Mean 187.6
Std Dev 139.3
pull1D
Entries 84
Mean 0.03723
Std Dev 0.9944

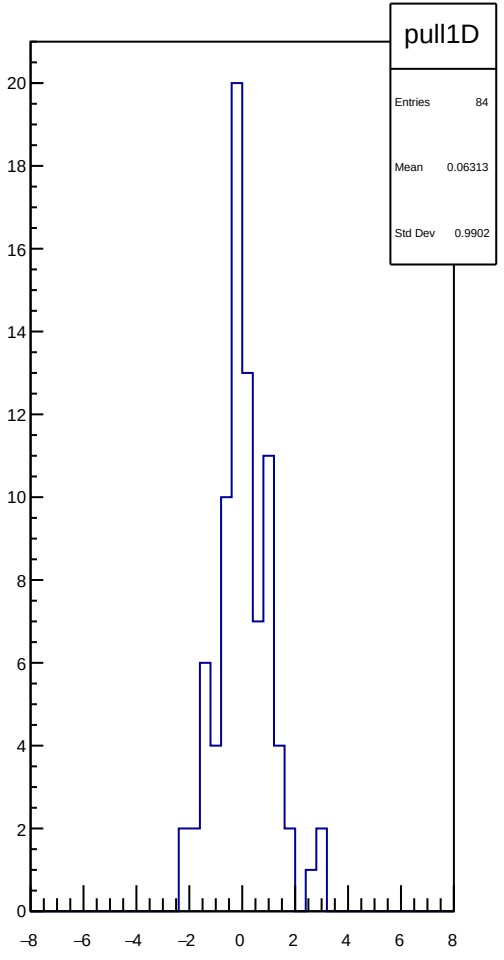

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 618.6 / 83
p0 23.12 ± 0.2326
pull
Entries 84
Mean 205.9
Std Dev 166.1

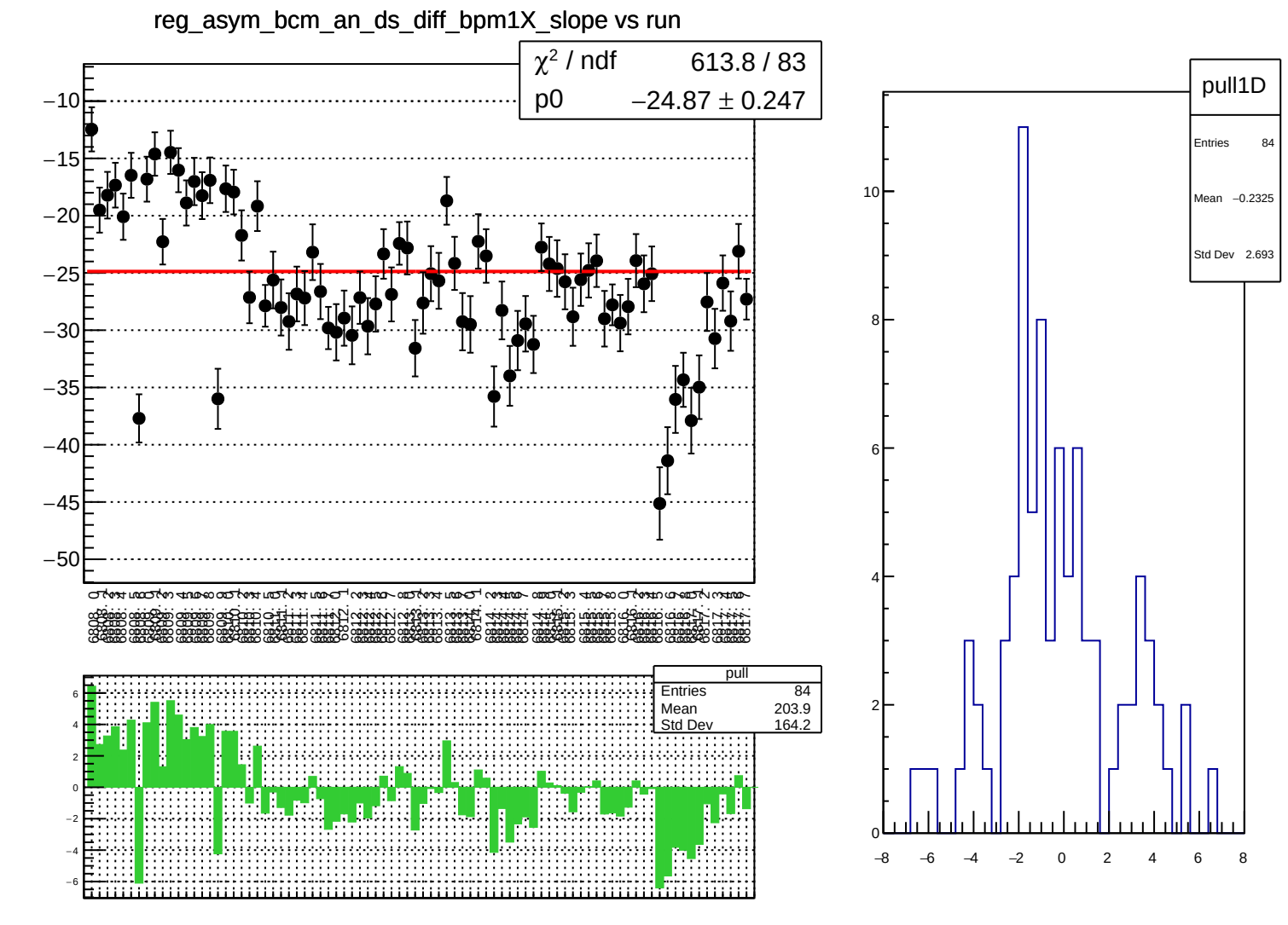

pull1D
Entries 84
Mean 0.2333
Std Dev 2.704

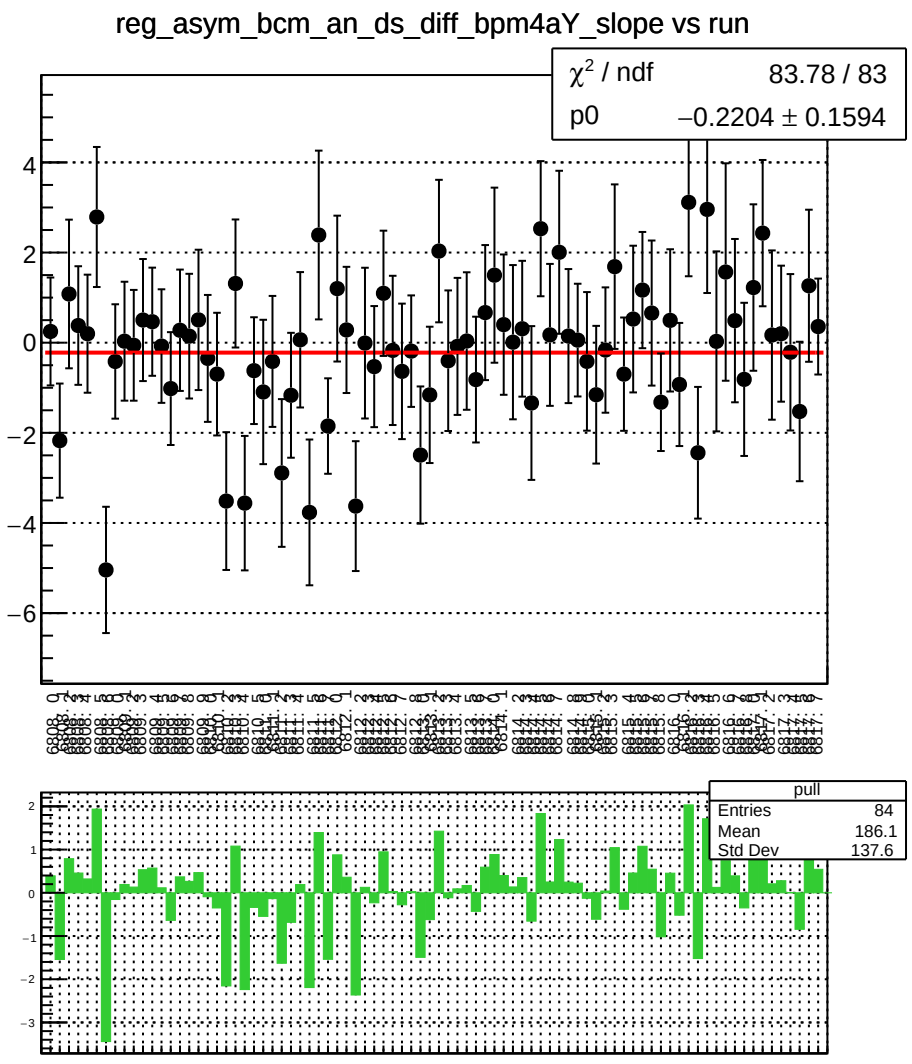

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 90.83 / 83
p0 0.6043 ± 0.1935
pull
Entries 84
Mean 250.7
Std Dev 203.2

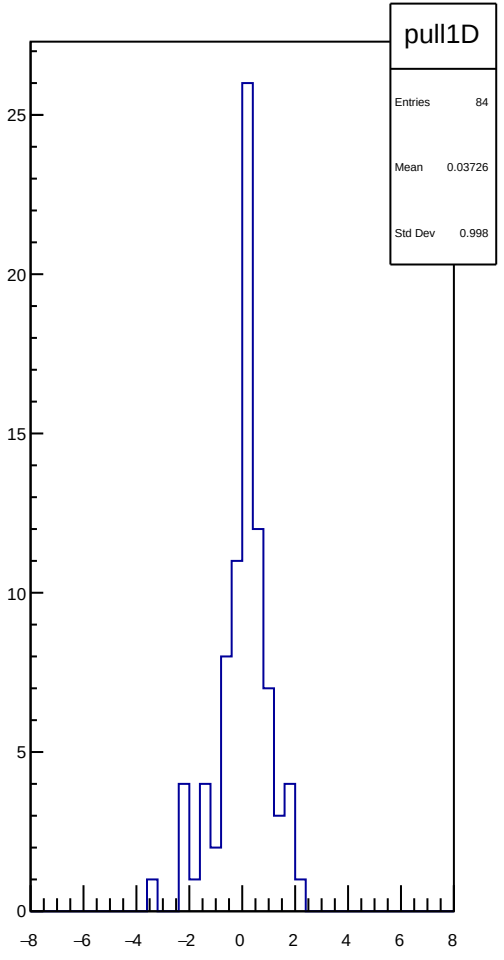

pull1D
Entries 84
Mean −0.02799
Std Dev 1.039

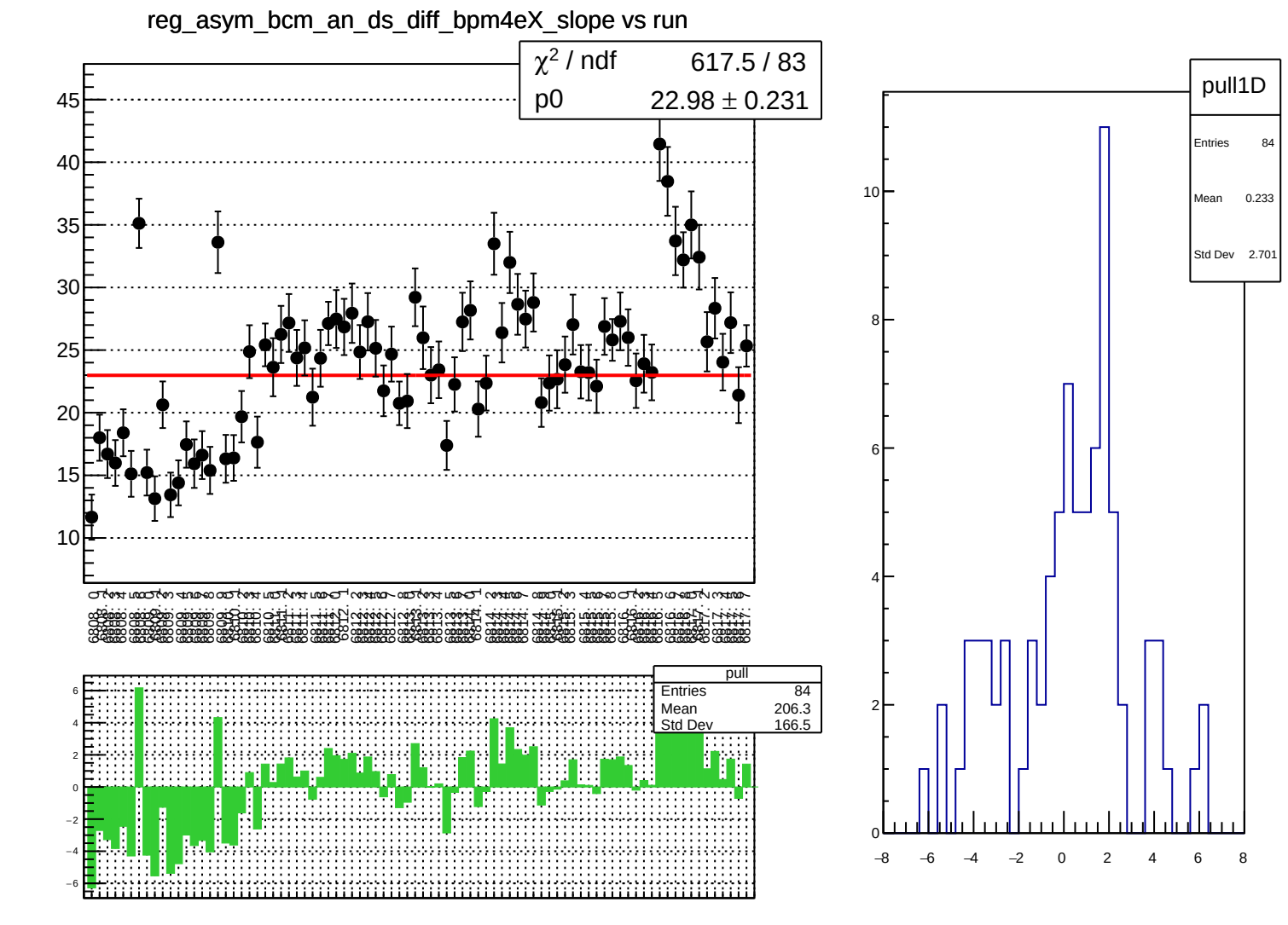

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 82.69 / 83
p0 0.1827 ± 0.01009
pull
Entries 84
Mean 196.1
Std Dev 157

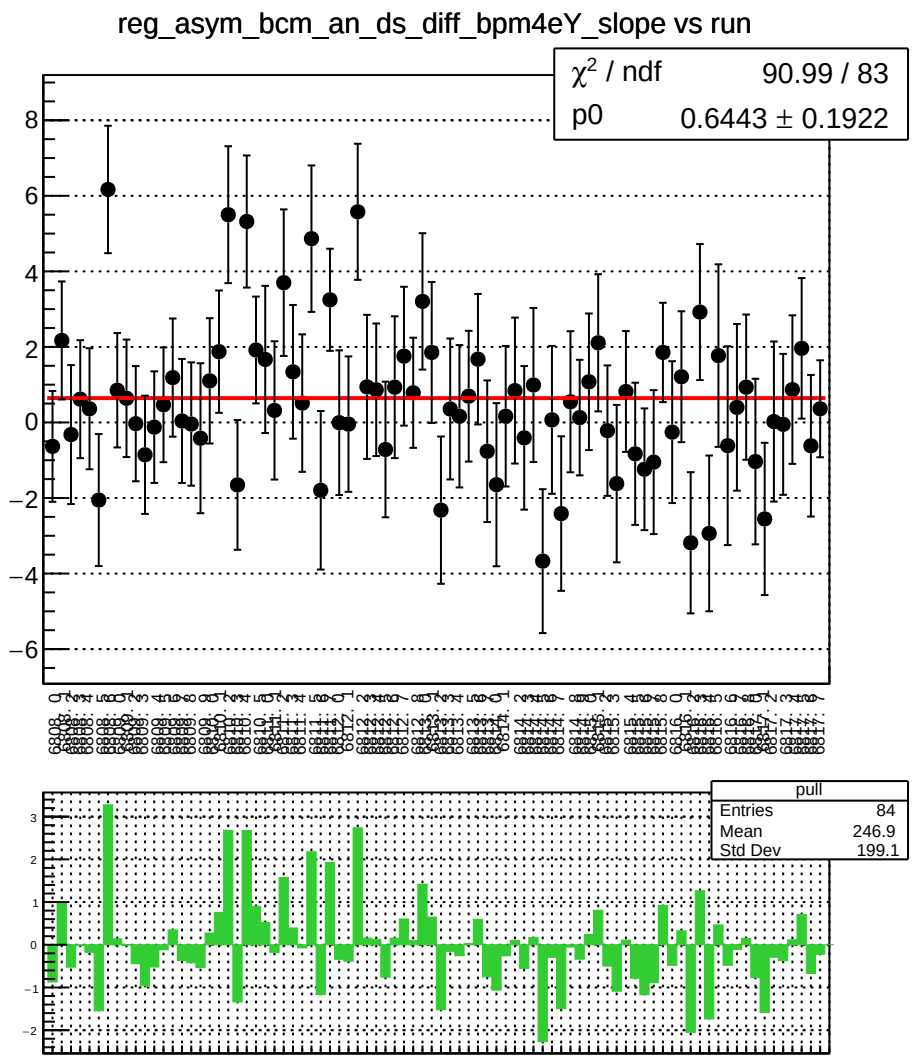

pull1D
Entries 84
Mean 0.06313
Std Dev 0.9902

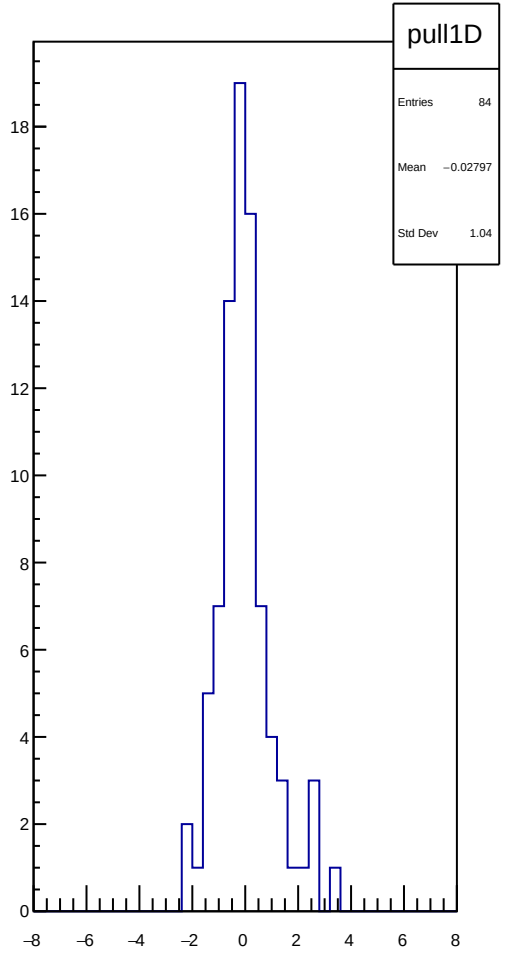

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 613.8 / 83
p0 −24.87 ± 0.247
pull
Entries 84
Mean 203.9
Std Dev 164.2
pull1D
Entries 84
Mean −0.2325
Std Dev 2.693

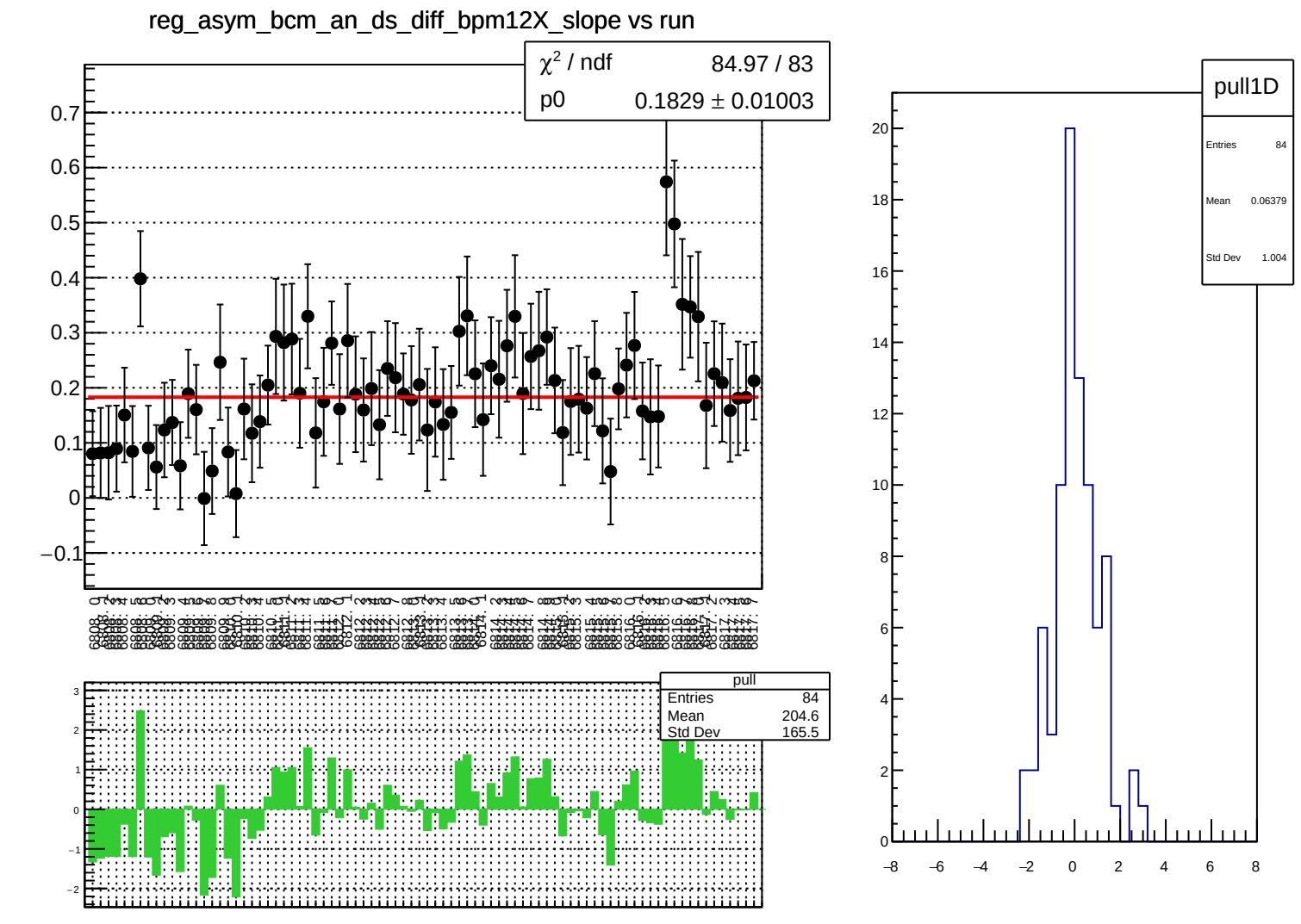

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 83.78 / 83
p0 −0.2204 ± 0.1594
pull
Entries 84
Mean 186.1
Std Dev 137.6

