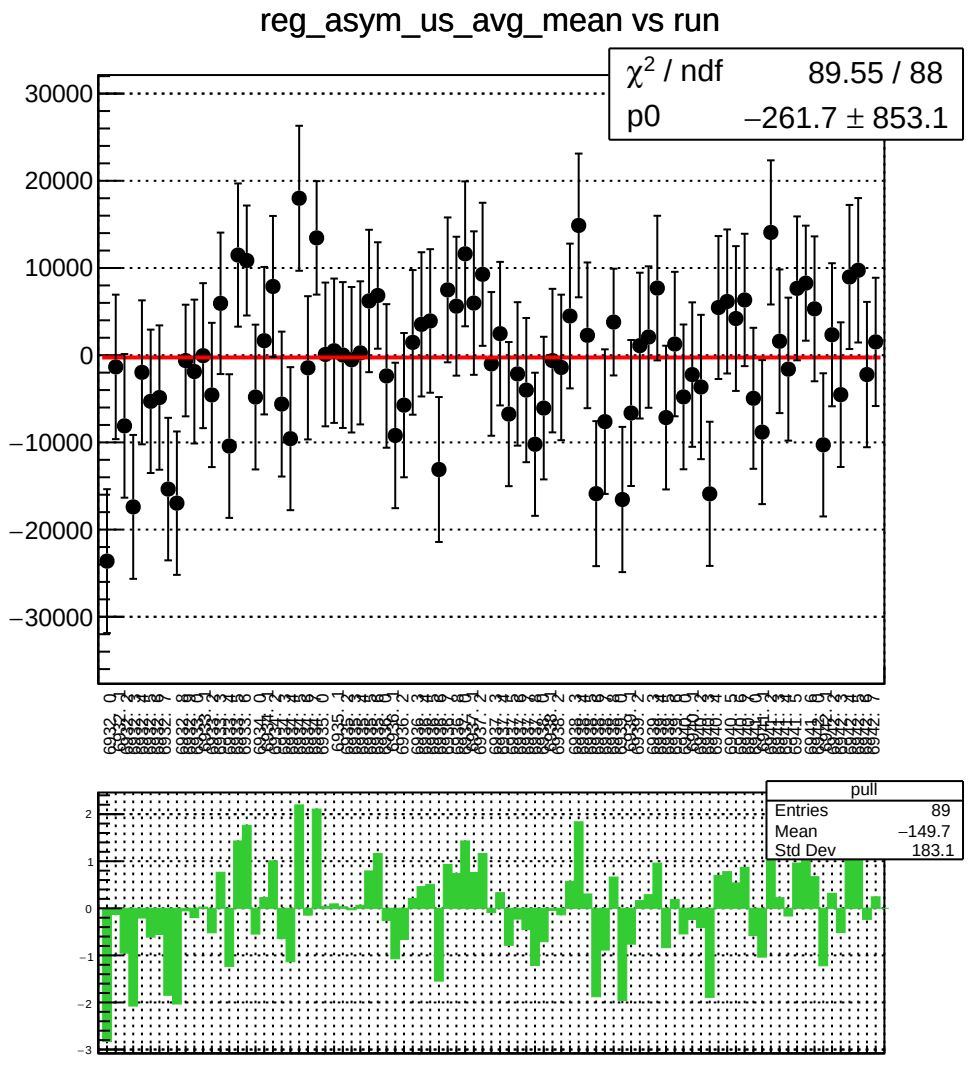
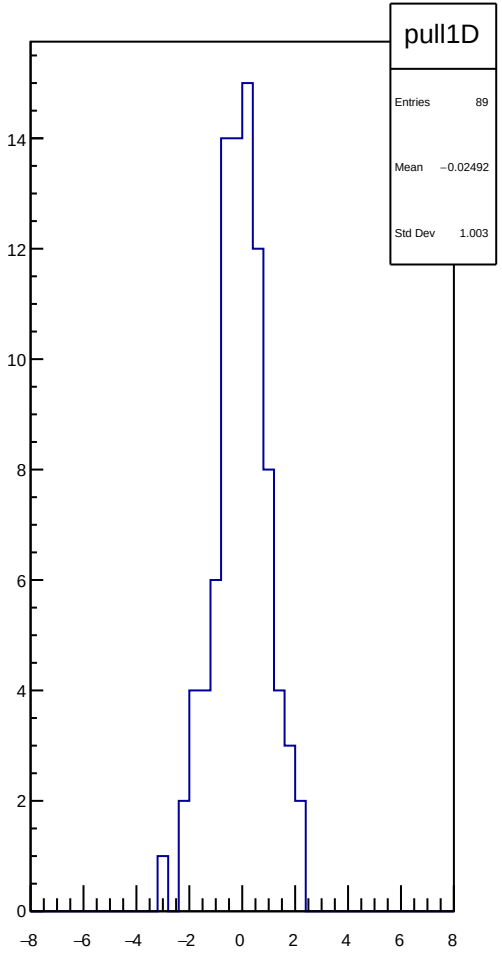
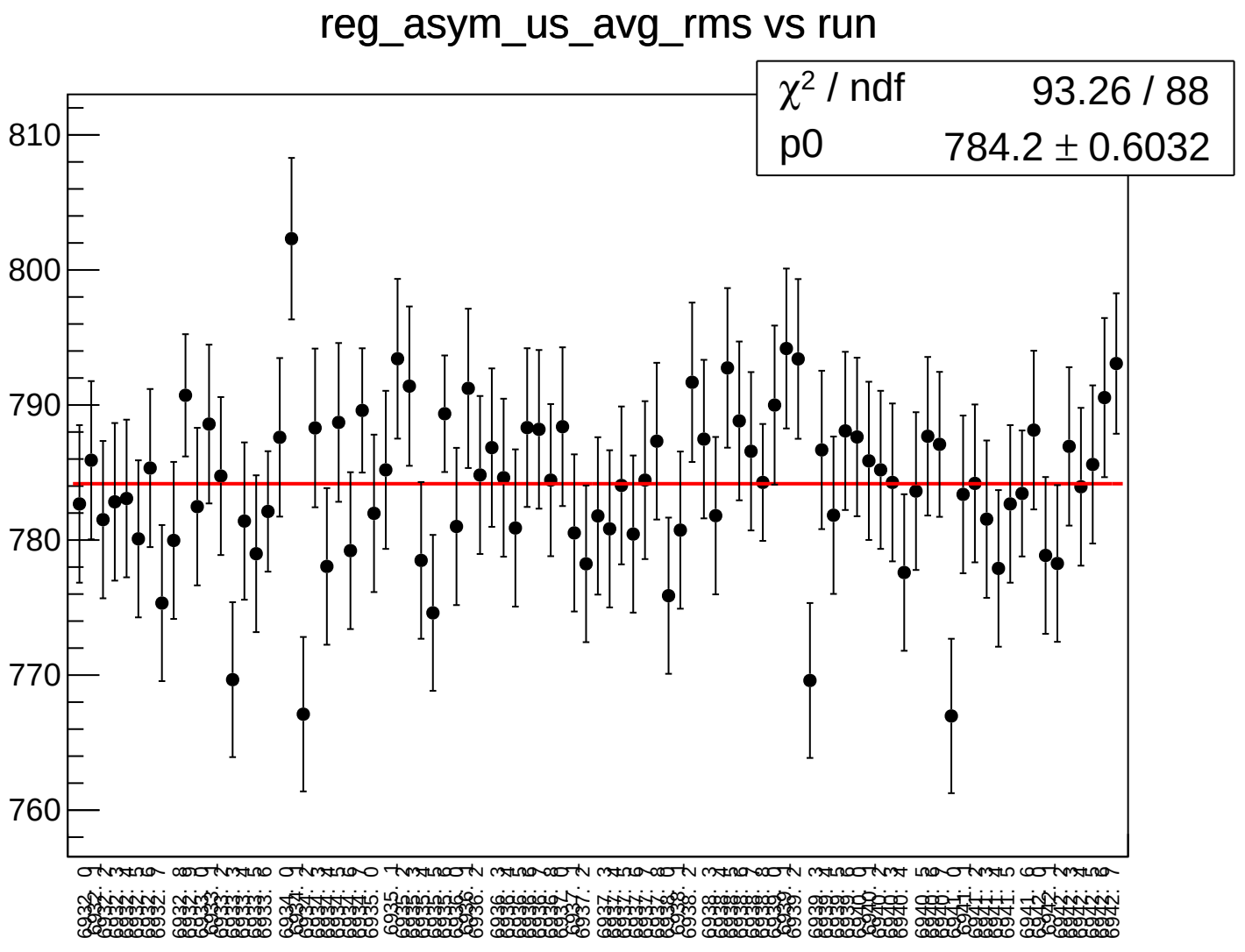
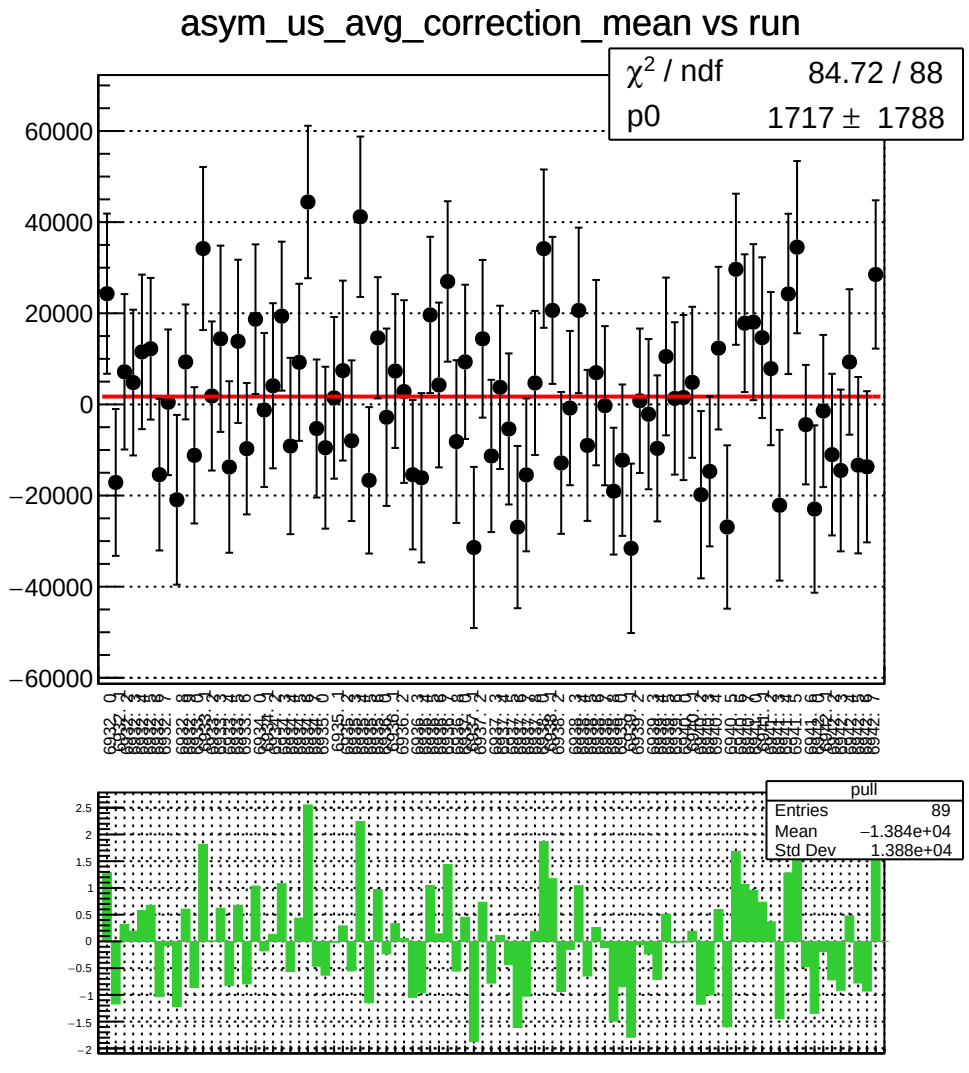
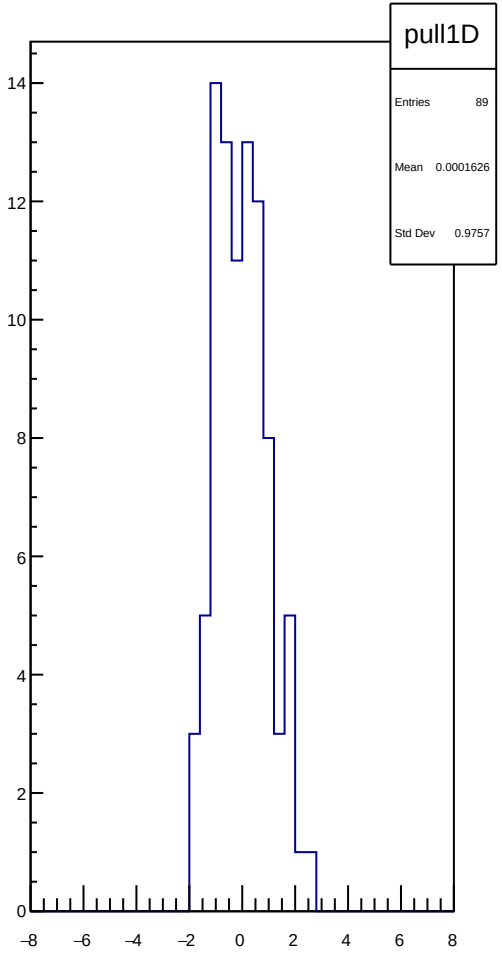
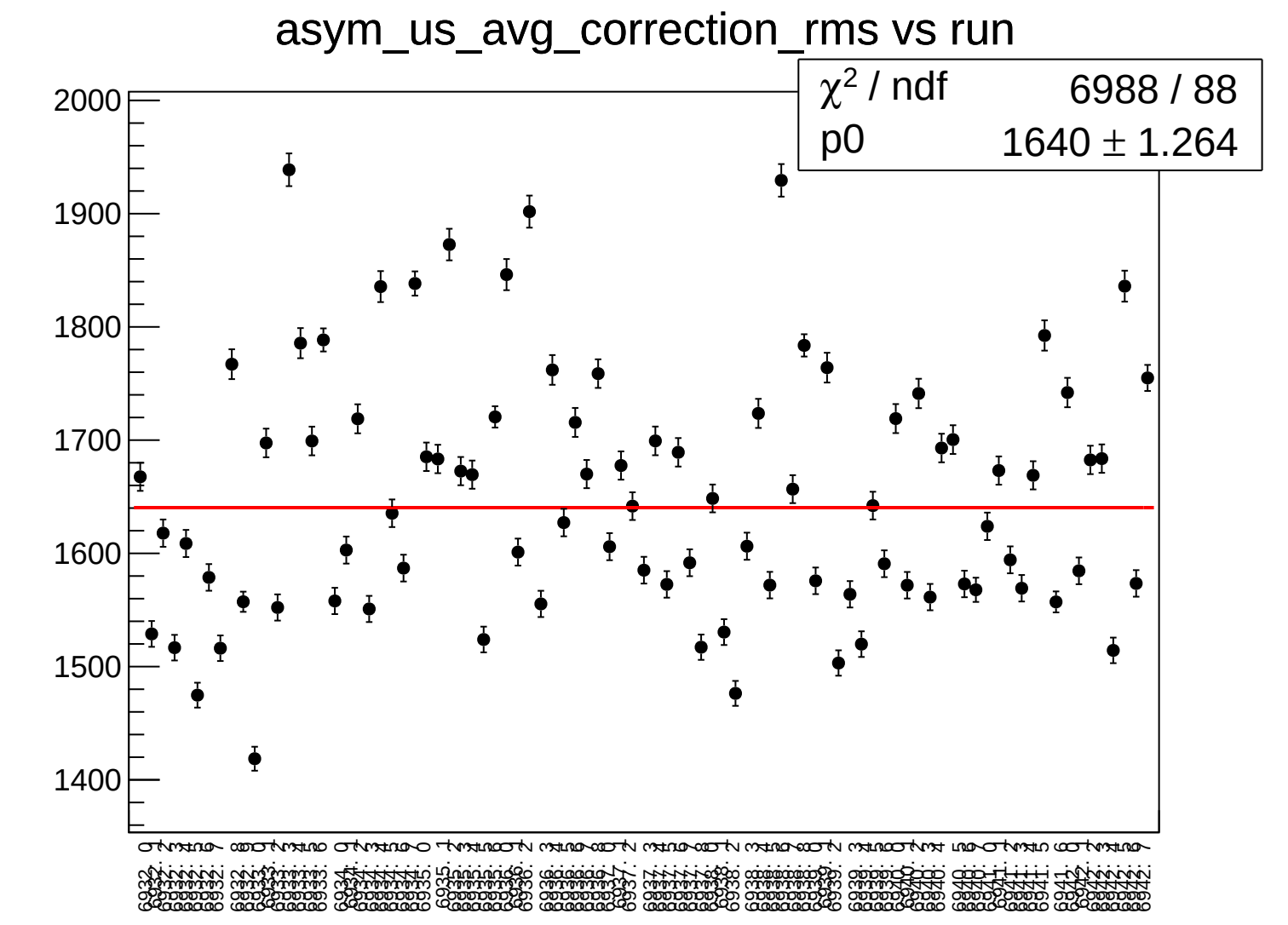

reg_asym_us_avg_mean vs run
χ² / ndf 89.55 / 88
p0 −261.7 ± 853.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −149.7
Std Dev 183.1
2
1
0
−1
−2
−3

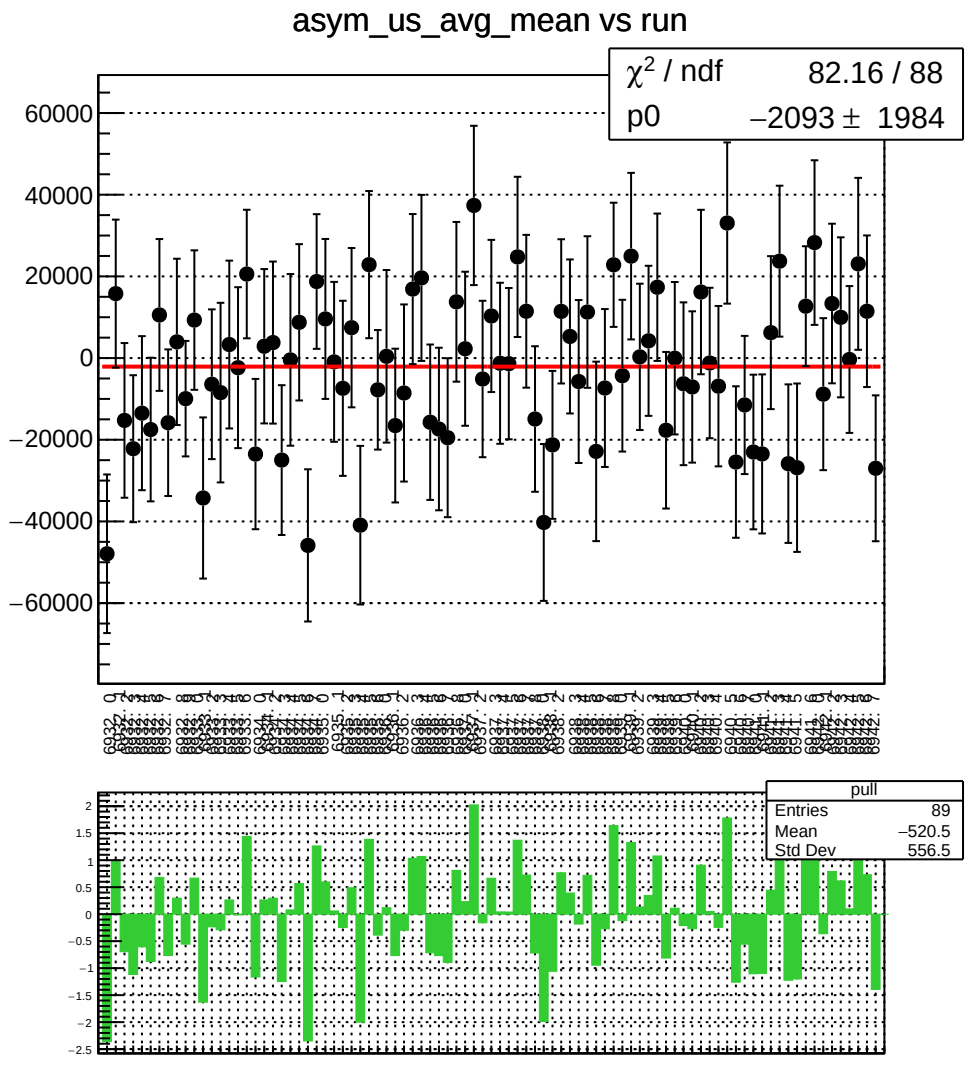

pull1D
Entries 89
Mean −0.02492
Std Dev 1.003
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

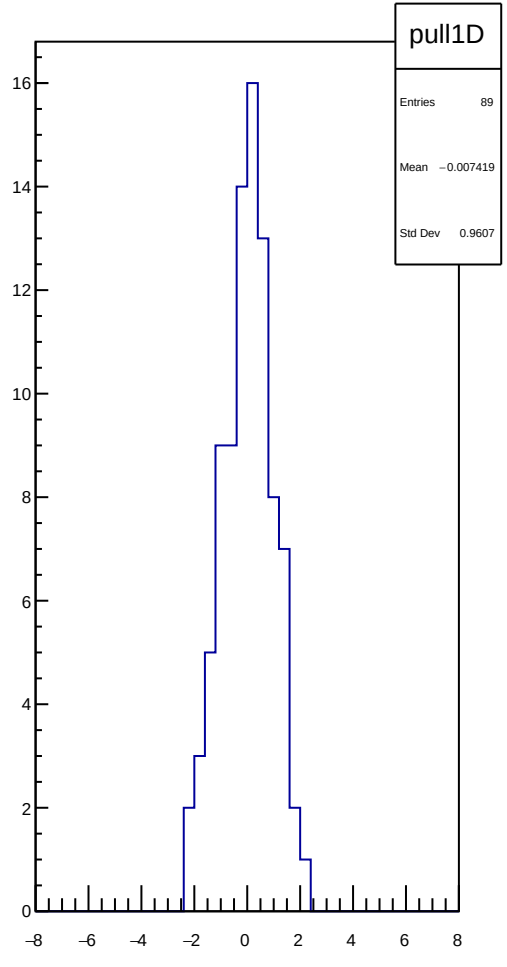

reg_asym_us_avg_rms vs run
χ² / ndf 93.26 / 88
p0 784.2 ± 0.6032
810
800
790
780
770
760

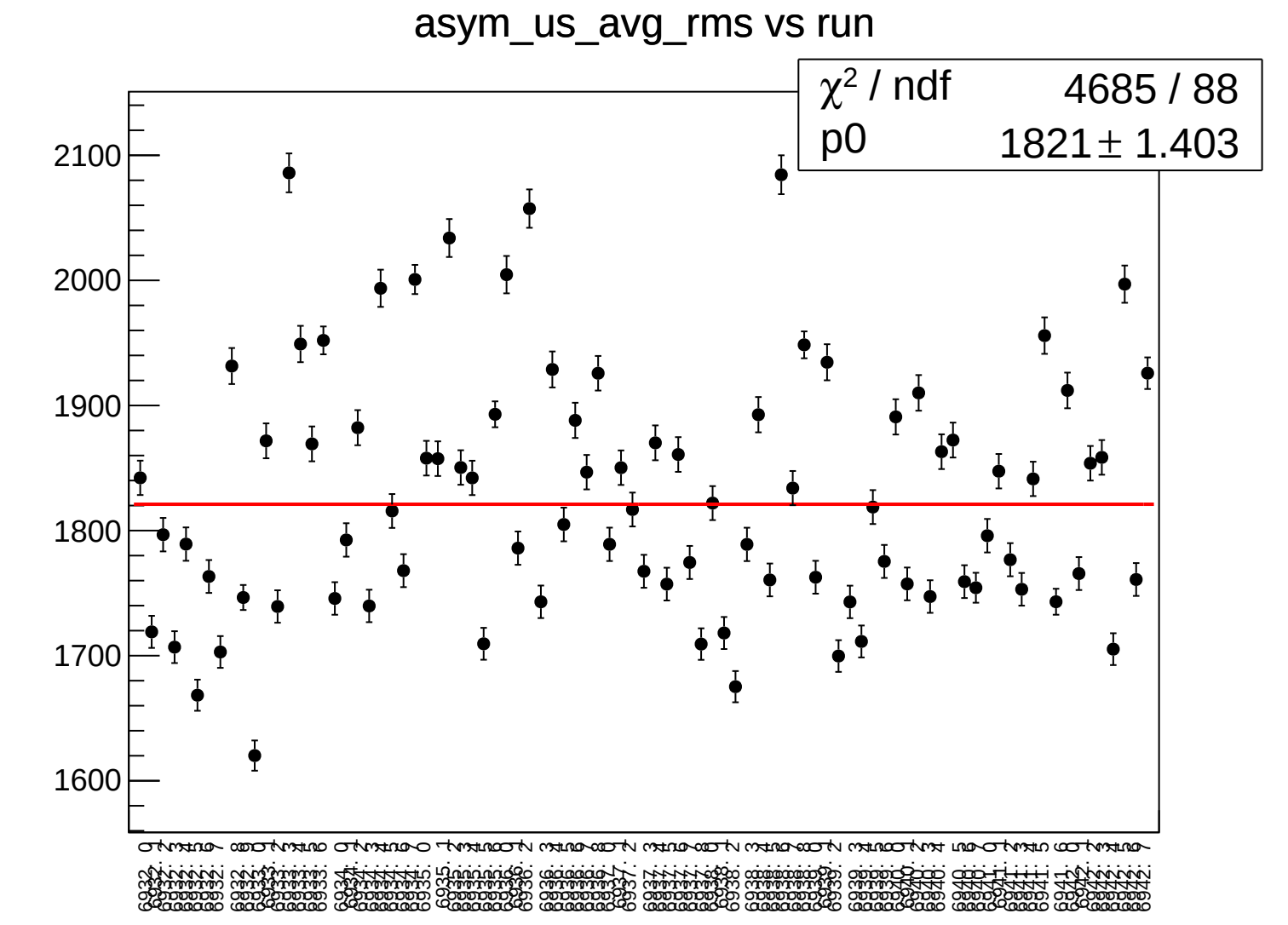

asym_us_avg_correction_mean vs run
χ² / ndf 84.72 / 88
p0 1717 ± 1788
pull
Entries 89
Mean −1.384e+04
Std Dev 1.388e+04

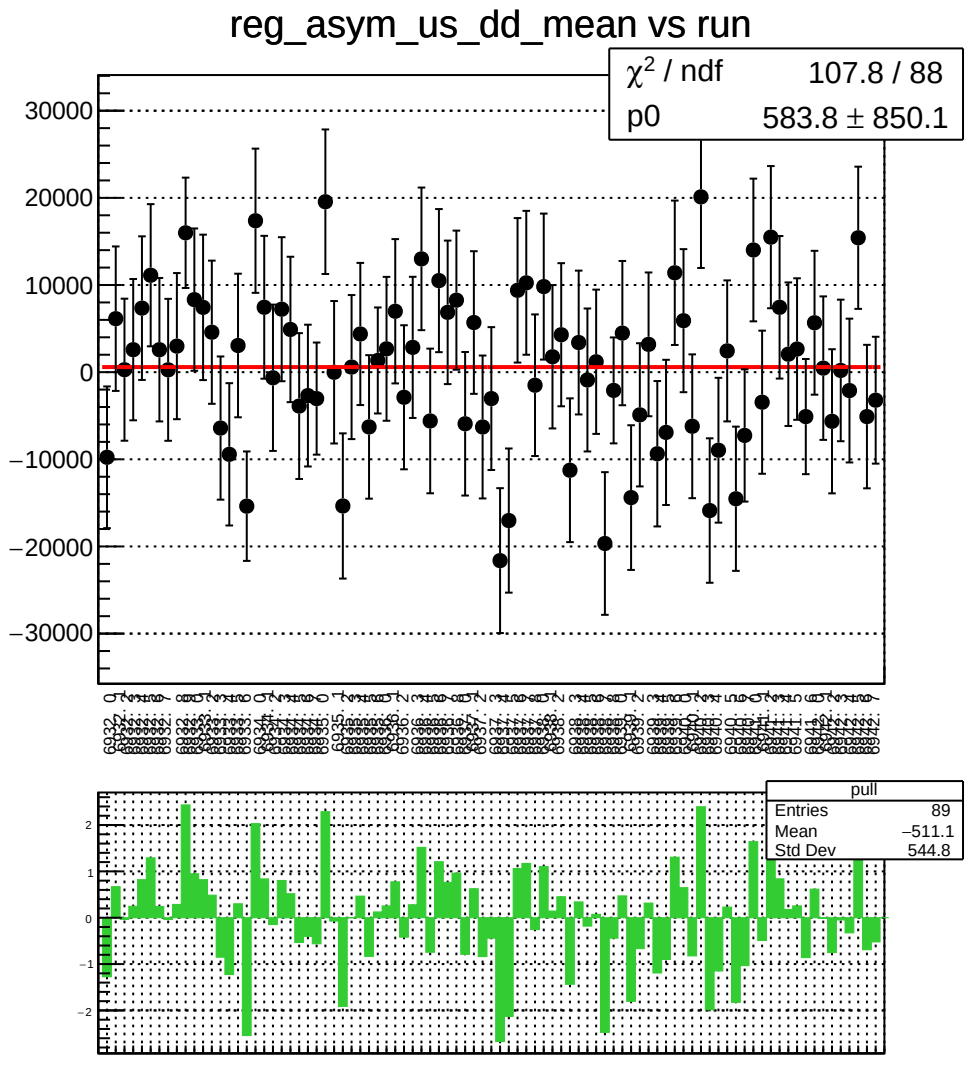

pull1D
Entries 89
Mean 0.0001626
Std Dev 0.9757

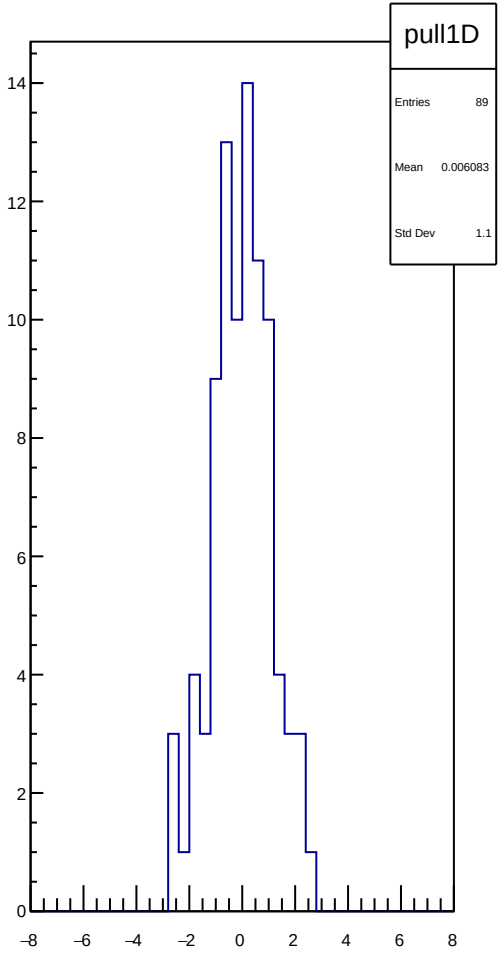

asym_us_avg_correction_rms vs run
χ^2 / ndf 6988 / 88
p0 1640 ± 1.264
2000
1900
1800
1700
1600
1500
1400

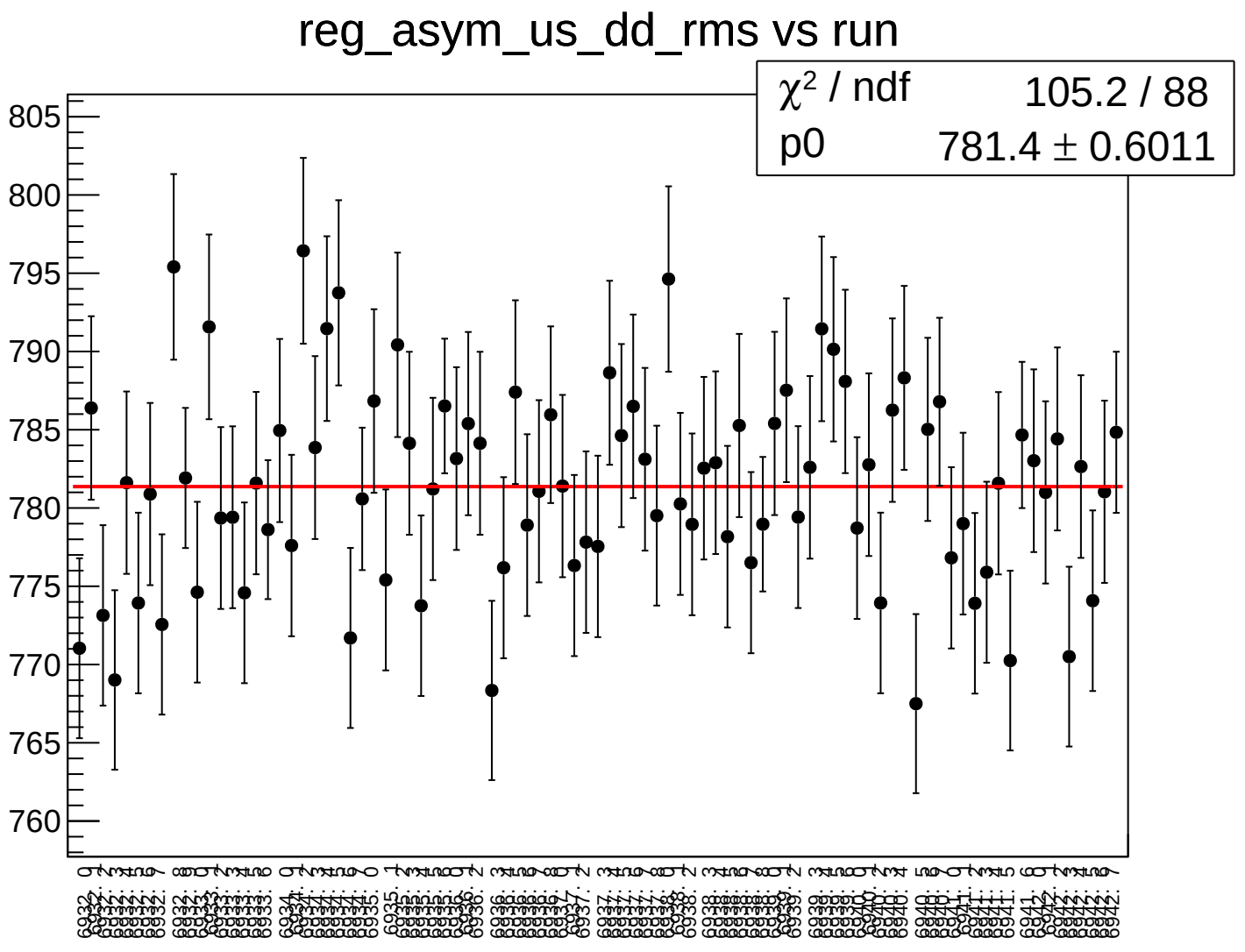

asym_us_avg_mean vs run
χ² / ndf 82.16 / 88
p0 −2093 ± 1984
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −520.5
Std Dev 556.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

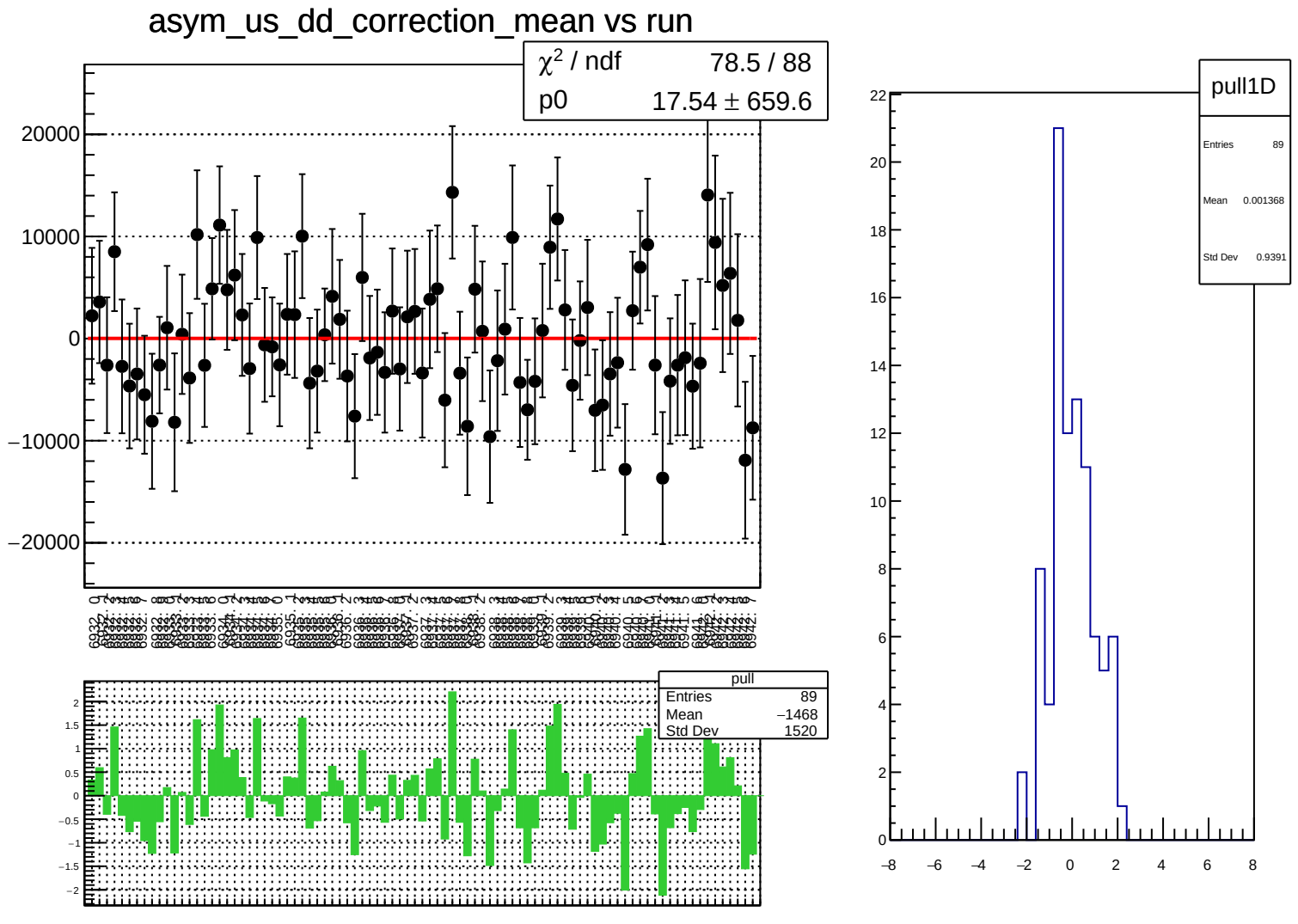

pull1D
Entries 89
Mean −0.007419
Std Dev 0.9607
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

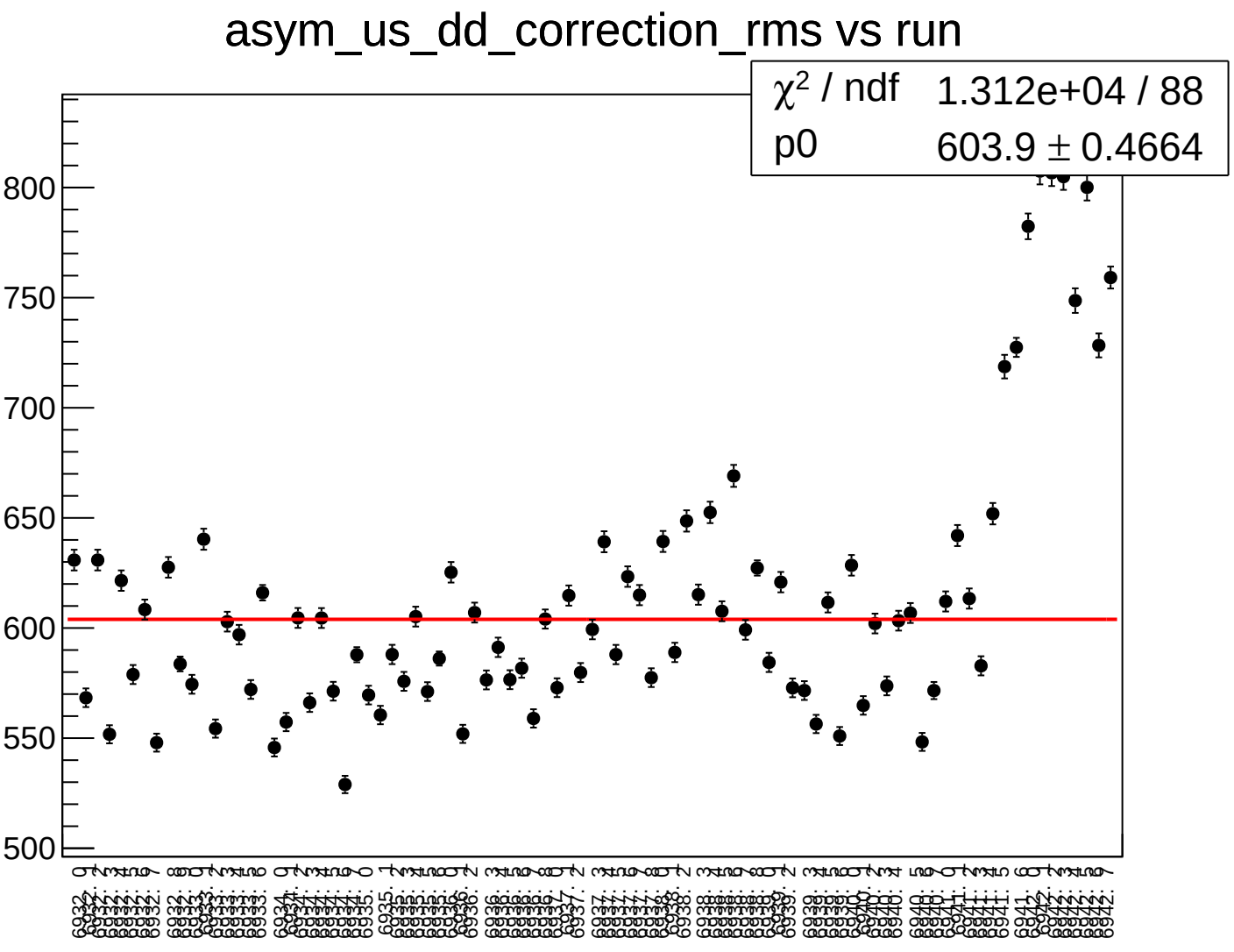

asym_us_avg_rms vs run
χ^2 / ndf 4685 / 88
p0 1821 ± 1.403
2100
2000
1900
1800
1700
1600

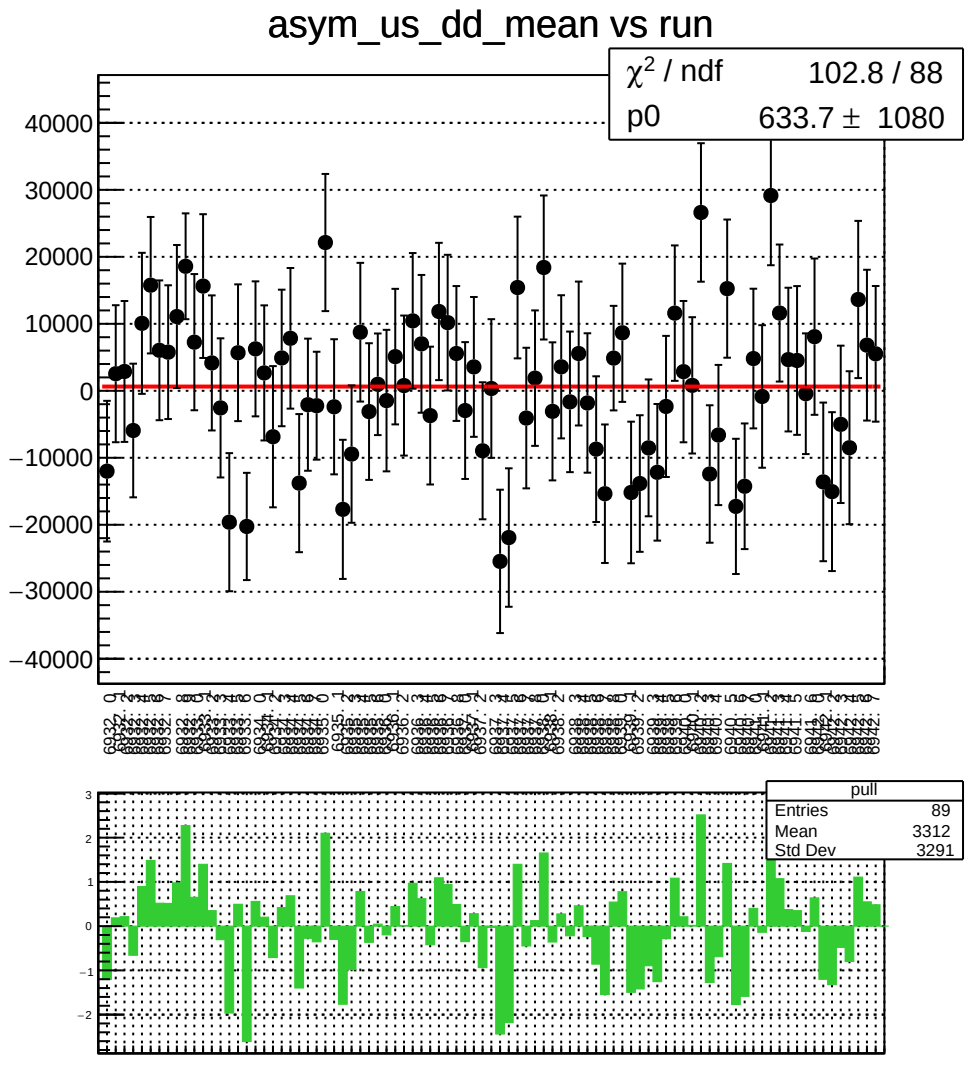

reg_asym_us_dd_mean vs run
χ² / ndf 107.8 / 88
p0 583.8 ± 850.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −511.1
Std Dev 544.8
2
1
0
−1
−2

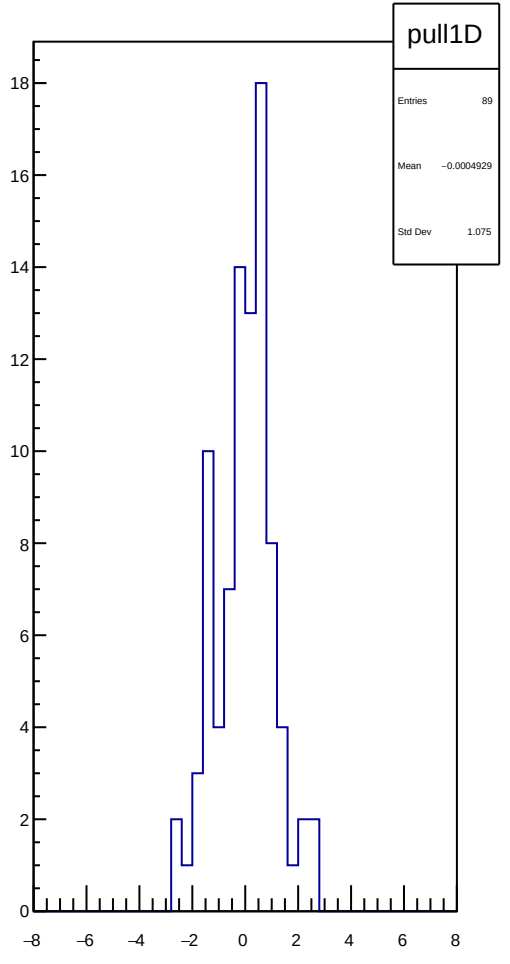

pull1D
Entries 89
Mean 0.006083
Std Dev 1.1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

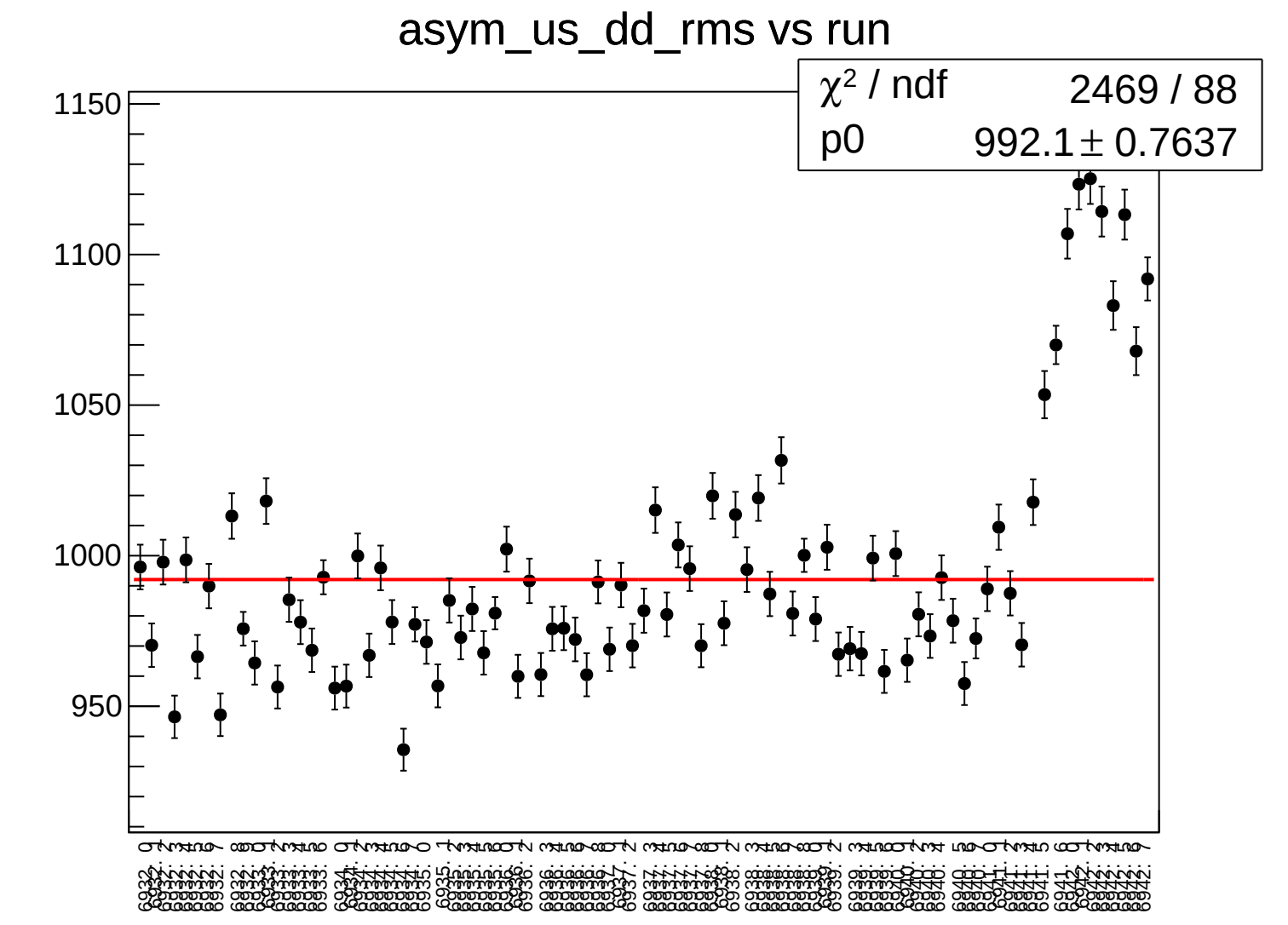

reg_asym_us_dd_rms vs run
χ² / ndf 105.2 / 88
p0 781.4 ± 0.6011
805
800
795
790
785
780
775
770
765
760

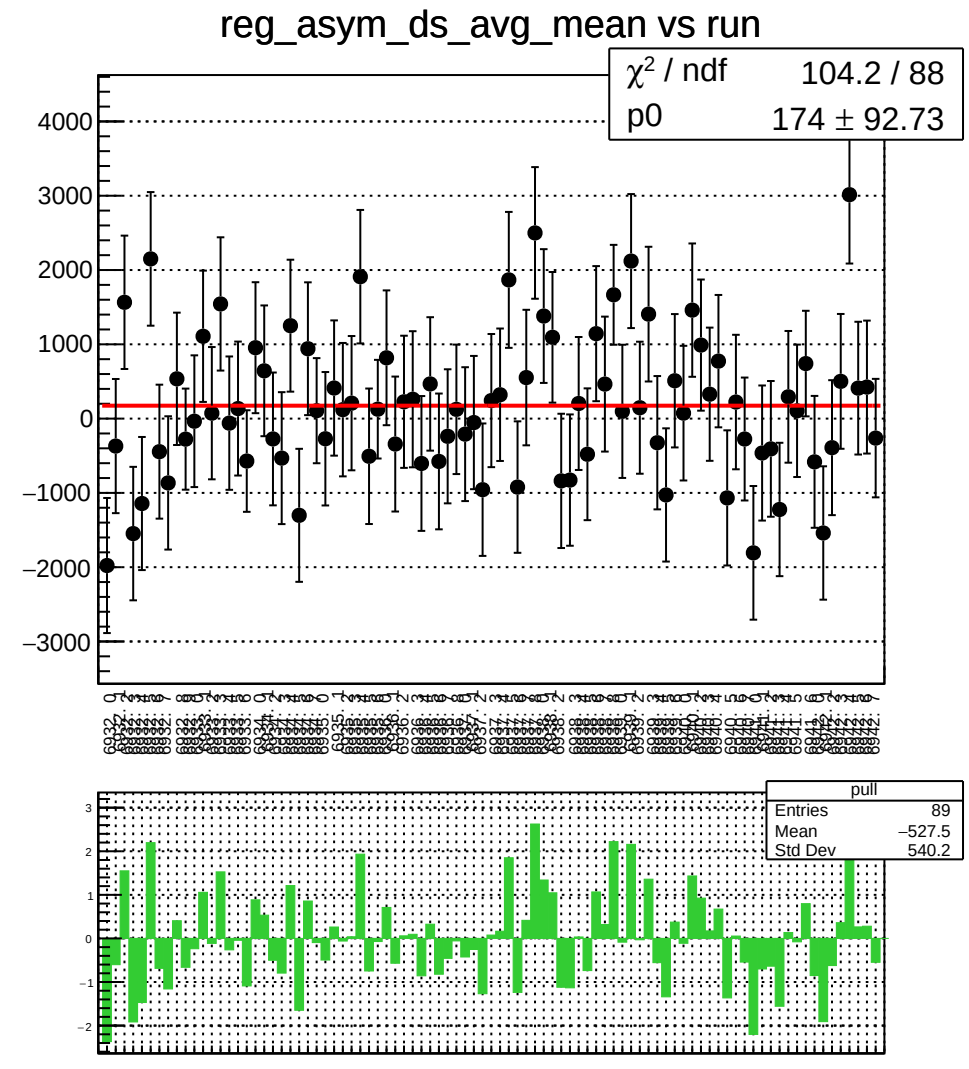

asym_us_dd_correction_mean vs run
χ² / ndf 78.5 / 88
p0 17.54 ± 659.6
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −1468
Std Dev 1520
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 89
Mean 0.001368
Std Dev 0.9391
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

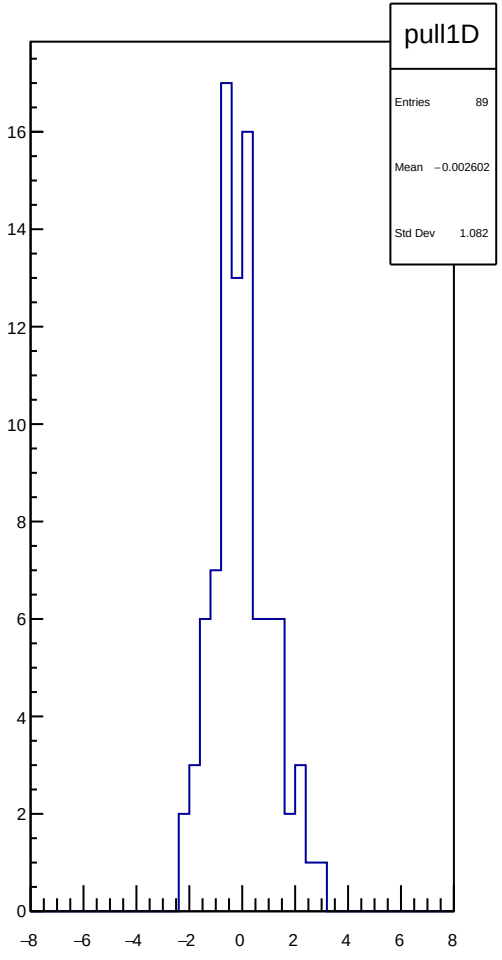

asym_us_dd_correction_rms vs run
χ² / ndf 1.312e+04 / 88
p0 603.9 ± 0.4664
800
750
700
650
600
550
500

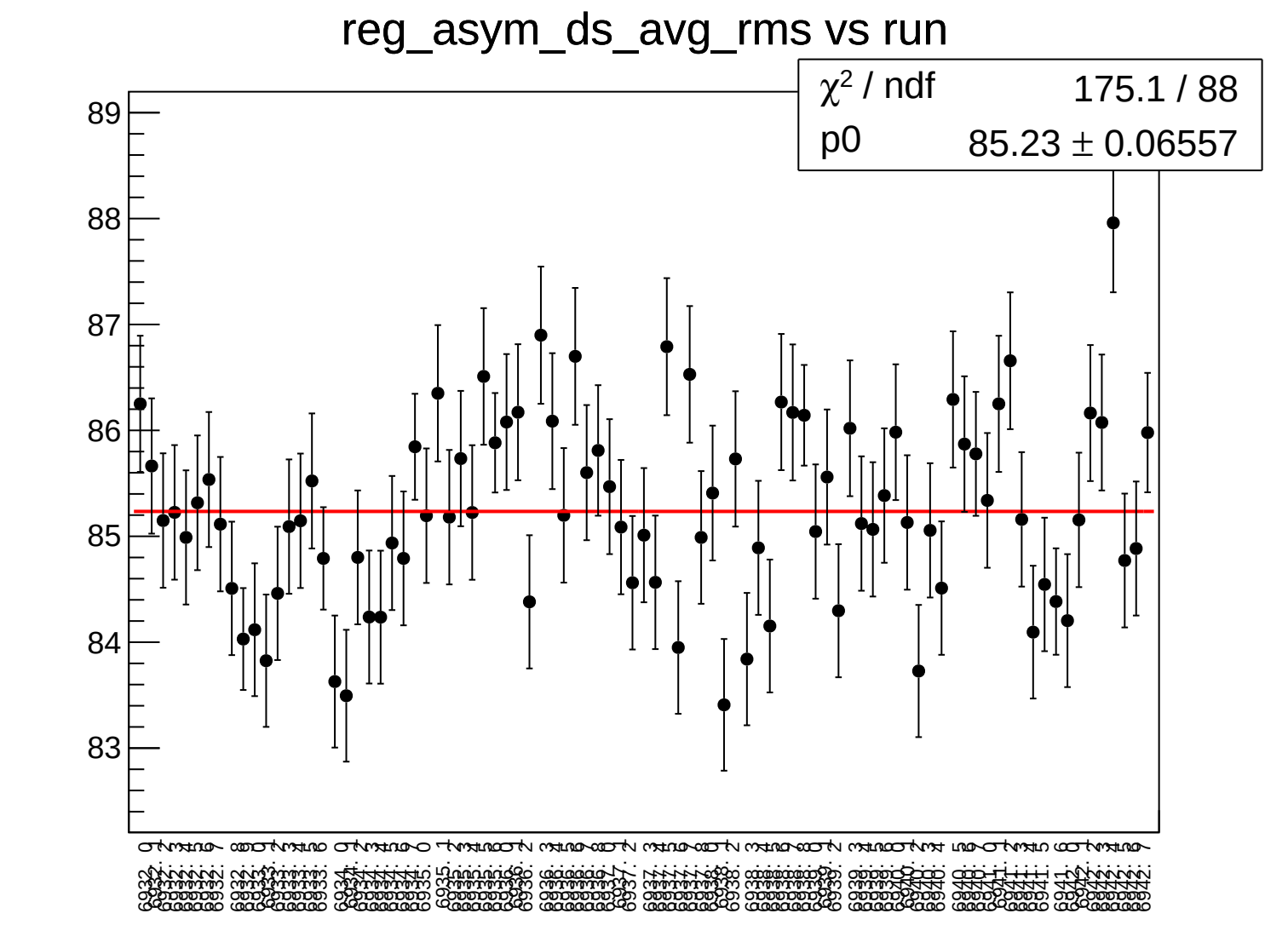

asym_us_dd_mean vs run
χ² / ndf 102.8 / 88
p0 633.7 ± 1080
pull
Entries 89
Mean 3312
Std Dev 3291

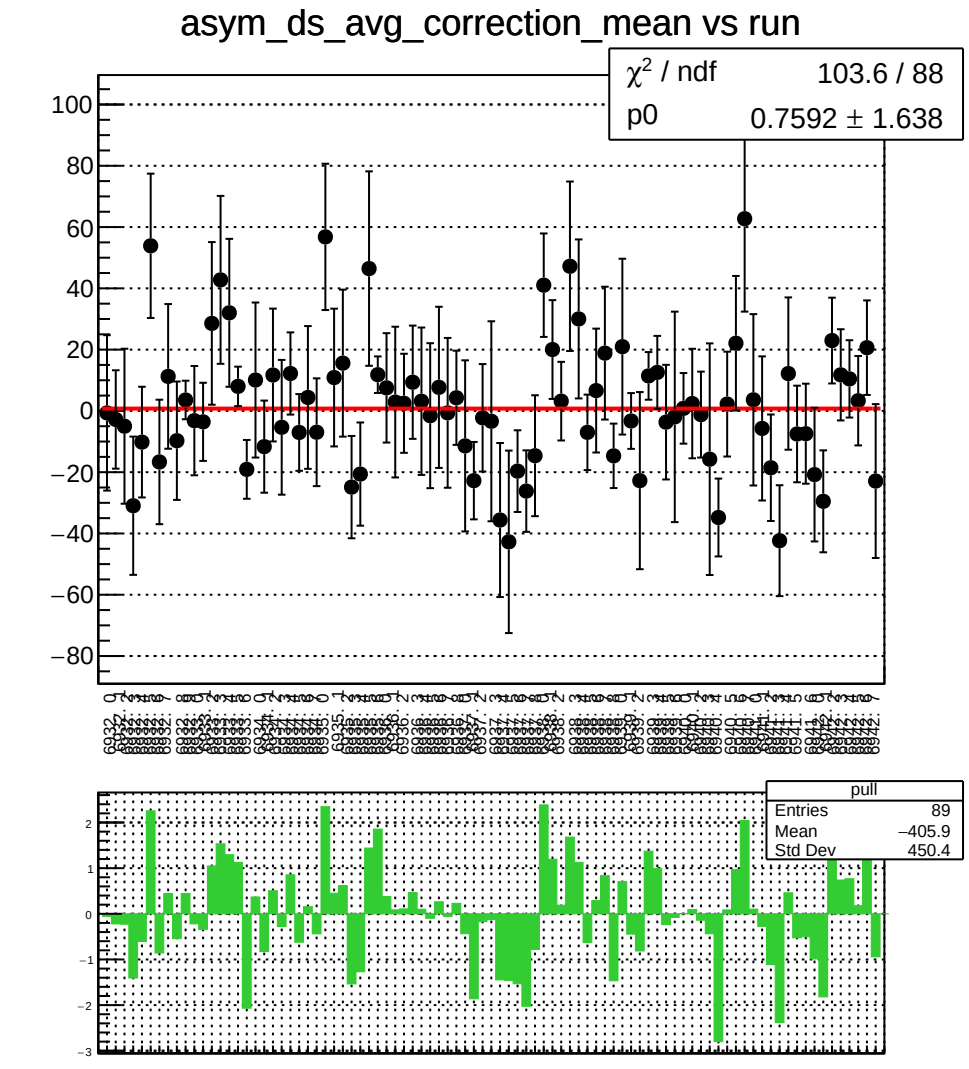

pull1D
Entries 89
Mean −0.0004929
Std Dev 1.075

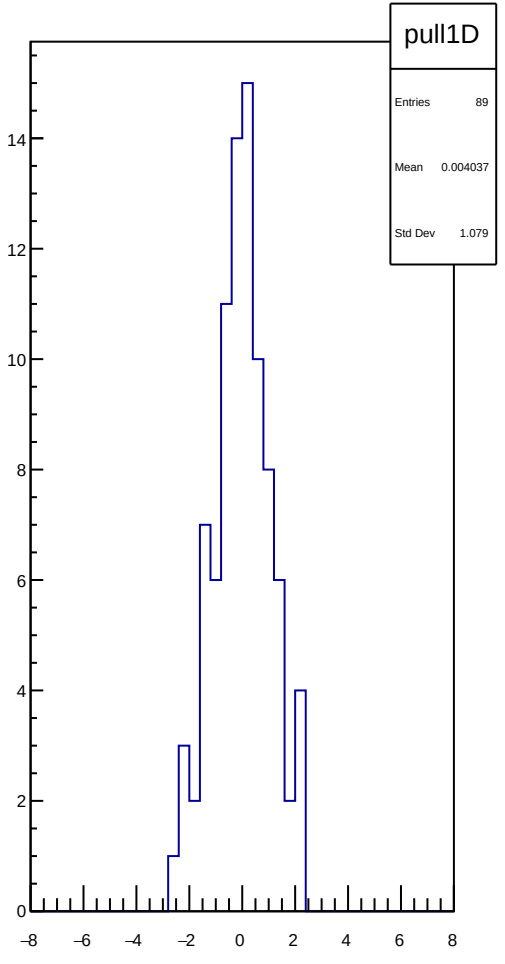

asym_us_dd_rms vs run
χ² / ndf 2469 / 88
p0 992.1 ± 0.7637
1150
1100
1050
1000
950

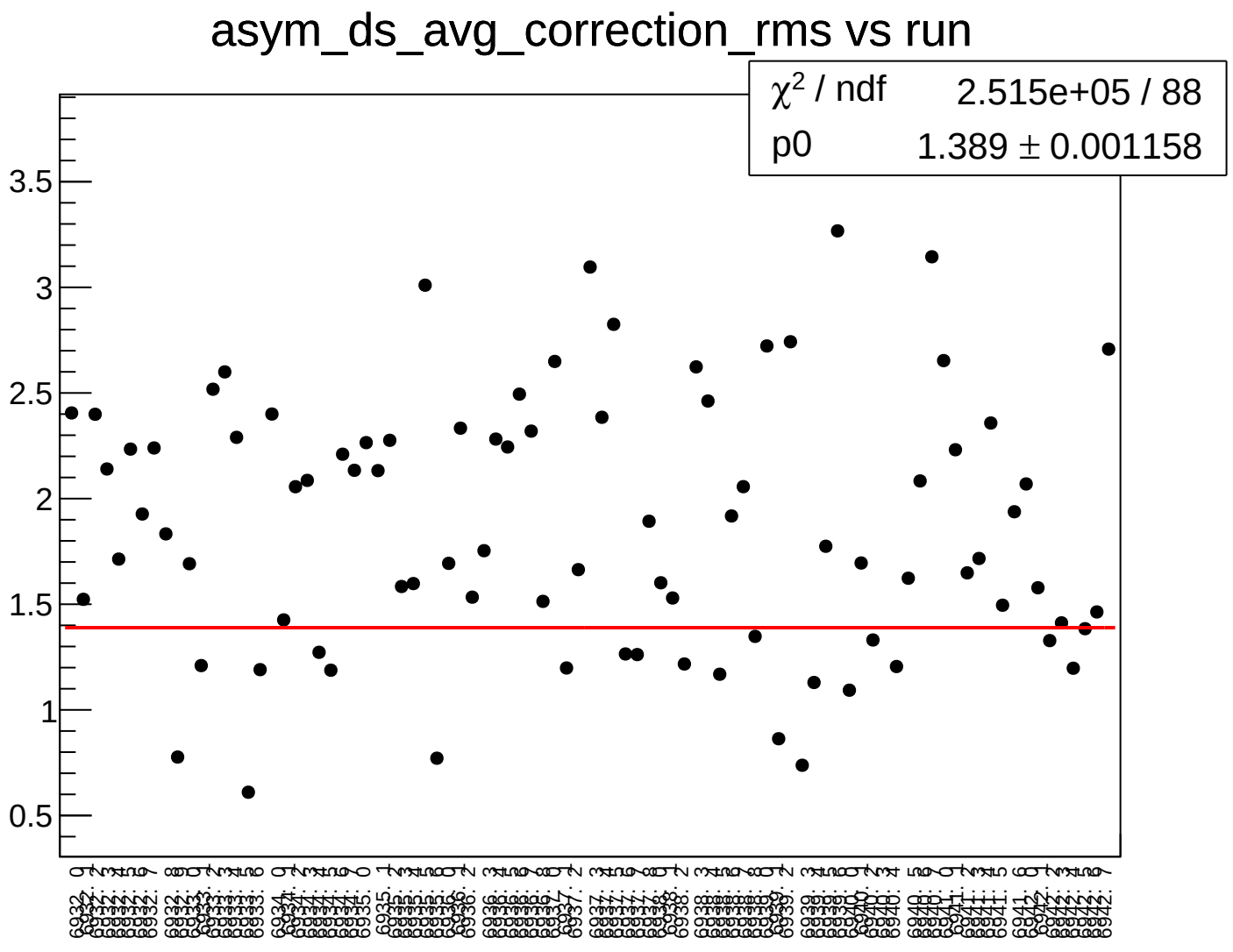

reg_asym_ds_avg_mean vs run
χ² / ndf 104.2 / 88
p0 174 ± 92.73
pull
Entries 89
Mean −527.5
Std Dev 540.2

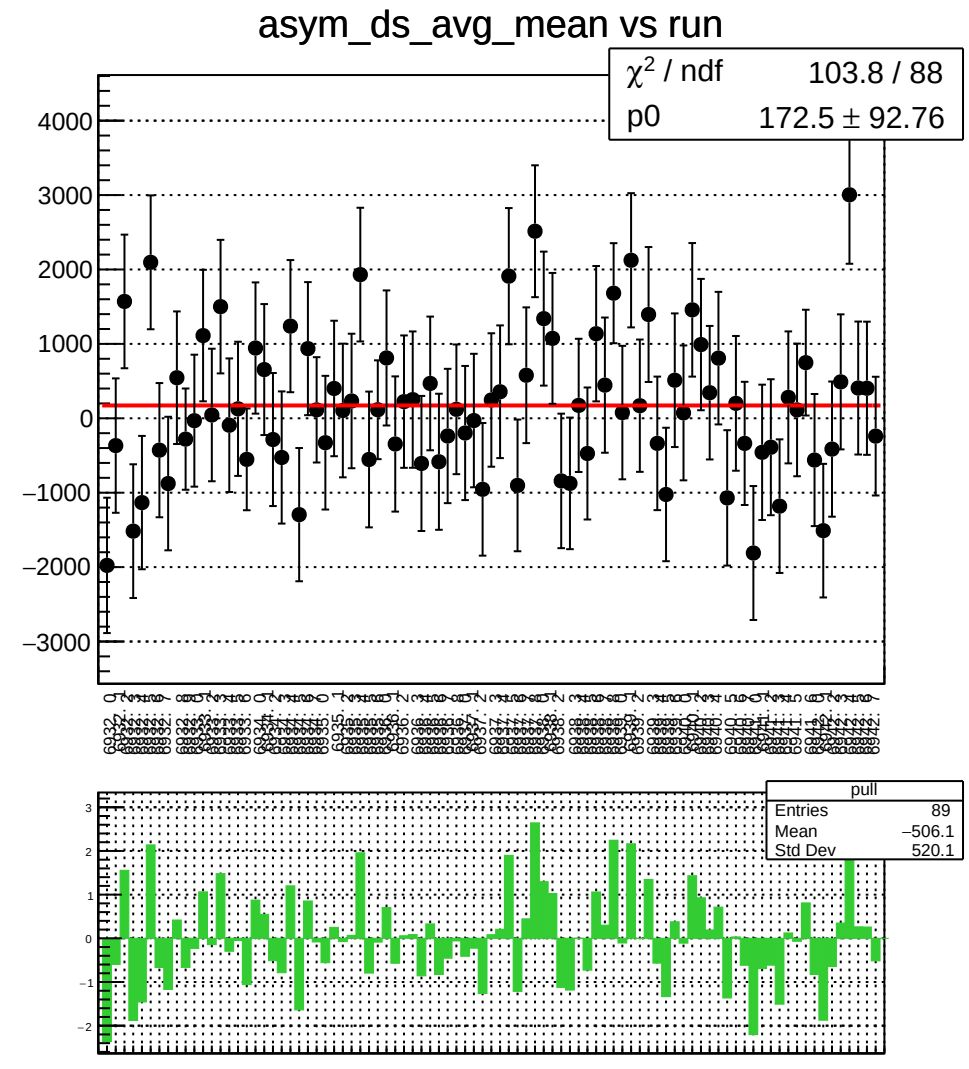

pull1D
Entries 89
Mean −0.002602
Std Dev 1.082

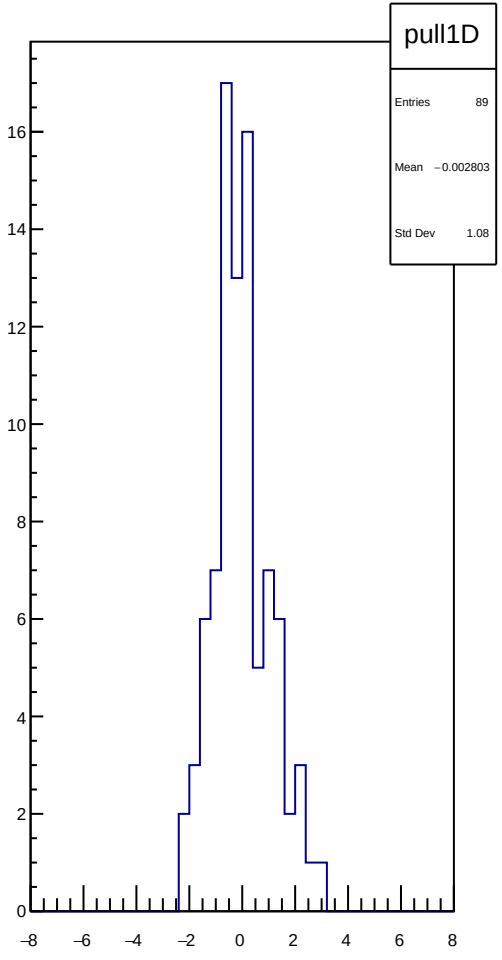

reg_asym_ds_avg_rms vs run
χ^2 / ndf 175.1 / 88
p0 85.23 ± 0.06557
89
88
87
86
85
84
83

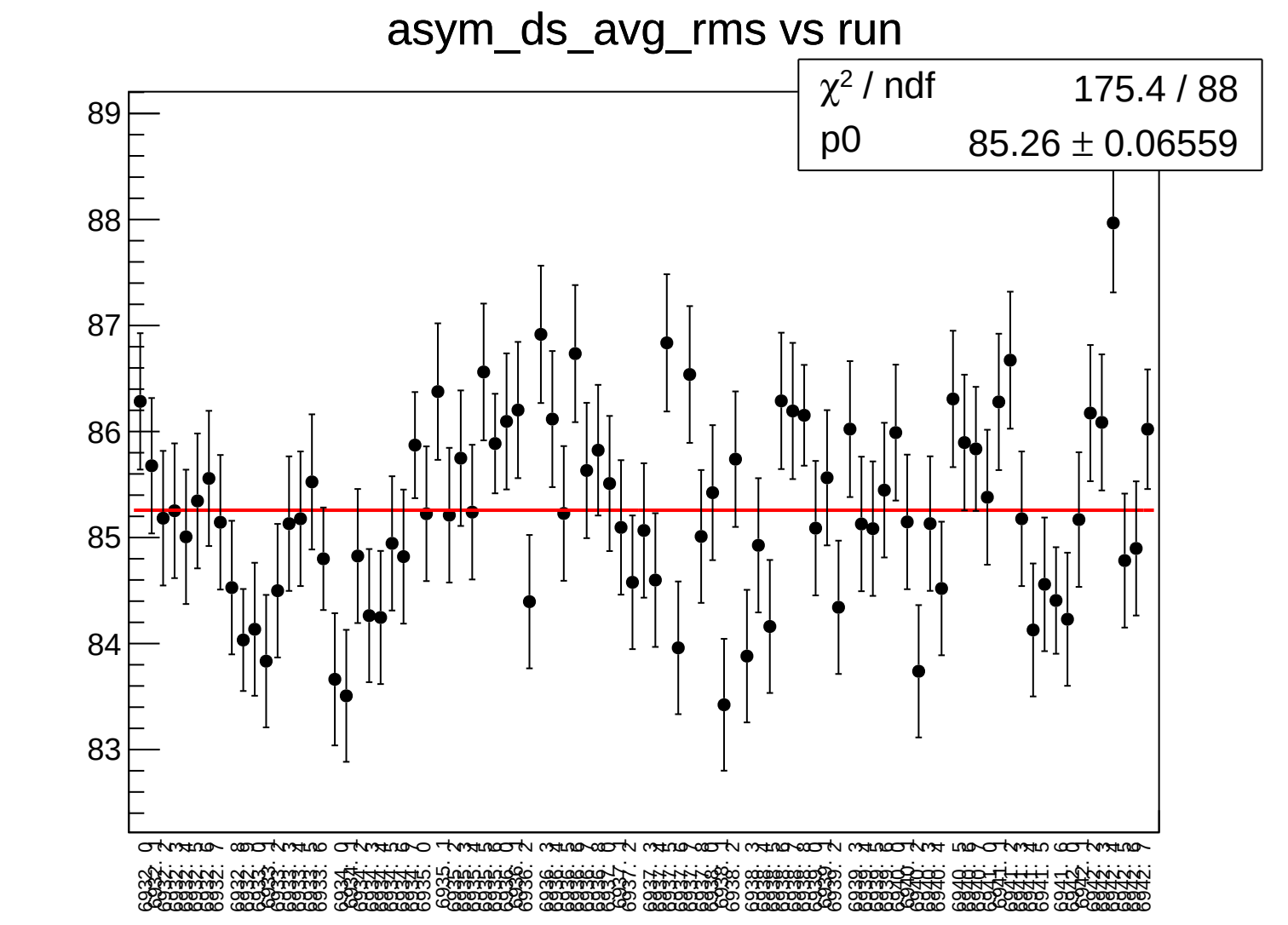

asym_ds_avg_correction_mean vs run
χ² / ndf 103.6 / 88
p0 0.7592 ± 1.638
pull
Entries 89
Mean −405.9
Std Dev 450.4

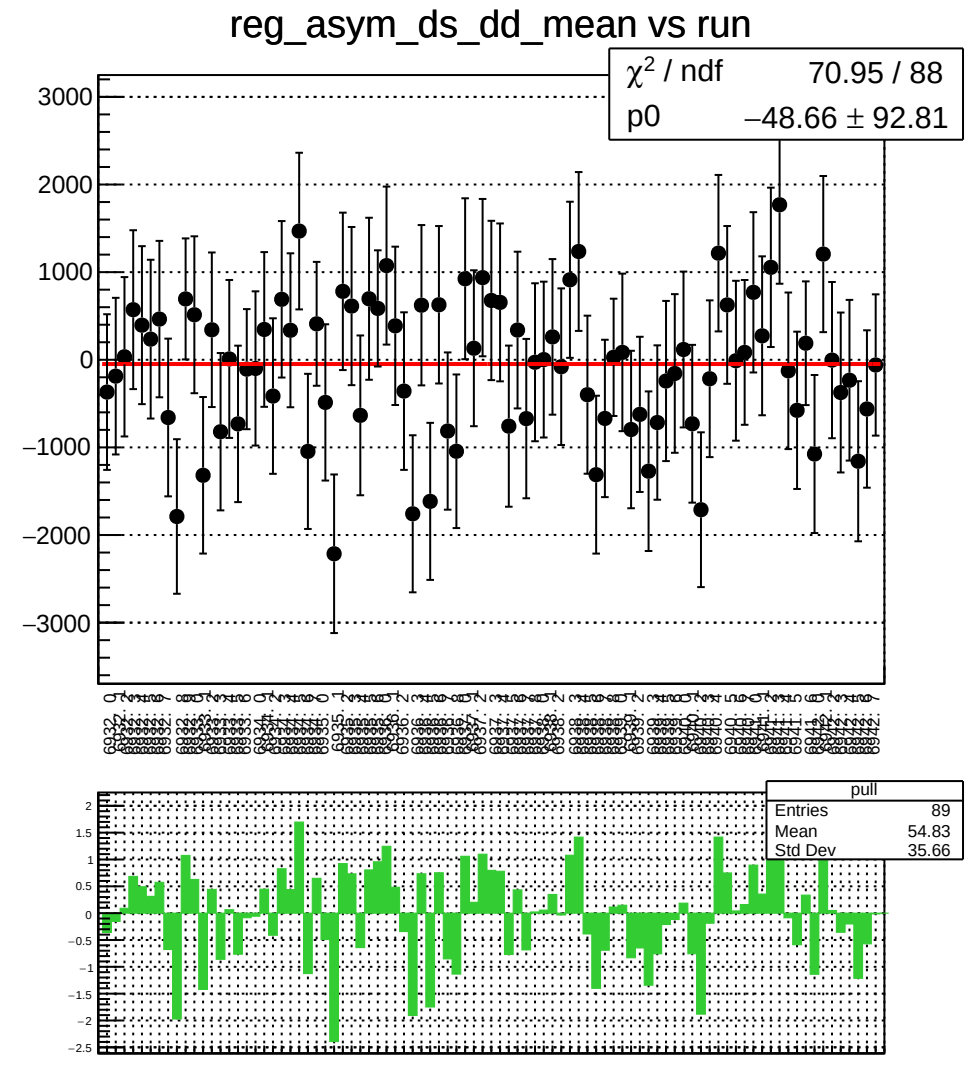

pull1D
Entries 89
Mean 0.004037
Std Dev 1.079

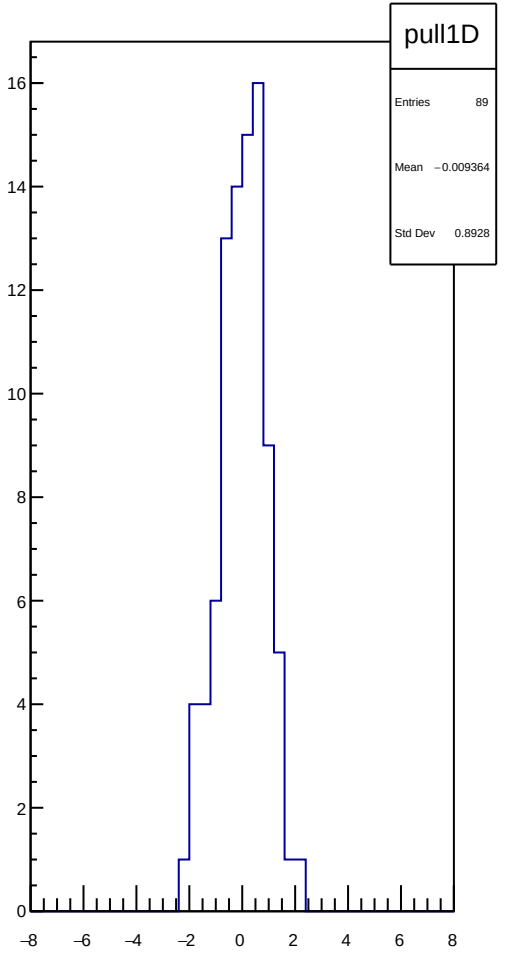

asym_ds_avg_correction_rms vs run
χ^2 / ndf 2.515e+05 / 88
p0 1.389 ± 0.001158
3.5
3
2.5
2
1.5
1
0.5

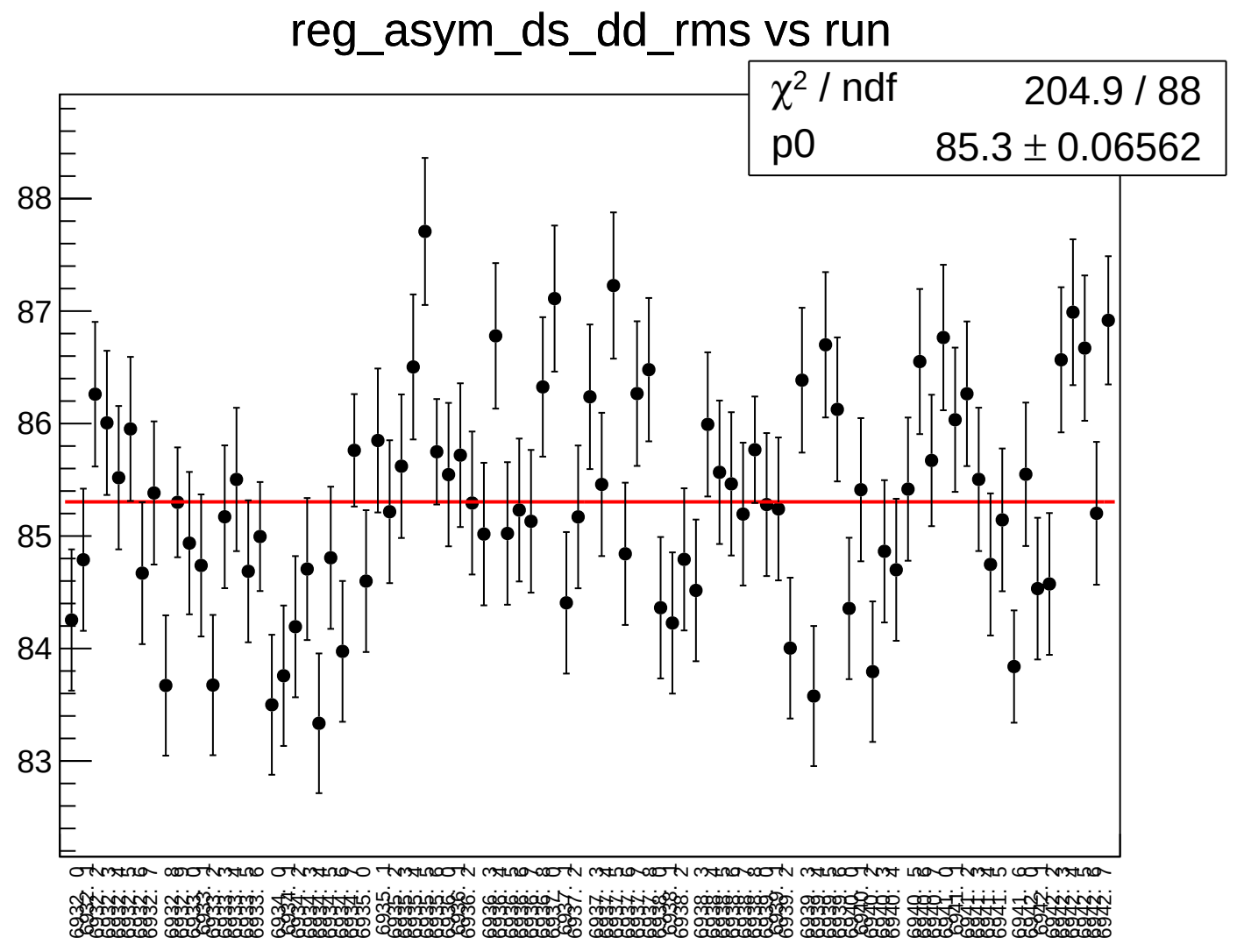

asym_ds_avg_mean vs run
χ² / ndf 103.8 / 88
p0 172.5 ± 92.76
4000
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean −506.1
Std Dev 520.1
3
2
1
0
−1
−2

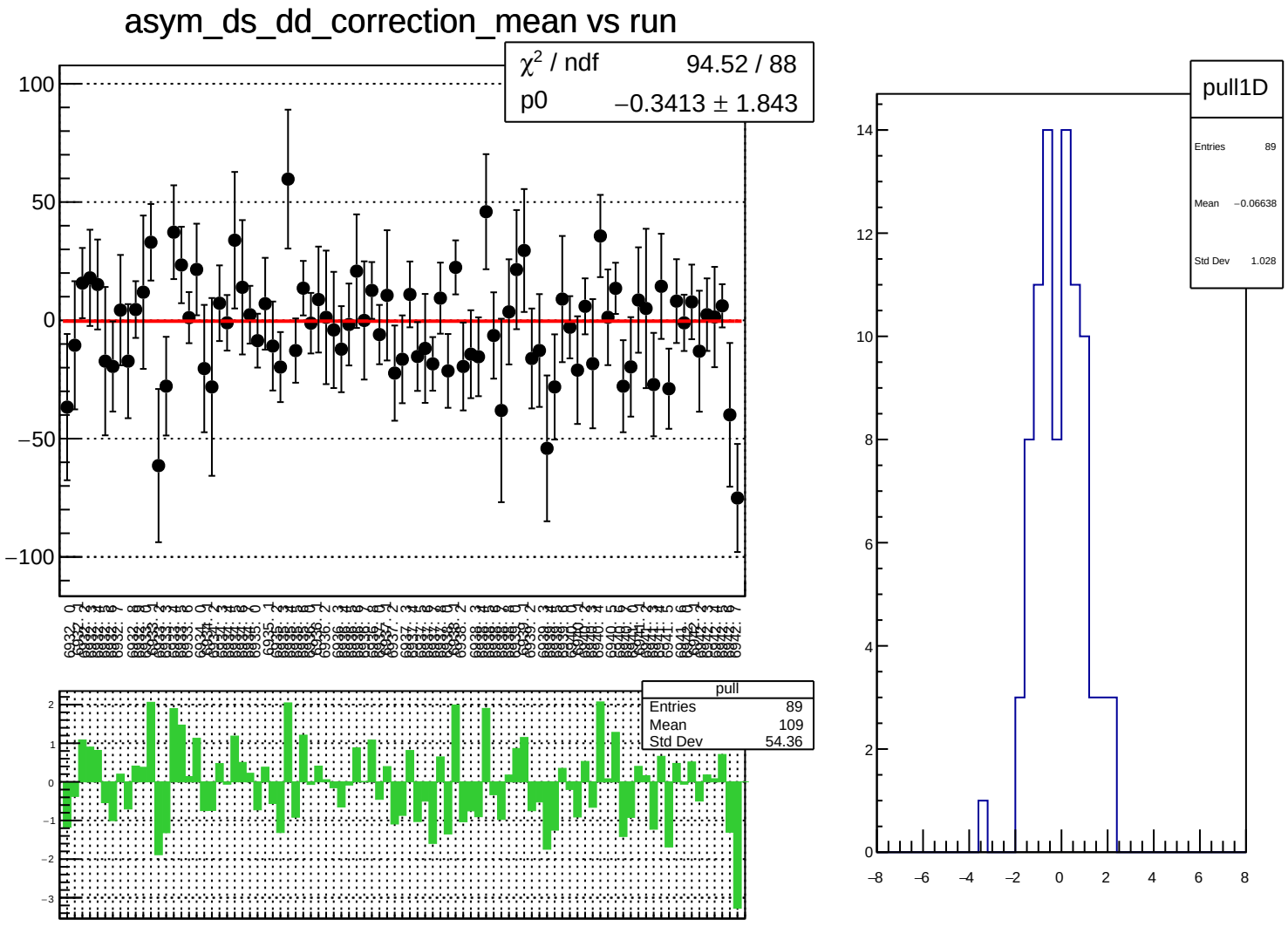

pull1D
Entries 89
Mean −0.002803
Std Dev 1.08
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

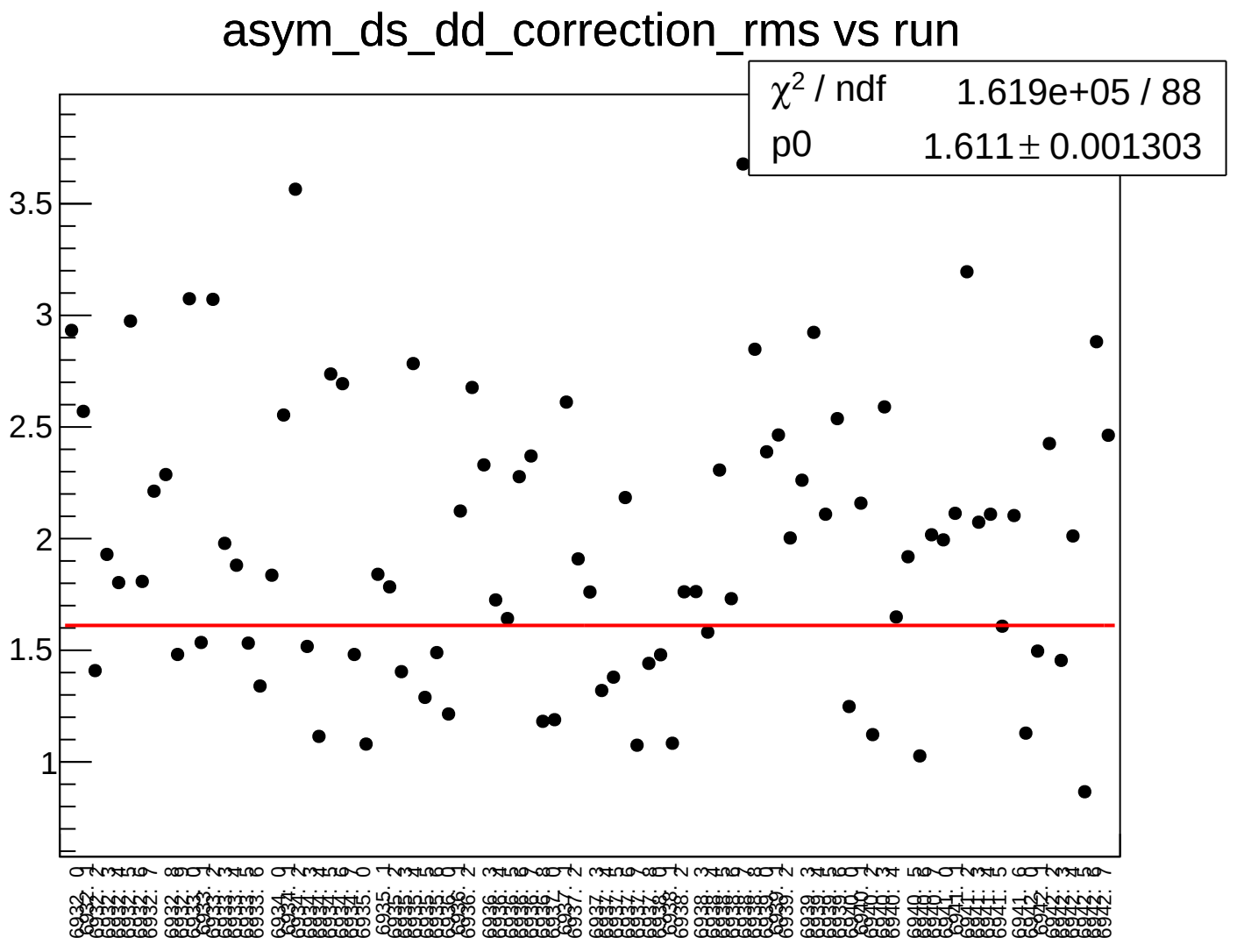

asym_ds_avg_rms vs run
χ^2 / ndf 175.4 / 88
p0 85.26 ± 0.06559
89
88
87
86
85
84
83

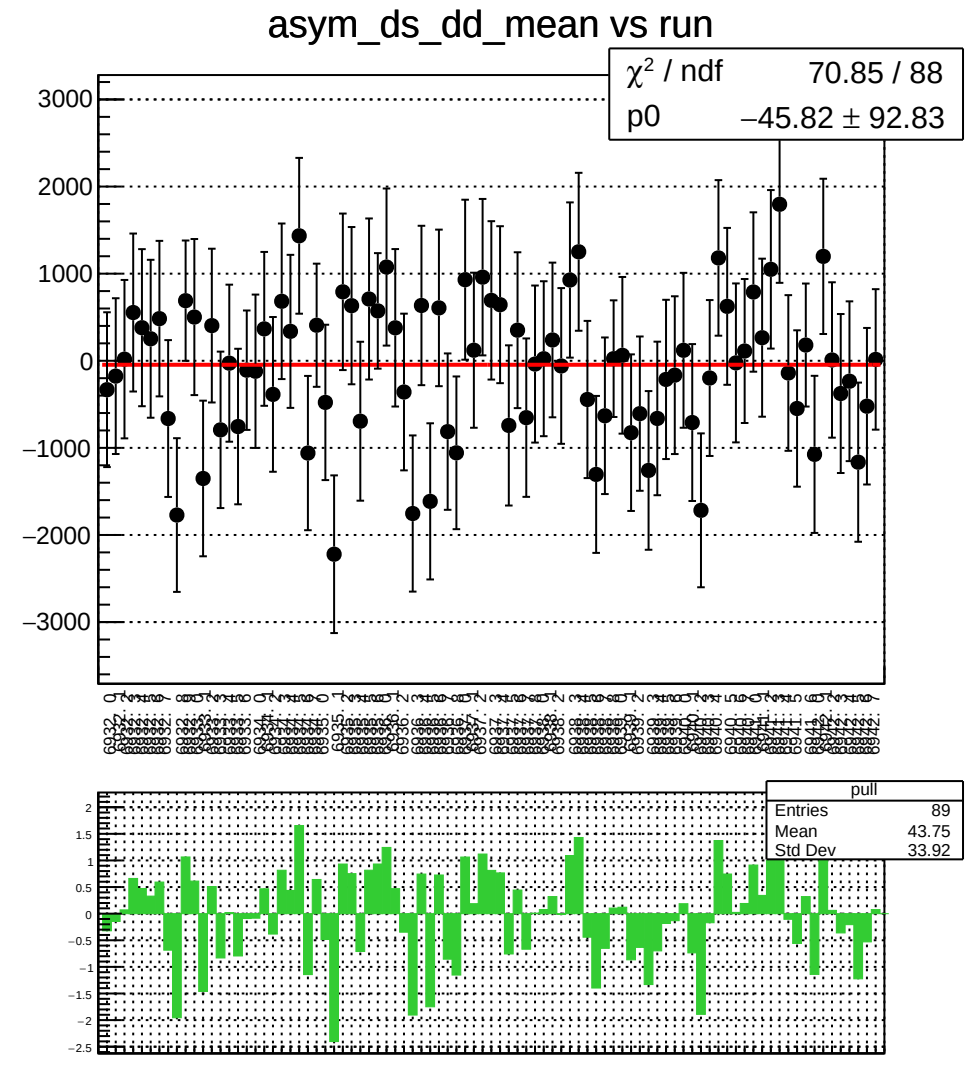

reg_asym_ds_dd_mean vs run
χ² / ndf 70.95 / 88
p0 −48.66 ± 92.81
pull
Entries 89
Mean 54.83
Std Dev 35.66

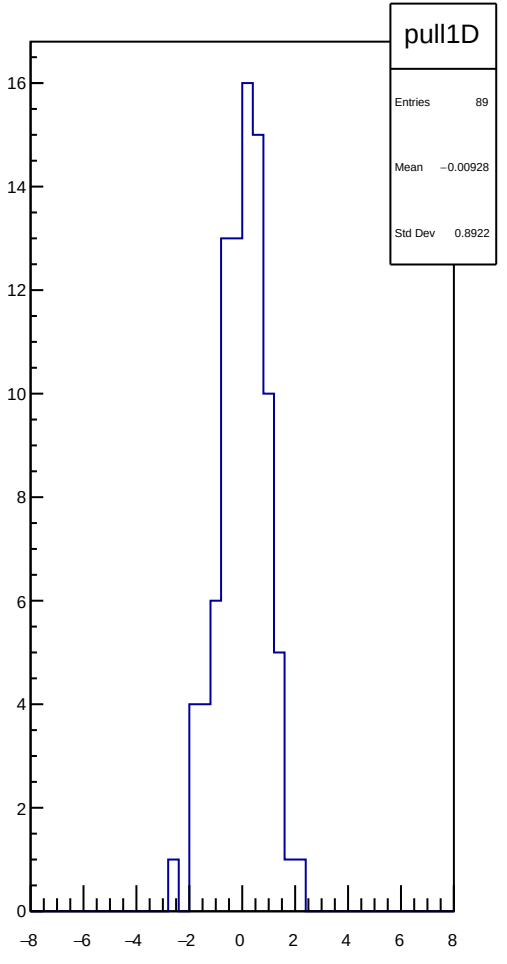

pull1D
Entries 89
Mean −0.009364
Std Dev 0.8928

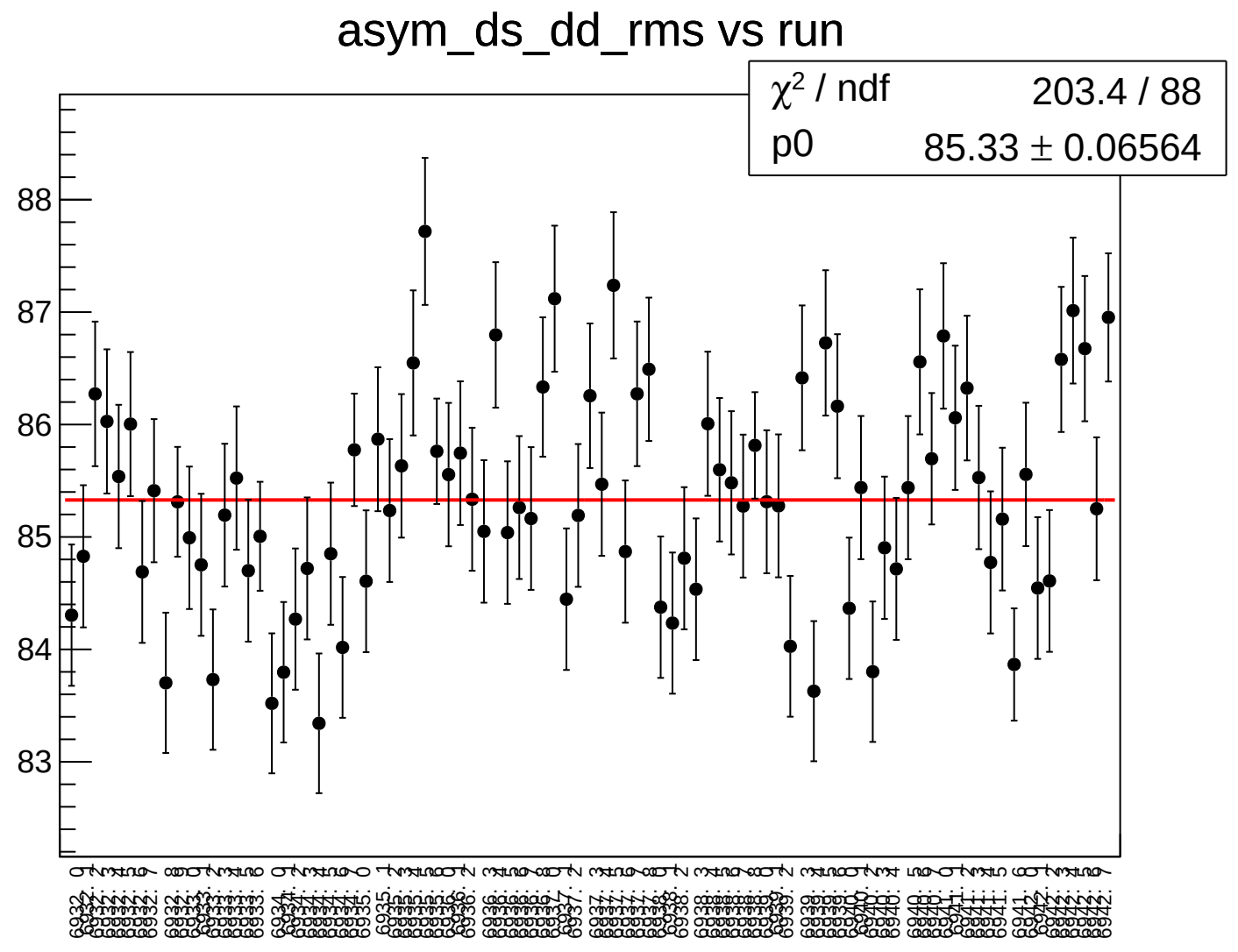

reg_asym_ds_dd_rms vs run
χ² / ndf 204.9 / 88
p0 85.3 ± 0.06562
88
87
86
85
84
83

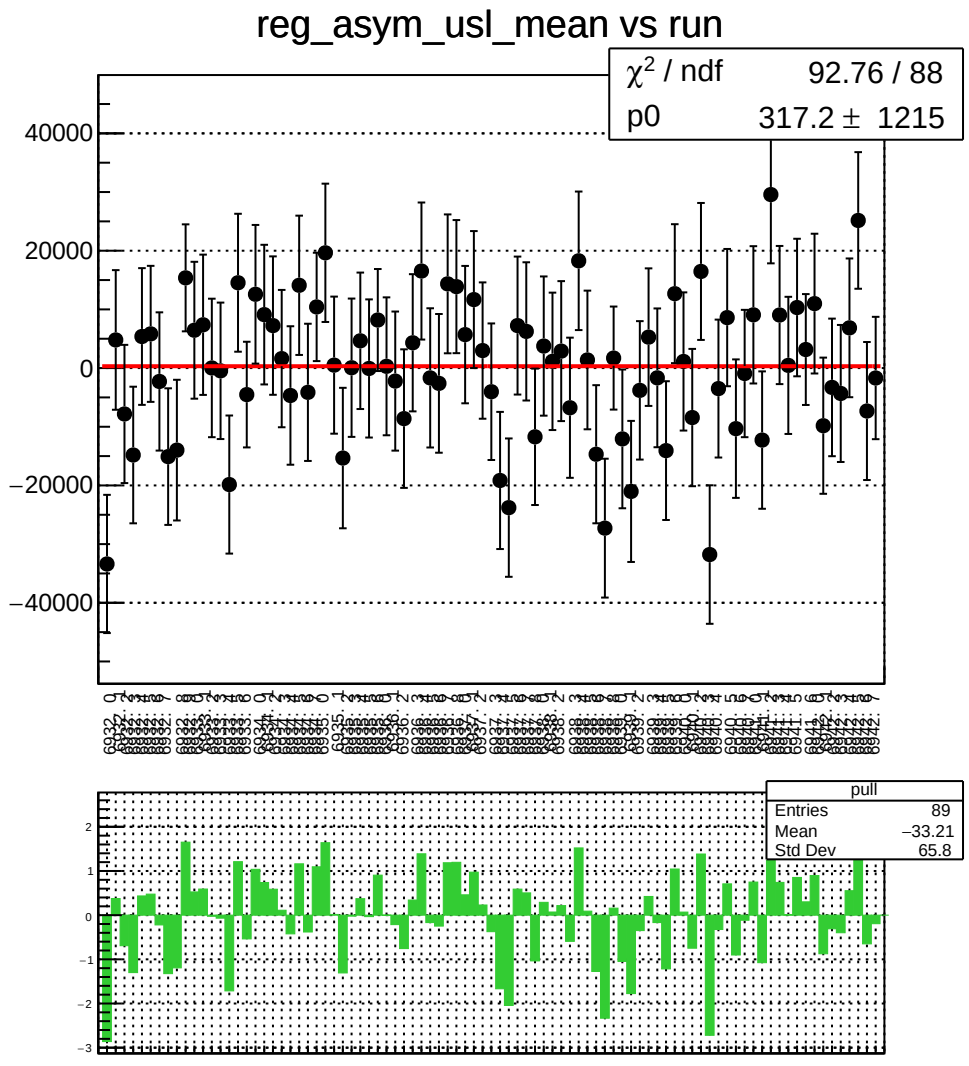

asym_ds_dd_correction_mean vs run
χ² / ndf 94.52 / 88
p0 −0.3413 ± 1.843
100
50
0
−50
−100
pull
Entries 89
Mean 109
Std Dev 54.36
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.06638
Std Dev 1.028
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

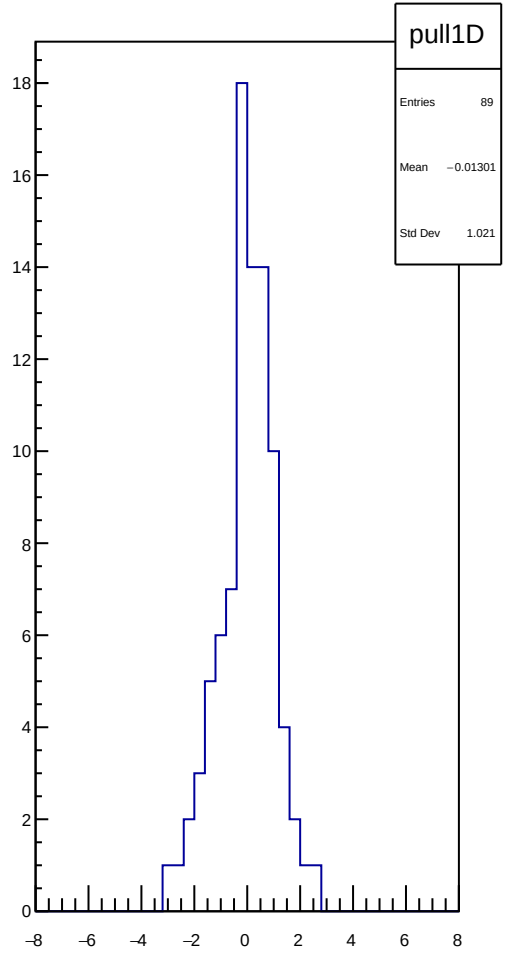

asym_ds_dd_correction_rms vs run
χ^2 / ndf 1.619e+05 / 88
p0 1.611 ± 0.001303
3.5
3
2.5
2
1.5
1

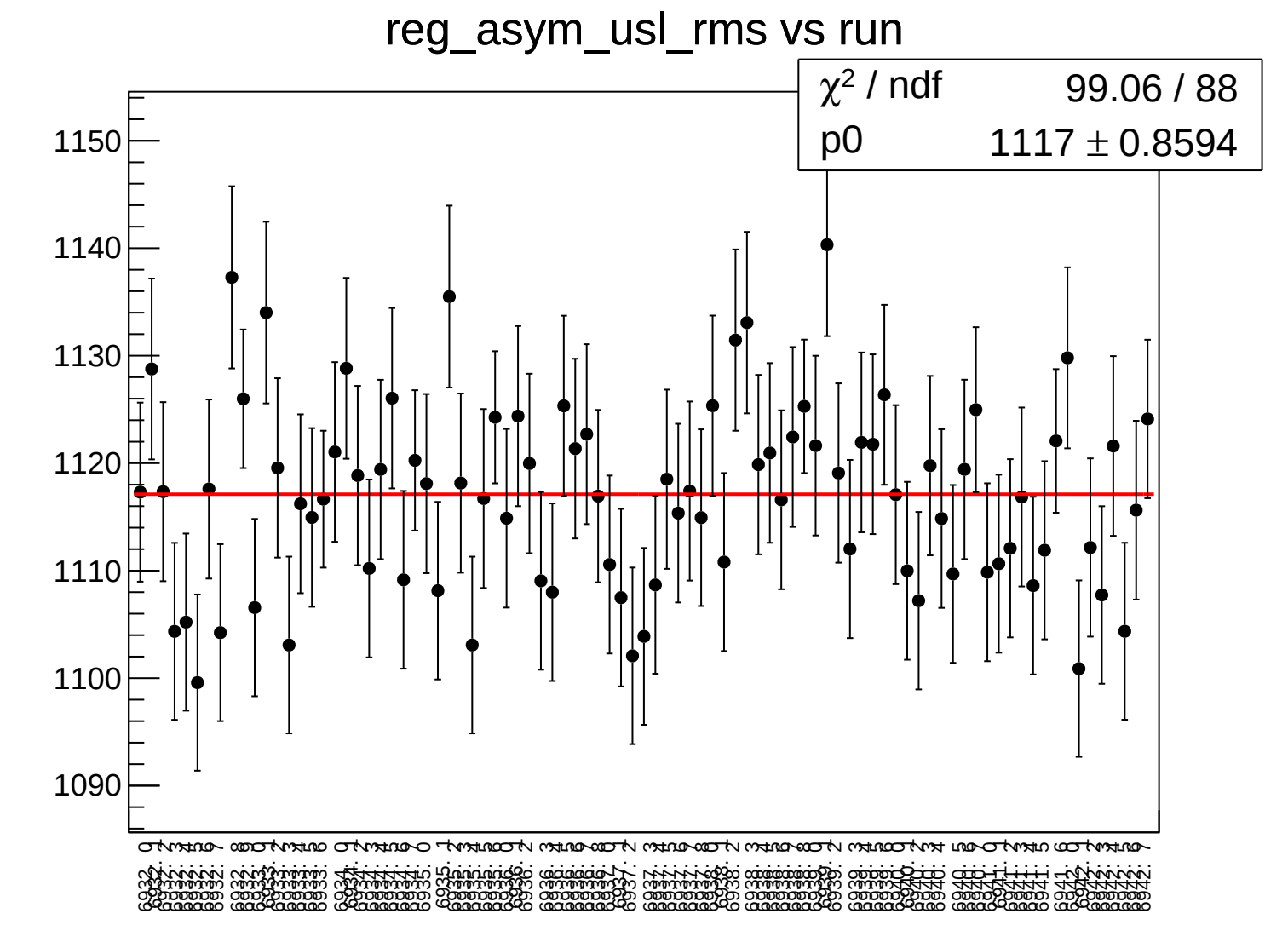

asym_ds_dd_mean vs run
χ² / ndf 70.85 / 88
p0 −45.82 ± 92.83
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean 43.75
Std Dev 33.92
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

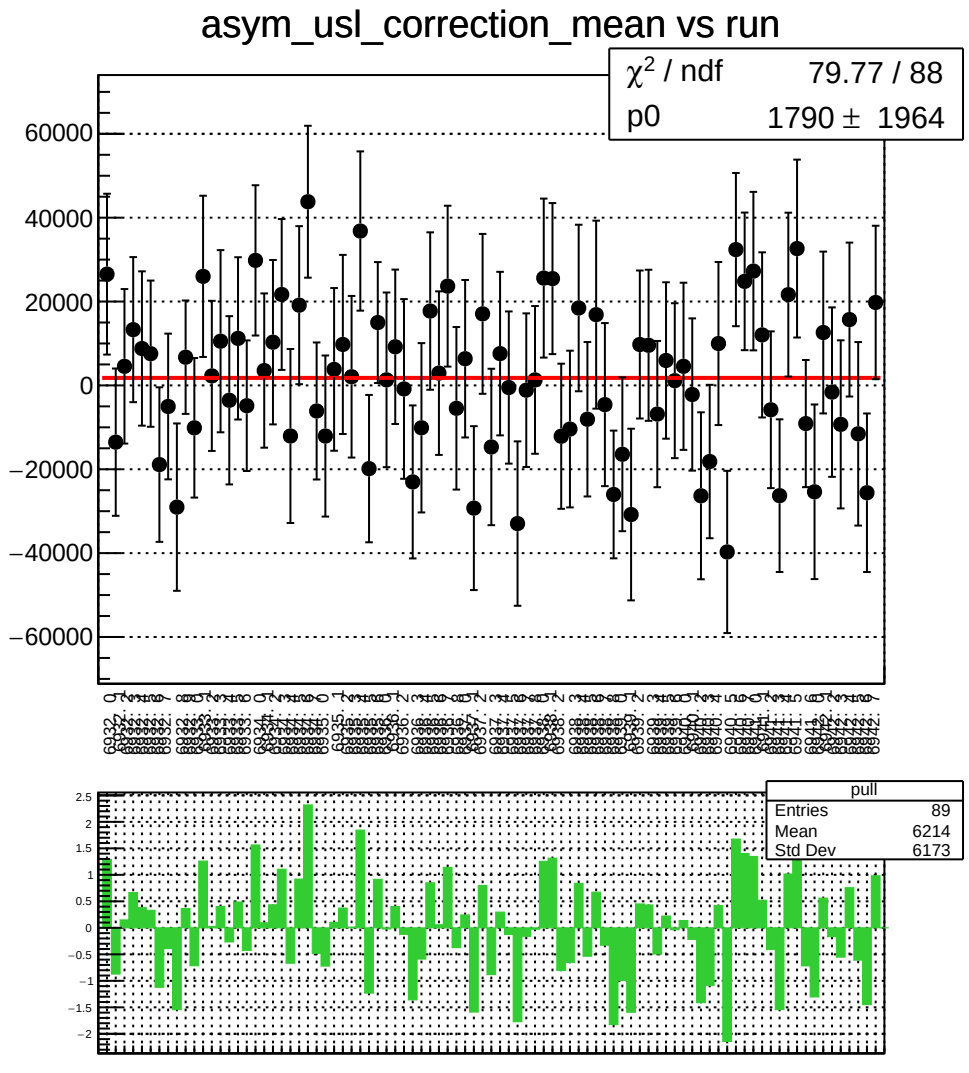

pull1D
Entries 89
Mean −0.00928
Std Dev 0.8922
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

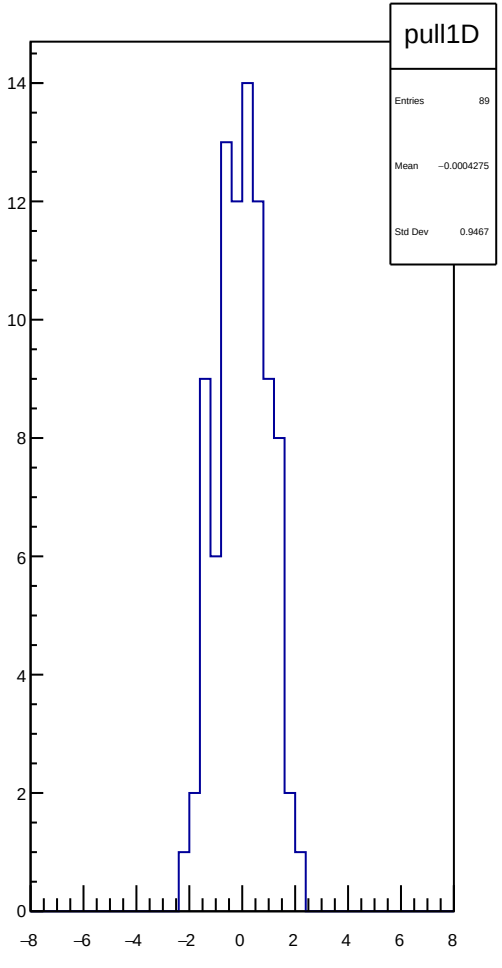

asym_ds_dd_rms vs run
χ² / ndf 203.4 / 88
p0 85.33 ± 0.06564
88
87
86
85
84
83

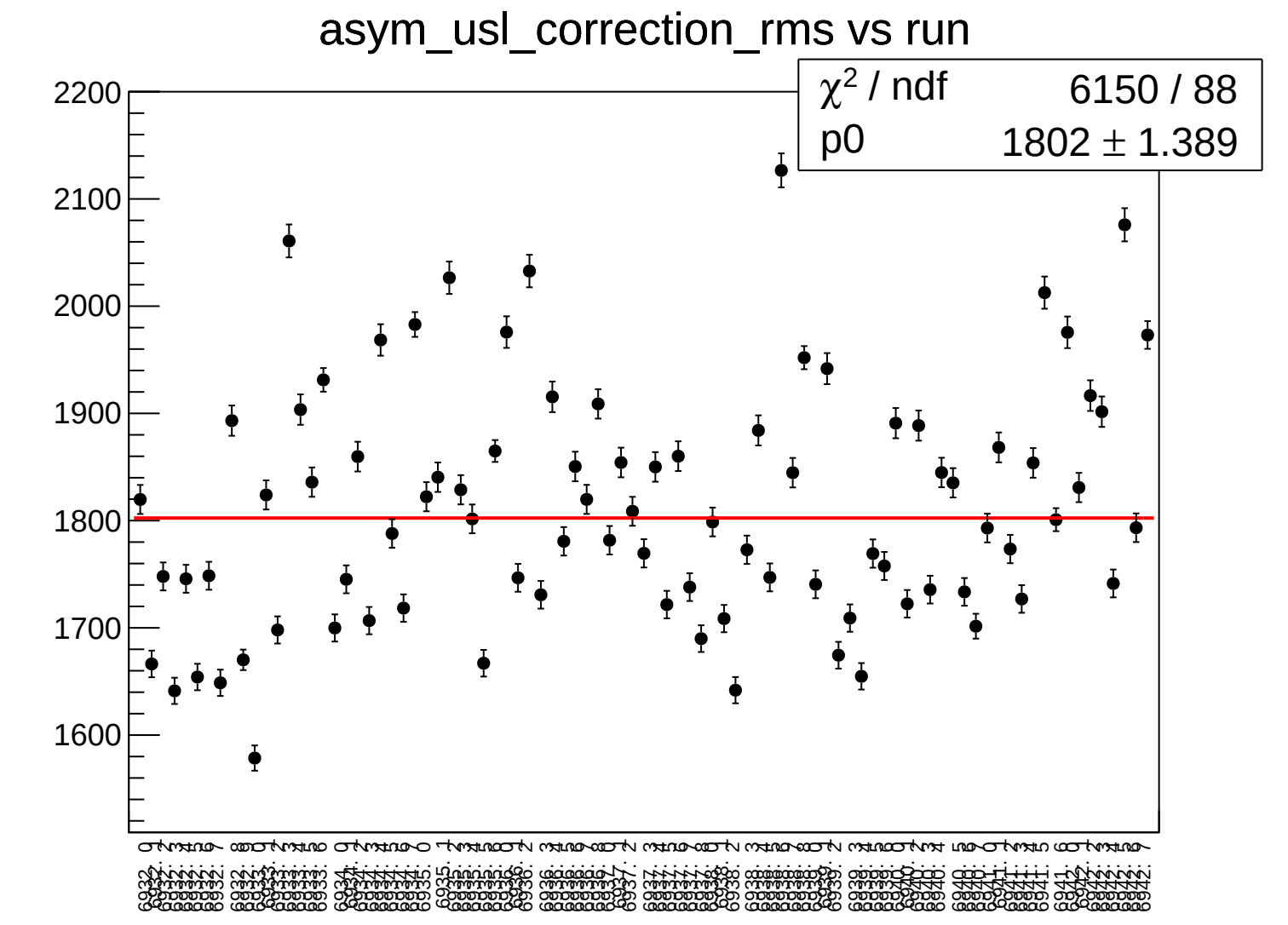

reg_asym_usl_mean vs run
χ² / ndf 92.76 / 88
p0 317.2 ± 1215
40000
20000
0
−20000
−40000
pull
Entries 89
Mean −33.21
Std Dev 65.8
2
1
0
−1
−2
−3

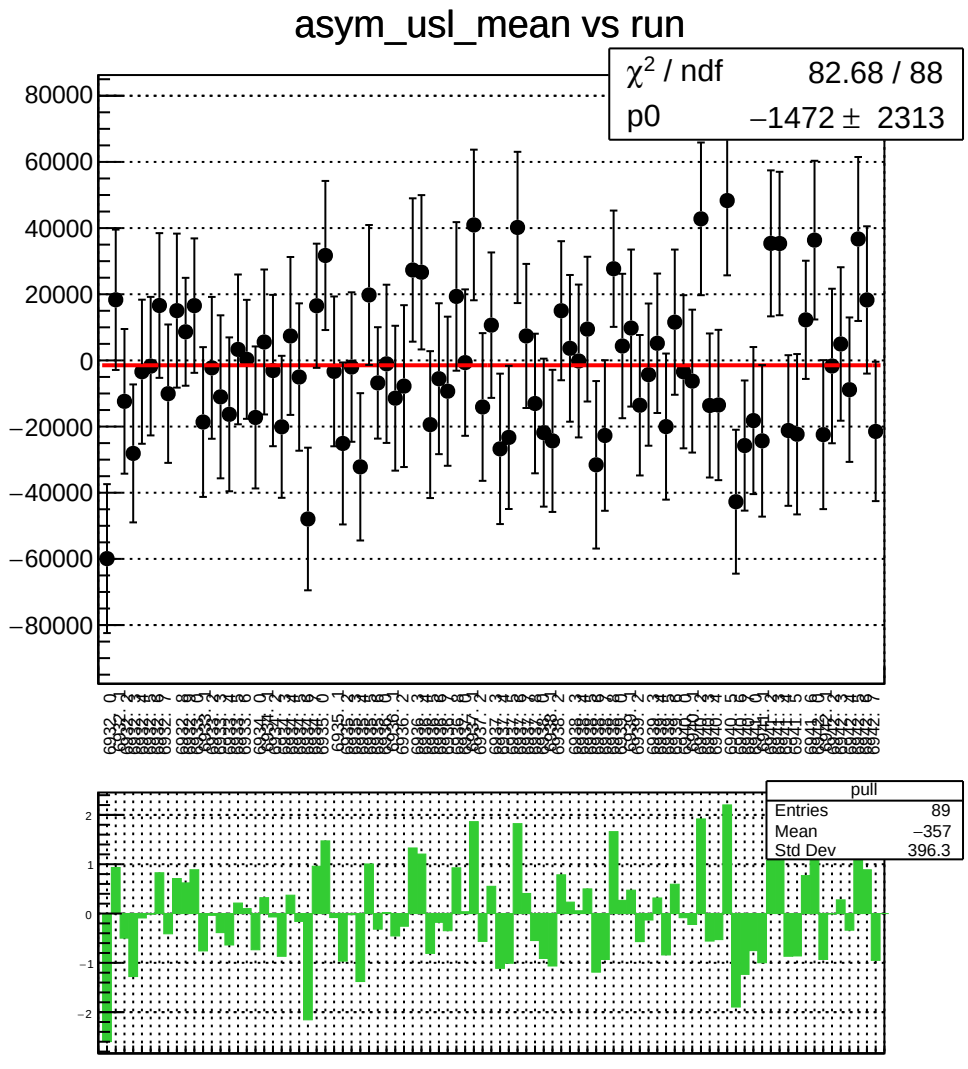

pull1D
Entries 89
Mean −0.01301
Std Dev 1.021
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

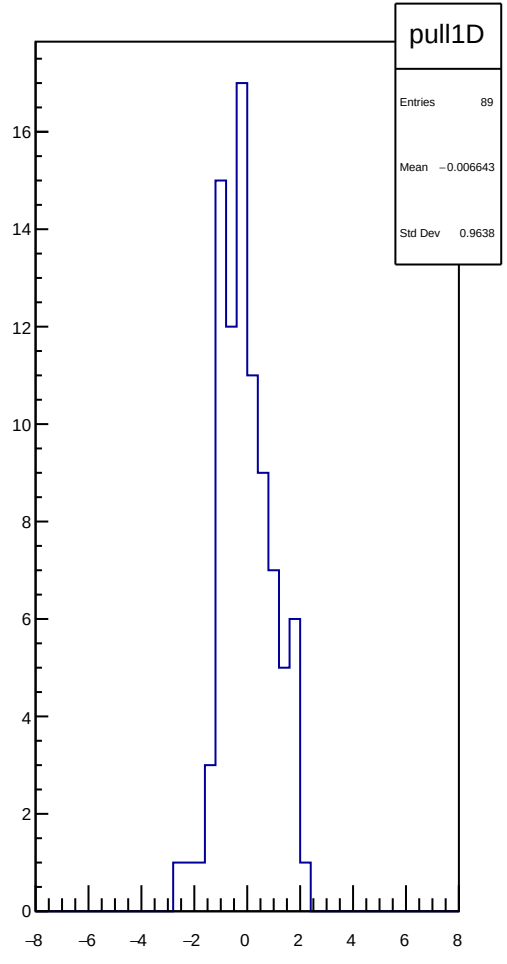

reg_asym_usl_rms vs run
χ² / ndf 99.06 / 88
p0 1117 ± 0.8594
1150
1140
1130
1120
1110
1100
1090

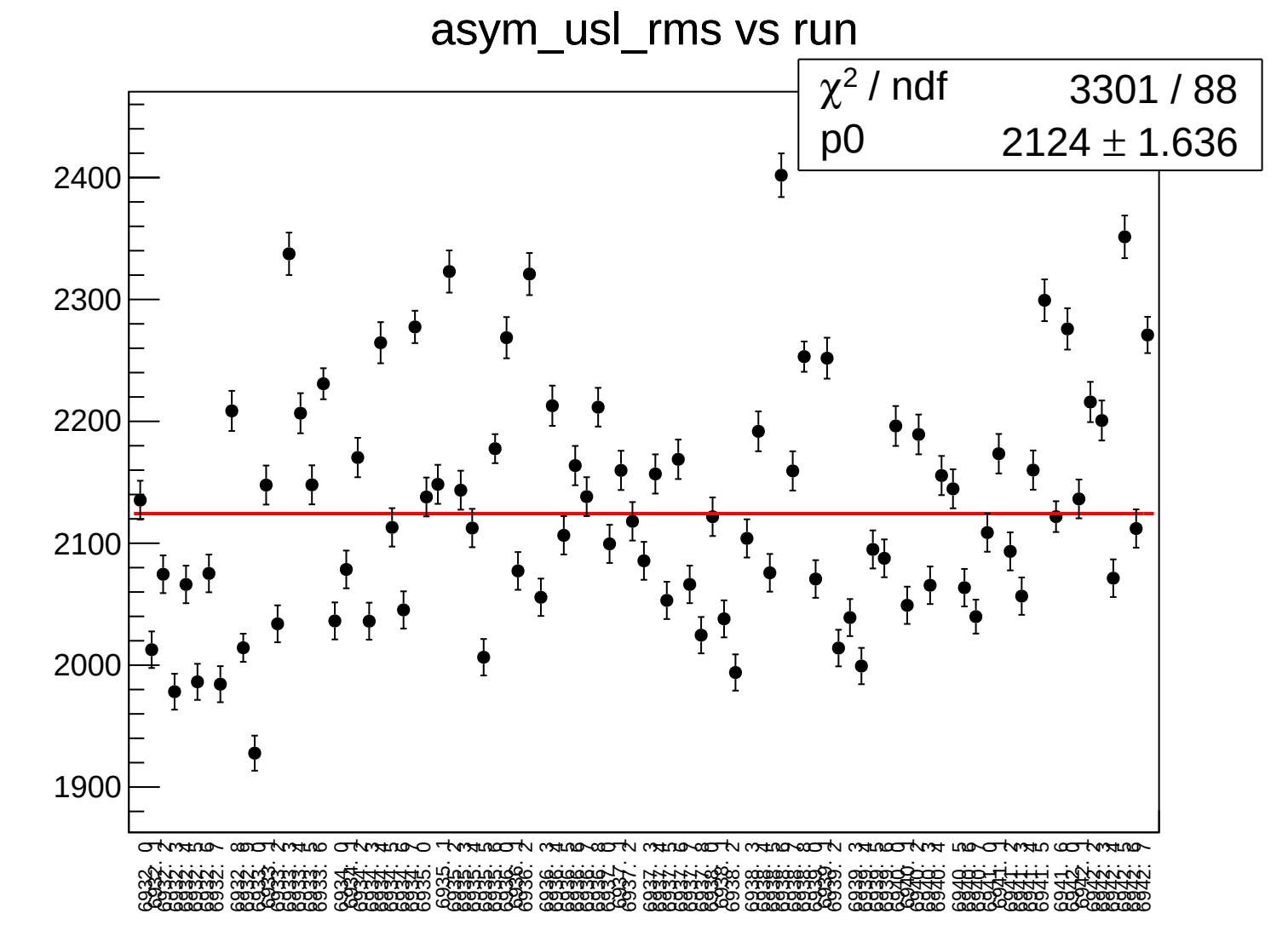

asym_usl_correction_mean vs run
χ² / ndf 79.77 / 88
p0 1790 ± 1964
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 6214
Std Dev 6173
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

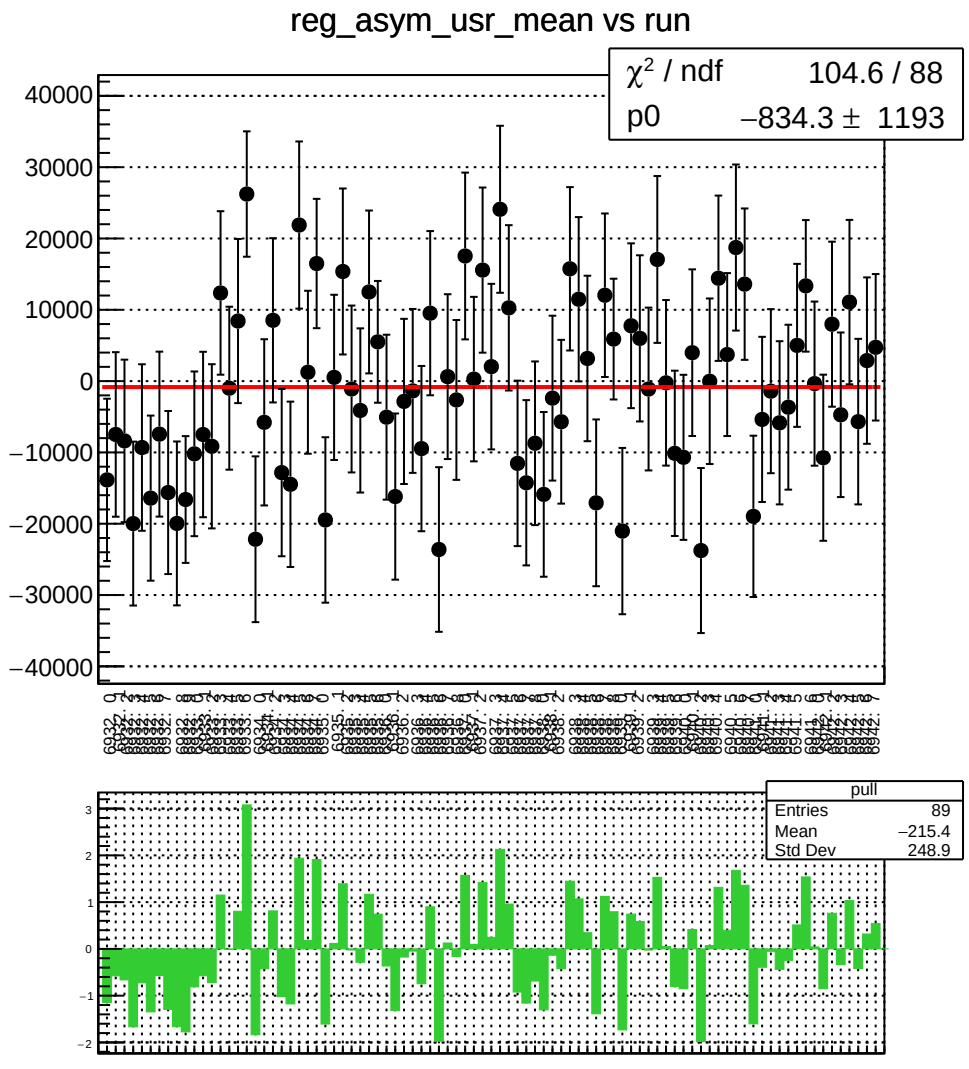

pull1D
Entries 89
Mean −0.0004275
Std Dev 0.9467
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

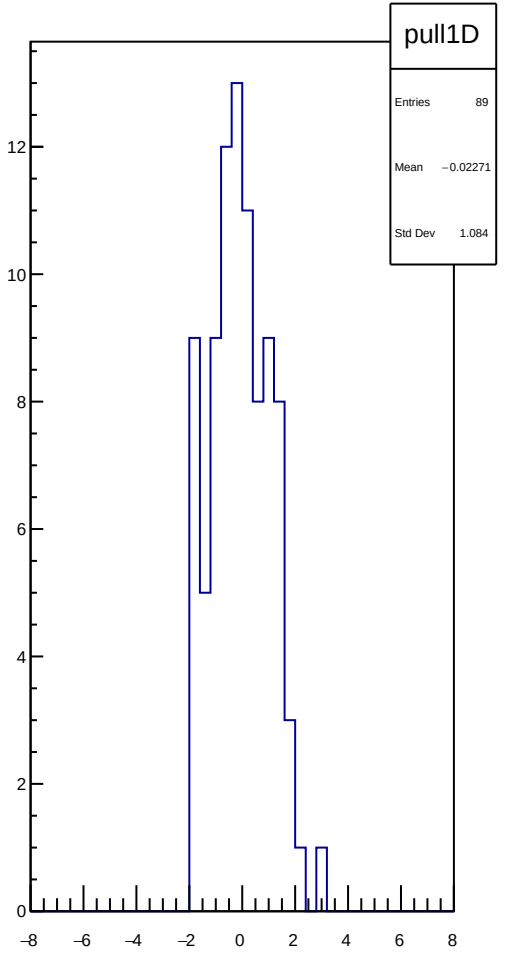

asym_usl_correction_rms vs run
χ² / ndf 6150 / 88
p0 1802 ± 1.389
2200
2100
2000
1900
1800
1700
1600

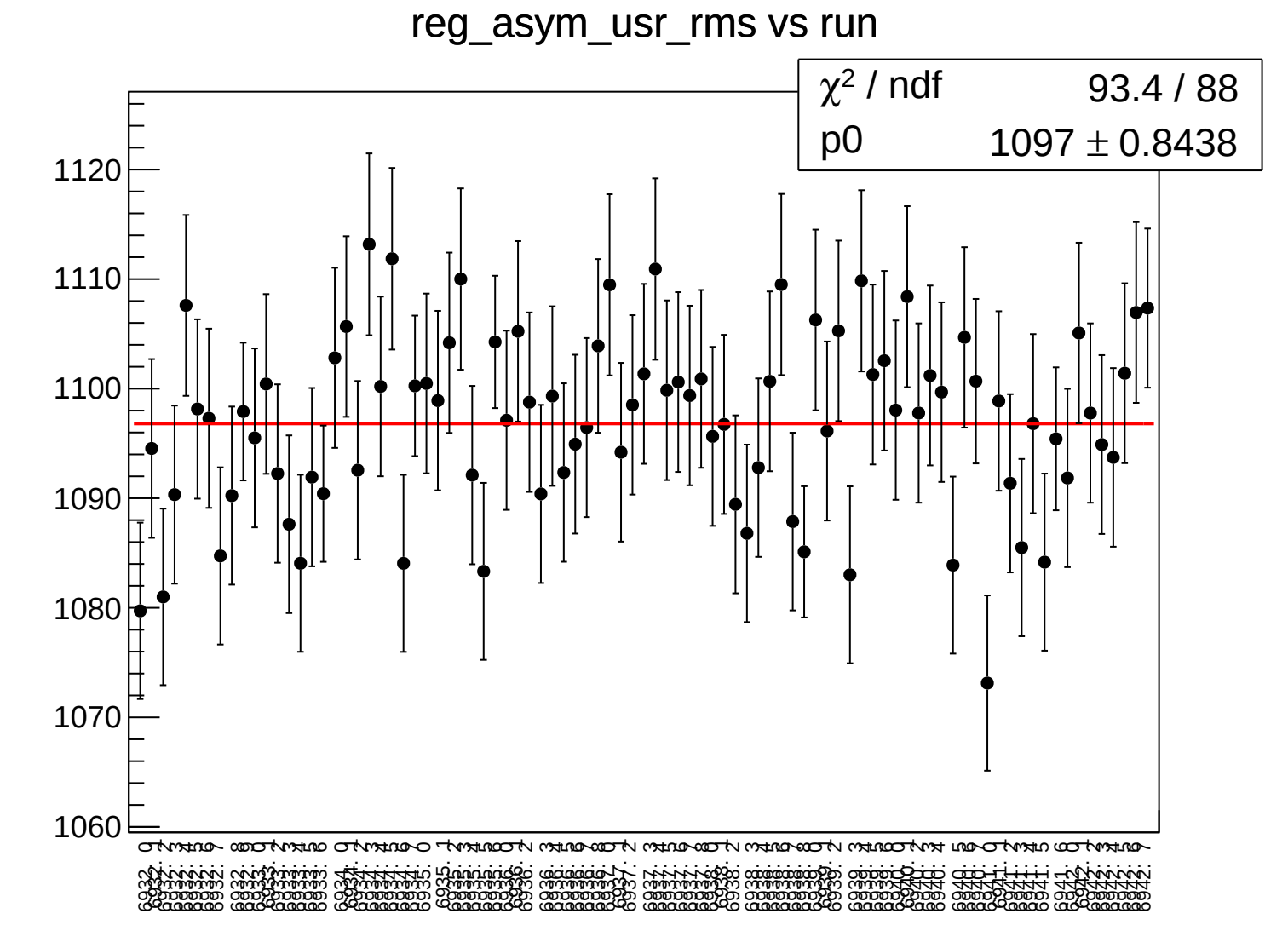

asym_usl_mean vs run
χ² / ndf 82.68 / 88
p0 −1472 ± 2313
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean −357
Std Dev 396.3
2
1
0
−1
−2

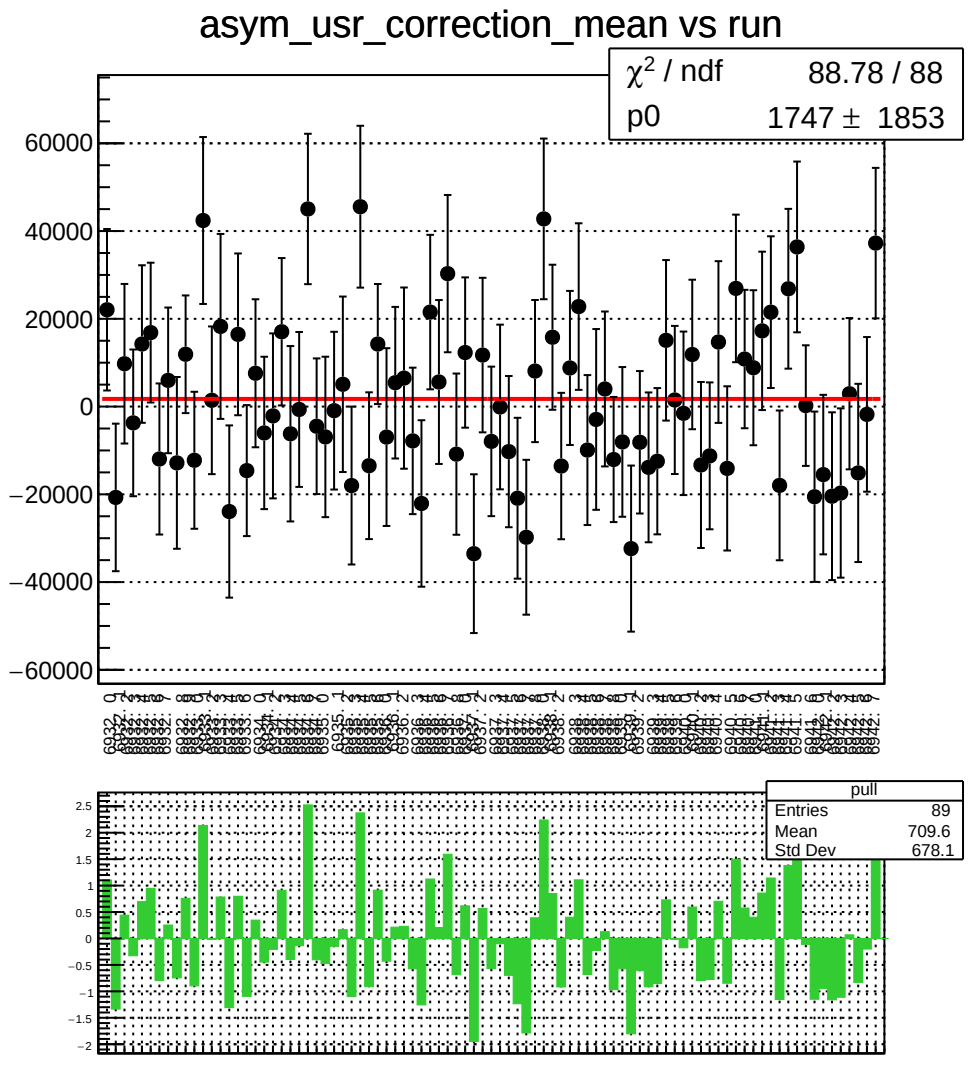

pull1D
Entries 89
Mean −0.006643
Std Dev 0.9638
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

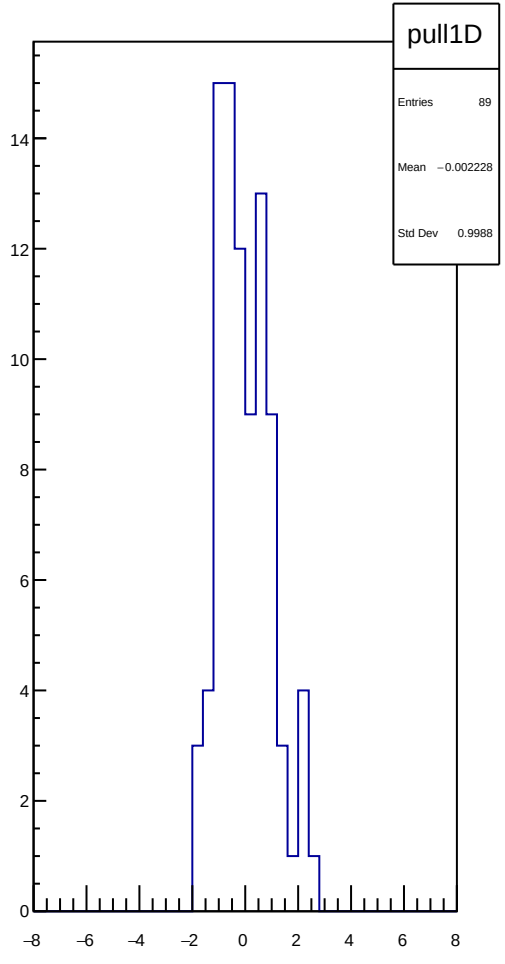

asym_usl_rms vs run
χ² / ndf 3301 / 88
p0 2124 ± 1.636
2400
2300
2200
2100
2000
1900

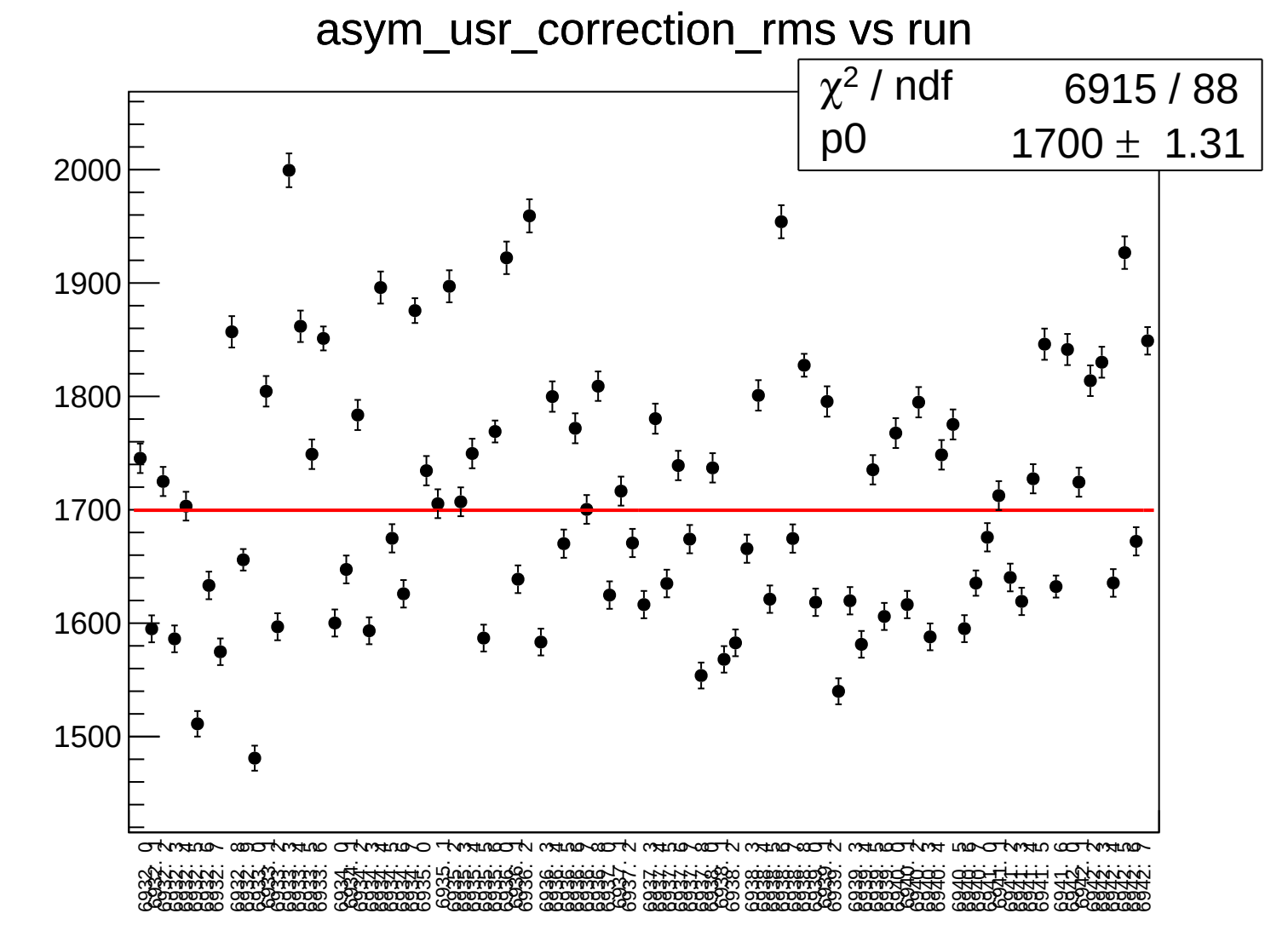

reg_asym_usr_mean vs run
χ² / ndf 104.6 / 88
p0 −834.3 ± 1193
pull
Entries 89
Mean −215.4
Std Dev 248.9

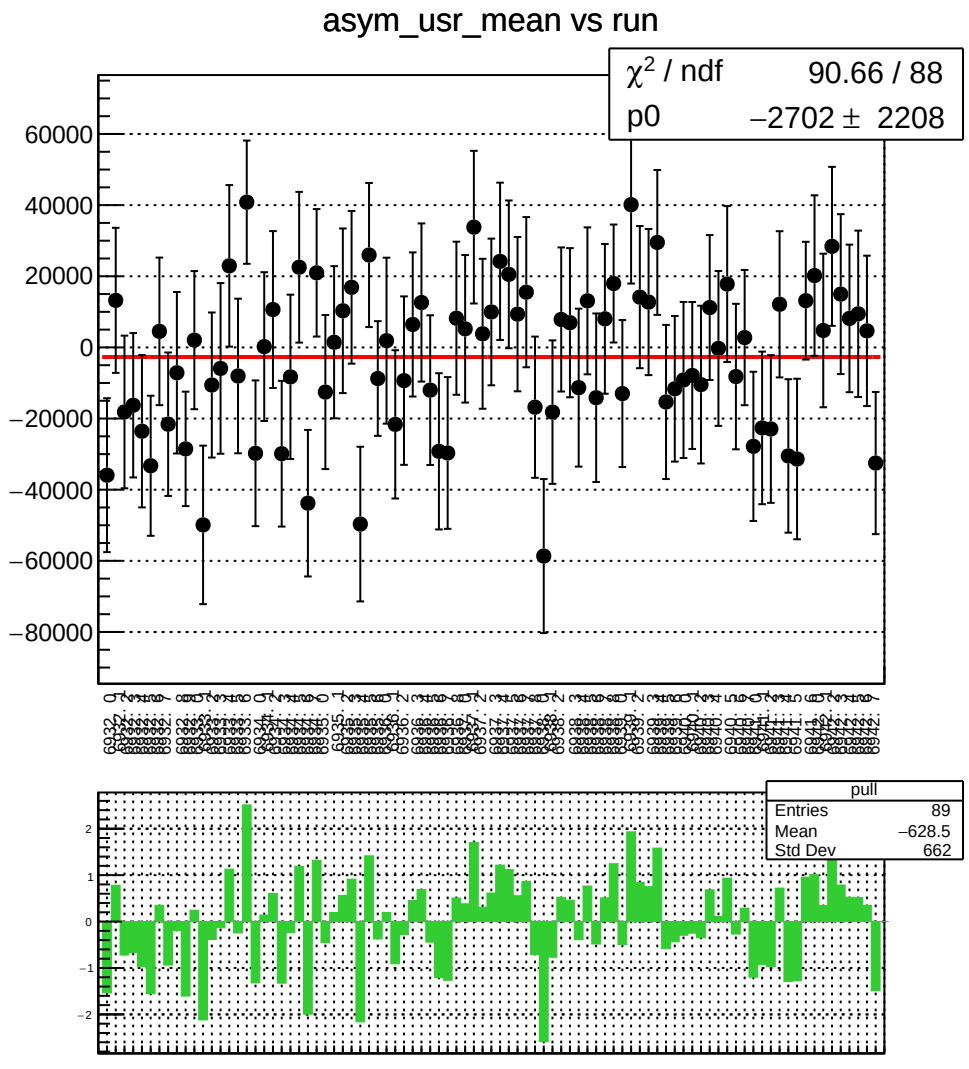

pull1D
Entries 89
Mean −0.02271
Std Dev 1.084

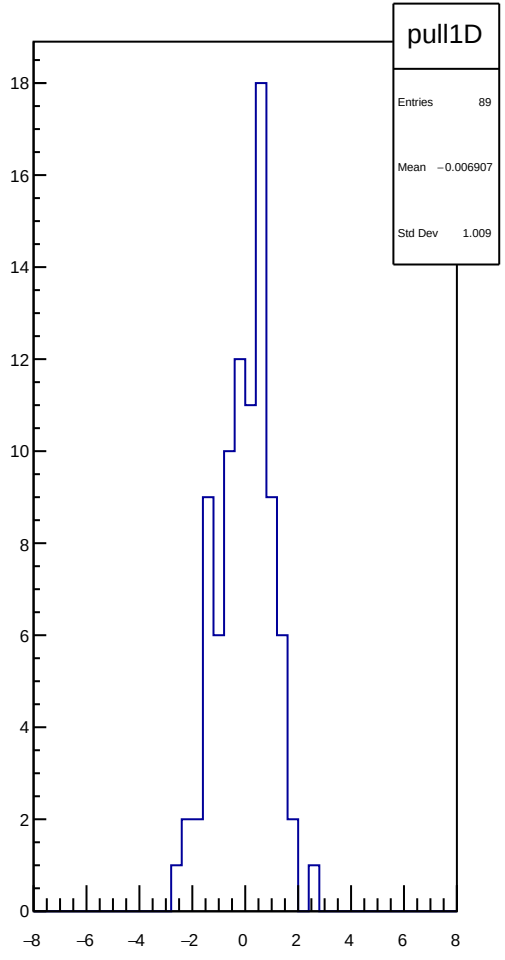

reg_asym_usr_rms vs run
χ² / ndf 93.4 / 88
p0 1097 ± 0.8438
1120
1110
1100
1090
1080
1070
1060

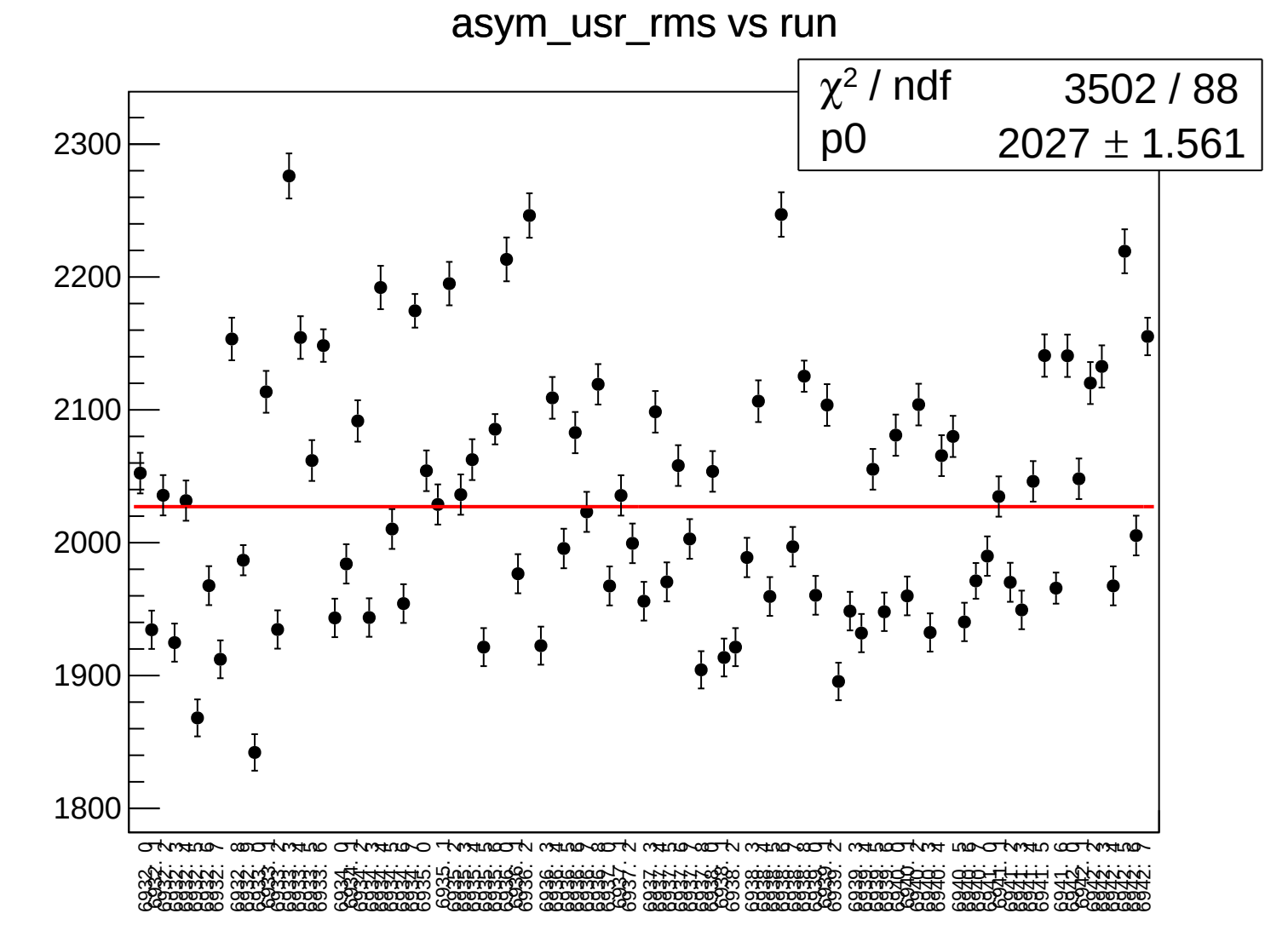

asym_usr_correction_mean vs run
χ² / ndf 88.78 / 88
p0 1747 ± 1853
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 709.6
Std Dev 678.1
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

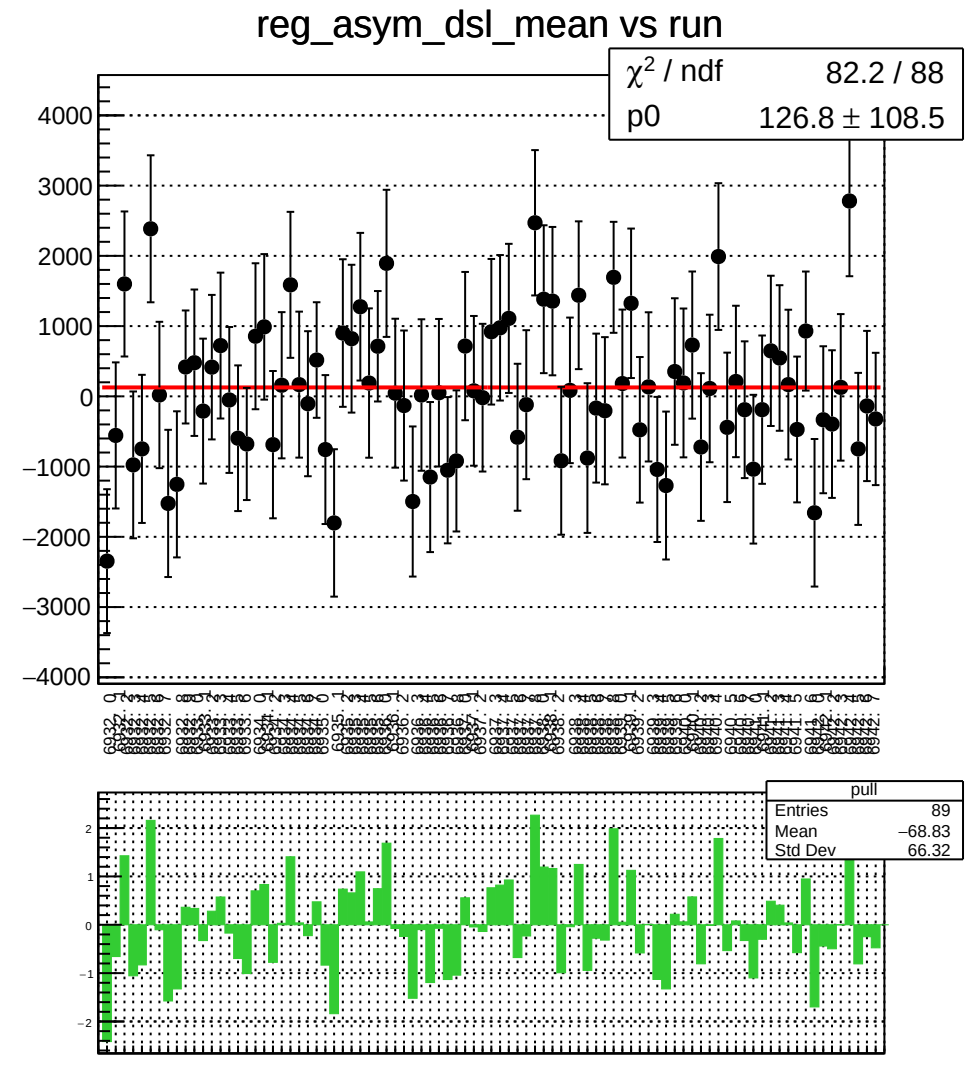

pull1D
Entries 89
Mean −0.002228
Std Dev 0.9988
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

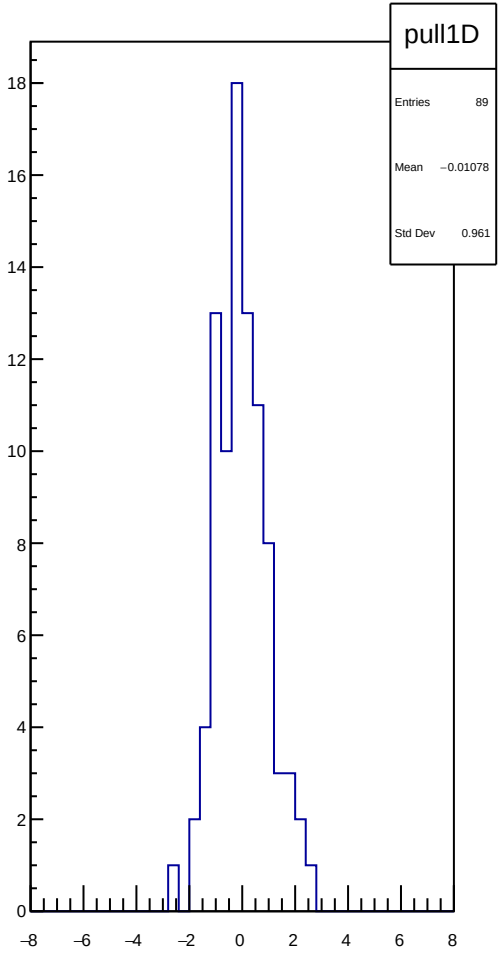

asym_usr_correction_rms vs run
χ² / ndf 6915 / 88
p0 1700 ± 1.31
2000
1900
1800
1700
1600
1500

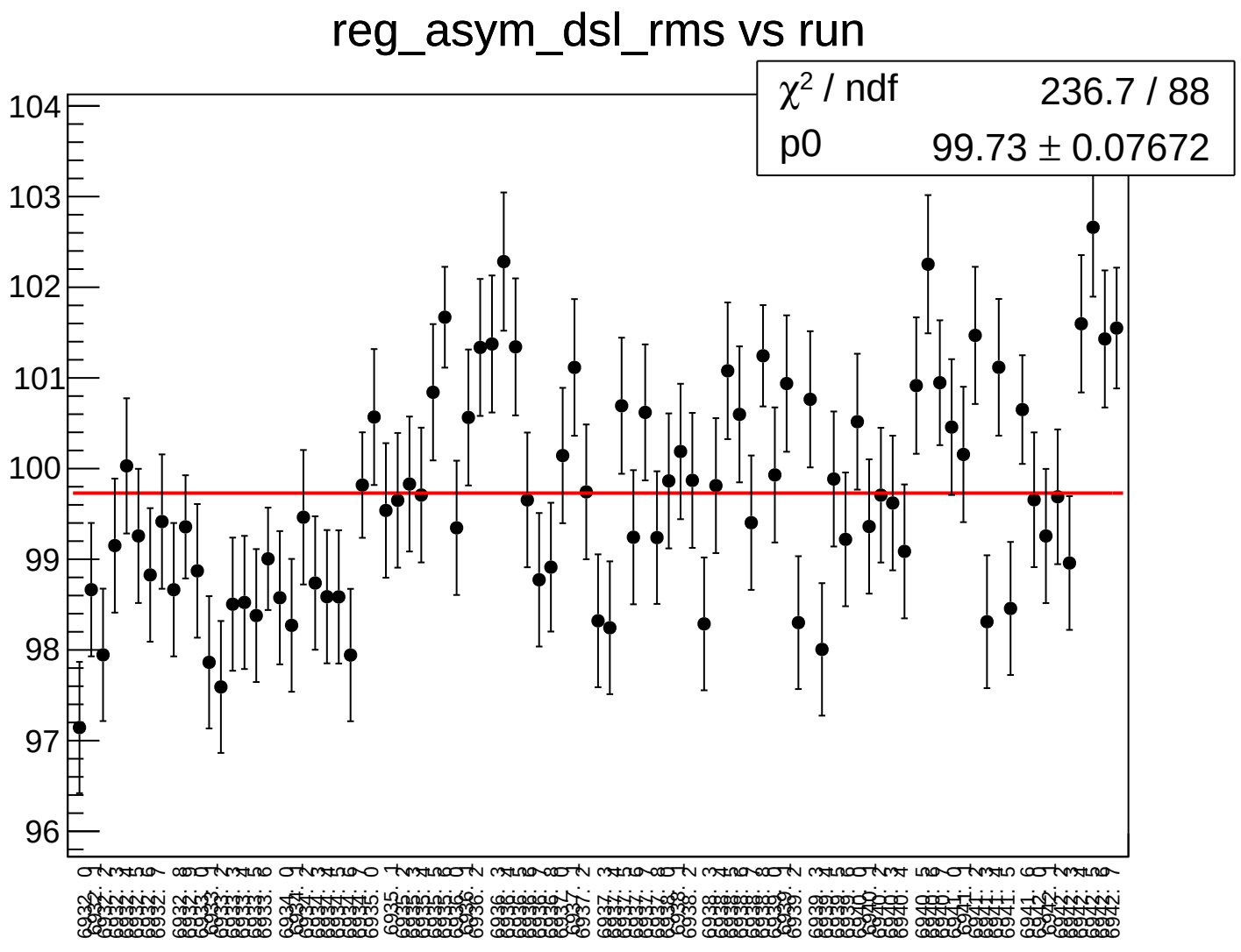

asym_usr_mean vs run
χ² / ndf 90.66 / 88
p0 −2702 ± 2208
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean −628.5
Std Dev 662
2
1
0
−1
−2

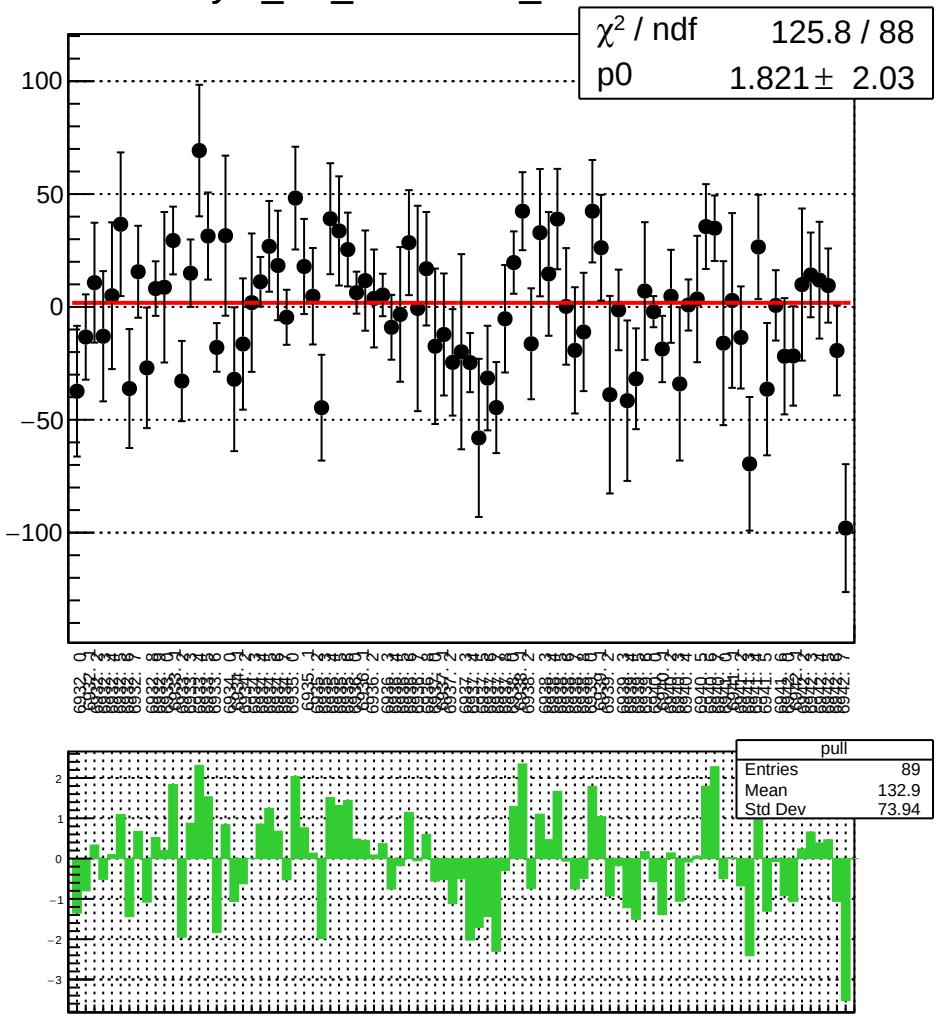

pull1D
Entries 89
Mean −0.006907
Std Dev 1.009
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

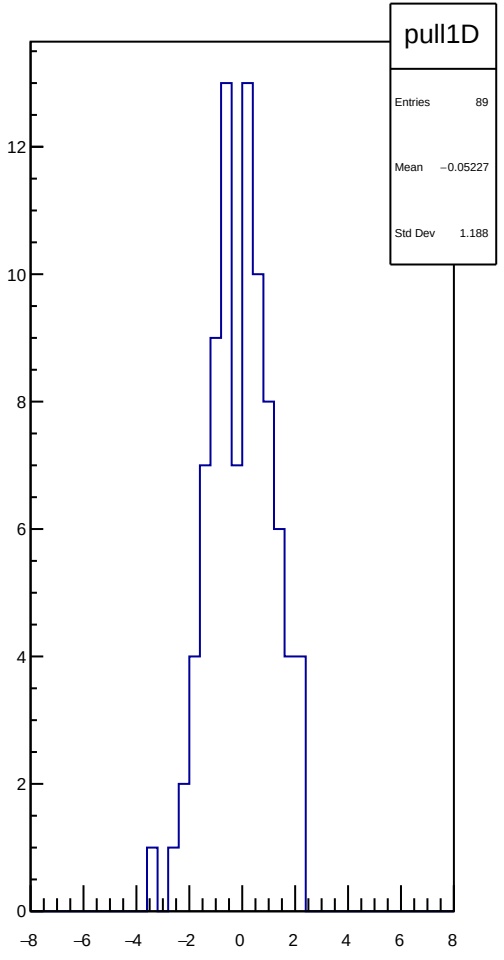

asym_usr_rms vs run
χ² / ndf 3502 / 88
p0 2027 ± 1.561
2300
2200
2100
2000
1900
1800

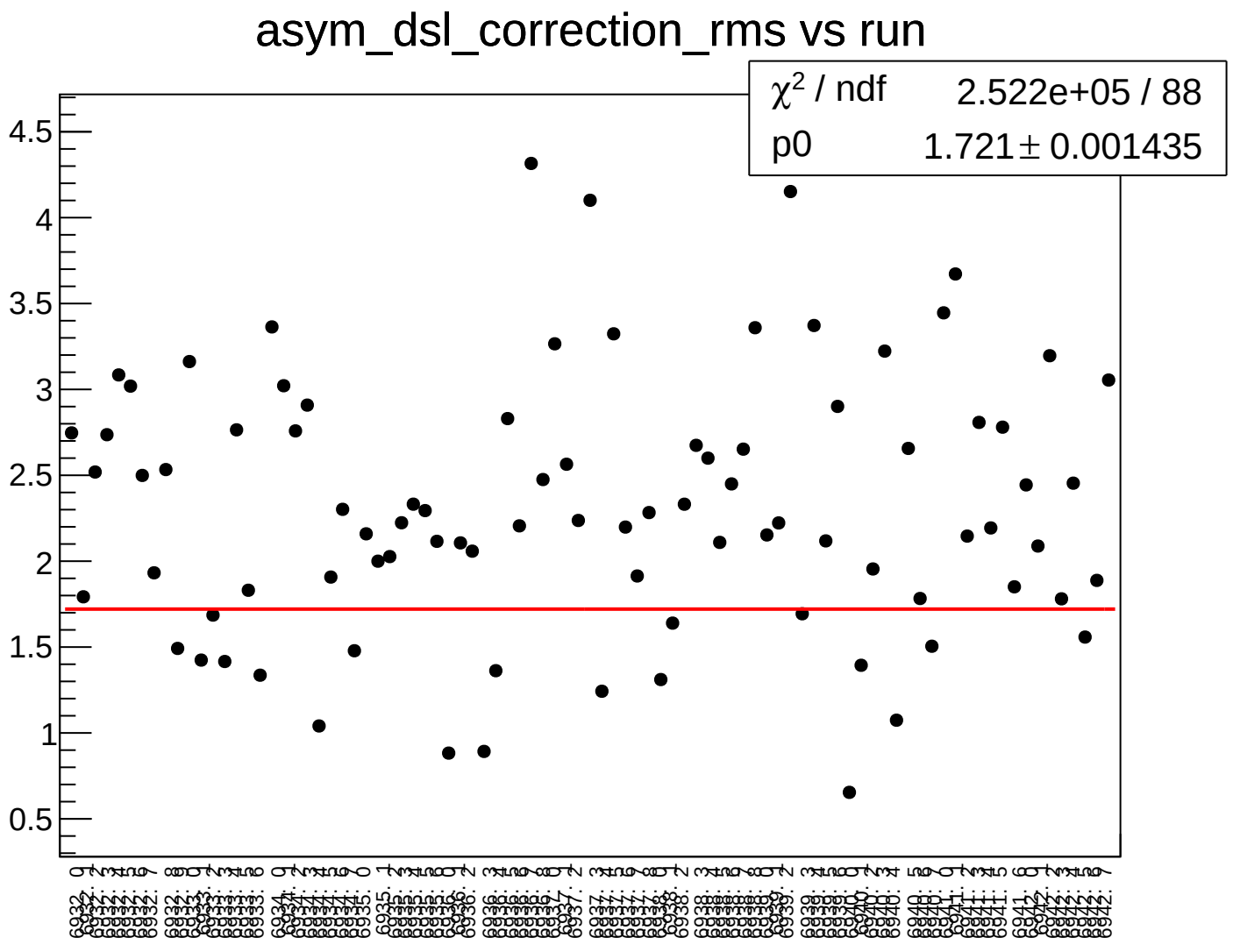

reg_asym_dsl_mean vs run
χ^2 / ndf 82.2 / 88
p0 126.8 ± 108.5
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 89
Mean −68.83
Std Dev 66.32
2
1
0
−1
−2

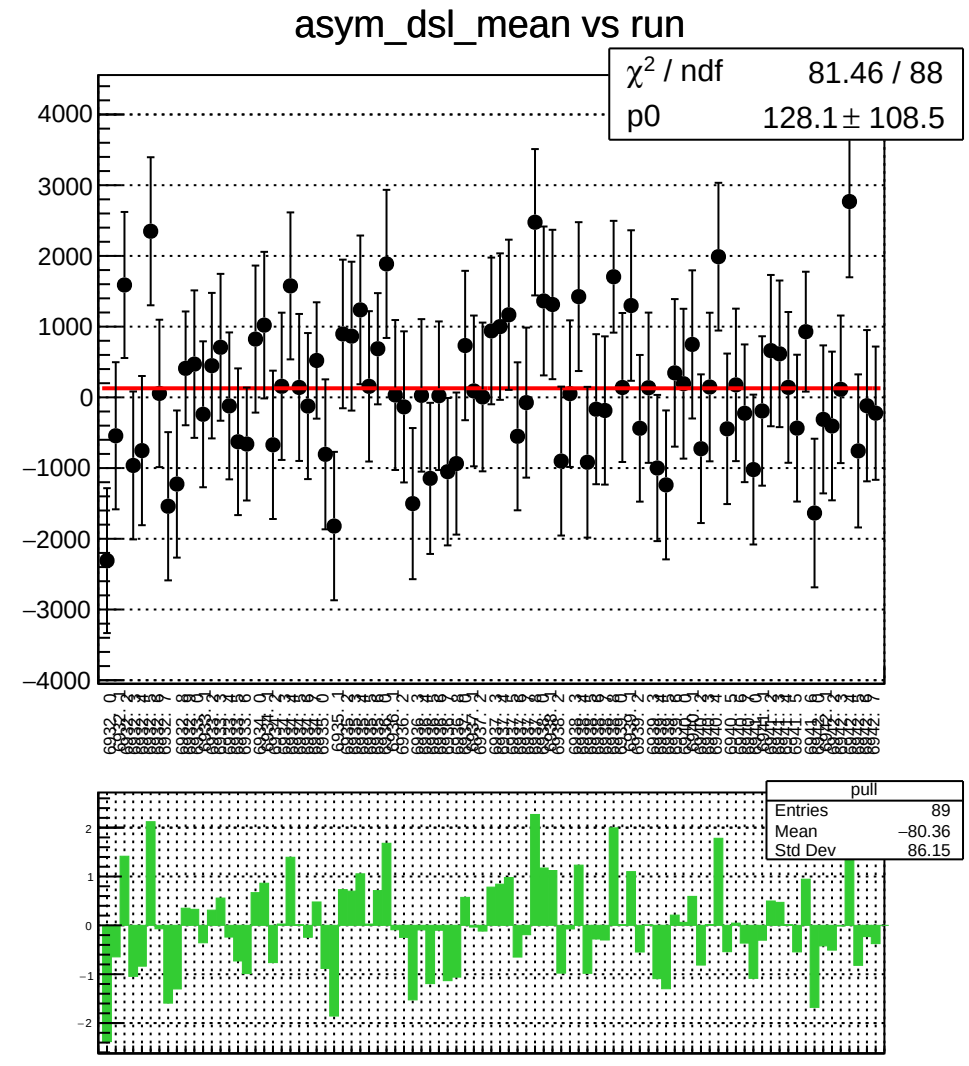

pull1D
Entries 89
Mean −0.01078
Std Dev 0.961
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

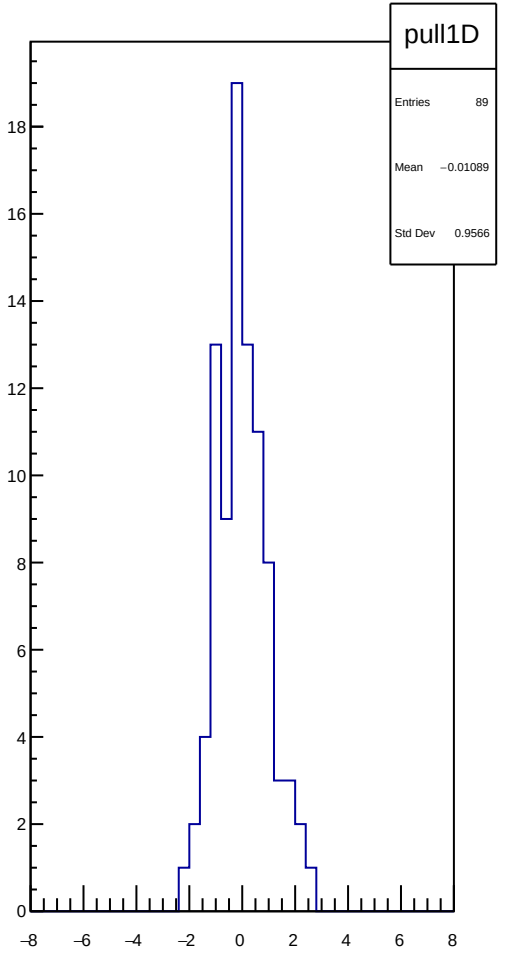

reg_asym_dsl_rms vs run
χ² / ndf 236.7 / 88
p0 99.73 ± 0.07672
104
103
102
101
100
99
98
97
96

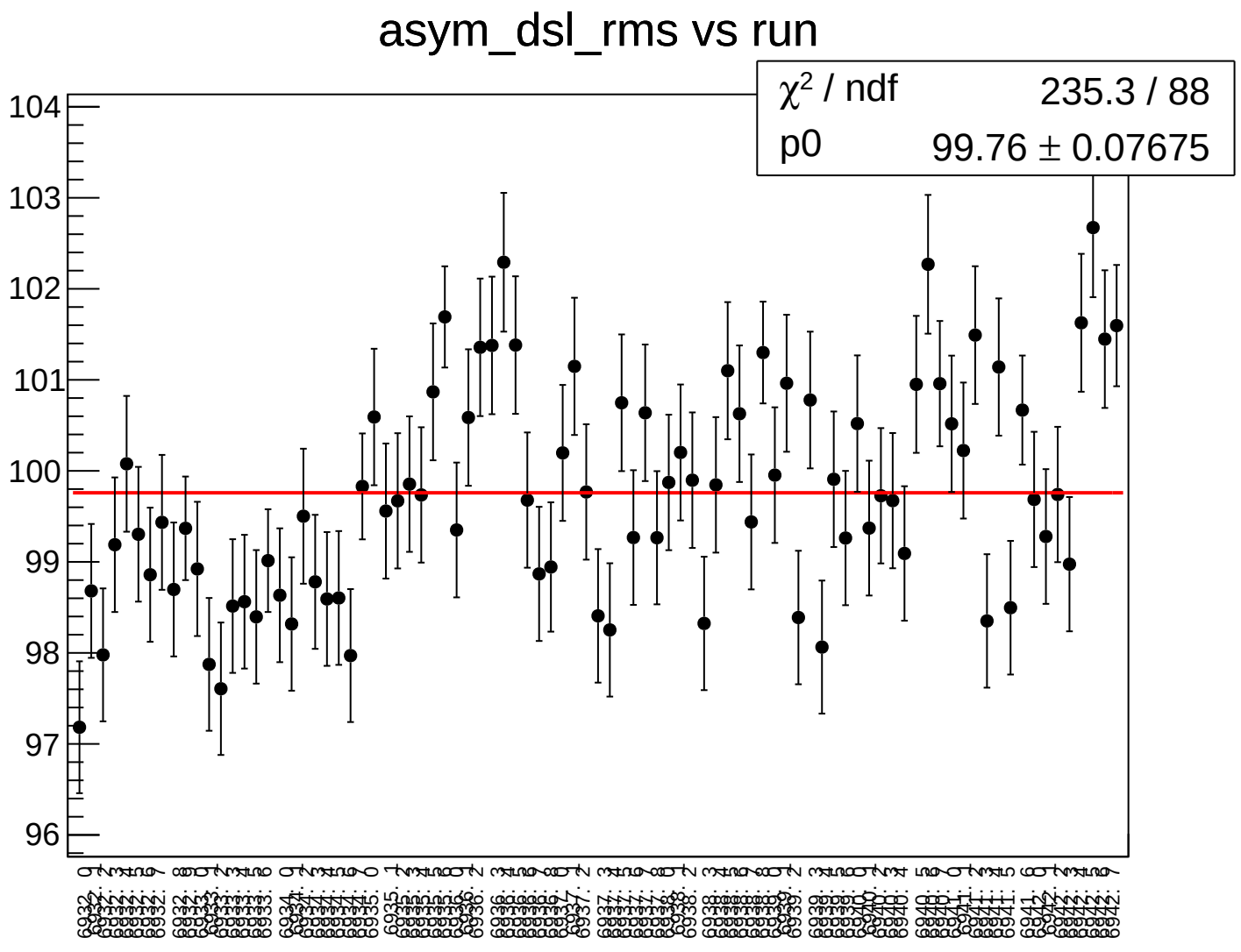

asym_dsl_correction_mean vs run
χ² / ndf 125.8 / 88
p0 1.821 ± 2.03
pull
Entries 89
Mean 132.9
Std Dev 73.94

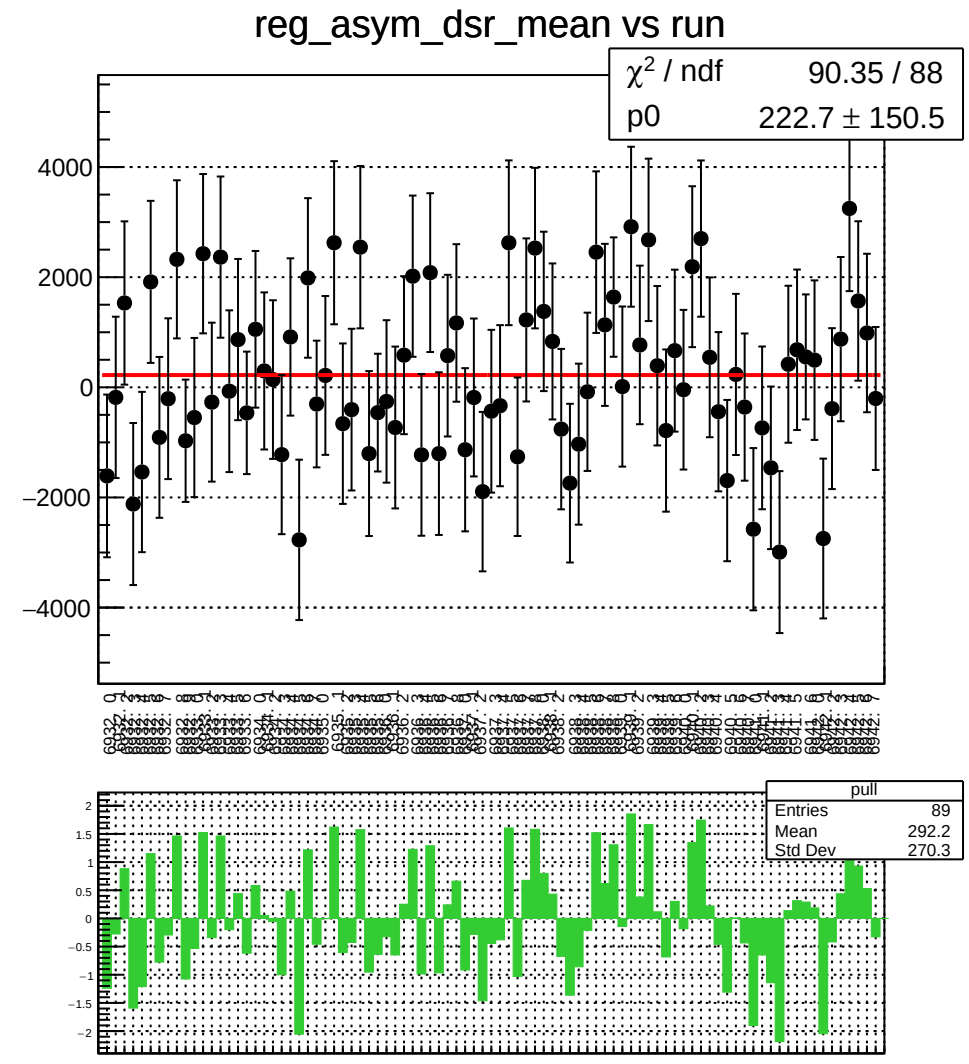

pull1D
Entries 89
Mean −0.05227
Std Dev 1.188

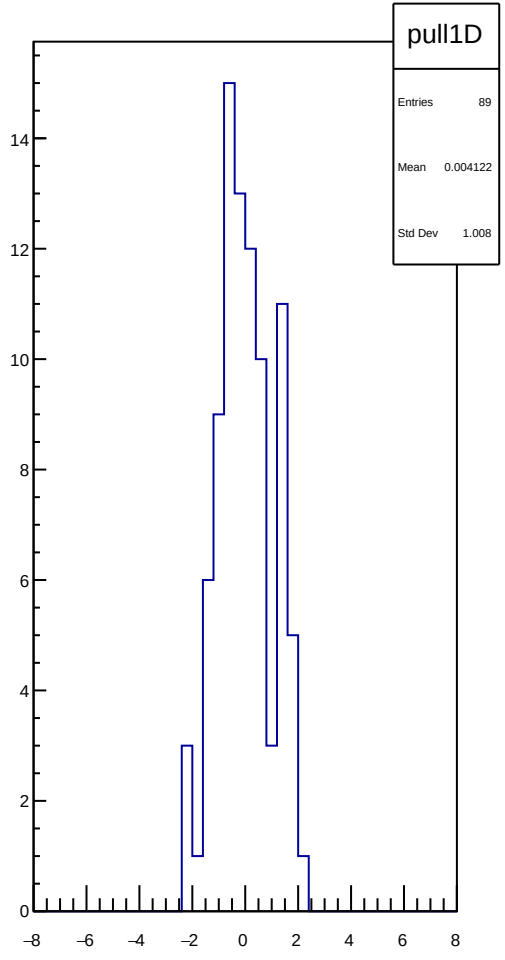

asym_dsl_correction_rms vs run
χ^2 / ndf 2.522e+05 / 88
p0 1.721 ± 0.001435
4.5
4
3.5
3
2.5
2
1.5
1
0.5

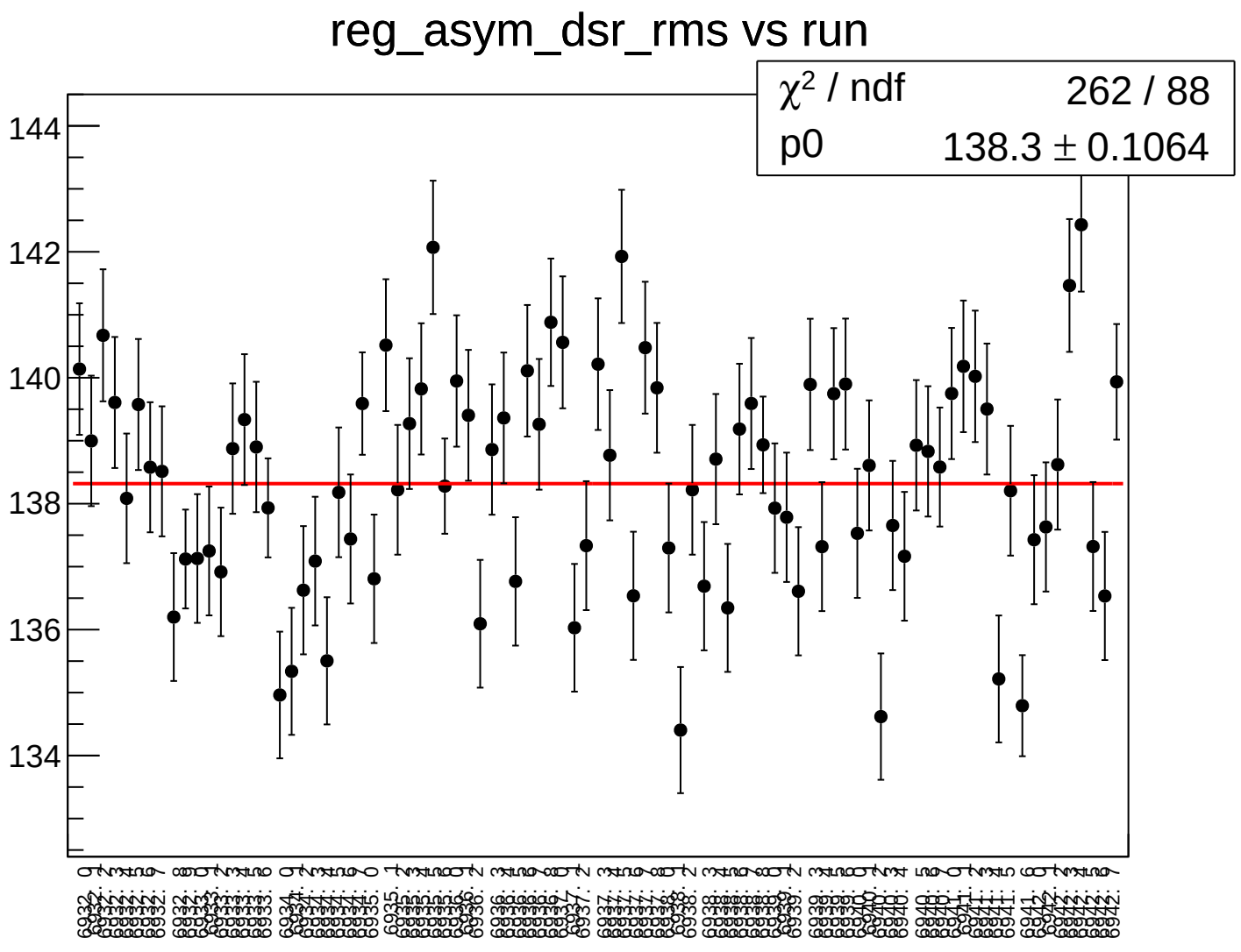

asym_dsl_mean vs run
χ² / ndf 81.46 / 88
p0 128.1 ± 108.5
pull
Entries 89
Mean −80.36
Std Dev 86.15

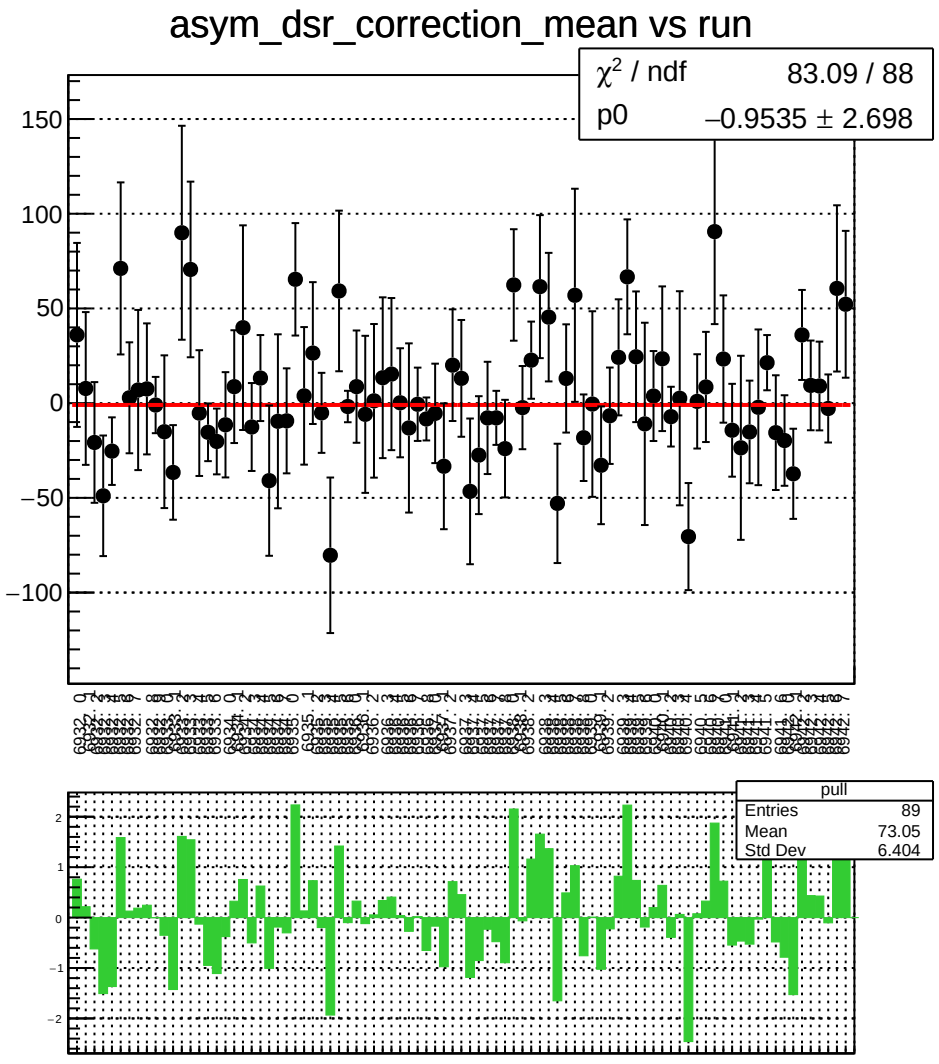

pull1D
Entries 89
Mean −0.01089
Std Dev 0.9566

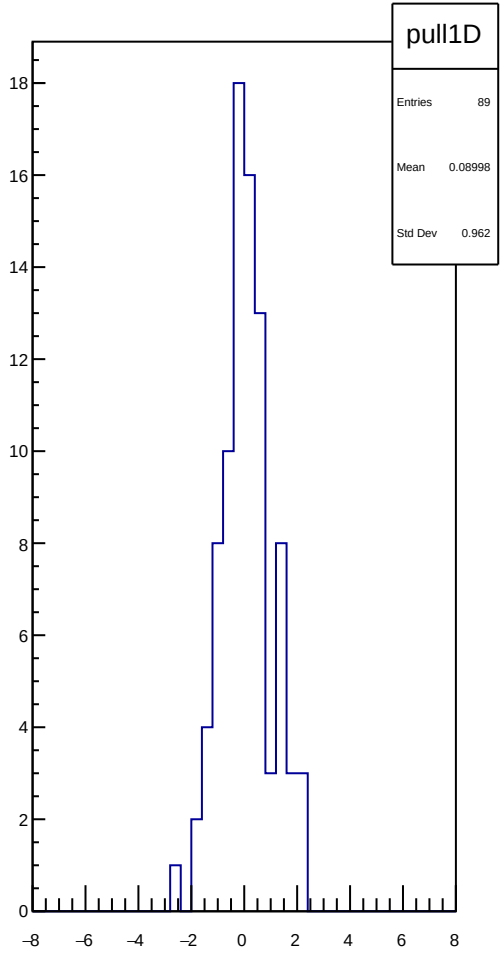

asym_dsl_rms vs run
χ² / ndf 235.3 / 88
p0 99.76 ± 0.07675
104
103
102
101
100
99
98
97
96

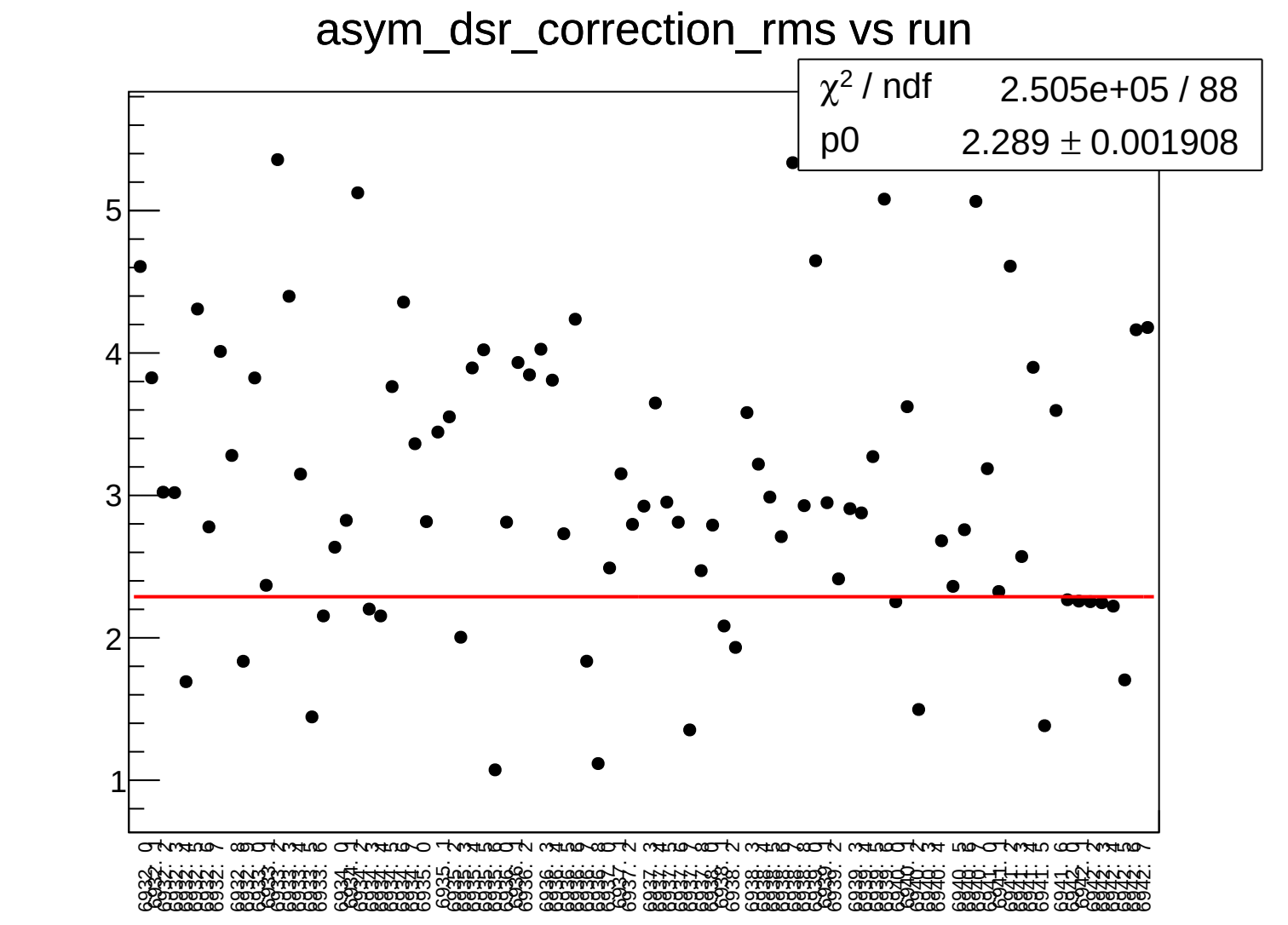

reg_asym_dsr_mean vs run
χ^2 / ndf 90.35 / 88
p0 222.7 ± 150.5
4000
2000
0
−2000
−4000
pull
Entries 89
Mean 292.2
Std Dev 270.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

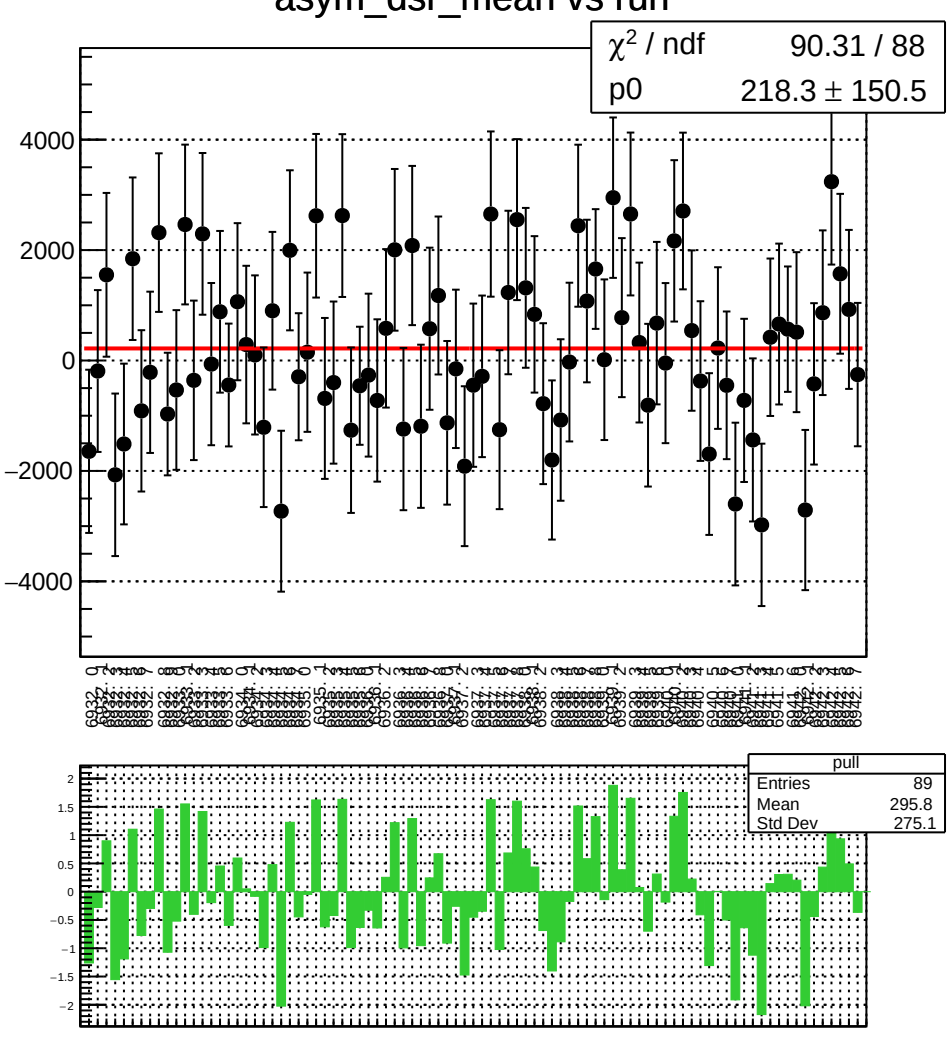

pull1D
Entries 89
Mean 0.004122
Std Dev 1.008
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

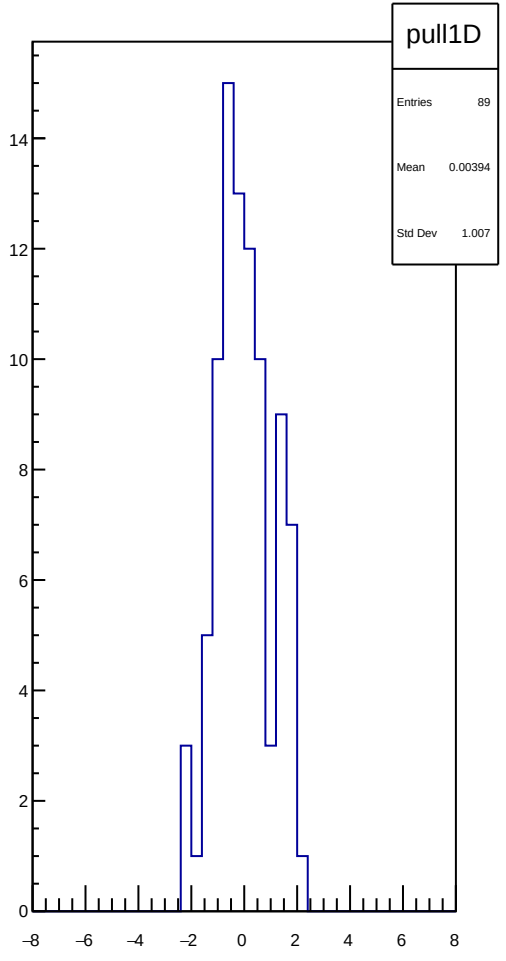

reg_asym_dsr_rms vs run
χ² / ndf 262 / 88
p0 138.3 ± 0.1064
144
142
140
138
136
134

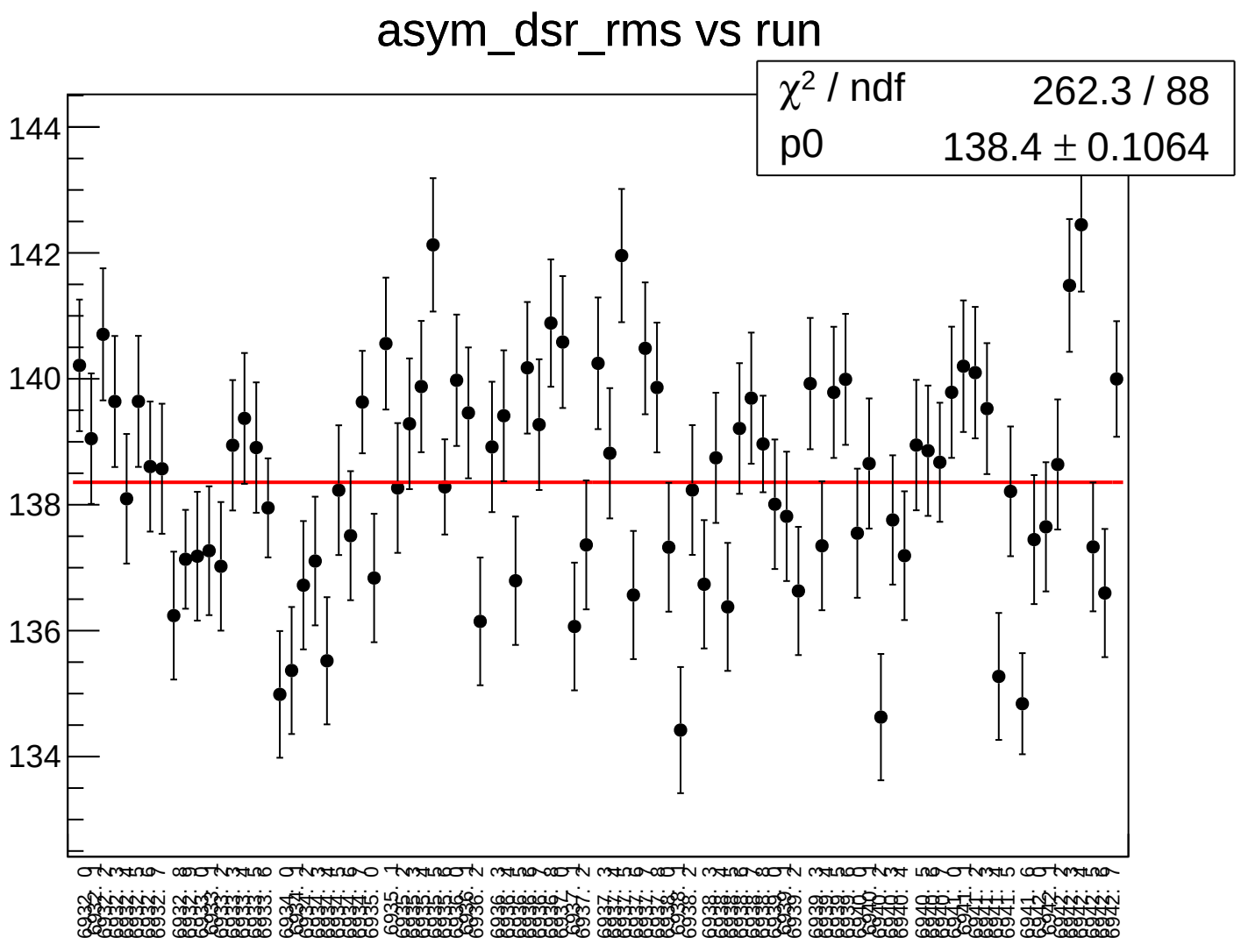

asym_dsr_correction_mean vs run
χ² / ndf 83.09 / 88
p0 −0.9535 ± 2.698
150
100
50
0
−50
−100
pull
Entries 89
Mean 73.05
Std Dev 6.404
2
1
0
−1
−2

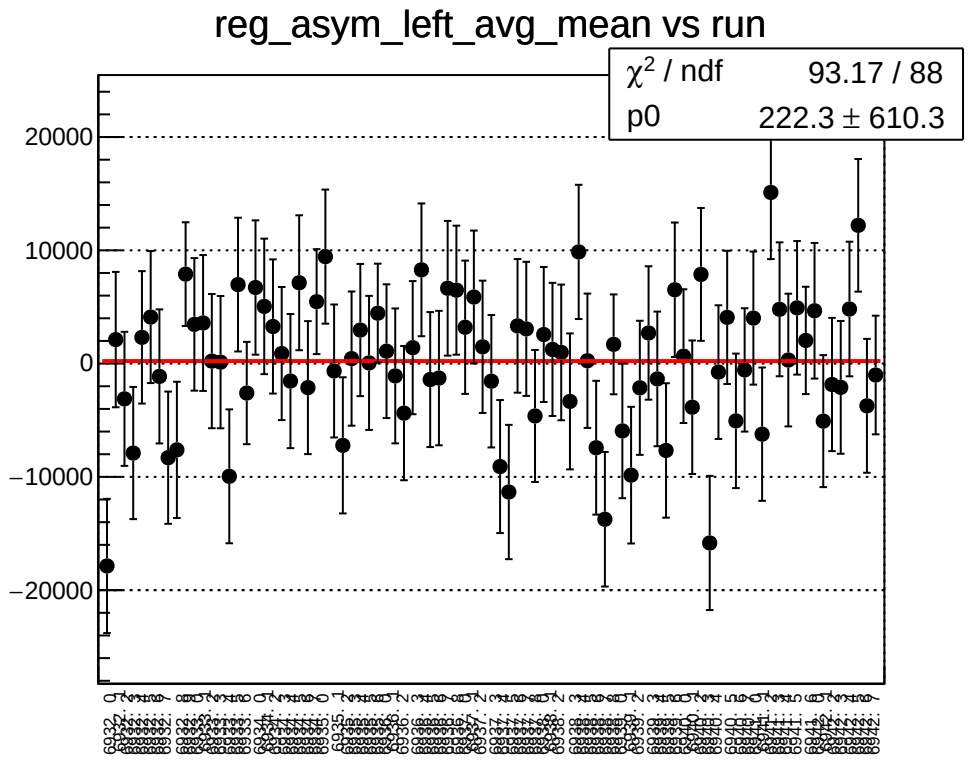

pull1D
Entries 89
Mean 0.08998
Std Dev 0.962
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

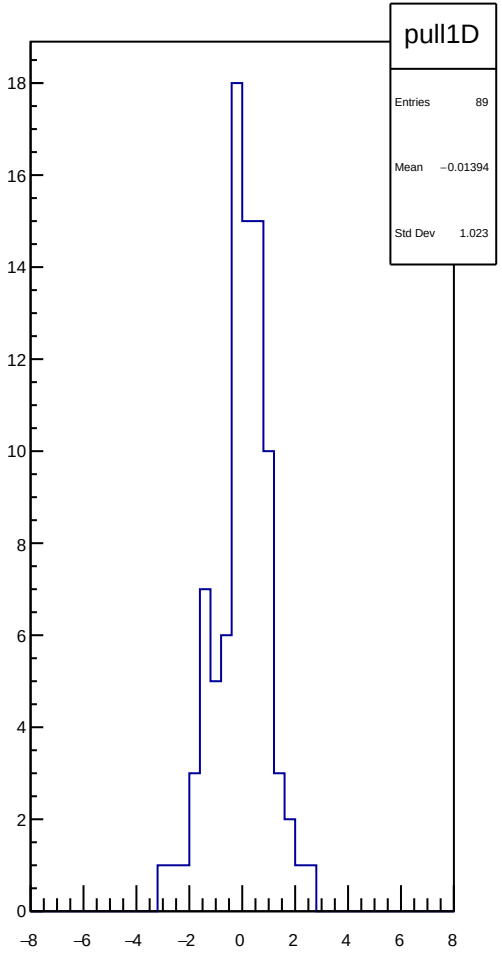

asym_dsr_correction_rms vs run
χ^2 / ndf 2.505e+05 / 88
p0 2.289 ± 0.001908
5
4
3
2
1

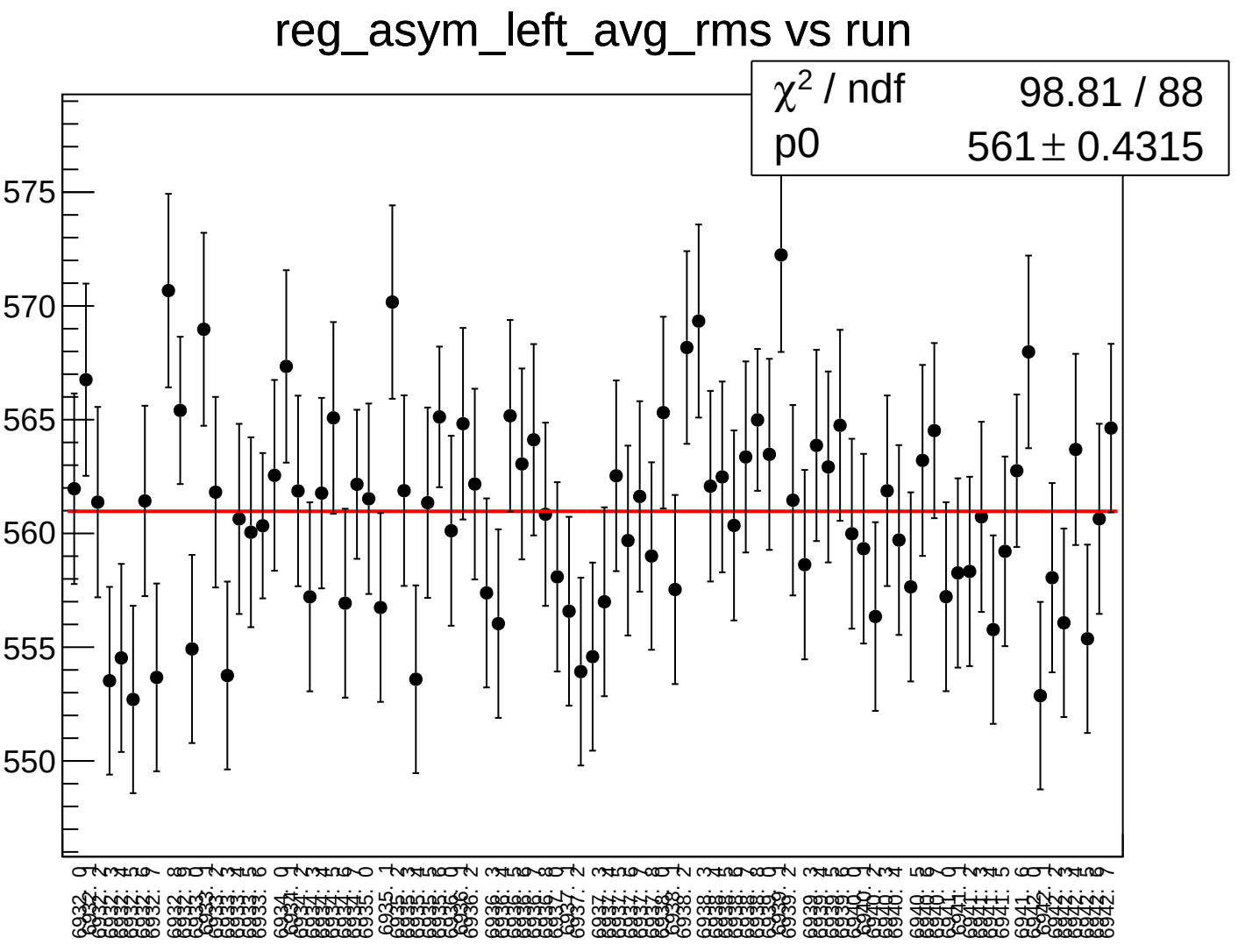

asym_dsr_mean vs run
χ^2 / ndf 90.31 / 88
p0 218.3 ± 150.5
4000
2000
0
−2000
−4000
pull
Entries 89
Mean 295.8
Std Dev 275.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

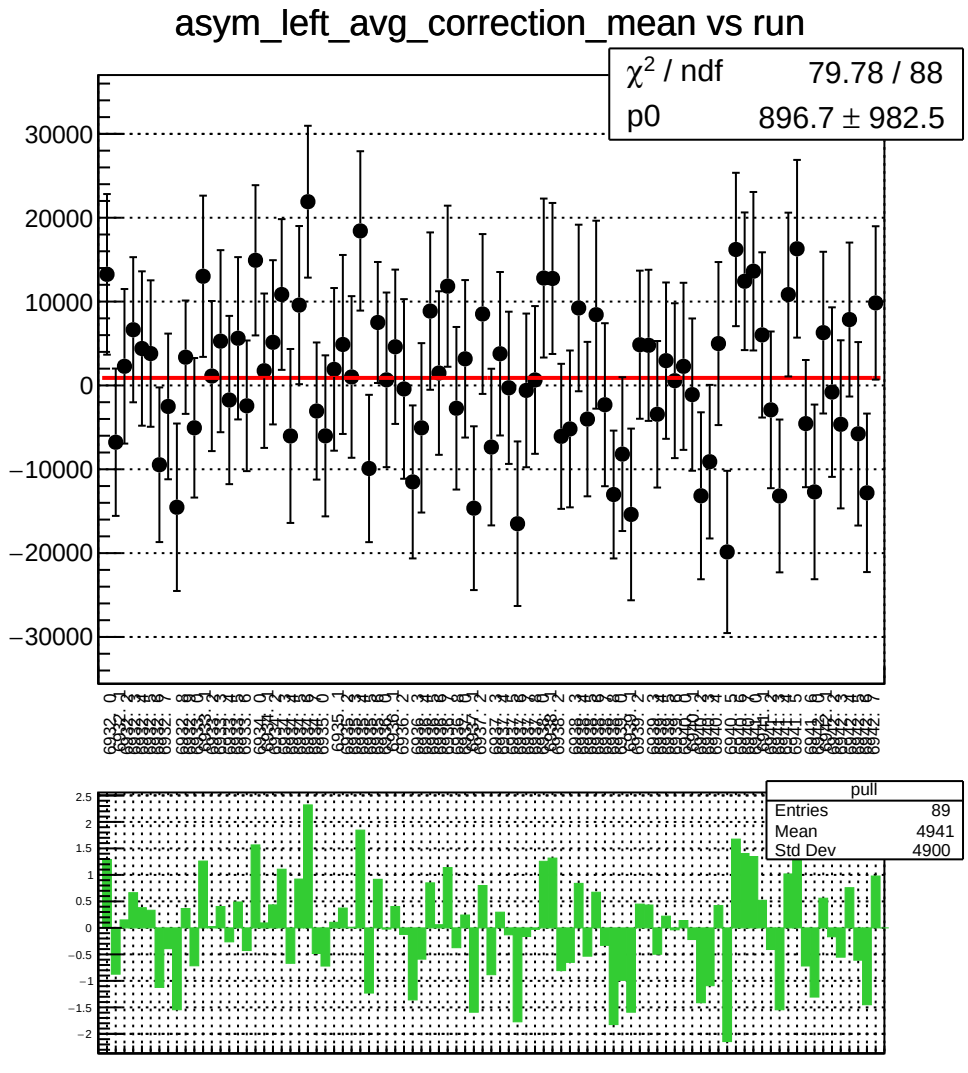

pull1D
Entries 89
Mean 0.00394
Std Dev 1.007
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

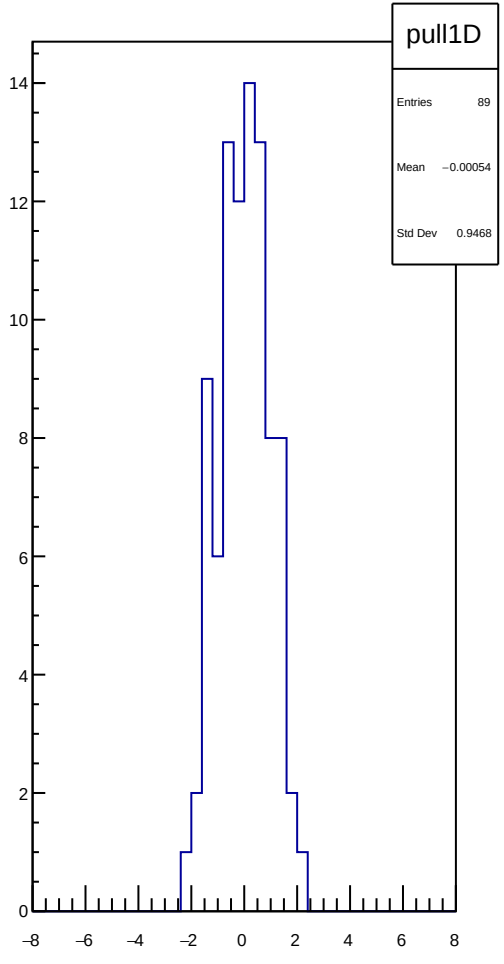

asym_dsr_rms vs run
χ^2 / ndf 262.3 / 88
p0 138.4 ± 0.1064
144
142
140
138
136
134

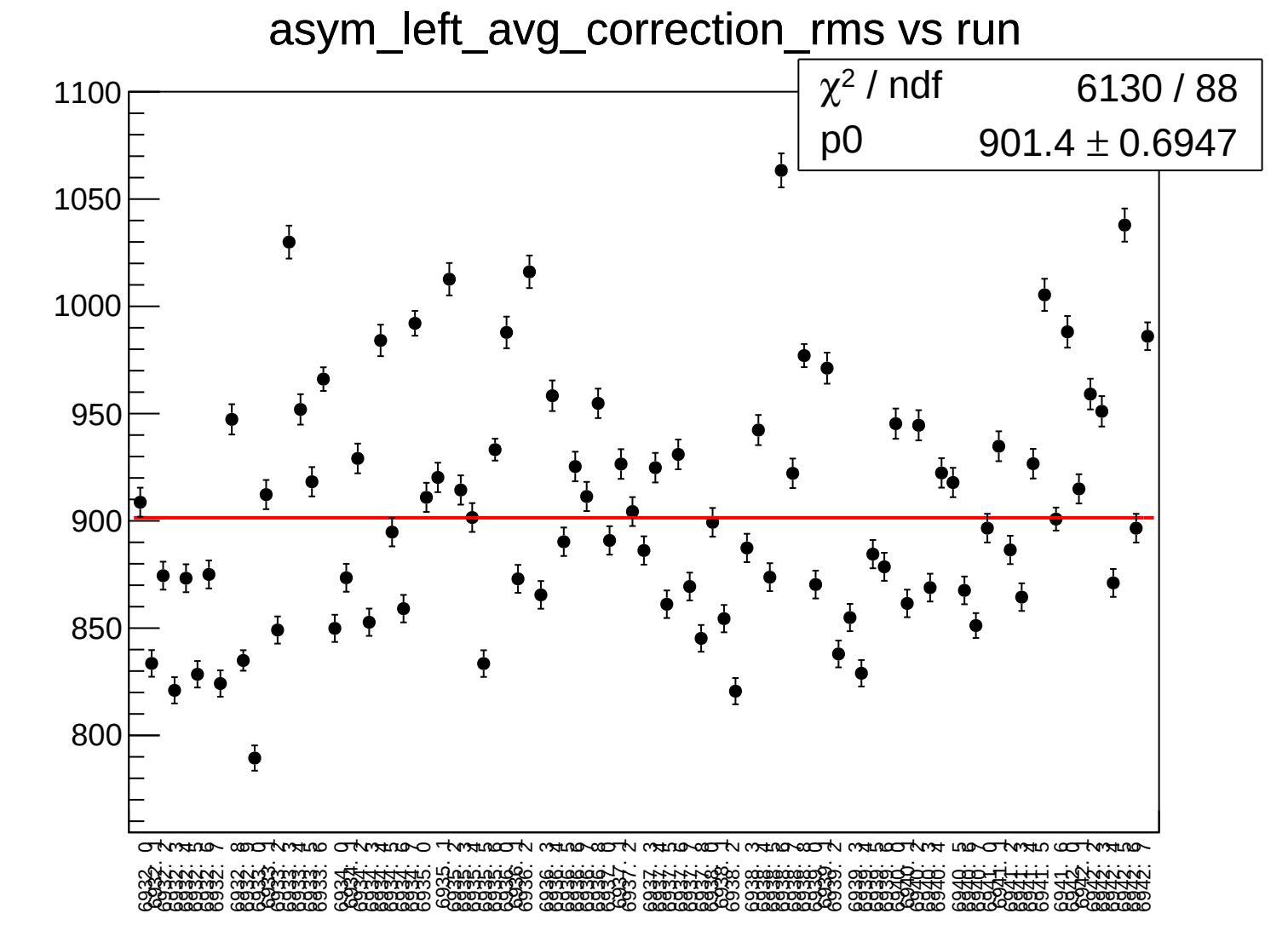

reg_asym_left_avg_mean vs run
χ² / ndf 93.17 / 88
p0 222.3 ± 610.3
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −35.18
Std Dev 64.69
2
1
0
−1
−2
−3

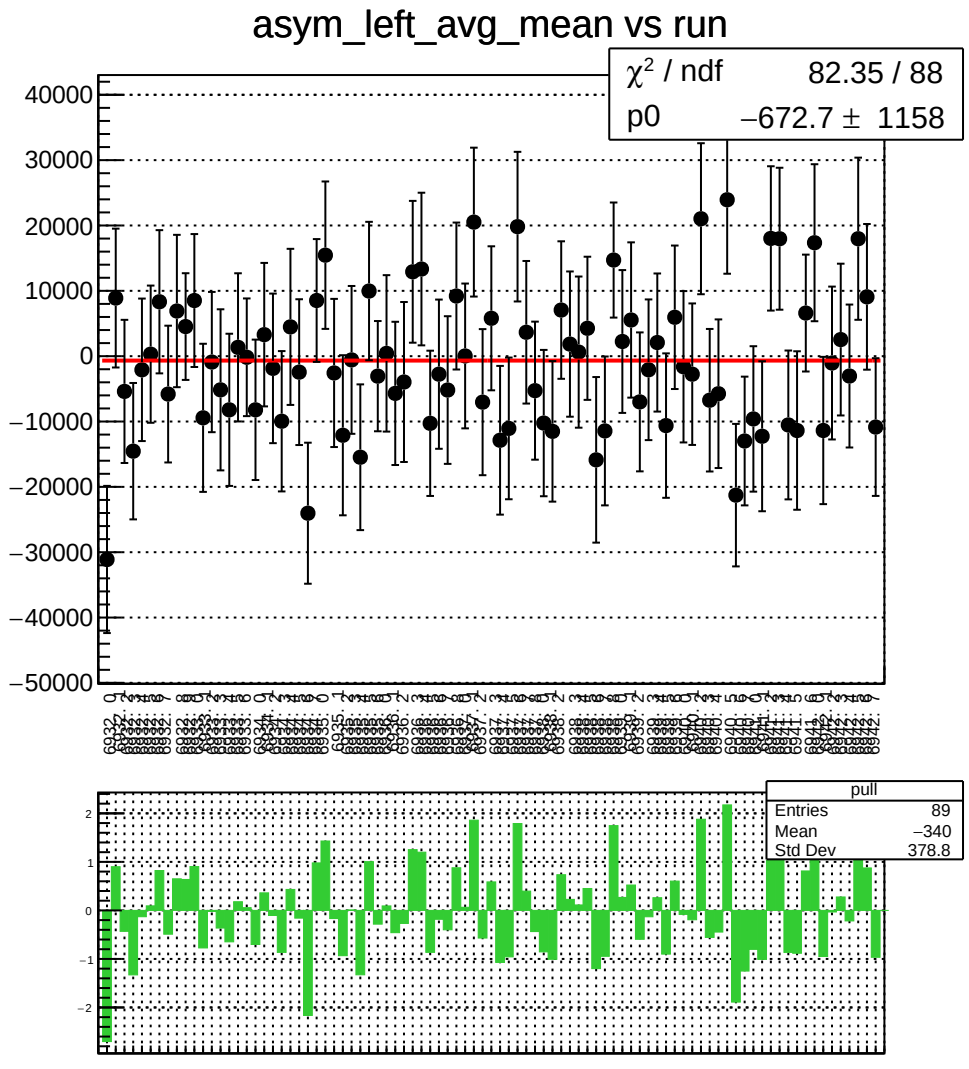

pull1D
Entries 89
Mean −0.01394
Std Dev 1.023
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

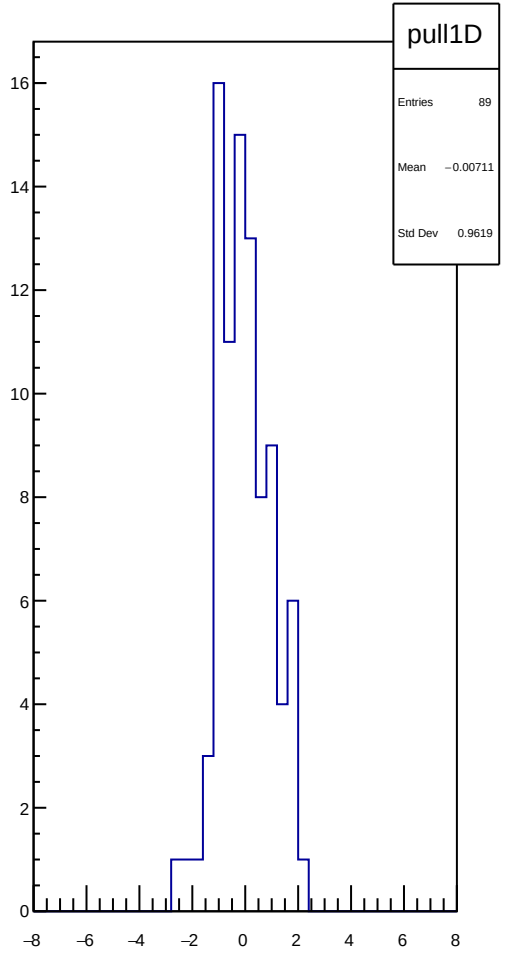

reg_asym_left_avg_rms vs run
χ^2 / ndf 98.81 / 88
p0 561 ± 0.4315
575
570
565
560
555
550

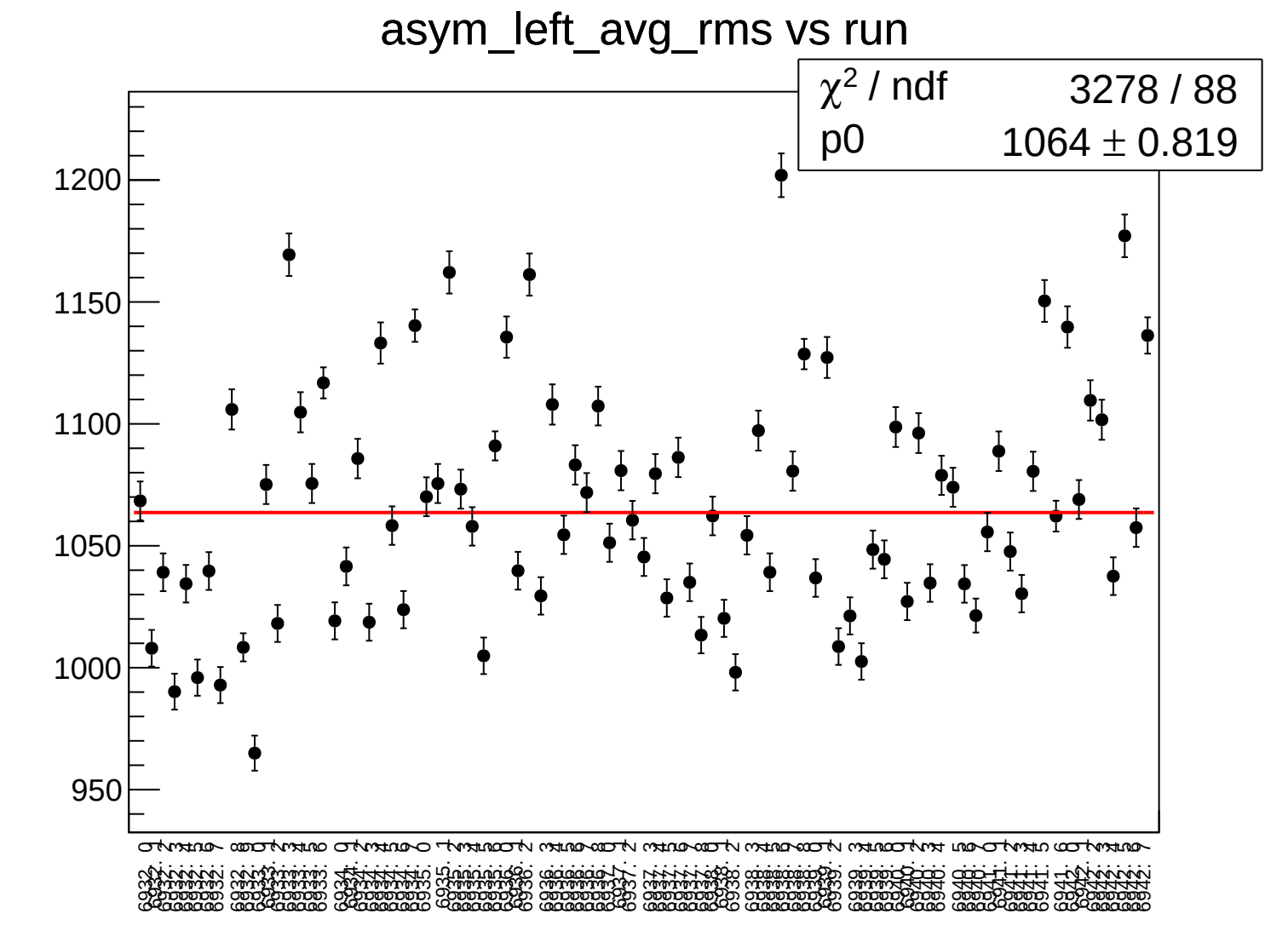

asym_left_avg_correction_mean vs run
χ² / ndf 79.78 / 88
p0 896.7 ± 982.5
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 4941
Std Dev 4900
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

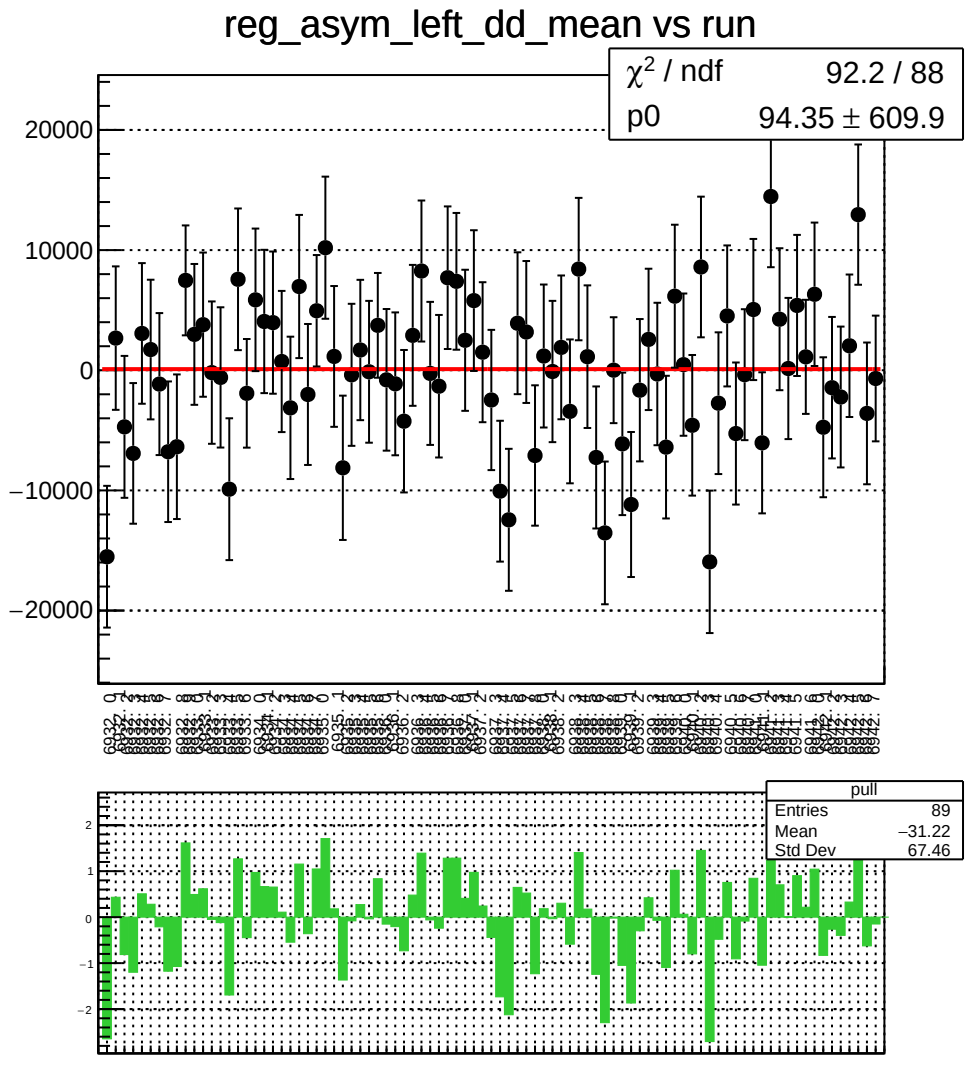

pull1D
Entries 89
Mean −0.00054
Std Dev 0.9468
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

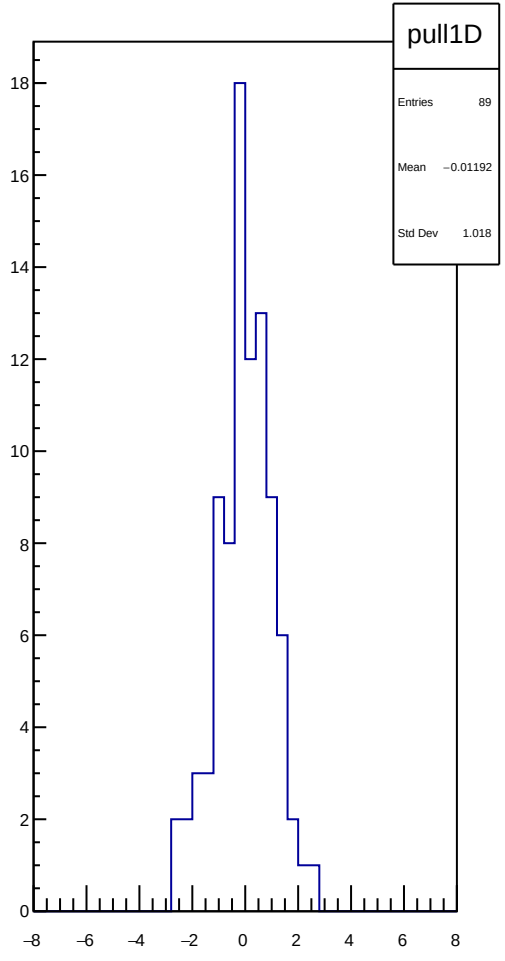

asym_left_avg_correction_rms vs run
χ² / ndf 6130 / 88
p0 901.4 ± 0.6947
1100
1050
1000
950
900
850
800

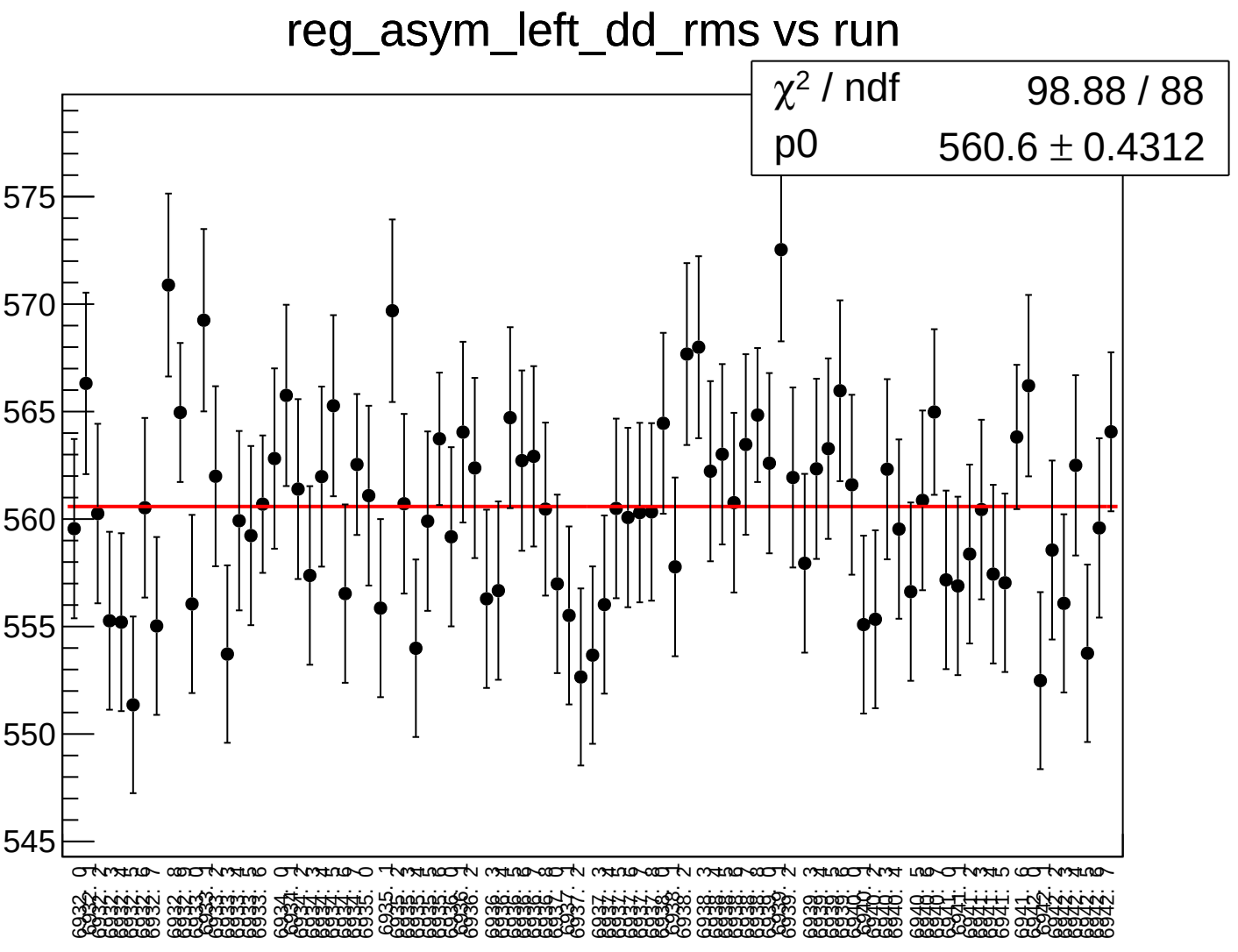

asym_left_avg_mean vs run
χ² / ndf 82.35 / 88
p0 −672.7 ± 1158
pull
Entries 89
Mean −340
Std Dev 378.8

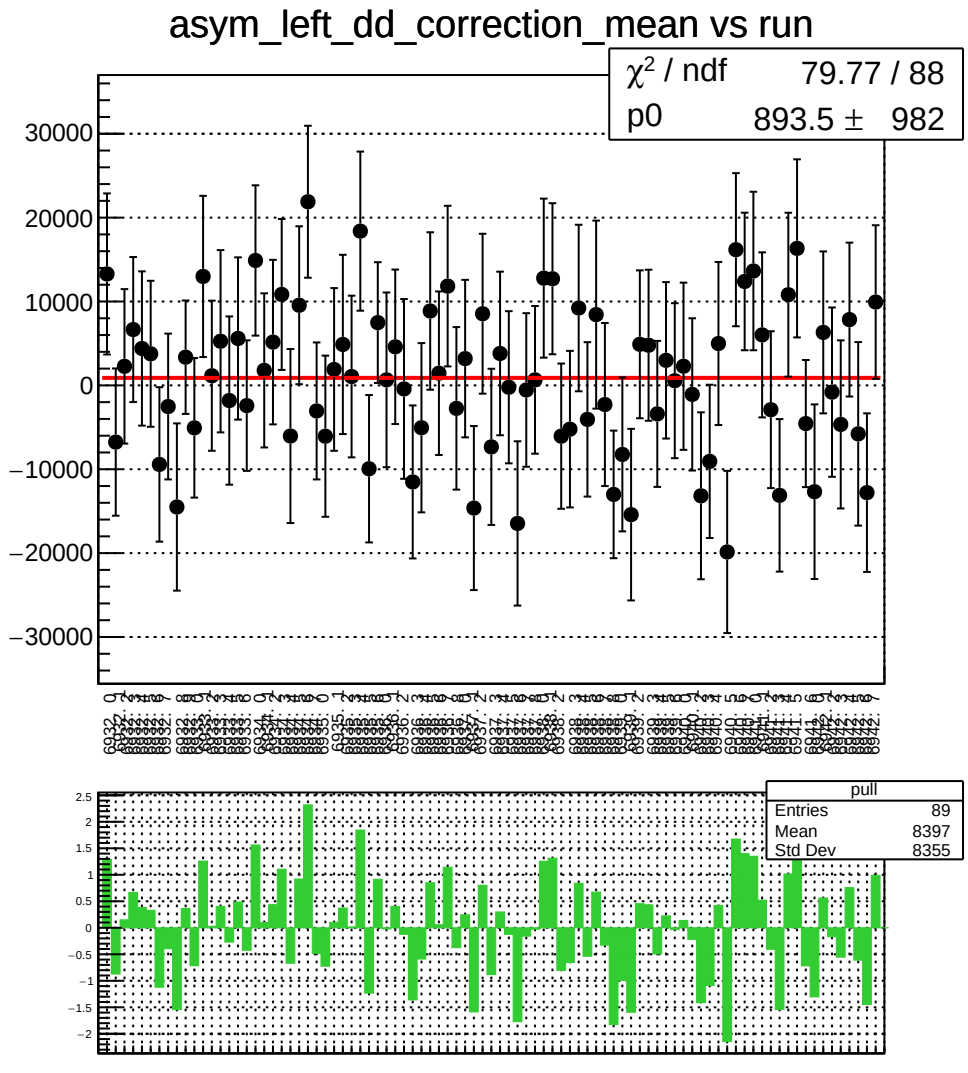

pull1D
Entries 89
Mean −0.00711
Std Dev 0.9619

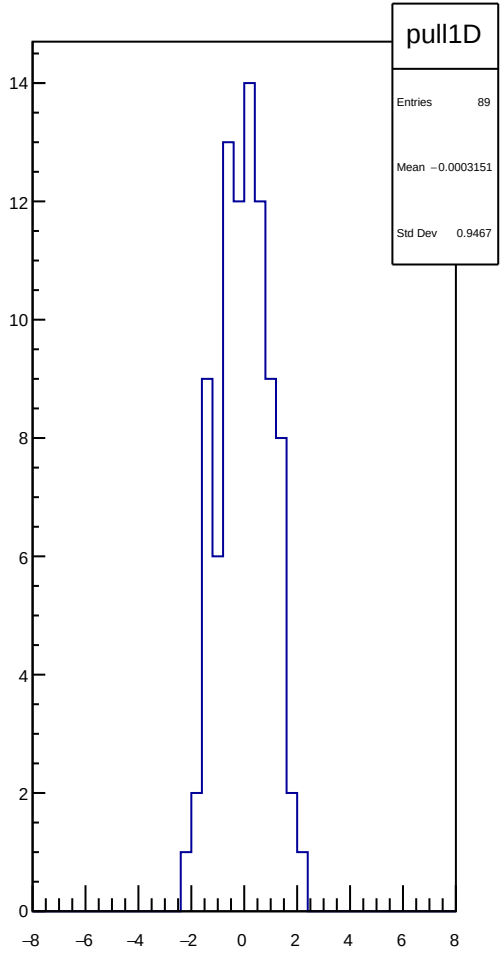

asym_left_avg_rms vs run
χ^2 / ndf 3278 / 88
p0 1064 ± 0.819
1200
1150
1100
1050
1000
950

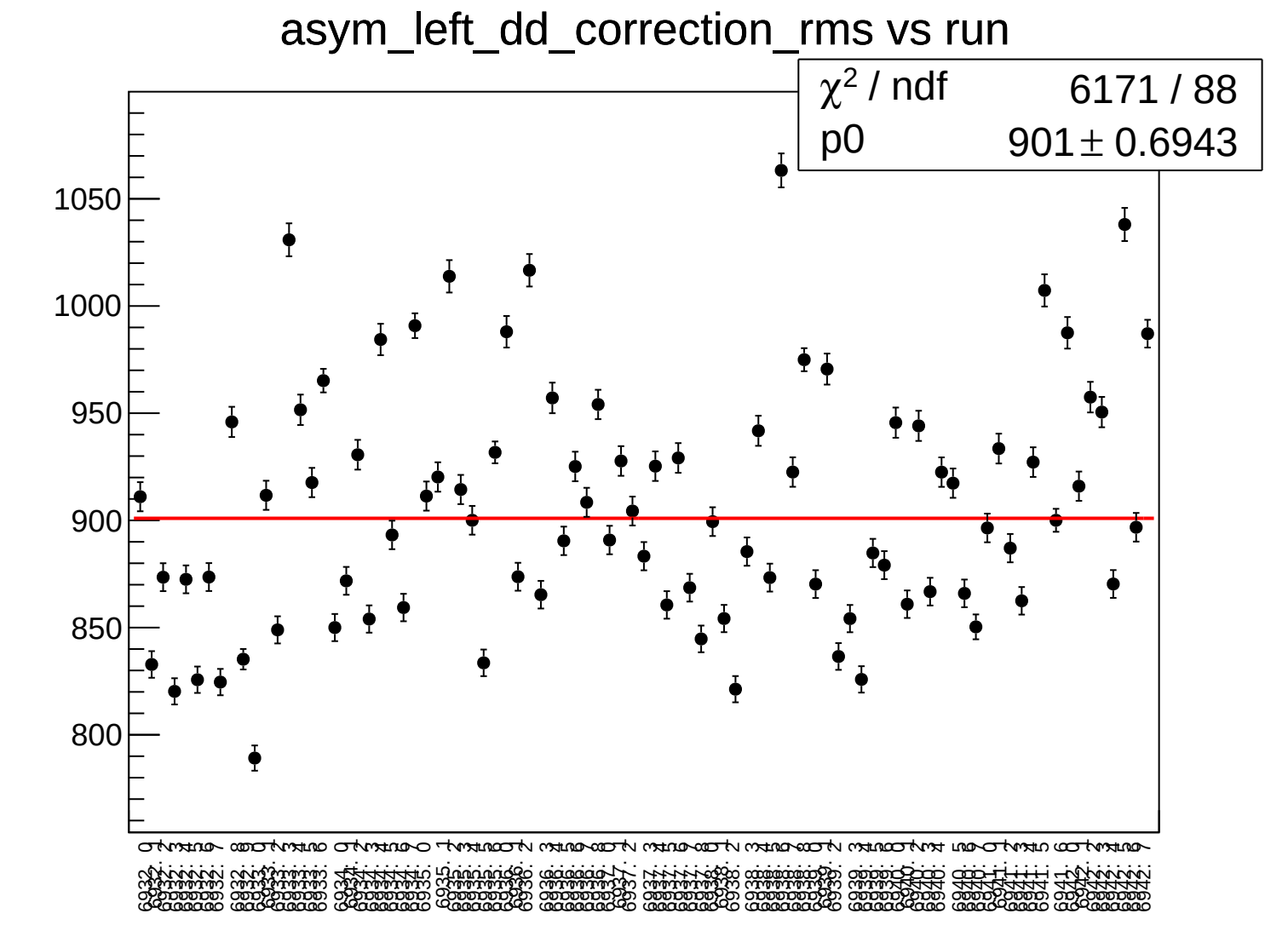

reg_asym_left_dd_mean vs run
χ² / ndf 92.2 / 88
p0 94.35 ± 609.9
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −31.22
Std Dev 67.46
2
1
0
−1
−2

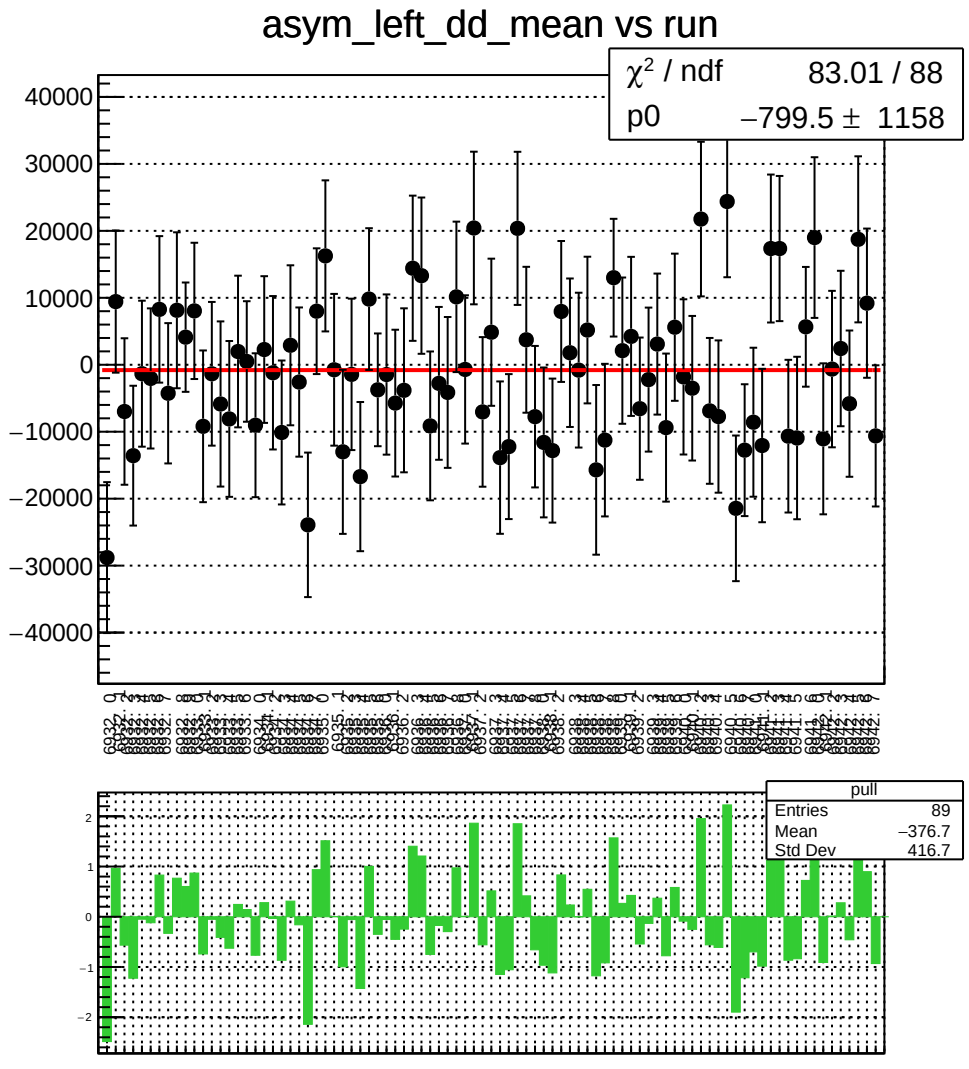

pull1D
Entries 89
Mean −0.01192
Std Dev 1.018
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

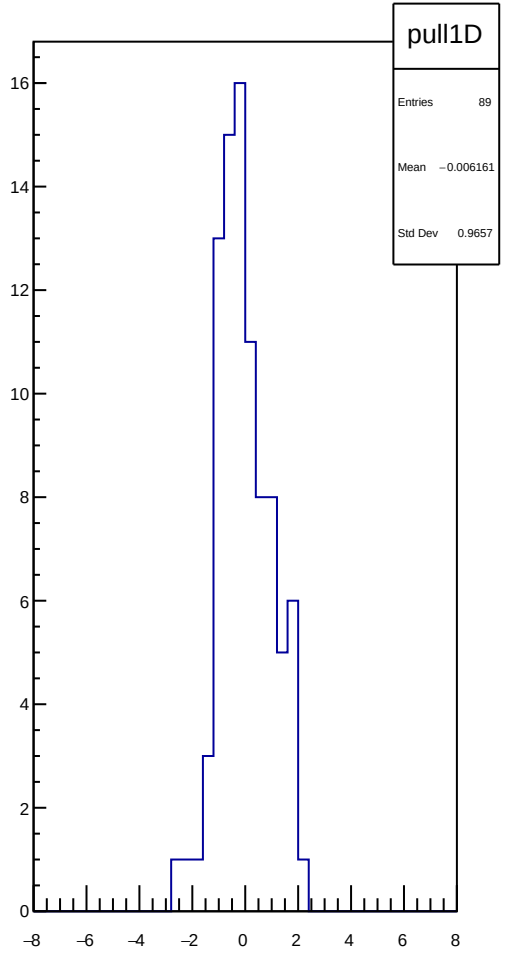

reg_asym_left_dd_rms vs run
χ² / ndf 98.88 / 88
p0 560.6 ± 0.4312
575
570
565
560
555
550
545

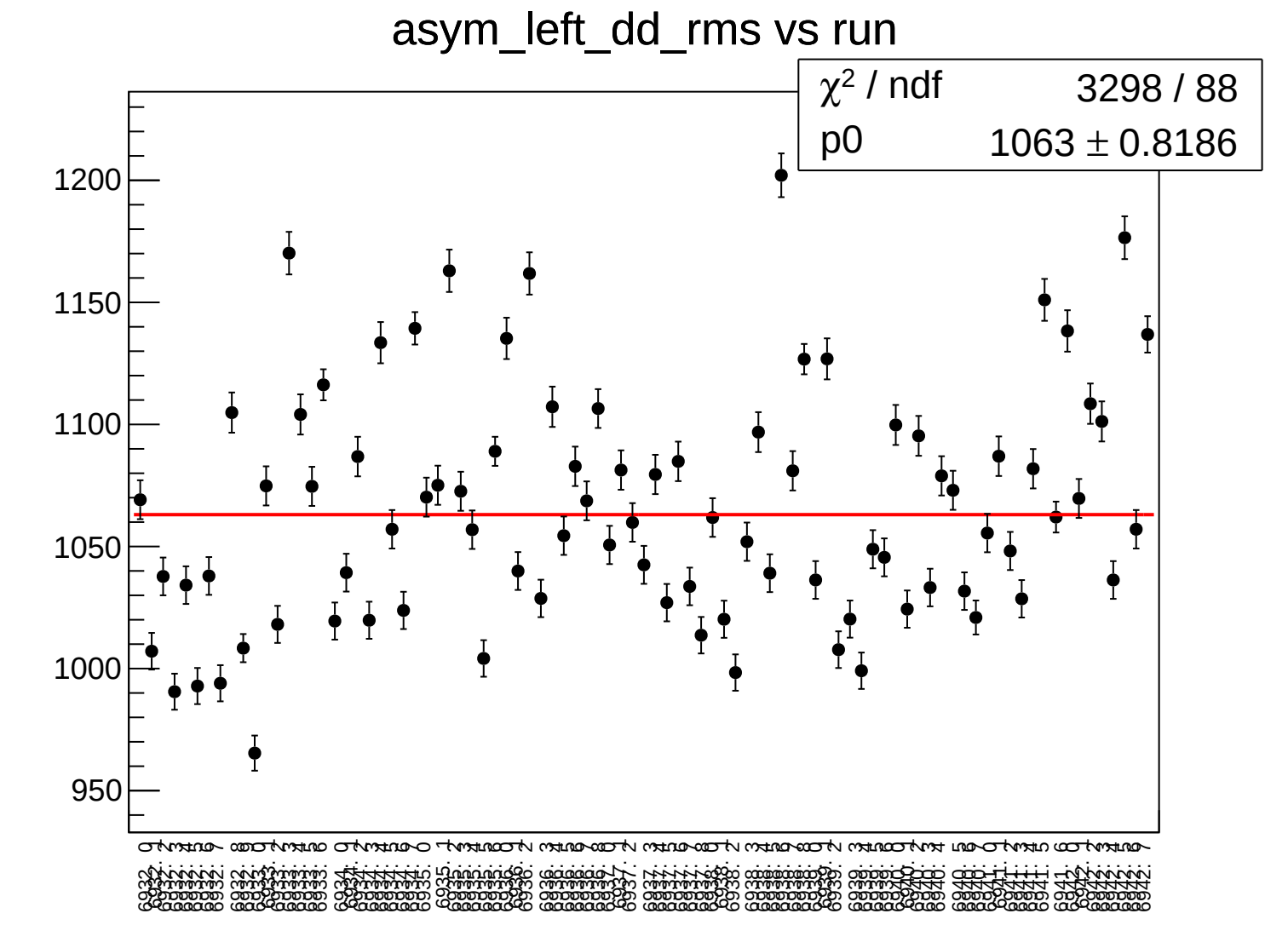

asym_left_dd_correction_mean vs run
χ² / ndf 79.77 / 88
p0 893.5 ± 982
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 8397
Std Dev 8355
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

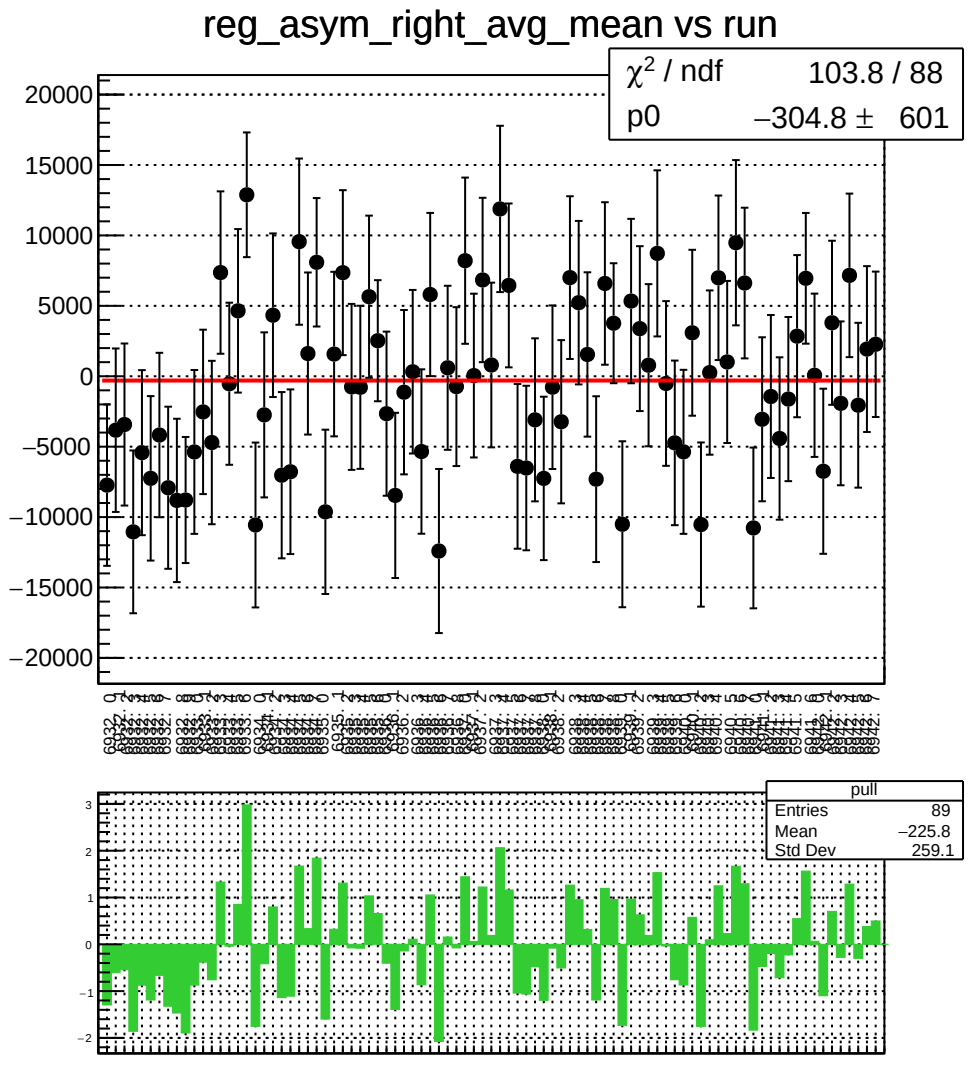

pull1D
Entries 89
Mean −0.0003151
Std Dev 0.9467
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

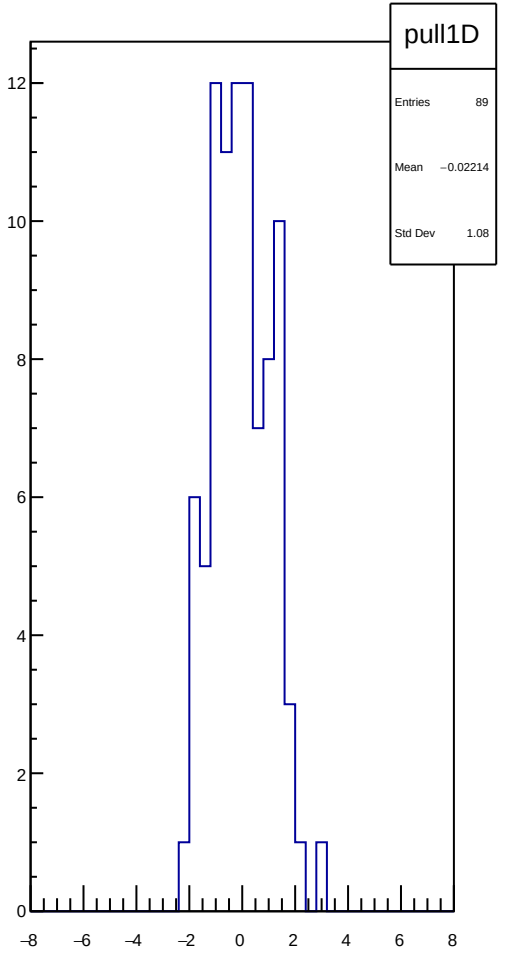

asym_left_dd_correction_rms vs run
χ² / ndf 6171 / 88
p0 901 ± 0.6943
1050
1000
950
900
850
800

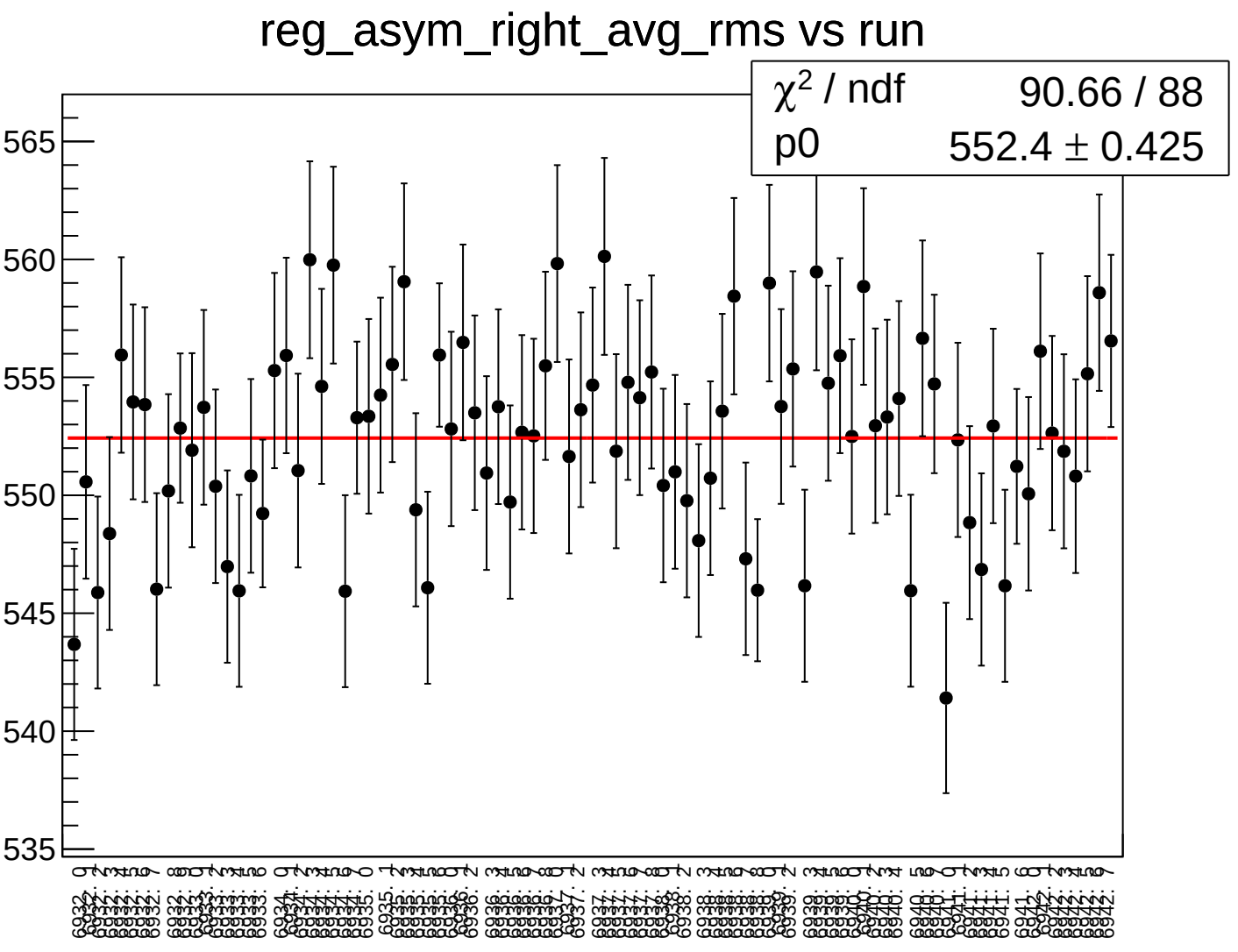

asym_left_dd_mean vs run
χ² / ndf 83.01 / 88
p0 −799.5 ± 1158
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −376.7
Std Dev 416.7
2
1
0
−1
−2

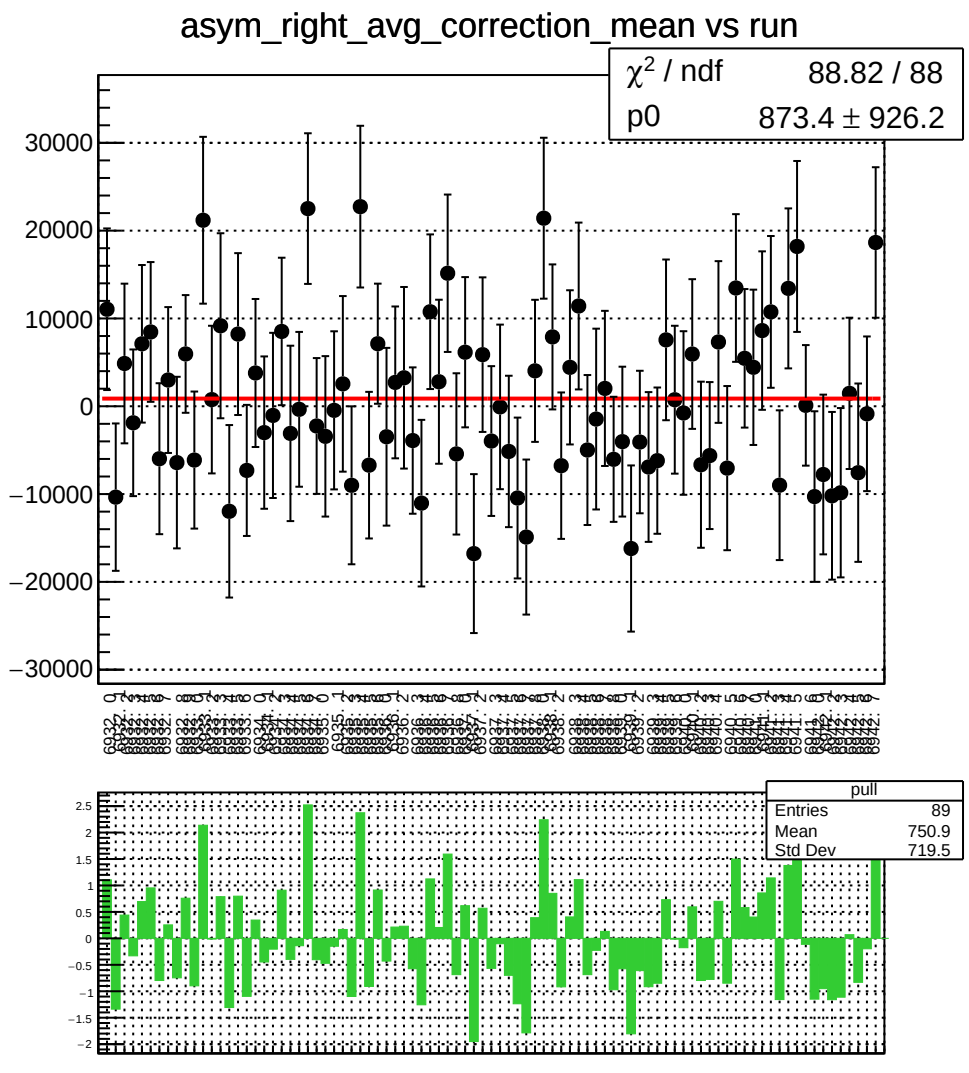

pull1D
Entries 89
Mean −0.006161
Std Dev 0.9657
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

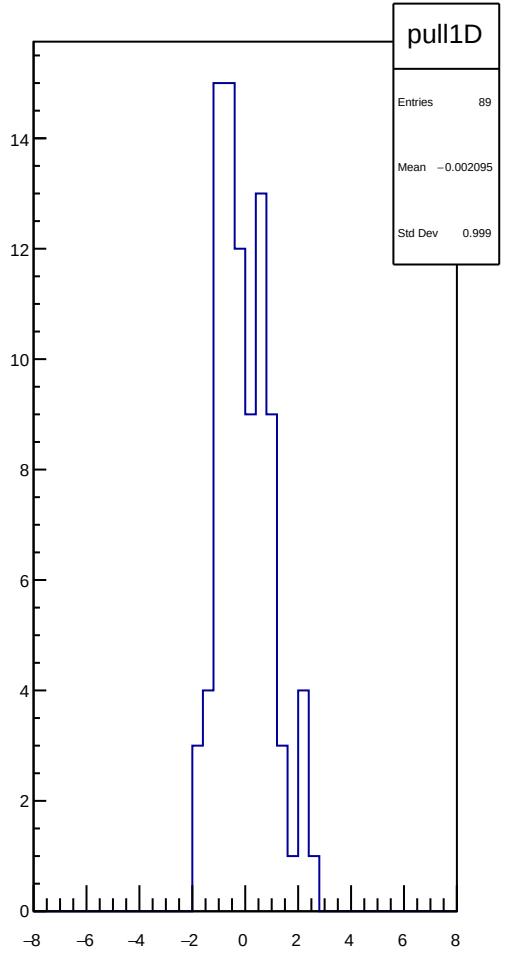

asym_left_dd_rms vs run
χ² / ndf 3298 / 88
p0 1063 ± 0.8186
1200
1150
1100
1050
1000
950

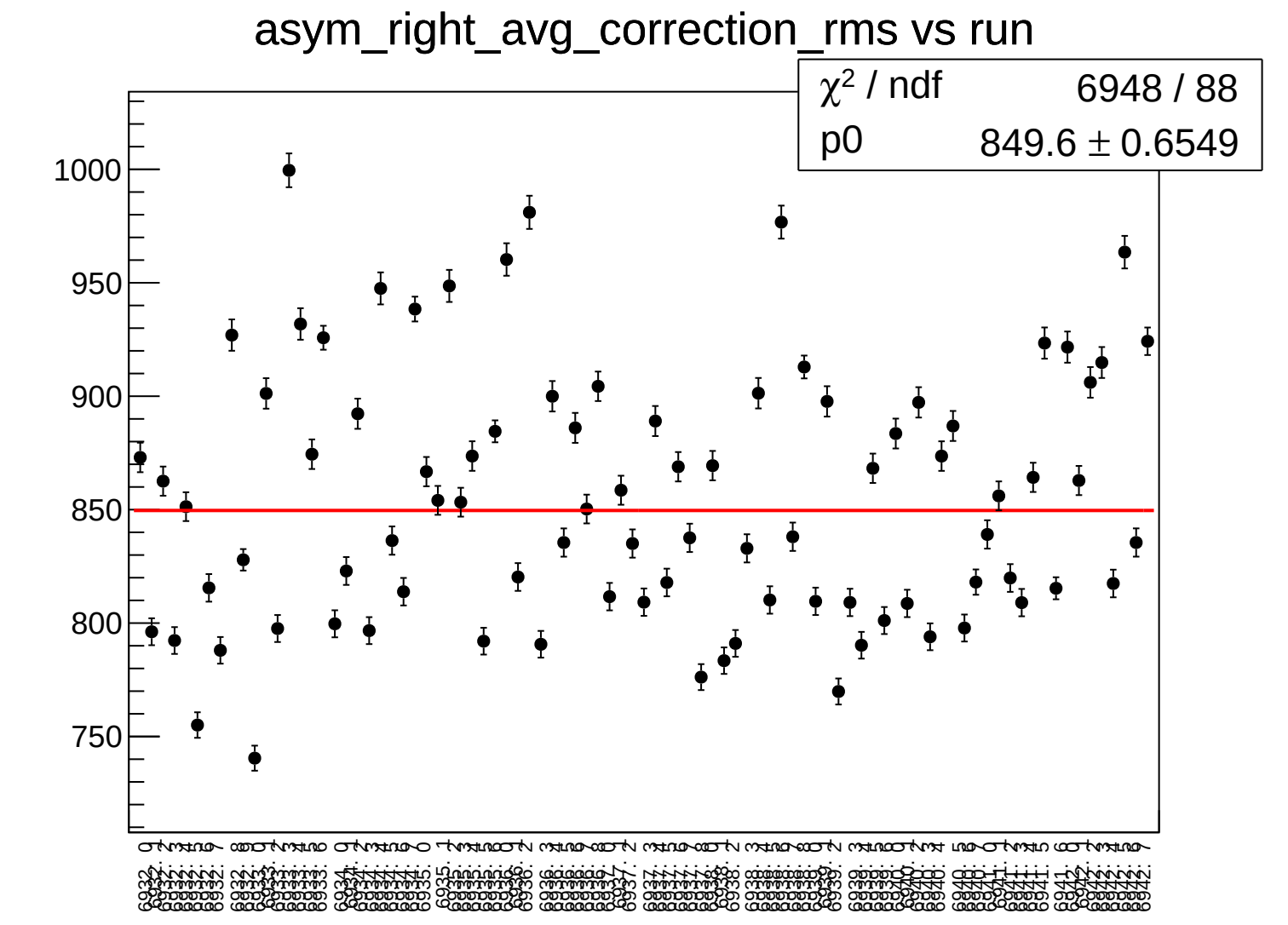

reg_asym_right_avg_mean vs run
χ² / ndf 103.8 / 88
p0 −304.8 ± 601
pull
Entries 89
Mean −225.8
Std Dev 259.1

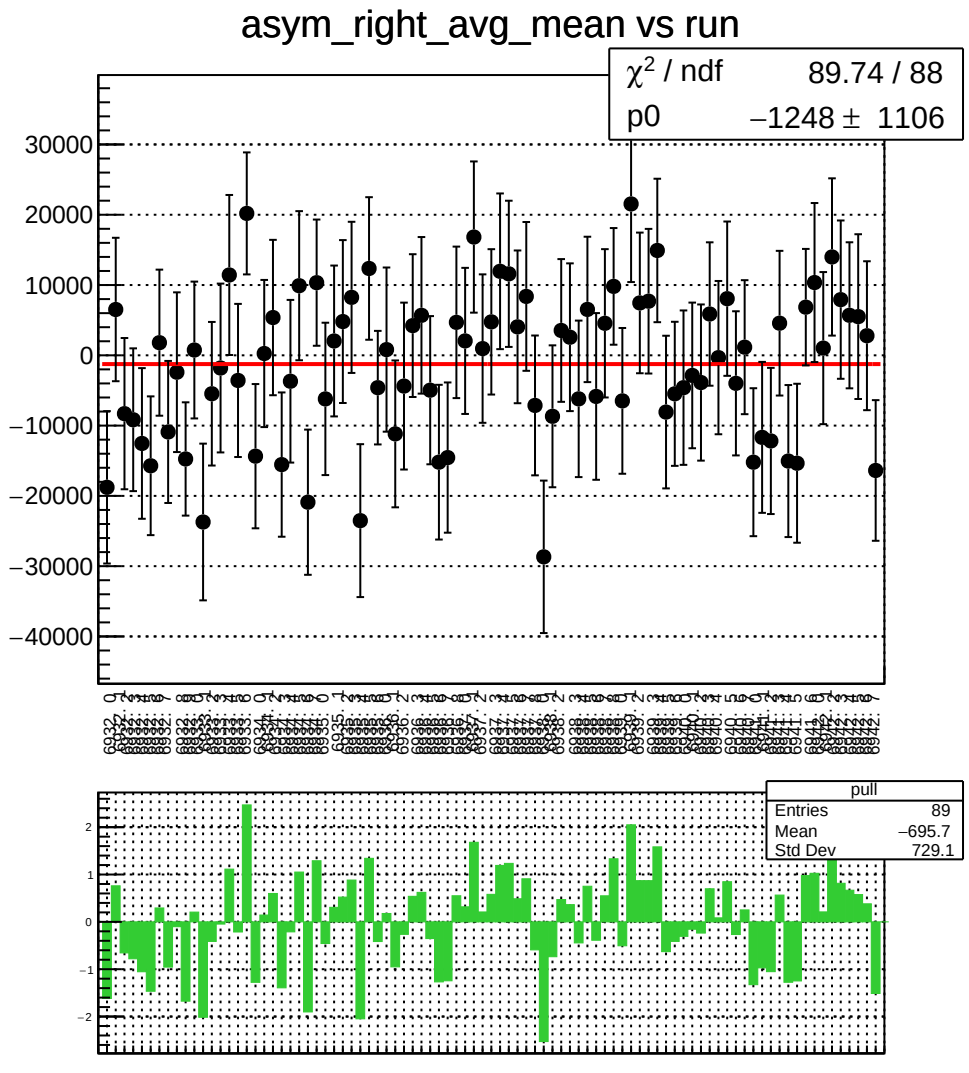

pull1D
Entries 89
Mean −0.02214
Std Dev 1.08

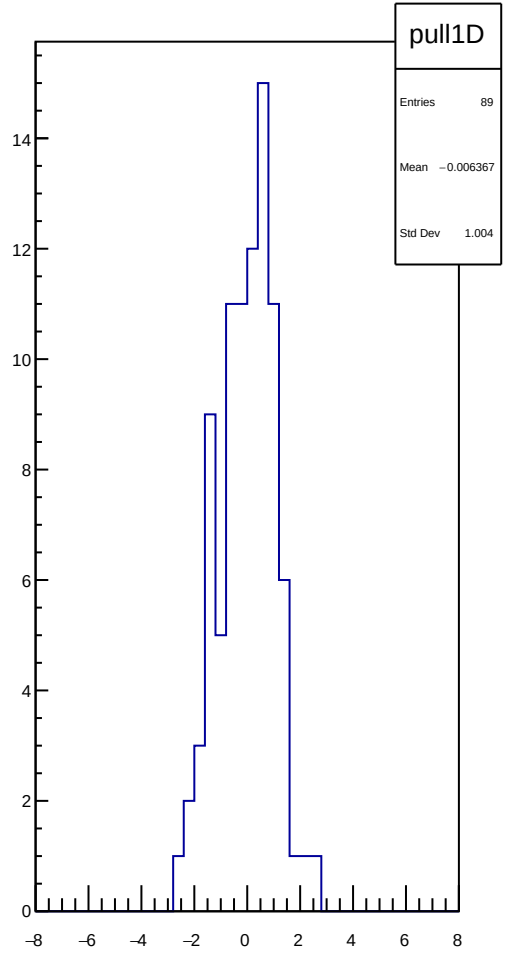

reg_asym_right_avg_rms vs run
χ^2 / ndf 90.66 / 88
p0 552.4 ± 0.425
565
560
555
550
545
540
535

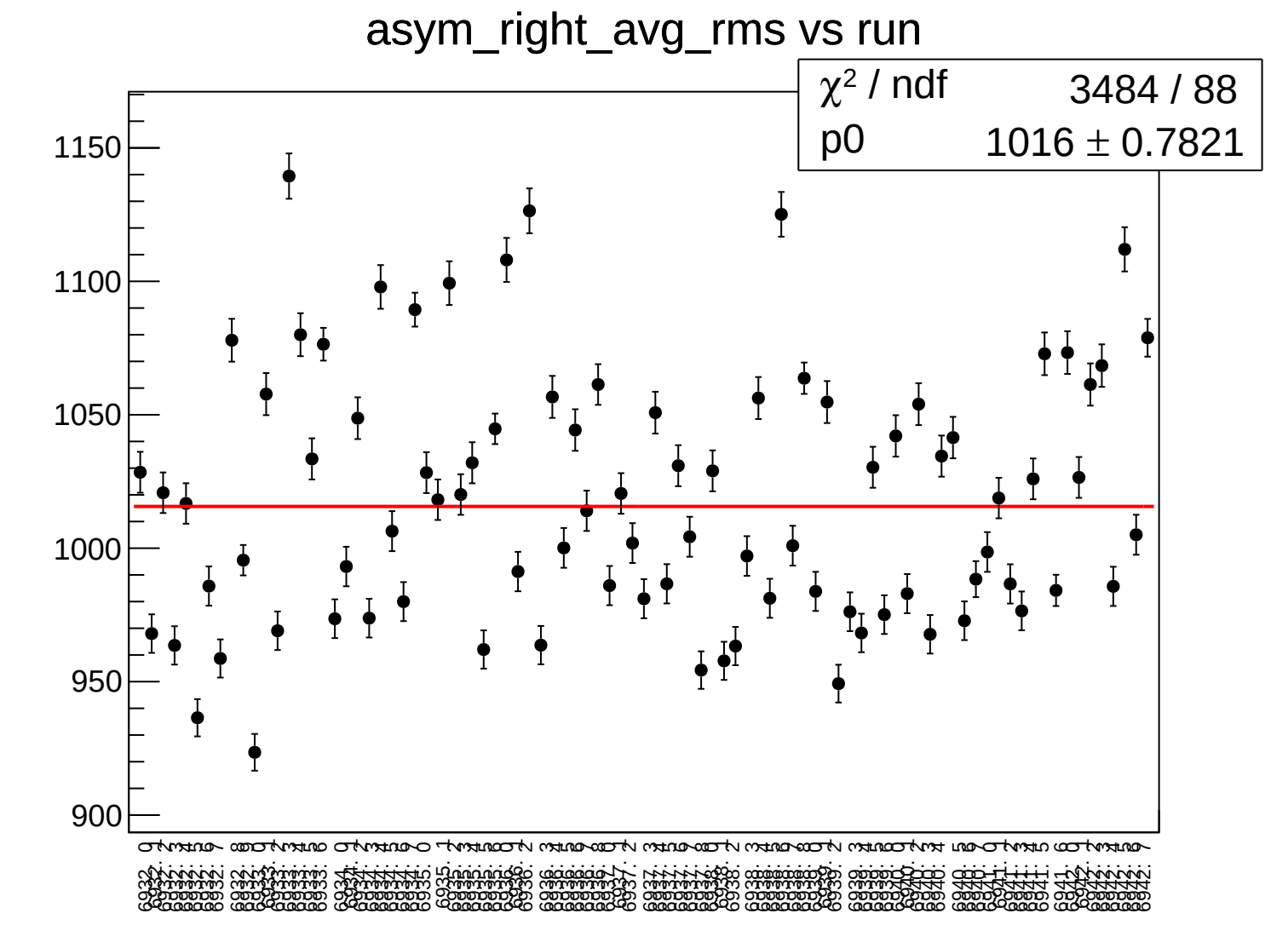

asym_right_avg_correction_mean vs run
χ² / ndf 88.82 / 88
p0 873.4 ± 926.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 750.9
Std Dev 719.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

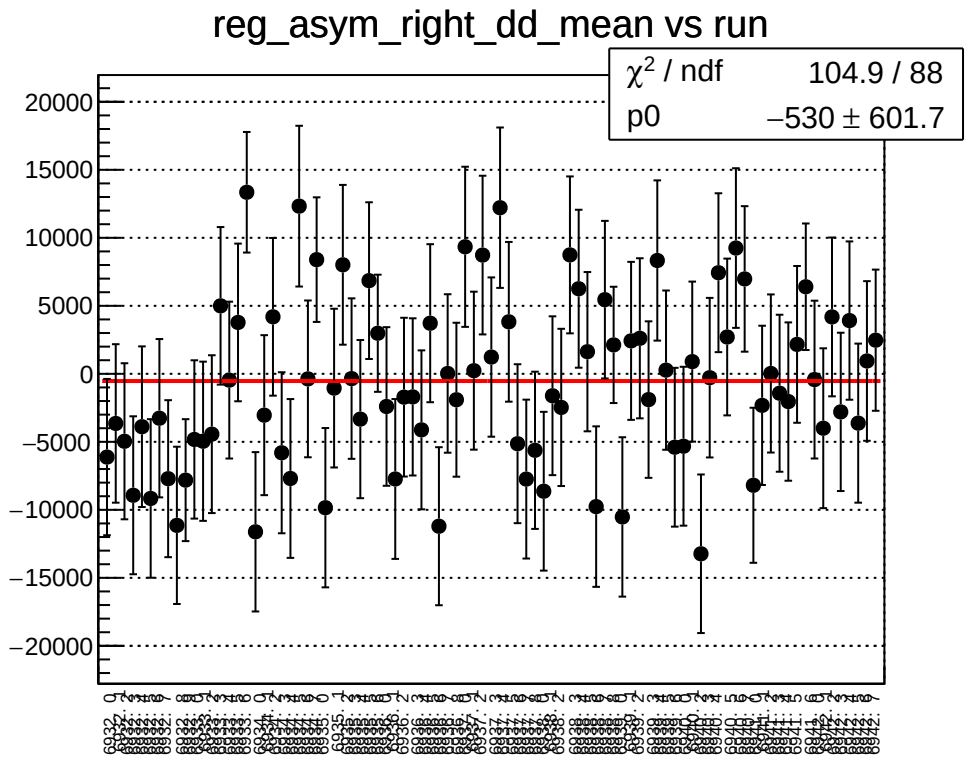

pull1D
Entries 89
Mean −0.002095
Std Dev 0.999
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

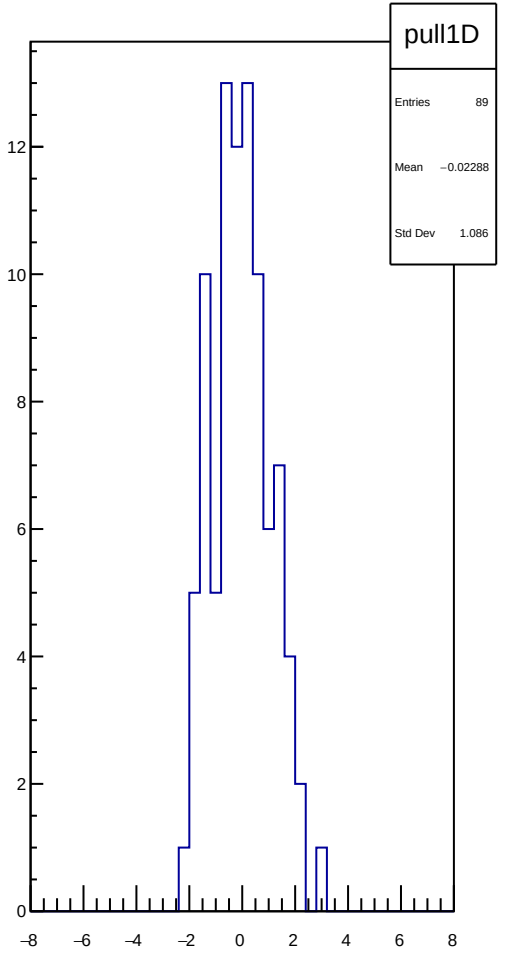

asym_right_avg_correction_rms vs run
χ² / ndf 6948 / 88
p0 849.6 ± 0.6549
1000
950
900
850
800
750

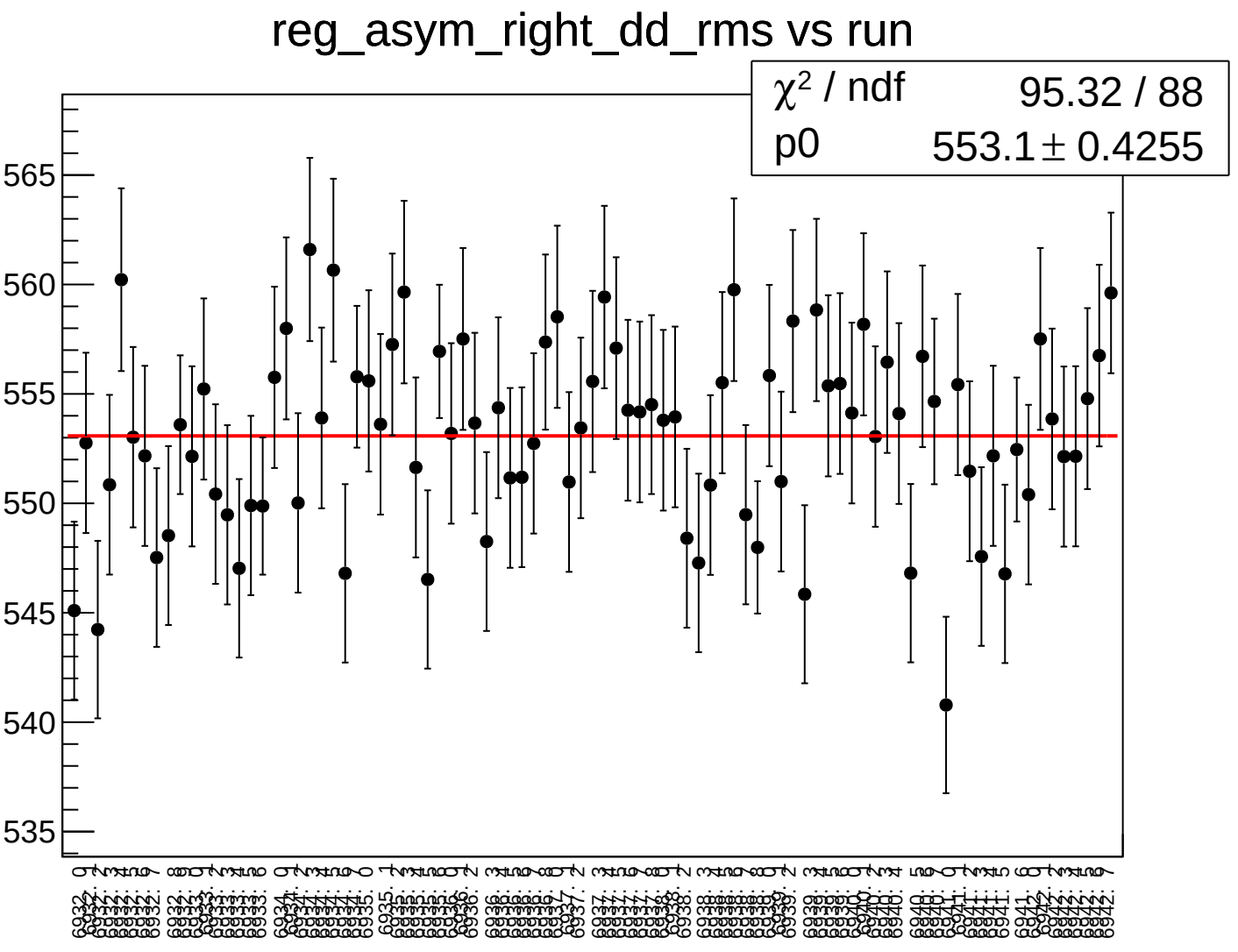

asym_right_avg_mean vs run
χ² / ndf 89.74 / 88
p0 −1248 ± 1106
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −695.7
Std Dev 729.1
2
1
0
−1
−2

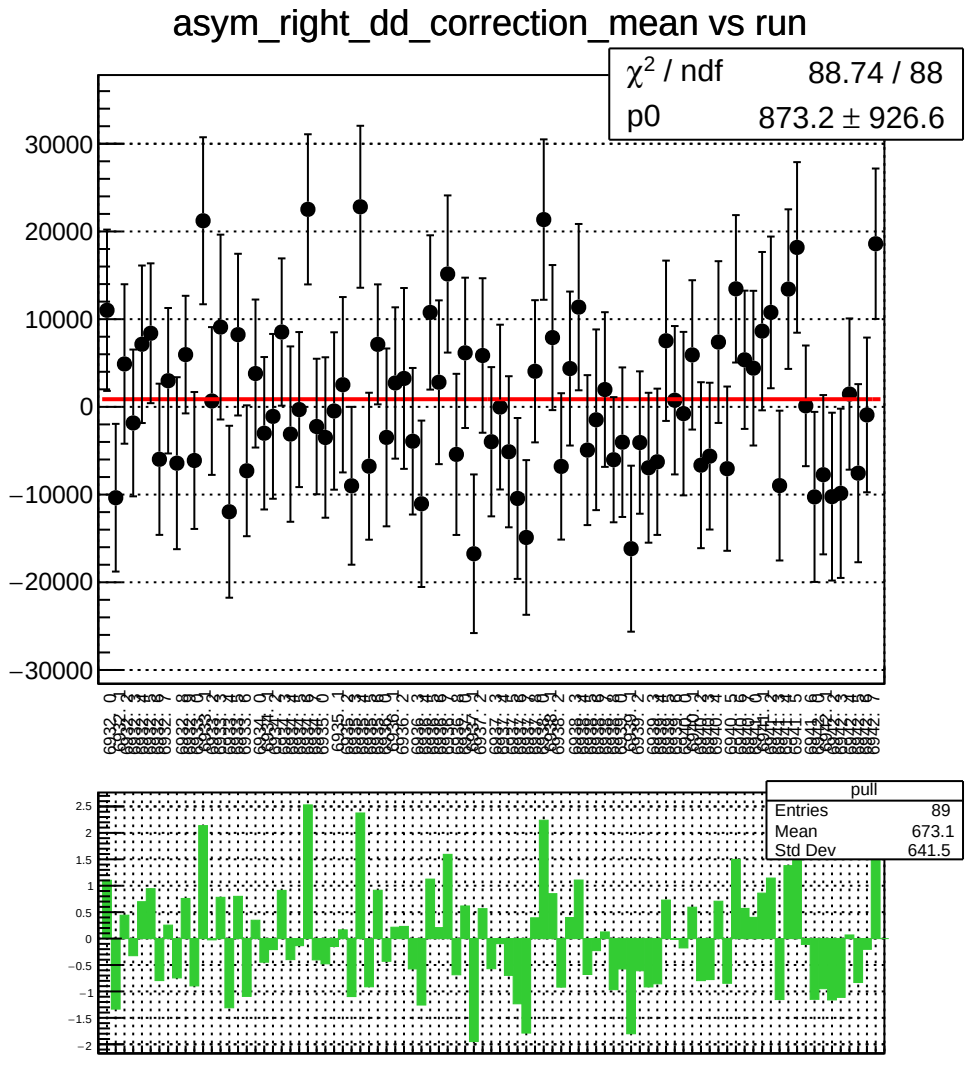

pull1D
Entries 89
Mean −0.006367
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

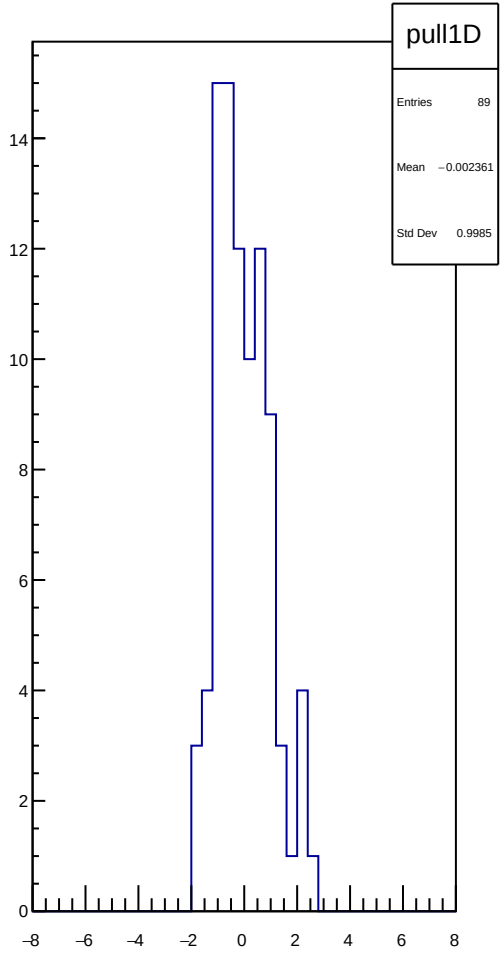

asym_right_avg_rms vs run
χ² / ndf 3484 / 88
p0 1016 ± 0.7821
1150
1100
1050
1000
950
900

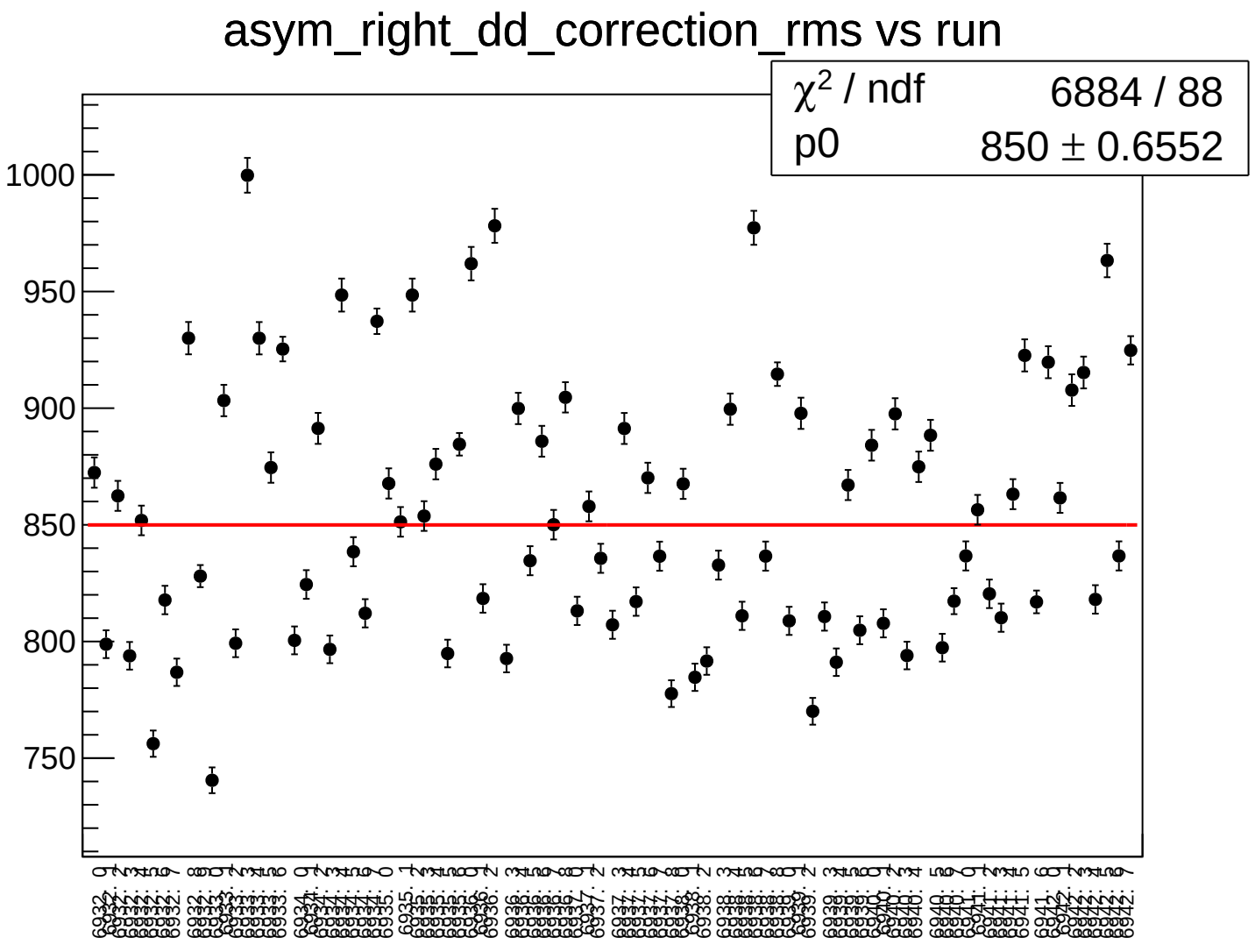

reg_asym_right_dd_mean vs run
χ² / ndf 104.9 / 88
p0 −530 ± 601.7
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 89
Mean −205.8
Std Dev 239.7
3
2
1
0
−1
−2

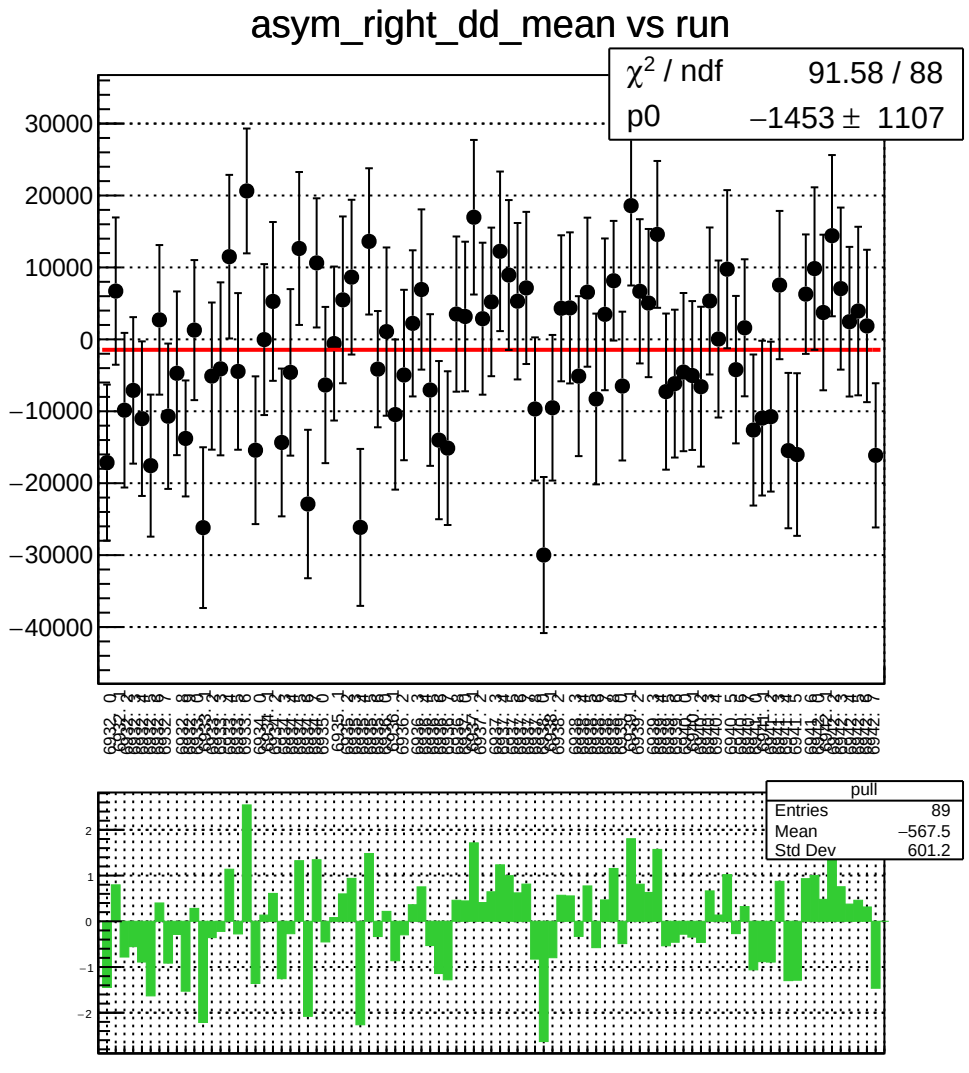

pull1D
Entries 89
Mean −0.02288
Std Dev 1.086
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

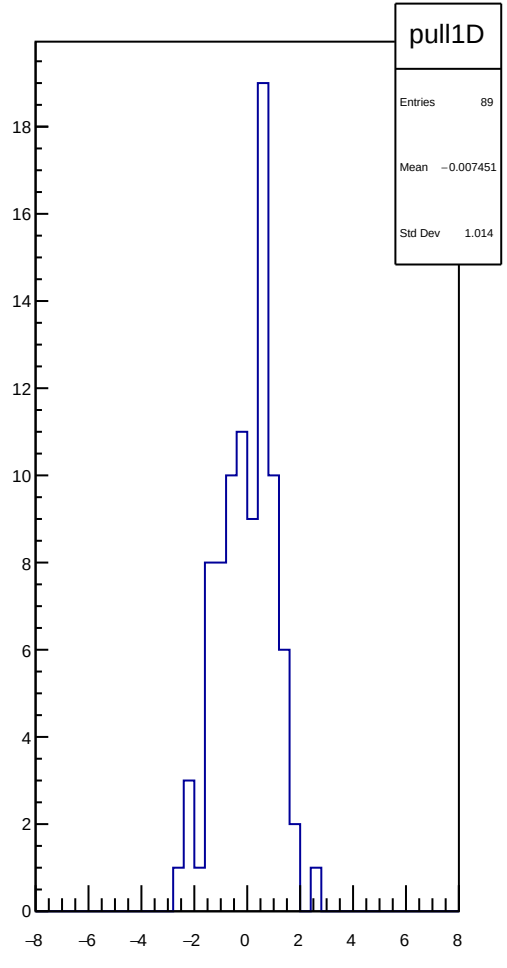

reg_asym_right_dd_rms vs run
χ² / ndf 95.32 / 88
p0 553.1 ± 0.4255
565
560
555
550
545
540
535

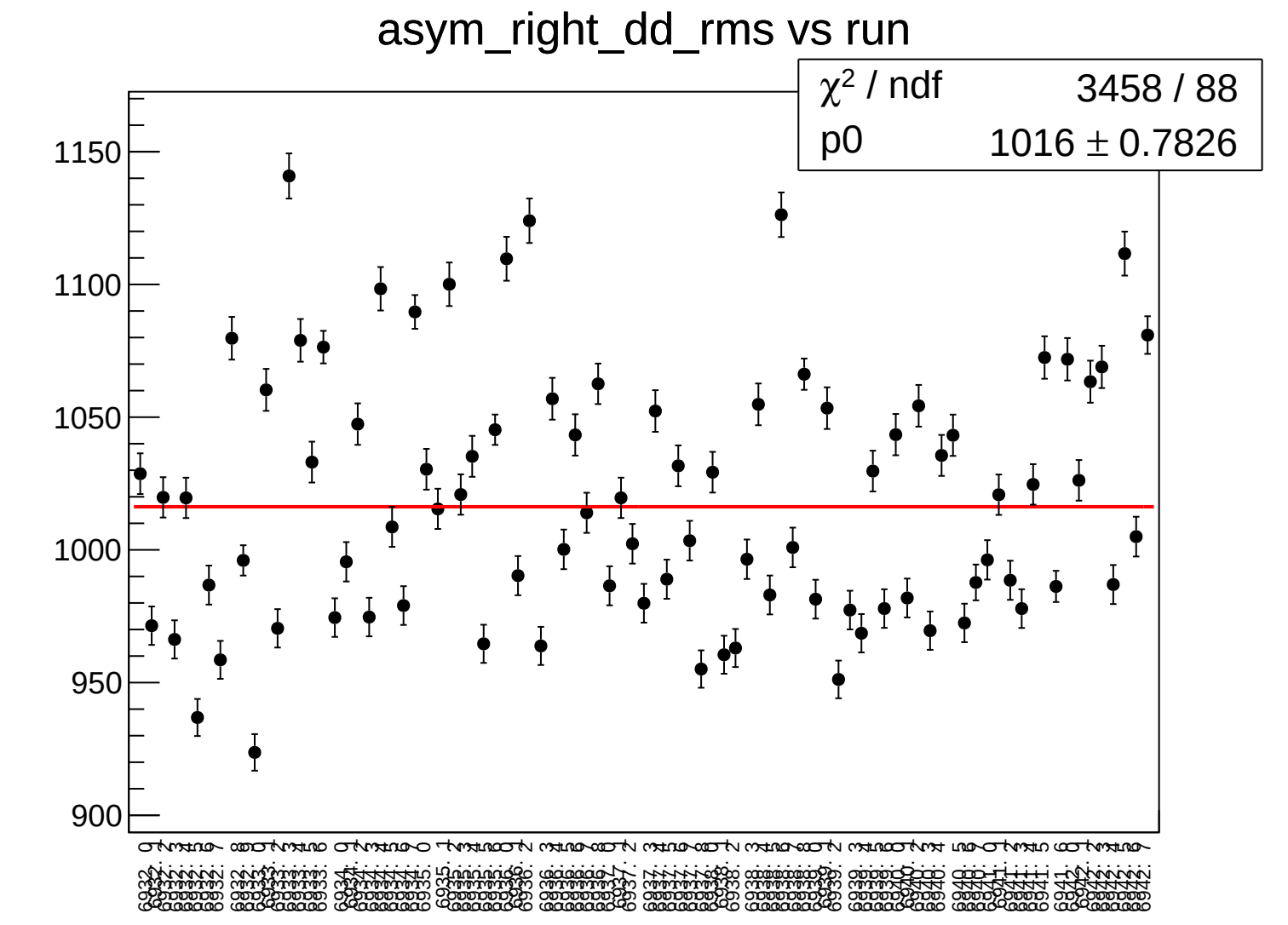

asym_right_dd_correction_mean vs run
χ² / ndf 88.74 / 88
p0 873.2 ± 926.6
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 673.1
Std Dev 641.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

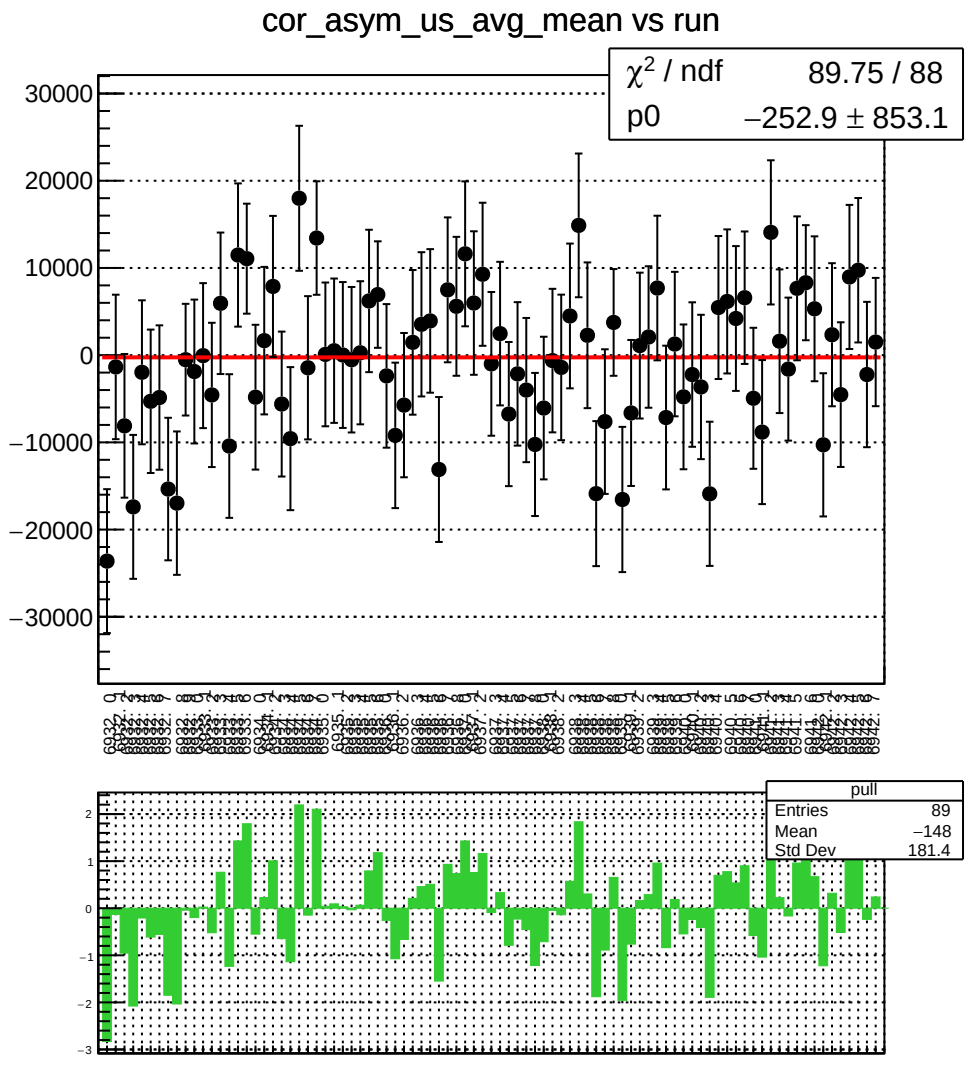

pull1D
Entries 89
Mean −0.002361
Std Dev 0.9985
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

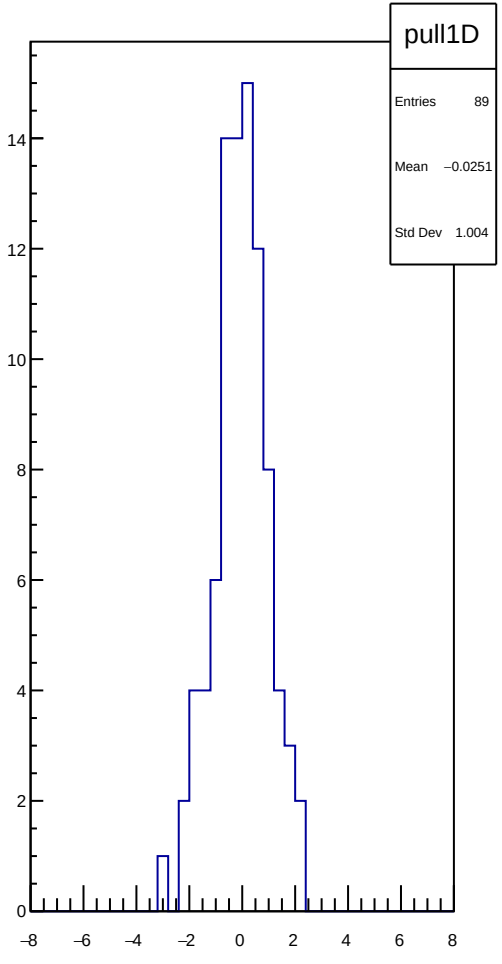

asym_right_dd_correction_rms vs run
χ² / ndf 6884 / 88
p0 850 ± 0.6552
1000
950
900
850
800
750

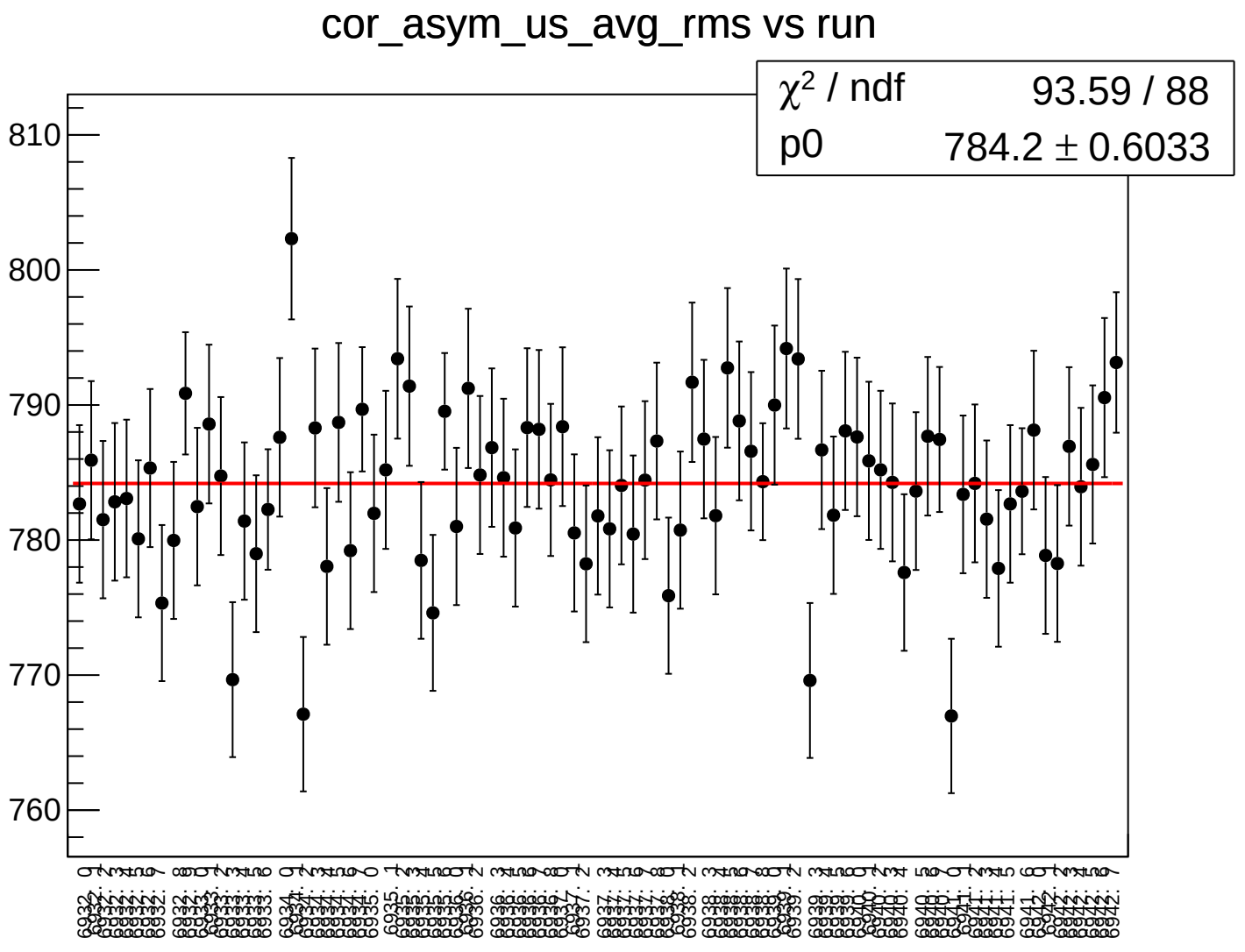

asym_right_dd_mean vs run
χ^2 / ndf 91.58 / 88
p0 −1453 ± 1107
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −567.5
Std Dev 601.2
2
1
0
−1
−2

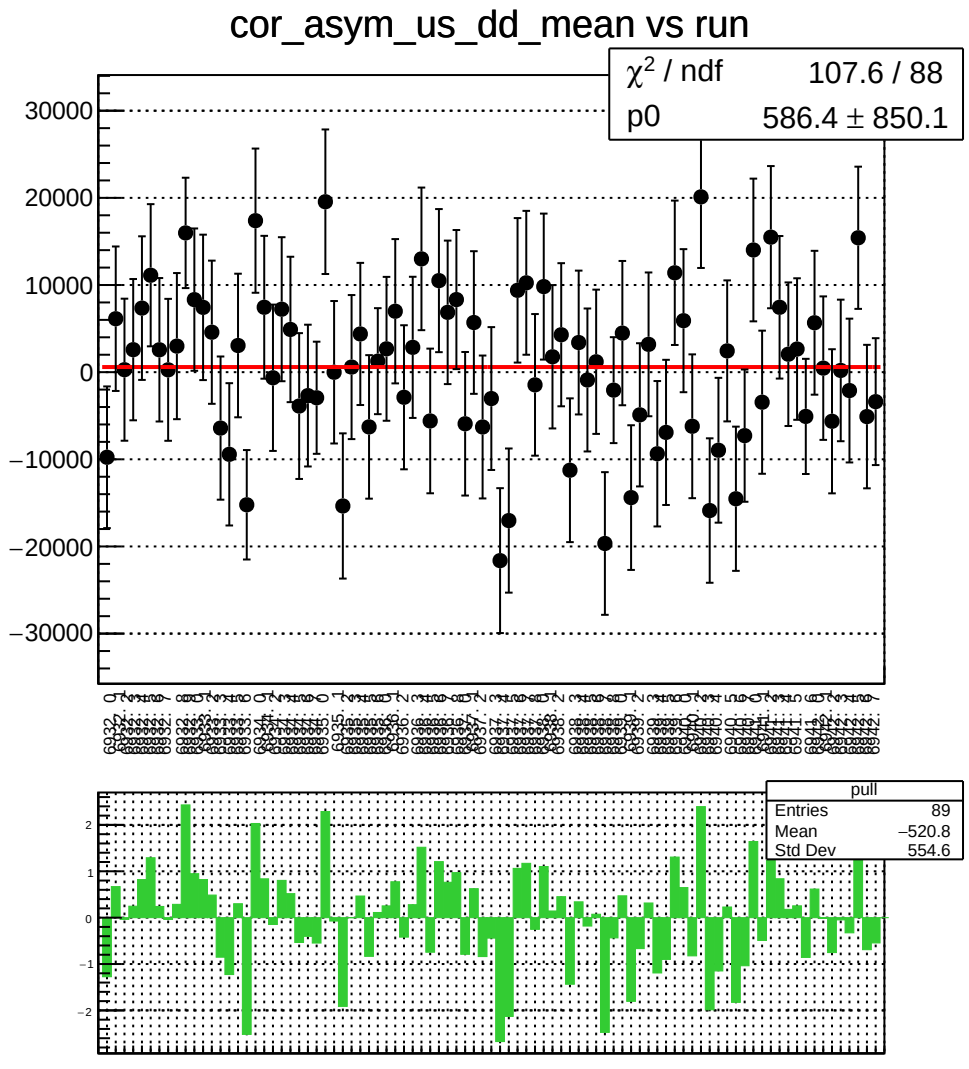

pull1D
Entries 89
Mean −0.007451
Std Dev 1.014
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

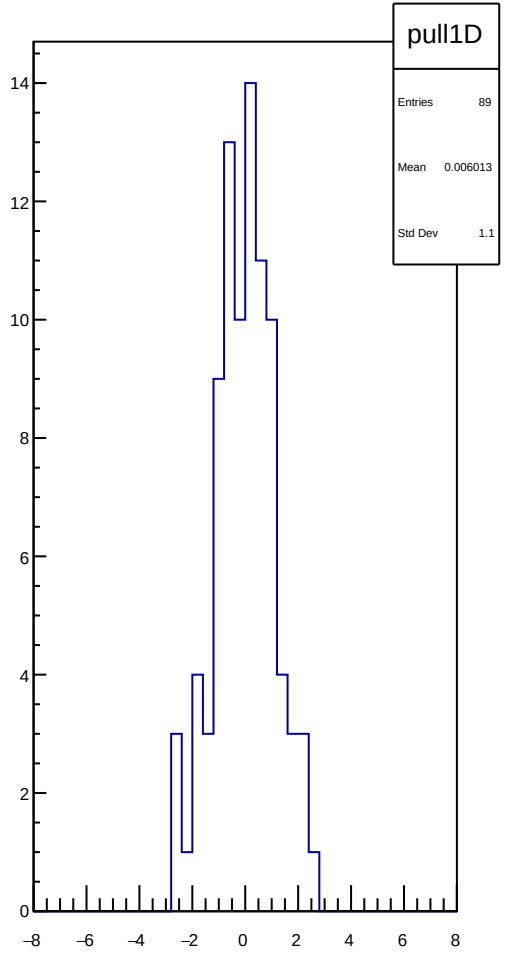

asym_right_dd_rms vs run
χ^2 / ndf 3458 / 88
p0 1016 ± 0.7826
1150
1100
1050
1000
950
900

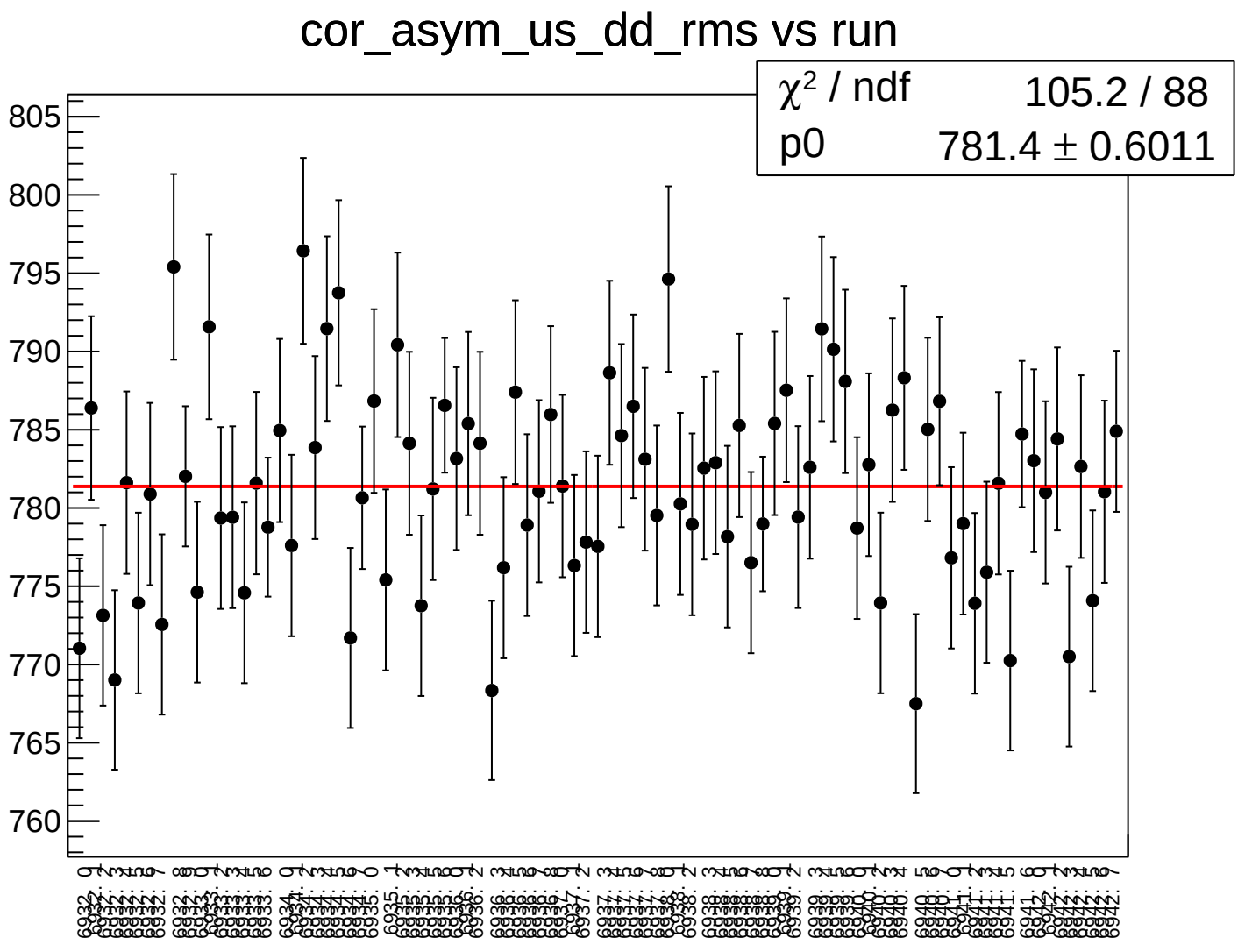

cor_asym_us_avg_mean vs run
χ² / ndf 89.75 / 88
p0 −252.9 ± 853.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −148
Std Dev 181.4
2
1
0
−1
−2
−3

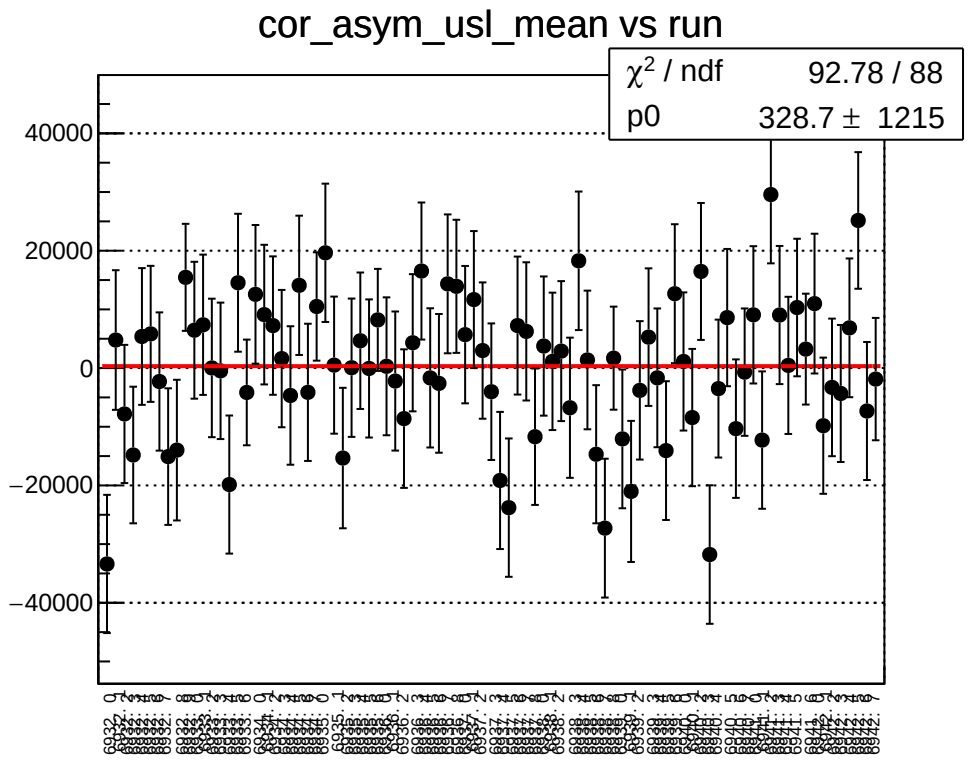

pull1D
Entries 89
Mean −0.0251
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

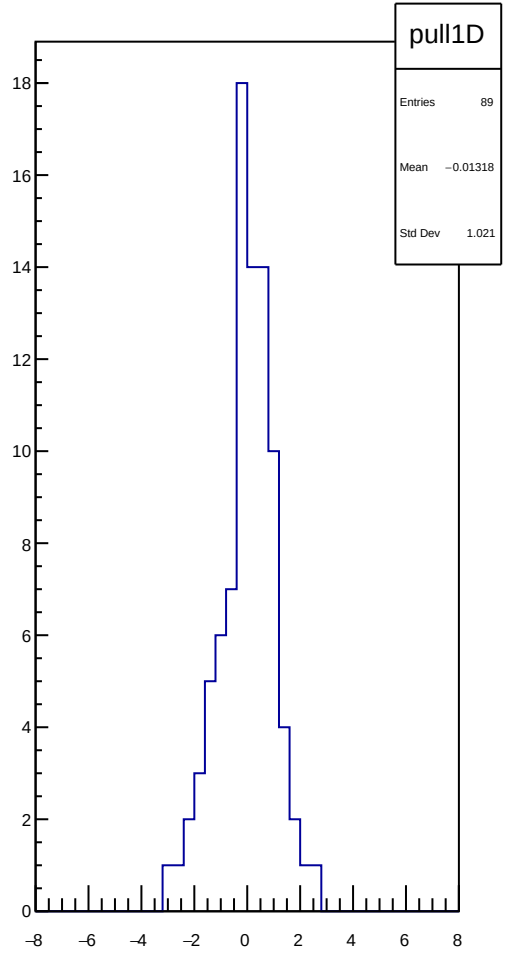

cor_asym_us_avg_rms vs run
χ² / ndf 93.59 / 88
p0 784.2 ± 0.6033
810
800
790
780
770
760

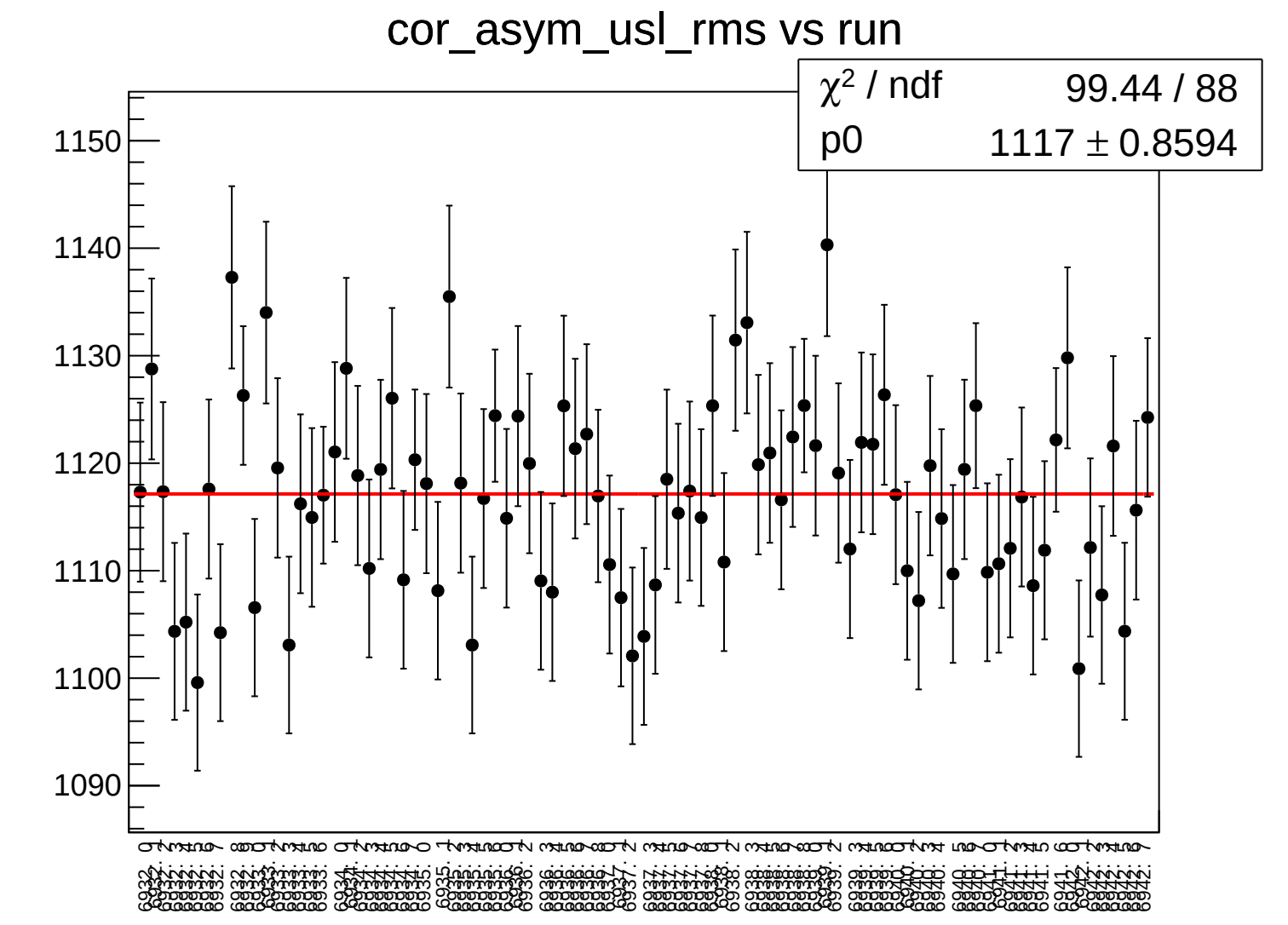

cor_asym_us_dd_mean vs run
χ² / ndf 107.6 / 88
p0 586.4 ± 850.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −520.8
Std Dev 554.6
2
1
0
−1
−2

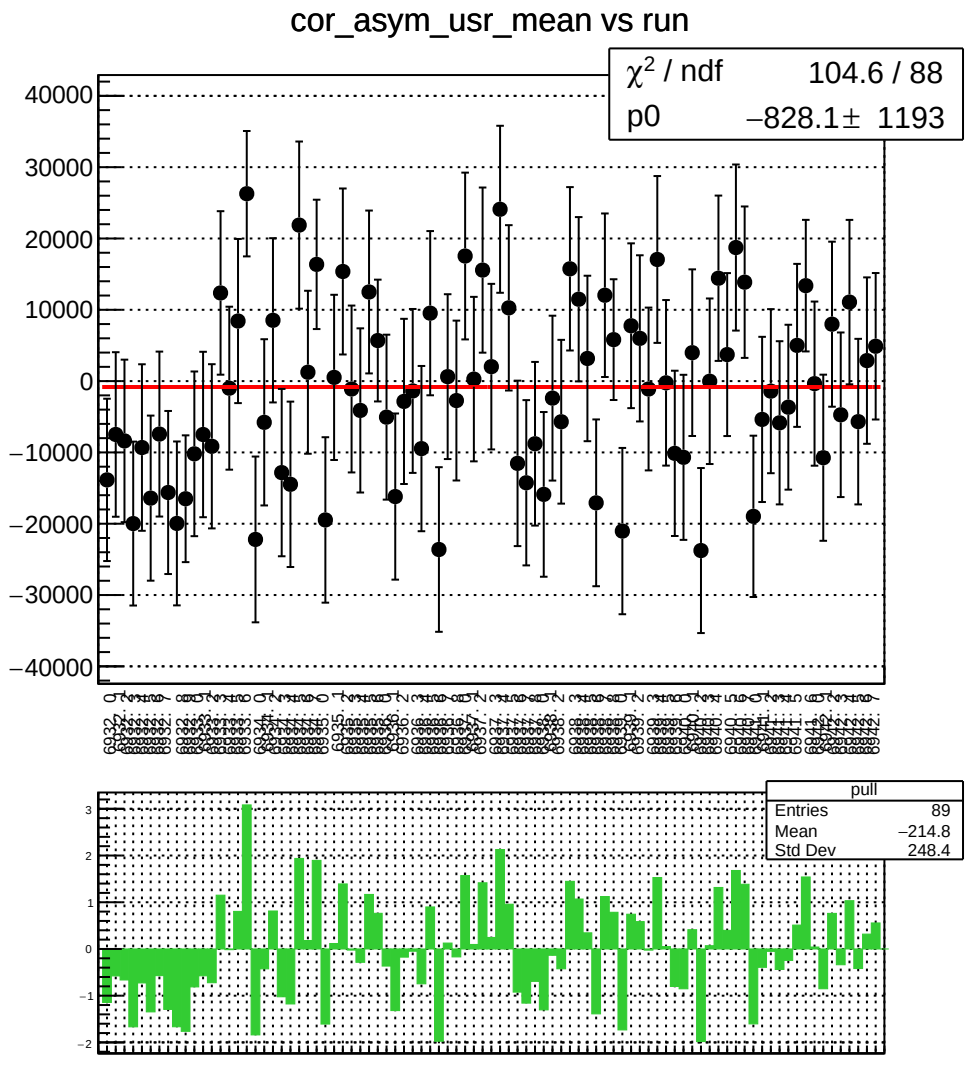

pull1D
Entries 89
Mean 0.006013
Std Dev 1.1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

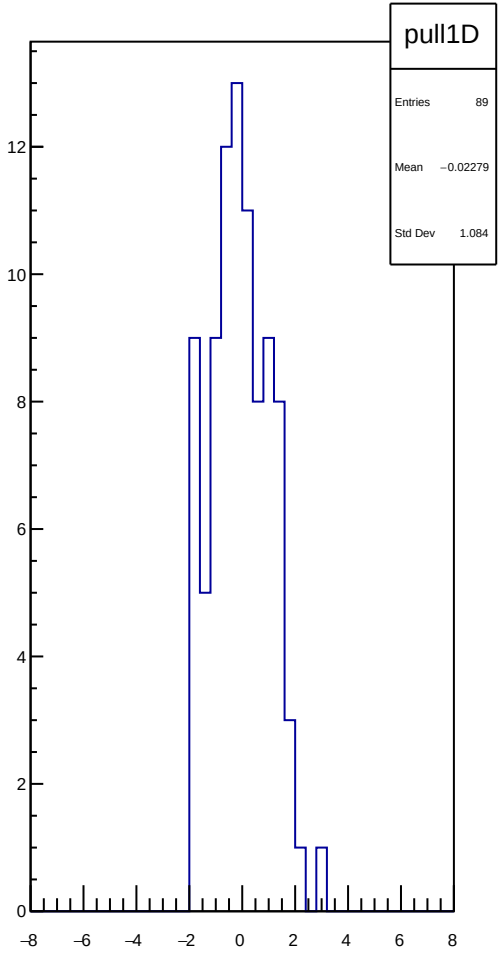

cor_asym_us_dd_rms vs run
χ² / ndf 105.2 / 88
p0 781.4 ± 0.6011
805
800
795
790
785
780
775
770
765
760

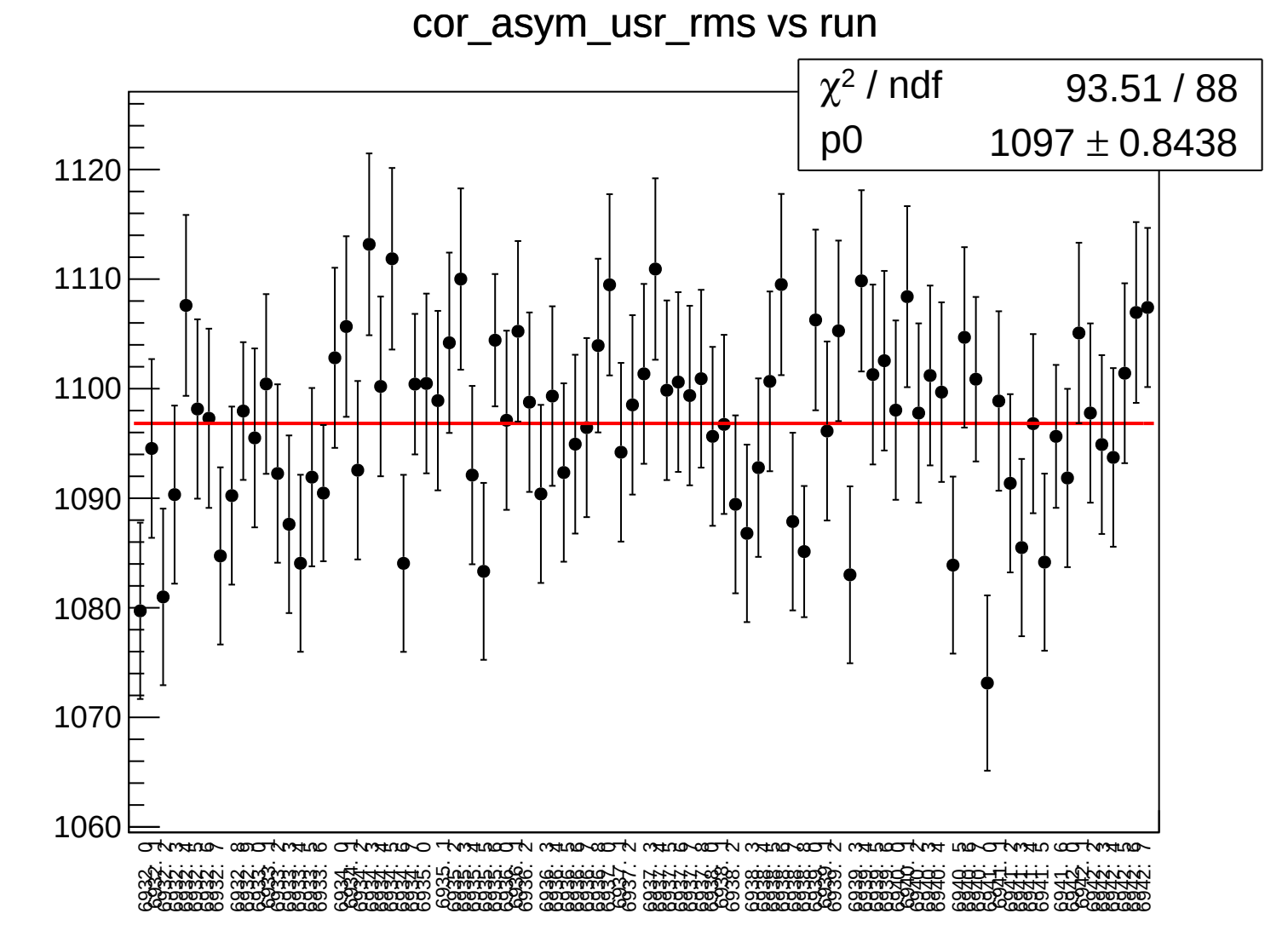

cor_asym_usl_mean vs run
χ² / ndf 92.78 / 88
p0 328.7 ± 1215
40000
20000
0
−20000
−40000
pull
Entries 89
Mean −30.88
Std Dev 63.06
2
1
0
−1
−2
−3

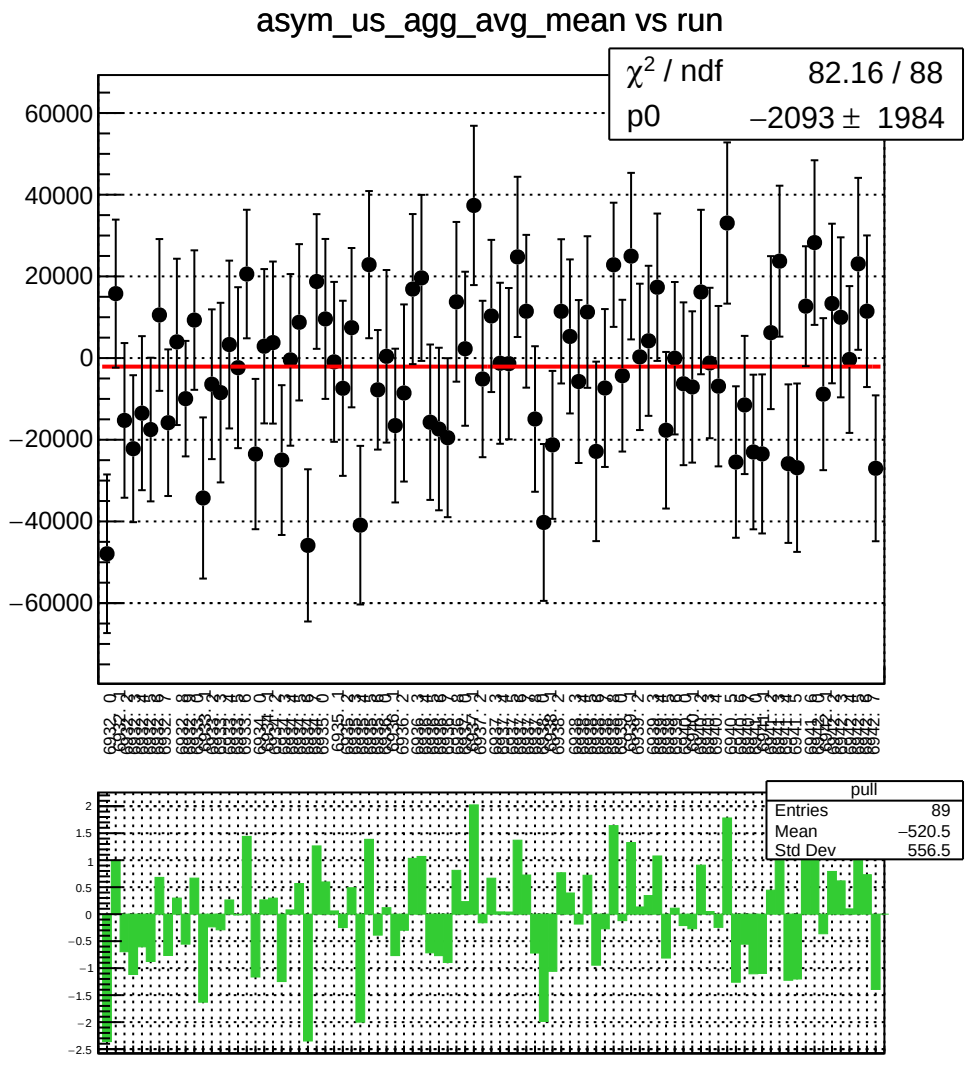

pull1D
Entries 89
Mean −0.01318
Std Dev 1.021
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

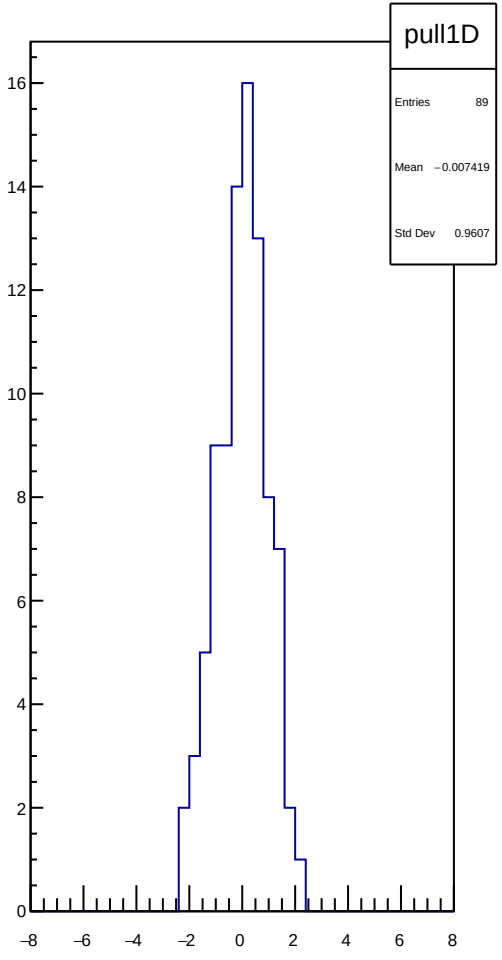

cor_asym_usl_rms vs run
χ² / ndf 99.44 / 88
p0 1117 ± 0.8594
1150
1140
1130
1120
1110
1100
1090

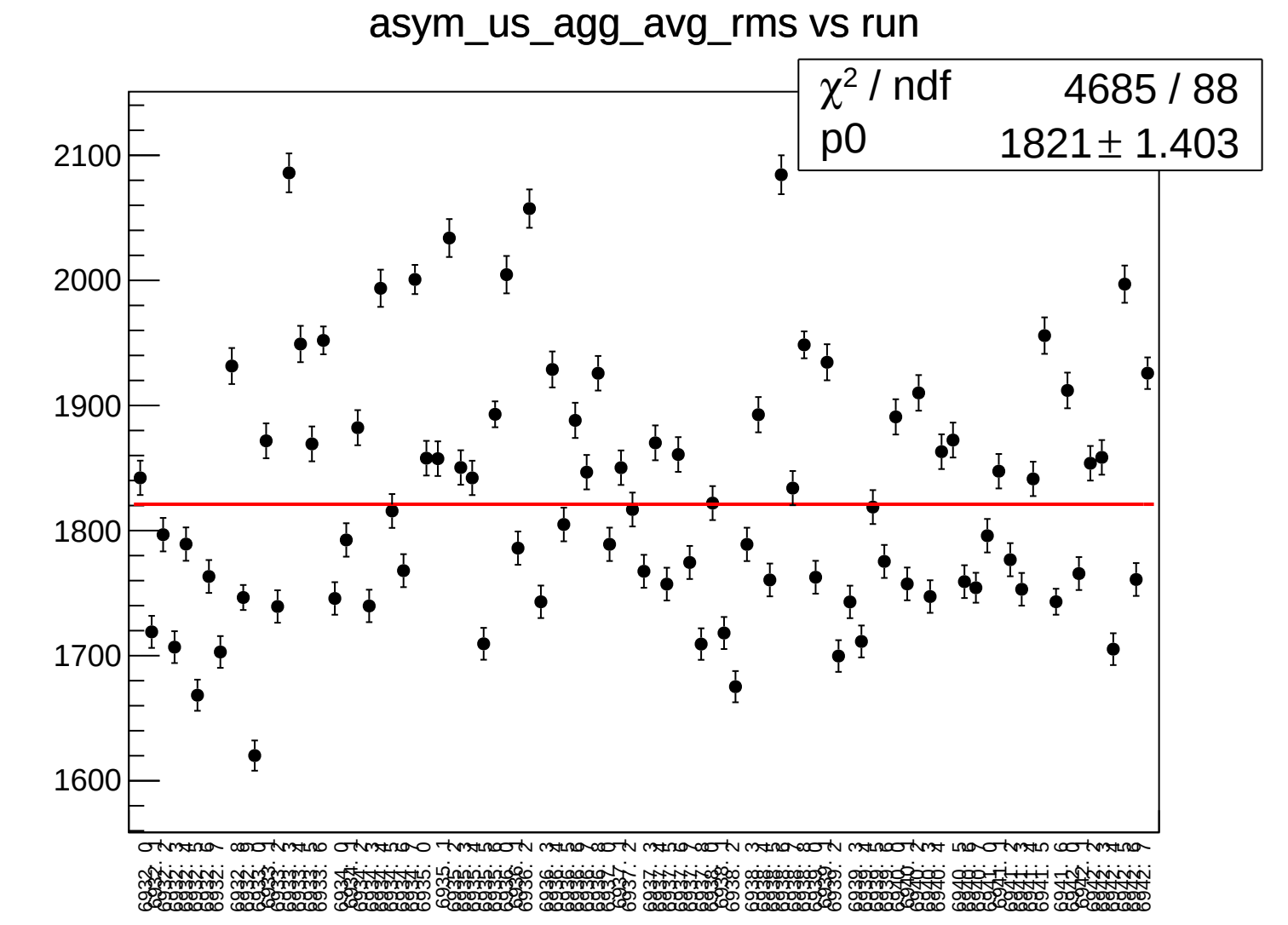

cor_asym_usr_mean vs run
χ² / ndf 104.6 / 88
p0 −828.1± 1193
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −214.8
Std Dev 248.4
3
2
1
0
−1
−2

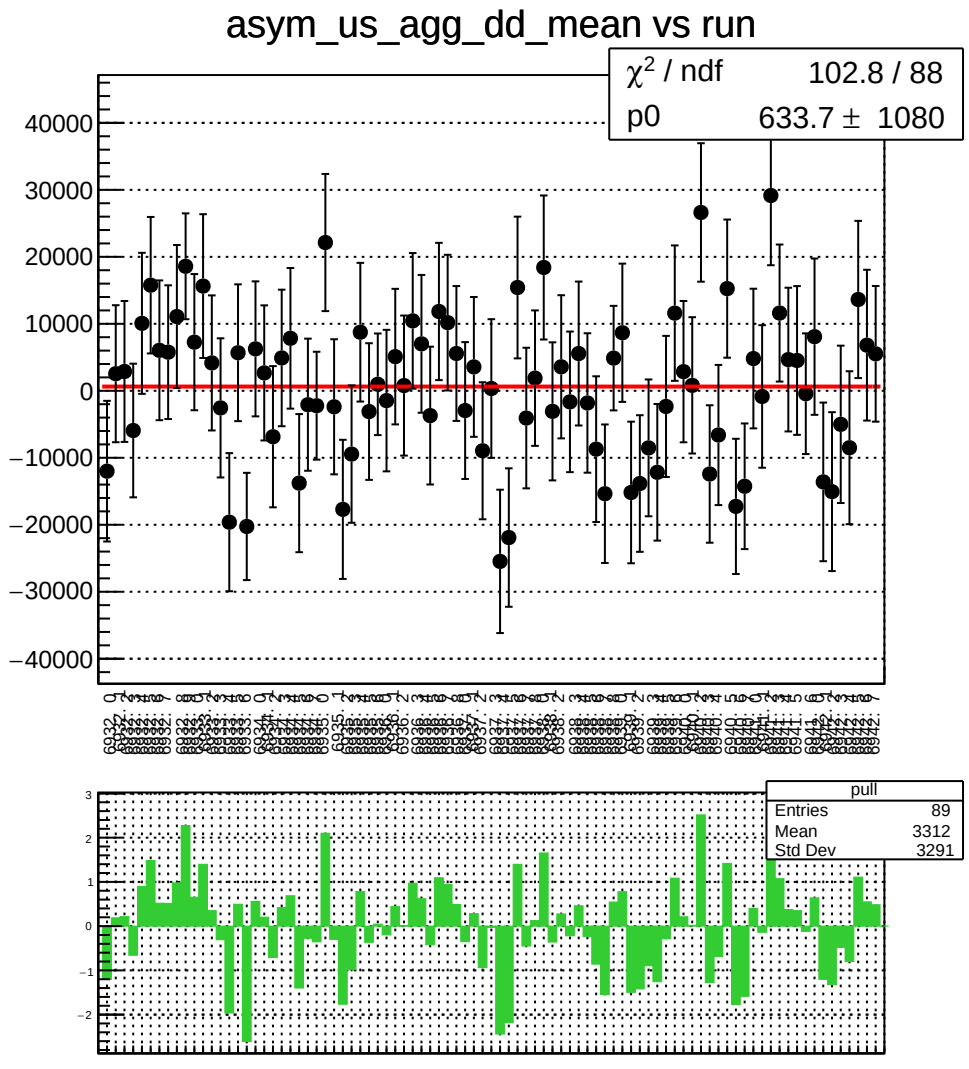

pull1D
Entries 89
Mean −0.02279
Std Dev 1.084
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

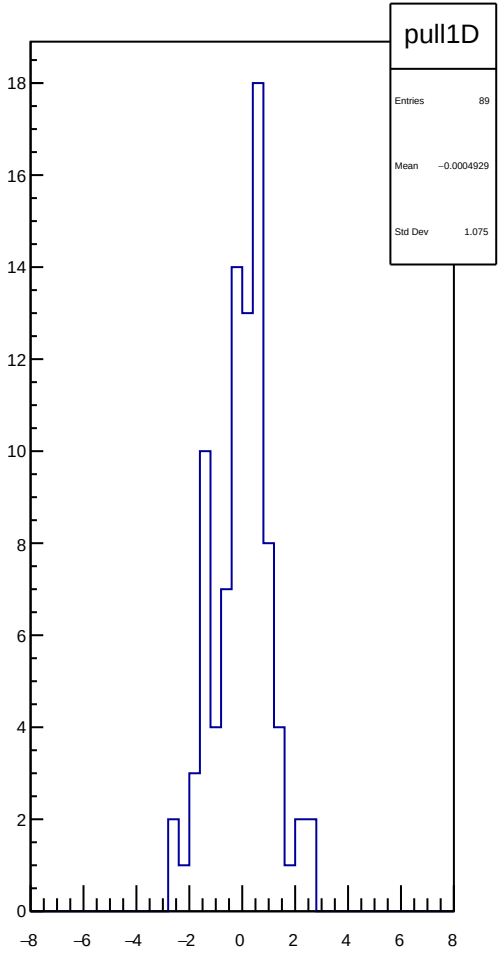

cor_asym_usr_rms vs run
χ² / ndf 93.51 / 88
p0 1097 ± 0.8438
1120
1110
1100
1090
1080
1070
1060

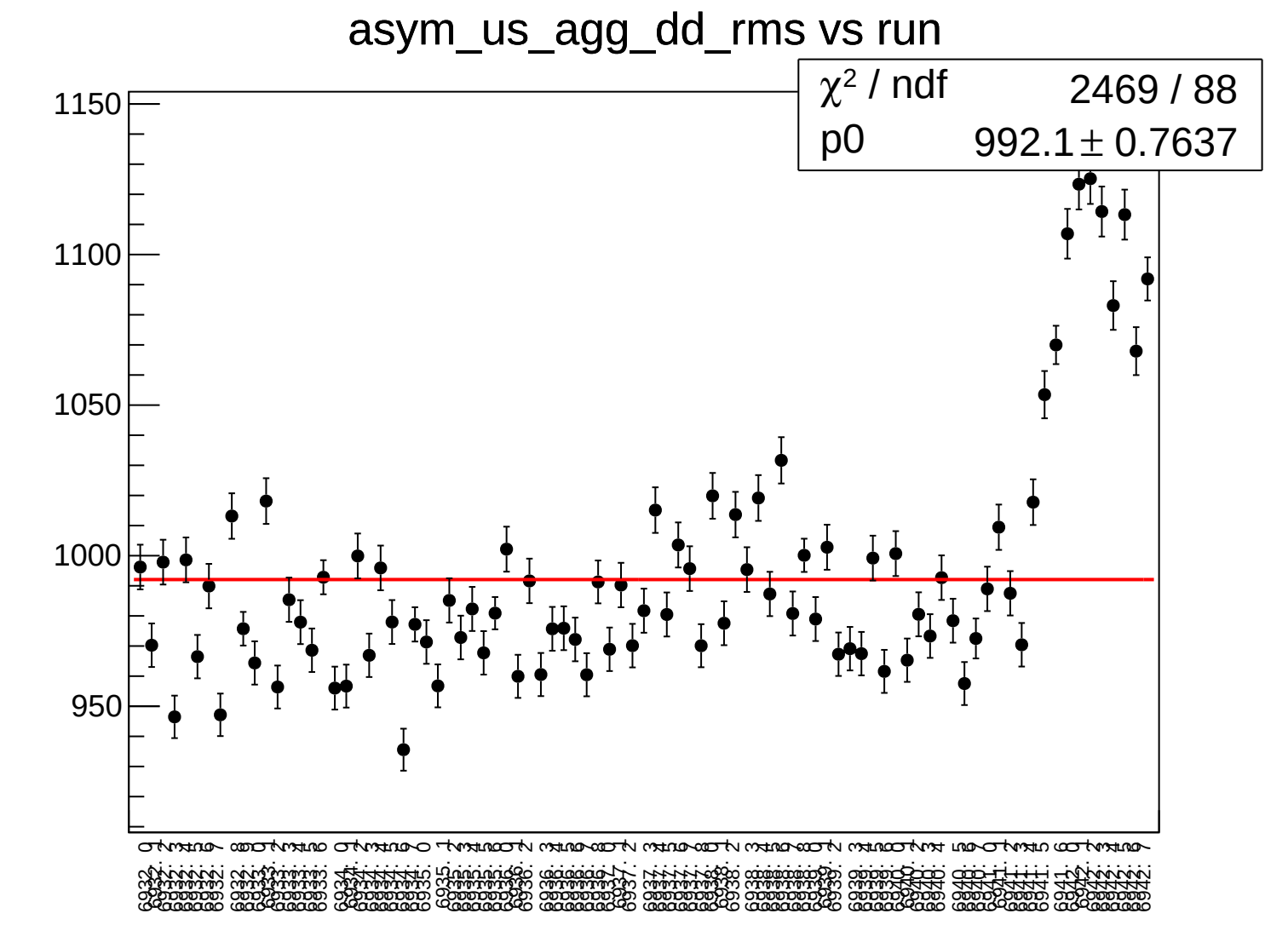

asym_us_agg_avg_mean vs run
χ² / ndf 82.16 / 88
p0 −2093 ± 1984
pull
Entries 89
Mean −520.5
Std Dev 556.5

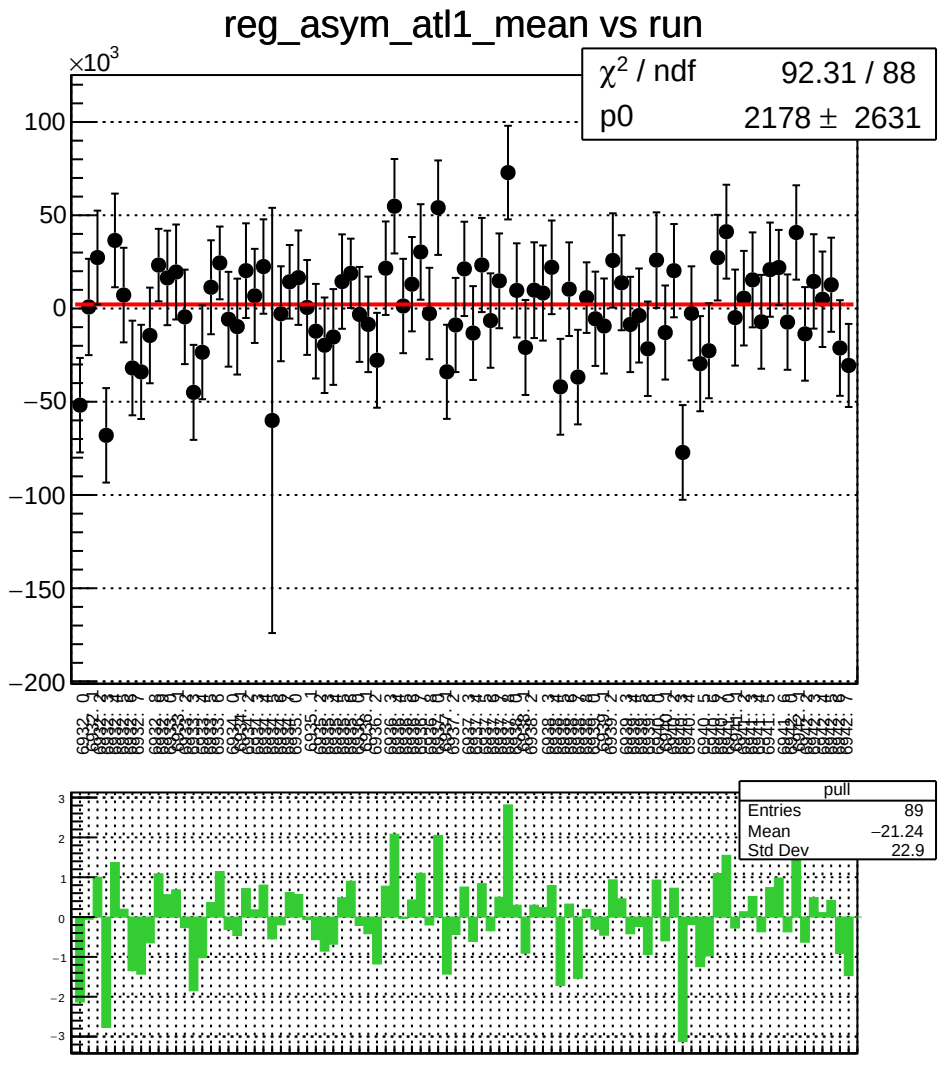

pull1D
Entries 89
Mean −0.007419
Std Dev 0.9607

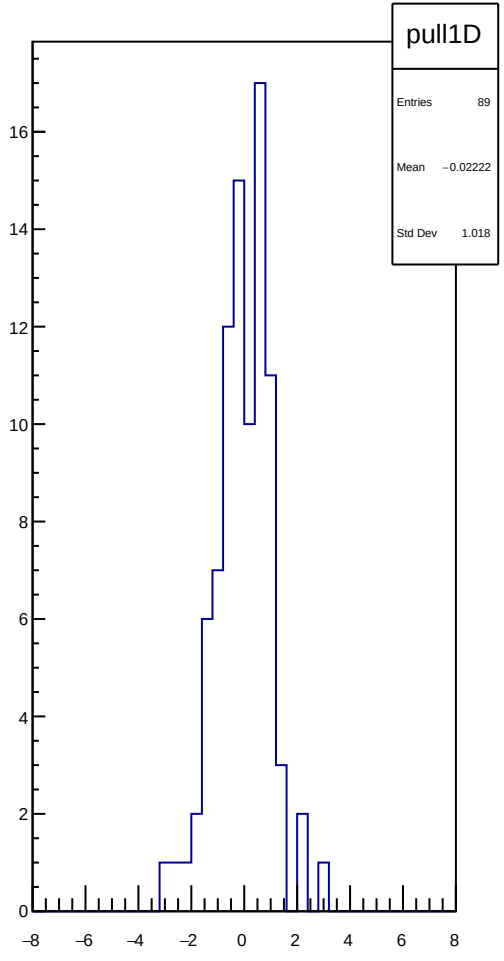

asym_us_agg_avg_rms vs run
χ^2 / ndf 4685 / 88
p0 1821 ± 1.403
2100
2000
1900
1800
1700
1600

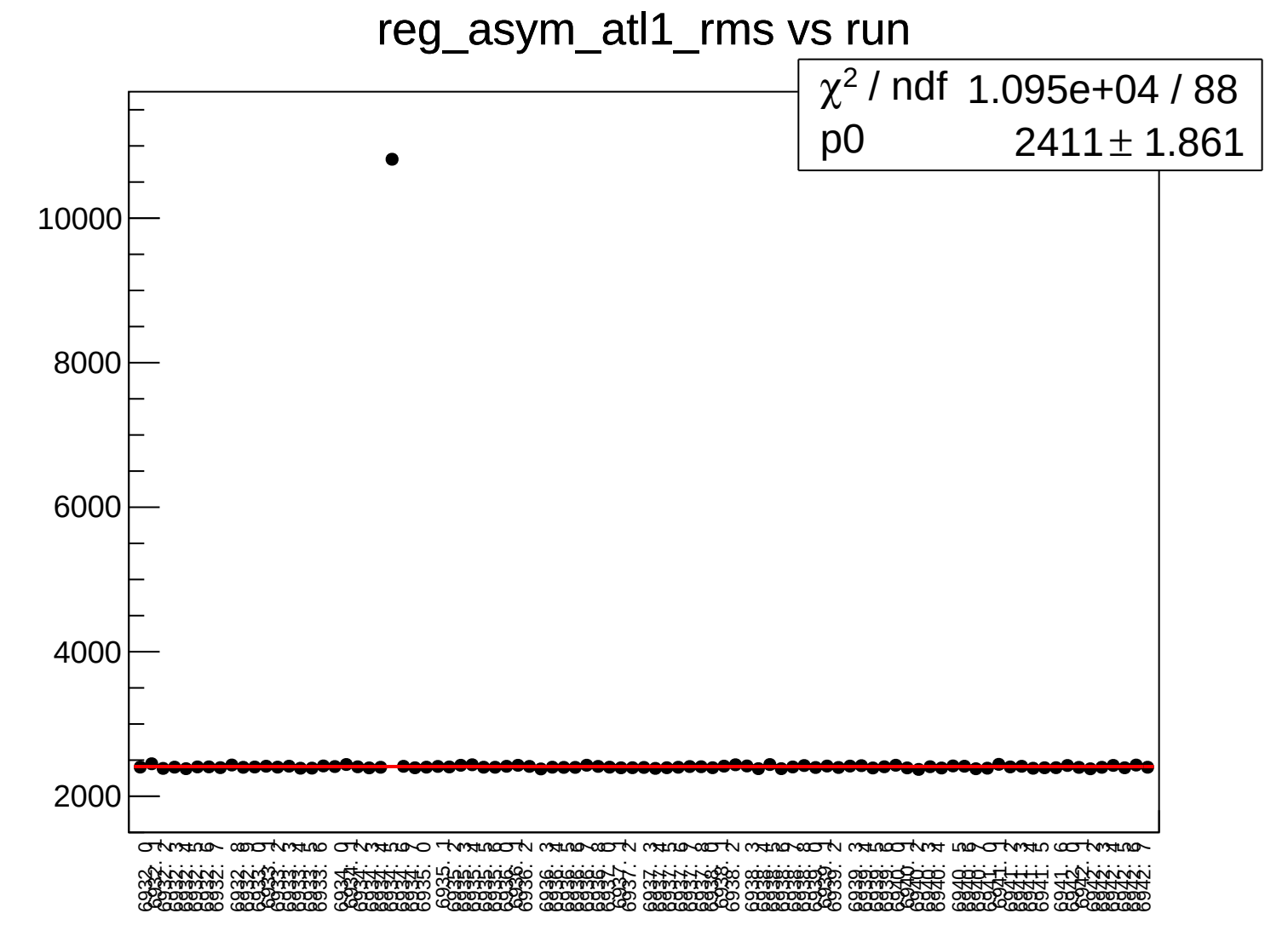

asym_us_agg_dd_mean vs run
χ² / ndf 102.8 / 88
p0 633.7 ± 1080
pull
Entries 89
Mean 3312
Std Dev 3291

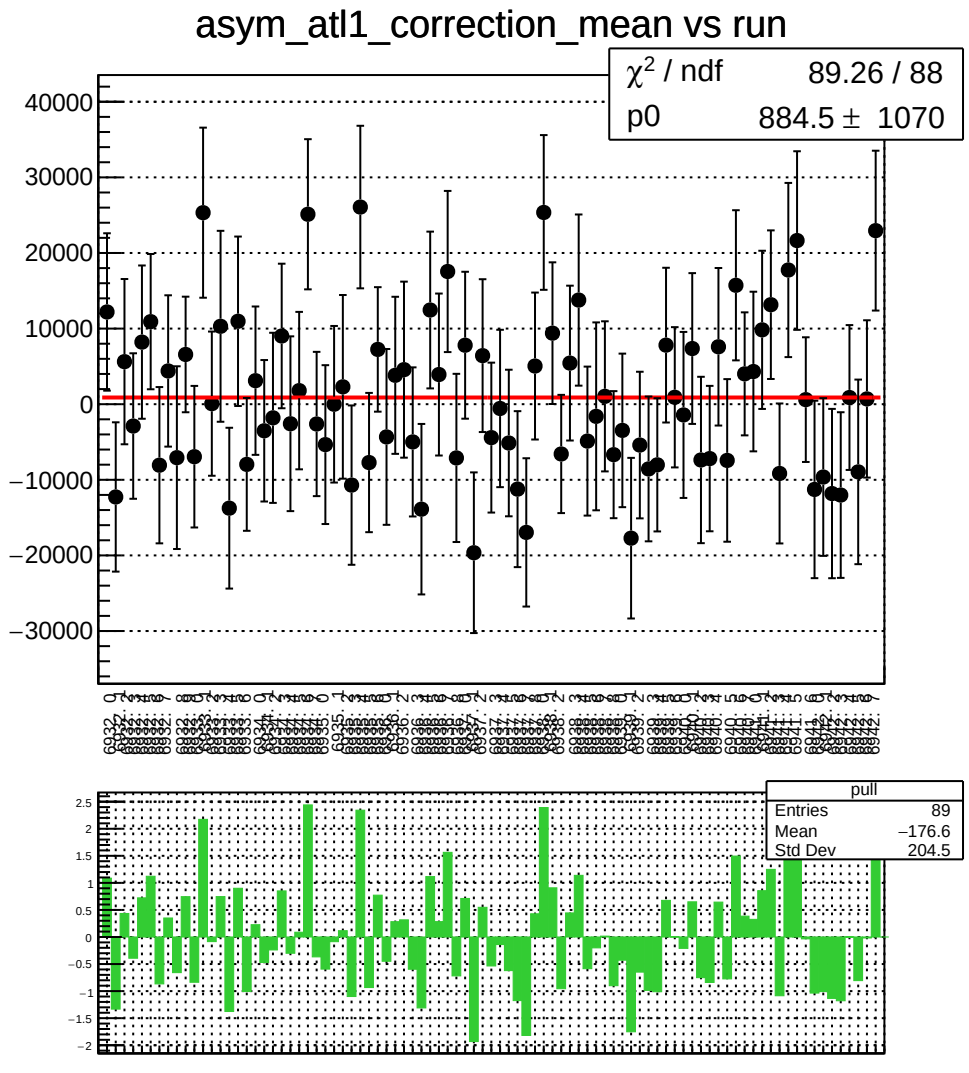

pull1D
Entries 89
Mean −0.0004929
Std Dev 1.075

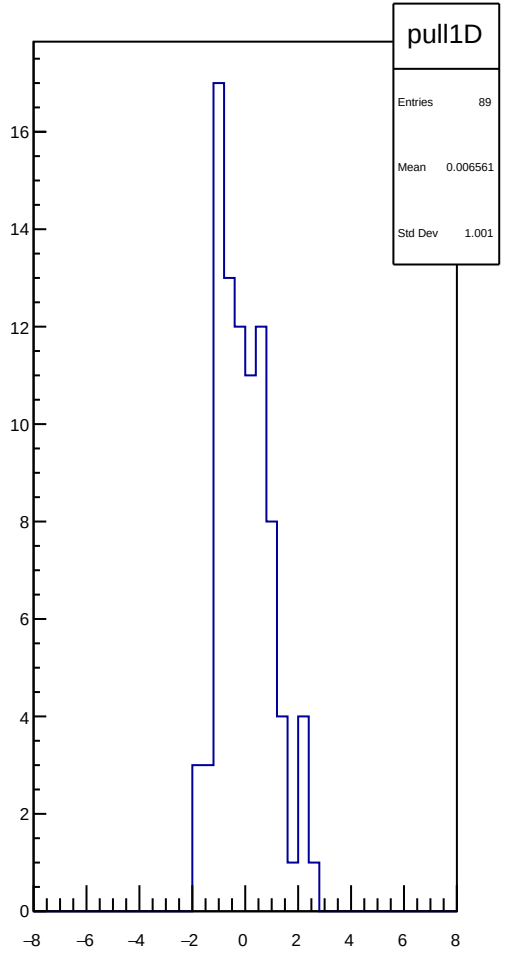

asym_us_agg_dd_rms vs run
χ² / ndf 2469 / 88
p0 992.1 ± 0.7637
1150
1100
1050
1000
950

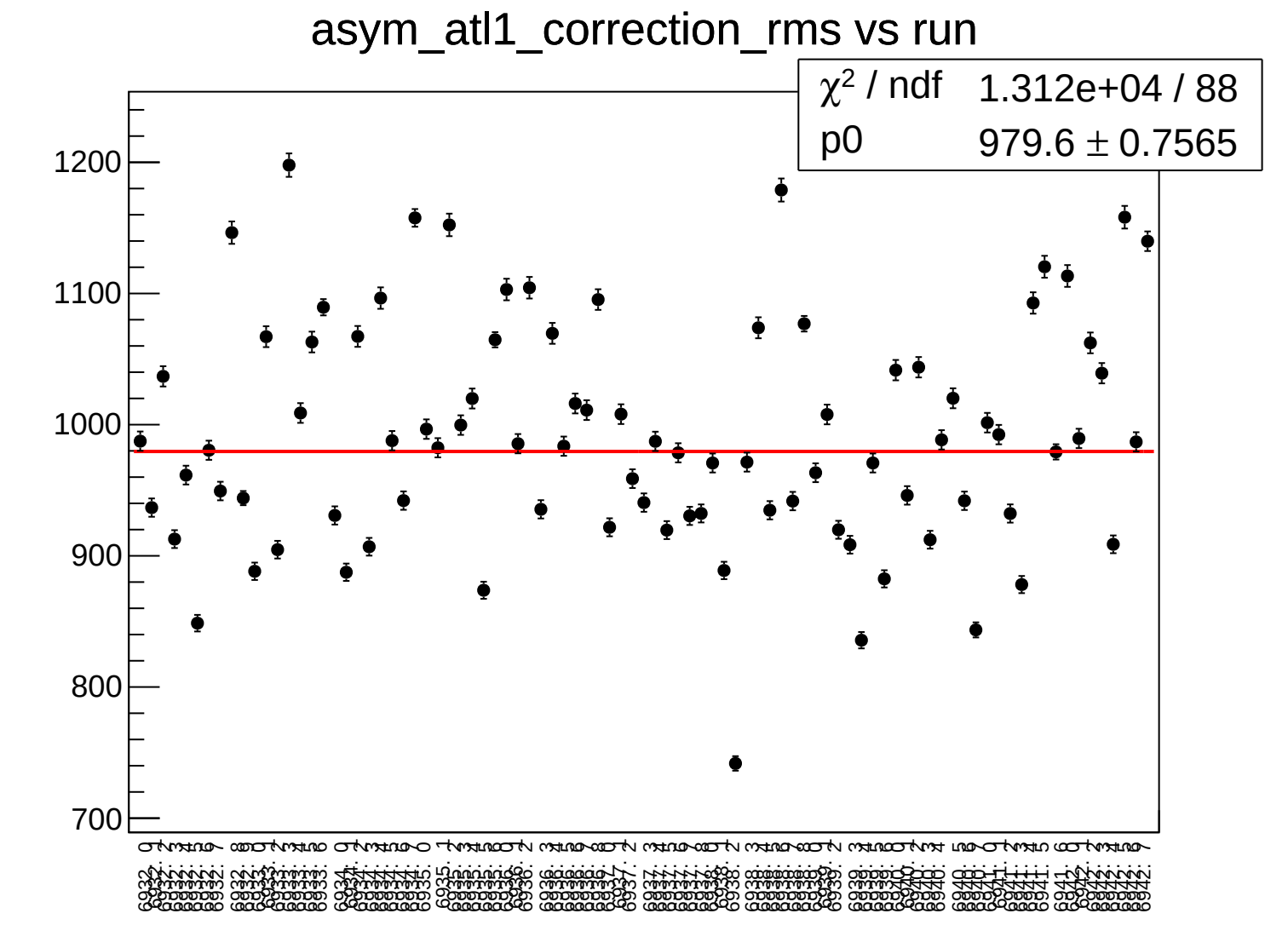

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 92.31 / 88
p0 2178 ± 2631
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean −21.24
Std Dev 22.9
3
2
1
0
−1
−2
−3

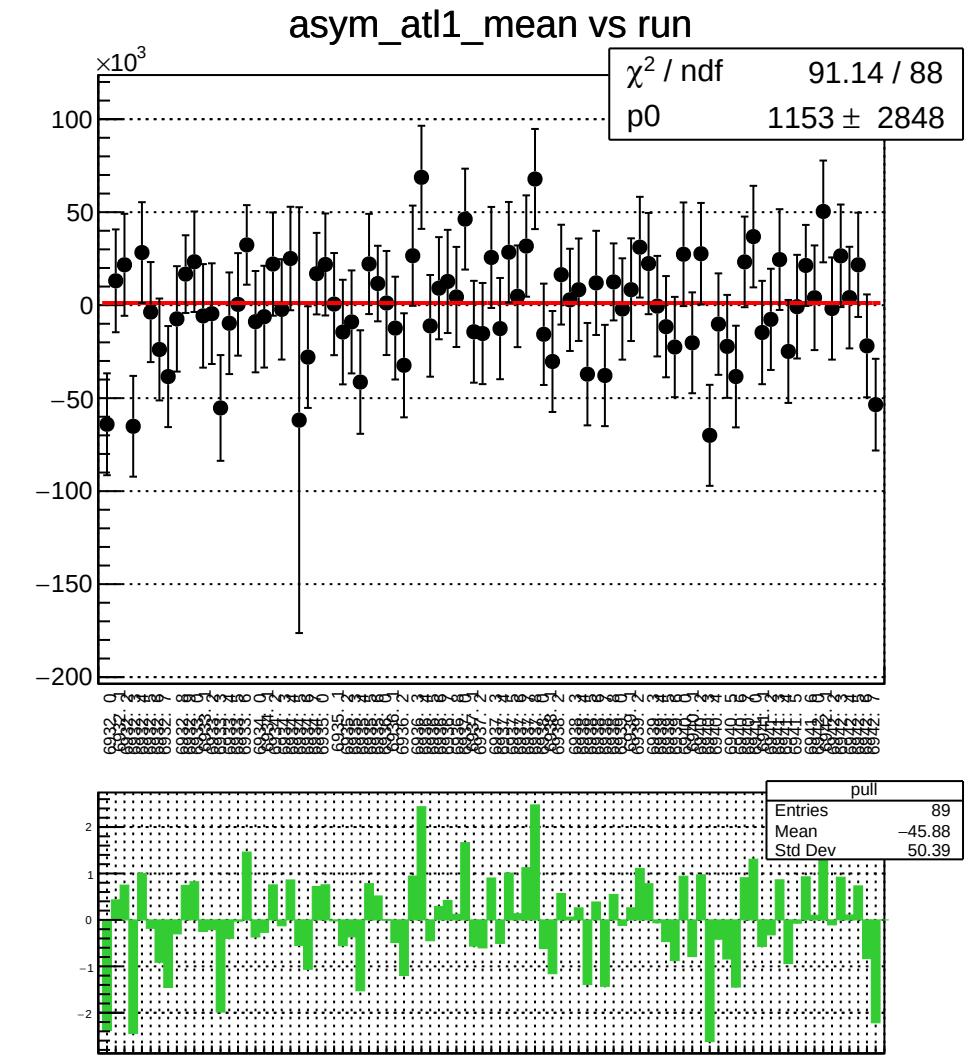

pull1D
Entries 89
Mean −0.02222
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

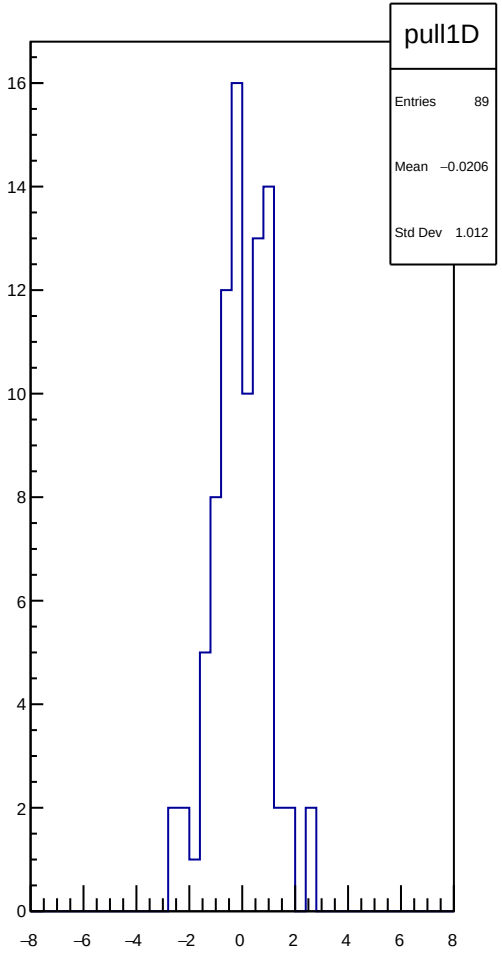

reg_asym_atl1_rms vs run
χ² / ndf 1.095e+04 / 88
p0 2411 ± 1.861
10000
8000
6000
4000
2000

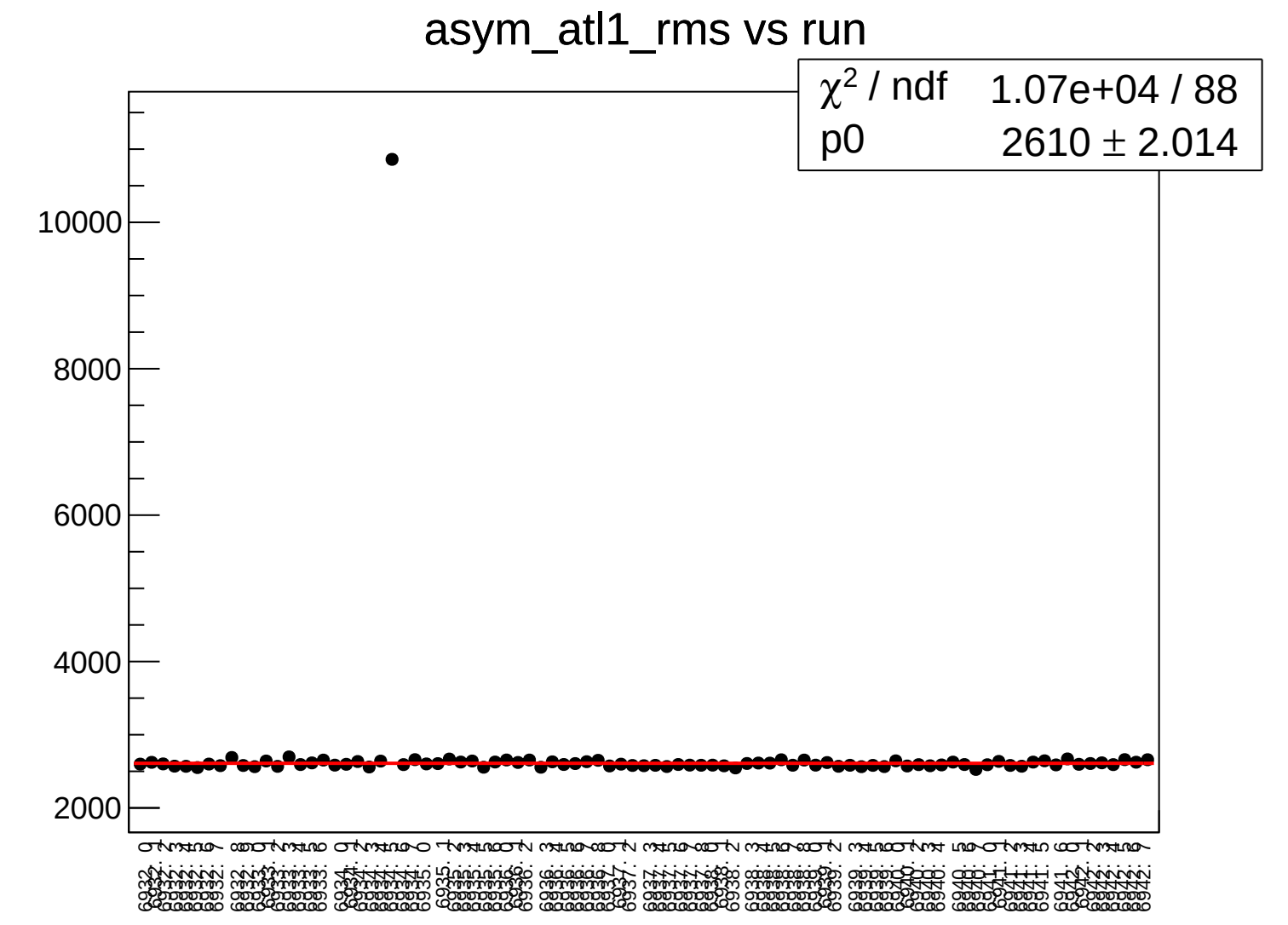

asym_atl1_correction_mean vs run
χ² / ndf 89.26 / 88
p0 884.5 ± 1070
pull
Entries 89
Mean −176.6
Std Dev 204.5

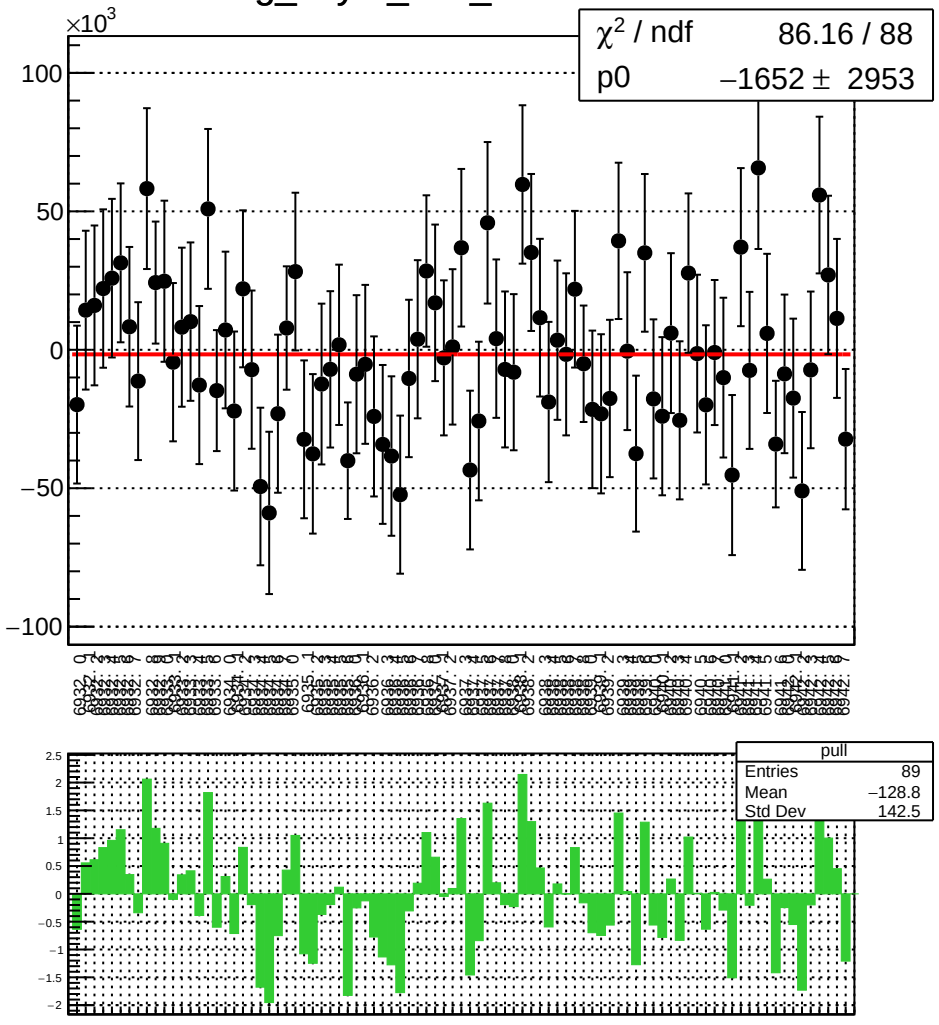

pull1D
Entries 89
Mean 0.006561
Std Dev 1.001

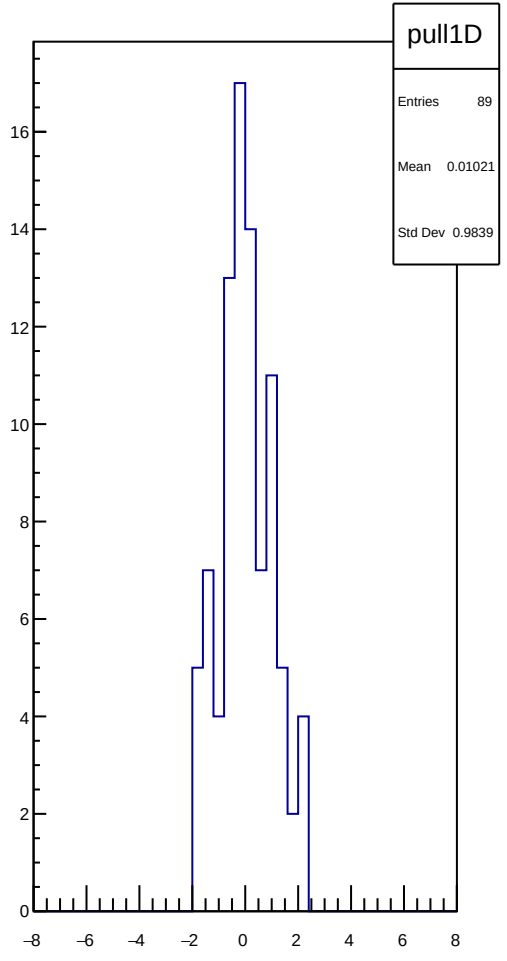

asym_atl1_correction_rms vs run
χ² / ndf 1.312e+04 / 88
p0 979.6 ± 0.7565
1200
1100
1000
900
800
700

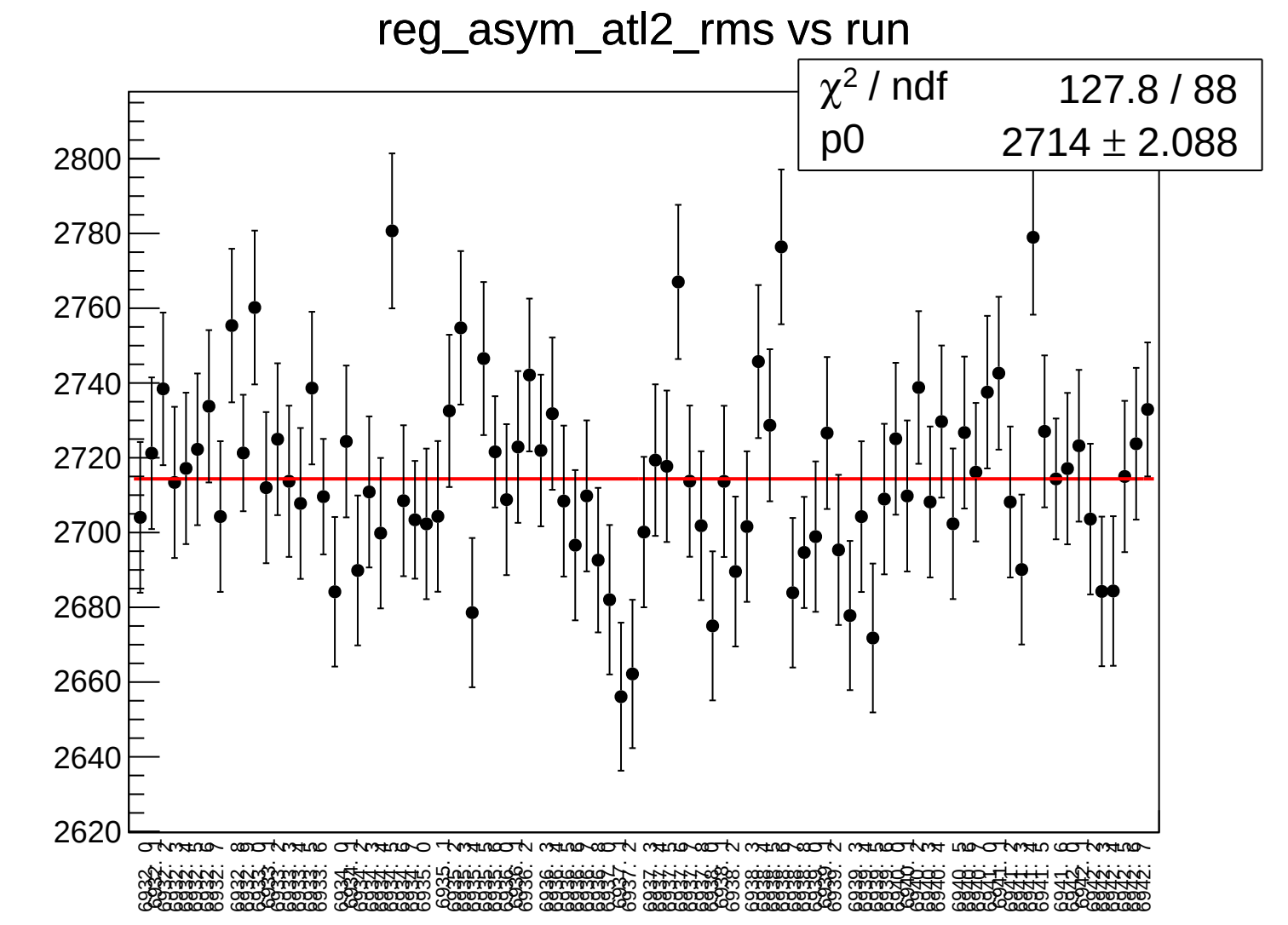

asym_atl1_mean vs run
×10^3
χ^2 / ndf 91.14 / 88
p0 1153 ± 2848
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean −45.88
Std Dev 50.39
2
1
0
−1
−2

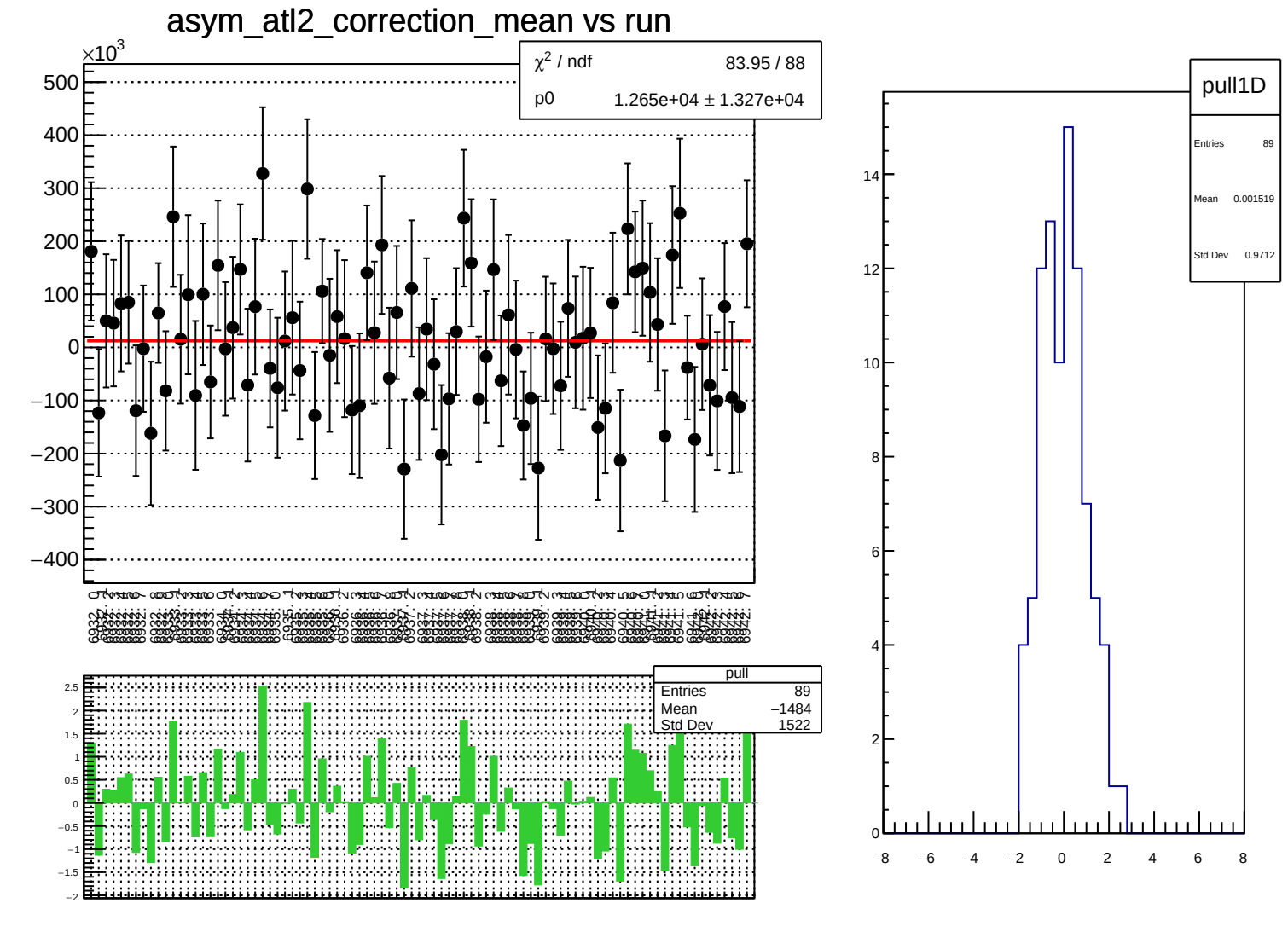

pull1D
Entries 89
Mean −0.0206
Std Dev 1.012
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

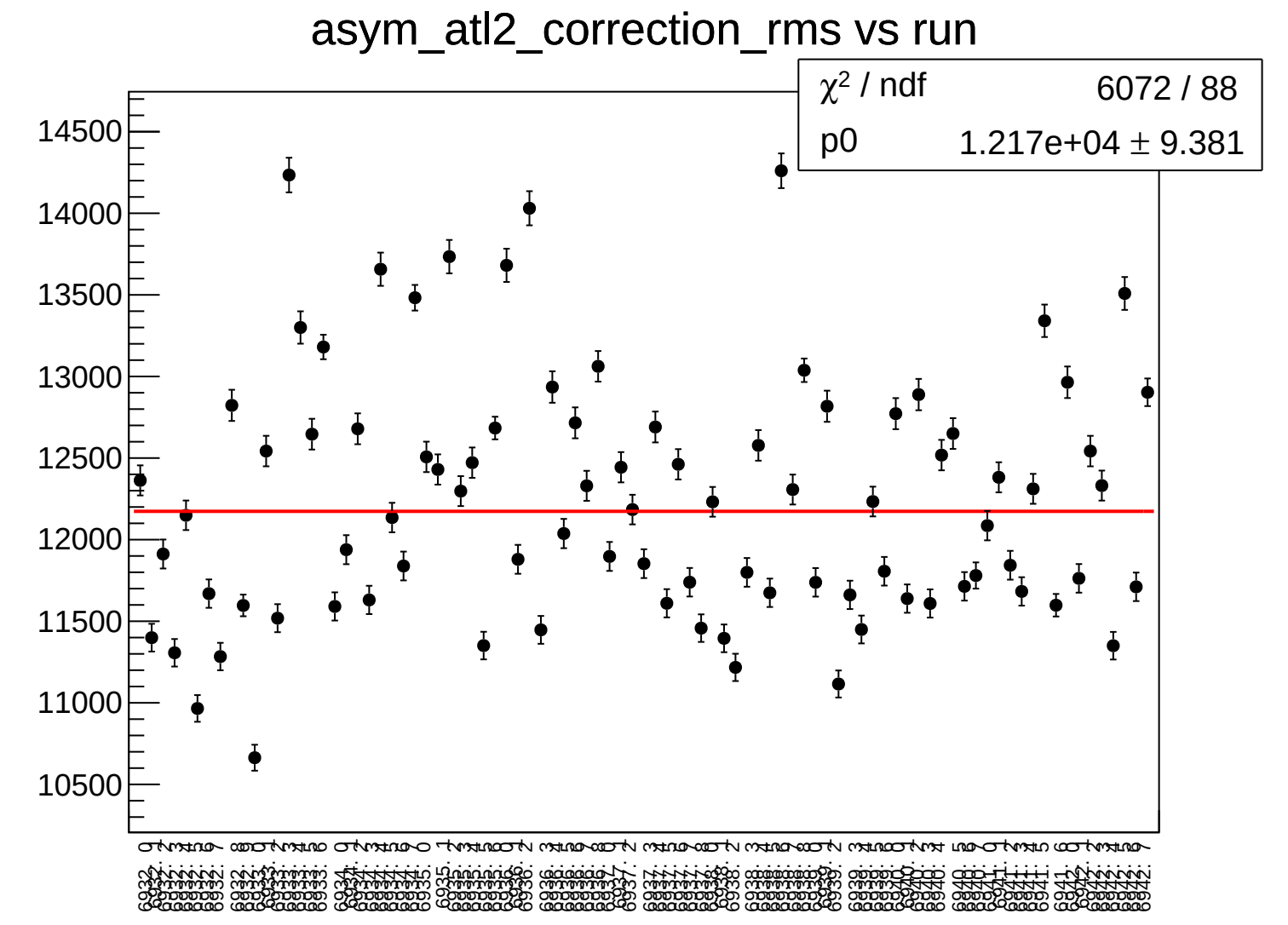

asym_atl1_rms vs run
χ² / ndf 1.07e+04 / 88
p0 2610 ± 2.014
10000
8000
6000
4000
2000

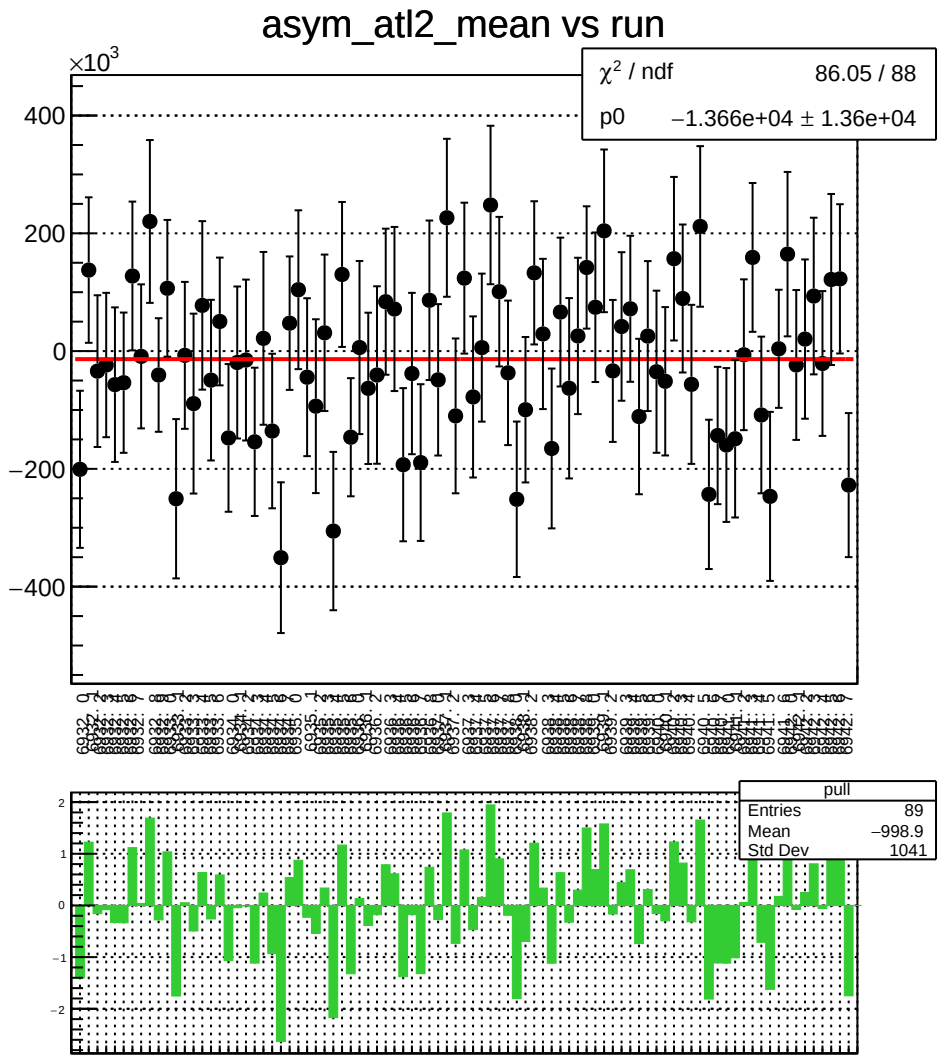

reg_asym_atl2_mean vs run
×10^3
χ² / ndf 86.16 / 88
p0 −1652 ± 2953
100
50
0
−50
−100
pull
Entries 89
Mean −128.8
Std Dev 142.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

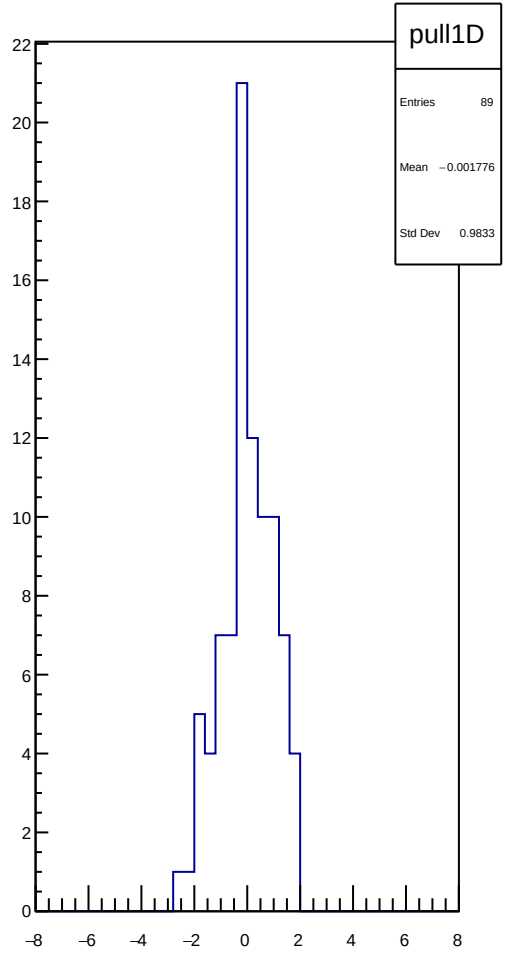

pull1D
Entries 89
Mean 0.01021
Std Dev 0.9839
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

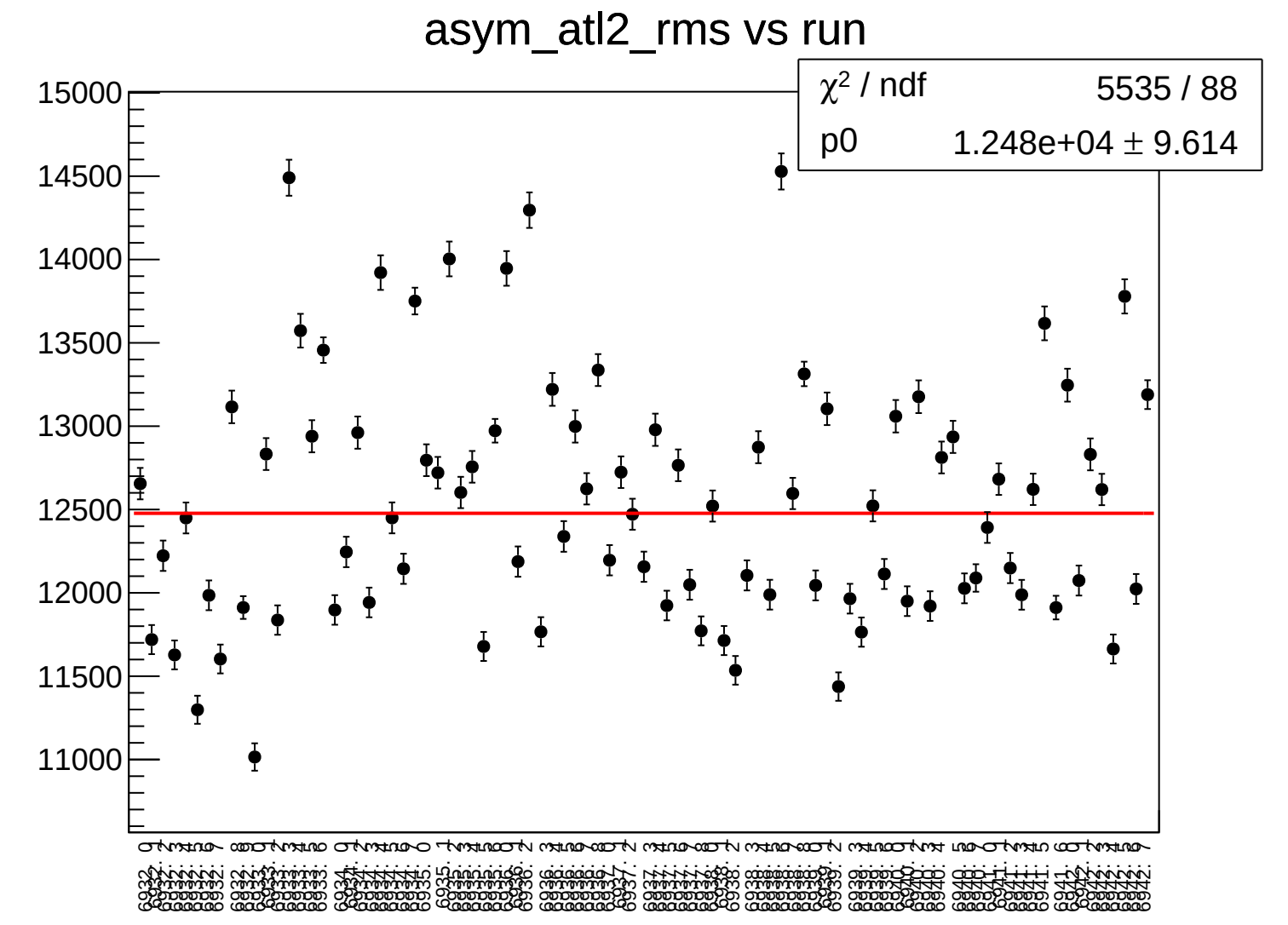

reg_asym_atl2_rms vs run
χ^2 / ndf 127.8 / 88
p0 2714 ± 2.088
2800
2780
2760
2740
2720
2700
2680
2660
2640
2620

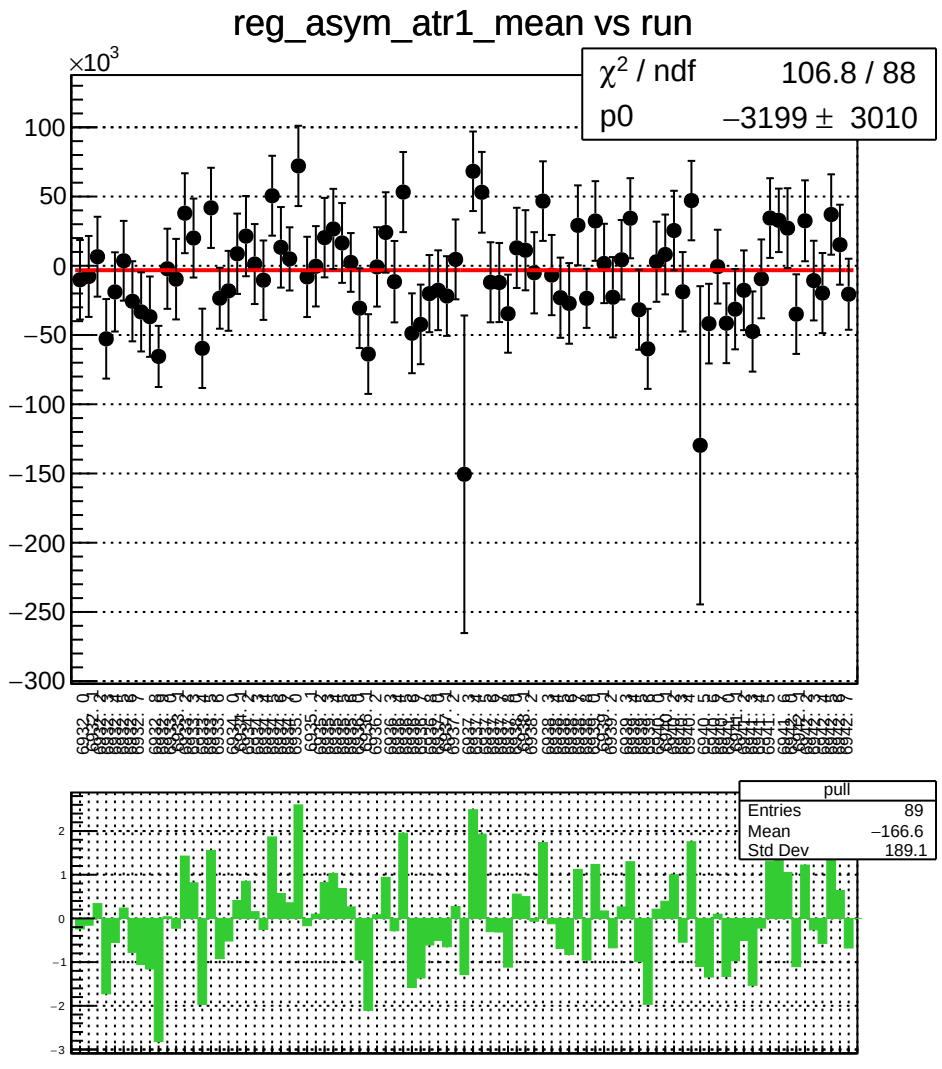

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 83.95 / 88
p0 1.265e+04 ± 1.327e+04
pull
Entries 89
Mean −1484
Std Dev 1522
pull1D
Entries 89
Mean 0.001519
Std Dev 0.9712

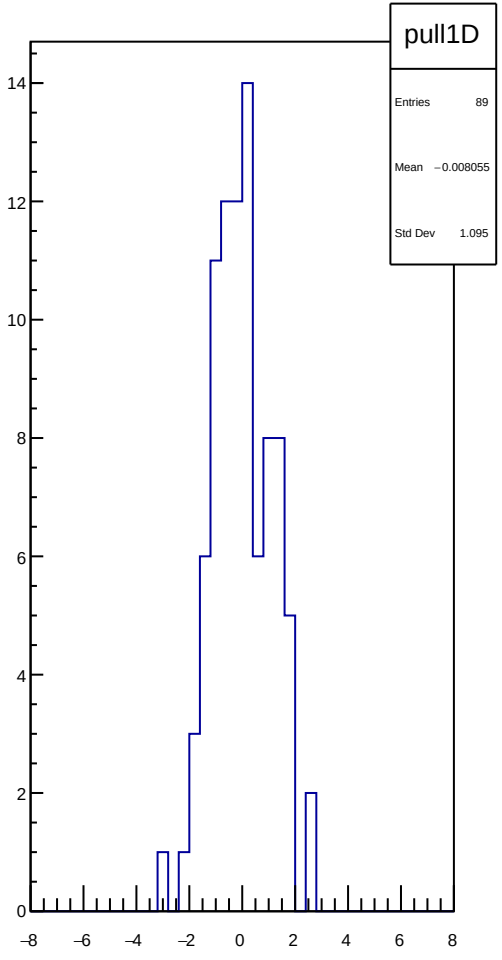

asym_atl2_correction_rms vs run
χ² / ndf 6072 / 88
p0 1.217e+04 ± 9.381
14500
14000
13500
13000
12500
12000
11500
11000
10500

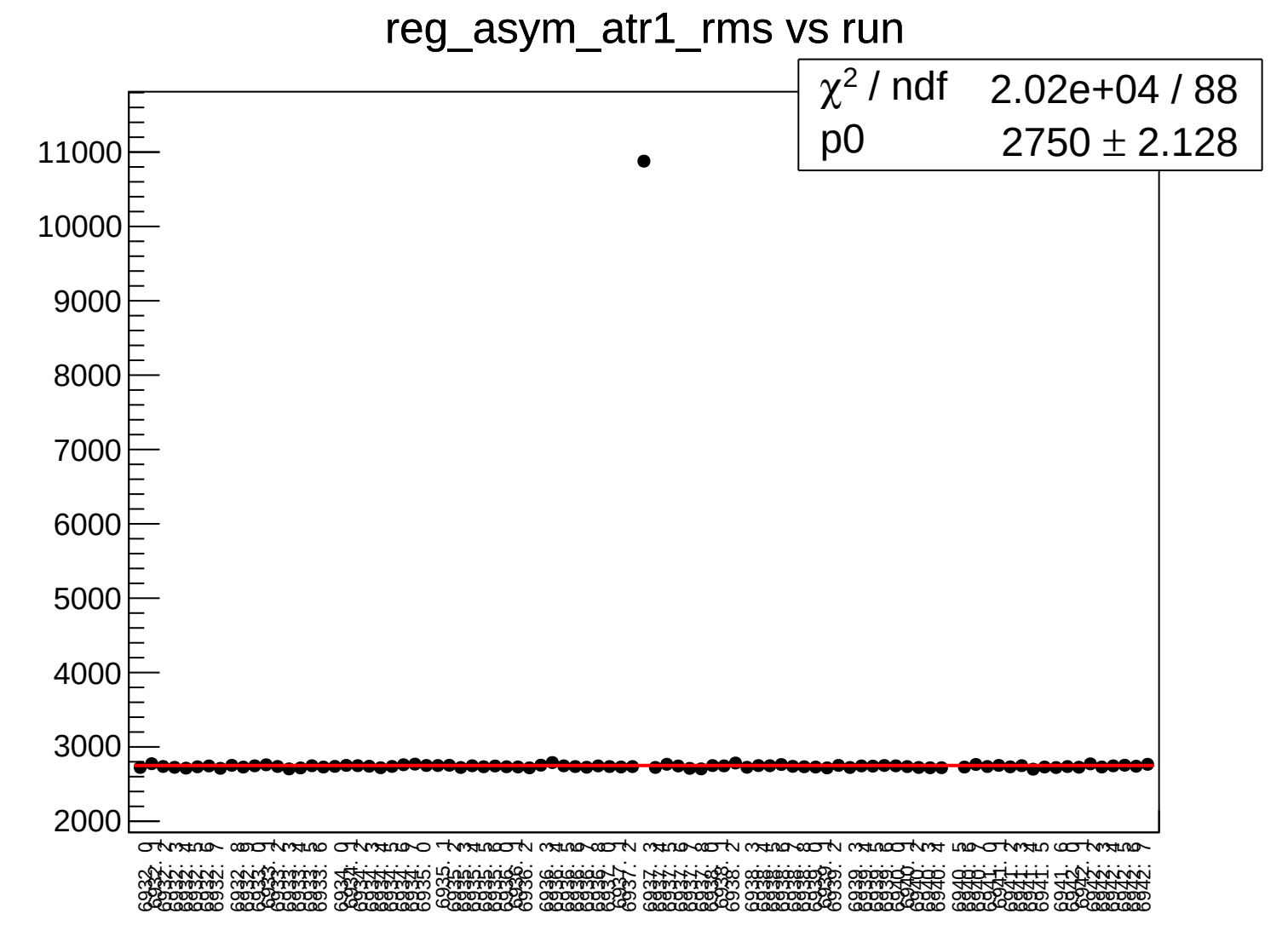

asym_atl2_mean vs run
×10^3
χ² / ndf 86.05 / 88
p0 −1.366e+04 ± 1.36e+04
400
200
0
−200
−400
pull
Entries 89
Mean −998.9
Std Dev 1041
2
1
0
−1
−2

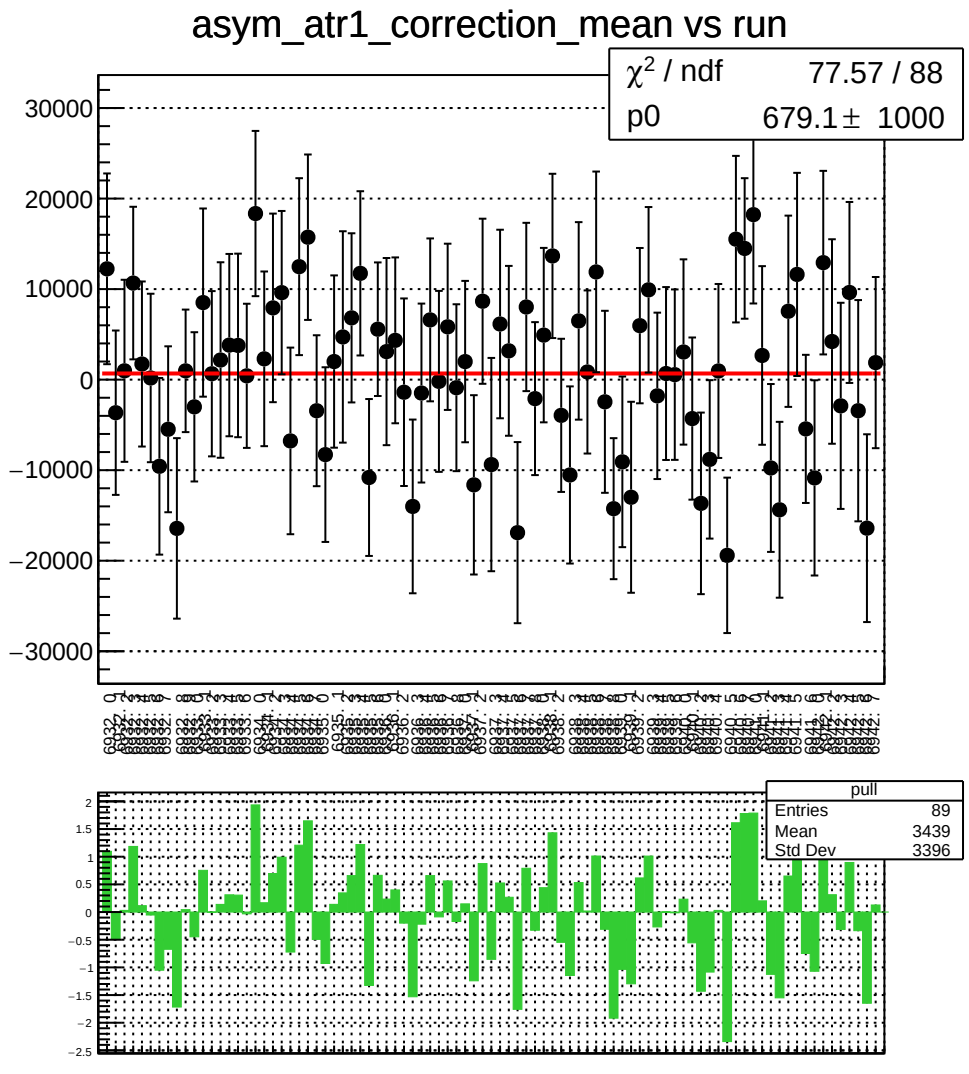

pull1D
Entries 89
Mean −0.001776
Std Dev 0.9833
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

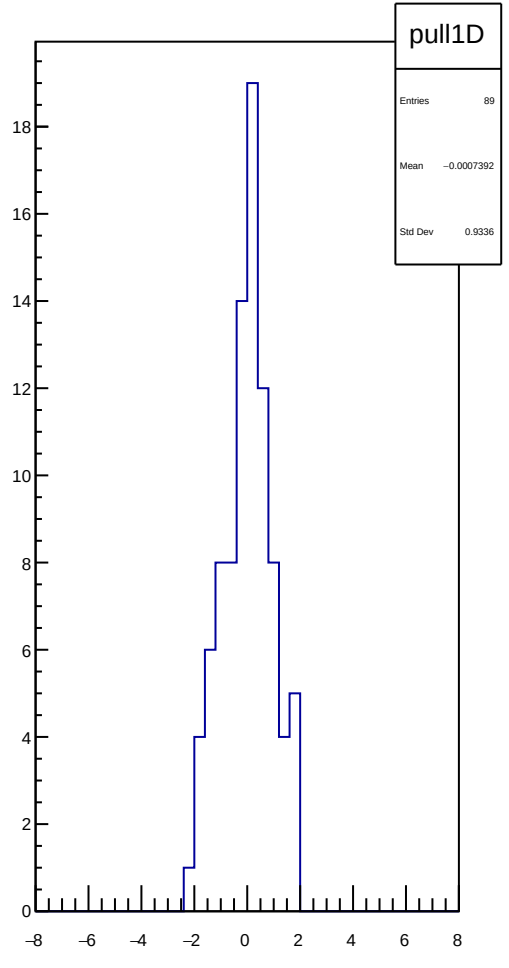

asym_atl2_rms vs run
χ² / ndf 5535 / 88
p0 1.248e+04 ± 9.614
15000
14500
14000
13500
13000
12500
12000
11500
11000

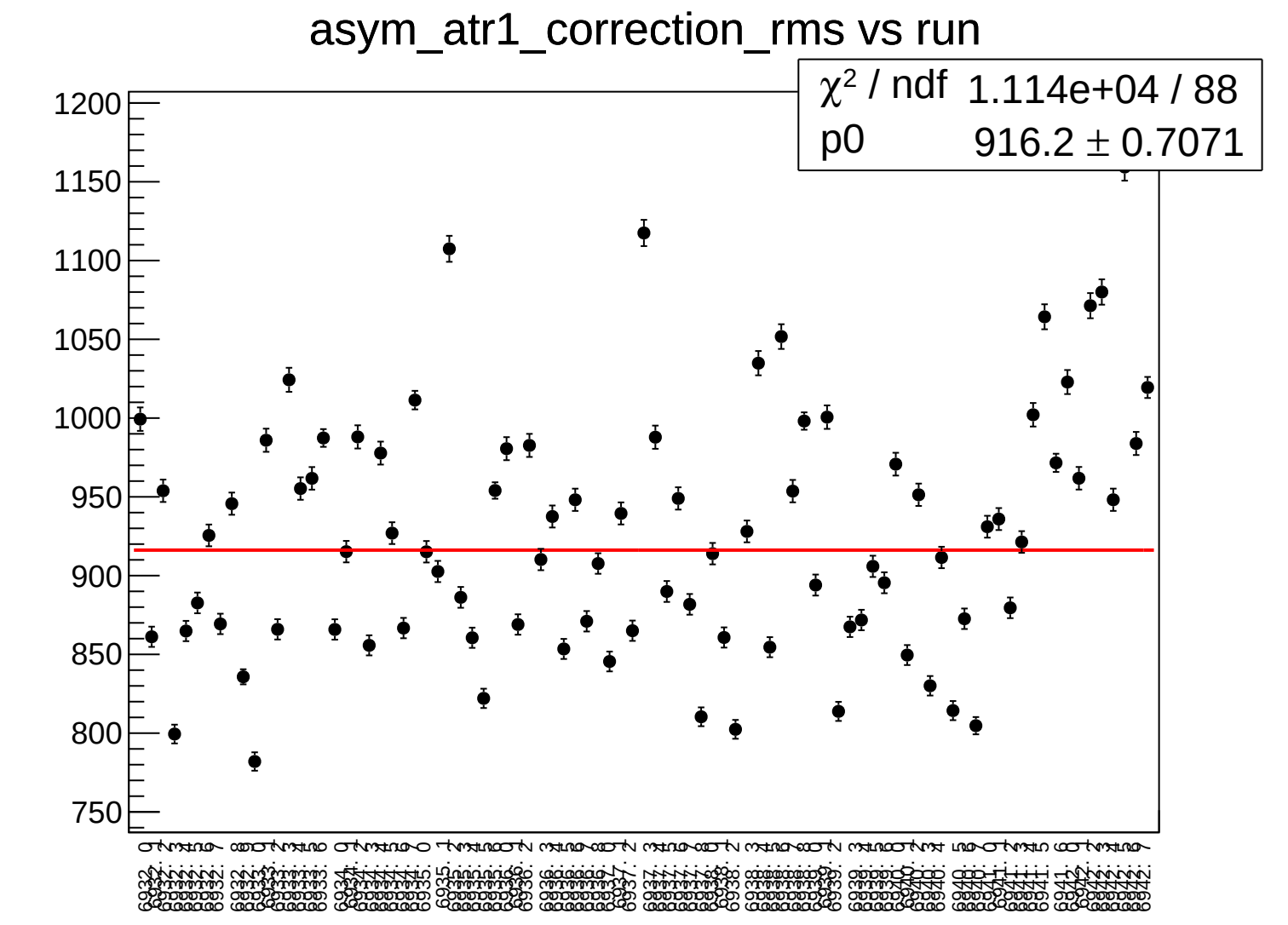

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 106.8 / 88
p0 −3199 ± 3010
100
50
0
−50
−100
−150
−200
−250
−300
pull
Entries 89
Mean −166.6
Std Dev 189.1
2
1
0
−1
−2
−3

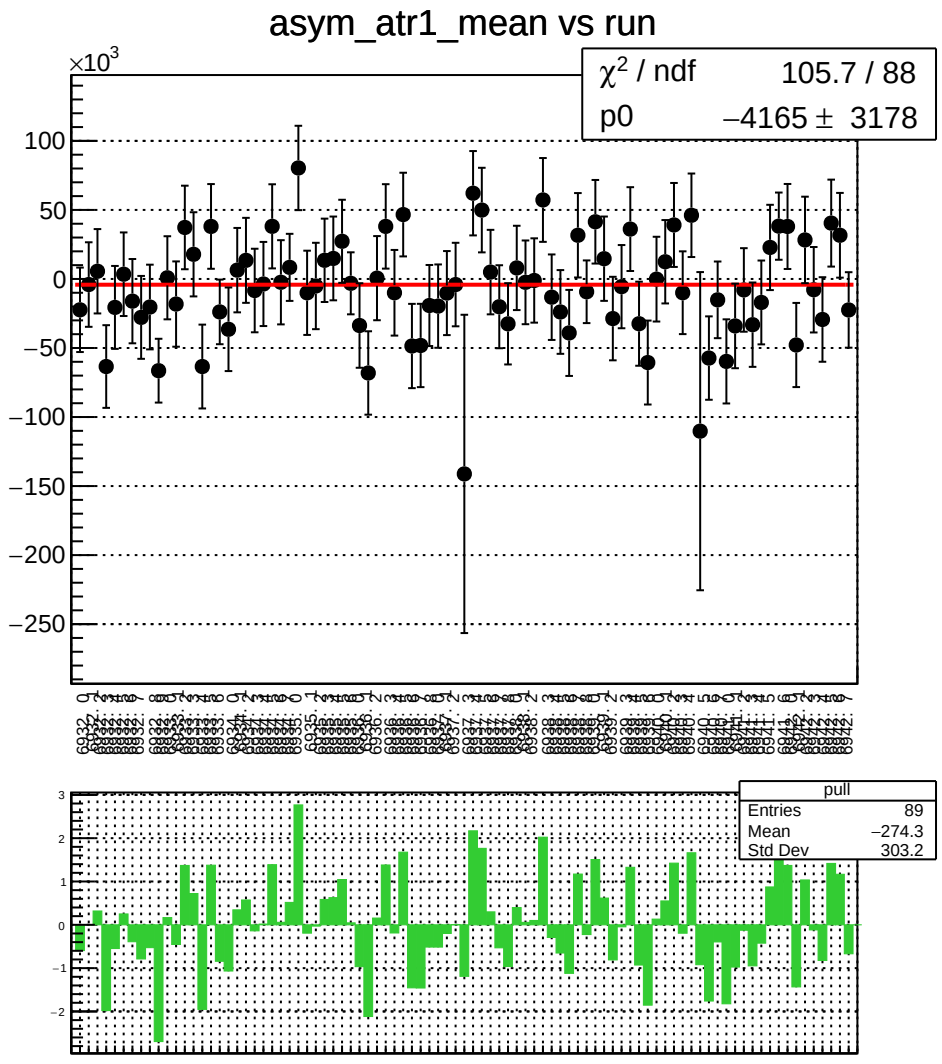

pull1D
Entries 89
Mean −0.008055
Std Dev 1.095
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

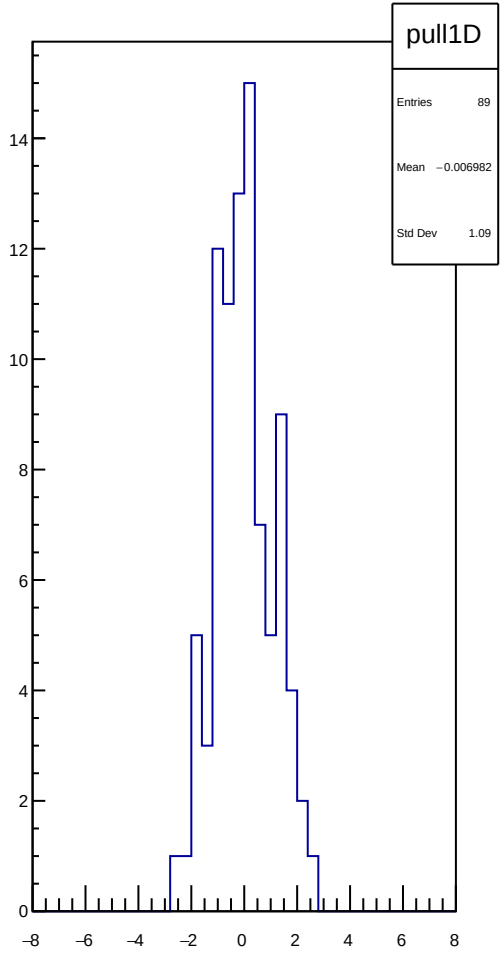

reg_asym_atr1_rms vs run
χ^2 / ndf 2.02e+04 / 88
p0 2750 ± 2.128
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

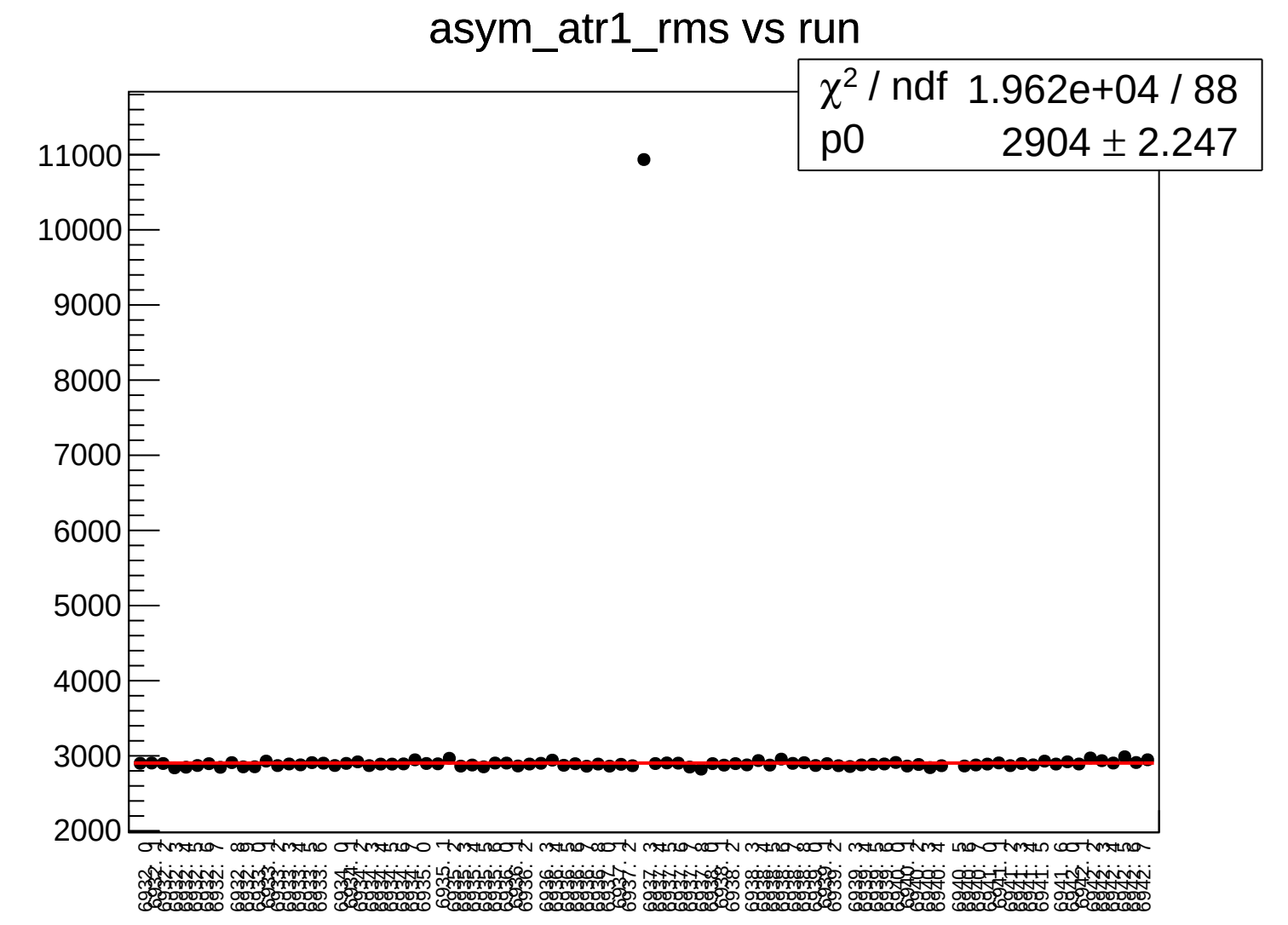

asym_atr1_correction_mean vs run
χ² / ndf 77.57 / 88
p0 679.1 ± 1000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean 3439
Std Dev 3396
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

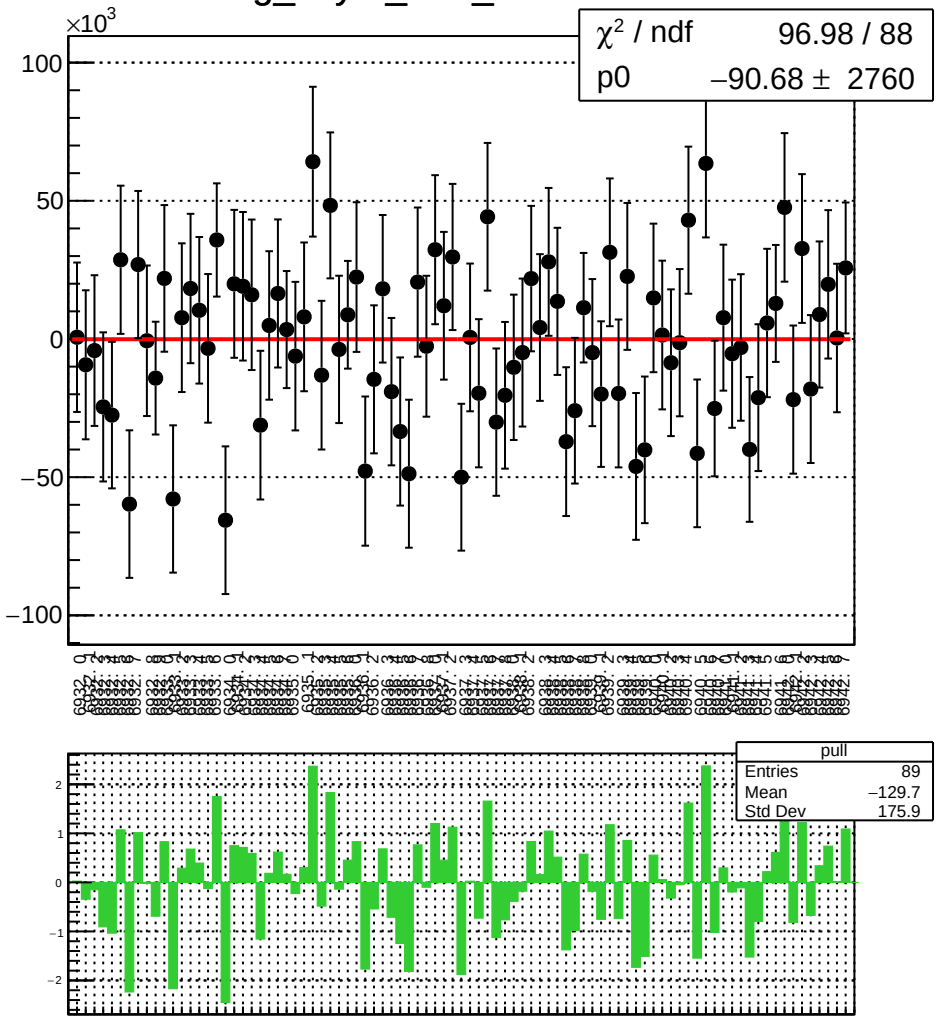

pull1D
Entries 89
Mean −0.0007392
Std Dev 0.9336
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

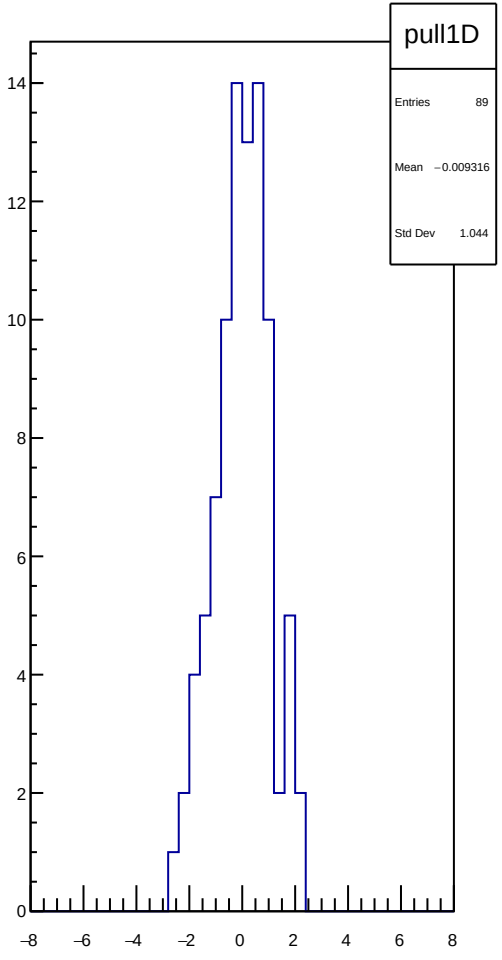

asym_atr1_correction_rms vs run
χ² / ndf 1.114e+04 / 88
p0 916.2 ± 0.7071
1200
1150
1100
1050
1000
950
900
850
800
750

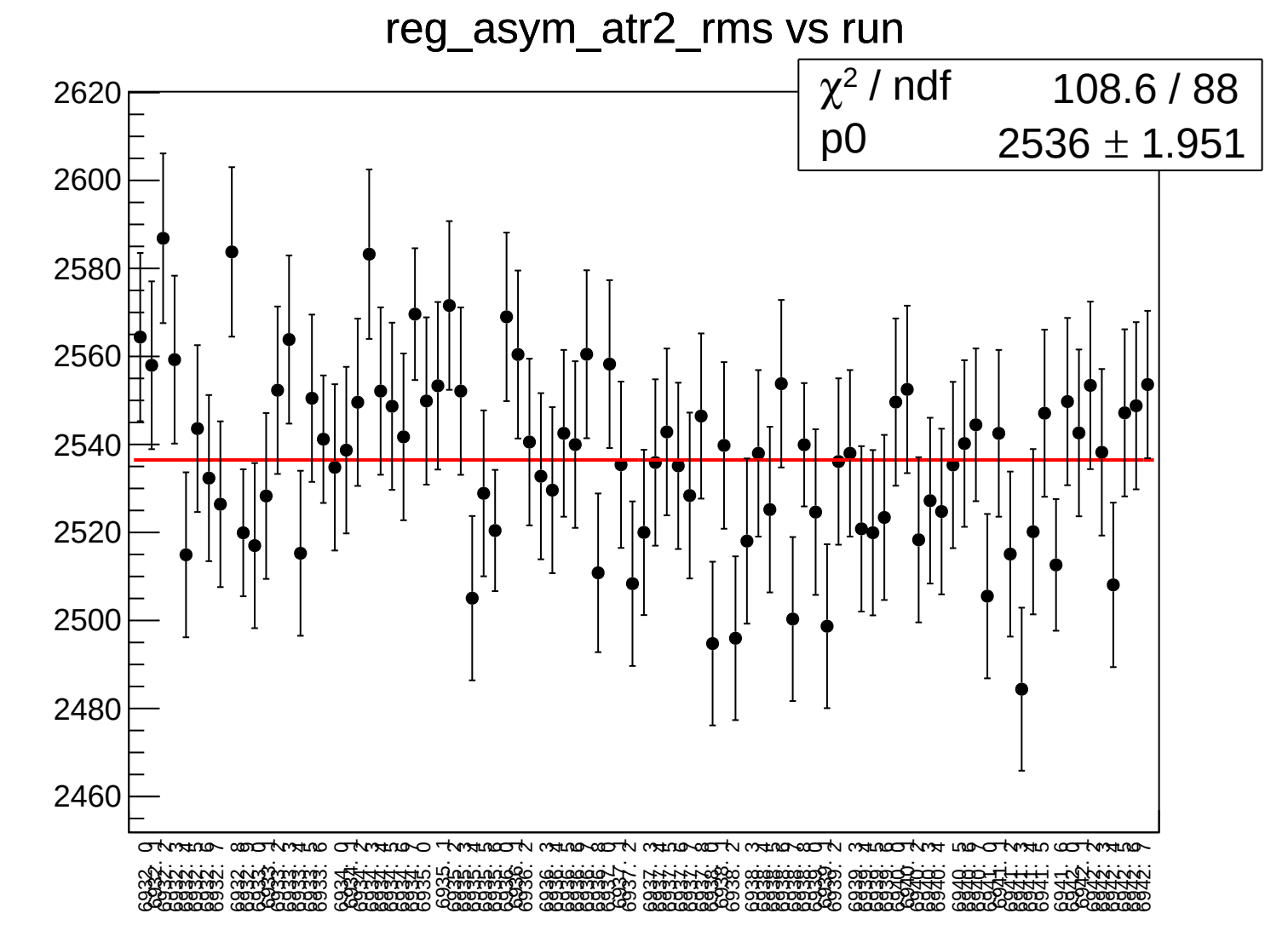

asym_atr1_mean vs run
×10^3
χ² / ndf 105.7 / 88
p0 −4165 ± 3178
100
50
0
−50
−100
−150
−200
−250
pull
Entries 89
Mean −274.3
Std Dev 303.2
3
2
1
0
−1
−2

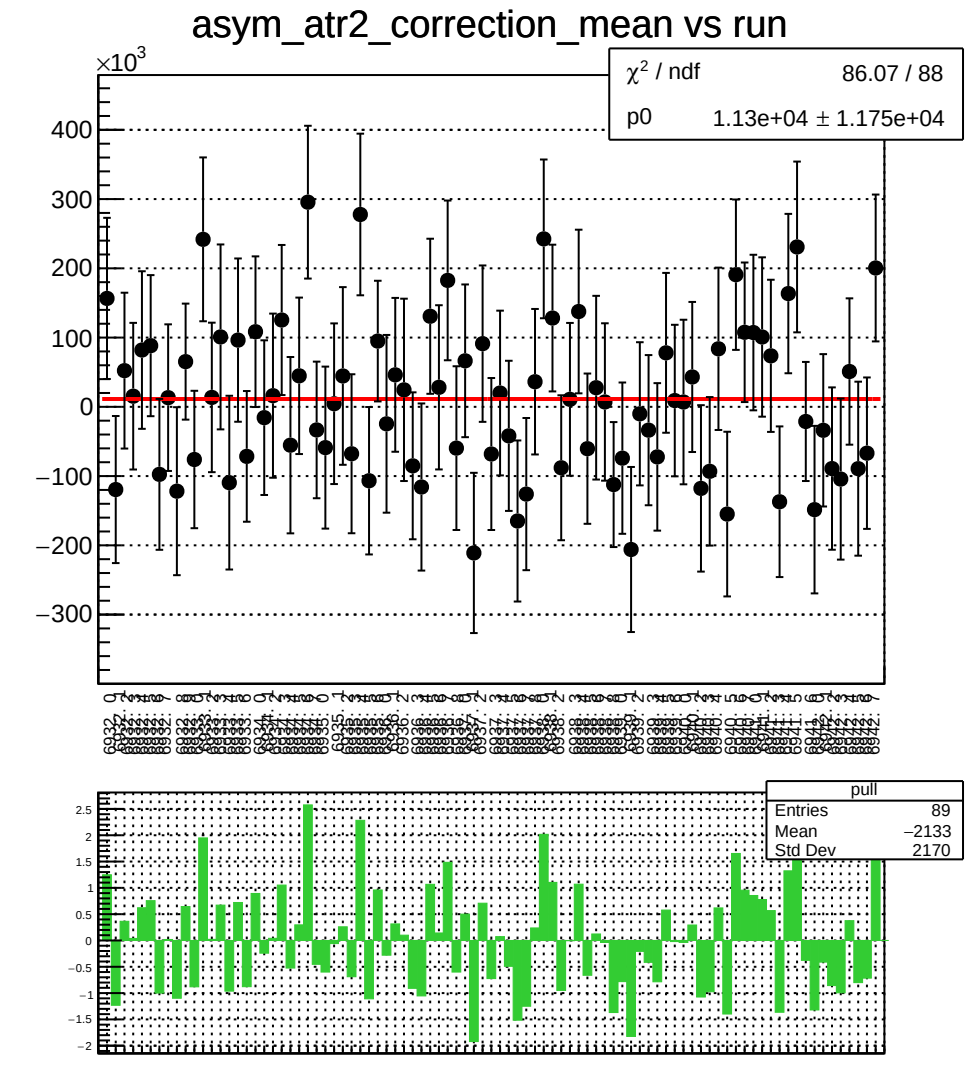

pull1D
Entries 89
Mean −0.006982
Std Dev 1.09
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

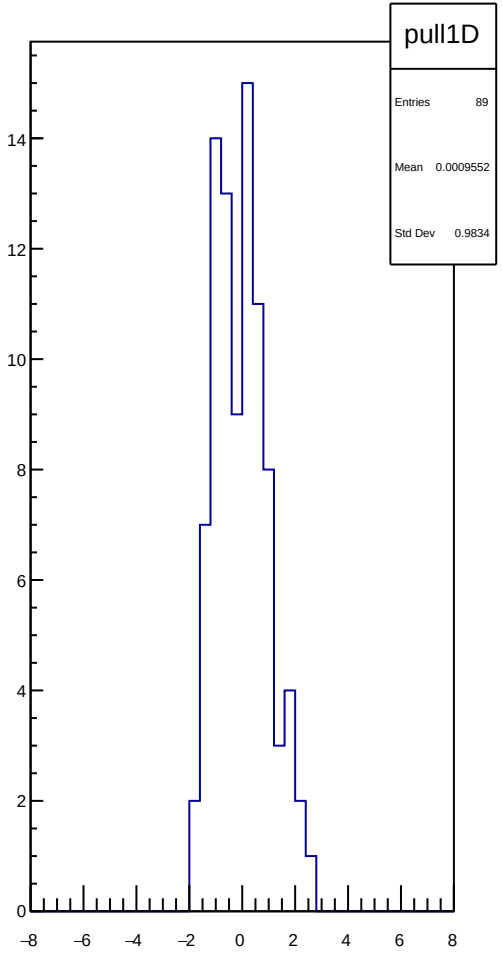

asym_atr1_rms vs run
χ^2 / ndf 1.962e+04 / 88
p0 2904 ± 2.247
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000

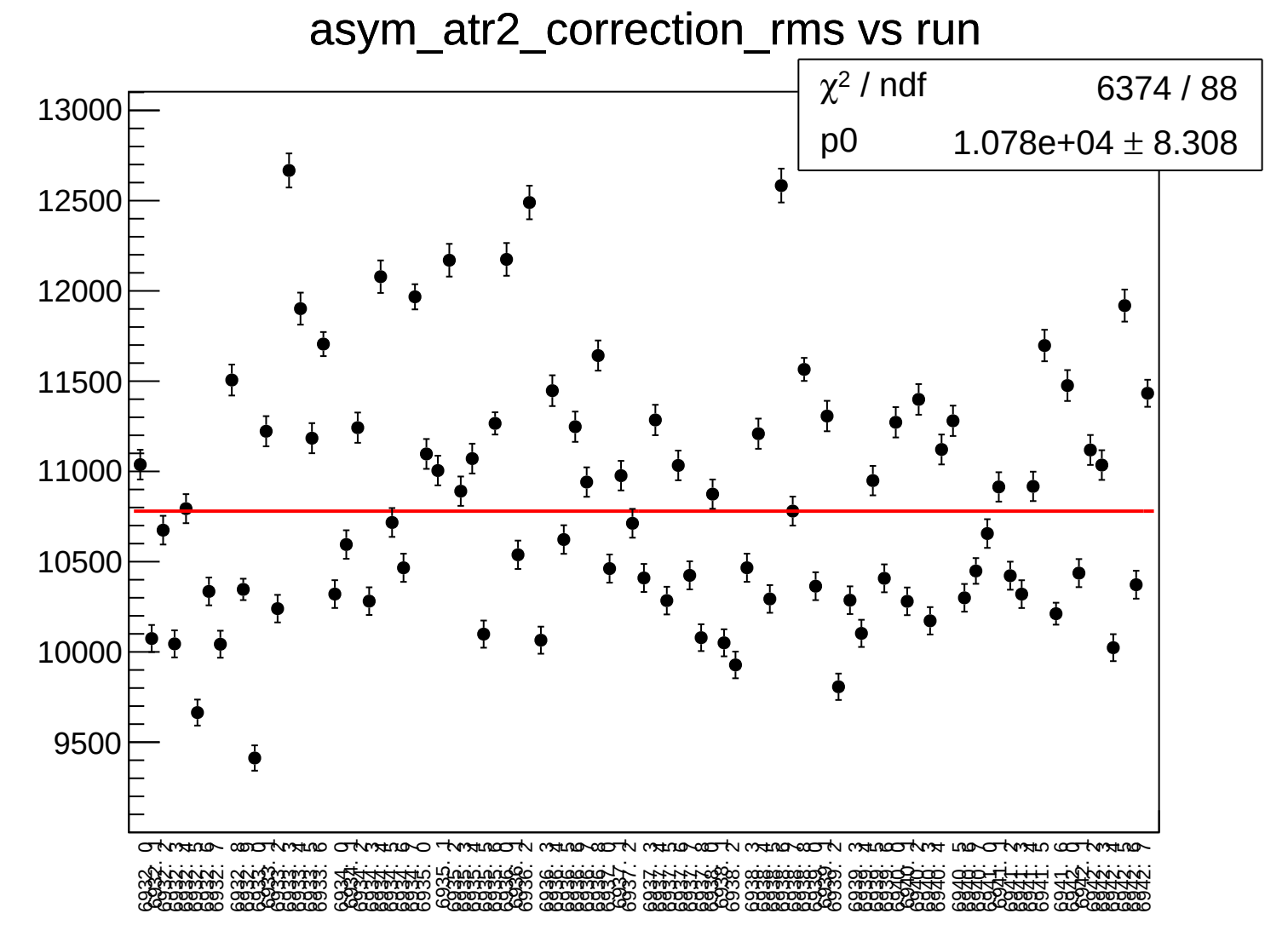

reg_asym_atr2_mean vs run
×10^3
χ² / ndf 96.98 / 88
p0 −90.68 ± 2760
100
50
0
−50
−100
pull
Entries 89
Mean −129.7
Std Dev 175.9
2
1
0
−1
−2

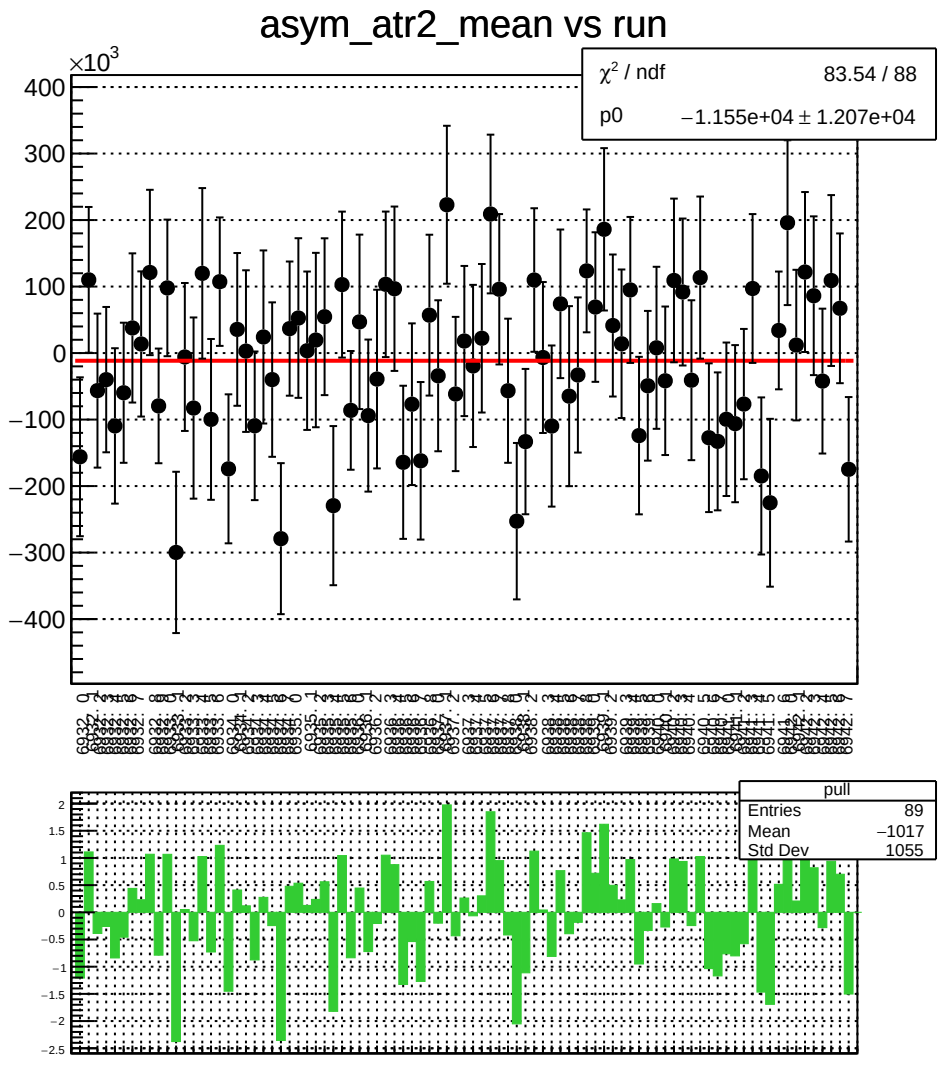

pull1D
Entries 89
Mean −0.009316
Std Dev 1.044
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

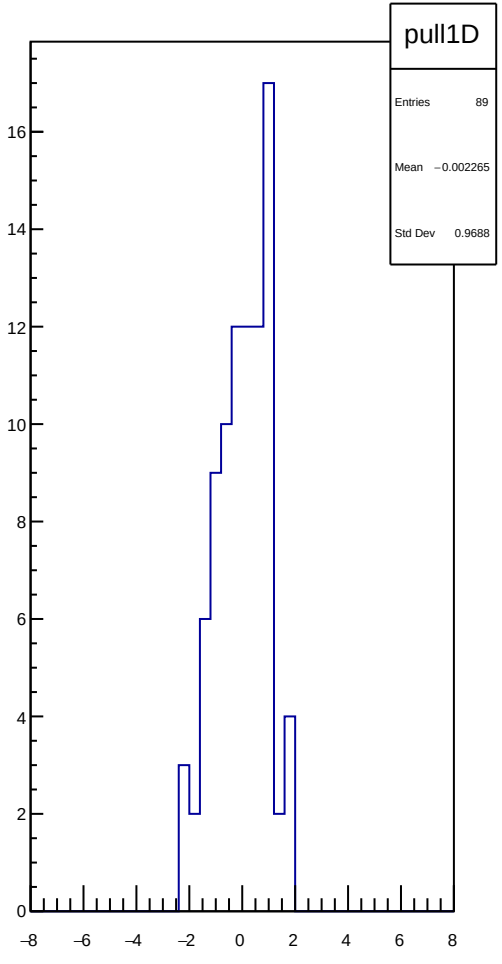

reg_asym_atr2_rms vs run
χ² / ndf 108.6 / 88
p0 2536 ± 1.951
2620
2600
2580
2560
2540
2520
2500
2480
2460

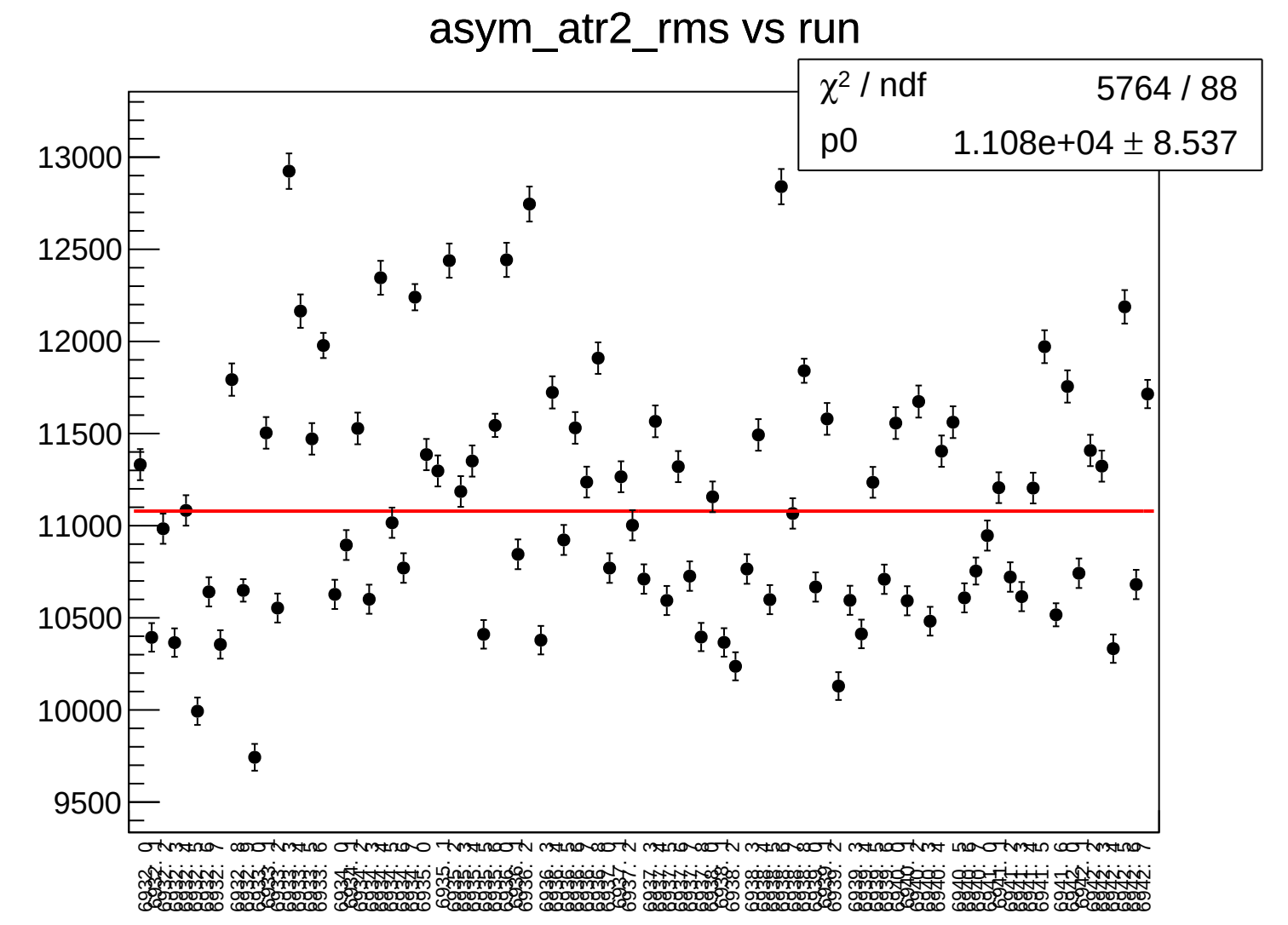

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 86.07 / 88
p0 1.13e+04 ± 1.175e+04
pull
Entries 89
Mean −2133
Std Dev 2170

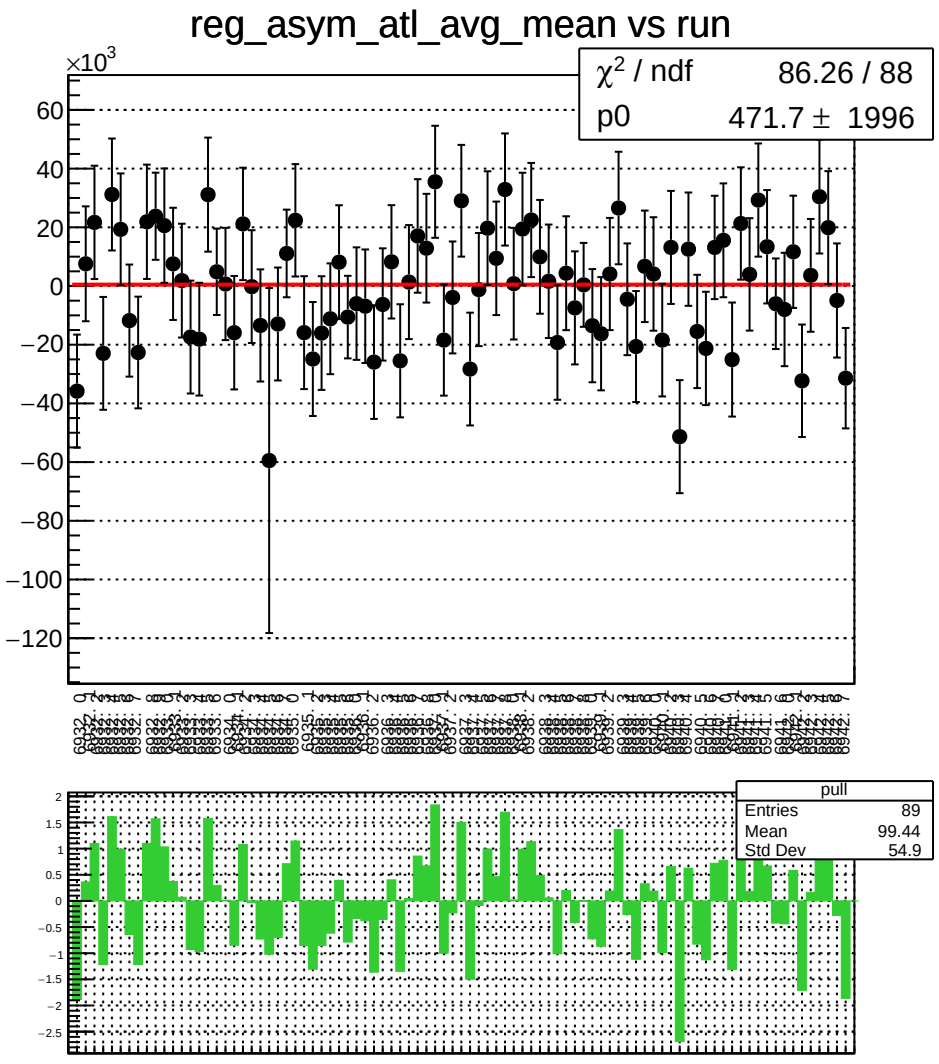

pull1D
Entries 89
Mean 0.0009552
Std Dev 0.9834

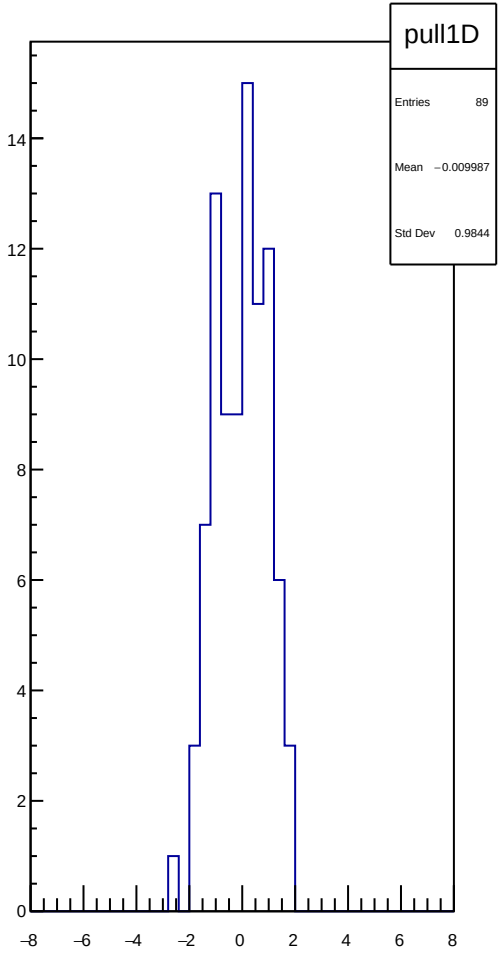

asym_atr2_correction_rms vs run
χ² / ndf 6374 / 88
p0 1.078e+04 ± 8.308
13000
12500
12000
11500
11000
10500
10000
9500

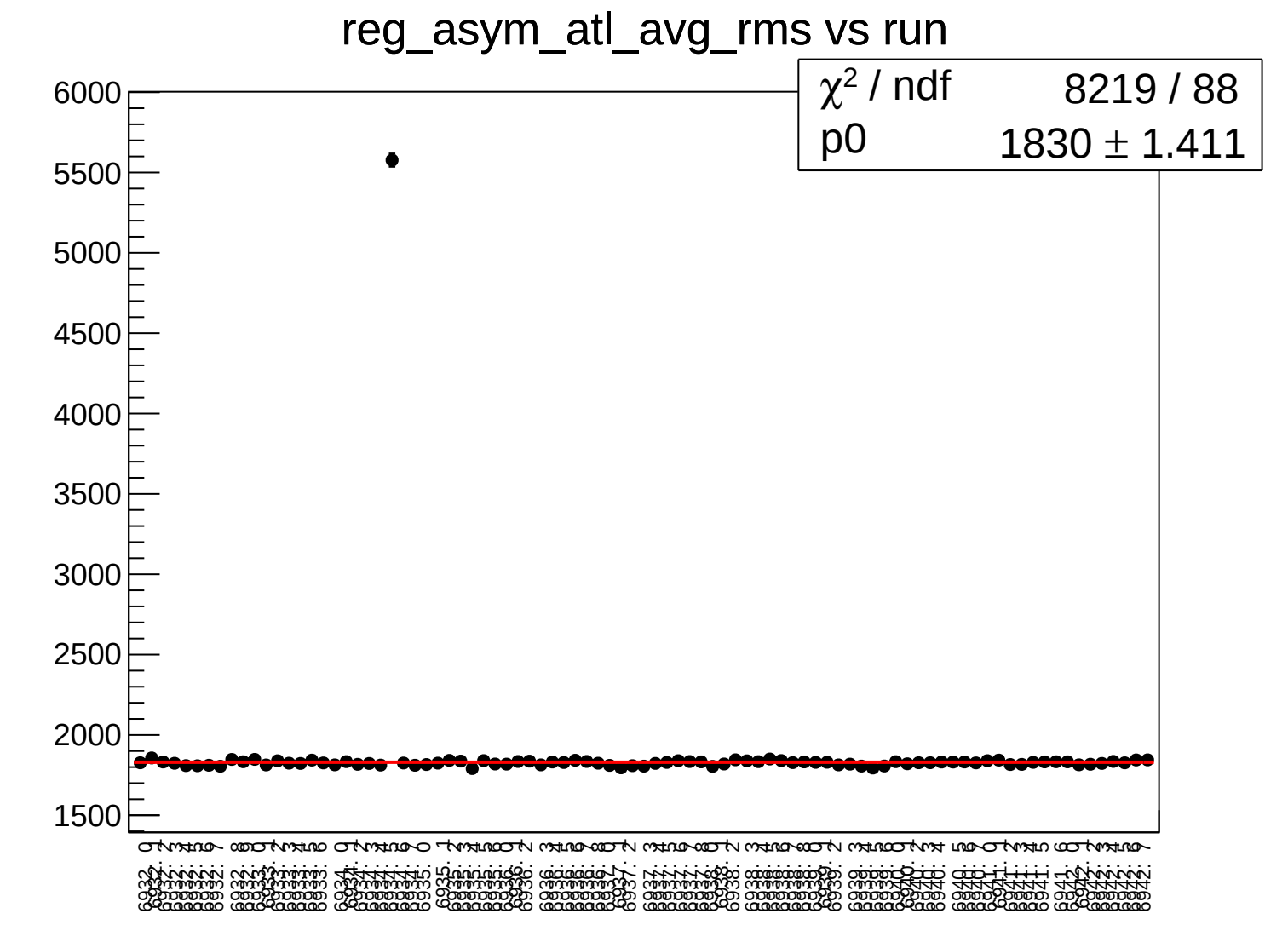

asym_atr2_mean vs run
×10^3
χ² / ndf 83.54 / 88
p0 −1.155e+04 ± 1.207e+04
pull
Entries 89
Mean −1017
Std Dev 1055

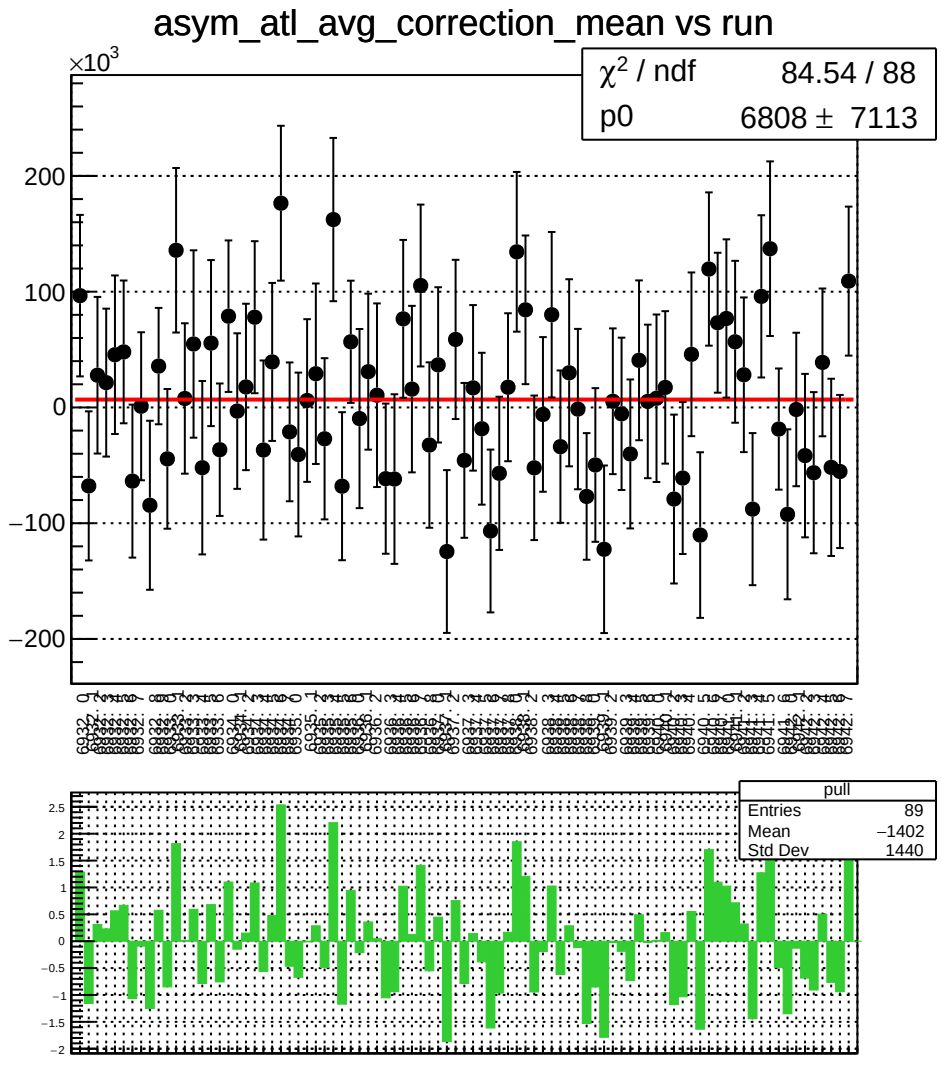

pull1D
Entries 89
Mean −0.002265
Std Dev 0.9688

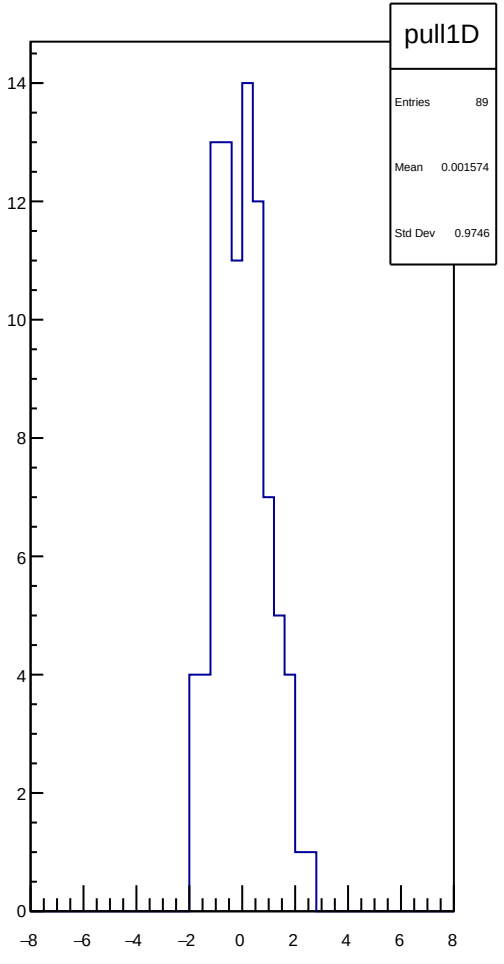

asym_atr2_rms vs run
χ² / ndf 5764 / 88
p0 1.108e+04 ± 8.537
13000
12500
12000
11500
11000
10500
10000
9500

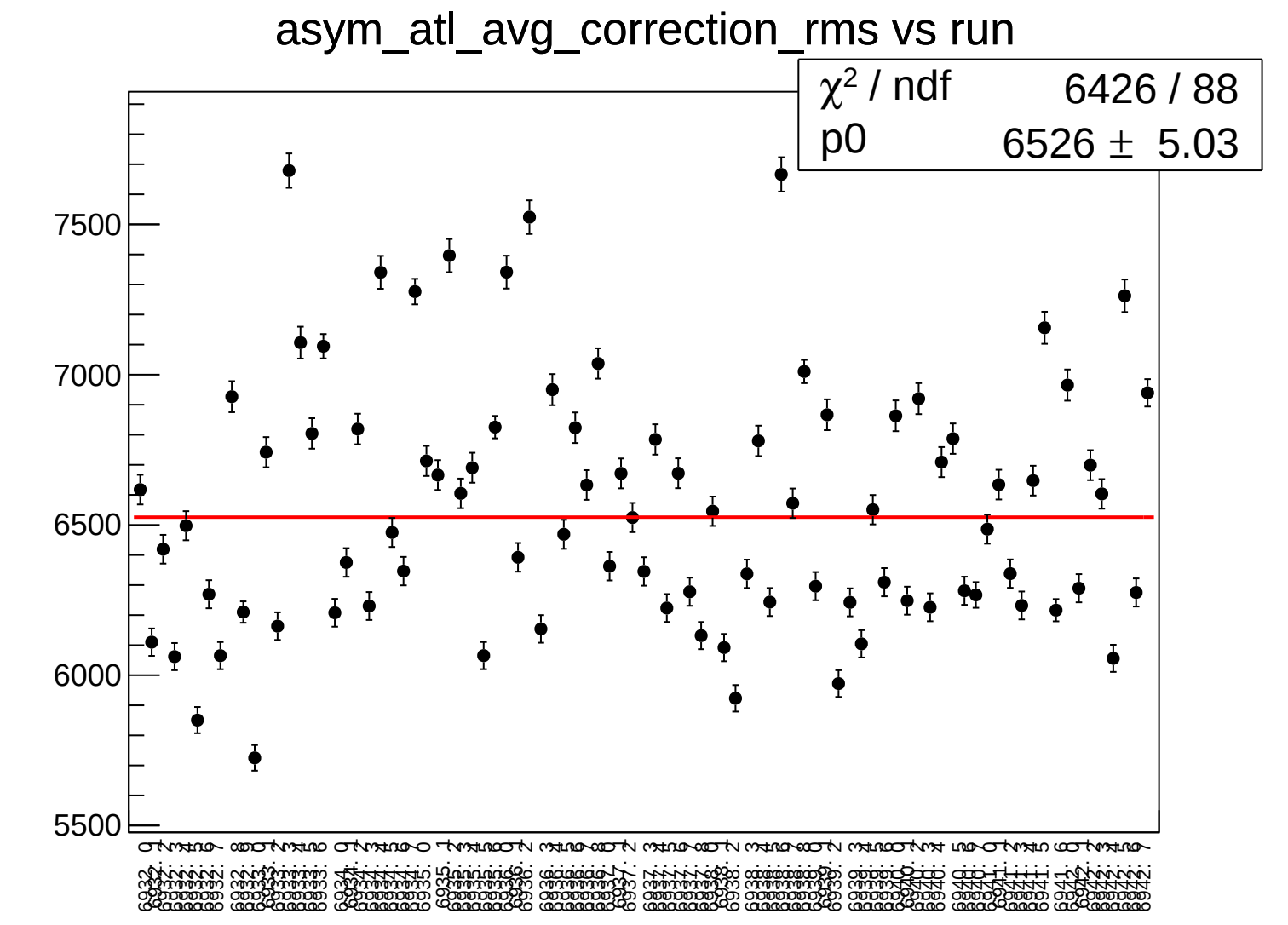

reg_asym_atl_avg_mean vs run
×10^3
χ² / ndf 86.26 / 88
p0 471.7 ± 1996
pull
Entries 89
Mean 99.44
Std Dev 54.9

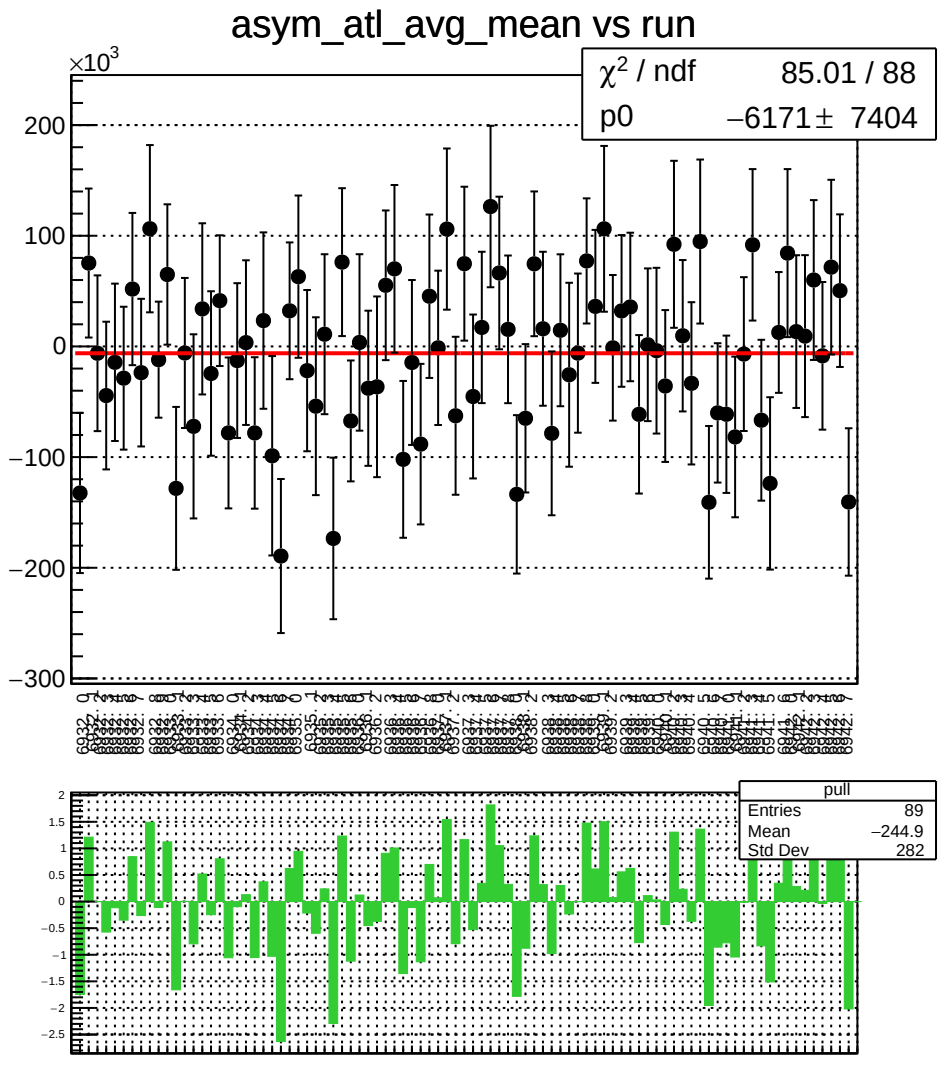

pull1D
Entries 89
Mean −0.009987
Std Dev 0.9844

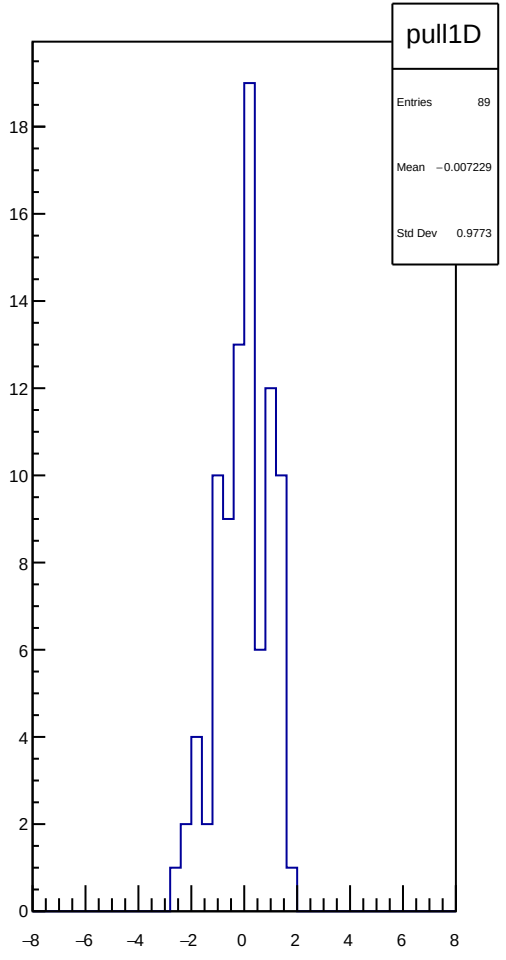

reg_asym_atl_avg_rms vs run
χ² / ndf 8219 / 88
p0 1830 ± 1.411
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

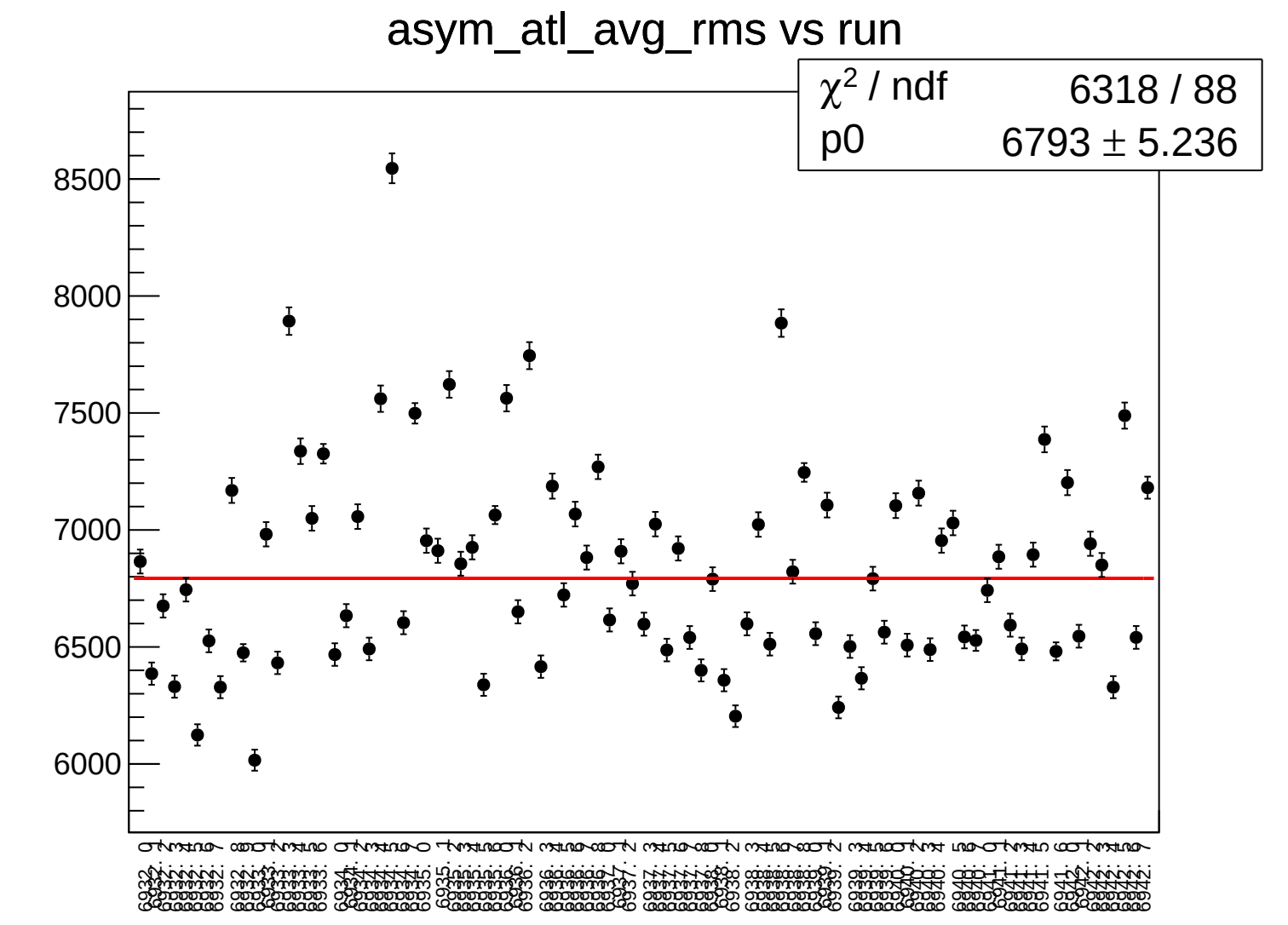

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 84.54 / 88
p0 6808 ± 7113
200
100
0
−100
−200
pull
Entries 89
Mean −1402
Std Dev 1440
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

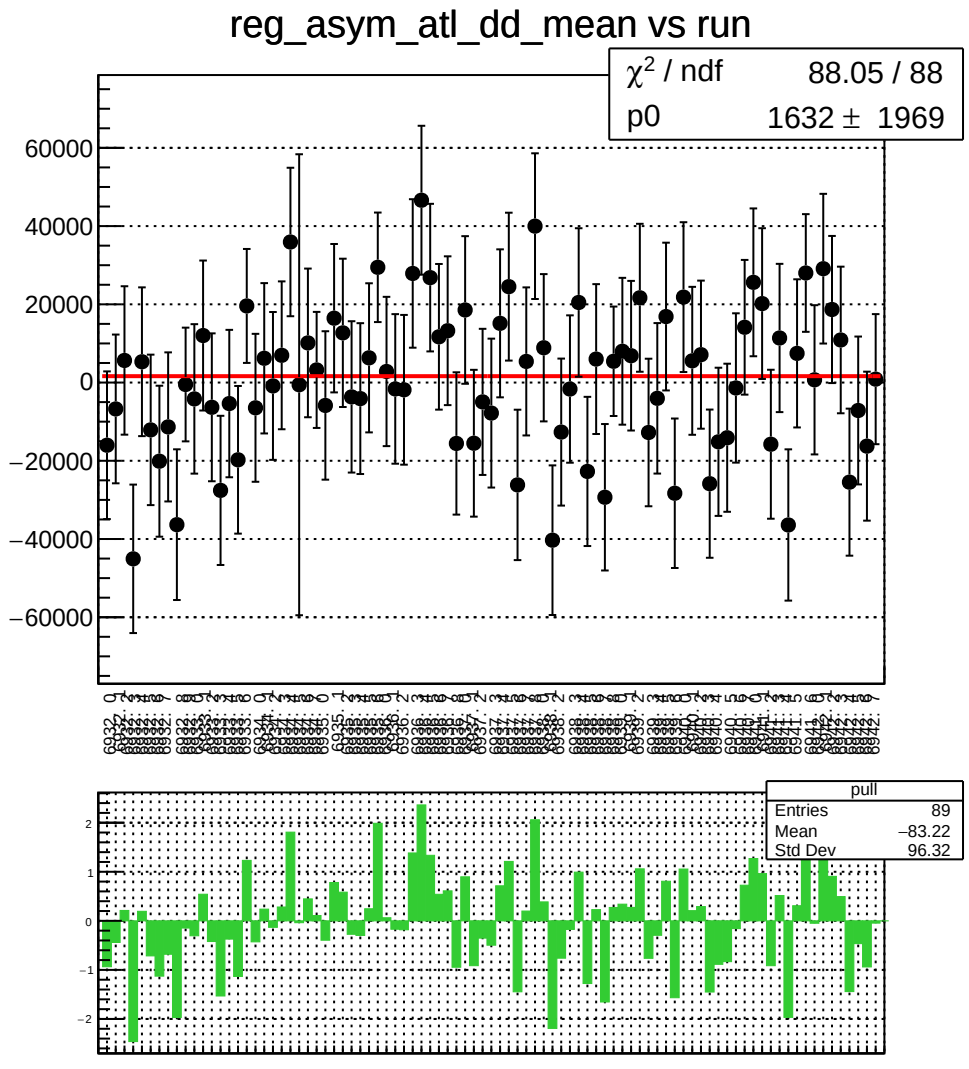

pull1D
Entries 89
Mean 0.001574
Std Dev 0.9746
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

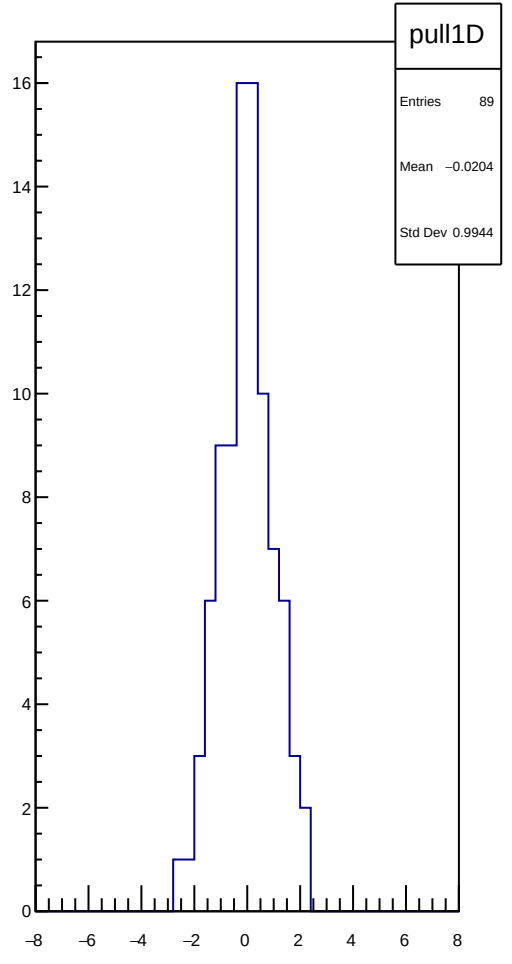

asym_atl_avg_correction_rms vs run
χ² / ndf 6426 / 88
p0 6526 ± 5.03
7500
7000
6500
6000
5500

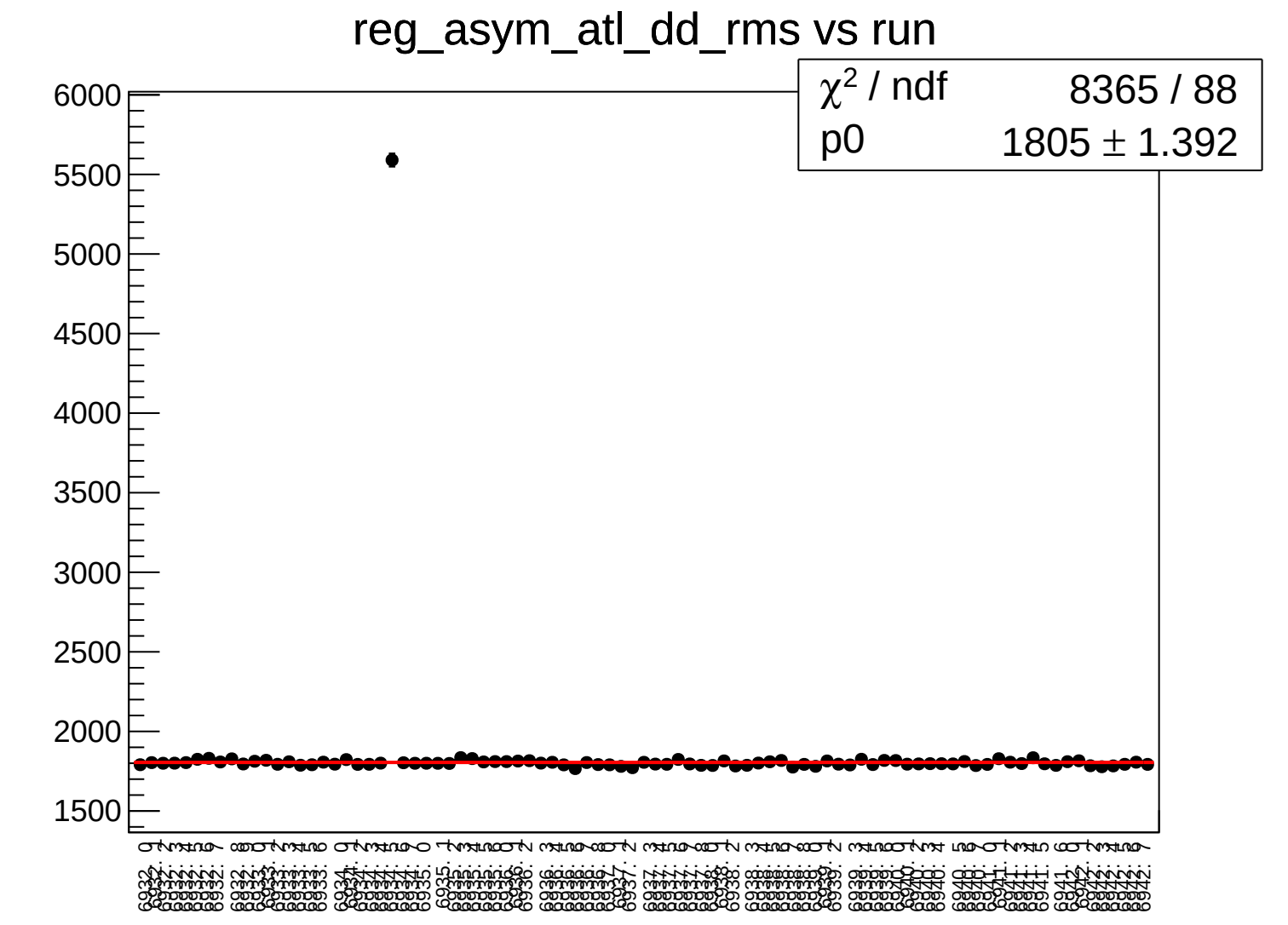

asym_atl_avg_mean vs run
×10^3
χ² / ndf 85.01 / 88
p0 −6171 ± 7404
200
100
0
−100
−200
−300
pull
Entries 89
Mean −244.9
Std Dev 282
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

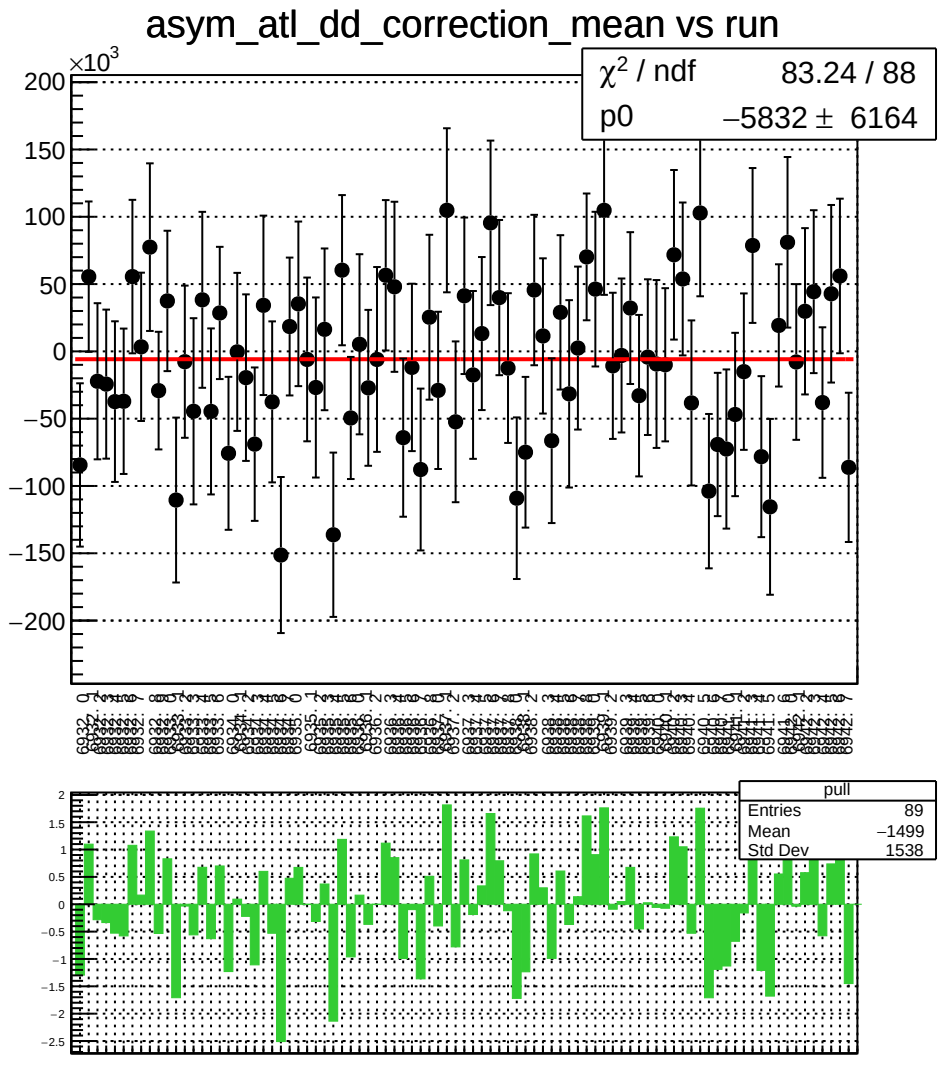

pull1D
Entries 89
Mean −0.007229
Std Dev 0.9773
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

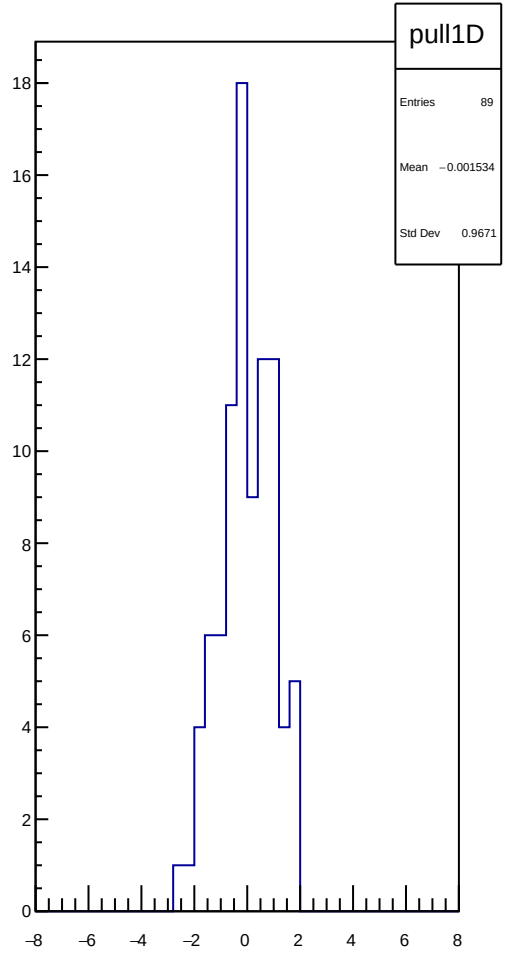

asym_atl_avg_rms vs run
χ^2 / ndf 6318 / 88
p0 6793 ± 5.236
8500
8000
7500
7000
6500
6000

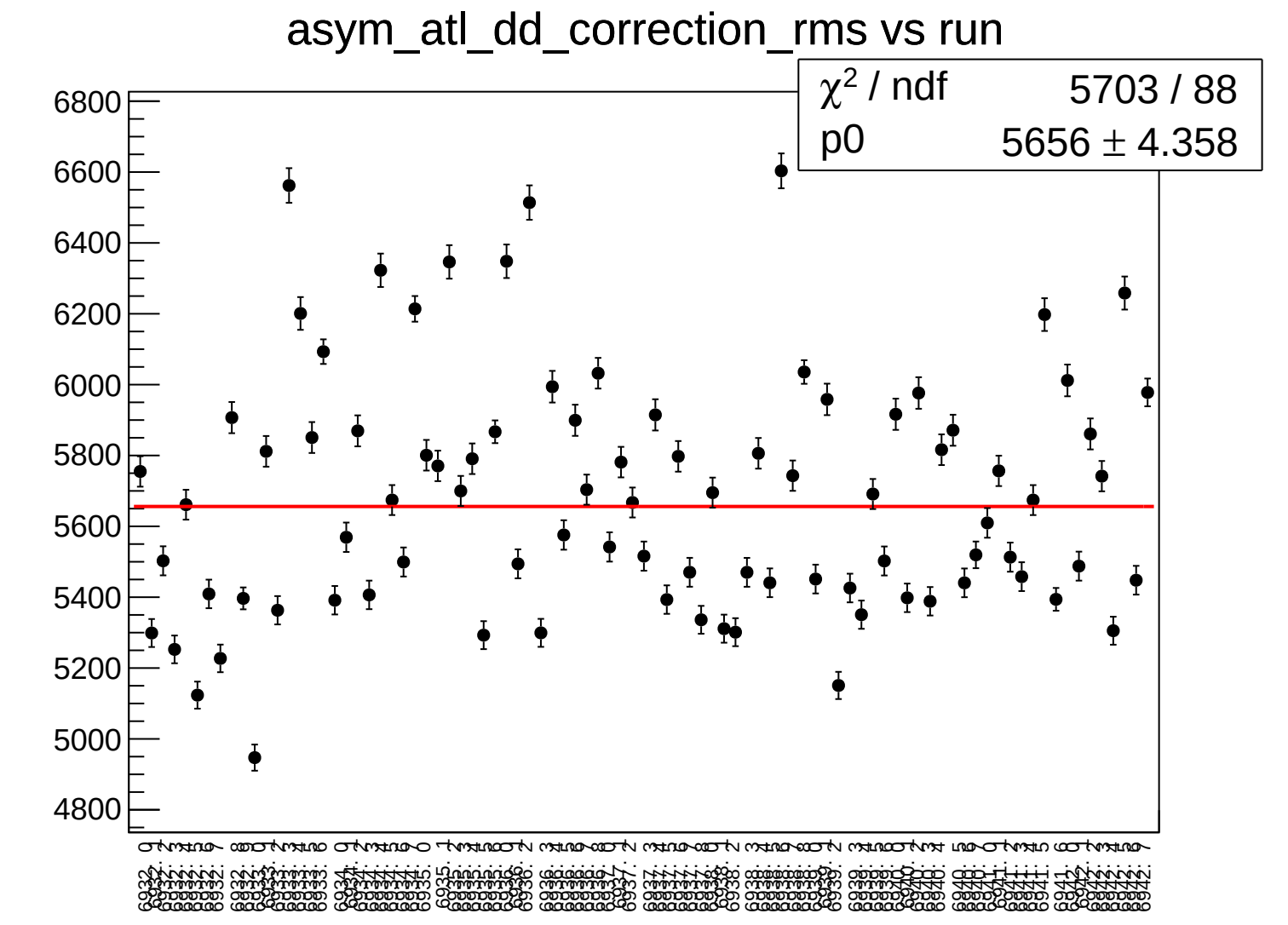

reg_asym_atl_dd_mean vs run
χ² / ndf 88.05 / 88
p0 1632 ± 1969
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −83.22
Std Dev 96.32
2
1
0
−1
−2

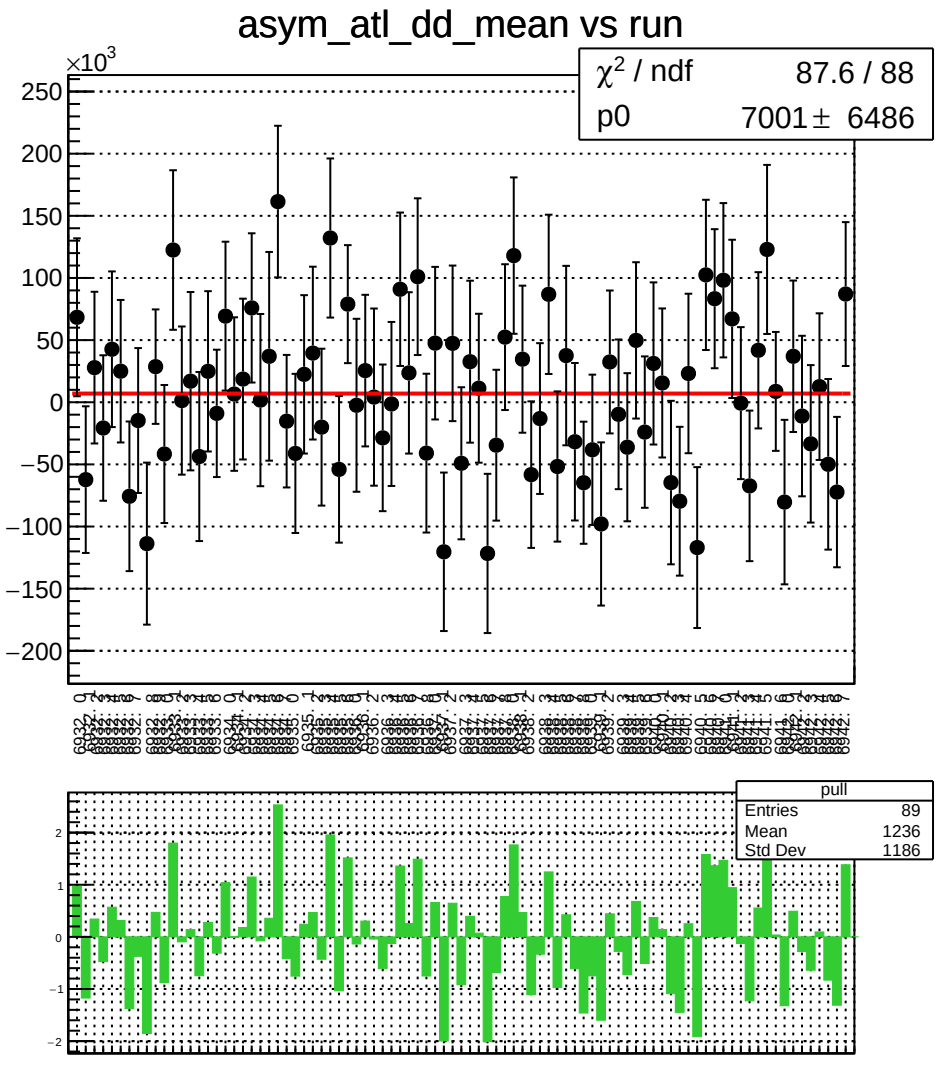

pull1D
Entries 89
Mean −0.0204
Std Dev 0.9944
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

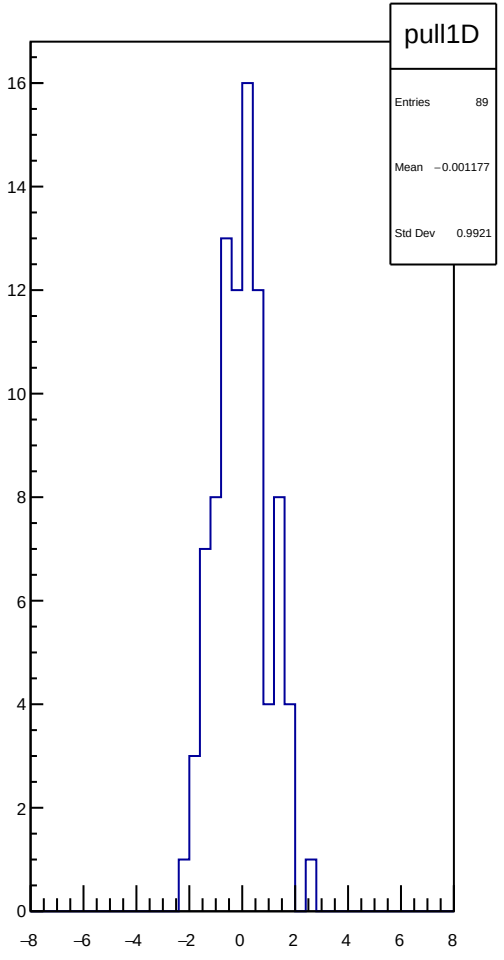

reg_asym_atl_dd_rms vs run
χ^2 / ndf 8365 / 88
p0 1805 ± 1.392
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

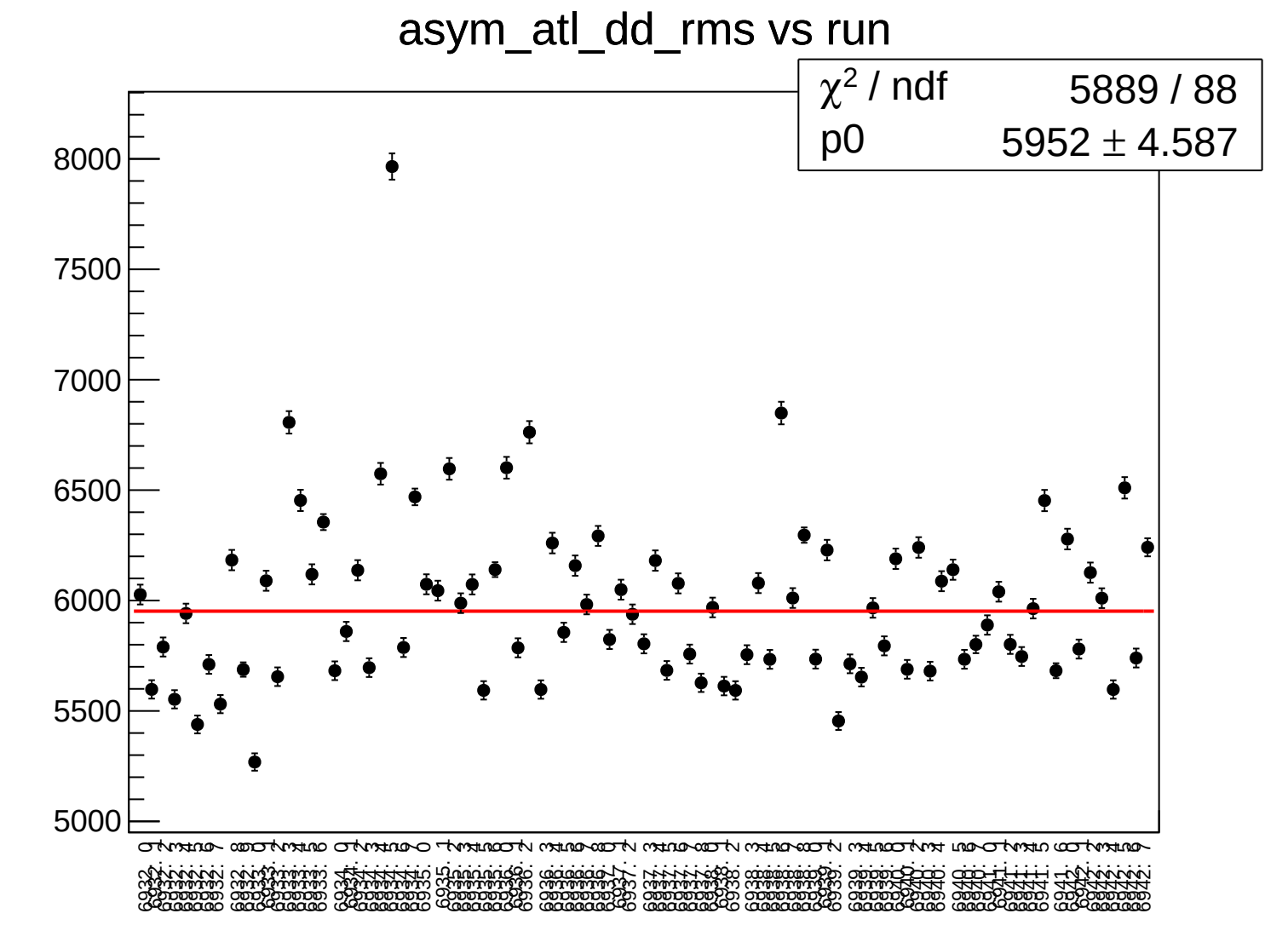

asym_atl_dd_correction_mean vs run
χ^2 / ndf 83.24 / 88
p0 −5832 ± 6164
×10^3
pull
Entries 89
Mean −1499
Std Dev 1538

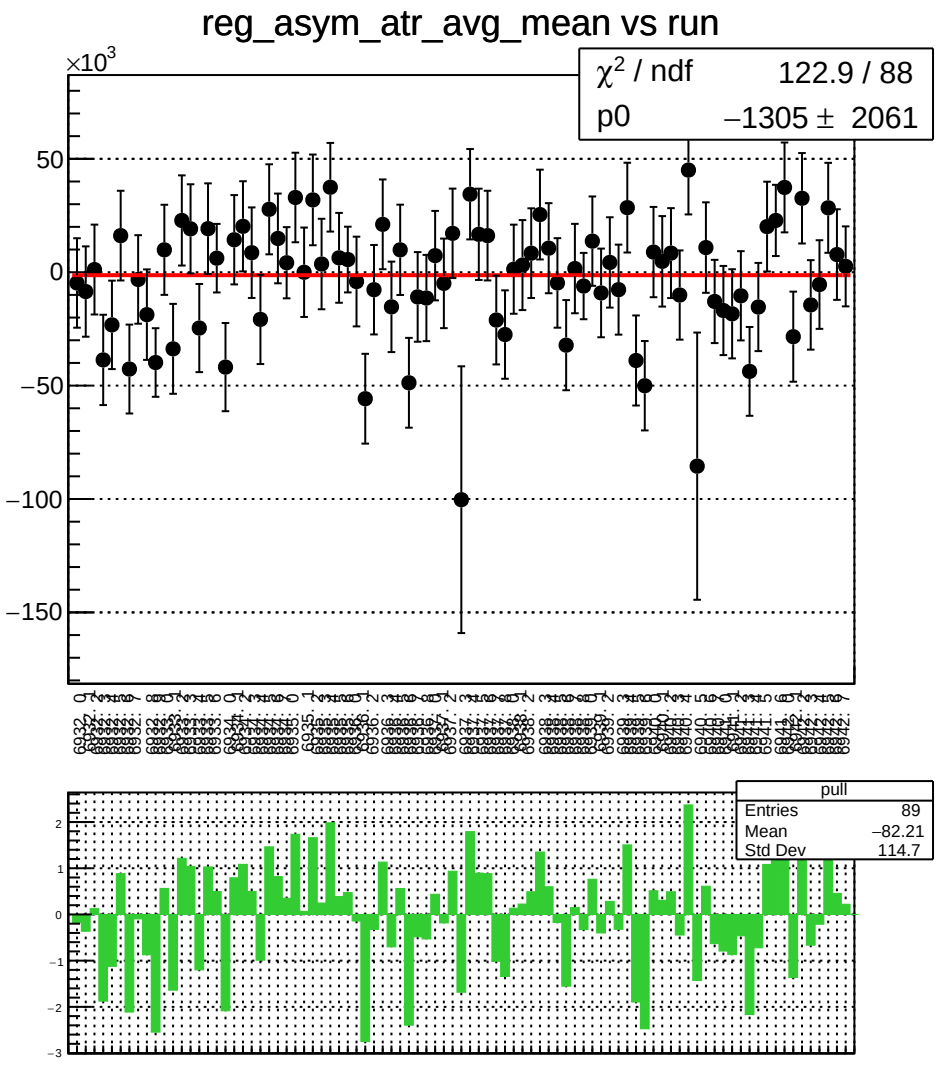

pull1D
Entries 89
Mean −0.001534
Std Dev 0.9671

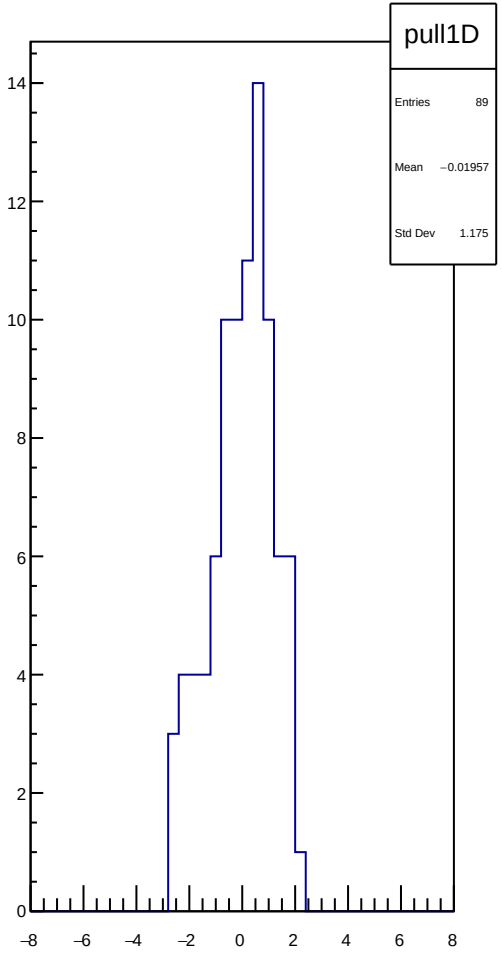

asym_atl_dd_correction_rms vs run
χ² / ndf 5703 / 88
p0 5656 ± 4.358
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

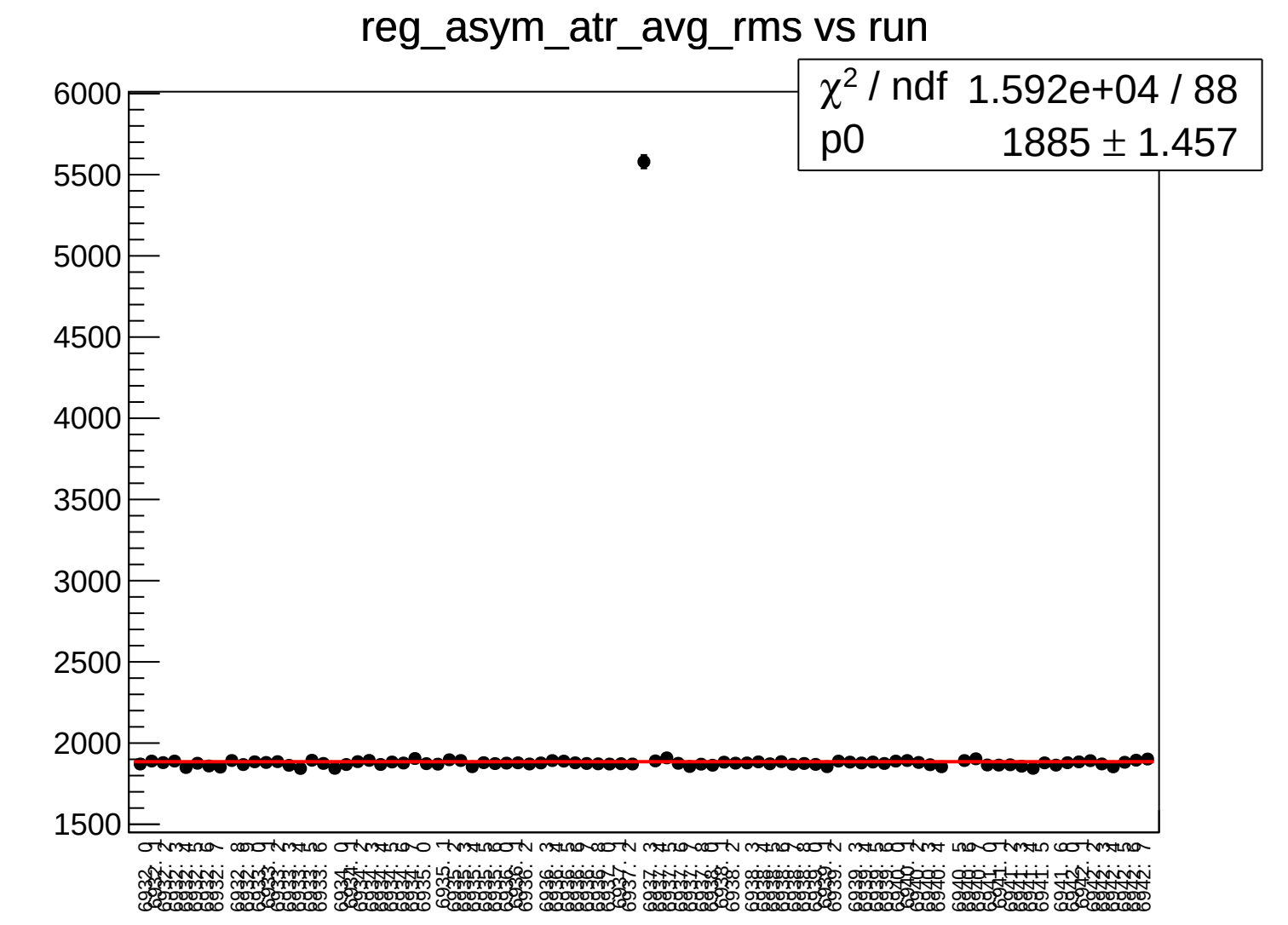

asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 87.6 / 88
p0 7001 ± 6486
pull
Entries 89
Mean 1236
Std Dev 1186

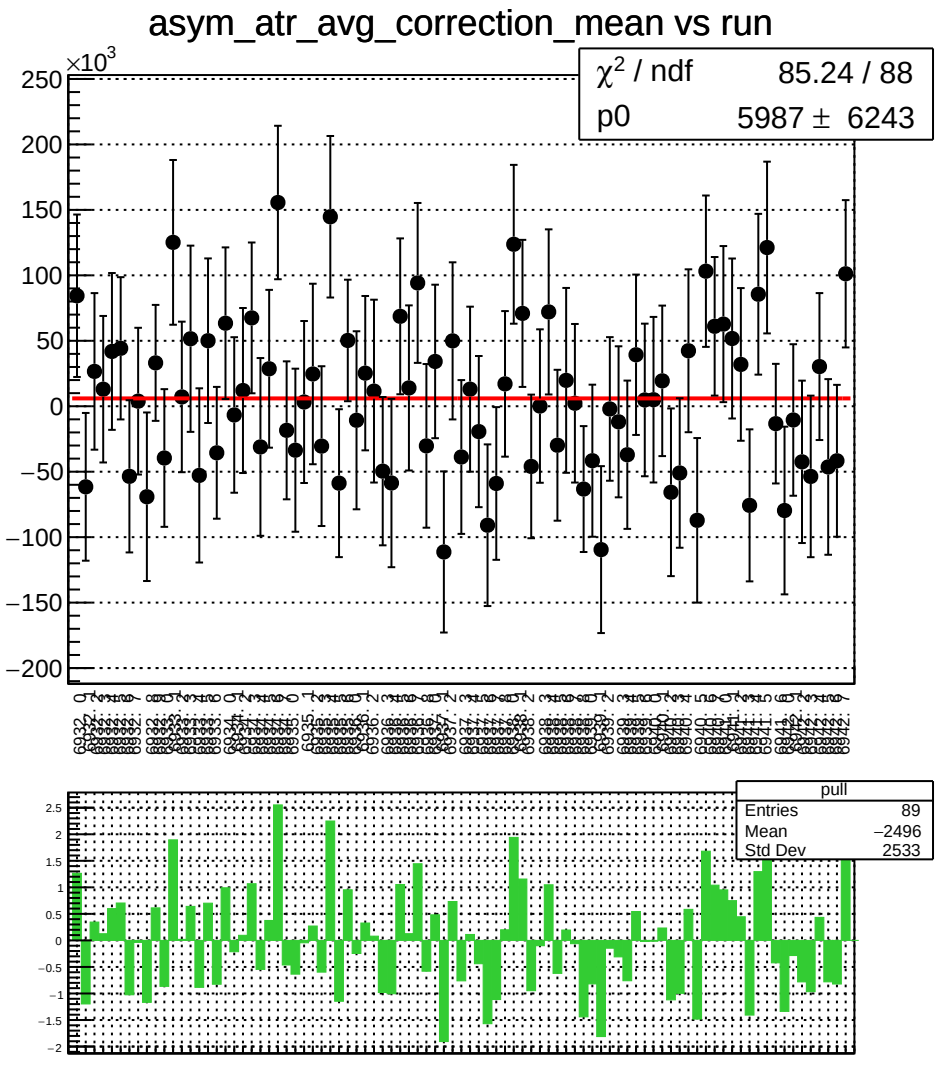

pull1D
Entries 89
Mean −0.001177
Std Dev 0.9921

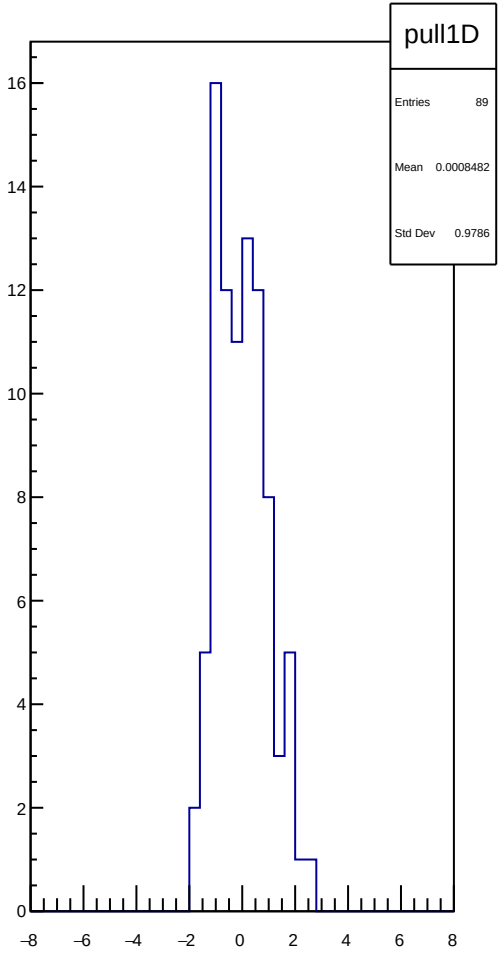

asym_atl_dd_rms vs run
χ^2 / ndf 5889 / 88
p0 5952 ± 4.587
8000
7500
7000
6500
6000
5500
5000

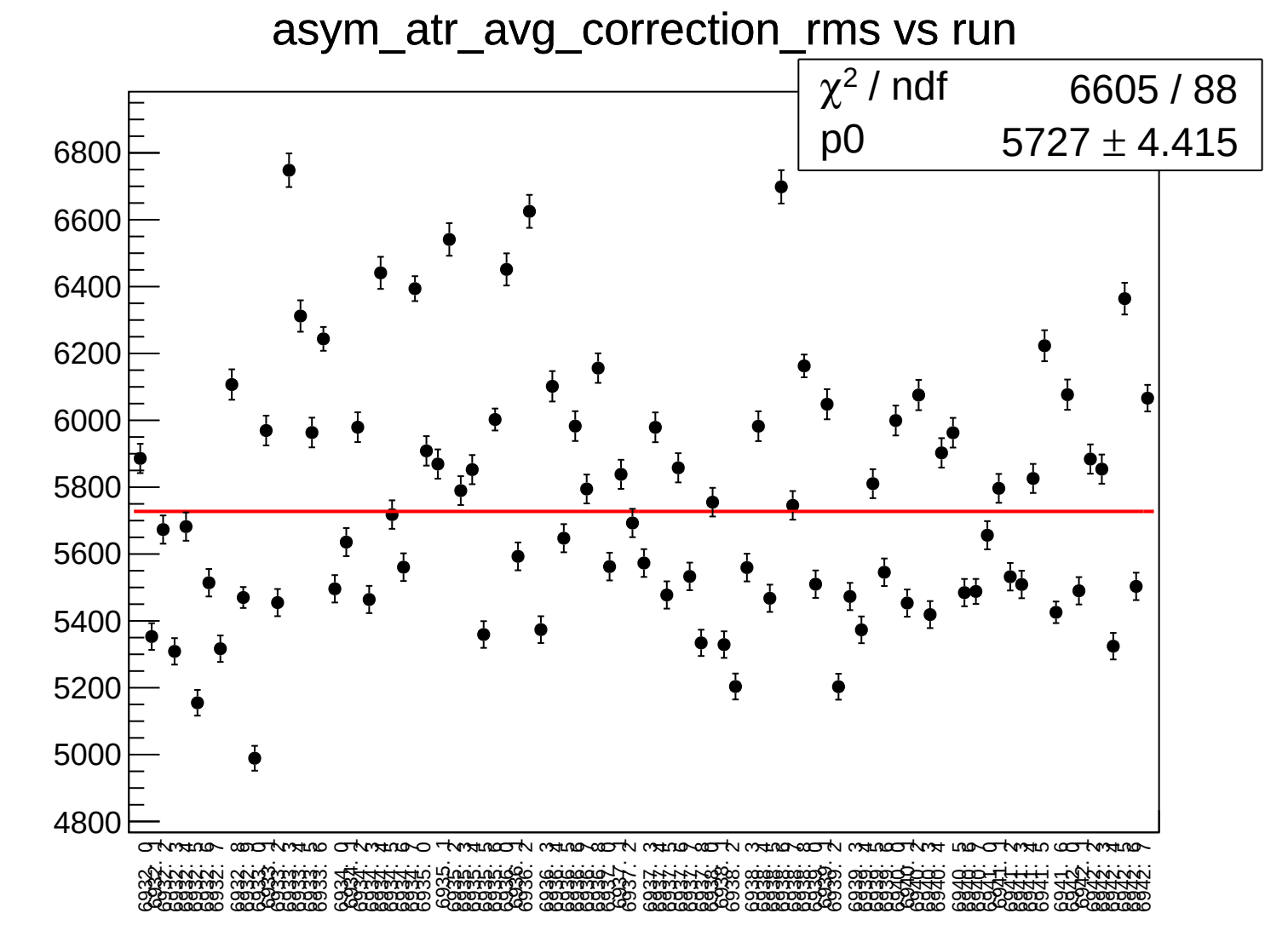

reg_asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 122.9 / 88
p0 −1305 ± 2061
50
0
−50
−100
−150
pull
Entries 89
Mean −82.21
Std Dev 114.7
2
1
0
−1
−2
−3

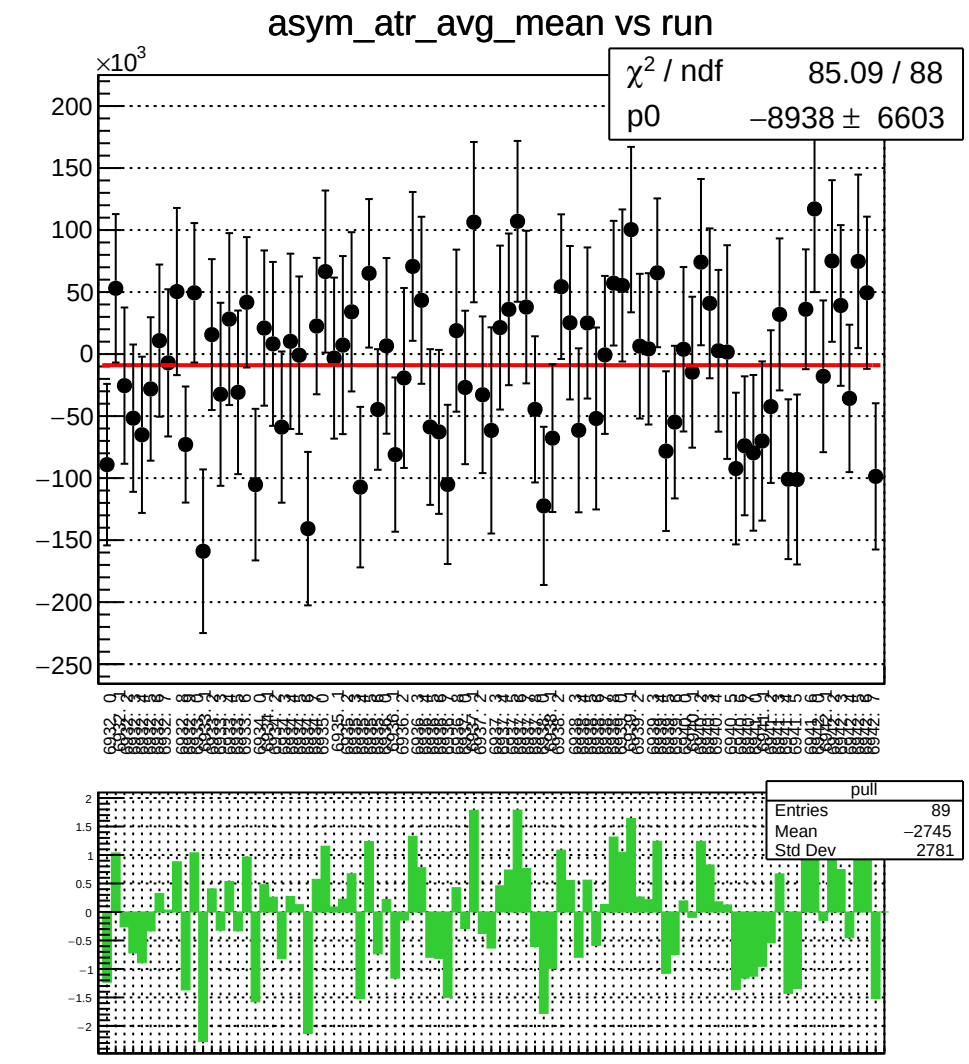

pull1D
Entries 89
Mean −0.01957
Std Dev 1.175
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

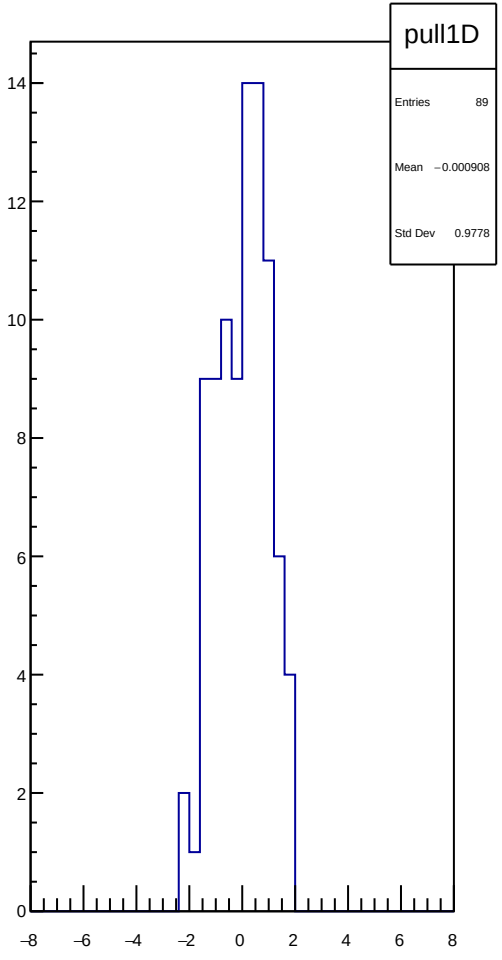

reg_asym_atr_avg_rms vs run
χ² / ndf 1.592e+04 / 88
p0 1885 ± 1.457
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

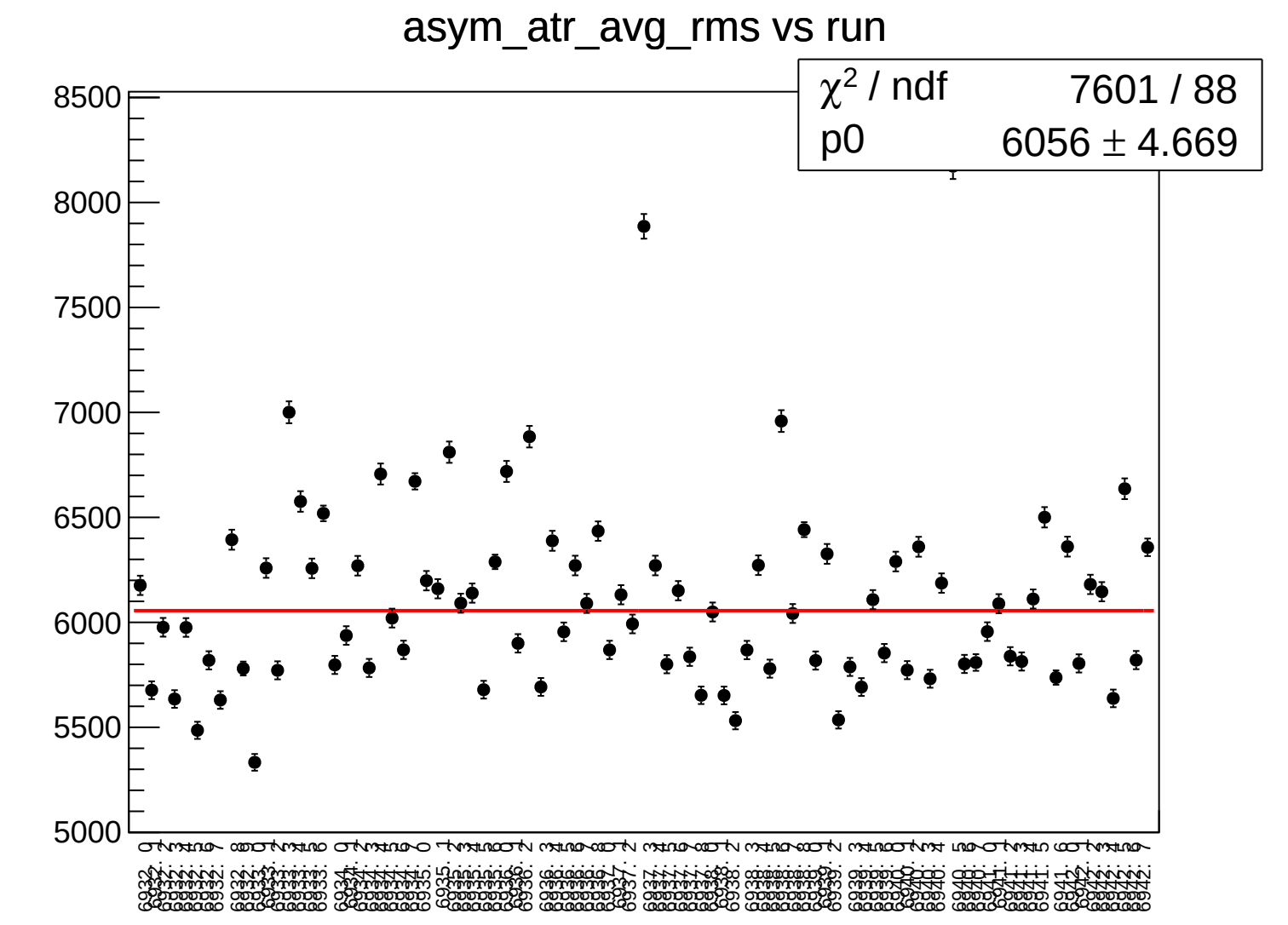

asym_atr_avg_correction_mean vs run
×10^3
χ^2 / ndf 85.24 / 88
p0 5987 ± 6243
pull
Entries 89
Mean −2496
Std Dev 2533

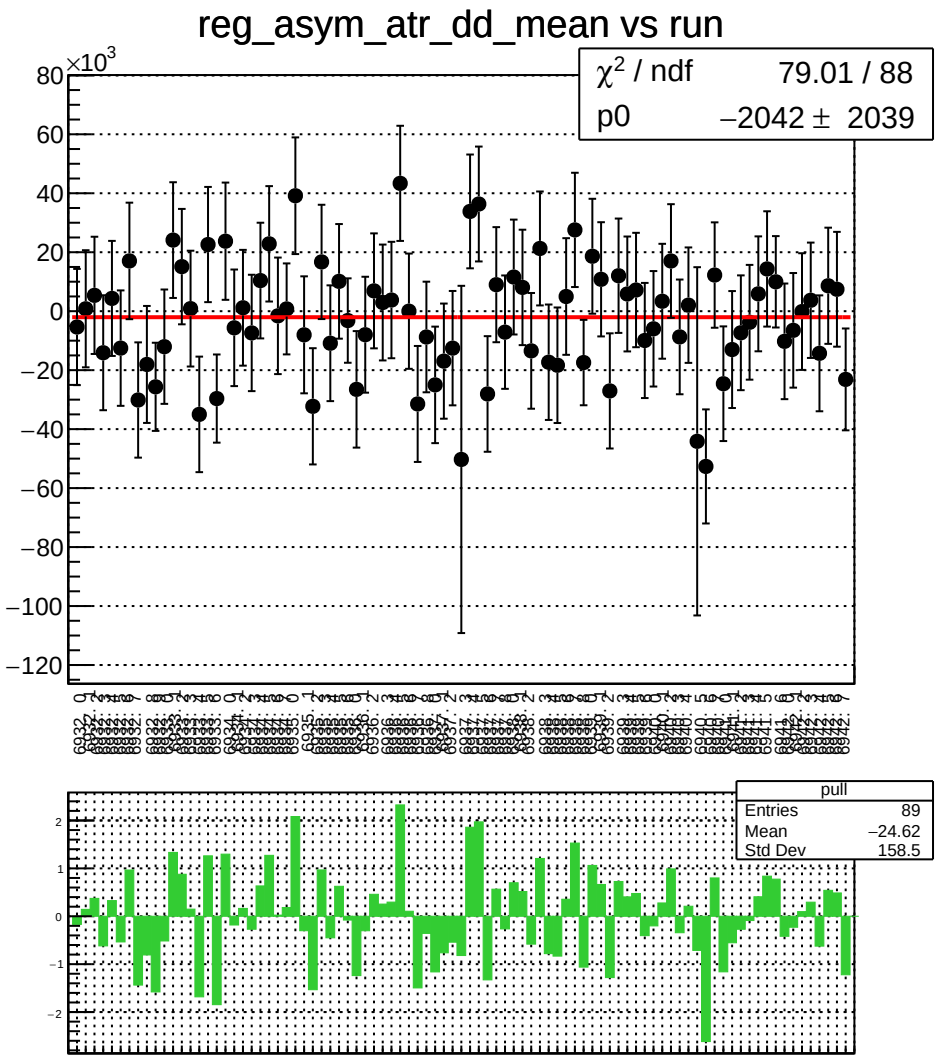

pull1D
Entries 89
Mean 0.0008482
Std Dev 0.9786

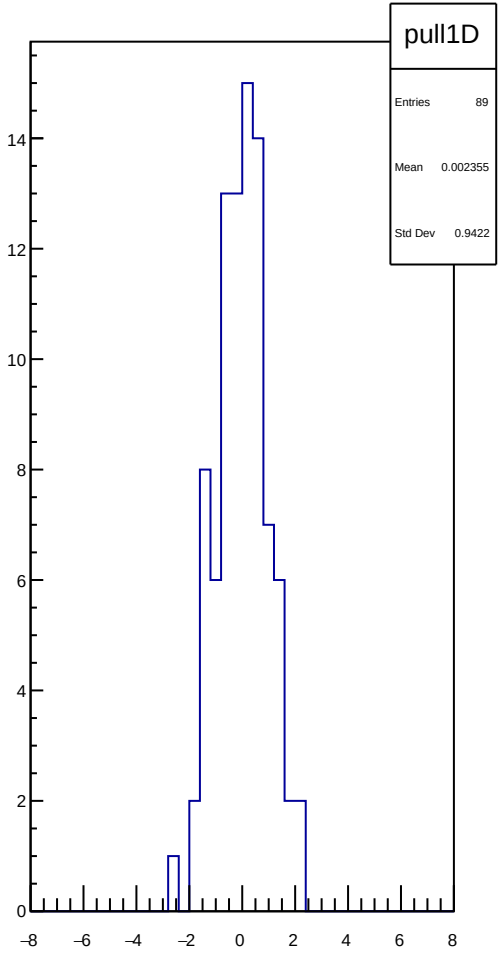

asym_atr_avg_correction_rms vs run
χ² / ndf 6605 / 88
p0 5727 ± 4.415
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

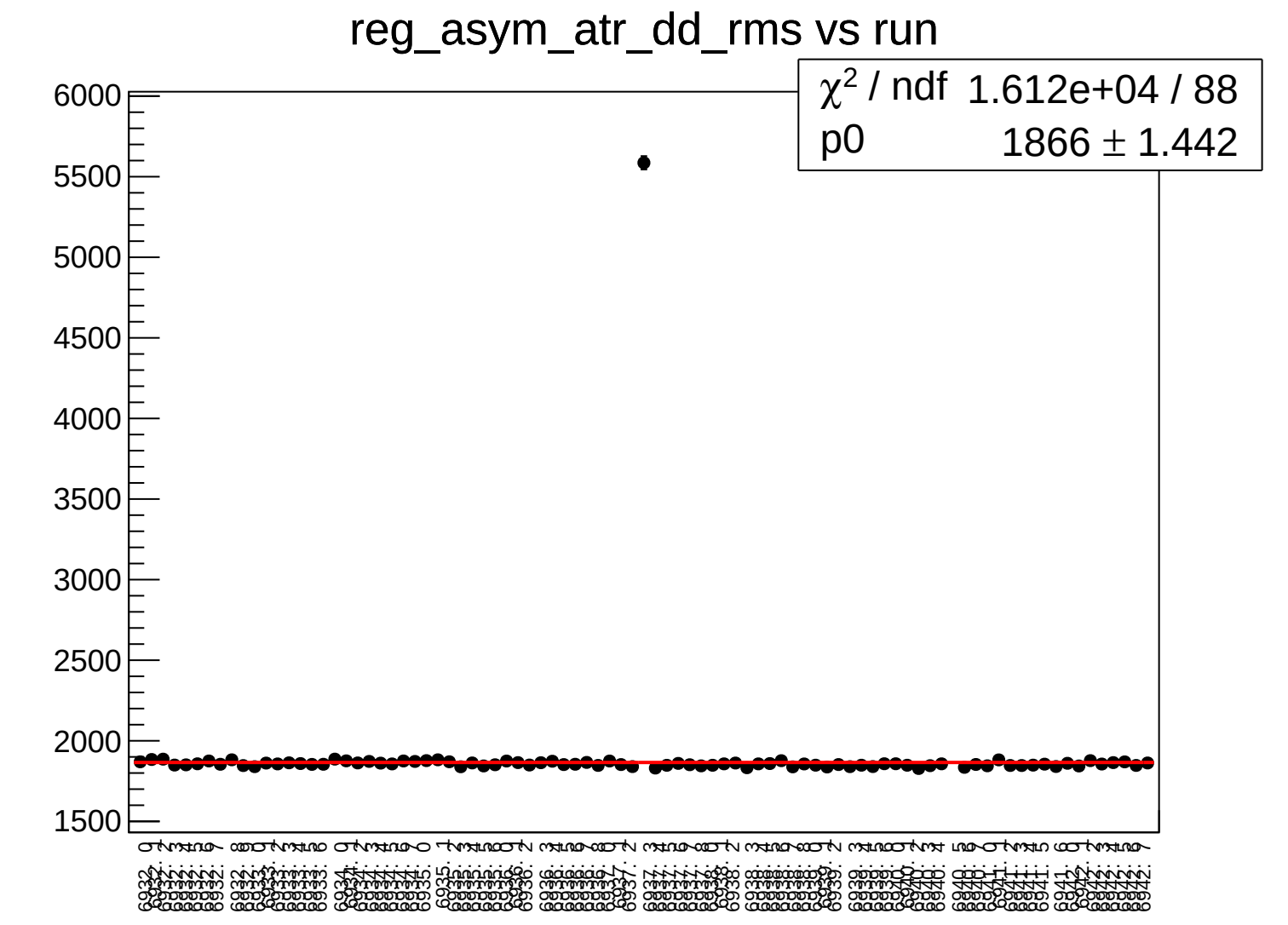

asym_atr_avg_mean vs run
×10^3
χ² / ndf 85.09 / 88
p0 −8938 ± 6603
pull
Entries 89
Mean −2745
Std Dev 2781

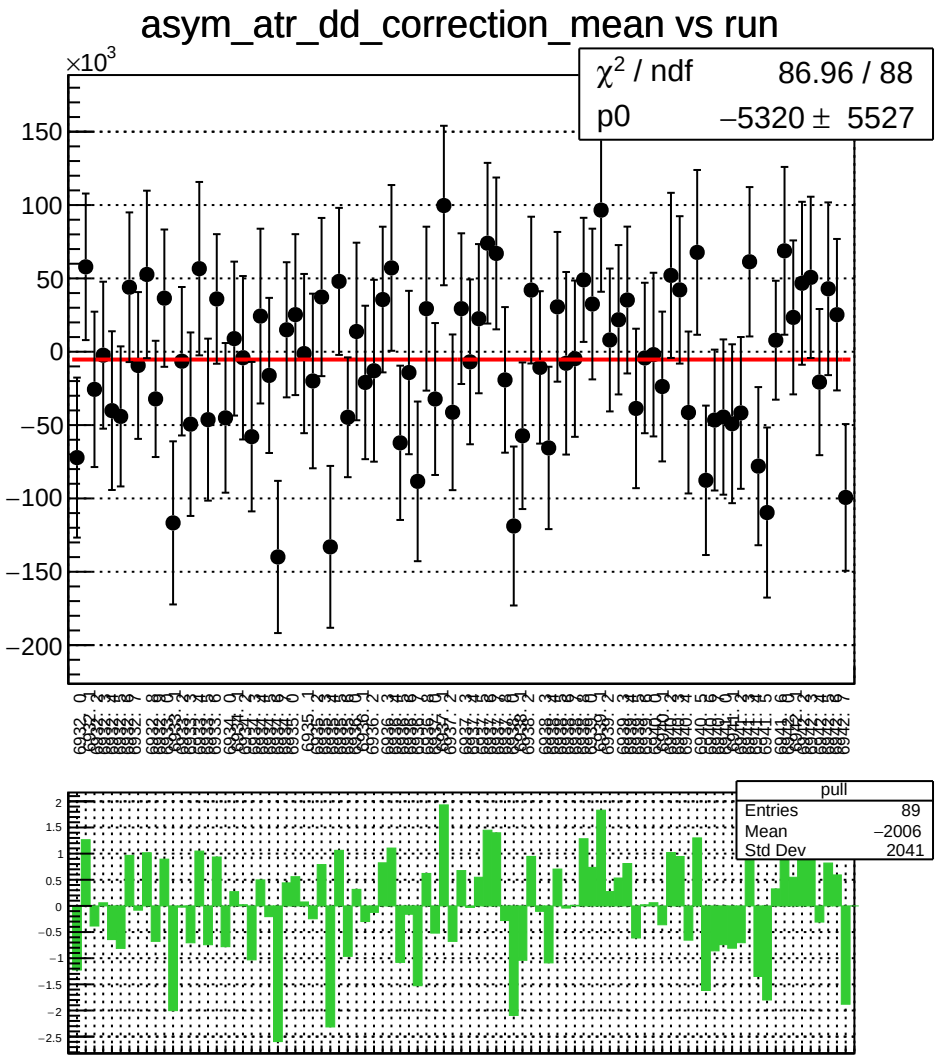

pull1D
Entries 89
Mean −0.000908
Std Dev 0.9778

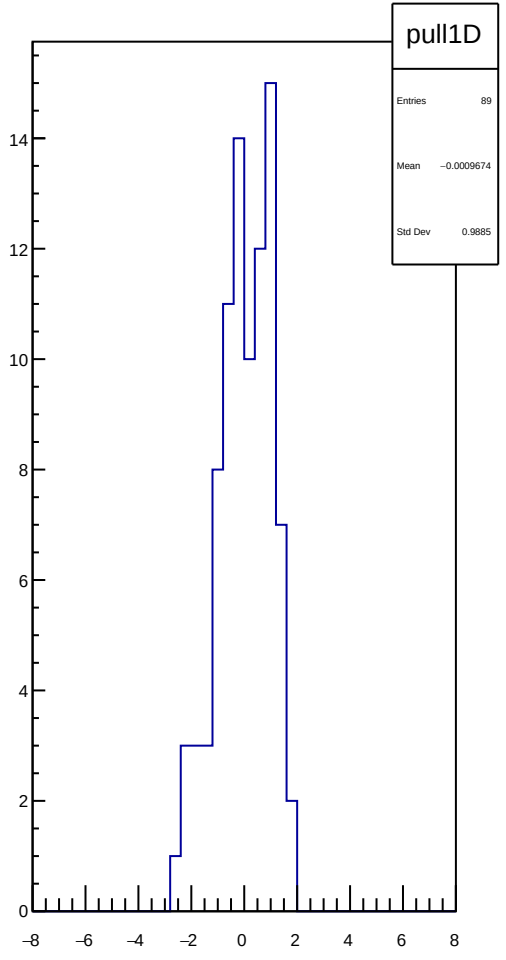

asym_atr_avg_rms vs run
χ² / ndf 7601 / 88
p0 6056 ± 4.669
8500
8000
7500
7000
6500
6000
5500
5000

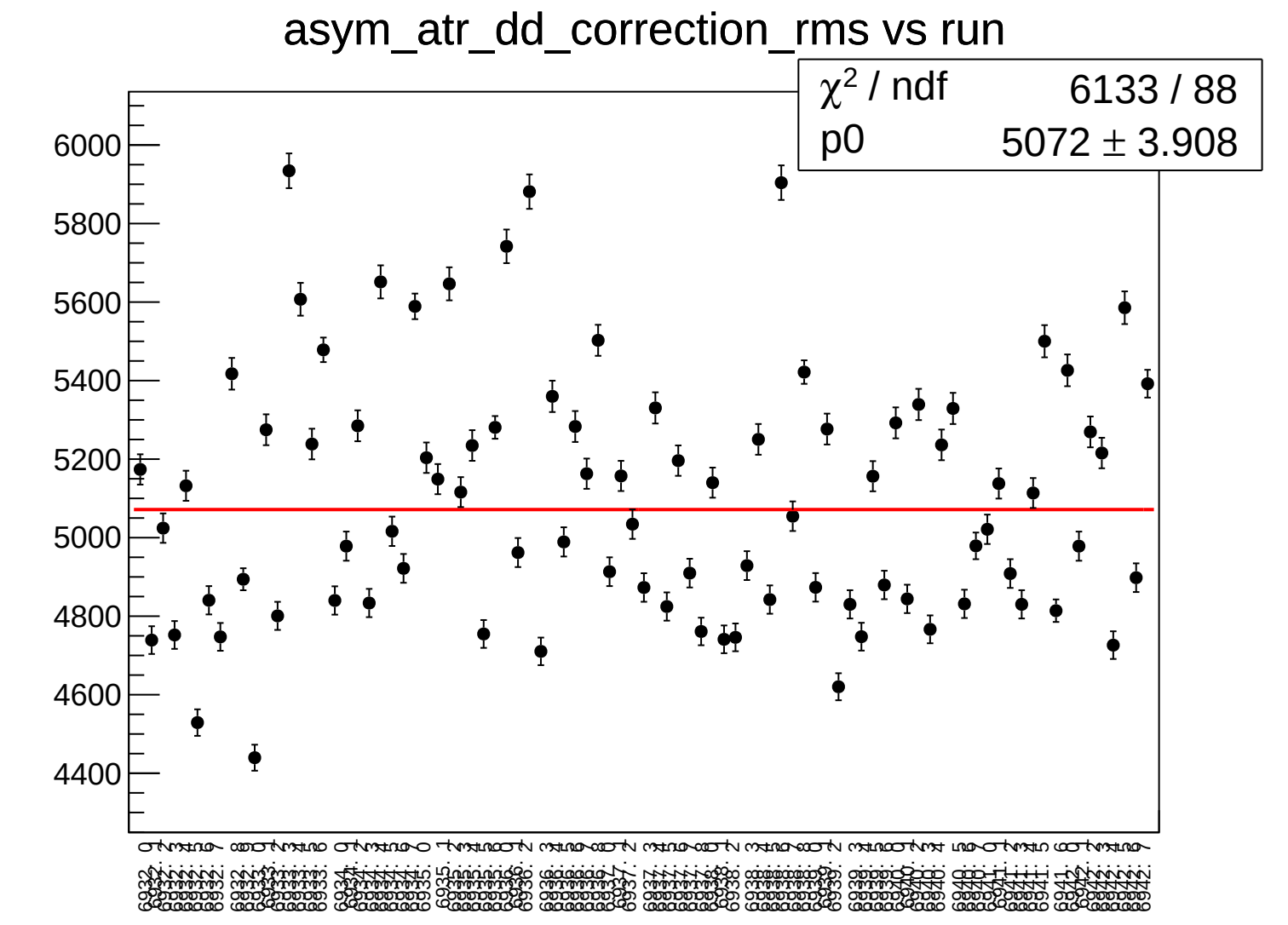

reg_asym_atr_dd_mean vs run
χ² / ndf 79.01 / 88
p0 −2042 ± 2039
×10³
pull
Entries 89
Mean −24.62
Std Dev 158.5

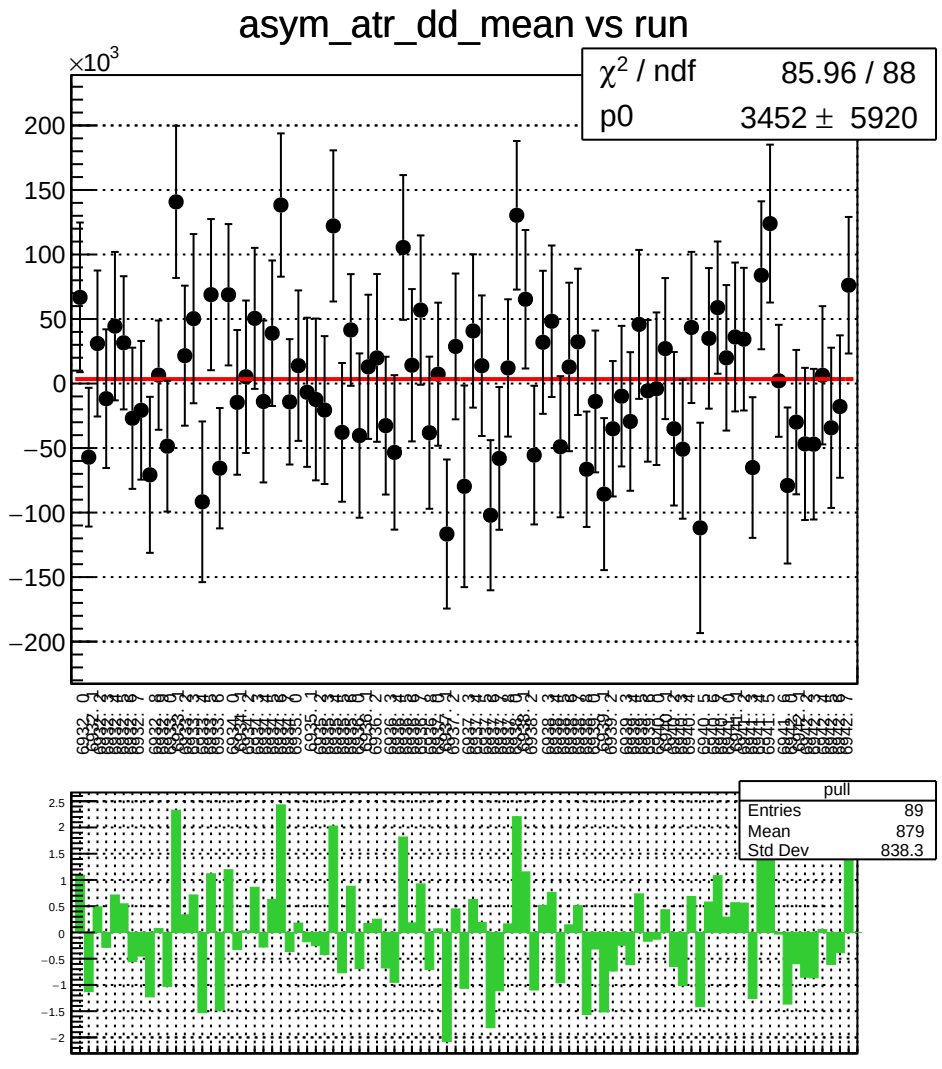

pull1D
Entries 89
Mean 0.002355
Std Dev 0.9422

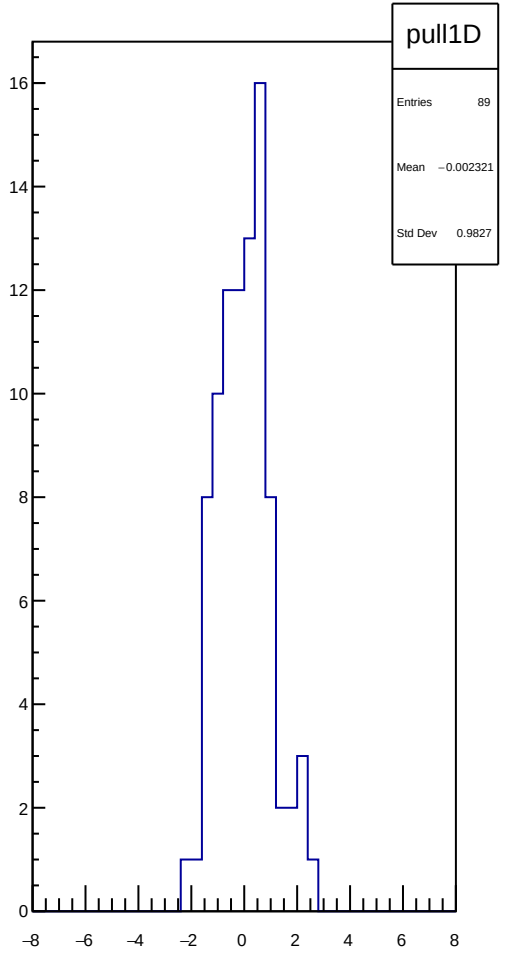

reg_asym_atr_dd_rms vs run
χ² / ndf 1.612e+04 / 88
p0 1866 ± 1.442
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

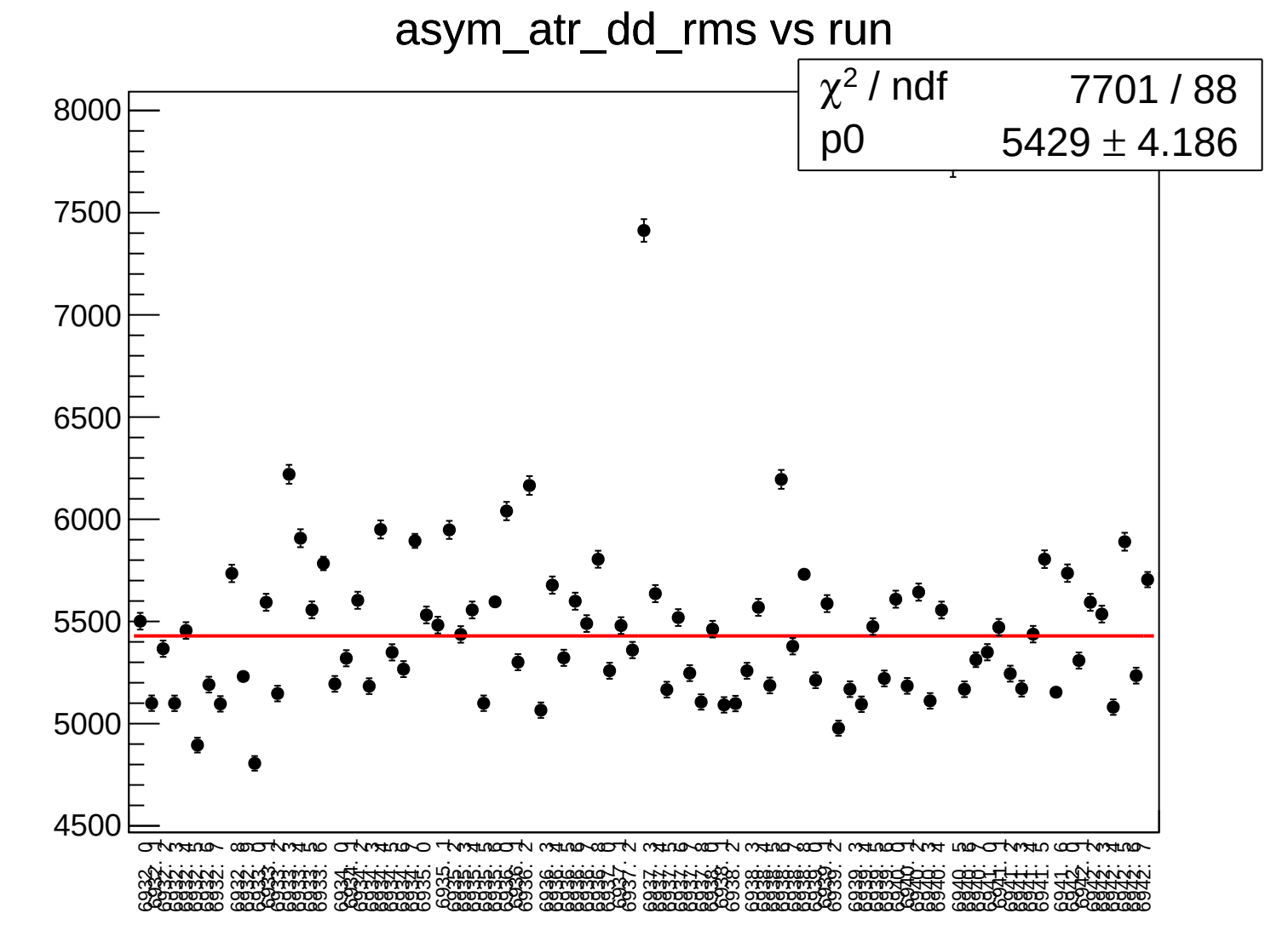

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 86.96 / 88
p0 −5320 ± 5527
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean −2006
Std Dev 2041
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

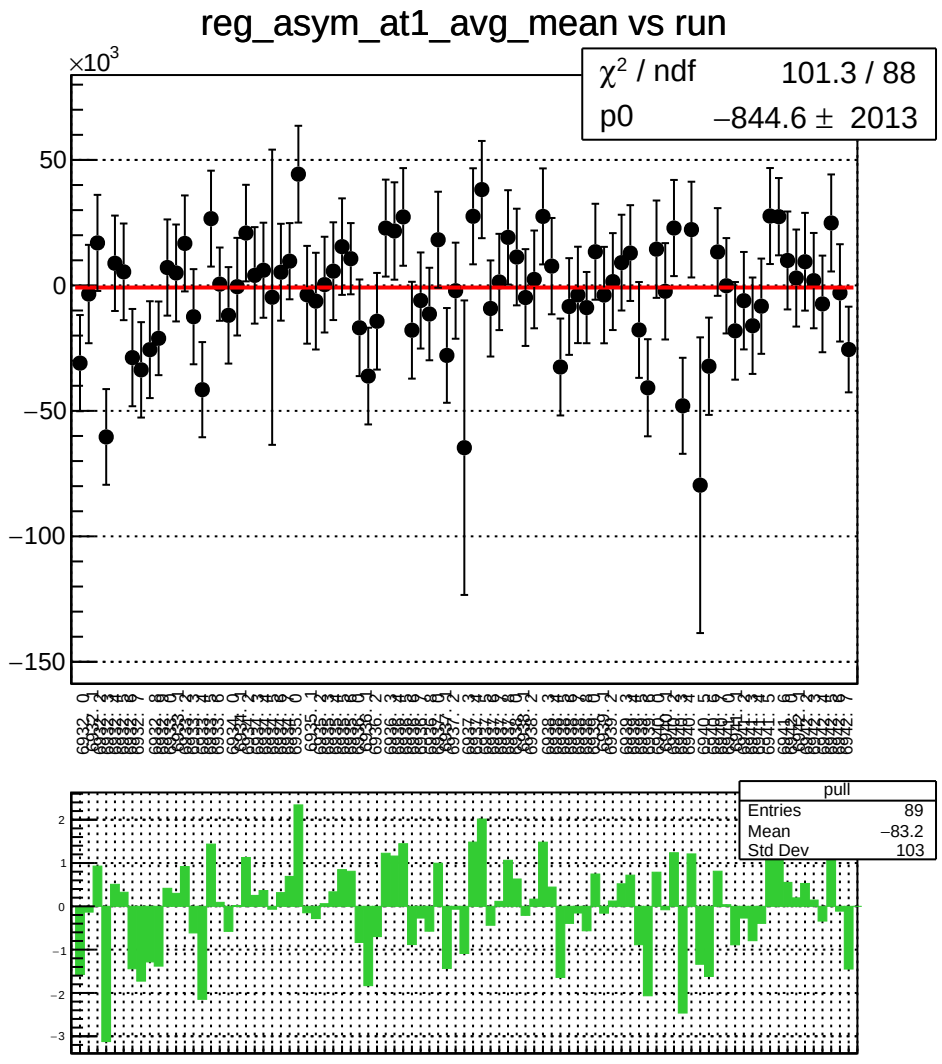

pull1D
Entries 89
Mean −0.0009674
Std Dev 0.9885
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

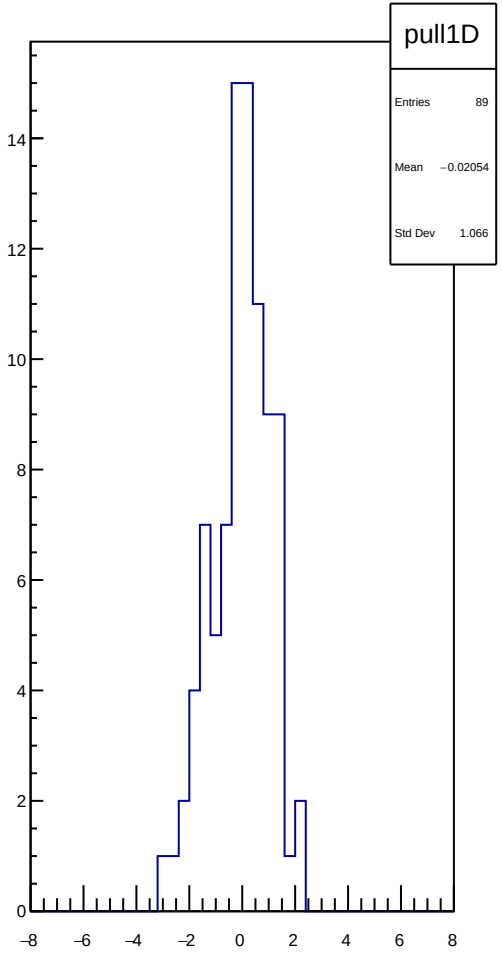

asym_atr_dd_correction_rms vs run
χ² / ndf 6133 / 88
p0 5072 ± 3.908
6000
5800
5600
5400
5200
5000
4800
4600
4400

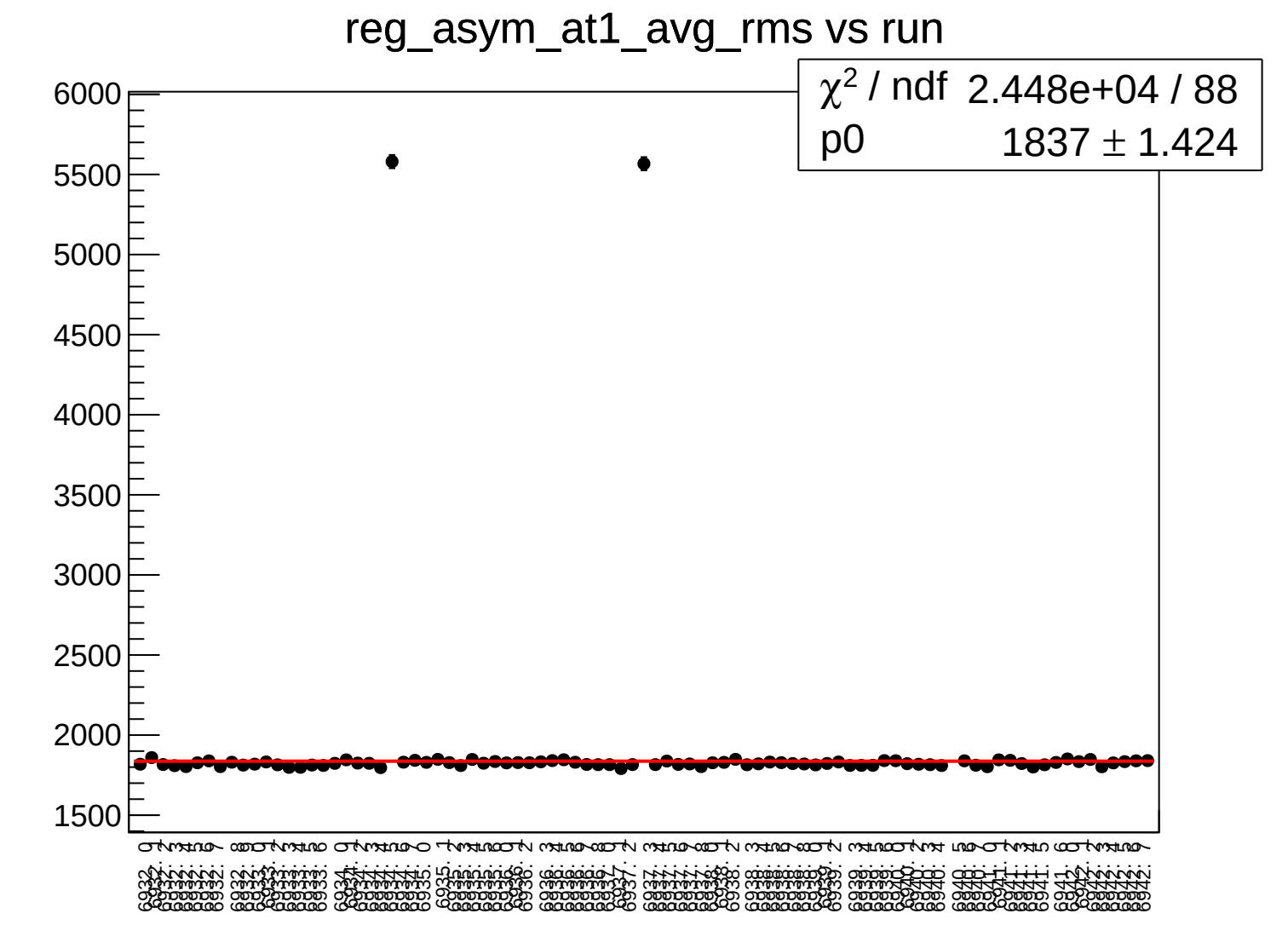

asym_atr_dd_mean vs run
×10^3
χ² / ndf 85.96 / 88
p0 3452 ± 5920
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 879
Std Dev 838.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

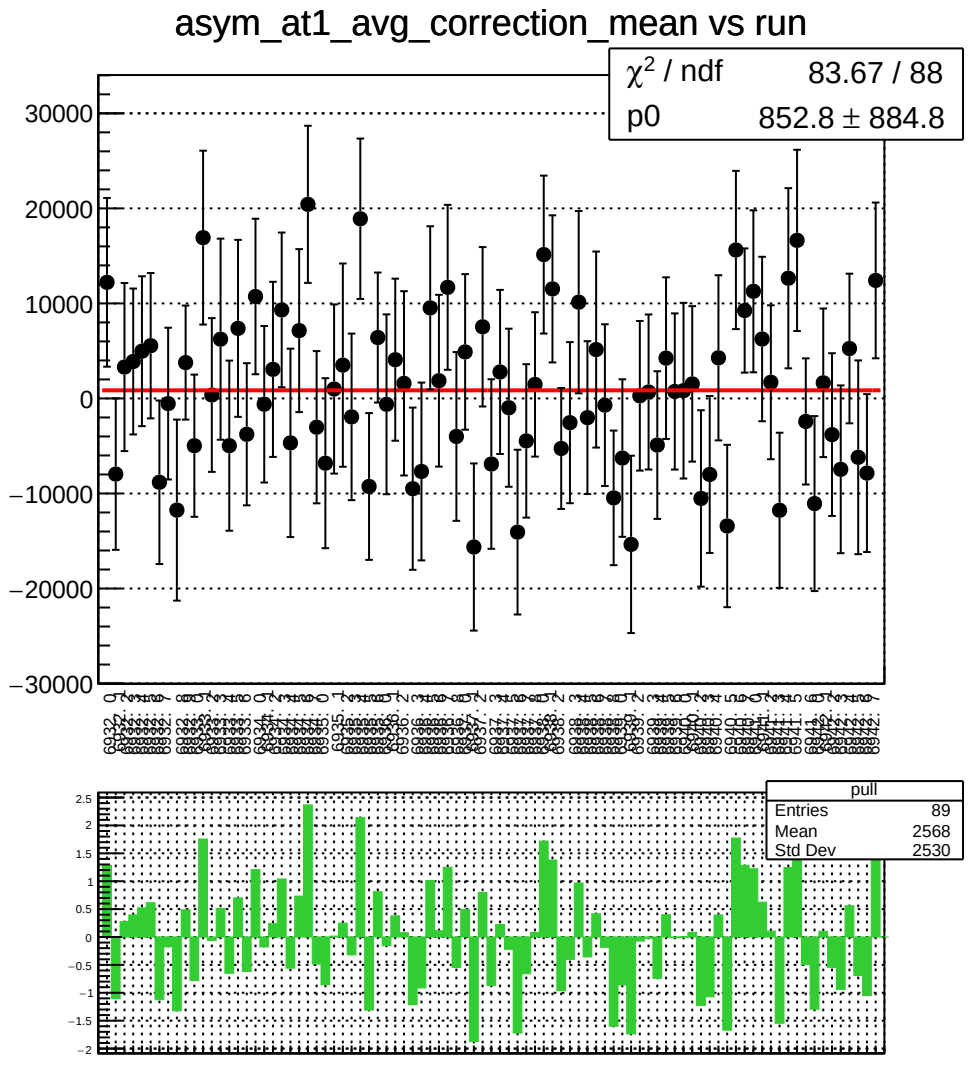

pull1D
Entries 89
Mean −0.002321
Std Dev 0.9827
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

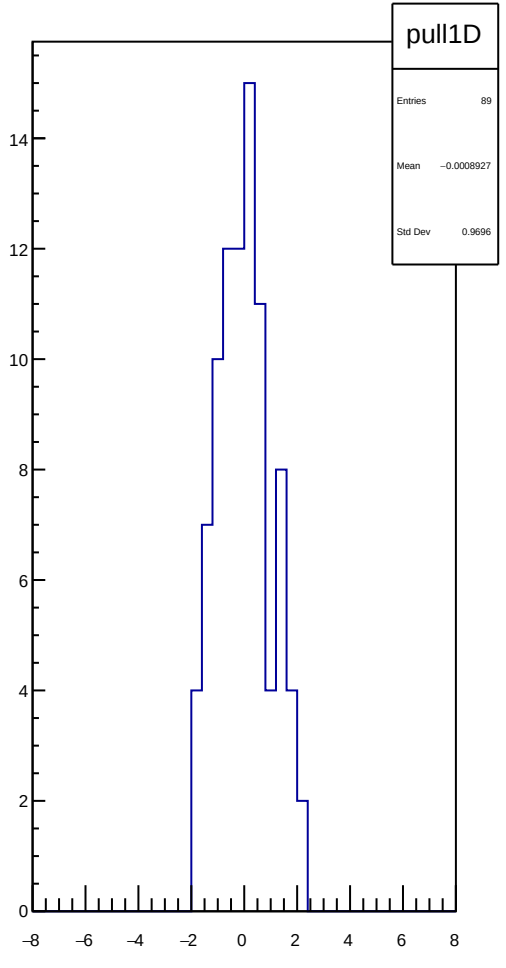

asym_atr_dd_rms vs run
χ² / ndf 7701 / 88
p0 5429 ± 4.186
8000
7500
7000
6500
6000
5500
5000
4500

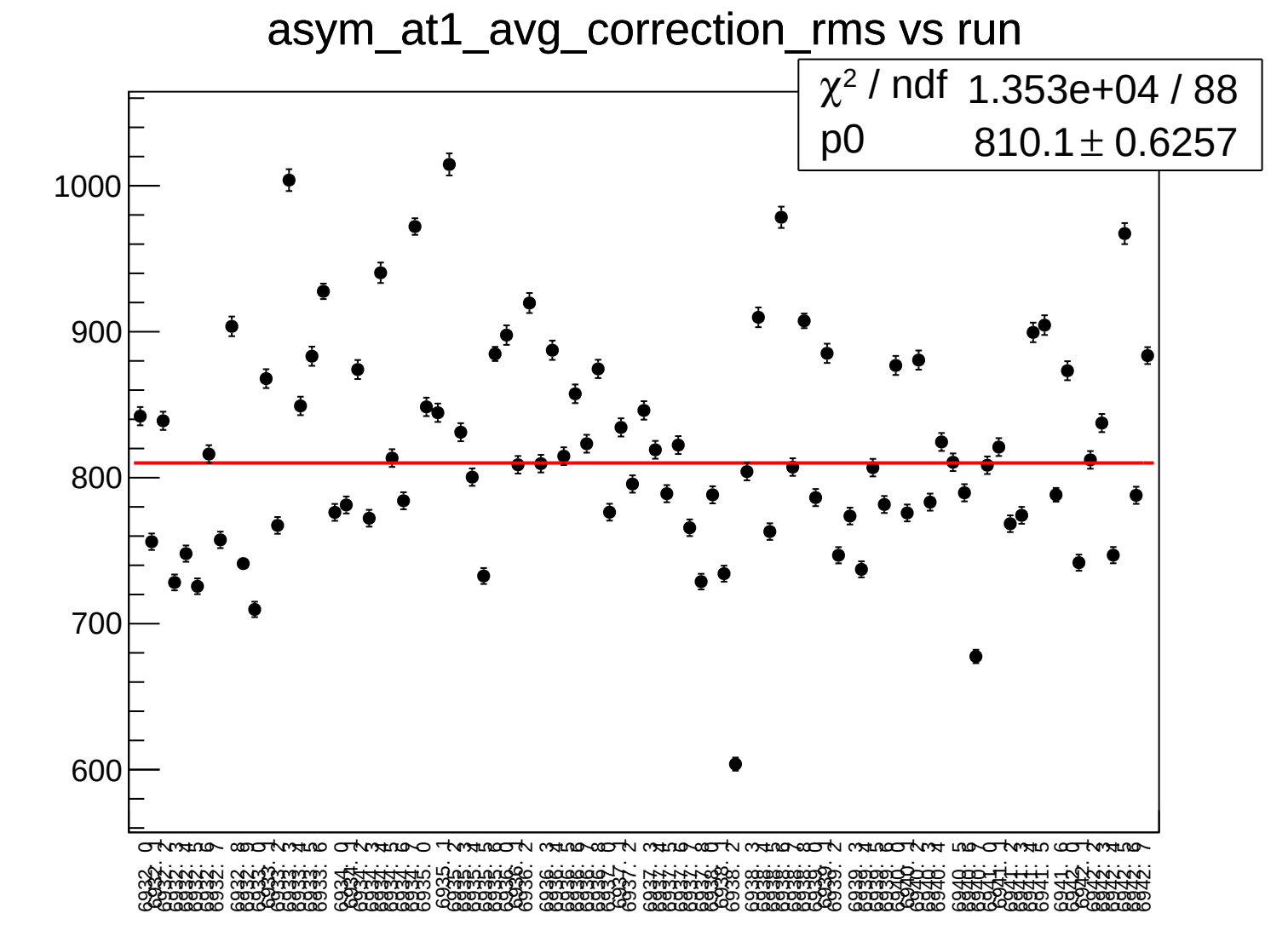

reg_asym_at1_avg_mean vs run
×10^3
χ² / ndf 101.3 / 88
p0 −844.6 ± 2013
50
0
−50
−100
−150
pull
Entries 89
Mean −83.2
Std Dev 103
2
1
0
−1
−2
−3

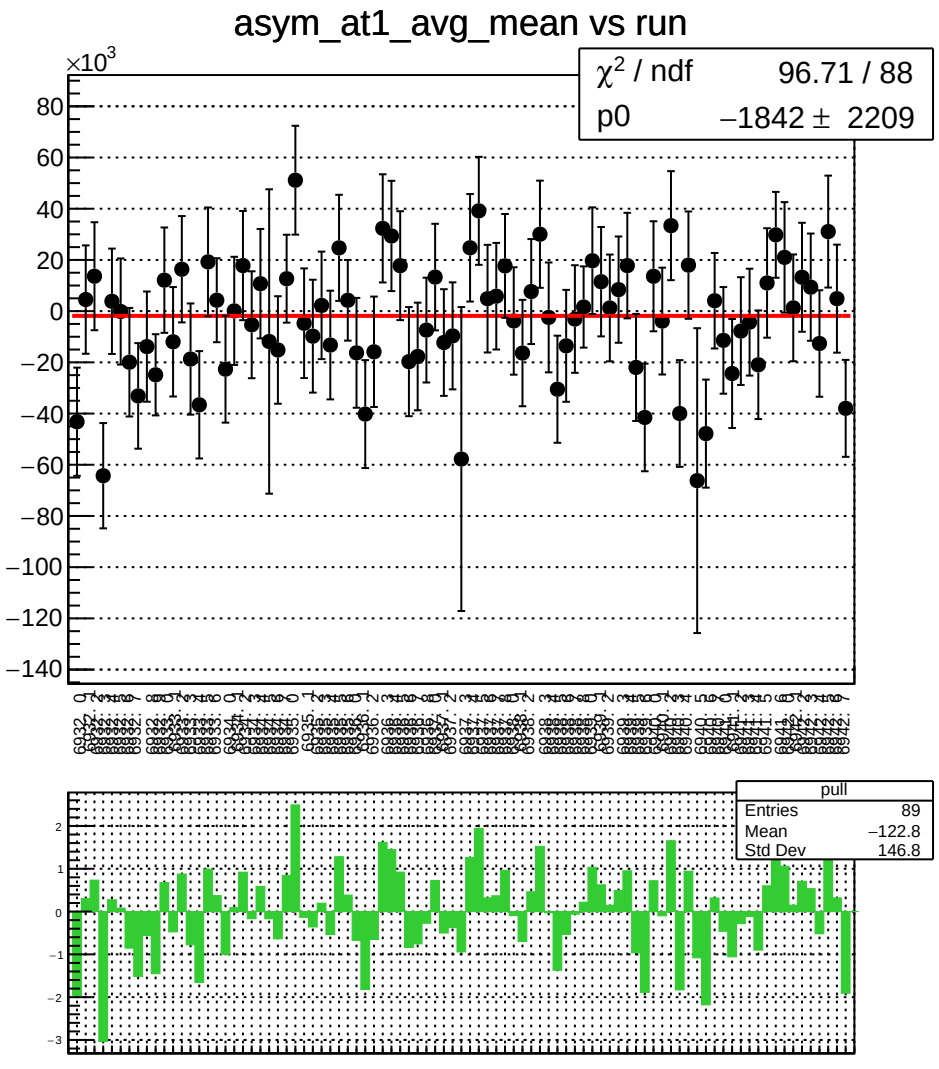

pull1D
Entries 89
Mean −0.02054
Std Dev 1.066
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

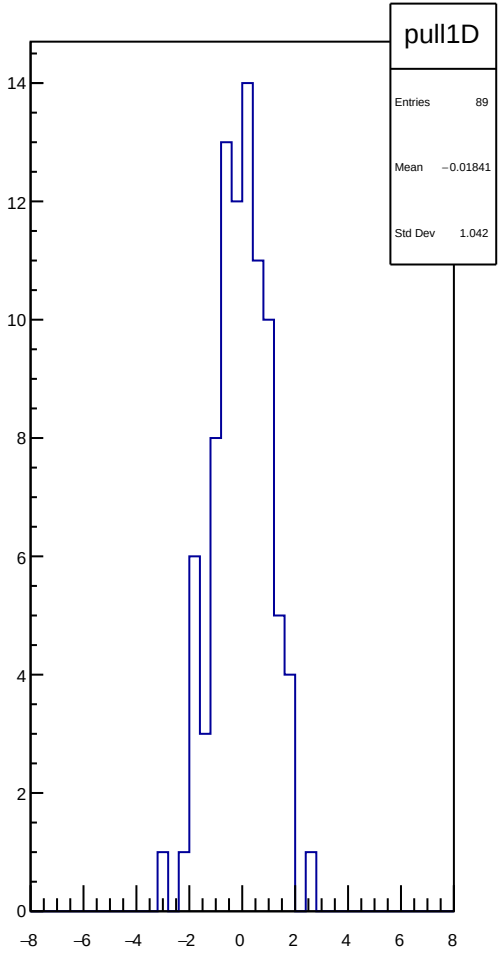

reg_asym_at1_avg_rms vs run
χ² / ndf 2.448e+04 / 88
p0 1837 ± 1.424
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

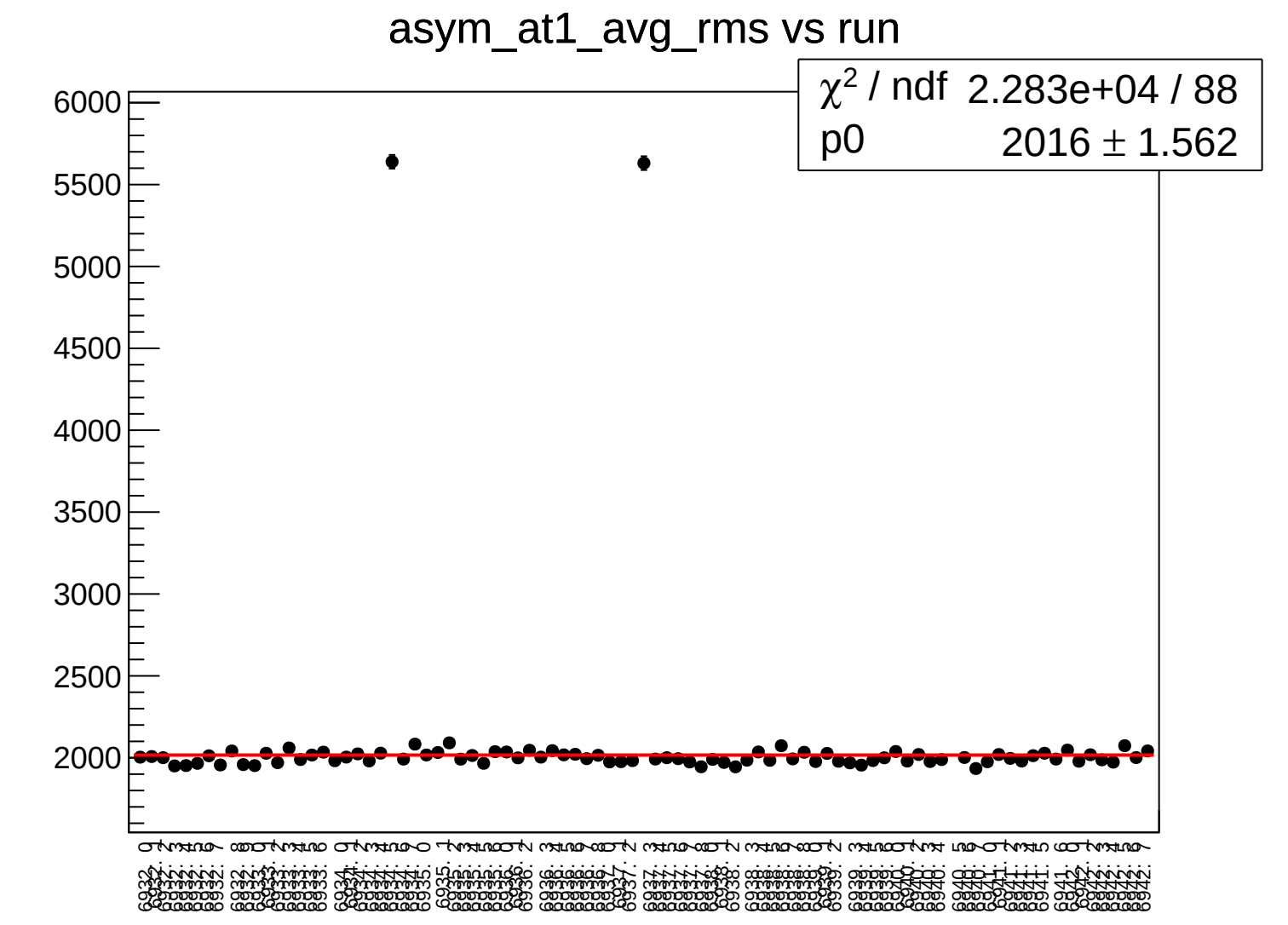

asym_at1_avg_correction_mean vs run
χ² / ndf 83.67 / 88
p0 852.8 ± 884.8
pull
Entries 89
Mean 2568
Std Dev 2530

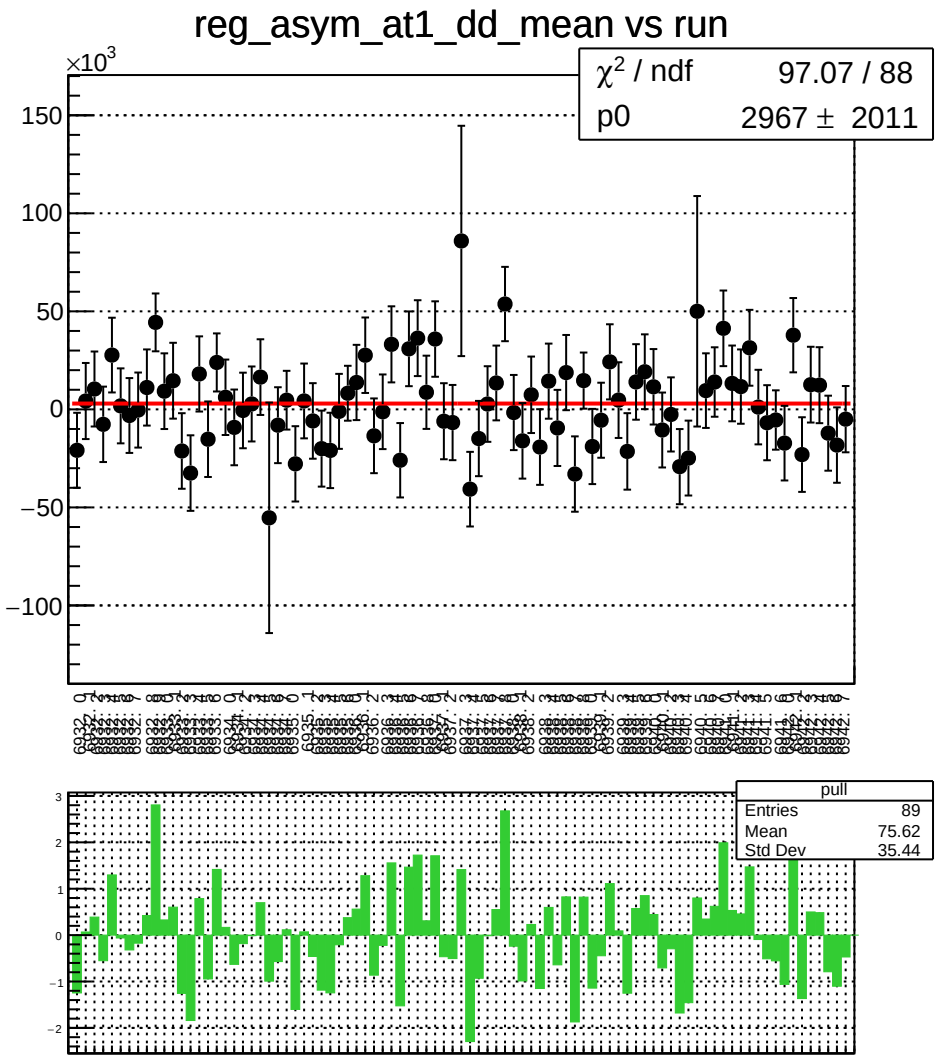

pull1D
Entries 89
Mean −0.0008927
Std Dev 0.9696

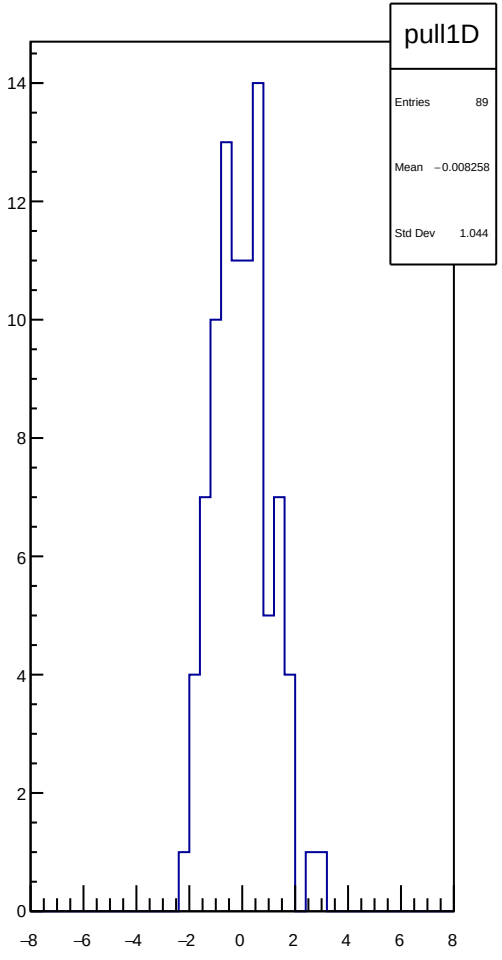

asym_at1_avg_correction_rms vs run
χ² / ndf 1.353e+04 / 88
p0 810.1 ± 0.6257
1000
900
800
700
600

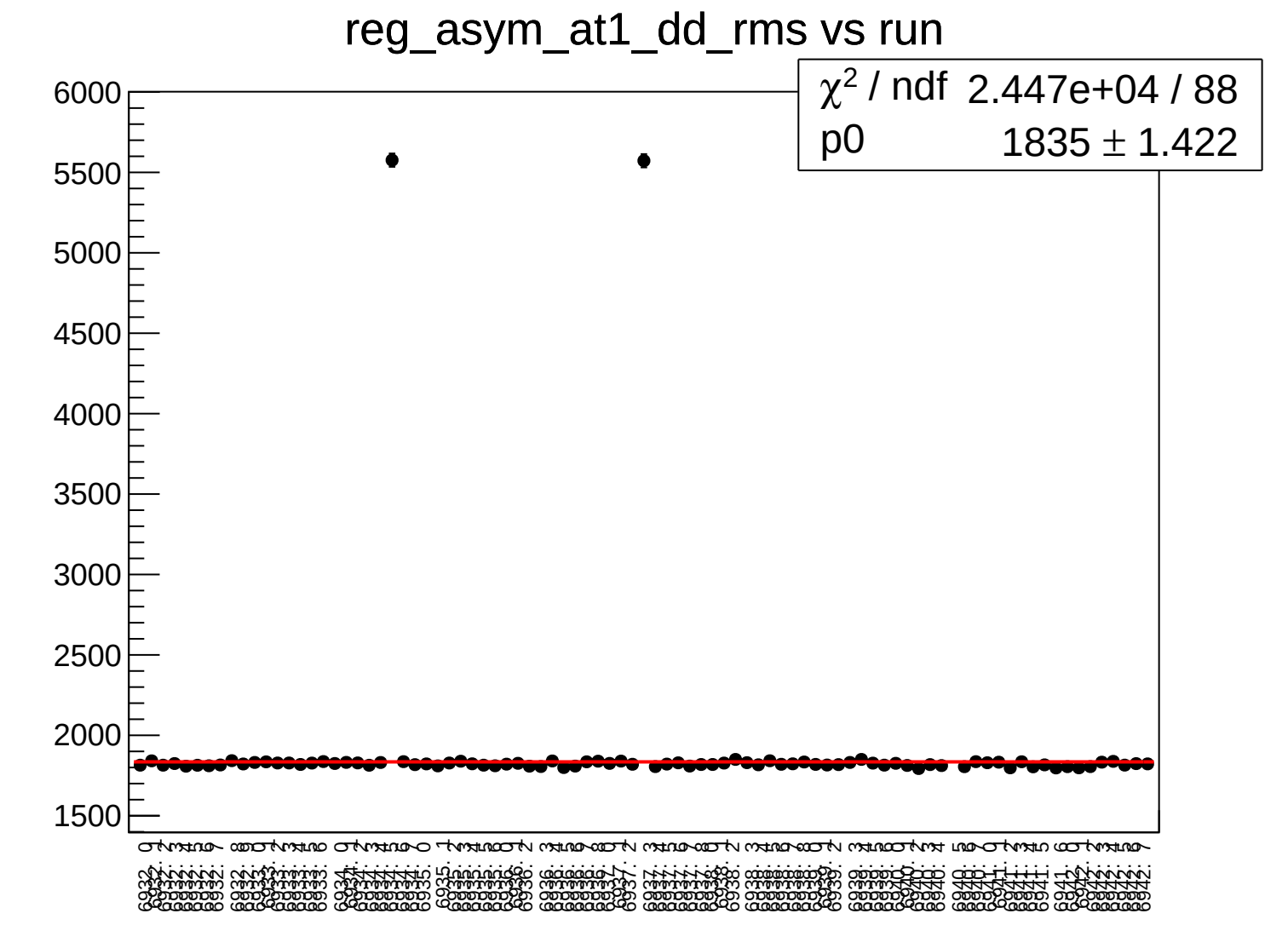

asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 96.71 / 88
p0 −1842 ± 2209
pull
Entries 89
Mean −122.8
Std Dev 146.8

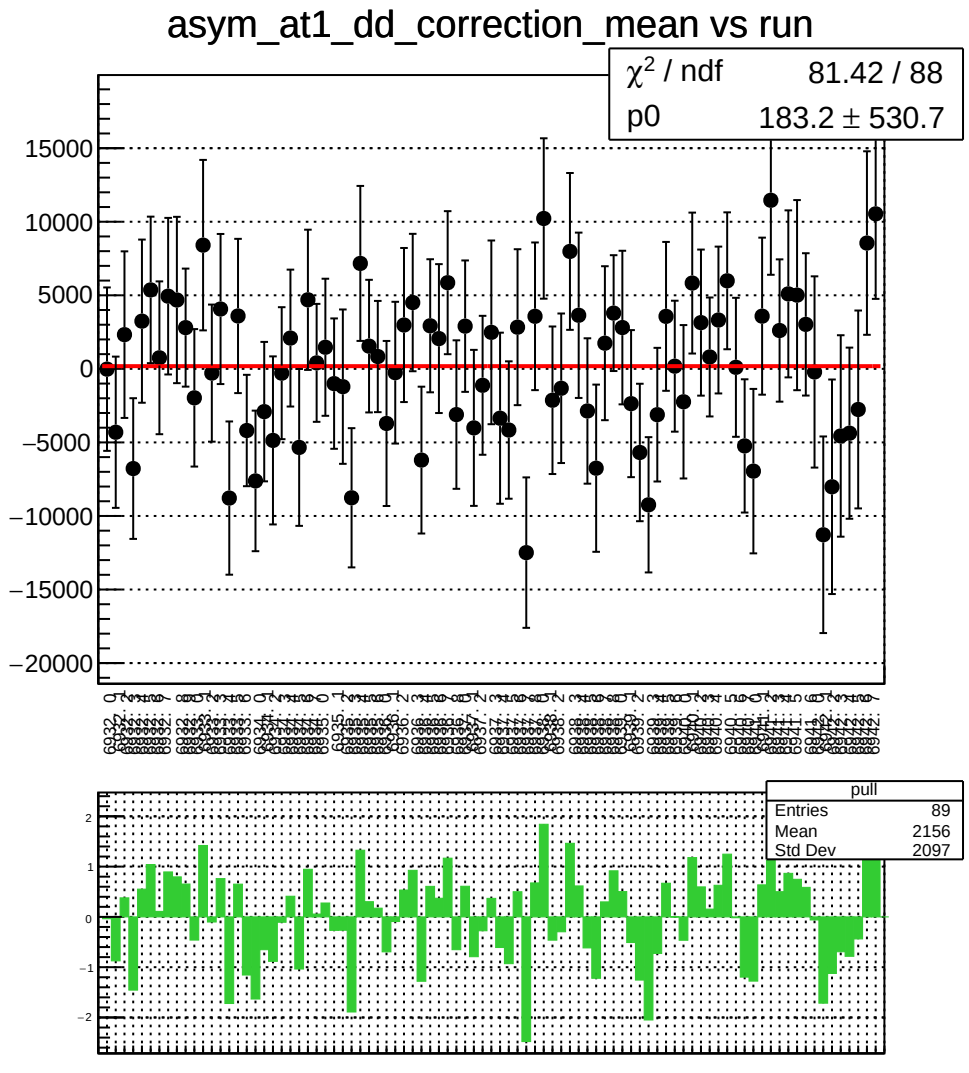

pull1D
Entries 89
Mean −0.01841
Std Dev 1.042

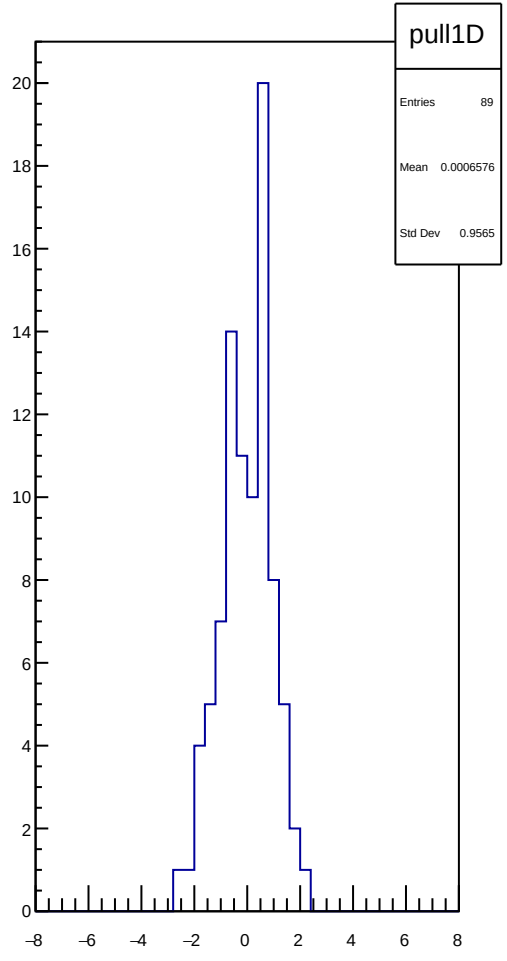

asym_at1_avg_rms vs run
χ² / ndf 2.283e+04 / 88
p0 2016 ± 1.562
6000
5500
5000
4500
4000
3500
3000
2500
2000

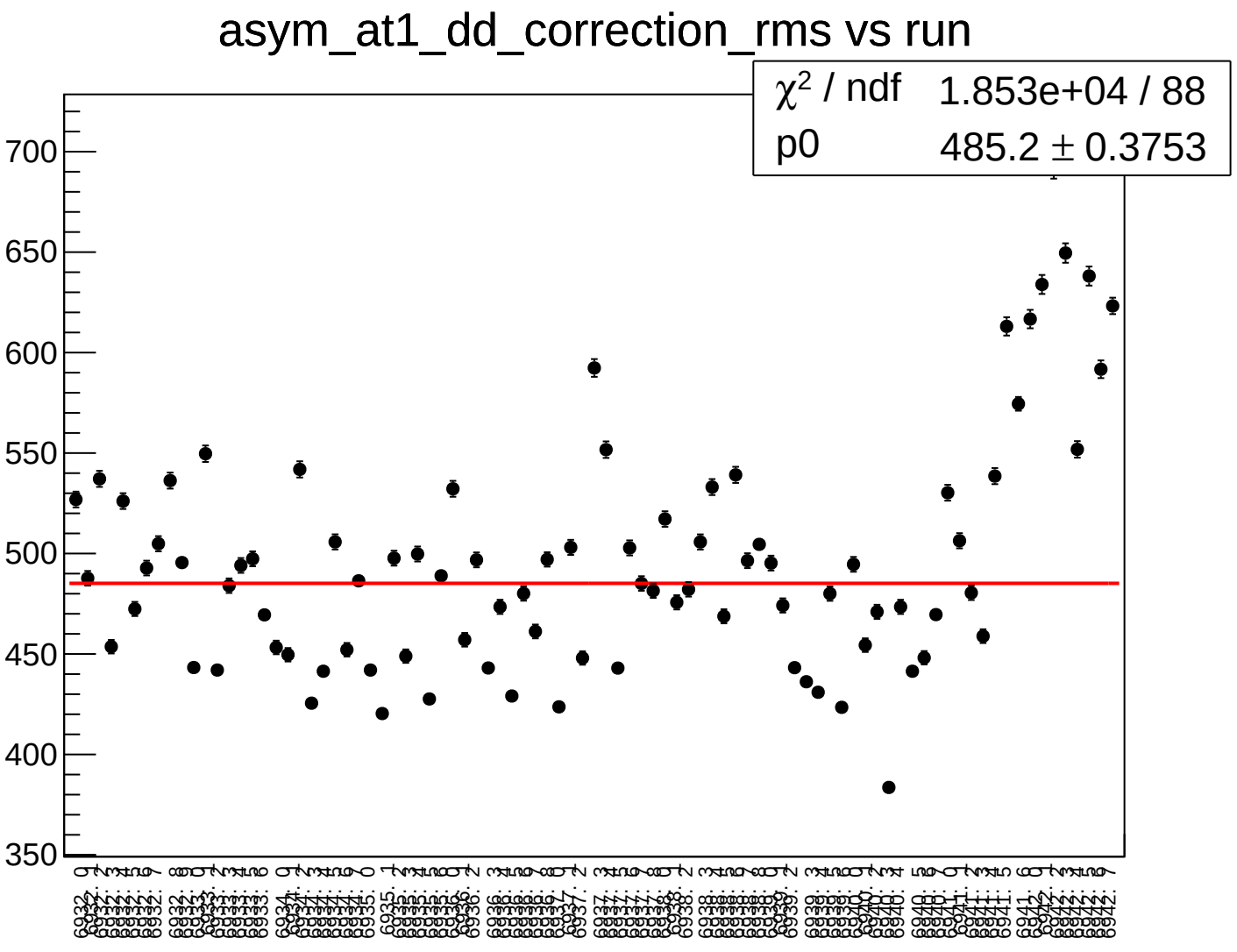

reg_asym_at1_dd_mean vs run
×10^3
χ^2 / ndf 97.07 / 88
p0 2967 ± 2011
150
100
50
0
−50
−100
pull
Entries 89
Mean 75.62
Std Dev 35.44
3
2
1
0
−1
−2

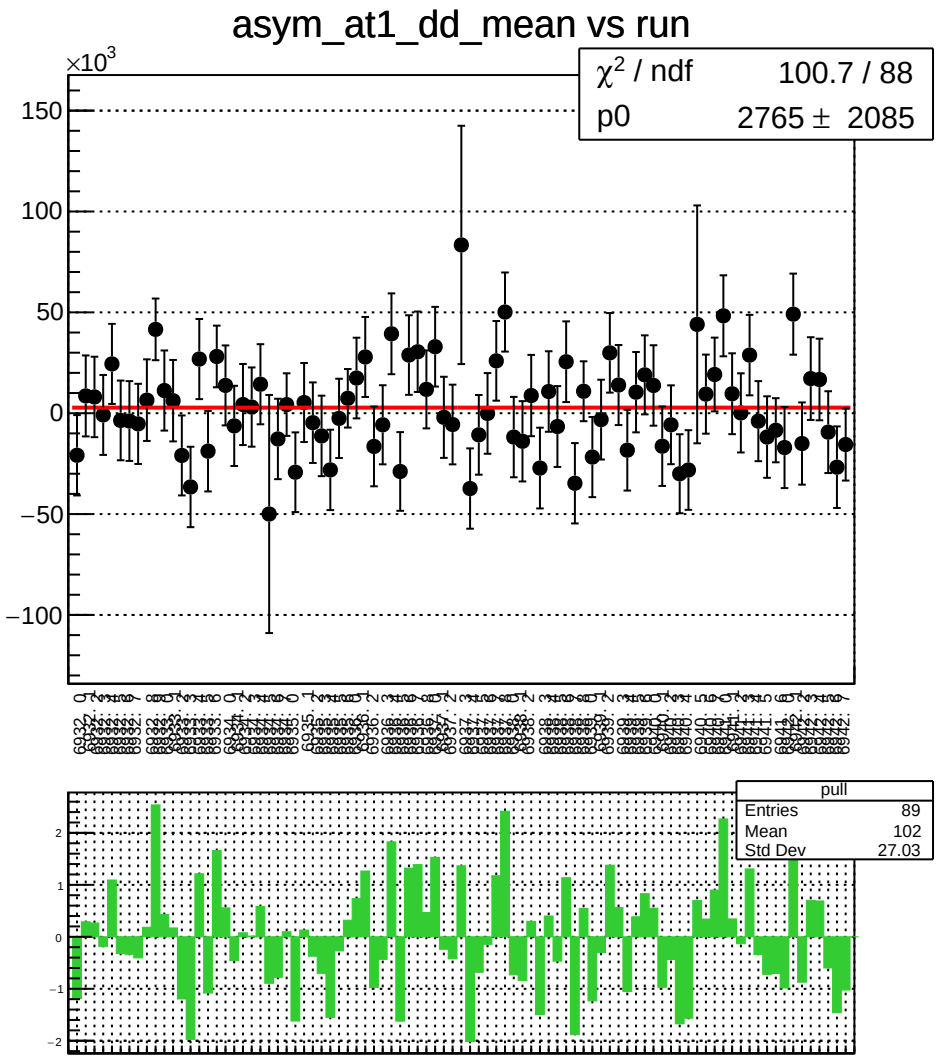

pull1D
Entries 89
Mean −0.008258
Std Dev 1.044
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

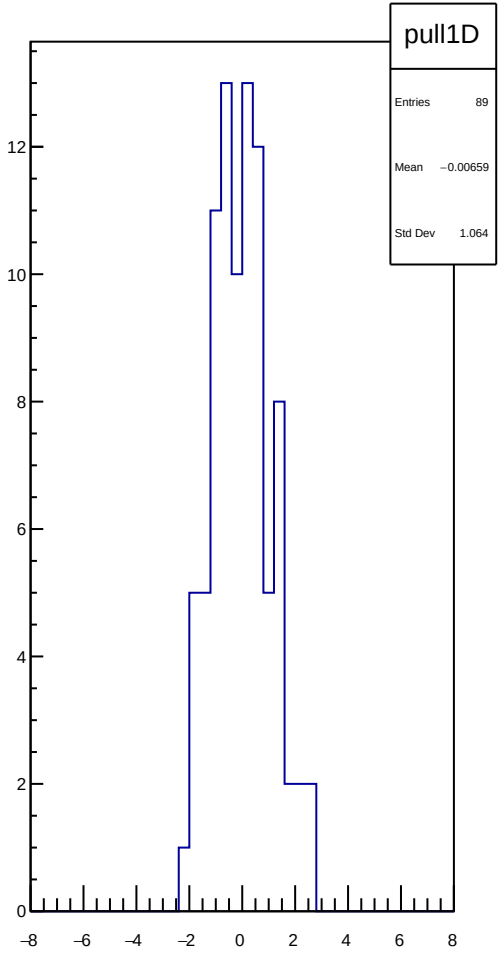

reg_asym_at1_dd_rms vs run
χ² / ndf 2.447e+04 / 88
p0 1835 ± 1.422
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

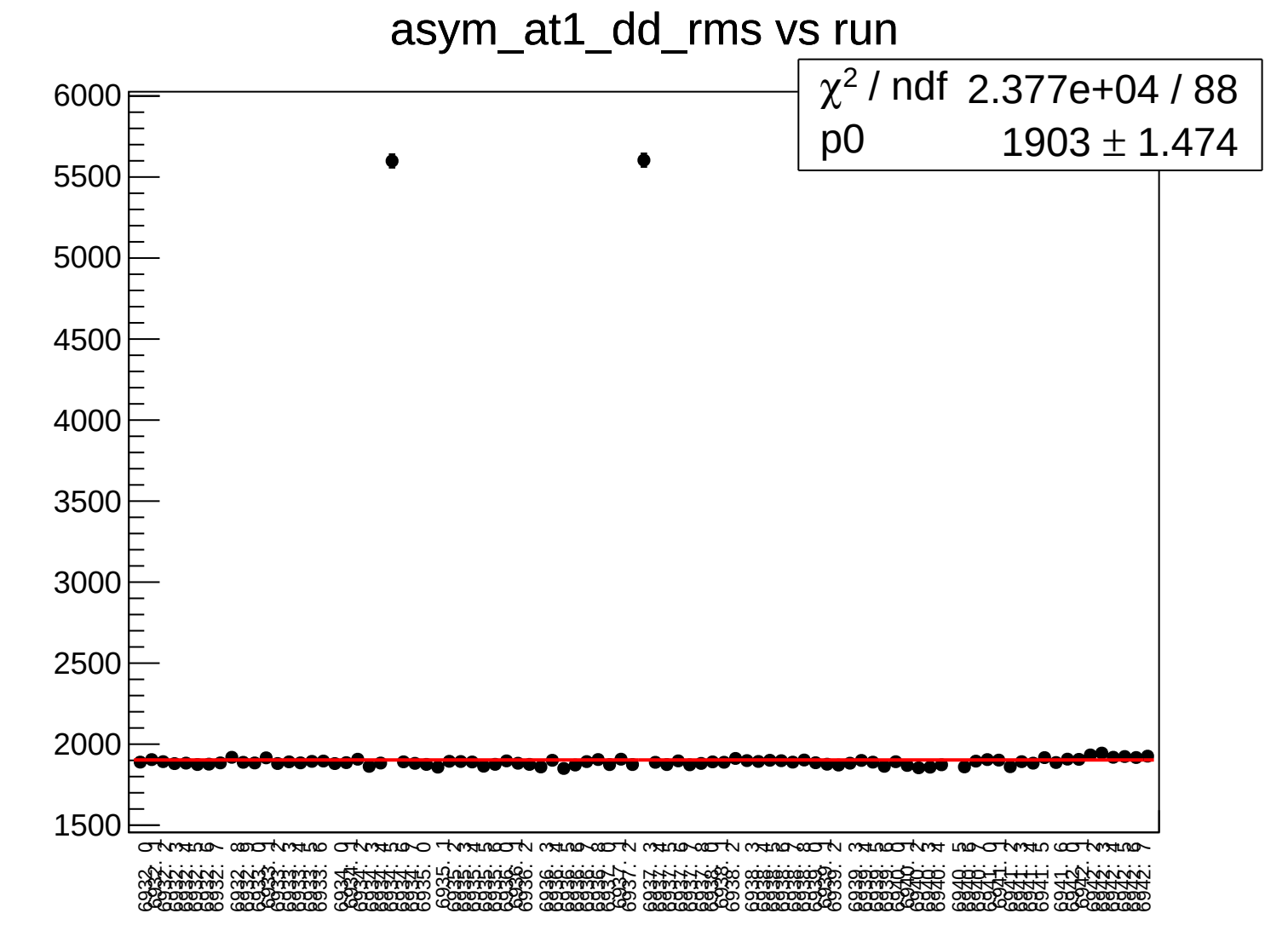

asym_at1_dd_correction_mean vs run
χ² / ndf 81.42 / 88
p0 183.2 ± 530.7
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 89
Mean 2156
Std Dev 2097
2
1
0
−1
−2

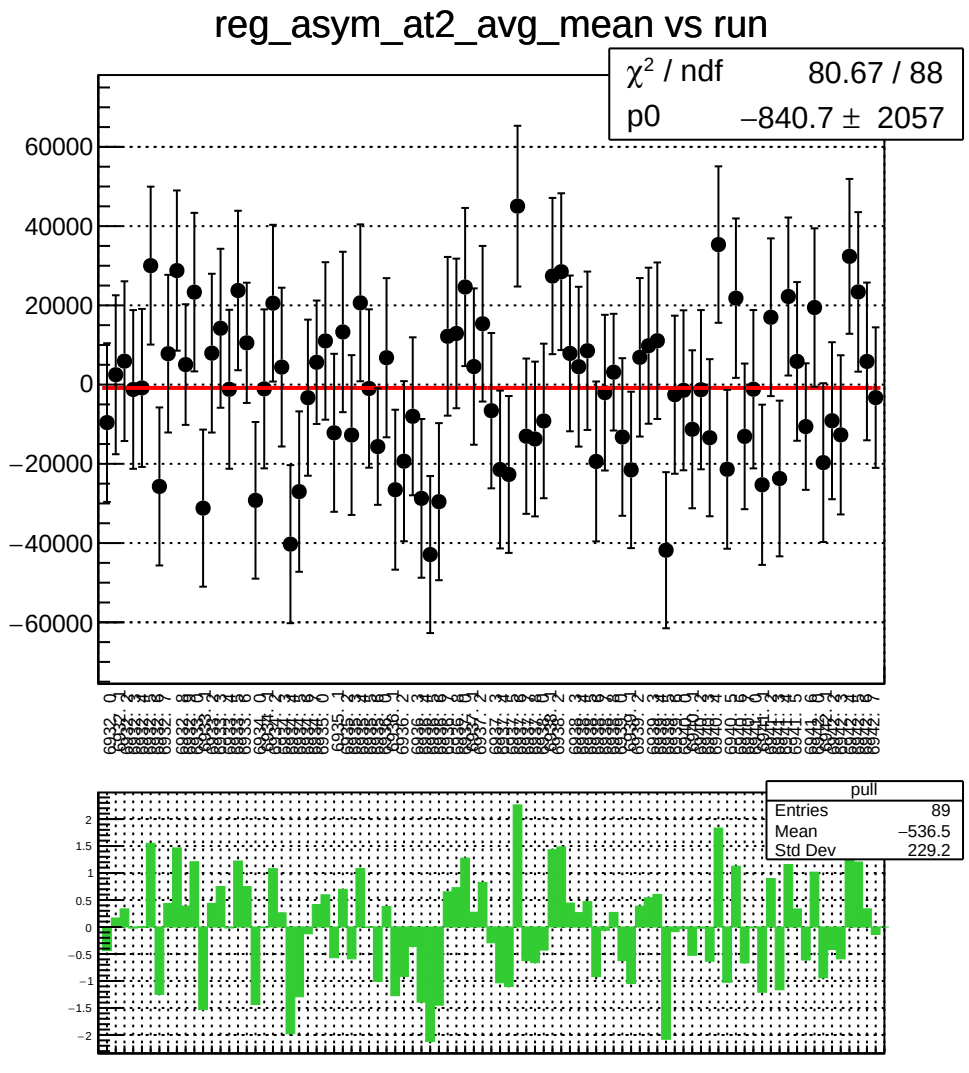

pull1D
Entries 89
Mean 0.0006576
Std Dev 0.9565
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

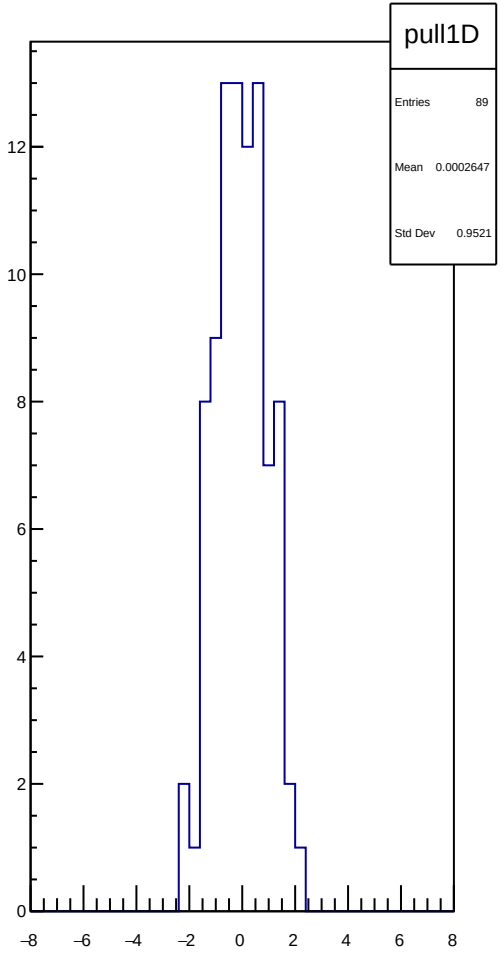

asym_at1_dd_correction_rms vs run
χ² / ndf 1.853e+04 / 88
p0 485.2 ± 0.3753
700
650
600
550
500
450
400
350

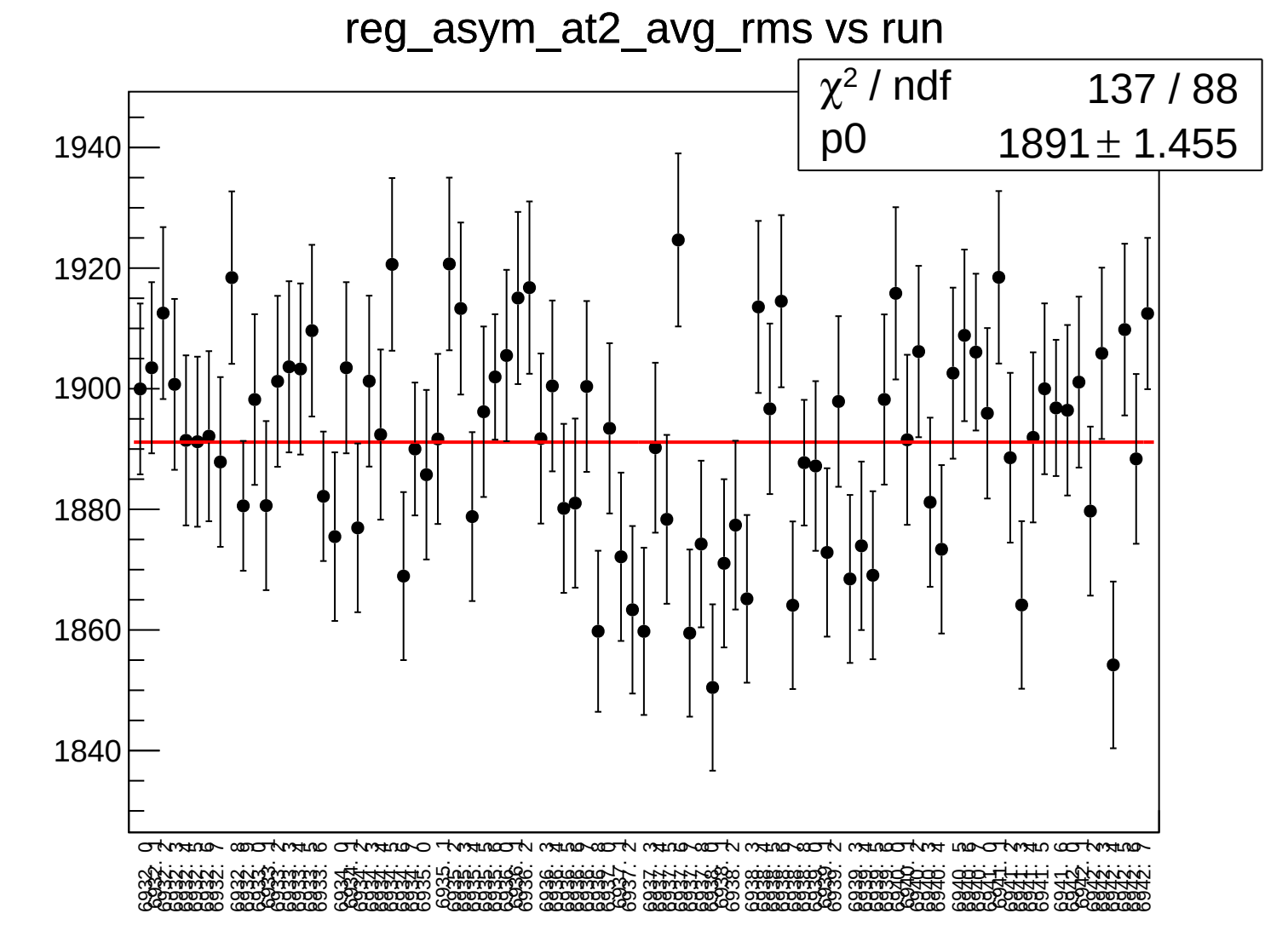

asym_at1_dd_mean vs run
×10^3
χ² / ndf 100.7 / 88
p0 2765 ± 2085
150
100
50
0
−50
−100
pull
Entries 89
Mean 102
Std Dev 27.03
2
1
0
−1
−2

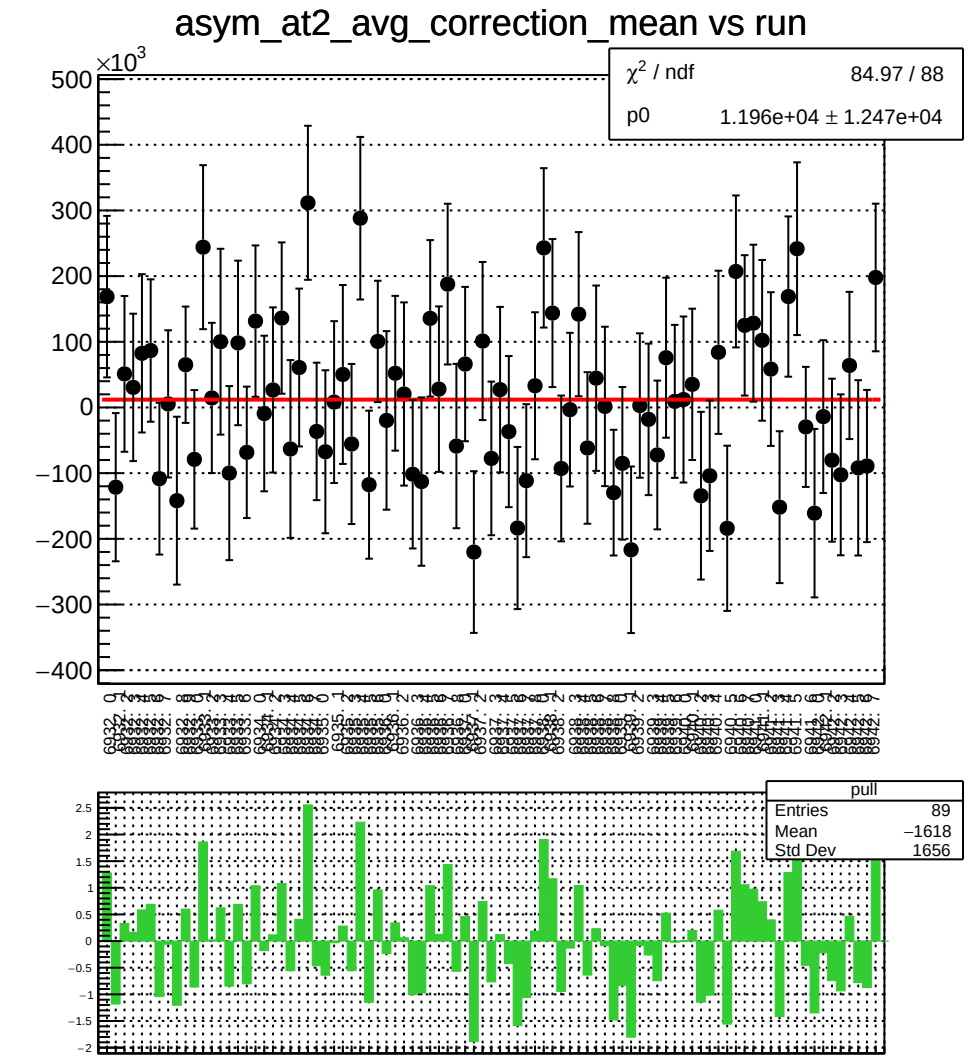

pull1D
Entries 89
Mean −0.00659
Std Dev 1.064
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

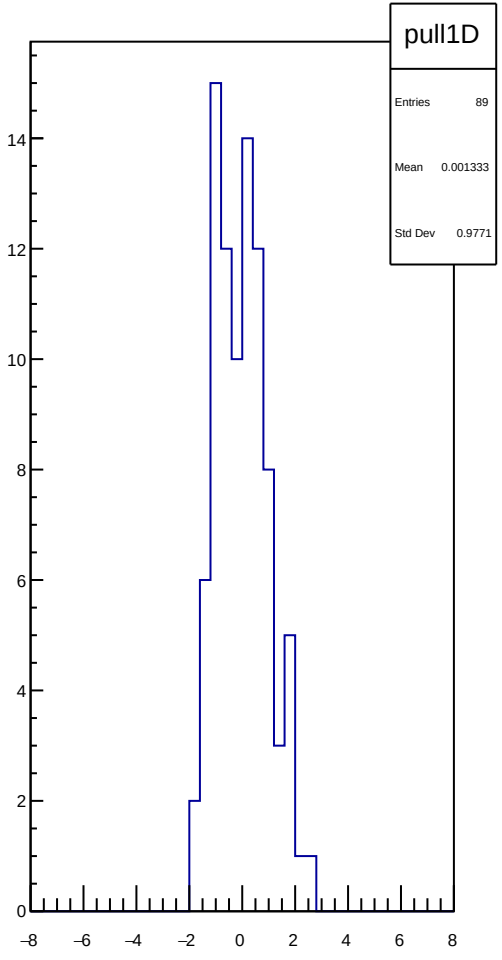

asym_at1_dd_rms vs run
χ² / ndf 2.377e+04 / 88
p0 1903 ± 1.474
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

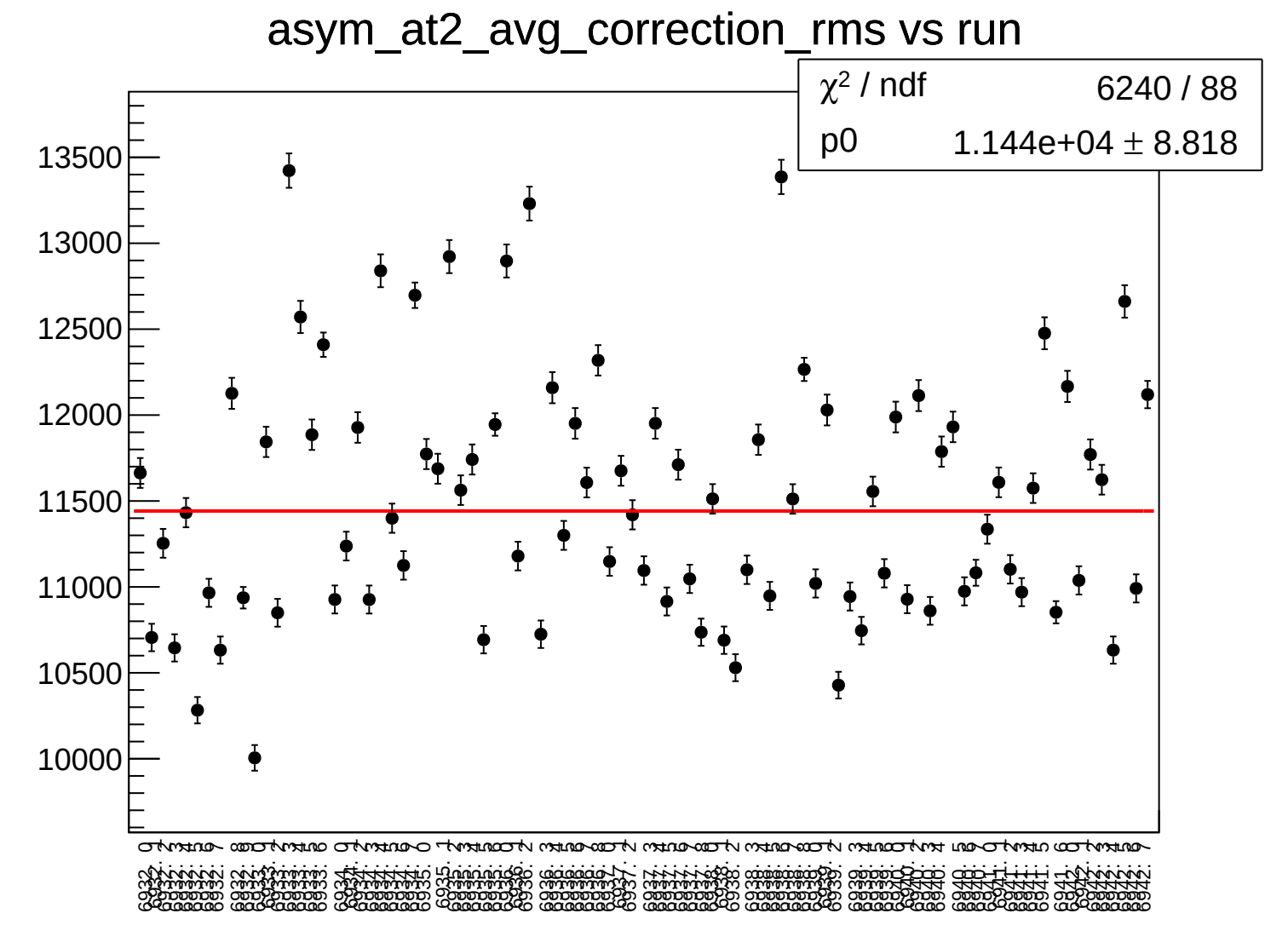

reg_asym_at2_avg_mean vs run
χ² / ndf 80.67 / 88
p0 −840.7 ± 2057
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −536.5
Std Dev 229.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

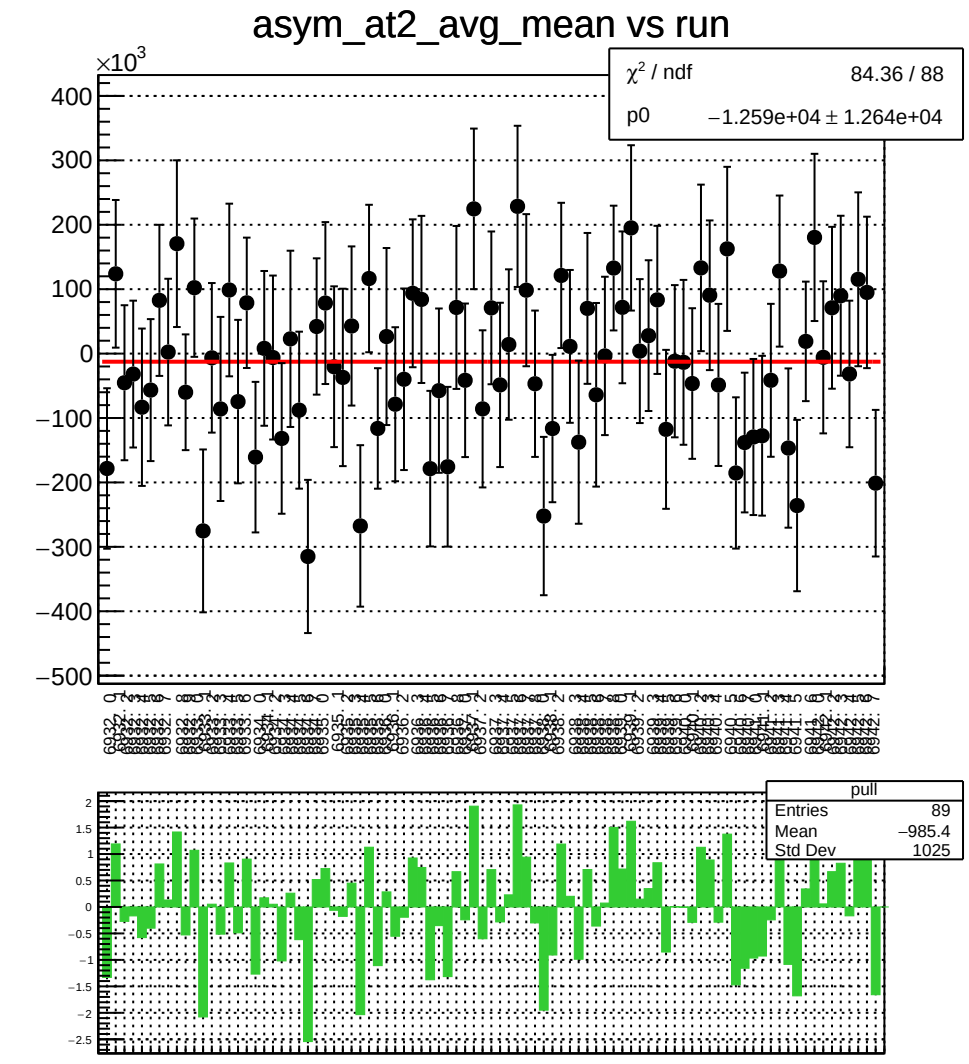

pull1D
Entries 89
Mean 0.0002647
Std Dev 0.9521
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

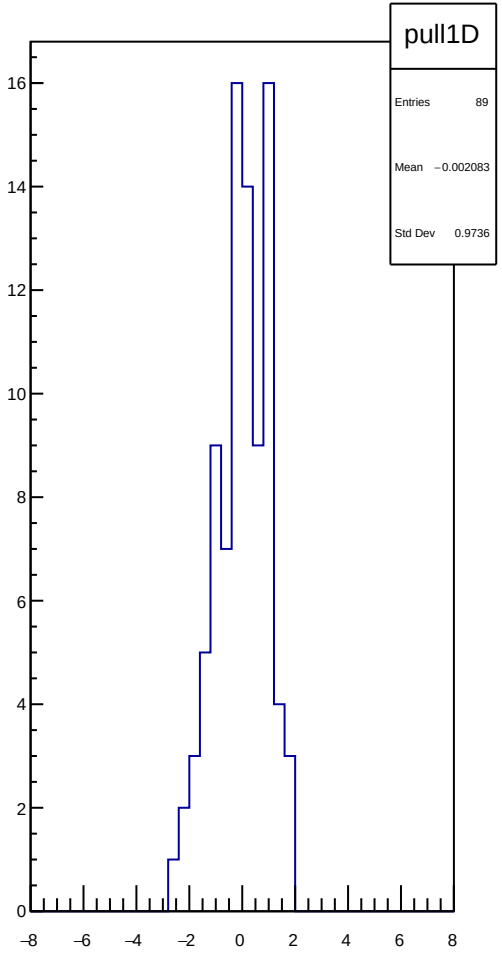

reg_asym_at2_avg_rms vs run
χ² / ndf 137 / 88
p0 1891 ± 1.455
1940
1920
1900
1880
1860
1840

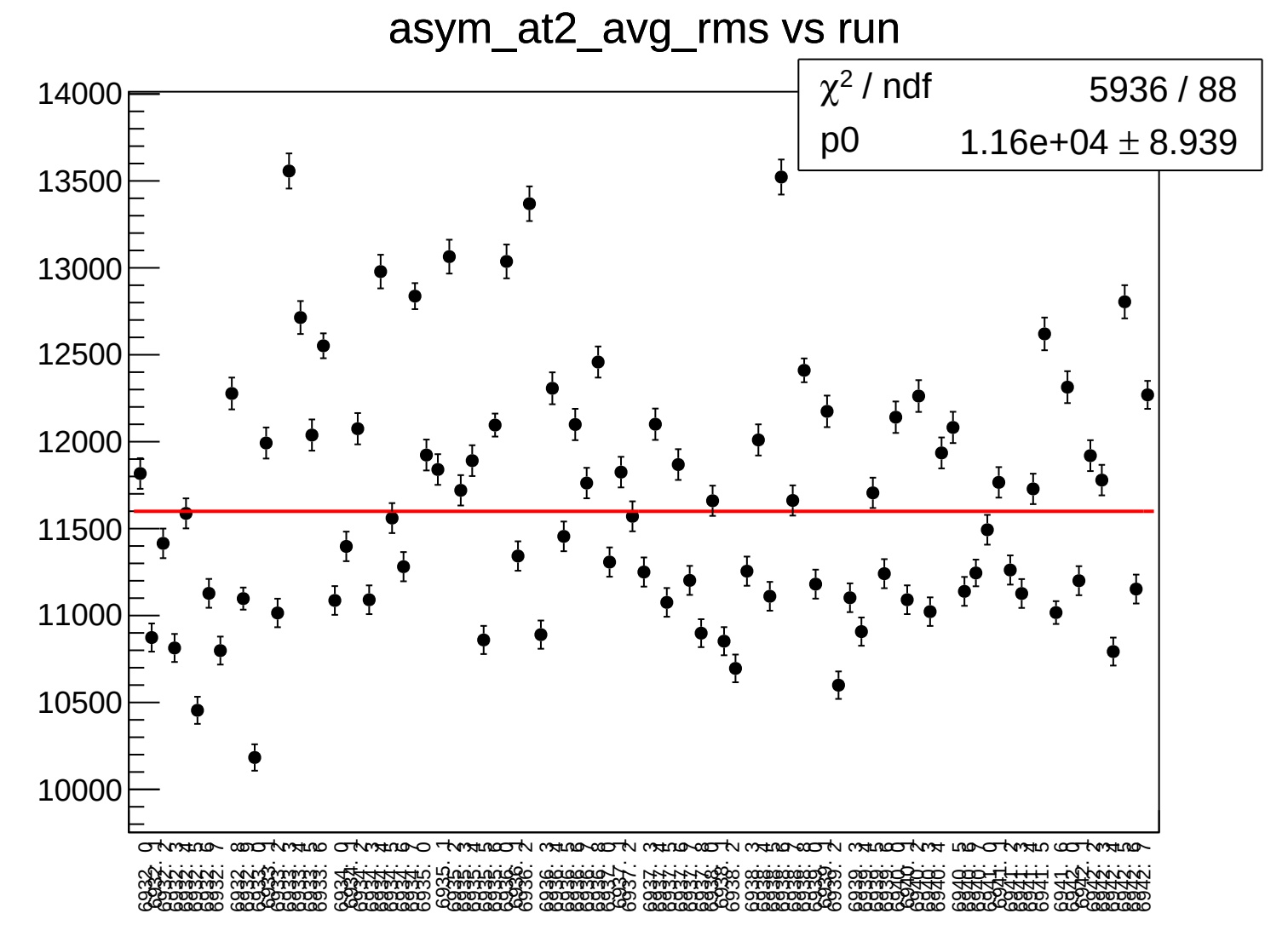

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 84.97 / 88
p0 1.196e+04 ± 1.247e+04
pull
Entries 89
Mean −1618
Std Dev 1656

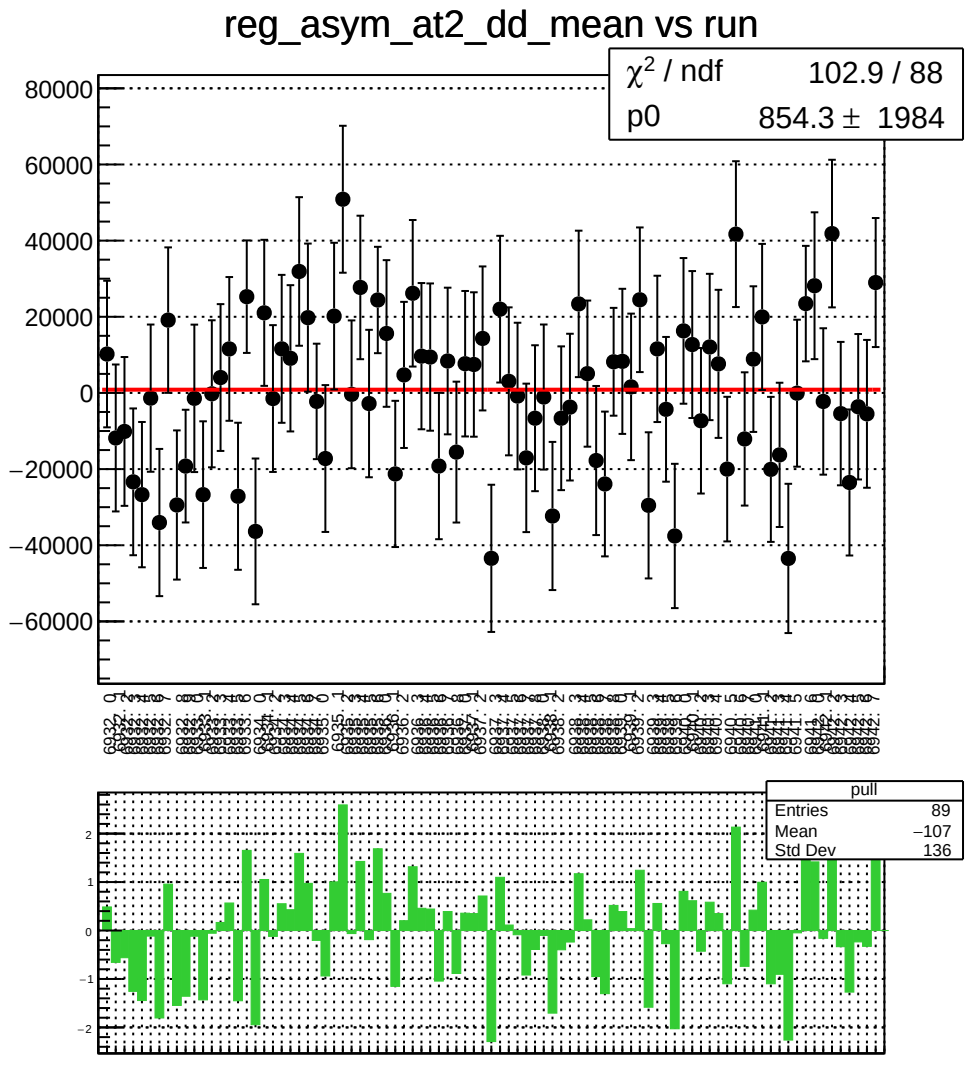

pull1D
Entries 89
Mean 0.001333
Std Dev 0.9771

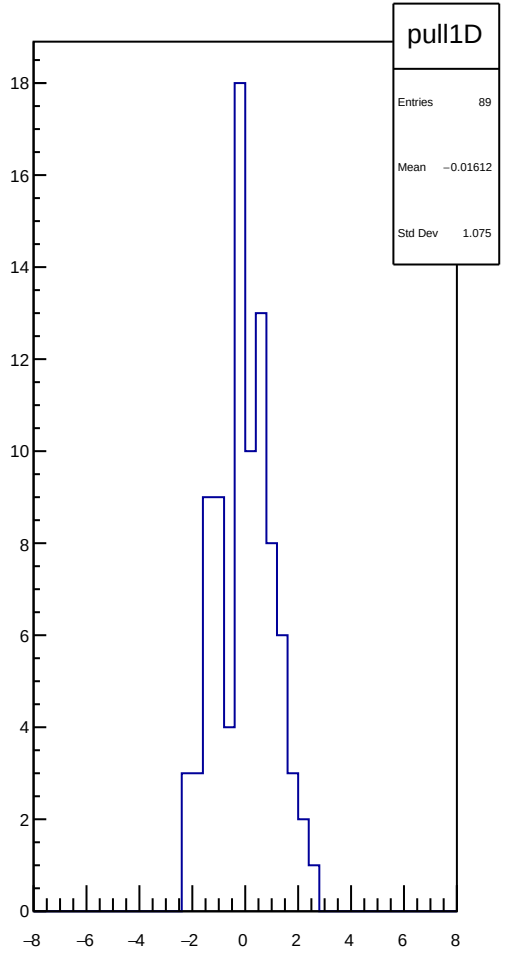

asym_at2_avg_correction_rms vs run
χ² / ndf 6240 / 88
p0 1.144e+04 ± 8.818
13500
13000
12500
12000
11500
11000
10500
10000

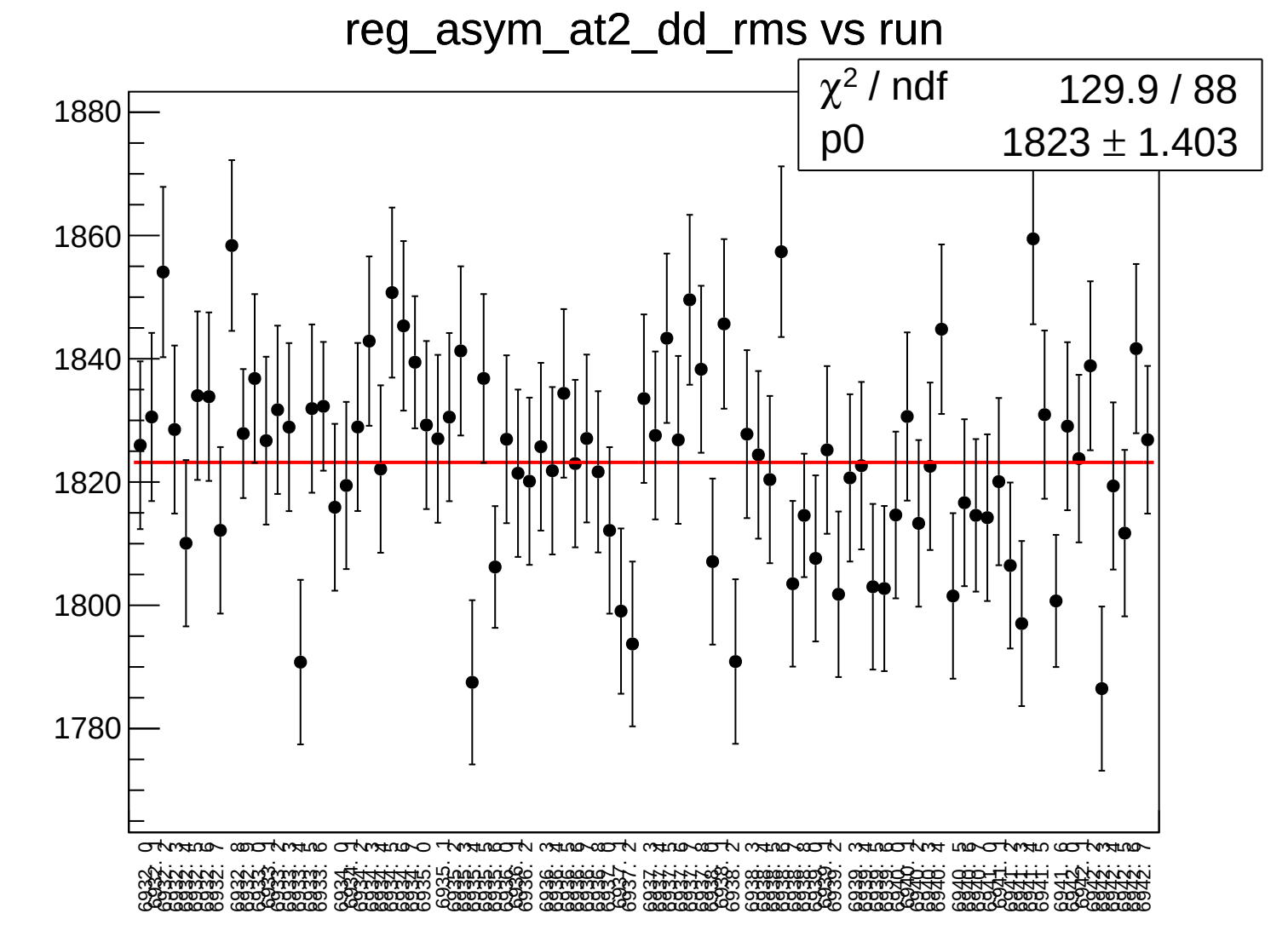

asym_at2_avg_mean vs run
×10^3
χ² / ndf 84.36 / 88
p0 −1.259e+04 ± 1.264e+04
pull
Entries 89
Mean −985.4
Std Dev 1025

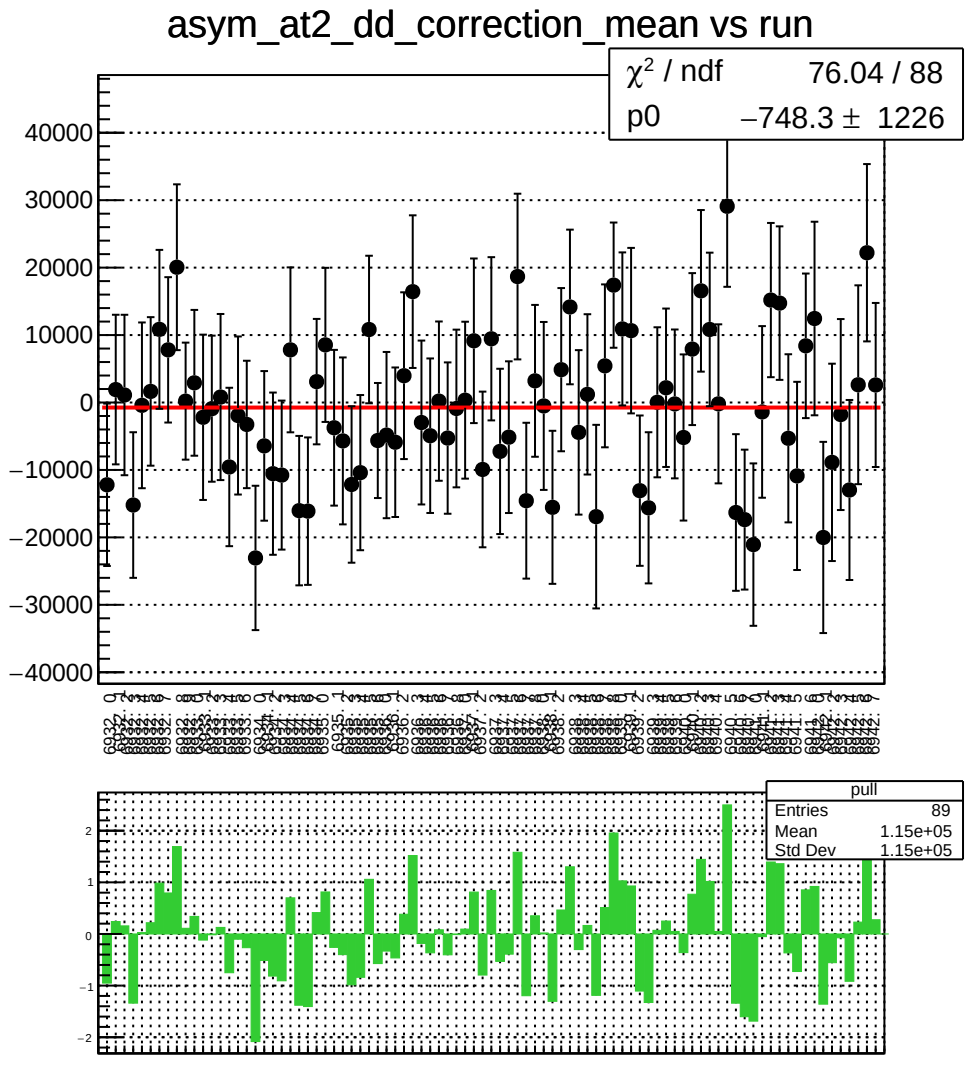

pull1D
Entries 89
Mean −0.002083
Std Dev 0.9736

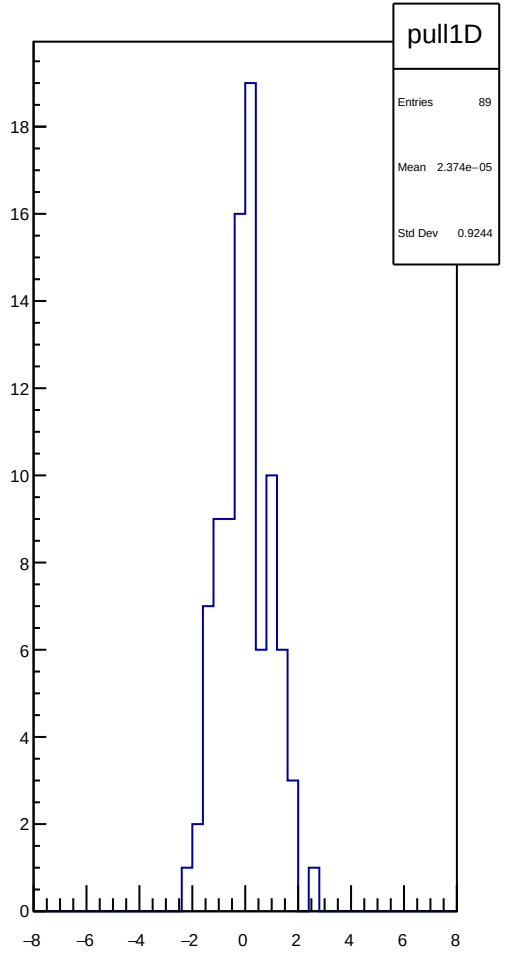

asym_at2_avg_rms vs run
χ^2 / ndf 5936 / 88
p0 1.16e+04 ± 8.939
14000
13500
13000
12500
12000
11500
11000
10500
10000

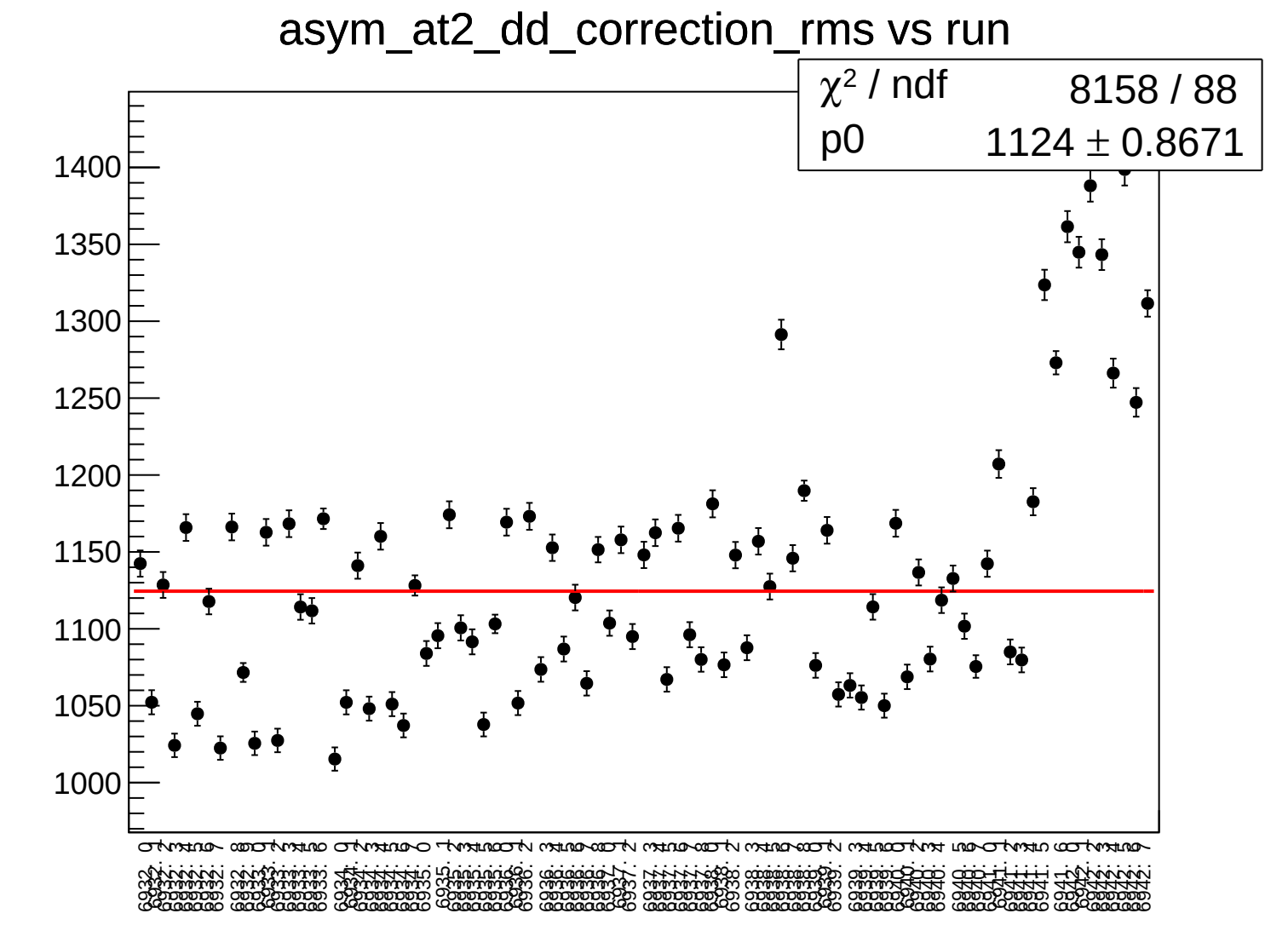

reg_asym_at2_dd_mean vs run
χ² / ndf 102.9 / 88
p0 854.3 ± 1984
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean −107
Std Dev 136
2
1
0
−1
−2

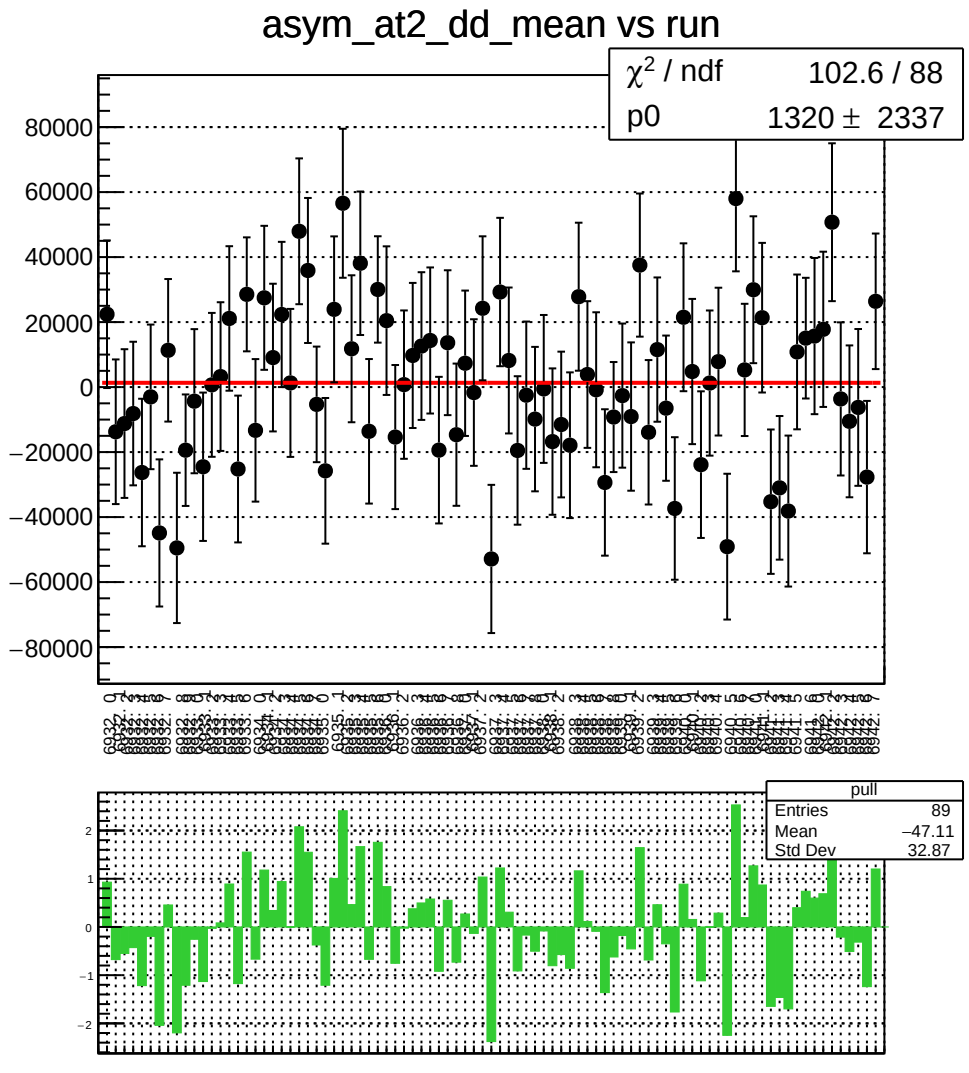

pull1D
Entries 89
Mean −0.01612
Std Dev 1.075
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

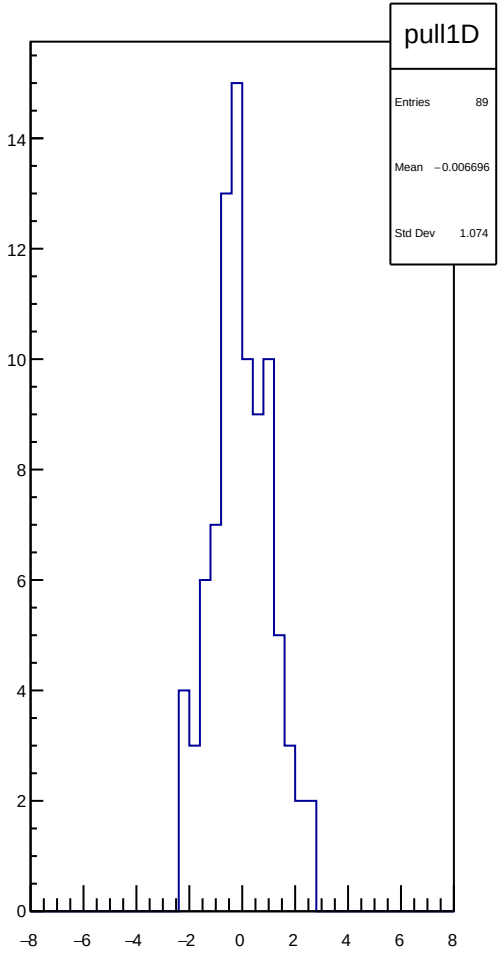

reg_asym_at2_dd_rms vs run
χ² / ndf 129.9 / 88
p0 1823 ± 1.403
1880
1860
1840
1820
1800
1780

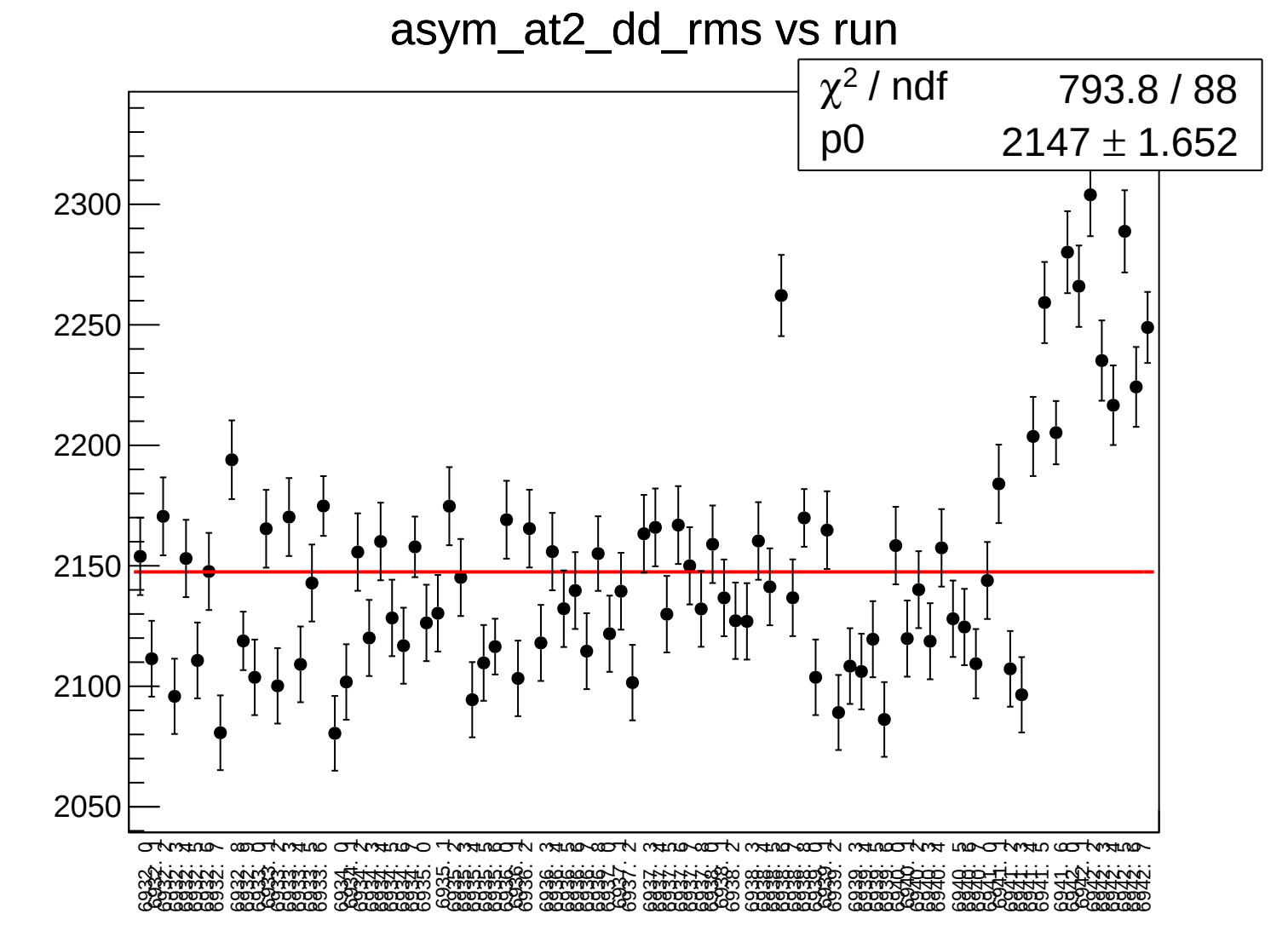

asym_at2_dd_correction_mean vs run
χ² / ndf 76.04 / 88
p0 −748.3 ± 1226
pull
Entries 89
Mean 1.15e+05
Std Dev 1.15e+05

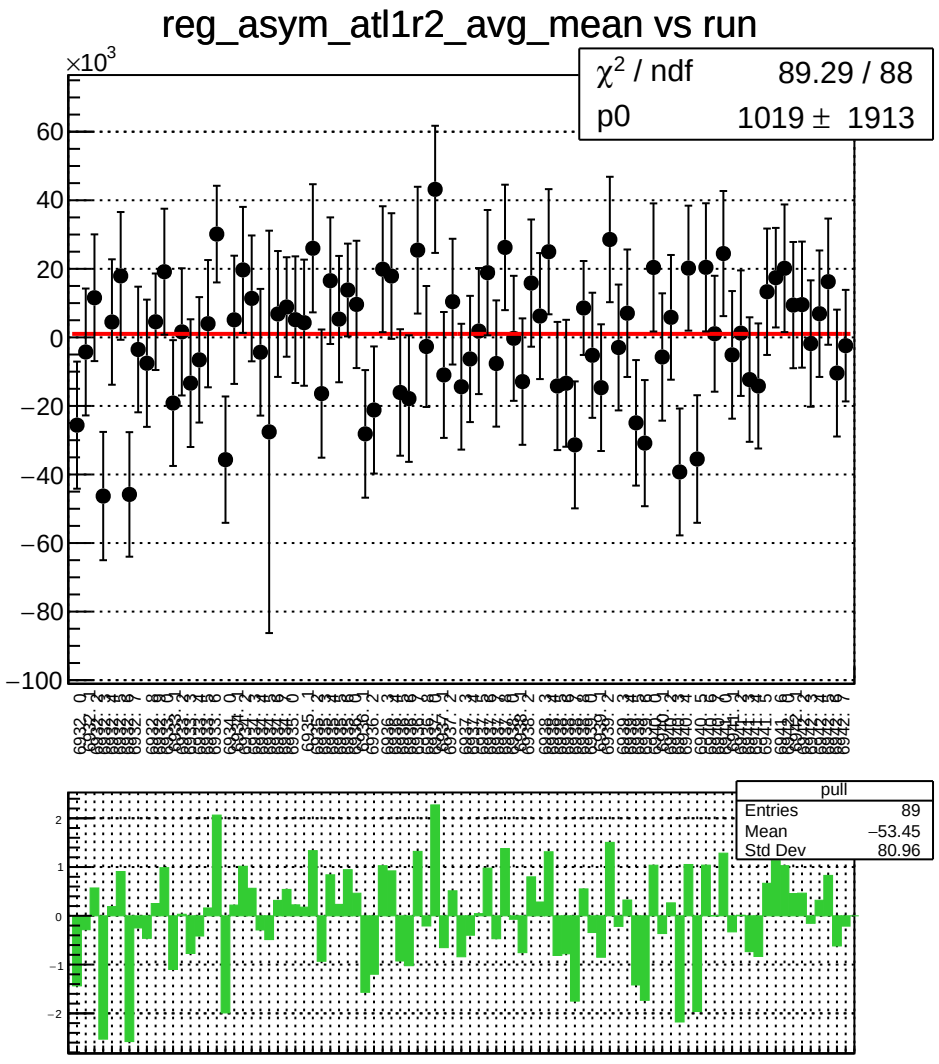

pull1D
Entries 89
Mean 2.374e−05
Std Dev 0.9244

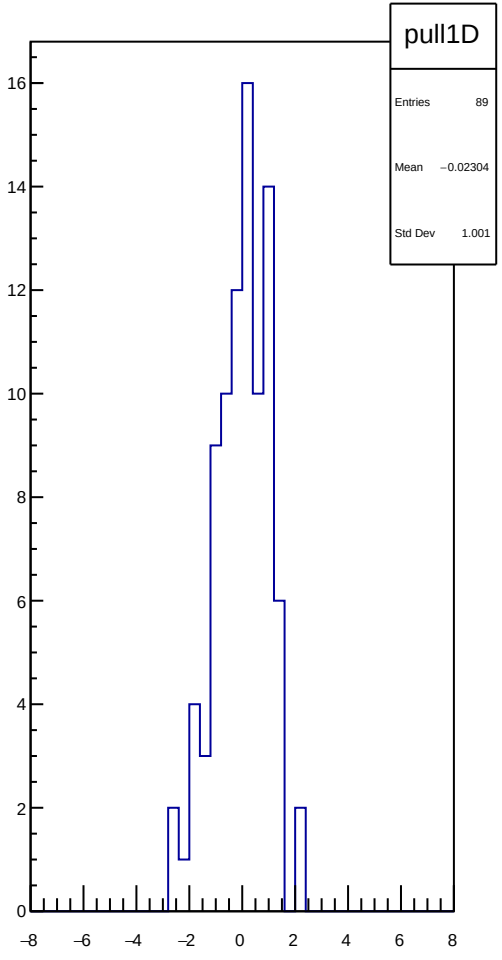

asym_at2_dd_correction_rms vs run
χ² / ndf 8158 / 88
p0 1124 ± 0.8671
1400
1350
1300
1250
1200
1150
1100
1050
1000

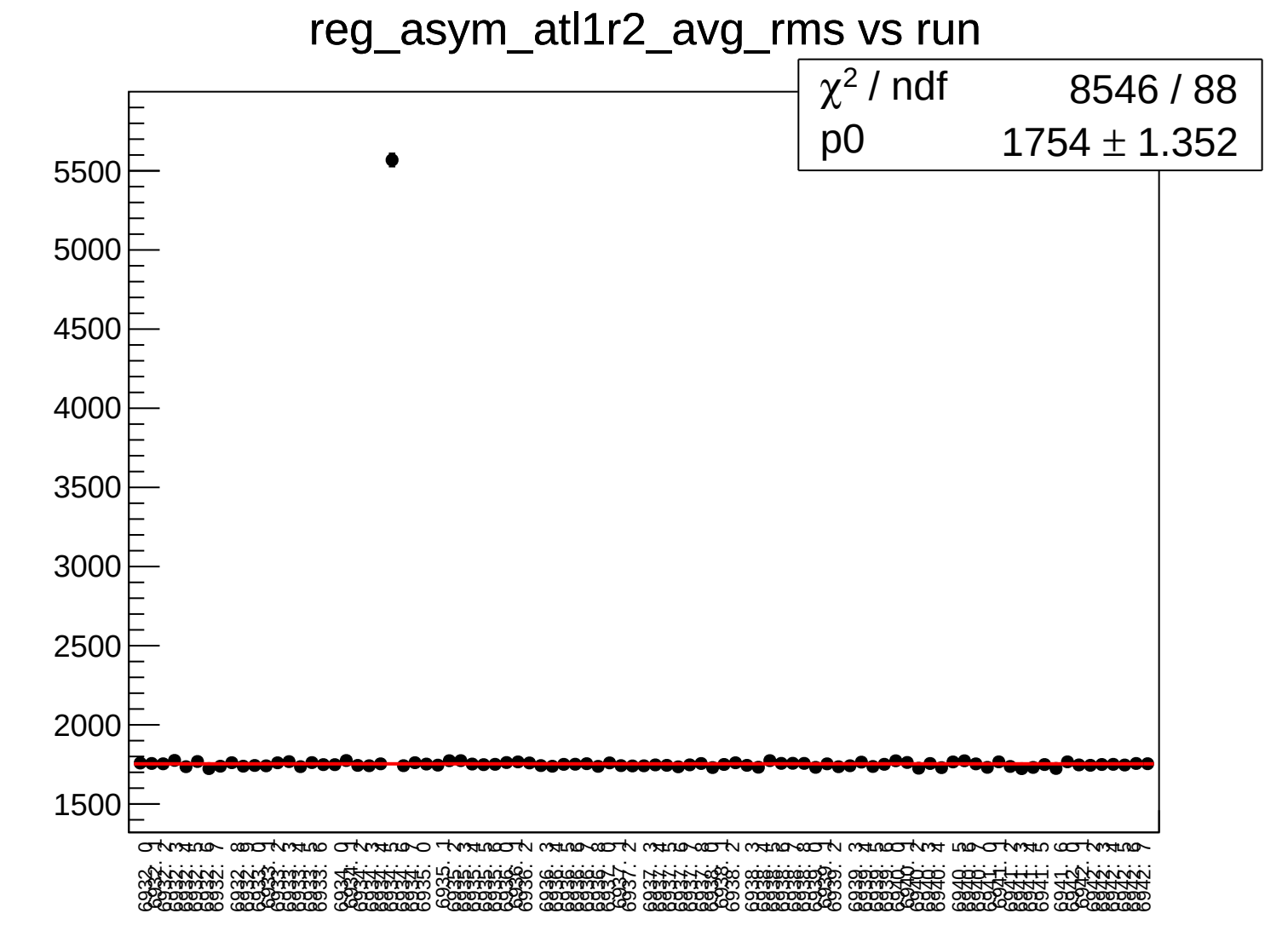

asym_at2_dd_mean vs run
χ² / ndf 102.6 / 88
p0 1320 ± 2337
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 89
Mean −47.11
Std Dev 32.87
2
1
0
−1
−2

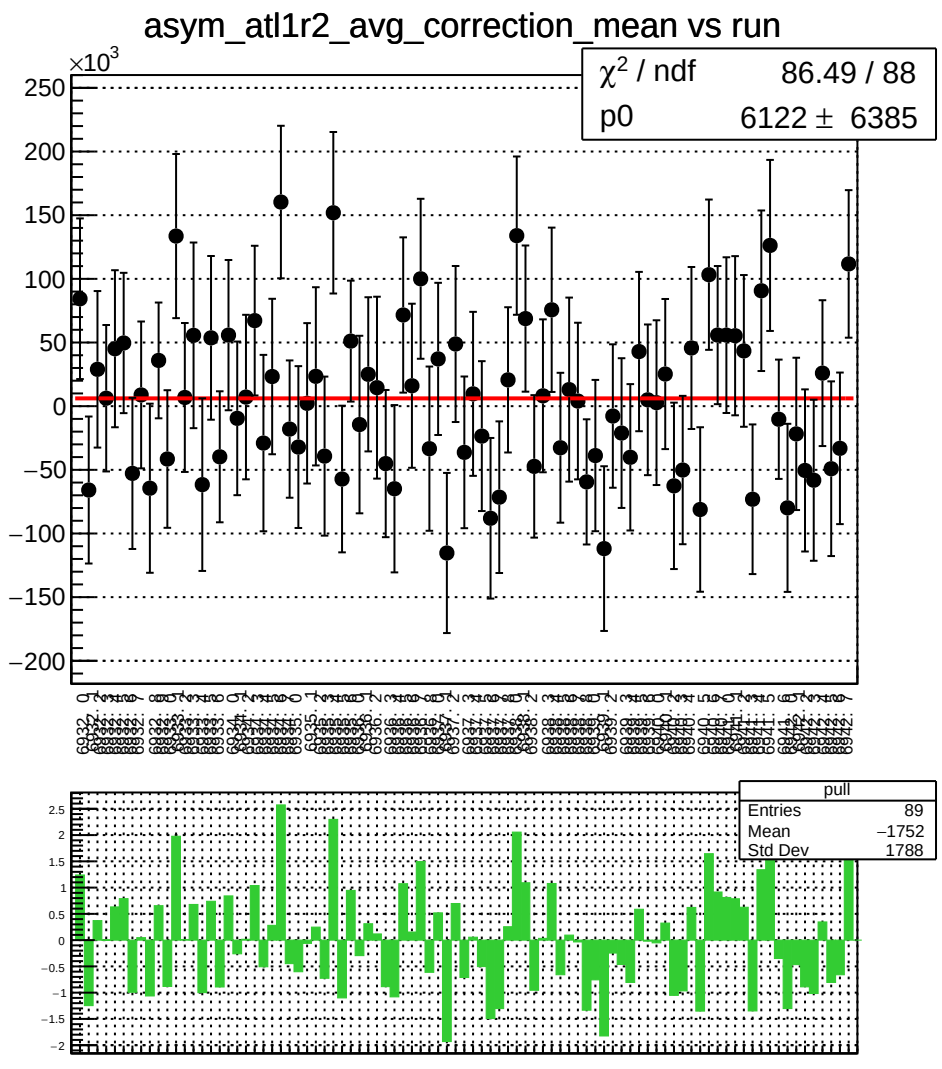

pull1D
Entries 89
Mean −0.006696
Std Dev 1.074
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

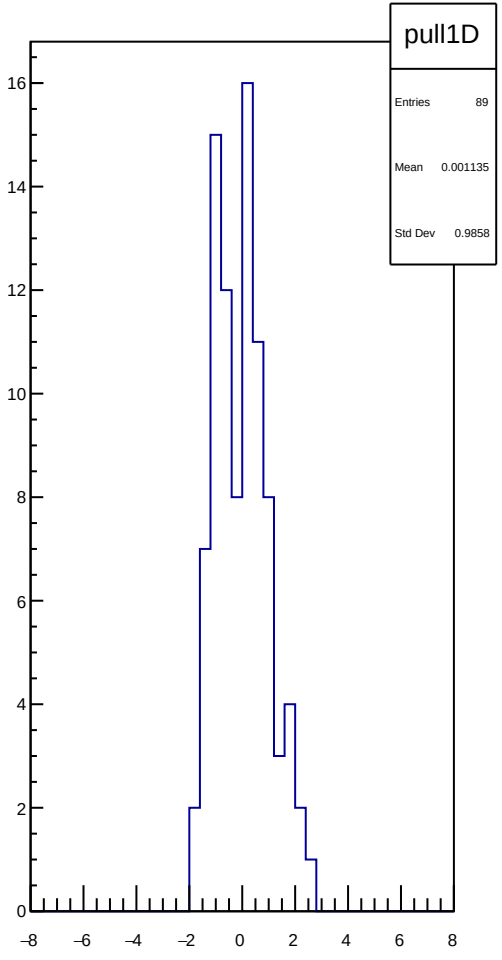

asym_at2_dd_rms vs run
χ² / ndf 793.8 / 88
p0 2147 ± 1.652
2300
2250
2200
2150
2100
2050

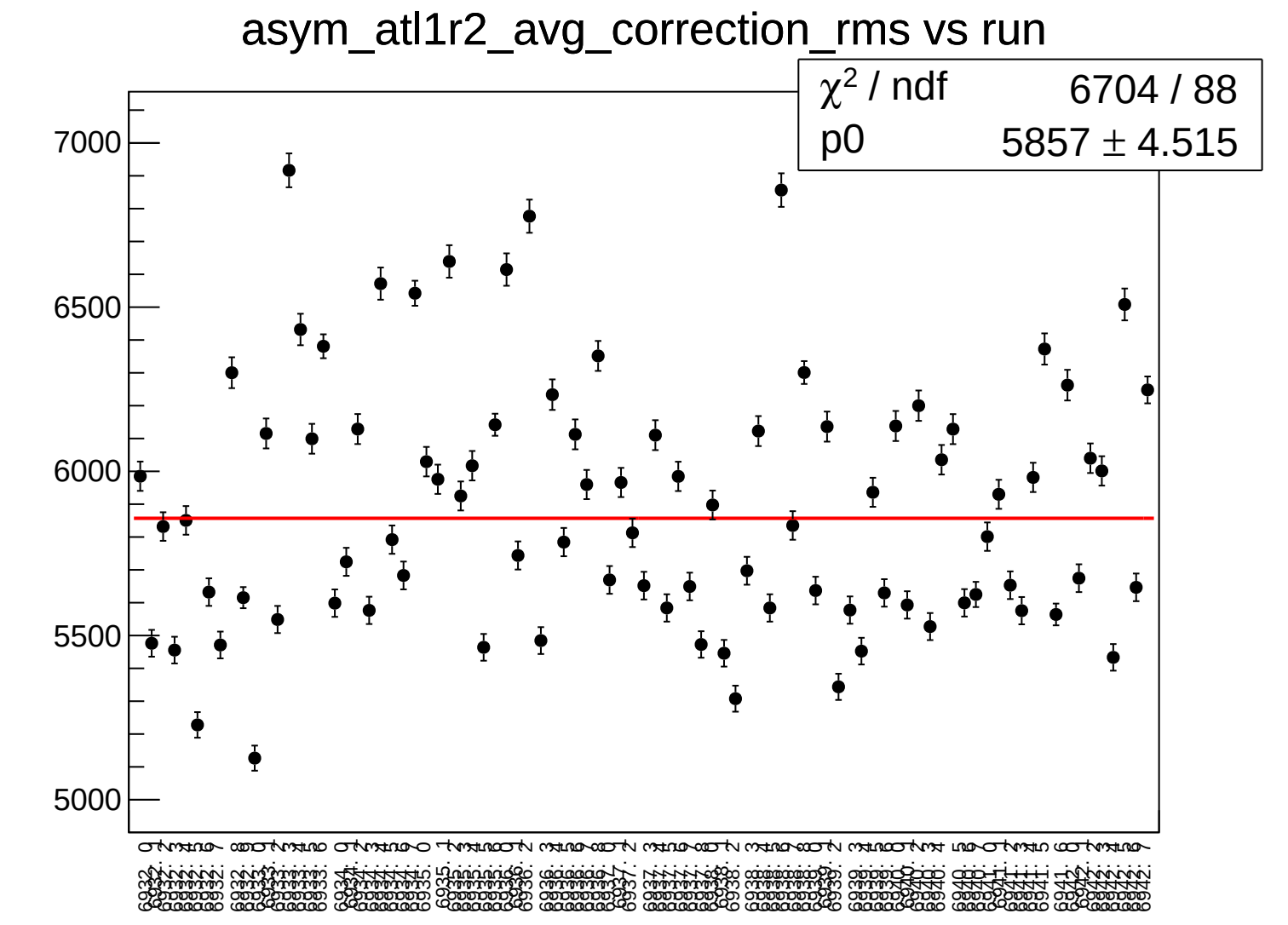

reg_asym_atl1r2_avg_mean vs run
χ² / ndf 89.29 / 88
p0 1019 ± 1913
pull
Entries 89
Mean −53.45
Std Dev 80.96

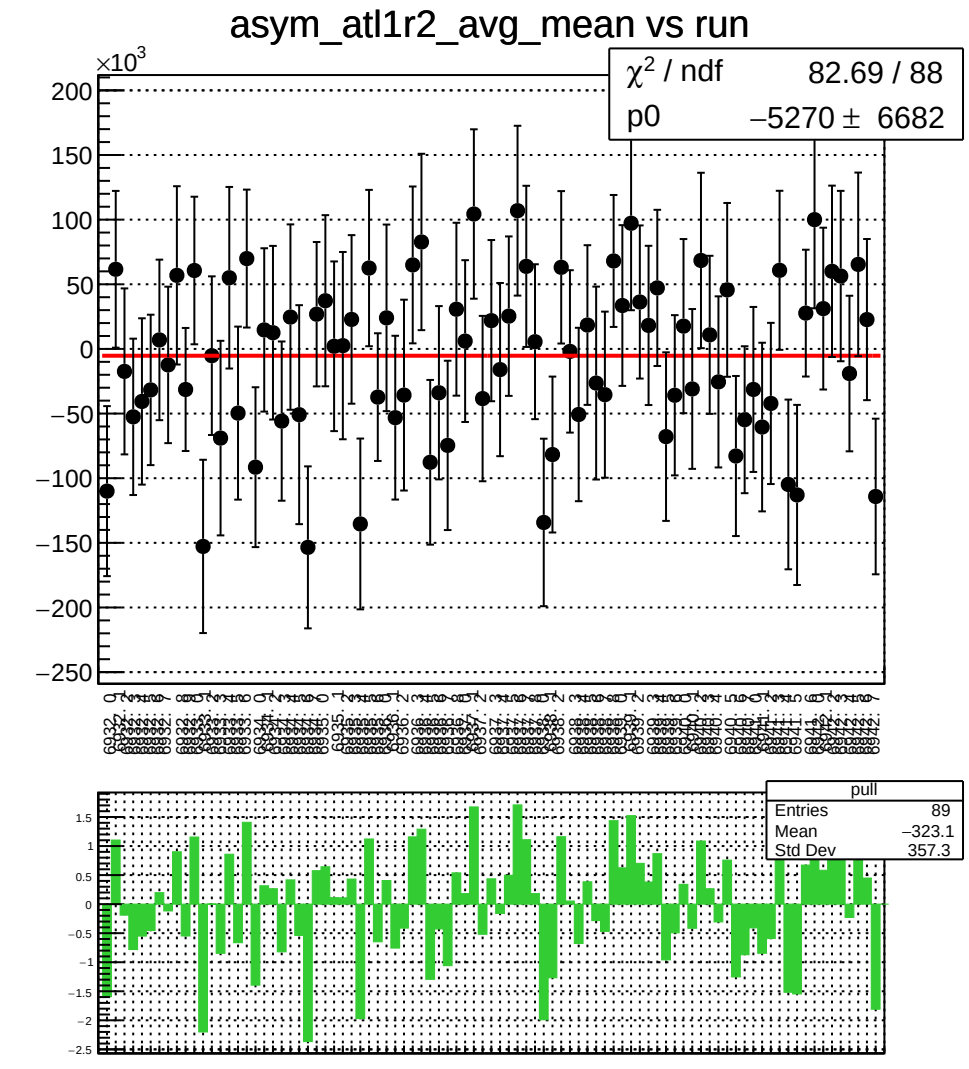

pull1D
Entries 89
Mean −0.02304
Std Dev 1.001

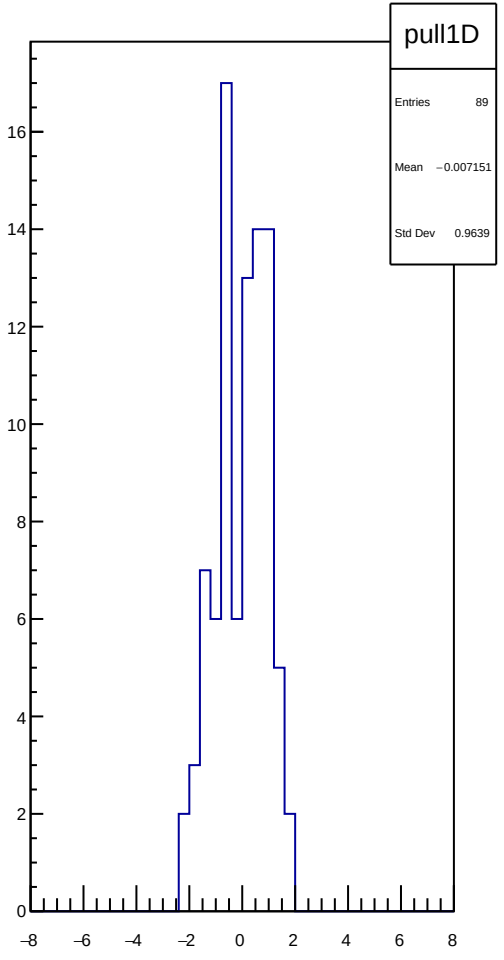

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 8546 / 88
p0 1754 ± 1.352
5500
5000
4500
4000
3500
3000
2500
2000
1500

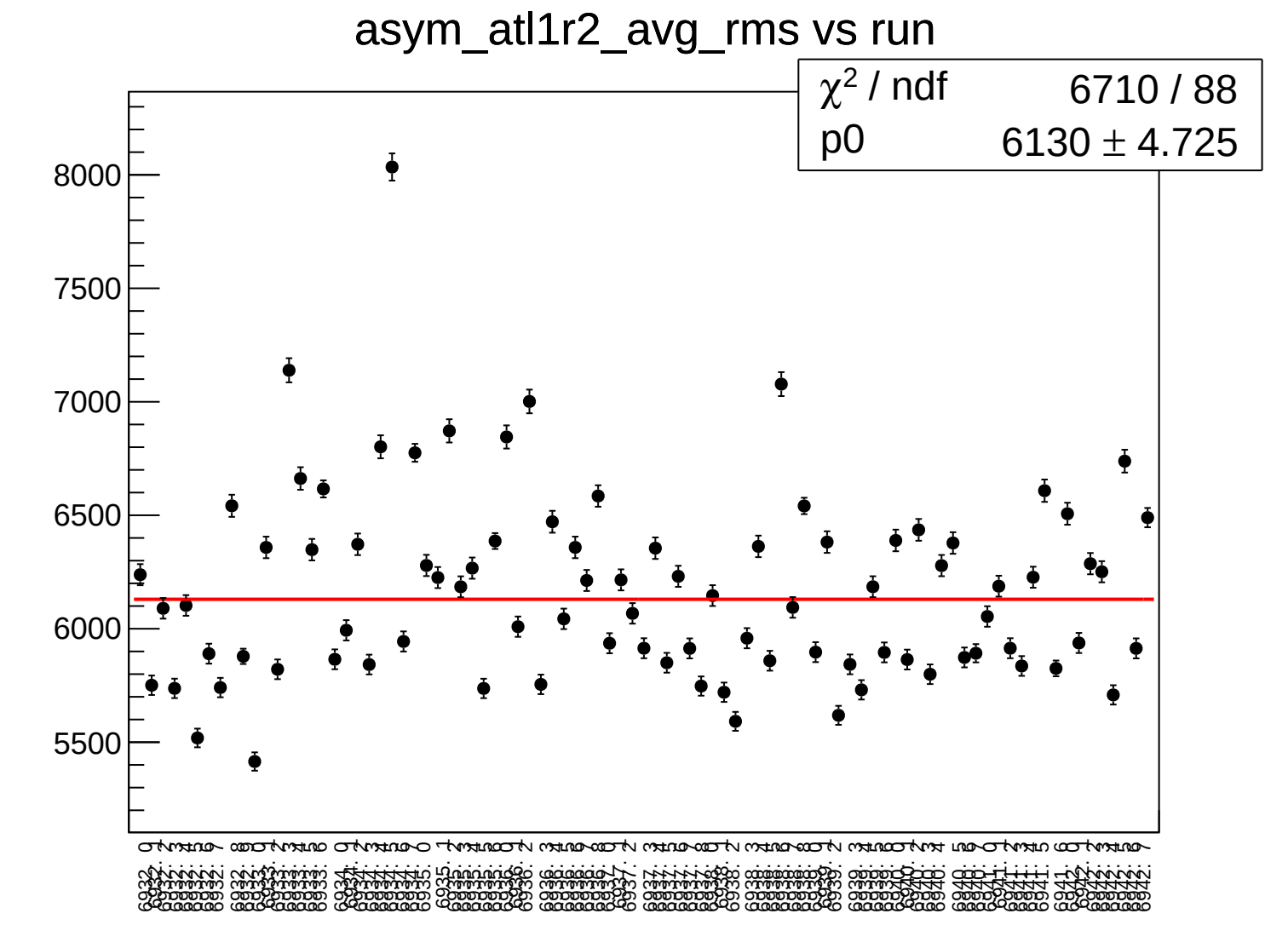

asym_atl1r2_avg_correction_mean vs run
×10^3
χ^2 / ndf 86.49 / 88
p0 6122 ± 6385
pull
Entries 89
Mean −1752
Std Dev 1788

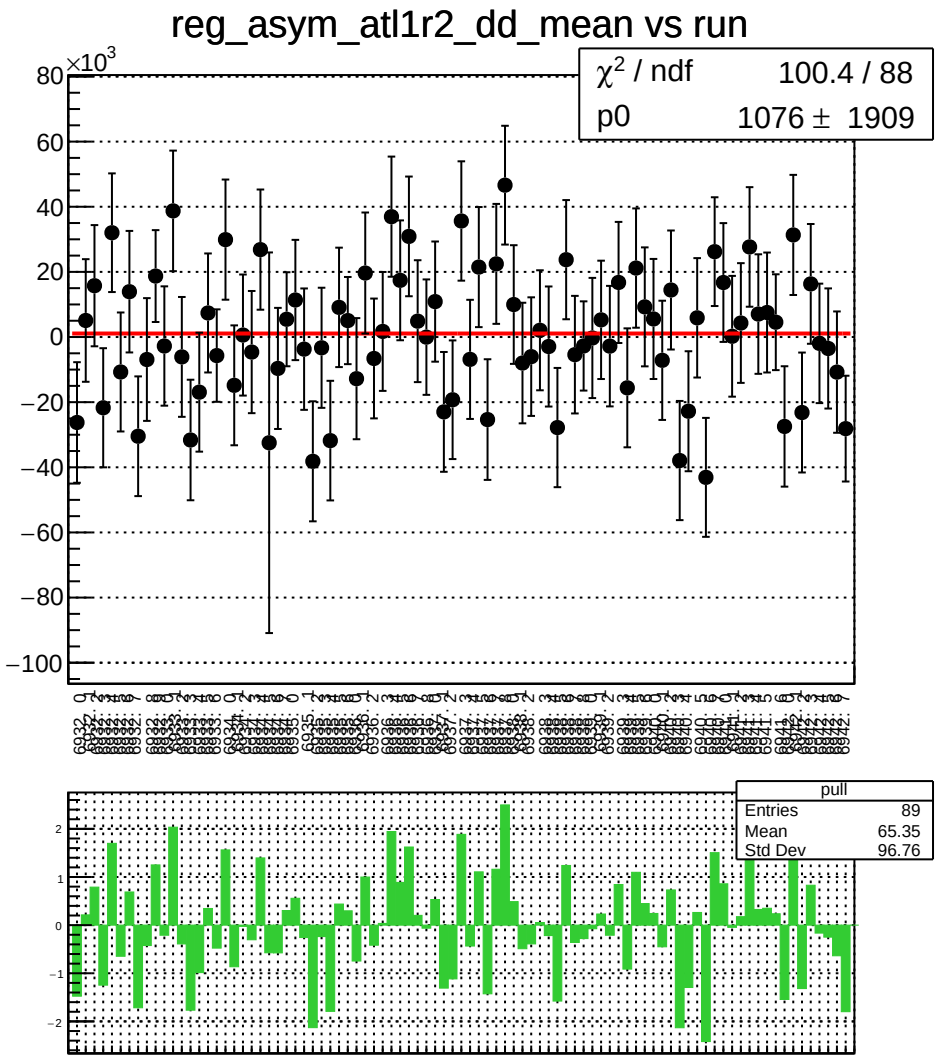

pull1D
Entries 89
Mean 0.001135
Std Dev 0.9858

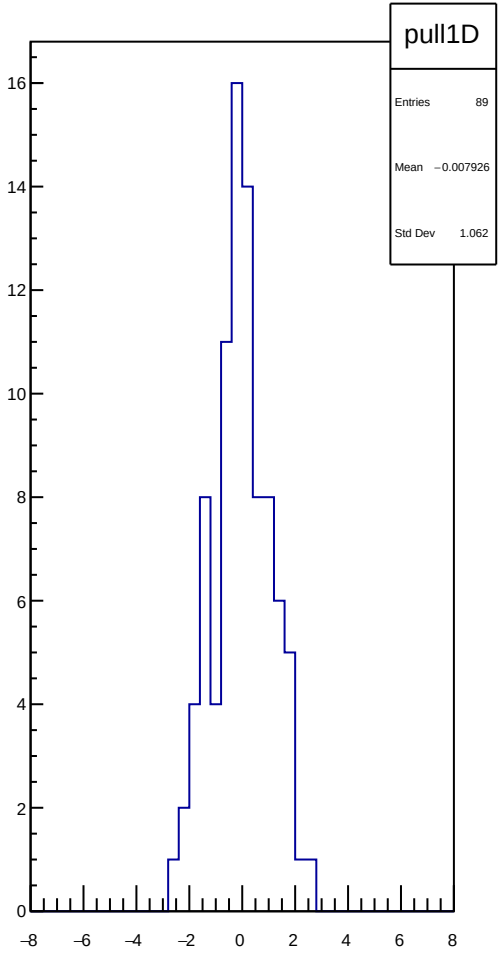

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 6704 / 88
p0 5857 ± 4.515
7000
6500
6000
5500
5000

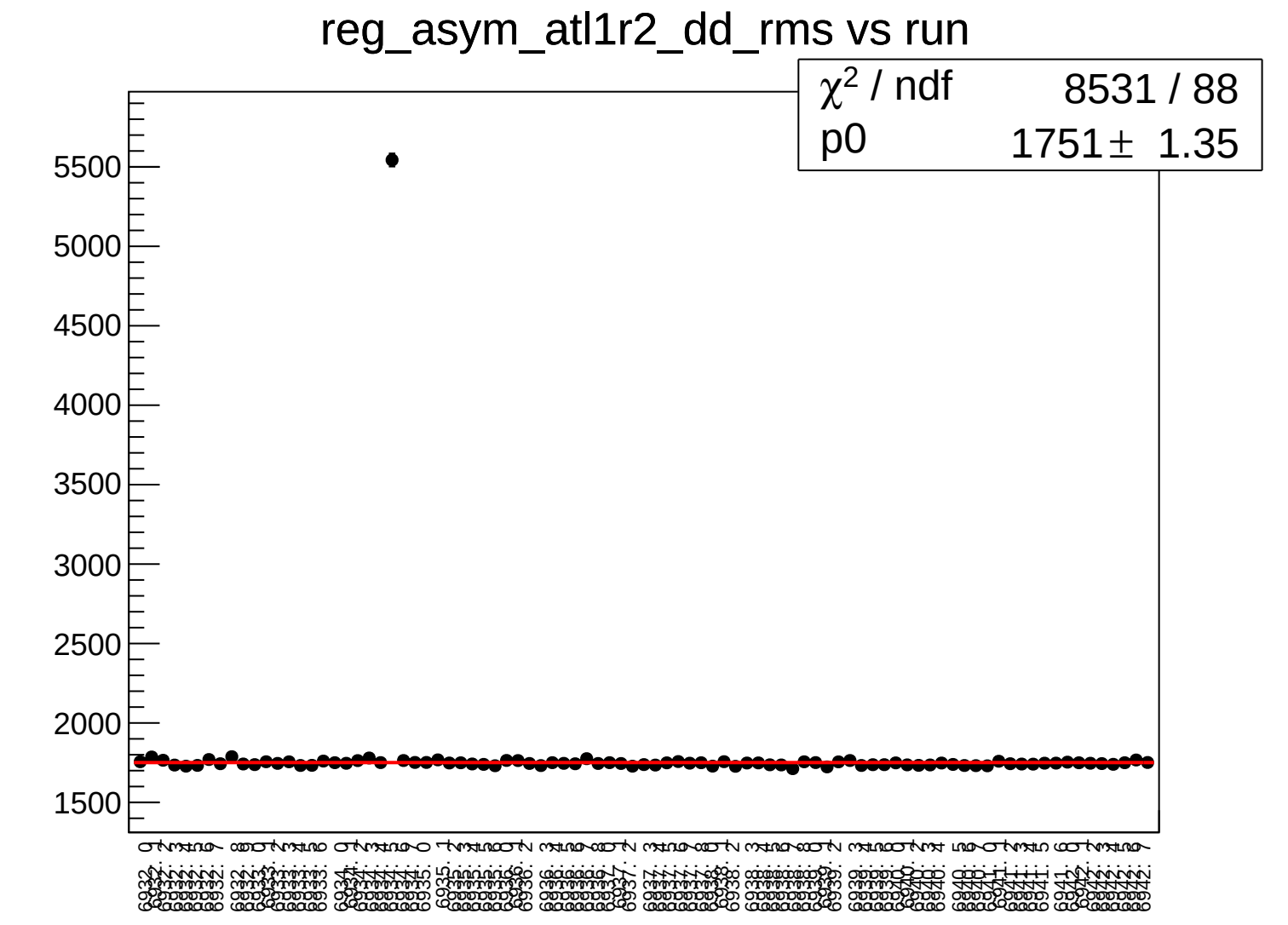

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 82.69 / 88
p0 −5270 ± 6682
pull
Entries 89
Mean −323.1
Std Dev 357.3

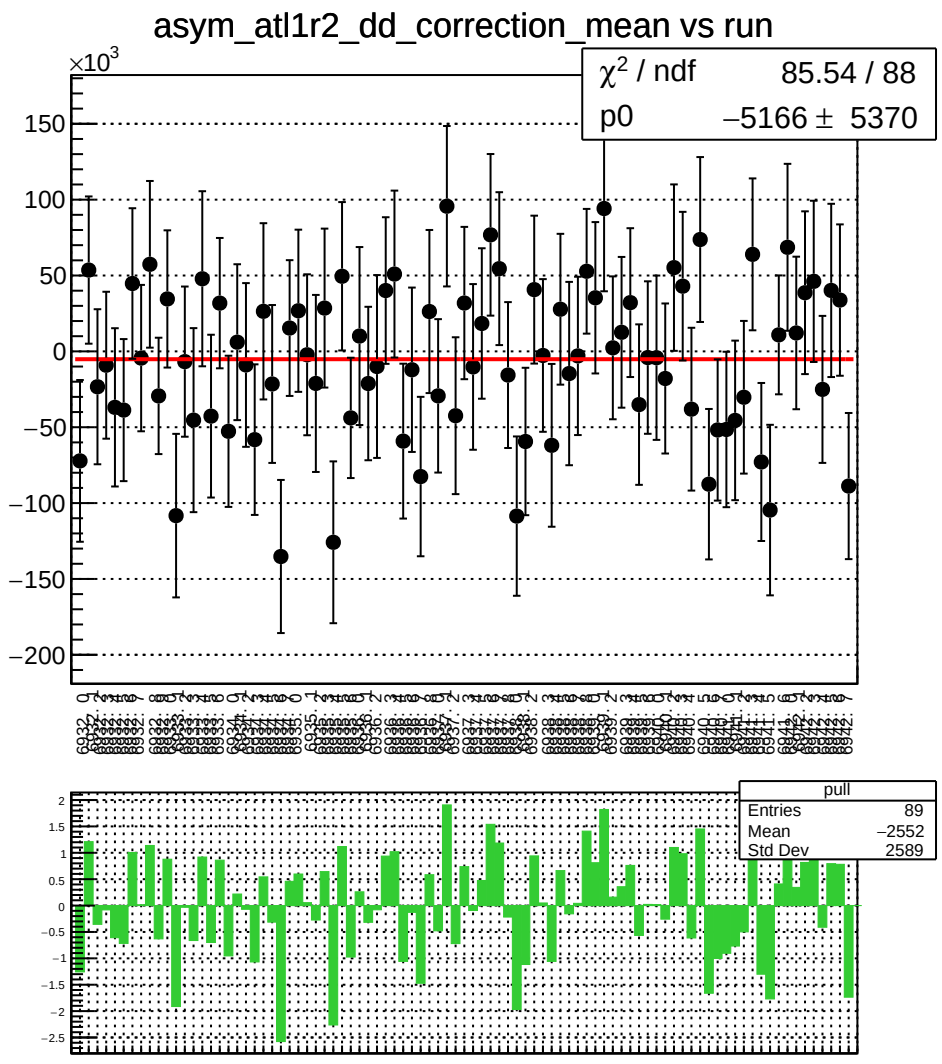

pull1D
Entries 89
Mean −0.007151
Std Dev 0.9639

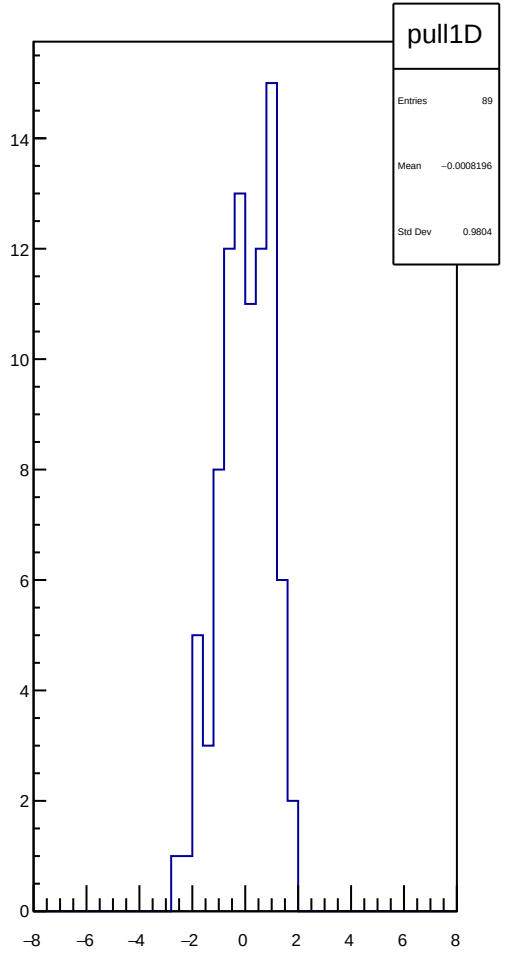

asym_atl1r2_avg_rms vs run
χ² / ndf 6710 / 88
p0 6130 ± 4.725
8000
7500
7000
6500
6000
5500

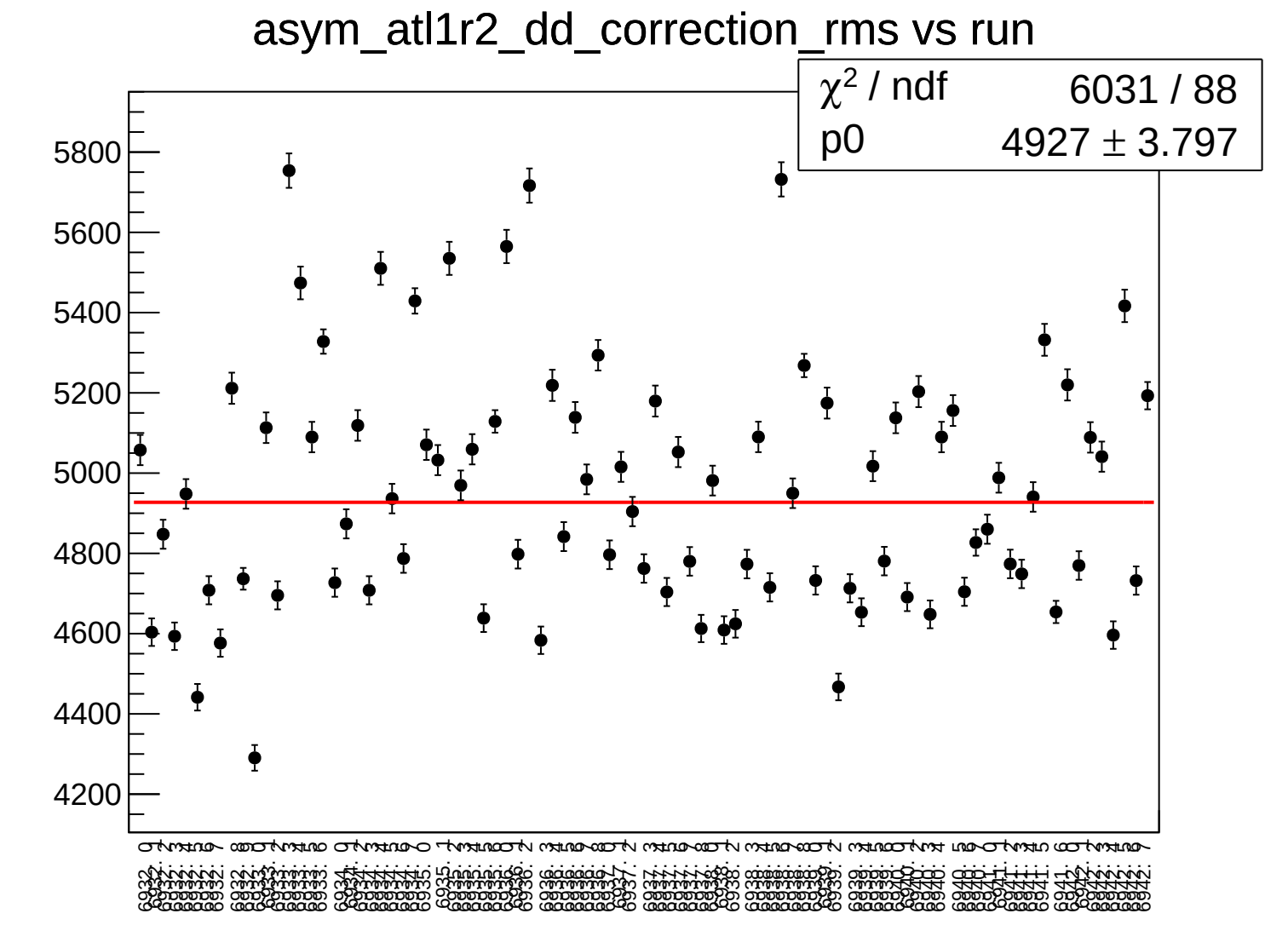

reg_asym_atl1r2_dd_mean vs run
χ² / ndf 100.4 / 88
p0 1076 ± 1909
×10³
pull
Entries 89
Mean 65.35
Std Dev 96.76

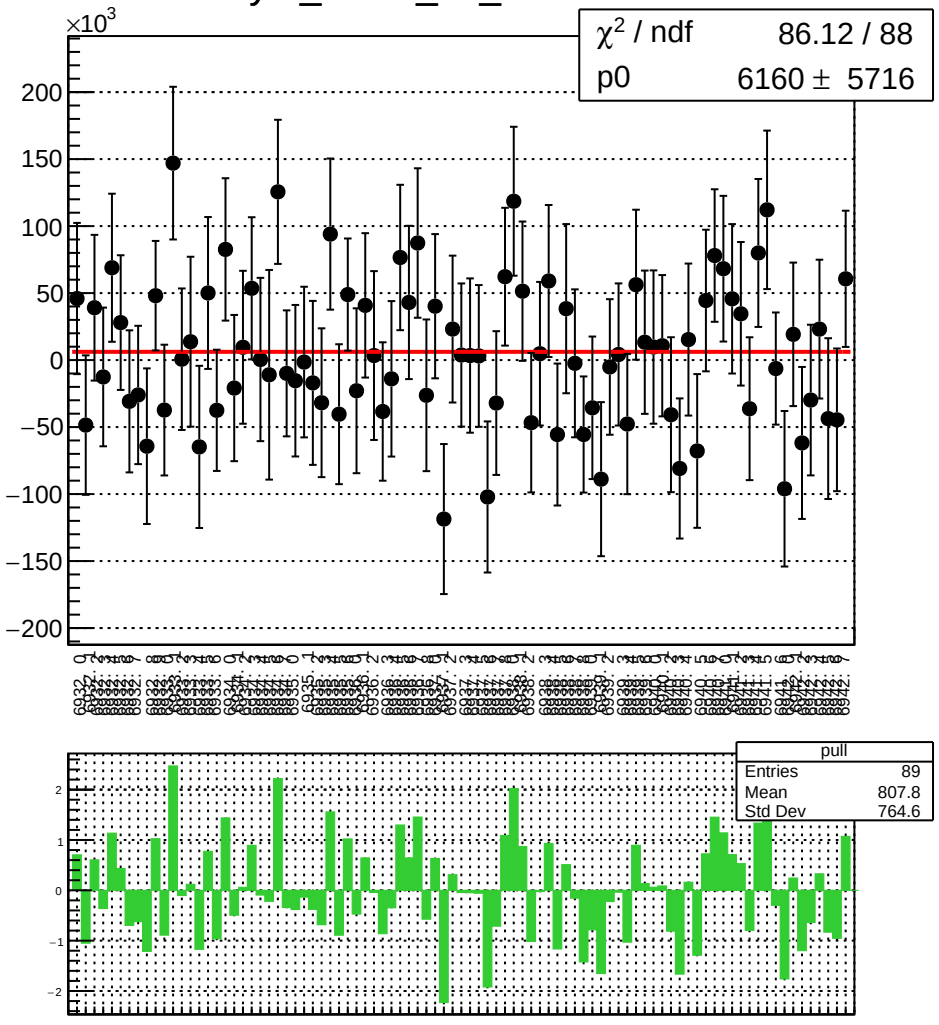

pull1D
Entries 89
Mean −0.007926
Std Dev 1.062

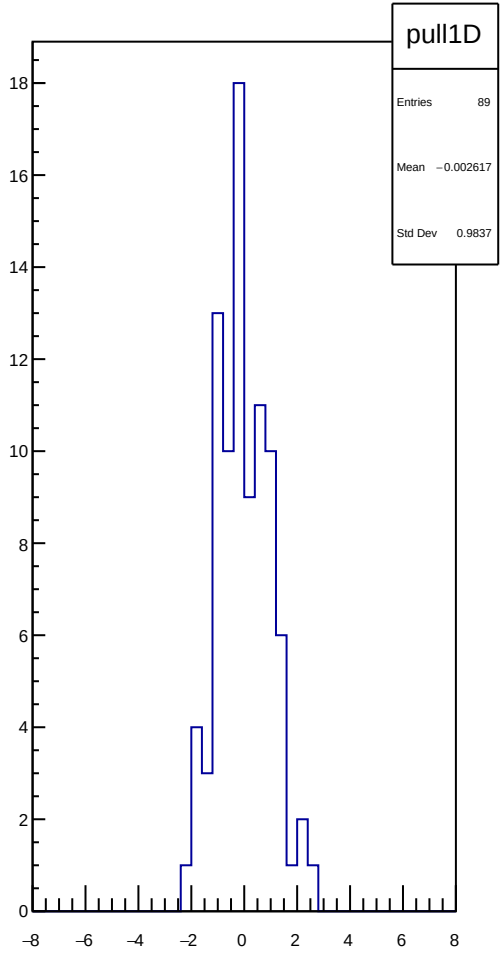

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 8531 / 88
p0 1751 ± 1.35
5500
5000
4500
4000
3500
3000
2500
2000
1500

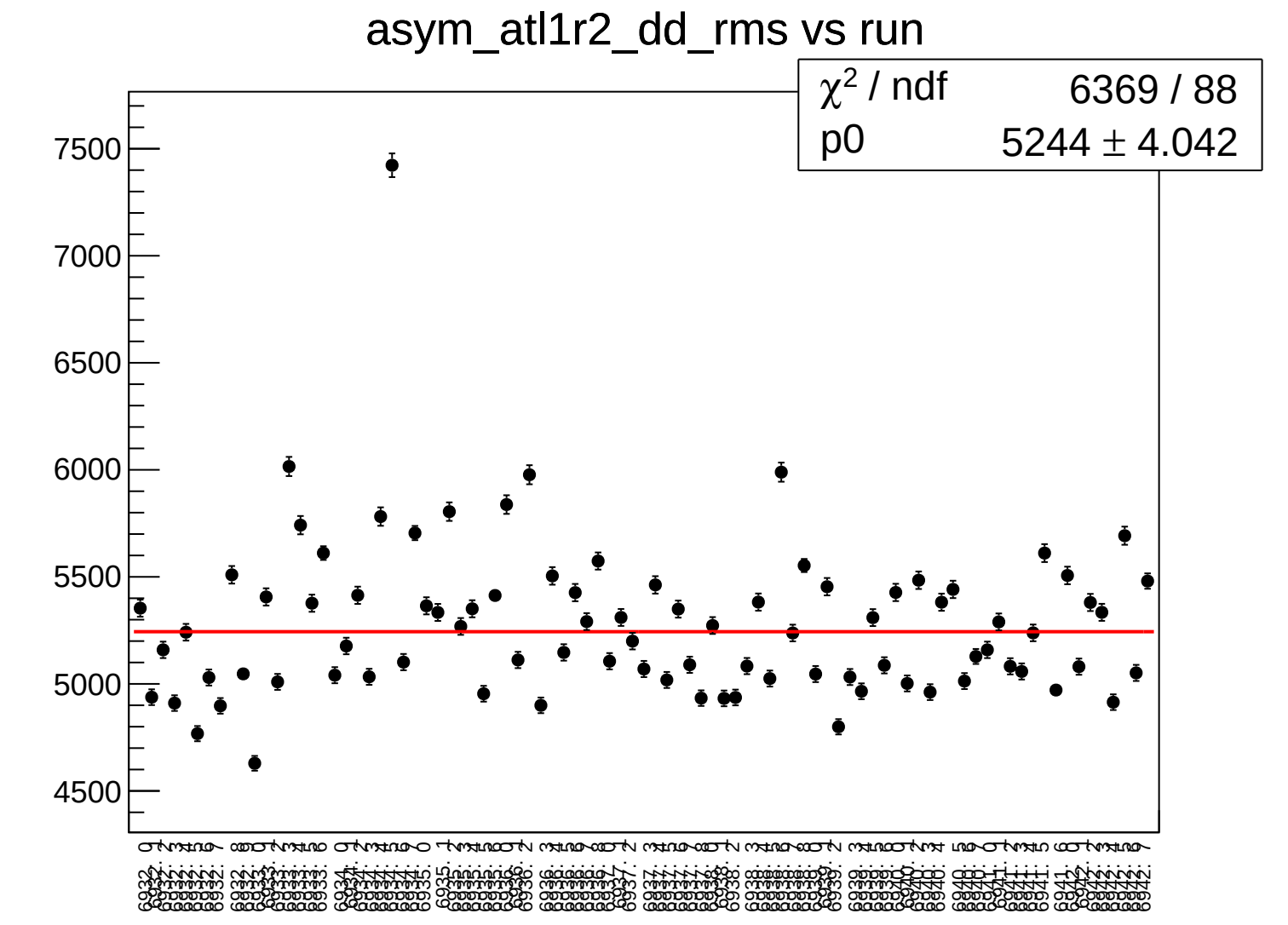

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 85.54 / 88
p0 −5166 ± 5370
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean −2552
Std Dev 2589
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

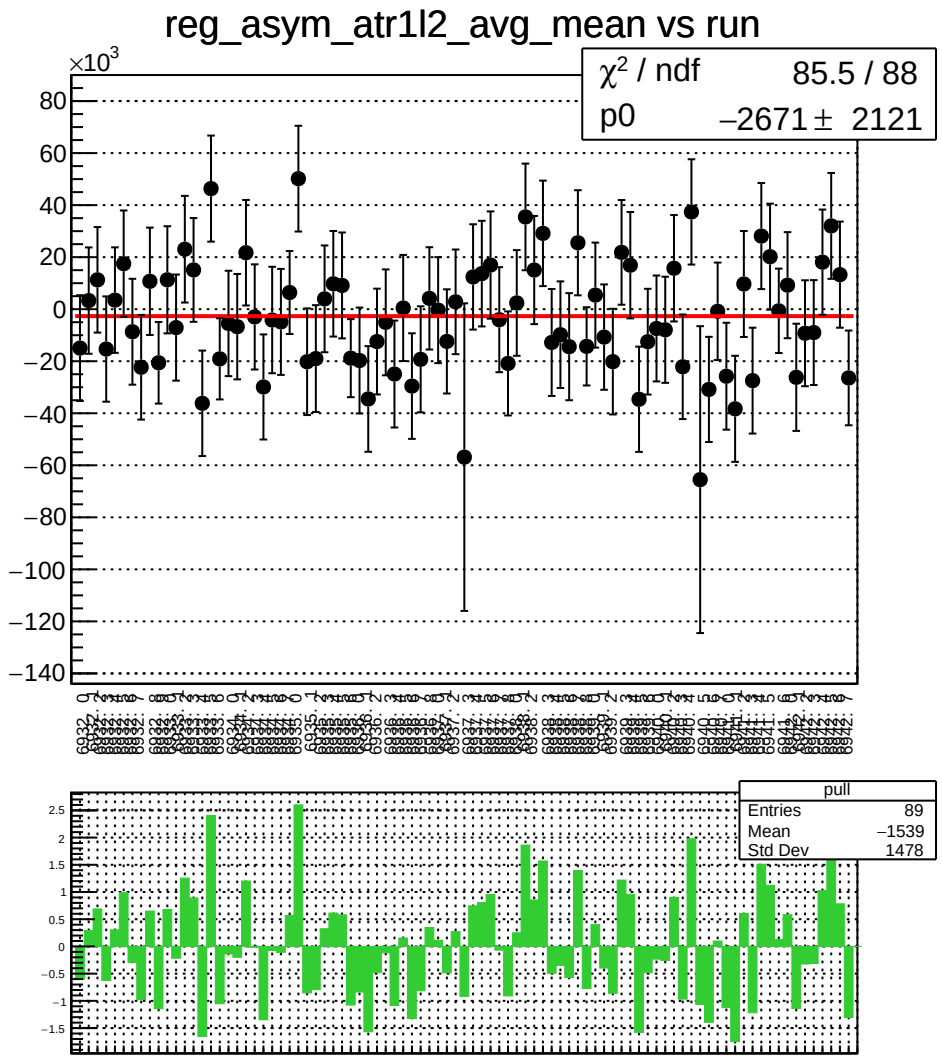

pull1D
Entries 89
Mean −0.0008196
Std Dev 0.9804
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

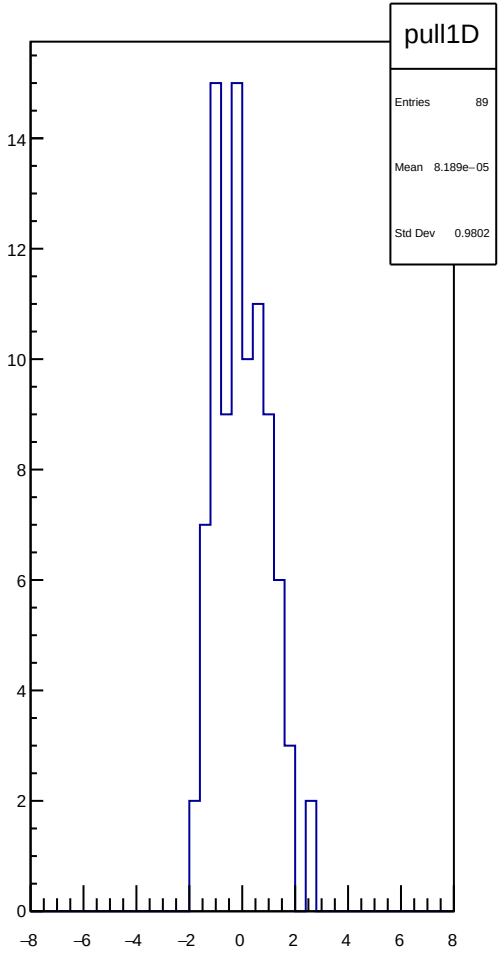

asym_atl1r2_dd_correction_rms vs run
χ^2 / ndf 6031 / 88
p0 4927 ± 3.797
5800
5600
5400
5200
5000
4800
4600
4400
4200

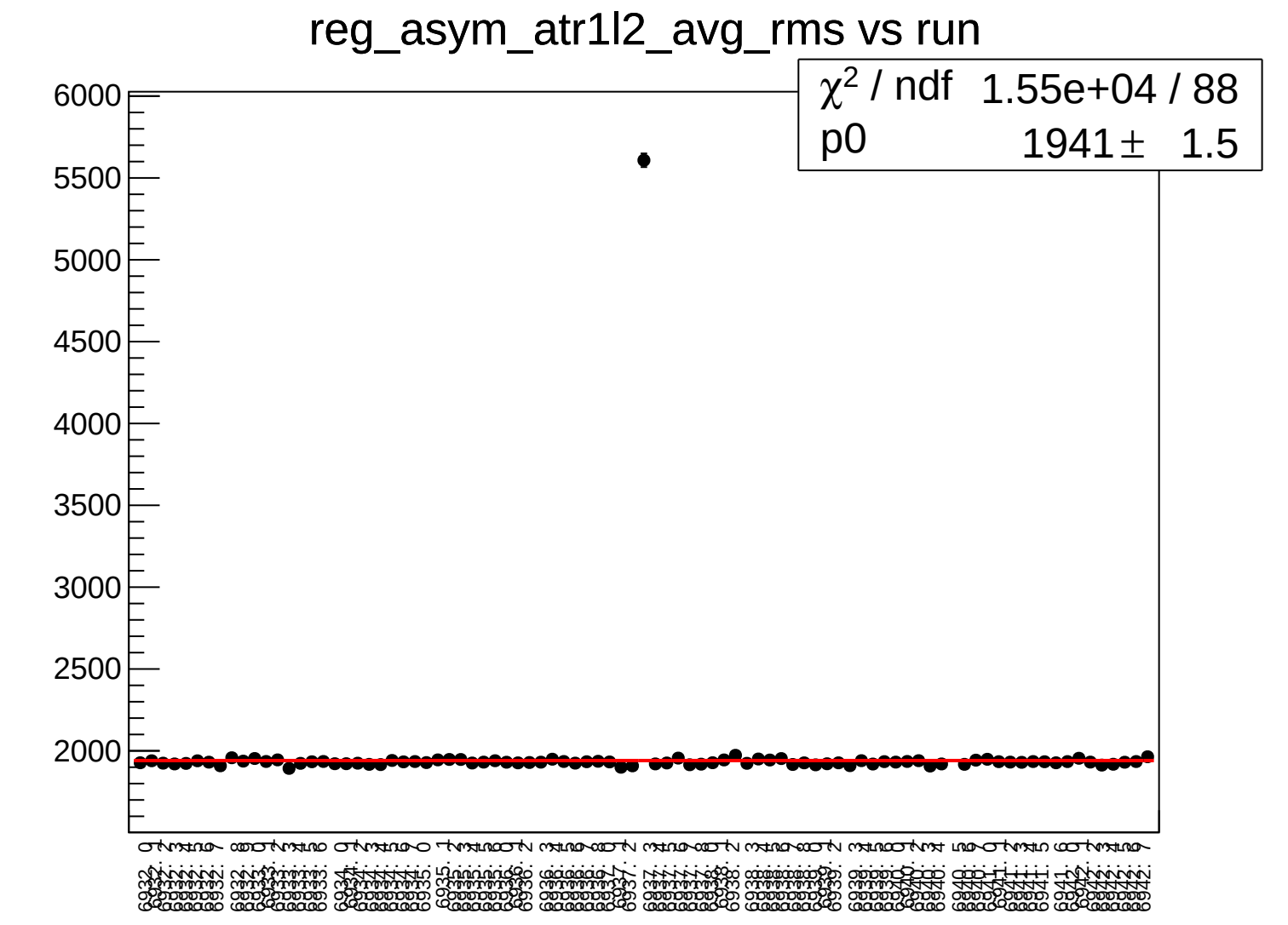

asym_atl1r2_dd_mean vs run
χ² / ndf 86.12 / 88
p0 6160 ± 5716
×10³
pull
Entries 89
Mean 807.8
Std Dev 764.6

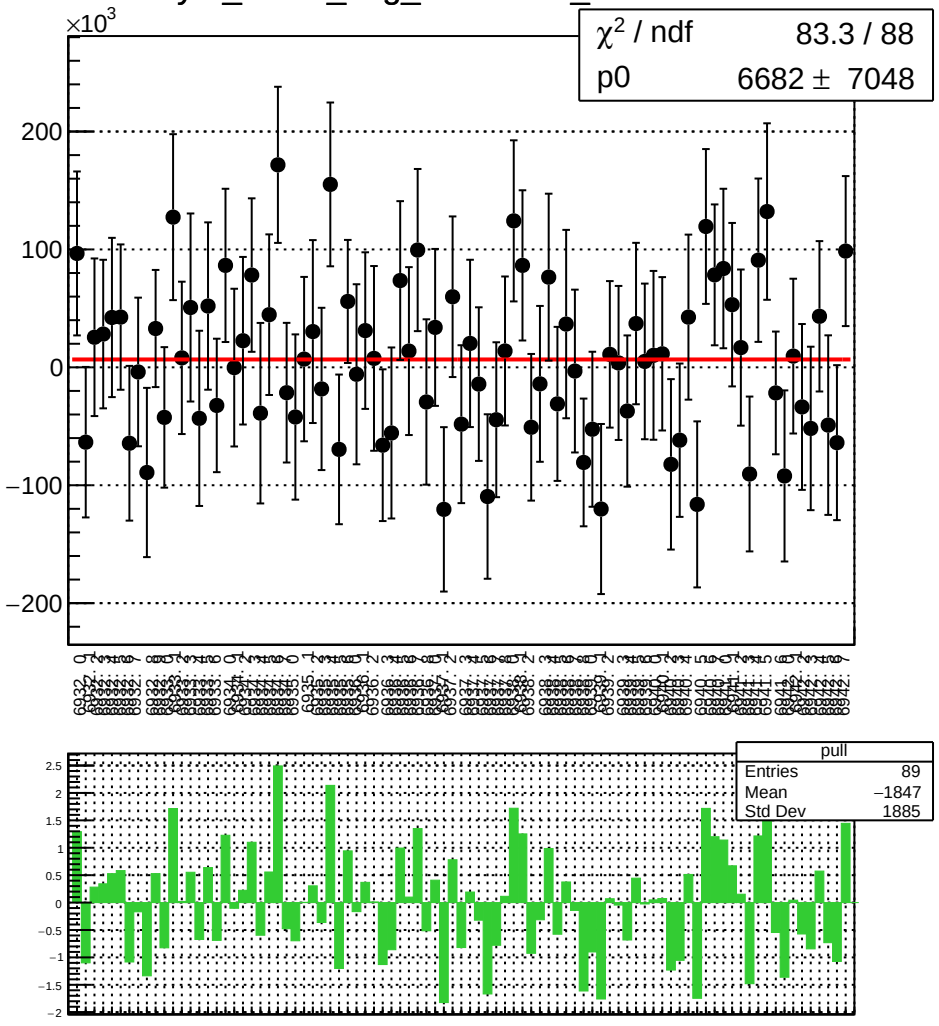

pull1D
Entries 89
Mean −0.002617
Std Dev 0.9837

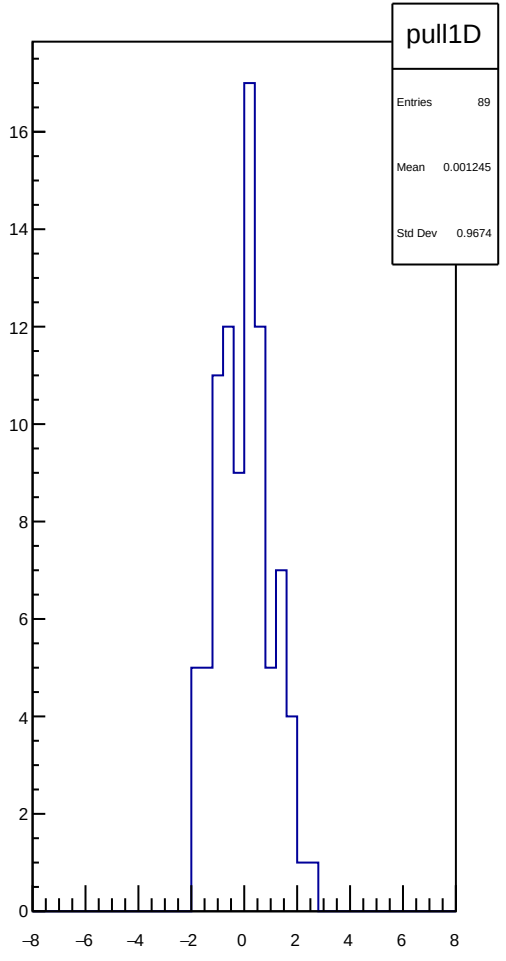

asym_atl1r2_dd_rms vs run
χ^2 / ndf 6369 / 88
p0 5244 ± 4.042
7500
7000
6500
6000
5500
5000
4500

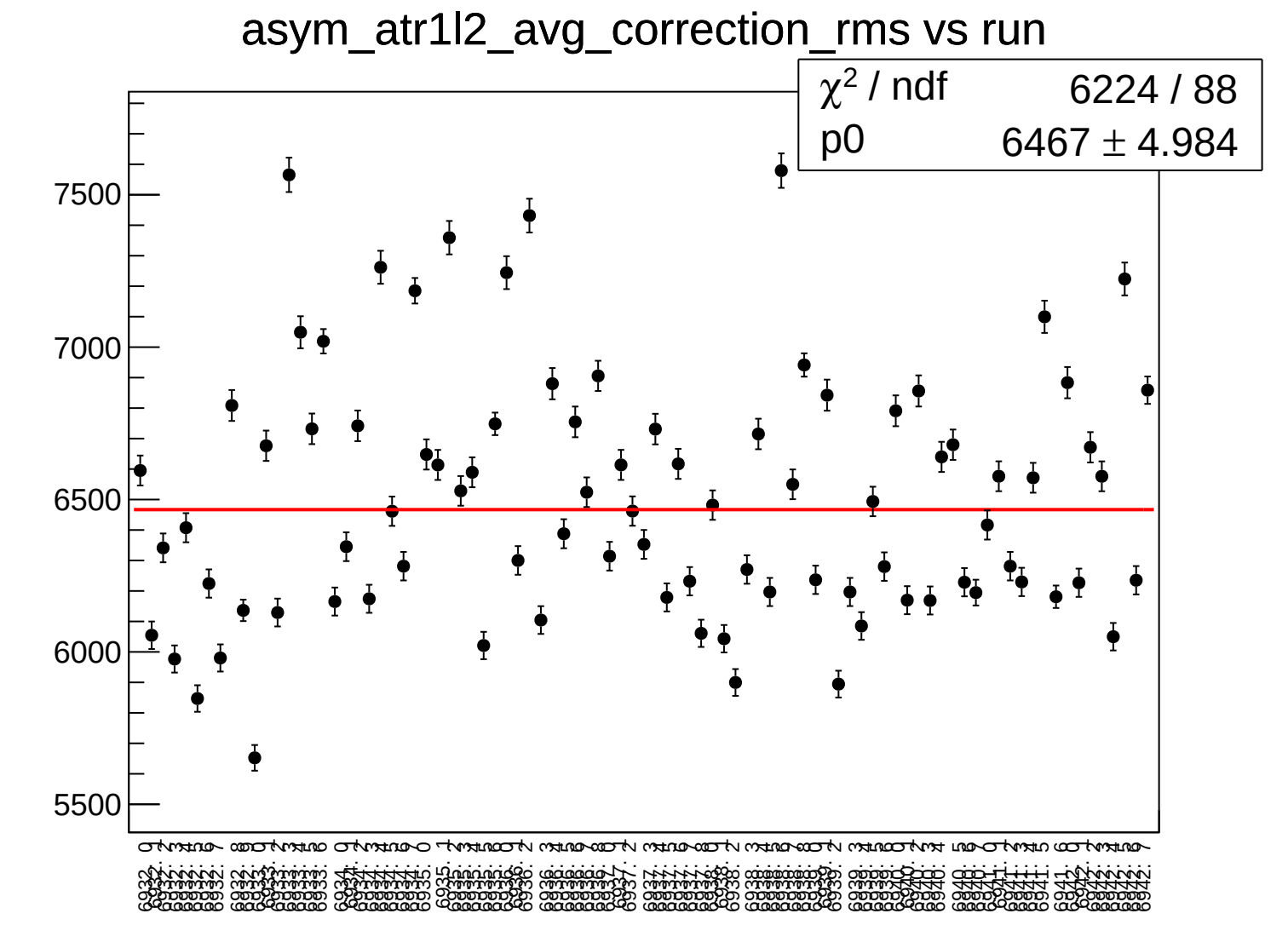

reg_asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 85.5 / 88
p0 −2671 ± 2121
pull
Entries 89
Mean −1539
Std Dev 1478

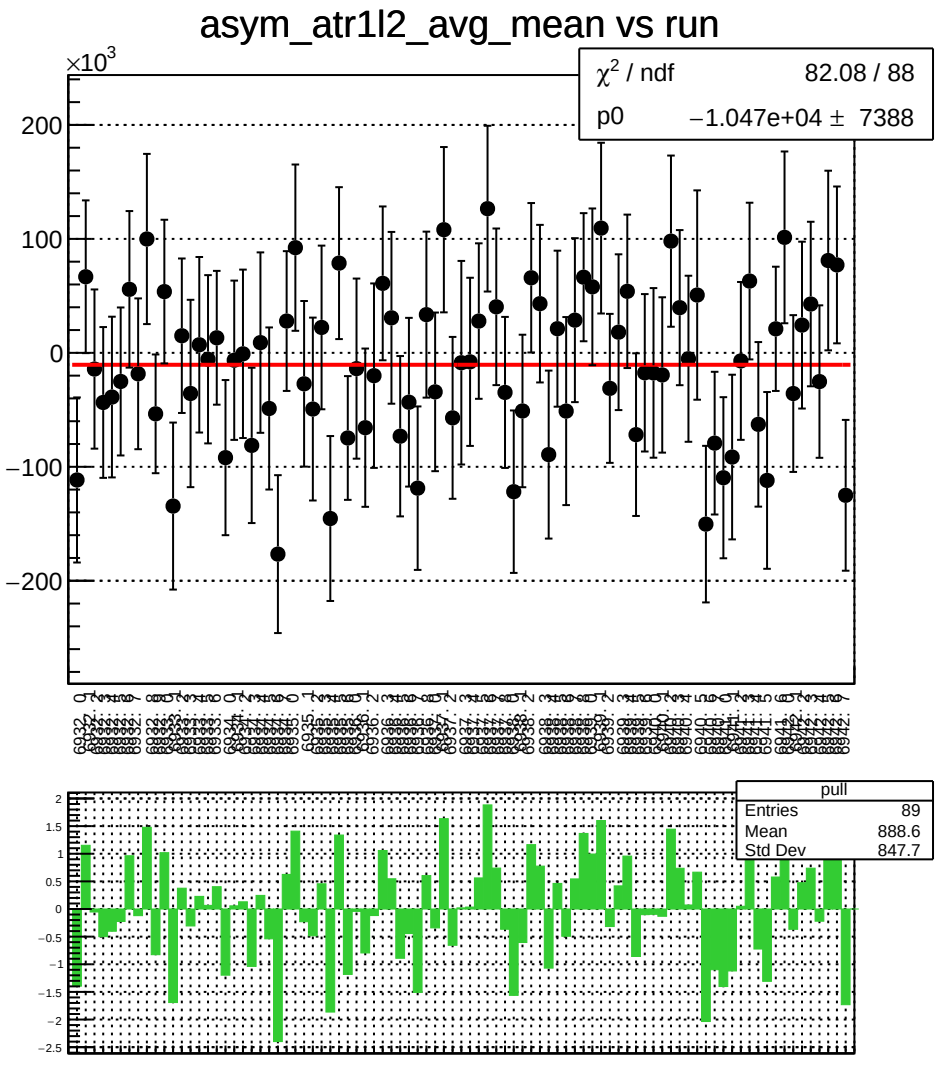

pull1D
Entries 89
Mean 8.189e−05
Std Dev 0.9802

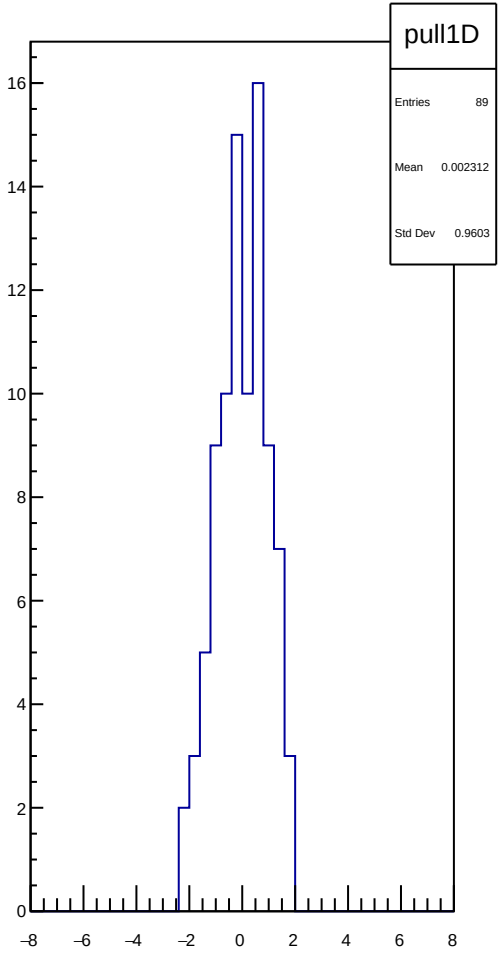

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 1.55e+04 / 88
p0 1941 ± 1.5
6000
5500
5000
4500
4000
3500
3000
2500
2000

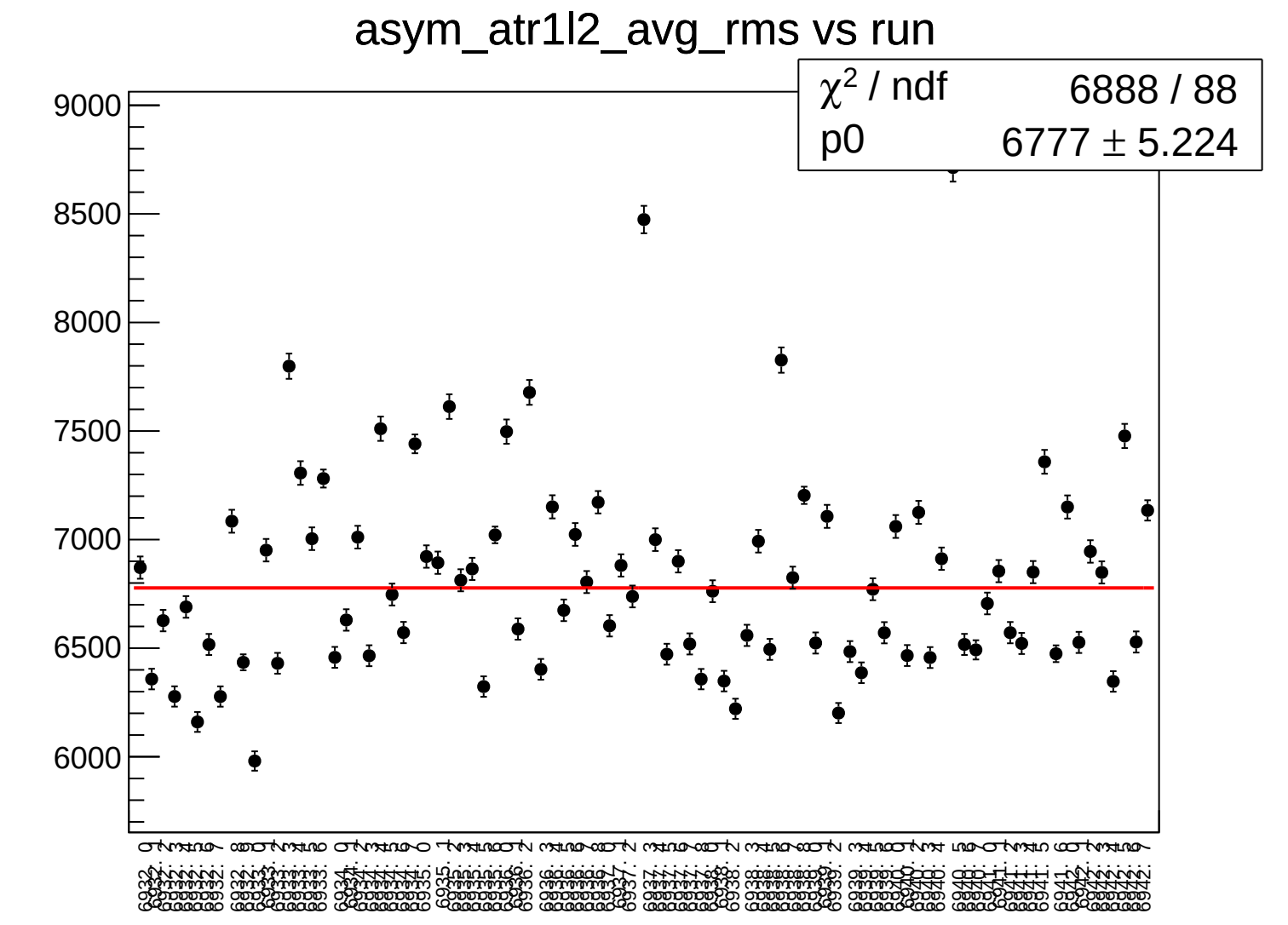

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 83.3 / 88
p0 6682 ± 7048
200
100
0
−100
−200
pull
Entries 89
Mean −1847
Std Dev 1885
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

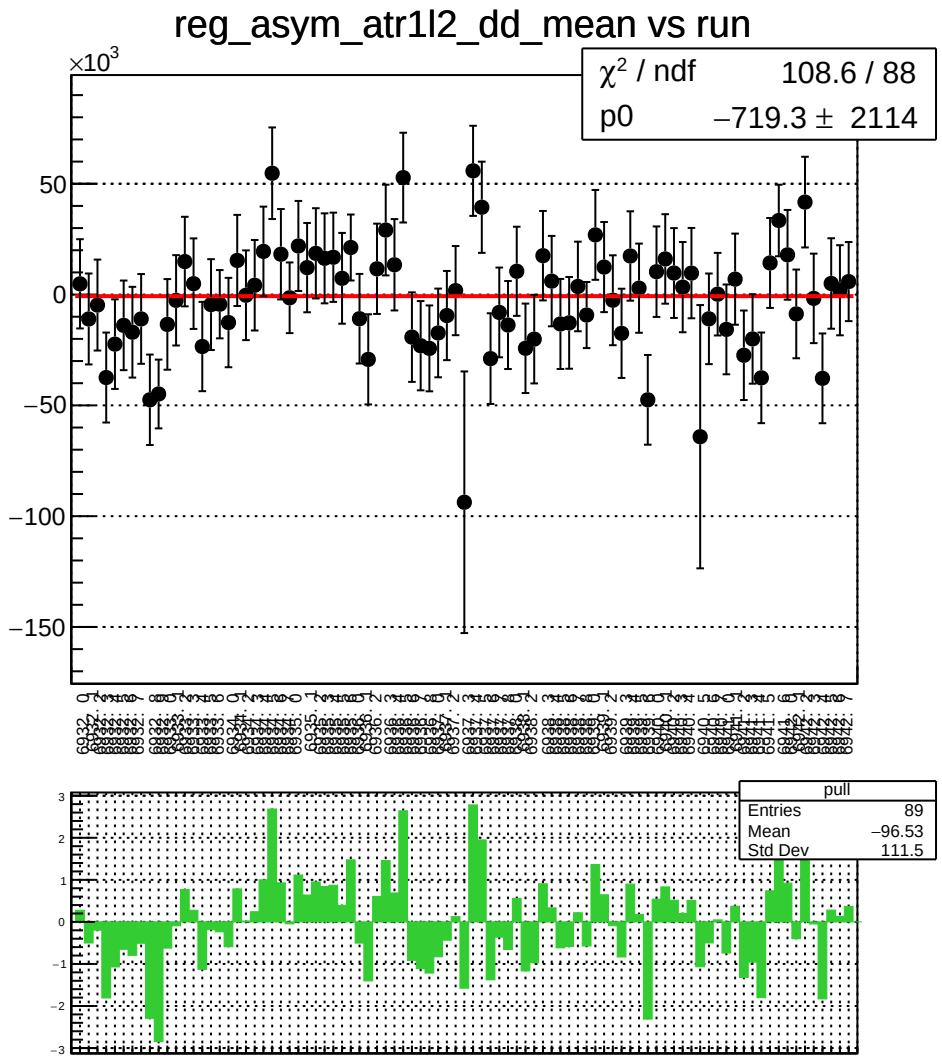

pull1D
Entries 89
Mean 0.001245
Std Dev 0.9674
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

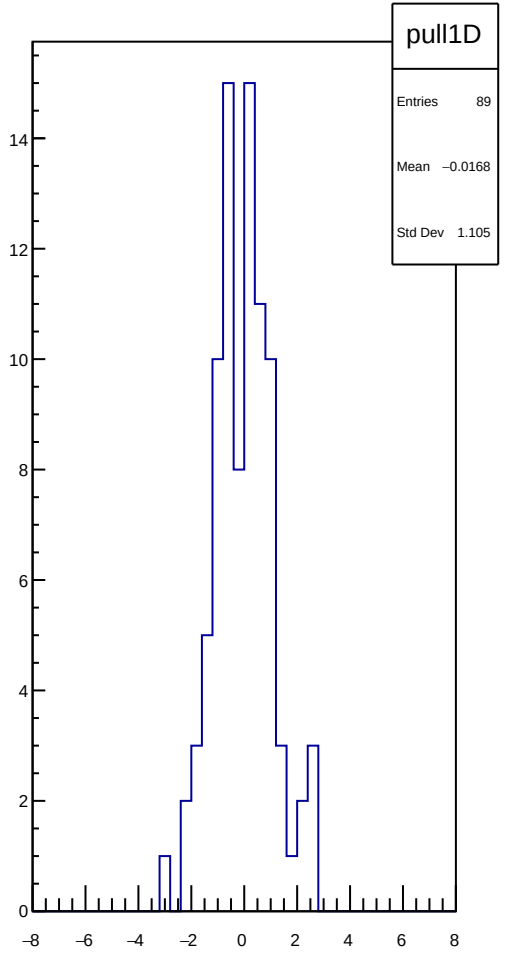

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 6224 / 88
p0 6467 ± 4.984
7500
7000
6500
6000
5500

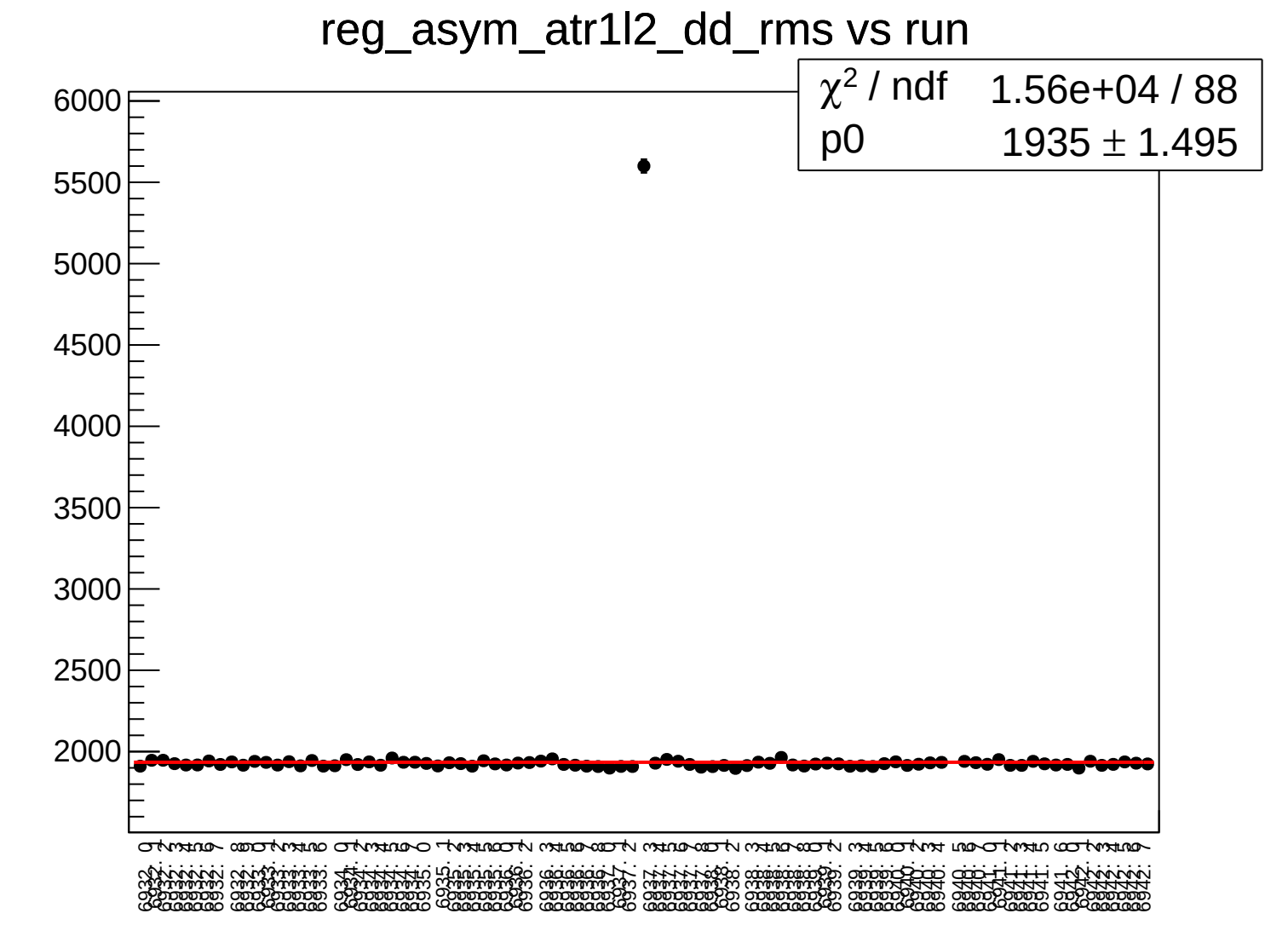

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 82.08 / 88
p0 −1.047e+04 ± 7388
pull
Entries 89
Mean 888.6
Std Dev 847.7

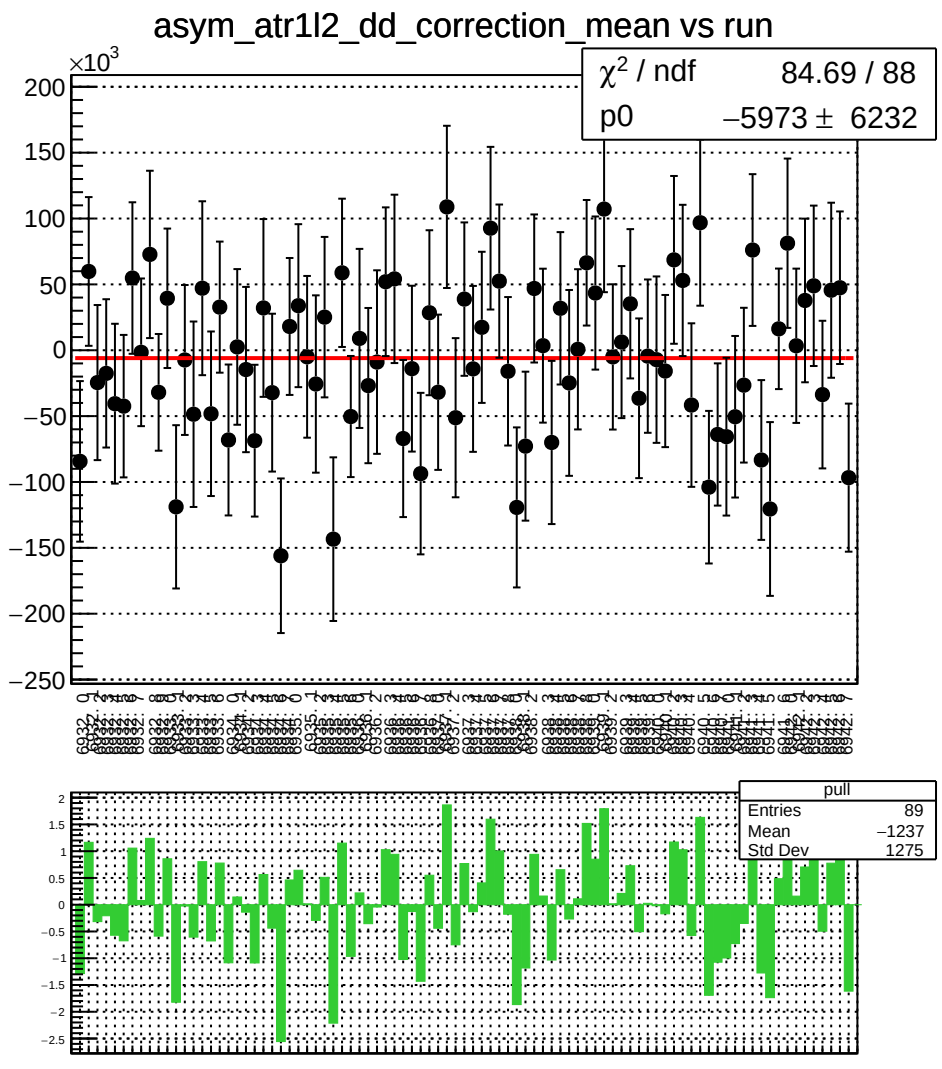

pull1D
Entries 89
Mean 0.002312
Std Dev 0.9603

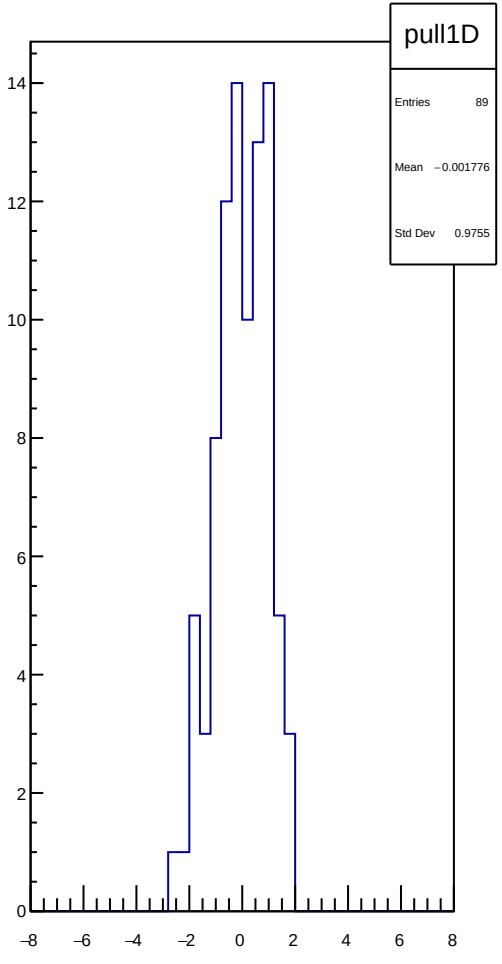

asym_atr1l2_avg_rms vs run
χ^2 / ndf 6888 / 88
p0 6777 ± 5.224
9000
8500
8000
7500
7000
6500
6000

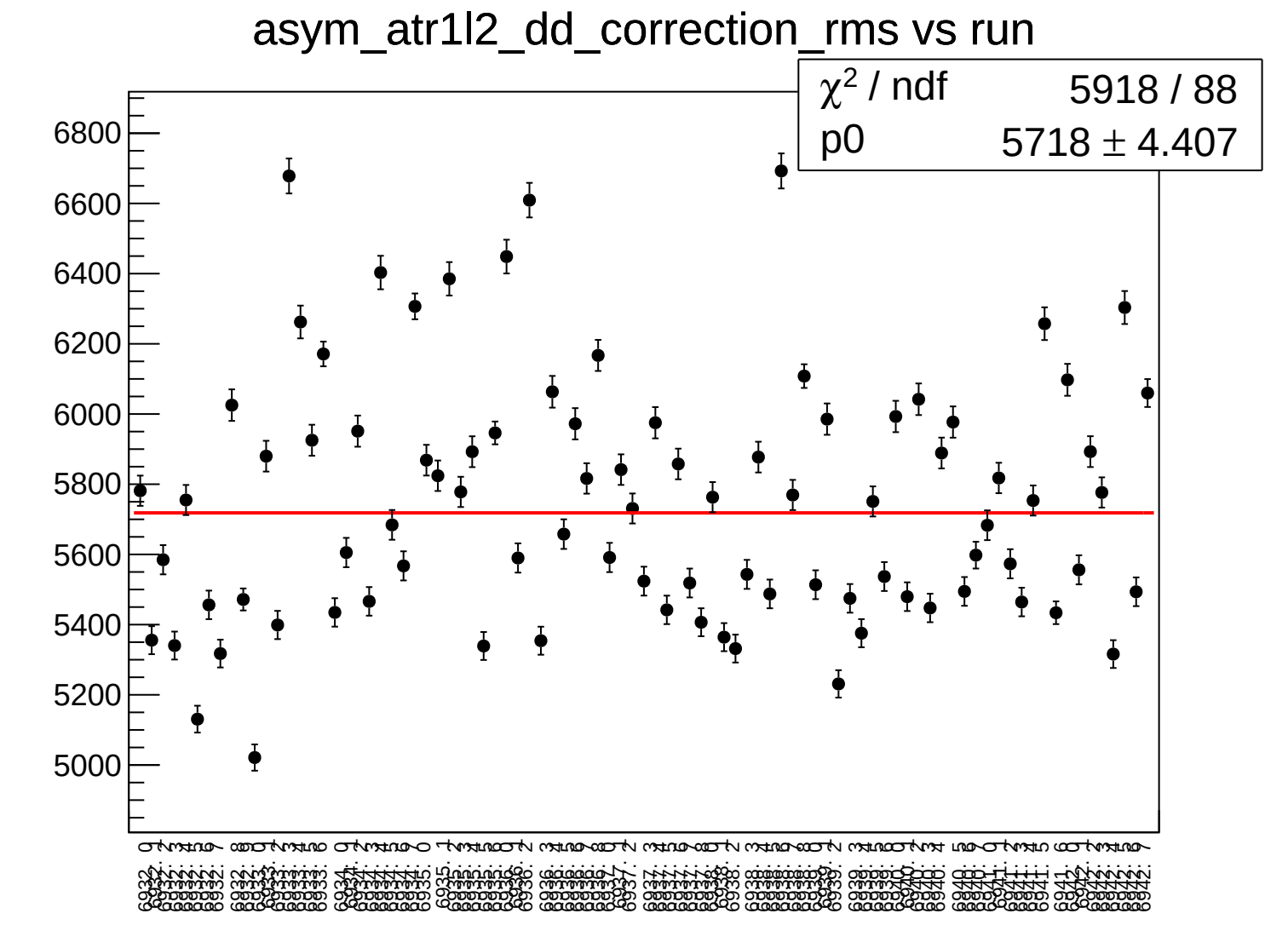

reg_asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 108.6 / 88
p0 −719.3 ± 2114
50
0
−50
−100
−150
pull
Entries 89
Mean −96.53
Std Dev 111.5
3
2
1
0
−1
−2
−3

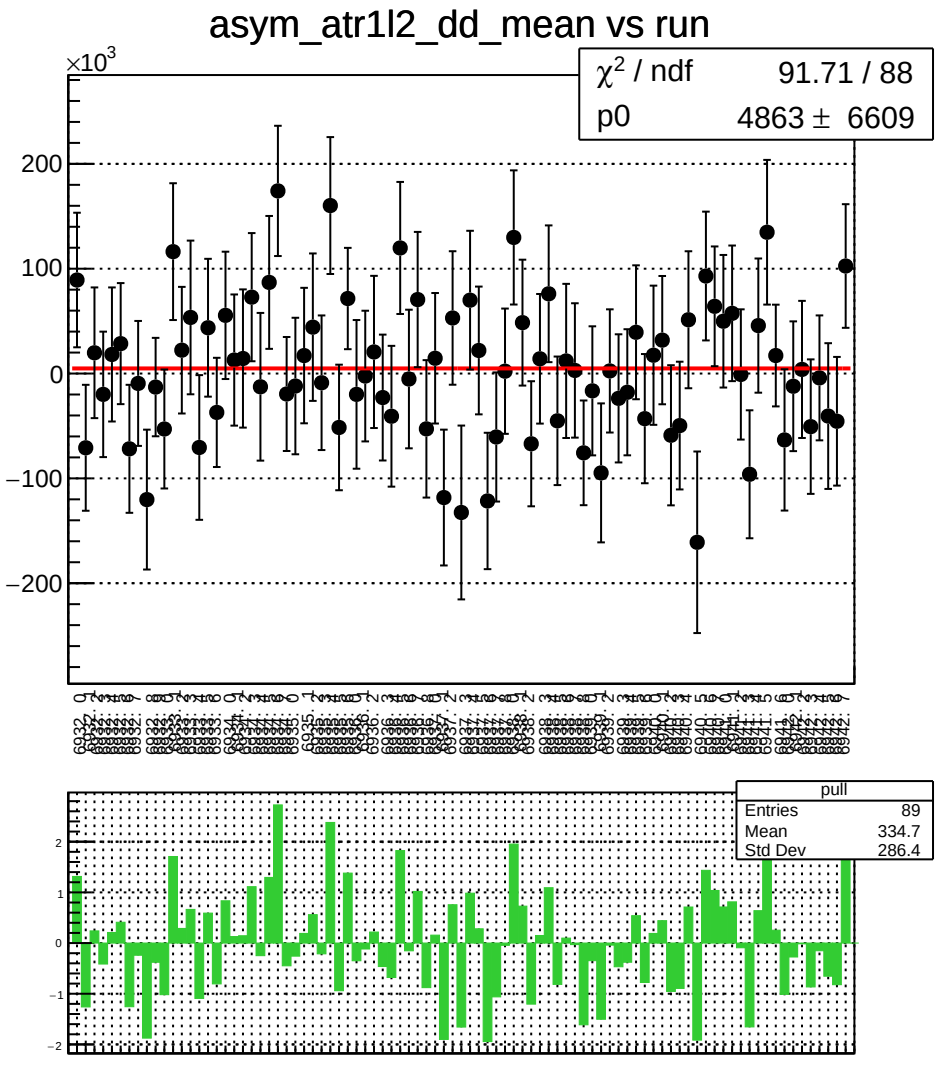

pull1D
Entries 89
Mean −0.0168
Std Dev 1.105
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

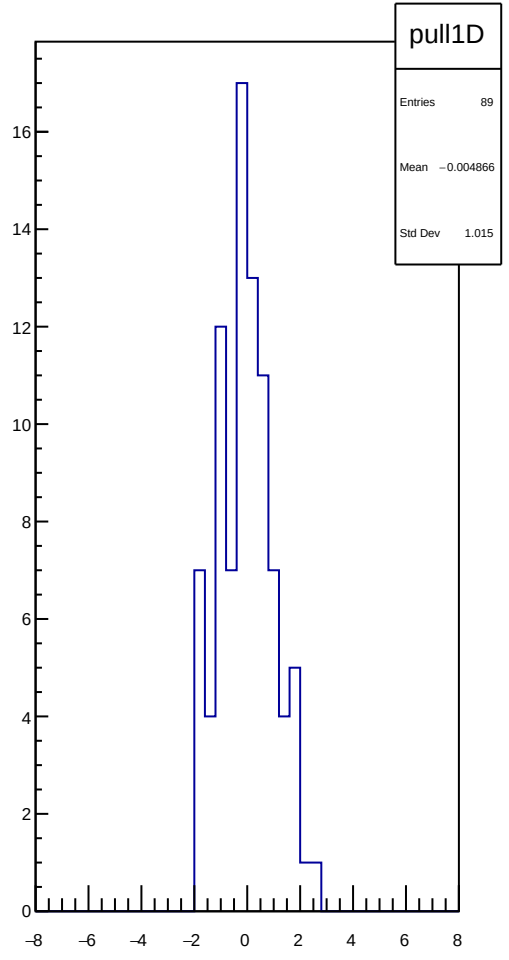

reg_asym_atr1l2_dd_rms vs run
χ^2 / ndf 1.56e+04 / 88
p0 1935 ± 1.495
6000
5500
5000
4500
4000
3500
3000
2500
2000

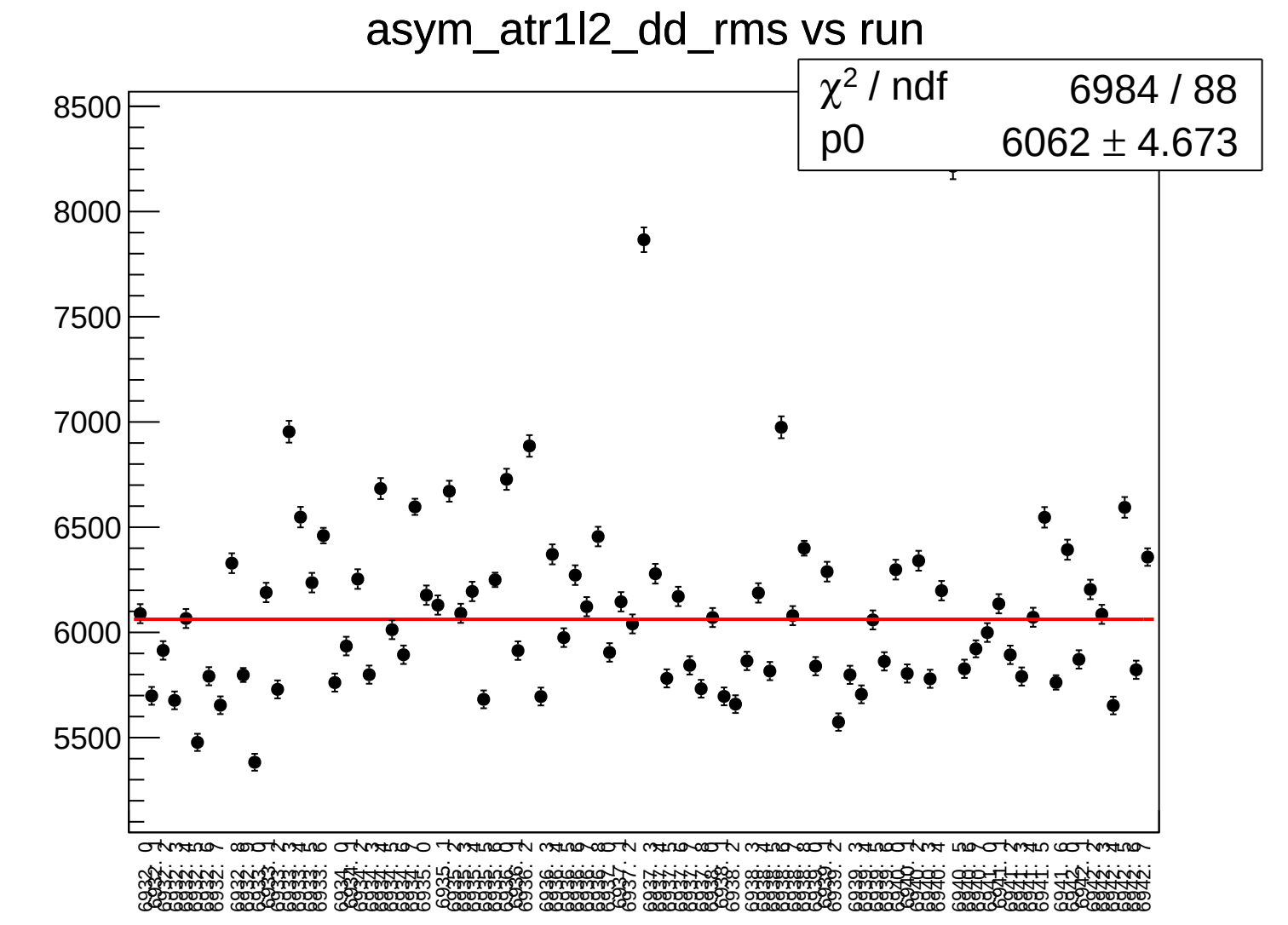

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 84.69 / 88
p0 −5973 ± 6232
pull
Entries 89
Mean −1237
Std Dev 1275

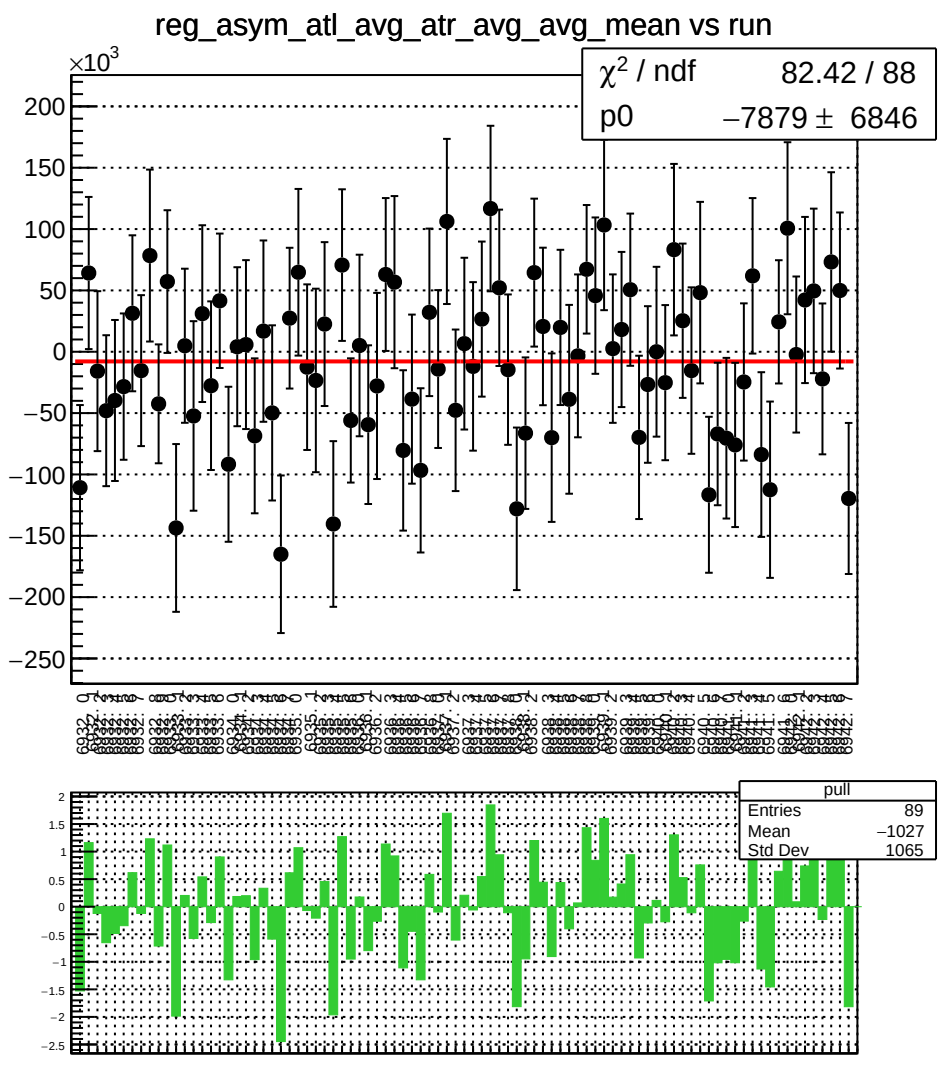

pull1D
Entries 89
Mean −0.001776
Std Dev 0.9755

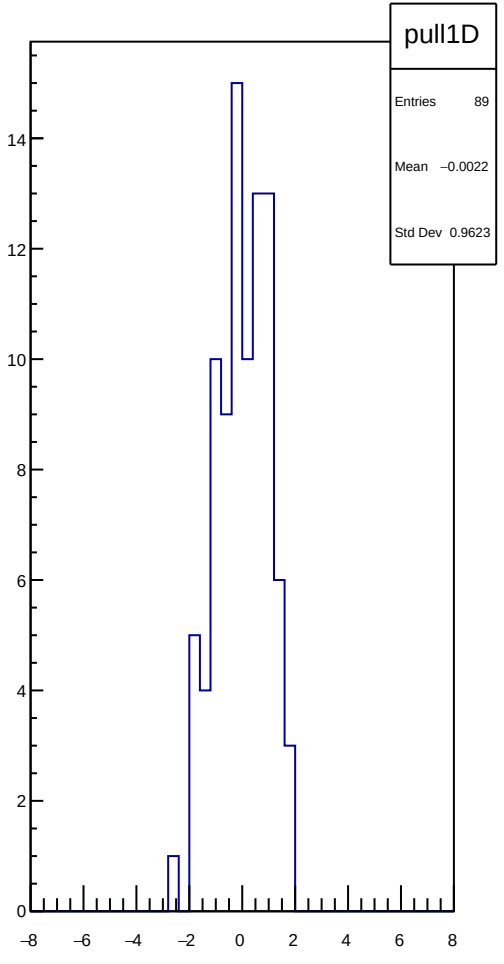

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 5918 / 88
p0 5718 ± 4.407
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000

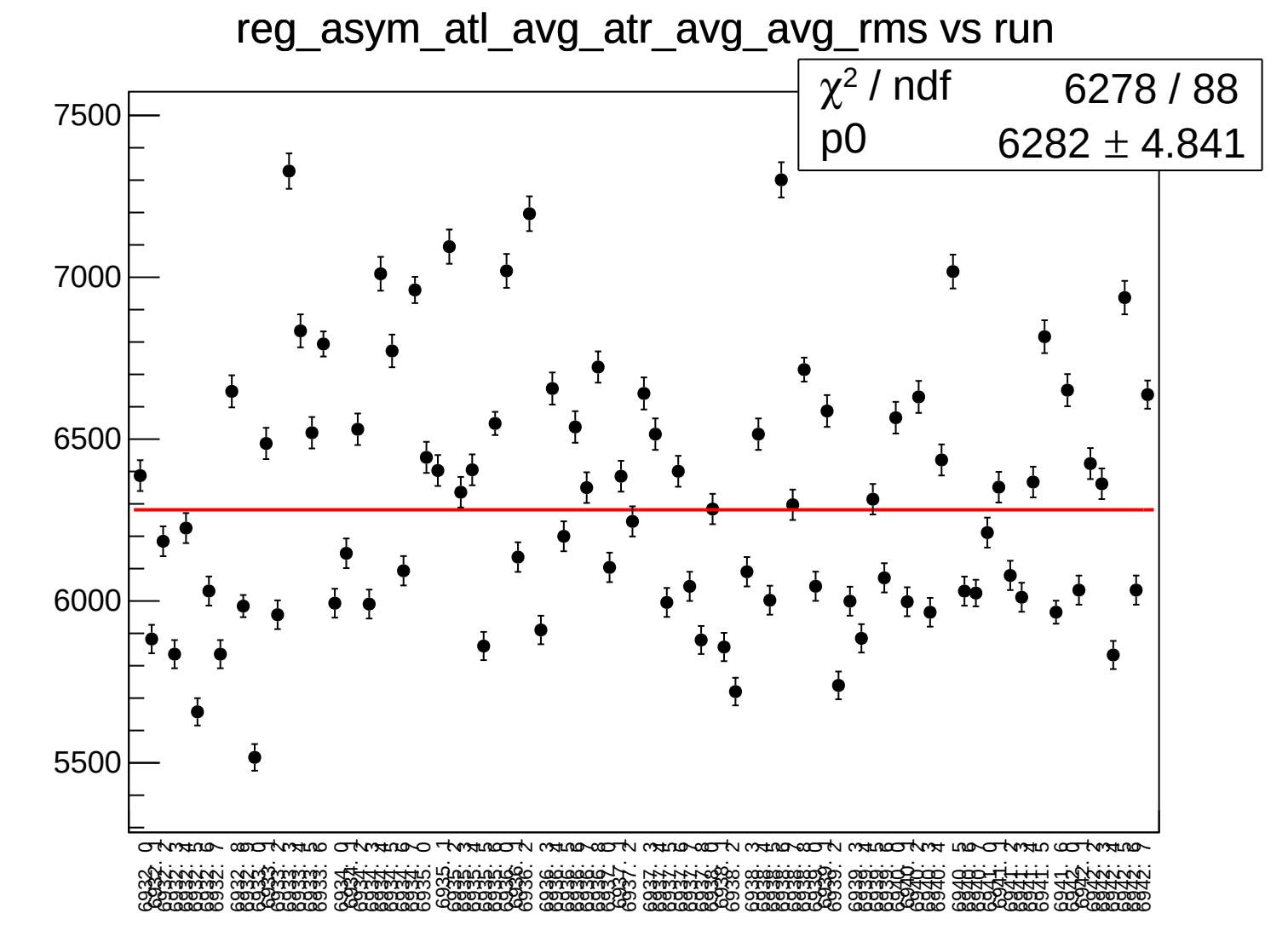

asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 91.71 / 88
p0 4863 ± 6609
200
100
0
−100
−200
pull
Entries 89
Mean 334.7
Std Dev 286.4
2
1
0
−1
−2

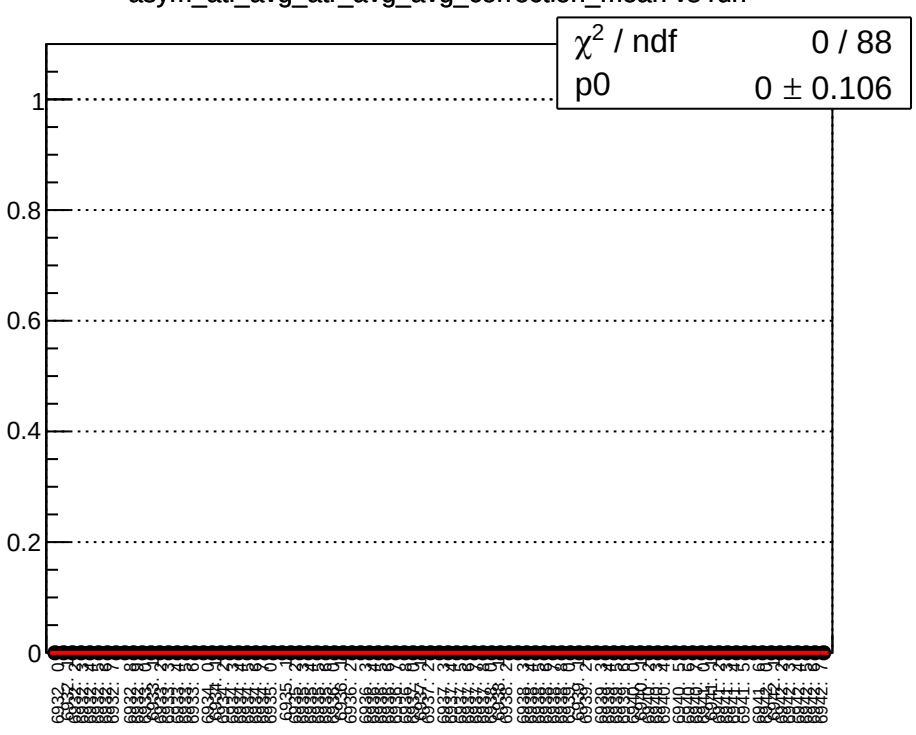

pull1D
Entries 89
Mean −0.004866
Std Dev 1.015
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

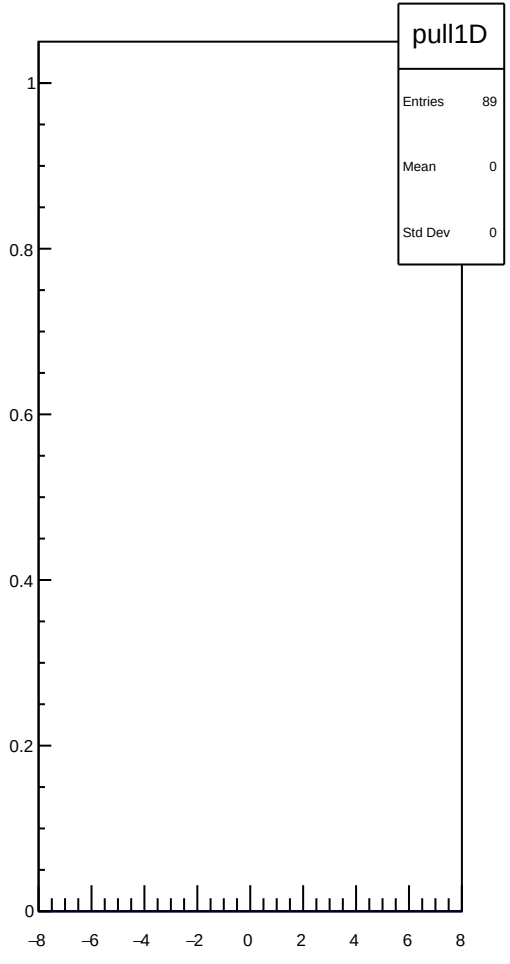

asym_atr1l2_dd_rms vs run
χ² / ndf 6984 / 88
p0 6062 ± 4.673
8500
8000
7500
7000
6500
6000
5500

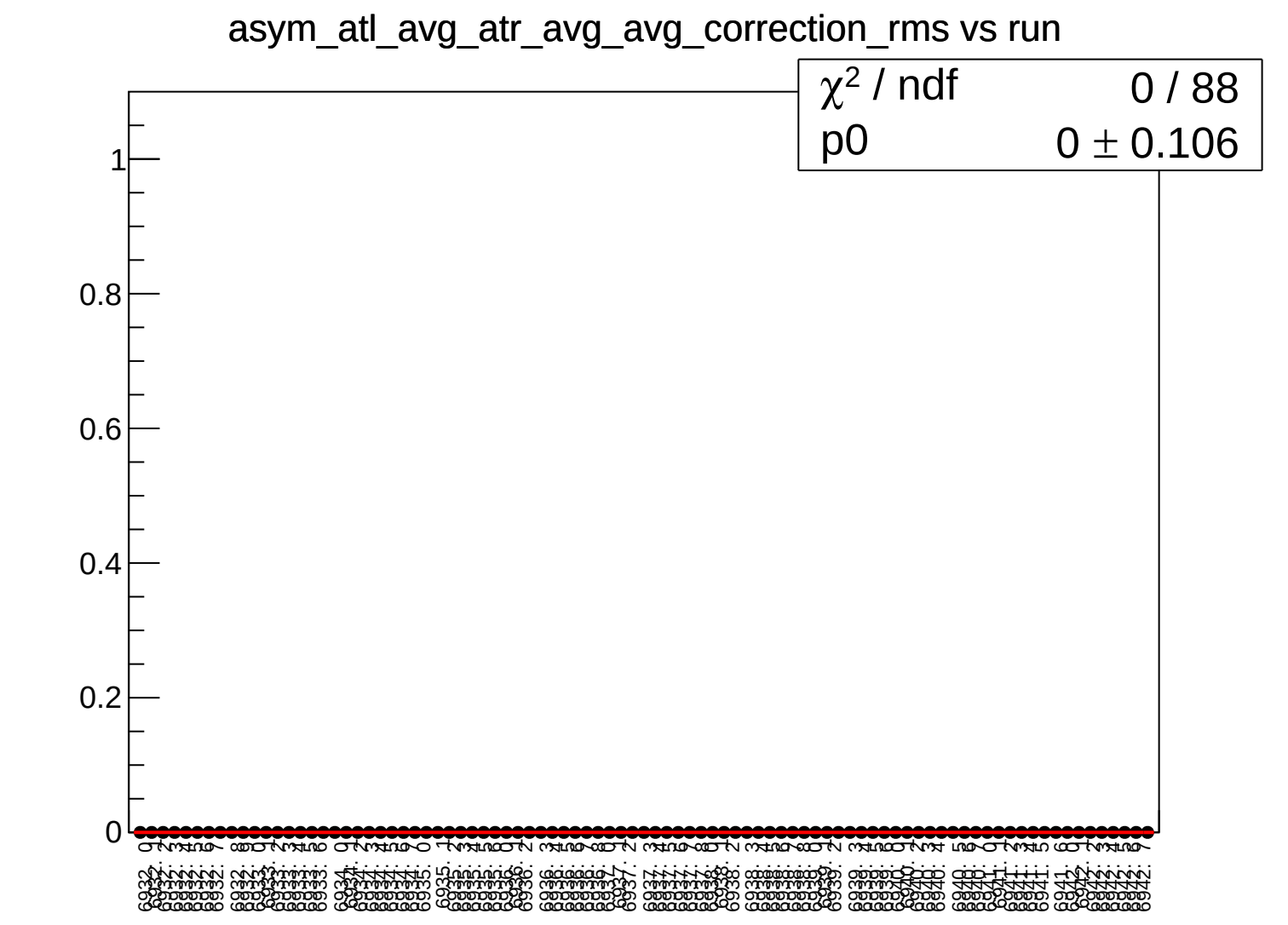

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 82.42 / 88
p0 −7879 ± 6846
pull
Entries 89
Mean −1027
Std Dev 1065

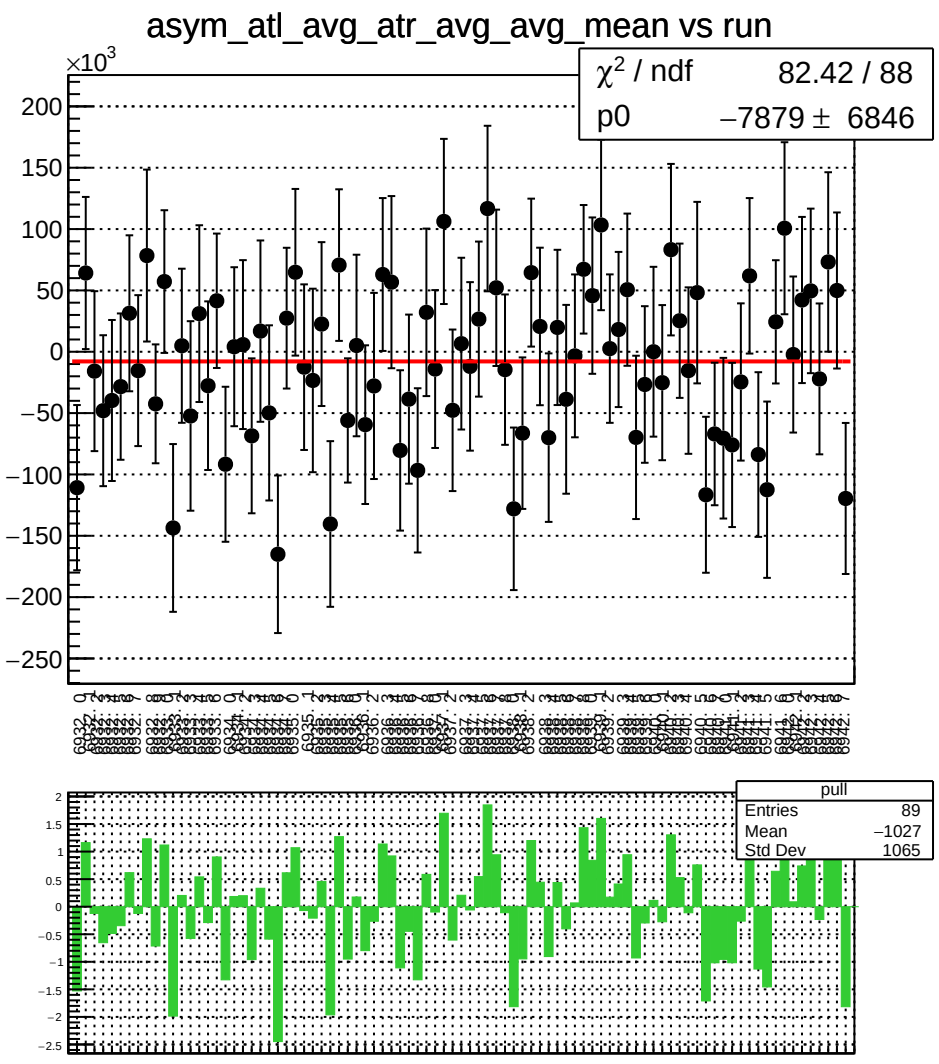

pull1D
Entries 89
Mean −0.0022
Std Dev 0.9623

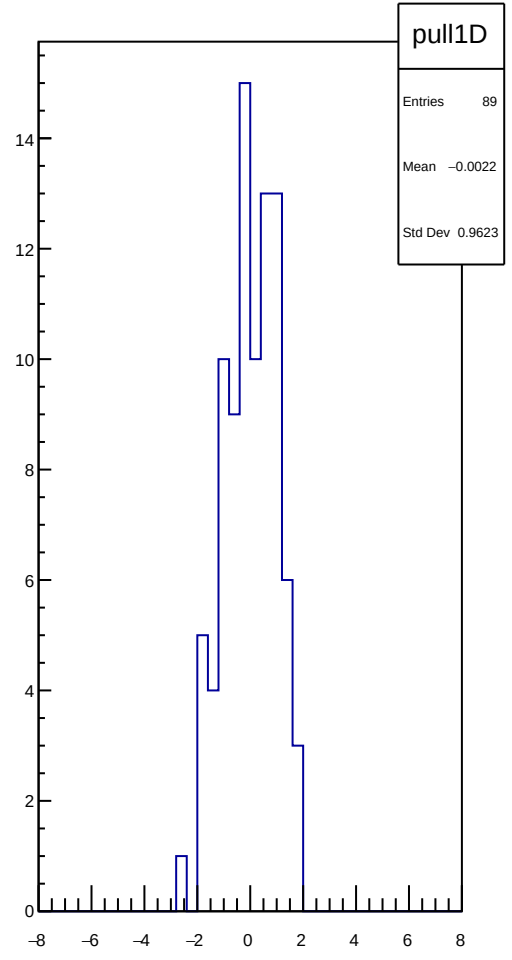

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 6278 / 88
p0 6282 ± 4.841
7500
7000
6500
6000
5500

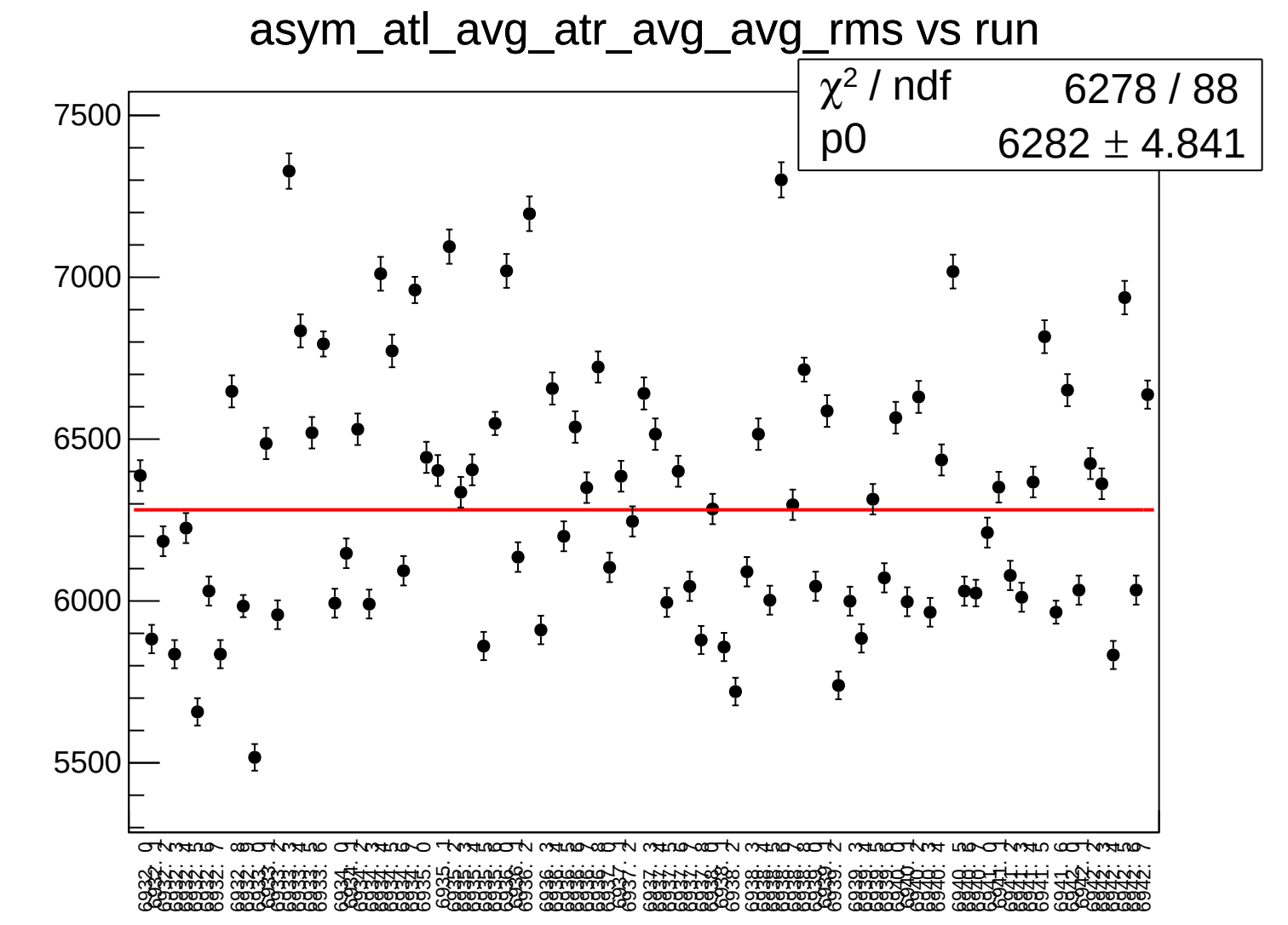

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

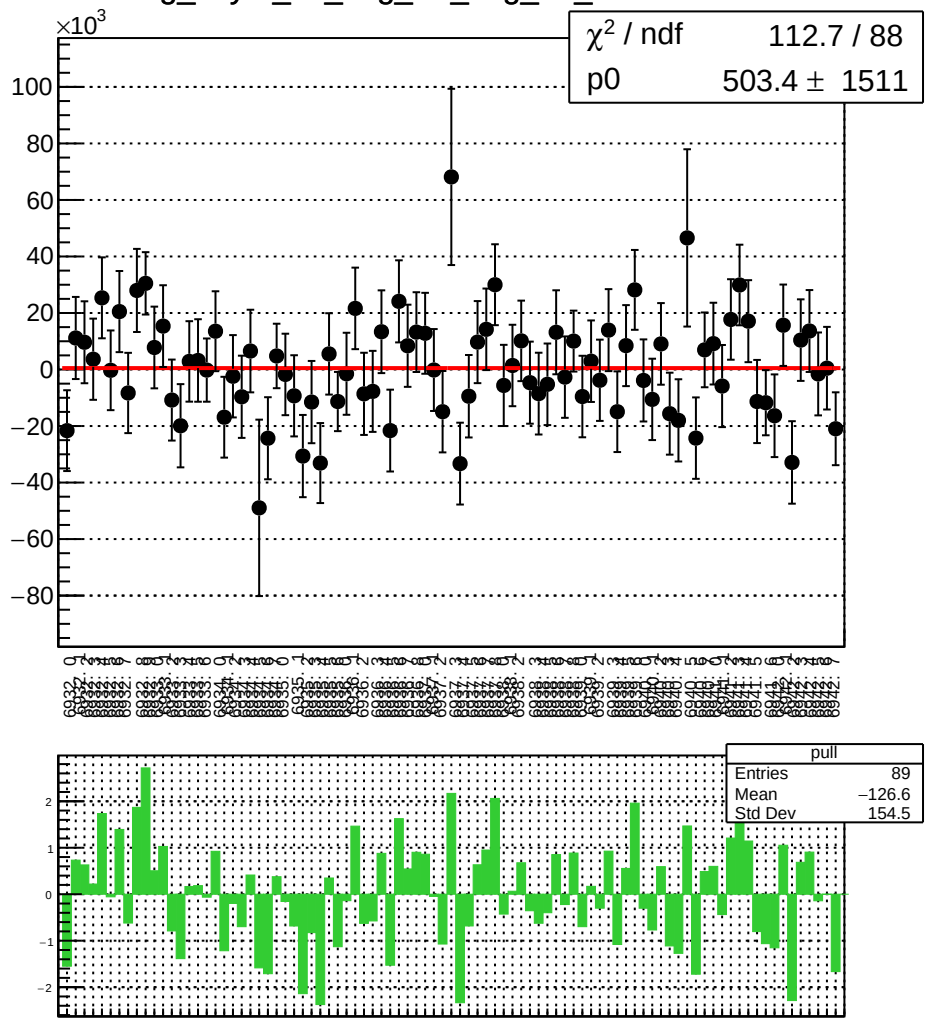

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

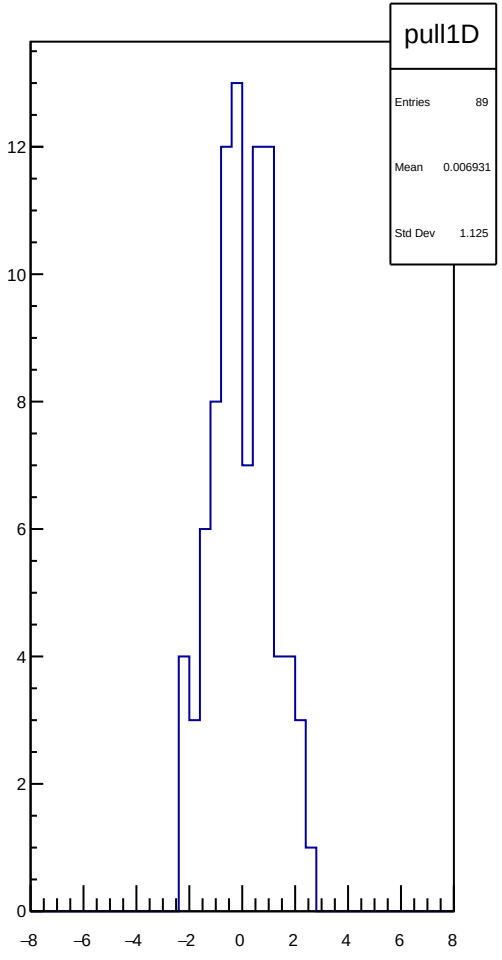

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

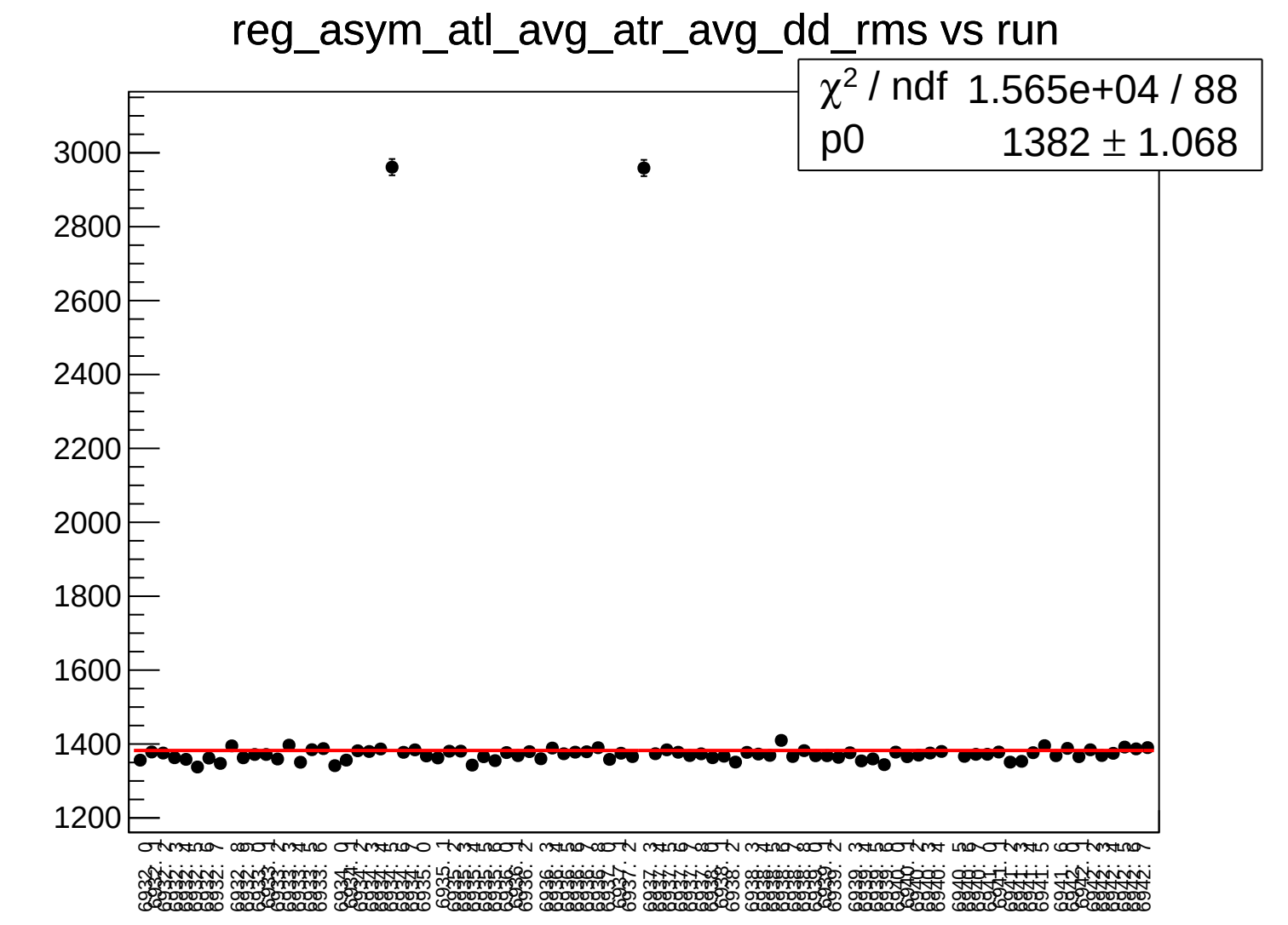

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 82.42 / 88
p0 −7879 ± 6846
pull
Entries 89
Mean −1027
Std Dev 1065

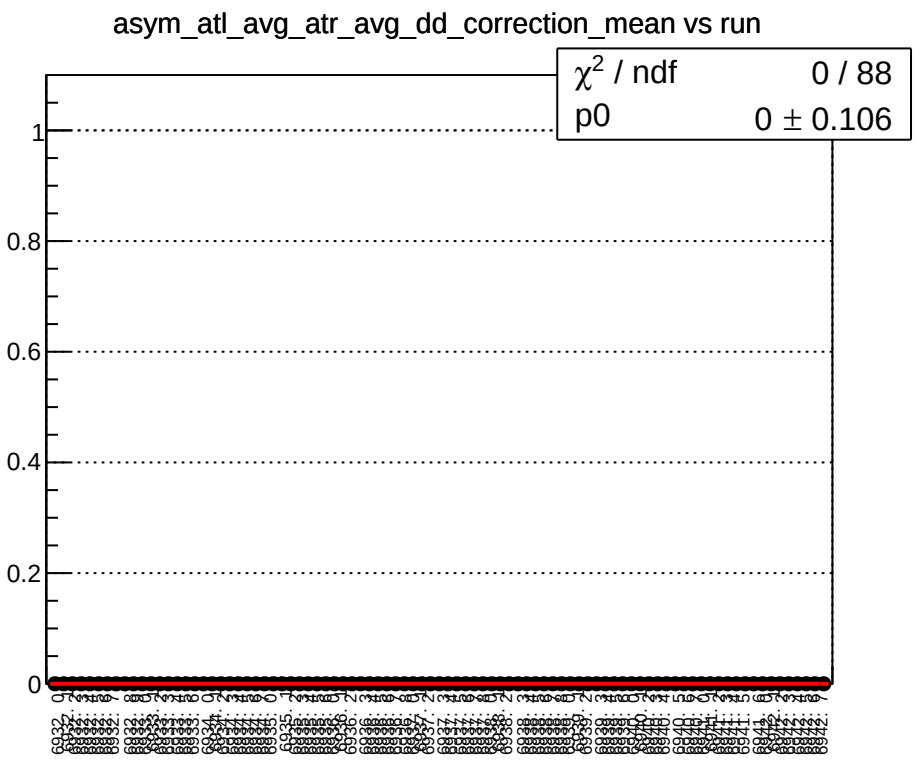

pull1D
Entries 89
Mean −0.0022
Std Dev 0.9623

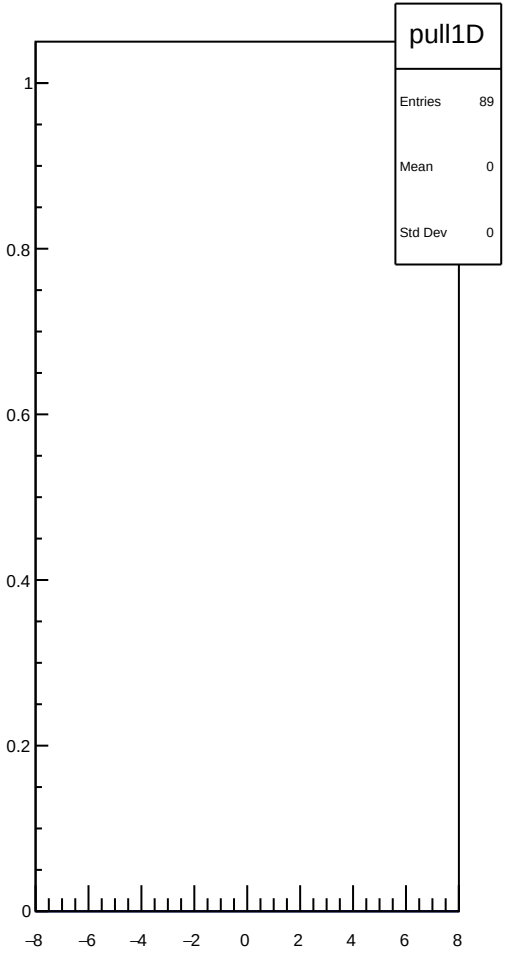

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 6278 / 88
p0 6282 ± 4.841
7500
7000
6500
6000
5500

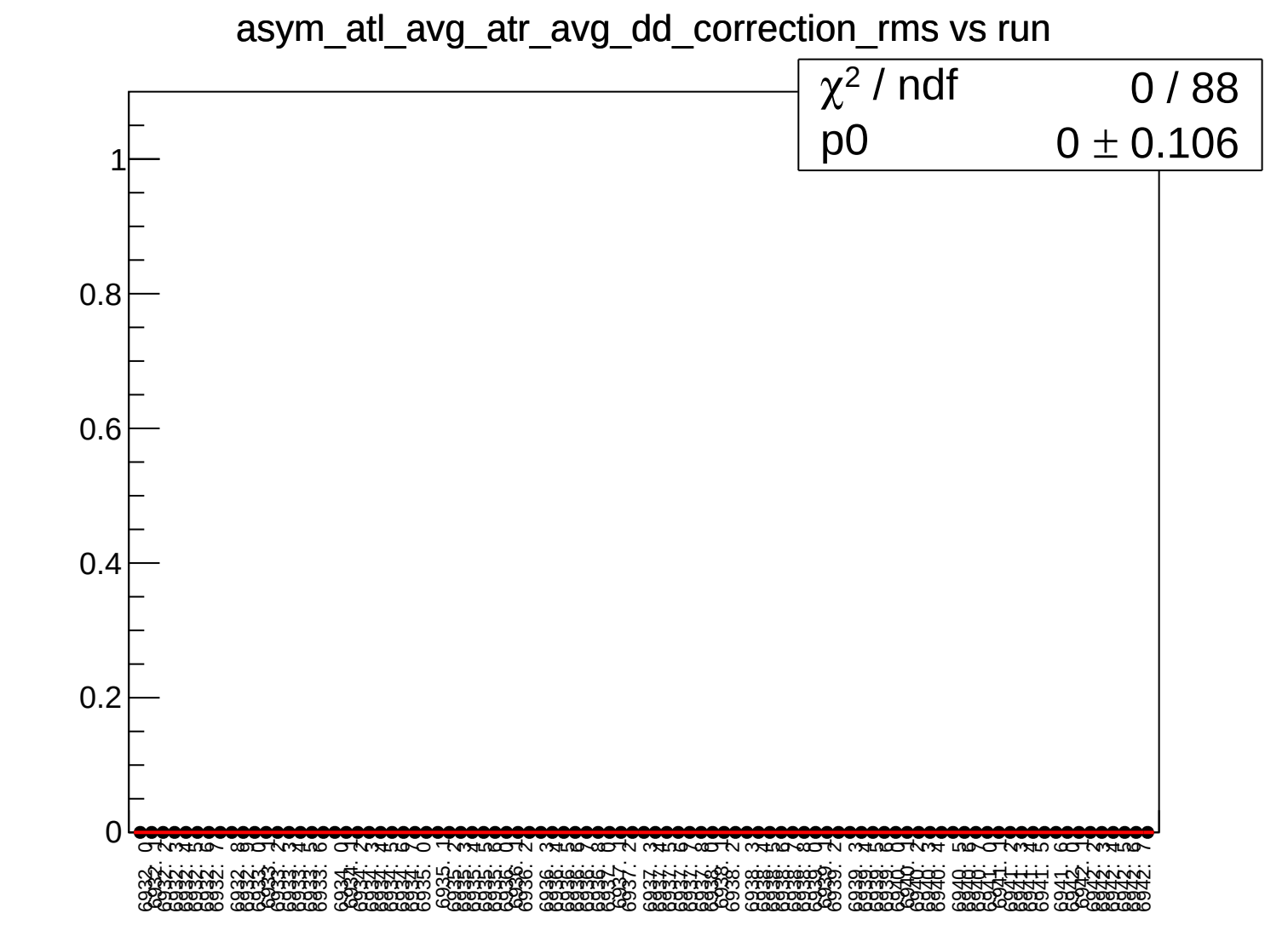

reg_asym_atl_avg_atr_avg_dd_mean vs run
×10^3
χ² / ndf 112.7 / 88
p0 503.4 ± 1511
100
80
60
40
20
0
−20
−40
−60
−80
pull
Entries 89
Mean −126.6
Std Dev 154.5
2
1
0
−1
−2

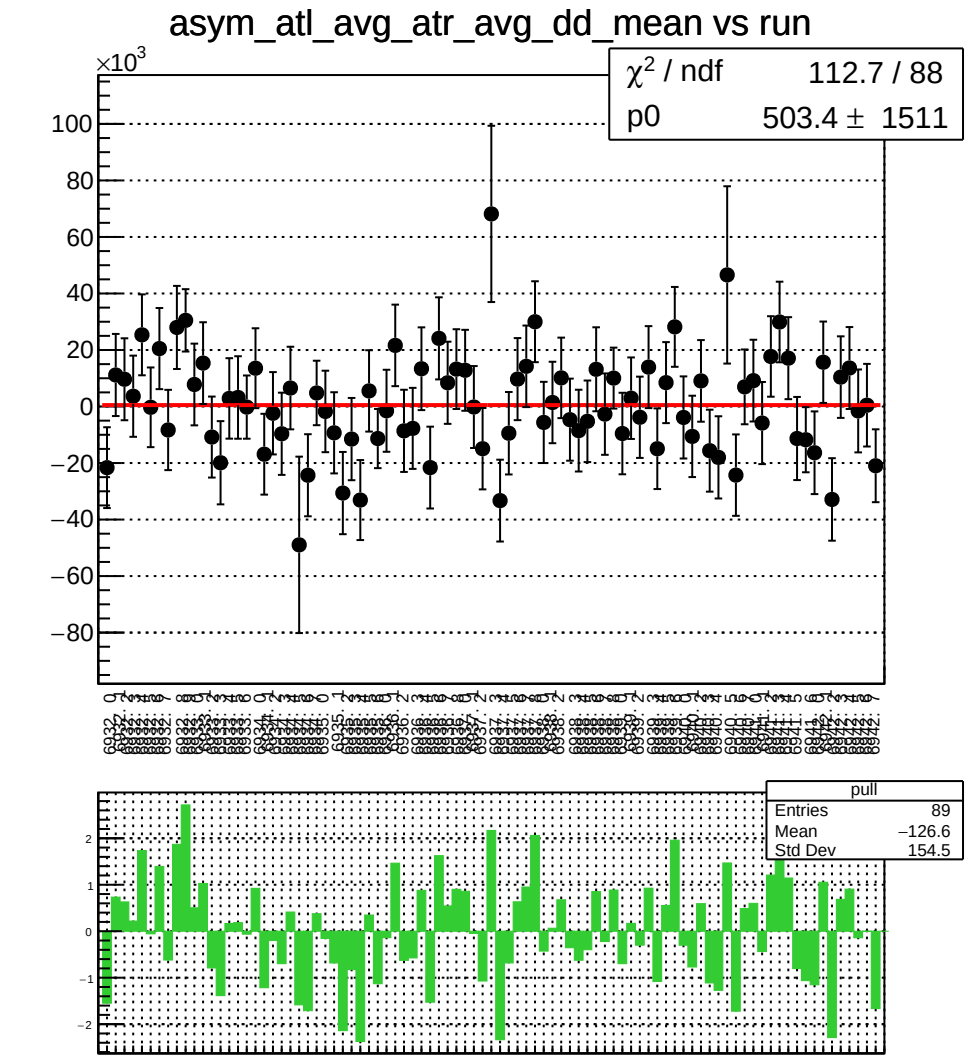

pull1D
Entries 89
Mean 0.006931
Std Dev 1.125
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

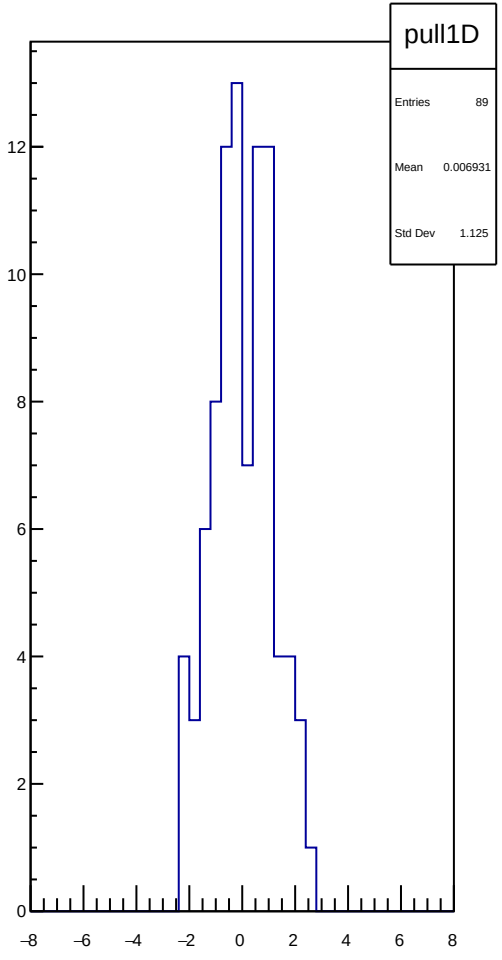

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.565e+04 / 88
p0 1382 ± 1.068
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

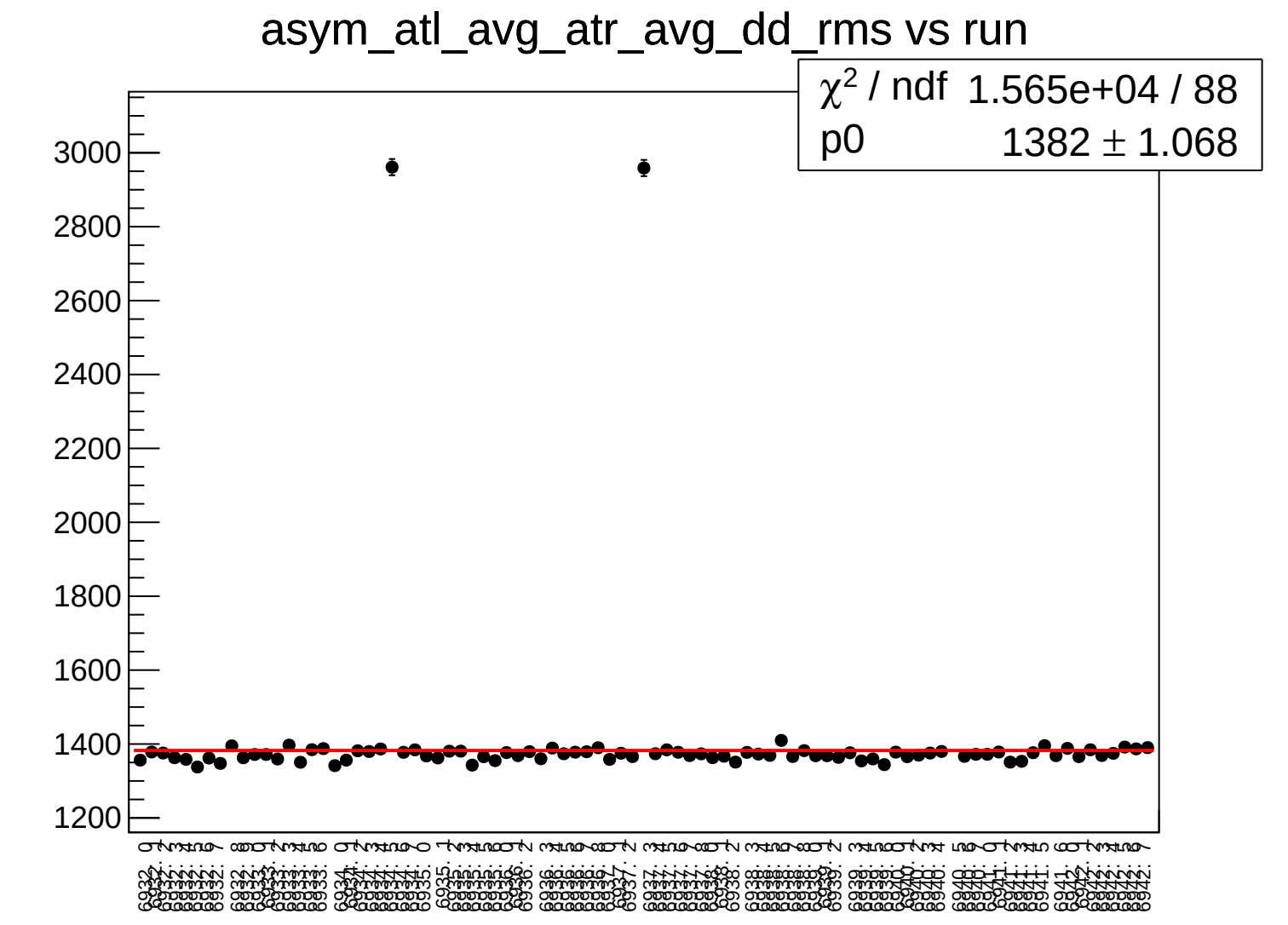

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

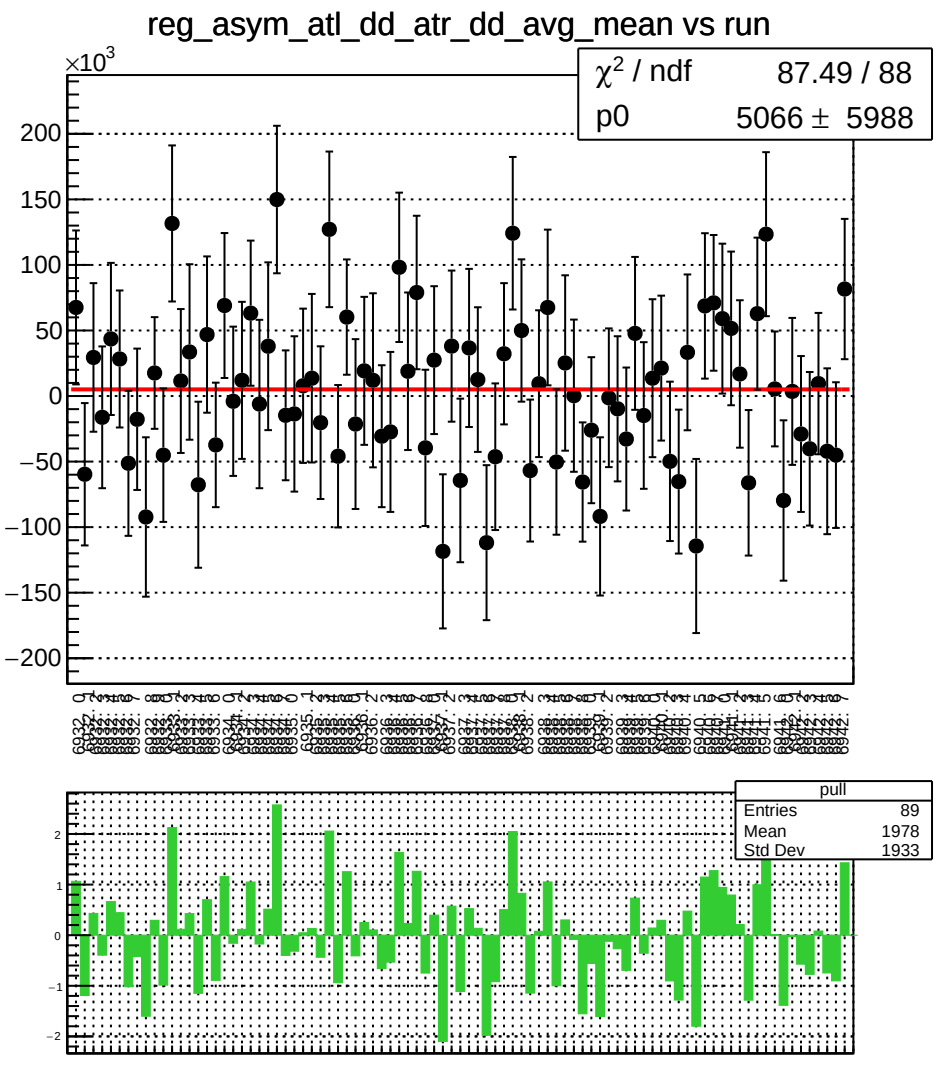

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

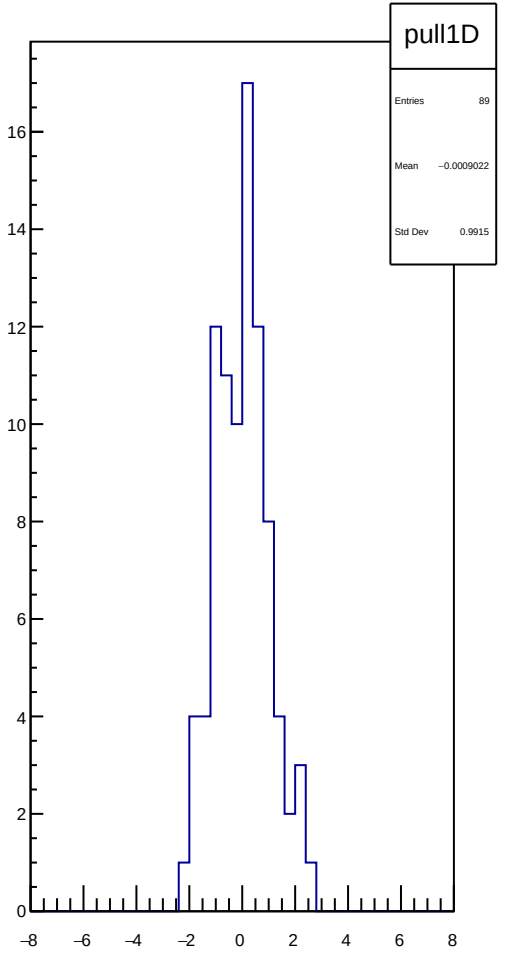

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

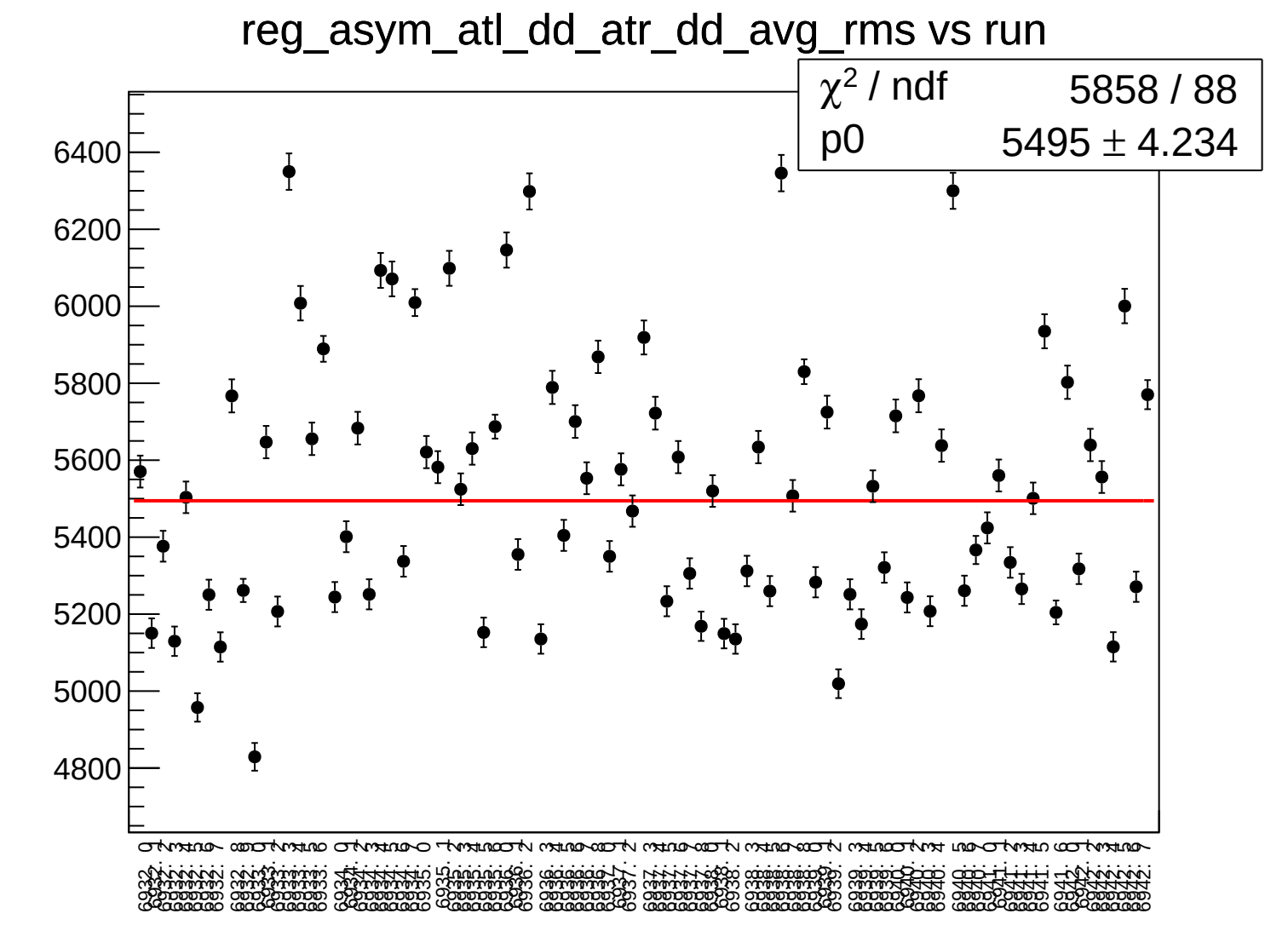

asym_atl_avg_atr_avg_dd_mean vs run
×10^3
χ² / ndf 112.7 / 88
p0 503.4 ± 1511
pull
Entries 89
Mean −126.6
Std Dev 154.5