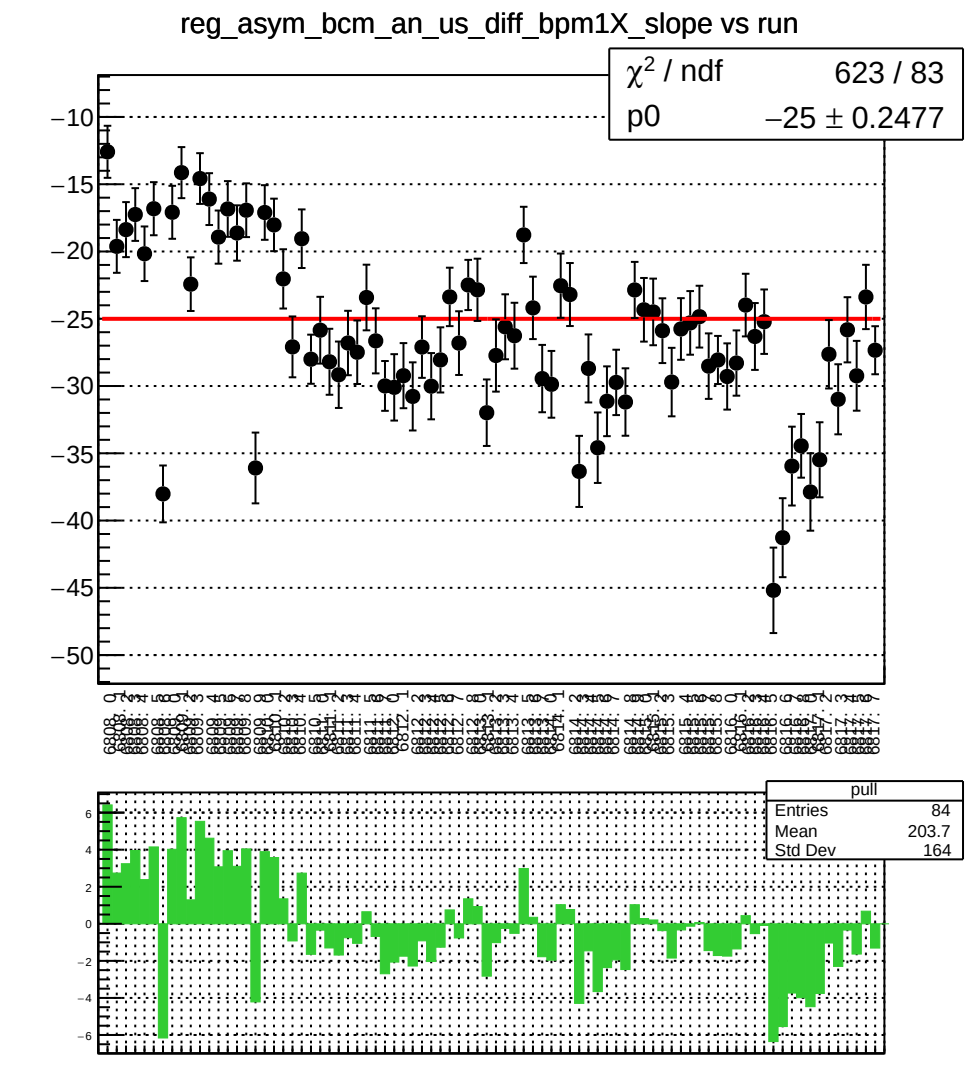

pull1D
Entries 84
Mean 0.03726
Std Dev 0.998

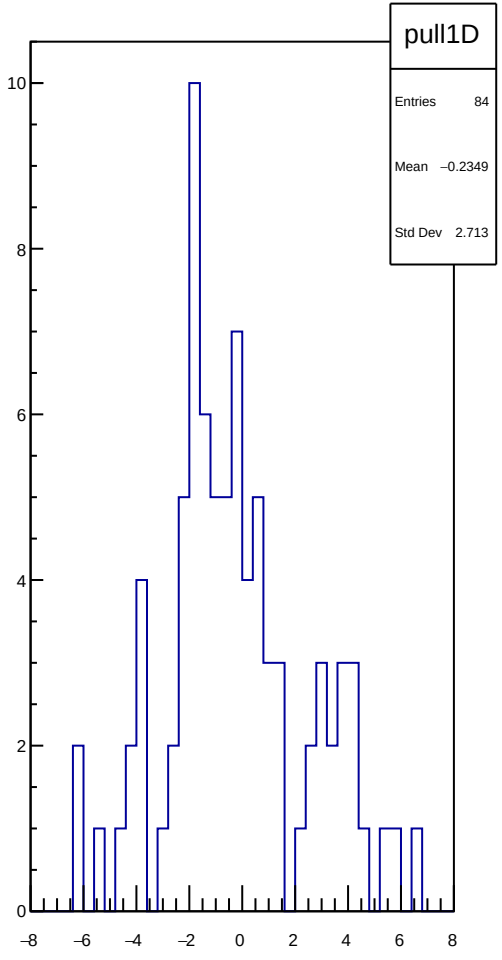

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 617.5 / 83
p0 22.98 ± 0.231
pull
Entries 84
Mean 206.3
Std Dev 166.5
pull1D
Entries 84
Mean 0.233
Std Dev 2.701

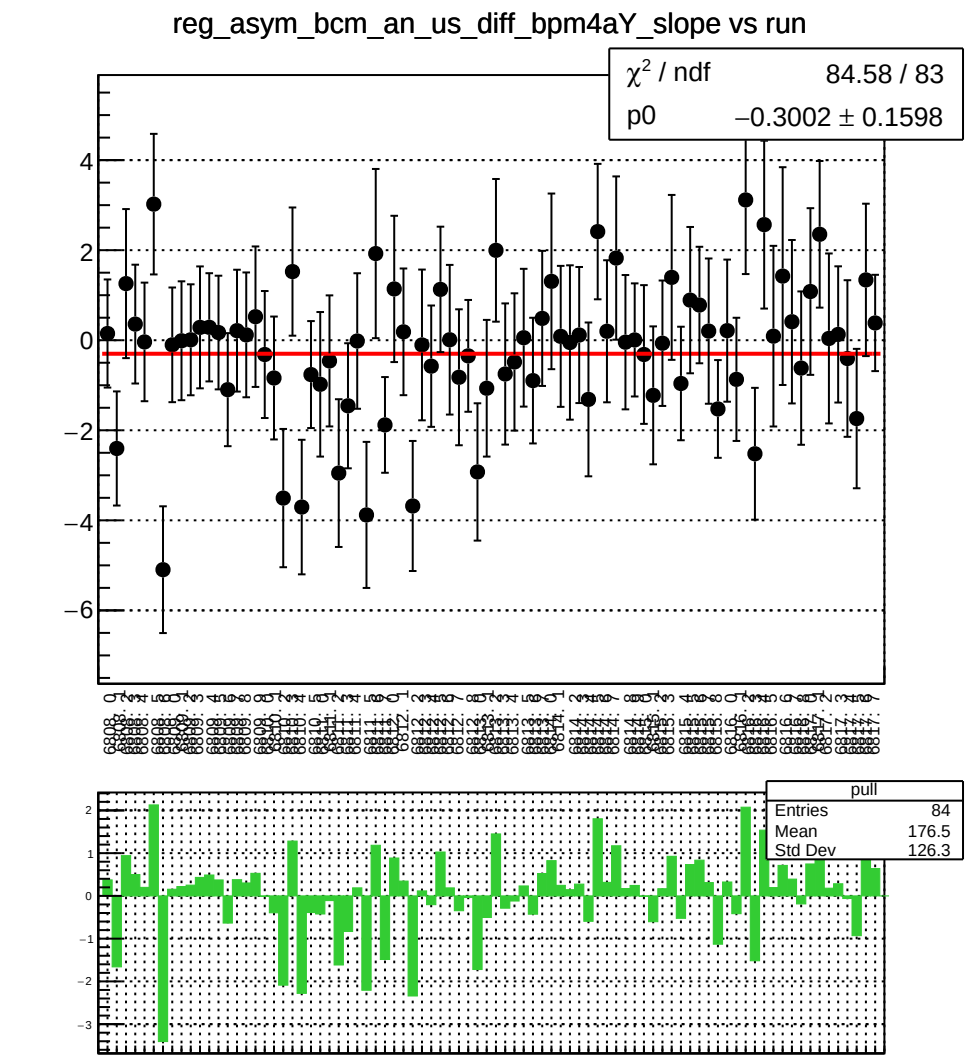

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 90.99 / 83
p0 0.6443 ± 0.1922
pull
Entries 84
Mean 246.9
Std Dev 199.1

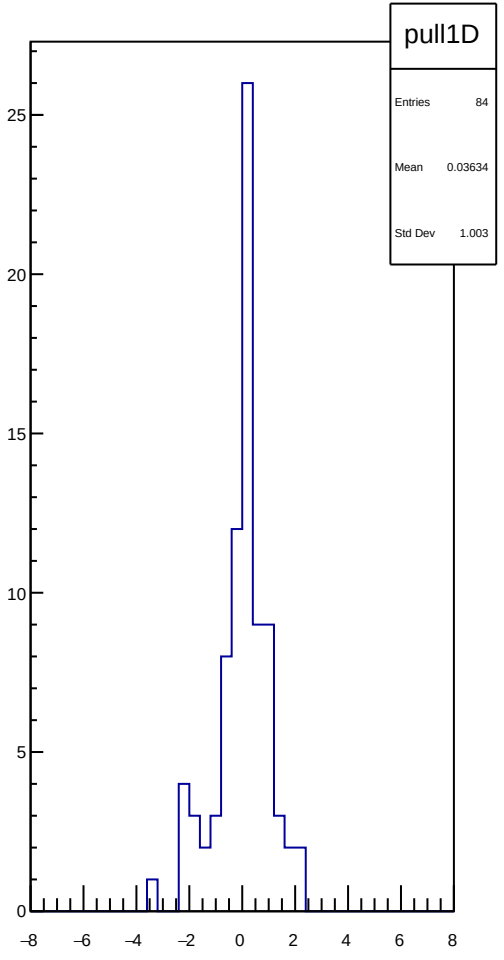

pull1D
Entries 84
Mean −0.02797
Std Dev 1.04

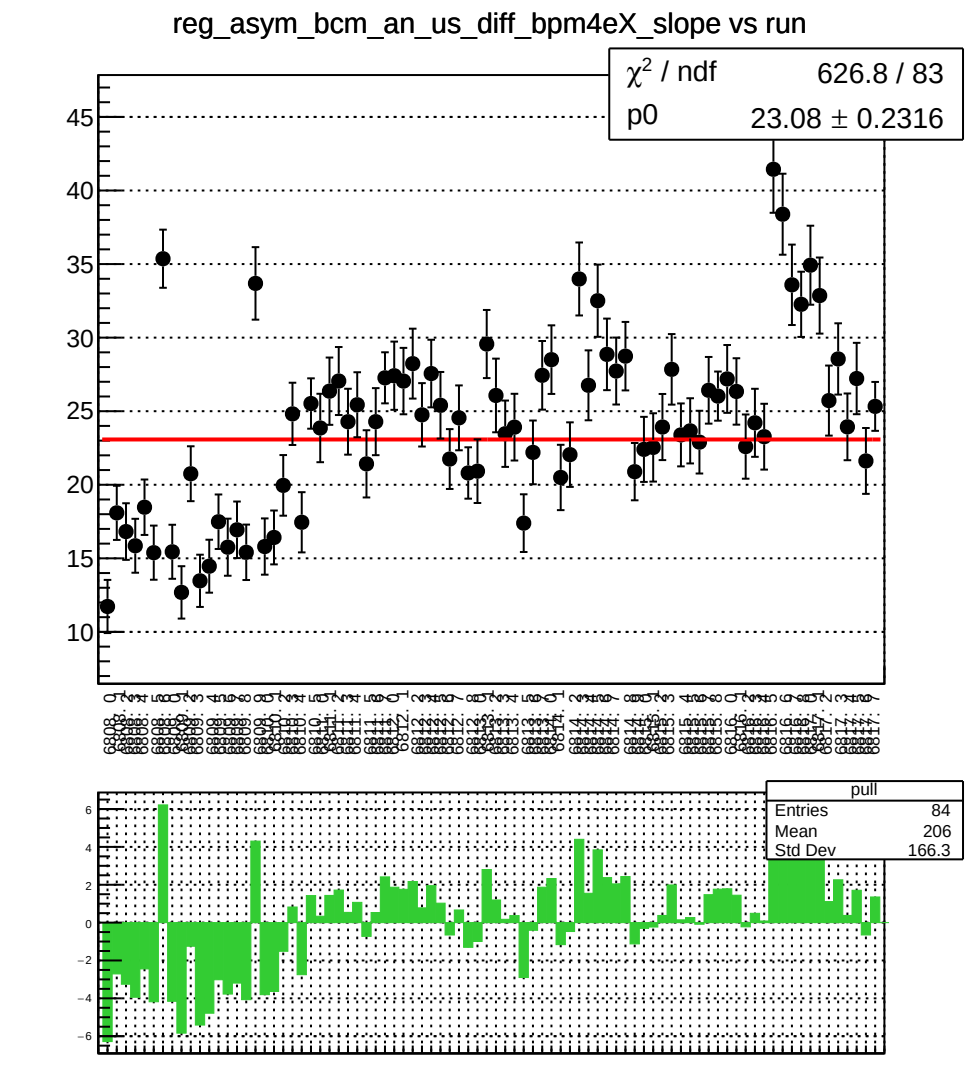

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 84.97 / 83
p0 0.1829 ± 0.01003
pull
Entries 84
Mean 204.6
Std Dev 165.5
pull1D
Entries 84
Mean 0.06379
Std Dev 1.004

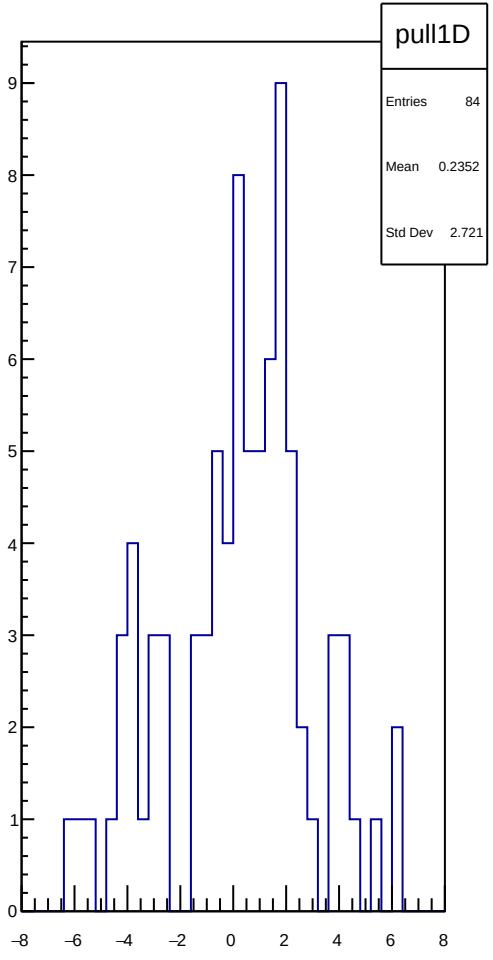

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 623 / 83
p0 −25 ± 0.2477
pull
Entries 84
Mean 203.7
Std Dev 164

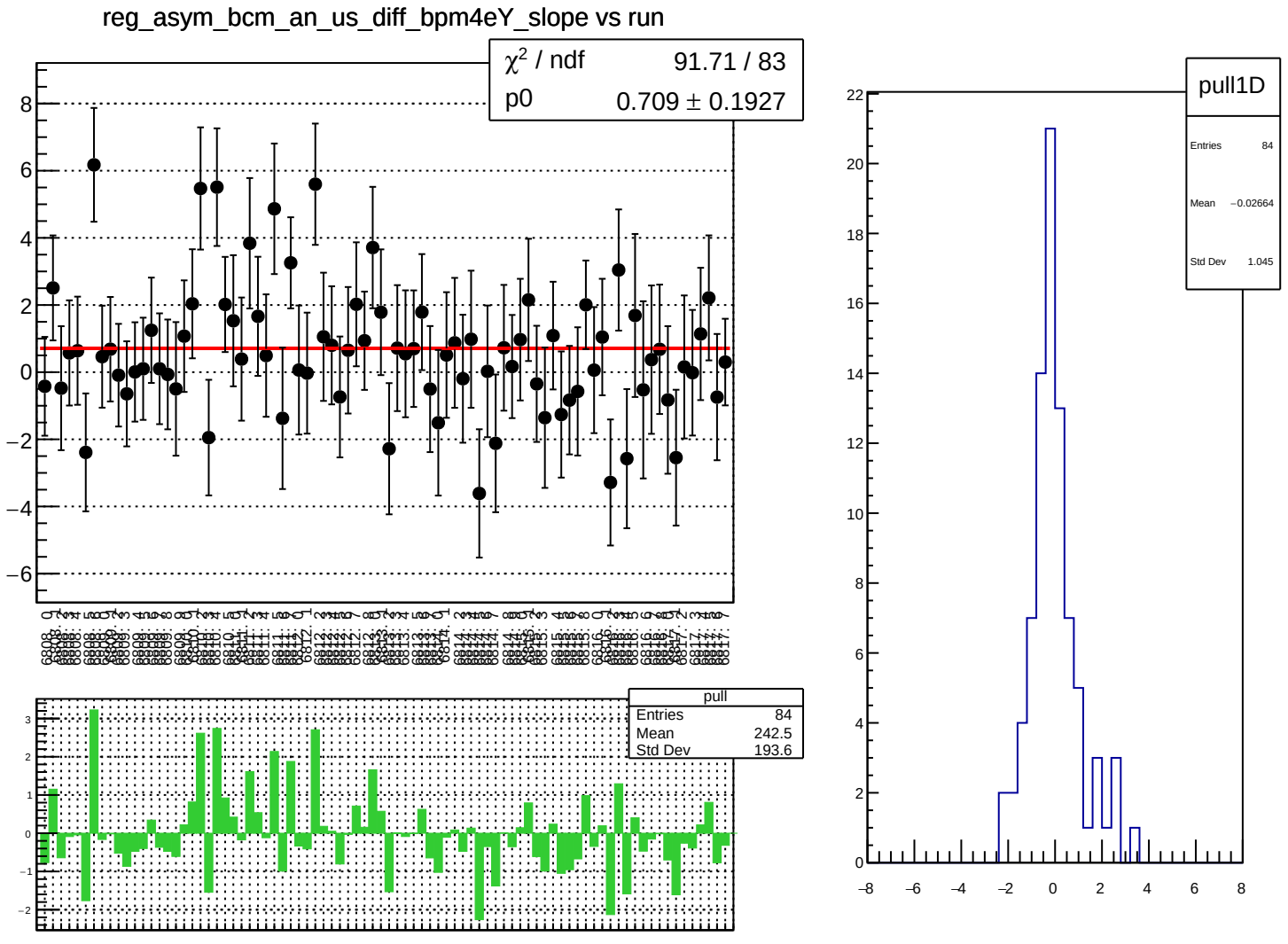

pull1D
Entries 84
Mean −0.2349
Std Dev 2.713

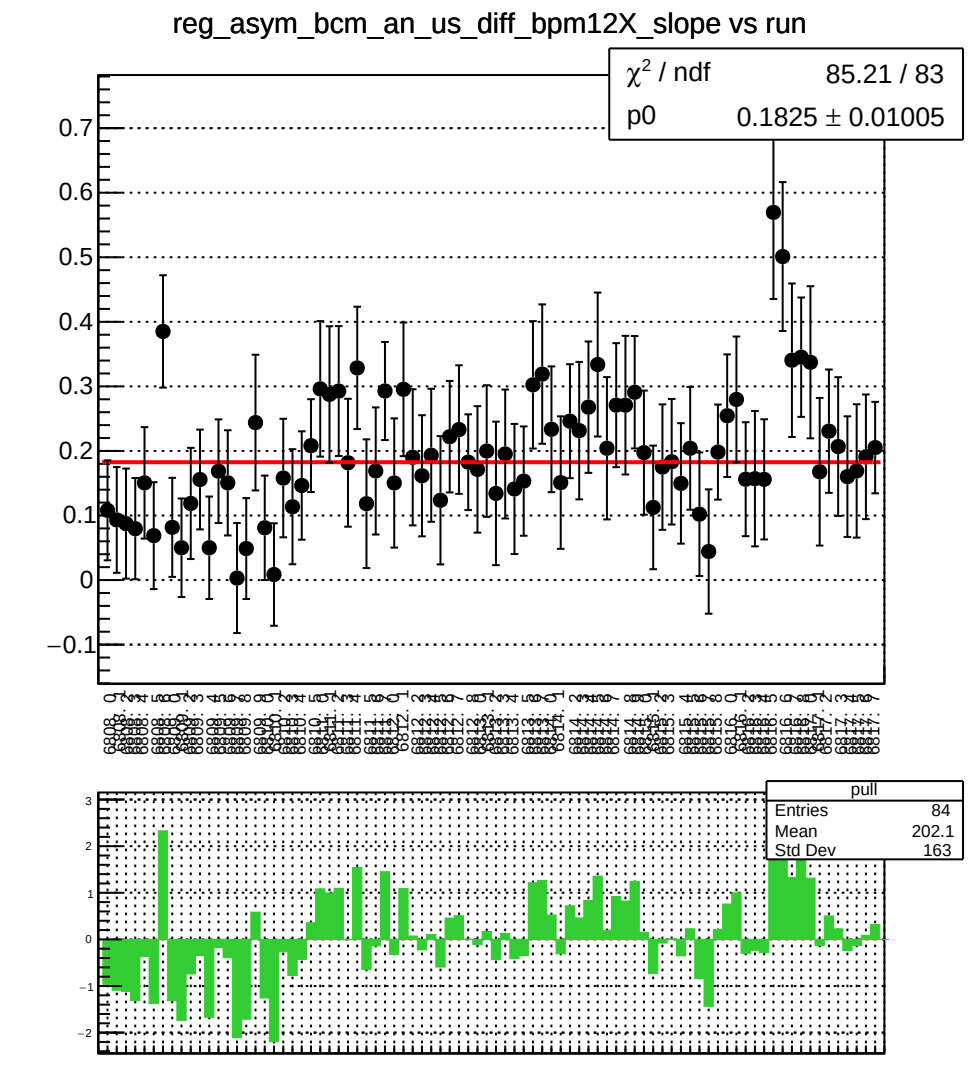

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 84.58 / 83
p0 −0.3002 ± 0.1598
pull
Entries 84
Mean 176.5
Std Dev 126.3