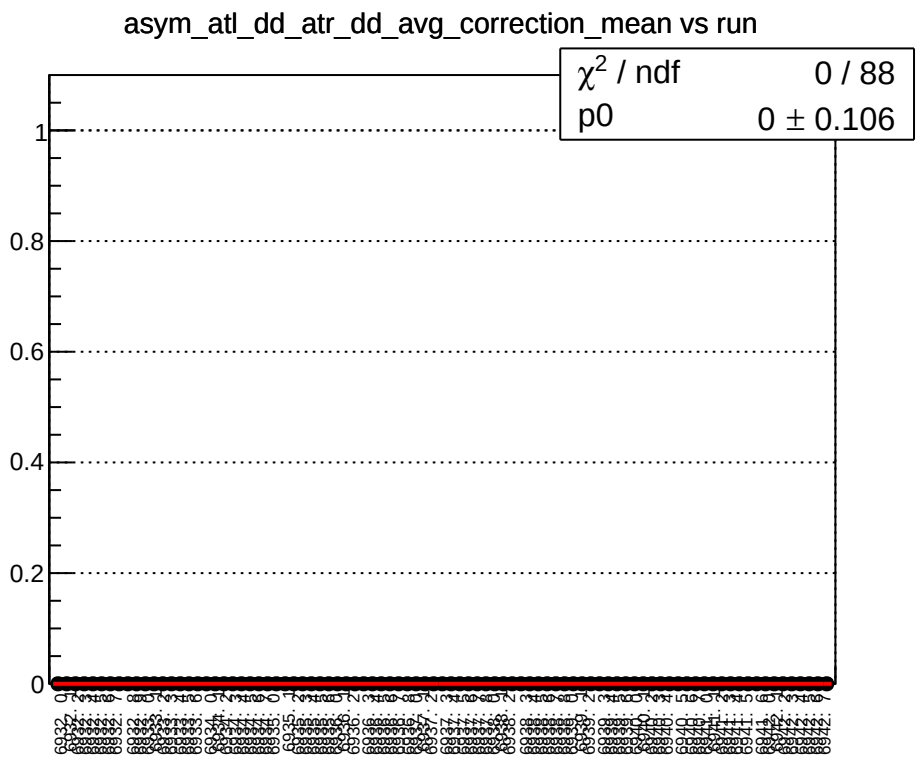

pull1D
Entries 89
Mean 0.006931
Std Dev 1.125

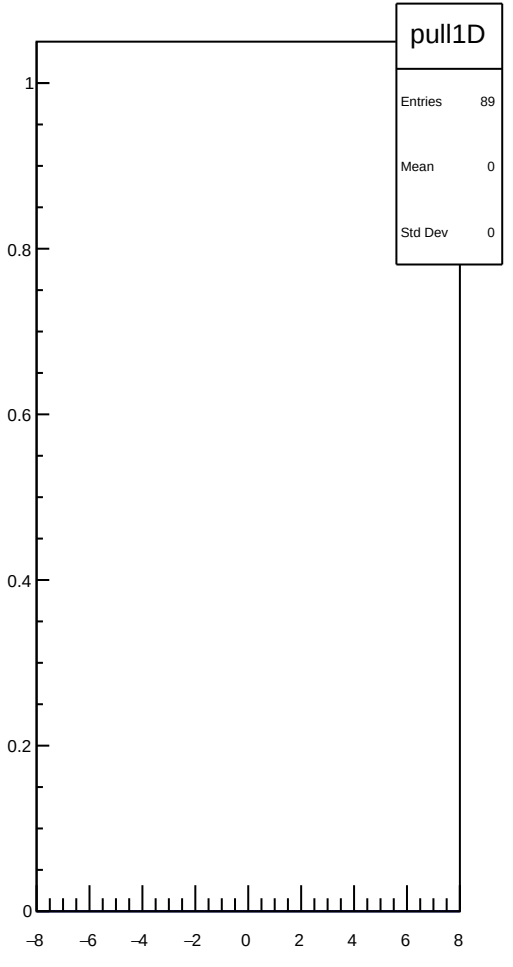

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.565e+04 / 88
p0 1382 ± 1.068
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

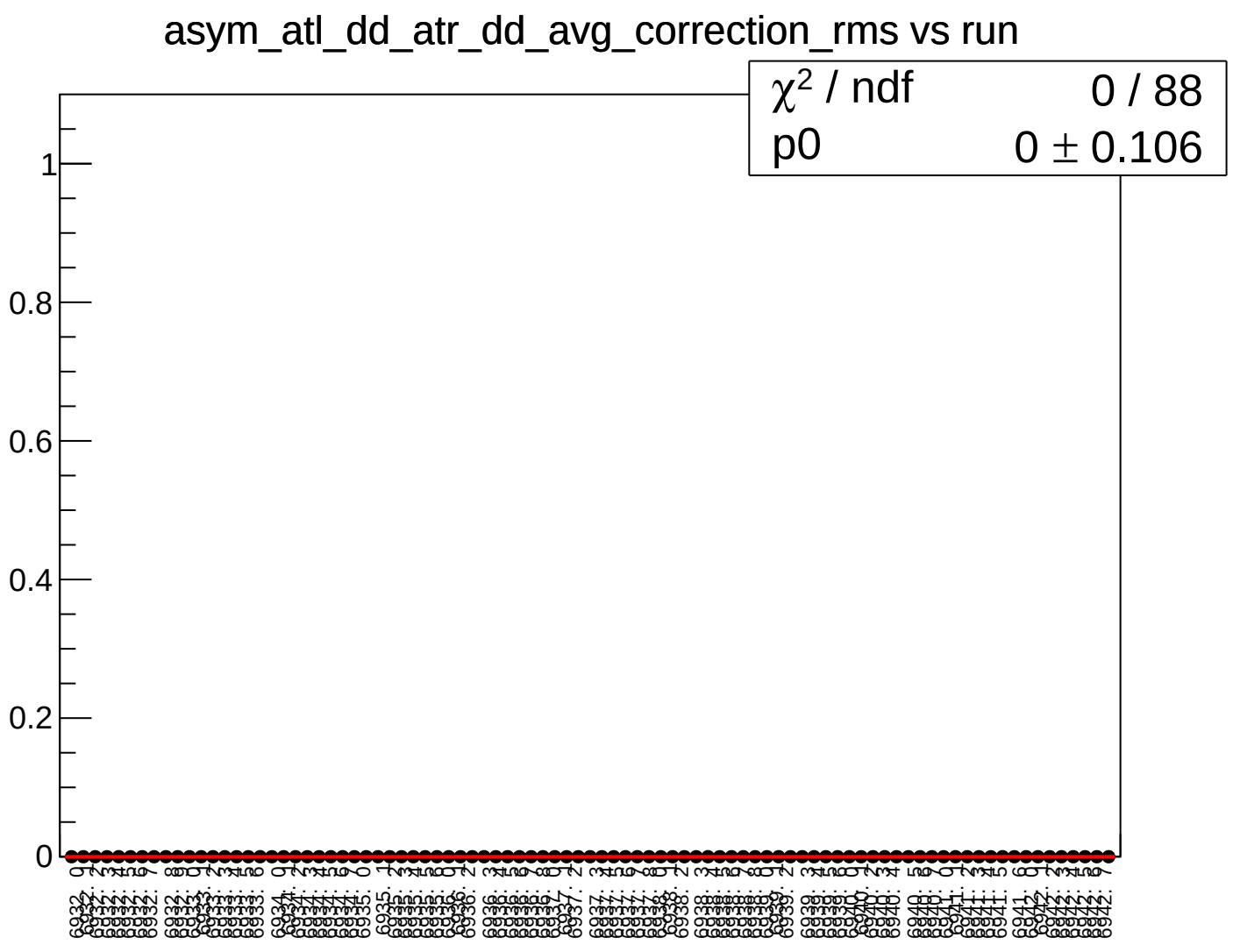

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 87.49 / 88
p0 5066 ± 5988
pull
Entries 89
Mean 1978
Std Dev 1933

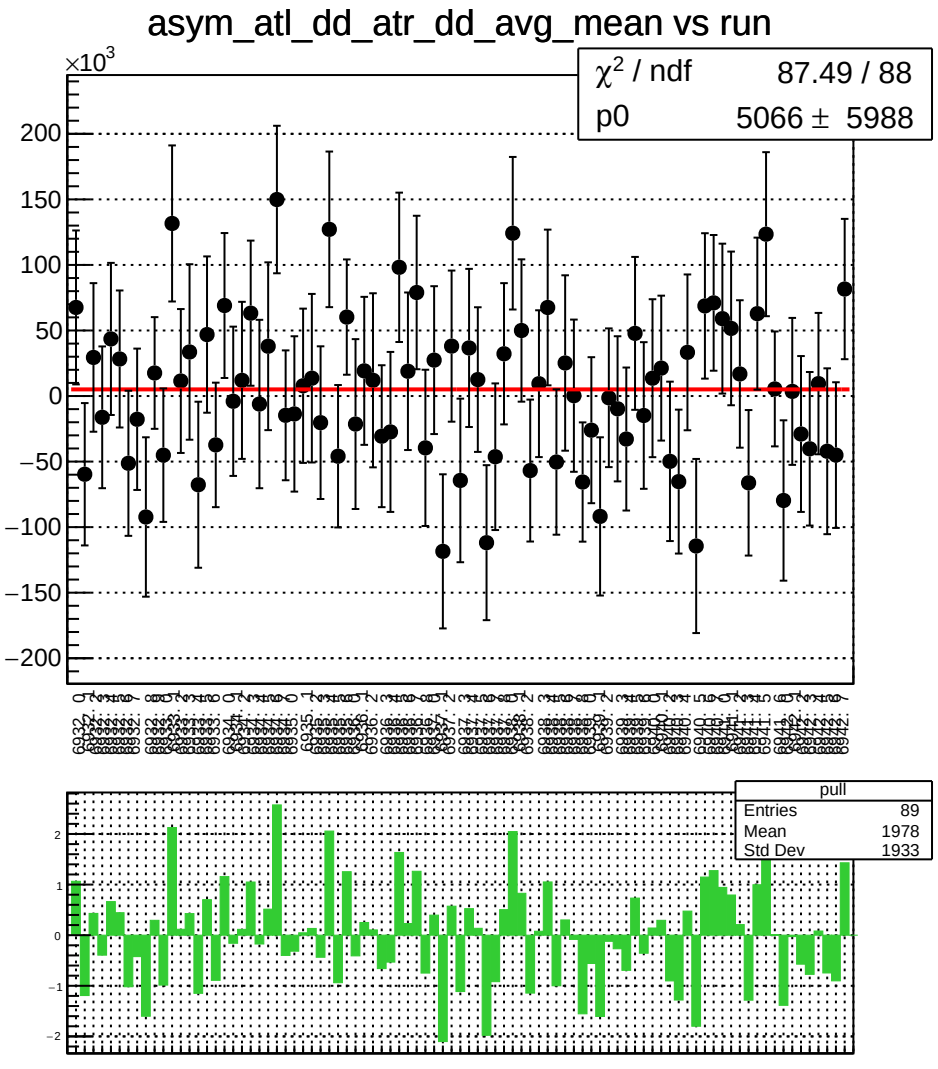

pull1D
Entries 89
Mean −0.0009022
Std Dev 0.9915

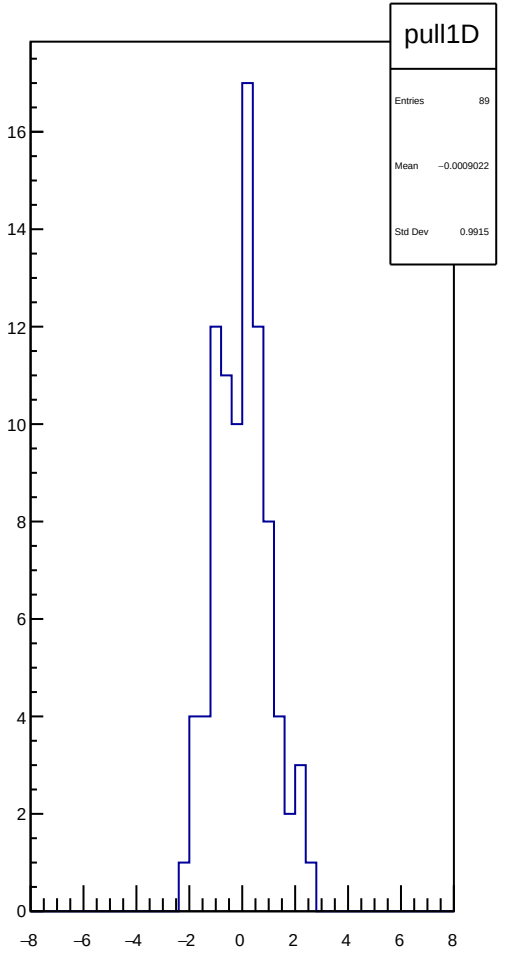

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 5858 / 88
p0 5495 ± 4.234
6400
6200
6000
5800
5600
5400
5200
5000
4800

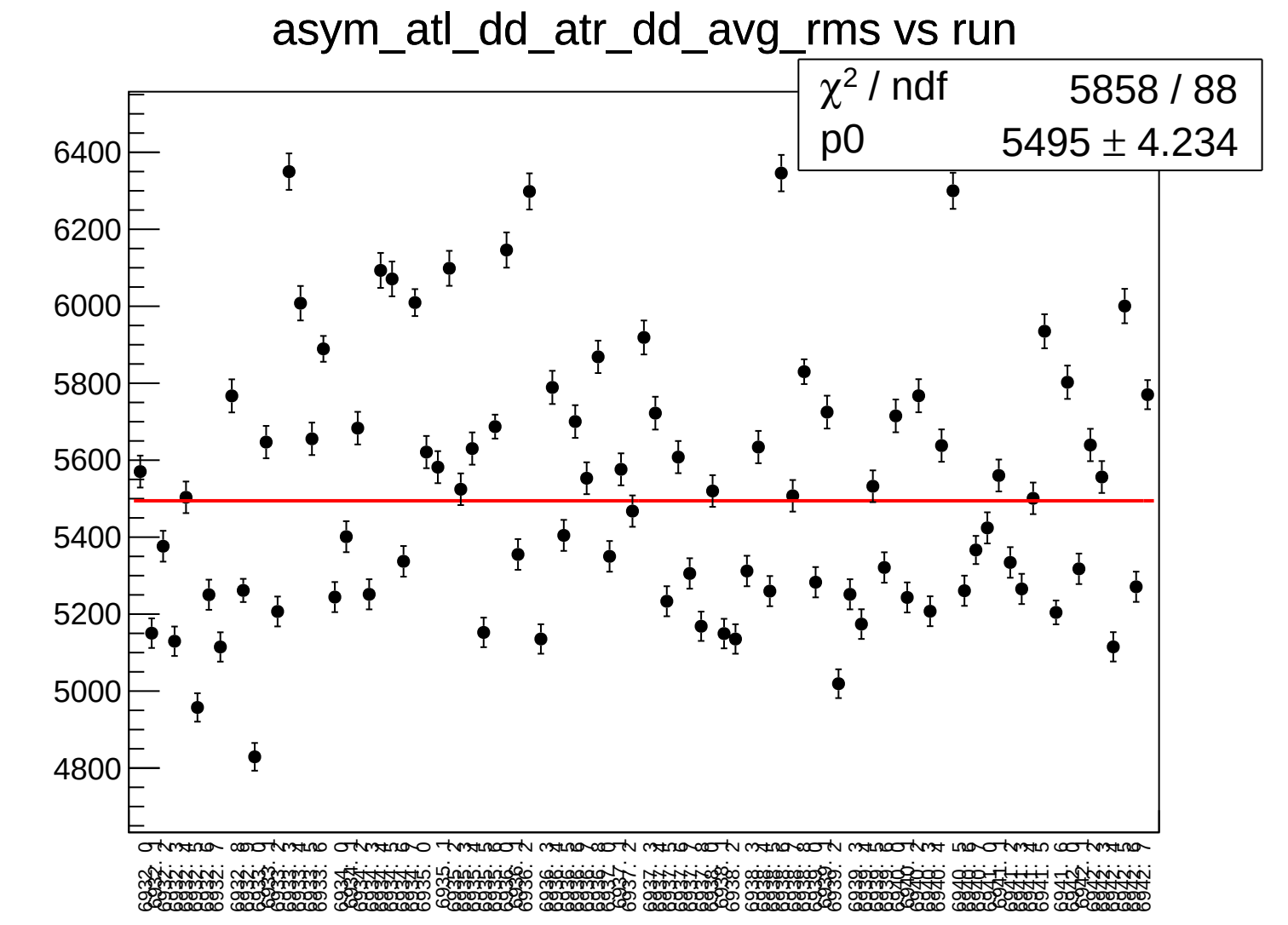

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

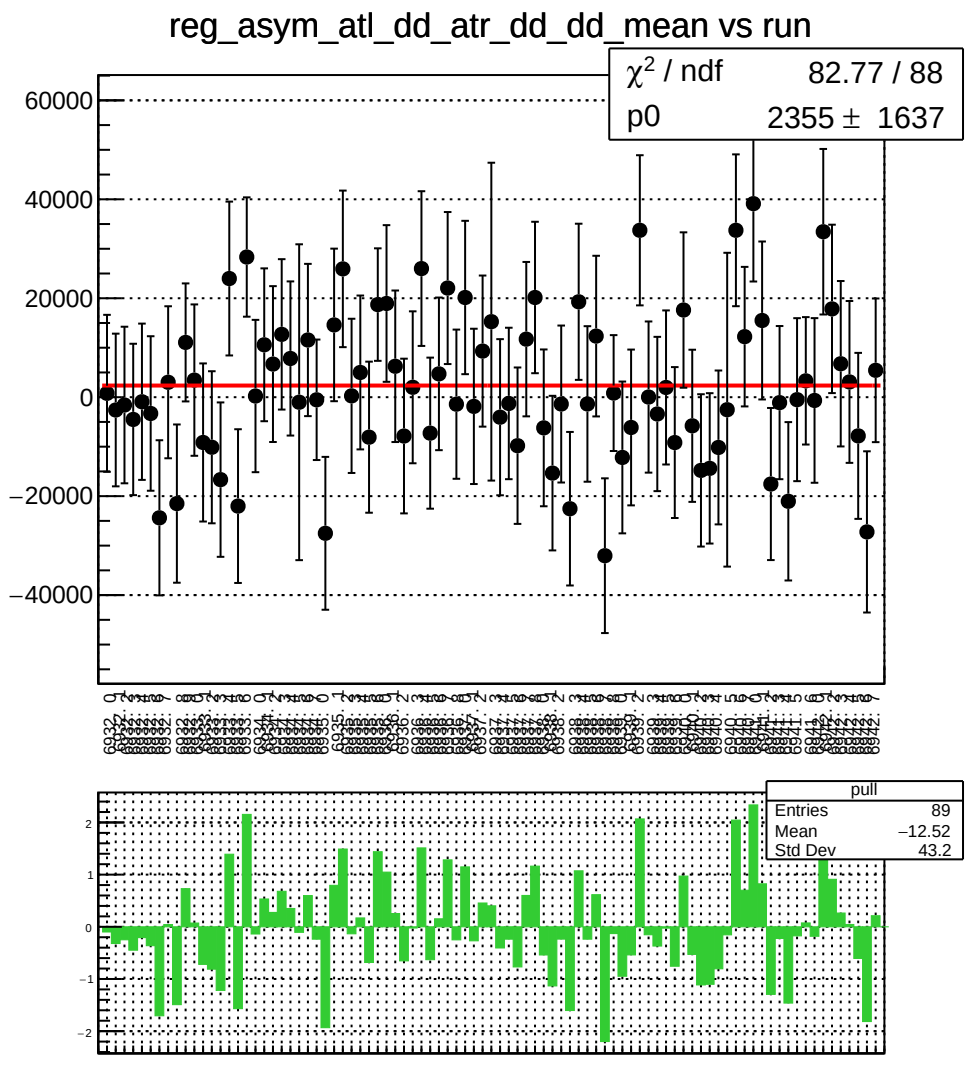

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

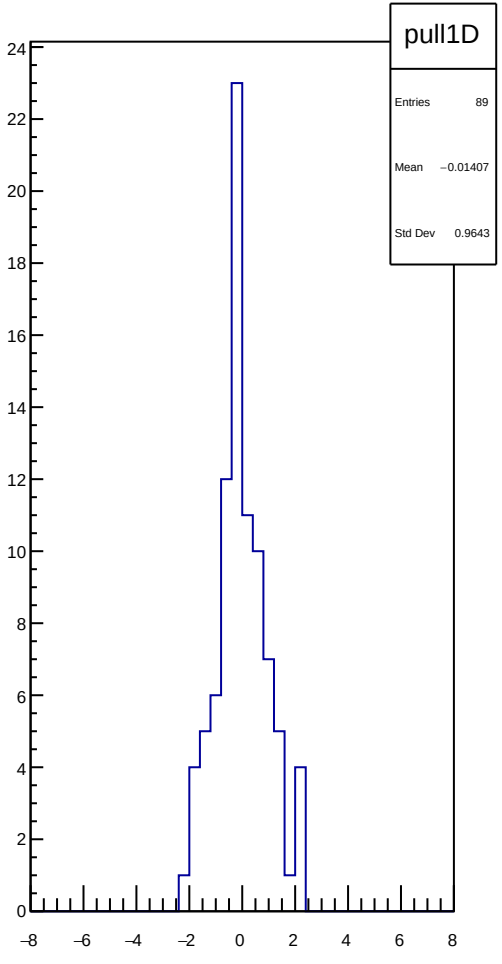

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

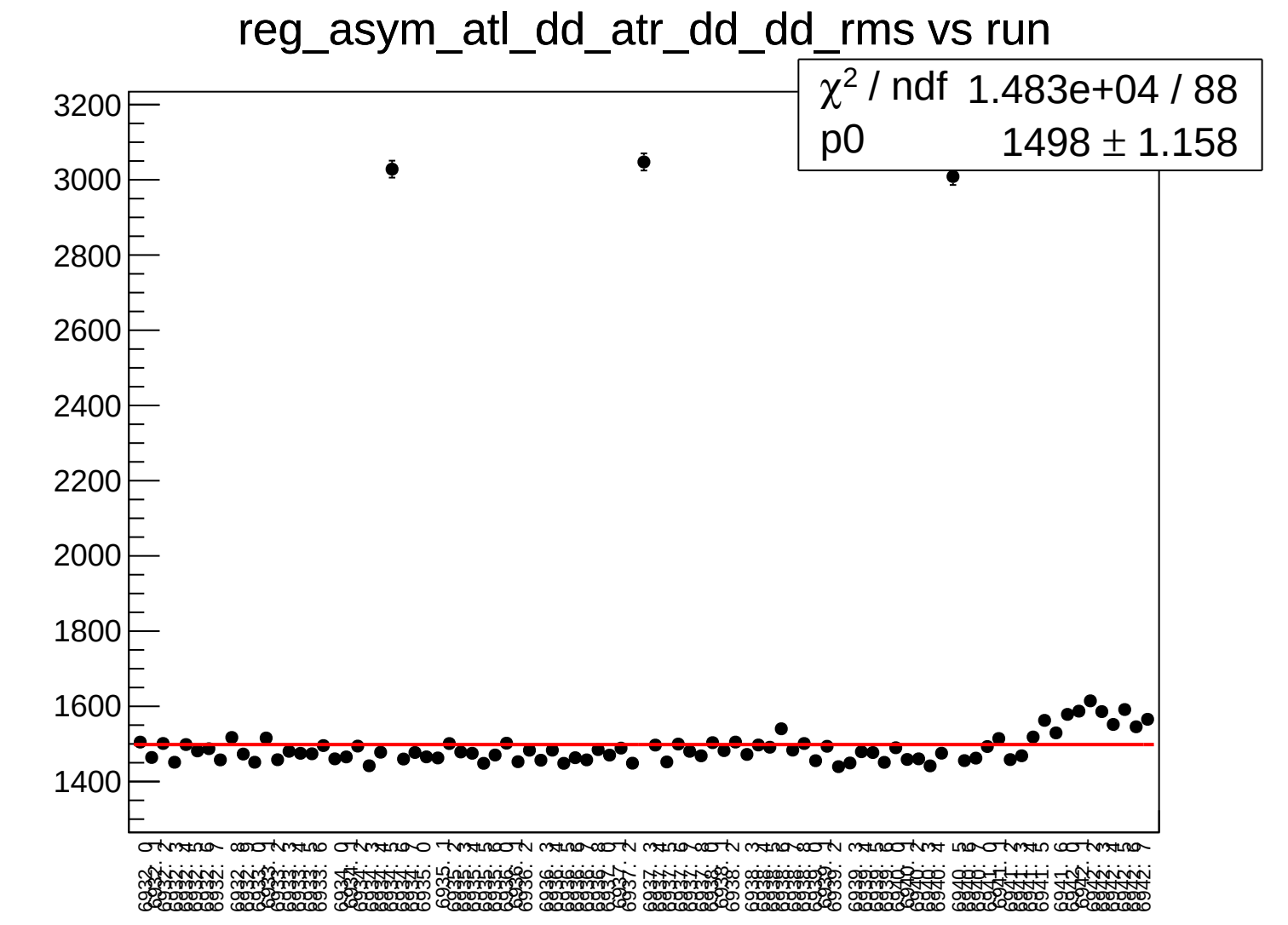

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ^2 / ndf 87.49 / 88
p0 5066 ± 5988
pull
Entries 89
Mean 1978
Std Dev 1933

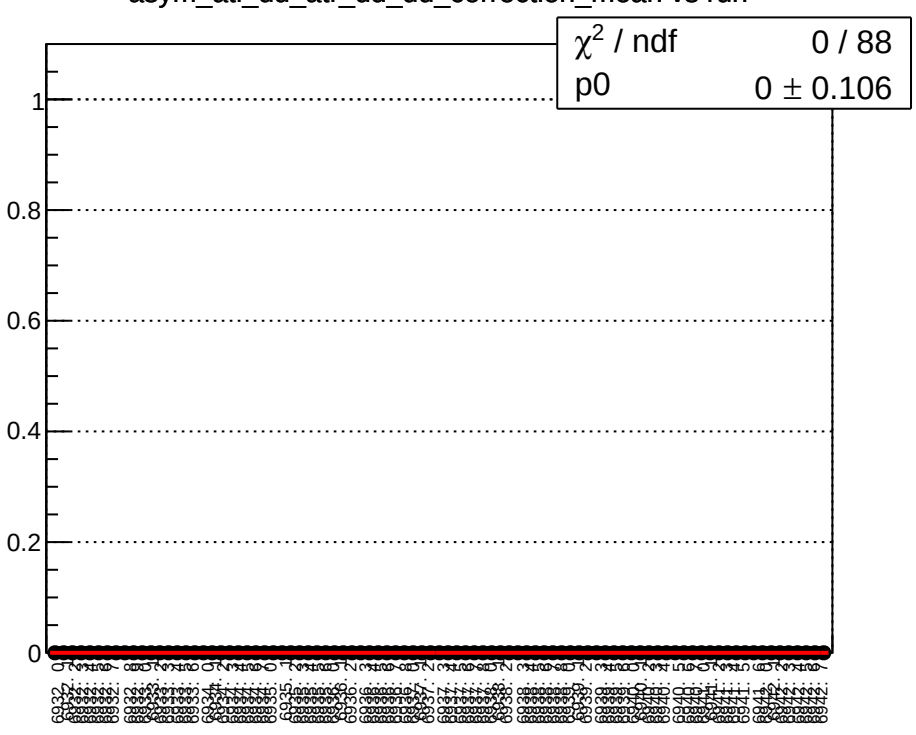

pull1D
Entries 89
Mean −0.0009022
Std Dev 0.9915

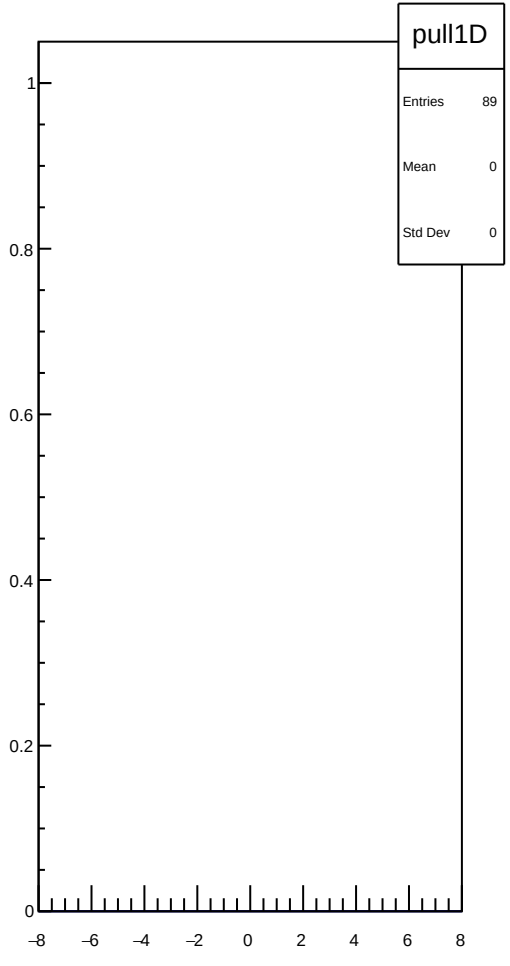

asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 5858 / 88
p0 5495 ± 4.234
6400
6200
6000
5800
5600
5400
5200
5000
4800

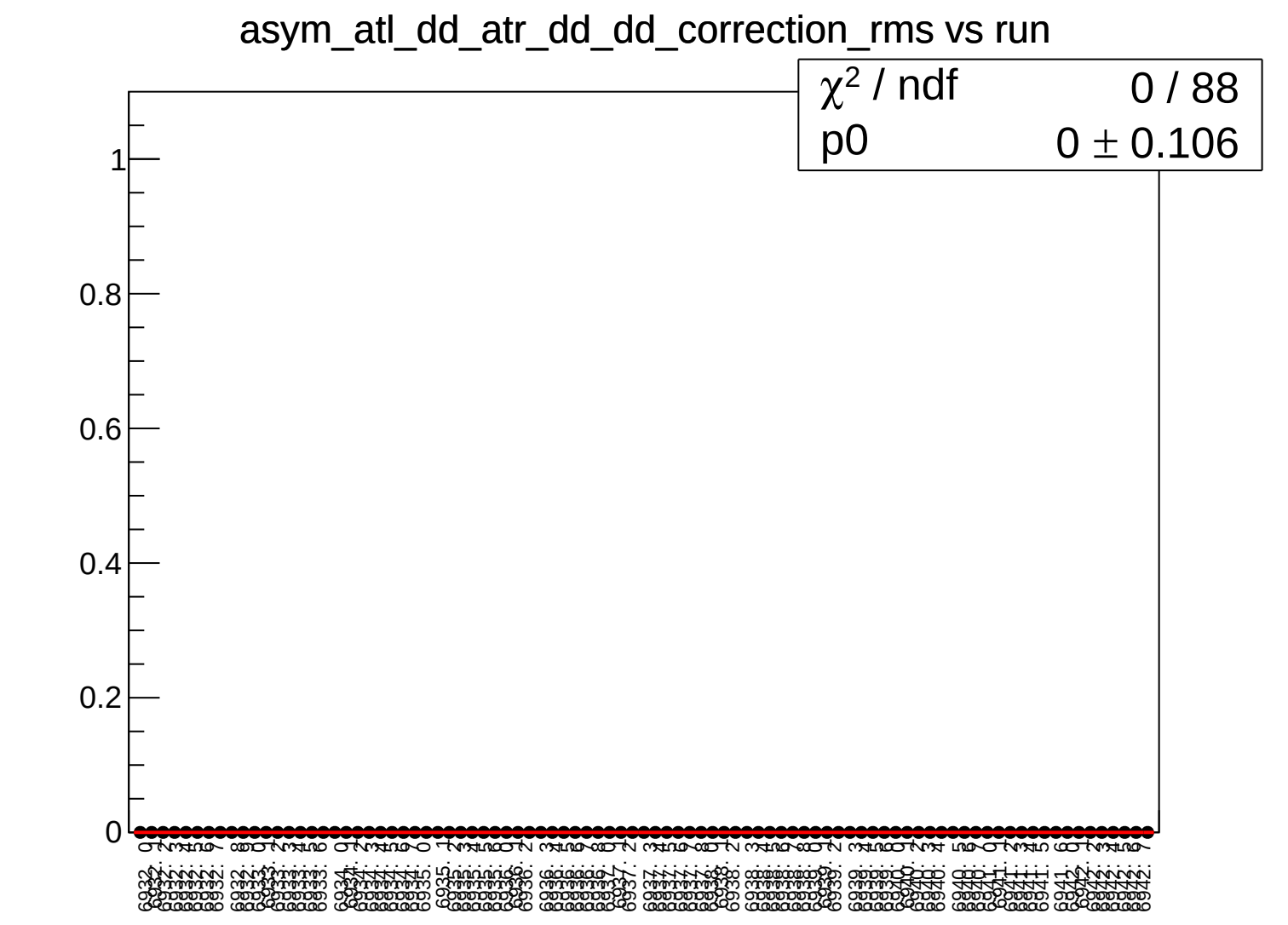

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 82.77 / 88
p0 2355 ± 1637
60000
40000
20000
0
−20000
−40000
pull
Entries 89
Mean −12.52
Std Dev 43.2
2
1
0
−1
−2

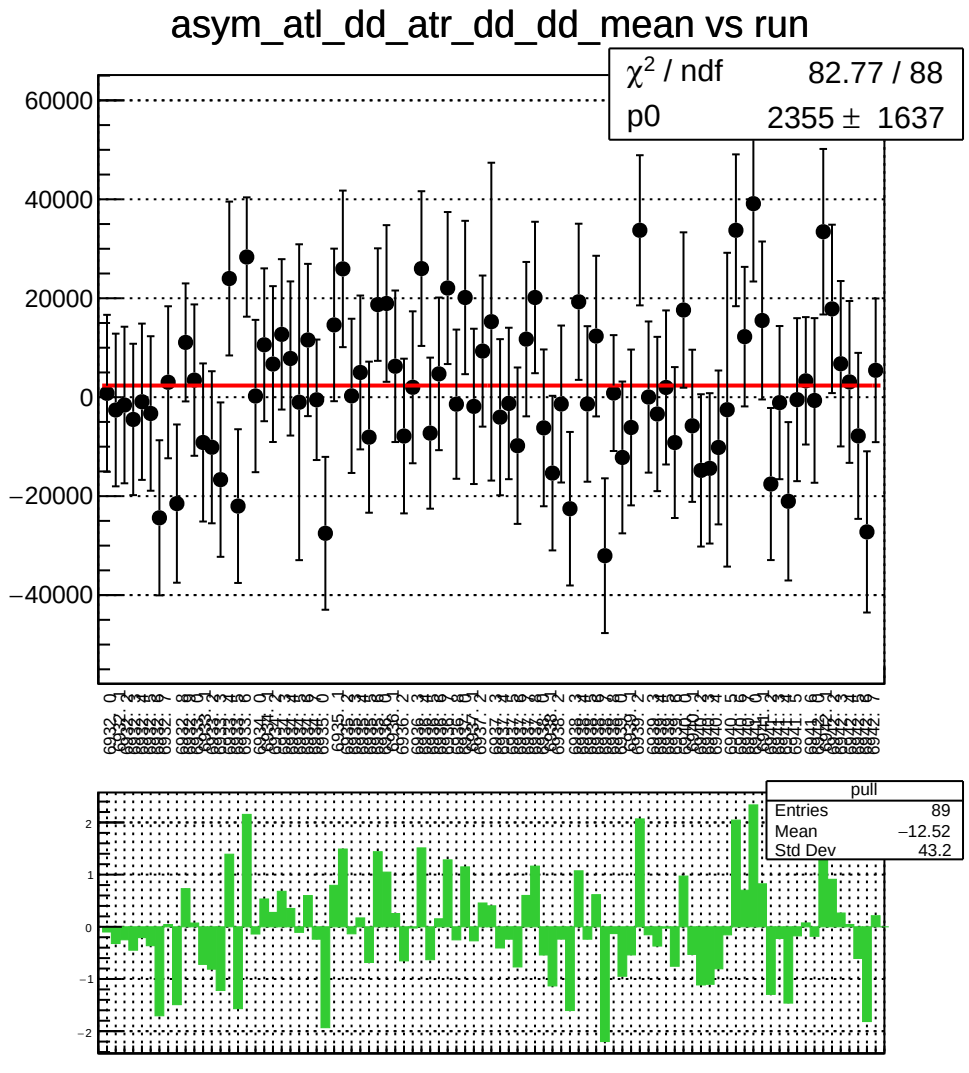

pull1D
Entries 89
Mean −0.01407
Std Dev 0.9643
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

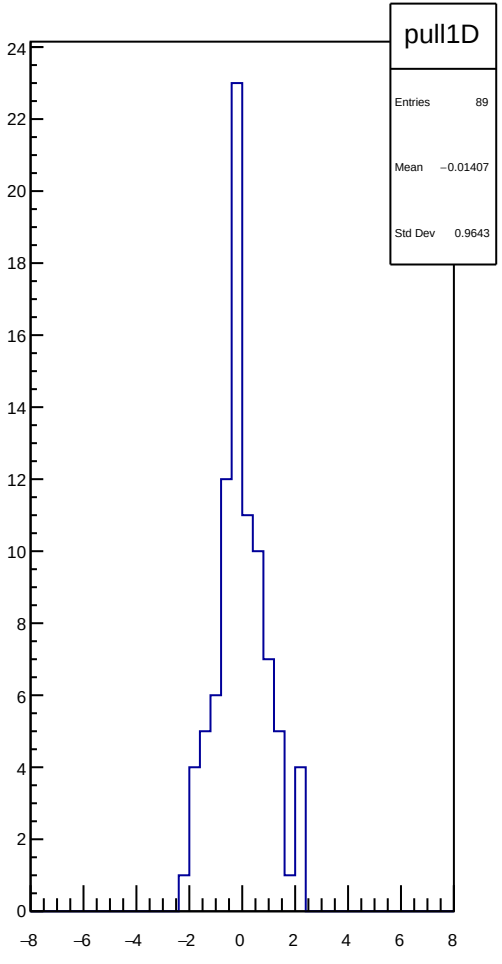

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.483e+04 / 88
p0 1498 ± 1.158
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

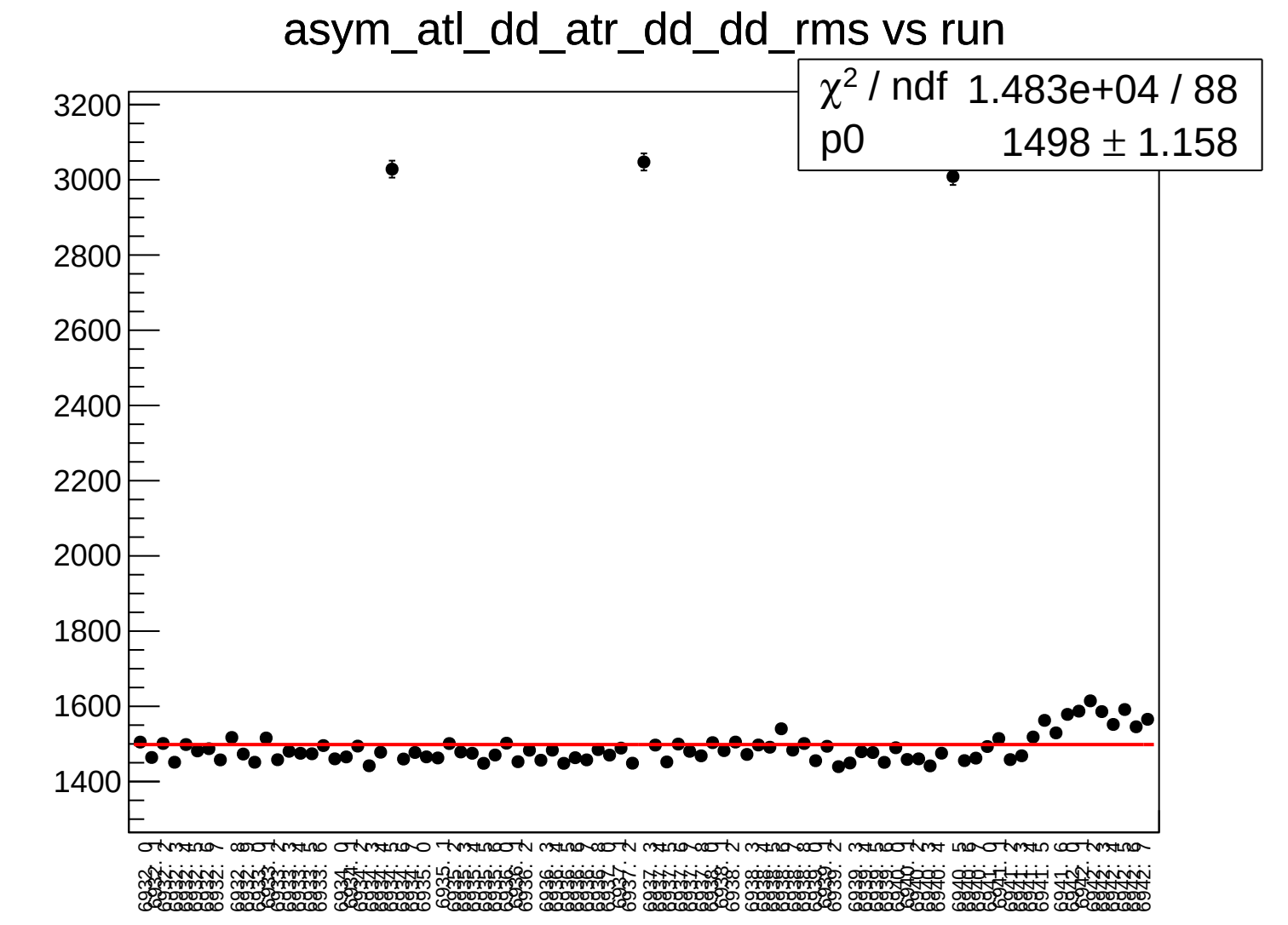

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ^2 / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

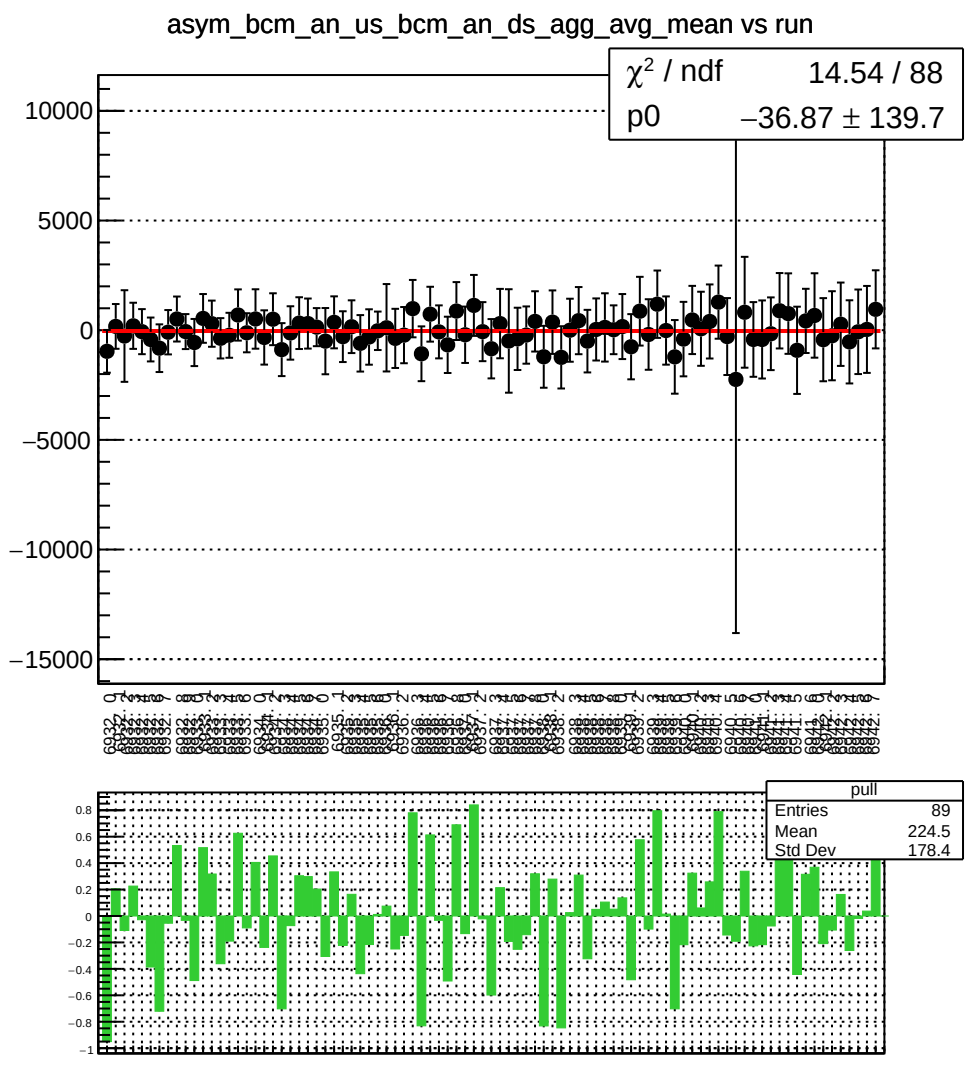

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

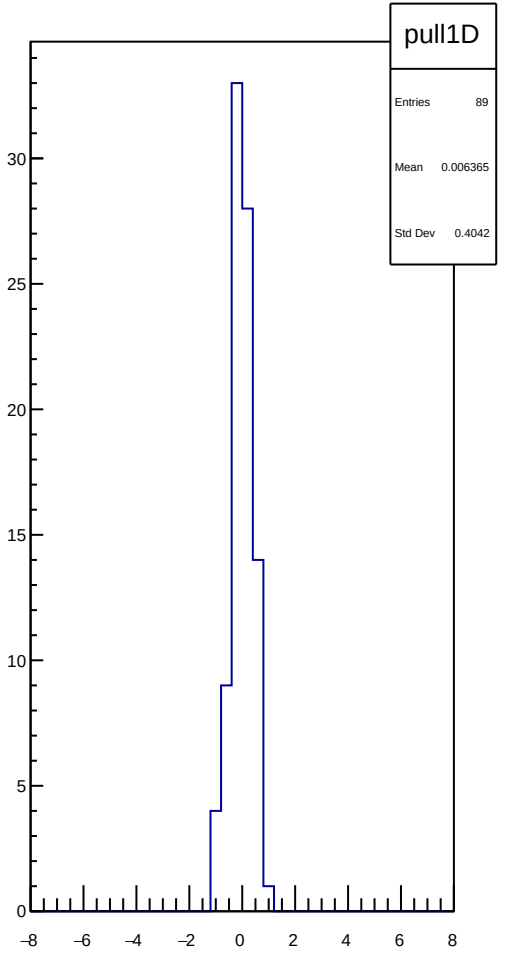

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 88
p0 0 ± 0.106
1
0.8
0.6
0.4
0.2
0

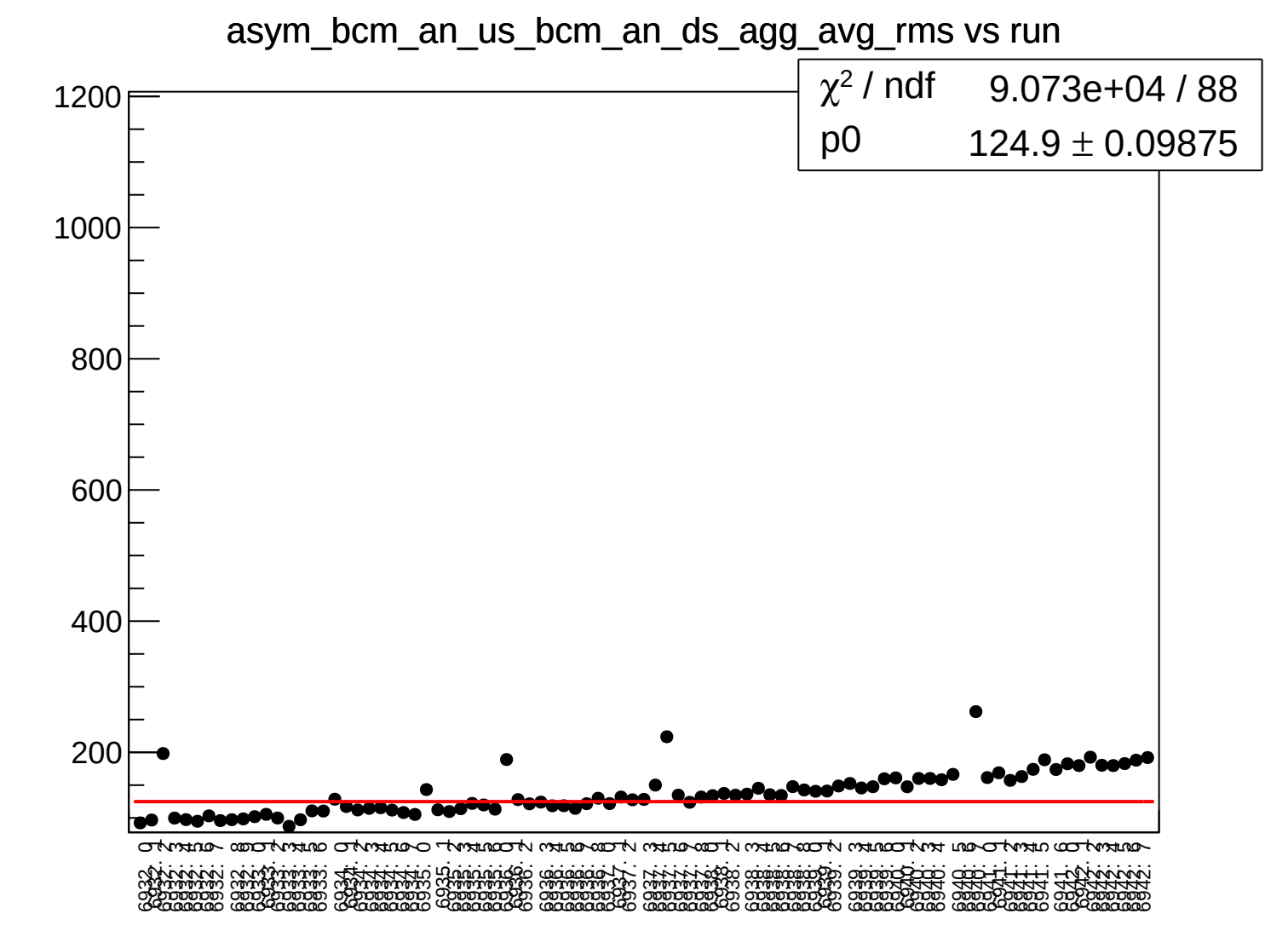

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 82.77 / 88
p0 2355 ± 1637
60000
40000
20000
0
−20000
−40000
pull
Entries 89
Mean −12.52
Std Dev 43.2
2
1
0
−1
−2

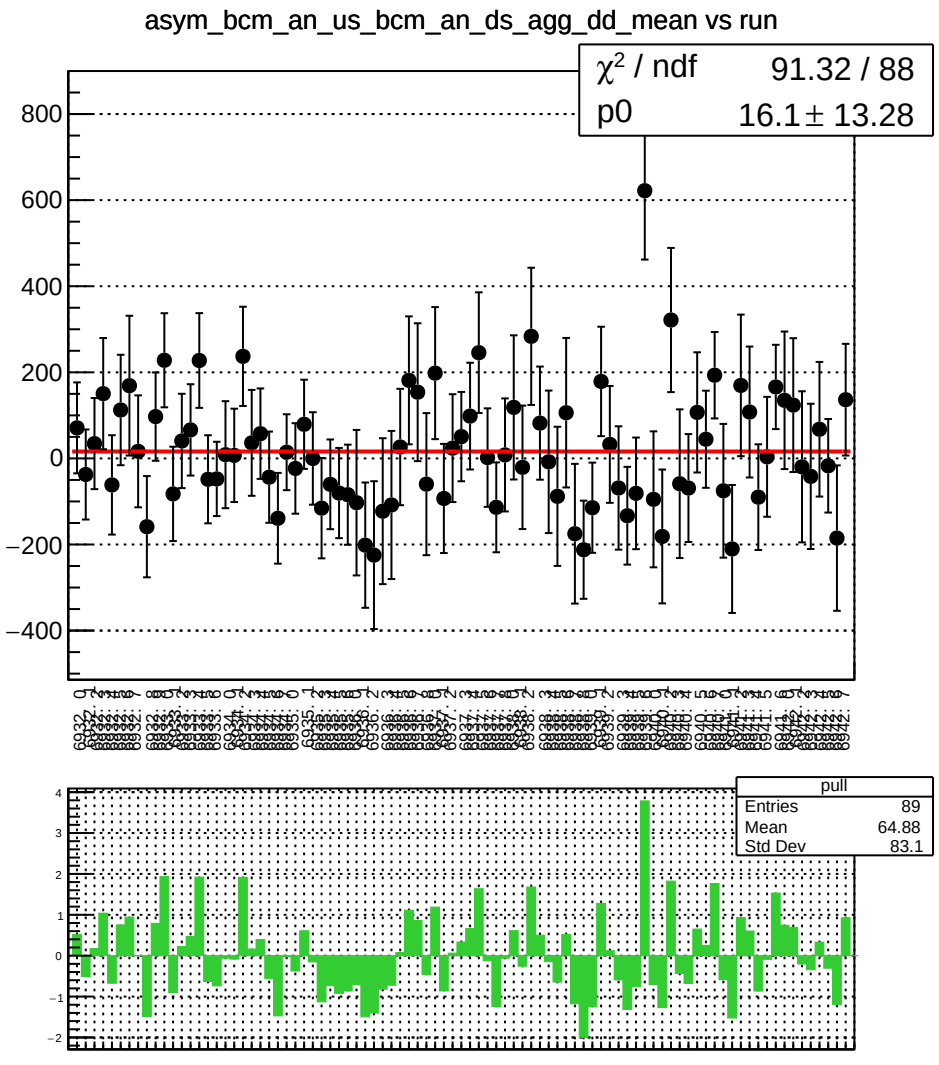

pull1D
Entries 89
Mean −0.01407
Std Dev 0.9643
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

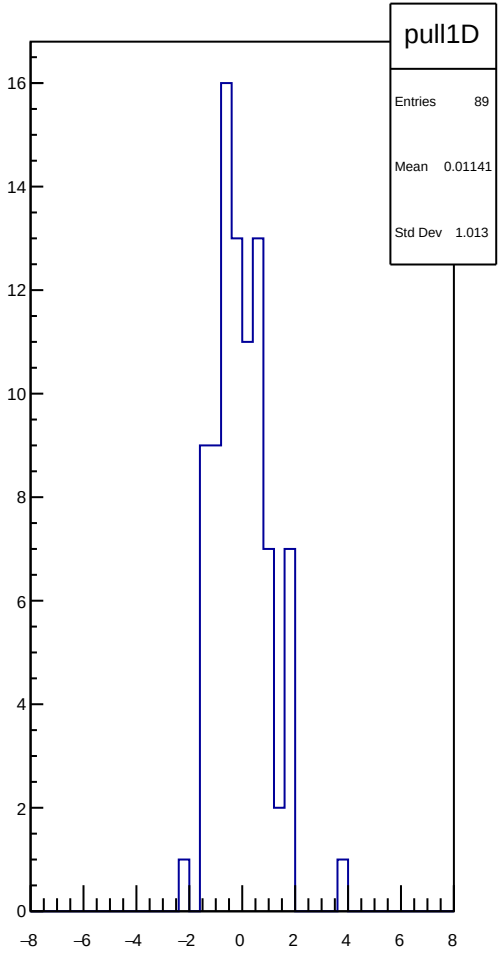

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.483e+04 / 88
p0 1498 ± 1.158
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

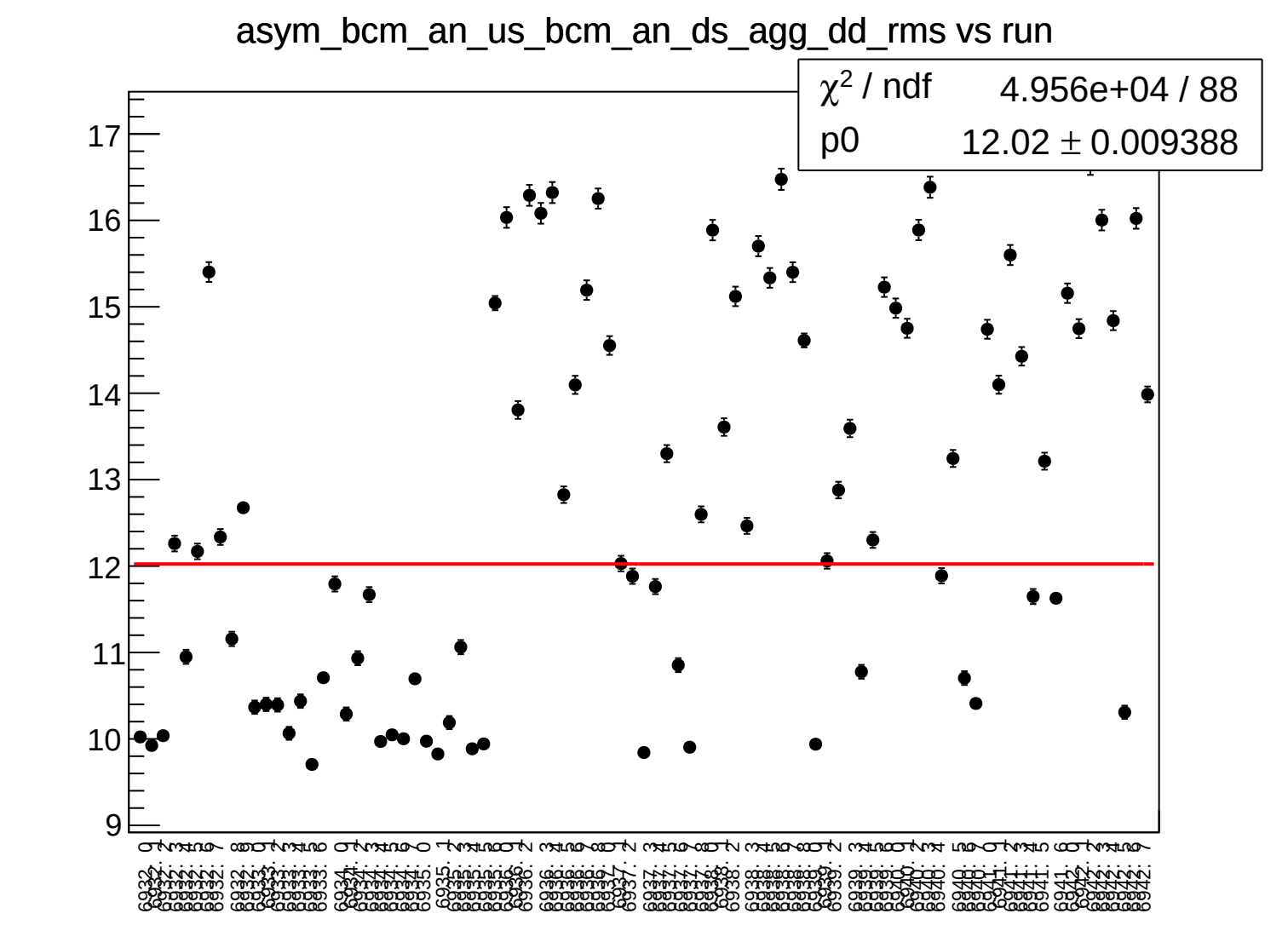

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.54 / 88
p0 −36.87 ± 139.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 224.5
Std Dev 178.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

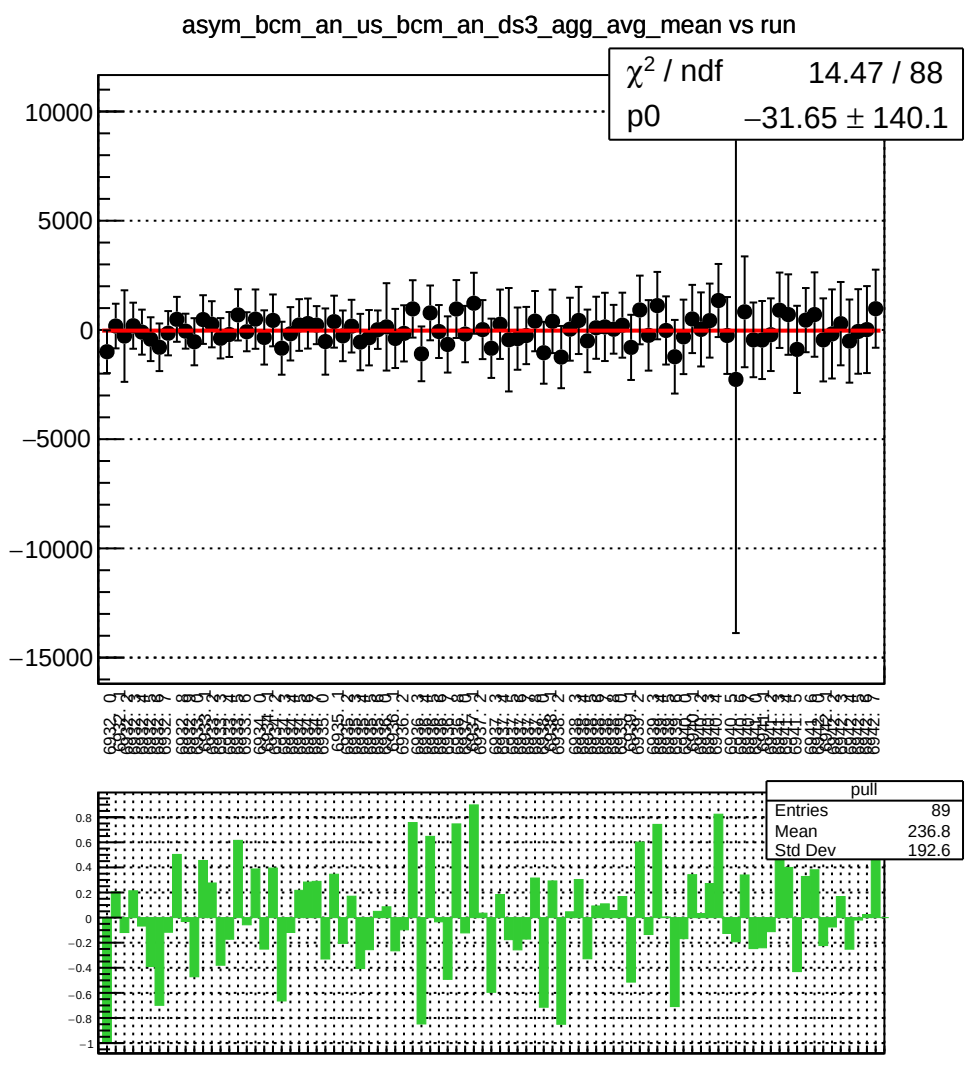

pull1D
Entries 89
Mean 0.006365
Std Dev 0.4042
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

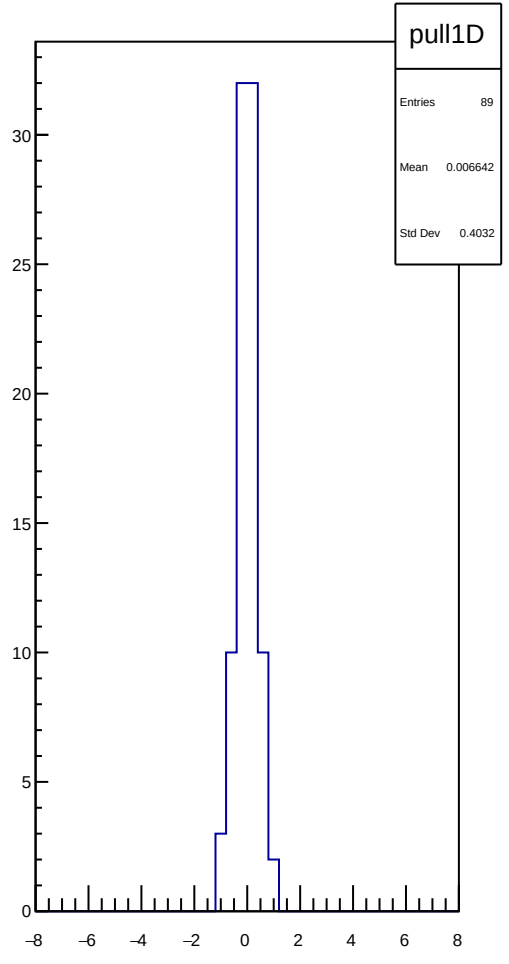

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 9.073e+04 / 88
p0 124.9 ± 0.09875
1200
1000
800
600
400
200

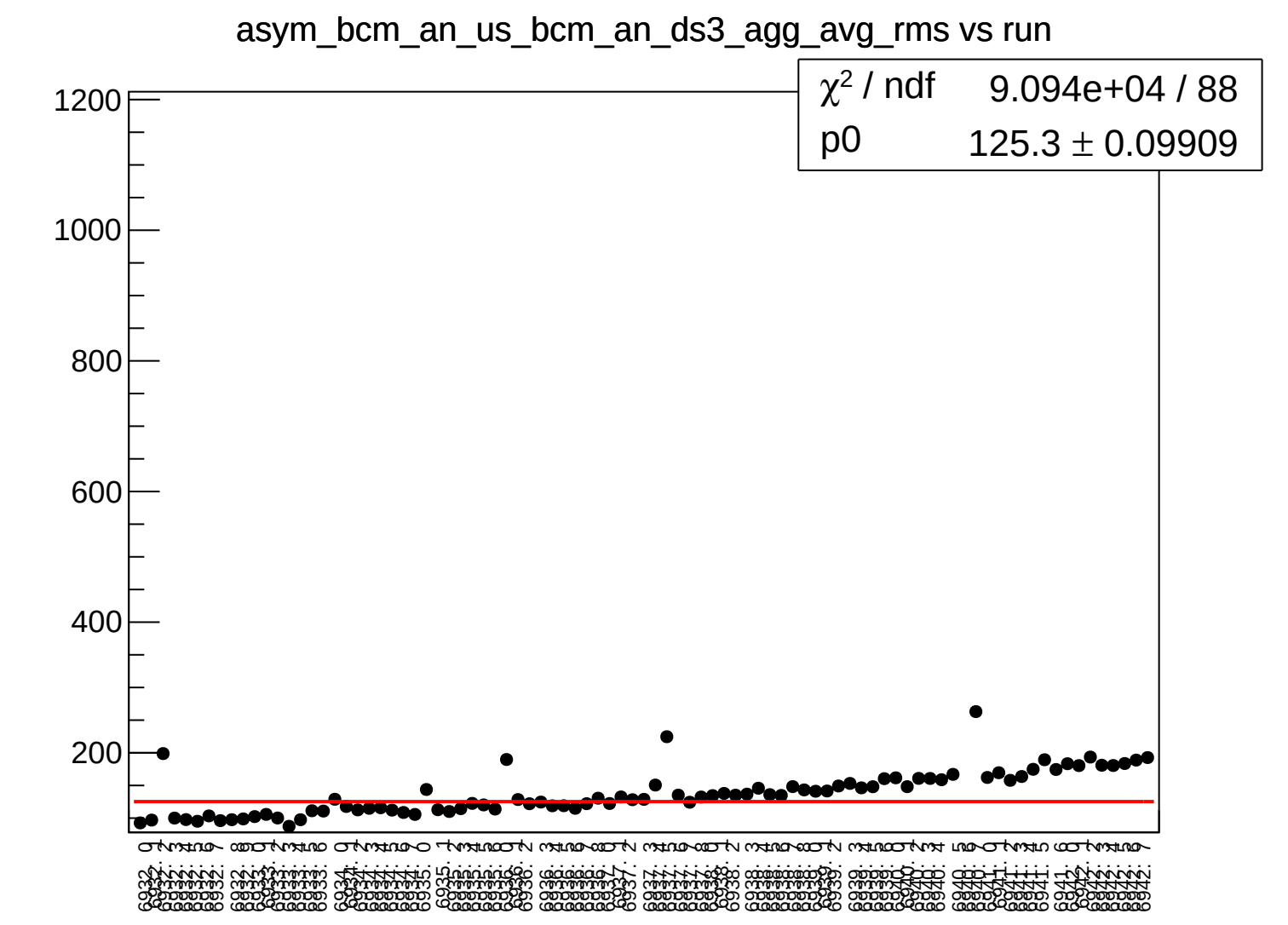

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.32 / 88
p0 16.1 ± 13.28
pull
Entries 89
Mean 64.88
Std Dev 83.1

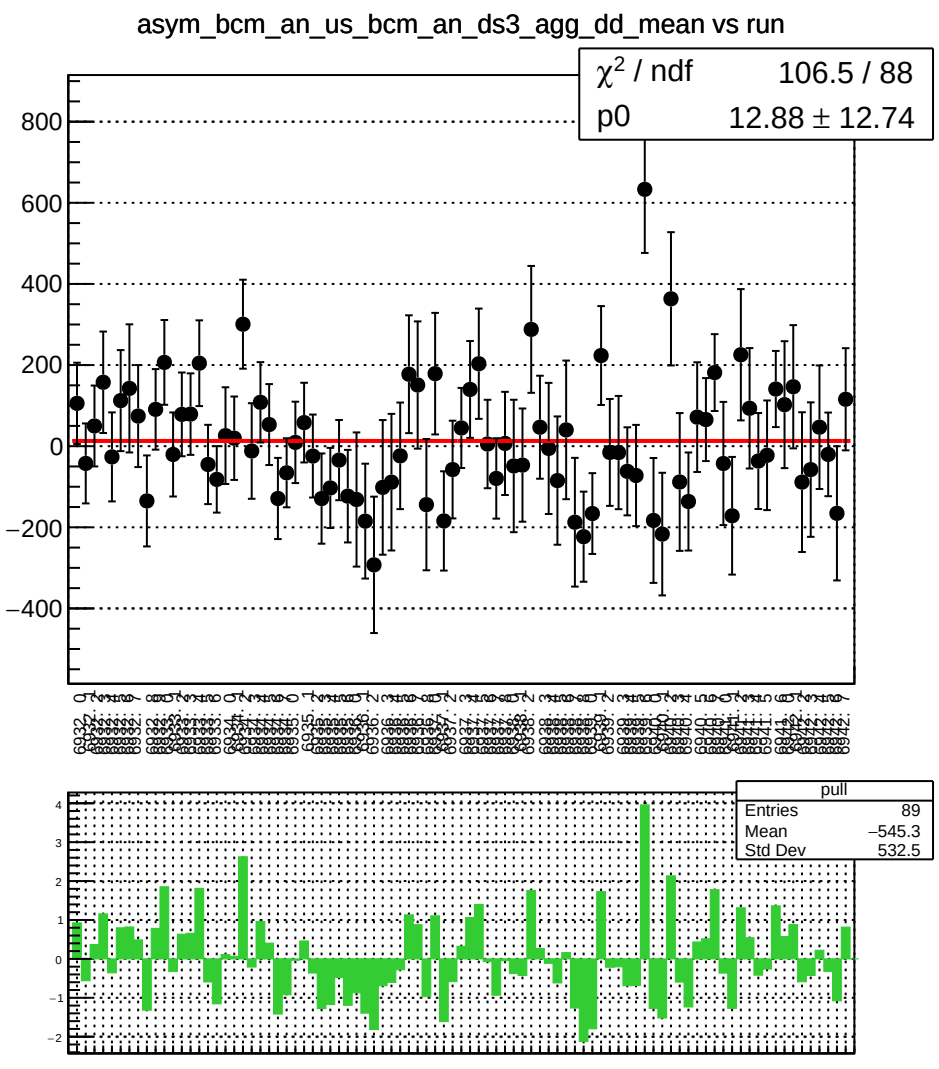

pull1D
Entries 89
Mean 0.01141
Std Dev 1.013

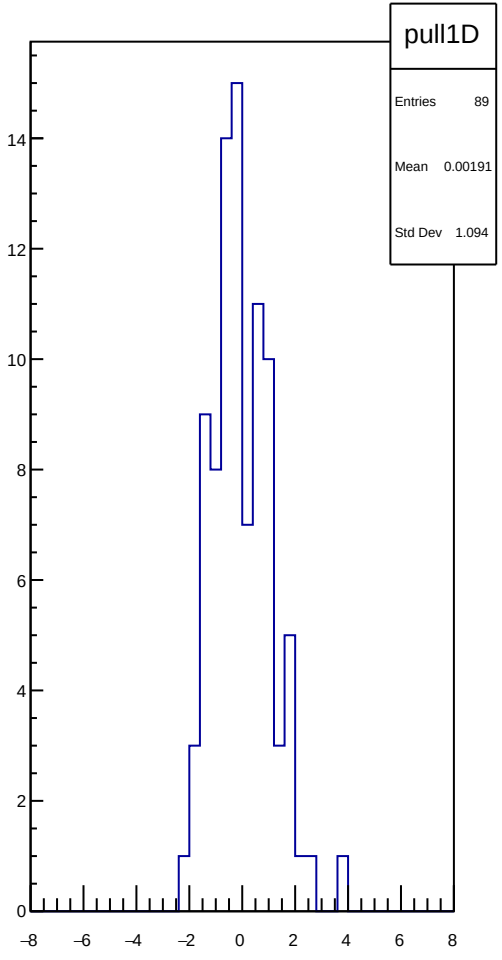

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4.956e+04 / 88
p0 12.02 ± 0.009388
17
16
15
14
13
12
11
10
9

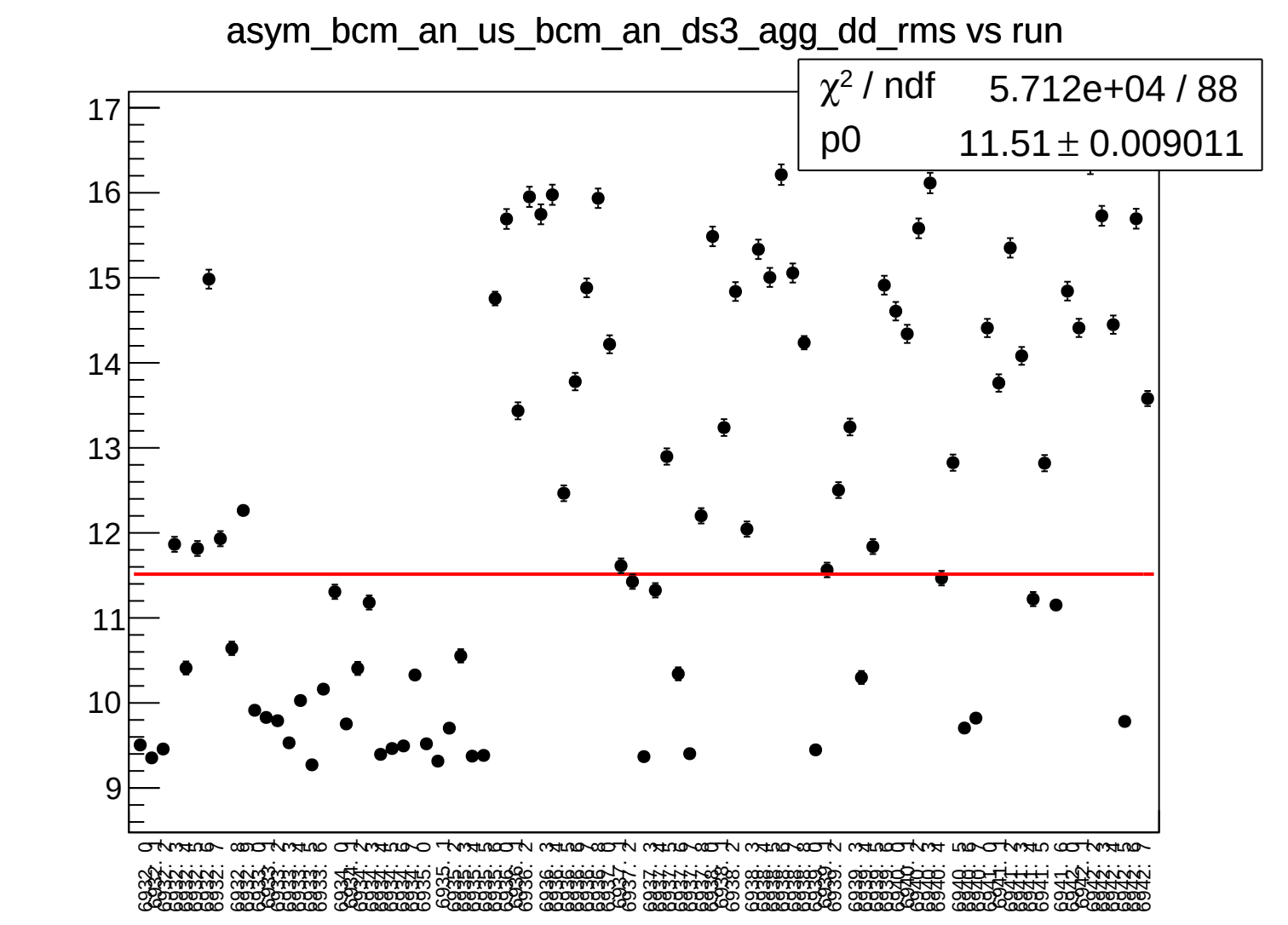

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.47 / 88
p0 −31.65 ± 140.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 236.8
Std Dev 192.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

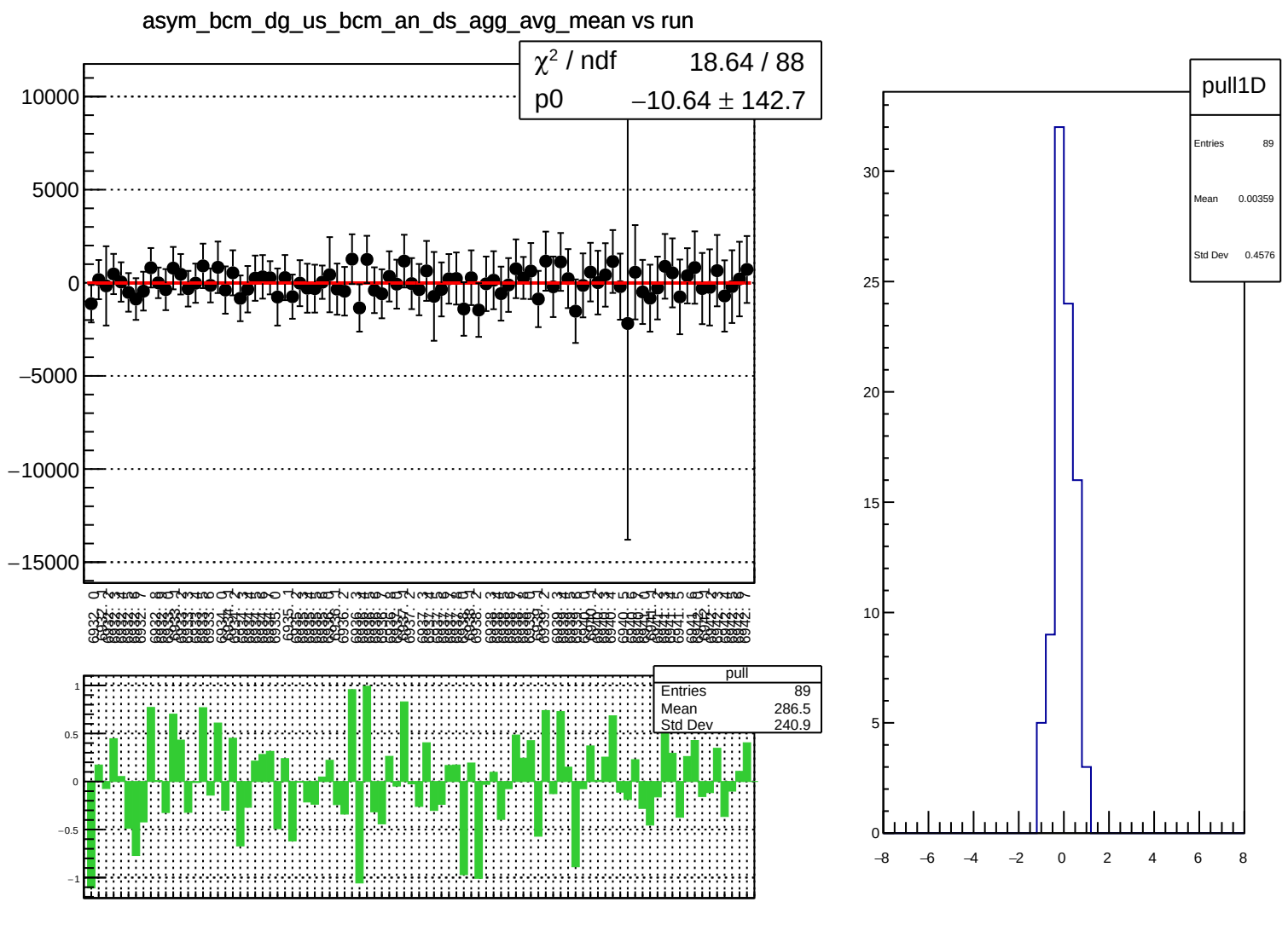

pull1D
Entries 89
Mean 0.006642
Std Dev 0.4032
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

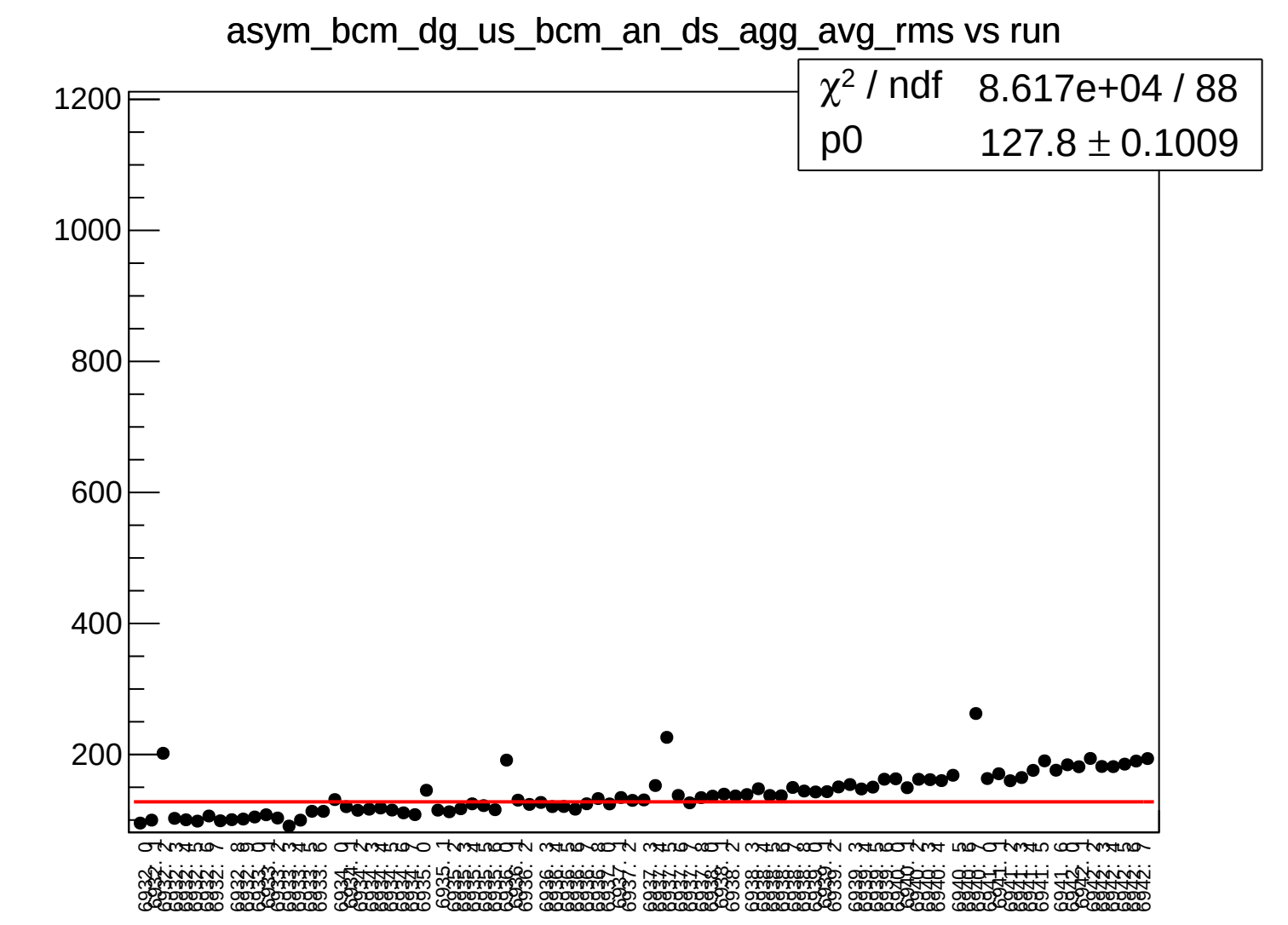

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 9.094e+04 / 88
p0 125.3 ± 0.09909
1200
1000
800
600
400
200

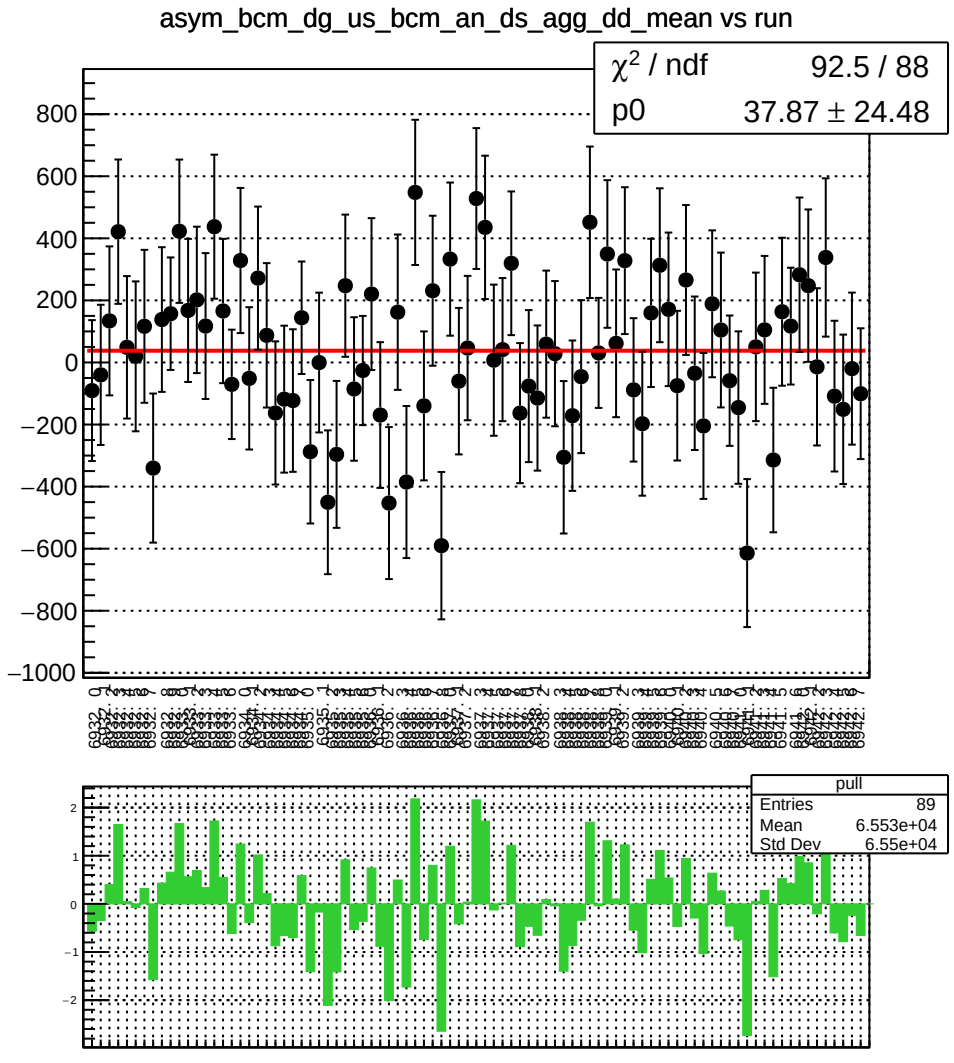

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 106.5 / 88
p0 12.88 ± 12.74
800
600
400
200
0
−200
−400
pull
Entries 89
Mean −545.3
Std Dev 532.5
4
3
2
1
0
−1
−2

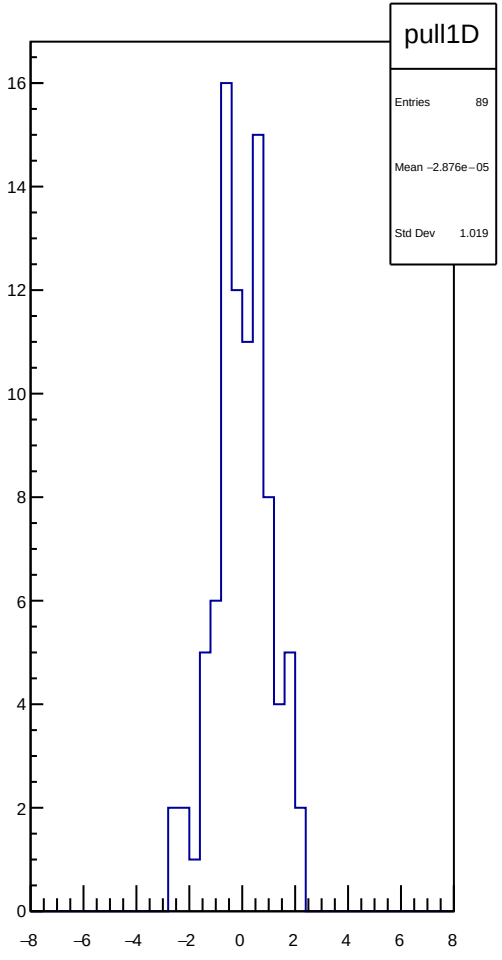

pull1D
Entries 89
Mean 0.00191
Std Dev 1.094
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

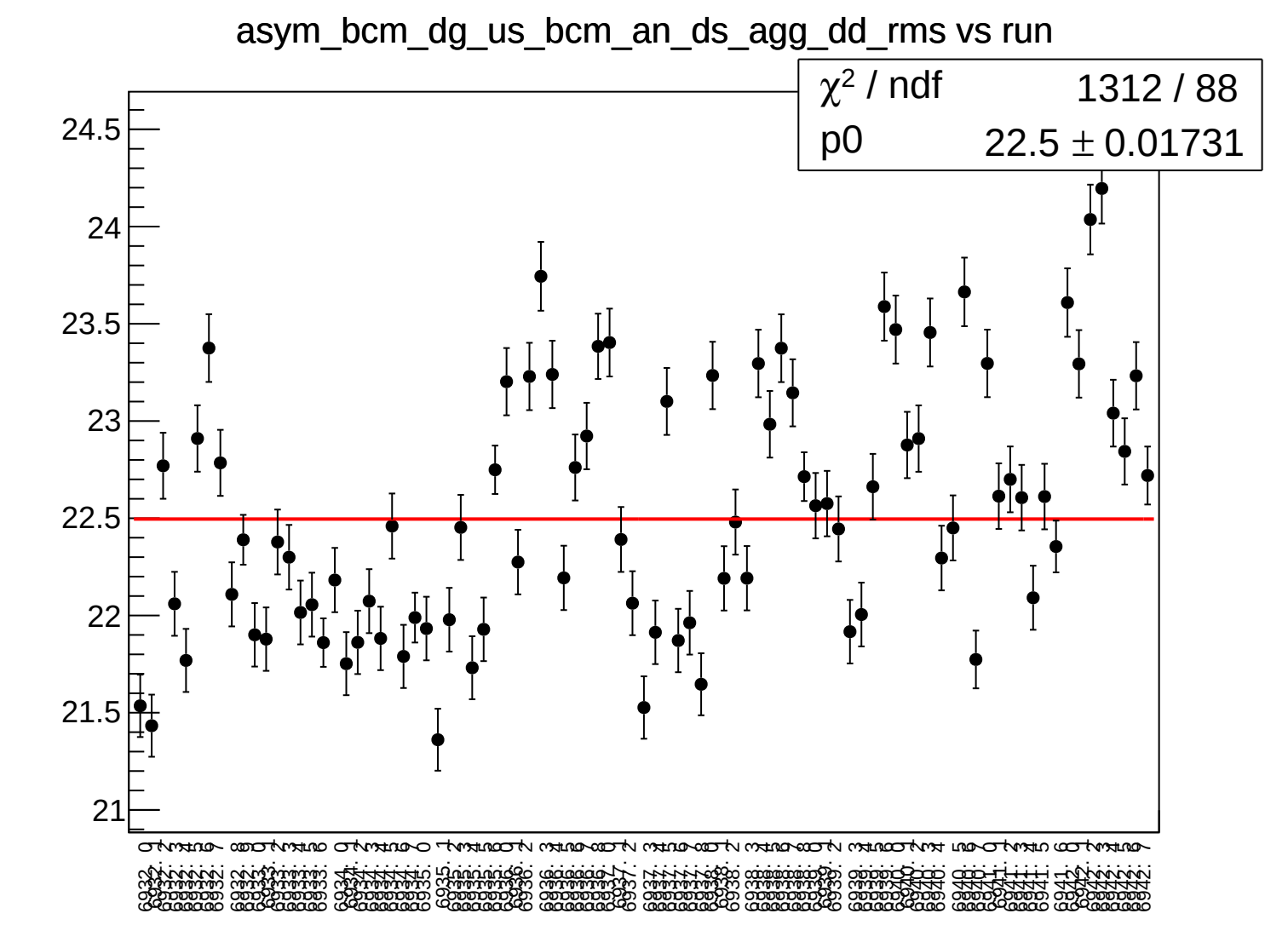

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 5.712e+04 / 88
p0 11.51 ± 0.009011
17
16
15
14
13
12
11
10
9

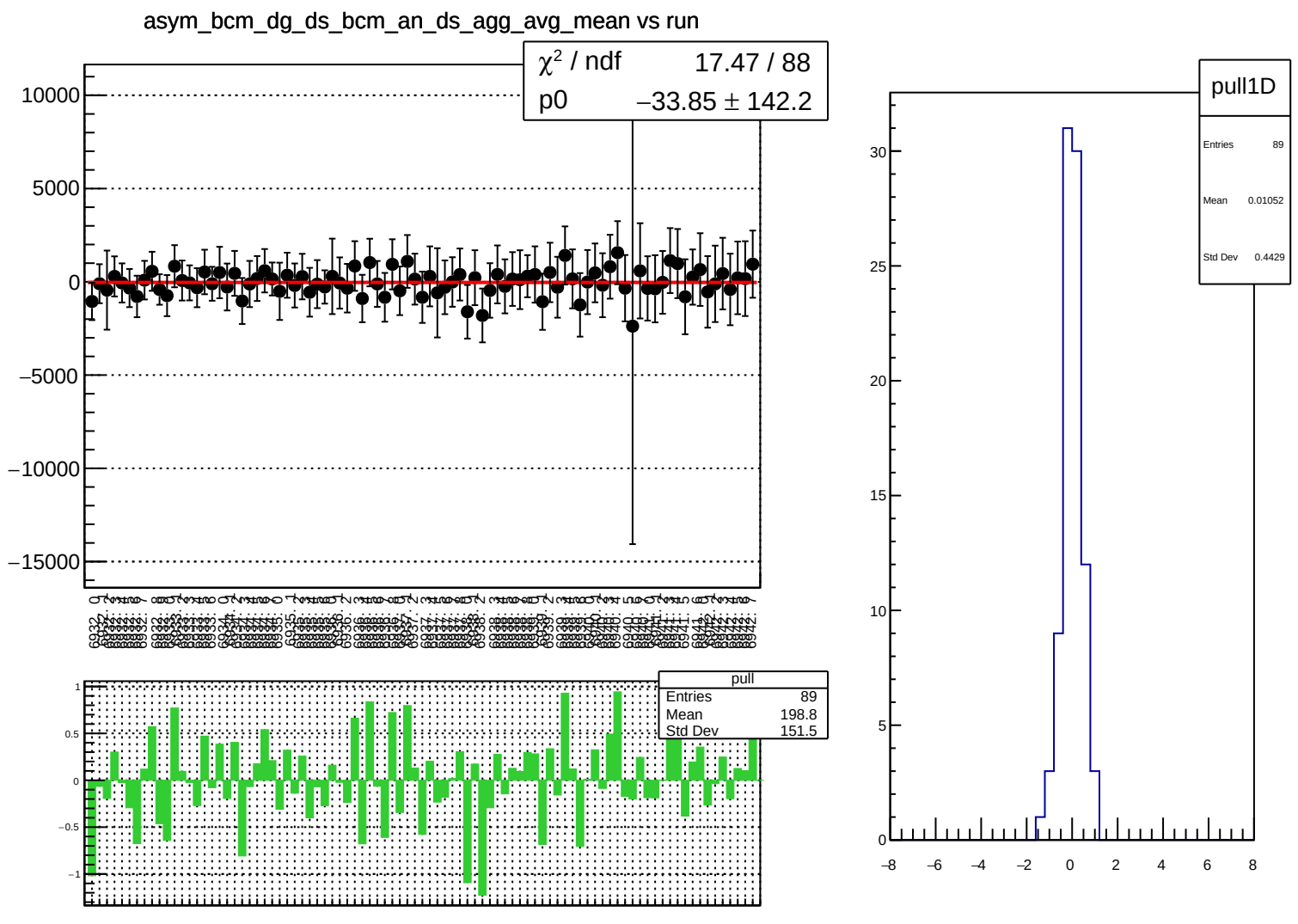

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.64 / 88
p0 −10.64 ± 142.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 286.5
Std Dev 240.9
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.00359
Std Dev 0.4576
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

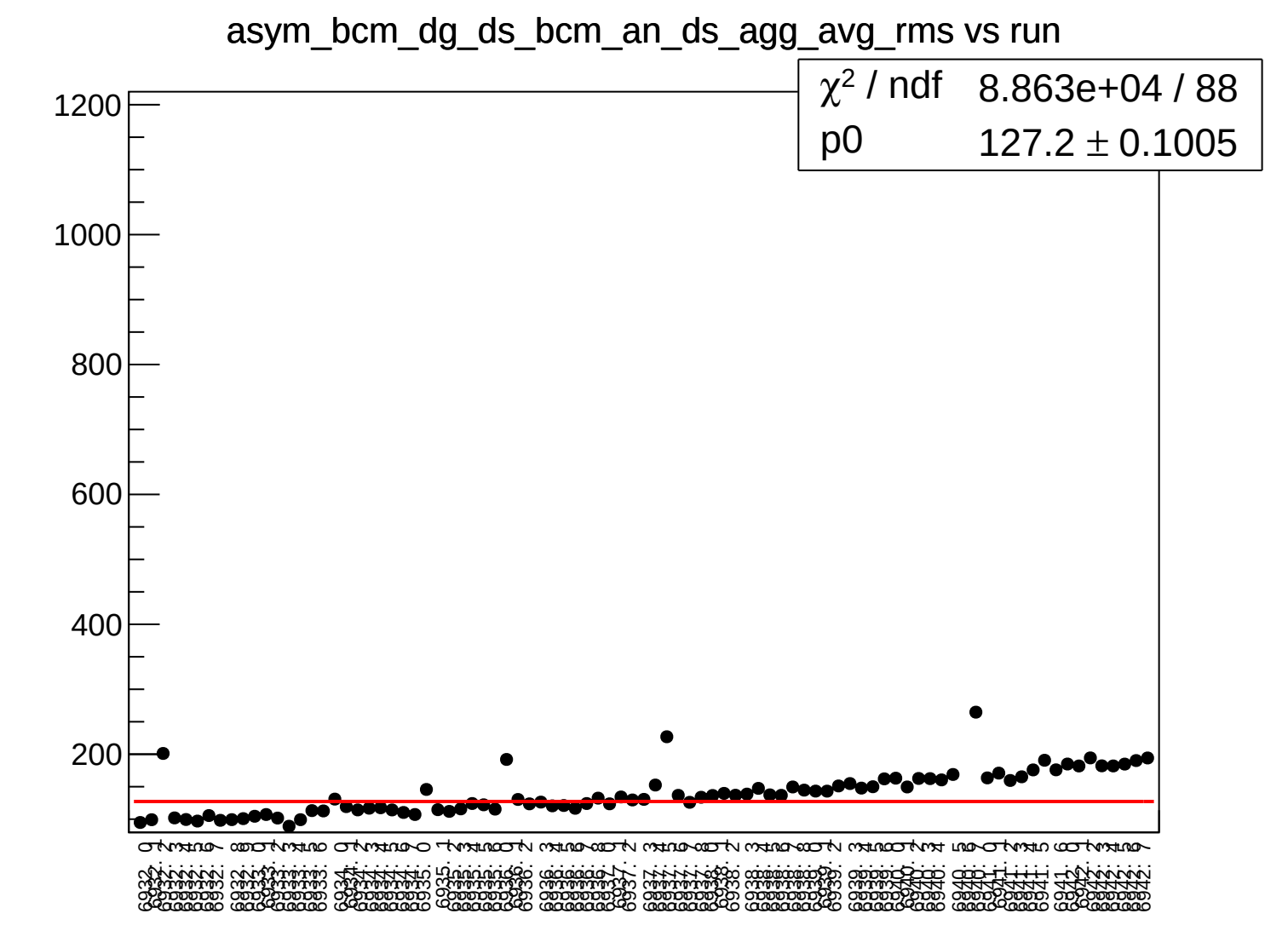

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 8.617e+04 / 88
p0 127.8 ± 0.1009
1200
1000
800
600
400
200

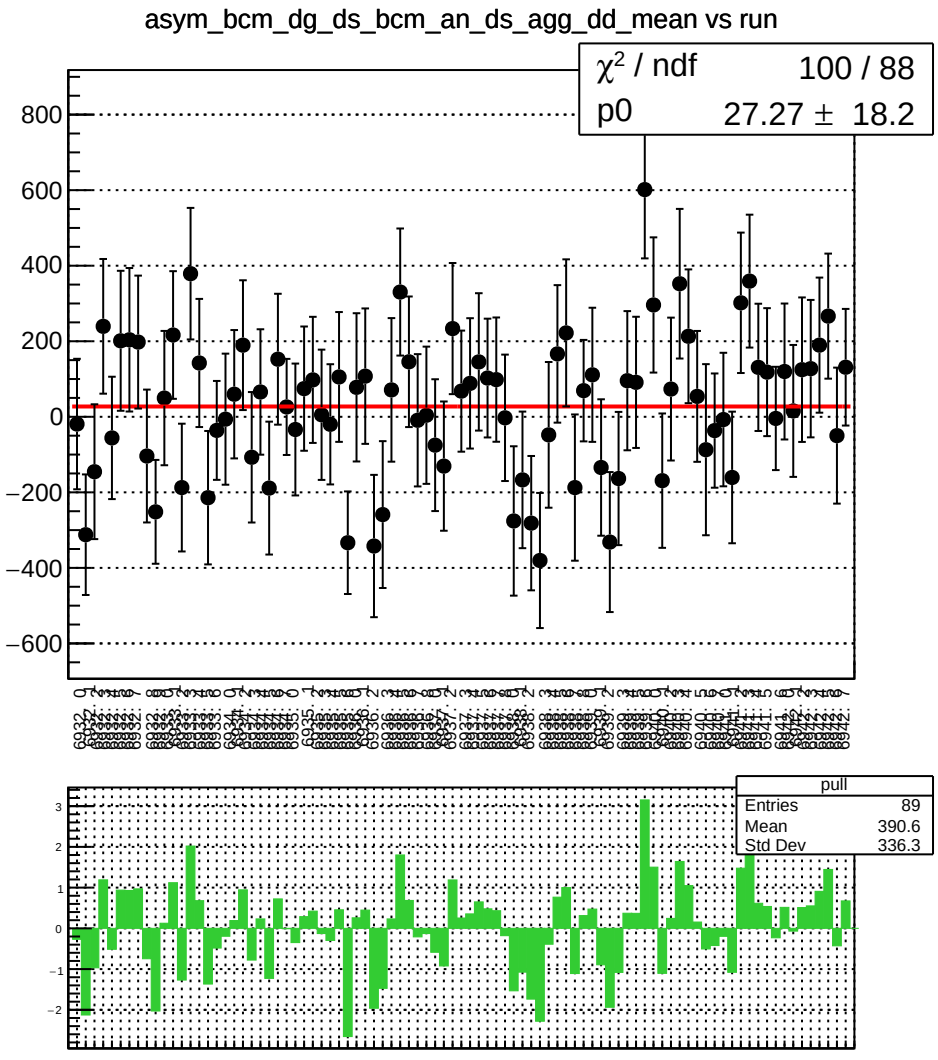

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 92.5 / 88
p0 37.87 ± 24.48
pull
Entries 89
Mean 6.553e+04
Std Dev 6.55e+04

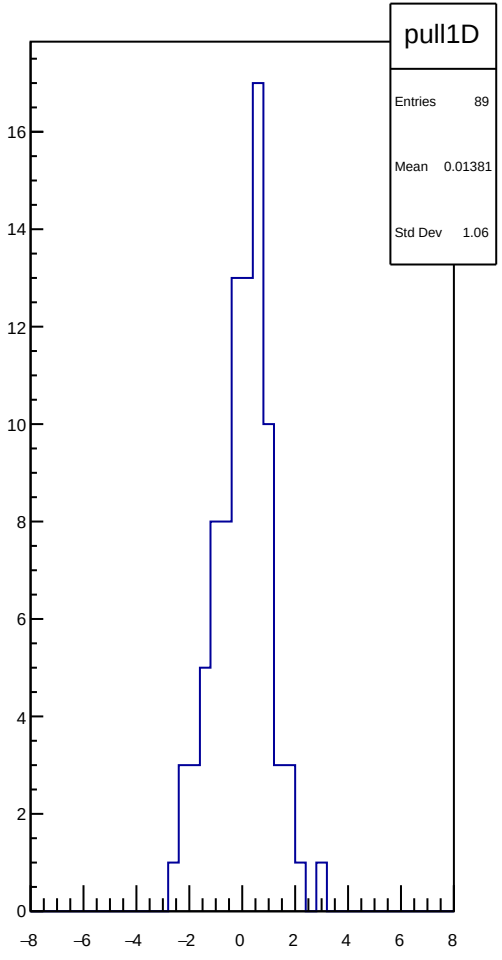

pull1D
Entries 89
Mean −2.876e−05
Std Dev 1.019

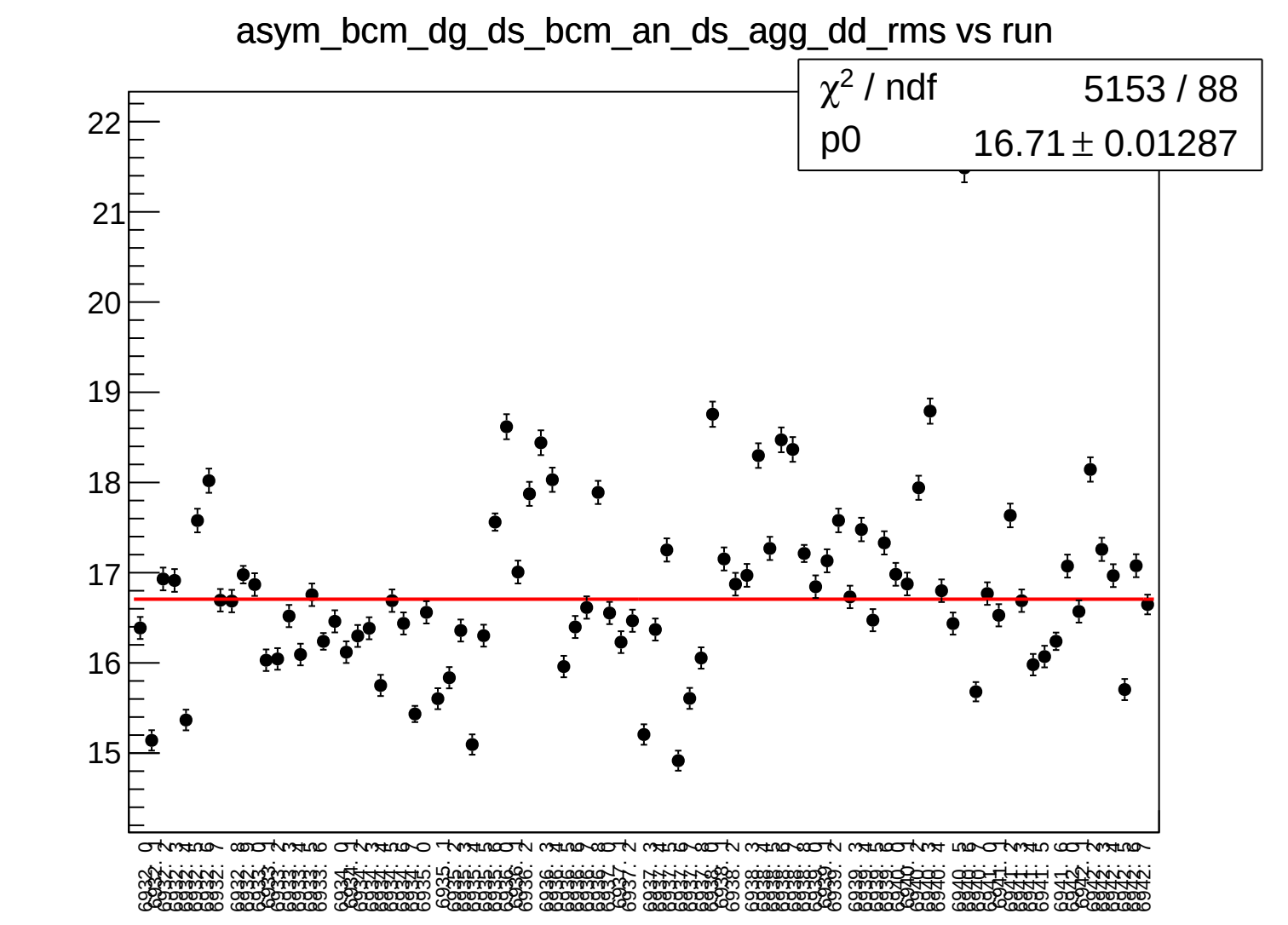

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1312 / 88
p0 22.5 ± 0.01731
24.5
24
23.5
23
22.5
22
21.5
21

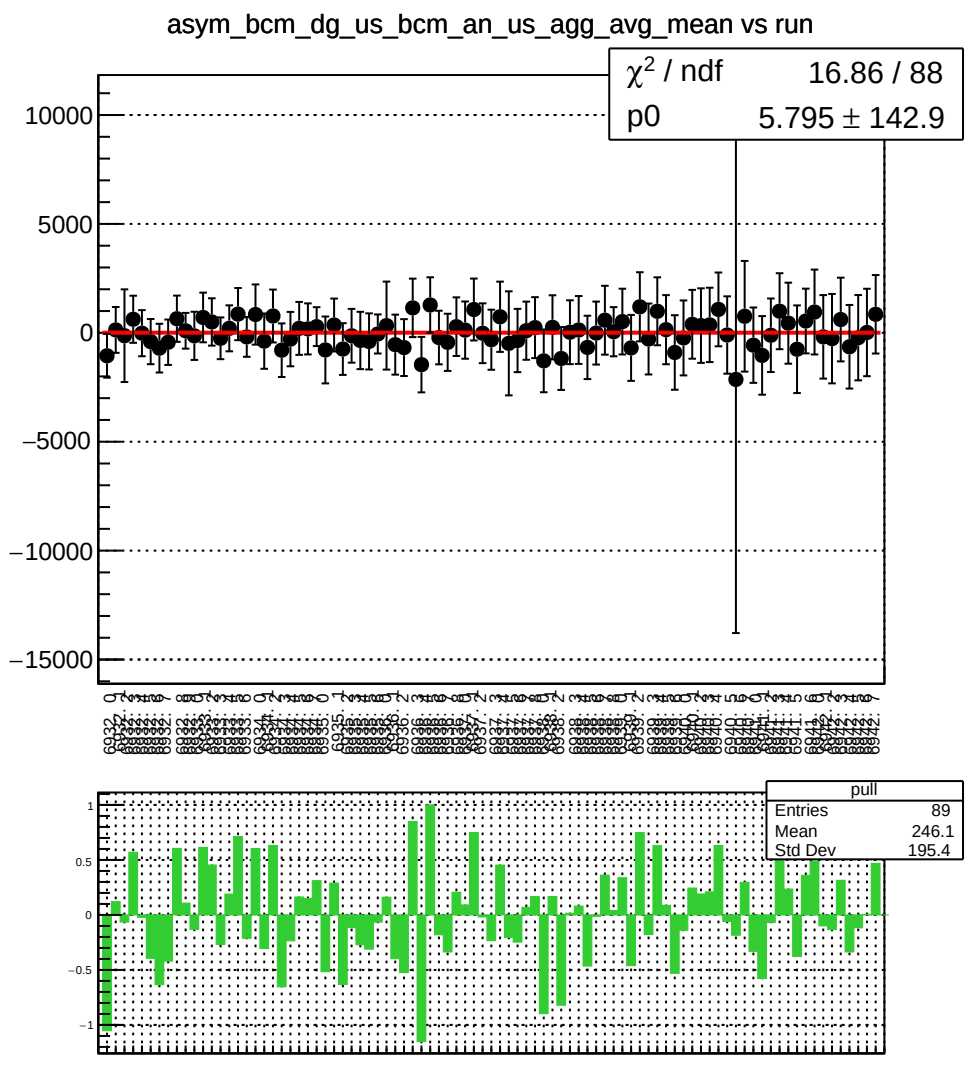

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.47 / 88
p0 −33.85 ± 142.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 198.8
Std Dev 151.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.01052
Std Dev 0.4429
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

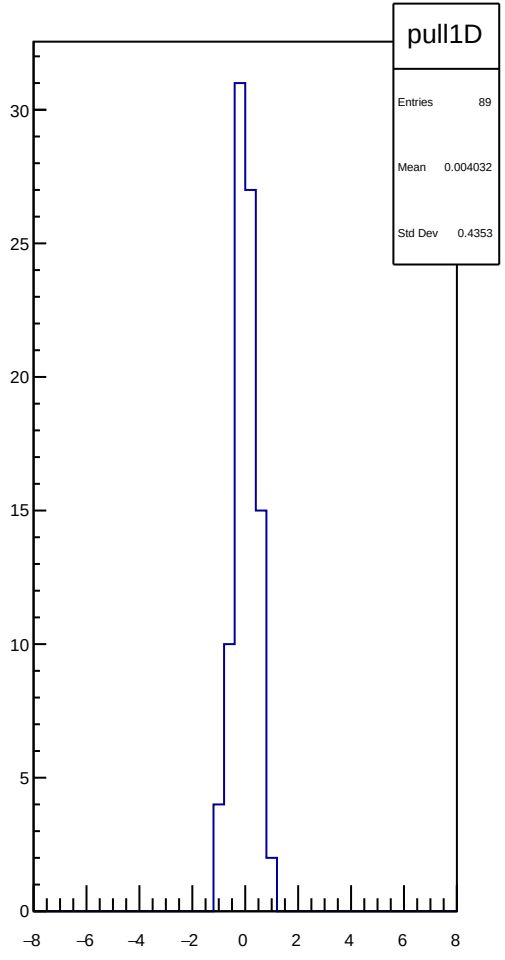

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 8.863e+04 / 88
p0 127.2 ± 0.1005
1200
1000
800
600
400
200

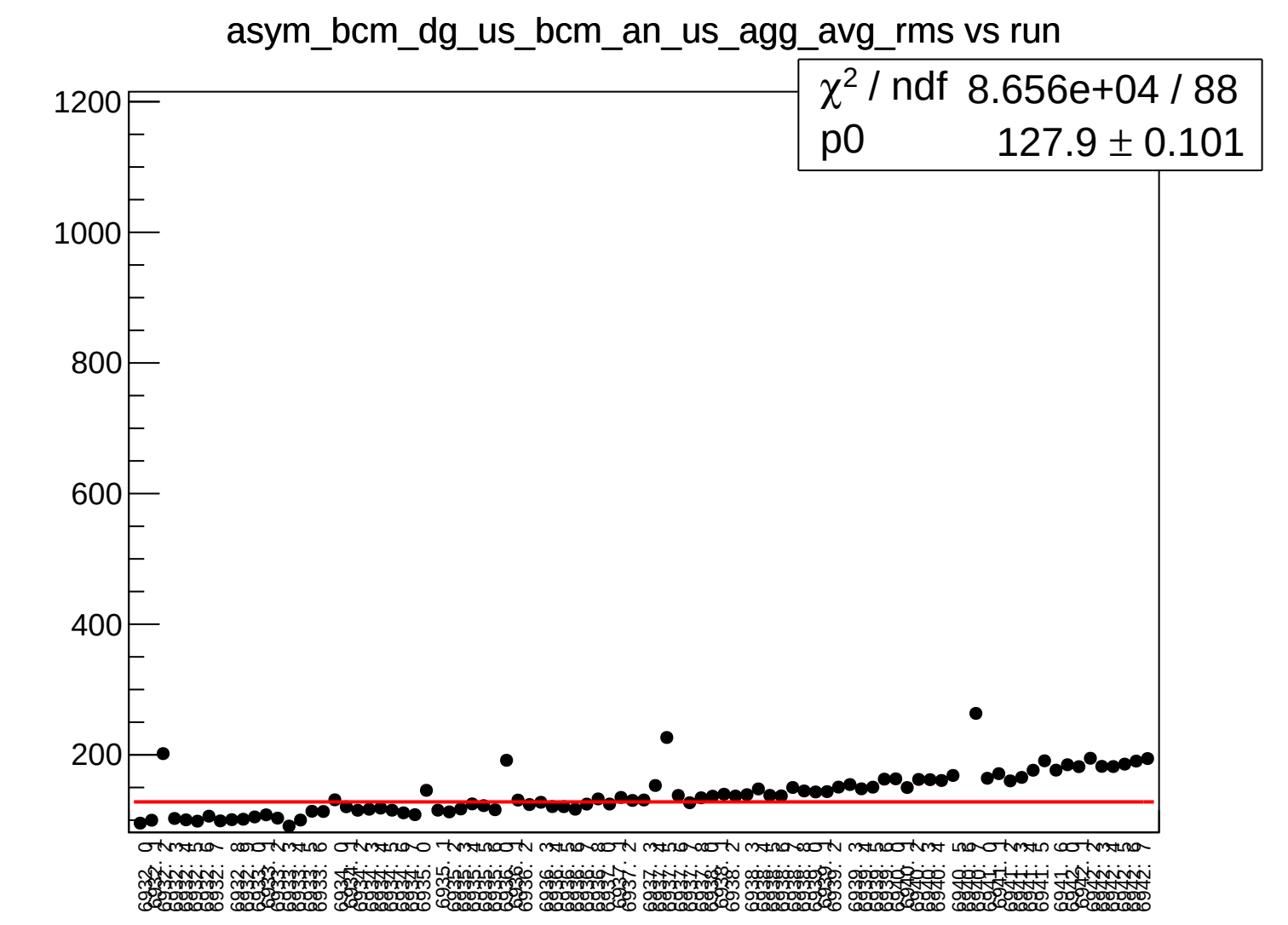

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 100 / 88
p0 27.27 ± 18.2
pull
Entries 89
Mean 390.6
Std Dev 336.3

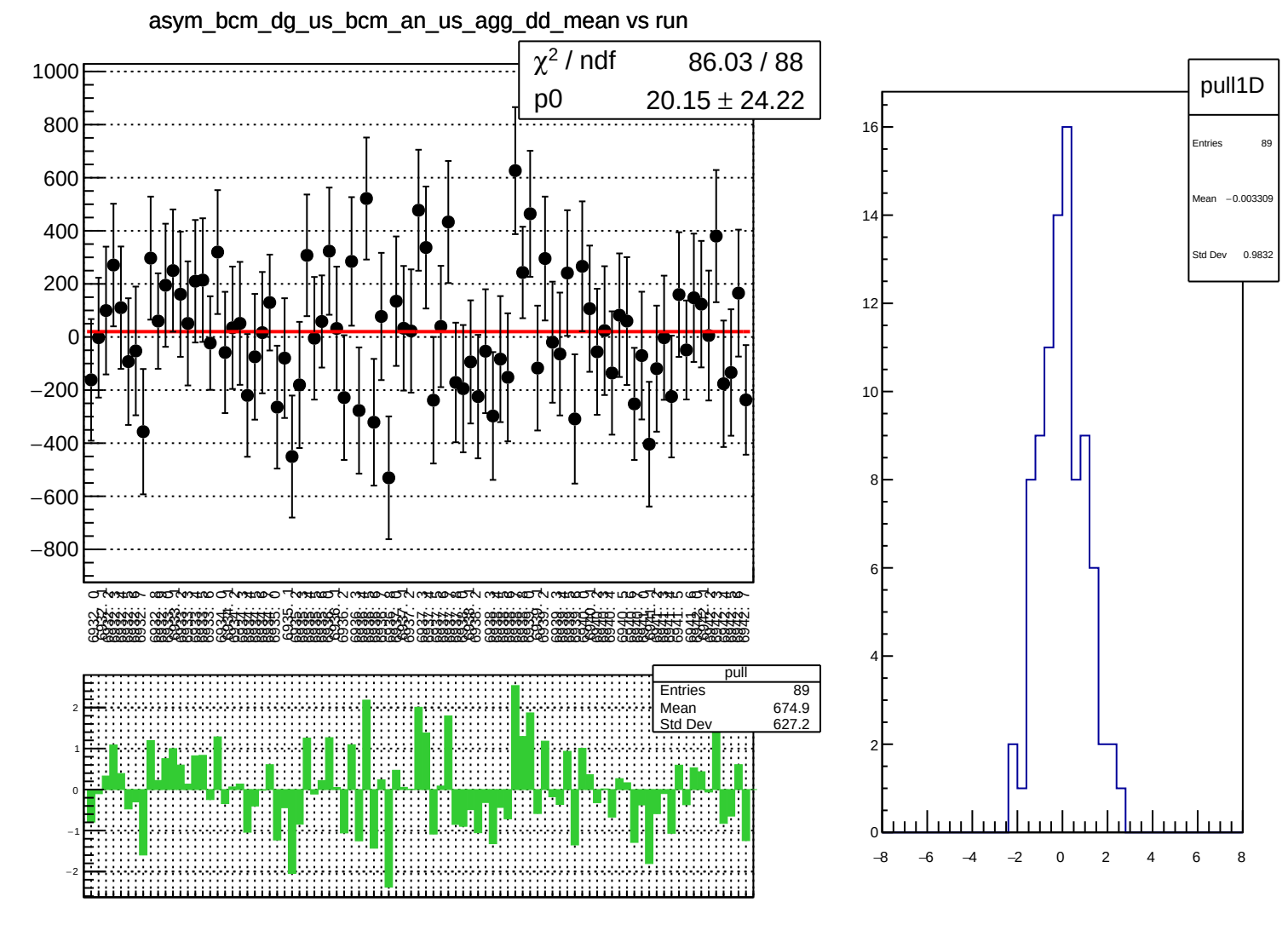

pull1D
Entries 89
Mean 0.01381
Std Dev 1.06

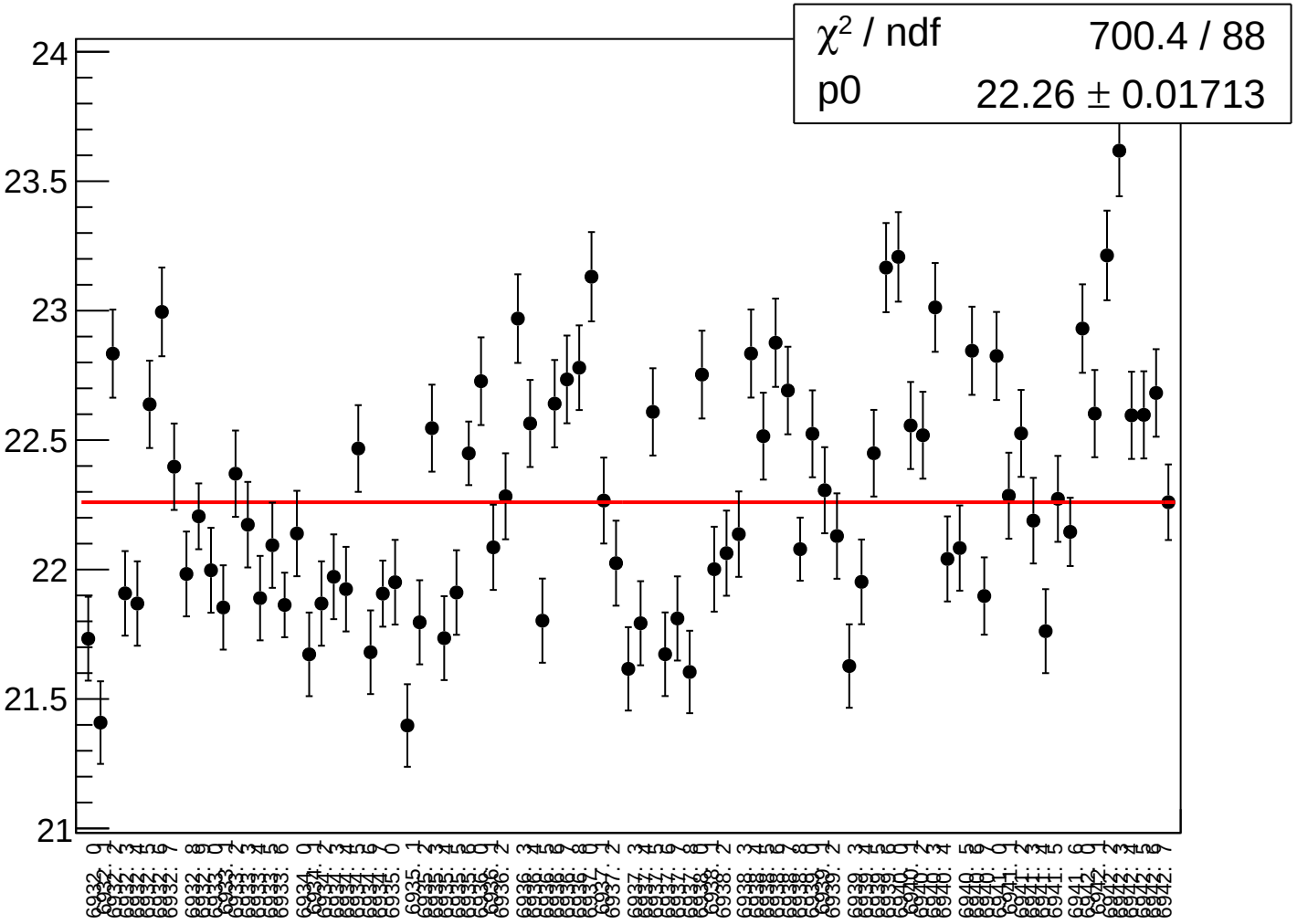

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5153 / 88
p0 16.71 ± 0.01287
22
21
20
19
18
17
16
15

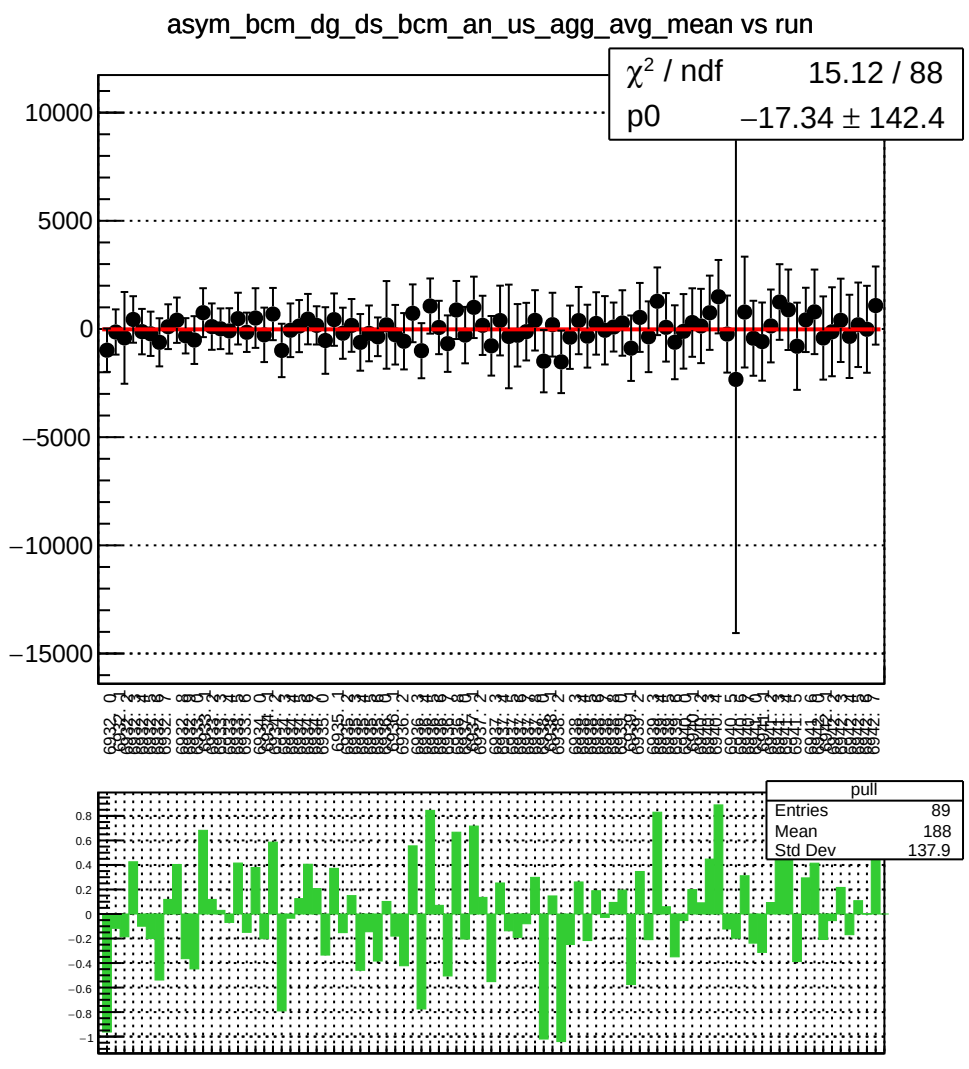

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.86 / 88
p0 5.795 ± 142.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 246.1
Std Dev 195.4
1
0.5
0
−0.5
−1

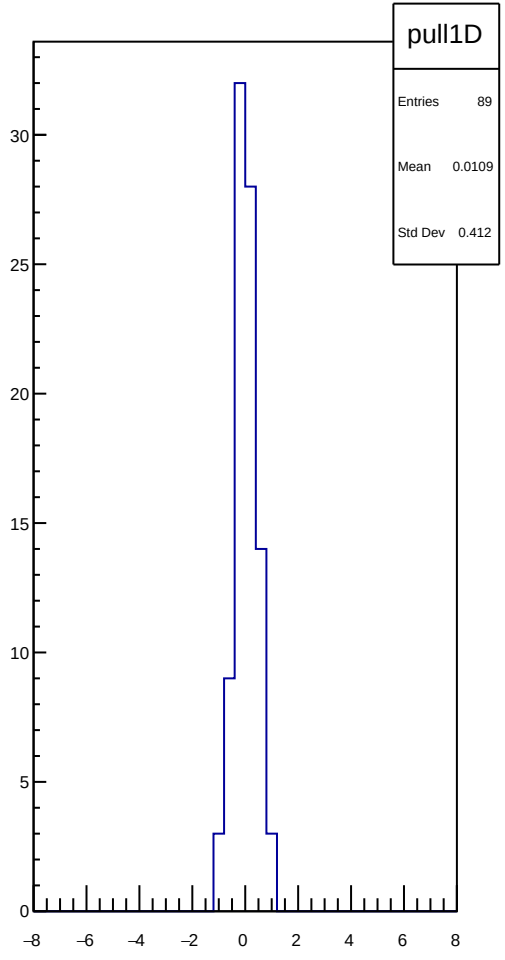

pull1D
Entries 89
Mean 0.004032
Std Dev 0.4353
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

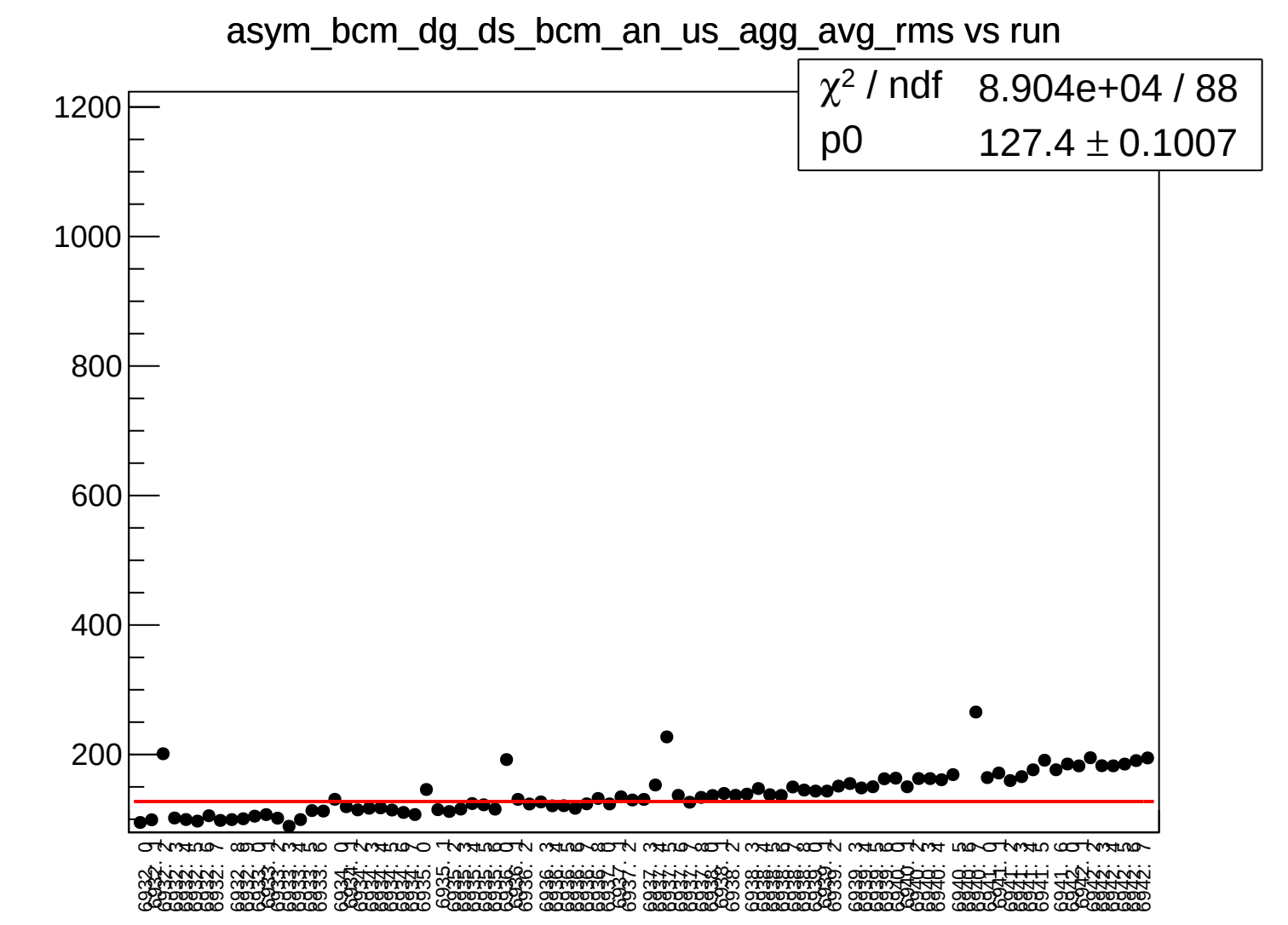

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 8.656e+04 / 88
p0 127.9 ± 0.101
1200
1000
800
600
400
200

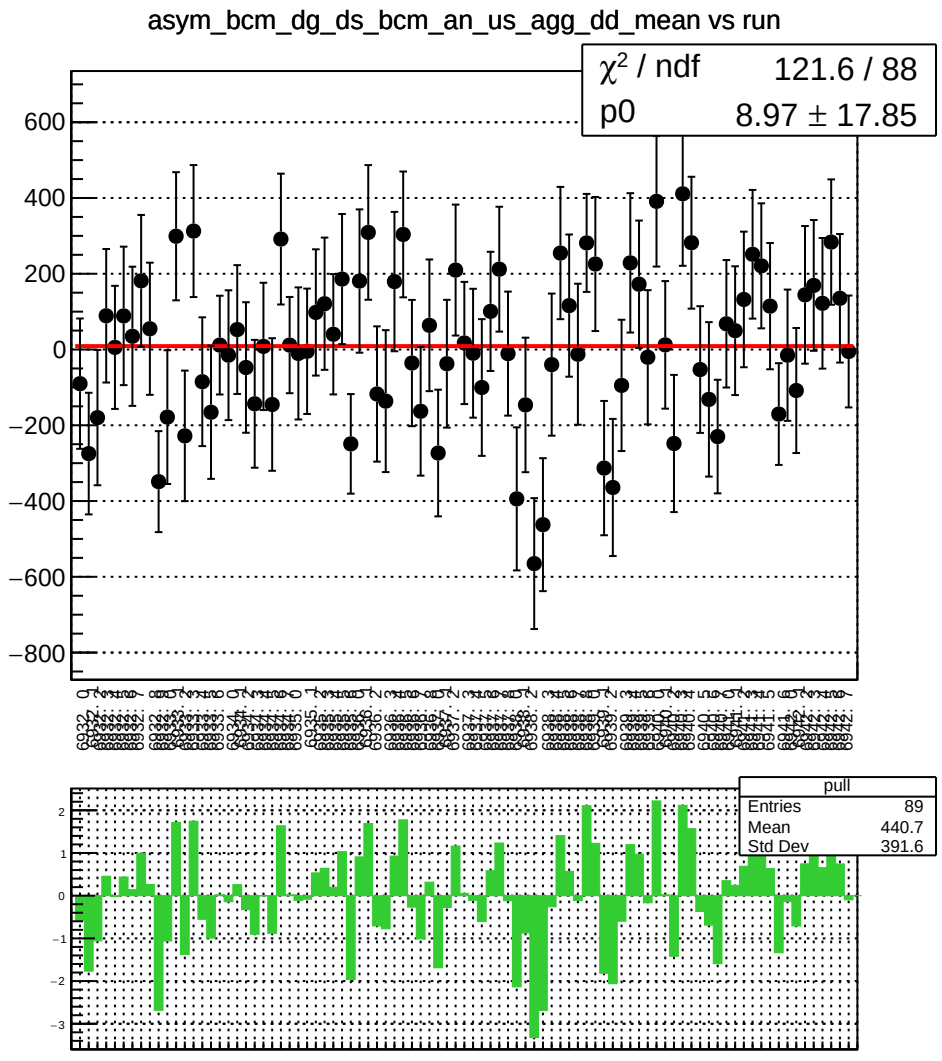

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 86.03 / 88
p0 20.15 ± 24.22
pull
Entries 89
Mean 674.9
Std Dev 627.2
pull1D
Entries 89
Mean −0.003309
Std Dev 0.9832

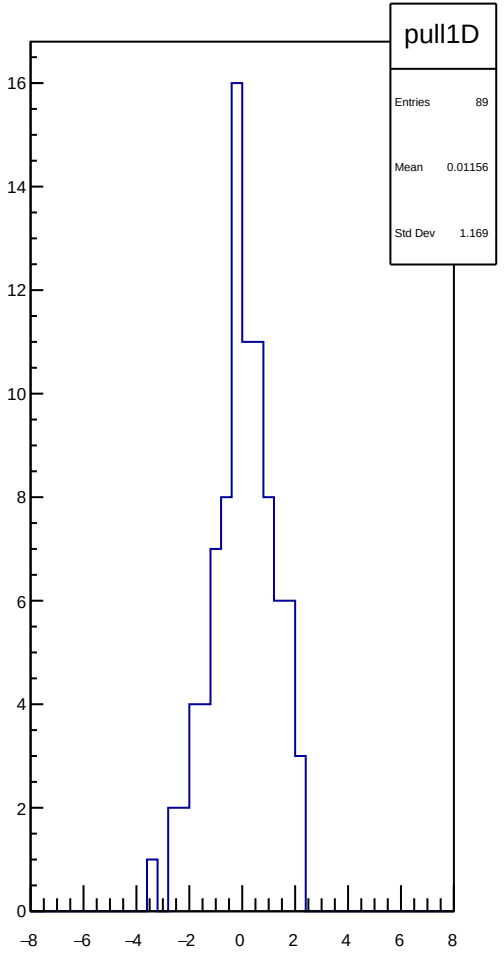

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 700.4 / 88
p0 22.26 ± 0.01713
24
23.5
23
22.5
22
21.5
21

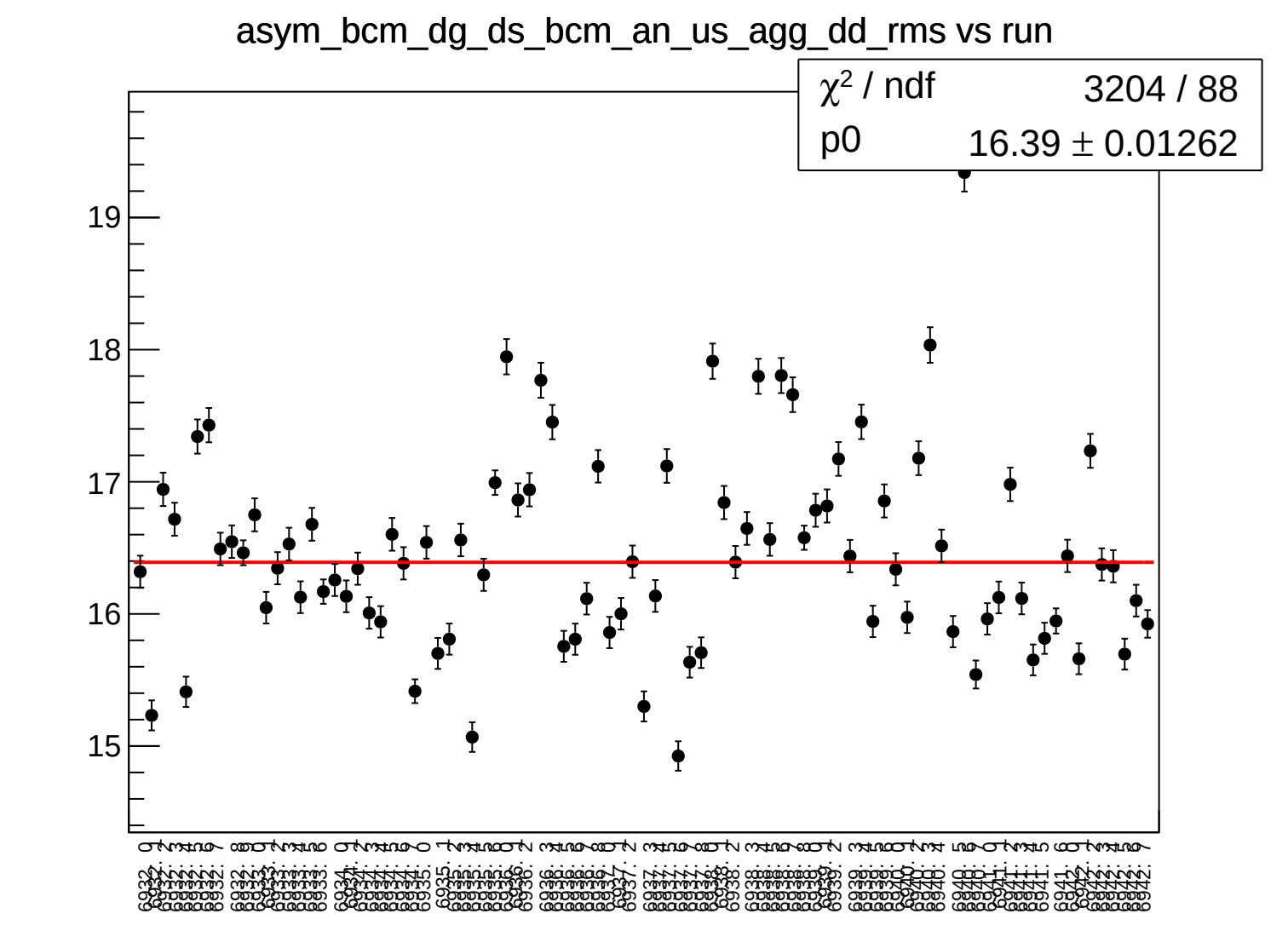

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.12 / 88
p0 −17.34 ± 142.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 188
Std Dev 137.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

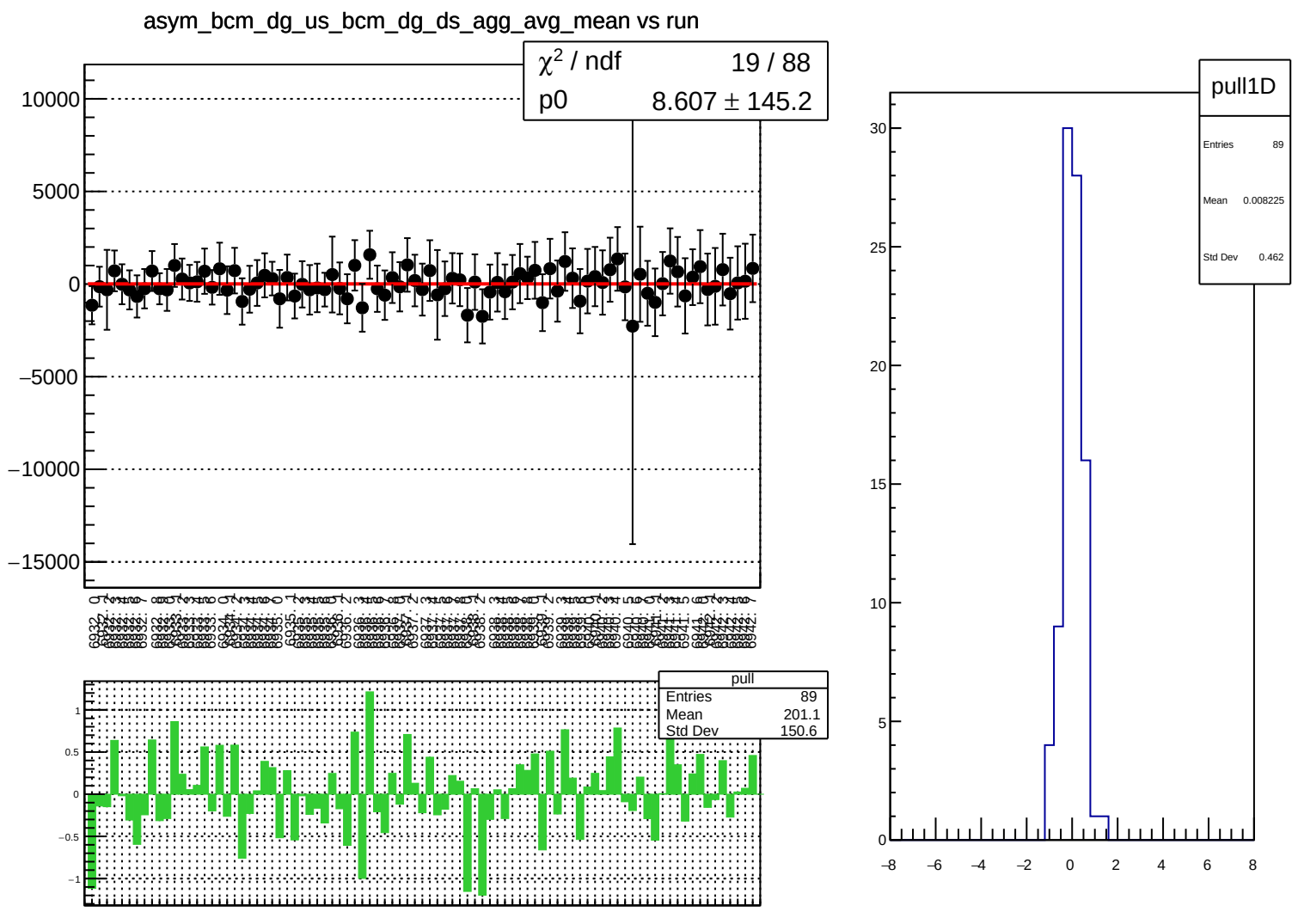

pull1D
Entries 89
Mean 0.0109
Std Dev 0.412
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

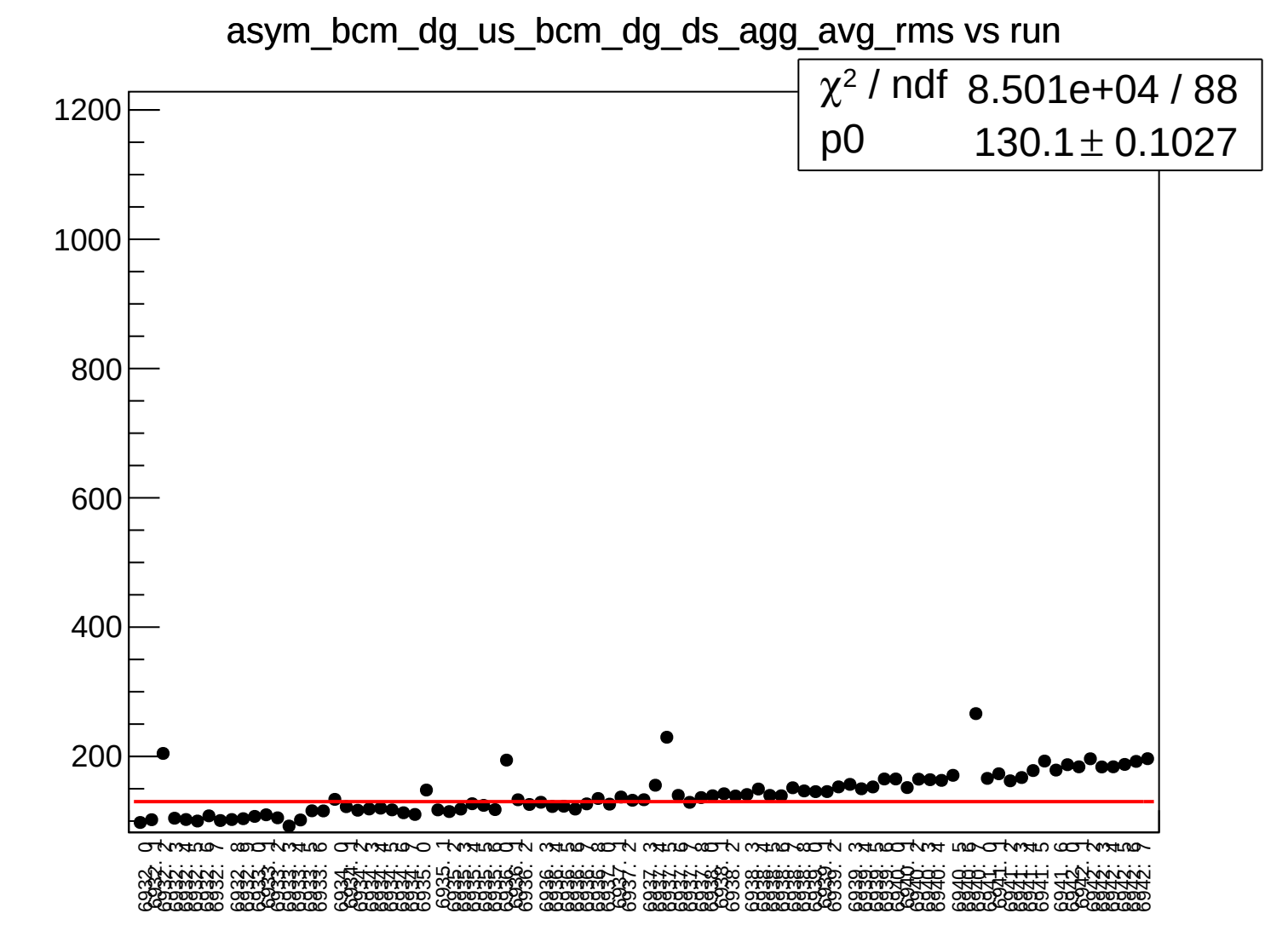

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 8.904e+04 / 88
p0 127.4 ± 0.1007
1200
1000
800
600
400
200

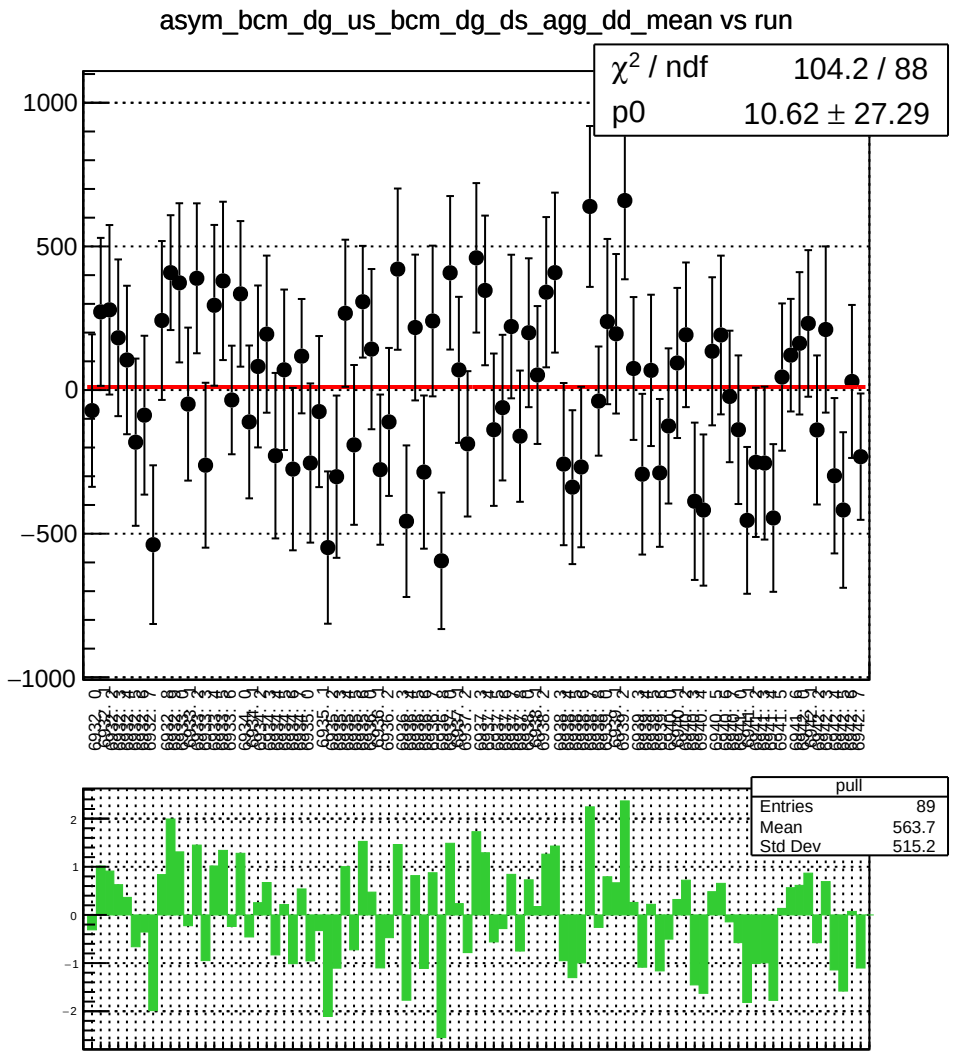

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 121.6 / 88
p0 8.97 ± 17.85
pull
Entries 89
Mean 440.7
Std Dev 391.6

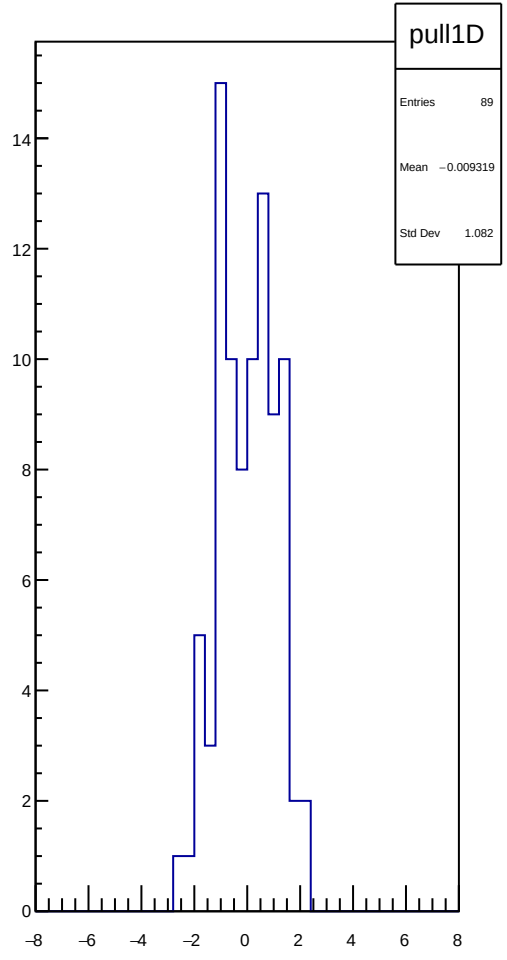

pull1D
Entries 89
Mean 0.01156
Std Dev 1.169

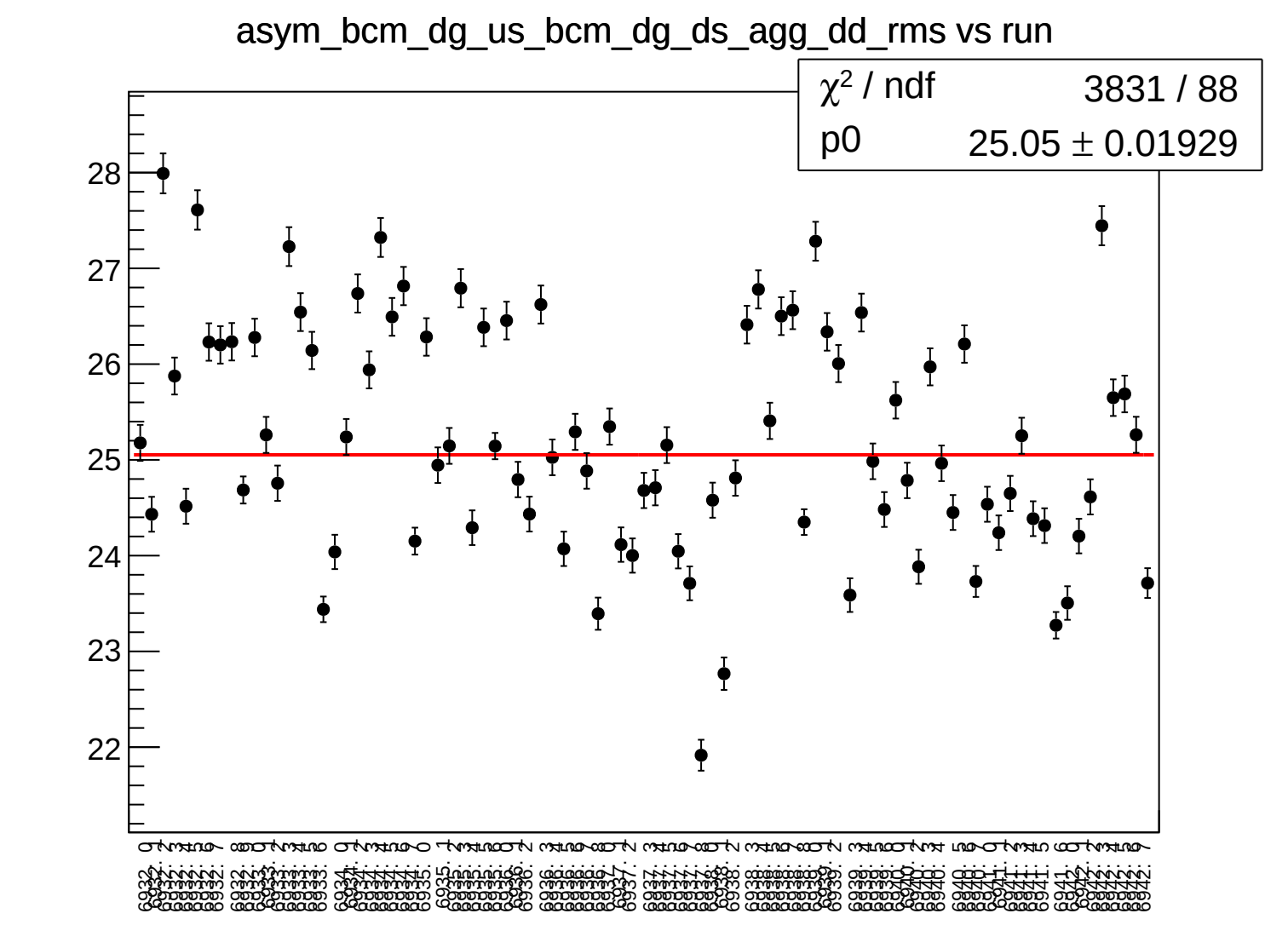

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3204 / 88
p0 16.39 ± 0.01262
19
18
17
16
15

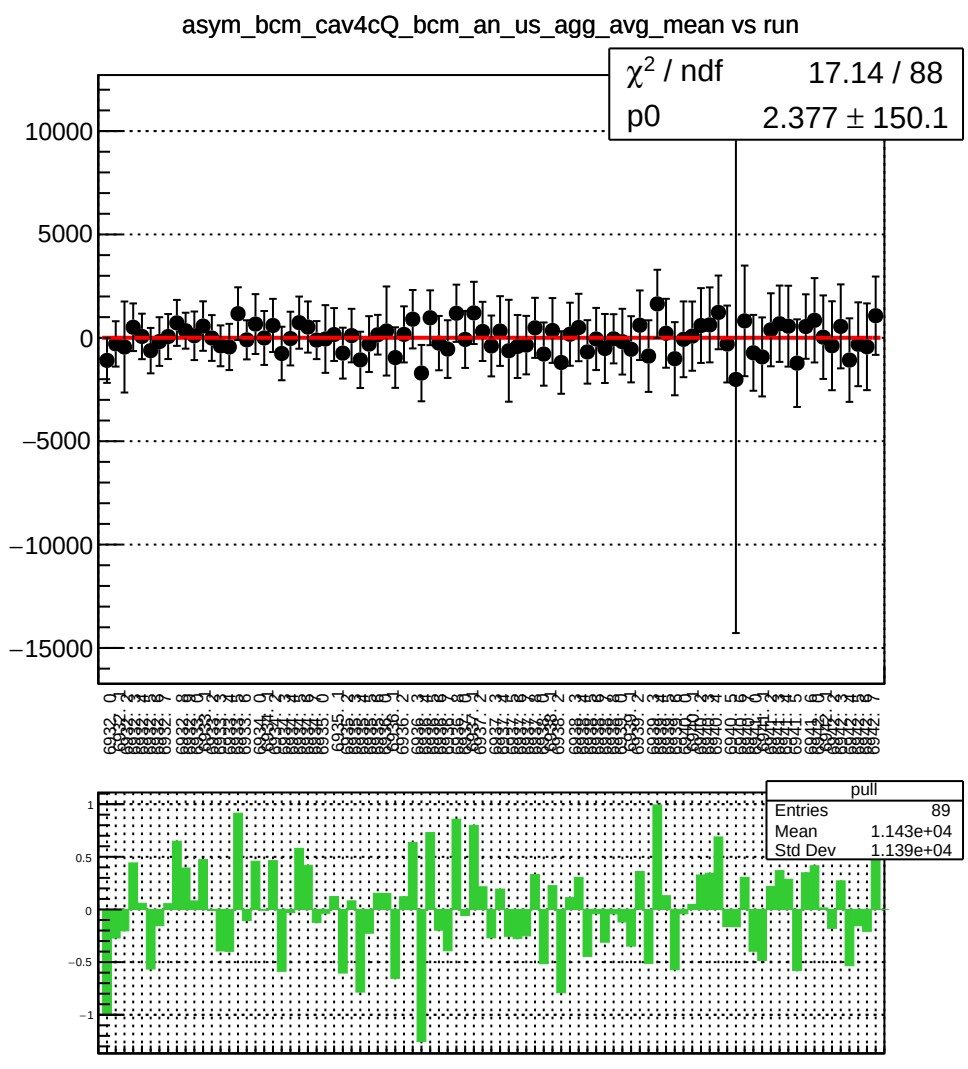

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 19 / 88
p0 8.607 ± 145.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 201.1
Std Dev 150.6
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.008225
Std Dev 0.462
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

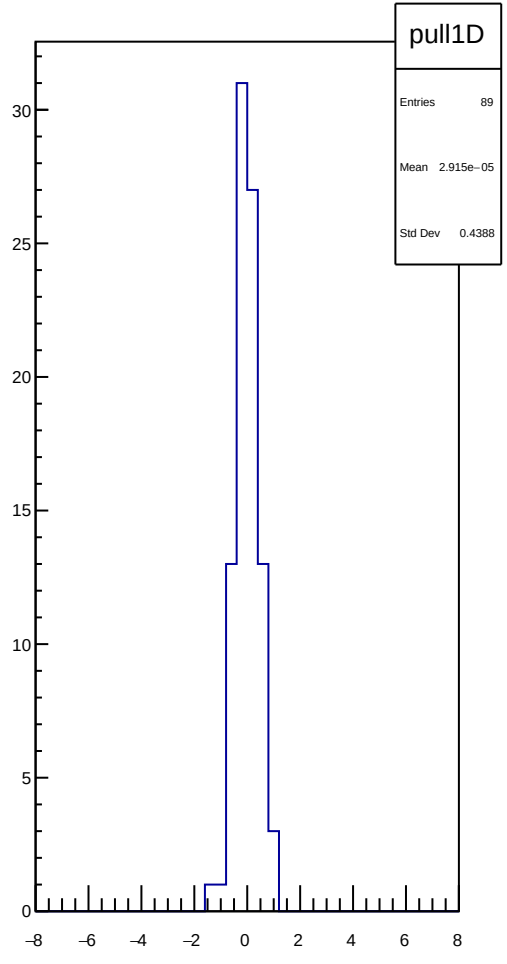

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 8.501e+04 / 88
p0 130.1 ± 0.1027
1200
1000
800
600
400
200


asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 104.2 / 88
p0 10.62 ± 27.29
1000
500
0
−500
−1000
pull
Entries 89
Mean 563.7
Std Dev 515.2
2
1
0
−1
−2


pull1D
Entries 89
Mean −0.009319
Std Dev 1.082
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3831 / 88
p0 25.05 ± 0.01929
28
27
26
25
24
23
22


asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.14 / 88
p0 2.377 ± 150.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 1.143e+04
Std Dev 1.139e+04
1
0.5
0
−0.5
−1


pull1D
Entries 89
Mean 2.915e−05
Std Dev 0.4388
30
25
20
15
10
5
0
−8
−6
−4
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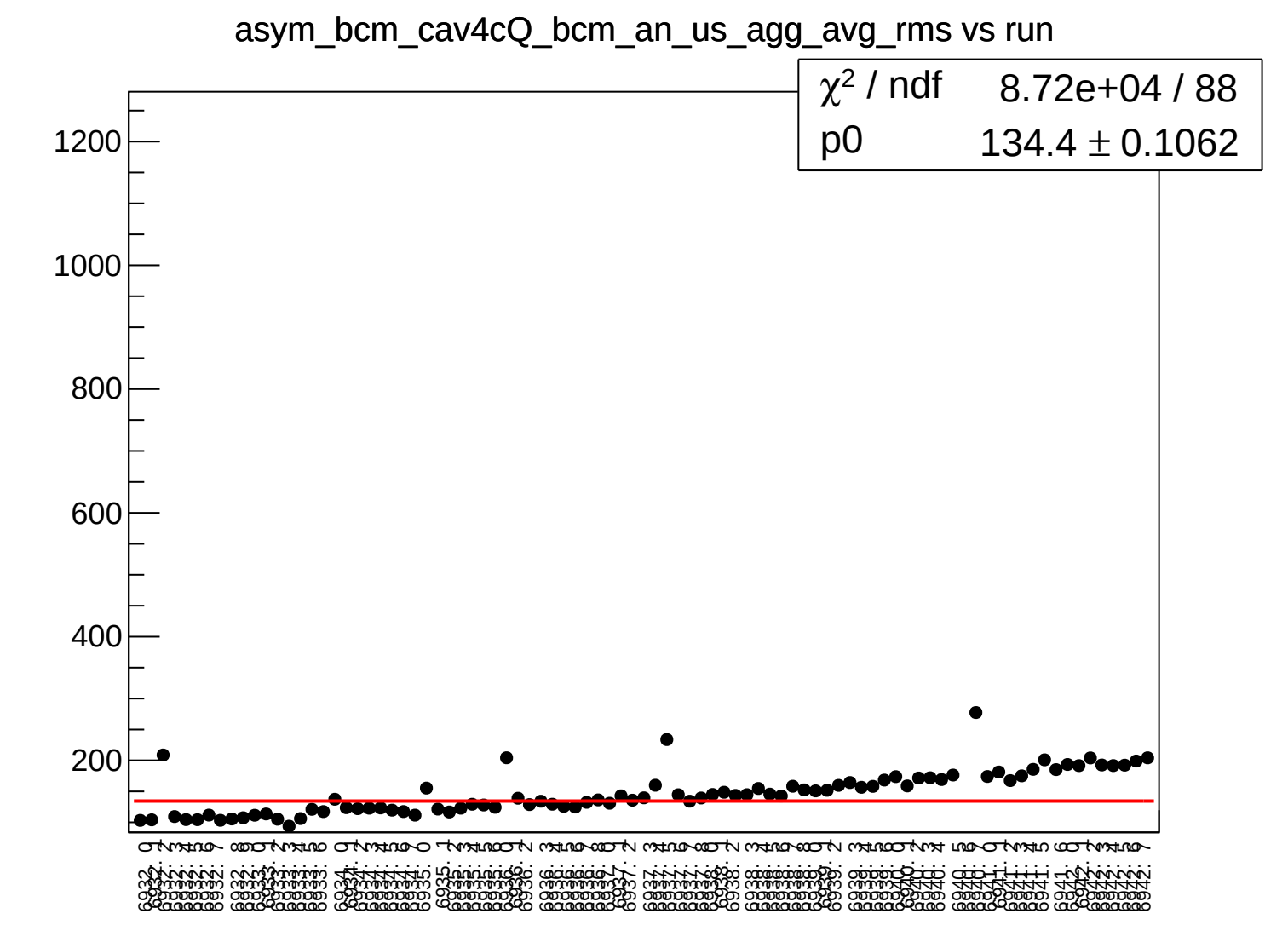
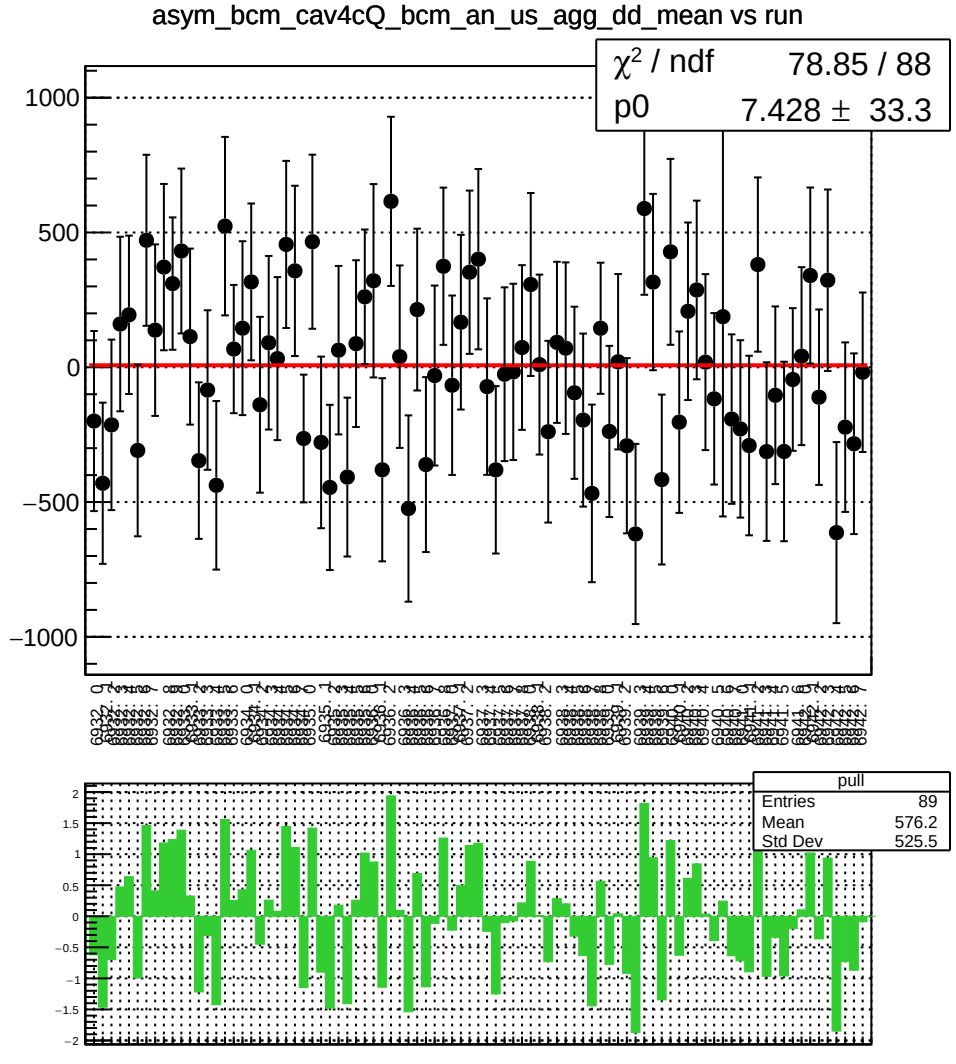
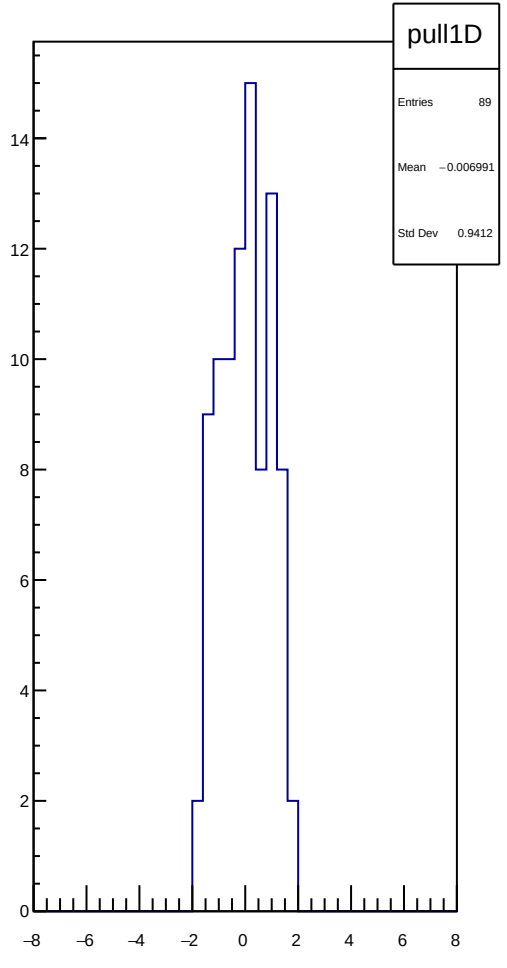
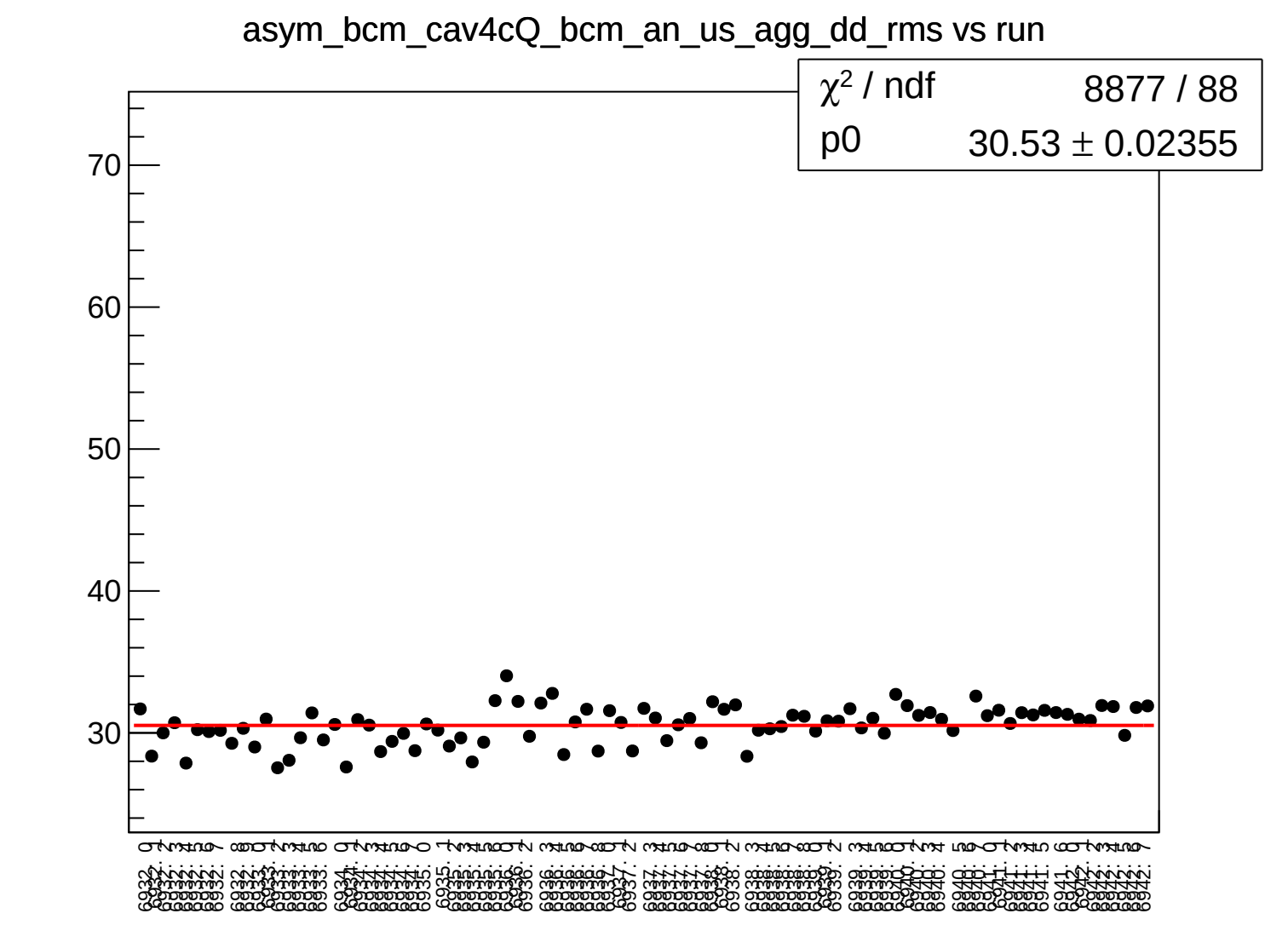
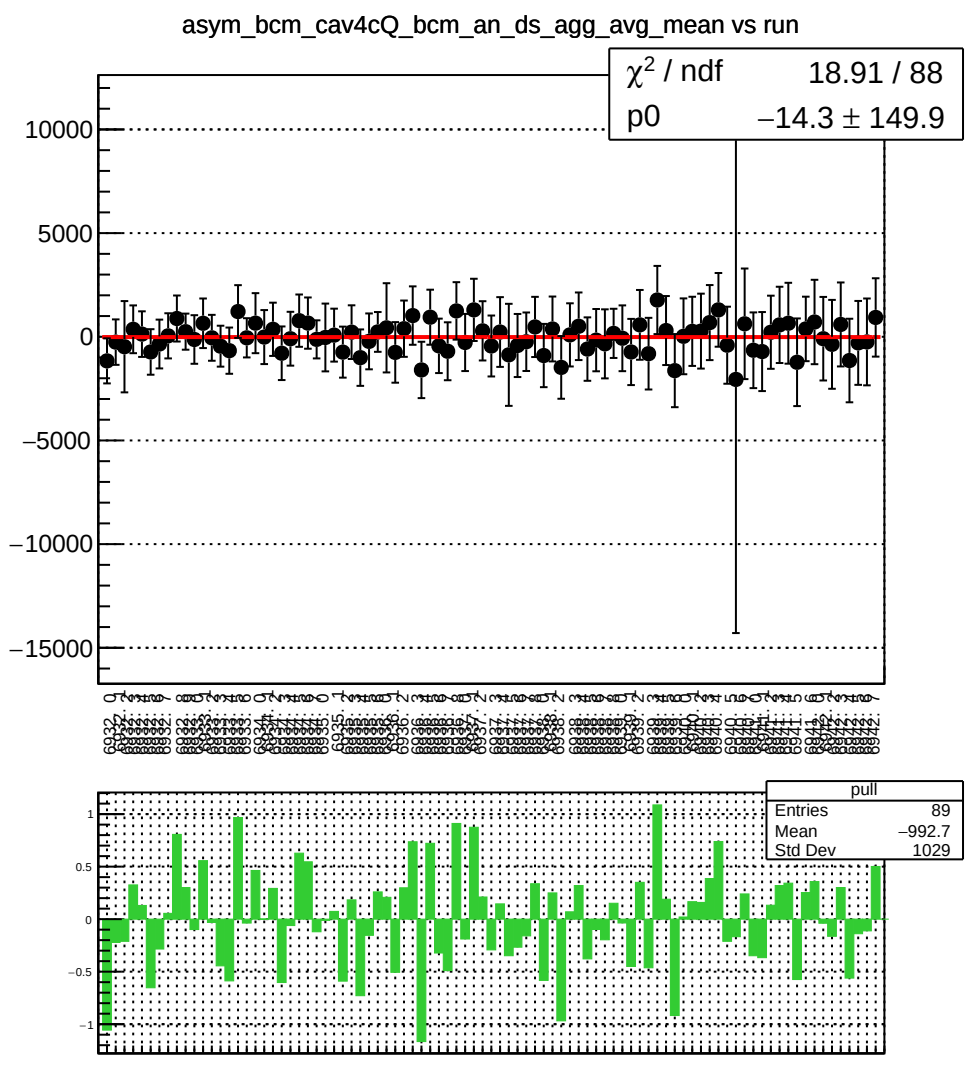
0
2
4
6
8

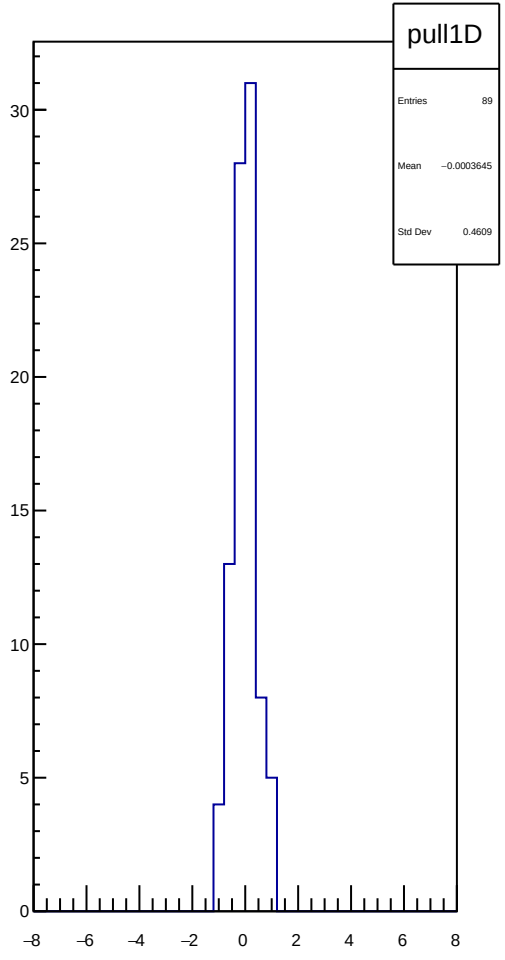

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 8.72e+04 / 88
p0 134.4 ± 0.1062
1200
1000
800
600
400
200

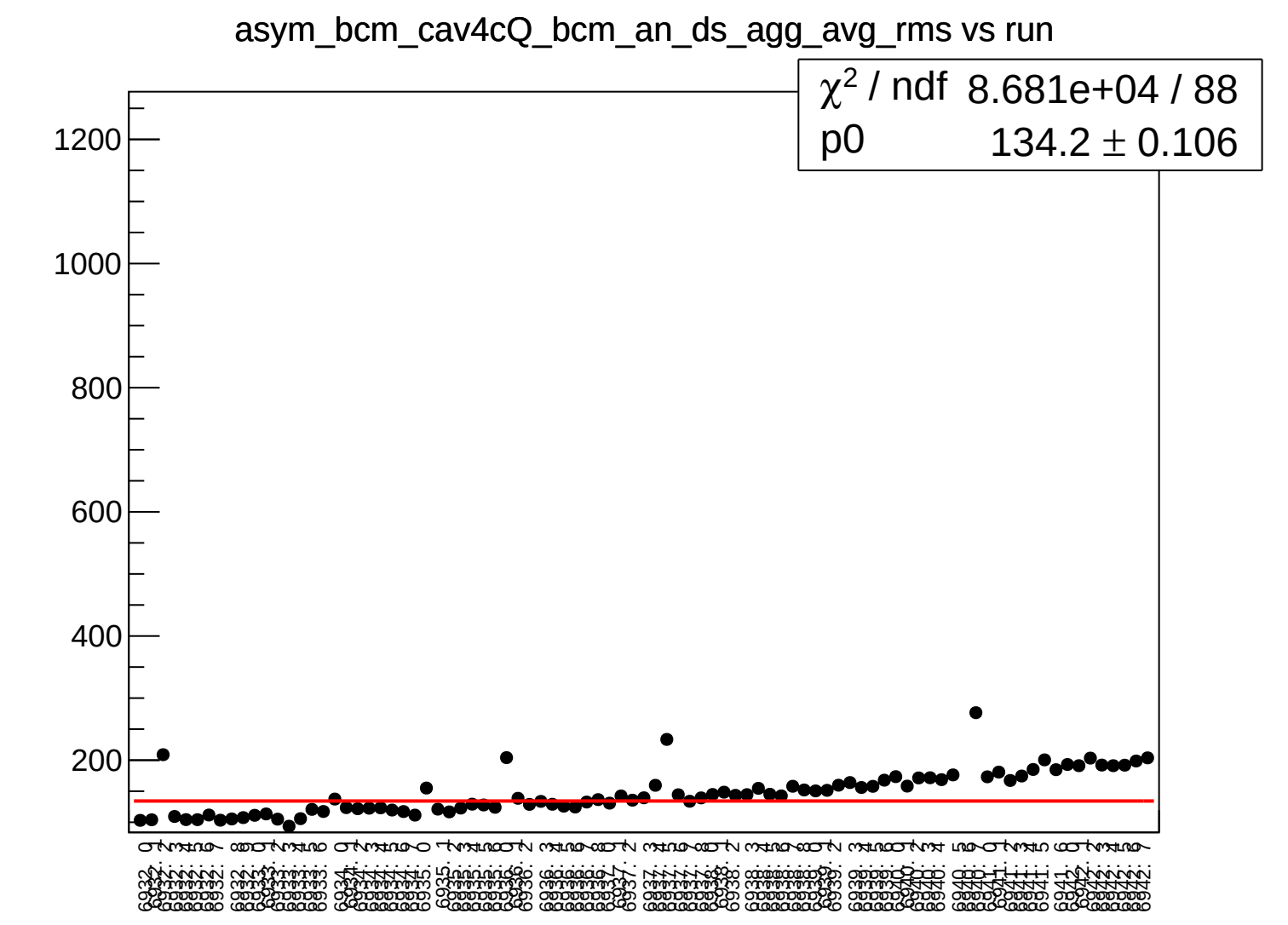

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 78.85 / 88
p0 7.428 ± 33.3
1000
500
0
−500
−1000
pull
Entries 89
Mean 576.2
Std Dev 525.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

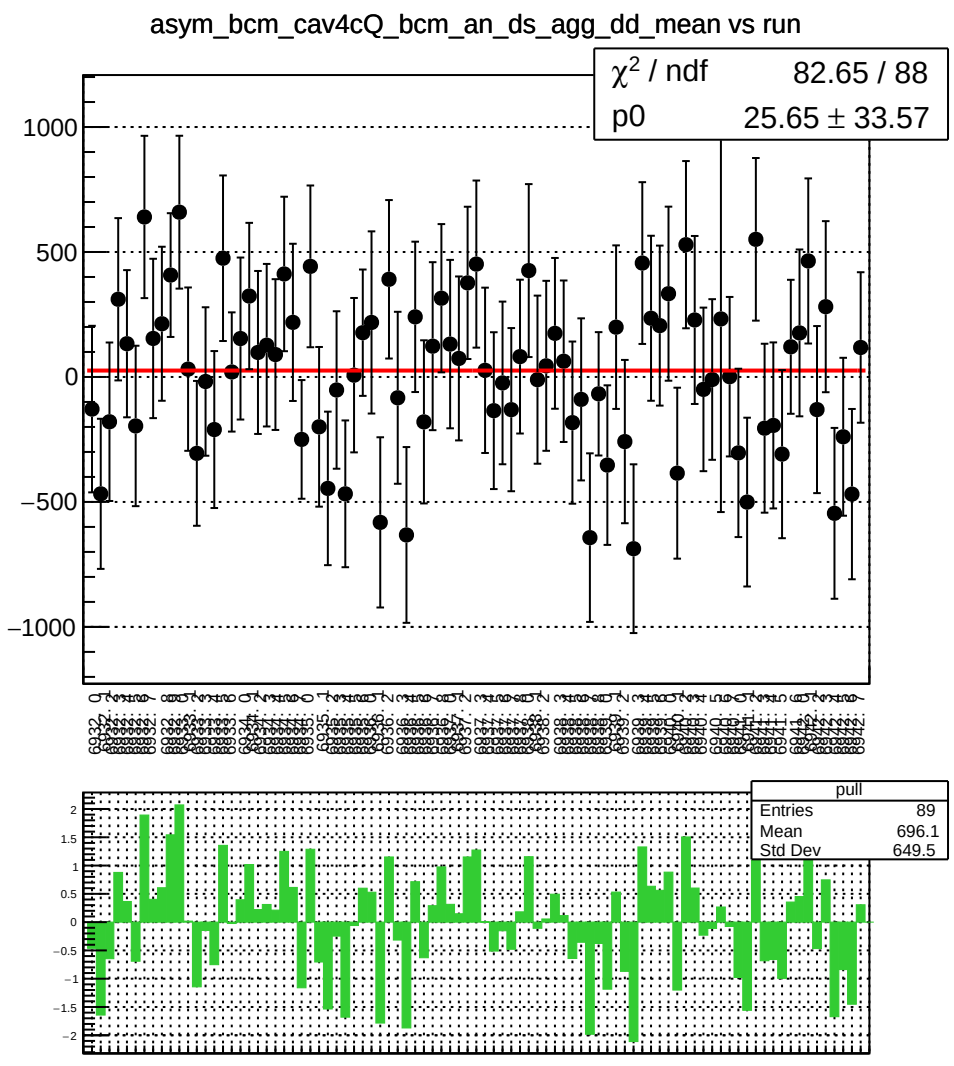

pull1D
Entries 89
Mean −0.006991
Std Dev 0.9412
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

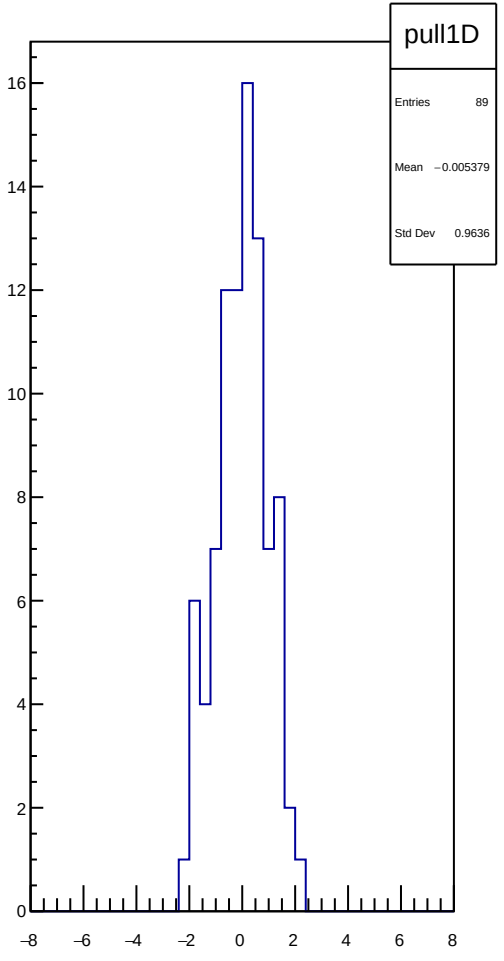

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 8877 / 88
p0 30.53 ± 0.02355
70
60
50
40
30

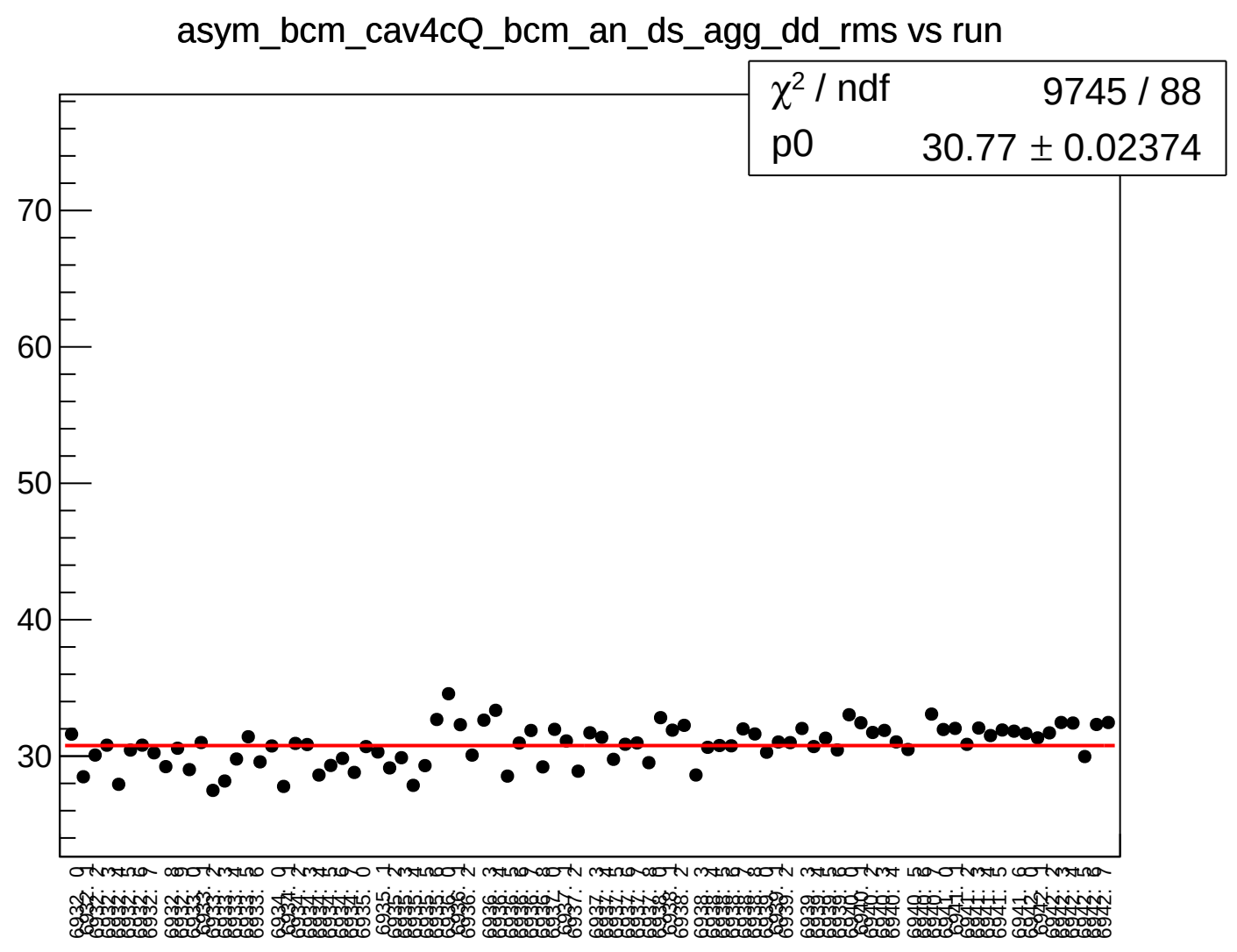

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.91 / 88
p0 −14.3 ± 149.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −992.7
Std Dev 1029
1
0.5
0
−0.5
−1

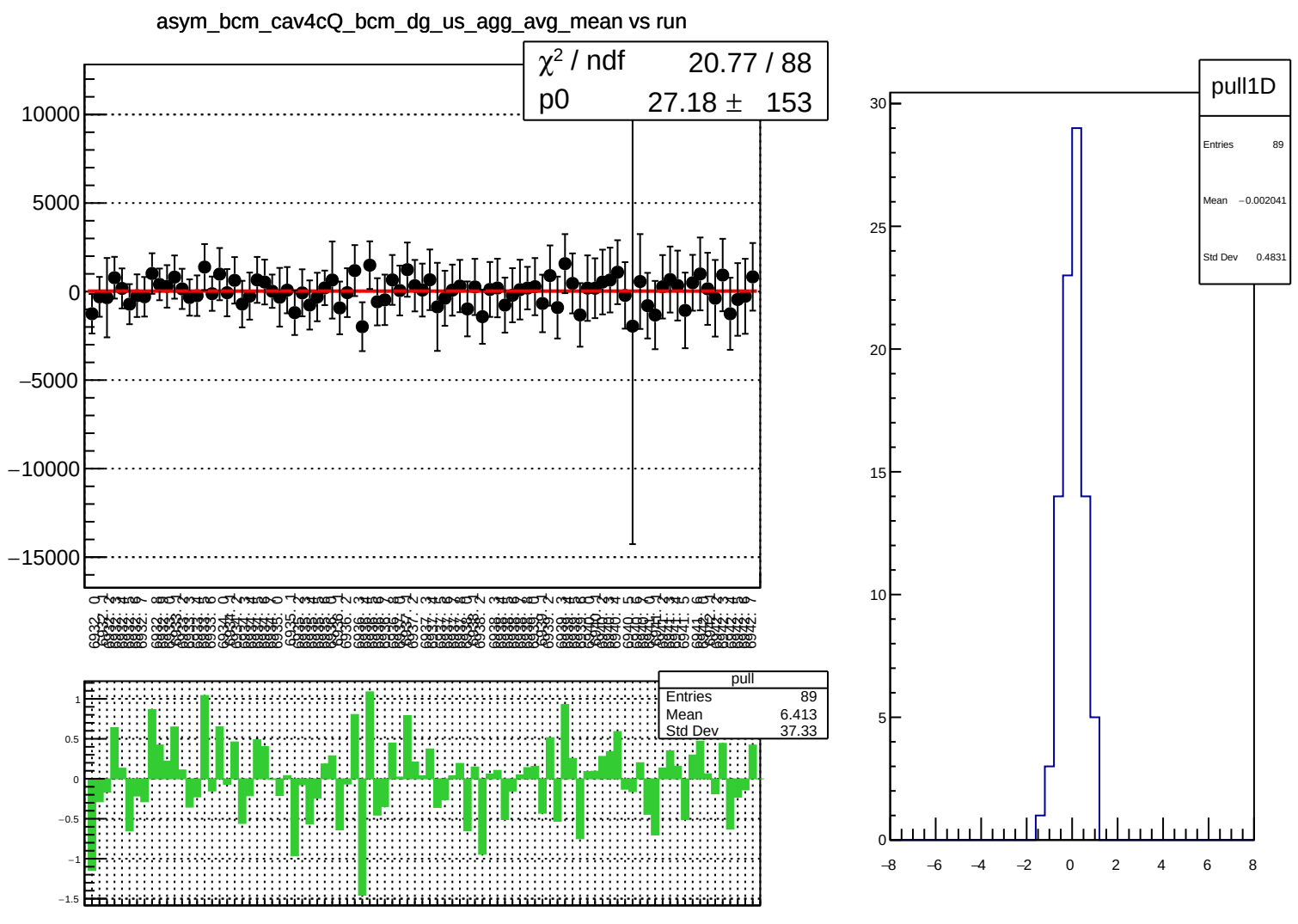

pull1D
Entries 89
Mean −0.0003645
Std Dev 0.4609
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

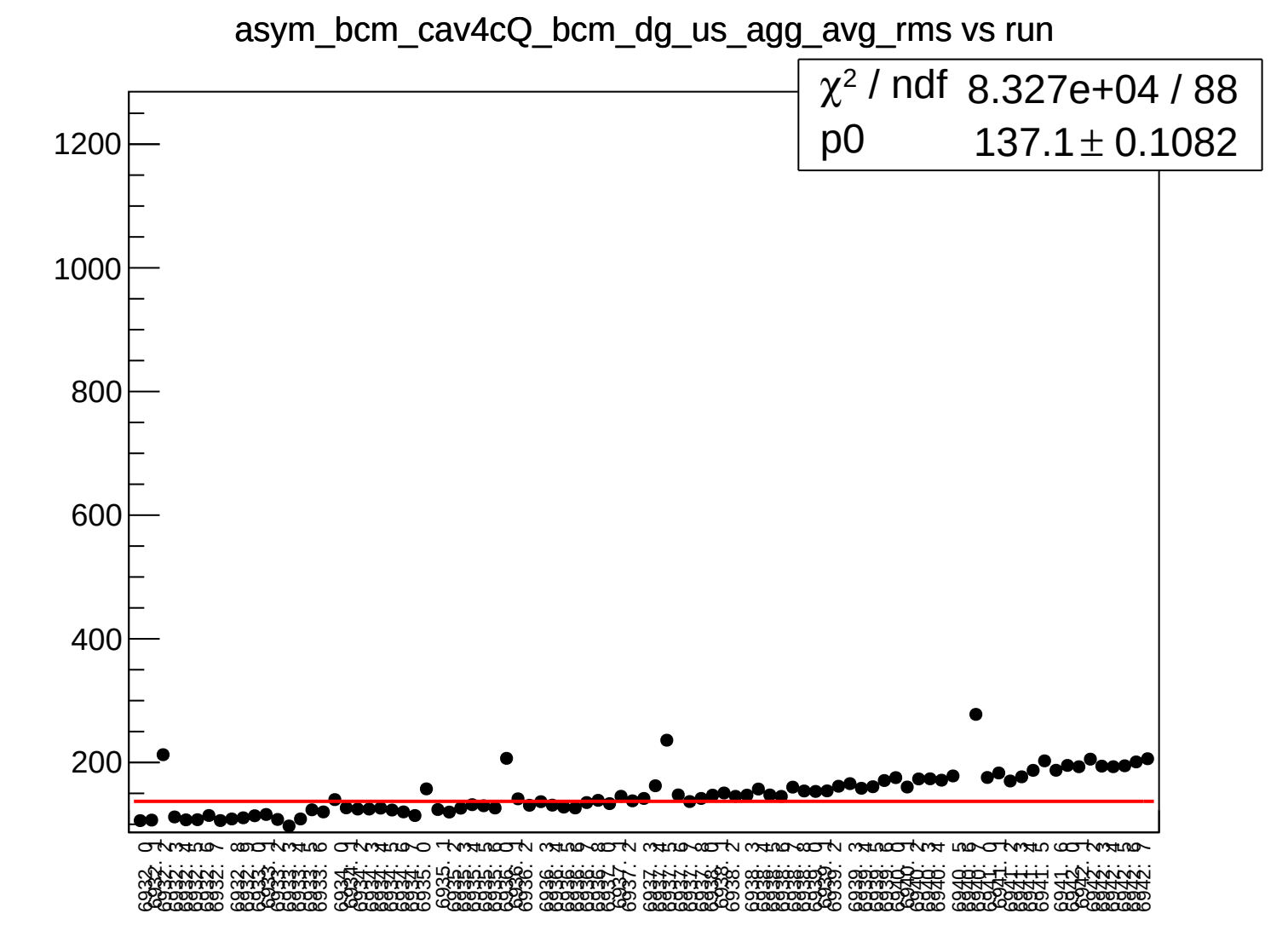

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 8.681e+04 / 88
p0 134.2 ± 0.106
1200
1000
800
600
400
200

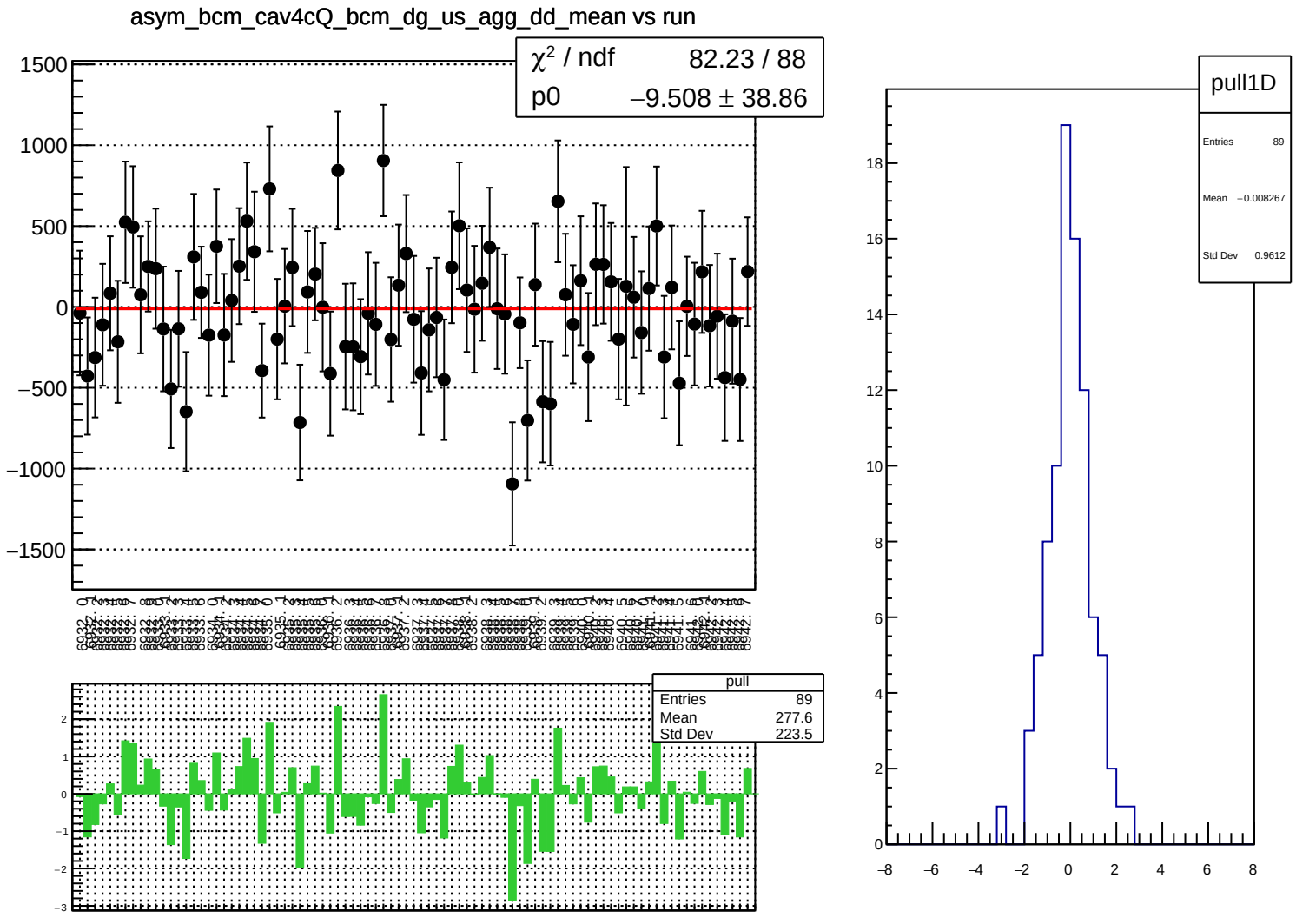

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.65 / 88
p0 25.65 ± 33.57
1000
500
0
−500
−1000
pull
Entries 89
Mean 696.1
Std Dev 649.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

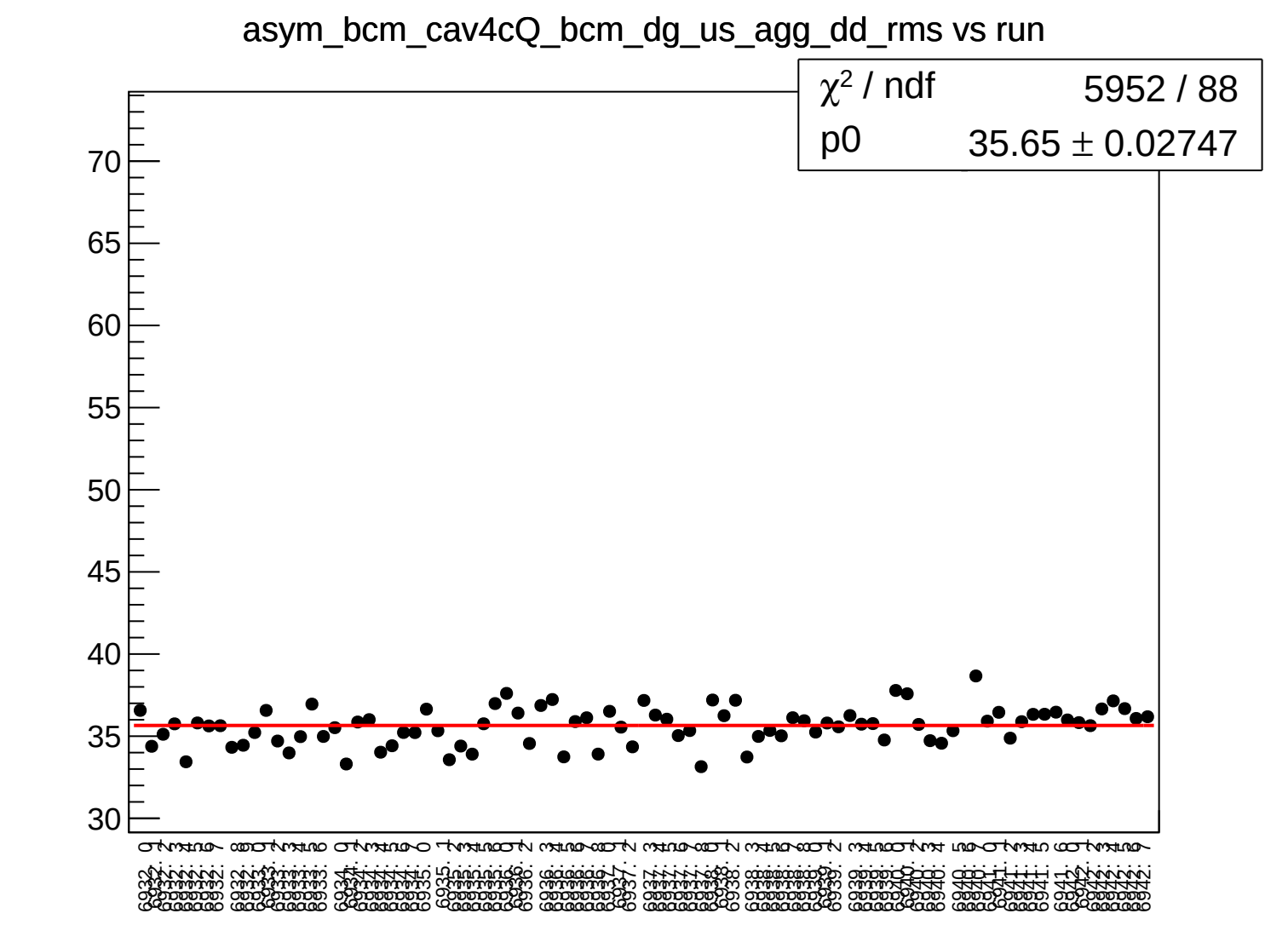

pull1D
Entries 89
Mean −0.005379
Std Dev 0.9636
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

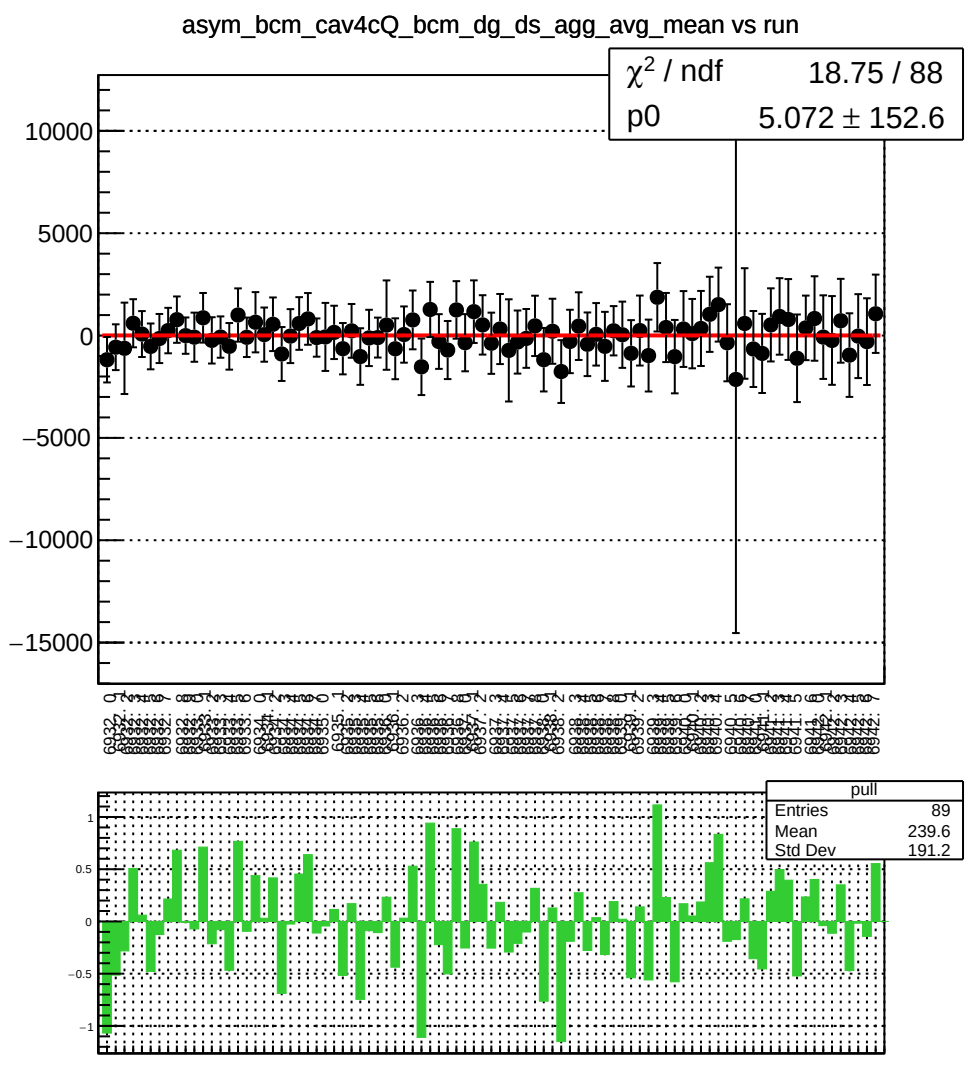

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 9745 / 88
p0 30.77 ± 0.02374
70
60
50
40
30

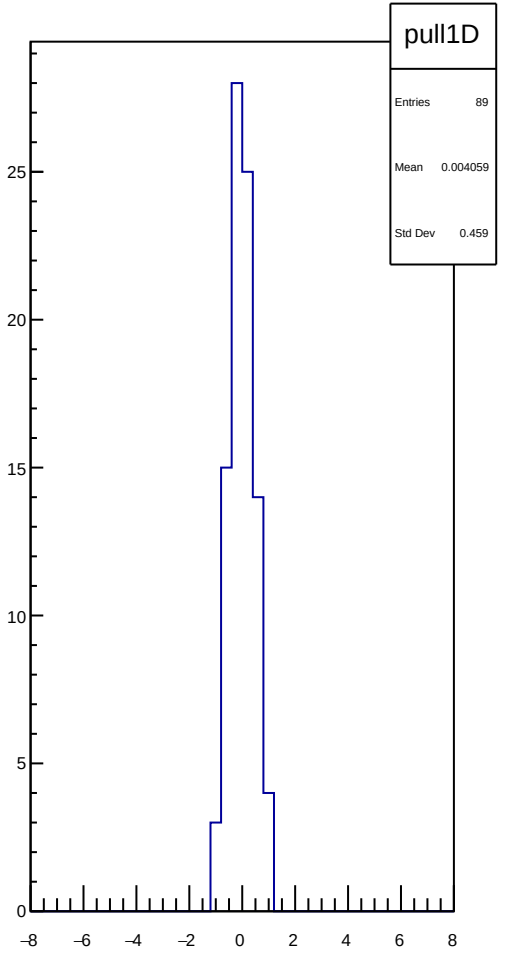

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 20.77 / 88
p0 27.18 ± 153
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 6.413
Std Dev 37.33
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean −0.002041
Std Dev 0.4831
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

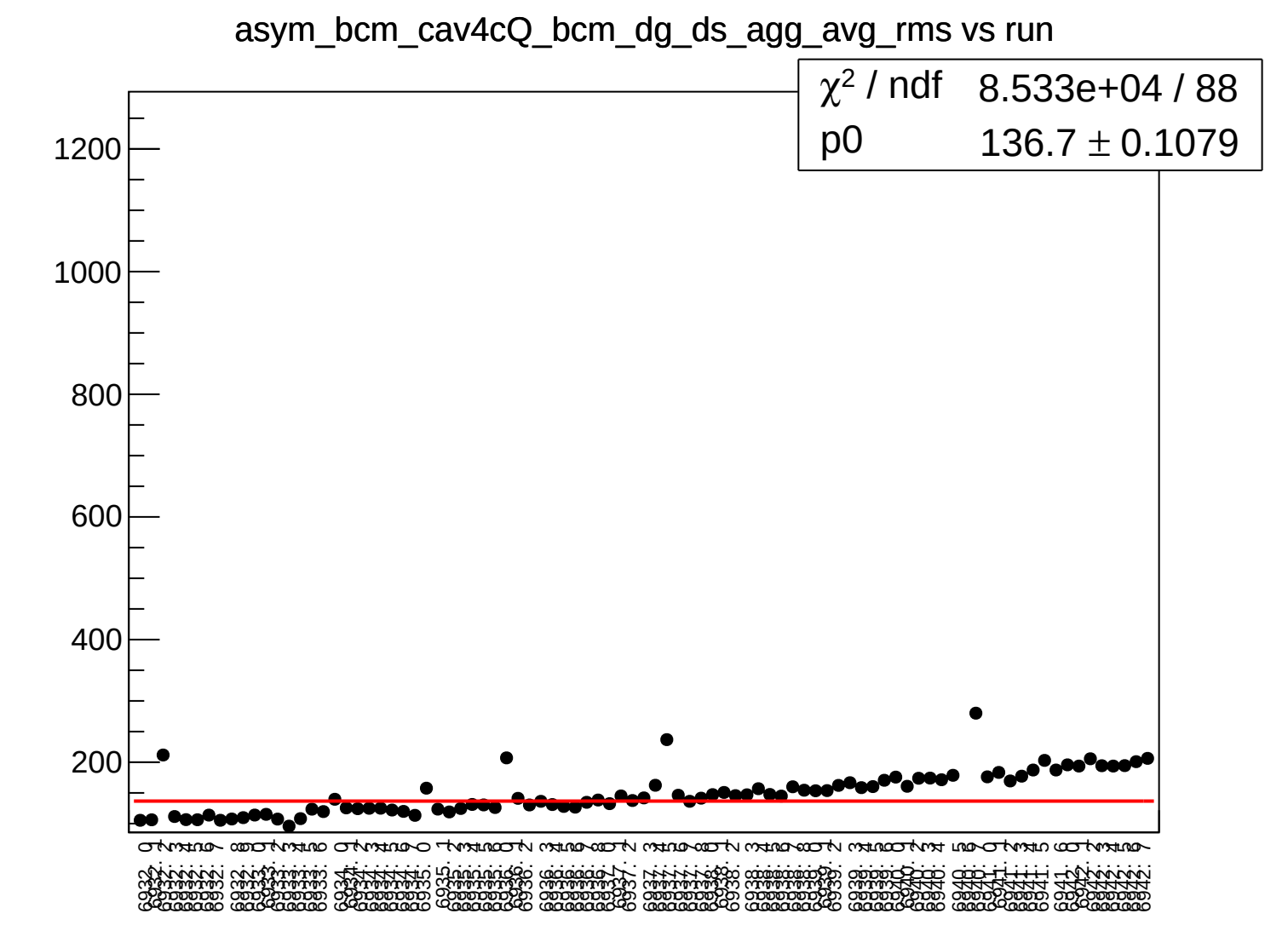

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 8.327e+04 / 88
p0 137.1 ± 0.1082
1200
1000
800
600
400
200

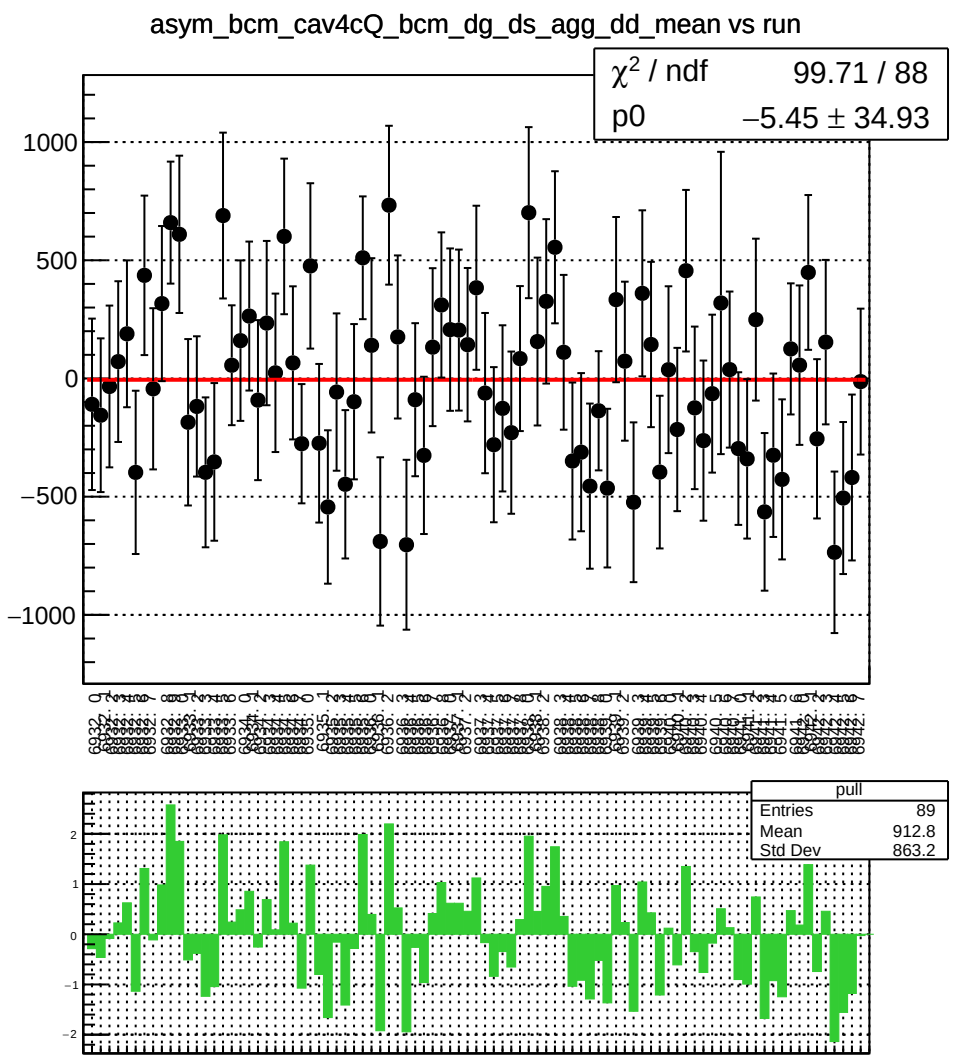

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 82.23 / 88
p0 −9.508 ± 38.86
pull
Entries 89
Mean 277.6
Std Dev 223.5
pull1D
Entries 89
Mean −0.008267
Std Dev 0.9612

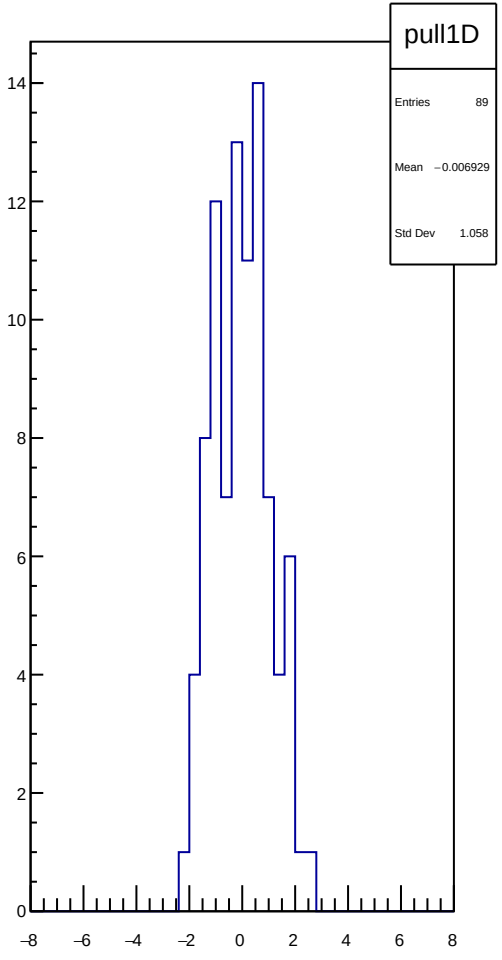

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 5952 / 88
p0 35.65 ± 0.02747
70
65
60
55
50
45
40
35
30

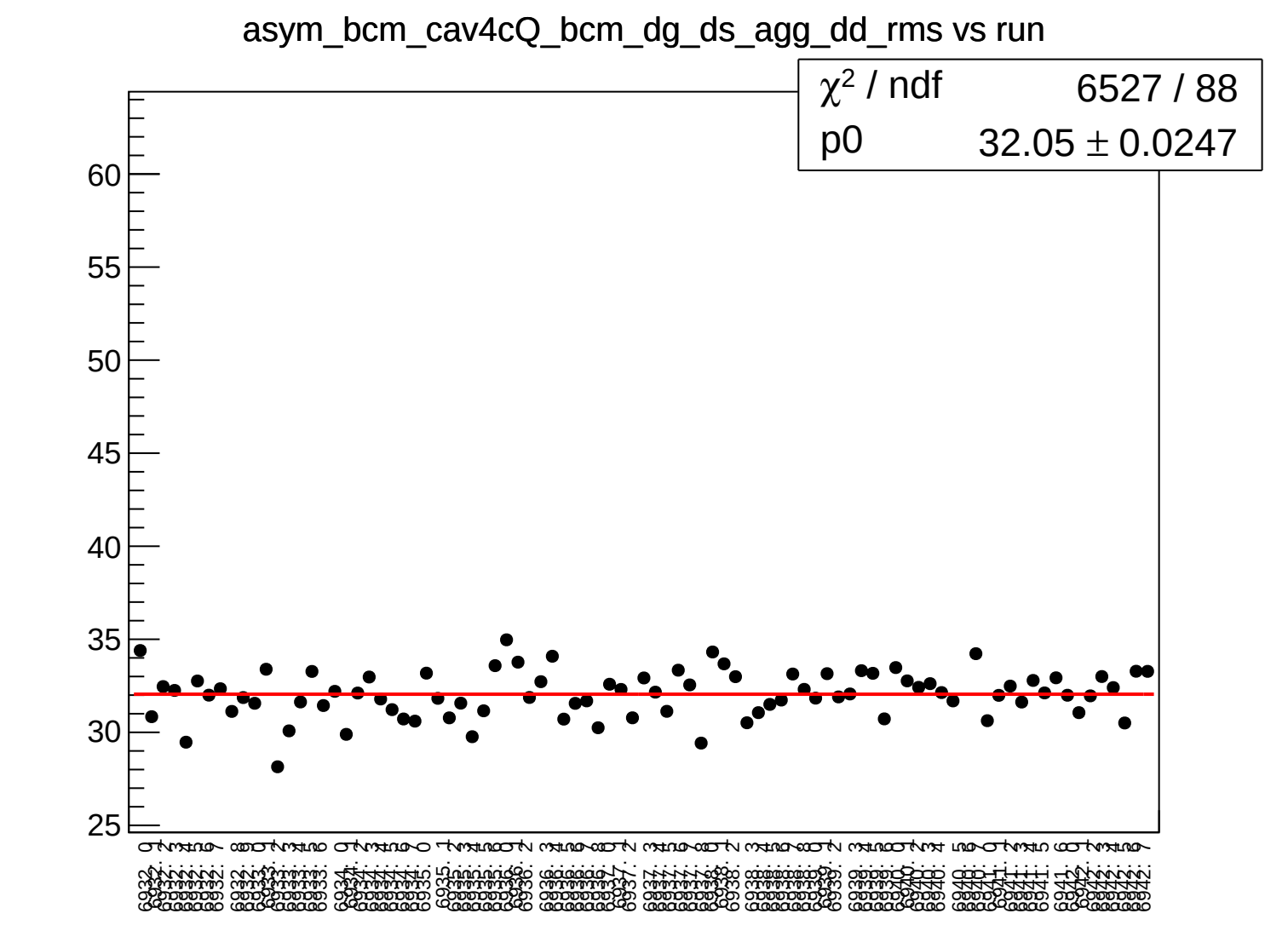

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.75 / 88
p0 5.072 ± 152.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 239.6
Std Dev 191.2
1
0.5
0
−0.5
−1

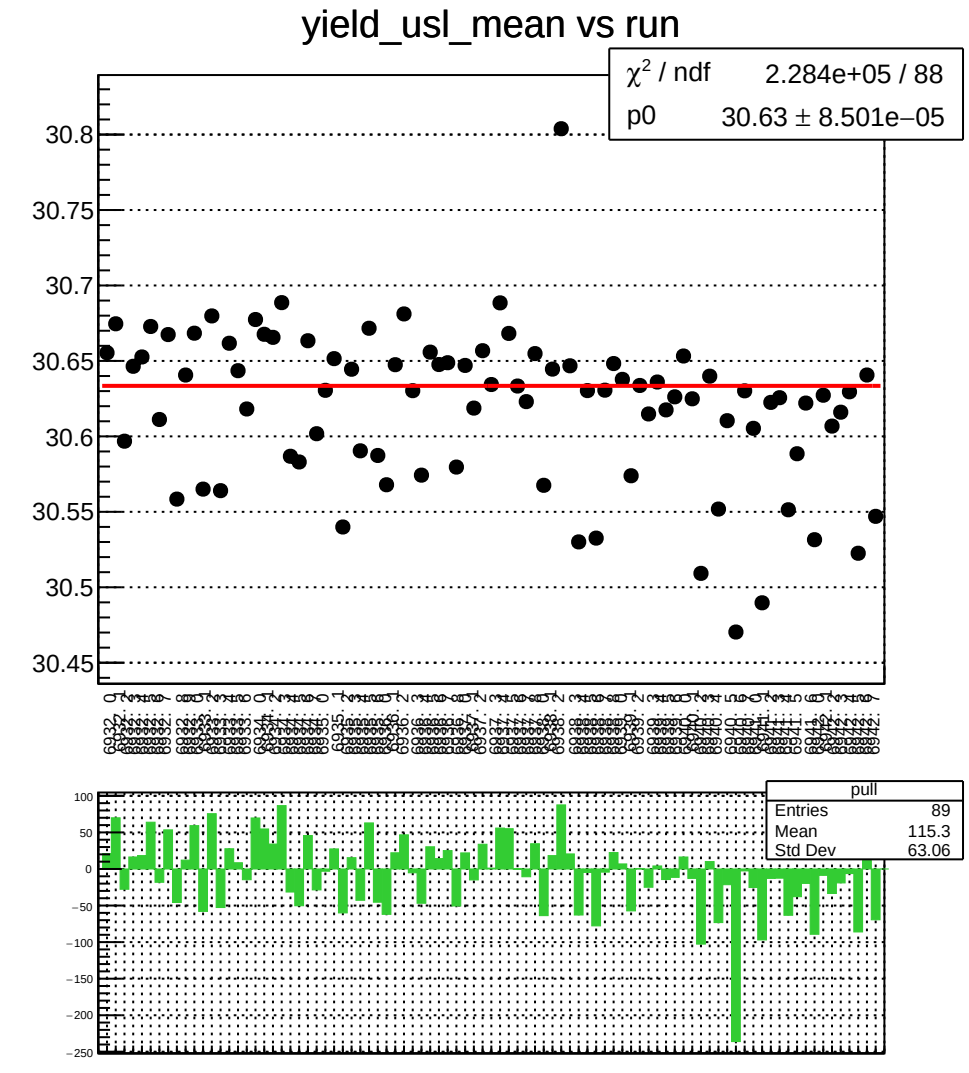

pull1D
Entries 89
Mean 0.004059
Std Dev 0.459
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

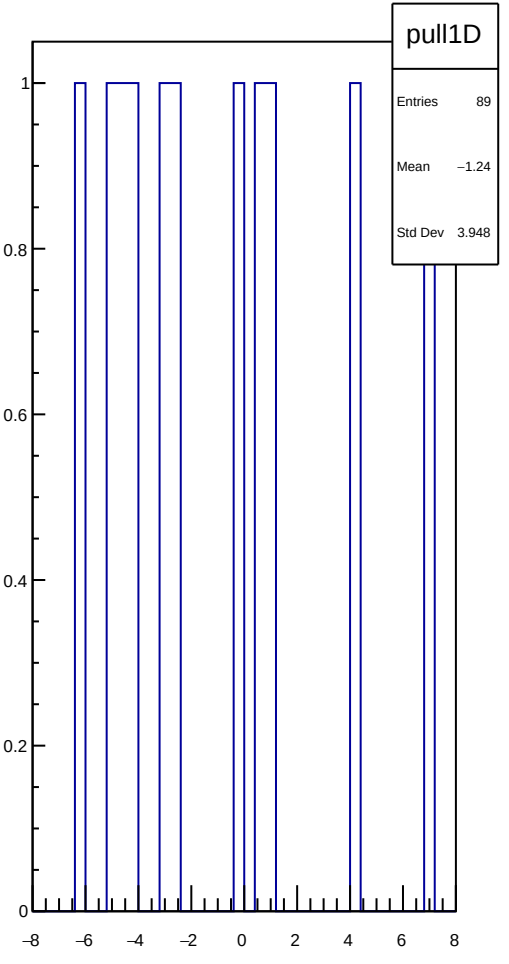

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 8.533e+04 / 88
p0 136.7 ± 0.1079
1200
1000
800
600
400
200

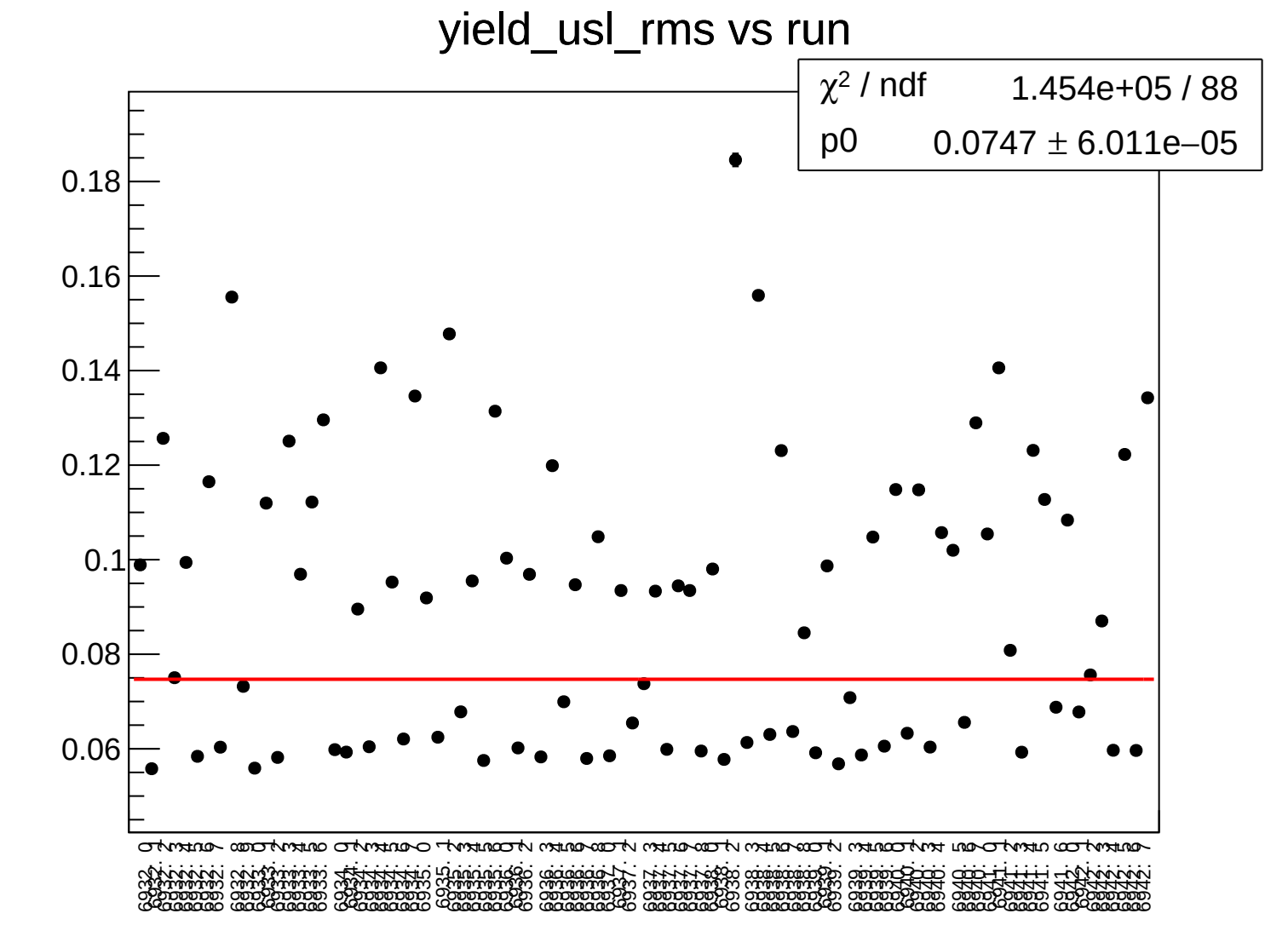

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 99.71 / 88
p0 −5.45 ± 34.93
1000
500
0
−500
−1000
pull
Entries 89
Mean 912.8
Std Dev 863.2
2
1
0
−1
−2

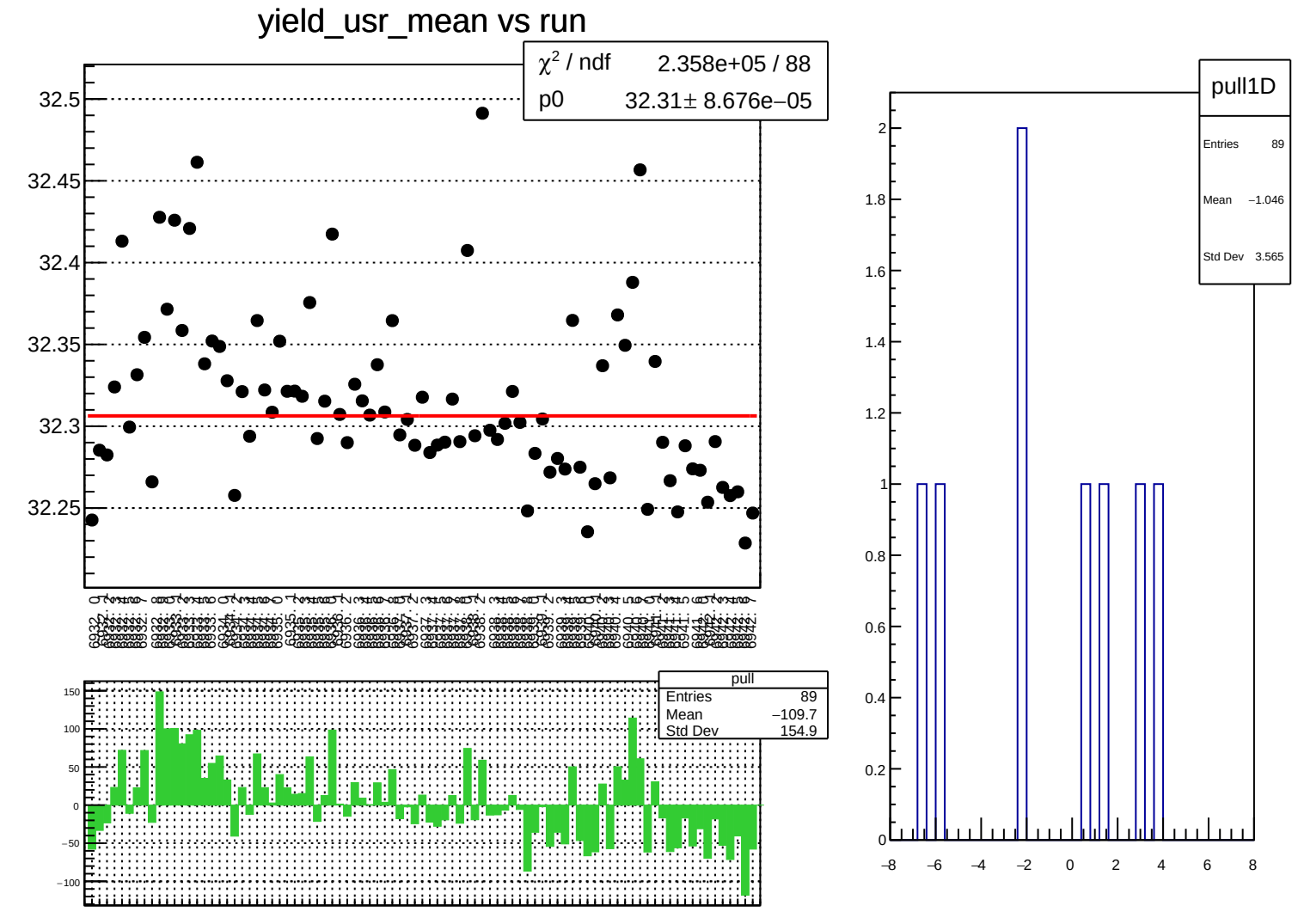

pull1D
Entries 89
Mean −0.006929
Std Dev 1.058
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

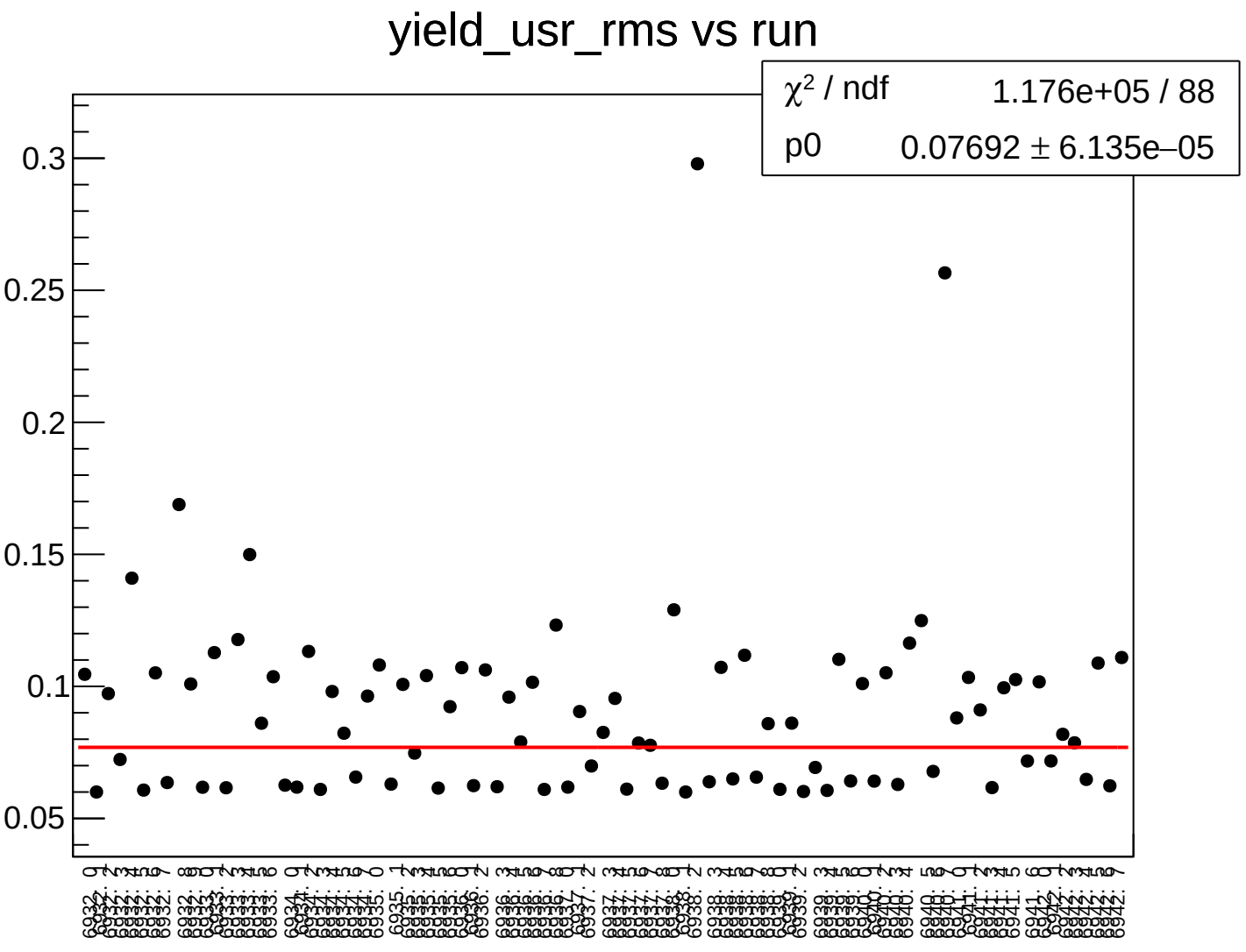

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 6527 / 88
p0 32.05 ± 0.0247
60
55
50
45
40
35
30
25

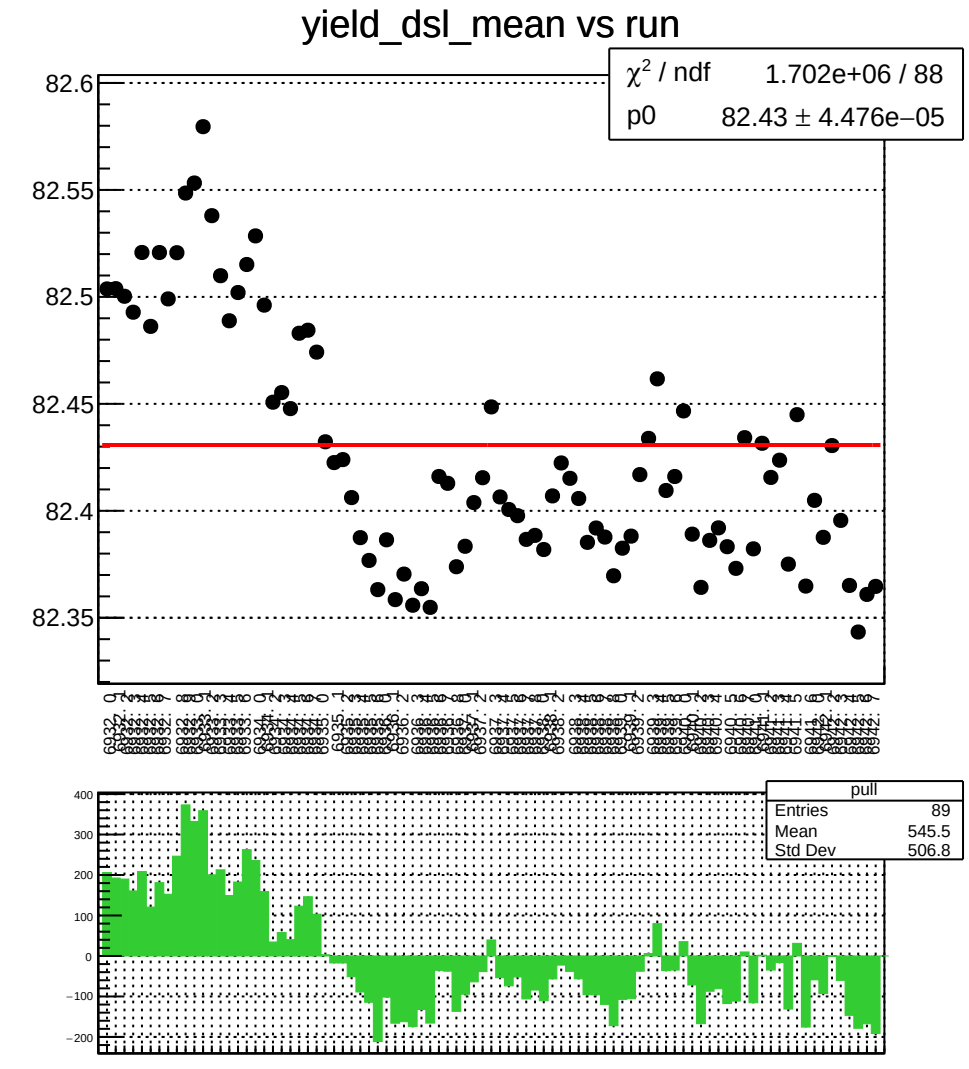

yield_usl_mean vs run
χ² / ndf 2.284e+05 / 88
p0 30.63 ± 8.501e−05
30.8
30.75
30.7
30.65
30.6
30.55
30.5
30.45
pull
Entries 89
Mean 115.3
Std Dev 63.06
100
50
0
−50
−100
−150
−200
−250

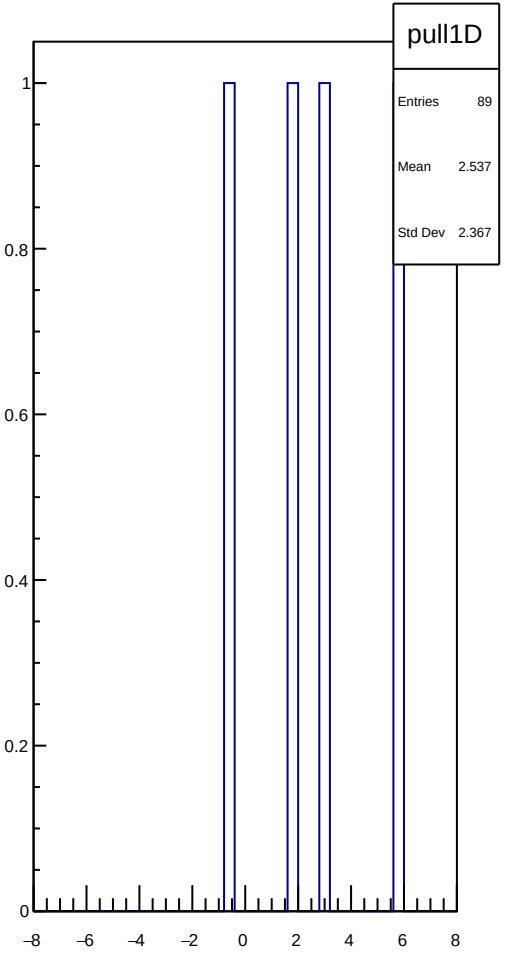

pull1D
Entries 89
Mean −1.24
Std Dev 3.948
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

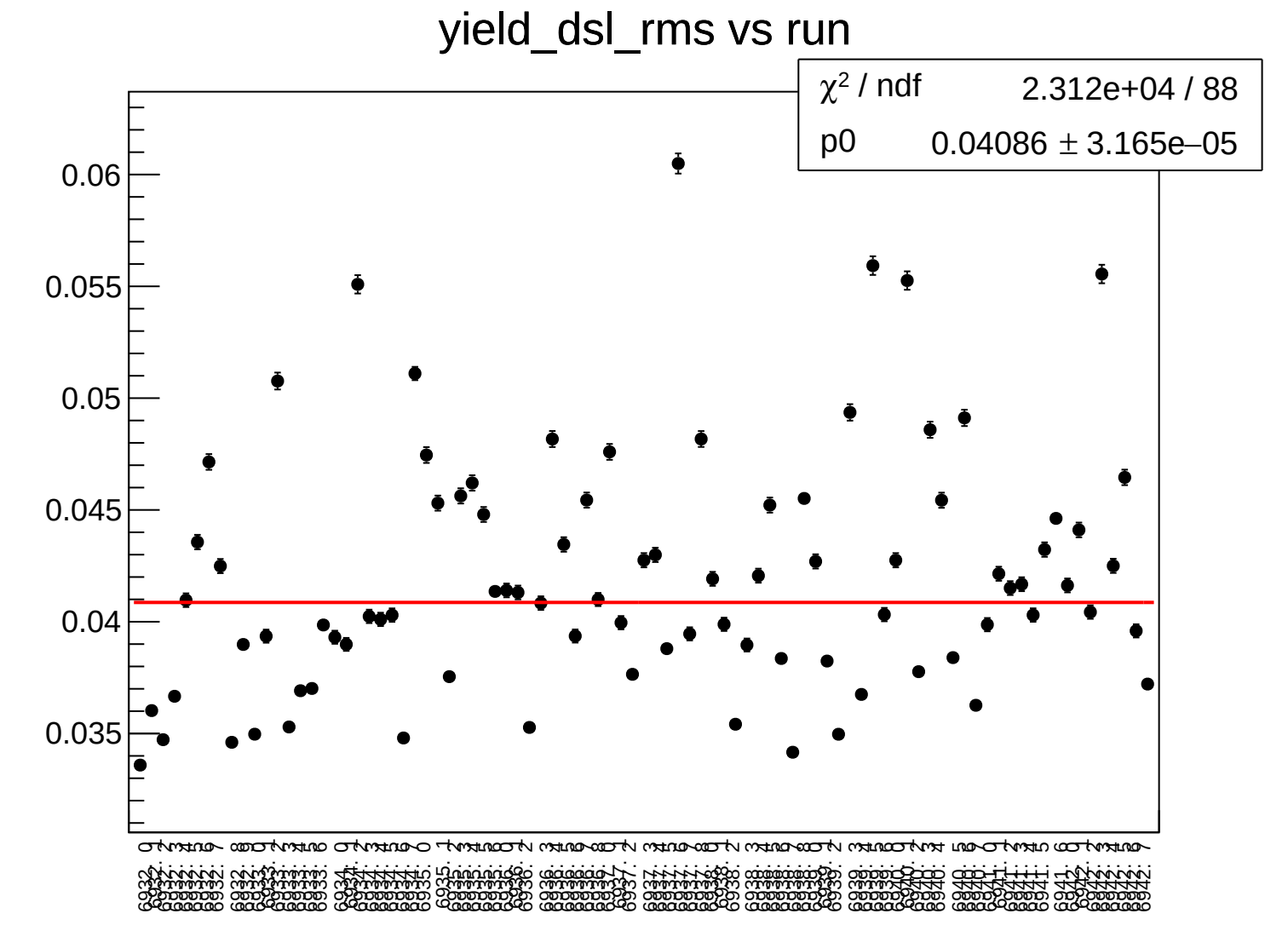

yield_usl_rms vs run
χ² / ndf 1.454e+05 / 88
p0 0.0747 ± 6.011e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06

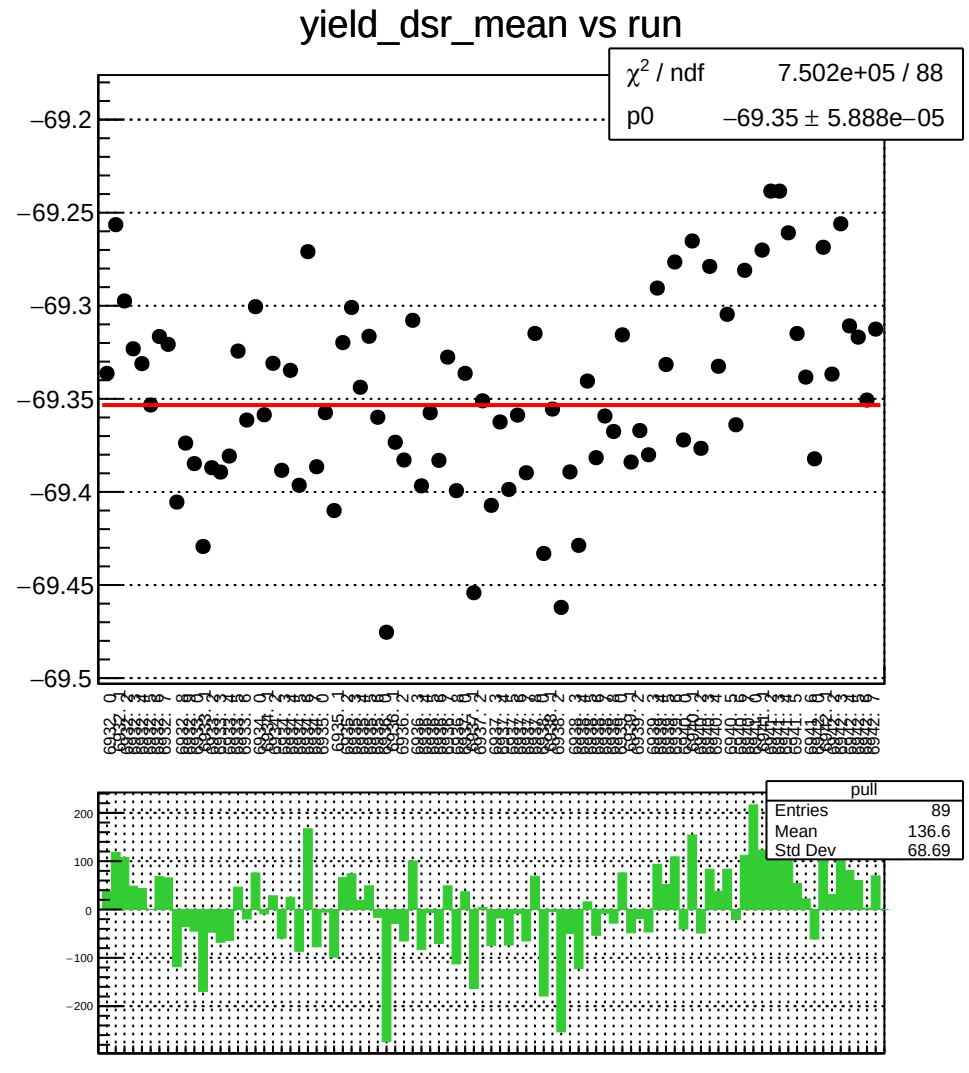

yield_usr_mean vs run
χ² / ndf 2.358e+05 / 88
p0 32.31± 8.676e−05
32.5
32.45
32.4
32.35
32.3
32.25
pull
Entries 89
Mean −109.7
Std Dev 154.9
150
100
50
0
−50
−100
pull1D
Entries 89
Mean −1.046
Std Dev 3.565
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

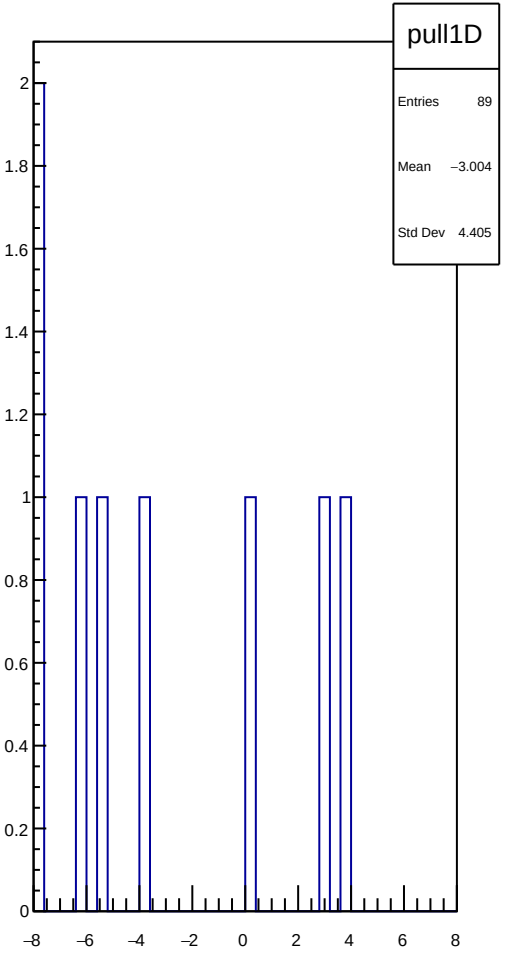

yield_usr_rms vs run
χ² / ndf 1.176e+05 / 88
p0 0.07692 ± 6.135e−05
0.3
0.25
0.2
0.15
0.1
0.05

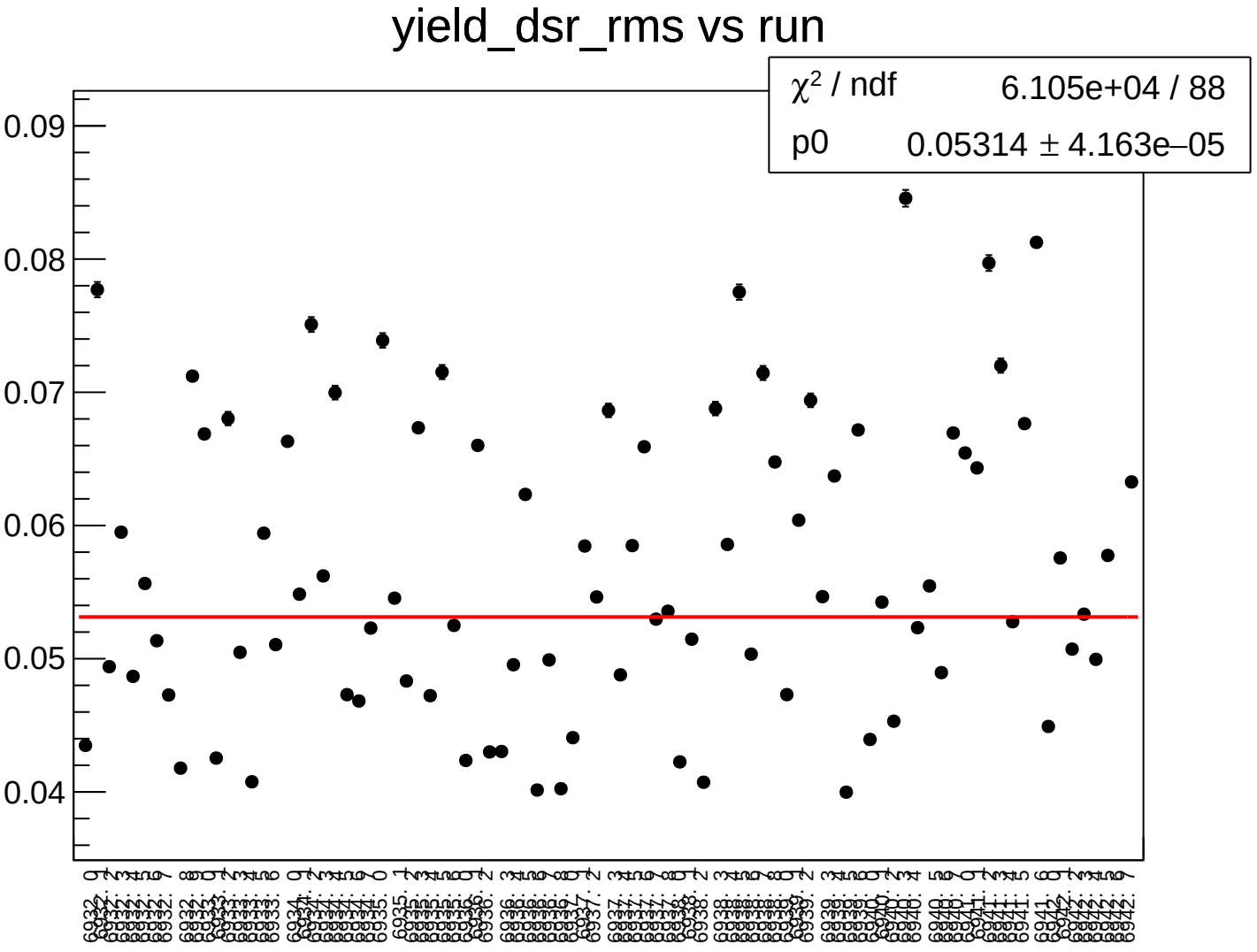

yield_dsl_mean vs run
χ² / ndf 1.702e+06 / 88
p0 82.43 ± 4.476e−05
82.6
82.55
82.5
82.45
82.4
82.35
pull
Entries 89
Mean 545.5
Std Dev 506.8
400
300
200
100
0
−100
−200

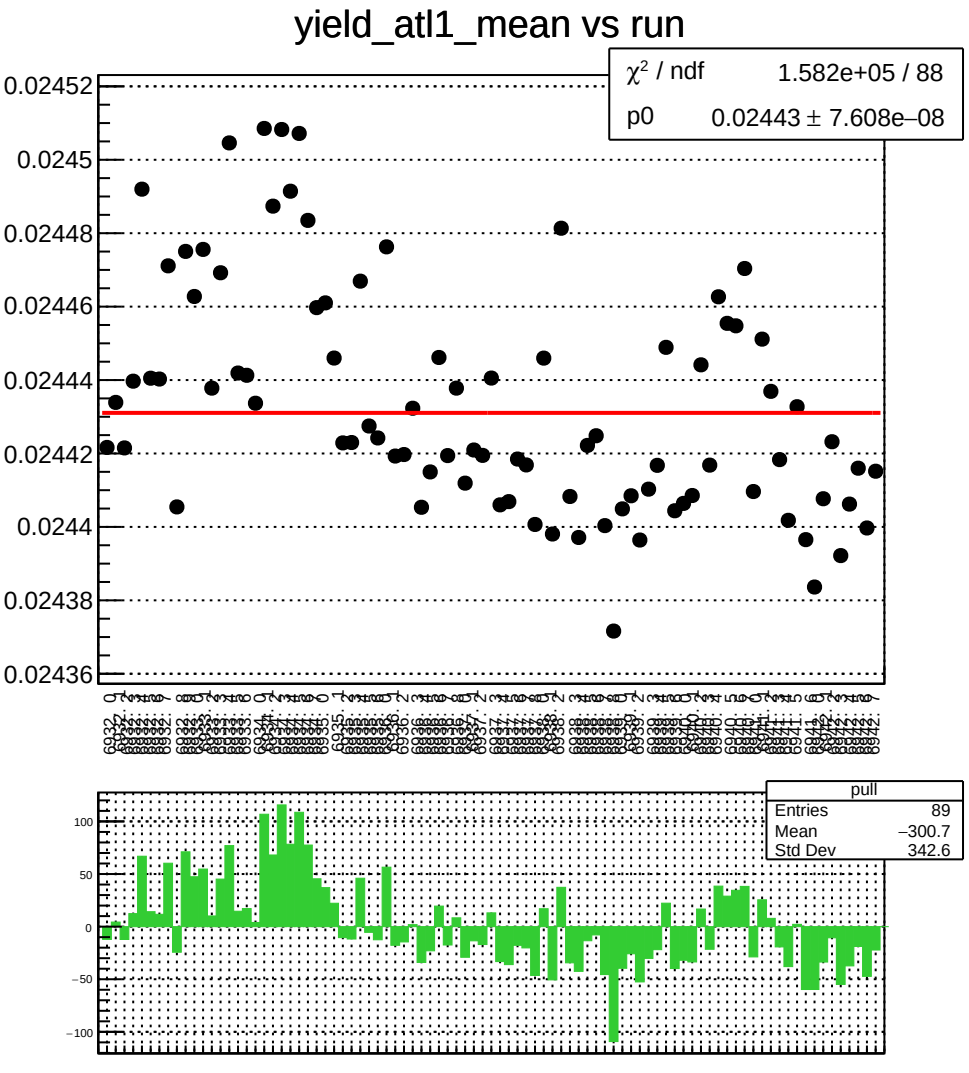

pull1D
Entries 89
Mean 2.537
Std Dev 2.367
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

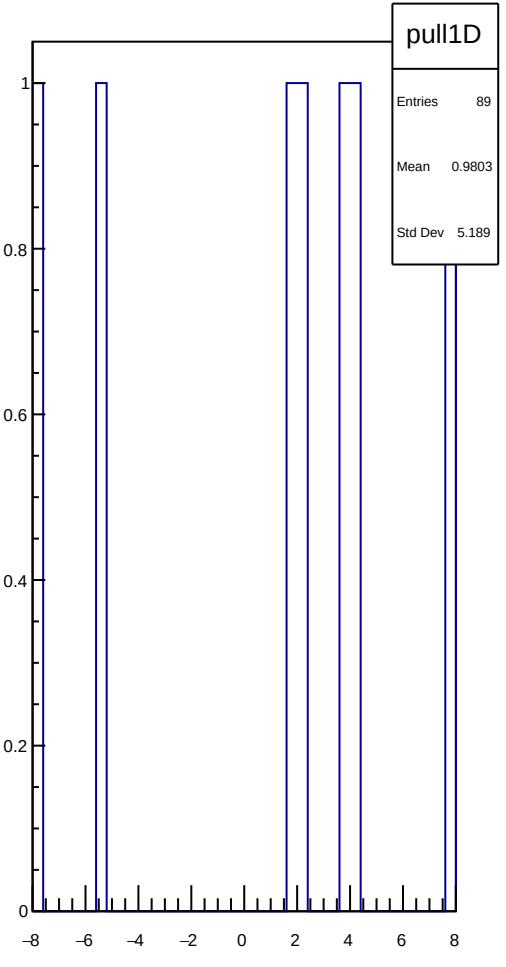

yield_dsl_rms vs run
χ² / ndf 2.312e+04 / 88
p0 0.04086 ± 3.165e−05
0.06
0.055
0.05
0.045
0.04
0.035

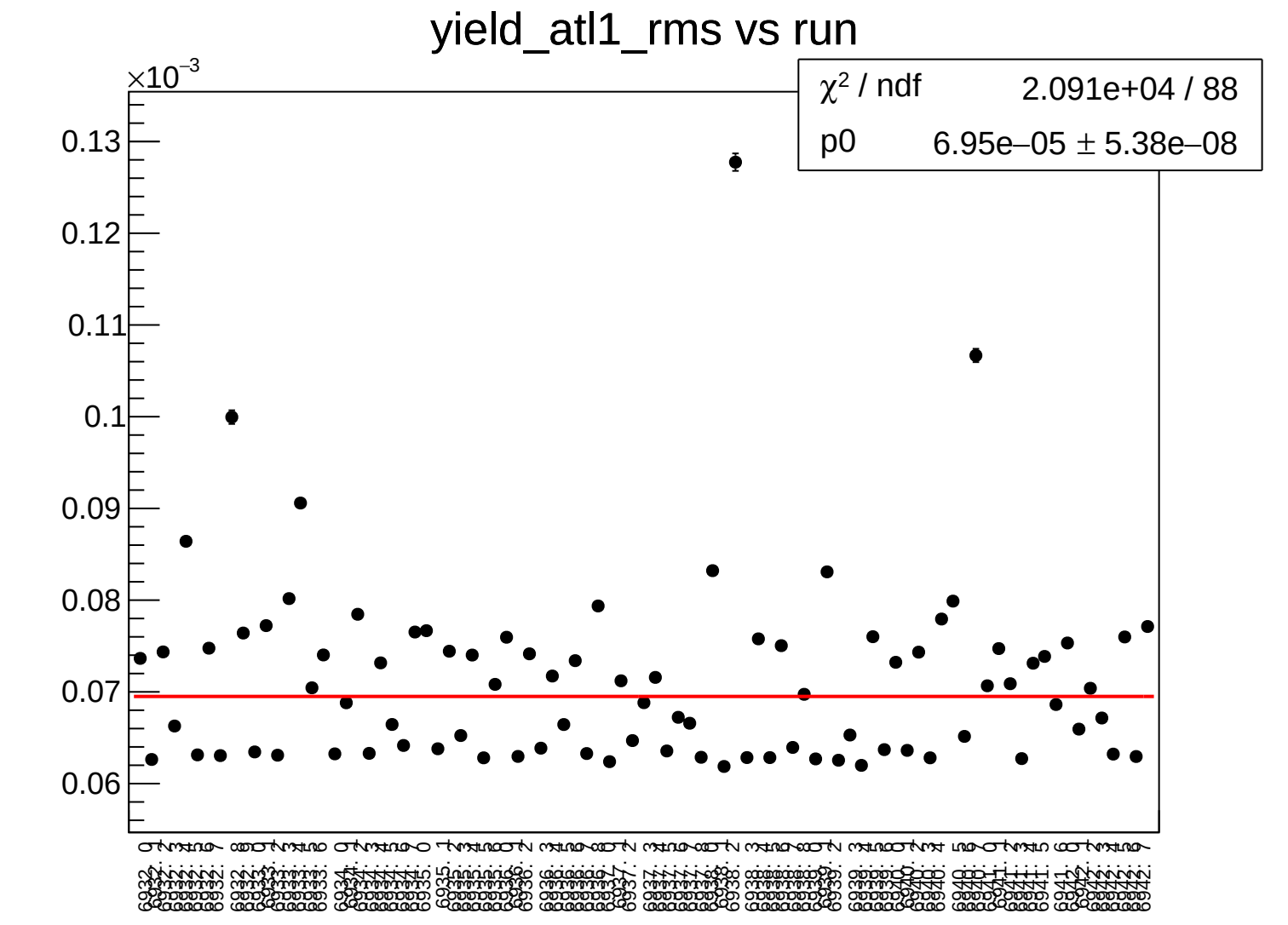

yield_dsr_mean vs run
χ² / ndf 7.502e+05 / 88
p0 −69.35 ± 5.888e−05
−69.2
−69.25
−69.3
−69.35
−69.4
−69.45
−69.5
pull
Entries 89
Mean 136.6
Std Dev 68.69
200
100
0
−100
−200

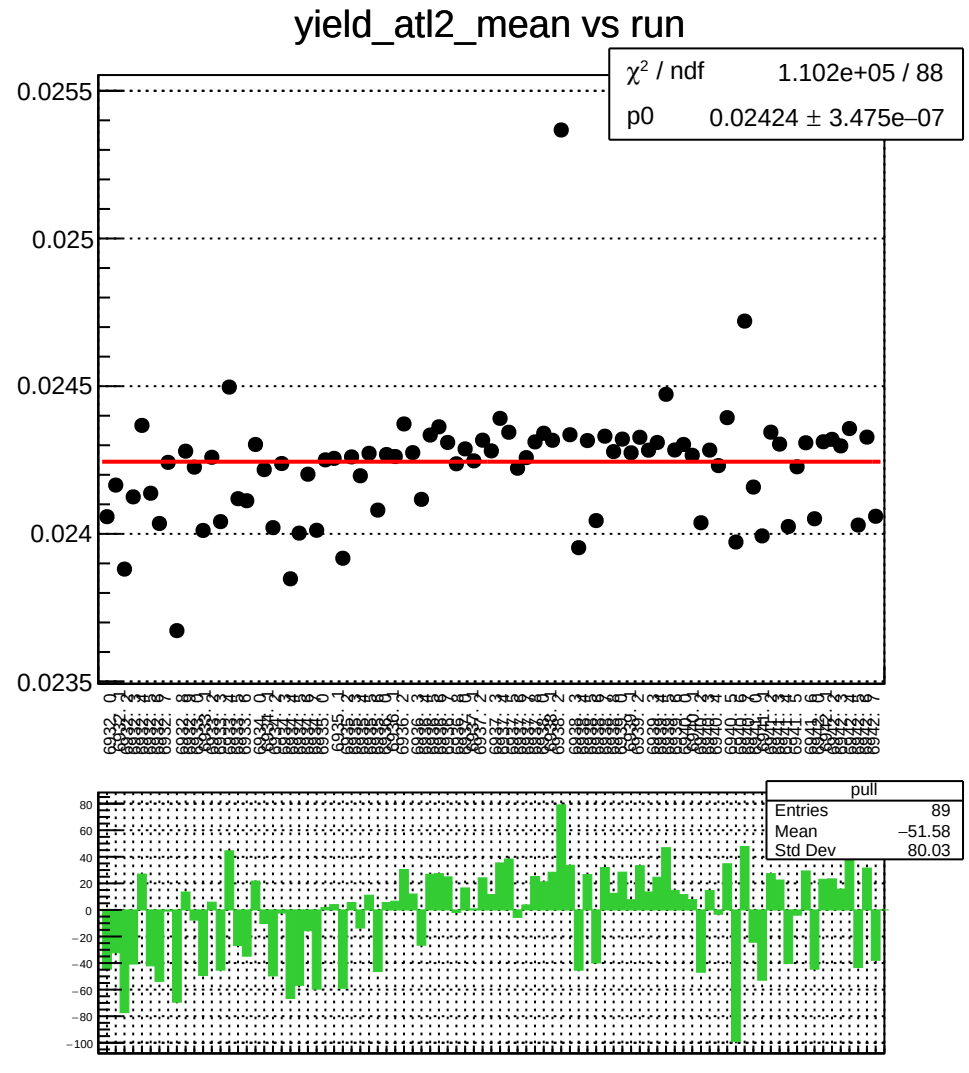

pull1D
Entries 89
Mean −3.004
Std Dev 4.405
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

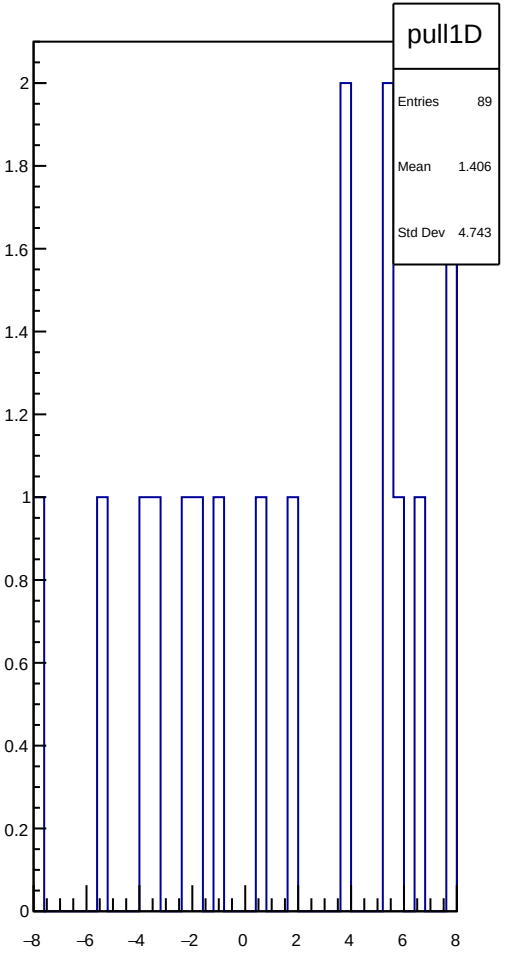

yield_dsr_rms vs run
χ² / ndf 6.105e+04 / 88
p0 0.05314 ± 4.163e–05
0.09
0.08
0.07
0.06
0.05
0.04

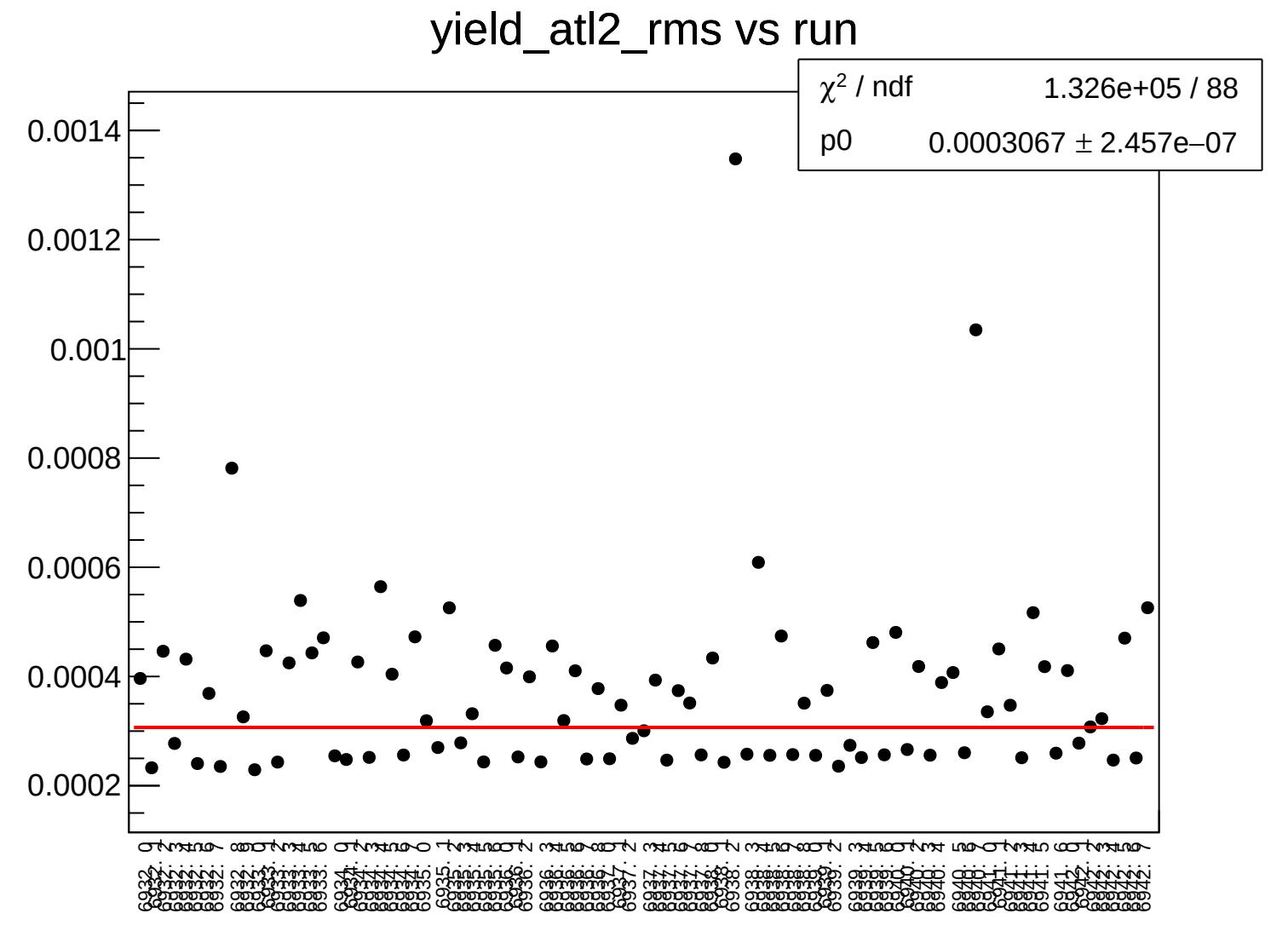

yield_atl1_mean vs run
χ² / ndf 1.582e+05 / 88
p0 0.02443 ± 7.608e–08
0.02452
0.0245
0.02448
0.02446
0.02444
0.02442
0.0244
0.02438
0.02436
pull
Entries 89
Mean –300.7
Std Dev 342.6
100
50
0
–50
–100

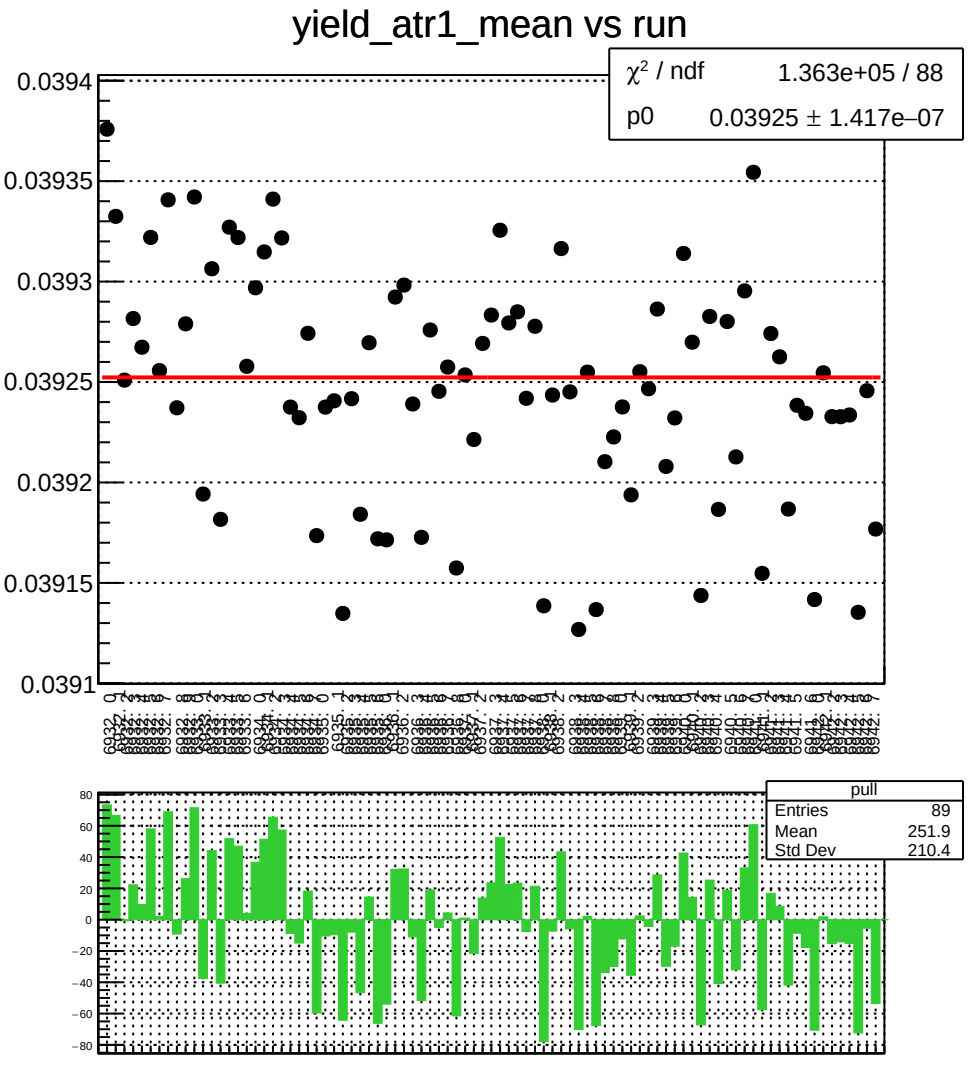

pull1D
Entries 89
Mean 0.9803
Std Dev 5.189
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

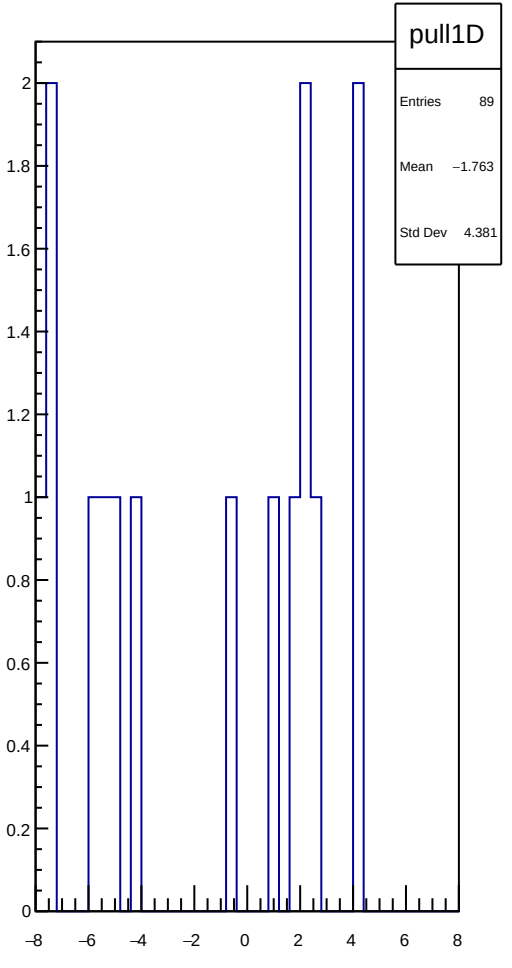

yield_atl1_rms vs run
×10⁻³
χ² / ndf 2.091e+04 / 88
p0 6.95e−05 ± 5.38e−08
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06

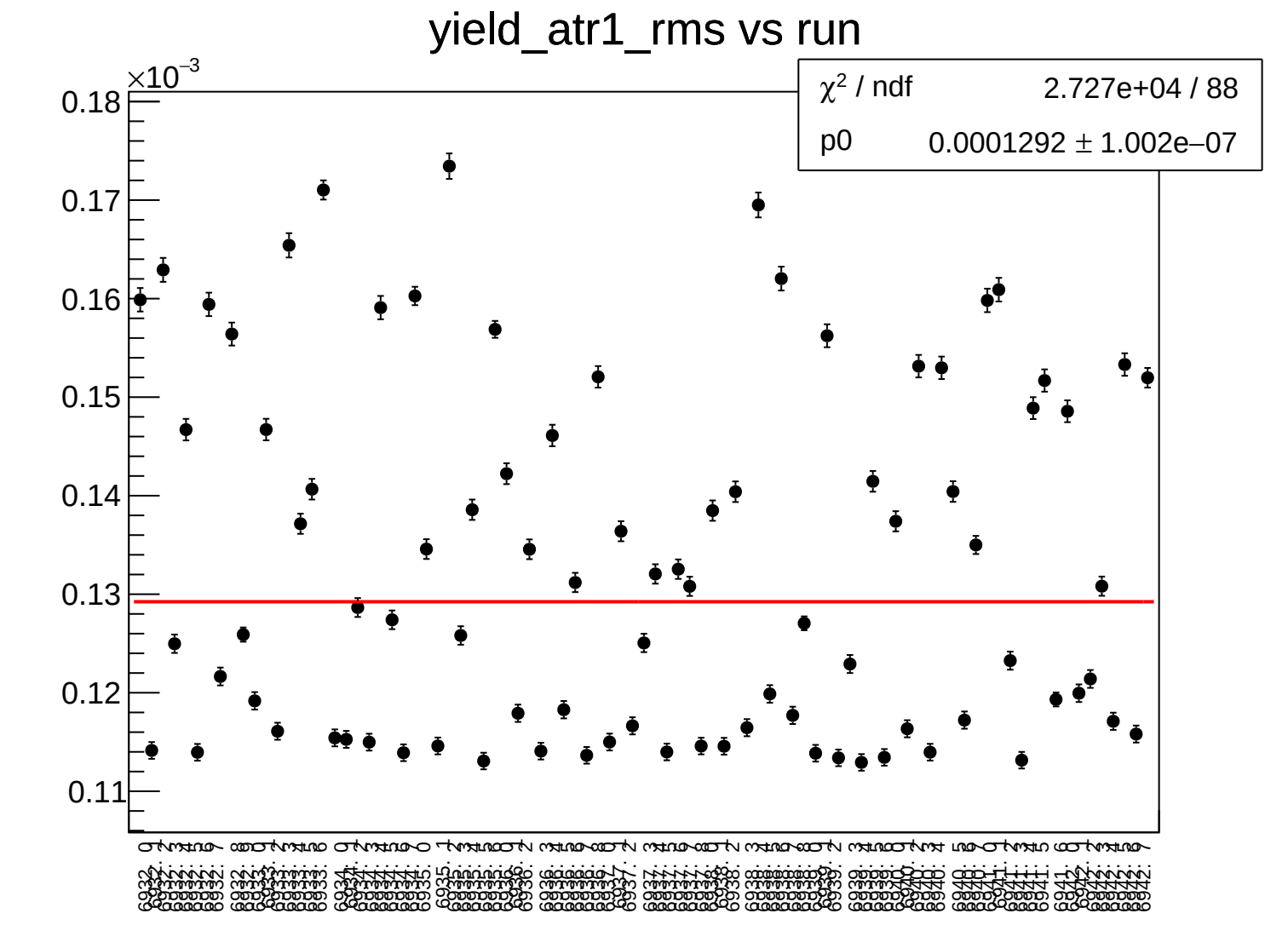

yield_atl2_mean vs run
χ² / ndf 1.102e+05 / 88
p0 0.02424 ± 3.475e–07
0.0255
0.025
0.0245
0.024
0.0235
pull
Entries 89
Mean –51.58
Std Dev 80.03
80
60
40
20
0
–20
–40
–60
–80
–100

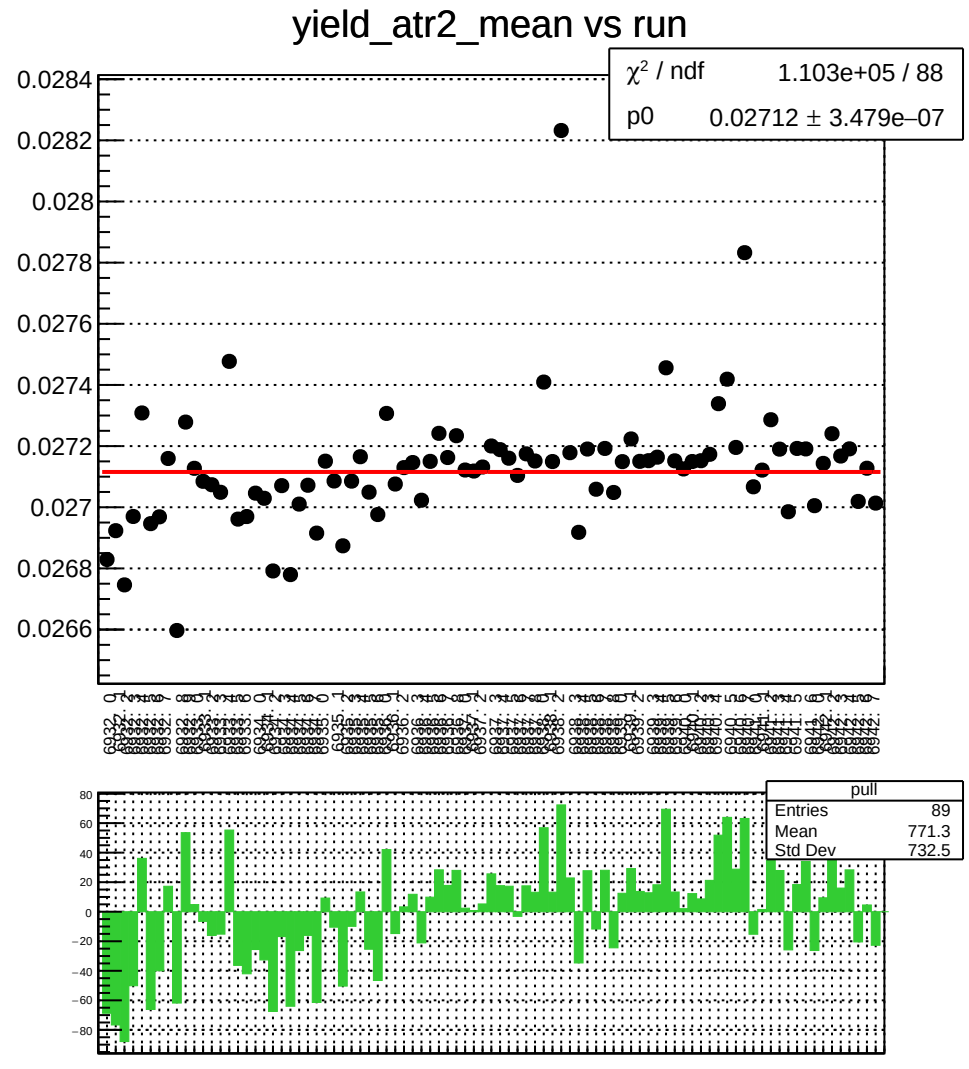

pull1D
Entries 89
Mean 1.406
Std Dev 4.743
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

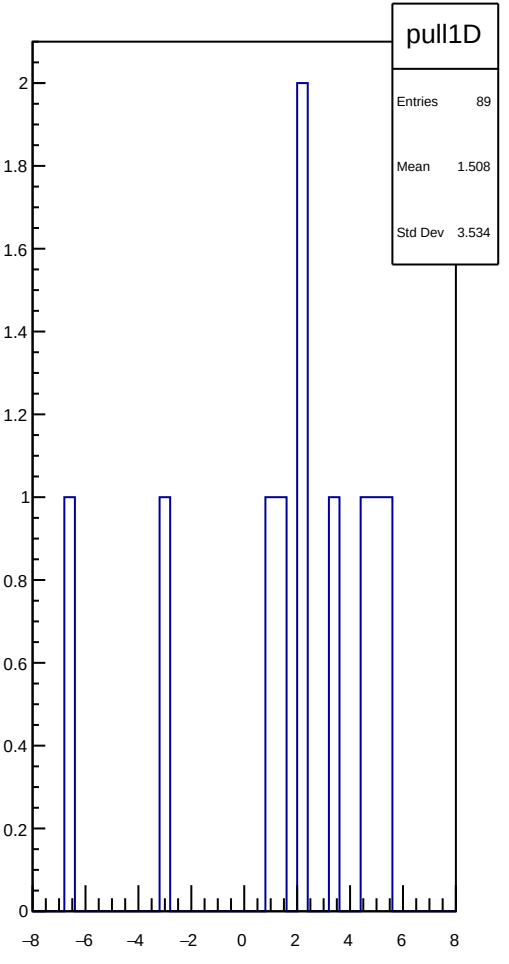

yield_atl2_rms vs run
χ² / ndf 1.326e+05 / 88
p0 0.0003067 ± 2.457e−07
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002

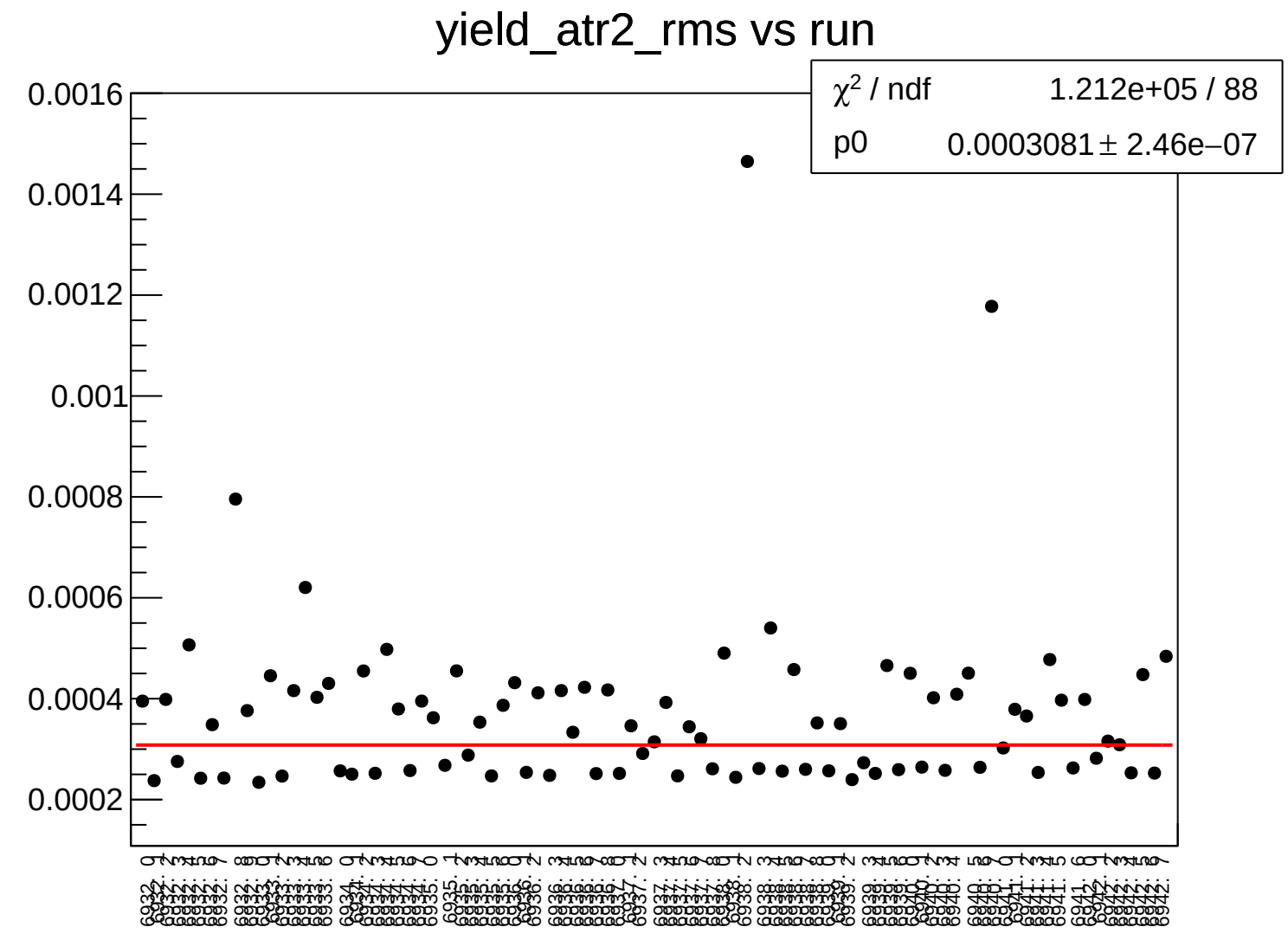

yield_atr1_mean vs run
χ² / ndf 1.363e+05 / 88
p0 0.03925 ± 1.417e−07
0.0394
0.03935
0.0393
0.03925
0.0392
0.03915
0.0391
pull
Entries 89
Mean 251.9
Std Dev 210.4
80
60
40
20
0
−20
−40
−60
−80

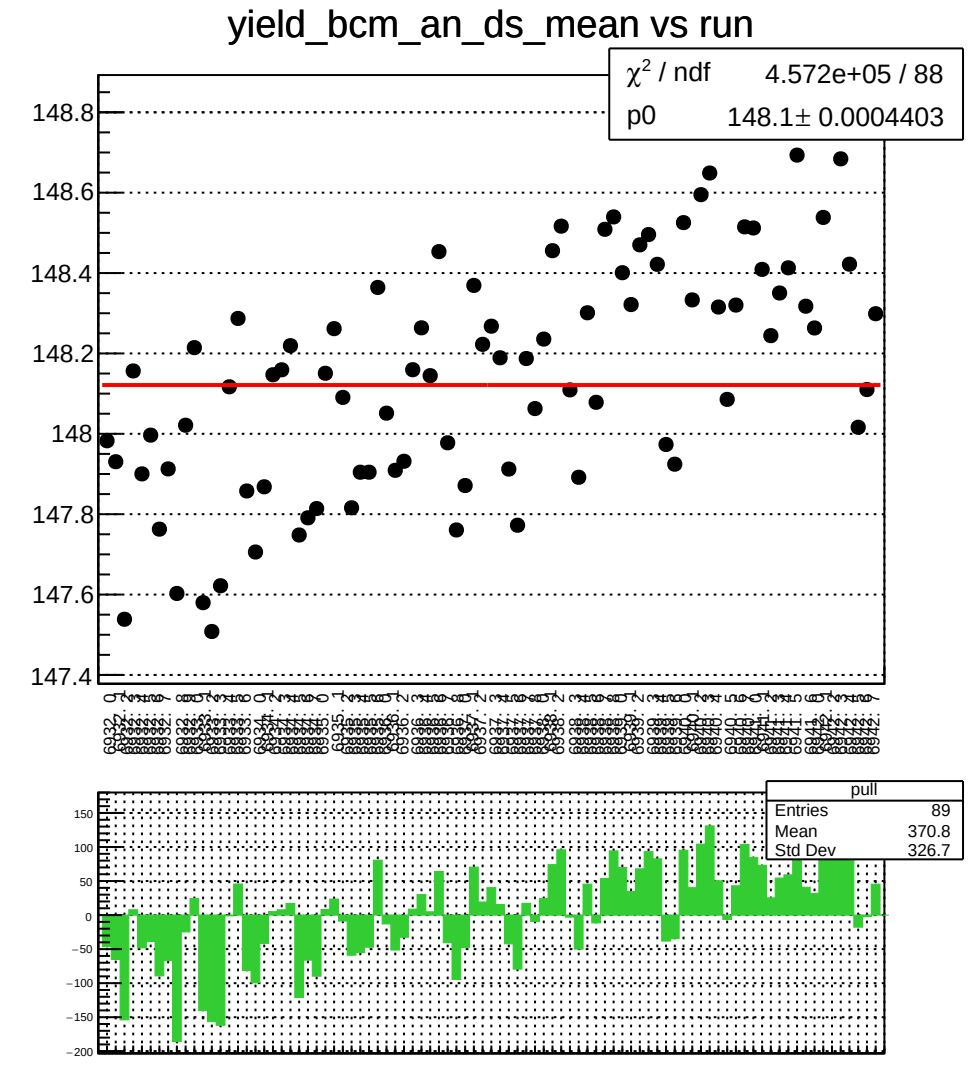

pull1D
Entries 89
Mean −1.763
Std Dev 4.381
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

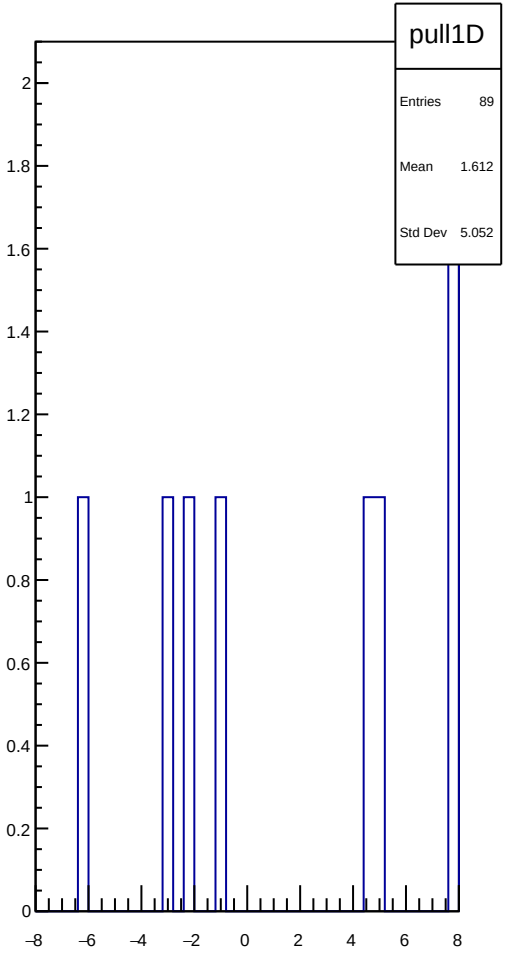

yield_atr1_rms vs run
×10⁻³
χ² / ndf 2.727e+04 / 88
p0 0.0001292 ± 1.002e−07
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11

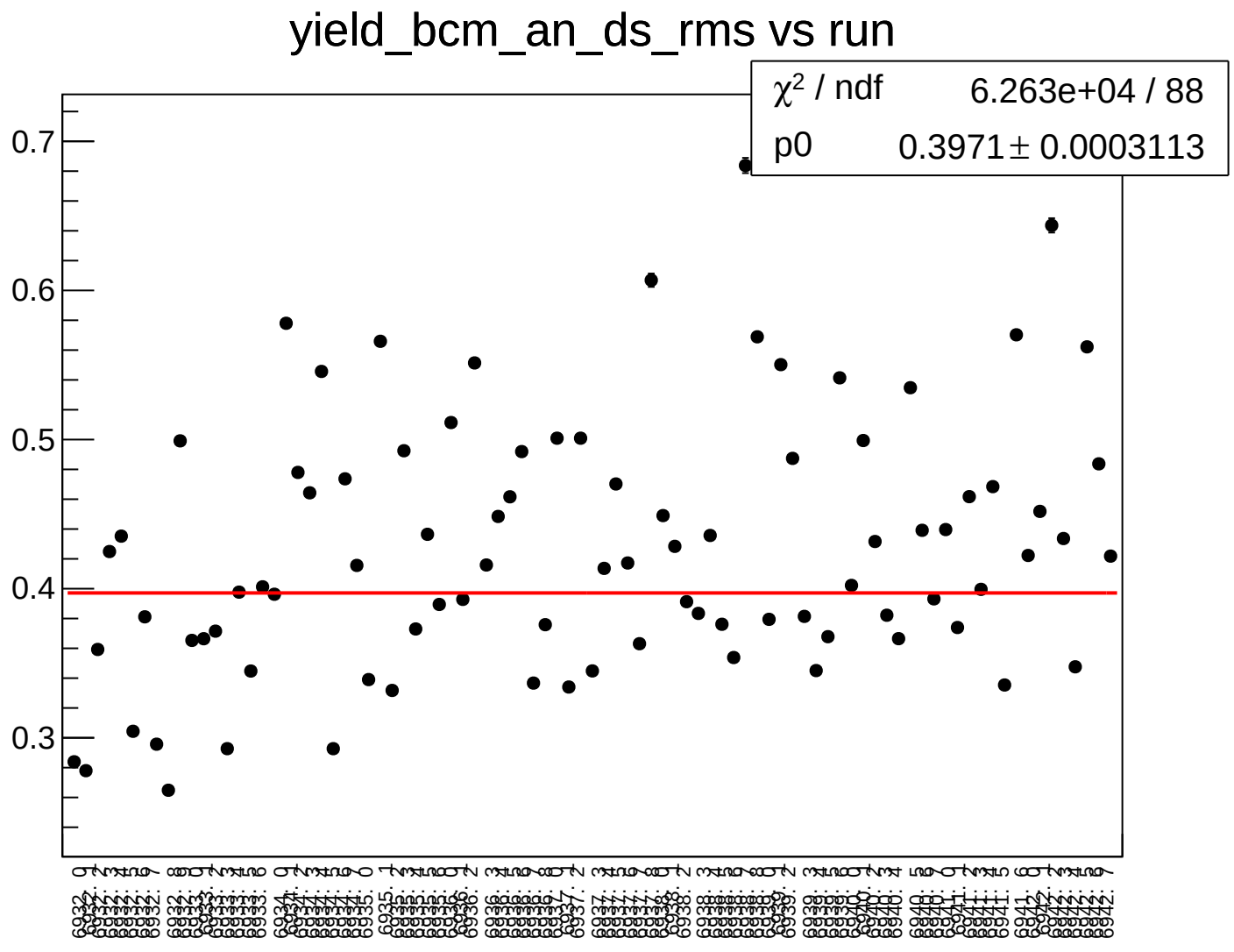

yield_atr2_mean vs run
χ² / ndf 1.103e+05 / 88
p0 0.02712 ± 3.479e−07
0.0284
0.0282
0.028
0.0278
0.0276
0.0274
0.0272
0.027
0.0268
0.0266
pull
Entries 89
Mean 771.3
Std Dev 732.5
80
60
40
20
0
−20
−40
−60
−80

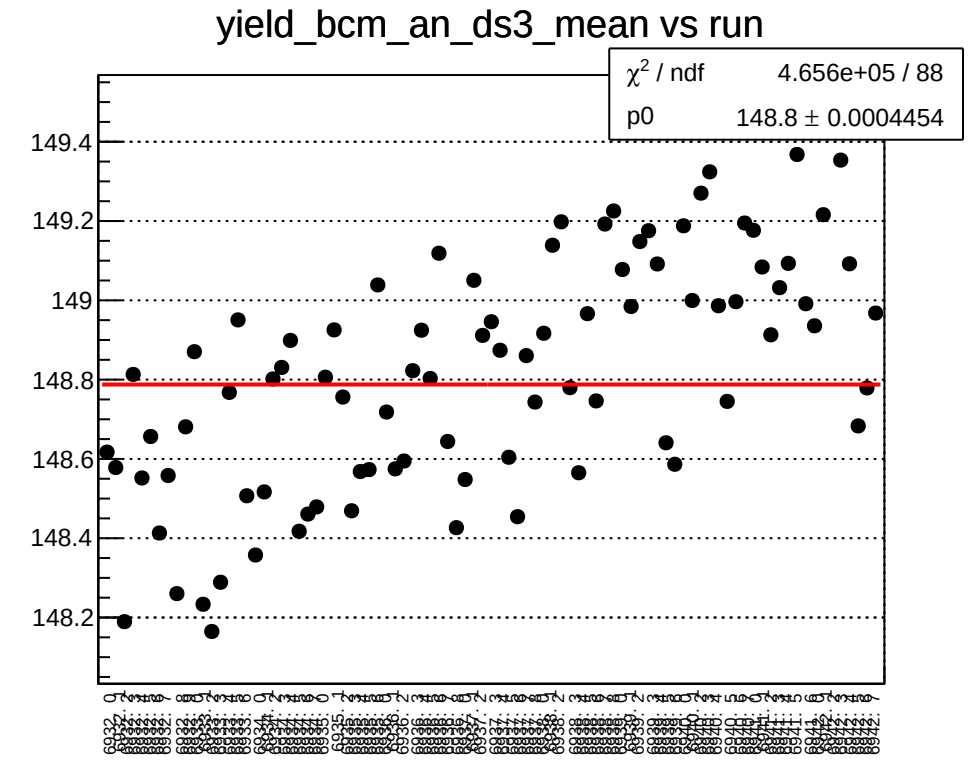

pull1D
Entries 89
Mean 1.508
Std Dev 3.534
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

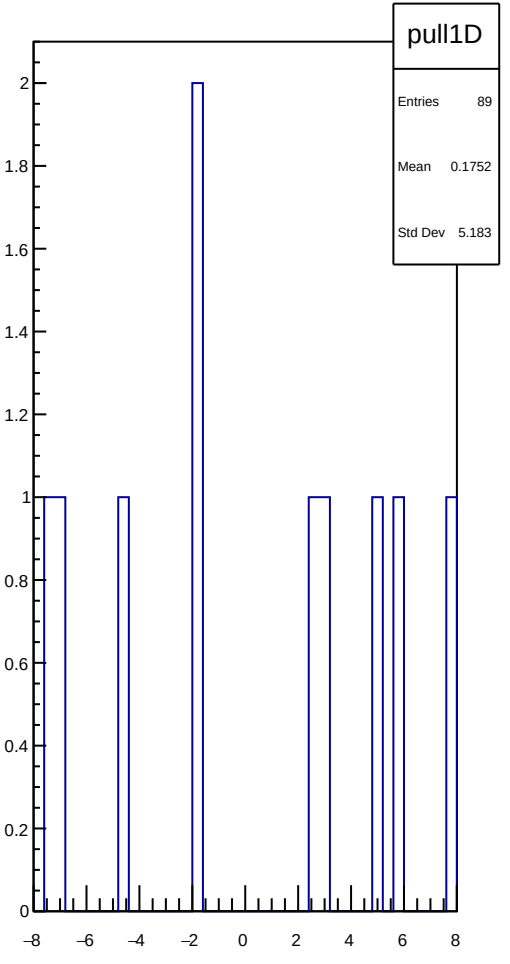

yield_atr2_rms vs run
χ² / ndf 1.212e+05 / 88
p0 0.0003081 ± 2.46e−07
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002

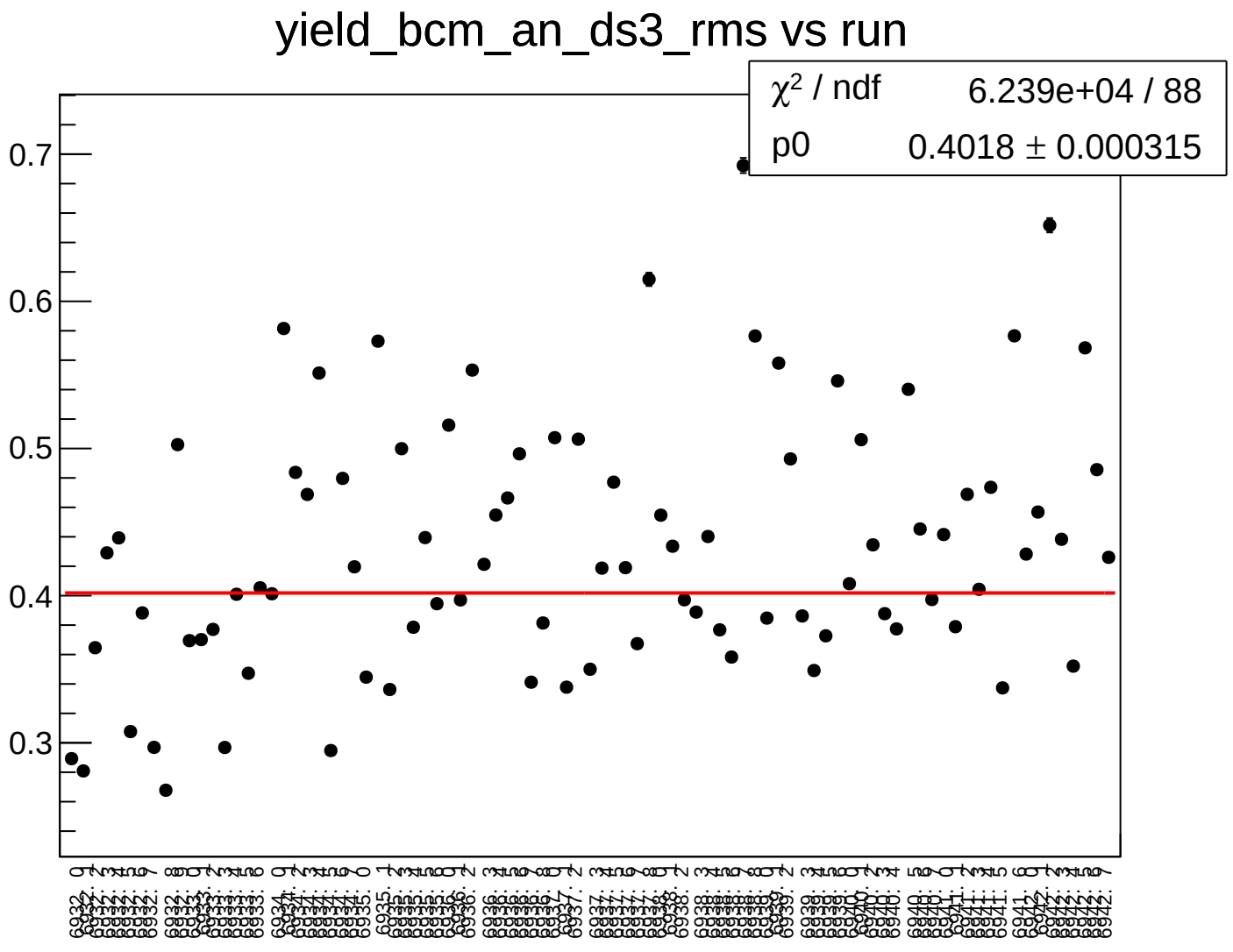

yield_bcm_an_ds_mean vs run
χ² / ndf 4.572e+05 / 88
p0 148.1± 0.0004403
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
pull
Entries 89
Mean 370.8
Std Dev 326.7
150
100
50
0
−50
−100
−150
−200

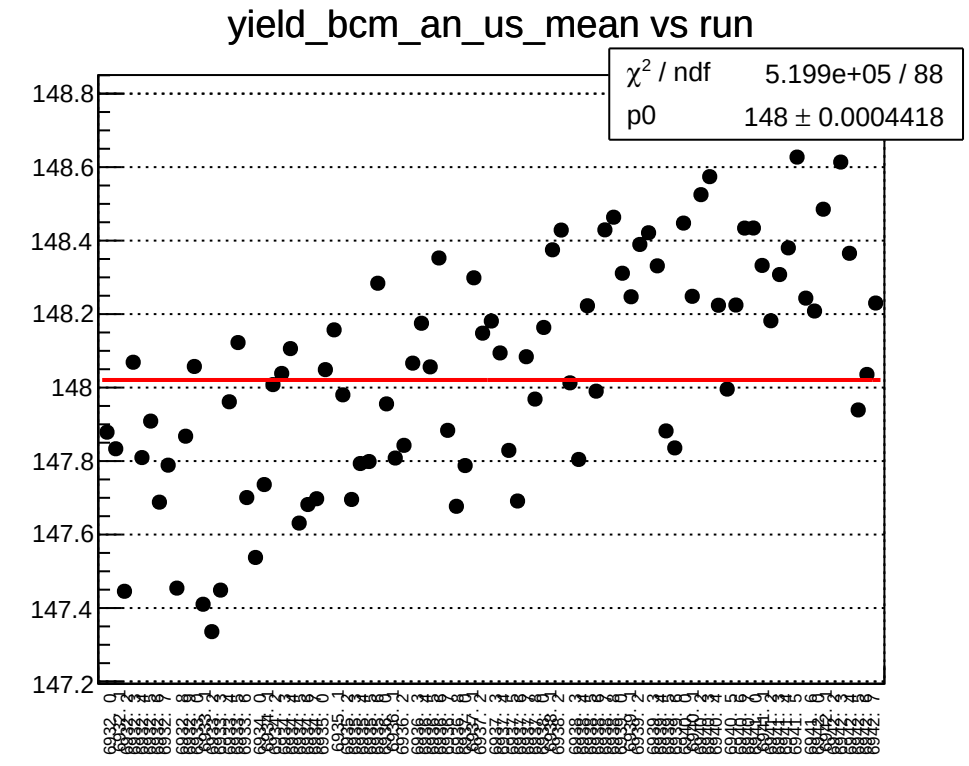

pull1D
Entries 89
Mean 1.612
Std Dev 5.052
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

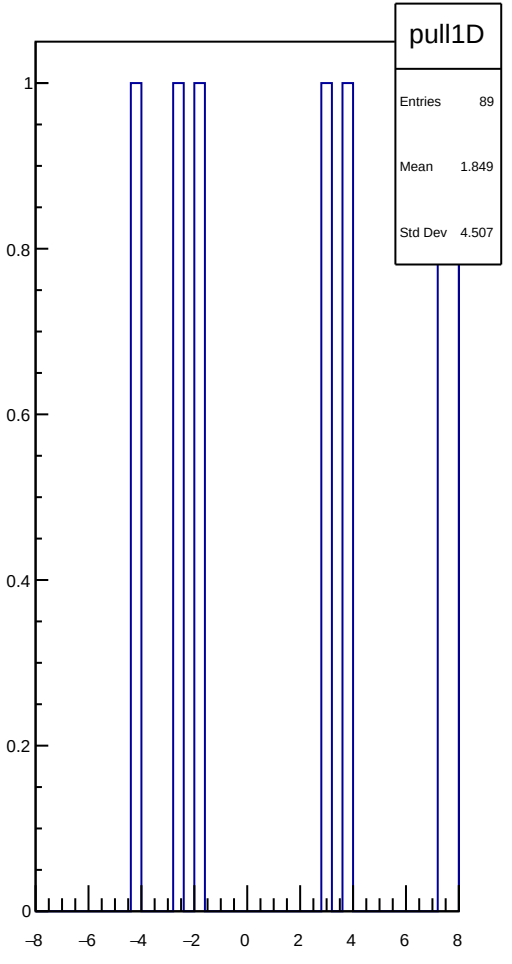

yield_bcm_an_ds_rms vs run
χ² / ndf 6.263e+04 / 88
p0 0.3971 ± 0.0003113
0.7
0.6
0.5
0.4
0.3

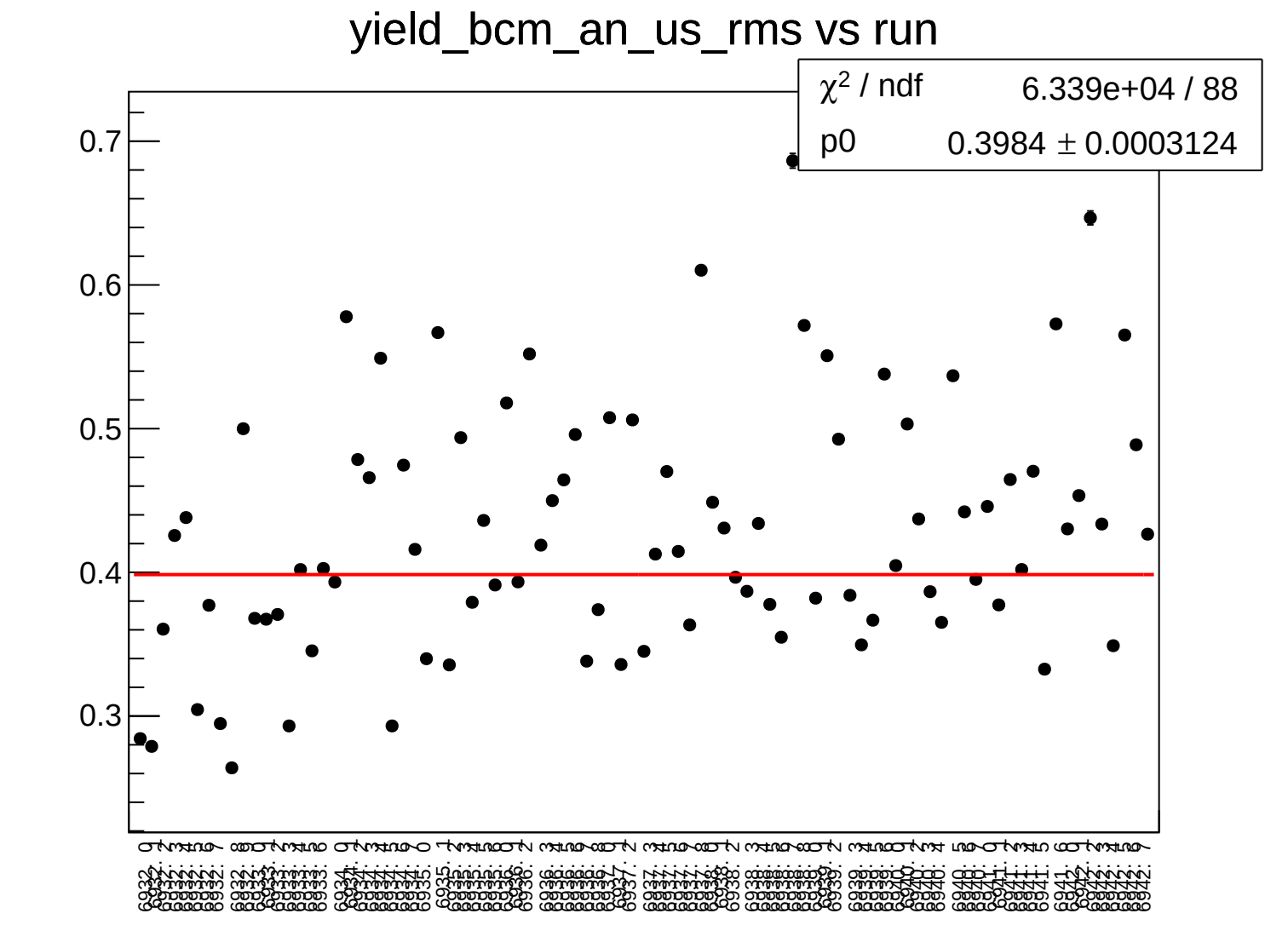

yield_bcm_an_ds3_mean vs run
χ² / ndf 4.656e+05 / 88
p0 148.8 ± 0.0004454
149.4
149.2
149
148.8
148.6
148.4
148.2
pull
Entries 89
Mean 367.6
Std Dev 323.7
150
100
50
0
−50
−100
−150
−200

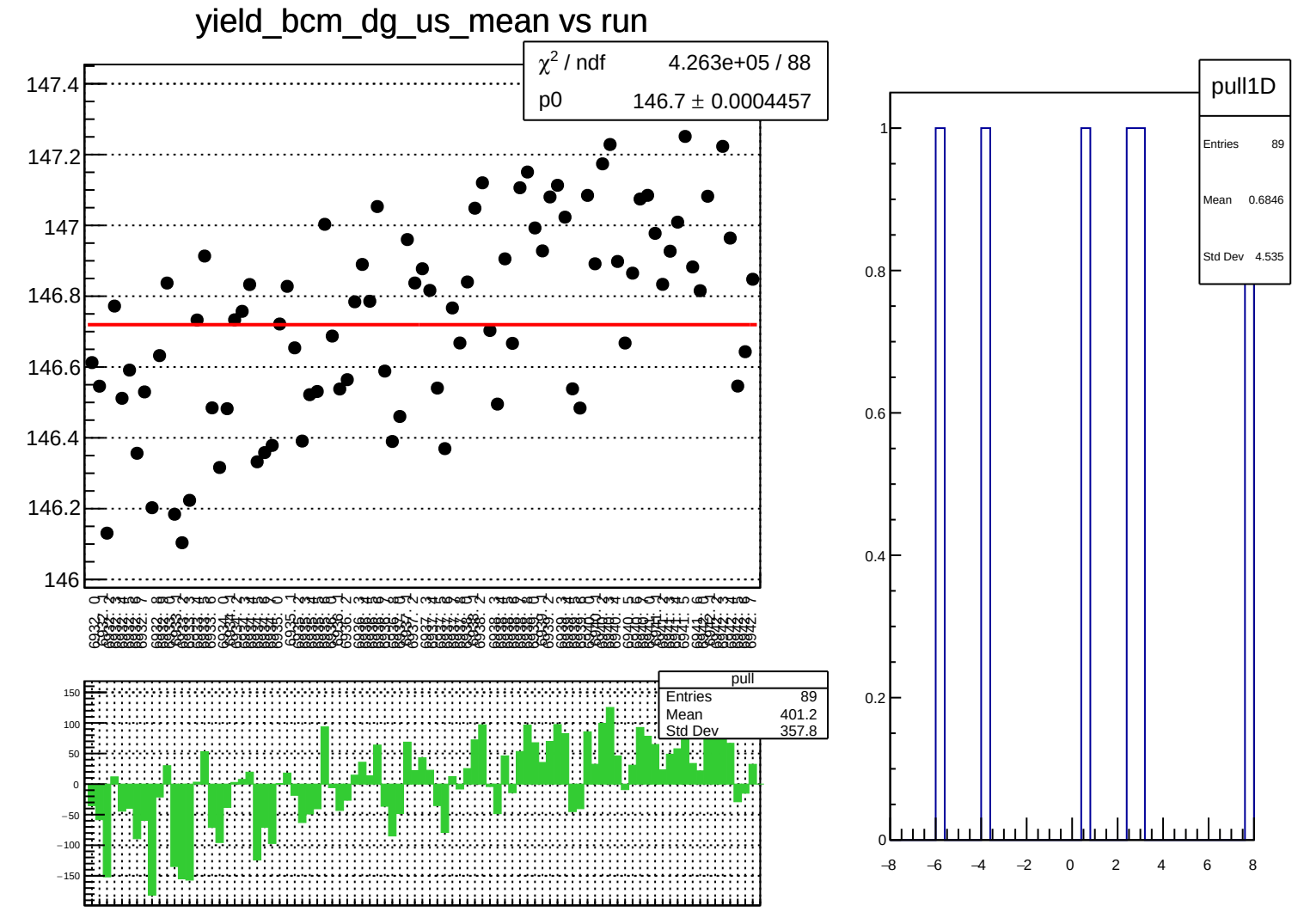

pull1D
Entries 89
Mean 0.1752
Std Dev 5.183
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

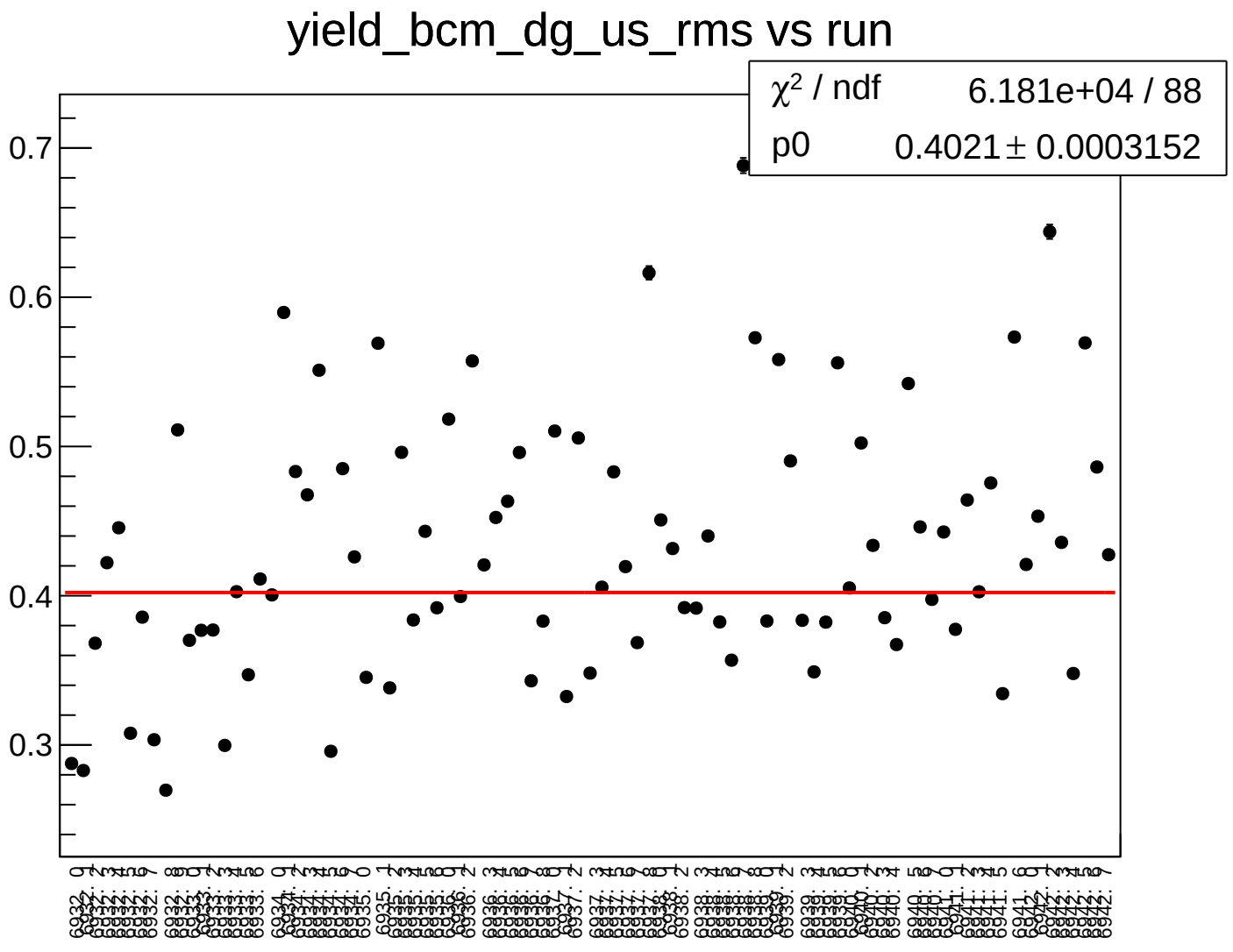

yield_bcm_an_ds3_rms vs run
χ² / ndf 6.239e+04 / 88
p0 0.4018 ± 0.000315
0.7
0.6
0.5
0.4
0.3

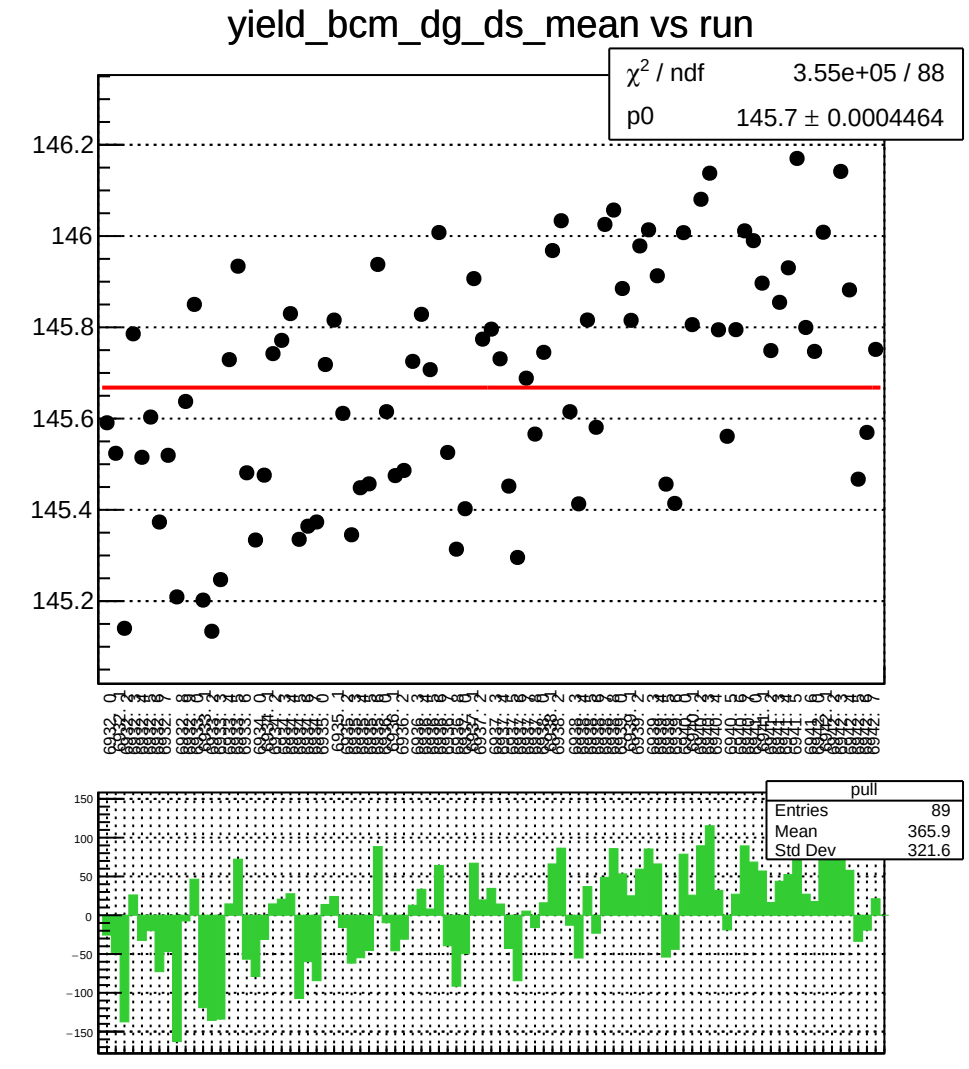

yield_bcm_an_us_mean vs run
χ² / ndf 5.199e+05 / 88
p0 148 ± 0.0004418
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 89
Mean 355.2
Std Dev 310.9
150
100
50
0
−50
−100
−150
−200

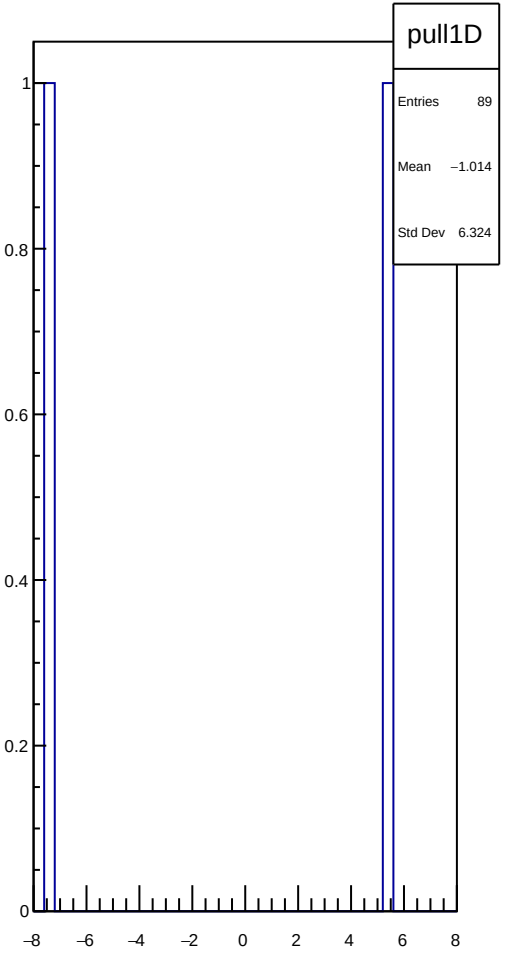

pull1D
Entries 89
Mean 1.849
Std Dev 4.507
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

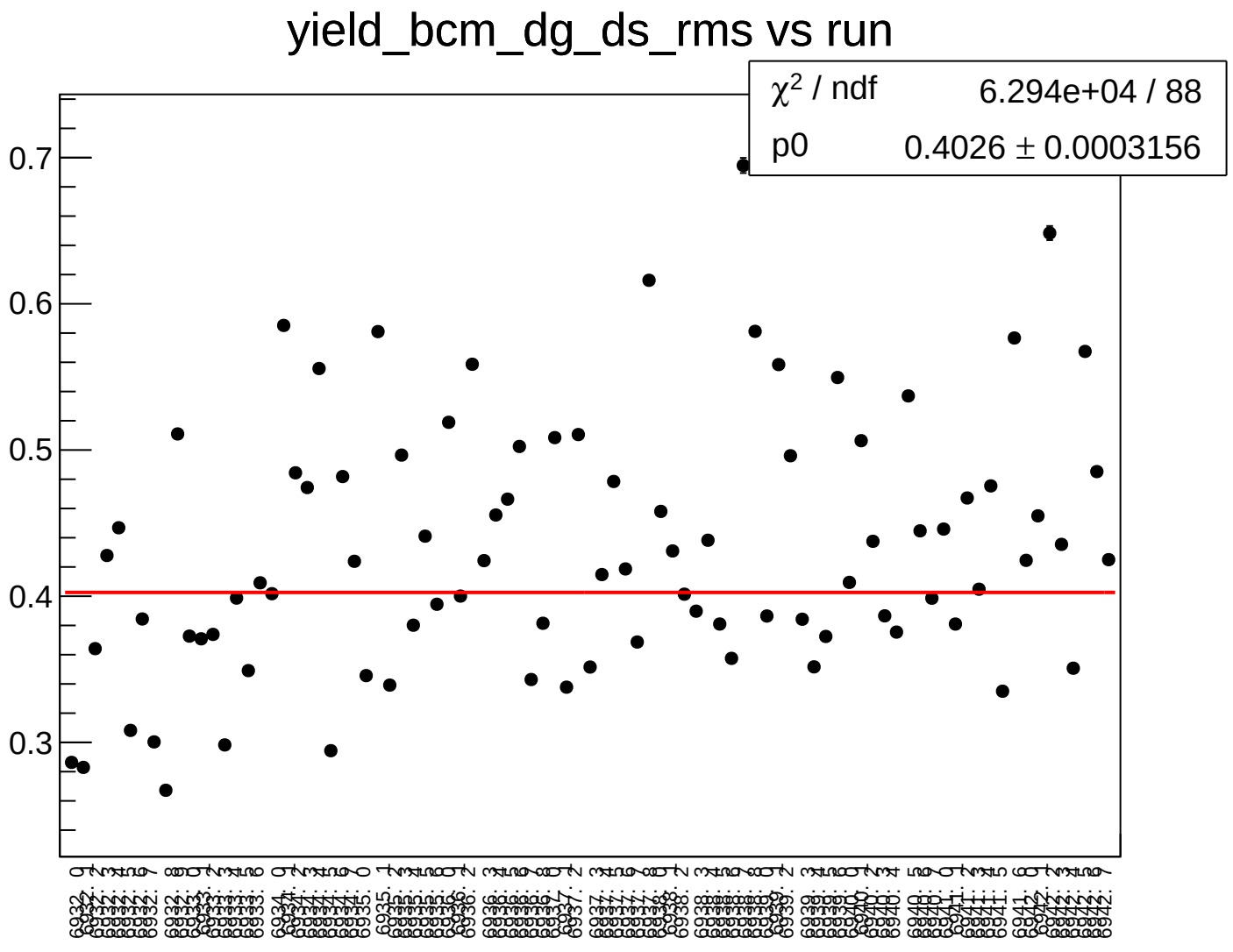

yield_bcm_an_us_rms vs run
χ² / ndf 6.339e+04 / 88
p0 0.3984 ± 0.0003124
0.7
0.6
0.5
0.4
0.3

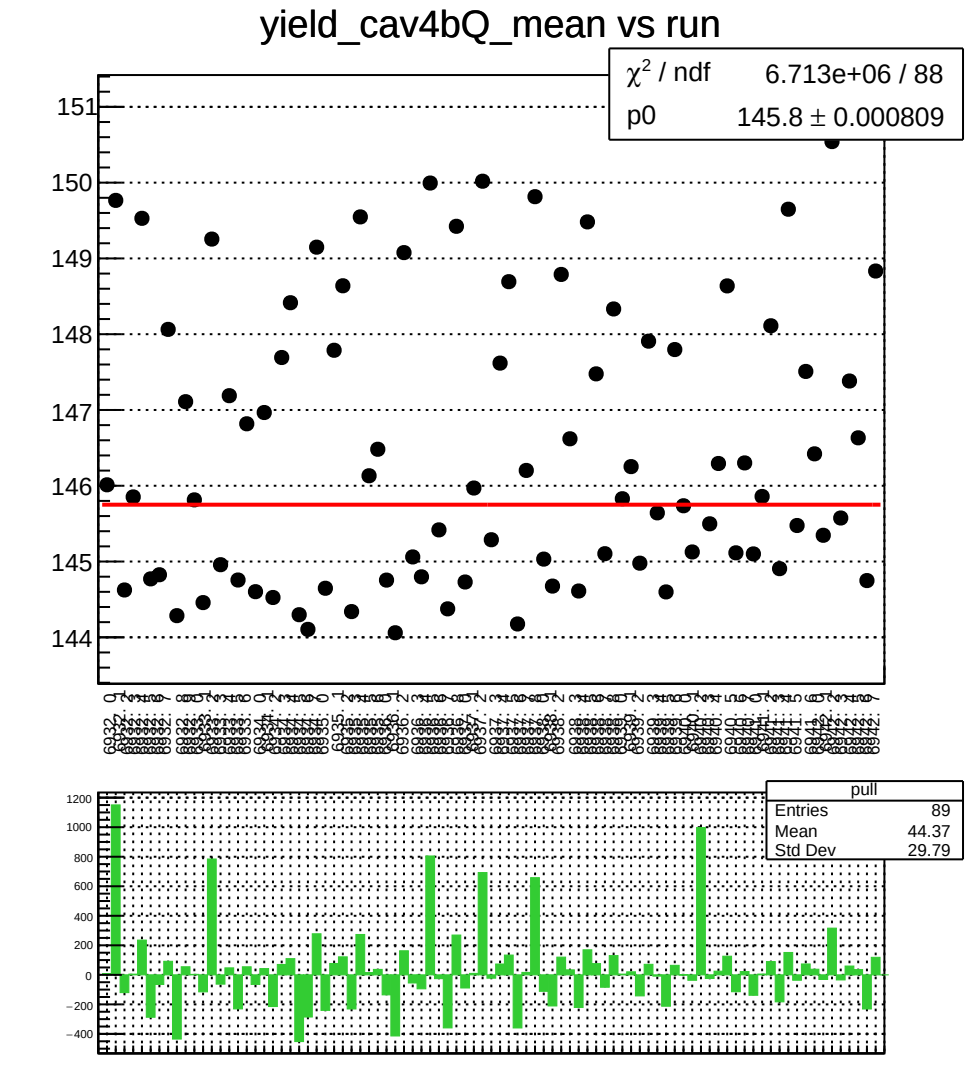

yield_bcm_dg_us_mean vs run
χ² / ndf 4.263e+05 / 88
p0 146.7 ± 0.0004457
147.4
147.2
147
146.8
146.6
146.4
146.2
146
pull
Entries 89
Mean 401.2
Std Dev 357.8
150
100
50
0
−50
−100
−150
pull1D
Entries 89
Mean 0.6846
Std Dev 4.535
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

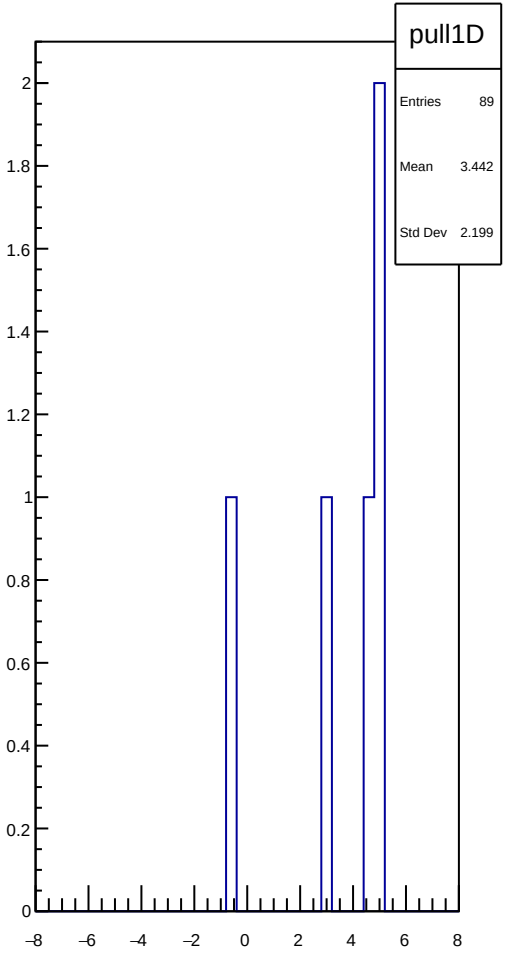

yield_bcm_dg_us_rms vs run
χ² / ndf 6.181e+04 / 88
p0 0.4021 ± 0.0003152
0.7
0.6
0.5
0.4
0.3

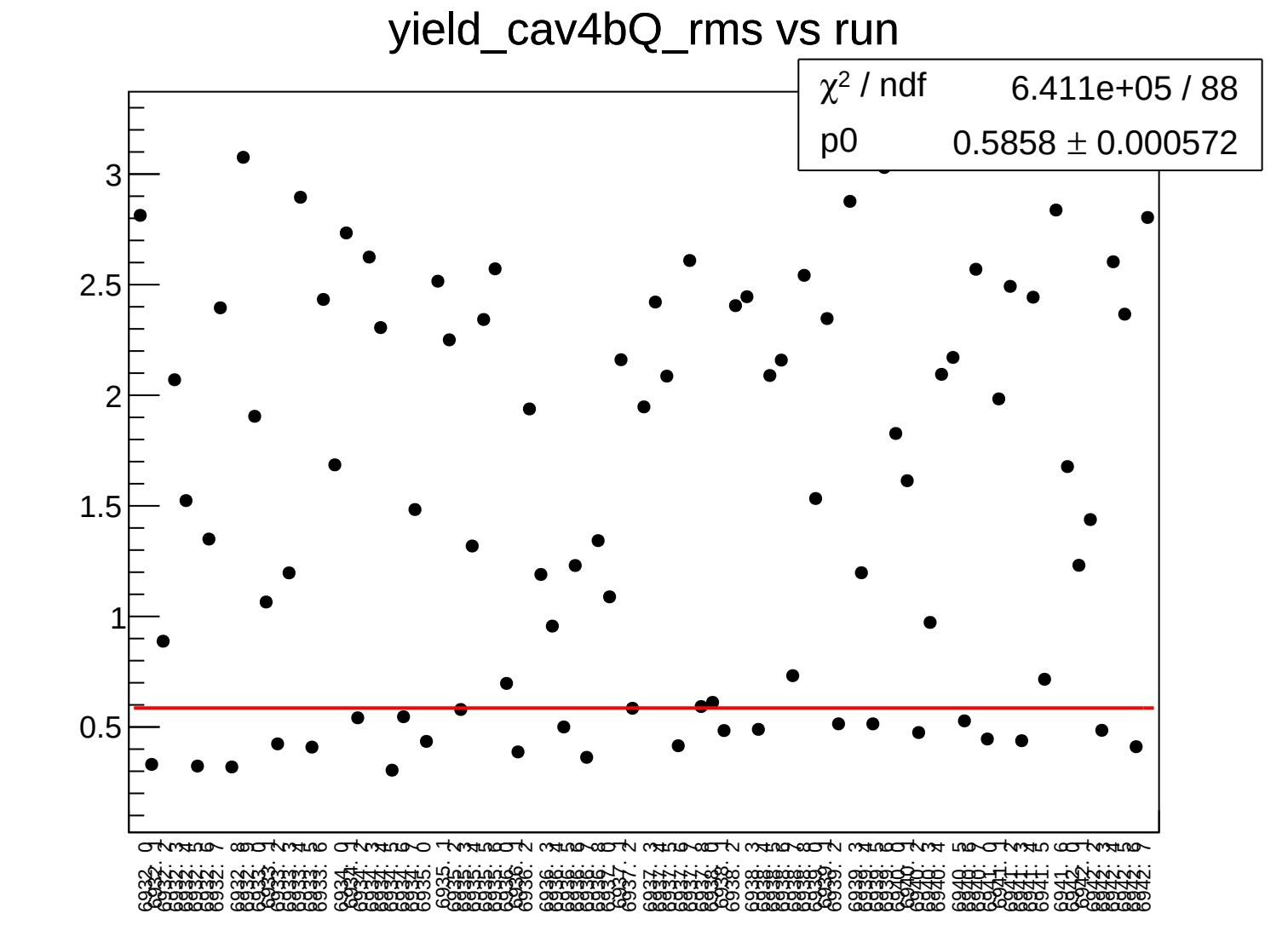

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.55e+05 / 88
p0 145.7 ± 0.0004464
146.2
146
145.8
145.6
145.4
145.2
pull
Entries 89
Mean 365.9
Std Dev 321.6
150
100
50
0
−50
−100
−150

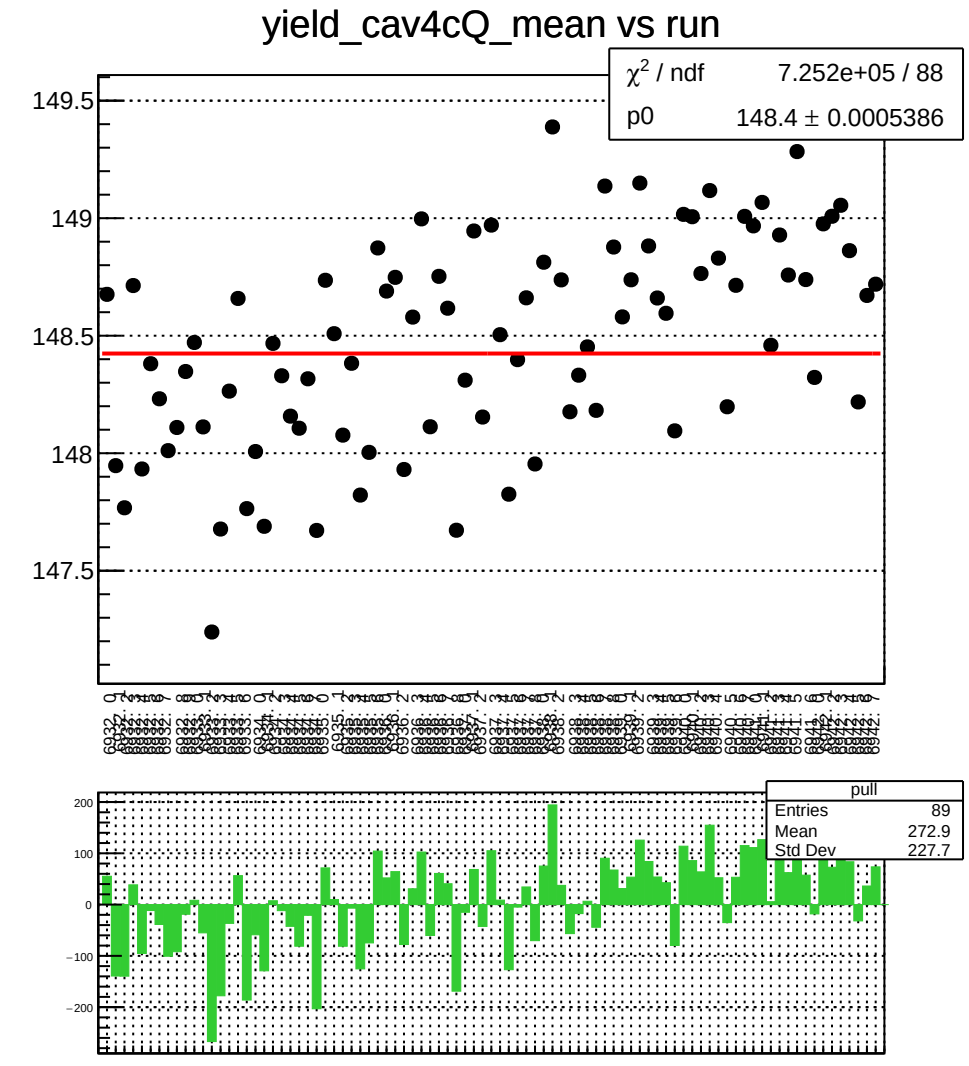

pull1D
Entries 89
Mean −1.014
Std Dev 6.324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

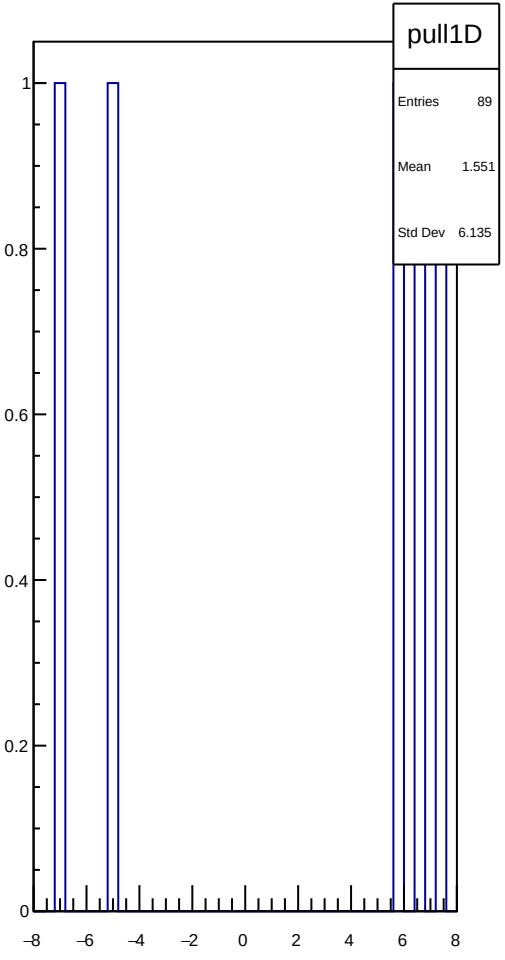

yield_bcm_dg_ds_rms vs run
χ² / ndf 6.294e+04 / 88
p0 0.4026 ± 0.0003156
0.7
0.6
0.5
0.4
0.3

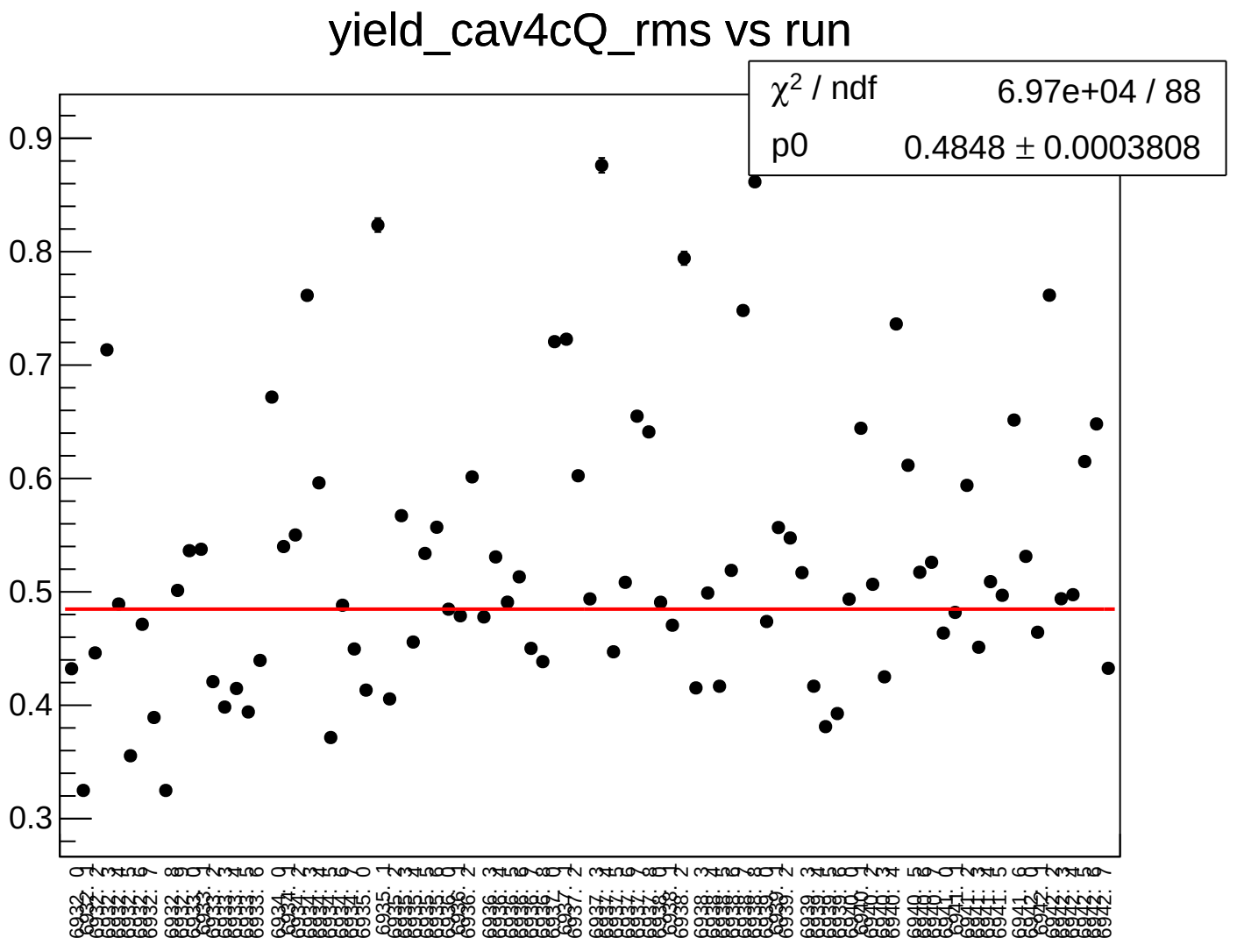

yield_cav4bQ_mean vs run
χ² / ndf 6.713e+06 / 88
p0 145.8 ± 0.000809
151
150
149
148
147
146
145
144
pull
Entries 89
Mean 44.37
Std Dev 29.79
1200
1000
800
600
400
200
0
−200
−400

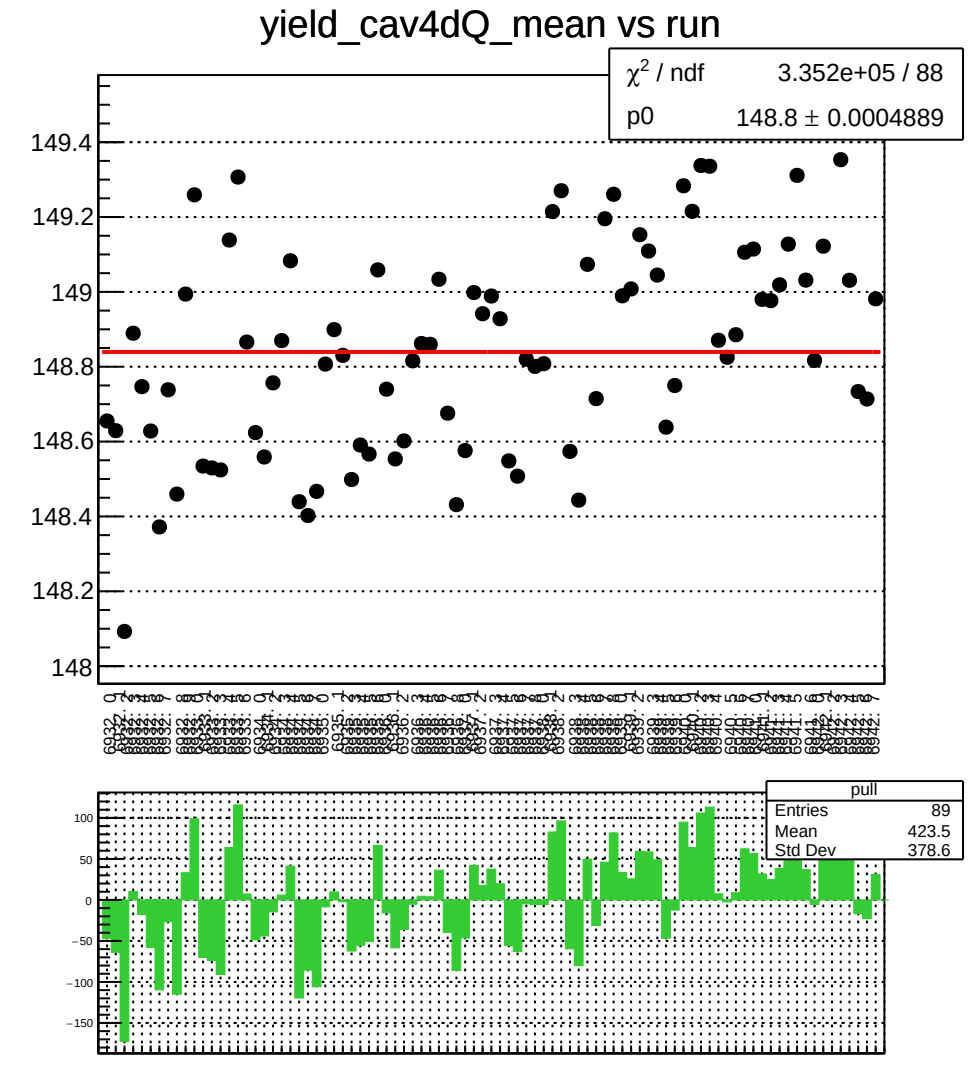

pull1D
Entries 89
Mean 3.442
Std Dev 2.199
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

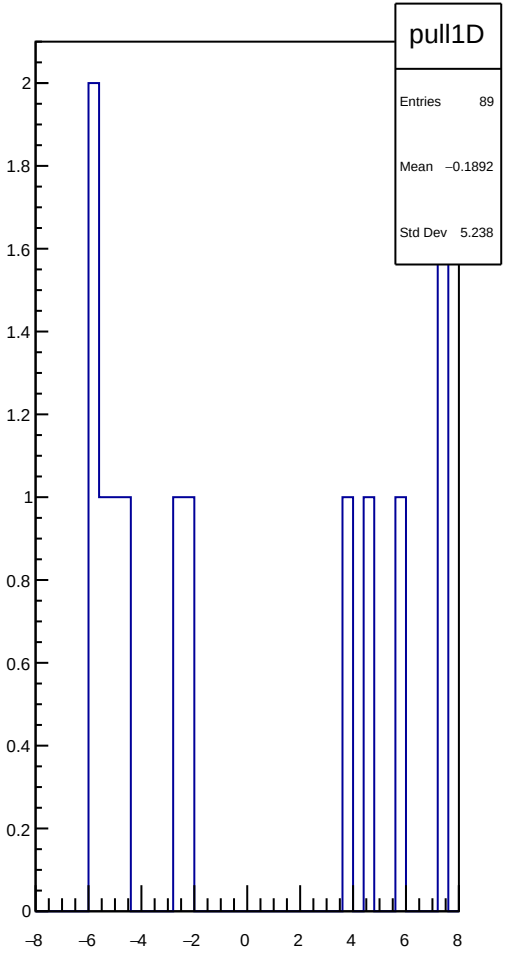

yield_cav4bQ_rms vs run
χ² / ndf 6.411e+05 / 88
p0 0.5858 ± 0.000572
3
2.5
2
1.5
1
0.5

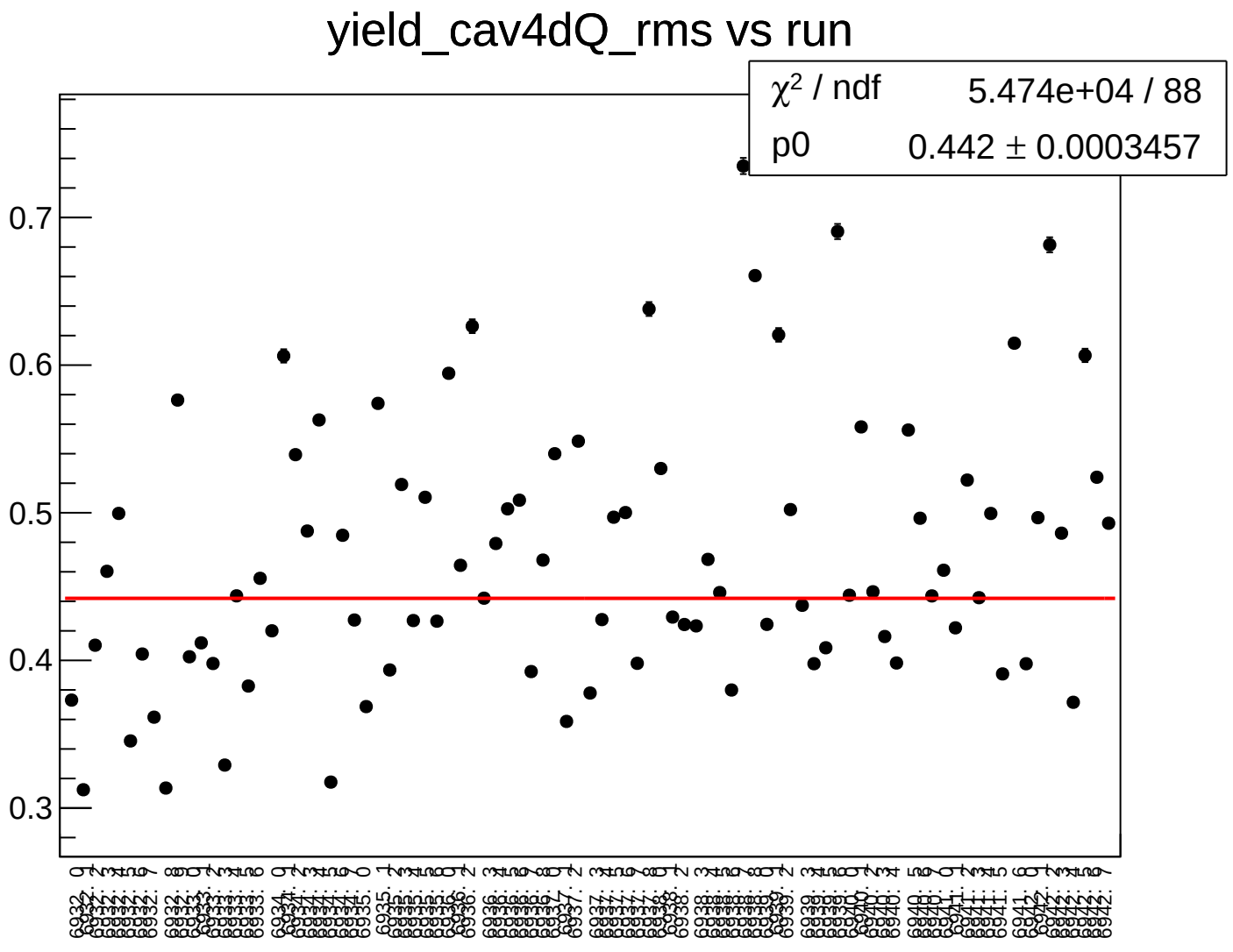

yield_cav4cQ_mean vs run
χ² / ndf 7.252e+05 / 88
p0 148.4 ± 0.0005386
149.5
149
148.5
148
147.5
pull
Entries 89
Mean 272.9
Std Dev 227.7
200
100
0
−100
−200

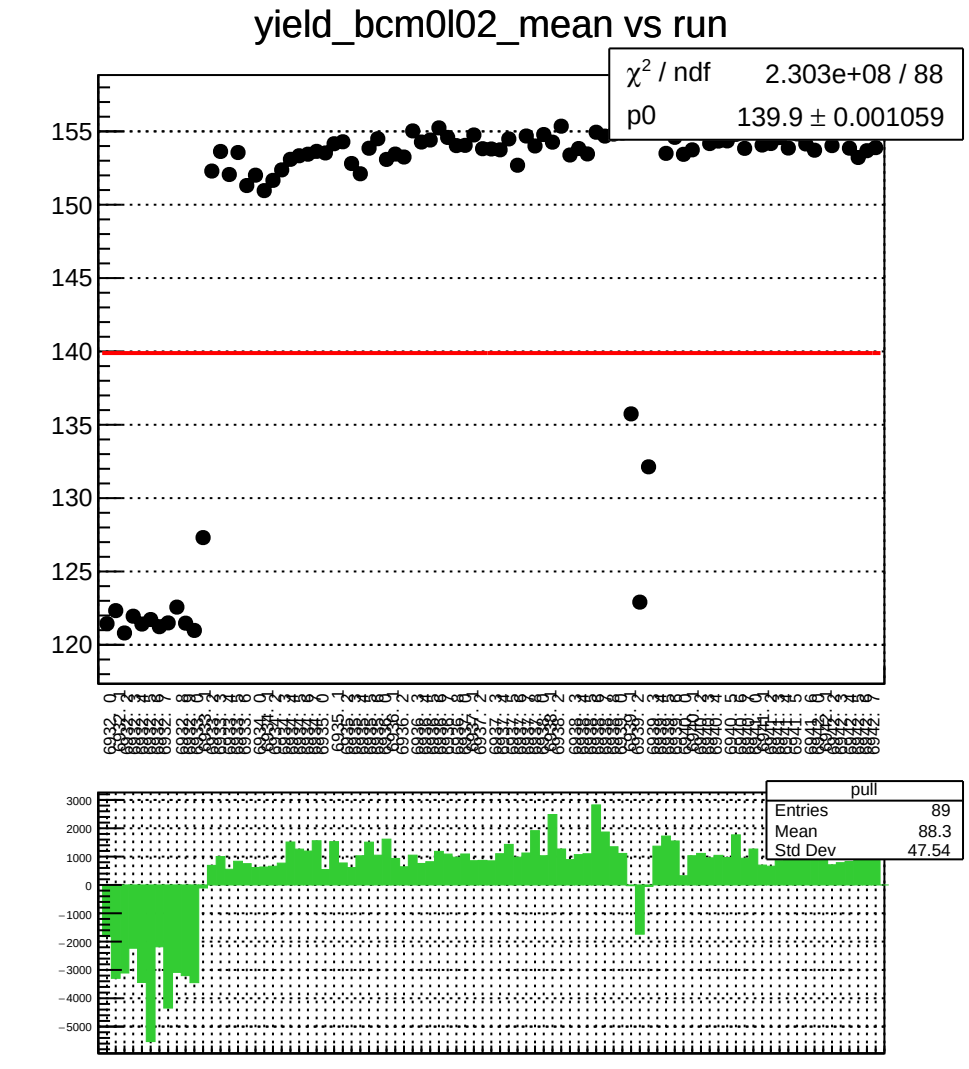

pull1D
Entries 89
Mean 1.551
Std Dev 6.135
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

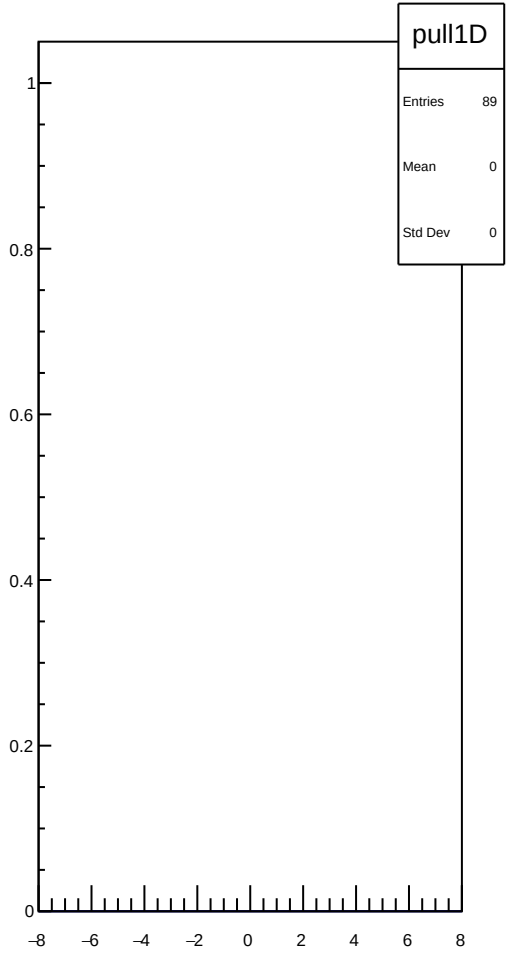

yield_cav4cQ_rms vs run
χ² / ndf 6.97e+04 / 88
p0 0.4848 ± 0.0003808
0.9
0.8
0.7
0.6
0.5
0.4
0.3

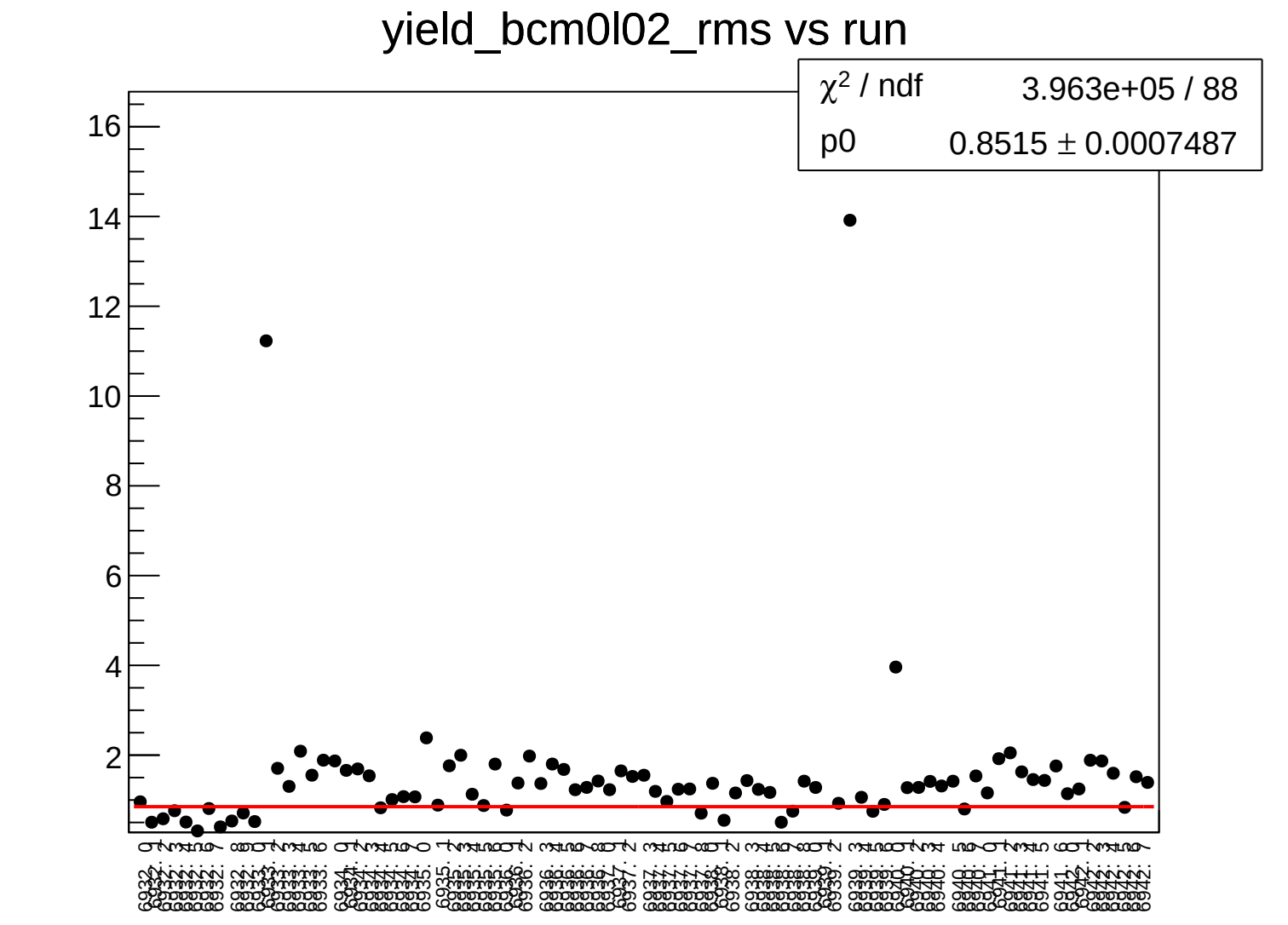

yield_cav4dQ_mean vs run
χ² / ndf 3.352e+05 / 88
p0 148.8 ± 0.0004889
149.4
149.2
149
148.8
148.6
148.4
148.2
148
pull
Entries 89
Mean 423.5
Std Dev 378.6
100
50
0
−50
−100
−150

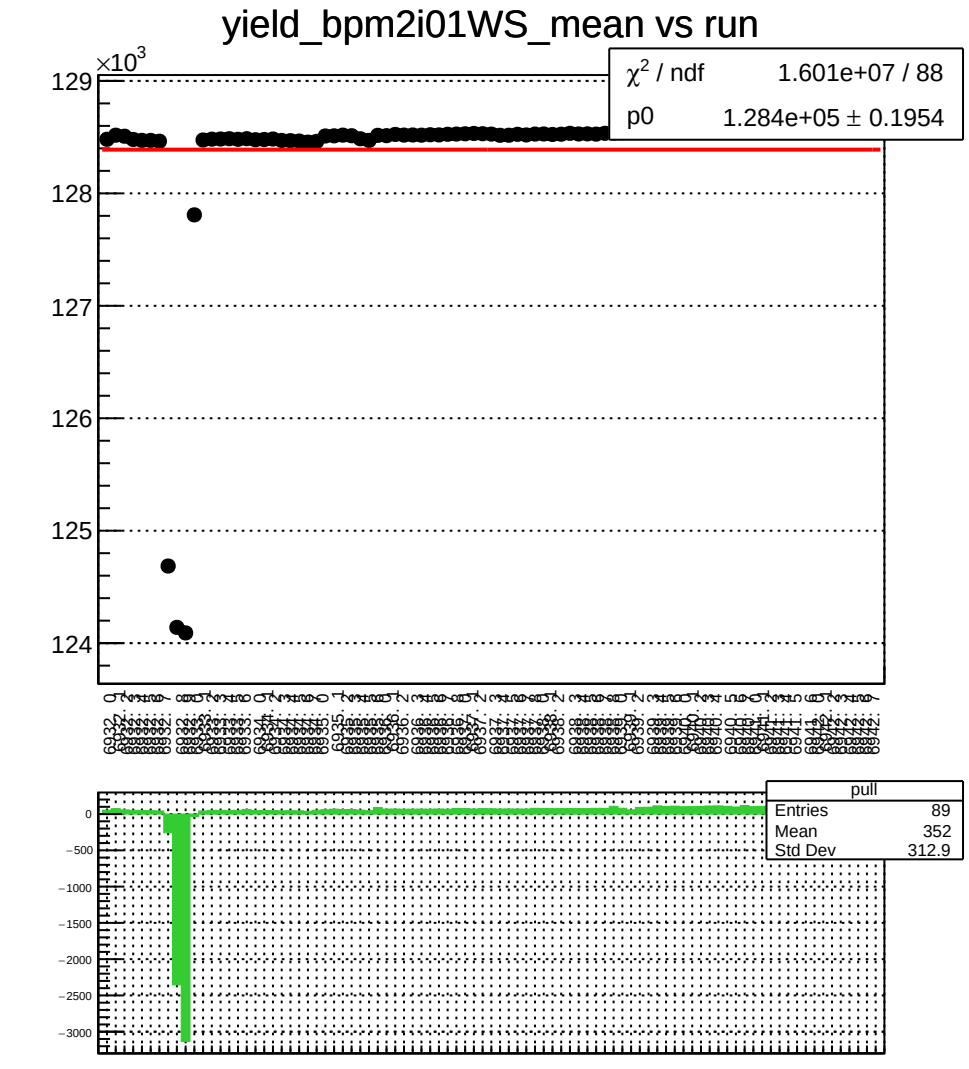

pull1D
Entries 89
Mean −0.1892
Std Dev 5.238
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

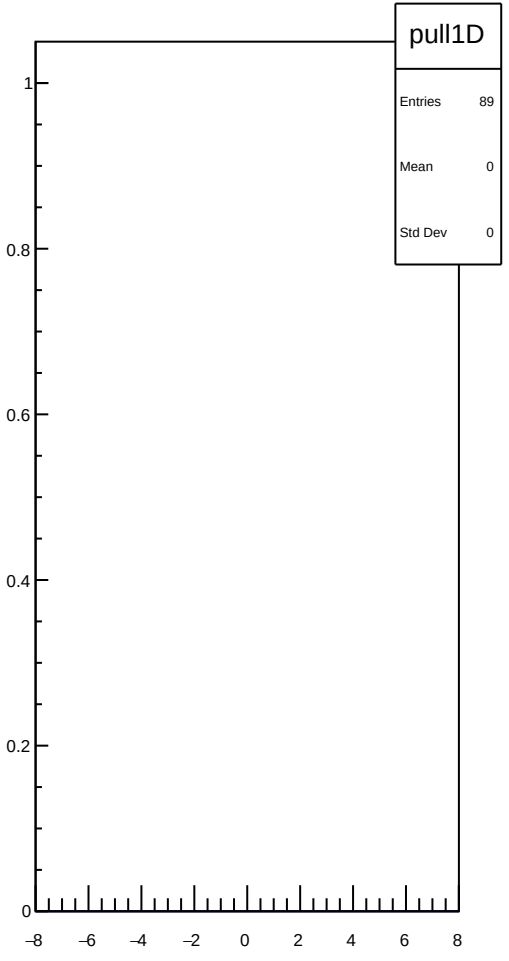

yield_cav4dQ_rms vs run
χ² / ndf 5.474e+04 / 88
p0 0.442 ± 0.0003457
0.7
0.6
0.5
0.4
0.3

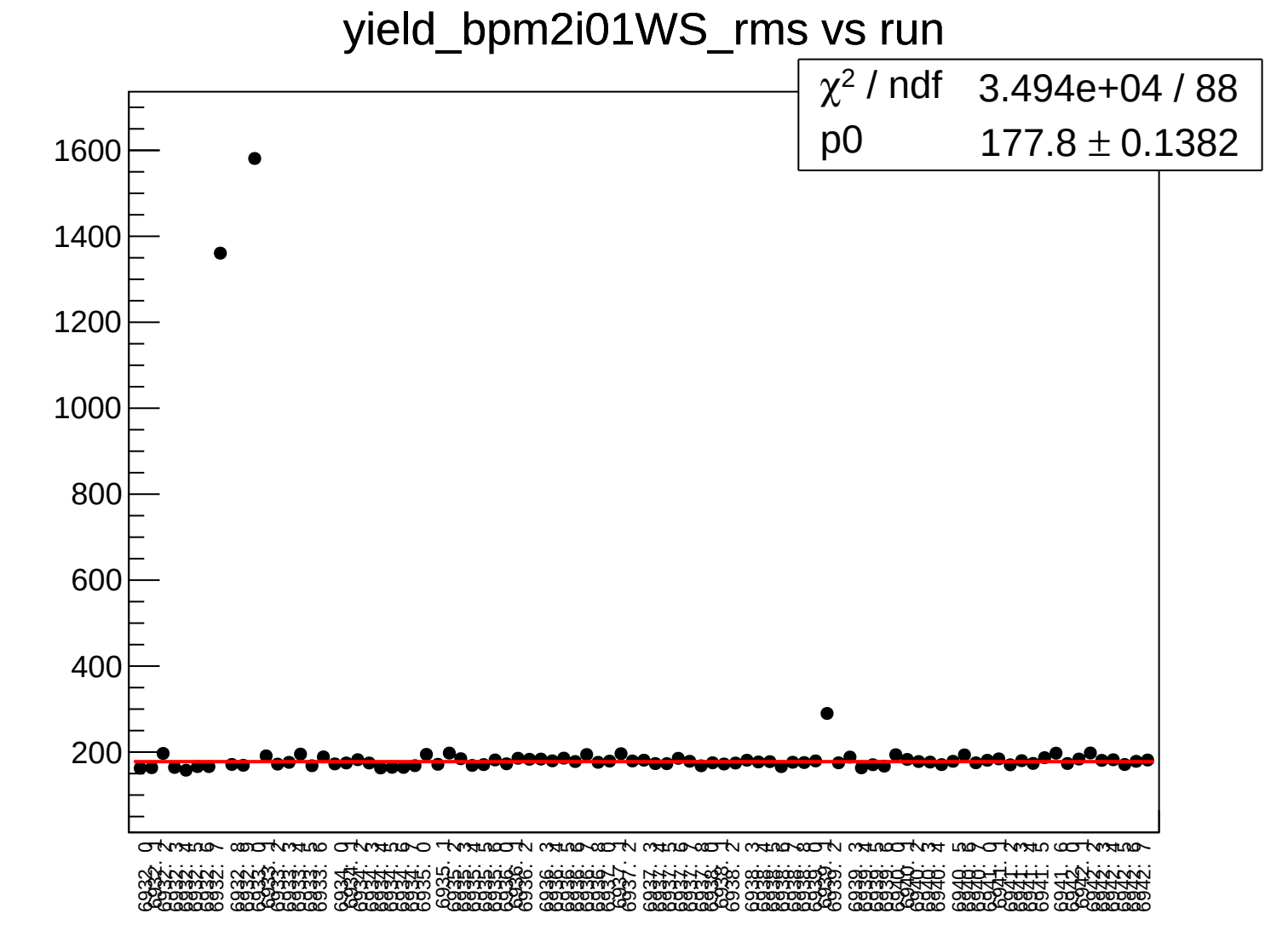

yield_bcm0l02_mean vs run
χ² / ndf 2.303e+08 / 88
p0 139.9 ± 0.001059
155
150
145
140
135
130
125
120
pull
Entries 89
Mean 88.3
Std Dev 47.54
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000

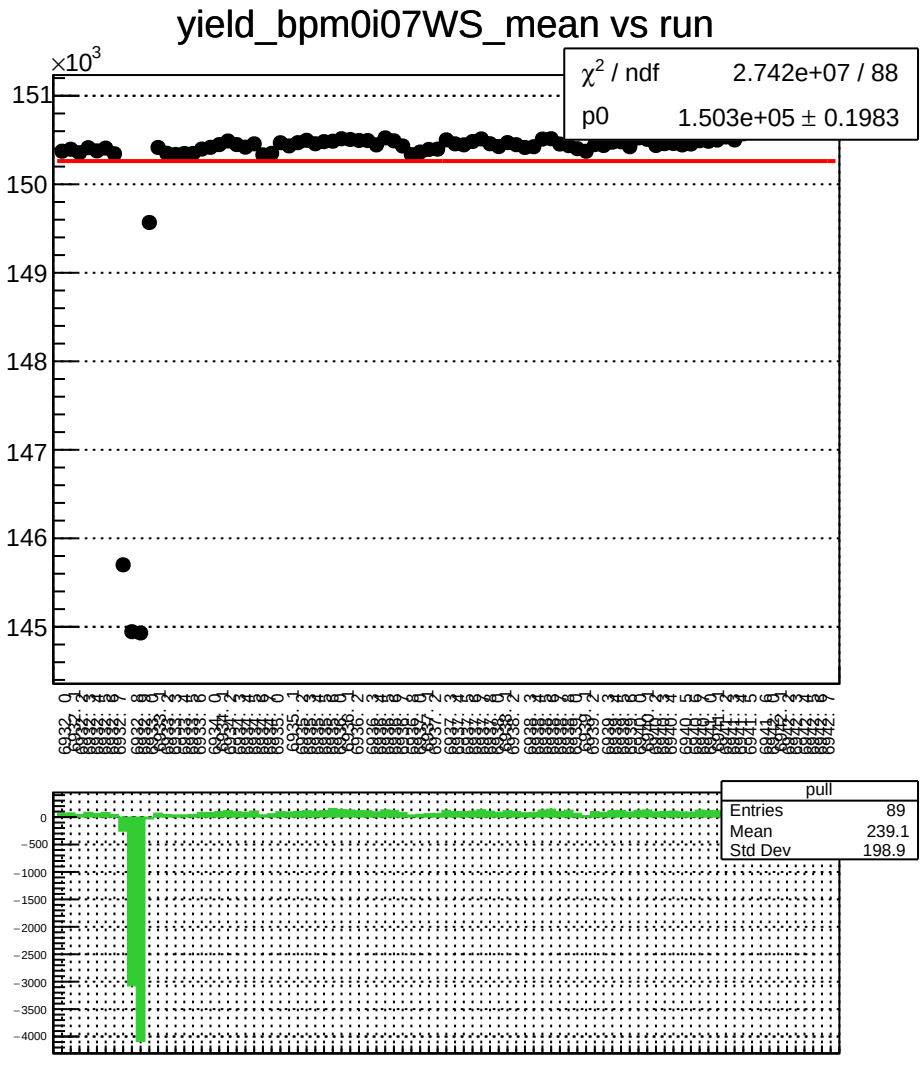

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

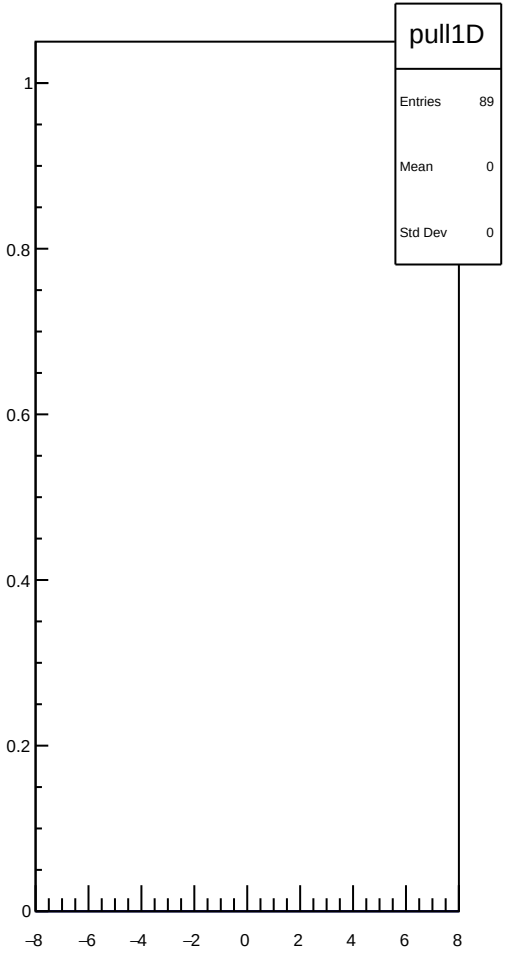

yield_bcm0l02_rms vs run
χ² / ndf 3.963e+05 / 88
p0 0.8515 ± 0.0007487
16
14
12
10
8
6
4
2

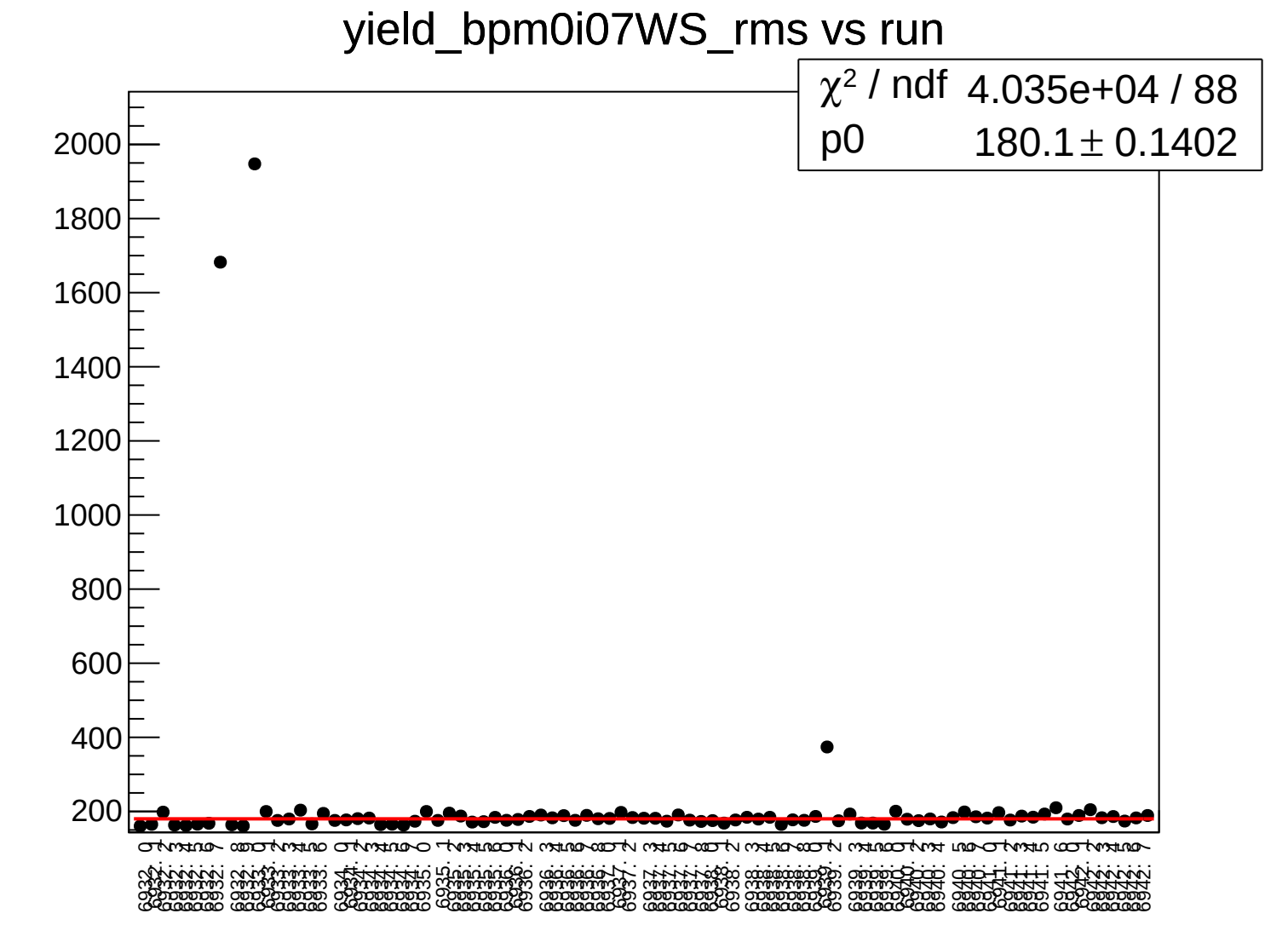

yield_bpm2i01WS_mean vs run
×10^3
129
128
127
126
125
124
χ² / ndf 1.601e+07 / 88
p0 1.284e+05 ± 0.1954
pull
Entries 89
Mean 352
Std Dev 312.9
0
−500
−1000
−1500
−2000
−2500
−3000

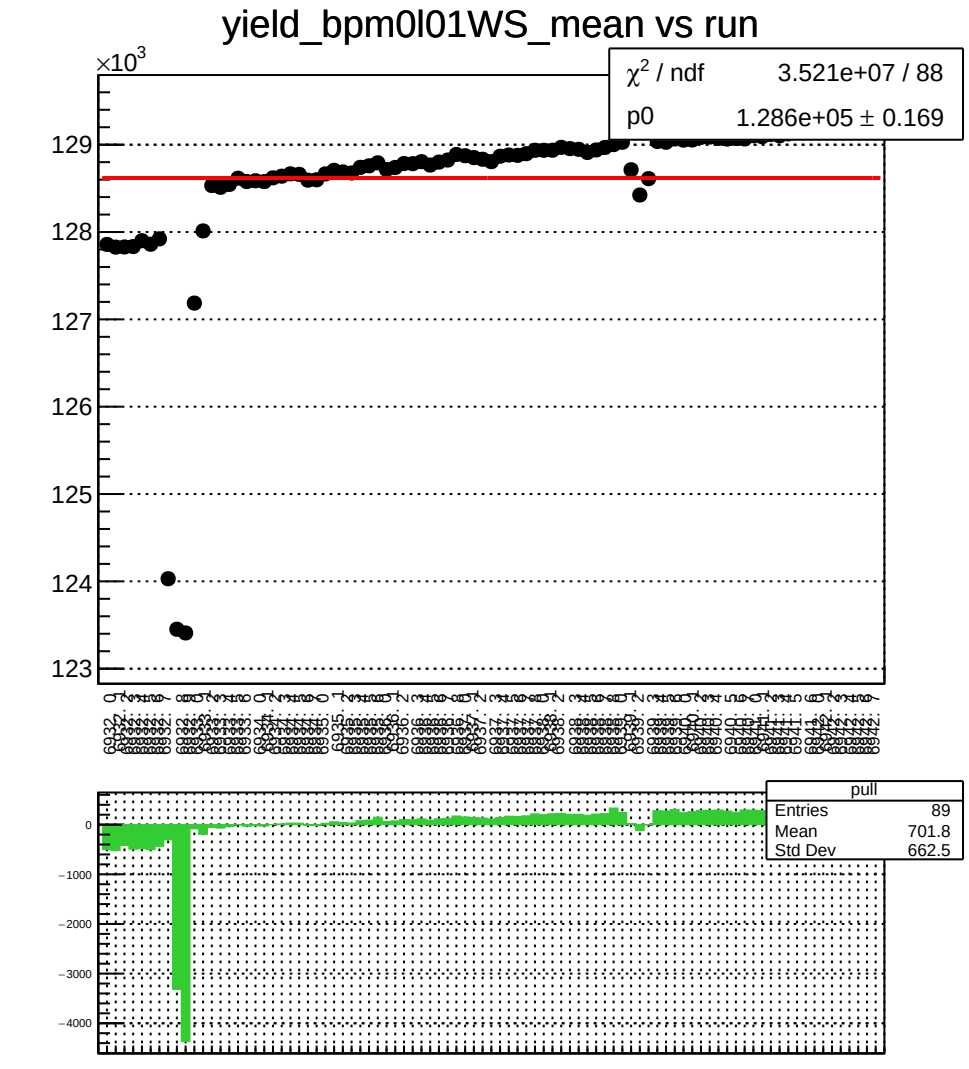

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

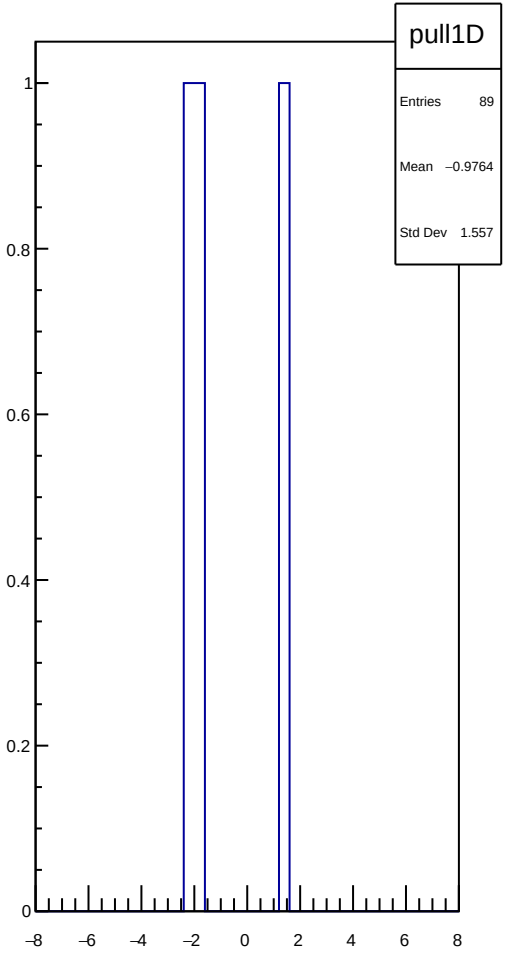

yield_bpm2i01WS_rms vs run
χ² / ndf 3.494e+04 / 88
p0 177.8 ± 0.1382
1600
1400
1200
1000
800
600
400
200

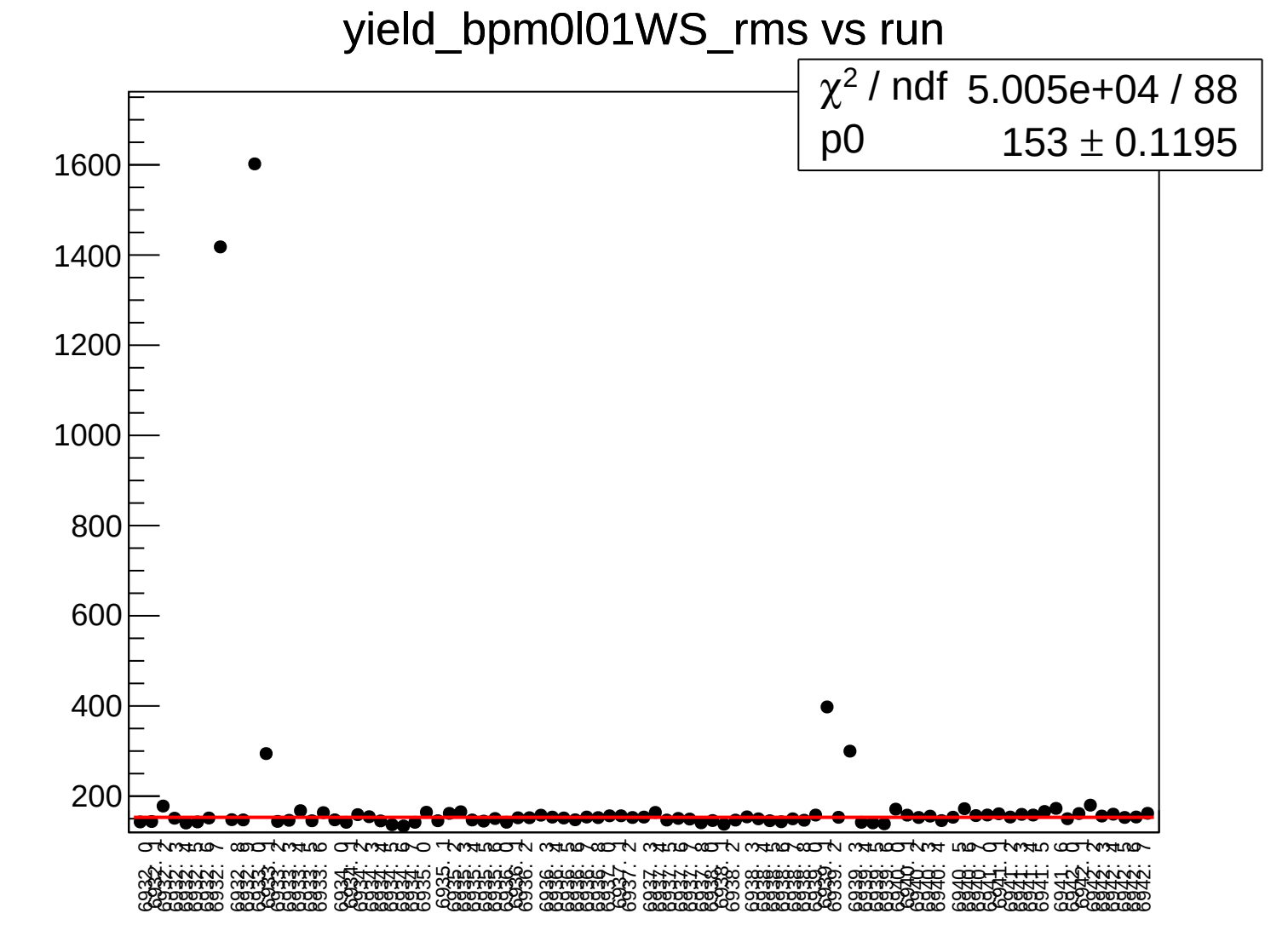

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 2.742e+07 / 88
p0 1.503e+05 ± 0.1983
151
150
149
148
147
146
145
pull
Entries 89
Mean 239.1
Std Dev 198.9
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000

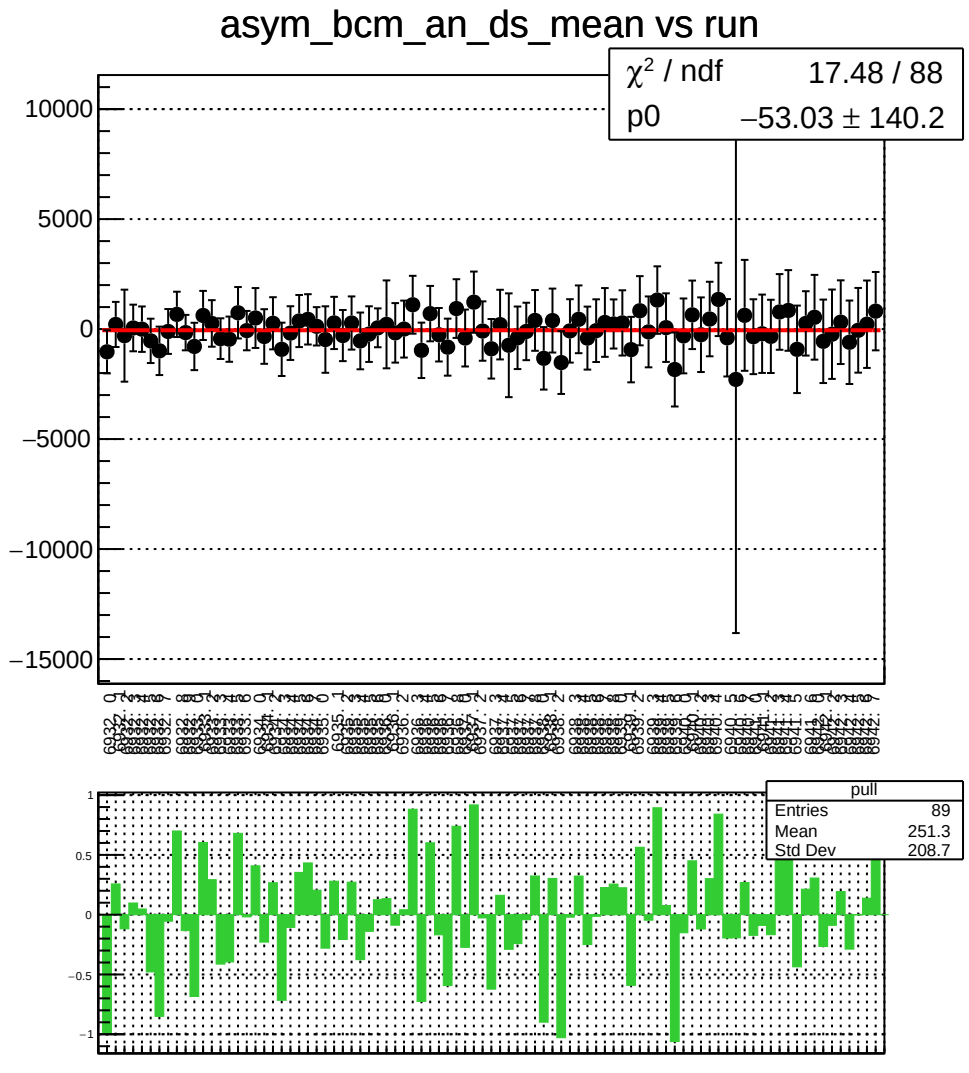

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

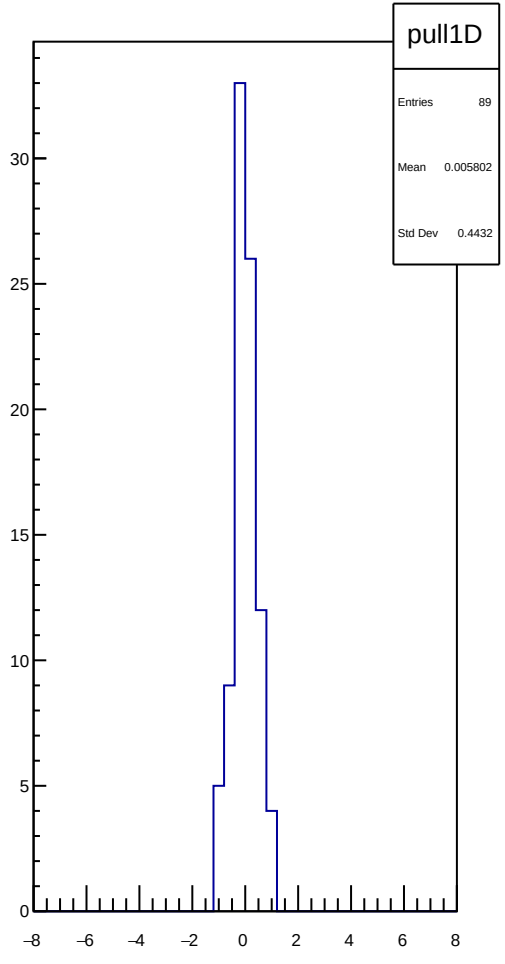

yield_bpm0i07WS_rms vs run
χ² / ndf 4.035e+04 / 88
p0 180.1 ± 0.1402
2000
1800
1600
1400
1200
1000
800
600
400
200

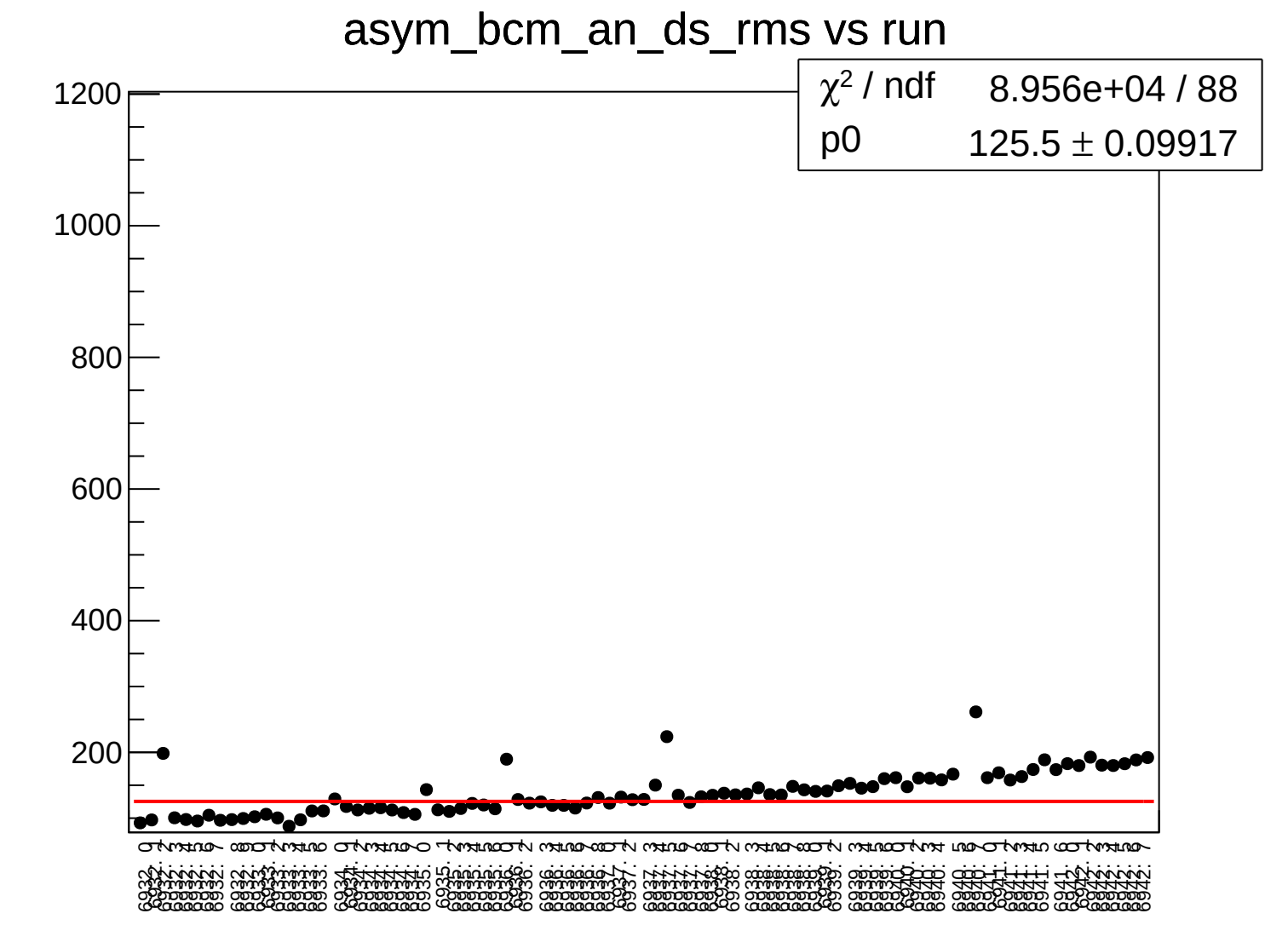

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 3.521e+07 / 88
p0 1.286e+05 ± 0.169
129
128
127
126
125
124
123
pull
Entries 89
Mean 701.8
Std Dev 662.5
0
−1000
−2000
−3000
−4000

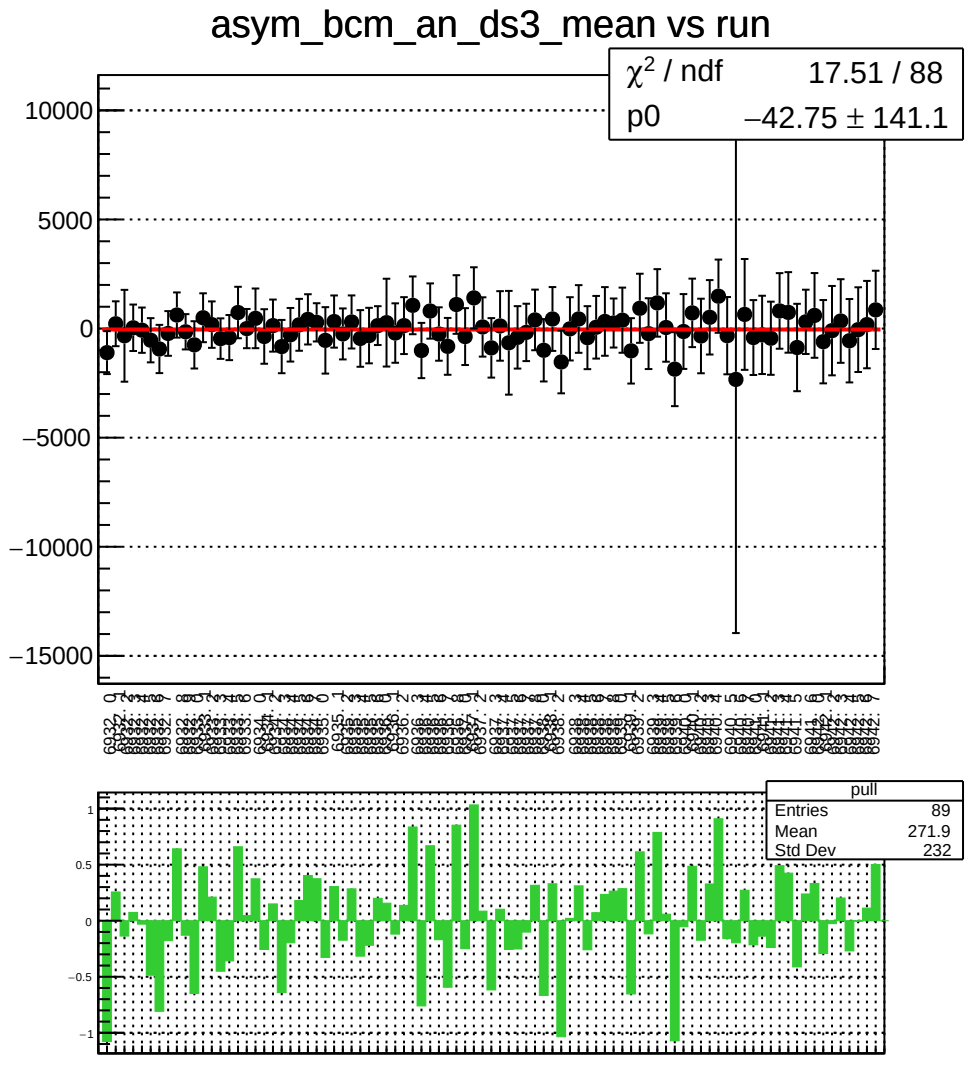

pull1D
Entries 89
Mean −0.9764
Std Dev 1.557
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

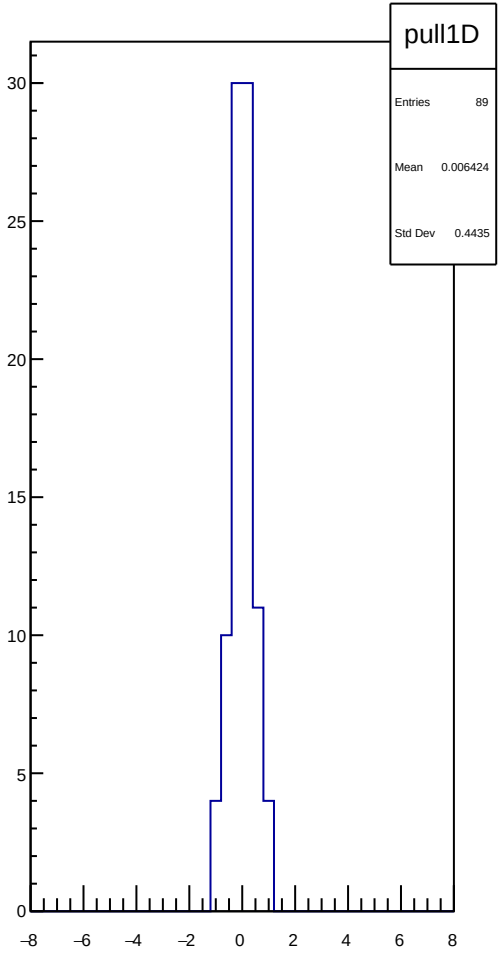

yield_bpm0l01WS_rms vs run
χ² / ndf 5.005e+04 / 88
p0 153 ± 0.1195
1600
1400
1200
1000
800
600
400
200

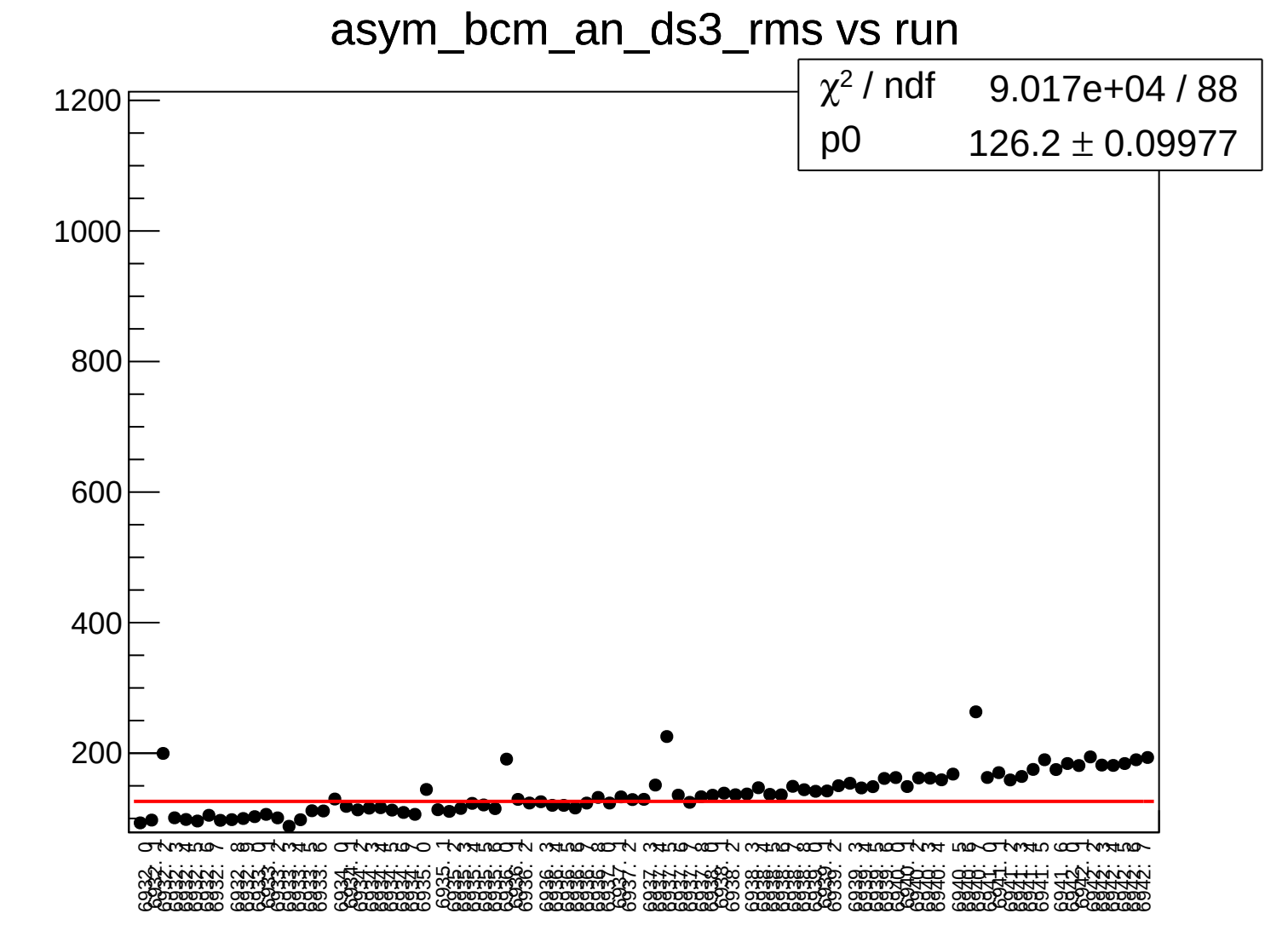

asym_bcm_an_ds_mean vs run
χ² / ndf 17.48 / 88
p0 −53.03 ± 140.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 251.3
Std Dev 208.7
1
0.5
0
−0.5
−1