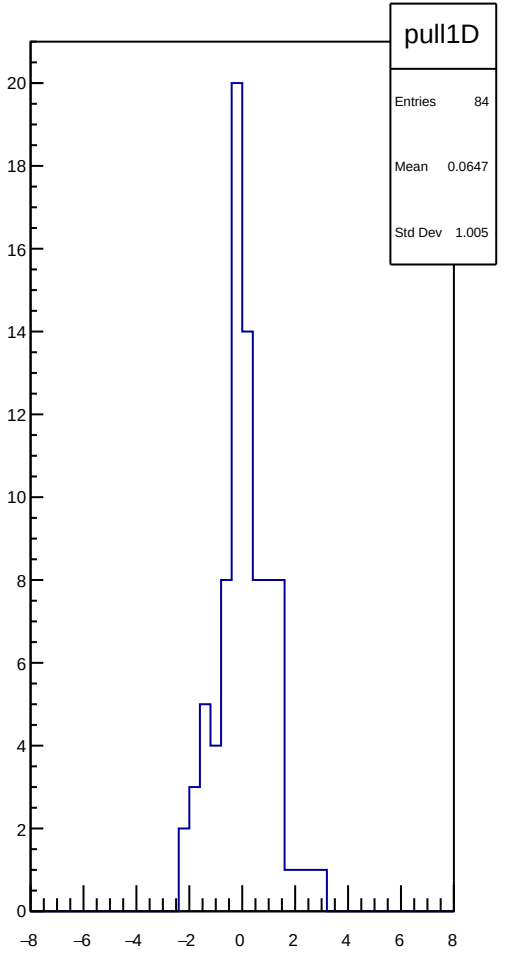

pull1D
Entries 84
Mean 0.03634
Std Dev 1.003

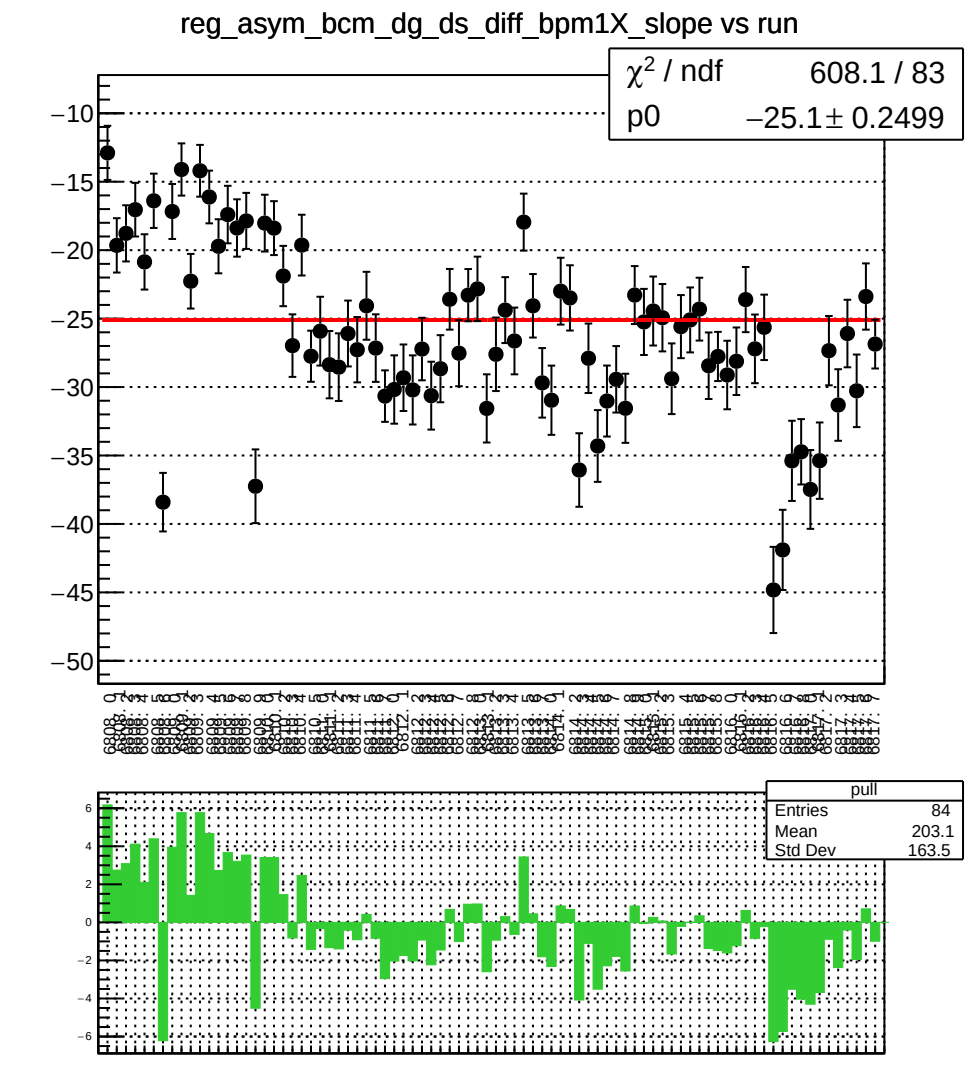

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 626.8 / 83
p0 23.08 ± 0.2316
pull
Entries 84
Mean 206
Std Dev 166.3

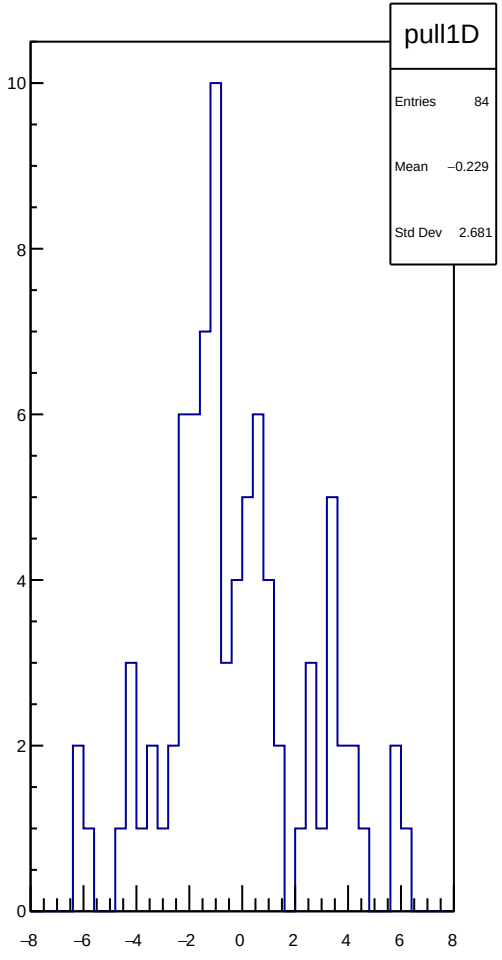

pull1D
Entries 84
Mean 0.2352
Std Dev 2.721

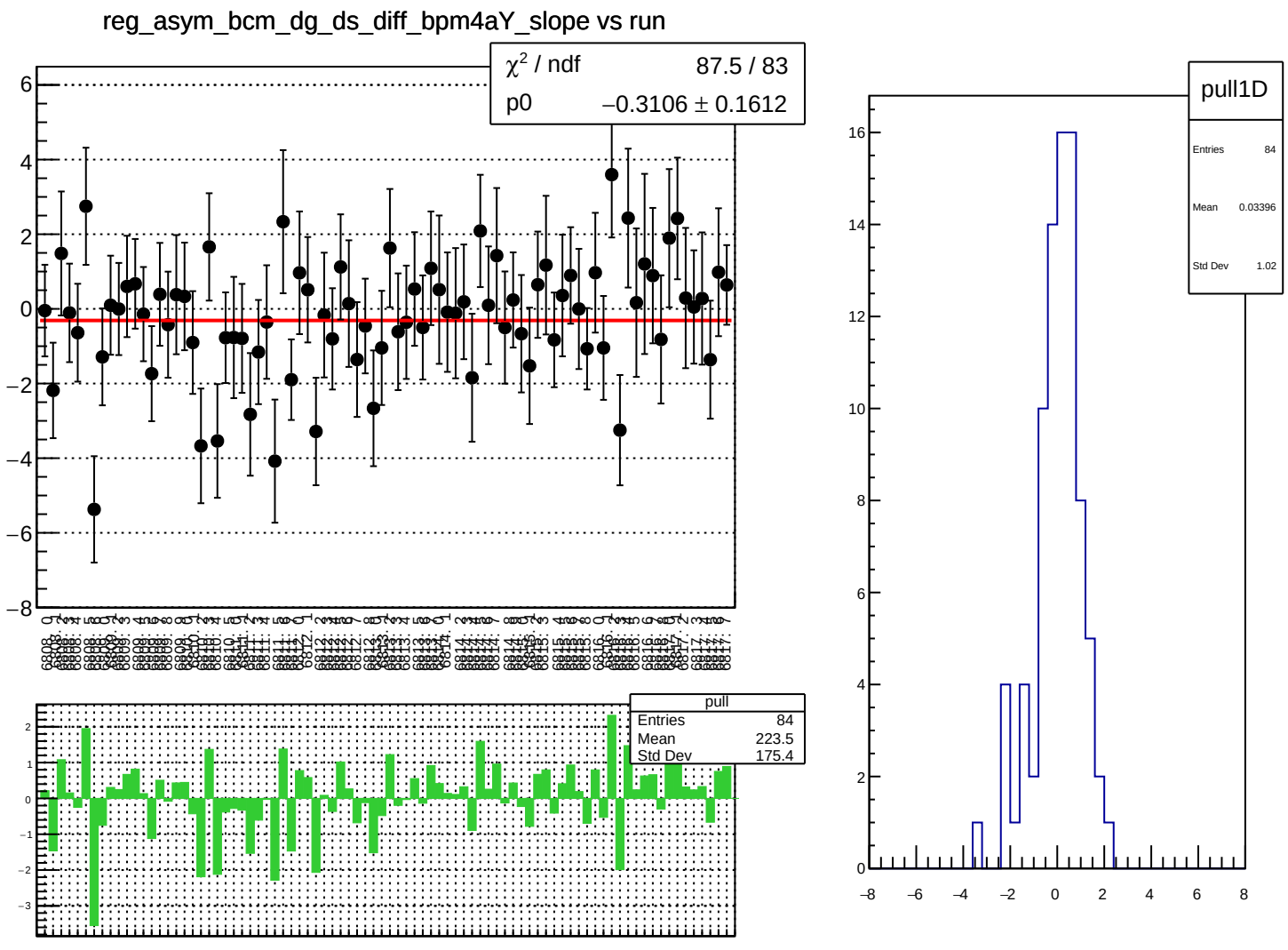

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 91.71 / 83
p0 0.709 ± 0.1927
pull
Entries 84
Mean 242.5
Std Dev 193.6
pull1D
Entries 84
Mean −0.02664
Std Dev 1.045

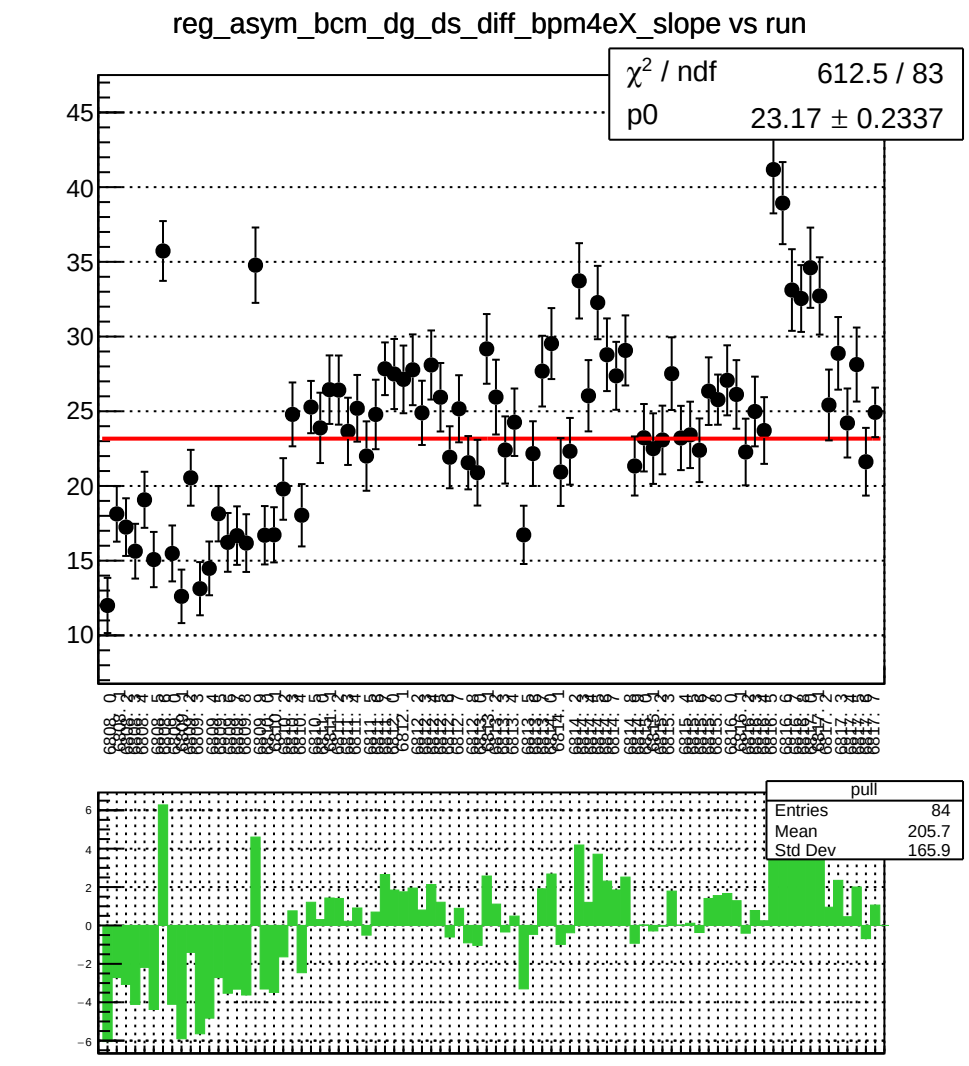

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 85.21 / 83
p0 0.1825 ± 0.01005
pull
Entries 84
Mean 202.1
Std Dev 163

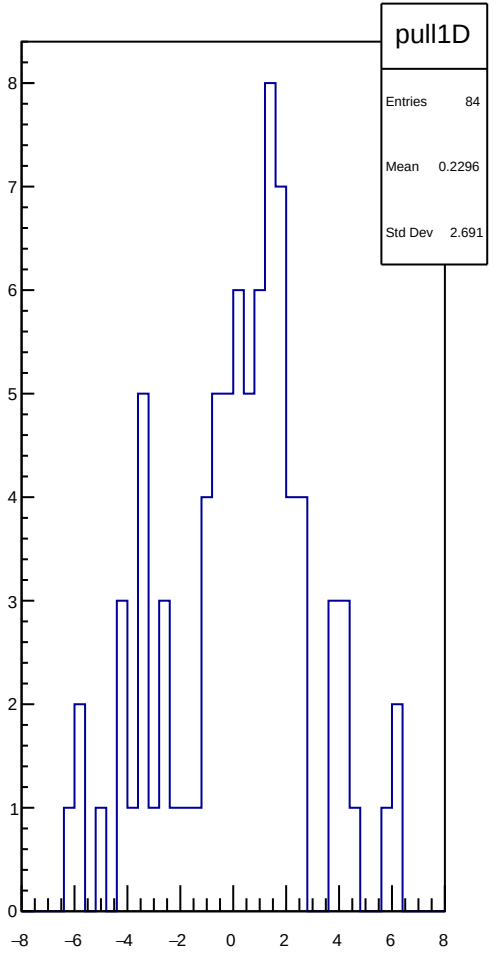

pull1D
Entries 84
Mean 0.0647
Std Dev 1.005

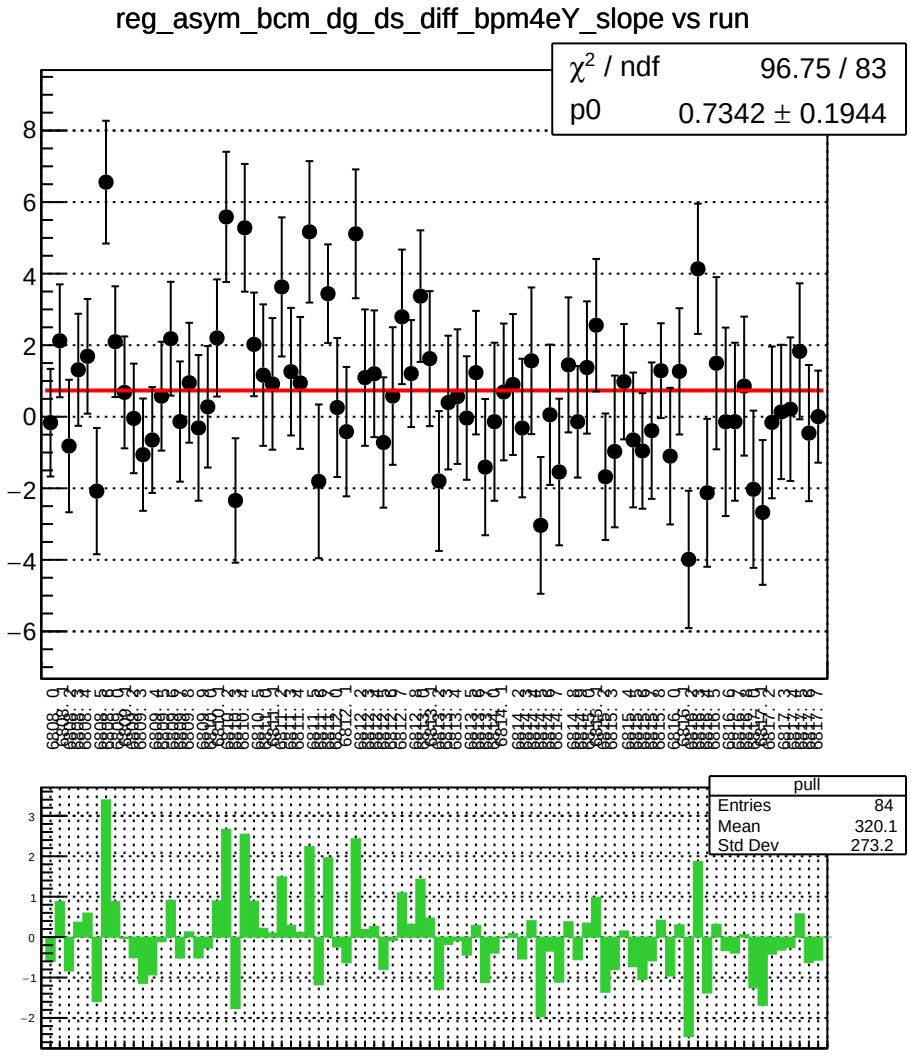

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 608.1 / 83
p0 −25.1 ± 0.2499
pull
Entries 84
Mean 203.1
Std Dev 163.5

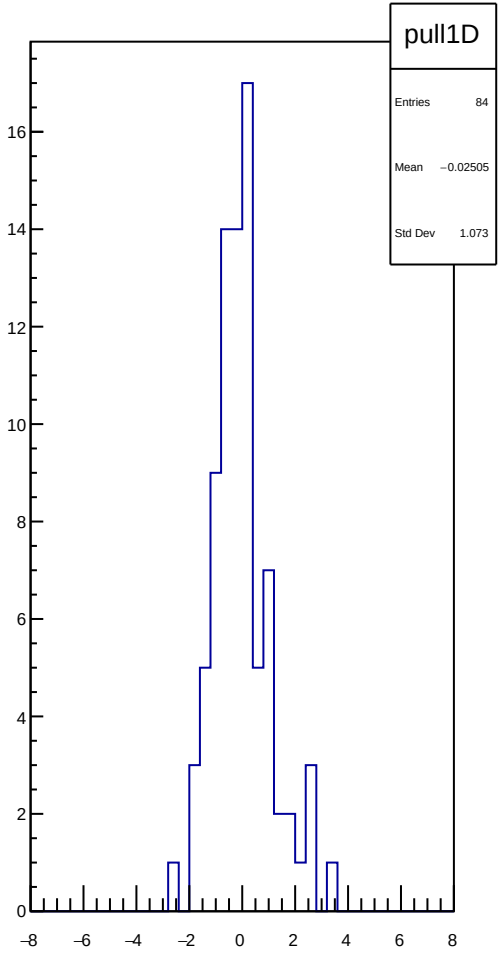

pull1D
Entries 84
Mean −0.229
Std Dev 2.681

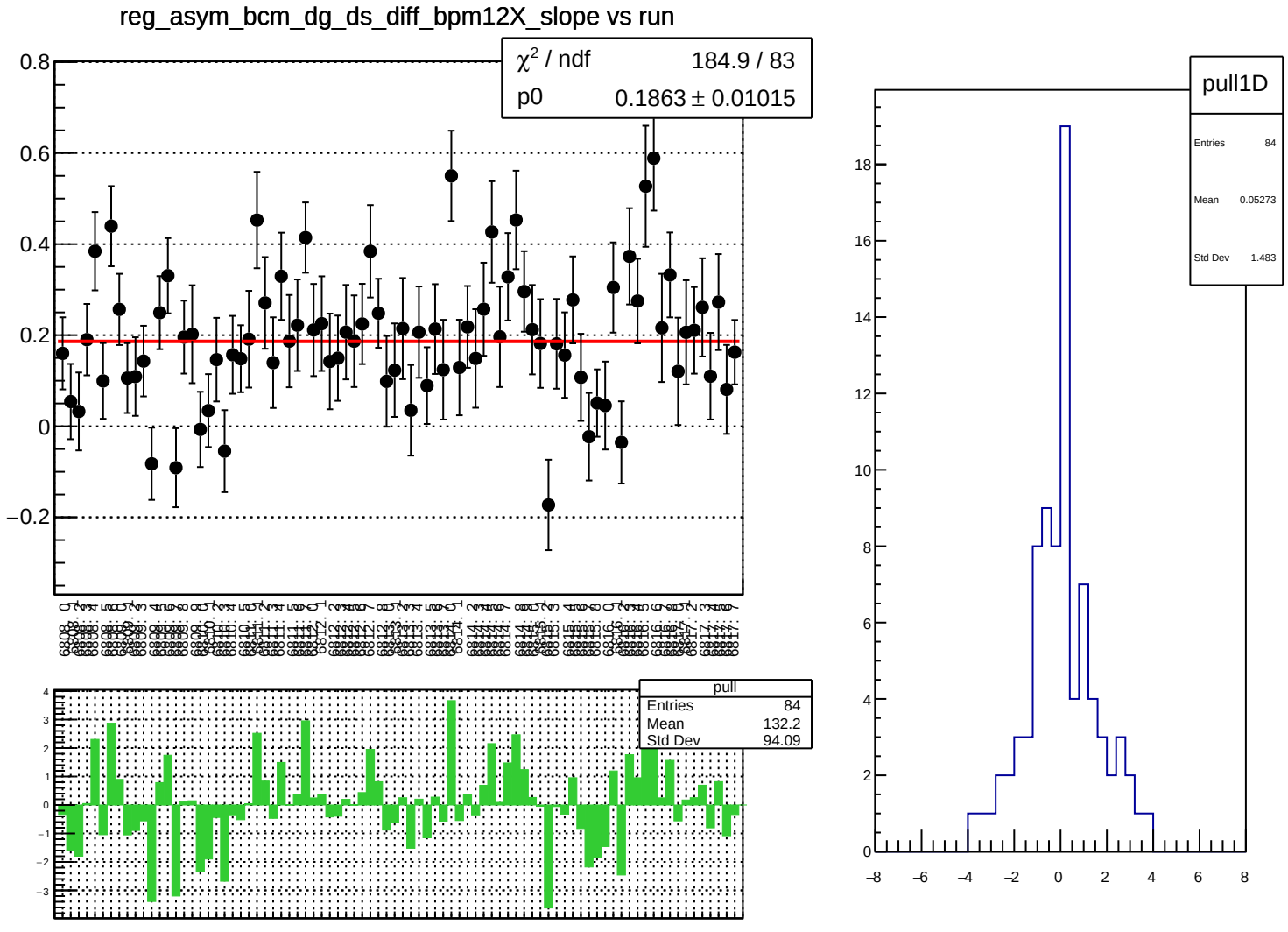

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 87.5 / 83
p0 −0.3106 ± 0.1612
pull
Entries 84
Mean 223.5
Std Dev 175.4
pull1D
Entries 84
Mean 0.03396
Std Dev 1.02