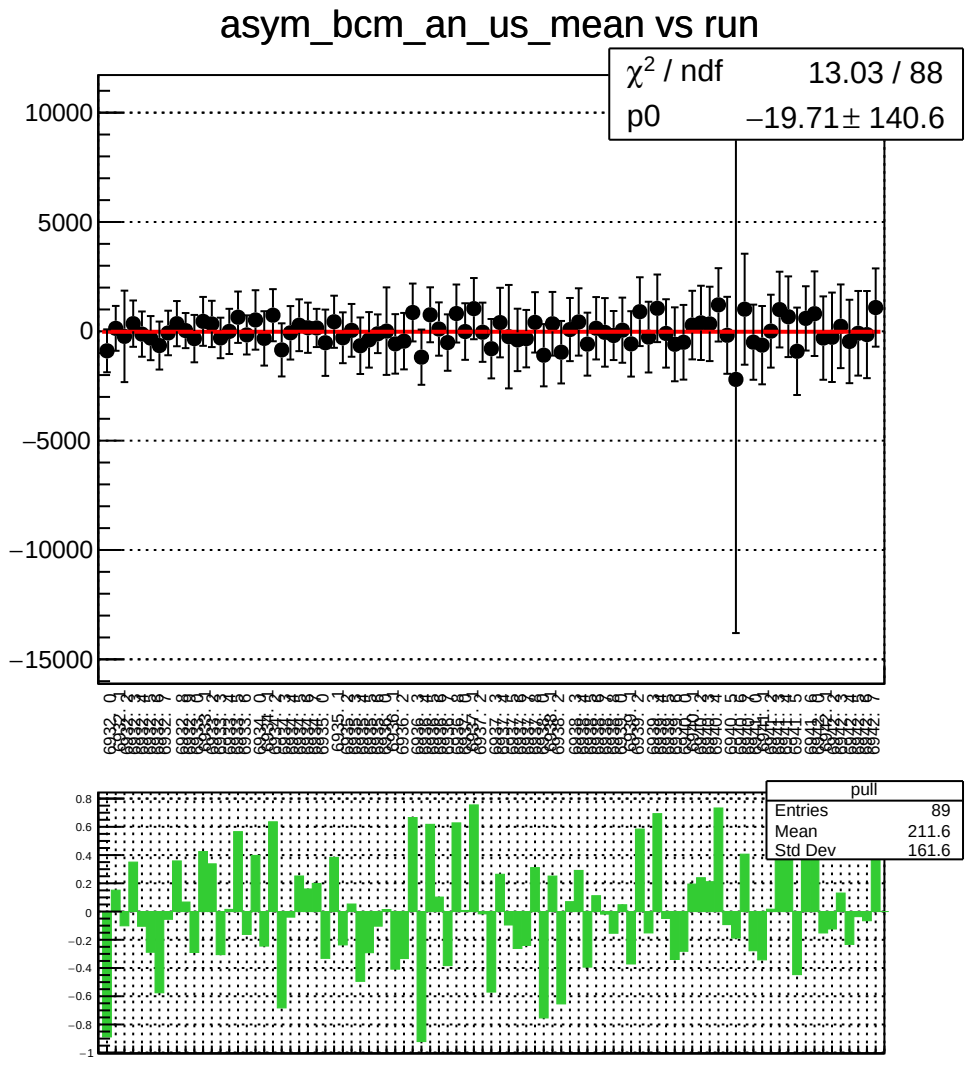

pull1D
Entries 89
Mean 0.005802
Std Dev 0.4432
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

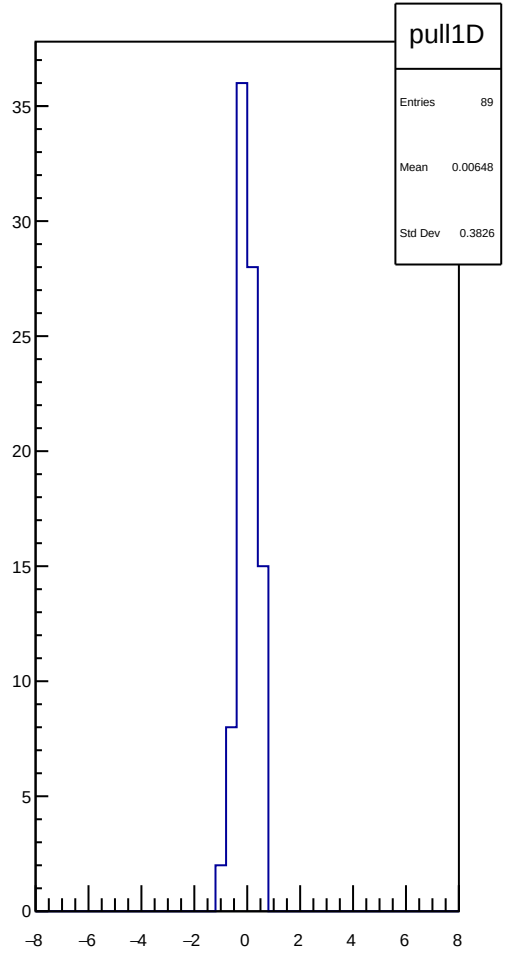

asym_bcm_an_ds_rms vs run
χ² / ndf 8.956e+04 / 88
p0 125.5 ± 0.09917
1200
1000
800
600
400
200

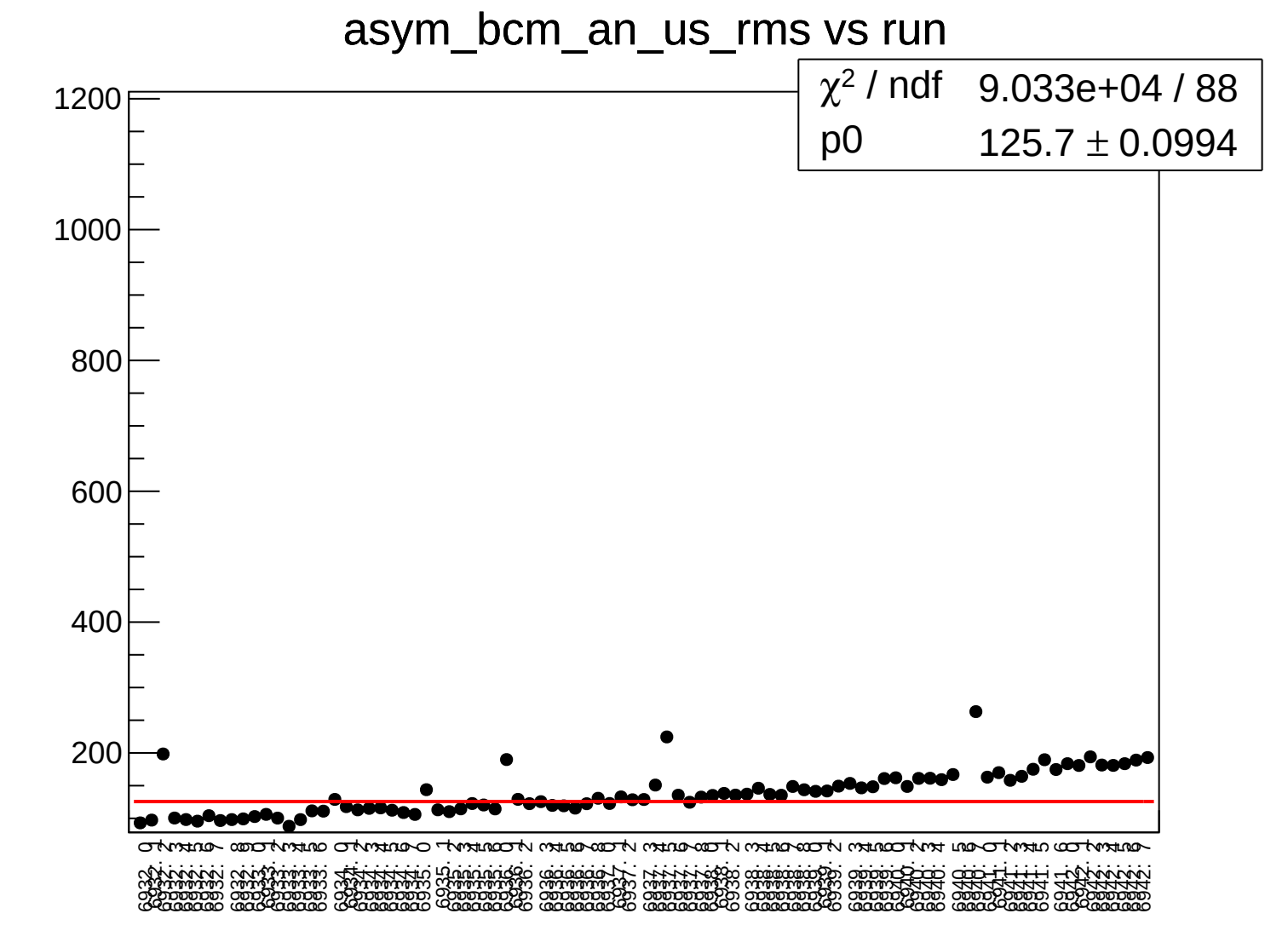

asym_bcm_an_ds3_mean vs run
χ² / ndf 17.51 / 88
p0 −42.75 ± 141.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 271.9
Std Dev 232
1
0.5
0
−0.5
−1

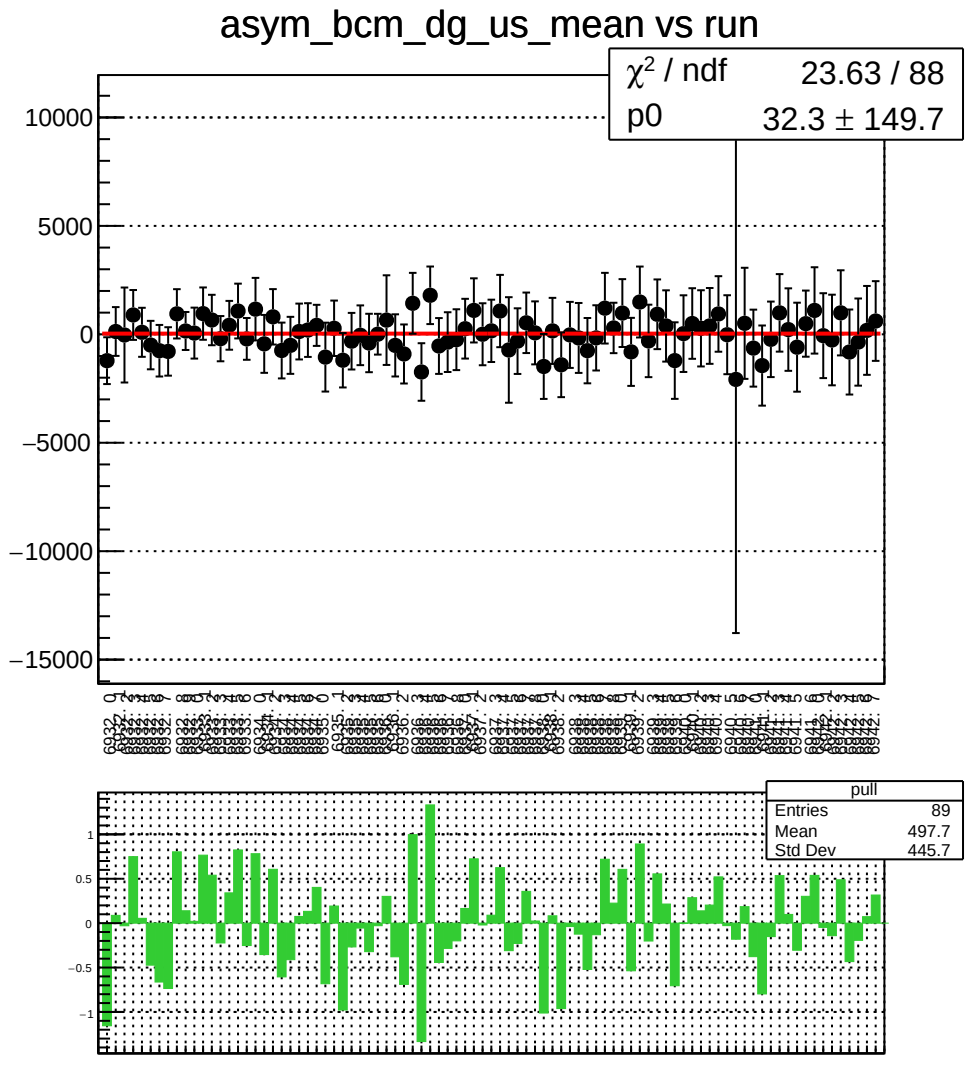

pull1D
Entries 89
Mean 0.006424
Std Dev 0.4435
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

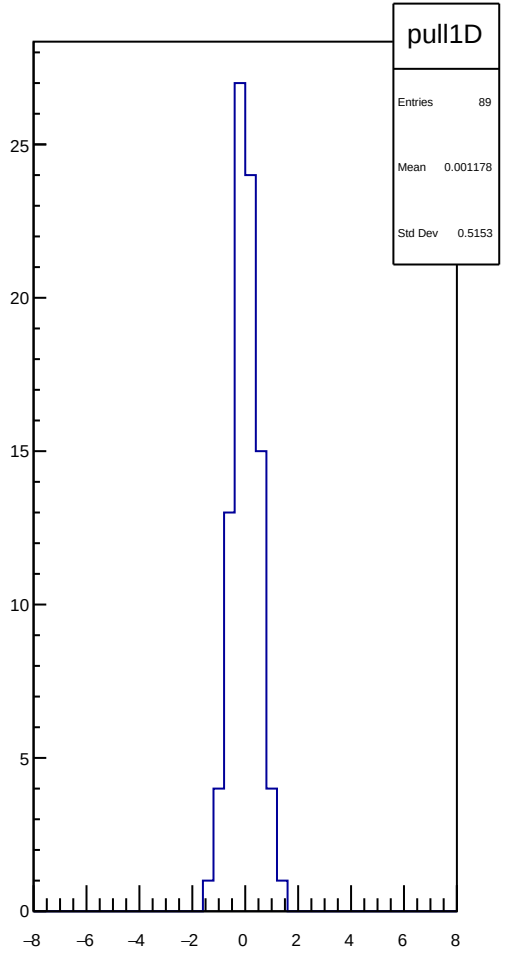

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 9.017e+04 / 88
p0 126.2 ± 0.09977
1200
1000
800
600
400
200


asym_bcm_an_us_mean vs run
χ² / ndf 13.03 / 88
p0 −19.71 ± 140.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 211.6
Std Dev 161.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

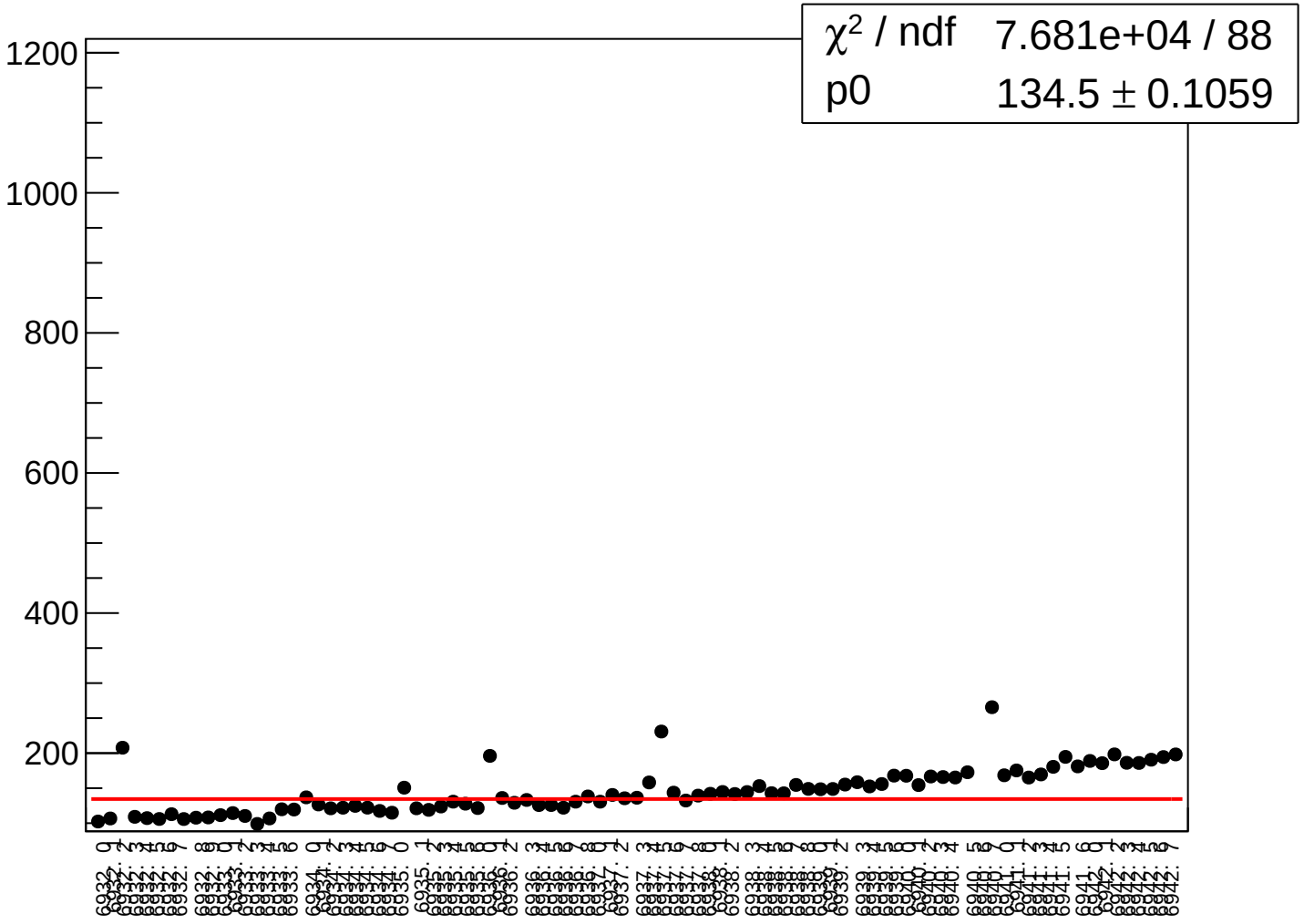

pull1D
Entries 89
Mean 0.00648
Std Dev 0.3826
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

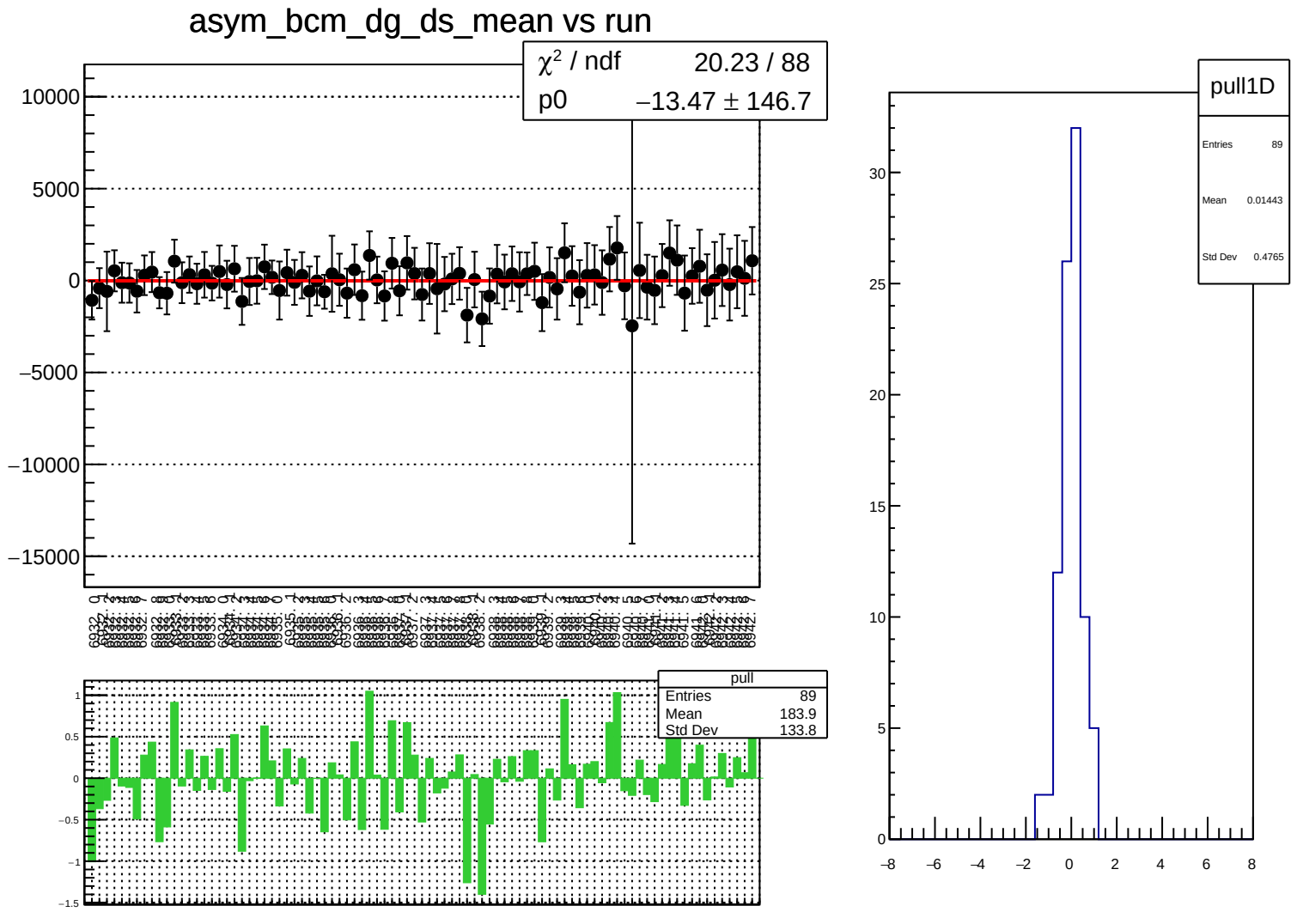

asym_bcm_an_us_rms vs run
χ^2 / ndf 9.033e+04 / 88
p0 125.7 ± 0.0994
1200
1000
800
600
400
200

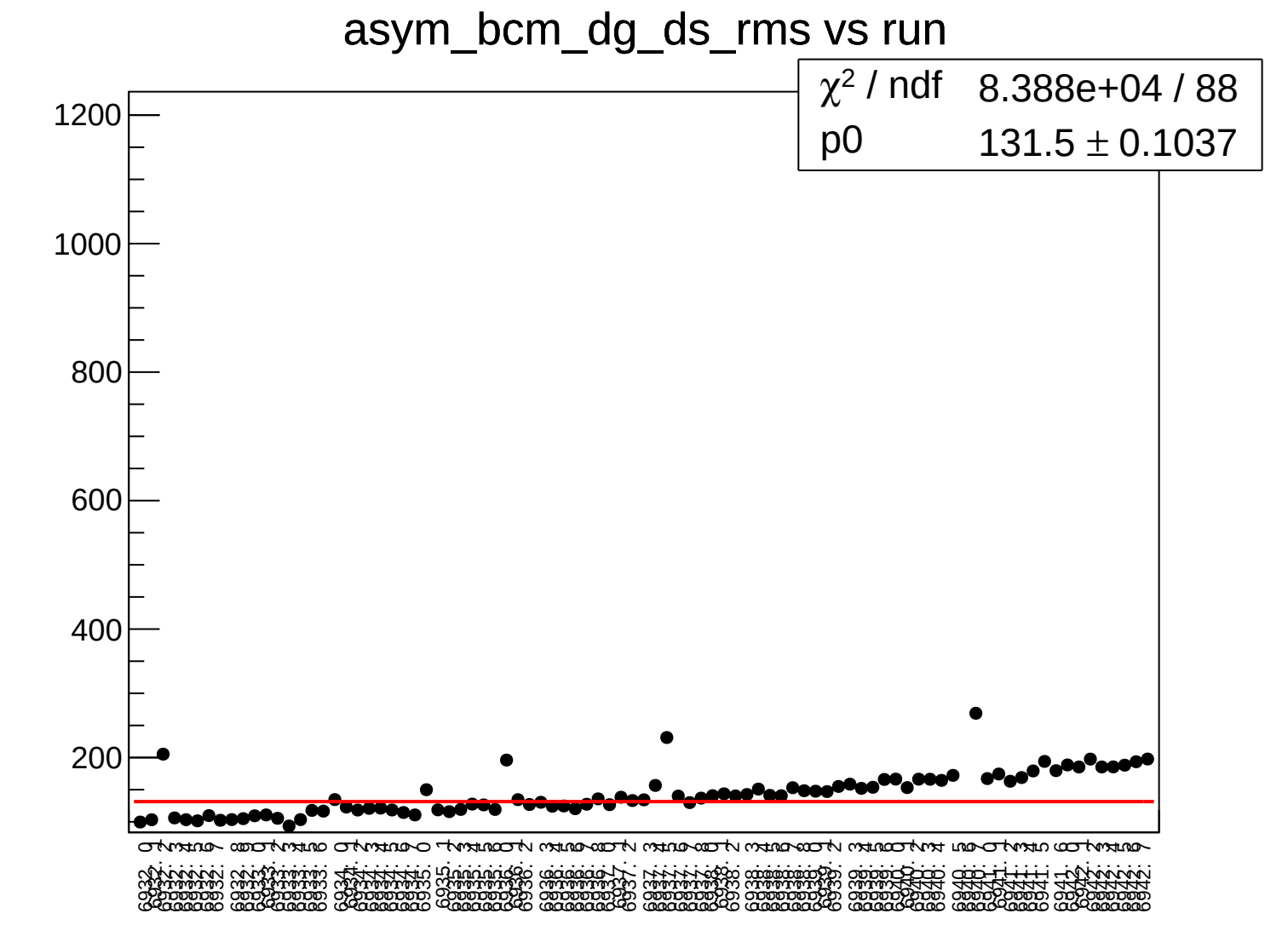

asym_bcm_dg_us_mean vs run
χ² / ndf 23.63 / 88
p0 32.3 ± 149.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 497.7
Std Dev 445.7
1
0.5
0
−0.5
−1

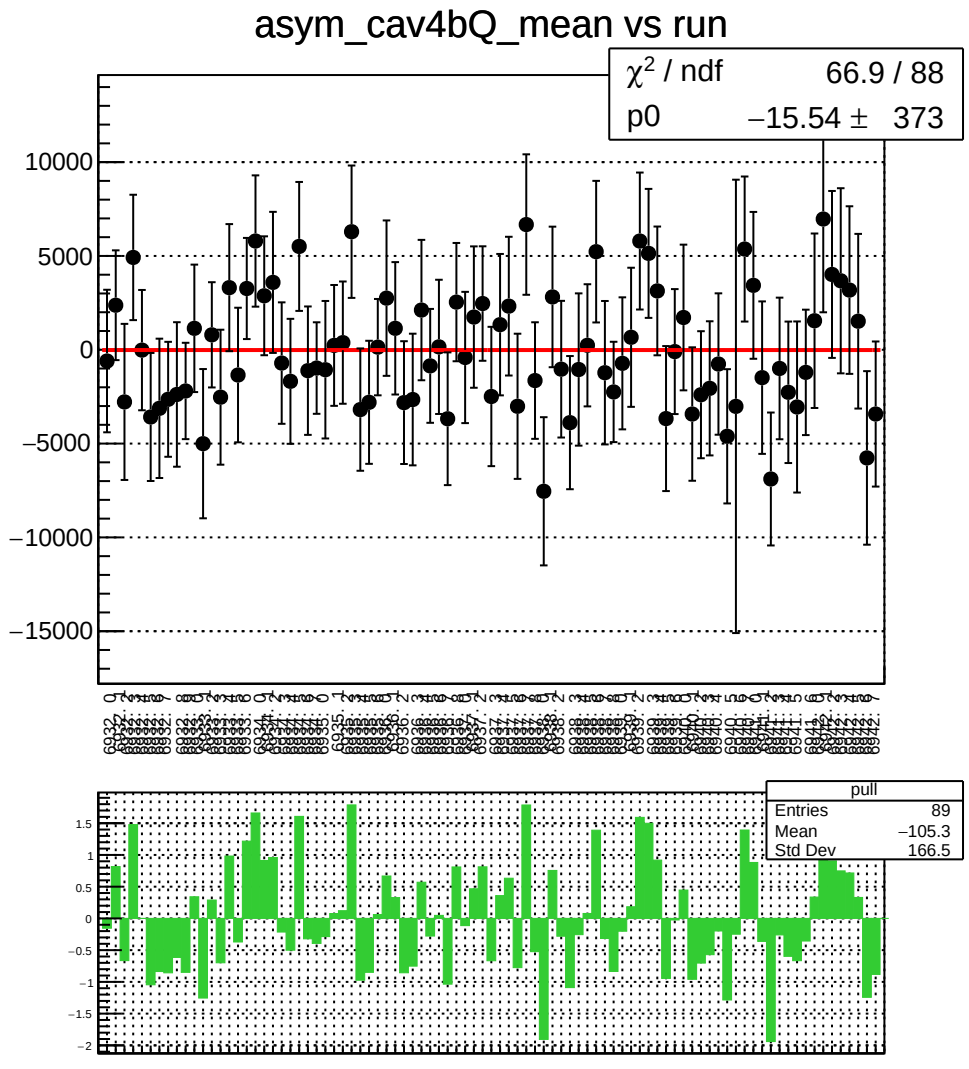

pull1D
Entries 89
Mean 0.001178
Std Dev 0.5153
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

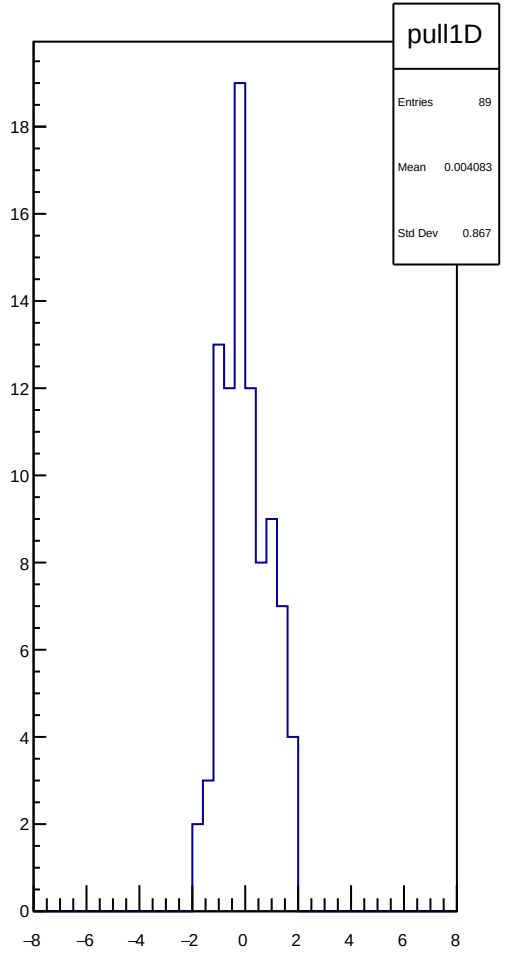
asym_bcm_dg_us_rms vs run

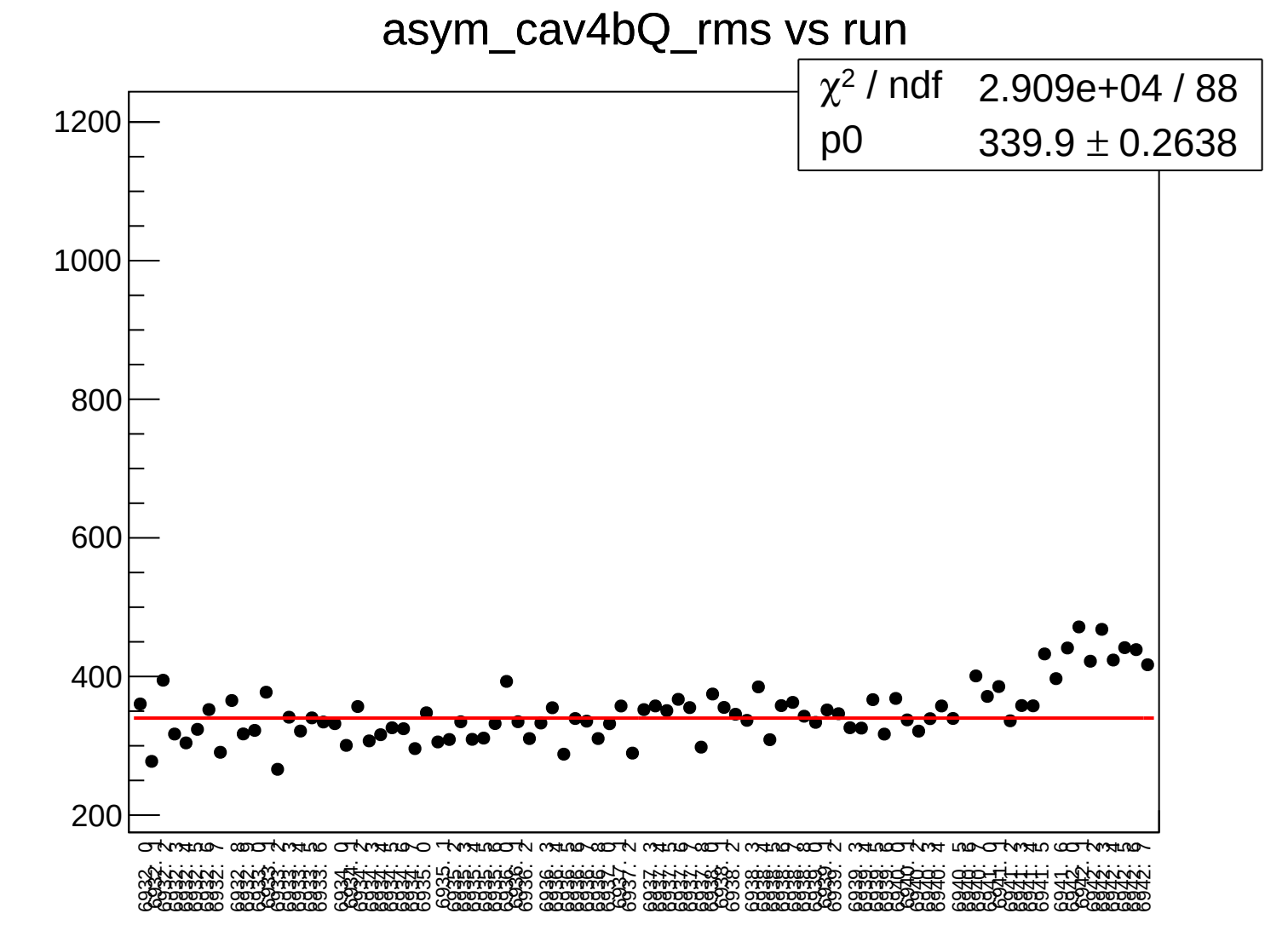


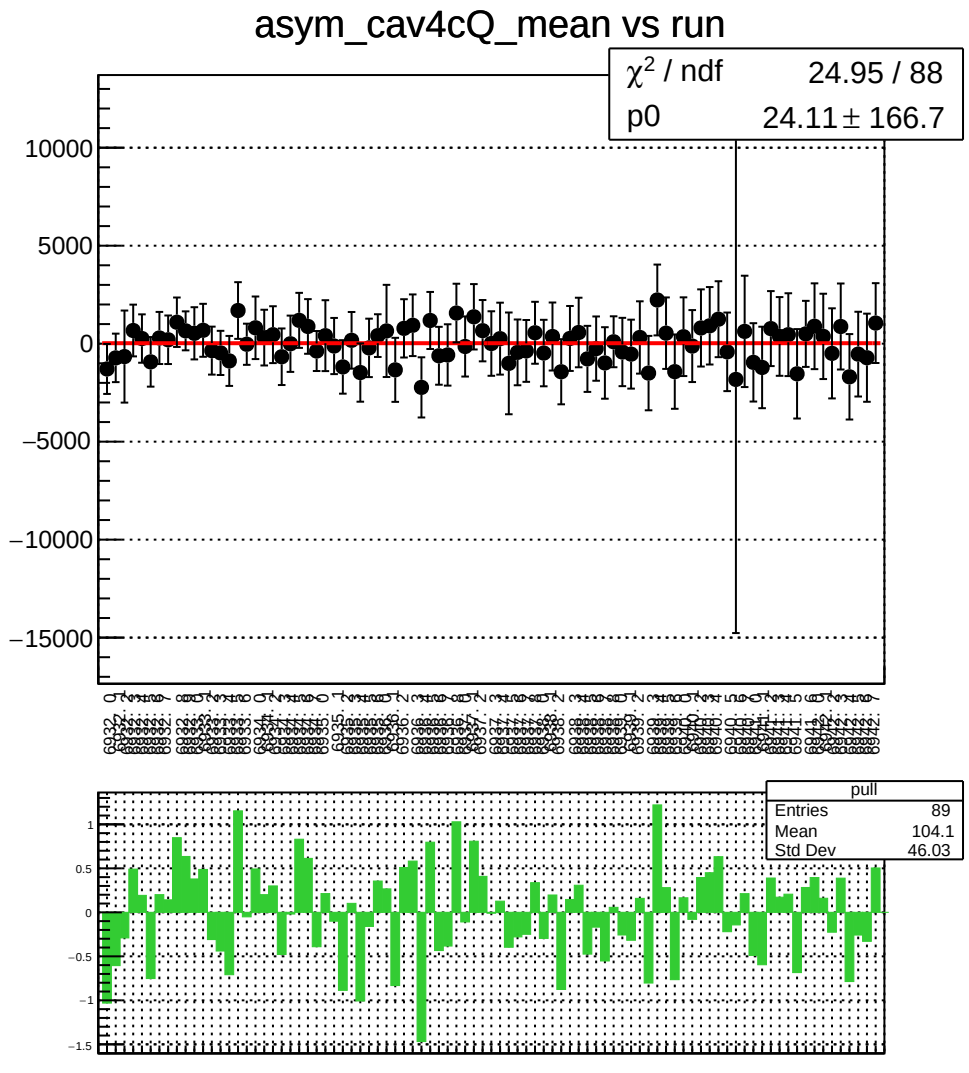

asym_bcm_dg_ds_mean vs run
χ² / ndf 20.23 / 88
p0 −13.47 ± 146.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 183.9
Std Dev 133.8
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean 0.01443
Std Dev 0.4765
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

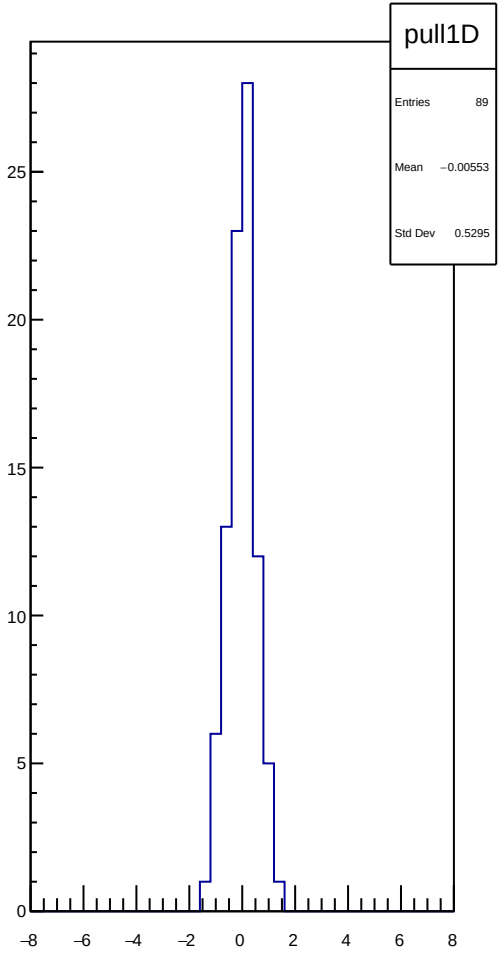

asym_bcm_dg_ds_rms vs run
χ² / ndf 8.388e+04 / 88
p0 131.5 ± 0.1037
1200
1000
800
600
400
200

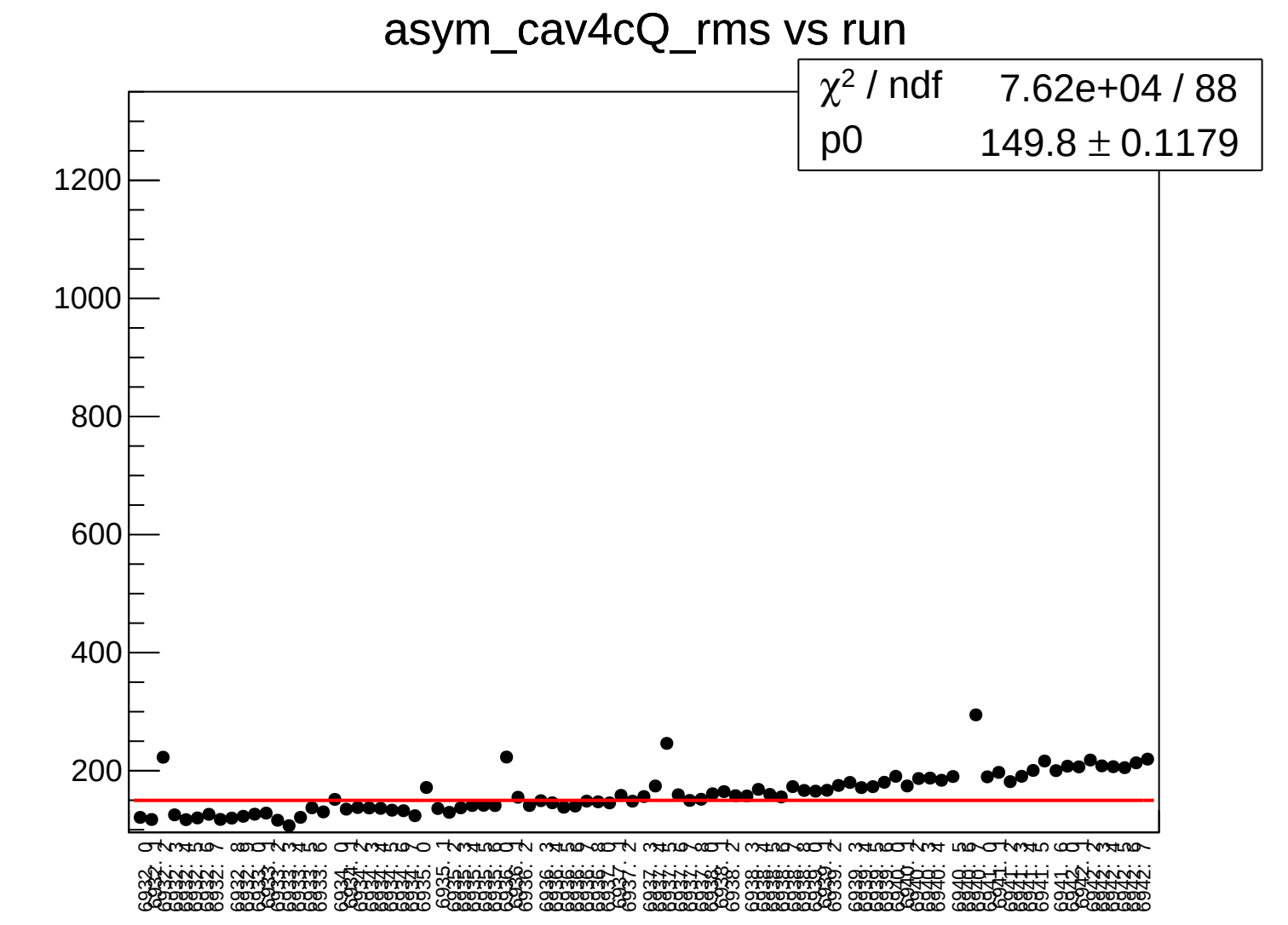

asym_cav4bQ_mean vs run
χ² / ndf 66.9 / 88
p0 −15.54 ± 373
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −105.3
Std Dev 166.5
1.5
1
0.5
0
−0.5
−1
−1.5
−2

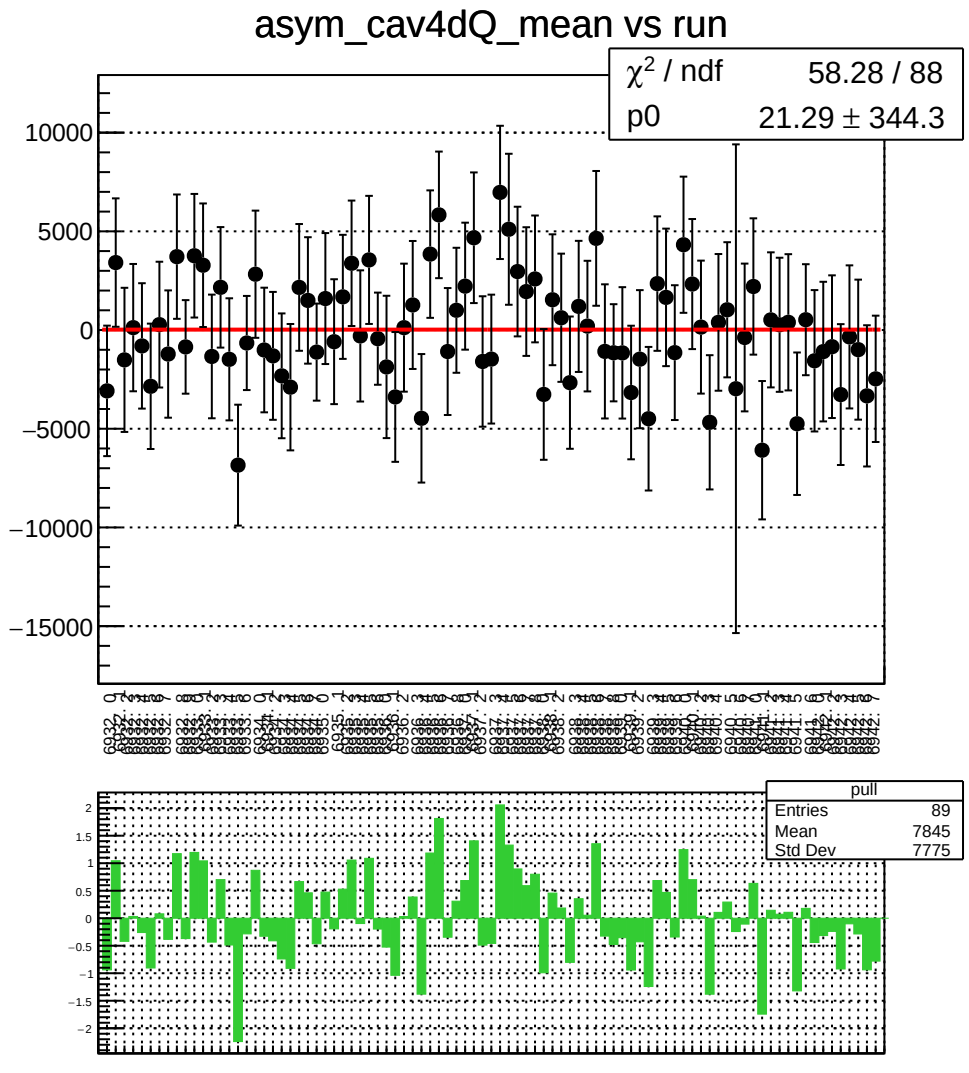

pull1D
Entries 89
Mean 0.004083
Std Dev 0.867
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

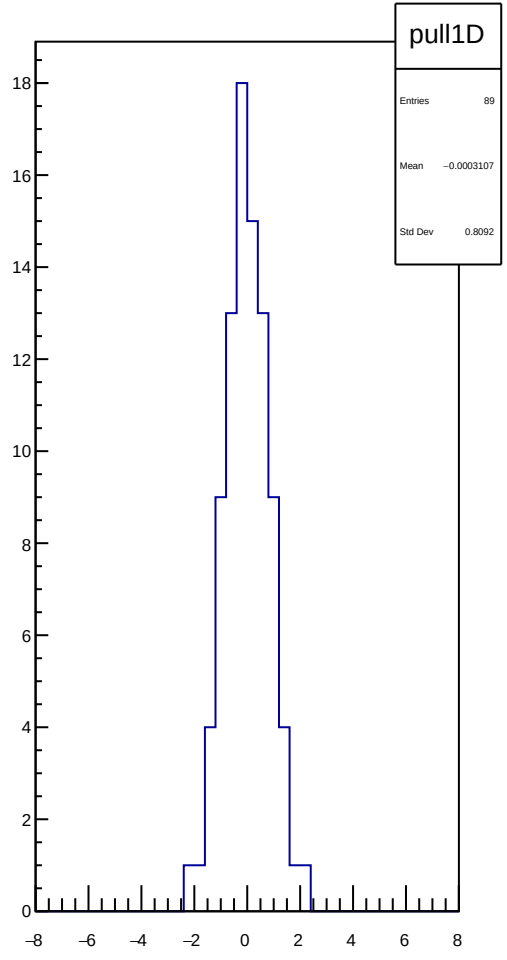

asym_cav4bQ_rms vs run
χ² / ndf 2.909e+04 / 88
p0 339.9 ± 0.2638
1200
1000
800
600
400
200

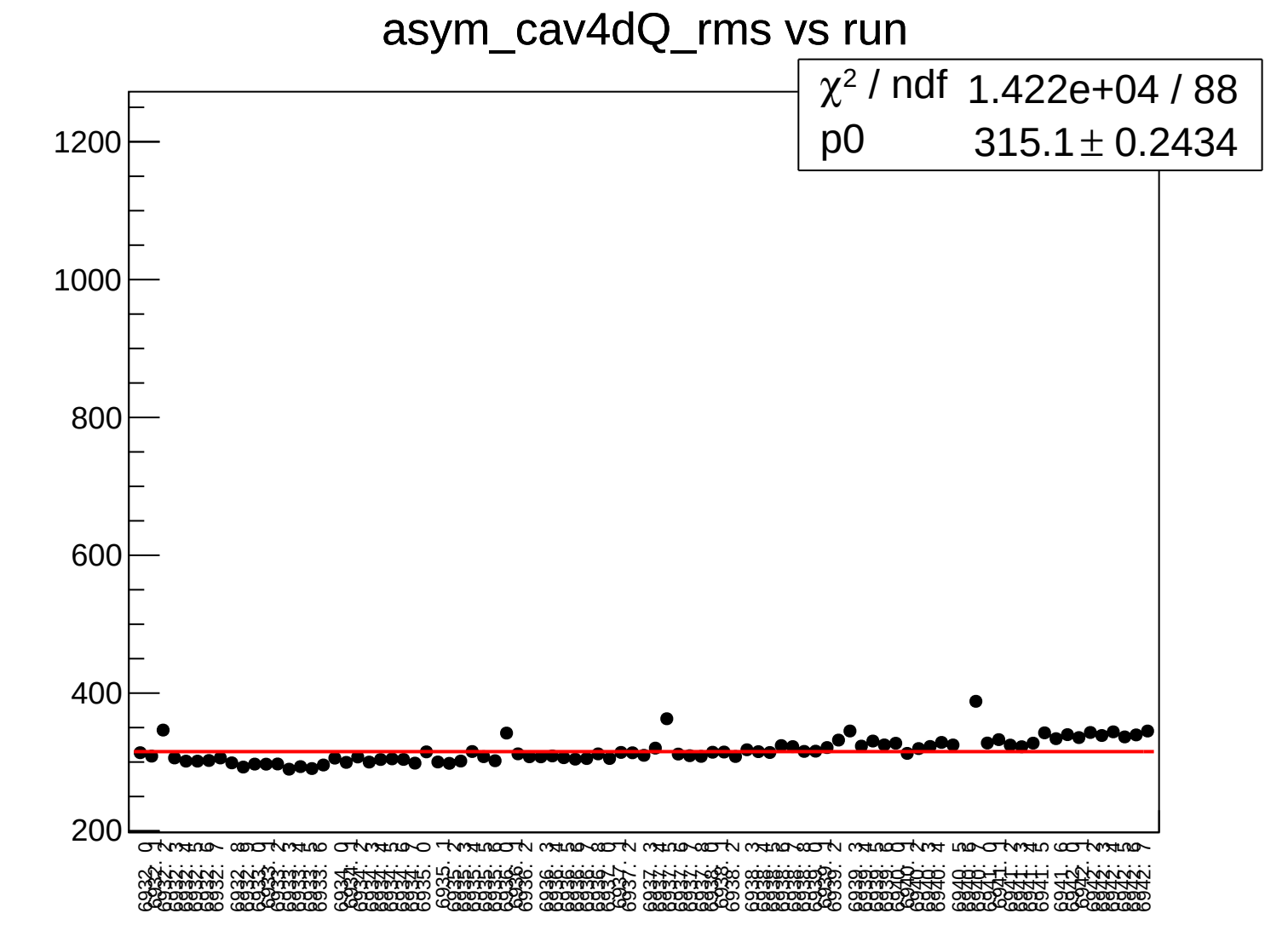

asym_cav4cQ_mean vs run
χ² / ndf 24.95 / 88
p0 24.11 ± 166.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 104.1
Std Dev 46.03
1
0.5
0
−0.5
−1
−1.5

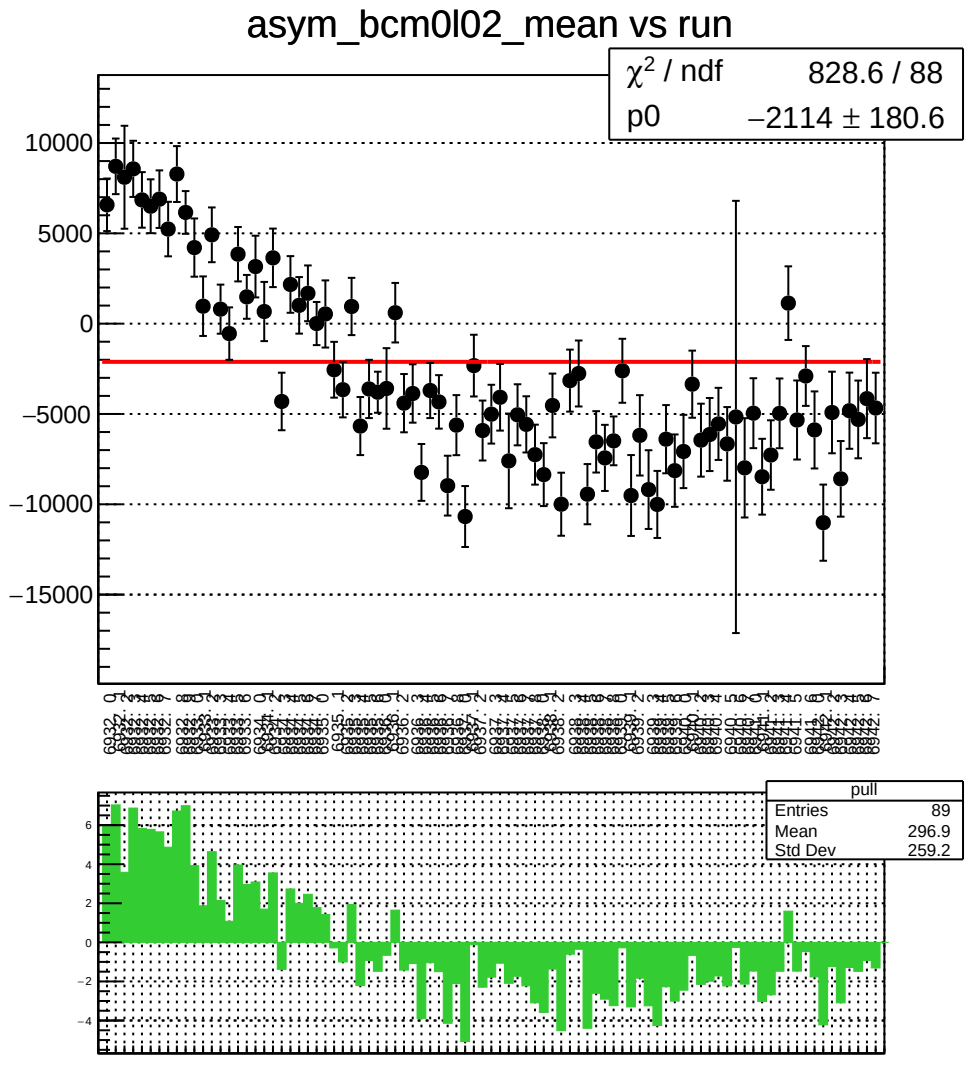

pull1D
Entries 89
Mean −0.00553
Std Dev 0.5295
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

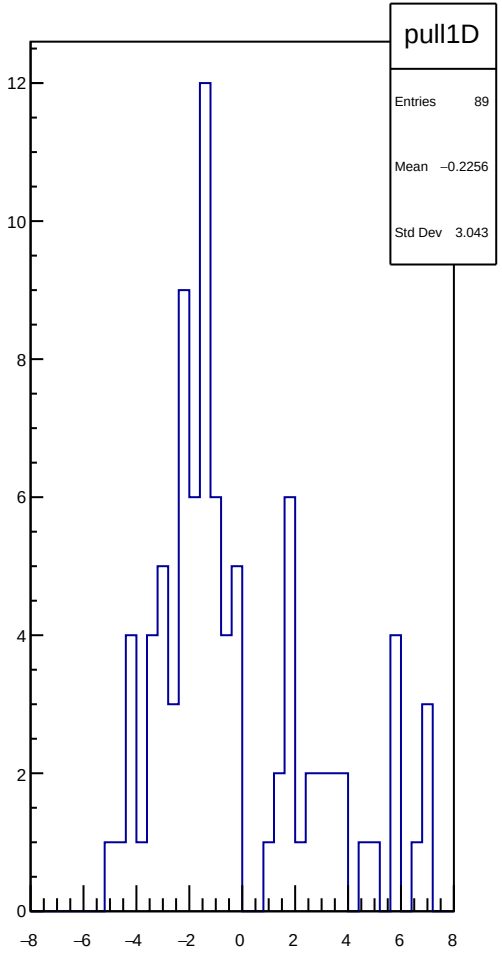

asym_cav4cQ_rms vs run
χ² / ndf 7.62e+04 / 88
p0 149.8 ± 0.1179
1200
1000
800
600
400
200

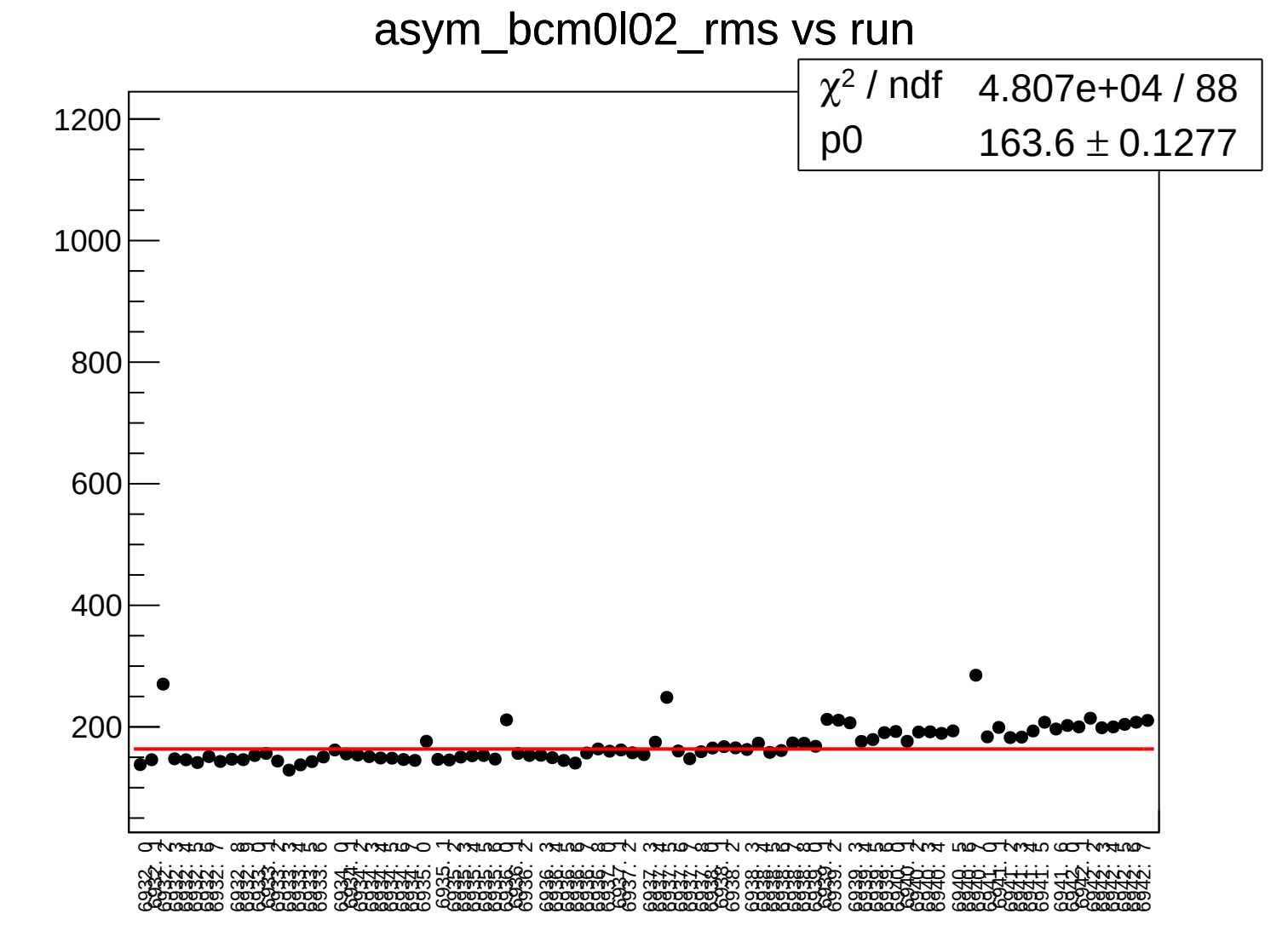

asym_cav4dQ_mean vs run
χ² / ndf 58.28 / 88
p0 21.29 ± 344.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 7845
Std Dev 7775
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

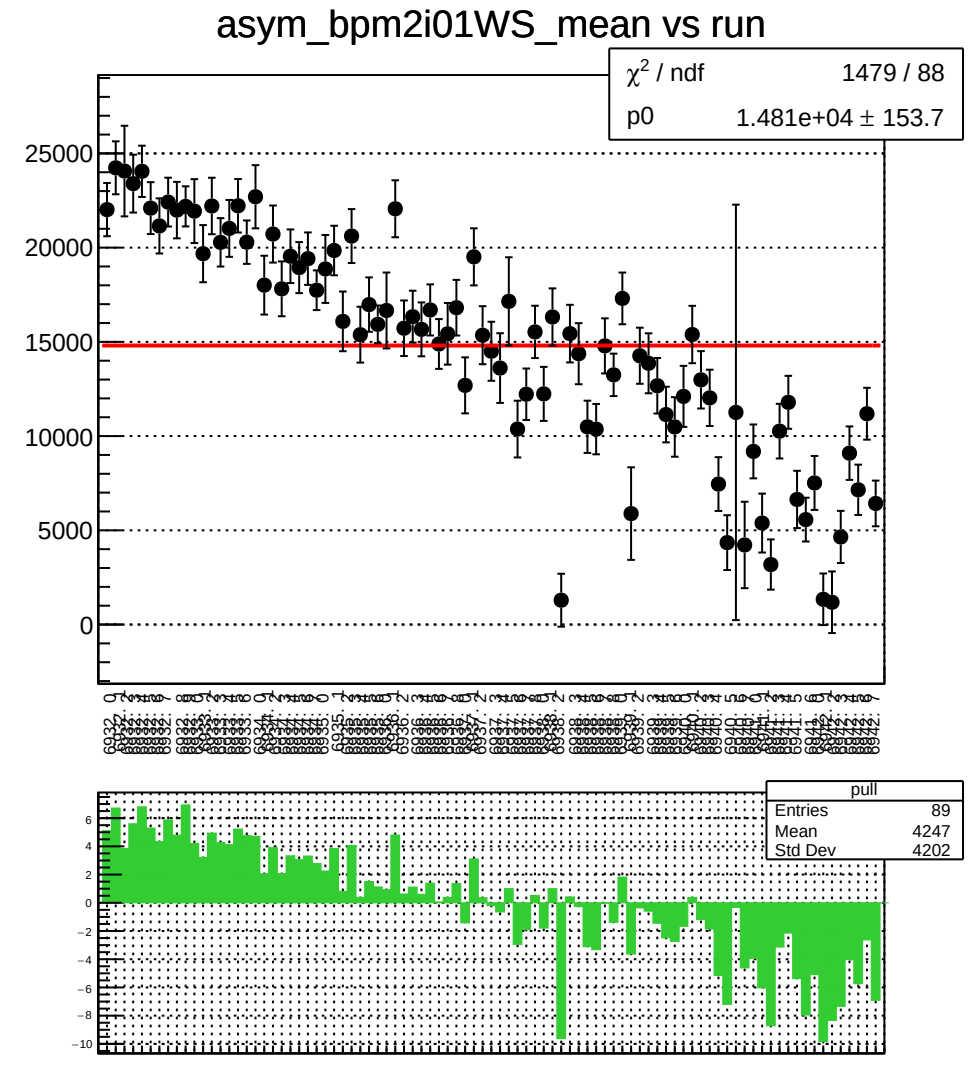

pull1D
Entries 89
Mean −0.0003107
Std Dev 0.8092
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

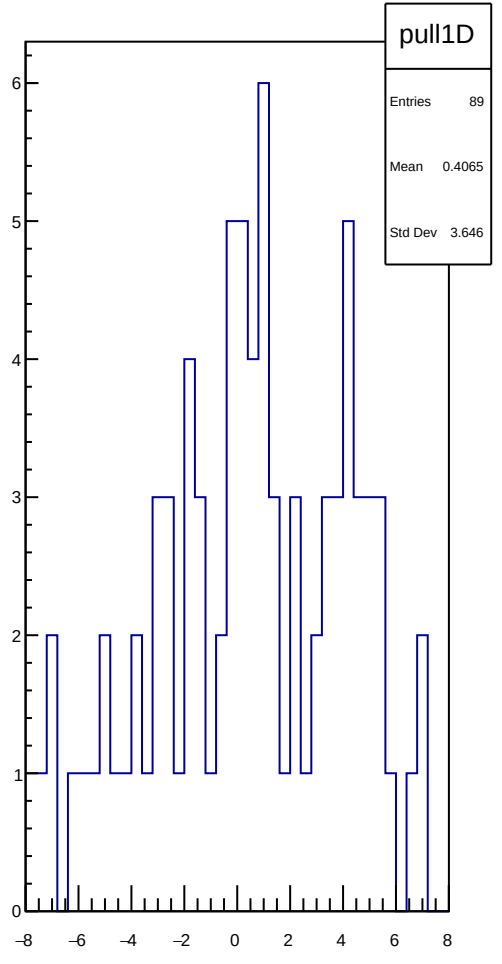

asym_cav4dQ_rms vs run
χ² / ndf 1.422e+04 / 88
p0 315.1 ± 0.2434
1200
1000
800
600
400
200

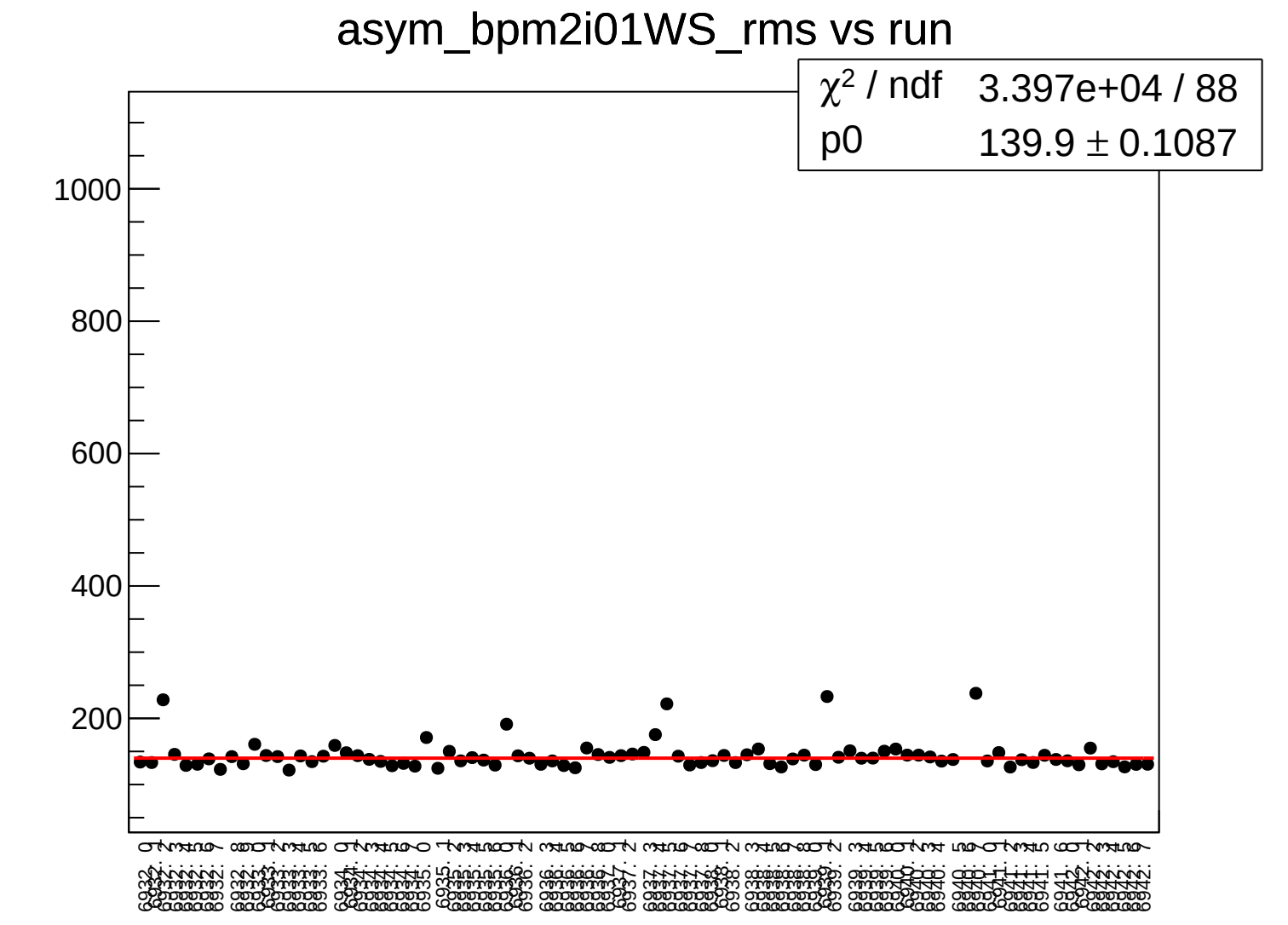

asym_bcm0l02_mean vs run
χ² / ndf 828.6 / 88
p0 −2114 ± 180.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 296.9
Std Dev 259.2
6
4
2
0
−2
−4

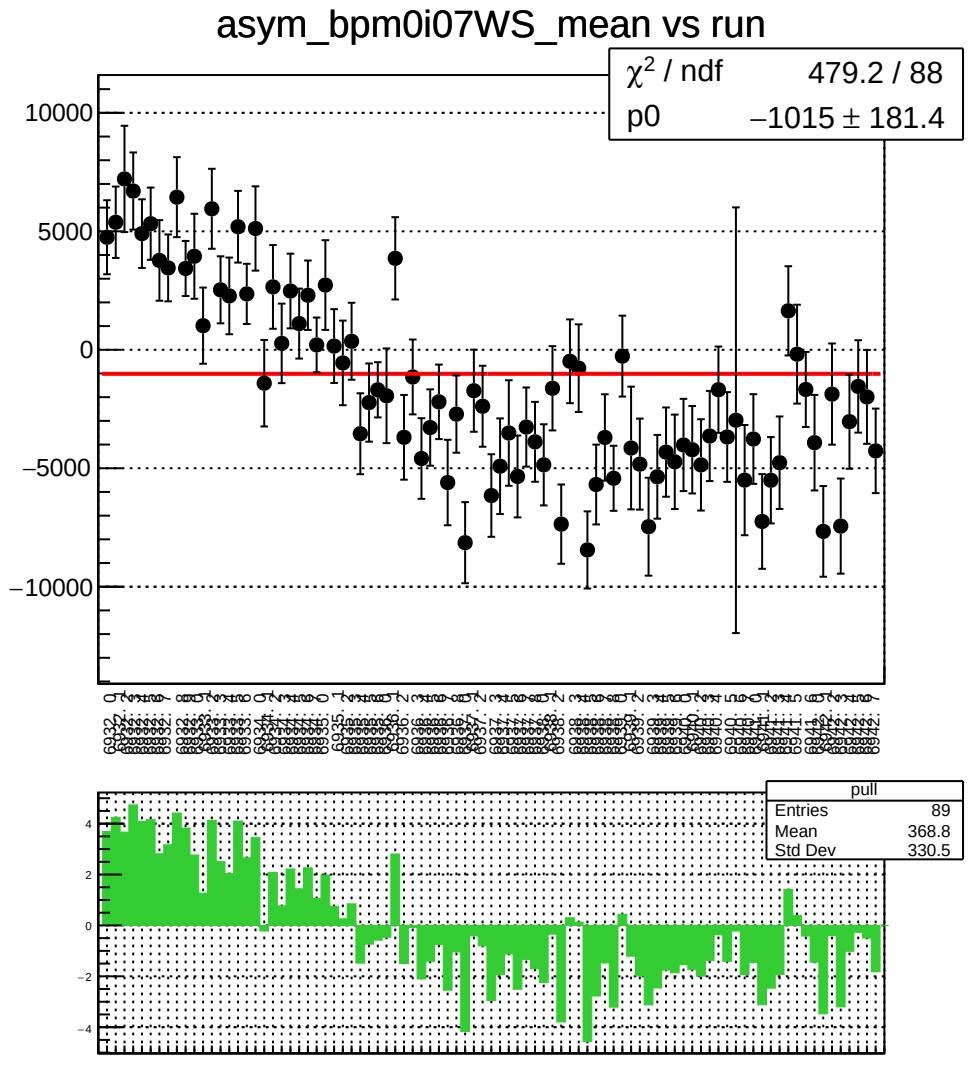

pull1D
Entries 89
Mean −0.2256
Std Dev 3.043
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

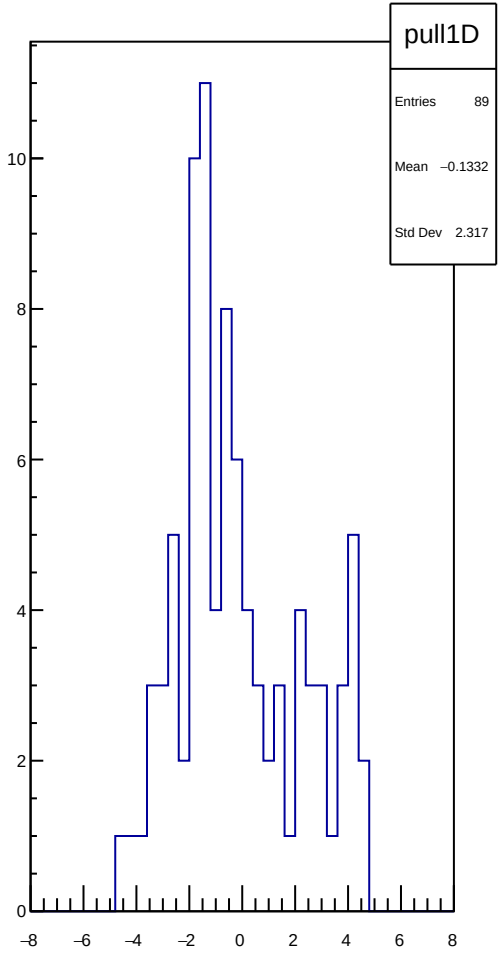

asym_bcm0l02_rms vs run
χ² / ndf 4.807e+04 / 88
p0 163.6 ± 0.1277
1200
1000
800
600
400
200

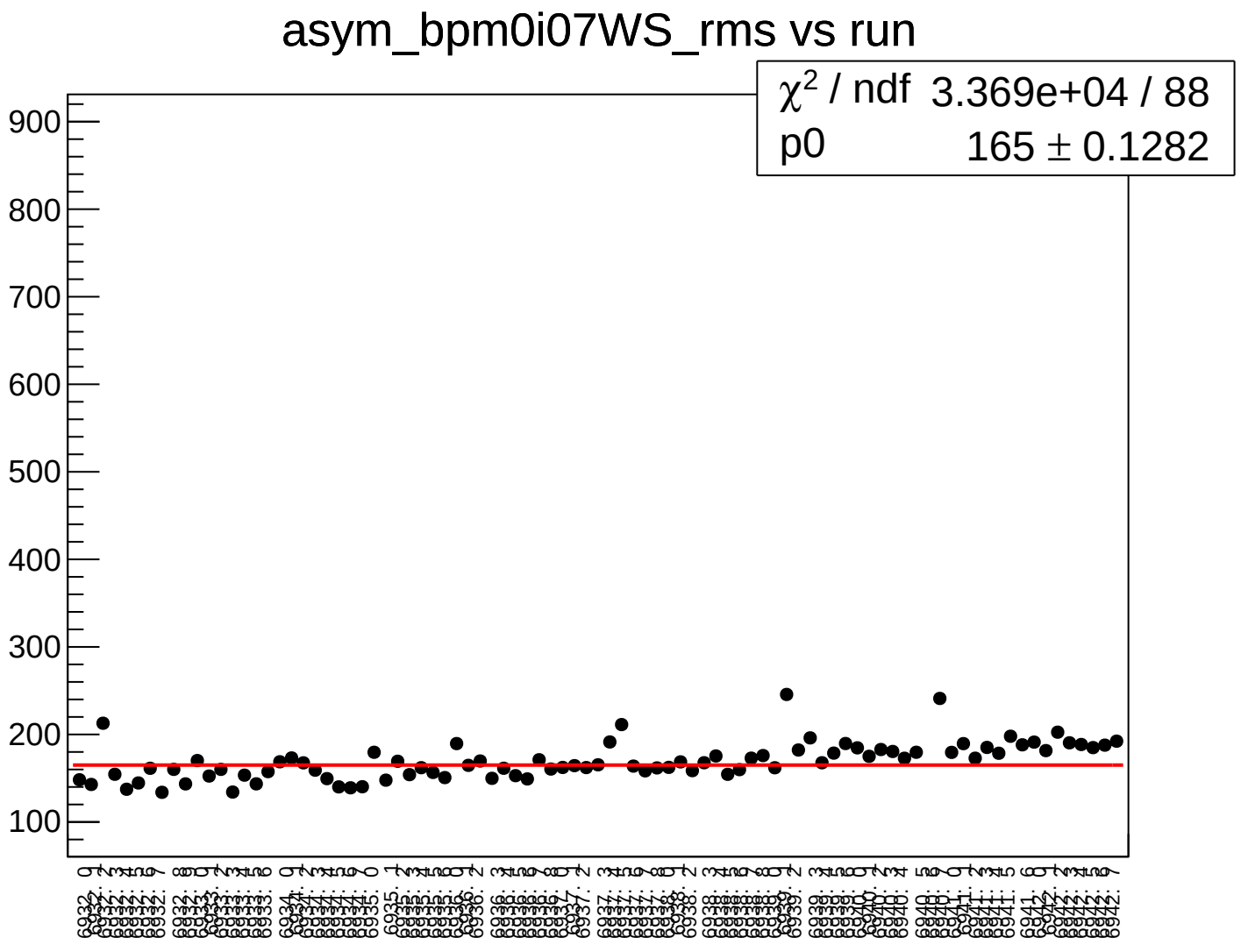

asym_bpm2i01WS_mean vs run
χ² / ndf 1479 / 88
p0 1.481e+04 ± 153.7
pull
Entries 89
Mean 4247
Std Dev 4202

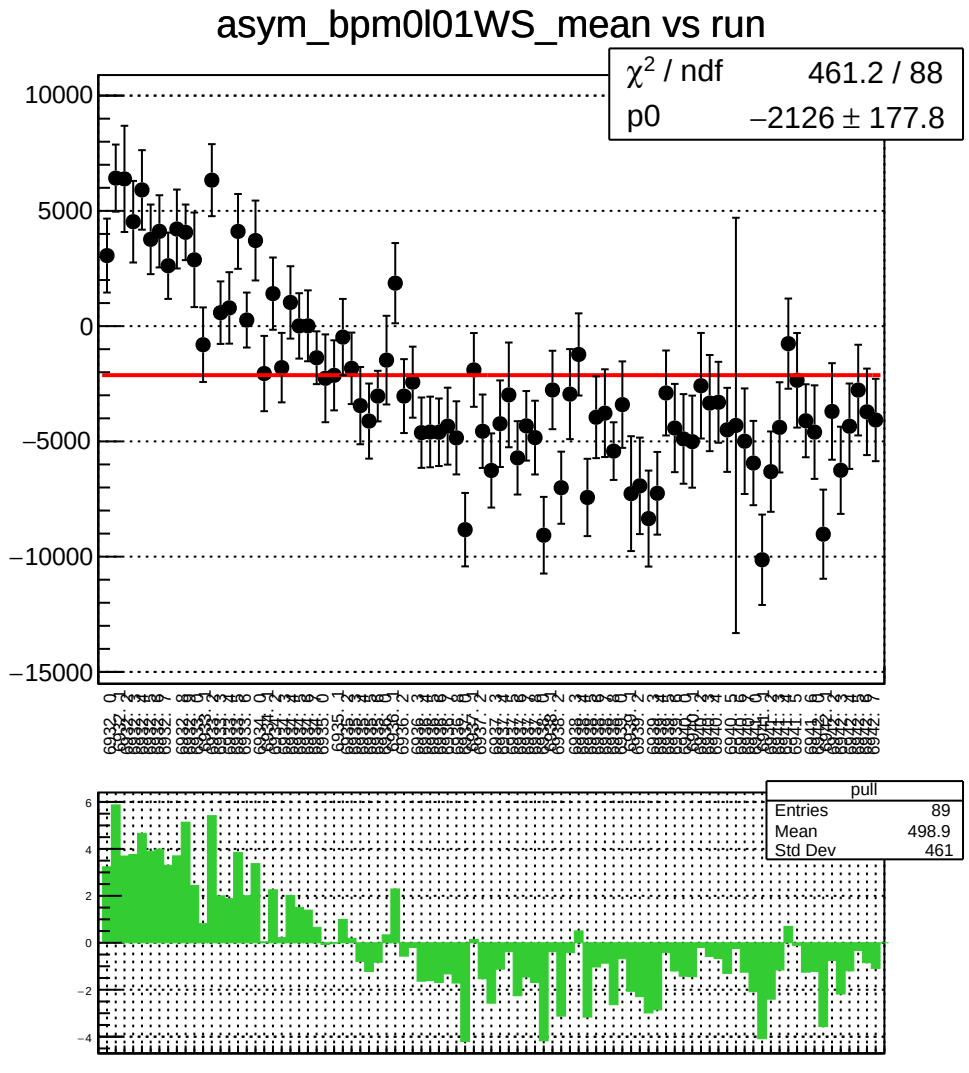

pull1D
Entries 89
Mean 0.4065
Std Dev 3.646

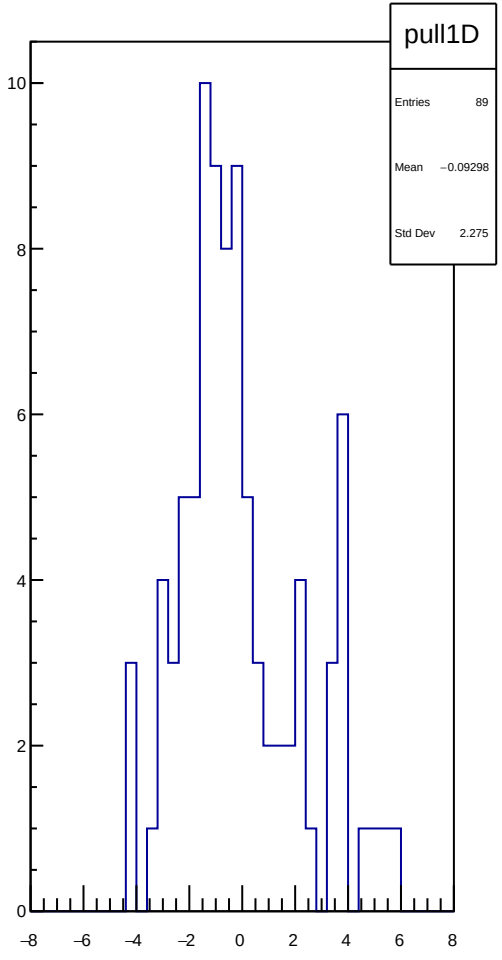

asym_bpm2i01WS_rms vs run
χ^2 / ndf 3.397e+04 / 88
p0 139.9 ± 0.1087
1000
800
600
400
200

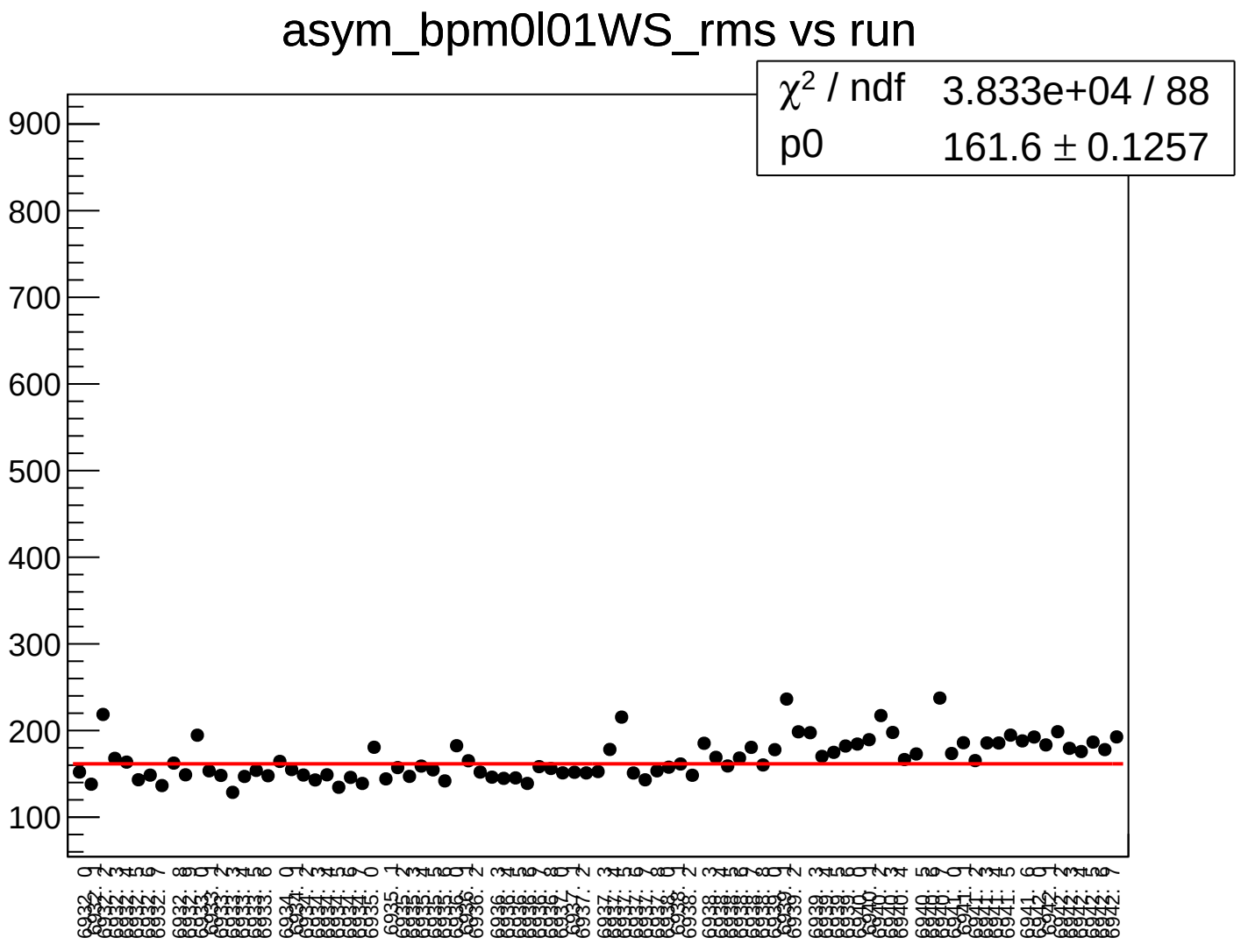

asym_bpm0i07WS_mean vs run
χ² / ndf 479.2 / 88
p0 −1015 ± 181.4
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 368.8
Std Dev 330.5
4
2
0
−2
−4

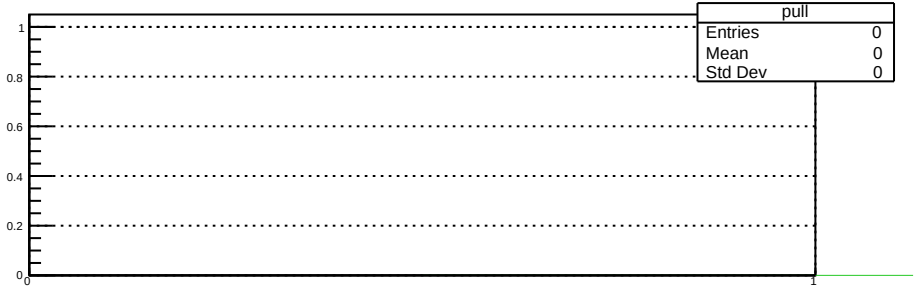

pull1D
Entries 89
Mean −0.1332
Std Dev 2.317
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

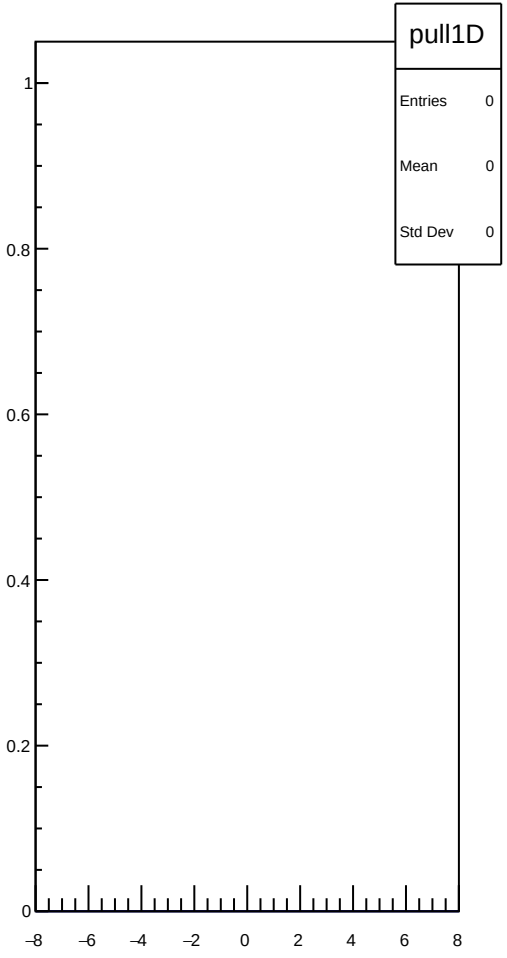

asym_bpm0i07WS_rms vs run
χ^2 / ndf 3.369e+04 / 88
p0 165 ± 0.1282
900
800
700
600
500
400
300
200
100

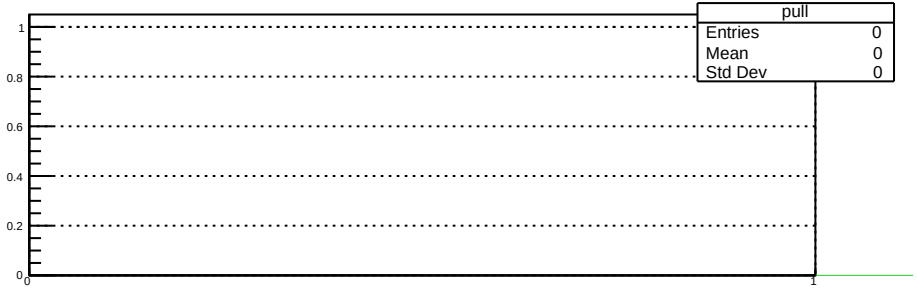

asym_bpm0l01WS_mean vs run
χ² / ndf 461.2 / 88
p0 −2126 ± 177.8
pull
Entries 89
Mean 498.9
Std Dev 461

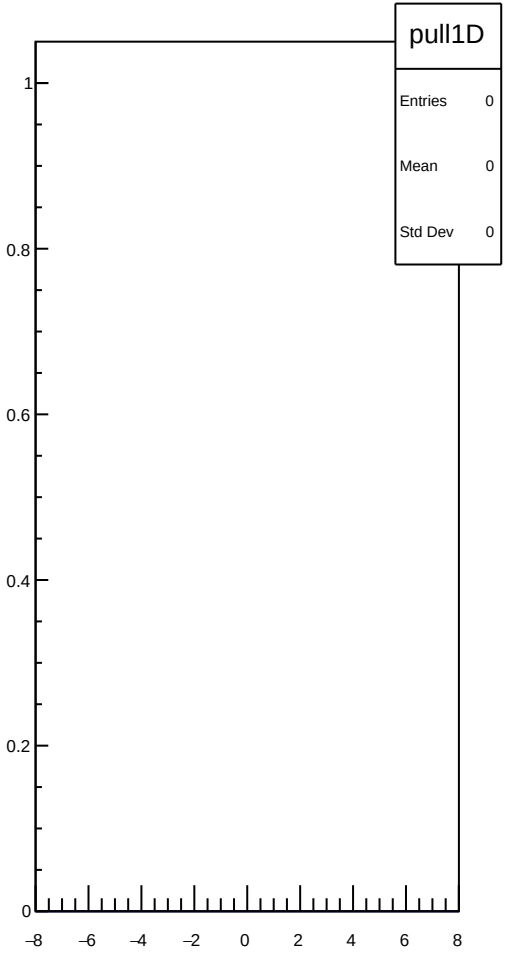

pull1D
Entries 89
Mean −0.09298
Std Dev 2.275

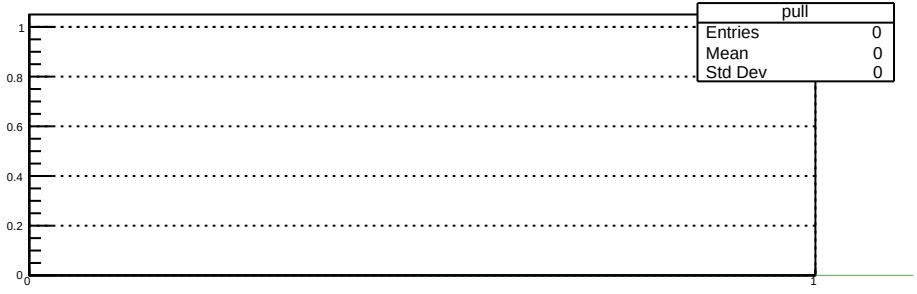

asym_bpm0l01WS_rms vs run
χ² / ndf 3.833e+04 / 88
p0 161.6 ± 0.1257
900
800
700
600
500
400
300
200
100

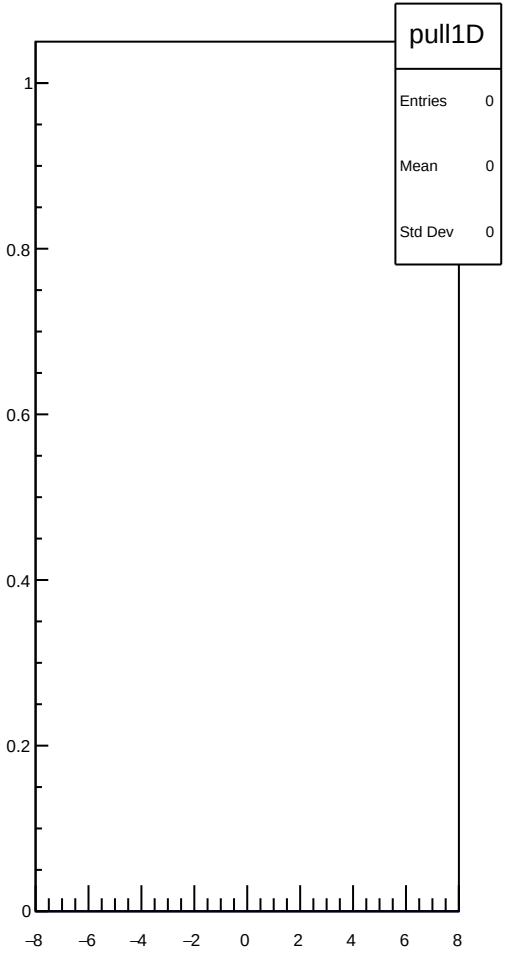

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

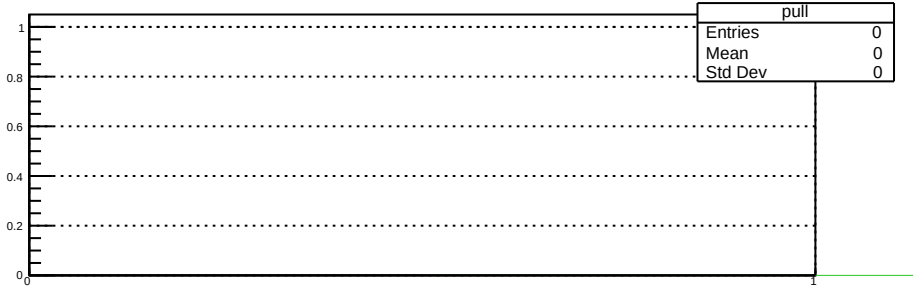

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

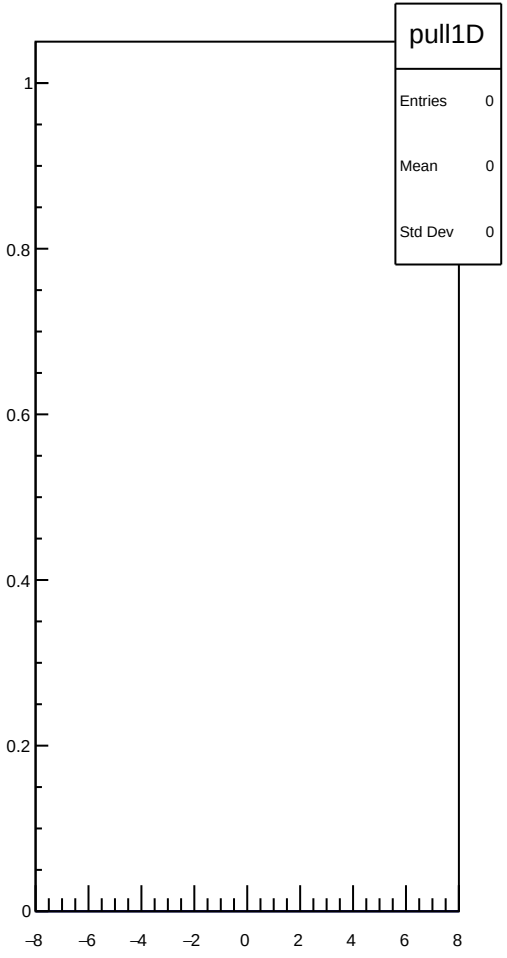

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

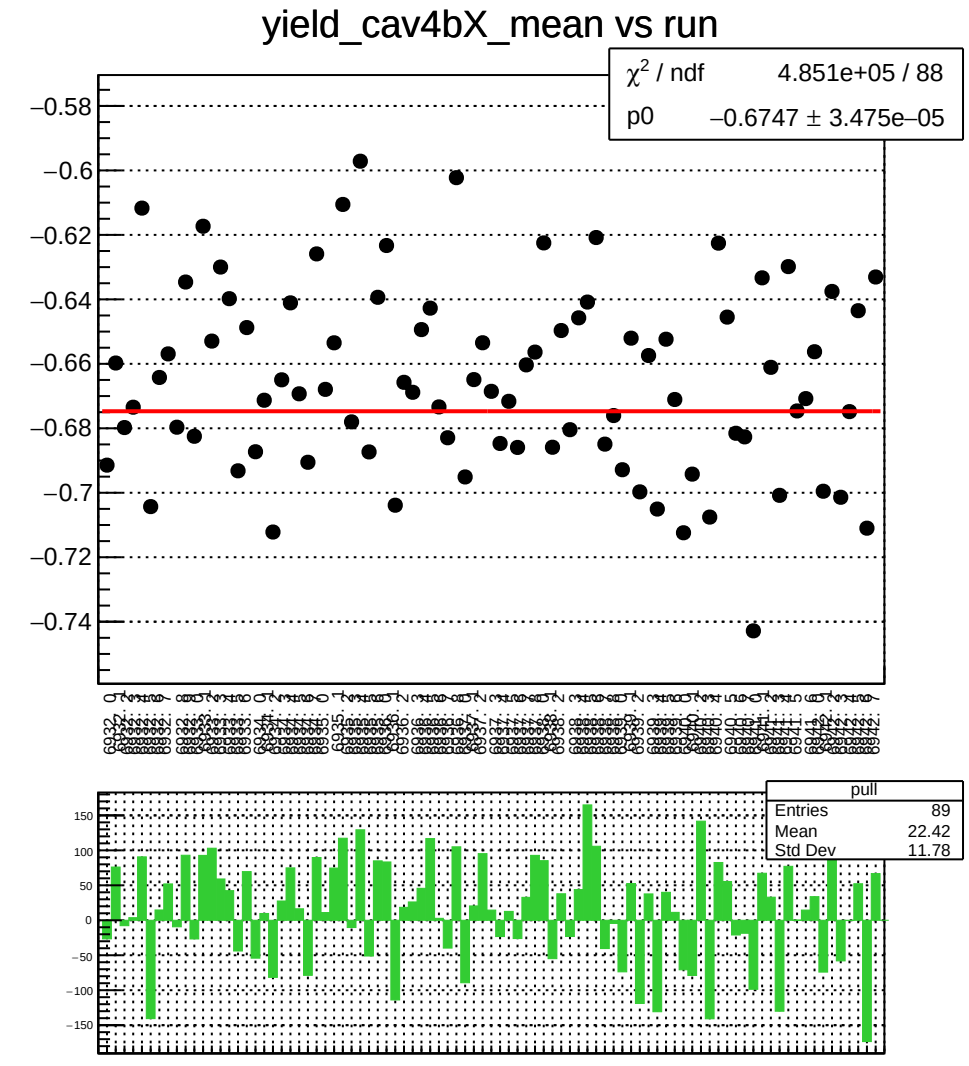

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

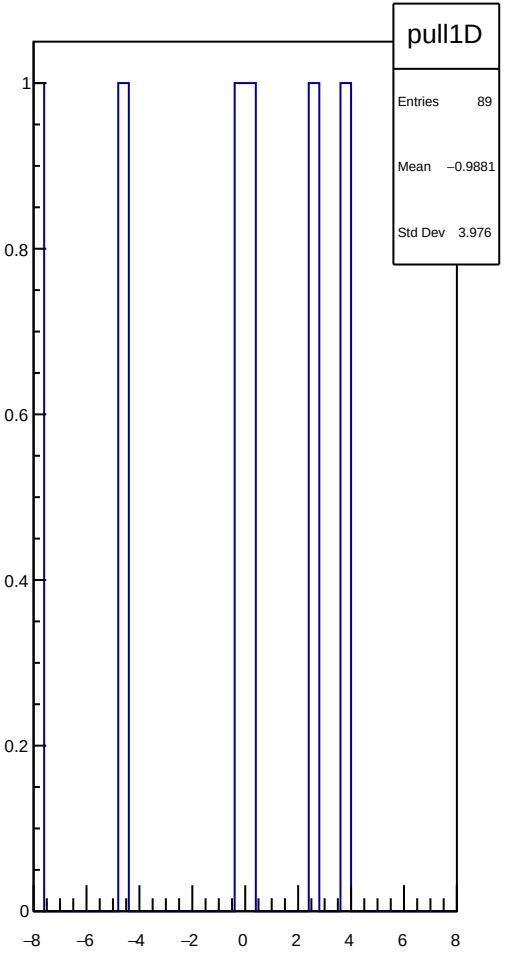

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

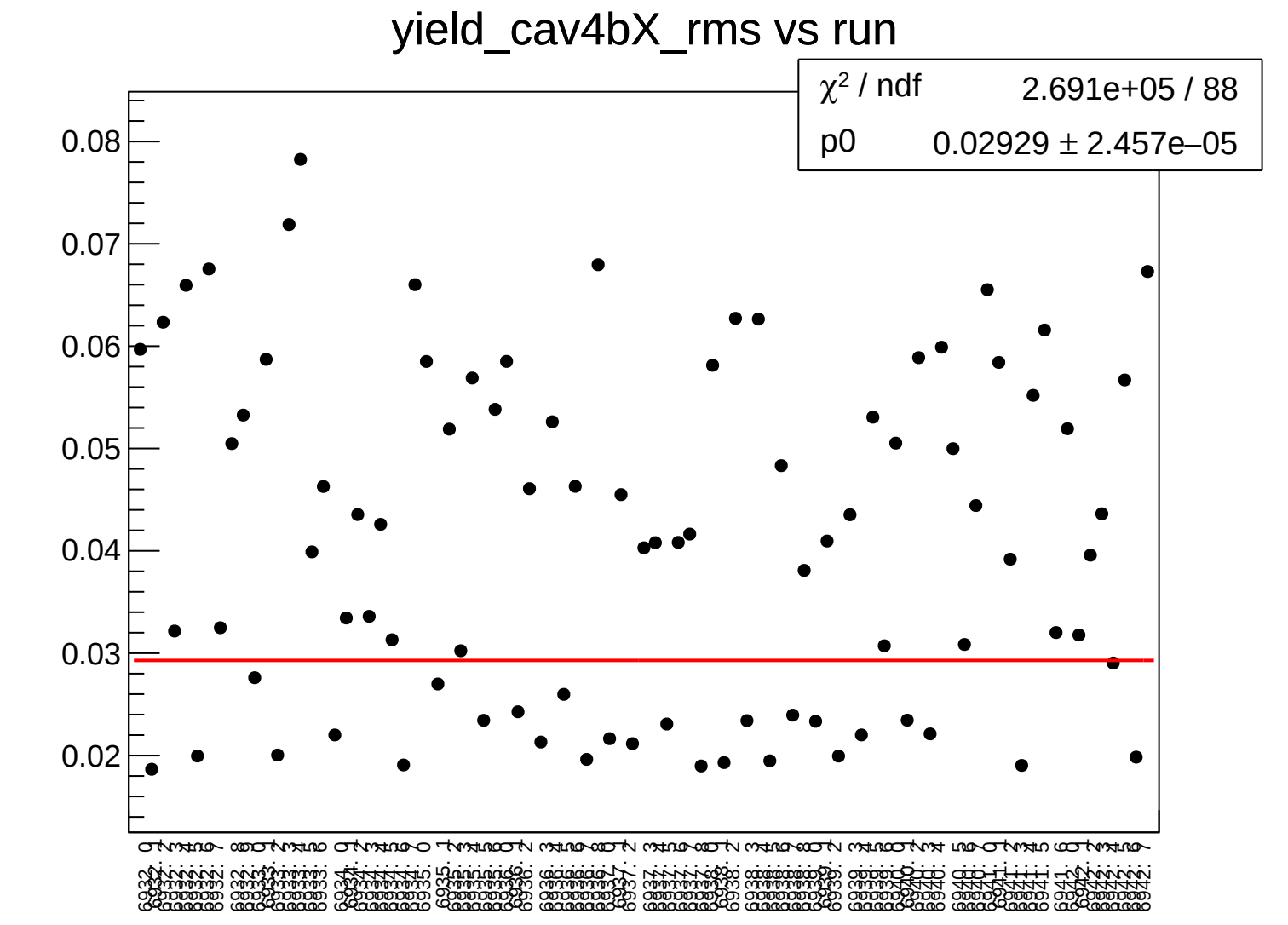

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

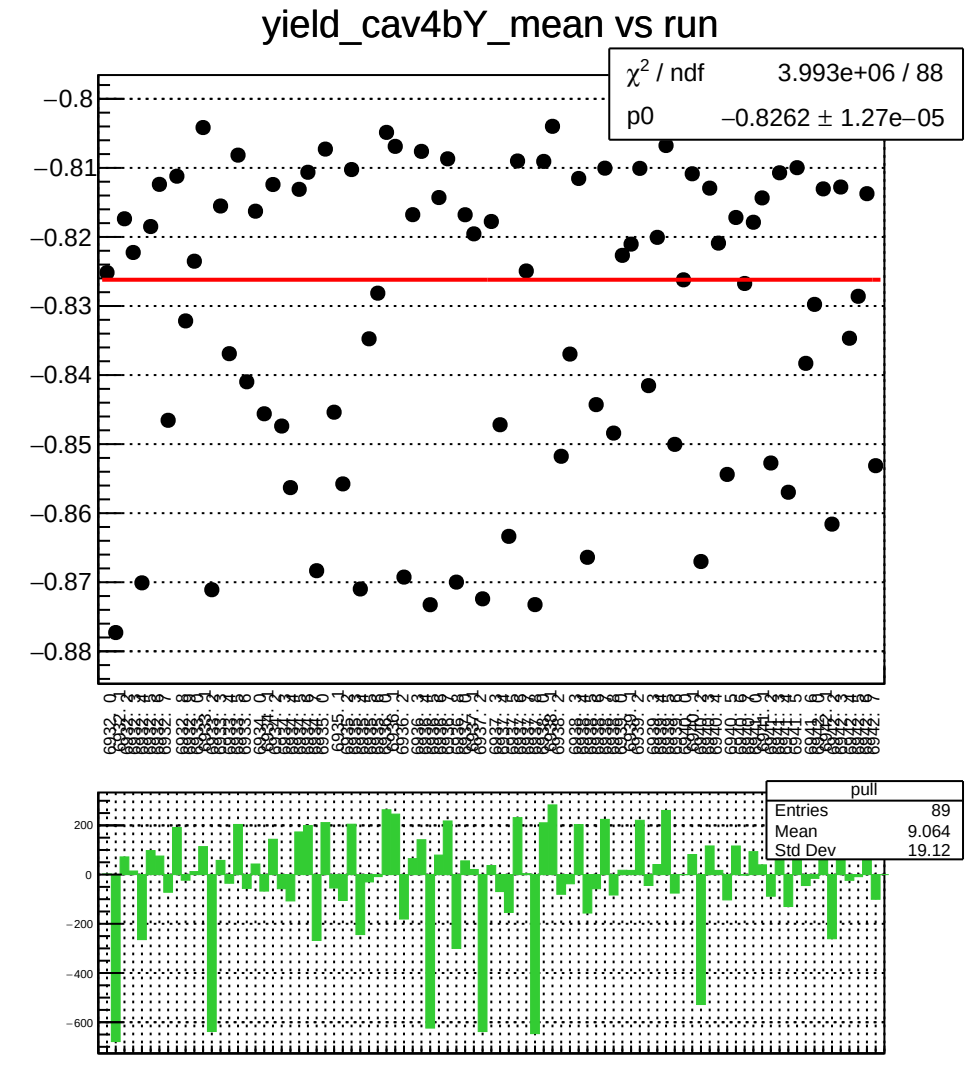

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

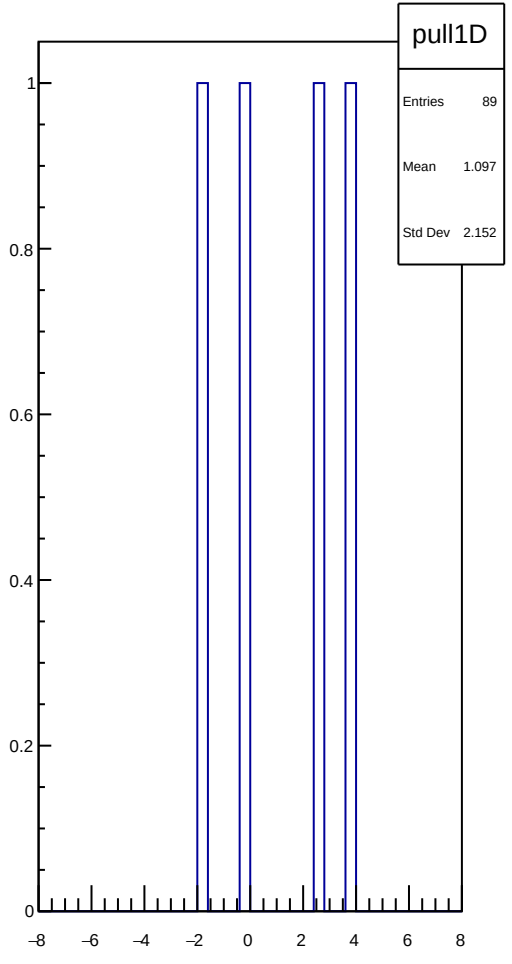

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

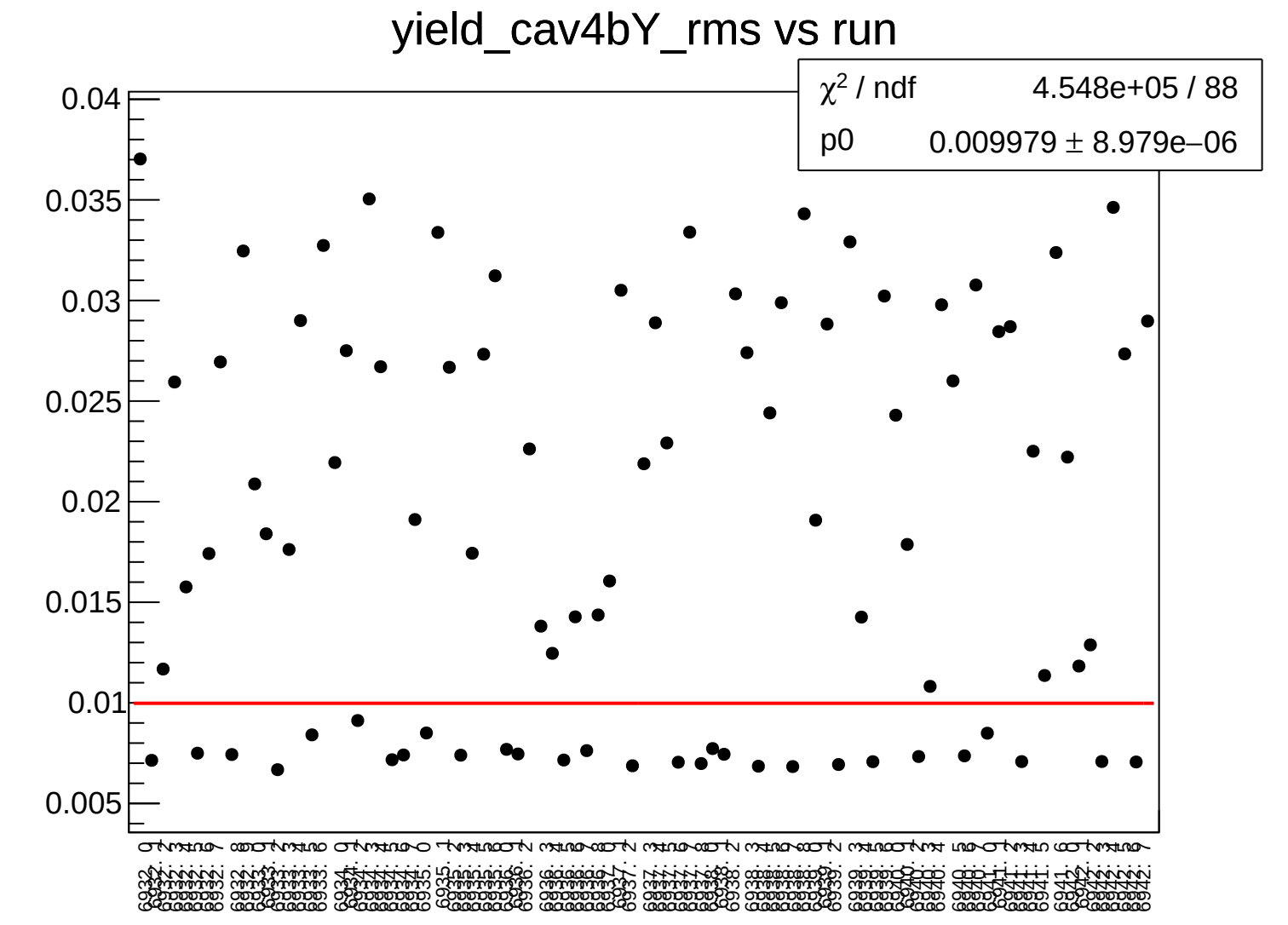

yield_cav4bX_mean vs run
χ² / ndf 4.851e+05 / 88
p0 −0.6747 ± 3.475e−05
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
−0.74
pull
Entries 89
Mean 22.42
Std Dev 11.78
150
100
50
0
−50
−100
−150

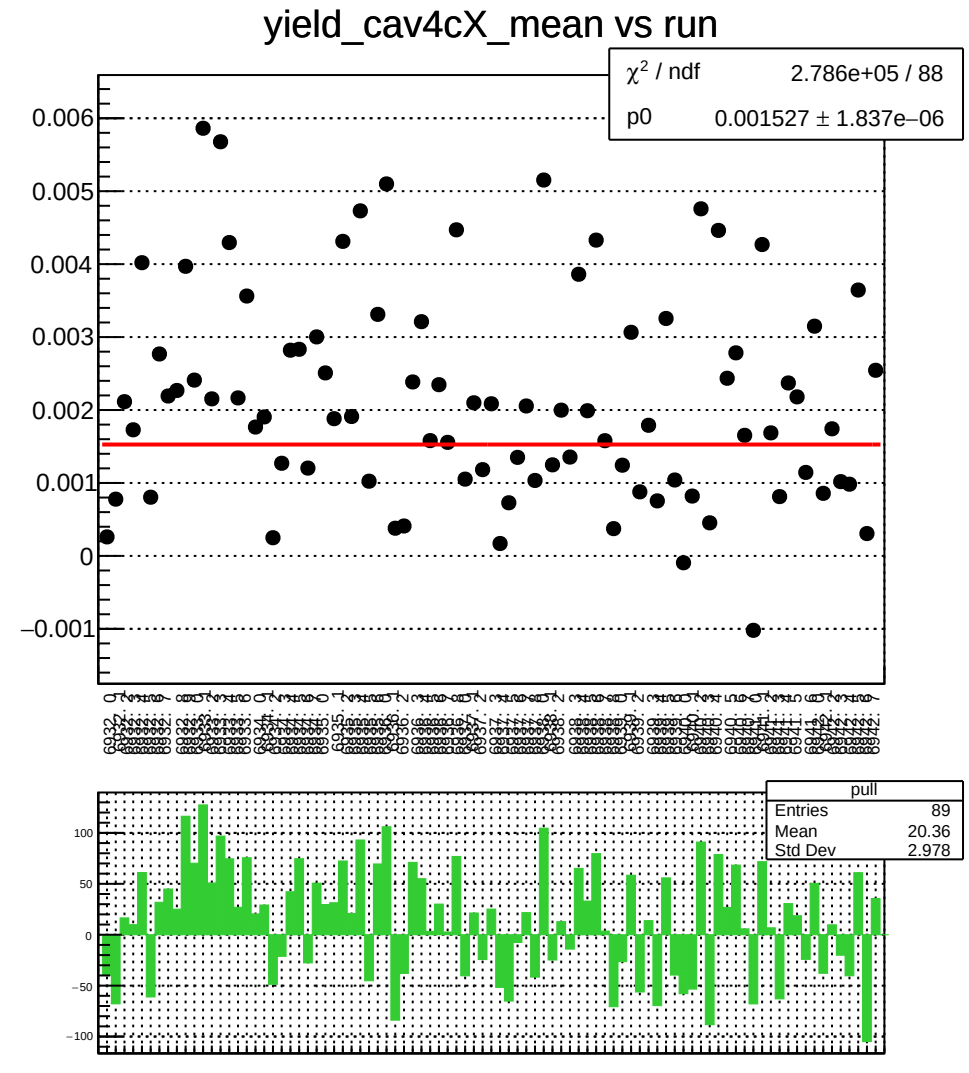

pull1D
Entries 89
Mean −0.9881
Std Dev 3.976
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

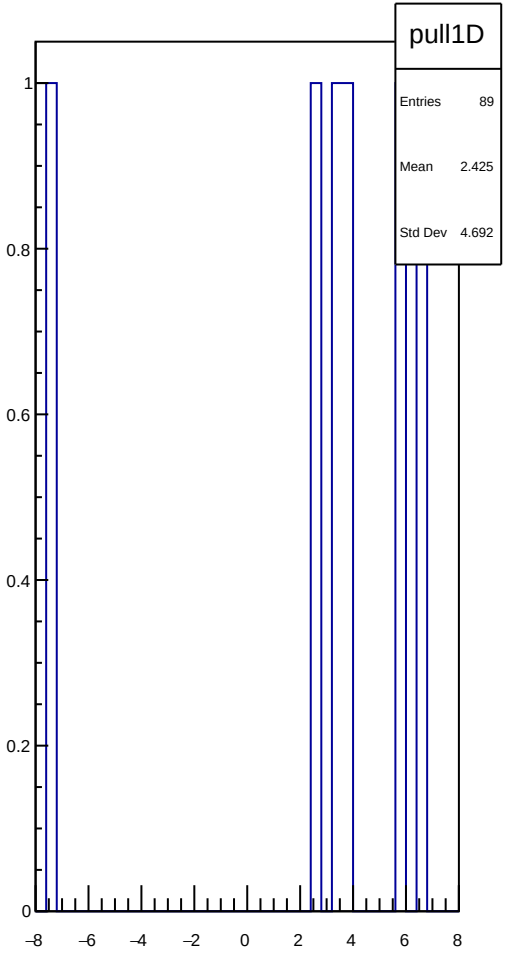

yield_cav4bX_rms vs run
χ² / ndf 2.691e+05 / 88
p0 0.02929 ± 2.457e–05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

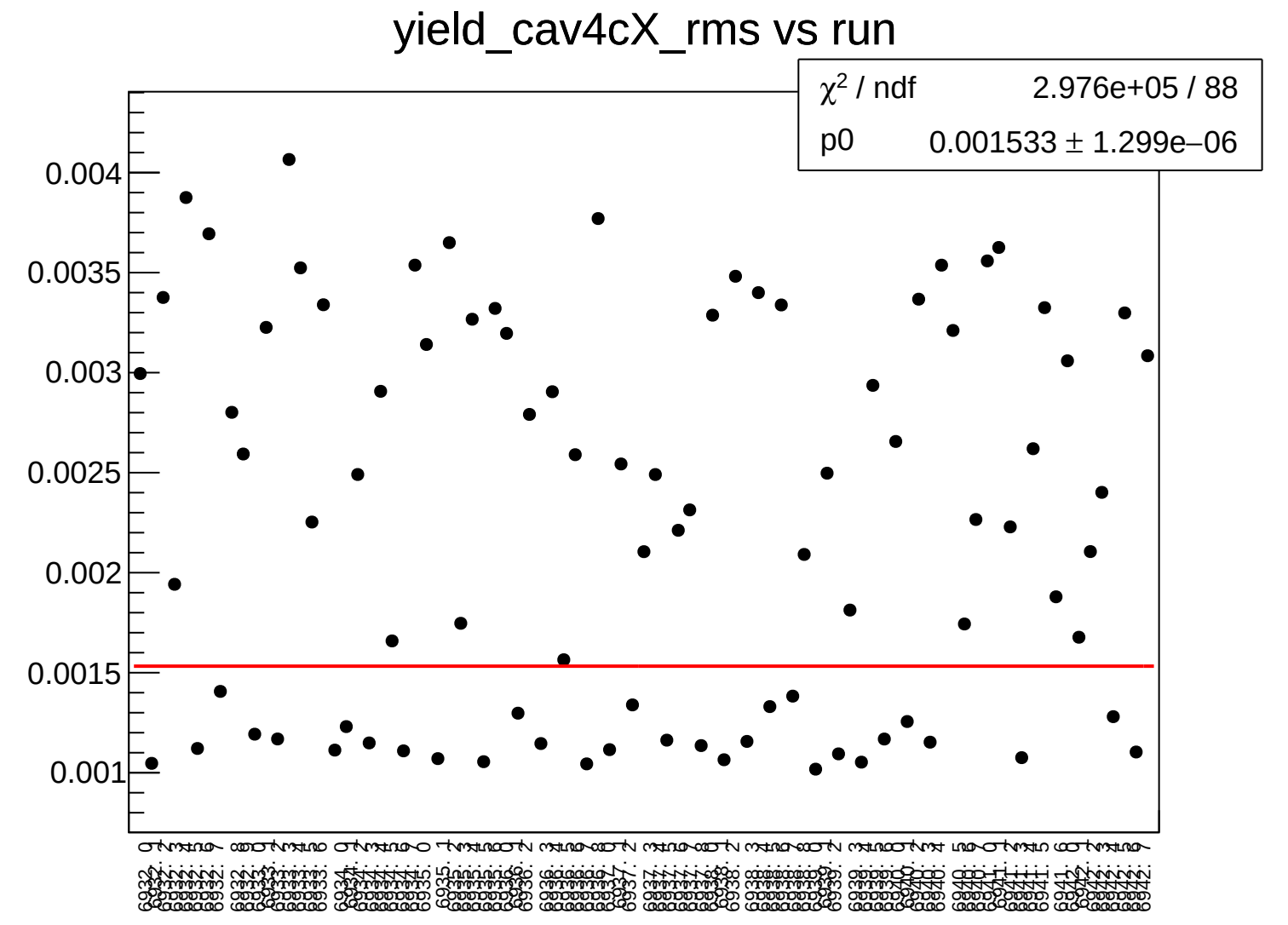

yield_cav4bY_mean vs run
χ² / ndf 3.993e+06 / 88
p0 −0.8262 ± 1.27e−05
−0.8
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 89
Mean 9.064
Std Dev 19.12
200
0
−200
−400
−600

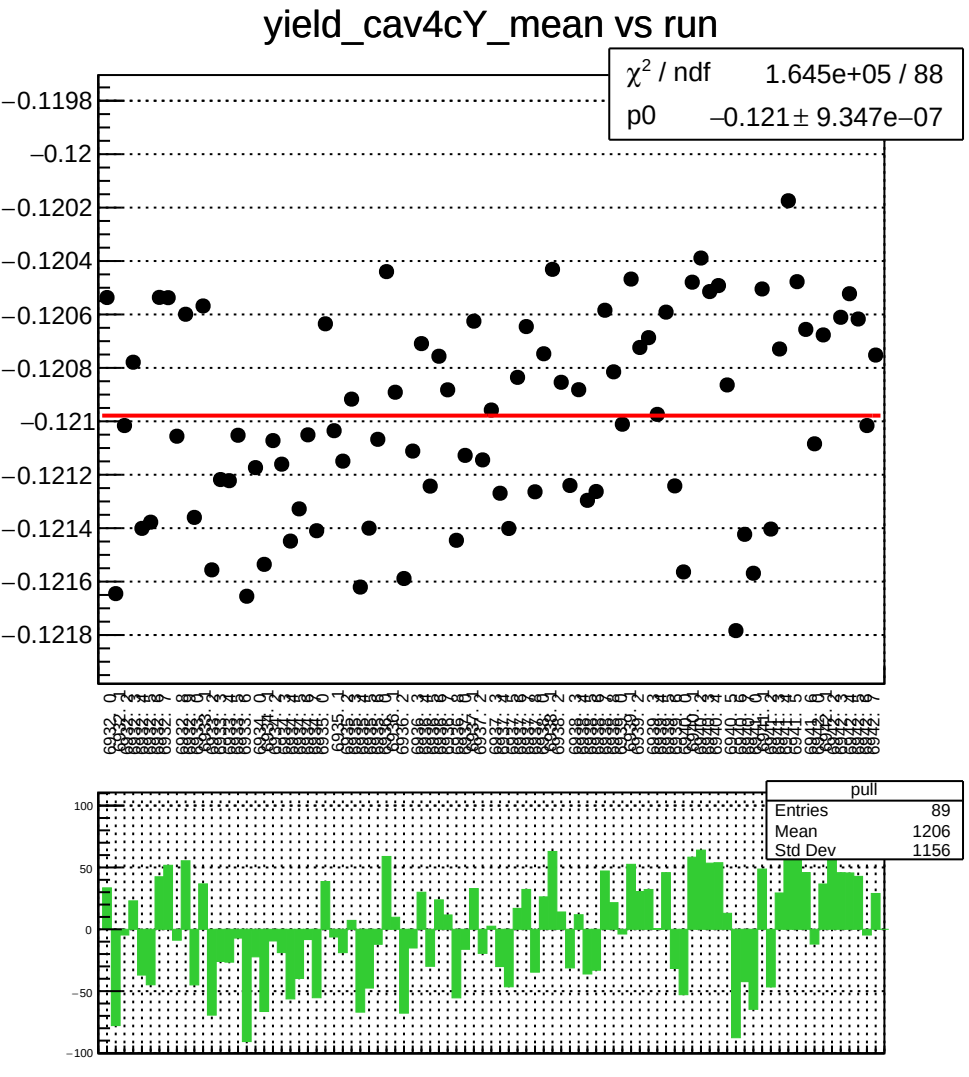

pull1D
Entries 89
Mean 1.097
Std Dev 2.152
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

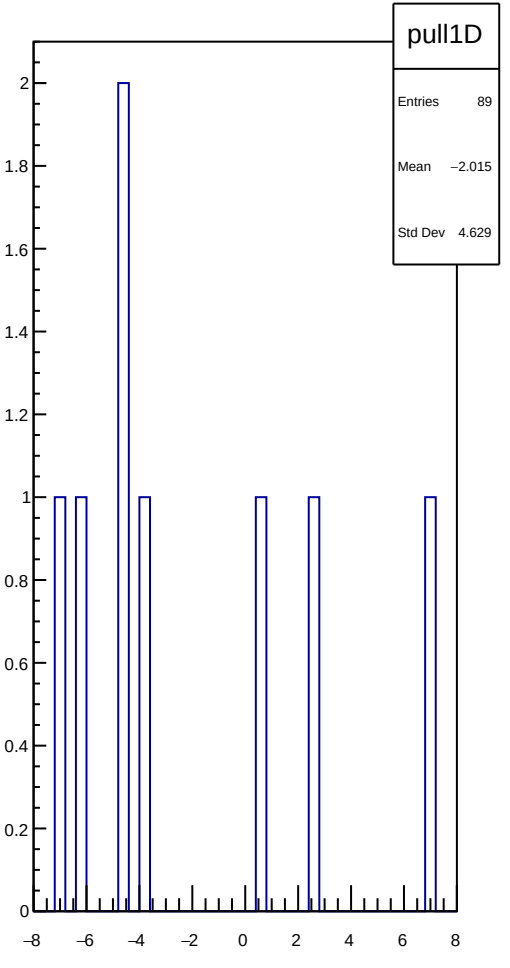

yield_cav4bY_rms vs run
χ² / ndf 4.548e+05 / 88
p0 0.009979 ± 8.979e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

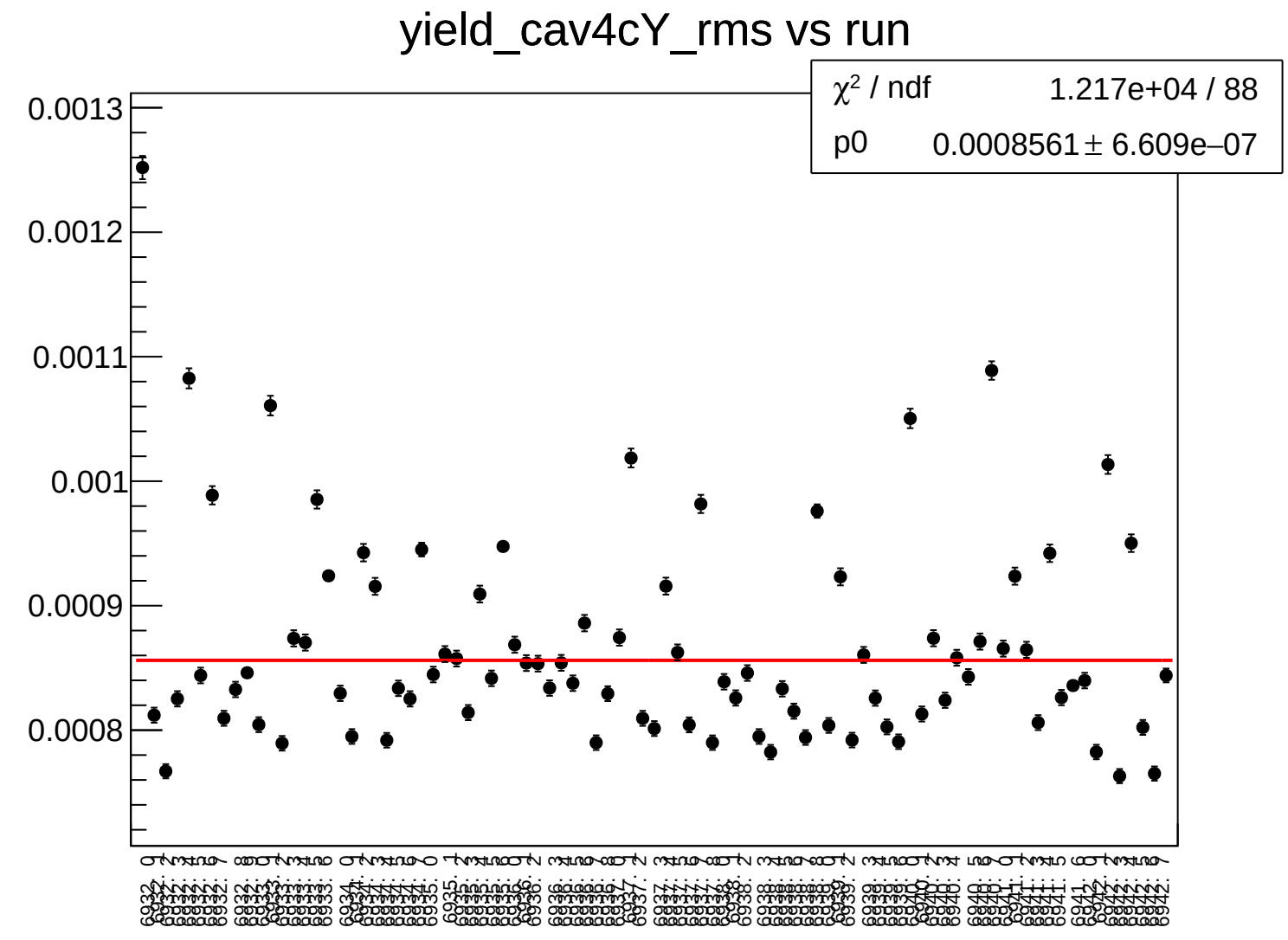

yield_cav4cX_mean vs run
χ² / ndf 2.786e+05 / 88
p0 0.001527 ± 1.837e−06
0.006
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 89
Mean 20.36
Std Dev 2.978
100
50
0
−50
−100

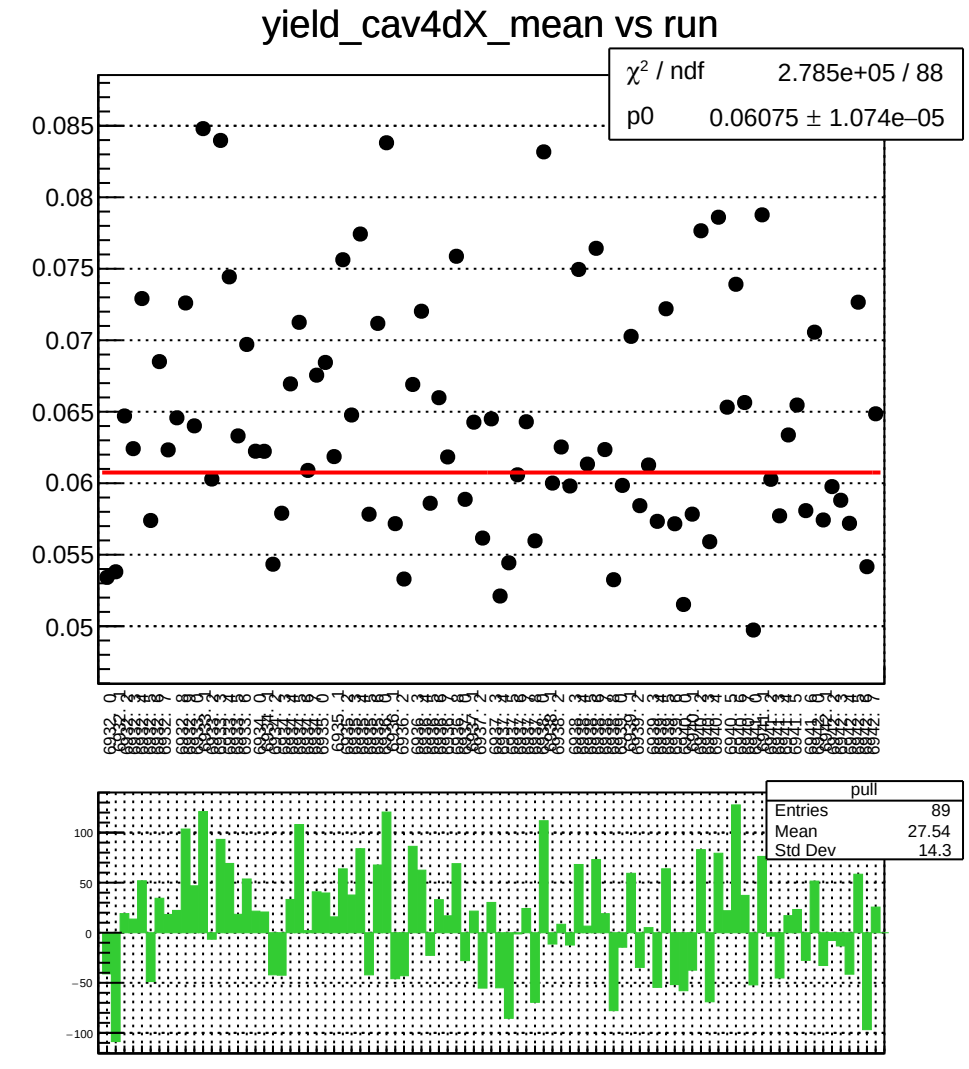

pull1D
Entries 89
Mean 2.425
Std Dev 4.692
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

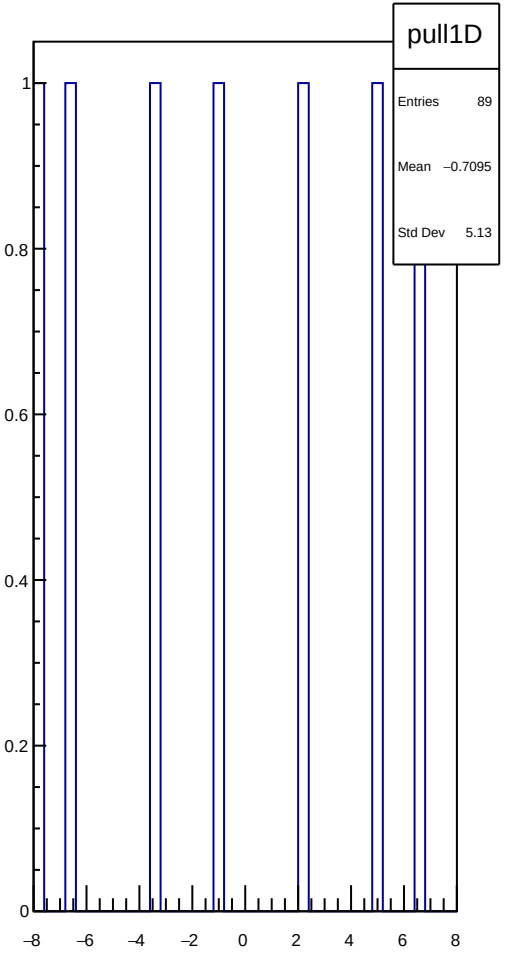

yield_cav4cX_rms vs run
χ² / ndf 2.976e+05 / 88
p0 0.001533 ± 1.299e−06
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

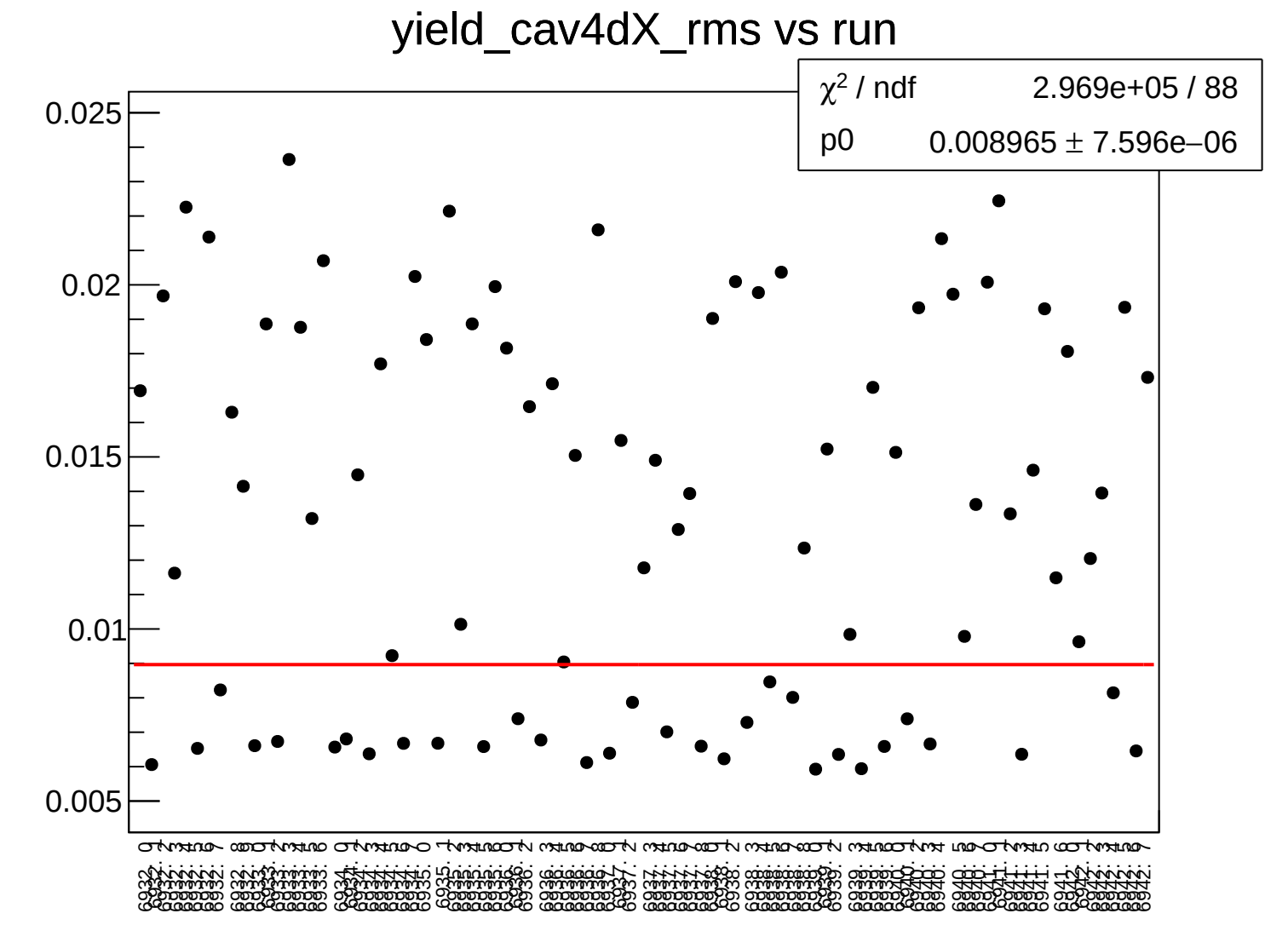

yield_cav4cY_mean vs run
χ² / ndf 1.645e+05 / 88
p0 −0.121 ± 9.347e−07
−0.1198
−0.12
−0.1202
−0.1204
−0.1206
−0.1208
−0.121
−0.1212
−0.1214
−0.1216
−0.1218
pull
Entries 89
Mean 1206
Std Dev 1156
100
50
0
−50
−100

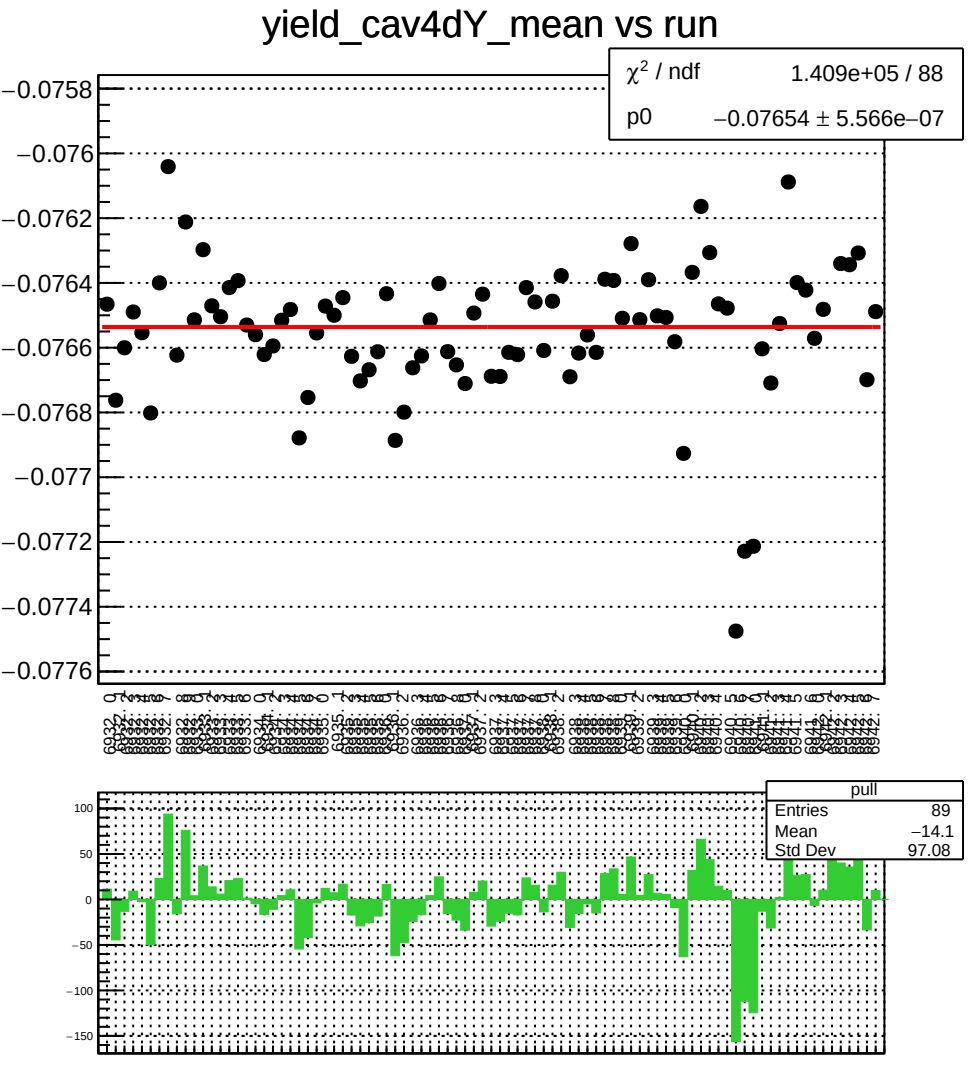

pull1D
Entries 89
Mean −2.015
Std Dev 4.629
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

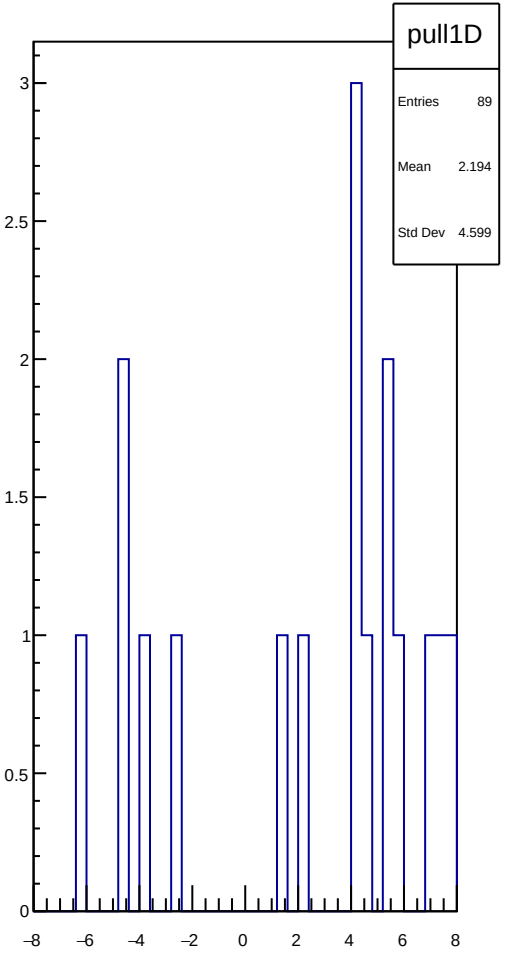

yield_cav4cY_rms vs run
χ² / ndf 1.217e+04 / 88
p0 0.0008561 ± 6.609e−07
0.0013
0.0012
0.0011
0.001
0.0009
0.0008

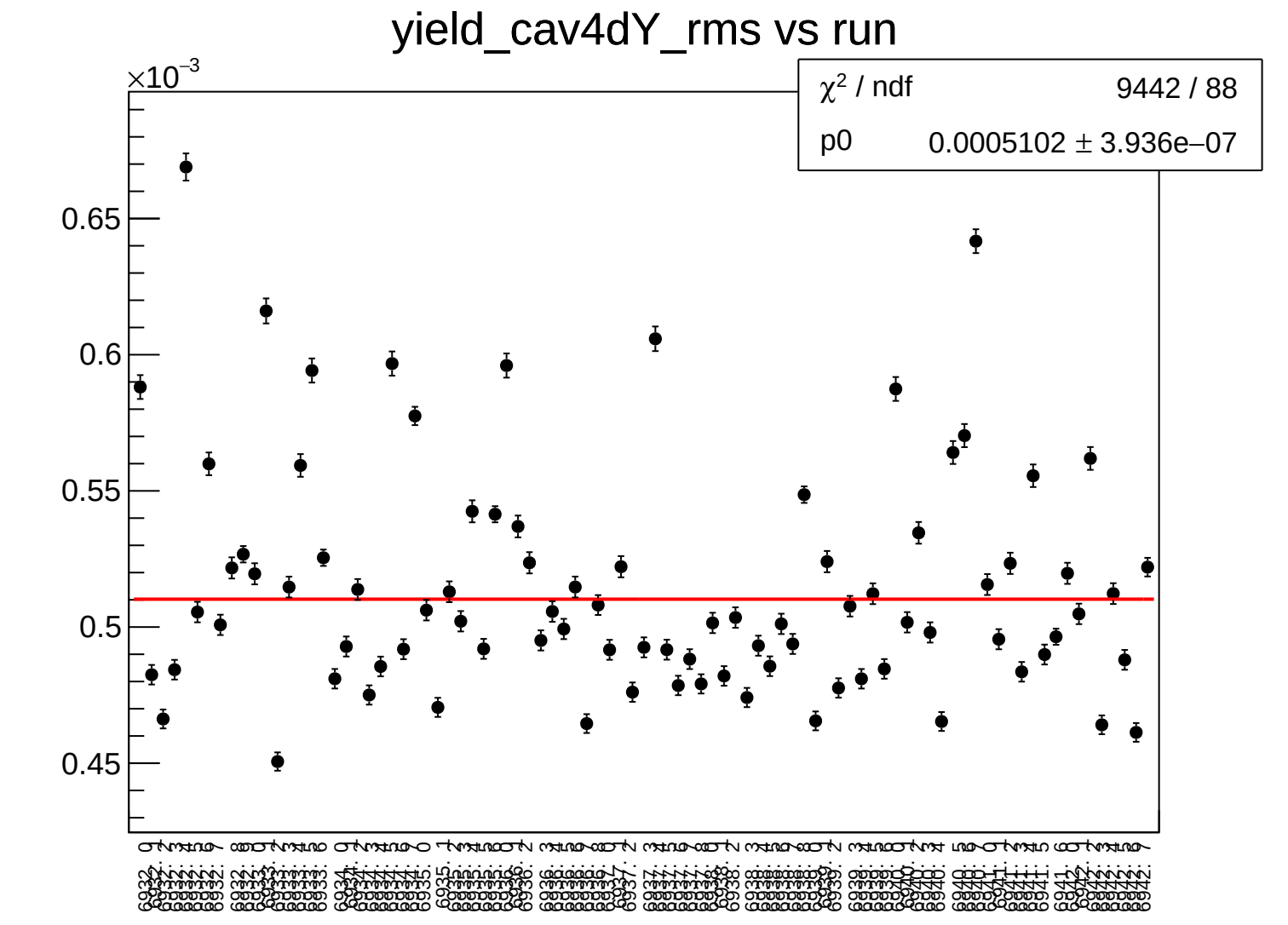

yield_cav4dX_mean vs run
χ² / ndf 2.785e+05 / 88
p0 0.06075 ± 1.074e−05
0.085
0.08
0.075
0.07
0.065
0.06
0.055
0.05
pull
Entries 89
Mean 27.54
Std Dev 14.3
100
50
0
−50
−100

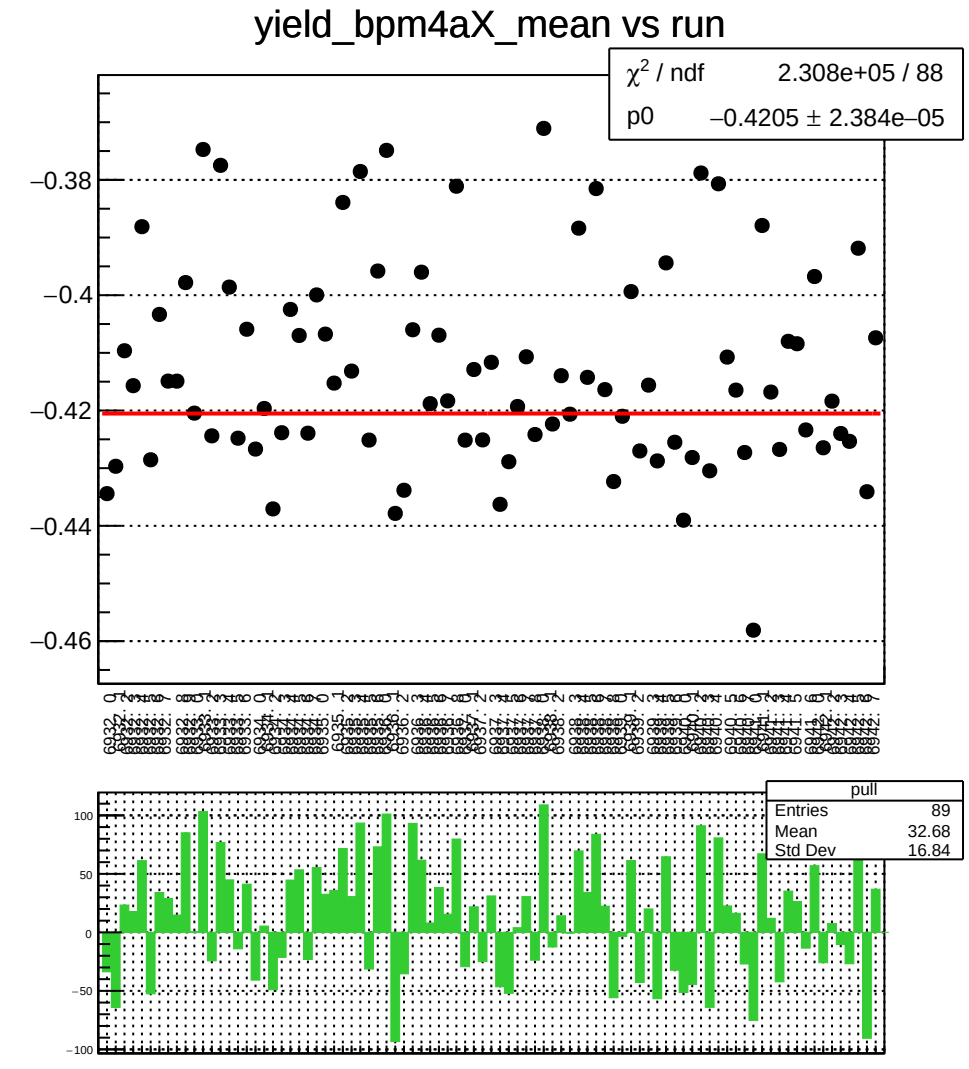

pull1D
Entries 89
Mean −0.7095
Std Dev 5.13
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

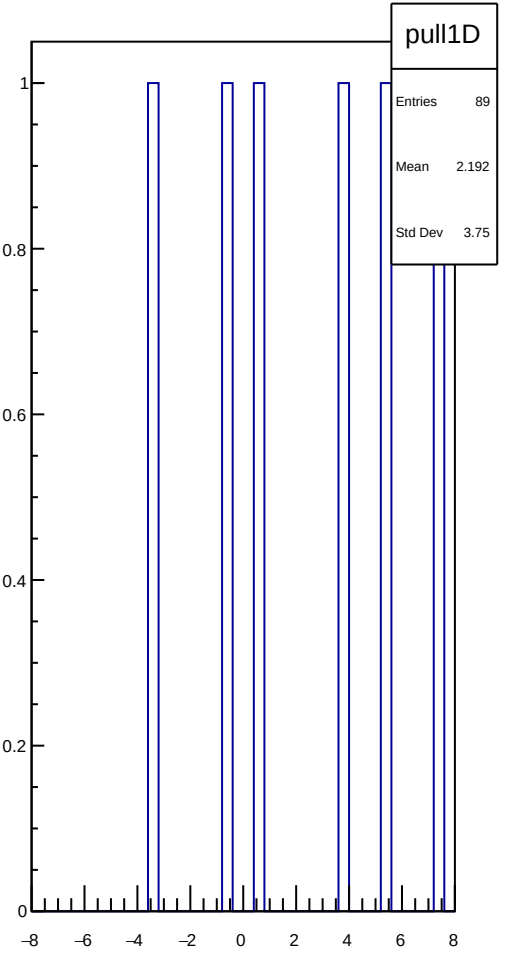

yield_cav4dX_rms vs run
χ² / ndf 2.969e+05 / 88
p0 0.008965 ± 7.596e−06
0.025
0.02
0.015
0.01
0.005

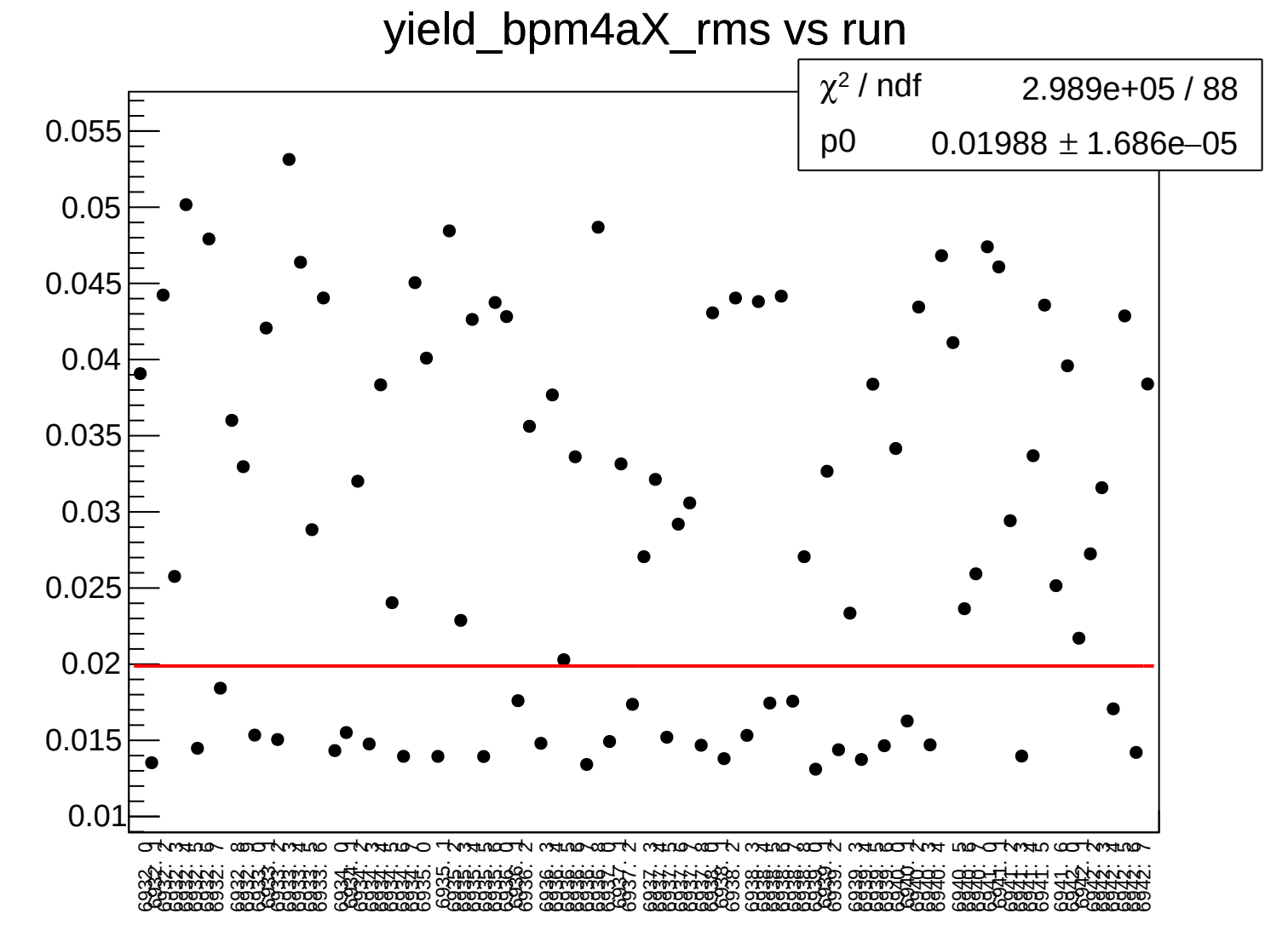

yield_cav4dY_mean vs run
χ² / ndf 1.409e+05 / 88
p0 −0.07654 ± 5.566e−07
−0.0758
−0.076
−0.0762
−0.0764
−0.0766
−0.0768
−0.077
−0.0772
−0.0774
−0.0776
pull
Entries 89
Mean −14.1
Std Dev 97.08
100
50
0
−50
−100
−150

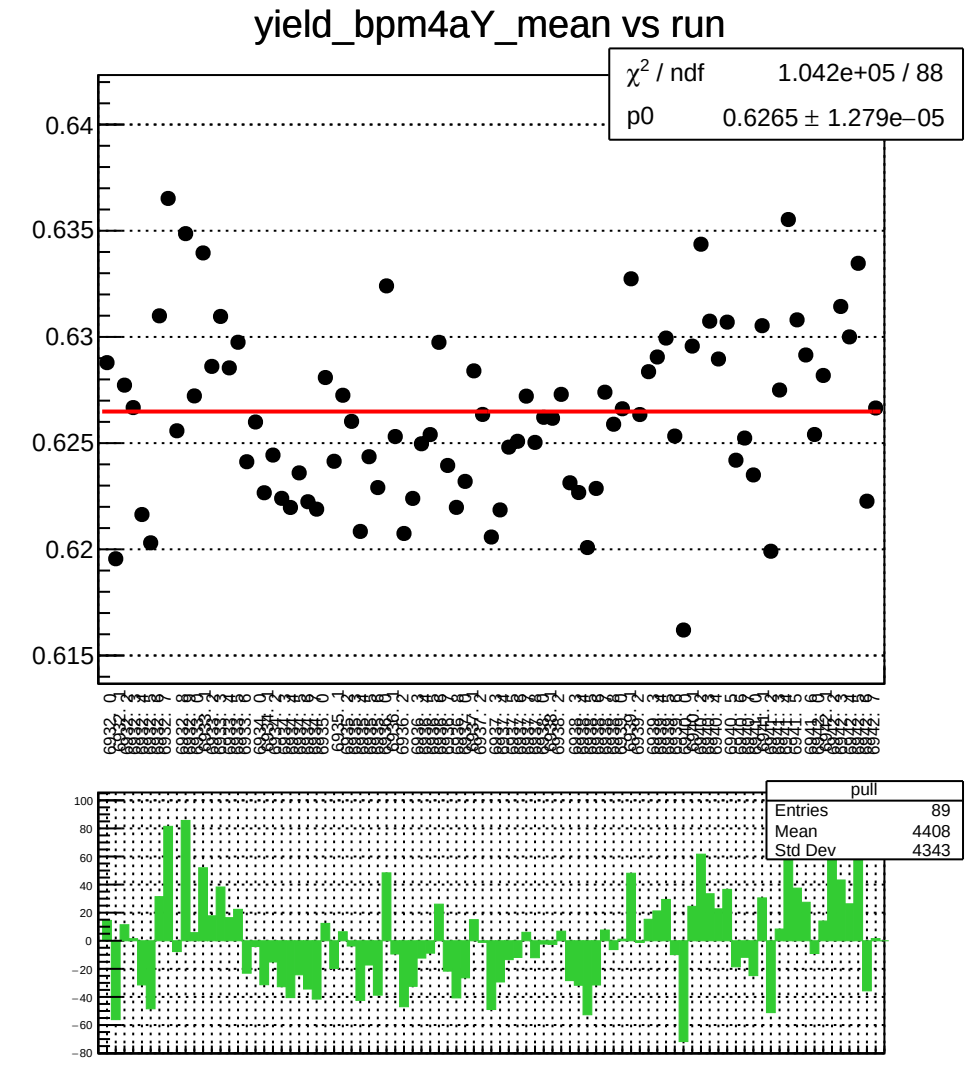

pull1D
Entries 89
Mean 2.194
Std Dev 4.599
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

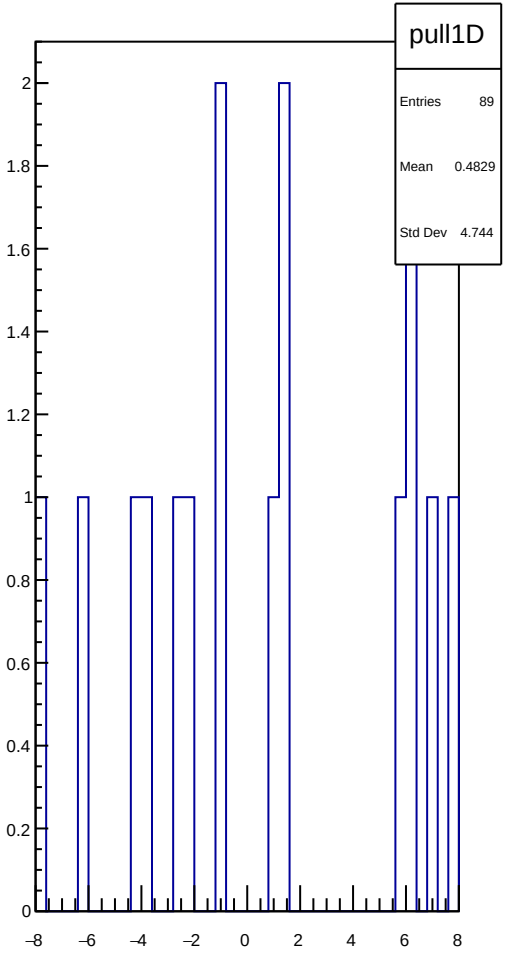

yield_cav4dY_rms vs run
×10⁻³
χ² / ndf 9442 / 88
p0 0.0005102 ± 3.936e−07
0.65
0.6
0.55
0.5
0.45

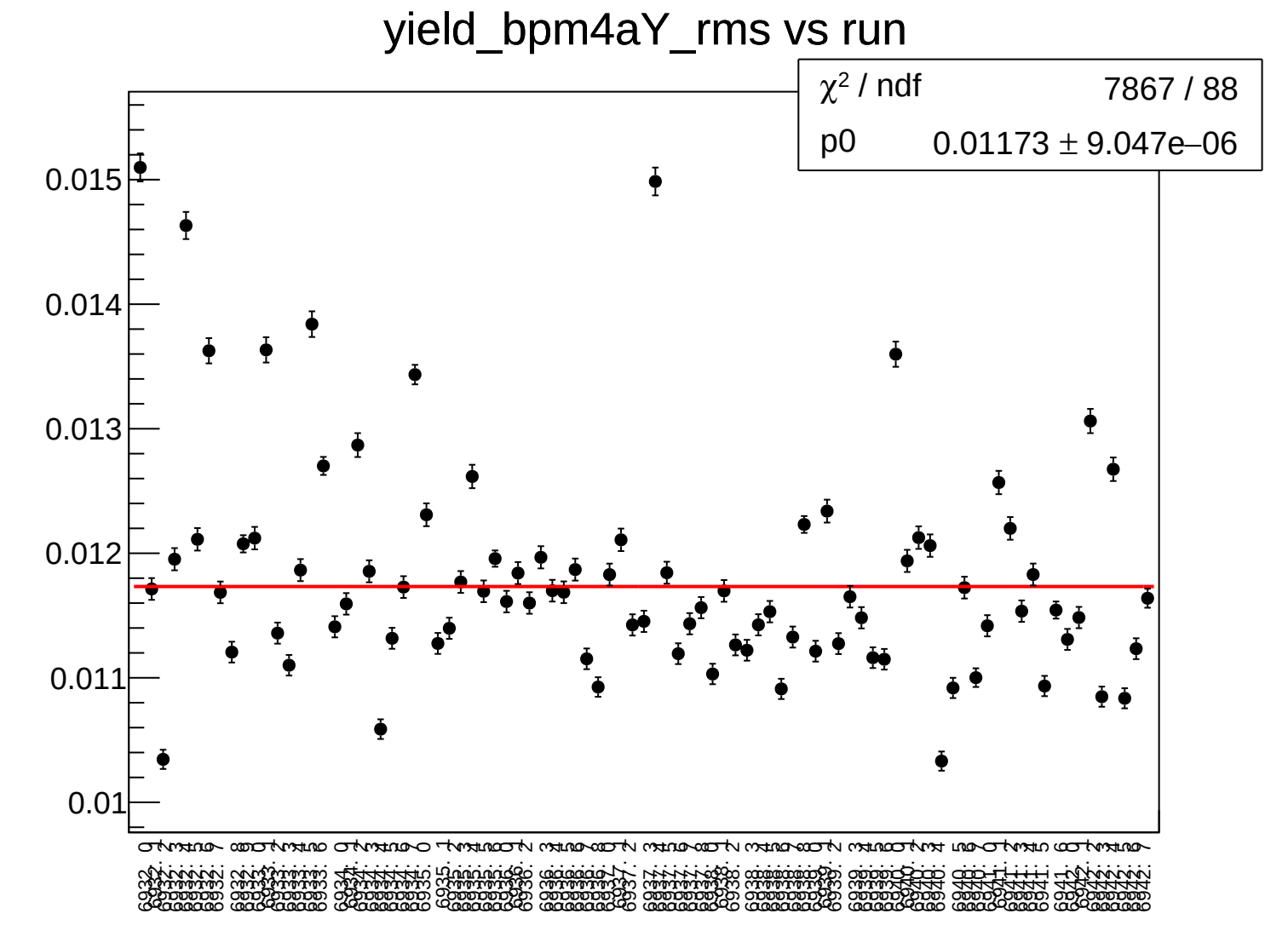

yield_bpm4aX_mean vs run
χ² / ndf 2.308e+05 / 88
p0 −0.4205 ± 2.384e−05
−0.38
−0.4
−0.42
−0.44
−0.46
pull
Entries 89
Mean 32.68
Std Dev 16.84
100
50
0
−50
−100

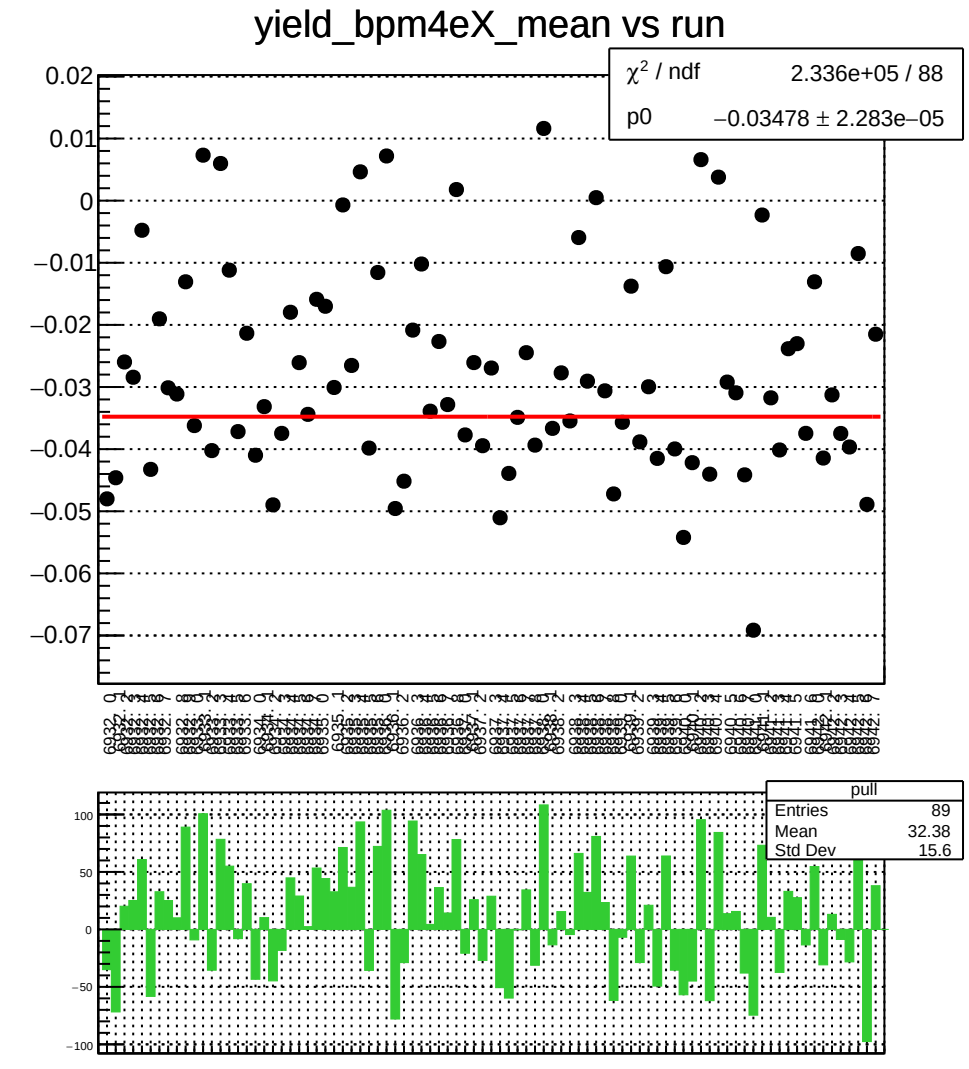

pull1D
Entries 89
Mean 2.192
Std Dev 3.75
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

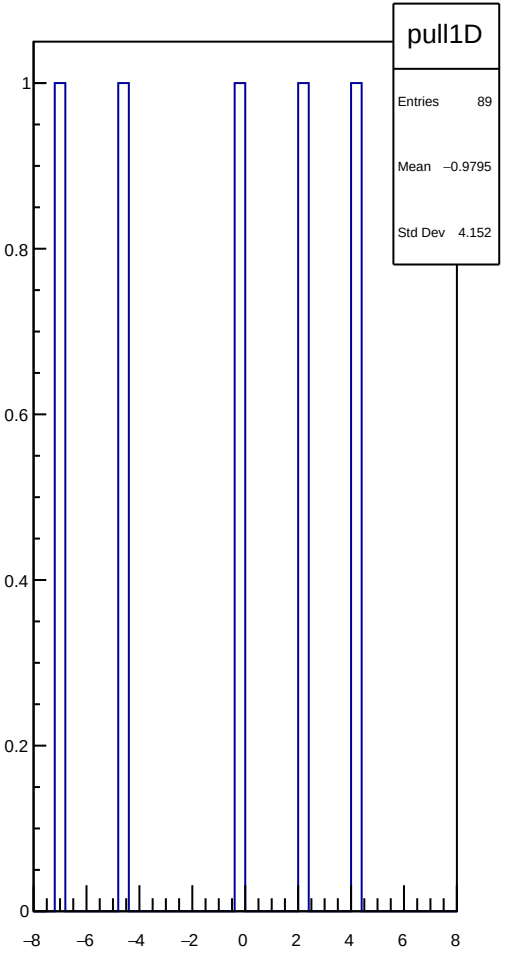

yield_bpm4aX_rms vs run
χ² / ndf 2.989e+05 / 88
p0 0.01988 ± 1.686e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

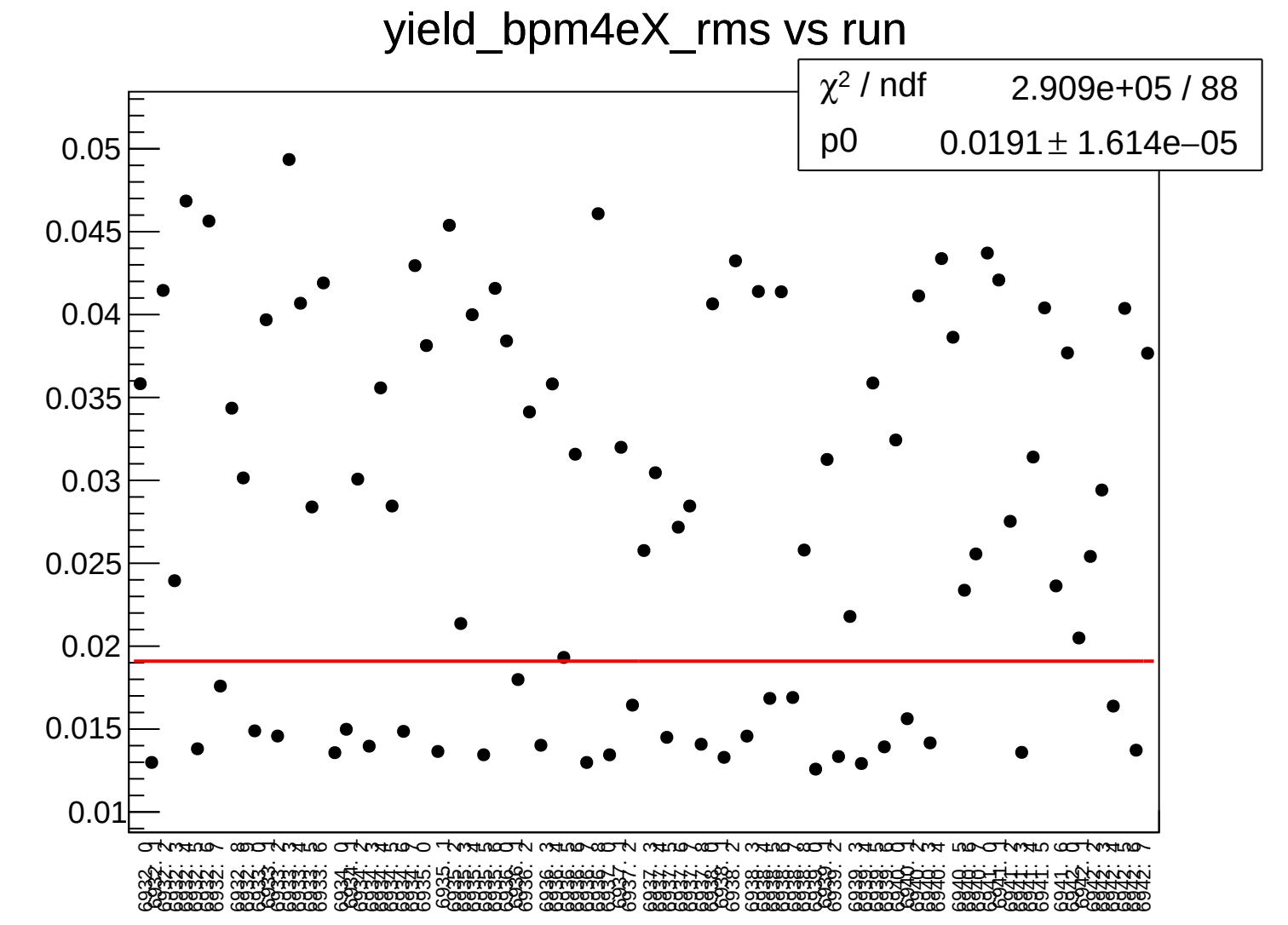

yield_bpm4aY_mean vs run
χ² / ndf 1.042e+05 / 88
p0 0.6265 ± 1.279e−05
0.64
0.635
0.63
0.625
0.62
0.615
pull
Entries 89
Mean 4408
Std Dev 4343
100
80
60
40
20
0
−20
−40
−60
−80

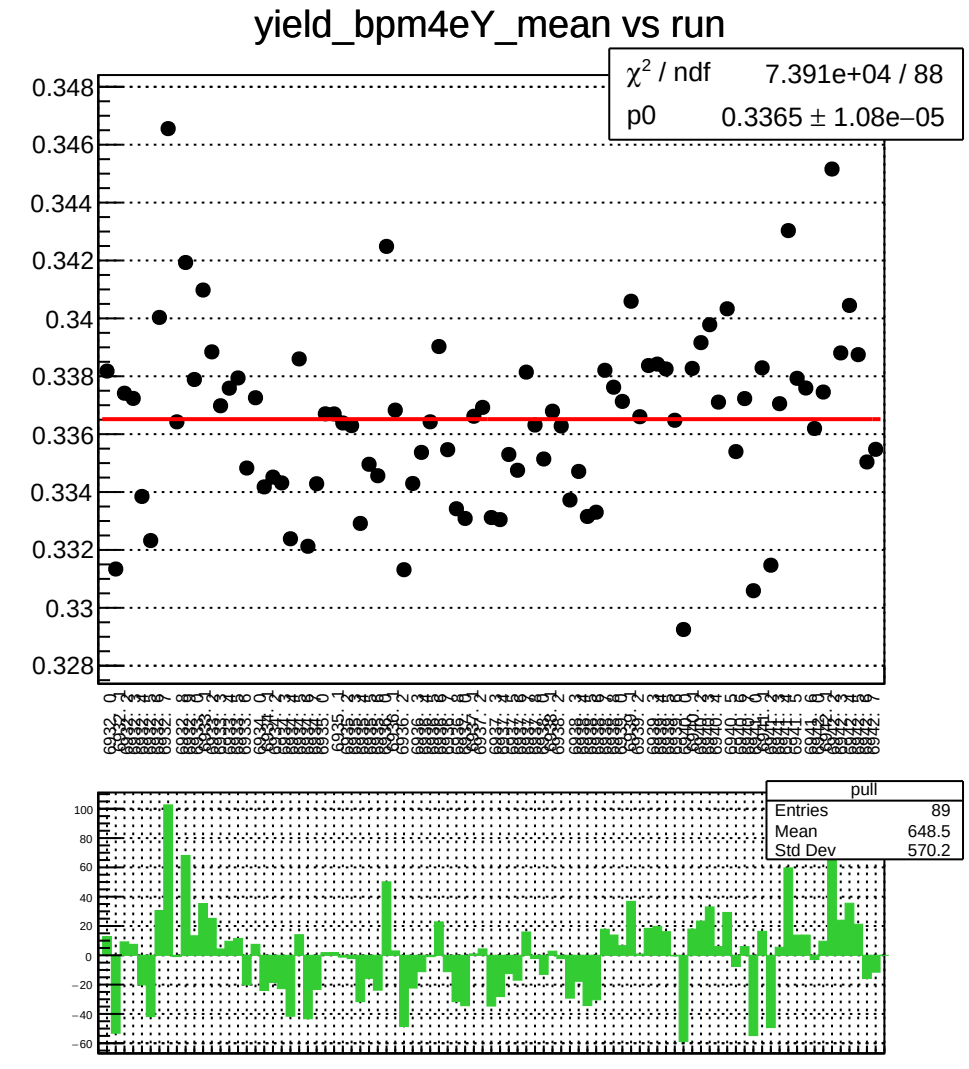

pull1D
Entries 89
Mean 0.4829
Std Dev 4.744
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

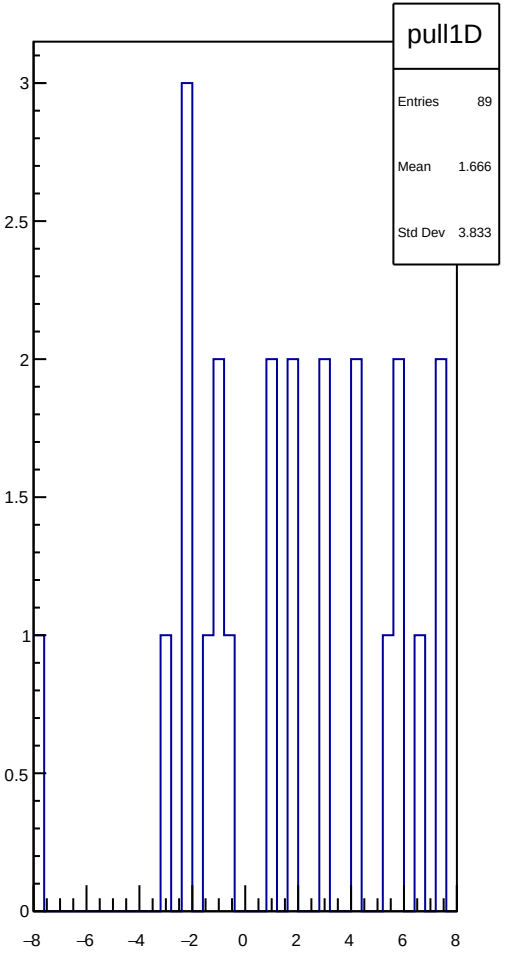

yield_bpm4aY_rms vs run
χ² / ndf 7867 / 88
p0 0.01173 ± 9.047e−06
0.015
0.014
0.013
0.012
0.011
0.01

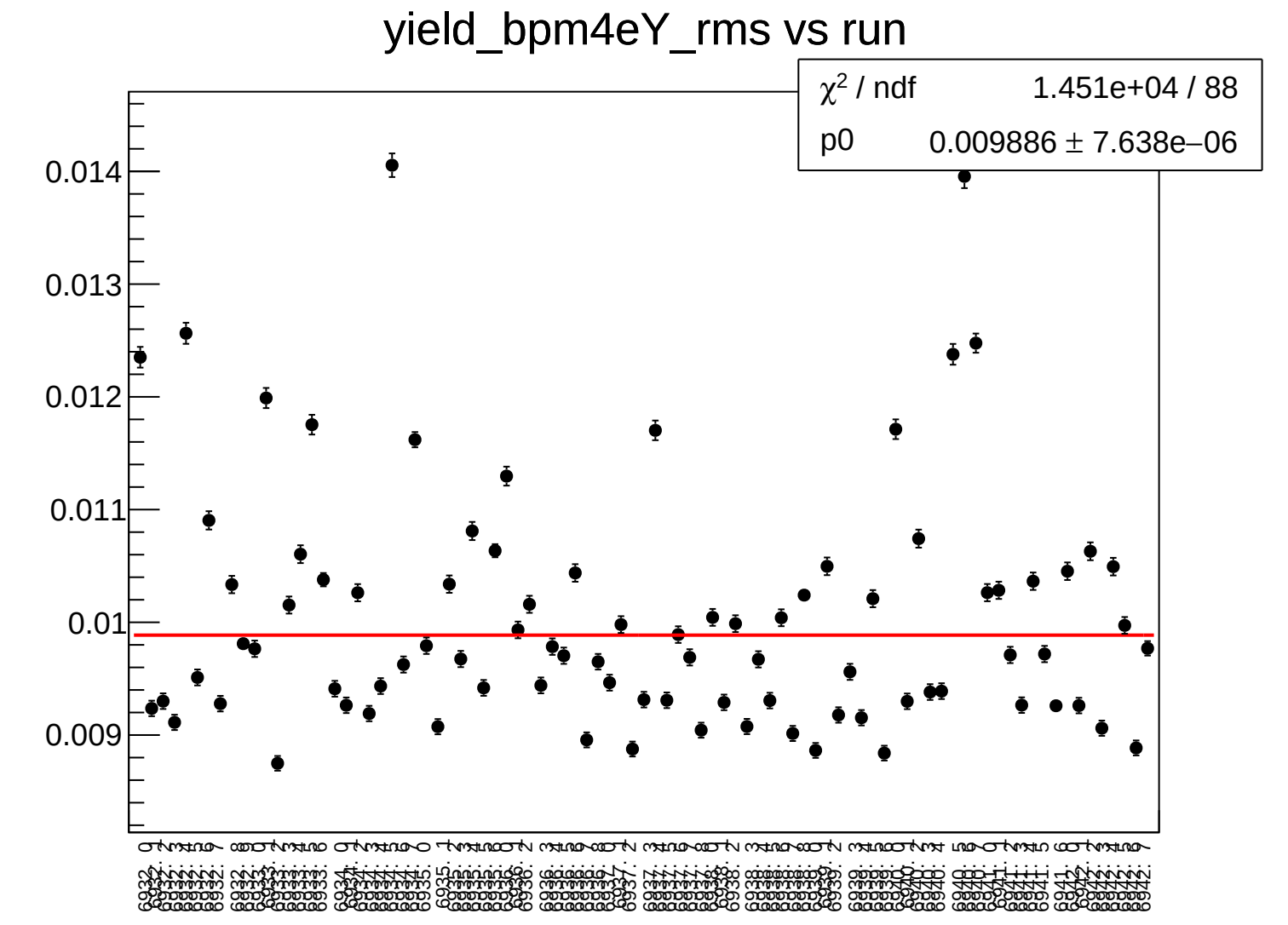

yield_bpm4eX_mean vs run
χ² / ndf 2.336e+05 / 88
p0 −0.03478 ± 2.283e−05
pull
Entries 89
Mean 32.38
Std Dev 15.6

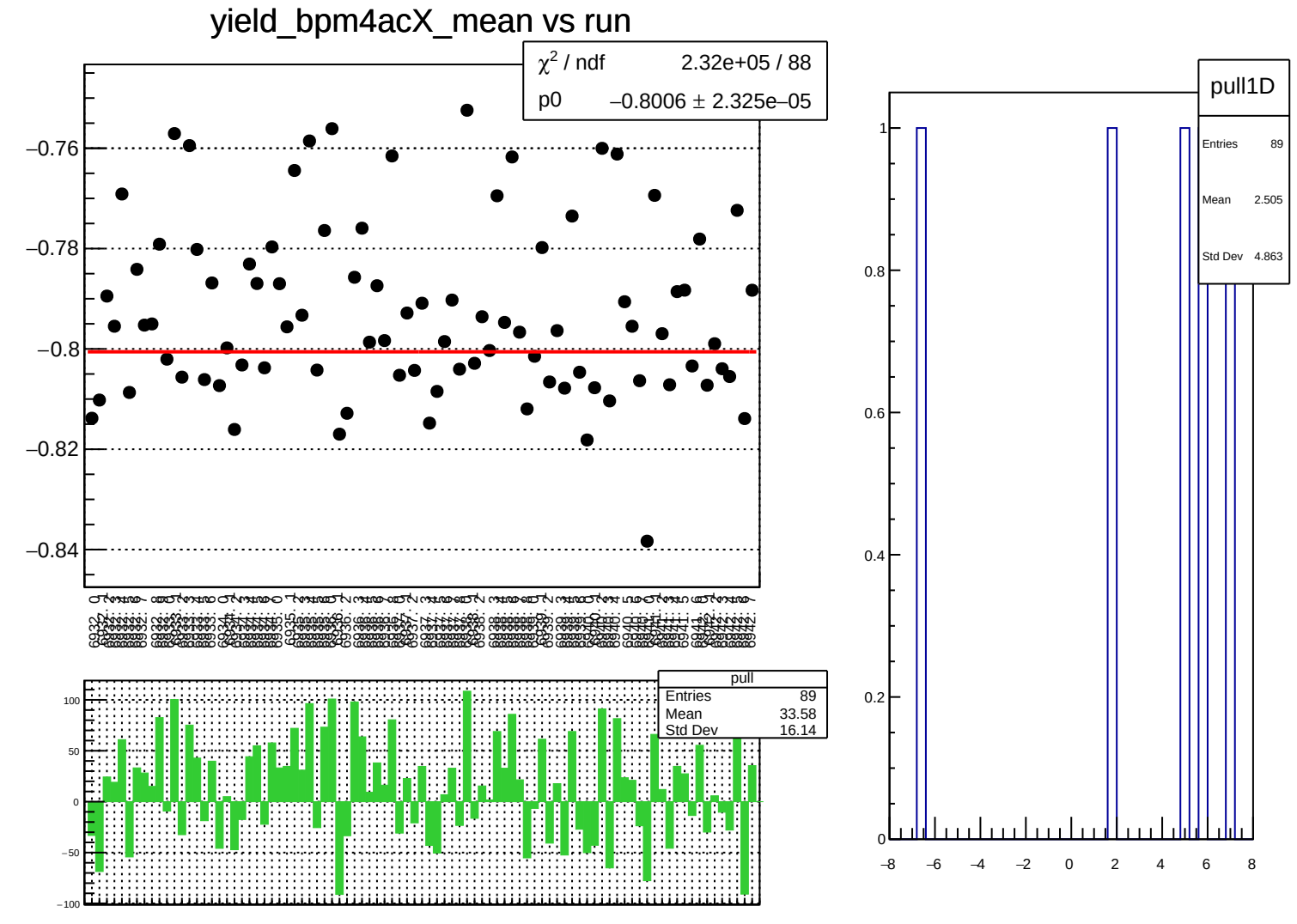

pull1D
Entries 89
Mean −0.9795
Std Dev 4.152

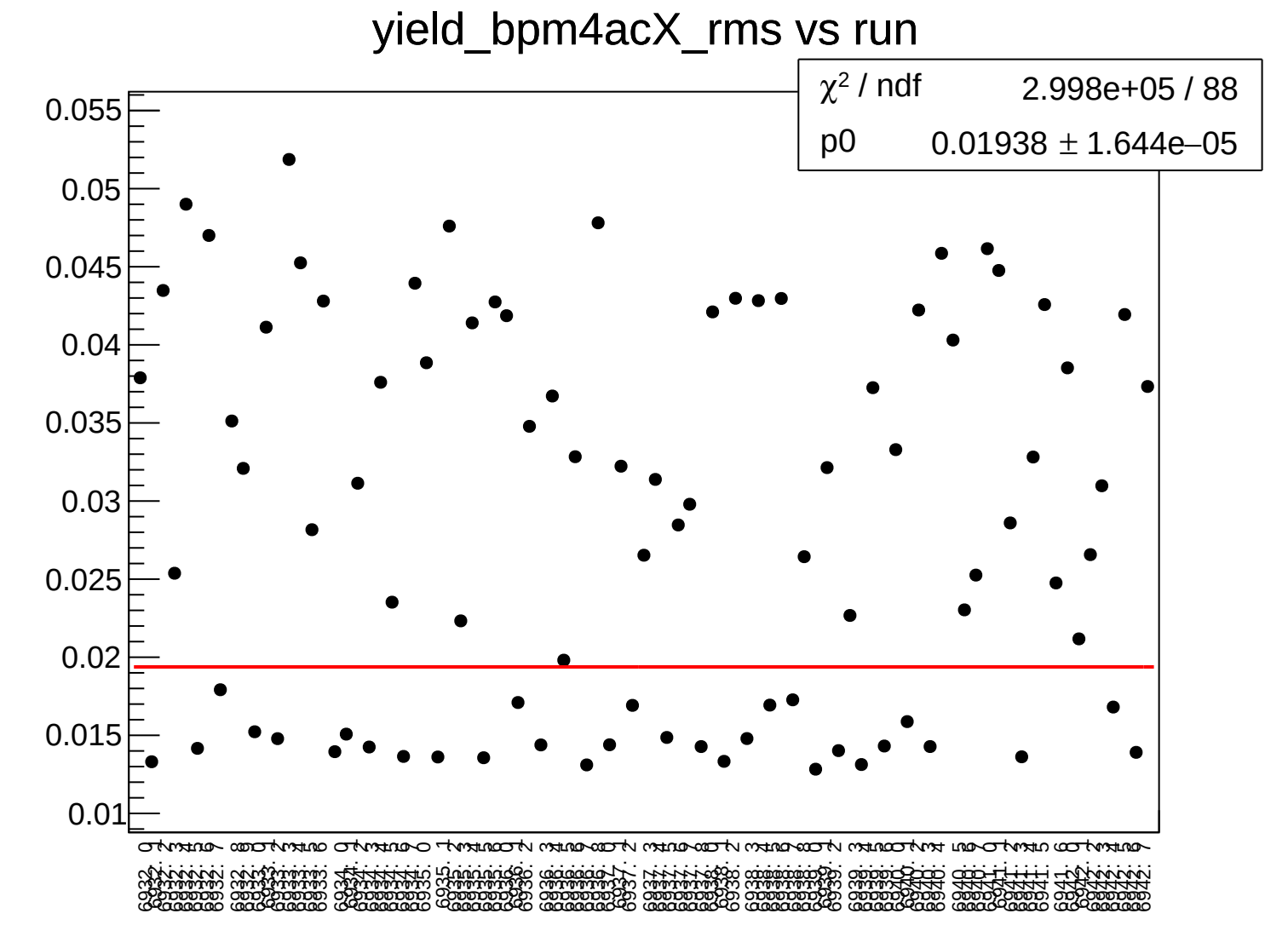

yield_bpm4eX_rms vs run
χ² / ndf 2.909e+05 / 88
p0 0.0191 ± 1.614e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

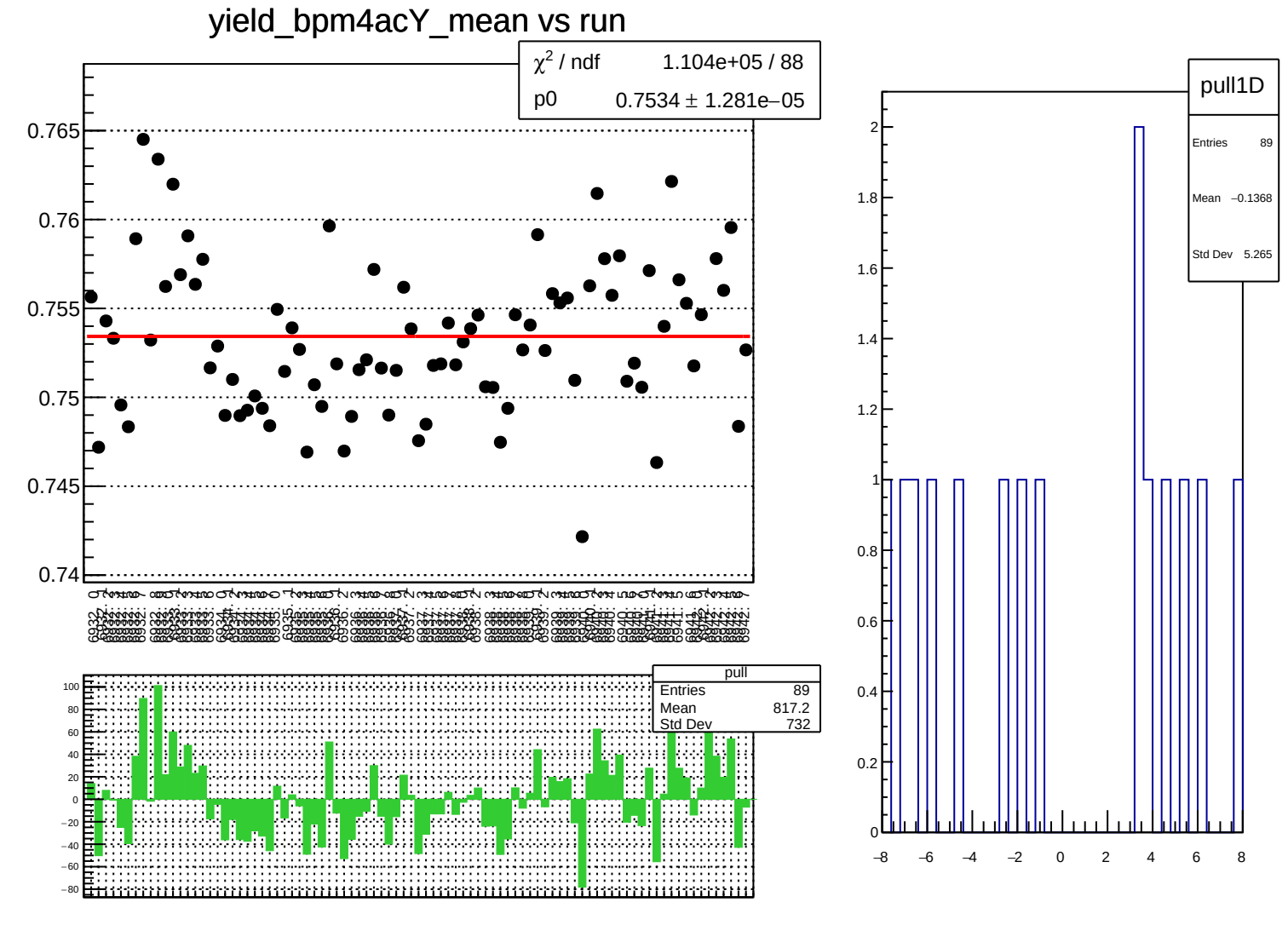

yield_bpm4eY_mean vs run
χ² / ndf 7.391e+04 / 88
p0 0.3365 ± 1.08e−05
0.348
0.346
0.344
0.342
0.34
0.338
0.336
0.334
0.332
0.33
0.328
pull
Entries 89
Mean 648.5
Std Dev 570.2
100
80
60
40
20
0
−20
−40
−60

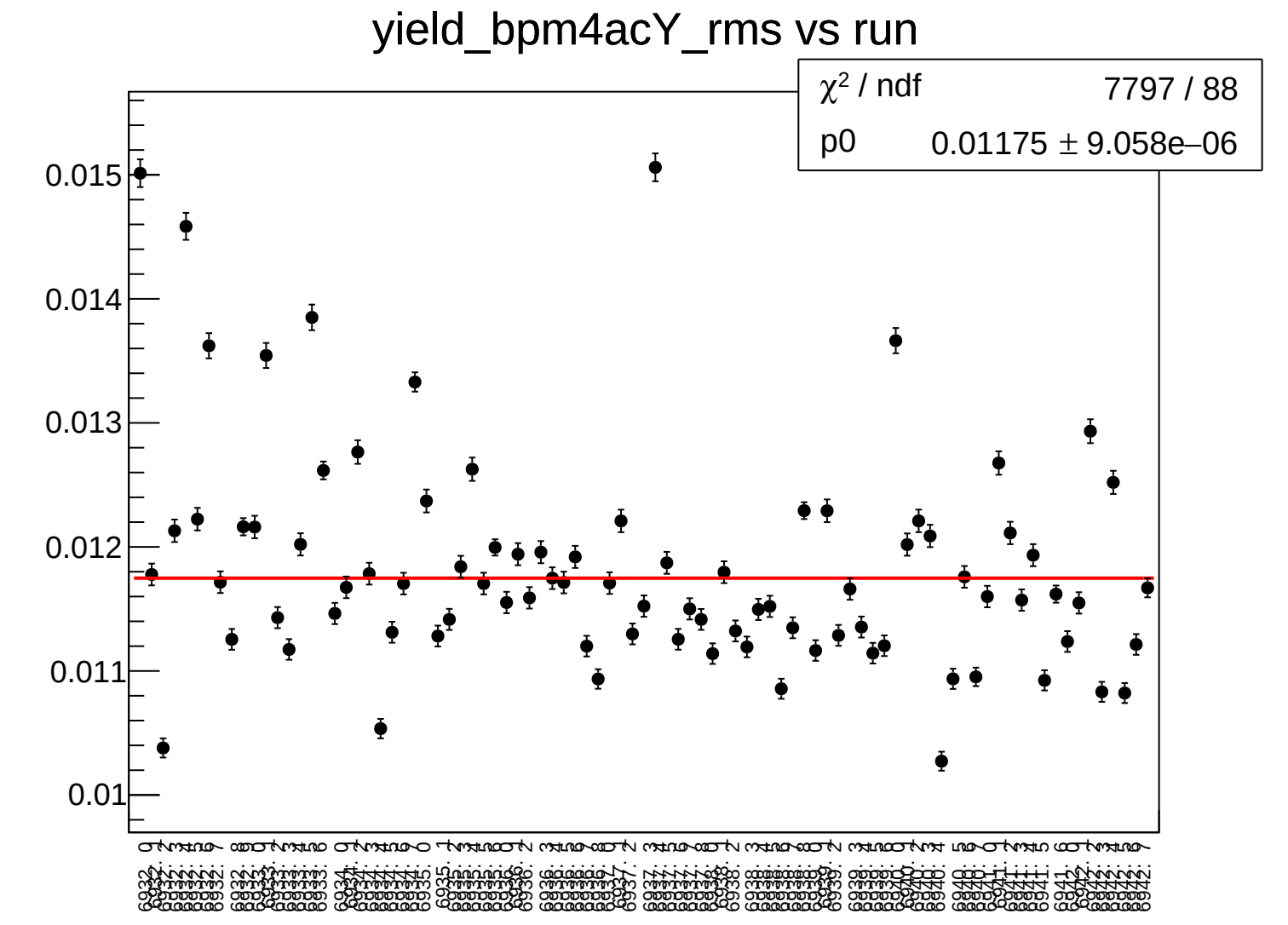

pull1D
Entries 89
Mean 1.666
Std Dev 3.833
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

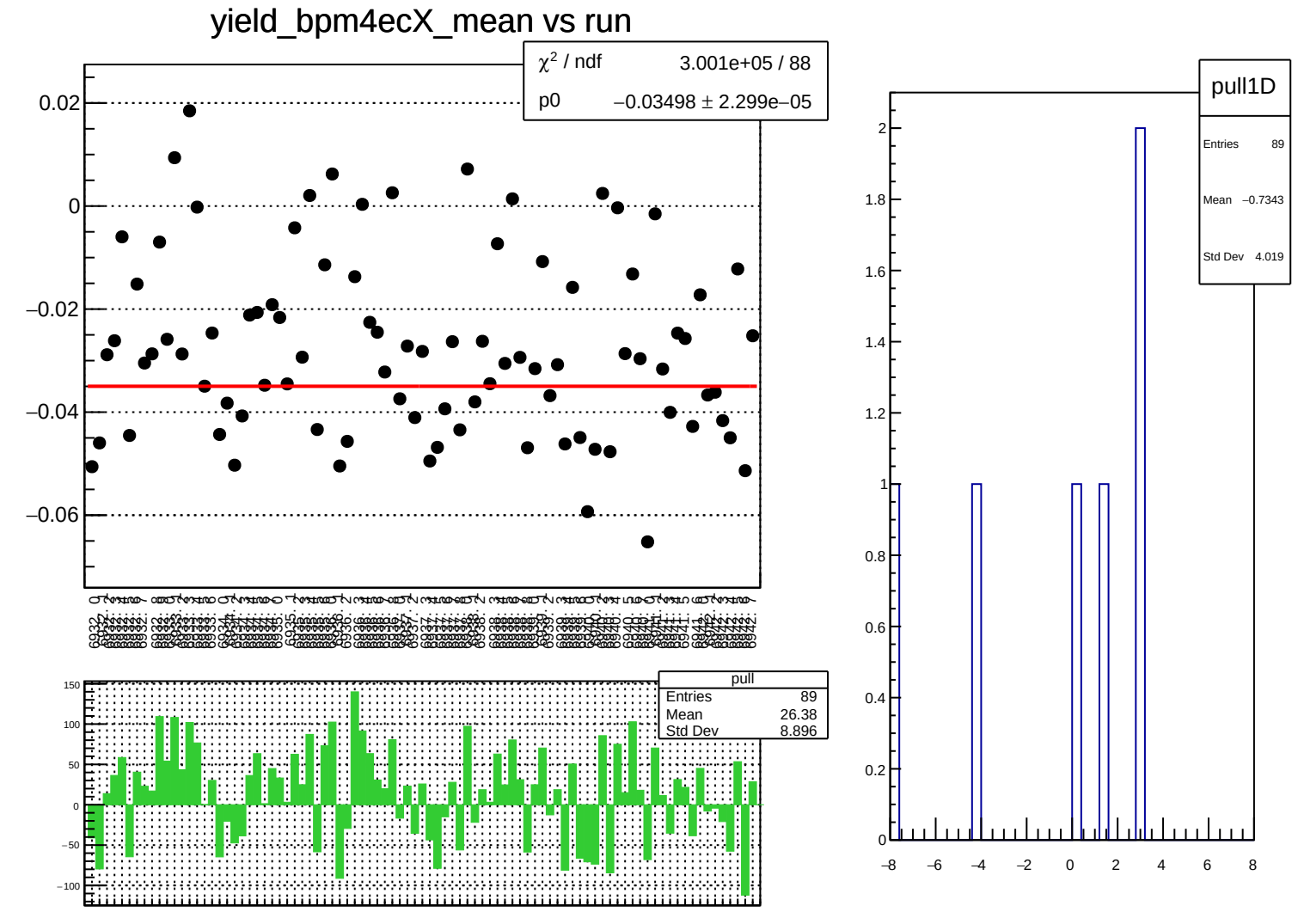

yield_bpm4eY_rms vs run
χ² / ndf 1.451e+04 / 88
p0 0.009886 ± 7.638e−06
0.014
0.013
0.012
0.011
0.01
0.009

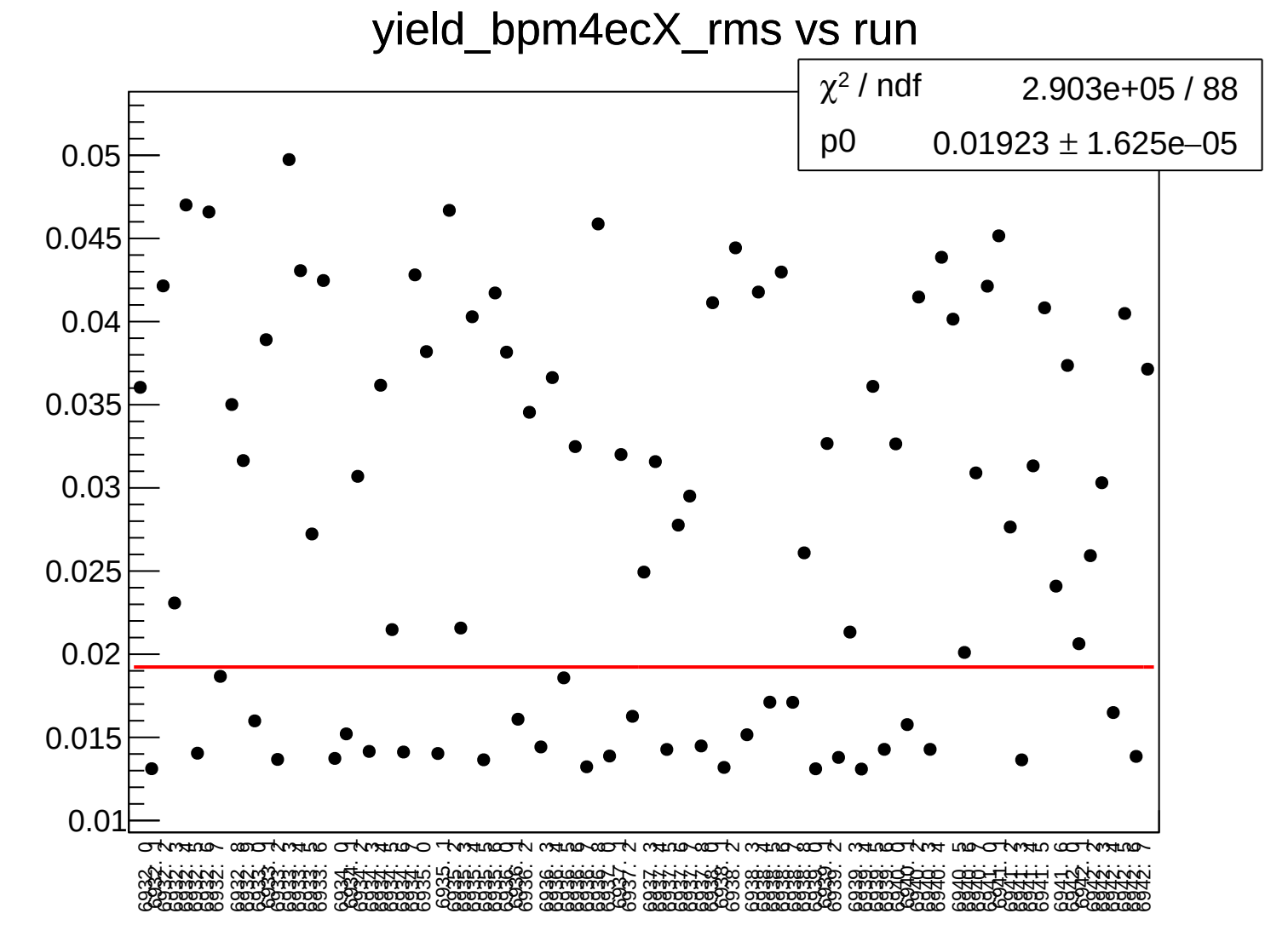

yield_bpm4acX_mean vs run
χ² / ndf 2.32e+05 / 88
p0 −0.8006 ± 2.325e−05
−0.76
−0.78
−0.8
−0.82
−0.84
pull
Entries 89
Mean 33.58
Std Dev 16.14
100
50
0
−50
−100
pull1D
Entries 89
Mean 2.505
Std Dev 4.863
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

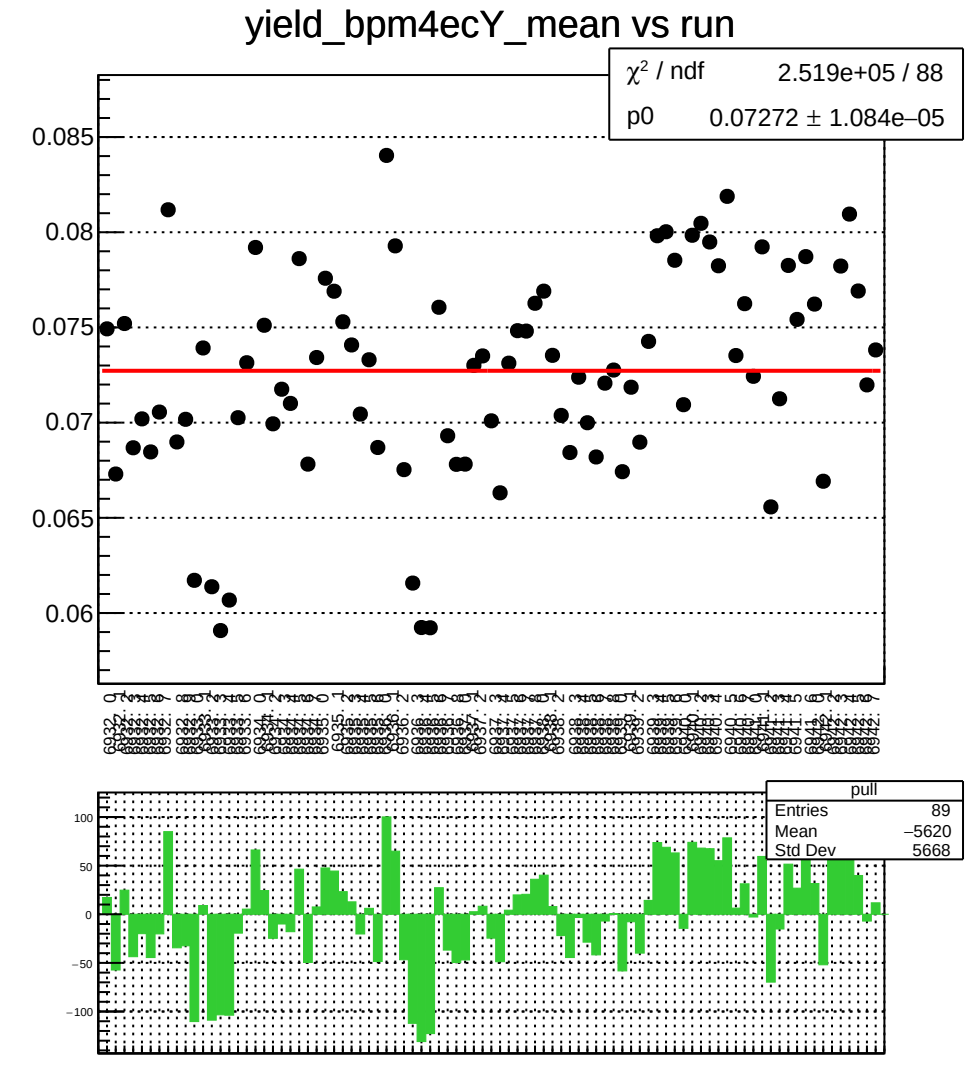

yield_bpm4acX_rms vs run
χ² / ndf 2.998e+05 / 88
p0 0.01938 ± 1.644e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

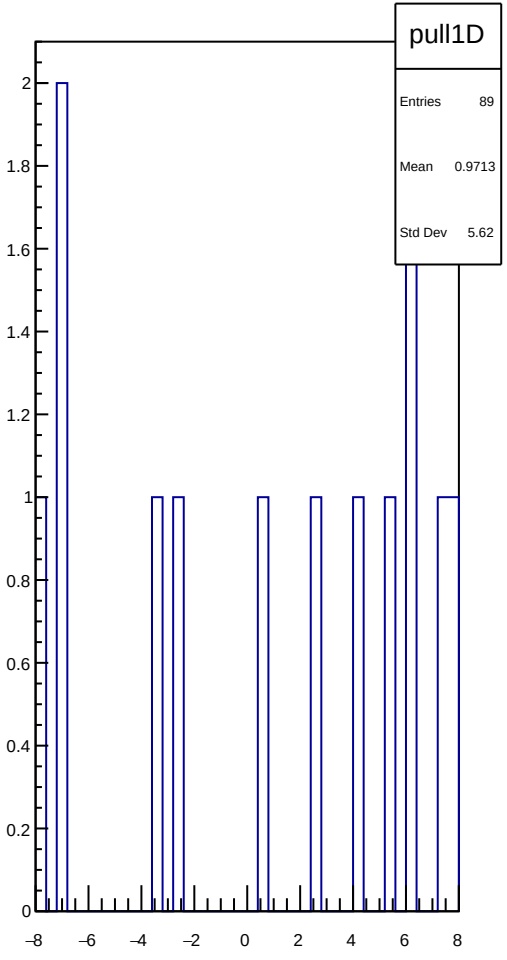

yield_bpm4acY_mean vs run
χ² / ndf 1.104e+05 / 88
p0 0.7534 ± 1.281e−05
0.765
0.76
0.755
0.75
0.745
0.74
pull
Entries 89
Mean 817.2
Std Dev 732
100
80
60
40
20
0
−20
−40
−60
−80
pull1D
Entries 89
Mean −0.1368
Std Dev 5.265
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

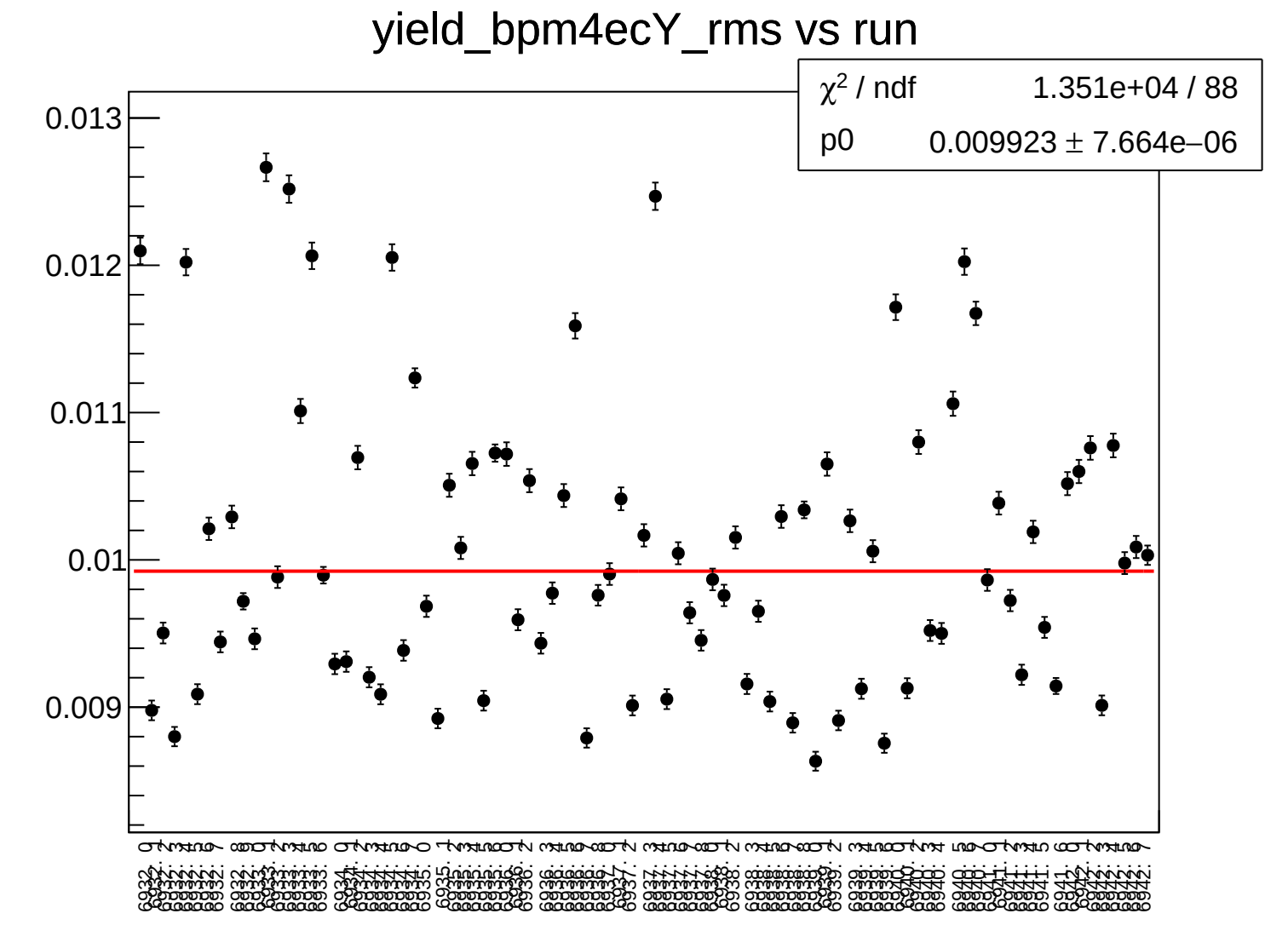

yield_bpm4acY_rms vs run
χ² / ndf 7797 / 88
p0 0.01175 ± 9.058e–06
0.015
0.014
0.013
0.012
0.011
0.01

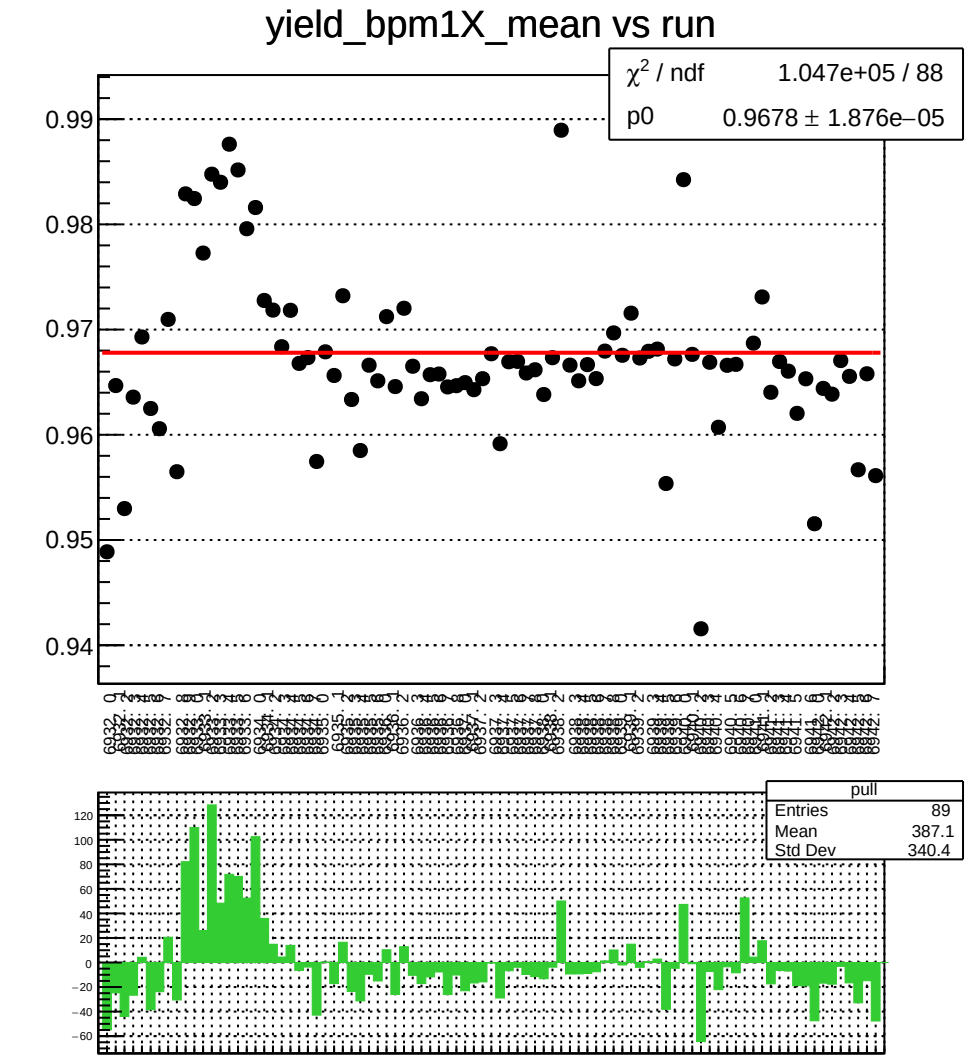

yield_bpm4ecX_mean vs run
χ² / ndf 3.001e+05 / 88
p0 −0.03498 ± 2.299e−05
0.02
0
−0.02
−0.04
−0.06
pull
Entries 89
Mean 26.38
Std Dev 8.896
150
100
50
0
−50
−100
pull1D
Entries 89
Mean −0.7343
Std Dev 4.019
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

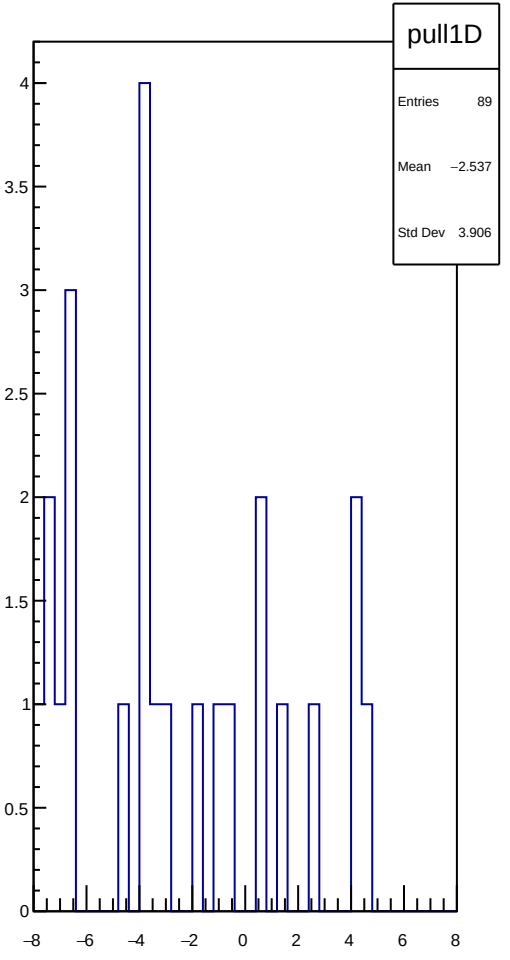

yield_bpm4ecX_rms vs run
χ² / ndf 2.903e+05 / 88
p0 0.01923 ± 1.625e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

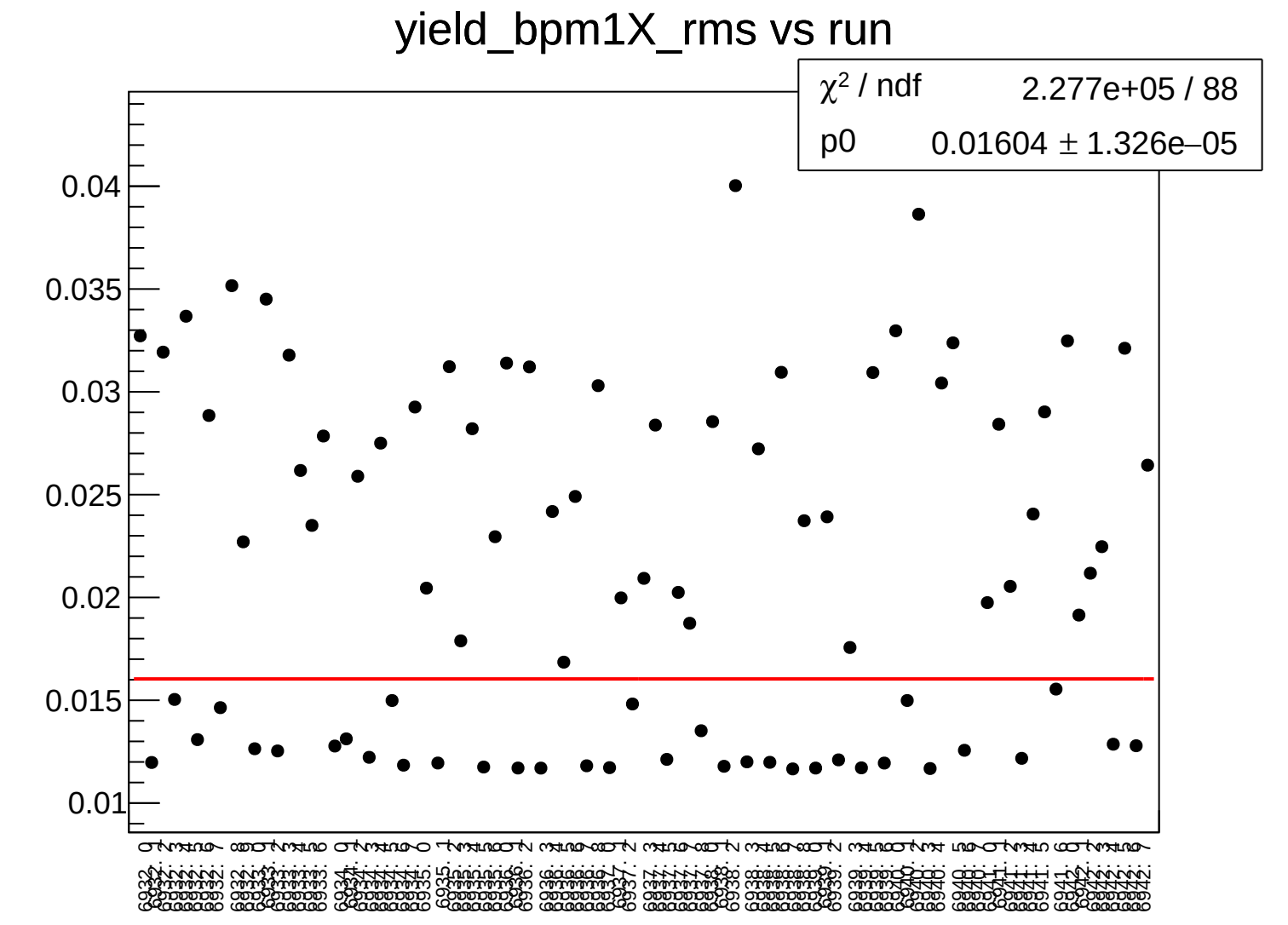

yield_bpm4ecY_mean vs run
χ² / ndf 2.519e+05 / 88
p0 0.07272 ± 1.084e−05
0.085
0.08
0.075
0.07
0.065
0.06
pull
Entries 89
Mean −5620
Std Dev 5668
100
50
0
−50
−100

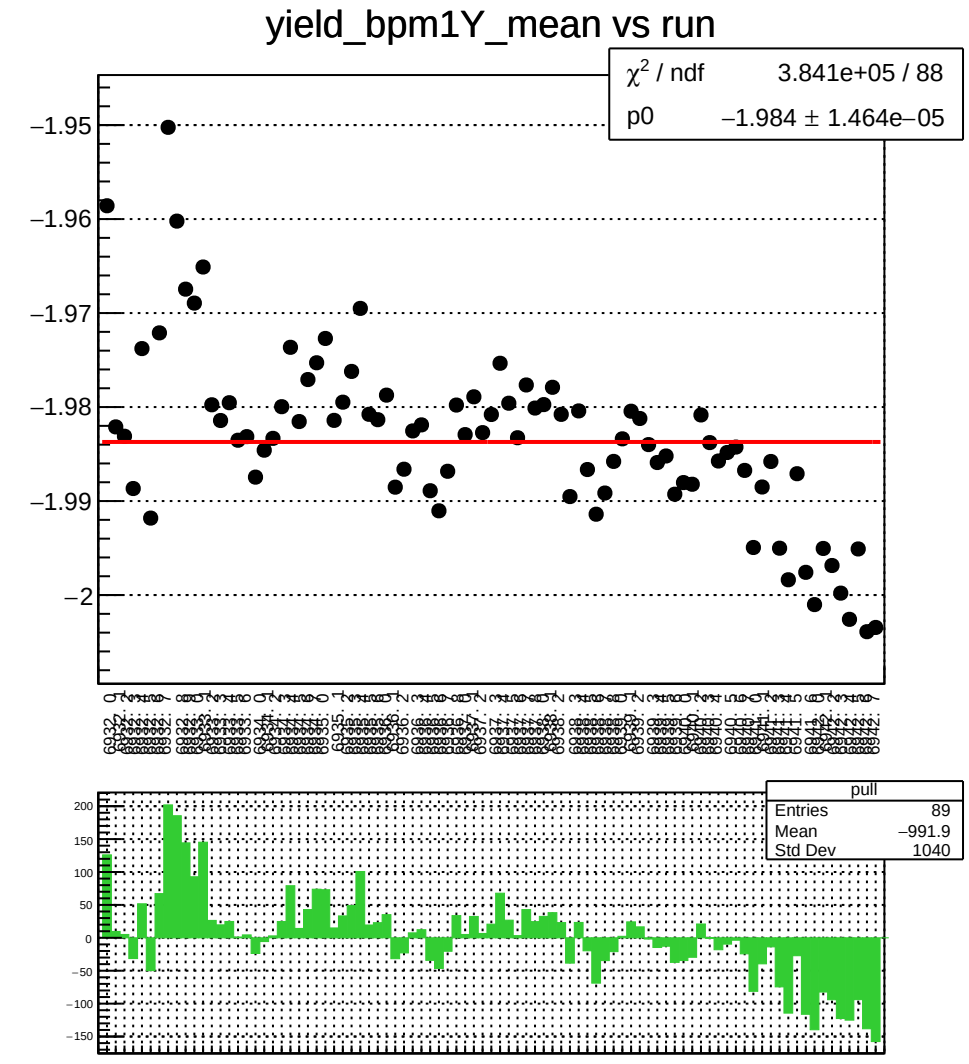

pull1D
Entries 89
Mean 0.9713
Std Dev 5.62
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

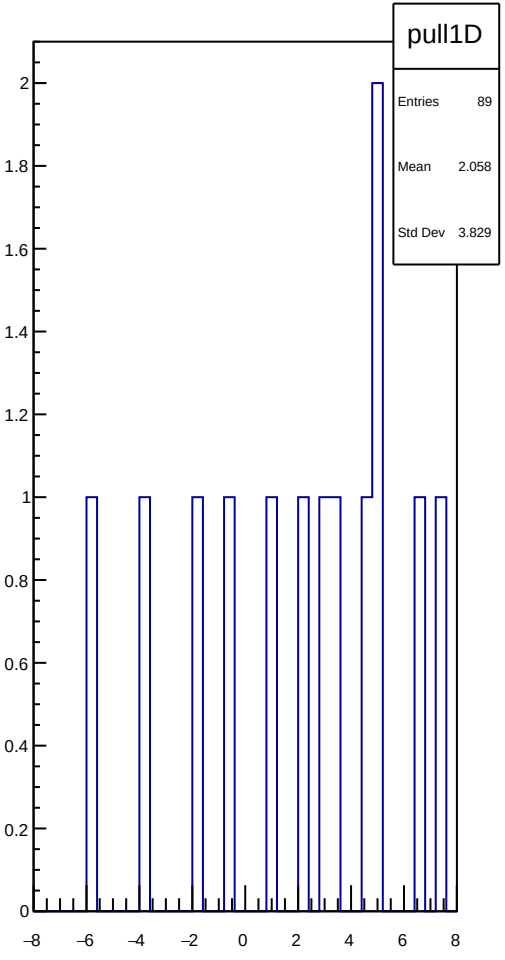

yield_bpm4ecY_rms vs run
χ² / ndf 1.351e+04 / 88
p0 0.009923 ± 7.664e−06
0.013
0.012
0.011
0.01
0.009

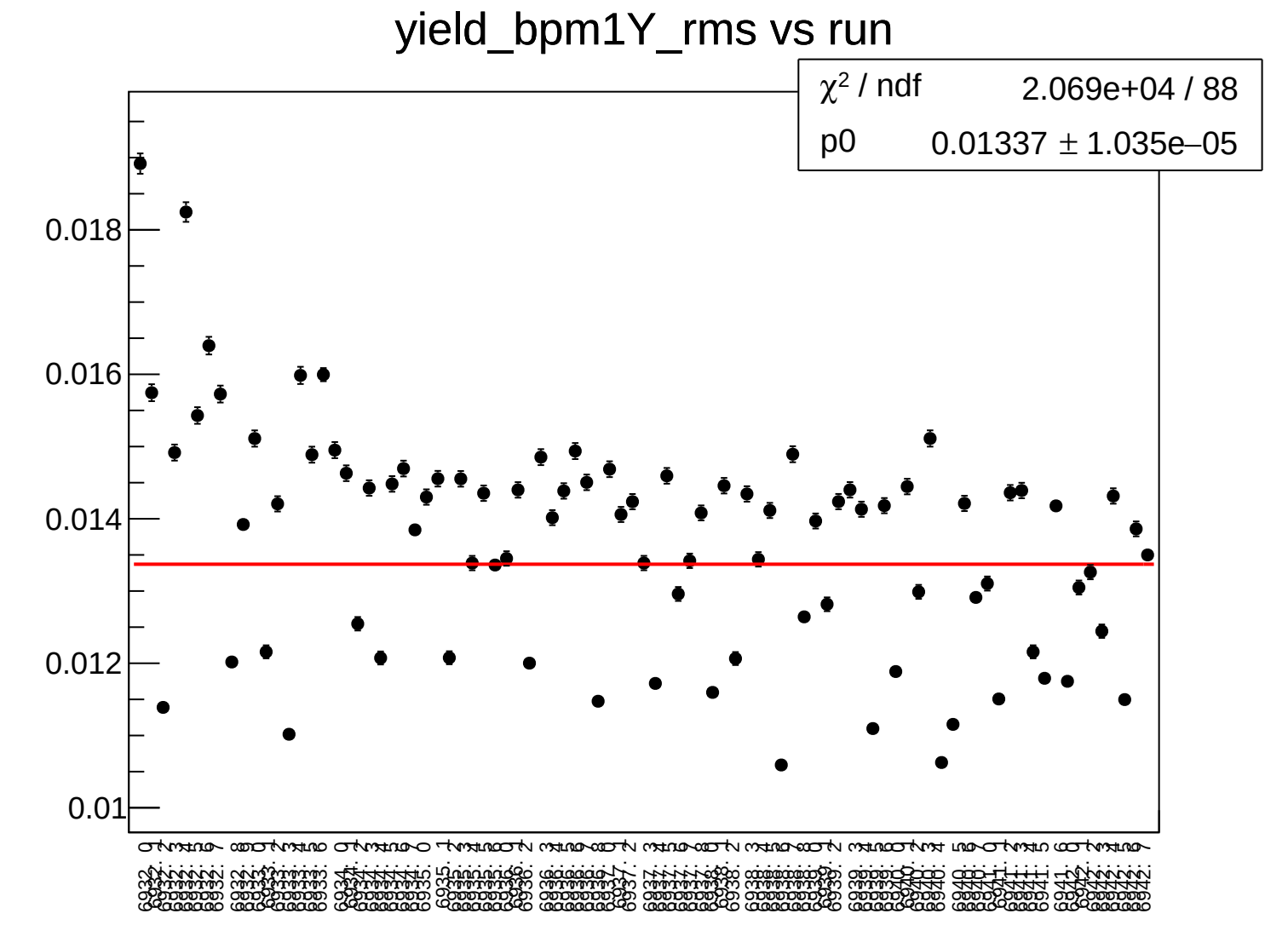

yield_bpm1X_mean vs run
χ² / ndf 1.047e+05 / 88
p0 0.9678 ± 1.876e−05
0.99
0.98
0.97
0.96
0.95
0.94
pull
Entries 89
Mean 387.1
Std Dev 340.4
120
100
80
60
40
20
0
−20
−40
−60

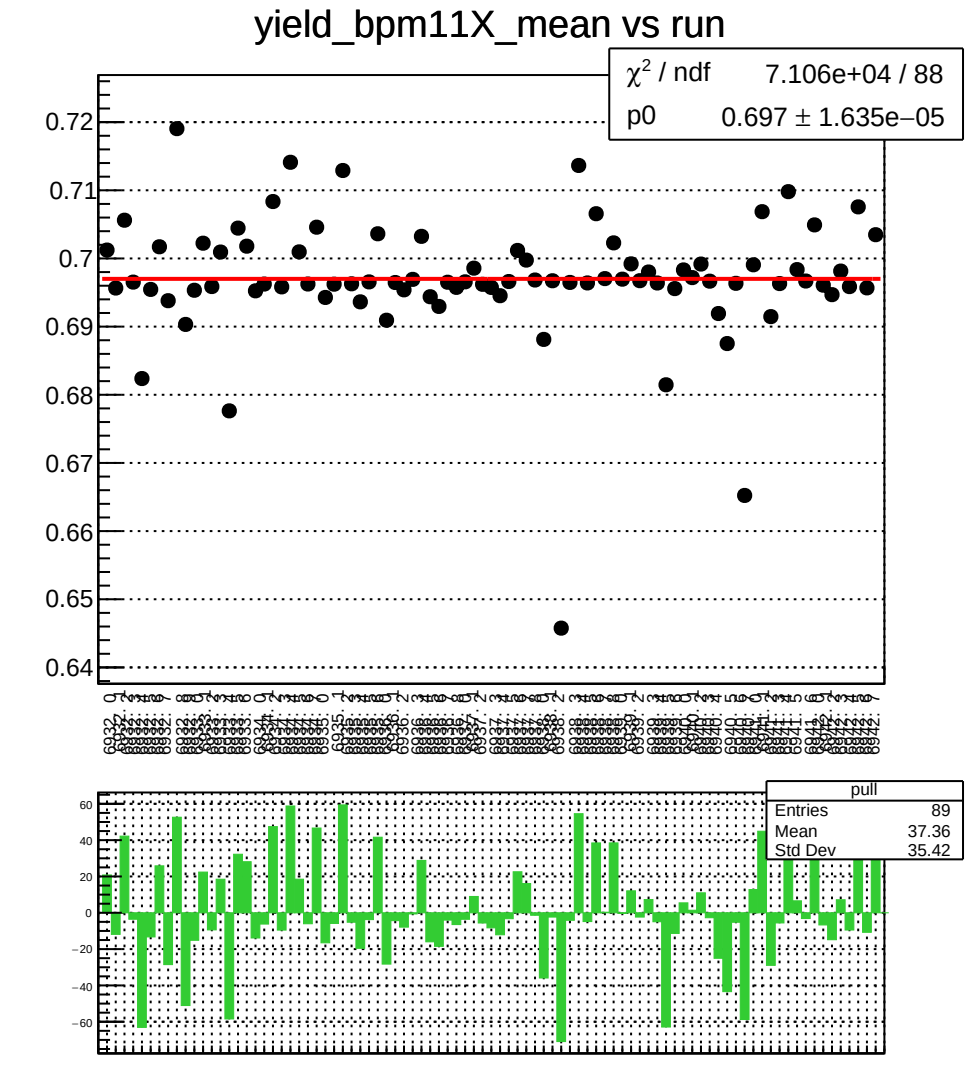

pull1D
Entries 89
Mean −2.537
Std Dev 3.906
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

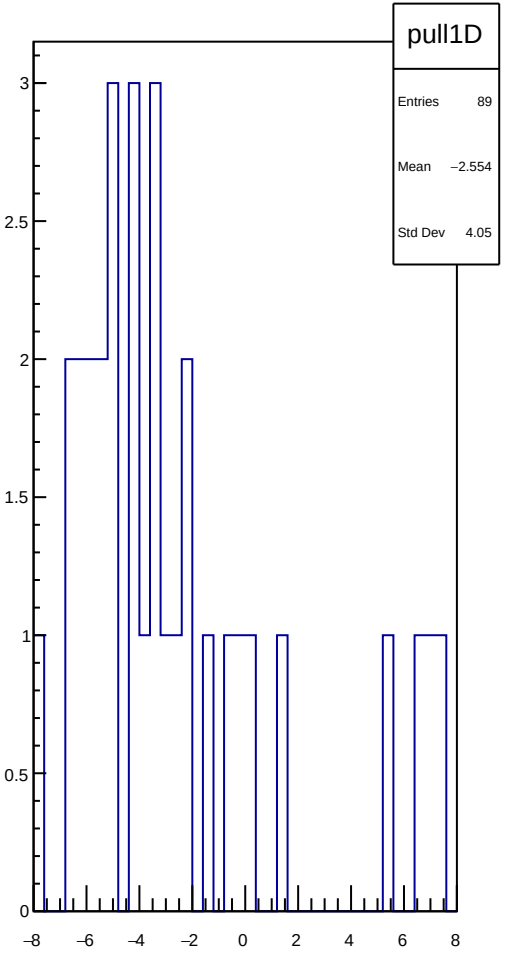

yield_bpm1X_rms vs run
χ² / ndf 2.277e+05 / 88
p0 0.01604 ± 1.326e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

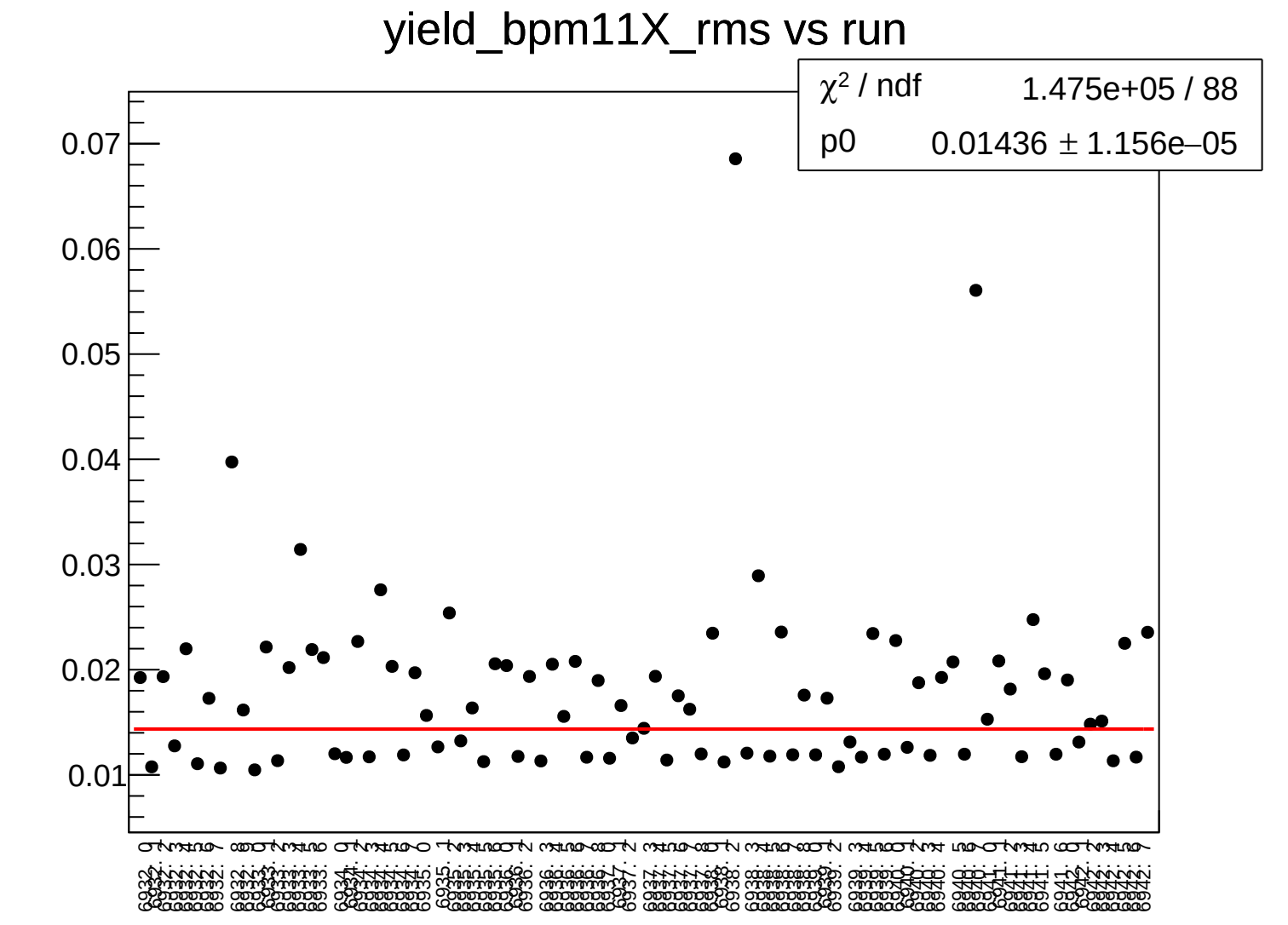

yield_bpm1Y_mean vs run
χ² / ndf 3.841e+05 / 88
p0 −1.984 ± 1.464e−05
−1.95
−1.96
−1.97
−1.98
−1.99
−2
pull
Entries 89
Mean −991.9
Std Dev 1040
200
150
100
50
0
−50
−100
−150

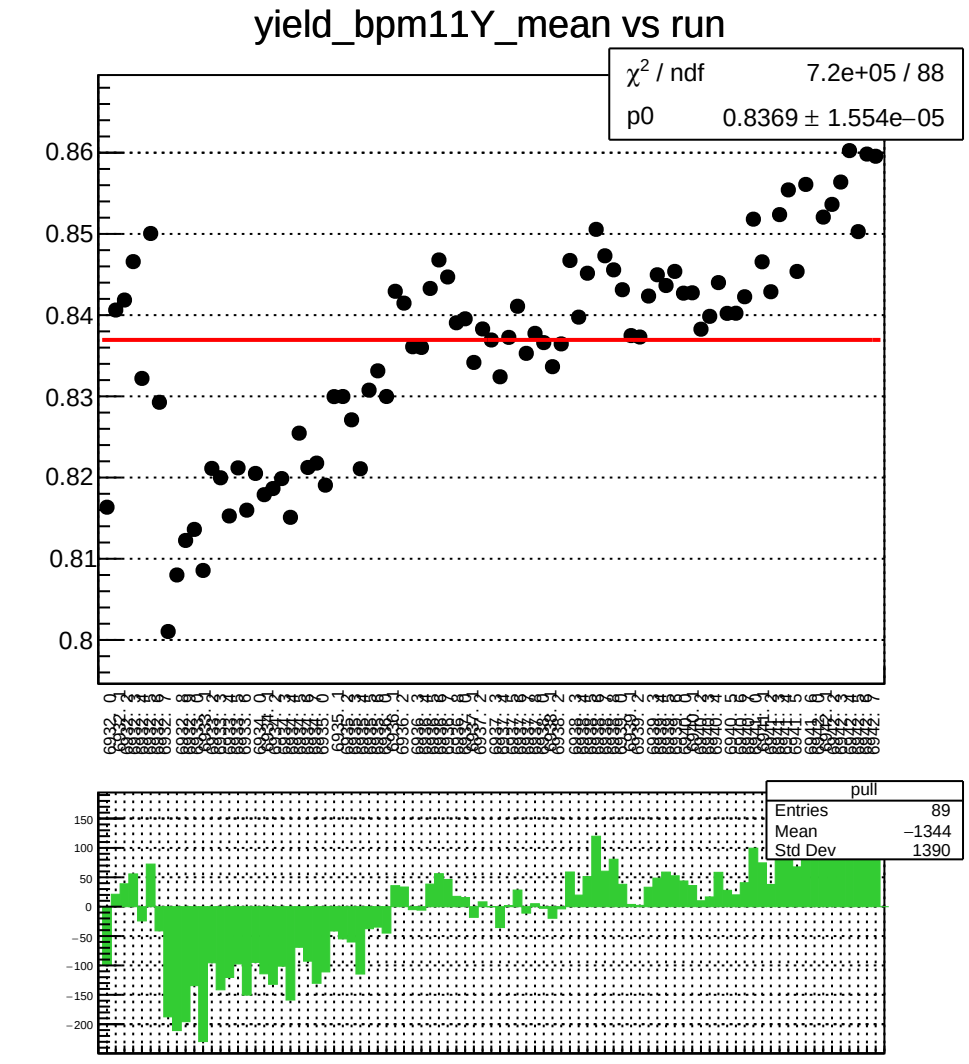

pull1D
Entries 89
Mean 2.058
Std Dev 3.829
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

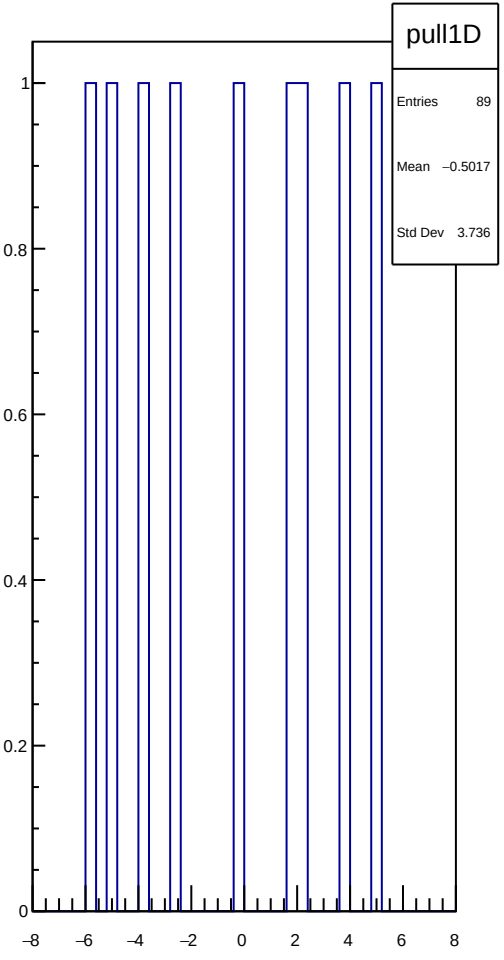

yield_bpm1Y_rms vs run
χ² / ndf 2.069e+04 / 88
p0 0.01337 ± 1.035e–05
0.018
0.016
0.014
0.012
0.01

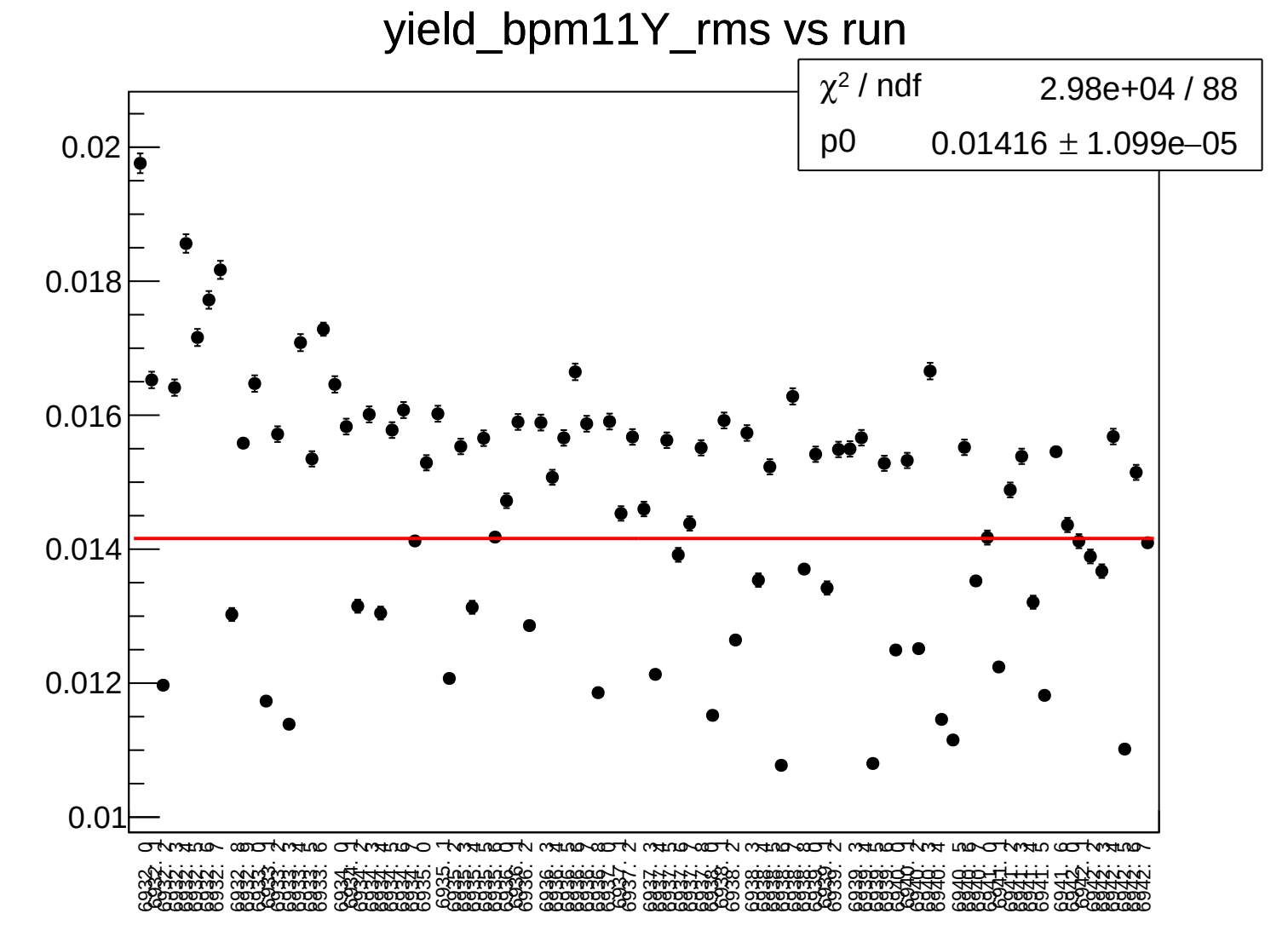

yield_bpm11X_mean vs run
χ² / ndf 7.106e+04 / 88
p0 0.697 ± 1.635e−05
0.72
0.71
0.7
0.69
0.68
0.67
0.66
0.65
0.64
pull
Entries 89
Mean 37.36
Std Dev 35.42
60
40
20
0
−20
−40
−60

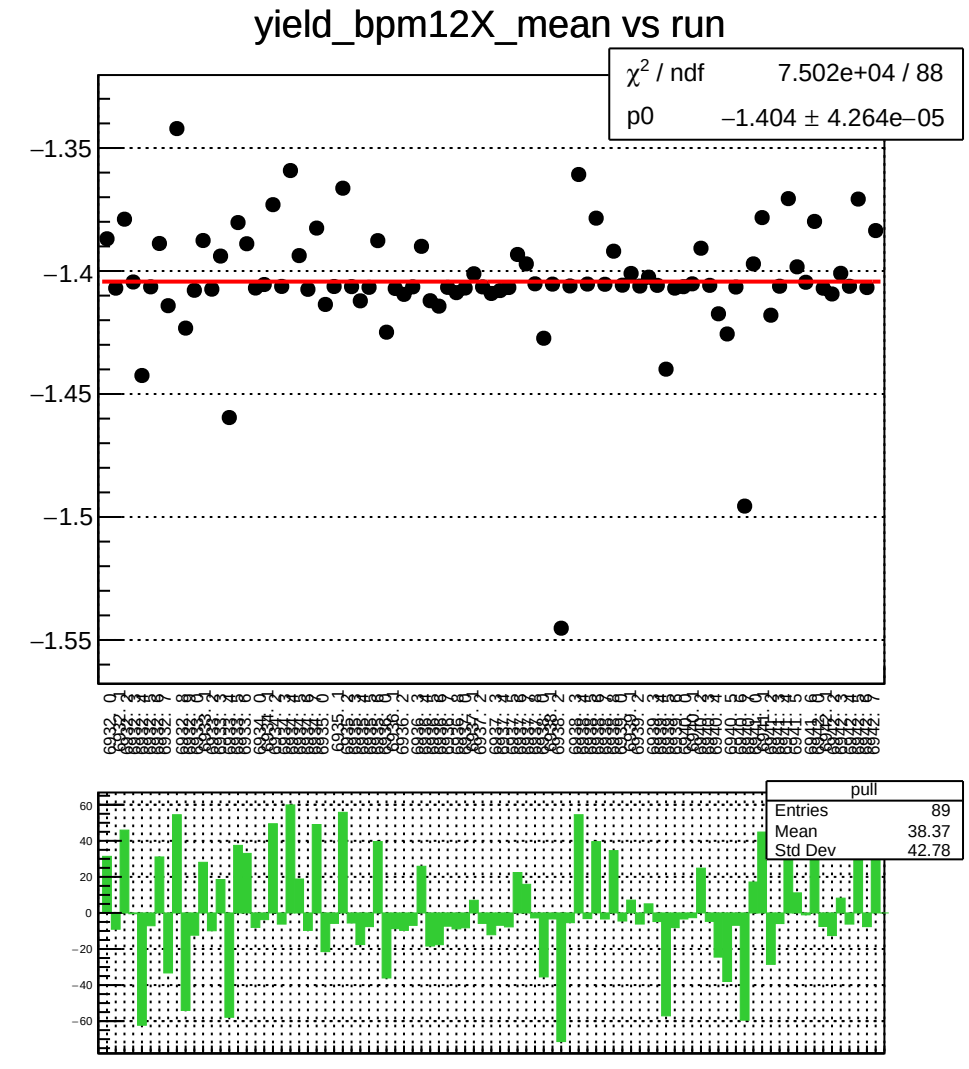

pull1D
Entries 89
Mean −2.554
Std Dev 4.05
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

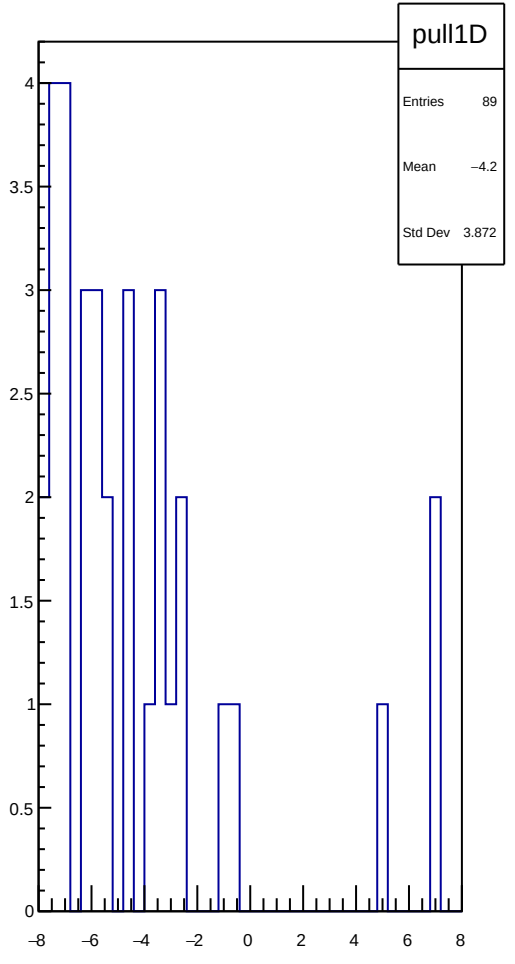

yield_bpm11X_rms vs run
χ² / ndf 1.475e+05 / 88
p0 0.01436 ± 1.156e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

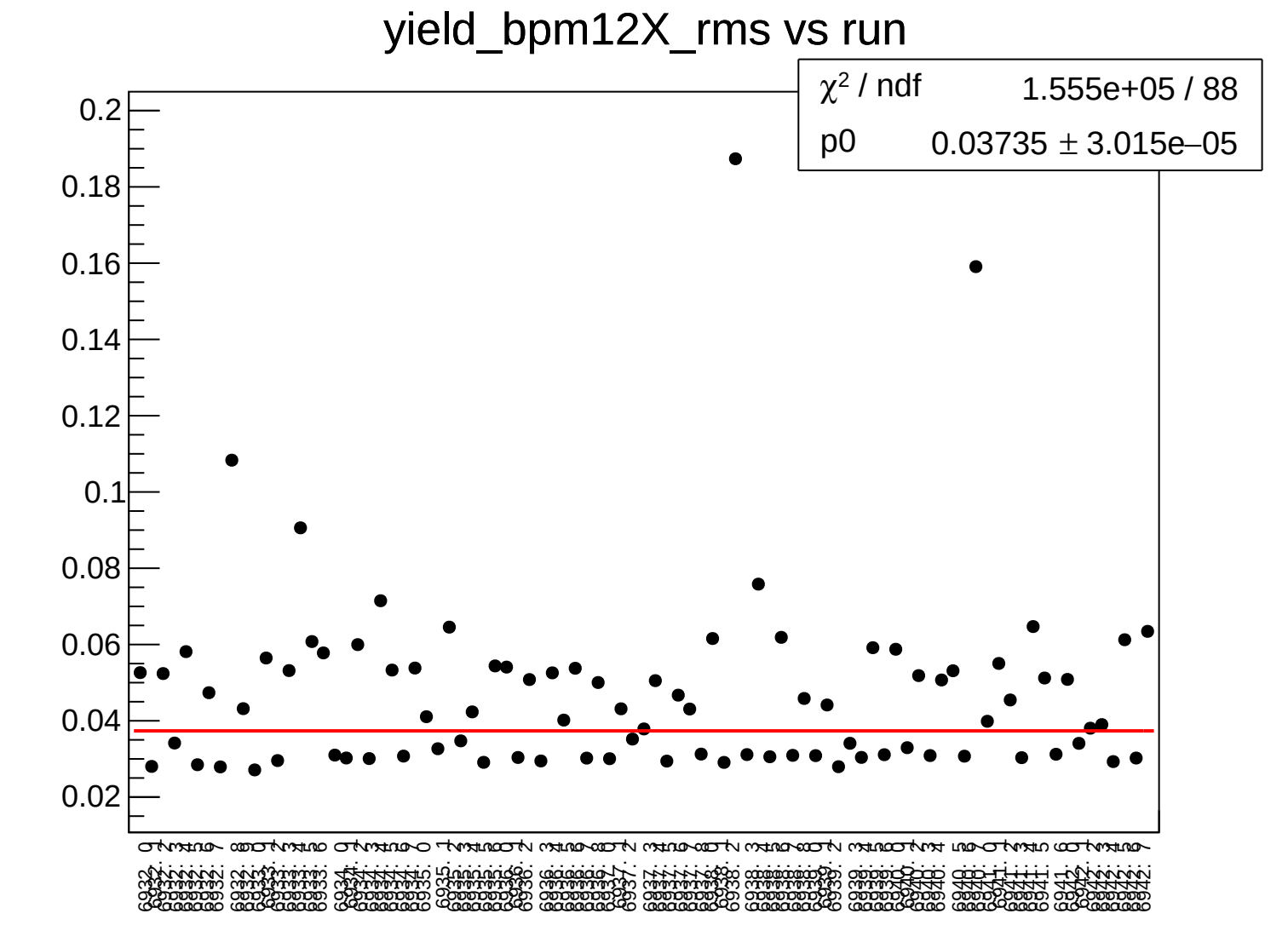

yield_bpm11Y_mean vs run
χ² / ndf 7.2e+05 / 88
p0 0.8369 ± 1.554e−05
0.86
0.85
0.84
0.83
0.82
0.81
0.8
pull
Entries 89
Mean −1344
Std Dev 1390
150
100
50
0
−50
−100
−150
−200

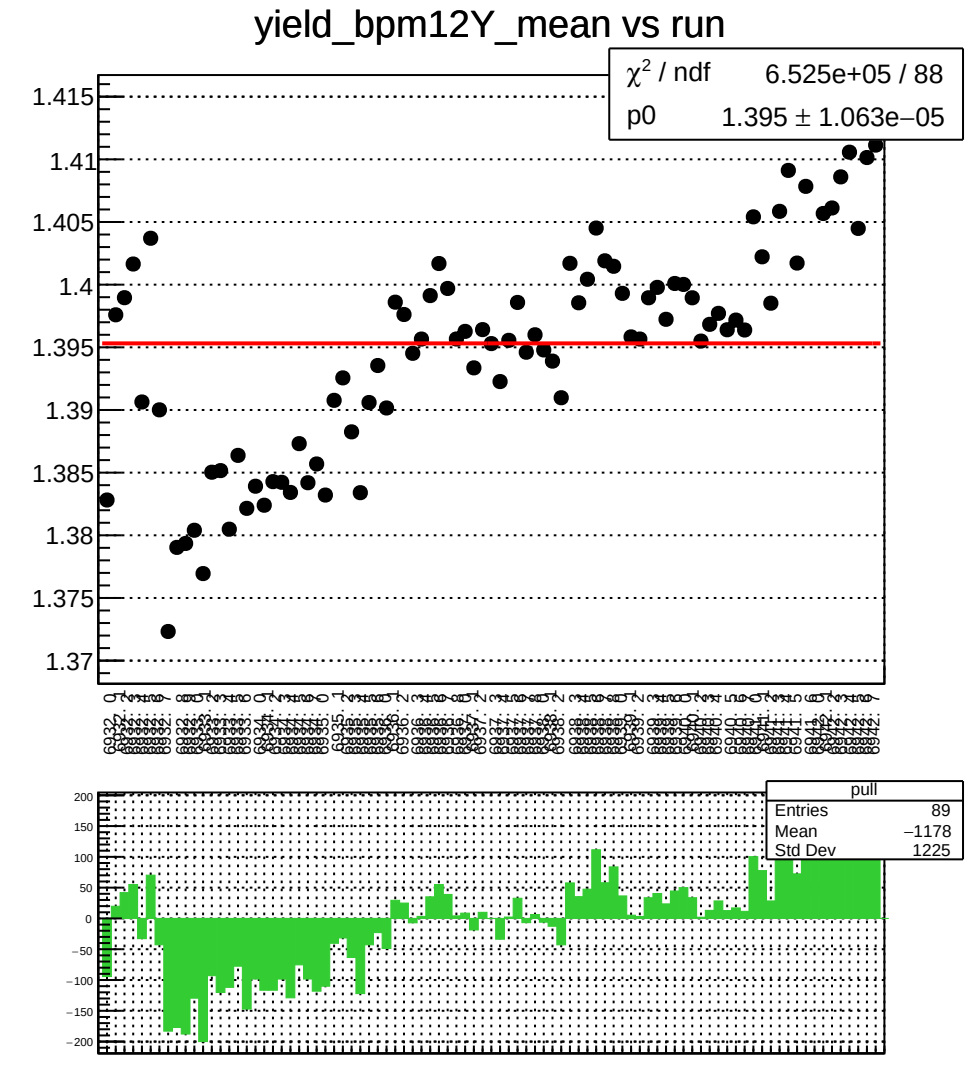

pull1D
Entries 89
Mean −0.5017
Std Dev 3.736
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

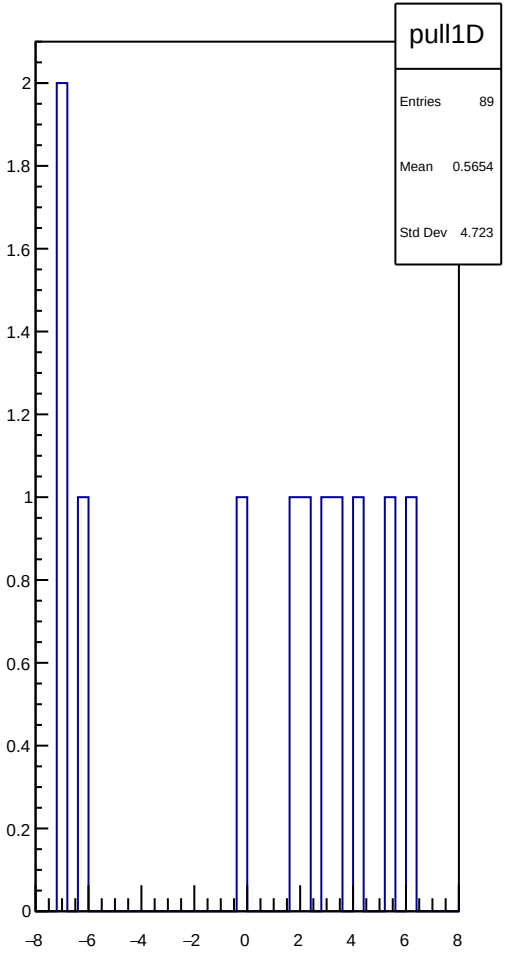

yield_bpm11Y_rms vs run
χ² / ndf 2.98e+04 / 88
p0 0.01416 ± 1.099e−05
0.02
0.018
0.016
0.014
0.012
0.01

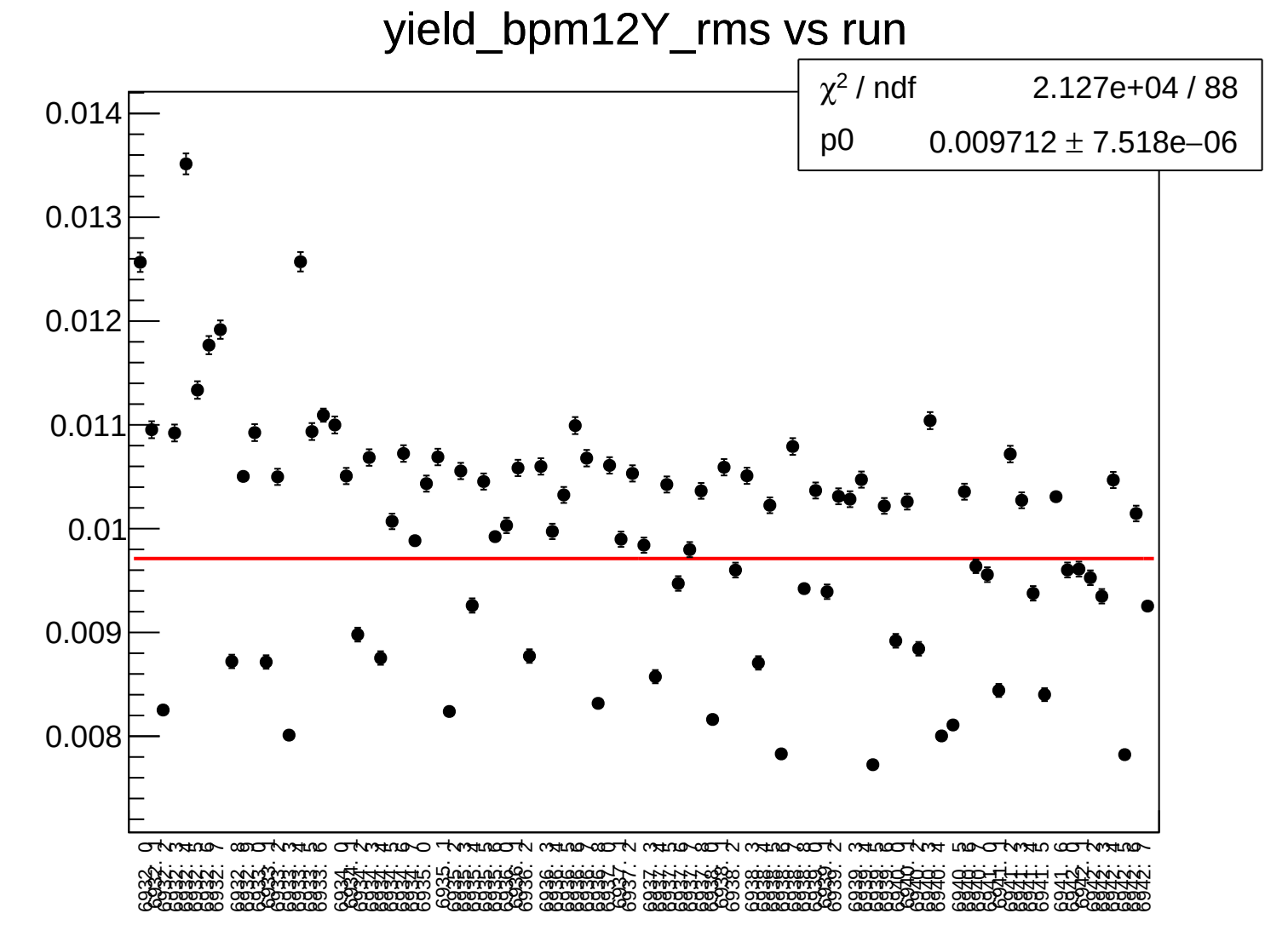

yield_bpm12X_mean vs run
χ² / ndf 7.502e+04 / 88
p0 −1.404 ± 4.264e−05
−1.35
−1.4
−1.45
−1.5
−1.55
pull
Entries 89
Mean 38.37
Std Dev 42.78
60
40
20
0
−20
−40
−60

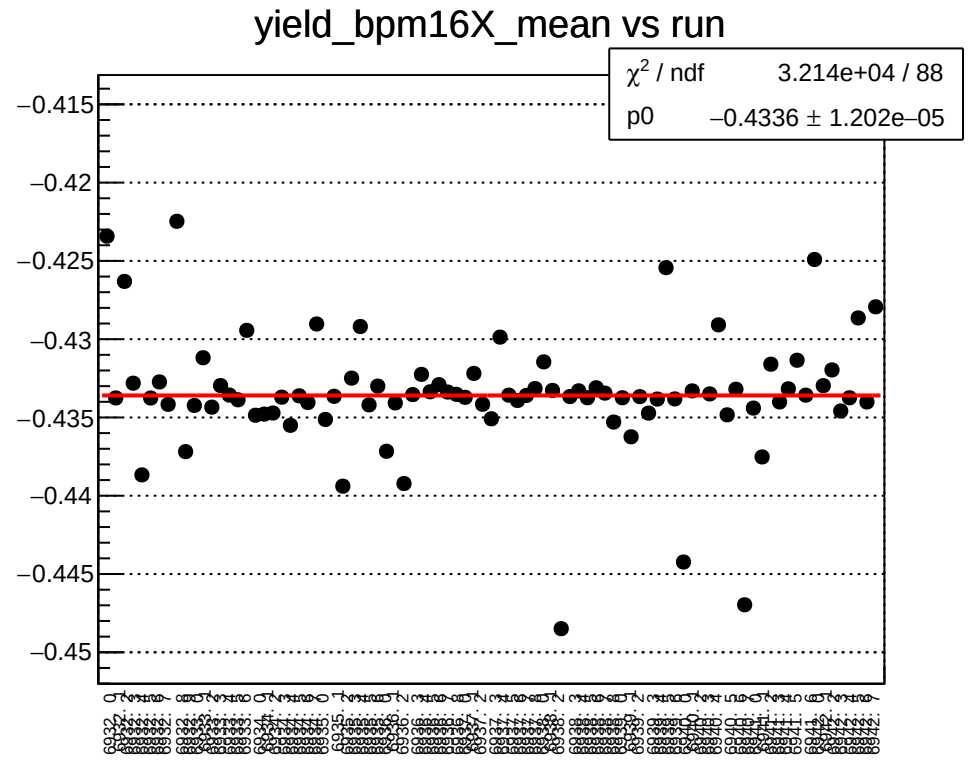

pull1D
Entries 89
Mean −4.2
Std Dev 3.872
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

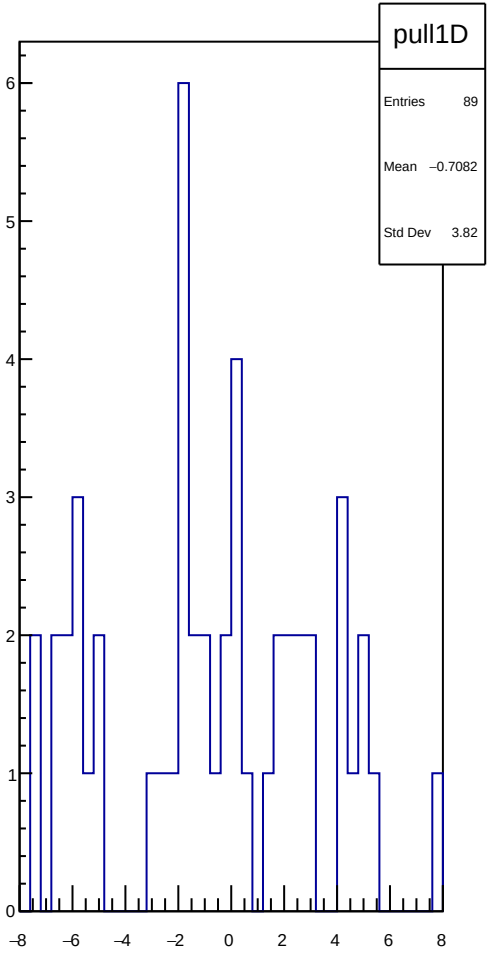

yield_bpm12X_rms vs run
χ² / ndf 1.555e+05 / 88
p0 0.03735 ± 3.015e–05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

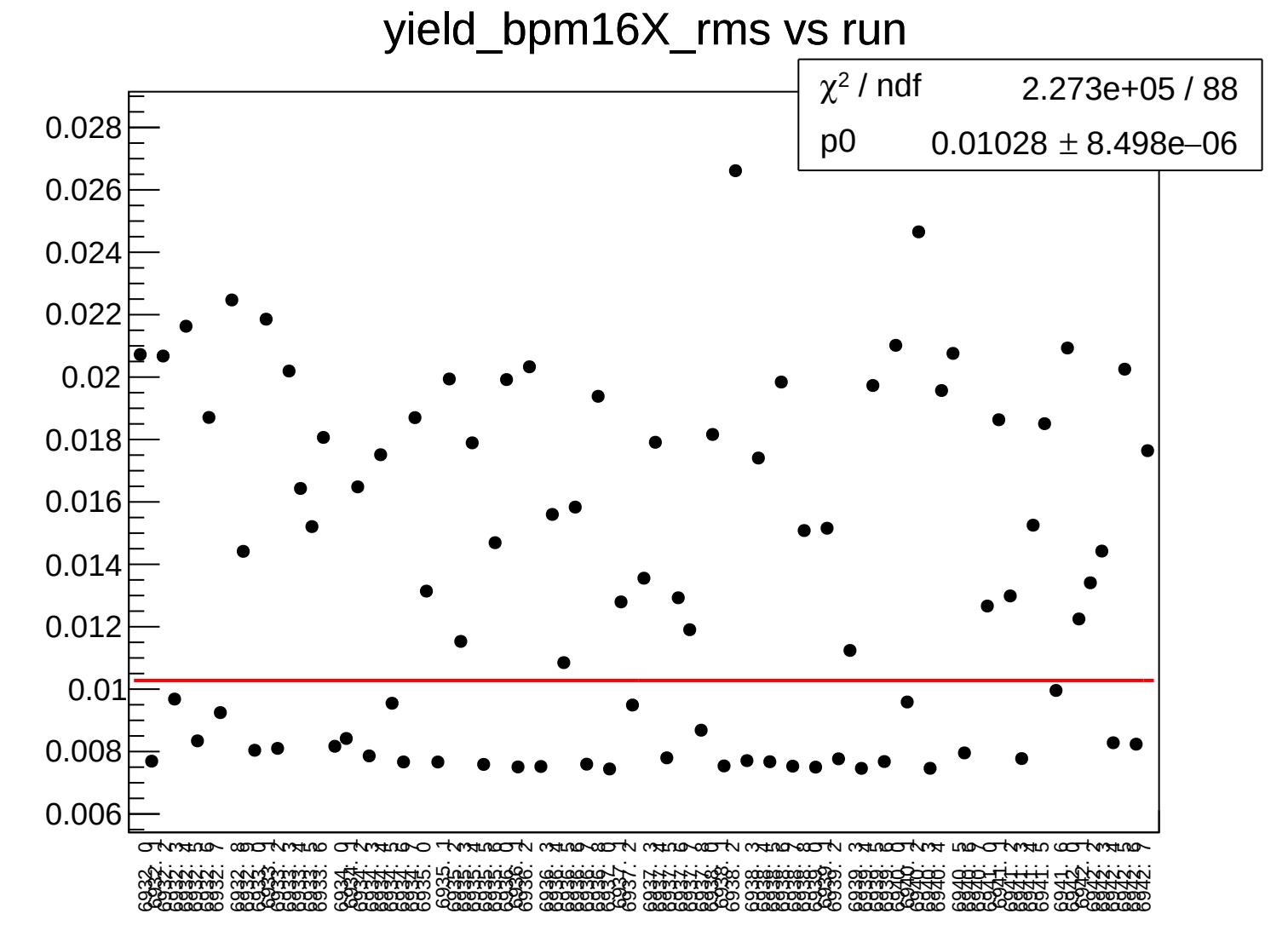

yield_bpm12Y_mean vs run
χ² / ndf 6.525e+05 / 88
p0 1.395 ± 1.063e−05
1.415
1.41
1.405
1.4
1.395
1.39
1.385
1.38
1.375
1.37
pull
Entries 89
Mean −1178
Std Dev 1225
200
150
100
50
0
−50
−100
−150
−200

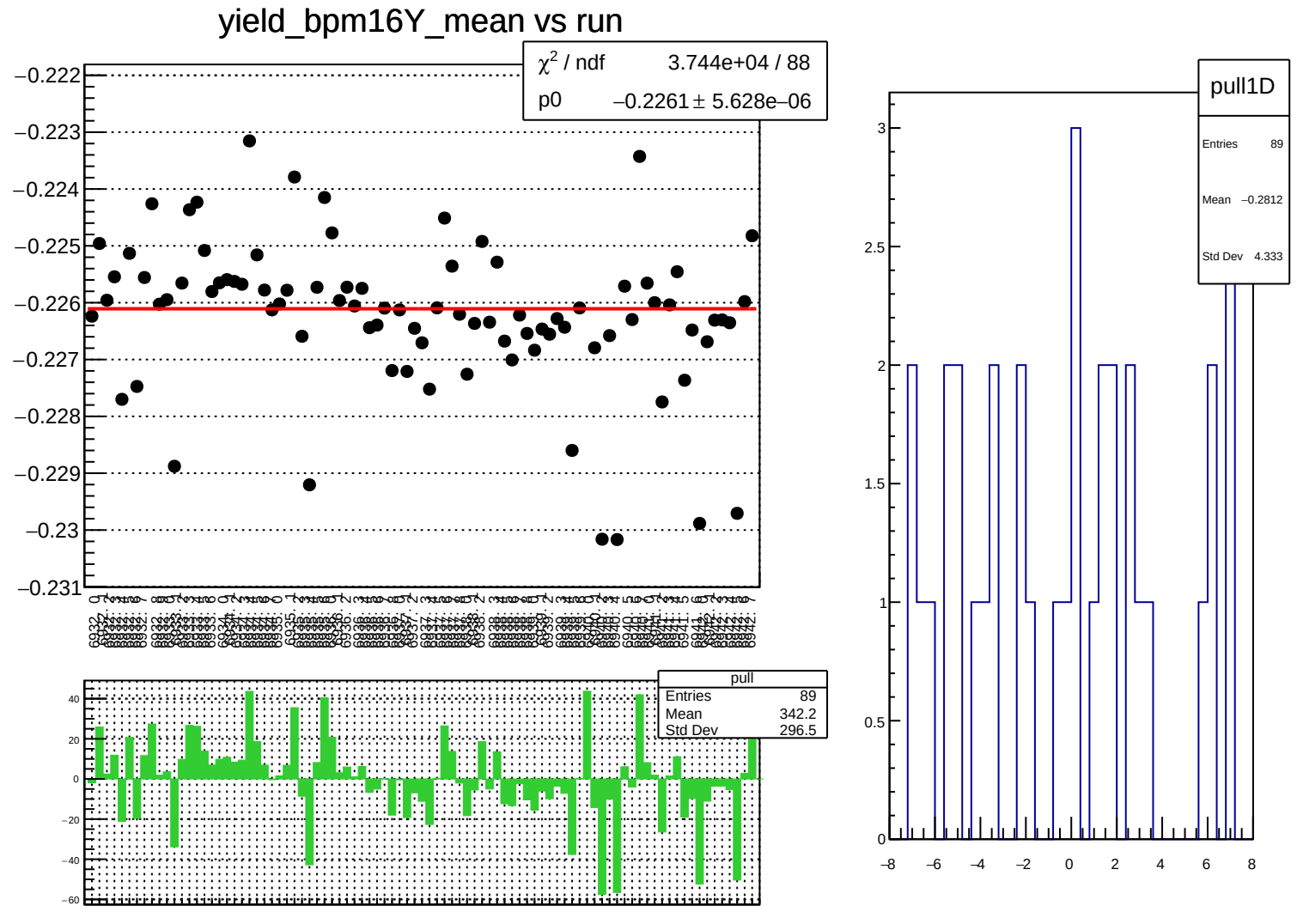

pull1D
Entries 89
Mean 0.5654
Std Dev 4.723
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

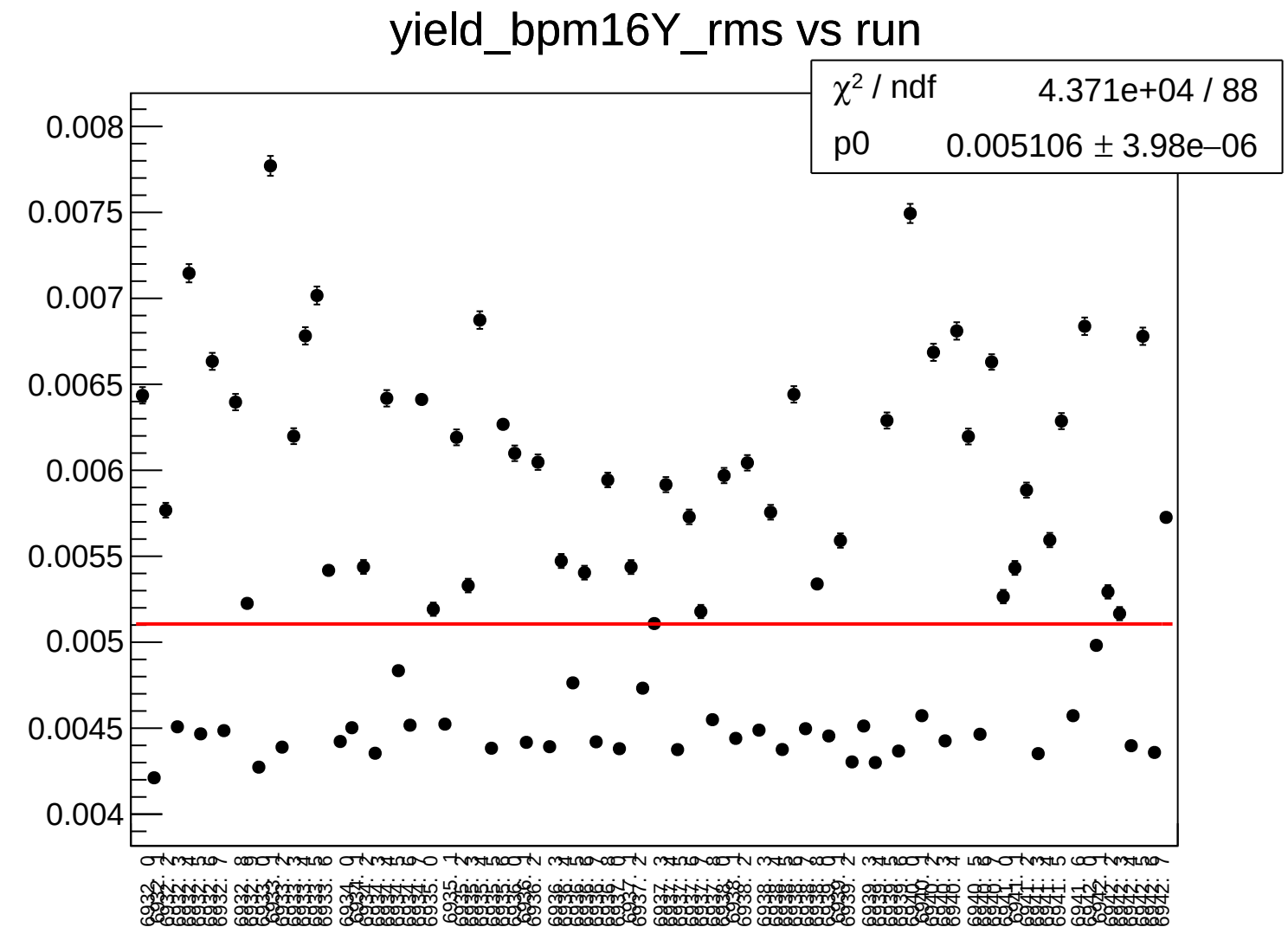

yield_bpm12Y_rms vs run
χ² / ndf 2.127e+04 / 88
p0 0.009712 ± 7.518e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008

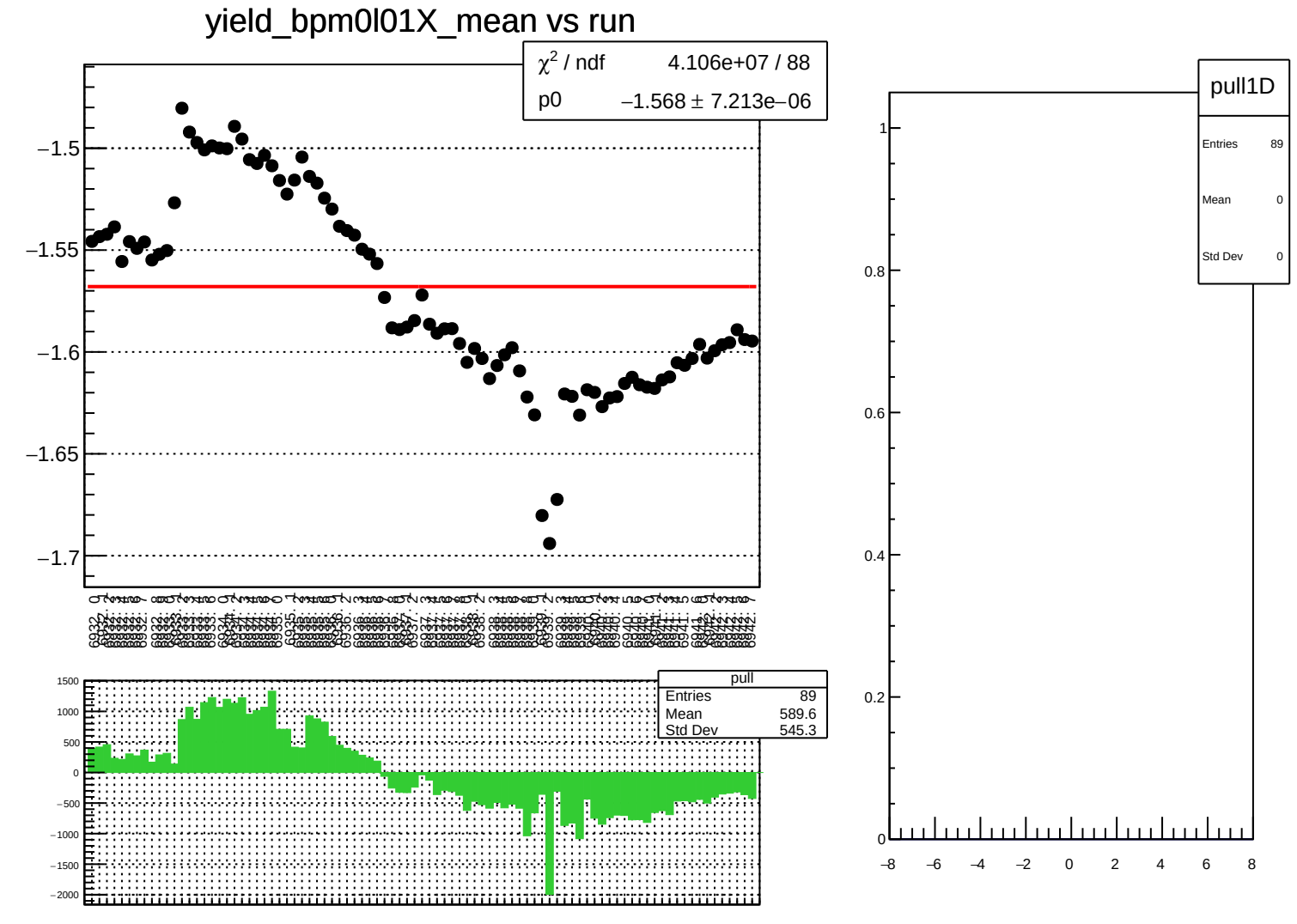

yield_bpm16X_mean vs run
χ² / ndf 3.214e+04 / 88
p0 −0.4336 ± 1.202e−05
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
−0.45
pull
Entries 89
Mean 53.19
Std Dev 53.06
60
40
20
0
−20
−40

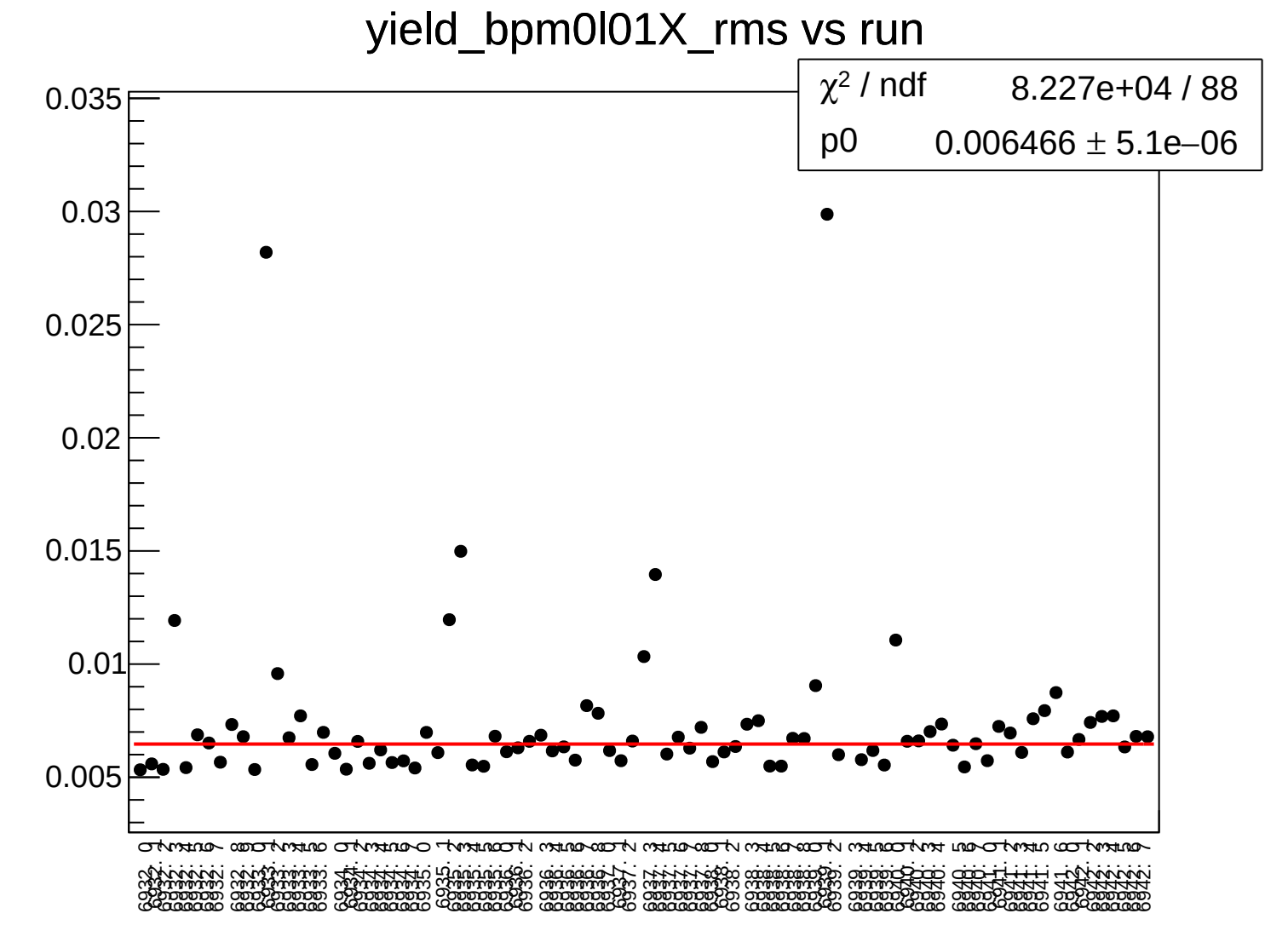

pull1D
Entries 89
Mean −0.7082
Std Dev 3.82
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

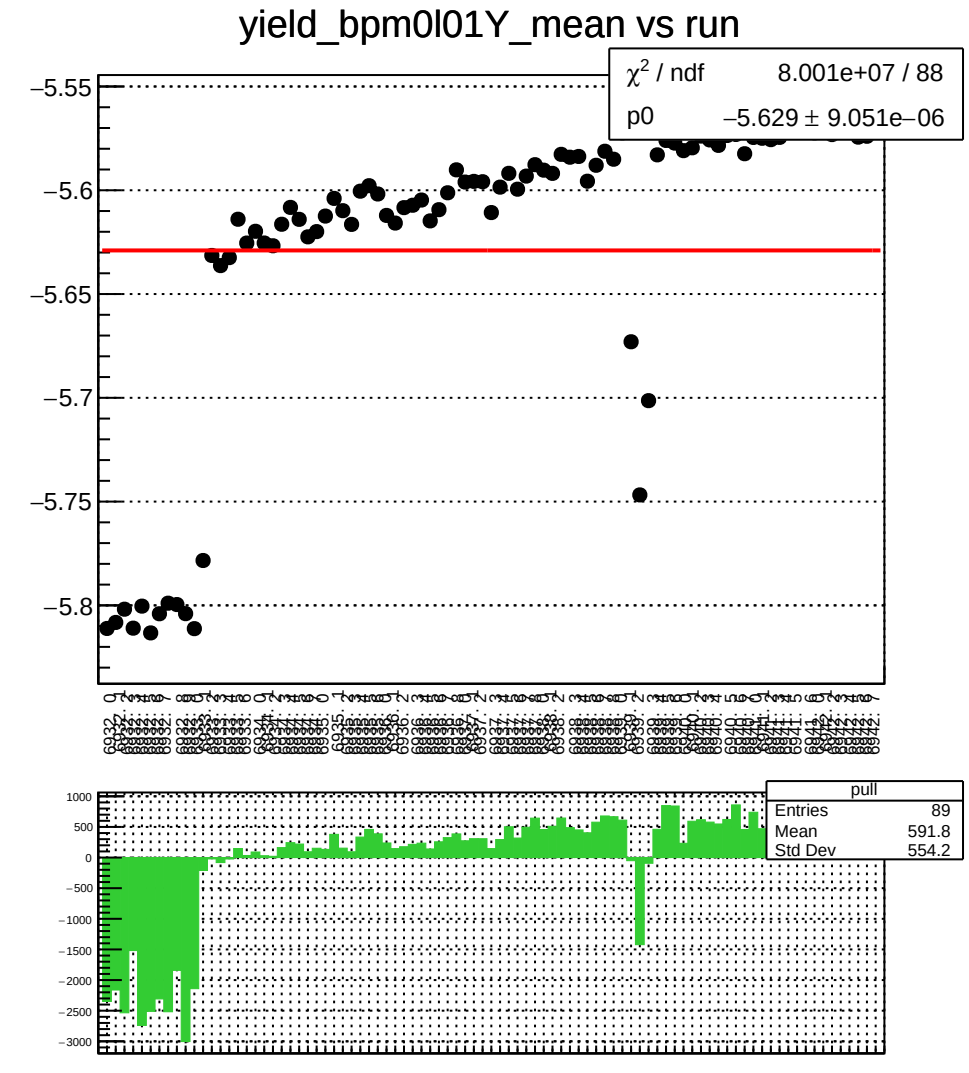

yield_bpm16X_rms vs run
χ² / ndf 2.273e+05 / 88
p0 0.01028 ± 8.498e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

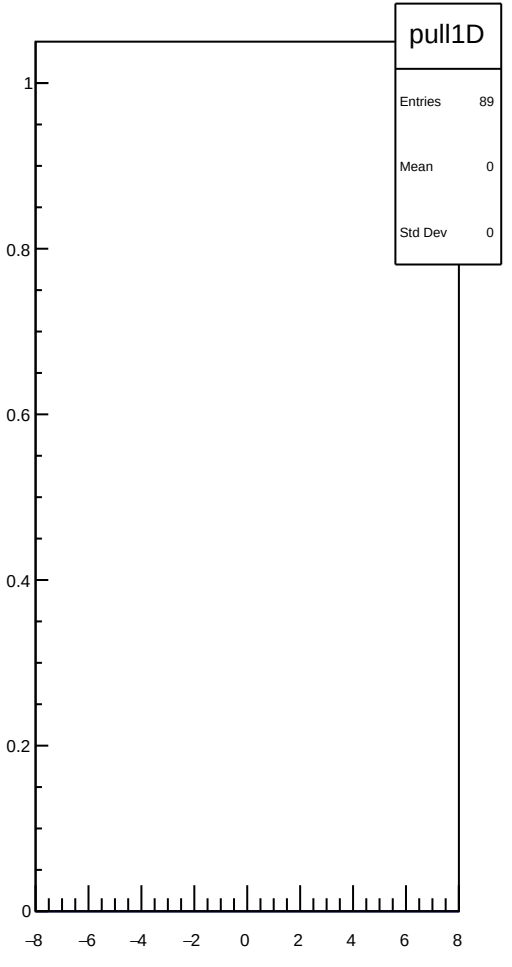

yield_bpm16Y_mean vs run
χ² / ndf 3.744e+04 / 88
p0 −0.2261 ± 5.628e−06
−0.222
−0.223
−0.224
−0.225
−0.226
−0.227
−0.228
−0.229
−0.23
−0.231
pull
Entries 89
Mean 342.2
Std Dev 296.5
40
20
0
−20
−40
−60
pull1D
Entries 89
Mean −0.2812
Std Dev 4.333
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

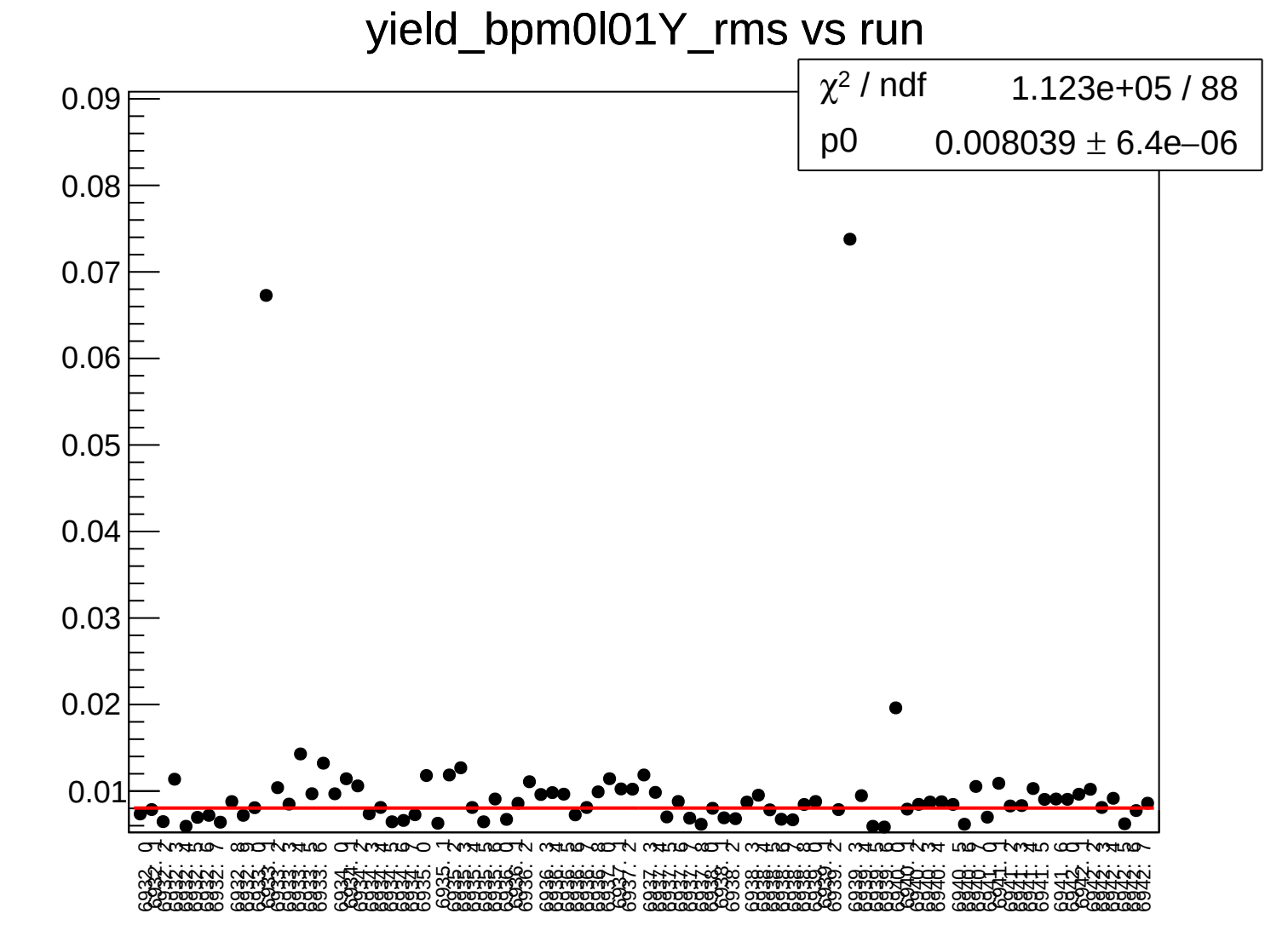

yield_bpm16Y_rms vs run
χ² / ndf 4.371e+04 / 88
p0 0.005106 ± 3.98e−06
0.008
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004

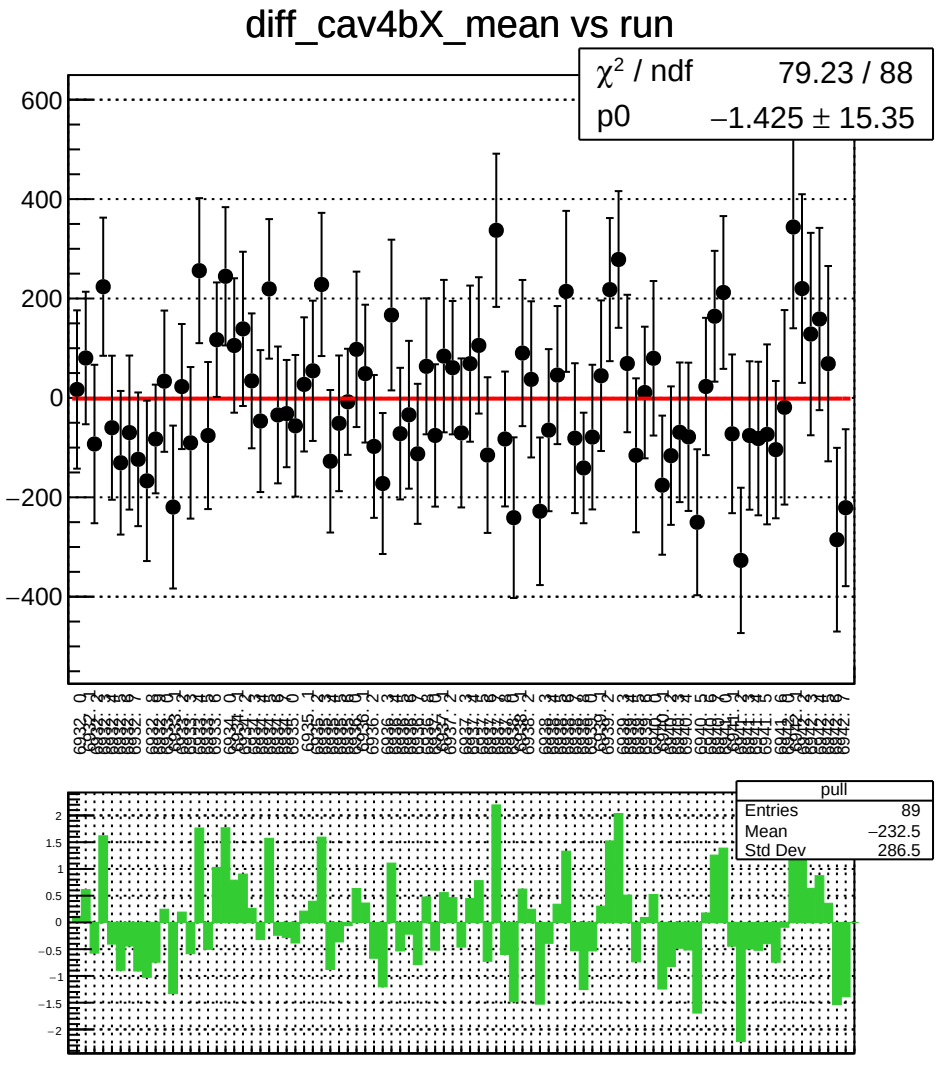

yield_bpm0l01X_mean vs run
χ² / ndf 4.106e+07 / 88
p0 −1.568 ± 7.213e−06
−1.5
−1.55
−1.6
−1.65
−1.7
pull
Entries 89
Mean 589.6
Std Dev 545.3
1500
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

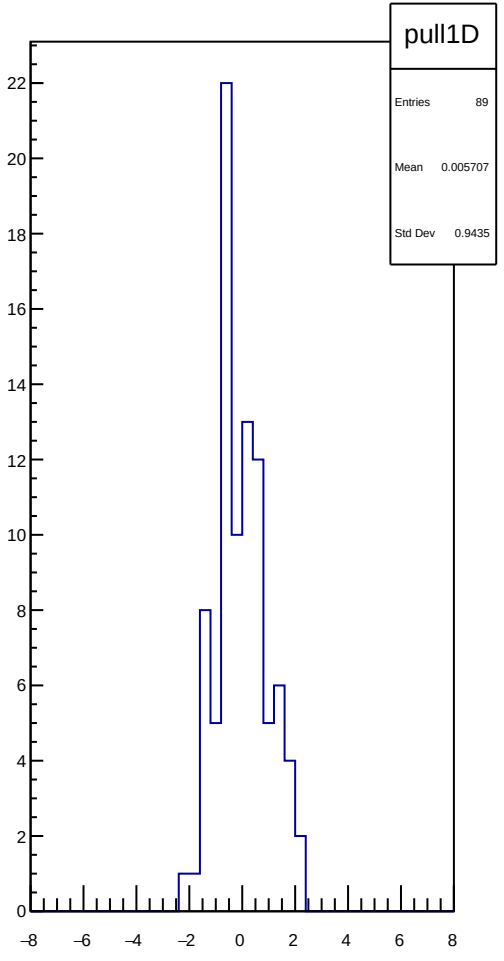

yield_bpm0l01X_rms vs run
χ² / ndf 8.227e+04 / 88
p0 0.006466 ± 5.1e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

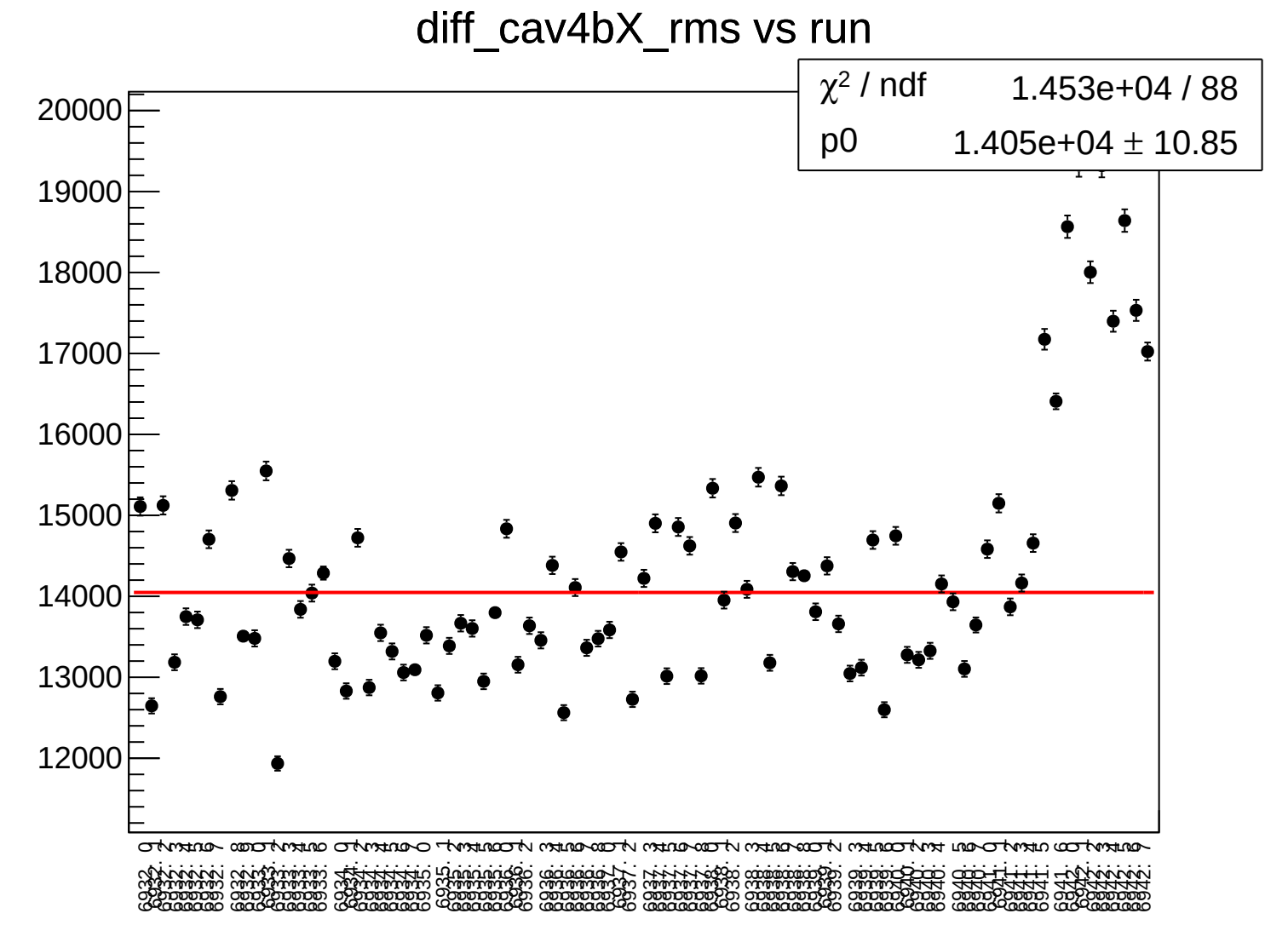

yield_bpm0l01Y_mean vs run
χ² / ndf 8.001e+07 / 88
p0 −5.629 ± 9.051e−06
−5.55
−5.6
−5.65
−5.7
−5.75
−5.8
pull
Entries 89
Mean 591.8
Std Dev 554.2
1000
500
0
−500
−1000
−1500
−2000
−2500
−3000

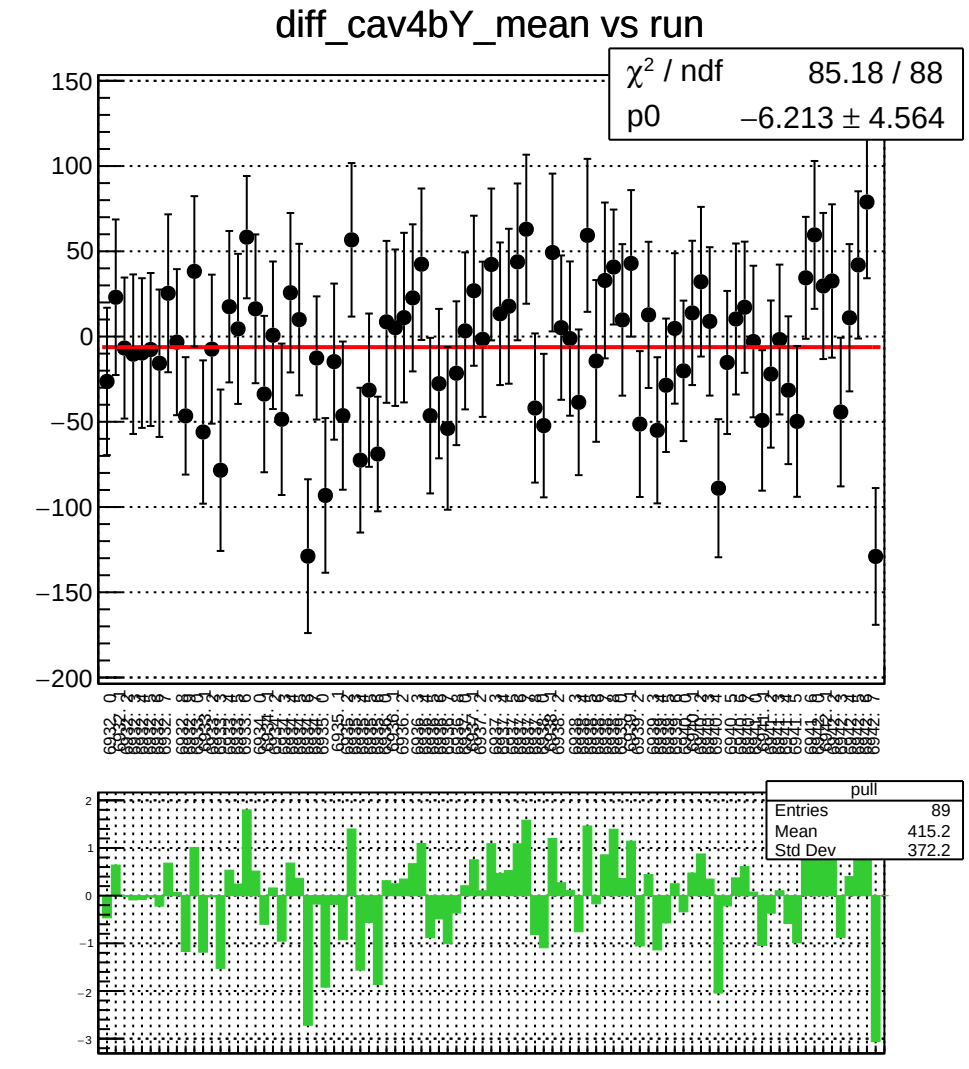

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

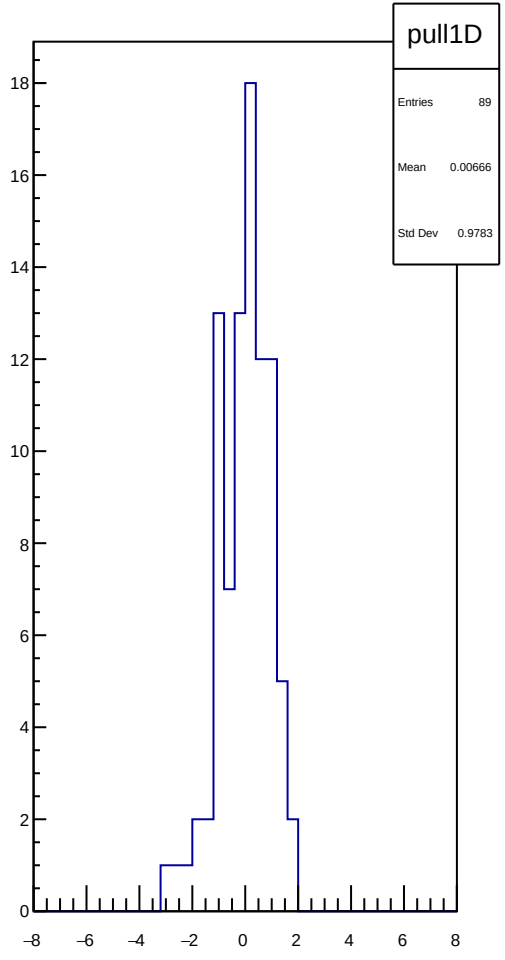

yield_bpm0l01Y_rms vs run
χ² / ndf 1.123e+05 / 88
p0 0.008039 ± 6.4e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

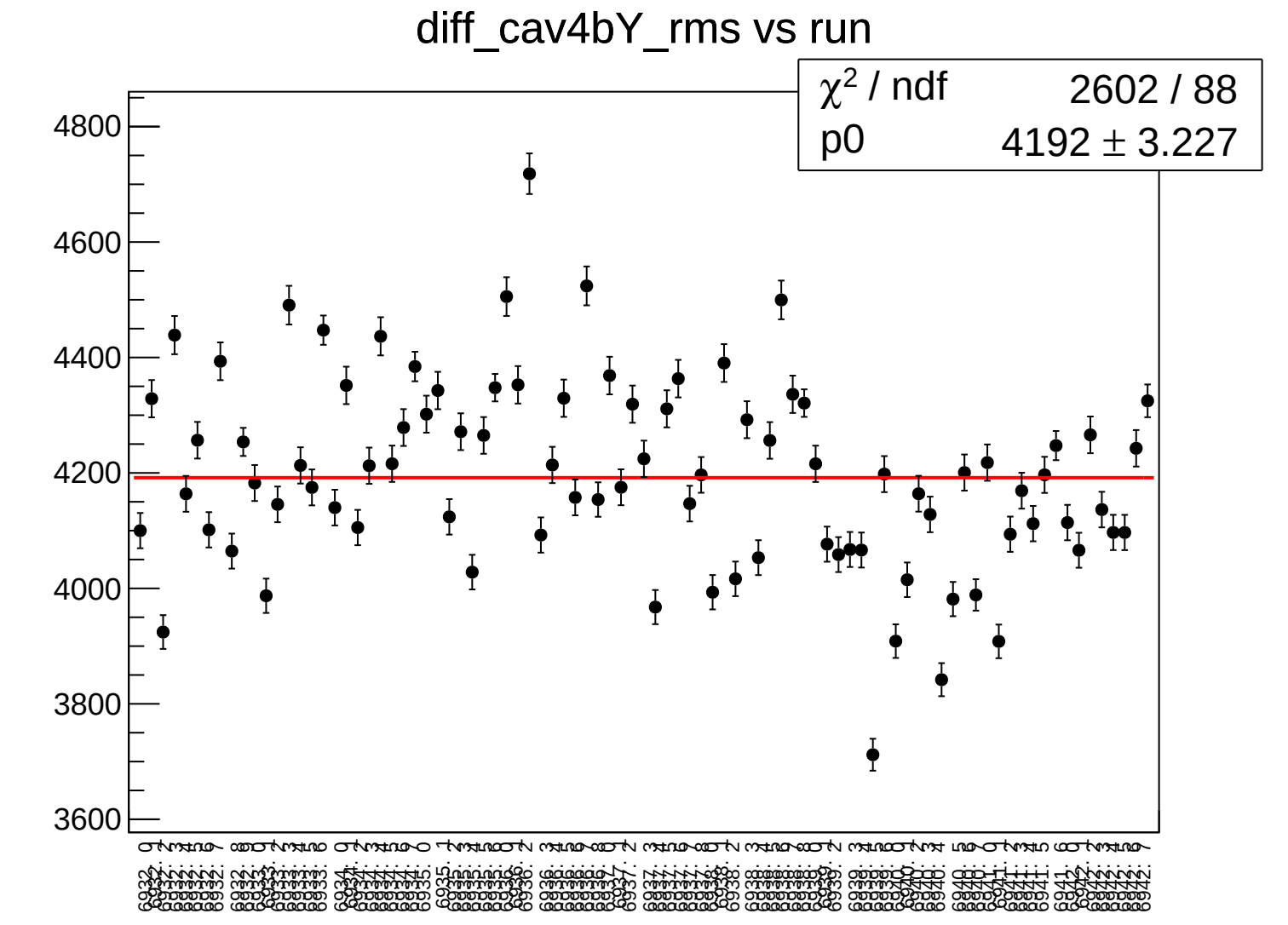

diff_cav4bX_mean vs run
χ² / ndf 79.23 / 88
p0 −1.425 ± 15.35
600
400
200
0
−200
−400
pull
Entries 89
Mean −232.5
Std Dev 286.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

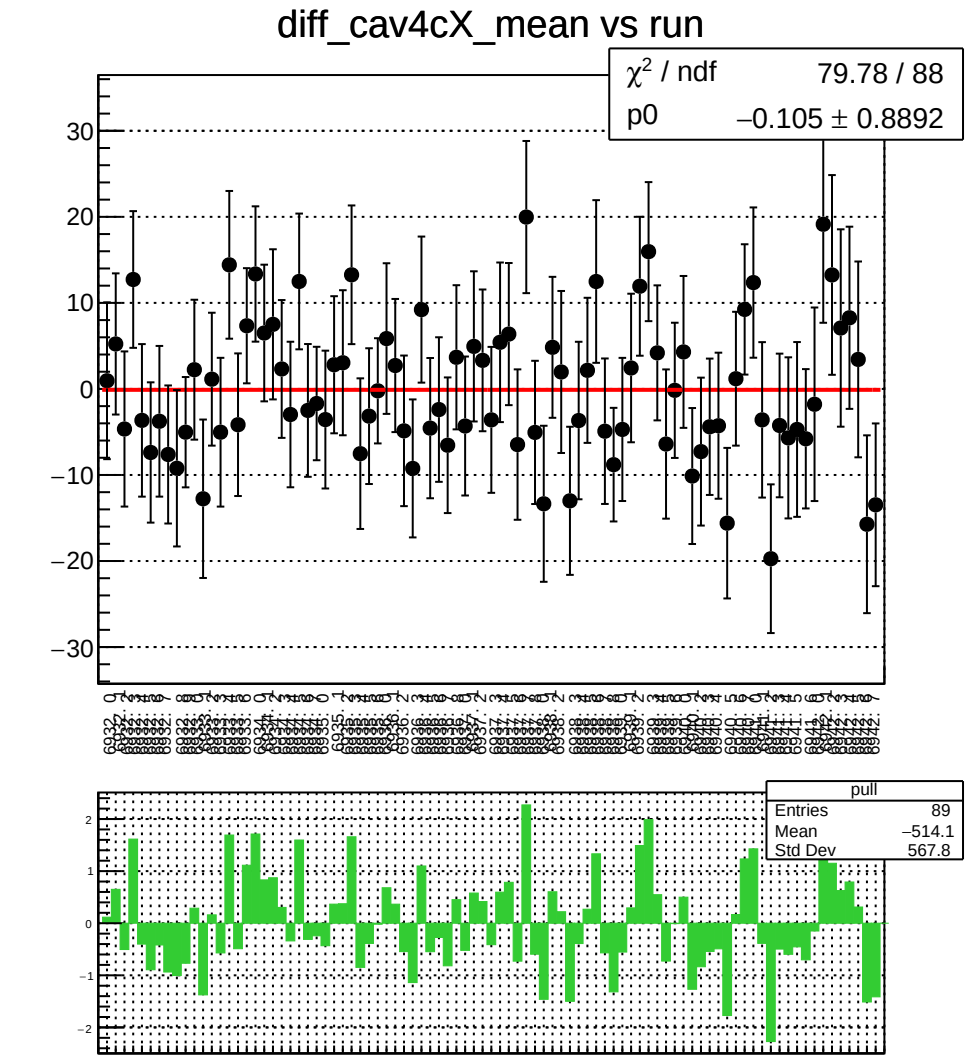

pull1D
Entries 89
Mean 0.005707
Std Dev 0.9435
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

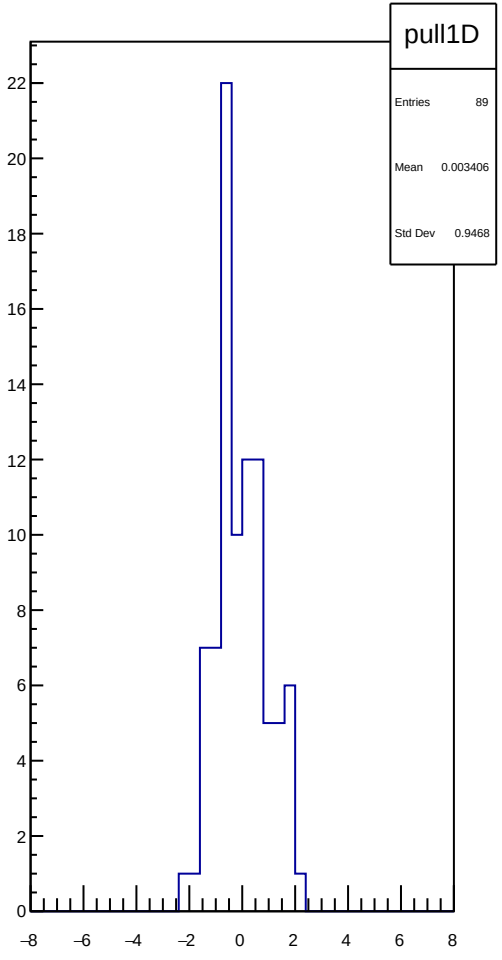

diff_cav4bX_rms vs run
χ² / ndf 1.453e+04 / 88
p0 1.405e+04 ± 10.85
20000
19000
18000
17000
16000
15000
14000
13000
12000

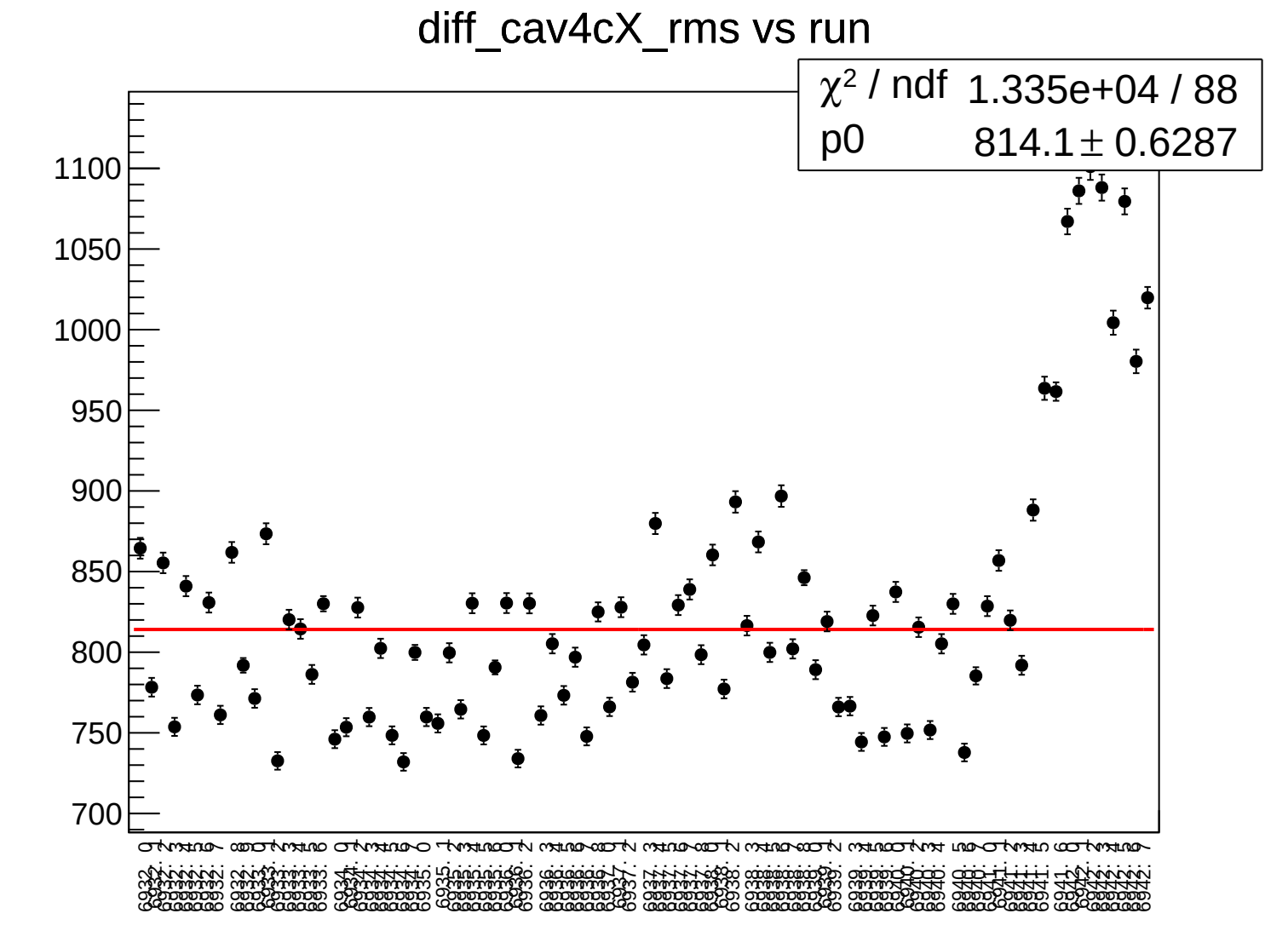

diff_cav4bY_mean vs run
χ² / ndf 85.18 / 88
p0 −6.213 ± 4.564
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 415.2
Std Dev 372.2
2
1
0
−1
−2
−3

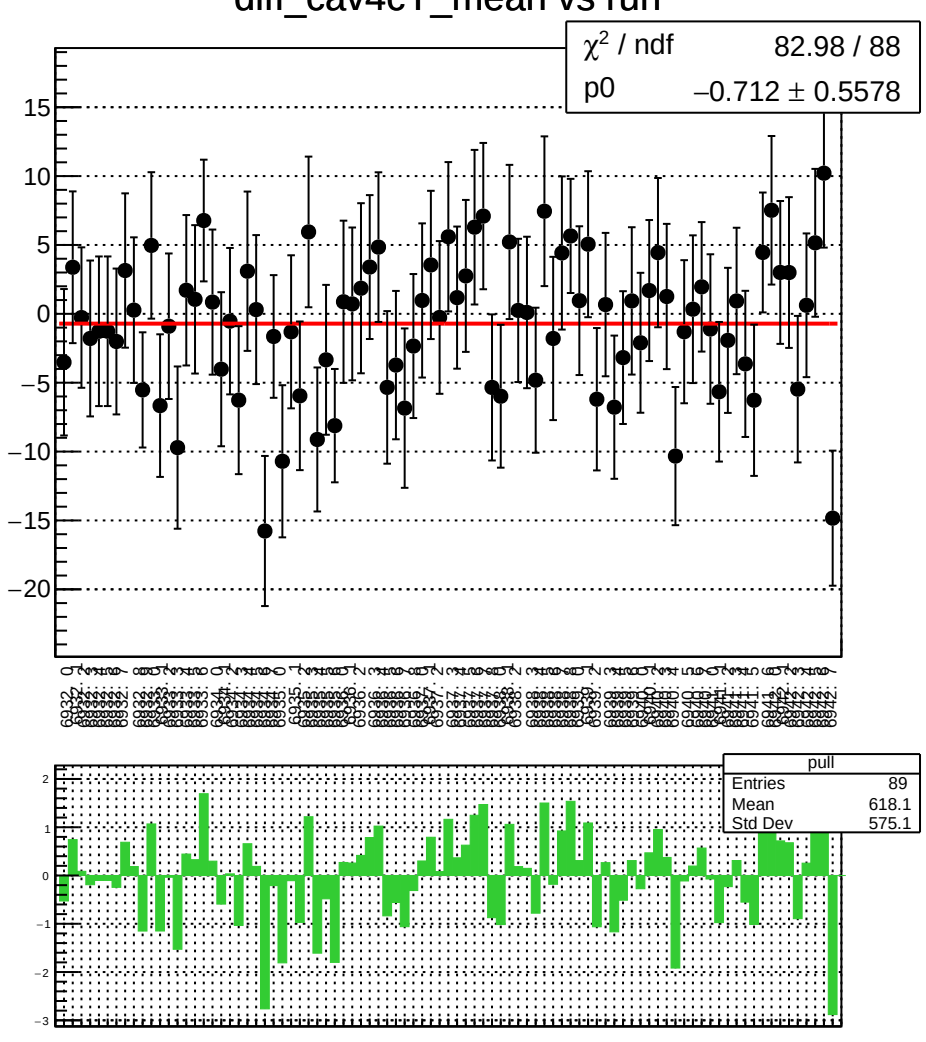

pull1D
Entries 89
Mean 0.00666
Std Dev 0.9783
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

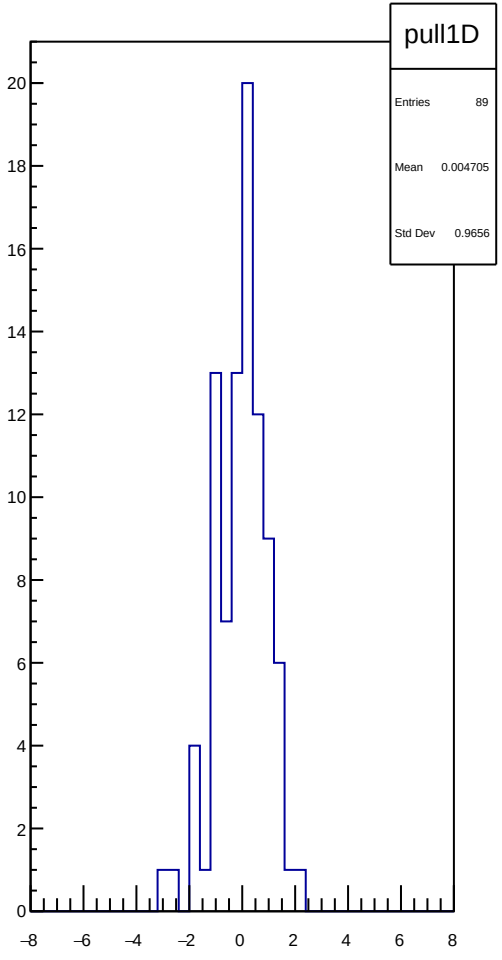

diff_cav4bY_rms vs run
χ² / ndf 2602 / 88
p0 4192 ± 3.227
4800
4600
4400
4200
4000
3800
3600

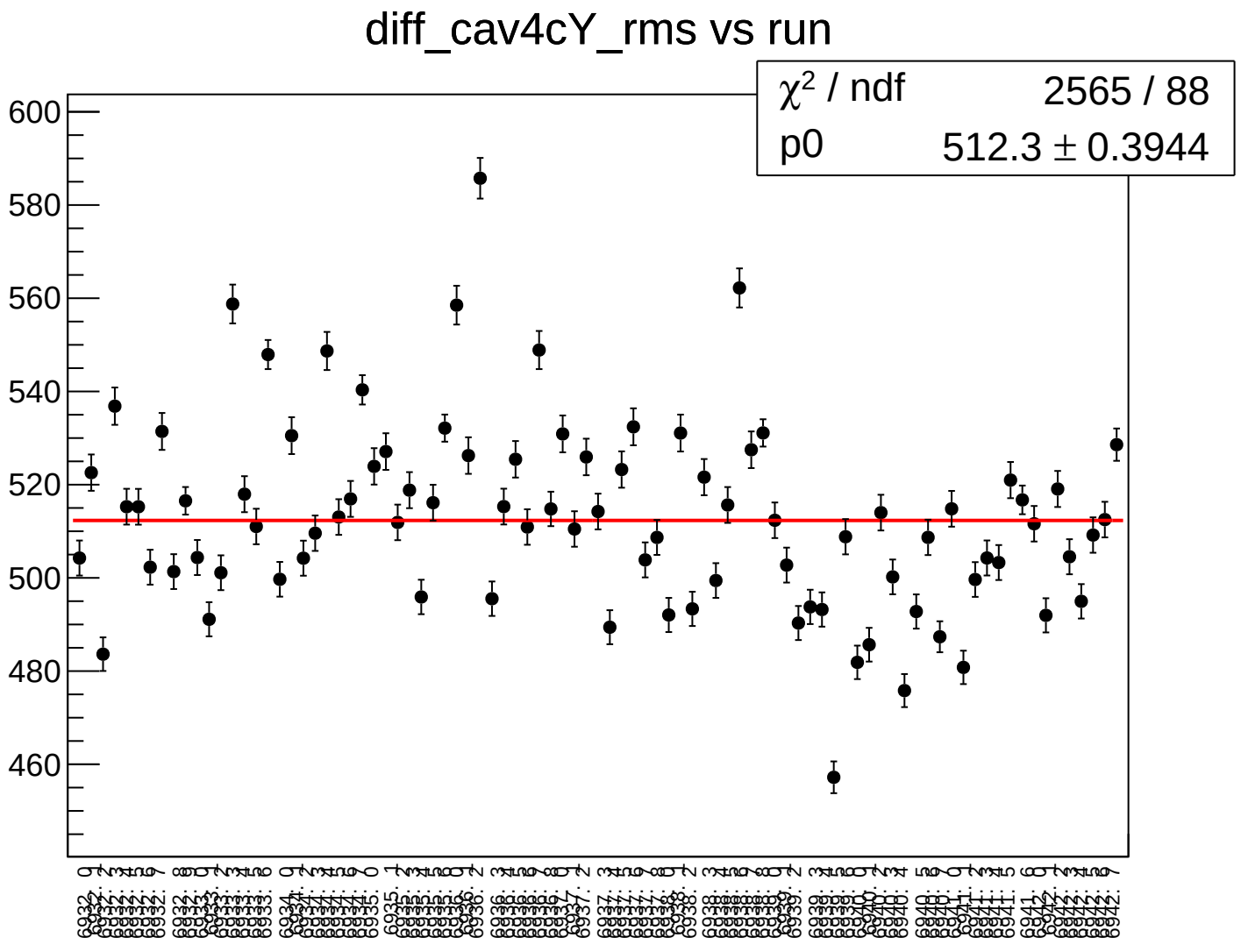

diff_cav4cX_mean vs run
χ² / ndf 79.78 / 88
p0 −0.105 ± 0.8892
pull
Entries 89
Mean −514.1
Std Dev 567.8

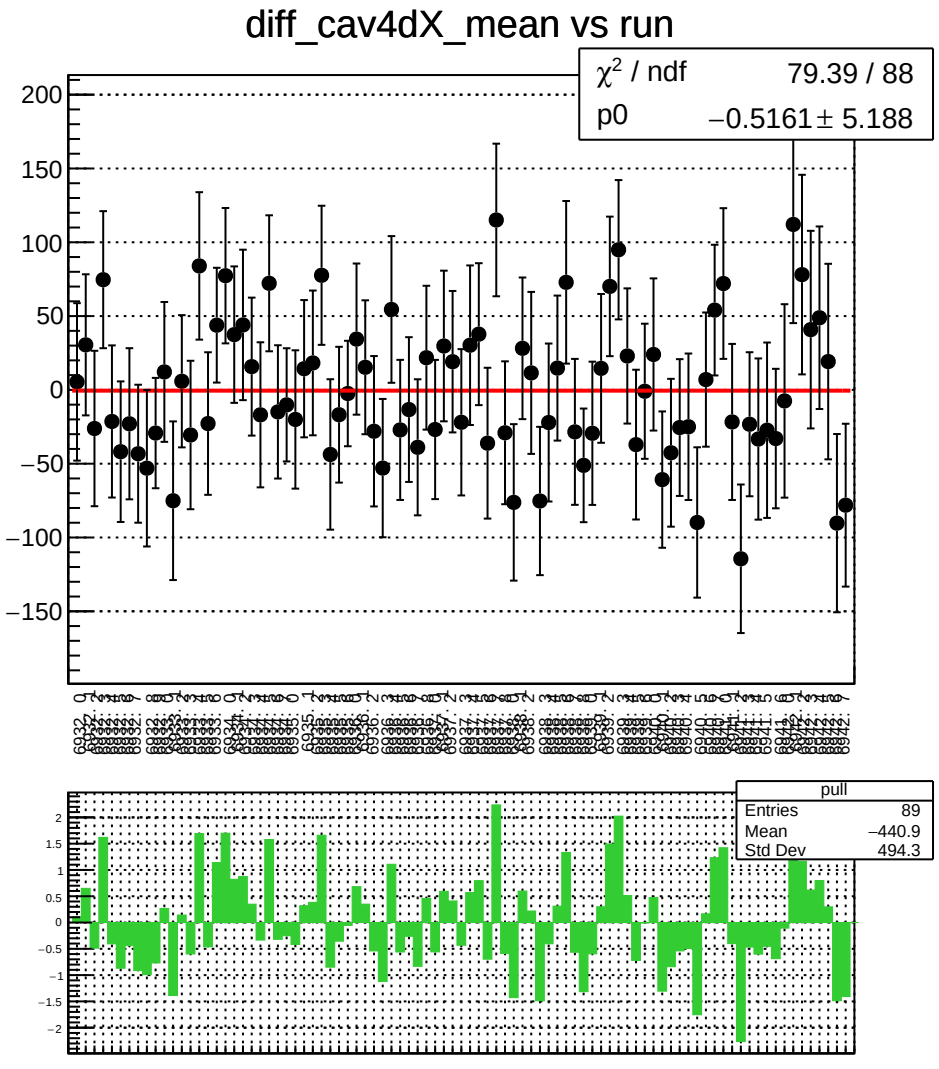

pull1D
Entries 89
Mean 0.003406
Std Dev 0.9468

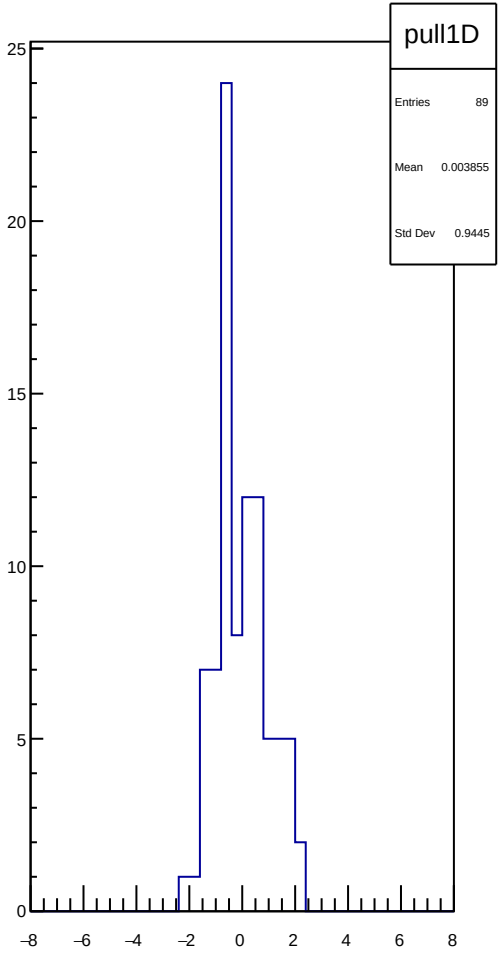

diff_cav4cX_rms vs run
χ² / ndf 1.335e+04 / 88
p0 814.1 ± 0.6287
1100
1050
1000
950
900
850
800
750
700

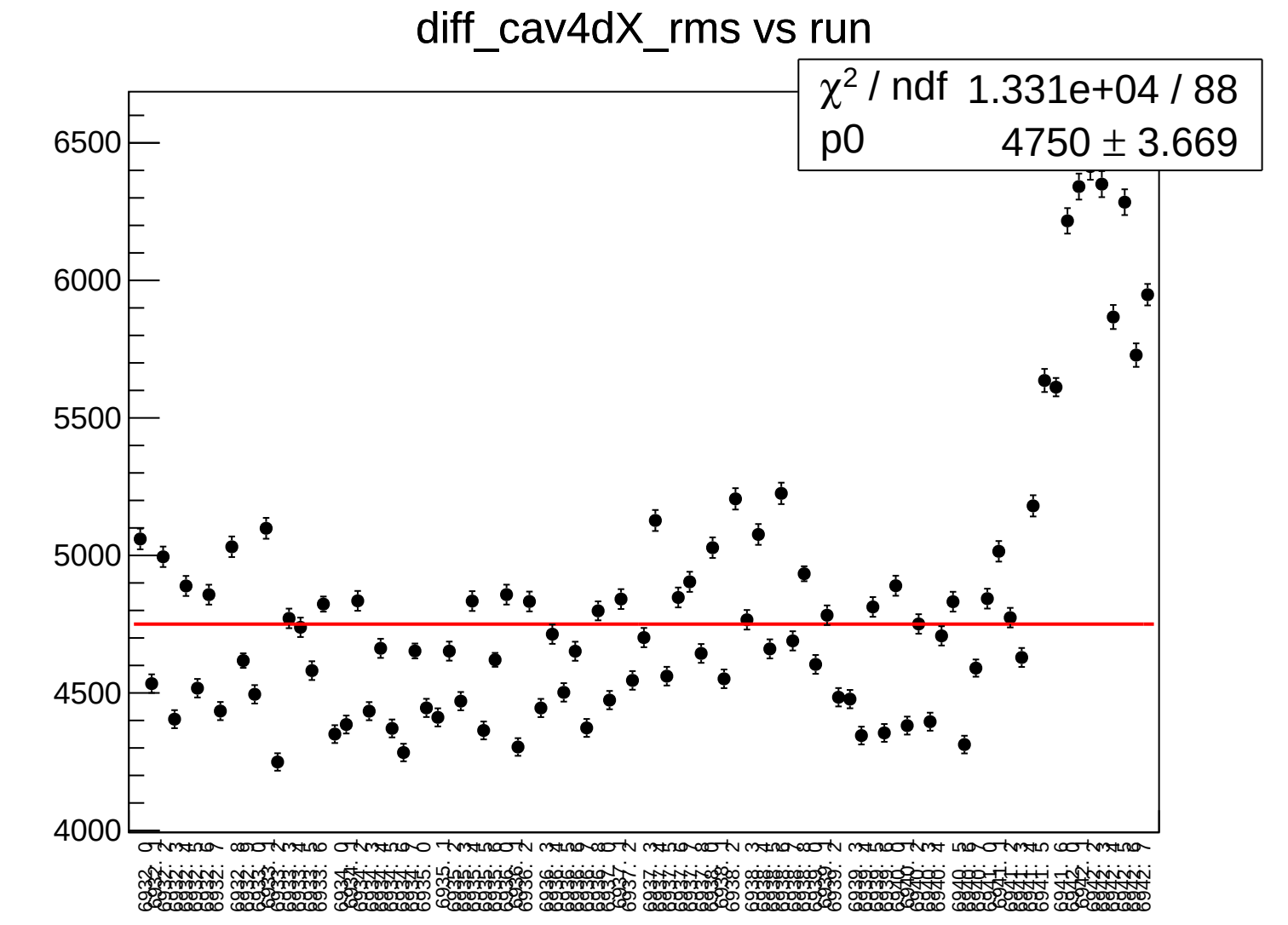

diff_cav4cY_mean vs run
χ² / ndf 82.98 / 88
p0 −0.712 ± 0.5578
pull
Entries 89
Mean 618.1
Std Dev 575.1

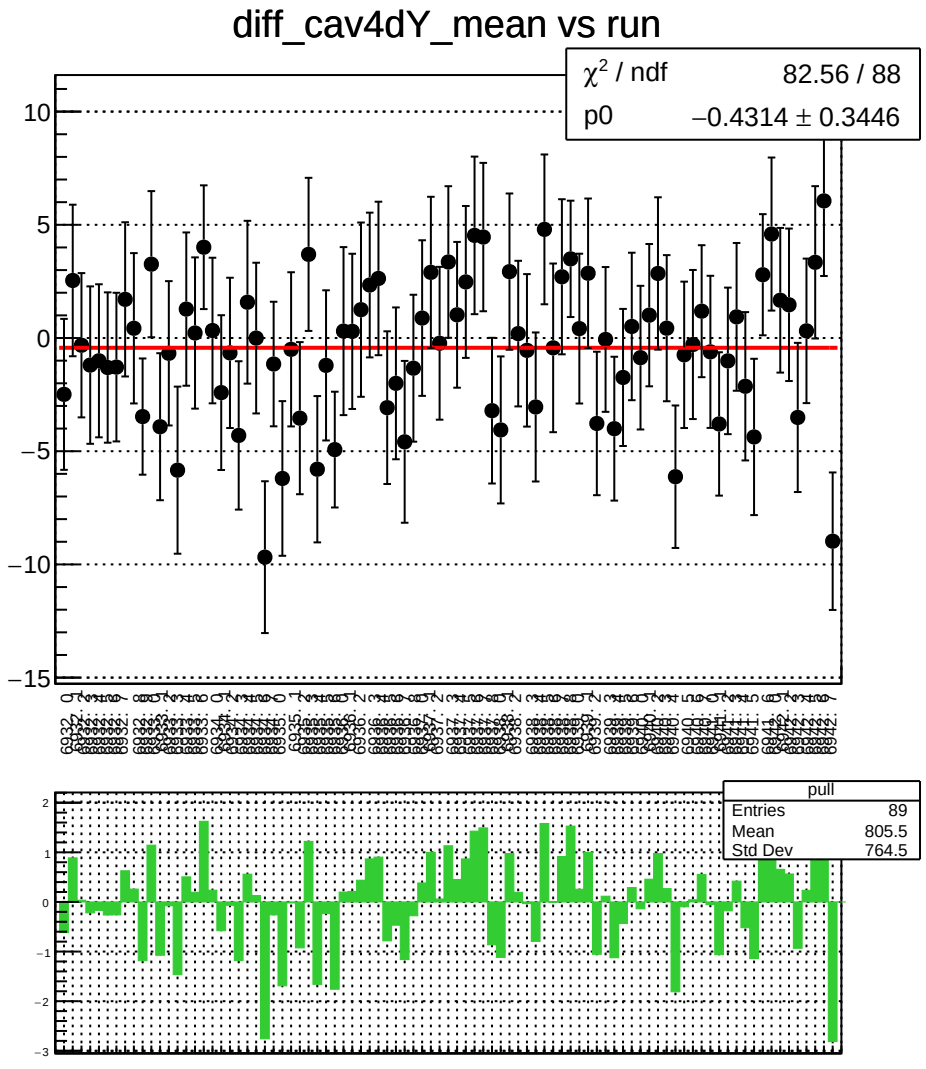

pull1D
Entries 89
Mean 0.004705
Std Dev 0.9656

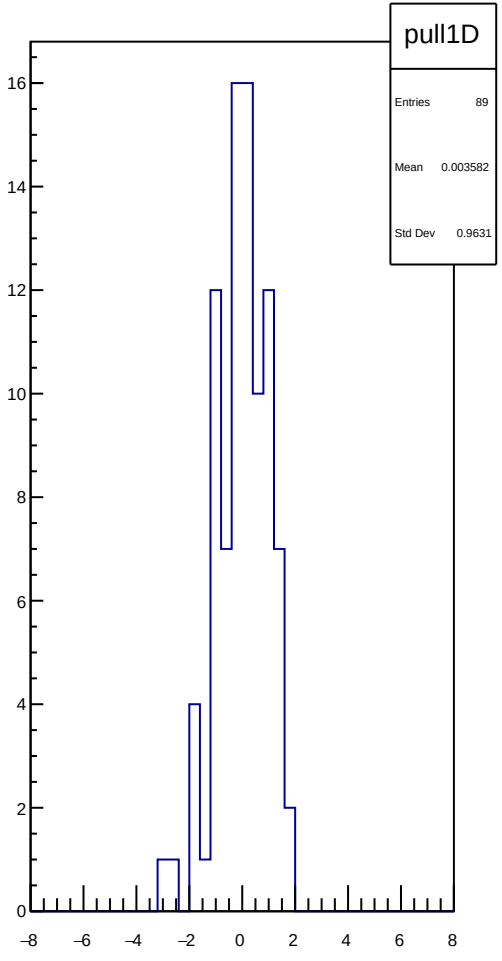

diff_cav4cY_rms vs run
χ² / ndf 2565 / 88
p0 512.3 ± 0.3944
600
580
560
540
520
500
480
460

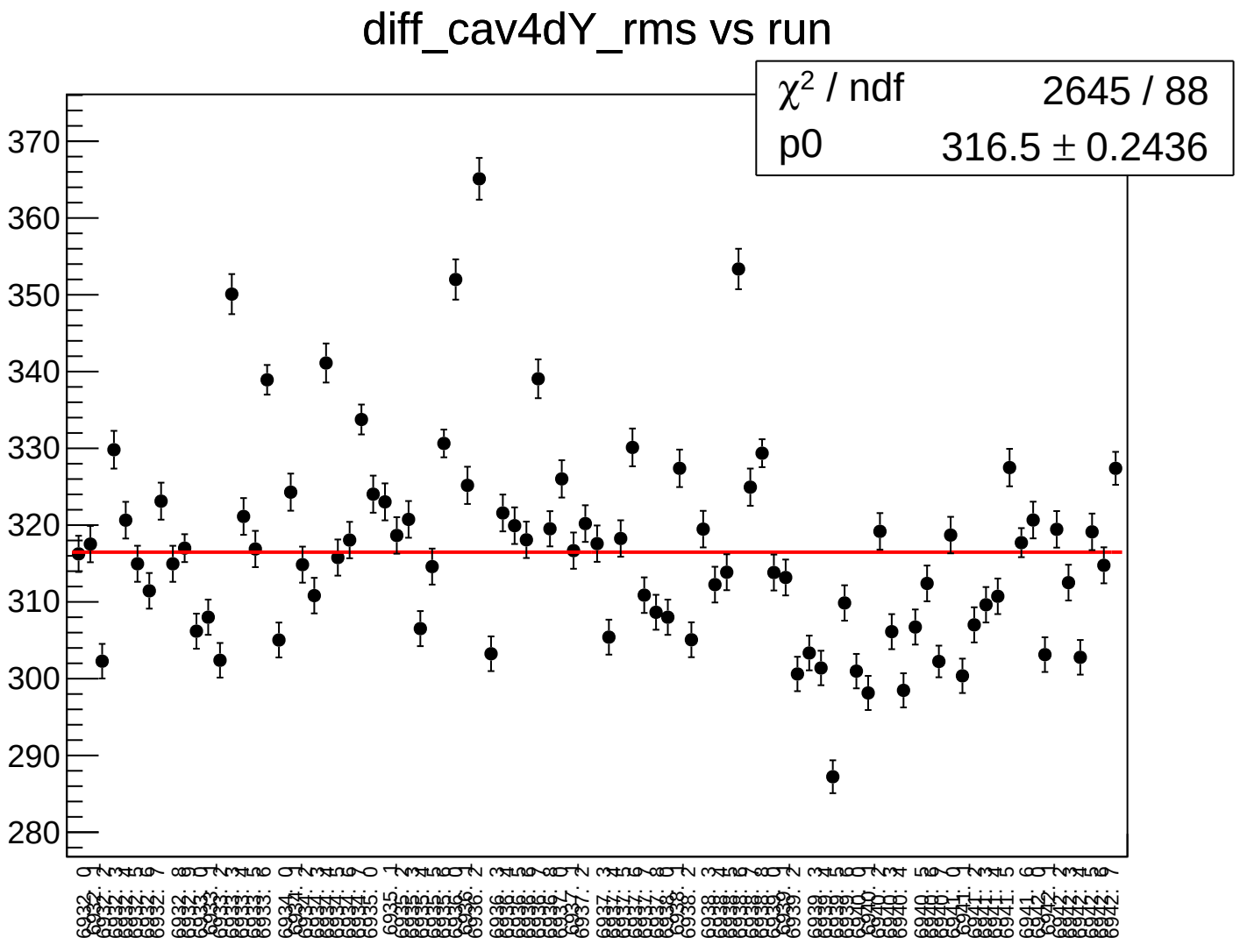

diff_cav4dX_mean vs run
χ² / ndf 79.39 / 88
p0 −0.5161 ± 5.188
pull
Entries 89
Mean −440.9
Std Dev 494.3

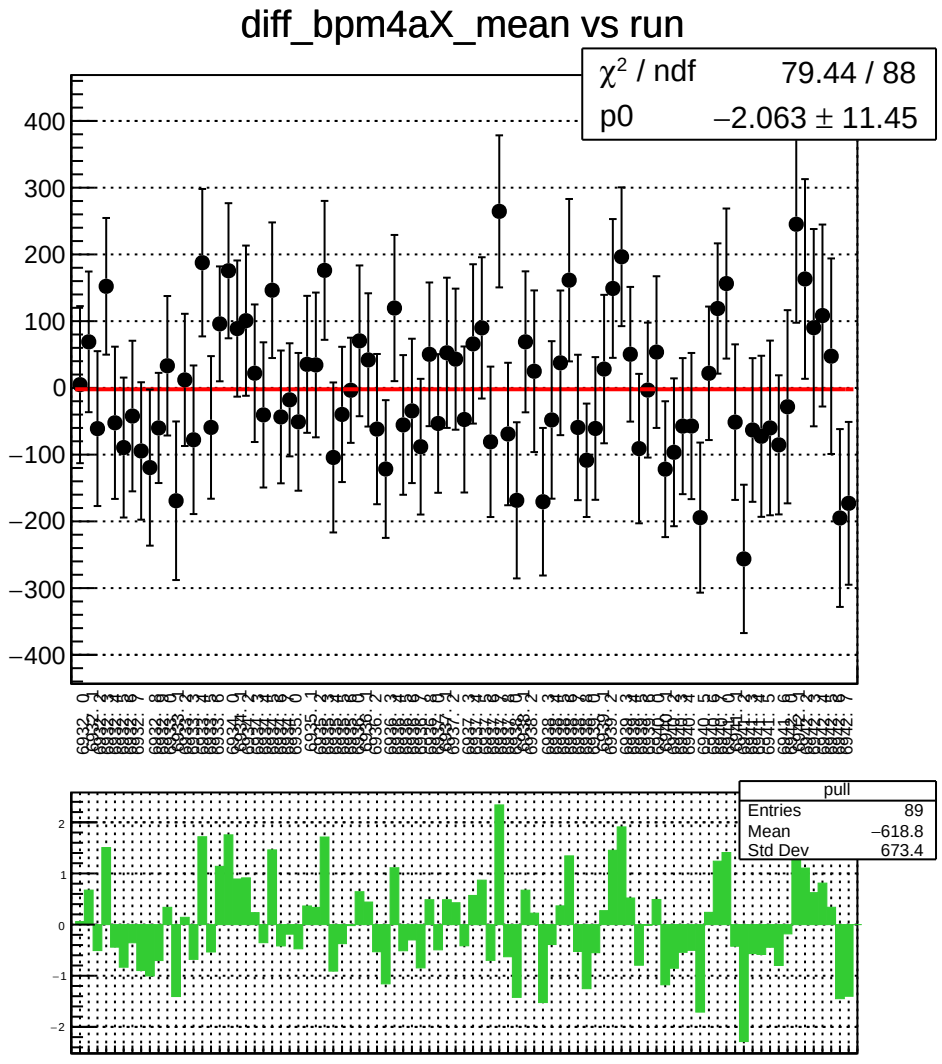

pull1D
Entries 89
Mean 0.003855
Std Dev 0.9445

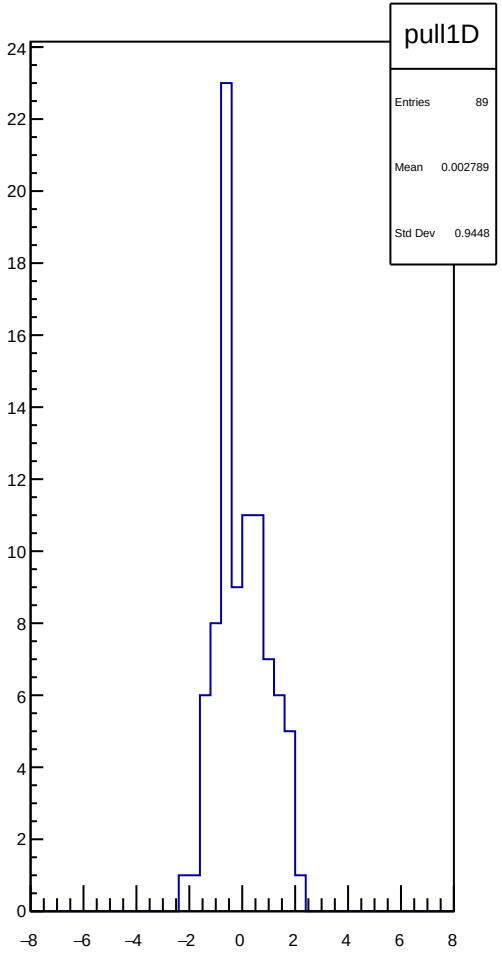

diff_cav4dX_rms vs run
χ² / ndf 1.331e+04 / 88
p0 4750 ± 3.669
6500
6000
5500
5000
4500
4000

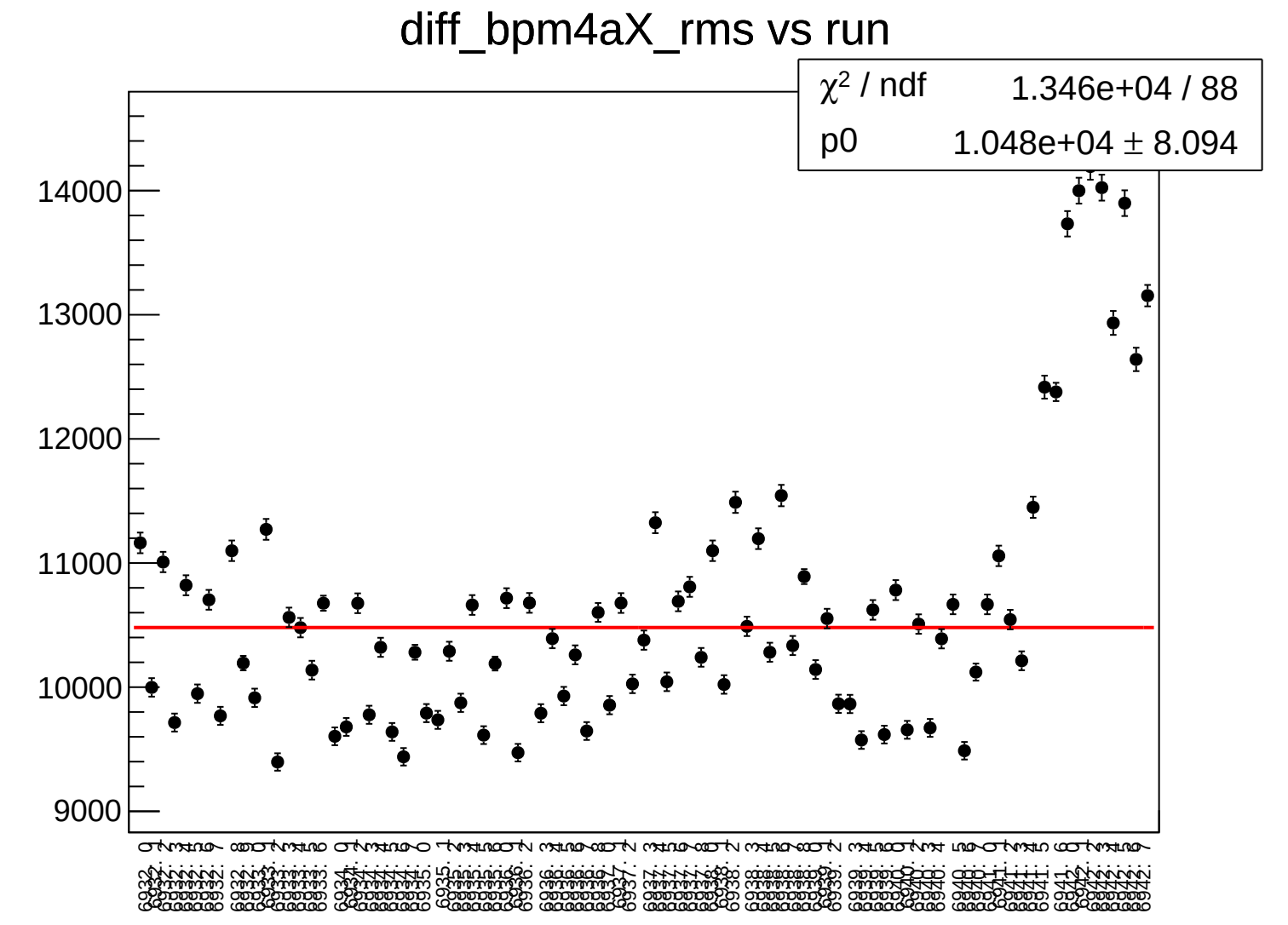

diff_cav4dY_mean vs run
χ² / ndf 82.56 / 88
p0 −0.4314 ± 0.3446
pull
Entries 89
Mean 805.5
Std Dev 764.5

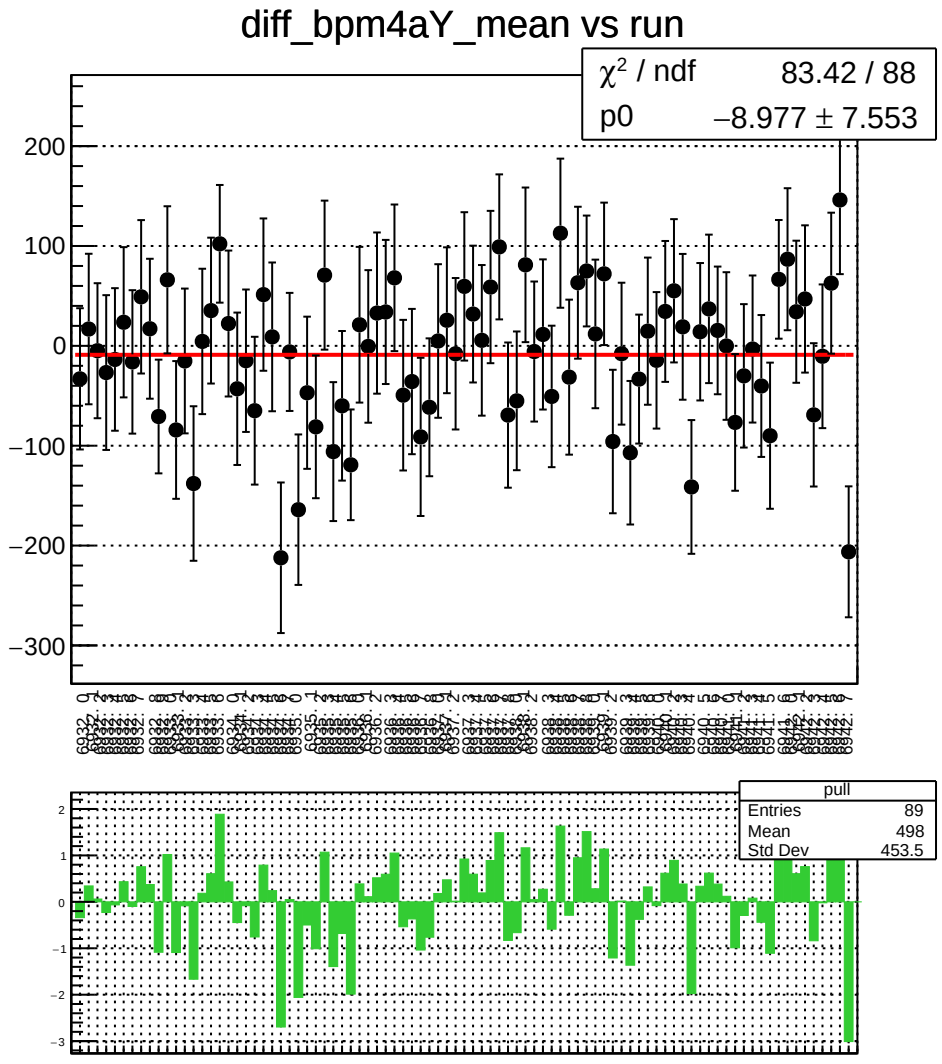

pull1D
Entries 89
Mean 0.003582
Std Dev 0.9631

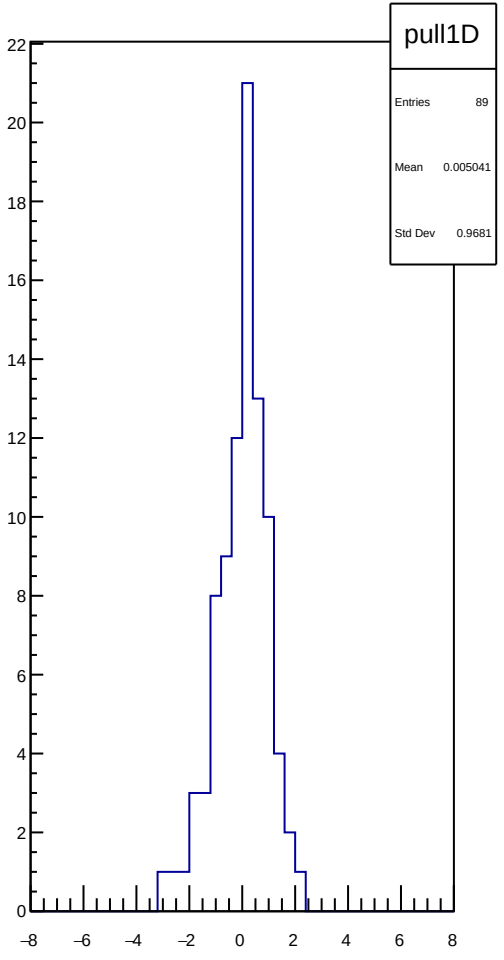

diff_cav4dY_rms vs run
χ² / ndf 2645 / 88
p0 316.5 ± 0.2436
370
360
350
340
330
320
310
300
290
280

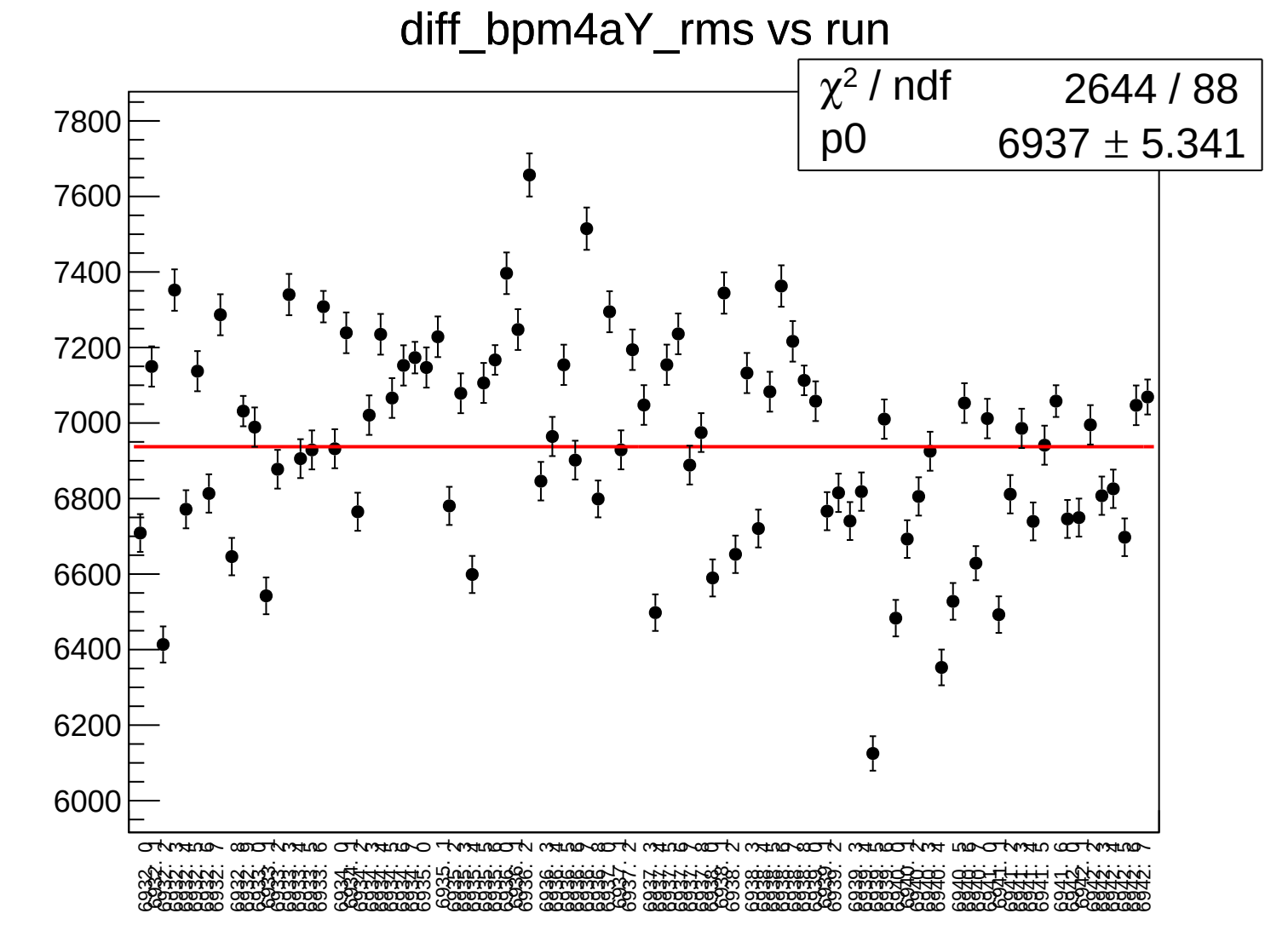

diff_bpm4aX_mean vs run
χ² / ndf 79.44 / 88
p0 −2.063 ± 11.45
pull
Entries 89
Mean −618.8
Std Dev 673.4

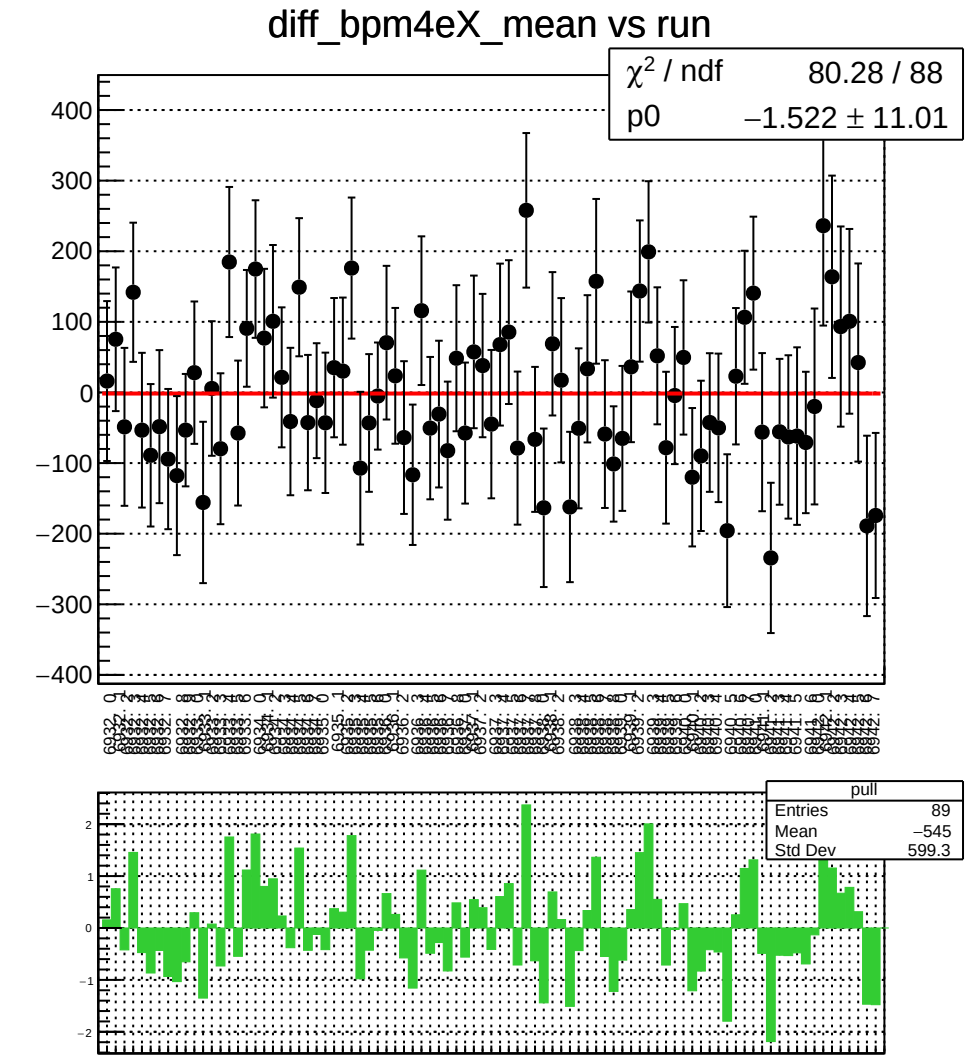

pull1D
Entries 89
Mean 0.002789
Std Dev 0.9448

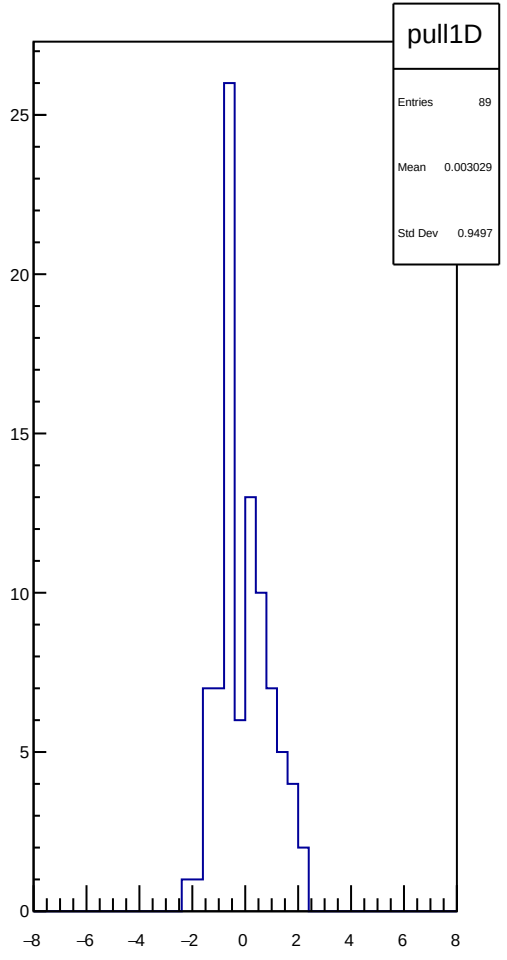

diff_bpm4aX_rms vs run
χ² / ndf 1.346e+04 / 88
p0 1.048e+04 ± 8.094
14000
13000
12000
11000
10000
9000

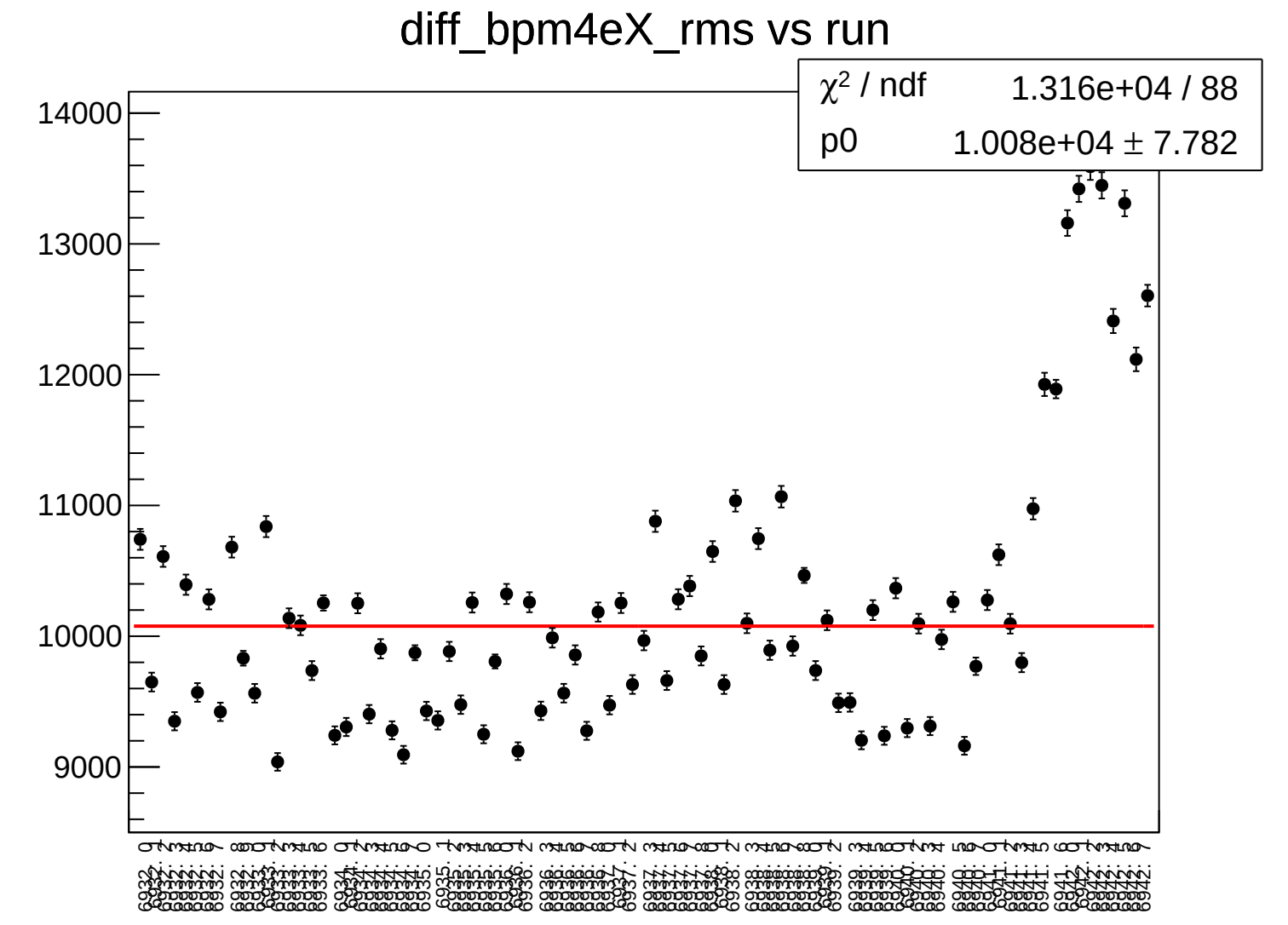

diff_bpm4aY_mean vs run
χ² / ndf 83.42 / 88
p0 −8.977 ± 7.553
200
100
0
−100
−200
−300
pull
Entries 89
Mean 498
Std Dev 453.5
2
1
0
−1
−2
−3

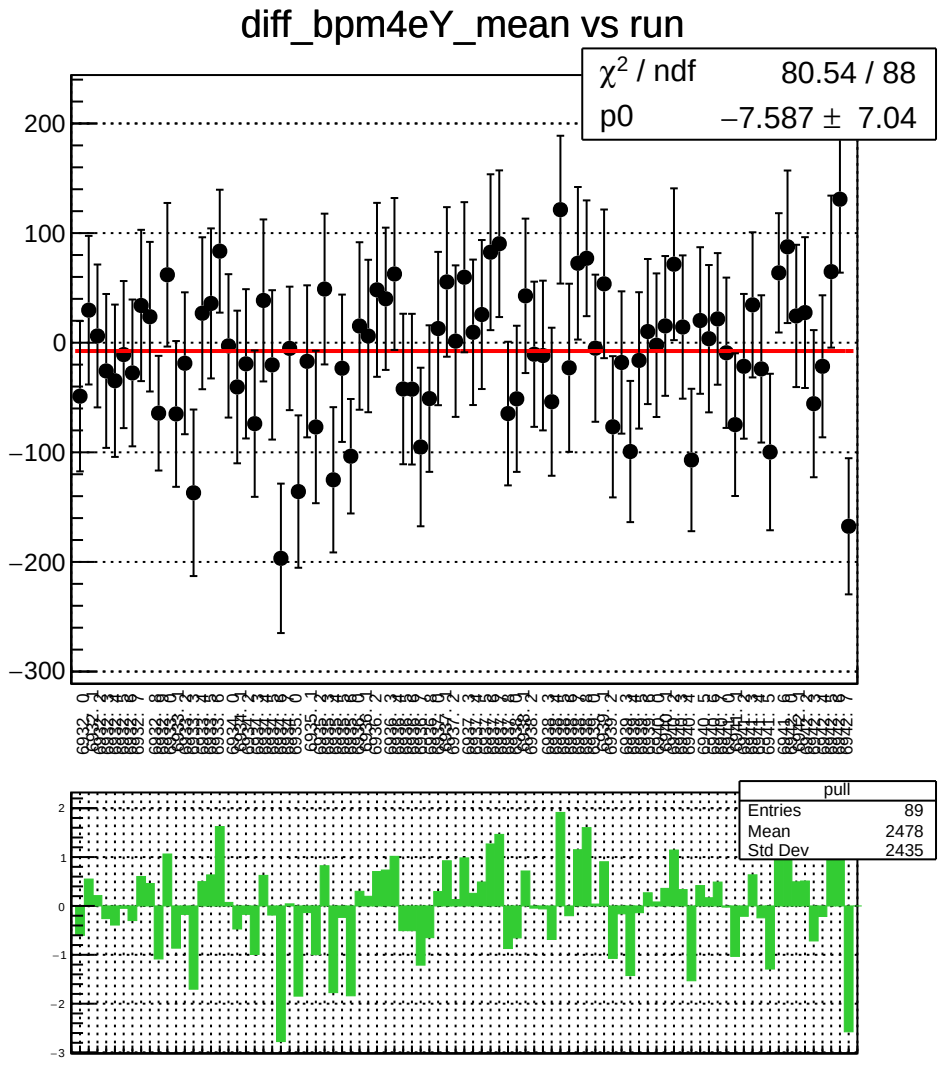

pull1D
Entries 89
Mean 0.005041
Std Dev 0.9681
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

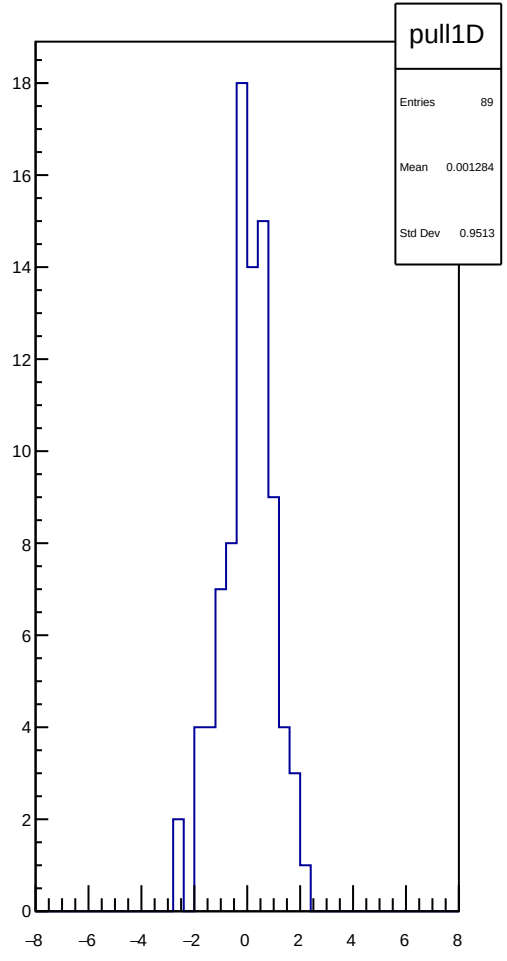

diff_bpm4aY_rms vs run
χ² / ndf 2644 / 88
p0 6937 ± 5.341
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

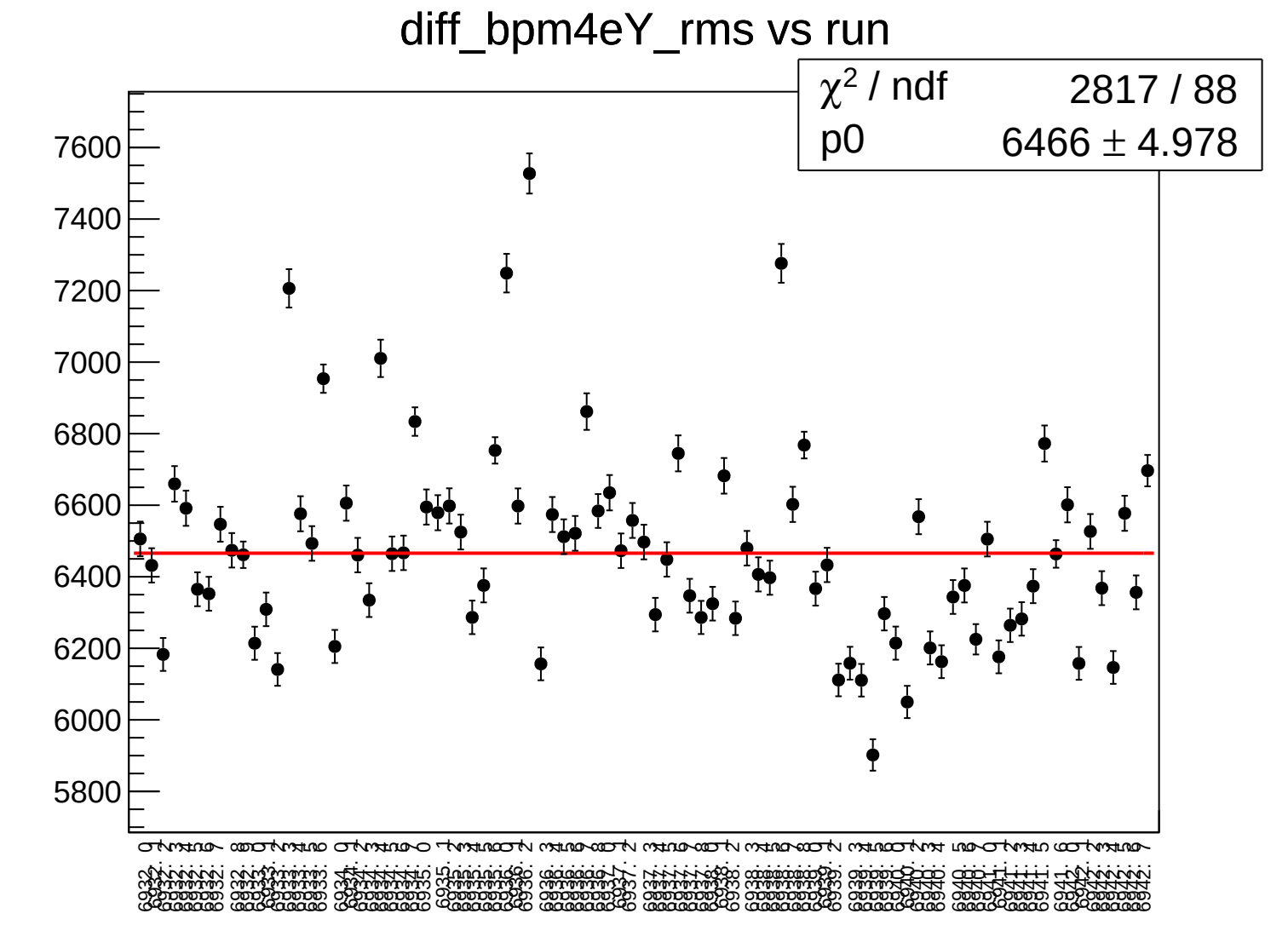

diff_bpm4eX_mean vs run
χ² / ndf 80.28 / 88
p0 −1.522 ± 11.01
pull
Entries 89
Mean −545
Std Dev 599.3

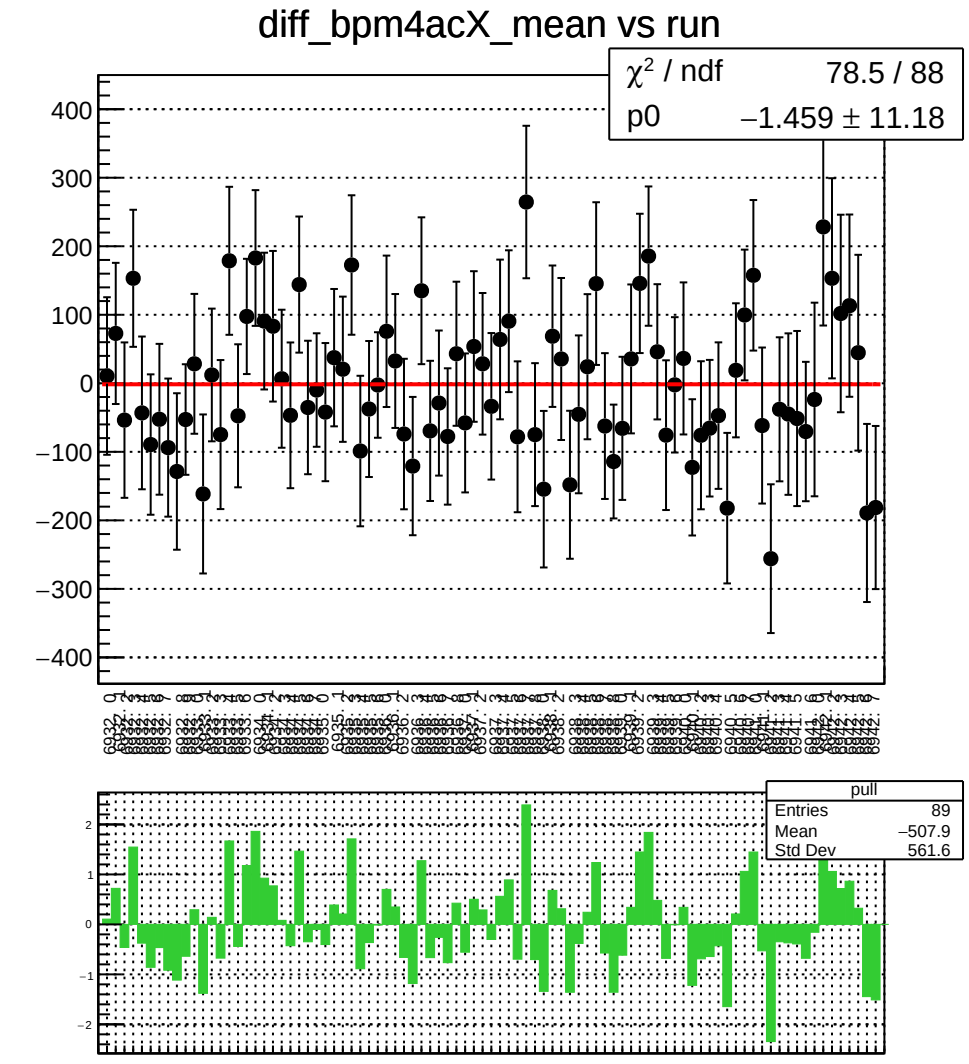

pull1D
Entries 89
Mean 0.003029
Std Dev 0.9497

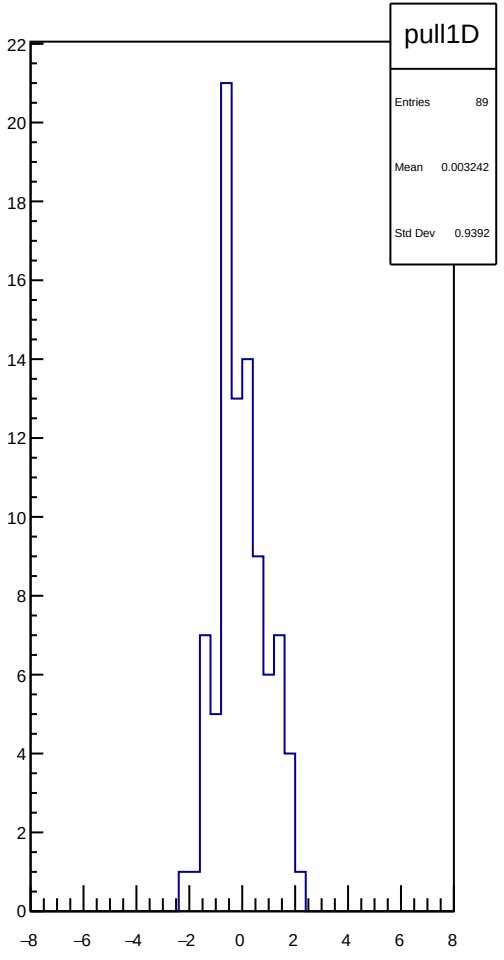

diff_bpm4eX_rms vs run
χ² / ndf 1.316e+04 / 88
p0 1.008e+04 ± 7.782
14000
13000
12000
11000
10000
9000

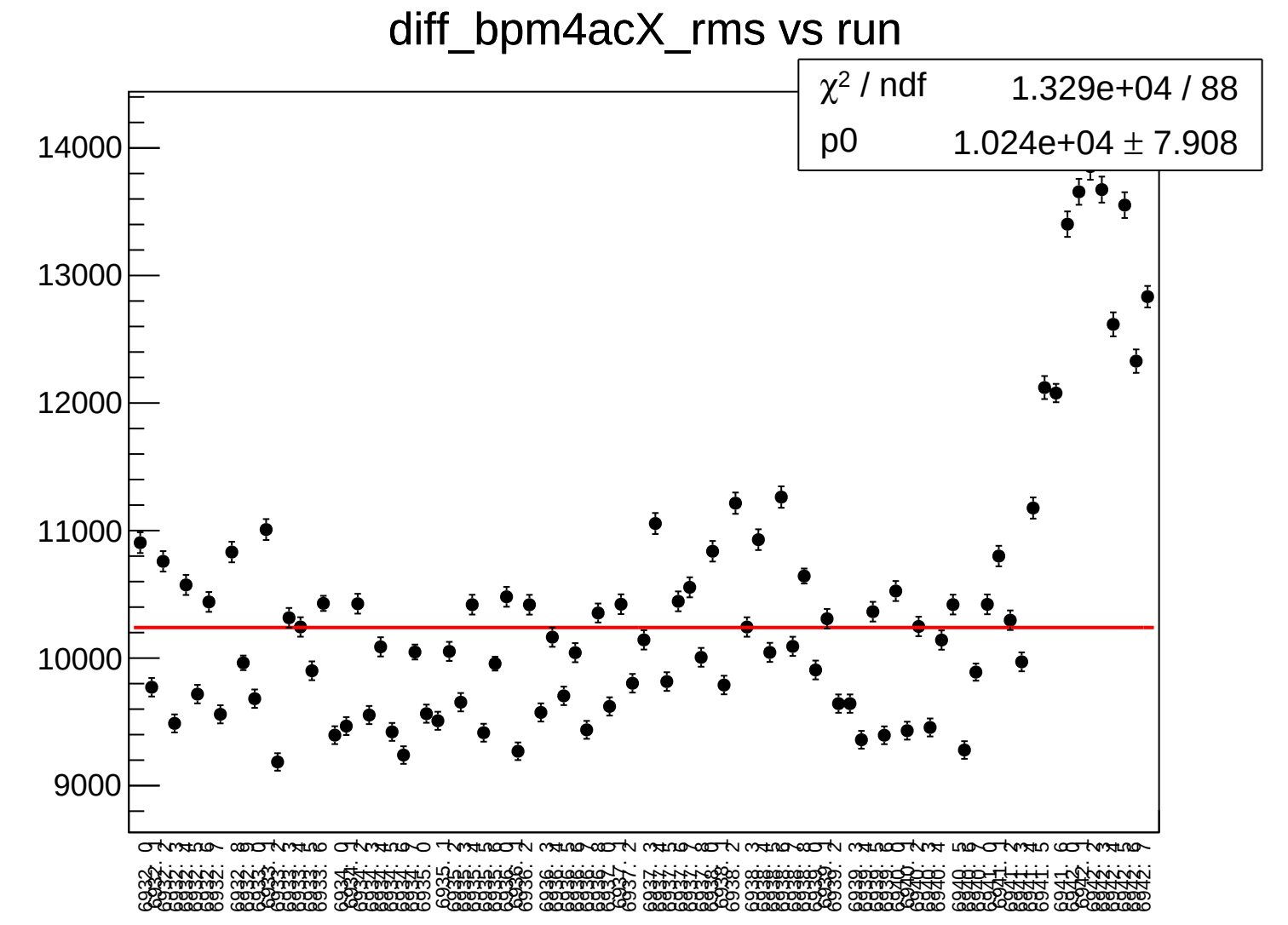

diff_bpm4eY_mean vs run
χ² / ndf 80.54 / 88
p0 −7.587 ± 7.04
200
100
0
−100
−200
−300
pull
Entries 89
Mean 2478
Std Dev 2435
2
1
0
−1
−2
−3

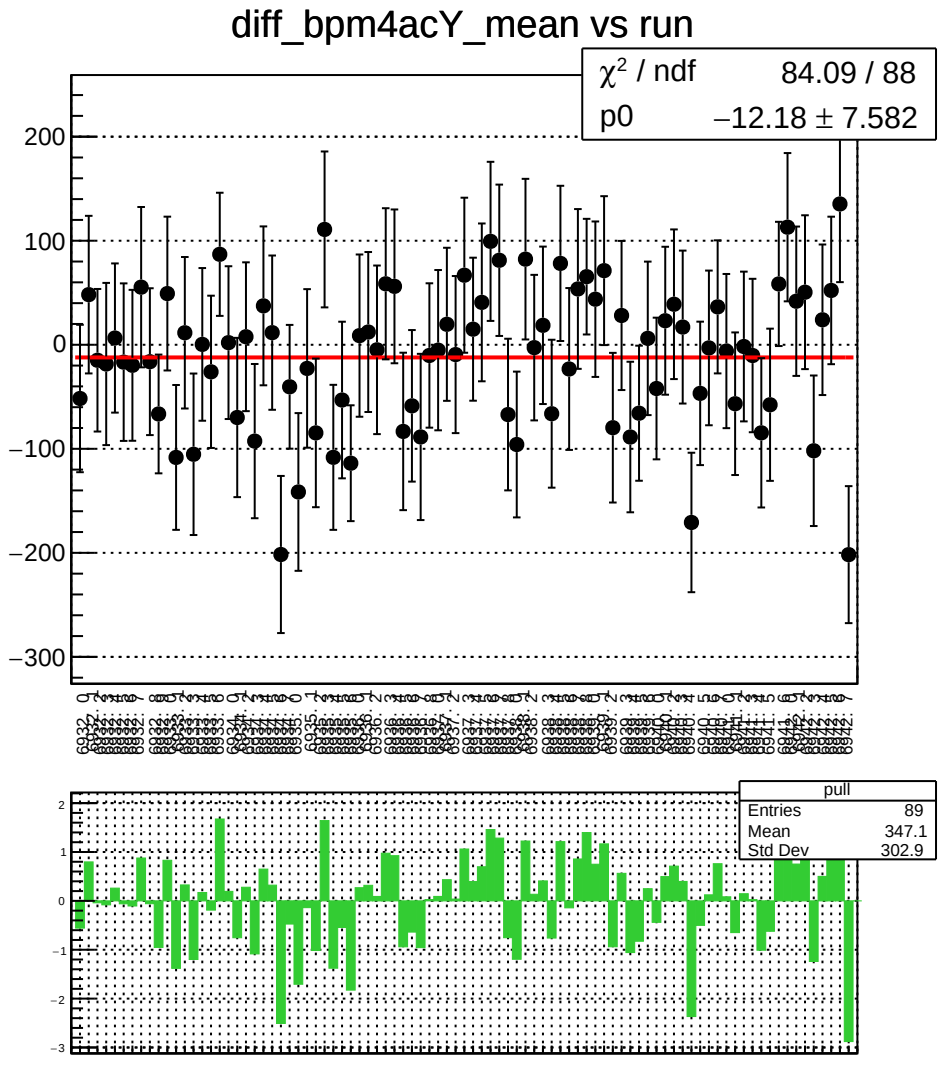

pull1D
Entries 89
Mean 0.001284
Std Dev 0.9513
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

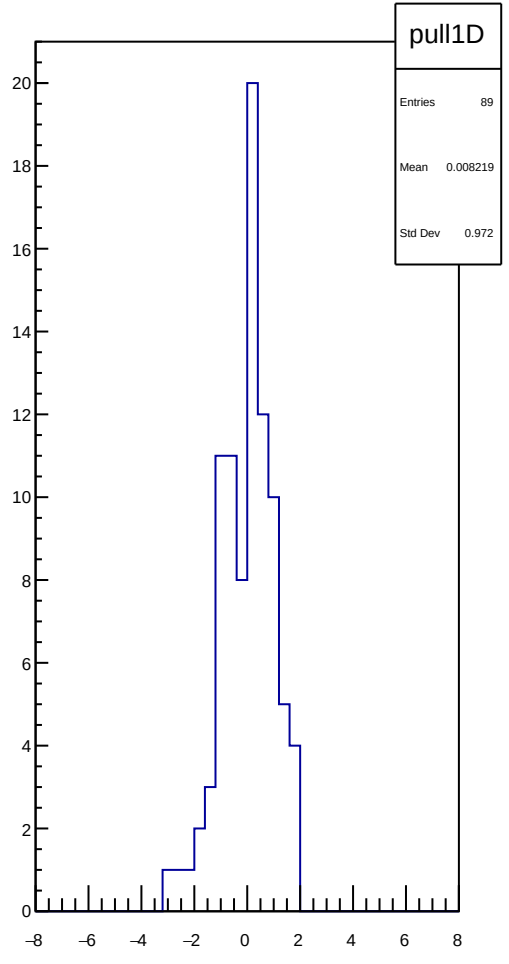

diff_bpm4eY_rms vs run
χ^2 / ndf 2817 / 88
p0 6466 ± 4.978
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800

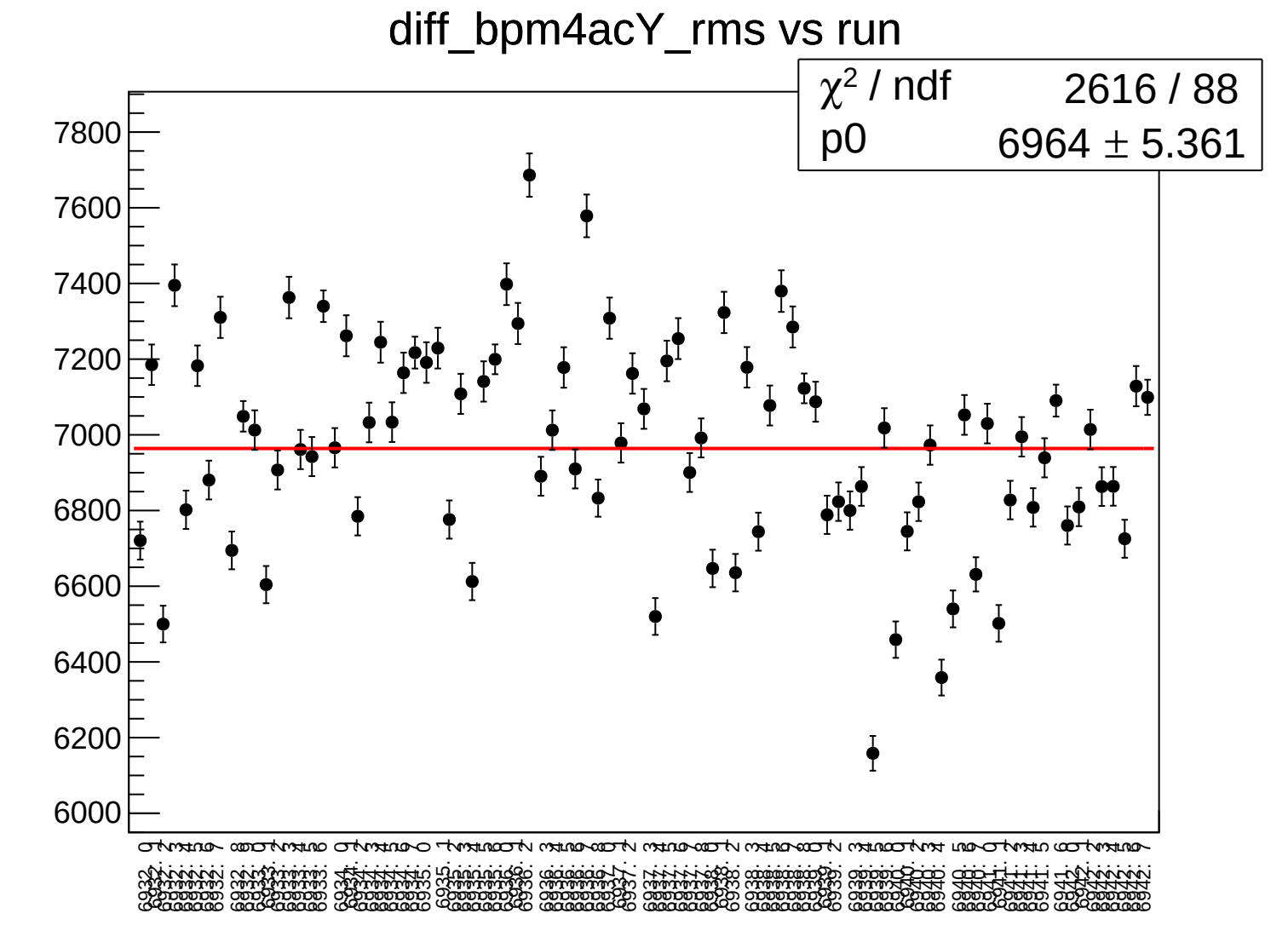

diff_bpm4acX_mean vs run
χ² / ndf 78.5 / 88
p0 −1.459 ± 11.18
pull
Entries 89
Mean −507.9
Std Dev 561.6

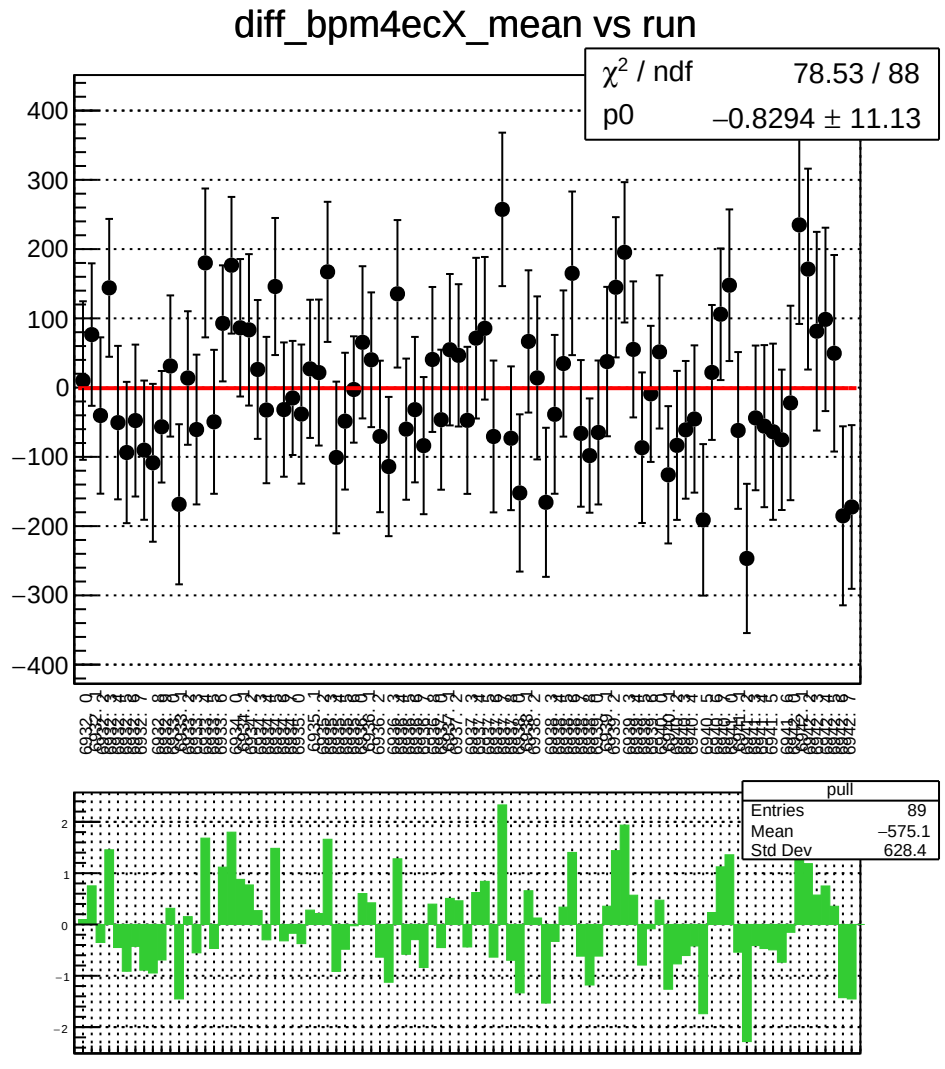

pull1D
Entries 89
Mean 0.003242
Std Dev 0.9392

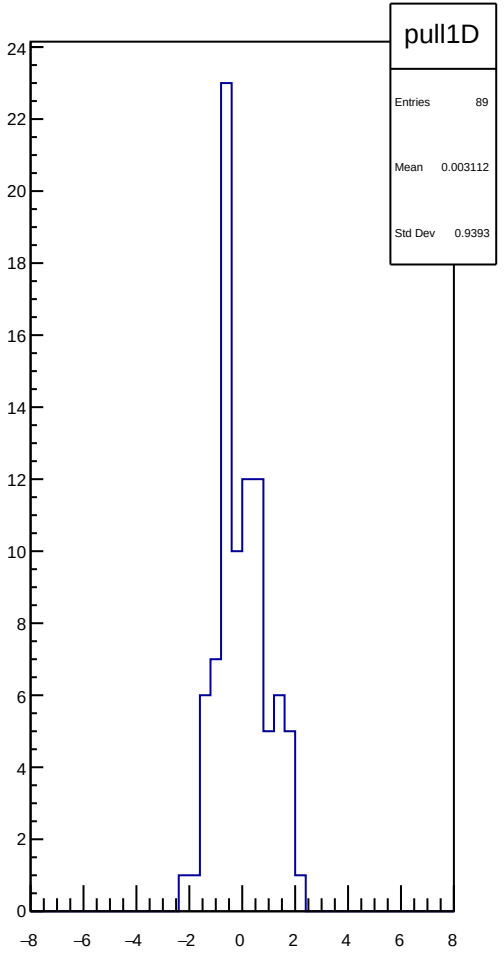

diff_bpm4acX_rms vs run
χ² / ndf 1.329e+04 / 88
p0 1.024e+04 ± 7.908
14000
13000
12000
11000
10000
9000

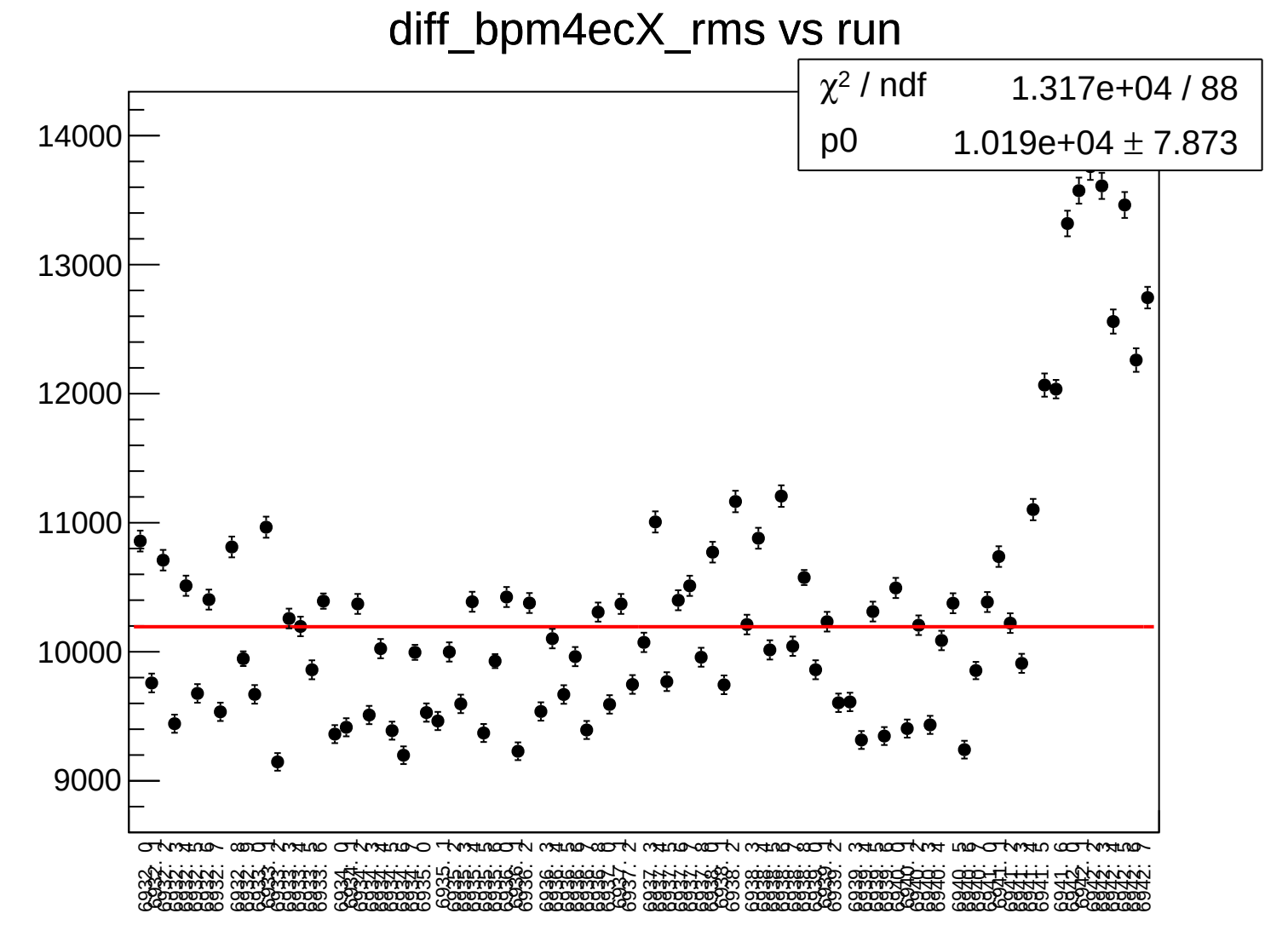

diff_bpm4acY_mean vs run
χ² / ndf 84.09 / 88
p0 −12.18 ± 7.582
200
100
0
−100
−200
−300
pull
Entries 89
Mean 347.1
Std Dev 302.9
2
1
0
−1
−2
−3