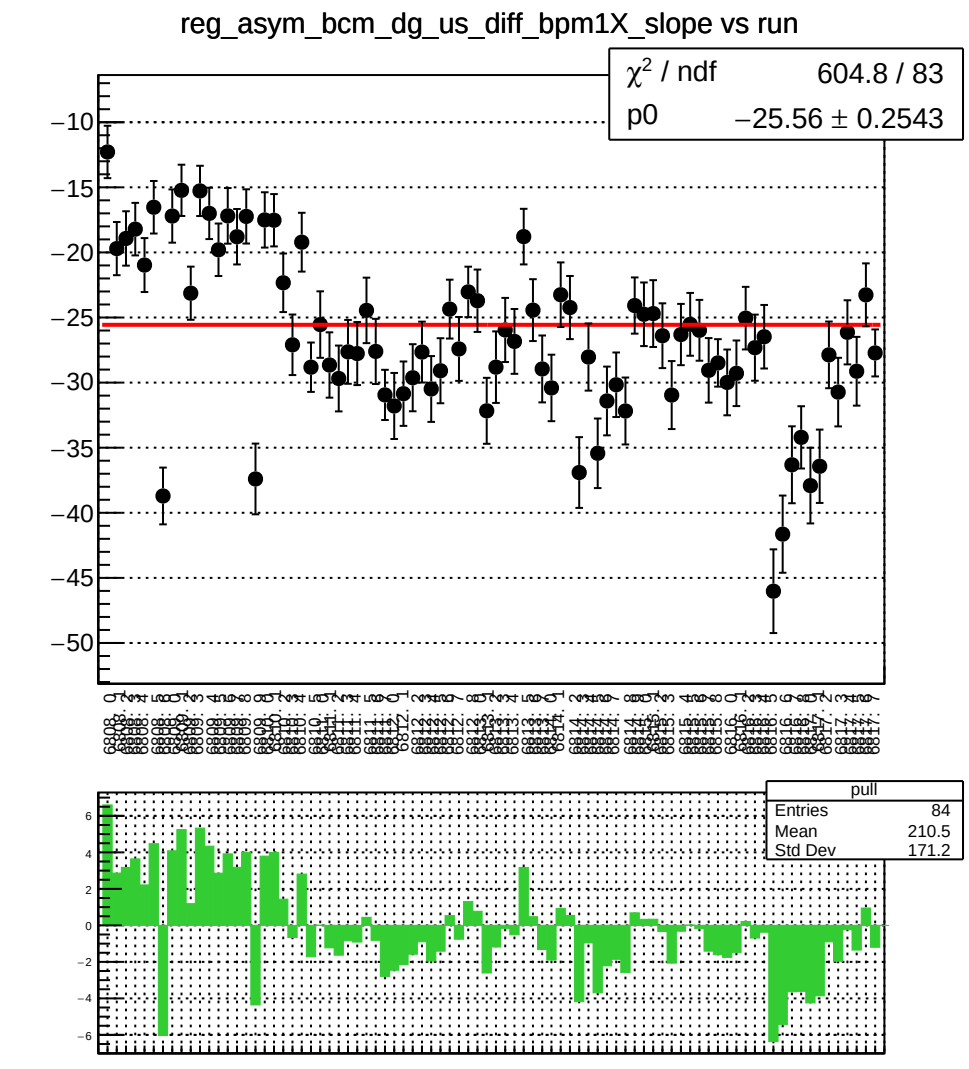

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 612.5 / 83
p0 23.17 ± 0.2337
pull
Entries 84
Mean 205.7
Std Dev 165.9

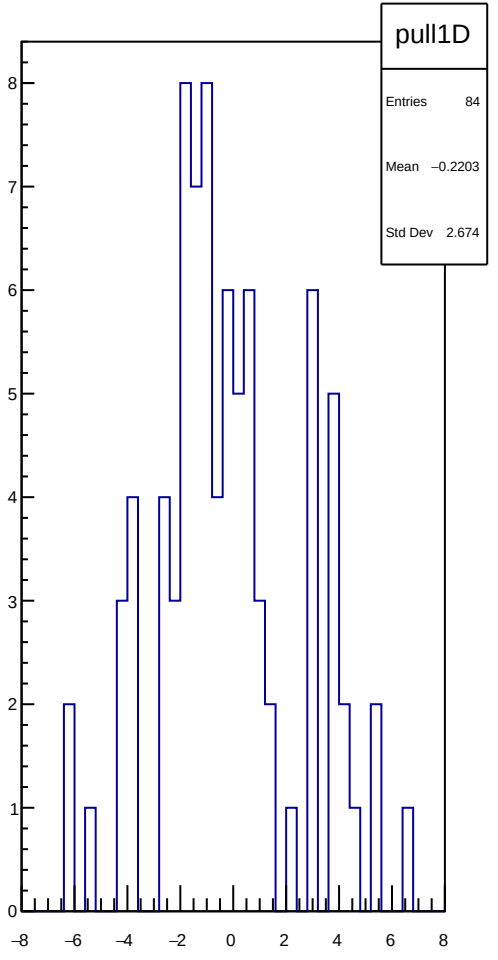

pull1D
Entries 84
Mean 0.2296
Std Dev 2.691

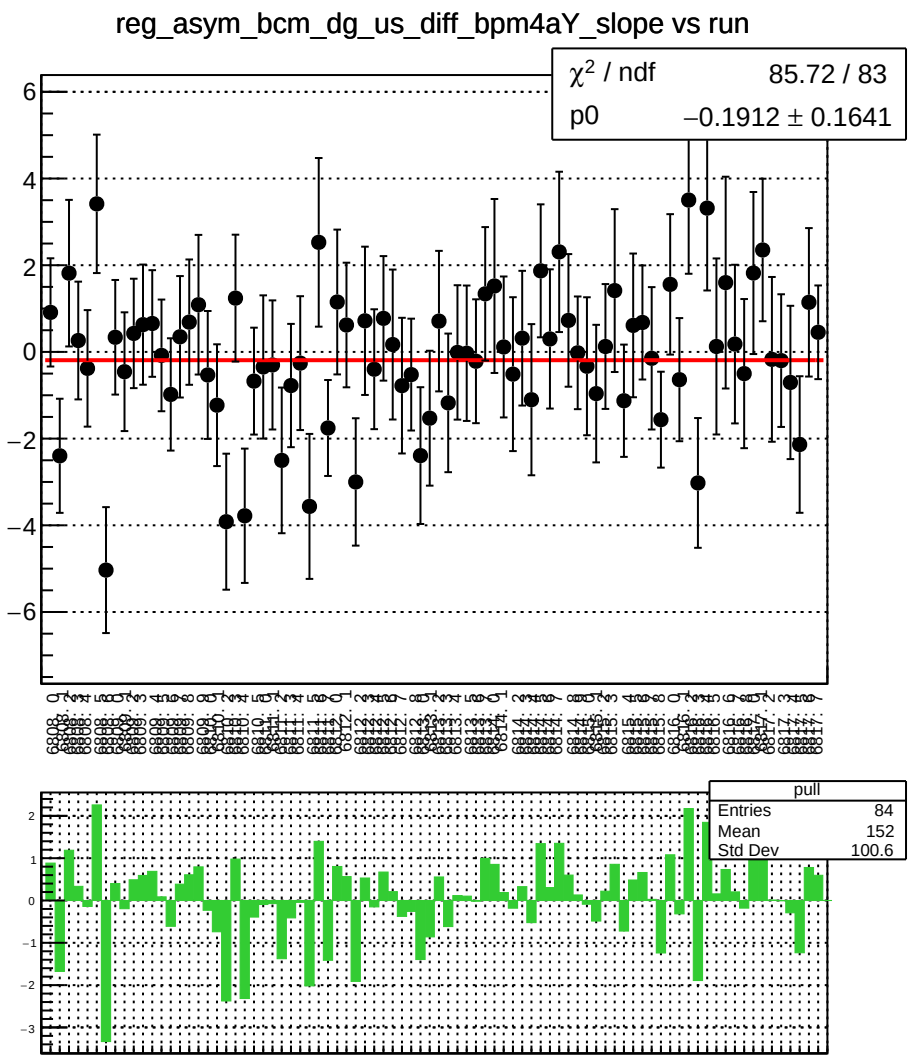

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 96.75 / 83
p0 0.7342 ± 0.1944
pull
Entries 84
Mean 320.1
Std Dev 273.2

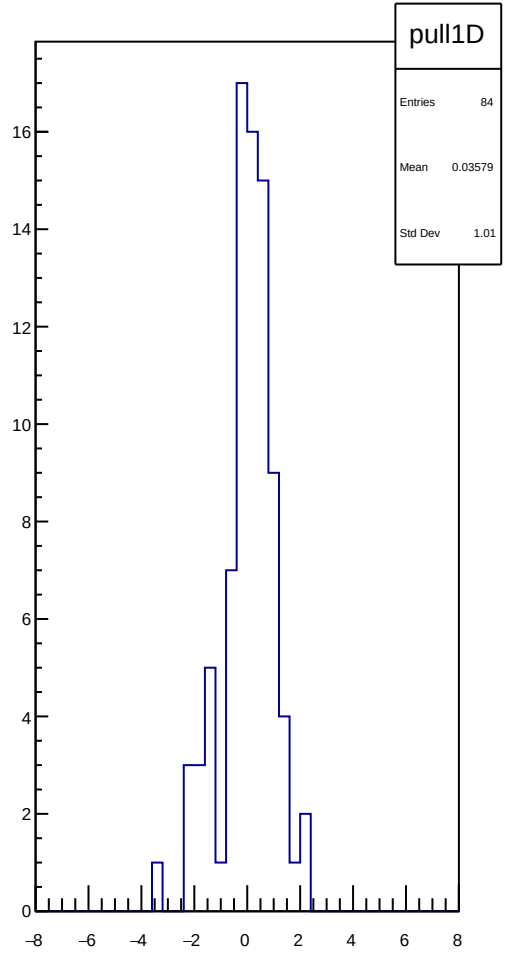

pull1D
Entries 84
Mean −0.02505
Std Dev 1.073

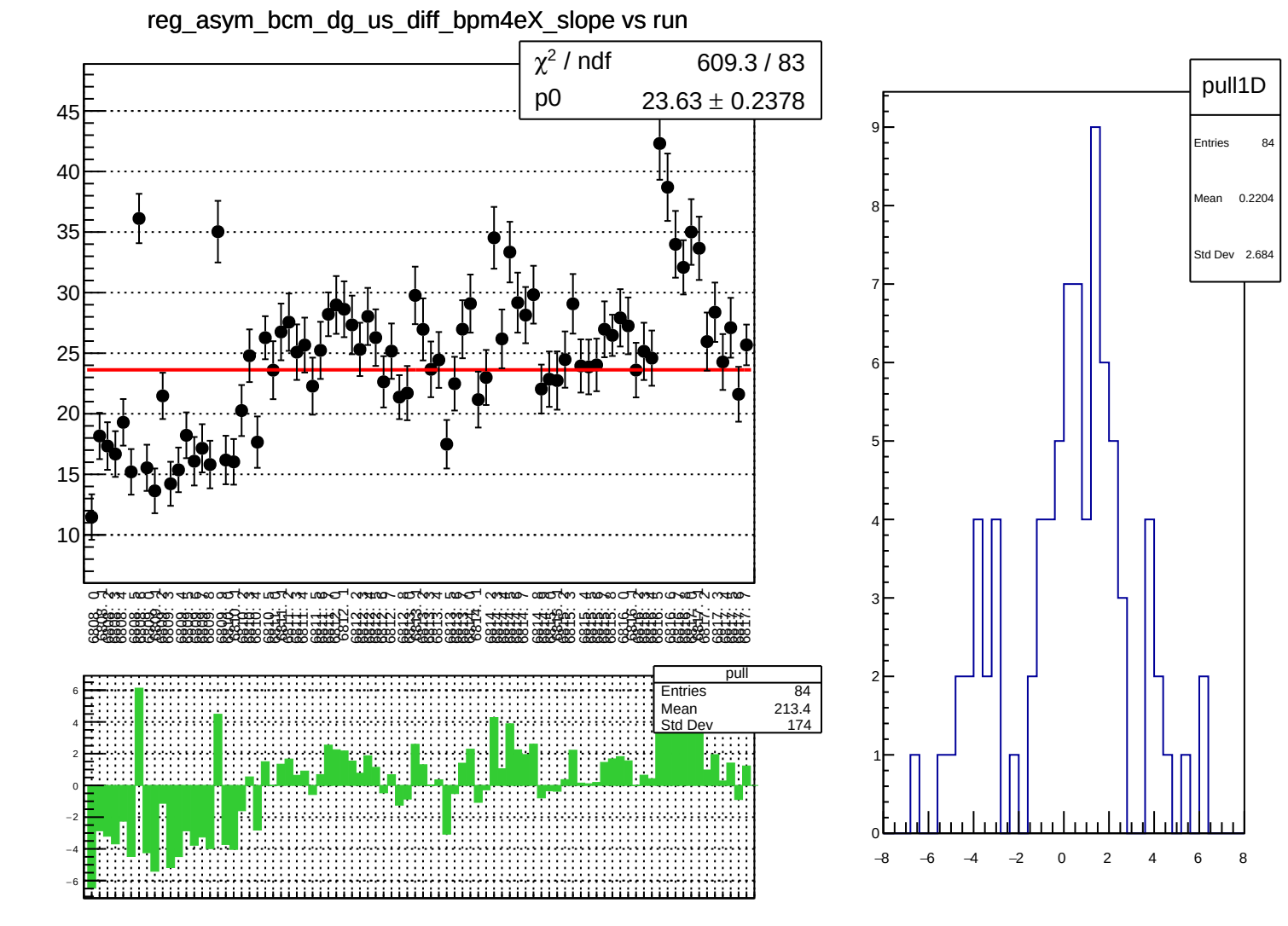

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 184.9 / 83
p0 0.1863 ± 0.01015
pull
Entries 84
Mean 132.2
Std Dev 94.09
pull1D
Entries 84
Mean 0.05273
Std Dev 1.483

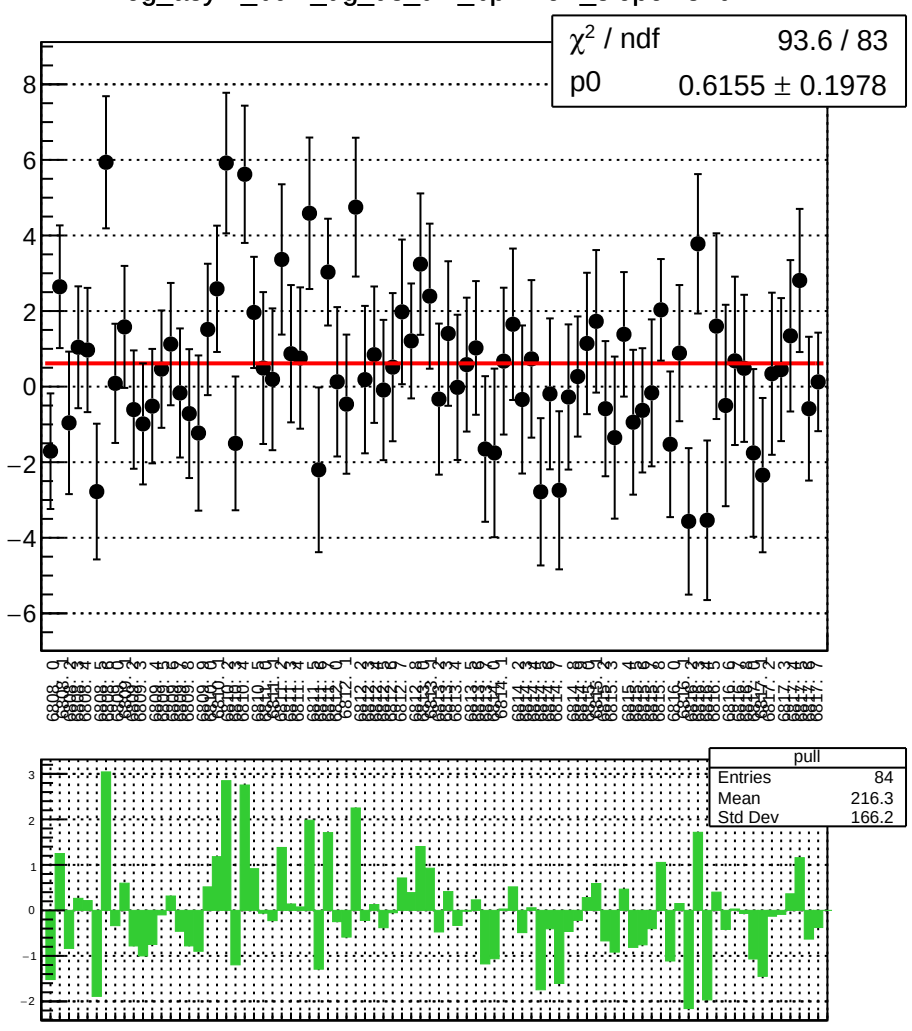

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 604.8 / 83
p0 −25.56 ± 0.2543
pull
Entries 84
Mean 210.5
Std Dev 171.2

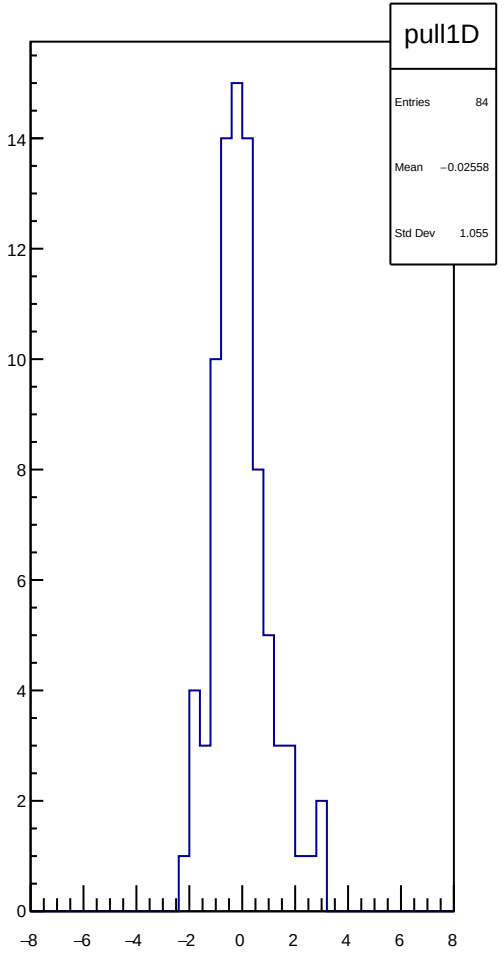

pull1D
Entries 84
Mean −0.2203
Std Dev 2.674

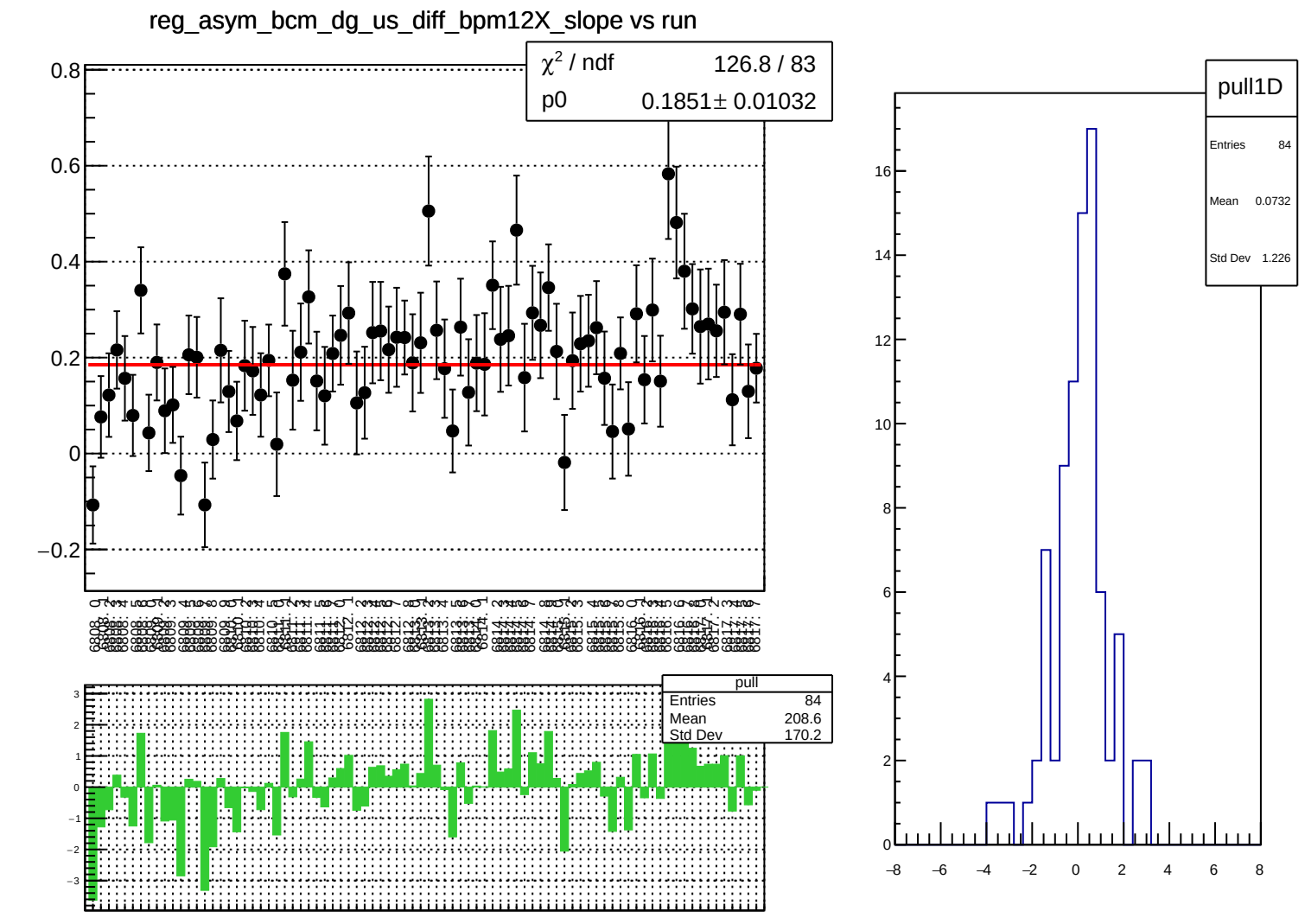

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 85.72 / 83
p0 −0.1912 ± 0.1641
pull
Entries 84
Mean 152
Std Dev 100.6

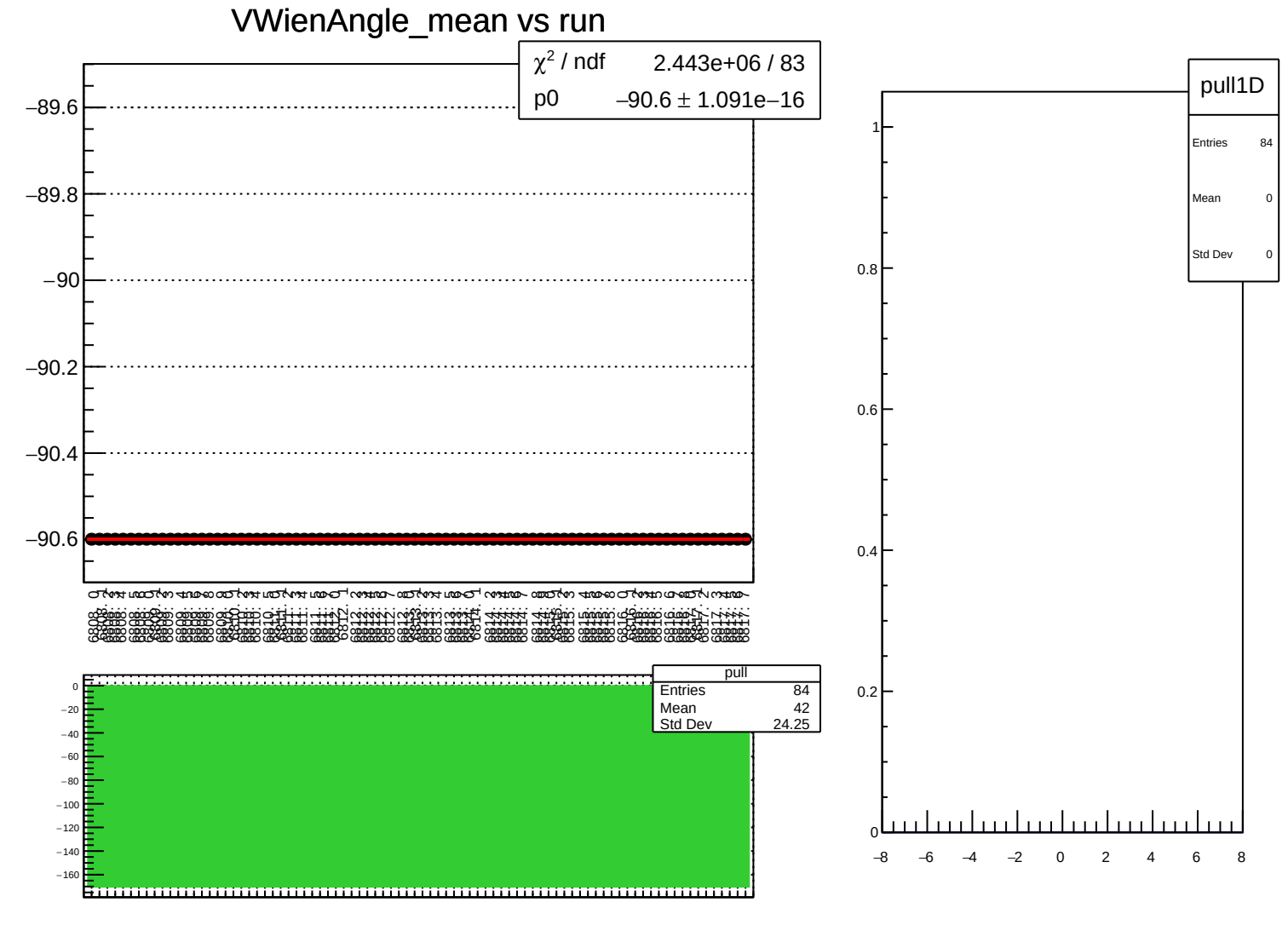

pull1D
Entries 84
Mean 0.03579
Std Dev 1.01

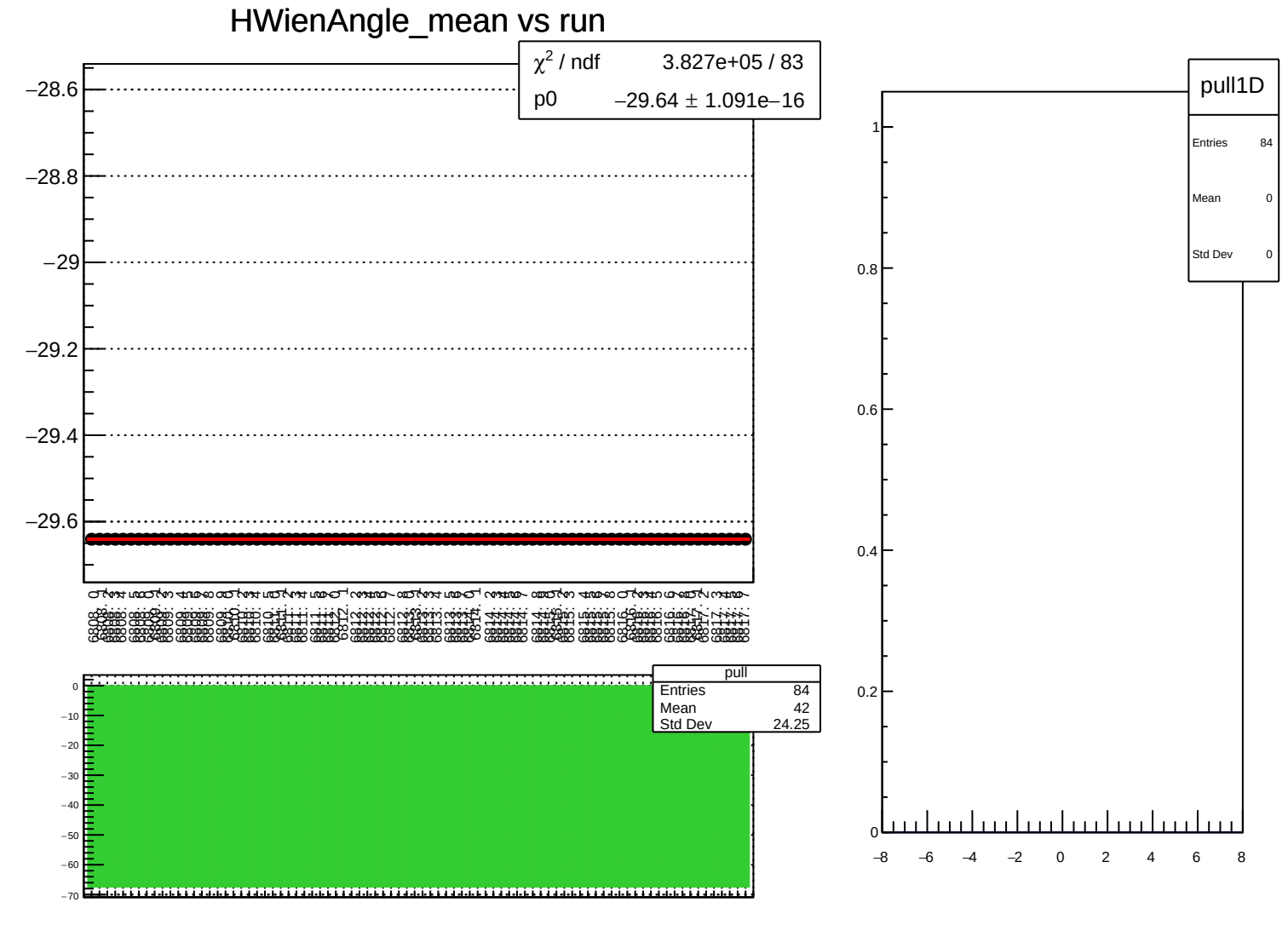

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 609.3 / 83
p0 23.63 ± 0.2378
pull
Entries 84
Mean 213.4
Std Dev 174
pull1D
Entries 84
Mean 0.2204
Std Dev 2.684

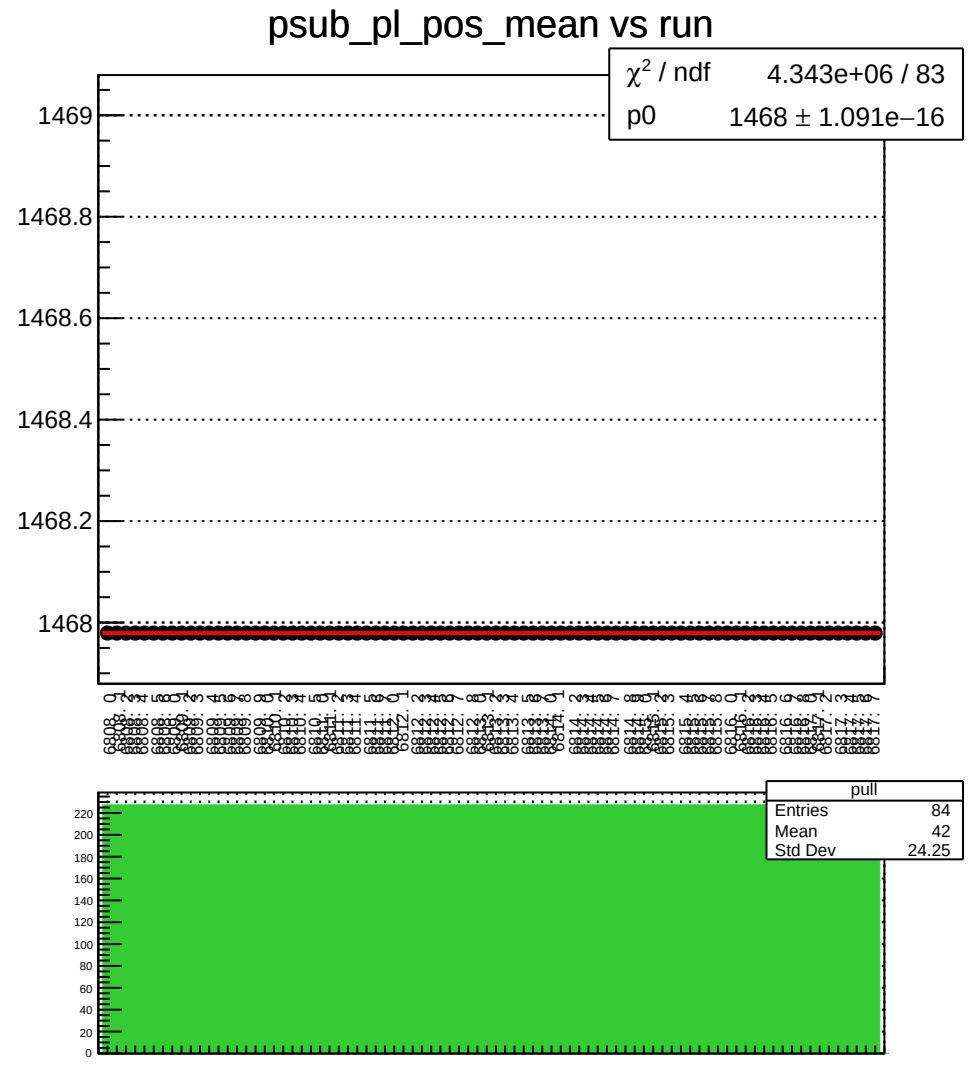

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 93.6 / 83
p0 0.6155 ± 0.1978
pull
Entries 84
Mean 216.3
Std Dev 166.2

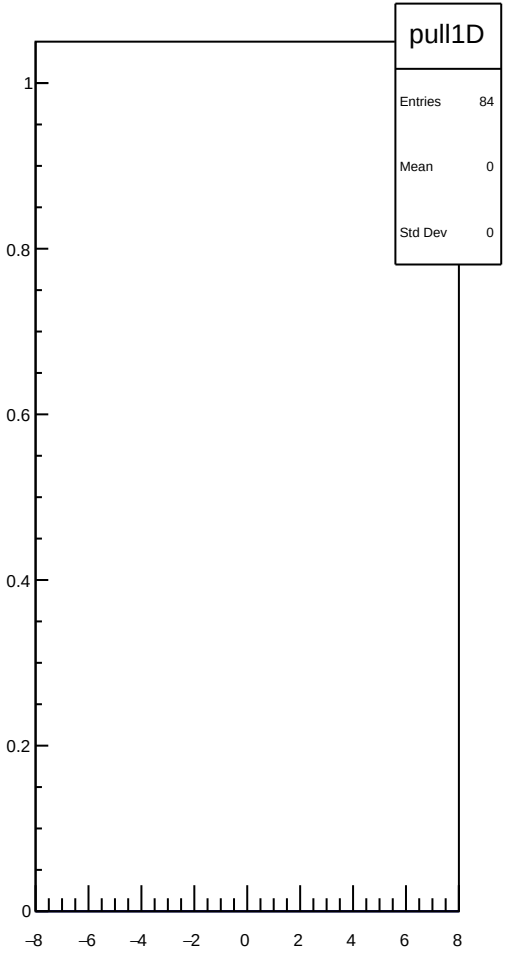

pull1D
Entries 84
Mean −0.02558
Std Dev 1.055

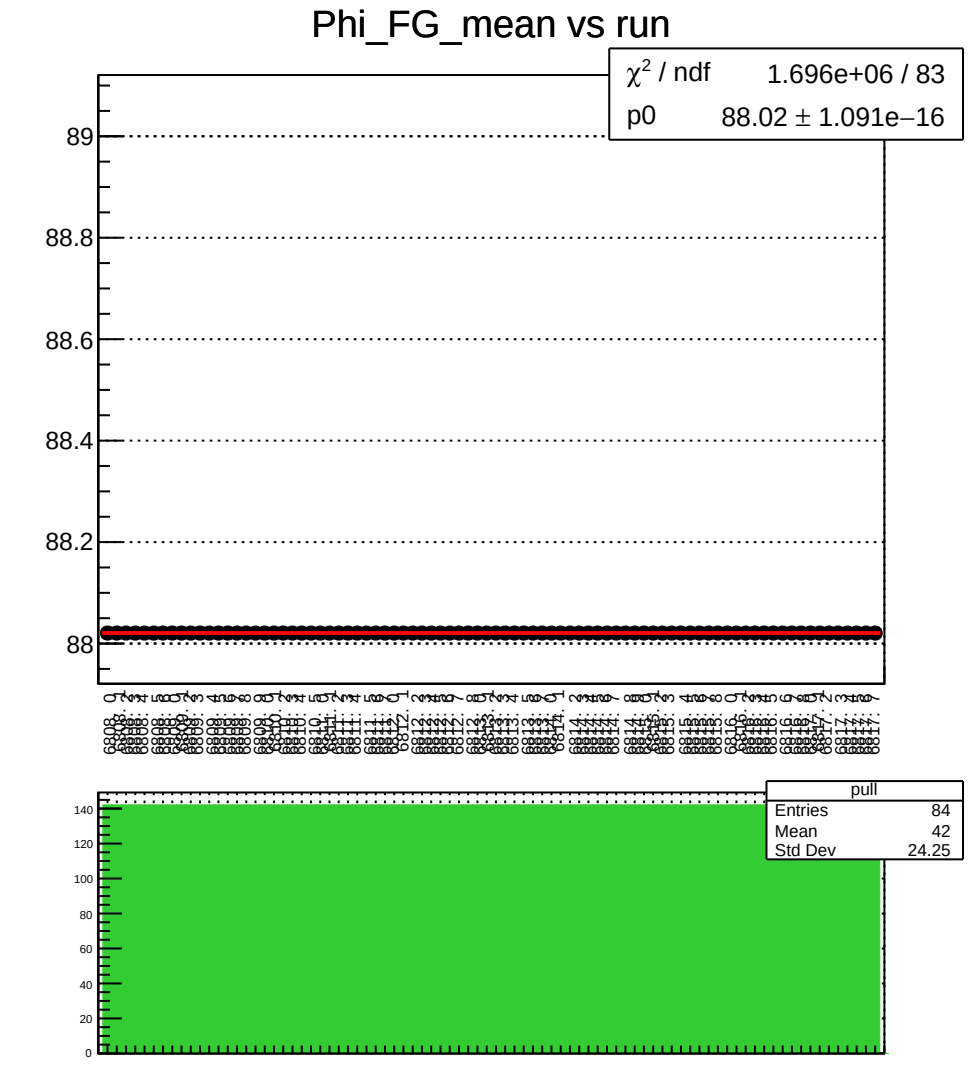

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 126.8 / 83
p0 0.1851± 0.01032
pull
Entries 84
Mean 208.6
Std Dev 170.2
pull1D
Entries 84
Mean 0.0732
Std Dev 1.226

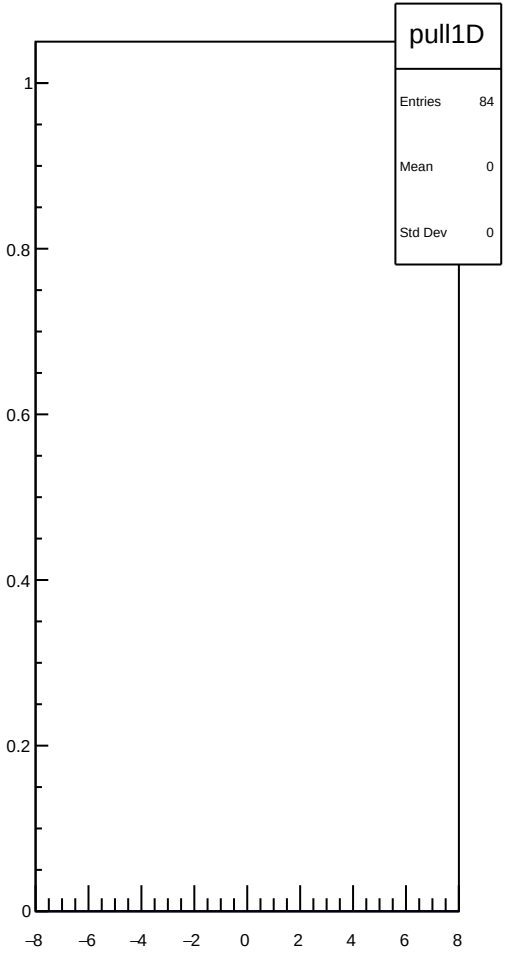

VWienAngle_mean vs run
χ² / ndf 2.443e+06 / 83
p0 −90.6 ± 1.091e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 84
Mean 42
Std Dev 24.25
0
−20
−40
−60
−80
−100
−120
−140
−160
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

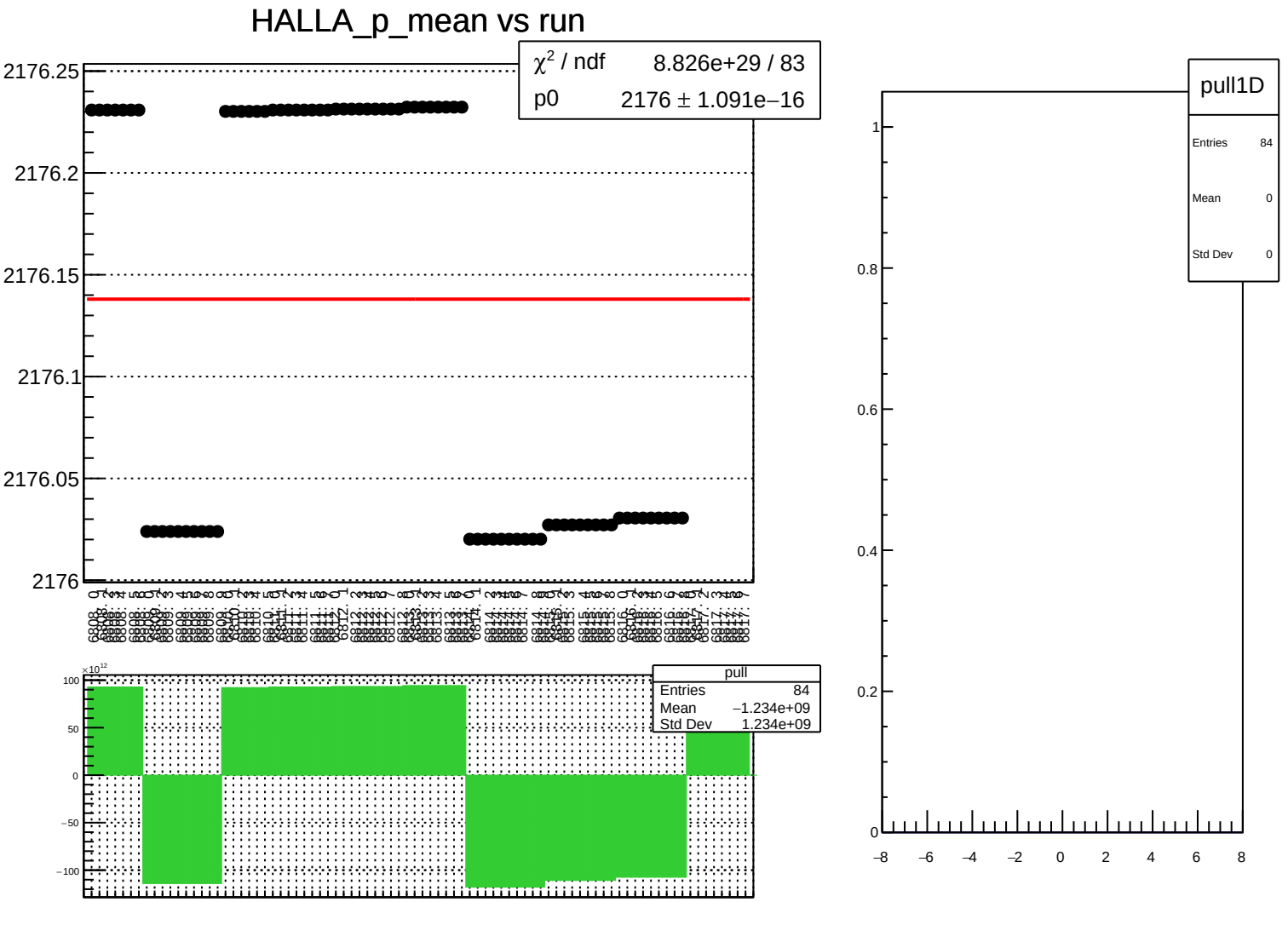

HWienAngle_mean vs run
χ² / ndf 3.827e+05 / 83
p0 −29.64 ± 1.091e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 84
Mean 42
Std Dev 24.25
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

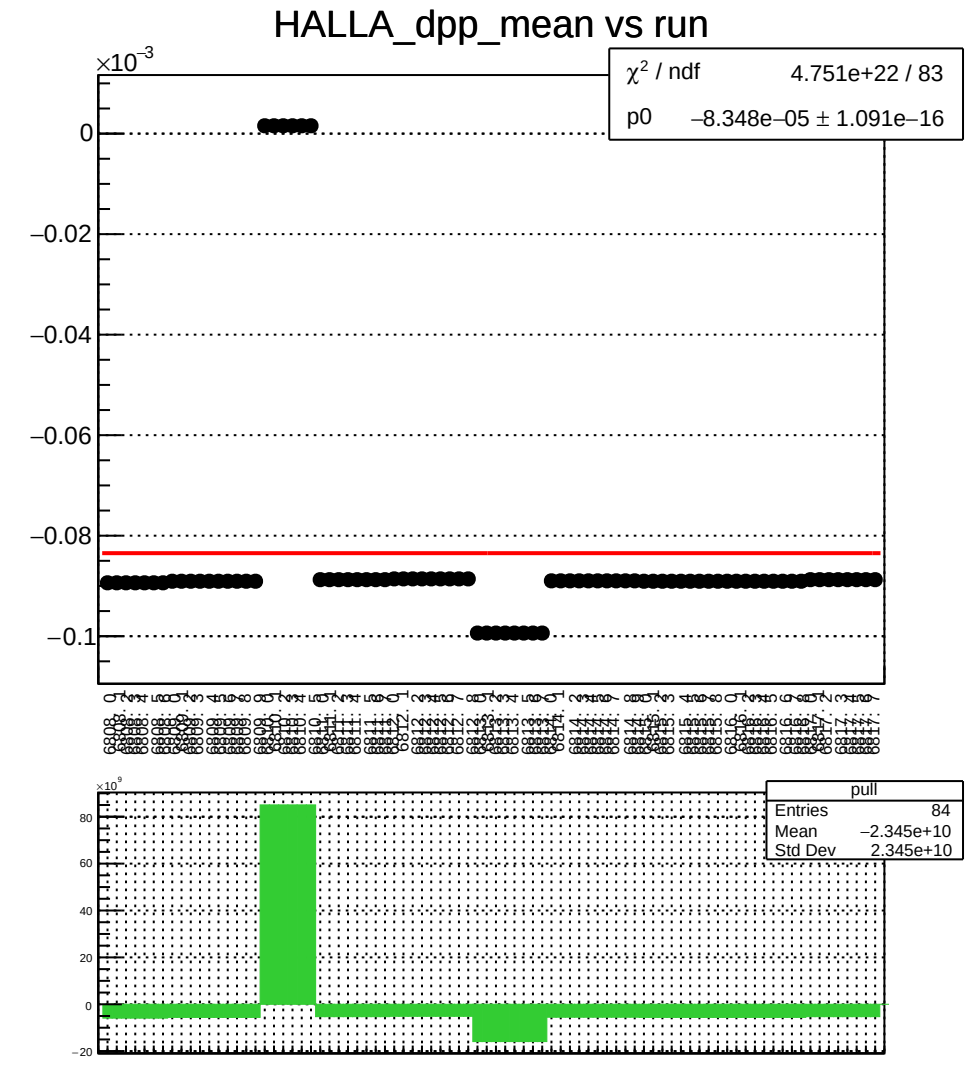

psub_pl_pos_mean vs run
χ² / ndf 4.343e+06 / 83
p0 1468 ± 1.091e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 84
Mean 42
Std Dev 24.25
220
200
180
160
140
120
100
80
60
40
20
0