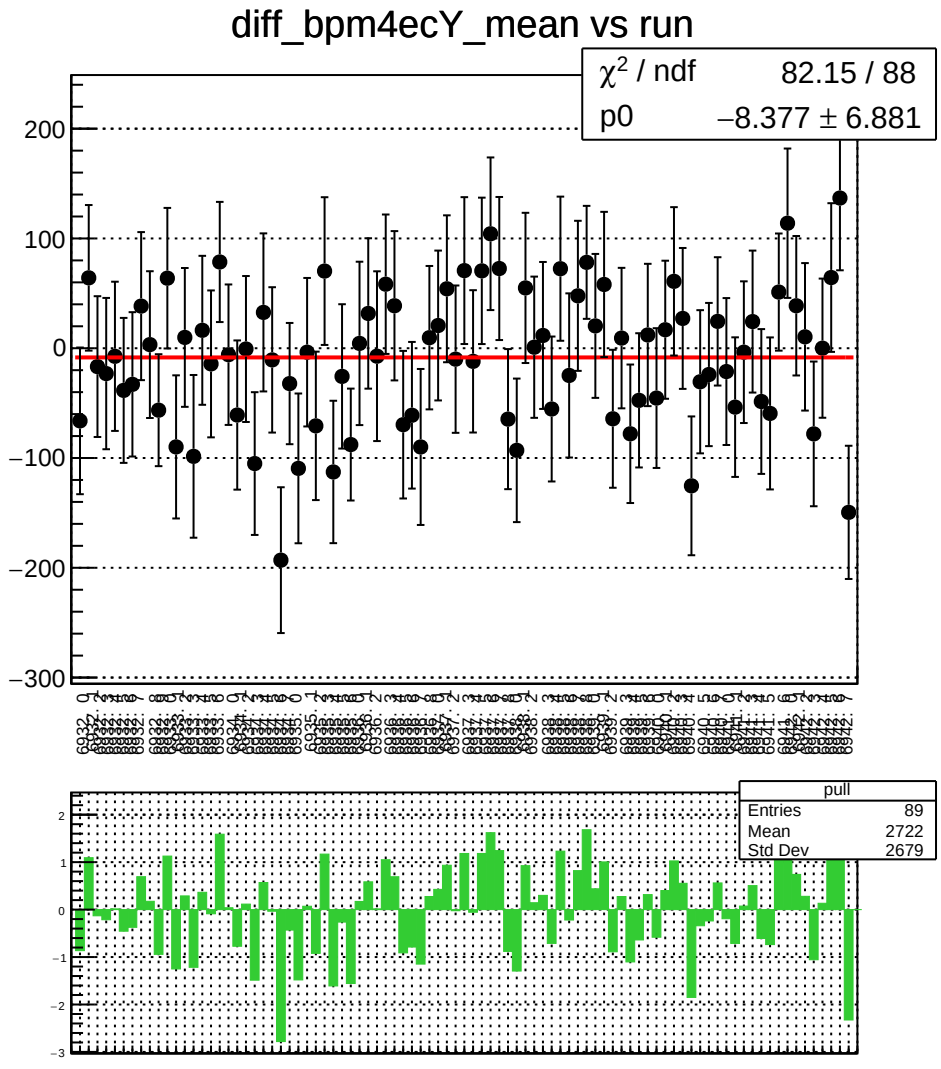

pull1D
Entries 89
Mean 0.008219
Std Dev 0.972
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

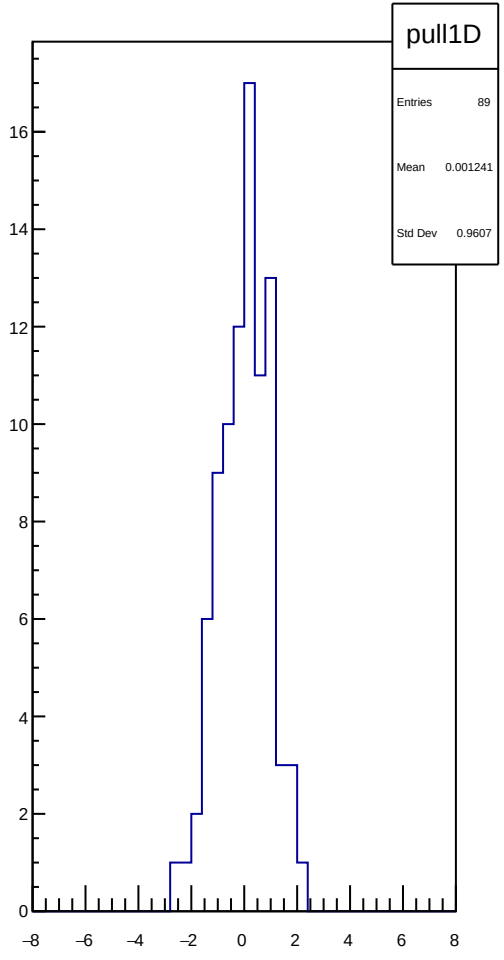

diff_bpm4acY_rms vs run
χ² / ndf 2616 / 88
p0 6964 ± 5.361
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

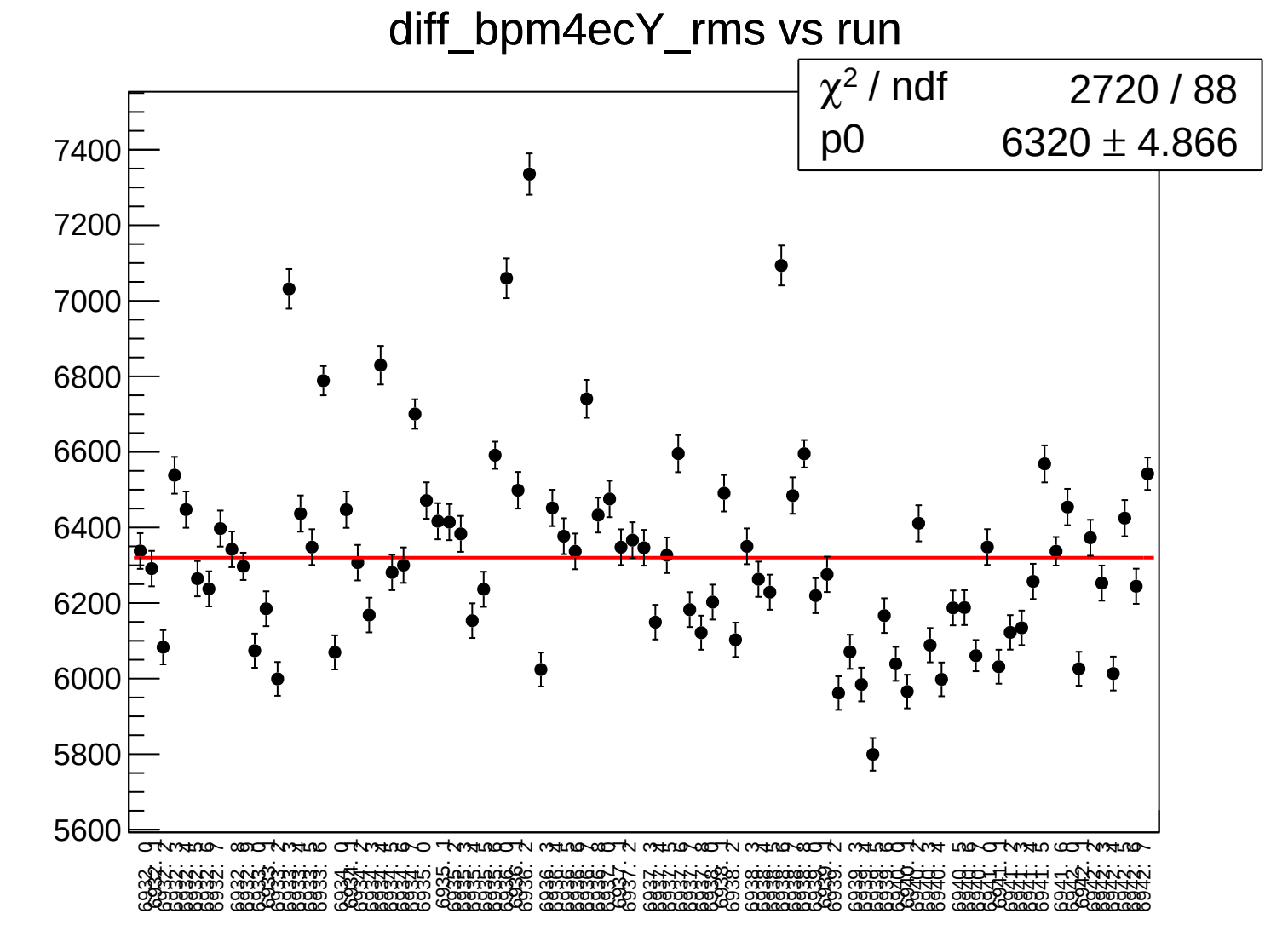

diff_bpm4ecX_mean vs run
χ² / ndf 78.53 / 88
p0 −0.8294 ± 11.13
pull
Entries 89
Mean −575.1
Std Dev 628.4

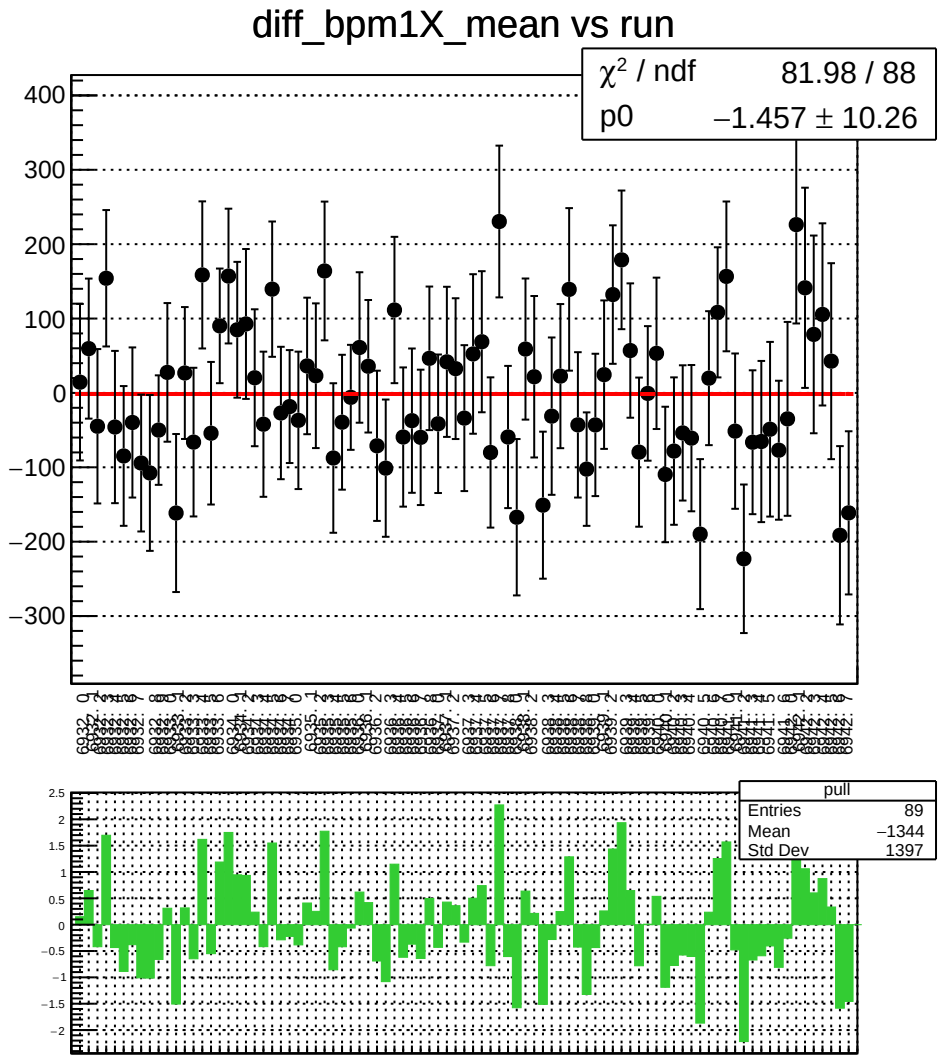

pull1D
Entries 89
Mean 0.003112
Std Dev 0.9393

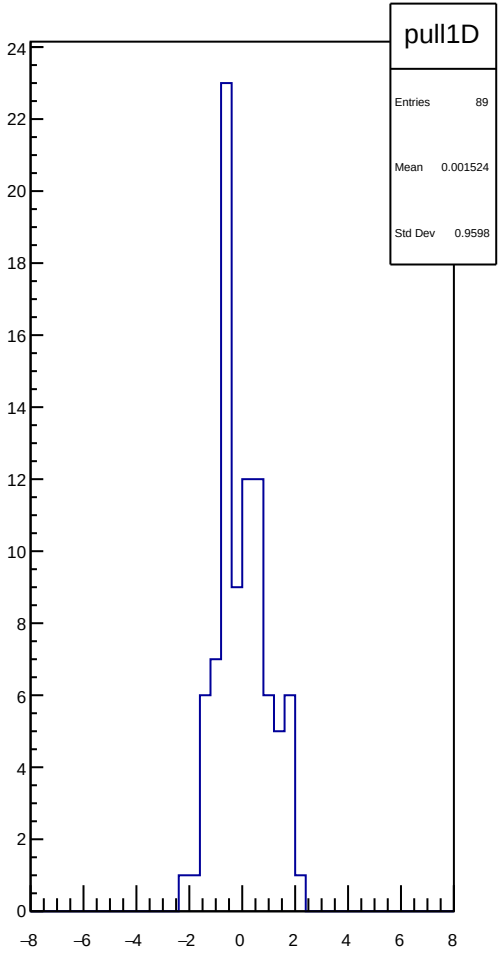

diff_bpm4ecX_rms vs run
χ² / ndf 1.317e+04 / 88
p0 1.019e+04 ± 7.873
14000
13000
12000
11000
10000
9000

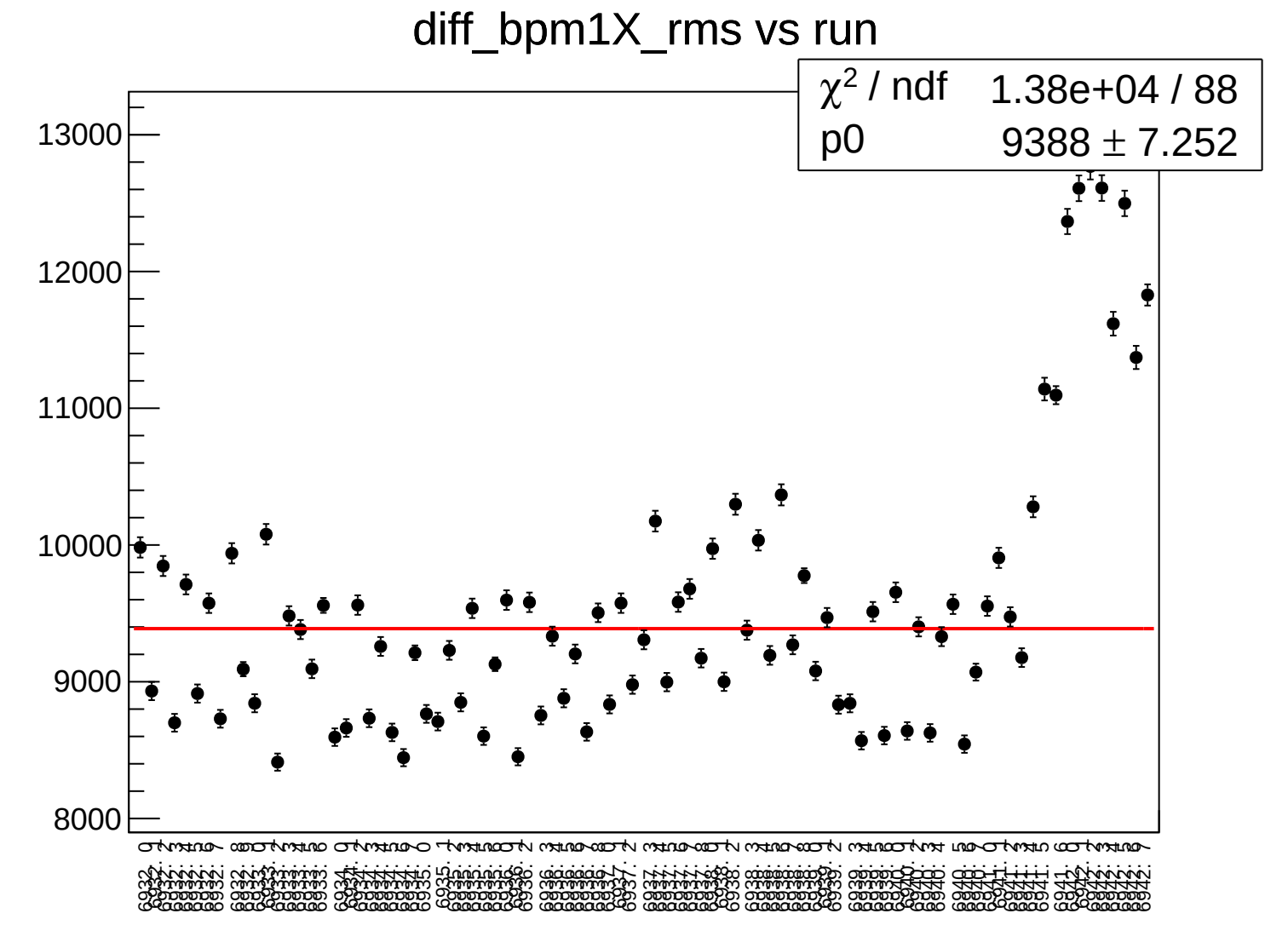

diff_bpm4ecY_mean vs run
χ² / ndf 82.15 / 88
p0 −8.377 ± 6.881
pull
Entries 89
Mean 2722
Std Dev 2679

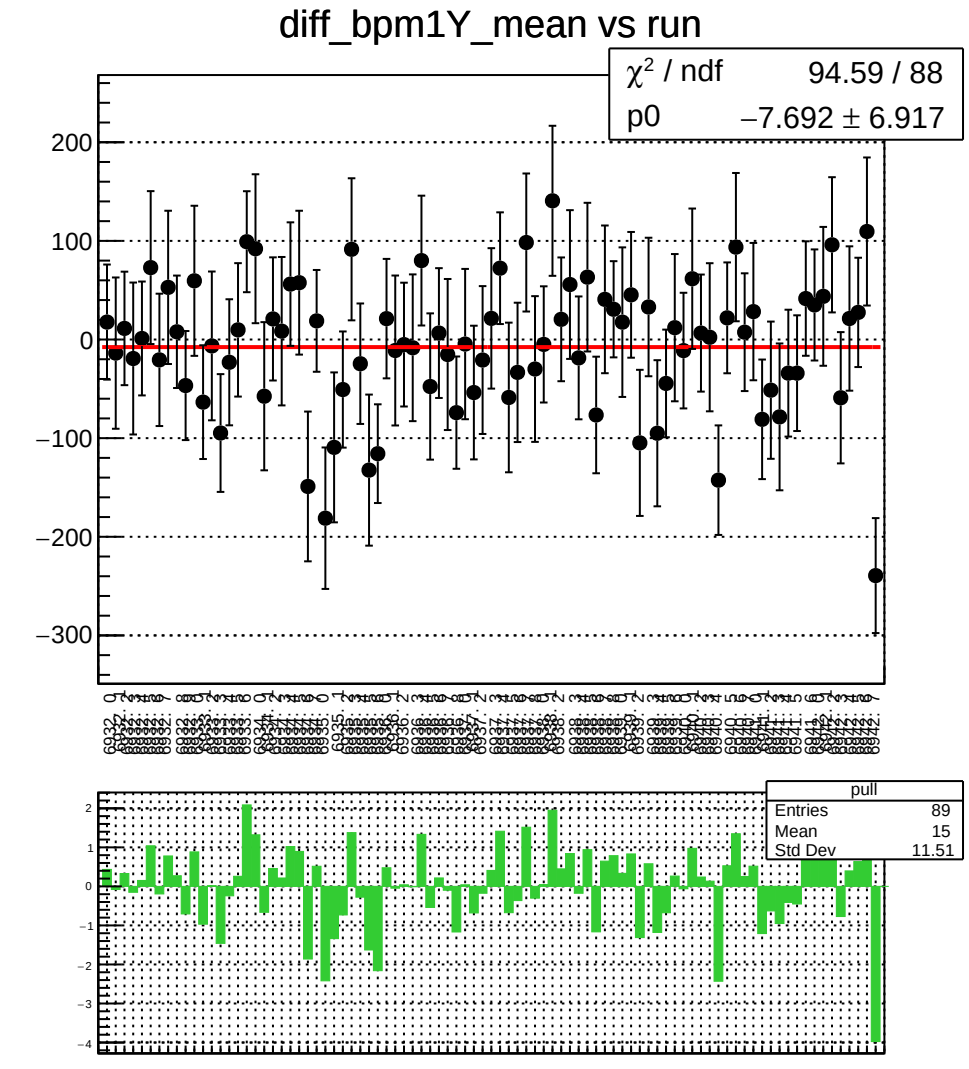

pull1D
Entries 89
Mean 0.001241
Std Dev 0.9607

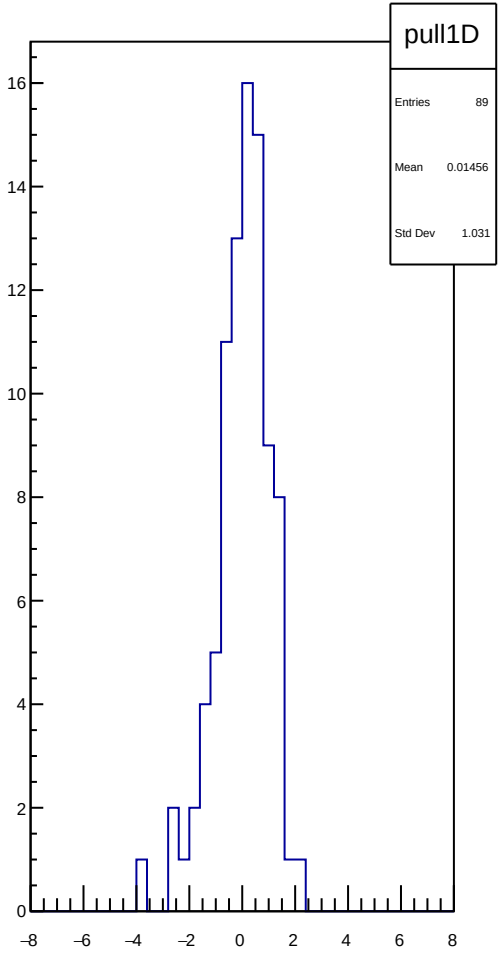

diff_bpm4ecY_rms vs run
χ² / ndf 2720 / 88
p0 6320 ± 4.866
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600

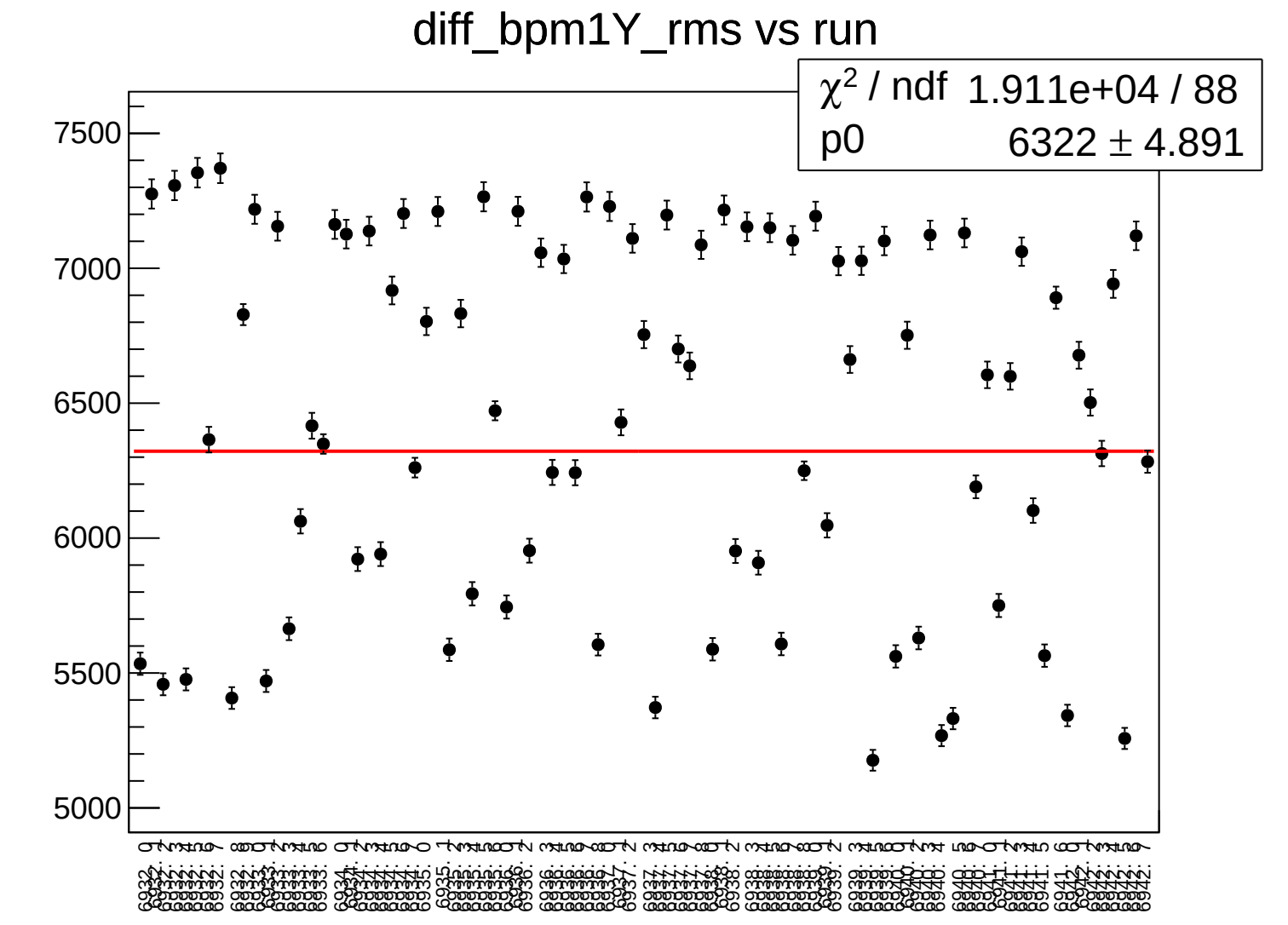

diff_bpm1X_mean vs run
χ² / ndf 81.98 / 88
p0 −1.457 ± 10.26
pull
Entries 89
Mean −1344
Std Dev 1397

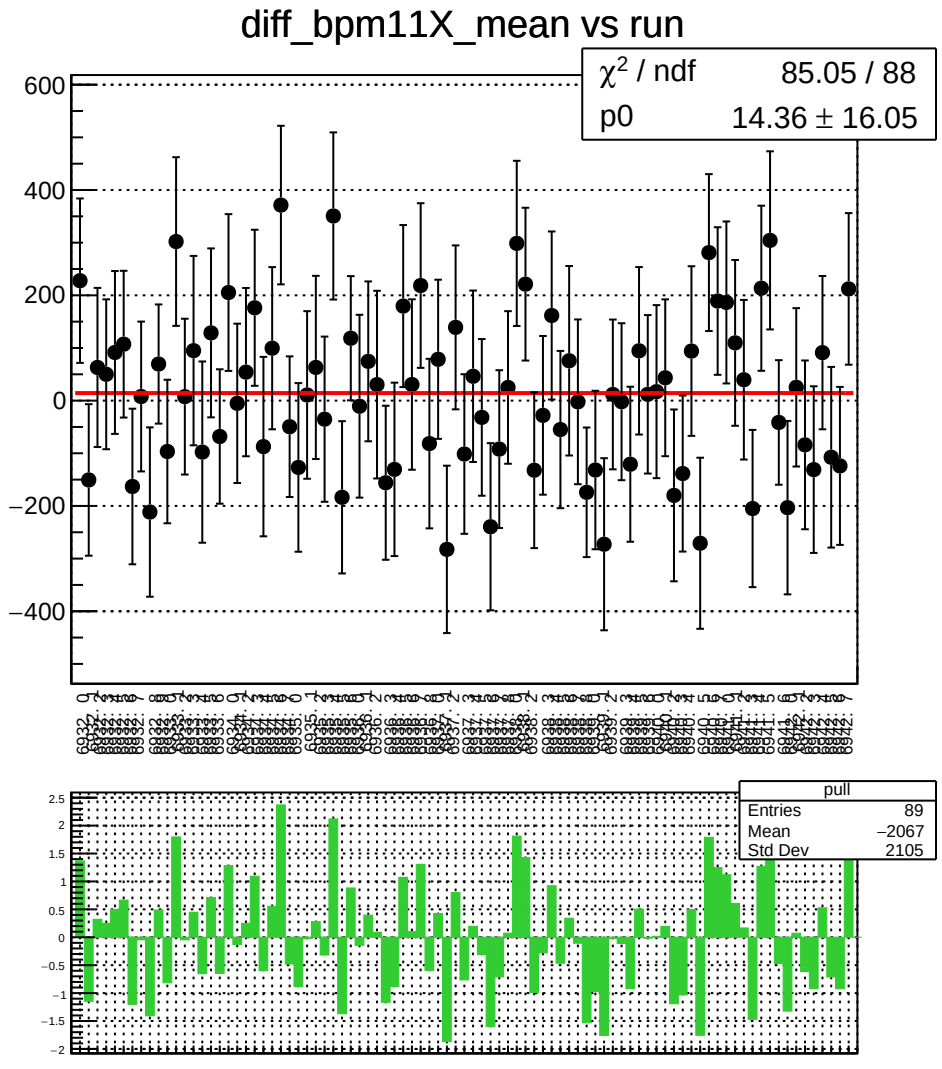

pull1D
Entries 89
Mean 0.001524
Std Dev 0.9598

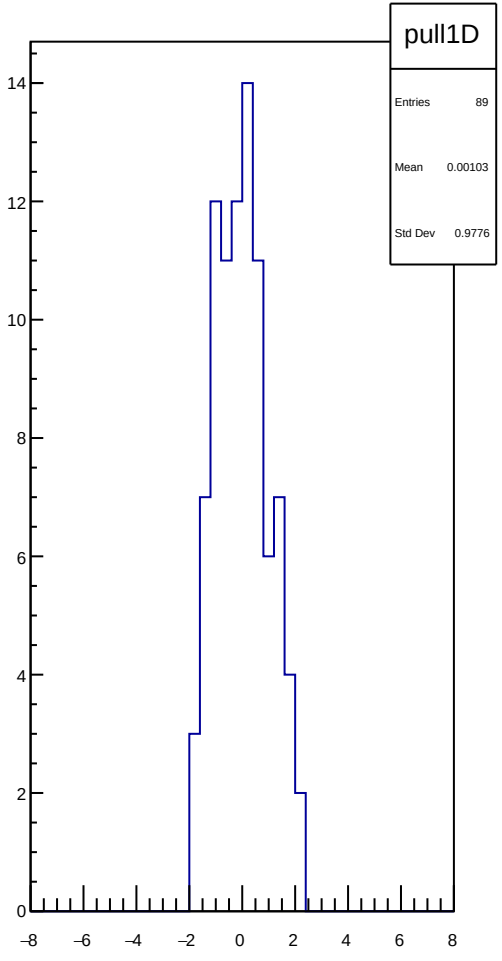

diff_bpm1X_rms vs run
χ² / ndf 1.38e+04 / 88
p0 9388 ± 7.252
13000
12000
11000
10000
9000
8000

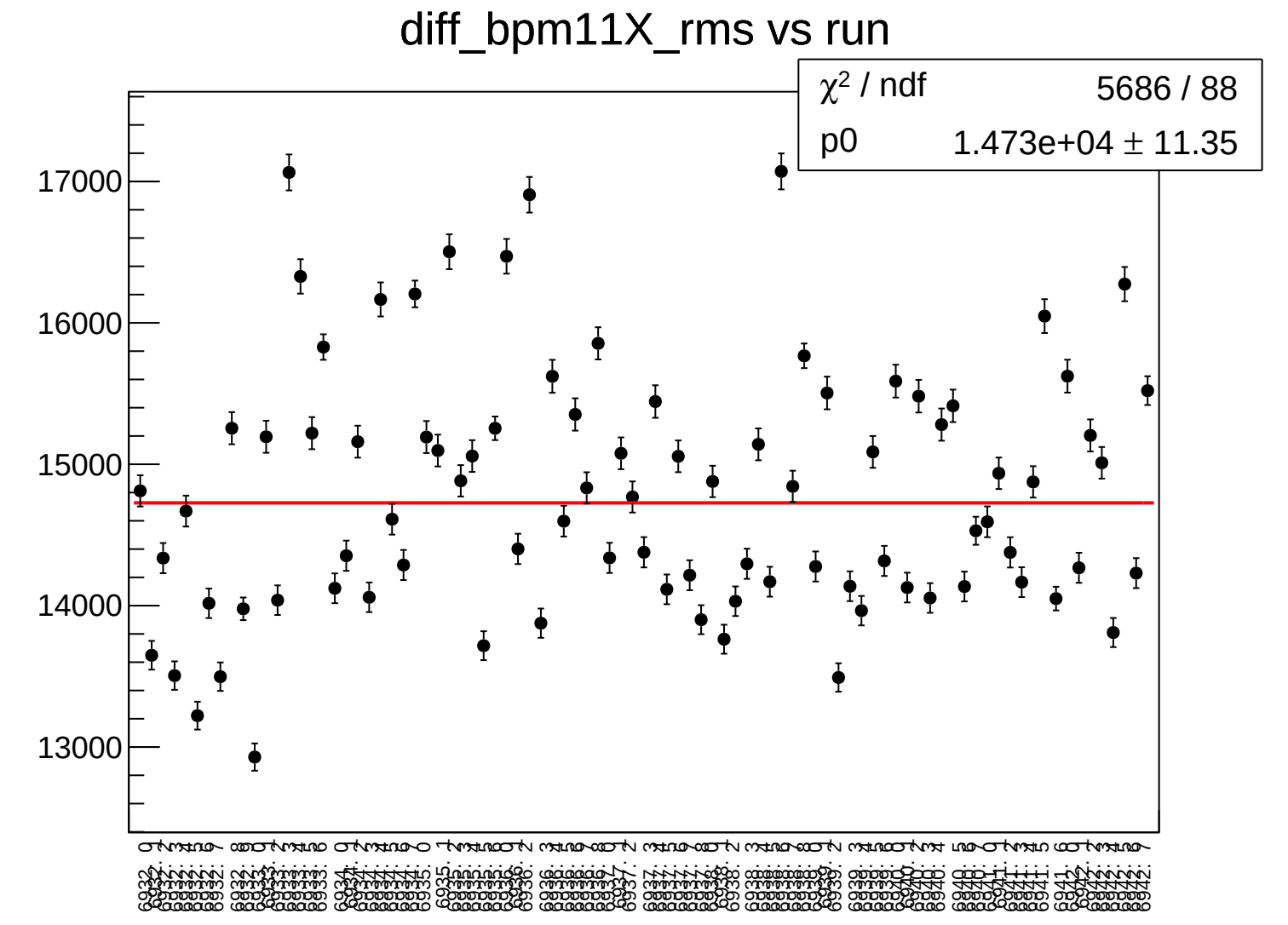

diff_bpm1Y_mean vs run
χ² / ndf 94.59 / 88
p0 −7.692 ± 6.917
200
100
0
−100
−200
−300
pull
Entries 89
Mean 15
Std Dev 11.51
2
1
0
−1
−2
−3
−4

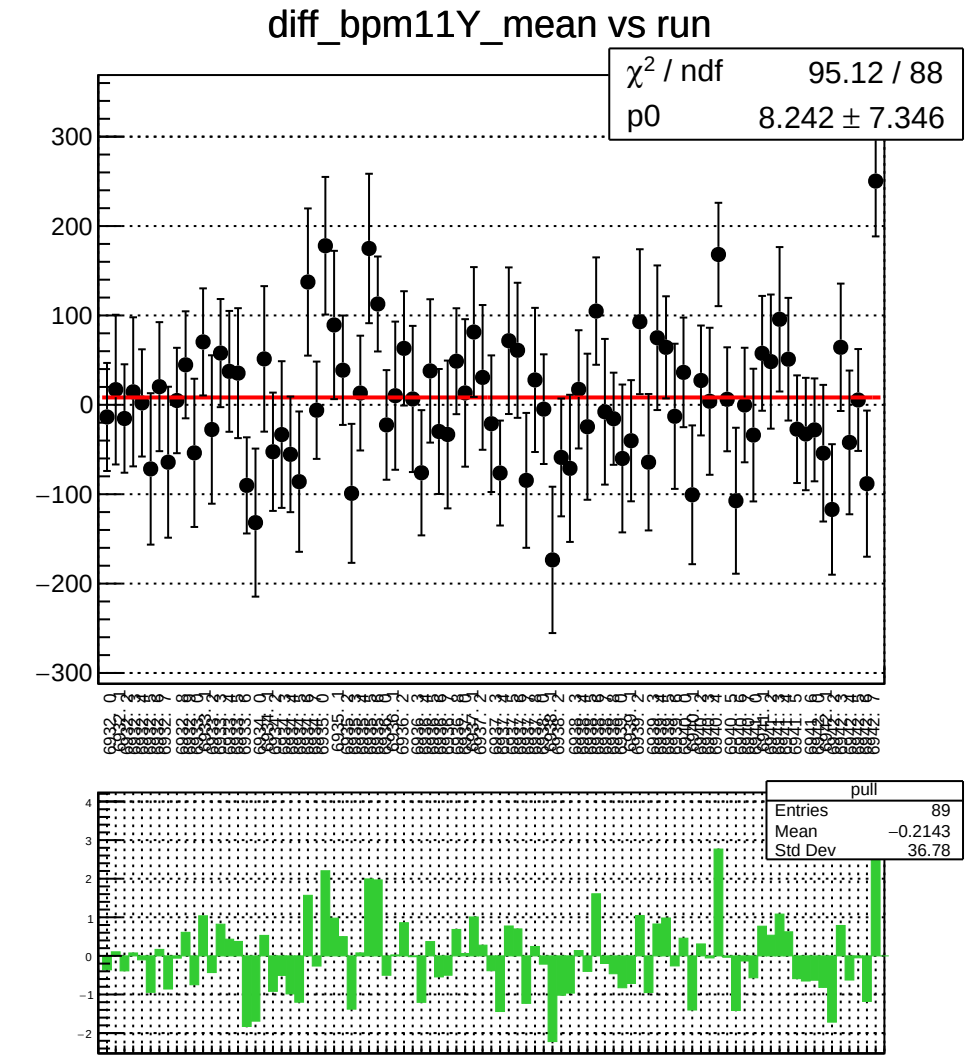

pull1D
Entries 89
Mean 0.01456
Std Dev 1.031
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

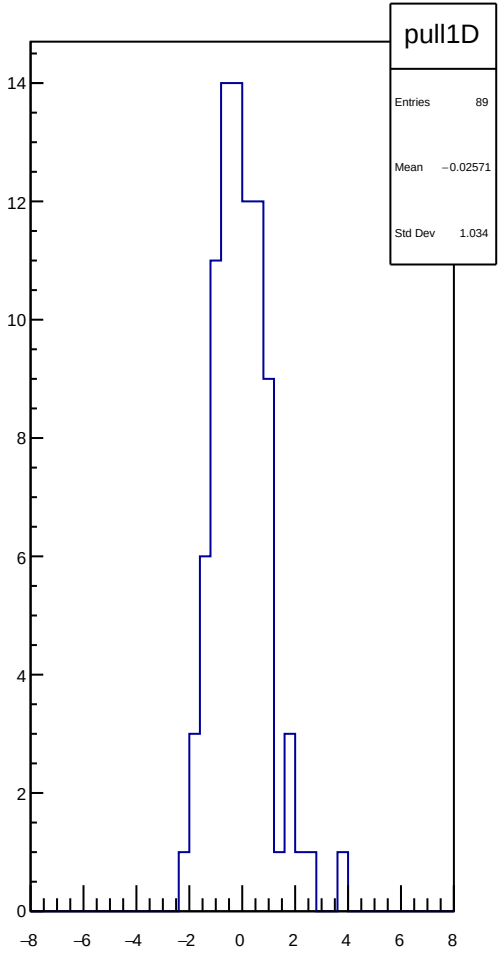

diff_bpm1Y_rms vs run
χ² / ndf 1.911e+04 / 88
p0 6322 ± 4.891
7500
7000
6500
6000
5500
5000

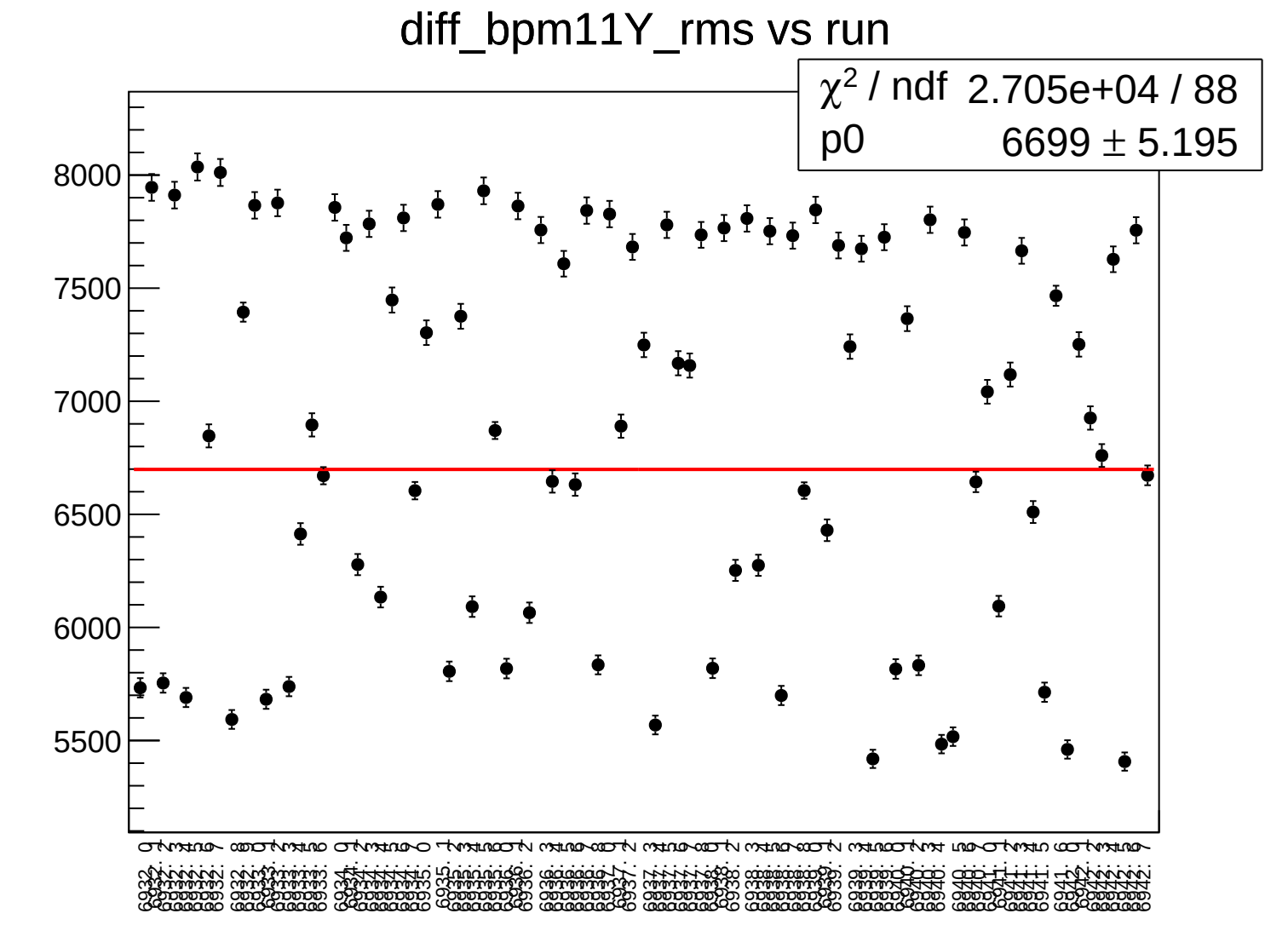

diff_bpm11X_mean vs run
χ^2 / ndf 85.05 / 88
p0 14.36 ± 16.05
600
400
200
0
−200
−400
pull
Entries 89
Mean −2067
Std Dev 2105
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

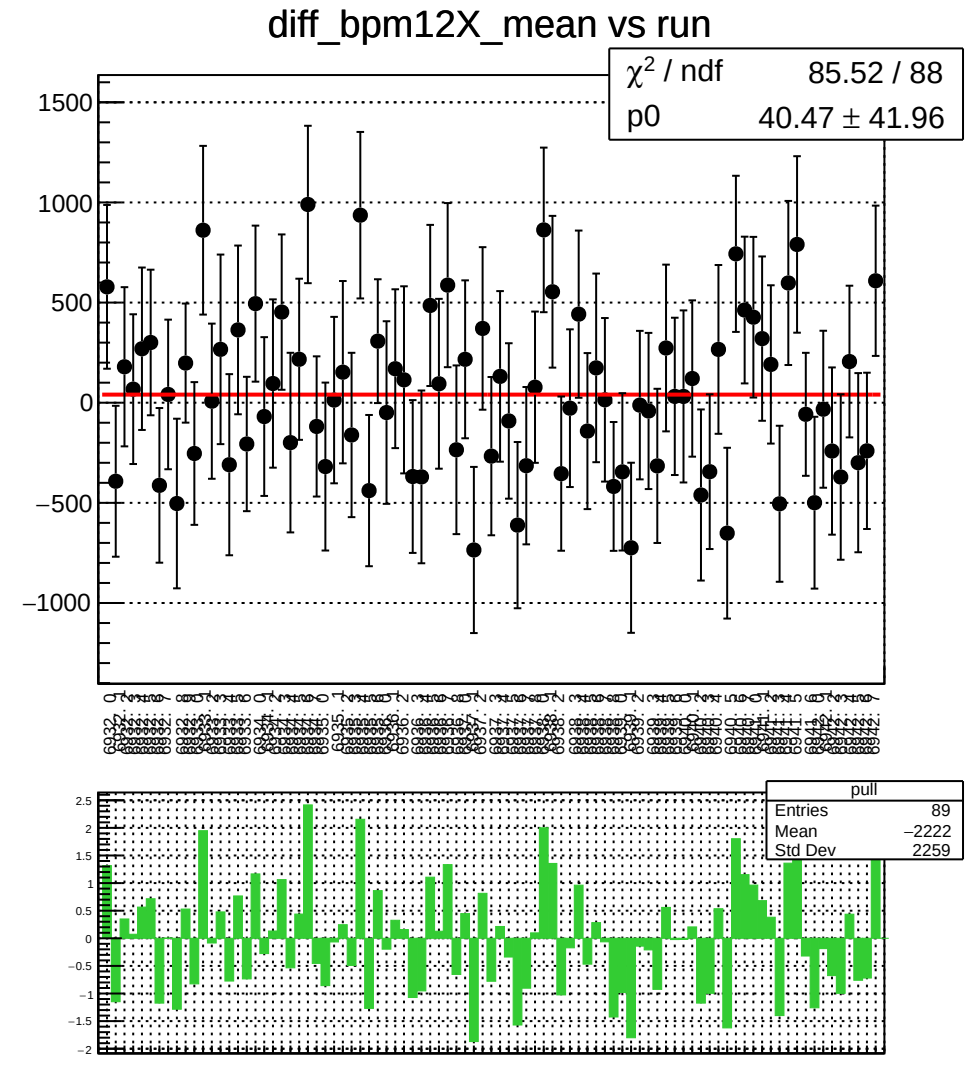

pull1D
Entries 89
Mean 0.00103
Std Dev 0.9776
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

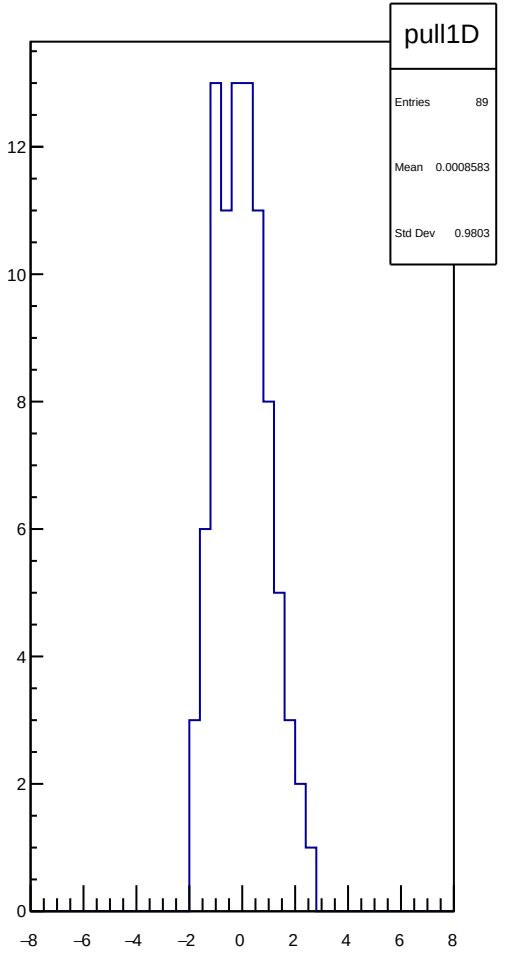

diff_bpm11X_rms vs run
χ² / ndf 5686 / 88
p0 1.473e+04 ± 11.35
17000
16000
15000
14000
13000

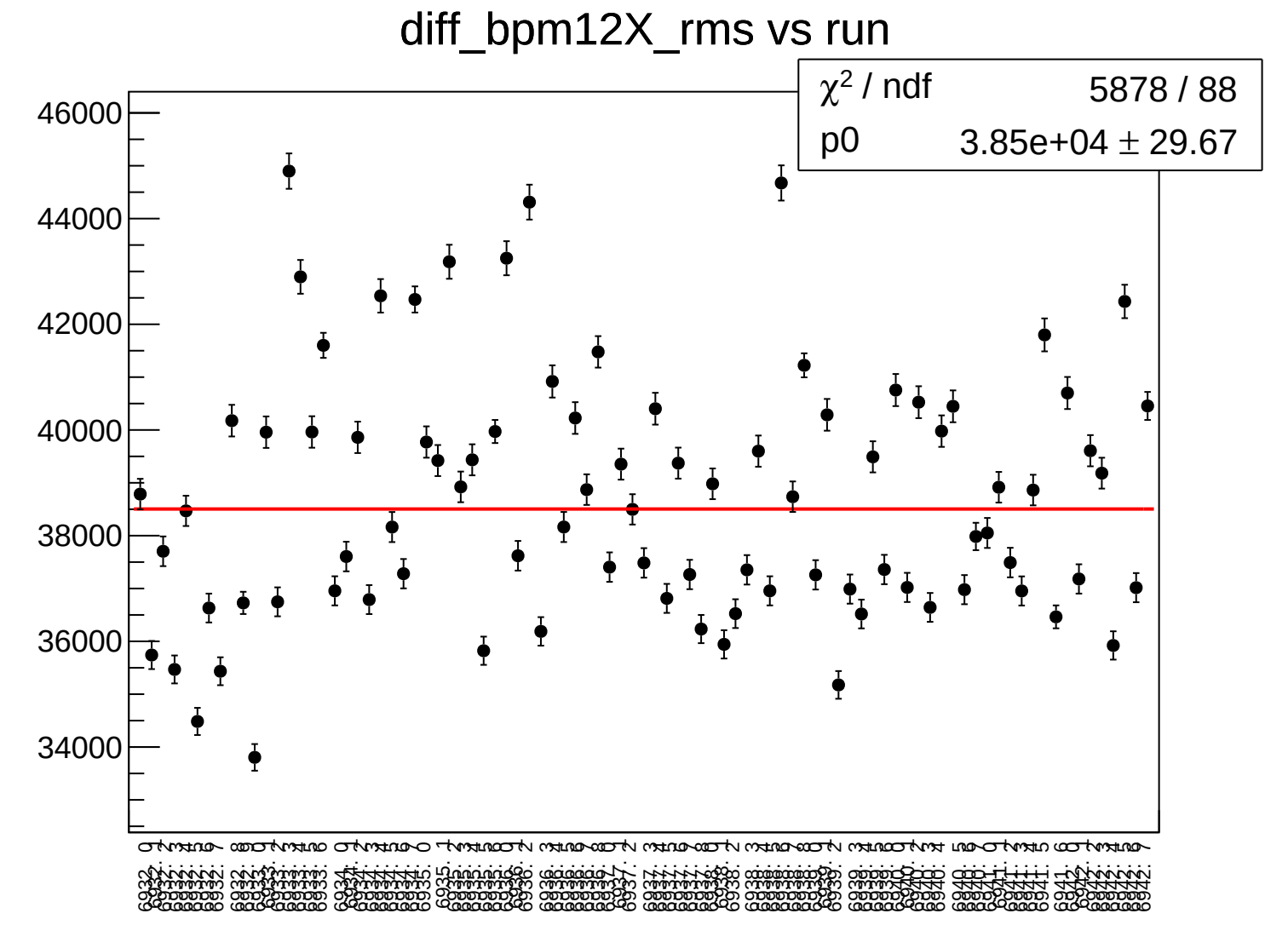

diff_bpm11Y_mean vs run
χ² / ndf 95.12 / 88
p0 8.242 ± 7.346
300
200
100
0
−100
−200
−300
pull
Entries 89
Mean −0.2143
Std Dev 36.78
4
3
2
1
0
−1
−2

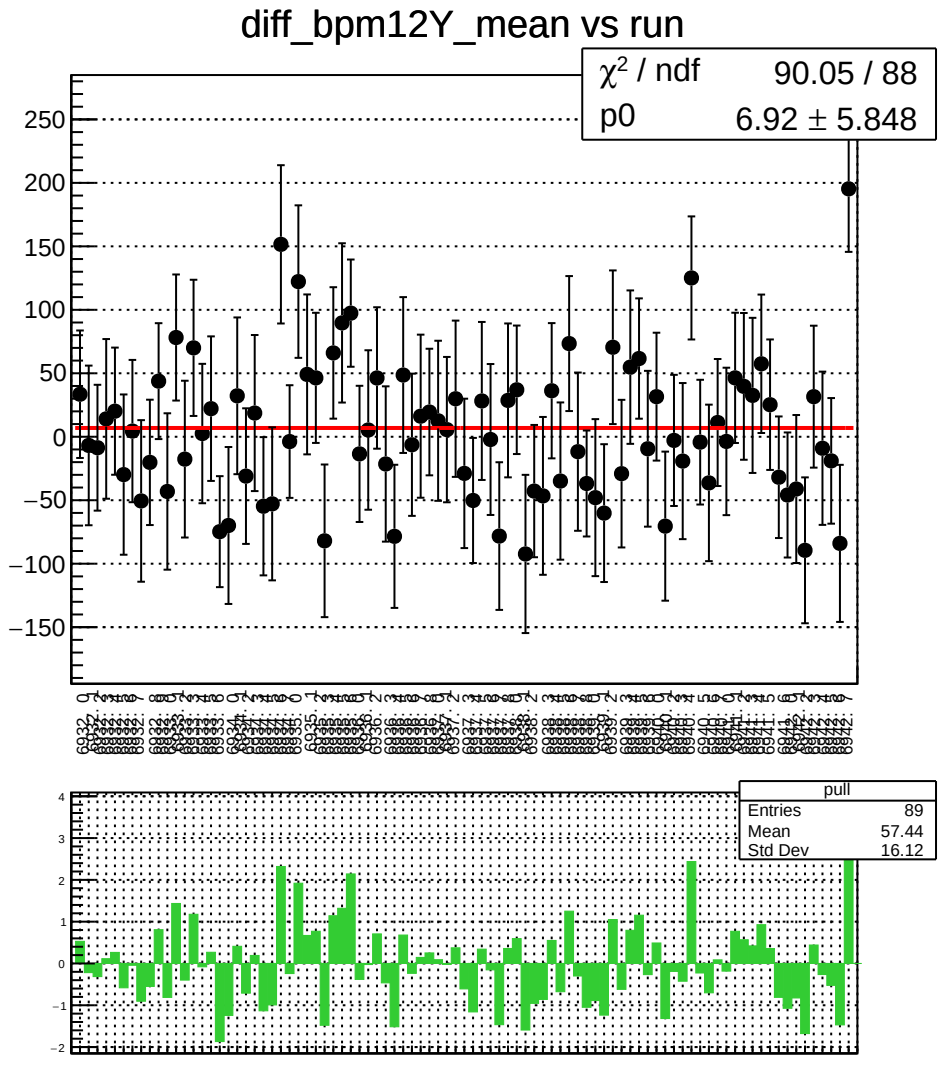

pull1D
Entries 89
Mean −0.02571
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

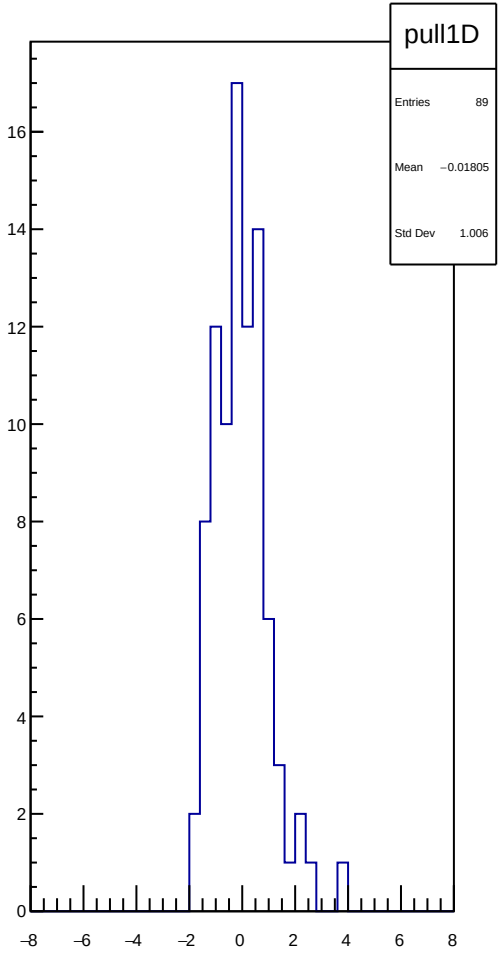

diff_bpm11Y_rms vs run
χ² / ndf 2.705e+04 / 88
p0 6699 ± 5.195
8000
7500
7000
6500
6000
5500

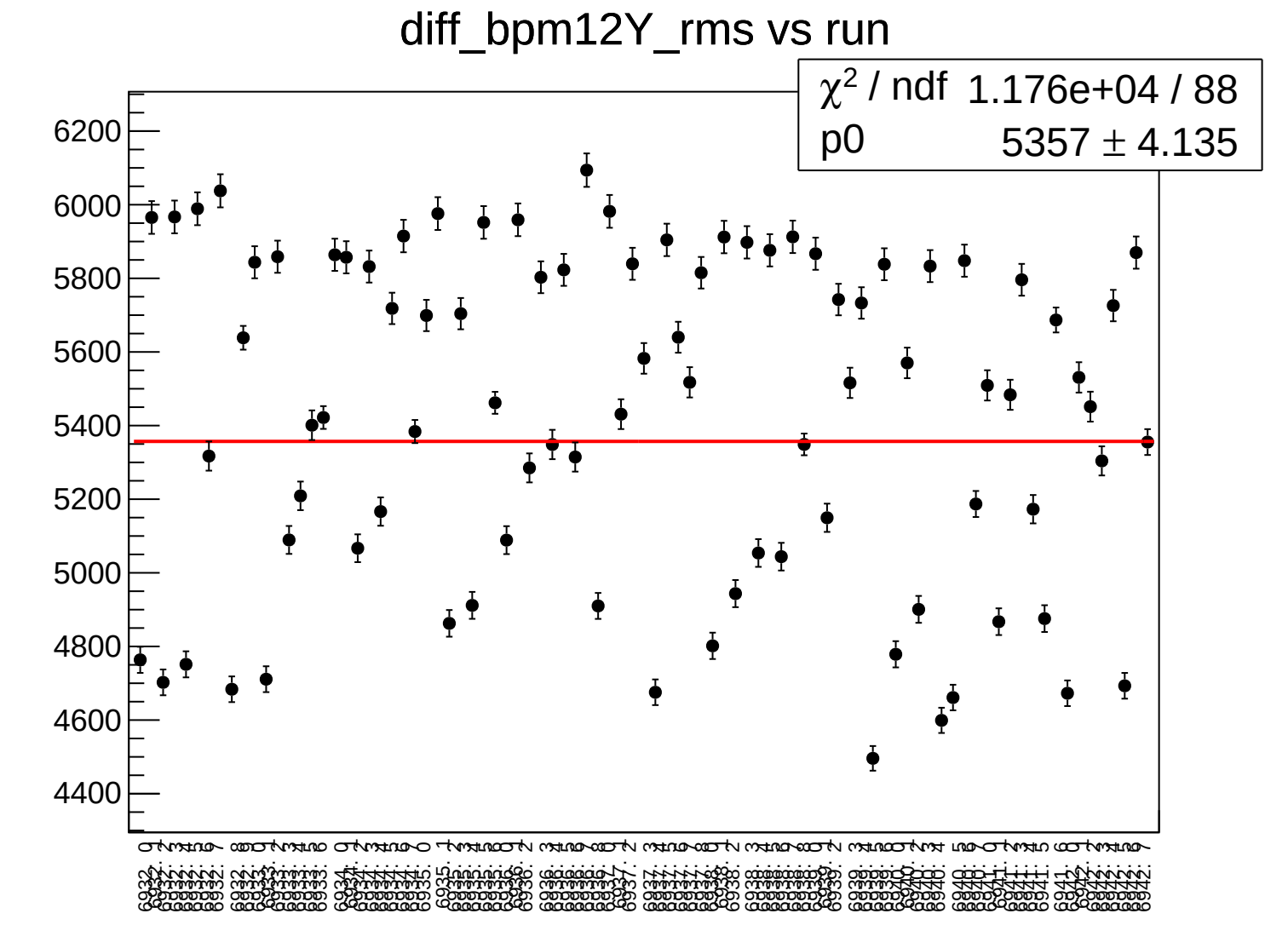

diff_bpm12X_mean vs run
χ² / ndf 85.52 / 88
p0 40.47 ± 41.96
1500
1000
500
0
−500
−1000
pull
Entries 89
Mean −2222
Std Dev 2259
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

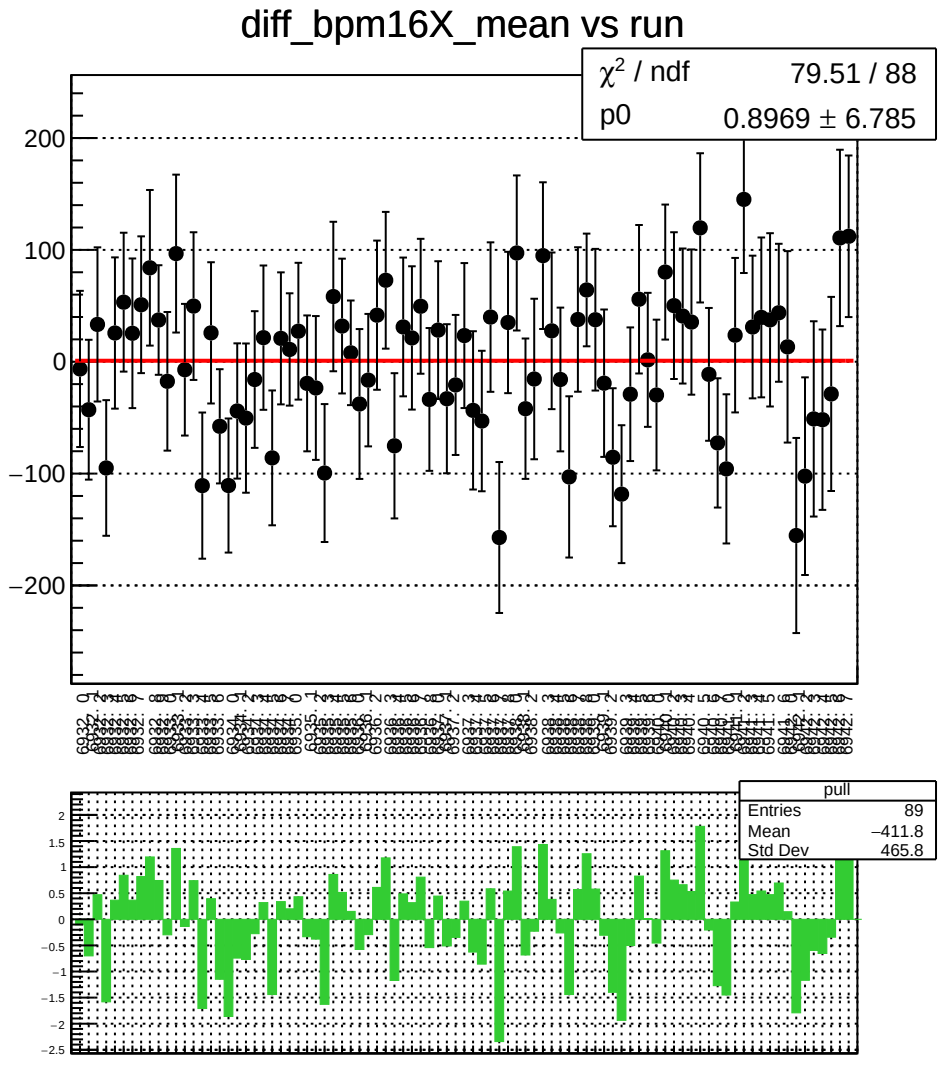

pull1D
Entries 89
Mean 0.0008583
Std Dev 0.9803
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

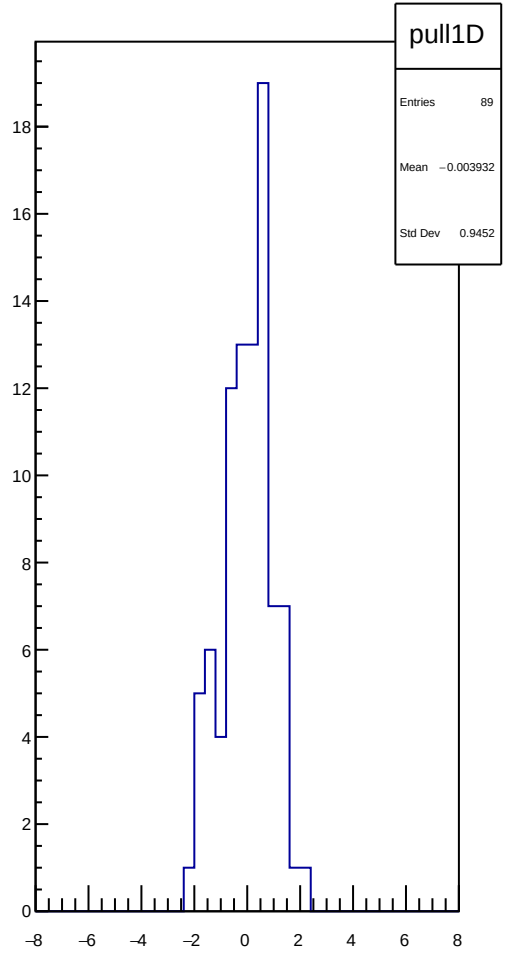

diff_bpm12X_rms vs run
χ^2 / ndf 5878 / 88
p0 3.85e+04 ± 29.67
46000
44000
42000
40000
38000
36000
34000

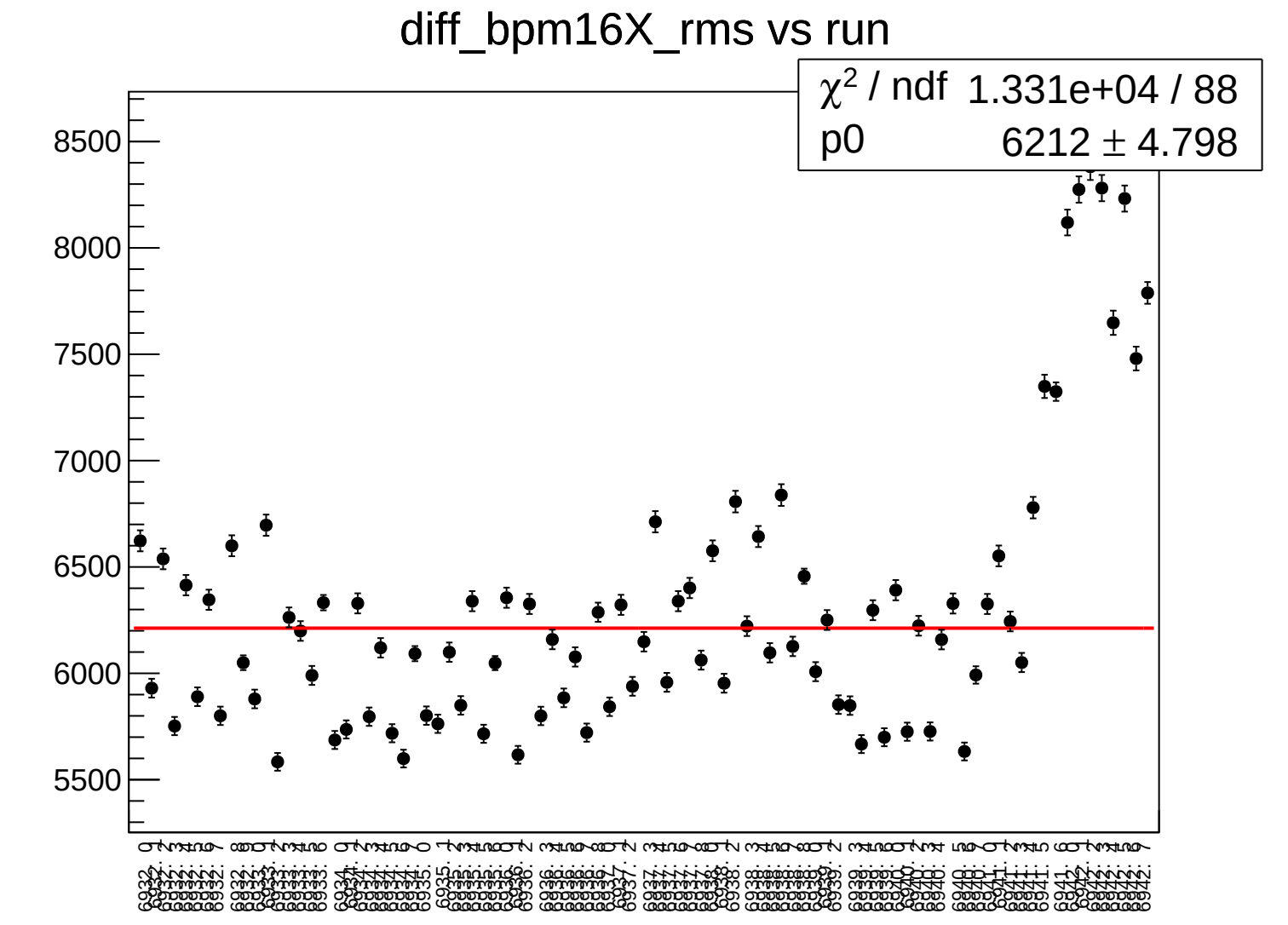

diff_bpm12Y_mean vs run
χ² / ndf 90.05 / 88
p0 6.92 ± 5.848
pull
Entries 89
Mean 57.44
Std Dev 16.12

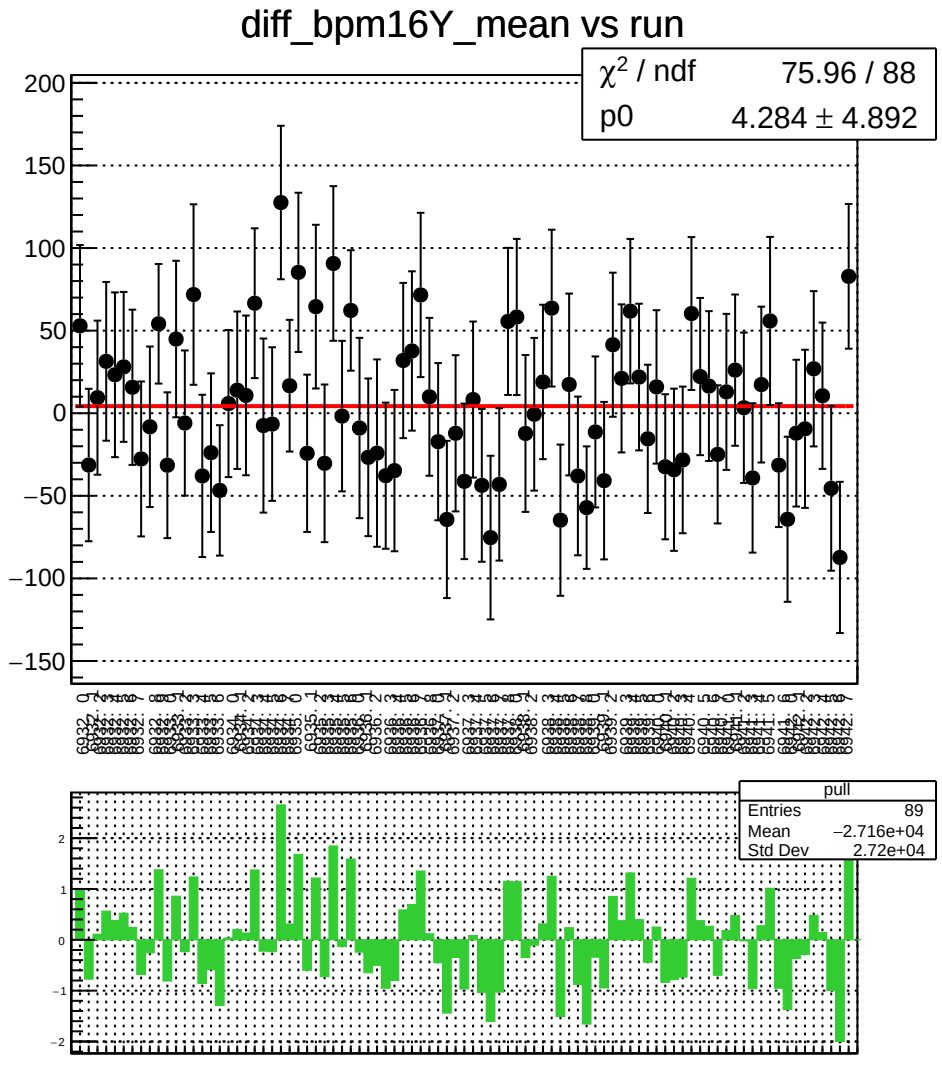

pull1D
Entries 89
Mean −0.01805
Std Dev 1.006

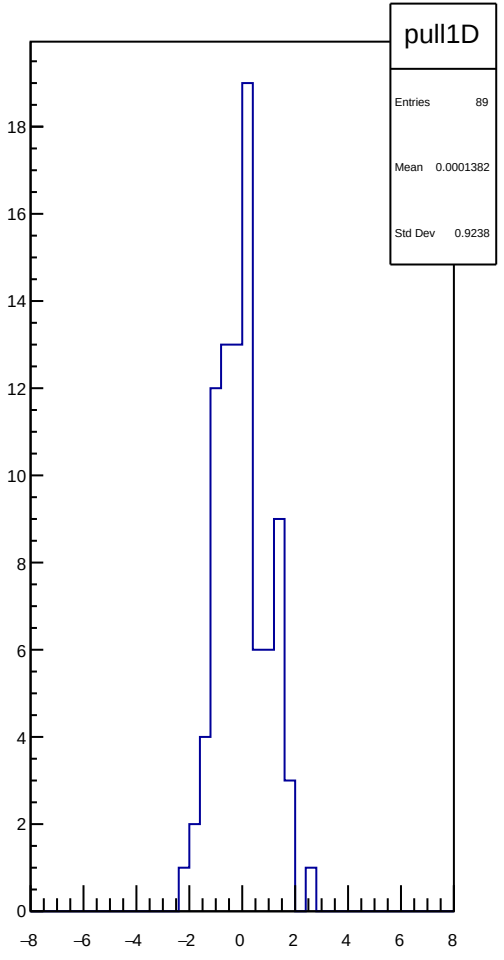

diff_bpm12Y_rms vs run
χ² / ndf 1.176e+04 / 88
p0 5357 ± 4.135
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

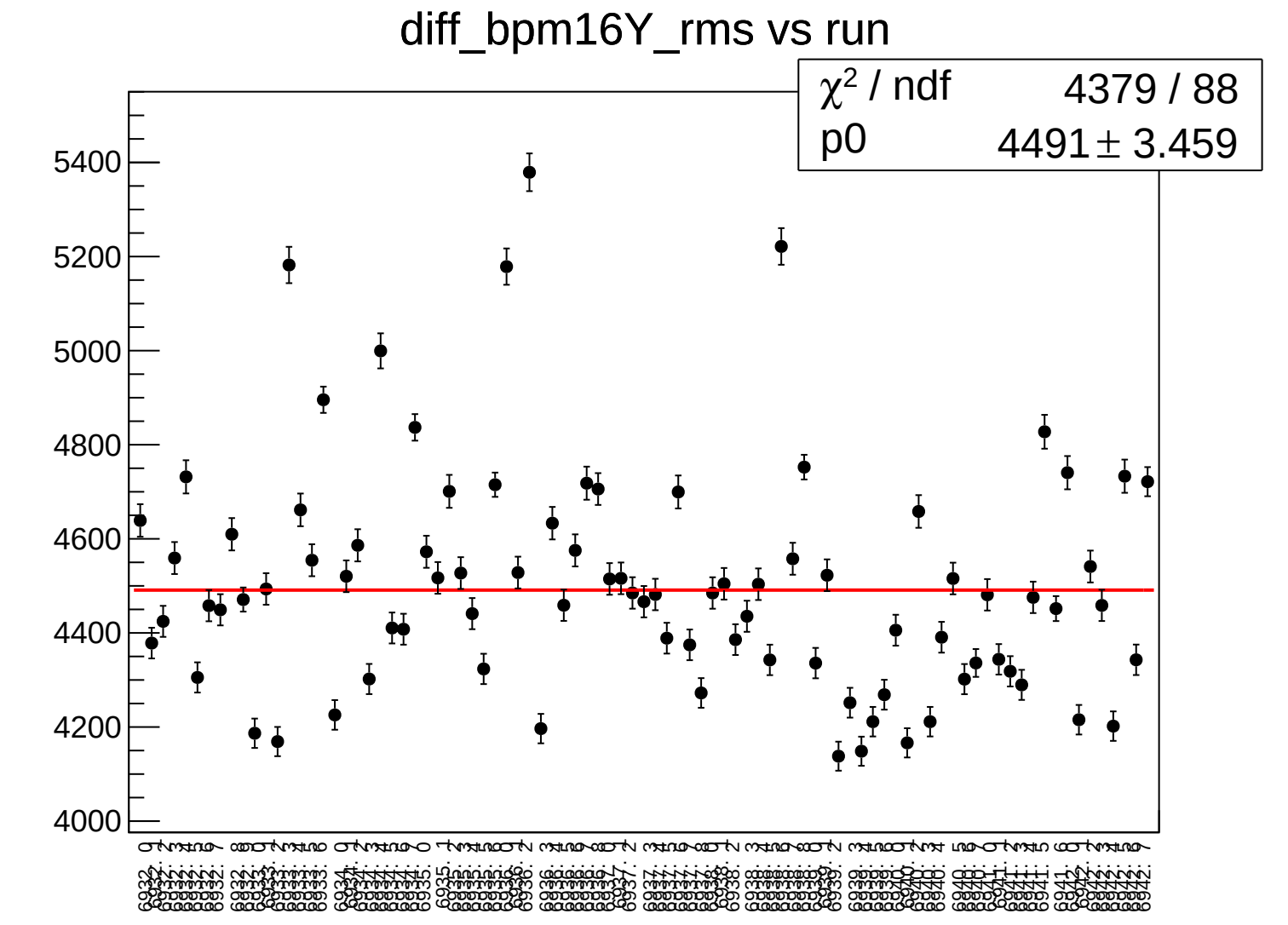

diff_bpm16X_mean vs run
χ² / ndf 79.51 / 88
p0 0.8969 ± 6.785
200
100
0
−100
−200
pull
Entries 89
Mean −411.8
Std Dev 465.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

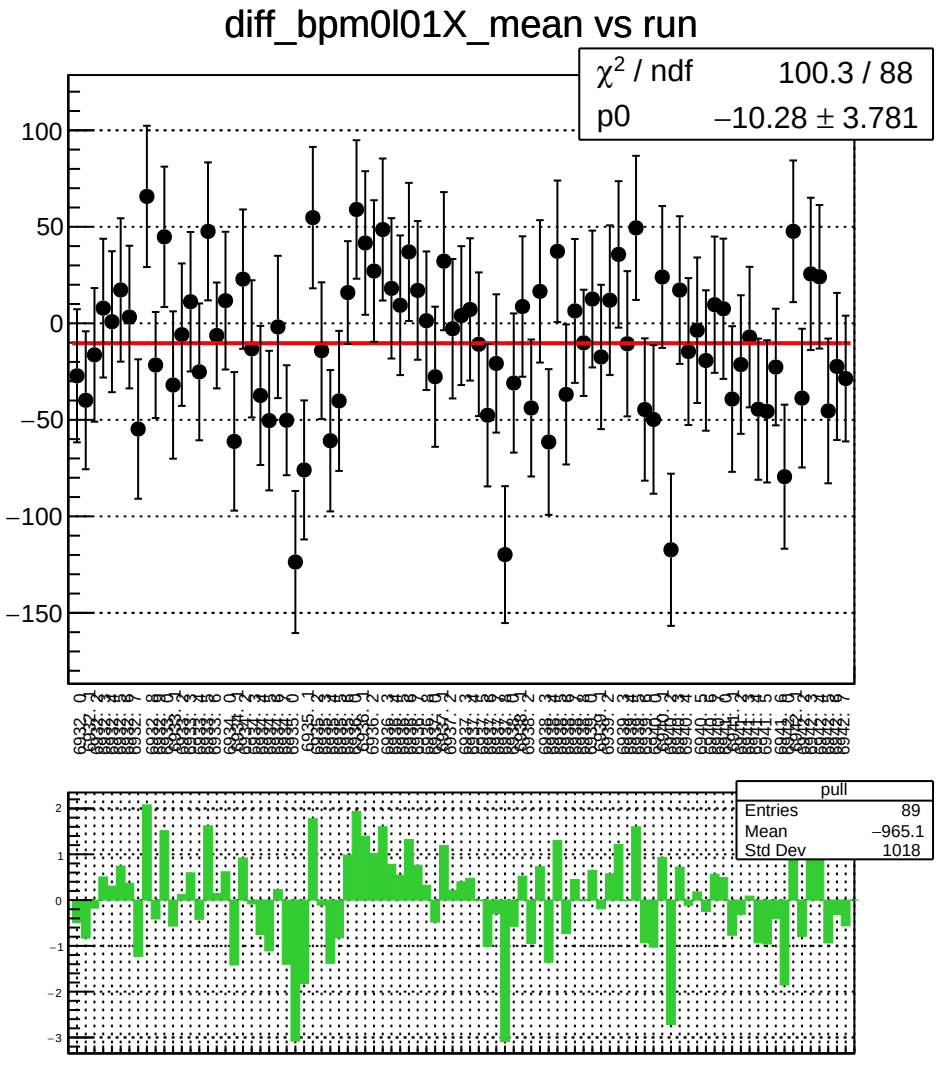

pull1D
Entries 89
Mean −0.003932
Std Dev 0.9452
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

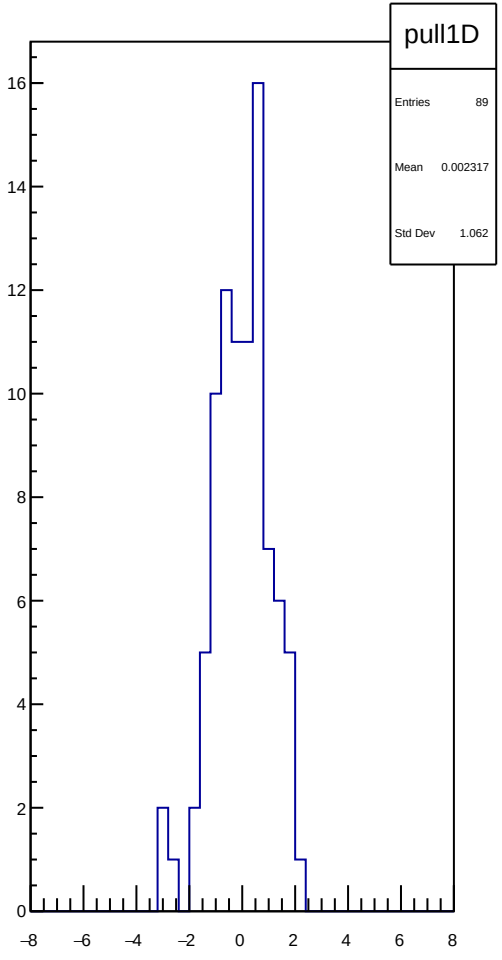

diff_bpm16X_rms vs run
χ^2 / ndf 1.331e+04 / 88
p0 6212 ± 4.798
8500
8000
7500
7000
6500
6000
5500

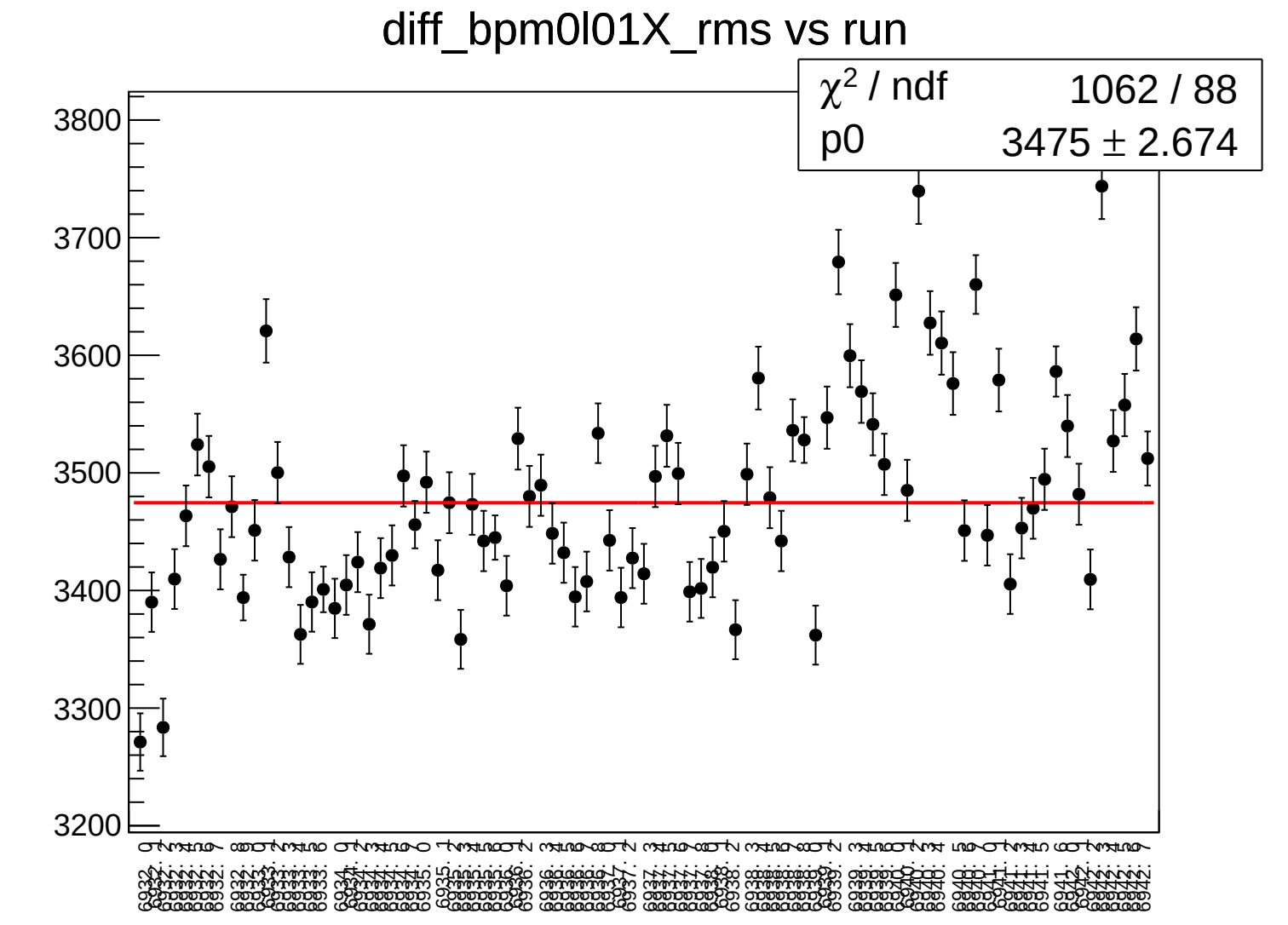

diff_bpm16Y_mean vs run
χ² / ndf 75.96 / 88
p0 4.284 ± 4.892
pull
Entries 89
Mean −2.716e+04
Std Dev 2.72e+04

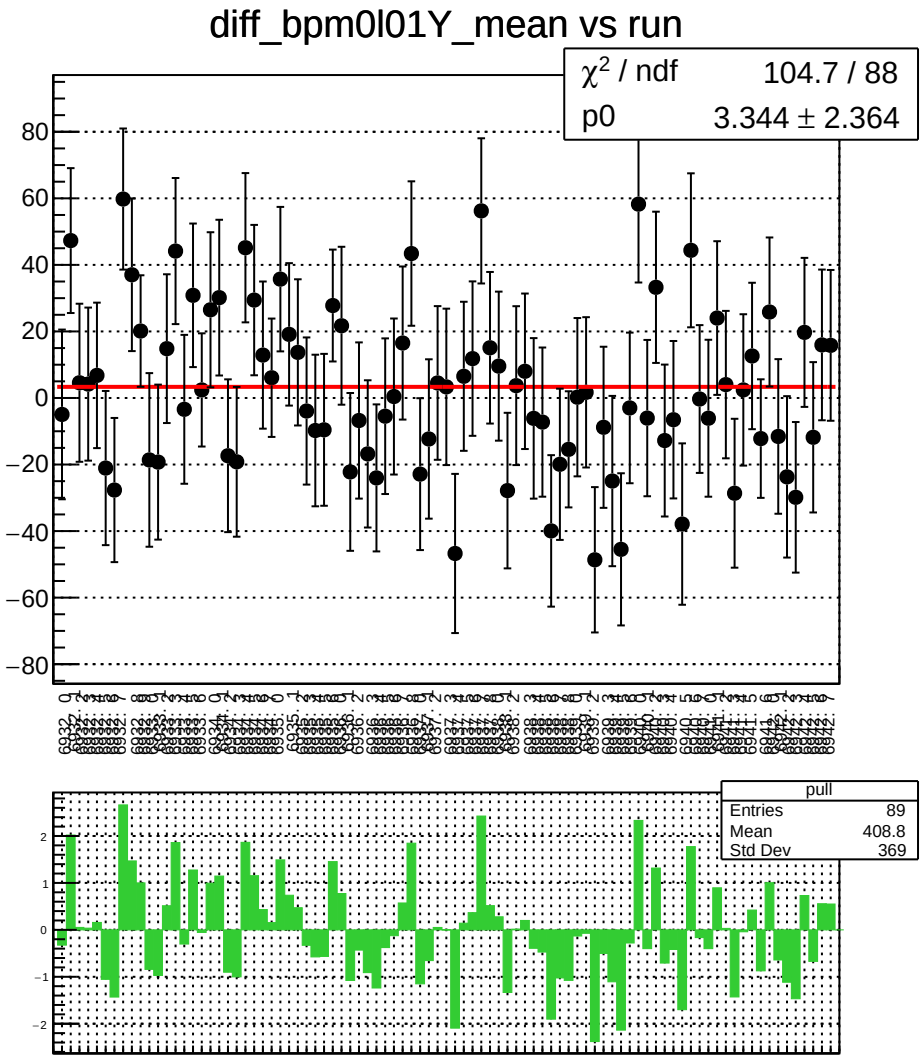

pull1D
Entries 89
Mean 0.0001382
Std Dev 0.9238

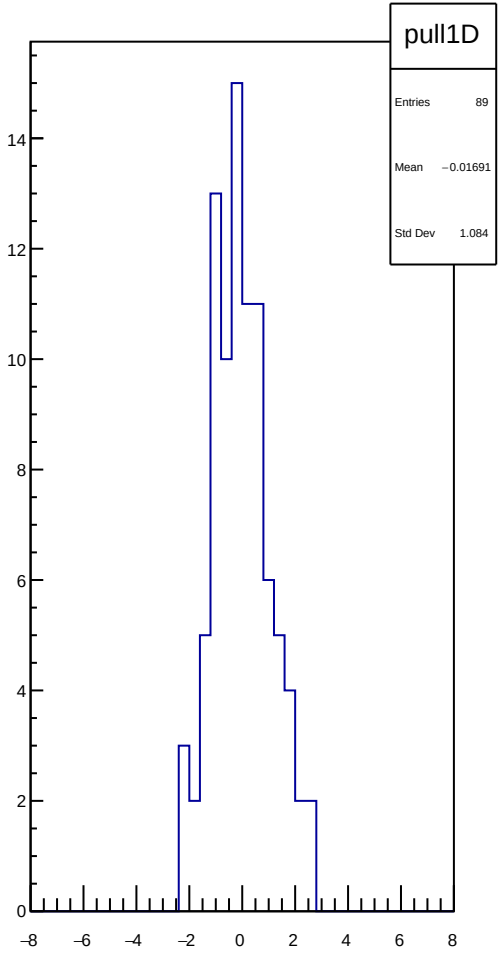

diff_bpm16Y_rms vs run
χ² / ndf 4379 / 88
p0 4491 ± 3.459
5400
5200
5000
4800
4600
4400
4200
4000

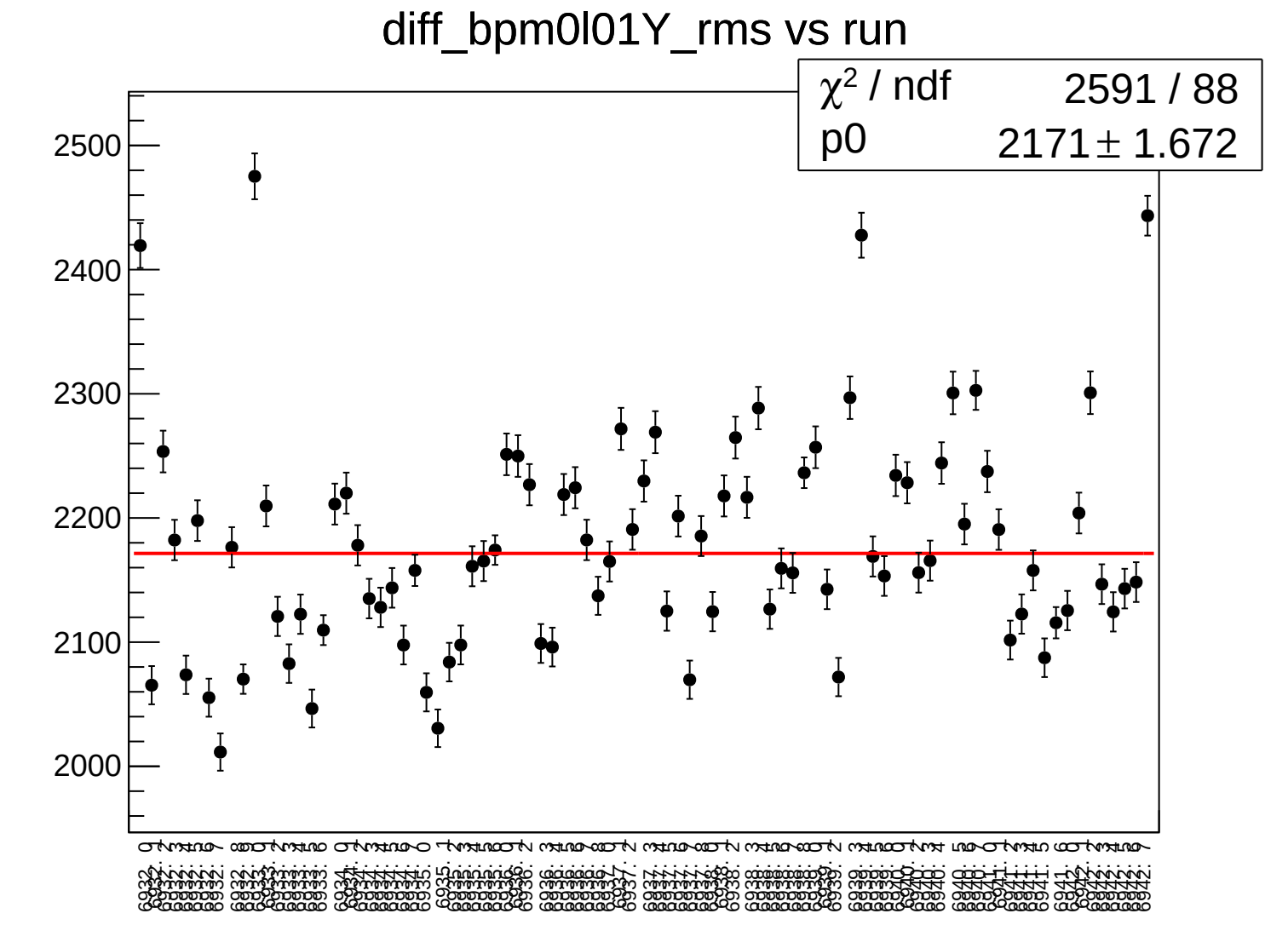

diff_bpm0l01X_mean vs run
χ² / ndf 100.3 / 88
p0 −10.28 ± 3.781
pull
Entries 89
Mean −965.1
Std Dev 1018

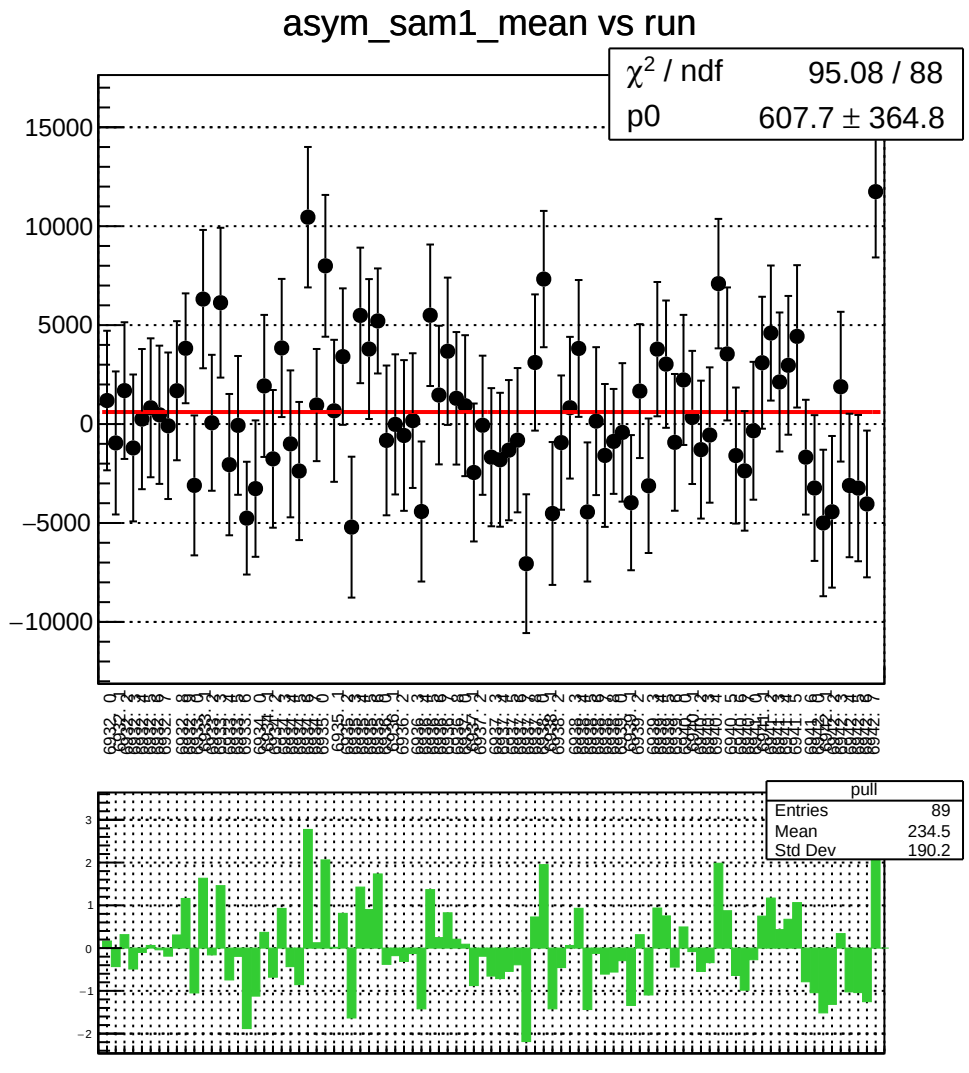

pull1D
Entries 89
Mean 0.002317
Std Dev 1.062

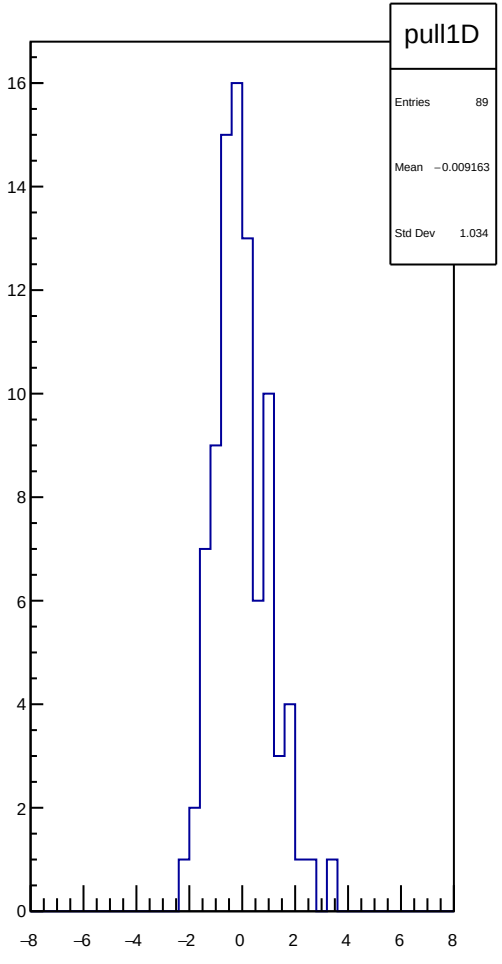

diff_bpm0l01X_rms vs run
χ² / ndf 1062 / 88
p0 3475 ± 2.674
3800
3700
3600
3500
3400
3300
3200

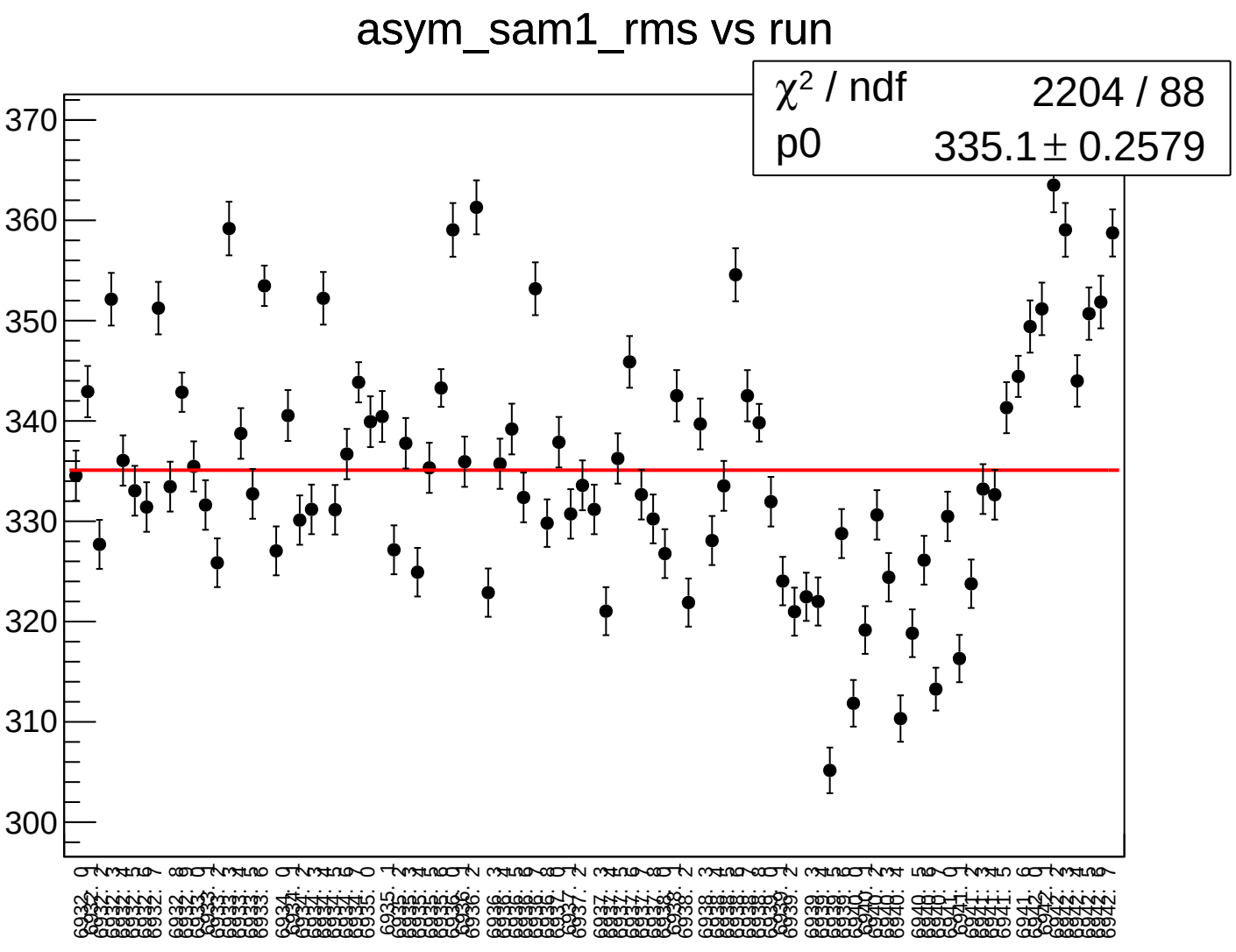

diff_bpm0l01Y_mean vs run
χ² / ndf 104.7 / 88
p0 3.344 ± 2.364
pull
Entries 89
Mean 408.8
Std Dev 369

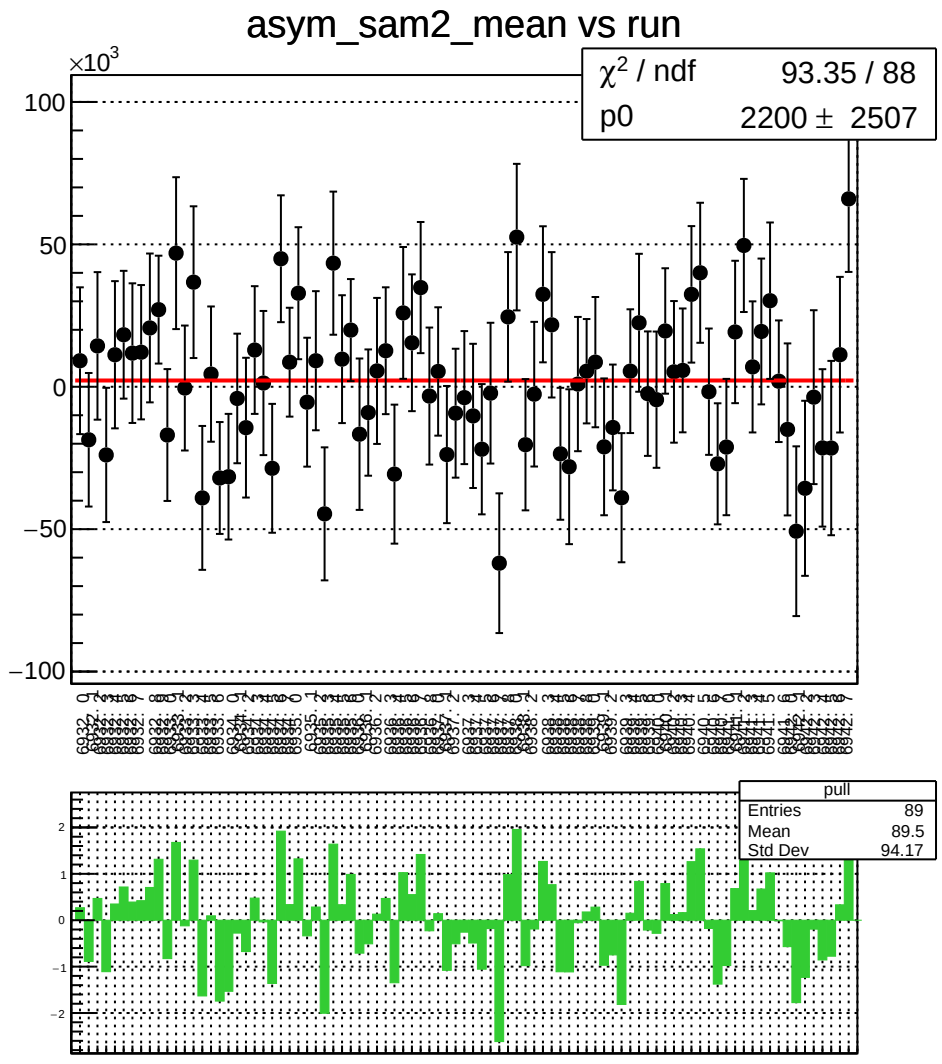

pull1D
Entries 89
Mean −0.01691
Std Dev 1.084

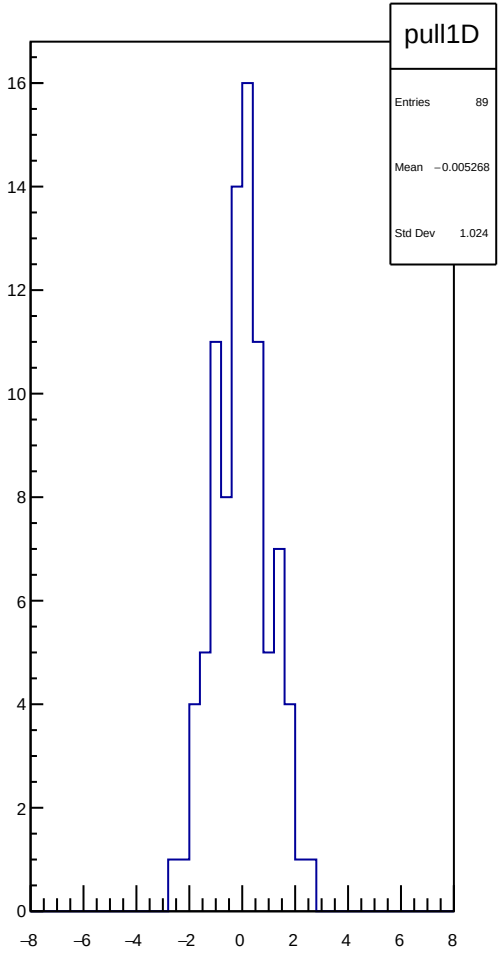

diff_bpm0l01Y_rms vs run
χ² / ndf 2591 / 88
p0 2171 ± 1.672
2500
2400
2300
2200
2100
2000

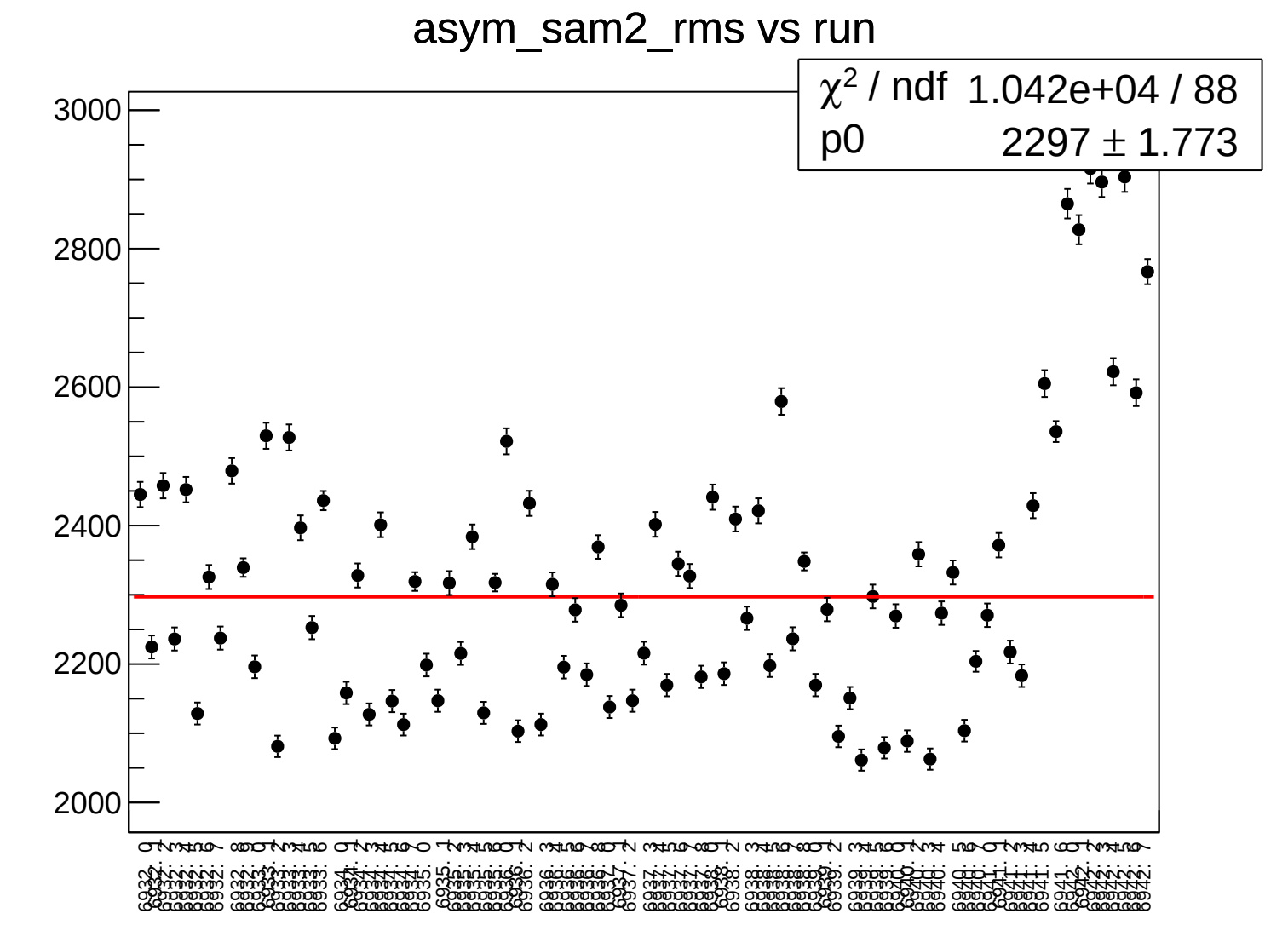

asym_sam1_mean vs run
χ² / ndf 95.08 / 88
p0 607.7 ± 364.8
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 234.5
Std Dev 190.2
3
2
1
0
−1
−2

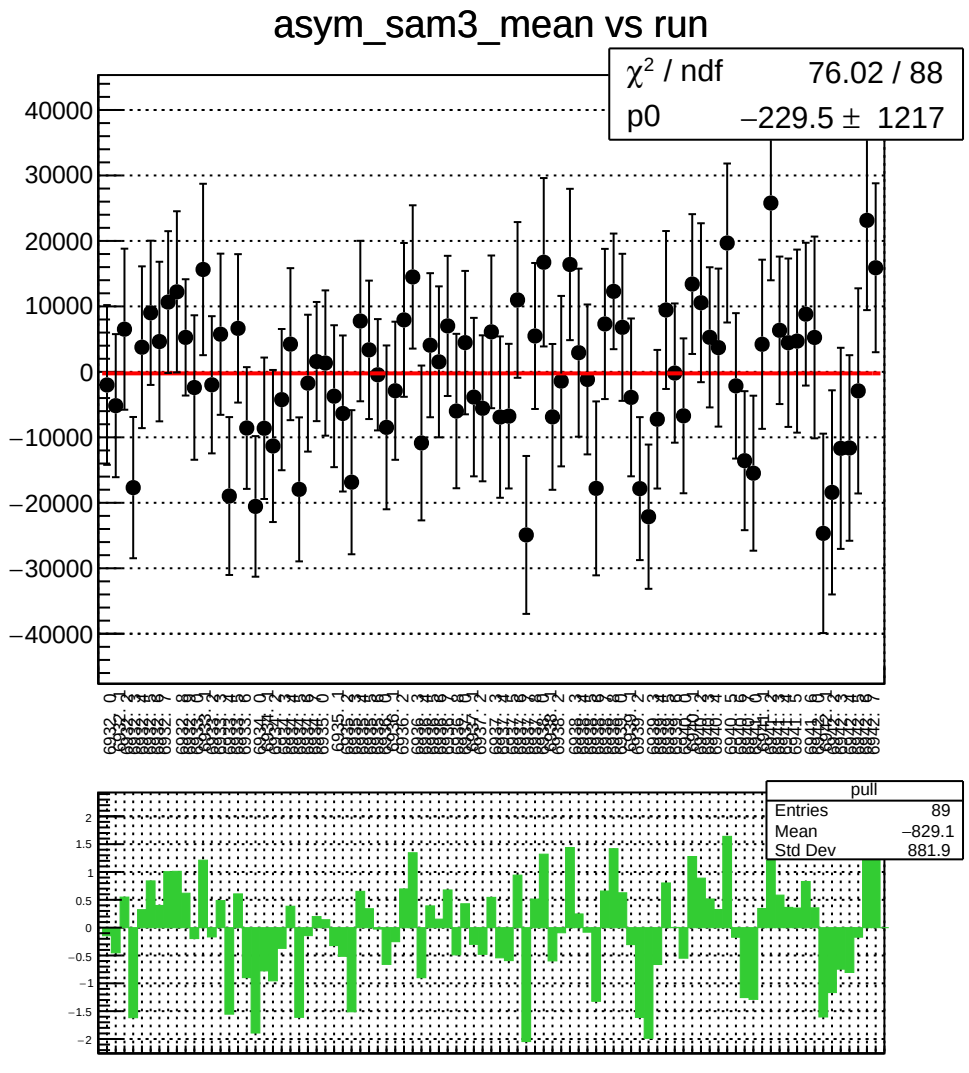

pull1D
Entries 89
Mean −0.009163
Std Dev 1.034
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

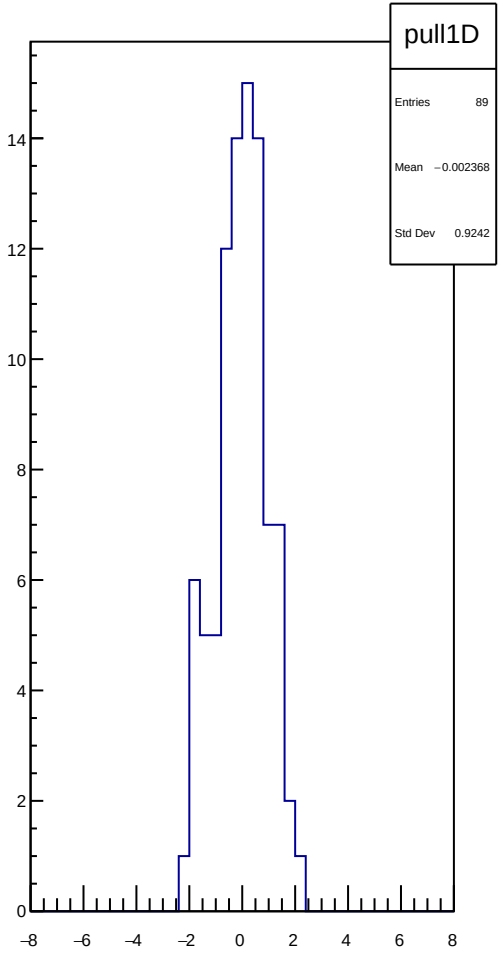

asym_sam1_rms vs run
χ² / ndf 2204 / 88
p0 335.1 ± 0.2579
370
360
350
340
330
320
310
300

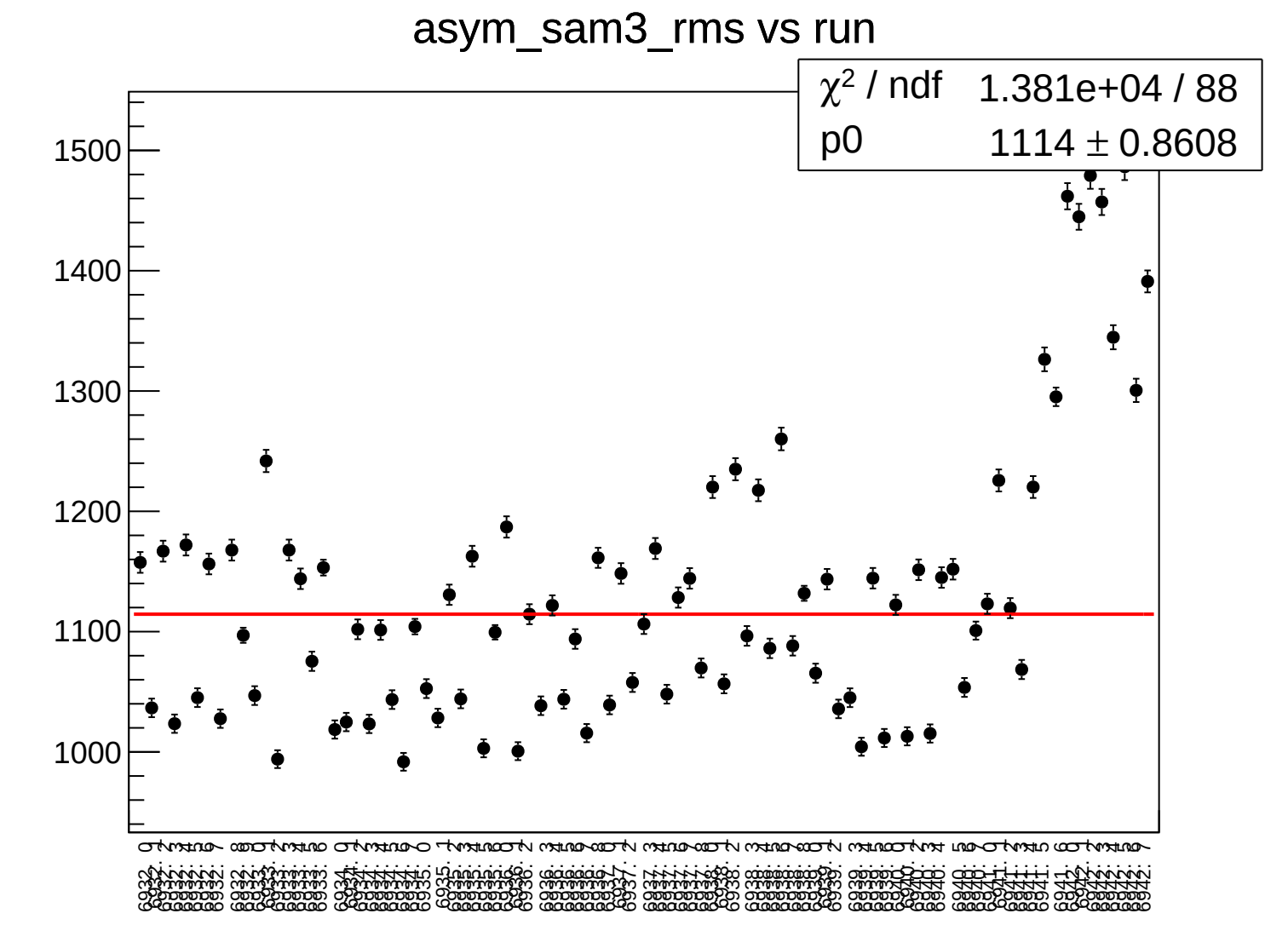

asym_sam2_mean vs run
×10^3
χ^2 / ndf 93.35 / 88
p0 2200 ± 2507
100
50
0
−50
−100
pull
Entries 89
Mean 89.5
Std Dev 94.17
2
1
0
−1
−2

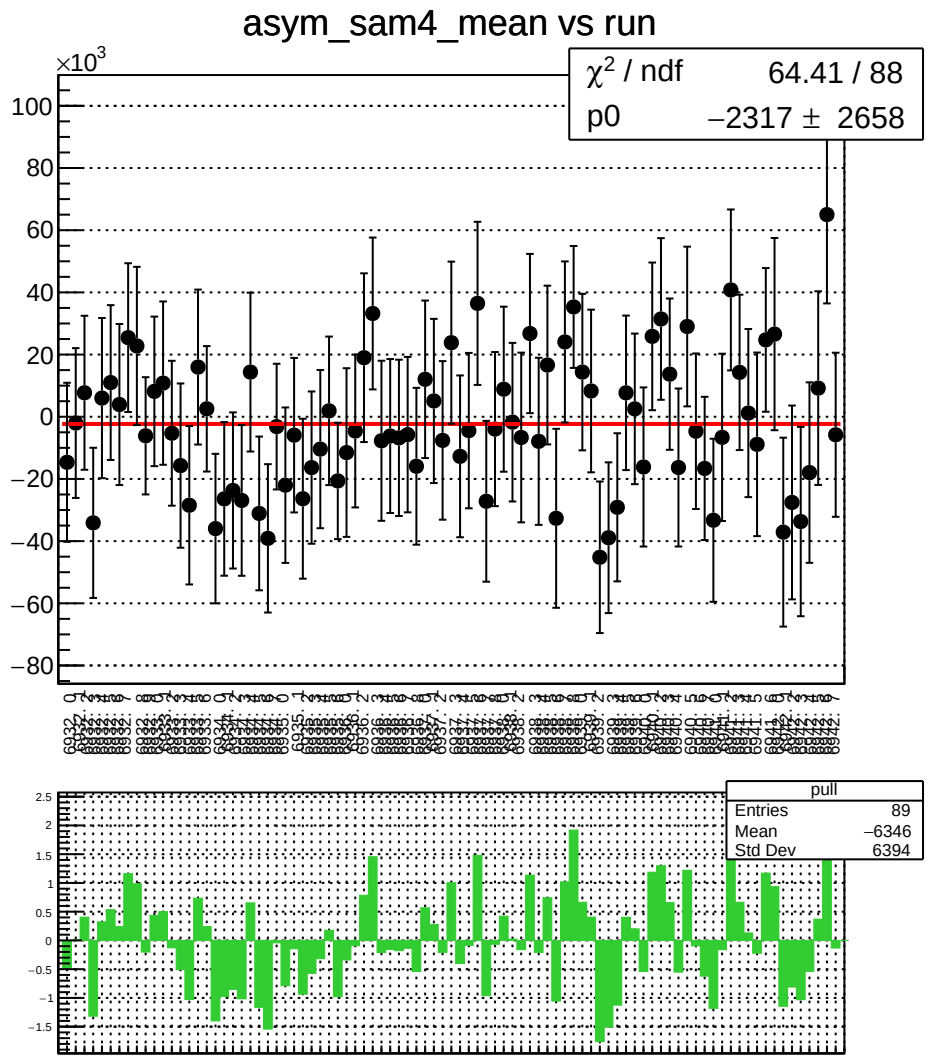

pull1D
Entries 89
Mean −0.005268
Std Dev 1.024
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

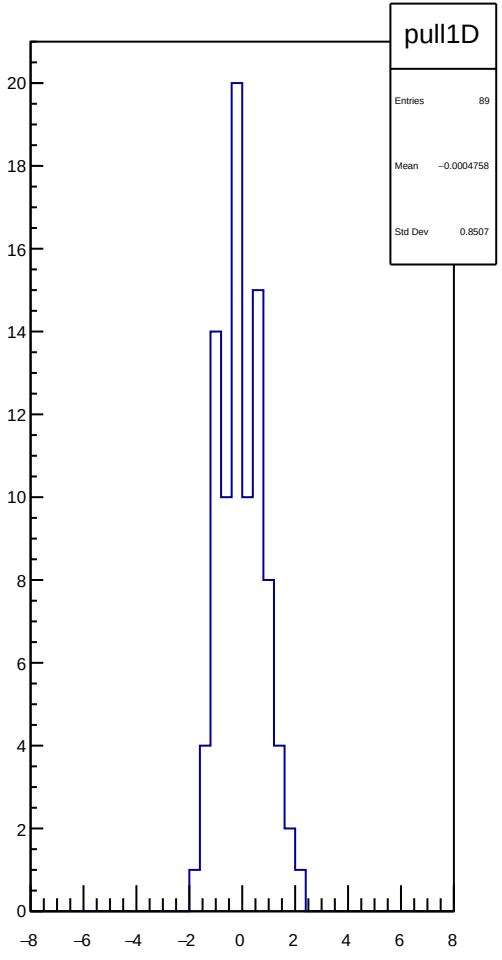

asym_sam2_rms vs run
χ² / ndf 1.042e+04 / 88
p0 2297 ± 1.773
3000
2800
2600
2400
2200
2000

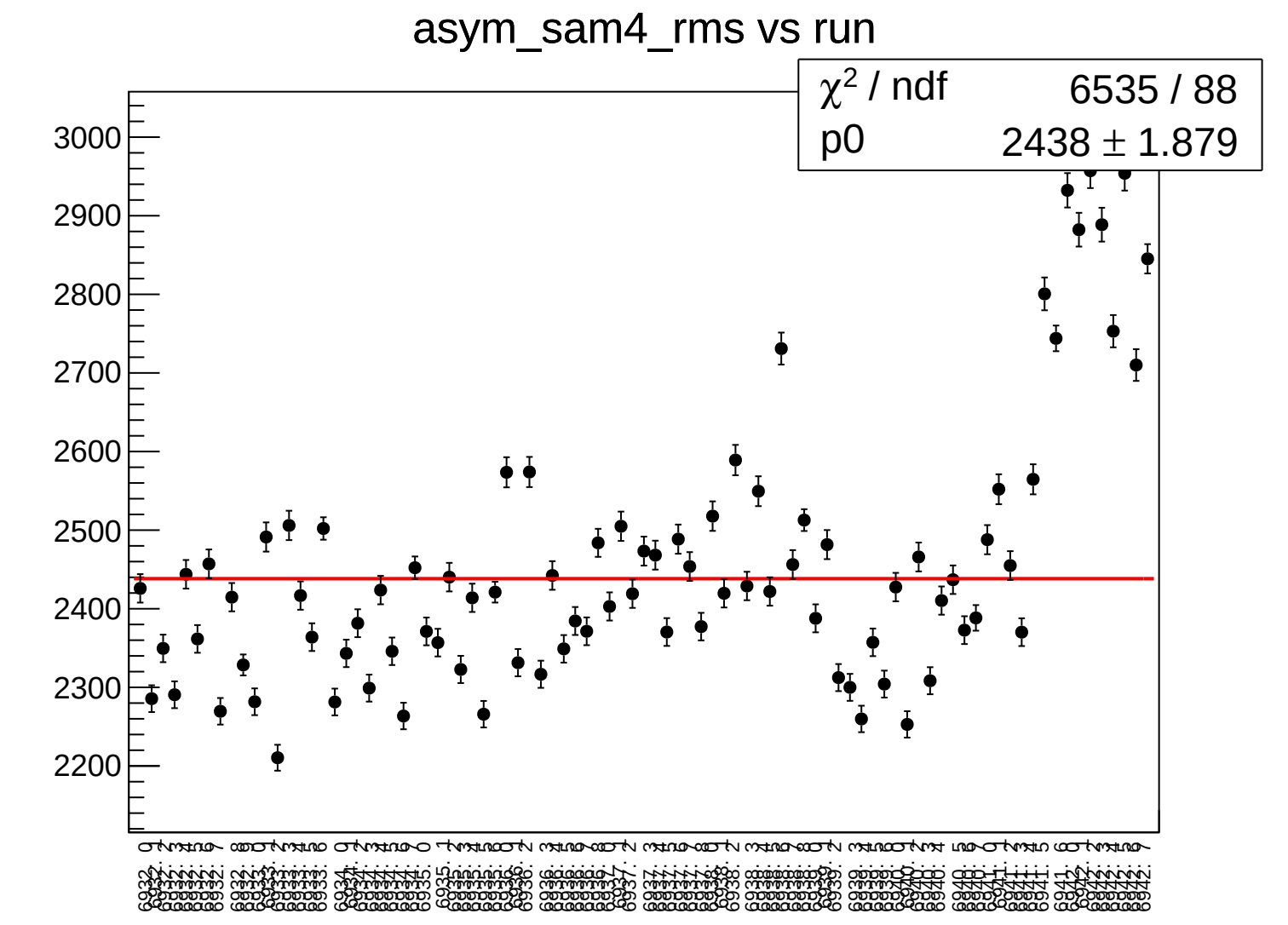

asym_sam3_mean vs run
χ² / ndf 76.02 / 88
p0 −229.5 ± 1217
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −829.1
Std Dev 881.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

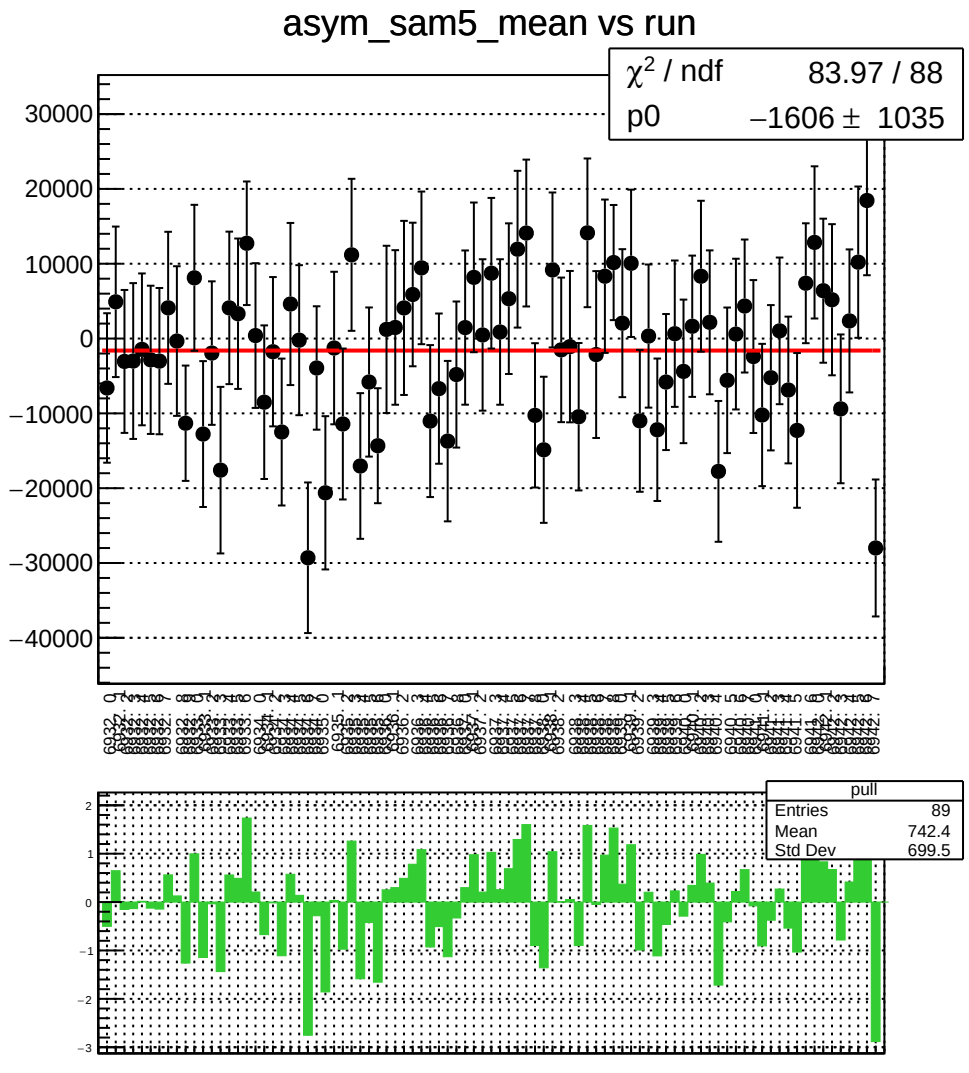

pull1D
Entries 89
Mean −0.002368
Std Dev 0.9242
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

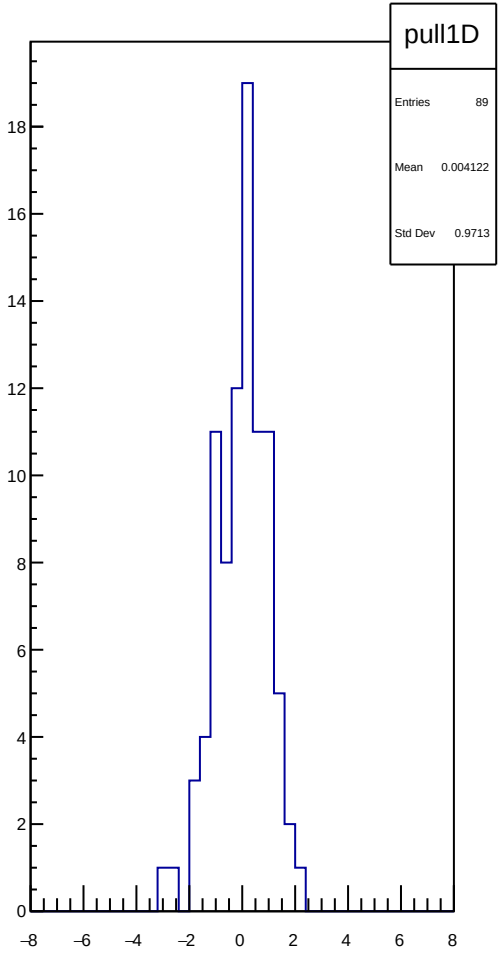

asym_sam3_rms vs run
χ² / ndf 1.381e+04 / 88
p0 1114 ± 0.8608
1500
1400
1300
1200
1100
1000

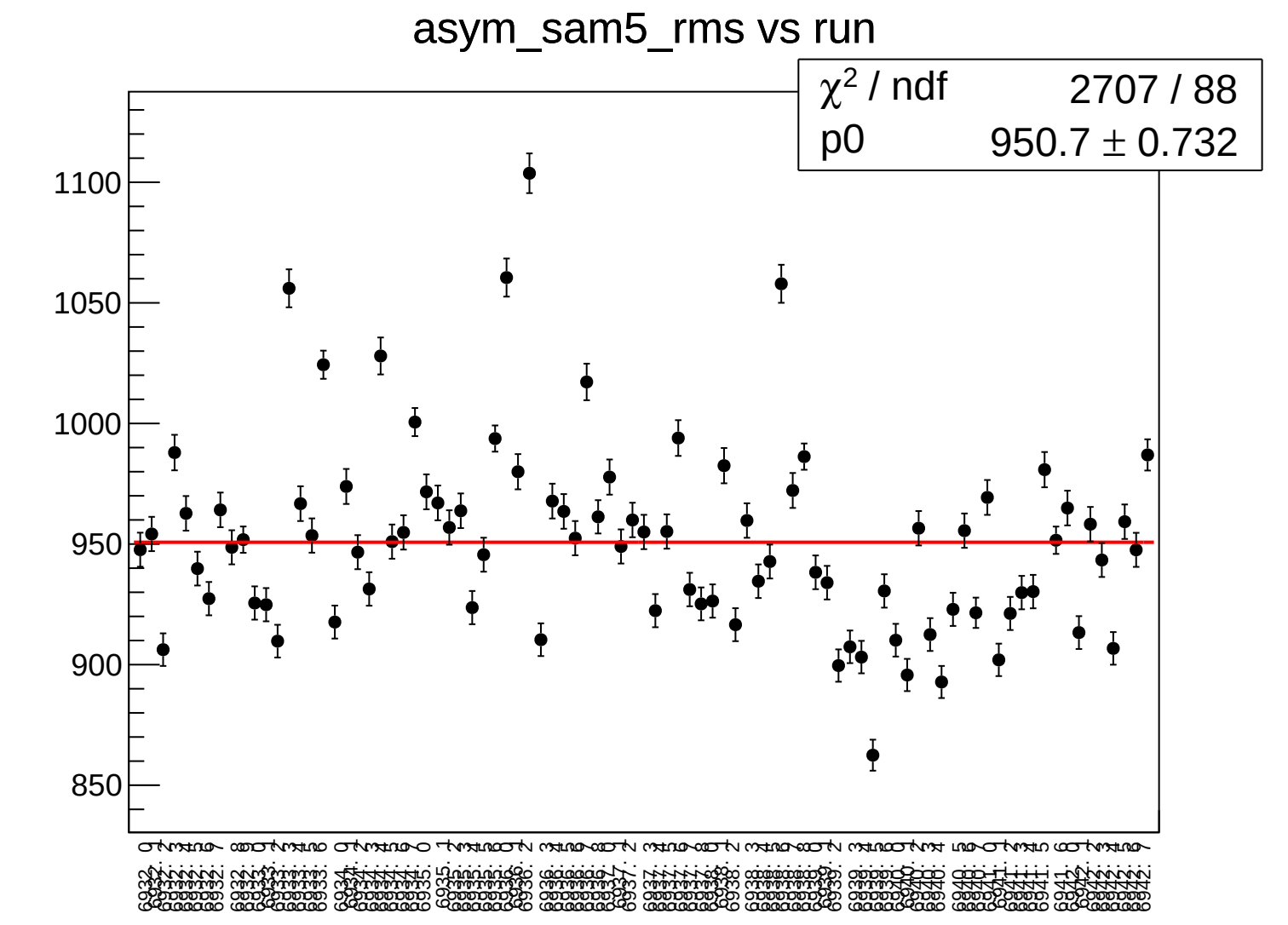

asym_sam4_mean vs run
×10^3
χ^2 / ndf 64.41 / 88
p0 −2317 ± 2658
pull
Entries 89
Mean −6346
Std Dev 6394

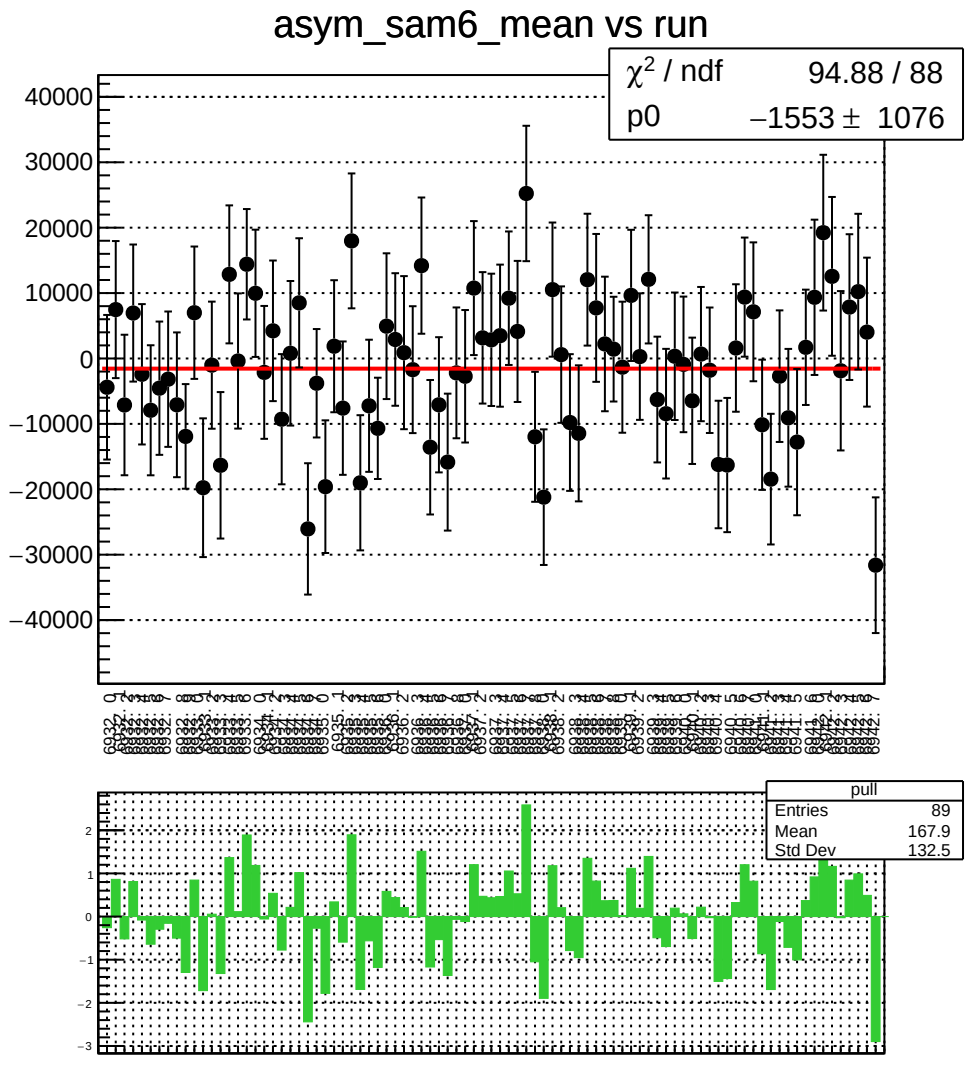

pull1D
Entries 89
Mean −0.0004758
Std Dev 0.8507

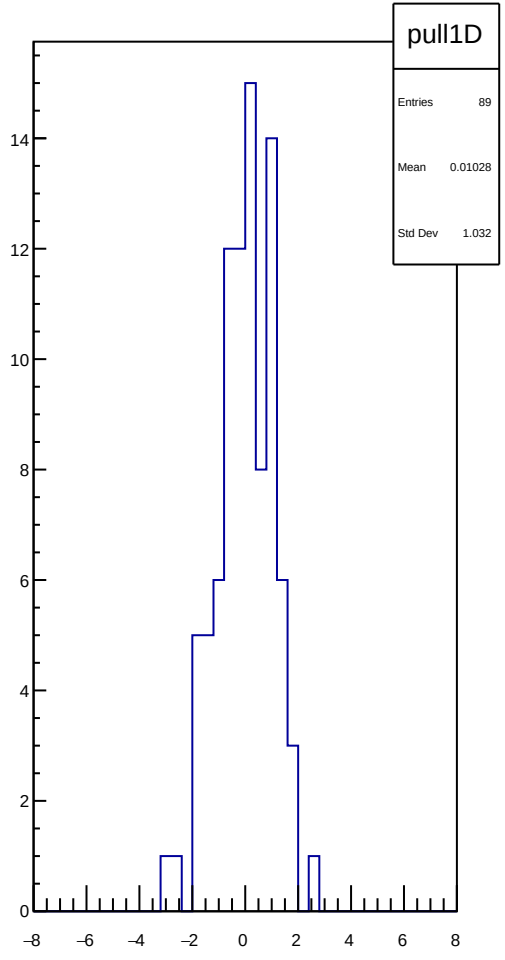

asym_sam4_rms vs run
χ^2 / ndf 6535 / 88
p0 2438 ± 1.879
3000
2900
2800
2700
2600
2500
2400
2300
2200

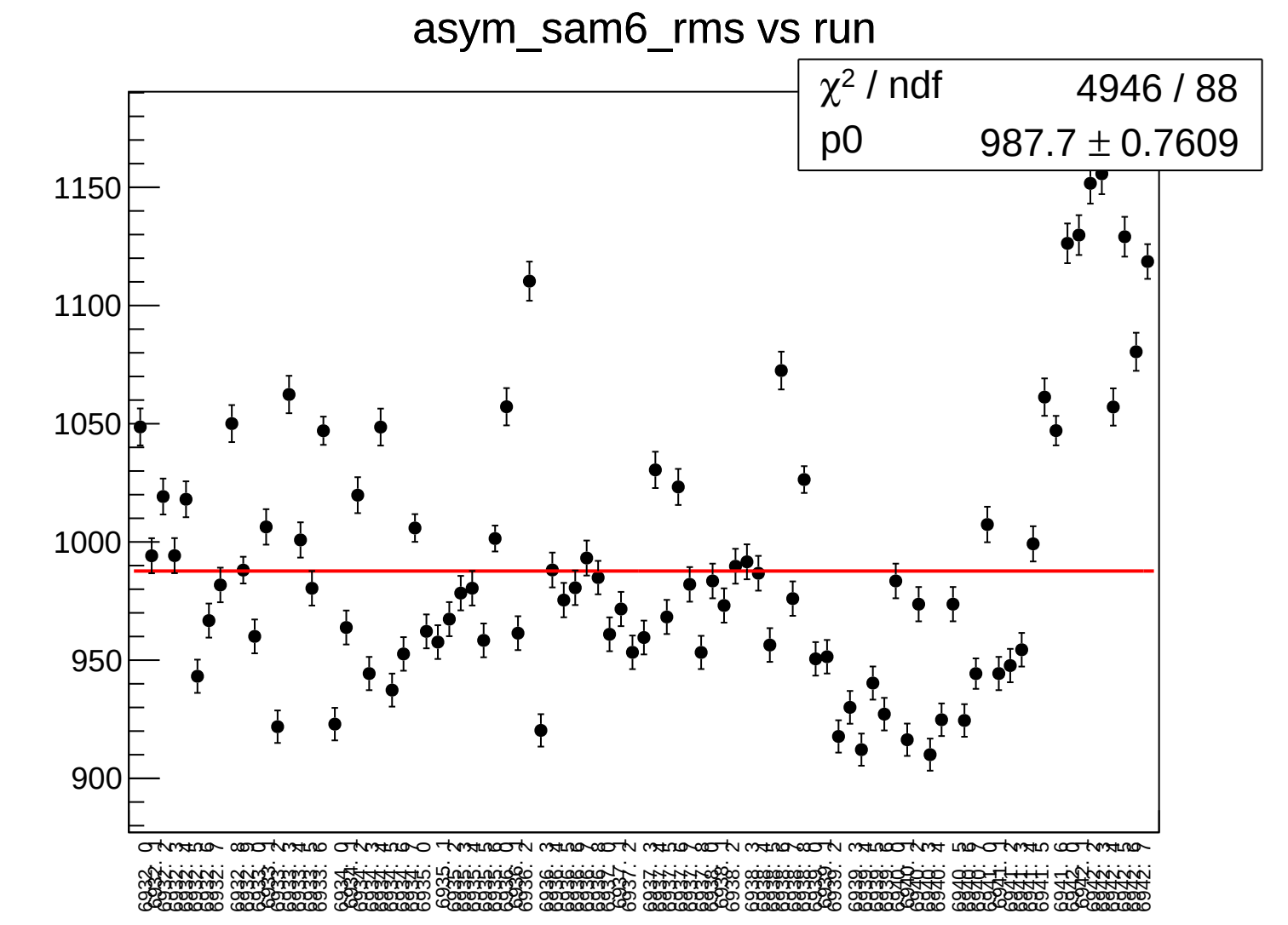

asym_sam5_mean vs run
χ² / ndf 83.97 / 88
p0 −1606 ± 1035
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean 742.4
Std Dev 699.5
2
1
0
−1
−2
−3

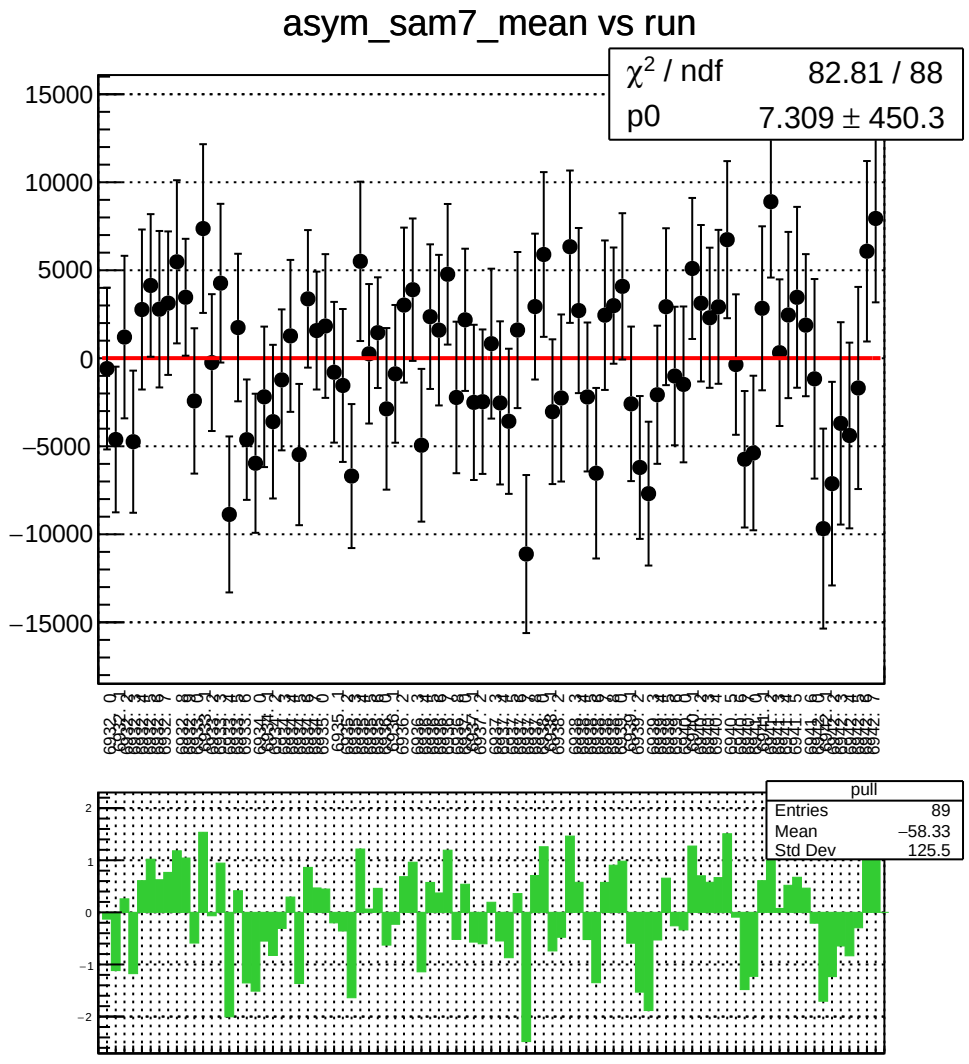

pull1D
Entries 89
Mean 0.004122
Std Dev 0.9713
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

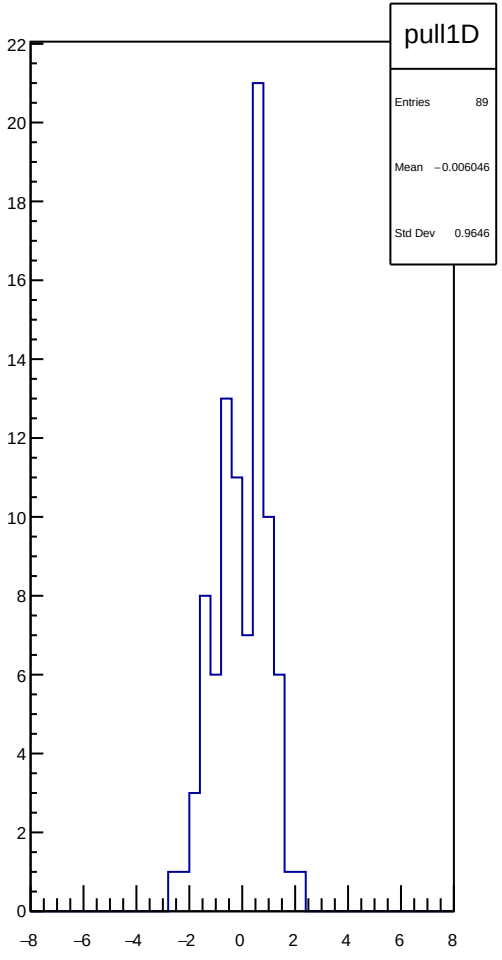

asym_sam5_rms vs run
χ^2 / ndf 2707 / 88
p0 950.7 ± 0.732
1100
1050
1000
950
900
850

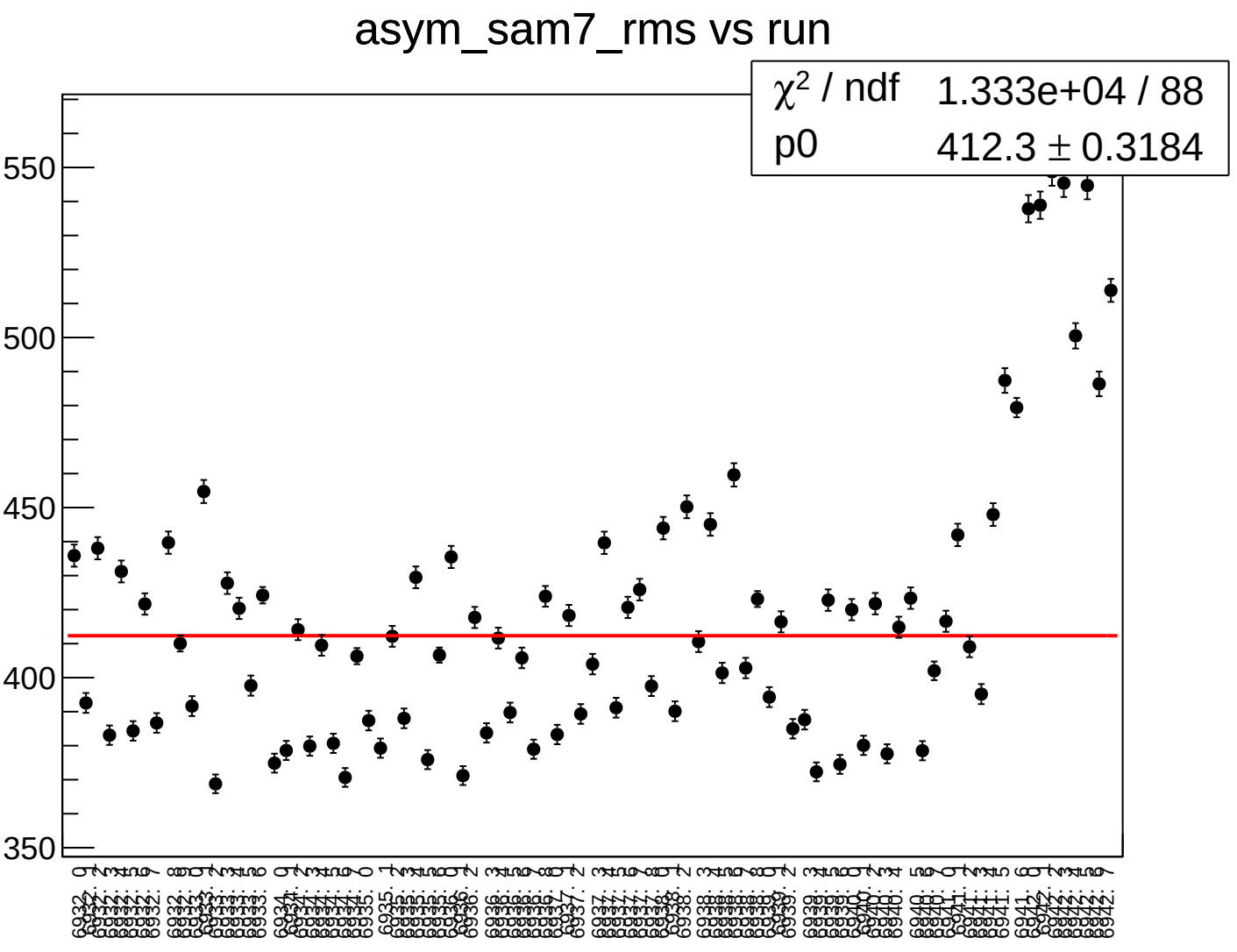

asym_sam6_mean vs run
χ² / ndf 94.88 / 88
p0 −1553 ± 1076
pull
Entries 89
Mean 167.9
Std Dev 132.5

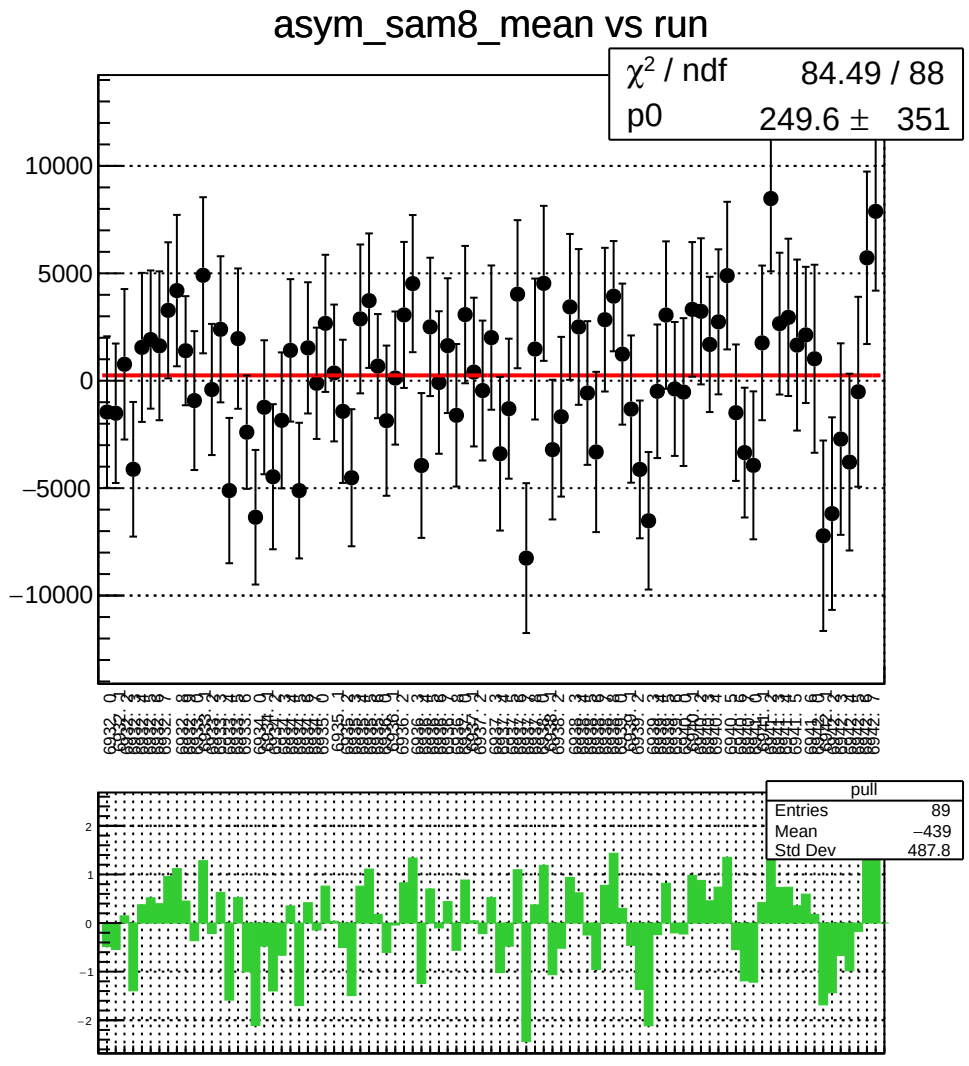

pull1D
Entries 89
Mean 0.01028
Std Dev 1.032

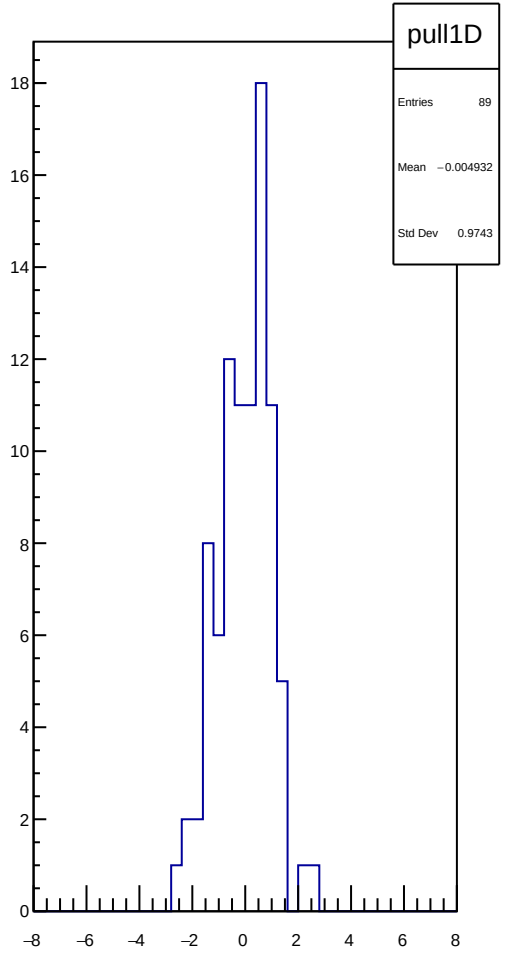

asym_sam6_rms vs run
χ² / ndf 4946 / 88
p0 987.7 ± 0.7609
1150
1100
1050
1000
950
900

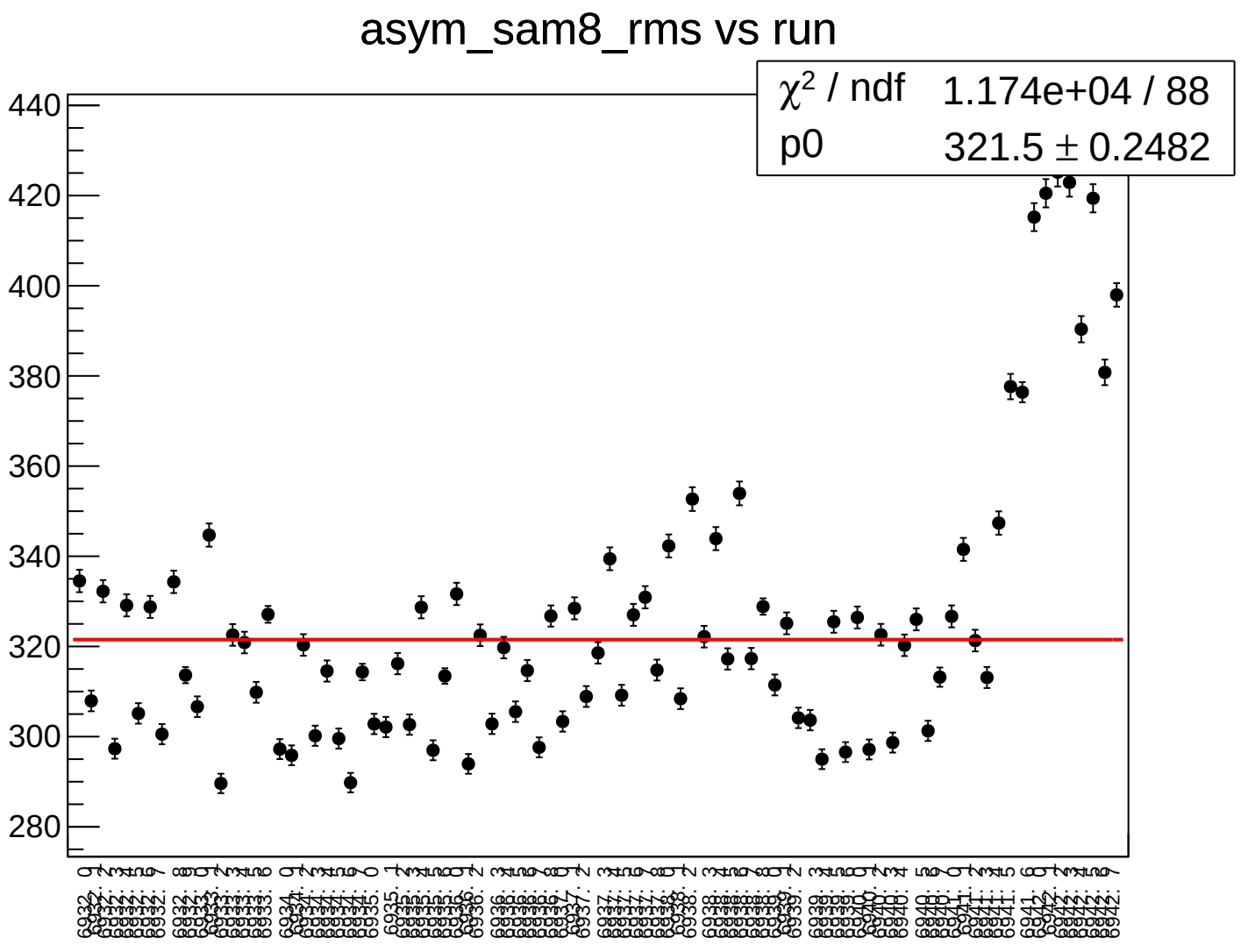

asym_sam7_mean vs run
χ² / ndf 82.81 / 88
p0 7.309 ± 450.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −58.33
Std Dev 125.5
2
1
0
−1
−2

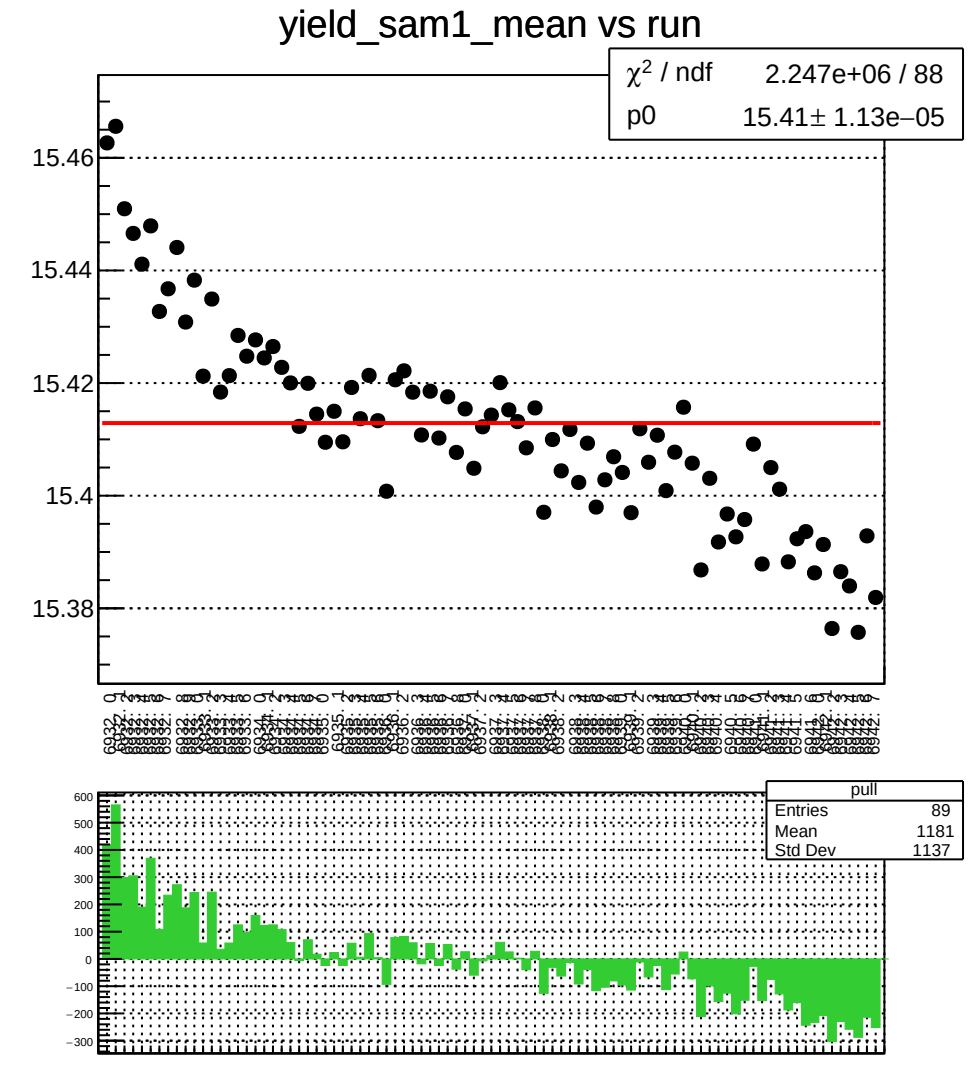

pull1D
Entries 89
Mean −0.006046
Std Dev 0.9646
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

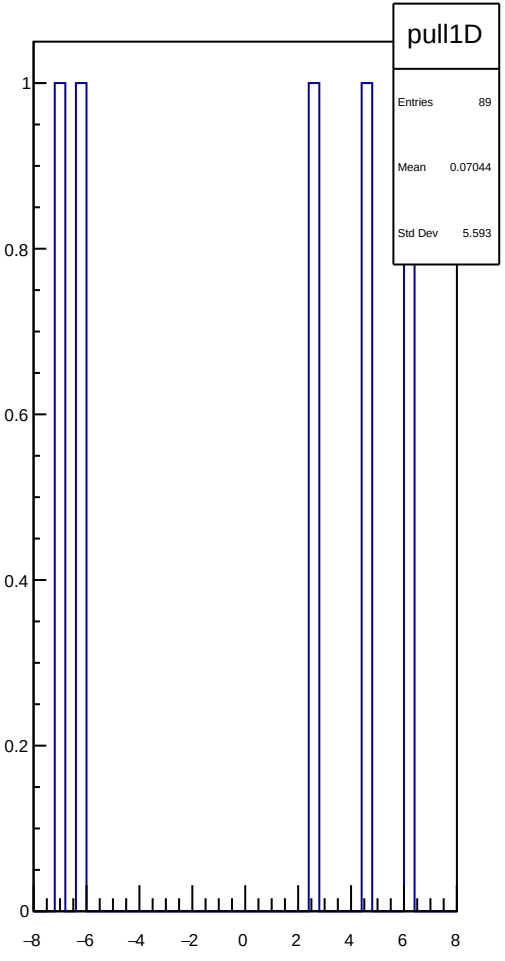

asym_sam7_rms vs run
χ² / ndf 1.333e+04 / 88
p0 412.3 ± 0.3184
550
500
450
400
350

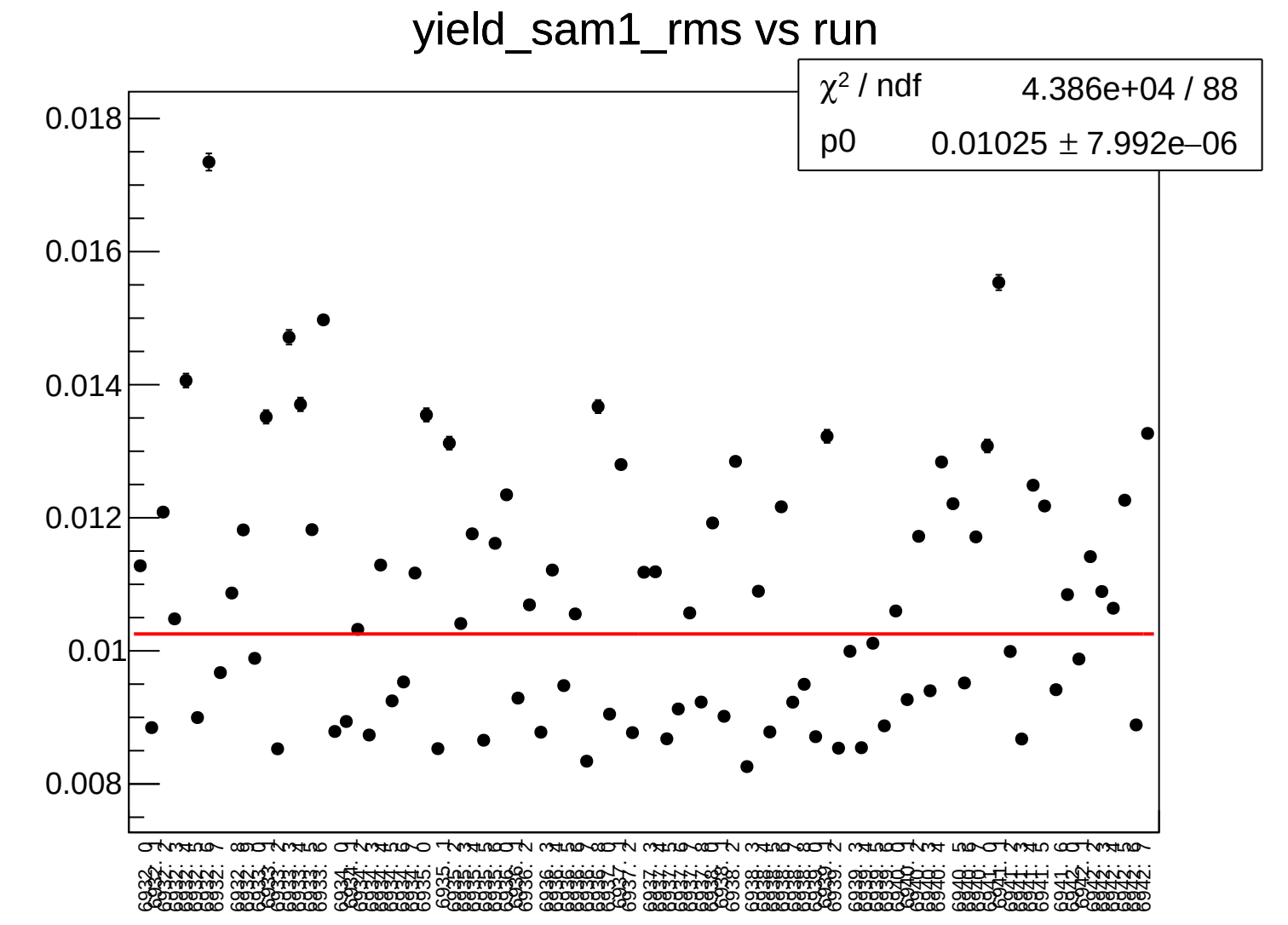

asym_sam8_mean vs run
χ² / ndf 84.49 / 88
p0 249.6 ± 351
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −439
Std Dev 487.8
2
1
0
−1
−2

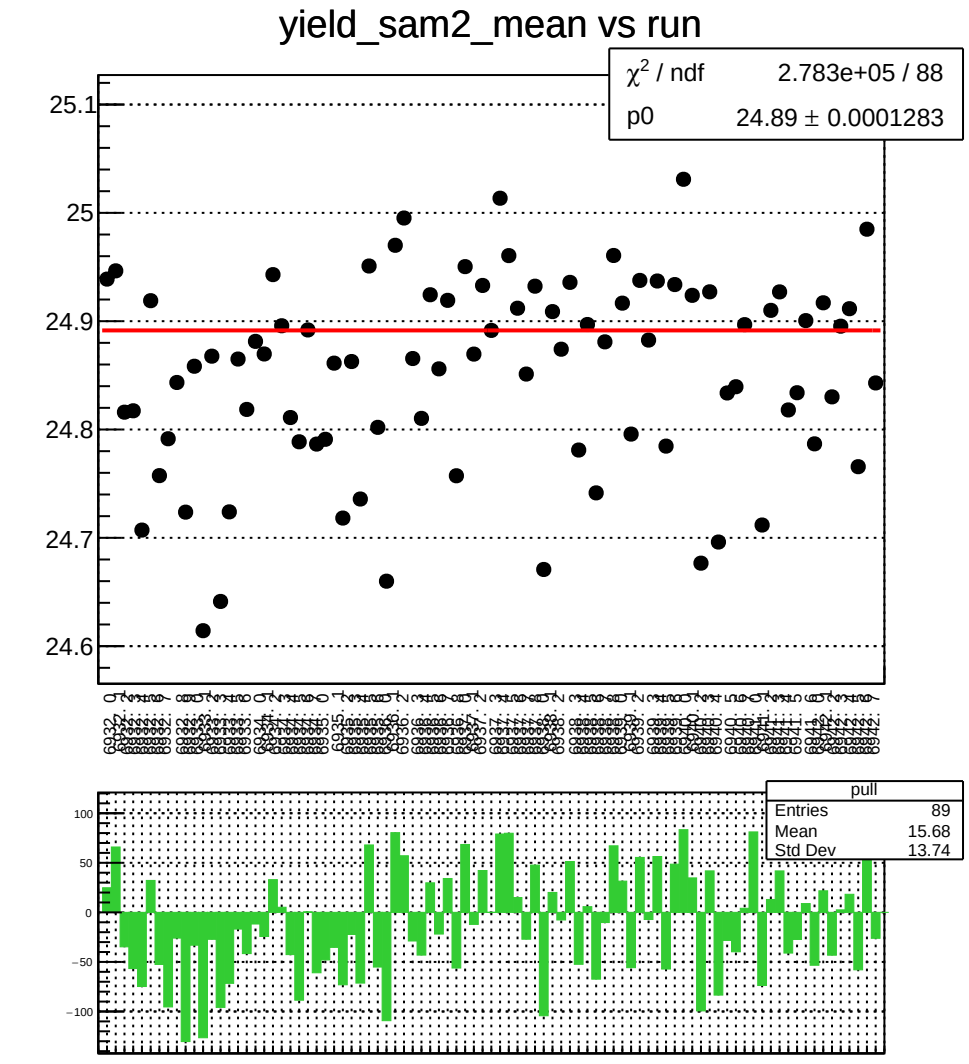

pull1D
Entries 89
Mean −0.004932
Std Dev 0.9743
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

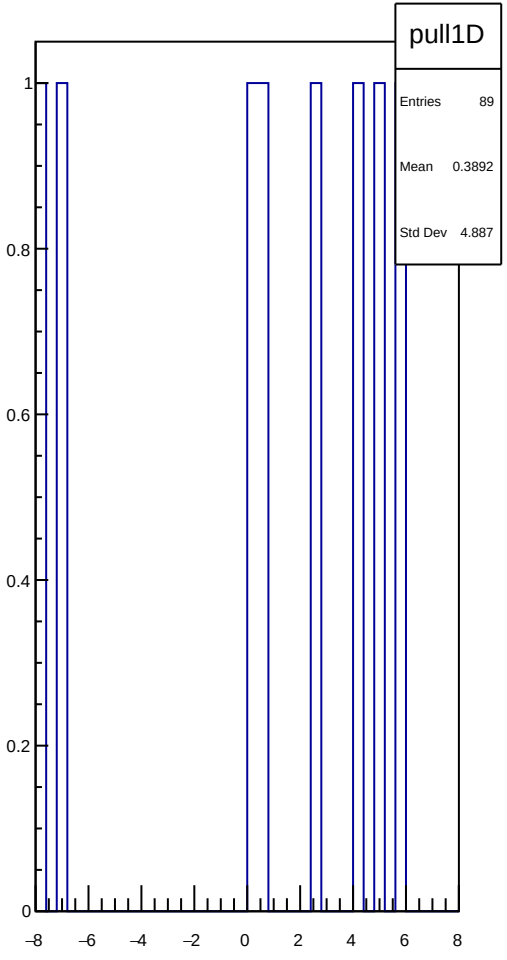

asym_sam8_rms vs run
χ^2 / ndf 1.174e+04 / 88
p0 321.5 ± 0.2482
440
420
400
380
360
340
320
300
280

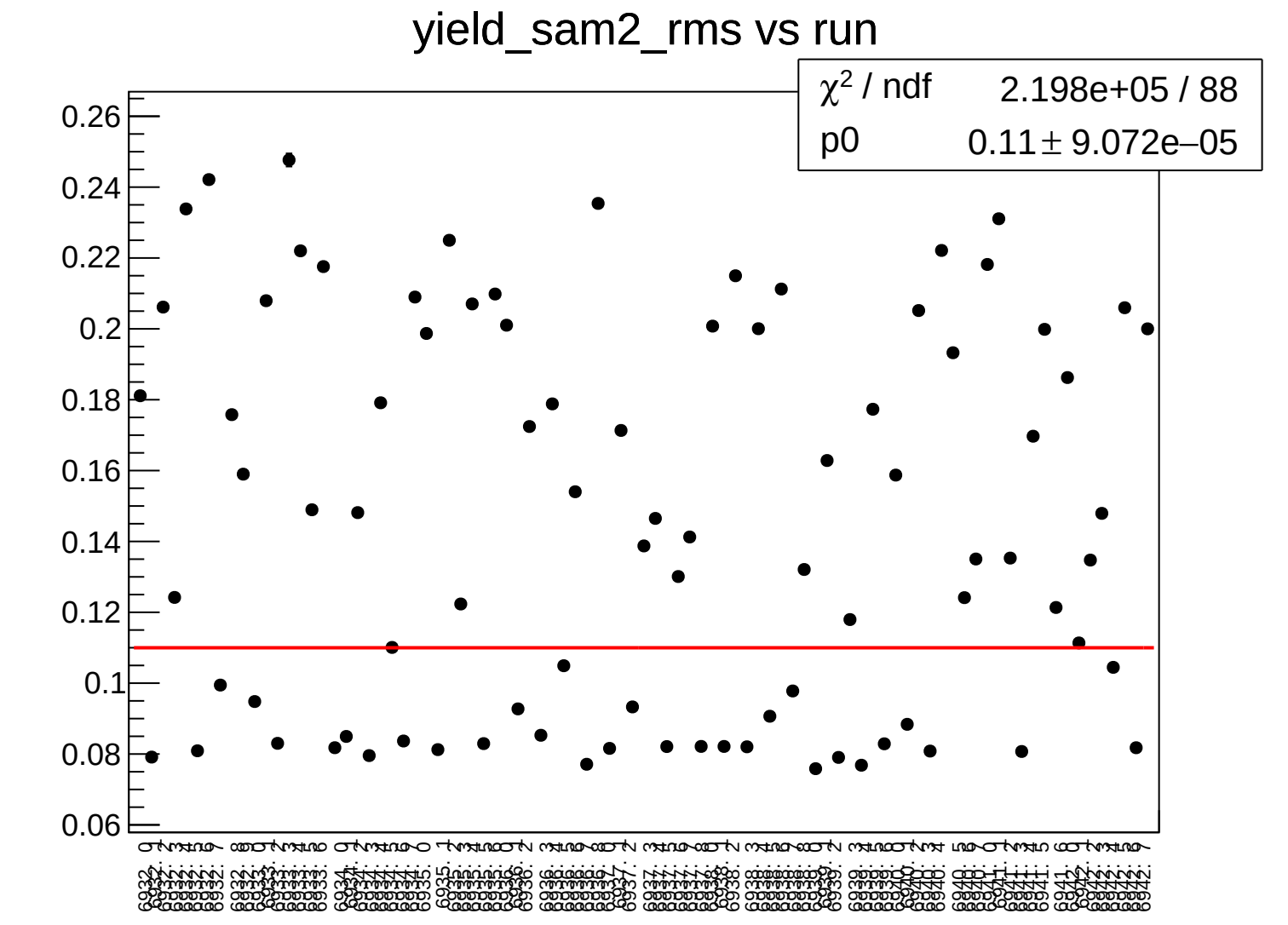

yield_sam1_mean vs run
χ² / ndf 2.247e+06 / 88
p0 15.41± 1.13e−05
15.46
15.44
15.42
15.4
15.38
pull
Entries 89
Mean 1181
Std Dev 1137
600
500
400
300
200
100
0
−100
−200
−300

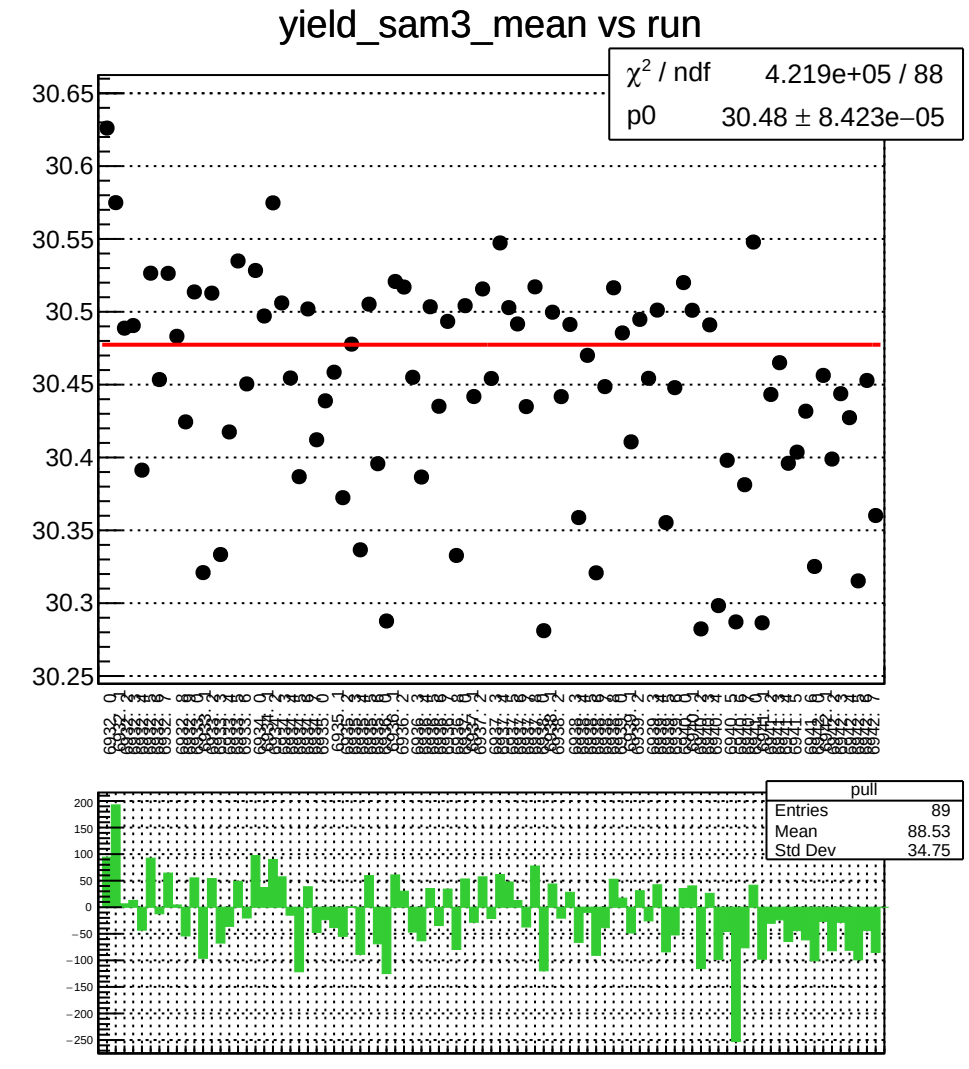

pull1D
Entries 89
Mean 0.07044
Std Dev 5.593
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

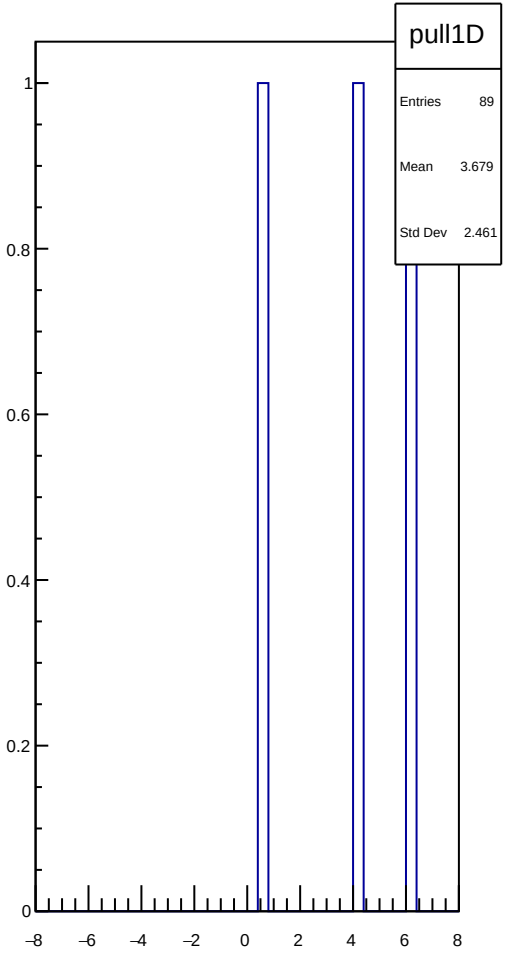

yield_sam1_rms vs run
χ² / ndf 4.386e+04 / 88
p0 0.01025 ± 7.992e–06
0.018
0.016
0.014
0.012
0.01
0.008

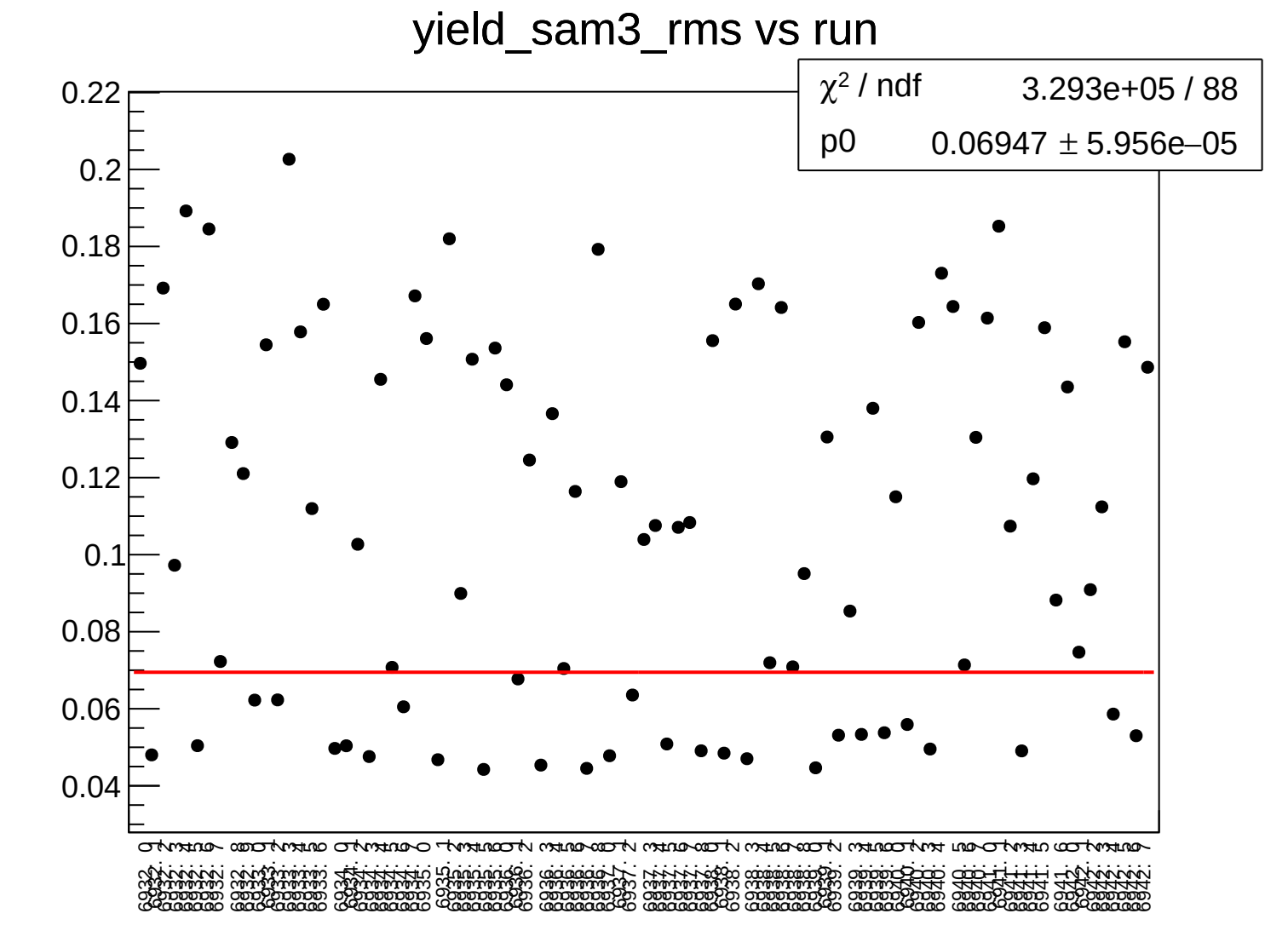

yield_sam2_mean vs run
χ² / ndf 2.783e+05 / 88
p0 24.89 ± 0.0001283
25.1
25
24.9
24.8
24.7
24.6
pull
Entries 89
Mean 15.68
Std Dev 13.74
100
50
0
−50
−100

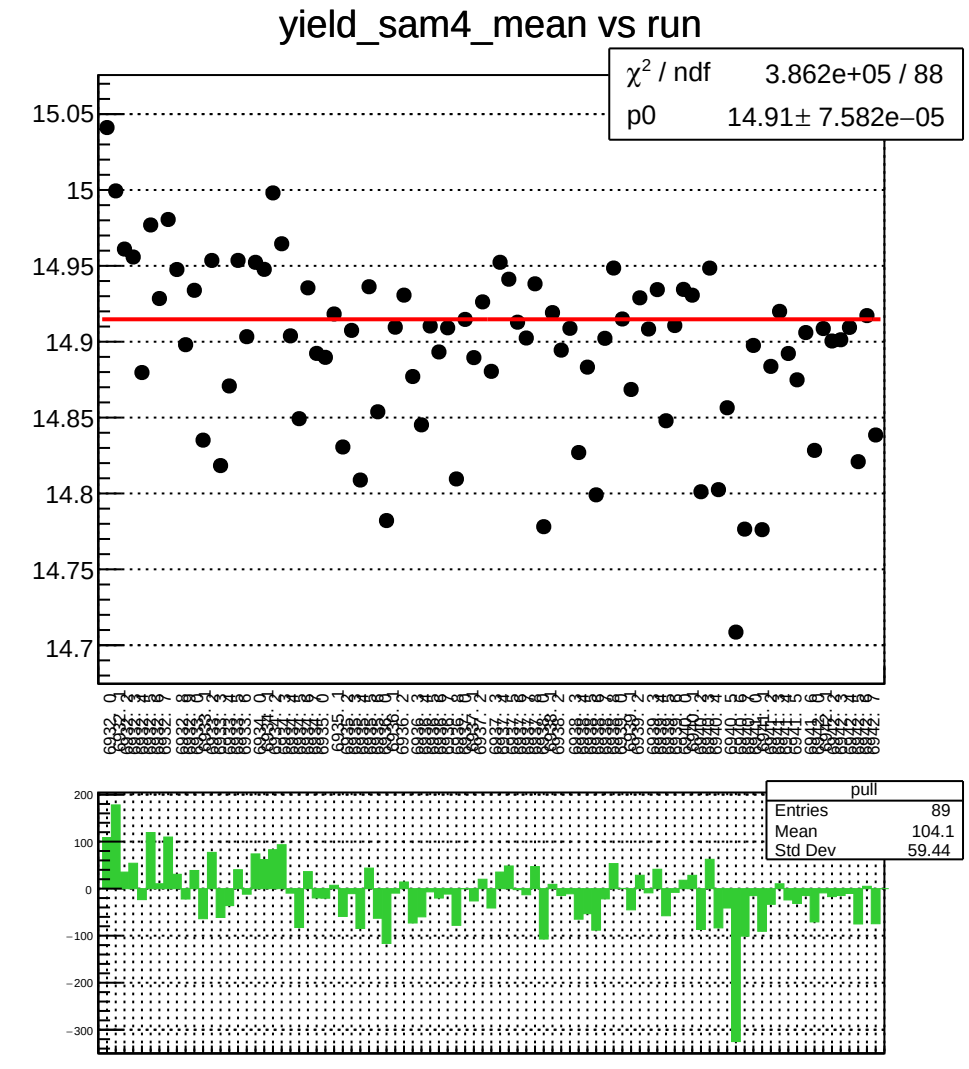

pull1D
Entries 89
Mean 0.3892
Std Dev 4.887
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

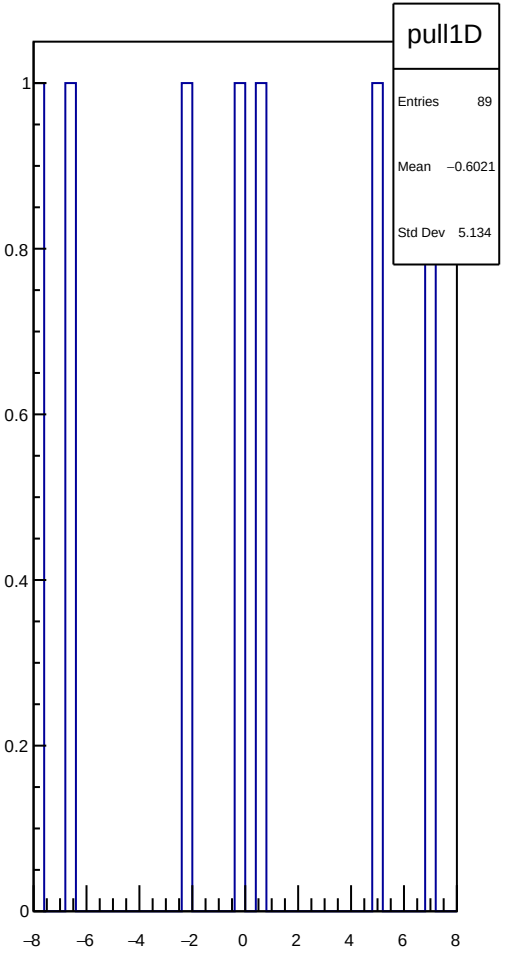

yield_sam2_rms vs run
χ² / ndf 2.198e+05 / 88
p0 0.11 ± 9.072e−05
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

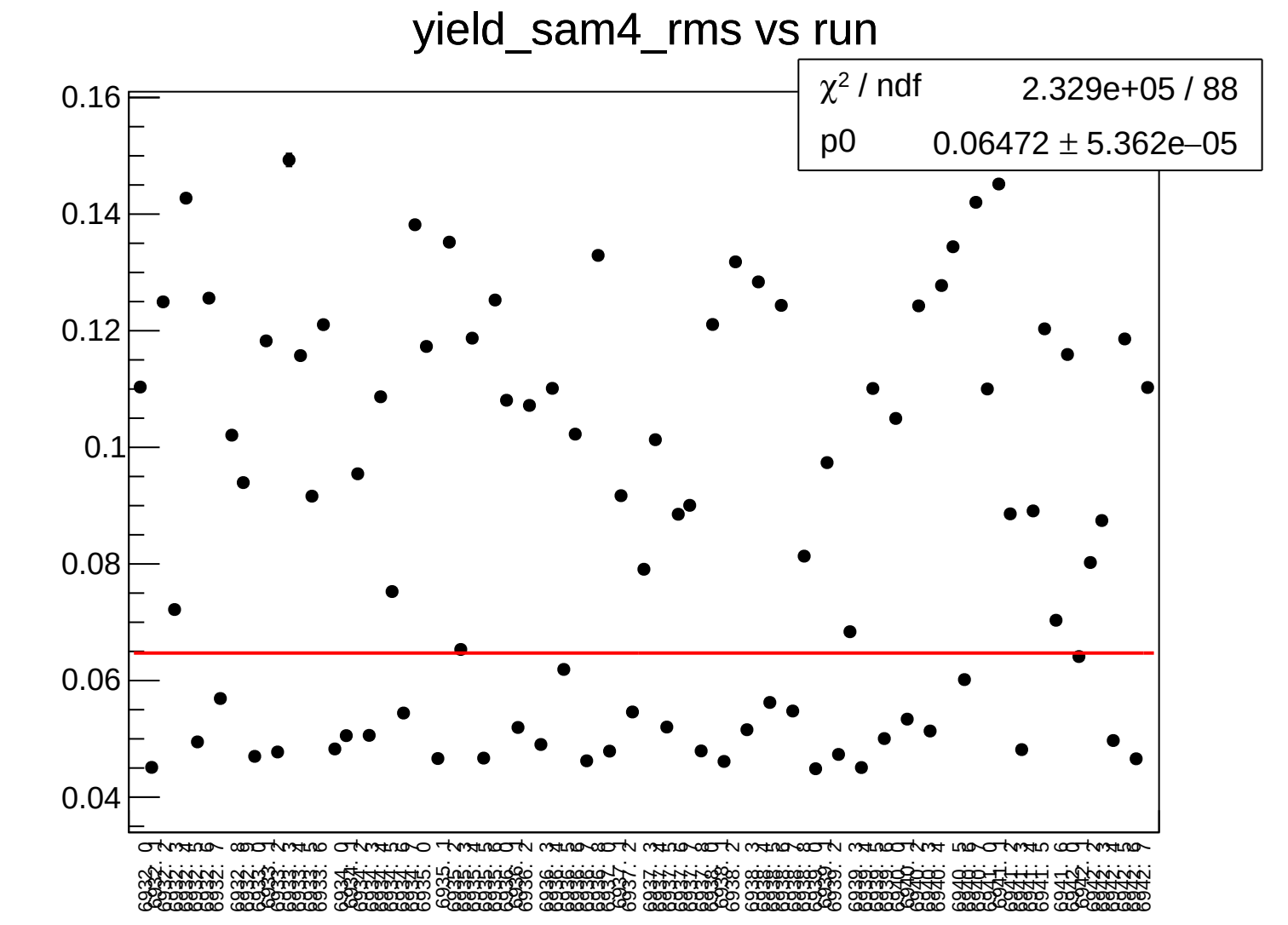

yield_sam3_mean vs run
χ² / ndf 4.219e+05 / 88
p0 30.48 ± 8.423e−05
30.65
30.6
30.55
30.5
30.45
30.4
30.35
30.3
30.25
pull
Entries 89
Mean 88.53
Std Dev 34.75
200
150
100
50
0
−50
−100
−150
−200
−250

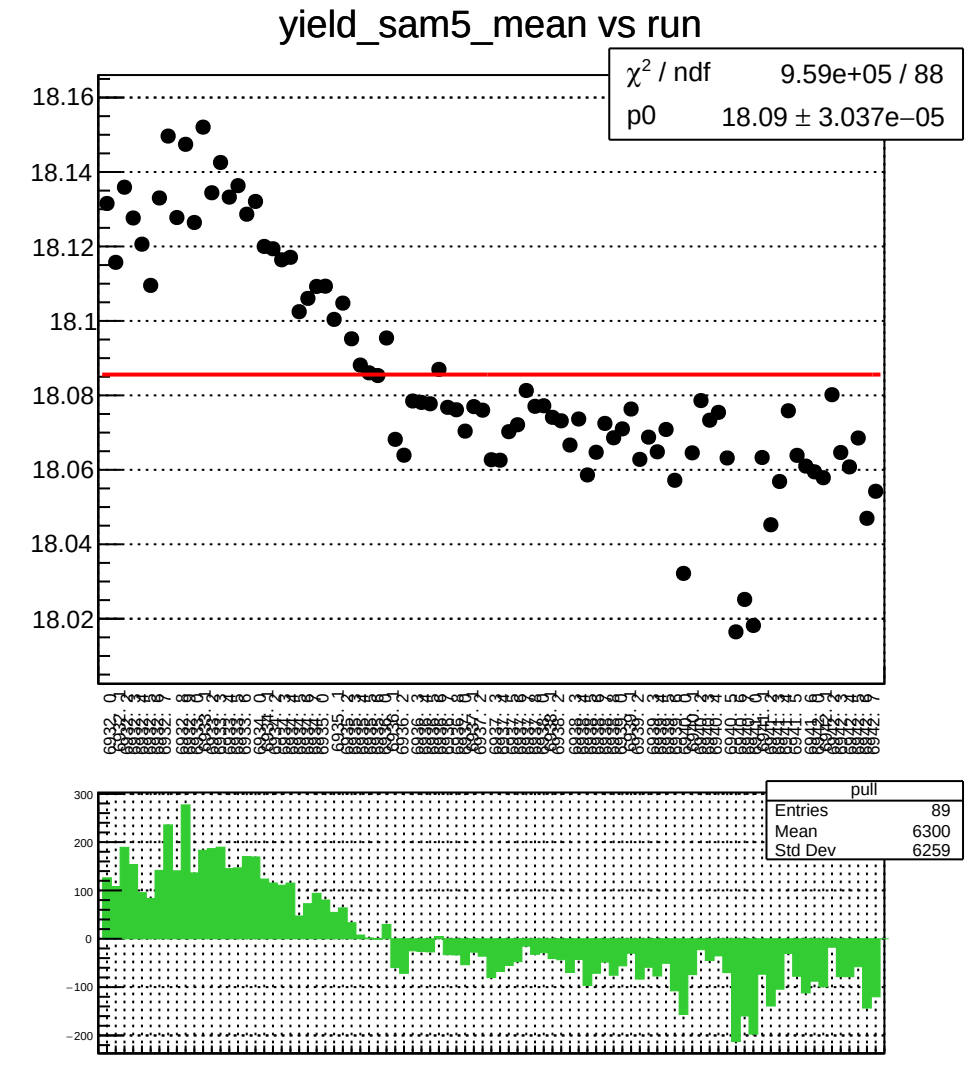

pull1D
Entries 89
Mean 3.679
Std Dev 2.461
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

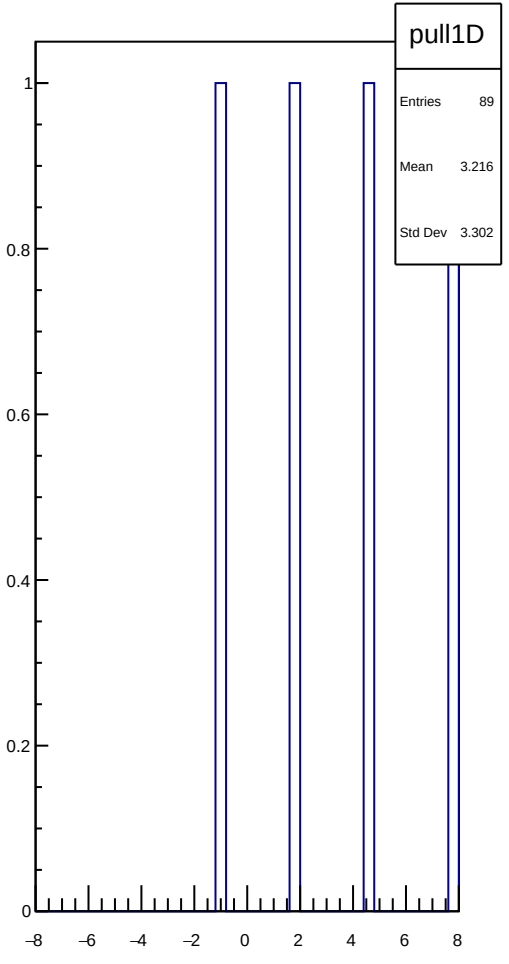

yield_sam3_rms vs run
χ² / ndf 3.293e+05 / 88
p0 0.06947 ± 5.956e−05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

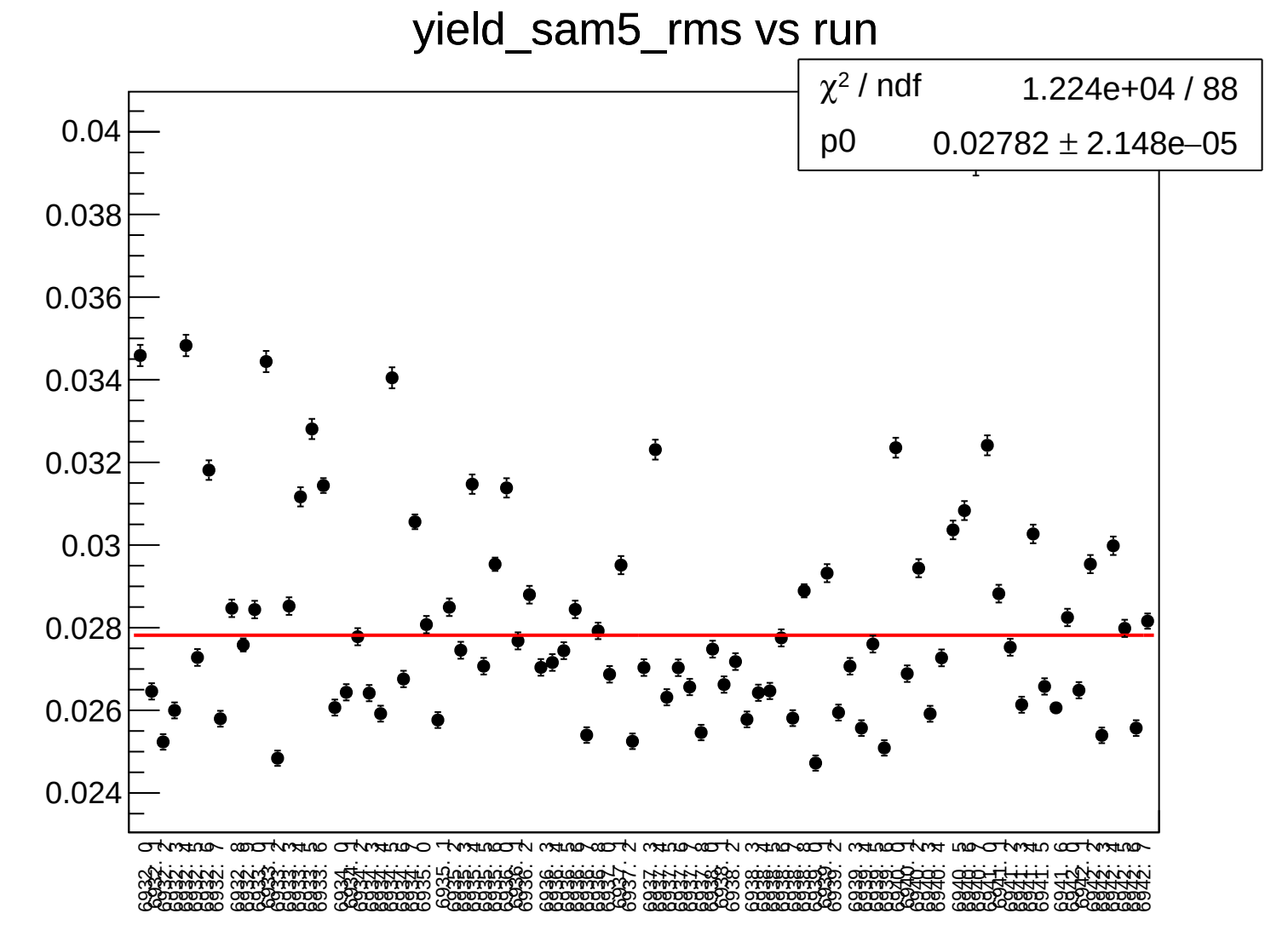

yield_sam4_mean vs run
χ² / ndf 3.862e+05 / 88
p0 14.91± 7.582e−05
15.05
15
14.95
14.9
14.85
14.8
14.75
14.7
pull
Entries 89
Mean 104.1
Std Dev 59.44
200
100
0
−100
−200
−300

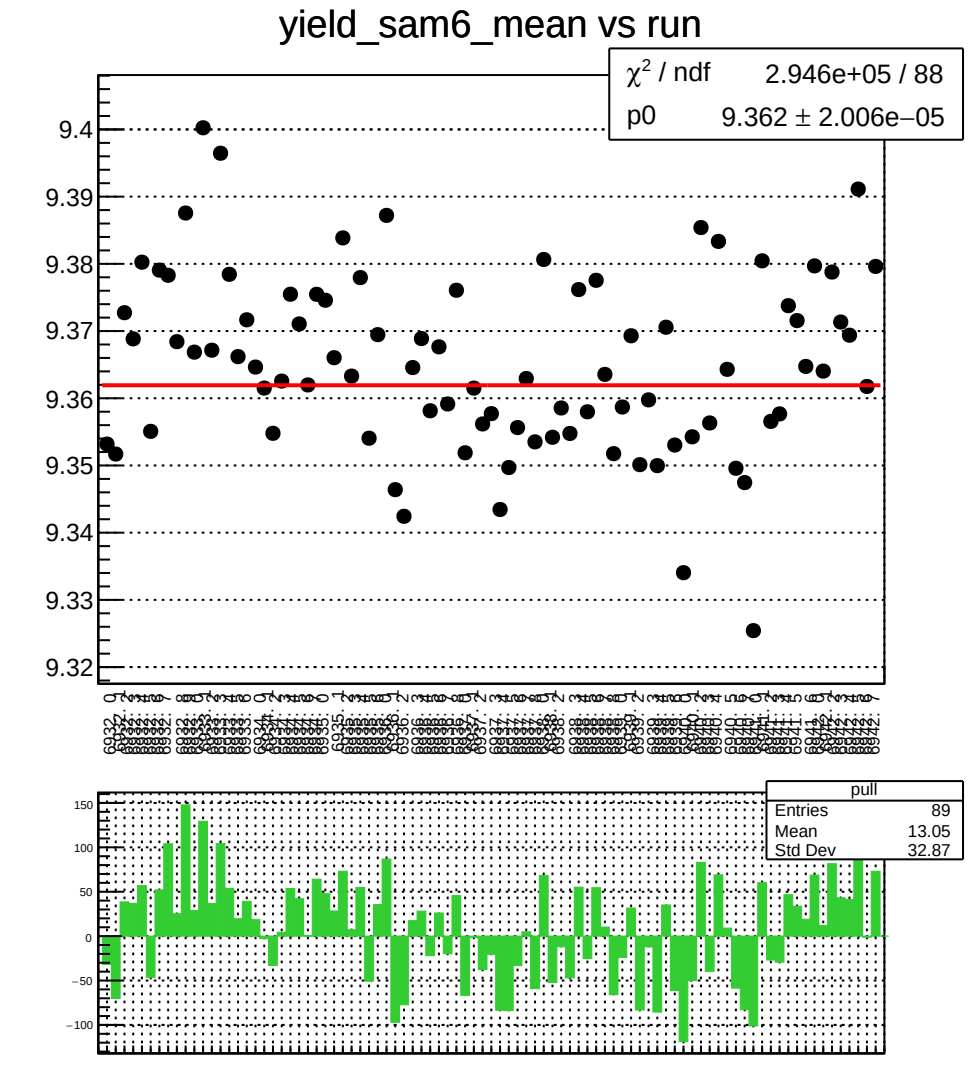

pull1D
Entries 89
Mean −0.6021
Std Dev 5.134
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

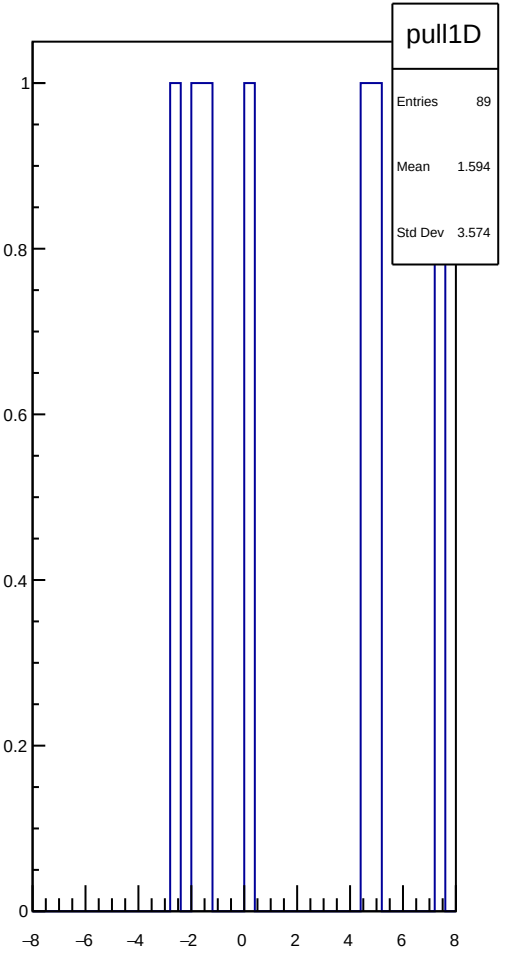

yield_sam4_rms vs run
χ² / ndf 2.329e+05 / 88
p0 0.06472 ± 5.362e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

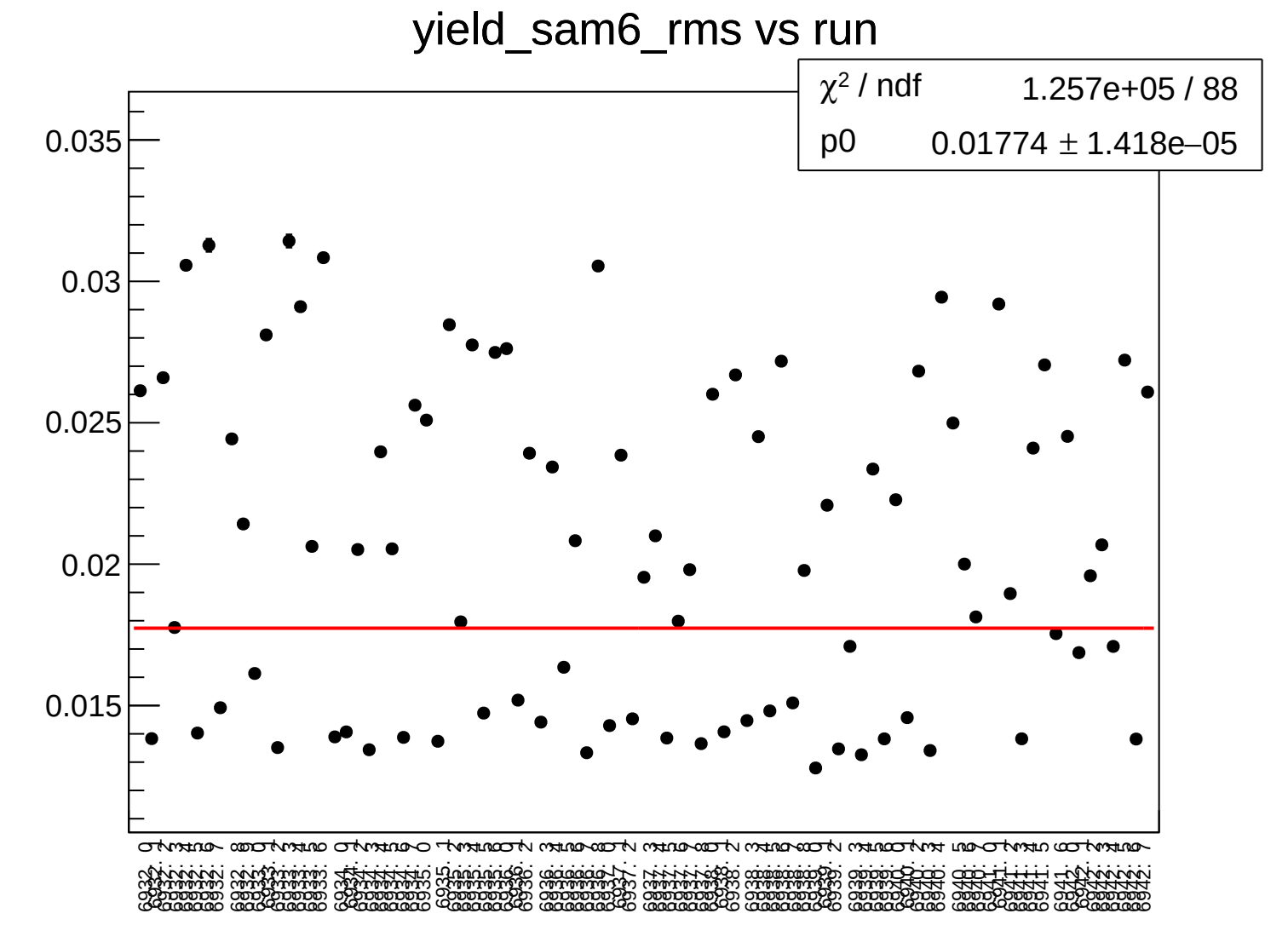

yield_sam5_mean vs run
χ² / ndf 9.59e+05 / 88
p0 18.09 ± 3.037e−05
18.16
18.14
18.12
18.1
18.08
18.06
18.04
18.02
pull
Entries 89
Mean 6300
Std Dev 6259
300
200
100
0
−100
−200

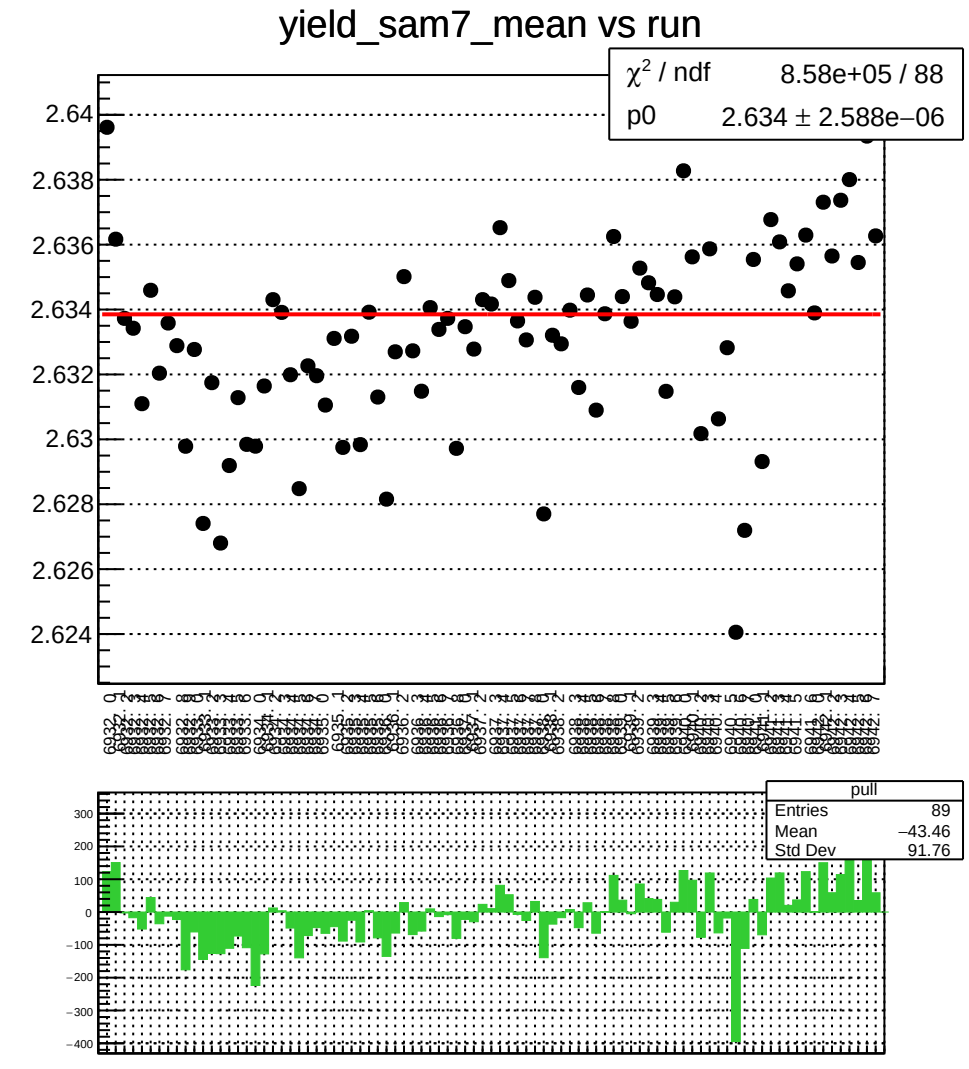

pull1D
Entries 89
Mean 3.216
Std Dev 3.302
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

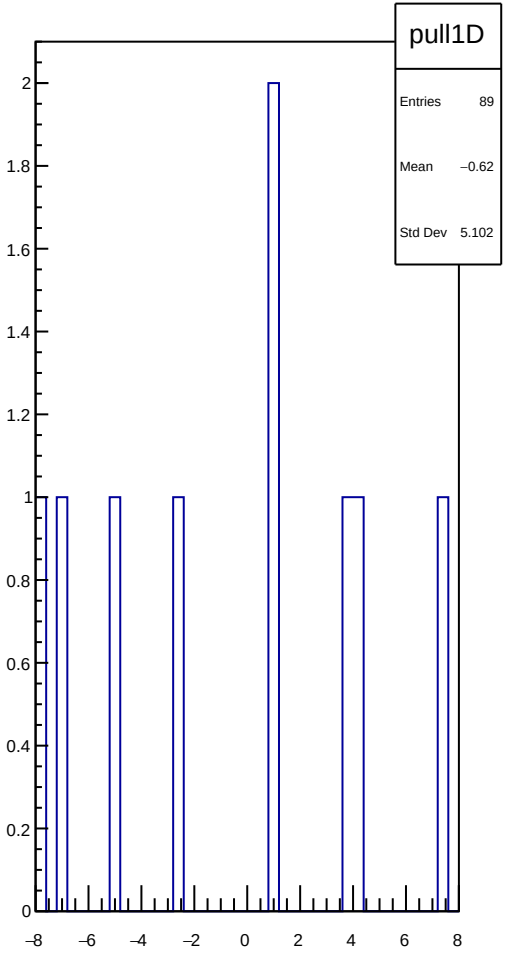

yield_sam5_rms vs run
χ² / ndf 1.224e+04 / 88
p0 0.02782 ± 2.148e−05
0.04
0.038
0.036
0.034
0.032
0.03
0.028
0.026
0.024

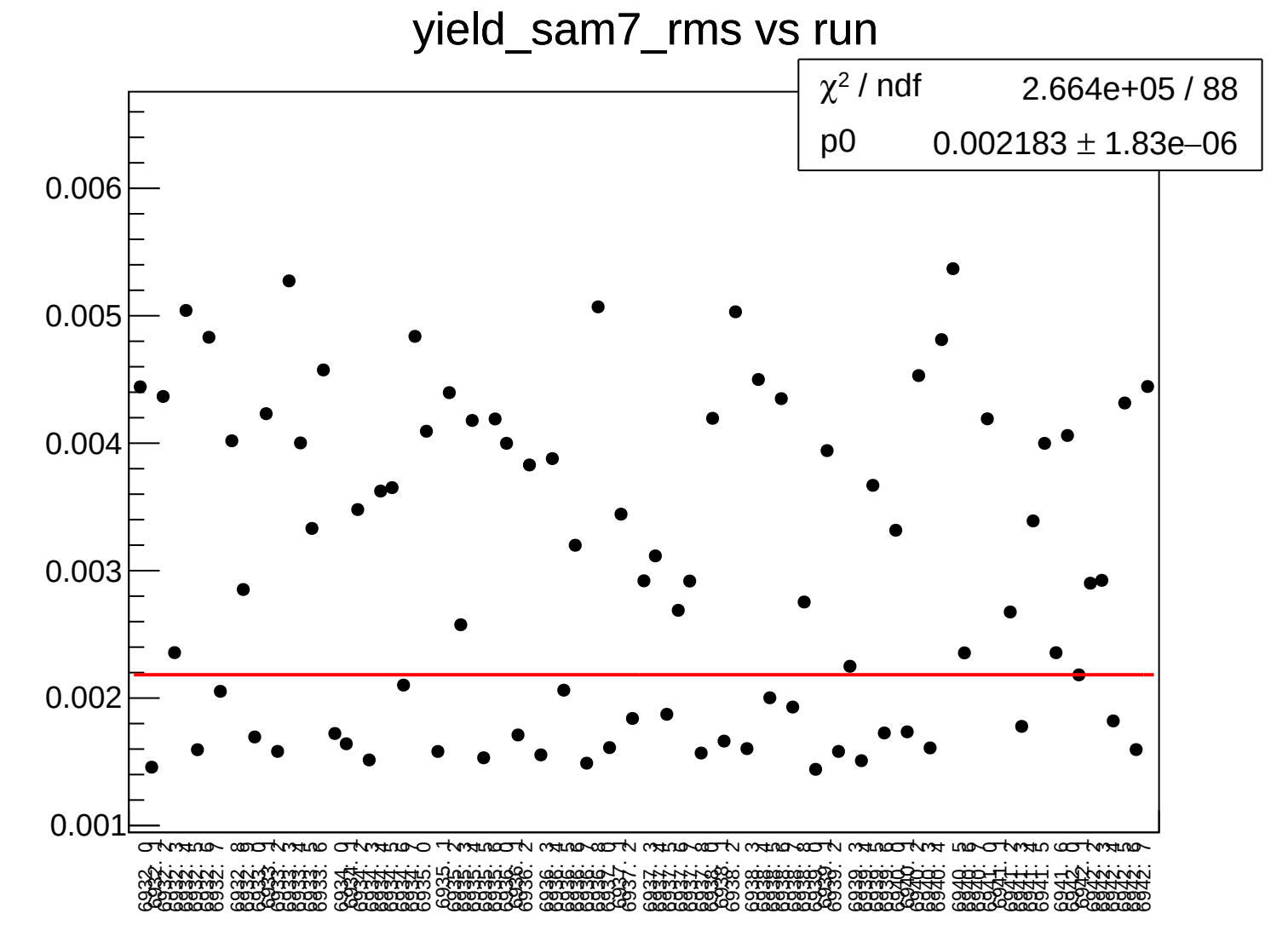

yield_sam6_mean vs run
χ² / ndf 2.946e+05 / 88
p0 9.362 ± 2.006e−05
9.4
9.39
9.38
9.37
9.36
9.35
9.34
9.33
9.32
pull
Entries 89
Mean 13.05
Std Dev 32.87
150
100
50
0
−50
−100

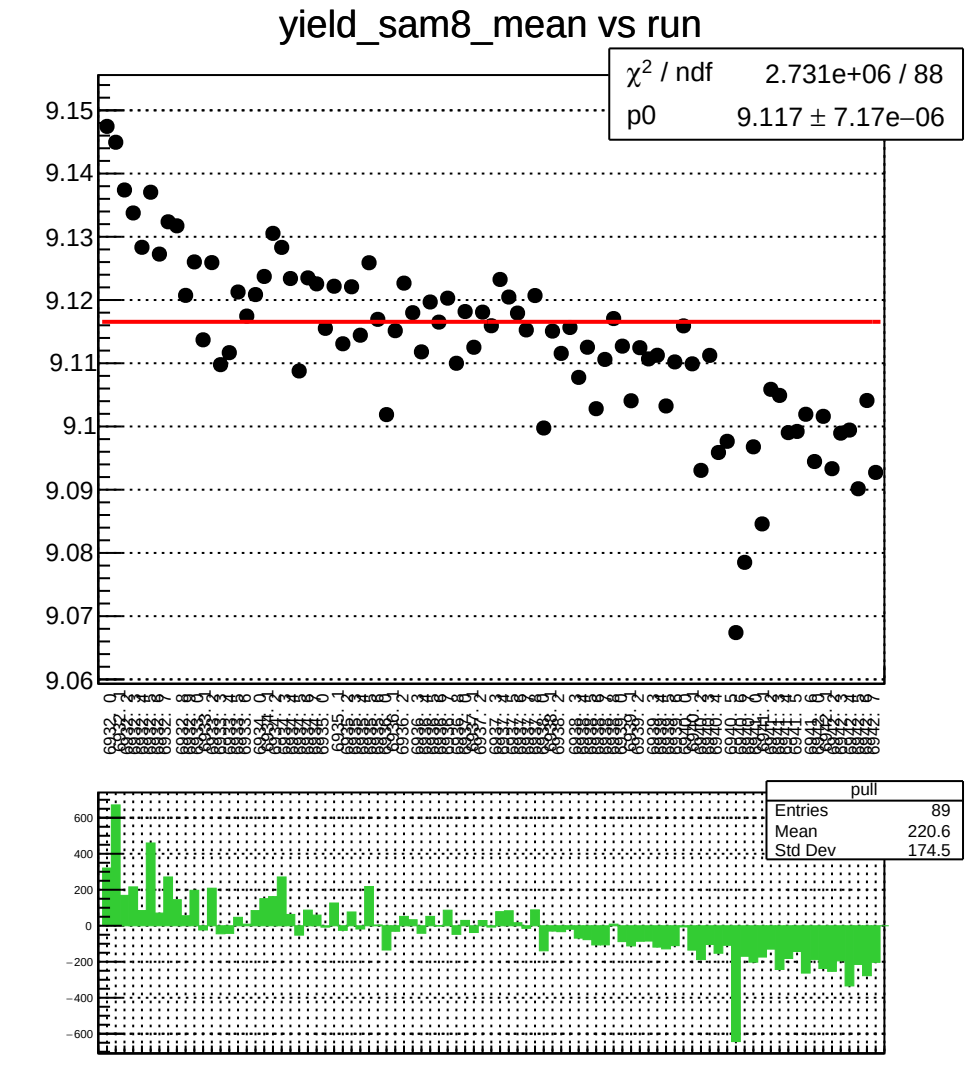

pull1D
Entries 89
Mean 1.594
Std Dev 3.574
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

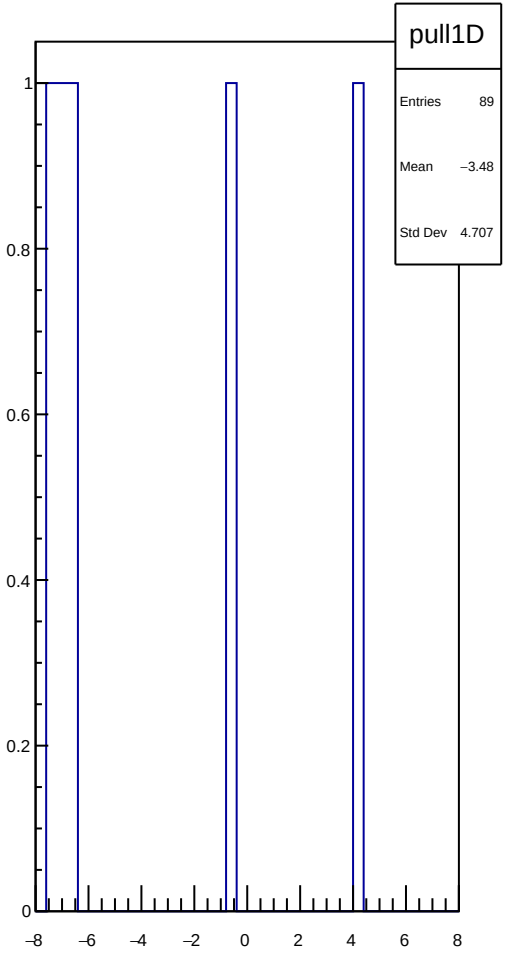

yield_sam6_rms vs run
χ² / ndf 1.257e+05 / 88
p0 0.01774 ± 1.418e−05
0.035
0.03
0.025
0.02
0.015

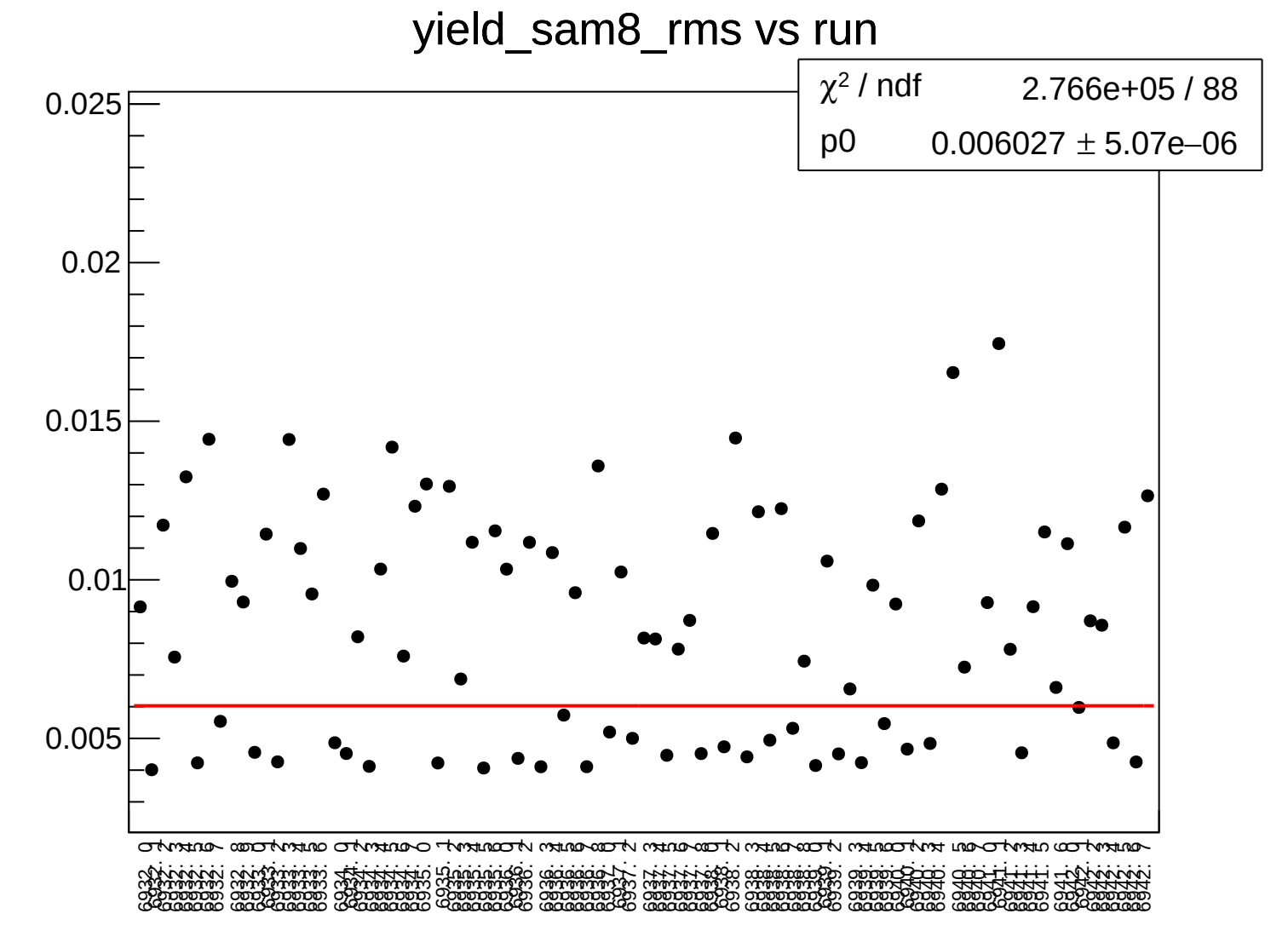

yield_sam7_mean vs run
χ² / ndf 8.58e+05 / 88
p0 2.634 ± 2.588e−06
2.64
2.638
2.636
2.634
2.632
2.63
2.628
2.626
2.624
pull
Entries 89
Mean −43.46
Std Dev 91.76
300
200
100
0
−100
−200
−300
−400

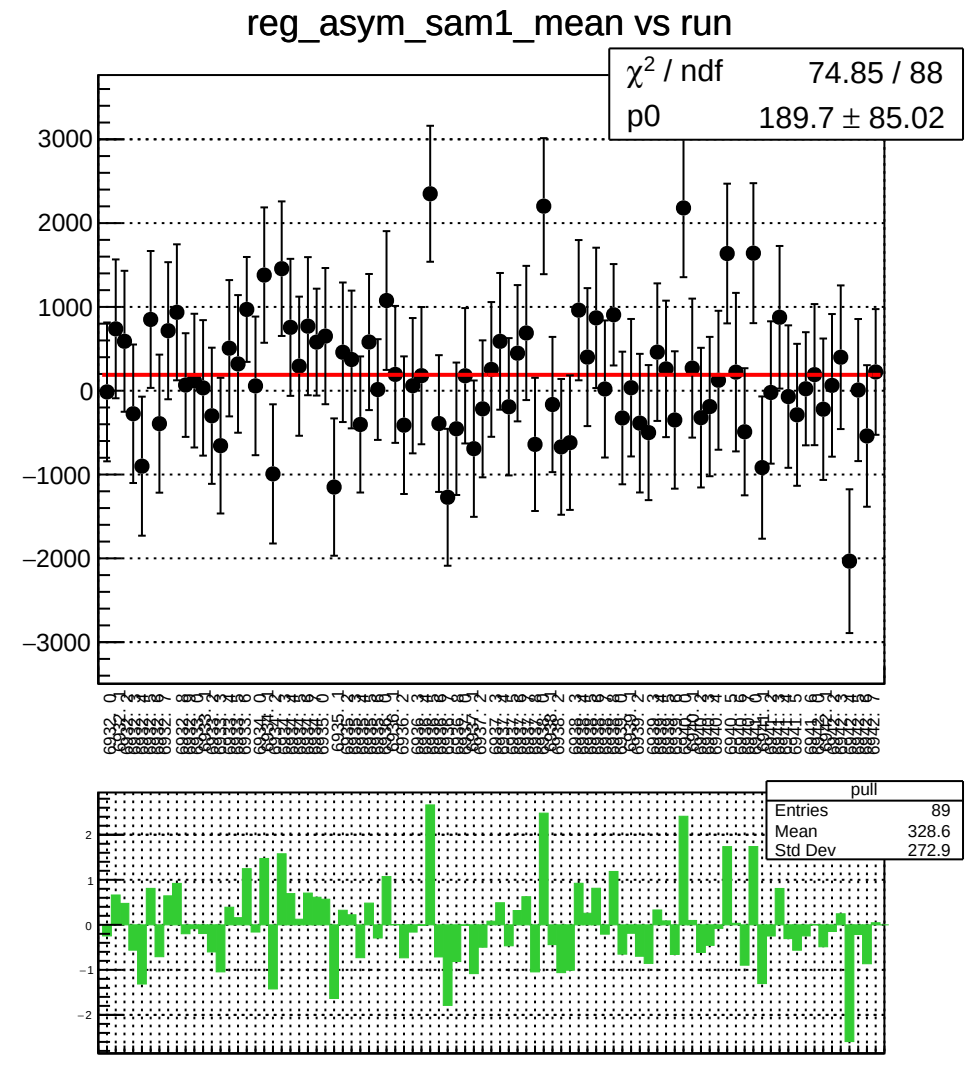

pull1D
Entries 89
Mean −0.62
Std Dev 5.102
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

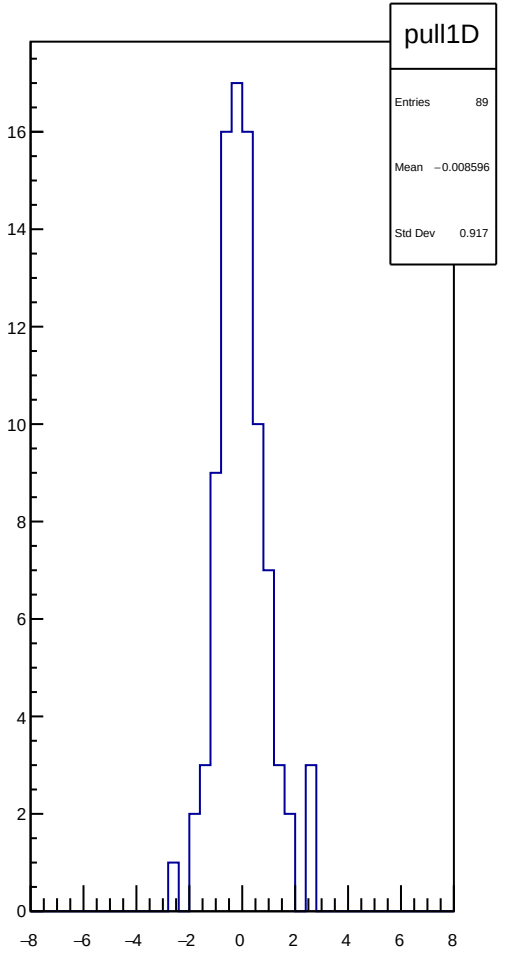

yield_sam7_rms vs run
χ² / ndf 2.664e+05 / 88
p0 0.002183 ± 1.83e−06
0.006
0.005
0.004
0.003
0.002
0.001

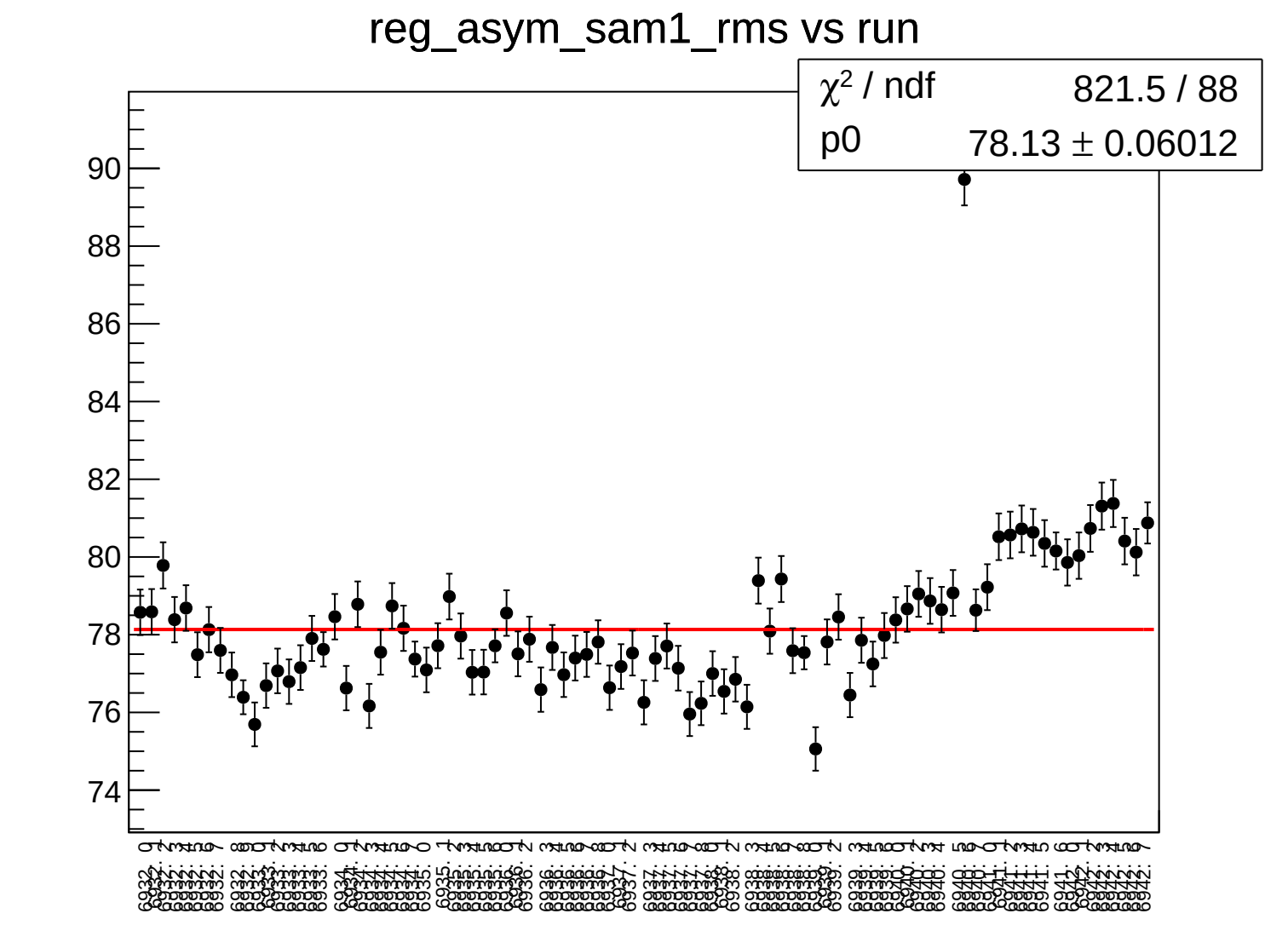

yield_sam8_mean vs run
χ² / ndf 2.731e+06 / 88
p0 9.117 ± 7.17e−06
9.15
9.14
9.13
9.12
9.11
9.1
9.09
9.08
9.07
9.06
pull
Entries 89
Mean 220.6
Std Dev 174.5
600
400
200
0
−200
−400
−600

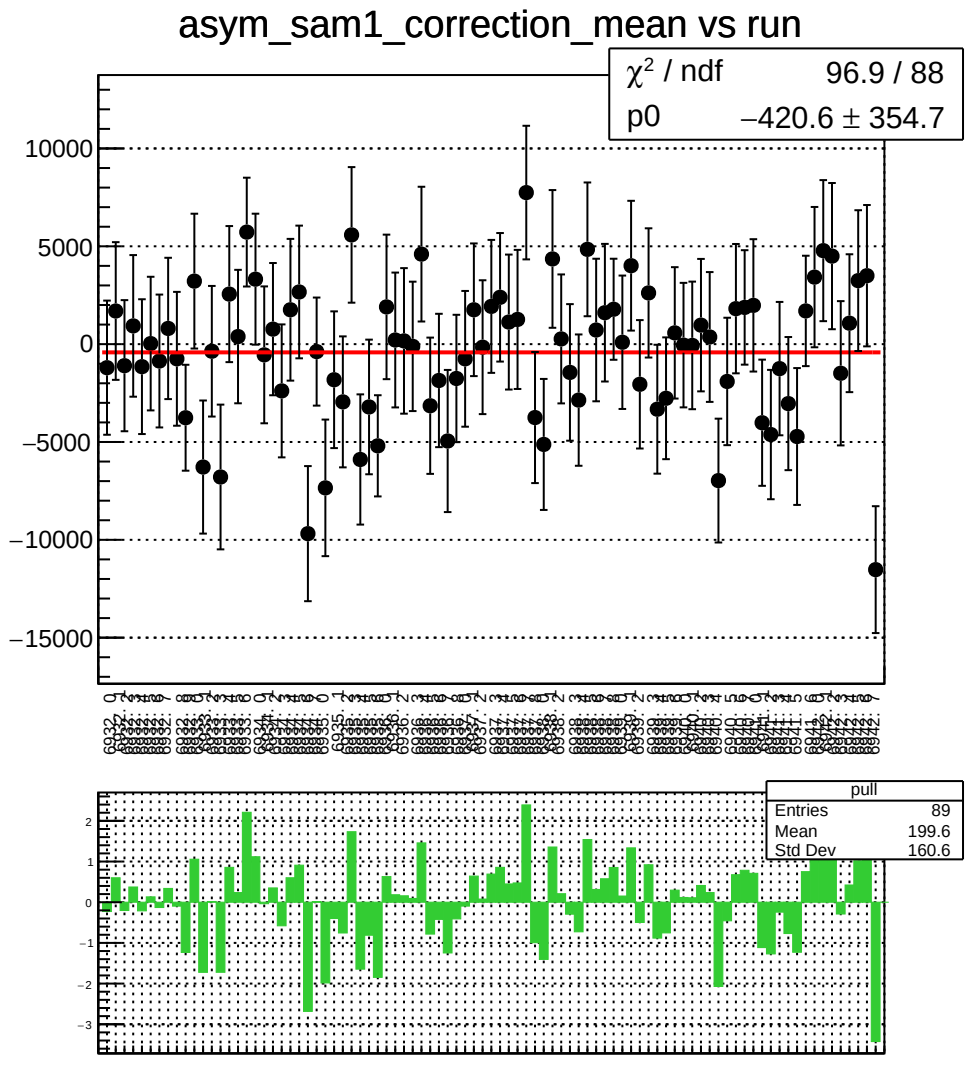

pull1D
Entries 89
Mean −3.48
Std Dev 4.707
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

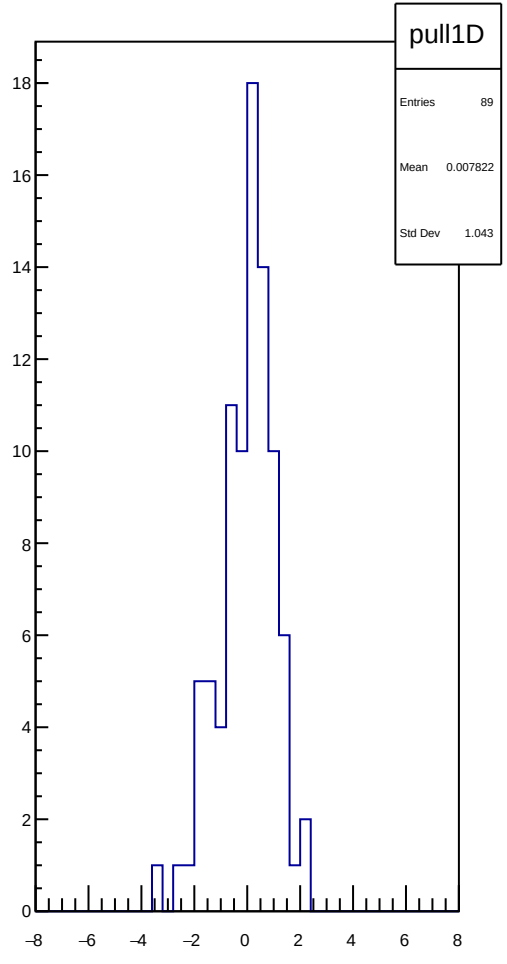

yield_sam8_rms vs run
χ² / ndf 2.766e+05 / 88
p0 0.006027 ± 5.07e−06
0.025
0.02
0.015
0.01
0.005

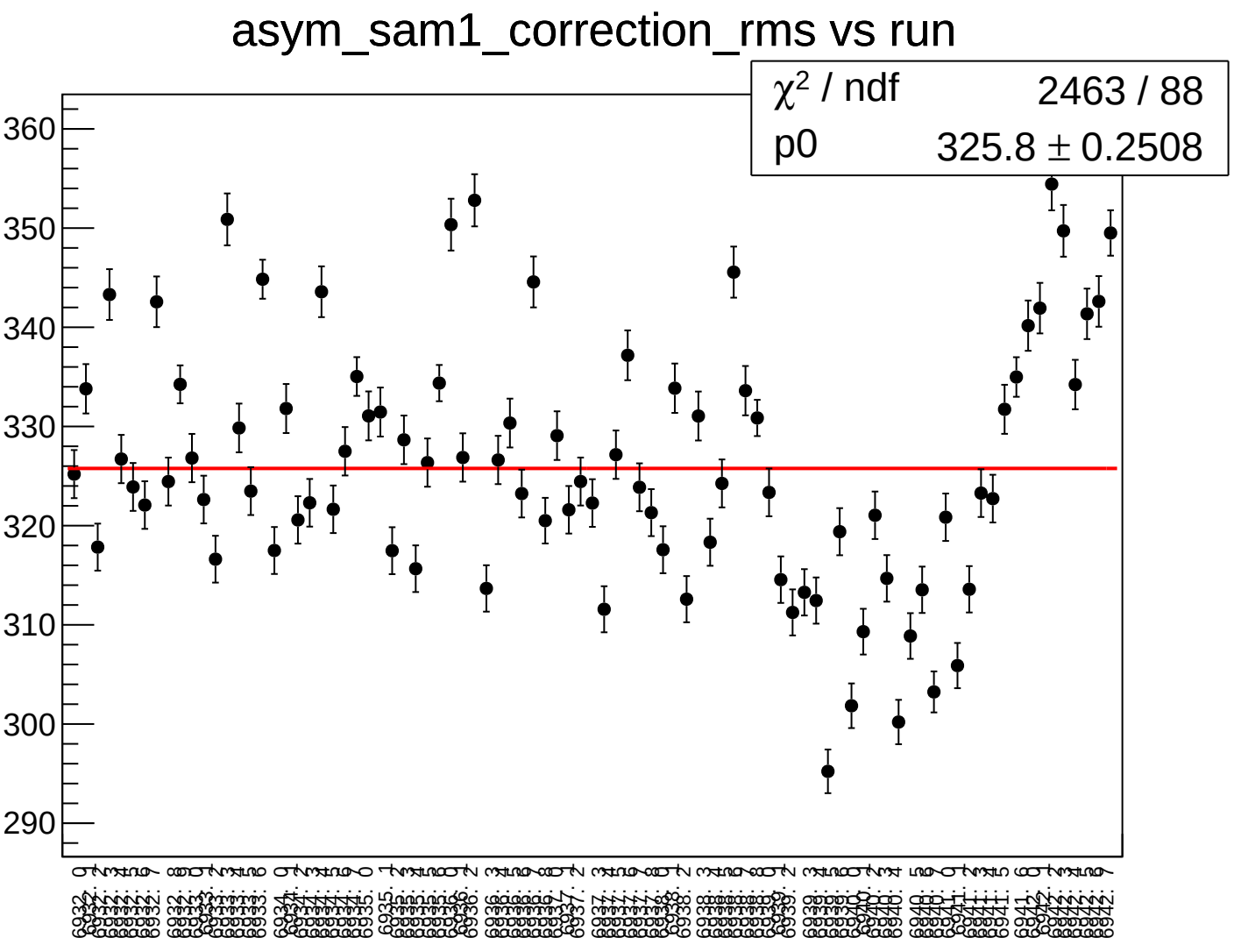

reg_asym_sam1_mean vs run
χ² / ndf 74.85 / 88
p0 189.7 ± 85.02
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean 328.6
Std Dev 272.9
2
1
0
−1
−2

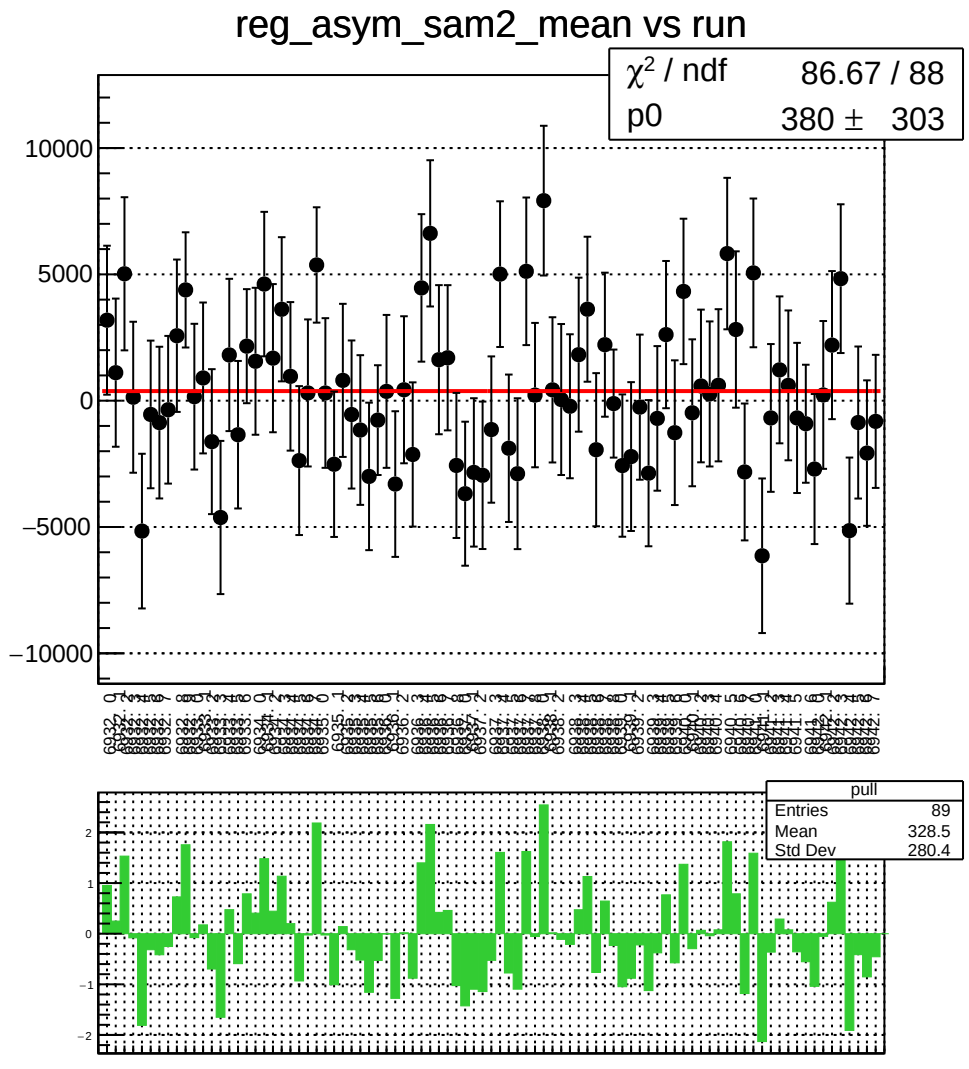

pull1D
Entries 89
Mean −0.008596
Std Dev 0.917
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

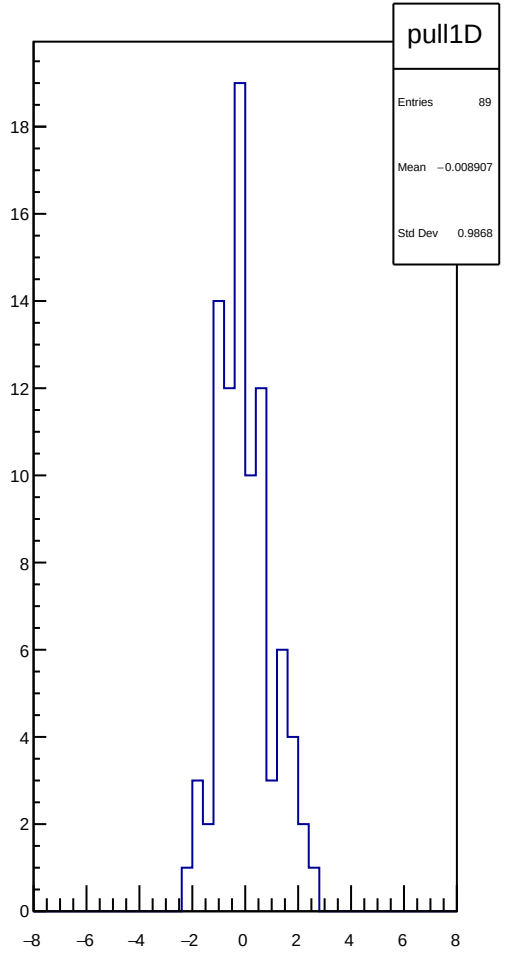

reg_asym_sam1_rms vs run
χ^2 / ndf 821.5 / 88
p0 78.13 ± 0.06012
90
88
86
84
82
80
78
76
74

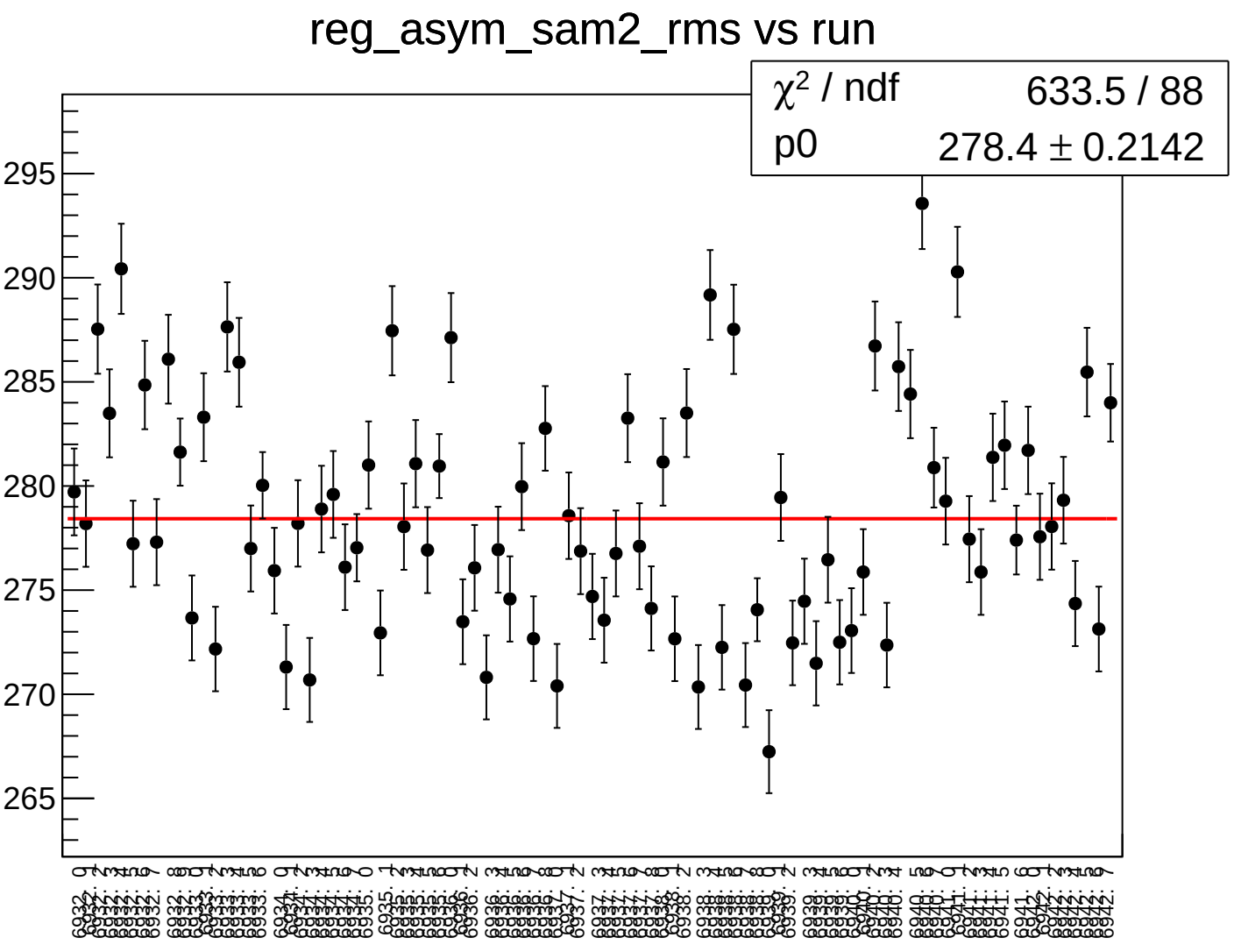

asym_sam1_correction_mean vs run
χ² / ndf 96.9 / 88
p0 −420.6 ± 354.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 199.6
Std Dev 160.6
2
1
0
−1
−2
−3

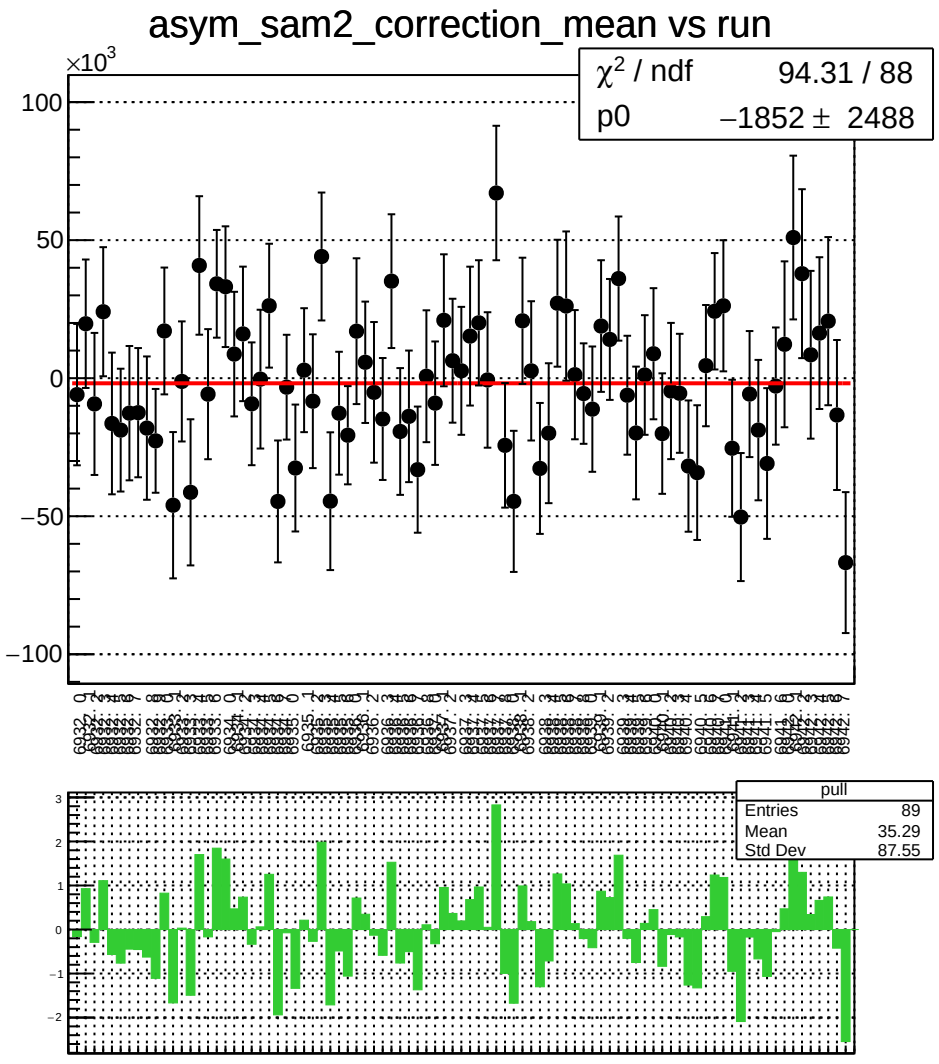

pull1D
Entries 89
Mean 0.007822
Std Dev 1.043
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

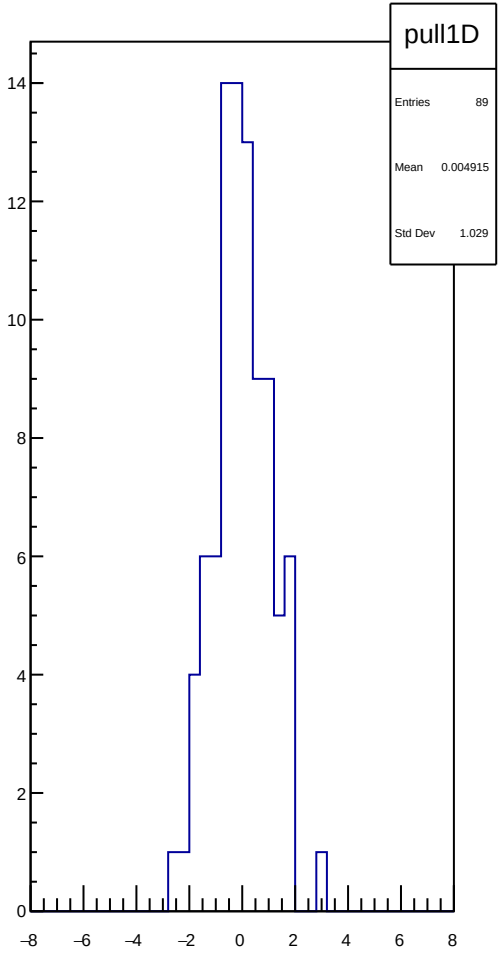

asym_sam1_correction_rms vs run
χ² / ndf 2463 / 88
p0 325.8 ± 0.2508
360
350
340
330
320
310
300
290

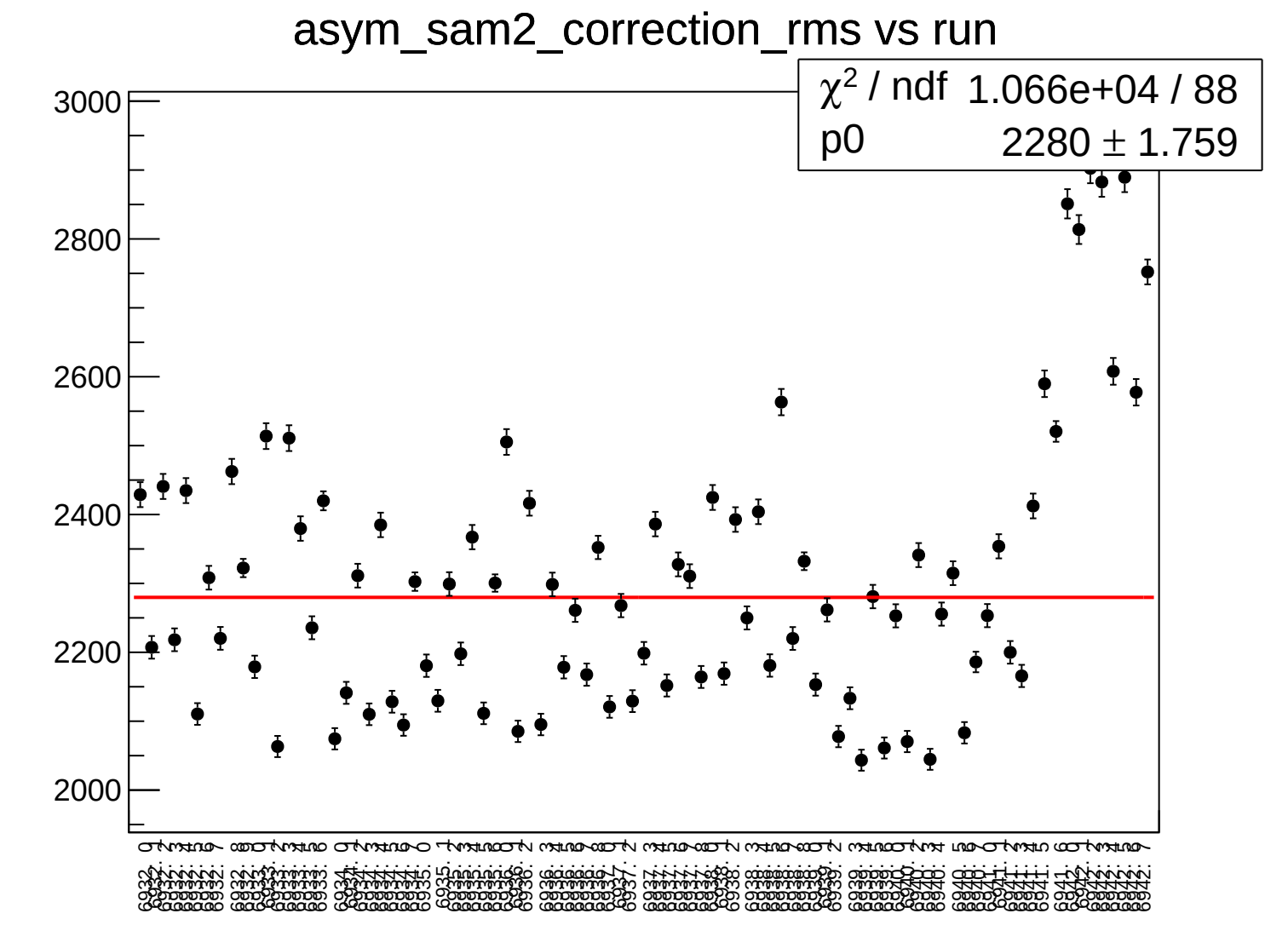

reg_asym_sam2_mean vs run
χ² / ndf 86.67 / 88
p0 380 ± 303
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 328.5
Std Dev 280.4
2
1
0
−1
−2

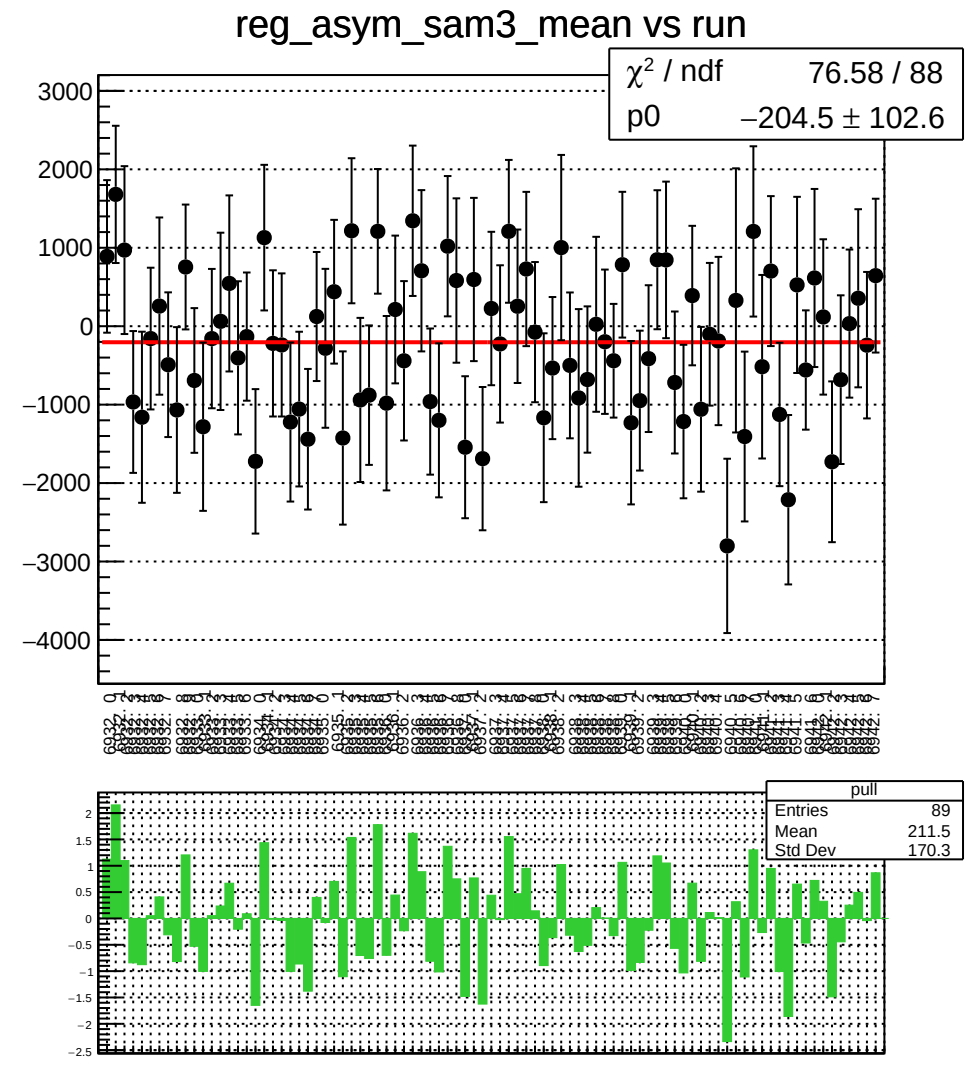

pull1D
Entries 89
Mean −0.008907
Std Dev 0.9868
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

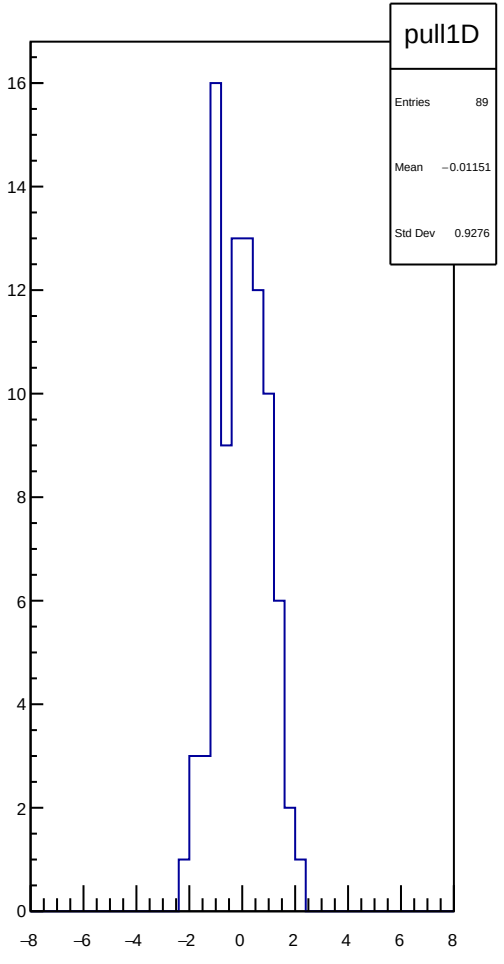

reg_asym_sam2_rms vs run
χ² / ndf 633.5 / 88
p0 278.4 ± 0.2142
295
290
285
280
275
270
265

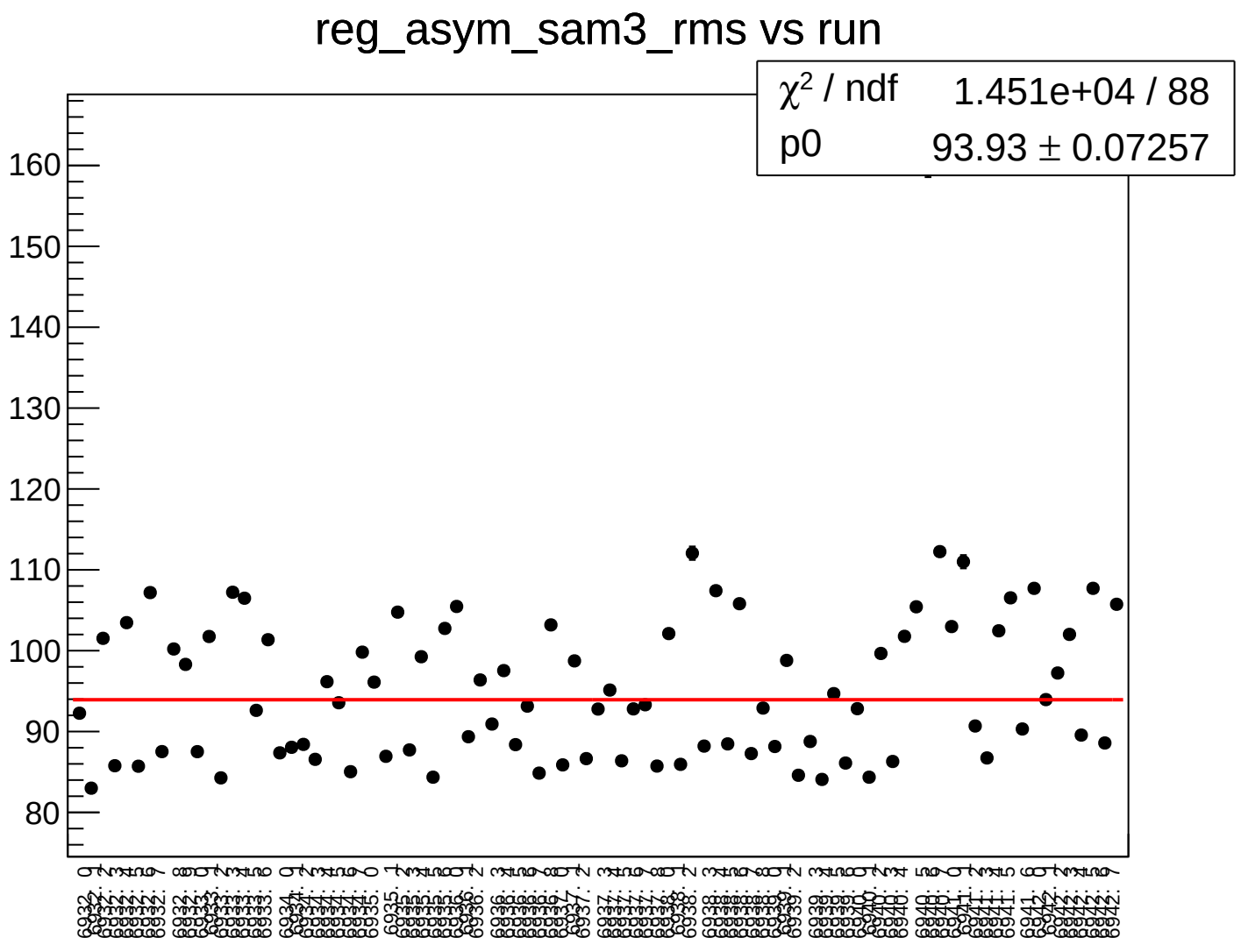

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 94.31 / 88
p0 −1852 ± 2488
100
50
0
−50
−100
pull
Entries 89
Mean 35.29
Std Dev 87.55
3
2
1
0
−1
−2

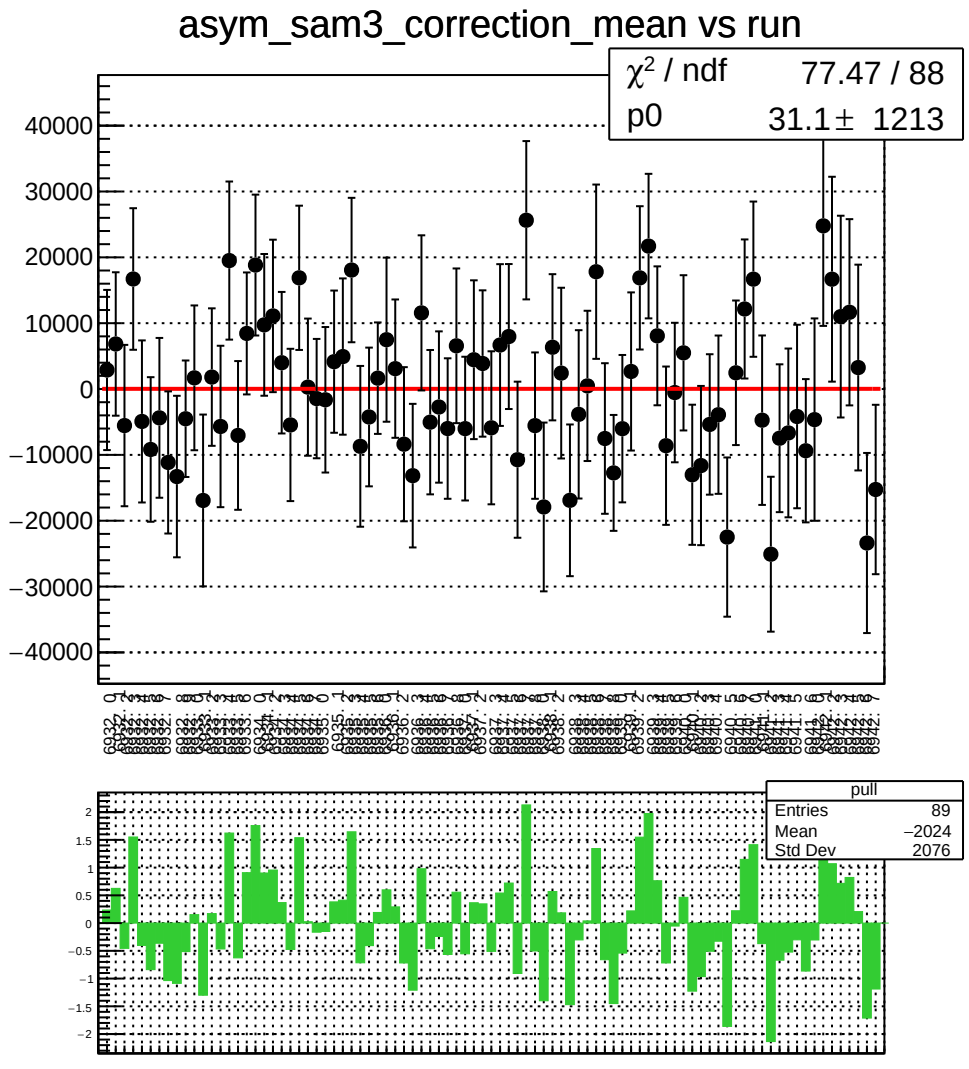

pull1D
Entries 89
Mean 0.004915
Std Dev 1.029
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

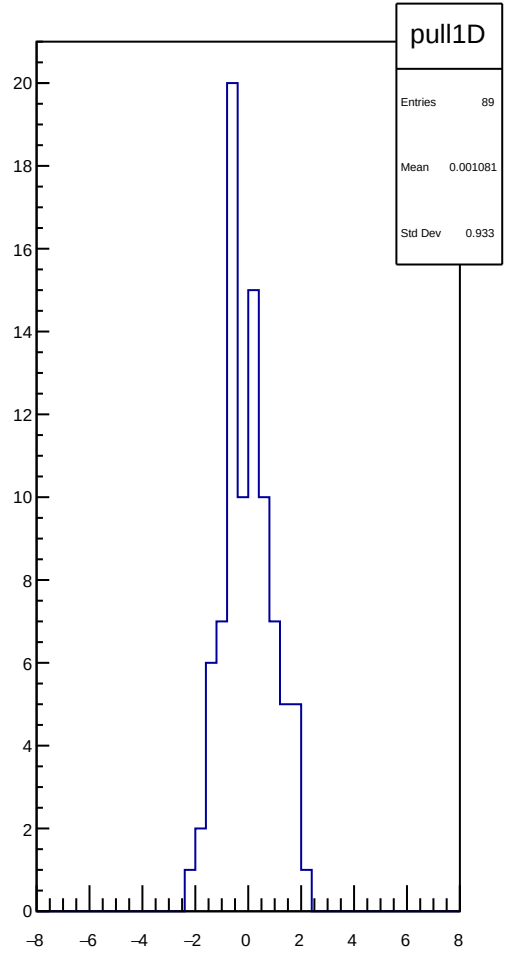

asym_sam2_correction_rms vs run
χ² / ndf 1.066e+04 / 88
p0 2280 ± 1.759
3000
2800
2600
2400
2200
2000

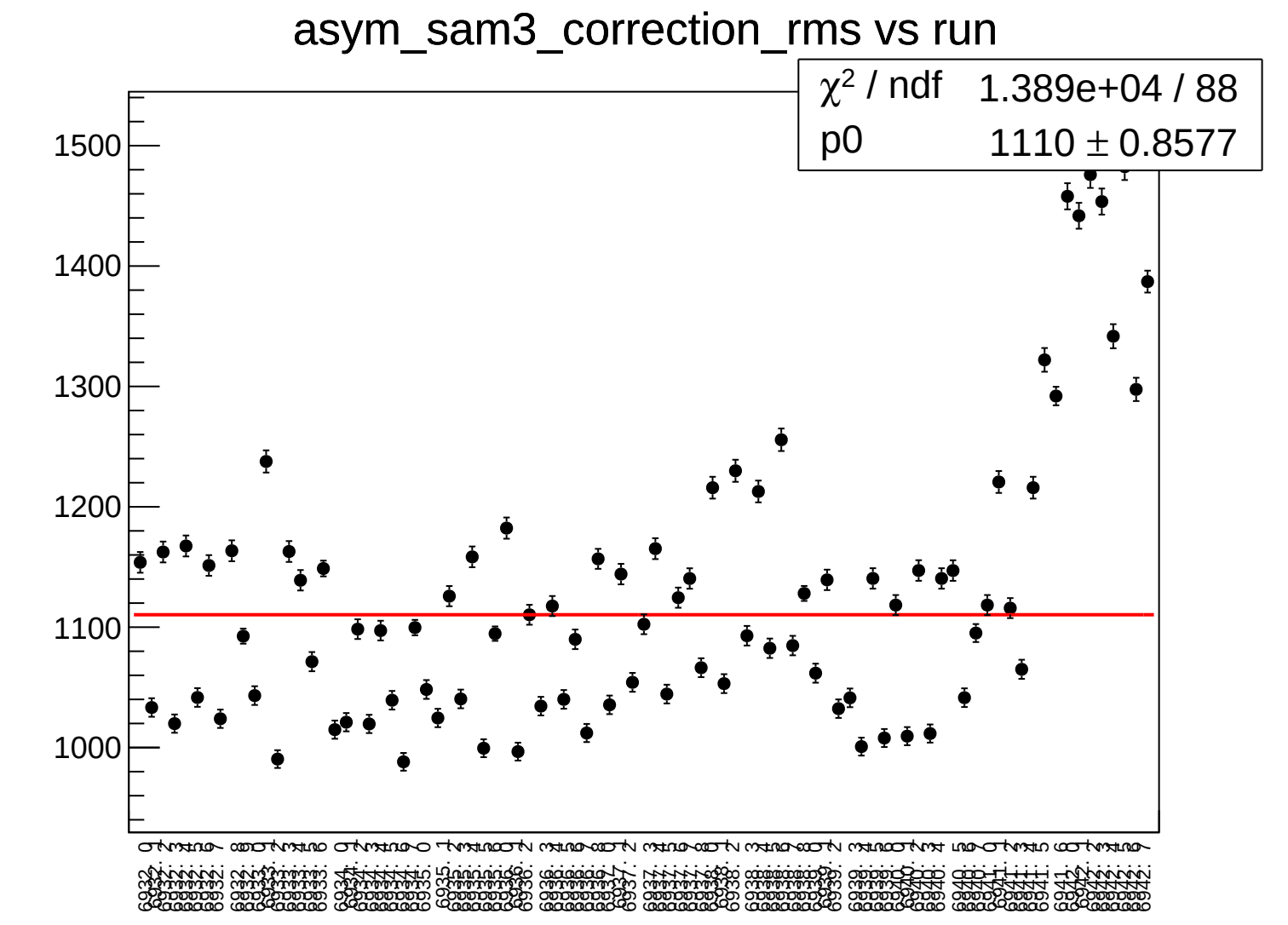

reg_asym_sam3_mean vs run
χ² / ndf 76.58 / 88
p0 −204.5 ± 102.6
pull
Entries 89
Mean 211.5
Std Dev 170.3

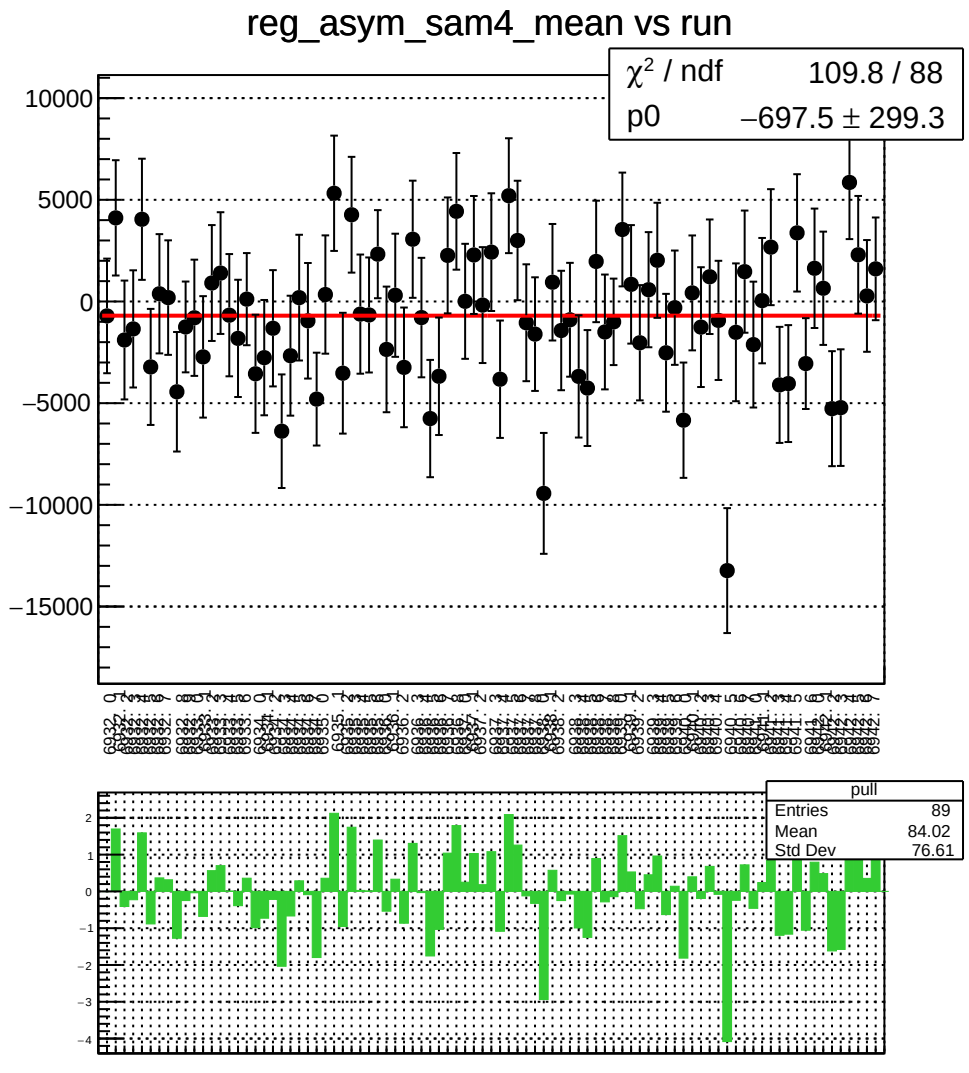

pull1D
Entries 89
Mean −0.01151
Std Dev 0.9276

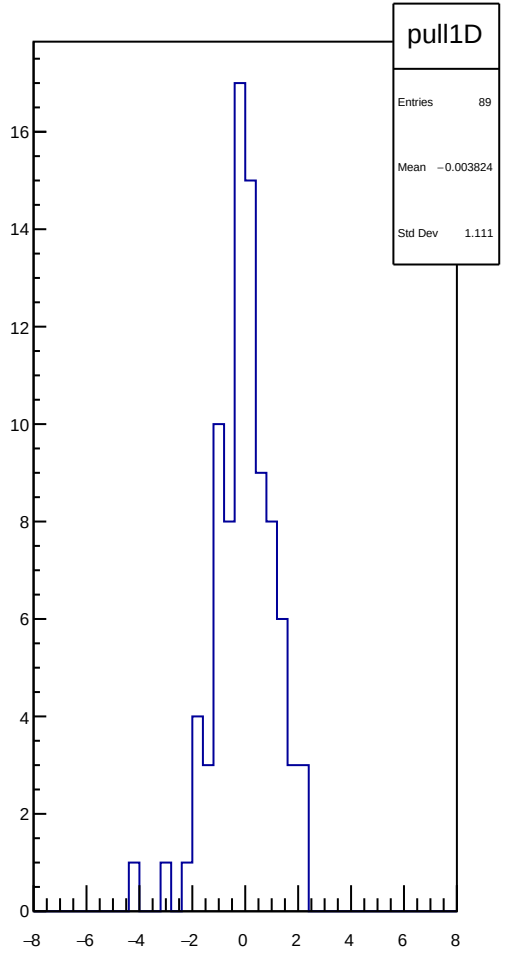

reg_asym_sam3_rms vs run
χ^2 / ndf 1.451e+04 / 88
p0 93.93 ± 0.07257
160
150
140
130
120
110
100
90
80

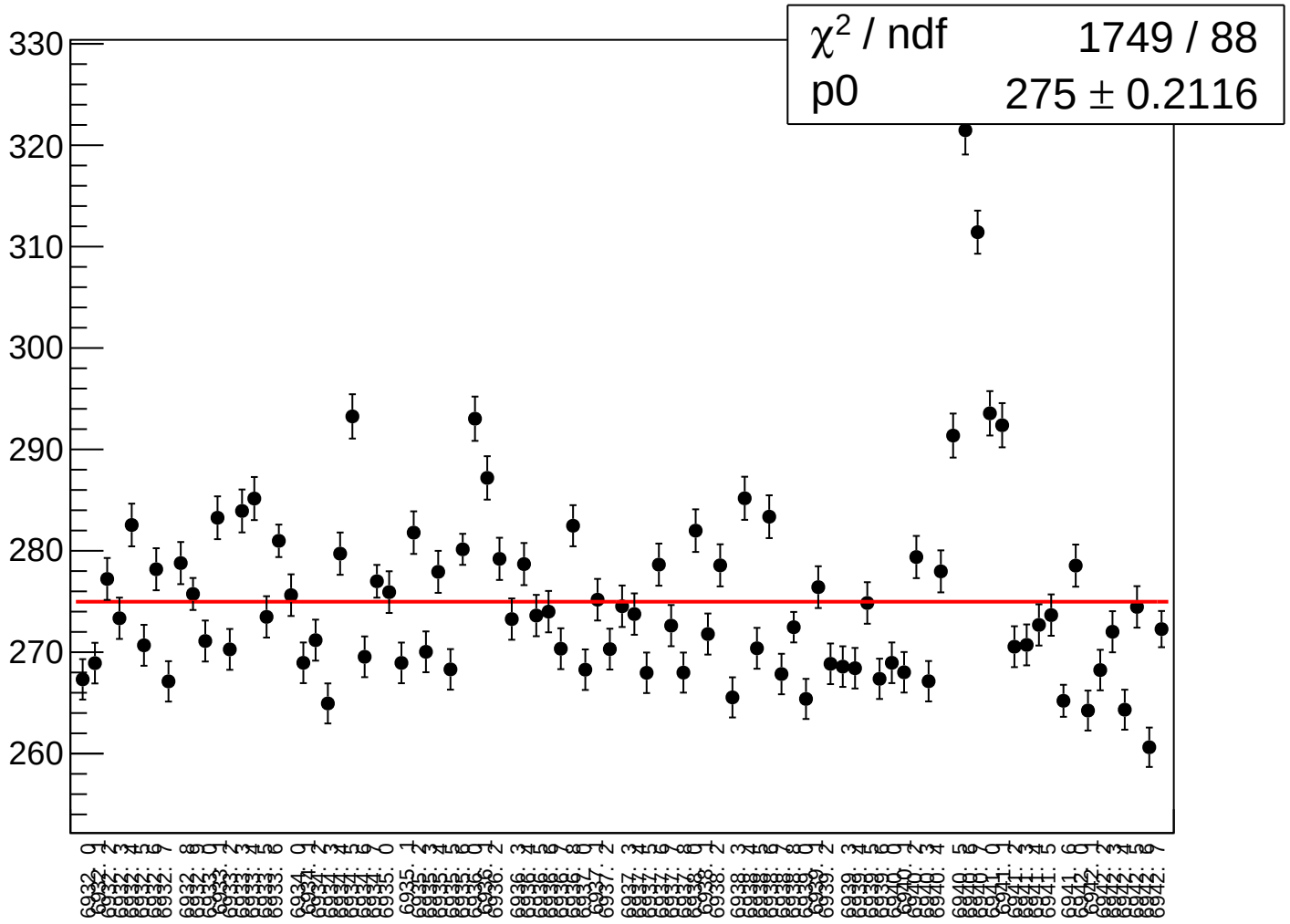

asym_sam3_correction_mean vs run
χ² / ndf 77.47 / 88
p0 31.1 ± 1213
pull
Entries 89
Mean −2024
Std Dev 2076

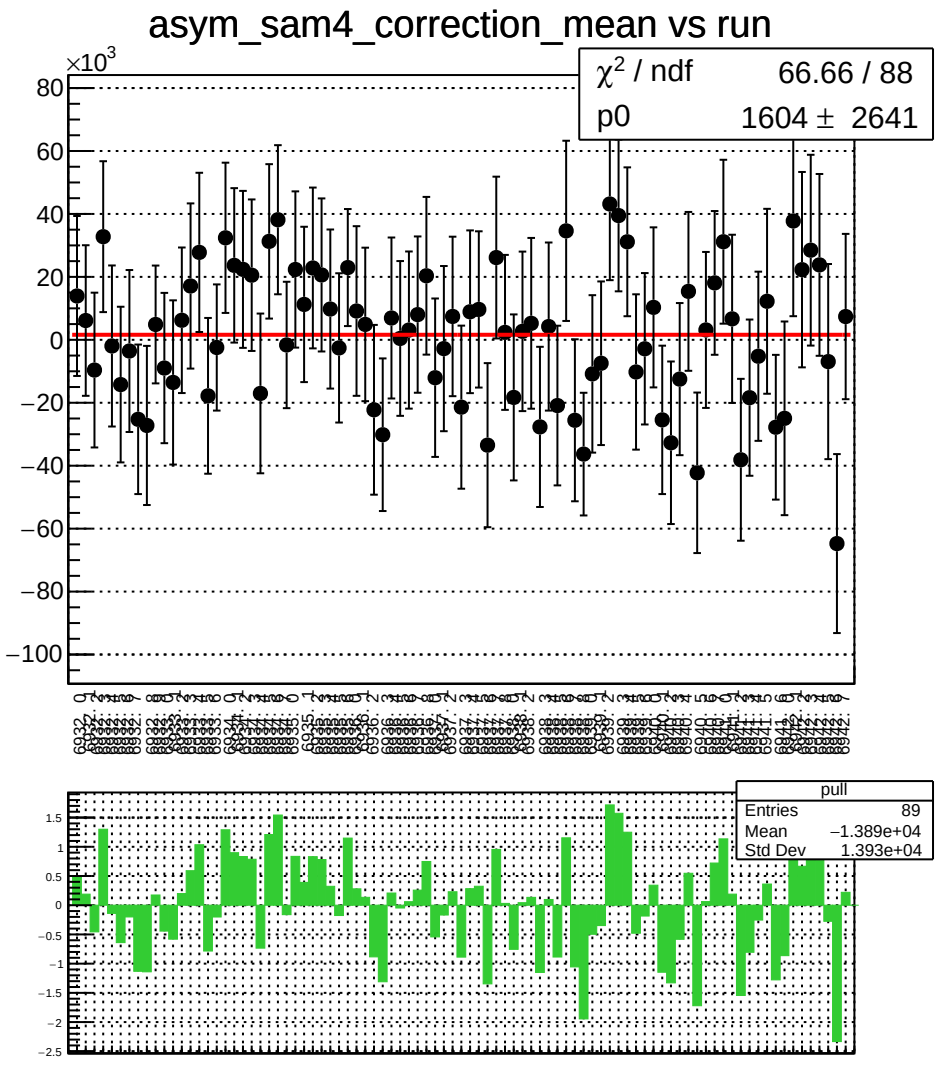

pull1D
Entries 89
Mean 0.001081
Std Dev 0.933

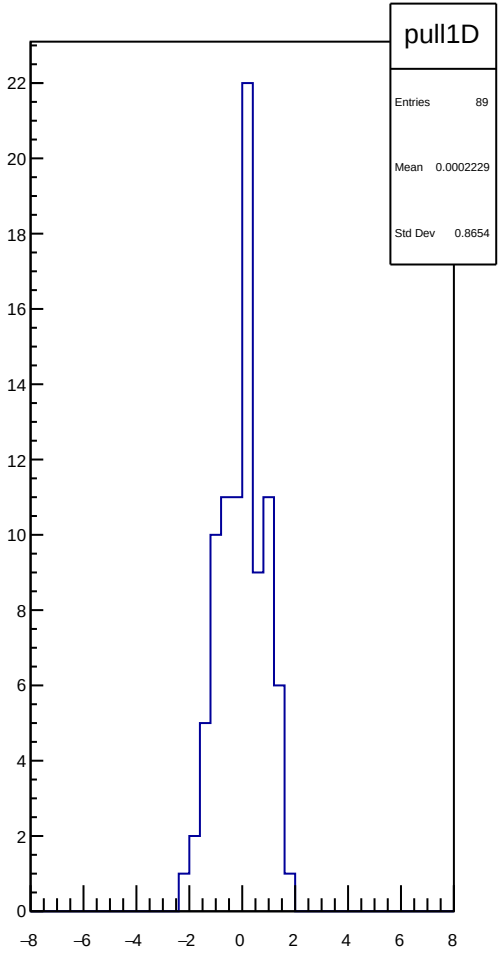

asym_sam3_correction_rms vs run
χ² / ndf 1.389e+04 / 88
p0 1110 ± 0.8577
1500
1400
1300
1200
1100
1000

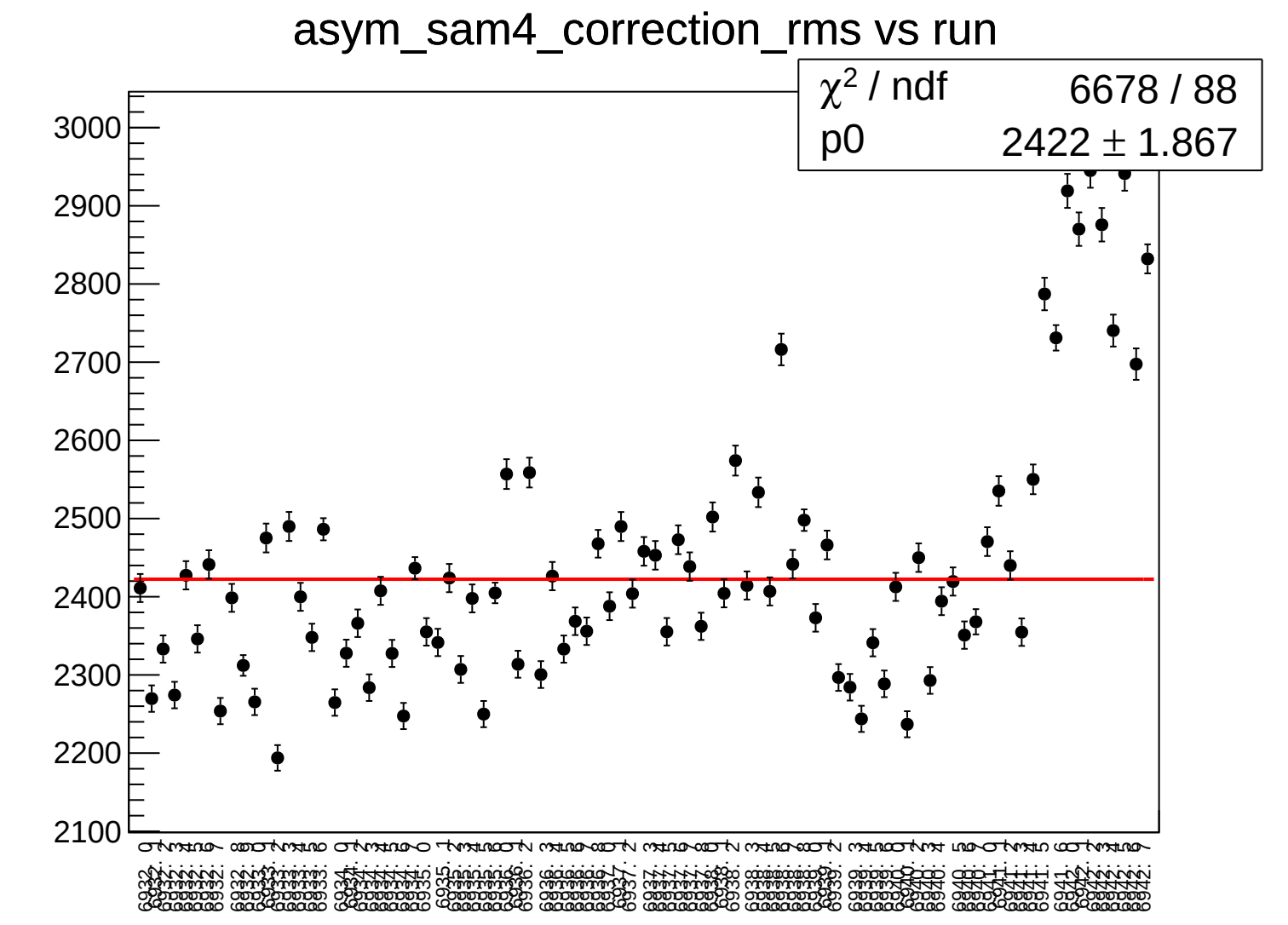

reg_asym_sam4_mean vs run
χ² / ndf 109.8 / 88
p0 −697.5 ± 299.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 84.02
Std Dev 76.61
2
1
0
−1
−2
−3
−4

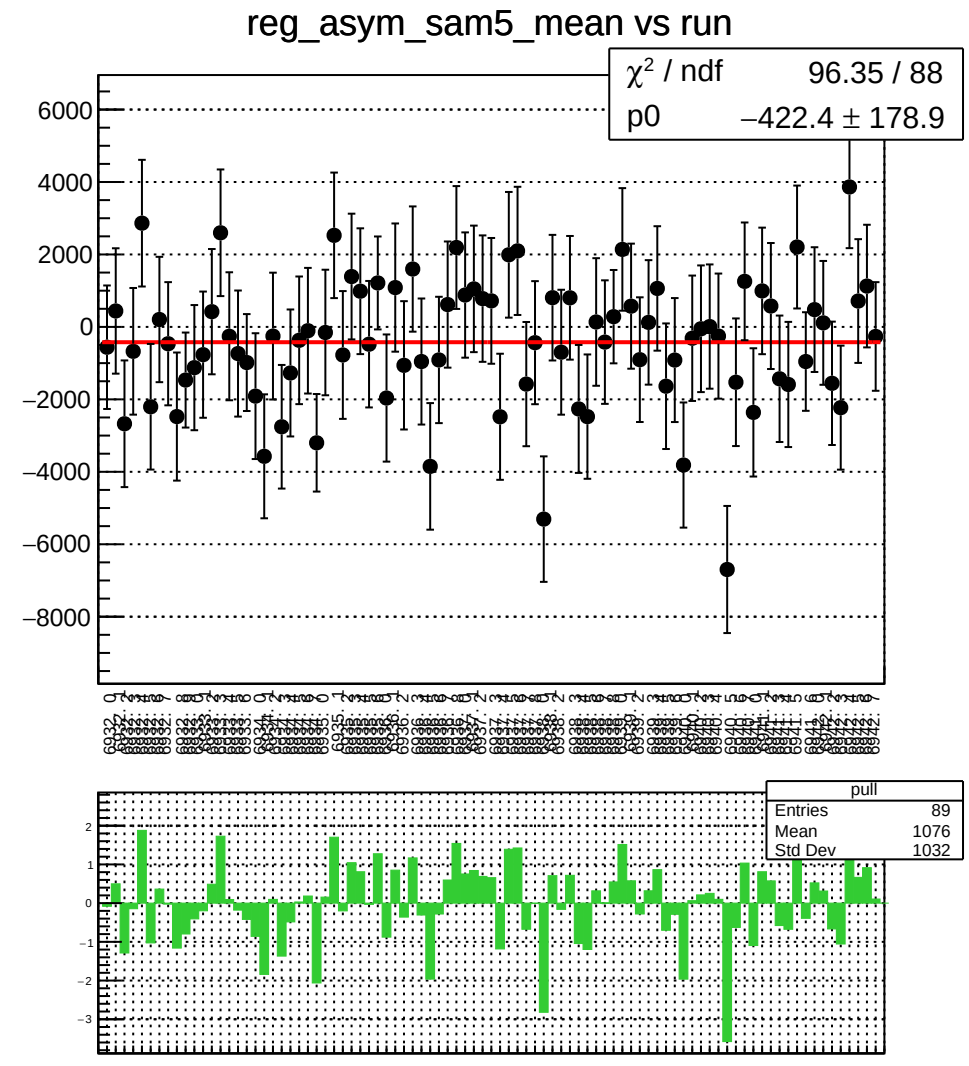

pull1D
Entries 89
Mean −0.003824
Std Dev 1.111
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

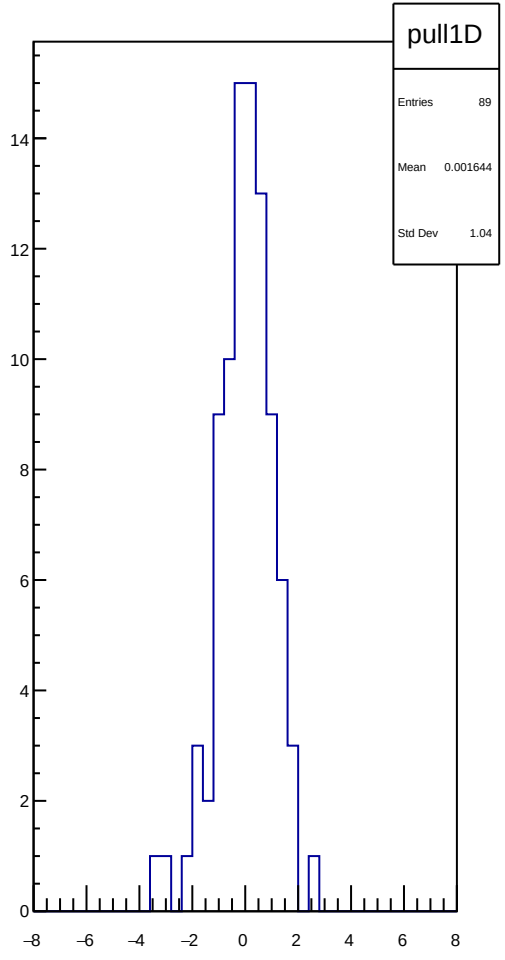

reg_asym_sam4_rms vs run
χ² / ndf 1749 / 88
p0 275 ± 0.2116
330
320
310
300
290
280
270
260

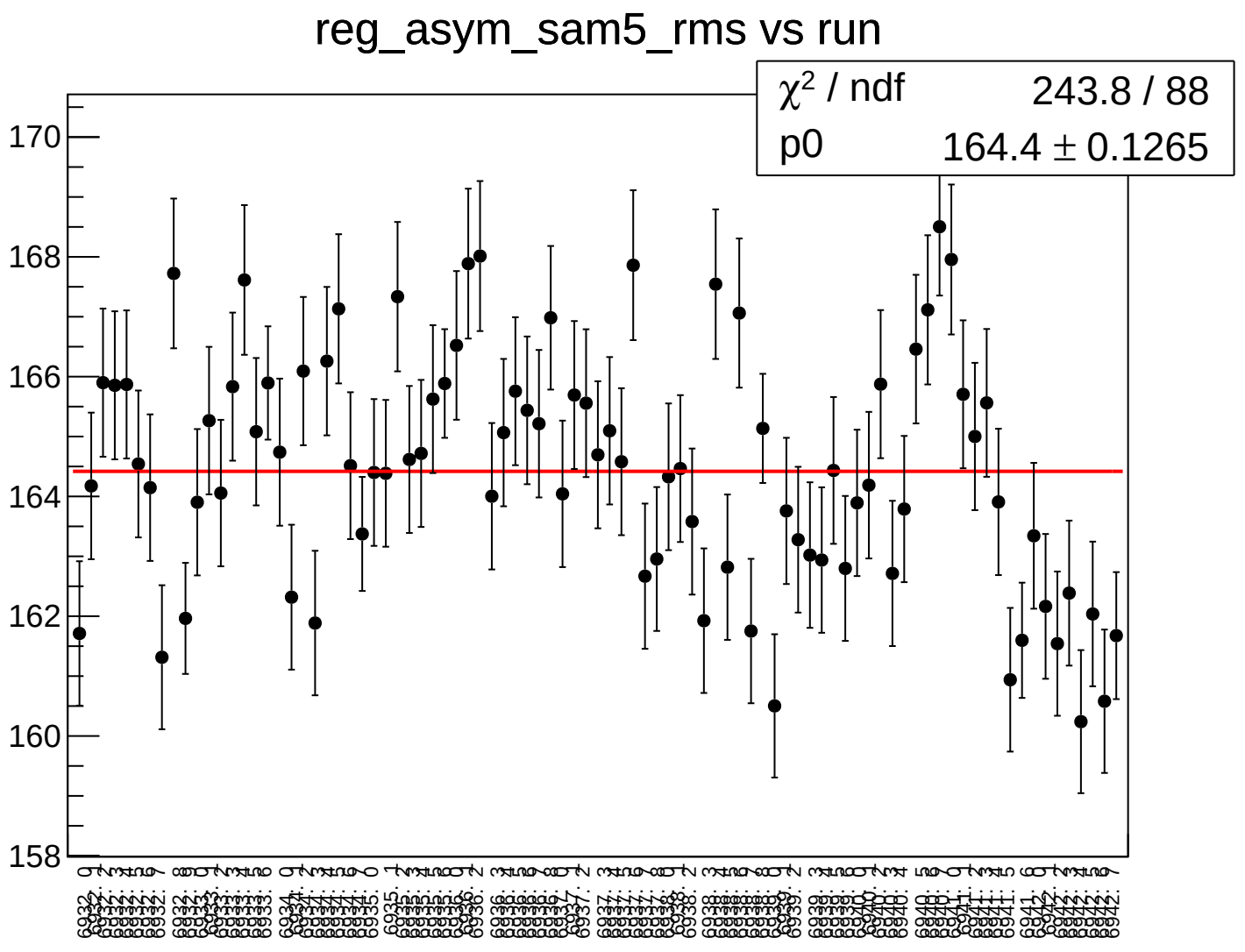

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 66.66 / 88
p0 1604 ± 2641
pull
Entries 89
Mean −1.389e+04
Std Dev 1.393e+04

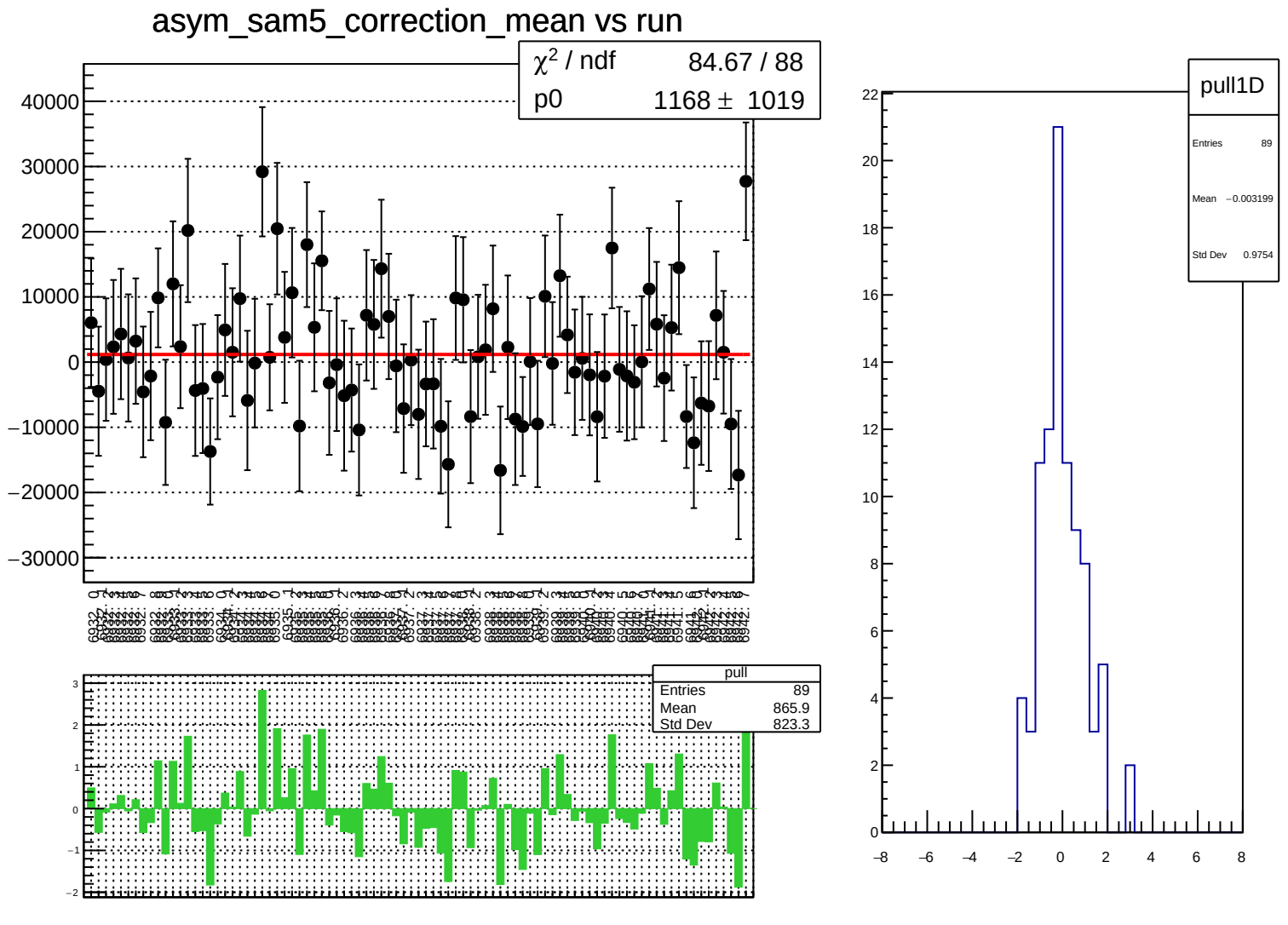

pull1D
Entries 89
Mean 0.0002229
Std Dev 0.8654

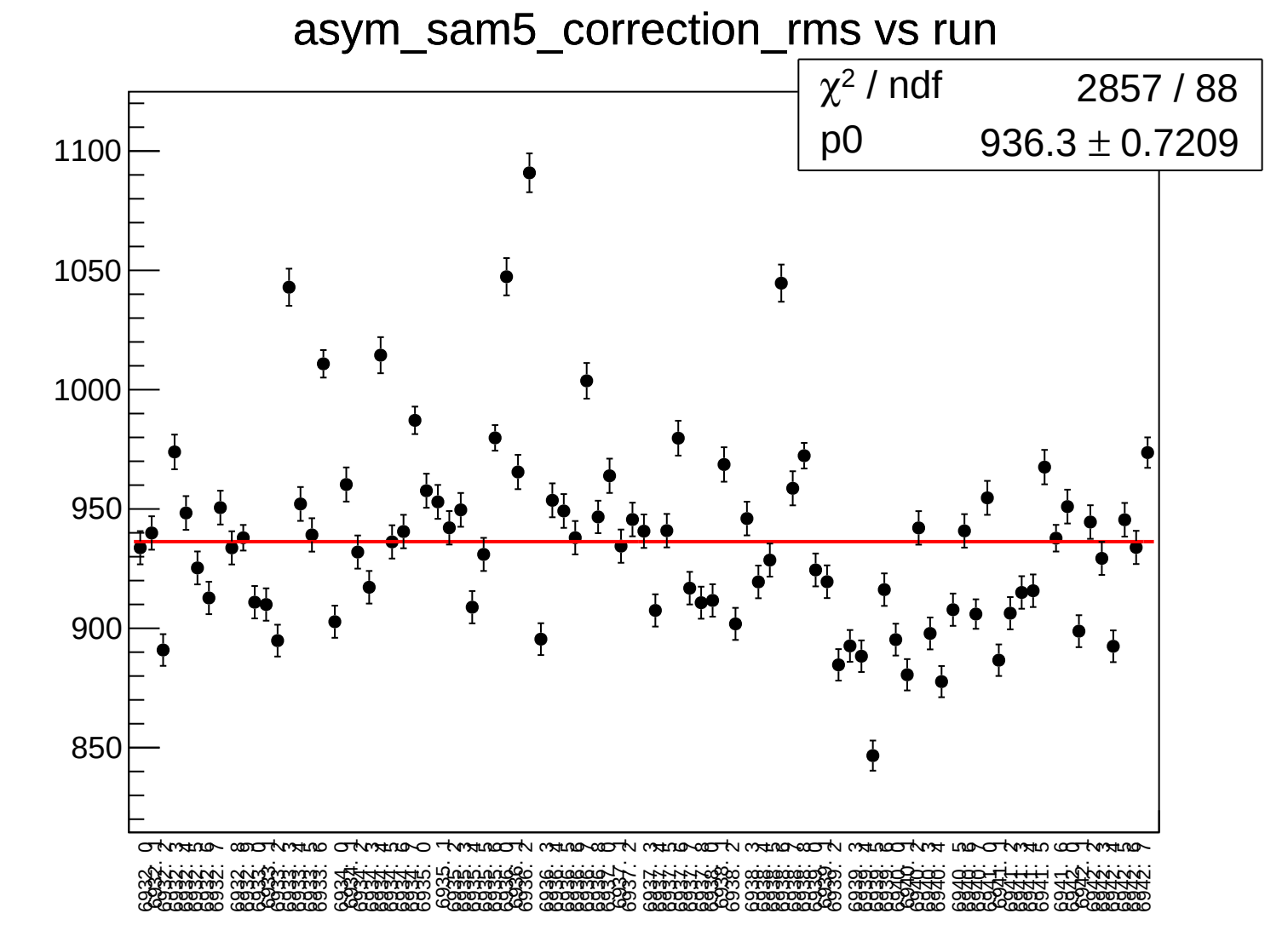

asym_sam4_correction_rms vs run
χ² / ndf 6678 / 88
p0 2422 ± 1.867
3000
2900
2800
2700
2600
2500
2400
2300
2200
2100

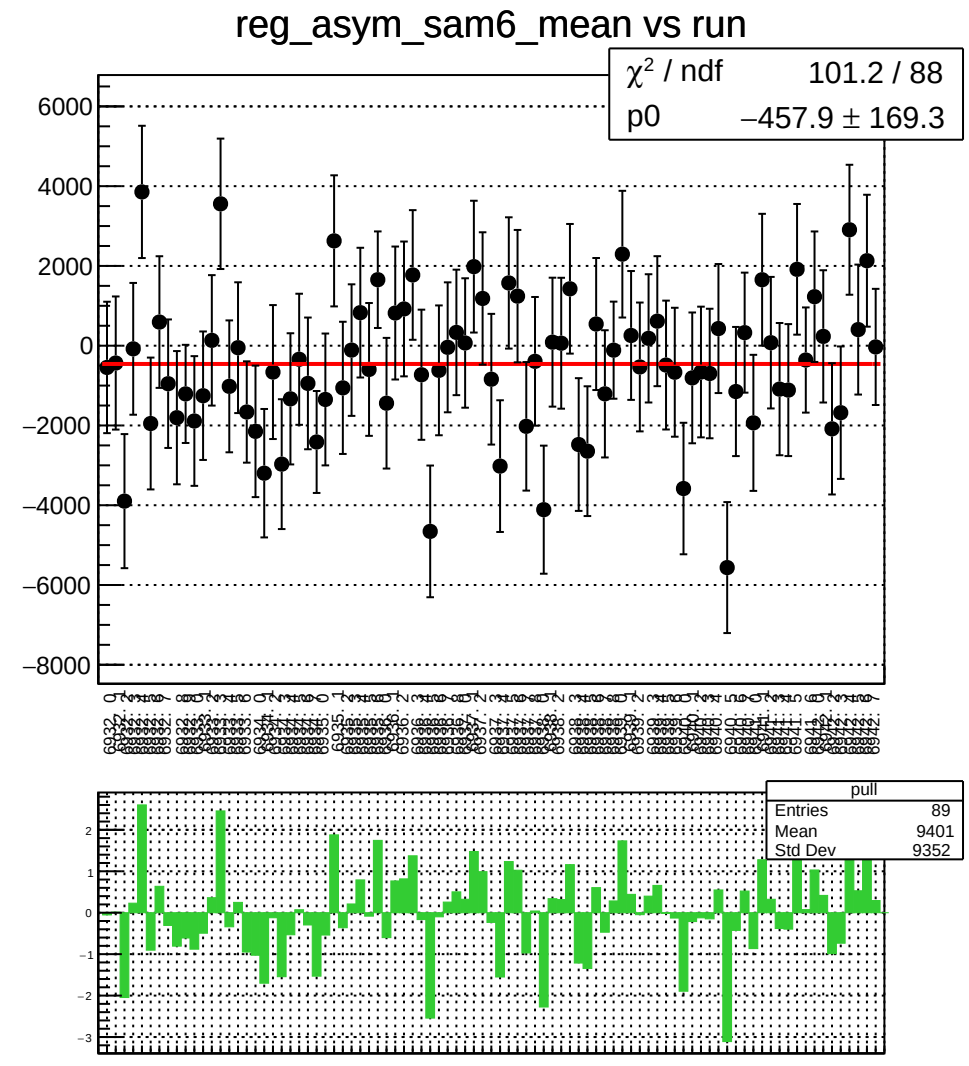

reg_asym_sam5_mean vs run
χ² / ndf 96.35 / 88
p0 −422.4 ± 178.9
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 89
Mean 1076
Std Dev 1032
2
1
0
−1
−2
−3

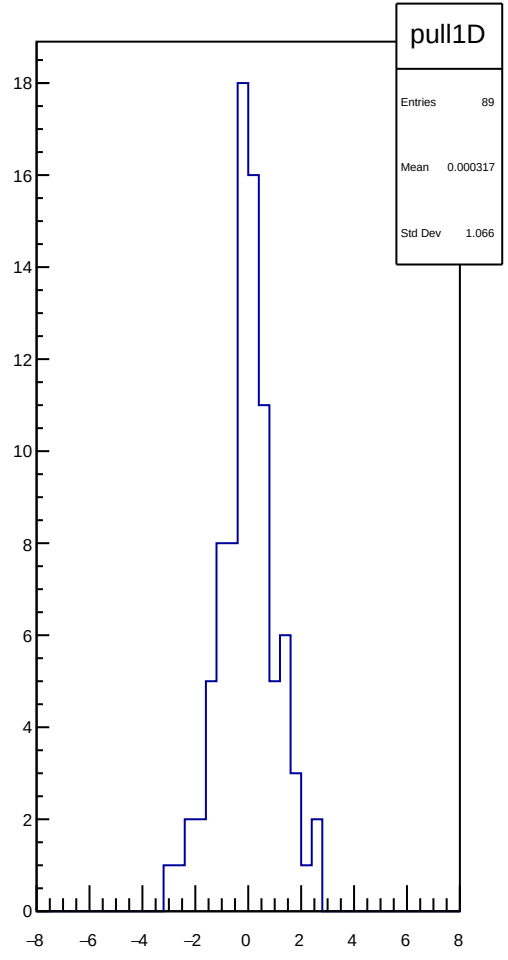

pull1D
Entries 89
Mean 0.001644
Std Dev 1.04
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

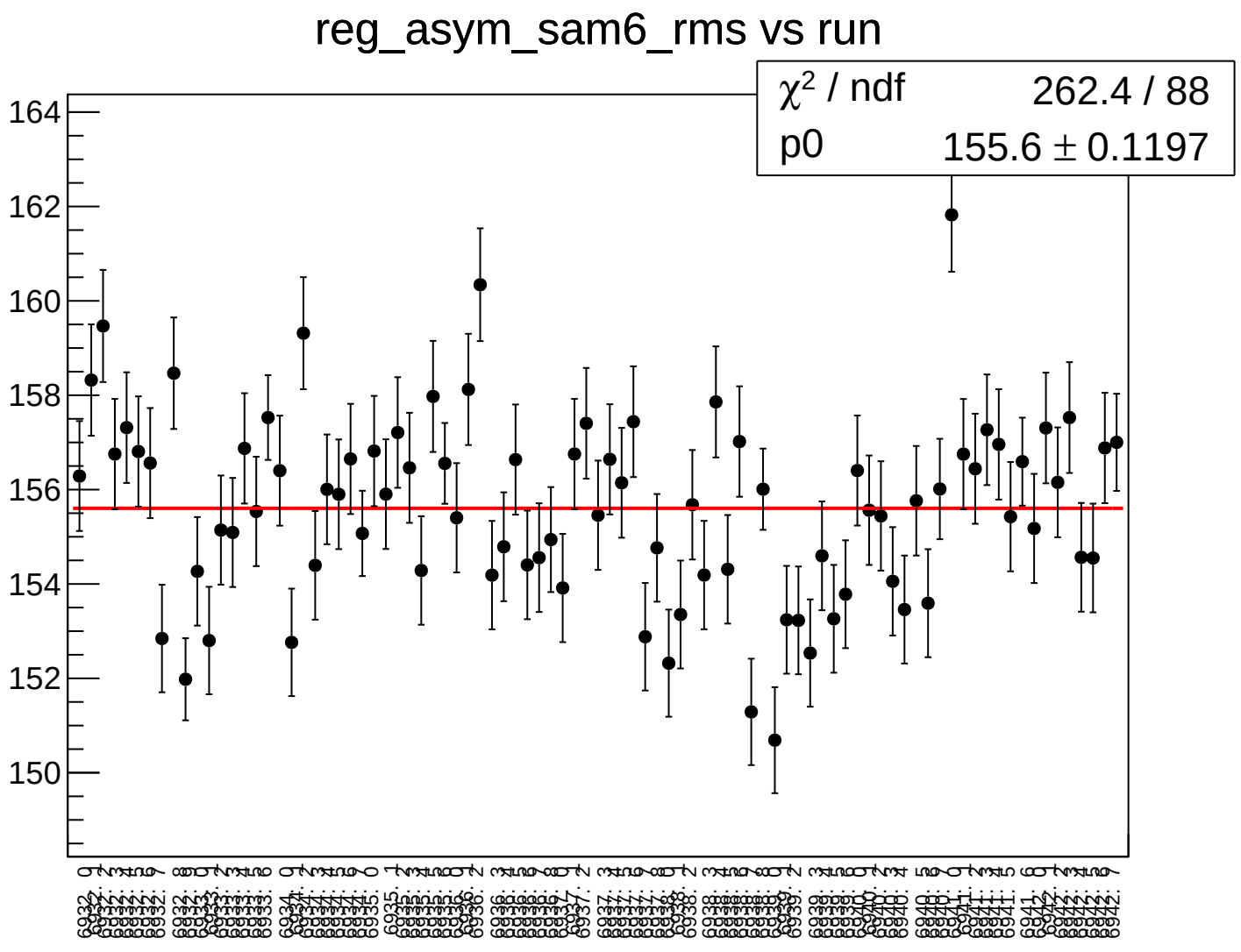

reg_asym_sam5_rms vs run
χ² / ndf 243.8 / 88
p0 164.4 ± 0.1265
170
168
166
164
162
160
158

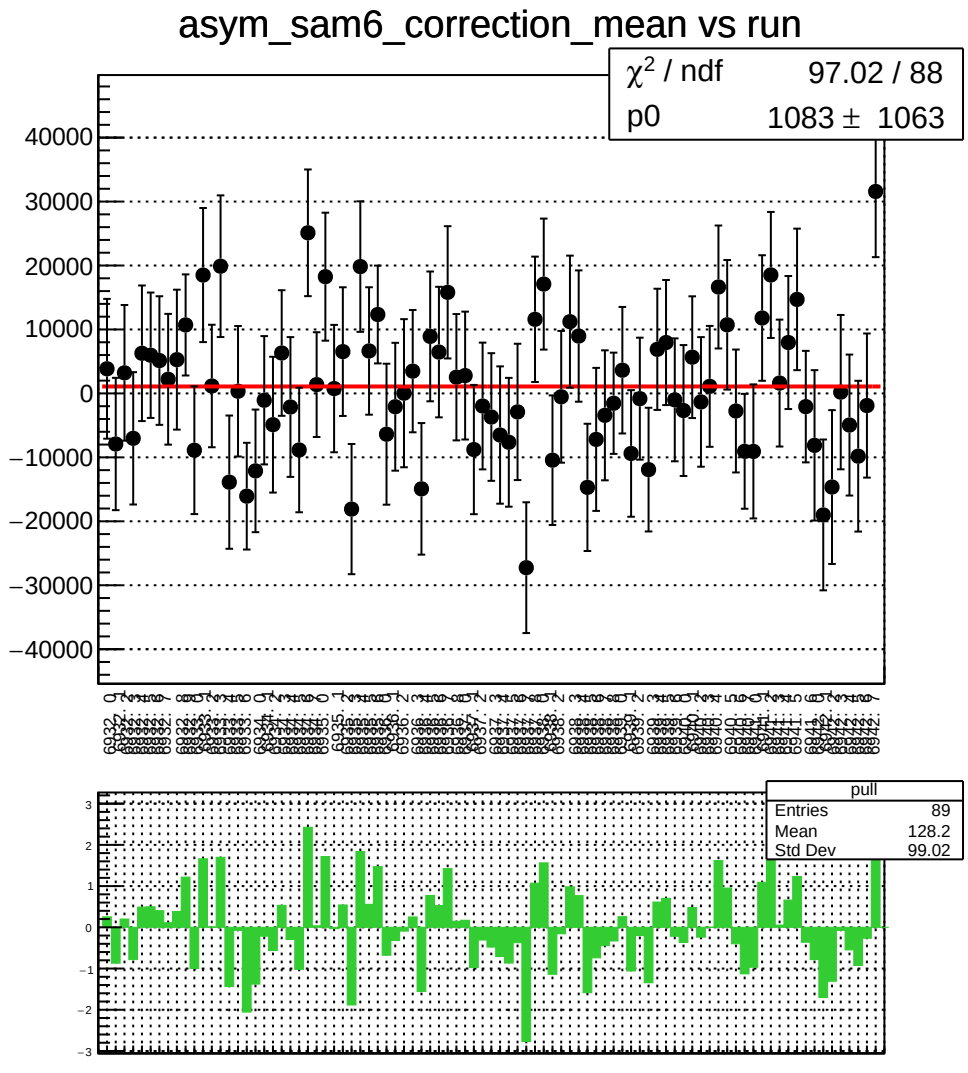

asym_sam5_correction_mean vs run
χ² / ndf 84.67 / 88
p0 1168 ± 1019
pull
Entries 89
Mean 865.9
Std Dev 823.3
pull1D
Entries 89
Mean −0.003199
Std Dev 0.9754

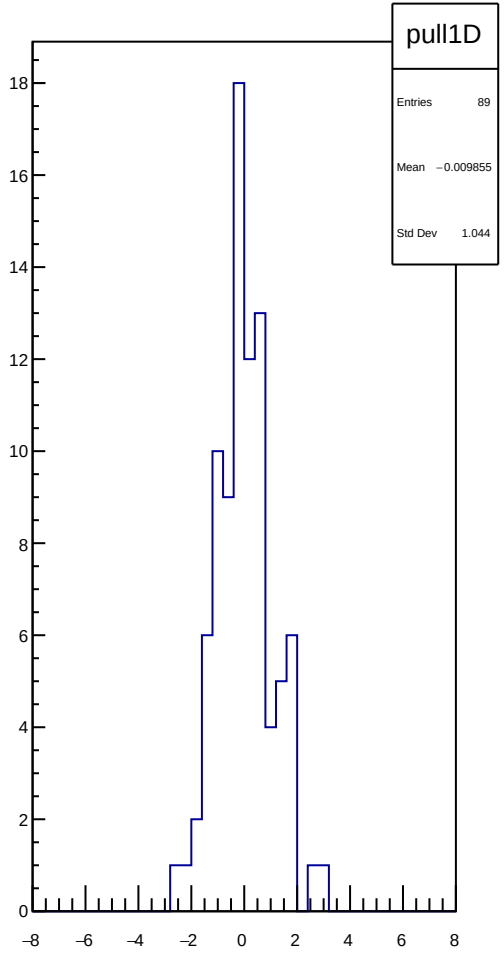

asym_sam5_correction_rms vs run
χ^2 / ndf 2857 / 88
p0 936.3 ± 0.7209
1100
1050
1000
950
900
850

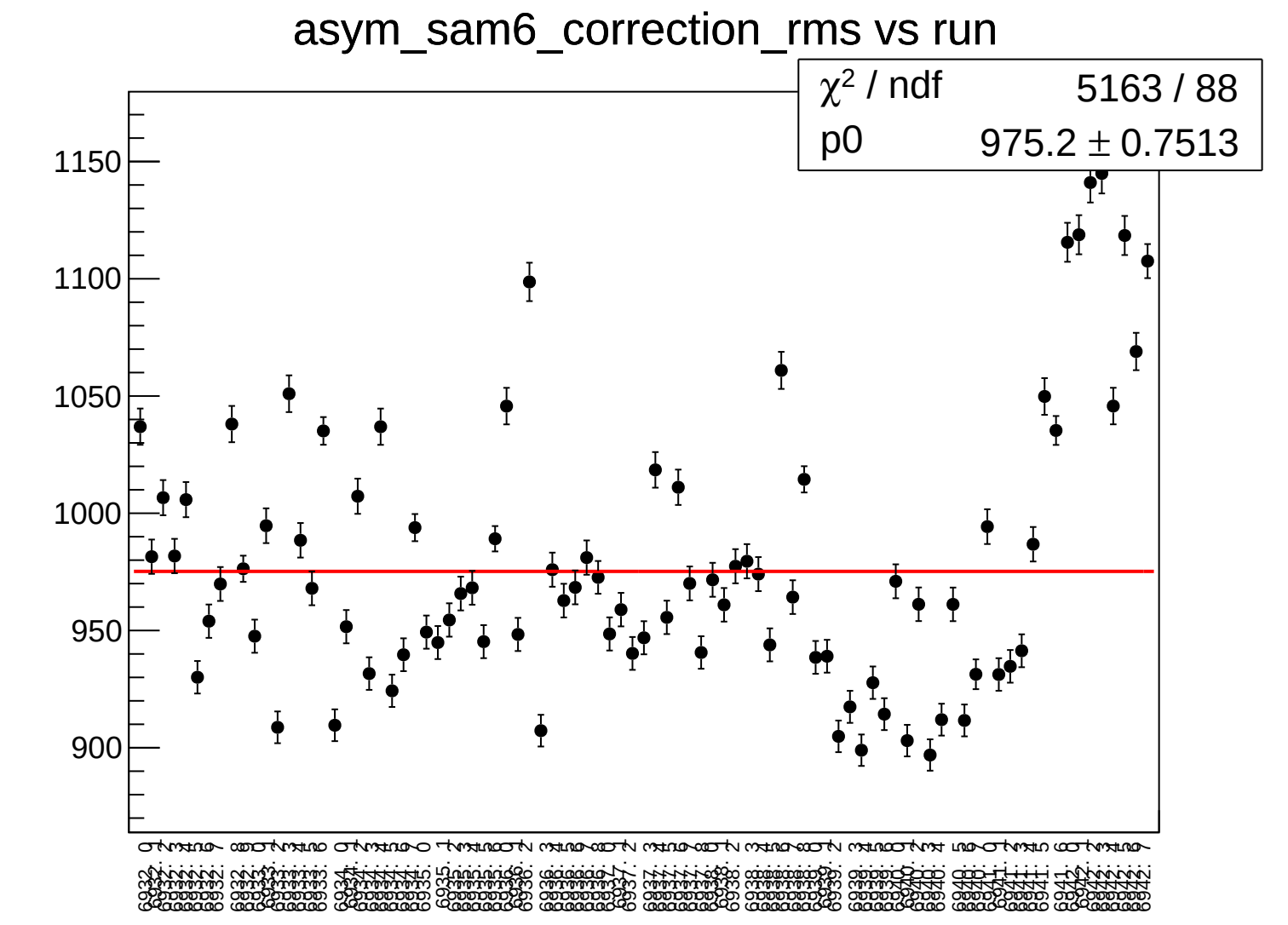

reg_asym_sam6_mean vs run
χ² / ndf 101.2 / 88
p0 −457.9 ± 169.3
pull
Entries 89
Mean 9401
Std Dev 9352

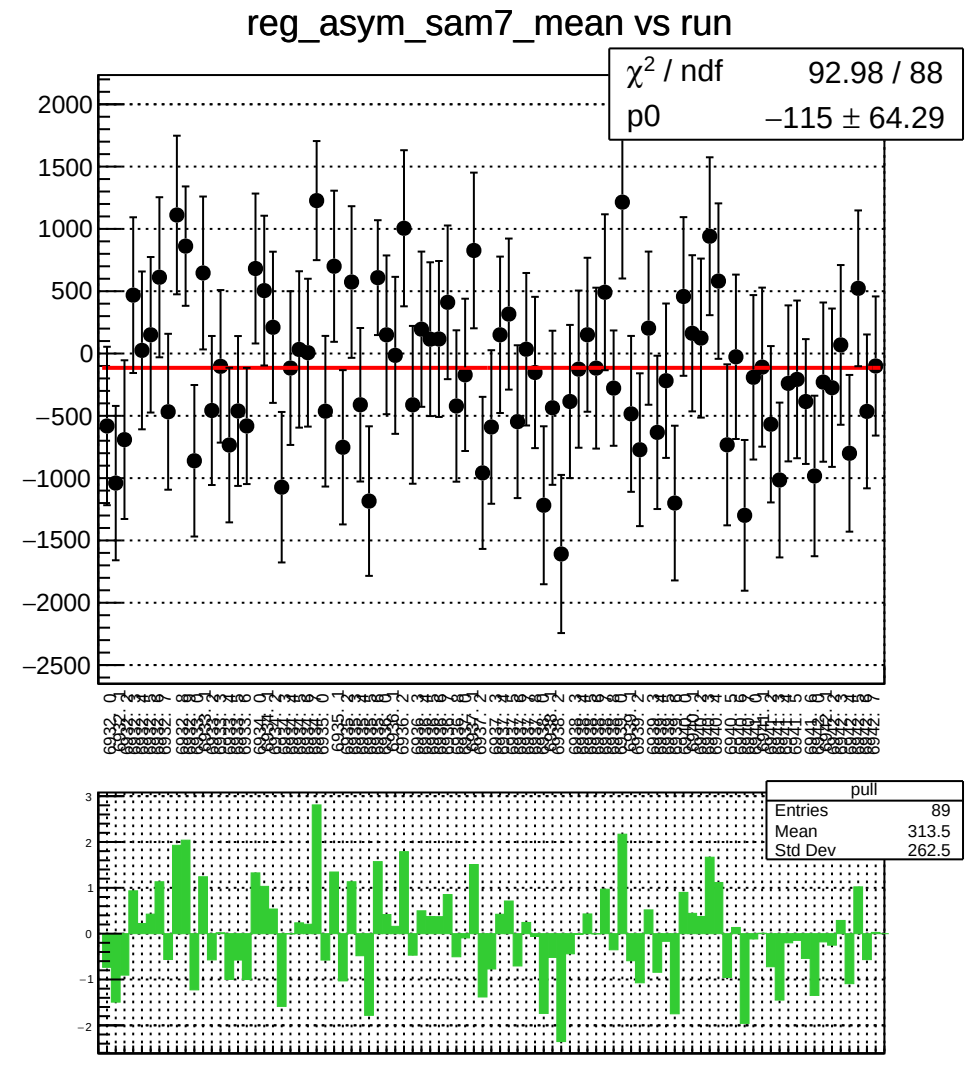

pull1D
Entries 89
Mean 0.000317
Std Dev 1.066

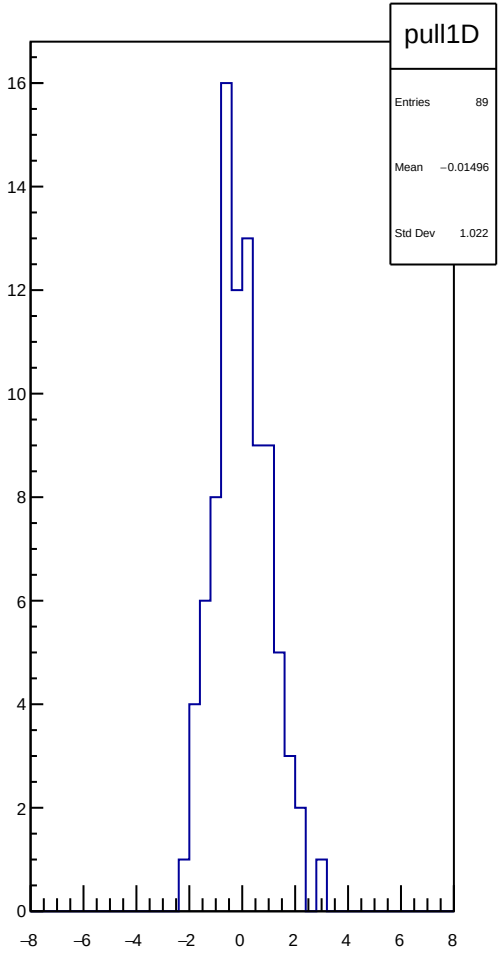

reg_asym_sam6_rms vs run
χ² / ndf 262.4 / 88
p0 155.6 ± 0.1197
164
162
160
158
156
154
152
150

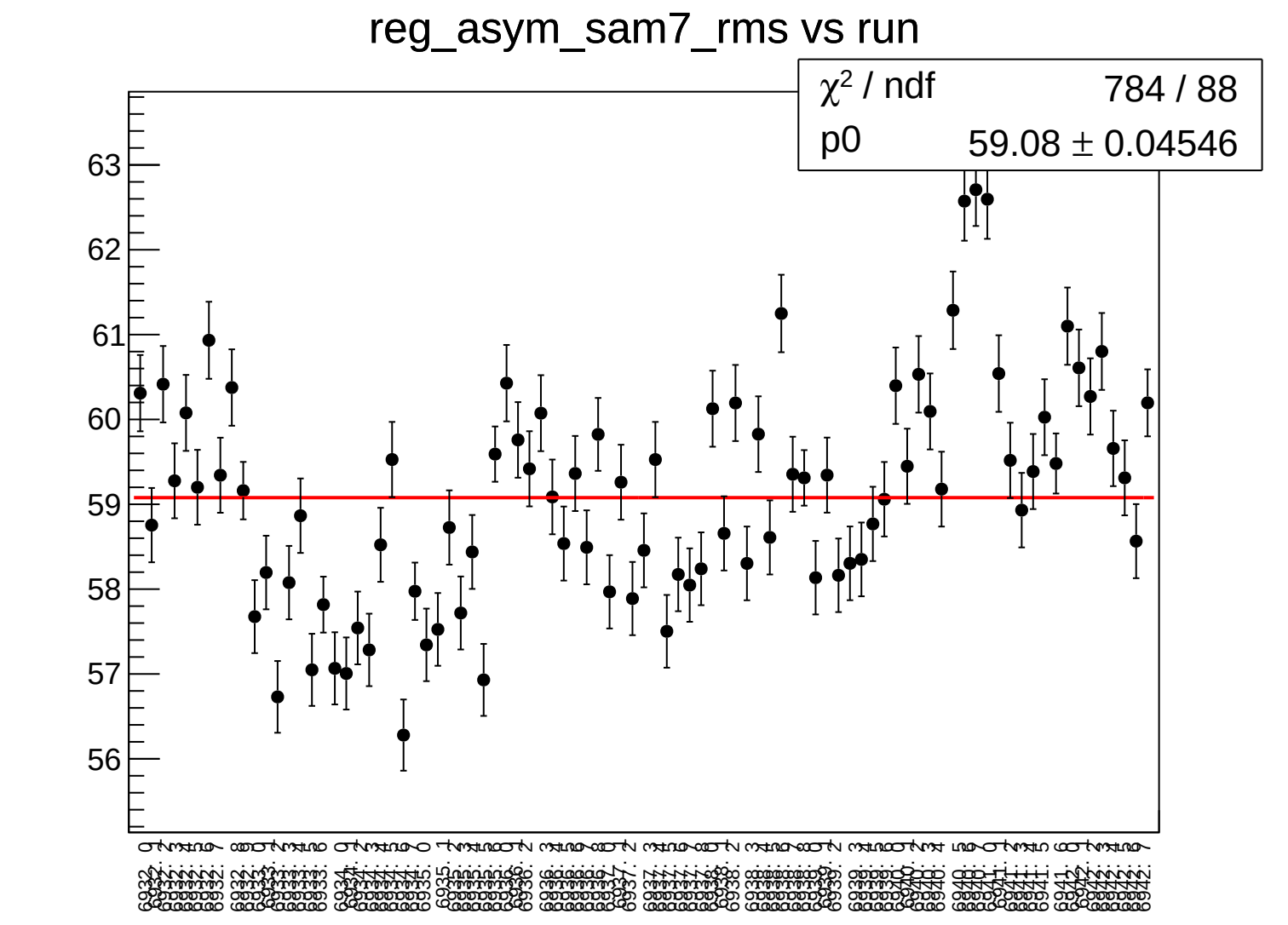

asym_sam6_correction_mean vs run
χ² / ndf 97.02 / 88
p0 1083 ± 1063
pull
Entries 89
Mean 128.2
Std Dev 99.02

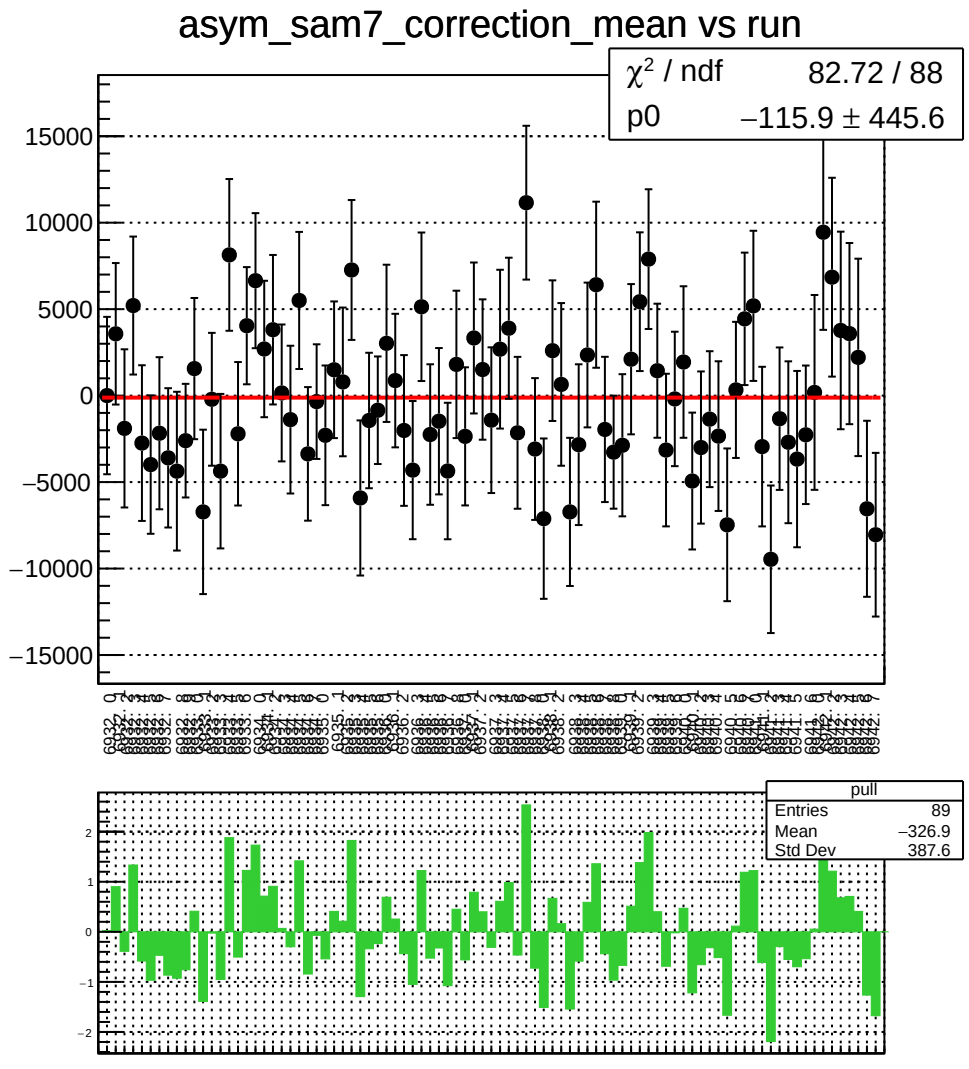

pull1D
Entries 89
Mean −0.009855
Std Dev 1.044

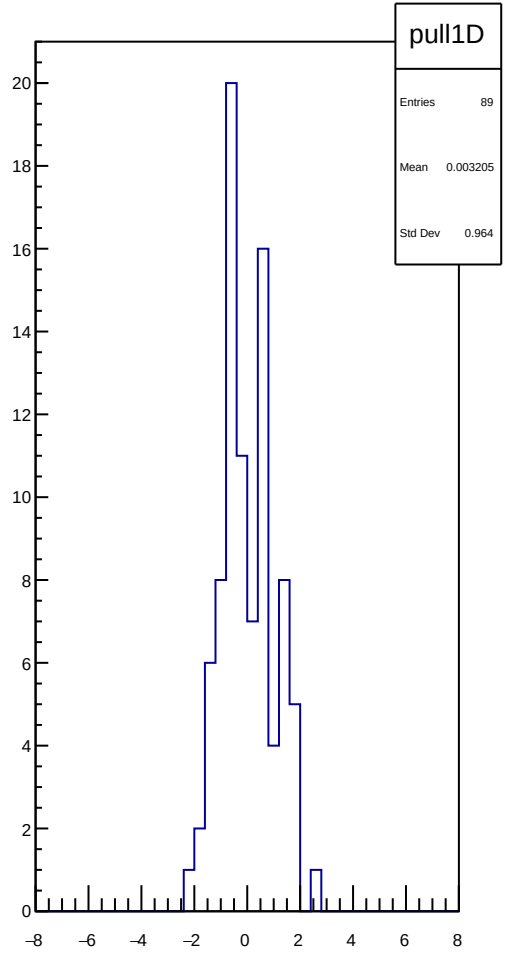

asym_sam6_correction_rms vs run
χ² / ndf 5163 / 88
p0 975.2 ± 0.7513
1150
1100
1050
1000
950
900

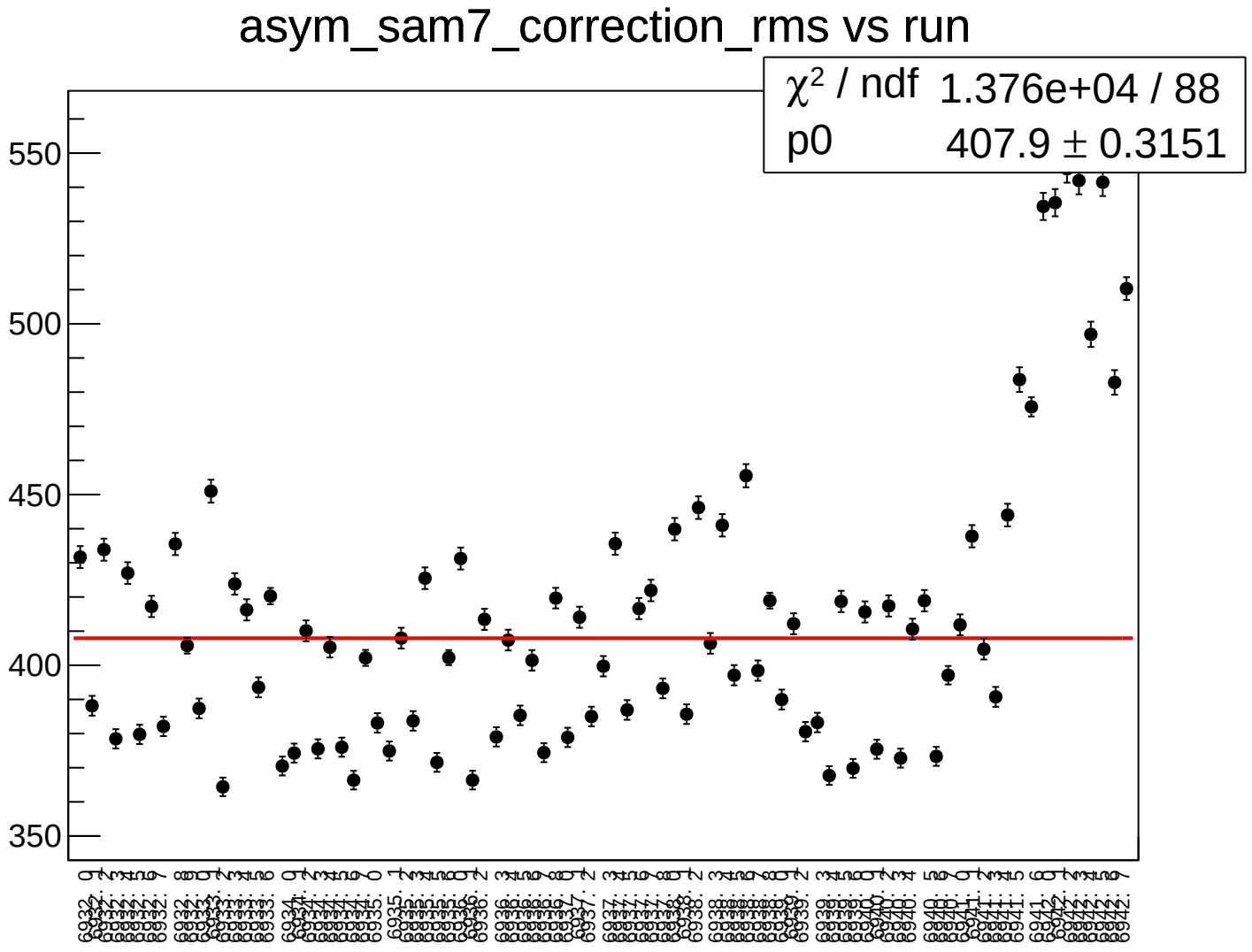

reg_asym_sam7_mean vs run
χ² / ndf 92.98 / 88
p0 −115 ± 64.29
pull
Entries 89
Mean 313.5
Std Dev 262.5

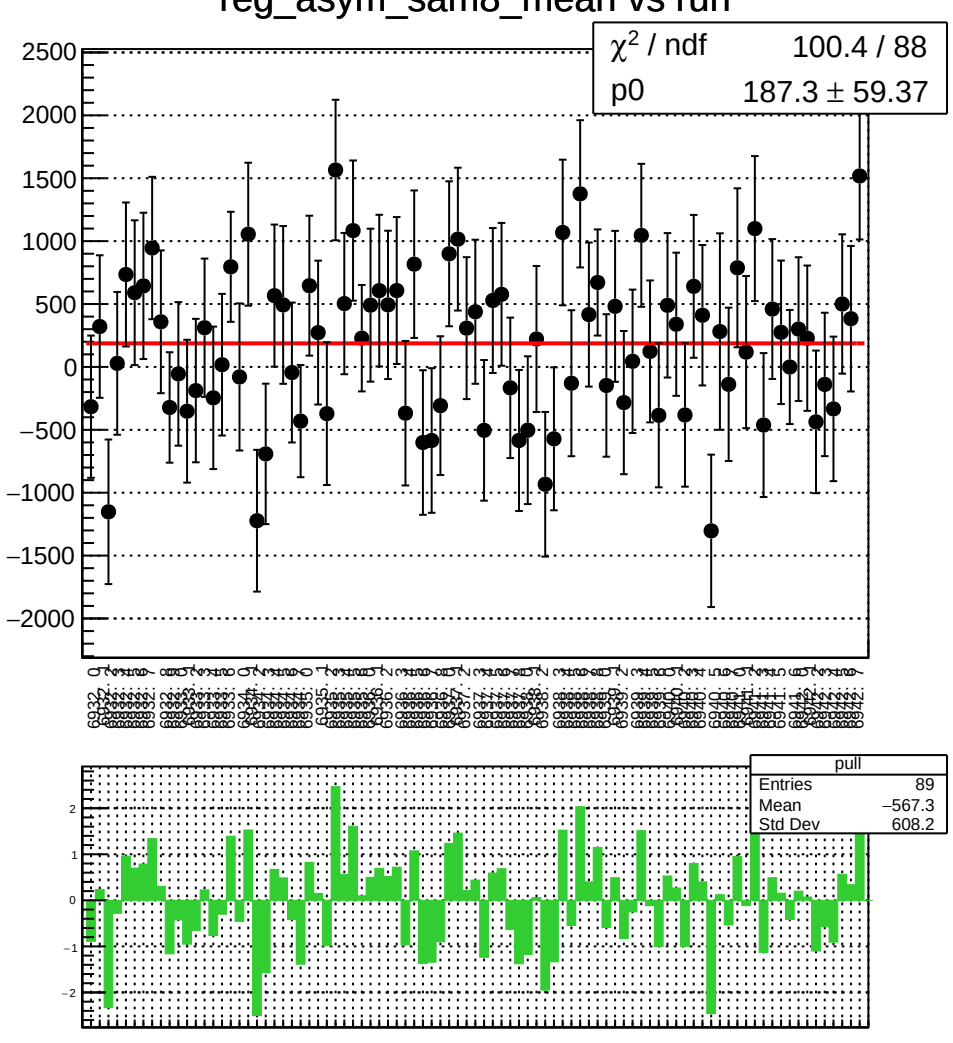

pull1D
Entries 89
Mean −0.01496
Std Dev 1.022

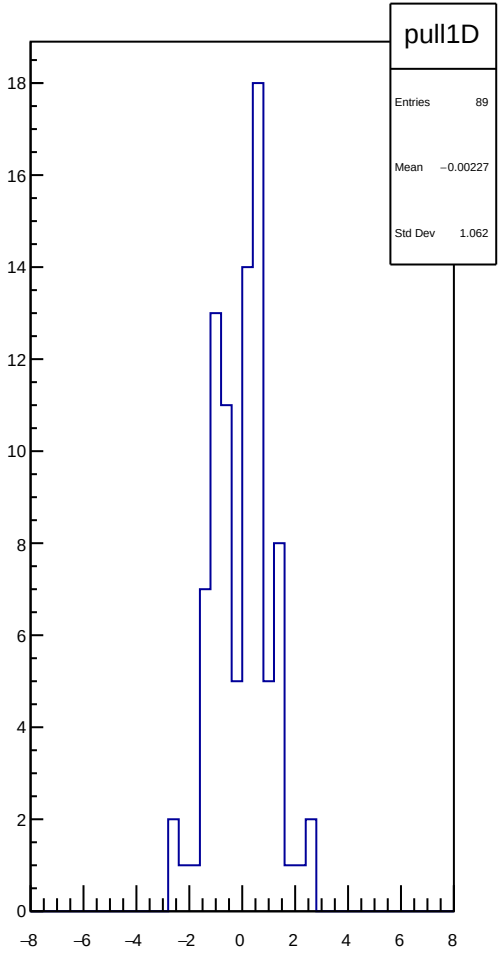

reg_asym_sam7_rms vs run
χ² / ndf 784 / 88
p0 59.08 ± 0.04546
63
62
61
60
59
58
57
56

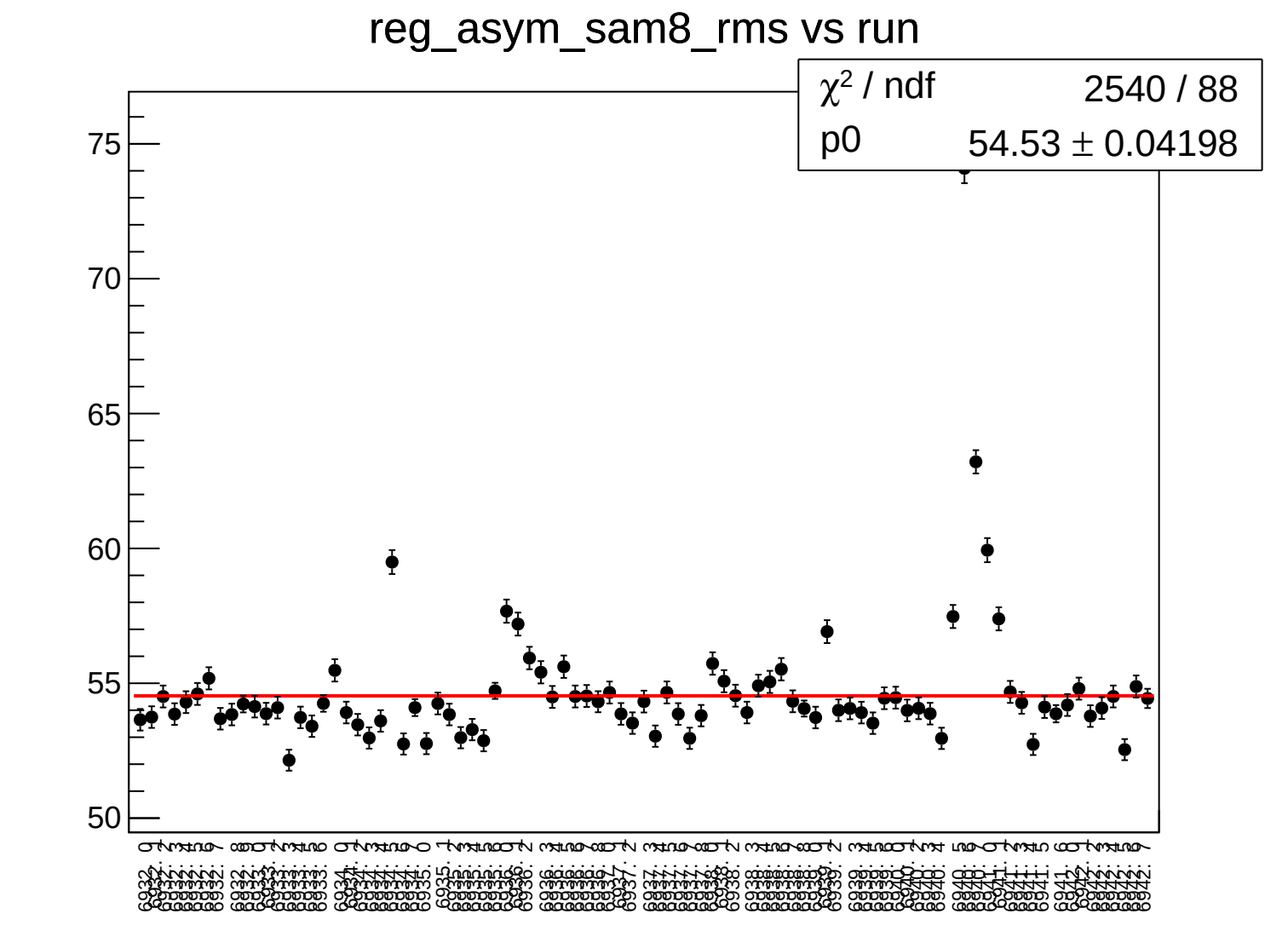

asym_sam7_correction_mean vs run
χ² / ndf 82.72 / 88
p0 −115.9 ± 445.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −326.9
Std Dev 387.6
2
1
0
−1
−2

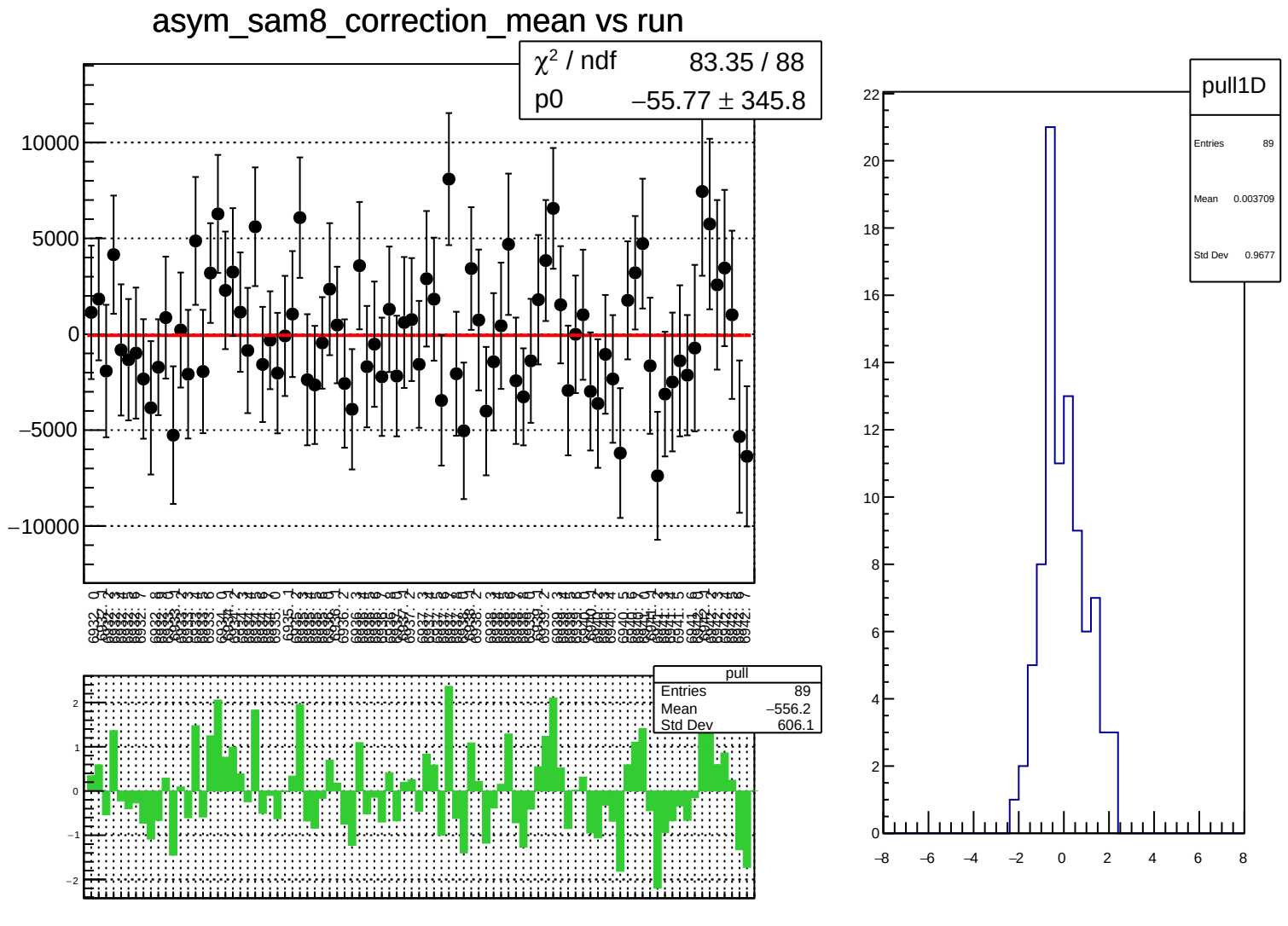

pull1D
Entries 89
Mean 0.003205
Std Dev 0.964
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

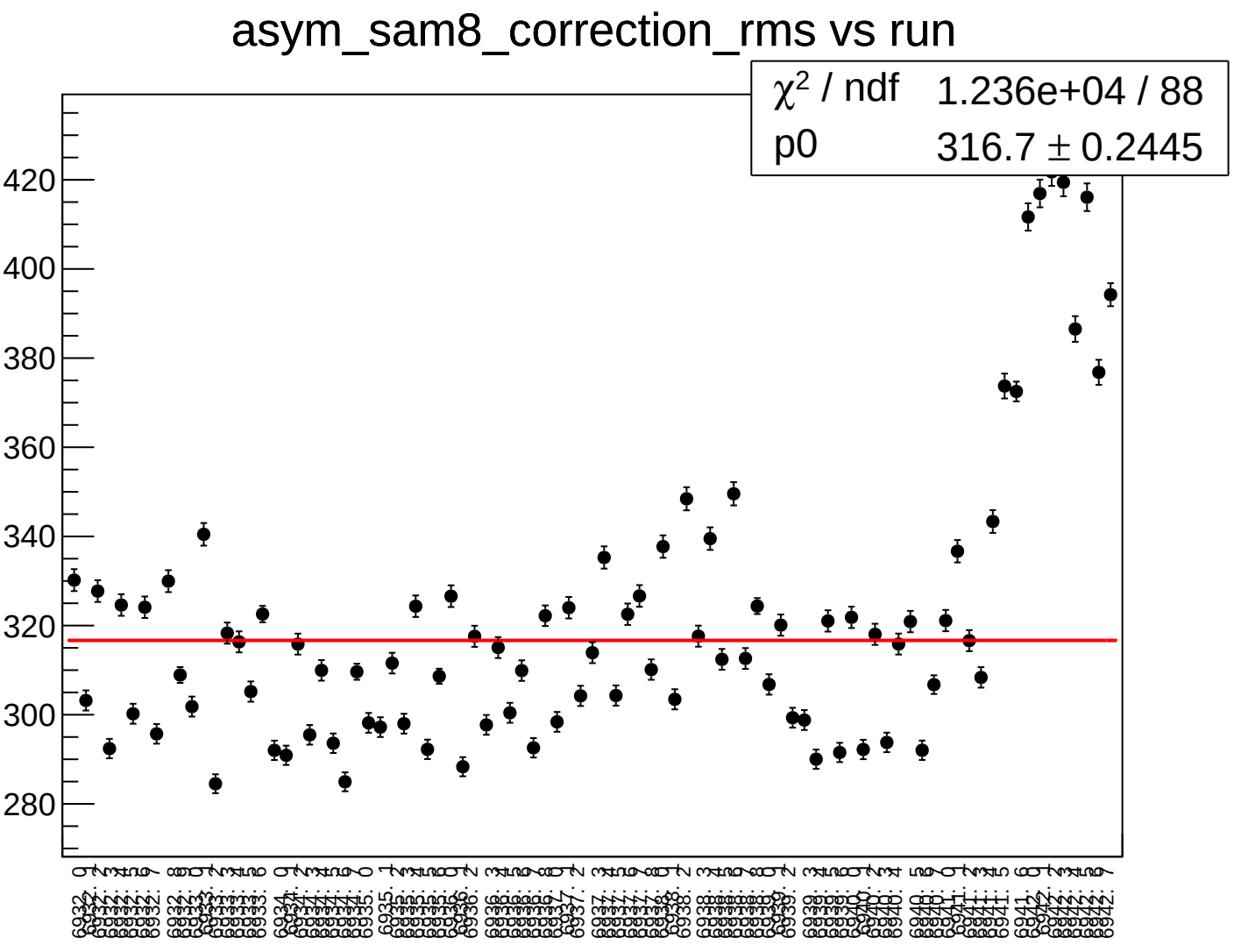

asym_sam7_correction_rms vs run
χ² / ndf 1.376e+04 / 88
p0 407.9 ± 0.3151
550
500
450
400
350

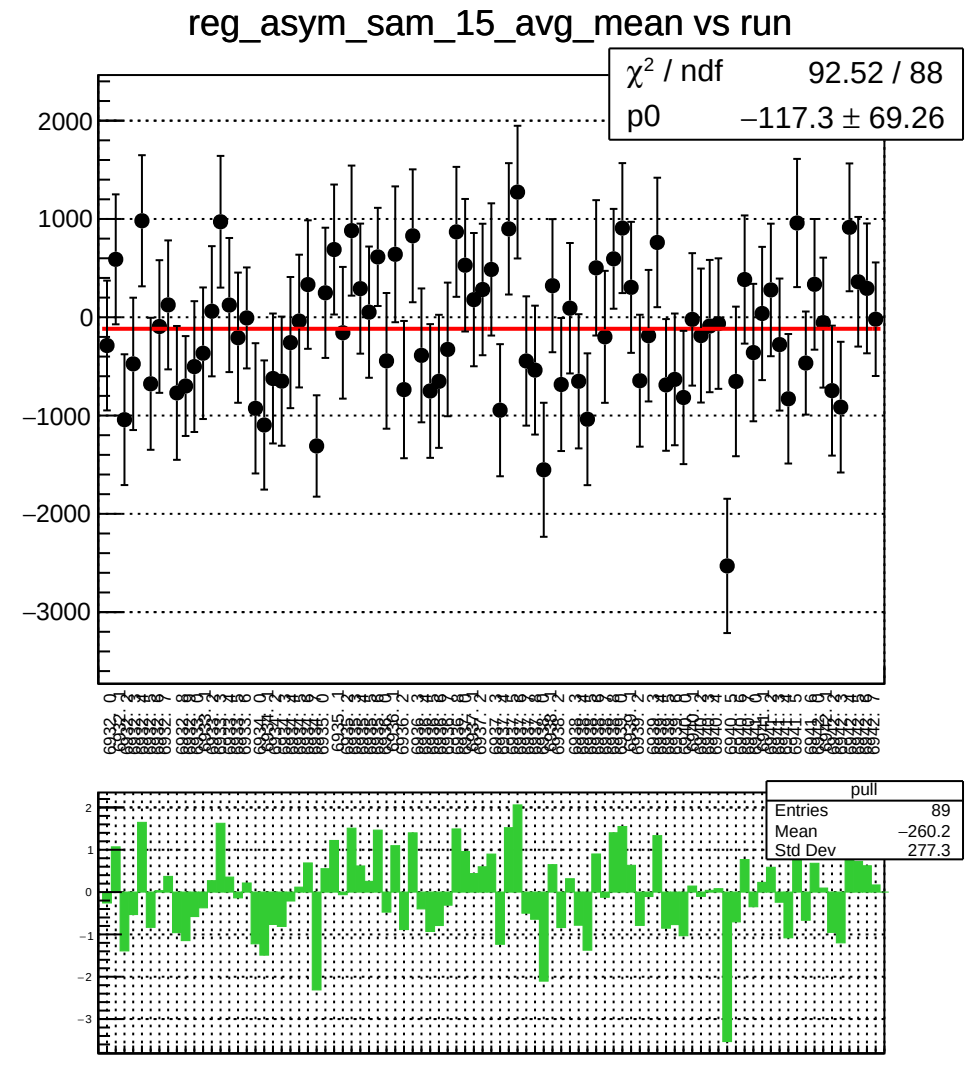

reg_asym_sam8_mean vs run
χ^2 / ndf 100.4 / 88
p0 187.3 ± 59.37
pull
Entries 89
Mean −567.3
Std Dev 608.2

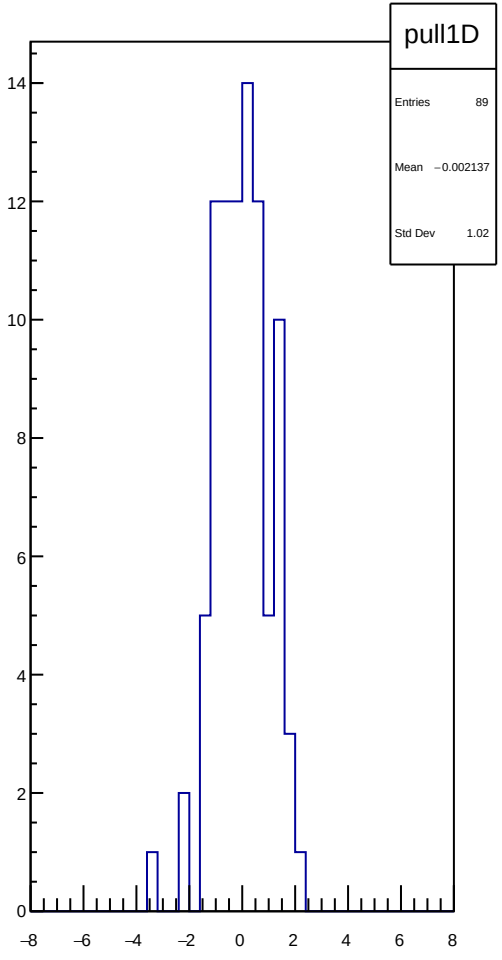

pull1D
Entries 89
Mean −0.00227
Std Dev 1.062

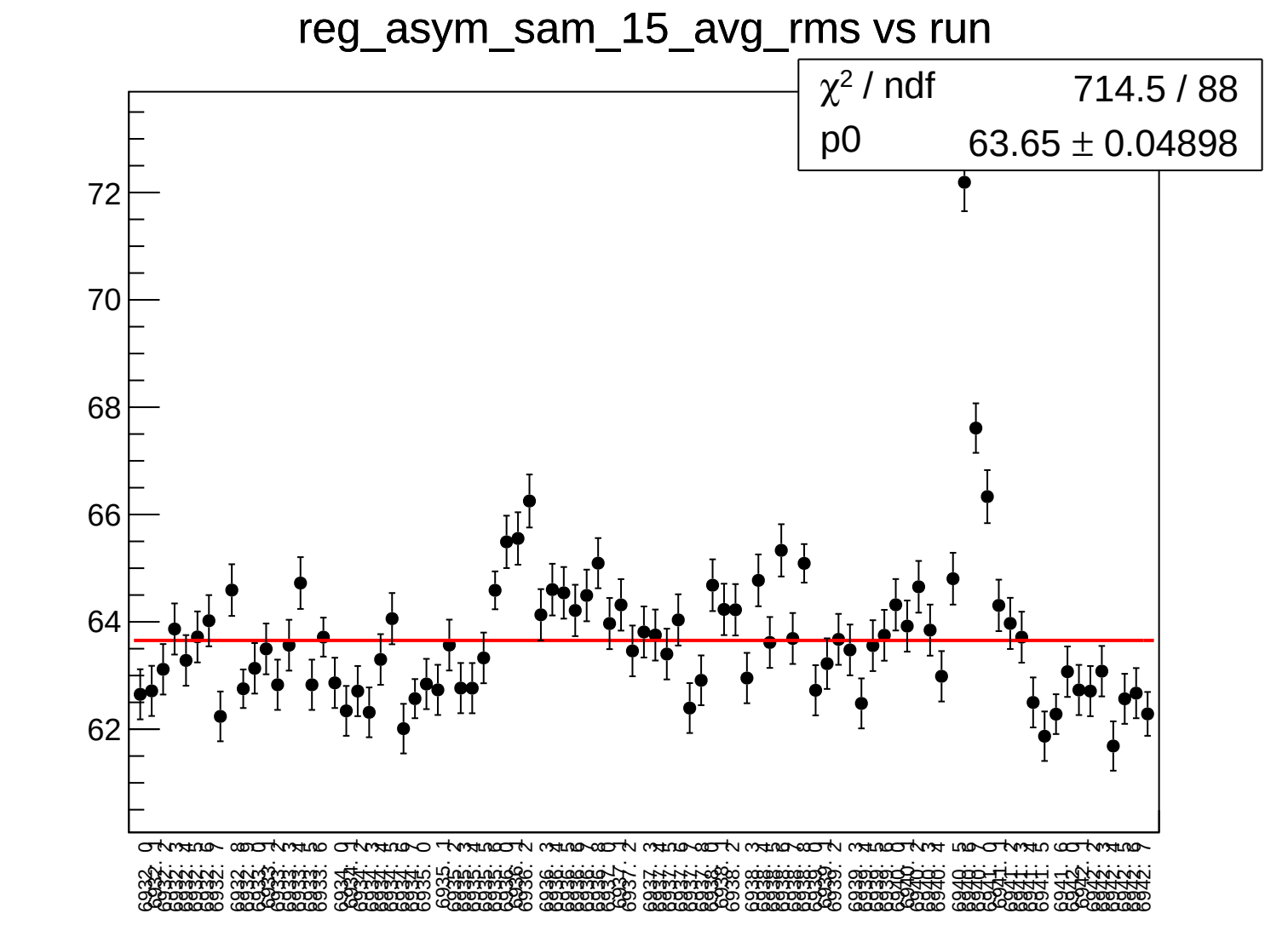

reg_asym_sam8_rms vs run
χ² / ndf 2540 / 88
p0 54.53 ± 0.04198
75
70
65
60
55
50

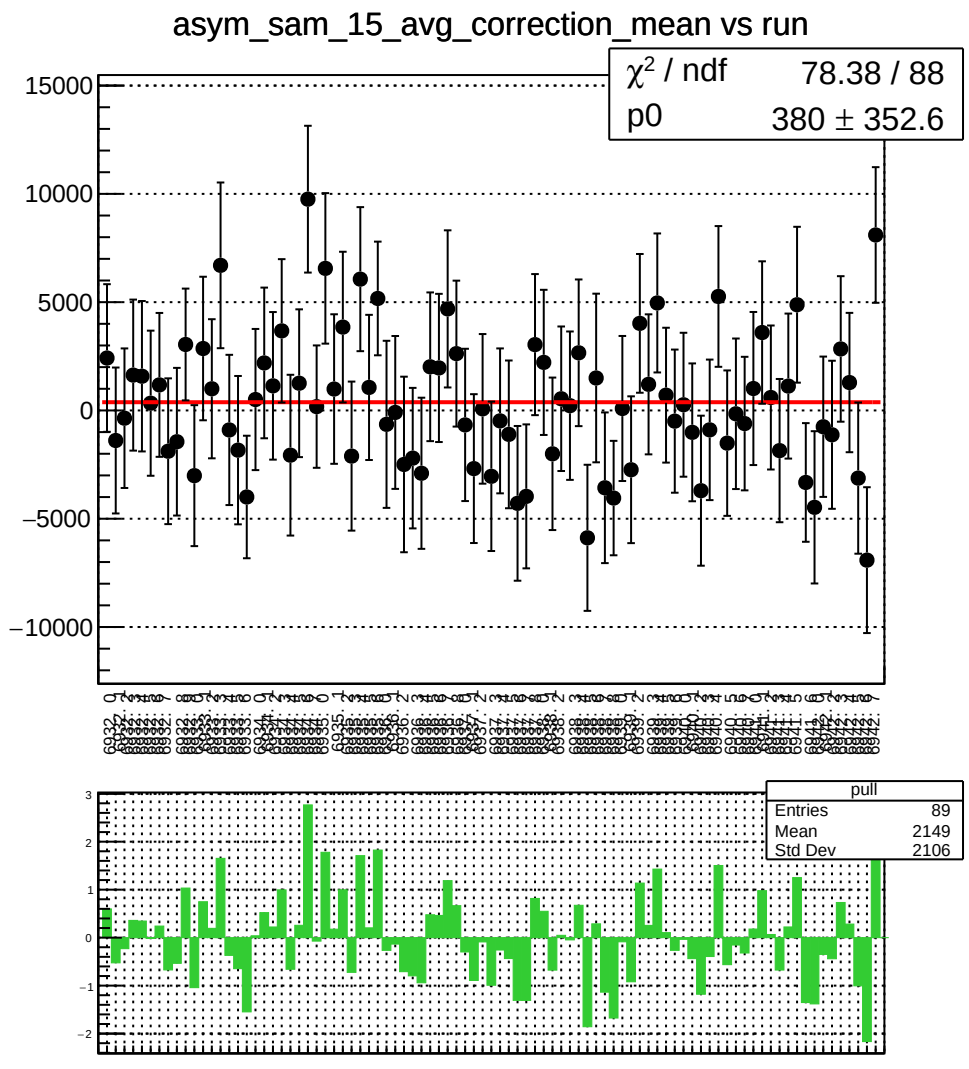

asym_sam8_correction_mean vs run
χ² / ndf 83.35 / 88
p0 −55.77 ± 345.8
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −556.2
Std Dev 606.1
2
1
0
−1
−2
pull1D
Entries 89
Mean 0.003709
Std Dev 0.9677
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

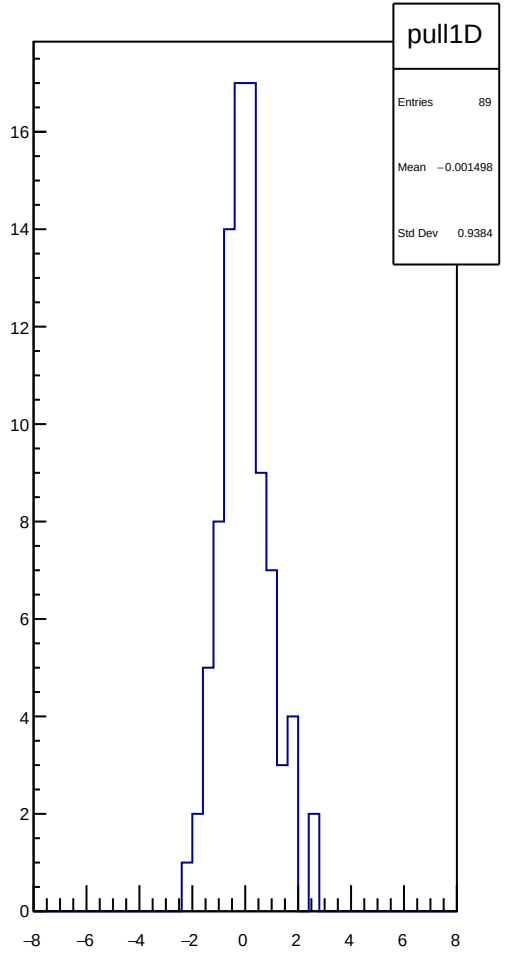

asym_sam8_correction_rms vs run
χ^2 / ndf 1.236e+04 / 88
p0 316.7 ± 0.2445
420
400
380
360
340
320
300
280

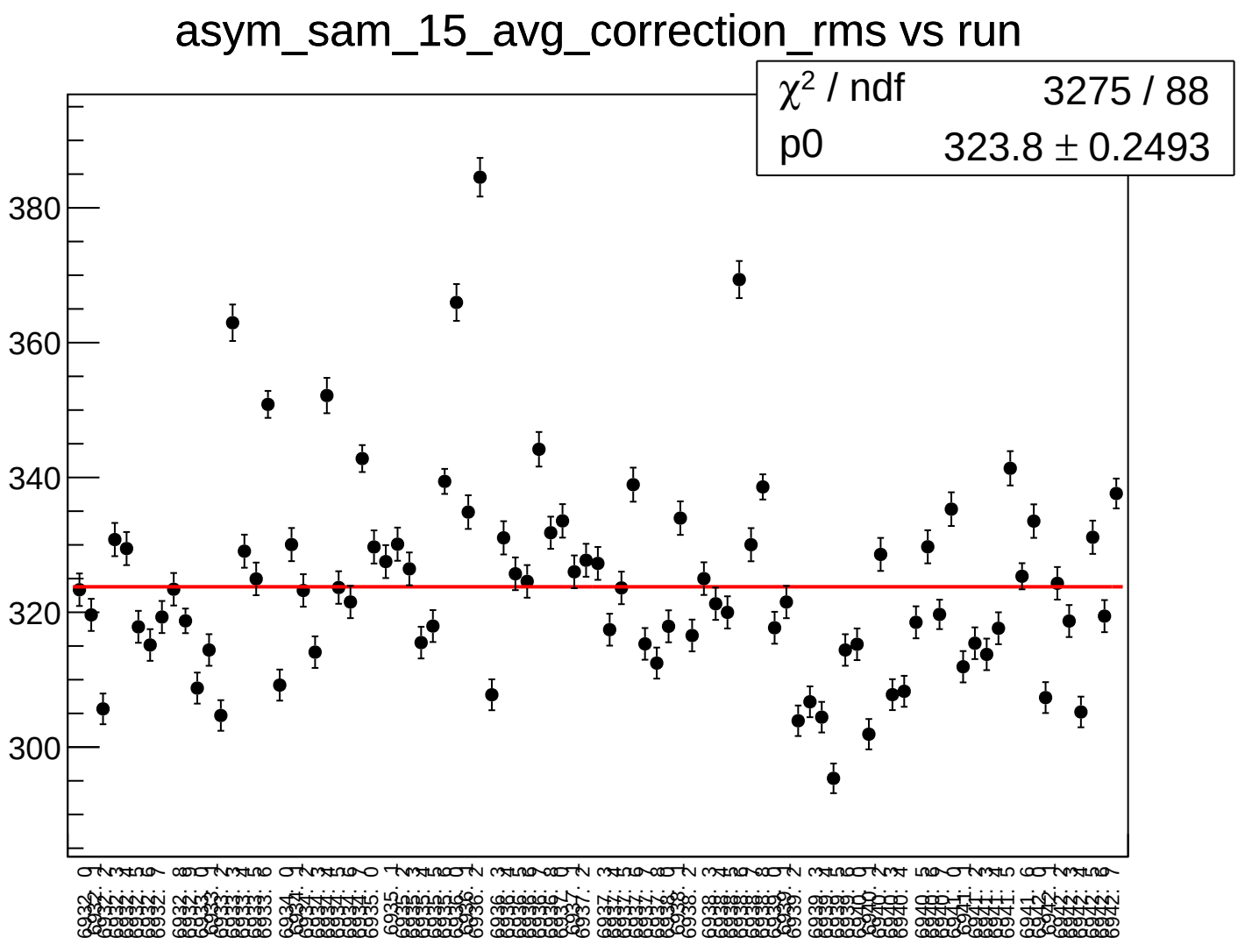

reg_asym_sam_15_avg_mean vs run
χ² / ndf 92.52 / 88
p0 −117.3 ± 69.26
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean −260.2
Std Dev 277.3
2
1
0
−1
−2
−3

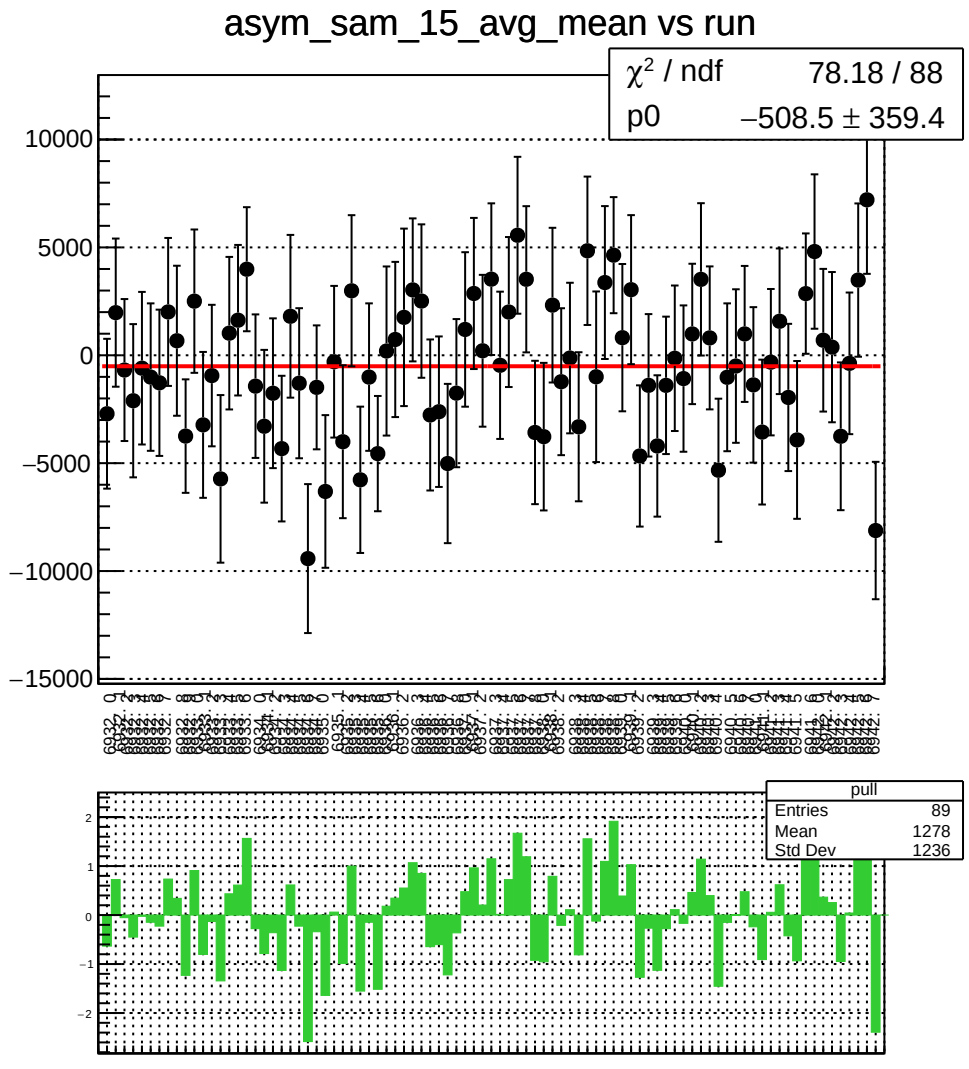

pull1D
Entries 89
Mean −0.002137
Std Dev 1.02
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

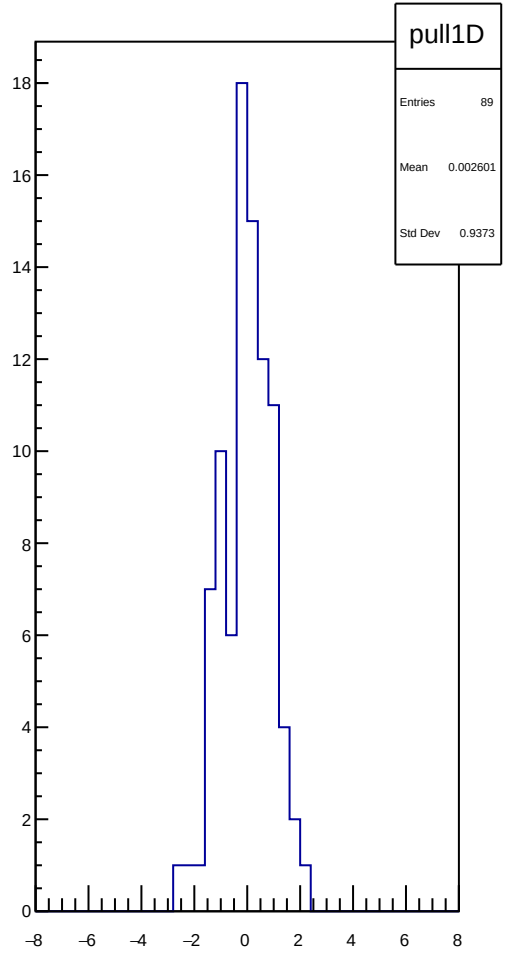

reg_asym_sam_15_avg_rms vs run
χ² / ndf 714.5 / 88
p0 63.65 ± 0.04898
72
70
68
66
64
62

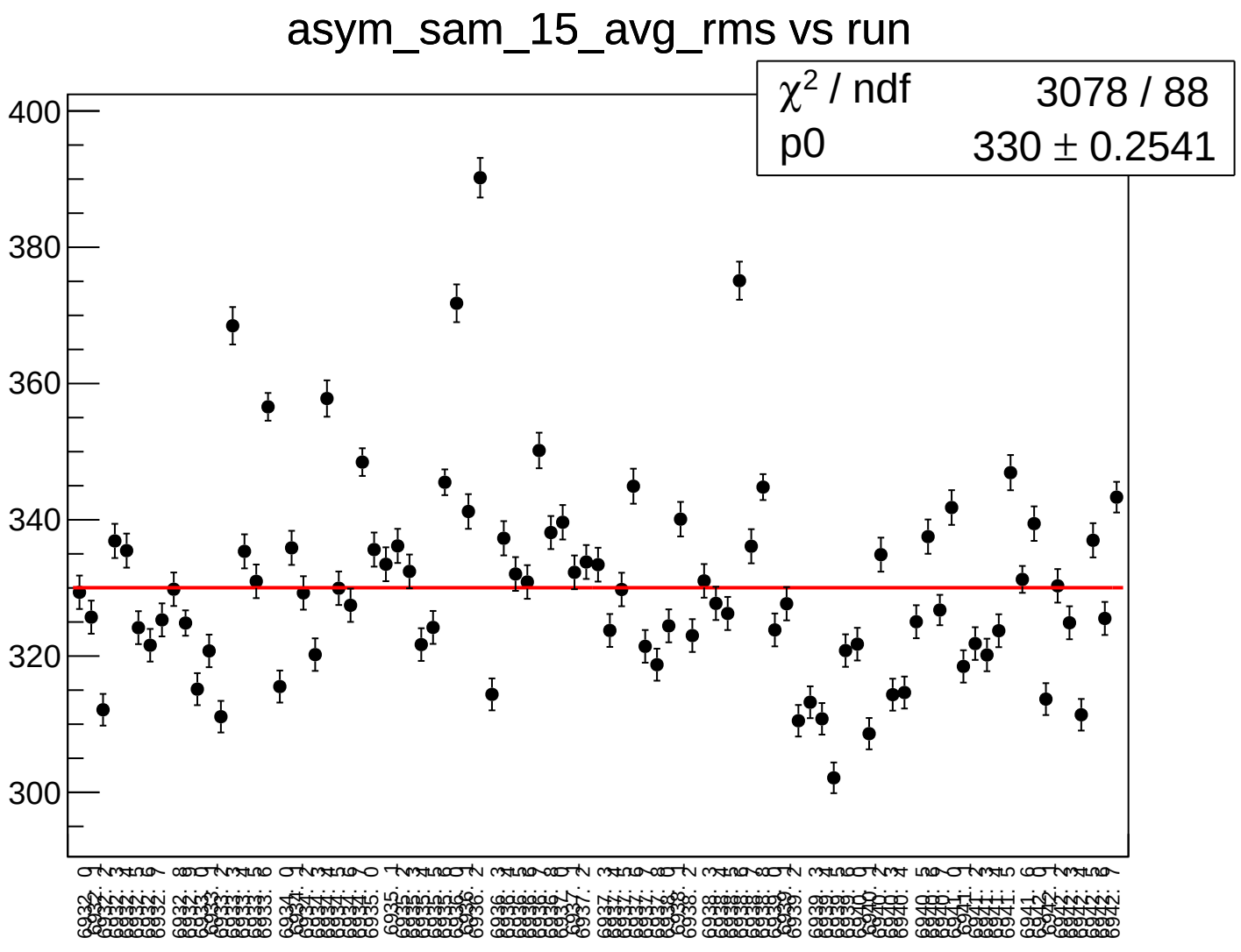

asym_sam_15_avg_correction_mean vs run
χ² / ndf 78.38 / 88
p0 380 ± 352.6
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 2149
Std Dev 2106
3
2
1
0
−1
−2

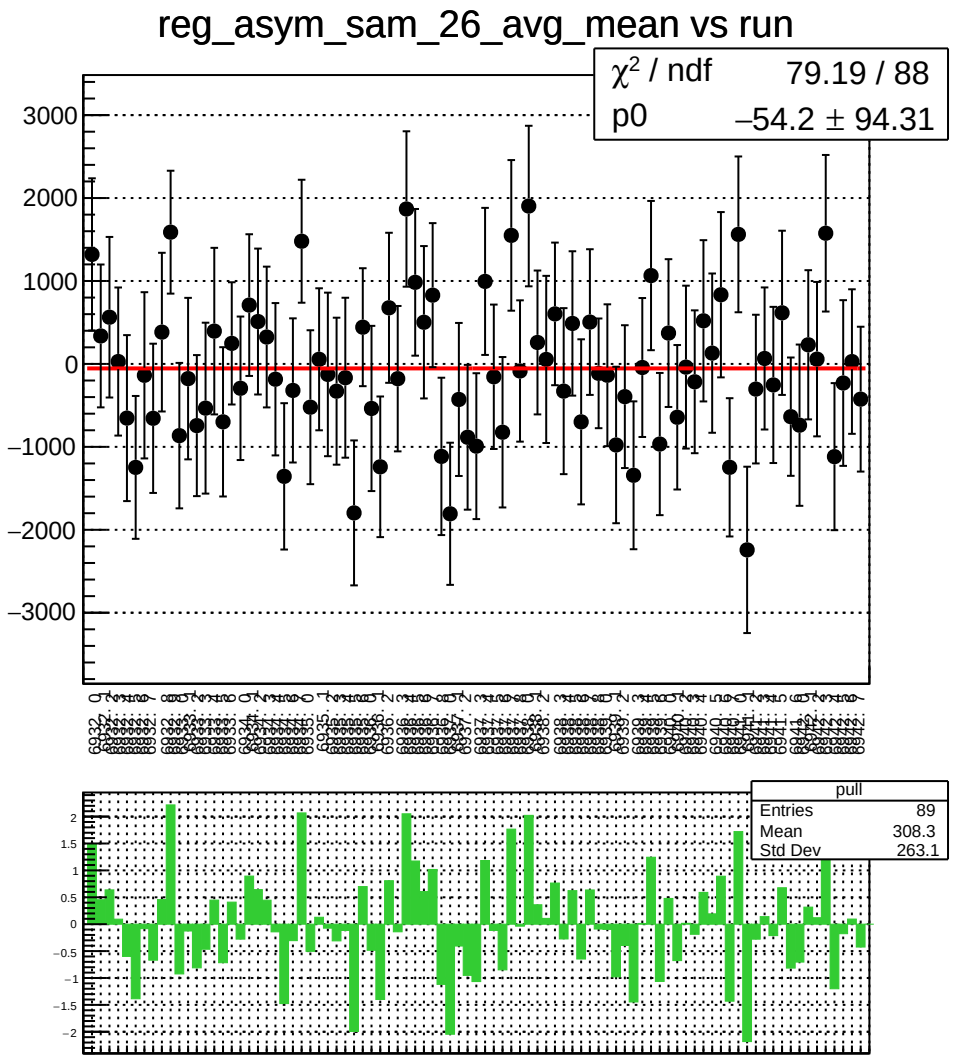

pull1D
Entries 89
Mean −0.001498
Std Dev 0.9384
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

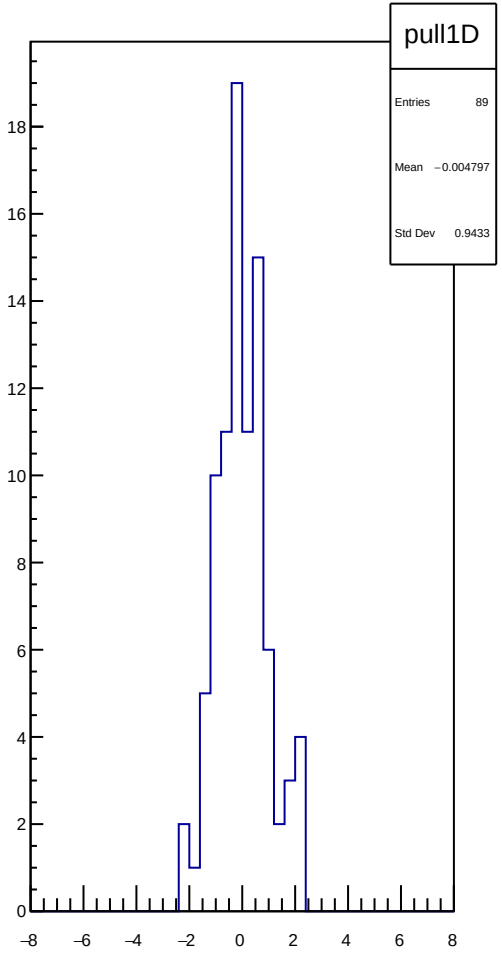

asym_sam_15_avg_correction_rms vs run
χ² / ndf 3275 / 88
p0 323.8 ± 0.2493
380
360
340
320
300

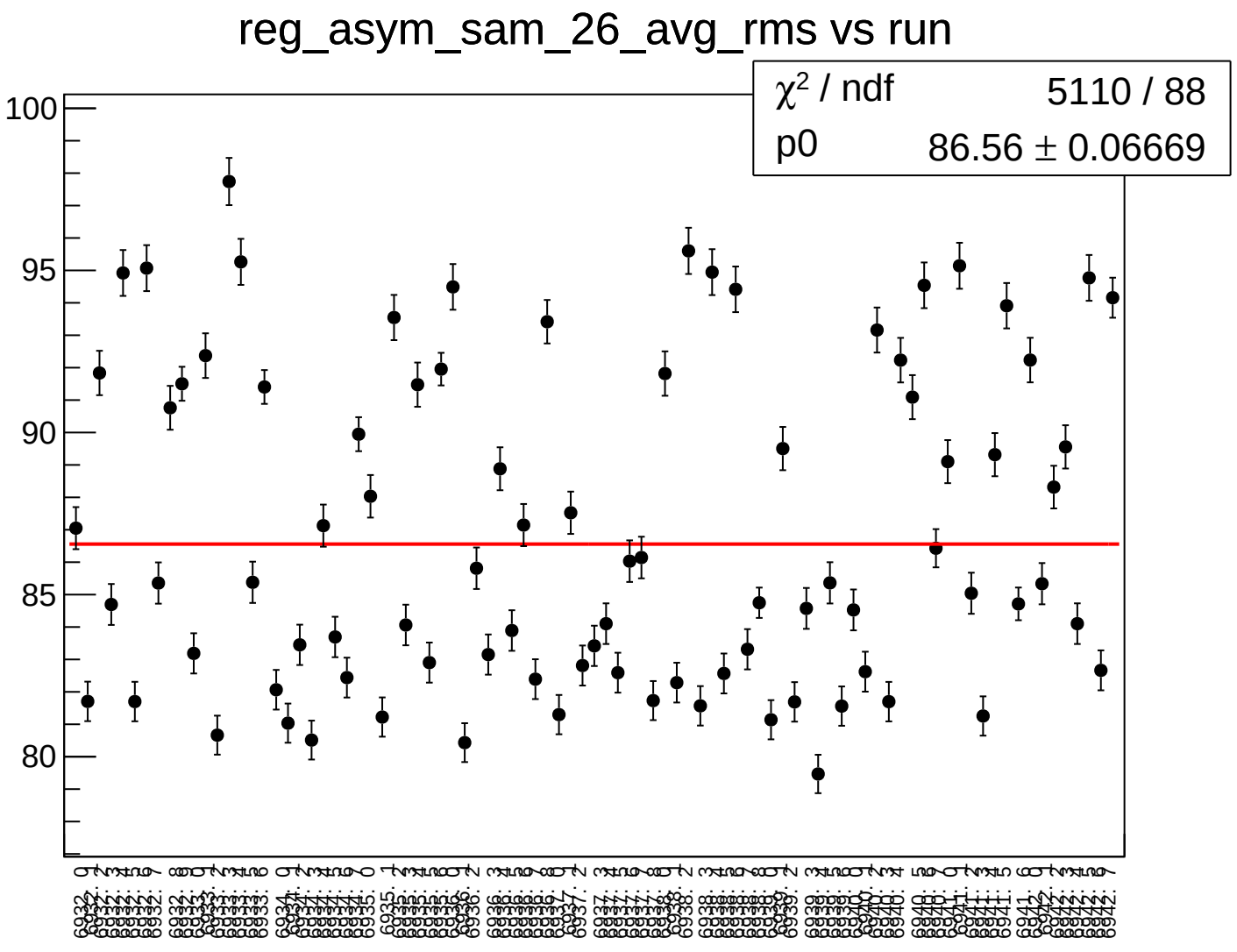

asym_sam_15_avg_mean vs run
χ² / ndf 78.18 / 88
p0 −508.5 ± 359.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 1278
Std Dev 1236
2
1
0
−1
−2

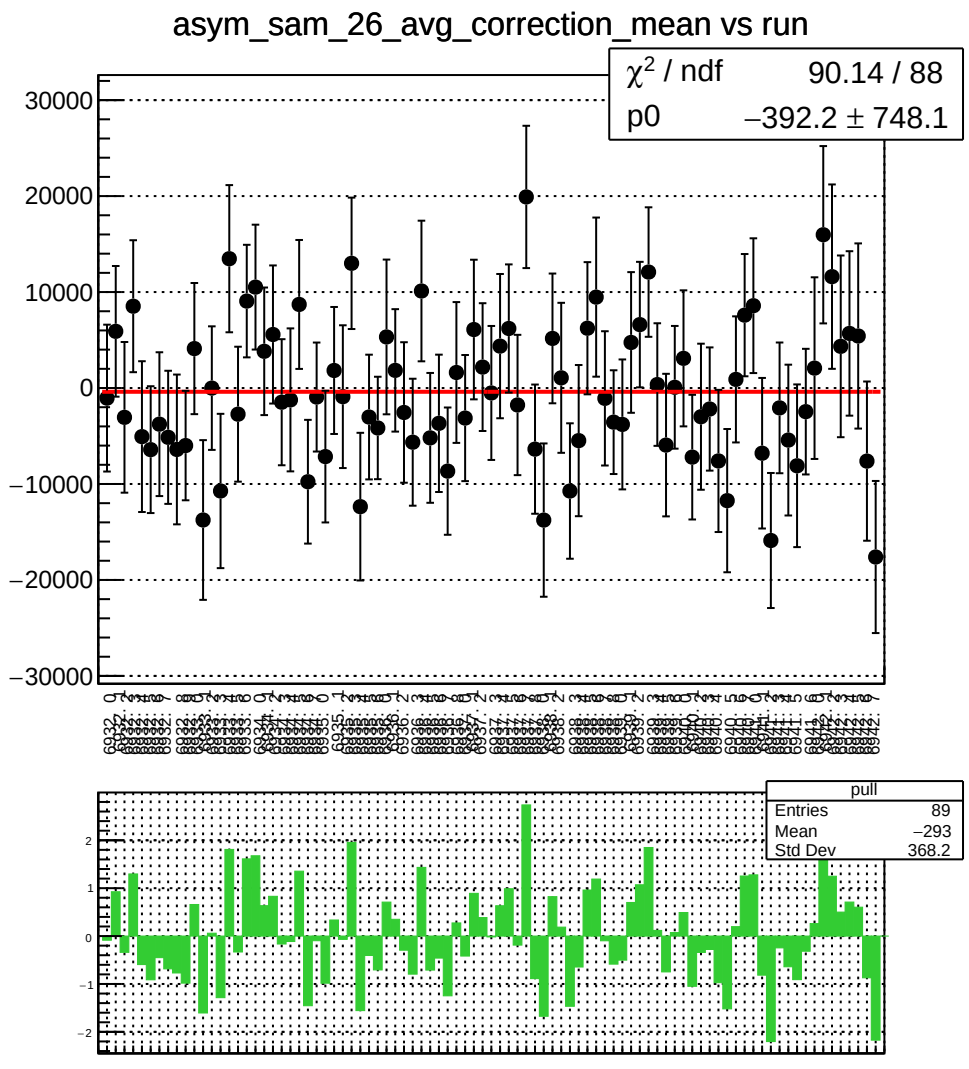

pull1D
Entries 89
Mean 0.002601
Std Dev 0.9373
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

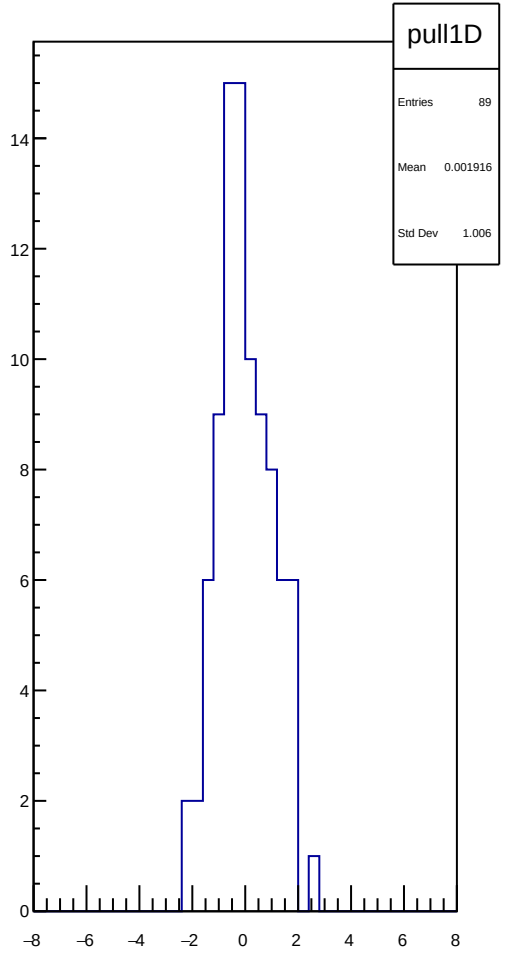

asym_sam_15_avg_rms vs run
χ^2 / ndf 3078 / 88
p0 330 ± 0.2541
400
380
360
340
320
300

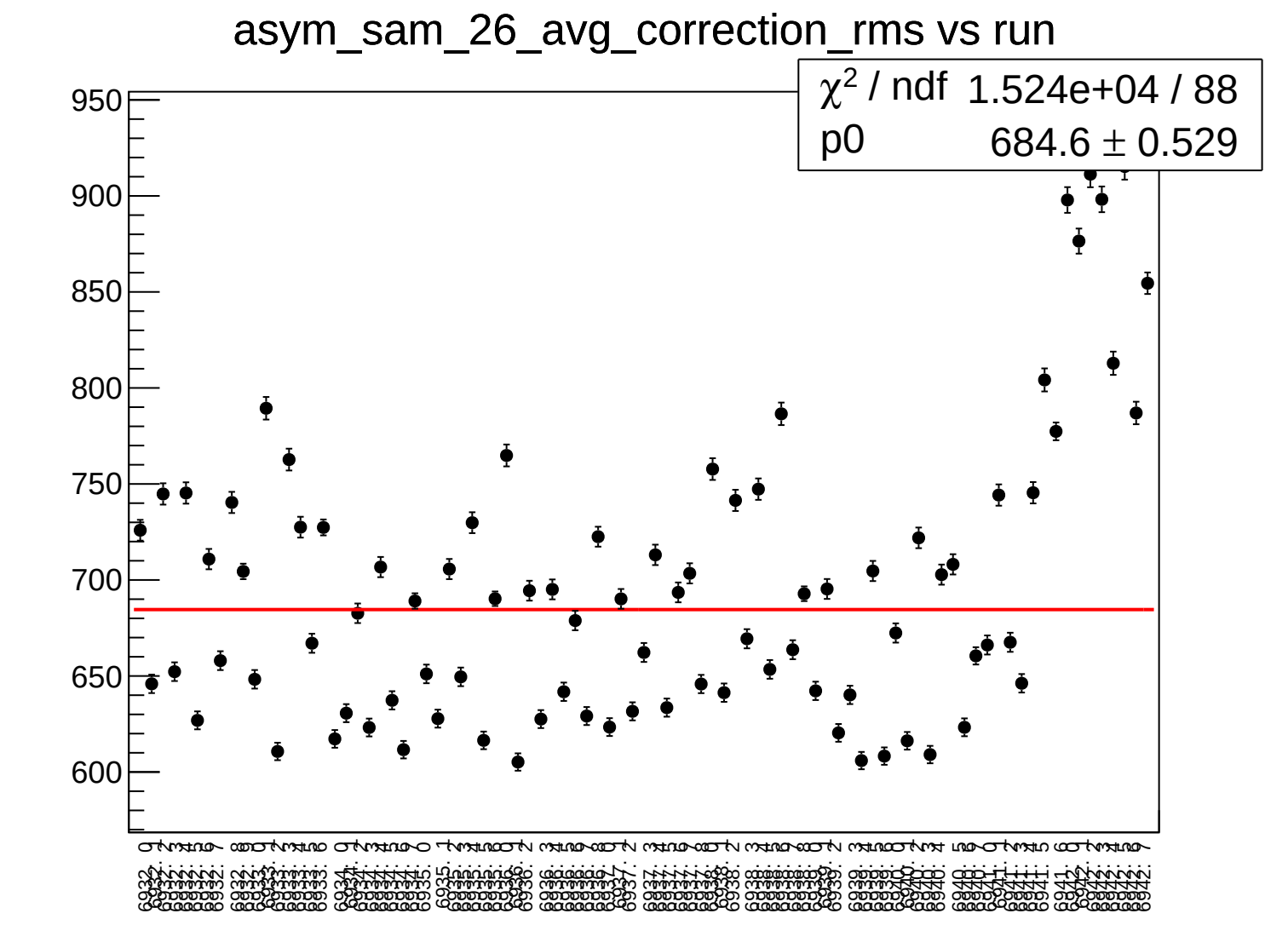

reg_asym_sam_26_avg_mean vs run
χ² / ndf 79.19 / 88
p0 −54.2 ± 94.31
pull
Entries 89
Mean 308.3
Std Dev 263.1