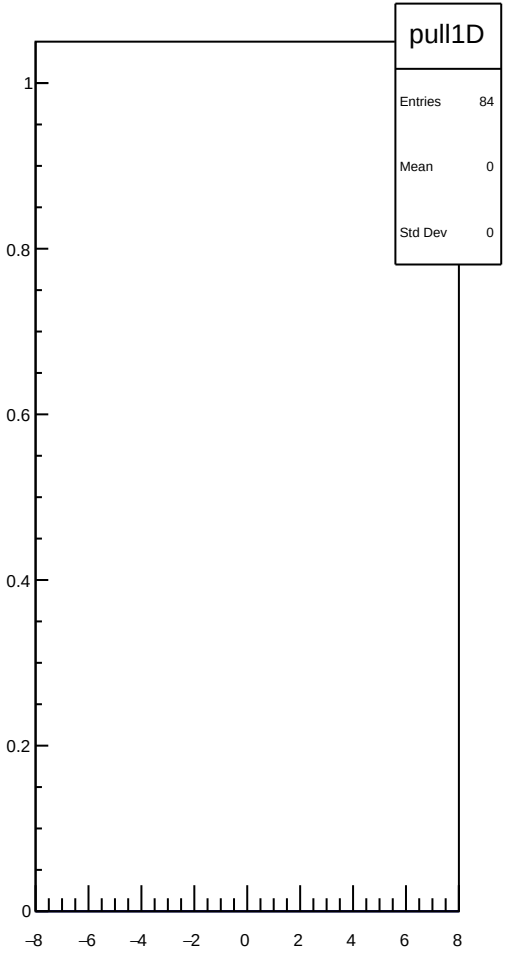

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

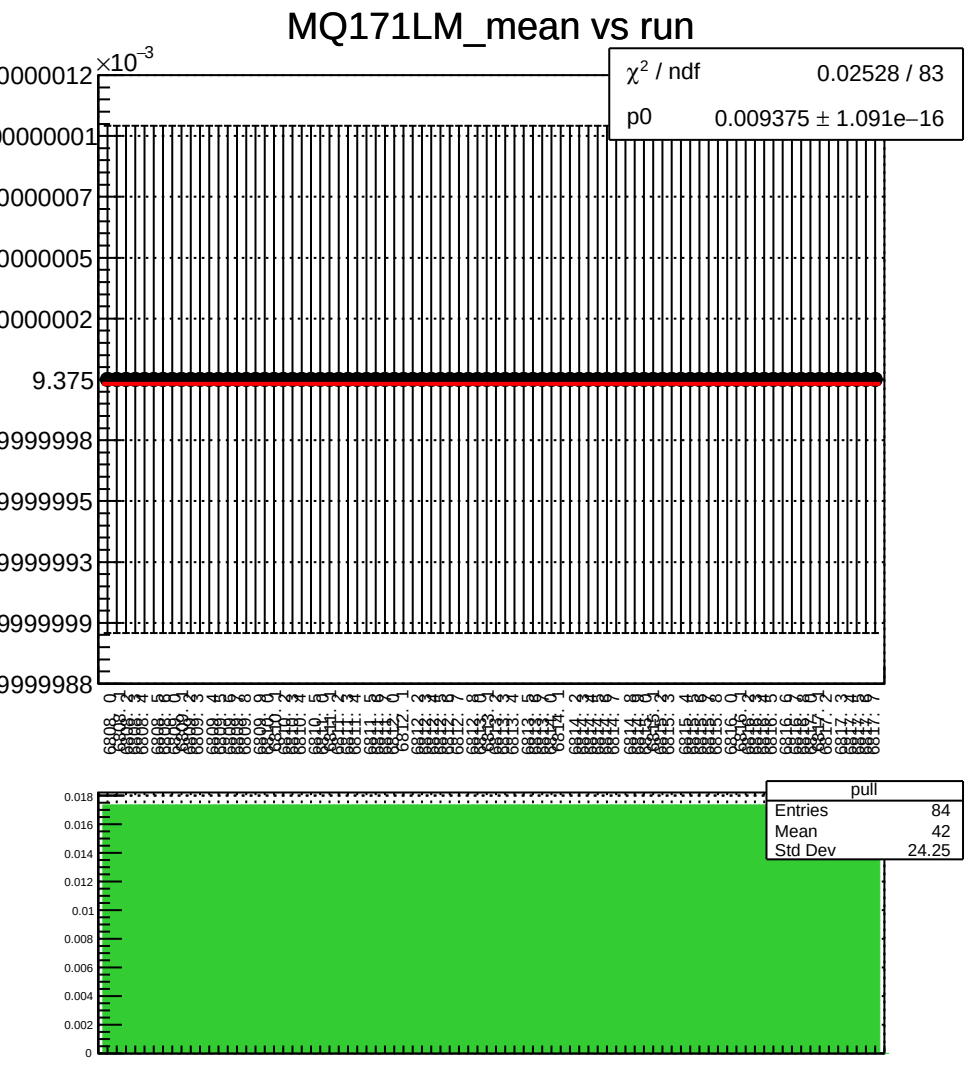

Phi_FG_mean vs run
χ² / ndf 1.696e+06 / 83
p0 88.02 ± 1.091e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 84
Mean 42
Std Dev 24.25
140
120
100
80
60
40
20
0

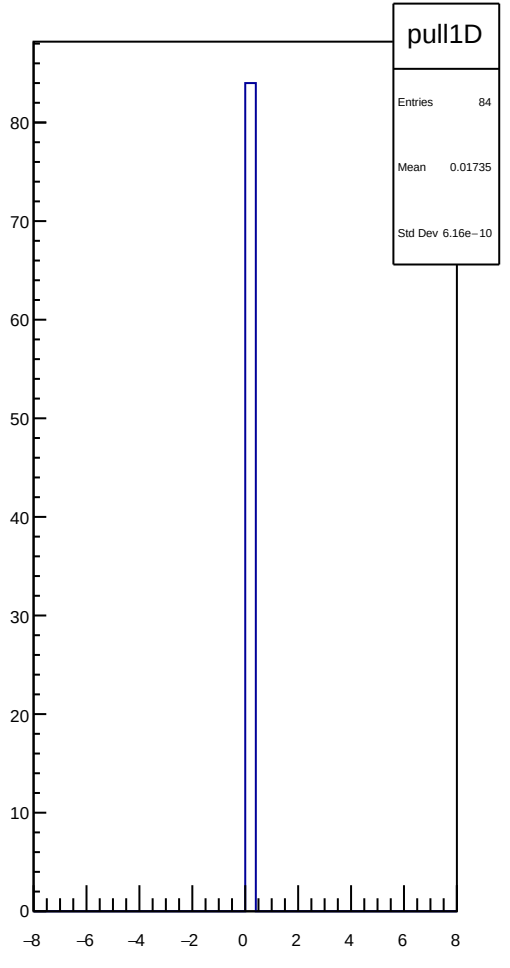

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

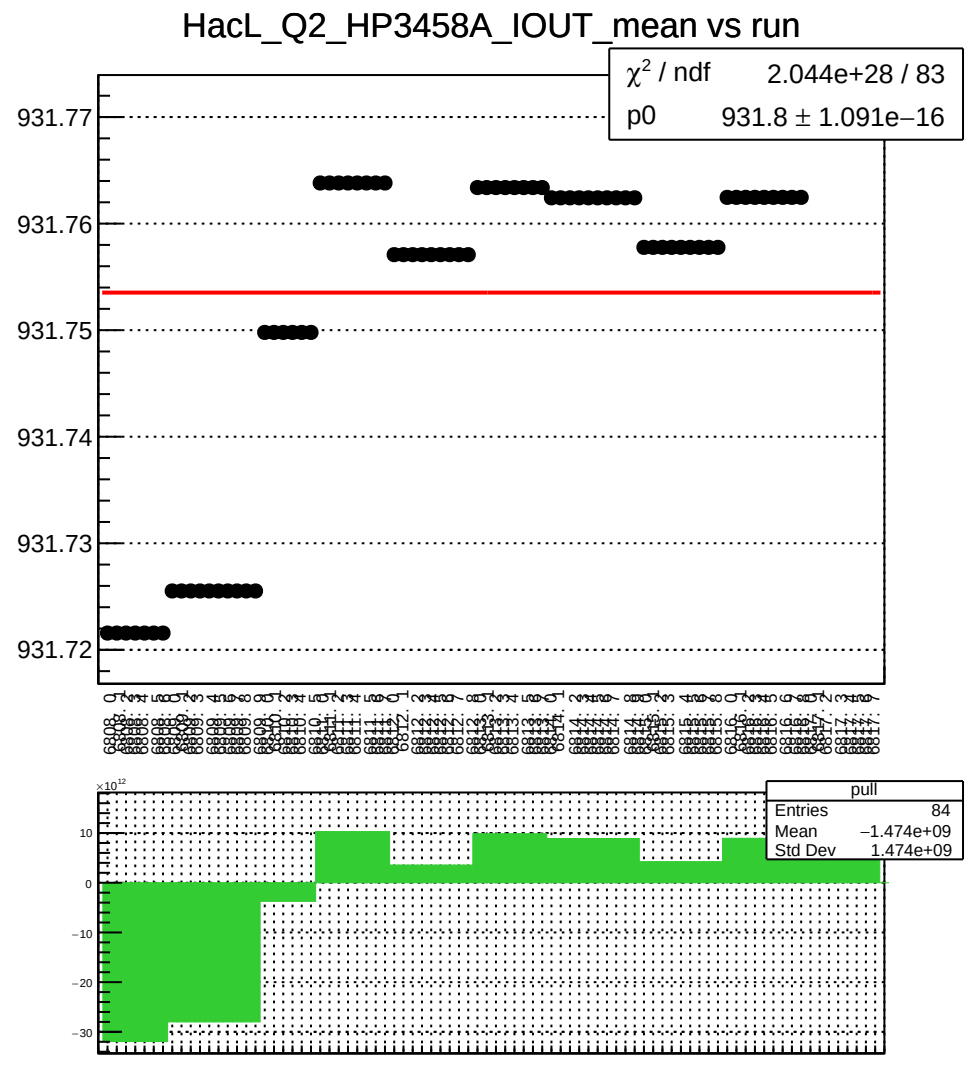

HALLA_p_mean vs run
χ² / ndf 8.826e+29 / 83
p0 2176 ± 1.091e−16
2176.25
2176.2
2176.15
2176.1
2176.05
2176
pull
Entries 84
Mean −1.234e+09
Std Dev 1.234e+09
×10¹²
100
50
0
−50
−100
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

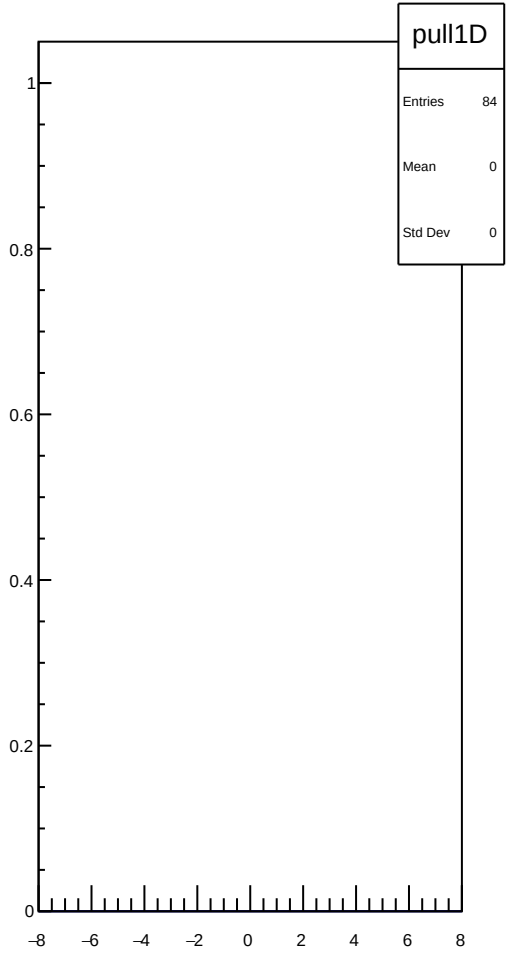

HALLA_dpp_mean vs run
χ² / ndf 4.751e+22 / 83
p0 −8.348e−05 ± 1.091e−16
×10⁻³
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull
Entries 84
Mean −2.345e+10
Std Dev 2.345e+10
×10⁹
80
60
40
20
0
−20

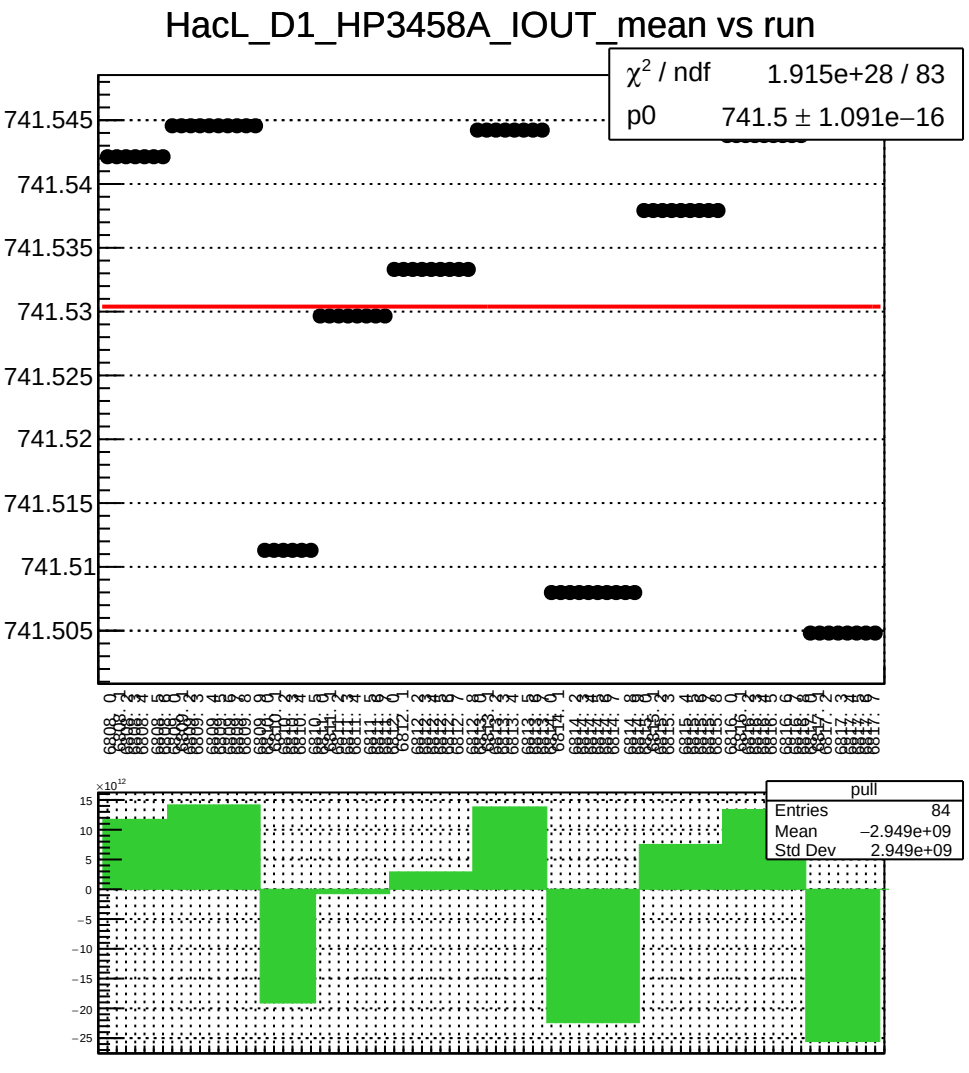

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

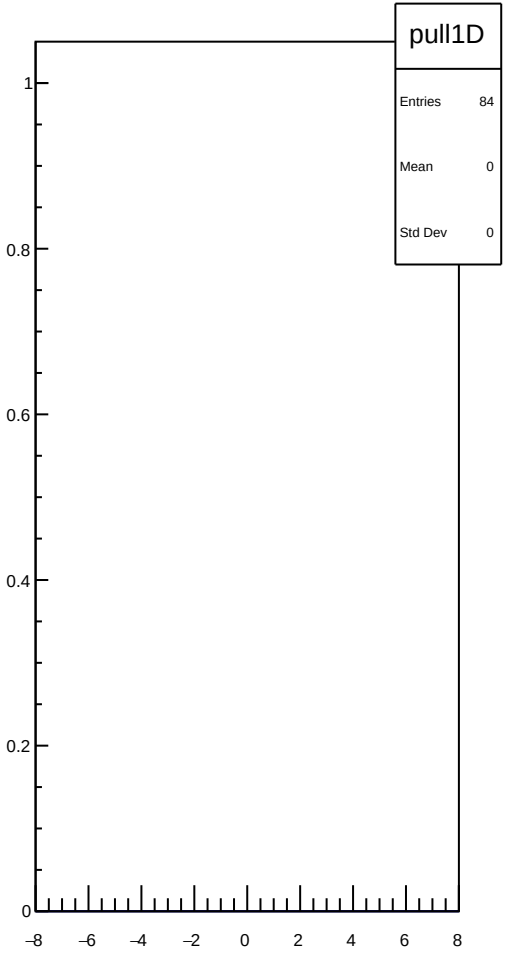

MQ171LM_mean vs run
×10⁻³
χ² / ndf 0.02528 / 83
p0 0.009375 ± 1.091e−16
pull
Entries 84
Mean 42
Std Dev 24.25

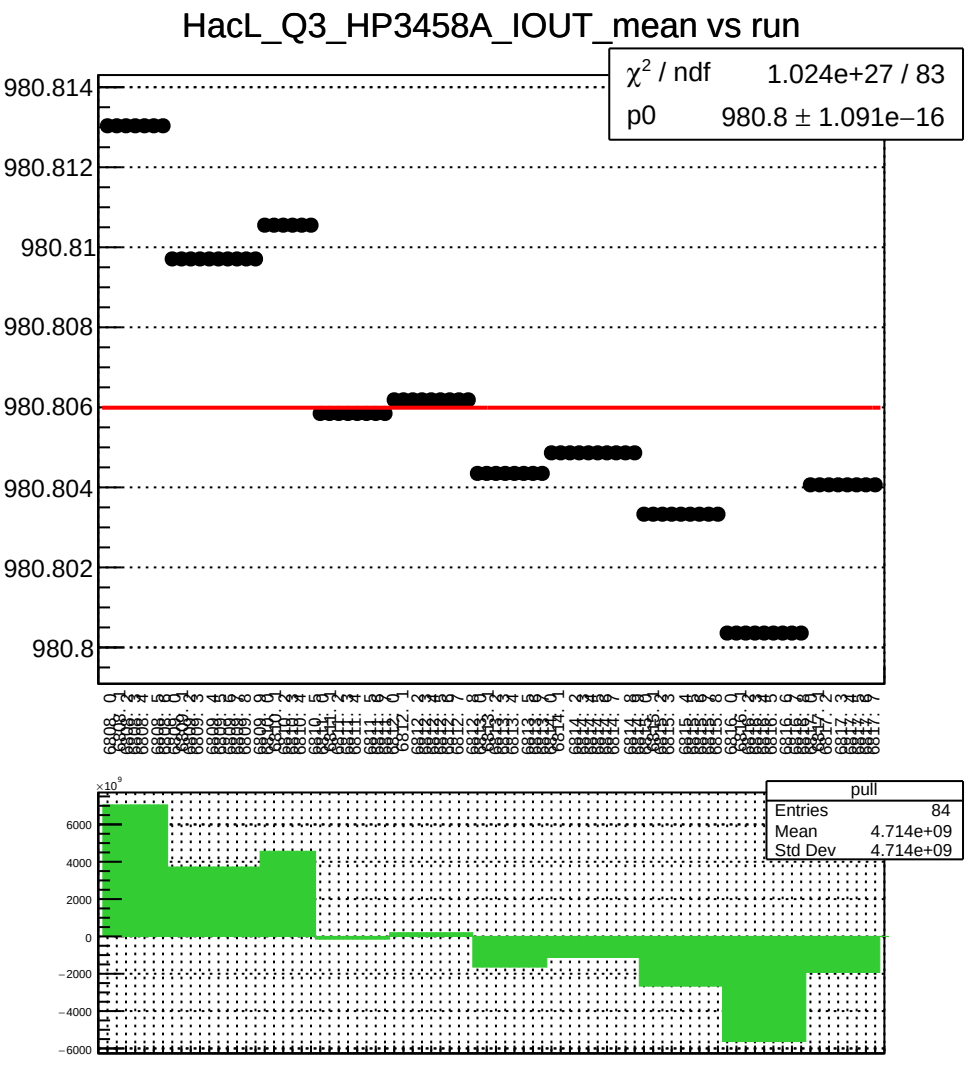

pull1D
Entries 84
Mean 0.01735
Std Dev 6.16e−10

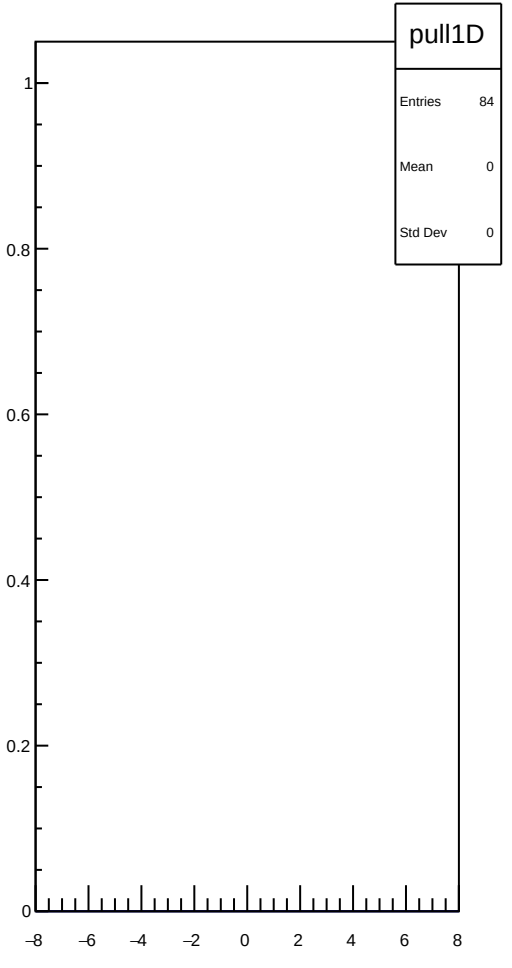

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 2.044e+28 / 83
p0 931.8 ± 1.091e−16
931.77
931.76
931.75
931.74
931.73
931.72
pull
Entries 84
Mean −1.474e+09
Std Dev 1.474e+09
×10¹²
10
0
−10
−20
−30

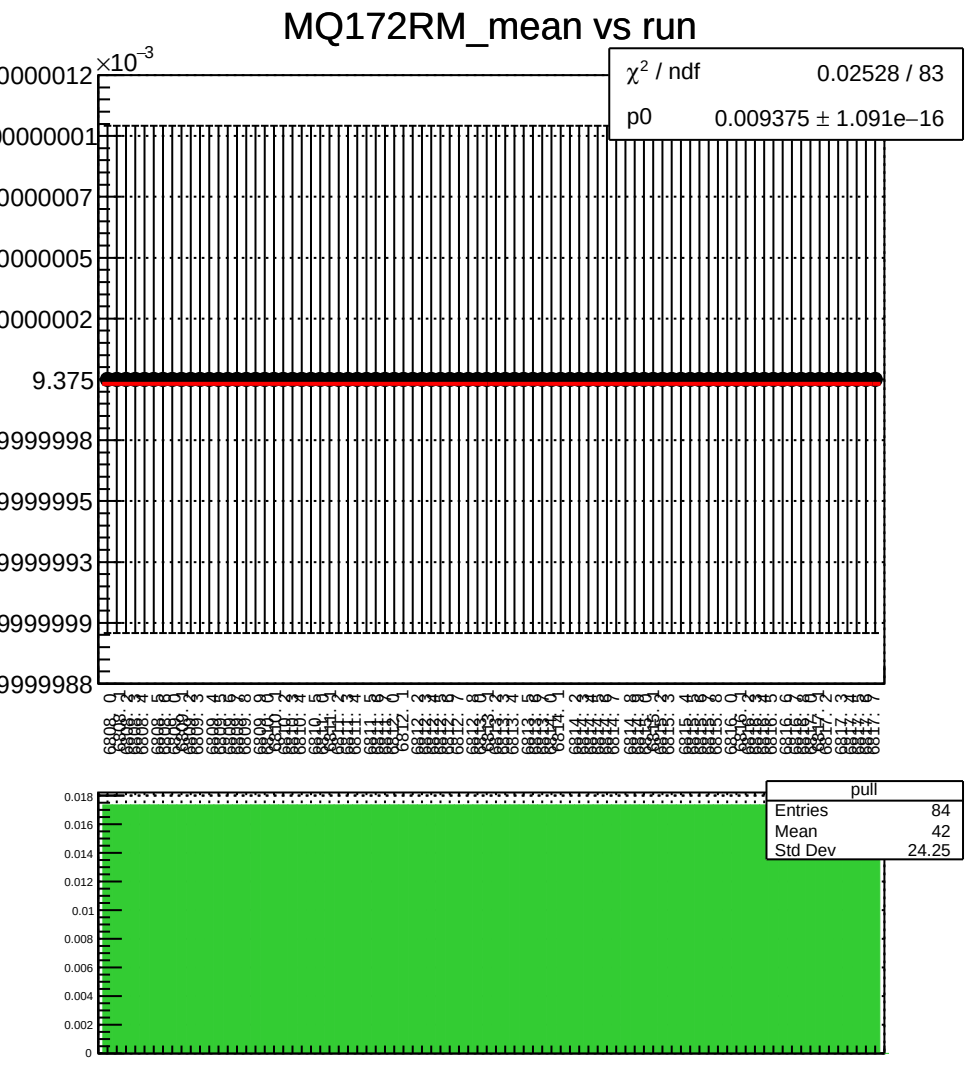

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

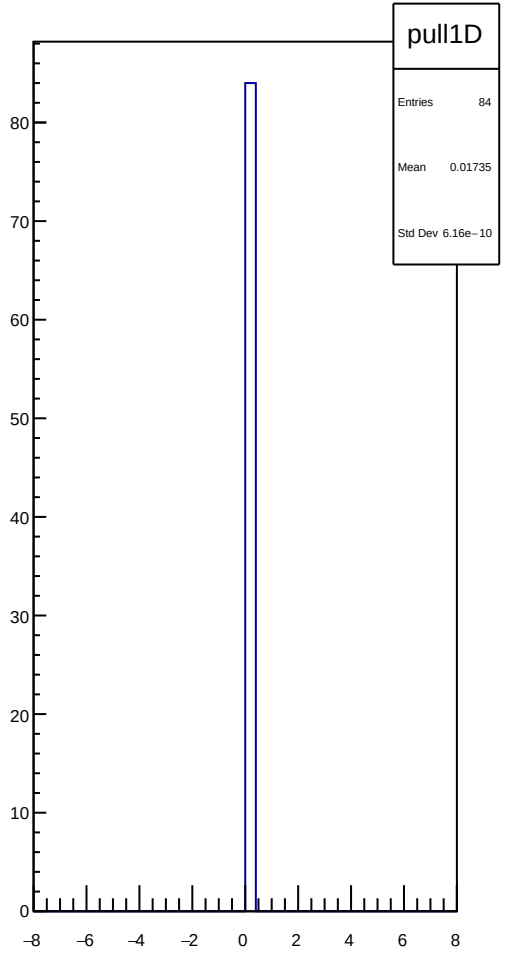

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.915e+28 / 83
p0 741.5 ± 1.091e−16
741.545
741.54
741.535
741.53
741.525
741.52
741.515
741.51
741.505
pull
Entries 84
Mean −2.949e+09
Std Dev 2.949e+09
×10¹²
15
10
5
0
−5
−10
−15
−20
−25

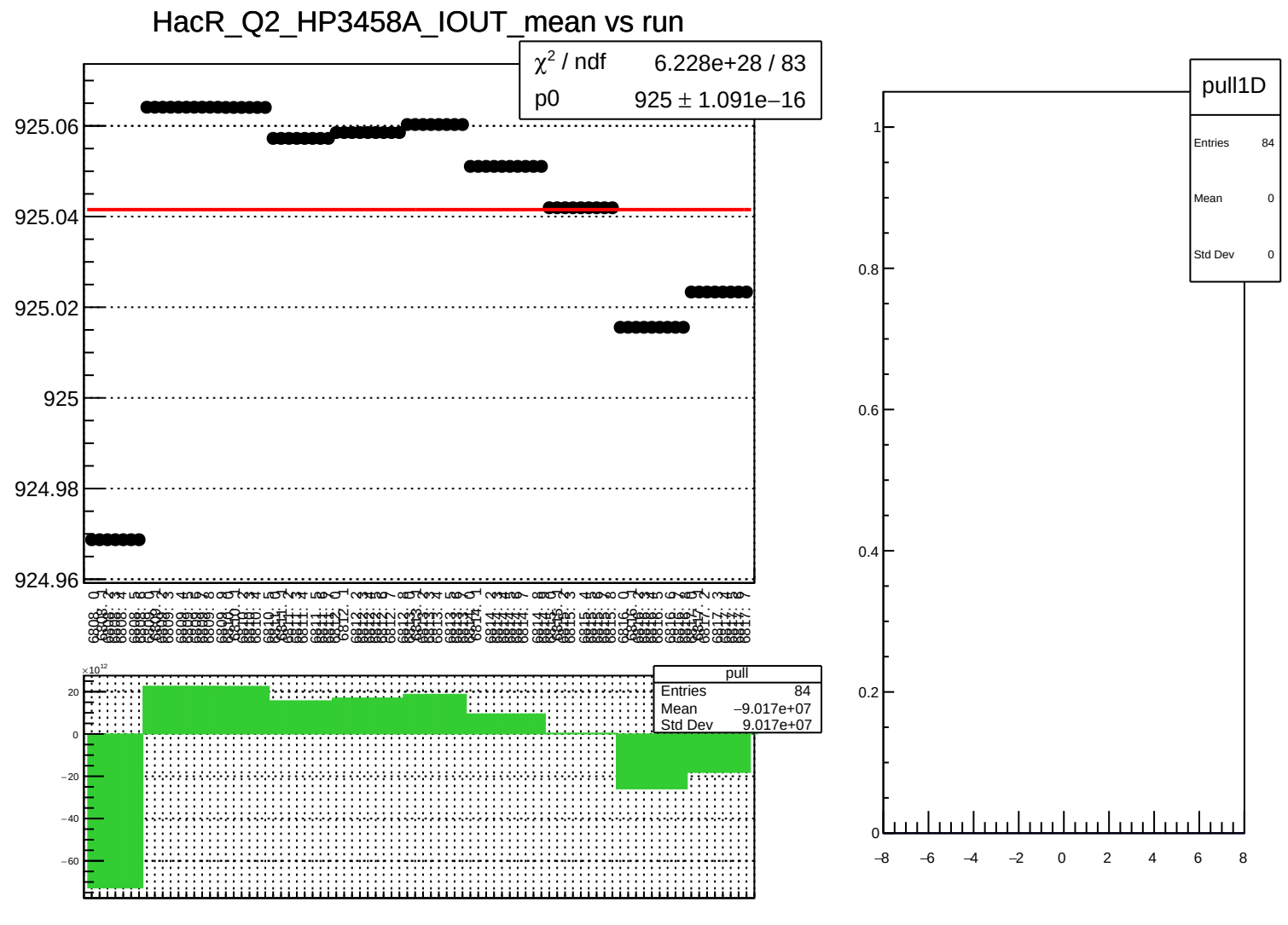

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

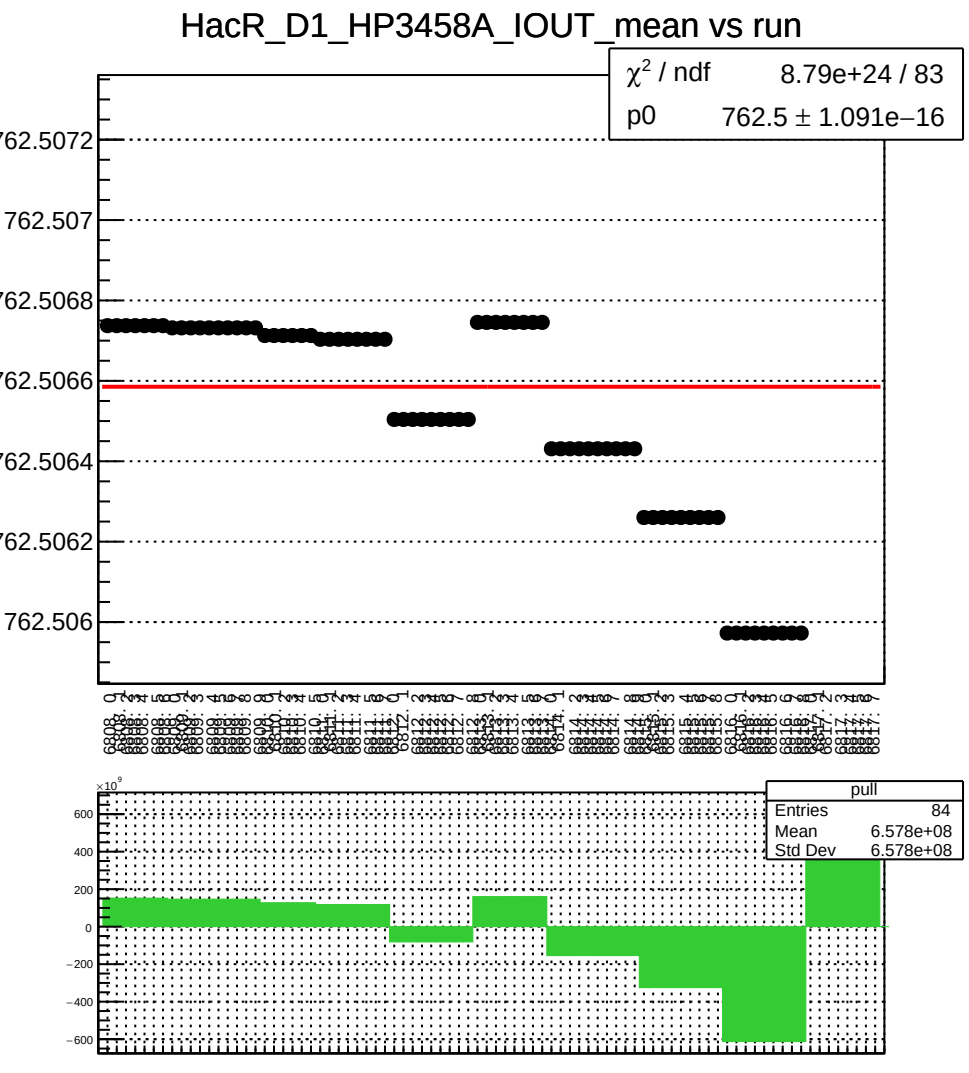

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 1.024e+27 / 83
p0 980.8 ± 1.091e−16
980.814
980.812
980.81
980.808
980.806
980.804
980.802
980.8
×10⁹
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 84
Mean 4.714e+09
Std Dev 4.714e+09

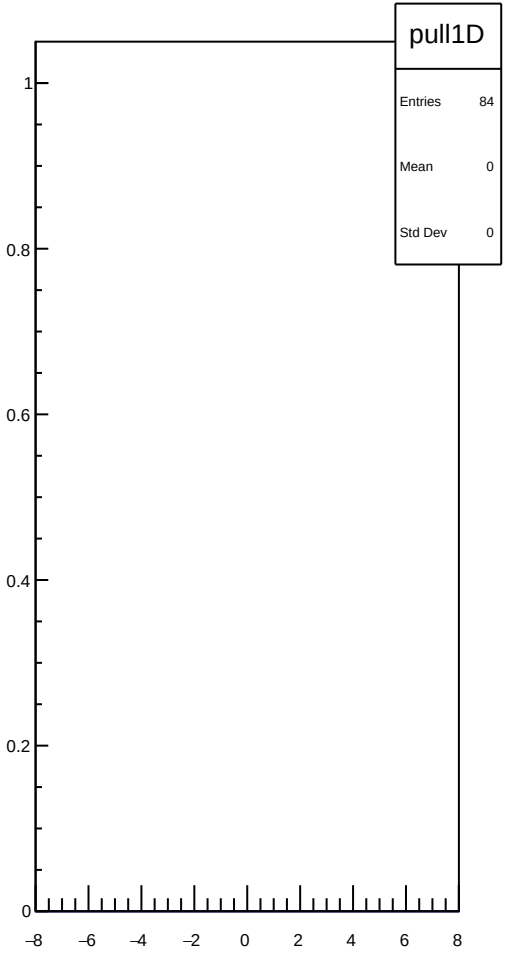

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

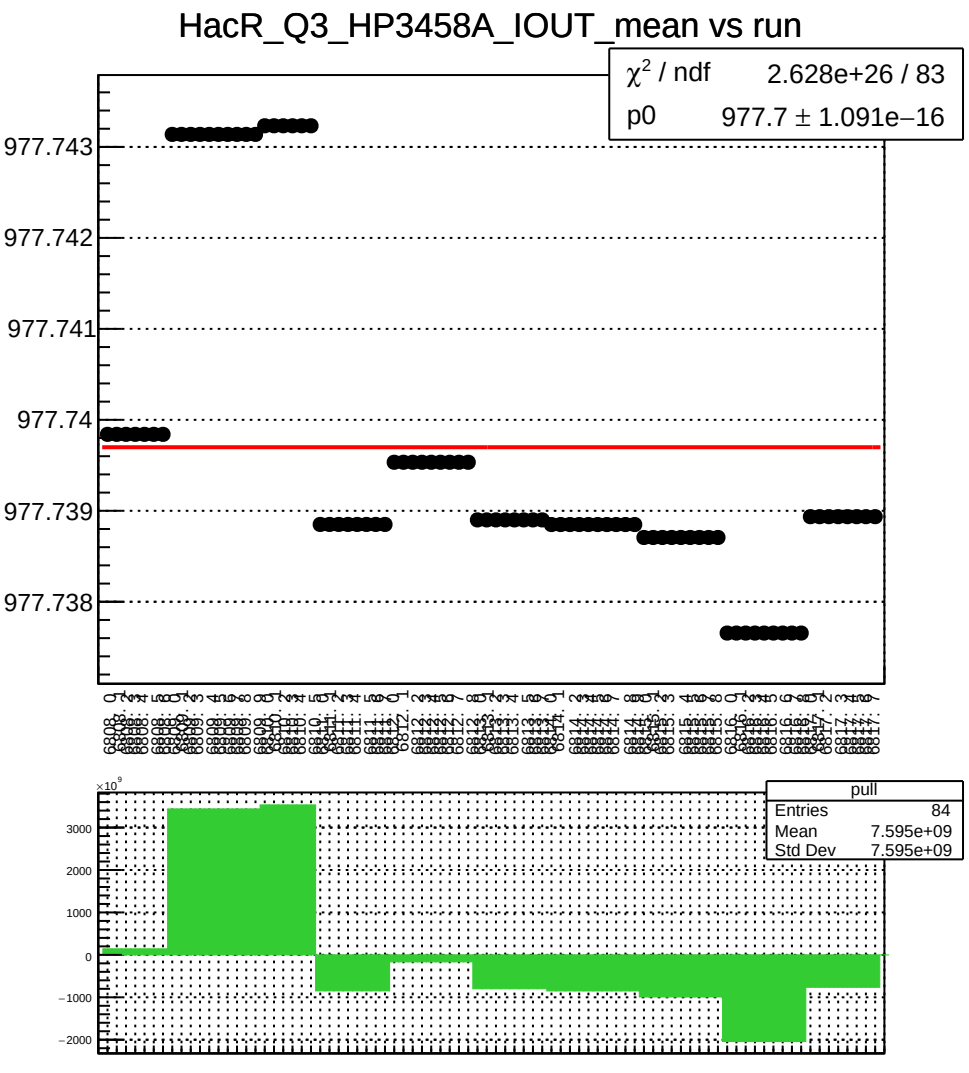

MQ172RM_mean vs run
χ² / ndf 0.02528 / 83
p0 0.009375 ± 1.091e−16
×10⁻³
pull
Entries 84
Mean 42
Std Dev 24.25

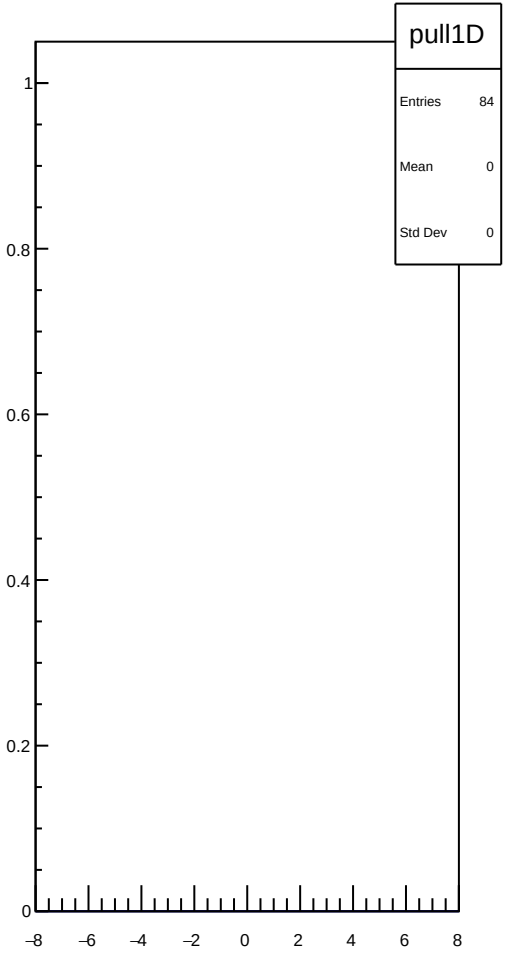

pull1D
Entries 84
Mean 0.01735
Std Dev 6.16e−10

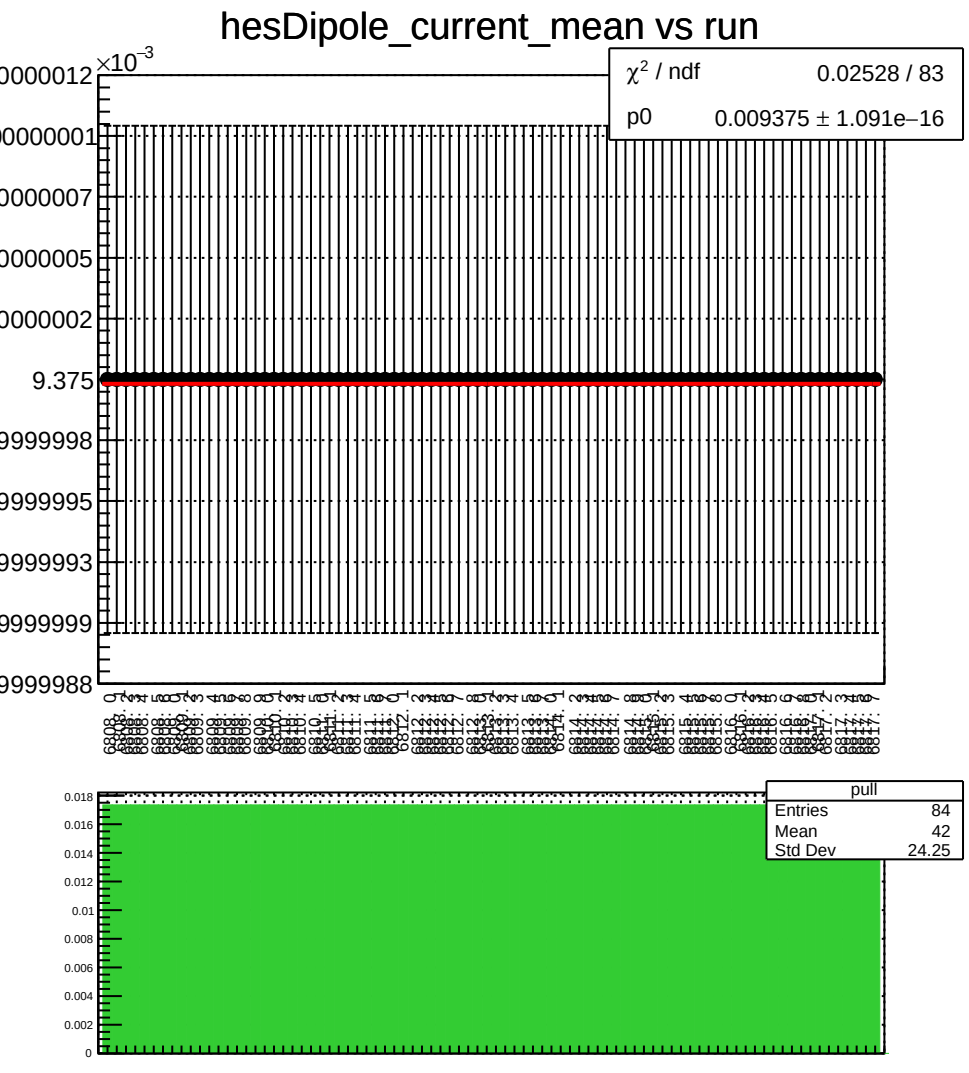

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 6.228e+28 / 83
p0 925 ± 1.091e−16
925.06
925.04
925.02
925
924.98
924.96
×10¹²
20
0
−20
−40
−60
pull
Entries 84
Mean −9.017e+07
Std Dev 9.017e+07
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

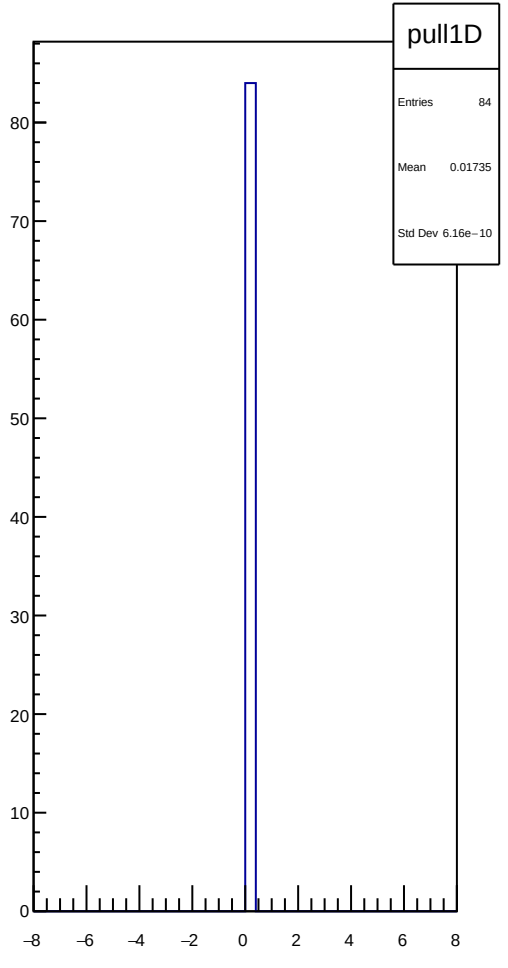

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 8.79e+24 / 83
p0 762.5 ± 1.091e−16
762.5072
762.507
762.5068
762.5066
762.5064
762.5062
762.506
pull
Entries 84
Mean 6.578e+08
Std Dev 6.578e+08
×10⁹
600
400
200
0
−200
−400
−600