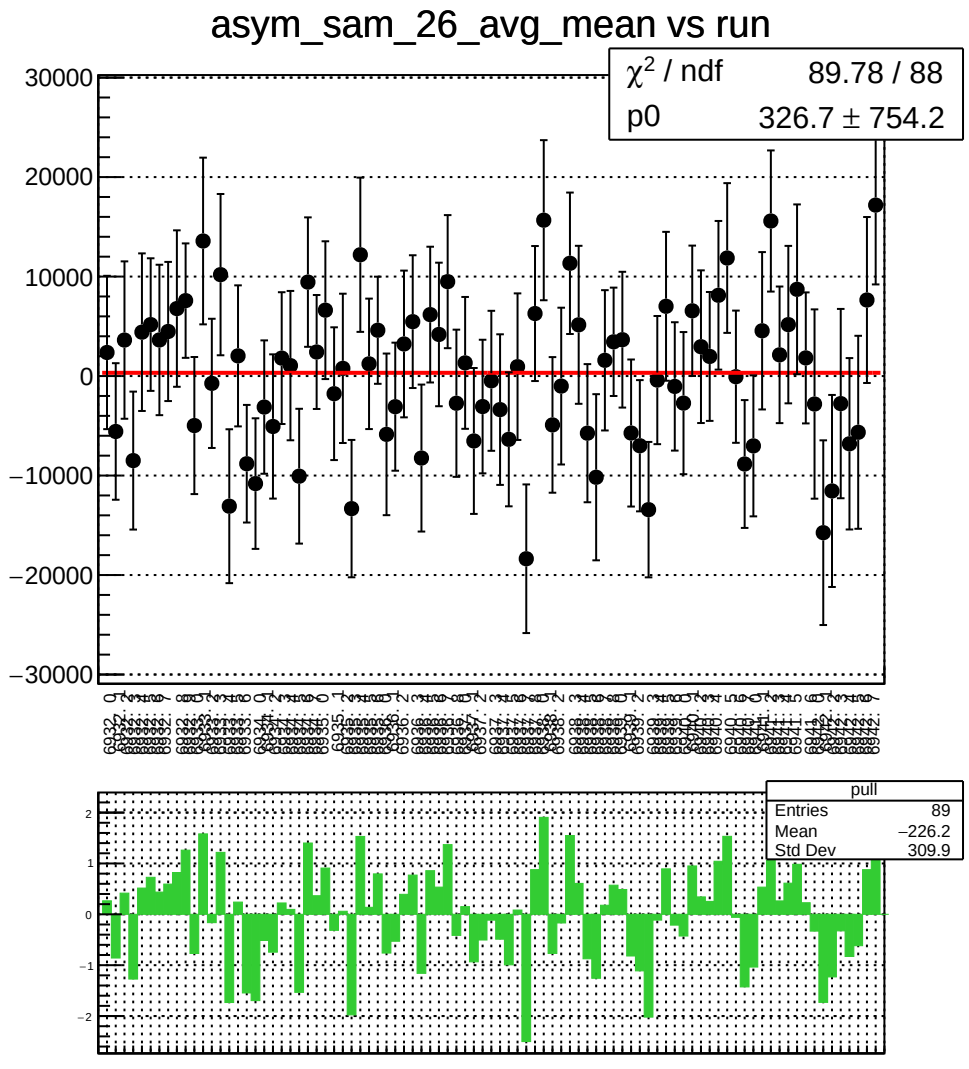

pull1D
Entries 89
Mean −0.004797
Std Dev 0.9433

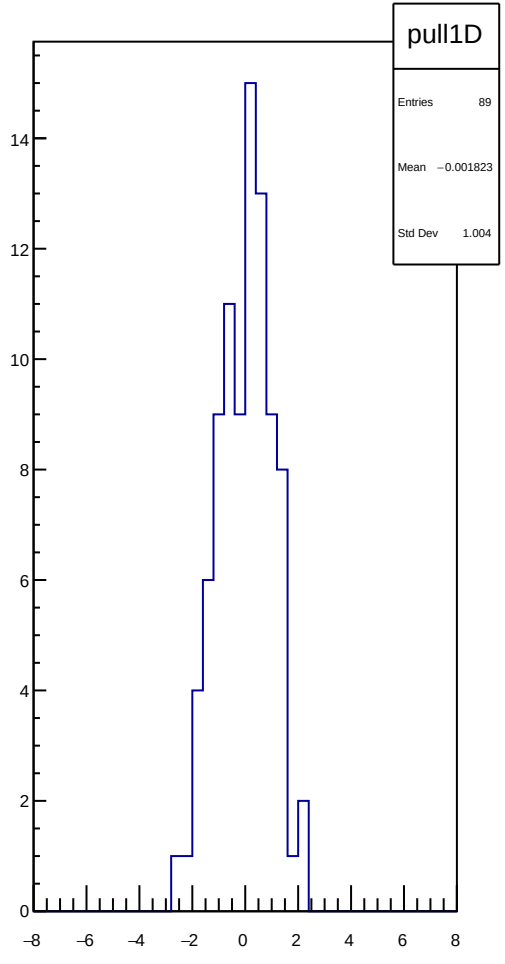

reg_asym_sam_26_avg_rms vs run
χ² / ndf 5110 / 88
p0 86.56 ± 0.06669
100
95
90
85
80

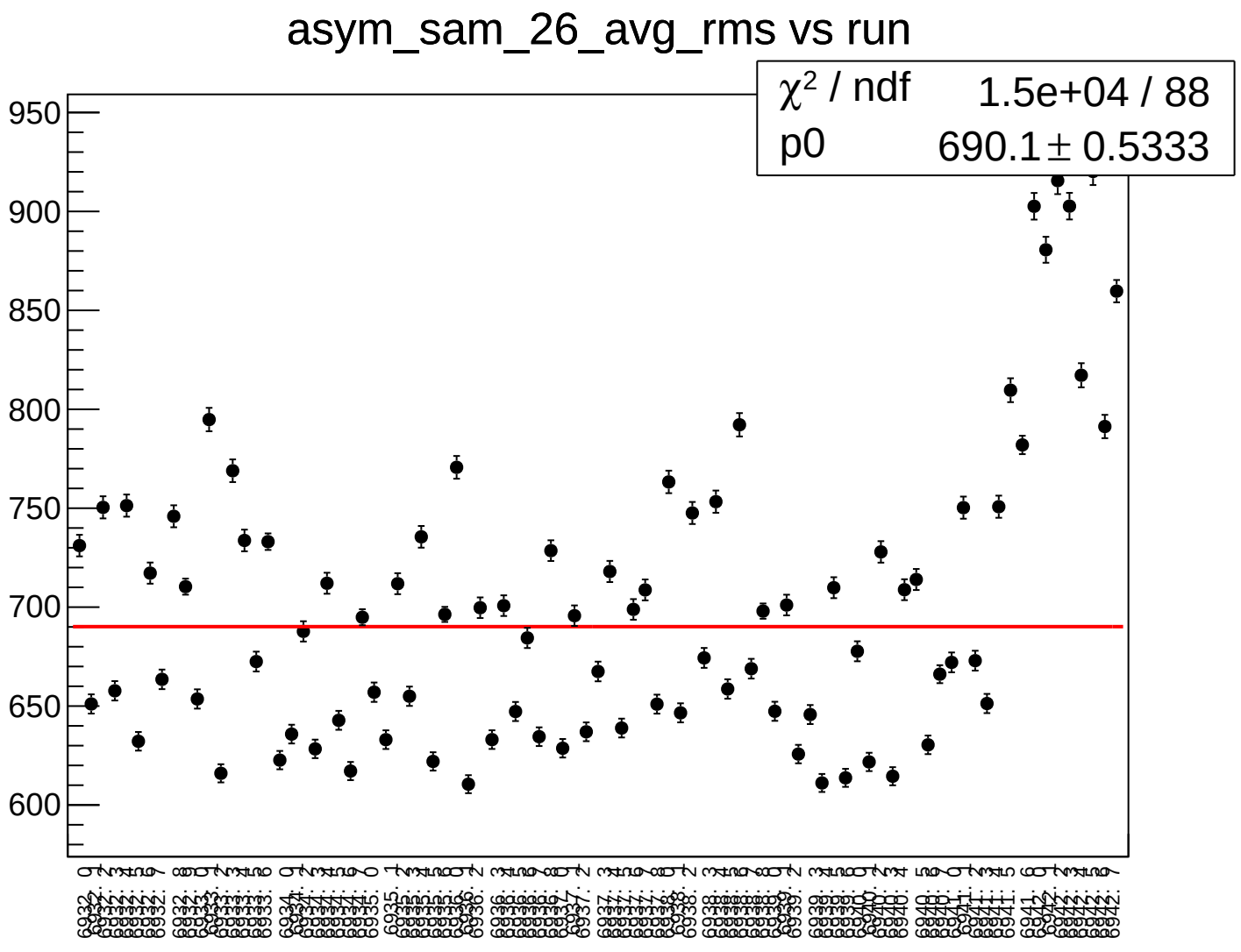

asym_sam_26_avg_correction_mean vs run
χ² / ndf 90.14 / 88
p0 −392.2 ± 748.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −293
Std Dev 368.2
2
1
0
−1
−2

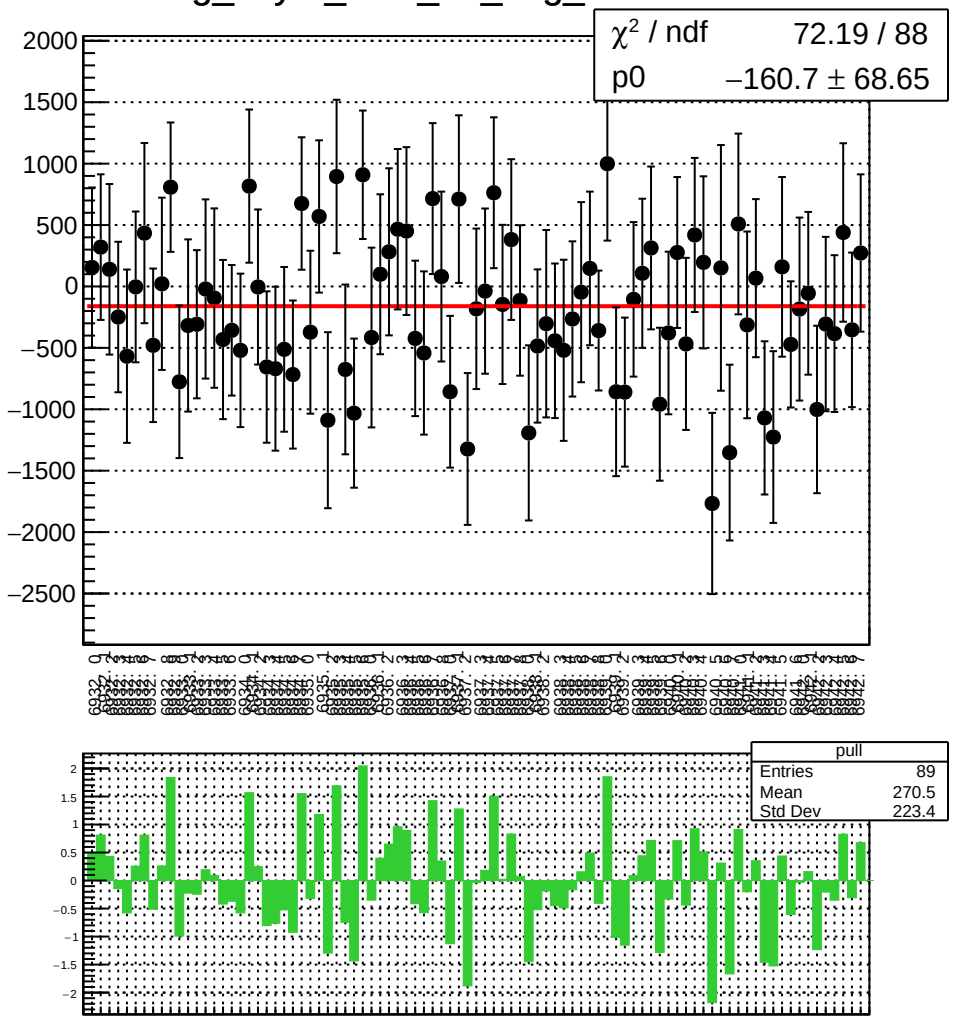

pull1D
Entries 89
Mean 0.001916
Std Dev 1.006
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

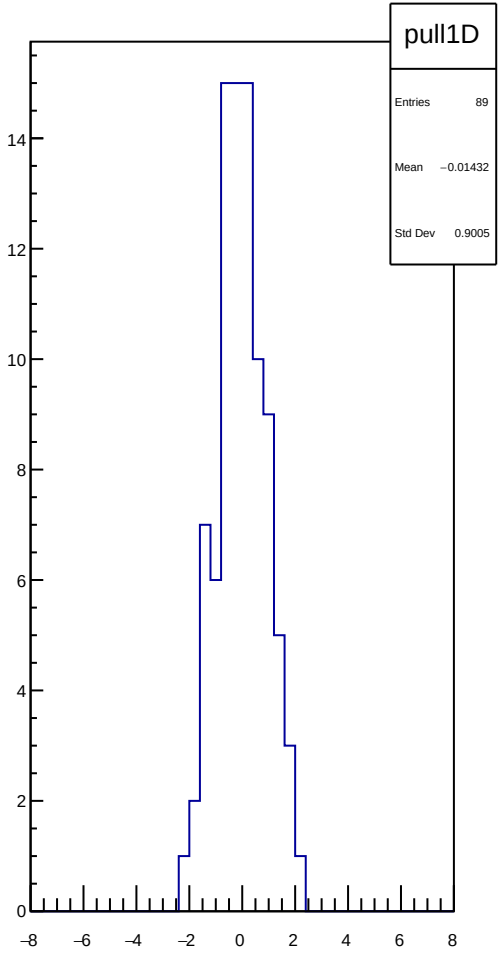

asym_sam_26_avg_correction_rms vs run
χ² / ndf 1.524e+04 / 88
p0 684.6 ± 0.529
950
900
850
800
750
700
650
600

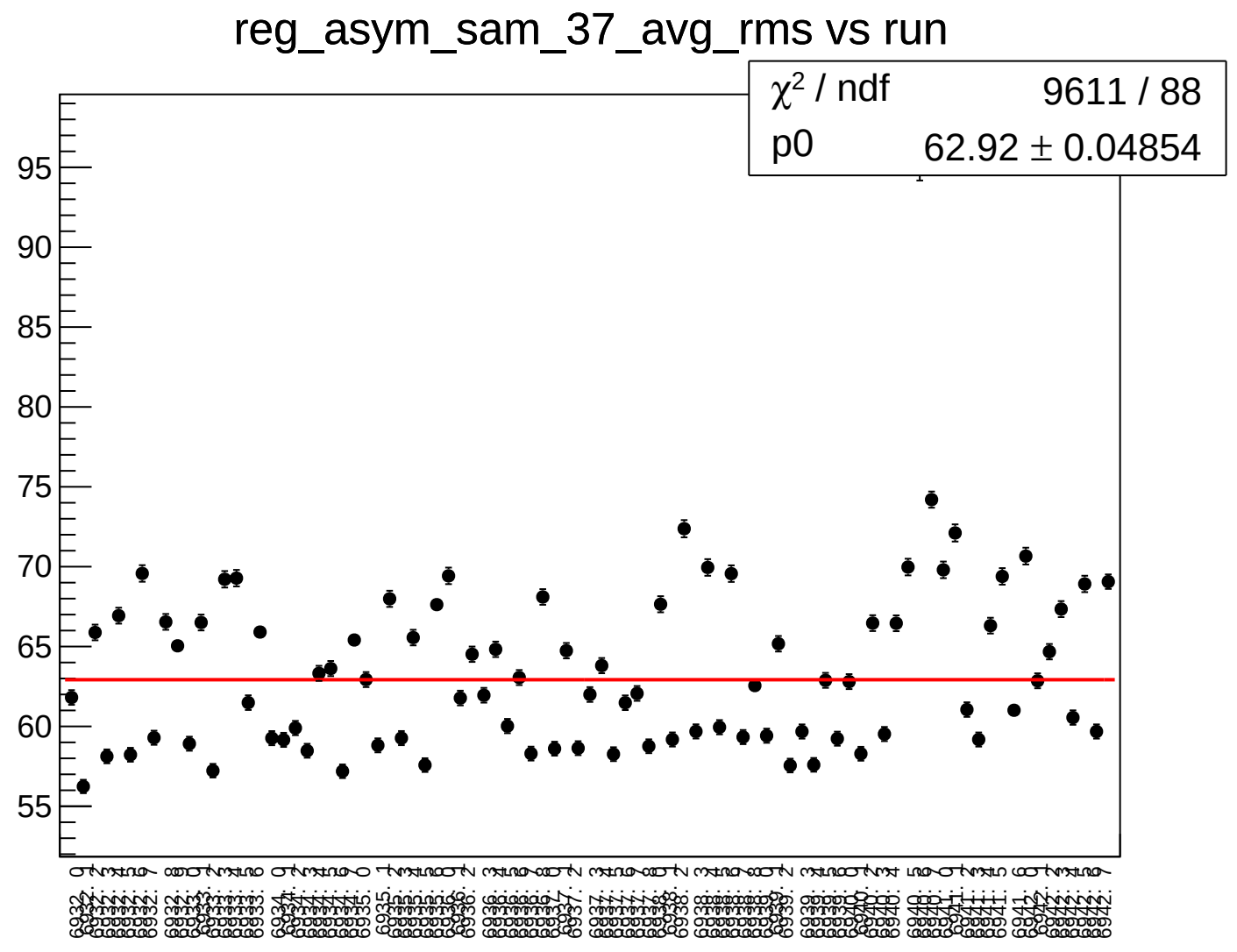

asym_sam_26_avg_mean vs run
χ² / ndf 89.78 / 88
p0 326.7 ± 754.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −226.2
Std Dev 309.9
2
1
0
−1
−2

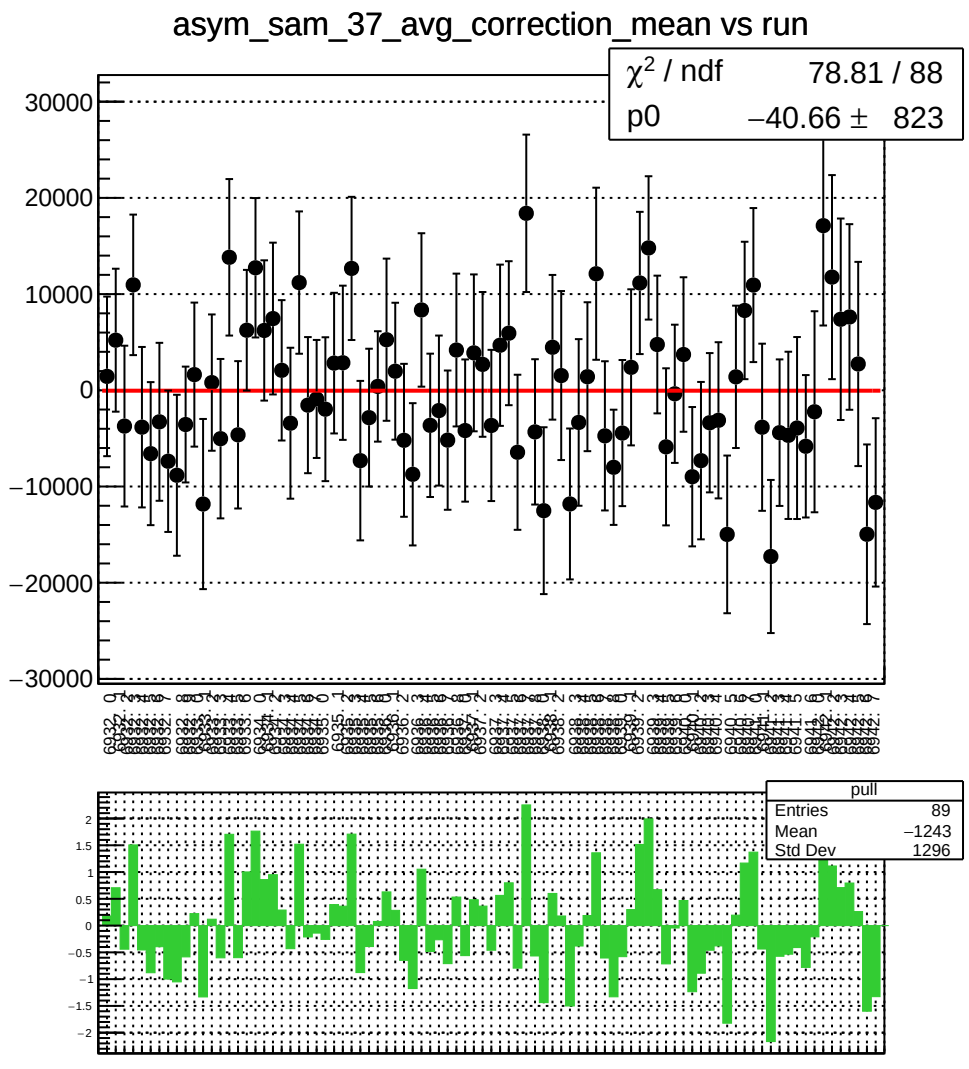

pull1D
Entries 89
Mean −0.001823
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

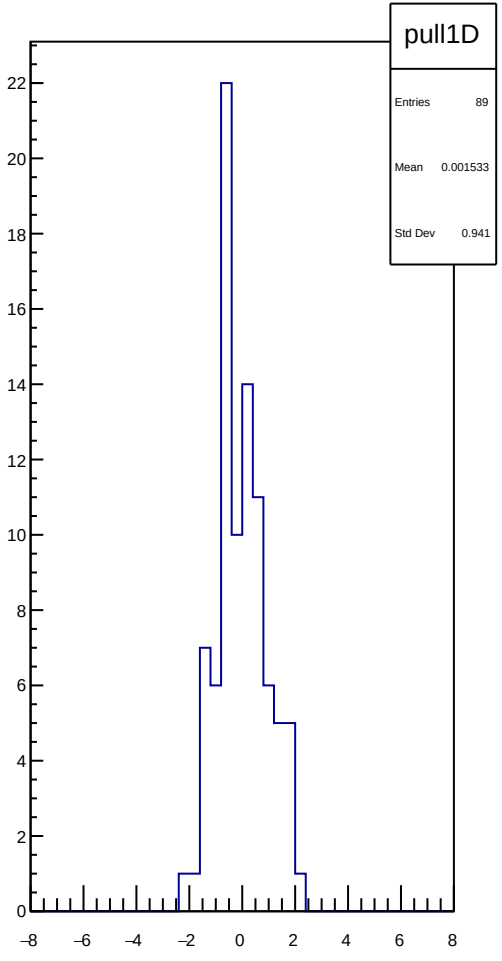

asym_sam_26_avg_rms vs run
χ² / ndf 1.5e+04 / 88
p0 690.1 ± 0.5333
950
900
850
800
750
700
650
600

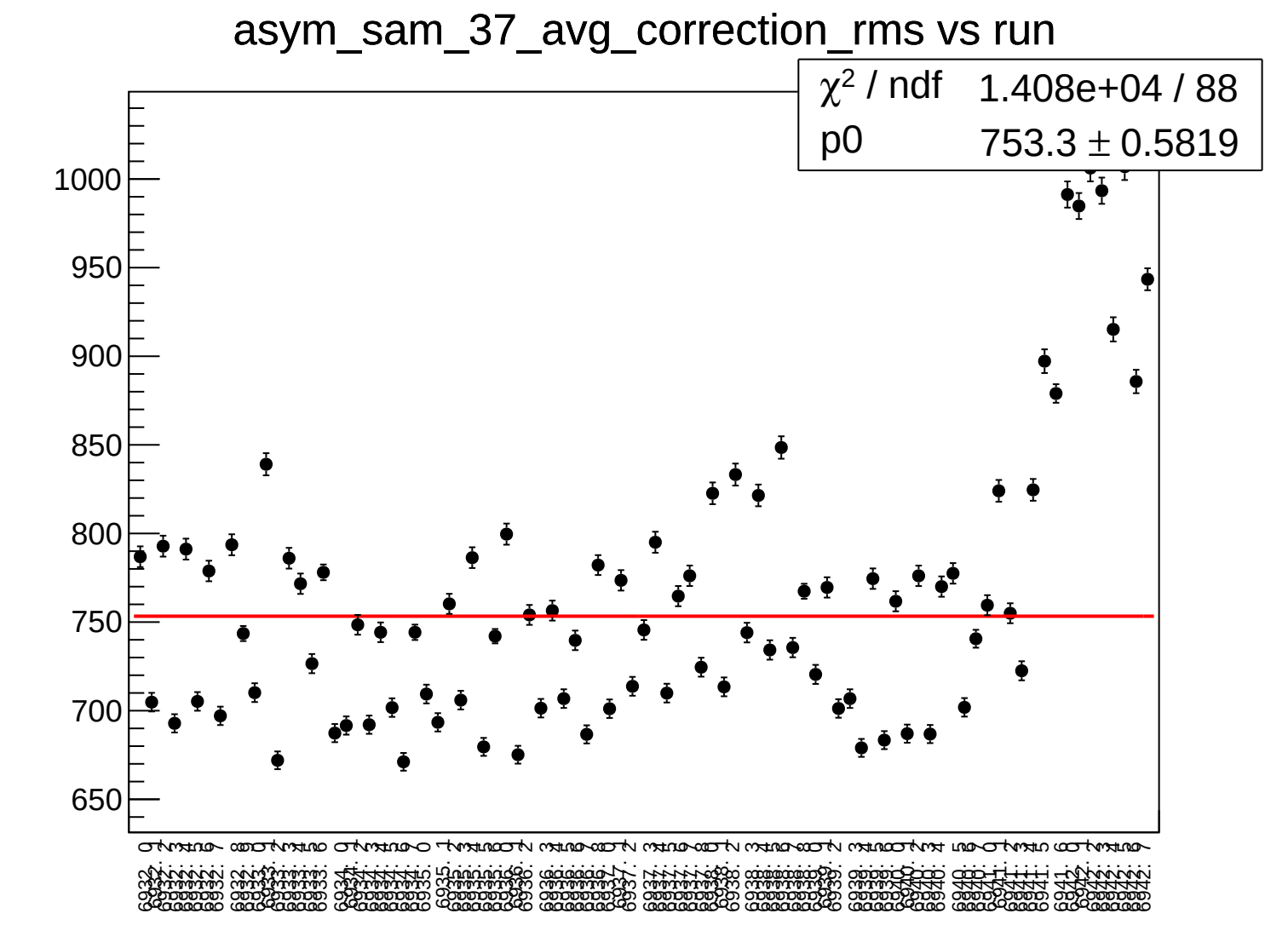

reg_asym_sam_37_avg_mean vs run
χ² / ndf 72.19 / 88
p0 −160.7 ± 68.65
pull
Entries 89
Mean 270.5
Std Dev 223.4

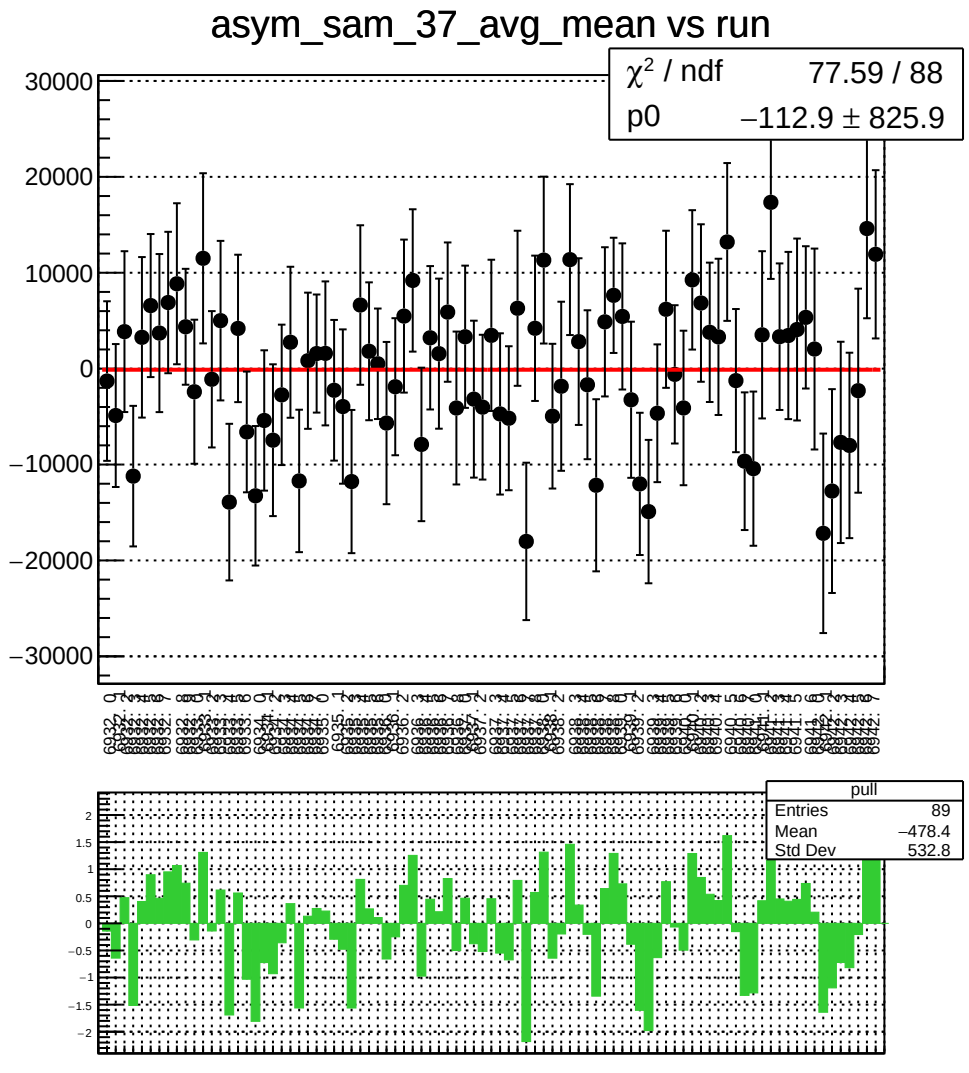

pull1D
Entries 89
Mean −0.01432
Std Dev 0.9005

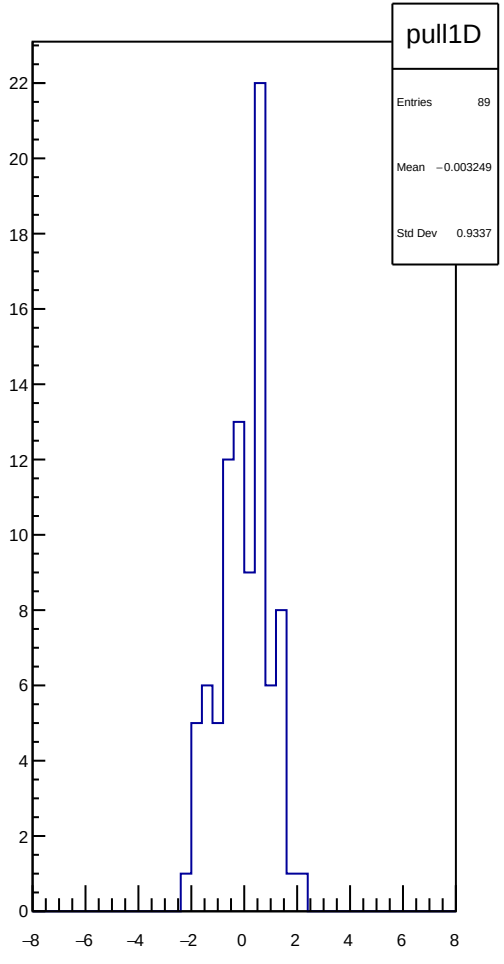

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 9611 / 88
p0 62.92 ± 0.04854
95
90
85
80
75
70
65
60
55

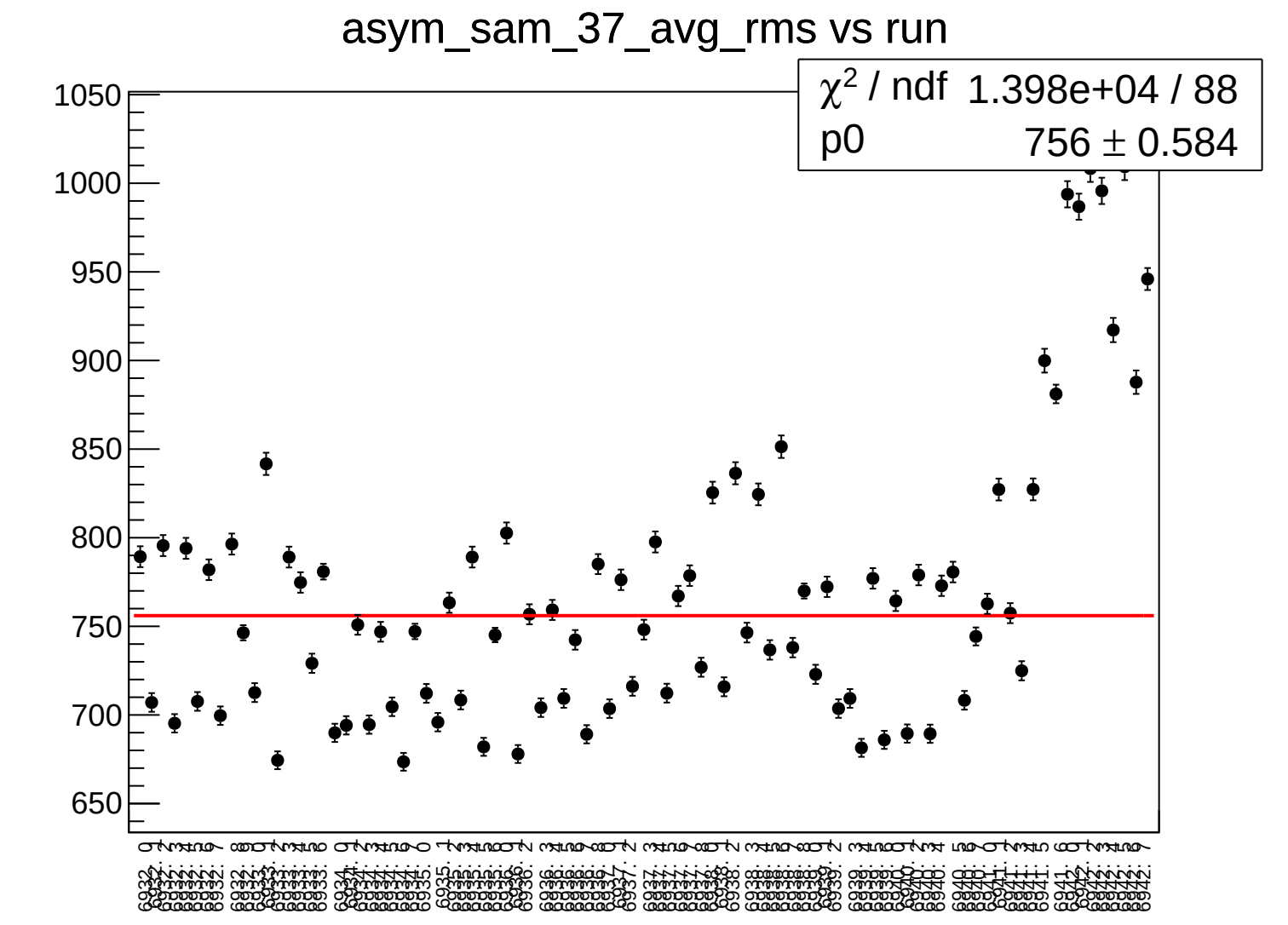

asym_sam_37_avg_correction_mean vs run
χ² / ndf 78.81 / 88
p0 −40.66 ± 823
pull
Entries 89
Mean −1243
Std Dev 1296

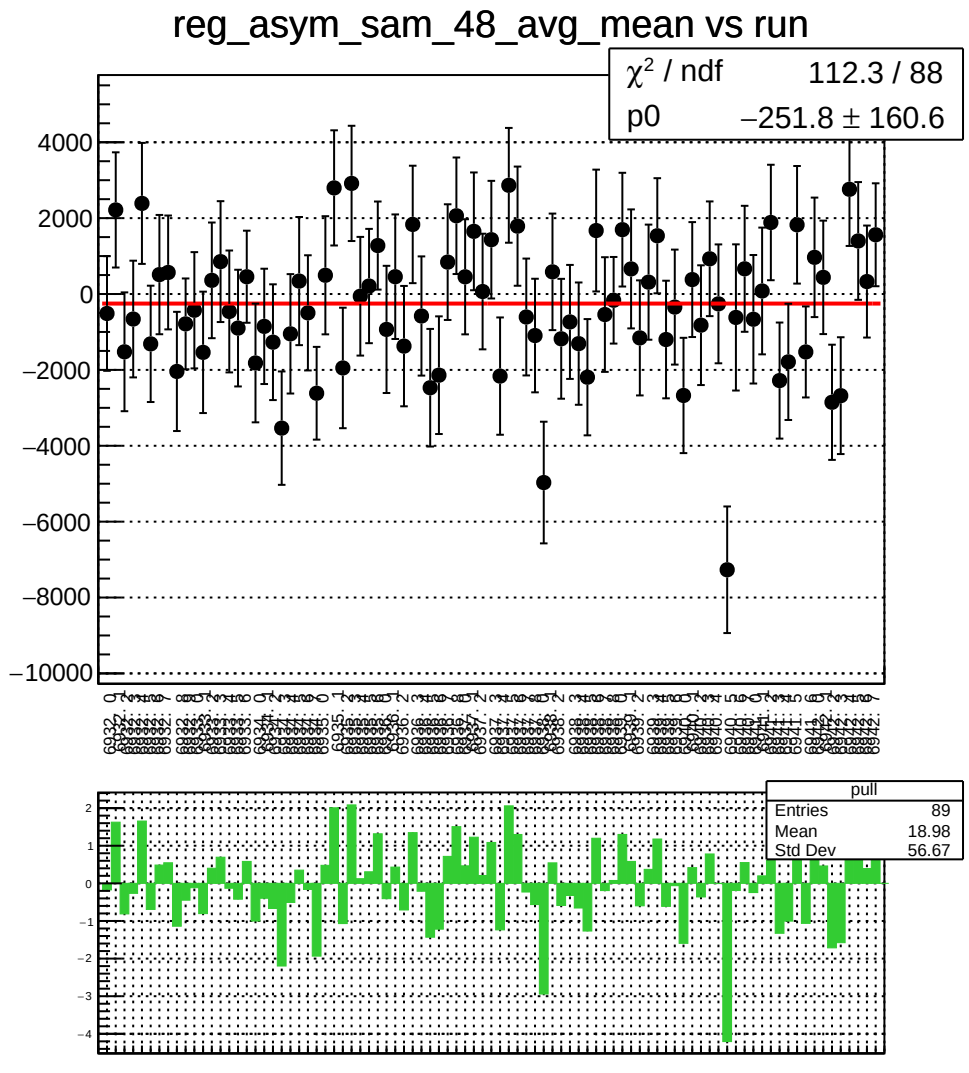

pull1D
Entries 89
Mean 0.001533
Std Dev 0.941

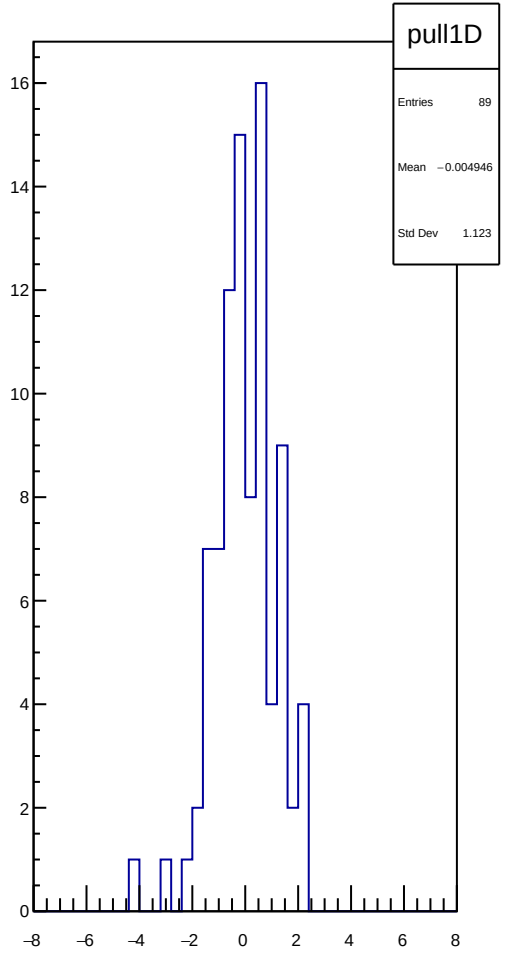

asym_sam_37_avg_correction_rms vs run
χ² / ndf 1.408e+04 / 88
p0 753.3 ± 0.5819
1000
950
900
850
800
750
700
650

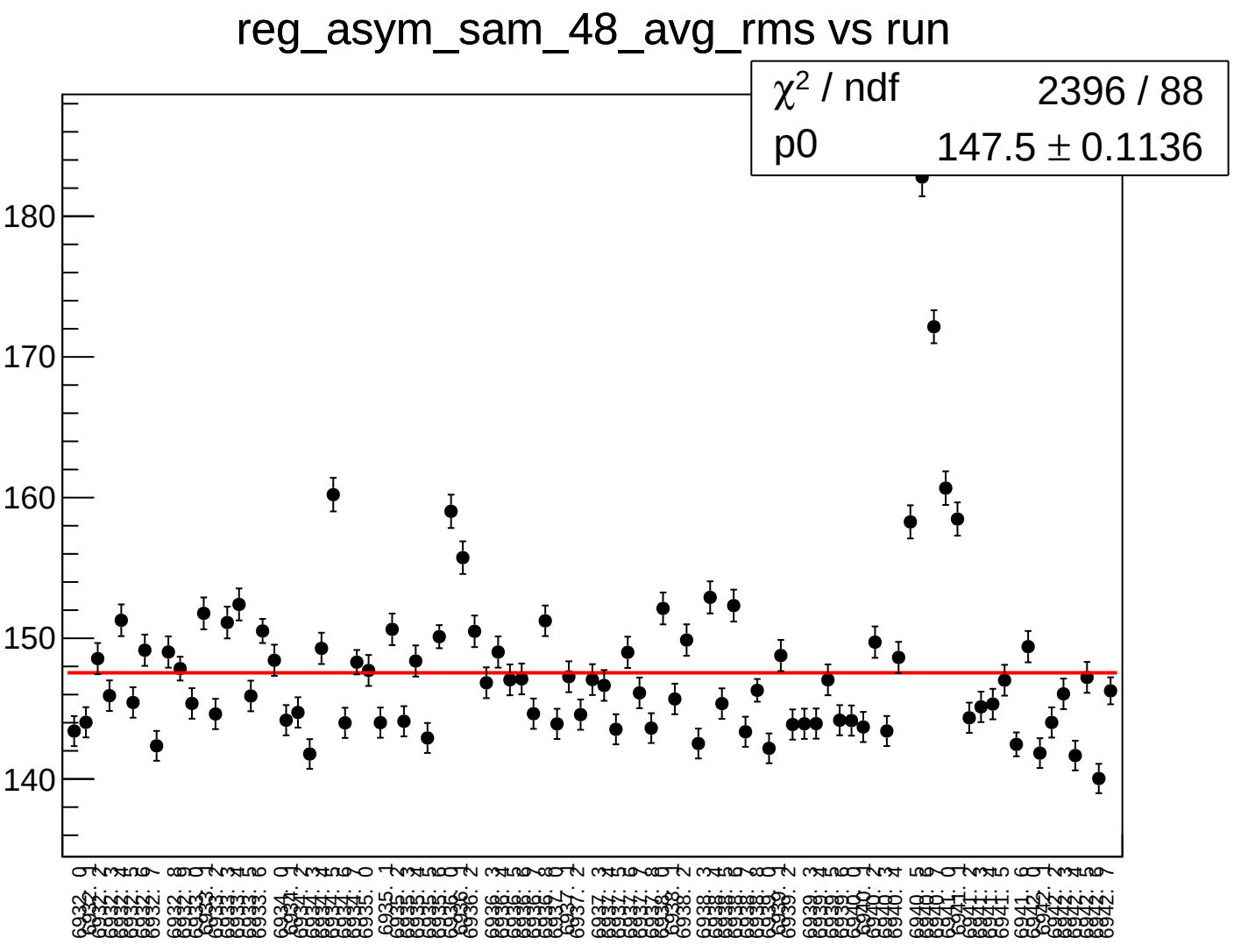

asym_sam_37_avg_mean vs run
χ² / ndf 77.59 / 88
p0 −112.9 ± 825.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −478.4
Std Dev 532.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

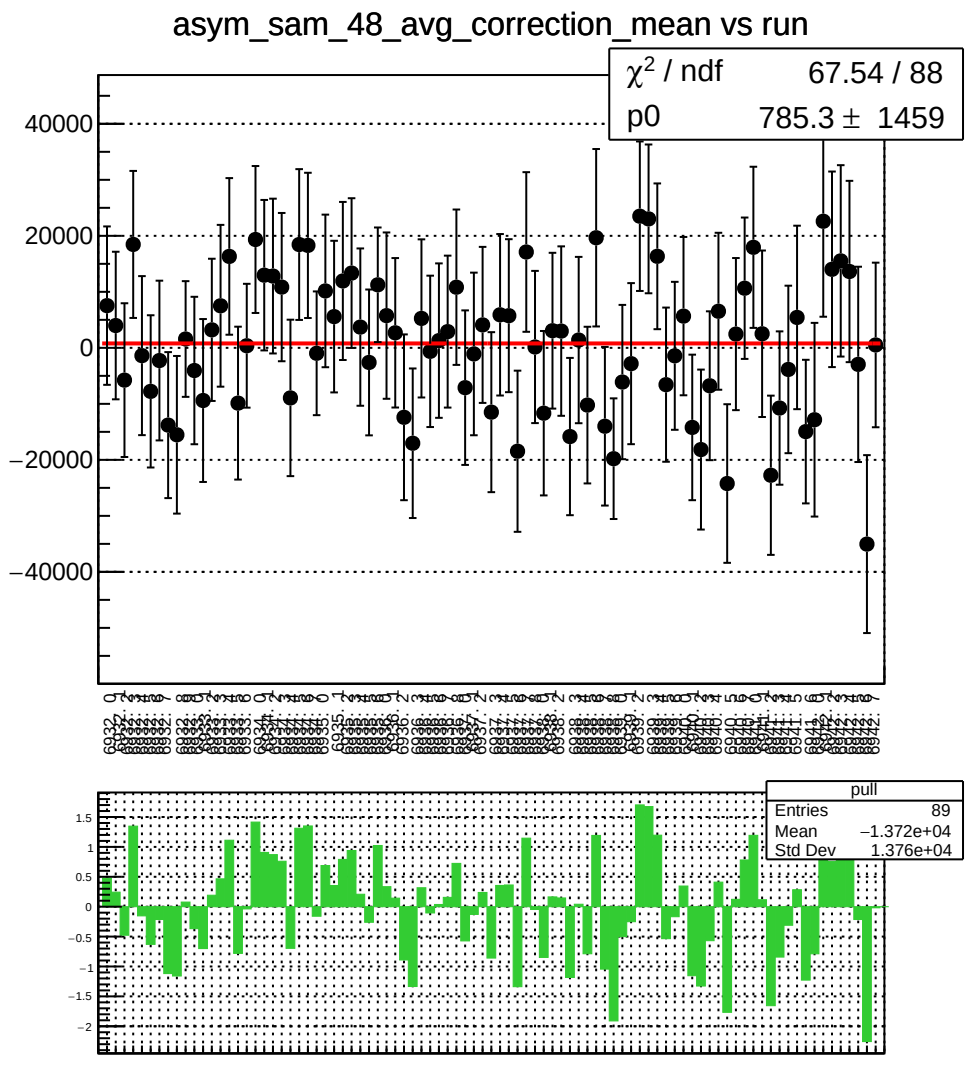

pull1D
Entries 89
Mean −0.003249
Std Dev 0.9337
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

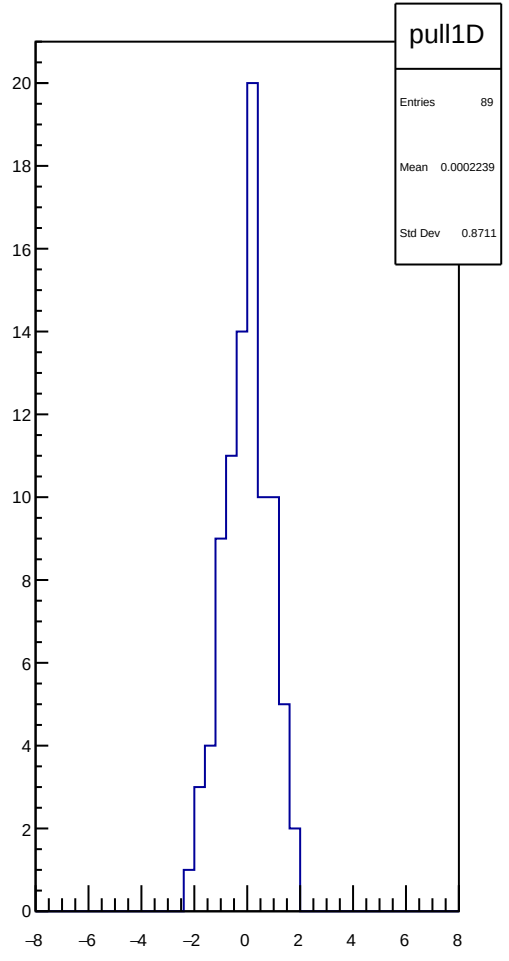

asym_sam_37_avg_rms vs run
χ² / ndf 1.398e+04 / 88
p0 756 ± 0.584
1050
1000
950
900
850
800
750
700
650

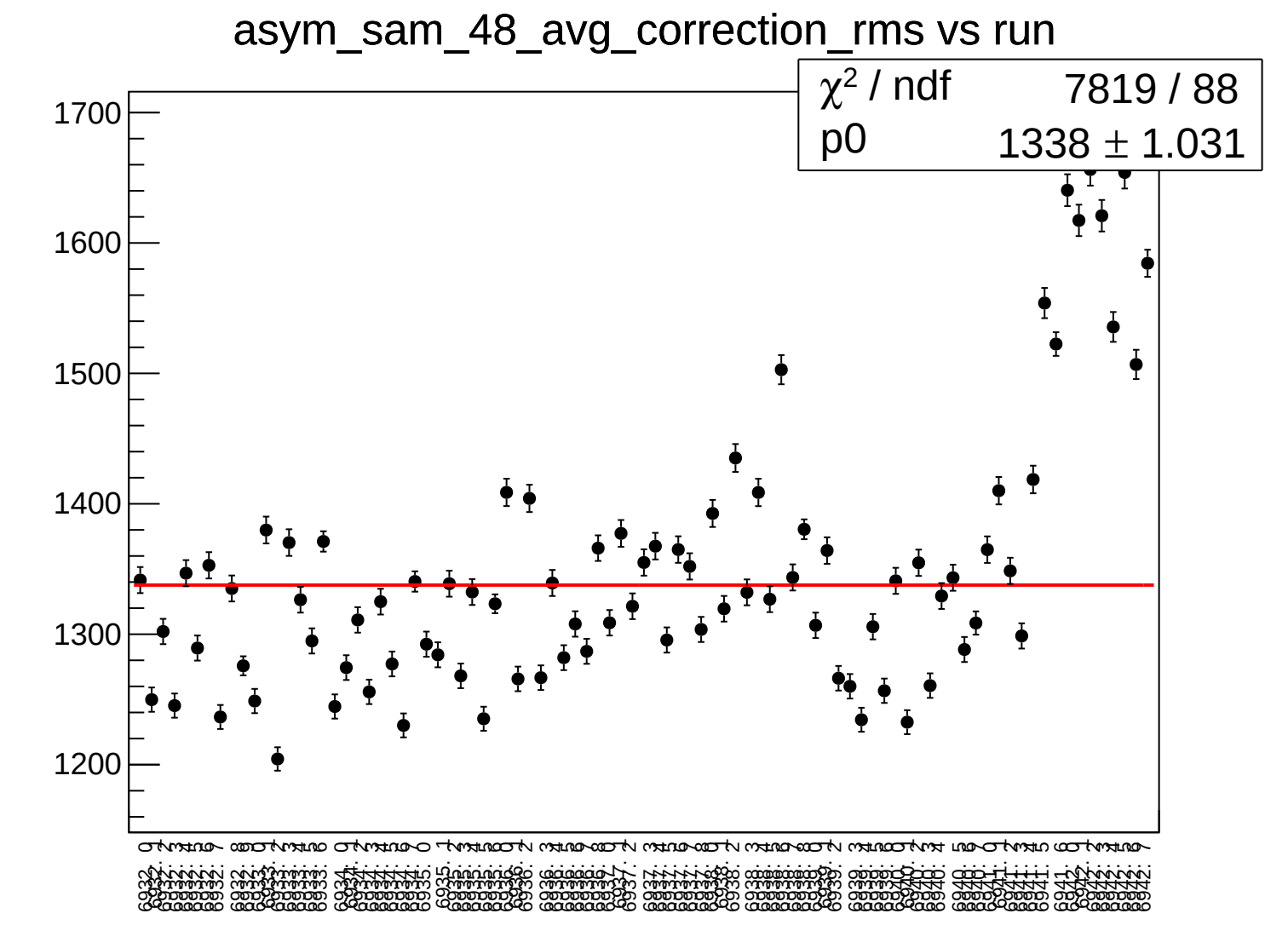

reg_asym_sam_48_avg_mean vs run
χ² / ndf 112.3 / 88
p0 −251.8 ± 160.6
4000
2000
0
−2000
−4000
−6000
−8000
−10000
pull
Entries 89
Mean 18.98
Std Dev 56.67
2
1
0
−1
−2
−3
−4

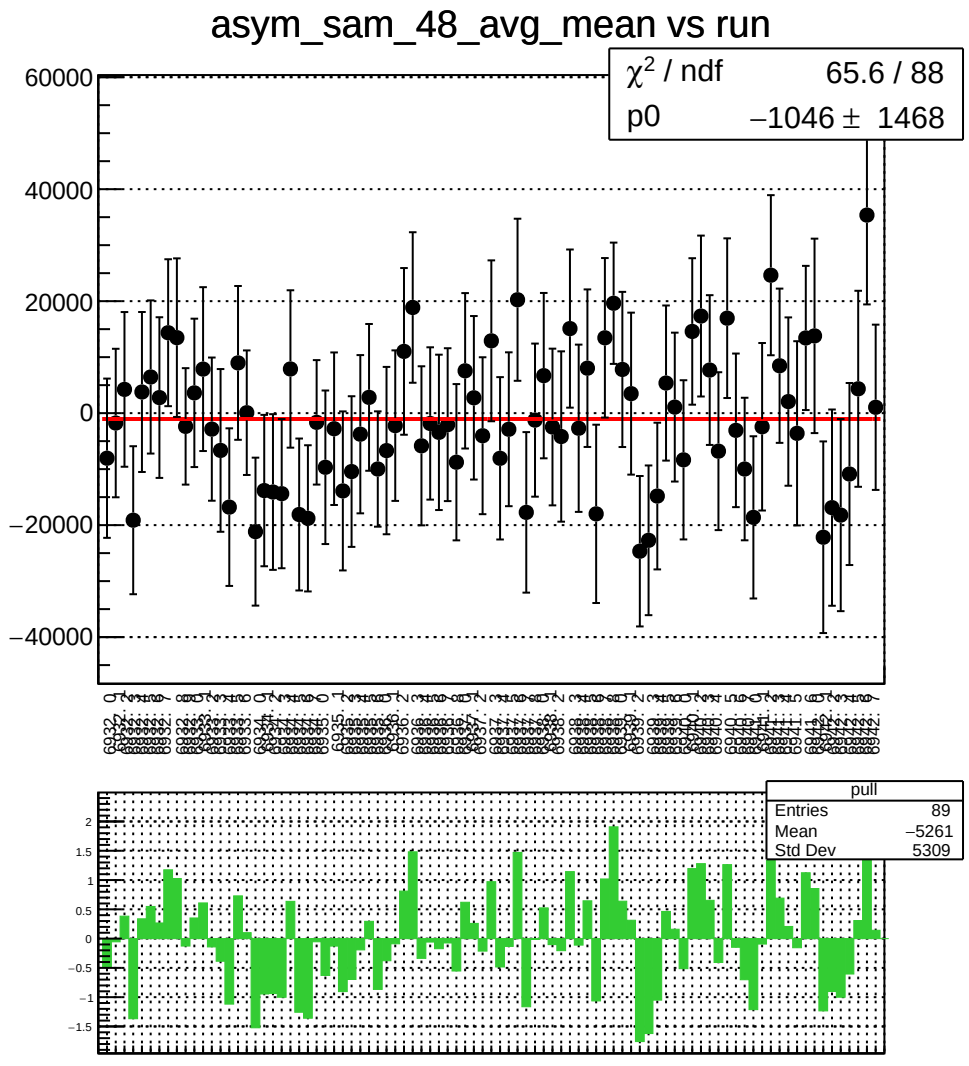

pull1D
Entries 89
Mean −0.004946
Std Dev 1.123
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

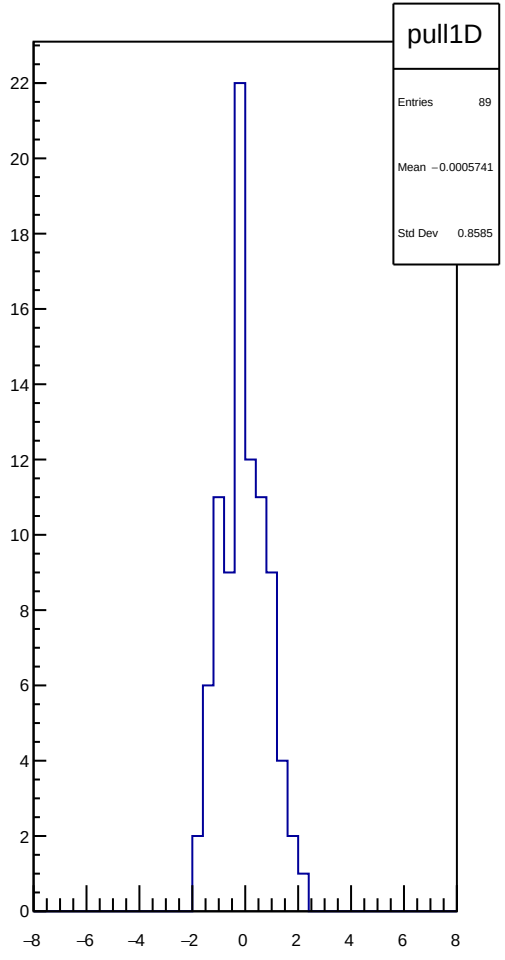

reg_asym_sam_48_avg_rms vs run
χ² / ndf 2396 / 88
p0 147.5 ± 0.1136
180
170
160
150
140

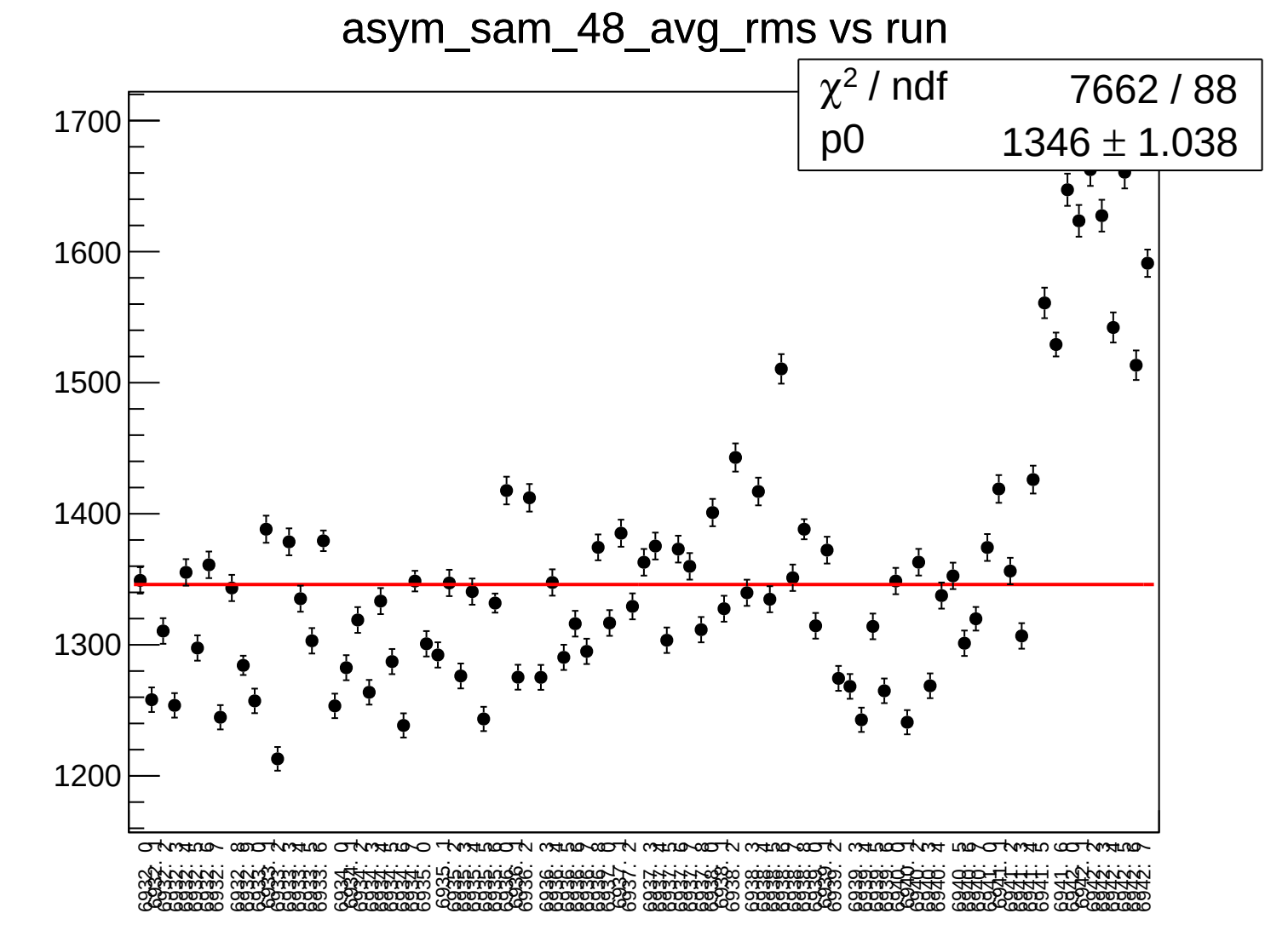

asym_sam_48_avg_correction_mean vs run
χ² / ndf 67.54 / 88
p0 785.3 ± 1459
40000
20000
0
−20000
−40000
pull
Entries 89
Mean −1.372e+04
Std Dev 1.376e+04
1.5
1
0.5
0
−0.5
−1
−1.5
−2

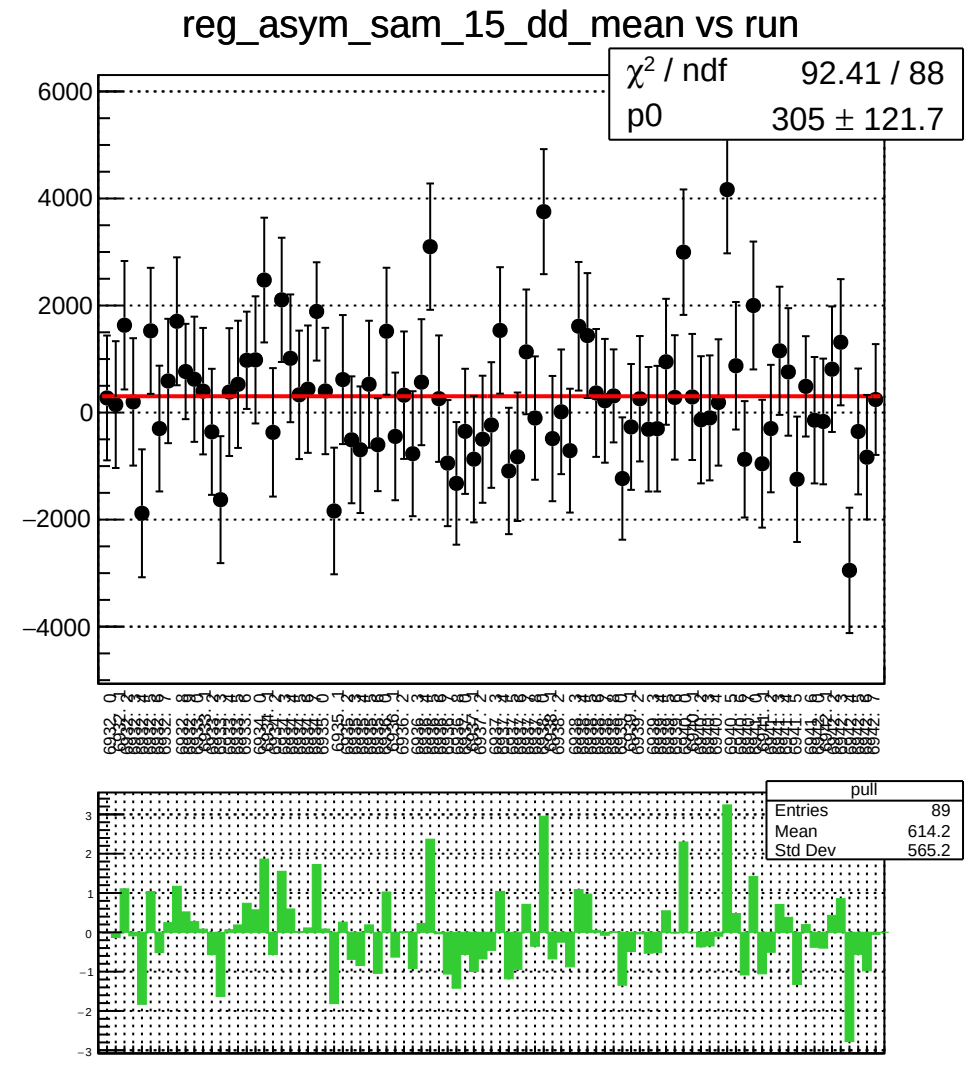

pull1D
Entries 89
Mean 0.0002239
Std Dev 0.8711
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

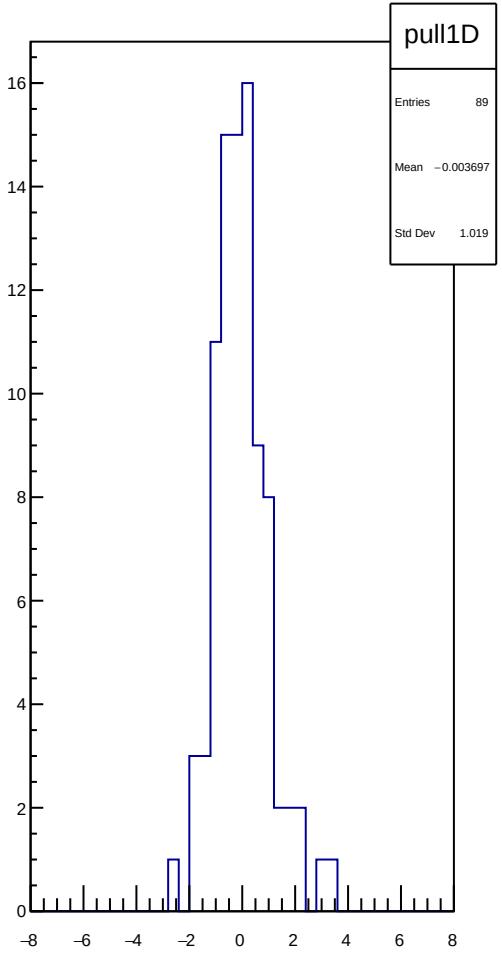

asym_sam_48_avg_correction_rms vs run
χ² / ndf 7819 / 88
p0 1338 ± 1.031
1700
1600
1500
1400
1300
1200

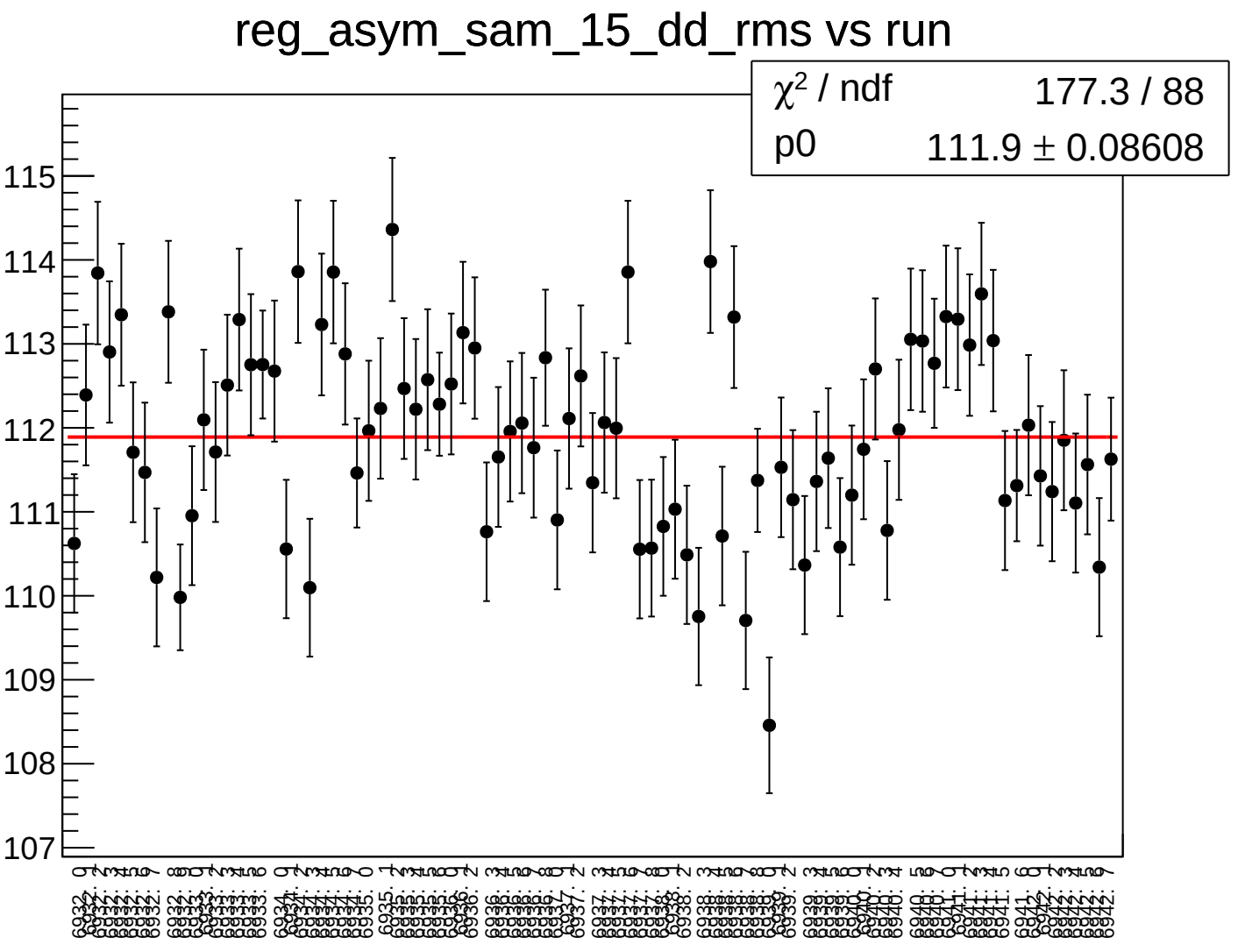

asym_sam_48_avg_mean vs run
χ² / ndf 65.6 / 88
p0 −1046 ± 1468
60000
40000
20000
0
−20000
−40000
pull
Entries 89
Mean −5261
Std Dev 5309
2
1.5
1
0.5
0
−0.5
−1
−1.5

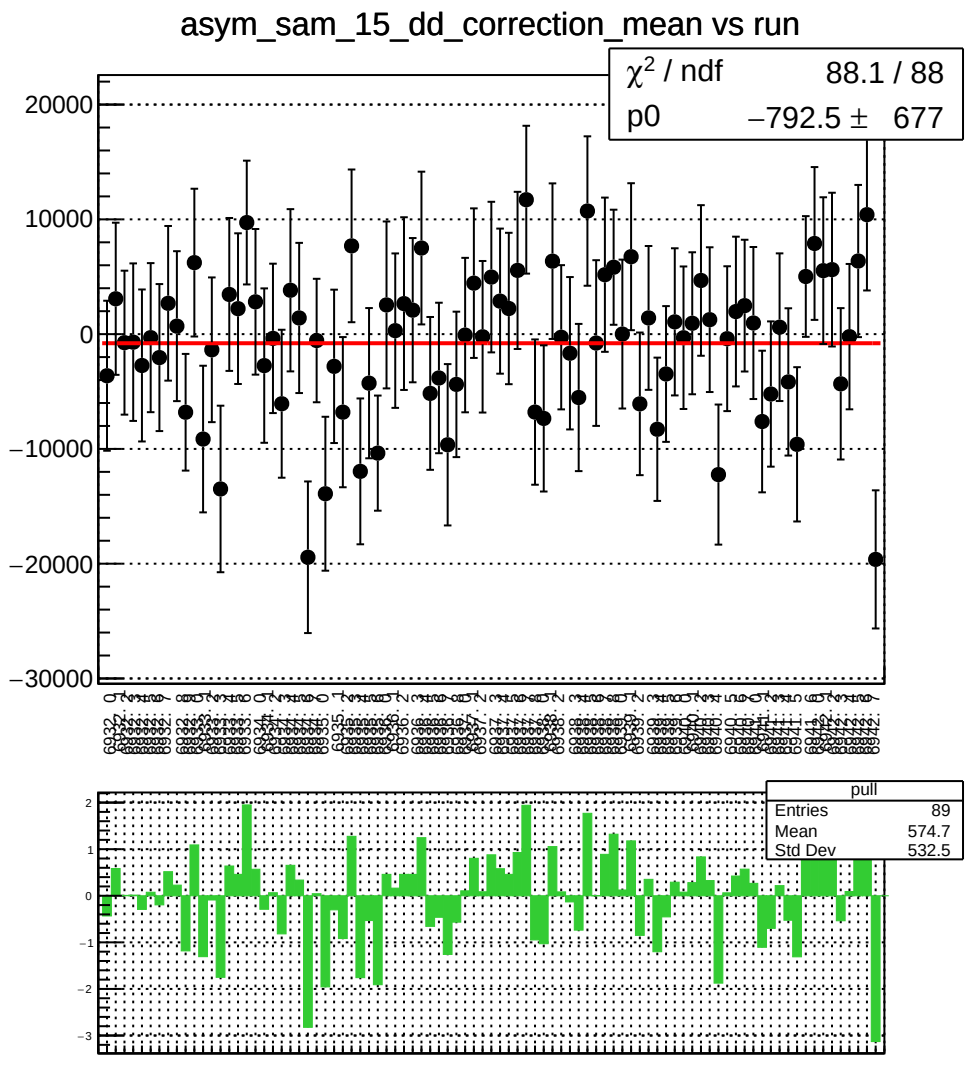

pull1D
Entries 89
Mean −0.0005741
Std Dev 0.8585
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

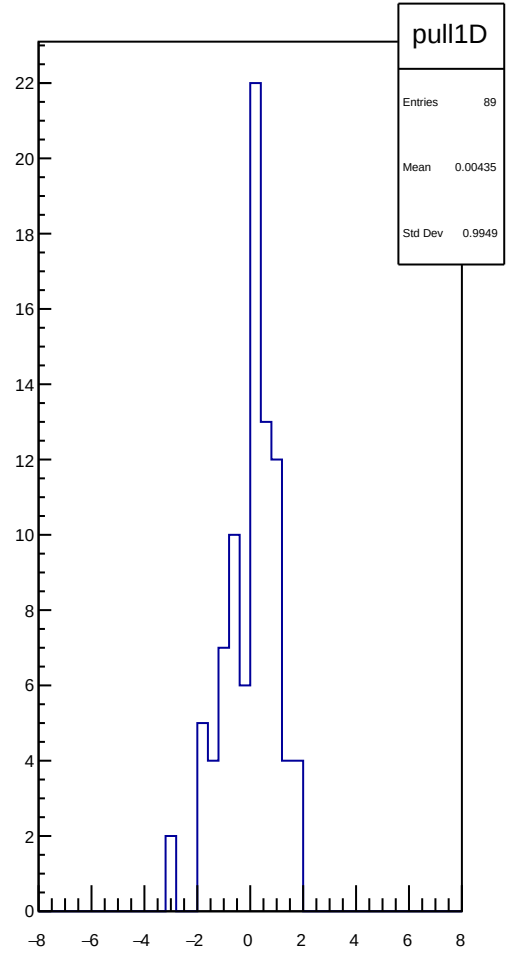

asym_sam_48_avg_rms vs run
χ² / ndf 7662 / 88
p0 1346 ± 1.038
1700
1600
1500
1400
1300
1200

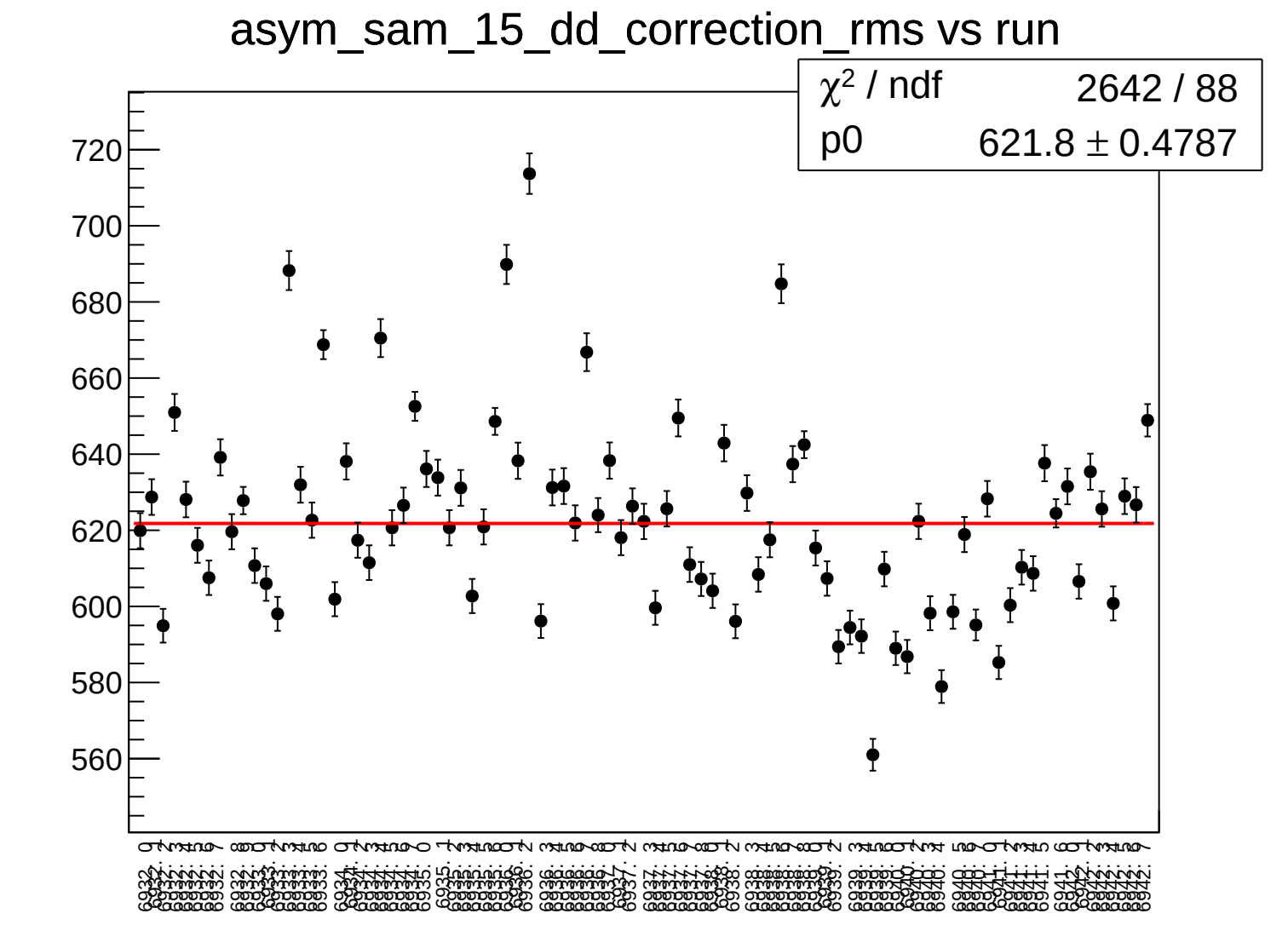

reg_asym_sam_15_dd_mean vs run
χ² / ndf 92.41 / 88
p0 305 ± 121.7
6000
4000
2000
0
−2000
−4000
pull
Entries 89
Mean 614.2
Std Dev 565.2
3
2
1
0
−1
−2
−3

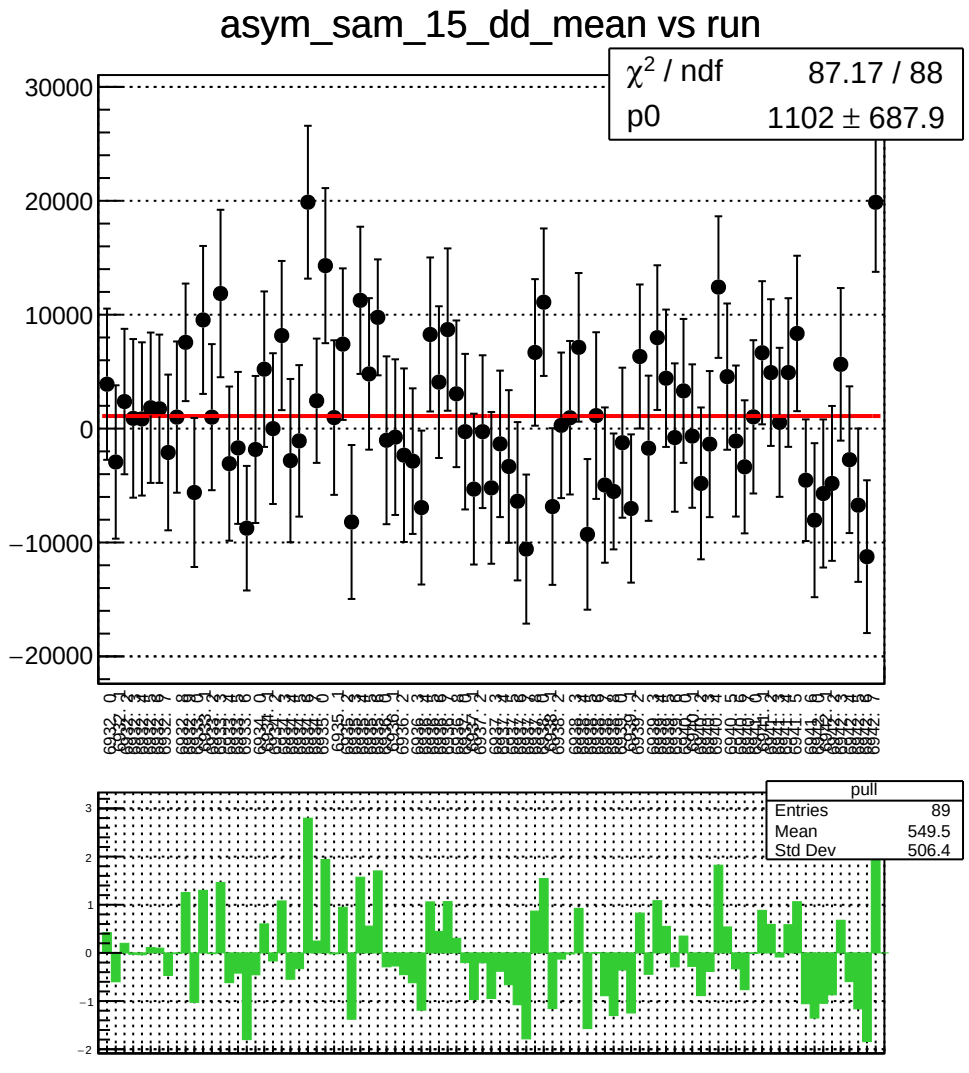

pull1D
Entries 89
Mean −0.003697
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

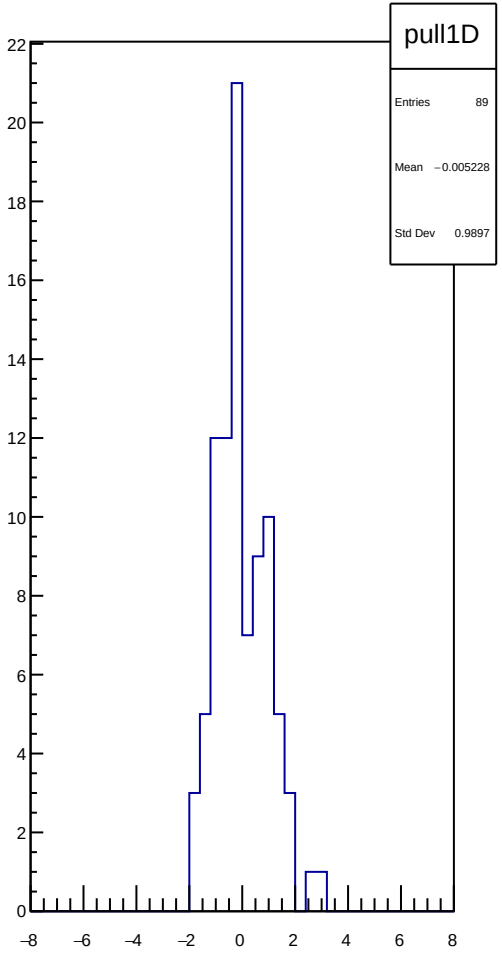

reg_asym_sam_15_dd_rms vs run
χ² / ndf 177.3 / 88
p0 111.9 ± 0.08608
115
114
113
112
111
110
109
108
107

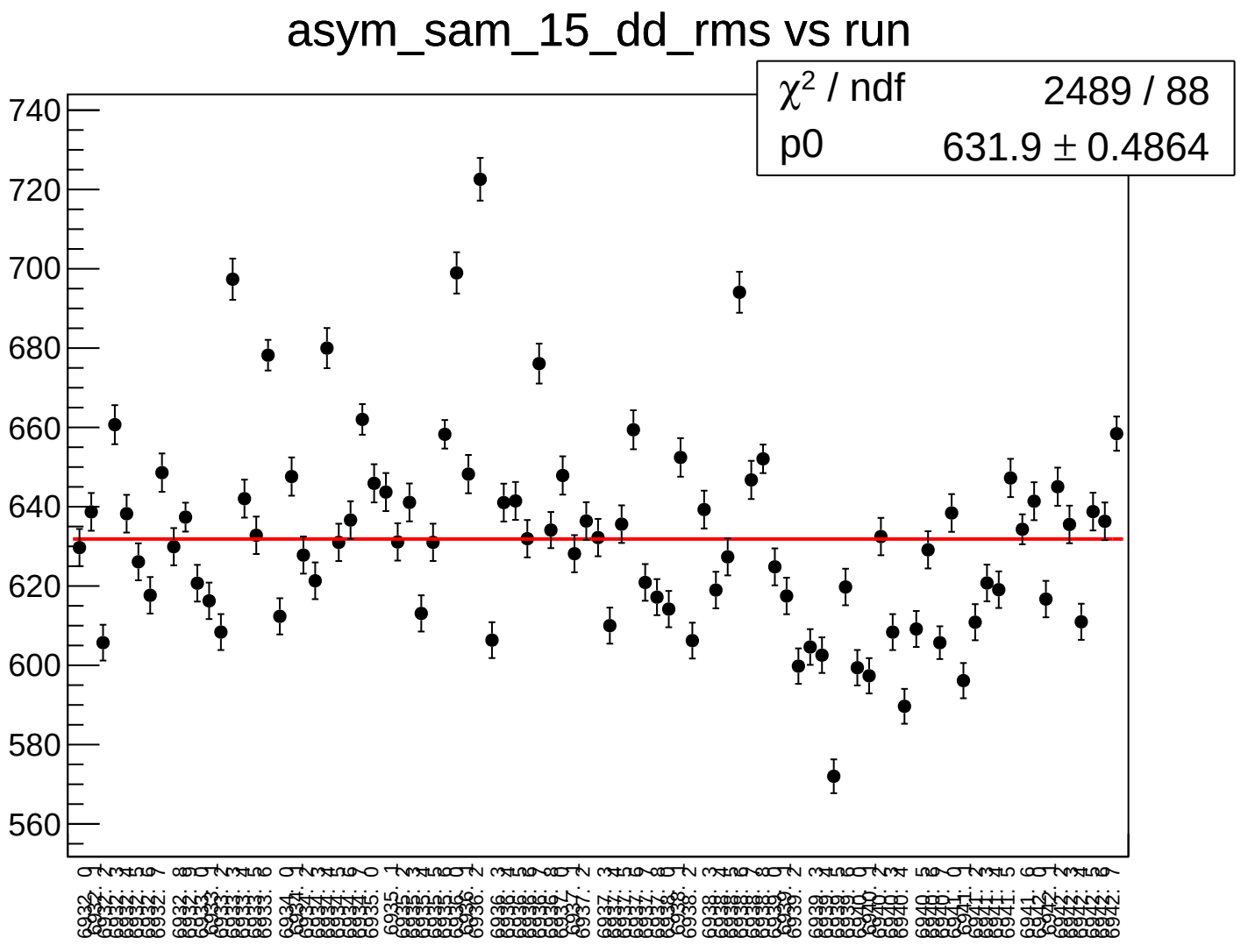

asym_sam_15_dd_correction_mean vs run
χ² / ndf 88.1 / 88
p0 −792.5 ± 677
pull
Entries 89
Mean 574.7
Std Dev 532.5

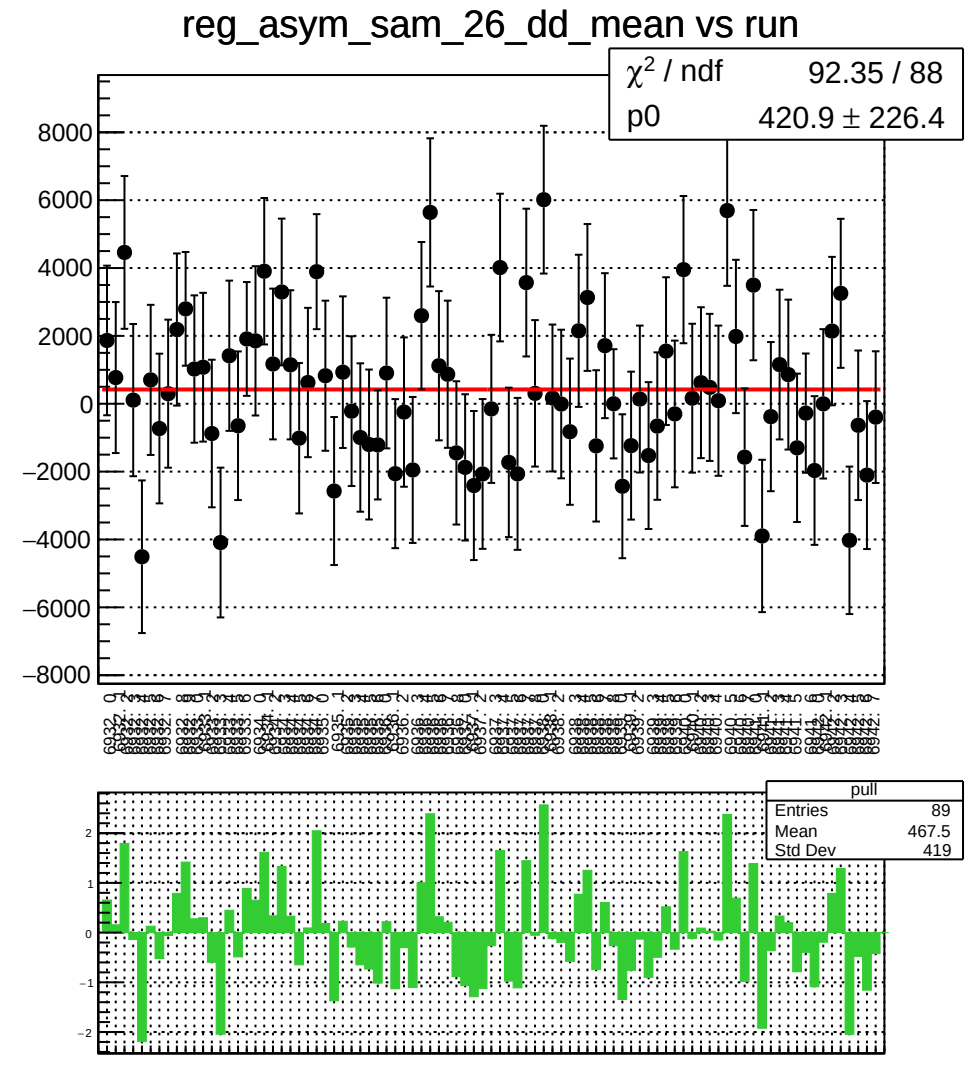

pull1D
Entries 89
Mean 0.00435
Std Dev 0.9949

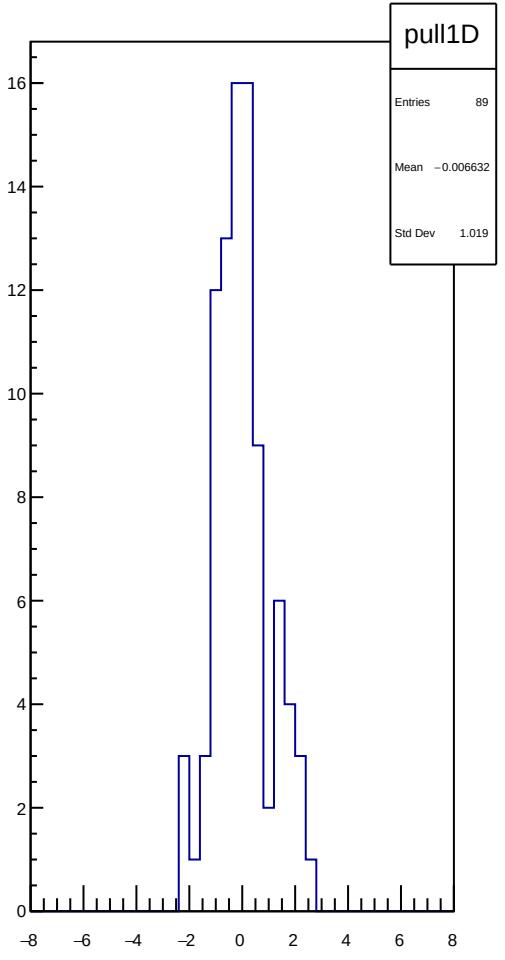

asym_sam_15_dd_correction_rms vs run
χ² / ndf 2642 / 88
p0 621.8 ± 0.4787
720
700
680
660
640
620
600
580
560

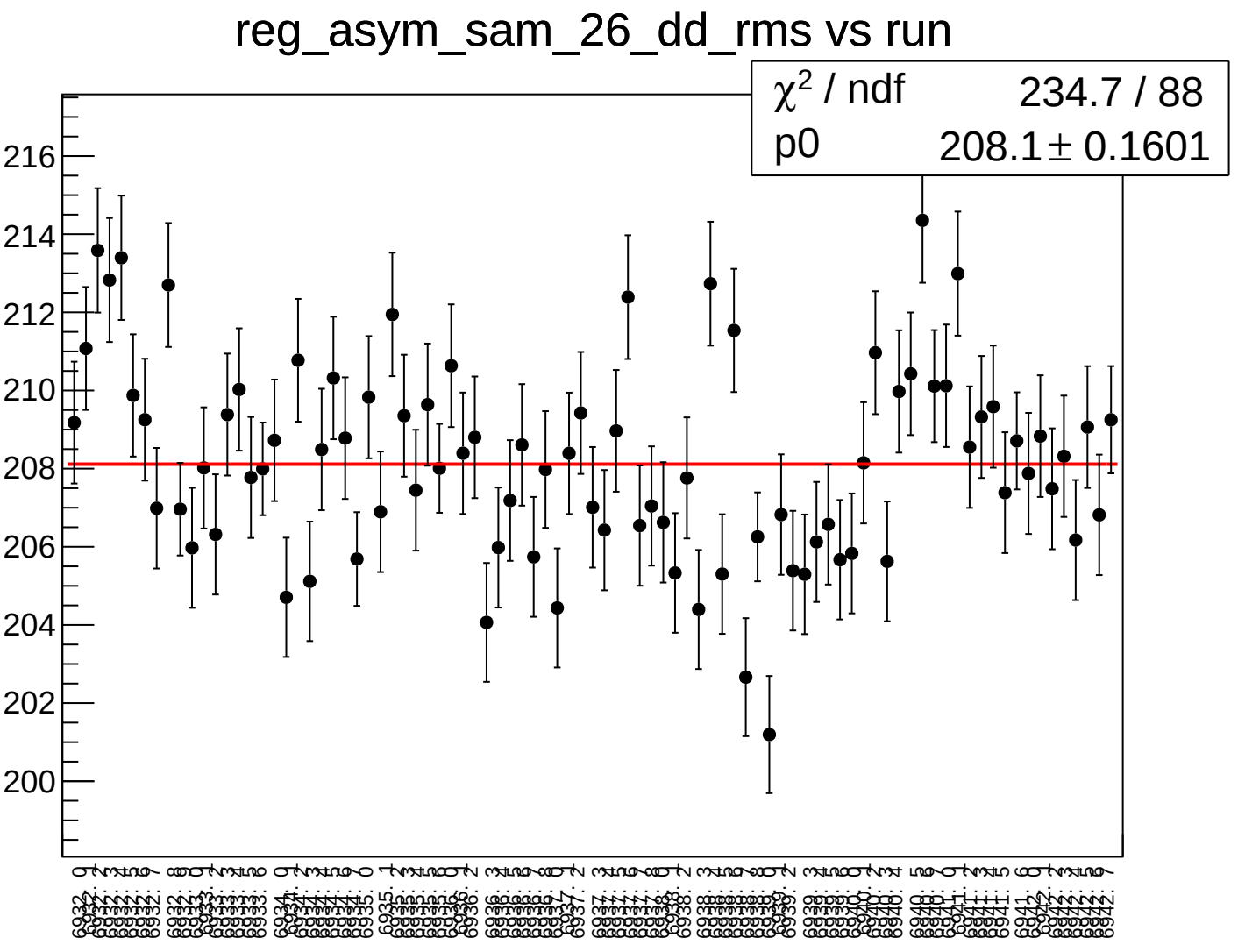

asym_sam_15_dd_mean vs run
χ² / ndf 87.17 / 88
p0 1102 ± 687.9
30000
20000
10000
0
−10000
−20000
pull
Entries 89
Mean 549.5
Std Dev 506.4
3
2
1
0
−1
−2

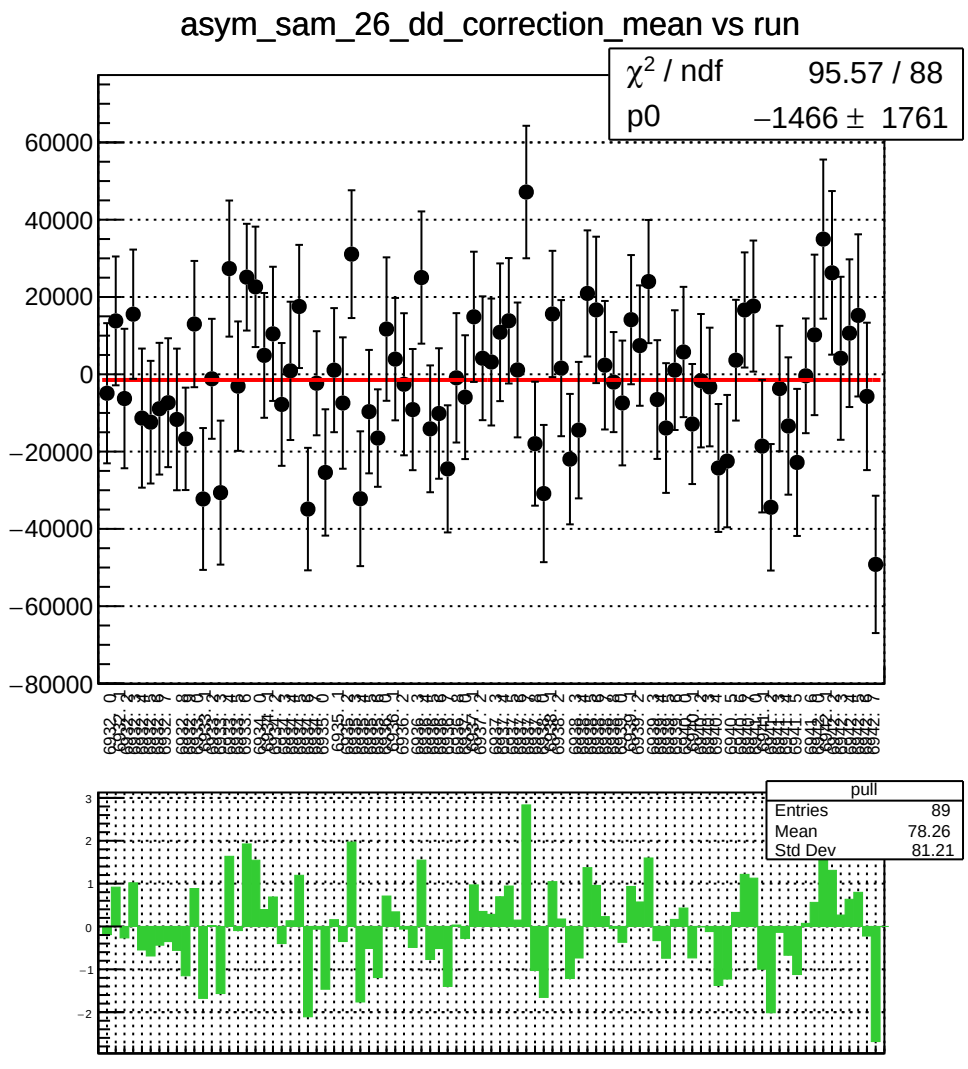

pull1D
Entries 89
Mean −0.005228
Std Dev 0.9897
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

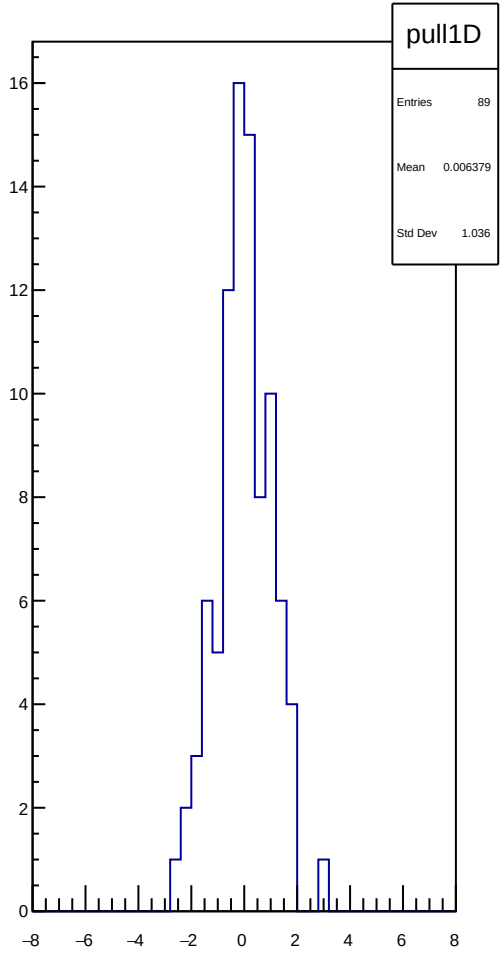

asym_sam_15_dd_rms vs run
χ² / ndf 2489 / 88
p0 631.9 ± 0.4864
740
720
700
680
660
640
620
600
580
560

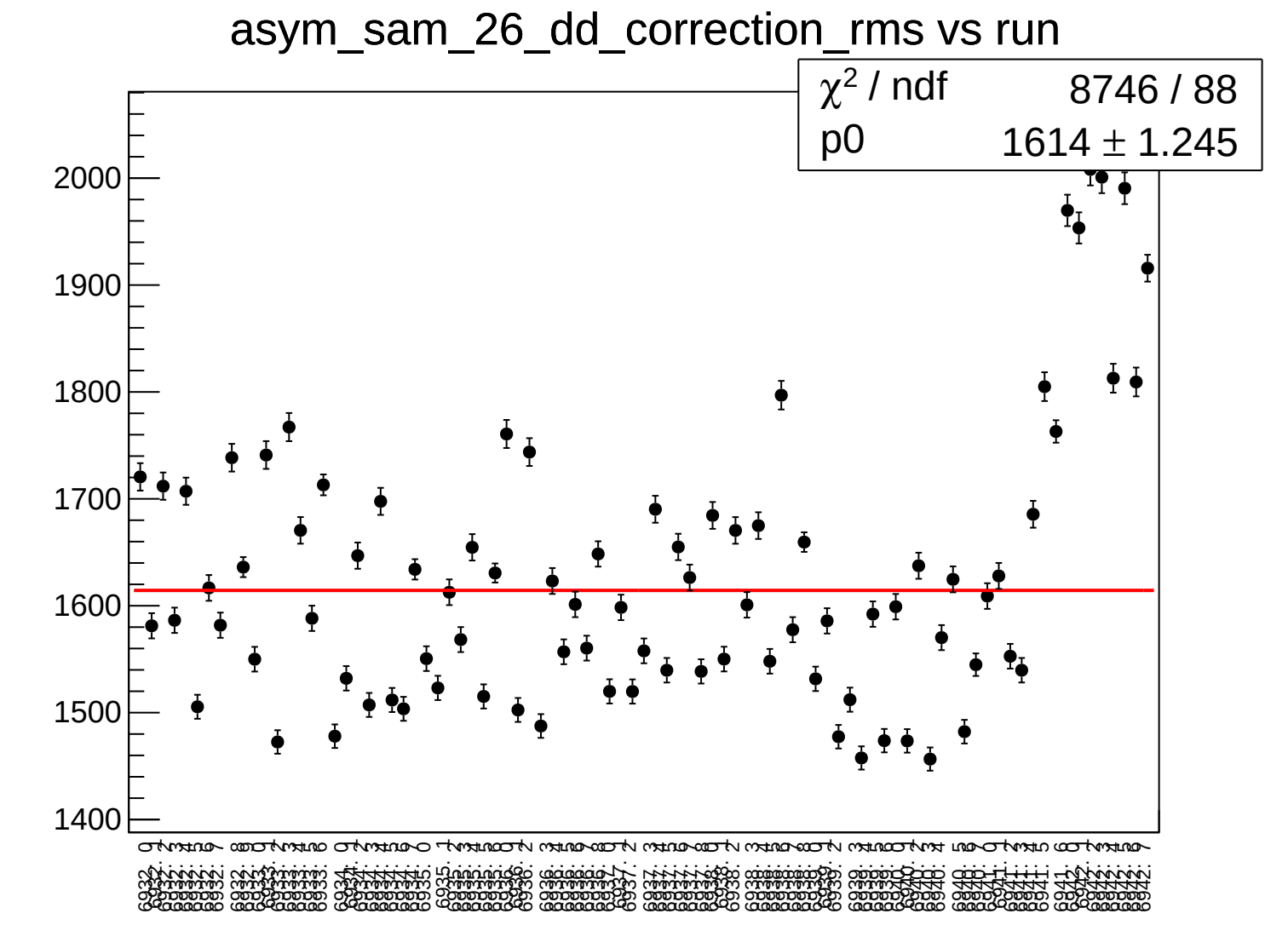

reg_asym_sam_26_dd_mean vs run
χ² / ndf 92.35 / 88
p0 420.9 ± 226.4
pull
Entries 89
Mean 467.5
Std Dev 419

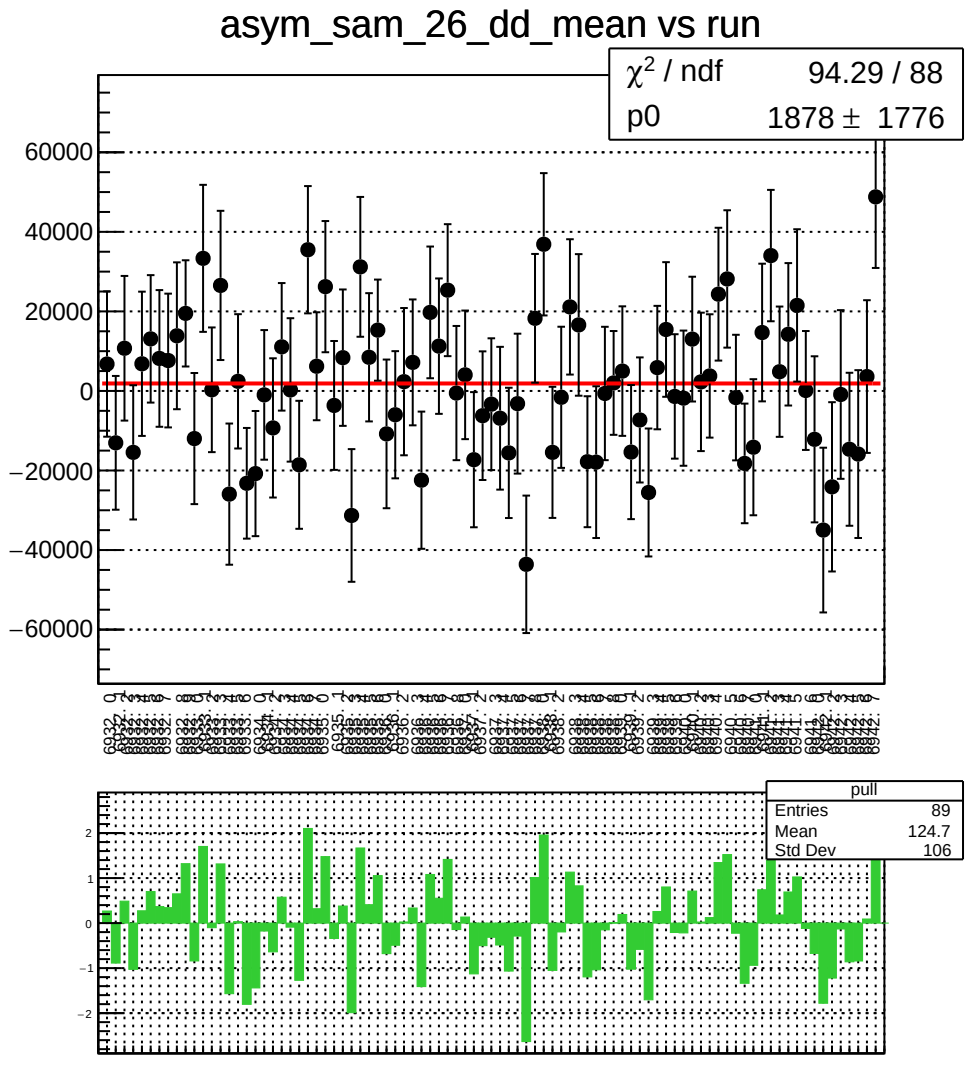

pull1D
Entries 89
Mean −0.006632
Std Dev 1.019

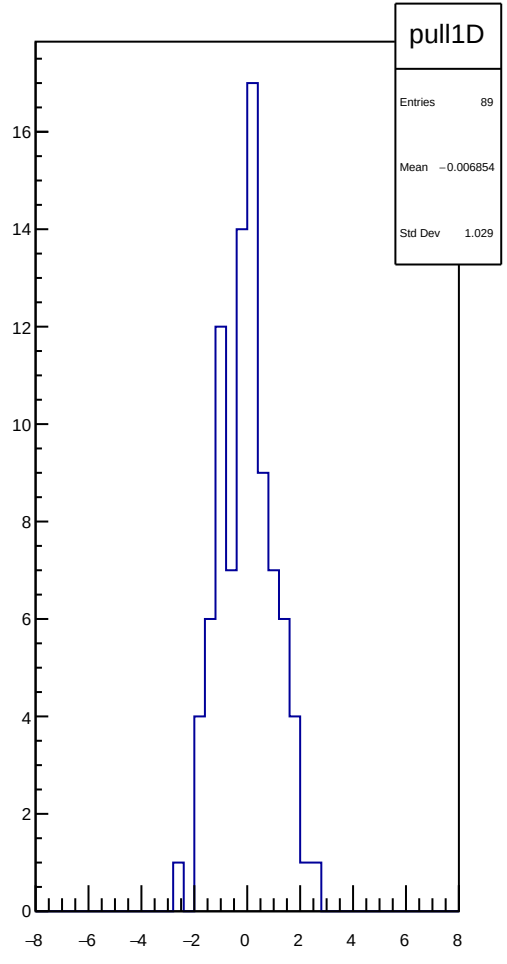

reg_asym_sam_26_dd_rms vs run
χ² / ndf 234.7 / 88
p0 208.1 ± 0.1601
216
214
212
210
208
206
204
202
200

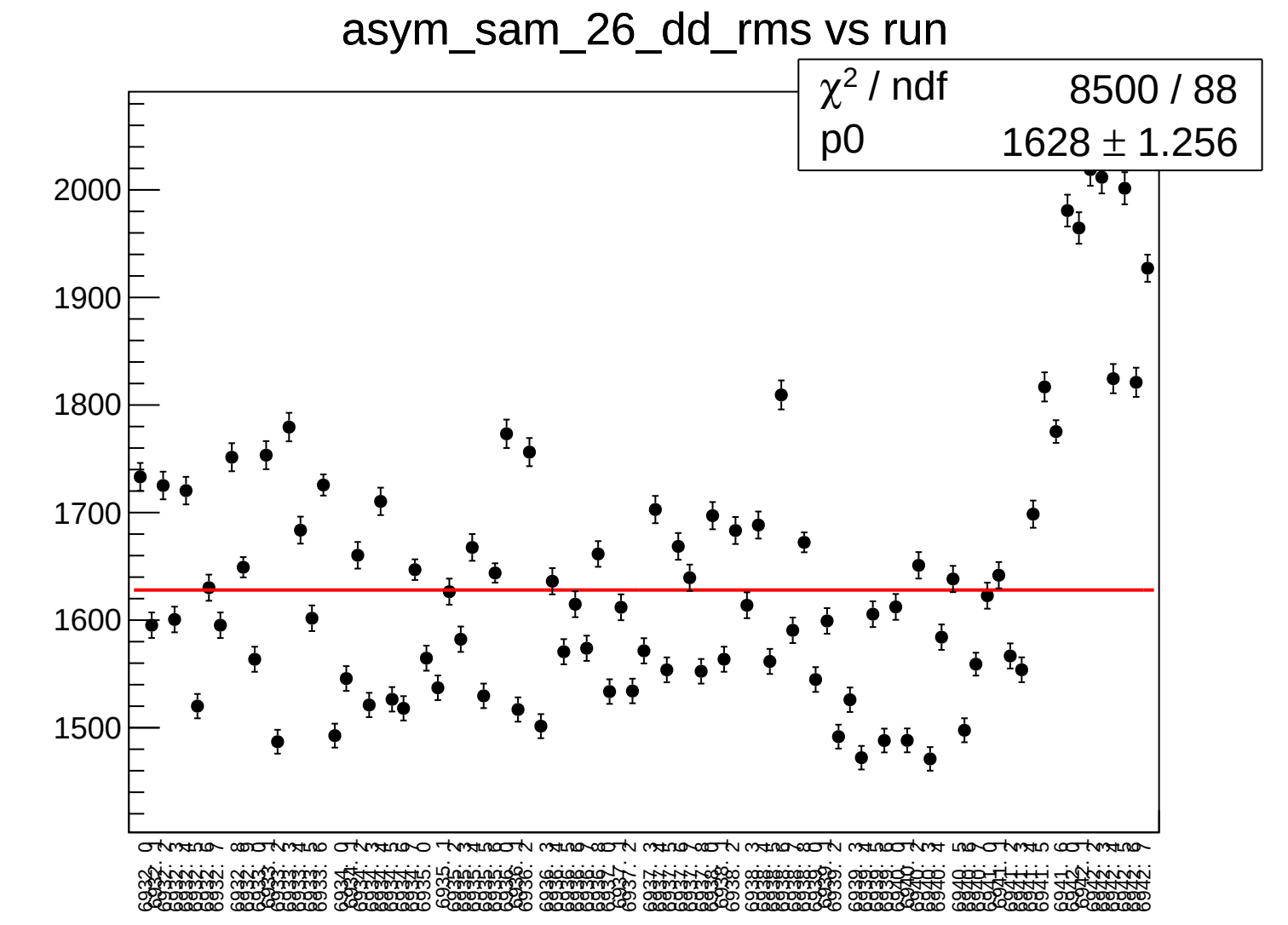

asym_sam_26_dd_correction_mean vs run
χ² / ndf 95.57 / 88
p0 −1466 ± 1761
pull
Entries 89
Mean 78.26
Std Dev 81.21

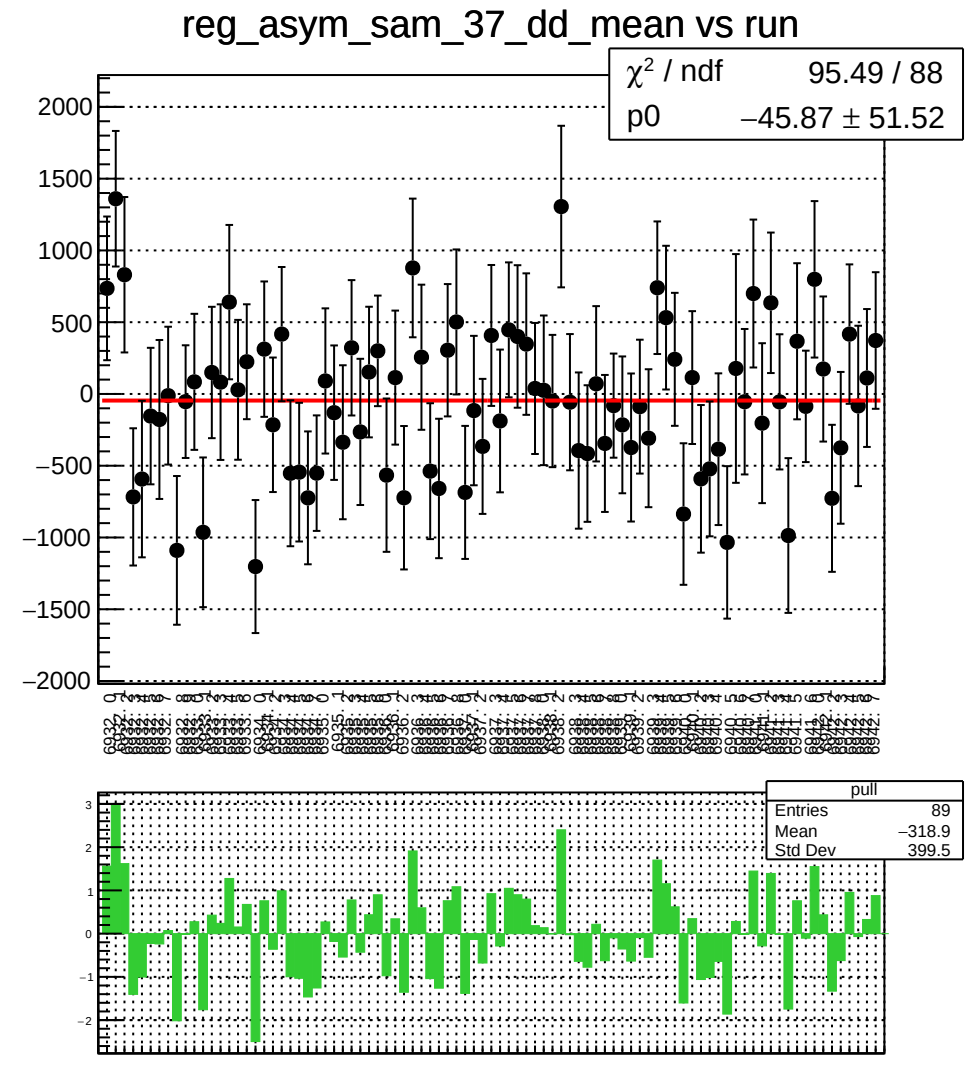

pull1D
Entries 89
Mean 0.006379
Std Dev 1.036

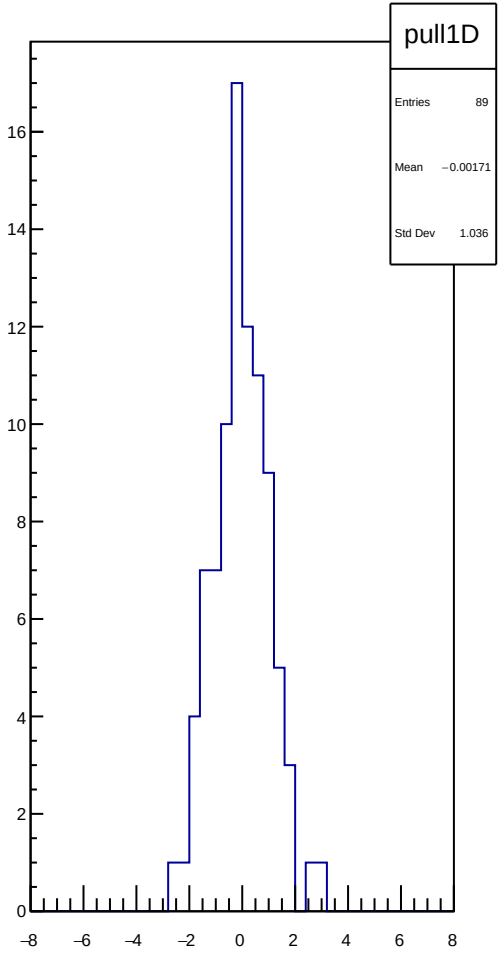

asym_sam_26_dd_correction_rms vs run
χ² / ndf 8746 / 88
p0 1614 ± 1.245
2000
1900
1800
1700
1600
1500
1400

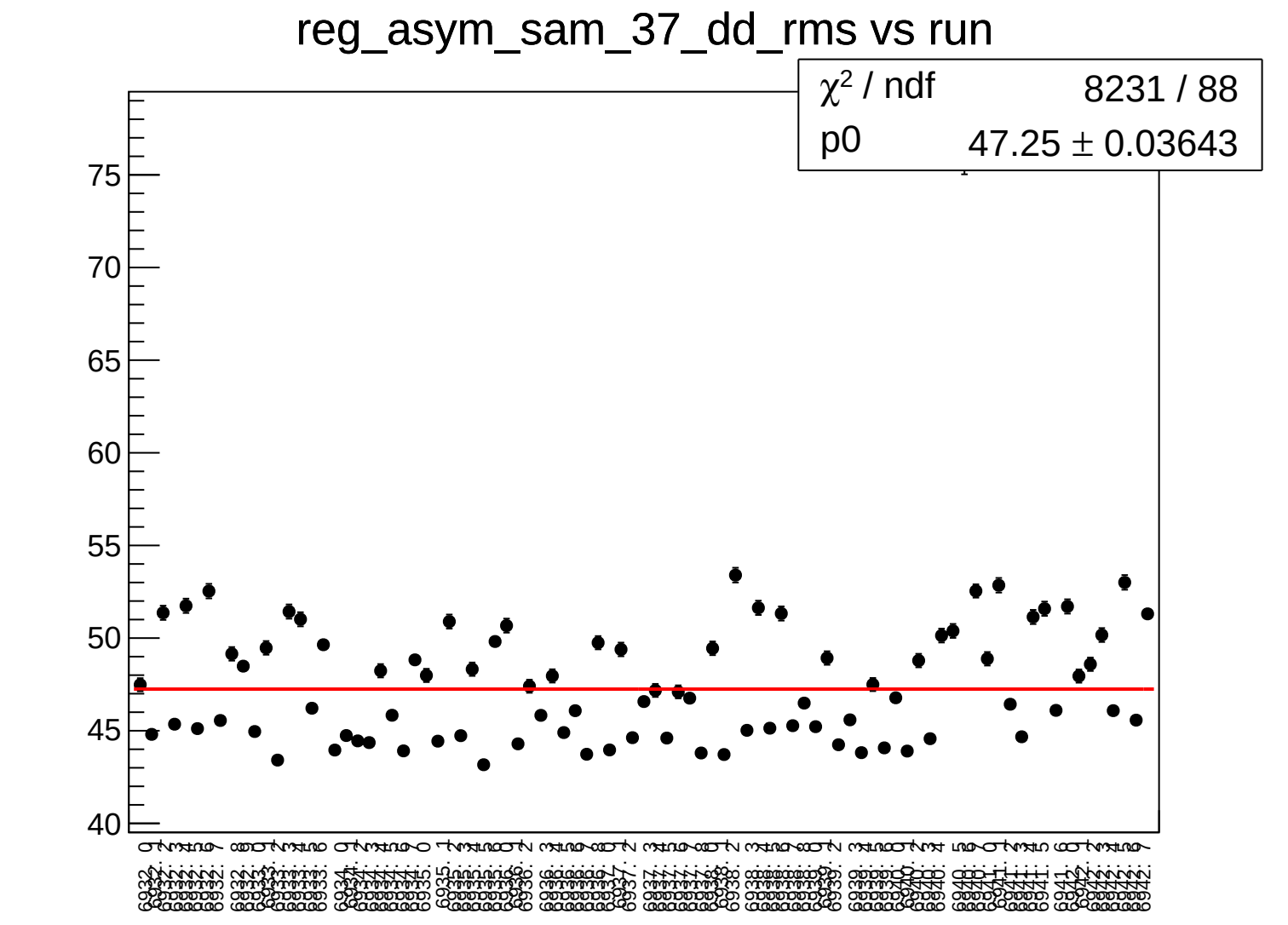

asym_sam_26_dd_mean vs run
χ² / ndf 94.29 / 88
p0 1878 ± 1776
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 89
Mean 124.7
Std Dev 106
2
1
0
−1
−2

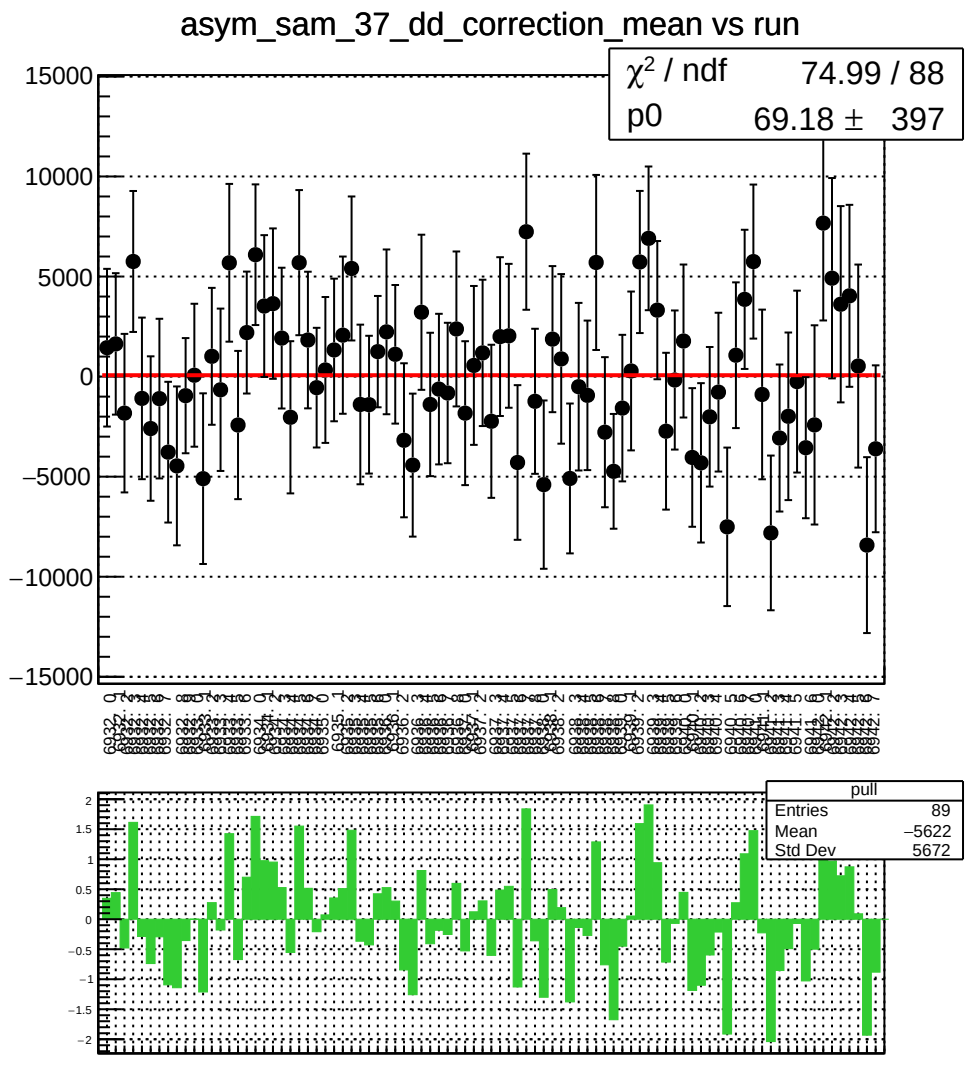

pull1D
Entries 89
Mean −0.006854
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

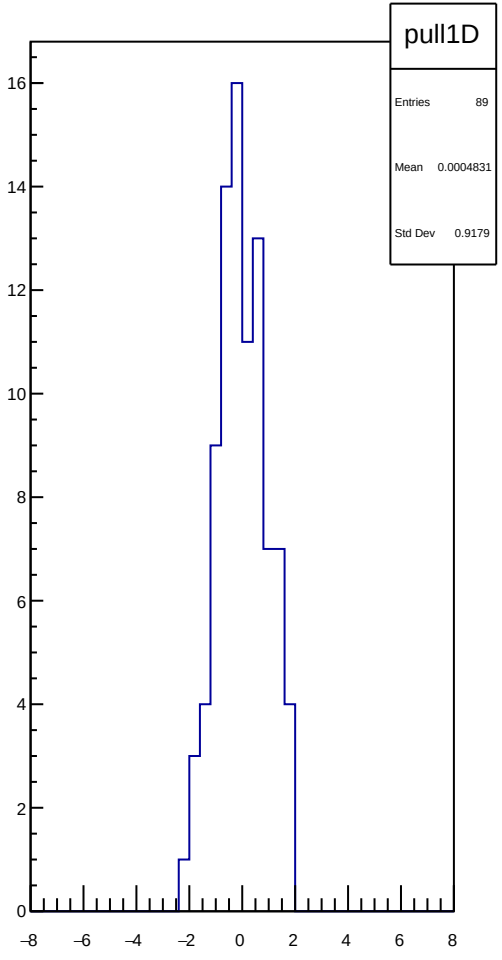

asym_sam_26_dd_rms vs run
χ² / ndf 8500 / 88
p0 1628 ± 1.256
2000
1900
1800
1700
1600
1500

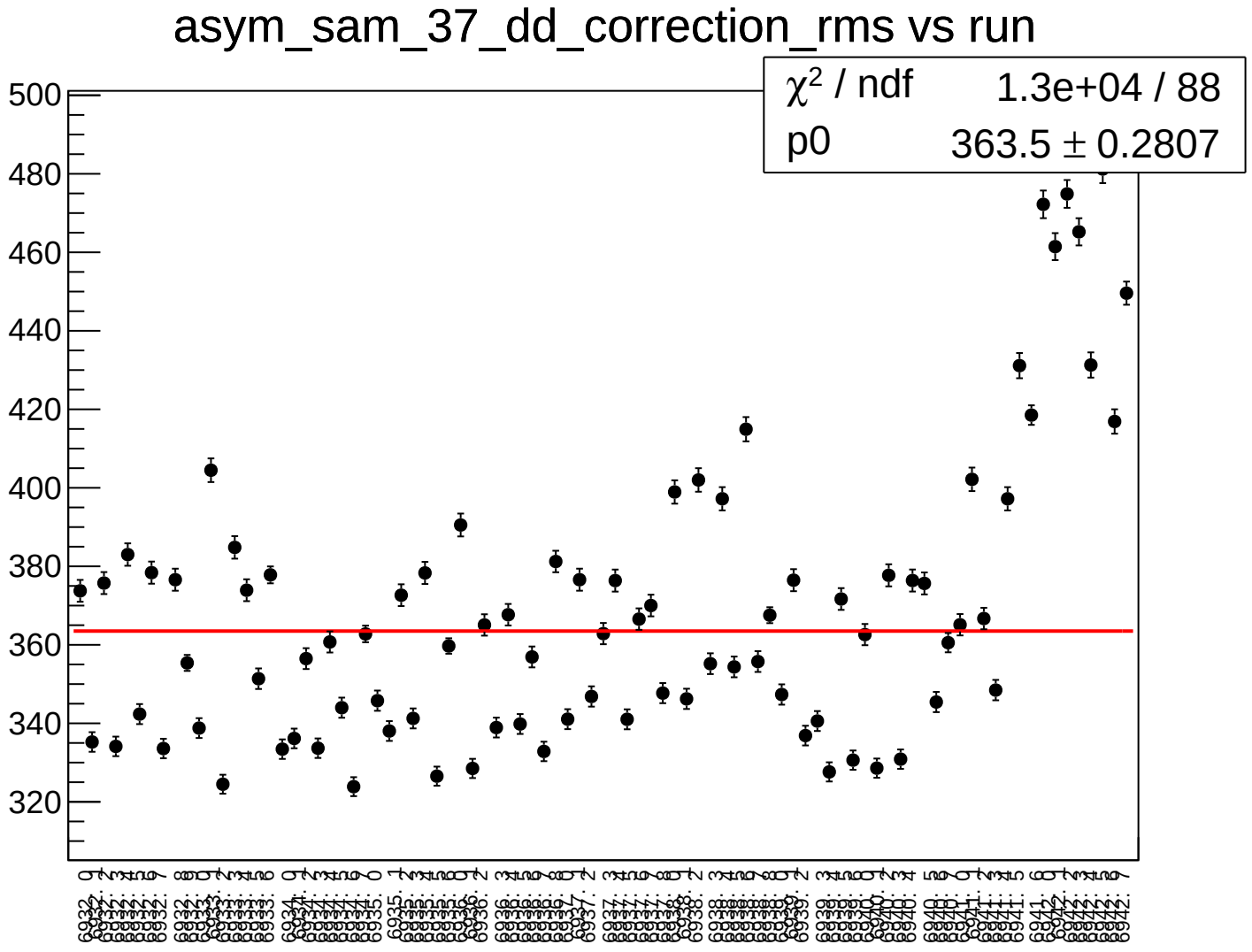

reg_asym_sam_37_dd_mean vs run
χ² / ndf 95.49 / 88
p0 −45.87 ± 51.52
pull
Entries 89
Mean −318.9
Std Dev 399.5

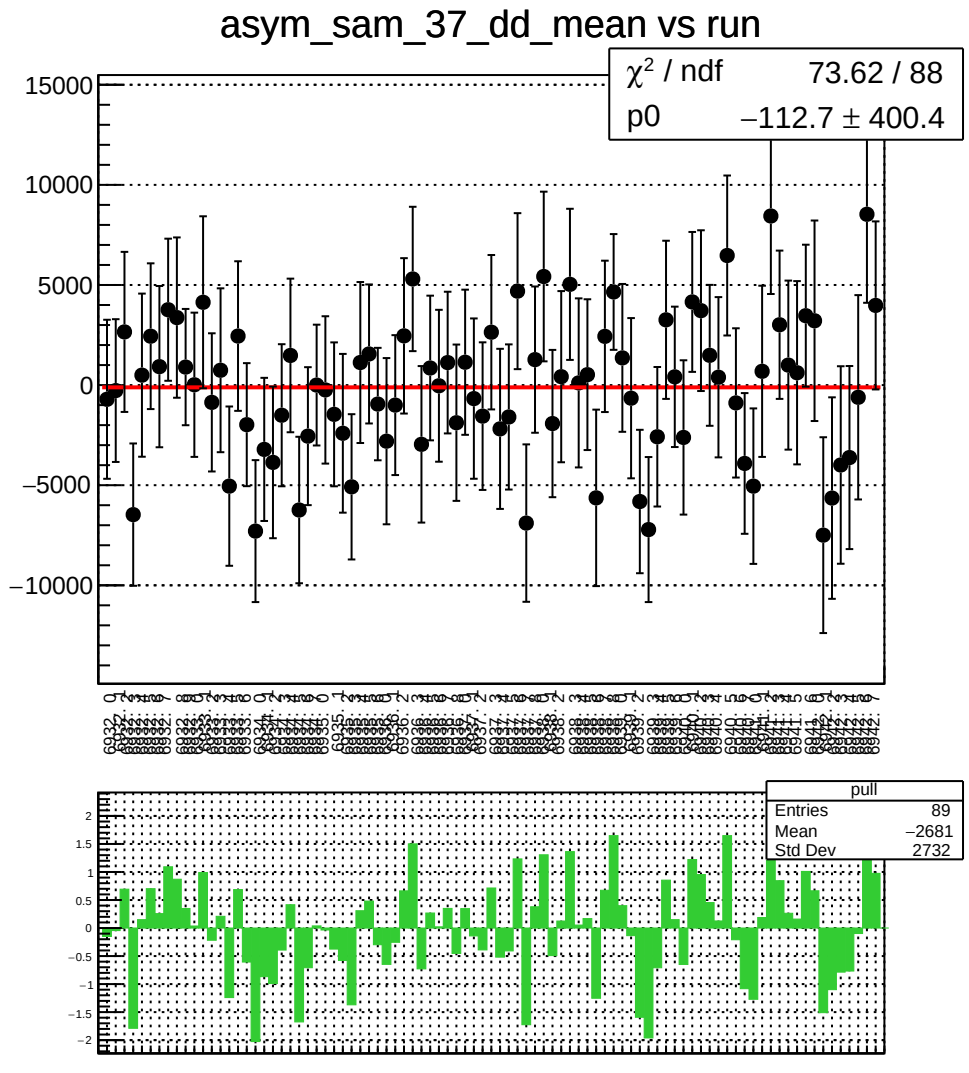

pull1D
Entries 89
Mean −0.00171
Std Dev 1.036

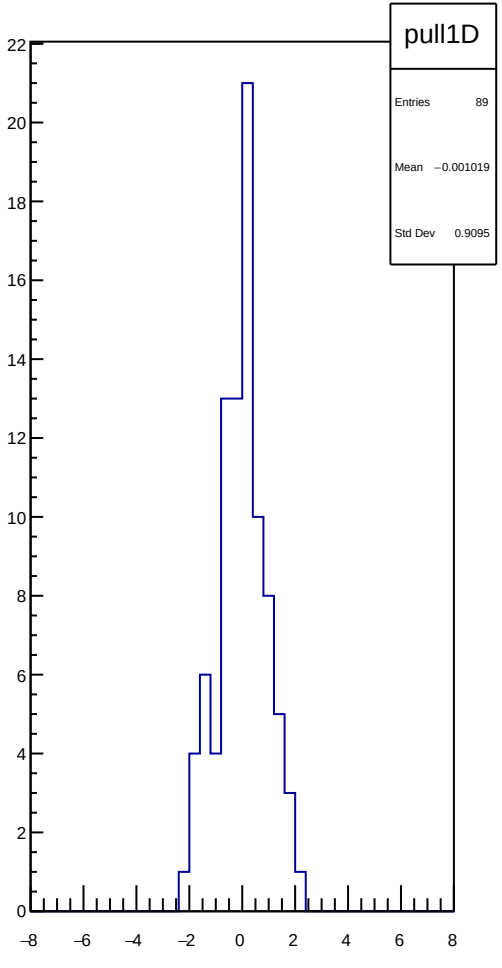

reg_asym_sam_37_dd_rms vs run
χ² / ndf 8231 / 88
p0 47.25 ± 0.03643
75
70
65
60
55
50
45
40

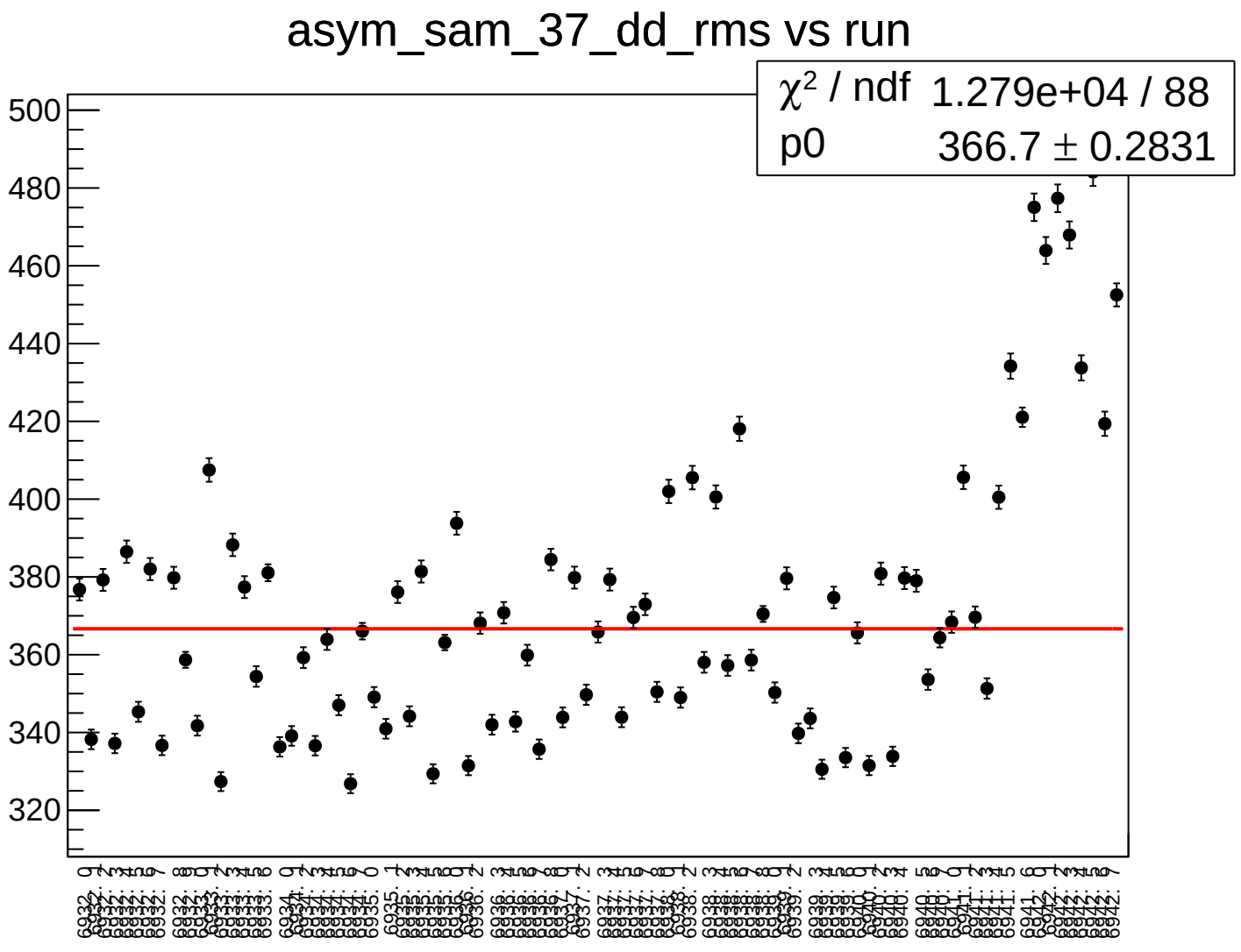

asym_sam_37_dd_correction_mean vs run
χ² / ndf 74.99 / 88
p0 69.18 ± 397
pull
Entries 89
Mean −5622
Std Dev 5672

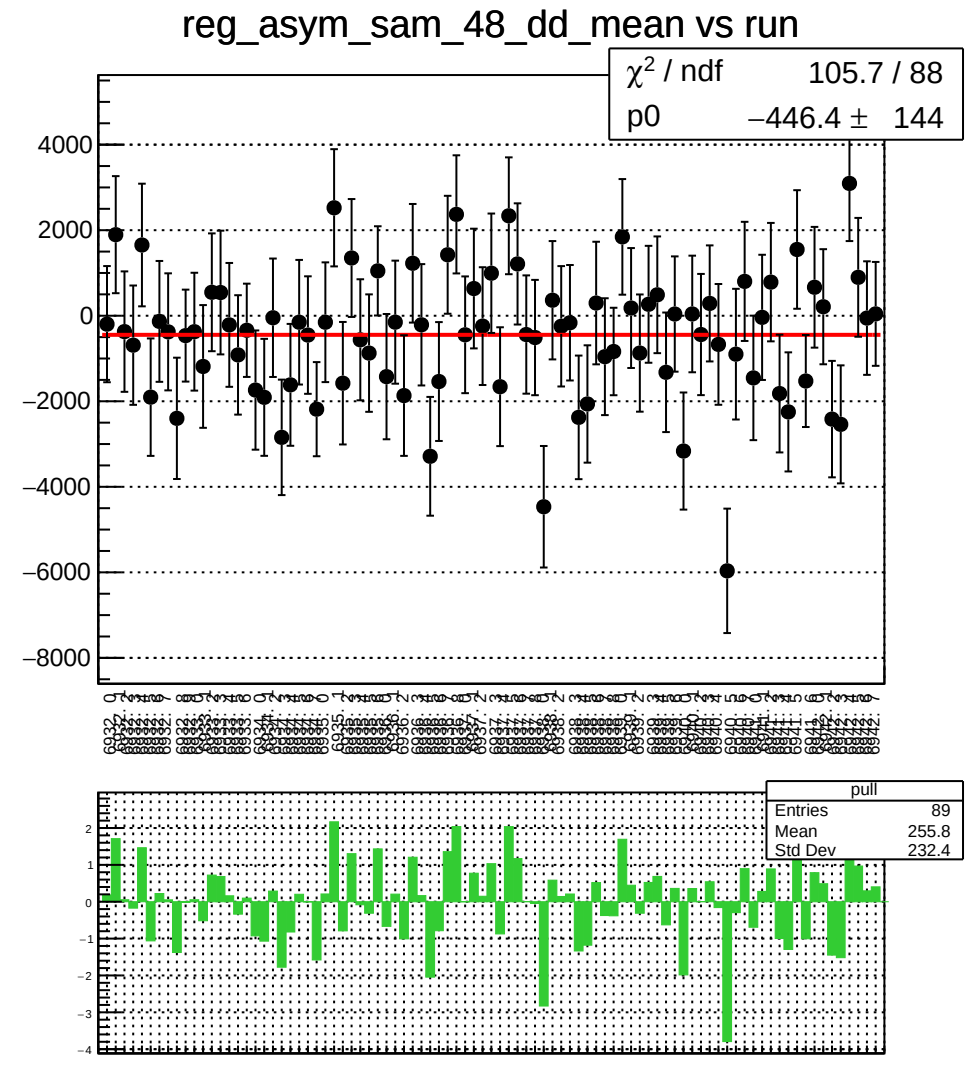

pull1D
Entries 89
Mean 0.0004831
Std Dev 0.9179

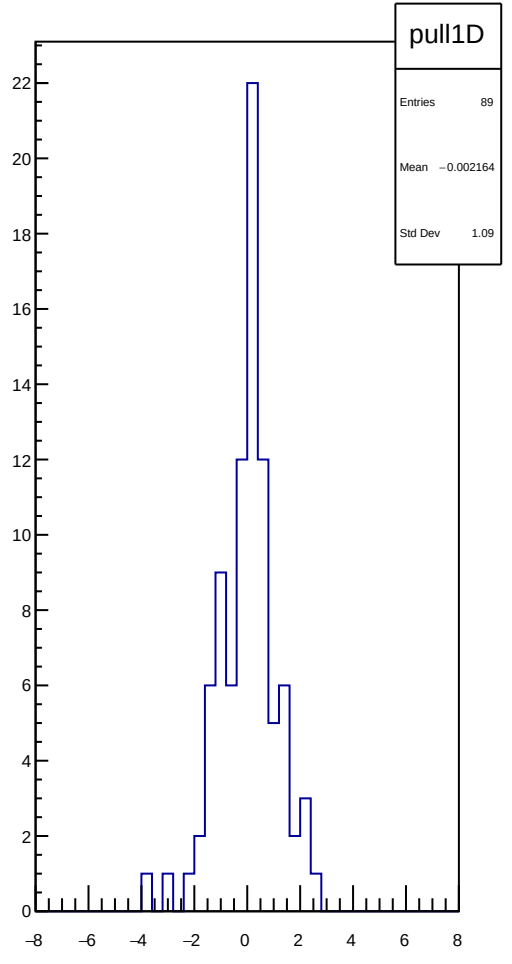

asym_sam_37_dd_correction_rms vs run
χ² / ndf 1.3e+04 / 88
p0 363.5 ± 0.2807
500
480
460
440
420
400
380
360
340
320

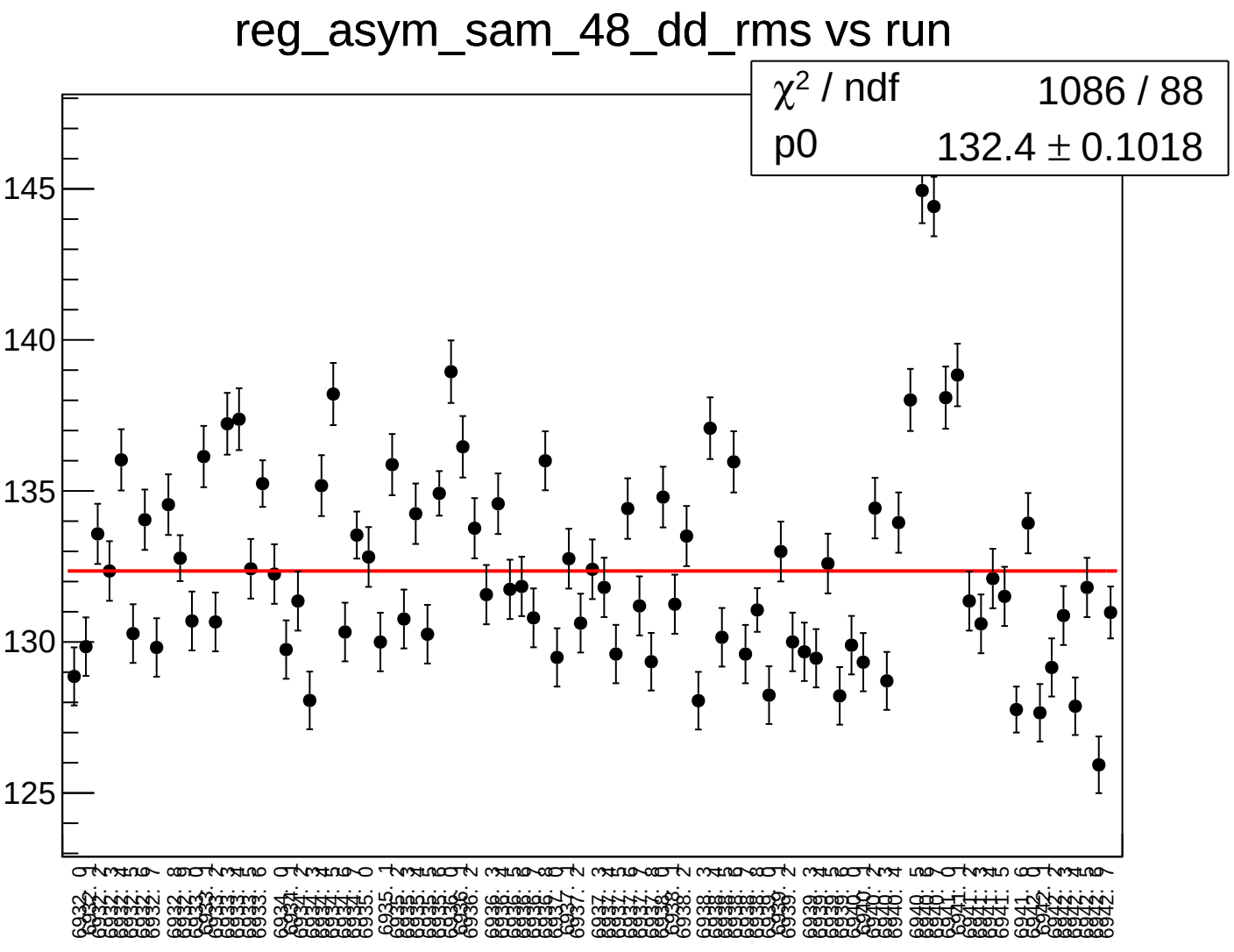

asym_sam_37_dd_mean vs run
χ² / ndf 73.62 / 88
p0 −112.7 ± 400.4
15000
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −2681
Std Dev 2732
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

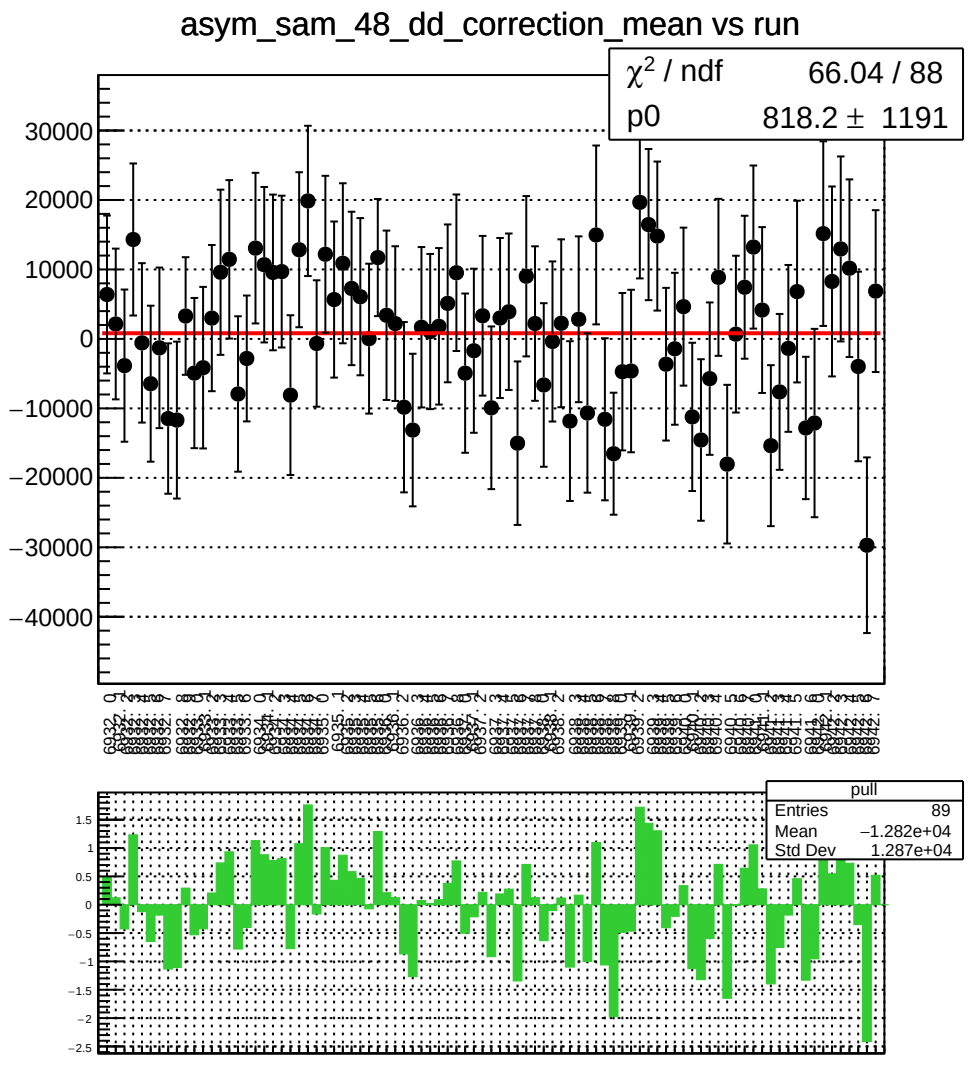

pull1D
Entries 89
Mean −0.001019
Std Dev 0.9095
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

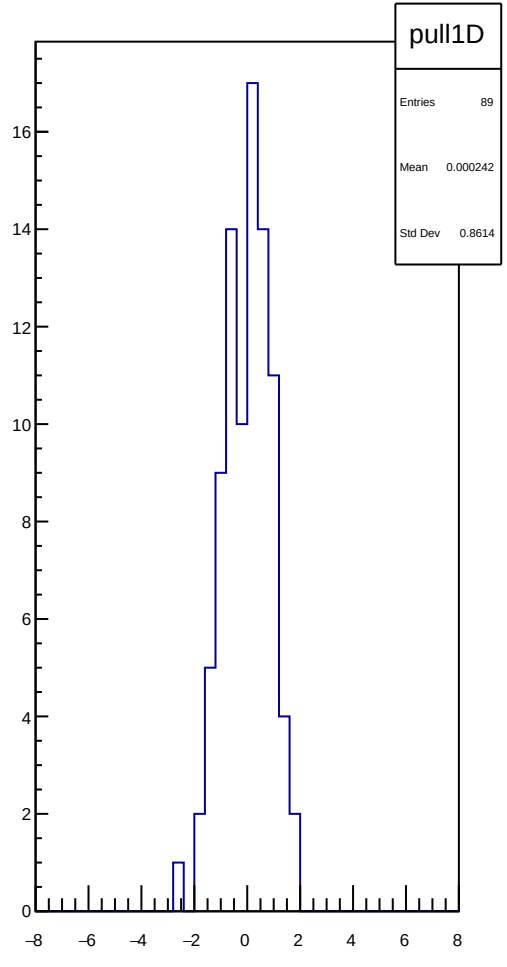

asym_sam_37_dd_rms vs run
χ² / ndf 1.279e+04 / 88
p0 366.7 ± 0.2831
500
480
460
440
420
400
380
360
340
320

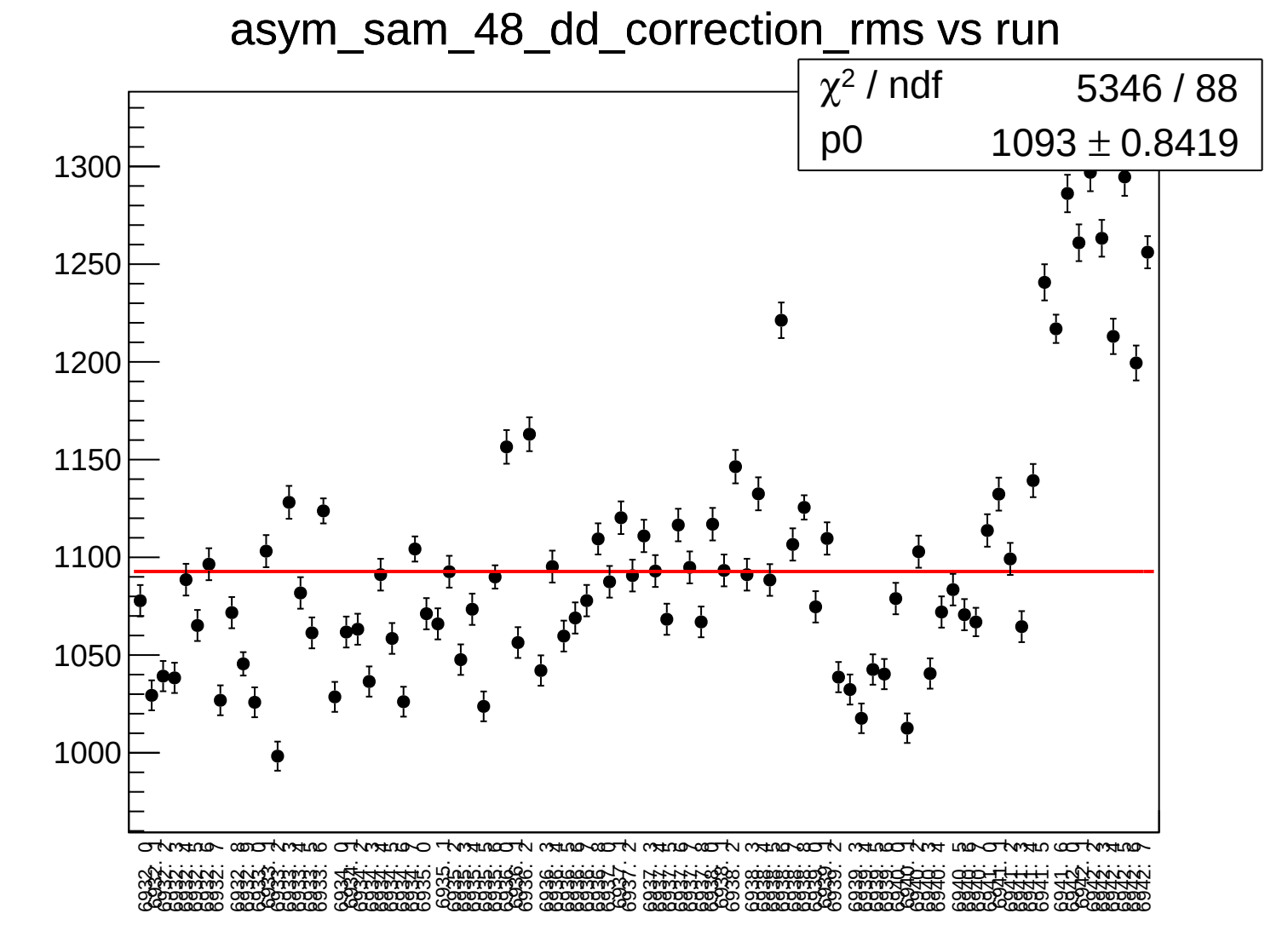

reg_asym_sam_48_dd_mean vs run
χ² / ndf 105.7 / 88
p0 −446.4 ± 144
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 89
Mean 255.8
Std Dev 232.4
2
1
0
−1
−2
−3
−4

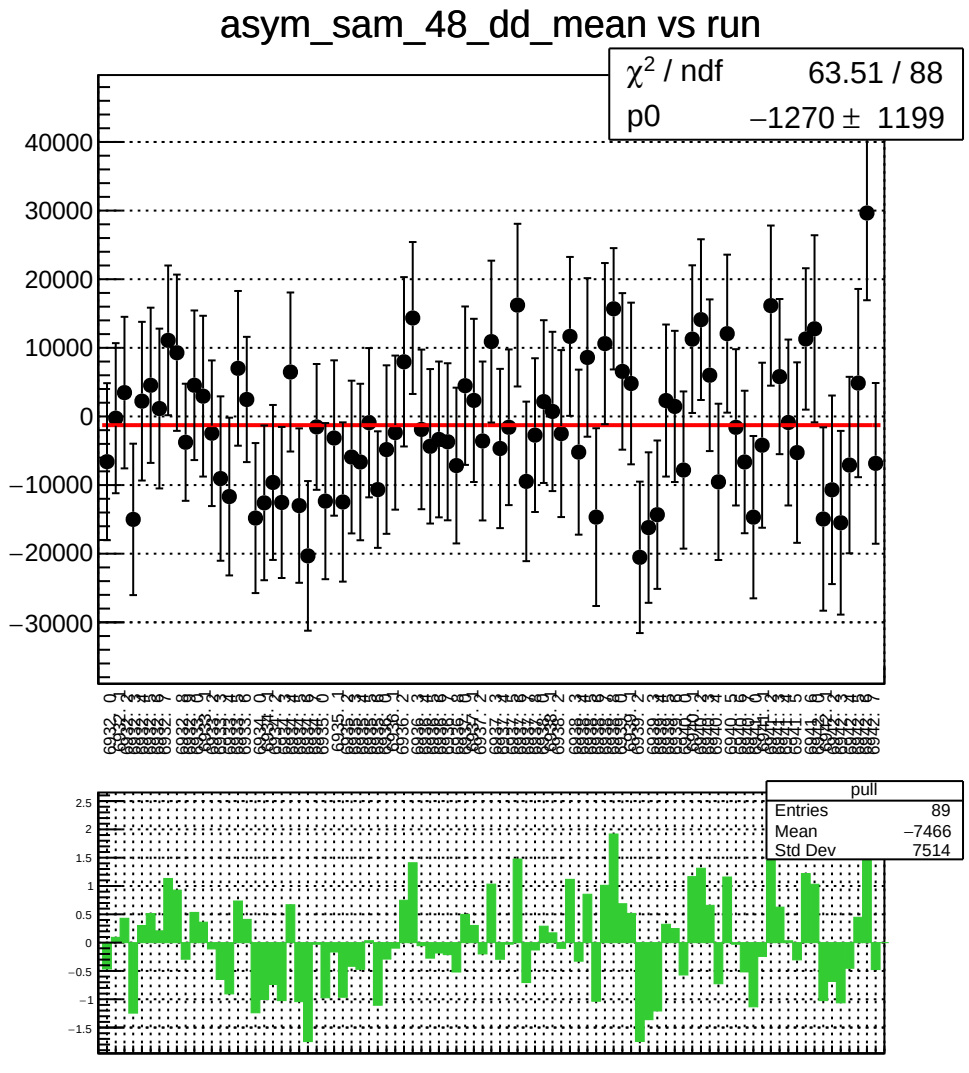

pull1D
Entries 89
Mean −0.002164
Std Dev 1.09
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

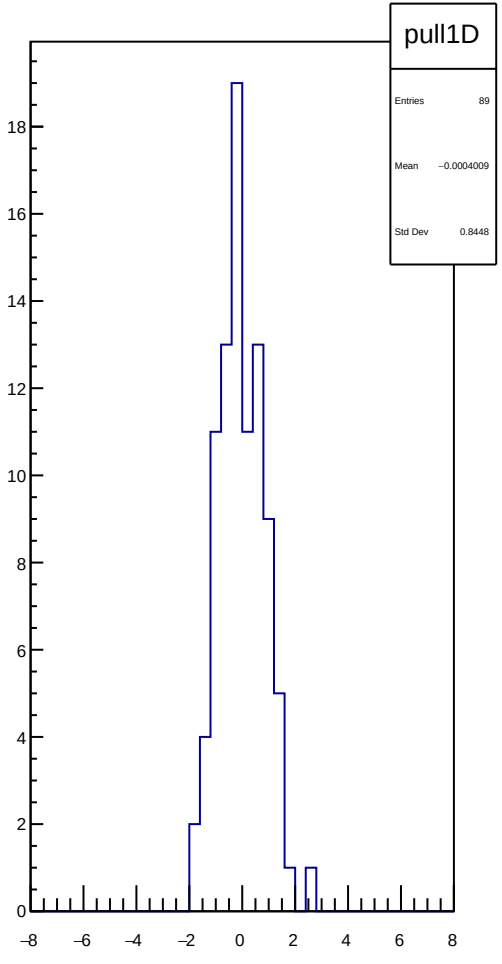

reg_asym_sam_48_dd_rms vs run
χ² / ndf 1086 / 88
p0 132.4 ± 0.1018
145
140
135
130
125

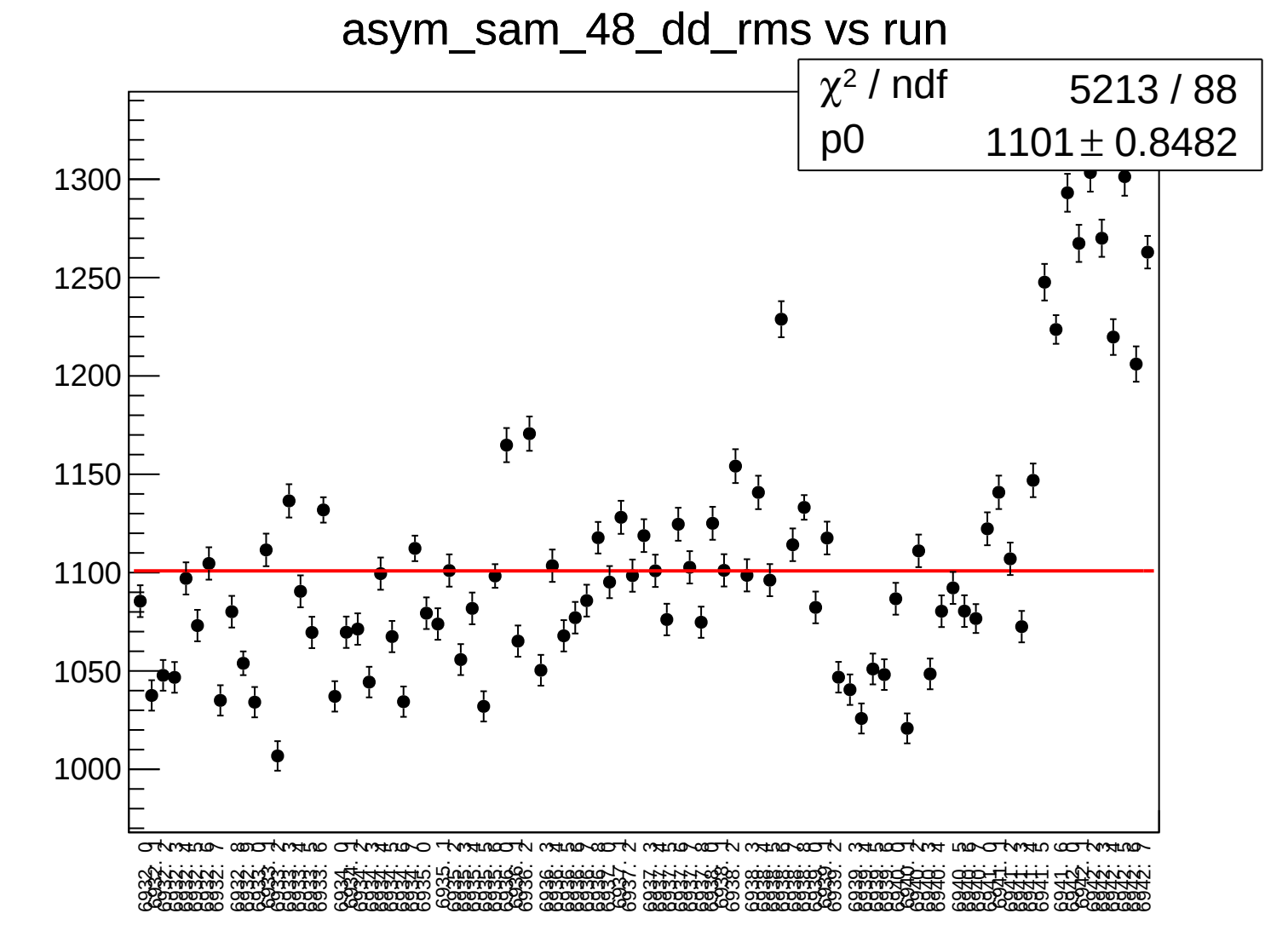

asym_sam_48_dd_correction_mean vs run
χ² / ndf 66.04 / 88
p0 818.2 ± 1191
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −1.282e+04
Std Dev 1.287e+04
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

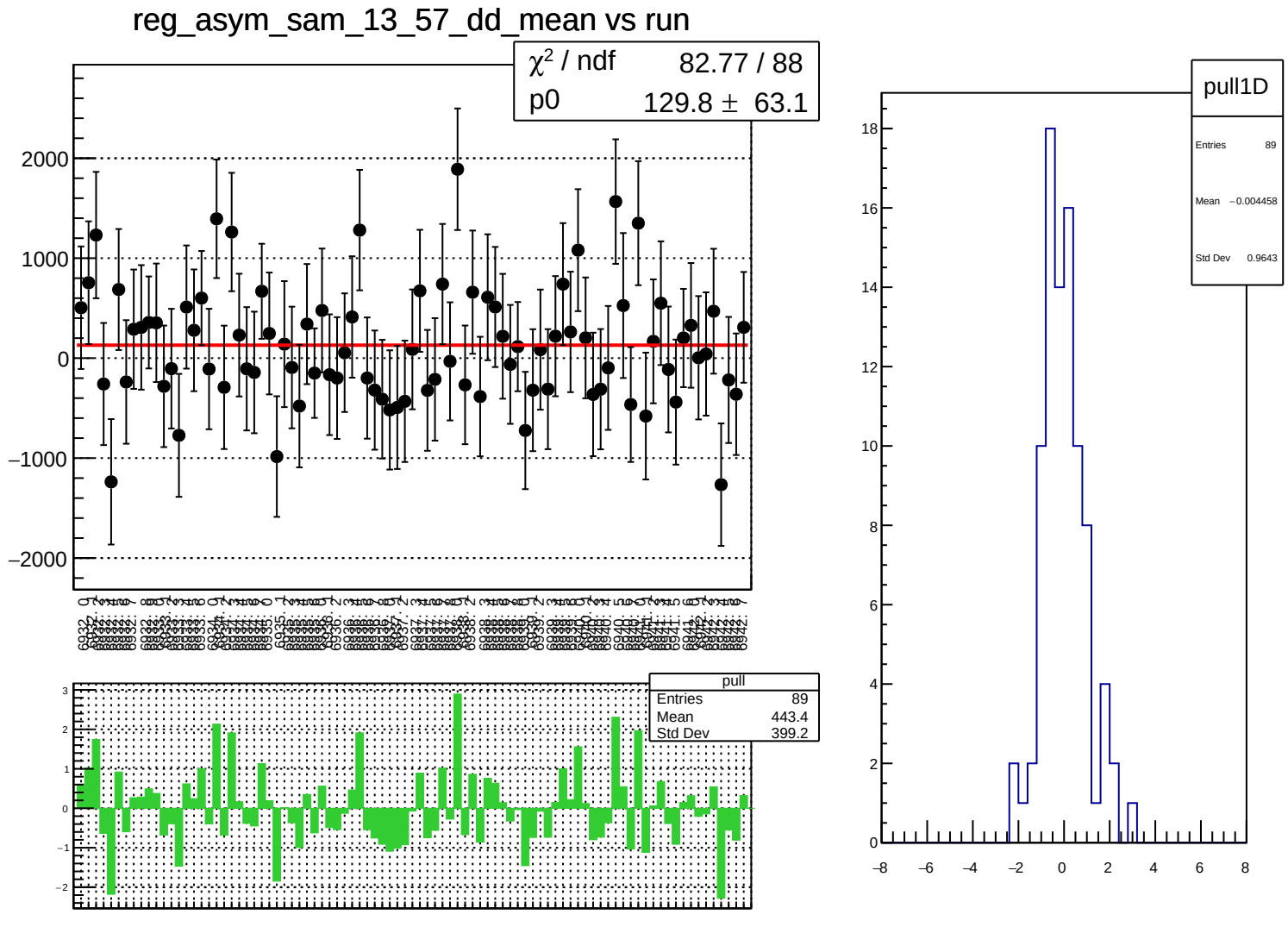

pull1D
Entries 89
Mean 0.000242
Std Dev 0.8614
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

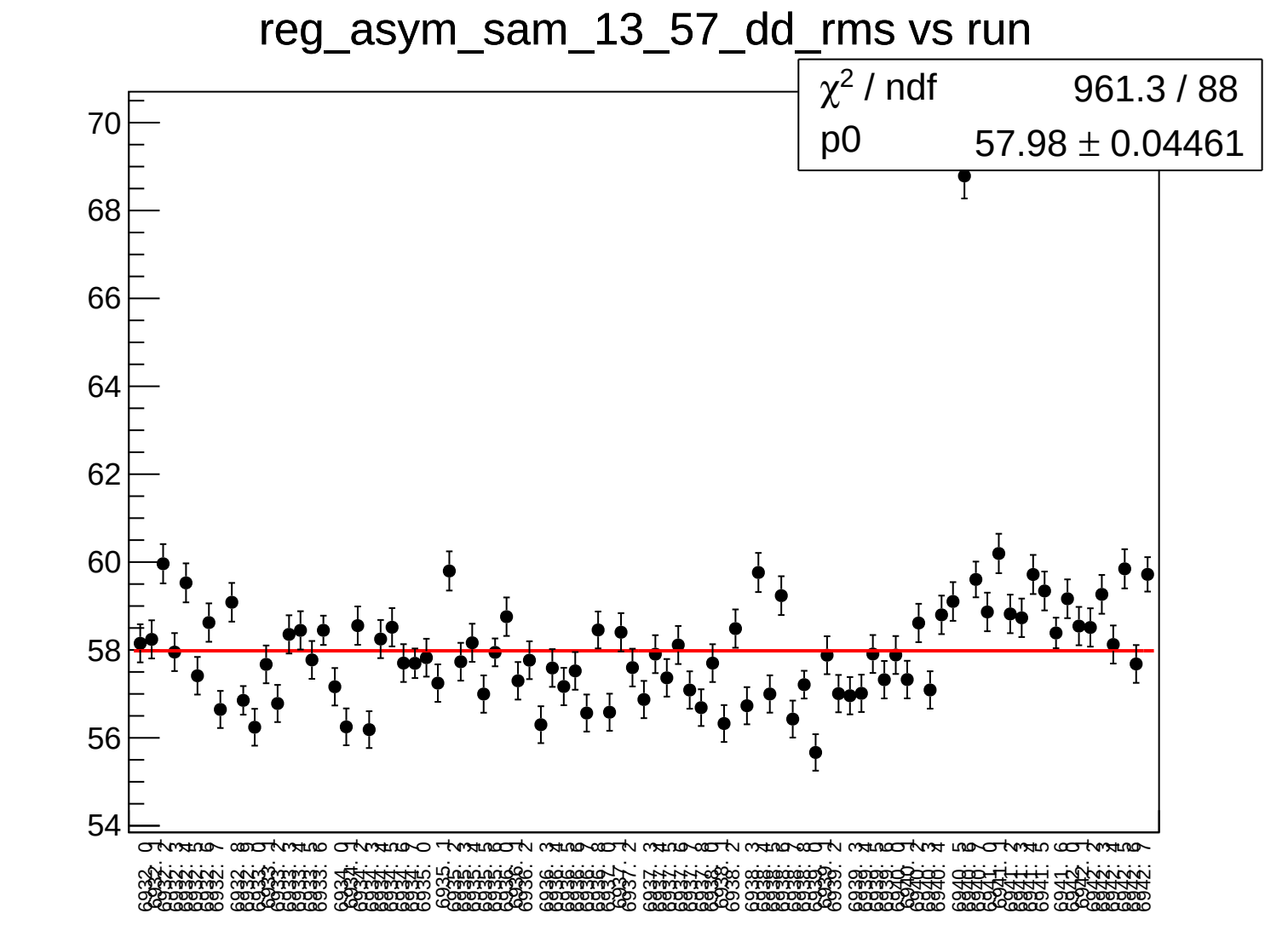

asym_sam_48_dd_correction_rms vs run
χ² / ndf 5346 / 88
p0 1093 ± 0.8419
1300
1250
1200
1150
1100
1050
1000

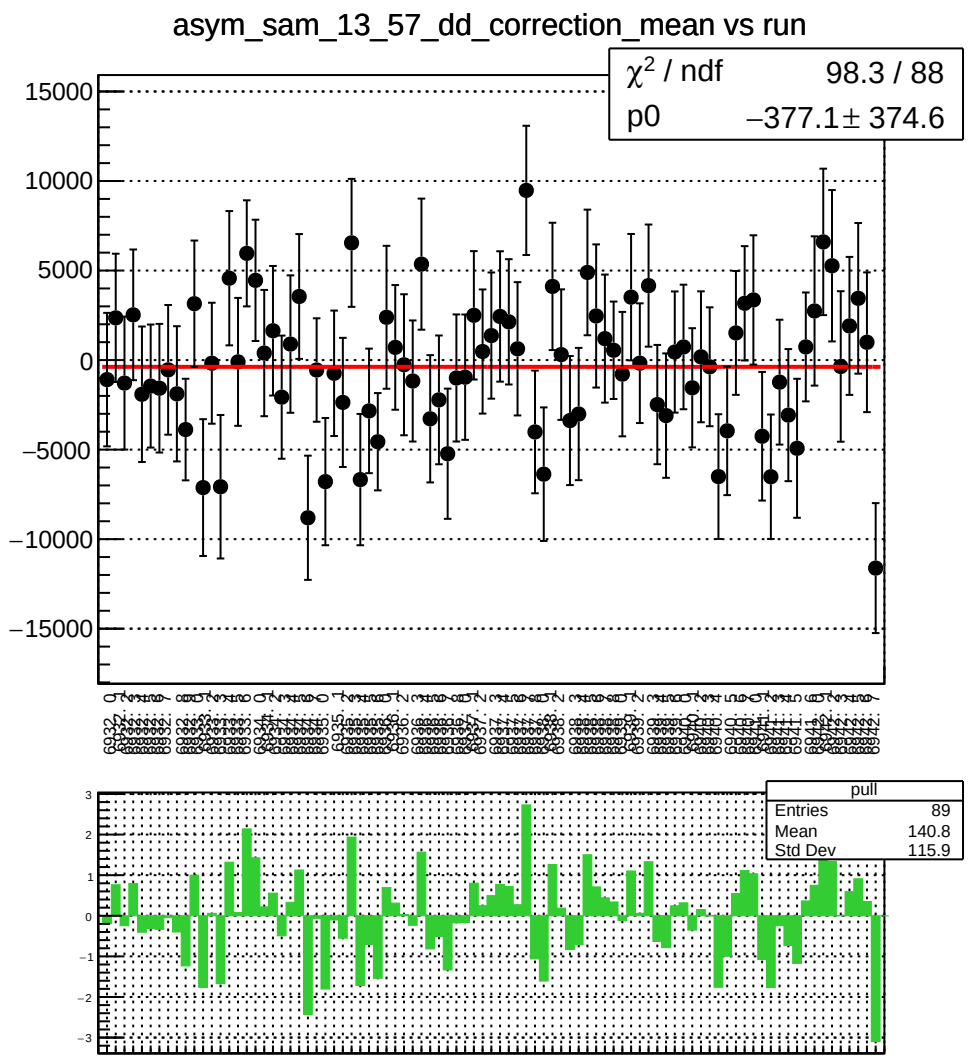

asym_sam_48_dd_mean vs run
χ² / ndf 63.51 / 88
p0 −1270 ± 1199
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −7466
Std Dev 7514
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

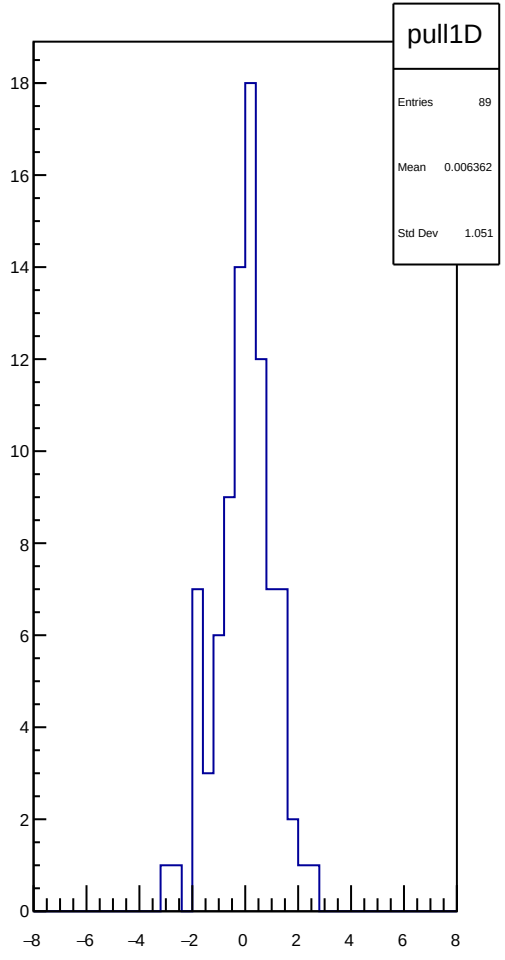

pull1D
Entries 89
Mean −0.0004009
Std Dev 0.8448
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

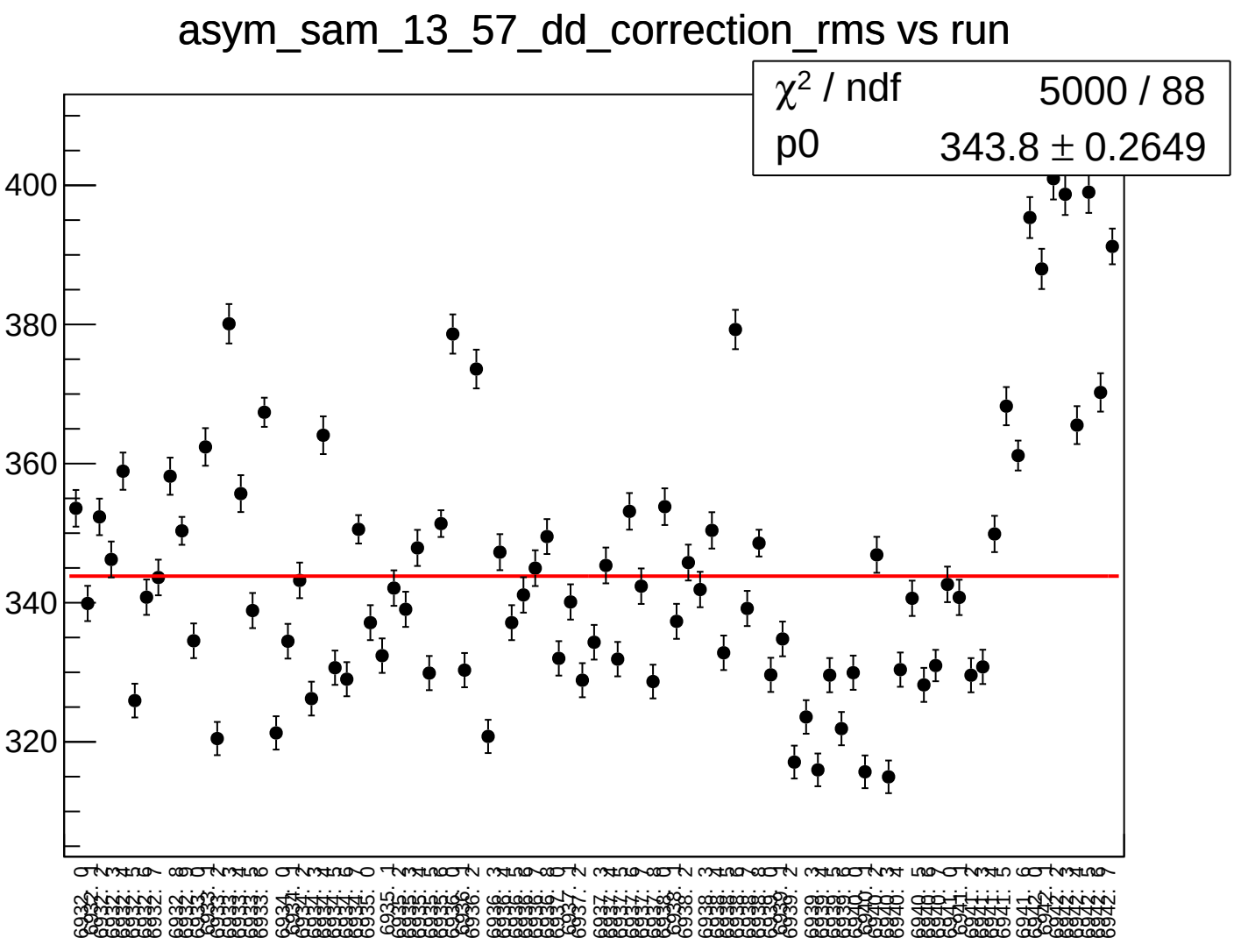

asym_sam_48_dd_rms vs run
χ² / ndf 5213 / 88
p0 1101 ± 0.8482
1300
1250
1200
1150
1100
1050
1000

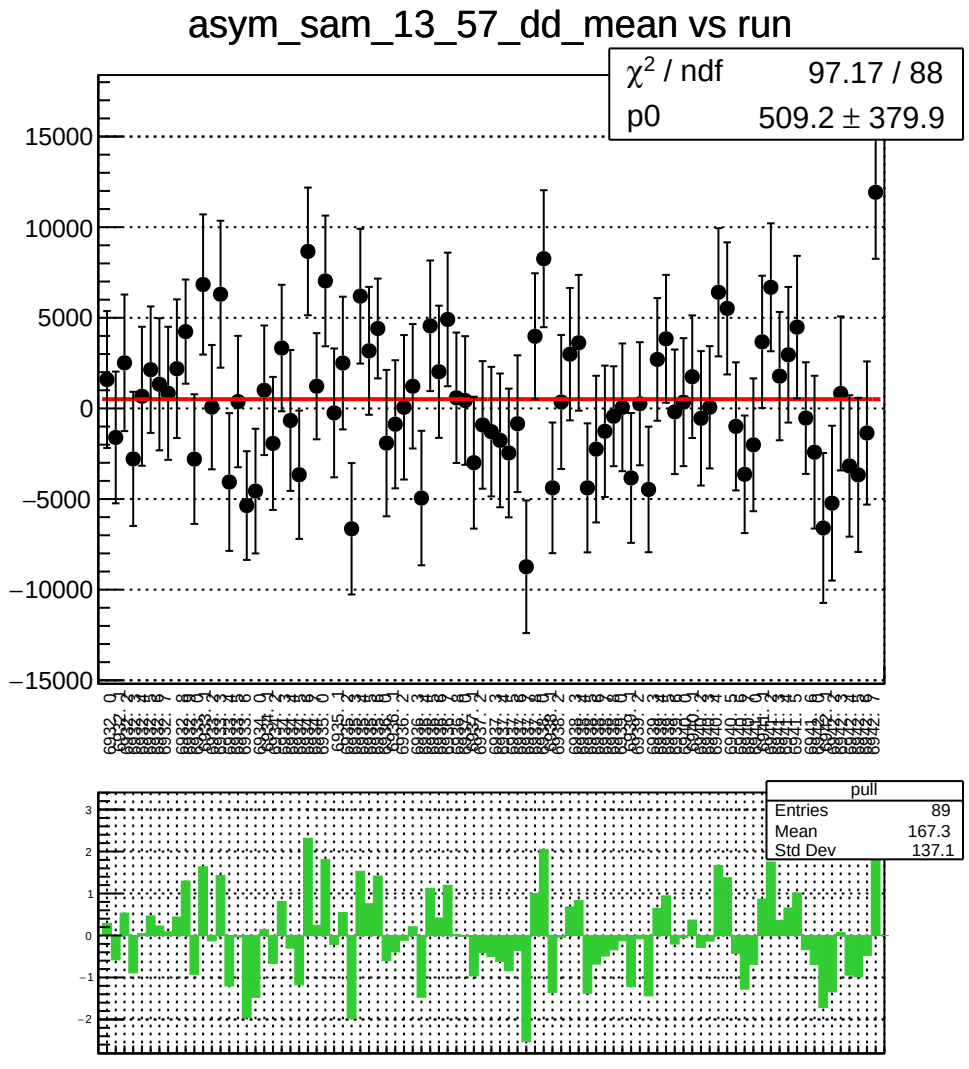

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 82.77 / 88
p0 129.8 ± 63.1
2000
1000
0
−1000
−2000
pull
Entries 89
Mean 443.4
Std Dev 399.2
3
2
1
0
−1
−2
pull1D
Entries 89
Mean −0.004458
Std Dev 0.9643
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

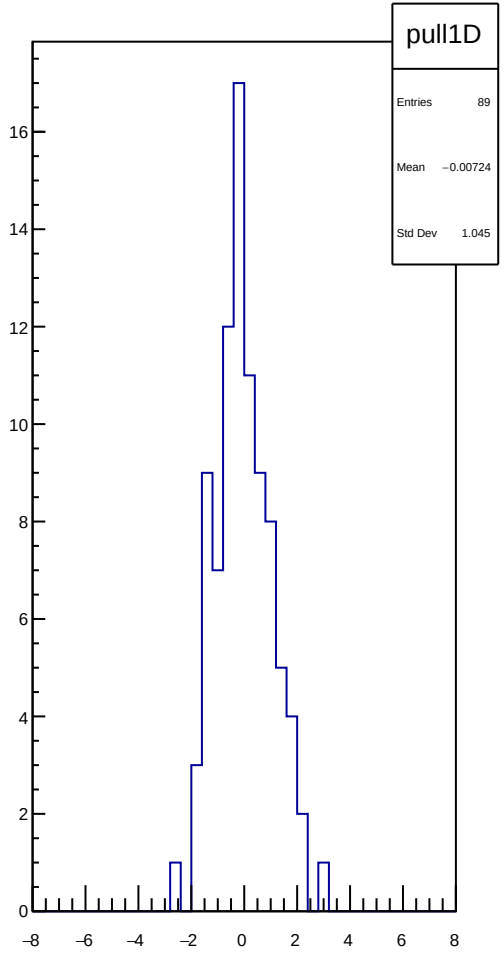

reg_asym_sam_13_57_dd_rms vs run
χ^2 / ndf 961.3 / 88
p0 57.98 ± 0.04461
70
68
66
64
62
60
58
56
54

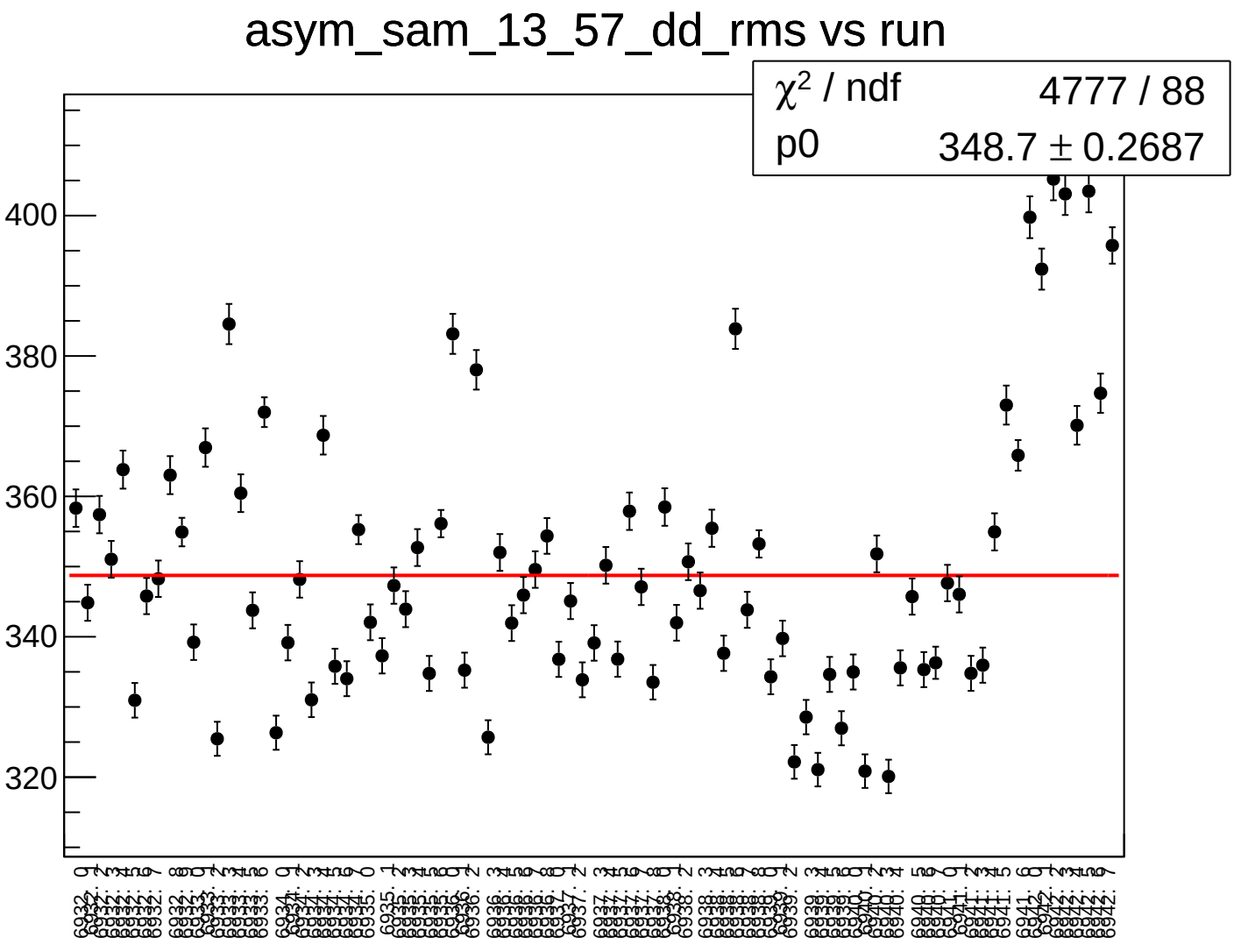

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 98.3 / 88
p0 −377.1± 374.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 140.8
Std Dev 115.9
3
2
1
0
−1
−2
−3

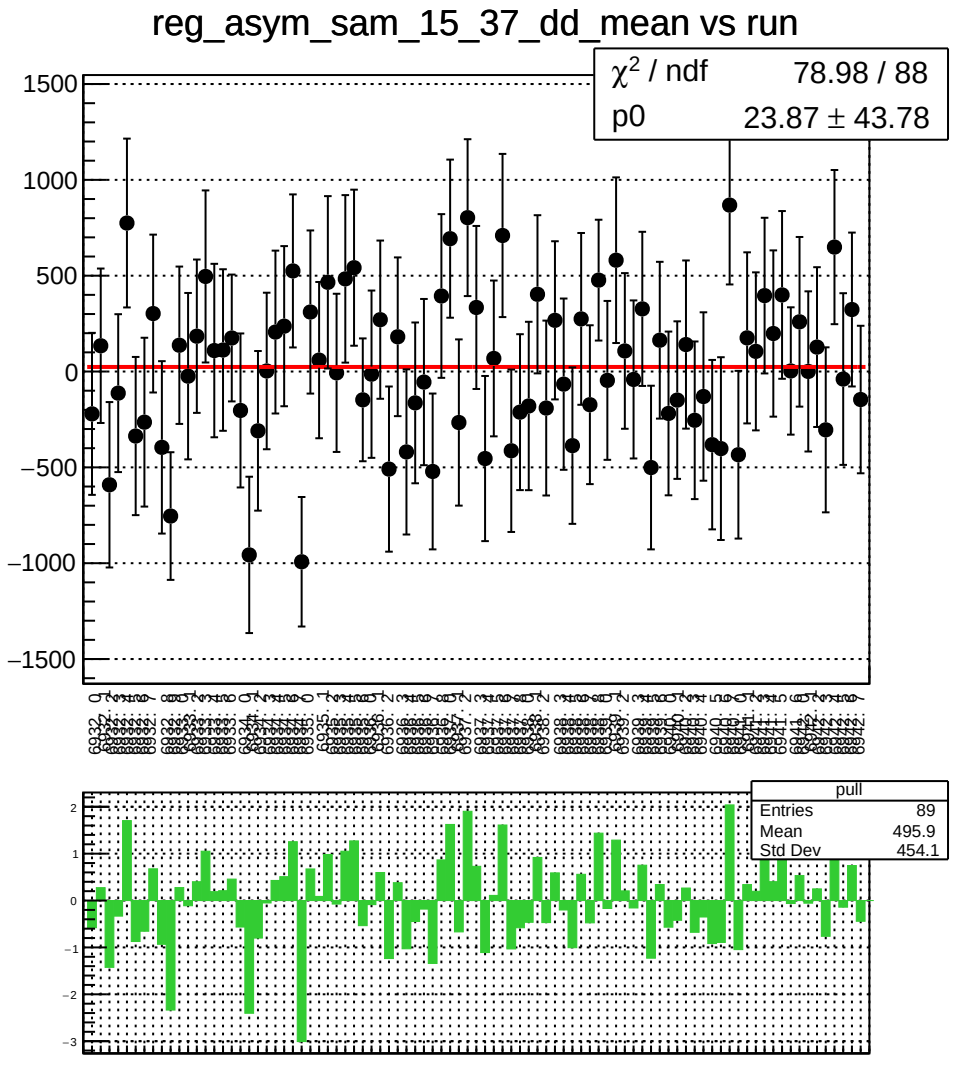

pull1D
Entries 89
Mean 0.006362
Std Dev 1.051
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

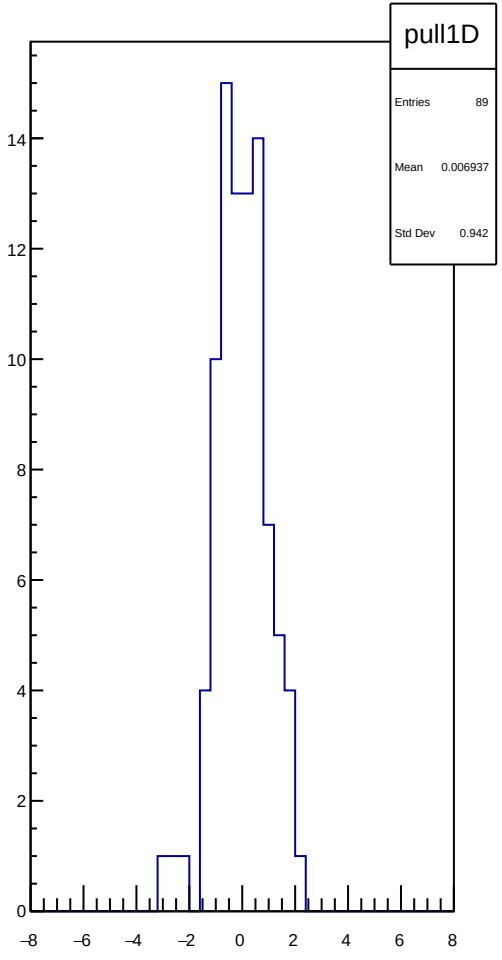

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 5000 / 88
p0 343.8 ± 0.2649
400
380
360
340
320

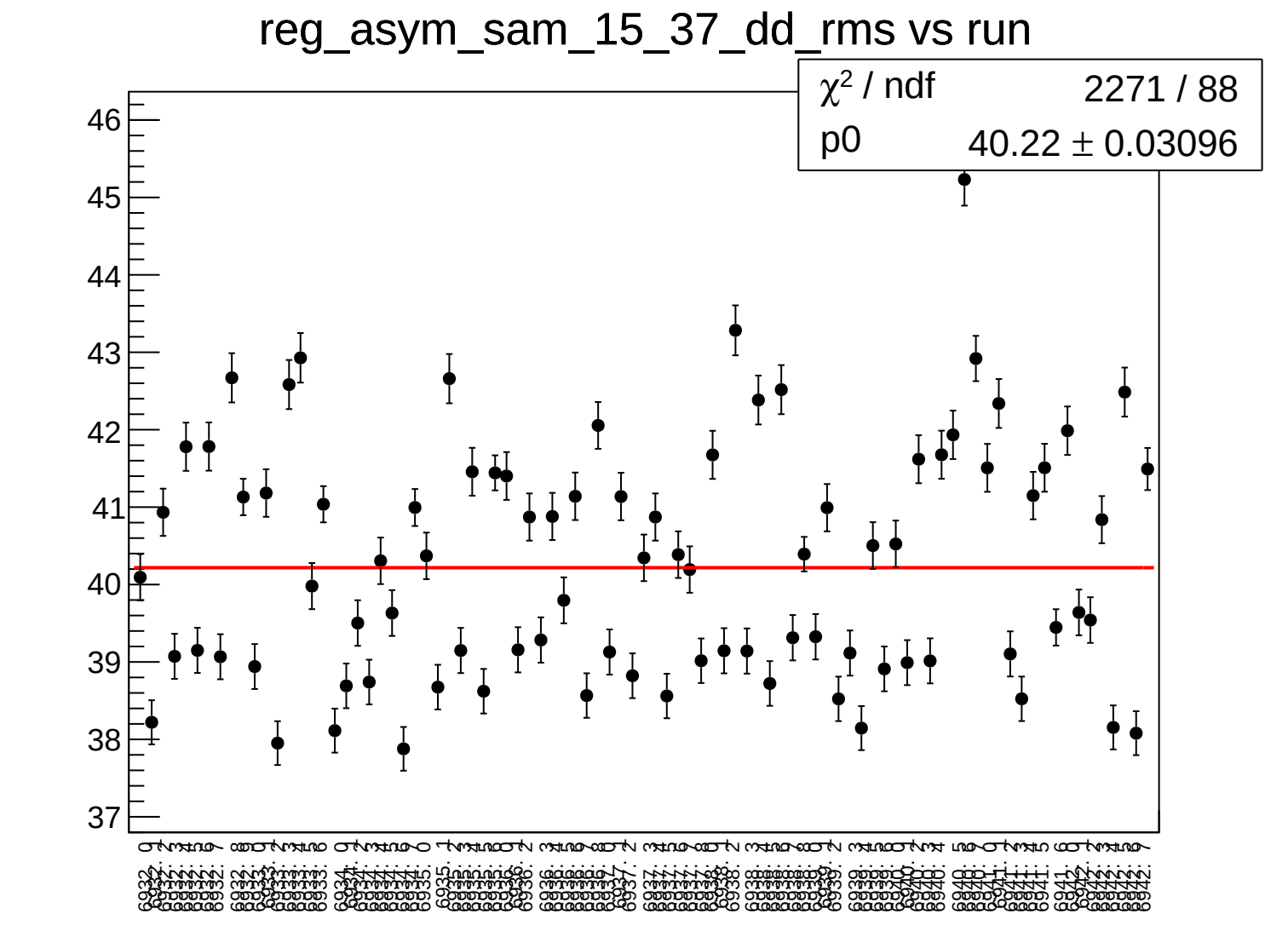

asym_sam_13_57_dd_mean vs run
χ² / ndf 97.17 / 88
p0 509.2 ± 379.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 167.3
Std Dev 137.1
3
2
1
0
−1
−2

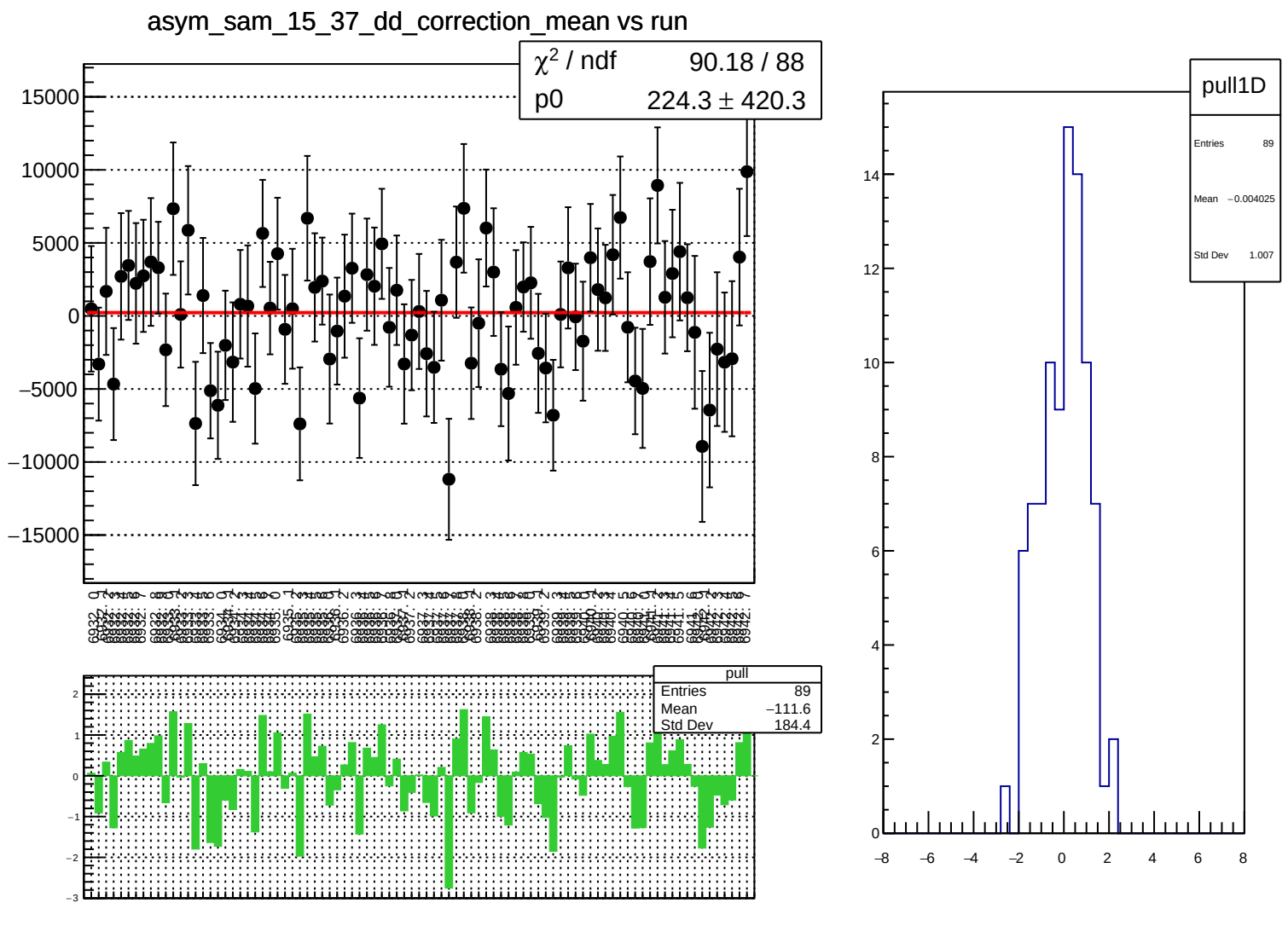

pull1D
Entries 89
Mean −0.00724
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

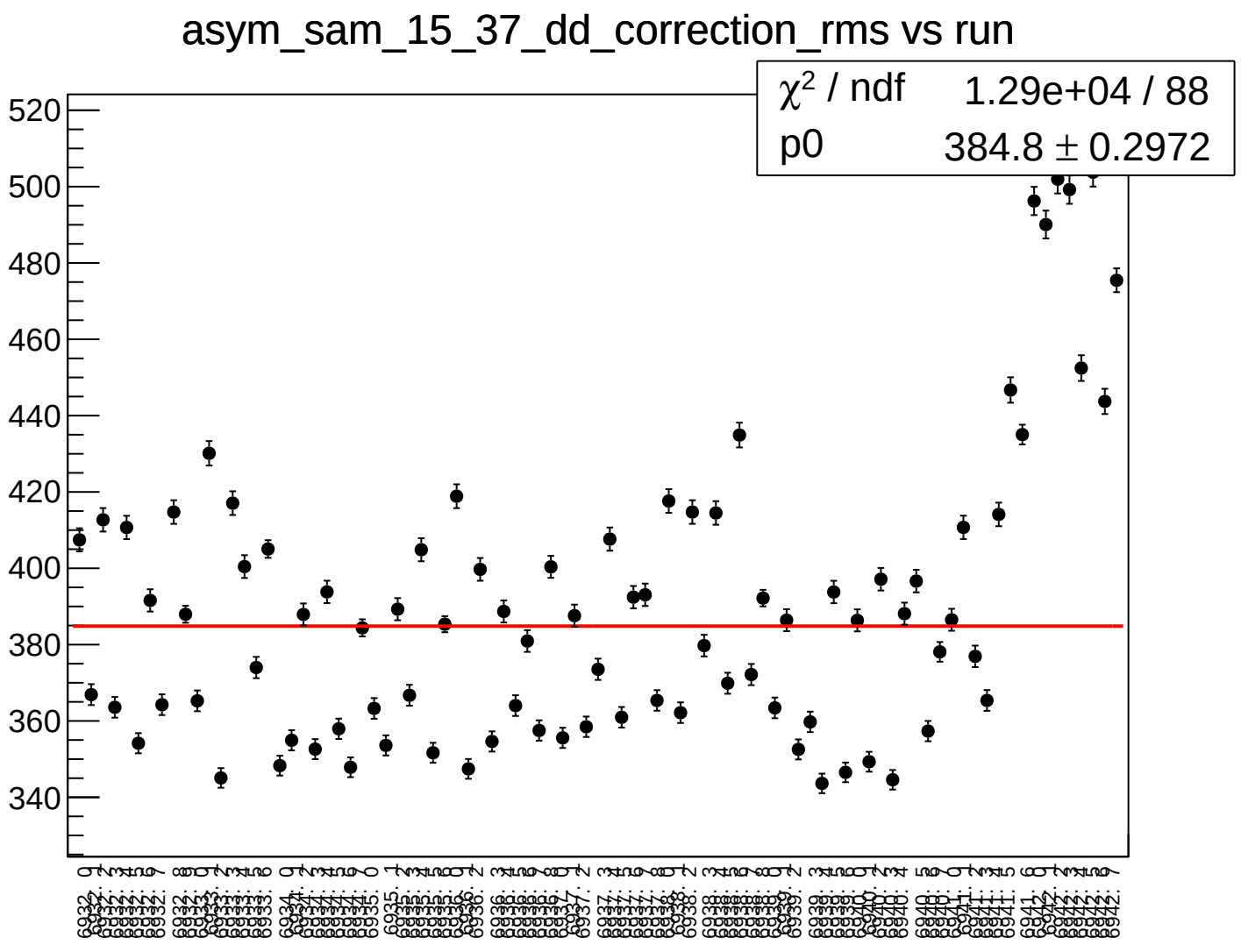

asym_sam_13_57_dd_rms vs run
χ² / ndf 4777 / 88
p0 348.7 ± 0.2687
400
380
360
340
320

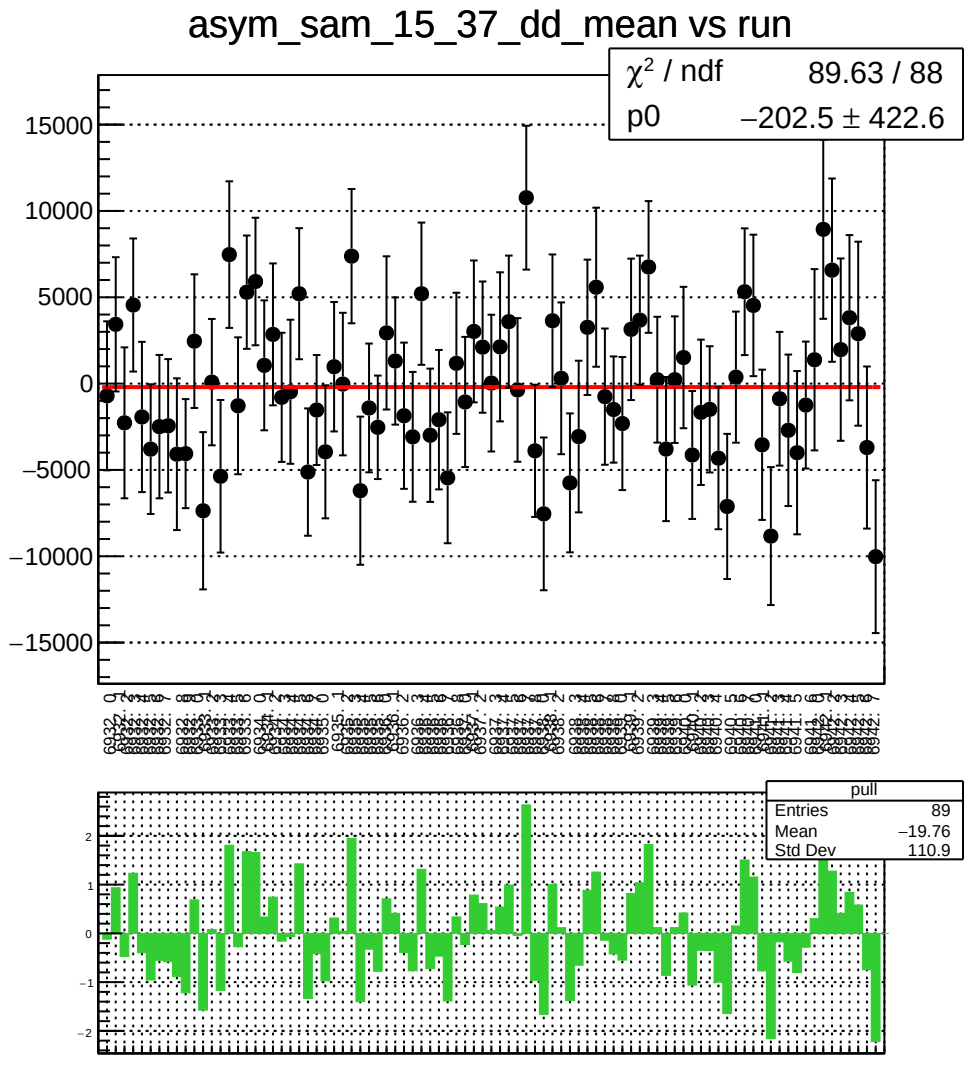

reg_asym_sam_15_37_dd_mean vs run
χ^2 / ndf 78.98 / 88
p0 23.87 ± 43.78
pull
Entries 89
Mean 495.9
Std Dev 454.1

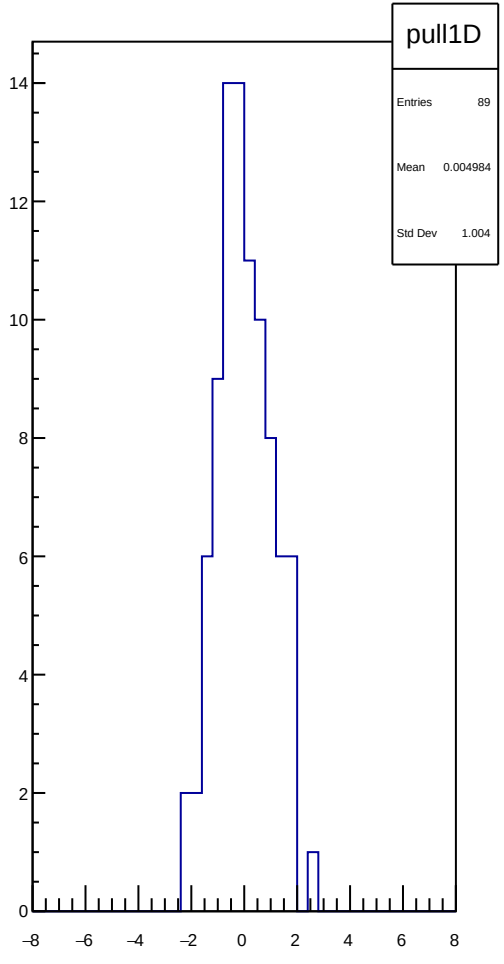

pull1D
Entries 89
Mean 0.006937
Std Dev 0.942

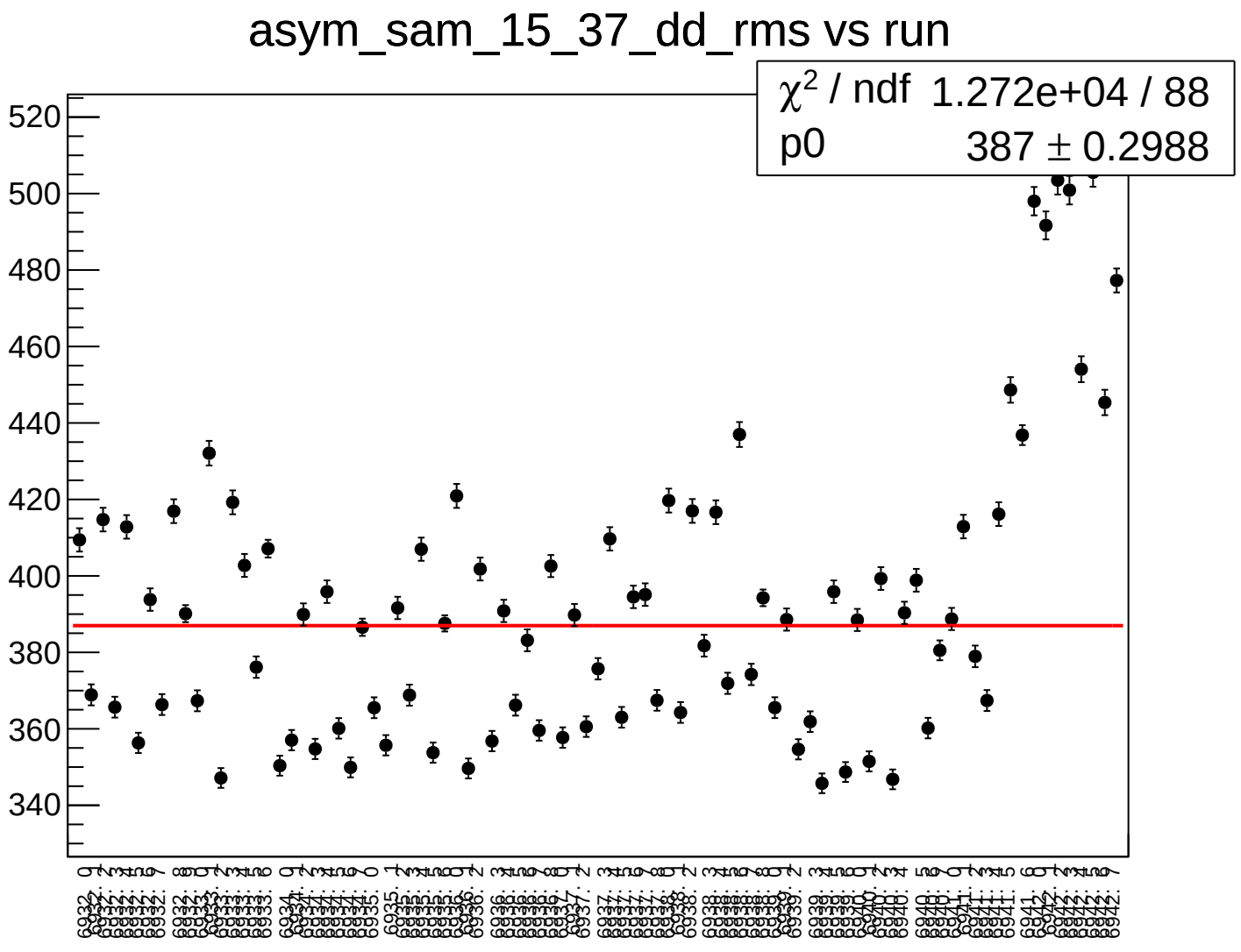

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 2271 / 88
p0 40.22 ± 0.03096
46
45
44
43
42
41
40
39
38
37

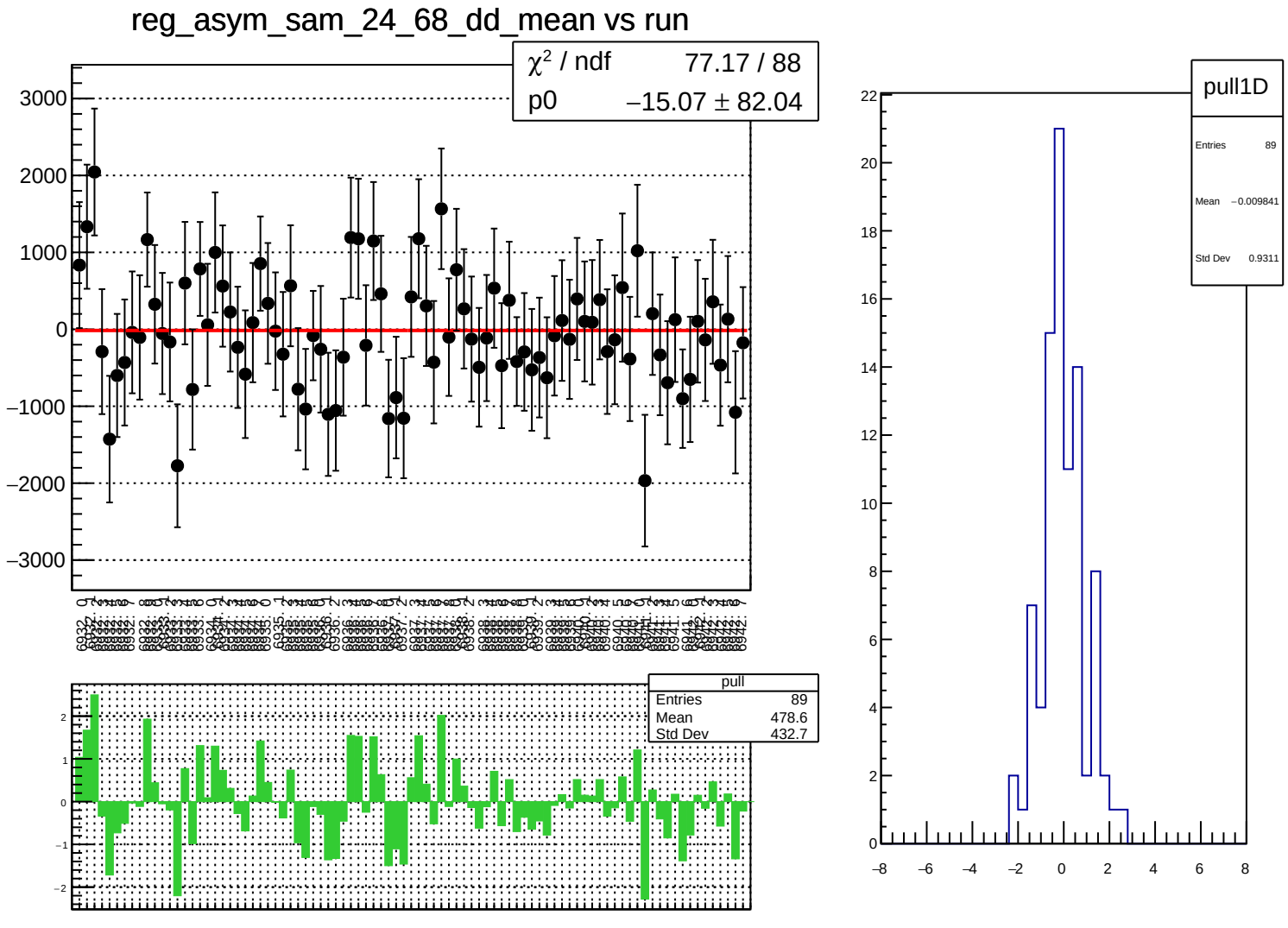

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 90.18 / 88
p0 224.3 ± 420.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −111.6
Std Dev 184.4
2
1
0
−1
−2
−3
pull1D
Entries 89
Mean −0.004025
Std Dev 1.007
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

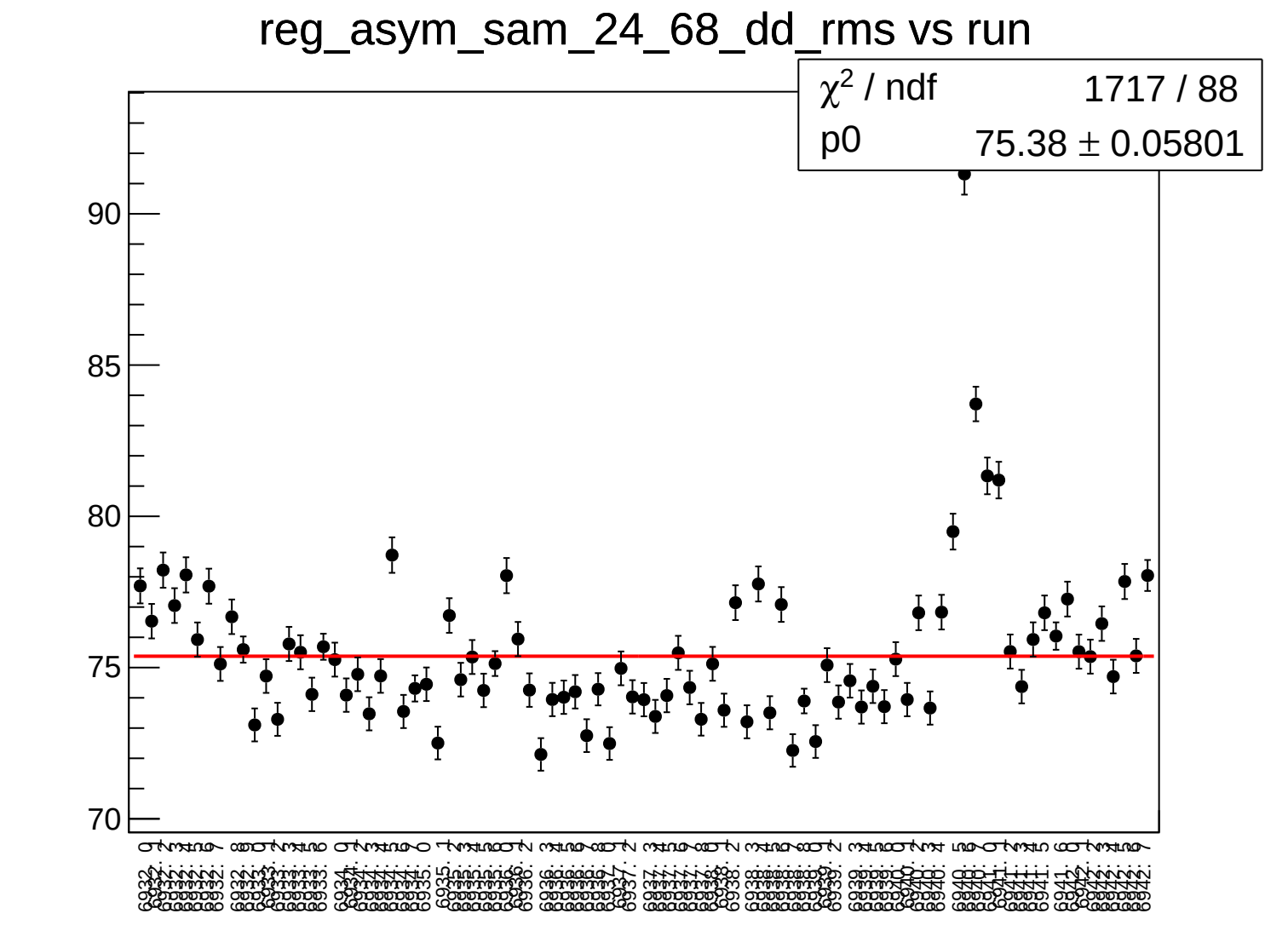

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 1.29e+04 / 88
p0 384.8 ± 0.2972
520
500
480
460
440
420
400
380
360
340

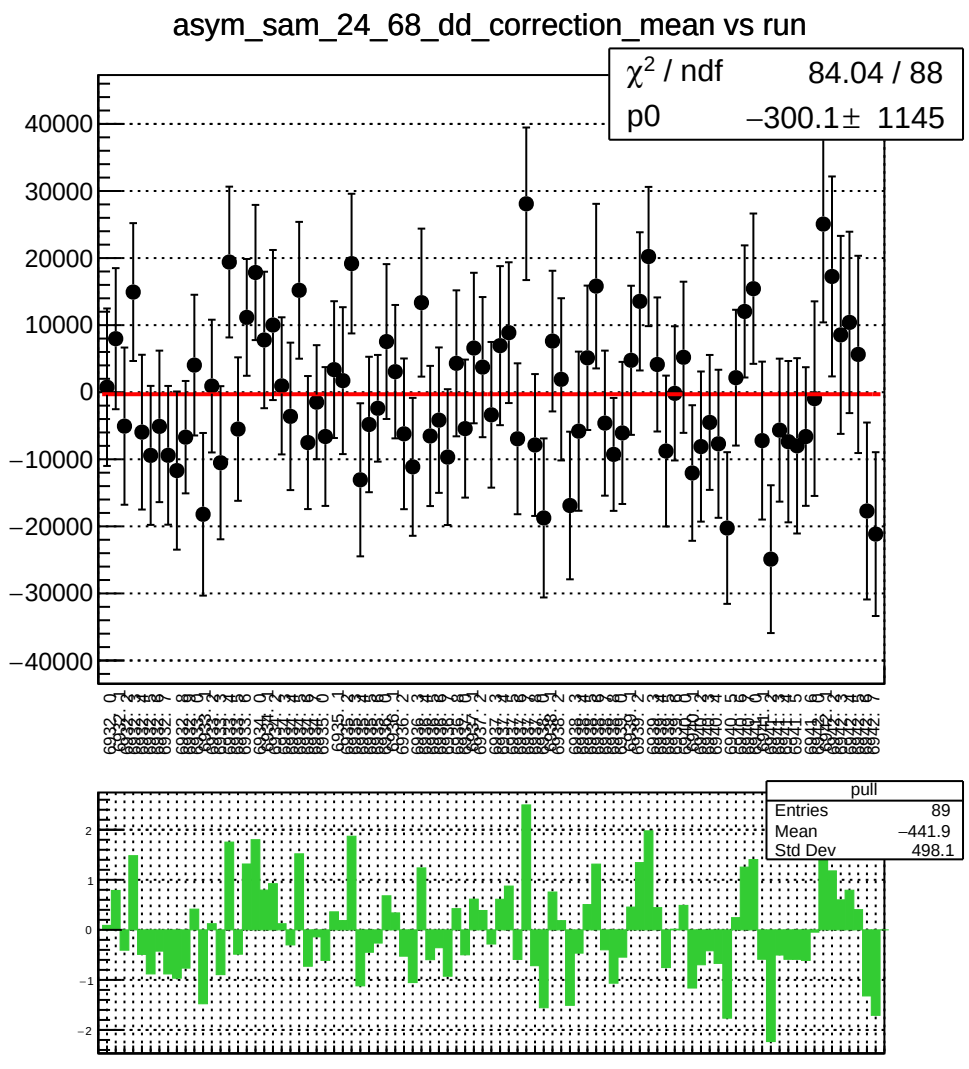

asym_sam_15_37_dd_mean vs run
χ² / ndf 89.63 / 88
p0 −202.5 ± 422.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −19.76
Std Dev 110.9
2
1
0
−1
−2

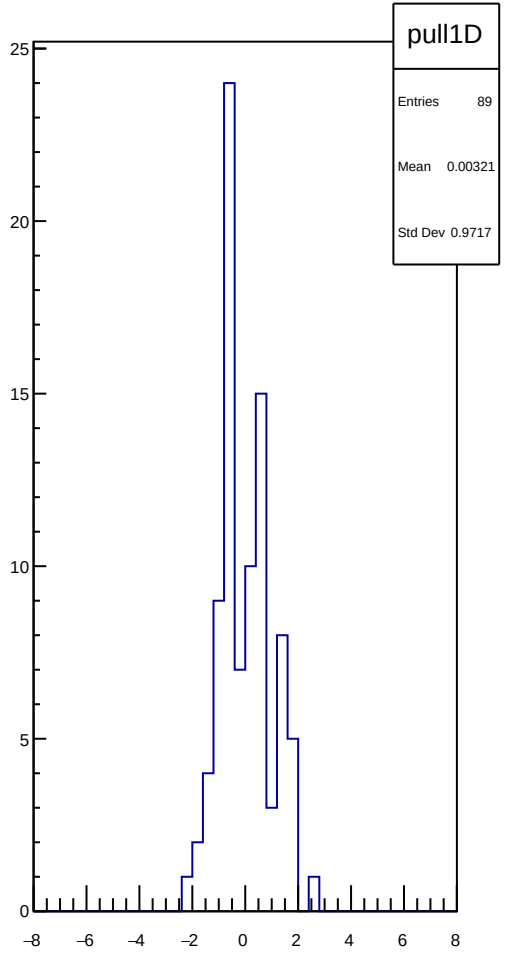

pull1D
Entries 89
Mean 0.004984
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

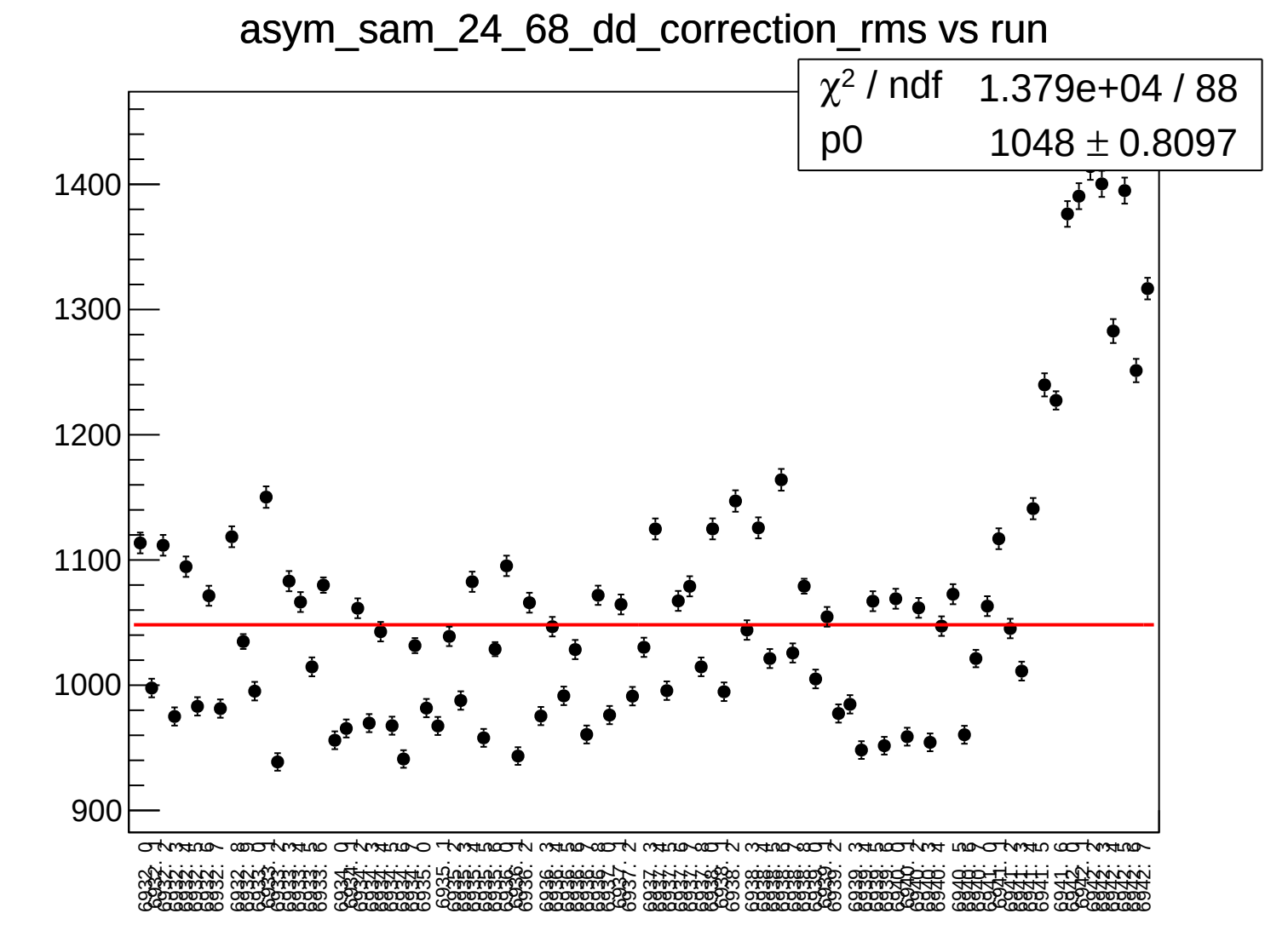

asym_sam_15_37_dd_rms vs run
χ^2 / ndf 1.272e+04 / 88
p0 387 ± 0.2988
520
500
480
460
440
420
400
380
360
340

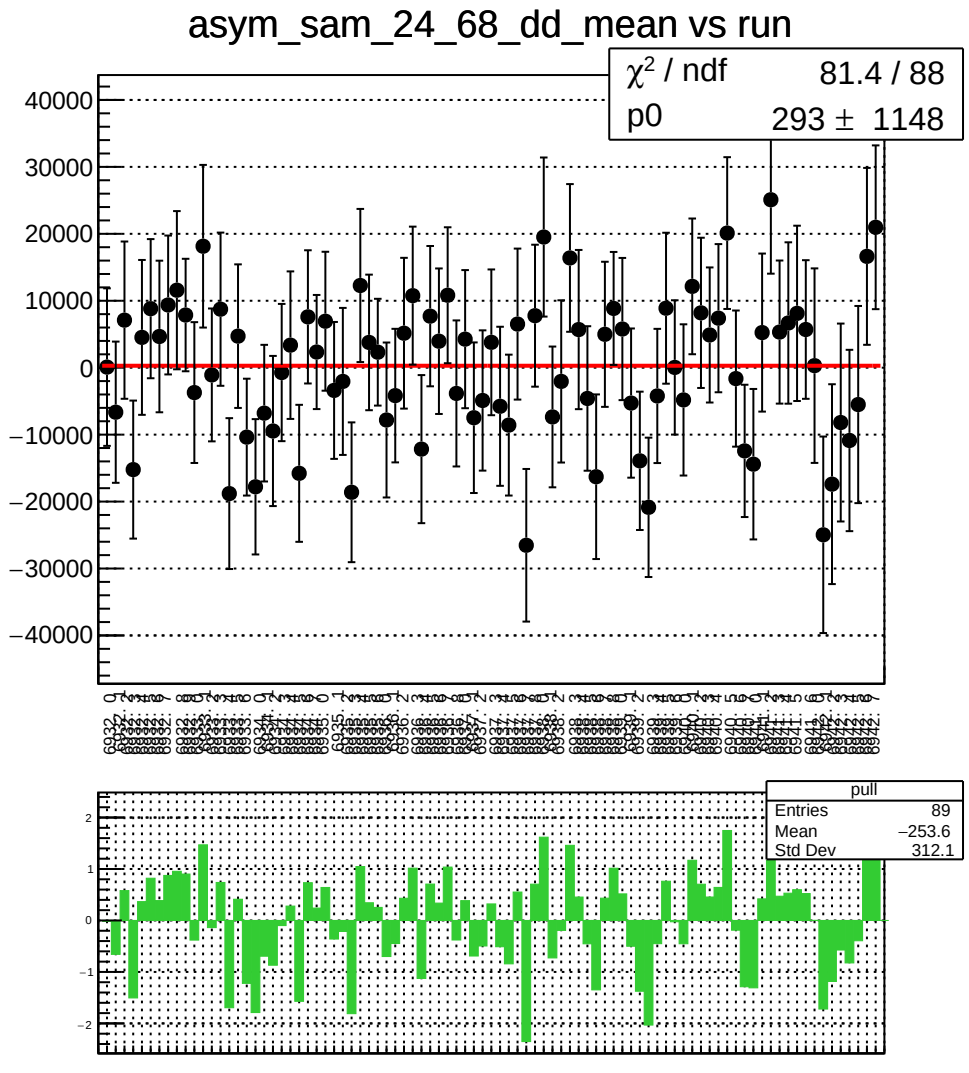

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 77.17 / 88
p0 −15.07 ± 82.04
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean 478.6
Std Dev 432.7
2
1
0
−1
−2
pull1D
Entries 89
Mean −0.009841
Std Dev 0.9311
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

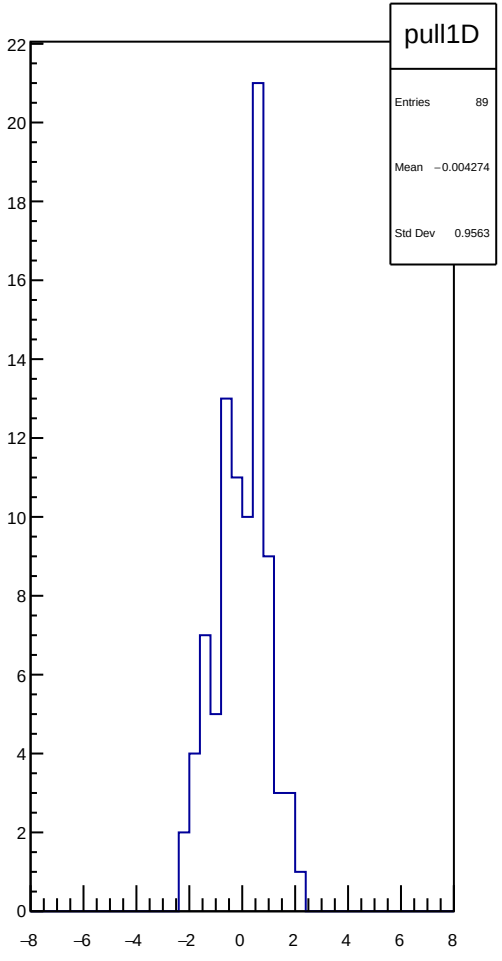

reg_asym_sam_24_68_dd_rms vs run
χ^2 / ndf 1717 / 88
p0 75.38 ± 0.05801
90
85
80
75
70

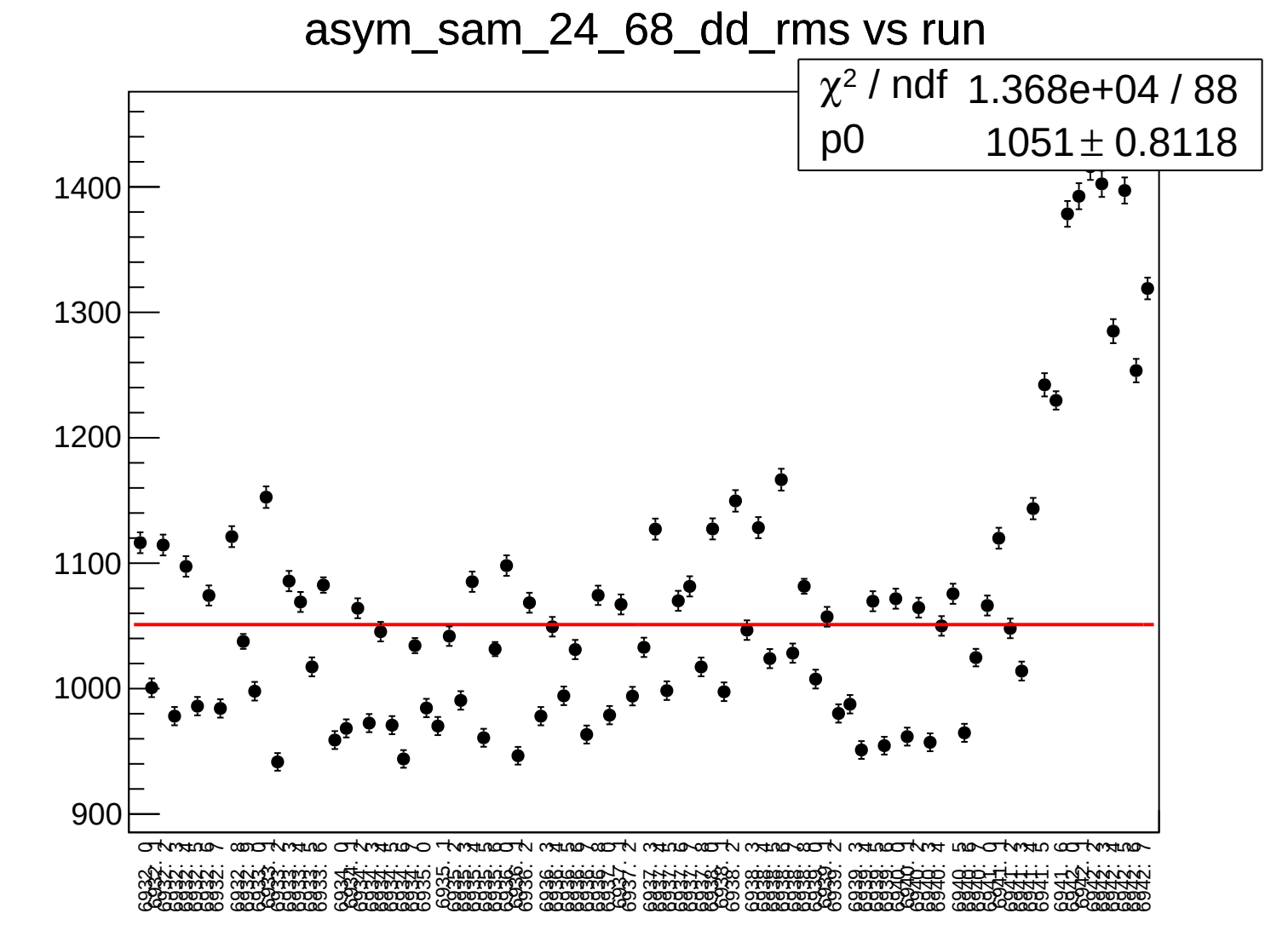

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 84.04 / 88
p0 −300.1± 1145
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 89
Mean −441.9
Std Dev 498.1
2
1
0
−1
−2

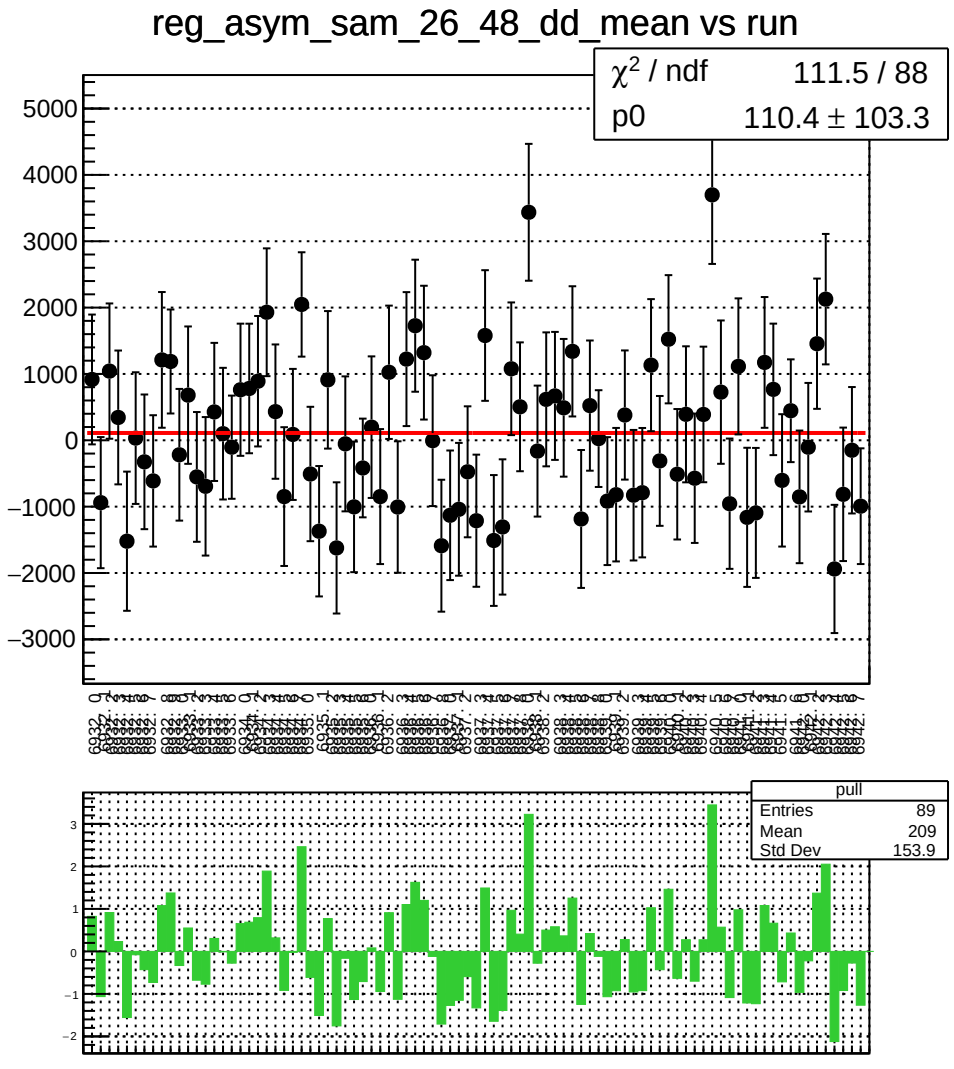

pull1D
Entries 89
Mean 0.00321
Std Dev 0.9717
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

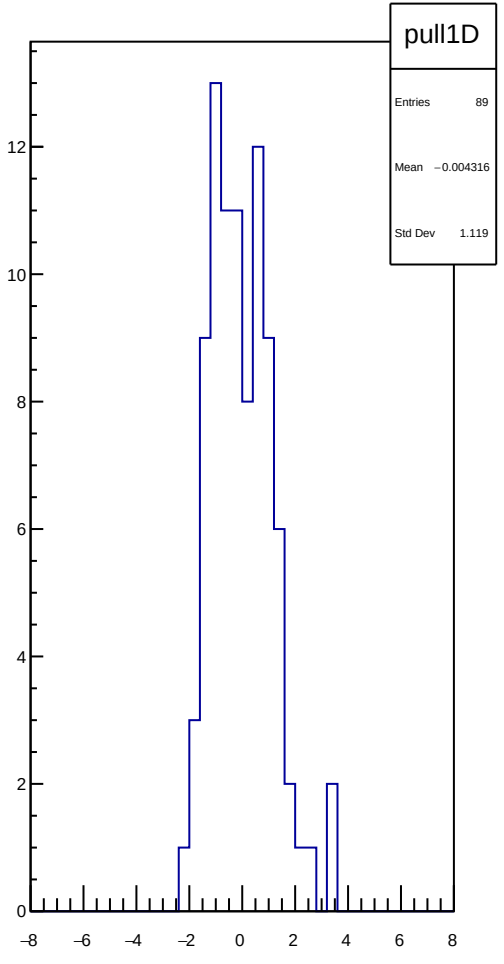

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 1.379e+04 / 88
p0 1048 ± 0.8097
1400
1300
1200
1100
1000
900

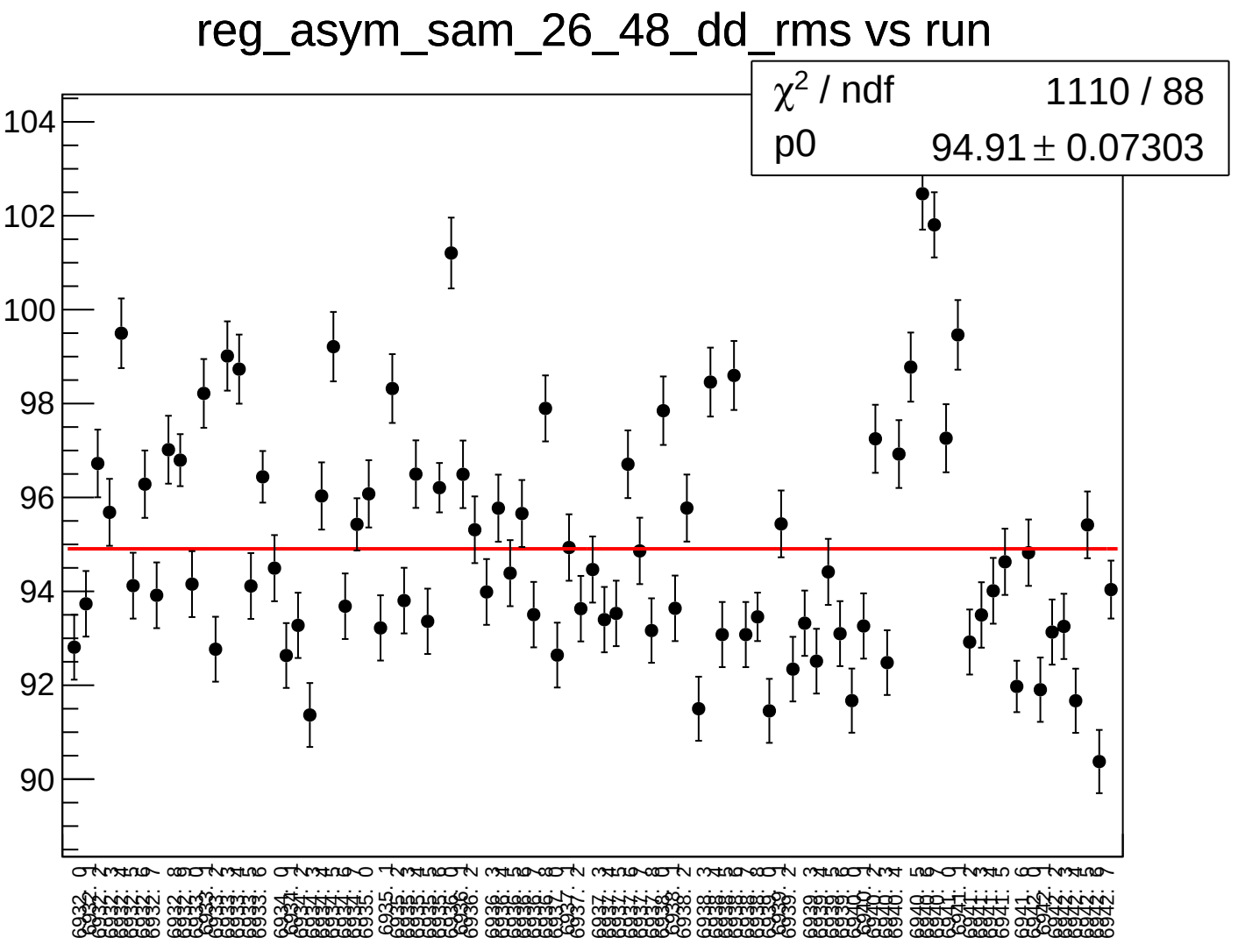

asym_sam_24_68_dd_mean vs run
χ² / ndf 81.4 / 88
p0 293 ± 1148
pull
Entries 89
Mean −253.6
Std Dev 312.1

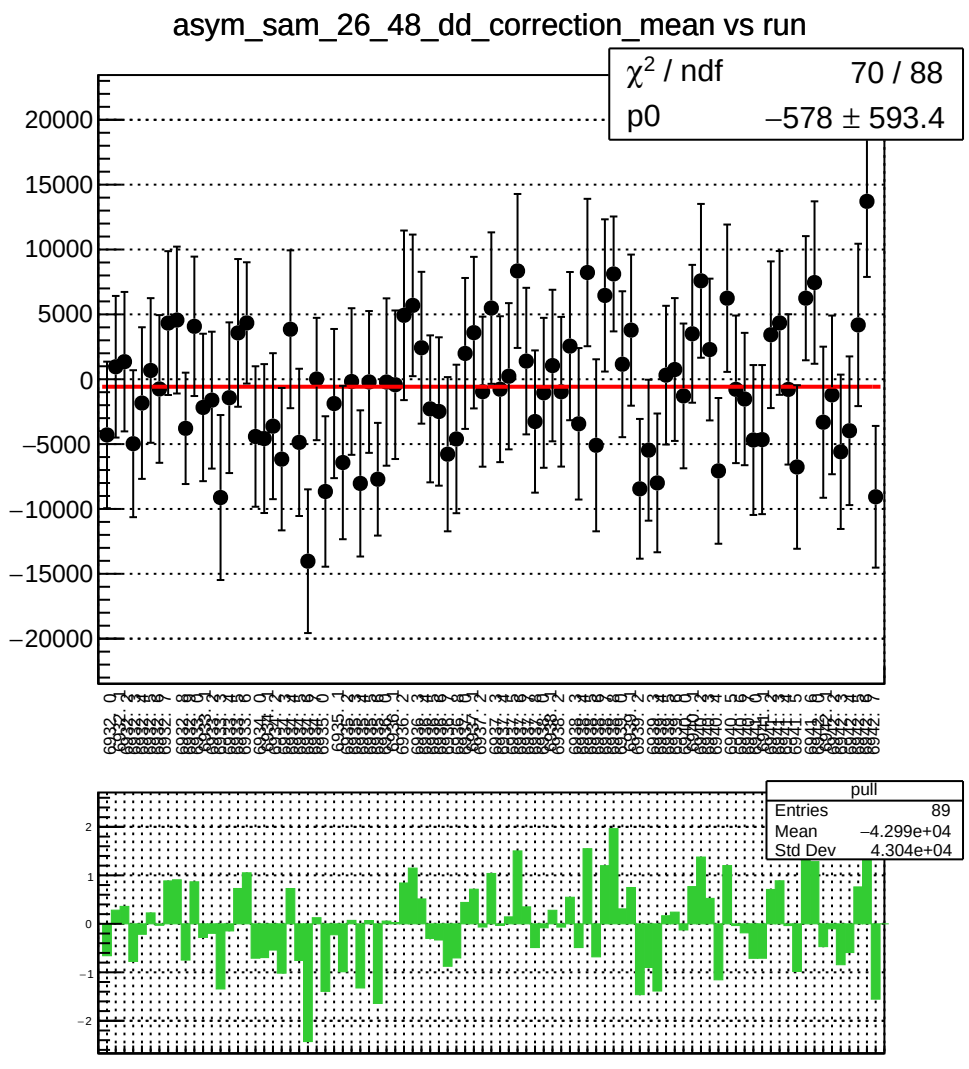

pull1D
Entries 89
Mean −0.004274
Std Dev 0.9563

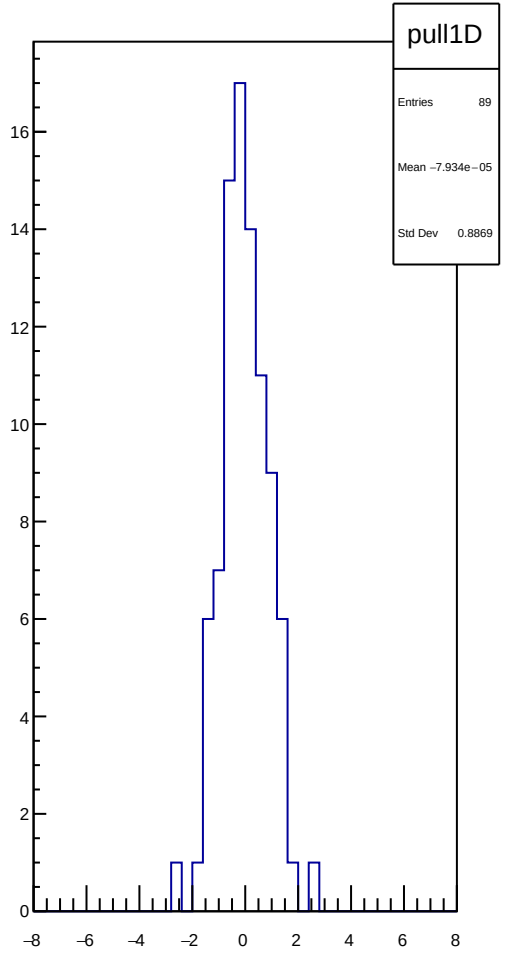

asym_sam_24_68_dd_rms vs run
χ² / ndf 1.368e+04 / 88
p0 1051 ± 0.8118
1400
1300
1200
1100
1000
900

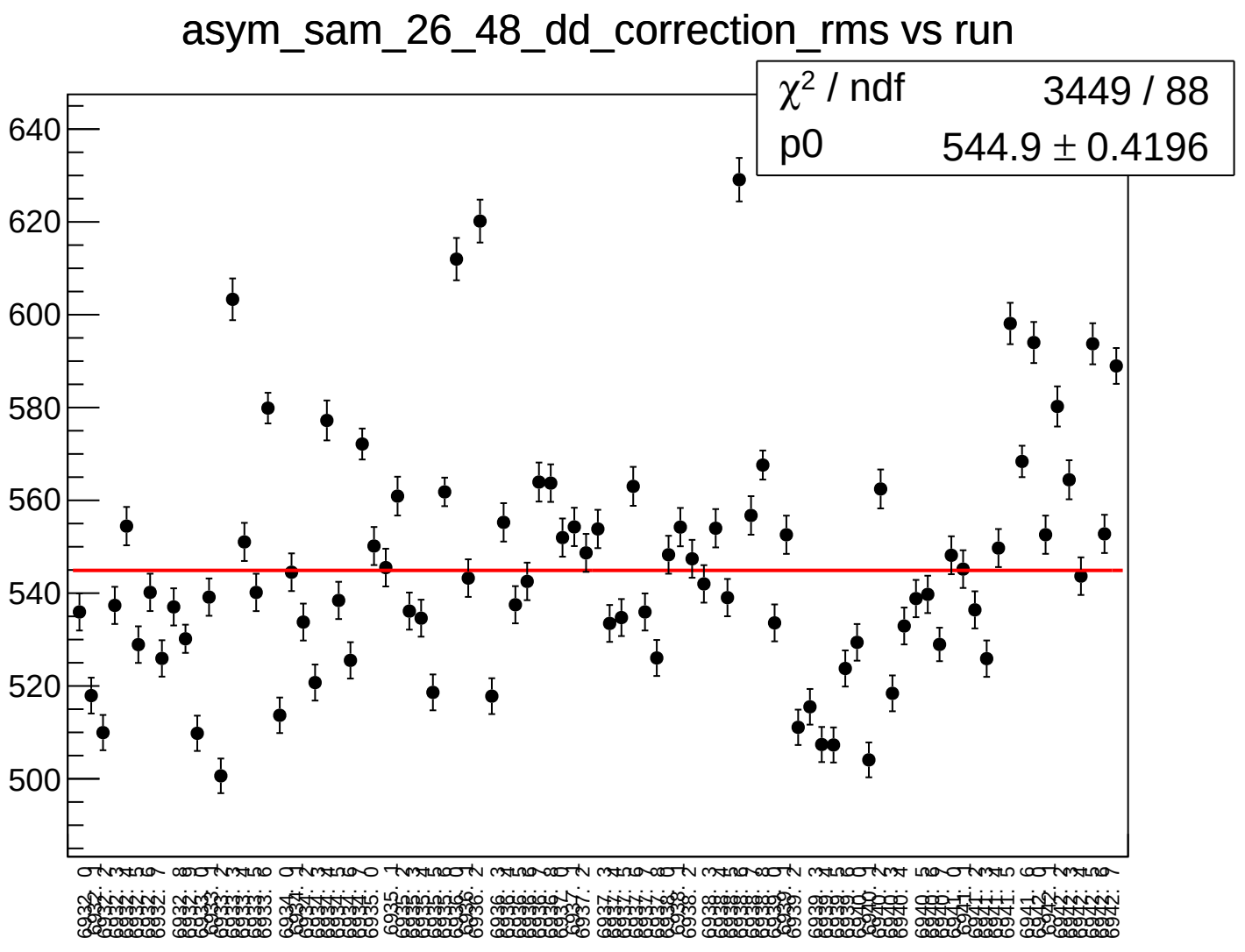

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 111.5 / 88
p0 110.4 ± 103.3
pull
Entries 89
Mean 209
Std Dev 153.9

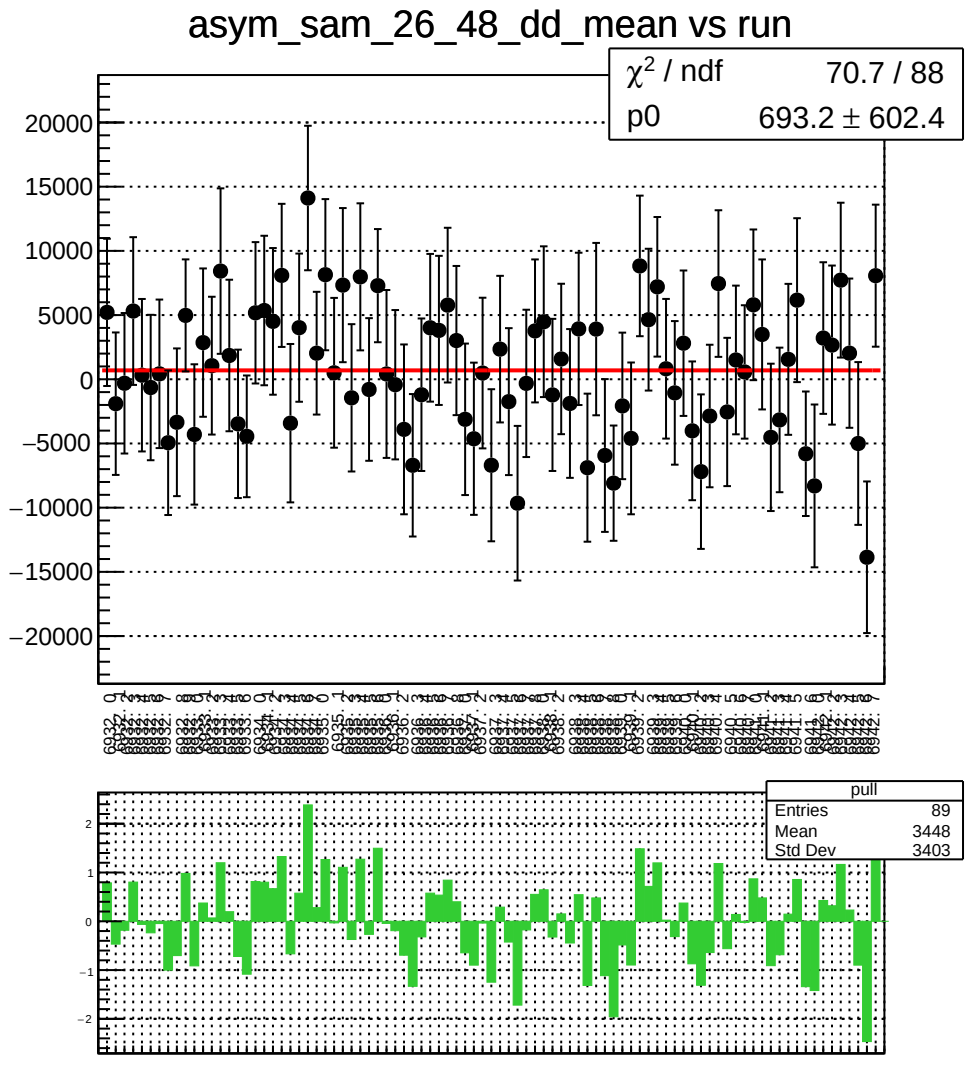

pull1D
Entries 89
Mean −0.004316
Std Dev 1.119

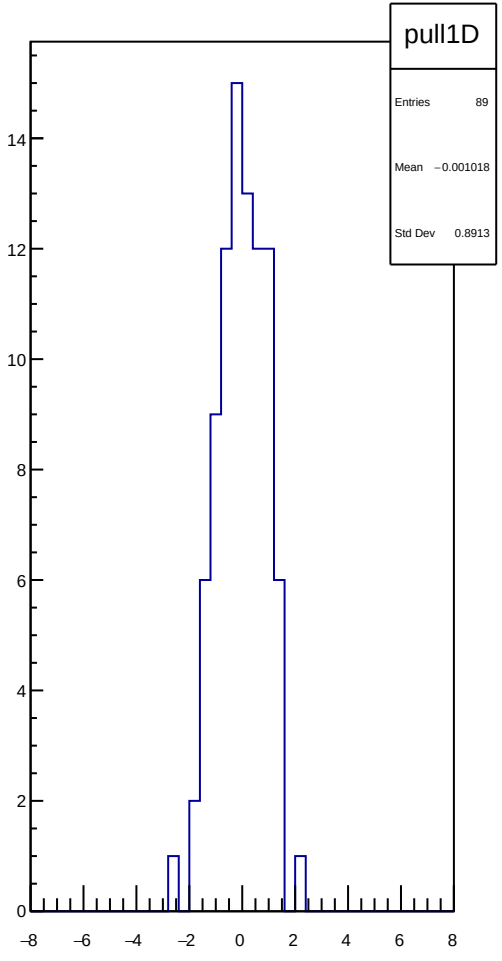

reg_asym_sam_26_48_dd_rms vs run
χ^2 / ndf 1110 / 88
p0 94.91 ± 0.07303
104
102
100
98
96
94
92
90

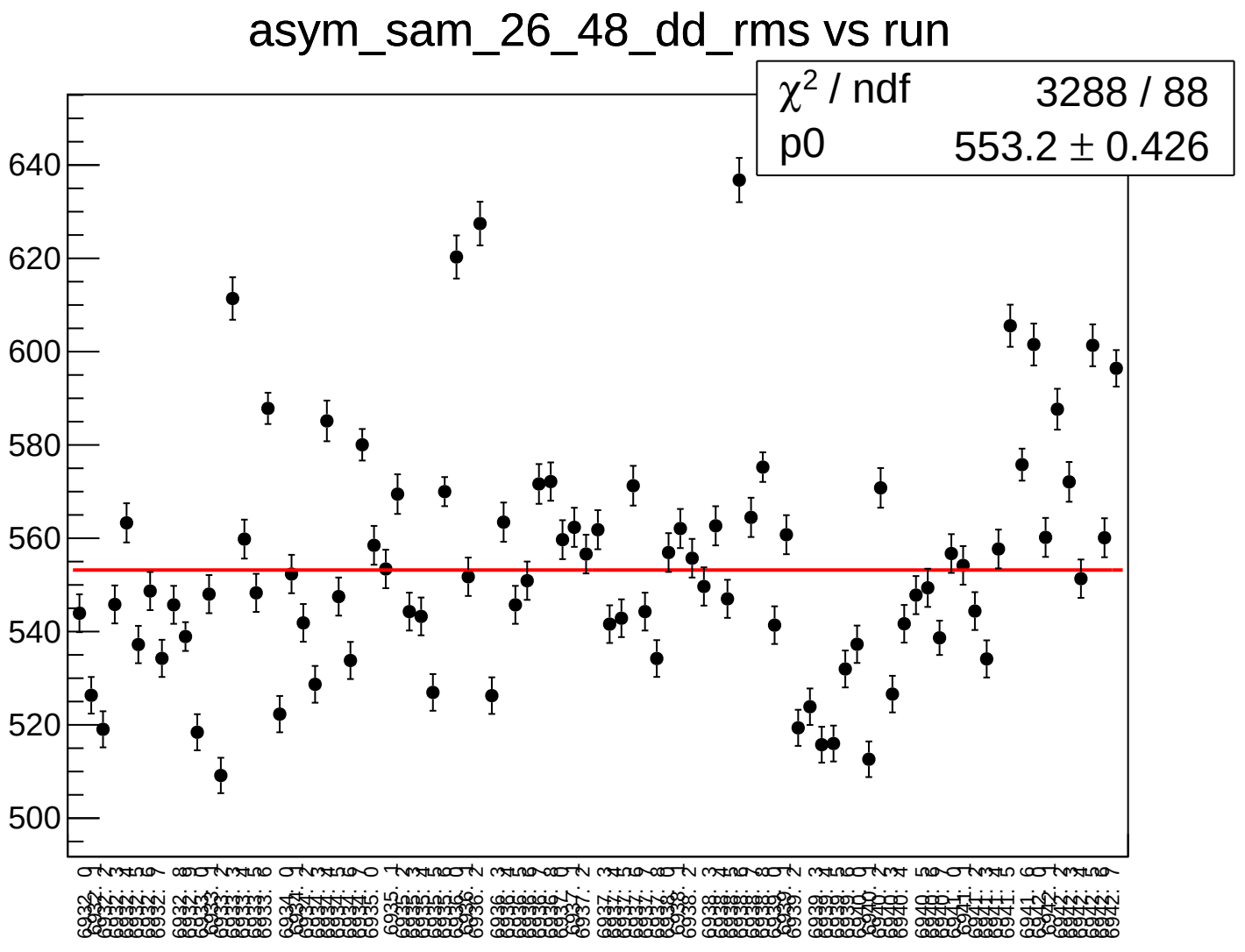

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 70 / 88
p0 −578 ± 593.4
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 89
Mean −4.299e+04
Std Dev 4.304e+04
2
1
0
−1
−2

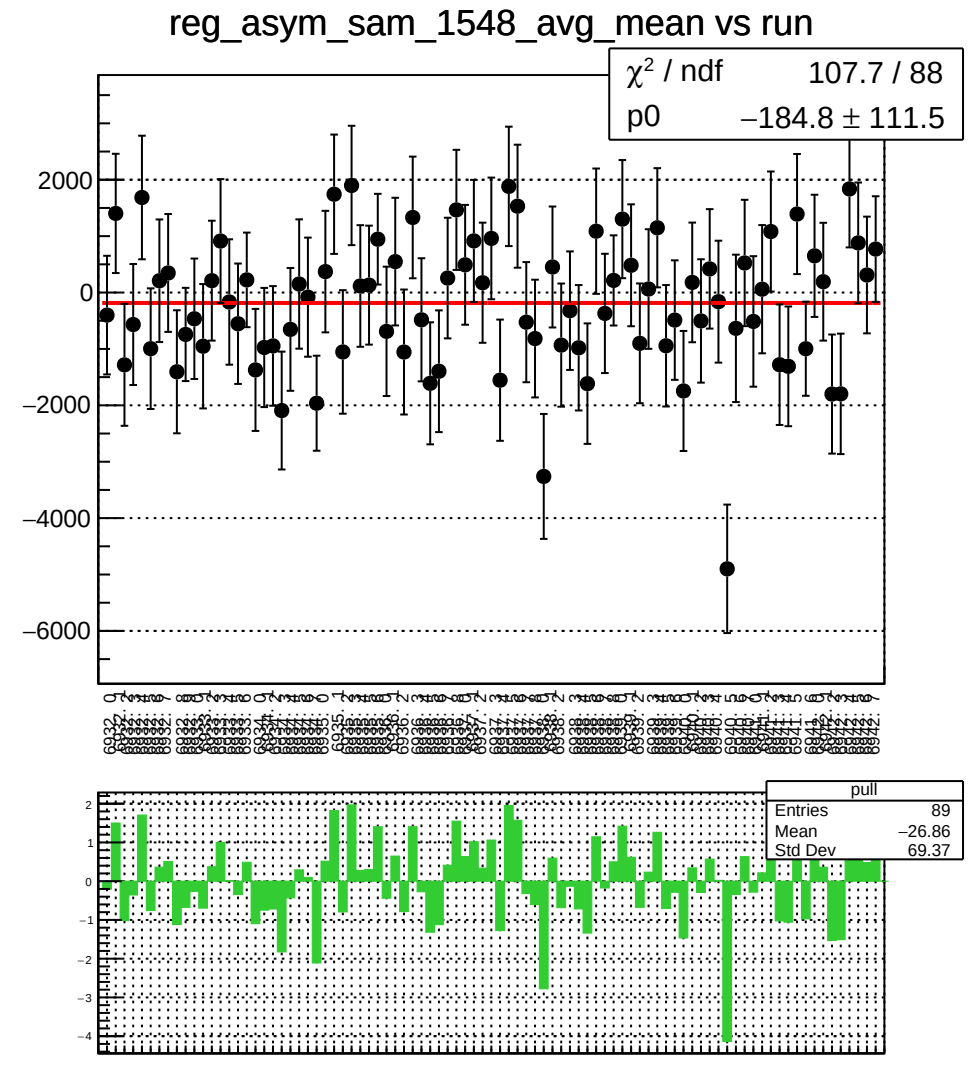

pull1D
Entries 89
Mean −7.934e−05
Std Dev 0.8869
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

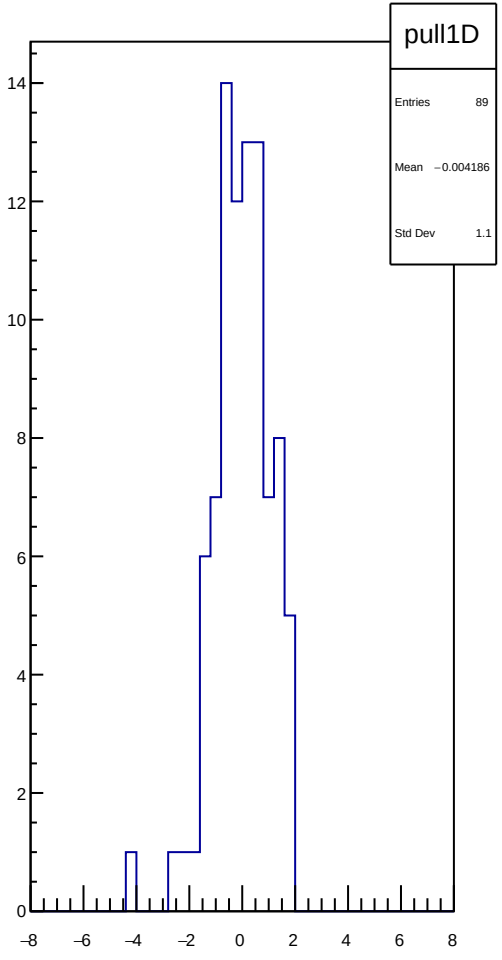

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 3449 / 88
p0 544.9 ± 0.4196
640
620
600
580
560
540
520
500

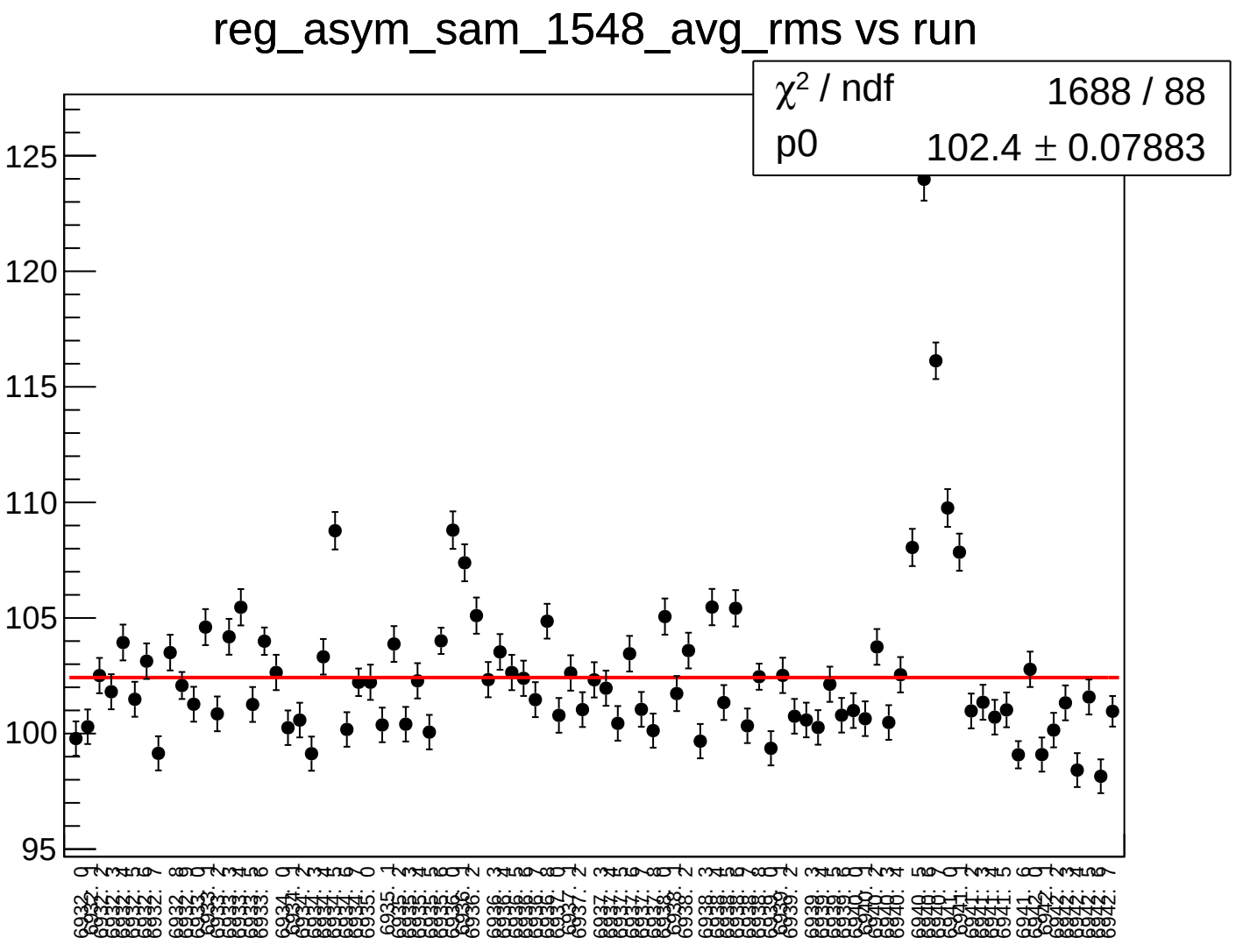

asym_sam_26_48_dd_mean vs run
χ² / ndf 70.7 / 88
p0 693.2 ± 602.4
pull
Entries 89
Mean 3448
Std Dev 3403

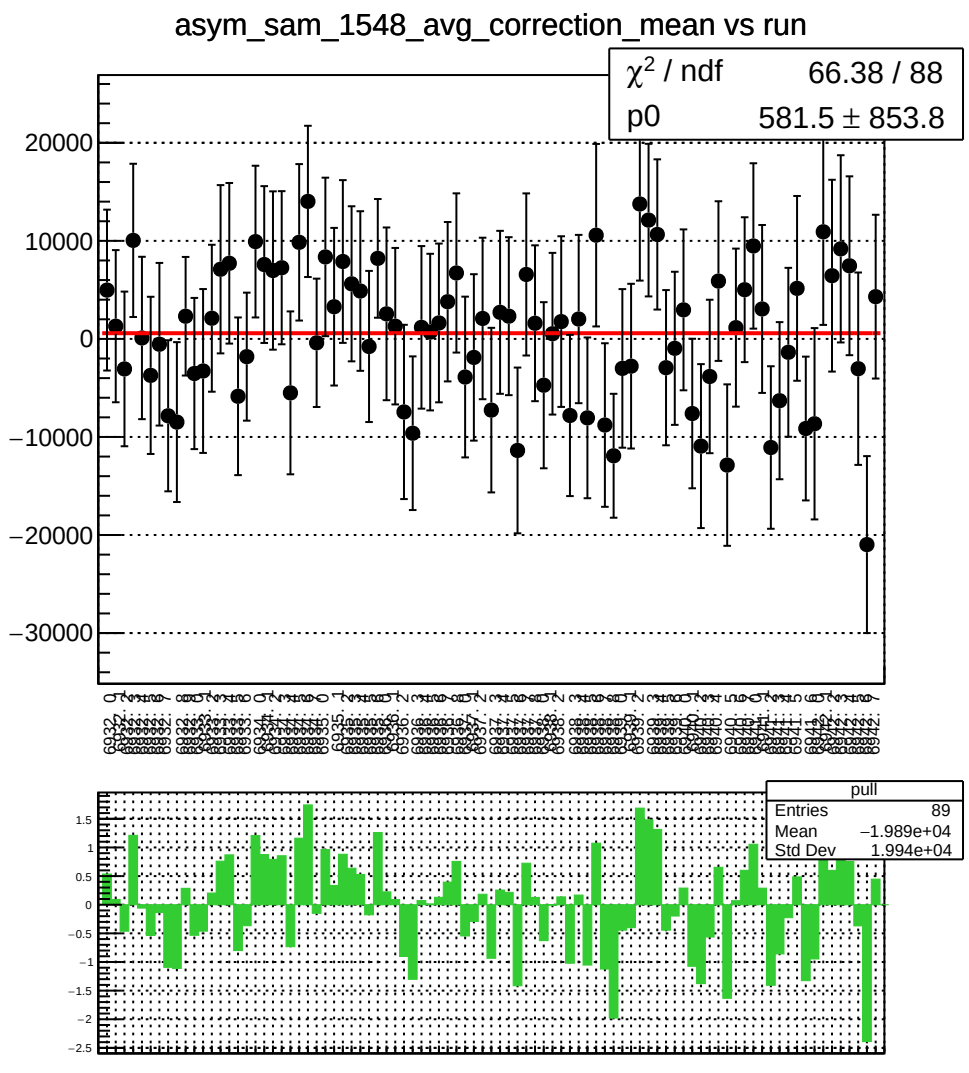

pull1D
Entries 89
Mean −0.001018
Std Dev 0.8913

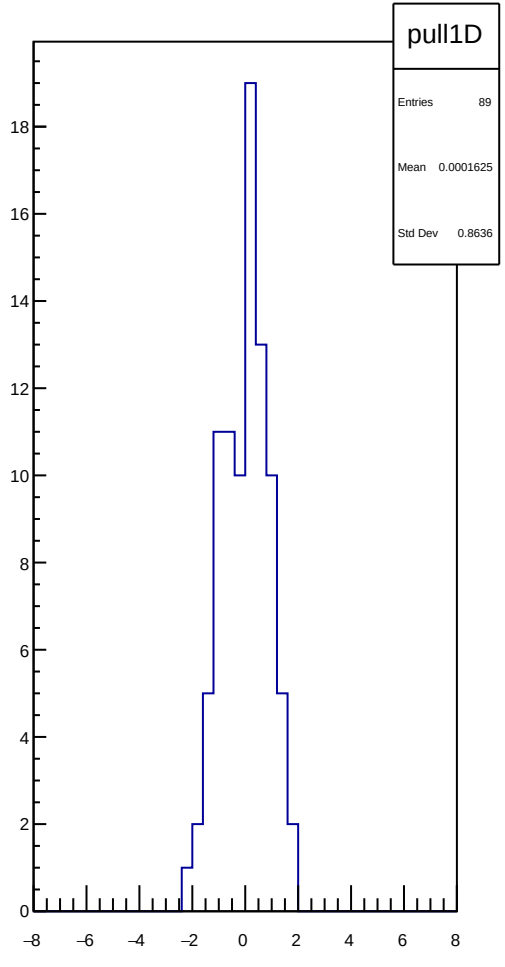

asym_sam_26_48_dd_rms vs run
χ² / ndf 3288 / 88
p0 553.2 ± 0.426
640
620
600
580
560
540
520
500

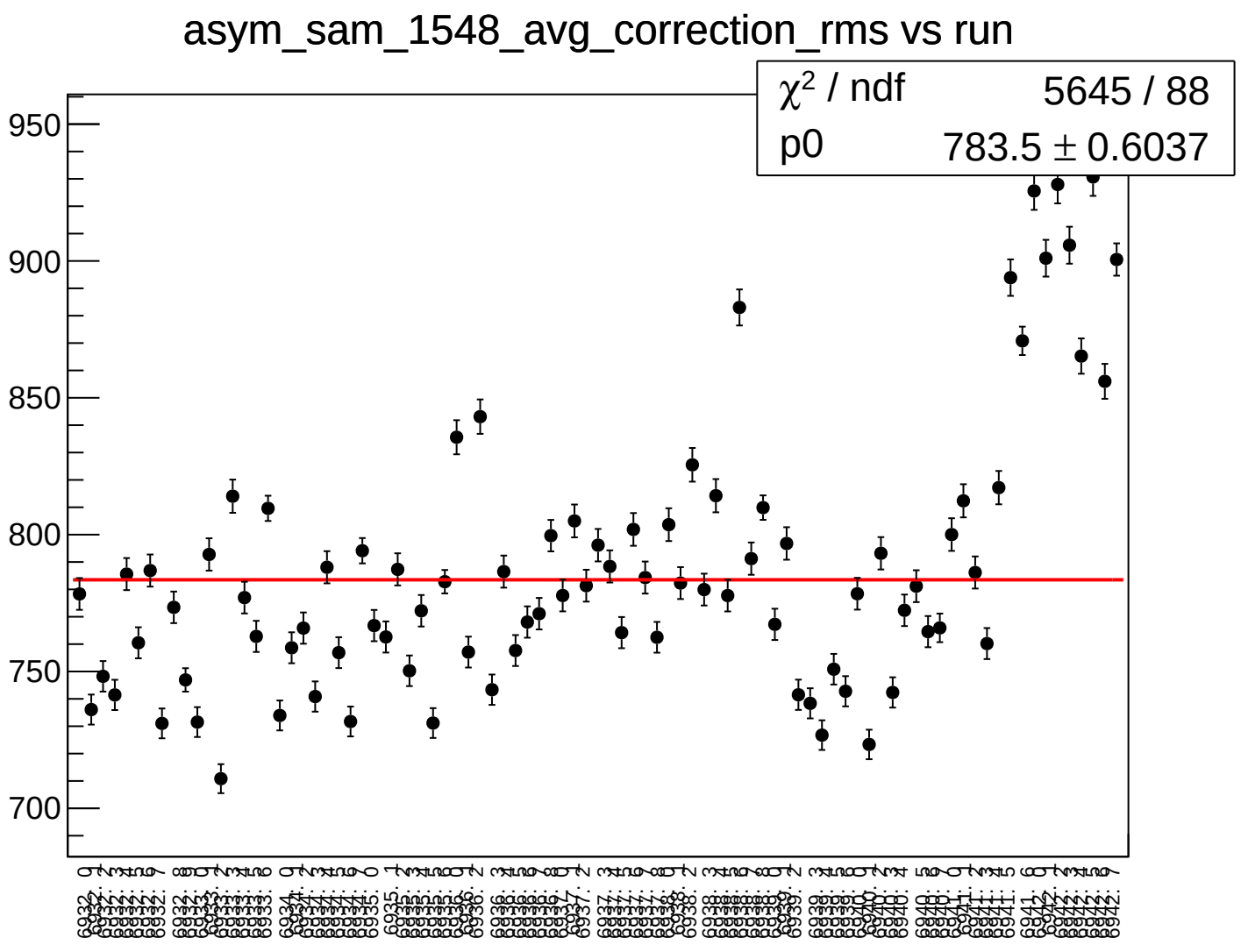

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 107.7 / 88
p0 −184.8 ± 111.5
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean −26.86
Std Dev 69.37
2
1
0
−1
−2
−3
−4

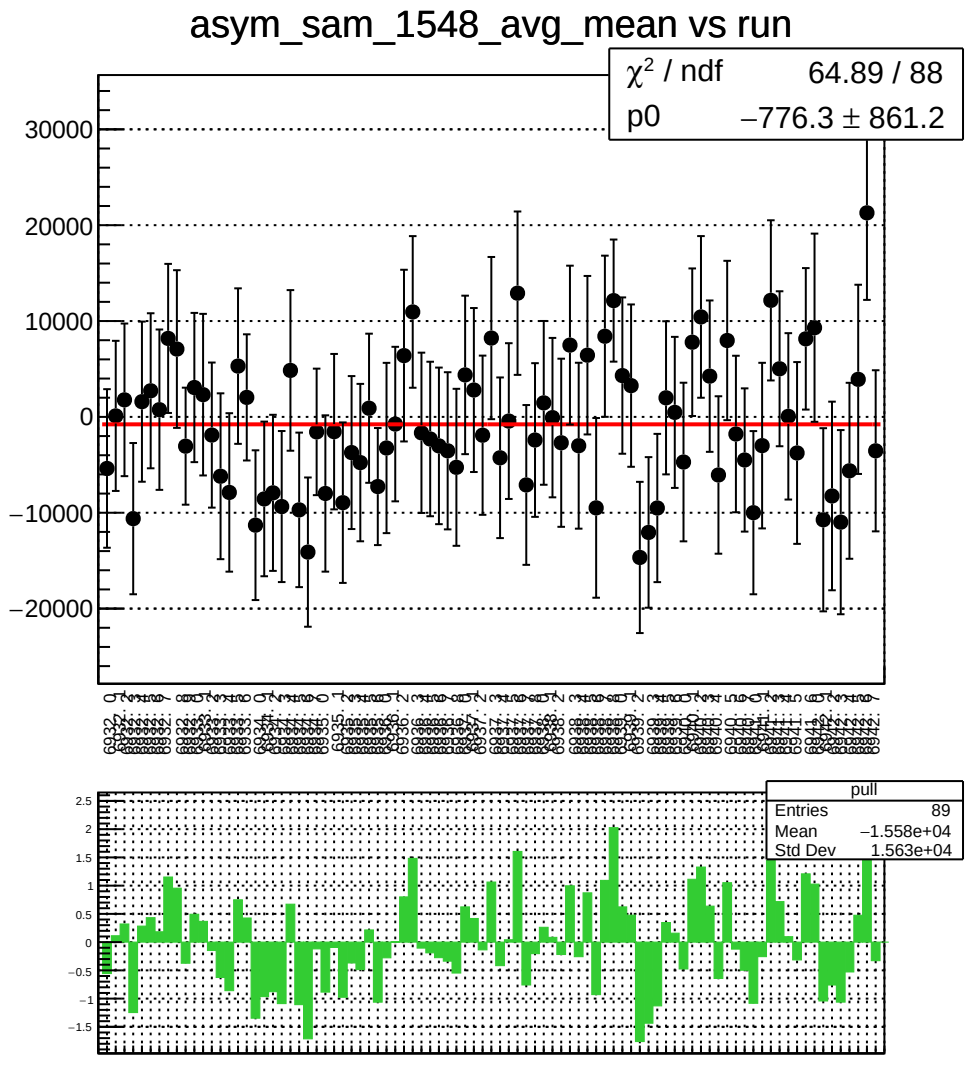

pull1D
Entries 89
Mean −0.004186
Std Dev 1.1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

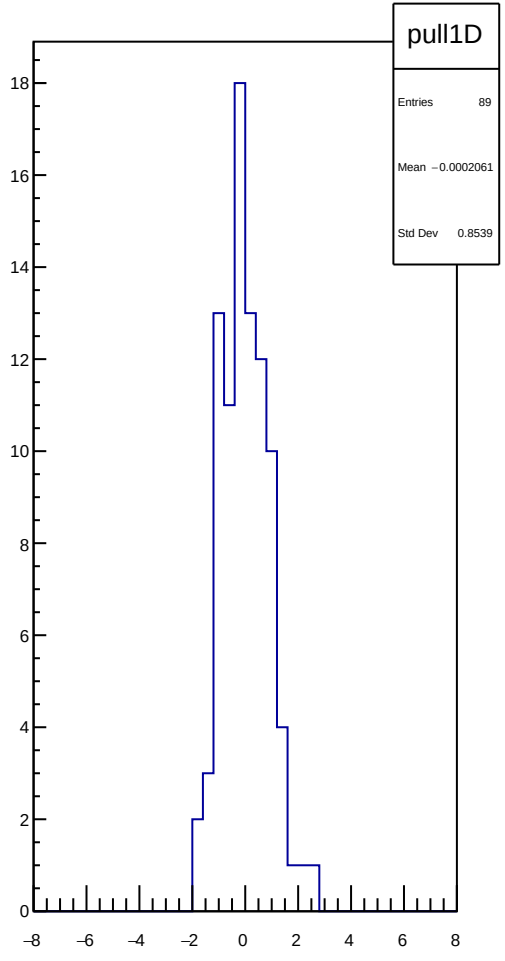

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 1688 / 88
p0 102.4 ± 0.07883
125
120
115
110
105
100
95

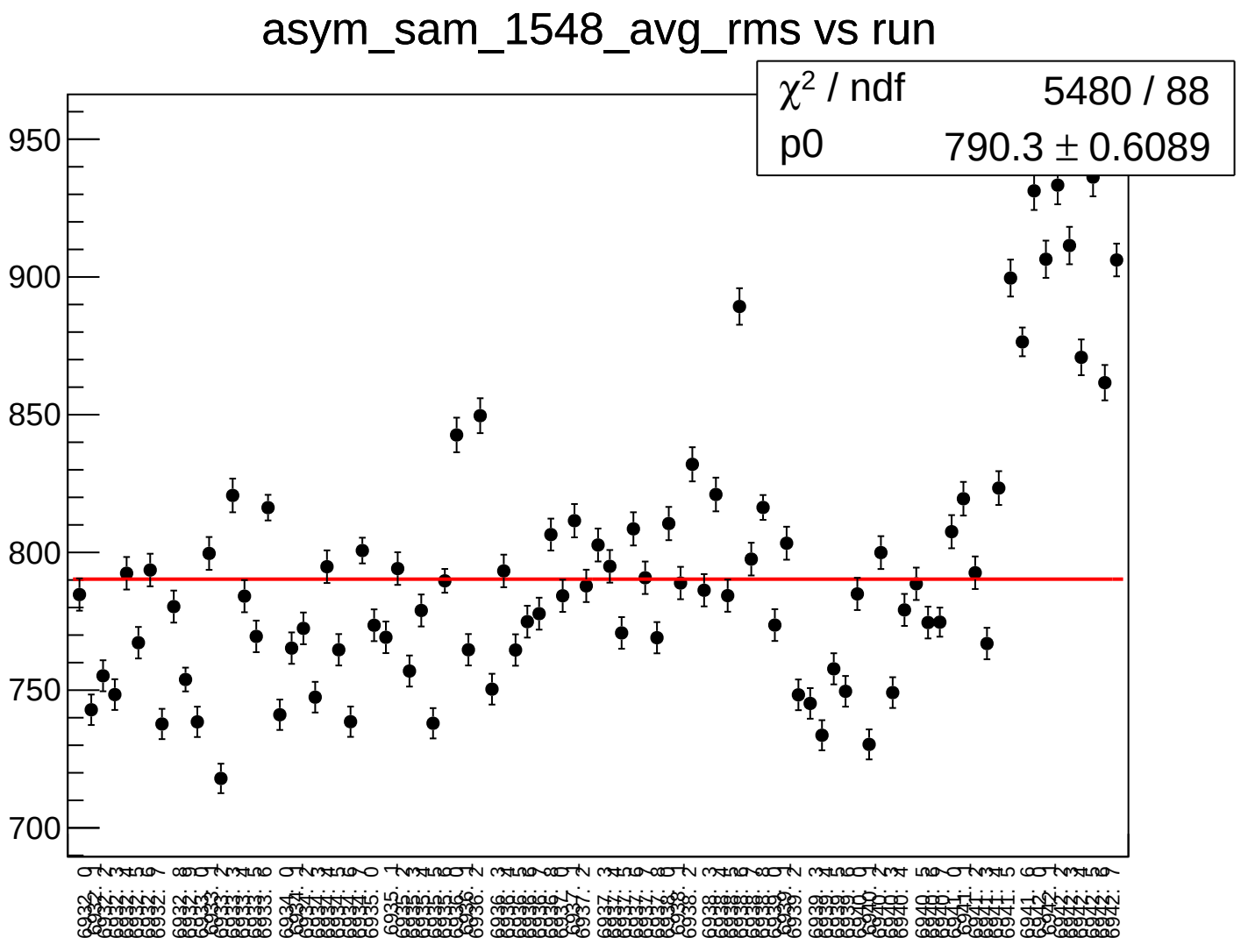

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 66.38 / 88
p0 581.5 ± 853.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −1.989e+04
Std Dev 1.994e+04
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

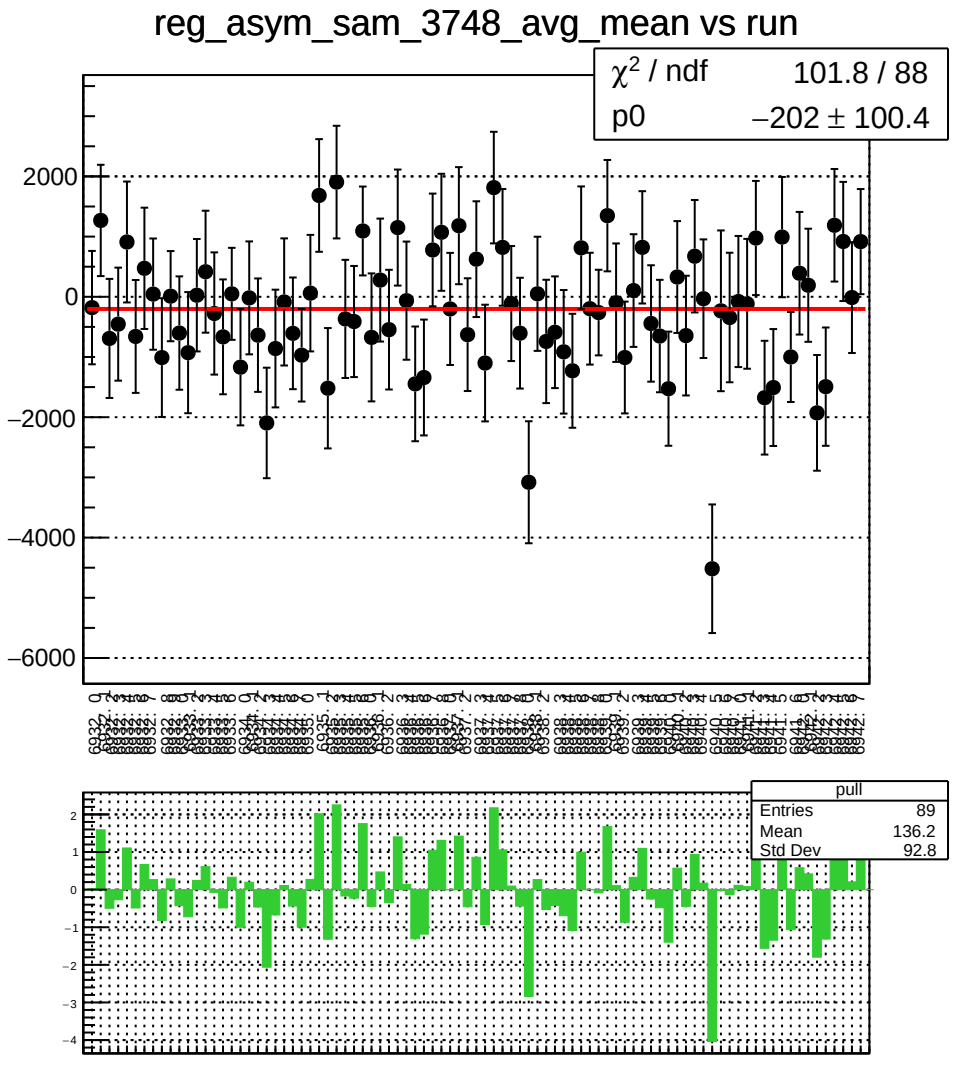

pull1D
Entries 89
Mean 0.0001625
Std Dev 0.8636
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

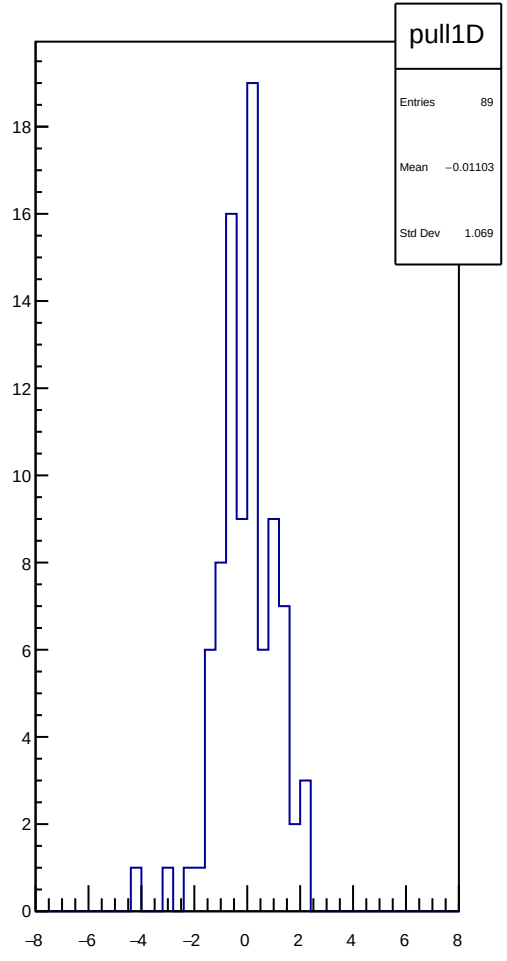

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 5645 / 88
p0 783.5 ± 0.6037
950
900
850
800
750
700

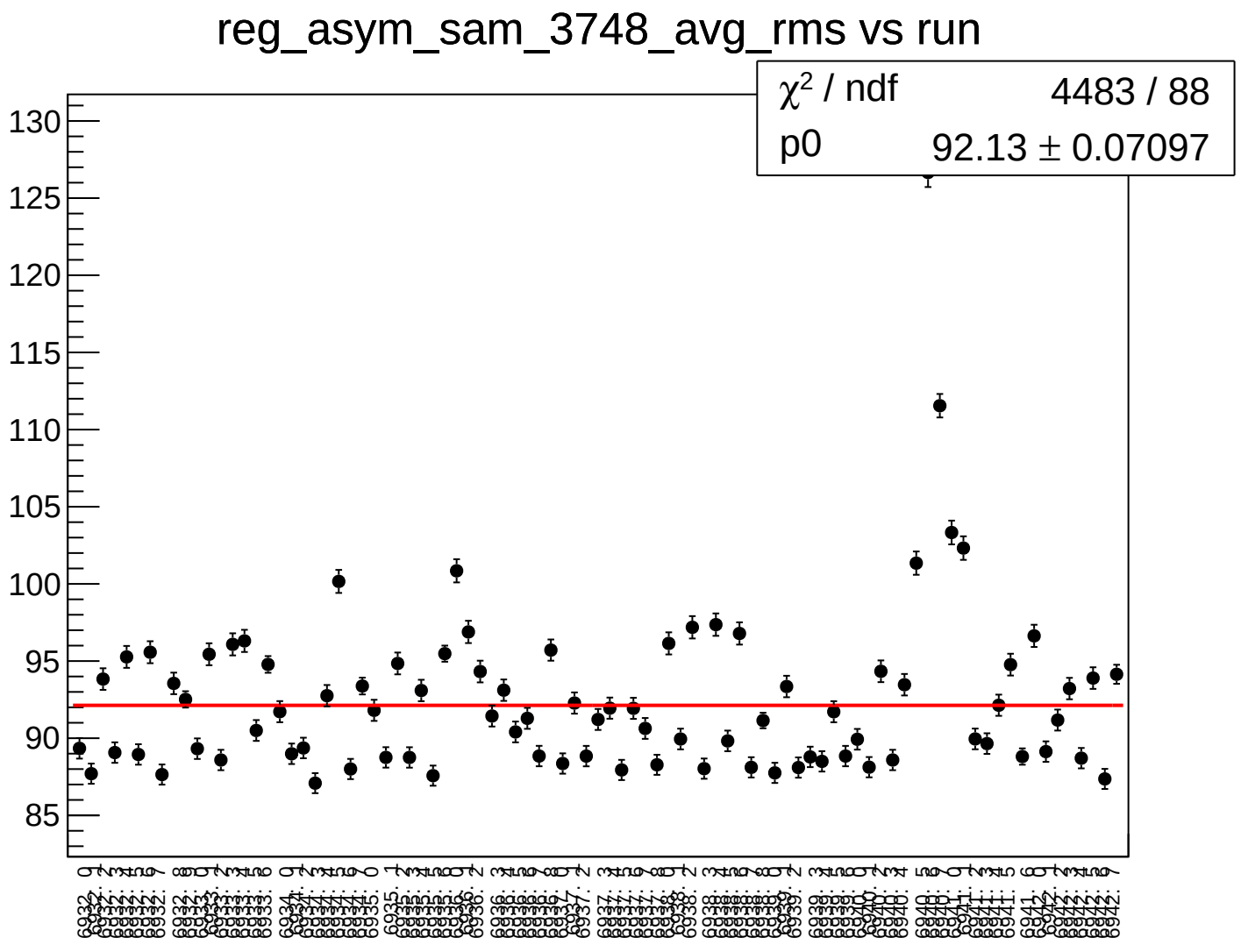

asym_sam_1548_avg_mean vs run
χ² / ndf 64.89 / 88
p0 −776.3 ± 861.2
30000
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −1.558e+04
Std Dev 1.563e+04
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

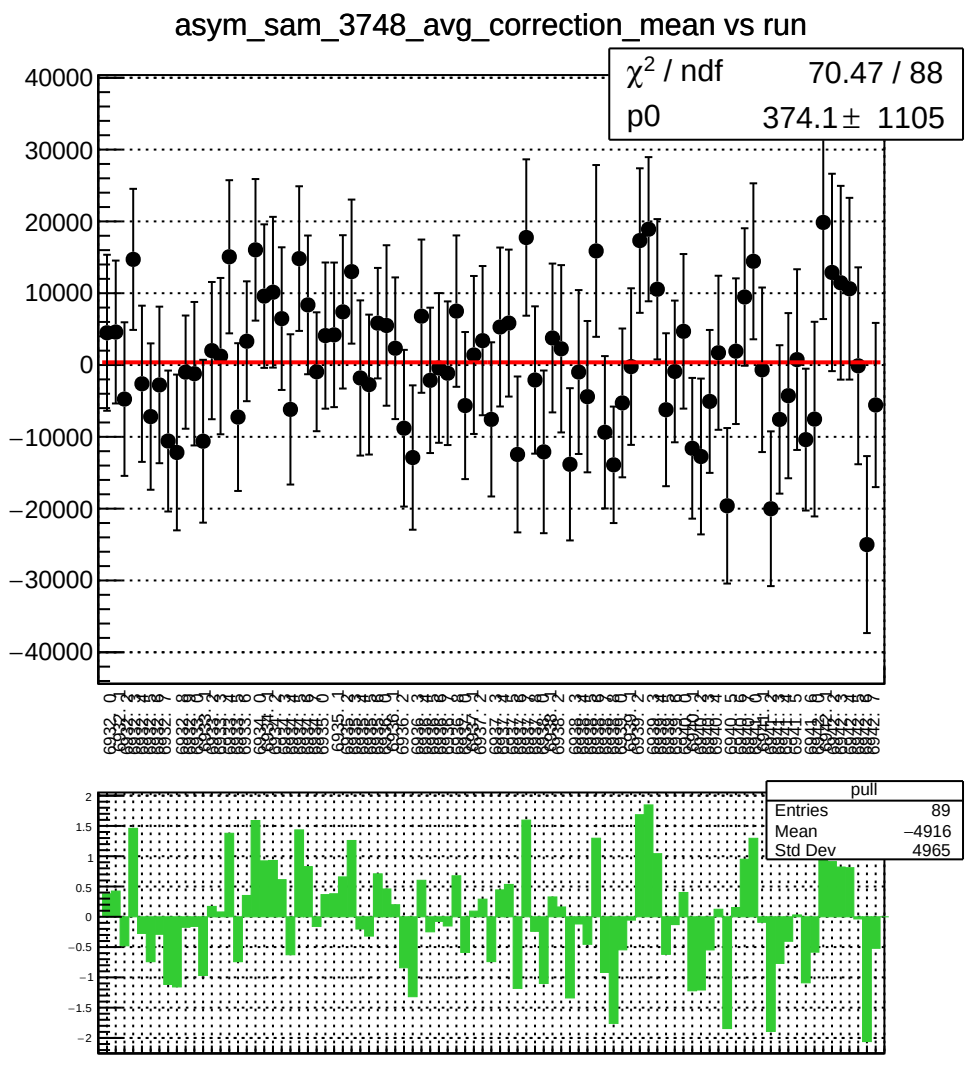

pull1D
Entries 89
Mean −0.0002061
Std Dev 0.8539
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

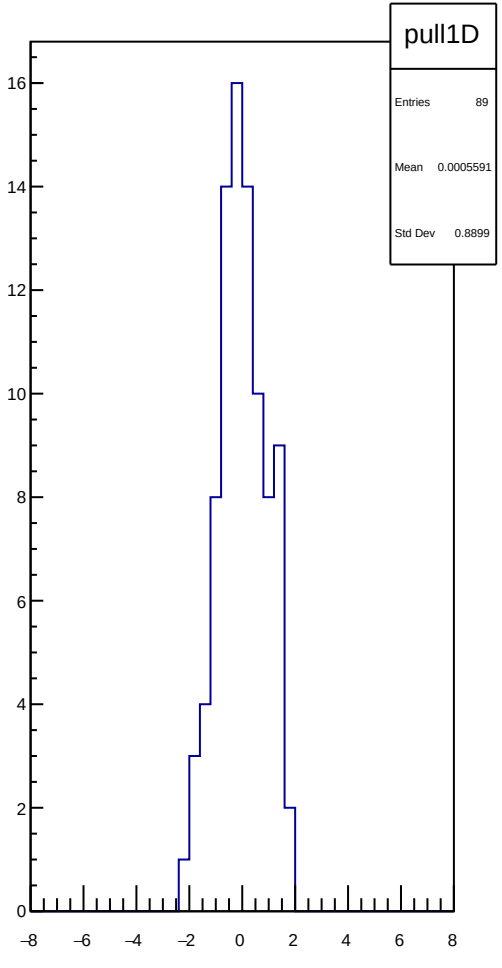

asym_sam_1548_avg_rms vs run
χ² / ndf 5480 / 88
p0 790.3 ± 0.6089
950
900
850
800
750
700

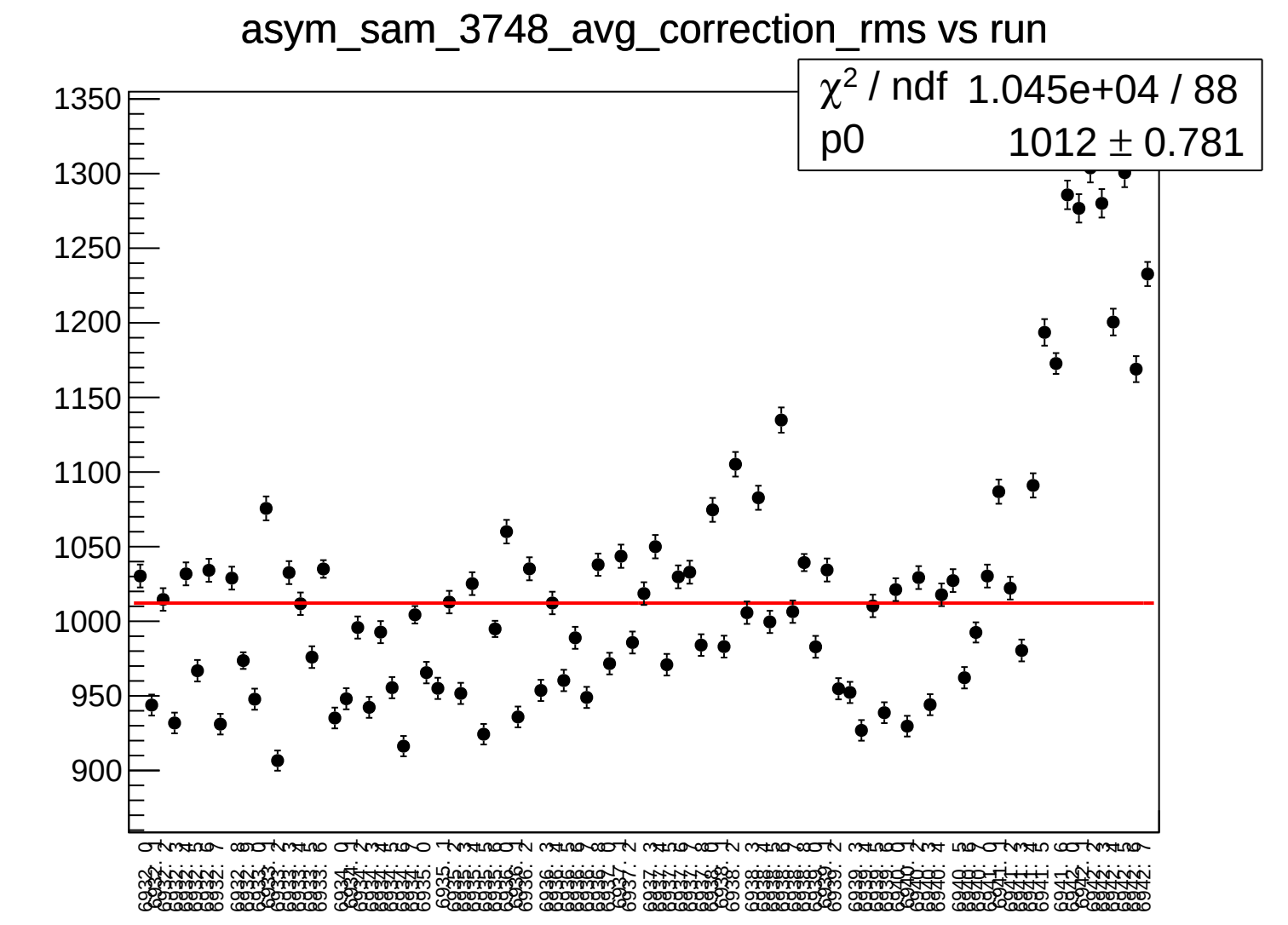

reg_asym_sam_3748_avg_mean vs run
χ^2 / ndf 101.8 / 88
p0 −202 ± 100.4
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean 136.2
Std Dev 92.8
2
1
0
−1
−2
−3
−4

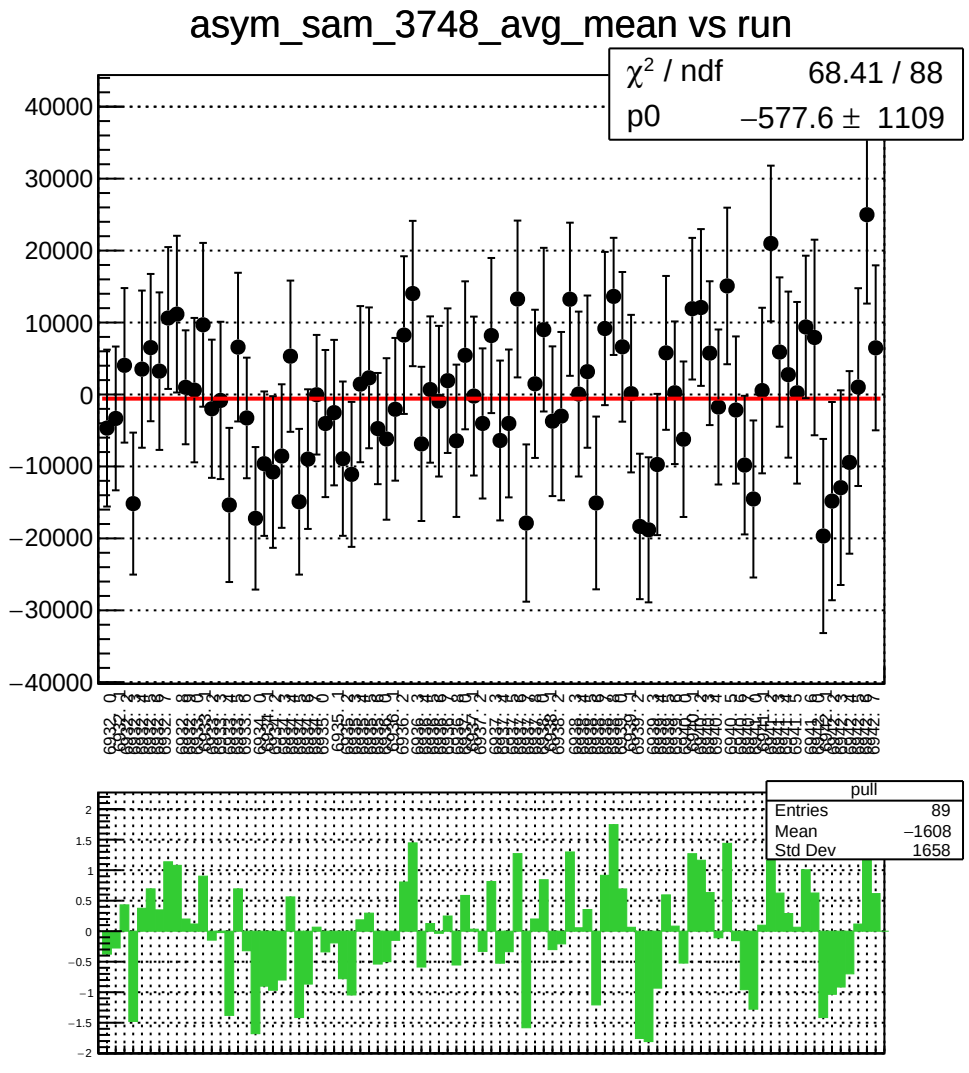

pull1D
Entries 89
Mean −0.01103
Std Dev 1.069
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

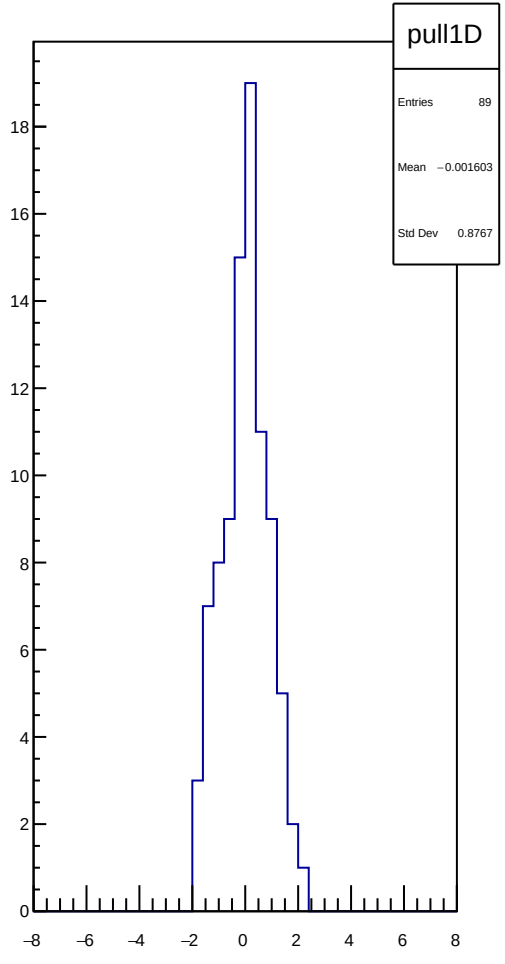

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 4483 / 88
p0 92.13 ± 0.07097
130
125
120
115
110
105
100
95
90
85

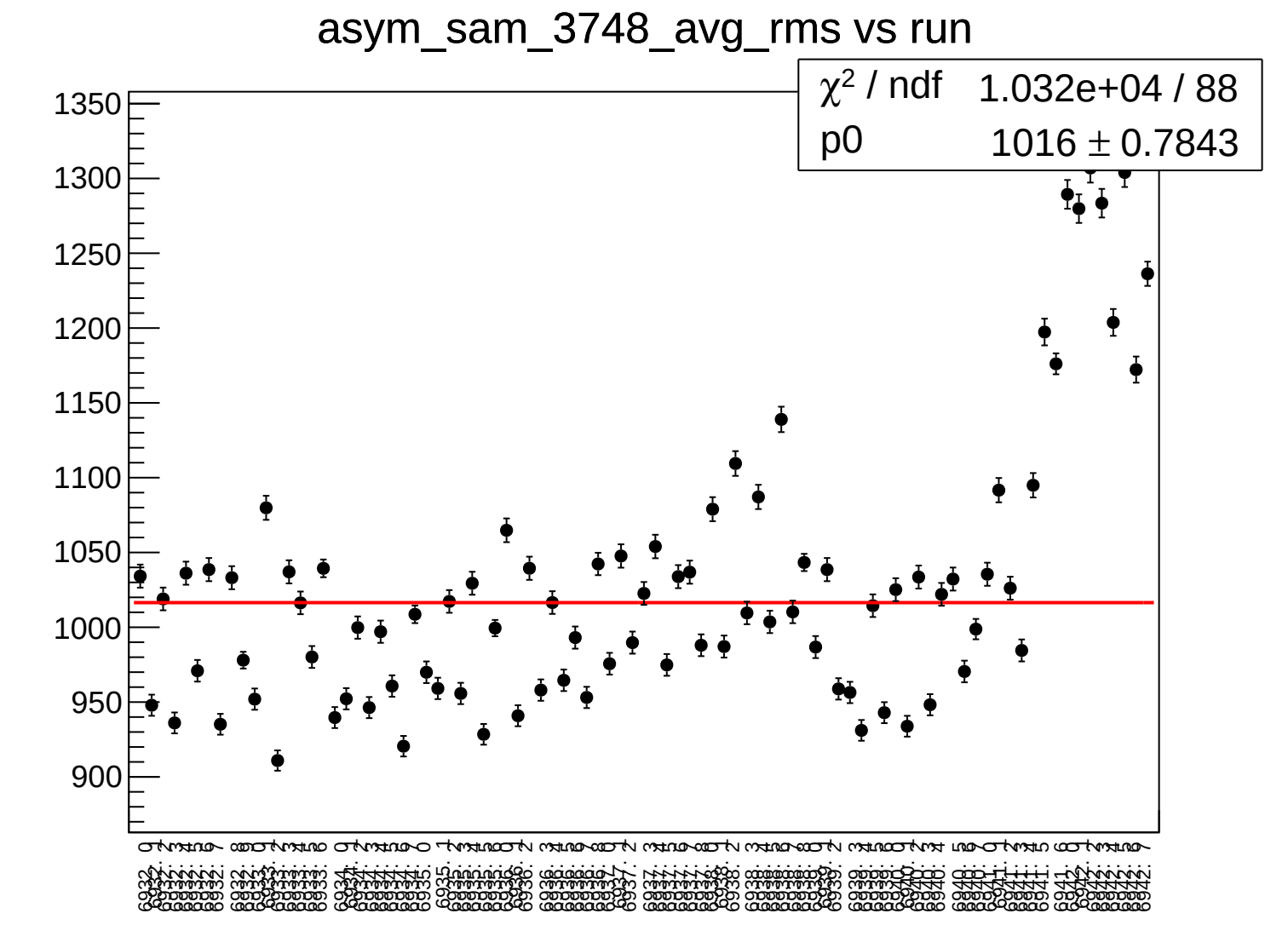

asym_sam_3748_avg_correction_mean vs run
χ^2 / ndf 70.47 / 88
p0 374.1± 1105
pull
Entries 89
Mean −4916
Std Dev 4965

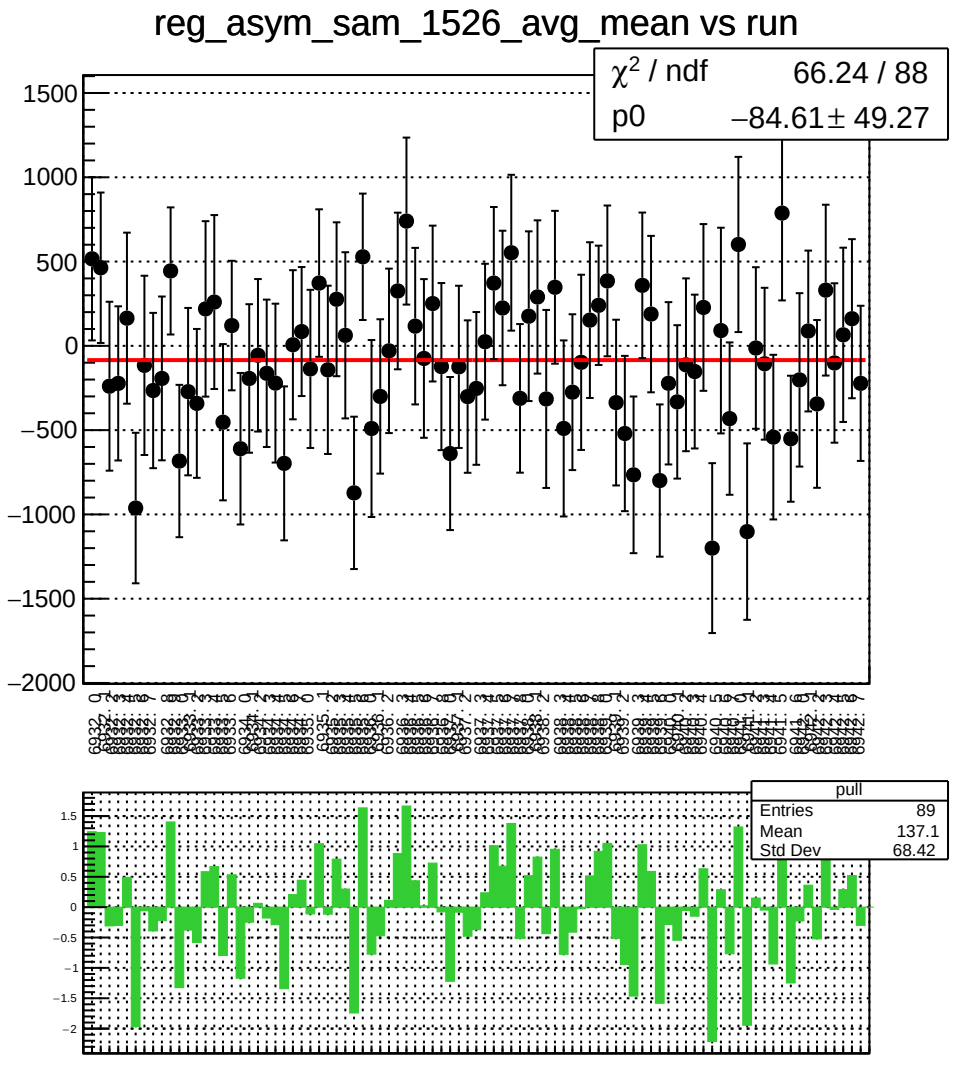

pull1D
Entries 89
Mean 0.0005591
Std Dev 0.8899

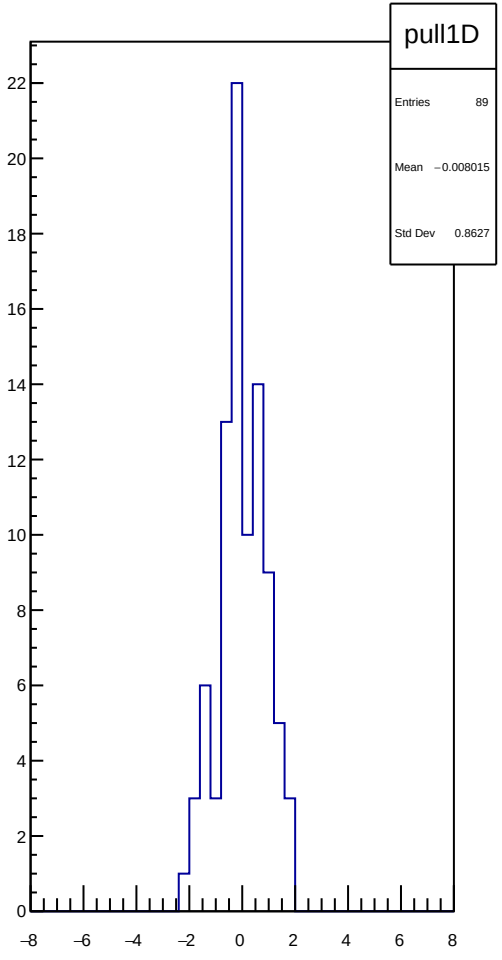

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 1.045e+04 / 88
p0 1012 ± 0.781
1350
1300
1250
1200
1150
1100
1050
1000
950
900

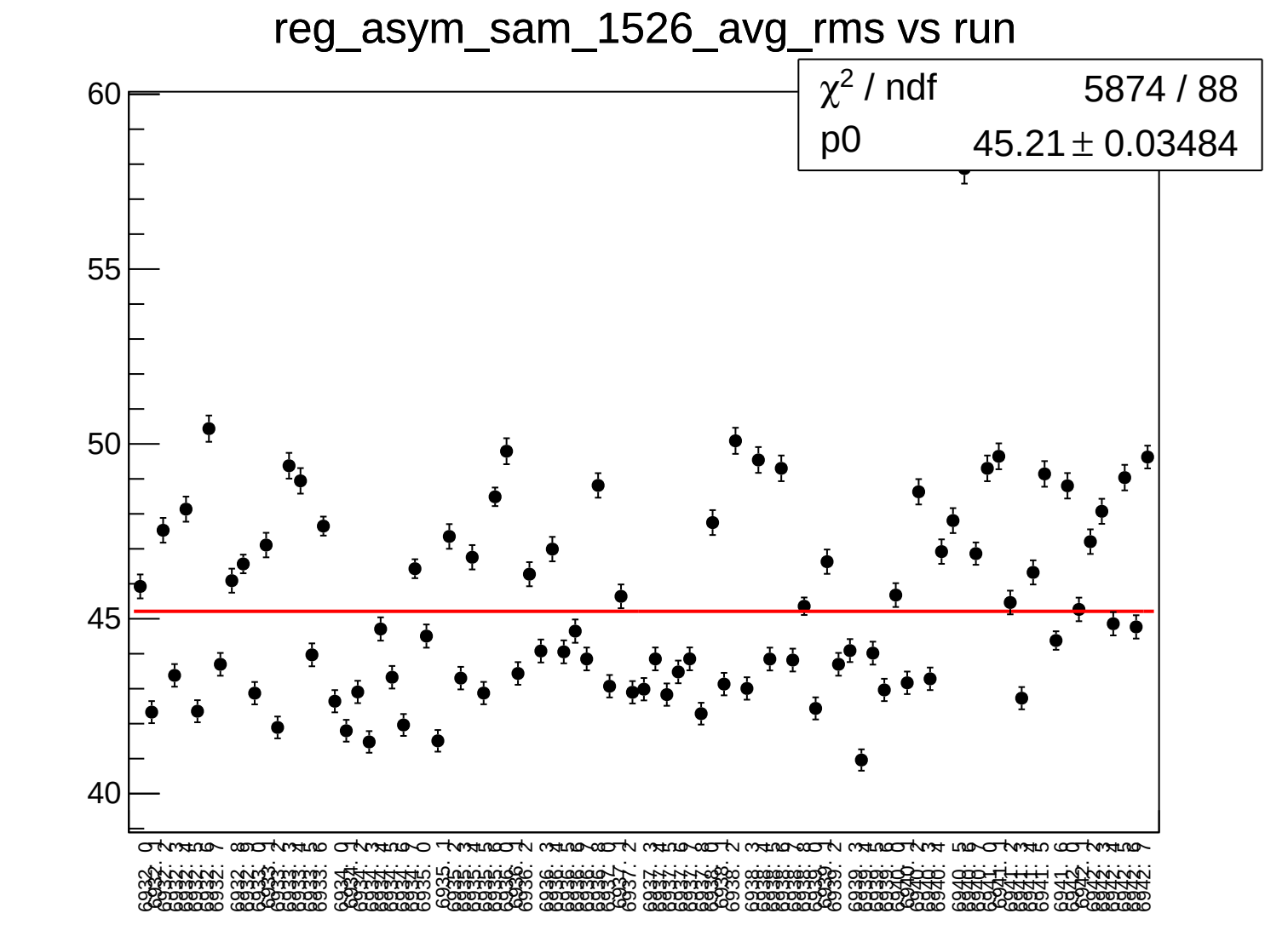

asym_sam_3748_avg_mean vs run
χ² / ndf 68.41 / 88
p0 −577.6 ± 1109
pull
Entries 89
Mean −1608
Std Dev 1658

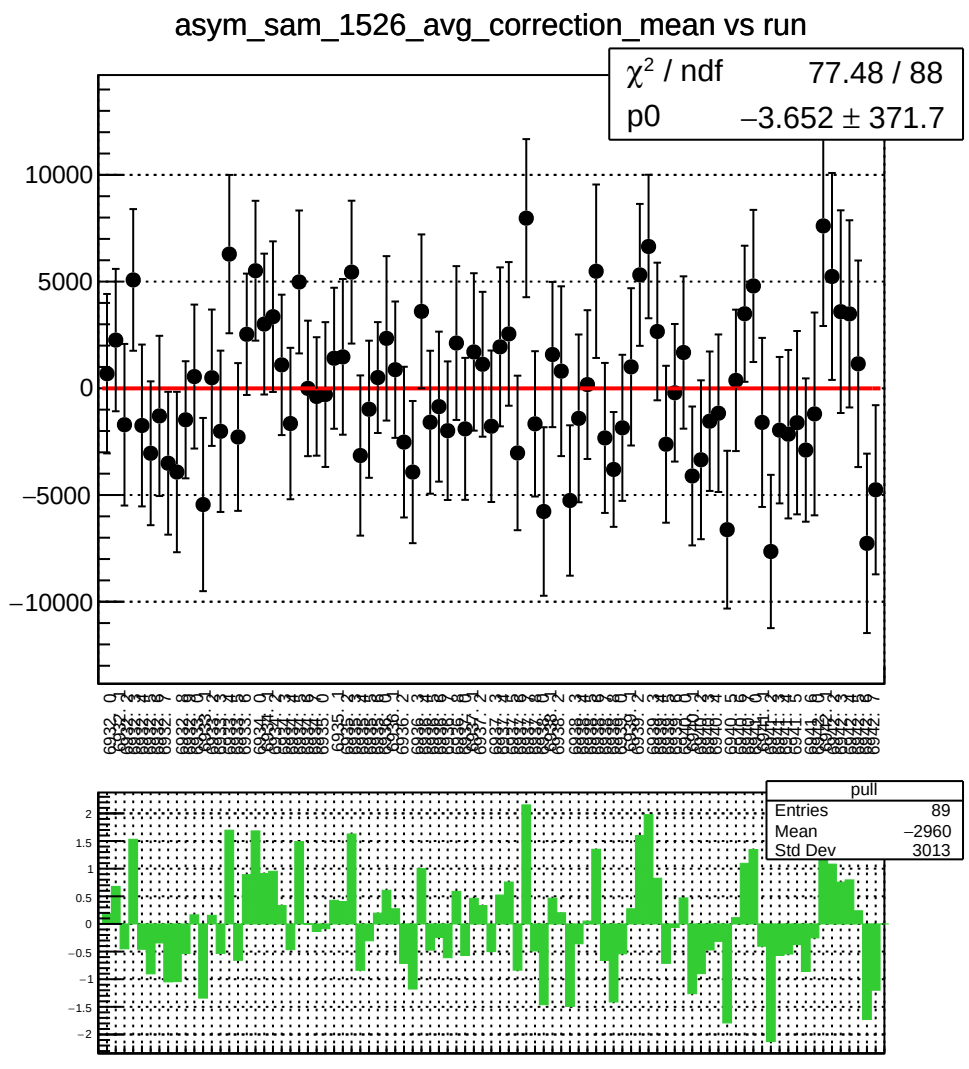

pull1D
Entries 89
Mean −0.001603
Std Dev 0.8767

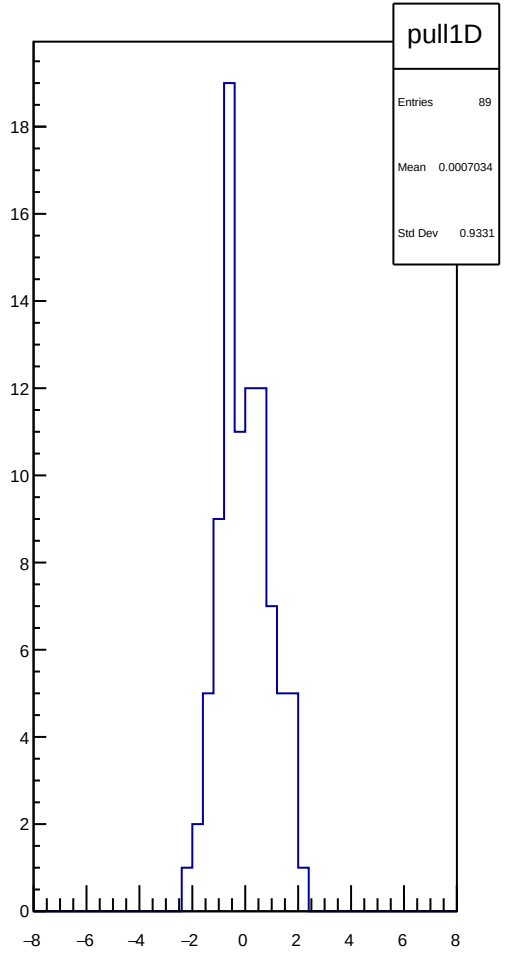

asym_sam_3748_avg_rms vs run
χ² / ndf 1.032e+04 / 88
p0 1016 ± 0.7843
1350
1300
1250
1200
1150
1100
1050
1000
950
900

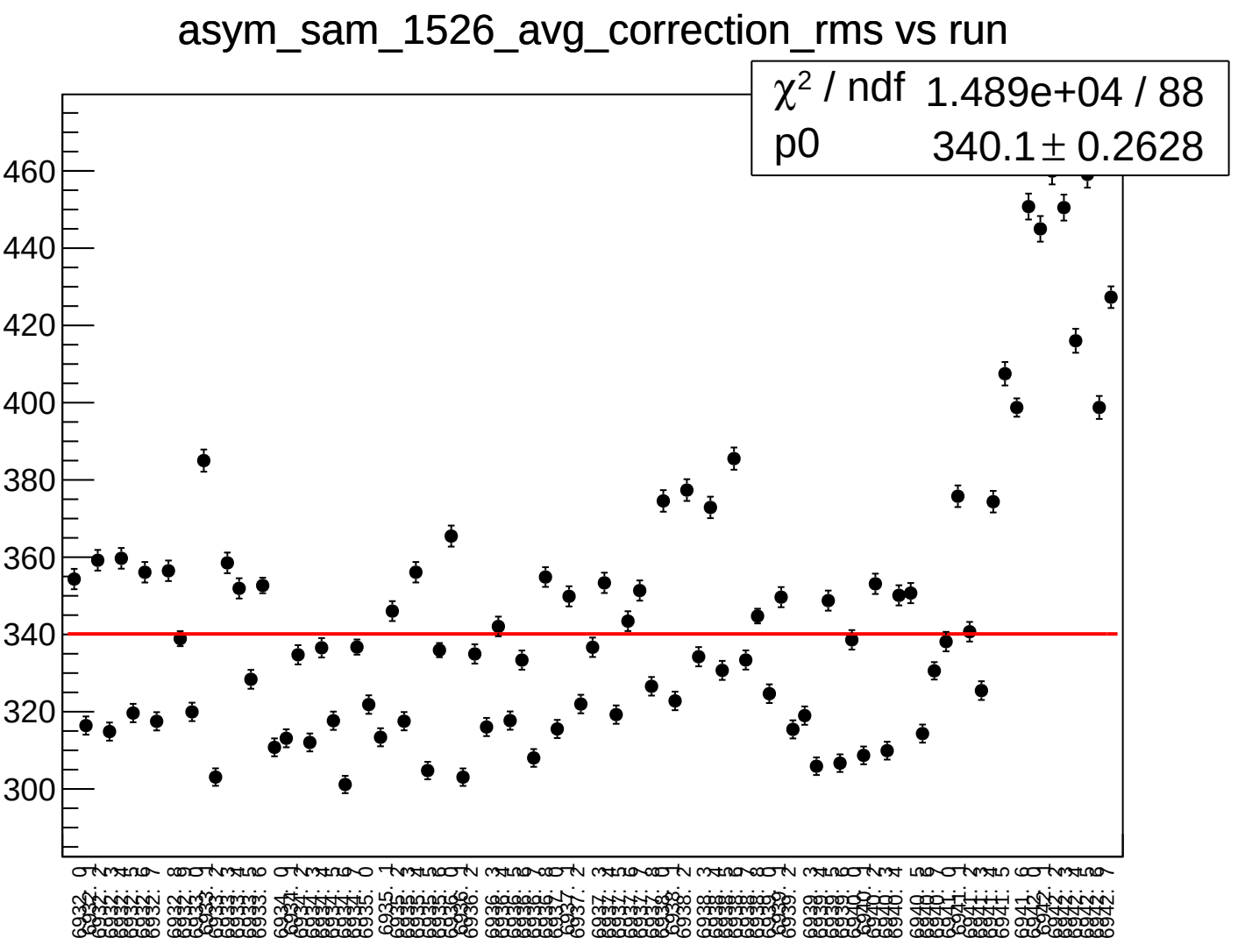

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 66.24 / 88
p0 −84.61 ± 49.27
pull
Entries 89
Mean 137.1
Std Dev 68.42

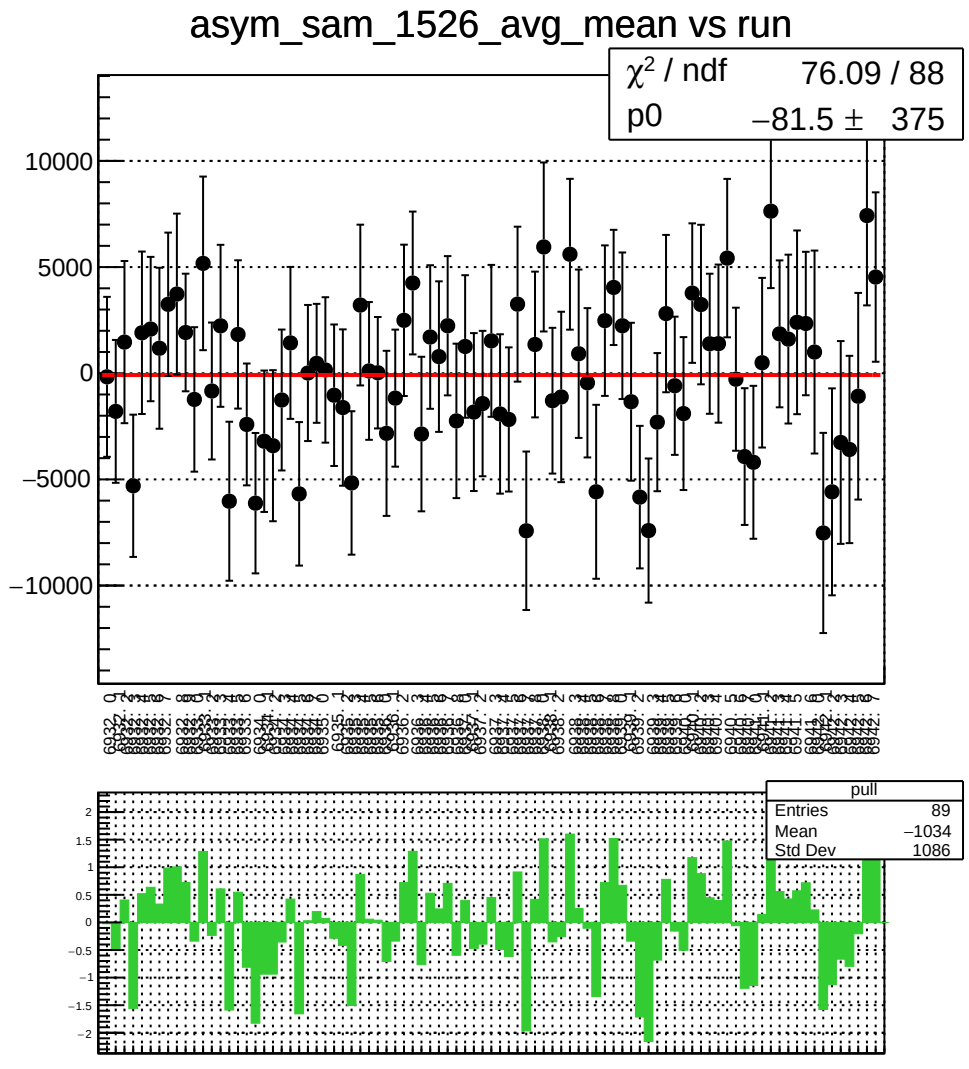

pull1D
Entries 89
Mean −0.008015
Std Dev 0.8627

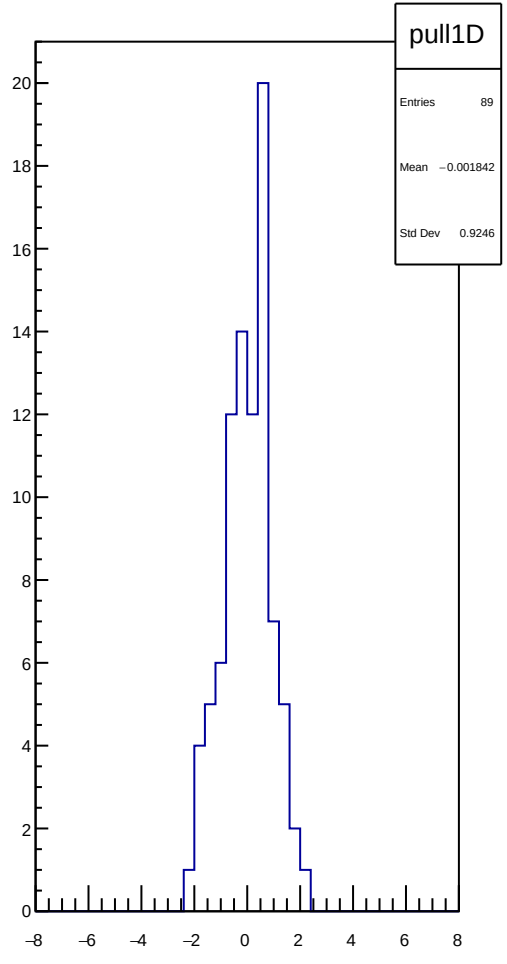

reg_asym_sam_1526_avg_rms vs run
χ^2 / ndf 5874 / 88
p0 45.21 ± 0.03484
60
55
50
45
40

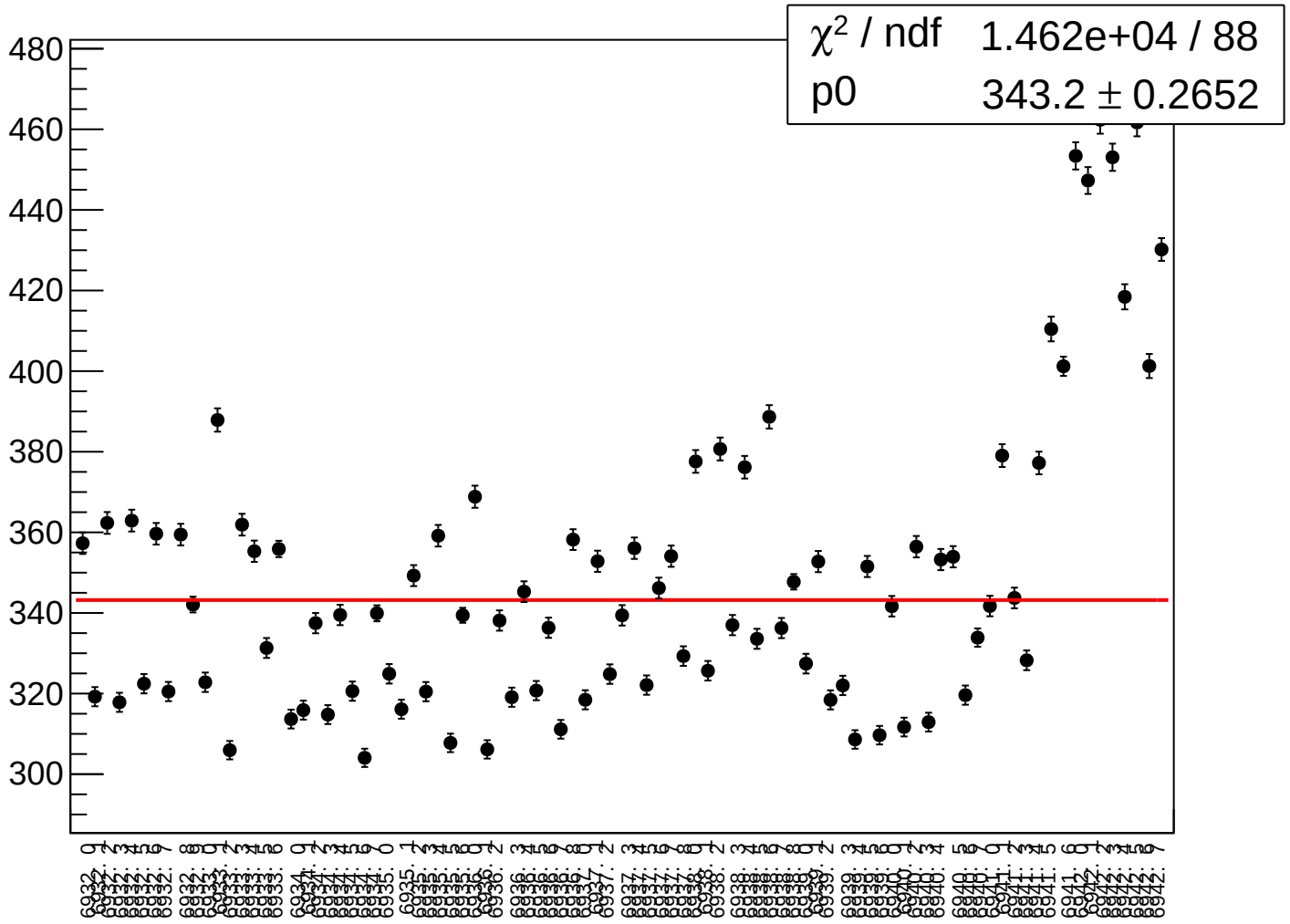

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 77.48 / 88
p0 −3.652 ± 371.7
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −2960
Std Dev 3013
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

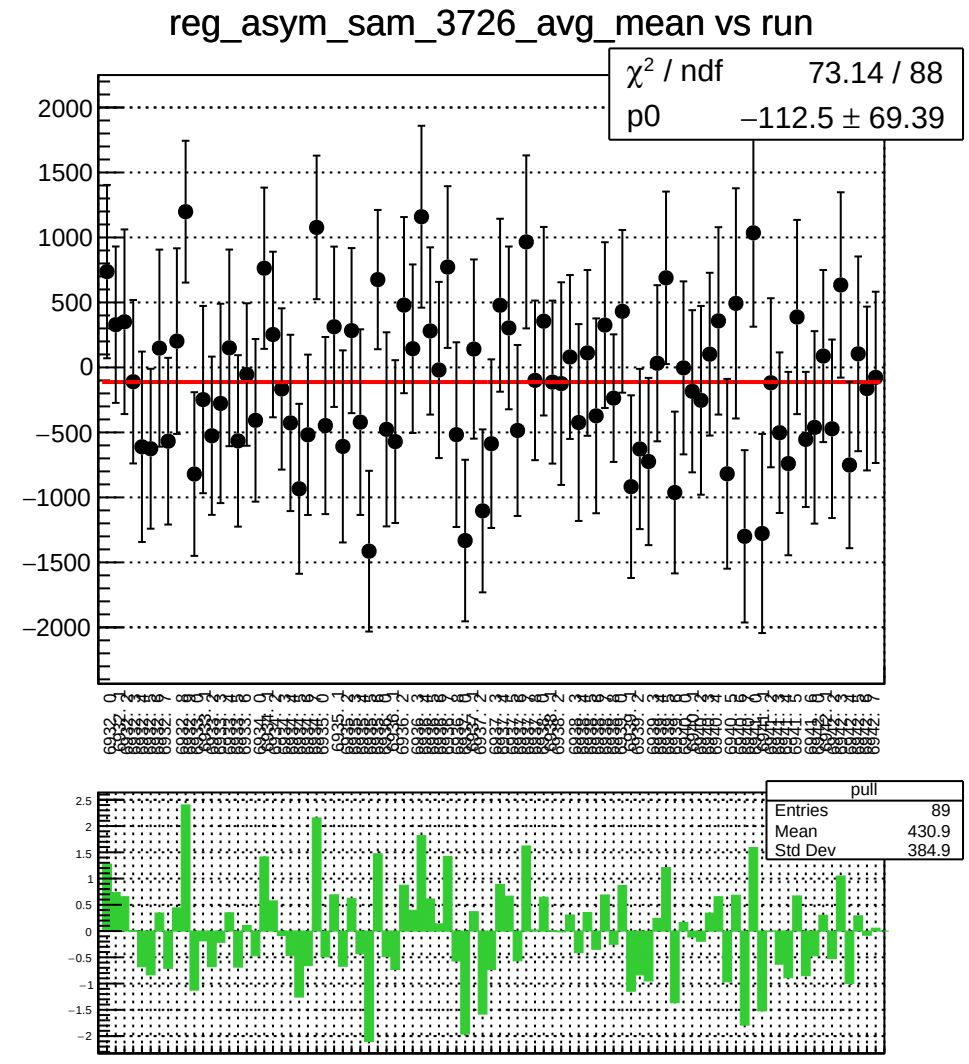

pull1D
Entries 89
Mean 0.0007034
Std Dev 0.9331
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

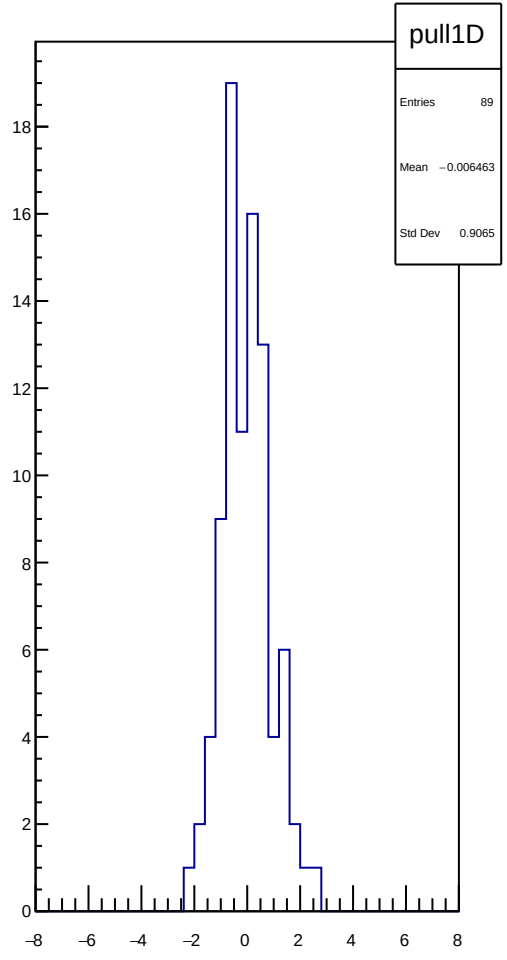

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 1.489e+04 / 88
p0 340.1 ± 0.2628
460
440
420
400
380
360
340
320
300

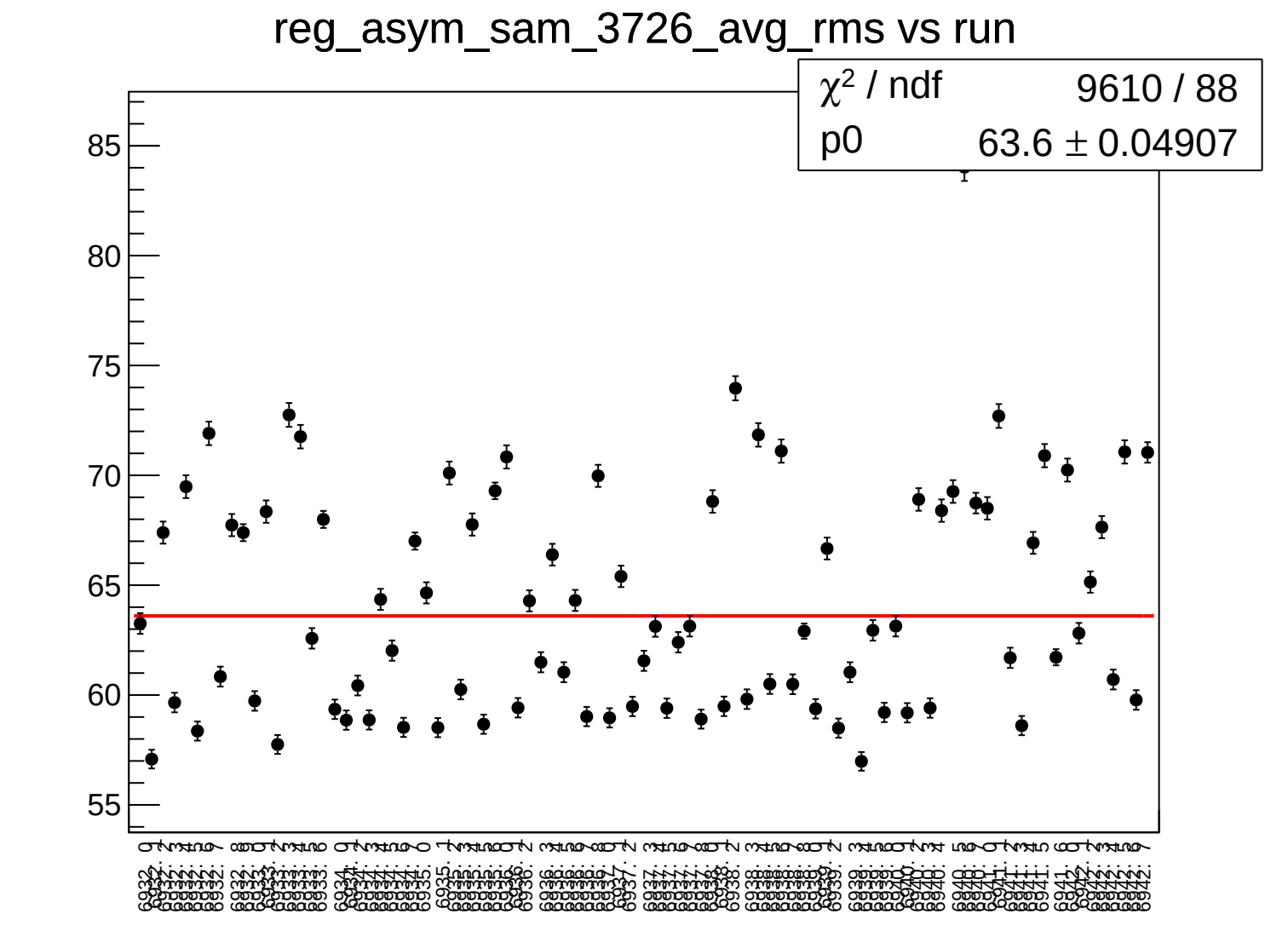

asym_sam_1526_avg_mean vs run
χ² / ndf 76.09 / 88
p0 −81.5 ± 375
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −1034
Std Dev 1086
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

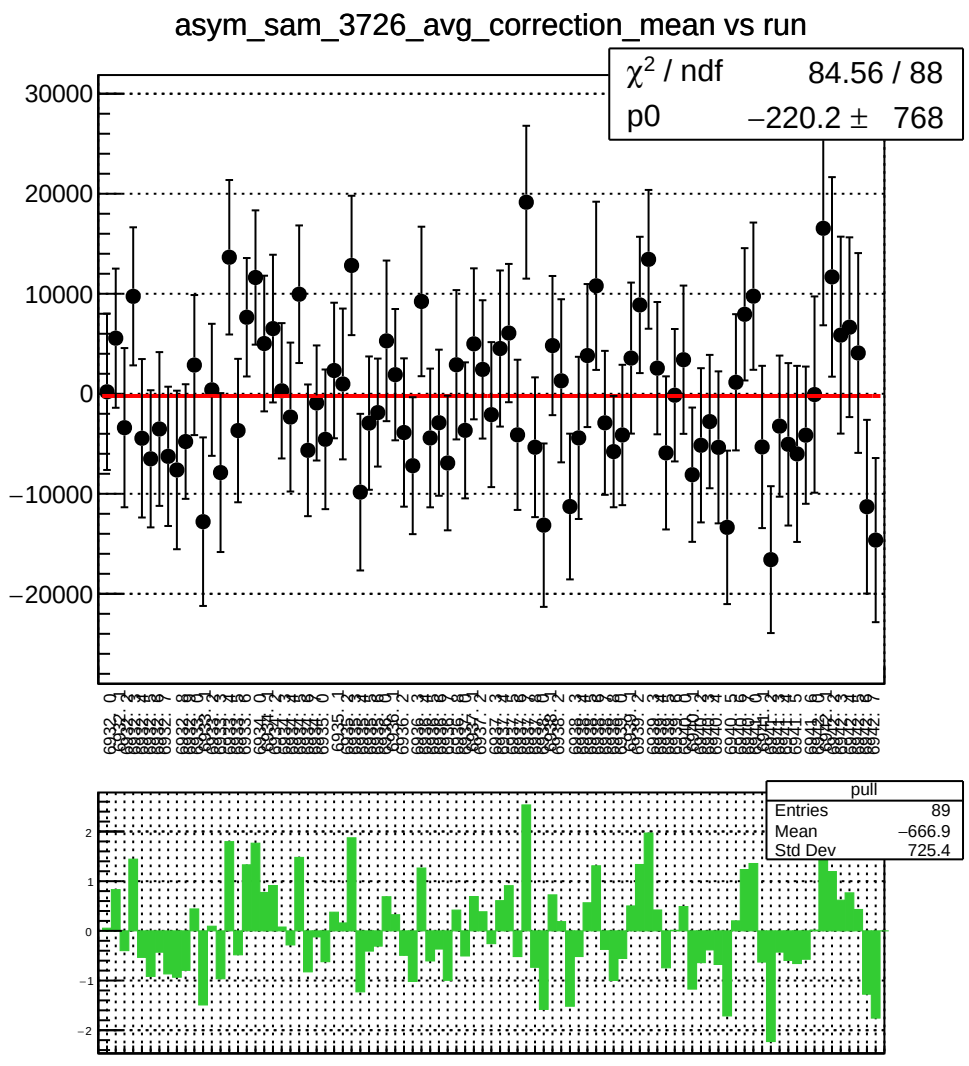

pull1D
Entries 89
Mean −0.001842
Std Dev 0.9246
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

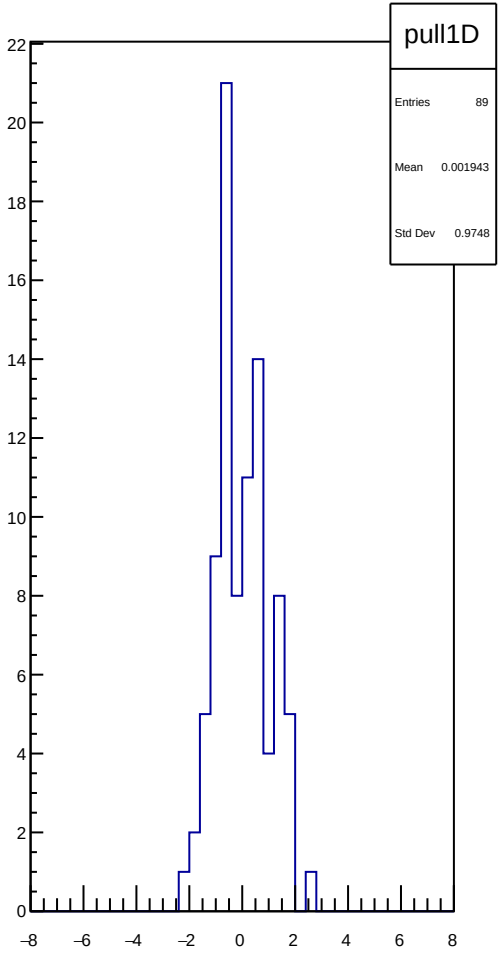

asym_sam_1526_avg_rms vs run
χ² / ndf 1.462e+04 / 88
p0 343.2 ± 0.2652
480
460
440
420
400
380
360
340
320
300

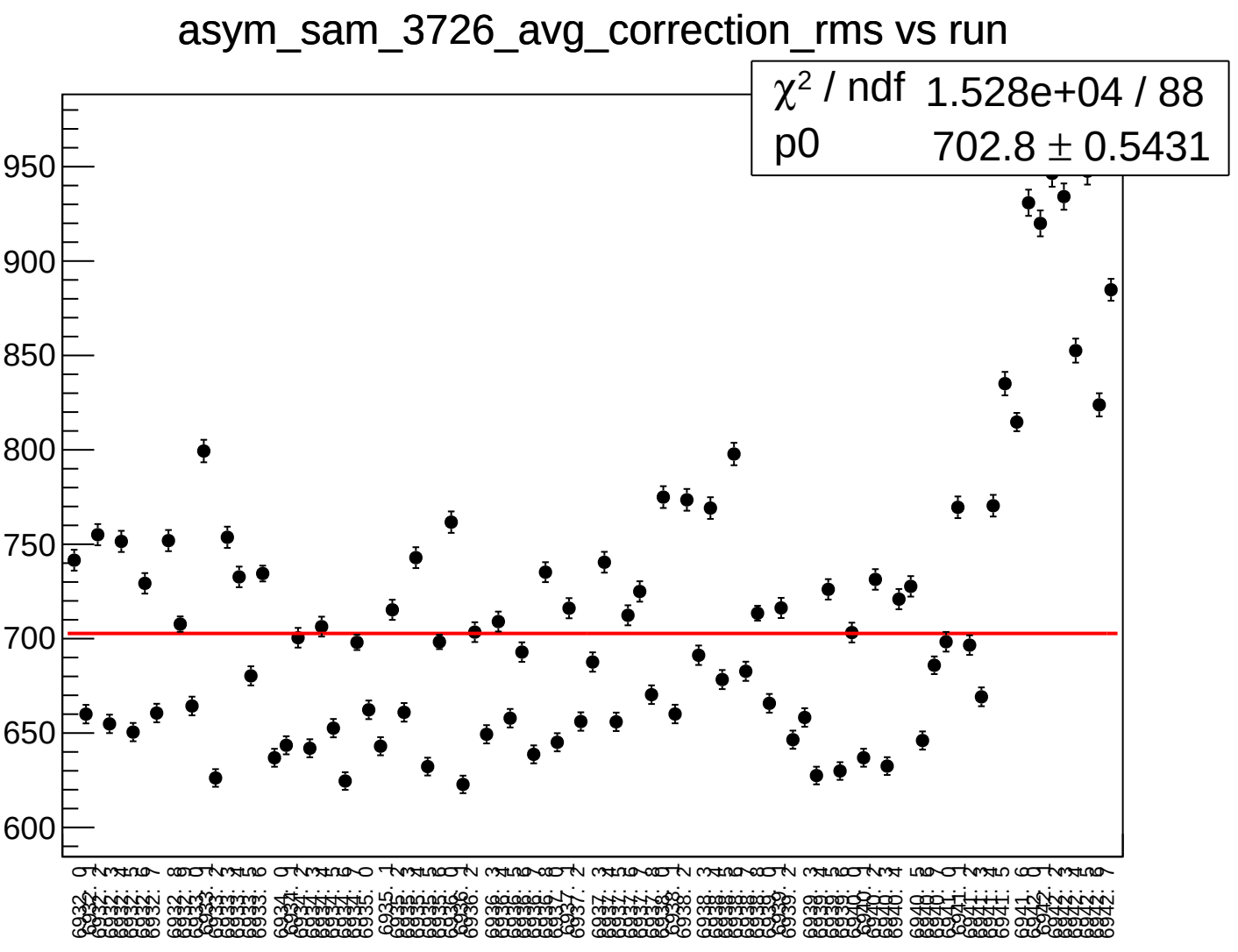

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 73.14 / 88
p0 −112.5 ± 69.39
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 89
Mean 430.9
Std Dev 384.9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

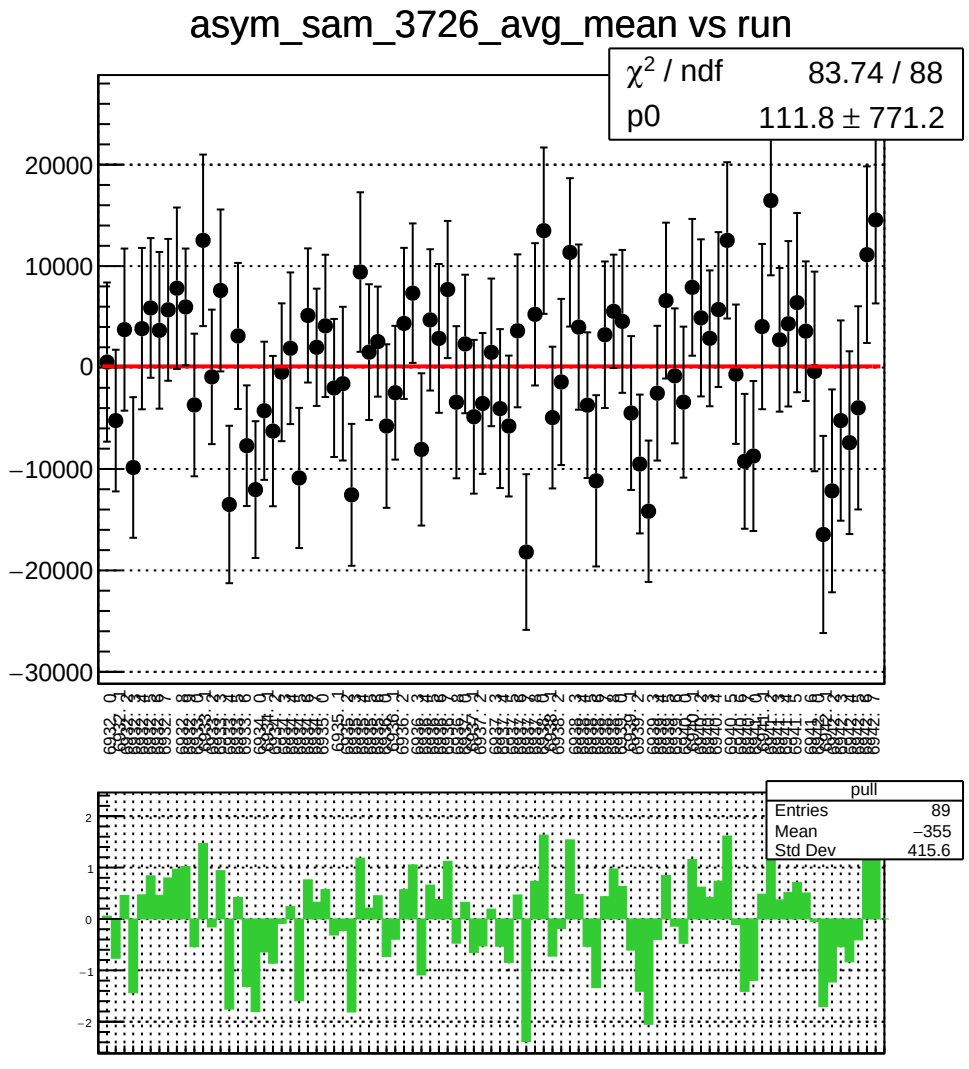

pull1D
Entries 89
Mean −0.006463
Std Dev 0.9065
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

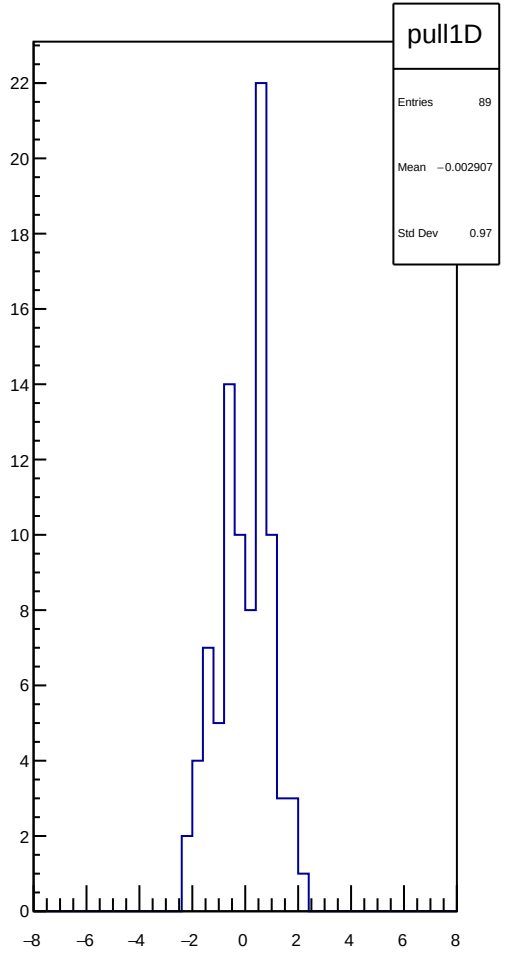

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 9610 / 88
p0 63.6 ± 0.04907
85
80
75
70
65
60
55

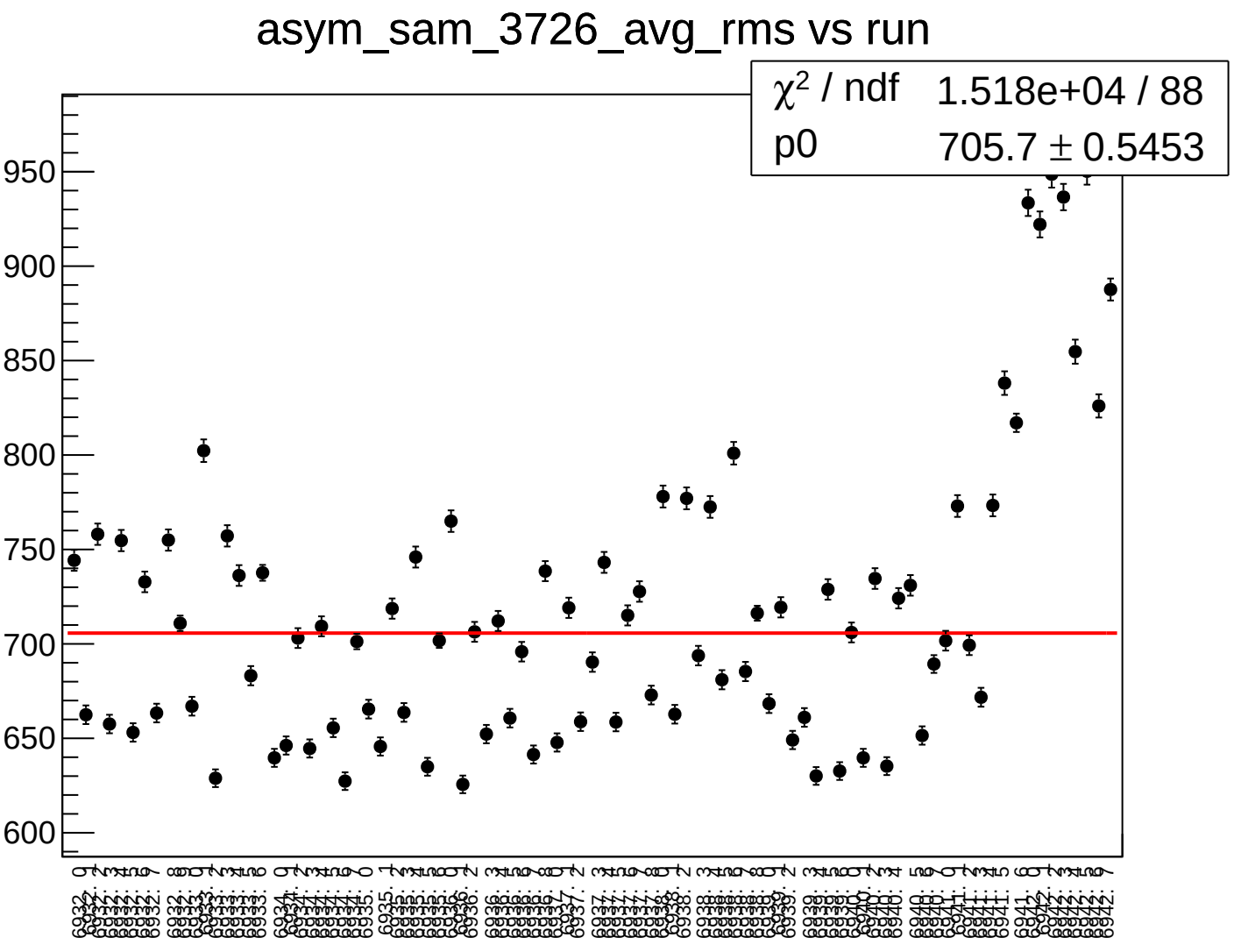

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 84.56 / 88
p0 −220.2 ± 768
30000
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −666.9
Std Dev 725.4
2
1
0
−1
−2

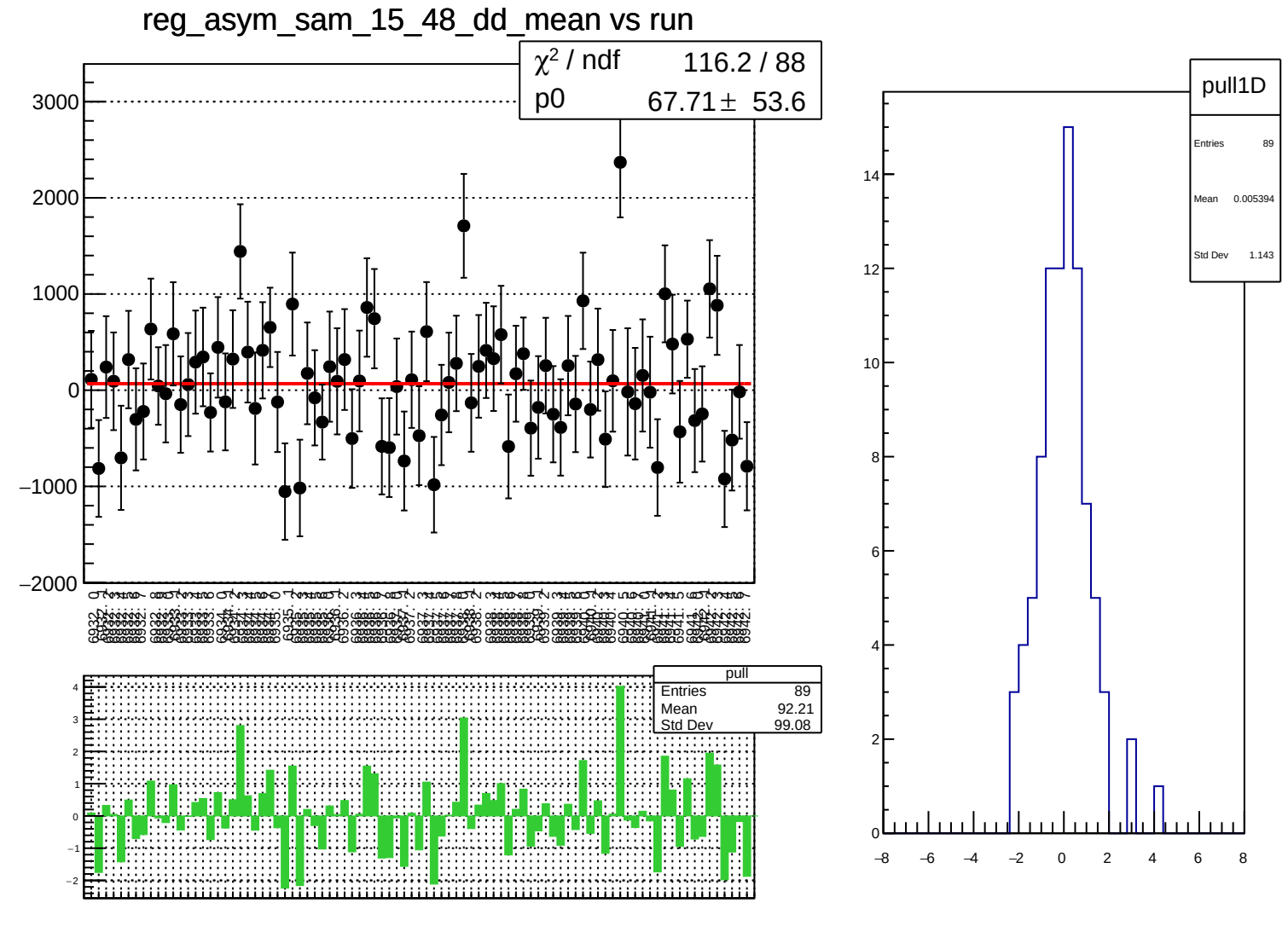

pull1D
Entries 89
Mean 0.001943
Std Dev 0.9748
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

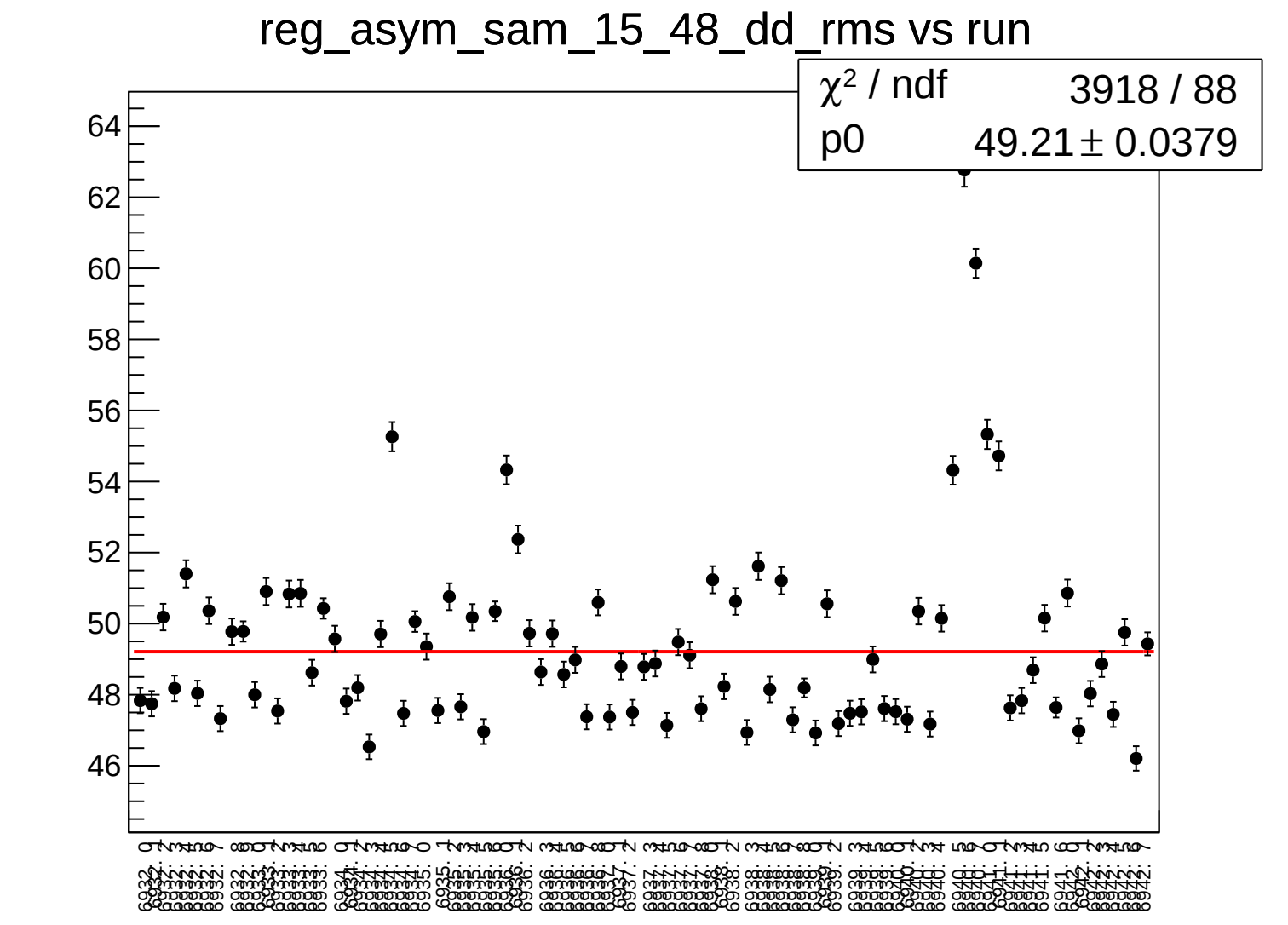

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 1.528e+04 / 88
p0 702.8 ± 0.5431
950
900
850
800
750
700
650
600

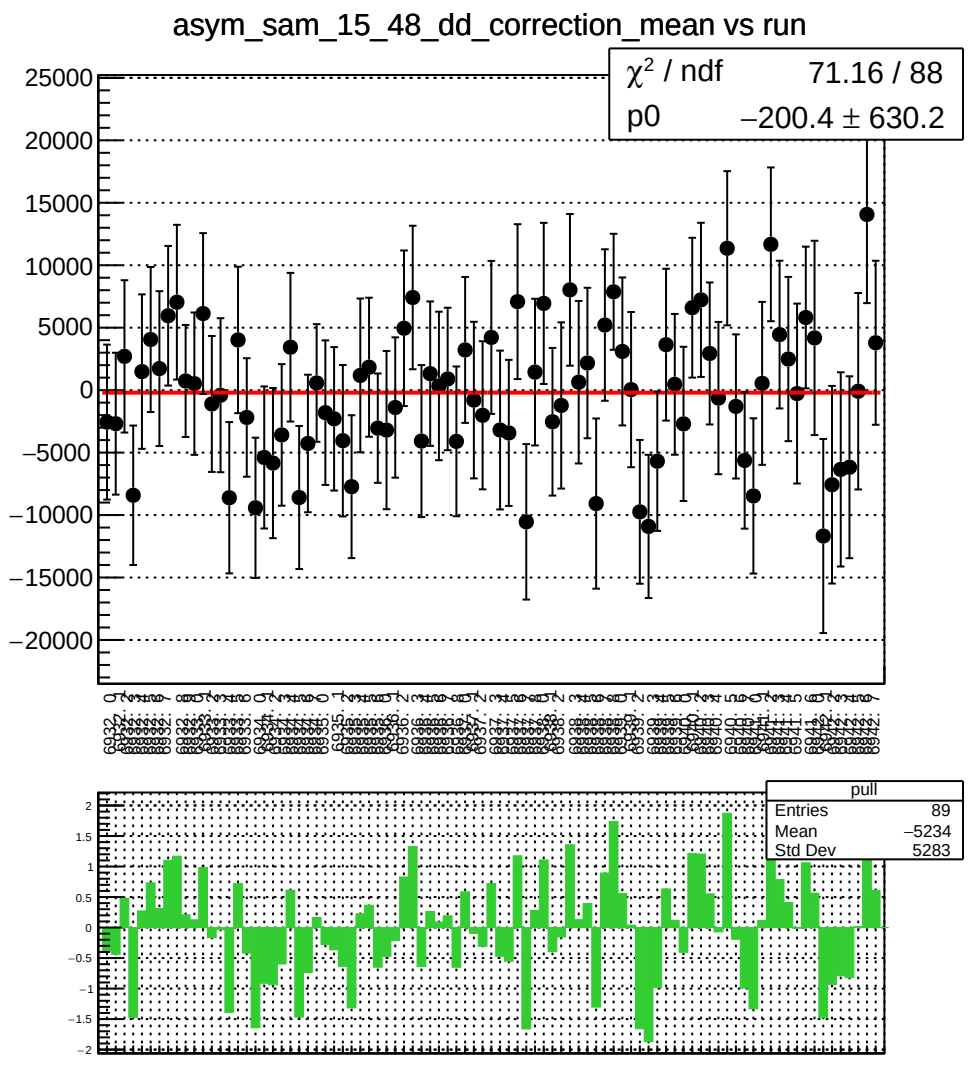

asym_sam_3726_avg_mean vs run
χ² / ndf 83.74 / 88
p0 111.8 ± 771.2
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −355
Std Dev 415.6
2
1
0
−1
−2

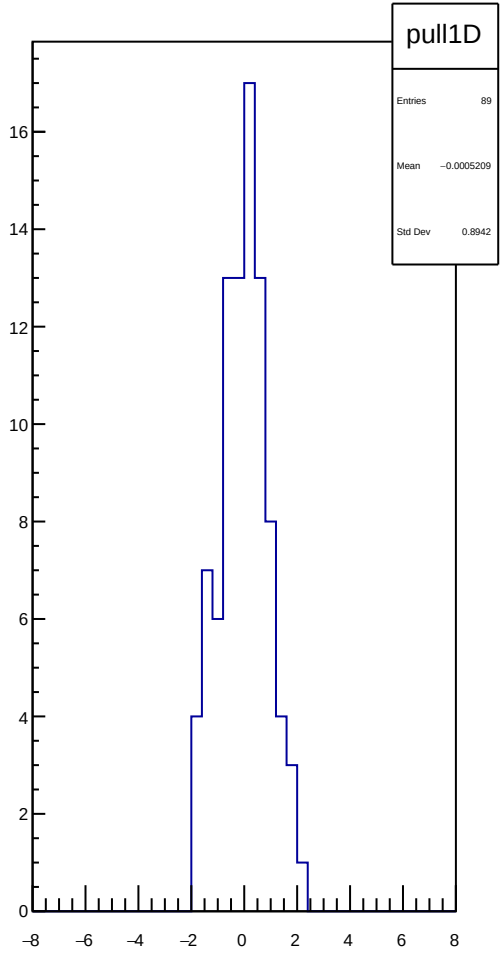

pull1D
Entries 89
Mean −0.002907
Std Dev 0.97
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

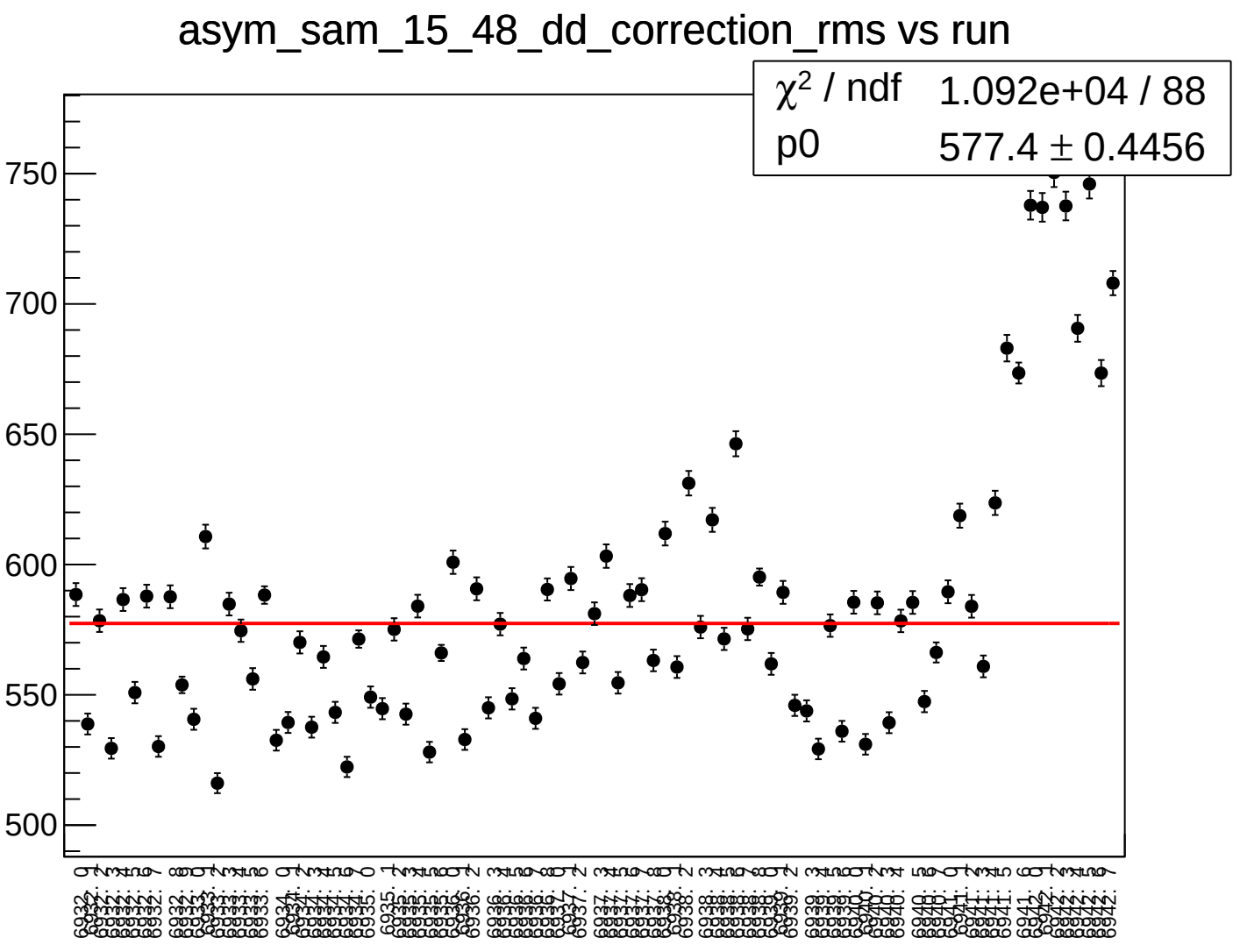

asym_sam_3726_avg_rms vs run
χ^2 / ndf 1.518e+04 / 88
p0 705.7 ± 0.5453
950
900
850
800
750
700
650
600

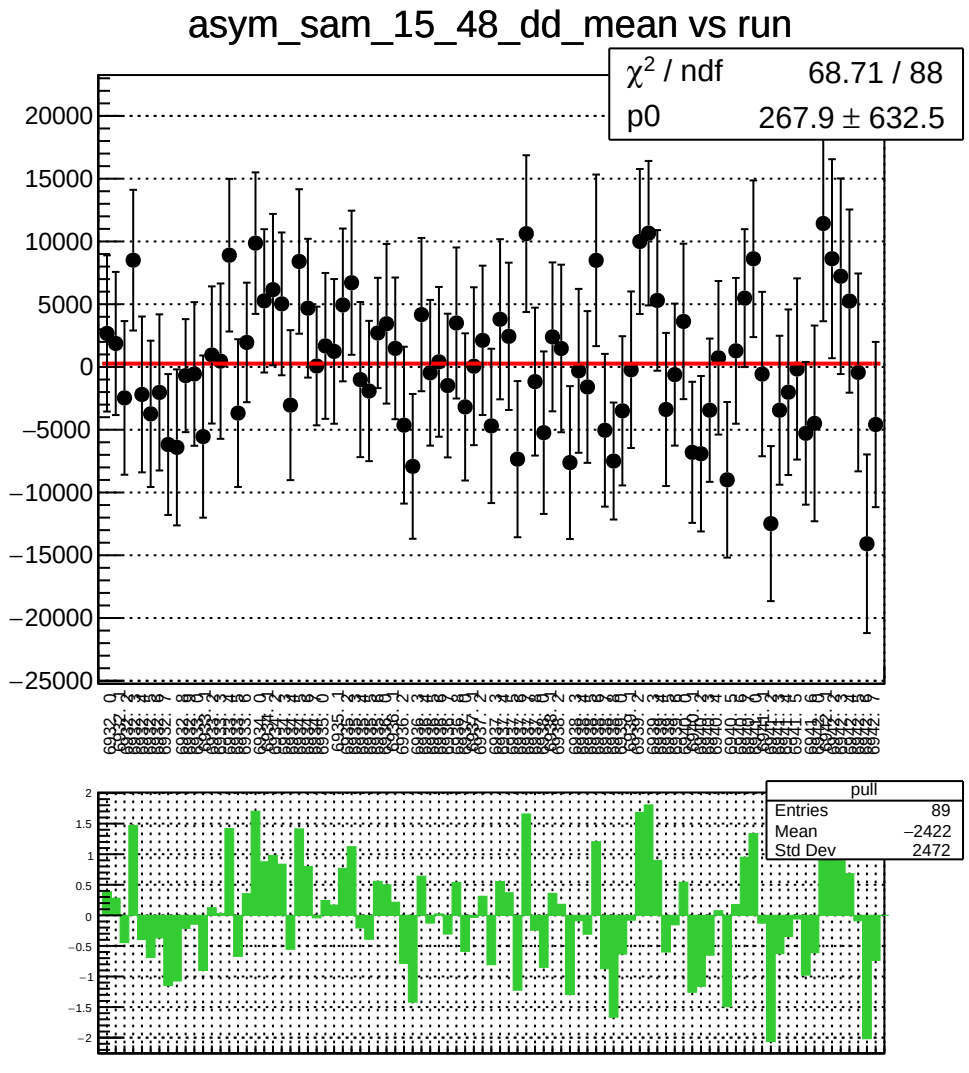

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 116.2 / 88
p0 67.71 ± 53.6
pull
Entries 89
Mean 92.21
Std Dev 99.08
pull1D
Entries 89
Mean 0.005394
Std Dev 1.143

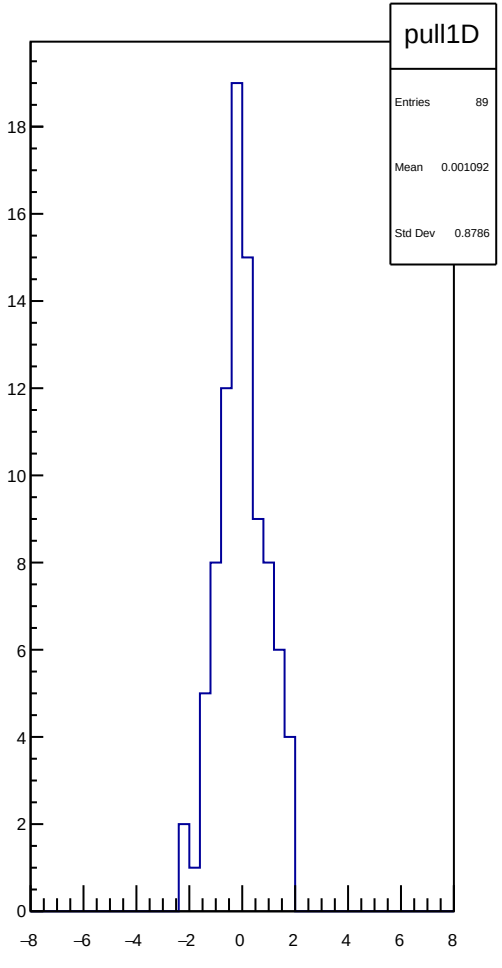

reg_asym_sam_15_48_dd_rms vs run
χ² / ndf 3918 / 88
p0 49.21 ± 0.0379
64
62
60
58
56
54
52
50
48
46

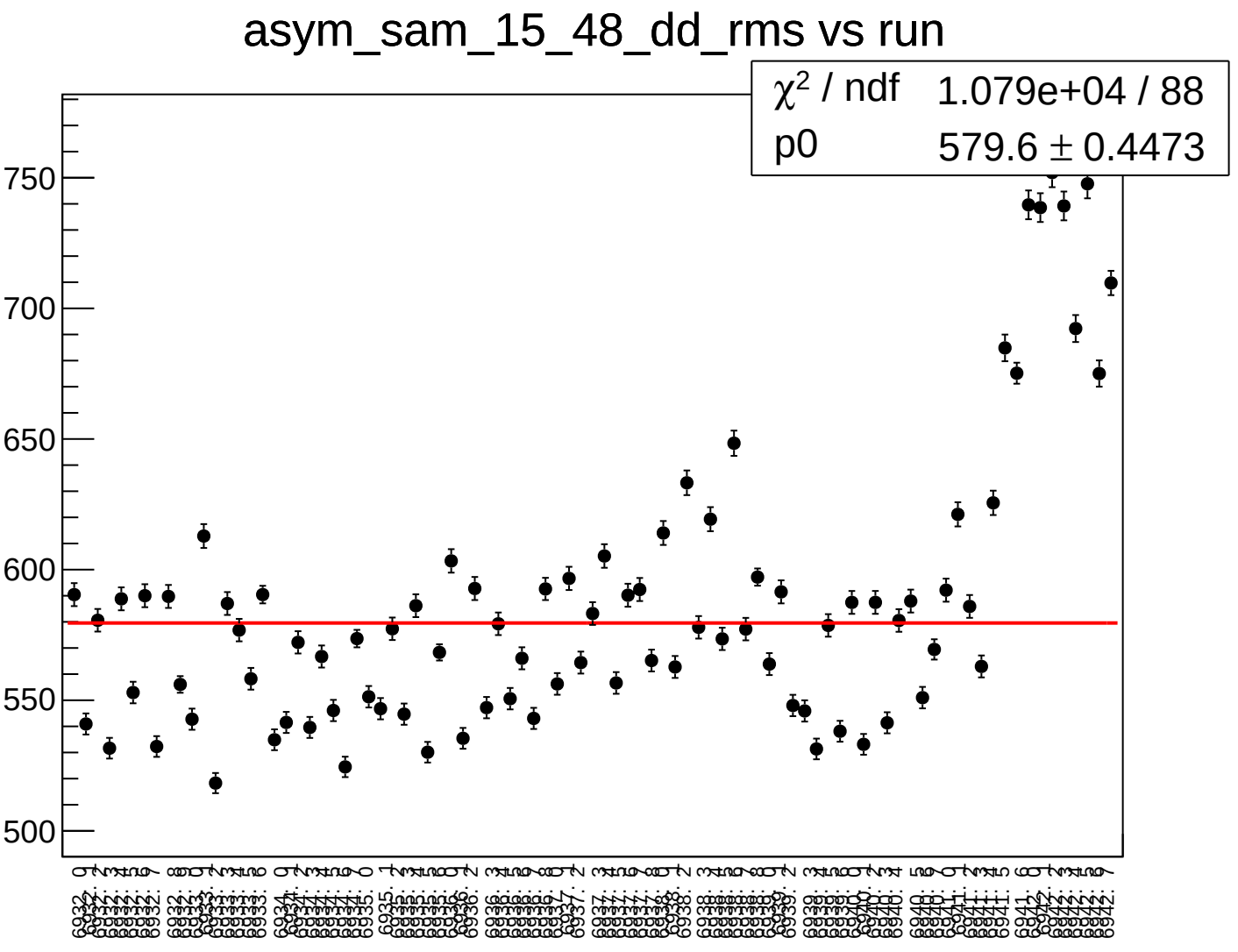

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 71.16 / 88
p0 −200.4 ± 630.2
pull
Entries 89
Mean −5234
Std Dev 5283

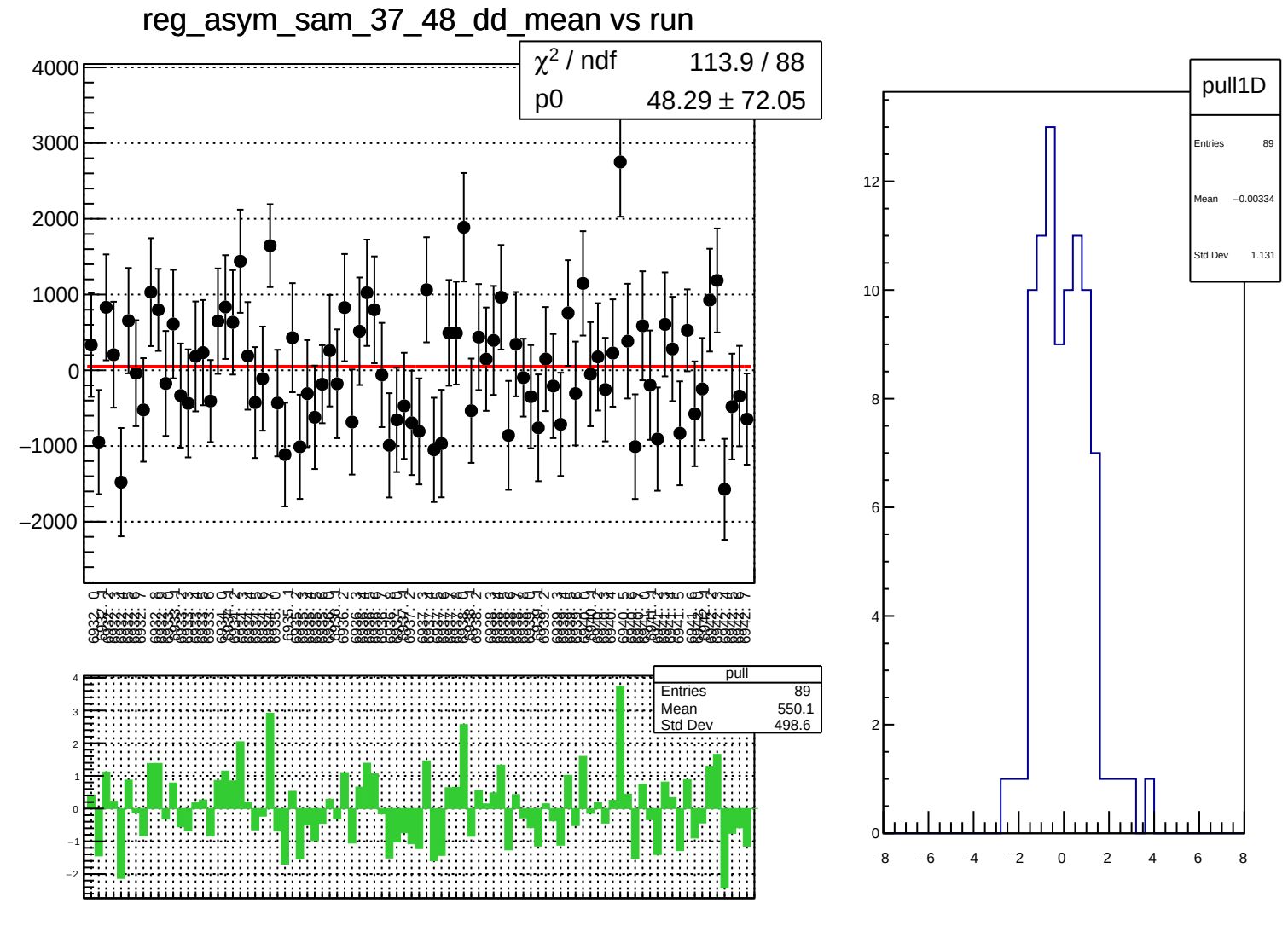

pull1D
Entries 89
Mean −0.0005209
Std Dev 0.8942

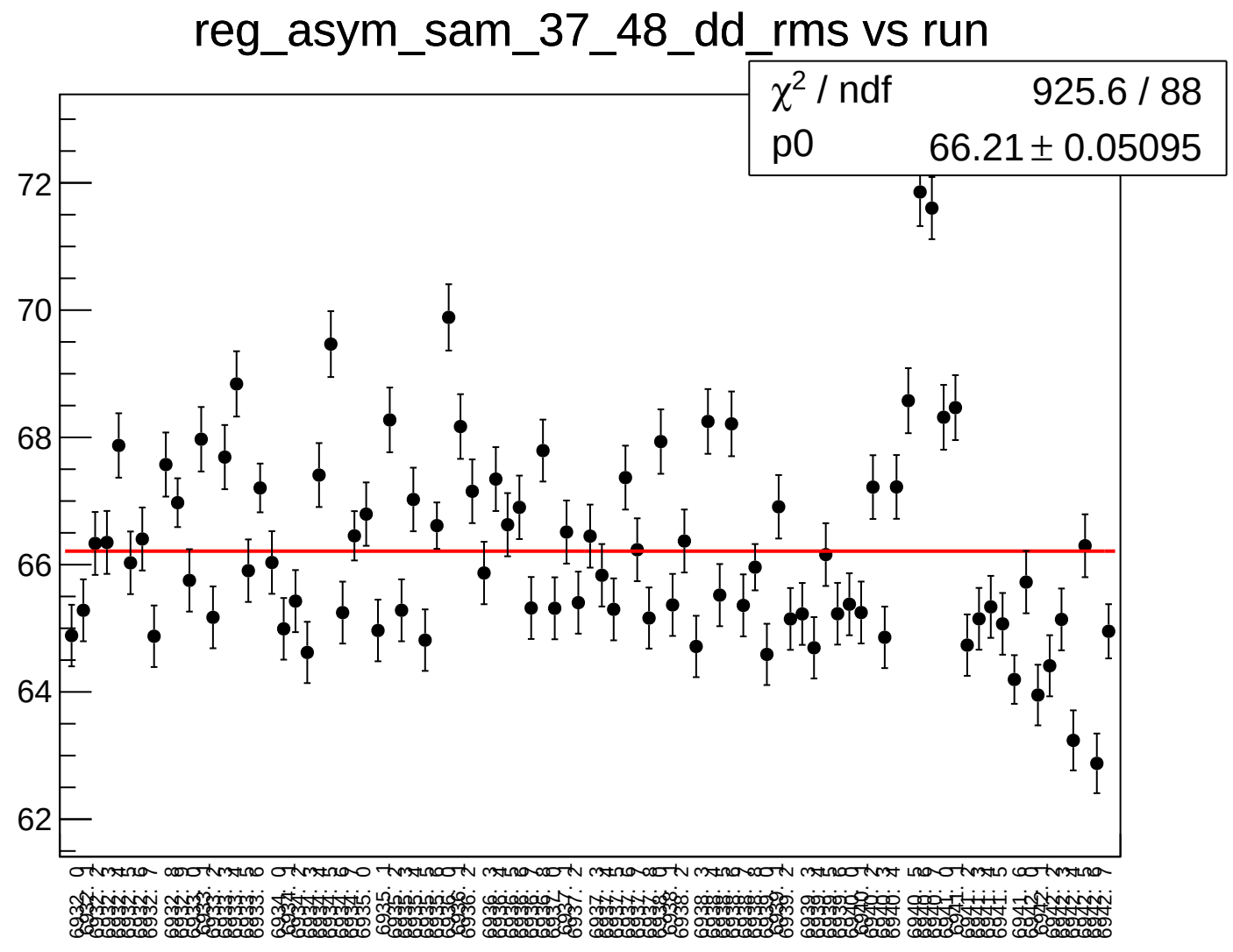

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 1.092e+04 / 88
p0 577.4 ± 0.4456
750
700
650
600
550
500


asym_sam_15_48_dd_mean vs run
χ² / ndf 68.71 / 88
p0 267.9 ± 632.5
pull
Entries 89
Mean −2422
Std Dev 2472

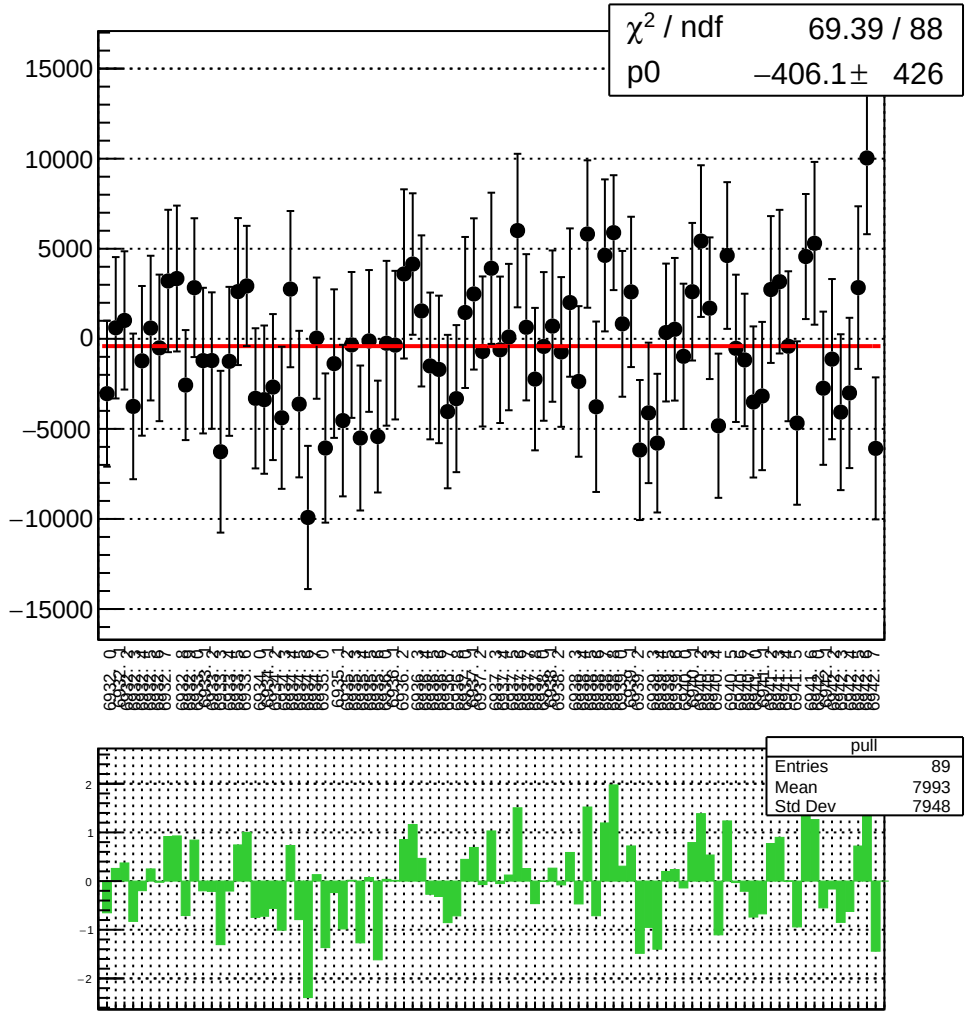

pull1D
Entries 89
Mean 0.001092
Std Dev 0.8786

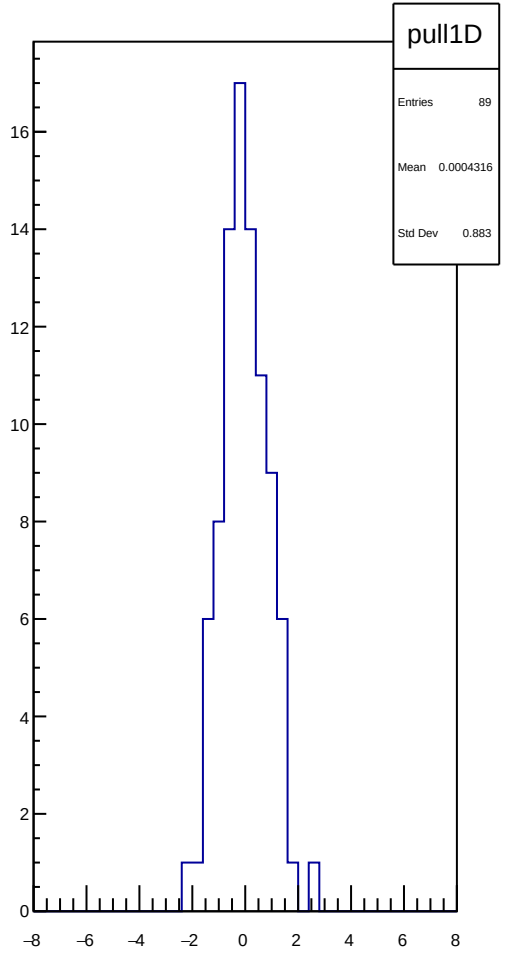

asym_sam_15_48_dd_rms vs run
χ² / ndf 1.079e+04 / 88
p0 579.6 ± 0.4473
750
700
650
600
550
500

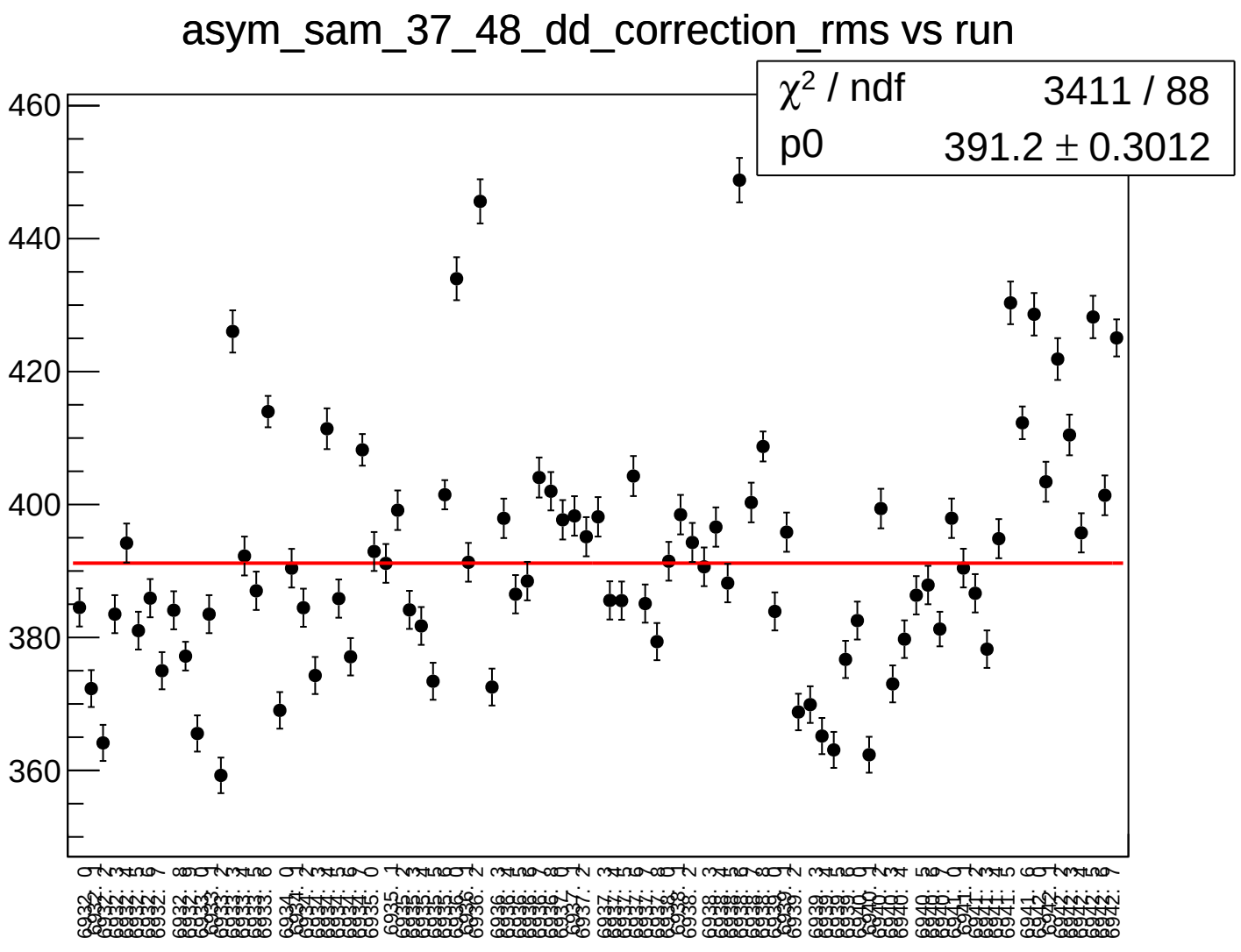

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 113.9 / 88
p0 48.29 ± 72.05
4000
3000
2000
1000
0
−1000
−2000
pull
Entries 89
Mean 550.1
Std Dev 498.6
pull1D
Entries 89
Mean −0.00334
Std Dev 1.131
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

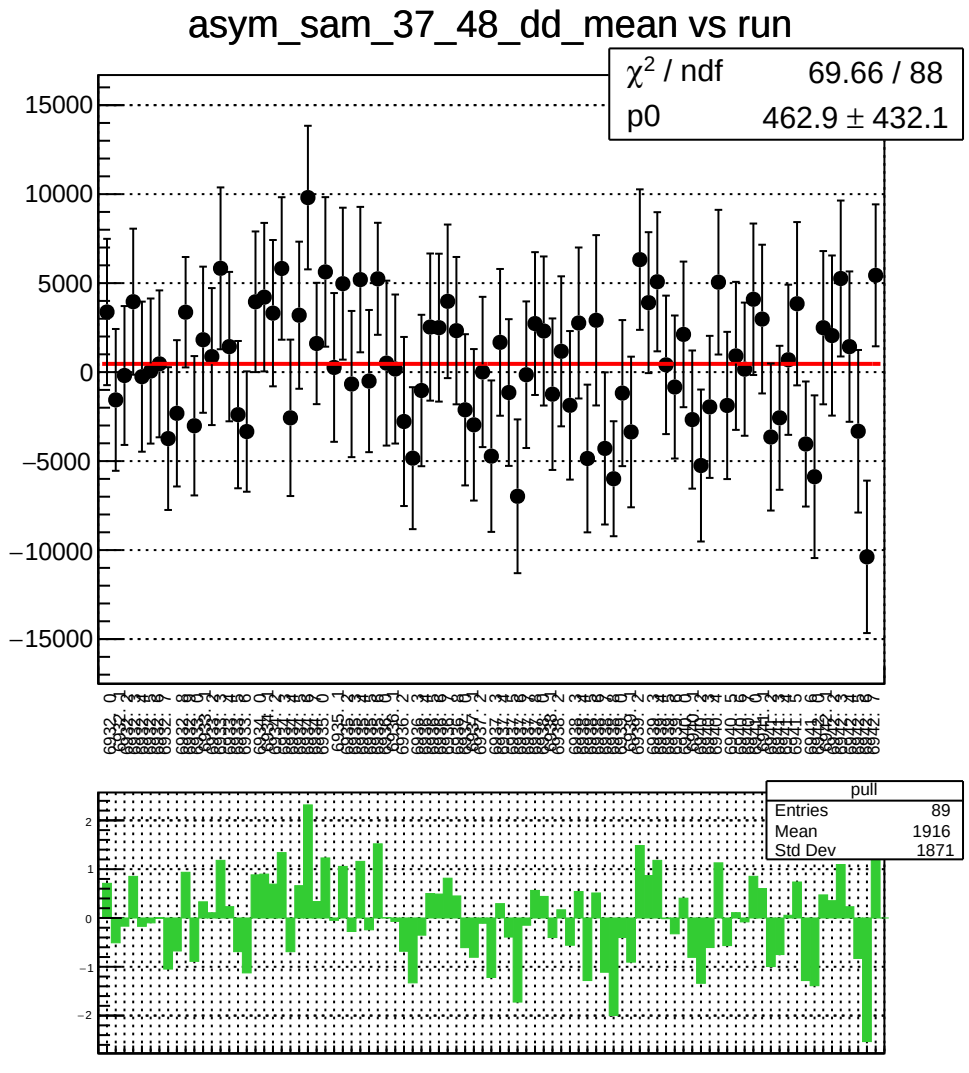

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 925.6 / 88
p0 66.21 ± 0.05095
72
70
68
66
64
62

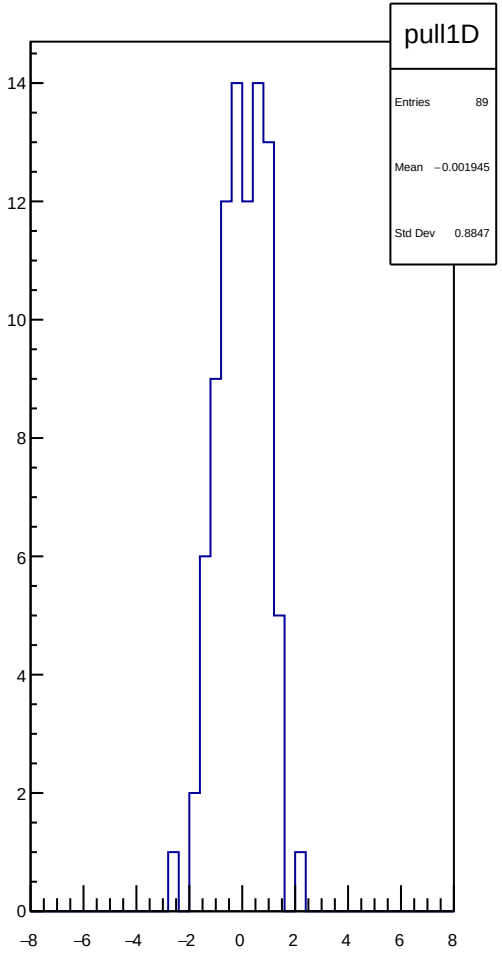
asym_sam_37_48_dd_correction_mean vs run

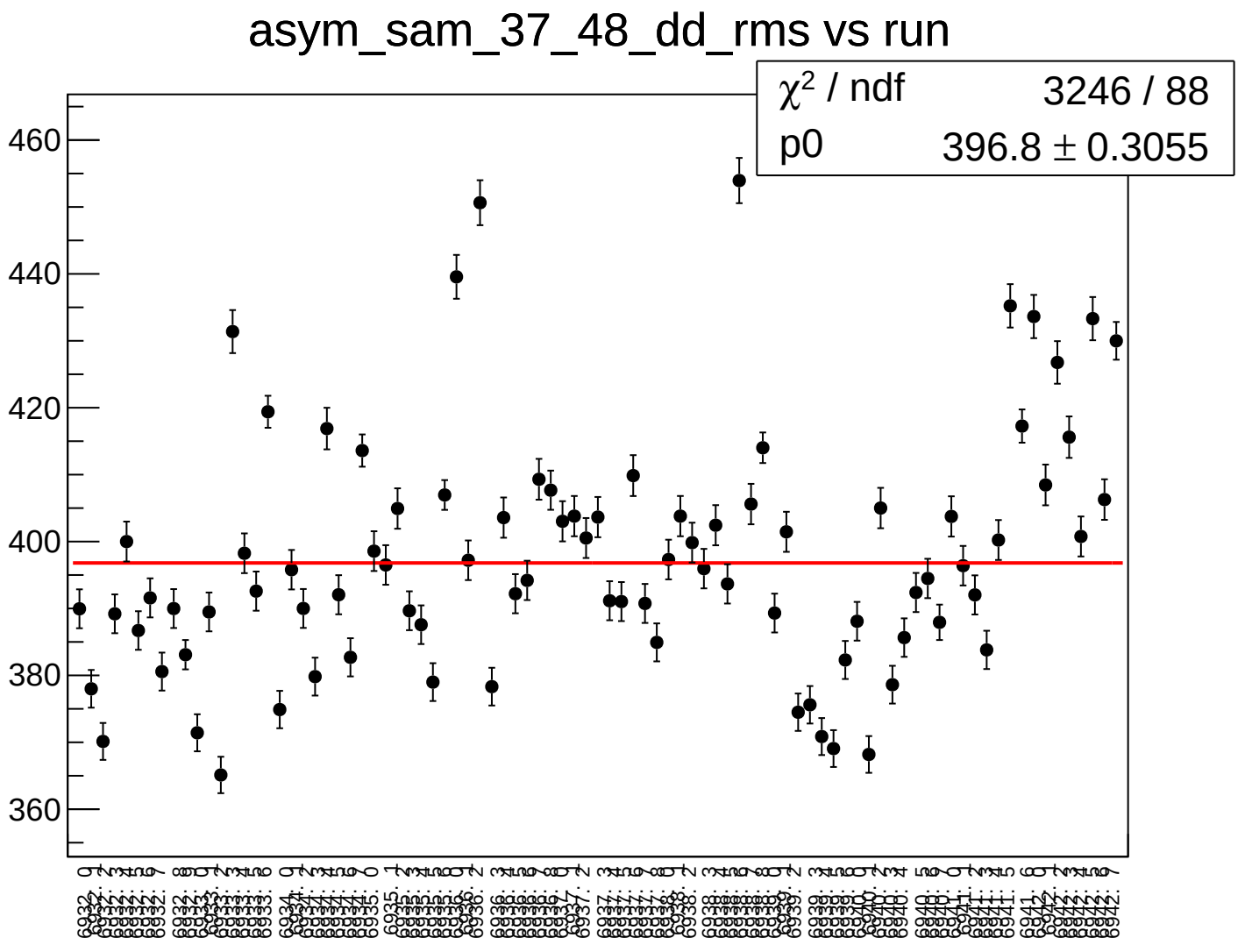


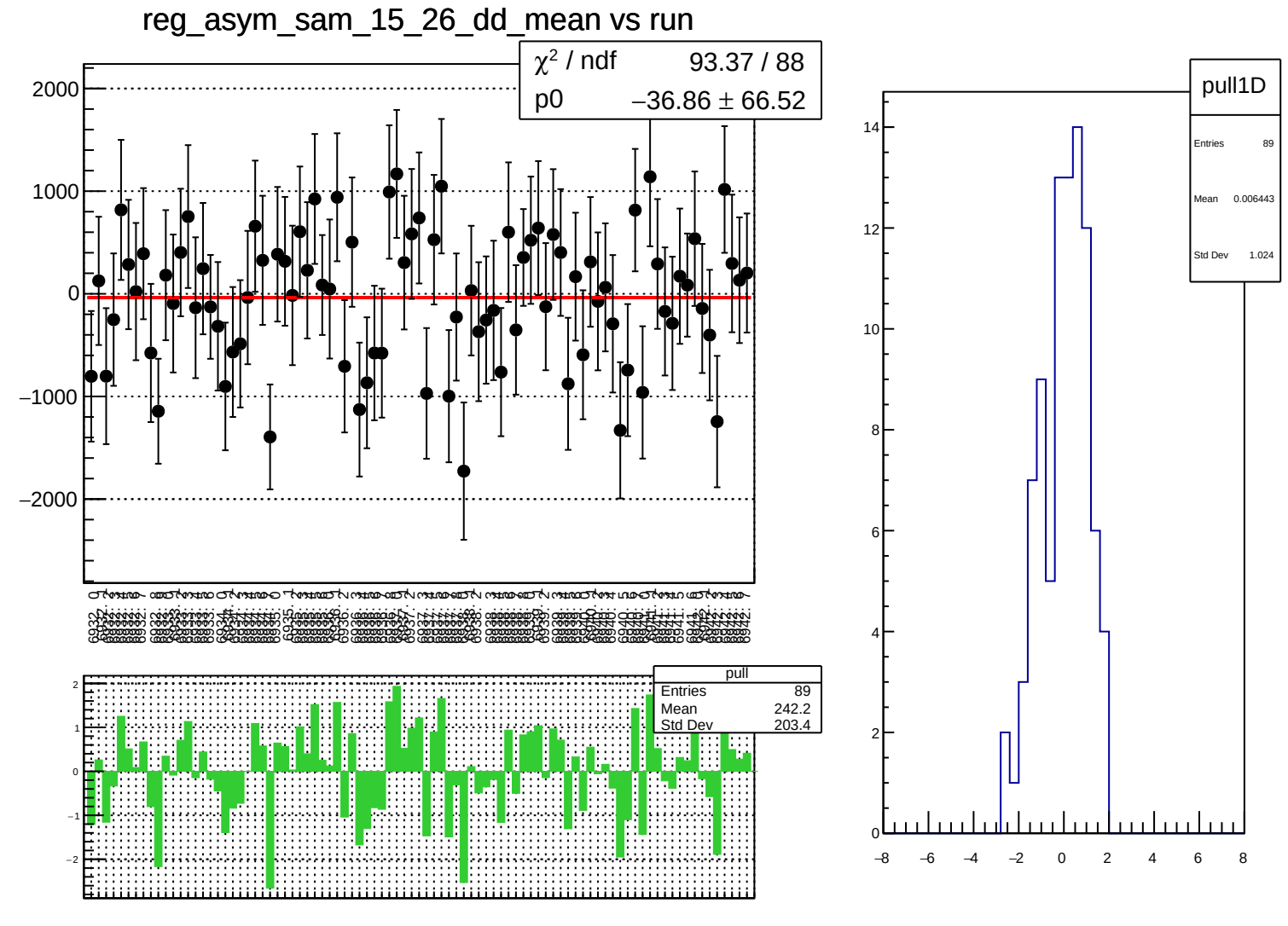


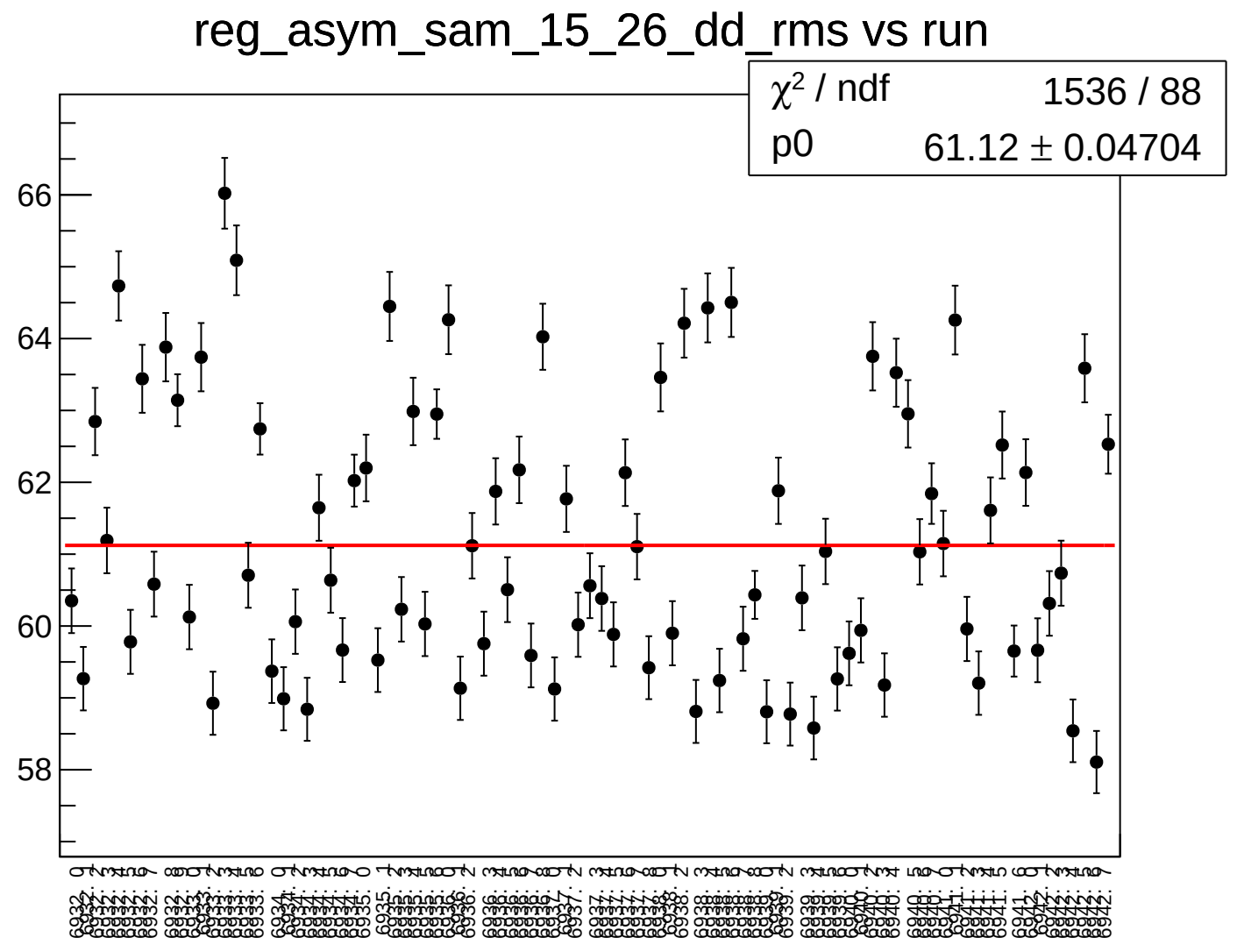

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 3411 / 88
p0 391.2 ± 0.3012
460
440
420
400
380
360

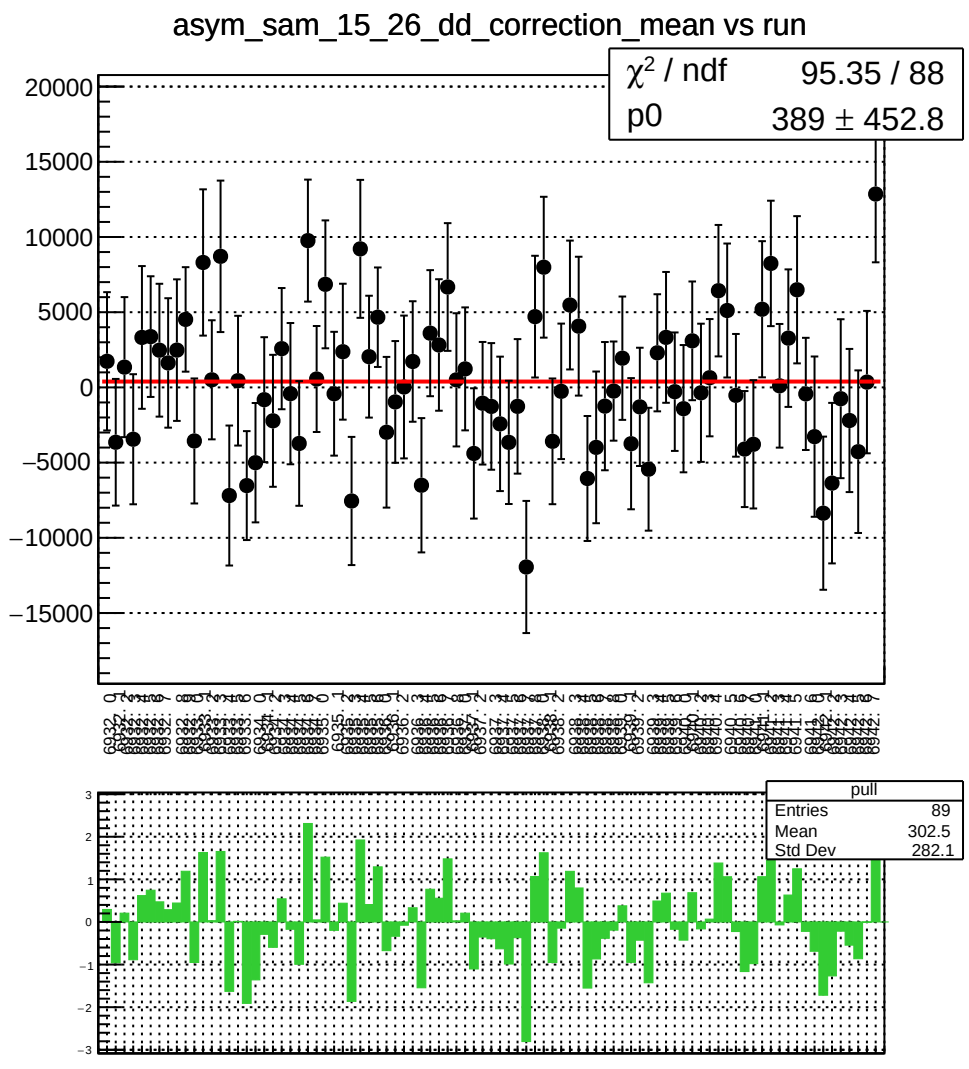

asym_sam_37_48_dd_mean vs run
χ² / ndf 69.66 / 88
p0 462.9 ± 432.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 1916
Std Dev 1871
2
1
0
−1
−2

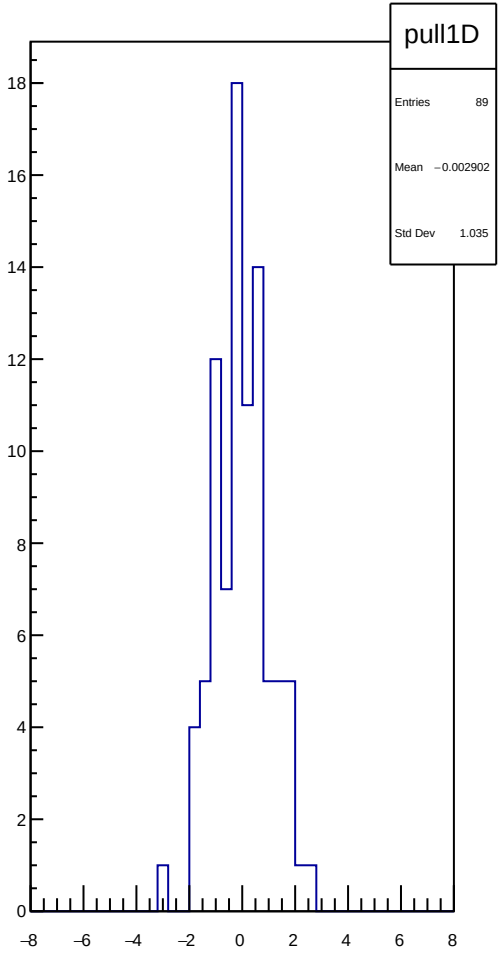

pull1D
Entries 89
Mean −0.001945
Std Dev 0.8847
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

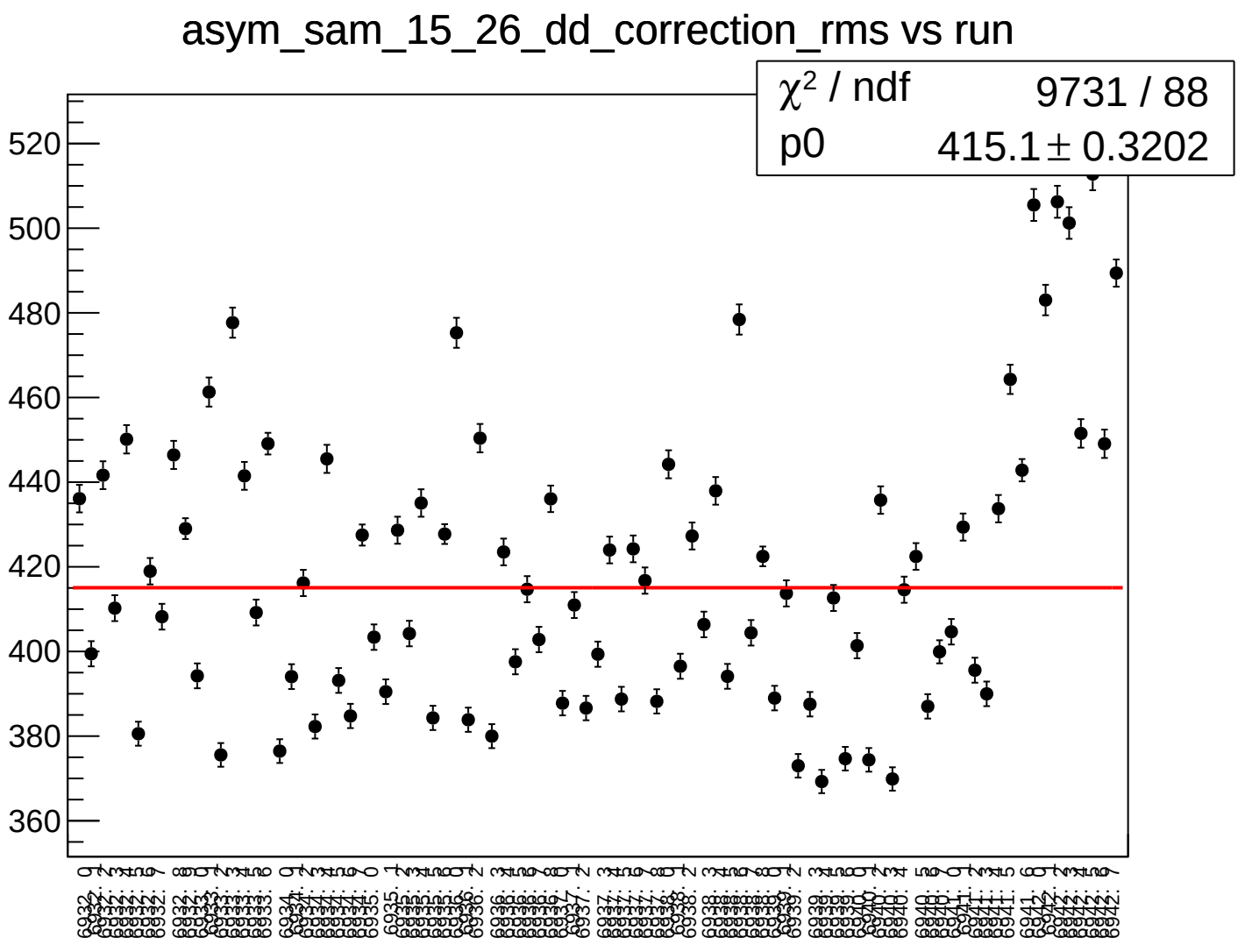

asym_sam_37_48_dd_rms vs run
χ² / ndf 3246 / 88
p0 396.8 ± 0.3055
460
440
420
400
380
360

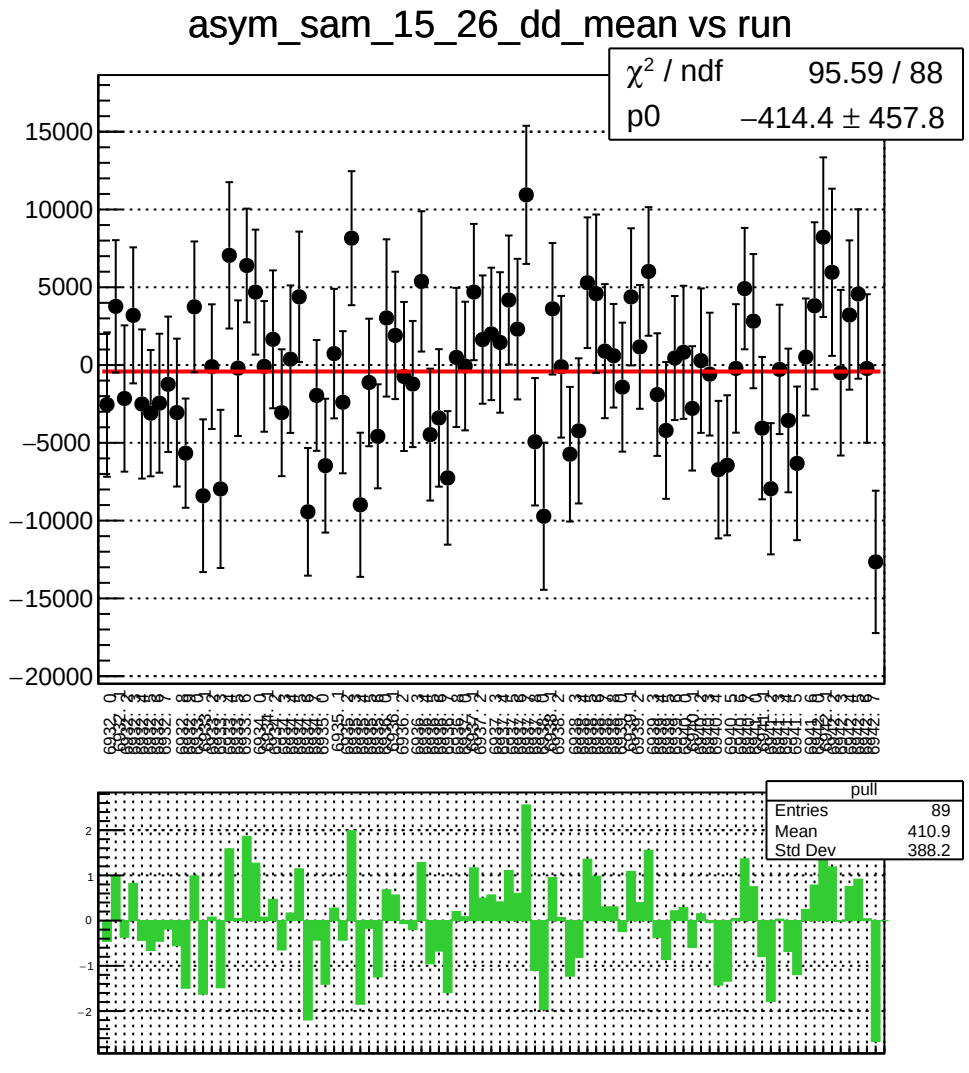

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 93.37 / 88
p0 −36.86 ± 66.52
2000
1000
0
−1000
−2000
pull
Entries 89
Mean 242.2
Std Dev 203.4
2
1
0
−1
−2
pull1D
Entries 89
Mean 0.006443
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

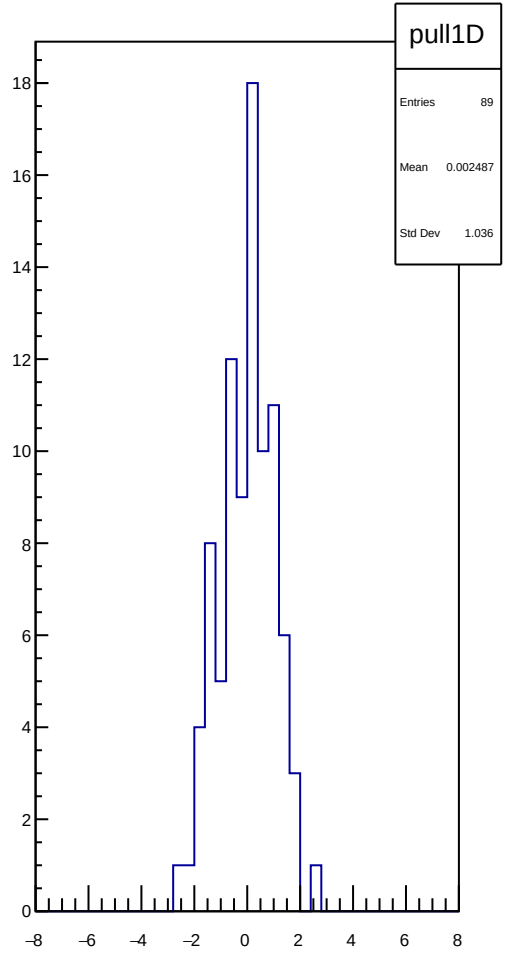

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 1536 / 88
p0 61.12 ± 0.04704
66
64
62
60
58

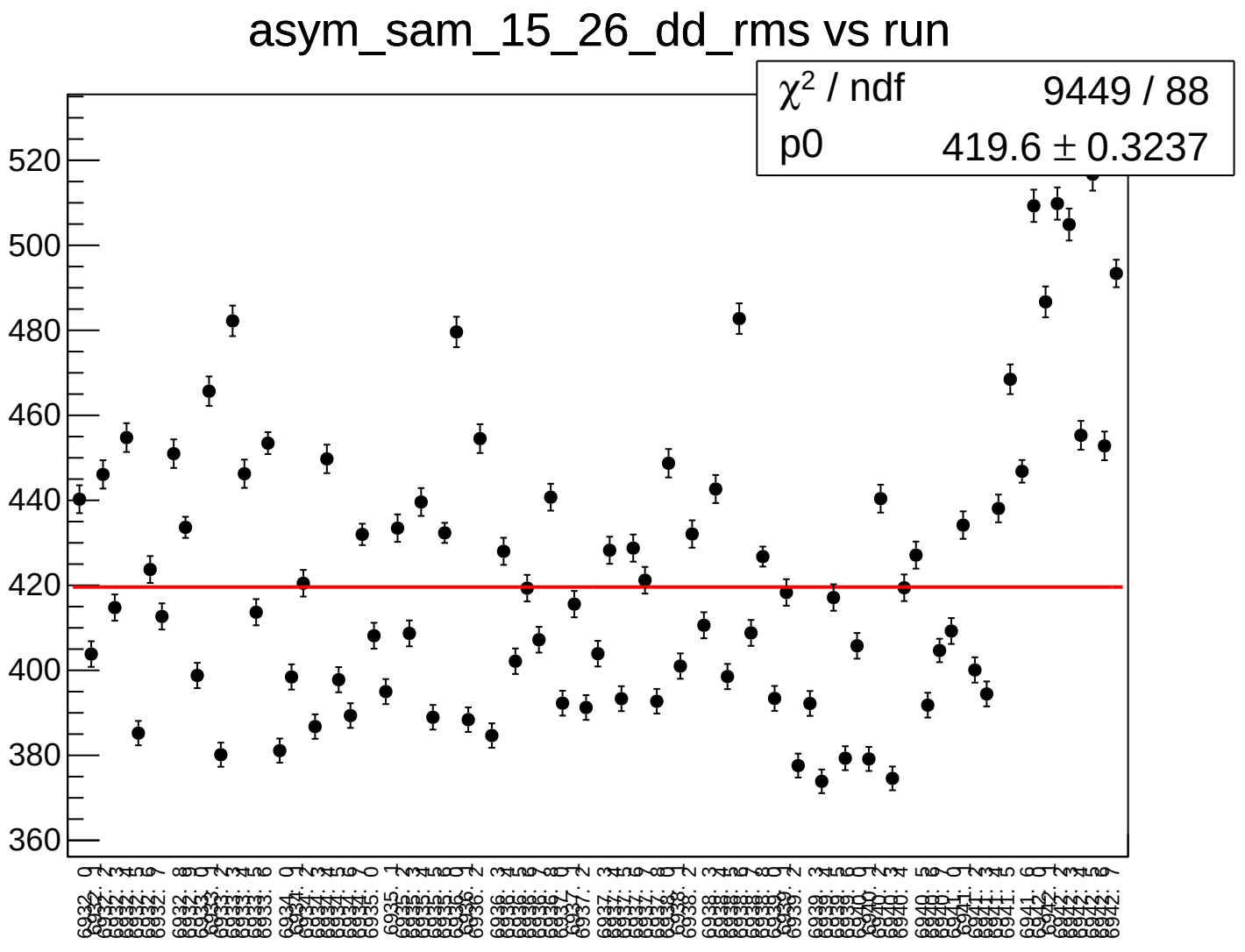

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 95.35 / 88
p0 389 ± 452.8
pull
Entries 89
Mean 302.5
Std Dev 282.1

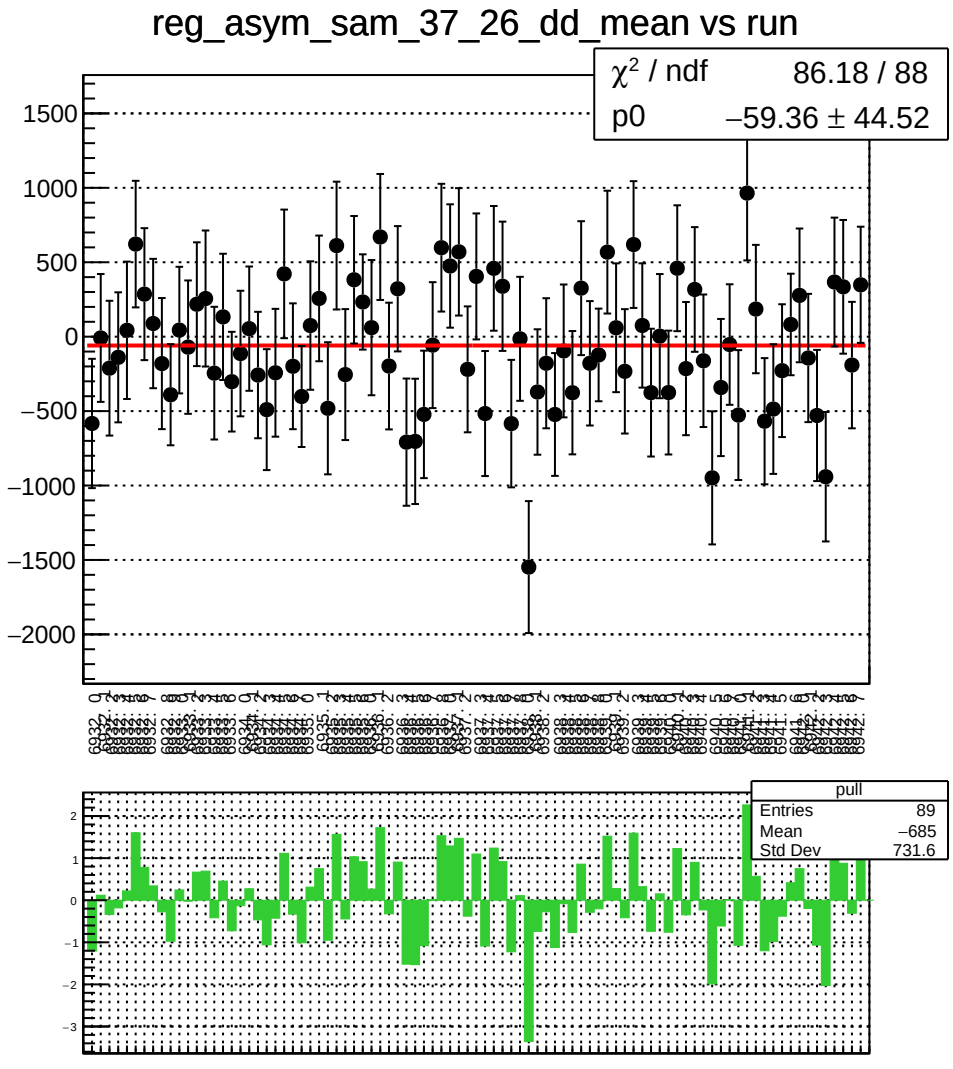

pull1D
Entries 89
Mean −0.002902
Std Dev 1.035

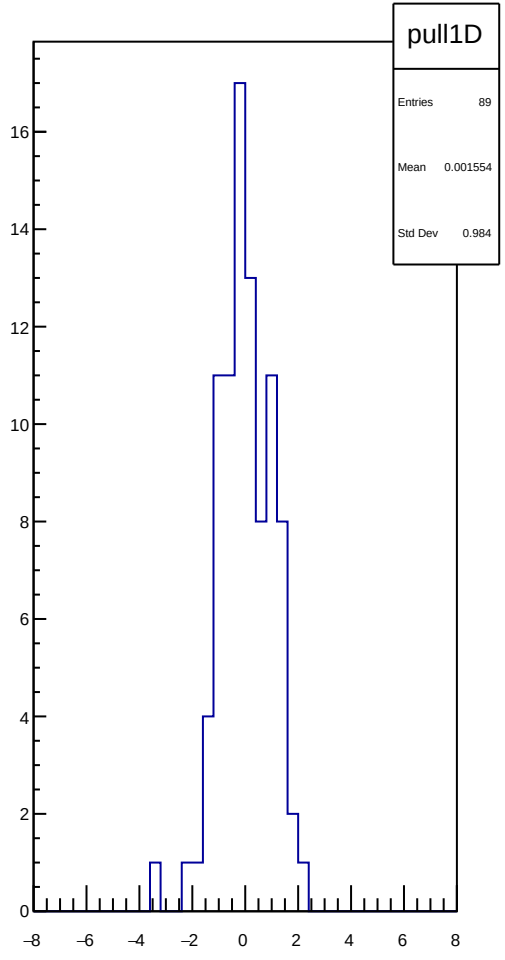

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 9731 / 88
p0 415.1 ± 0.3202
520
500
480
460
440
420
400
380
360

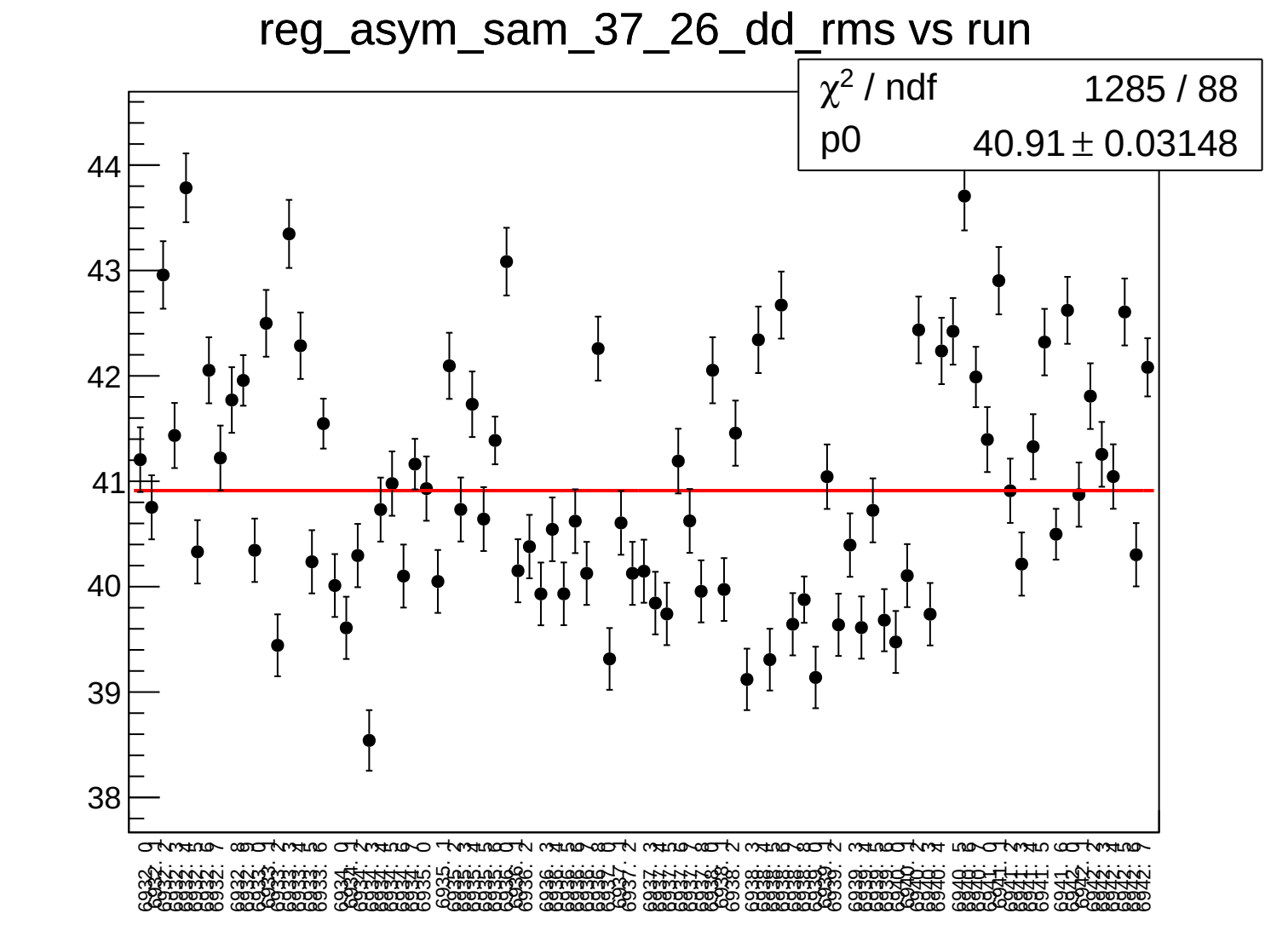

asym_sam_15_26_dd_mean vs run
χ² / ndf 95.59 / 88
p0 −414.4 ± 457.8
pull
Entries 89
Mean 410.9
Std Dev 388.2

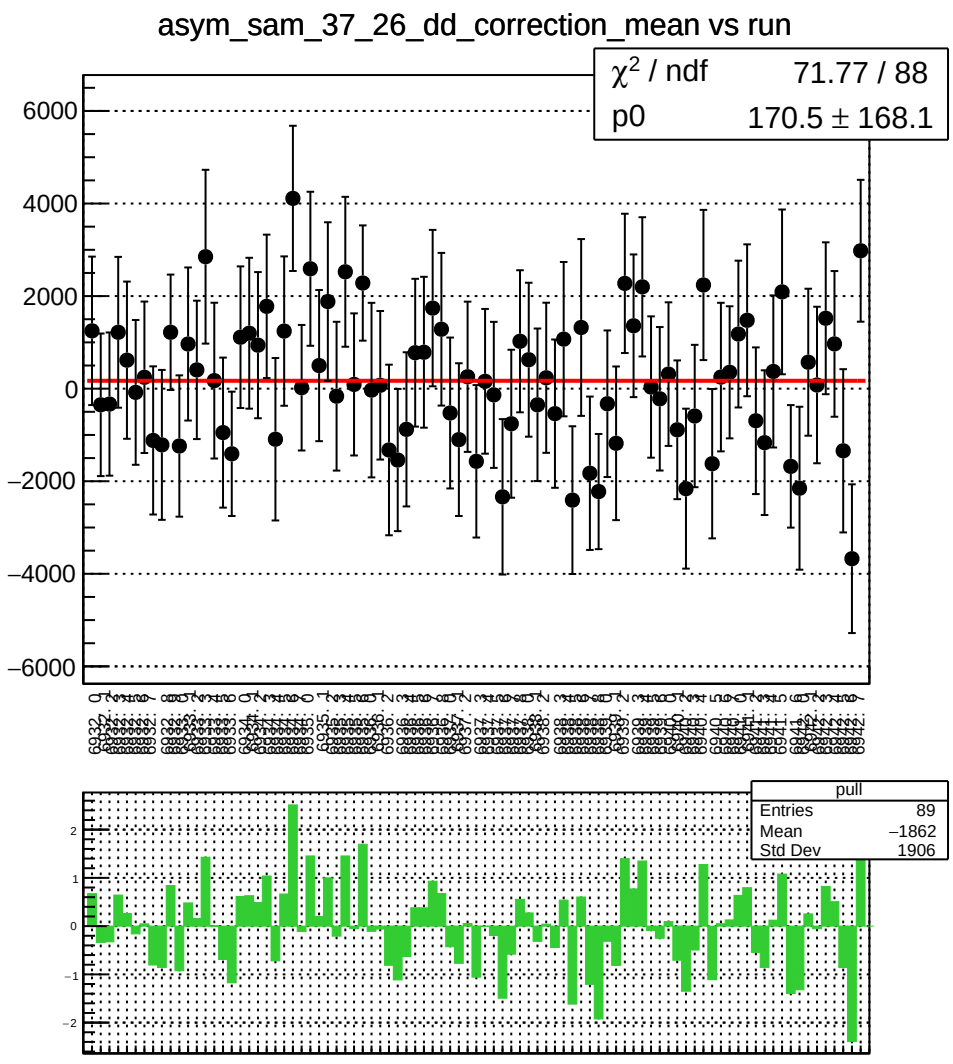

pull1D
Entries 89
Mean 0.002487
Std Dev 1.036

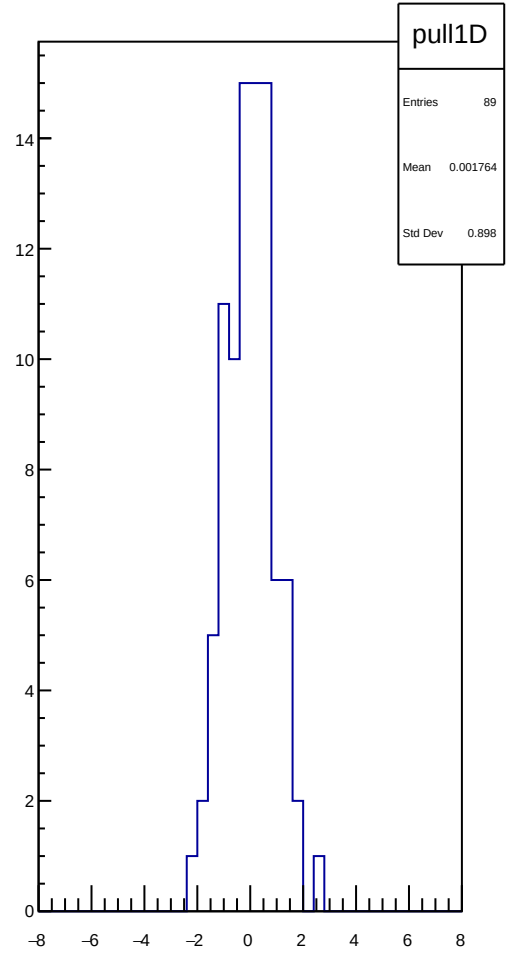

asym_sam_15_26_dd_rms vs run
χ² / ndf 9449 / 88
p0 419.6 ± 0.3237
520
500
480
460
440
420
400
380
360

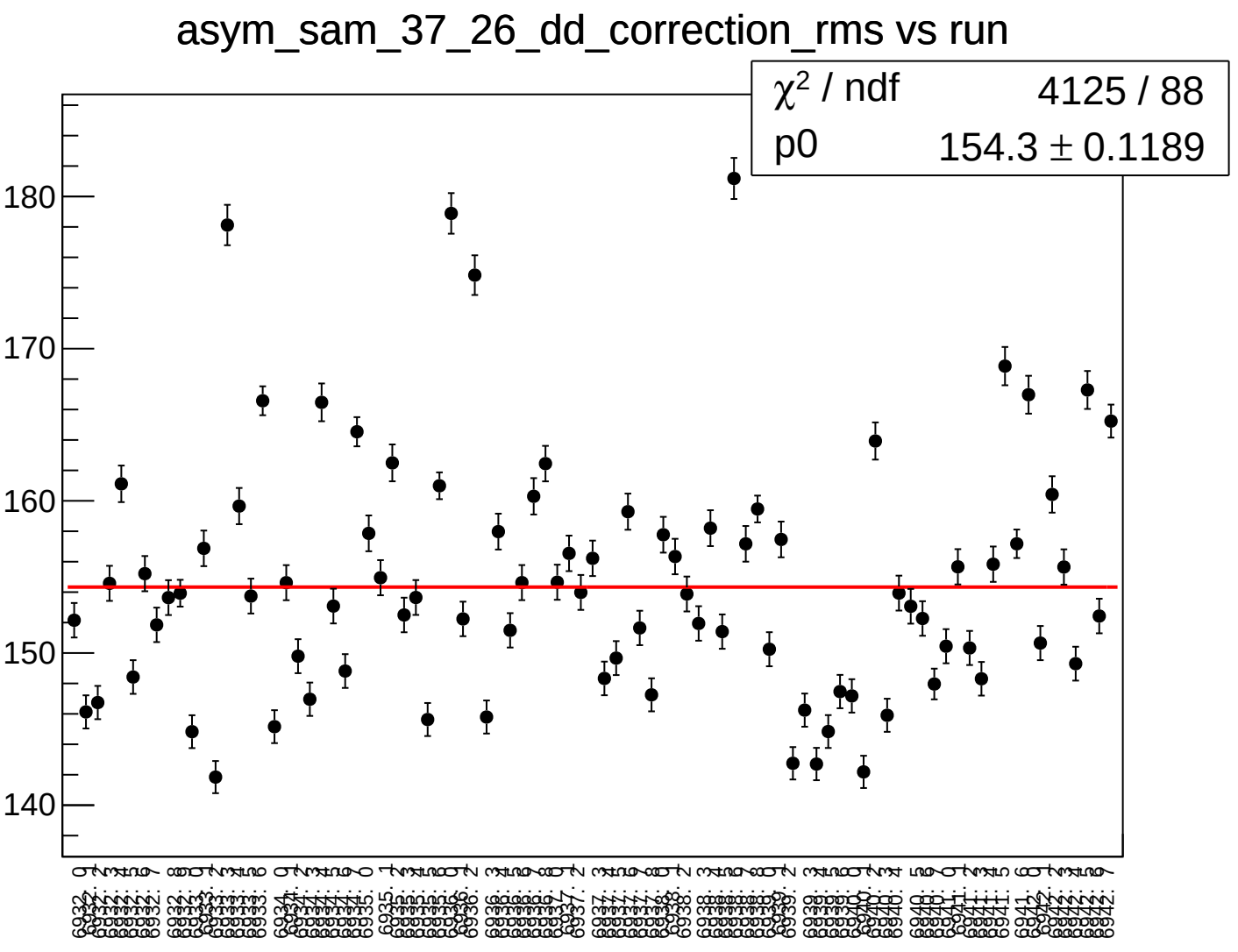

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 86.18 / 88
p0 −59.36 ± 44.52
1500
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 89
Mean −685
Std Dev 731.6
2
1
0
−1
−2
−3

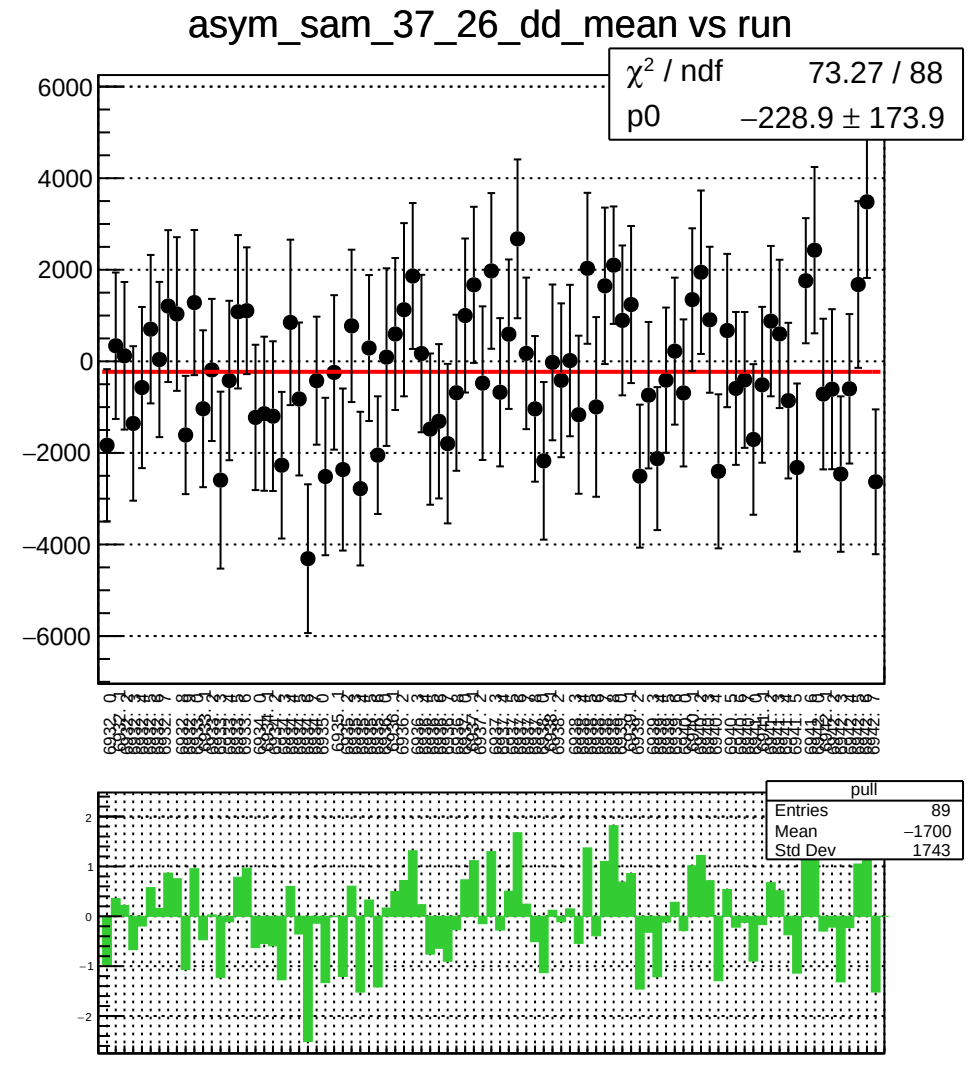

pull1D
Entries 89
Mean 0.001554
Std Dev 0.984
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

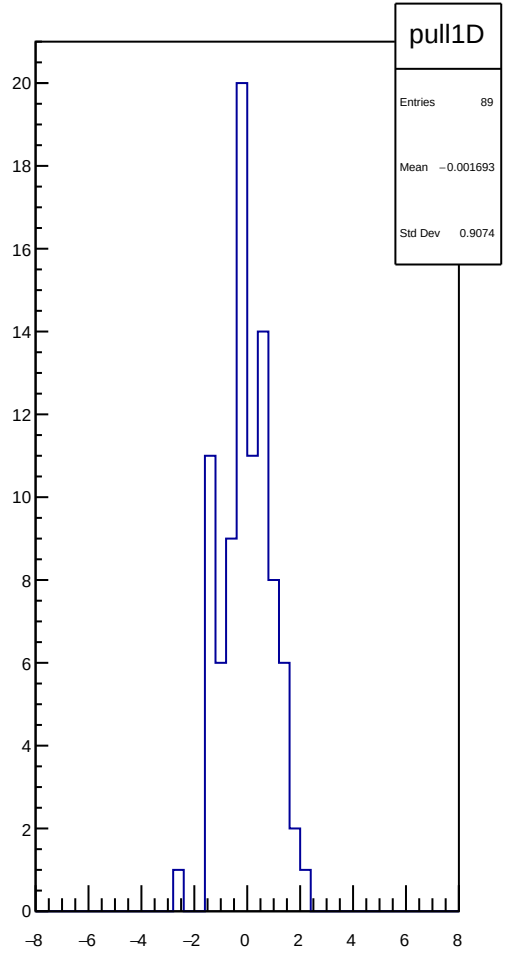

reg_asym_sam_37_26_dd_rms vs run
χ^2 / ndf 1285 / 88
p0 40.91 ± 0.03148
44
43
42
41
40
39
38

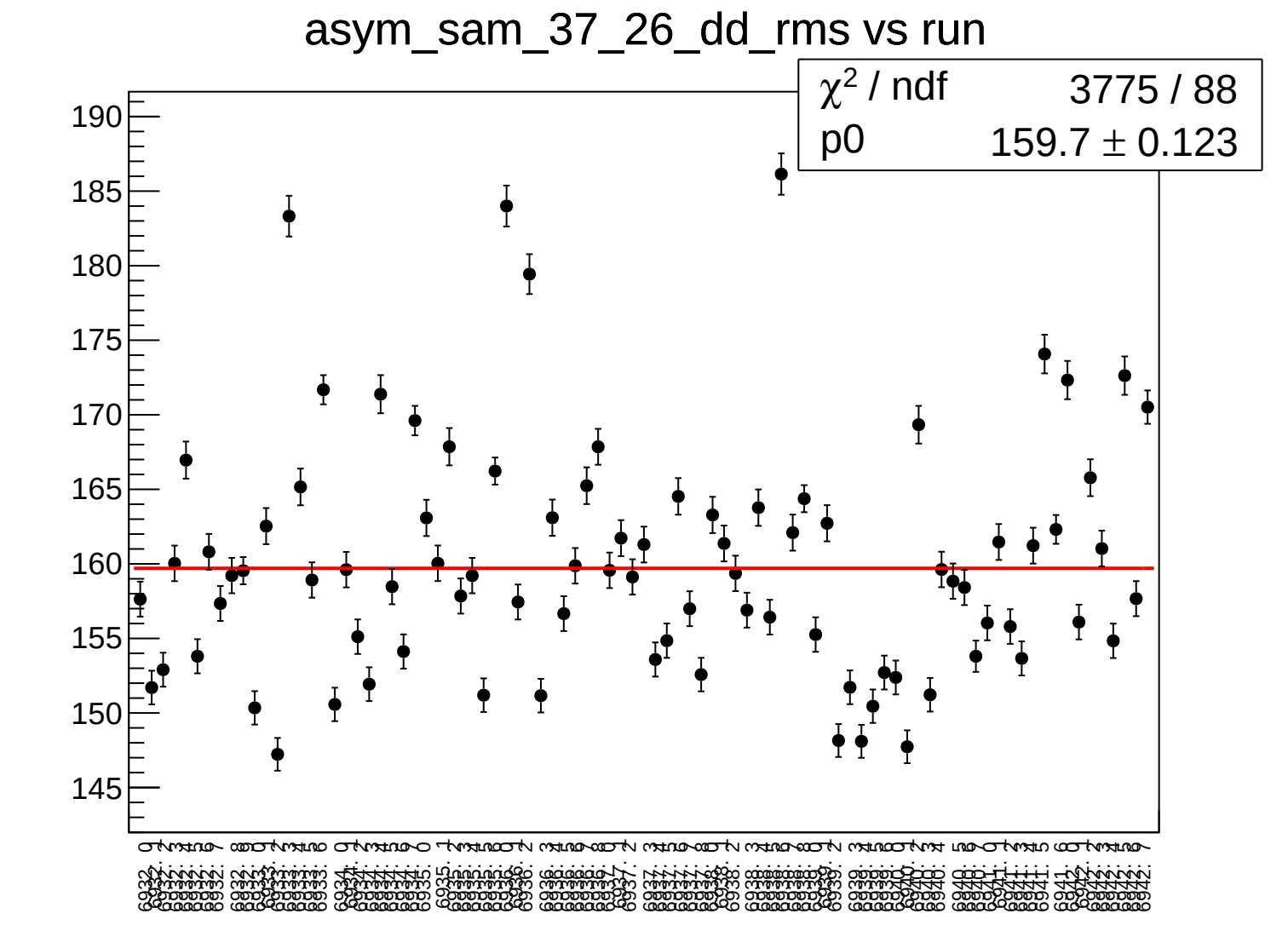

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 71.77 / 88
p0 170.5 ± 168.1
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean −1862
Std Dev 1906
2
1
0
−1
−2

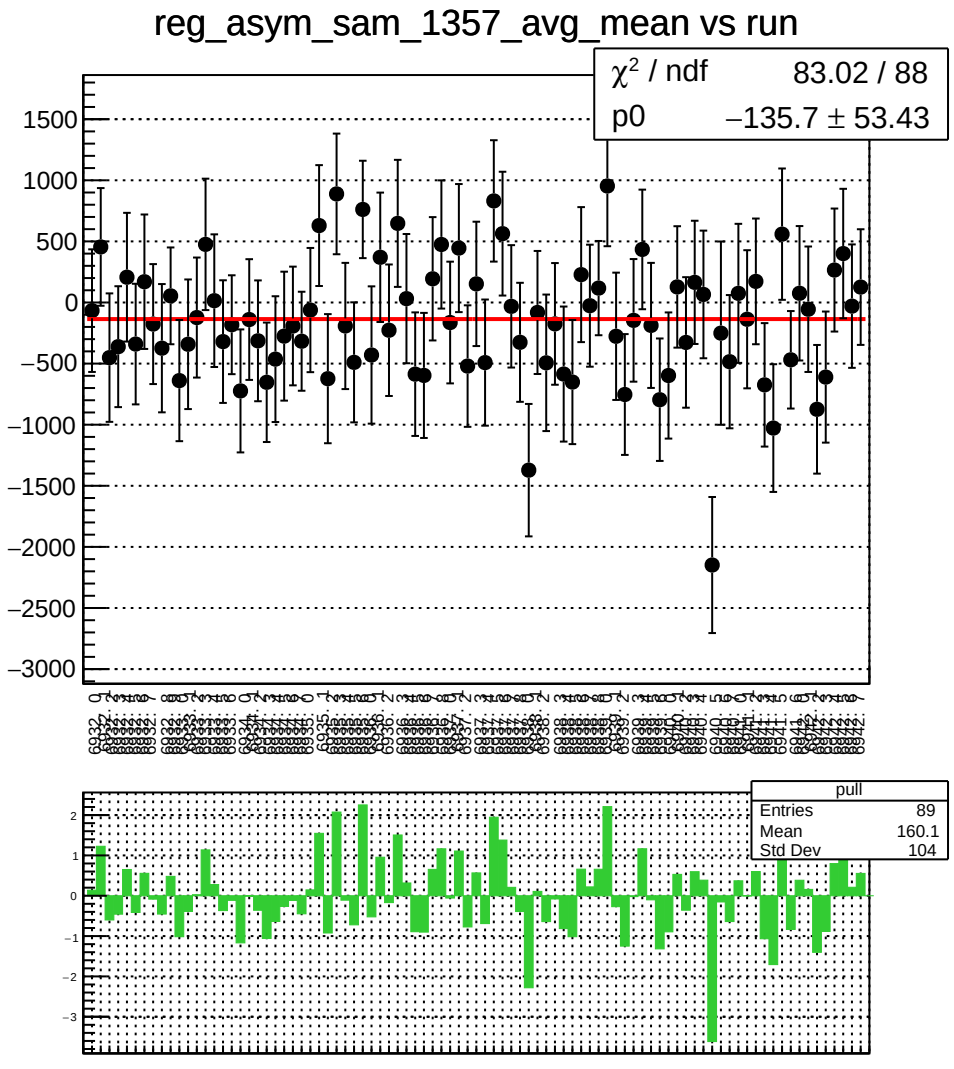

pull1D
Entries 89
Mean 0.001764
Std Dev 0.898
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

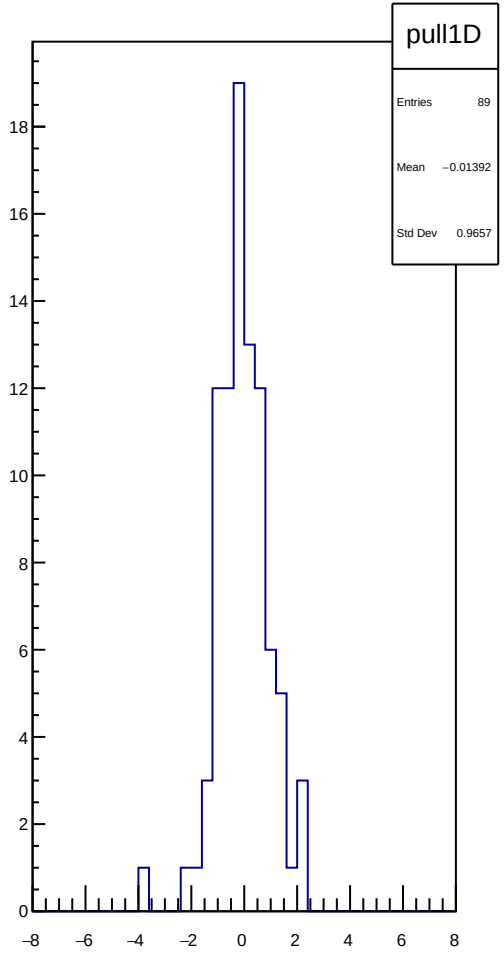

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 4125 / 88
p0 154.3 ± 0.1189
180
170
160
150
140

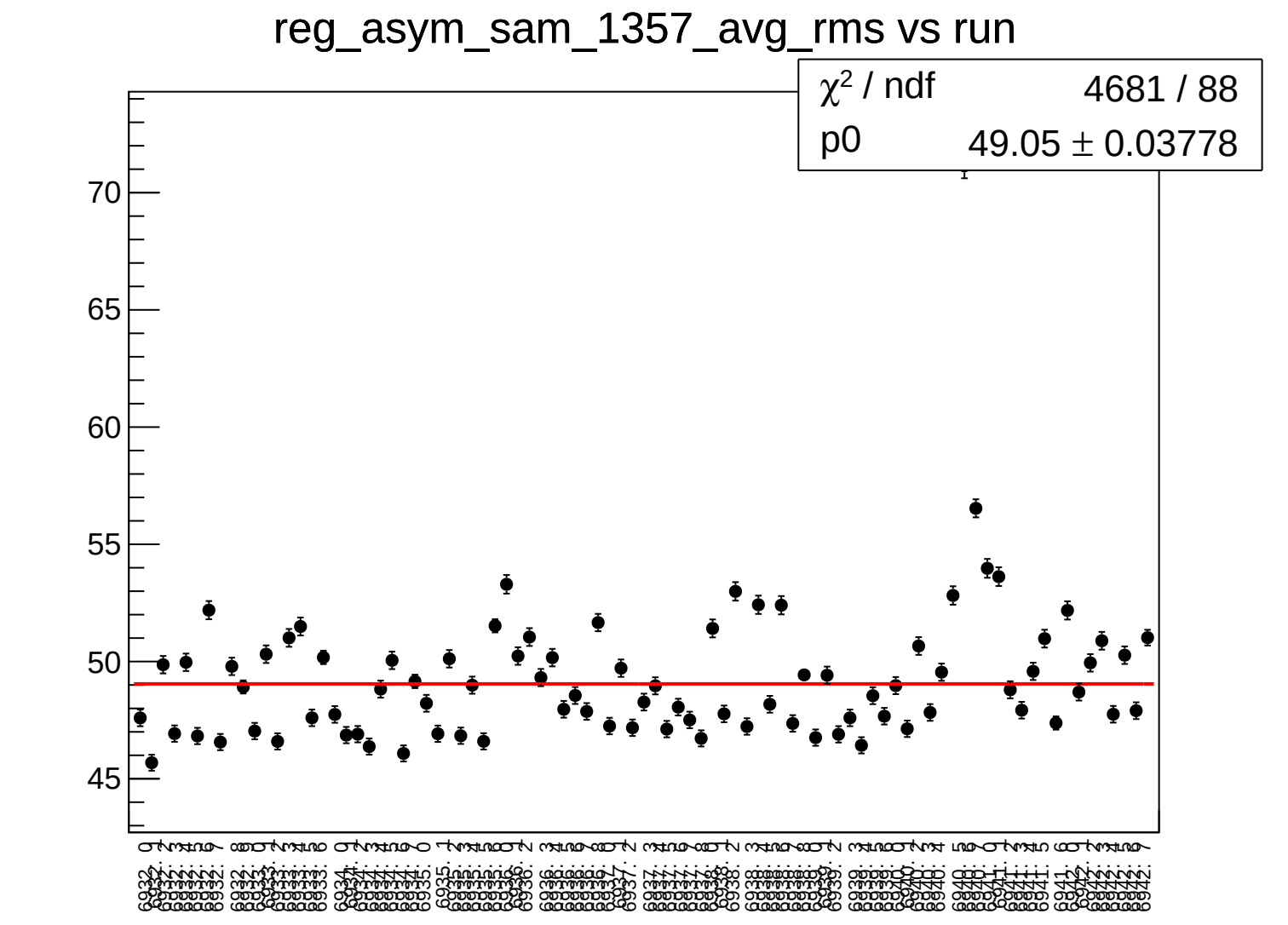

asym_sam_37_26_dd_mean vs run
χ² / ndf 73.27 / 88
p0 −228.9 ± 173.9
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 89
Mean −1700
Std Dev 1743
2
1
0
−1
−2

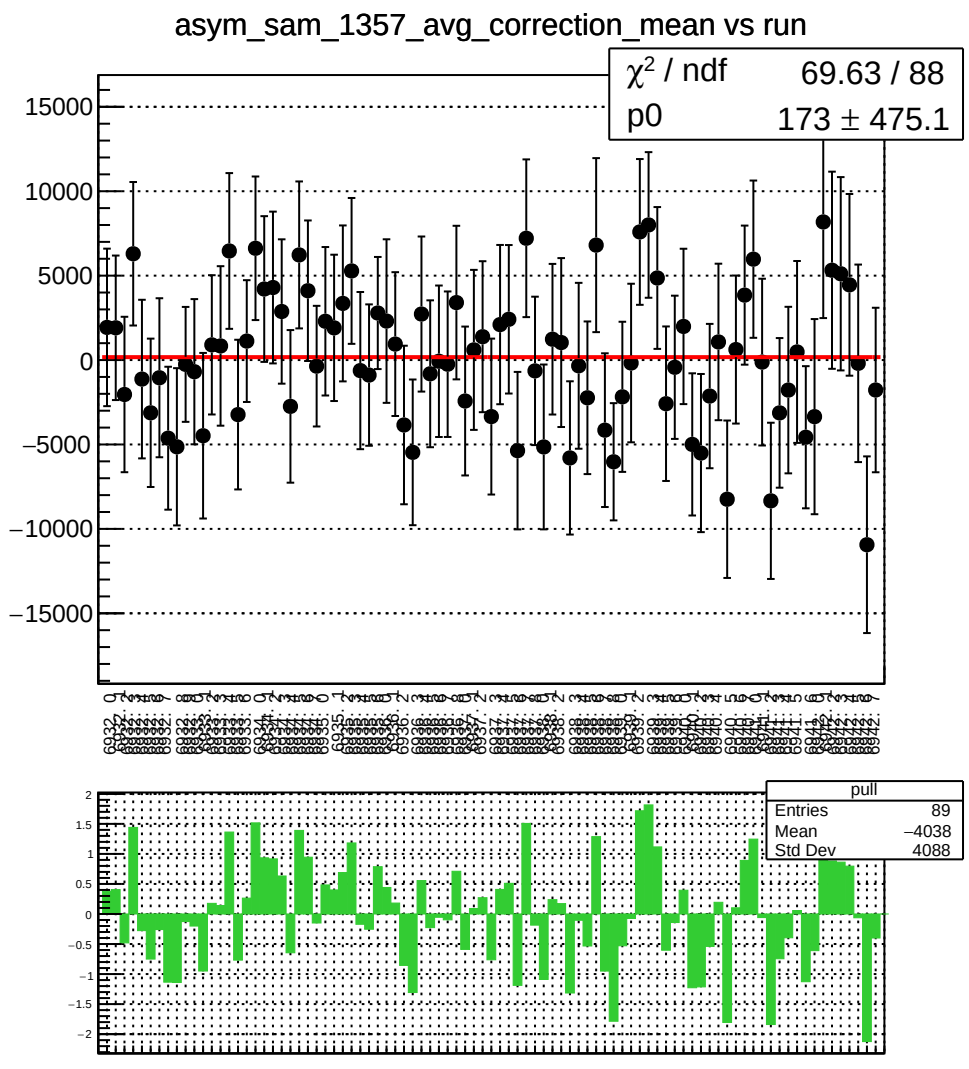

pull1D
Entries 89
Mean −0.001693
Std Dev 0.9074
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

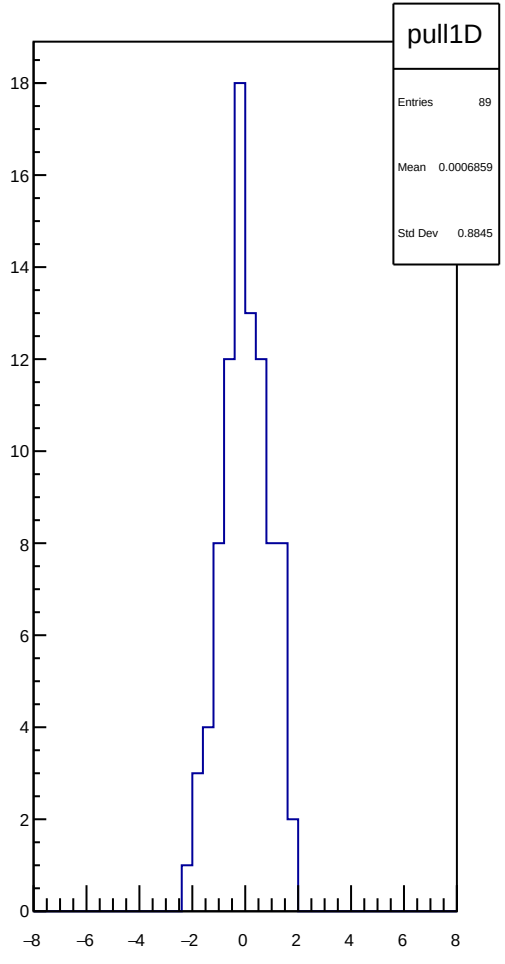

asym_sam_37_26_dd_rms vs run
χ² / ndf 3775 / 88
p0 159.7 ± 0.123
190
185
180
175
170
165
160
155
150
145

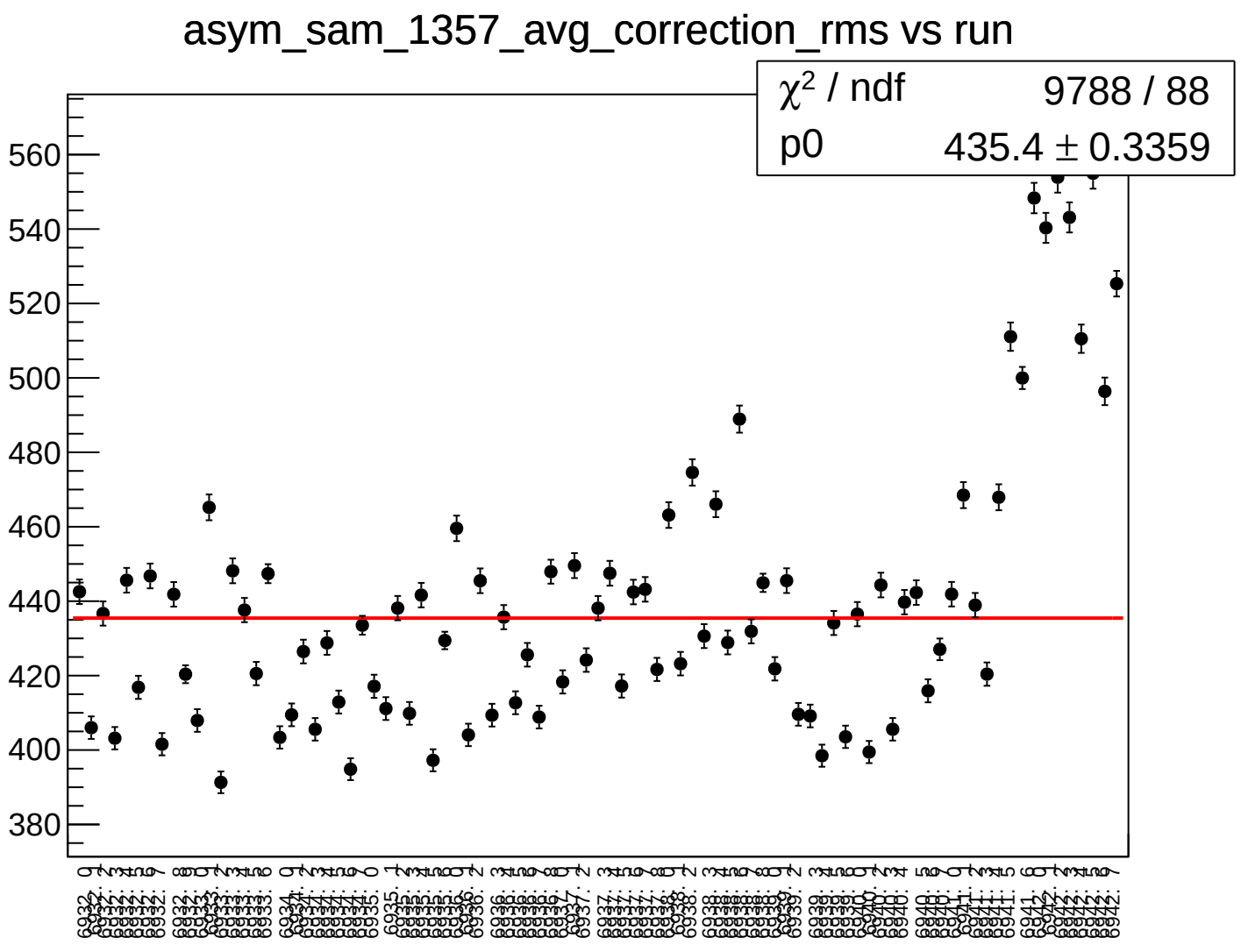

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 83.02 / 88
p0 −135.7 ± 53.43
pull
Entries 89
Mean 160.1
Std Dev 104

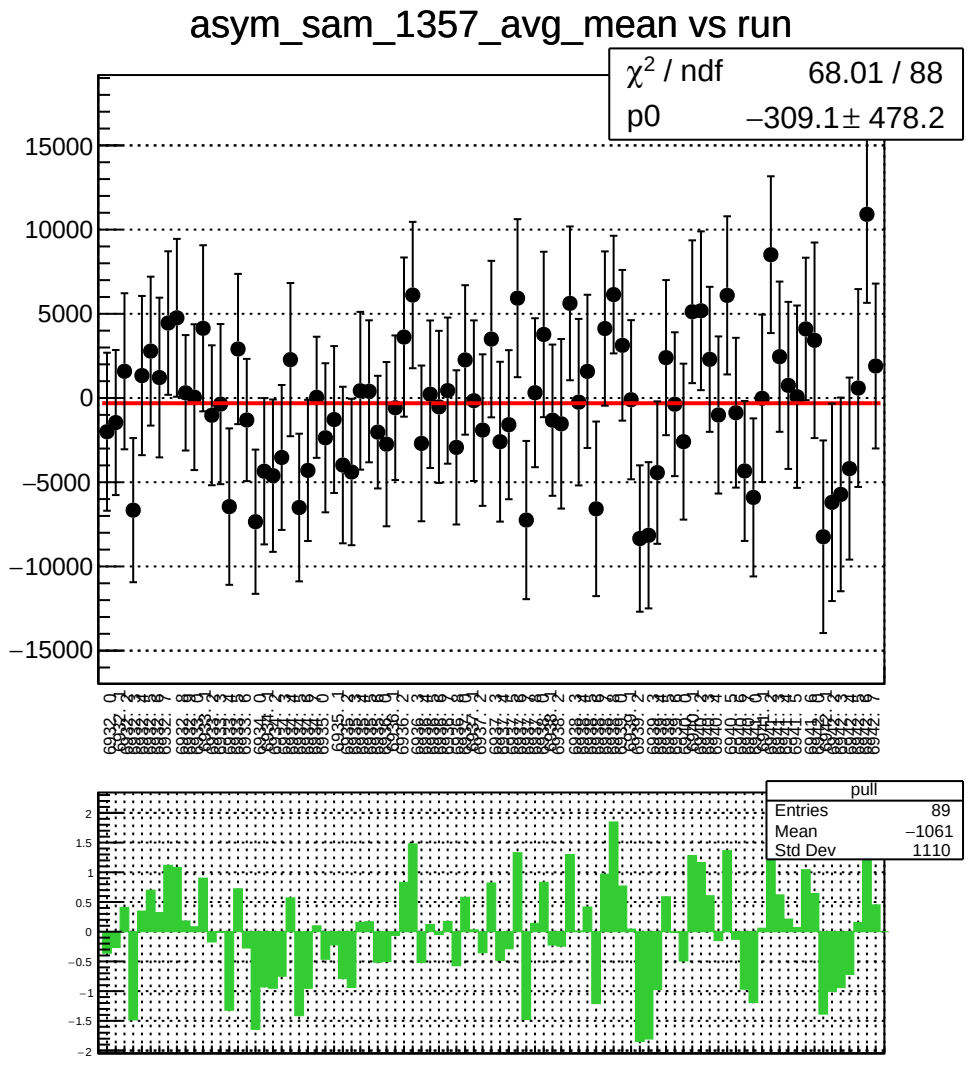

pull1D
Entries 89
Mean −0.01392
Std Dev 0.9657

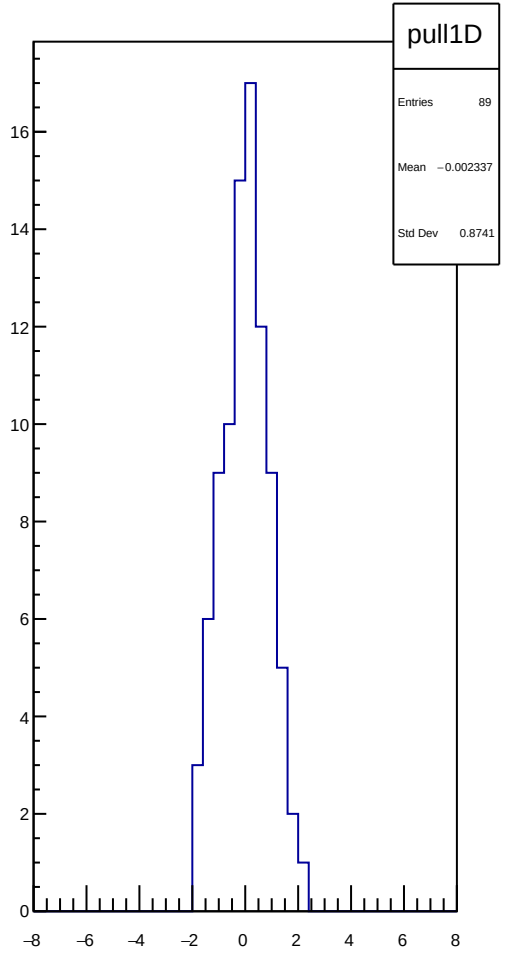

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 4681 / 88
p0 49.05 ± 0.03778
70
65
60
55
50
45

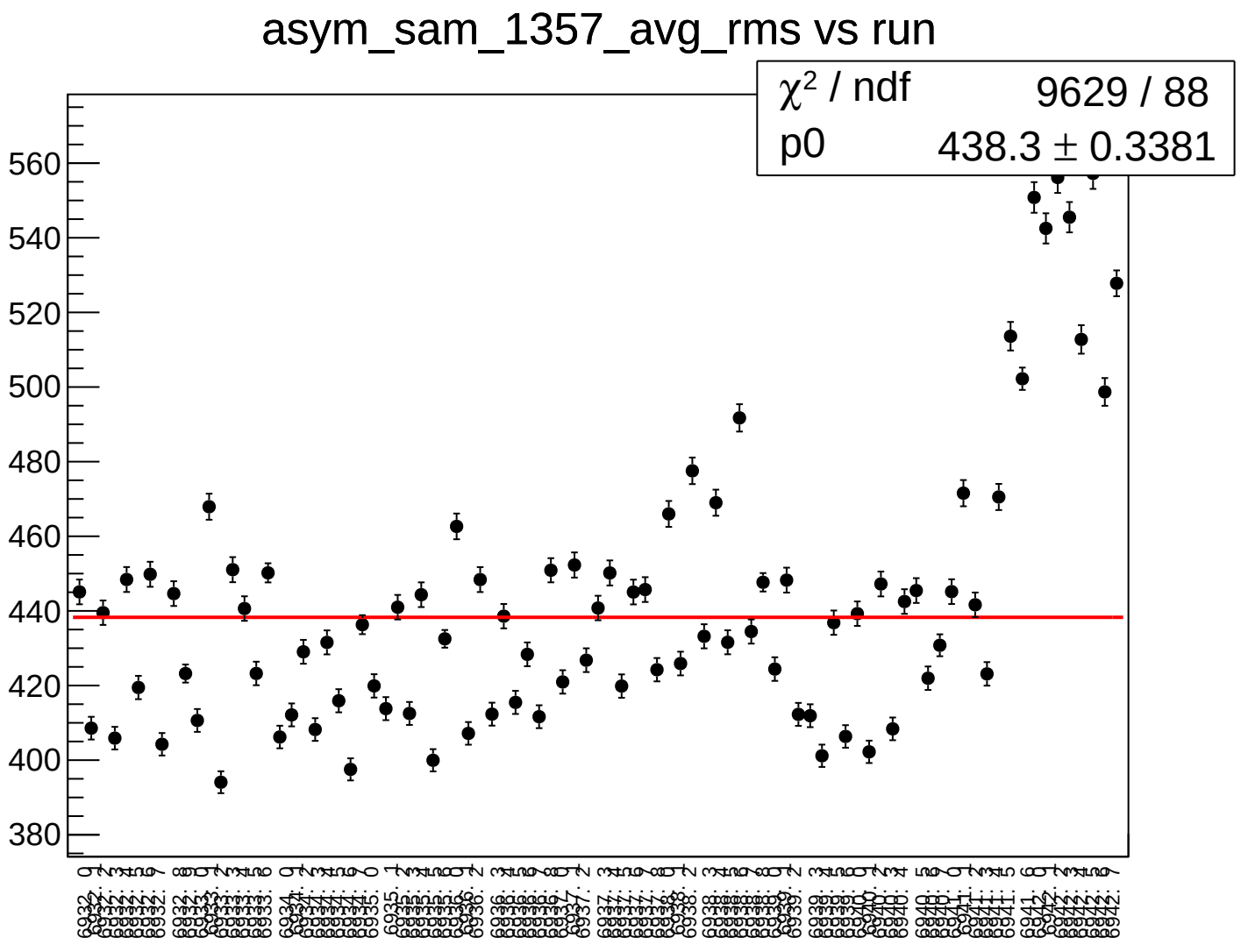

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 69.63 / 88
p0 173 ± 475.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −4038
Std Dev 4088
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

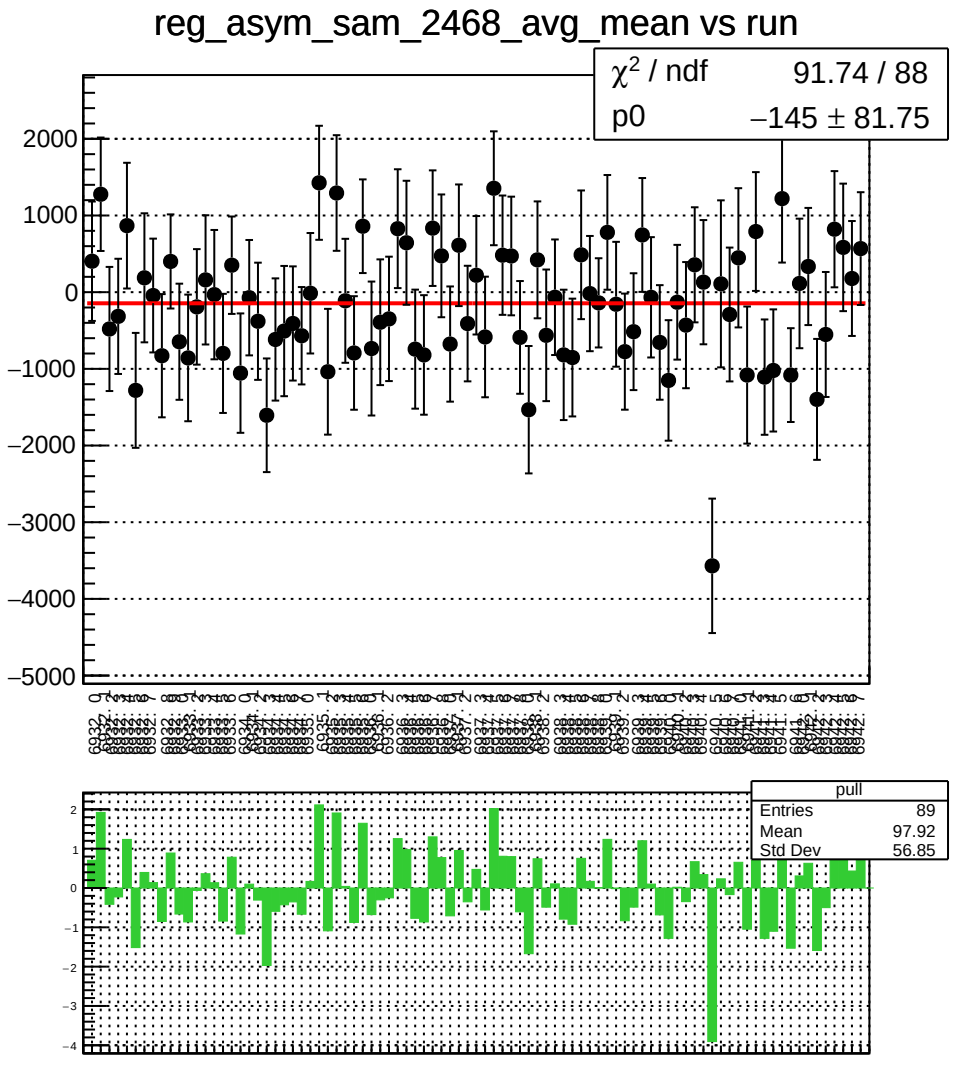

pull1D
Entries 89
Mean 0.0006859
Std Dev 0.8845
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

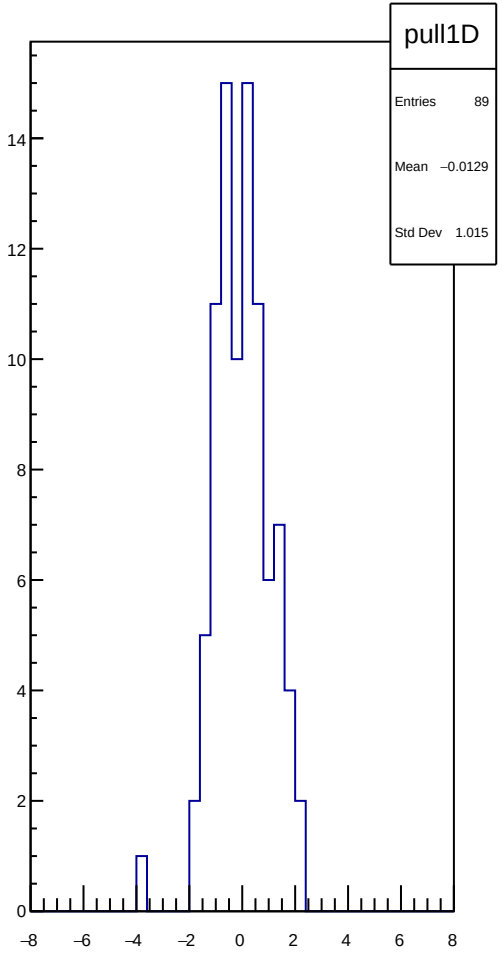

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 9788 / 88
p0 435.4 ± 0.3359
560
540
520
500
480
460
440
420
400
380

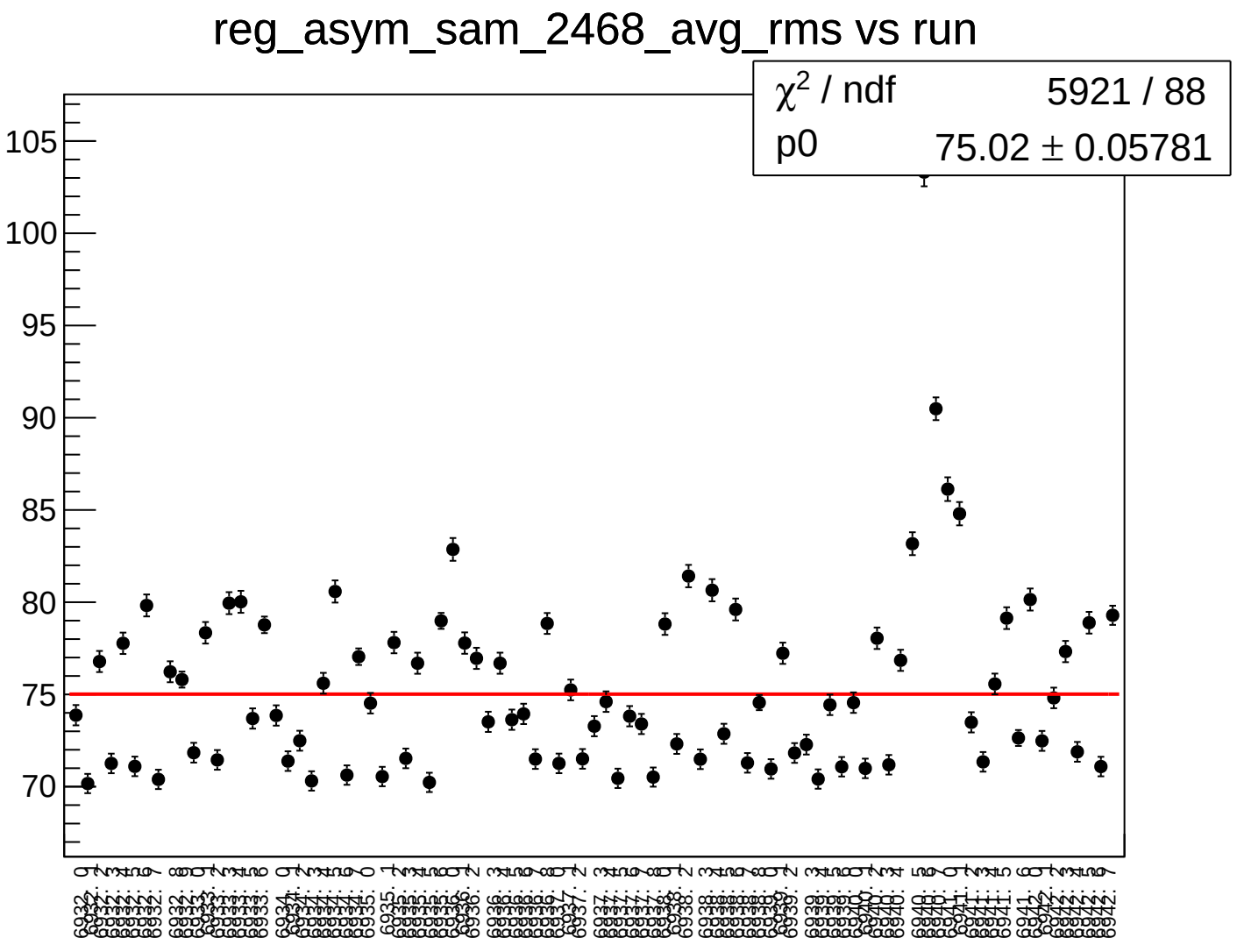

asym_sam_1357_avg_mean vs run
χ² / ndf 68.01 / 88
p0 −309.1 ± 478.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −1061
Std Dev 1110
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

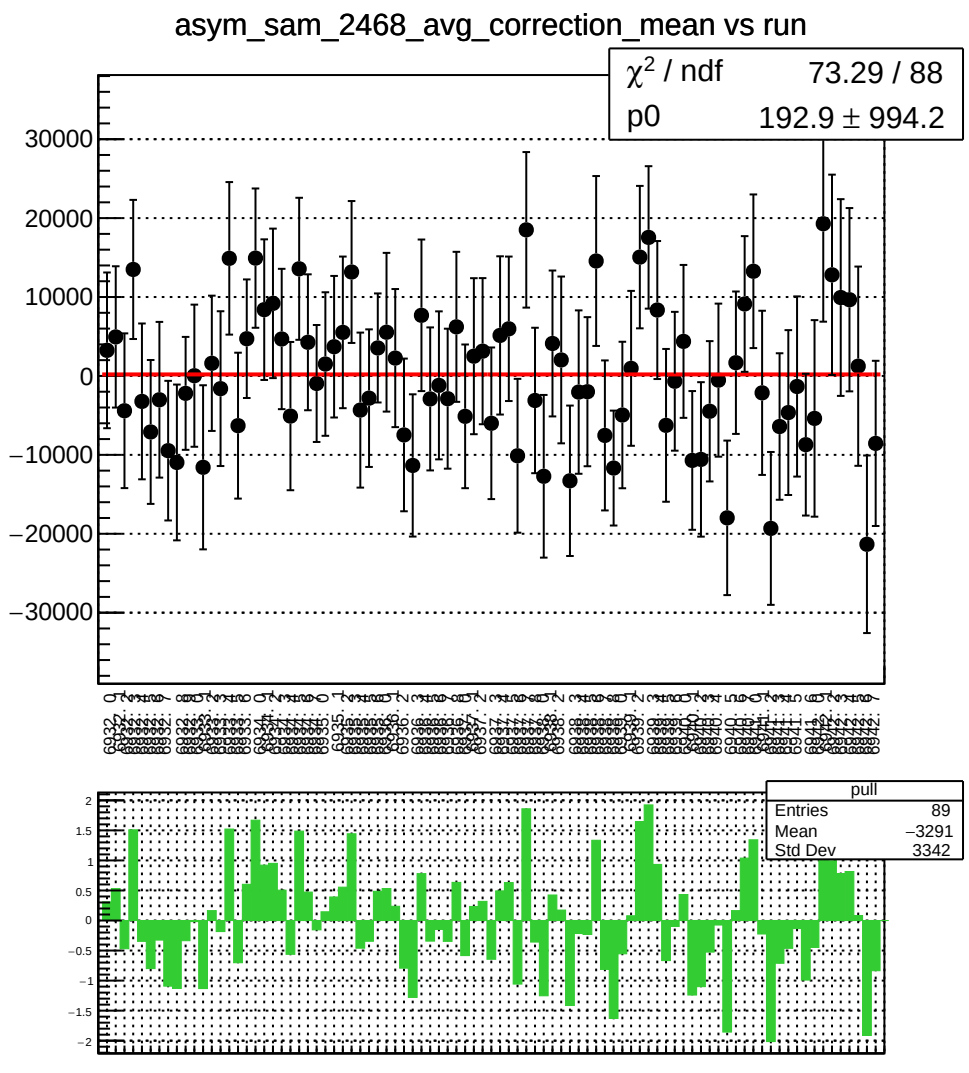

pull1D
Entries 89
Mean −0.002337
Std Dev 0.8741
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

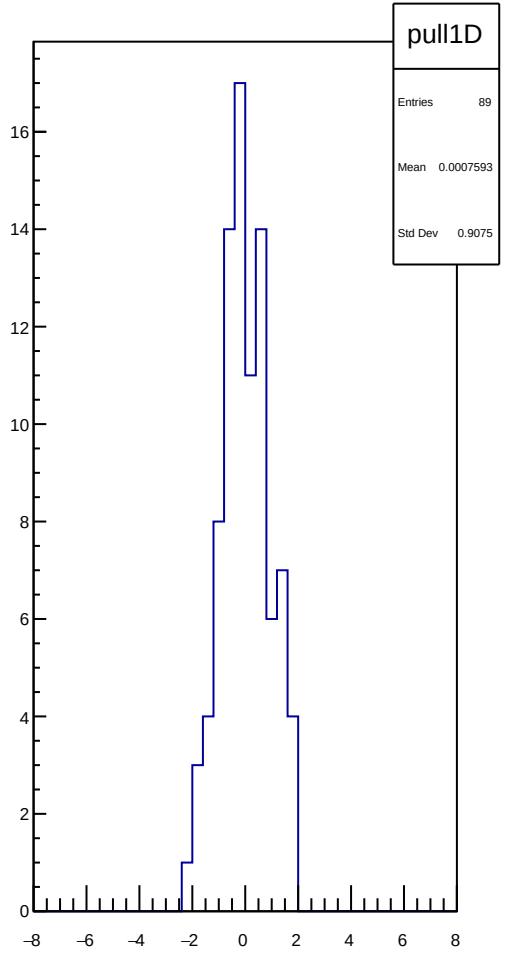

asym_sam_1357_avg_rms vs run
χ² / ndf 9629 / 88
p0 438.3 ± 0.3381
560
540
520
500
480
460
440
420
400
380

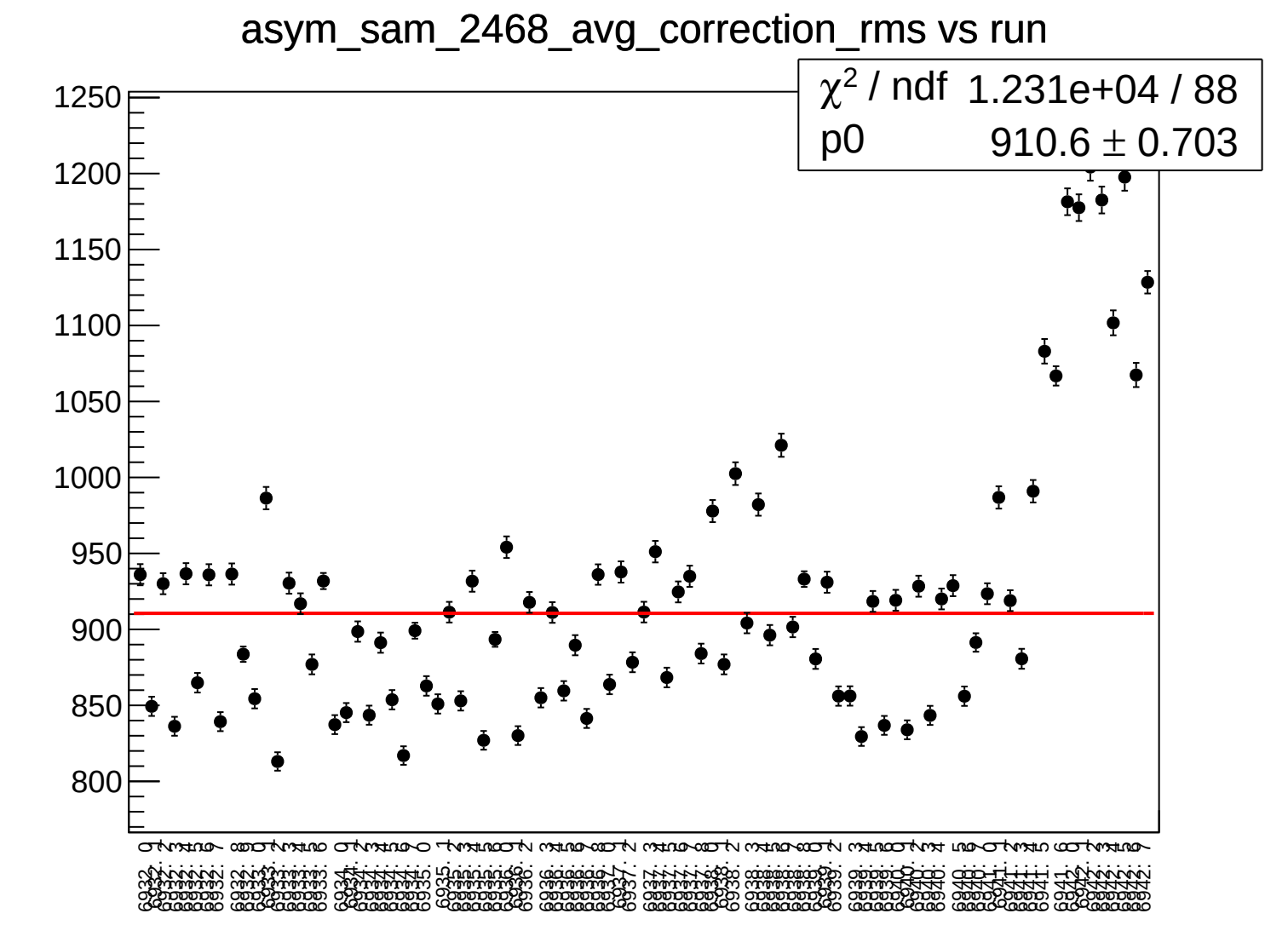

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 91.74 / 88
p0 −145 ± 81.75
pull
Entries 89
Mean 97.92
Std Dev 56.85

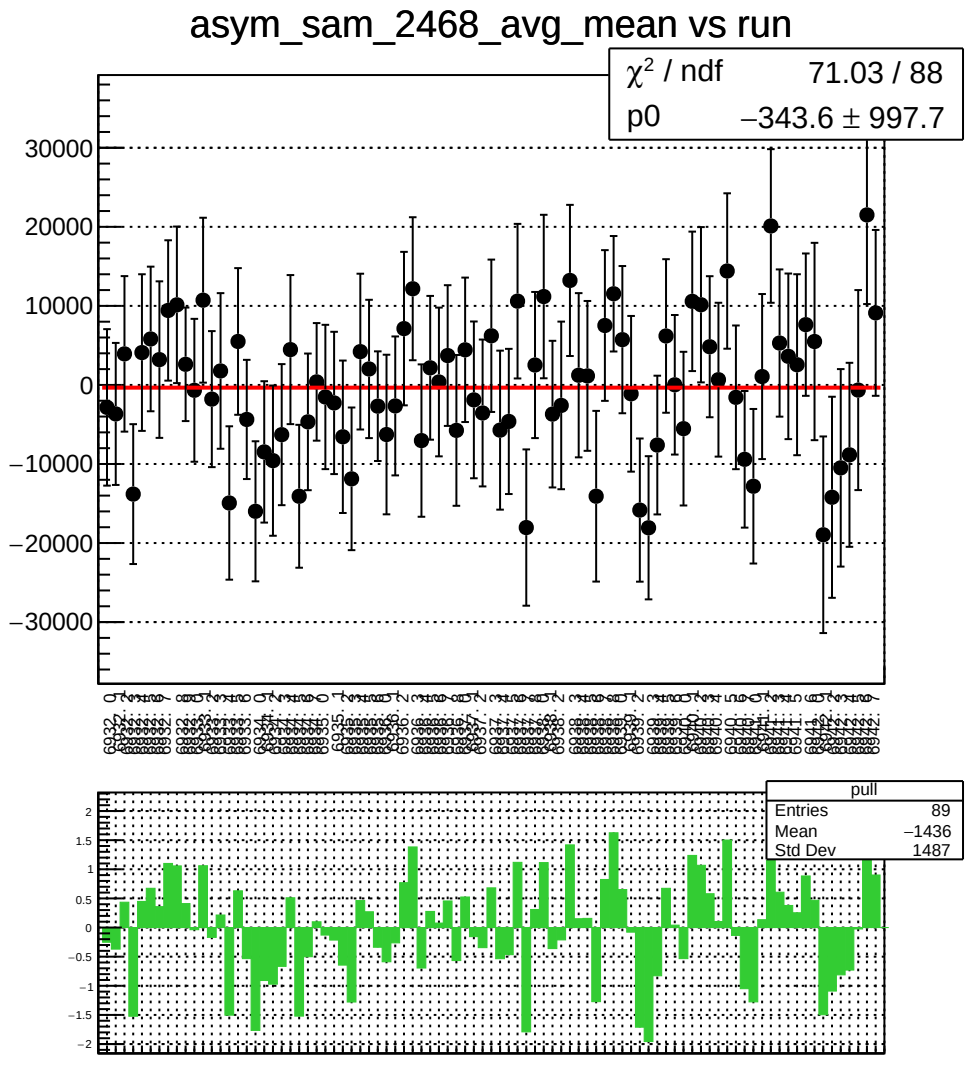

pull1D
Entries 89
Mean −0.0129
Std Dev 1.015

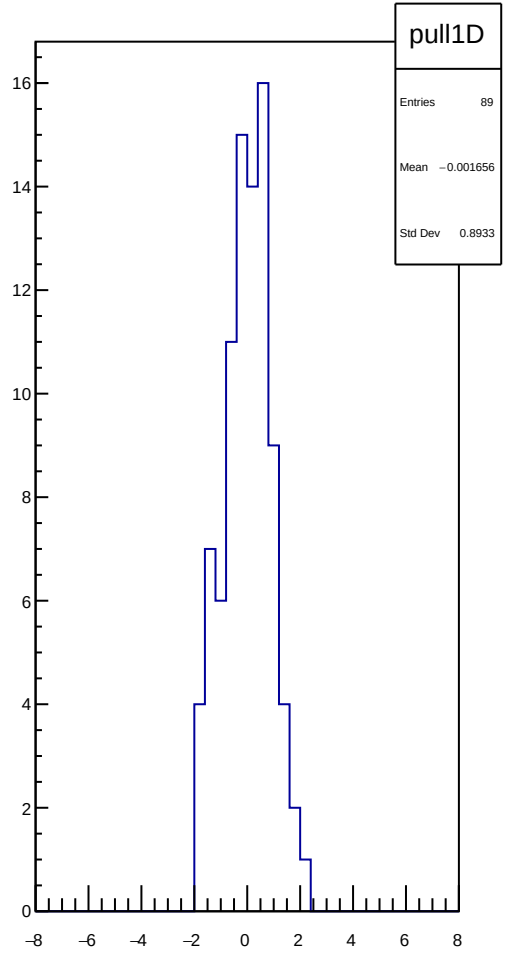

reg_asym_sam_2468_avg_rms vs run
χ^2 / ndf 5921 / 88
p0 75.02 ± 0.05781
105
100
95
90
85
80
75
70

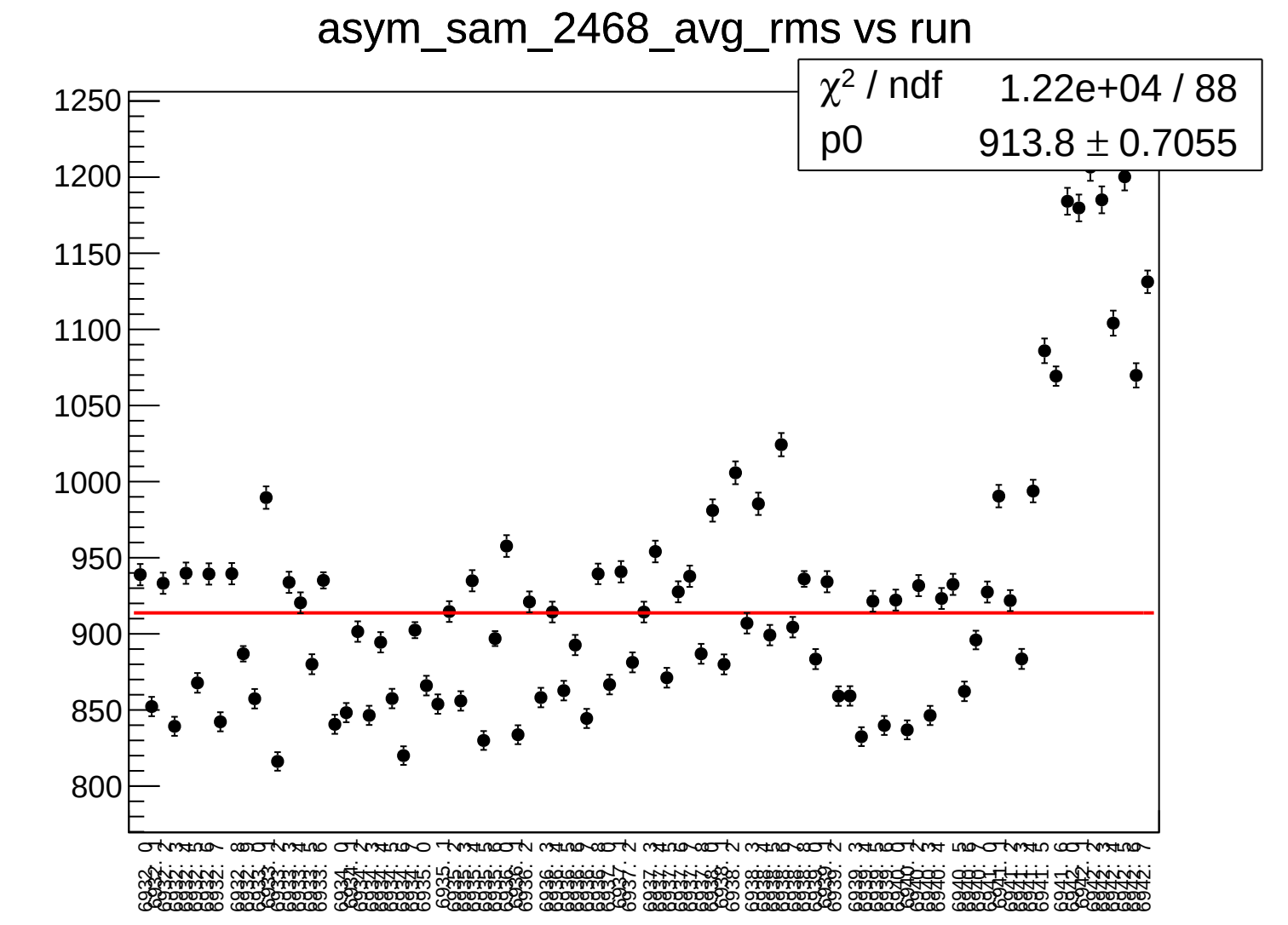

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 73.29 / 88
p0 192.9 ± 994.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −3291
Std Dev 3342
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

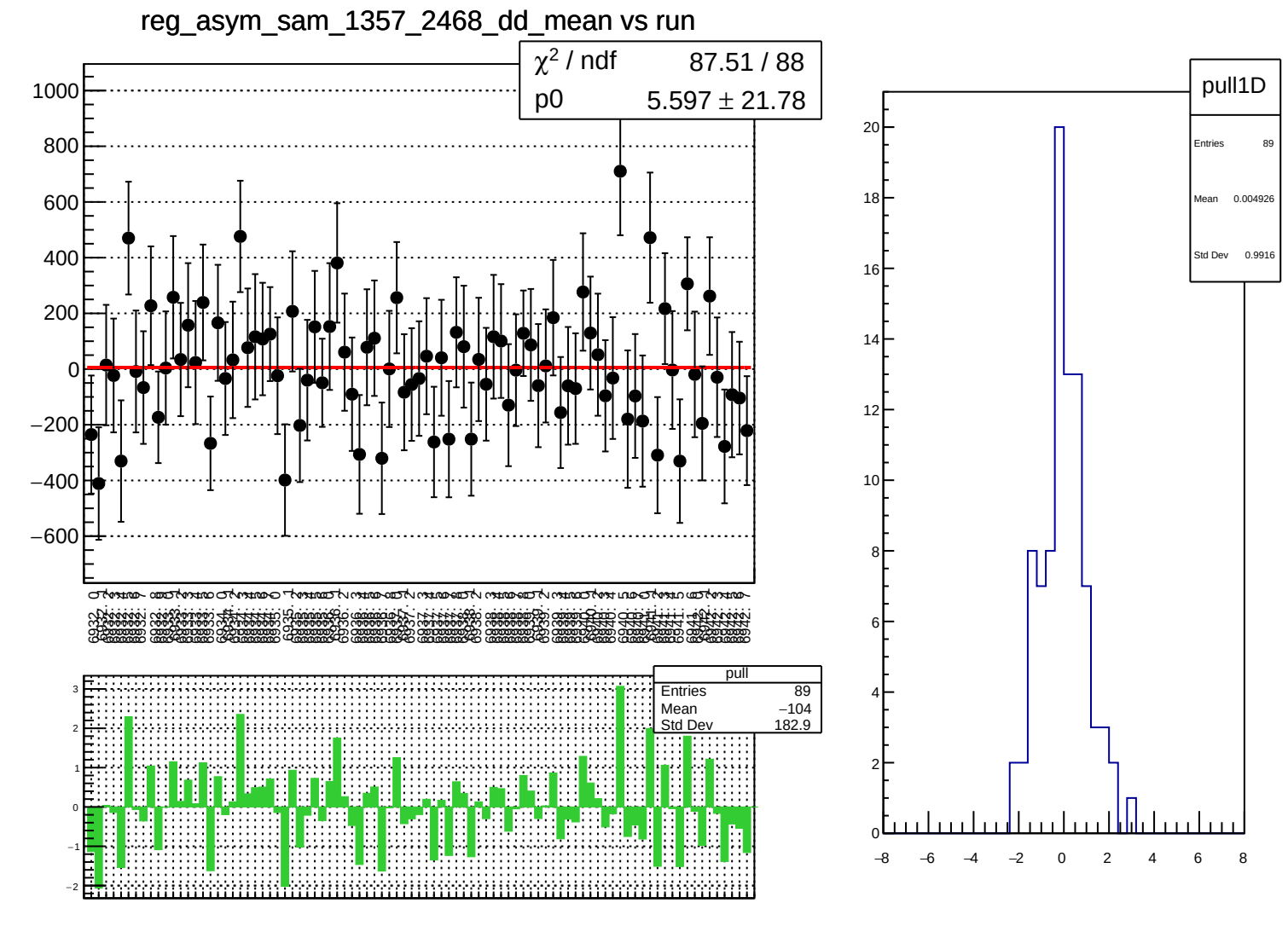

pull1D
Entries 89
Mean 0.0007593
Std Dev 0.9075
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

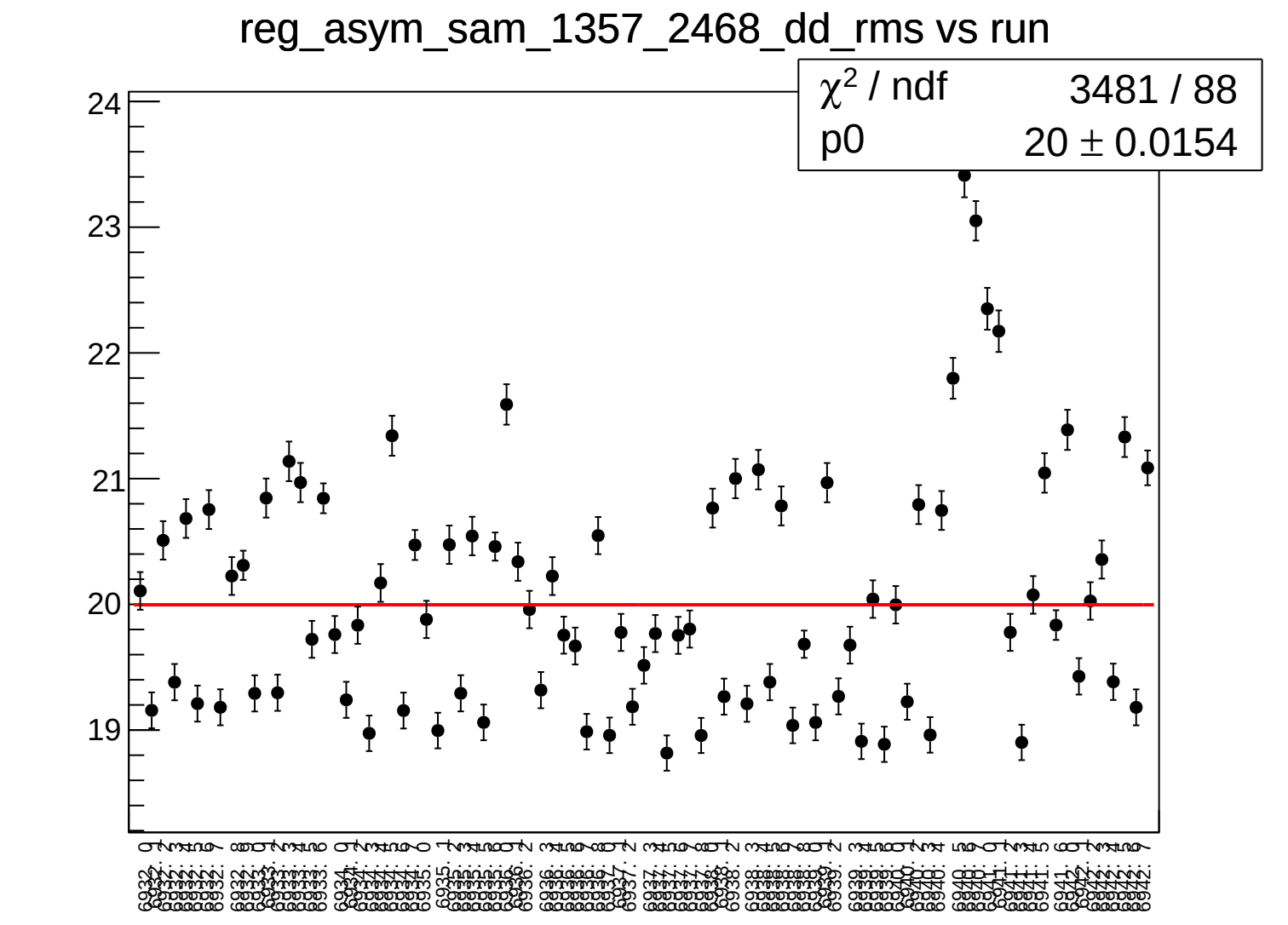

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 1.231e+04 / 88
p0 910.6 ± 0.703
1250
1200
1150
1100
1050
1000
950
900
850
800

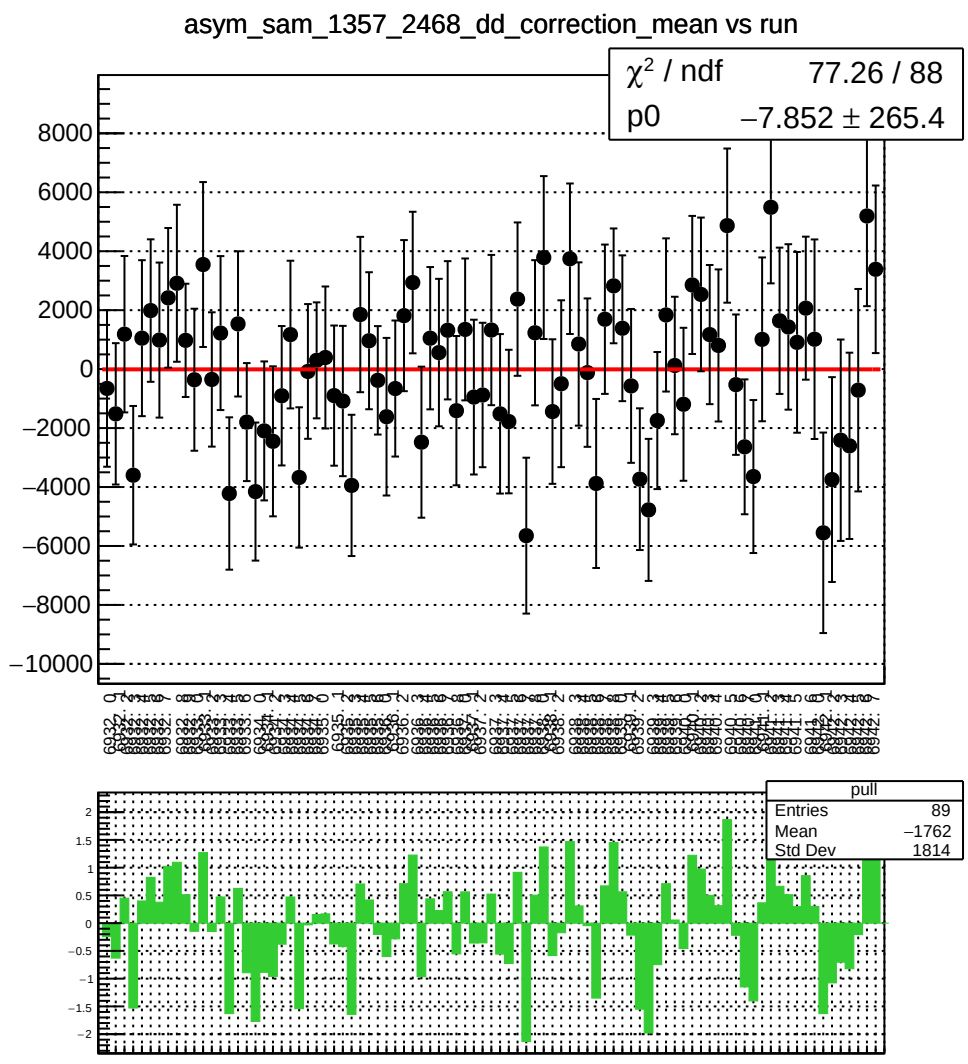

asym_sam_2468_avg_mean vs run
χ² / ndf 71.03 / 88
p0 −343.6 ± 997.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 89
Mean −1436
Std Dev 1487
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

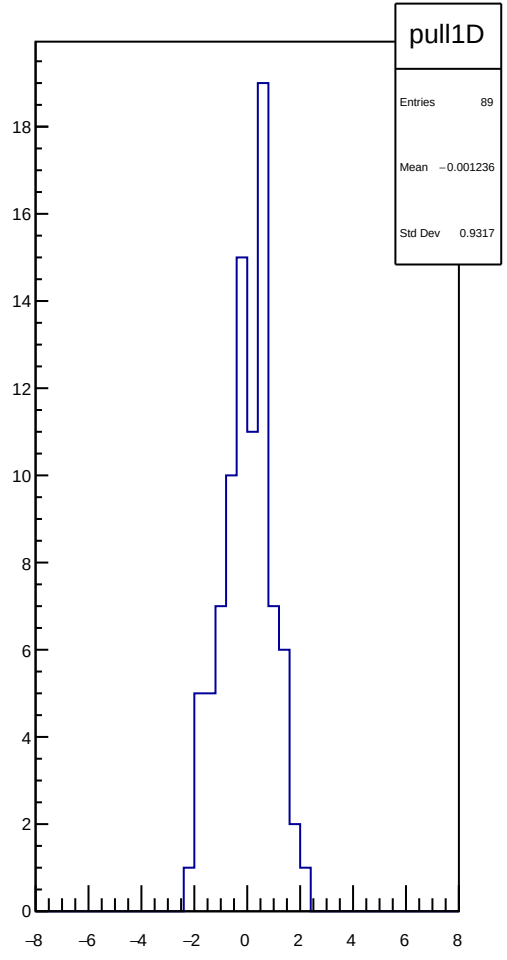

pull1D
Entries 89
Mean −0.001656
Std Dev 0.8933
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

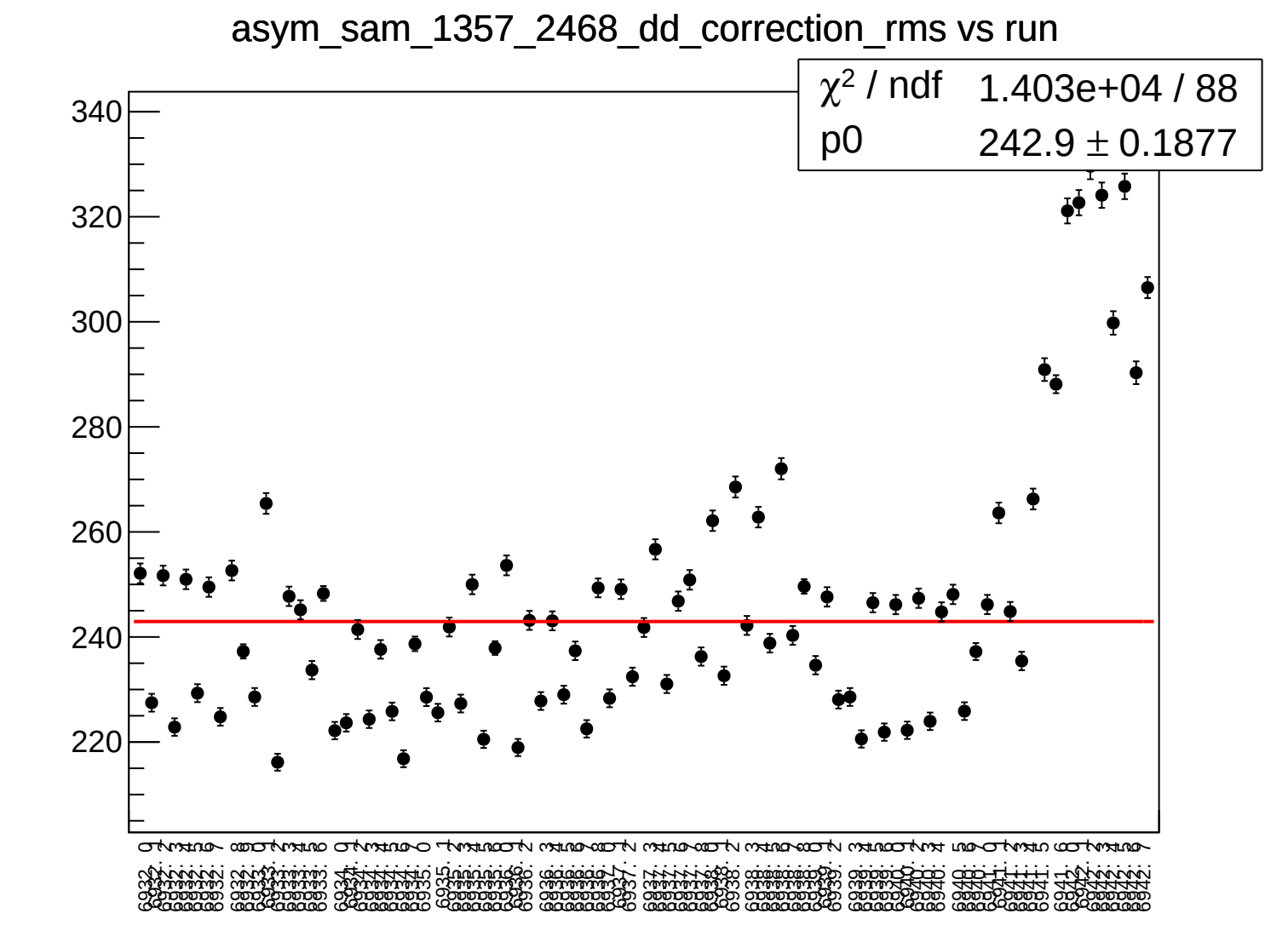

asym_sam_2468_avg_rms vs run
χ² / ndf 1.22e+04 / 88
p0 913.8 ± 0.7055
1250
1200
1150
1100
1050
1000
950
900
850
800

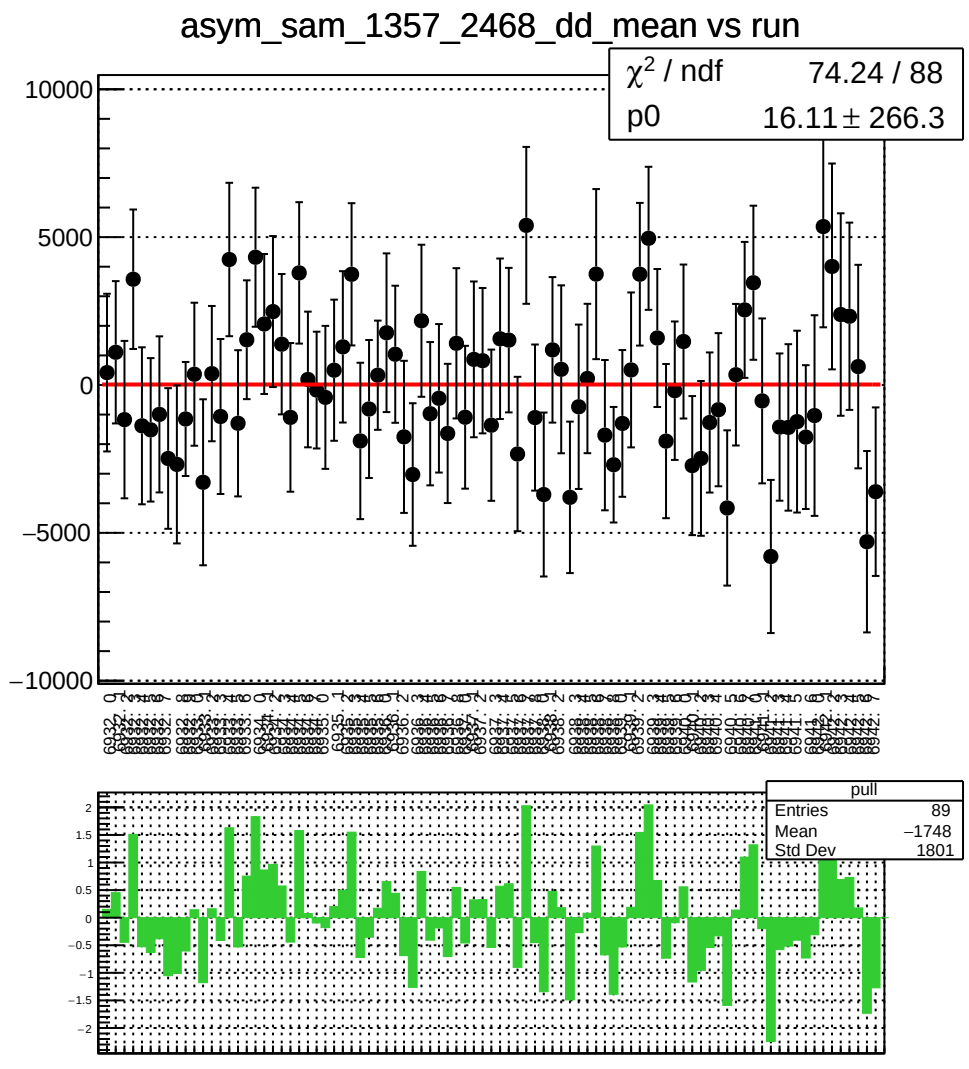

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 87.51 / 88
p0 5.597 ± 21.78
pull
Entries 89
Mean −104
Std Dev 182.9
pull1D
Entries 89
Mean 0.004926
Std Dev 0.9916

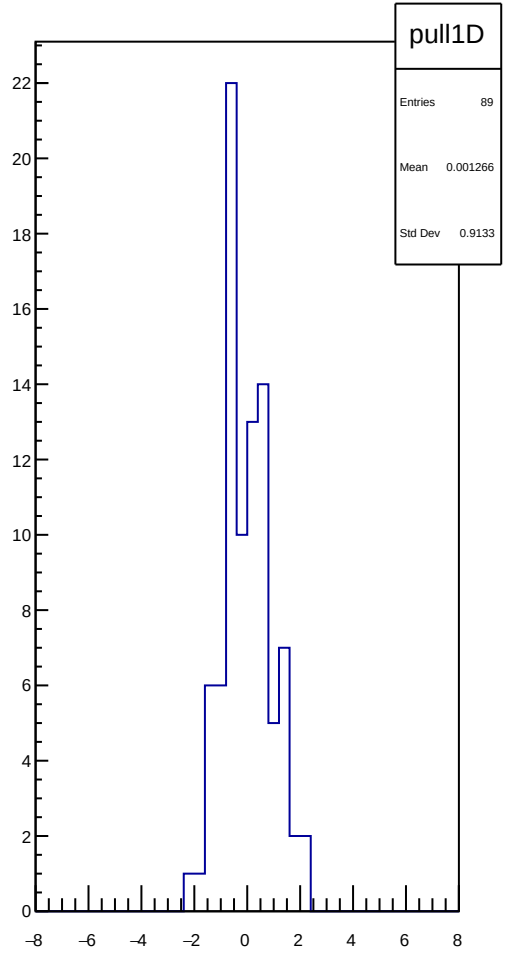

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 3481 / 88
p0 20 ± 0.0154
24
23
22
21
20
19

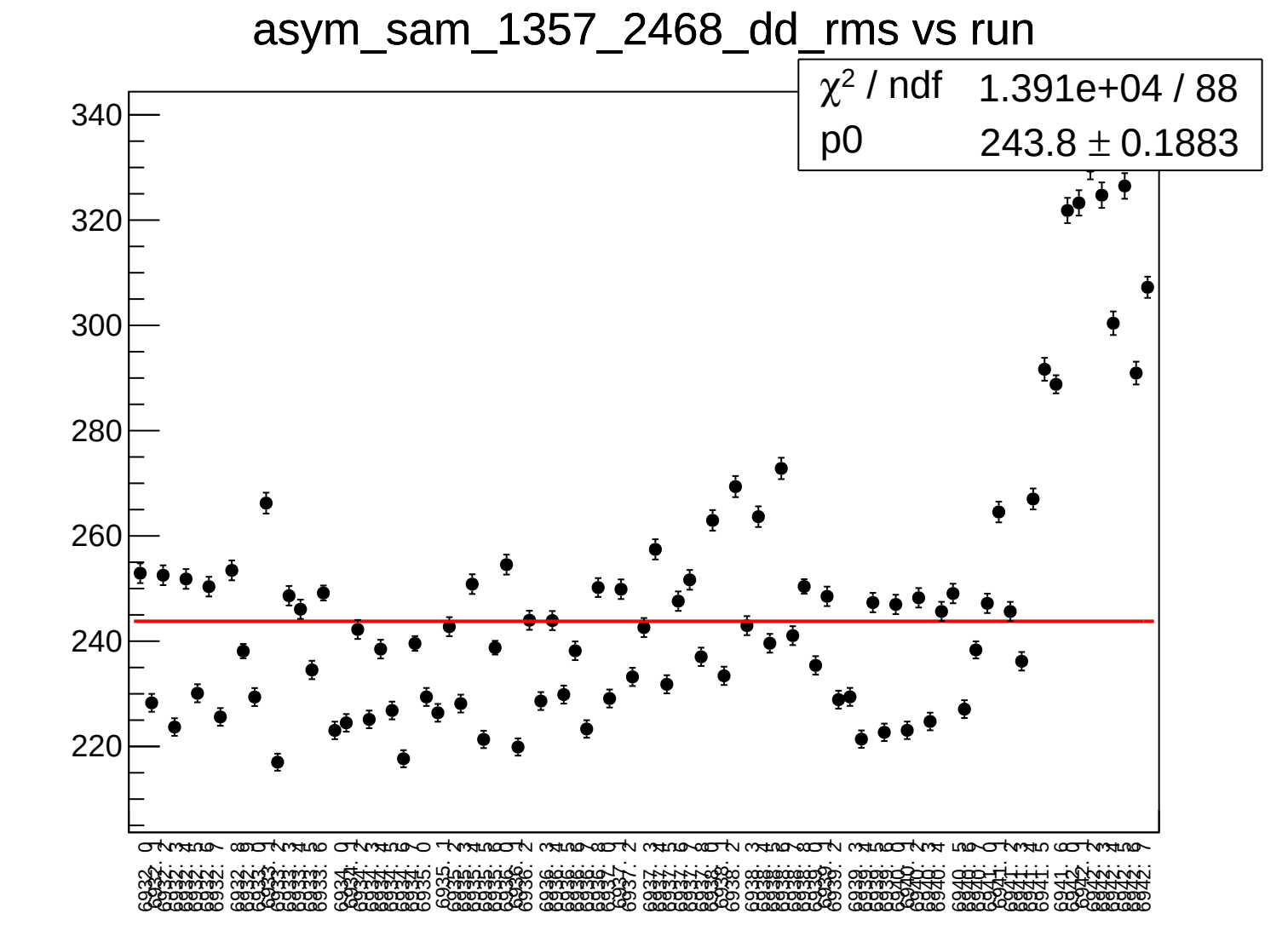

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 77.26 / 88
p0 −7.852 ± 265.4
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
pull
Entries 89
Mean −1762
Std Dev 1814
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

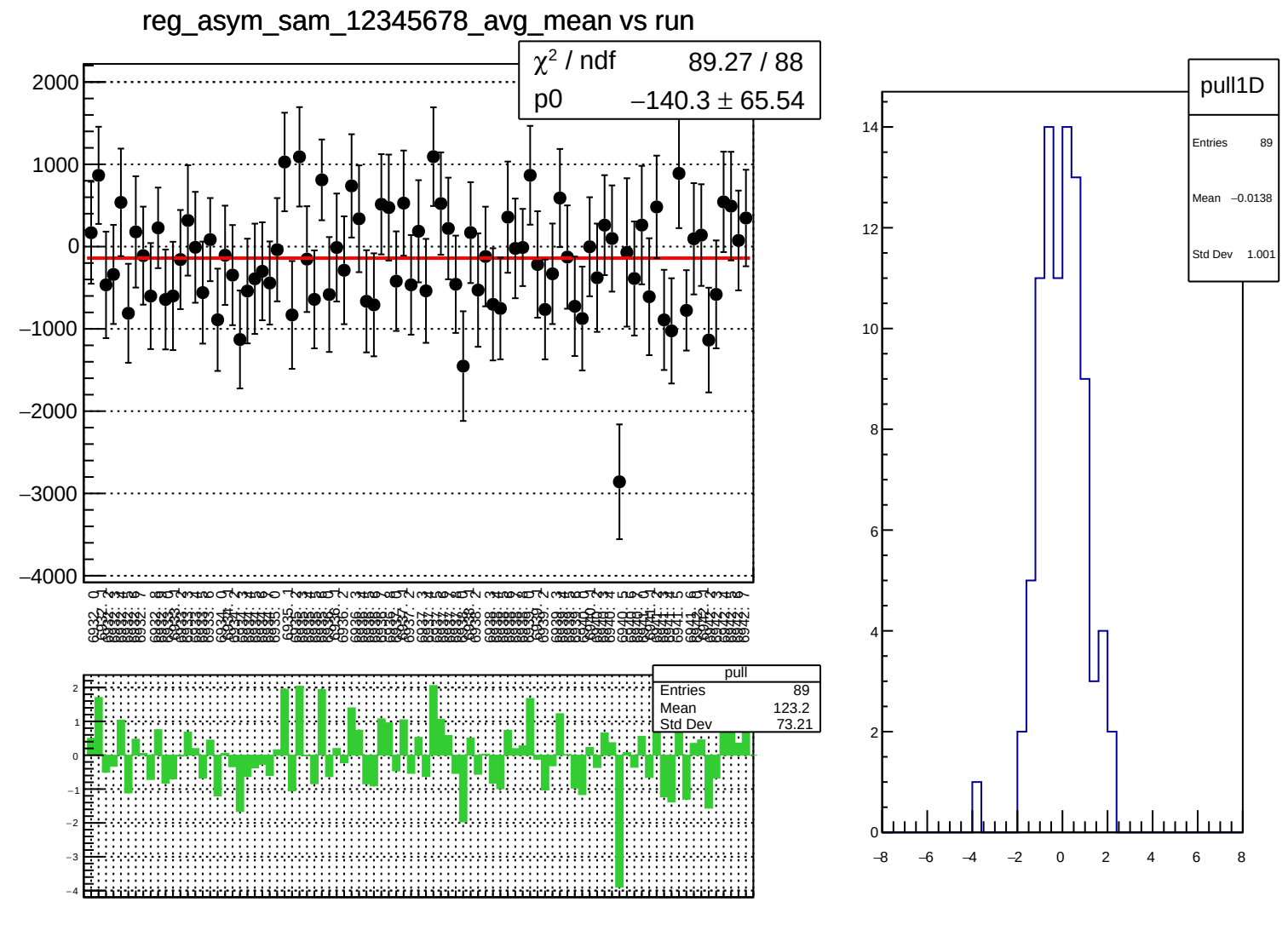

pull1D
Entries 89
Mean −0.001236
Std Dev 0.9317
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

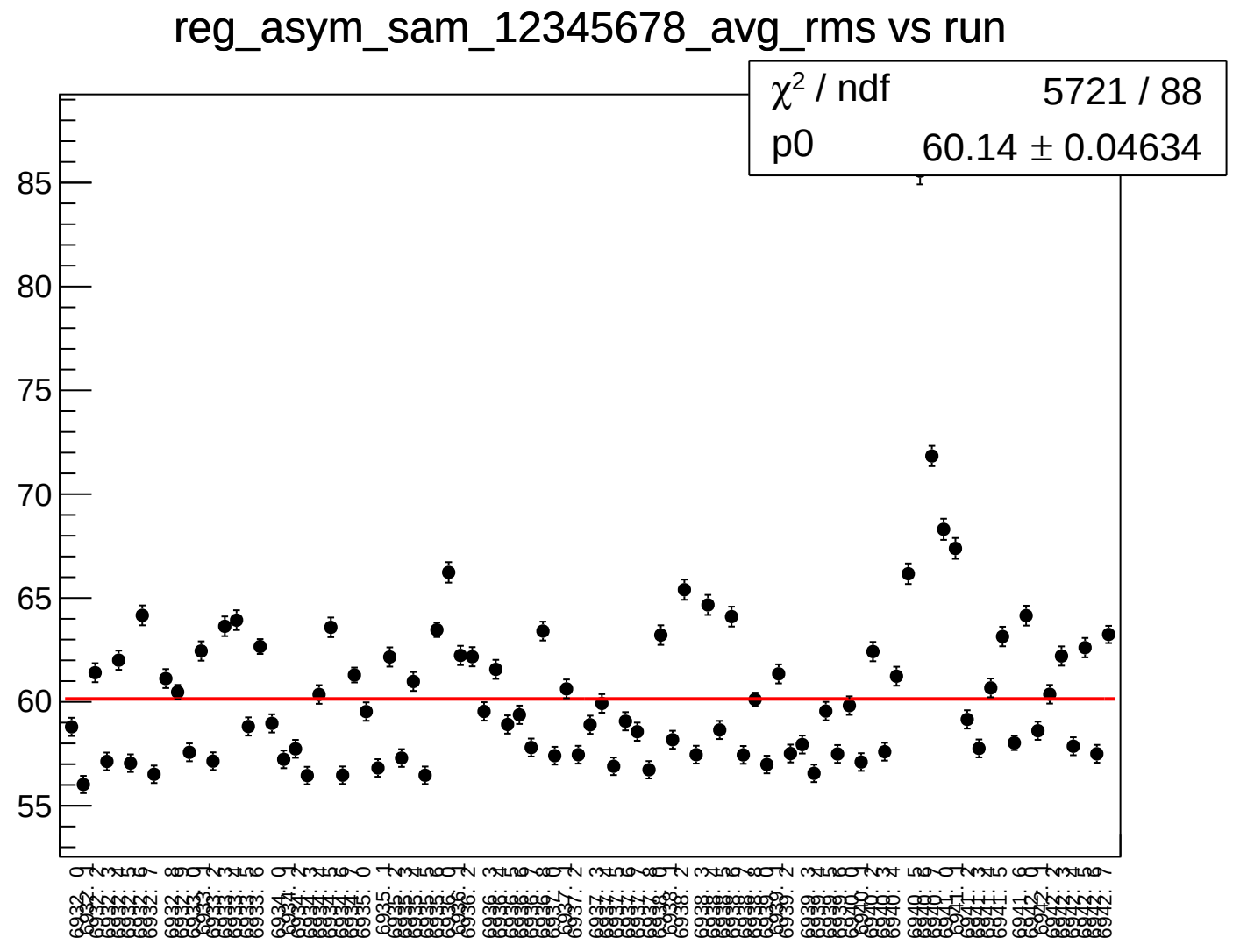

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 1.403e+04 / 88
p0 242.9 ± 0.1877
340
320
300
280
260
240
220

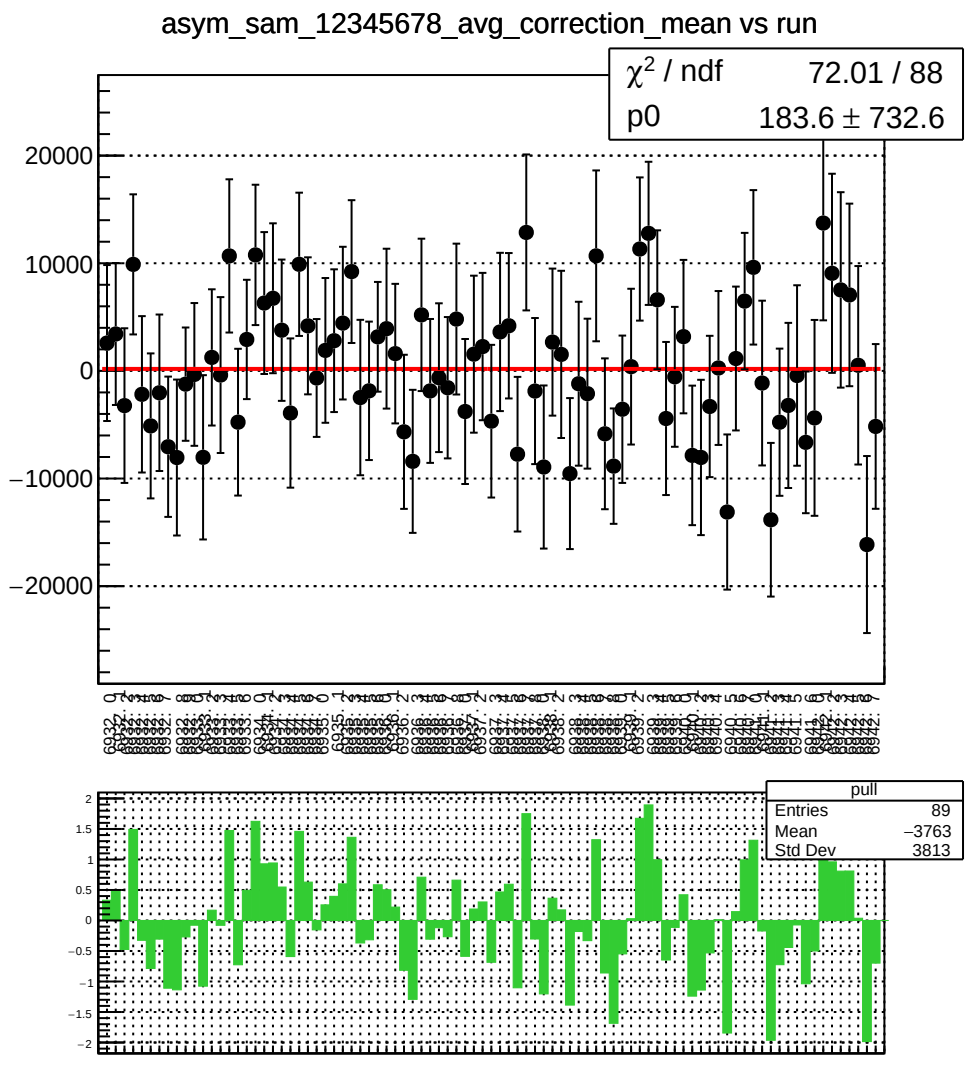

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 74.24 / 88
p0 16.11 ± 266.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean −1748
Std Dev 1801
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

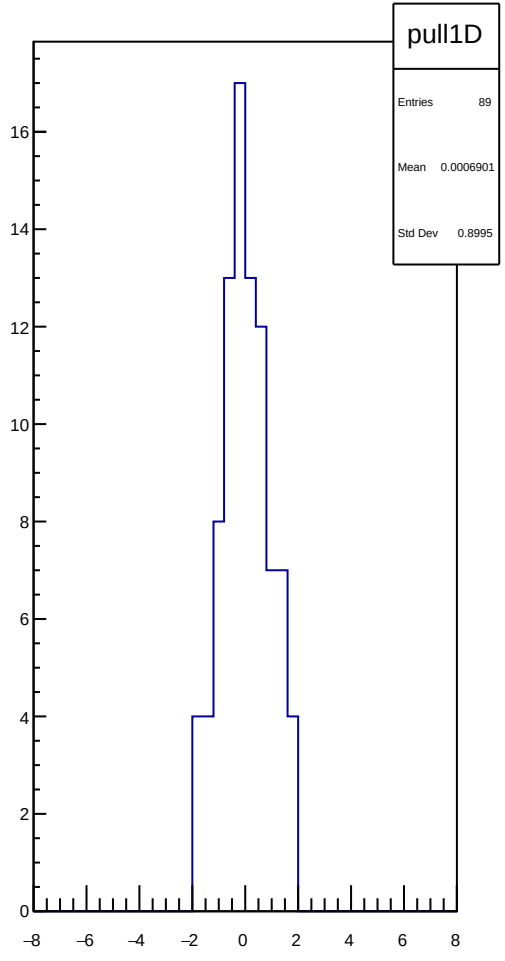

pull1D
Entries 89
Mean 0.001266
Std Dev 0.9133
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

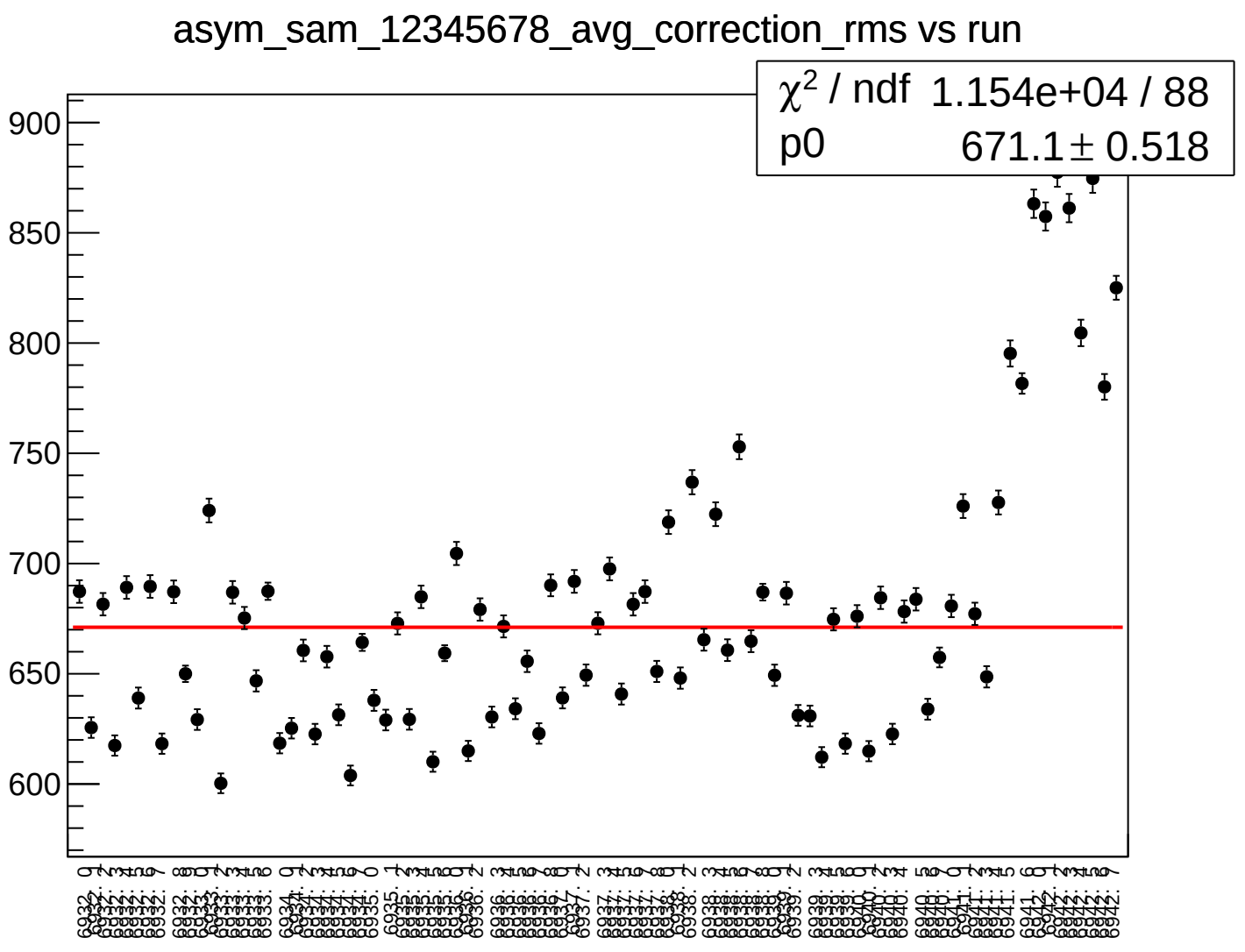

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.391e+04 / 88
p0 243.8 ± 0.1883
340
320
300
280
260
240
220

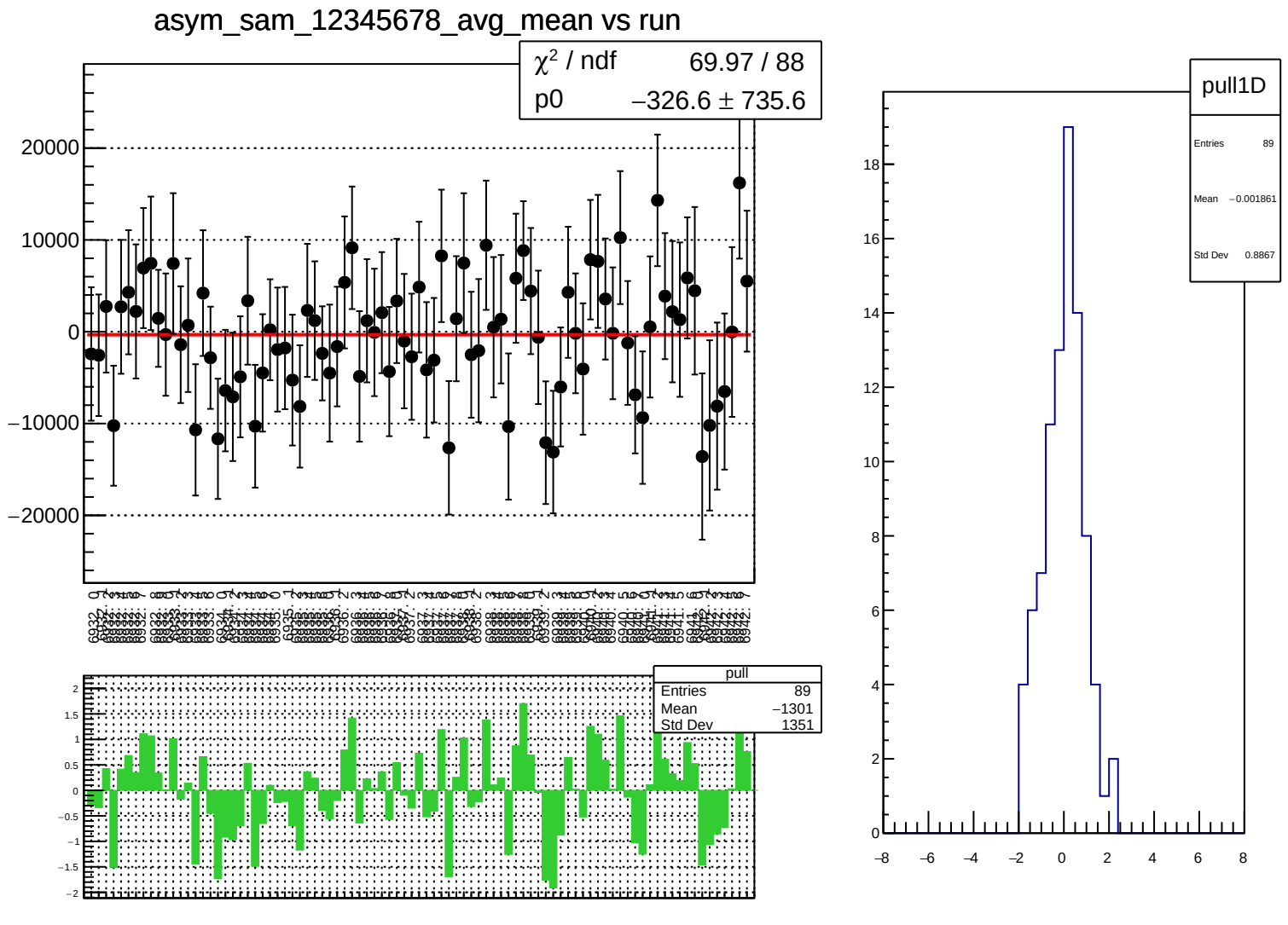

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 89.27 / 88
p0 −140.3 ± 65.54
pull
Entries 89
Mean 123.2
Std Dev 73.21
pull1D
Entries 89
Mean −0.0138
Std Dev 1.001

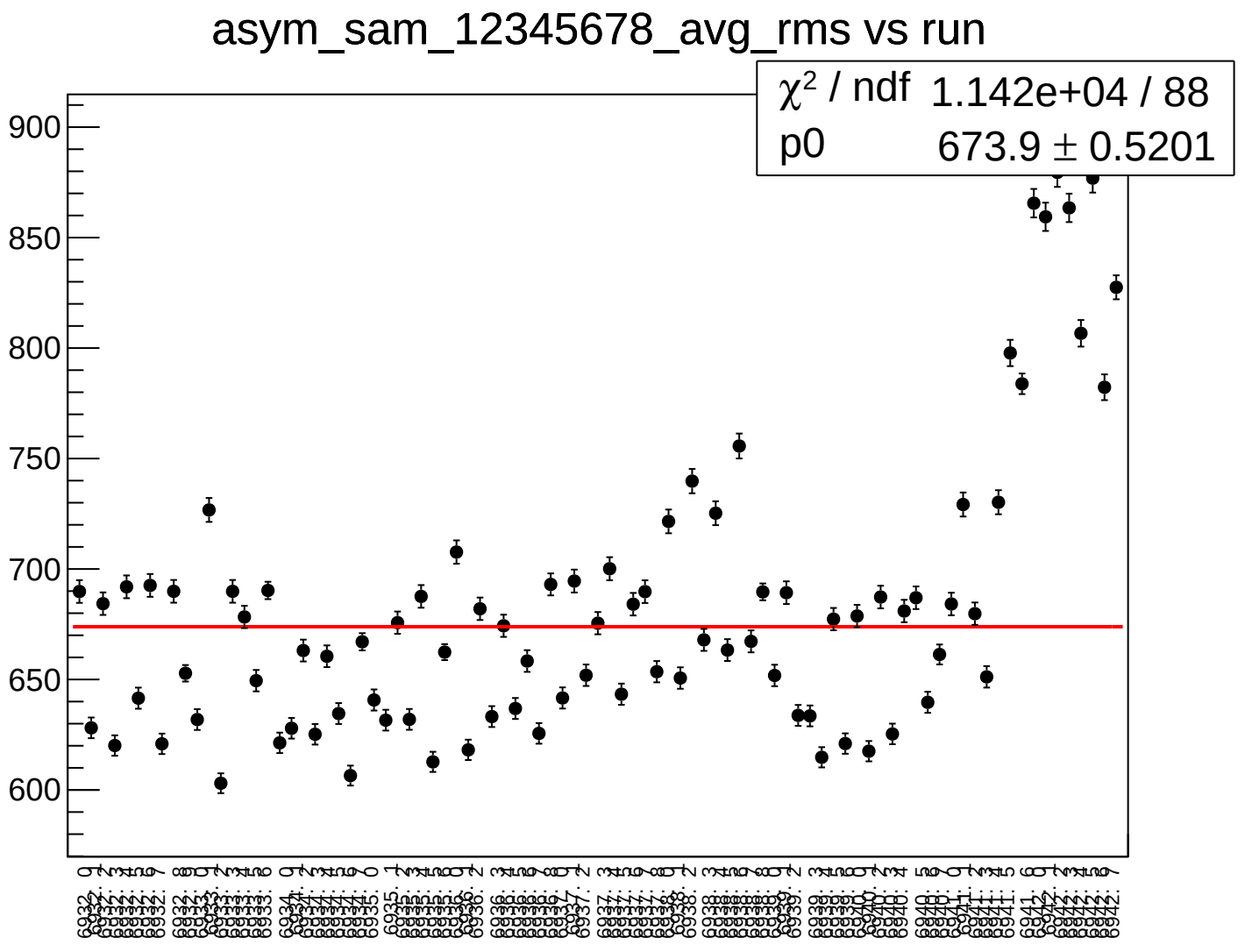

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 5721 / 88
p0 60.14 ± 0.04634
85
80
75
70
65
60
55

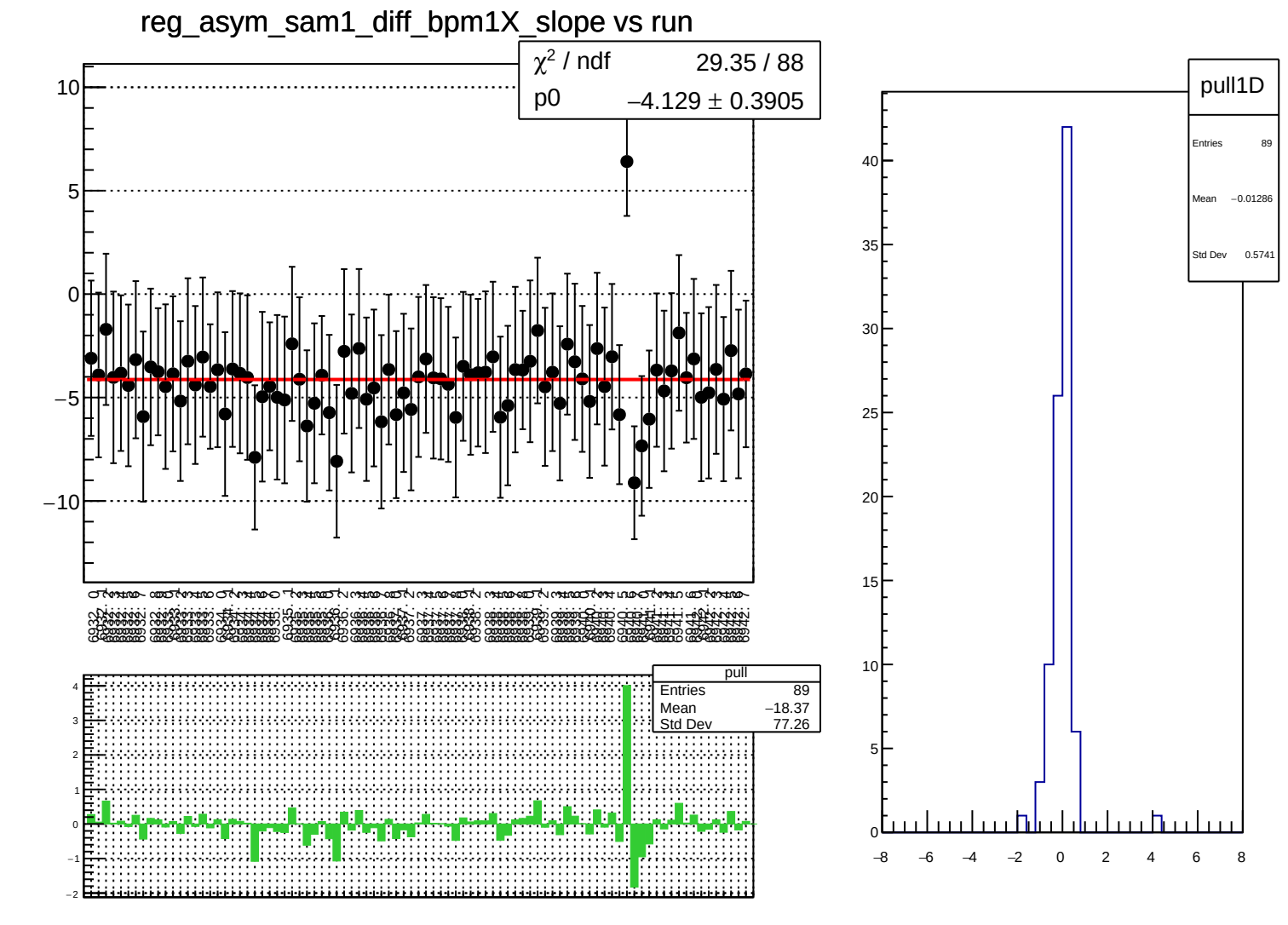

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 72.01 / 88
p0 183.6 ± 732.6
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −3763
Std Dev 3813
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

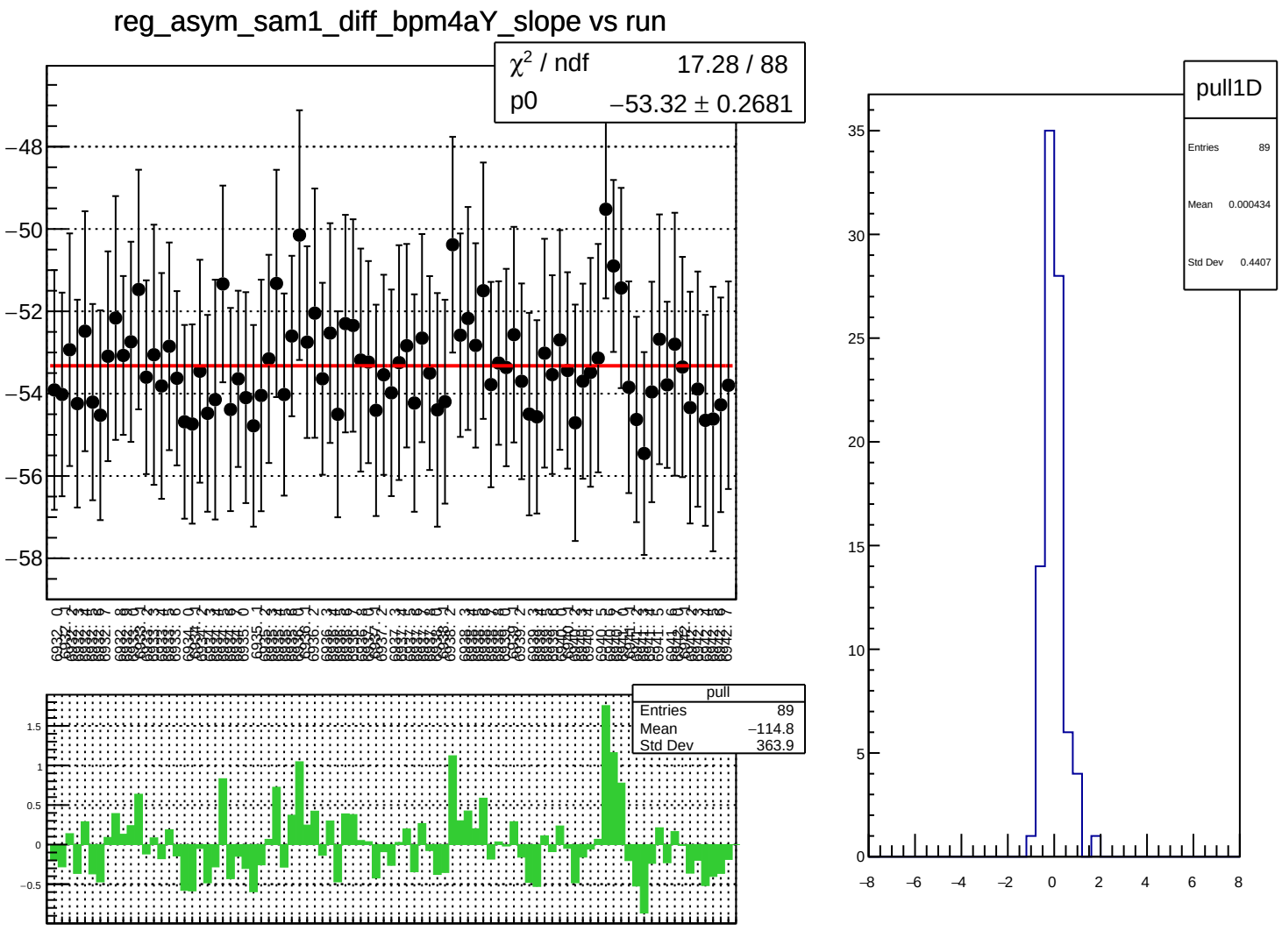

pull1D
Entries 89
Mean 0.0006901
Std Dev 0.8995
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

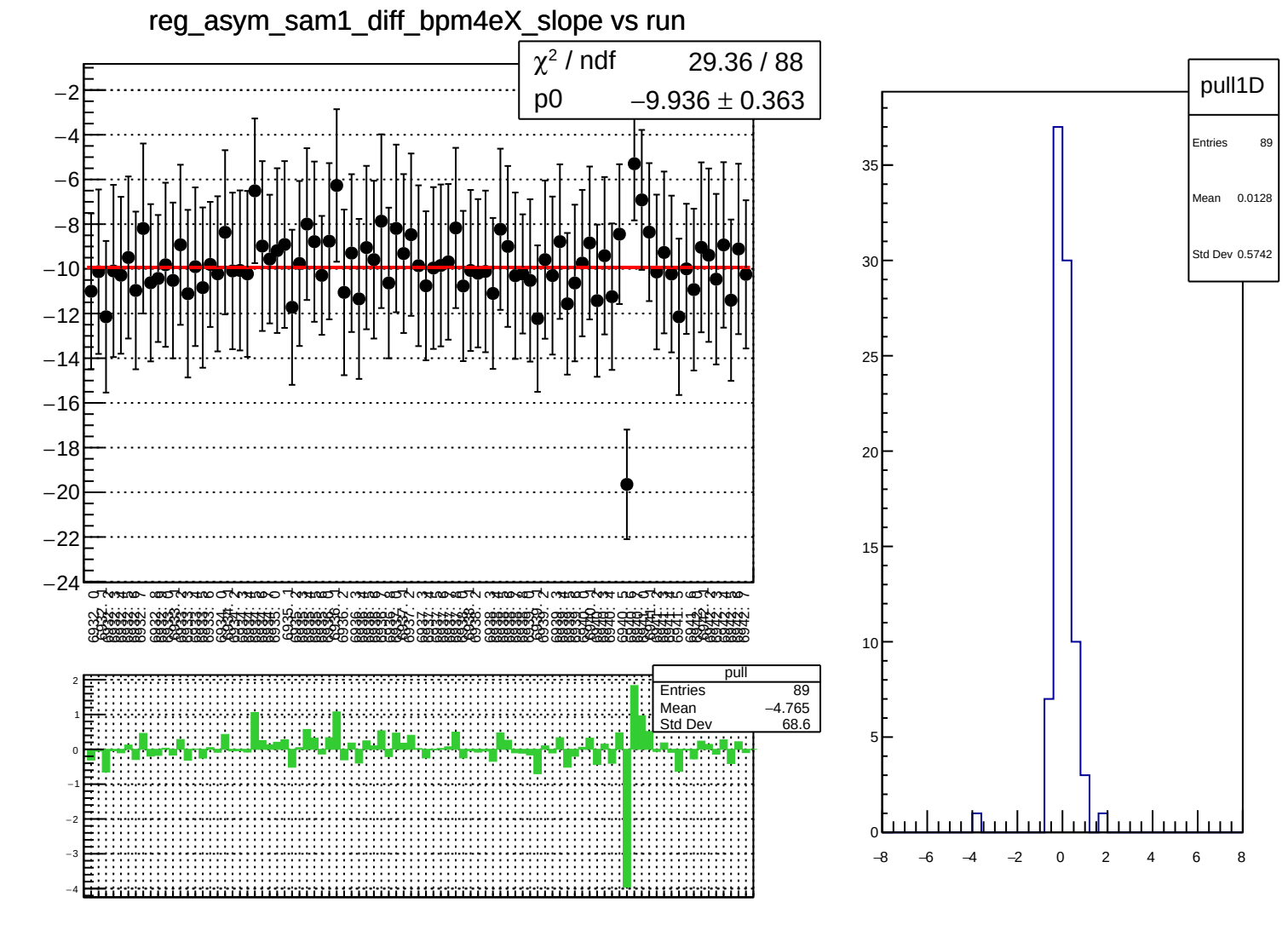

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 1.154e+04 / 88
p0 671.1 ± 0.518
900
850
800
750
700
650
600

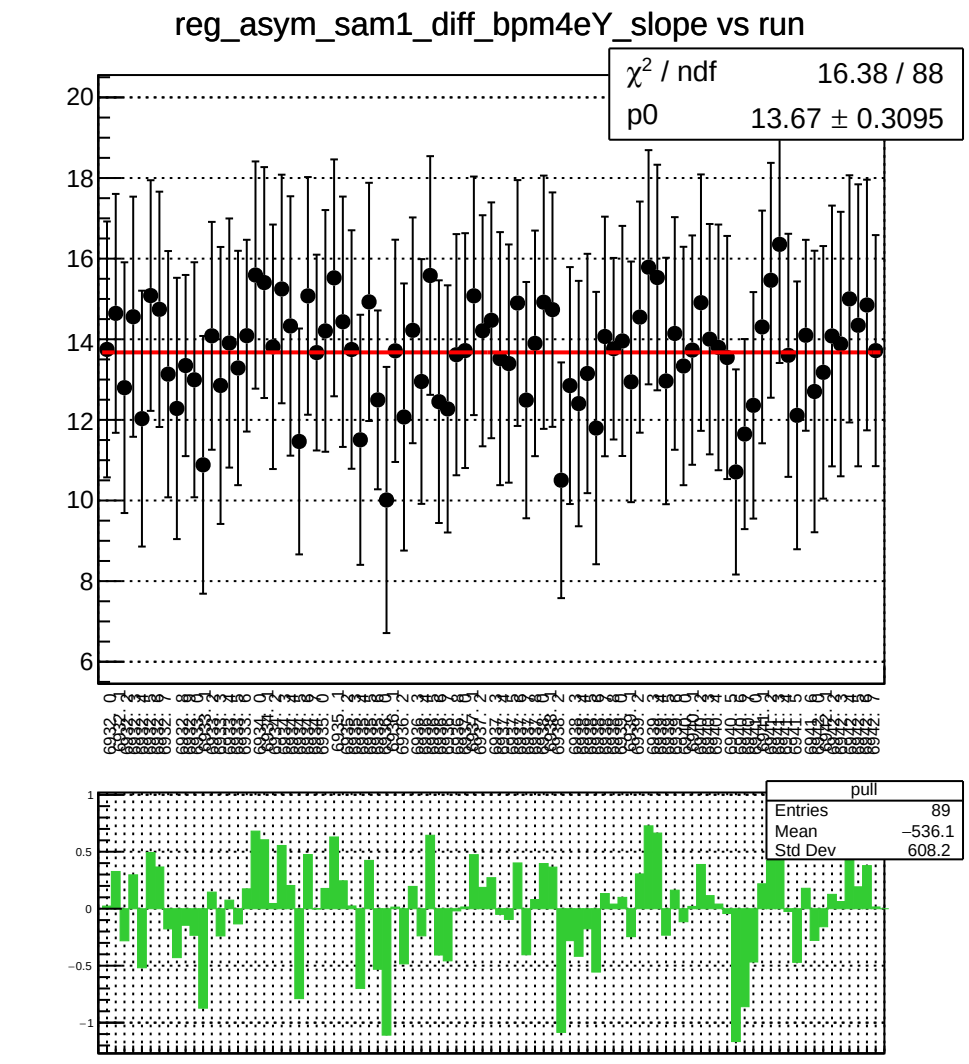

asym_sam_12345678_avg_mean vs run
χ² / ndf 69.97 / 88
p0 −326.6 ± 735.6
20000
10000
0
−10000
−20000
pull
Entries 89
Mean −1301
Std Dev 1351
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 89
Mean −0.001861
Std Dev 0.8867
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

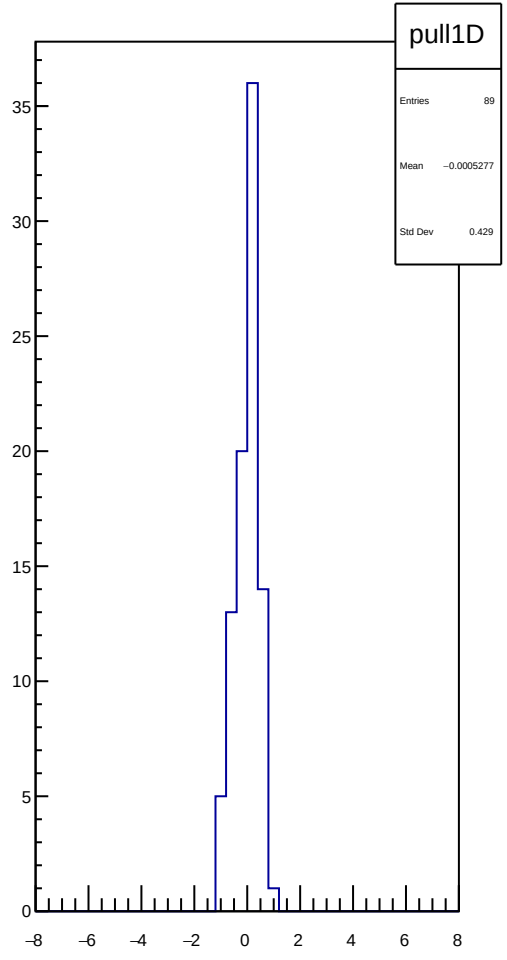

asym_sam_12345678_avg_rms vs run
χ² / ndf 1.142e+04 / 88
p0 673.9 ± 0.5201
900
850
800
750
700
650
600

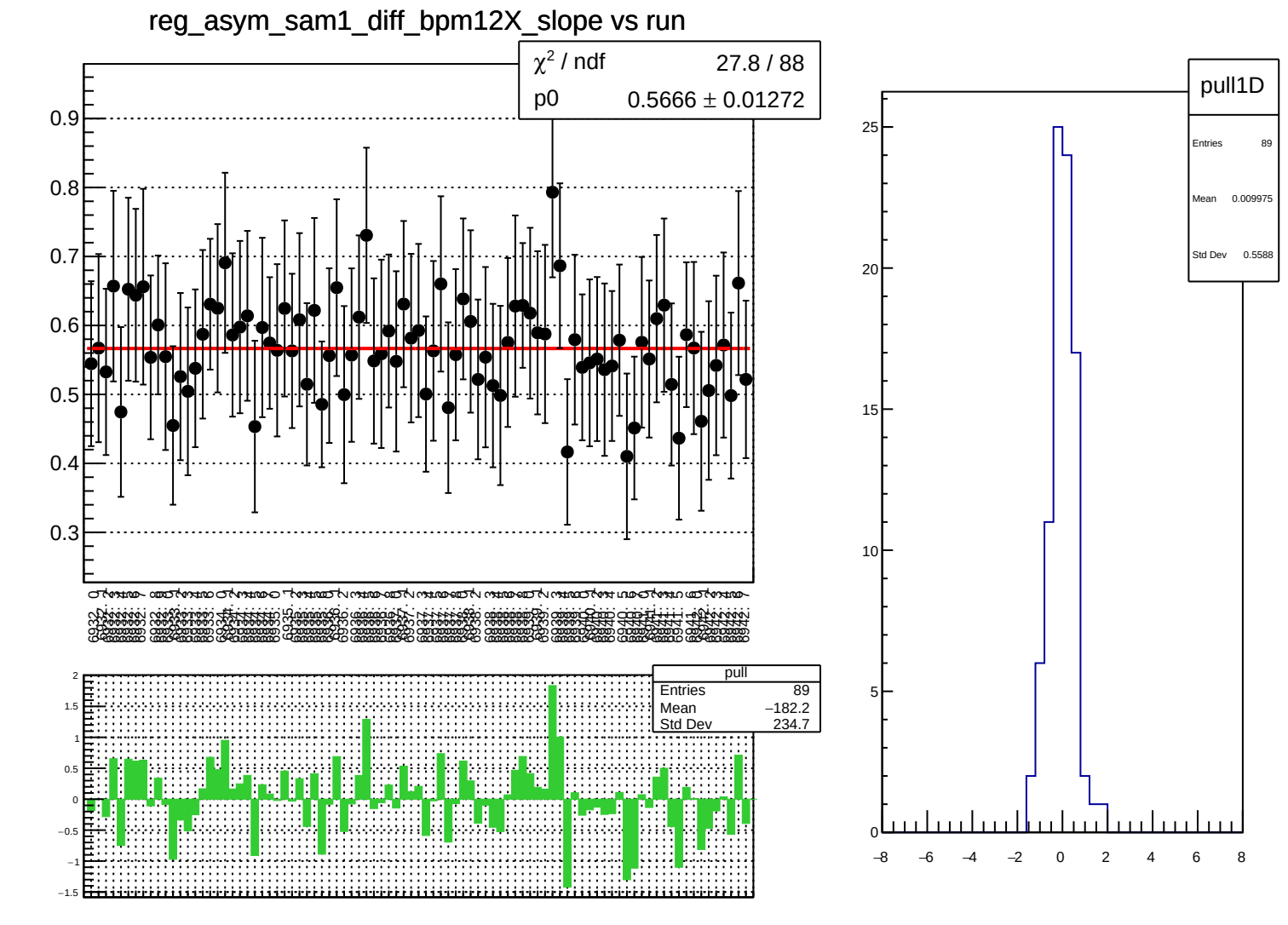

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 29.35 / 88
p0 −4.129 ± 0.3905
pull
Entries 89
Mean −18.37
Std Dev 77.26
pull1D
Entries 89
Mean −0.01286
Std Dev 0.5741

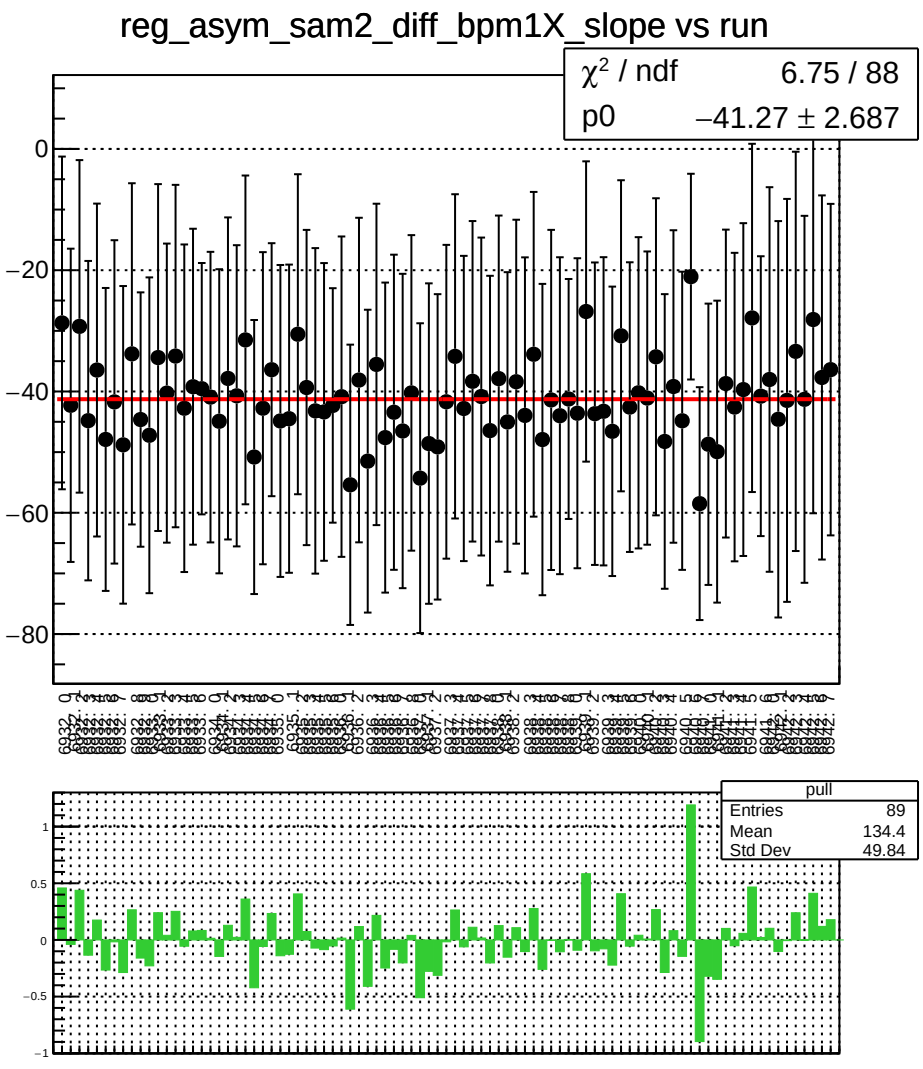

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 17.28 / 88
p0 −53.32 ± 0.2681
−48
−50
−52
−54
−56
−58
pull
Entries 89
Mean −114.8
Std Dev 363.9
1.5
1
0.5
0
−0.5
pull1D
Entries 89
Mean 0.000434
Std Dev 0.4407
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

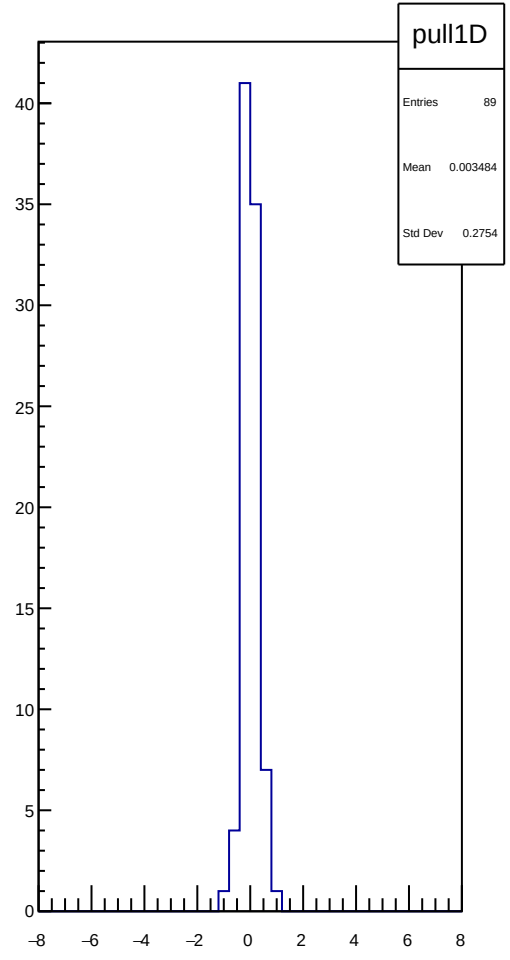

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 29.36 / 88
p0 −9.936 ± 0.363
pull
Entries 89
Mean −4.765
Std Dev 68.6
pull1D
Entries 89
Mean 0.0128
Std Dev 0.5742

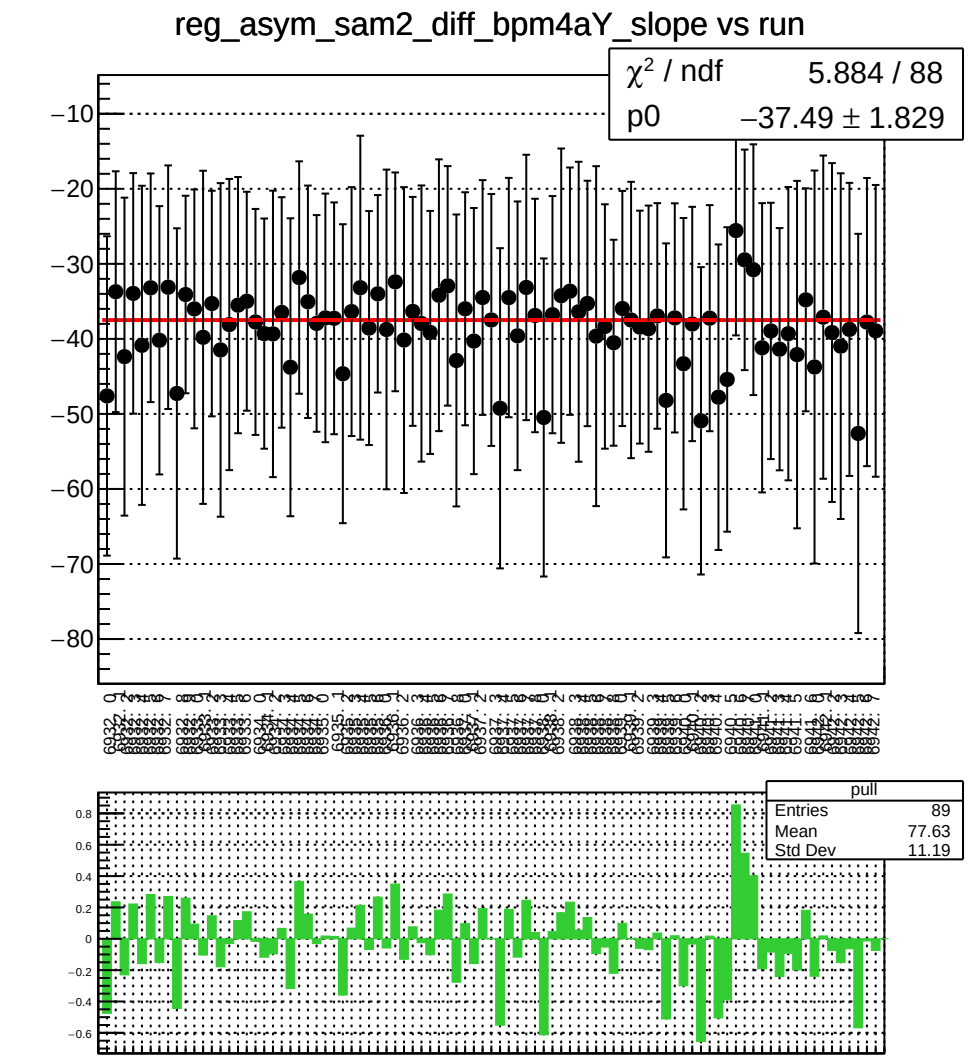

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 16.38 / 88
p0 13.67 ± 0.3095
pull
Entries 89
Mean −536.1
Std Dev 608.2

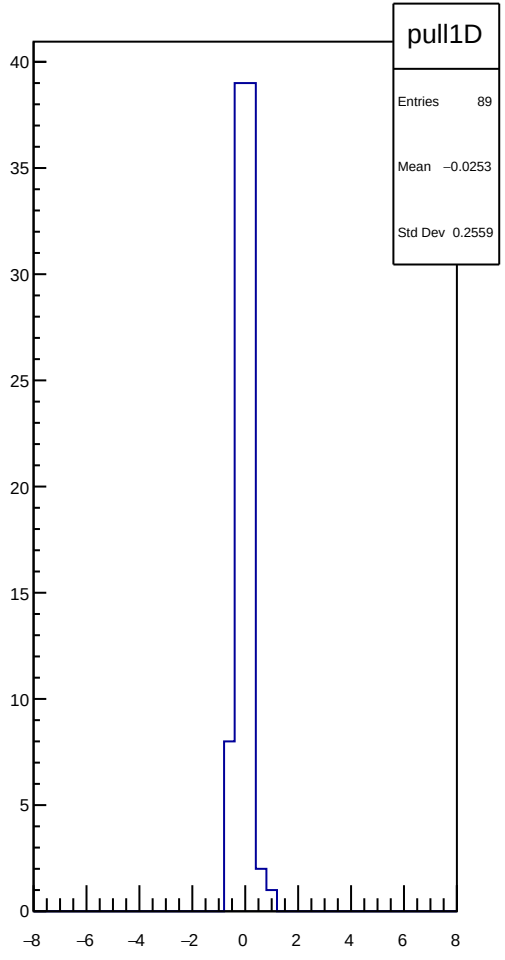

pull1D
Entries 89
Mean −0.0005277
Std Dev 0.429

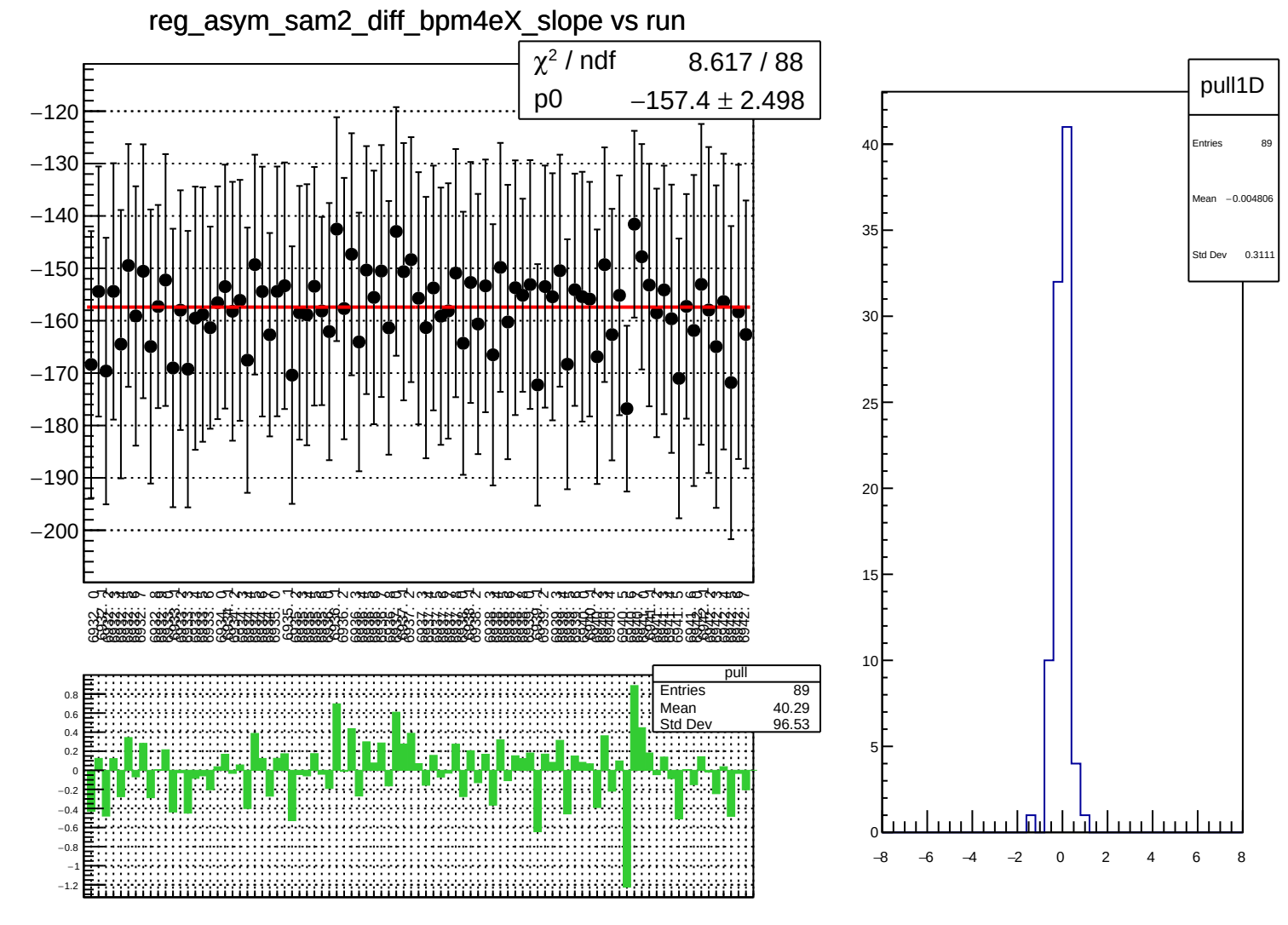

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 27.8 / 88
p0 0.5666 ± 0.01272
pull
Entries 89
Mean −182.2
Std Dev 234.7
pull1D
Entries 89
Mean 0.009975
Std Dev 0.5588

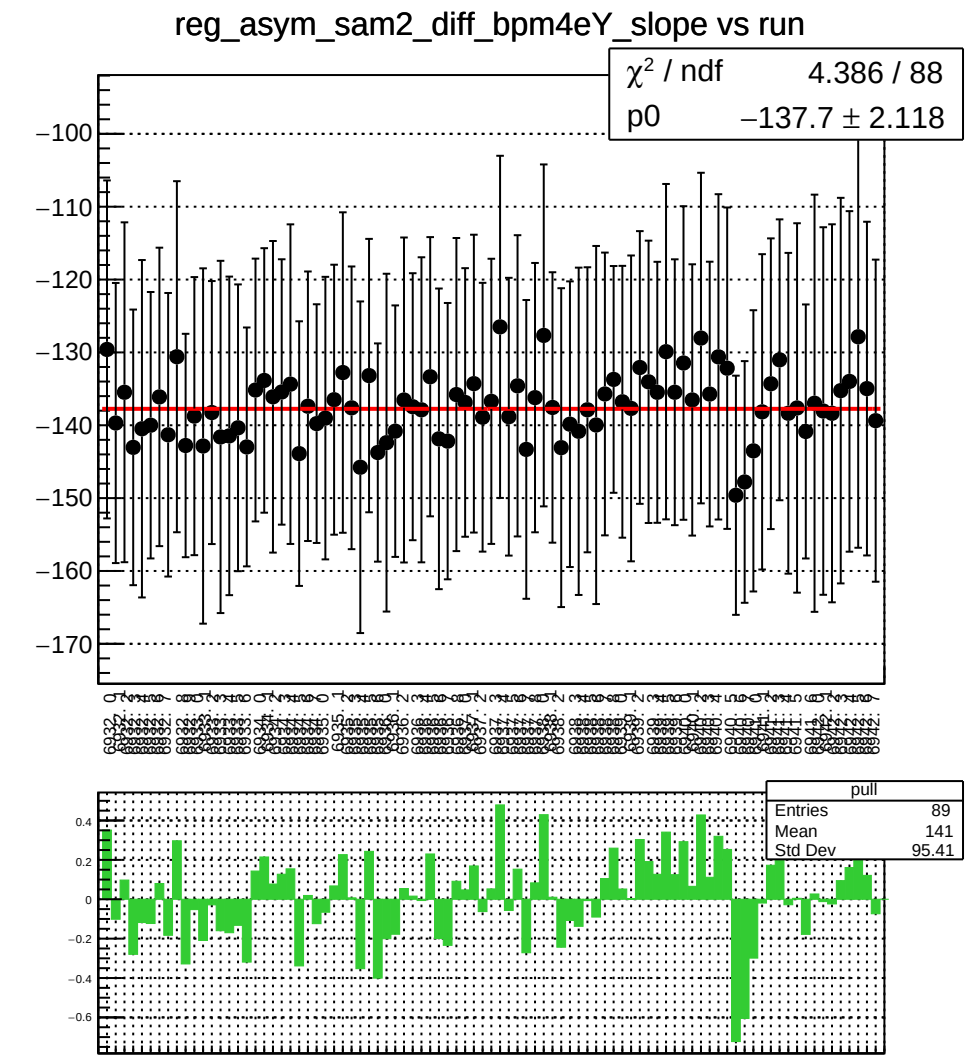

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 6.75 / 88
p0 −41.27 ± 2.687
pull
Entries 89
Mean 134.4
Std Dev 49.84

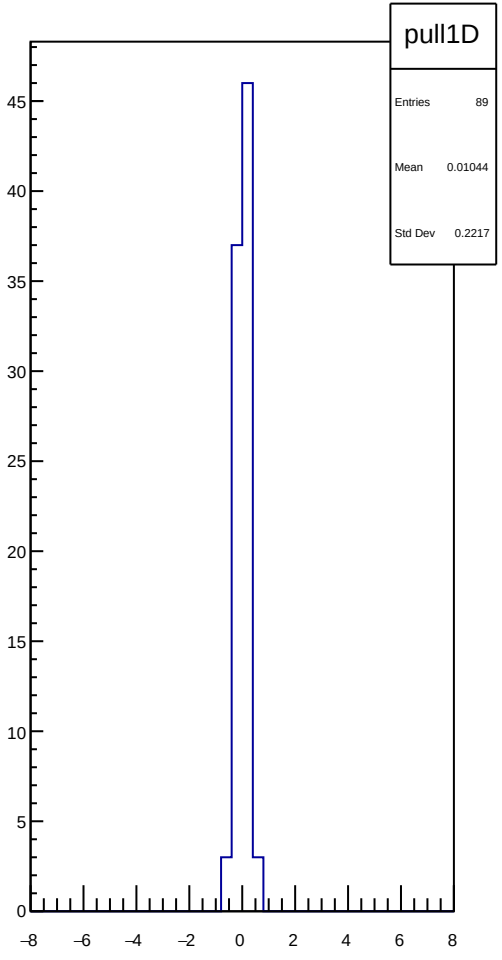

pull1D
Entries 89
Mean 0.003484
Std Dev 0.2754

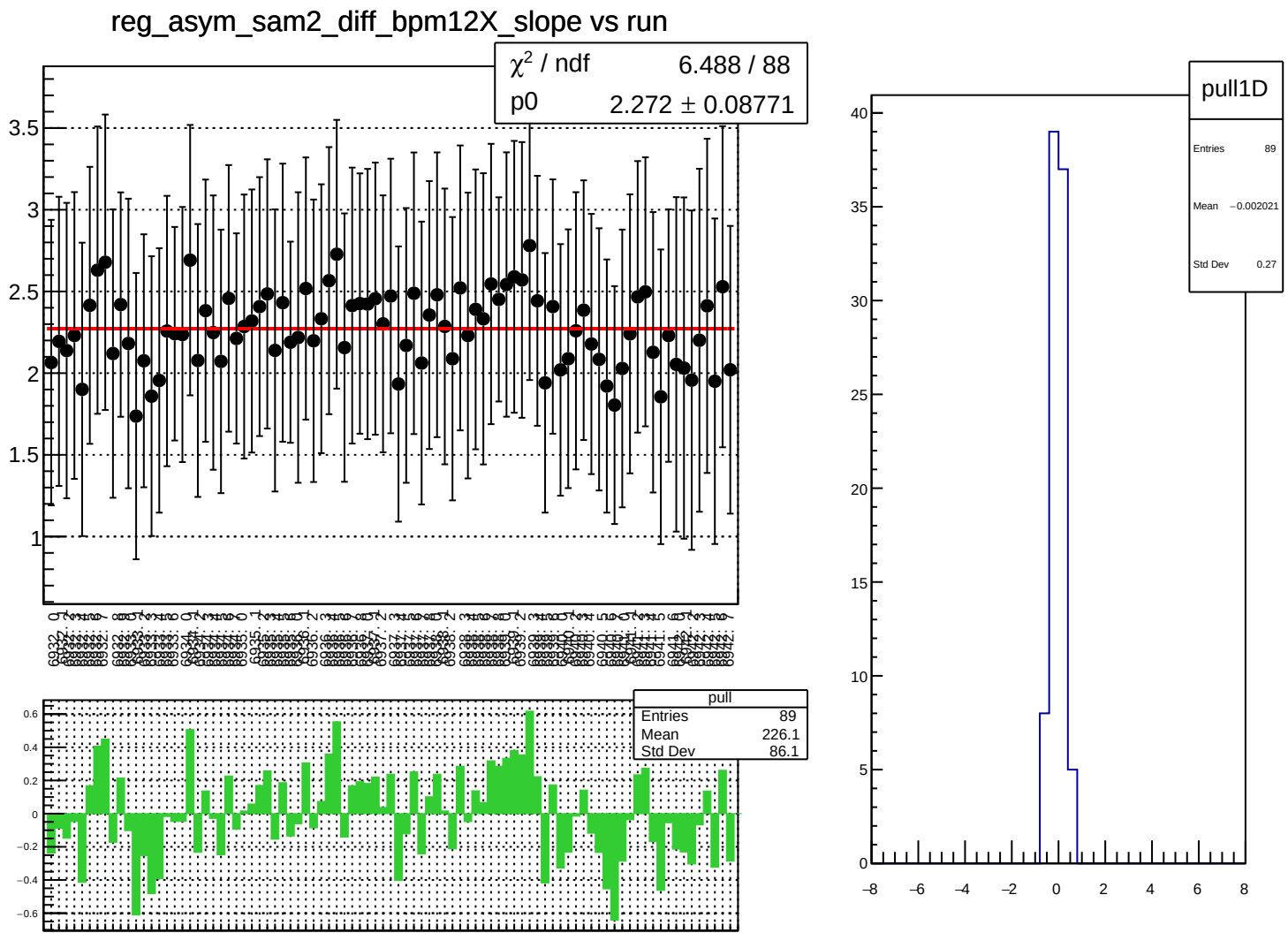

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 5.884 / 88
p0 −37.49 ± 1.829
pull
Entries 89
Mean 77.63
Std Dev 11.19

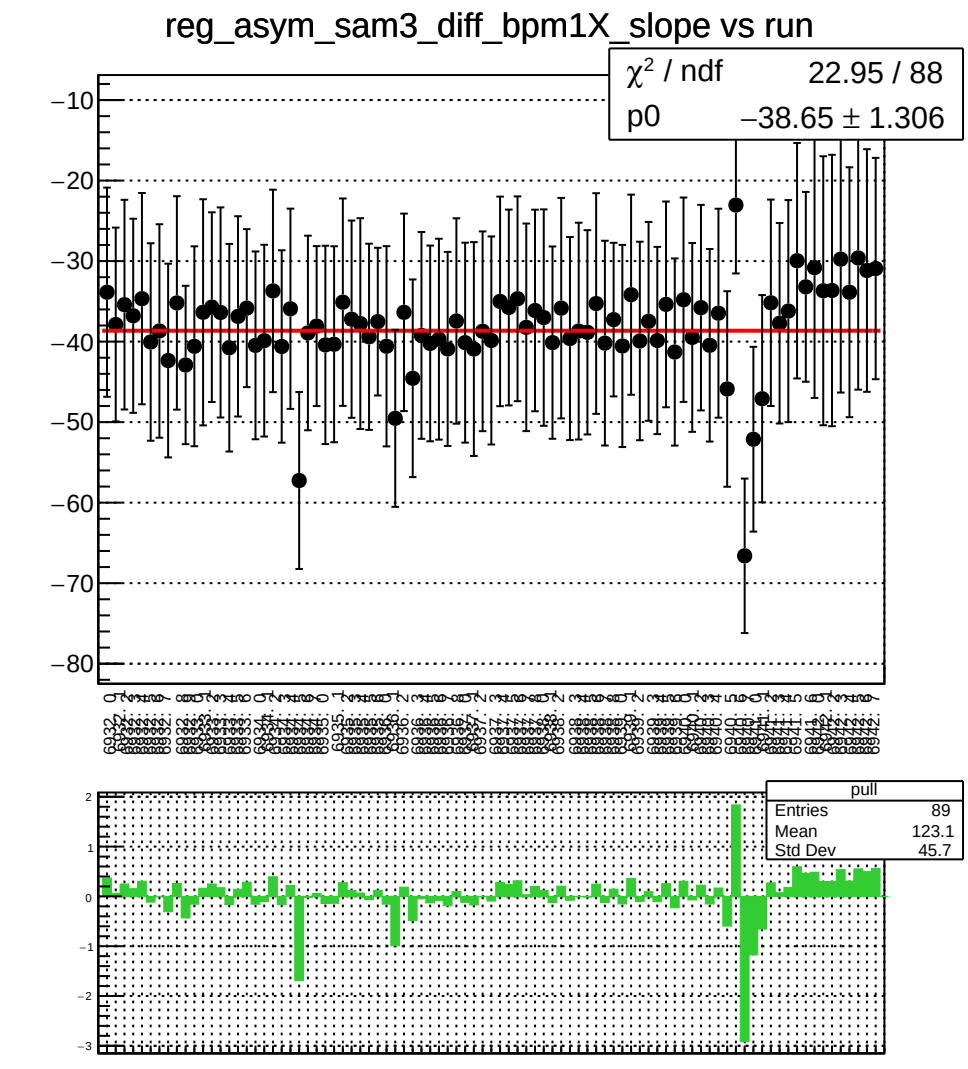

pull1D
Entries 89
Mean −0.0253
Std Dev 0.2559

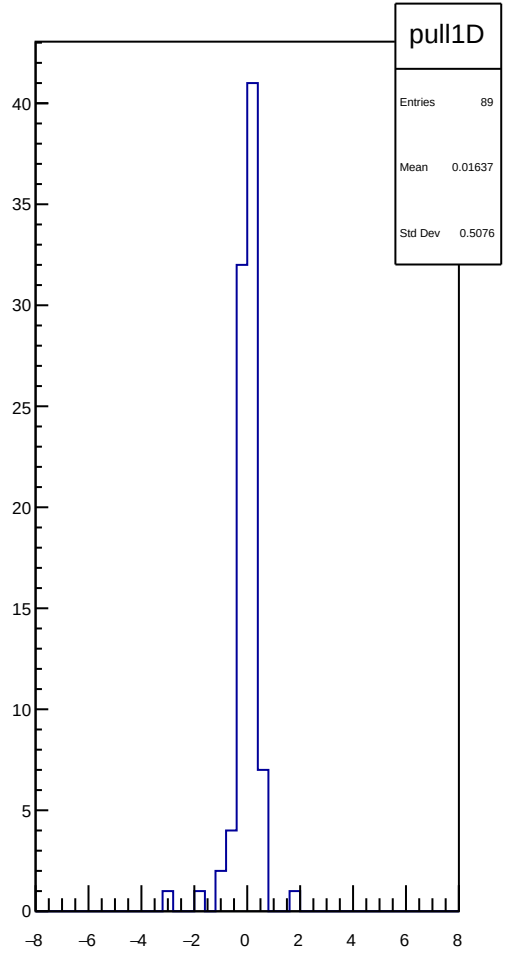

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 8.617 / 88
p0 −157.4 ± 2.498
pull
Entries 89
Mean 40.29
Std Dev 96.53
pull1D
Entries 89
Mean −0.004806
Std Dev 0.3111

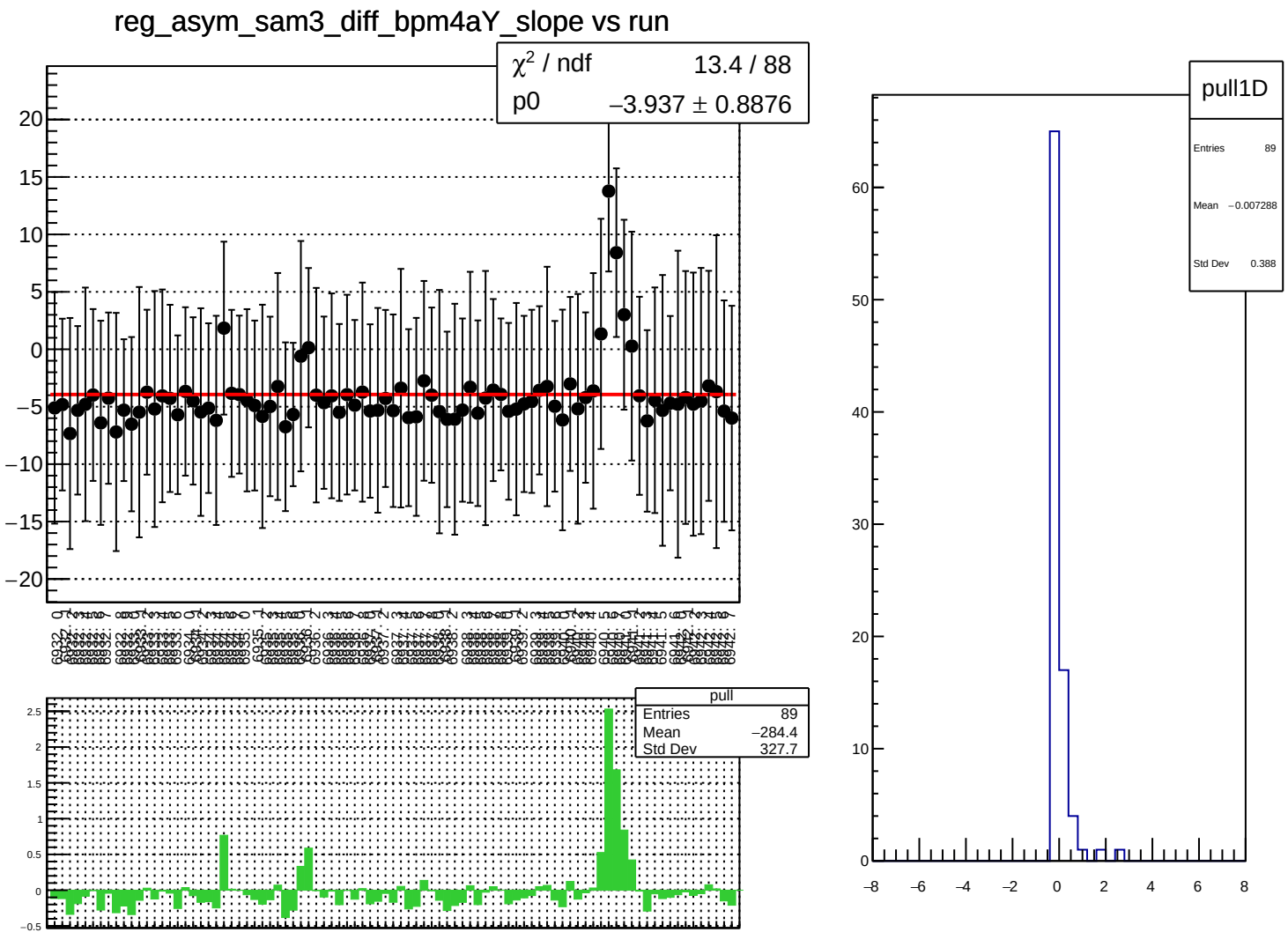

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 4.386 / 88
p0 −137.7 ± 2.118
pull
Entries 89
Mean 141
Std Dev 95.41

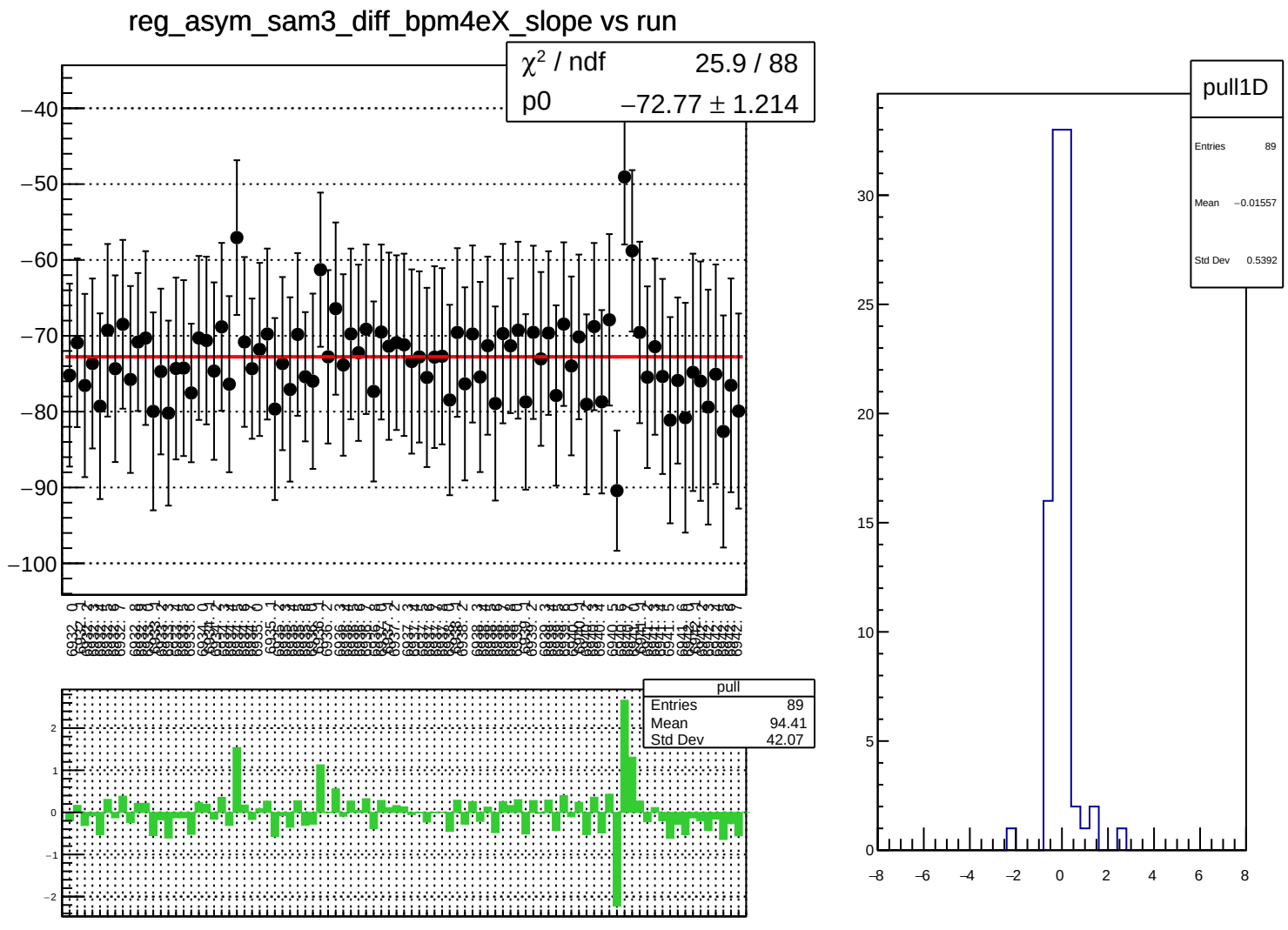

pull1D
Entries 89
Mean 0.01044
Std Dev 0.2217

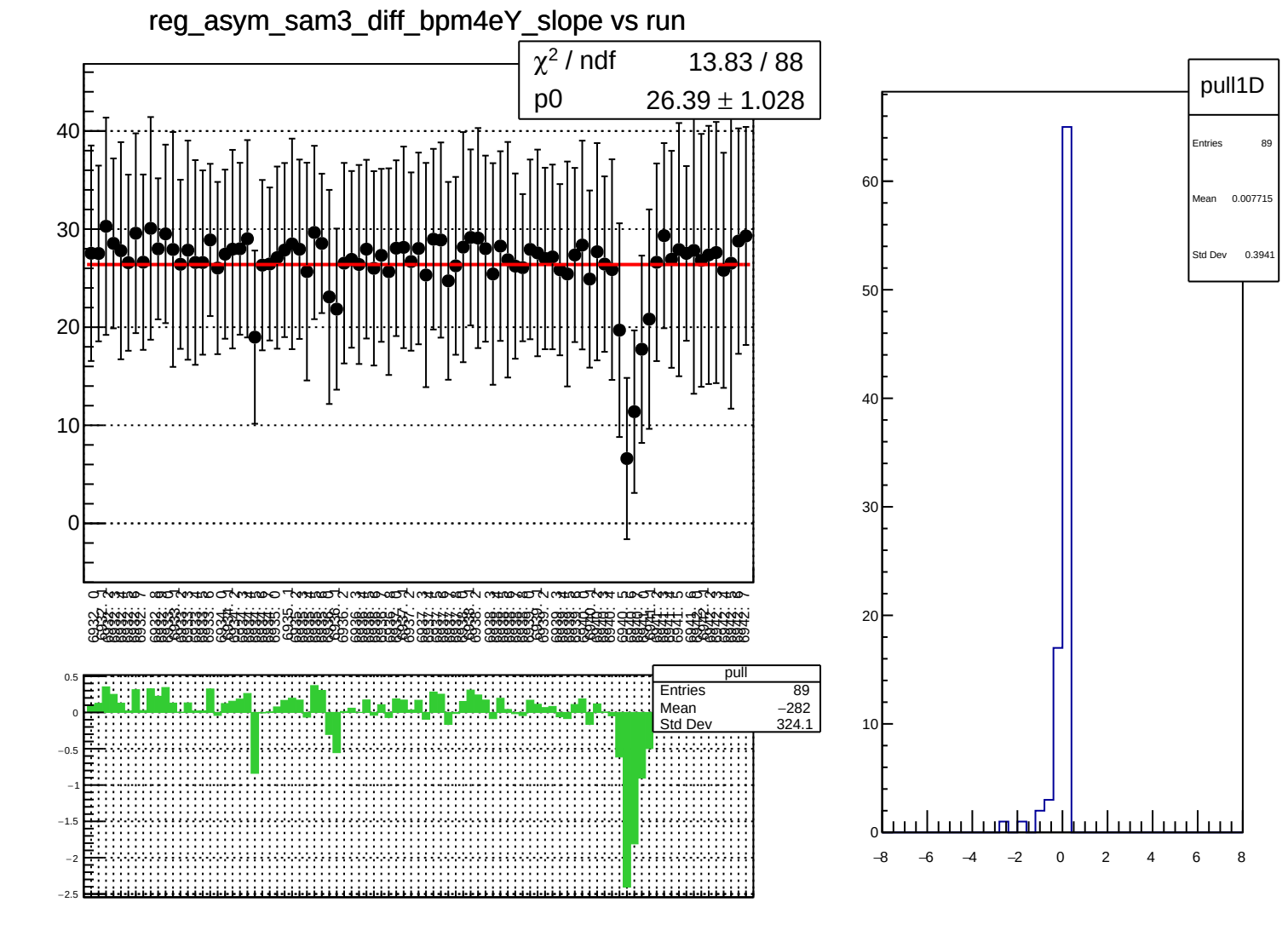

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 6.488 / 88
p0 2.272 ± 0.08771
pull
Entries 89
Mean 226.1
Std Dev 86.1
pull1D
Entries 89
Mean −0.002021
Std Dev 0.27

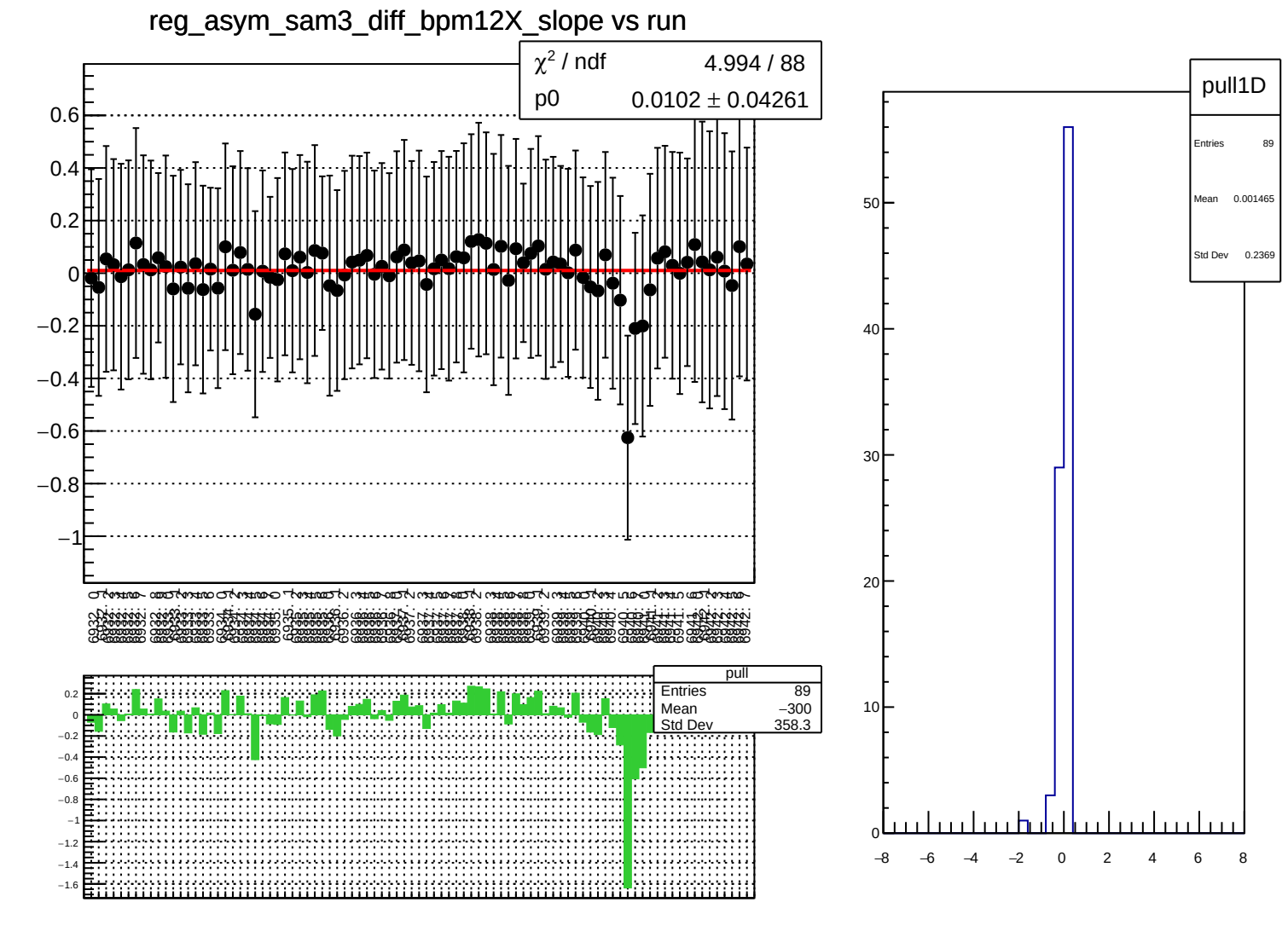

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 22.95 / 88
p0 −38.65 ± 1.306
pull
Entries 89
Mean 123.1
Std Dev 45.7

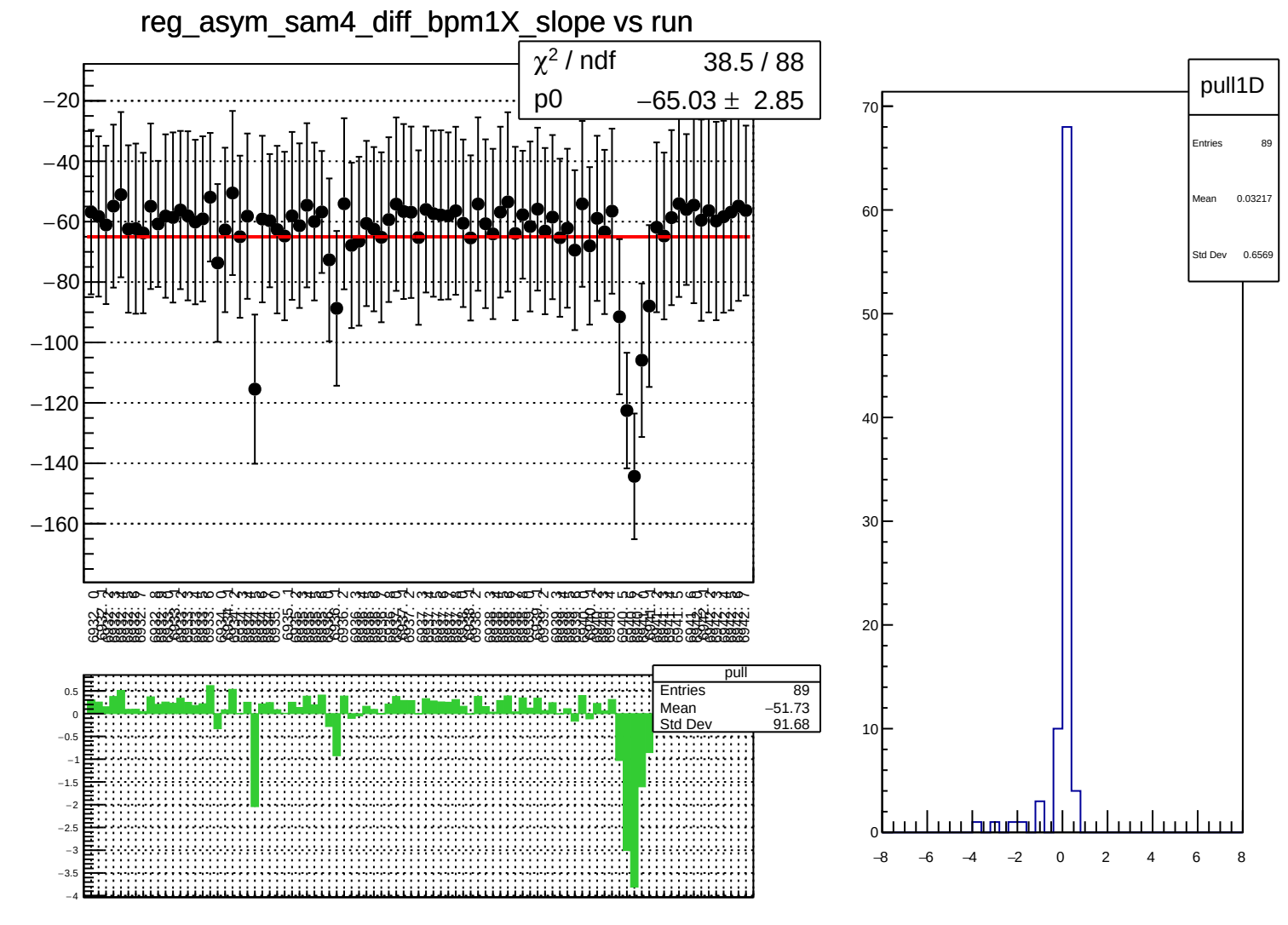

pull1D
Entries 89
Mean 0.01637
Std Dev 0.5076

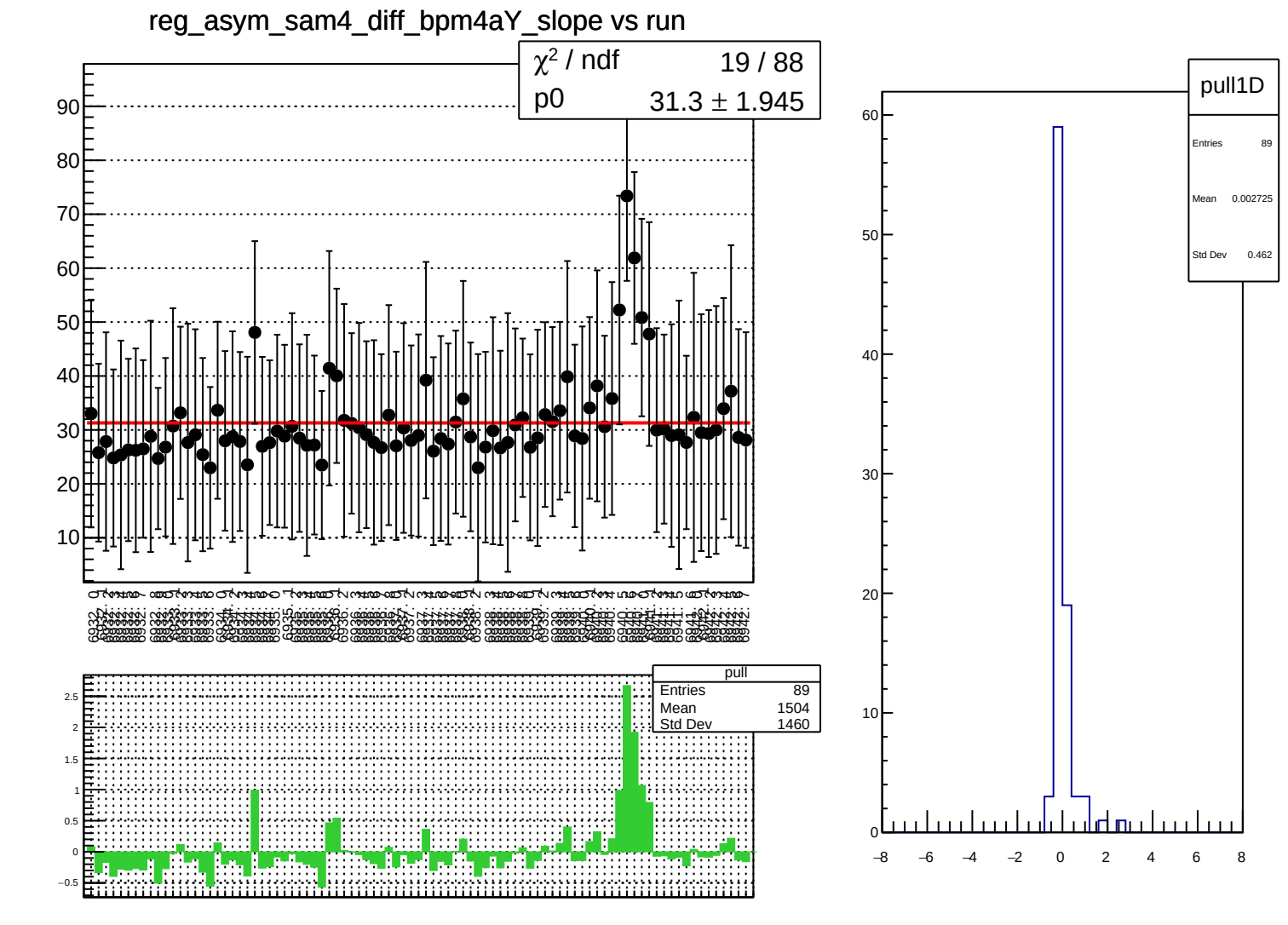

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 13.4 / 88
p0 −3.937 ± 0.8876
pull
Entries 89
Mean −284.4
Std Dev 327.7
pull1D
Entries 89
Mean −0.007288
Std Dev 0.388

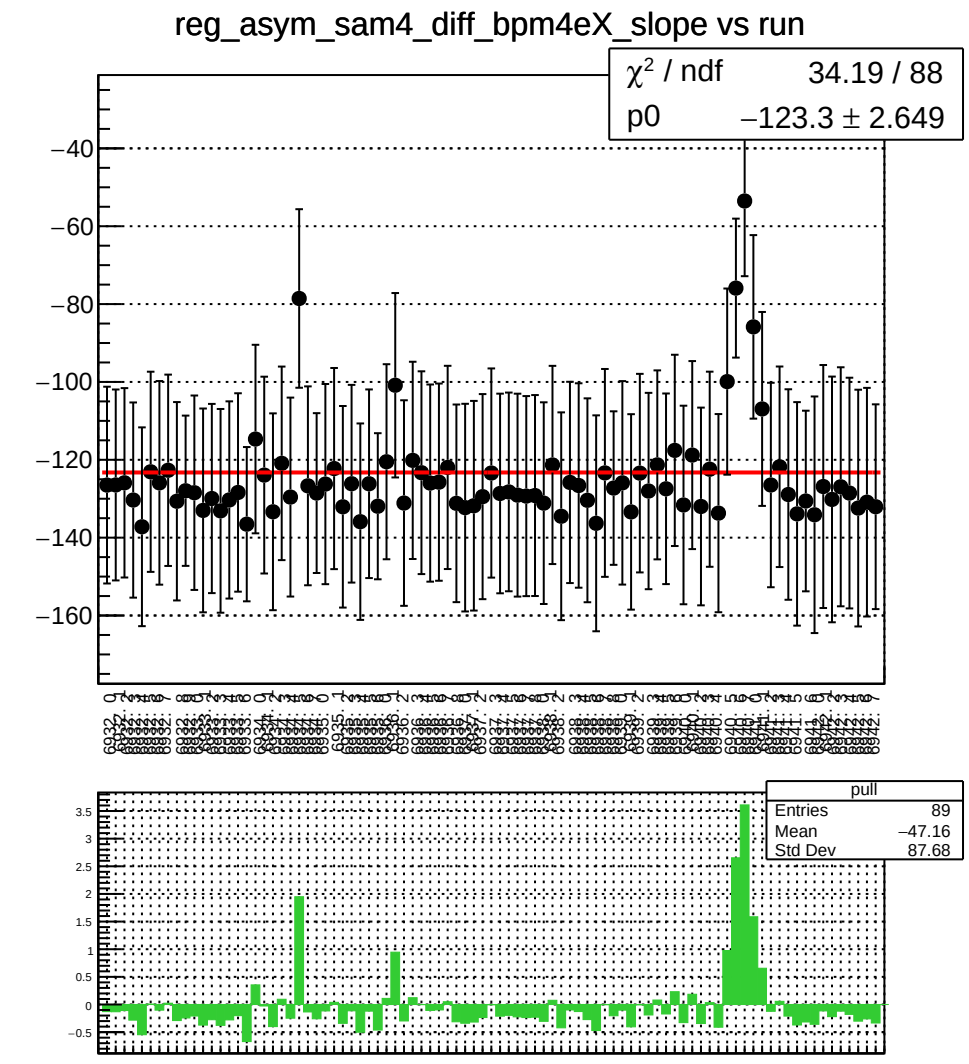

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 25.9 / 88
p0 −72.77 ± 1.214
−40
−50
−60
−70
−80
−90
−100
pull
Entries 89
Mean 94.41
Std Dev 42.07
2
1
0
−1
−2
pull1D
Entries 89
Mean −0.01557
Std Dev 0.5392
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

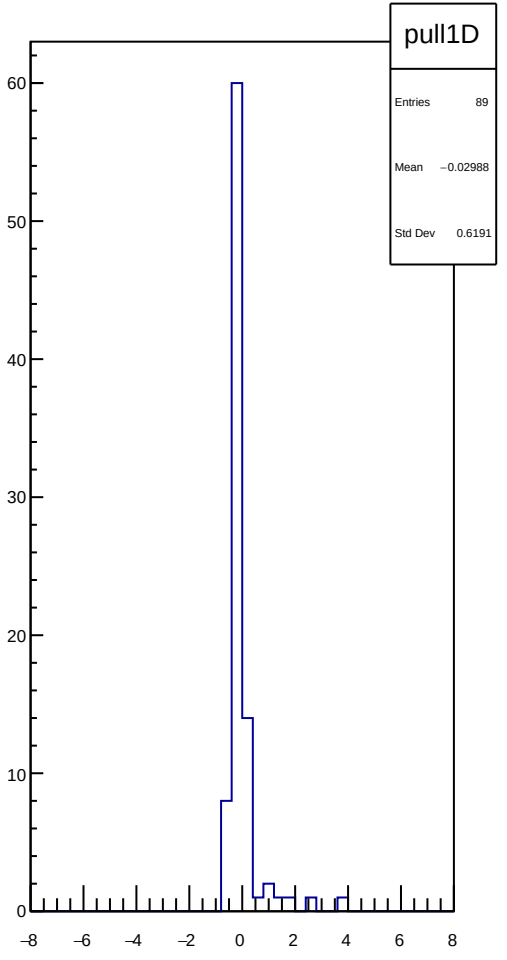

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 13.83 / 88
p0 26.39 ± 1.028
pull
Entries 89
Mean −282
Std Dev 324.1
pull1D
Entries 89
Mean 0.007715
Std Dev 0.3941

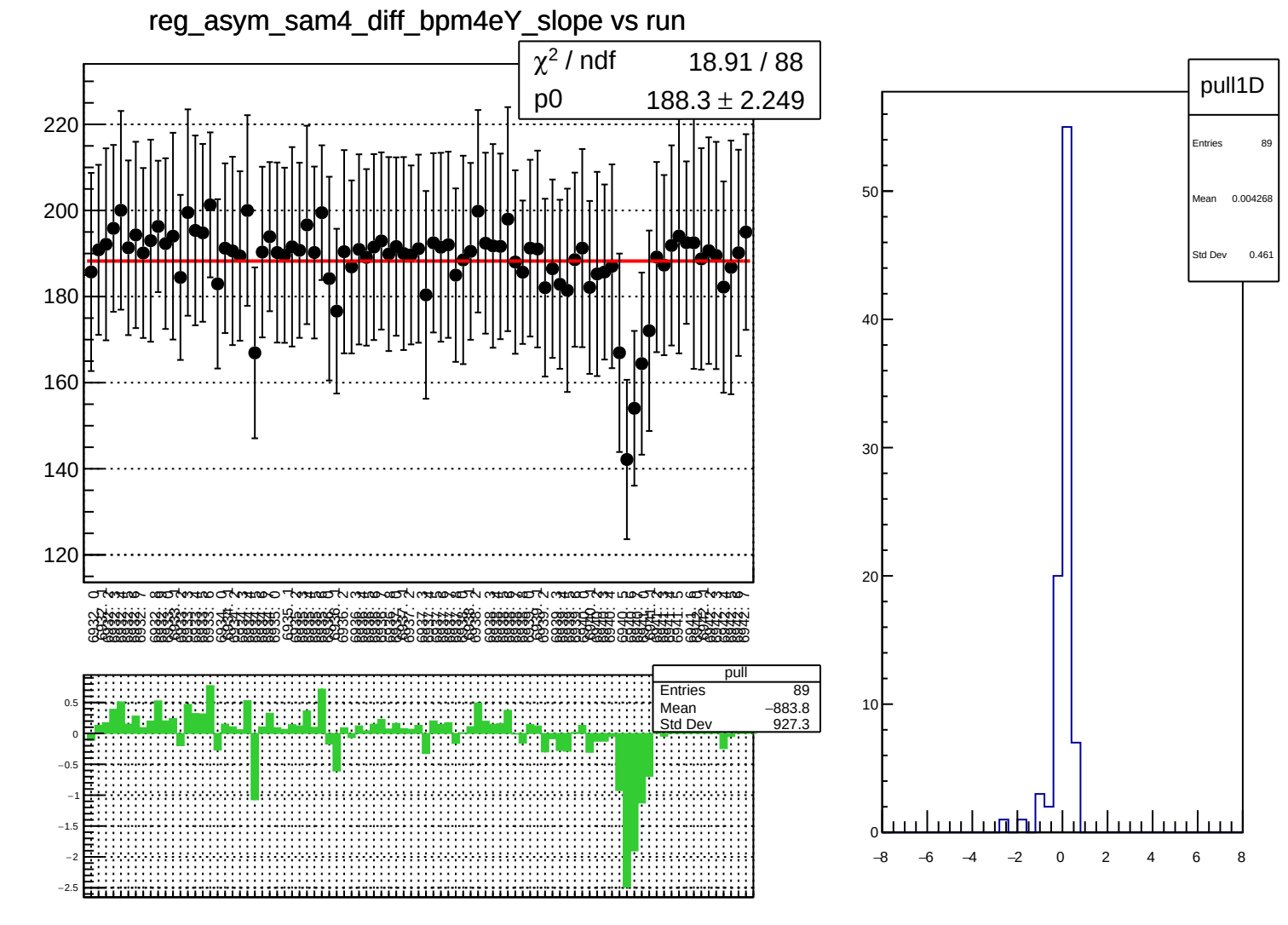

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 4.994 / 88
p0 0.0102 ± 0.04261
pull
Entries 89
Mean −300
Std Dev 358.3
pull1D
Entries 89
Mean 0.001465
Std Dev 0.2369

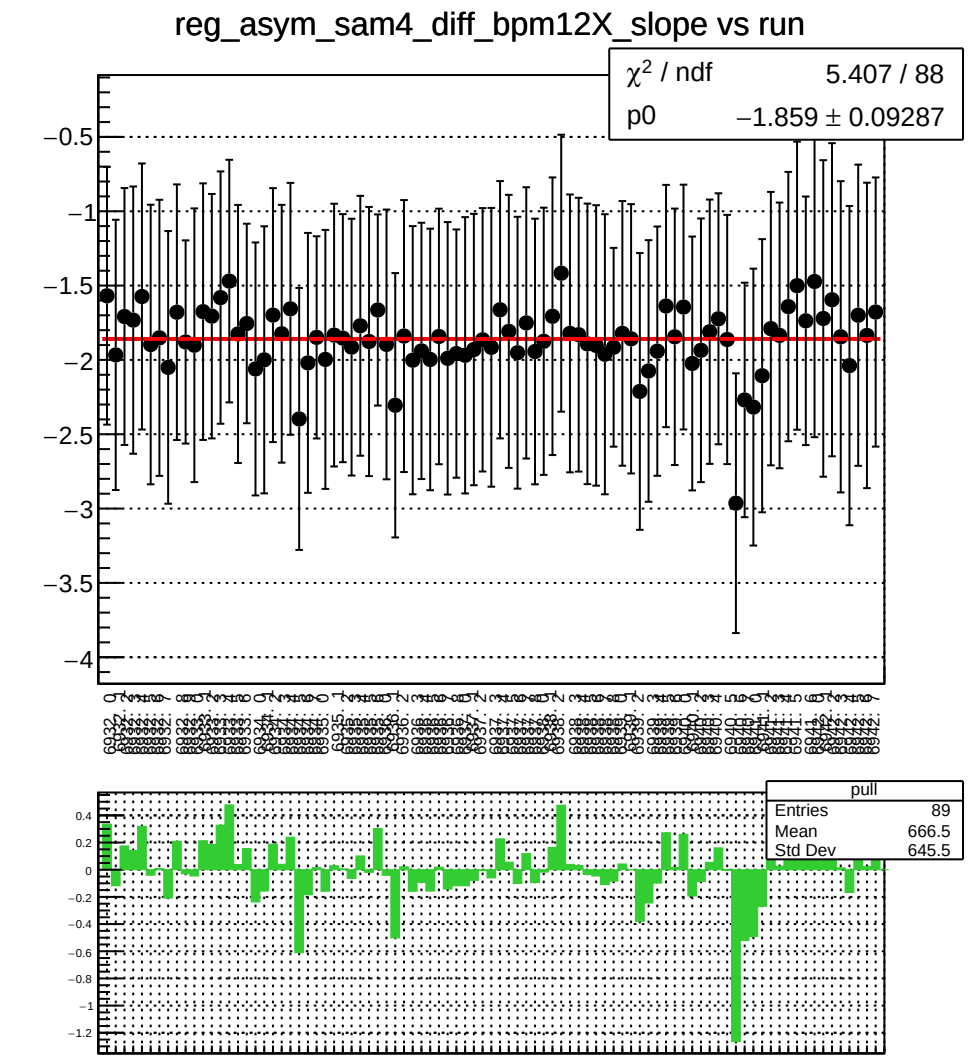

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 38.5 / 88
p0 −65.03 ± 2.85
pull
Entries 89
Mean −51.73
Std Dev 91.68
pull1D
Entries 89
Mean 0.03217
Std Dev 0.6569

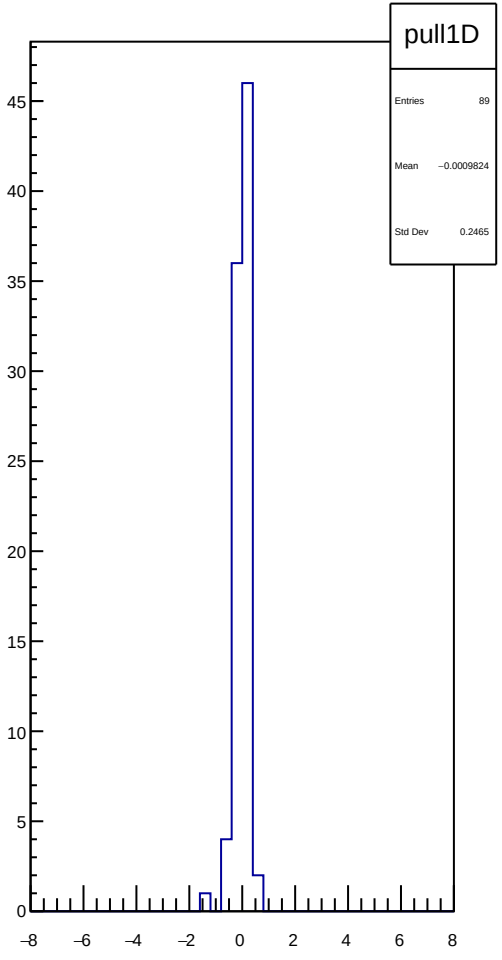

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 19 / 88
p0 31.3 ± 1.945
pull
Entries 89
Mean 1504
Std Dev 1460
pull1D
Entries 89
Mean 0.002725
Std Dev 0.462

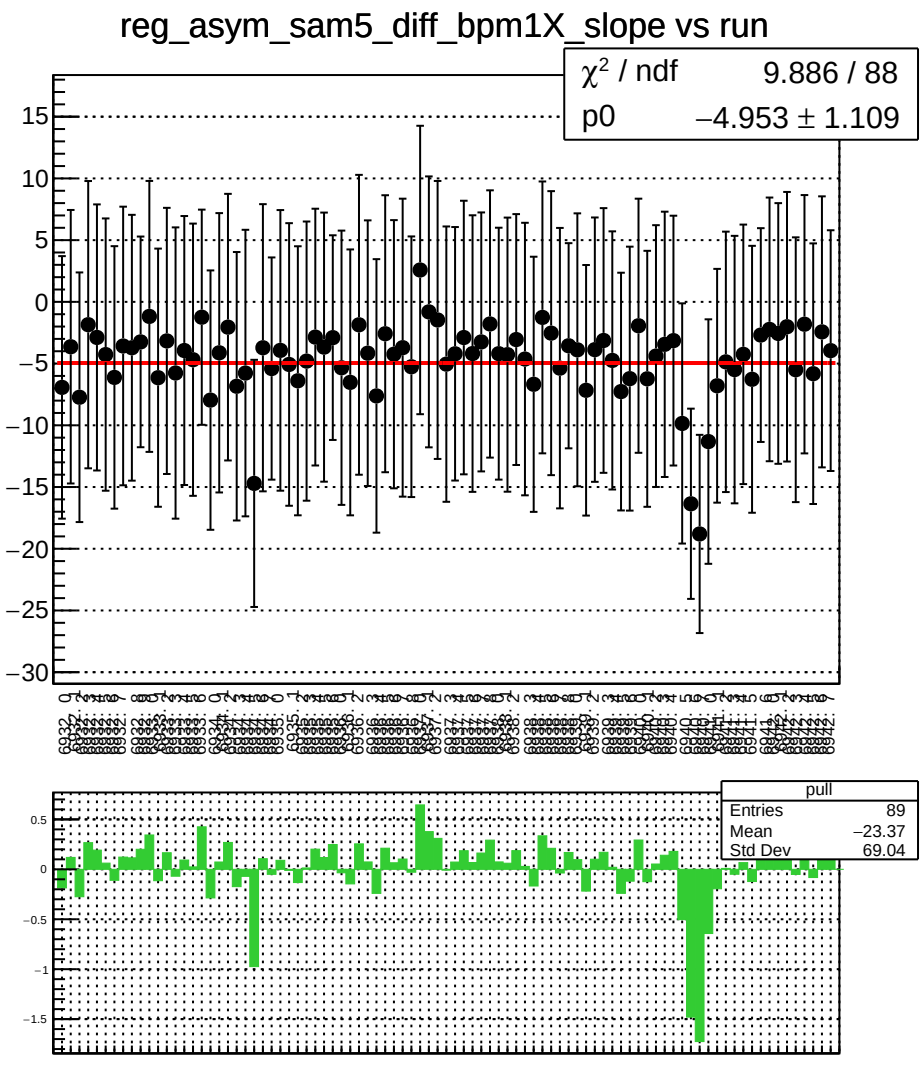

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 34.19 / 88
p0 −123.3 ± 2.649
pull
Entries 89
Mean −47.16
Std Dev 87.68

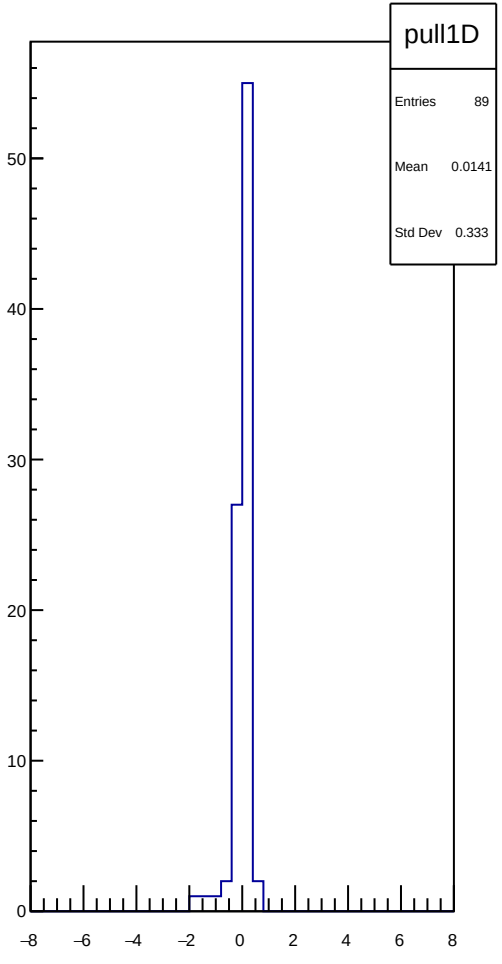

pull1D
Entries 89
Mean −0.02988
Std Dev 0.6191

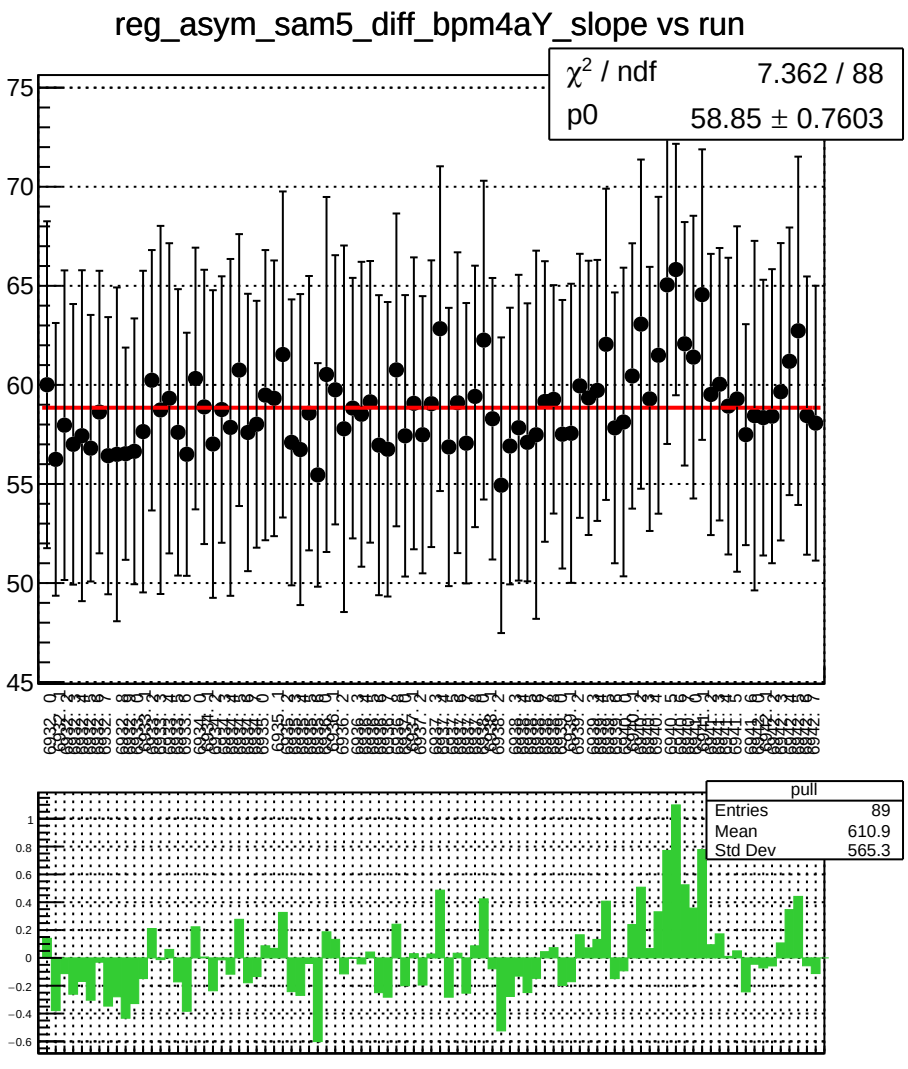

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 18.91 / 88
p0 188.3 ± 2.249
220
200
180
160
140
120
pull
Entries 89
Mean −883.8
Std Dev 927.3
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 89
Mean 0.004268
Std Dev 0.461
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

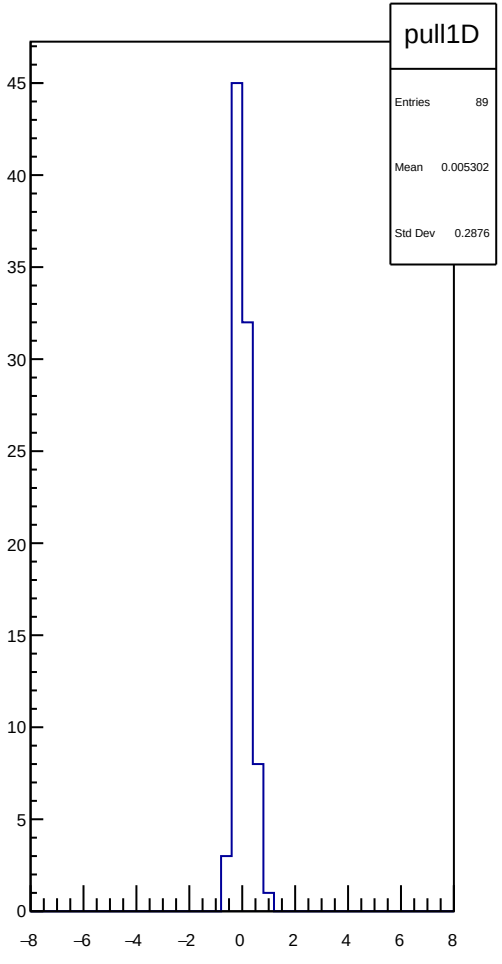

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 5.407 / 88
p0 −1.859 ± 0.09287
pull
Entries 89
Mean 666.5
Std Dev 645.5

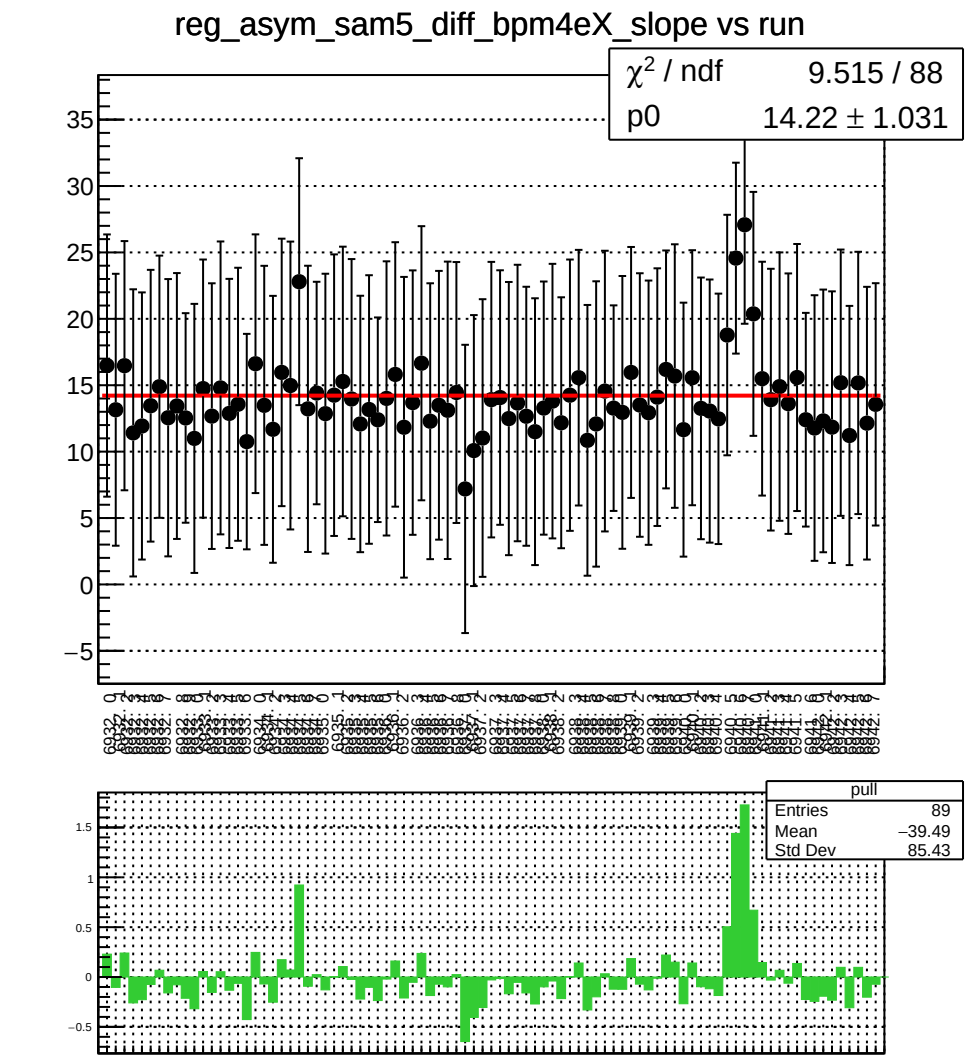

pull1D
Entries 89
Mean −0.0009824
Std Dev 0.2465

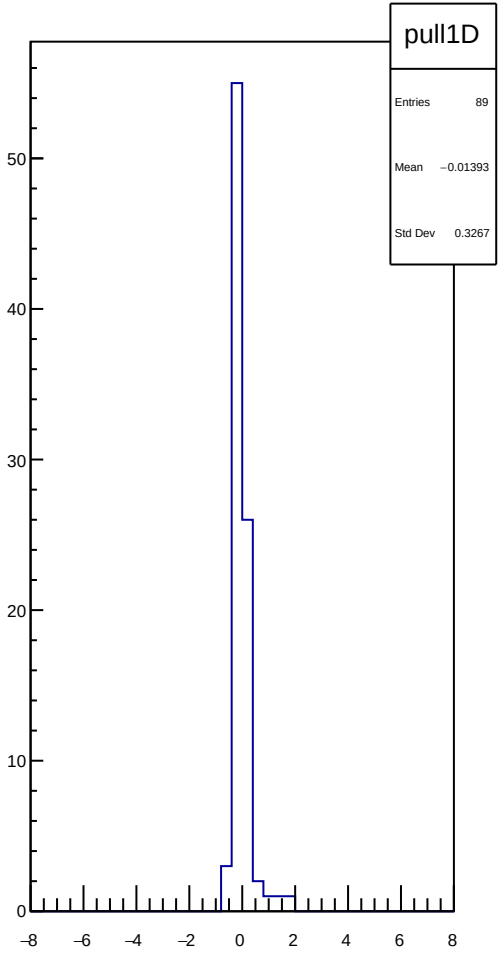

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 9.886 / 88
p0 −4.953 ± 1.109
pull
Entries 89
Mean −23.37
Std Dev 69.04

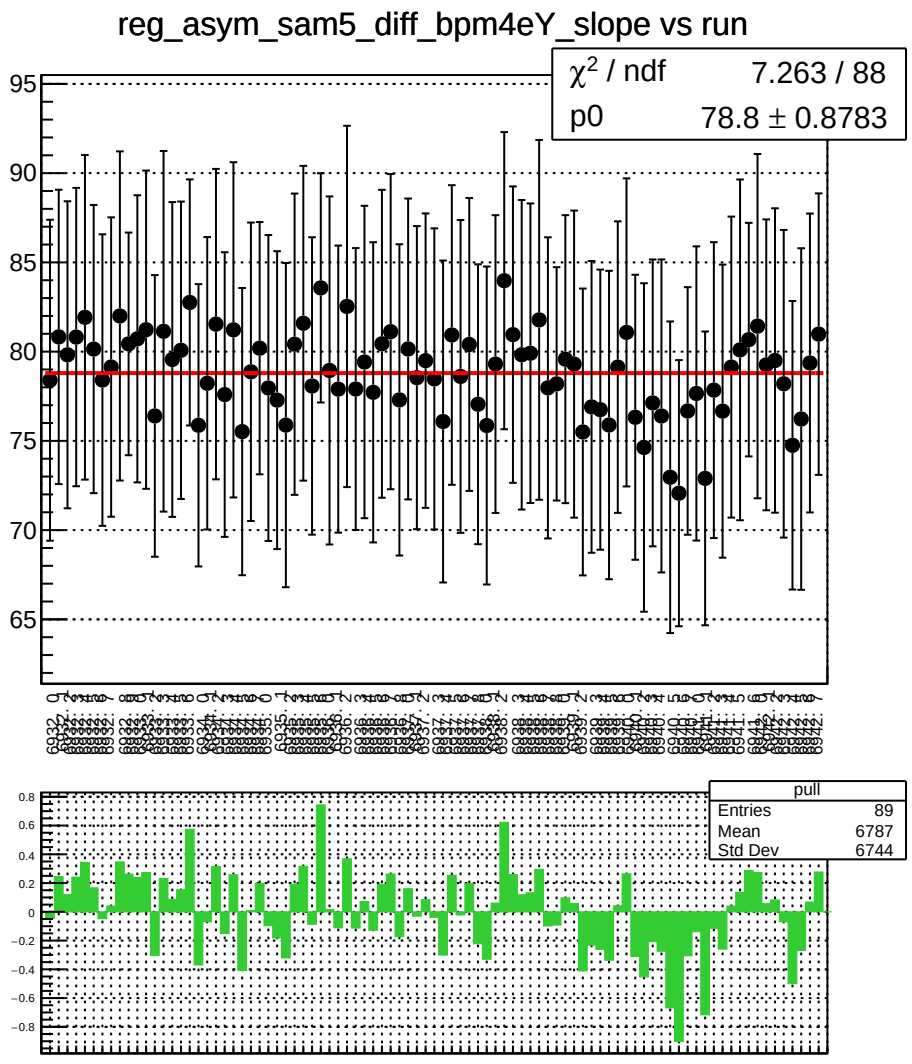

pull1D
Entries 89
Mean 0.0141
Std Dev 0.333

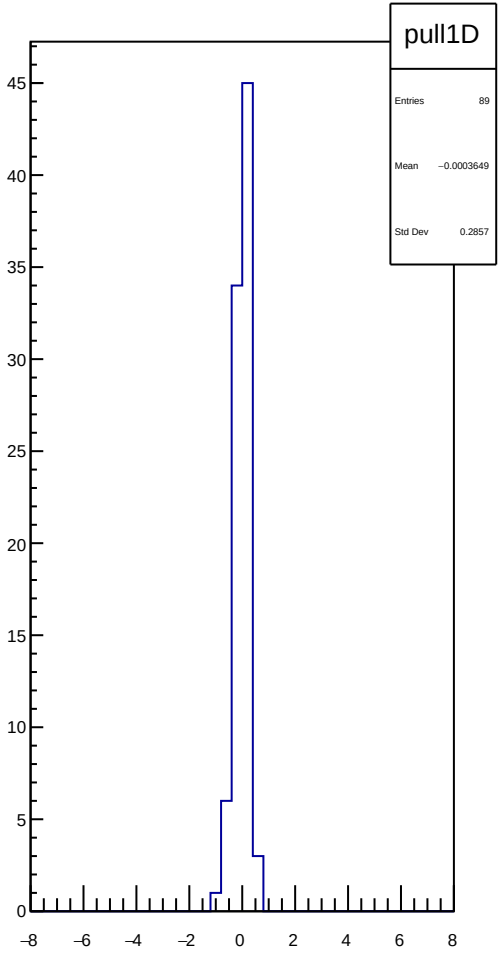

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 7.362 / 88
p0 58.85 ± 0.7603
pull
Entries 89
Mean 610.9
Std Dev 565.3

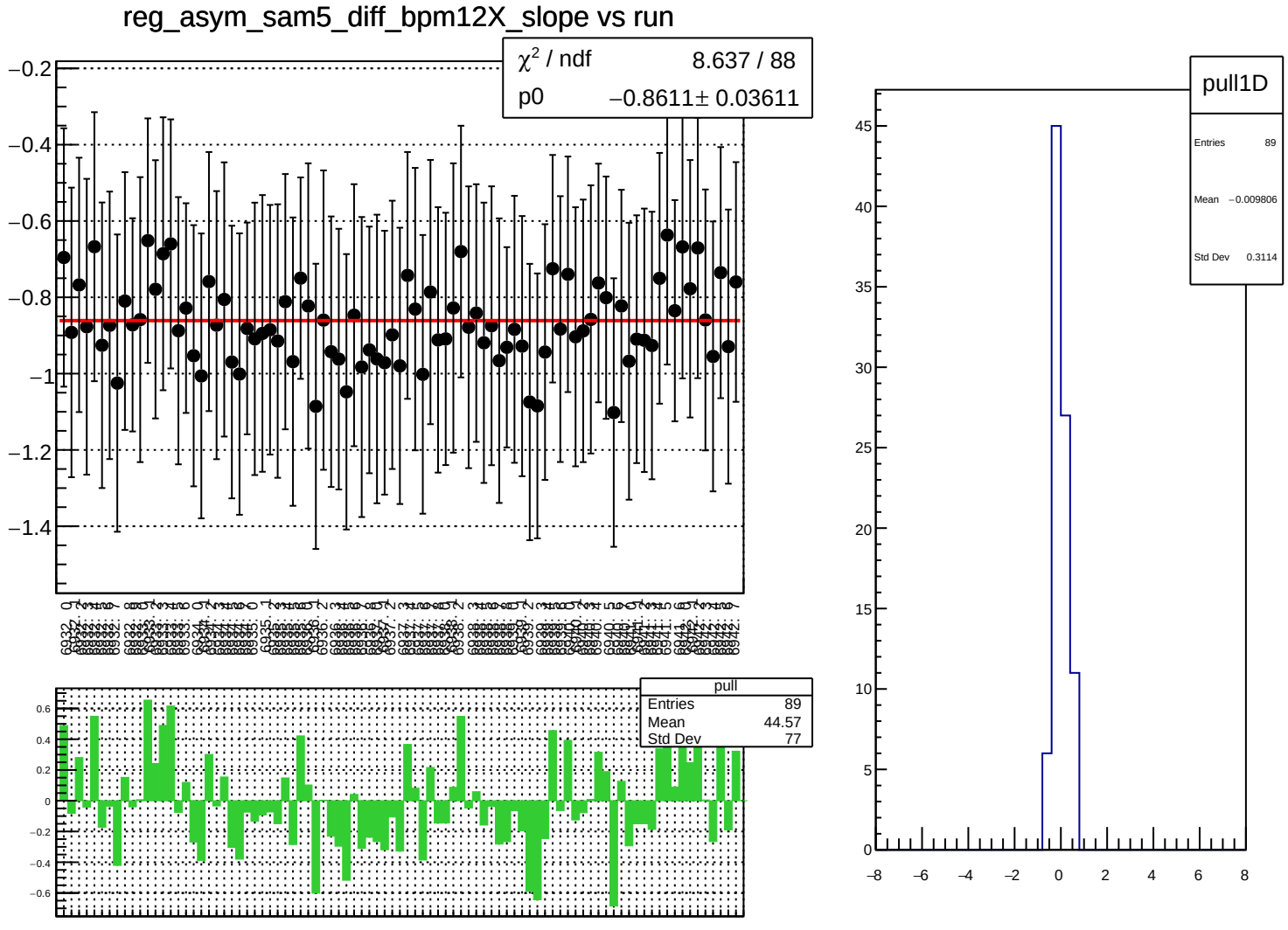

pull1D
Entries 89
Mean 0.005302
Std Dev 0.2876

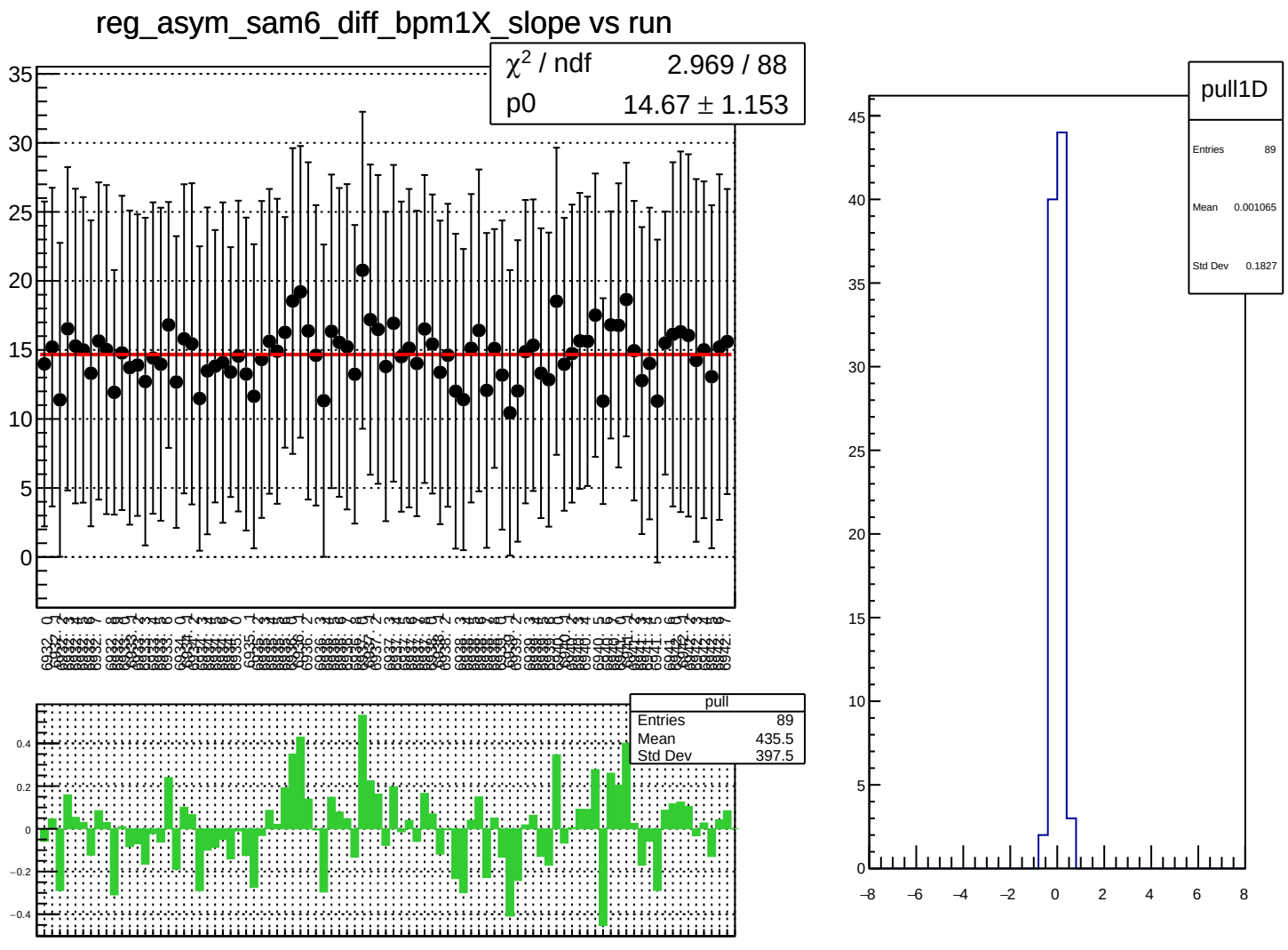

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 9.515 / 88
p0 14.22 ± 1.031
pull
Entries 89
Mean −39.49
Std Dev 85.43

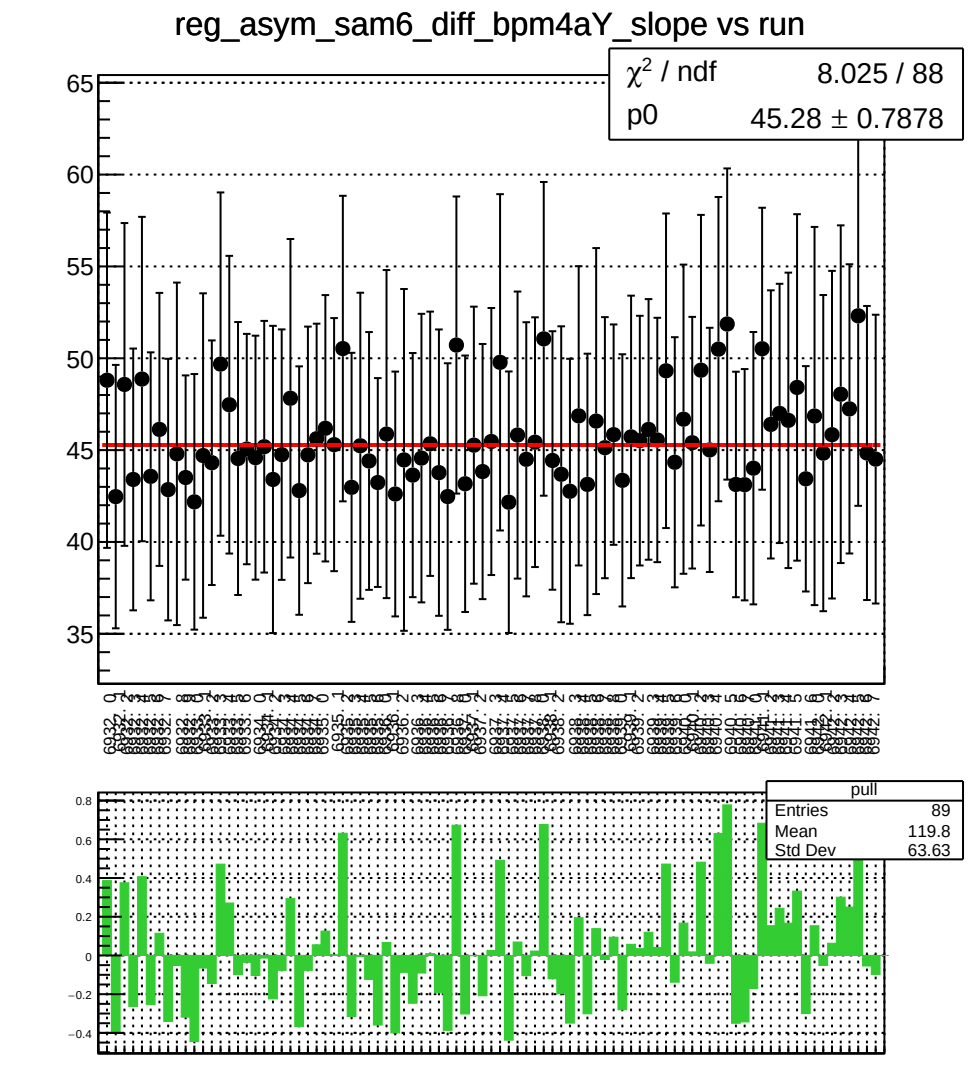

pull1D
Entries 89
Mean −0.01393
Std Dev 0.3267

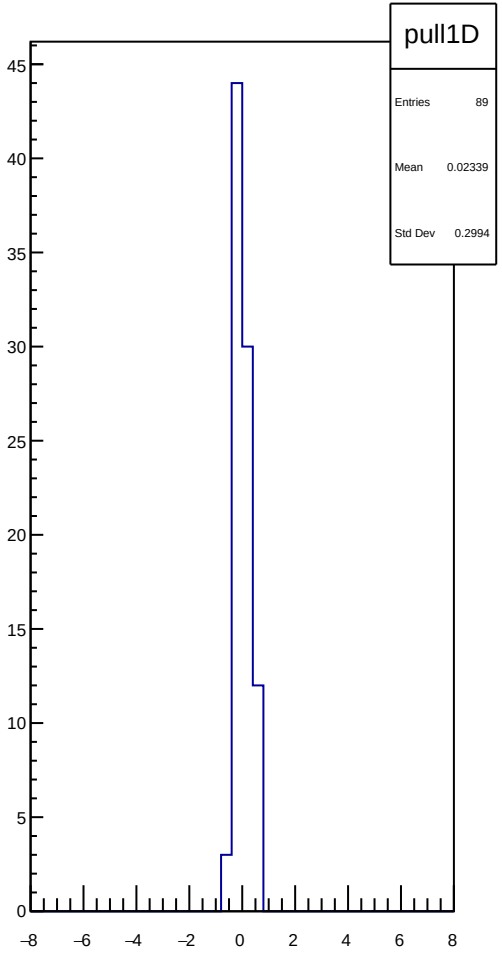

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 7.263 / 88
p0 78.8 ± 0.8783
pull
Entries 89
Mean 6787
Std Dev 6744

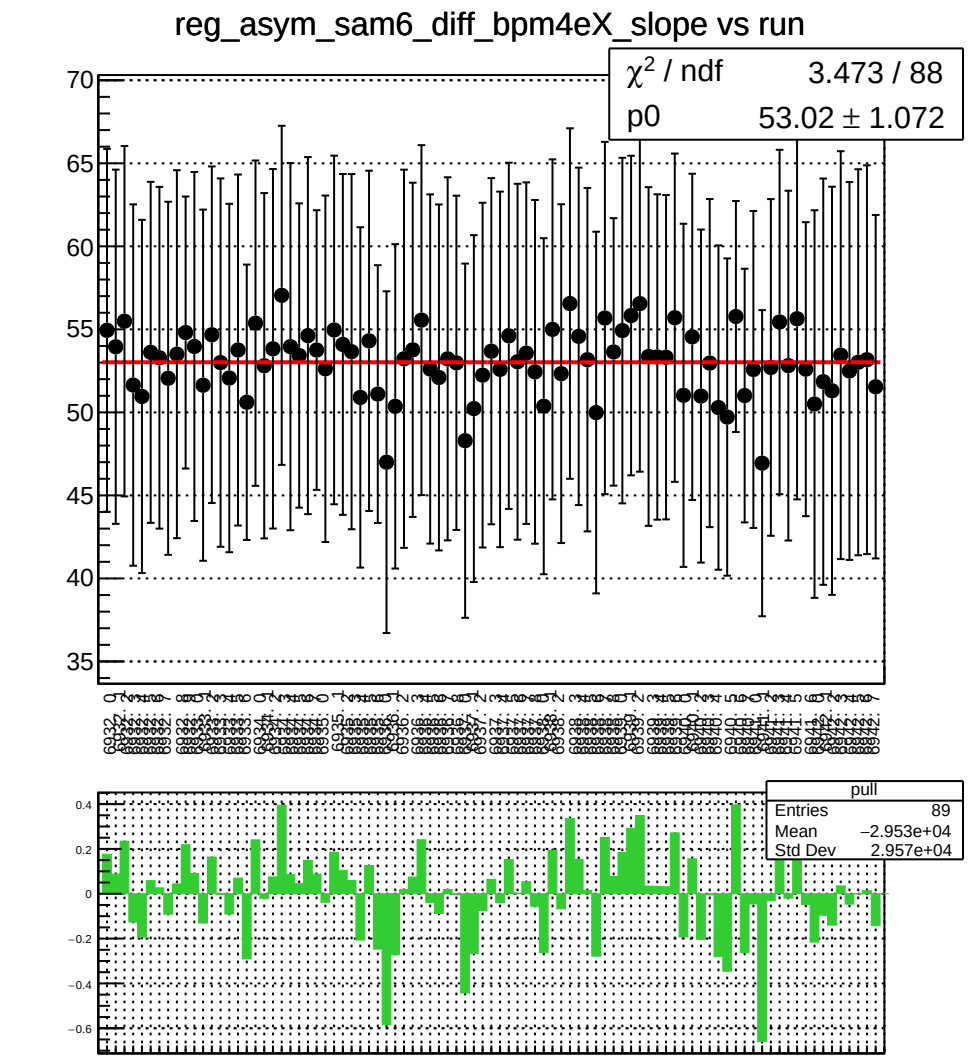

pull1D
Entries 89
Mean −0.0003649
Std Dev 0.2857

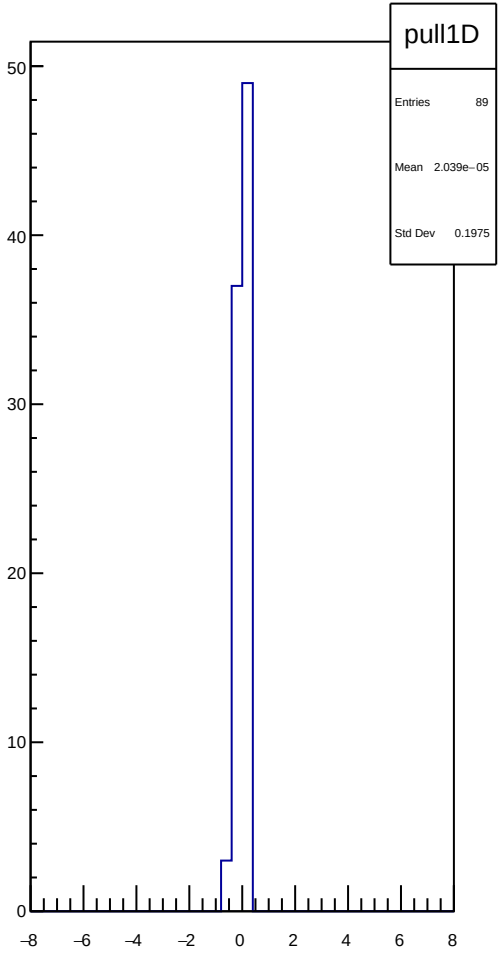

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 8.637 / 88
p0 −0.8611± 0.03611
pull
Entries 89
Mean 44.57
Std Dev 77
pull1D
Entries 89
Mean −0.009806
Std Dev 0.3114

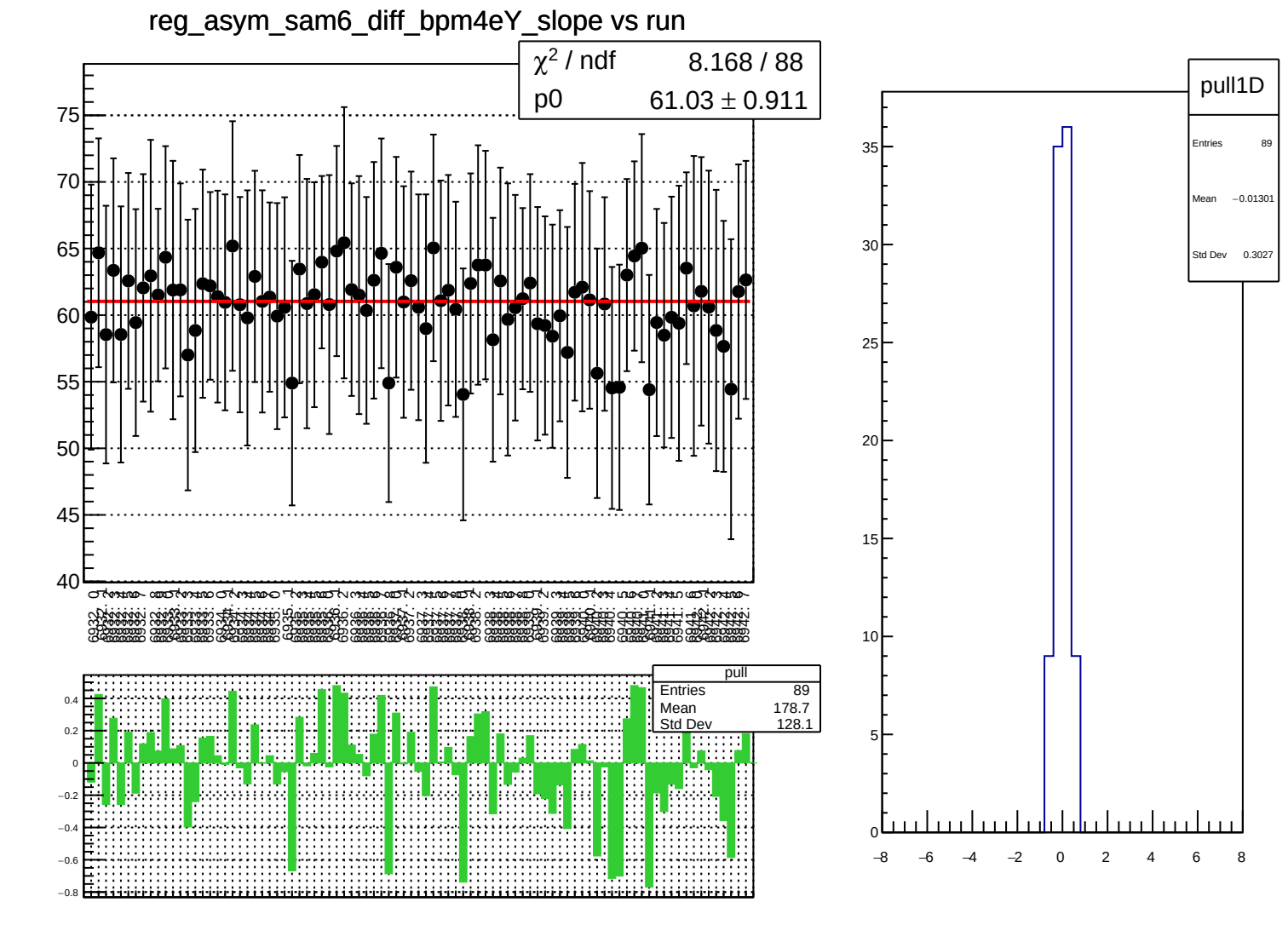

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 2.969 / 88
p0 14.67 ± 1.153
pull
Entries 89
Mean 435.5
Std Dev 397.5
pull1D
Entries 89
Mean 0.001065
Std Dev 0.1827

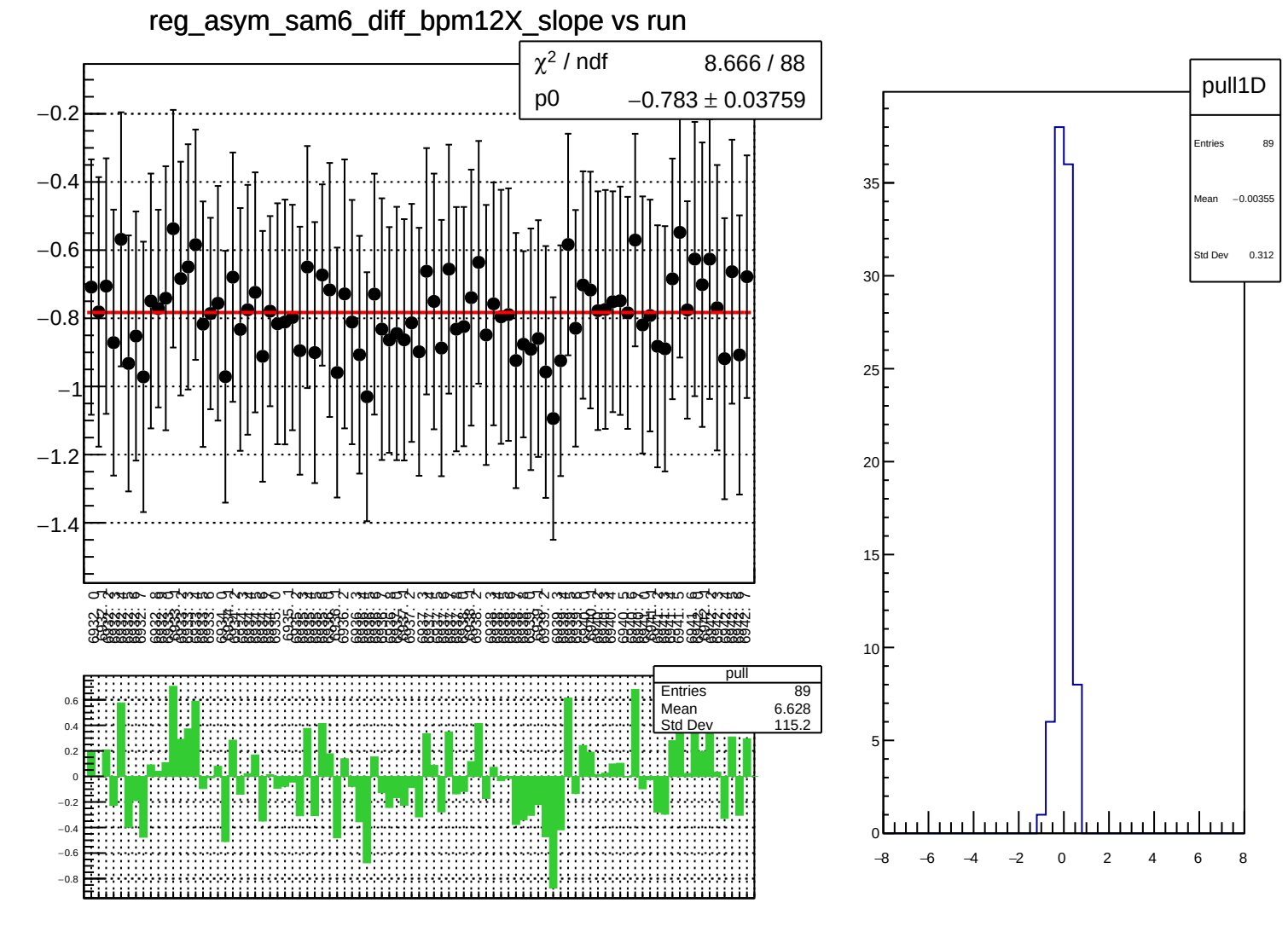

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 8.025 / 88
p0 45.28 ± 0.7878
pull
Entries 89
Mean 119.8
Std Dev 63.63

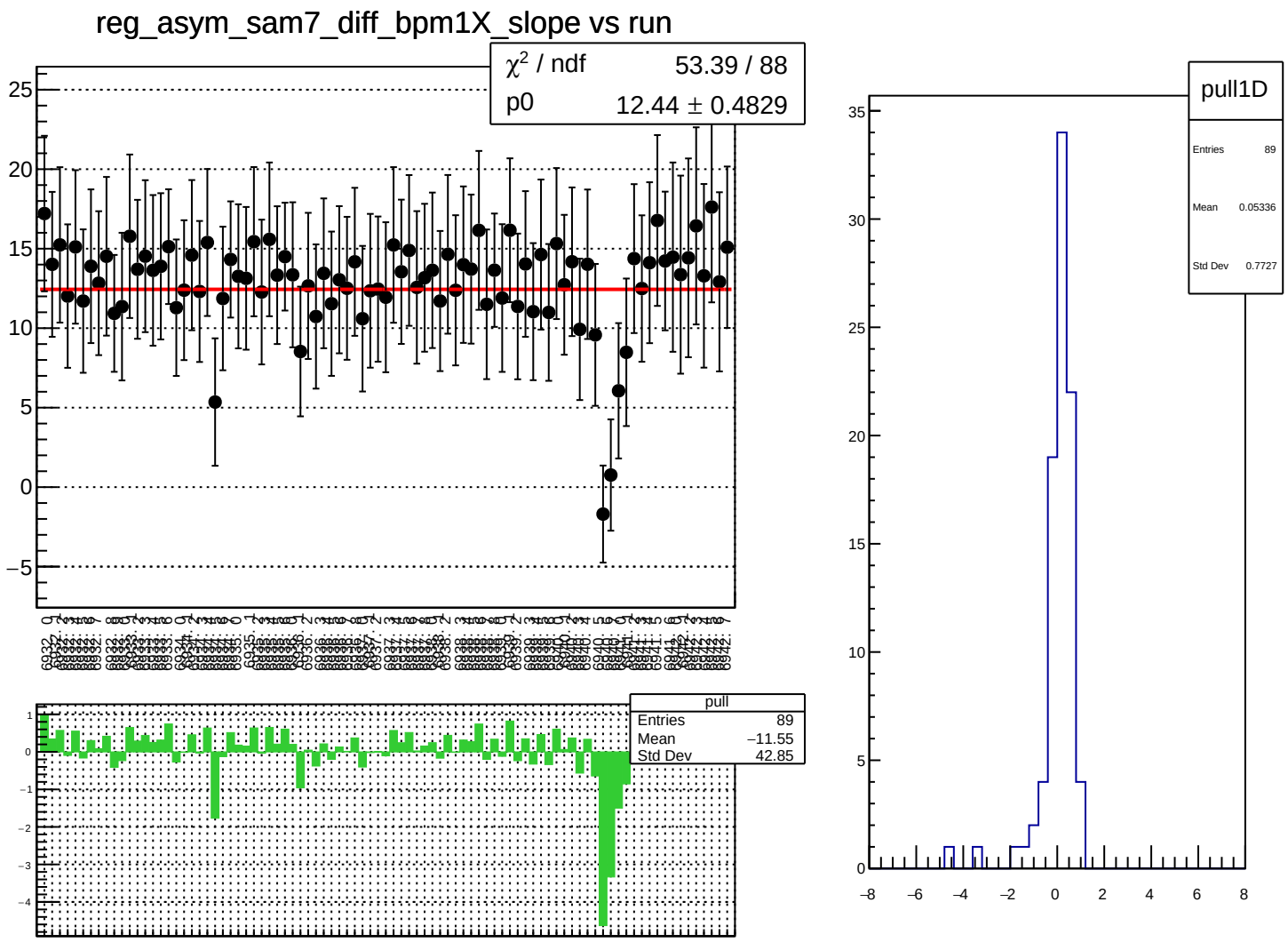

pull1D
Entries 89
Mean 0.02339
Std Dev 0.2994

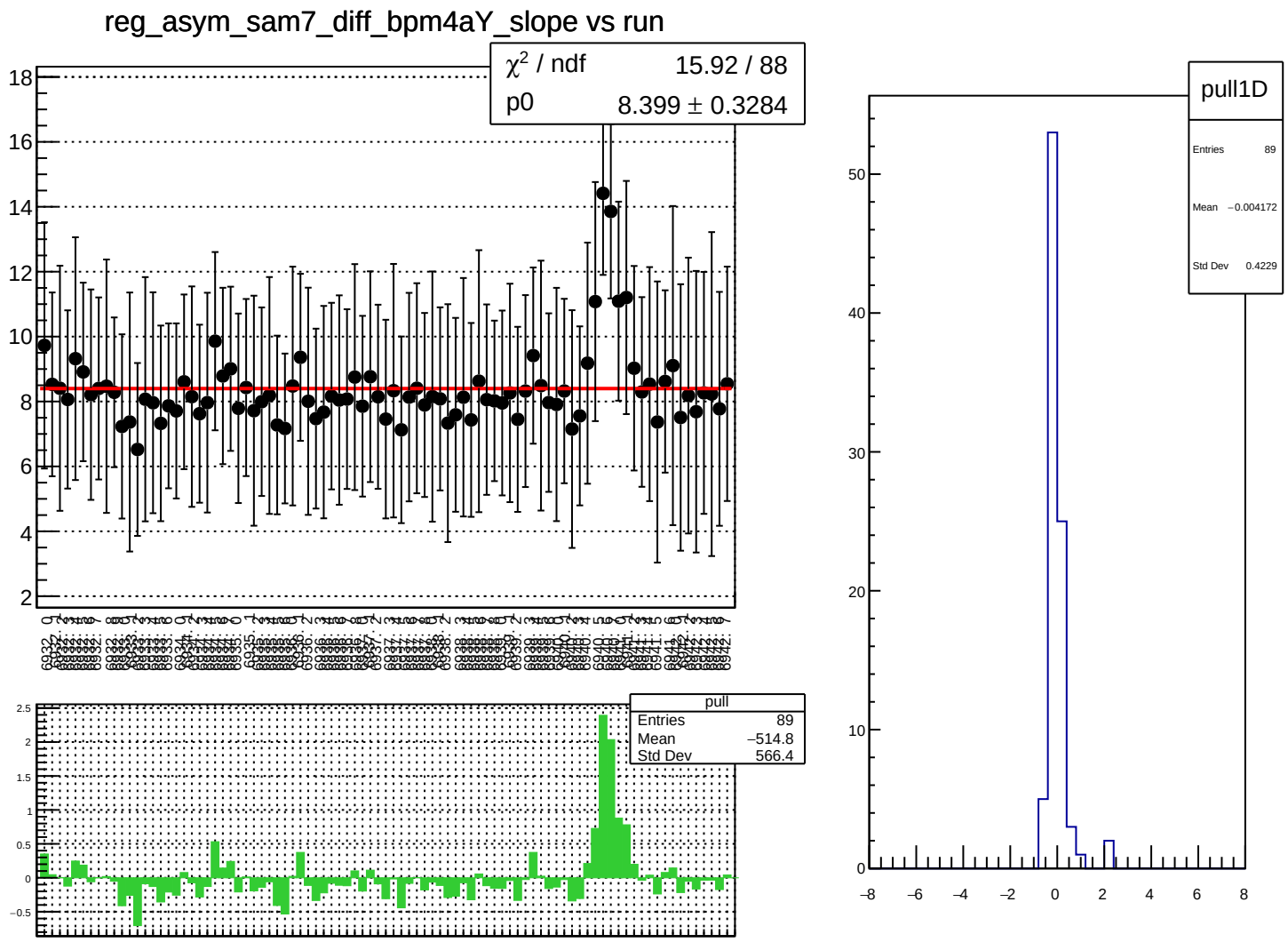

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 3.473 / 88
p0 53.02 ± 1.072
pull
Entries 89
Mean −2.953e+04
Std Dev 2.957e+04

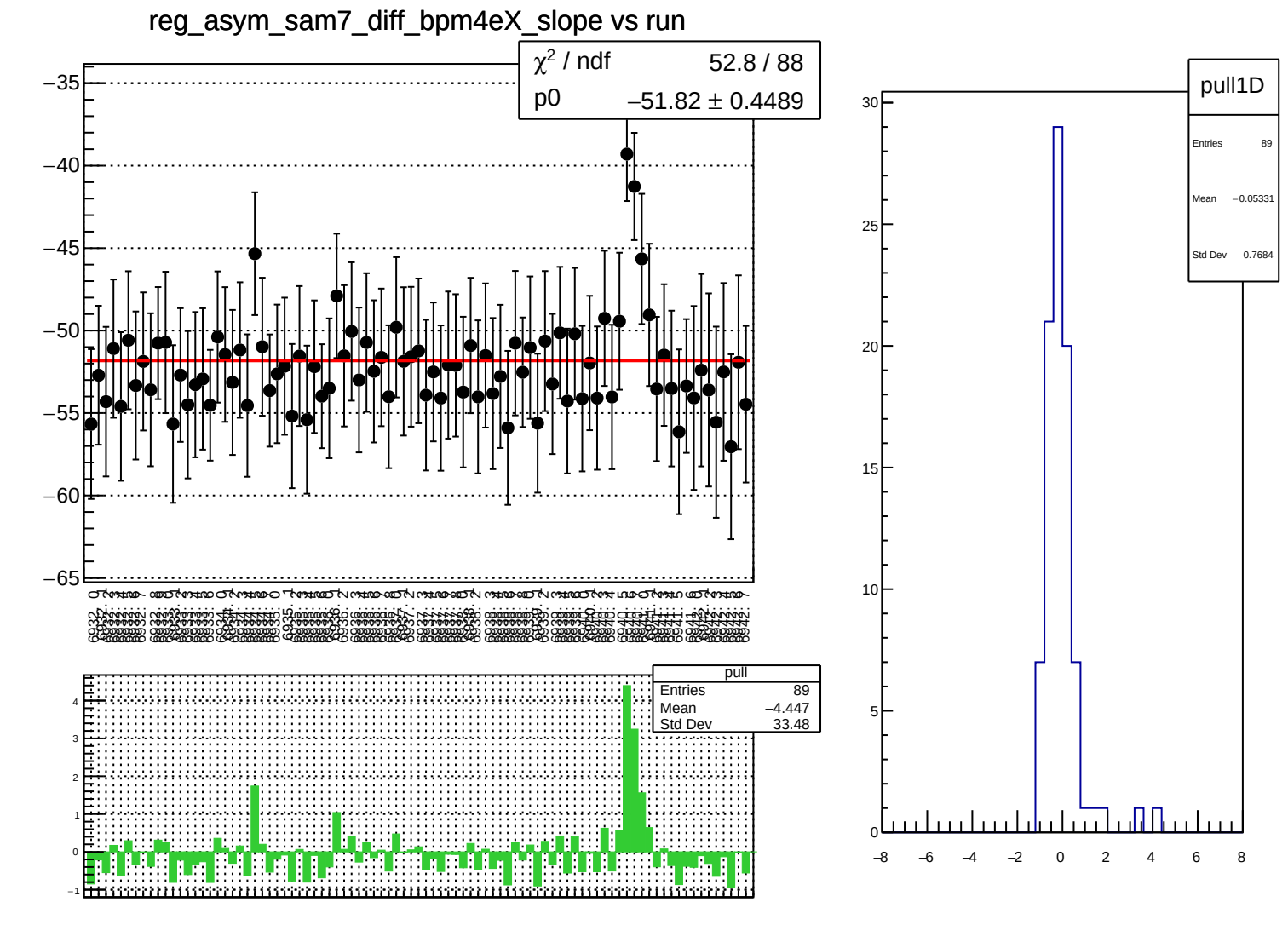

pull1D
Entries 89
Mean 2.039e−05
Std Dev 0.1975

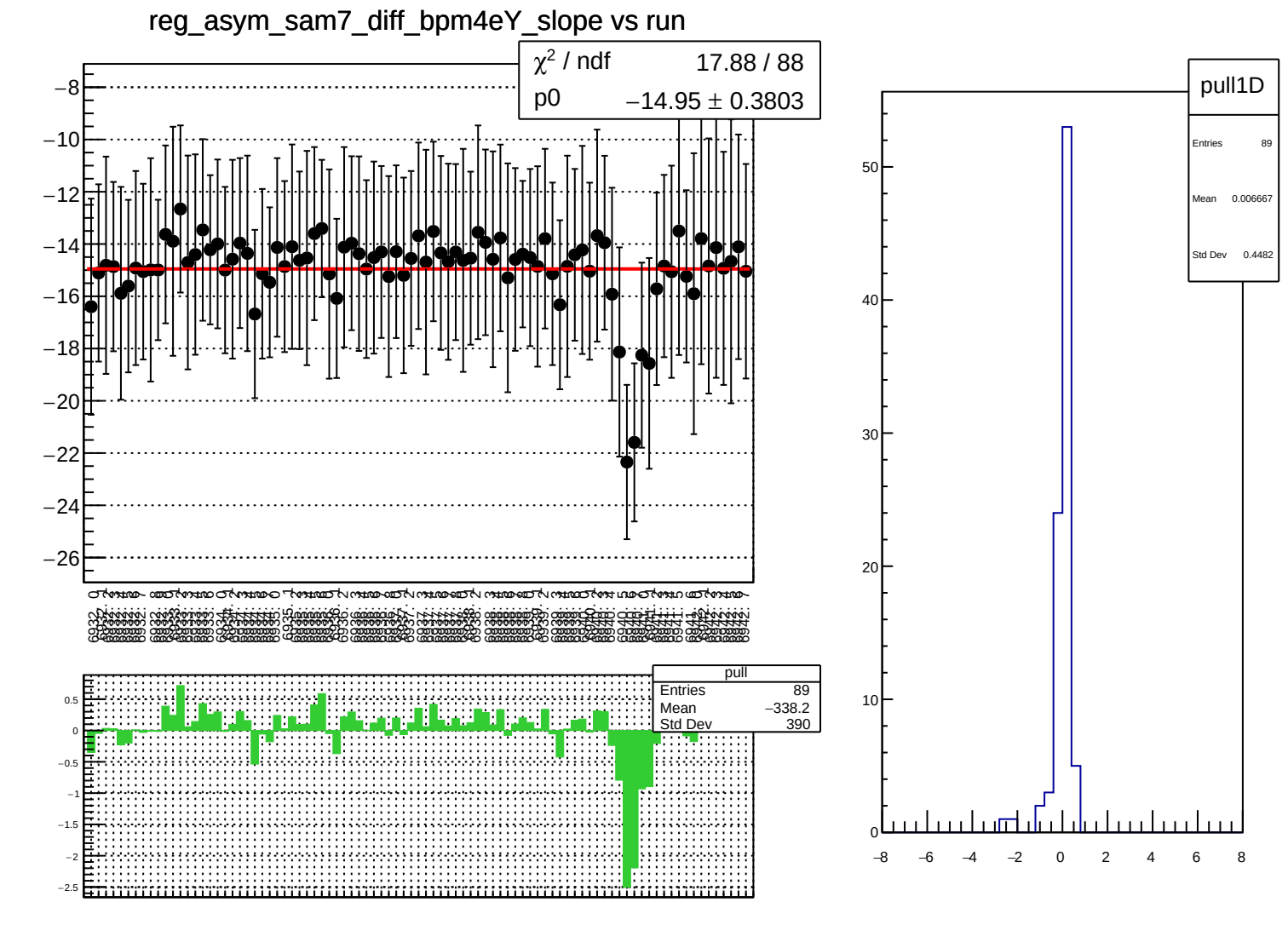

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 8.168 / 88
p0 61.03 ± 0.911
pull
Entries 89
Mean 178.7
Std Dev 128.1
pull1D
Entries 89
Mean −0.01301
Std Dev 0.3027

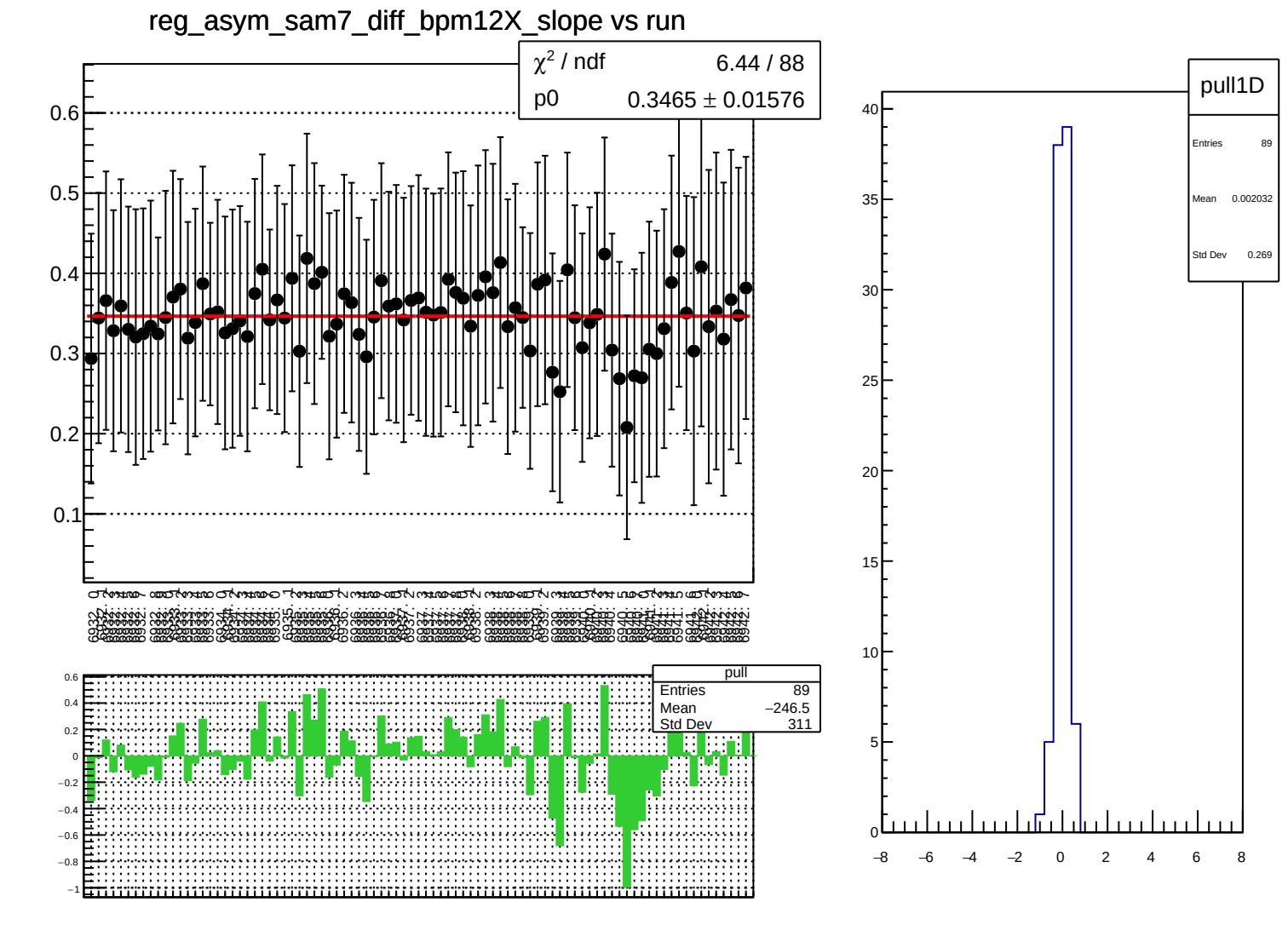

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 8.666 / 88
p0 −0.783 ± 0.03759
pull
Entries 89
Mean 6.628
Std Dev 115.2
pull1D
Entries 89
Mean −0.00355
Std Dev 0.312

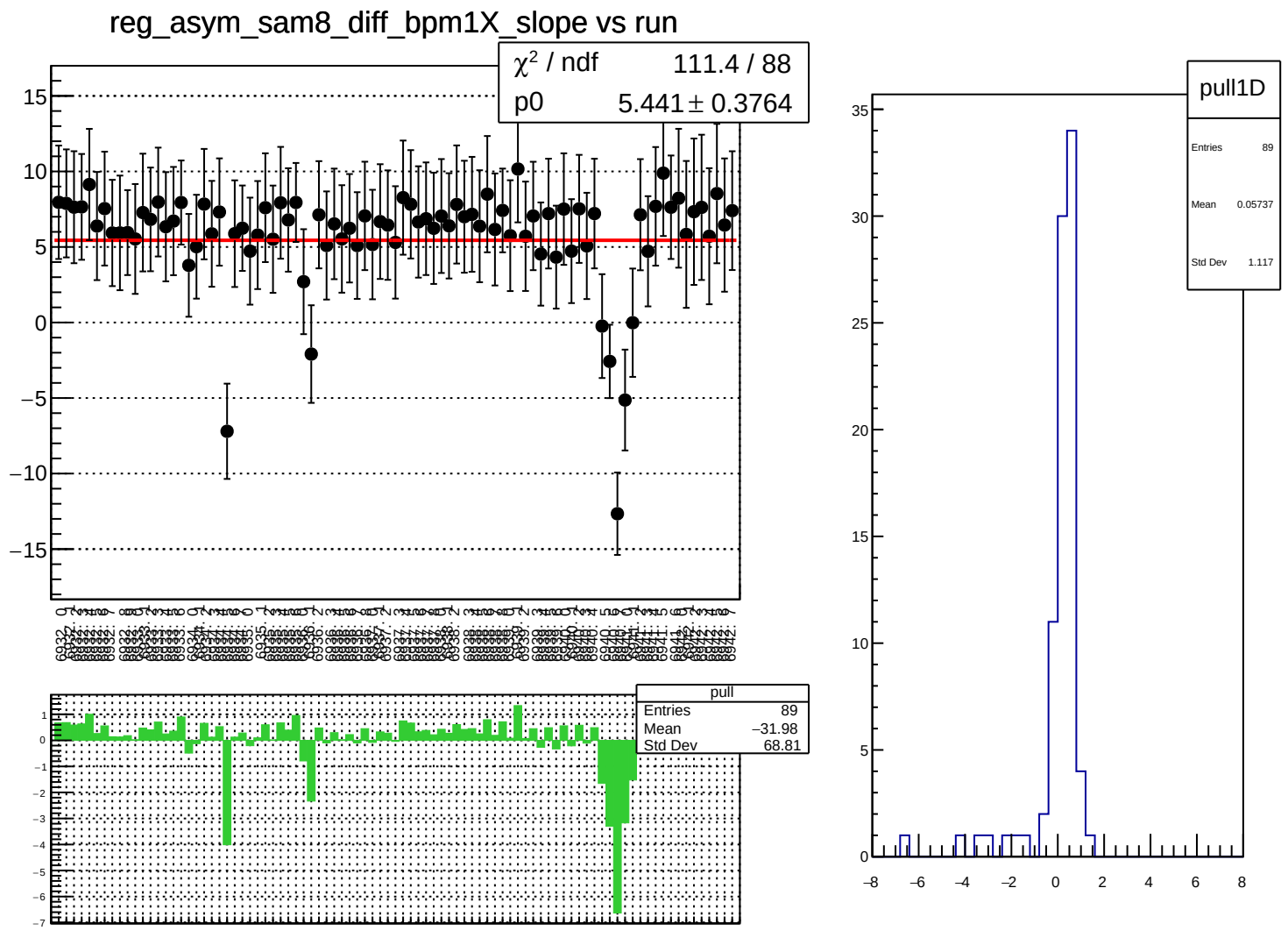

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 53.39 / 88
p0 12.44 ± 0.4829
pull
Entries 89
Mean −11.55
Std Dev 42.85
pull1D
Entries 89
Mean 0.05336
Std Dev 0.7727

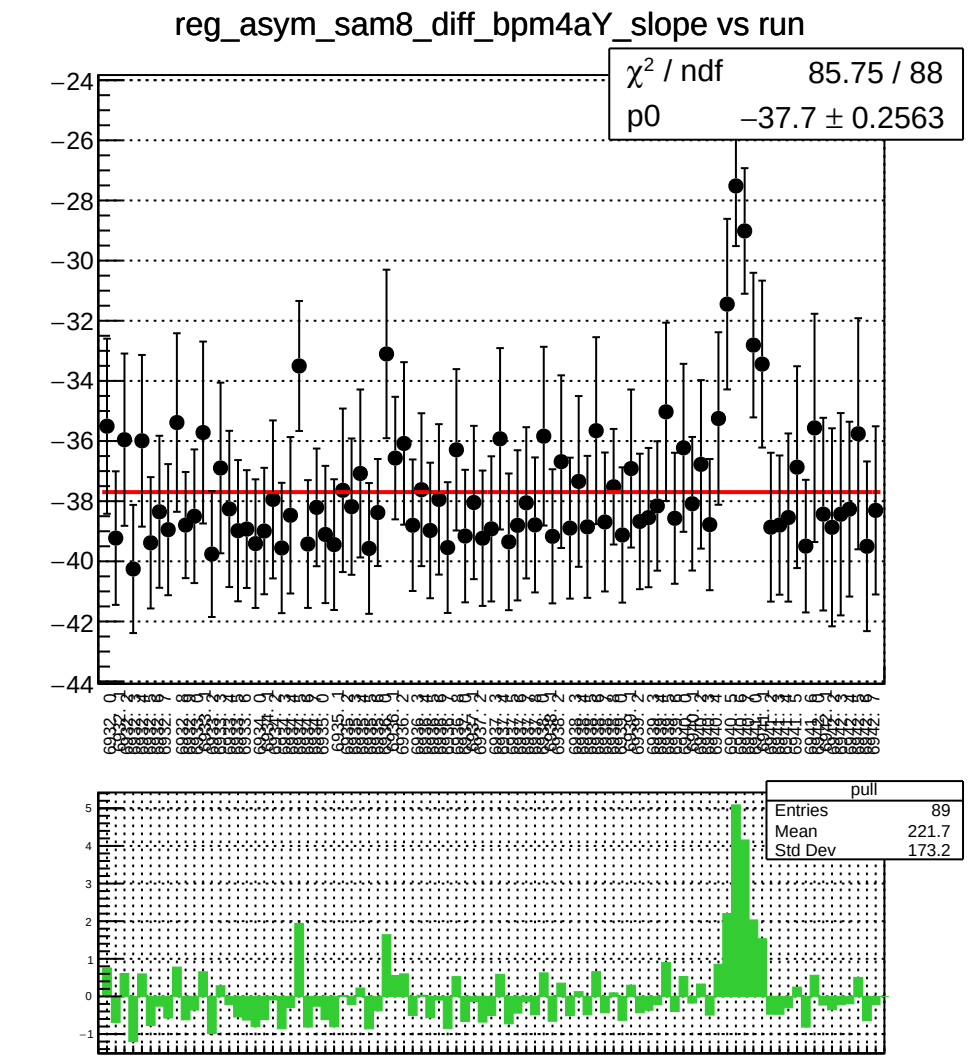

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 15.92 / 88
p0 8.399 ± 0.3284
pull
Entries 89
Mean −514.8
Std Dev 566.4
pull1D
Entries 89
Mean −0.004172
Std Dev 0.4229

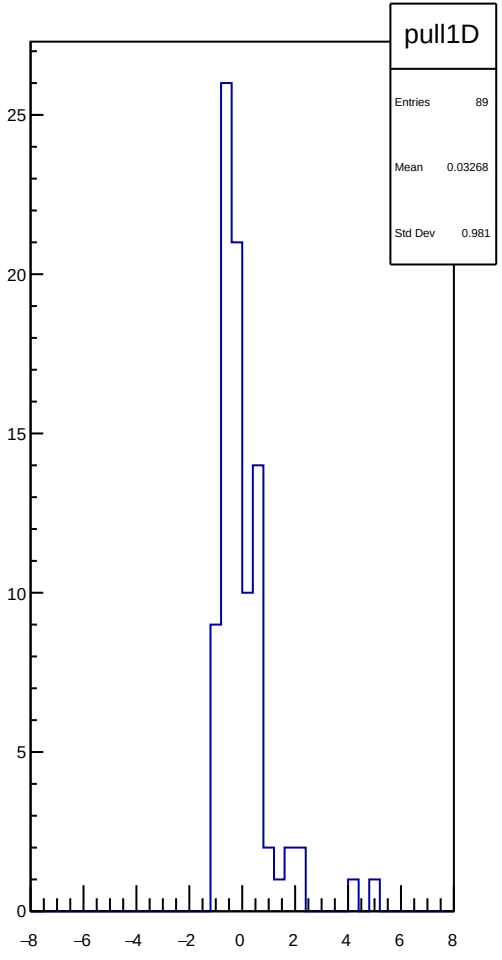

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 52.8 / 88
p0 −51.82 ± 0.4489
pull
Entries 89
Mean −4.447
Std Dev 33.48
pull1D
Entries 89
Mean −0.05331
Std Dev 0.7684

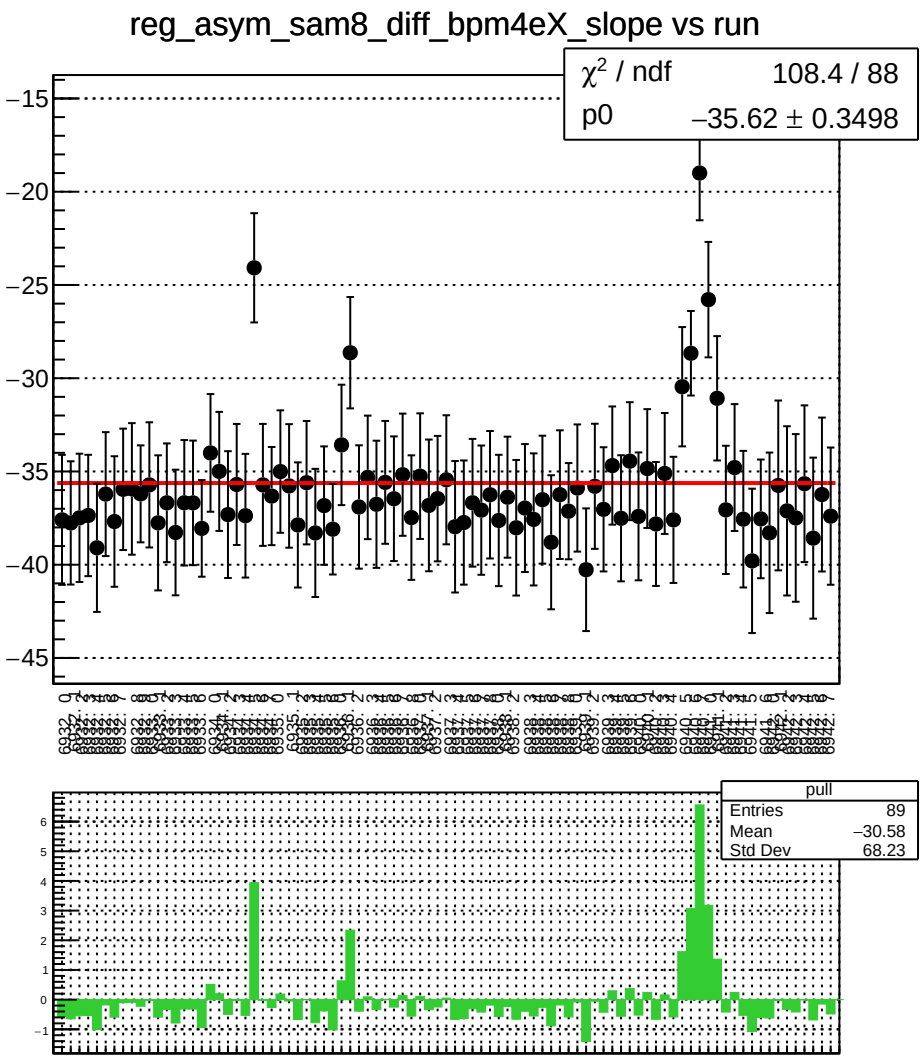

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 17.88 / 88
p0 −14.95 ± 0.3803
pull
Entries 89
Mean −338.2
Std Dev 390
pull1D
Entries 89
Mean 0.006667
Std Dev 0.4482

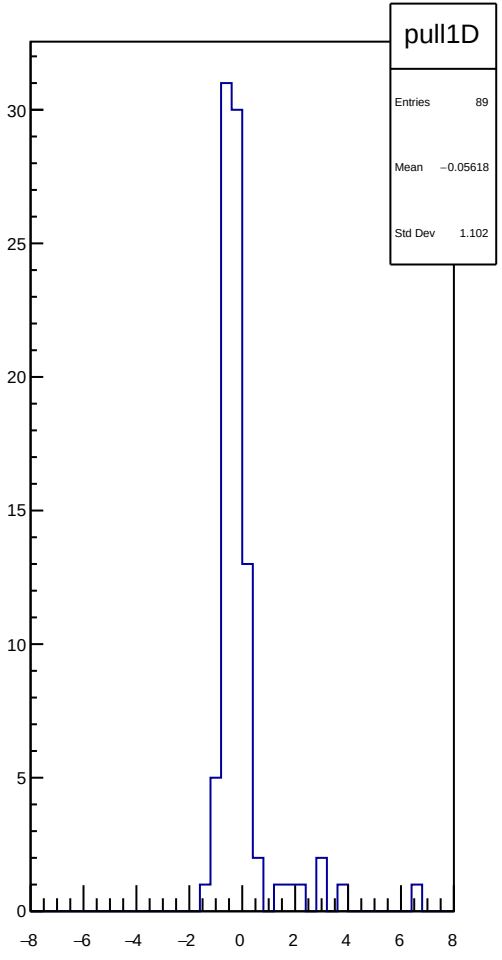

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 6.44 / 88
p0 0.3465 ± 0.01576
pull
Entries 89
Mean −246.5
Std Dev 311
pull1D
Entries 89
Mean 0.002032
Std Dev 0.269

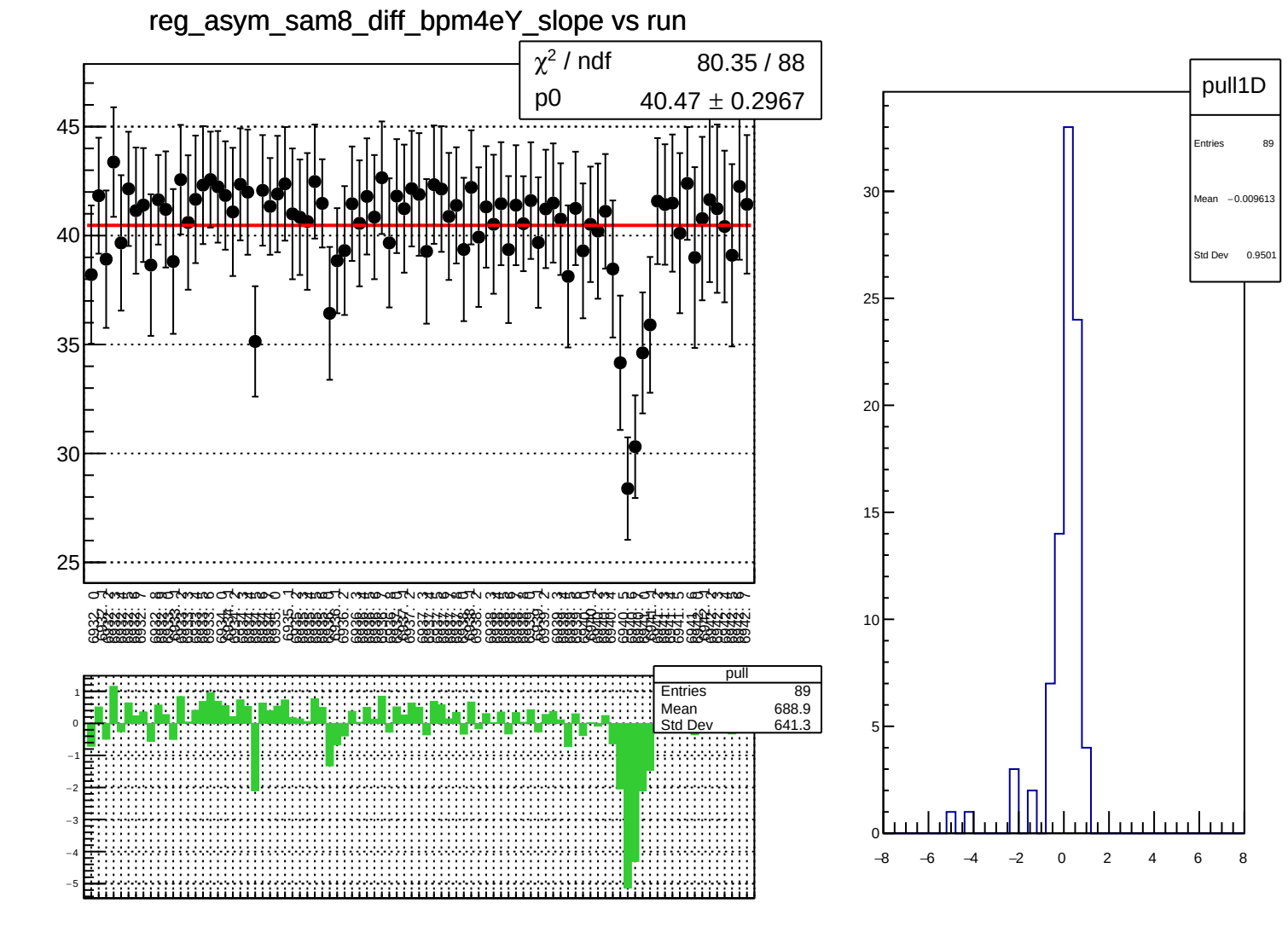

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 111.4 / 88
p0 5.441 ± 0.3764
pull
Entries 89
Mean −31.98
Std Dev 68.81
pull1D
Entries 89
Mean 0.05737
Std Dev 1.117

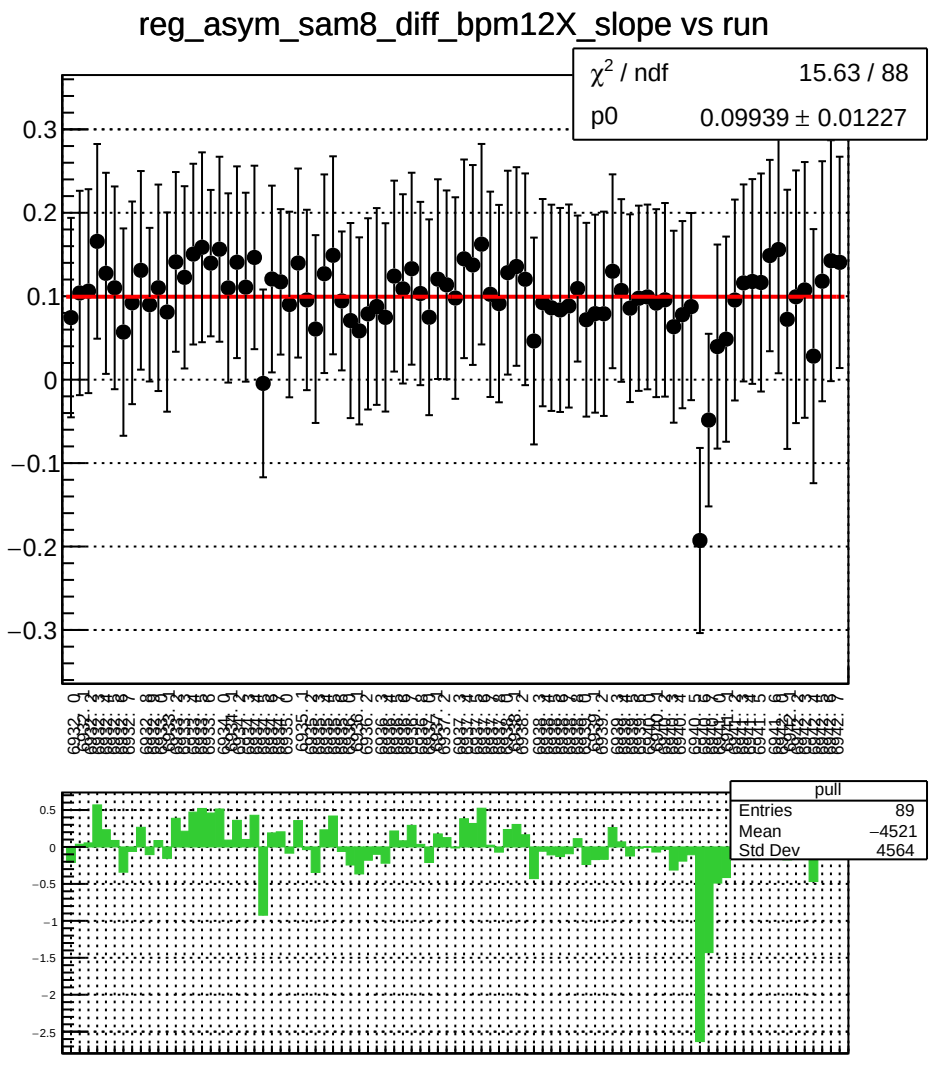

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 85.75 / 88
p0 −37.7 ± 0.2563
pull
Entries 89
Mean 221.7
Std Dev 173.2

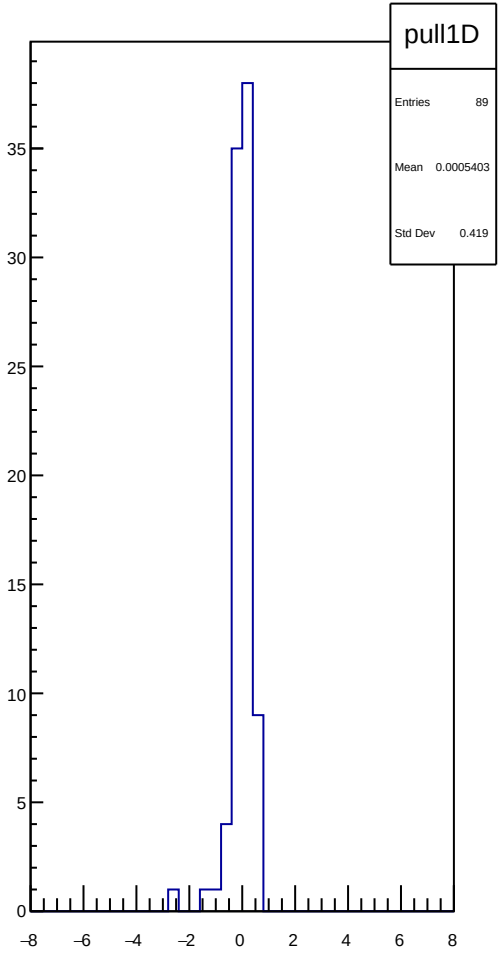

pull1D
Entries 89
Mean 0.03268
Std Dev 0.981

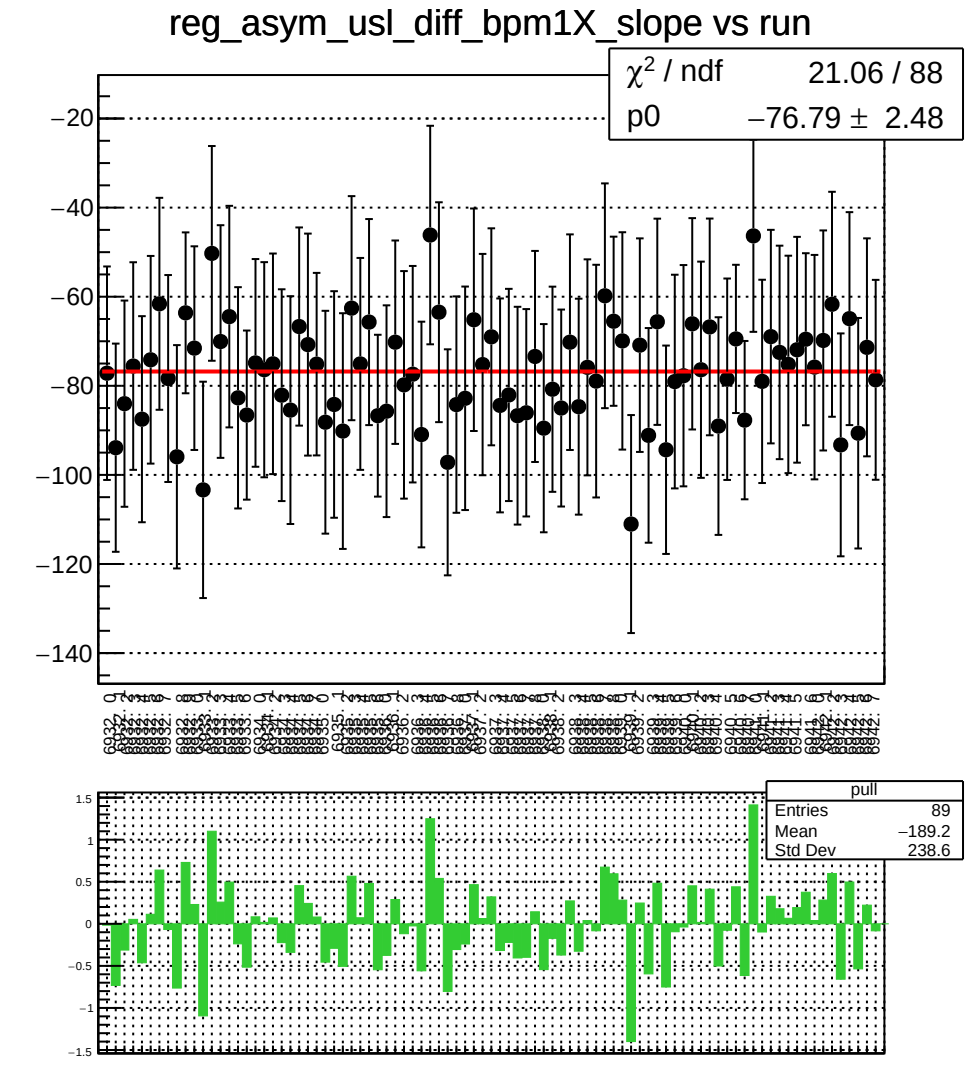

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 108.4 / 88
p0 −35.62 ± 0.3498
pull
Entries 89
Mean −30.58
Std Dev 68.23

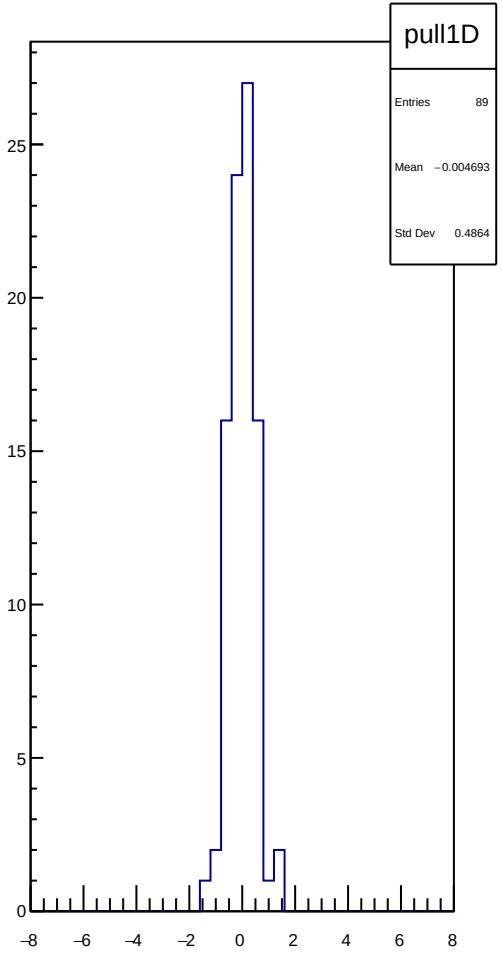

pull1D
Entries 89
Mean −0.05618
Std Dev 1.102

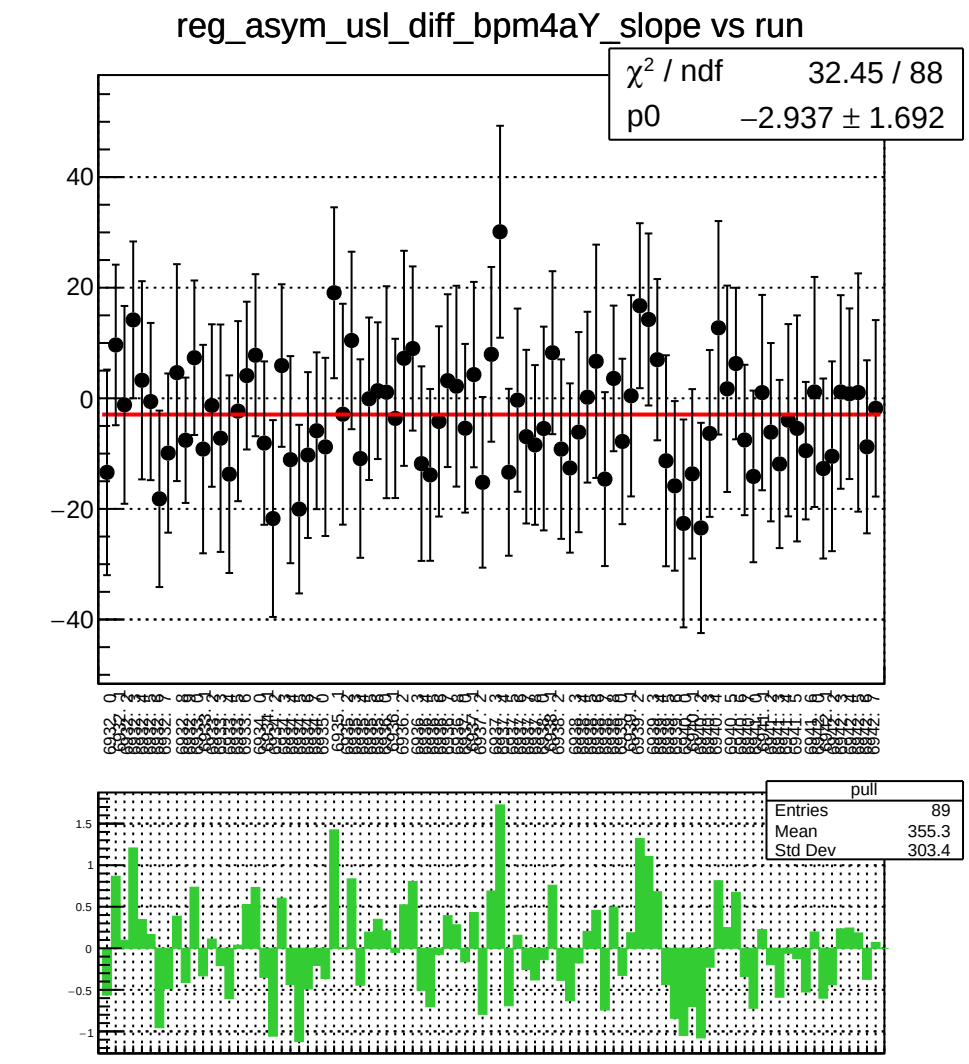

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 80.35 / 88
p0 40.47 ± 0.2967
45
40
35
30
25
pull
Entries 89
Mean 688.9
Std Dev 641.3
1
0
−1
−2
−3
−4
−5
pull1D
Entries 89
Mean −0.009613
Std Dev 0.9501
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

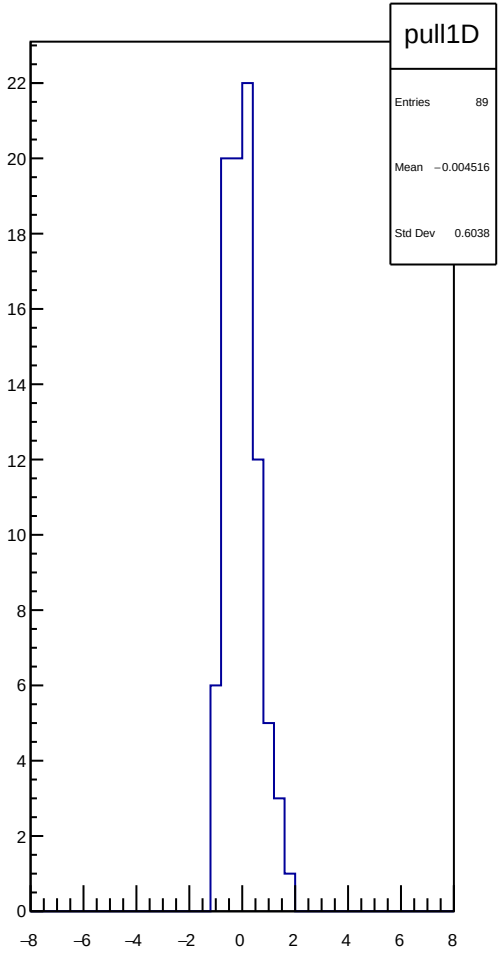

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 15.63 / 88
p0 0.09939 ± 0.01227
pull
Entries 89
Mean −4521
Std Dev 4564

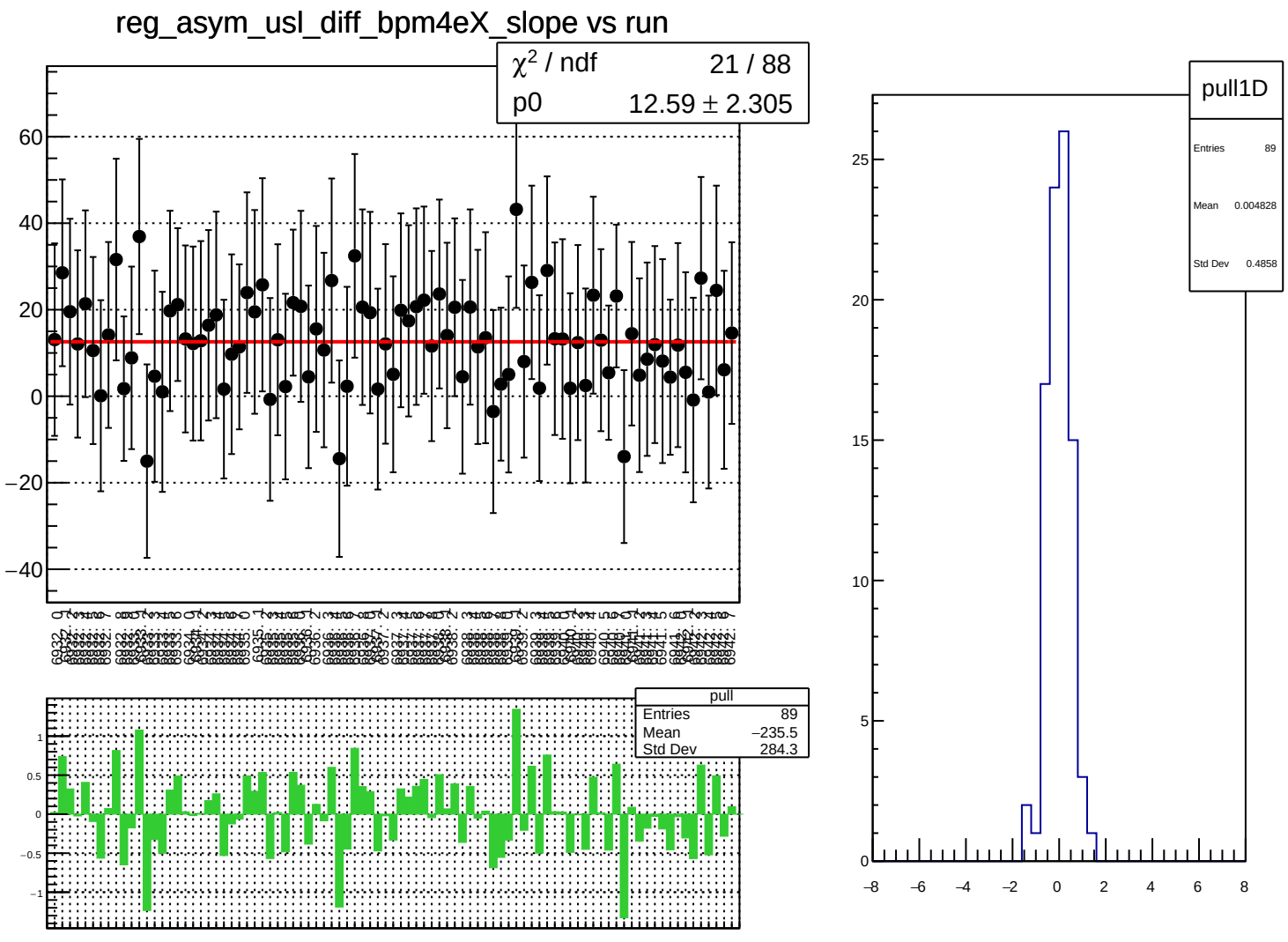

pull1D
Entries 89
Mean 0.0005403
Std Dev 0.419

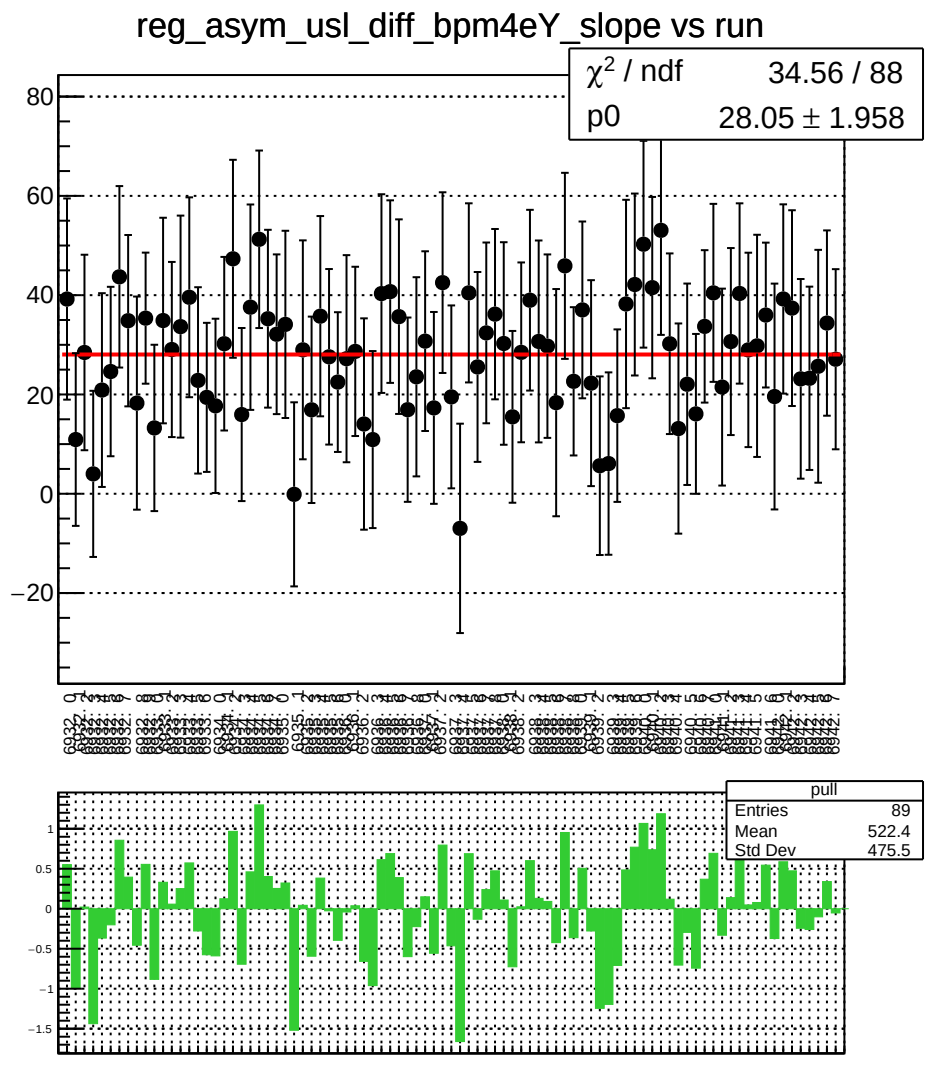

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 21.06 / 88
p0 −76.79 ± 2.48
pull
Entries 89
Mean −189.2
Std Dev 238.6

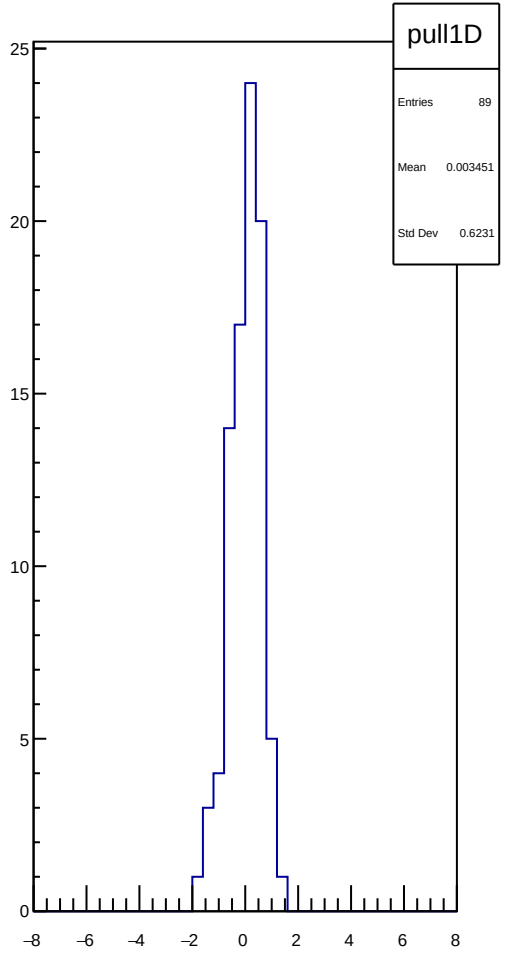

pull1D
Entries 89
Mean −0.004693
Std Dev 0.4864

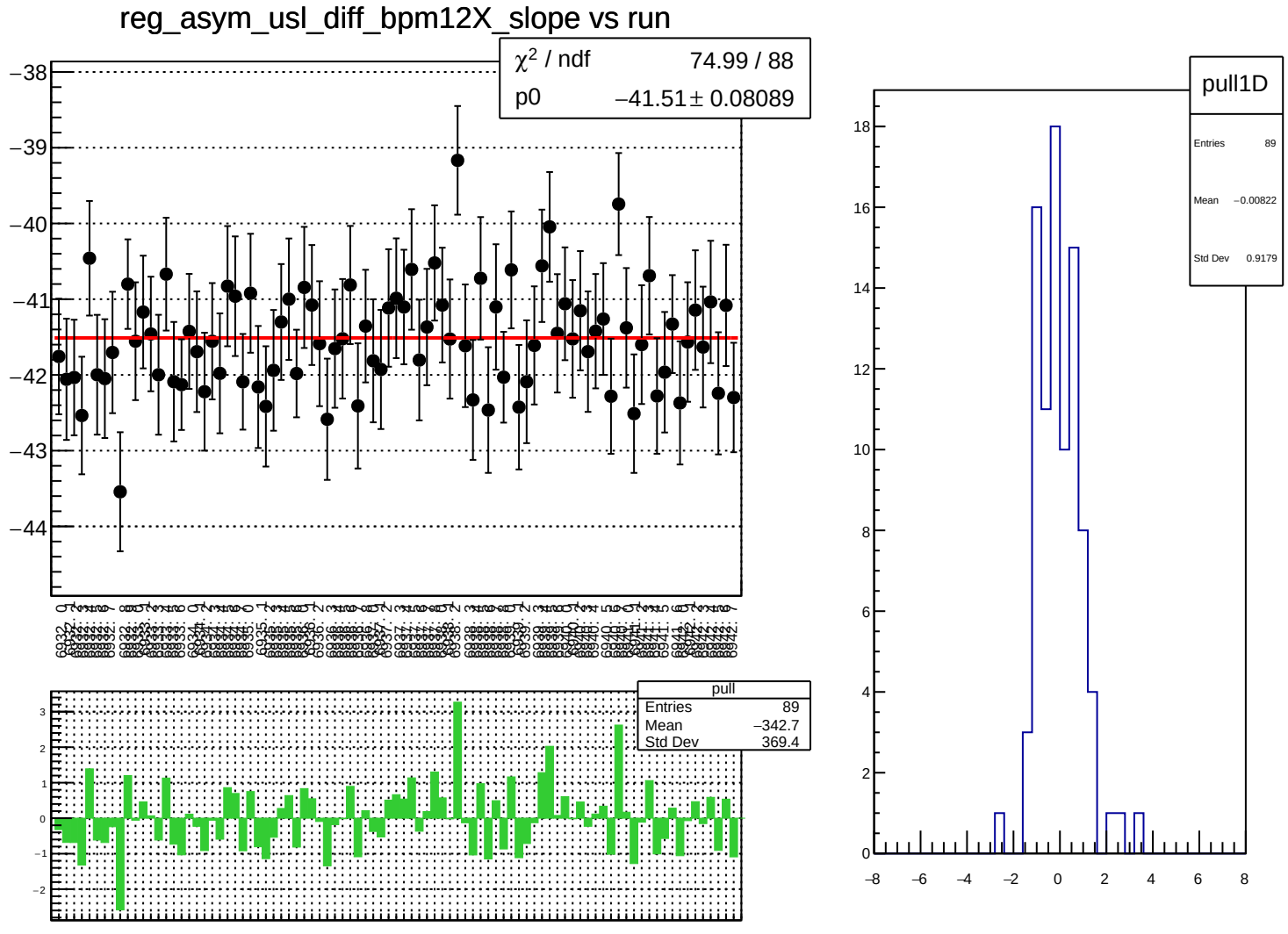

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 32.45 / 88
p0 −2.937 ± 1.692
pull
Entries 89
Mean 355.3
Std Dev 303.4

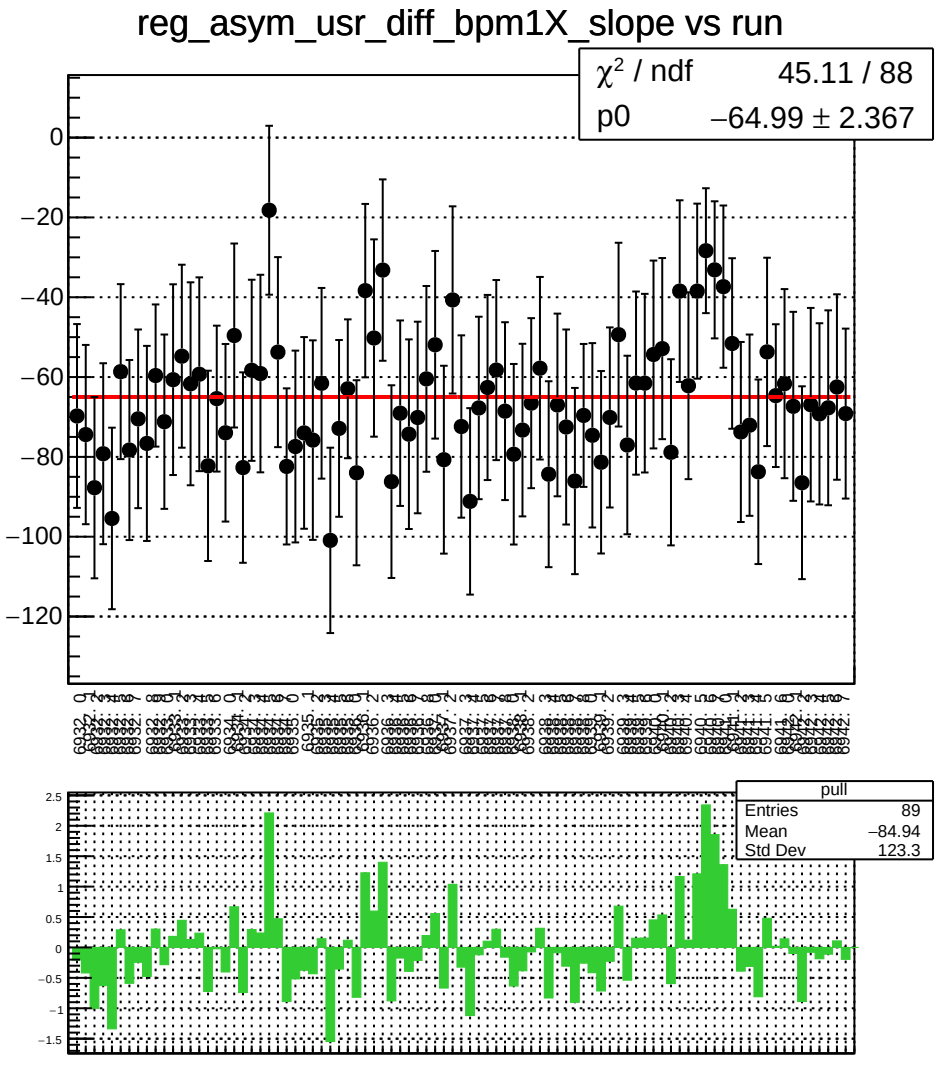

pull1D
Entries 89
Mean −0.004516
Std Dev 0.6038

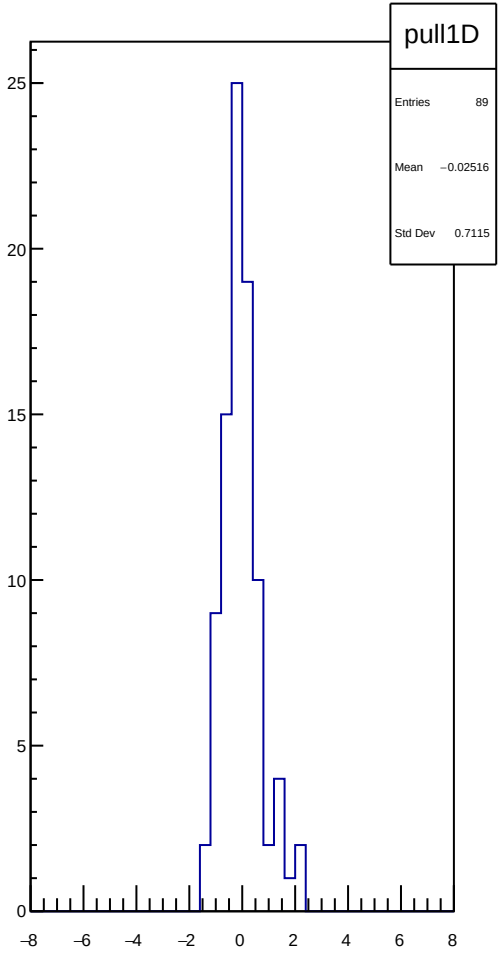

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 21 / 88
p0 12.59 ± 2.305
pull
Entries 89
Mean −235.5
Std Dev 284.3
pull1D
Entries 89
Mean 0.004828
Std Dev 0.4858

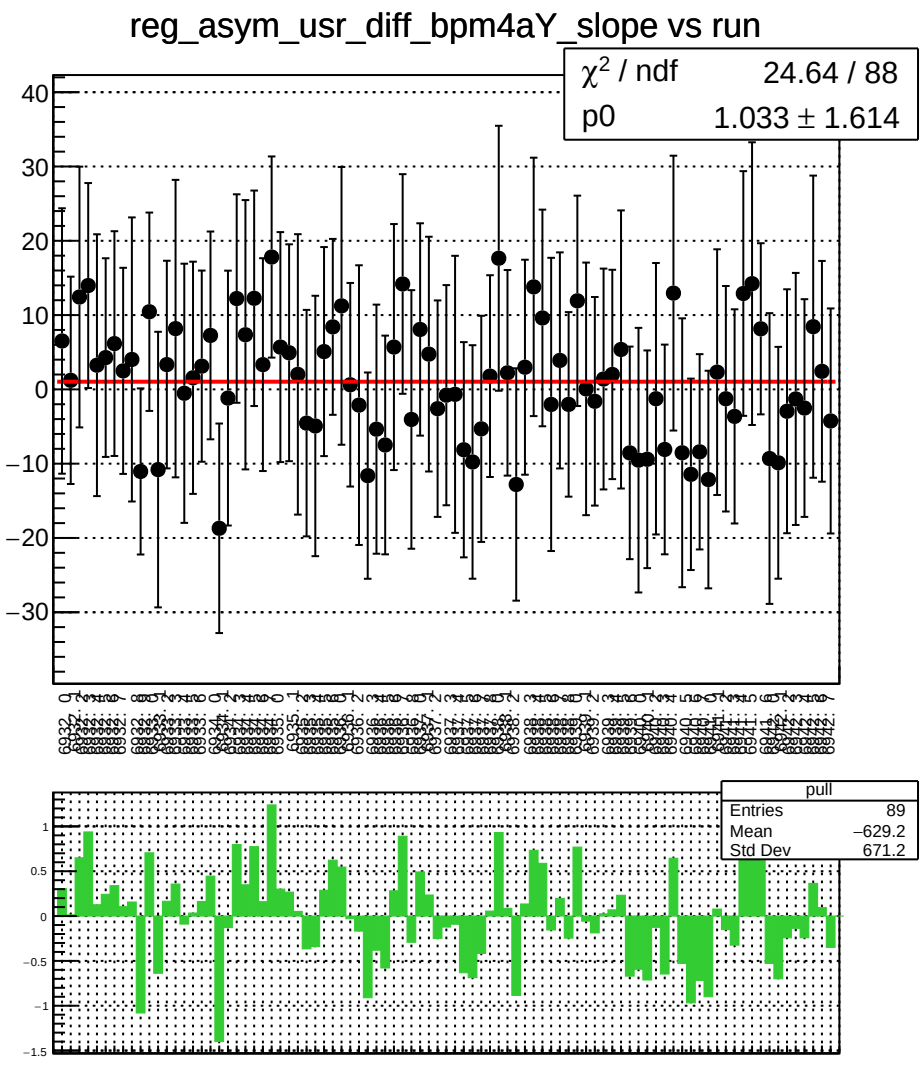

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 34.56 / 88
p0 28.05 ± 1.958
80
60
40
20
0
−20
pull
Entries 89
Mean 522.4
Std Dev 475.5
1
0.5
0
−0.5
−1
−1.5

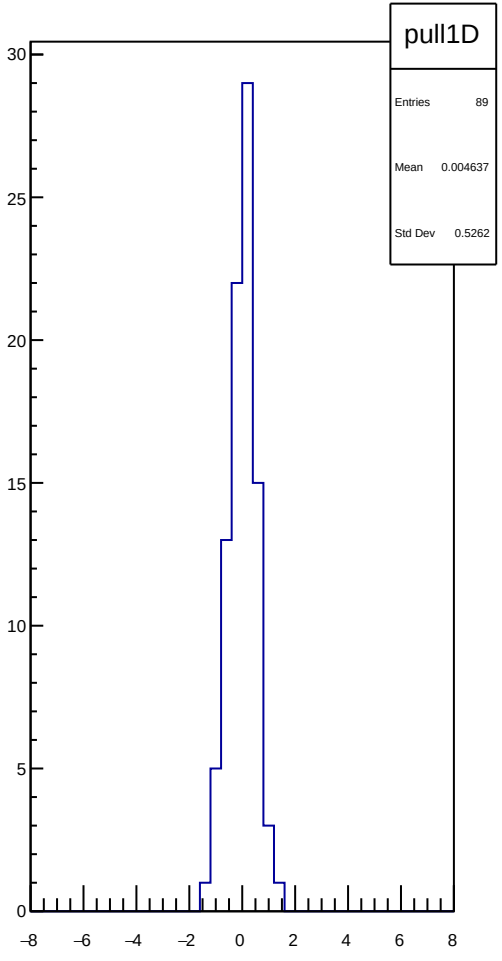

pull1D
Entries 89
Mean 0.003451
Std Dev 0.6231
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

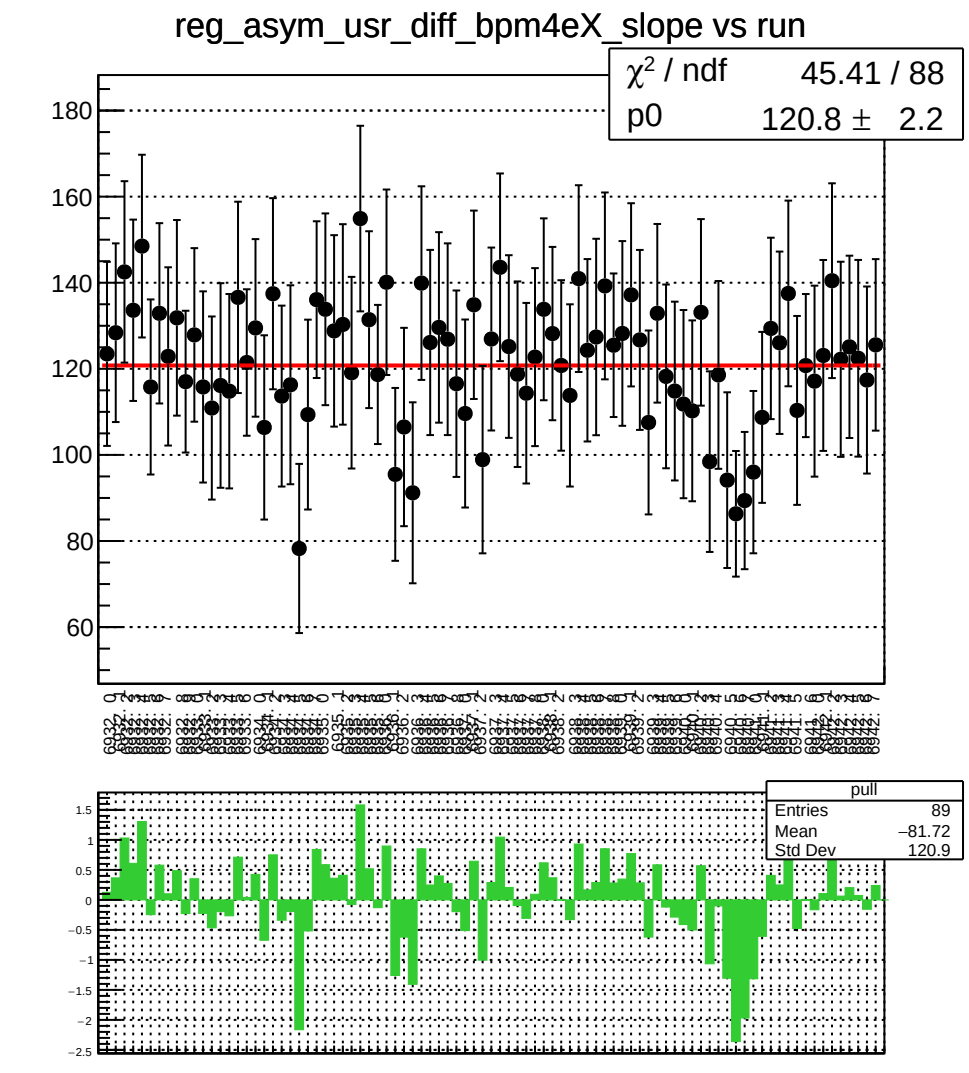

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 74.99 / 88
p0 −41.51 ± 0.08089
pull
Entries 89
Mean −342.7
Std Dev 369.4
pull1D
Entries 89
Mean −0.00822
Std Dev 0.9179

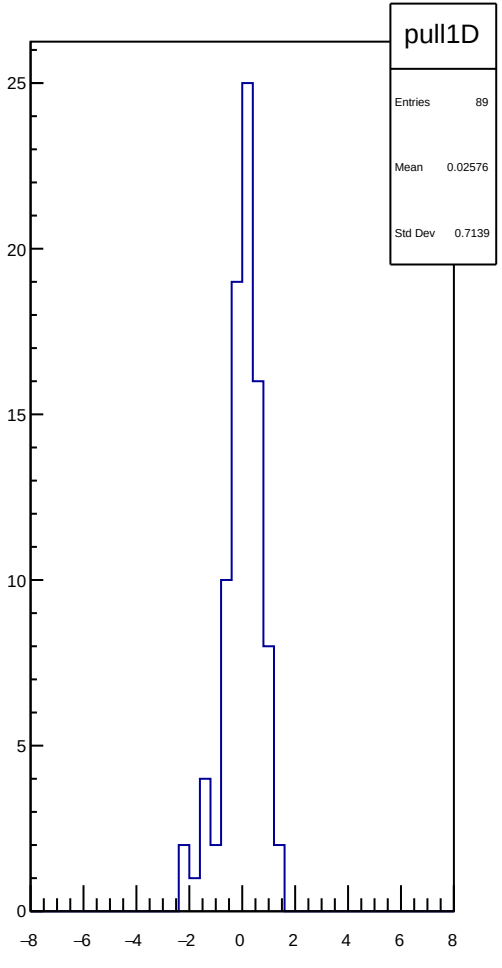

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 45.11 / 88
p0 −64.99 ± 2.367
pull
Entries 89
Mean −84.94
Std Dev 123.3

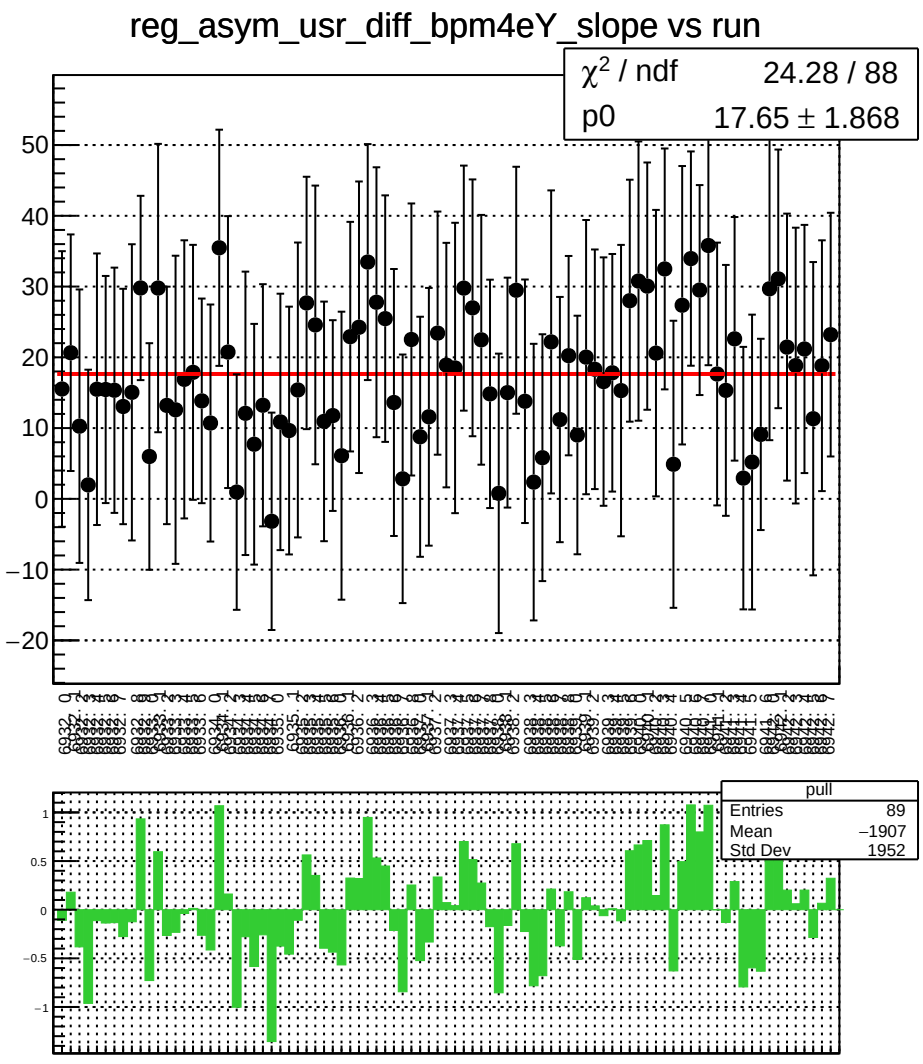

pull1D
Entries 89
Mean −0.02516
Std Dev 0.7115

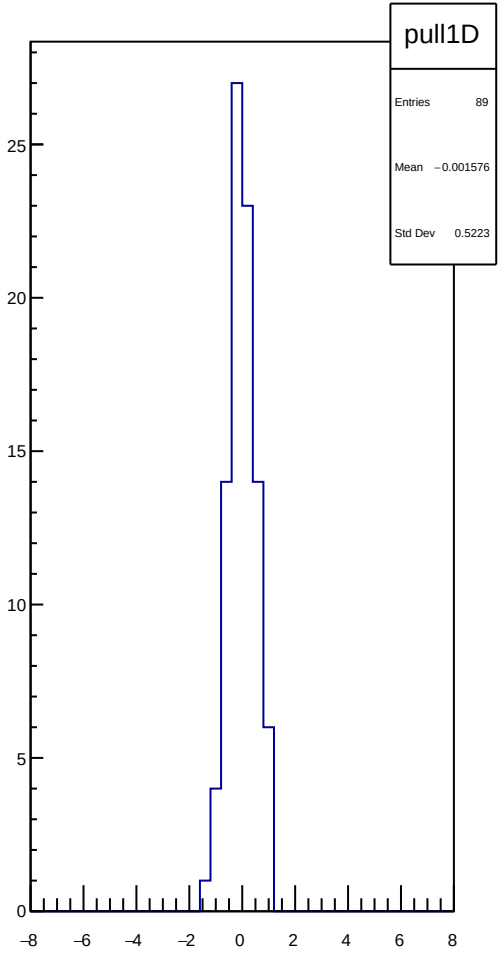

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 24.64 / 88
p0 1.033 ± 1.614
pull
Entries 89
Mean −629.2
Std Dev 671.2

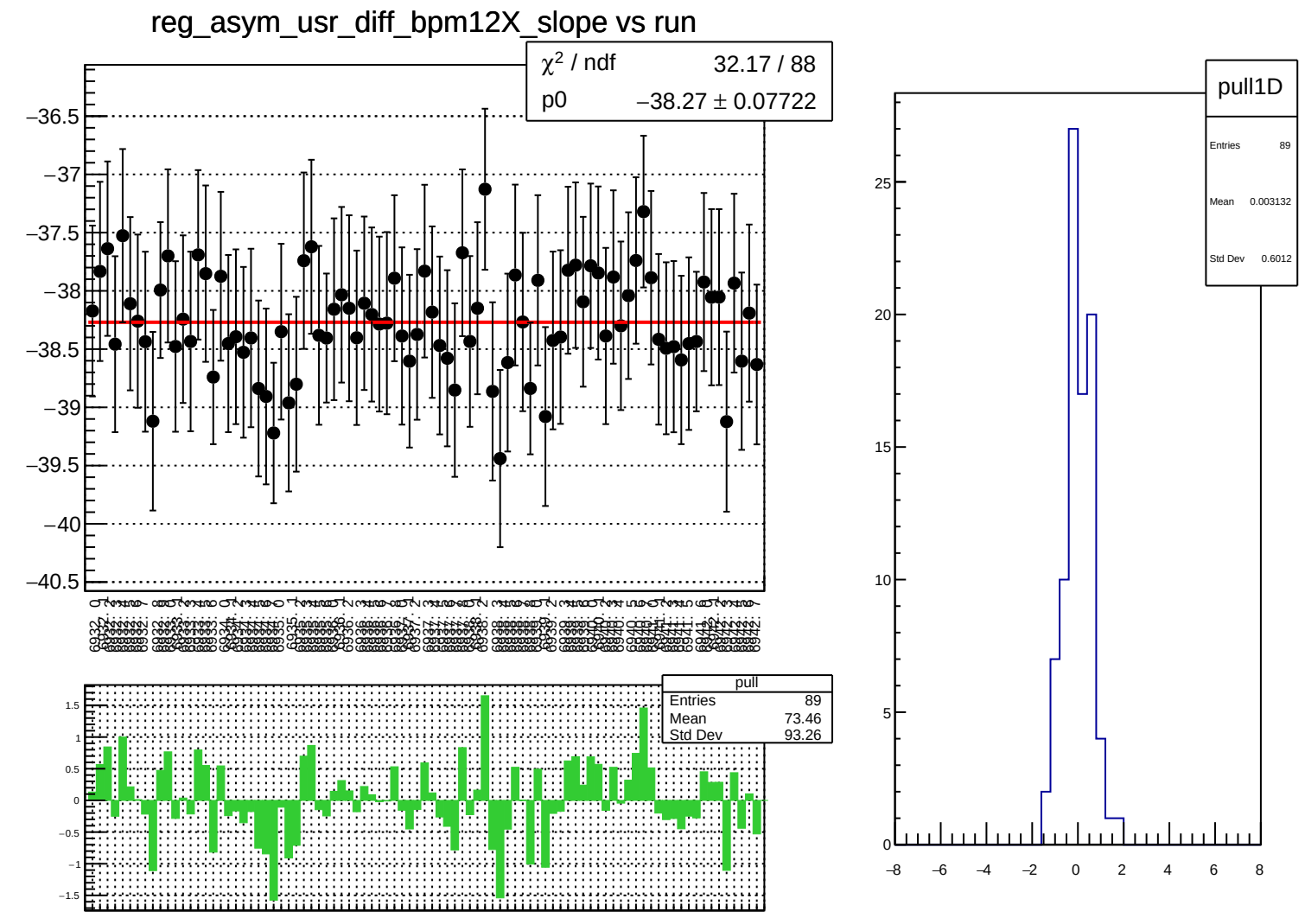

pull1D
Entries 89
Mean 0.004637
Std Dev 0.5262

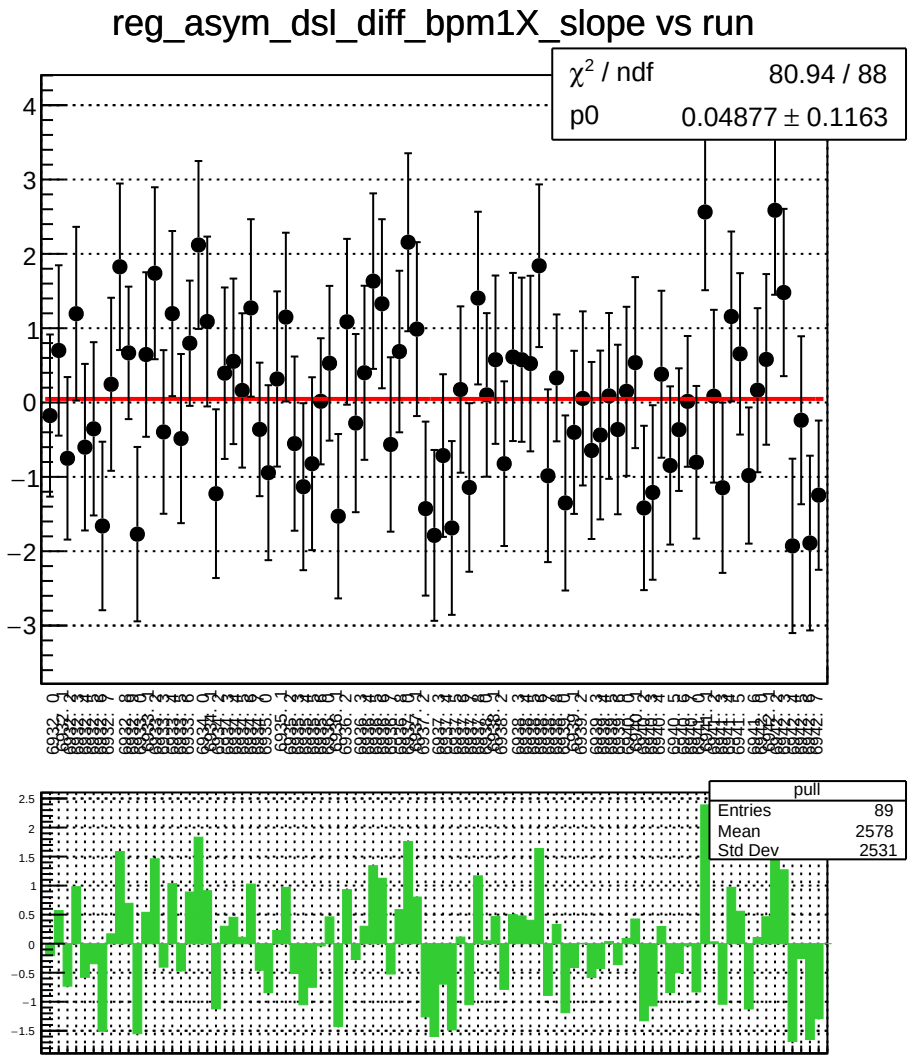

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 45.41 / 88
p0 120.8 ± 2.2
pull
Entries 89
Mean −81.72
Std Dev 120.9

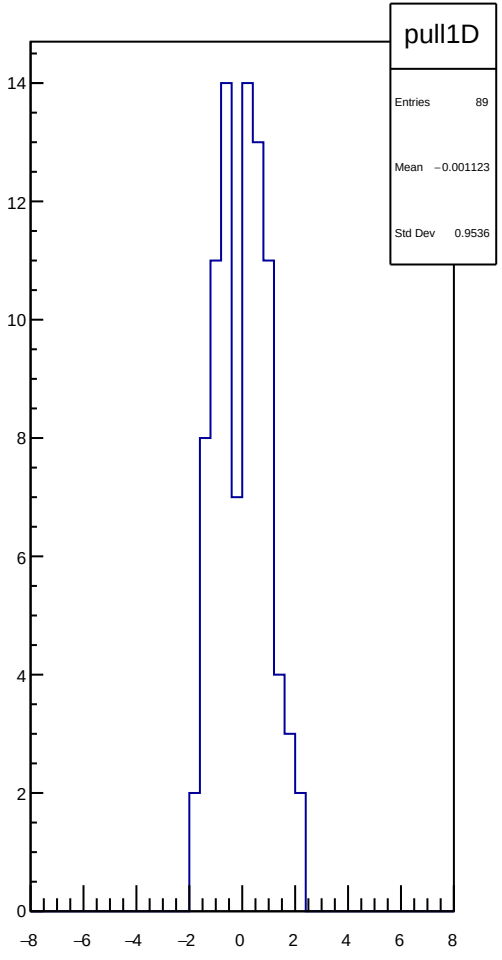

pull1D
Entries 89
Mean 0.02576
Std Dev 0.7139

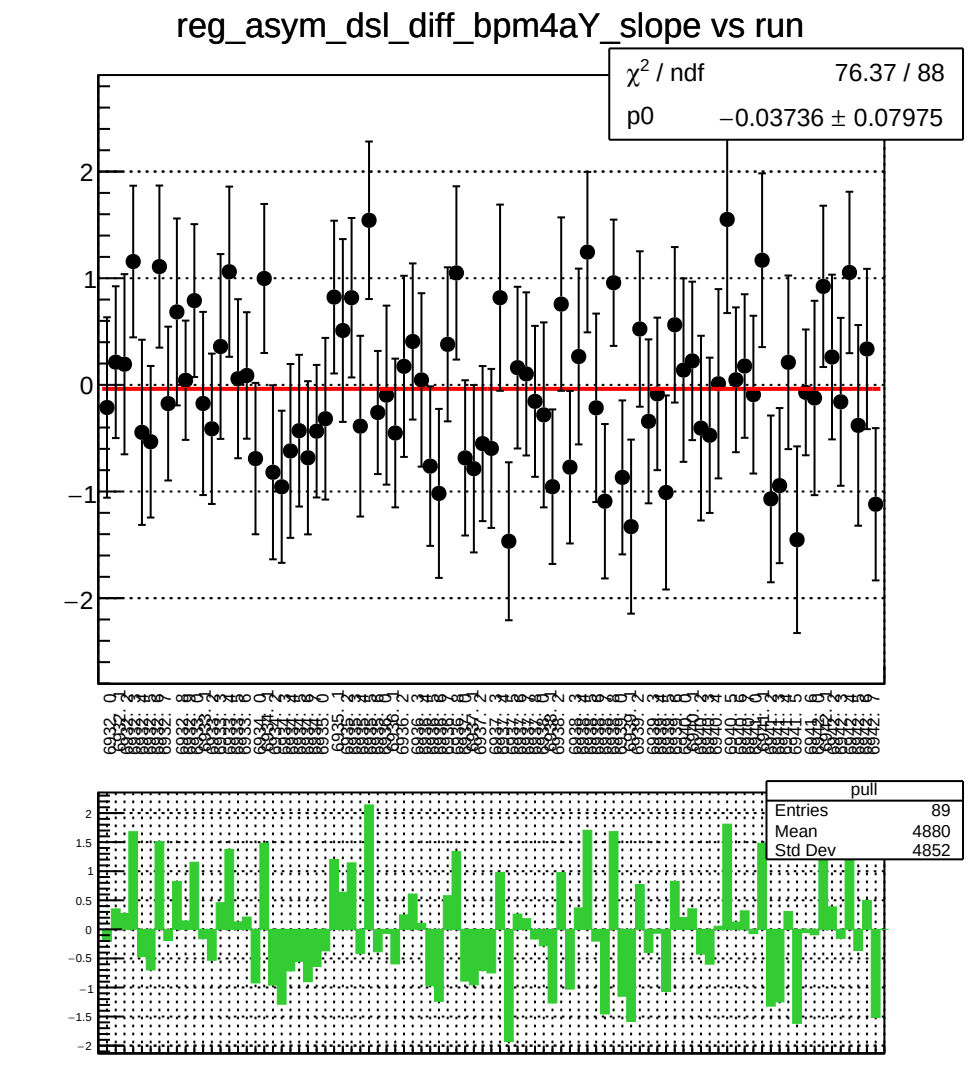

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 24.28 / 88
p0 17.65 ± 1.868
pull
Entries 89
Mean −1907
Std Dev 1952

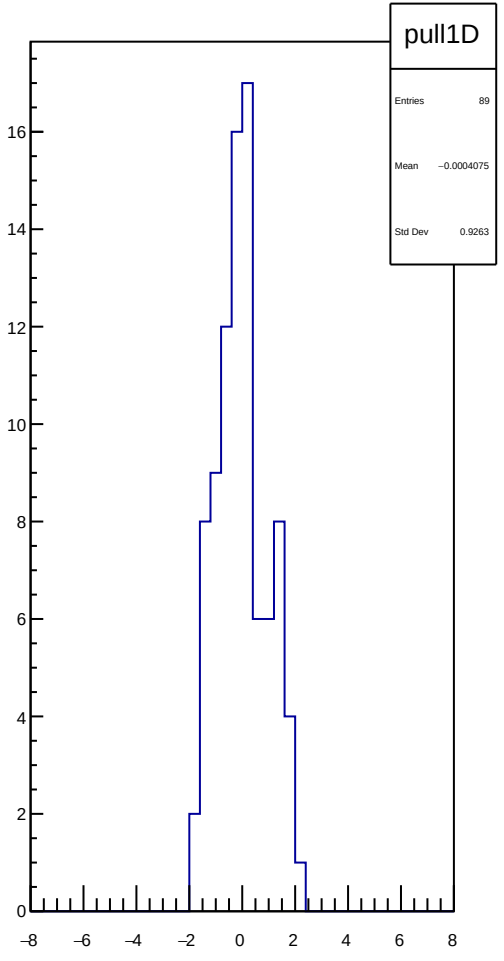

pull1D
Entries 89
Mean −0.001576
Std Dev 0.5223

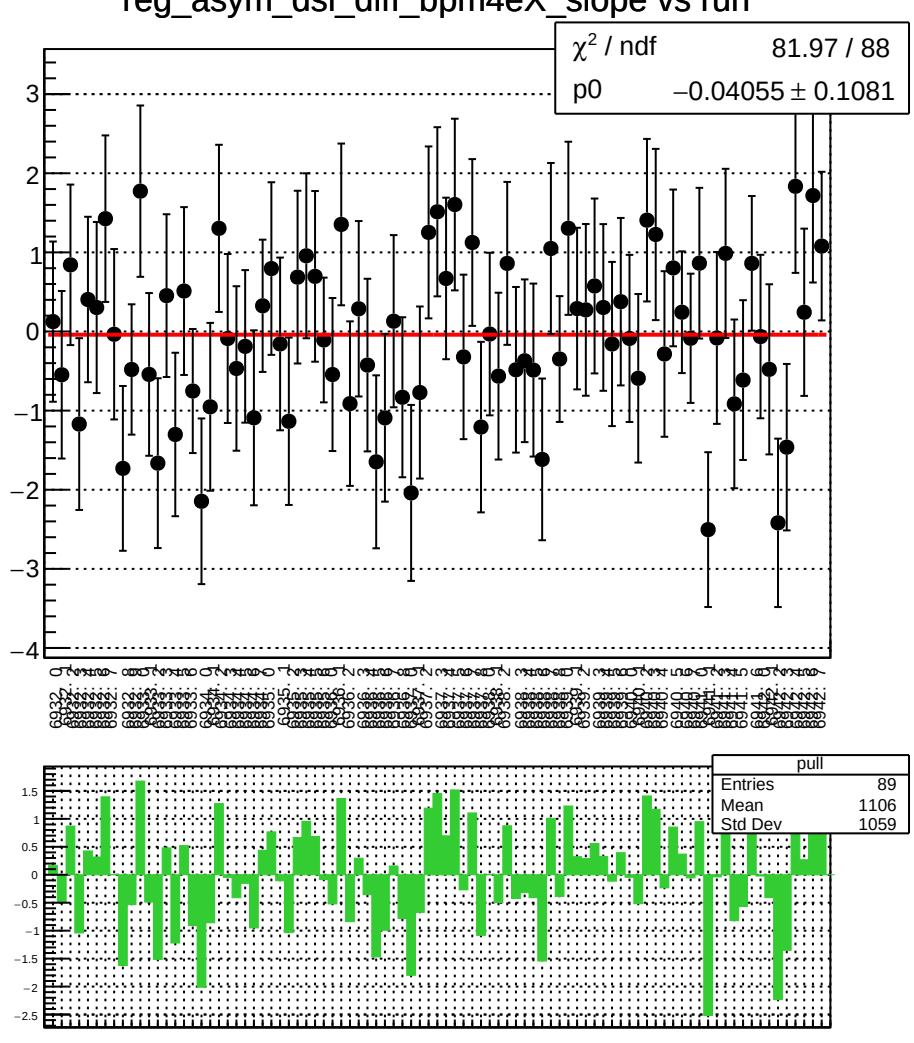

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 32.17 / 88
p0 −38.27 ± 0.07722
pull
Entries 89
Mean 73.46
Std Dev 93.26
pull1D
Entries 89
Mean 0.003132
Std Dev 0.6012

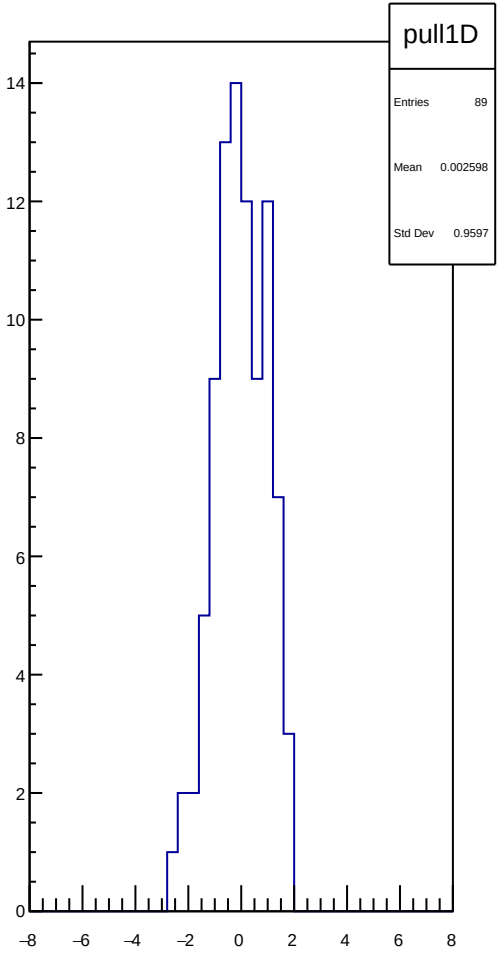

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 80.94 / 88
p0 0.04877 ± 0.1163
pull
Entries 89
Mean 2578
Std Dev 2531

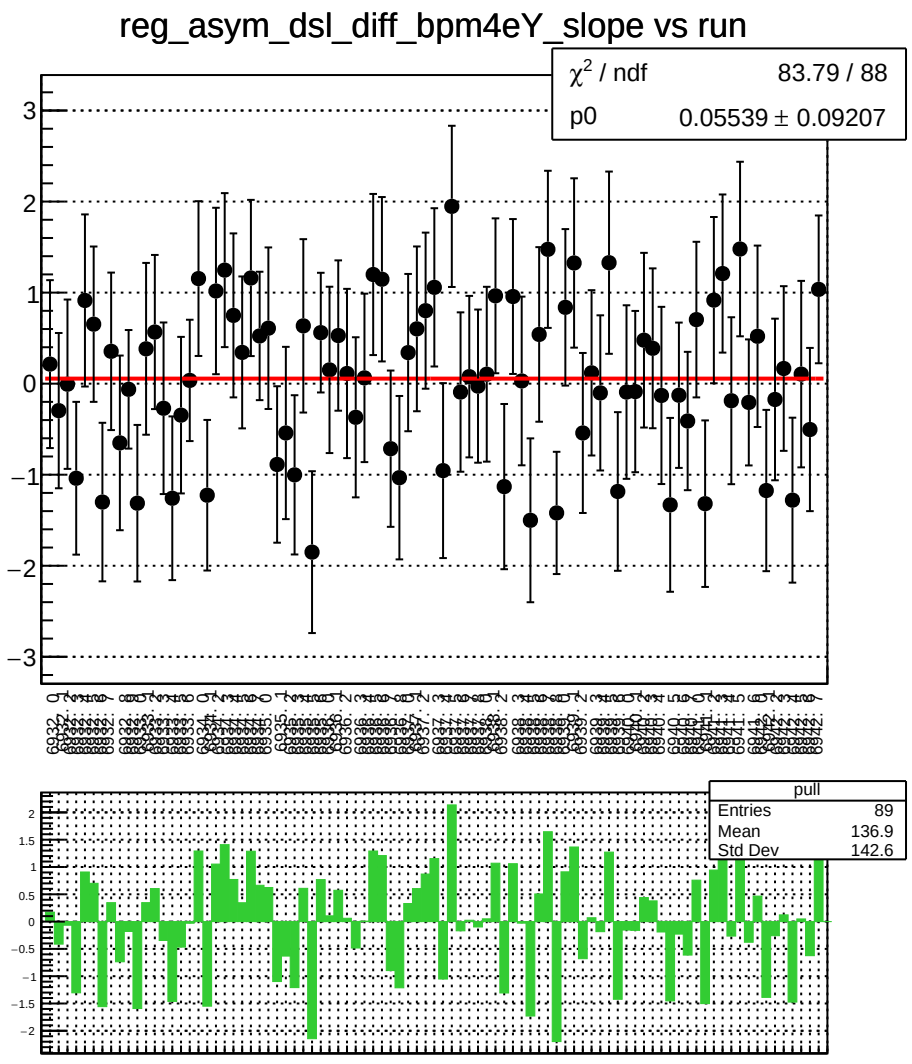

pull1D
Entries 89
Mean −0.001123
Std Dev 0.9536

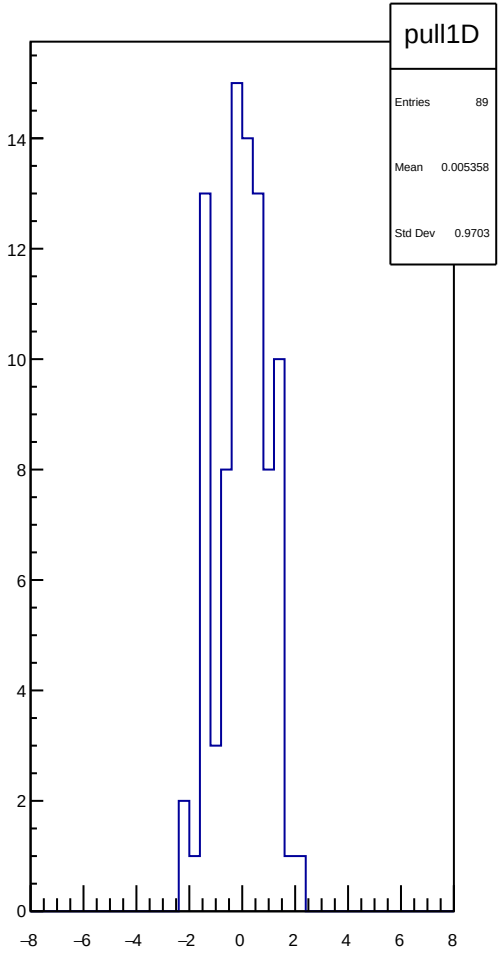

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 76.37 / 88
p0 −0.03736 ± 0.07975
pull
Entries 89
Mean 4880
Std Dev 4852

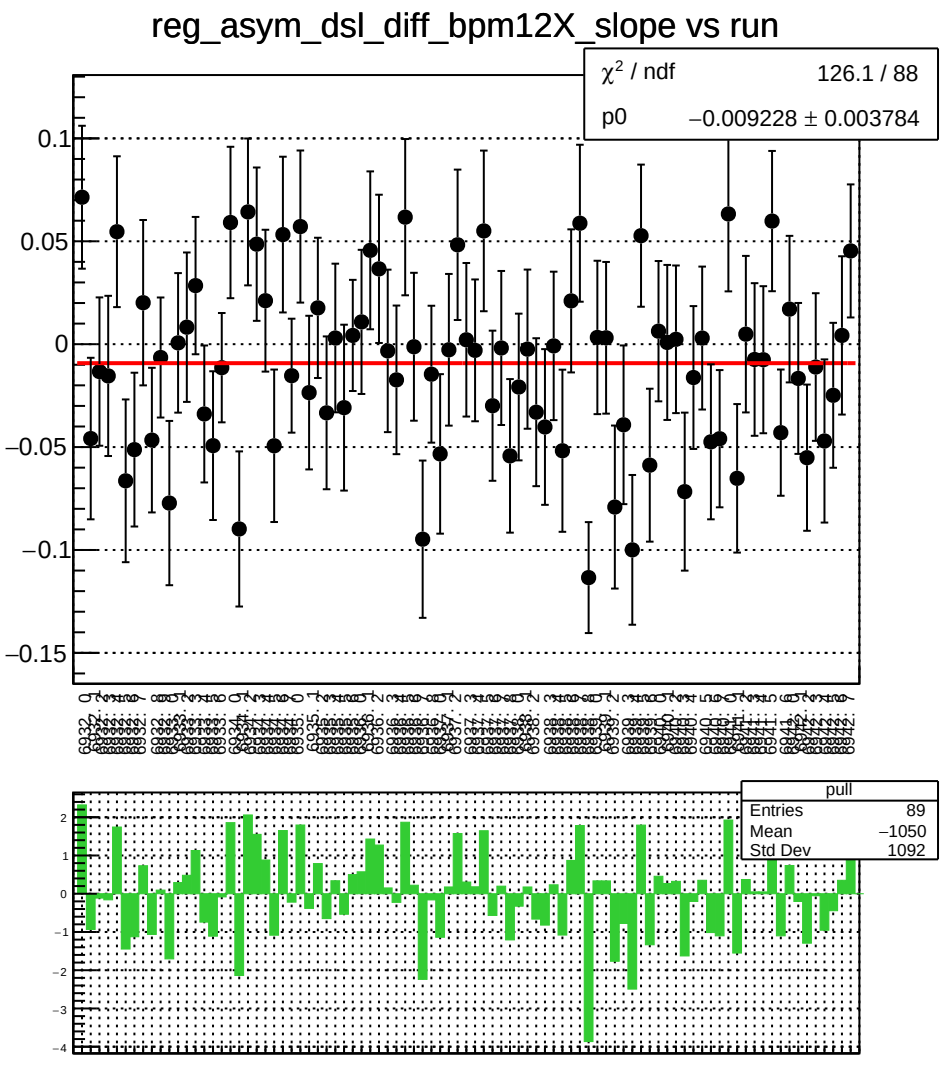

pull1D
Entries 89
Mean −0.0004075
Std Dev 0.9263

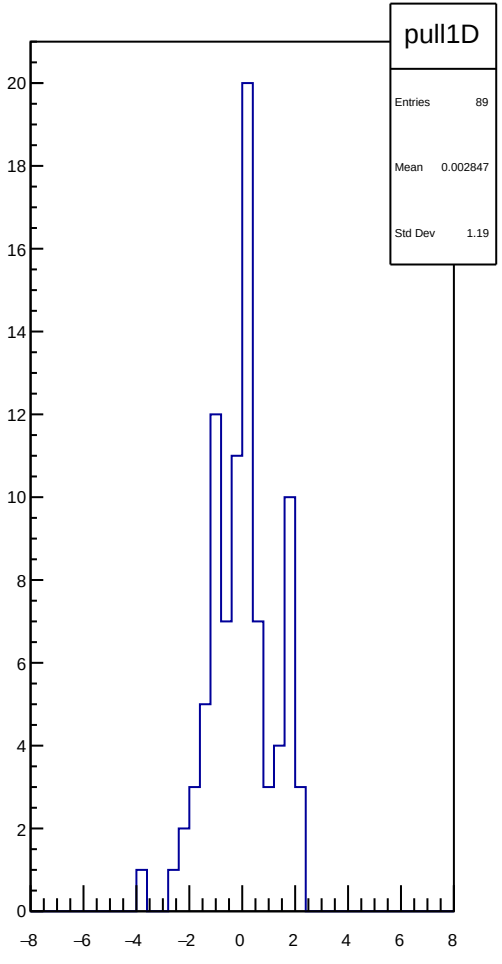

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 81.97 / 88
p0 −0.04055 ± 0.1081
pull
Entries 89
Mean 1106
Std Dev 1059

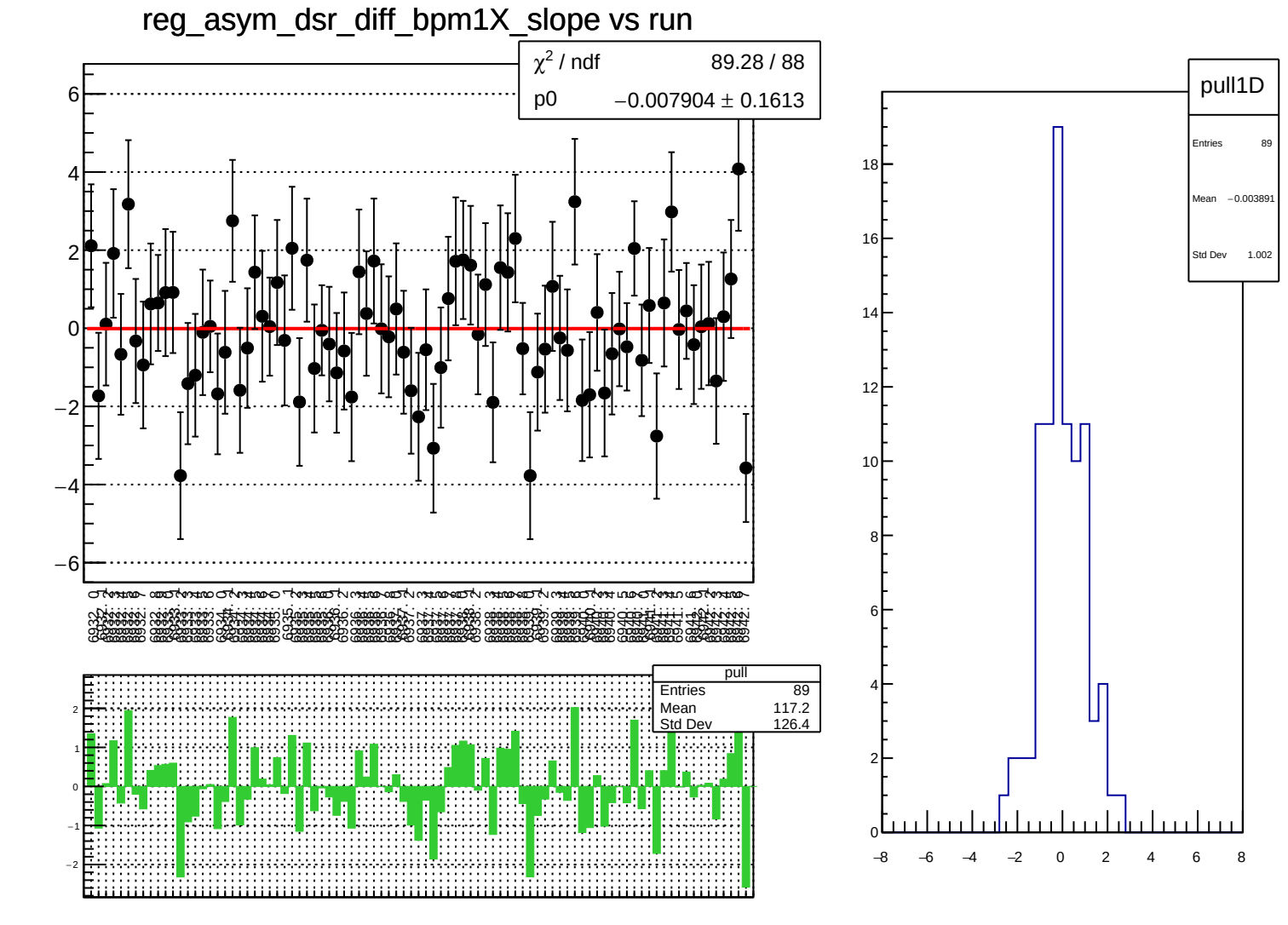

pull1D
Entries 89
Mean 0.002598
Std Dev 0.9597

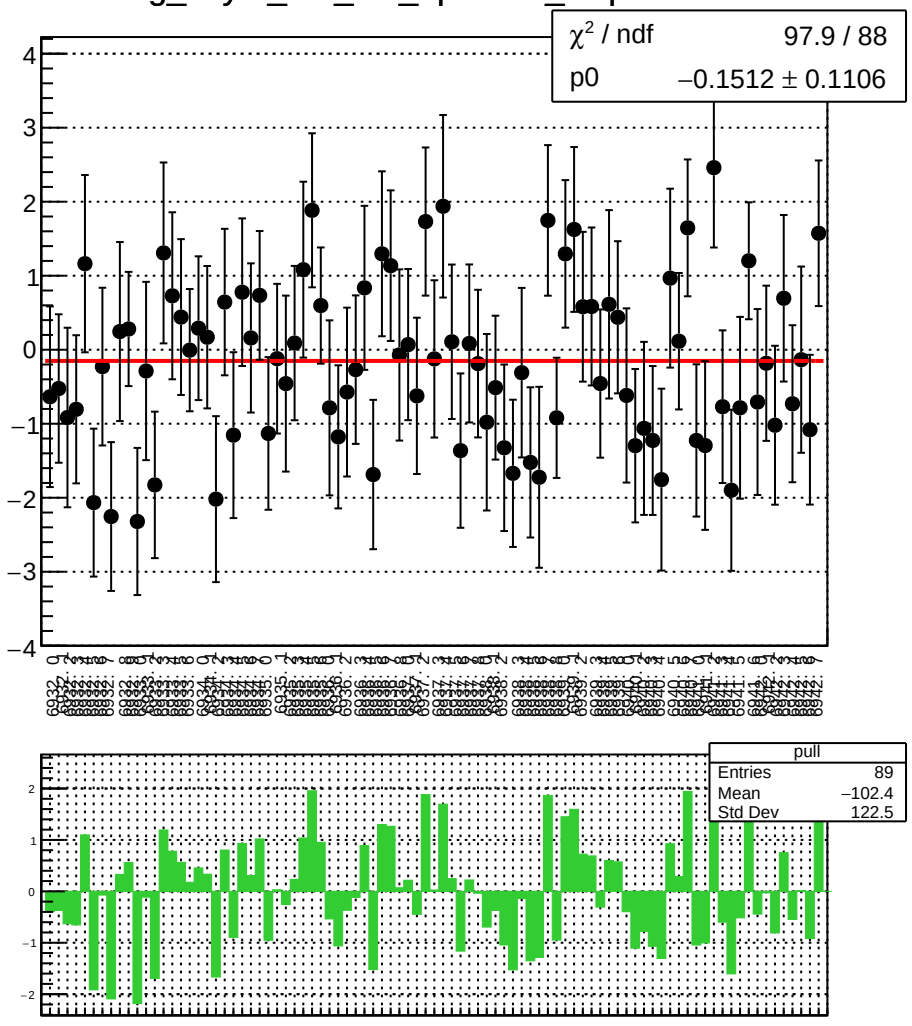

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 83.79 / 88
p0 0.05539 ± 0.09207
pull
Entries 89
Mean 136.9
Std Dev 142.6

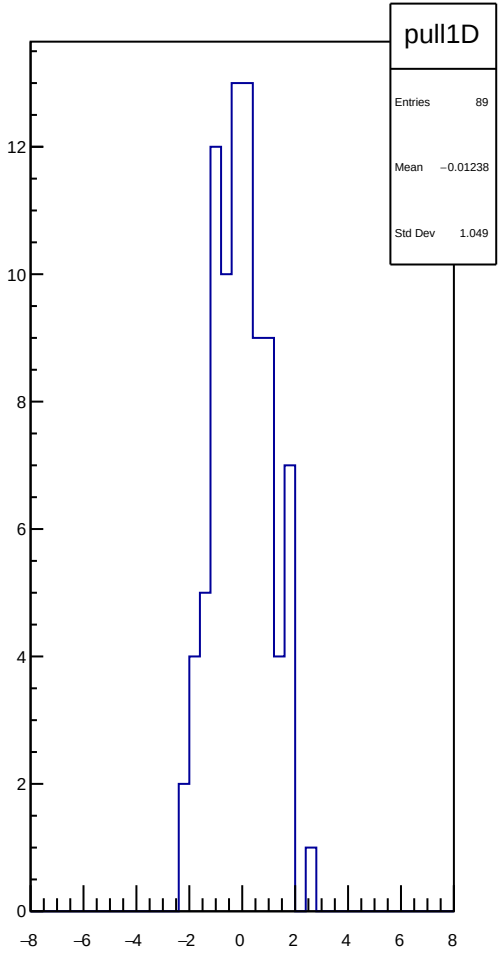

pull1D
Entries 89
Mean 0.005358
Std Dev 0.9703

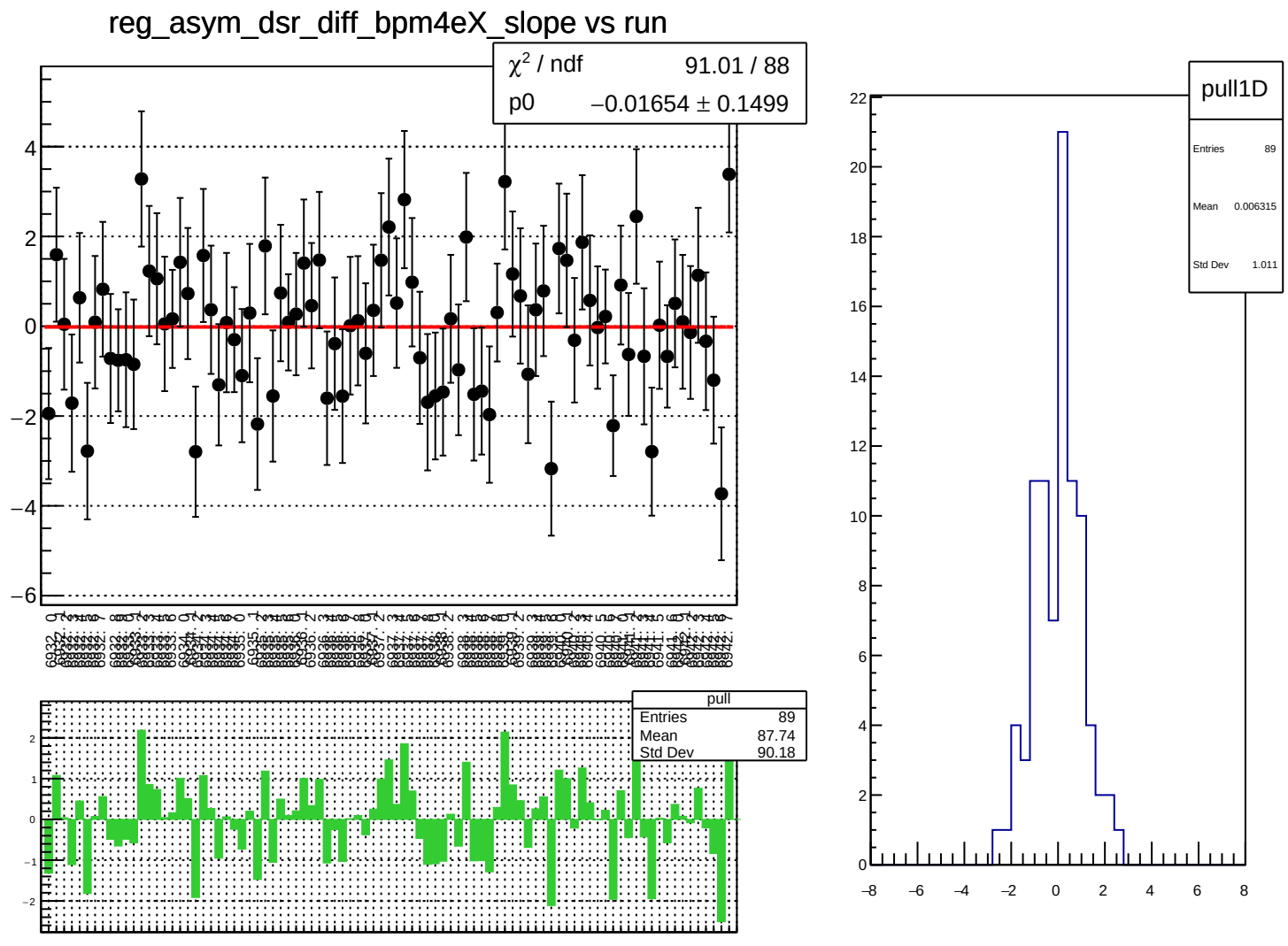

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 126.1 / 88
p0 −0.009228 ± 0.003784
pull
Entries 89
Mean −1050
Std Dev 1092

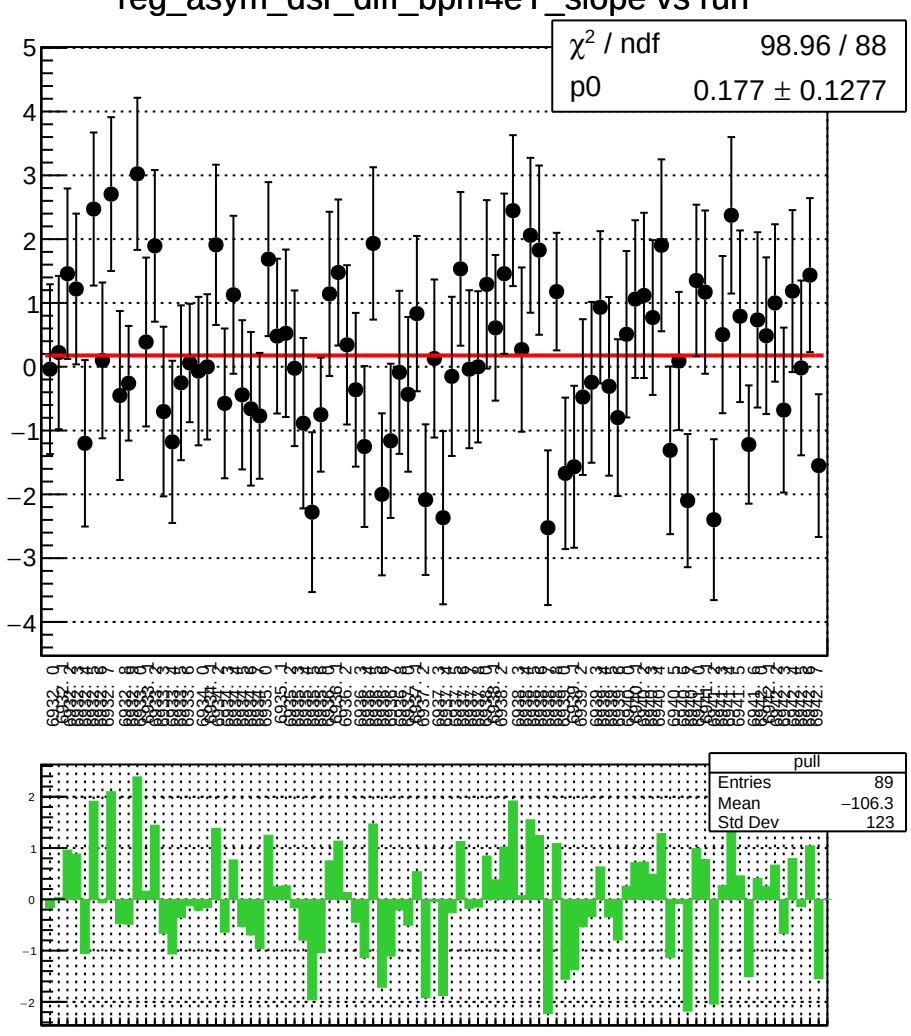

pull1D
Entries 89
Mean 0.002847
Std Dev 1.19

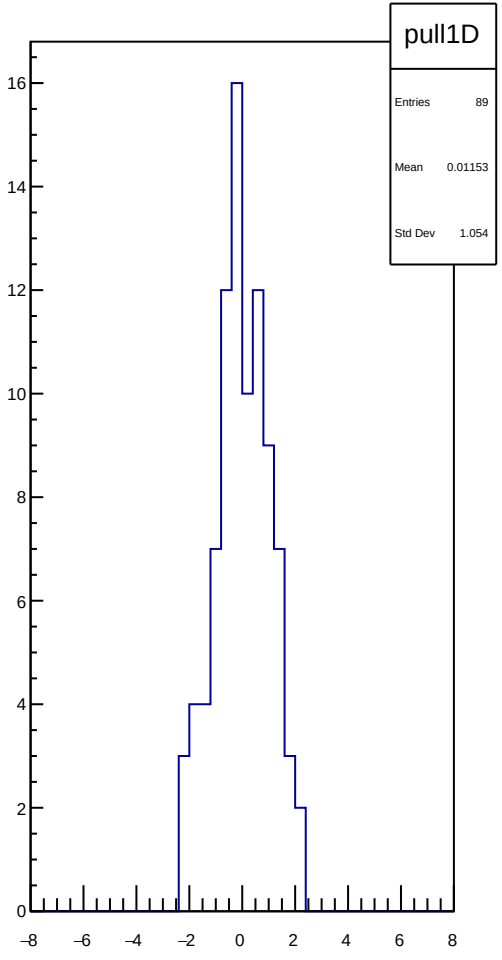

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 89.28 / 88
p0 −0.007904 ± 0.1613
pull
Entries 89
Mean 117.2
Std Dev 126.4
pull1D
Entries 89
Mean −0.003891
Std Dev 1.002

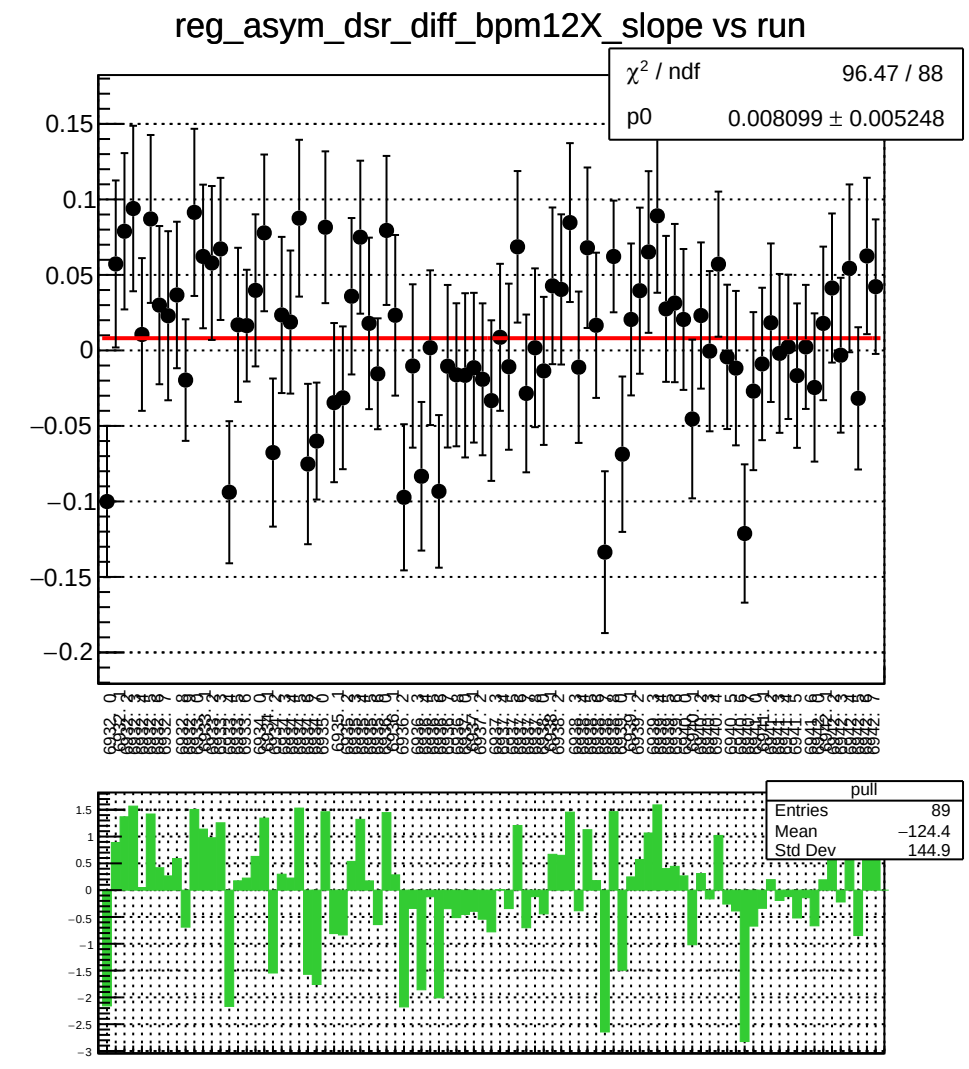

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 97.9 / 88
p0 −0.1512 ± 0.1106
pull
Entries 89
Mean −102.4
Std Dev 122.5