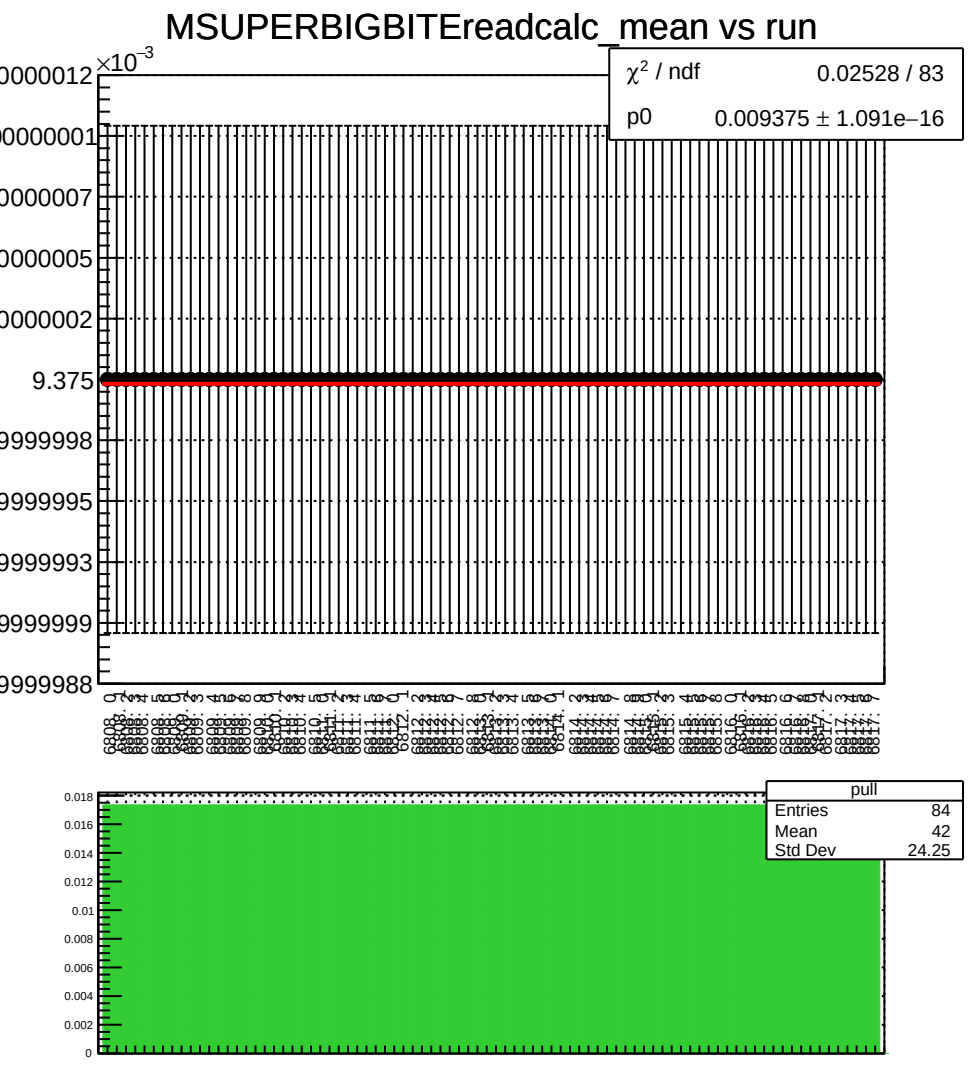

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

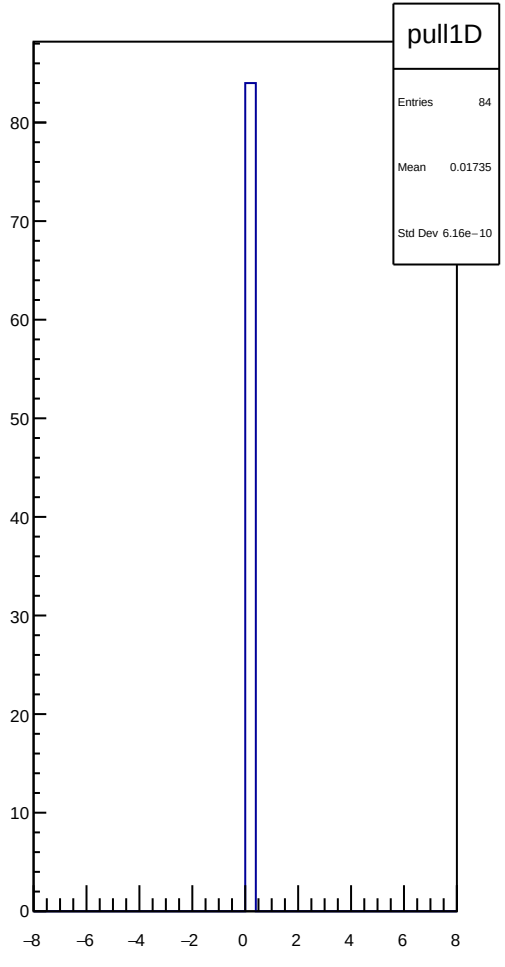

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.628e+26 / 83
p0 977.7 ± 1.091e−16
977.743
977.742
977.741
977.74
977.739
977.738
×10⁹
3000
2000
1000
0
−1000
−2000
pull
Entries 84
Mean 7.595e+09
Std Dev 7.595e+09

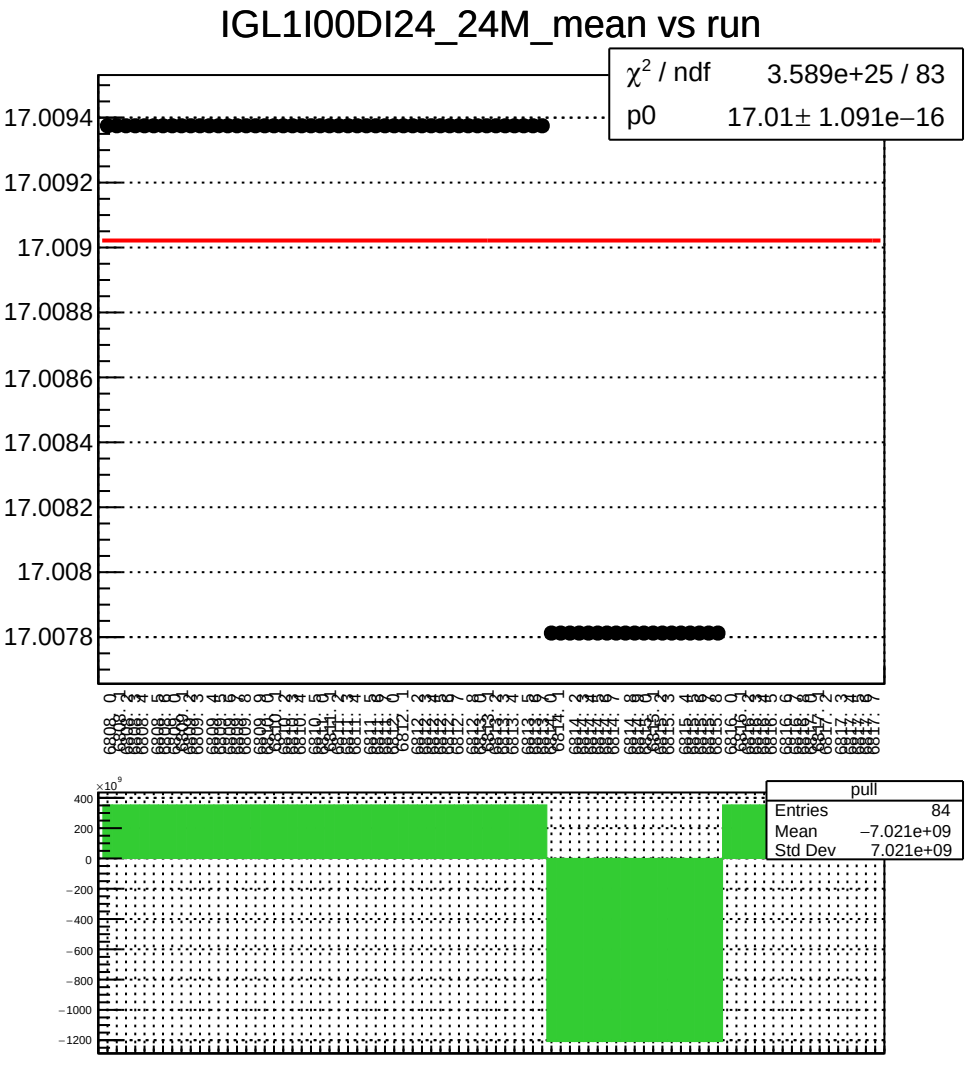

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

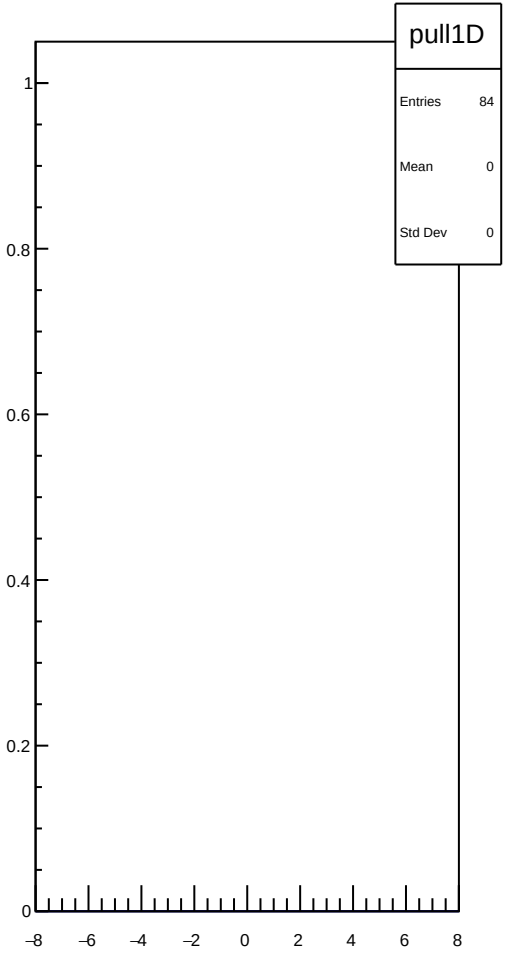

hesDipole_current_mean vs run
χ² / ndf 0.02528 / 83
p0 0.009375 ± 1.091e−16
×10⁻³
pull
Entries 84
Mean 42
Std Dev 24.25

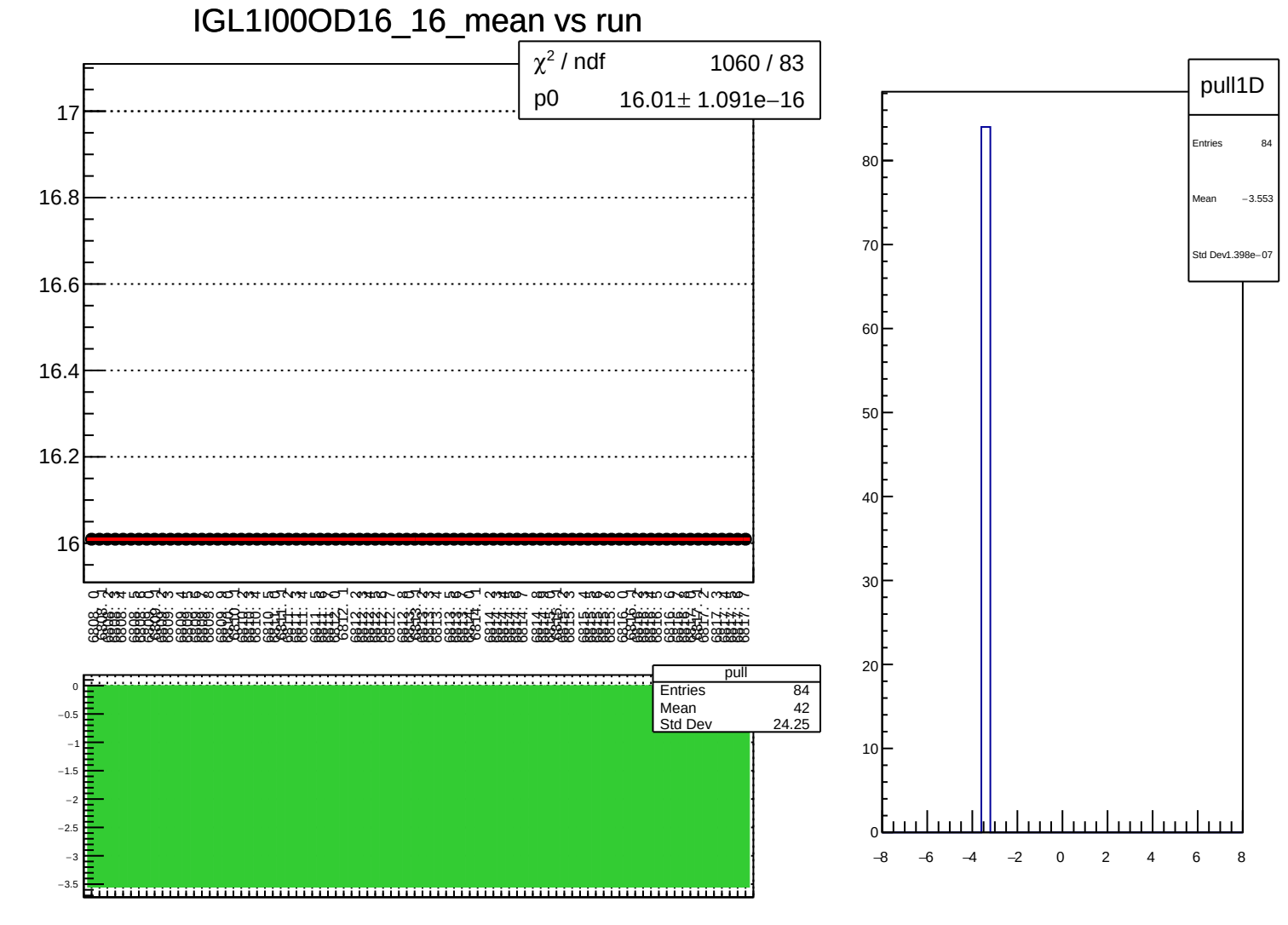

pull1D
Entries 84
Mean 0.01735
Std Dev 6.16e−10

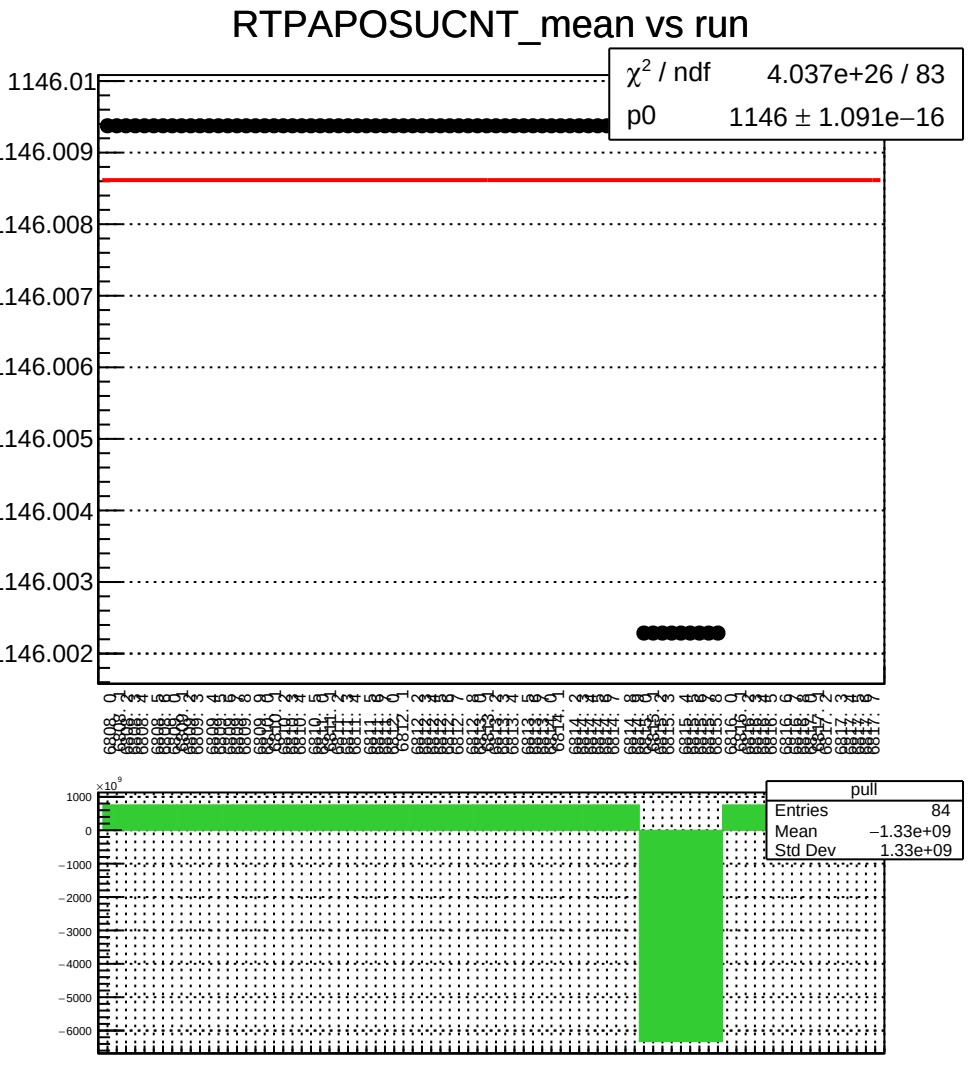

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.02528 / 83
p0 0.009375 ± 1.091e−16
×10⁻³
pull
Entries 84
Mean 42
Std Dev 24.25

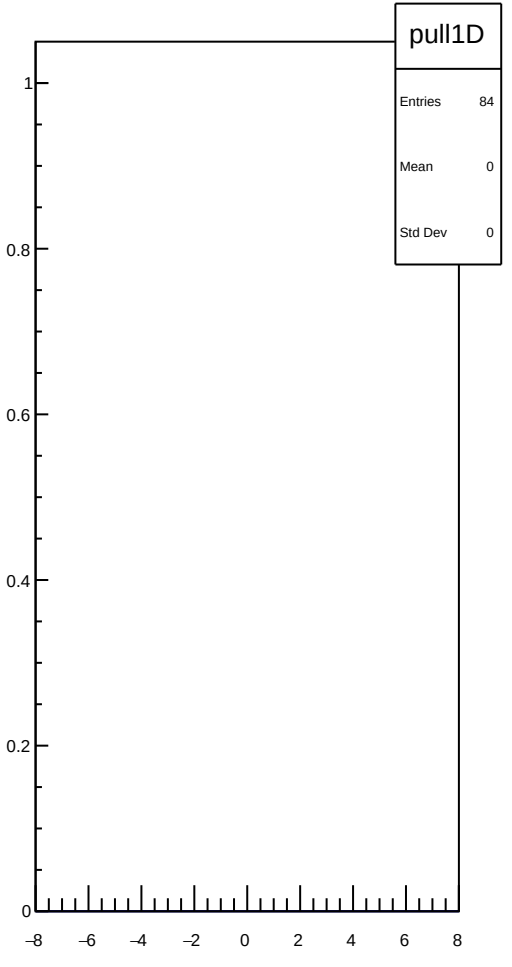

pull1D
Entries 84
Mean 0.01735
Std Dev 6.16e−10

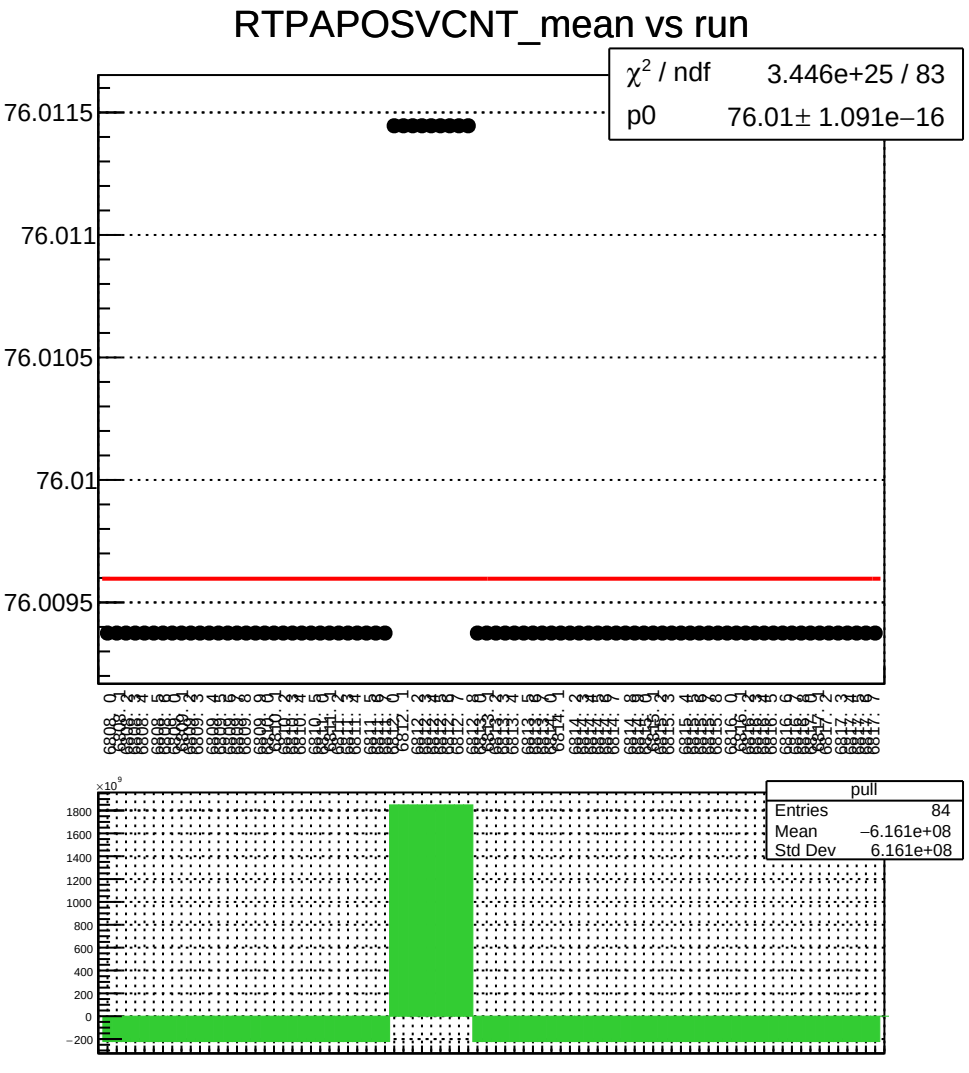

IGL1I00DI24_24M_mean vs run
χ² / ndf 3.589e+25 / 83
p0 17.01± 1.091e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 84
Mean −7.021e+09
Std Dev 7.021e+09
×10⁹
400
200
0
−200
−400
−600
−800
−1000
−1200

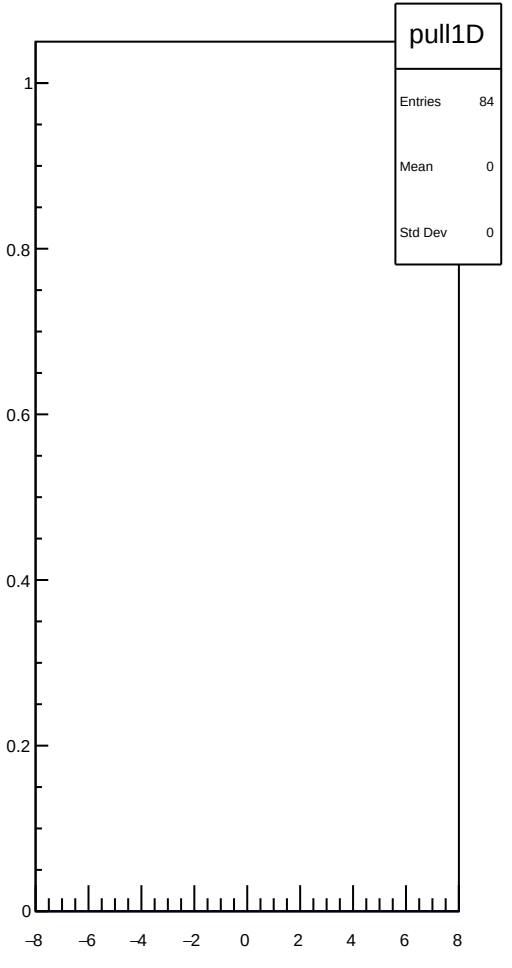

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 1060 / 83
p0 16.01± 1.091e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 84
Mean 42
Std Dev 24.25
0
−0.5
−1
−1.5
−2
−2.5
−3
−3.5
pull1D
Entries 84
Mean −3.553
Std Dev1.398e−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 4.037e+26 / 83
p0 1146 ± 1.091e−16
1146.01
1146.009
1146.008
1146.007
1146.006
1146.005
1146.004
1146.003
1146.002
pull
Entries 84
Mean −1.33e+09
Std Dev 1.33e+09
×10⁹
1000
0
−1000
−2000
−3000
−4000
−5000
−6000


pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 3.446e+25 / 83
p0 76.01± 1.091e−16
76.0115
76.011
76.0105
76.01
76.0095
×10⁹
pull
Entries 84
Mean −6.161e+08
Std Dev 6.161e+08


pull1D
Entries 84
Mean 0
Std Dev 0