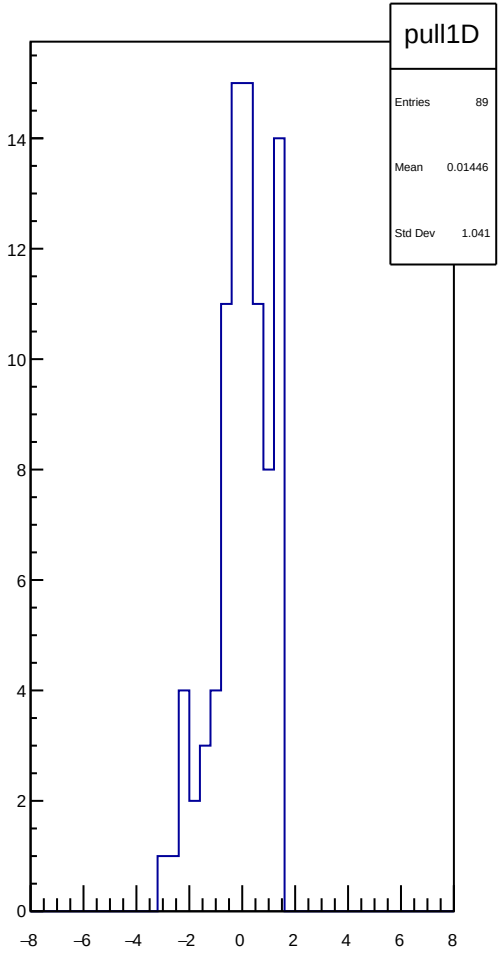

pull1D
Entries 89
Mean −0.01238
Std Dev 1.049

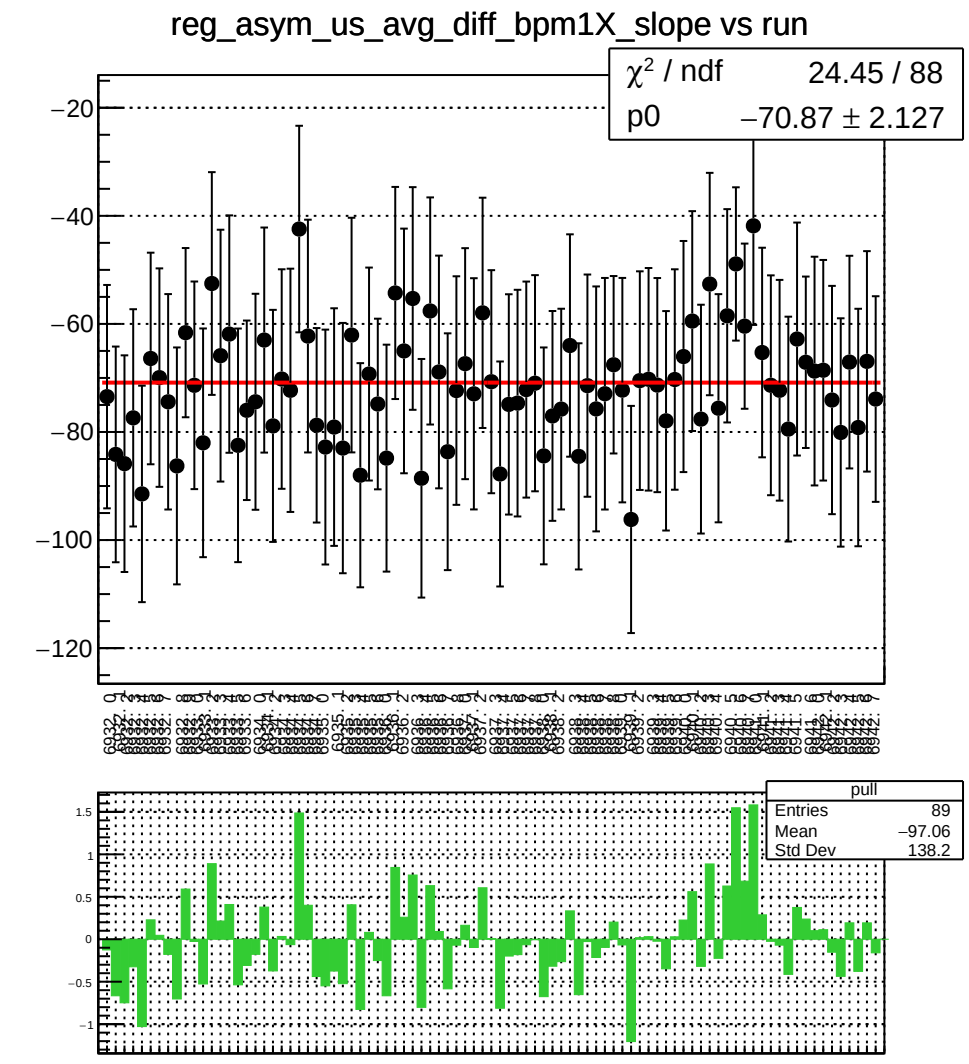

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 91.01 / 88
p0 −0.01654 ± 0.1499
pull
Entries 89
Mean 87.74
Std Dev 90.18
pull1D
Entries 89
Mean 0.006315
Std Dev 1.011

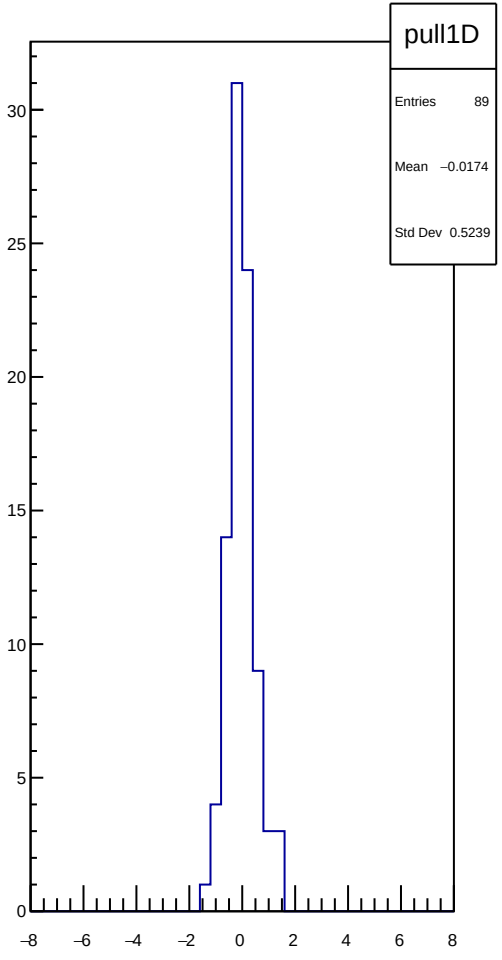

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 98.96 / 88
p0 0.177 ± 0.1277
pull
Entries 89
Mean −106.3
Std Dev 123

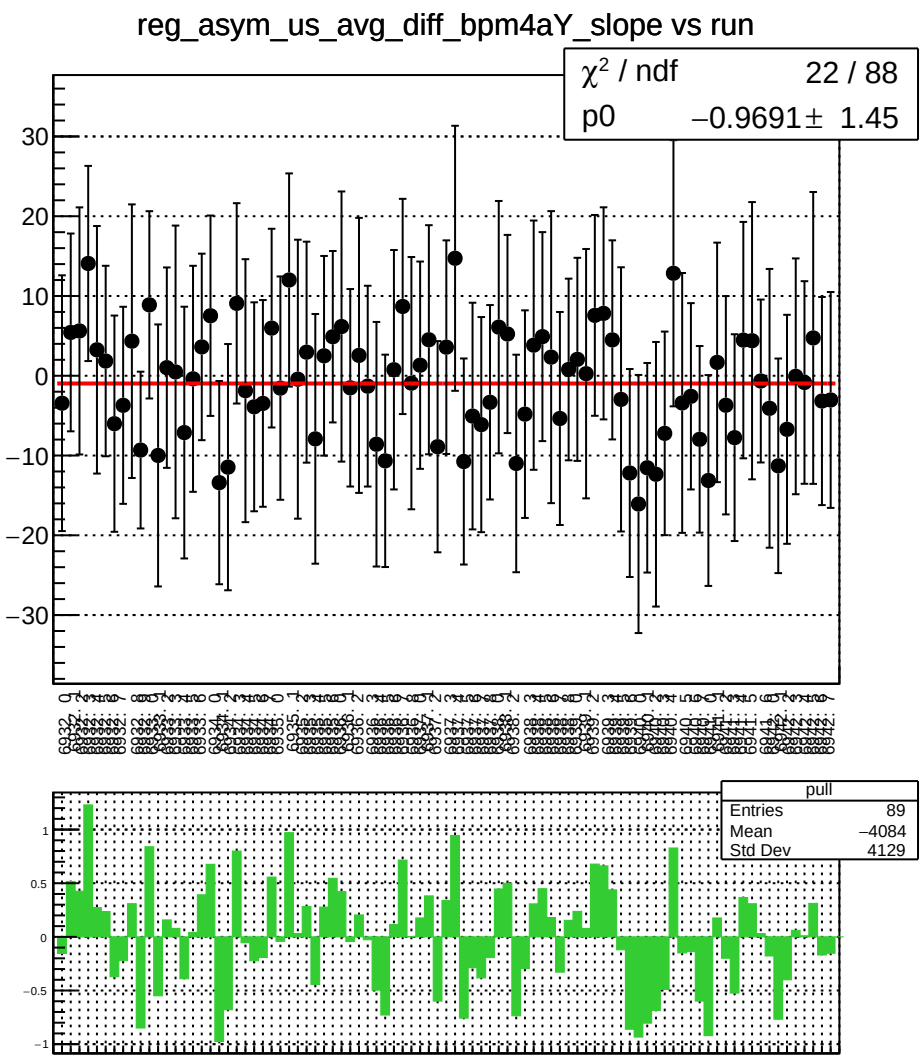

pull1D
Entries 89
Mean 0.01153
Std Dev 1.054

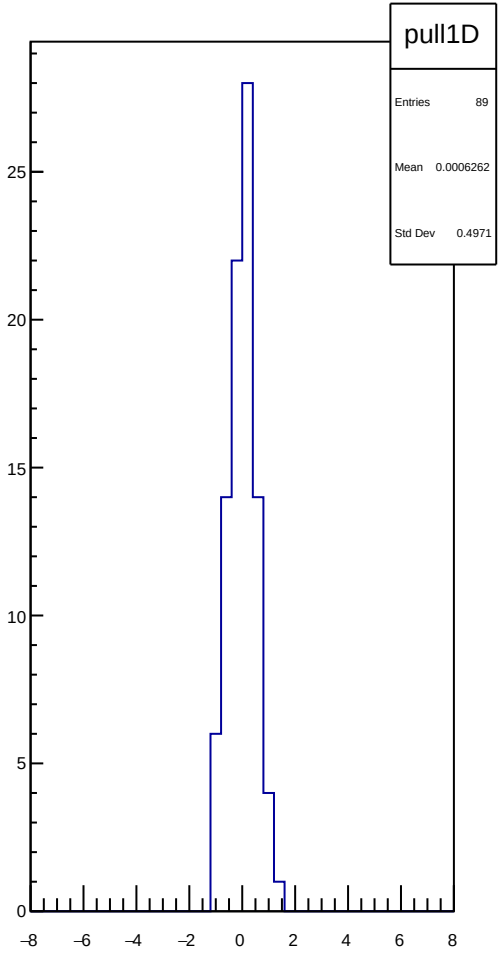

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 96.47 / 88
p0 0.008099 ± 0.005248
pull
Entries 89
Mean −124.4
Std Dev 144.9

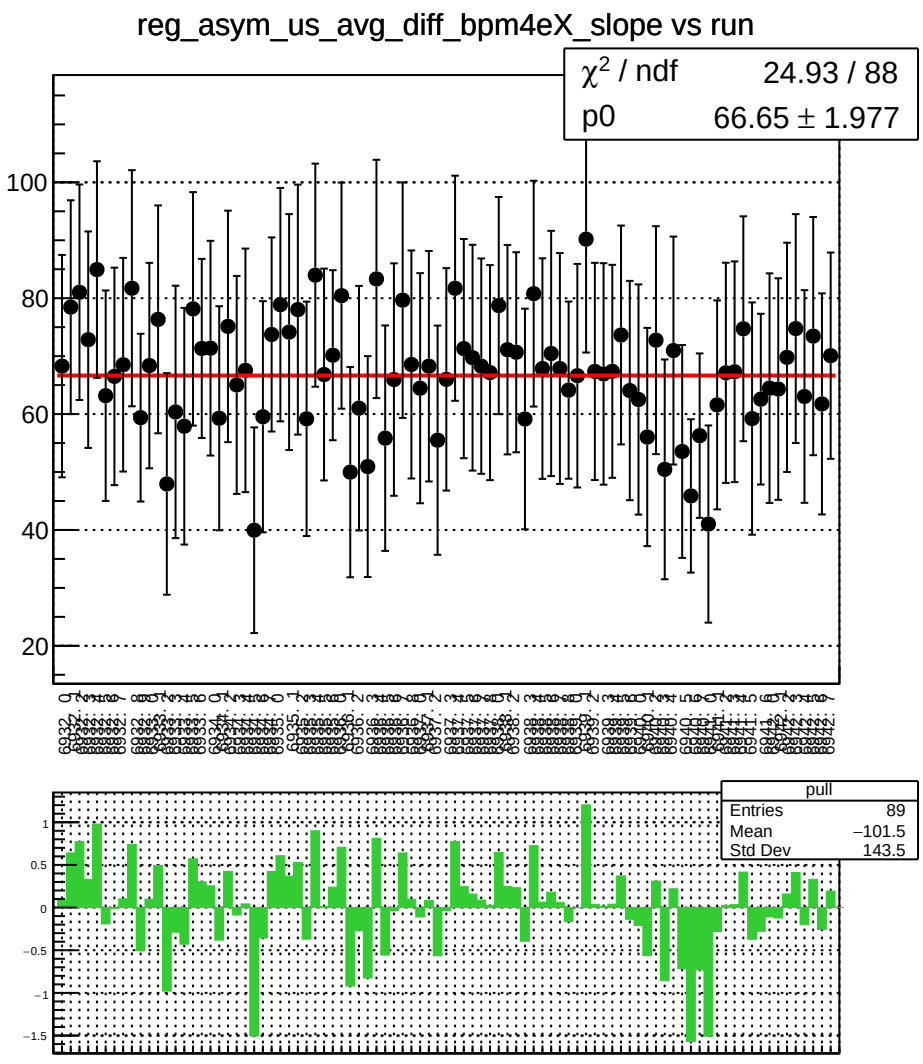

pull1D
Entries 89
Mean 0.01446
Std Dev 1.041

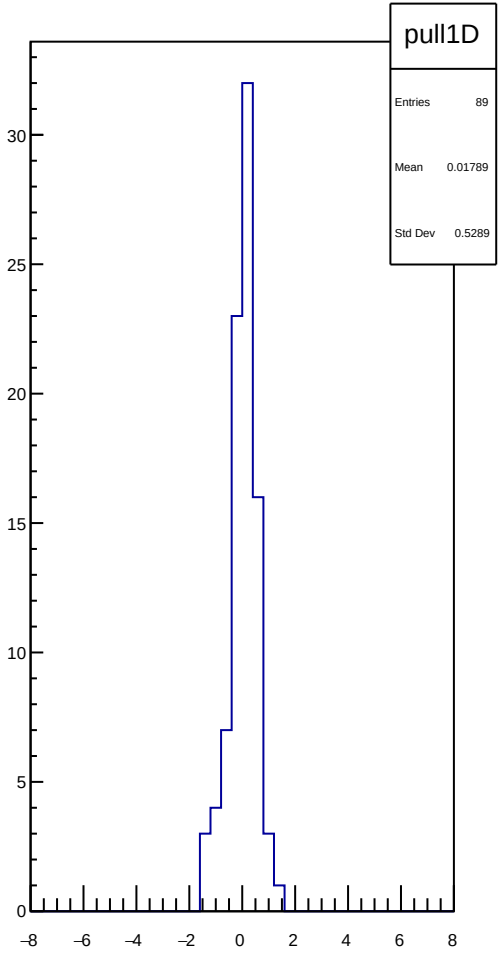

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 24.45 / 88
p0 −70.87 ± 2.127
pull
Entries 89
Mean −97.06
Std Dev 138.2

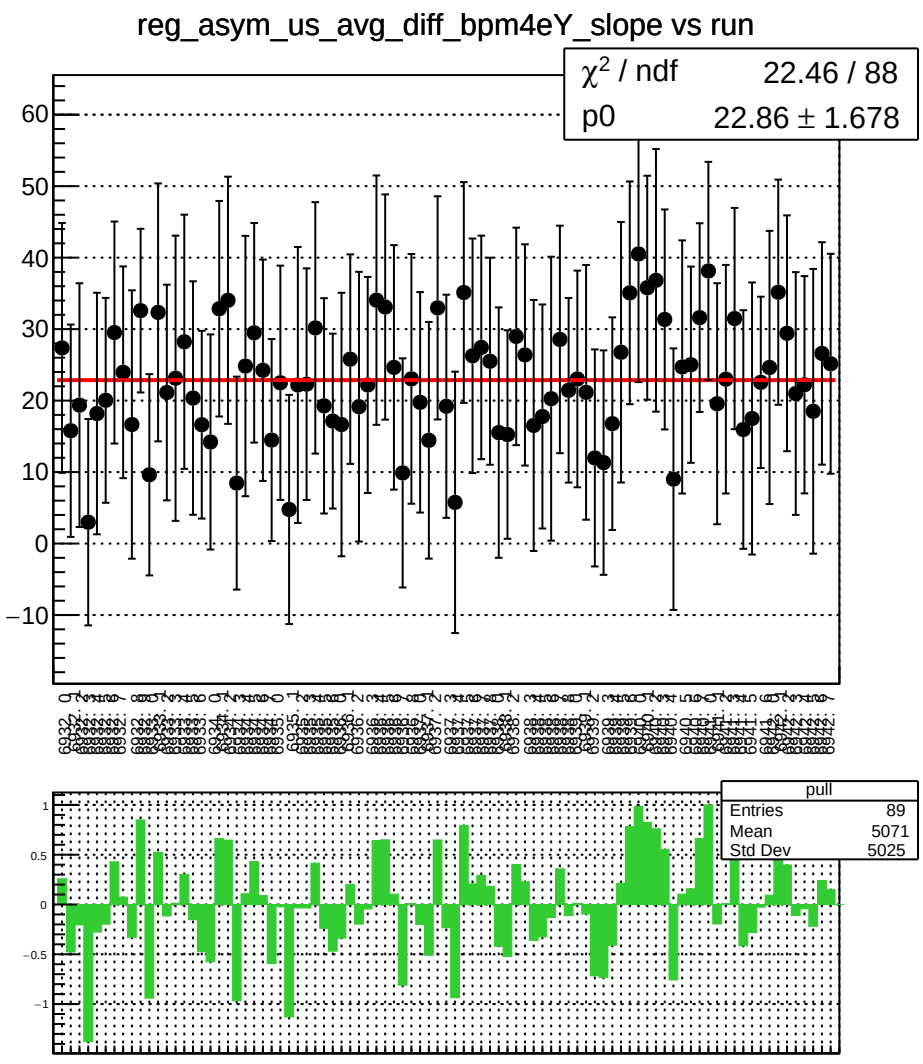

pull1D
Entries 89
Mean −0.0174
Std Dev 0.5239

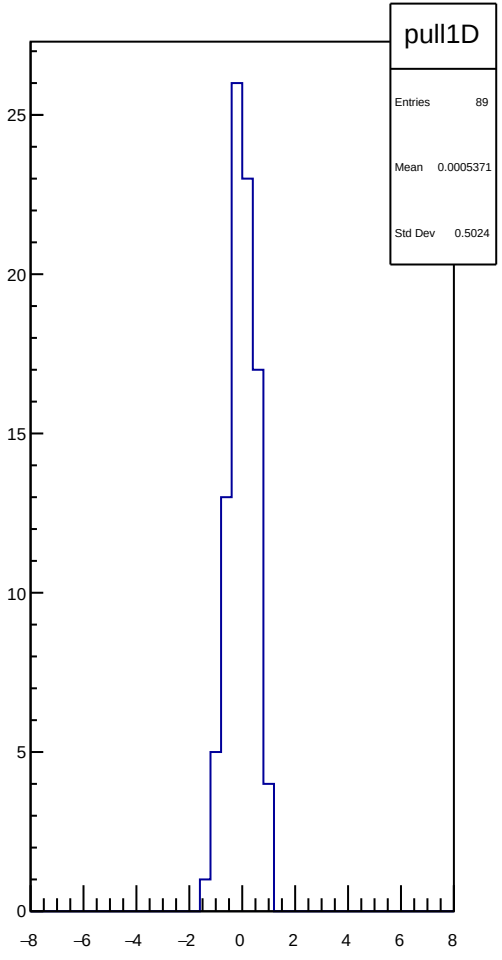

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 22 / 88
p0 −0.9691 ± 1.45
pull
Entries 89
Mean −4084
Std Dev 4129

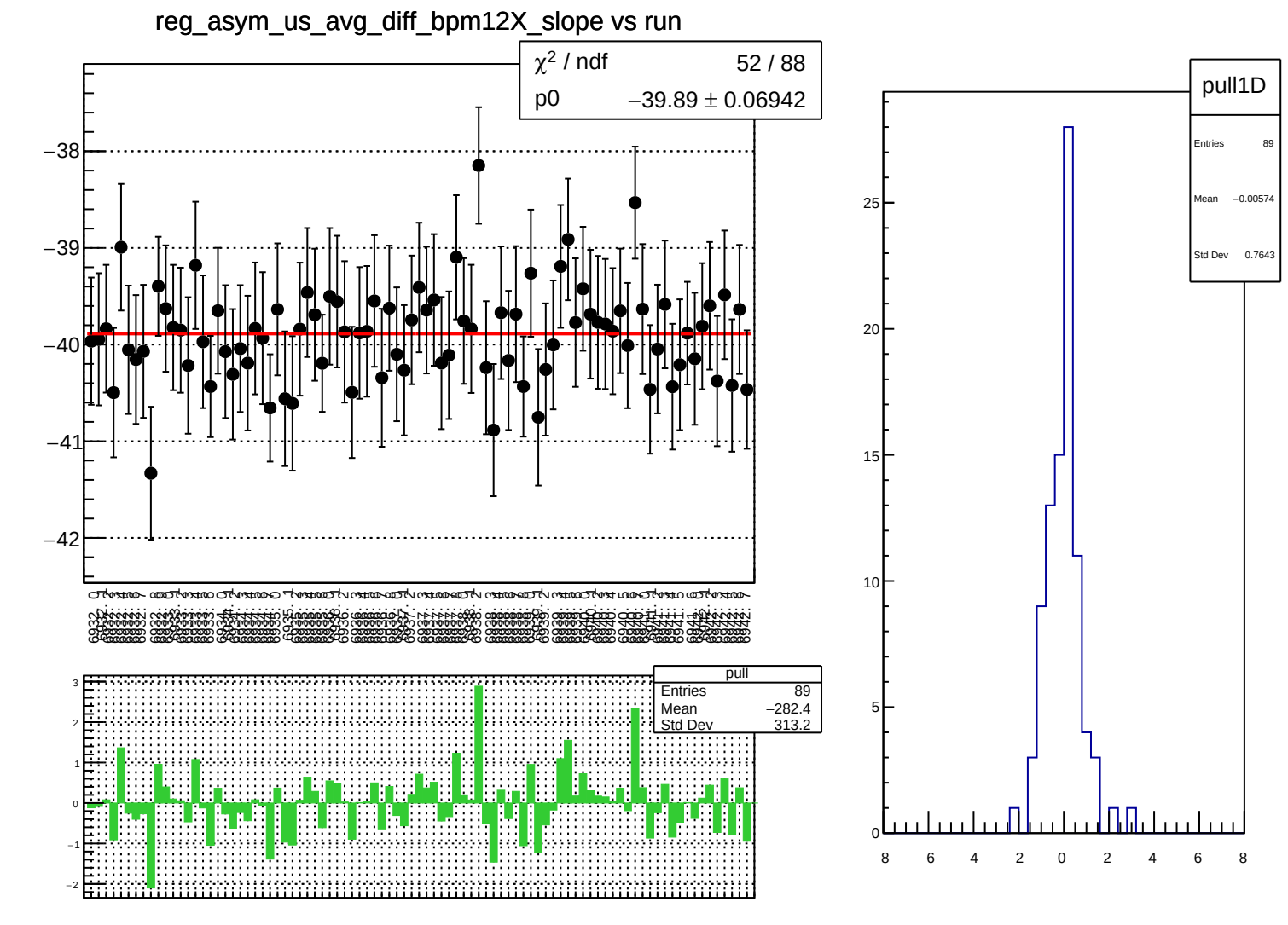

pull1D
Entries 89
Mean 0.0006262
Std Dev 0.4971

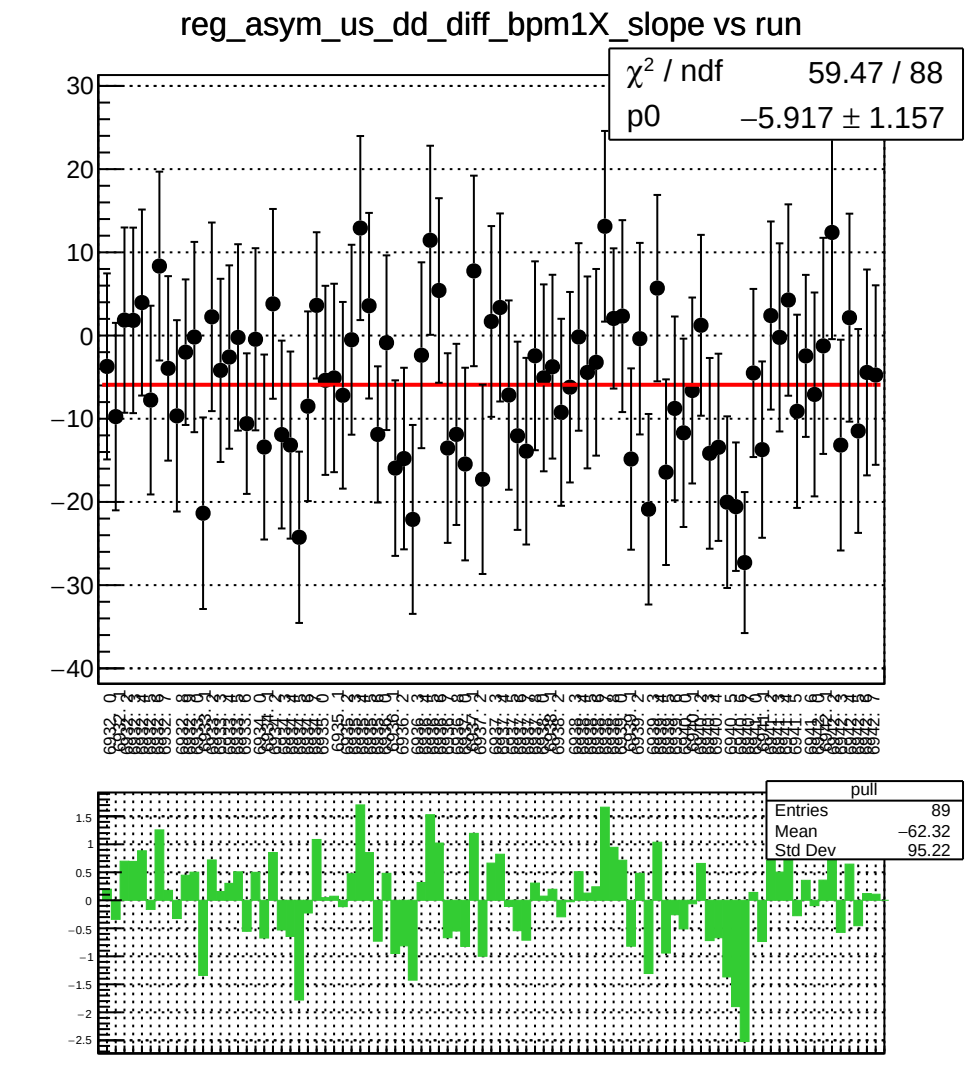

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 24.93 / 88
p0 66.65 ± 1.977
pull
Entries 89
Mean −101.5
Std Dev 143.5

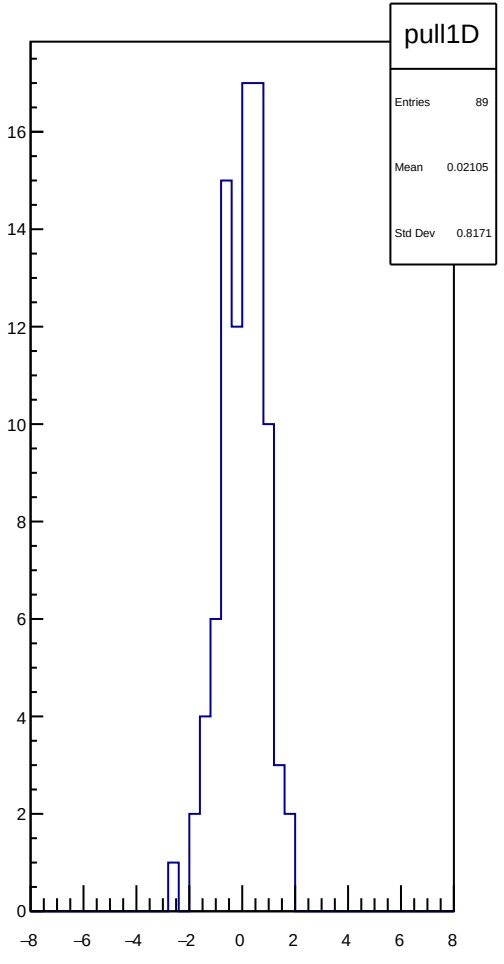

pull1D
Entries 89
Mean 0.01789
Std Dev 0.5289

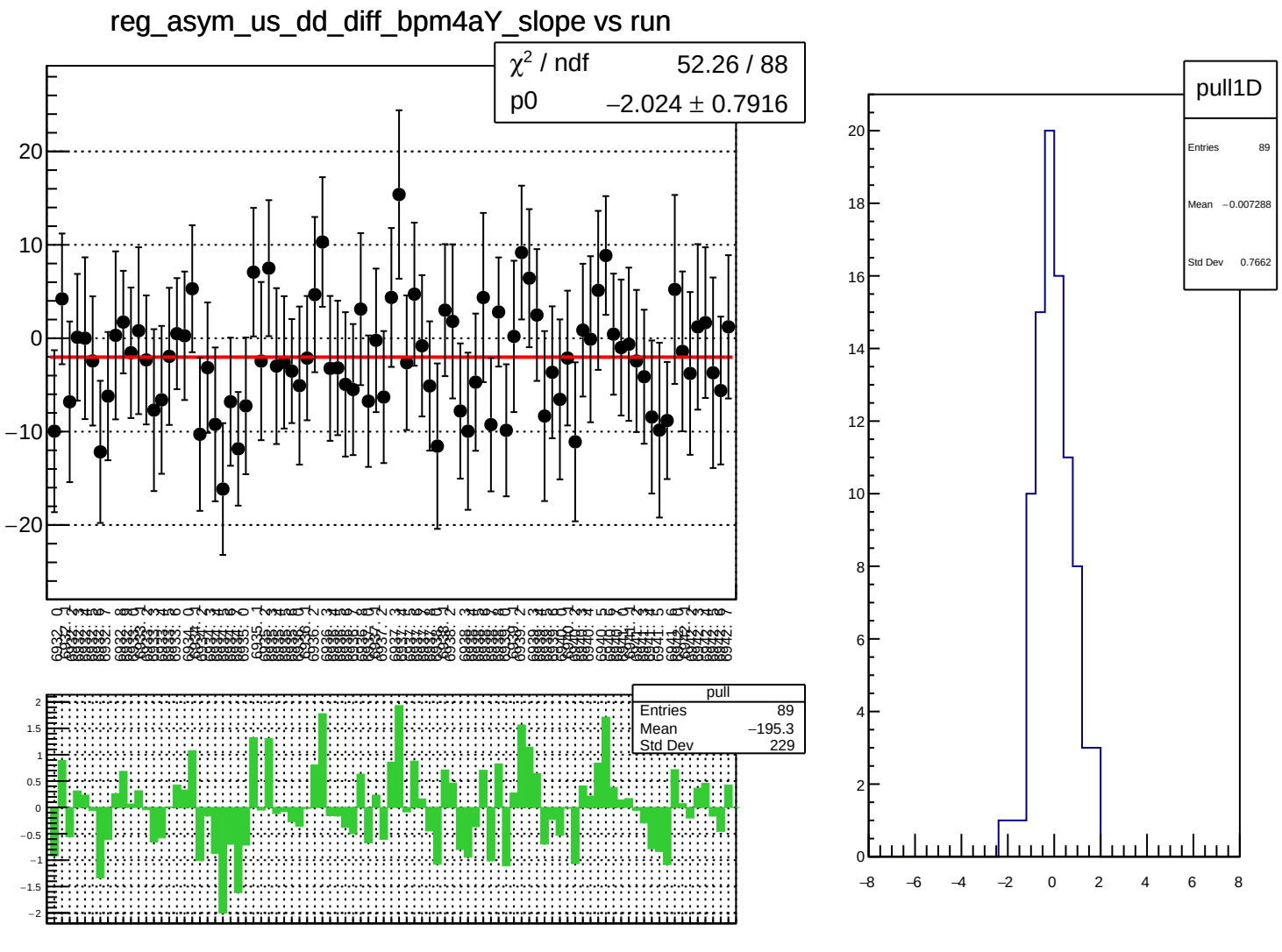

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 22.46 / 88
p0 22.86 ± 1.678
pull
Entries 89
Mean 5071
Std Dev 5025

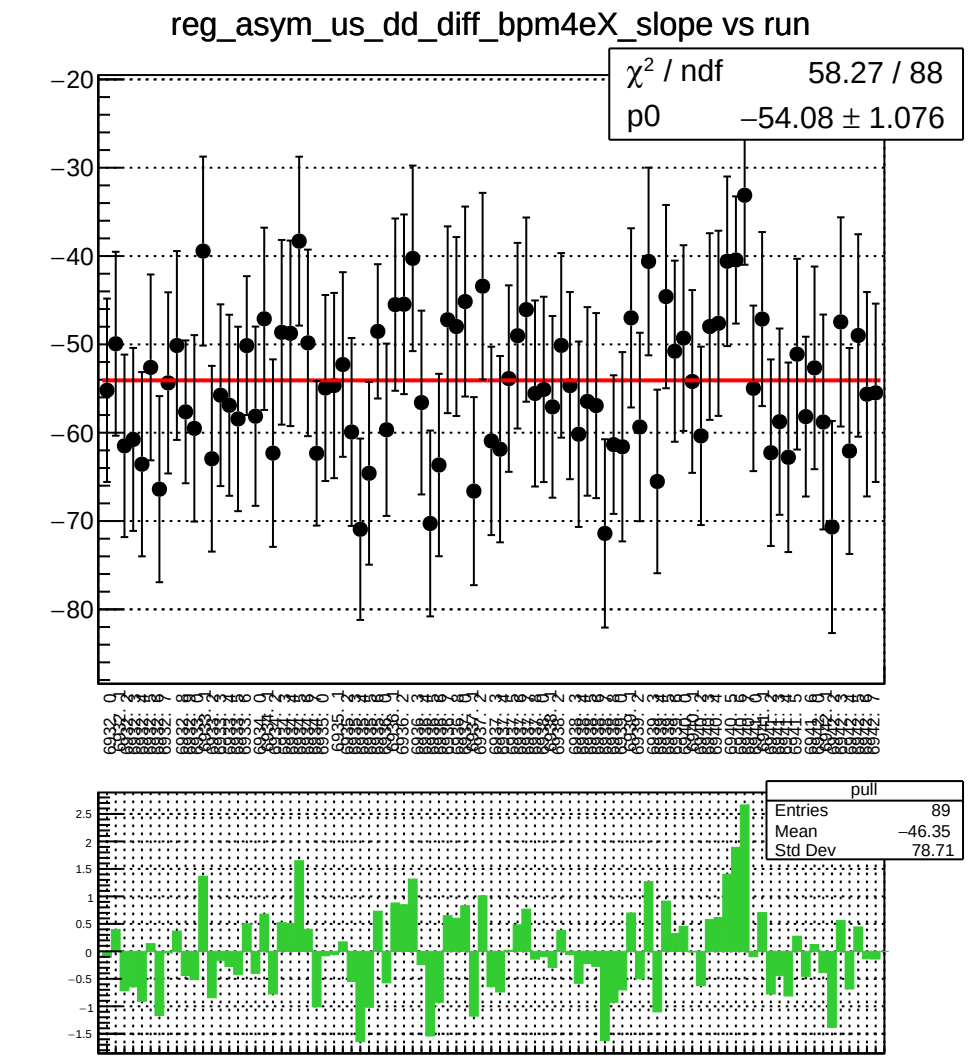

pull1D
Entries 89
Mean 0.0005371
Std Dev 0.5024

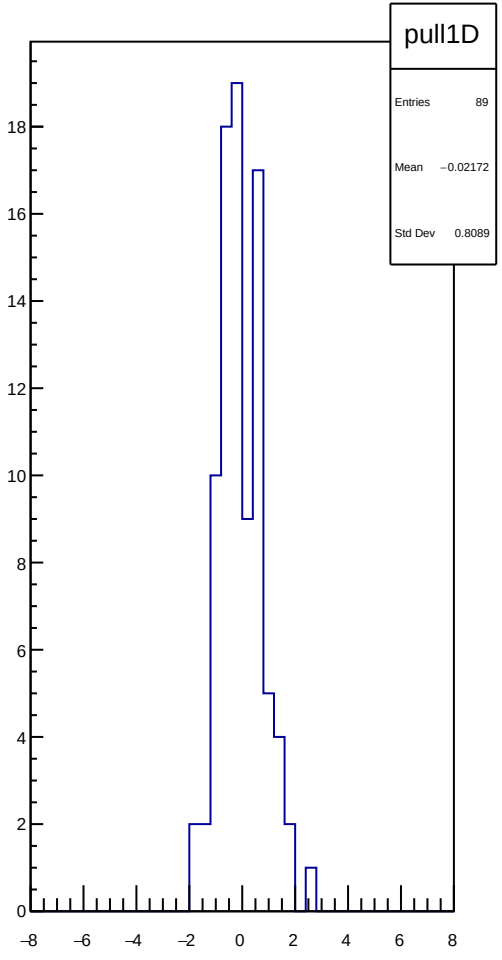

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 52 / 88
p0 −39.89 ± 0.06942
−38
−39
−40
−41
−42
pull
Entries 89
Mean −282.4
Std Dev 313.2
3
2
1
0
−1
−2
pull1D
Entries 89
Mean −0.00574
Std Dev 0.7643
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

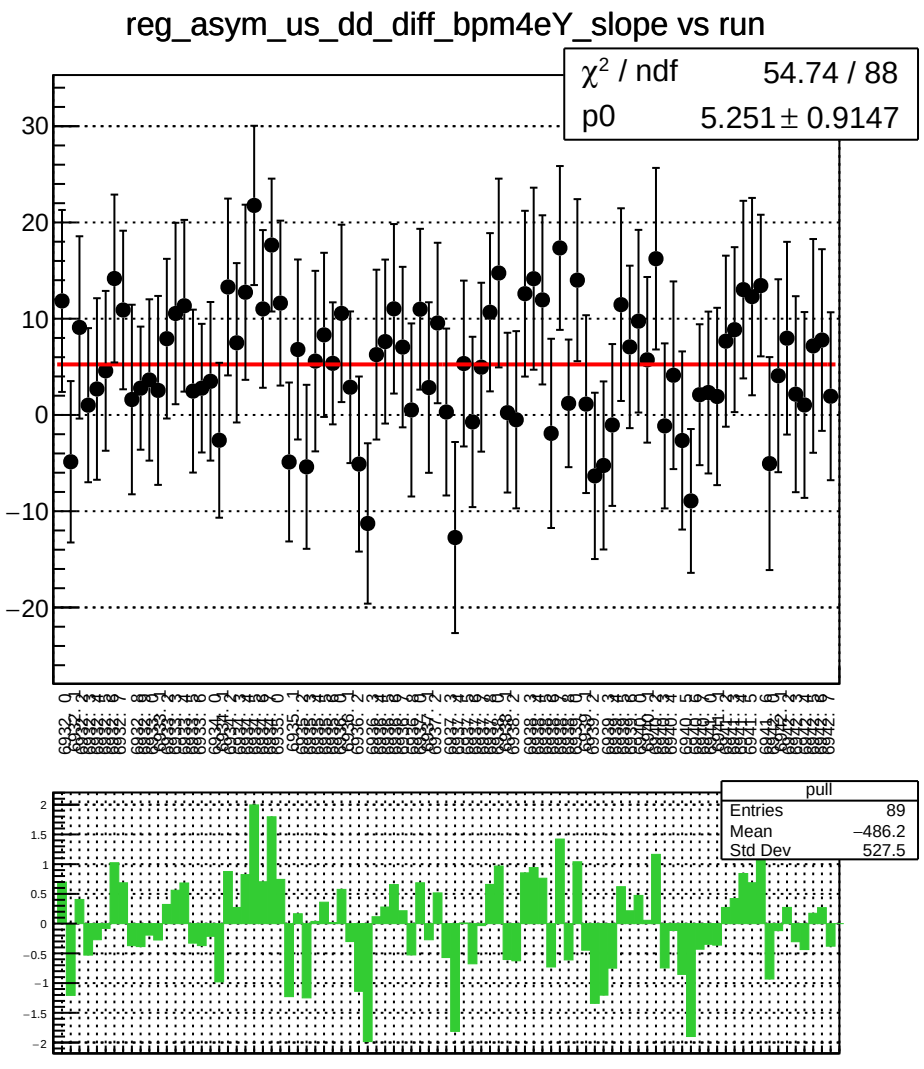

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 59.47 / 88
p0 −5.917 ± 1.157
pull
Entries 89
Mean −62.32
Std Dev 95.22

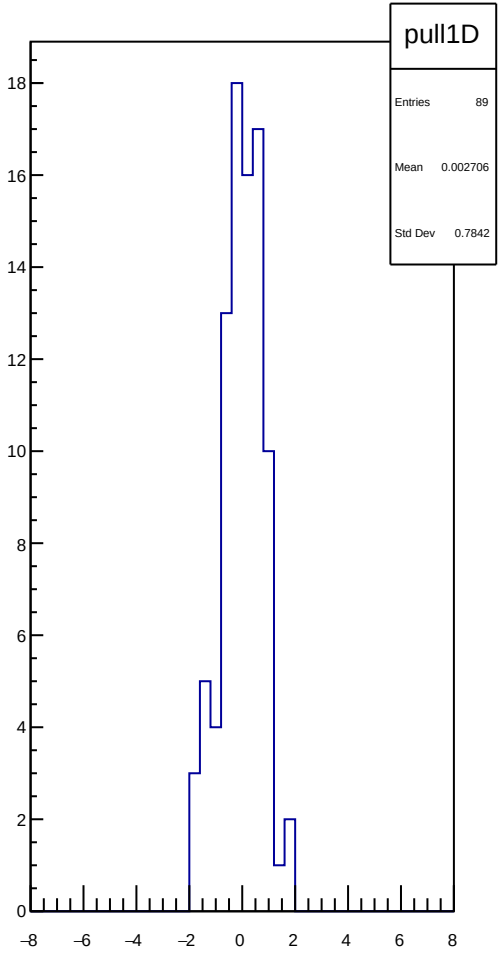

pull1D
Entries 89
Mean 0.02105
Std Dev 0.8171

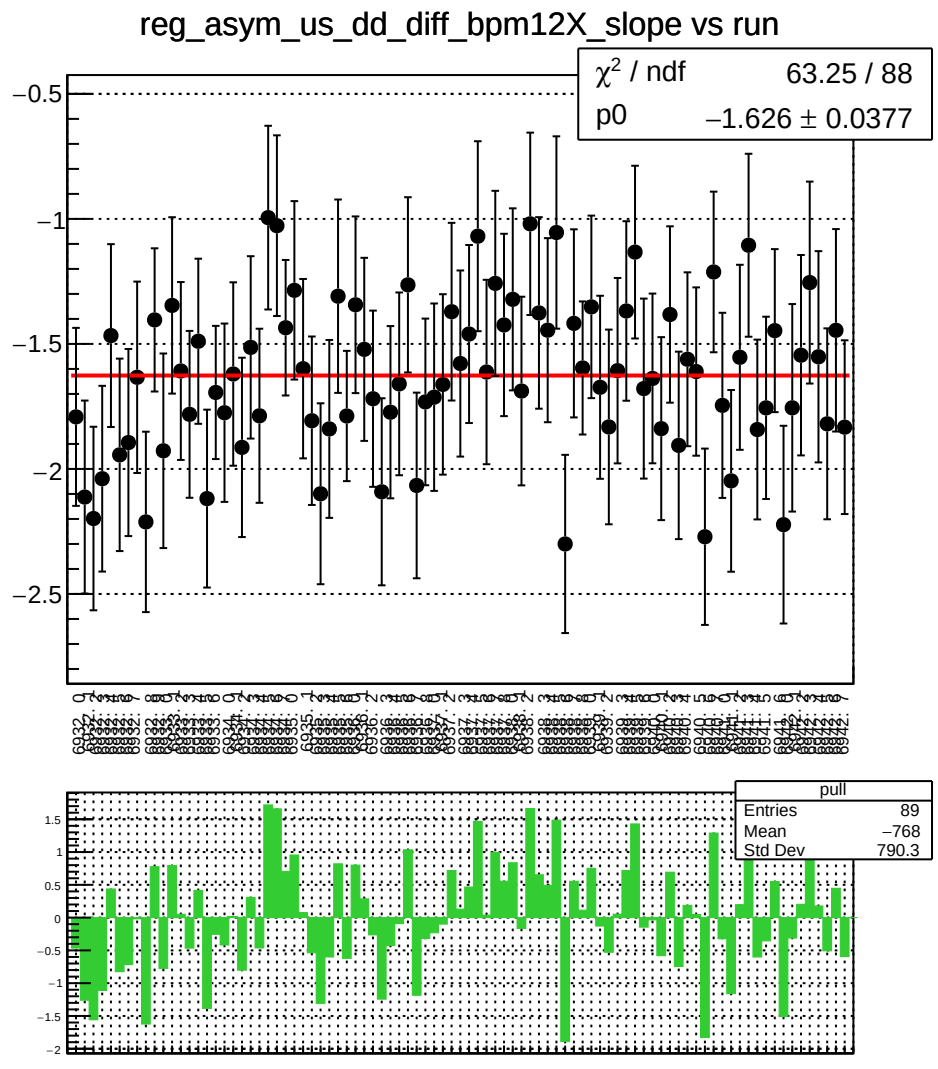

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 52.26 / 88
p0 −2.024 ± 0.7916
pull
Entries 89
Mean −195.3
Std Dev 229
pull1D
Entries 89
Mean −0.007288
Std Dev 0.7662

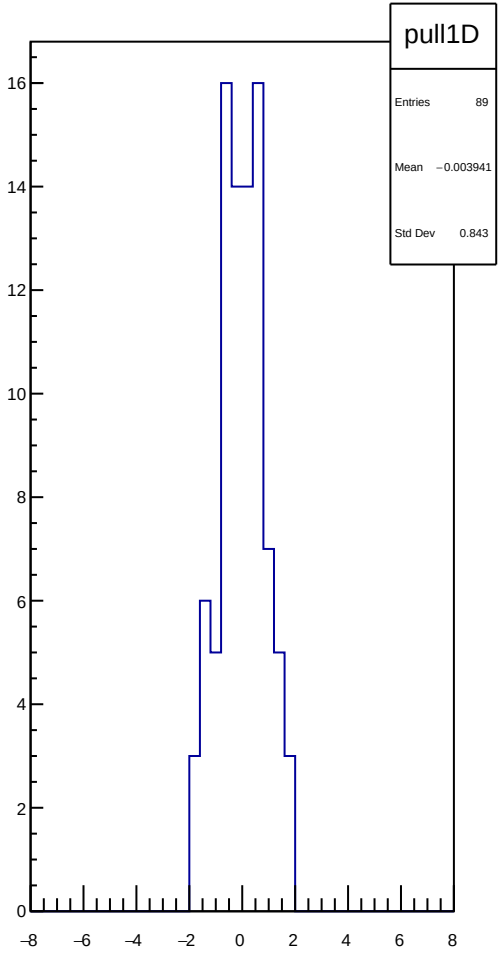

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 58.27 / 88
p0 −54.08 ± 1.076
pull
Entries 89
Mean −46.35
Std Dev 78.71

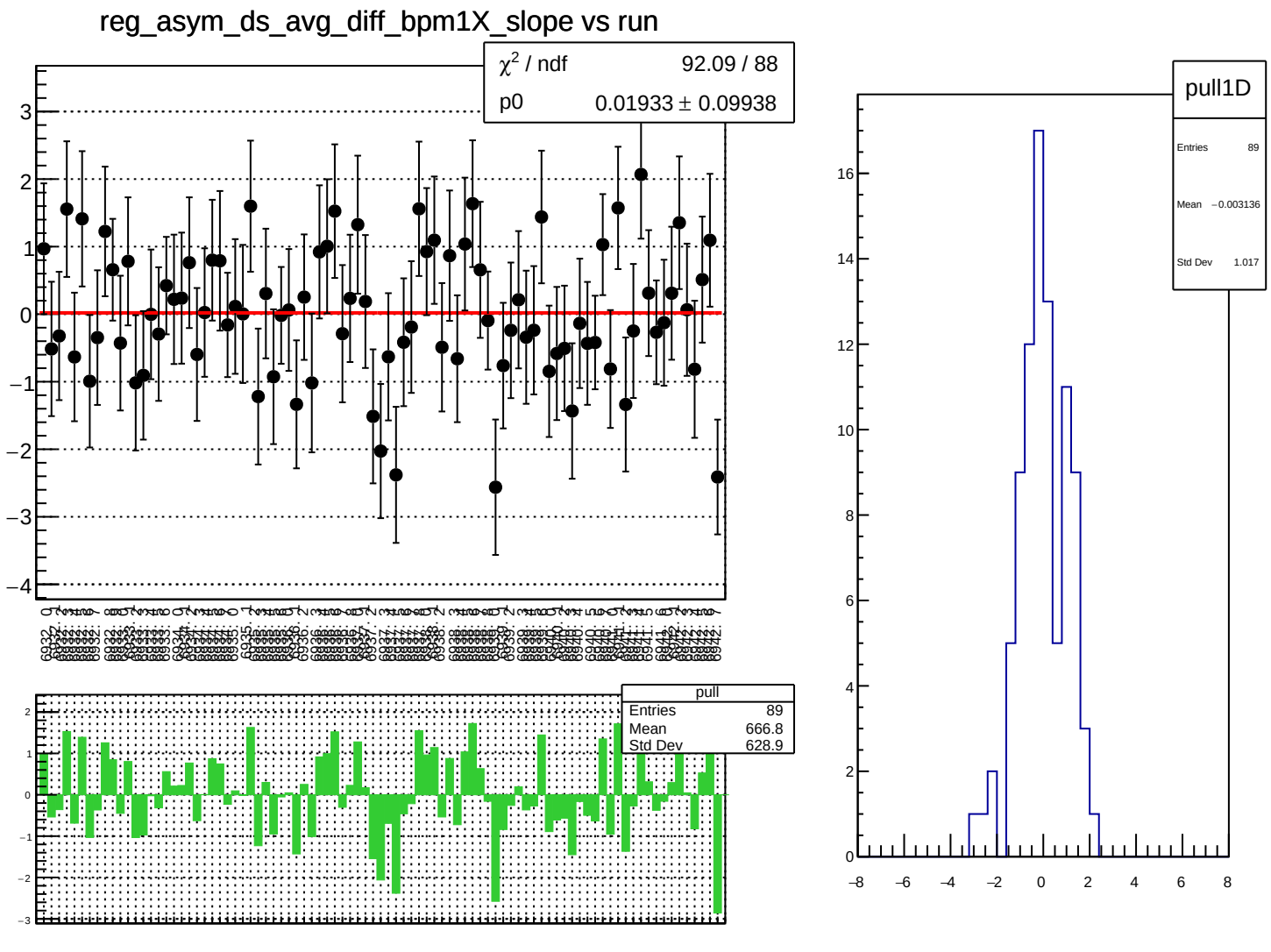

pull1D
Entries 89
Mean −0.02172
Std Dev 0.8089

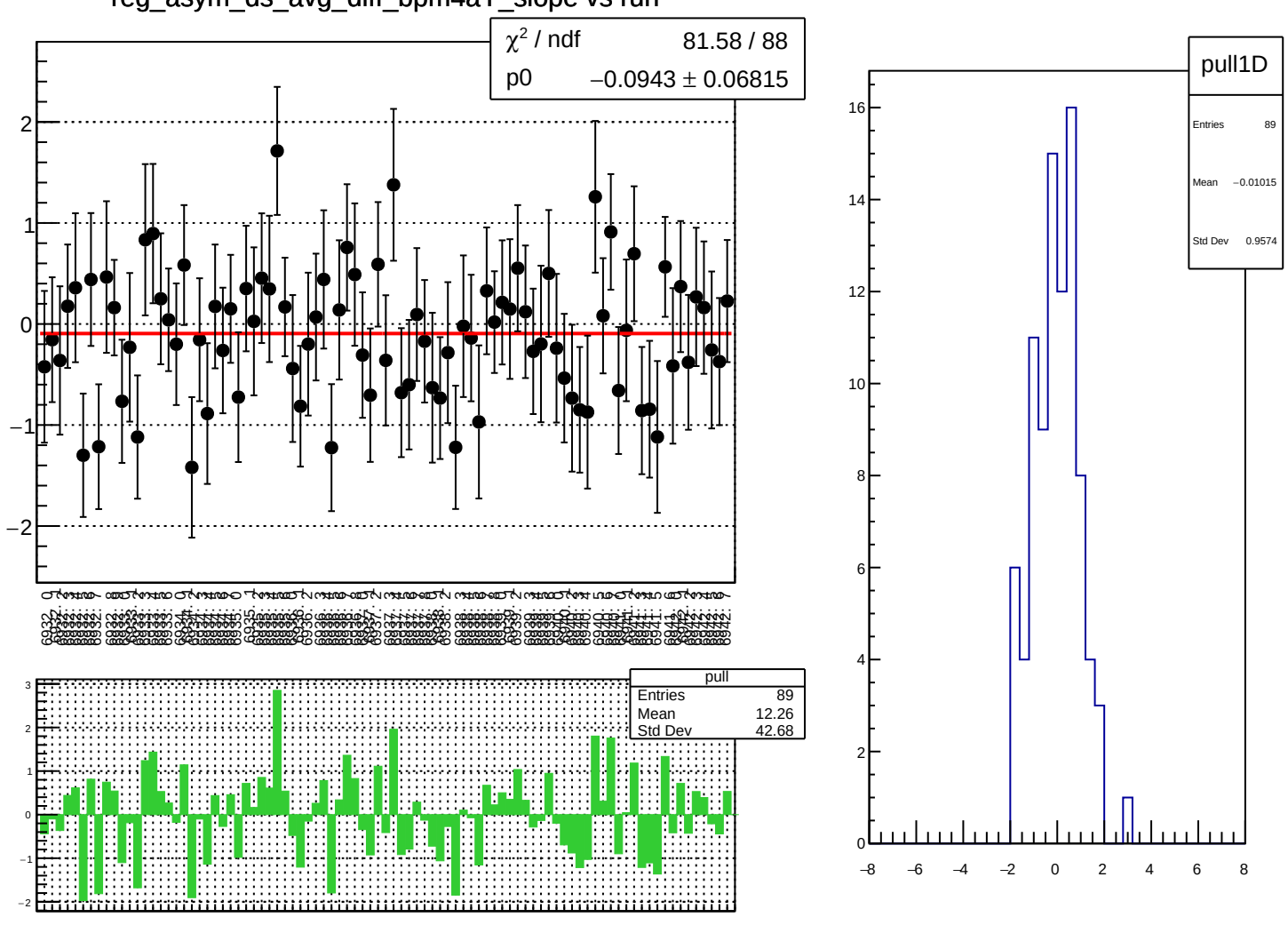

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 54.74 / 88
p0 5.251 ± 0.9147
pull
Entries 89
Mean −486.2
Std Dev 527.5

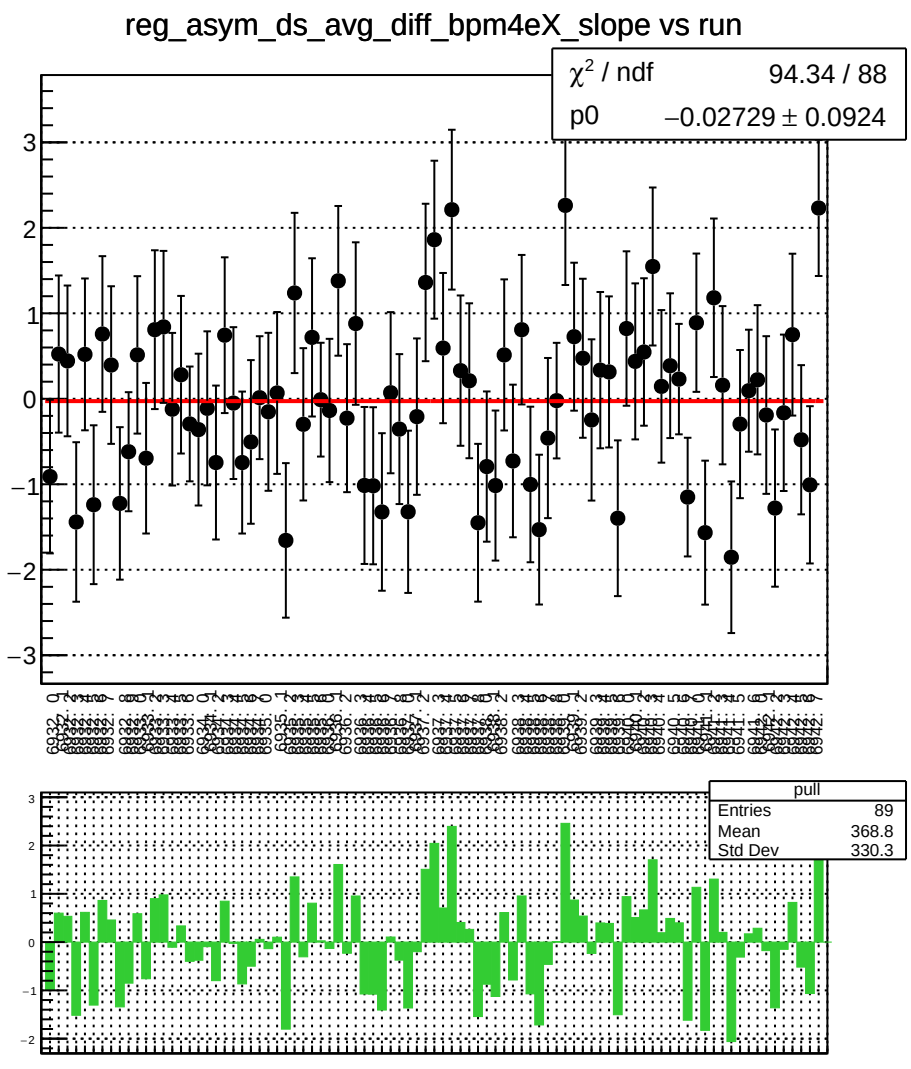

pull1D
Entries 89
Mean 0.002706
Std Dev 0.7842

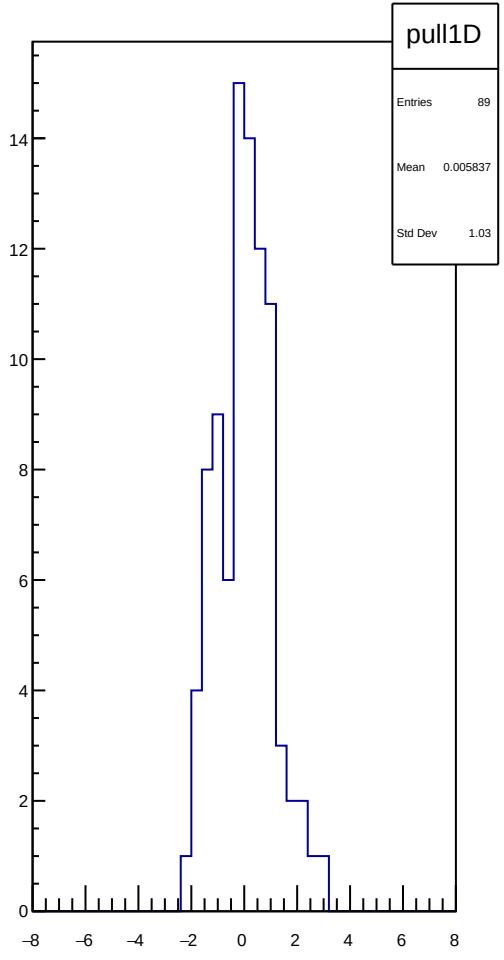

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 63.25 / 88
p0 −1.626 ± 0.0377
pull
Entries 89
Mean −768
Std Dev 790.3

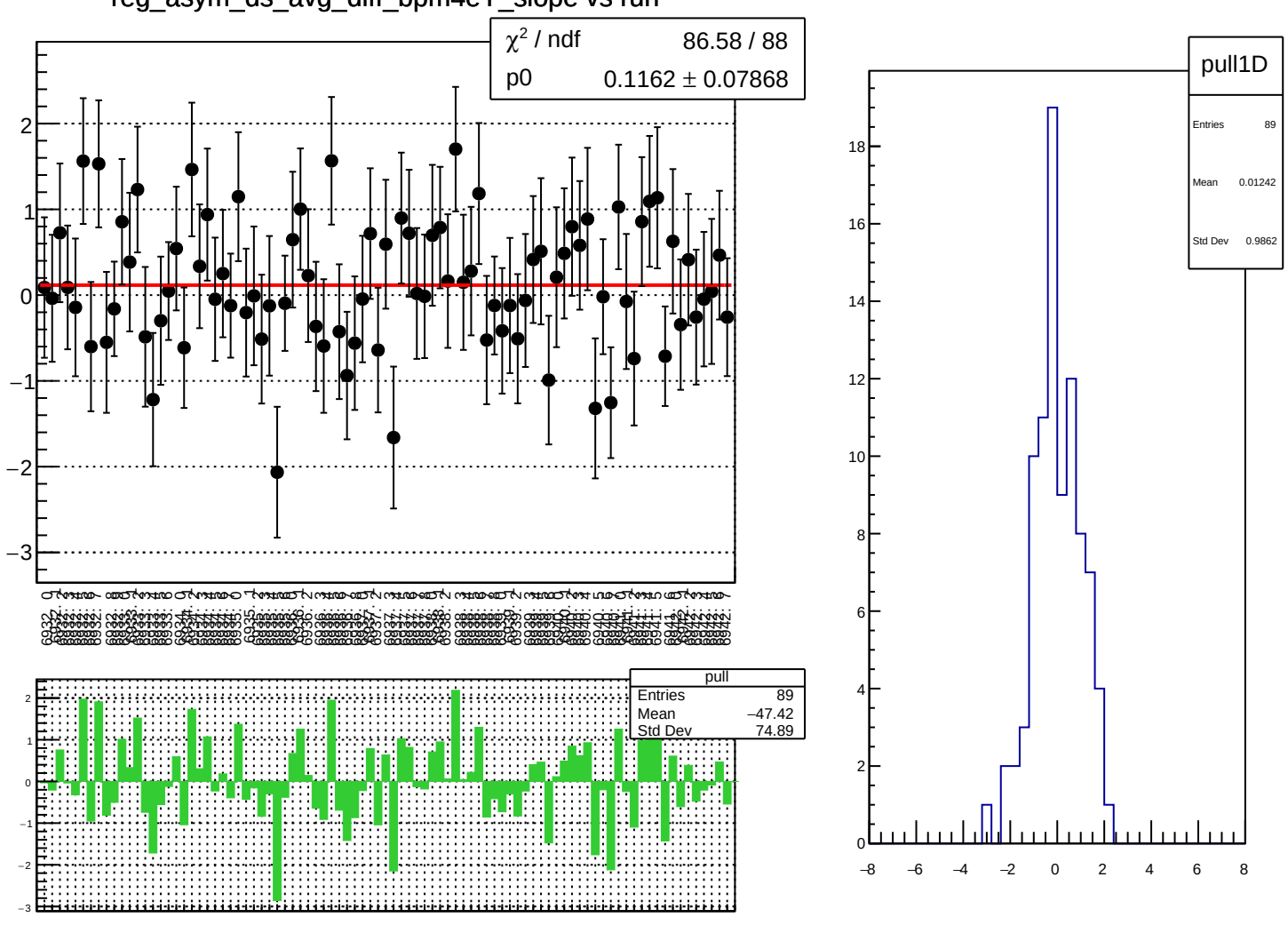

pull1D
Entries 89
Mean −0.003941
Std Dev 0.843

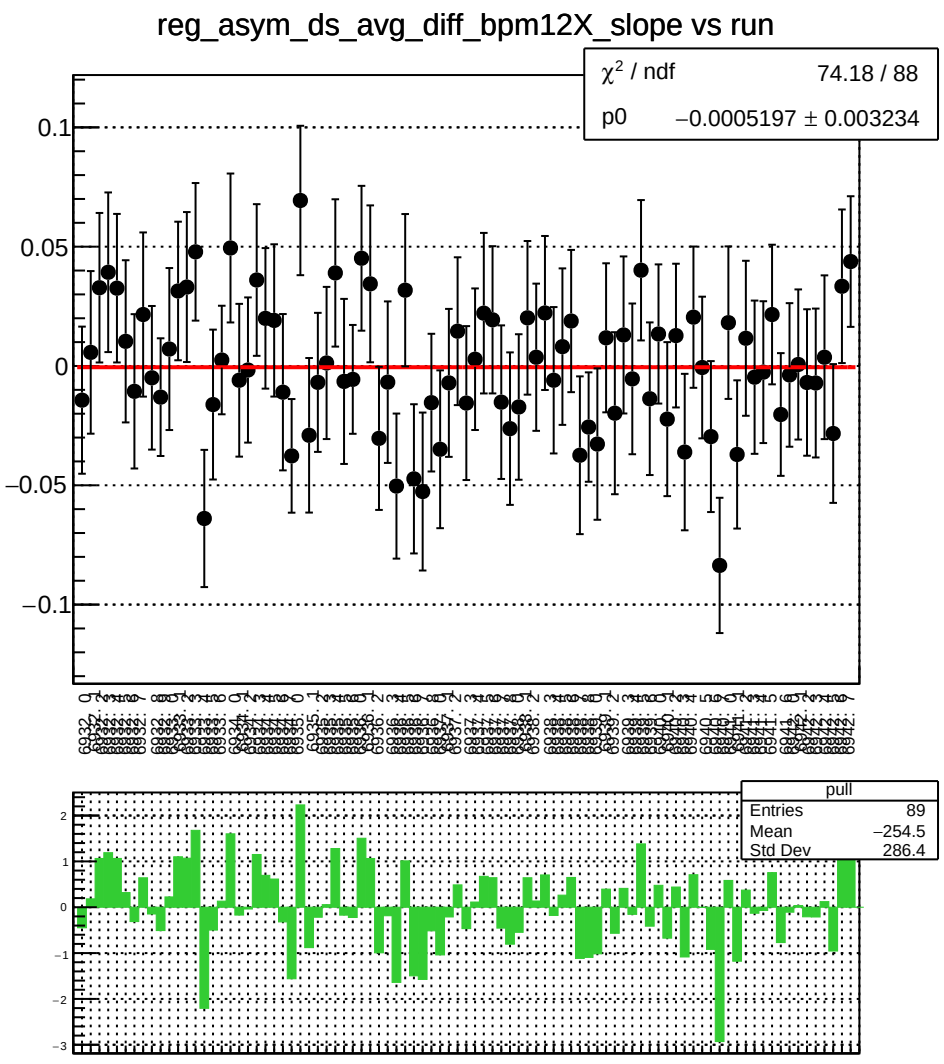

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 92.09 / 88
p0 0.01933 ± 0.09938
pull
Entries 89
Mean 666.8
Std Dev 628.9
pull1D
Entries 89
Mean −0.003136
Std Dev 1.017

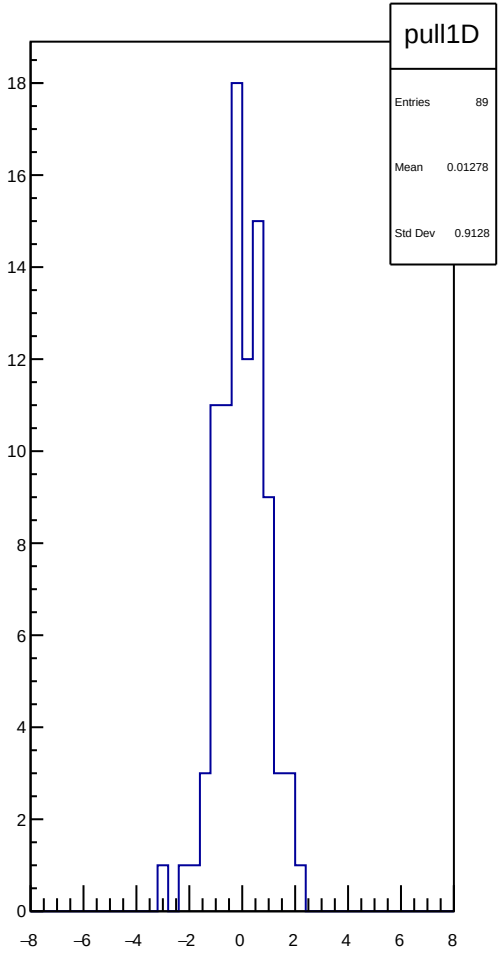

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 81.58 / 88
p0 −0.0943 ± 0.06815
pull
Entries 89
Mean 12.26
Std Dev 42.68
pull1D
Entries 89
Mean −0.01015
Std Dev 0.9574

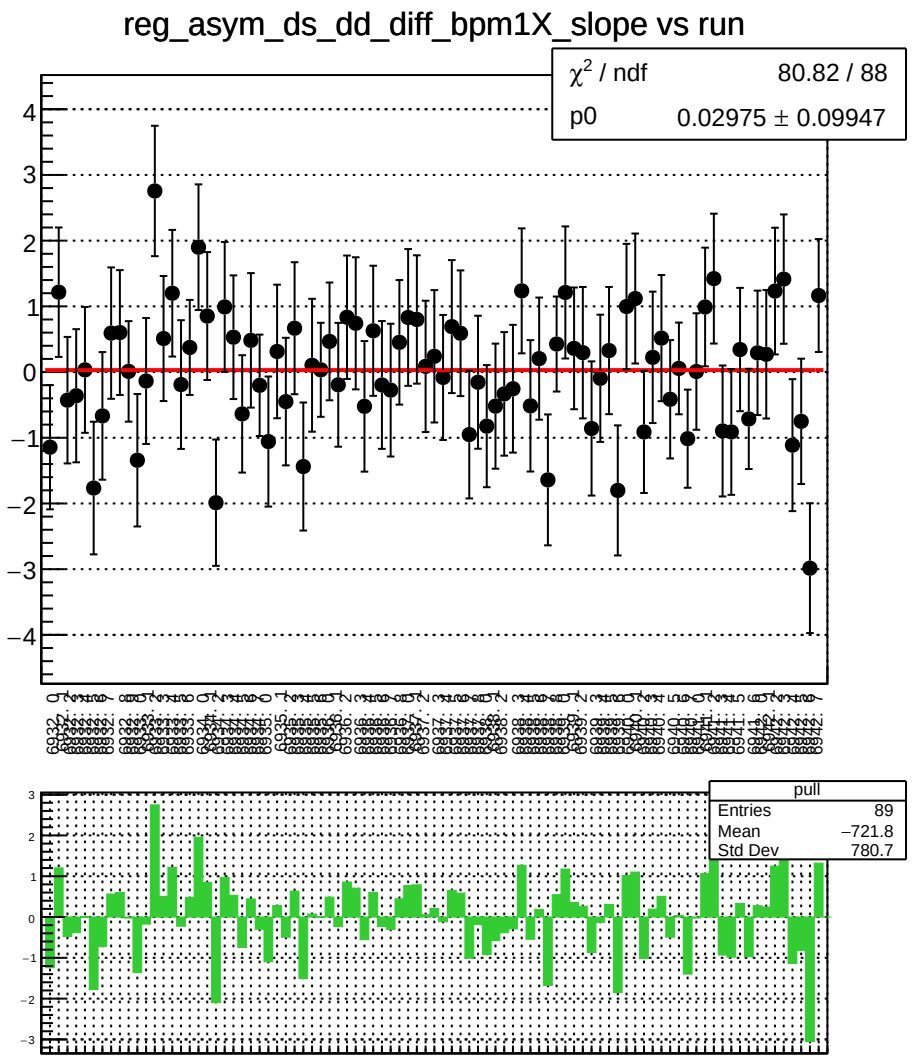

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 94.34 / 88
p0 −0.02729 ± 0.0924
pull
Entries 89
Mean 368.8
Std Dev 330.3

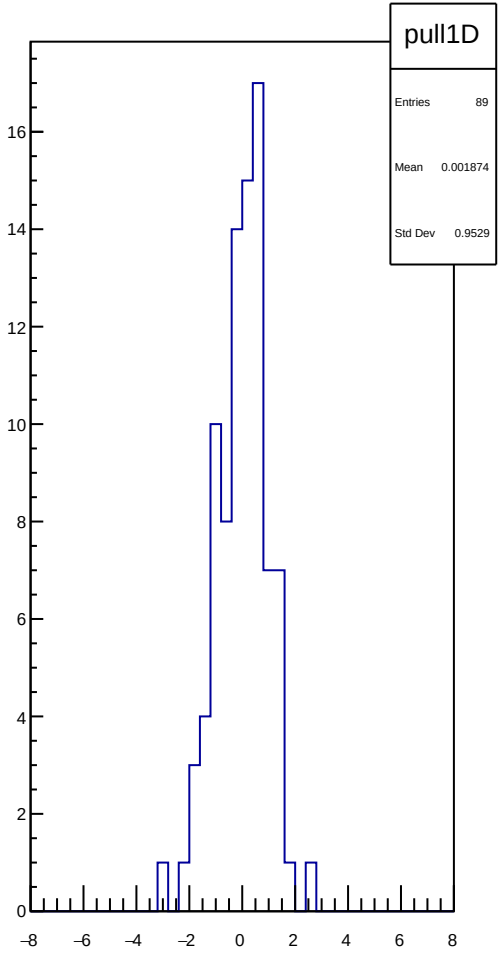

pull1D
Entries 89
Mean 0.005837
Std Dev 1.03

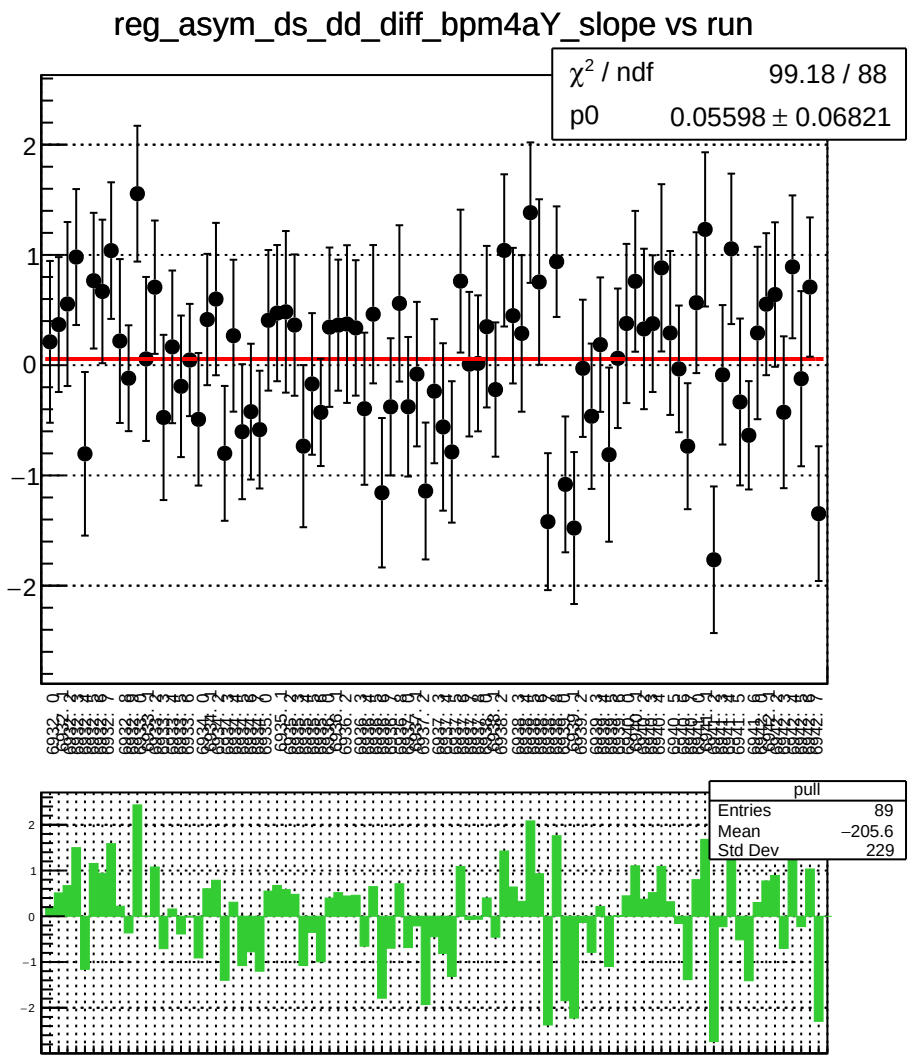

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 86.58 / 88
p0 0.1162 ± 0.07868
pull
Entries 89
Mean −47.42
Std Dev 74.89
pull1D
Entries 89
Mean 0.01242
Std Dev 0.9862

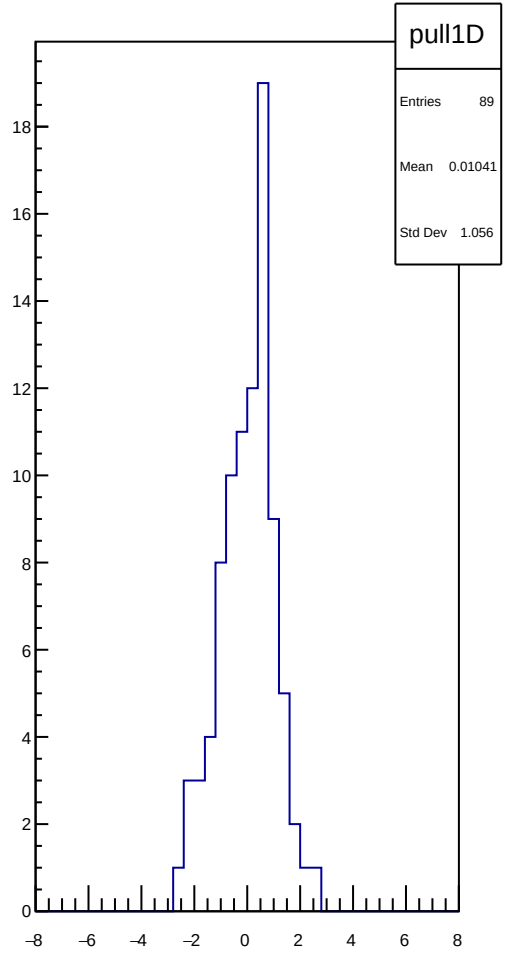

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 74.18 / 88
p0 −0.0005197 ± 0.003234
pull
Entries 89
Mean −254.5
Std Dev 286.4

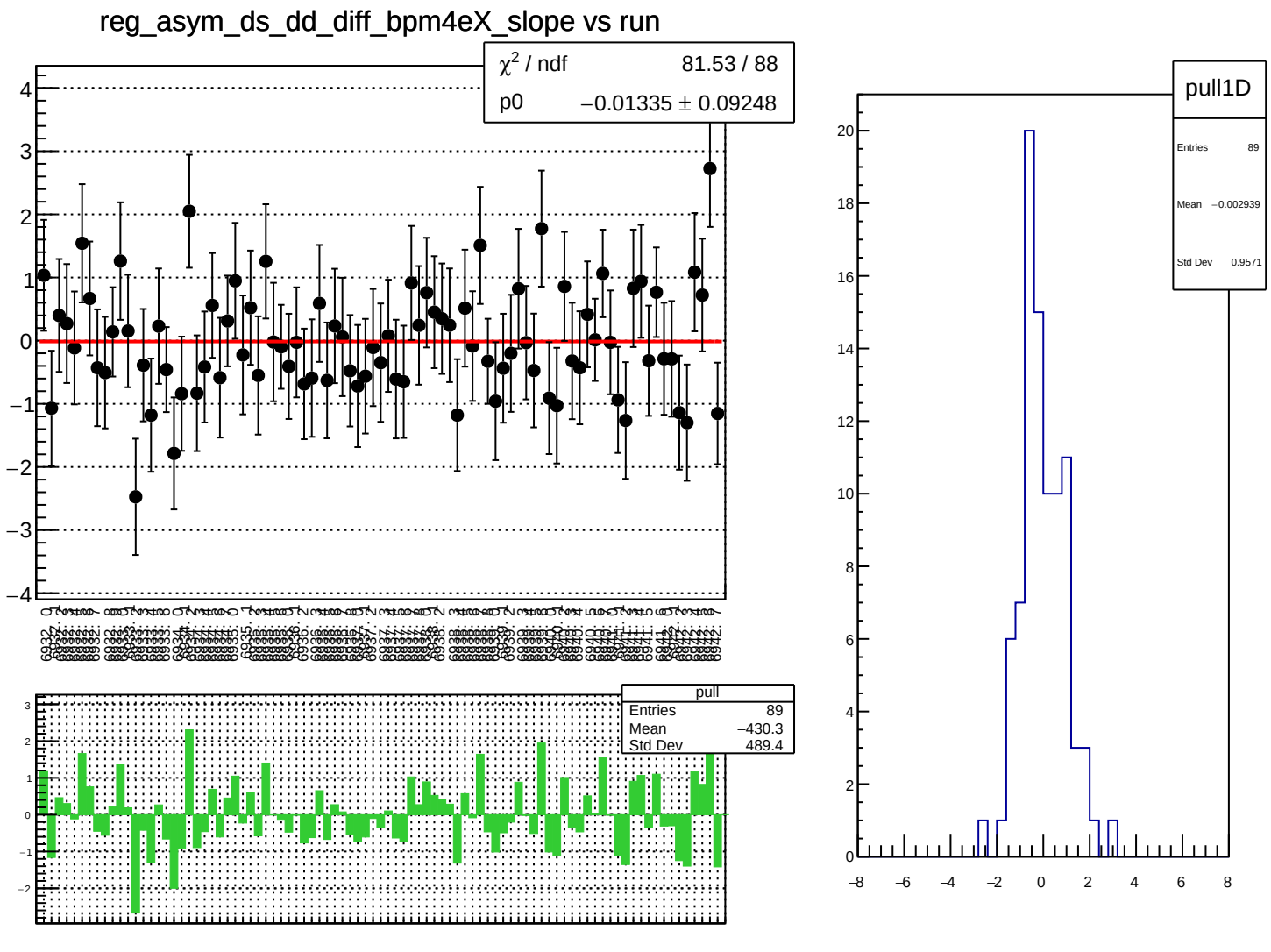

pull1D
Entries 89
Mean 0.01278
Std Dev 0.9128

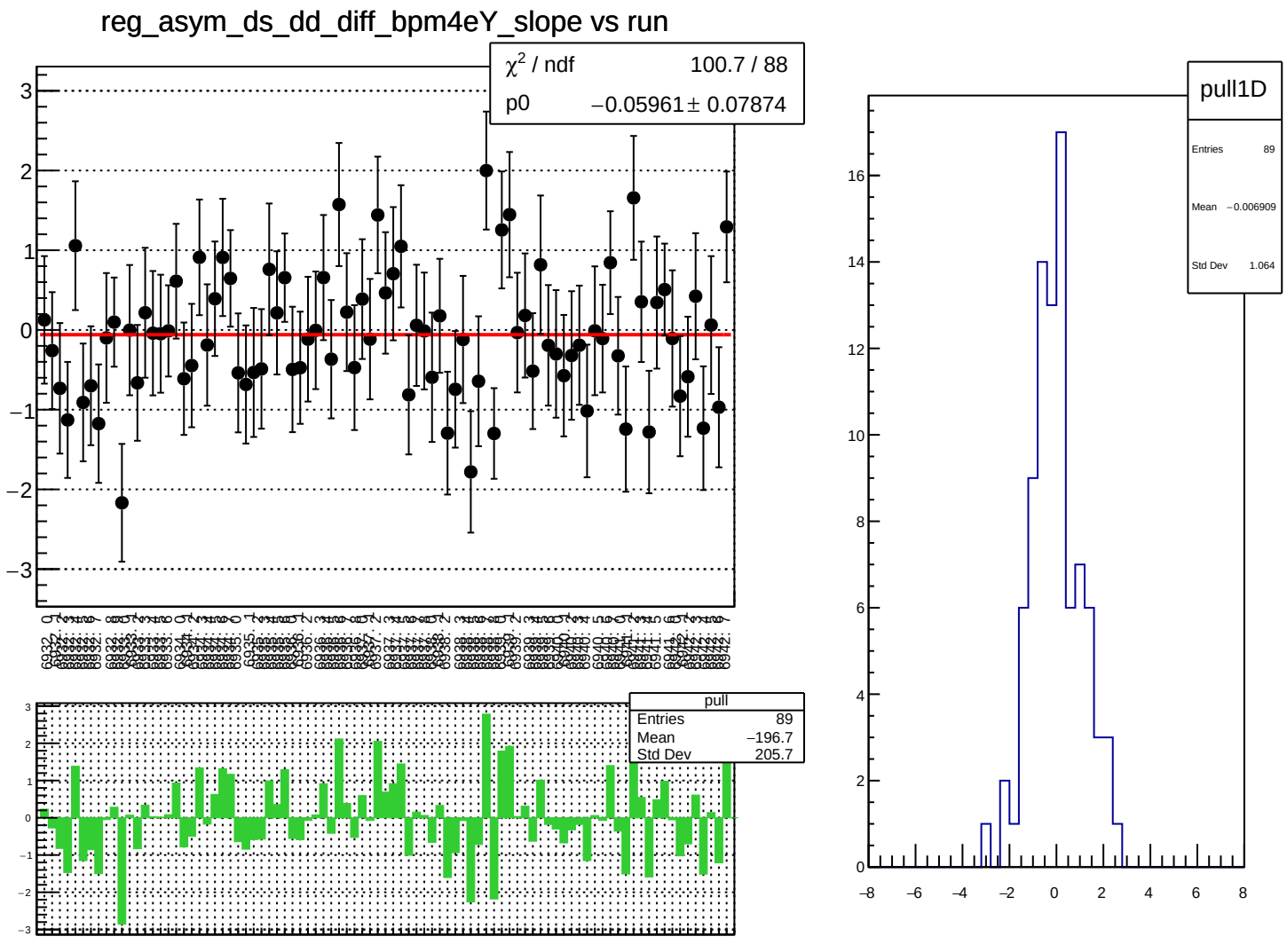

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 80.82 / 88
p0 0.02975 ± 0.09947
pull
Entries 89
Mean −721.8
Std Dev 780.7

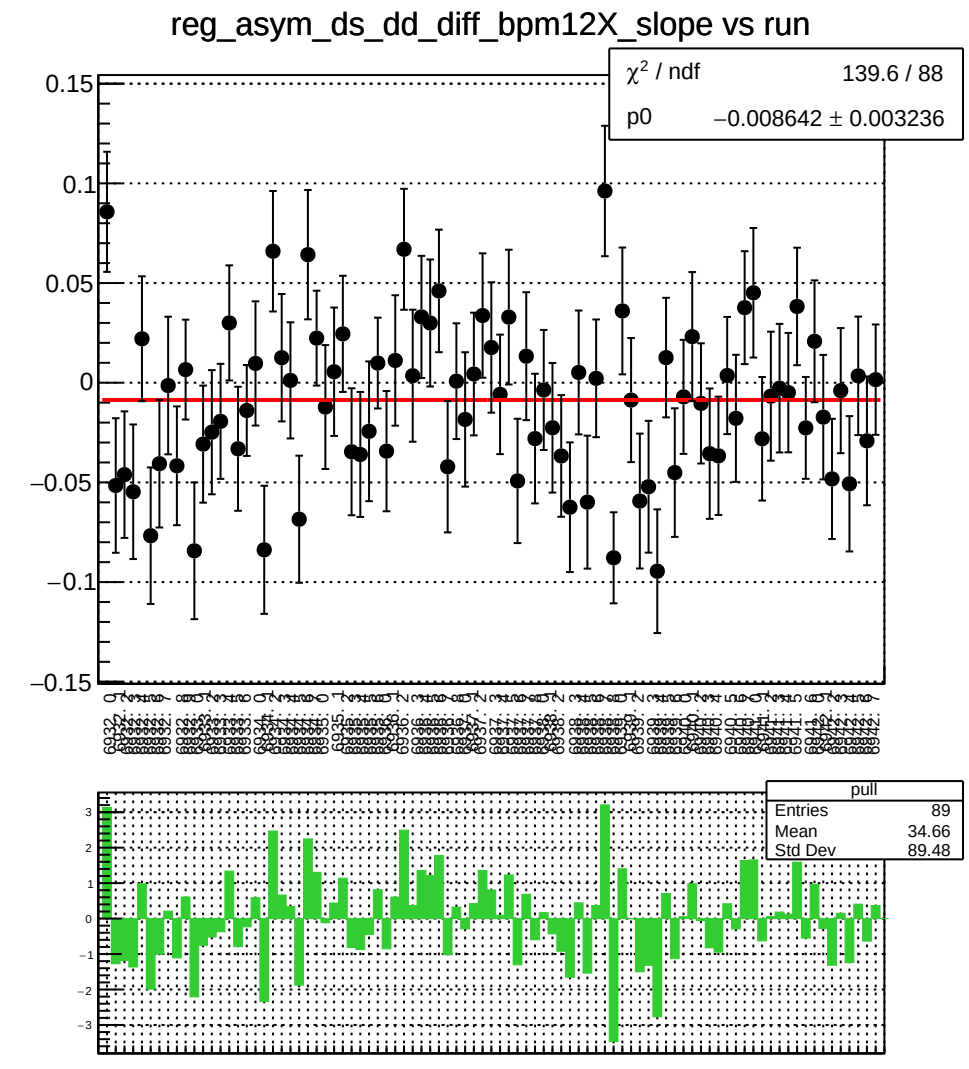

pull1D
Entries 89
Mean 0.001874
Std Dev 0.9529

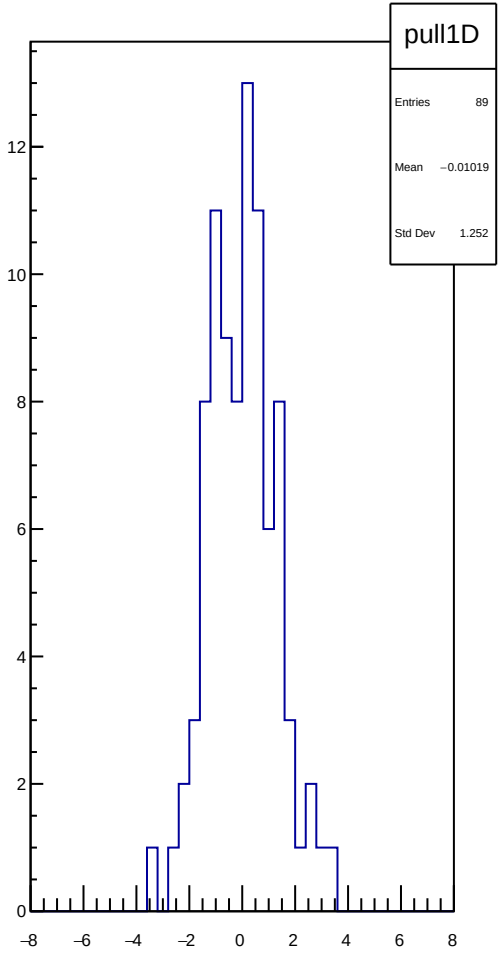

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 99.18 / 88
p0 0.05598 ± 0.06821
pull
Entries 89
Mean −205.6
Std Dev 229

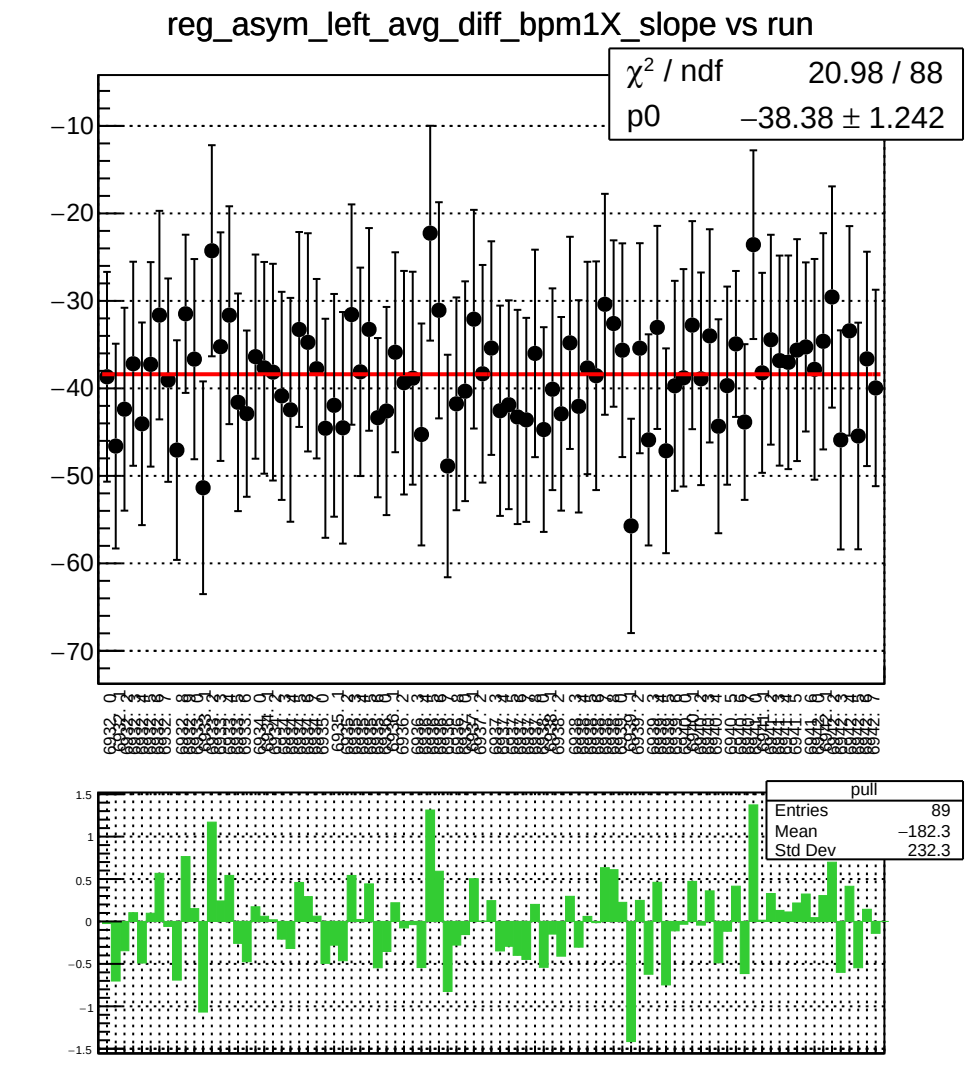

pull1D
Entries 89
Mean 0.01041
Std Dev 1.056

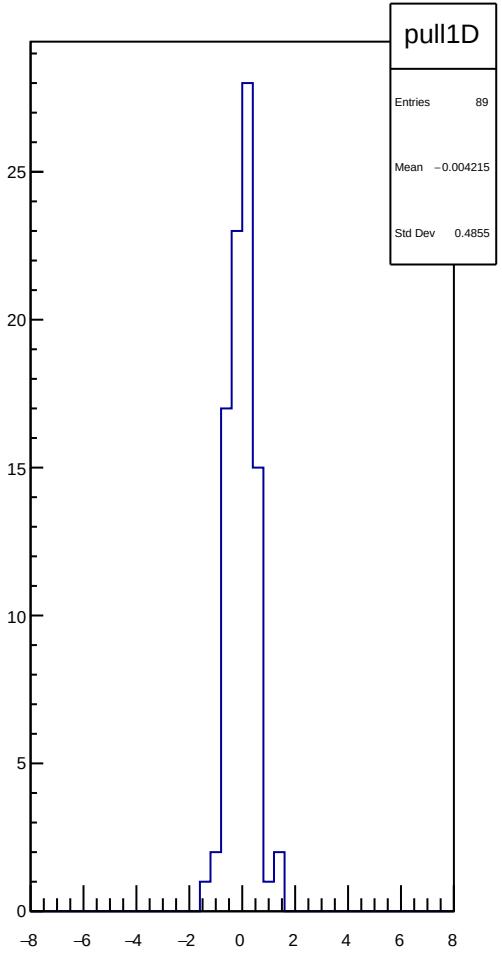

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 81.53 / 88
p0 −0.01335 ± 0.09248
pull
Entries 89
Mean −430.3
Std Dev 489.4
pull1D
Entries 89
Mean −0.002939
Std Dev 0.9571

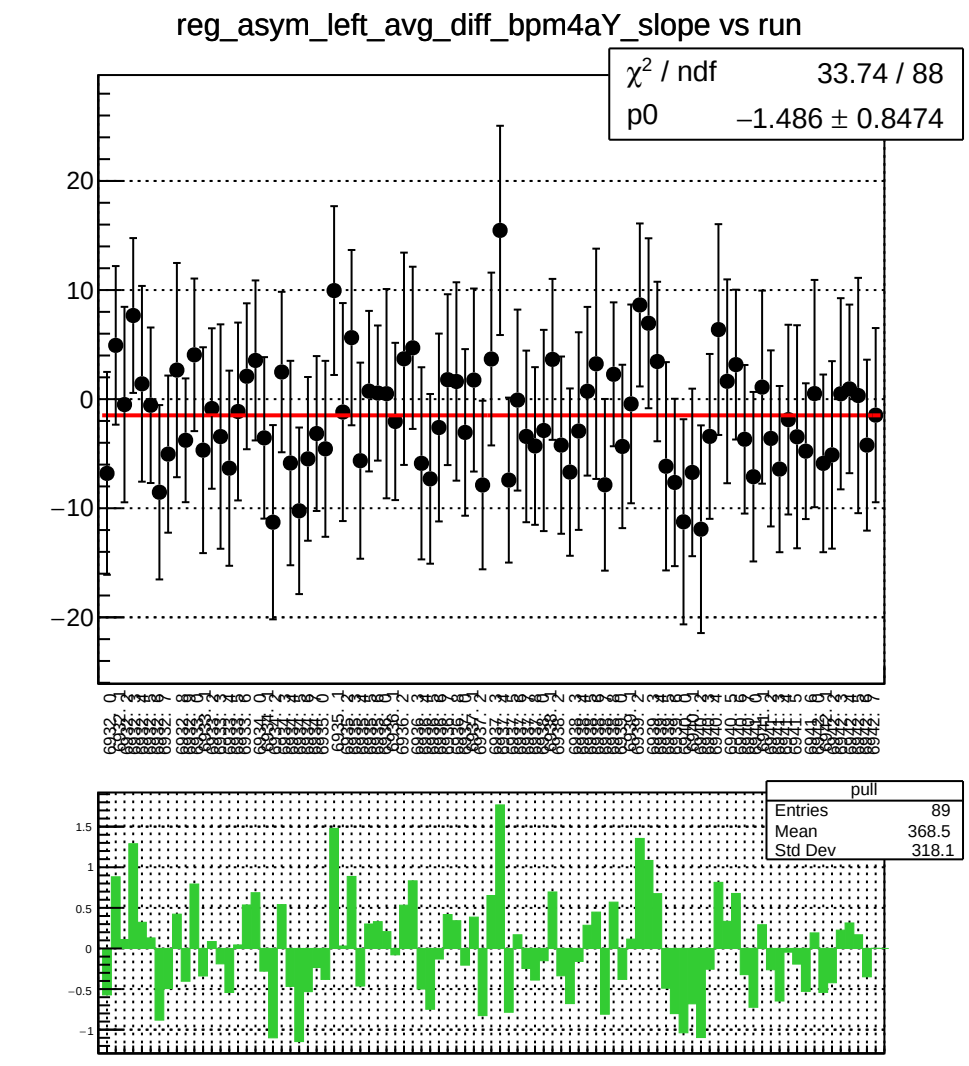

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 100.7 / 88
p0 −0.05961 ± 0.07874
pull
Entries 89
Mean −196.7
Std Dev 205.7
pull1D
Entries 89
Mean −0.006909
Std Dev 1.064

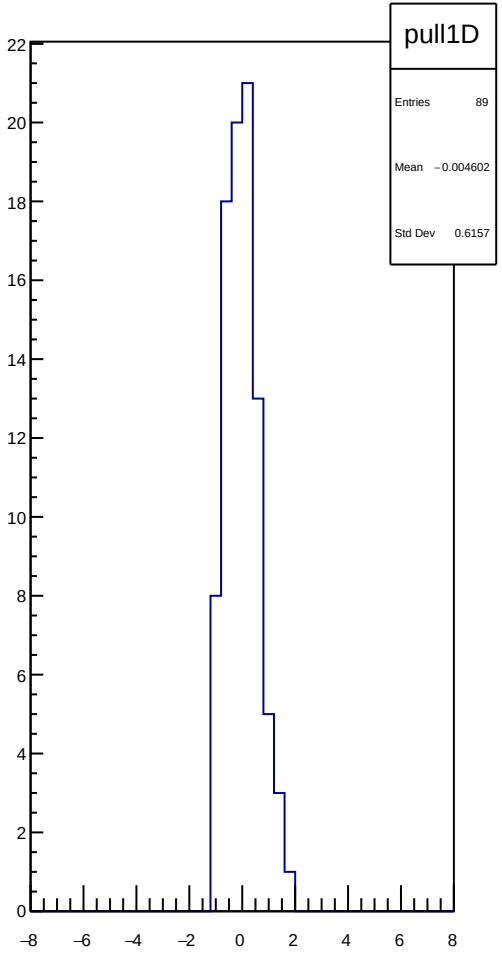

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 139.6 / 88
p0 −0.008642 ± 0.003236
pull
Entries 89
Mean 34.66
Std Dev 89.48

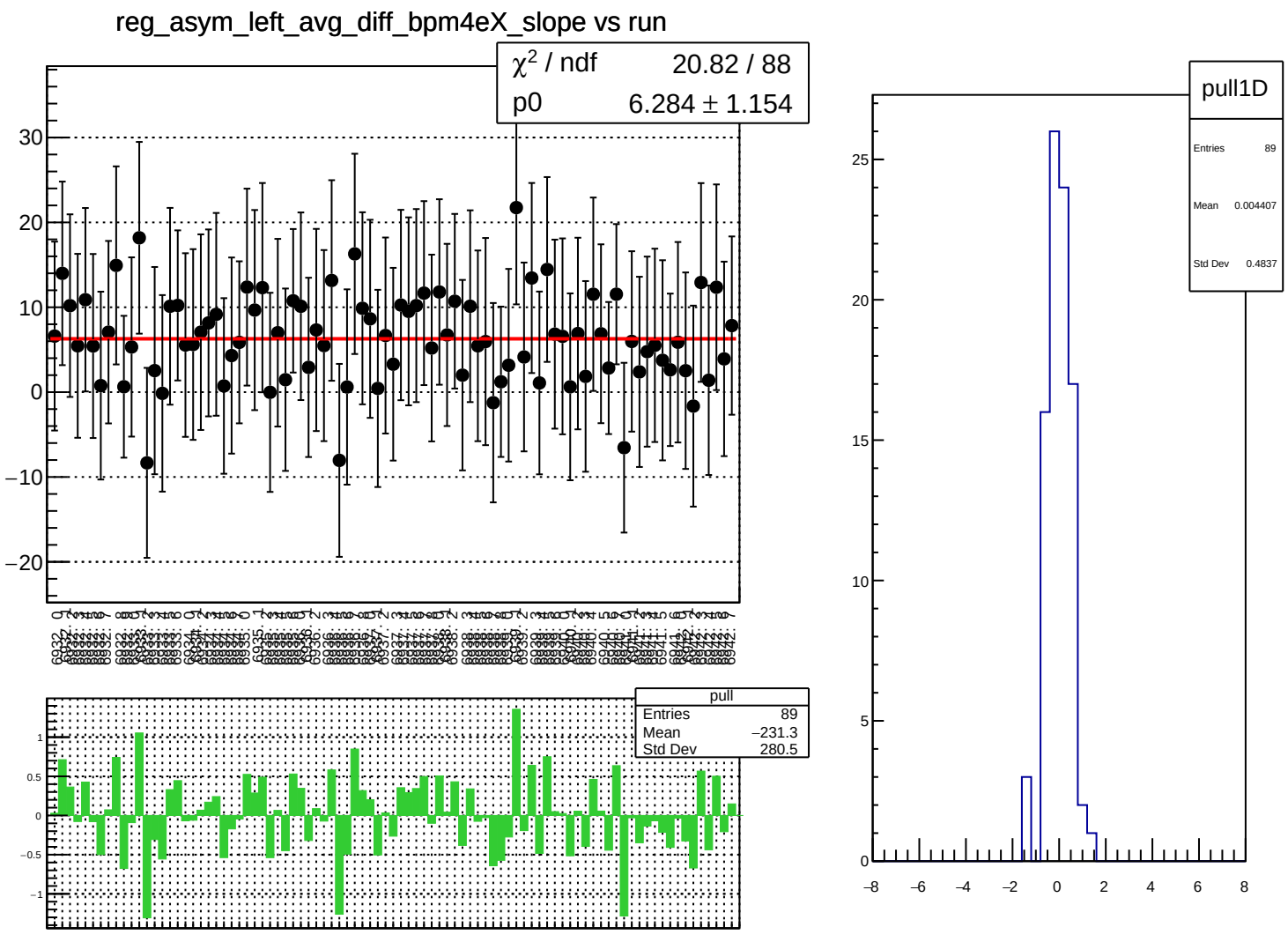

pull1D
Entries 89
Mean −0.01019
Std Dev 1.252

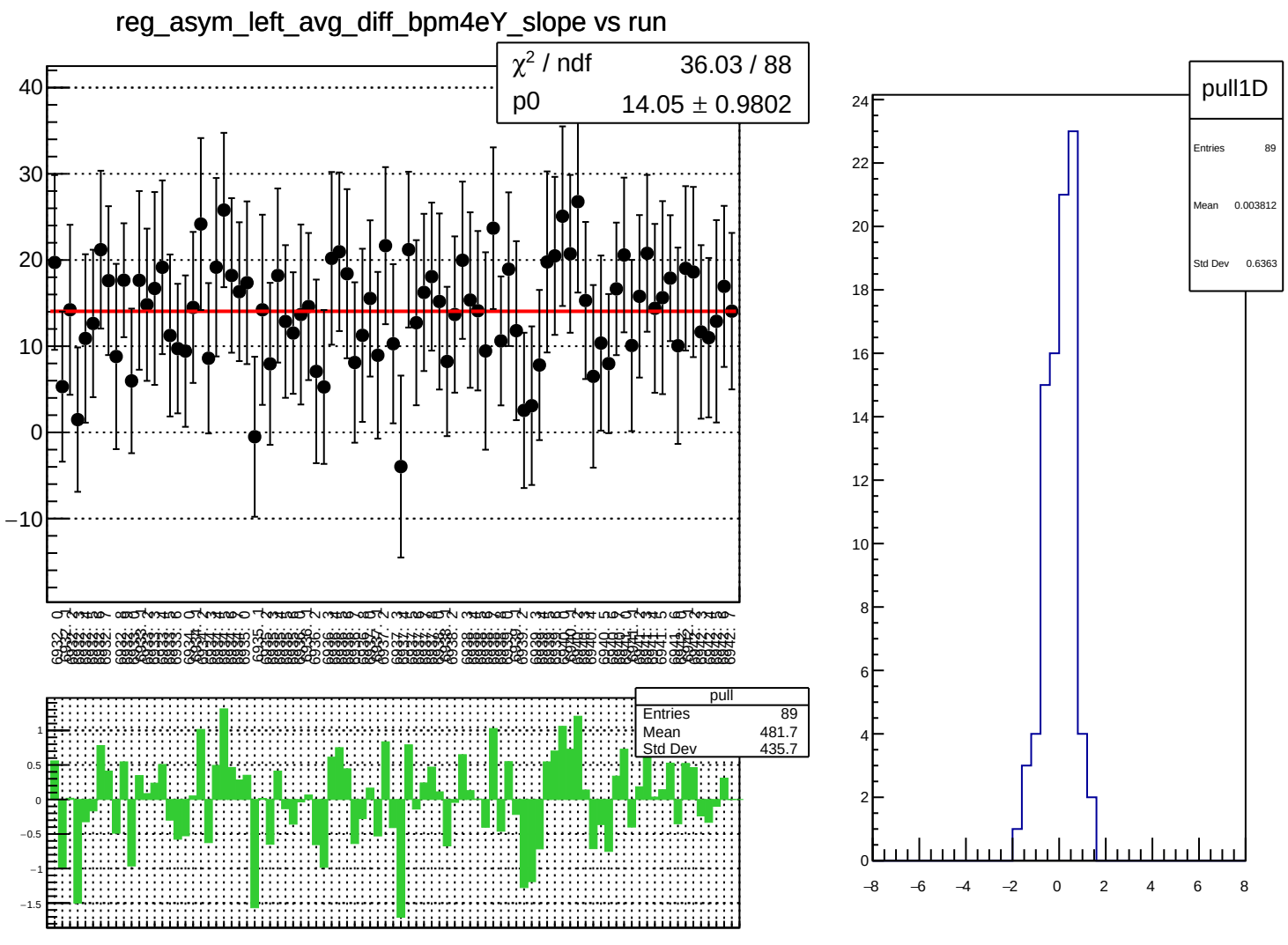

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 20.98 / 88
p0 −38.38 ± 1.242
pull
Entries 89
Mean −182.3
Std Dev 232.3

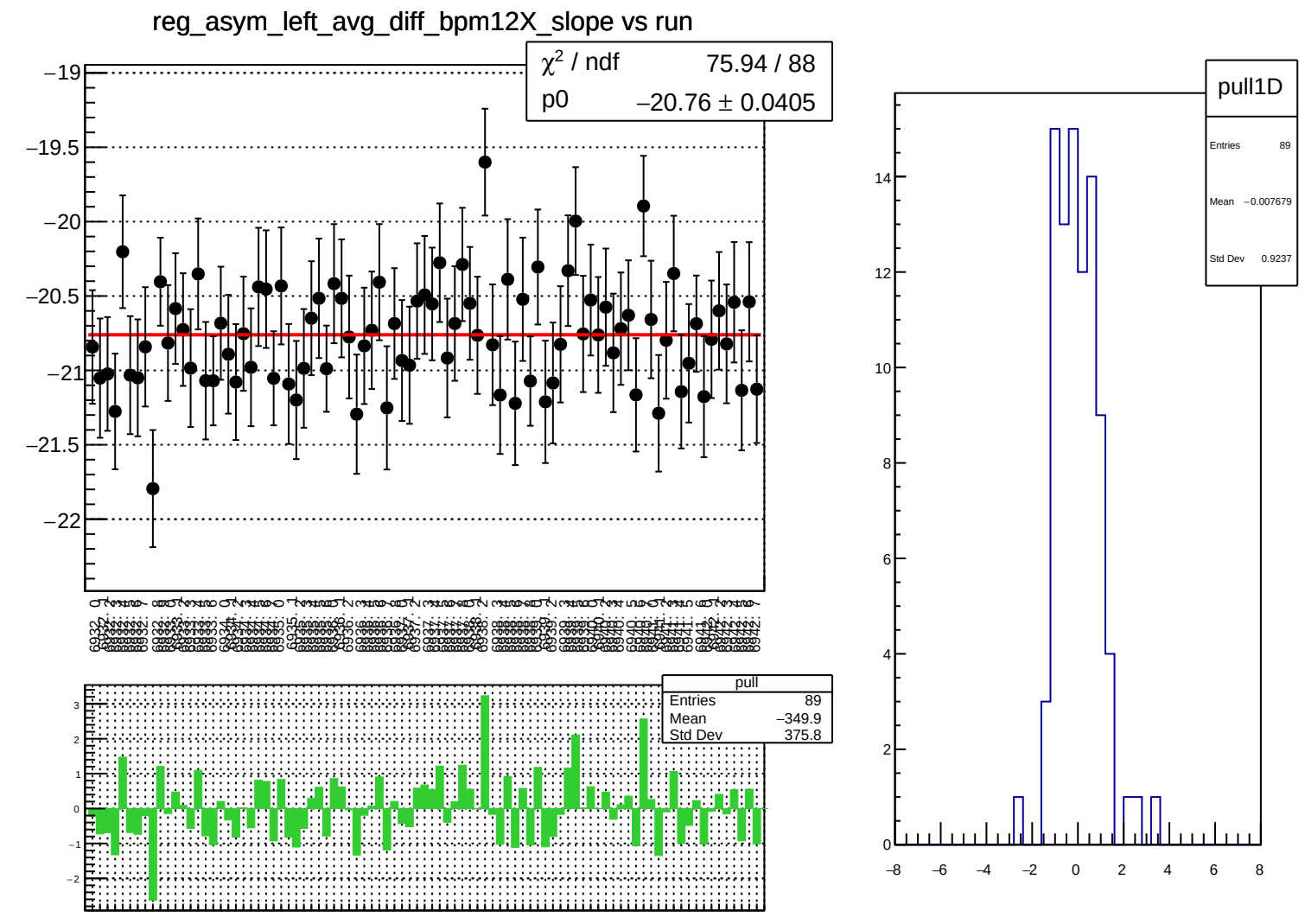

pull1D
Entries 89
Mean −0.004215
Std Dev 0.4855

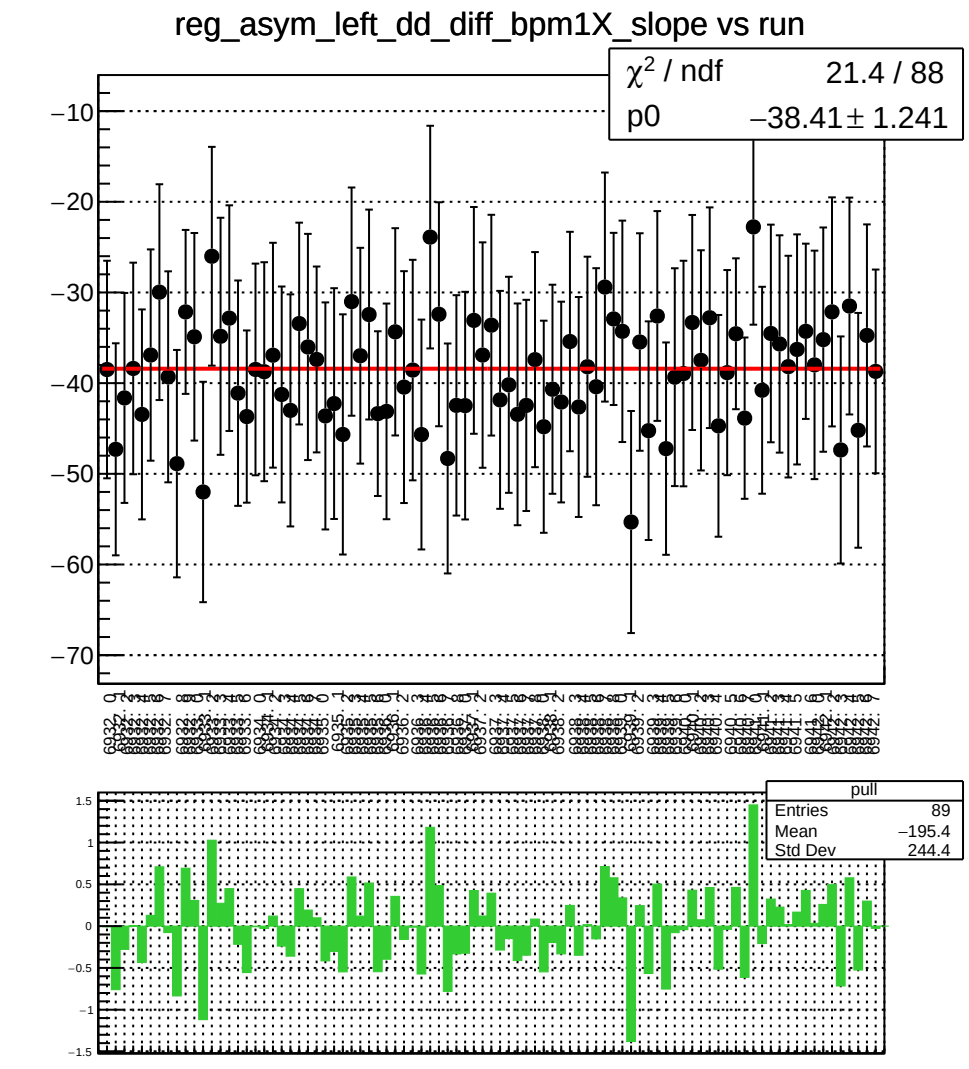

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 33.74 / 88
p0 −1.486 ± 0.8474
pull
Entries 89
Mean 368.5
Std Dev 318.1

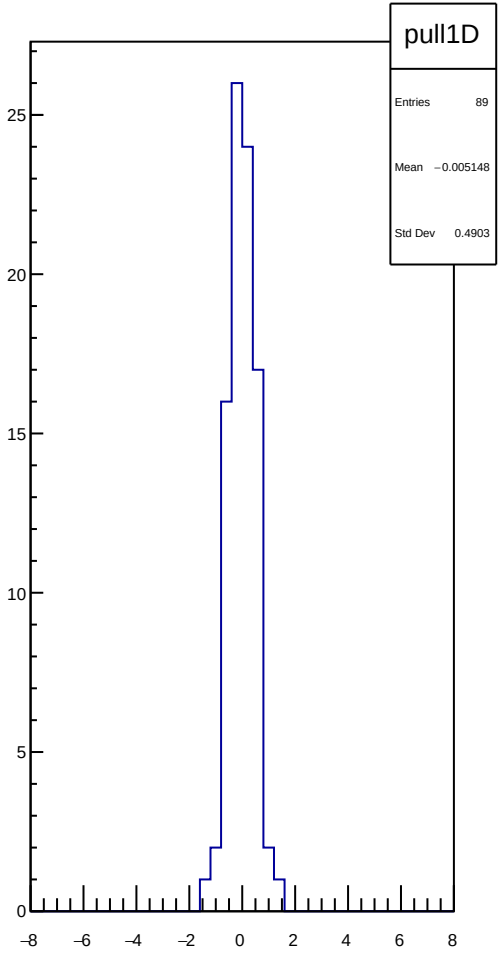

pull1D
Entries 89
Mean −0.004602
Std Dev 0.6157

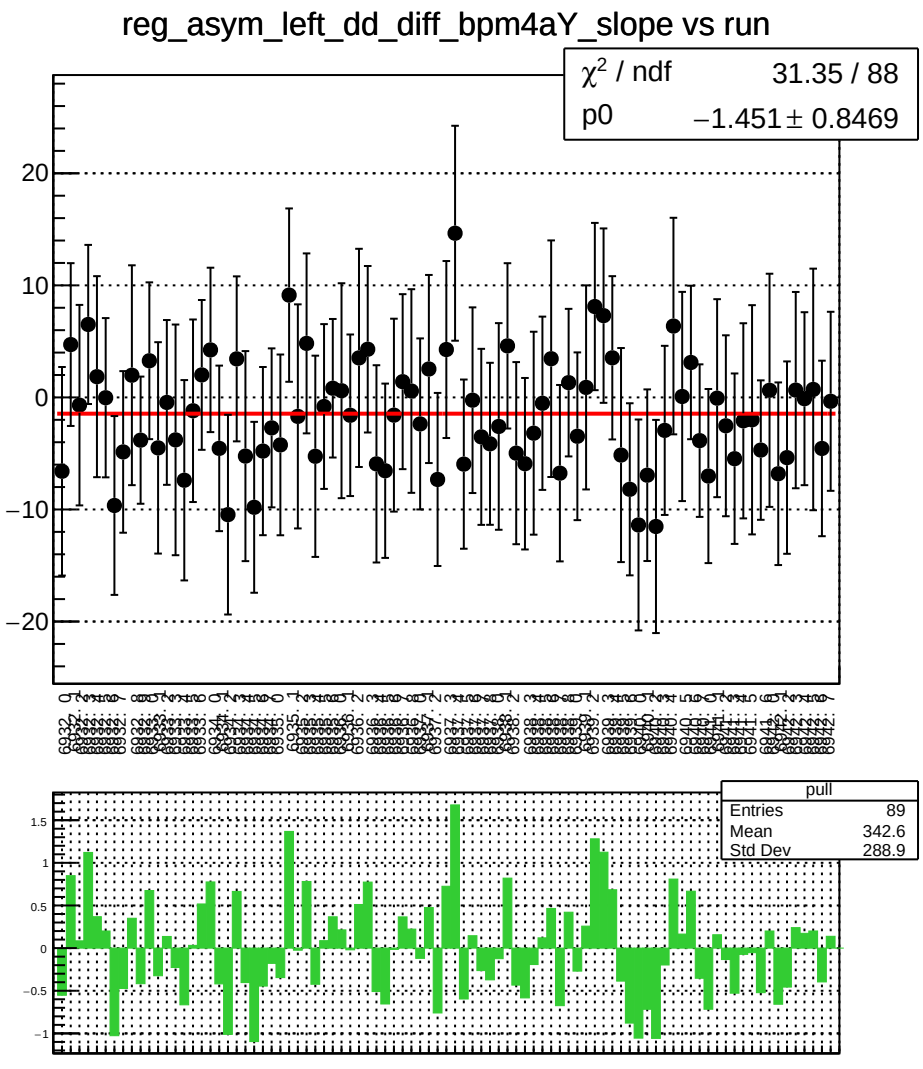

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 20.82 / 88
p0 6.284 ± 1.154
pull
Entries 89
Mean −231.3
Std Dev 280.5
pull1D
Entries 89
Mean 0.004407
Std Dev 0.4837

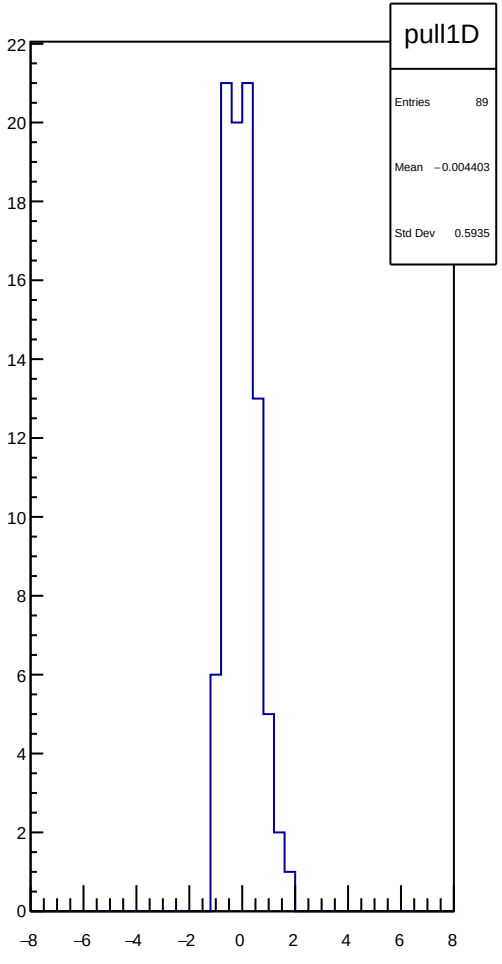

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 36.03 / 88
p0 14.05 ± 0.9802
pull
Entries 89
Mean 481.7
Std Dev 435.7
pull1D
Entries 89
Mean 0.003812
Std Dev 0.6363

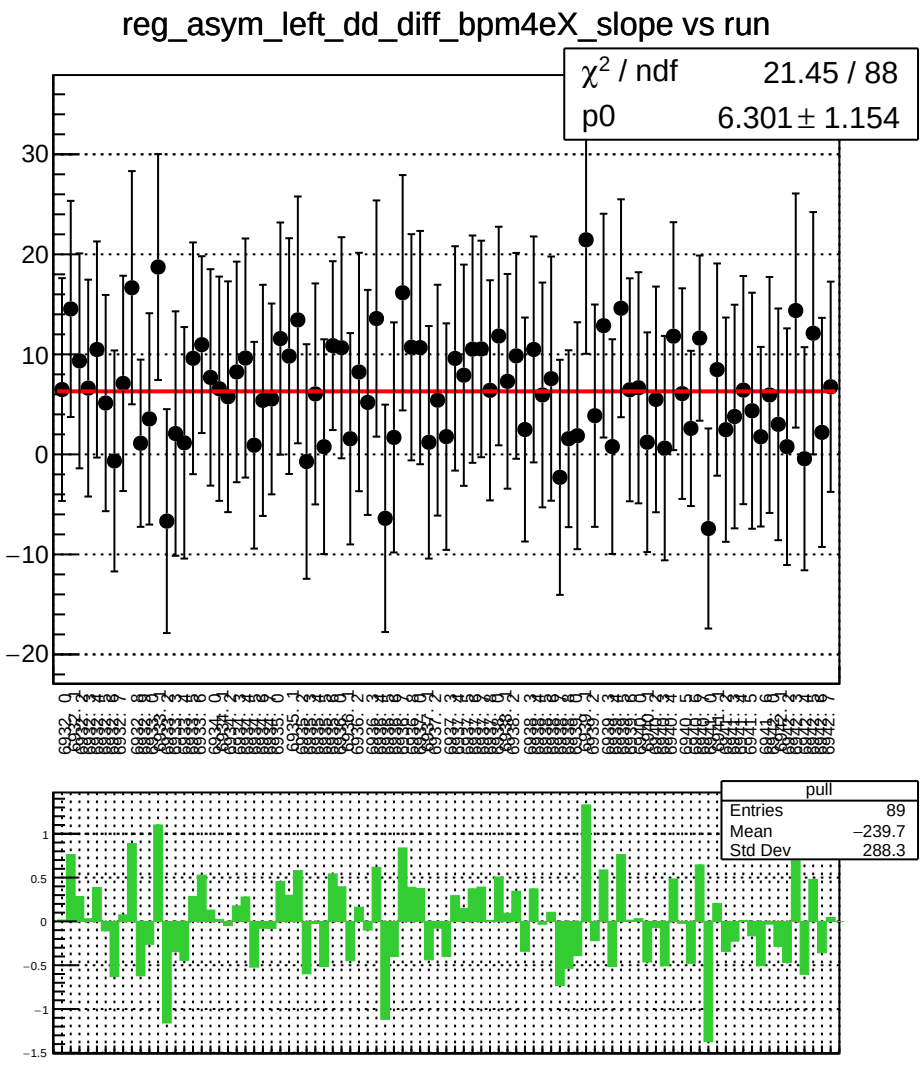

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 75.94 / 88
p0 −20.76 ± 0.0405
pull
Entries 89
Mean −349.9
Std Dev 375.8
pull1D
Entries 89
Mean −0.007679
Std Dev 0.9237

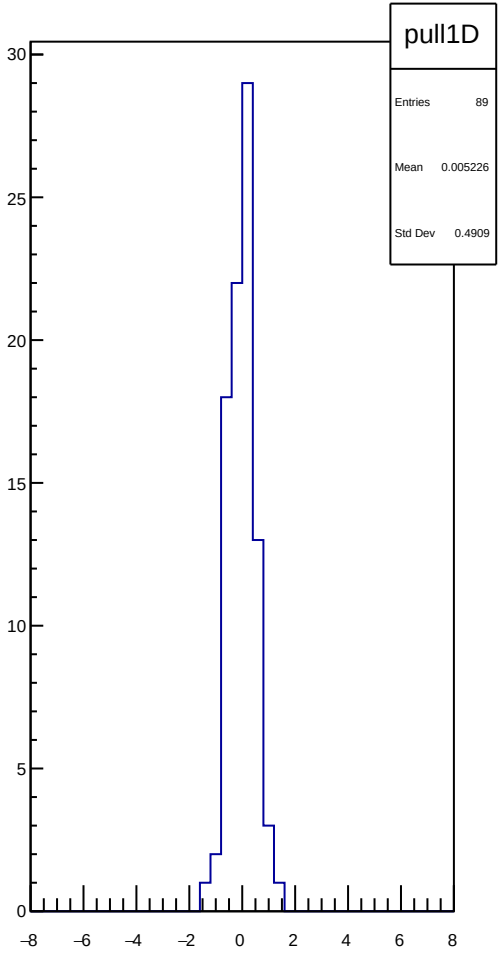

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 21.4 / 88
p0 −38.41 ± 1.241
pull
Entries 89
Mean −195.4
Std Dev 244.4

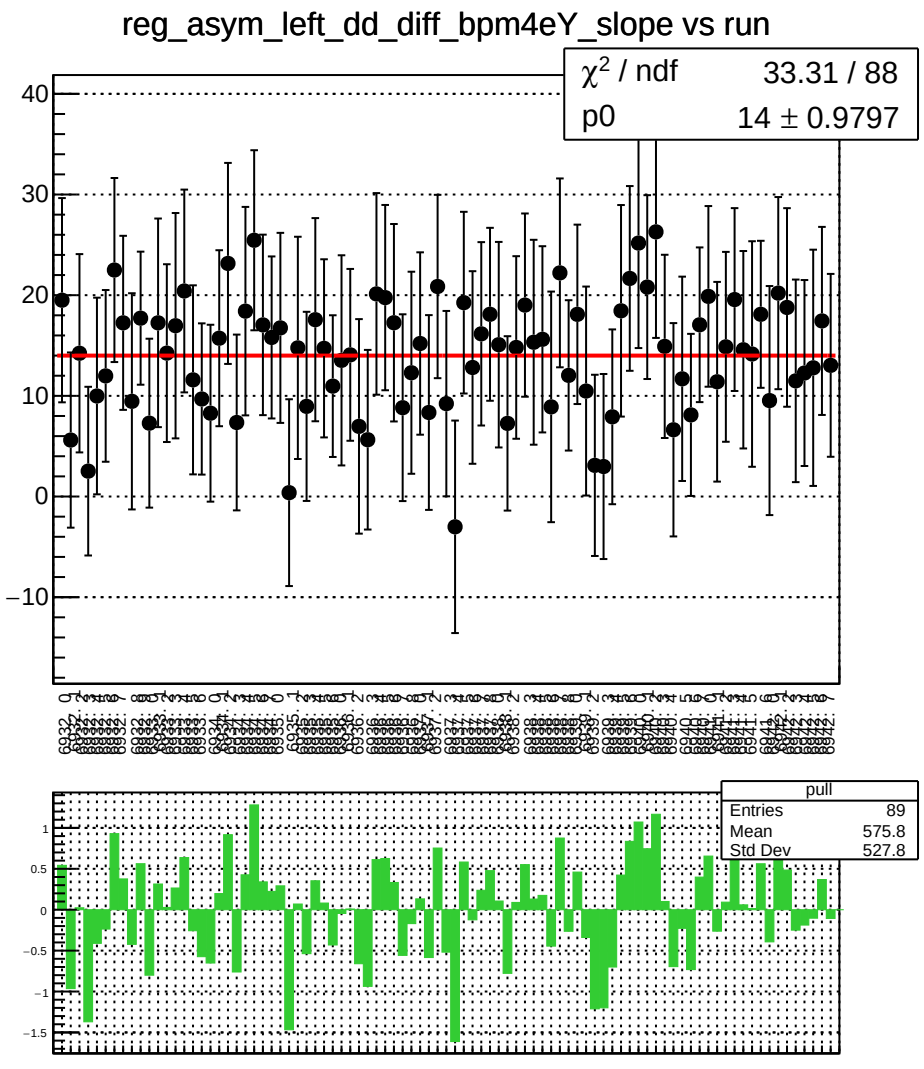

pull1D
Entries 89
Mean −0.005148
Std Dev 0.4903

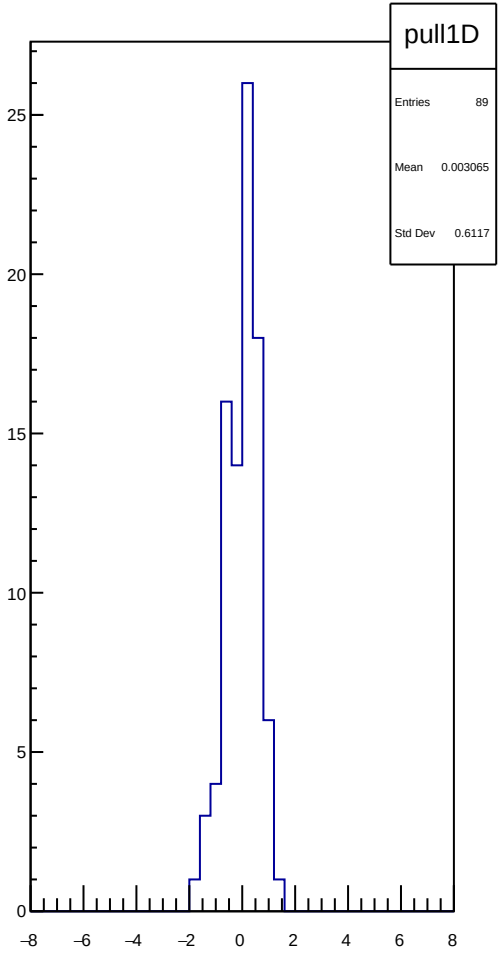

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 31.35 / 88
p0 −1.451 ± 0.8469
pull
Entries 89
Mean 342.6
Std Dev 288.9

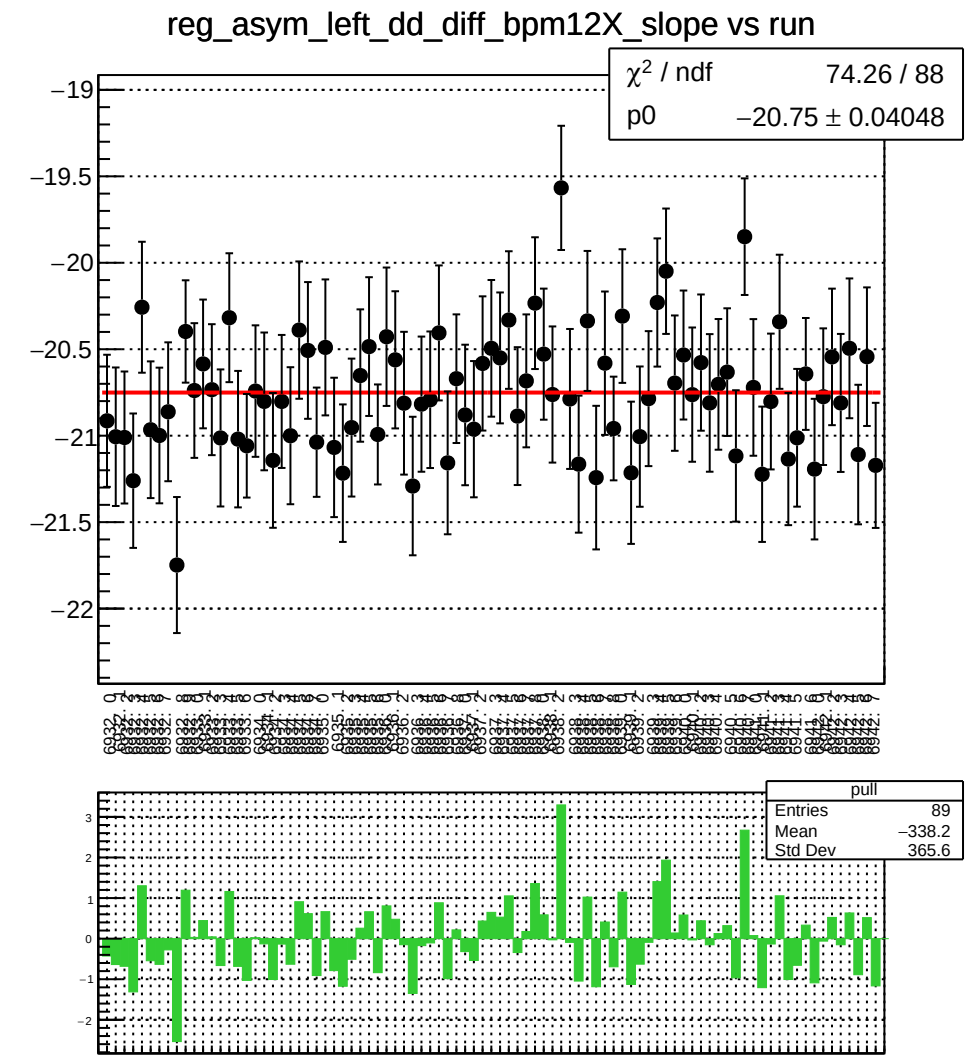

pull1D
Entries 89
Mean −0.004403
Std Dev 0.5935

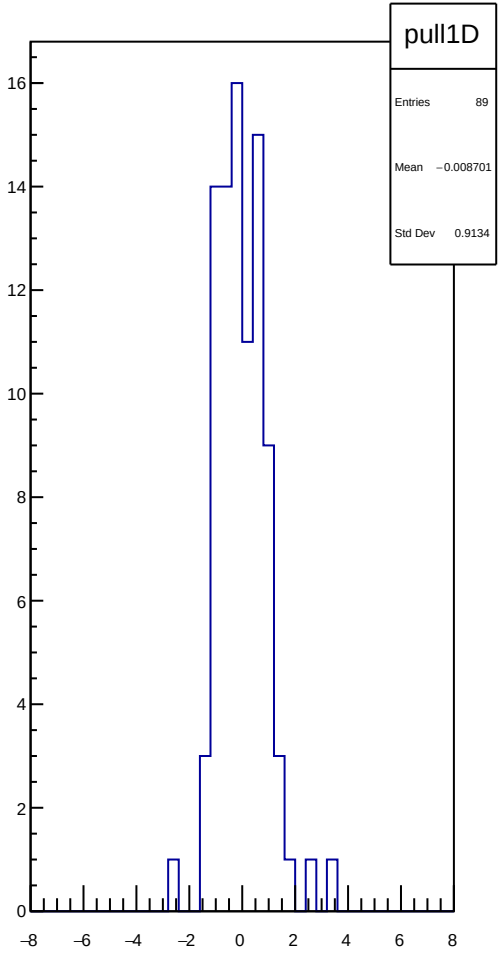

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 21.45 / 88
p0 6.301 ± 1.154
pull
Entries 89
Mean −239.7
Std Dev 288.3

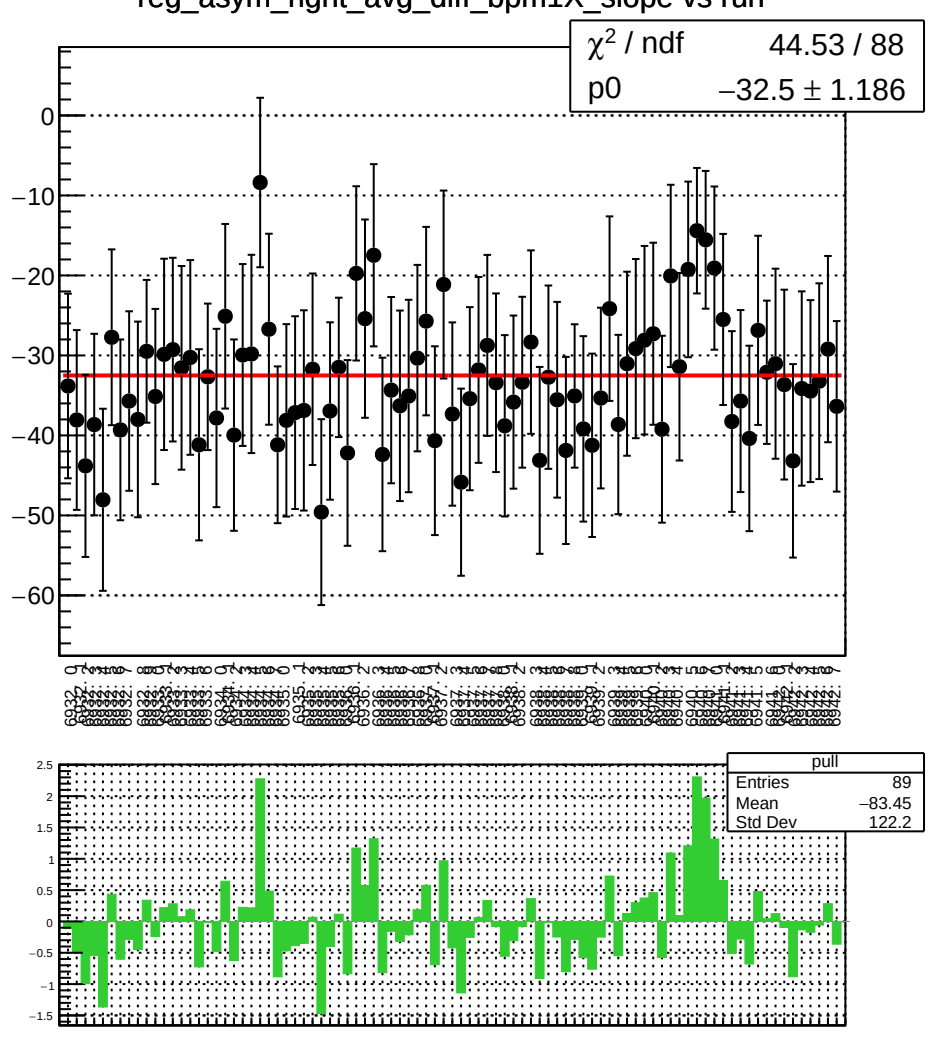

pull1D
Entries 89
Mean 0.005226
Std Dev 0.4909

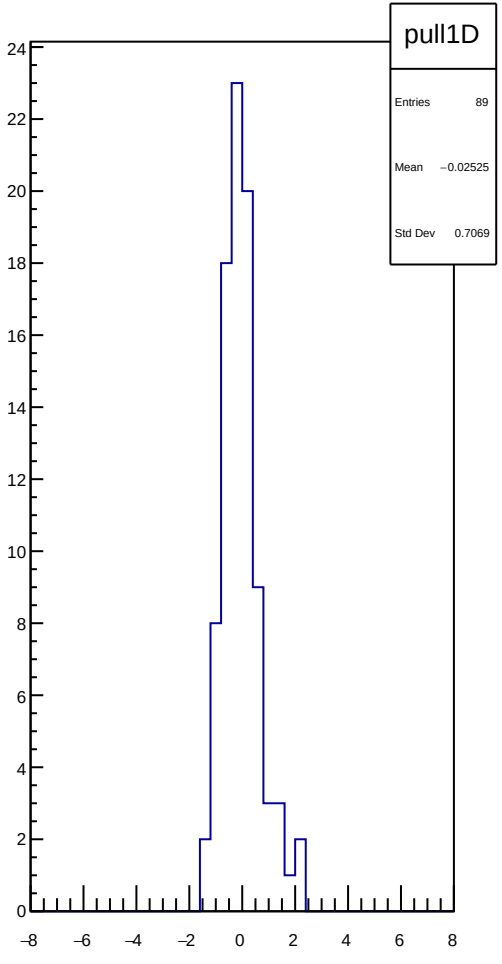

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ^2 / ndf 33.31 / 88
p0 14 ± 0.9797
pull
Entries 89
Mean 575.8
Std Dev 527.8

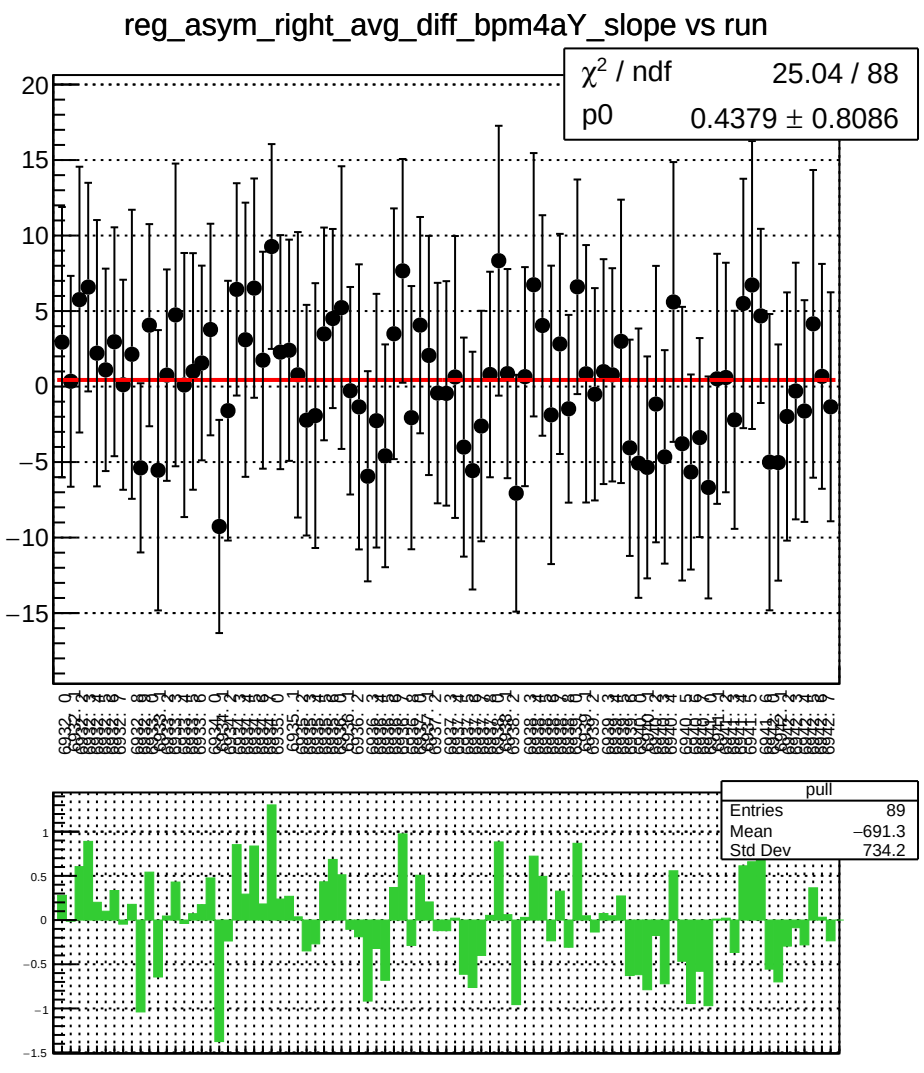

pull1D
Entries 89
Mean 0.003065
Std Dev 0.6117

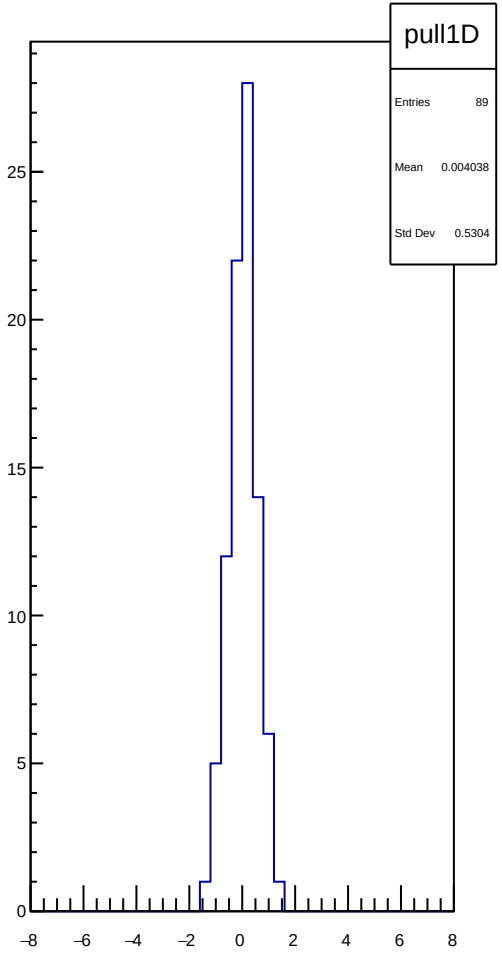

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 74.26 / 88
p0 −20.75 ± 0.04048
pull
Entries 89
Mean −338.2
Std Dev 365.6

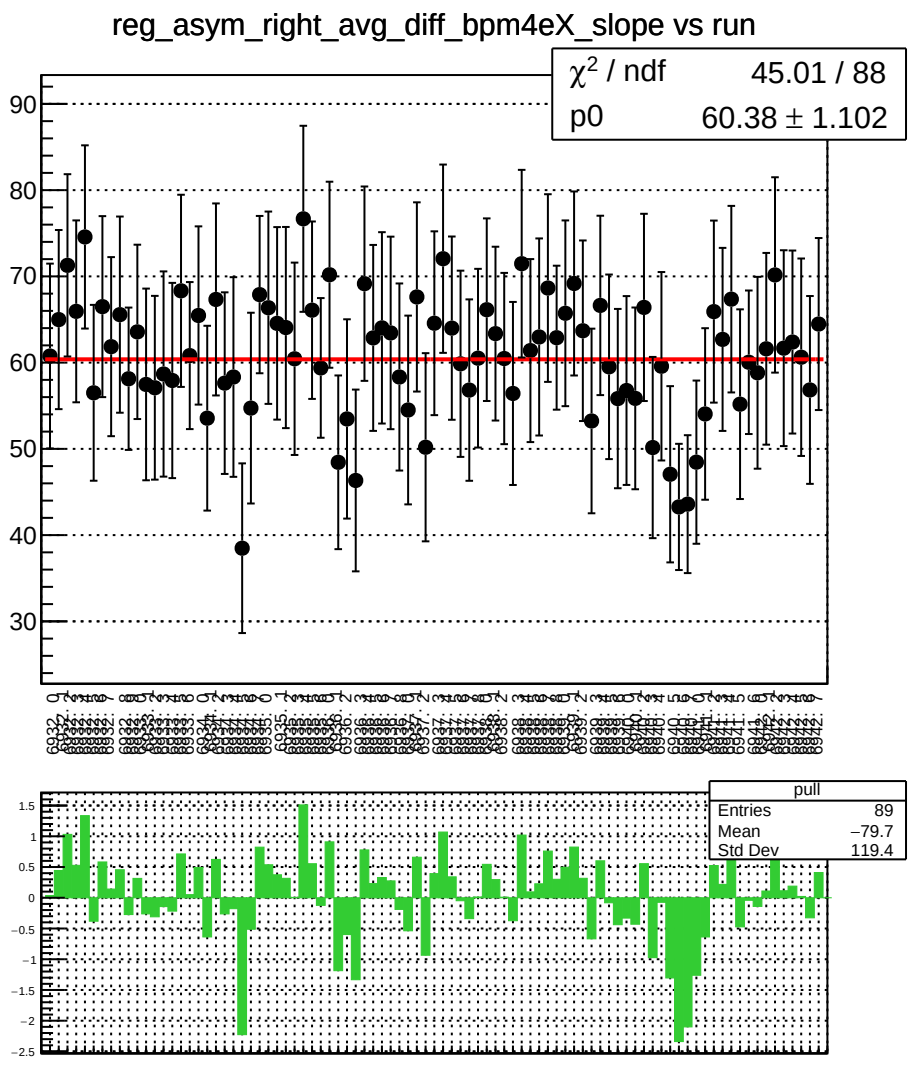

pull1D
Entries 89
Mean −0.008701
Std Dev 0.9134

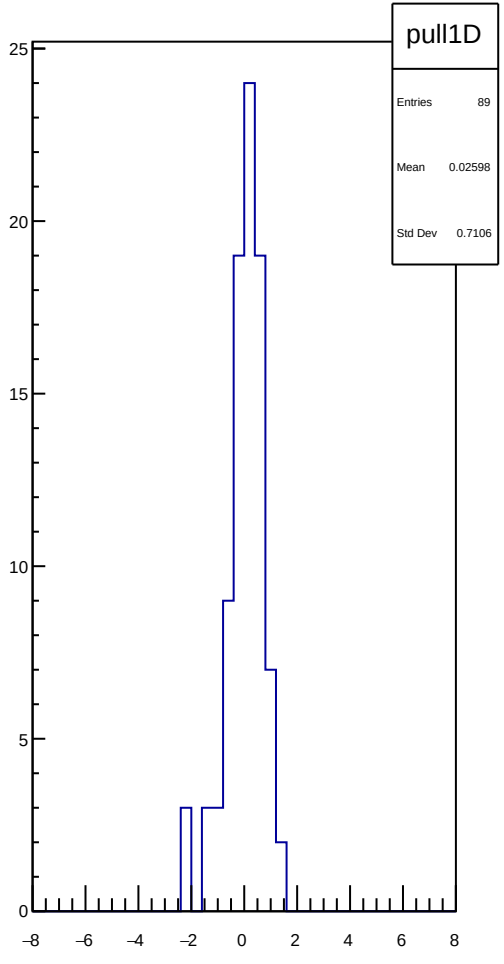

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 44.53 / 88
p0 −32.5 ± 1.186
pull
Entries 89
Mean −83.45
Std Dev 122.2

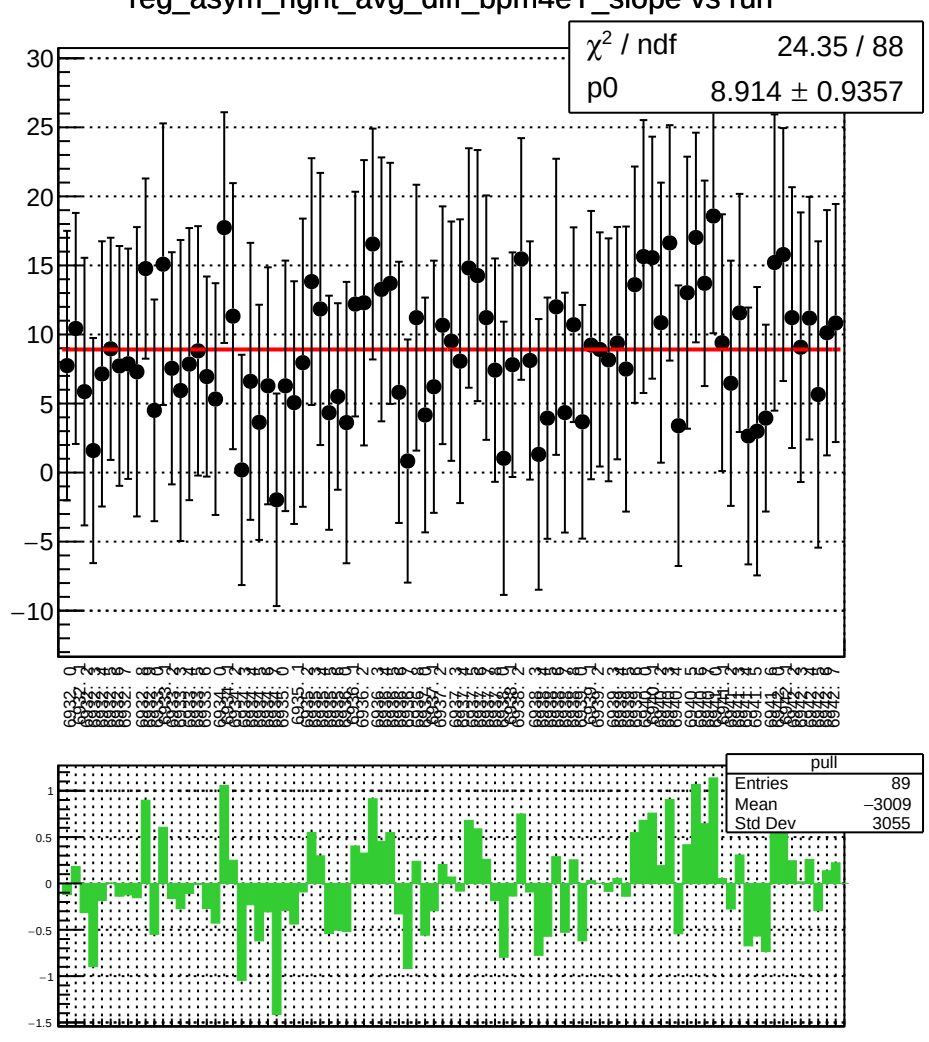

pull1D
Entries 89
Mean −0.02525
Std Dev 0.7069

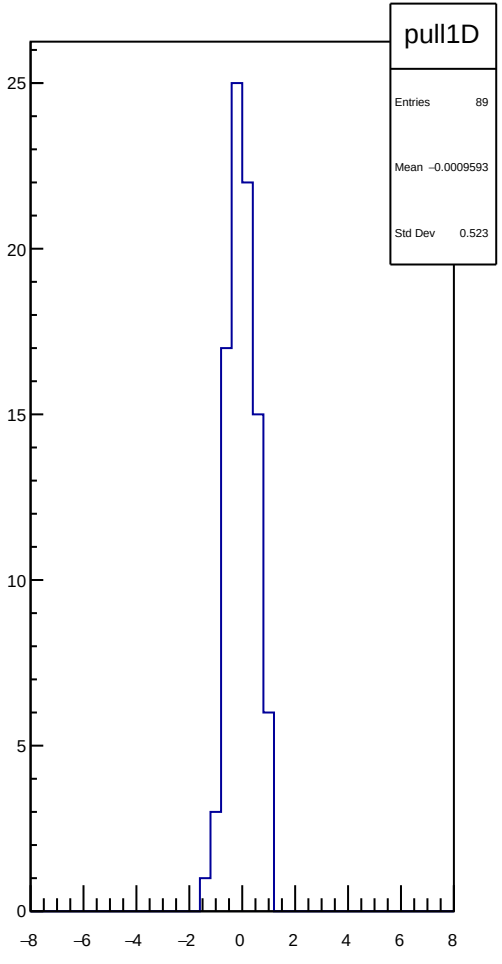

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 25.04 / 88
p0 0.4379 ± 0.8086
pull
Entries 89
Mean −691.3
Std Dev 734.2

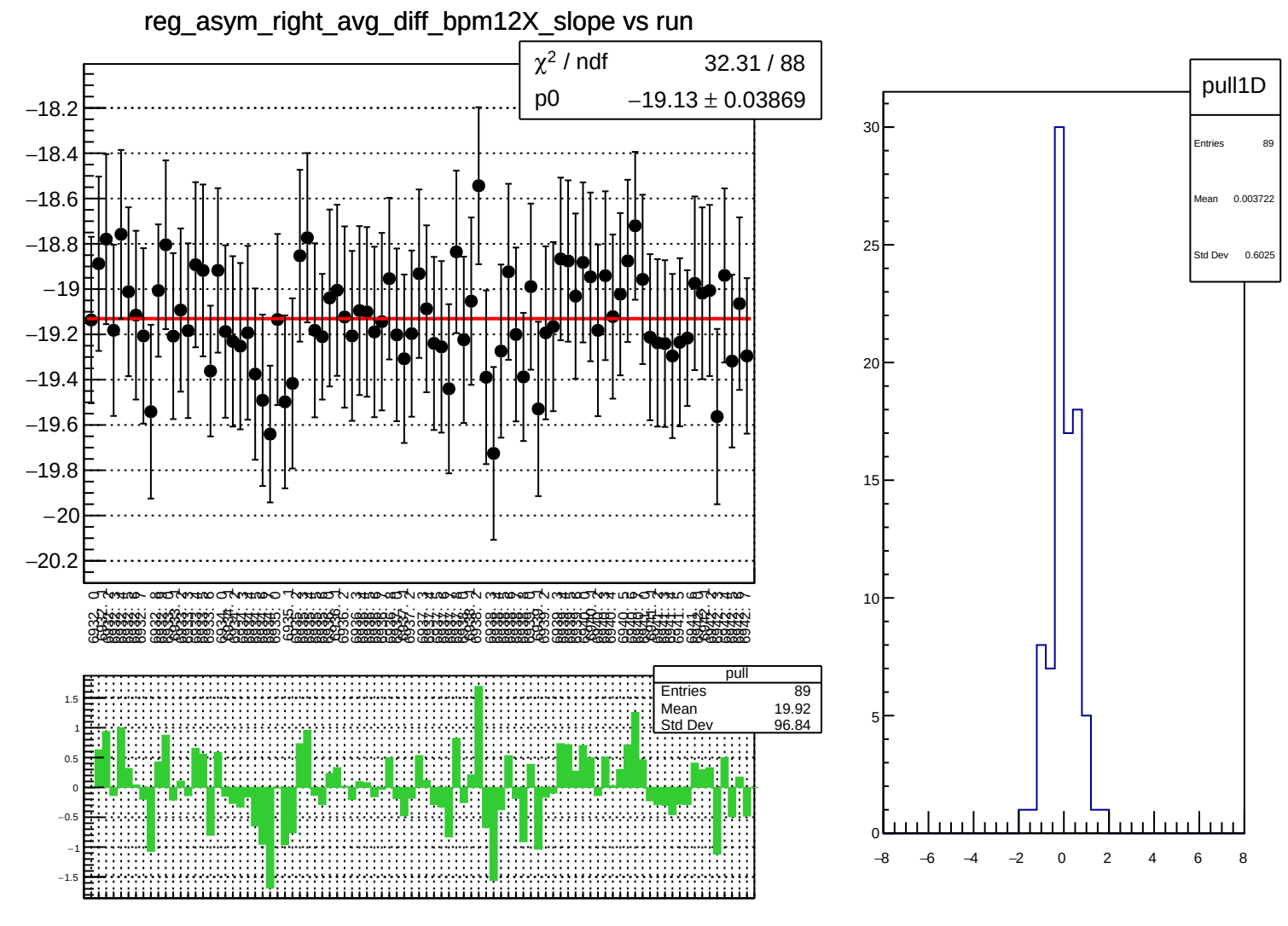

pull1D
Entries 89
Mean 0.004038
Std Dev 0.5304

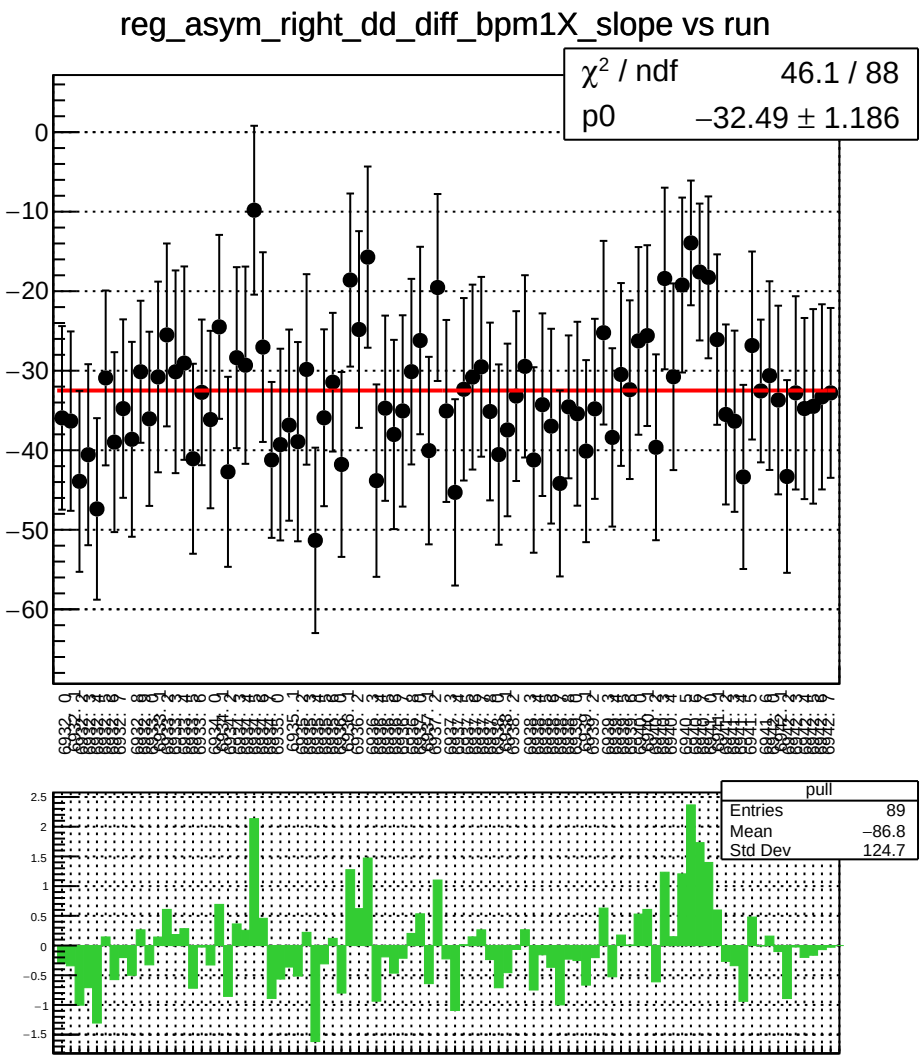

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 45.01 / 88
p0 60.38 ± 1.102
pull
Entries 89
Mean −79.7
Std Dev 119.4

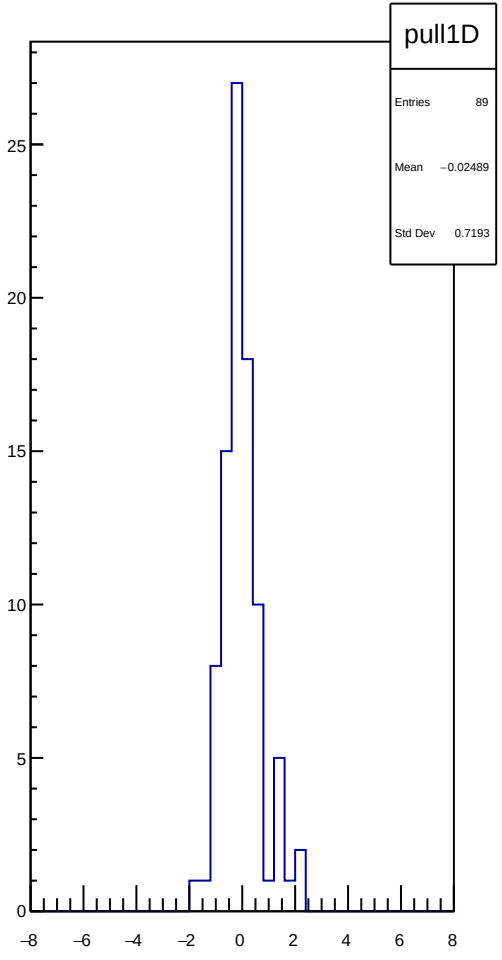

pull1D
Entries 89
Mean 0.02598
Std Dev 0.7106

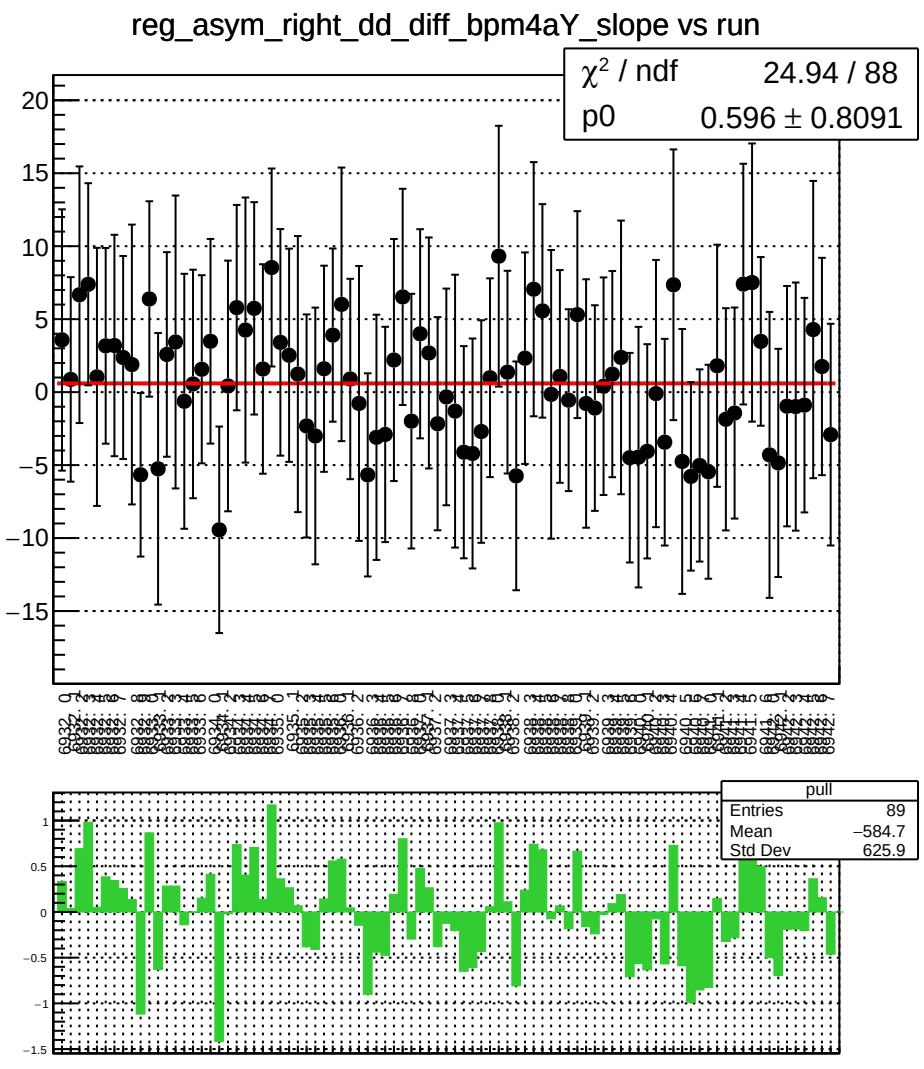

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 24.35 / 88
p0 8.914 ± 0.9357
pull
Entries 89
Mean −3009
Std Dev 3055

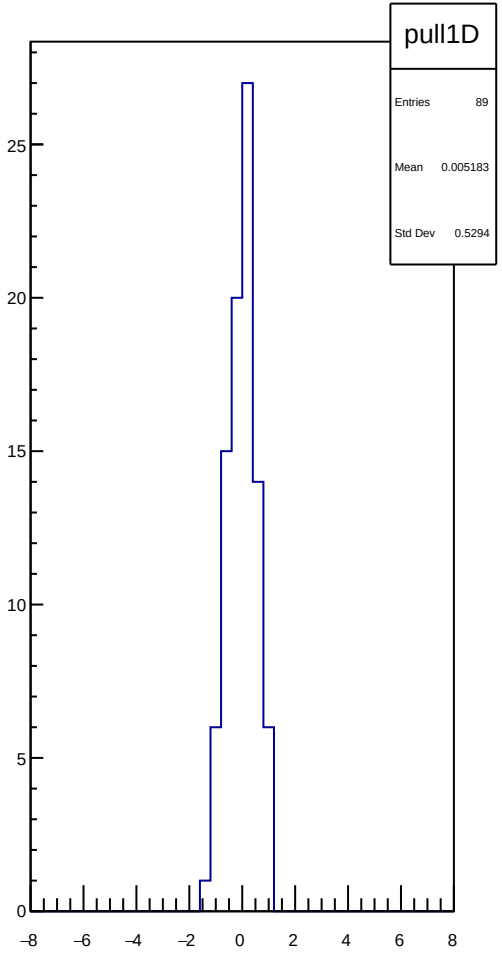

pull1D
Entries 89
Mean −0.0009593
Std Dev 0.523

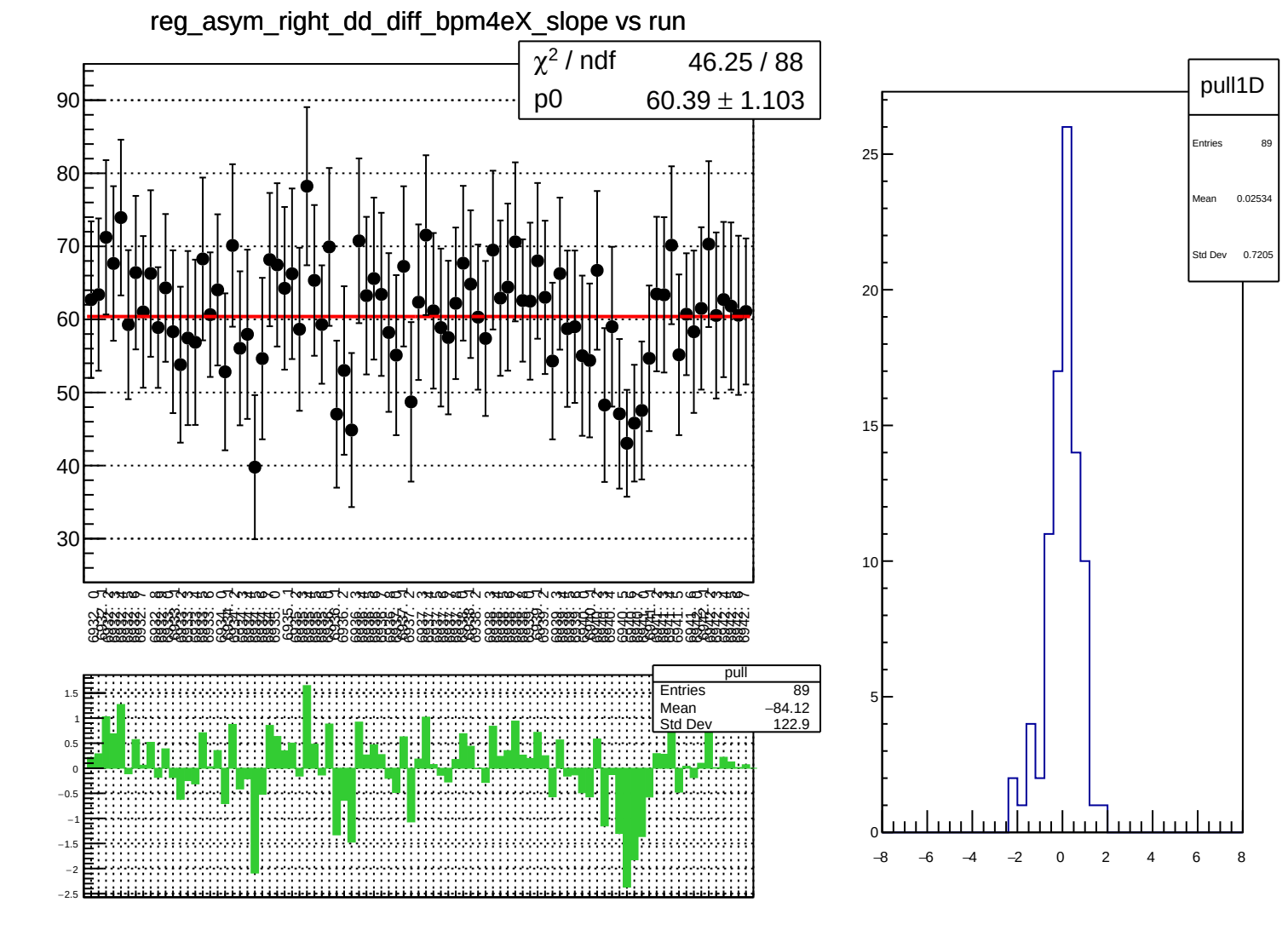

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 32.31 / 88
p0 −19.13 ± 0.03869
pull
Entries 89
Mean 19.92
Std Dev 96.84
pull1D
Entries 89
Mean 0.003722
Std Dev 0.6025

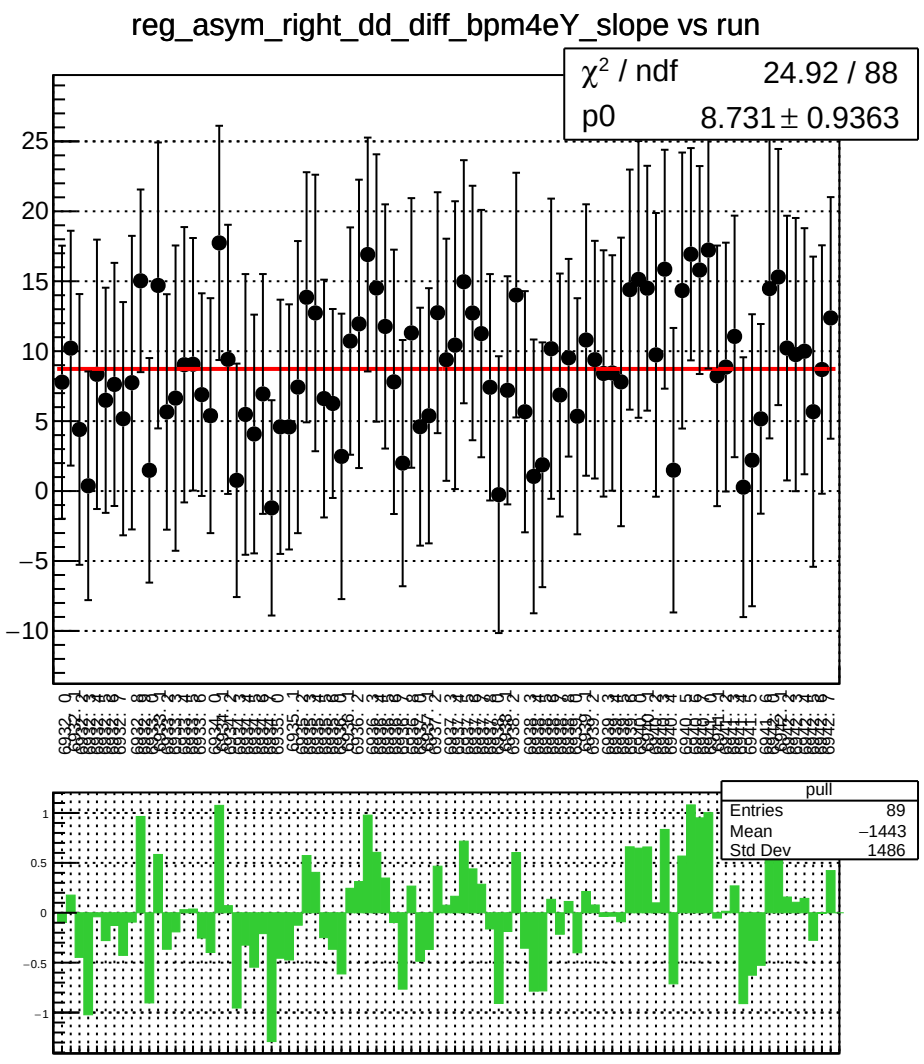

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 46.1 / 88
p0 −32.49 ± 1.186
pull
Entries 89
Mean −86.8
Std Dev 124.7

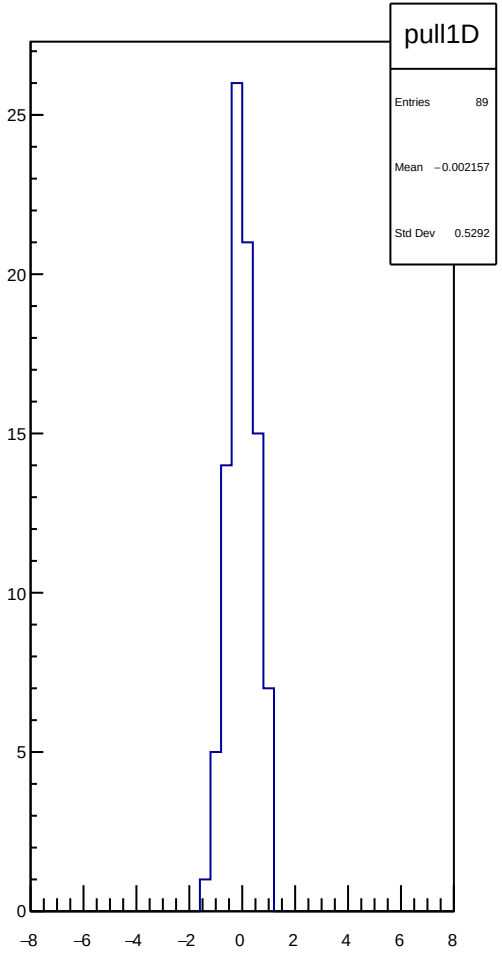

pull1D
Entries 89
Mean −0.02489
Std Dev 0.7193

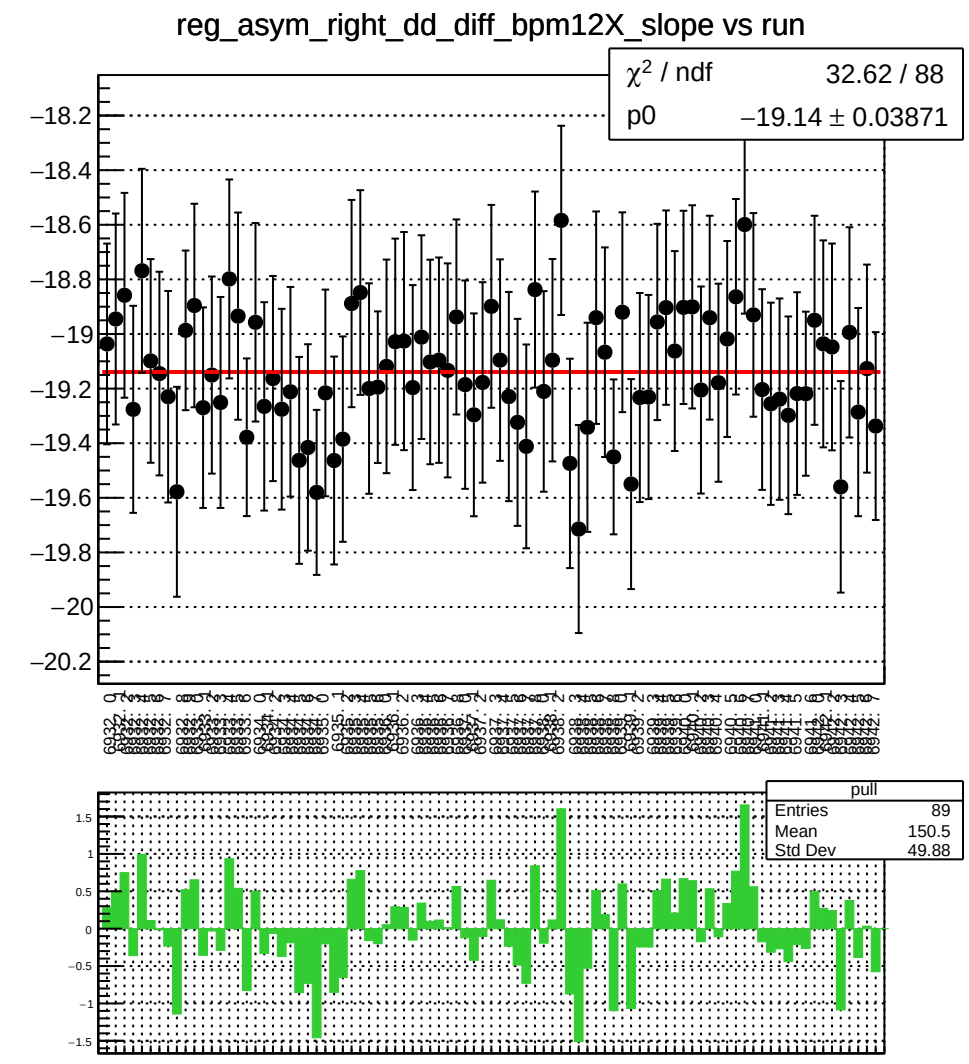

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 24.94 / 88
p0 0.596 ± 0.8091
pull
Entries 89
Mean −584.7
Std Dev 625.9

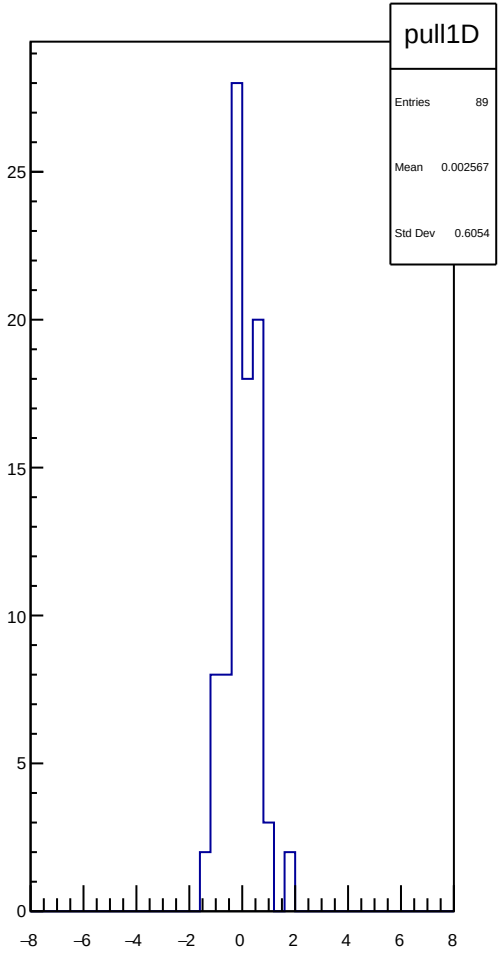

pull1D
Entries 89
Mean 0.005183
Std Dev 0.5294

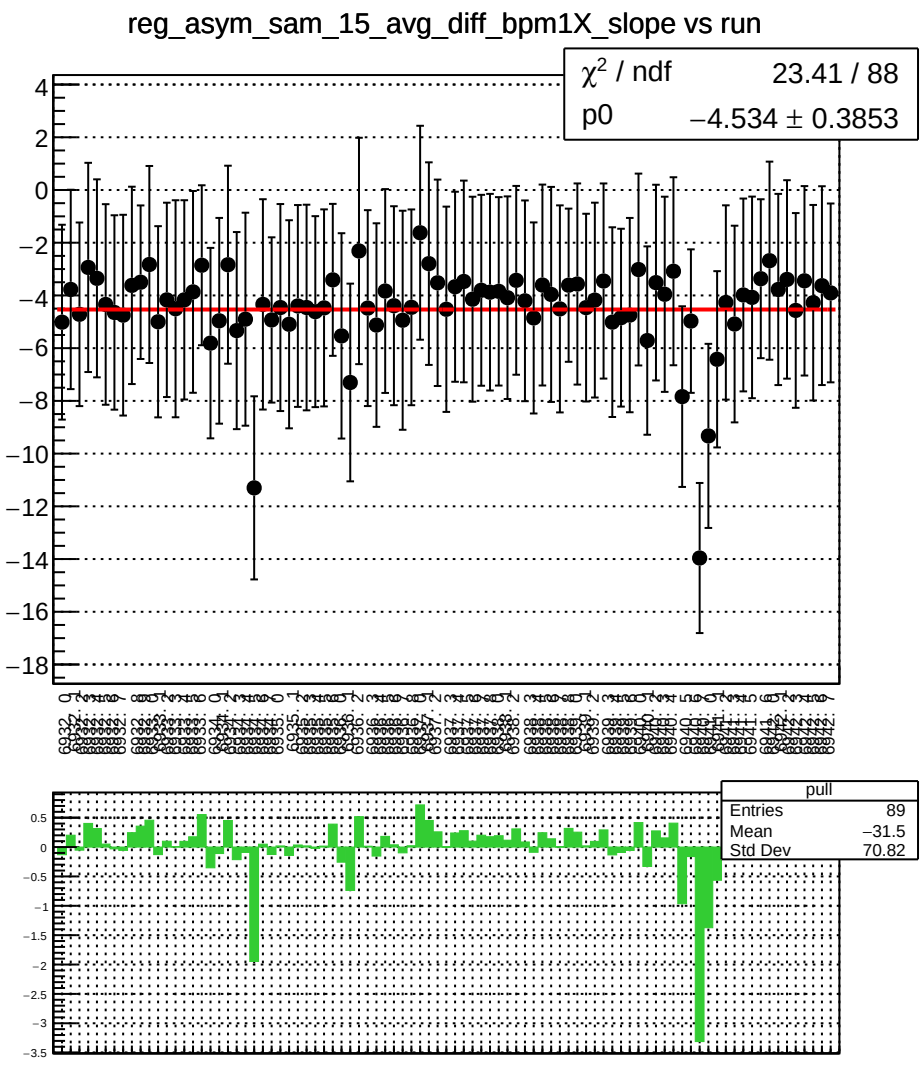

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 46.25 / 88
p0 60.39 ± 1.103
pull
Entries 89
Mean −84.12
Std Dev 122.9
pull1D
Entries 89
Mean 0.02534
Std Dev 0.7205

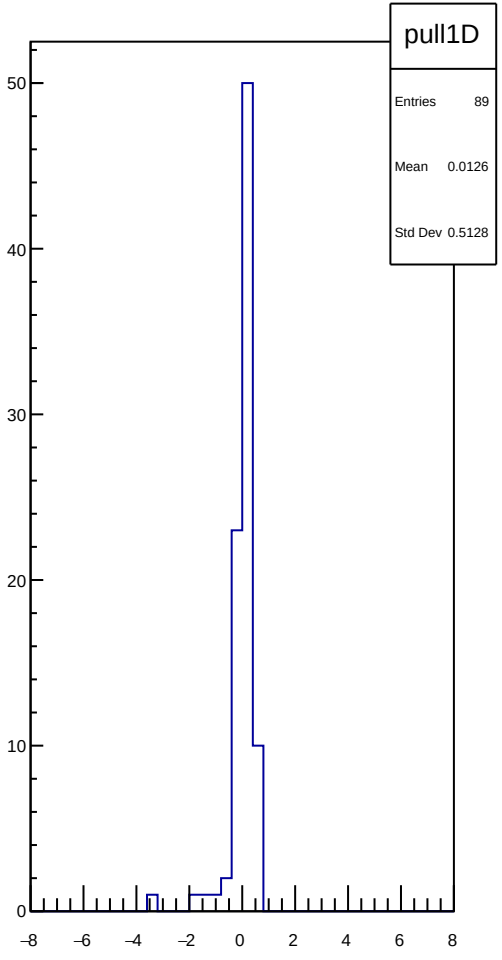

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 24.92 / 88
p0 8.731 ± 0.9363
pull
Entries 89
Mean −1443
Std Dev 1486

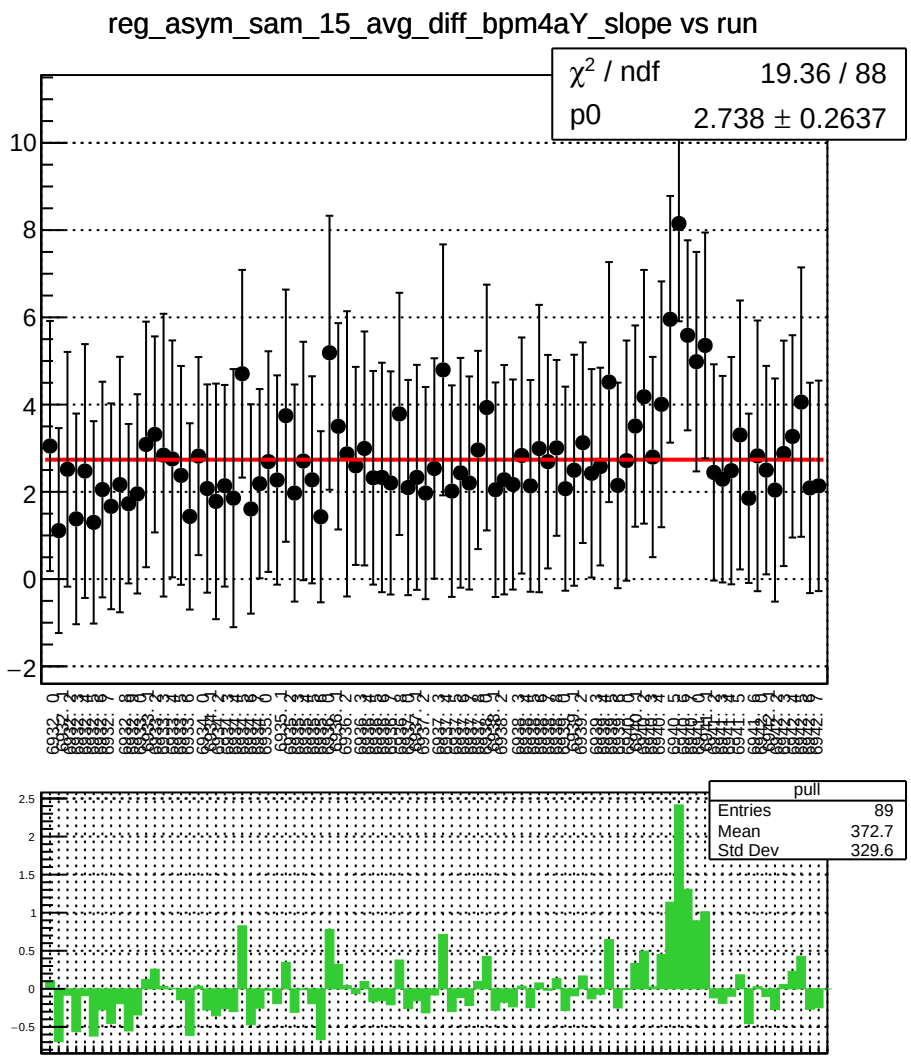

pull1D
Entries 89
Mean −0.002157
Std Dev 0.5292

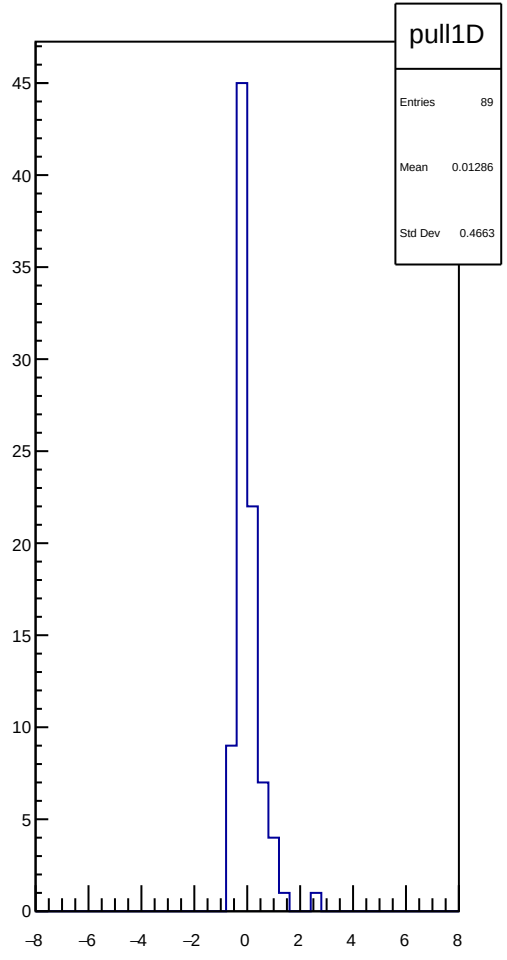

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 32.62 / 88
p0 −19.14 ± 0.03871
−18.2
−18.4
−18.6
−18.8
−19
−19.2
−19.4
−19.6
−19.8
−20
−20.2
pull
Entries 89
Mean 150.5
Std Dev 49.88
1.5
1
0.5
0
−0.5
−1
−1.5

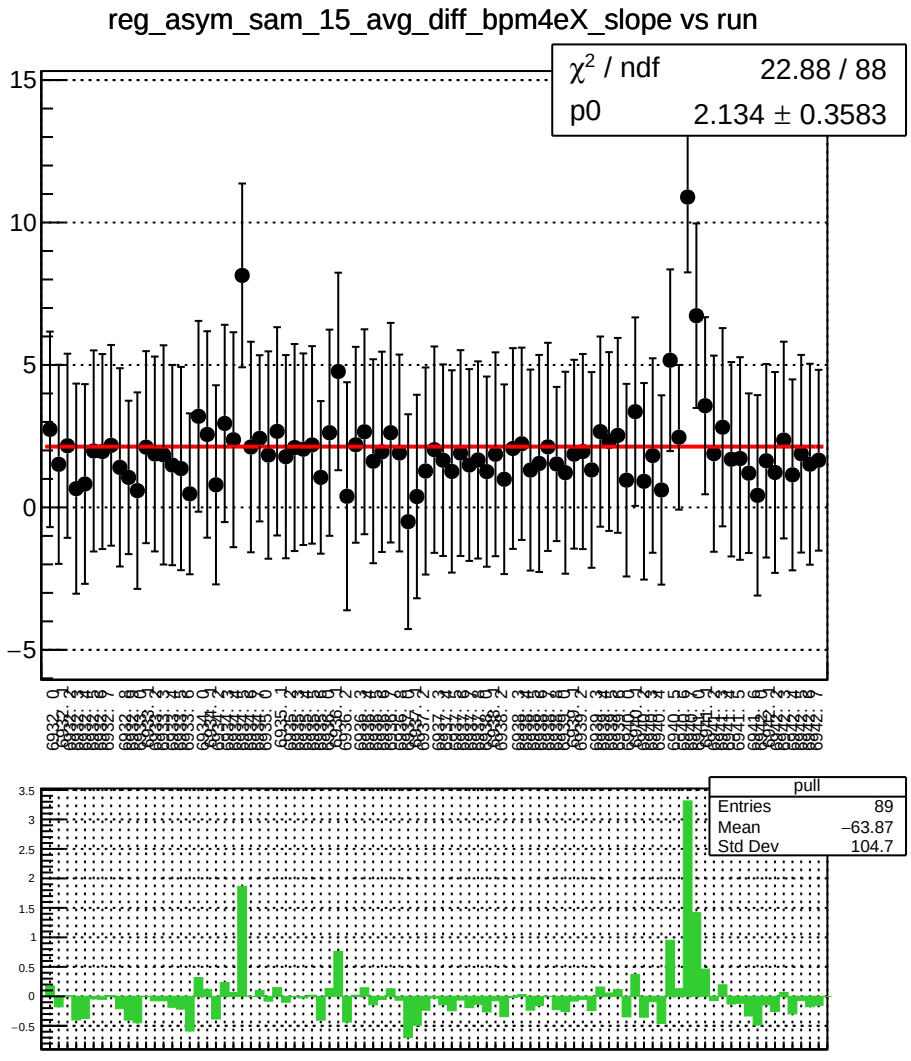

pull1D
Entries 89
Mean 0.002567
Std Dev 0.6054
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

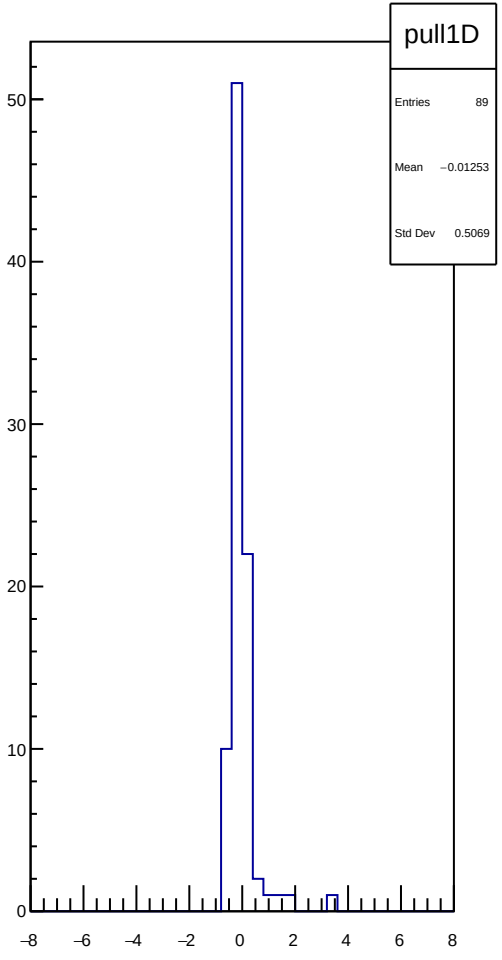

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 23.41 / 88
p0 −4.534 ± 0.3853
pull
Entries 89
Mean −31.5
Std Dev 70.82

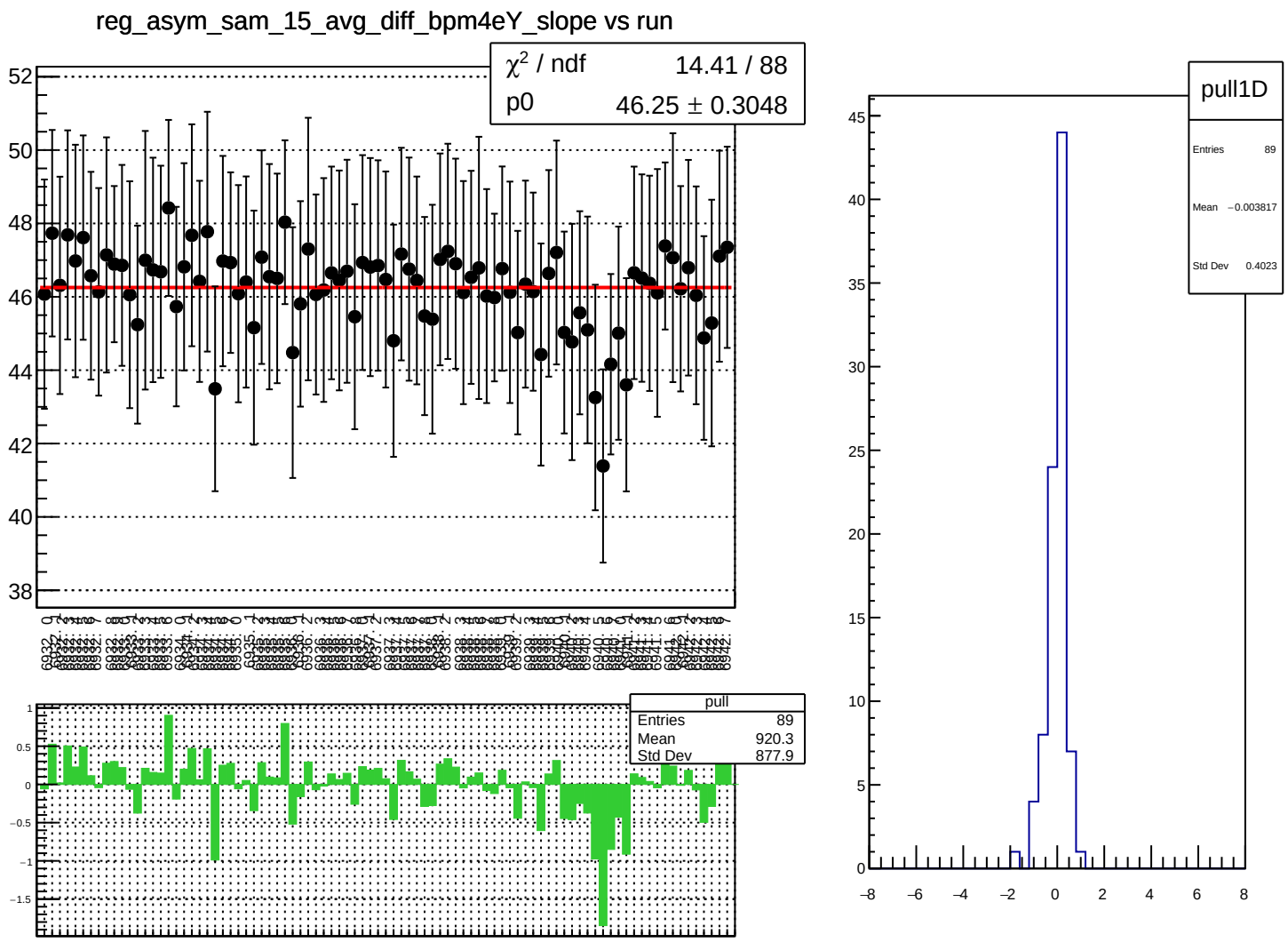

pull1D
Entries 89
Mean 0.0126
Std Dev 0.5128

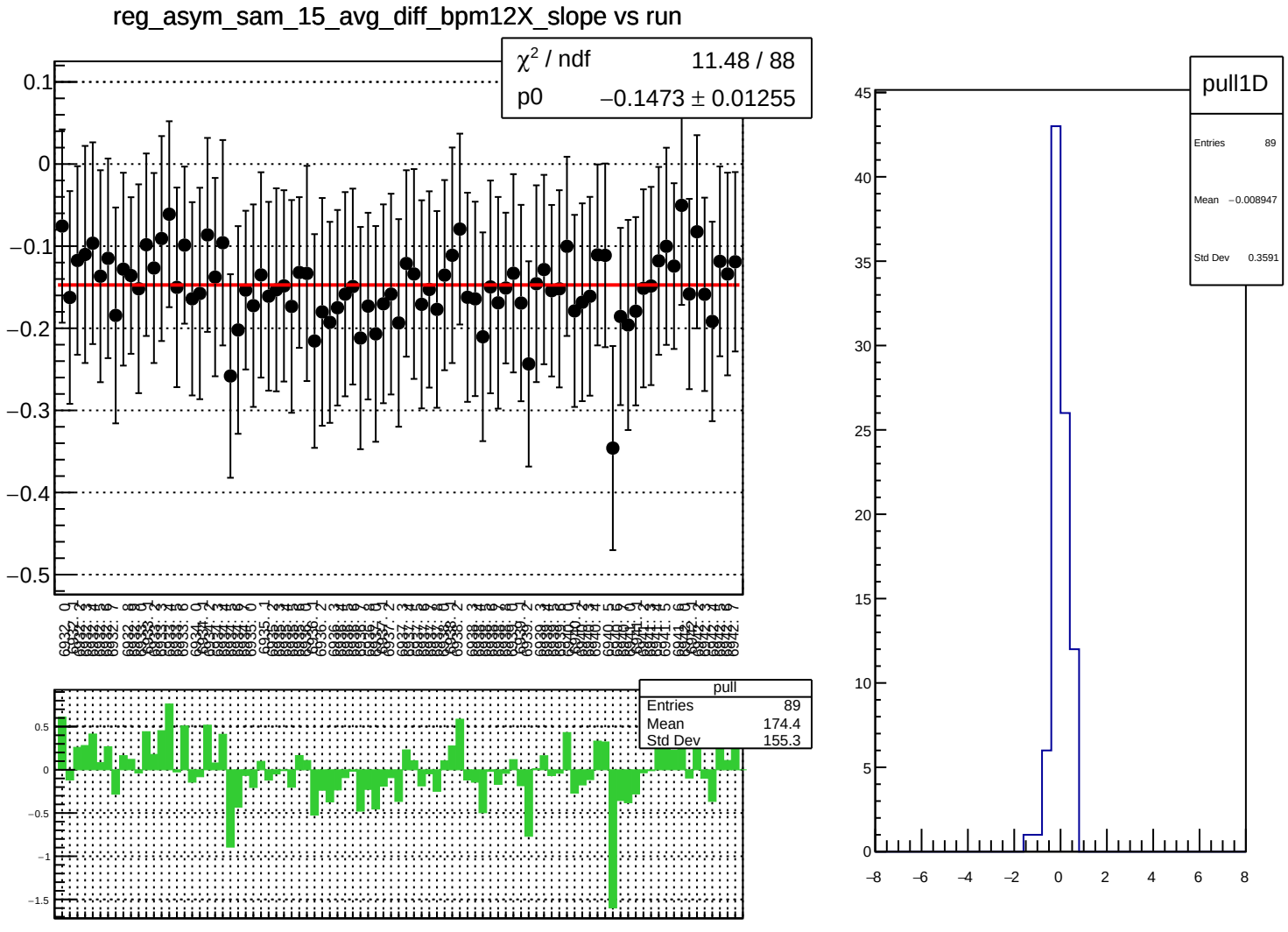

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 19.36 / 88
p0 2.738 ± 0.2637
pull
Entries 89
Mean 372.7
Std Dev 329.6

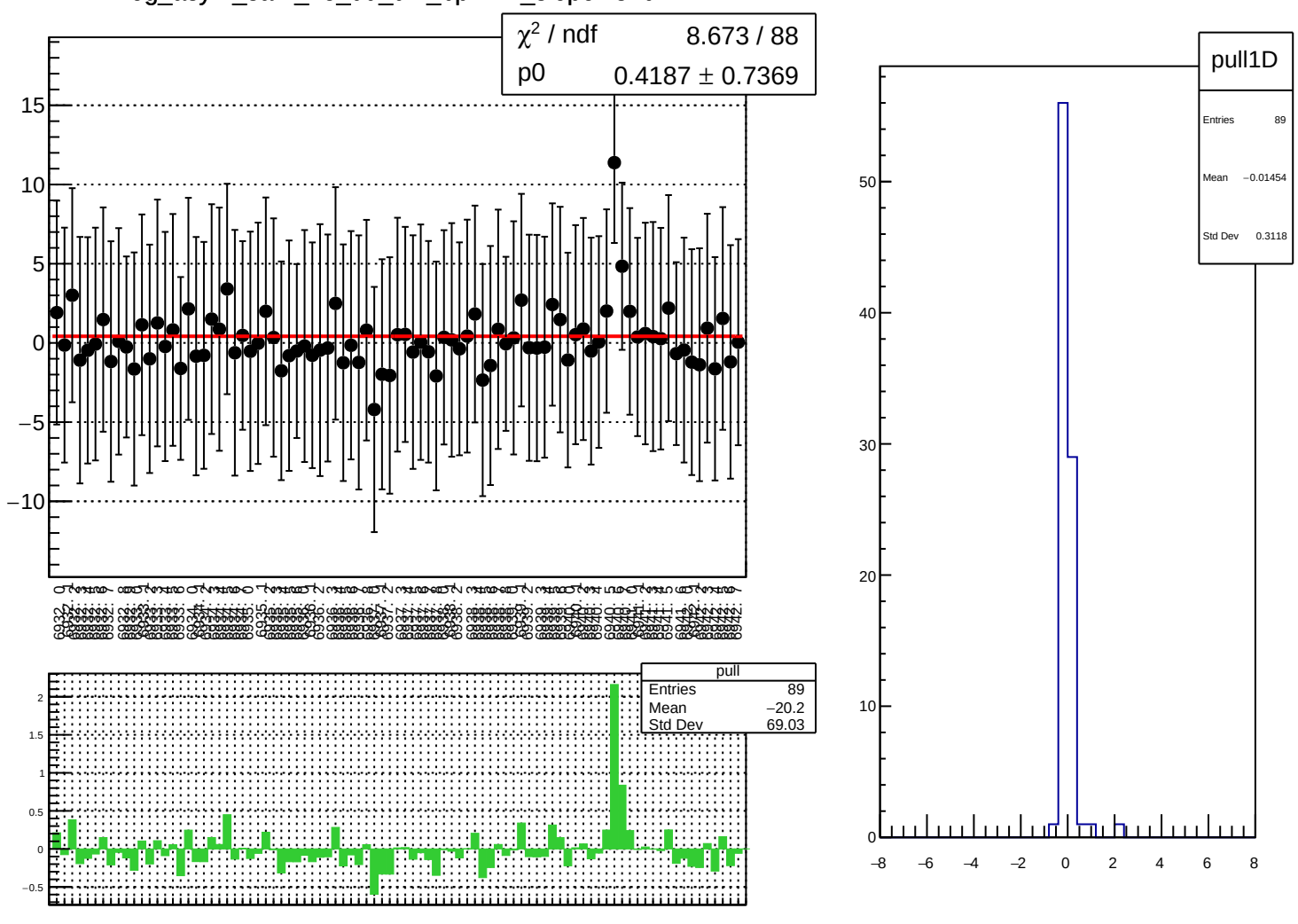

pull1D
Entries 89
Mean 0.01286
Std Dev 0.4663

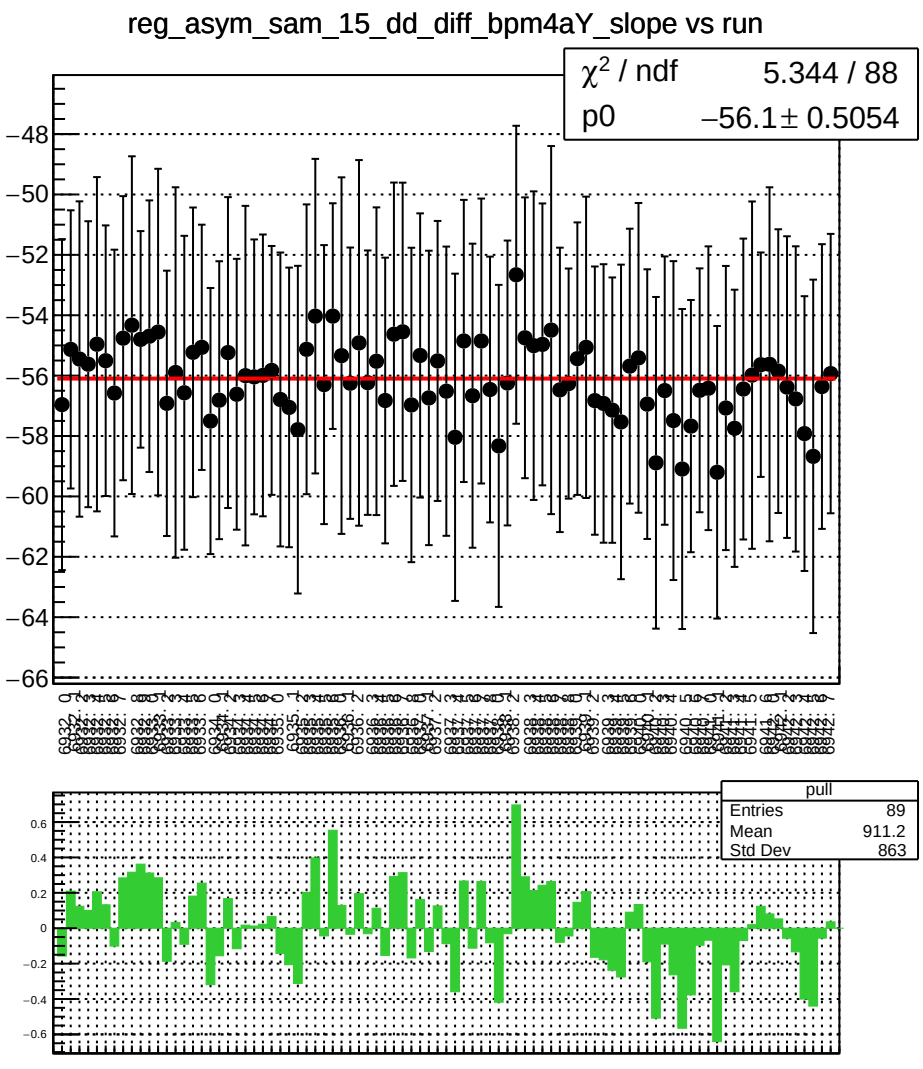

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 22.88 / 88
p0 2.134 ± 0.3583
pull
Entries 89
Mean −63.87
Std Dev 104.7

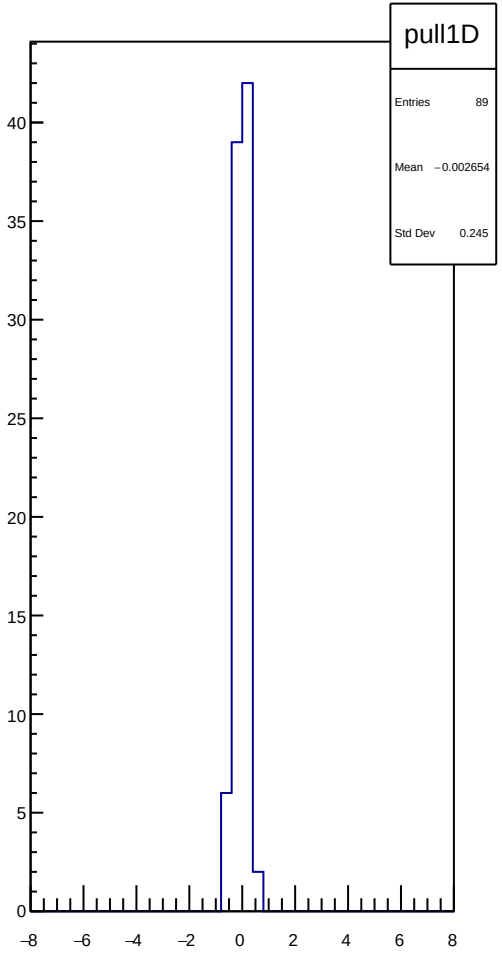

pull1D
Entries 89
Mean −0.01253
Std Dev 0.5069

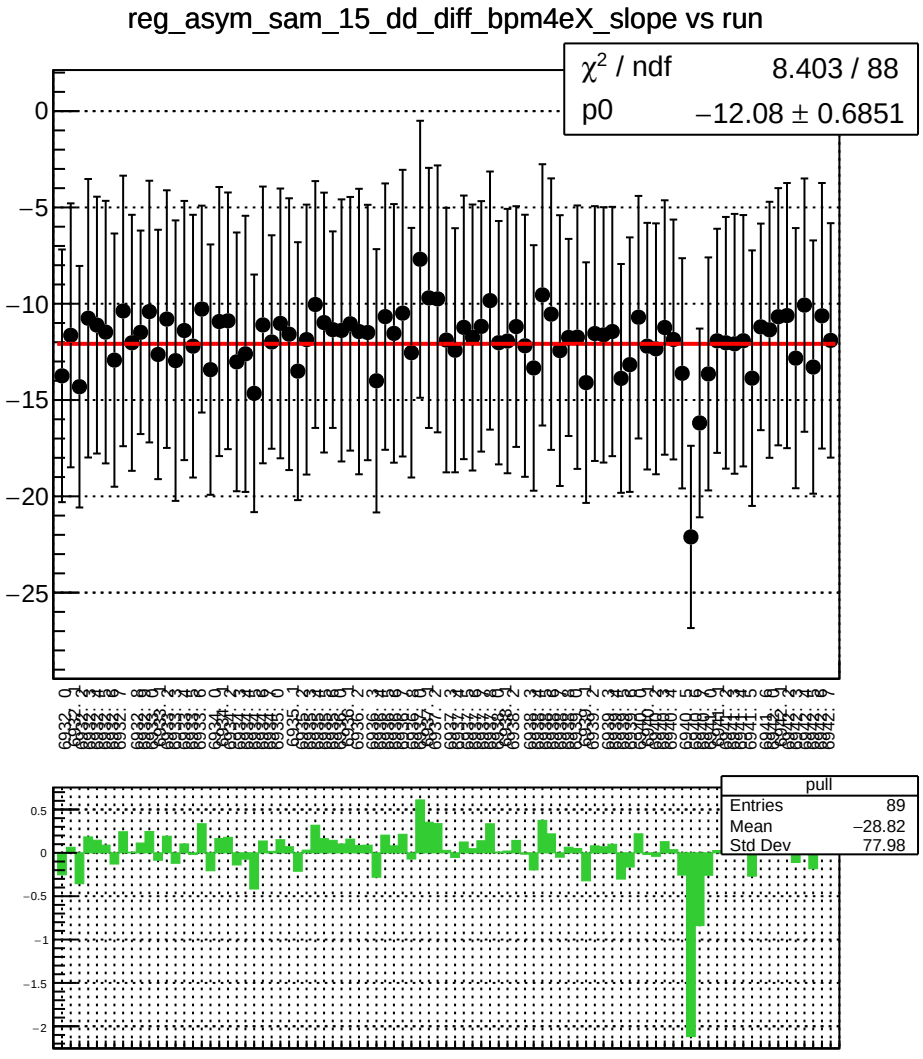

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.41 / 88
p0 46.25 ± 0.3048
pull
Entries 89
Mean 920.3
Std Dev 877.9
pull1D
Entries 89
Mean −0.003817
Std Dev 0.4023

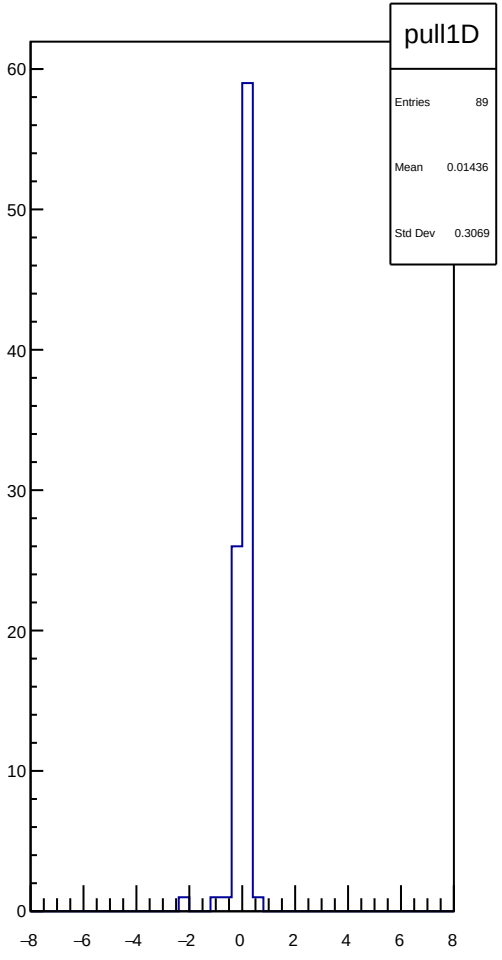

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 11.48 / 88
p0 −0.1473 ± 0.01255
pull
Entries 89
Mean 174.4
Std Dev 155.3
pull1D
Entries 89
Mean −0.008947
Std Dev 0.3591

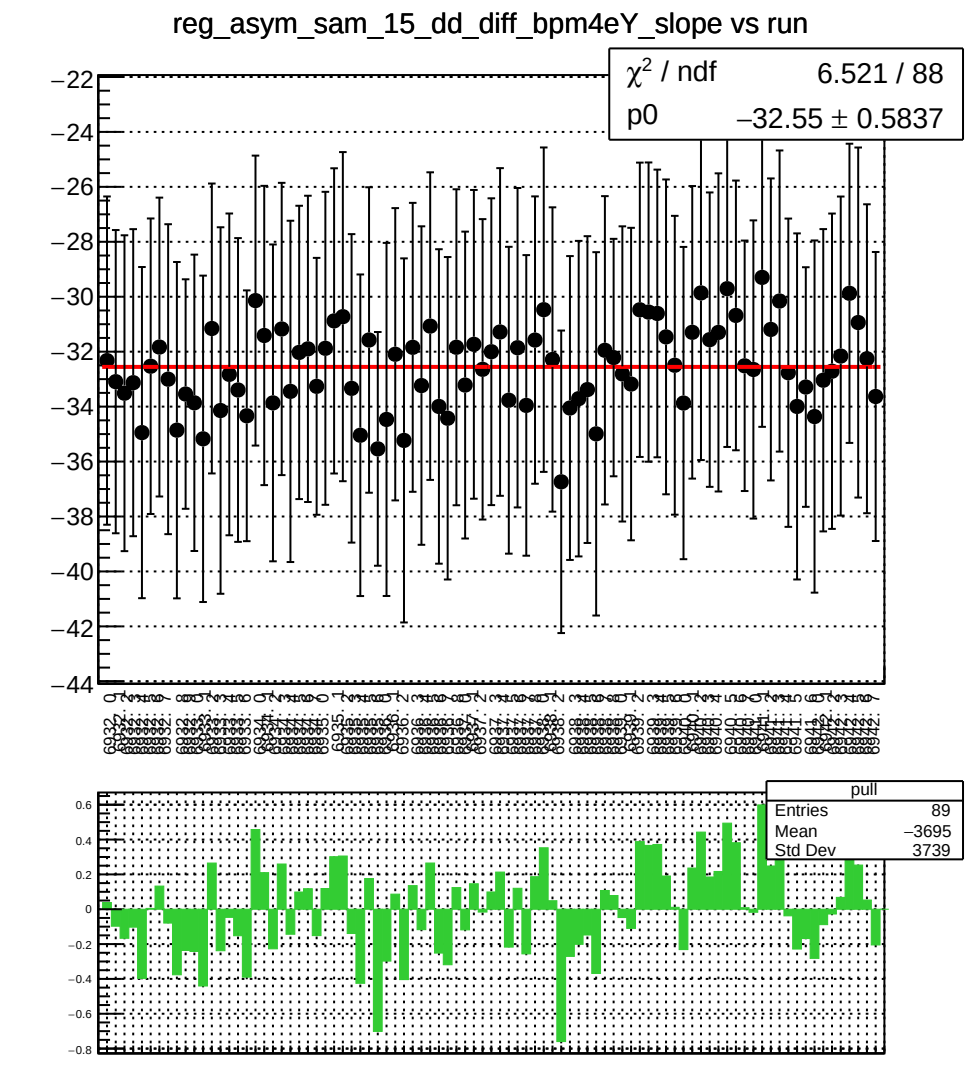

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 8.673 / 88
p0 0.4187 ± 0.7369
pull
Entries 89
Mean −20.2
Std Dev 69.03
pull1D
Entries 89
Mean −0.01454
Std Dev 0.3118

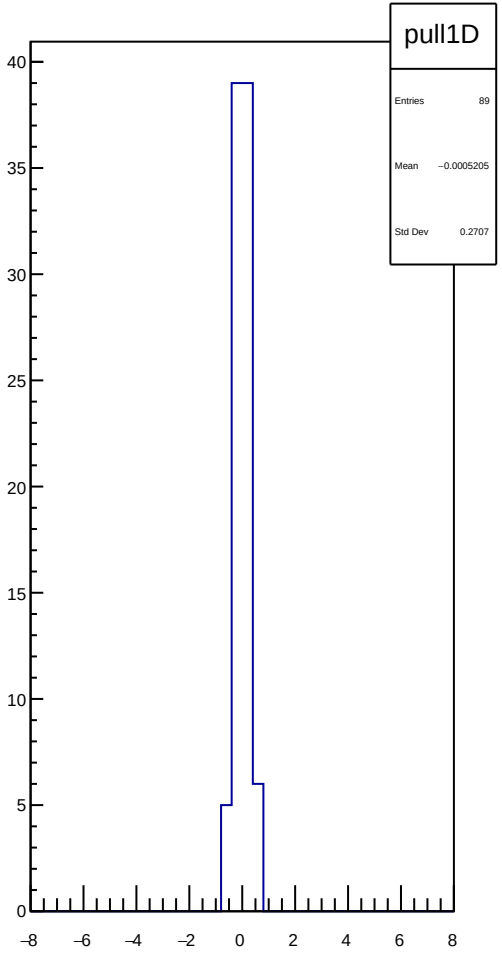

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.344 / 88
p0 −56.1 ± 0.5054
pull
Entries 89
Mean 911.2
Std Dev 863

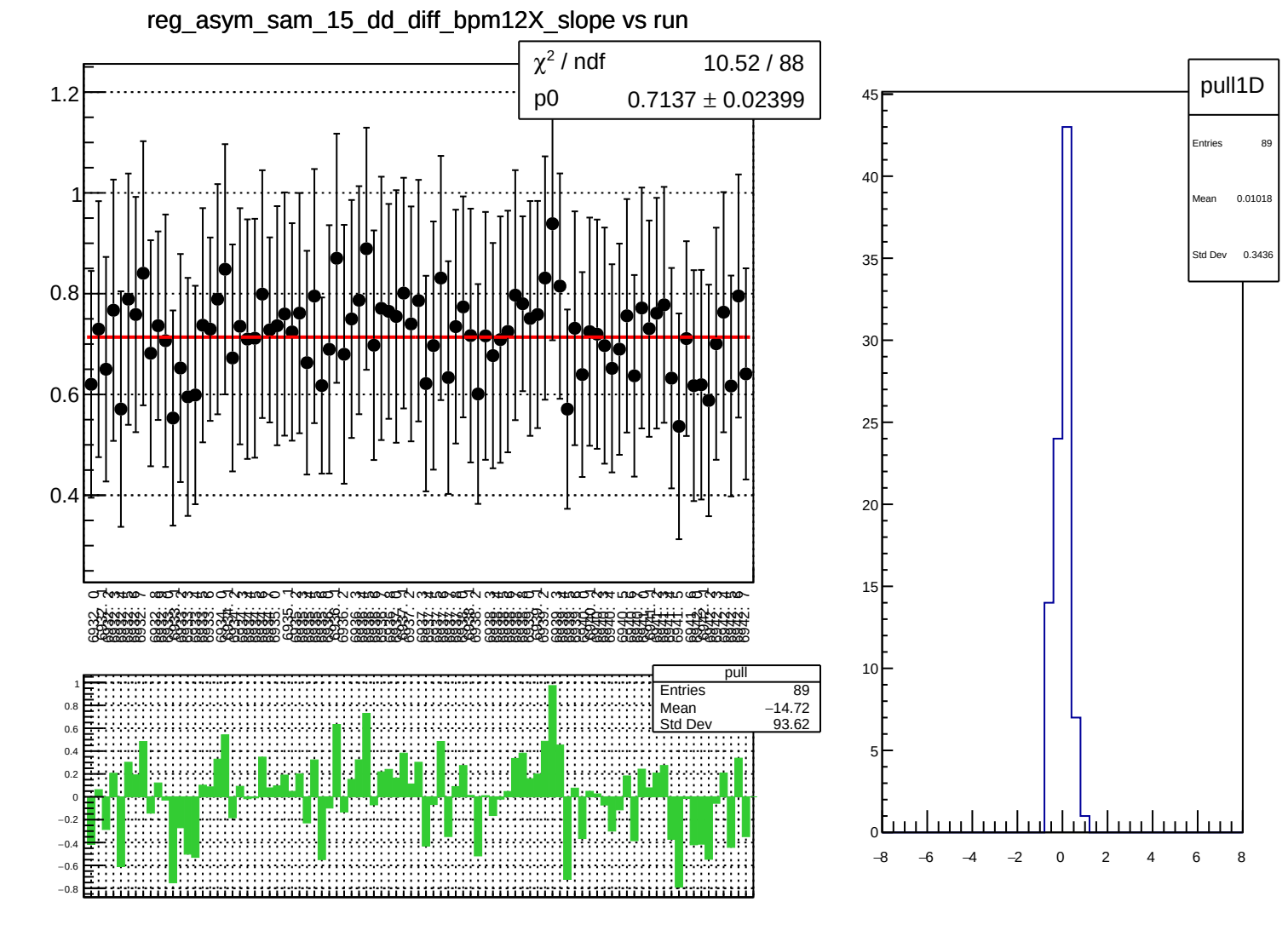

pull1D
Entries 89
Mean −0.002654
Std Dev 0.245

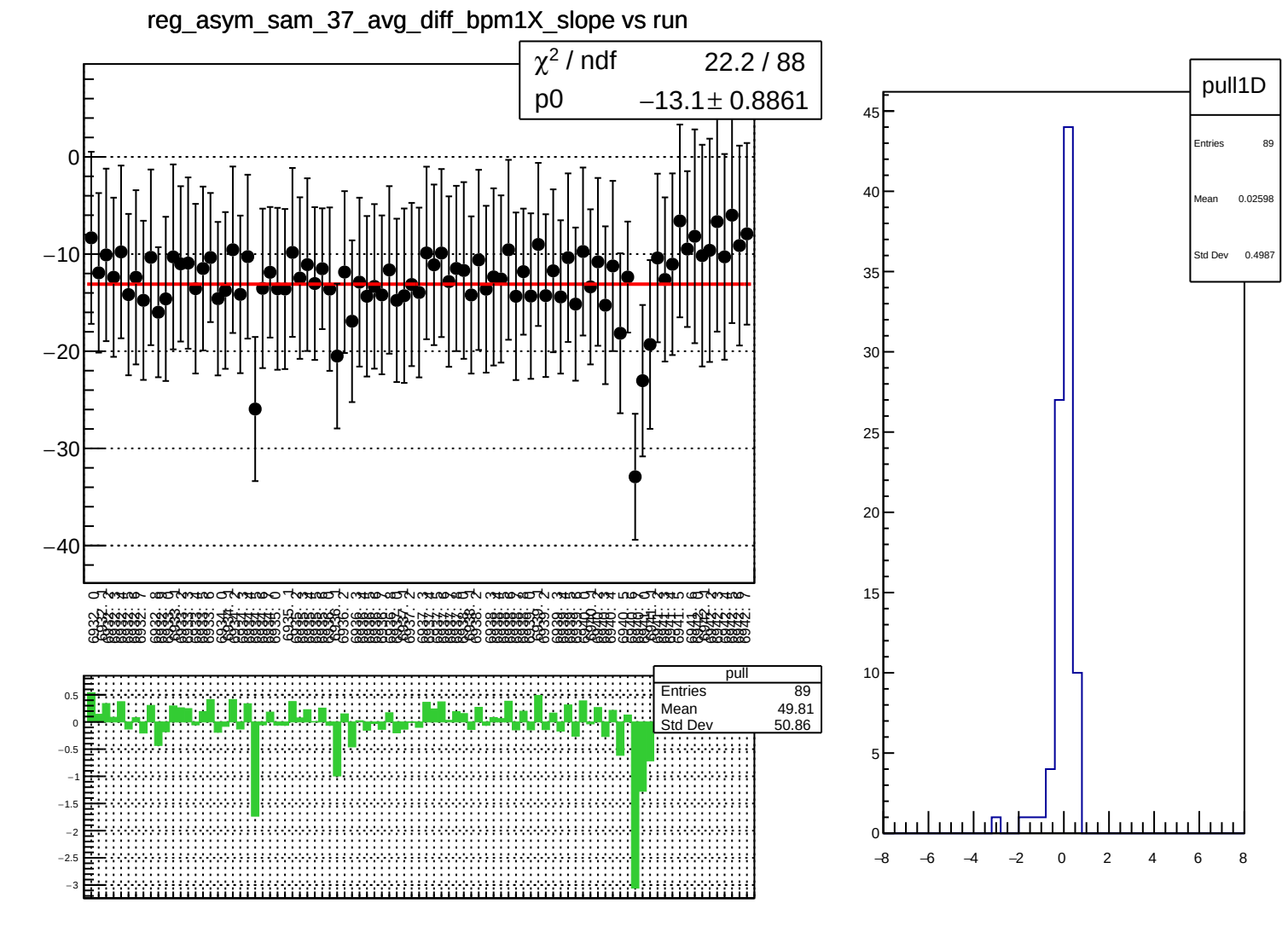

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 8.403 / 88
p0 −12.08 ± 0.6851
pull
Entries 89
Mean −28.82
Std Dev 77.98

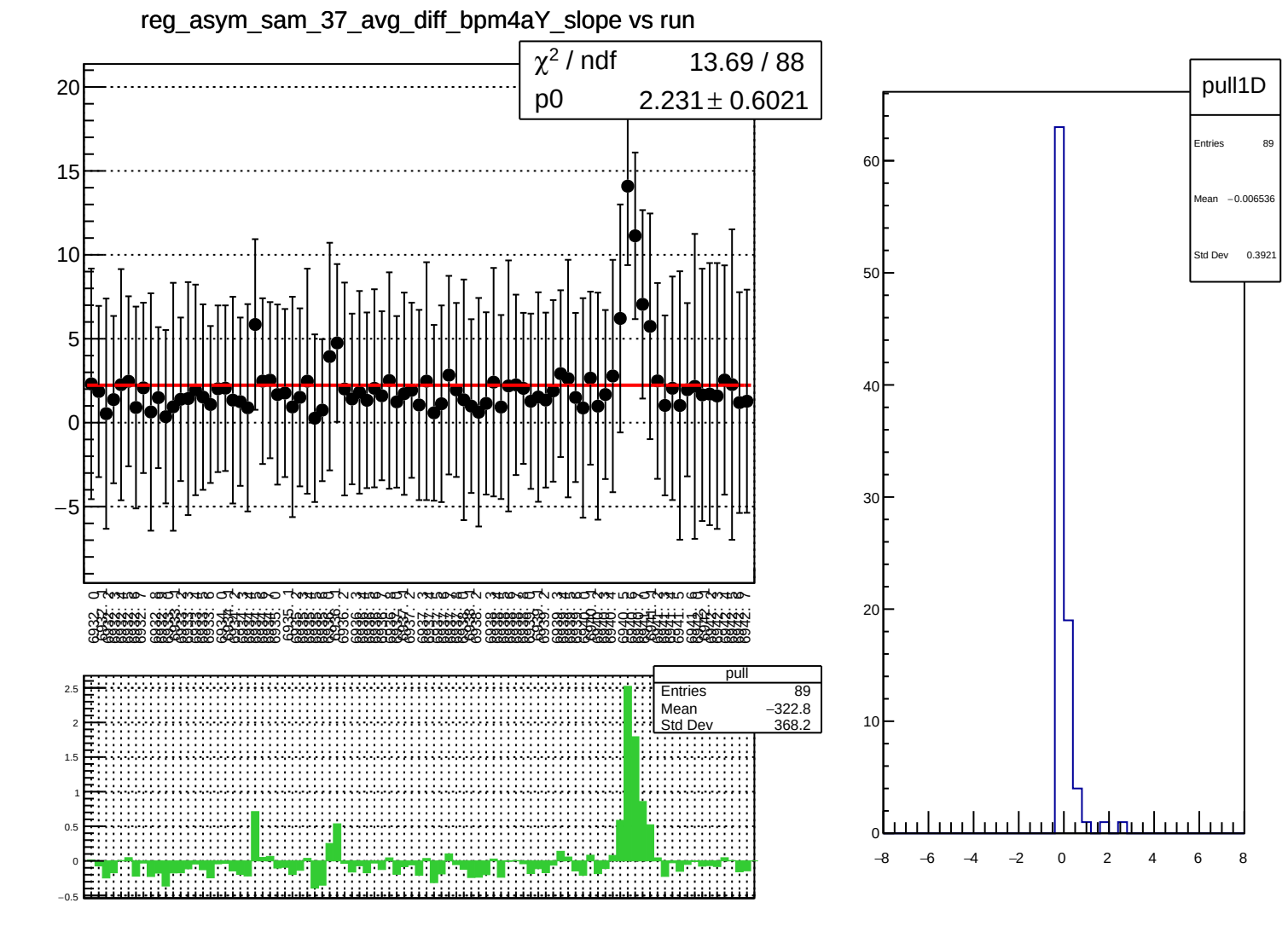

pull1D
Entries 89
Mean 0.01436
Std Dev 0.3069

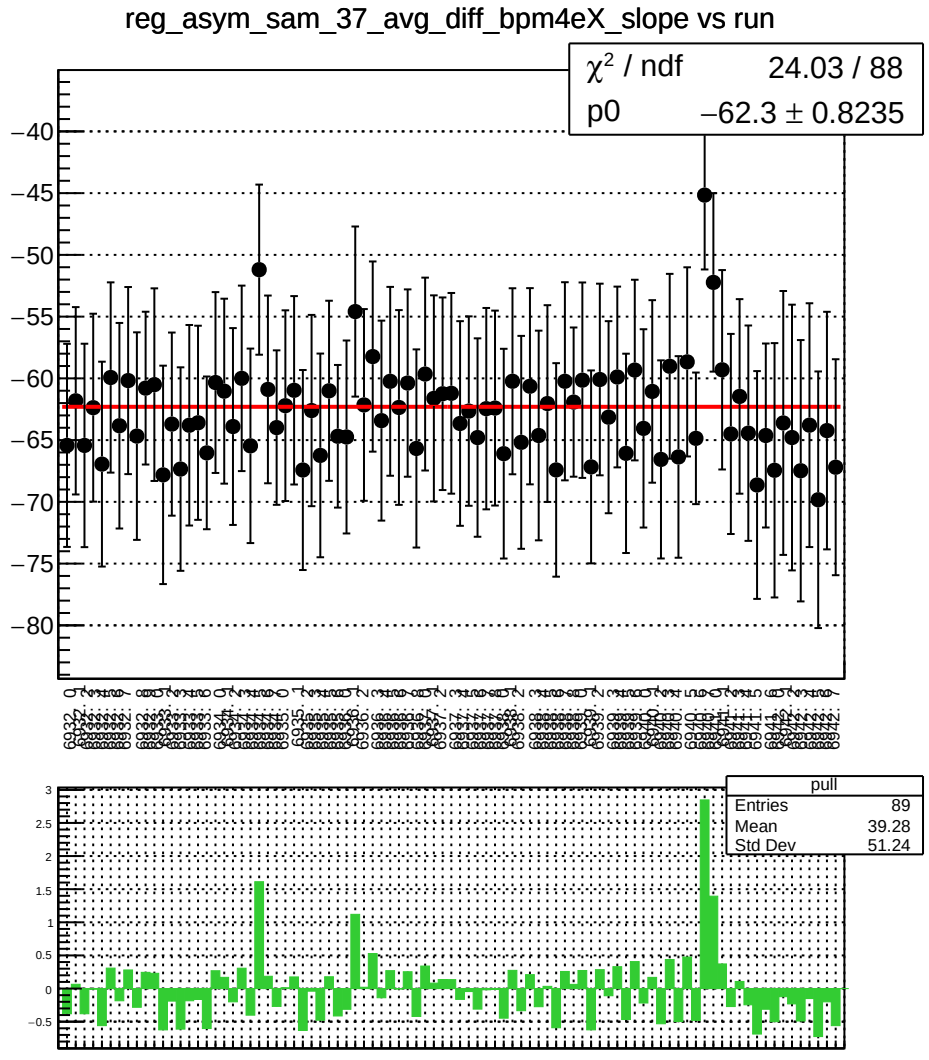

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.521 / 88
p0 −32.55 ± 0.5837
pull
Entries 89
Mean −3695
Std Dev 3739

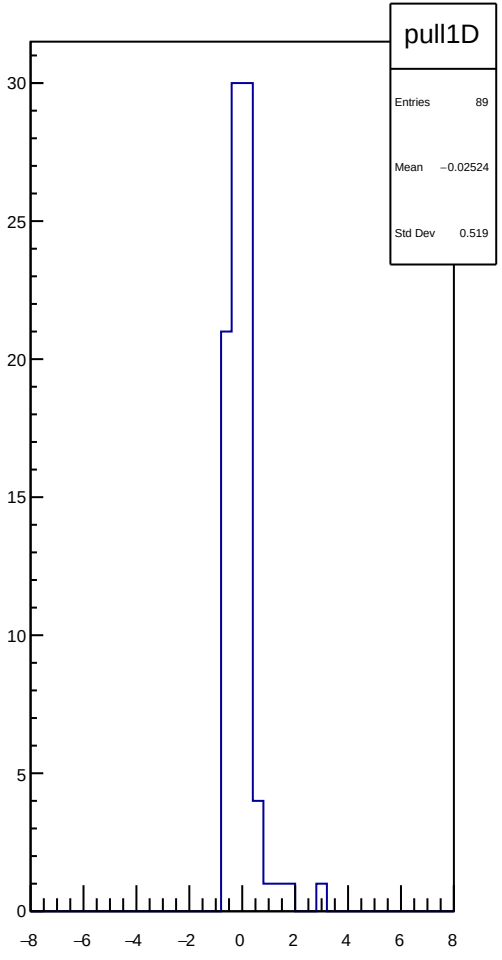

pull1D
Entries 89
Mean −0.0005205
Std Dev 0.2707

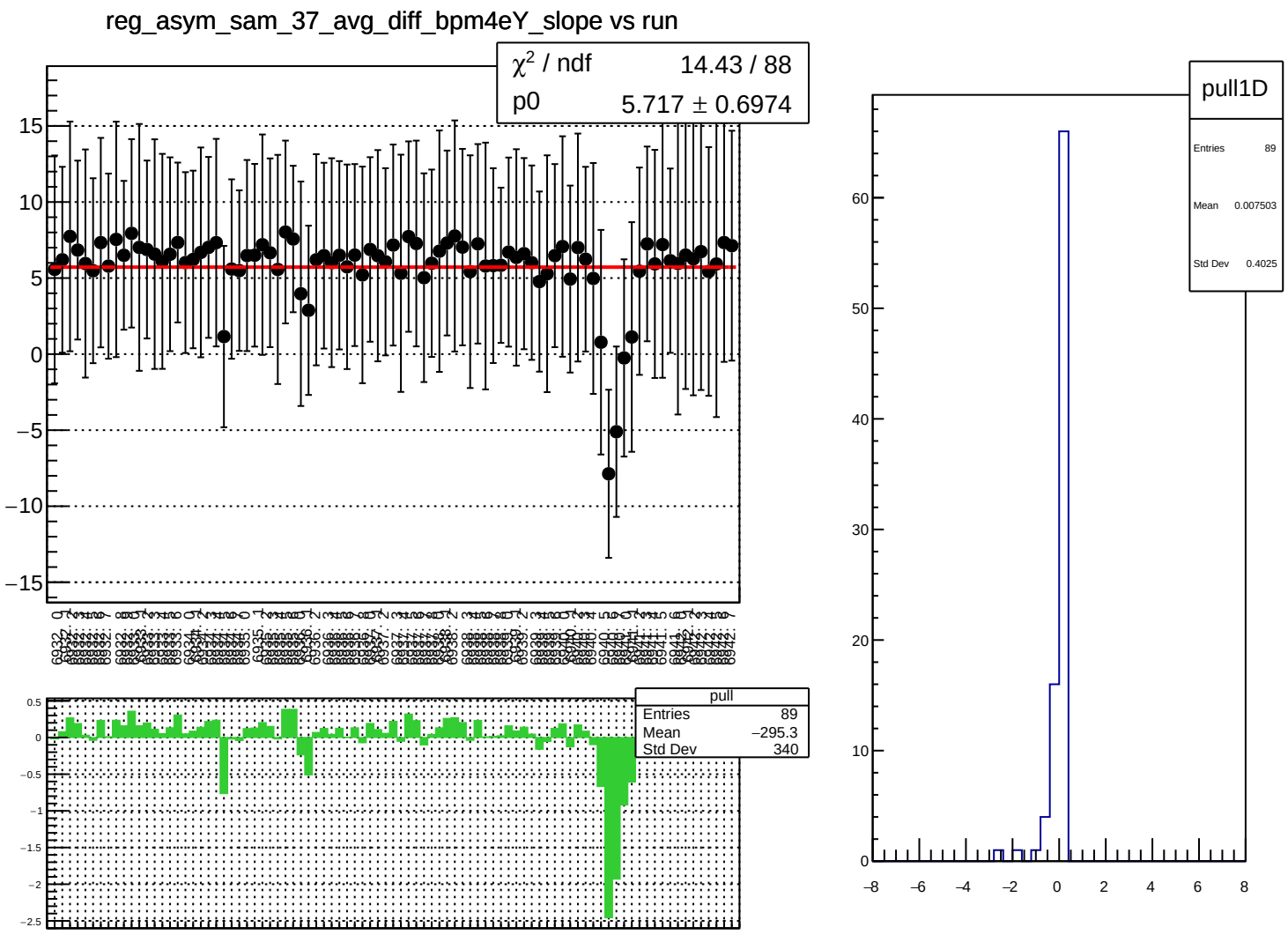

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 10.52 / 88
p0 0.7137 ± 0.02399
pull
Entries 89
Mean −14.72
Std Dev 93.62
pull1D
Entries 89
Mean 0.01018
Std Dev 0.3436

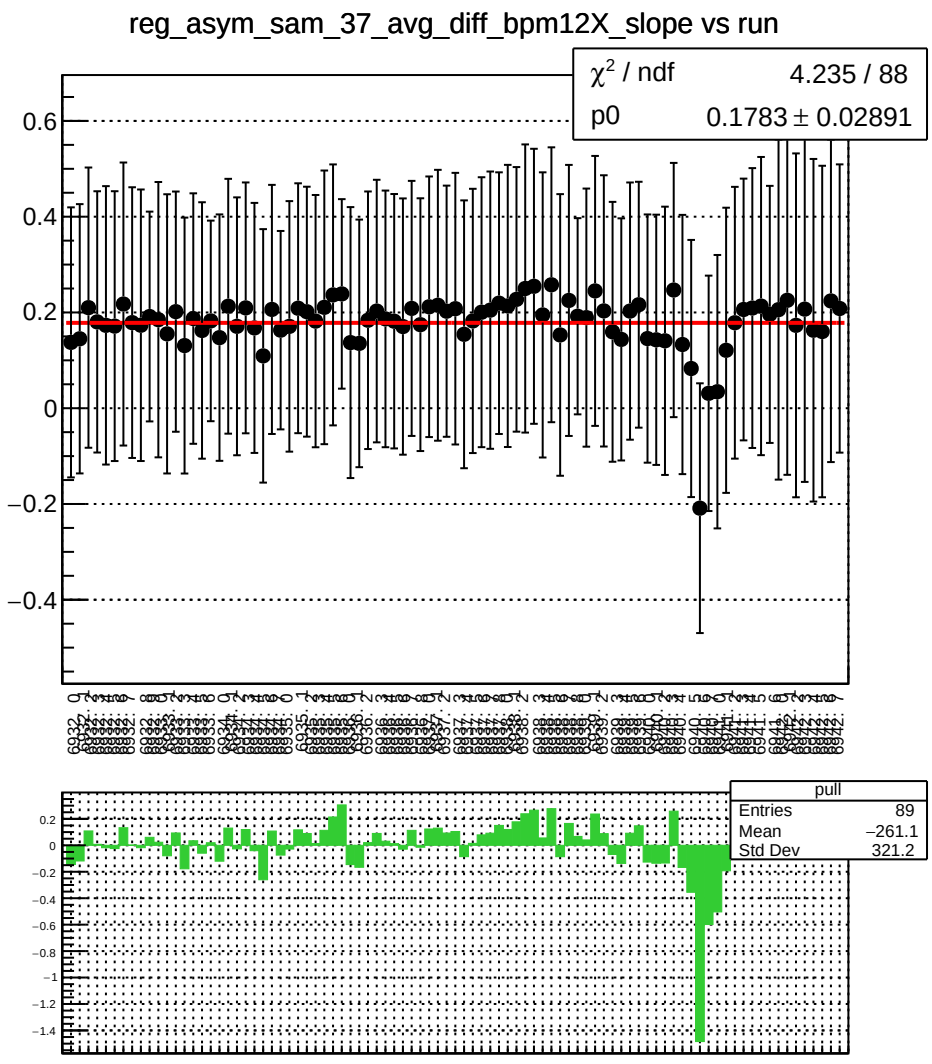

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 22.2 / 88
p0 −13.1± 0.8861
pull
Entries 89
Mean 49.81
Std Dev 50.86
pull1D
Entries 89
Mean 0.02598
Std Dev 0.4987

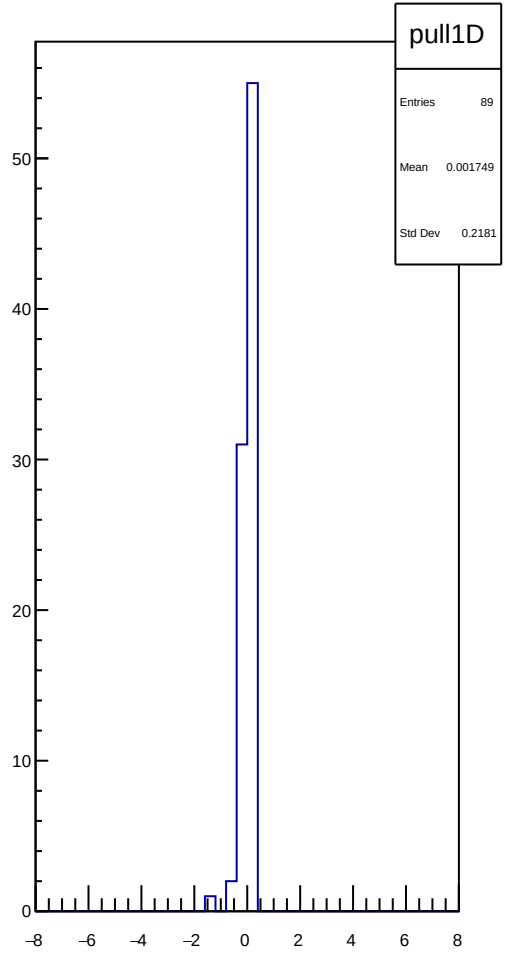

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.69 / 88
p0 2.231 ± 0.6021
pull
Entries 89
Mean −322.8
Std Dev 368.2
pull1D
Entries 89
Mean −0.006536
Std Dev 0.3921

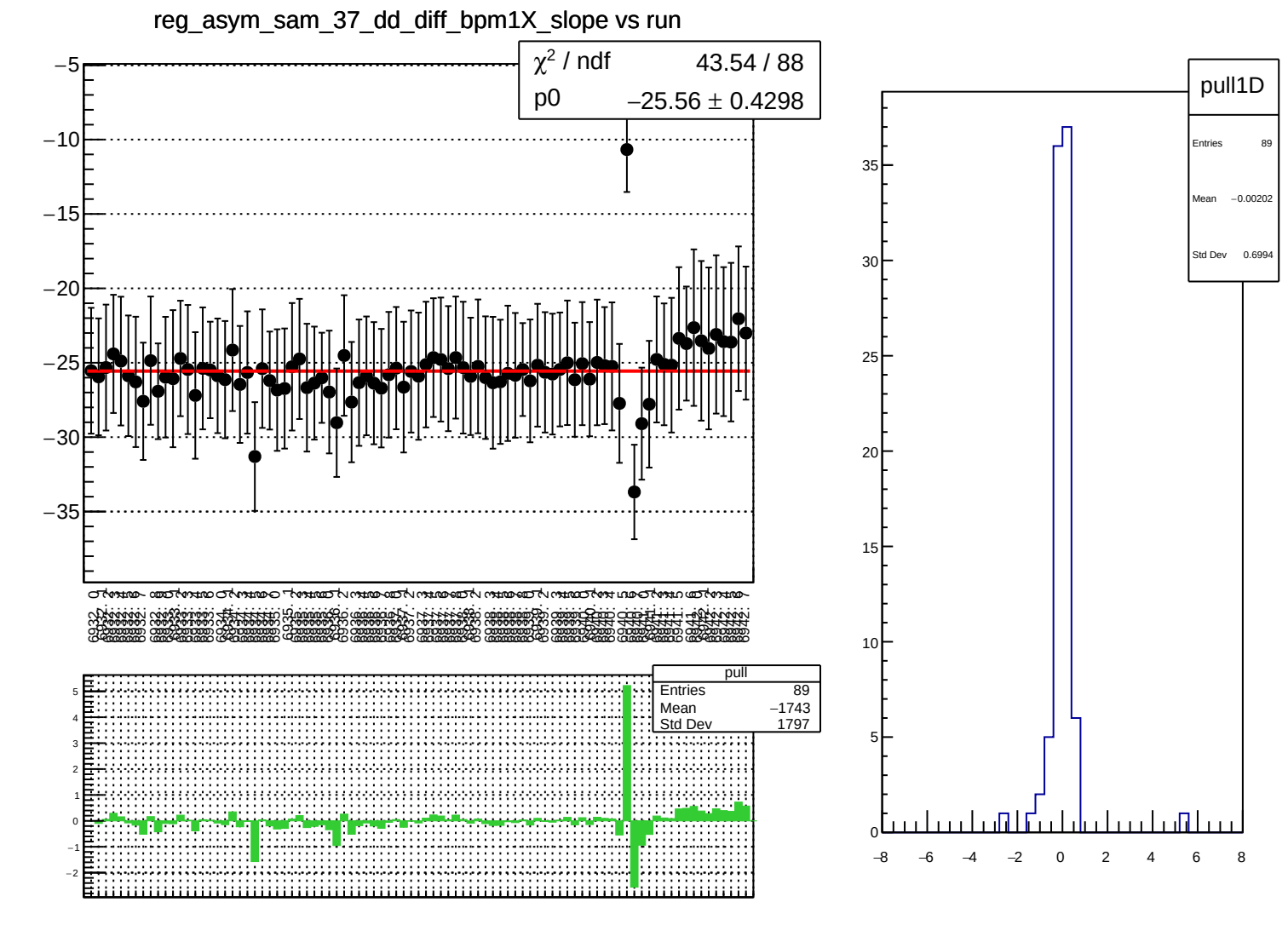

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 24.03 / 88
p0 −62.3 ± 0.8235
pull
Entries 89
Mean 39.28
Std Dev 51.24

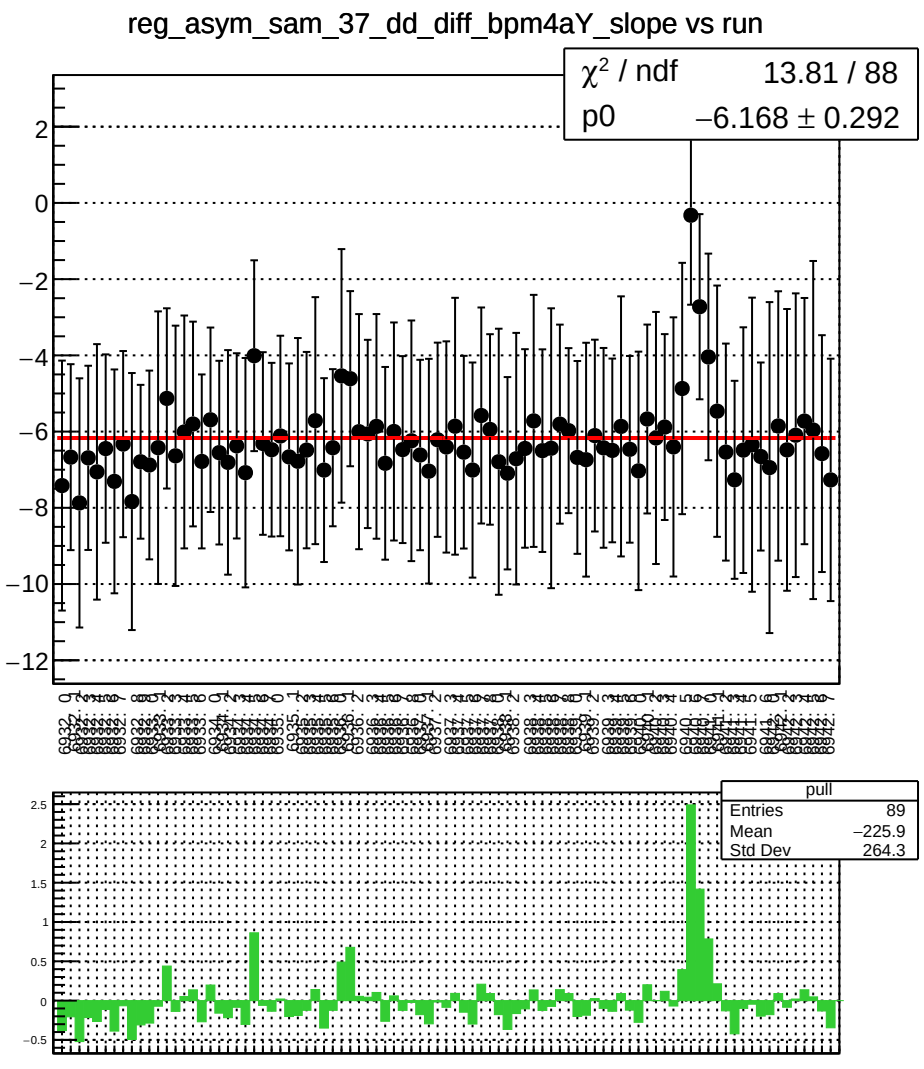

pull1D
Entries 89
Mean −0.02524
Std Dev 0.519

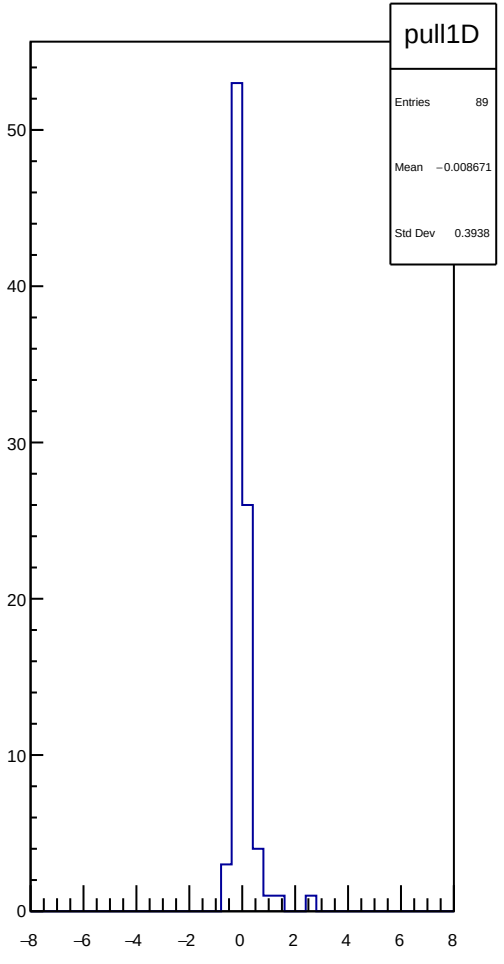

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.43 / 88
p0 5.717 ± 0.6974
pull
Entries 89
Mean −295.3
Std Dev 340
pull1D
Entries 89
Mean 0.007503
Std Dev 0.4025

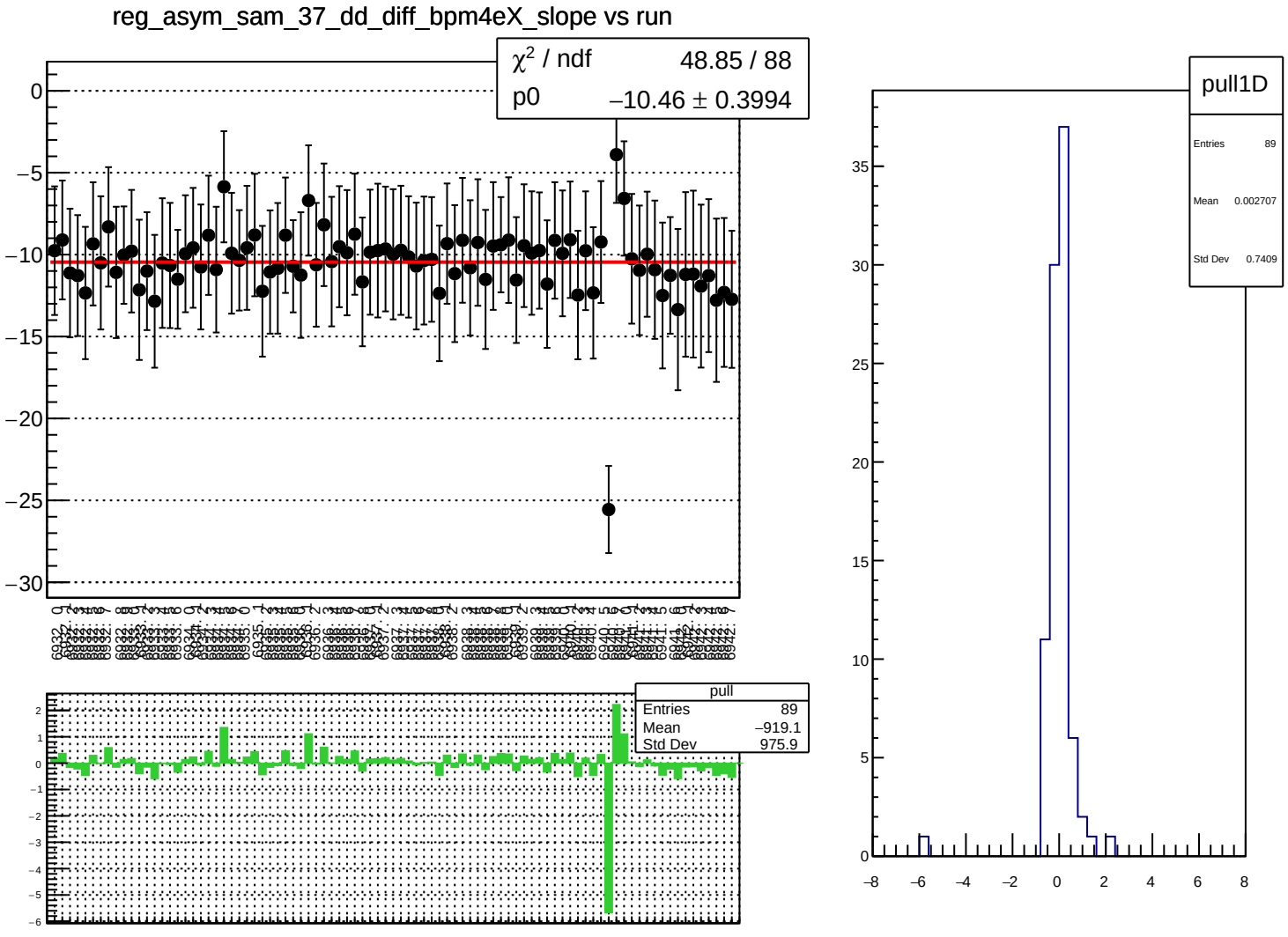

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 4.235 / 88
p0 0.1783 ± 0.02891
pull
Entries 89
Mean −261.1
Std Dev 321.2

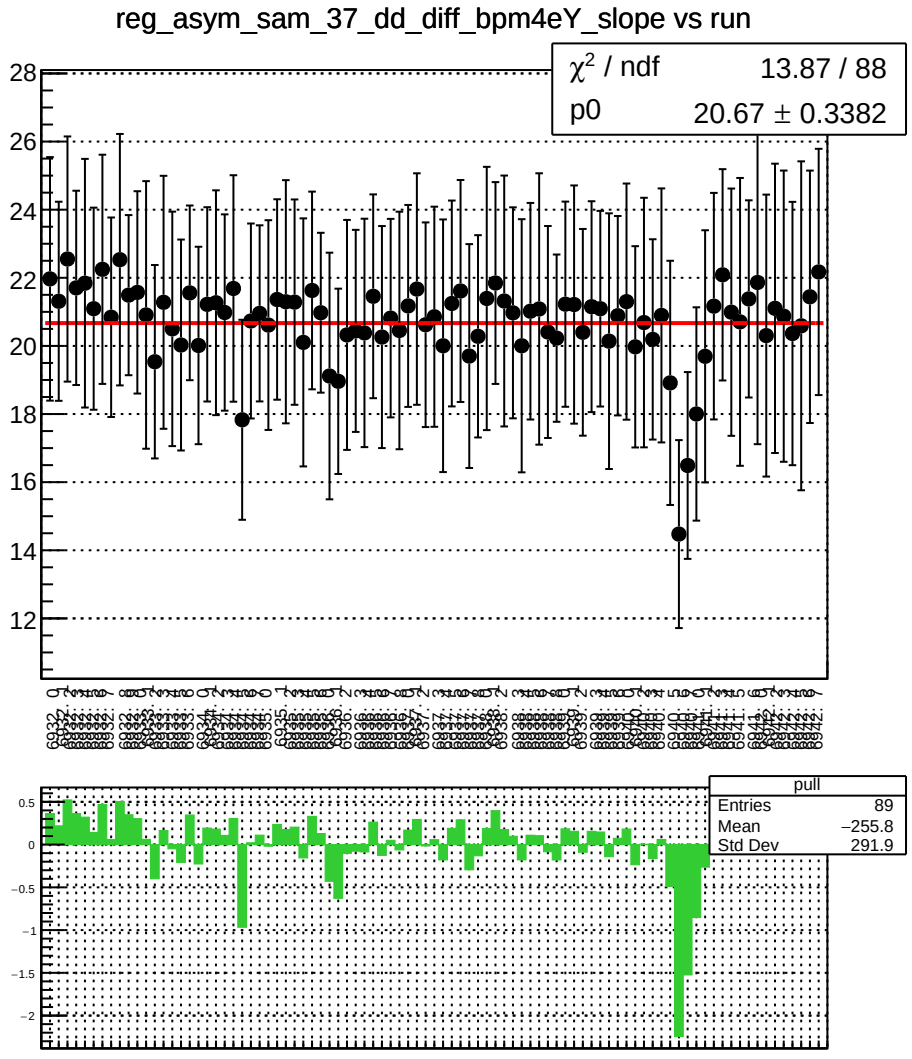

pull1D
Entries 89
Mean 0.001749
Std Dev 0.2181

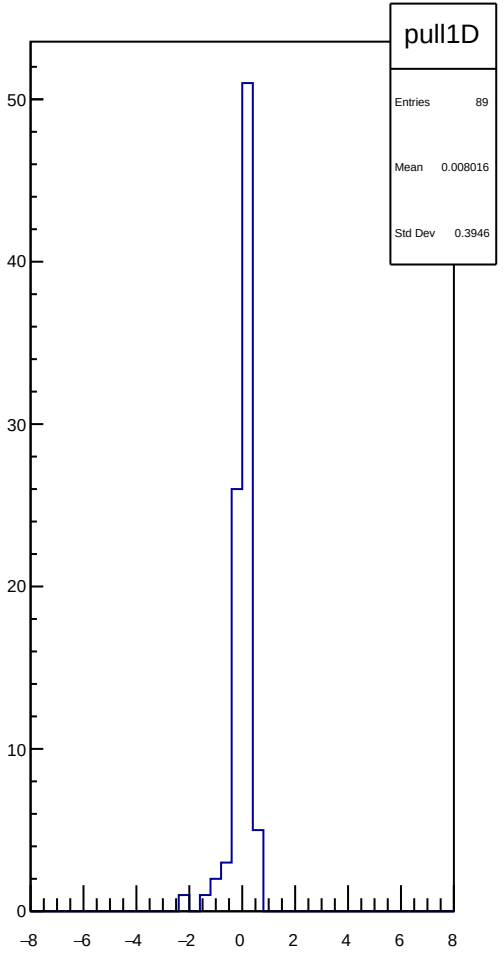

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 43.54 / 88
p0 −25.56 ± 0.4298
pull
Entries 89
Mean −1743
Std Dev 1797
pull1D
Entries 89
Mean −0.00202
Std Dev 0.6994

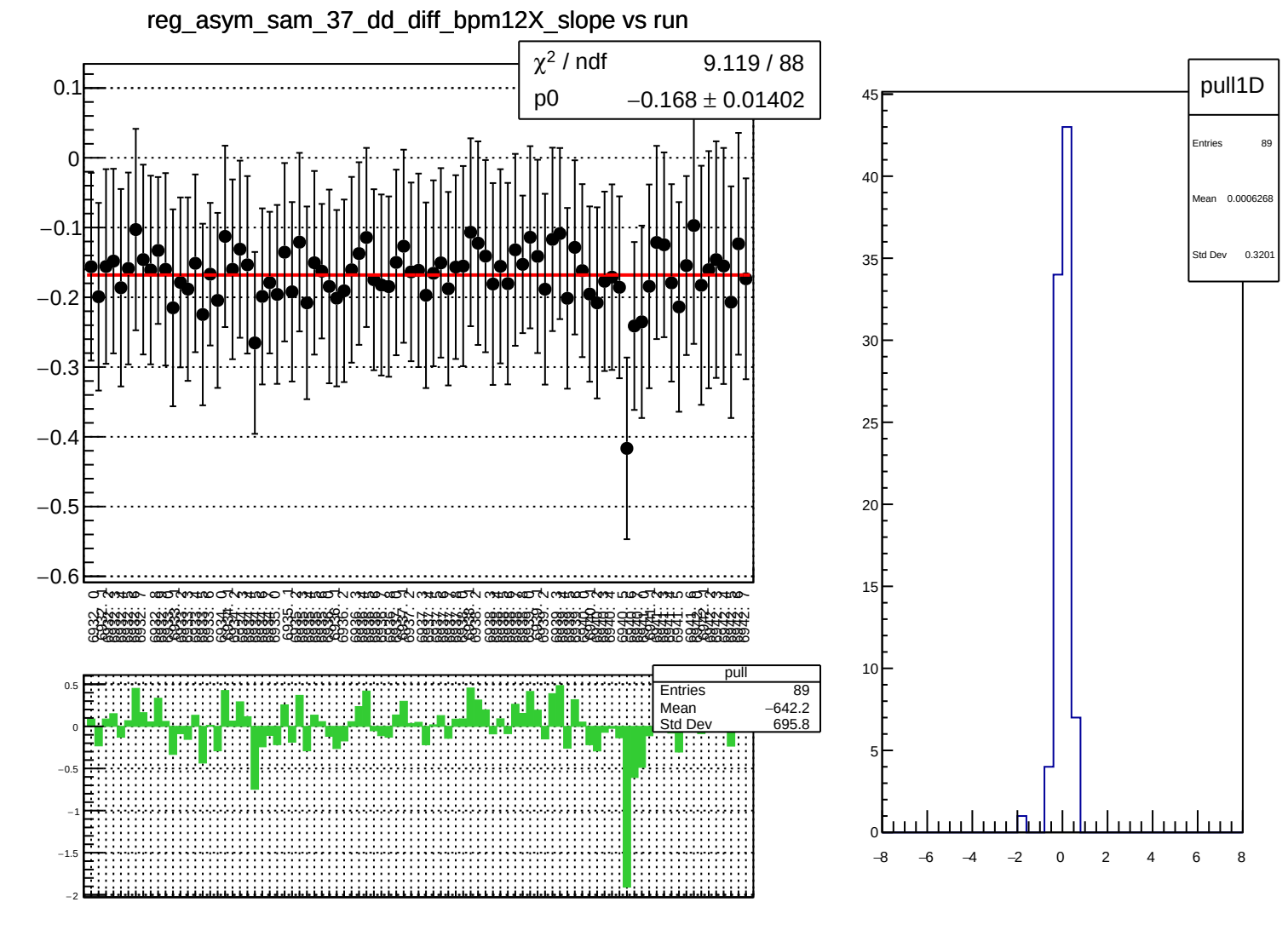

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.81 / 88
p0 −6.168 ± 0.292
pull
Entries 89
Mean −225.9
Std Dev 264.3

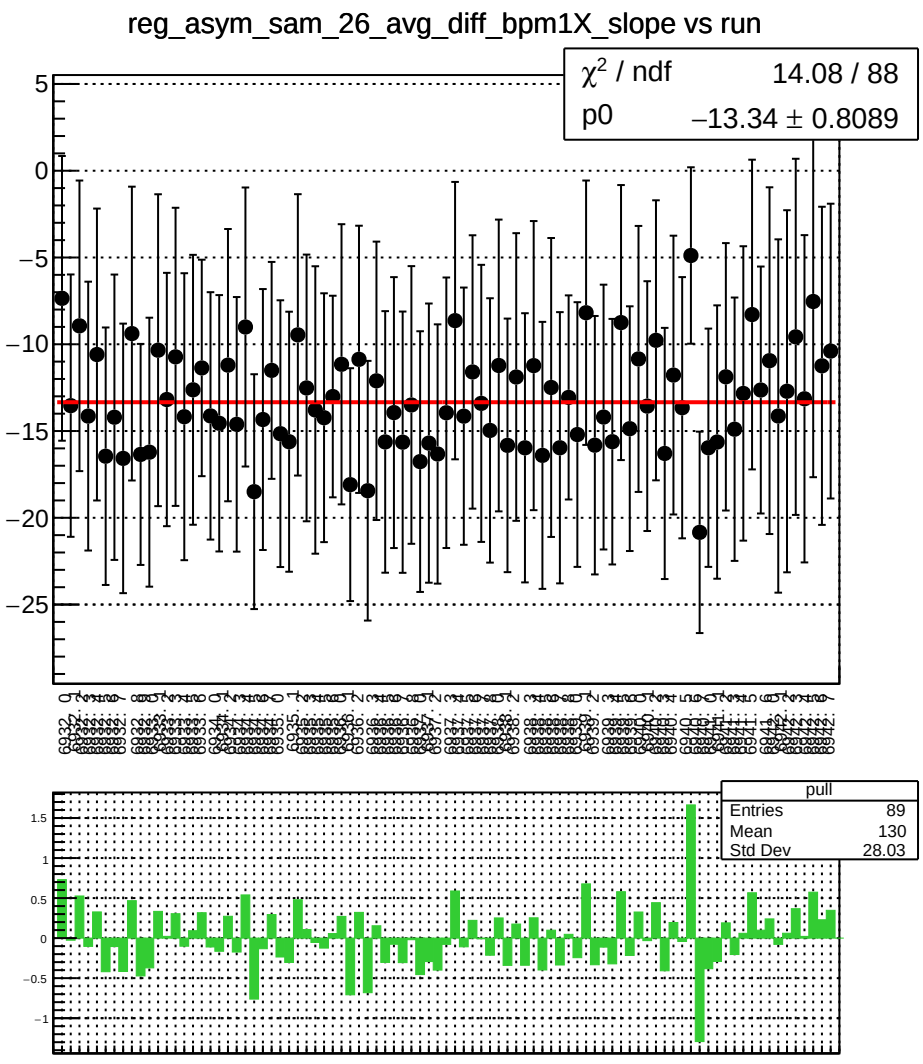

pull1D
Entries 89
Mean −0.008671
Std Dev 0.3938

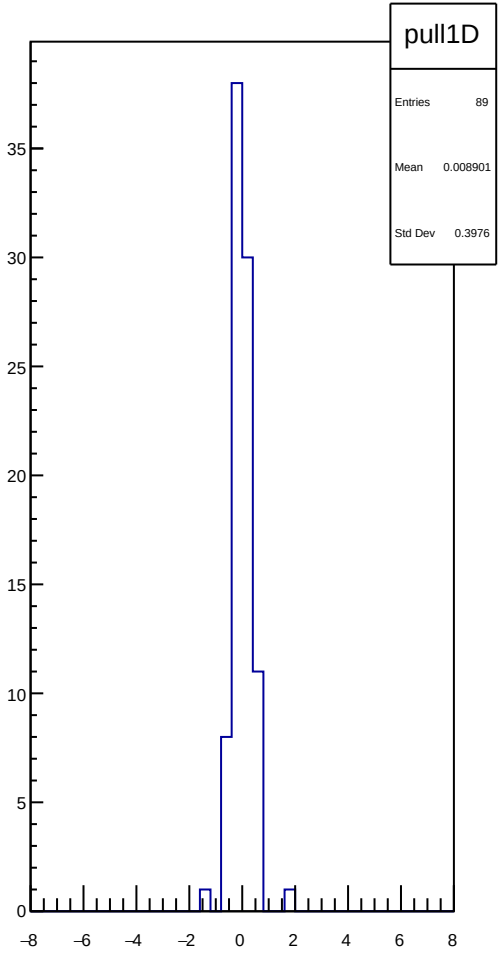

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 48.85 / 88
p0 −10.46 ± 0.3994
pull
Entries 89
Mean −919.1
Std Dev 975.9
pull1D
Entries 89
Mean 0.002707
Std Dev 0.7409

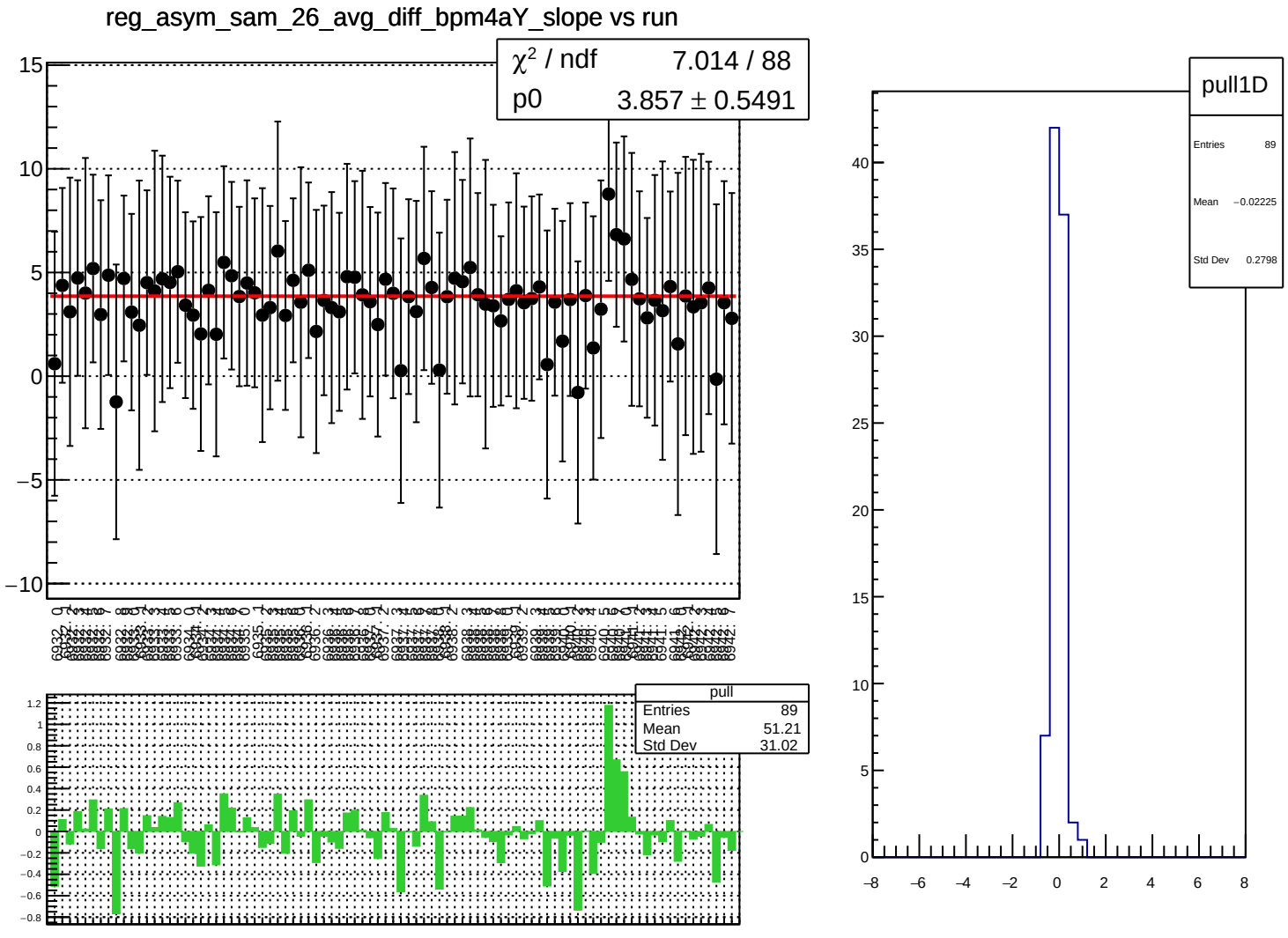

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 13.87 / 88
p0 20.67 ± 0.3382
pull
Entries 89
Mean −255.8
Std Dev 291.9

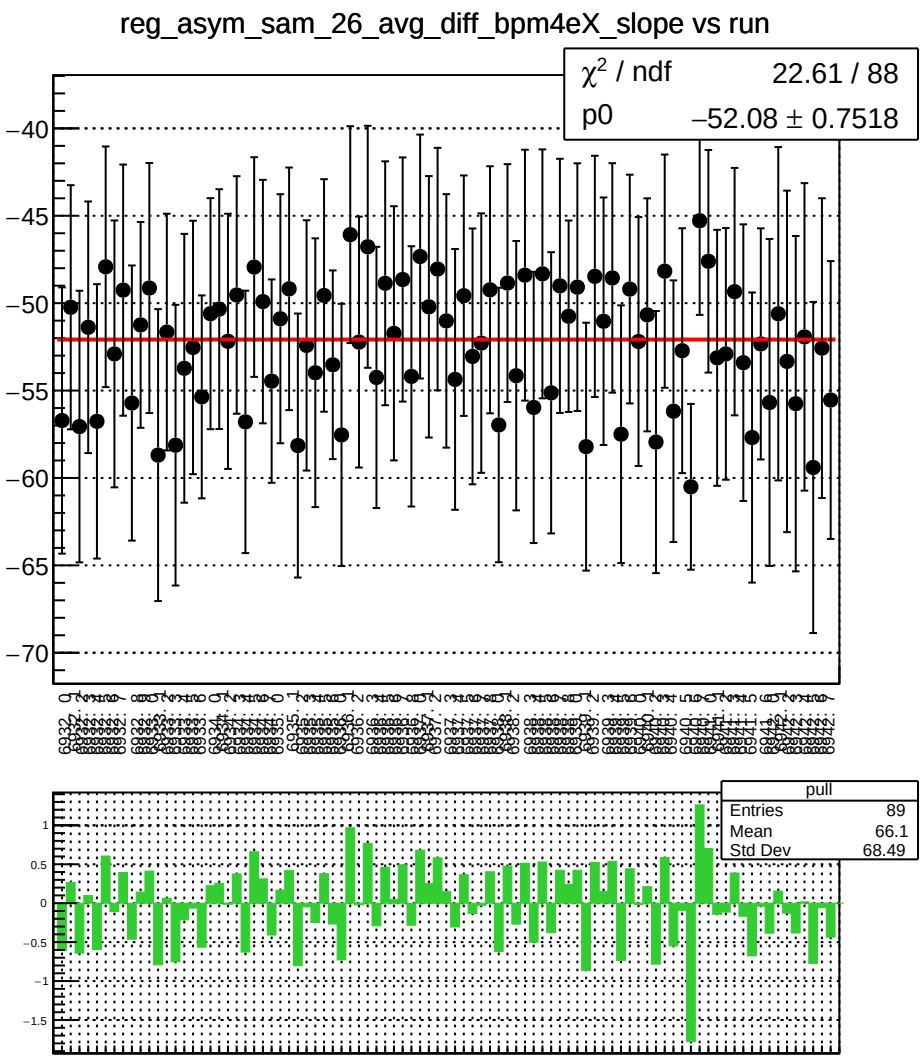

pull1D
Entries 89
Mean 0.008016
Std Dev 0.3946

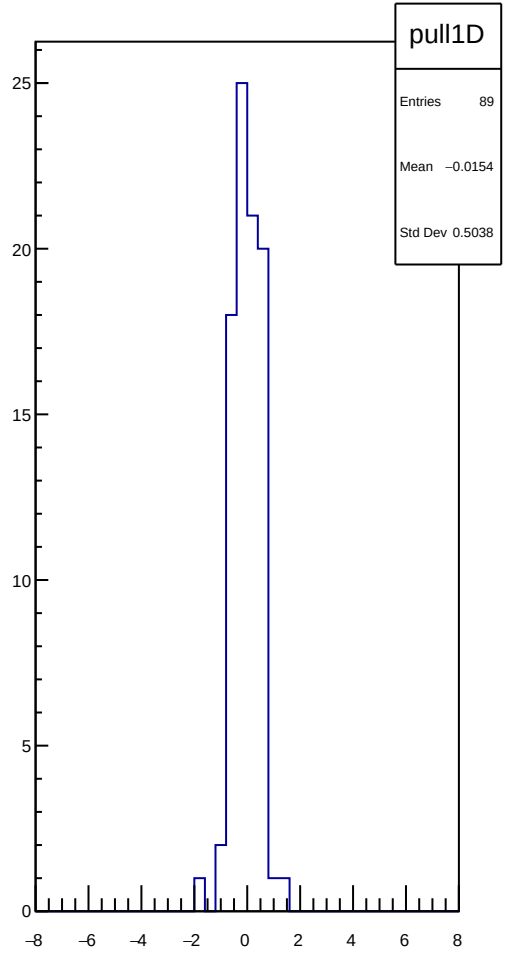

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 9.119 / 88
p0 −0.168 ± 0.01402
pull
Entries 89
Mean −642.2
Std Dev 695.8
pull1D
Entries 89
Mean 0.0006268
Std Dev 0.3201

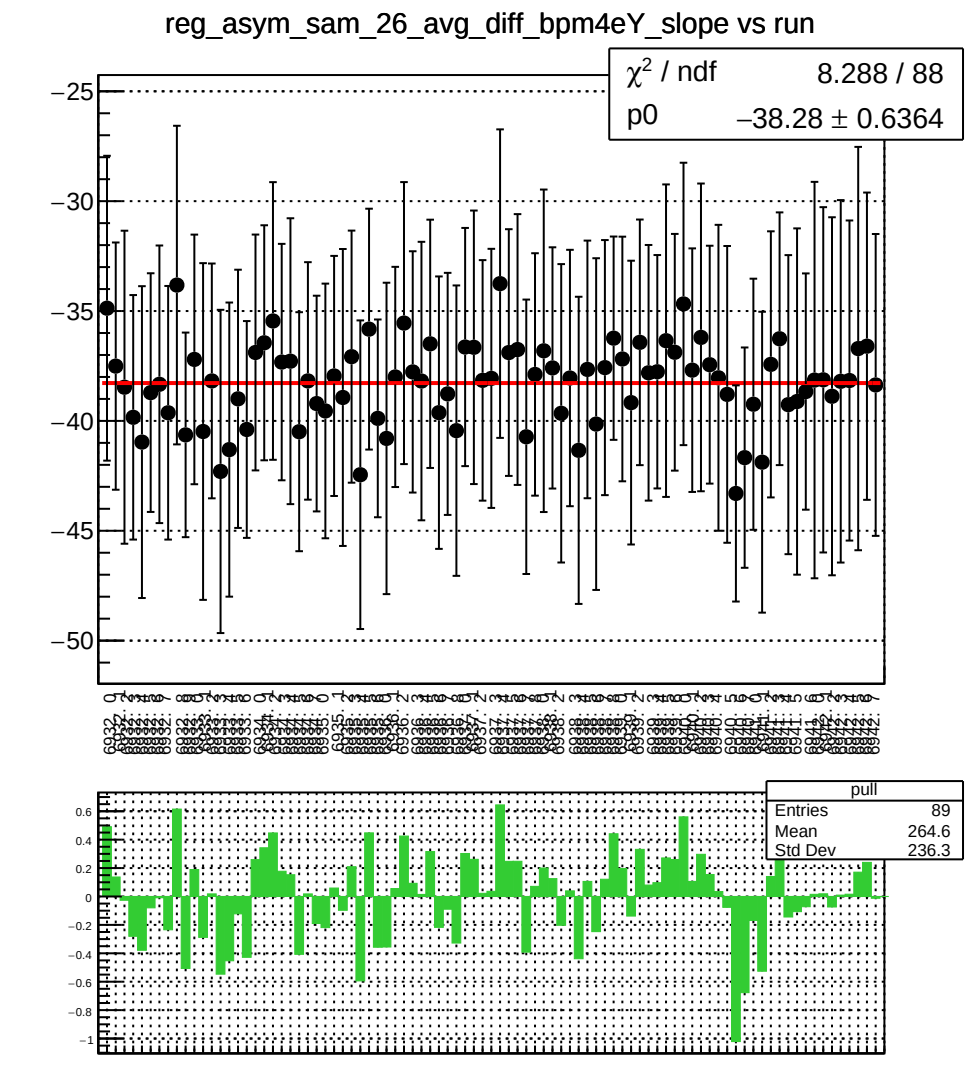

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 14.08 / 88
p0 −13.34 ± 0.8089
pull
Entries 89
Mean 130
Std Dev 28.03

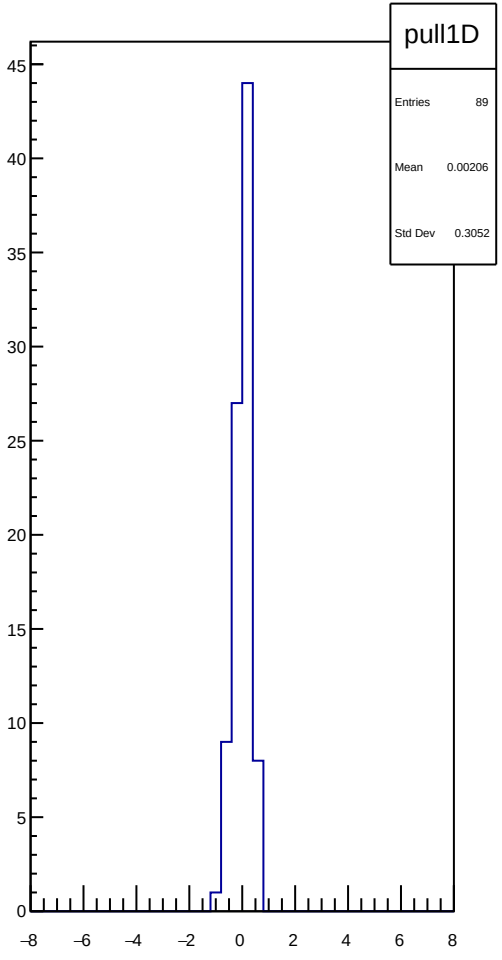

pull1D
Entries 89
Mean 0.008901
Std Dev 0.3976

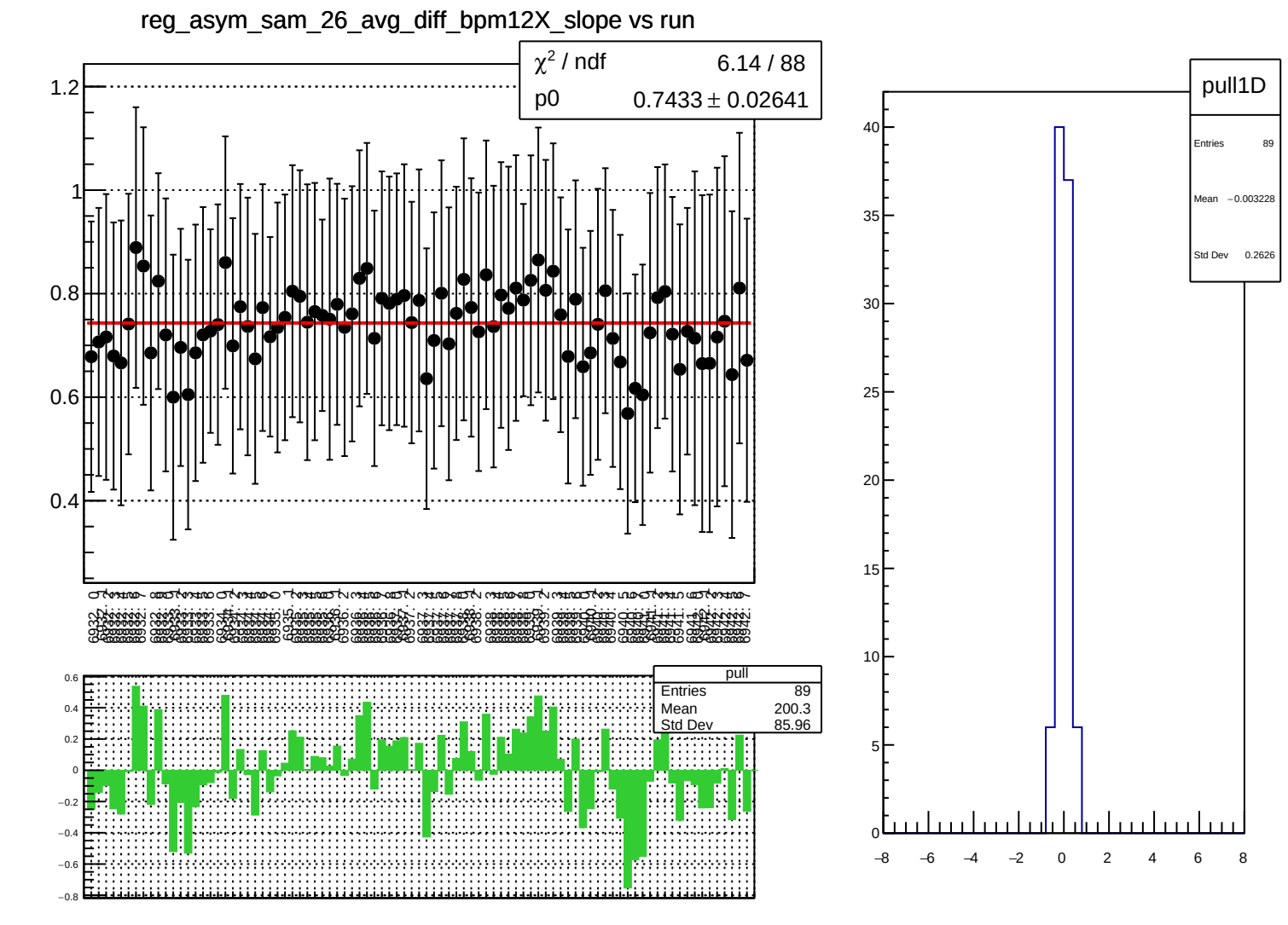

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.014 / 88
p0 3.857 ± 0.5491
pull
Entries 89
Mean 51.21
Std Dev 31.02
pull1D
Entries 89
Mean −0.02225
Std Dev 0.2798

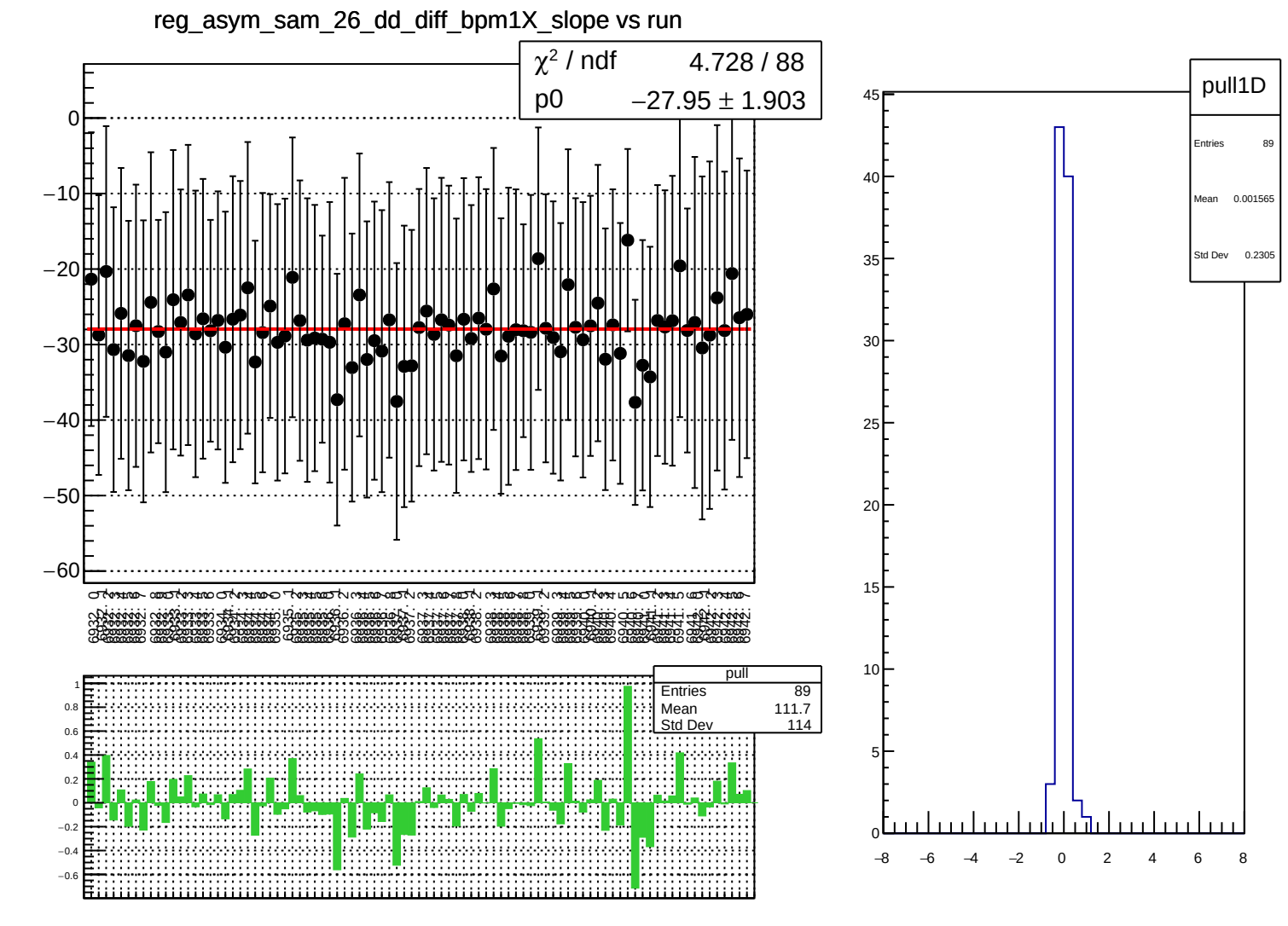

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 22.61 / 88
p0 −52.08 ± 0.7518
−40
−45
−50
−55
−60
−65
−70
pull
Entries 89
Mean 66.1
Std Dev 68.49
1
0.5
0
−0.5
−1
−1.5

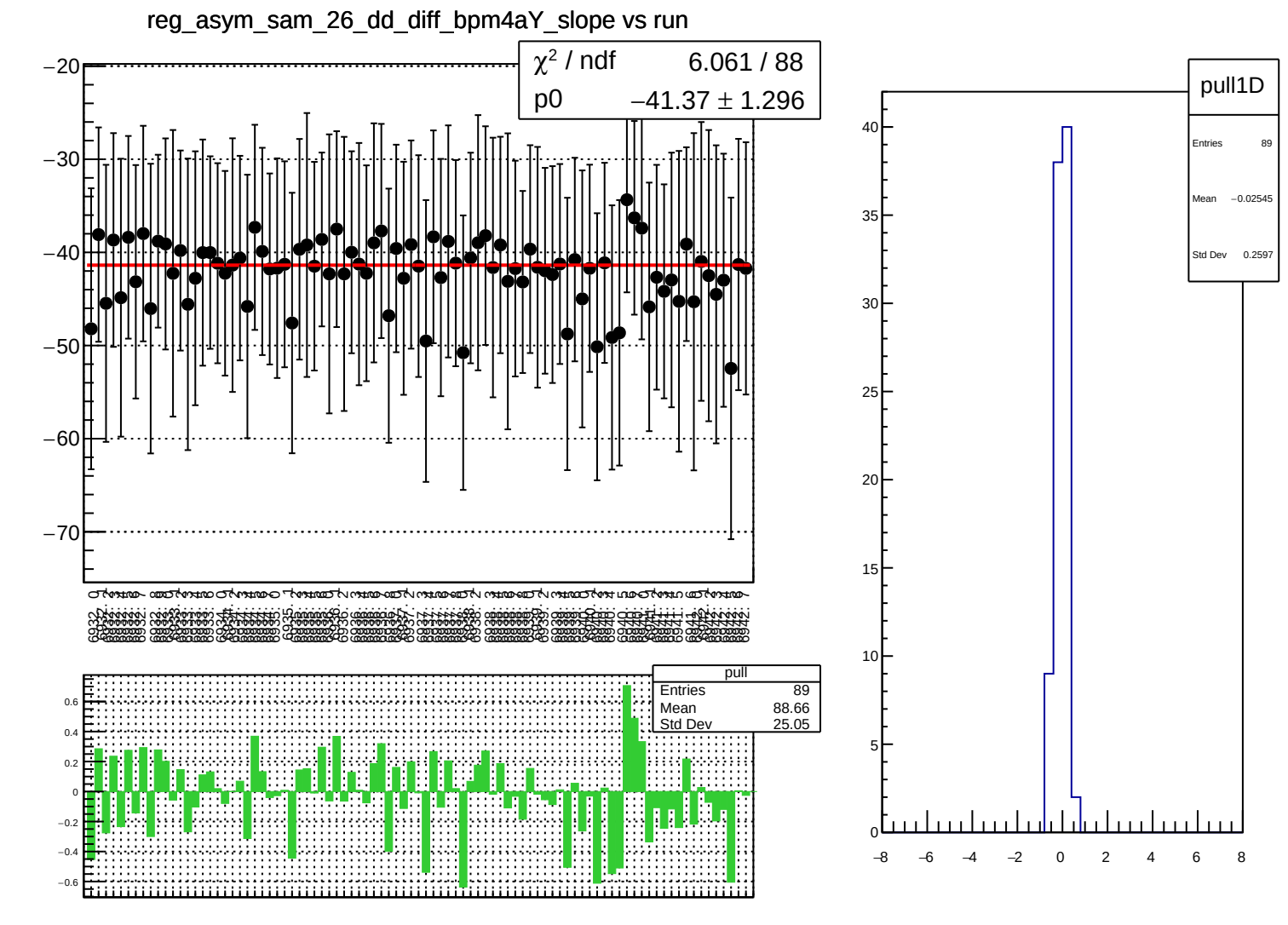

pull1D
Entries 89
Mean −0.0154
Std Dev 0.5038
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

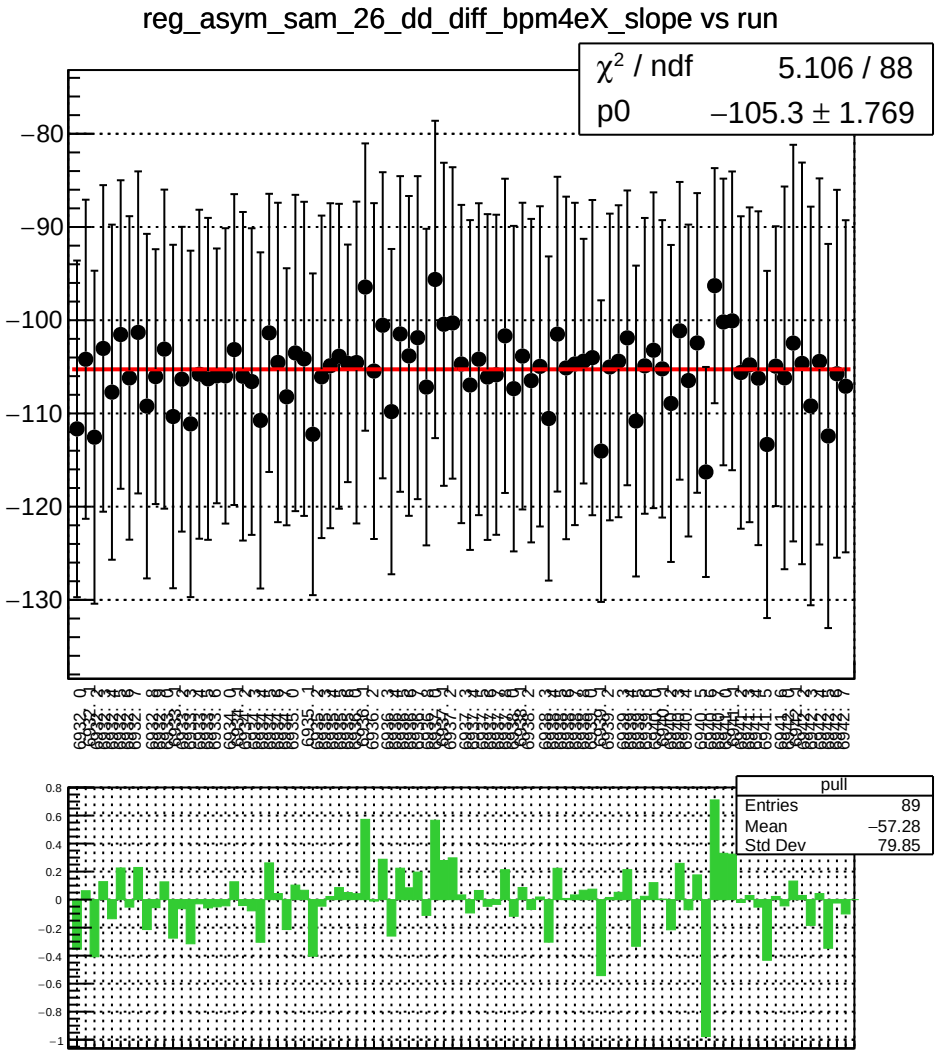

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.288 / 88
p0 −38.28 ± 0.6364
pull
Entries 89
Mean 264.6
Std Dev 236.3

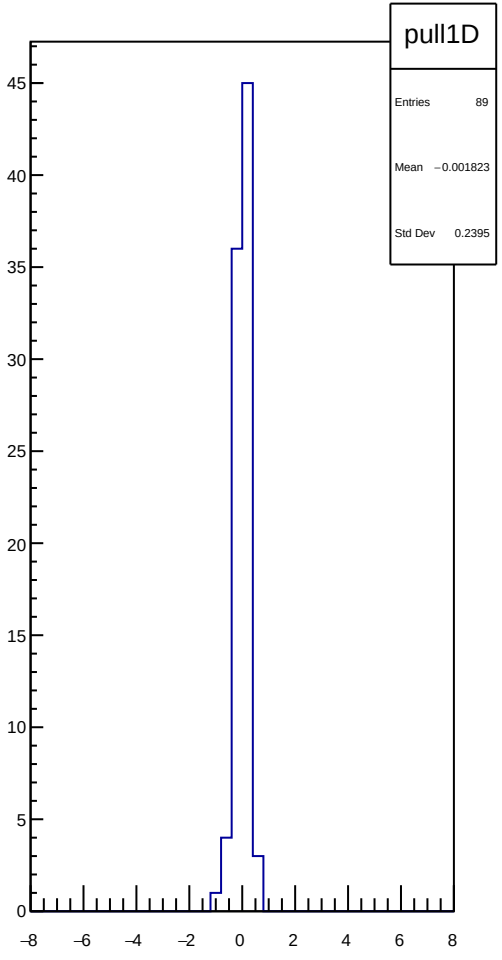

pull1D
Entries 89
Mean 0.00206
Std Dev 0.3052

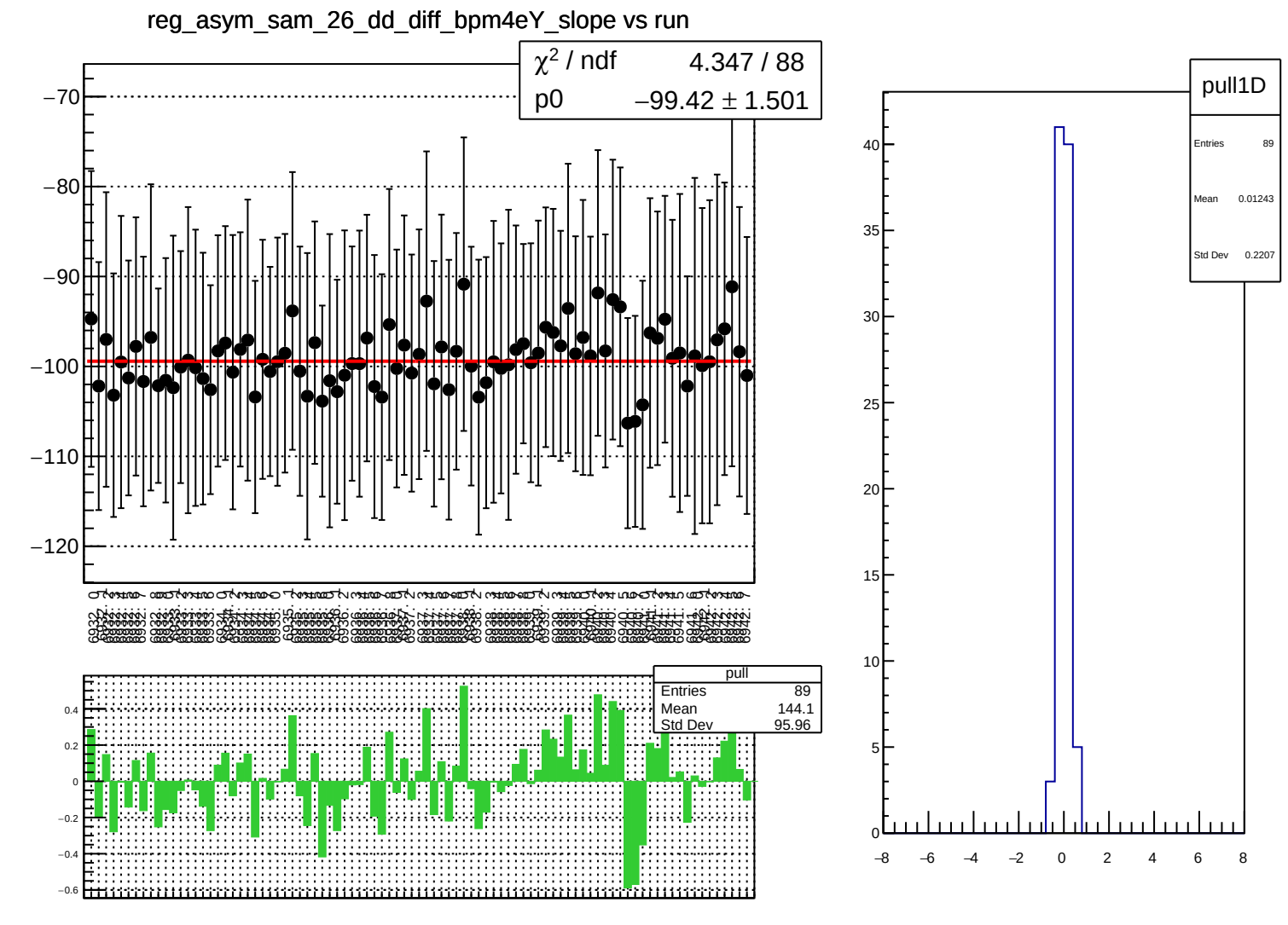

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 6.14 / 88
p0 0.7433 ± 0.02641
1.2
1
0.8
0.6
0.4
pull
Entries 89
Mean 200.3
Std Dev 85.96
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 89
Mean −0.003228
Std Dev 0.2626
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

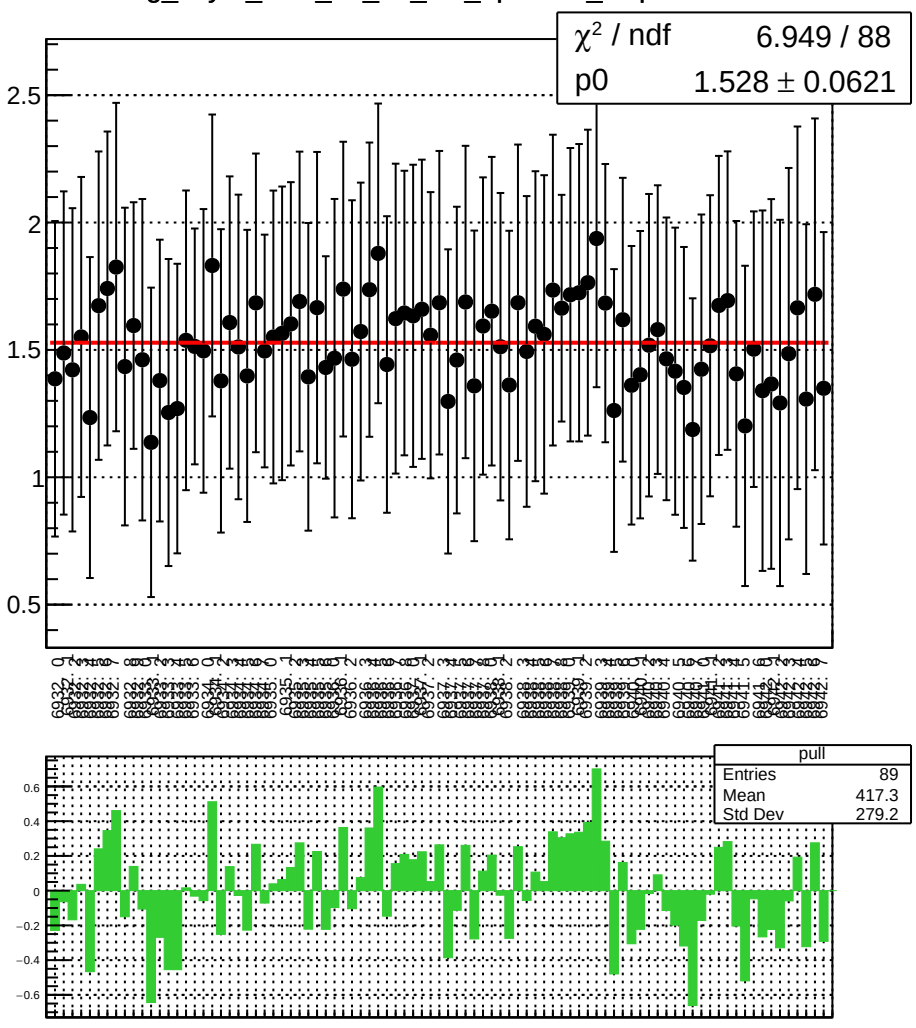

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 4.728 / 88
p0 −27.95 ± 1.903
pull
Entries 89
Mean 111.7
Std Dev 114
pull1D
Entries 89
Mean 0.001565
Std Dev 0.2305

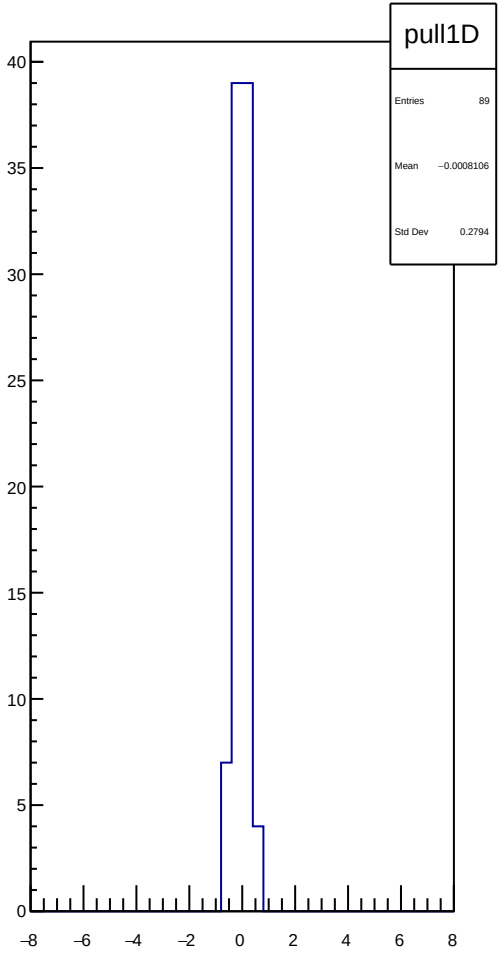

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.061 / 88
p0 −41.37 ± 1.296
pull
Entries 89
Mean 88.66
Std Dev 25.05
pull1D
Entries 89
Mean −0.02545
Std Dev 0.2597

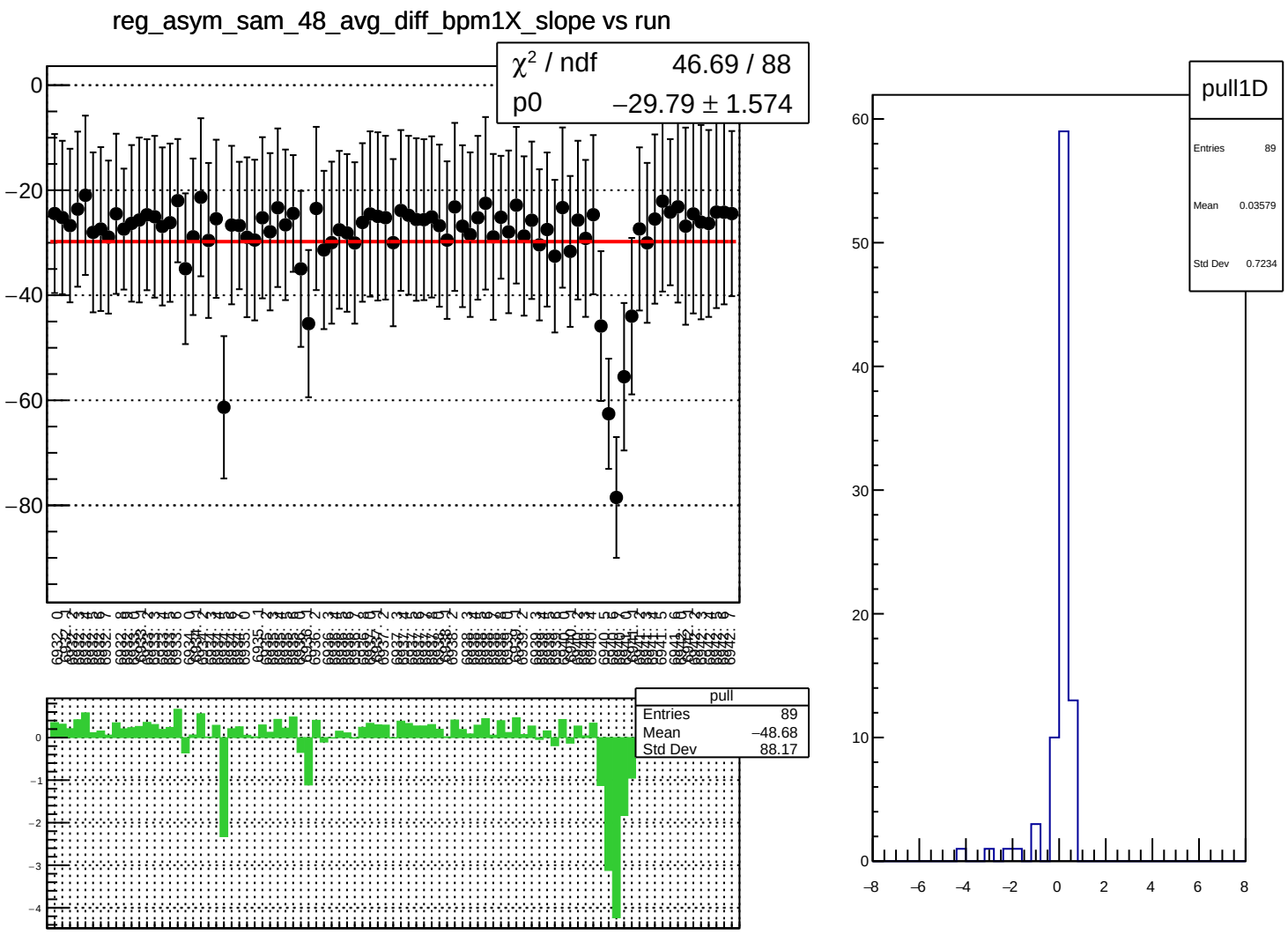

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.106 / 88
p0 −105.3 ± 1.769
−80
−90
−100
−110
−120
−130
pull
Entries 89
Mean −57.28
Std Dev 79.85
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

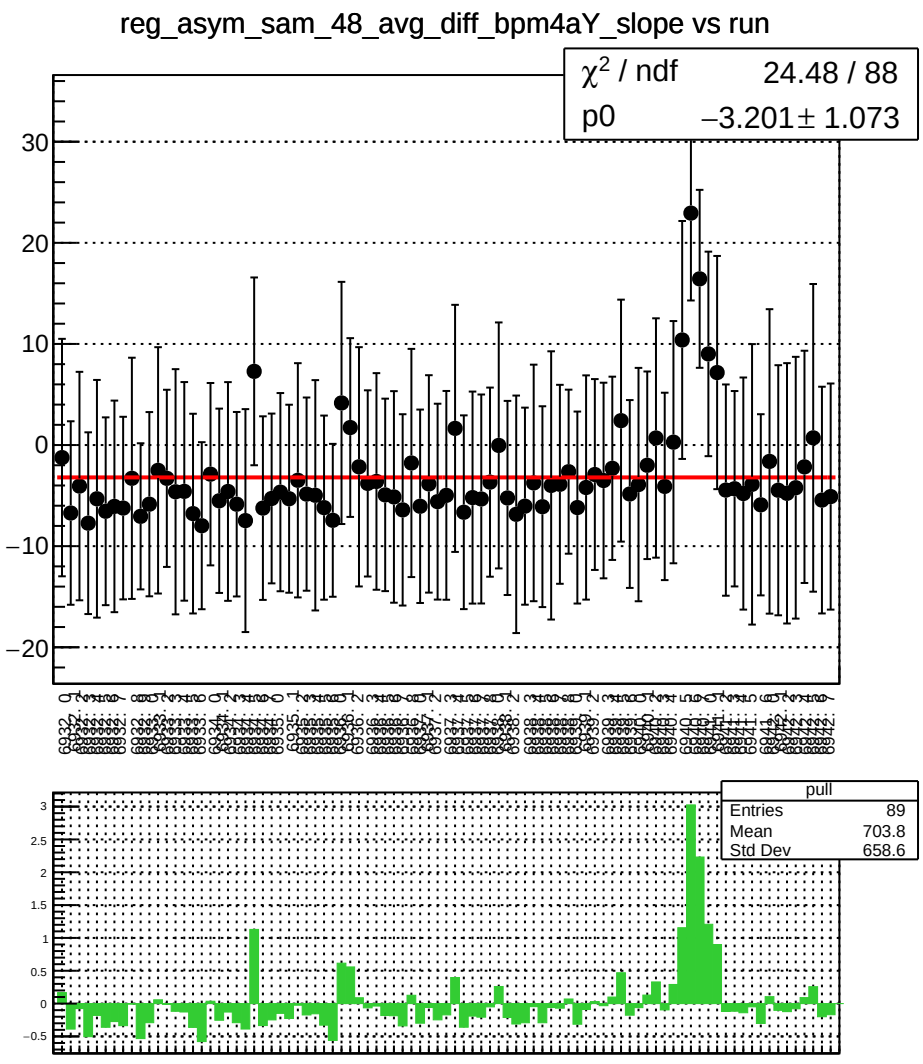

pull1D
Entries 89
Mean −0.001823
Std Dev 0.2395
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

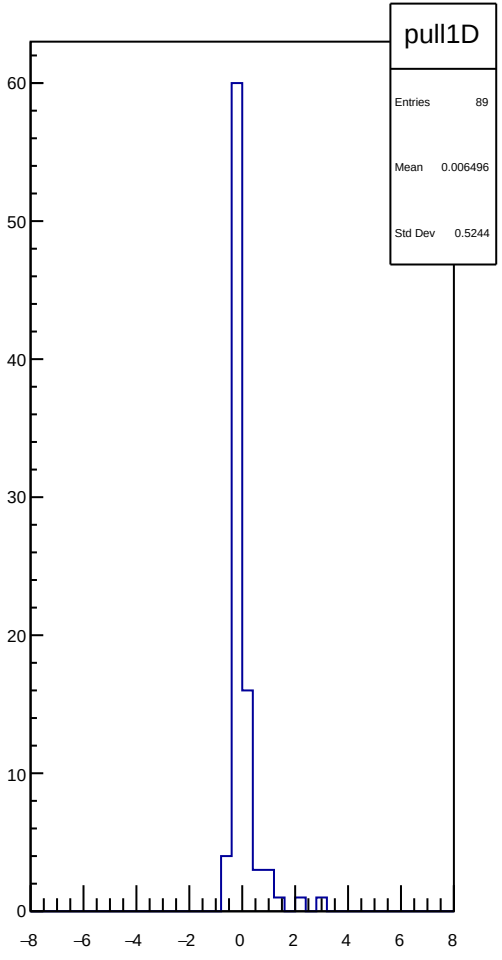

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.347 / 88
p0 −99.42 ± 1.501
−70
−80
−90
−100
−110
−120
pull
Entries 89
Mean 144.1
Std Dev 95.96
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 89
Mean 0.01243
Std Dev 0.2207
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

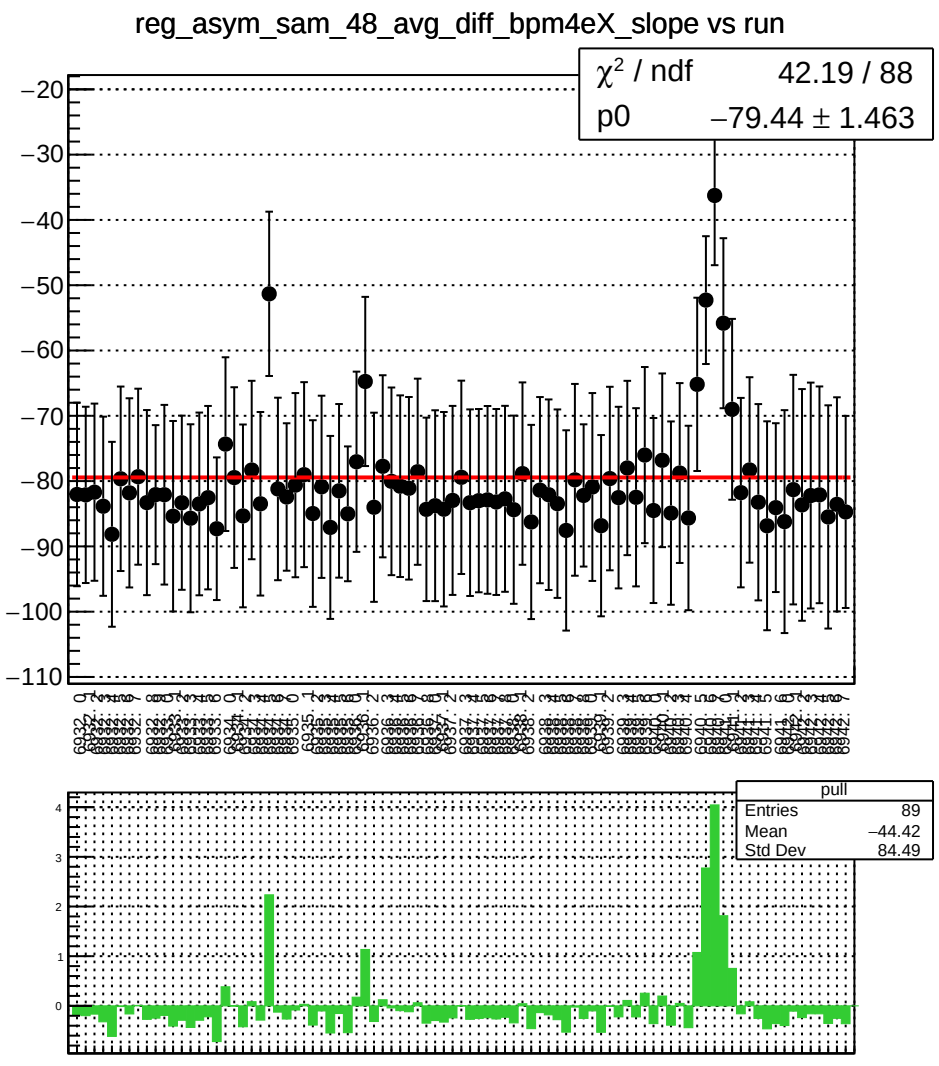

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 6.949 / 88
p0 1.528 ± 0.0621
2.5
2
1.5
1
0.5
pull
Entries 89
Mean 417.3
Std Dev 279.2
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

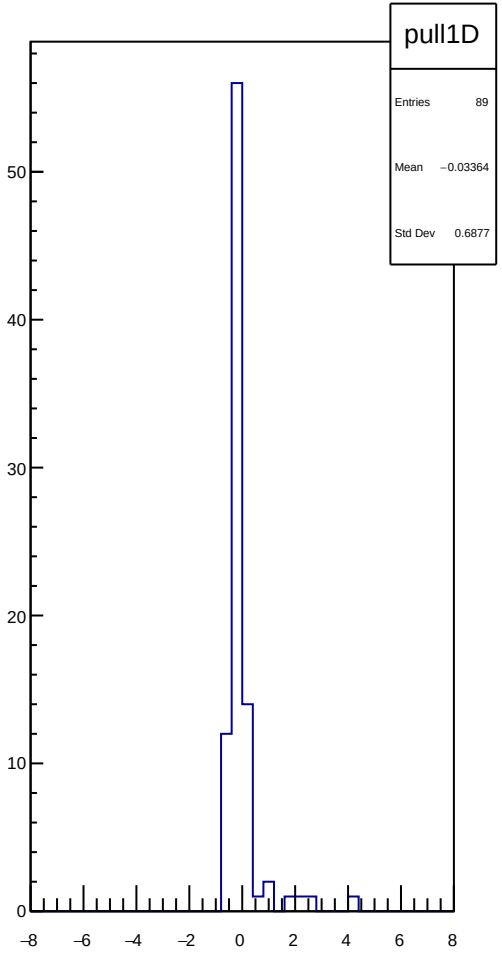

pull1D
Entries 89
Mean −0.0008106
Std Dev 0.2794
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

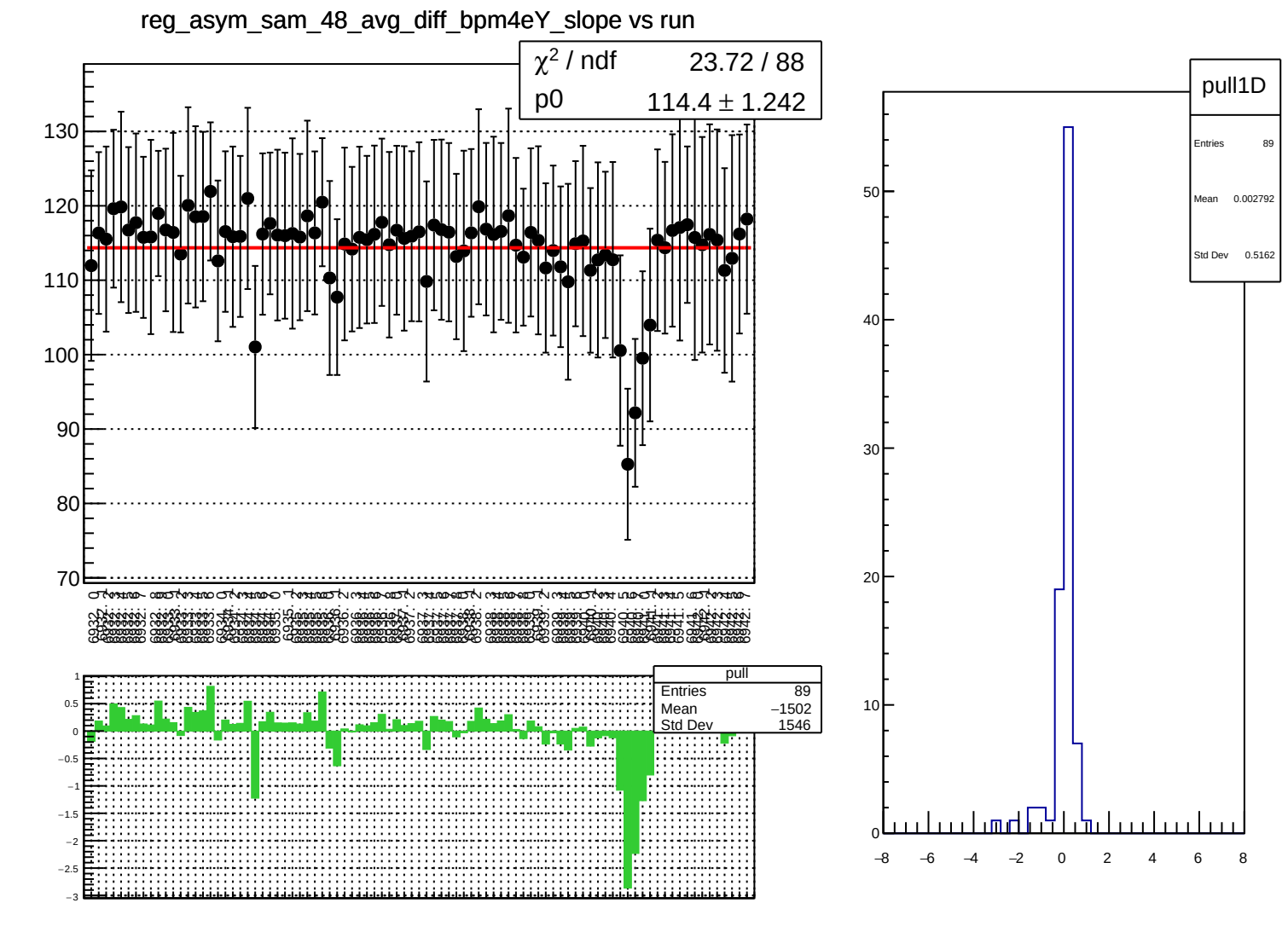

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 46.69 / 88
p0 −29.79 ± 1.574
0
−20
−40
−60
−80
pull
Entries 89
Mean −48.68
Std Dev 88.17
pull1D
Entries 89
Mean 0.03579
Std Dev 0.7234
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

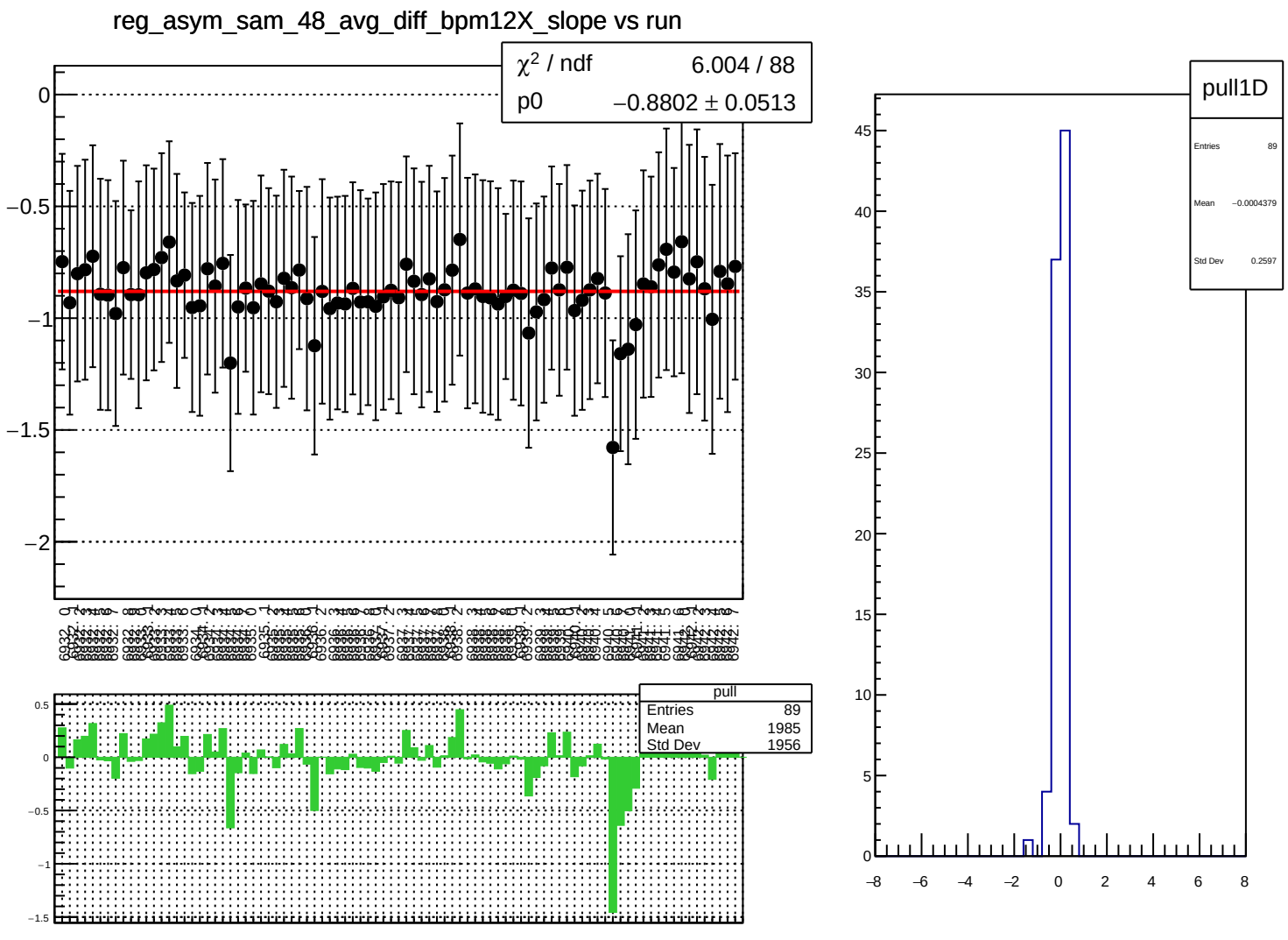

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 24.48 / 88
p0 −3.201± 1.073
pull
Entries 89
Mean 703.8
Std Dev 658.6

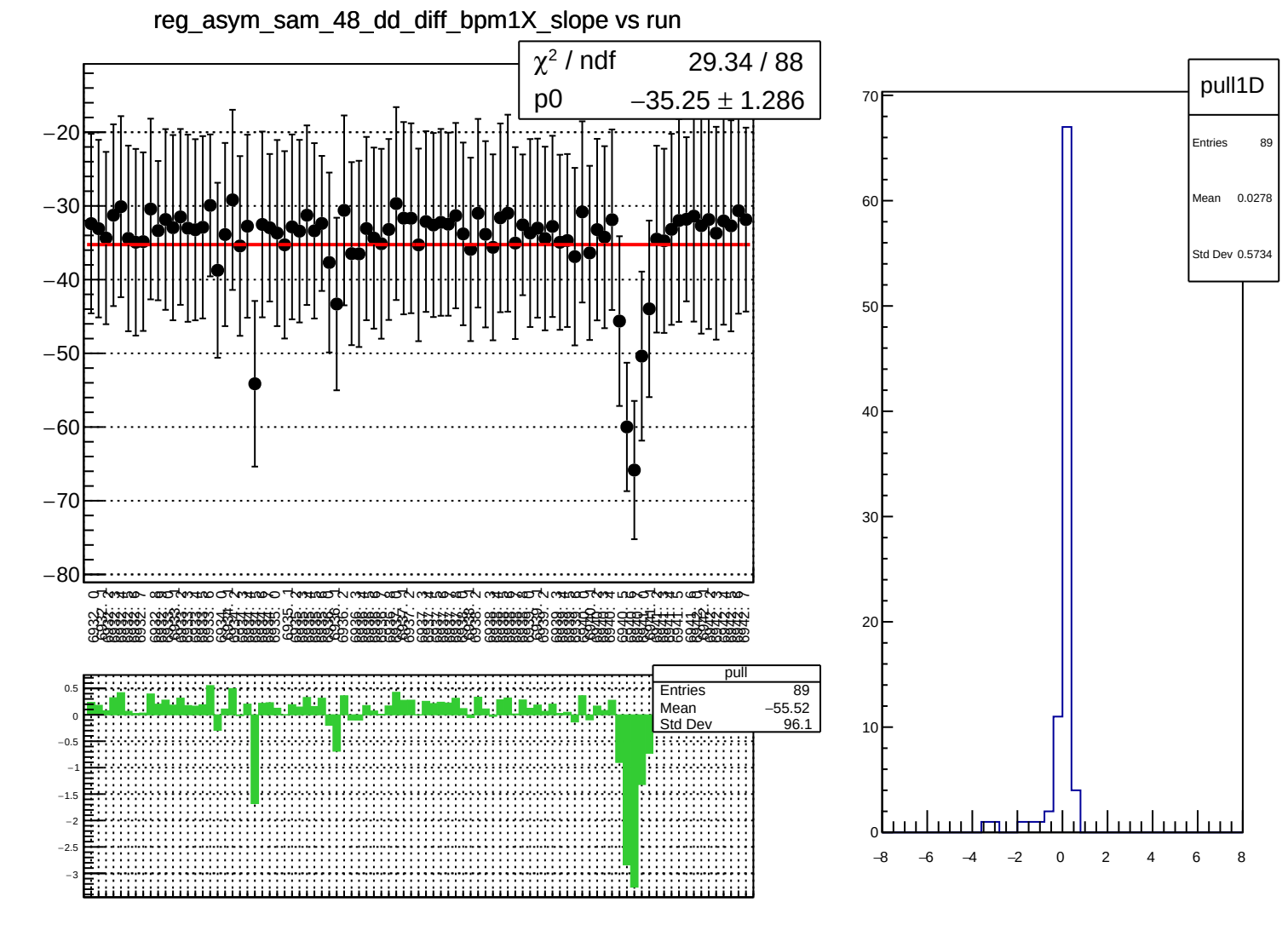

pull1D
Entries 89
Mean 0.006496
Std Dev 0.5244

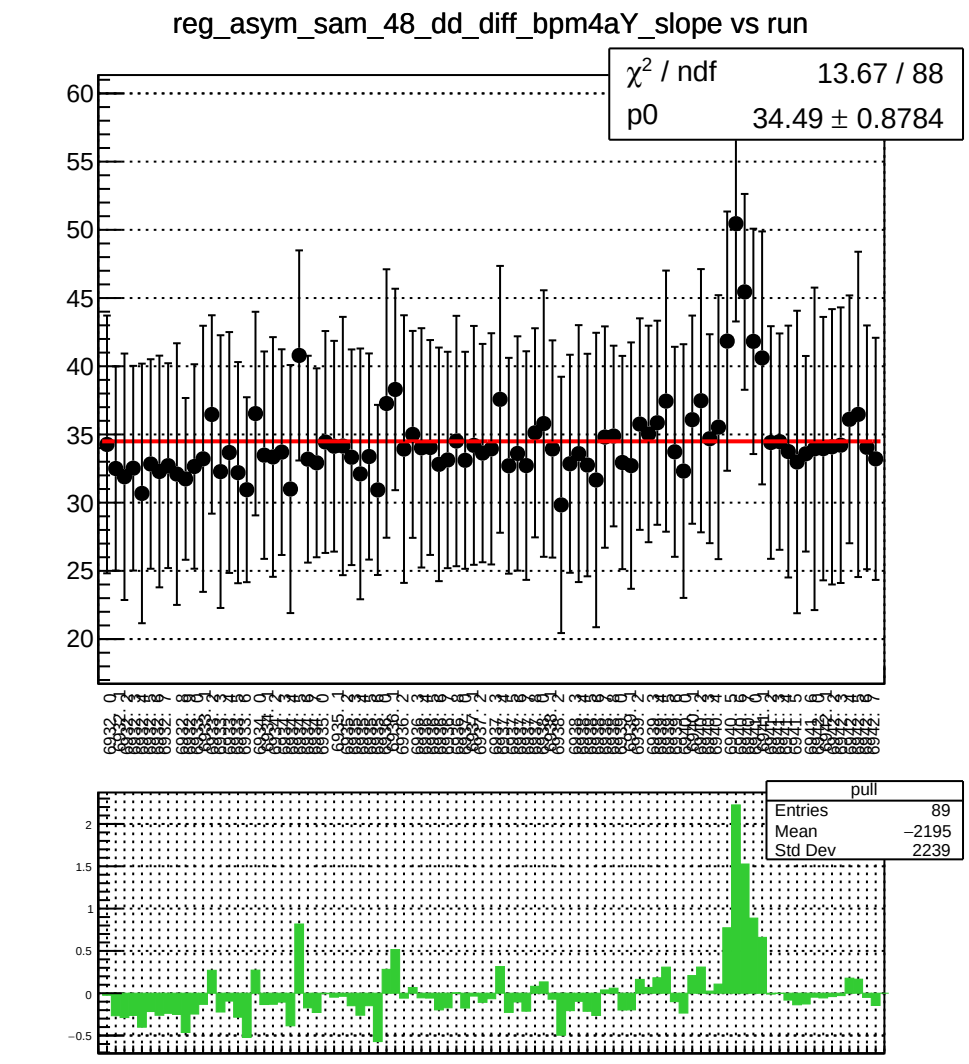

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 42.19 / 88
p0 −79.44 ± 1.463
pull
Entries 89
Mean −44.42
Std Dev 84.49

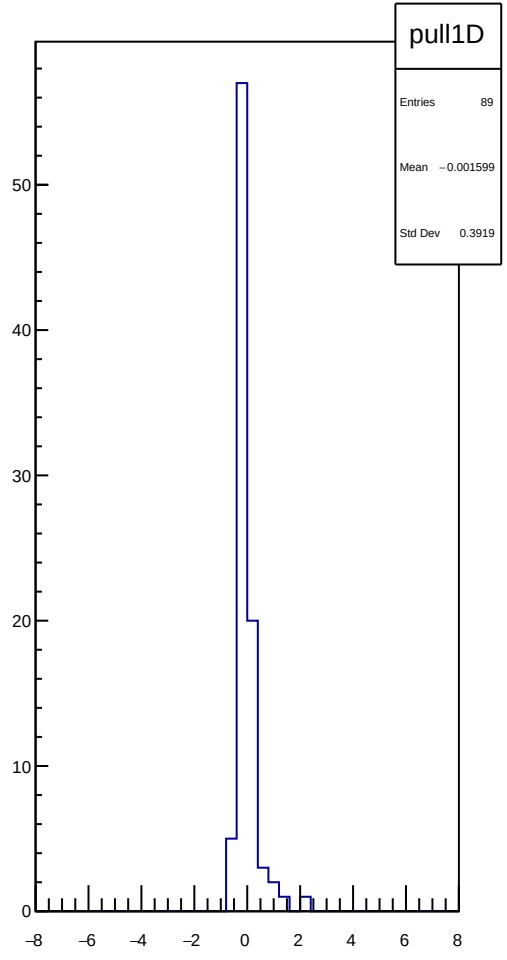

pull1D
Entries 89
Mean −0.03364
Std Dev 0.6877

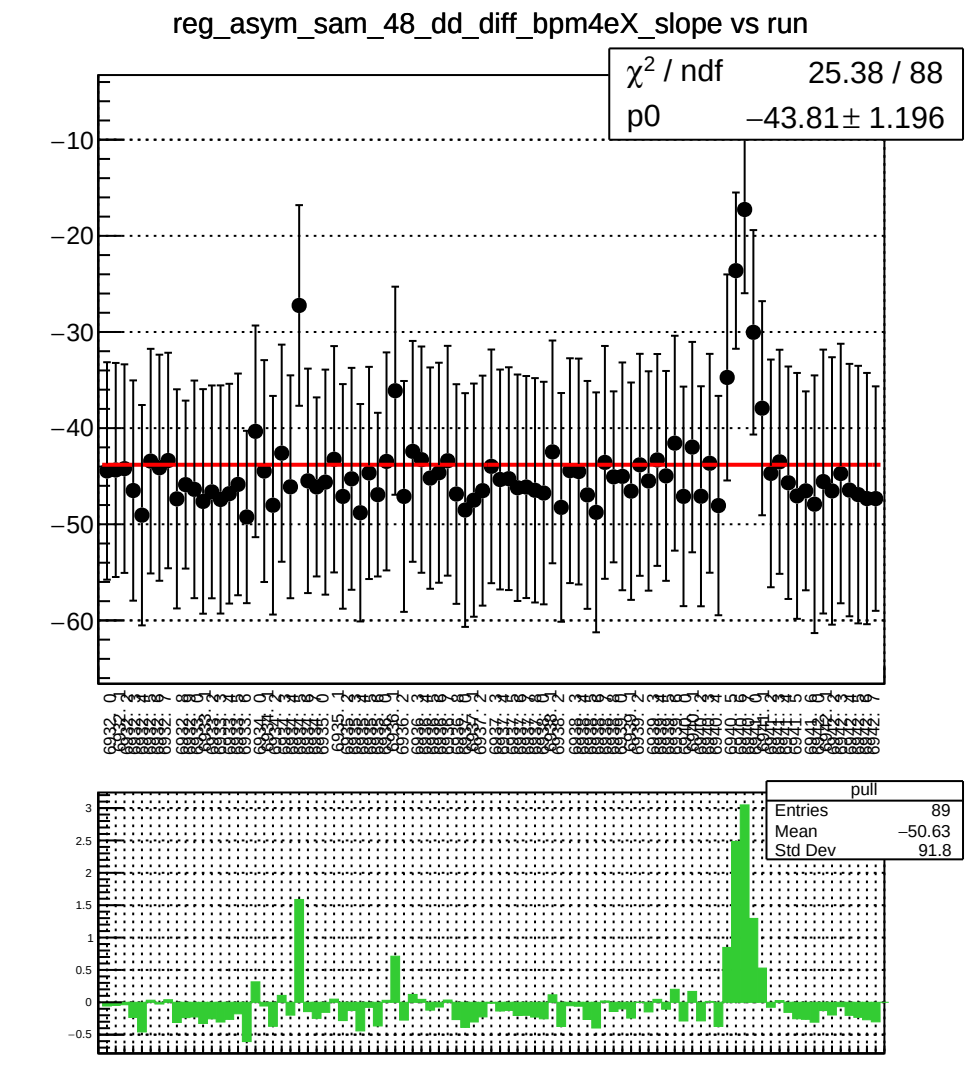

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 23.72 / 88
p0 114.4 ± 1.242
130
120
110
100
90
80
70
pull
Entries 89
Mean −1502
Std Dev 1546
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
pull1D
Entries 89
Mean 0.002792
Std Dev 0.5162
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

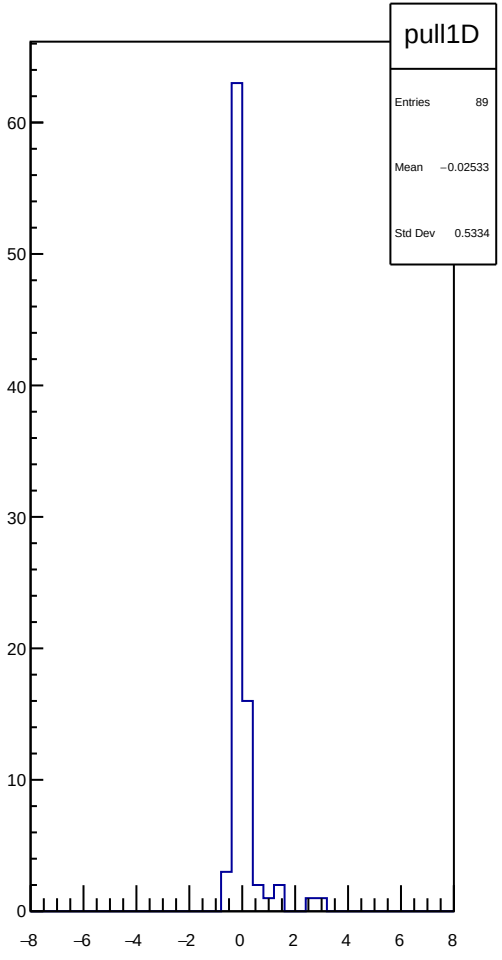

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 6.004 / 88
p0 −0.8802 ± 0.0513
0
−0.5
−1
−1.5
−2
pull
Entries 89
Mean 1985
Std Dev 1956
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean −0.0004379
Std Dev 0.2597
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

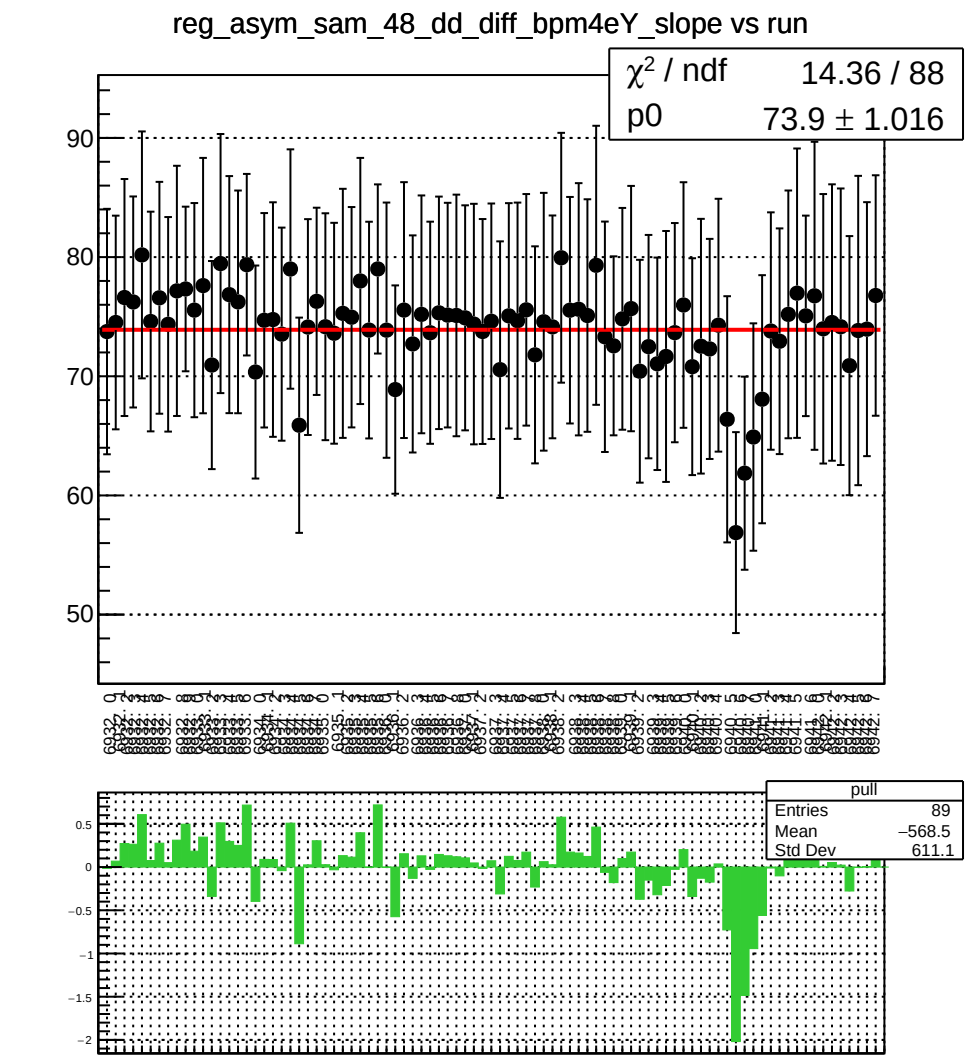

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 29.34 / 88
p0 −35.25 ± 1.286
pull
Entries 89
Mean −55.52
Std Dev 96.1
pull1D
Entries 89
Mean 0.0278
Std Dev 0.5734

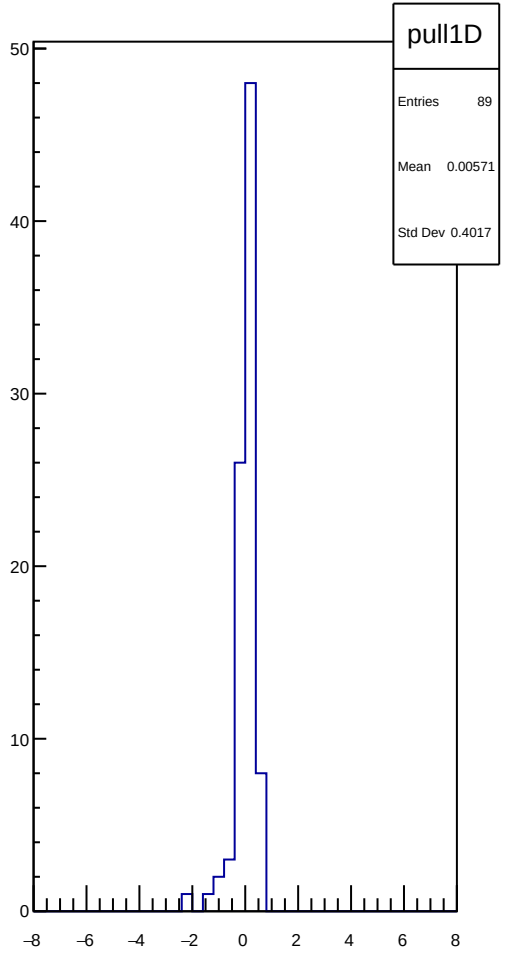

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.67 / 88
p0 34.49 ± 0.8784
pull
Entries 89
Mean −2195
Std Dev 2239

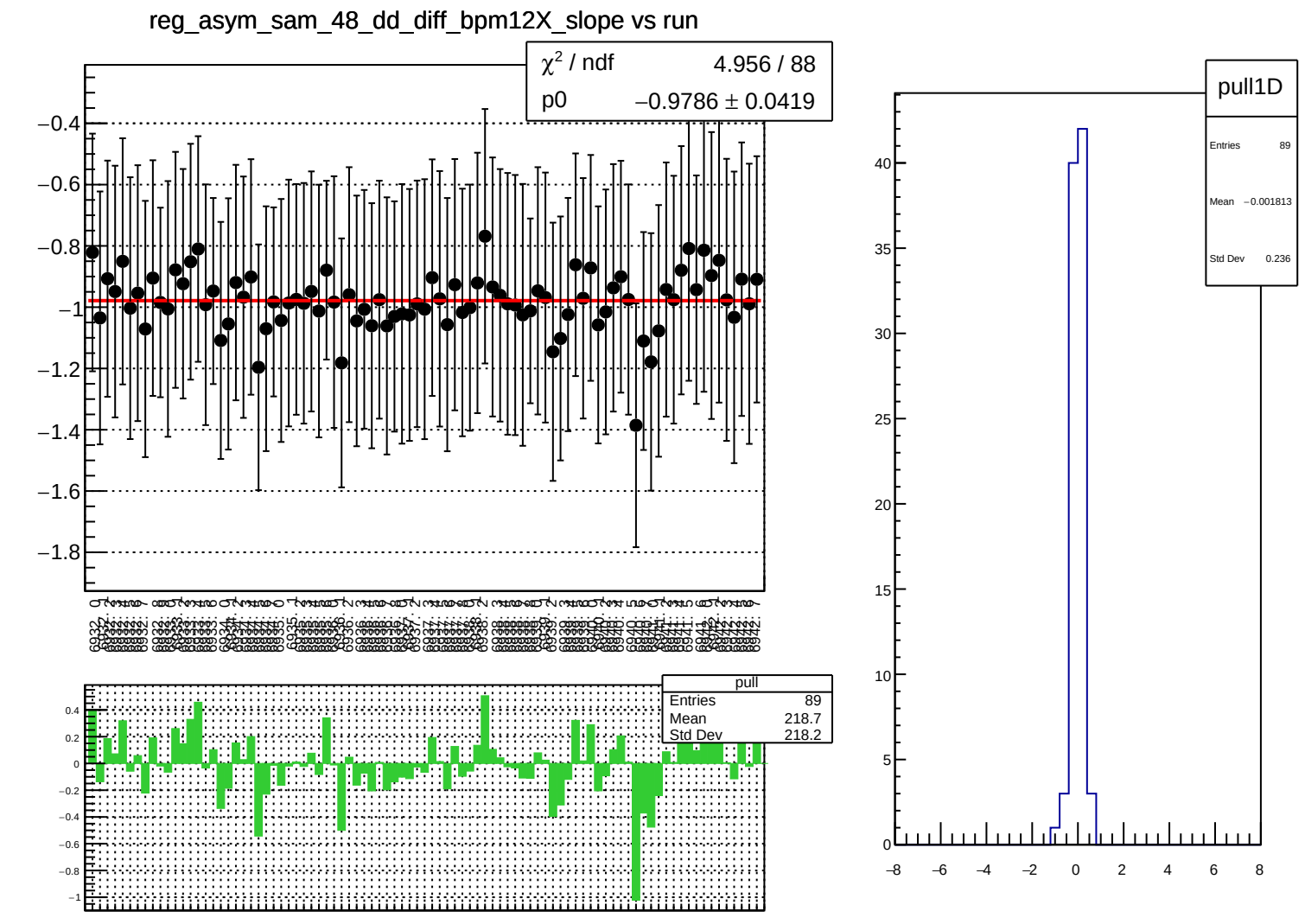

pull1D
Entries 89
Mean −0.001599
Std Dev 0.3919

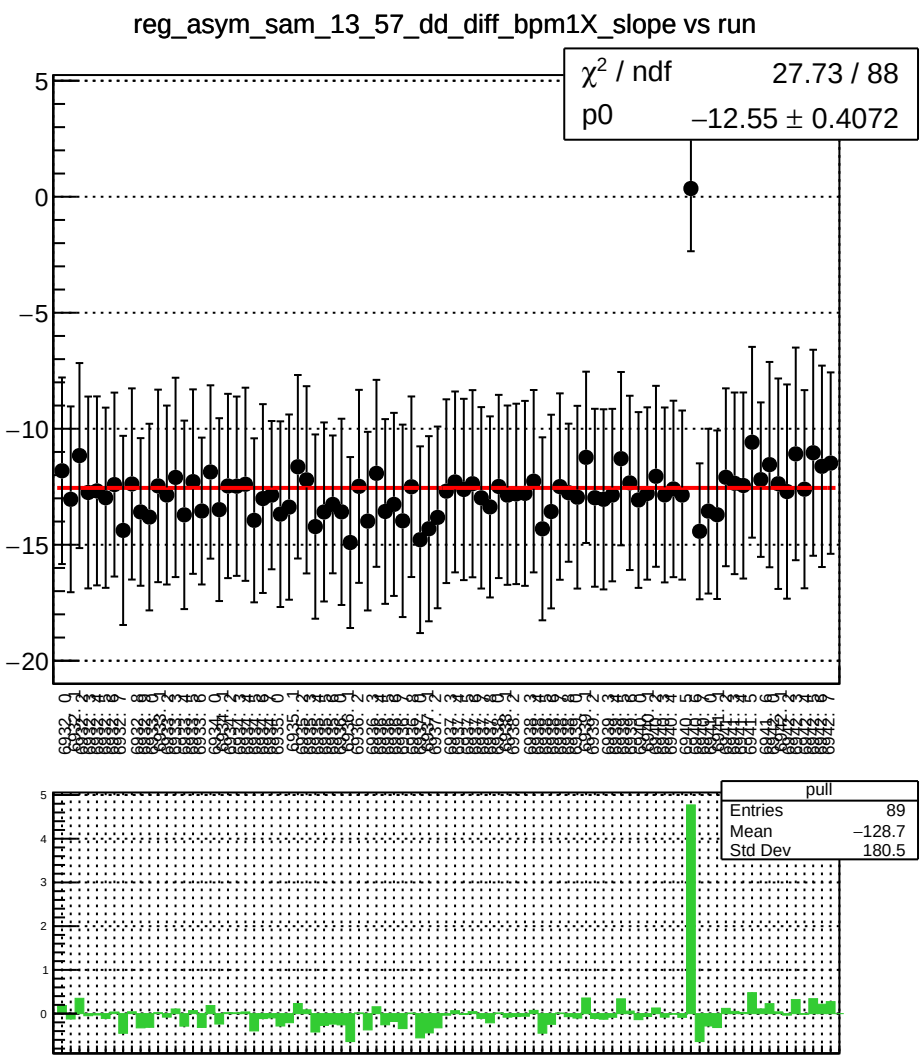

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 25.38 / 88
p0 −43.81 ± 1.196
pull
Entries 89
Mean −50.63
Std Dev 91.8

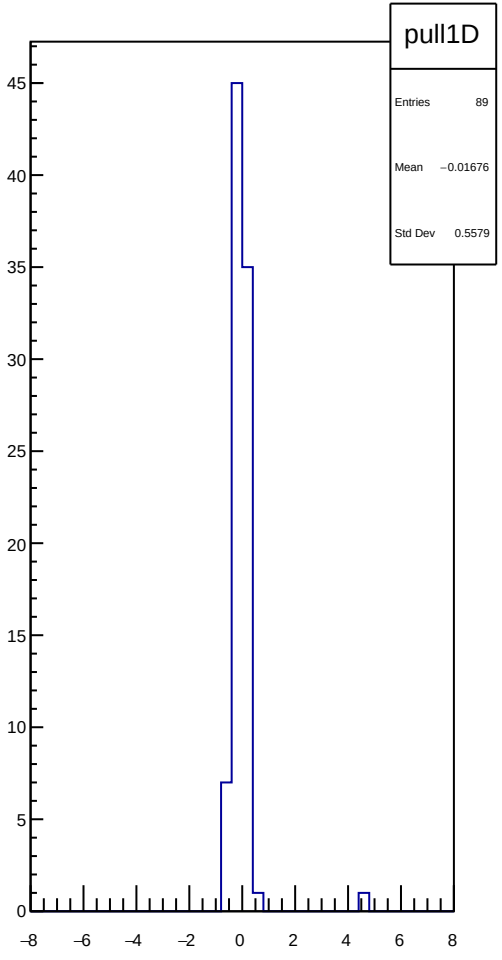

pull1D
Entries 89
Mean −0.02533
Std Dev 0.5334

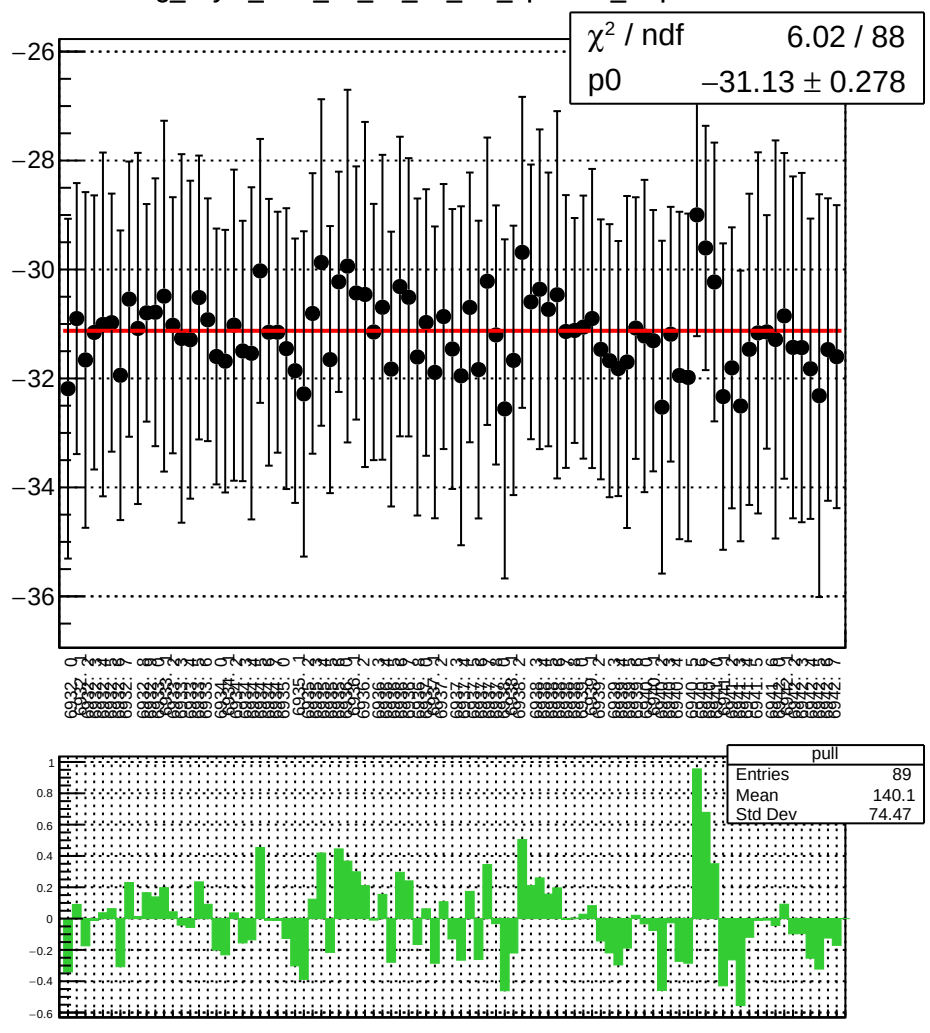

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.36 / 88
p0 73.9 ± 1.016
90
80
70
60
50
pull
Entries 89
Mean −568.5
Std Dev 611.1
0.5
0
−0.5
−1
−1.5
−2

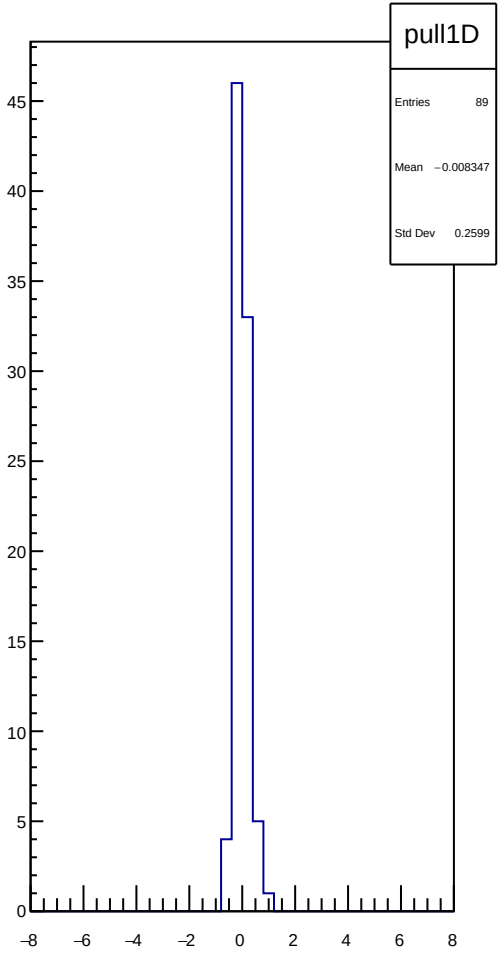

pull1D
Entries 89
Mean 0.00571
Std Dev 0.4017
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

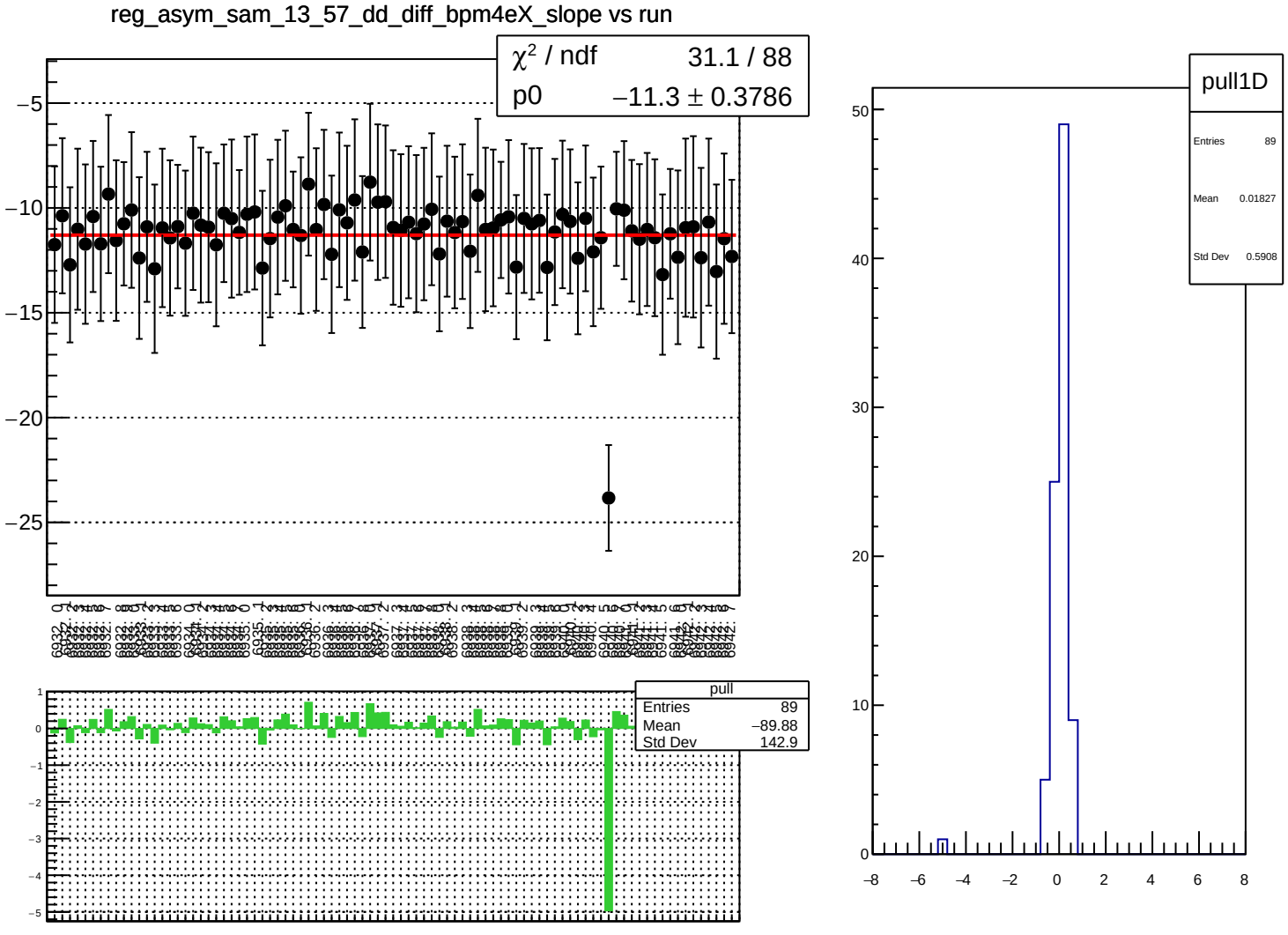

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 4.956 / 88
p0 −0.9786 ± 0.0419
pull
Entries 89
Mean 218.7
Std Dev 218.2
pull1D
Entries 89
Mean −0.001813
Std Dev 0.236

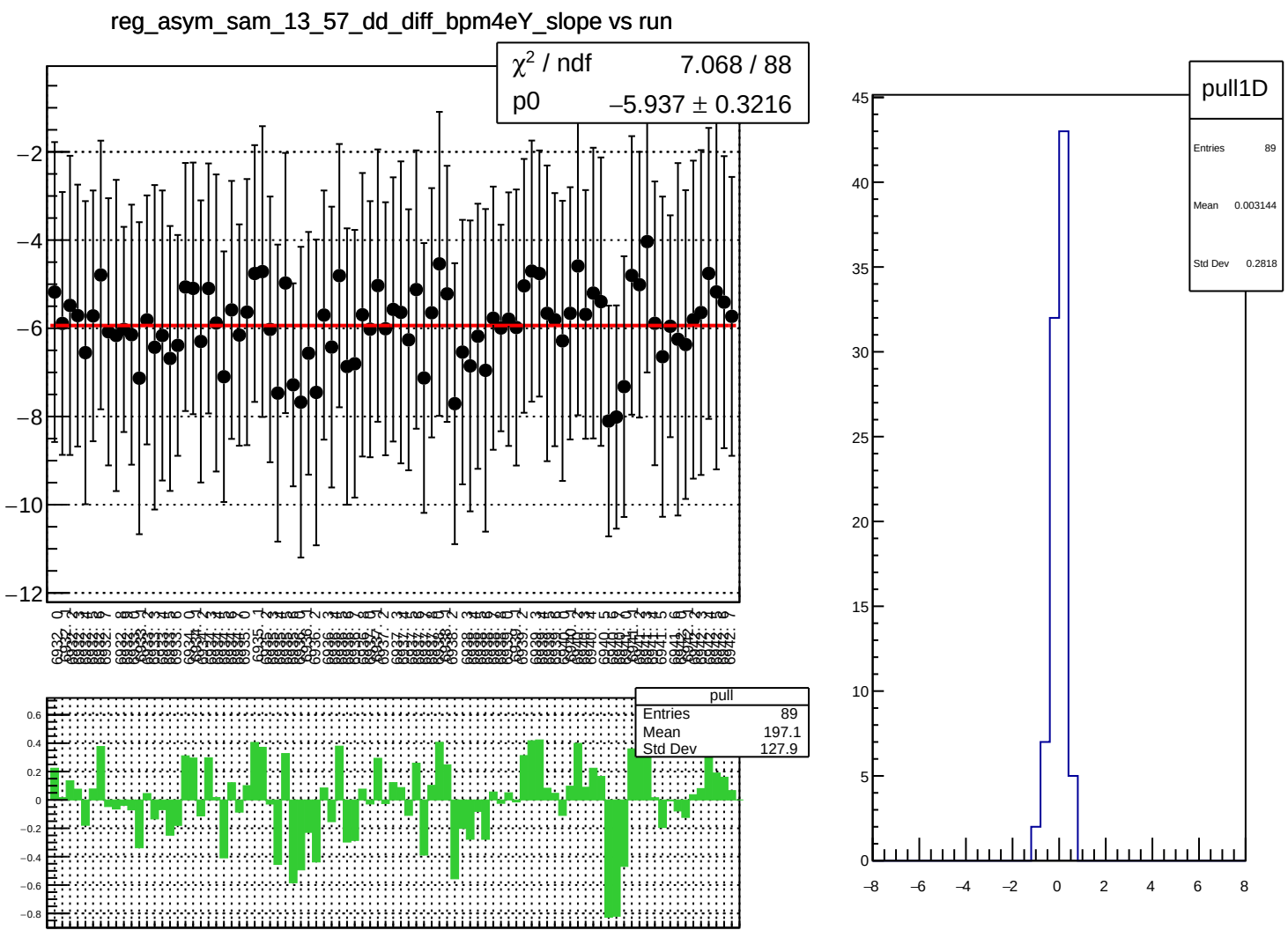

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 27.73 / 88
p0 −12.55 ± 0.4072
pull
Entries 89
Mean −128.7
Std Dev 180.5

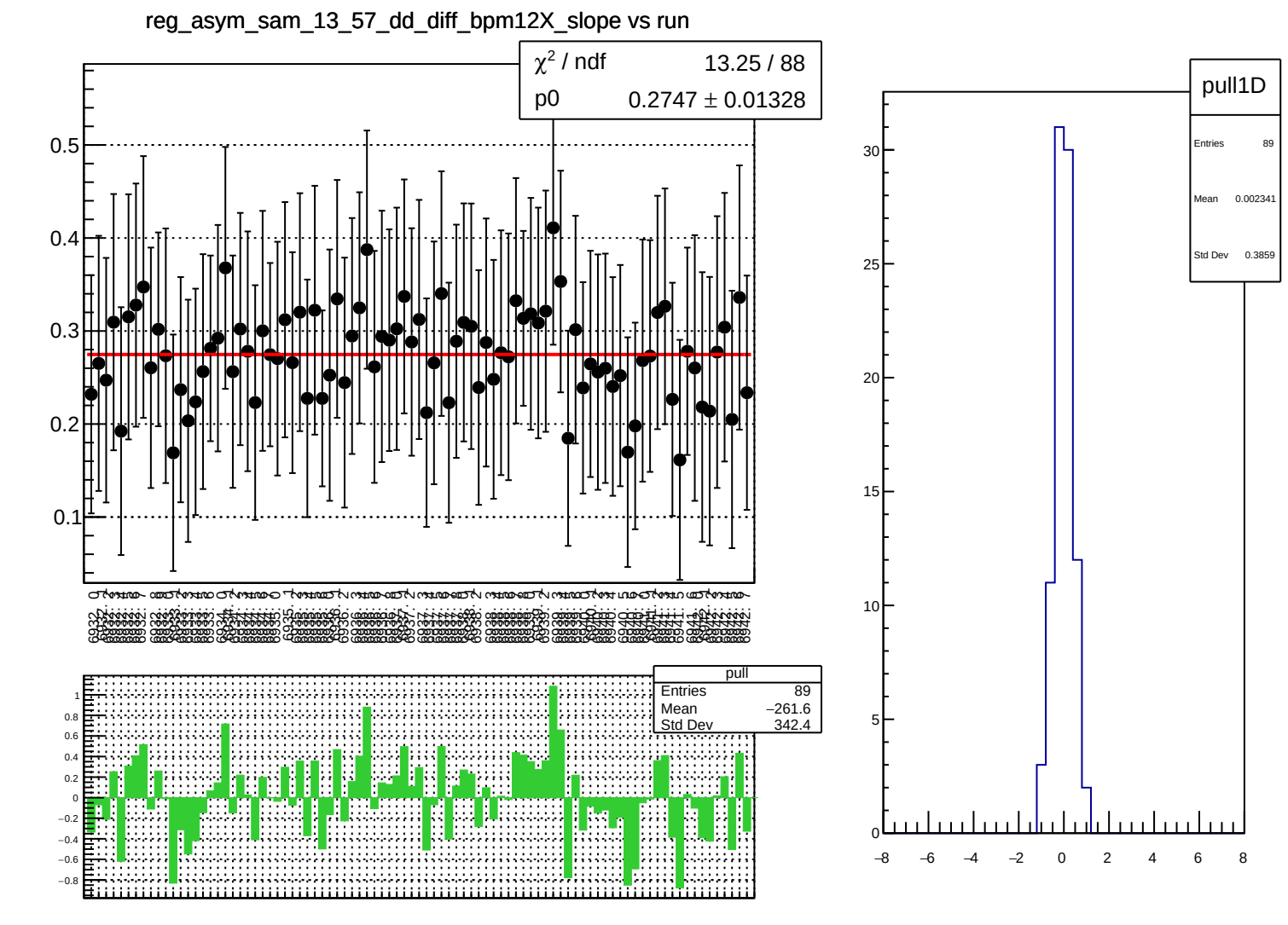

pull1D
Entries 89
Mean −0.01676
Std Dev 0.5579

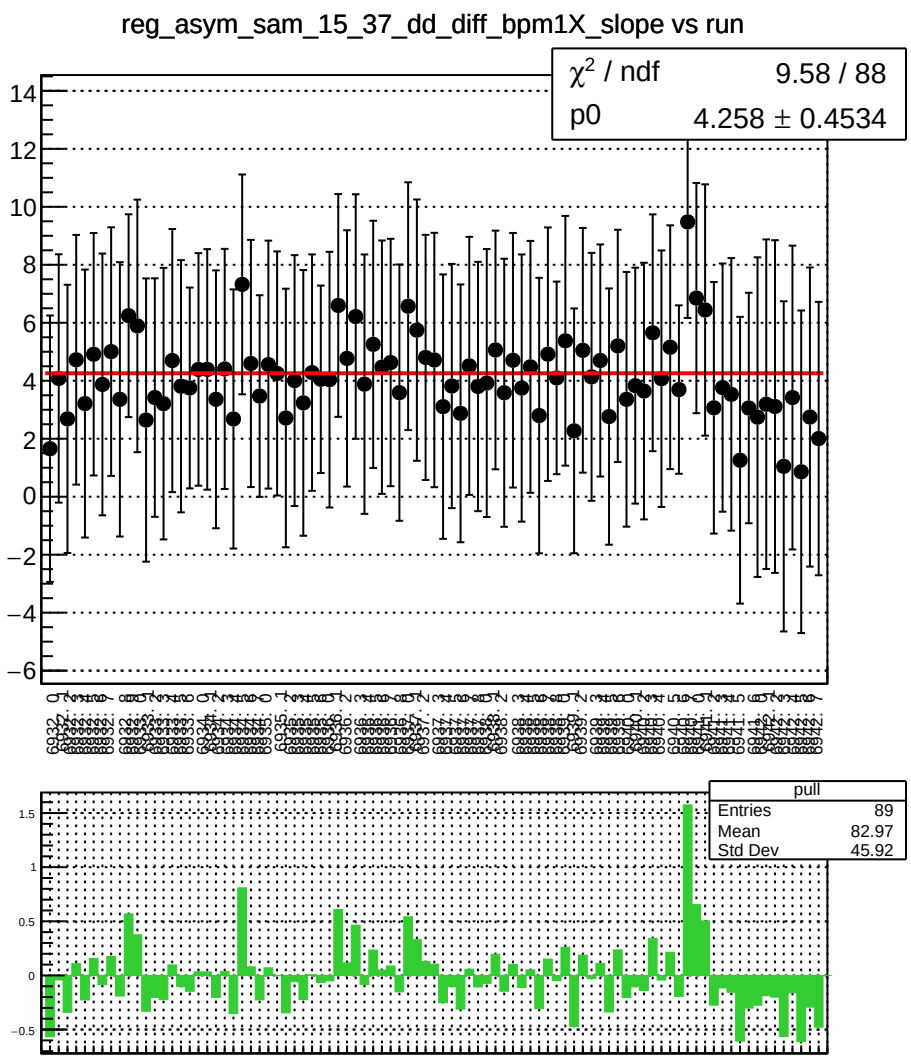

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.02 / 88
p0 −31.13 ± 0.278
−26
−28
−30
−32
−34
−36
pull
Entries 89
Mean 140.1
Std Dev 74.47
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

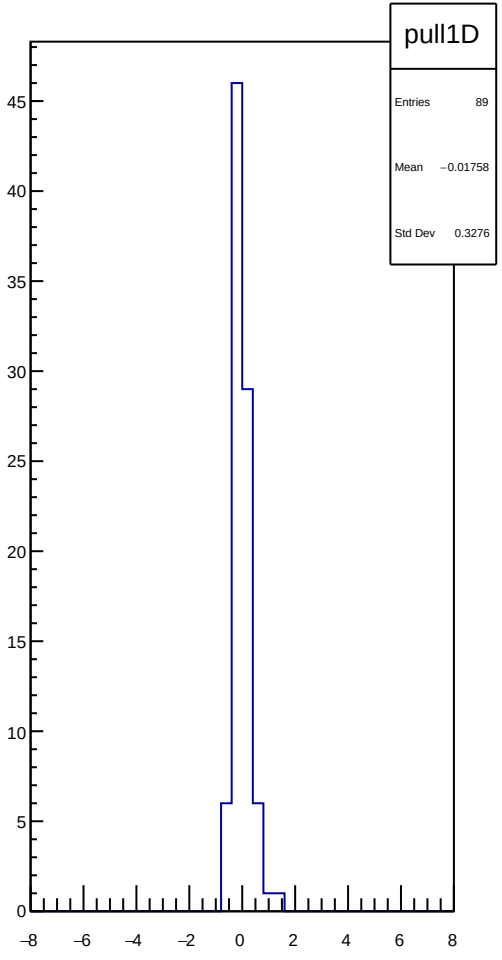

pull1D
Entries 89
Mean −0.008347
Std Dev 0.2599
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

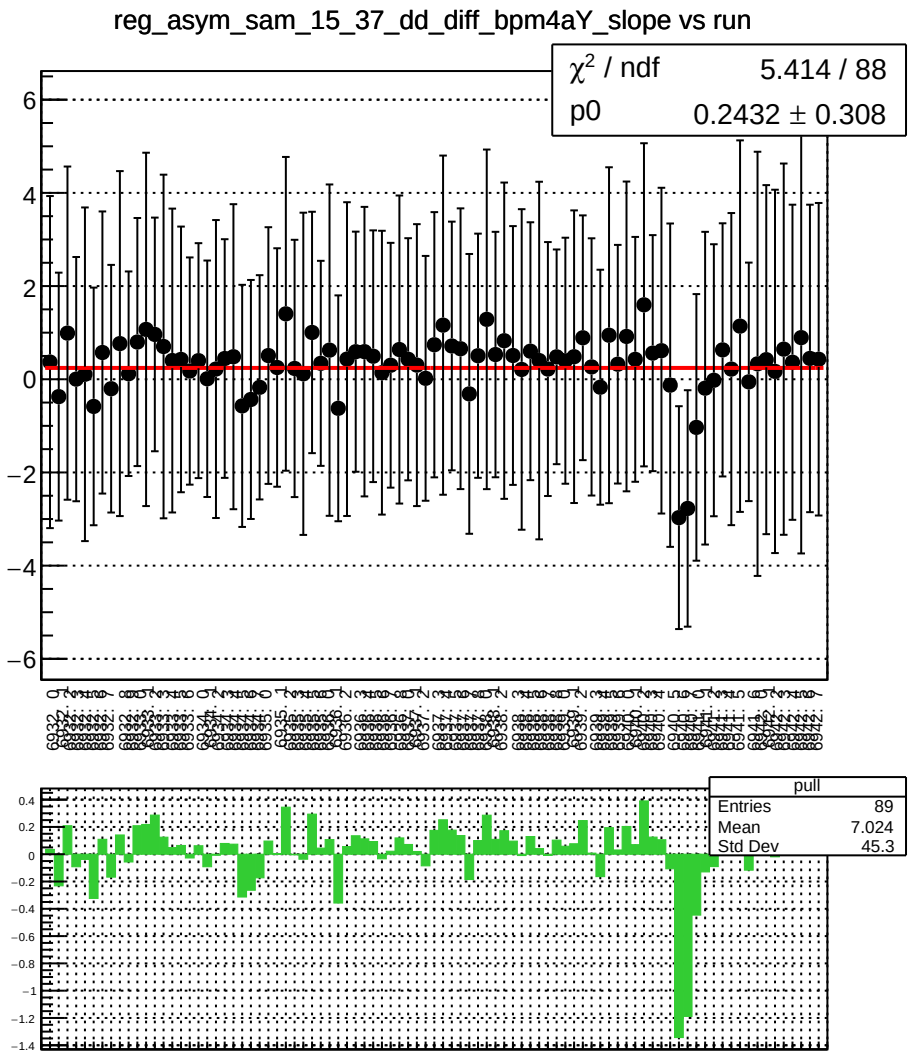

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 31.1 / 88
p0 −11.3 ± 0.3786
pull
Entries 89
Mean −89.88
Std Dev 142.9
pull1D
Entries 89
Mean 0.01827
Std Dev 0.5908

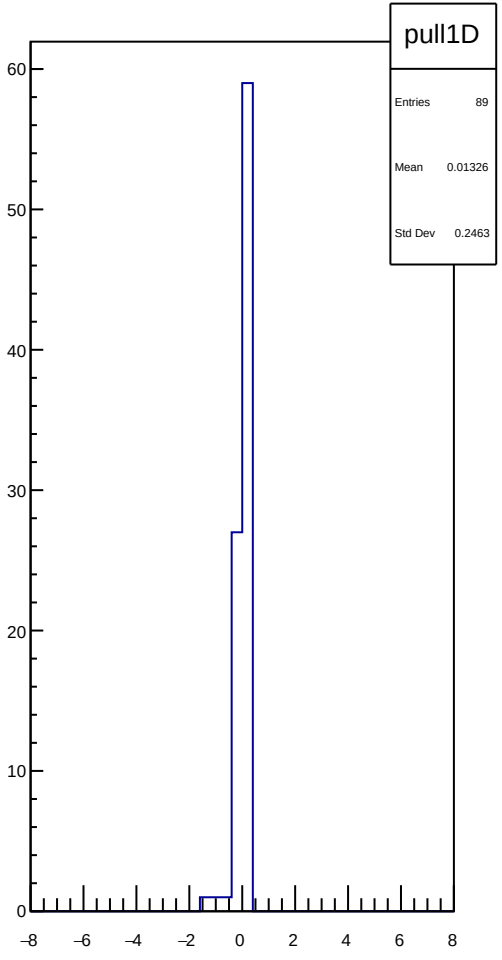

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.068 / 88
p0 −5.937 ± 0.3216
pull
Entries 89
Mean 197.1
Std Dev 127.9
pull1D
Entries 89
Mean 0.003144
Std Dev 0.2818

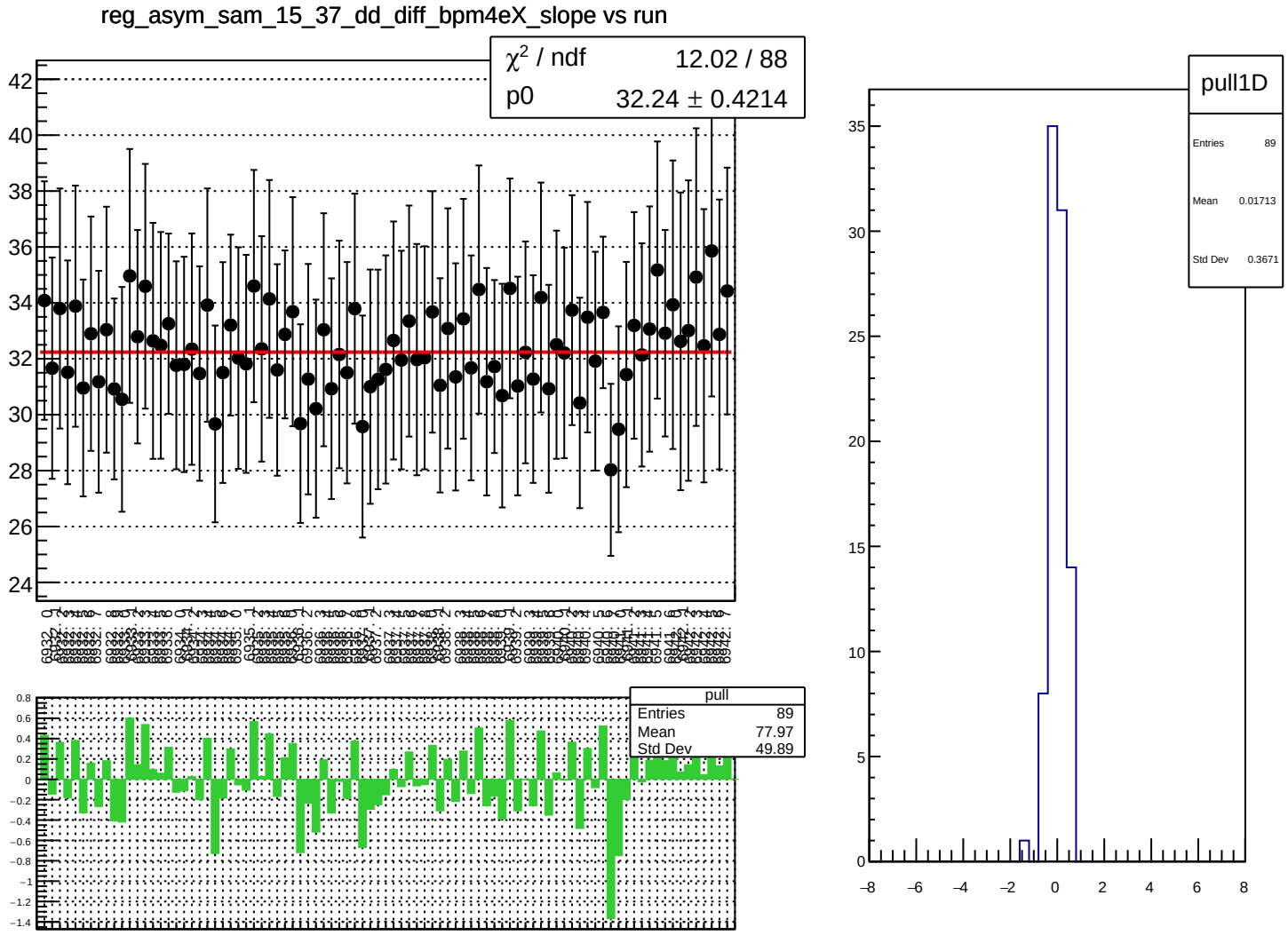

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 13.25 / 88
p0 0.2747 ± 0.01328
0.5
0.4
0.3
0.2
0.1
pull
Entries 89
Mean −261.6
Std Dev 342.4
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 89
Mean 0.002341
Std Dev 0.3859
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

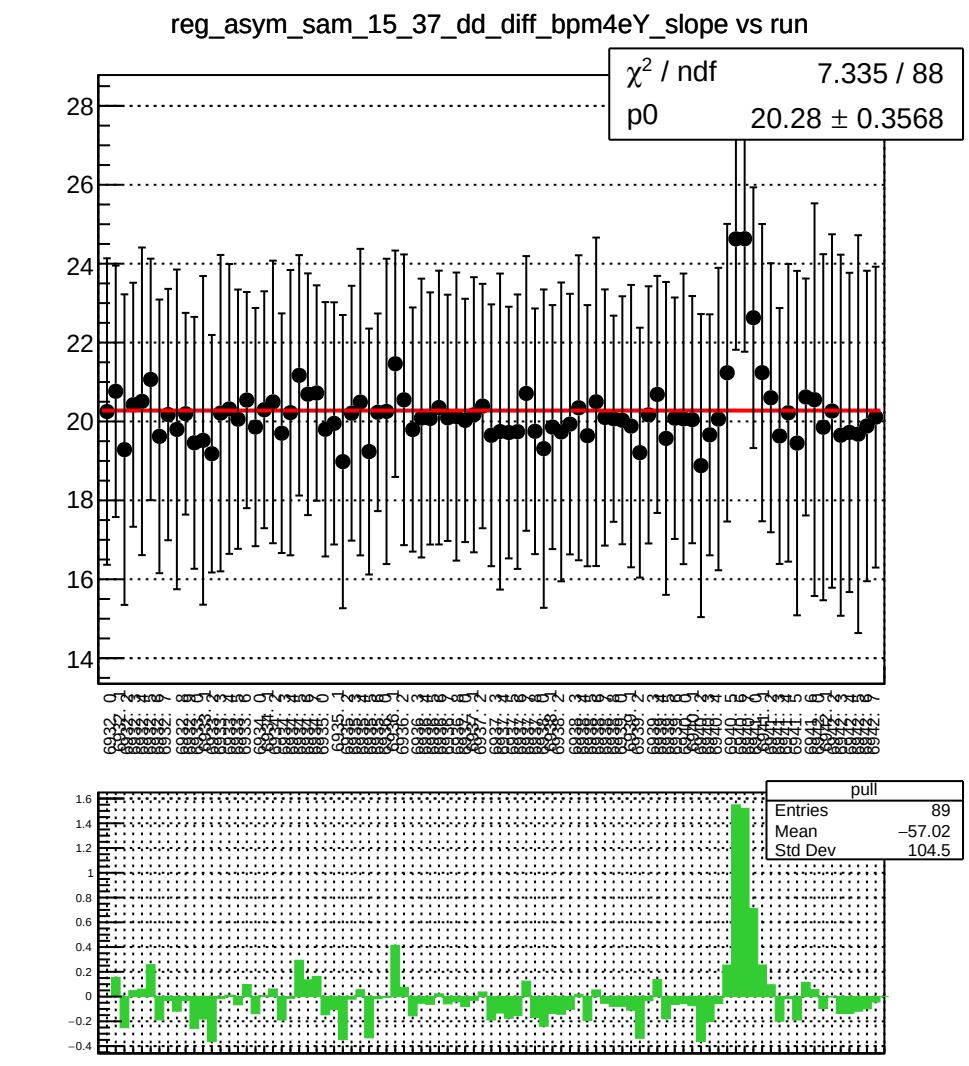

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 9.58 / 88
p0 4.258 ± 0.4534
pull
Entries 89
Mean 82.97
Std Dev 45.92

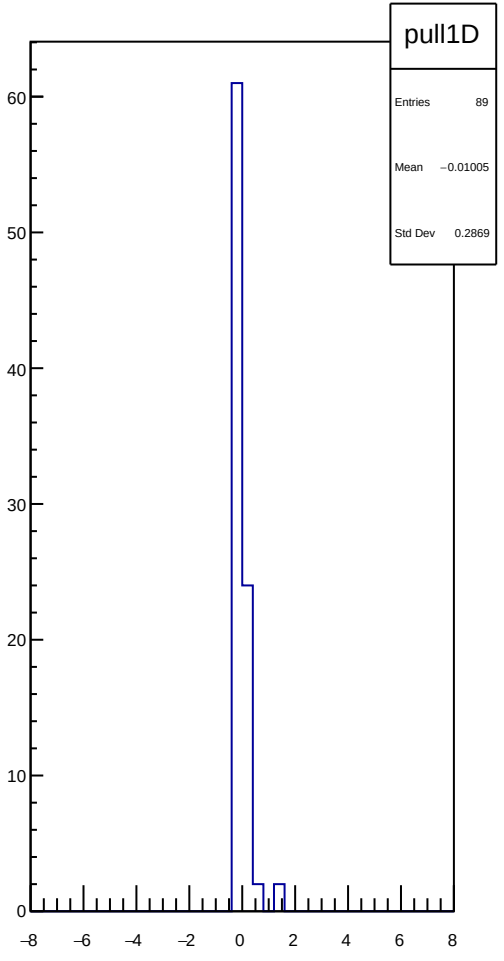

pull1D
Entries 89
Mean −0.01758
Std Dev 0.3276

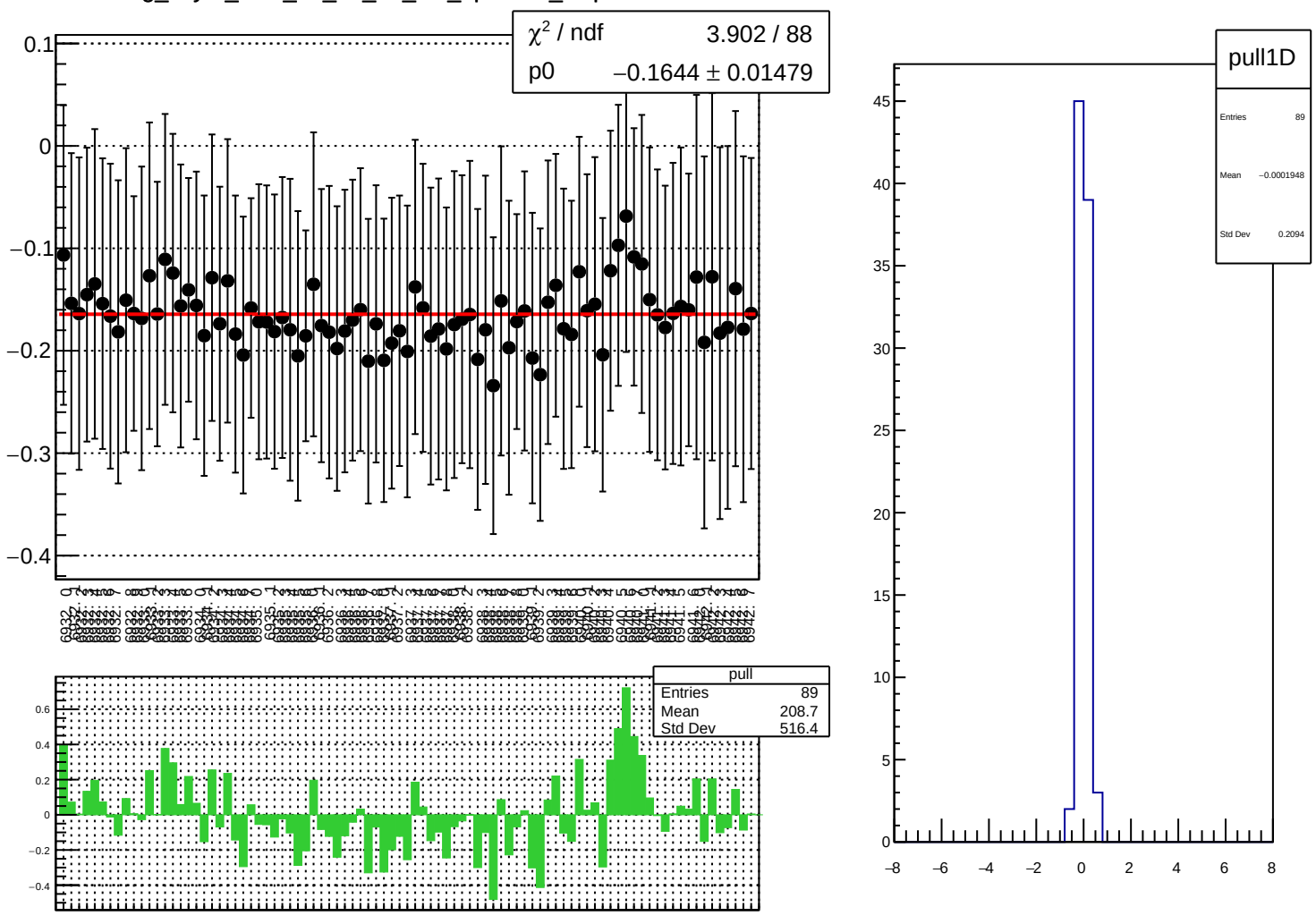

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.414 / 88
p0 0.2432 ± 0.308
pull
Entries 89
Mean 7.024
Std Dev 45.3

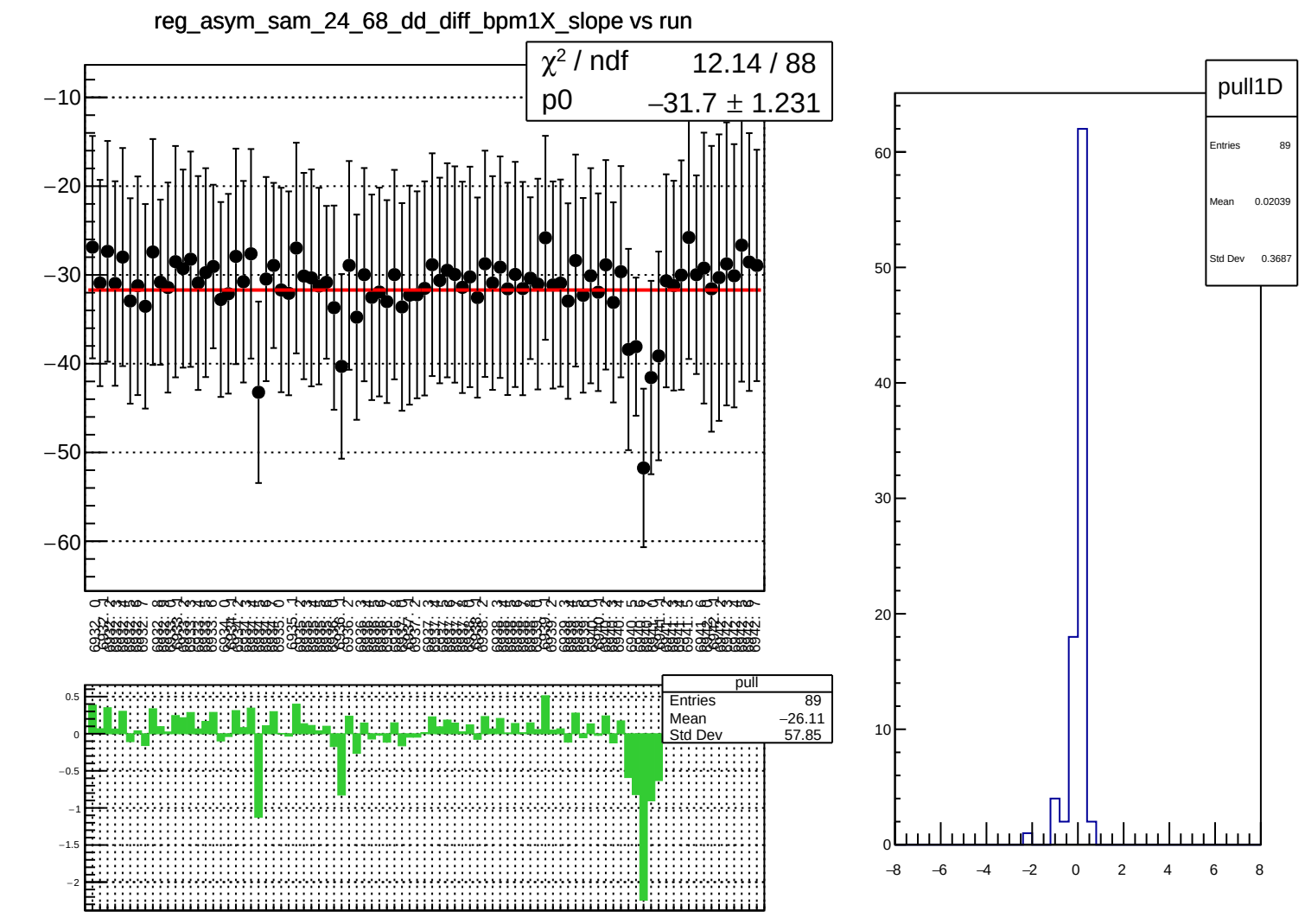

pull1D
Entries 89
Mean 0.01326
Std Dev 0.2463

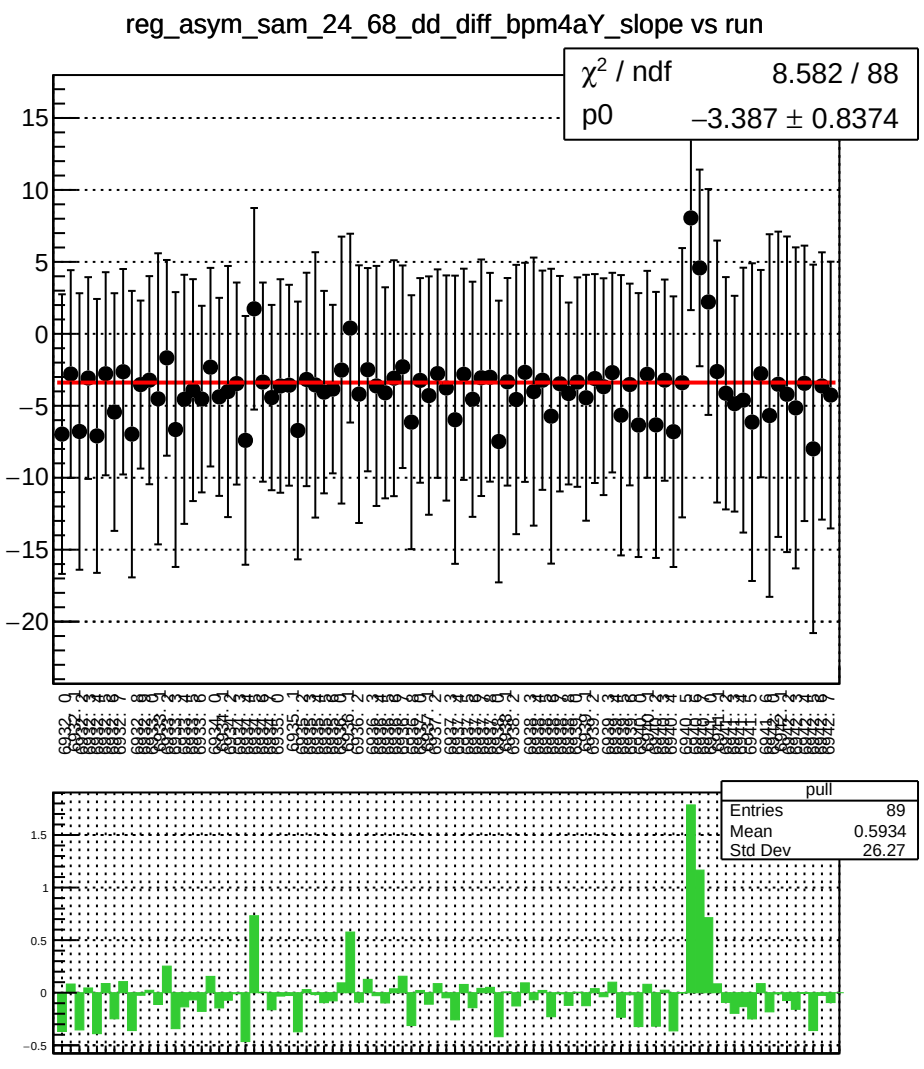

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.02 / 88
p0 32.24 ± 0.4214
pull
Entries 89
Mean 77.97
Std Dev 49.89
pull1D
Entries 89
Mean 0.01713
Std Dev 0.3671

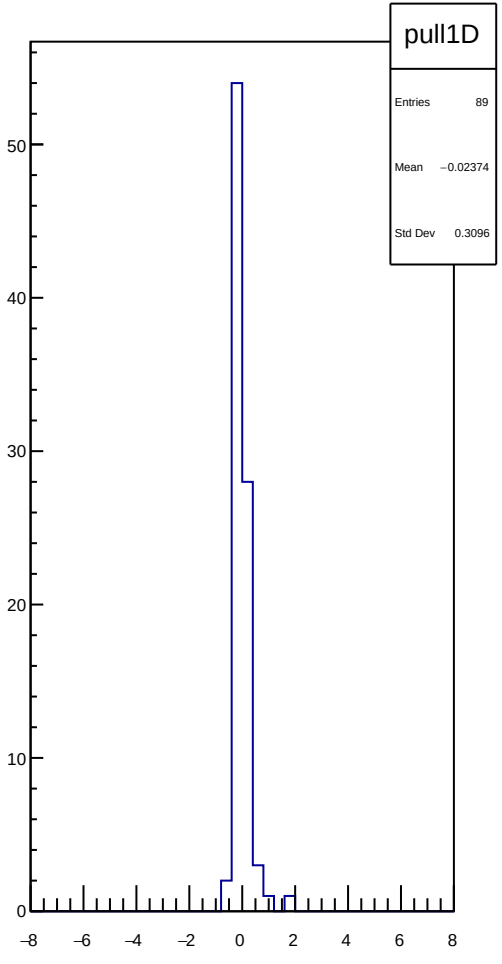

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.335 / 88
p0 20.28 ± 0.3568
pull
Entries 89
Mean −57.02
Std Dev 104.5

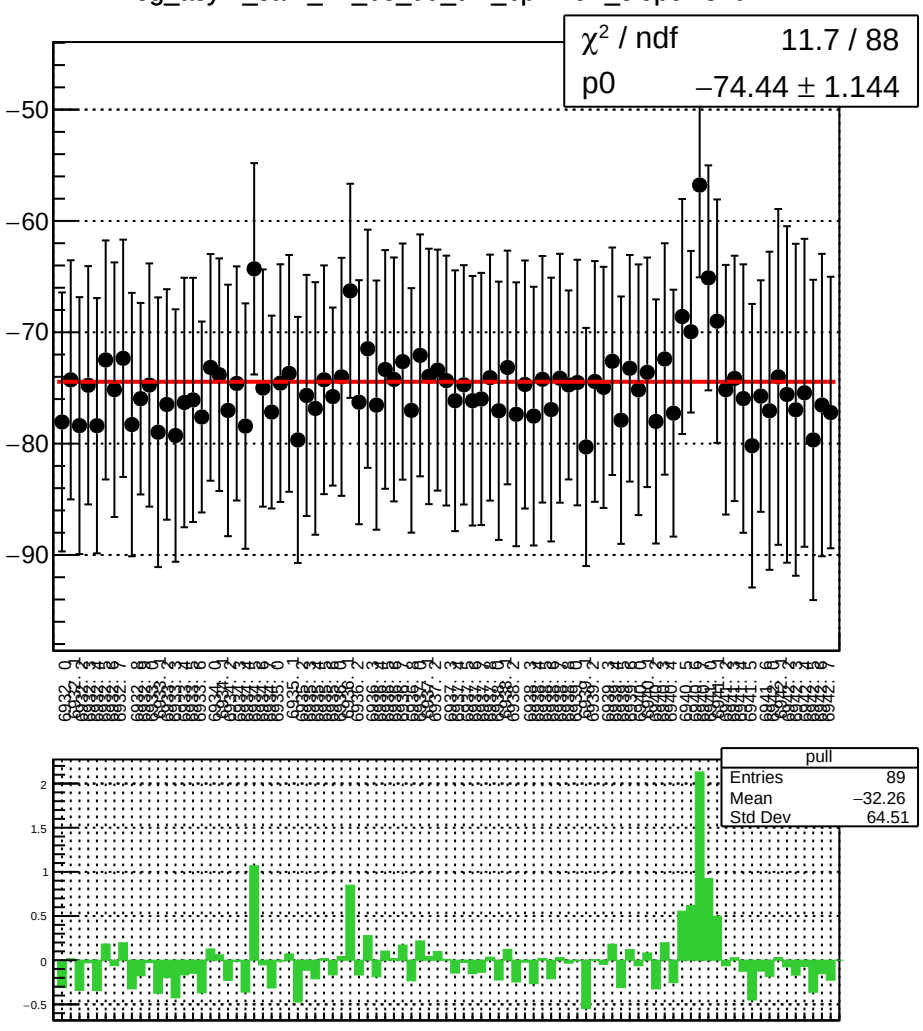

pull1D
Entries 89
Mean −0.01005
Std Dev 0.2869

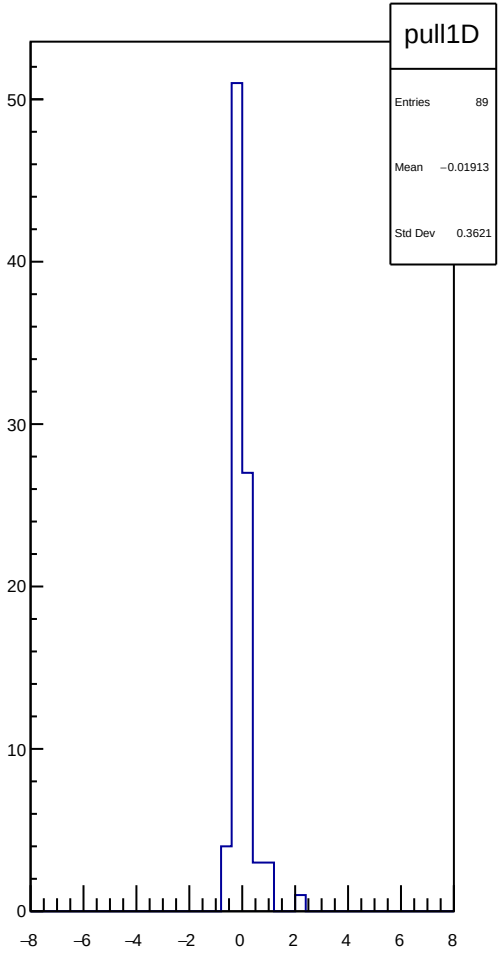

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 3.902 / 88
p0 −0.1644 ± 0.01479
pull
Entries 89
Mean 208.7
Std Dev 516.4
pull1D
Entries 89
Mean −0.0001948
Std Dev 0.2094

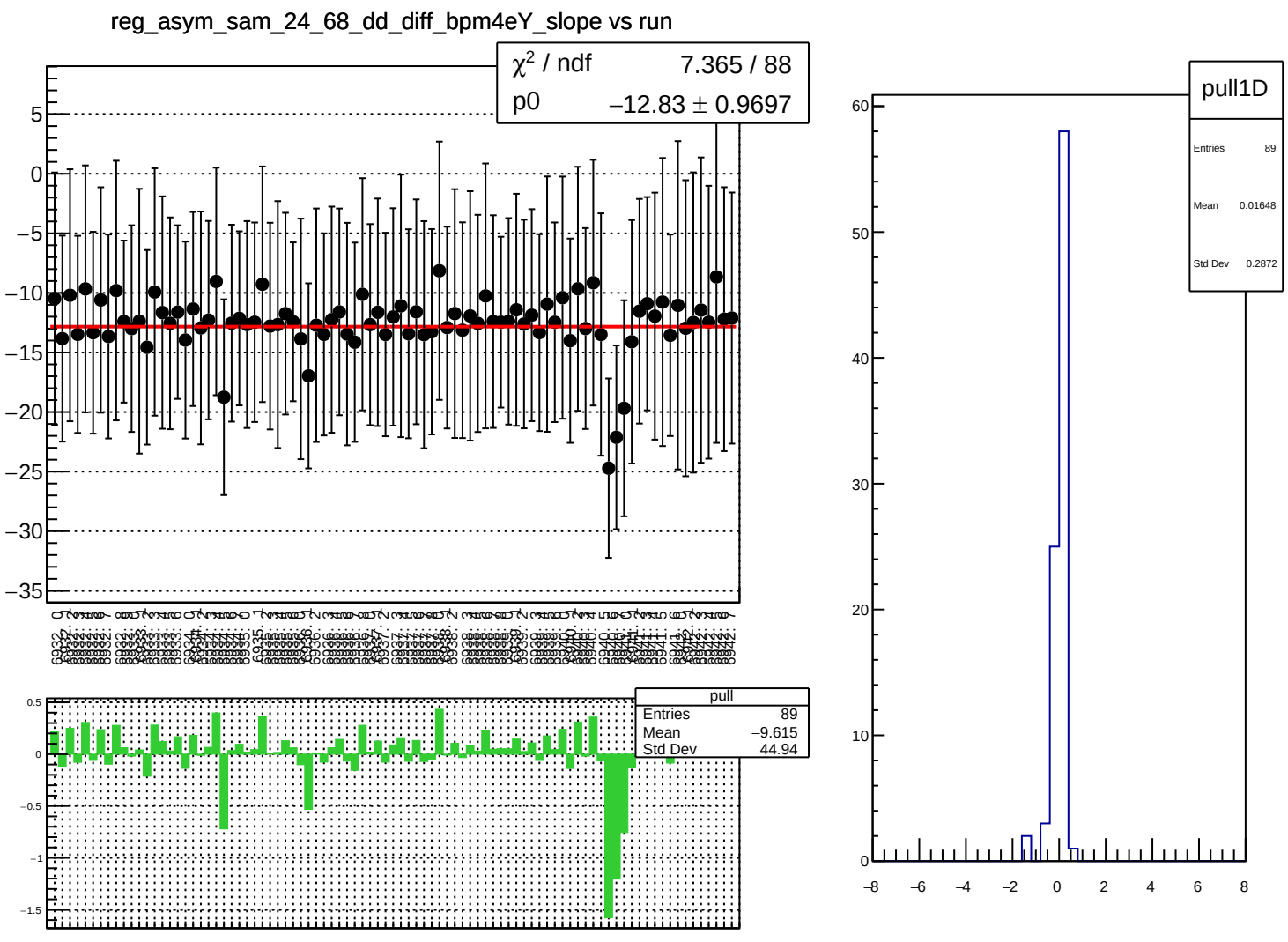

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 12.14 / 88
p0 −31.7 ± 1.231
pull
Entries 89
Mean −26.11
Std Dev 57.85
pull1D
Entries 89
Mean 0.02039
Std Dev 0.3687

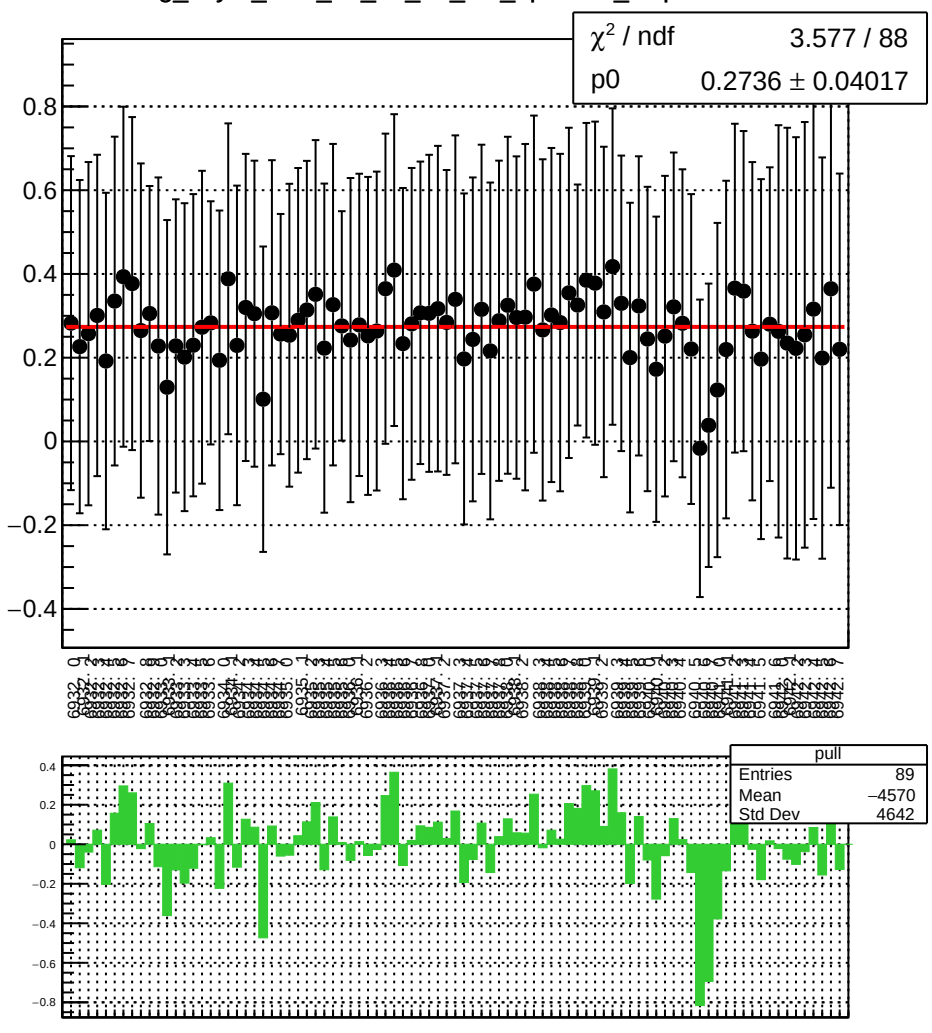

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 8.582 / 88
p0 −3.387 ± 0.8374
pull
Entries 89
Mean 0.5934
Std Dev 26.27

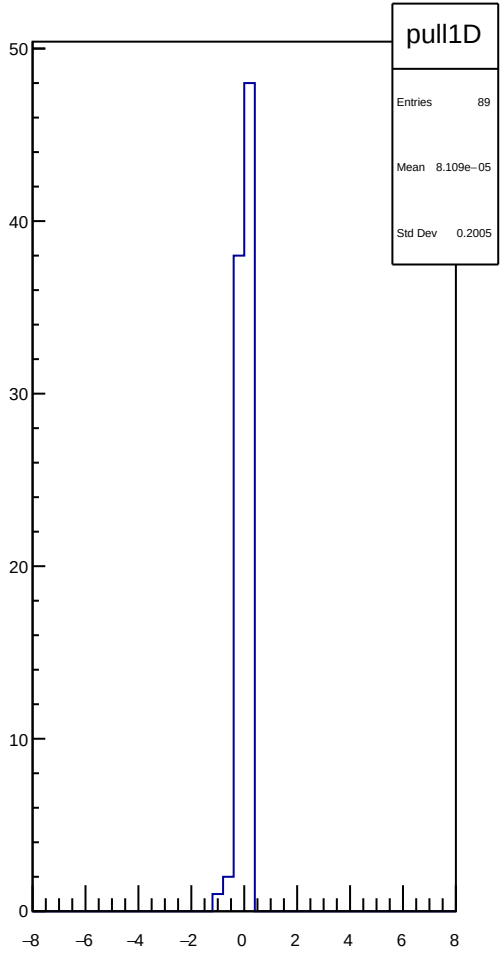

pull1D
Entries 89
Mean −0.02374
Std Dev 0.3096

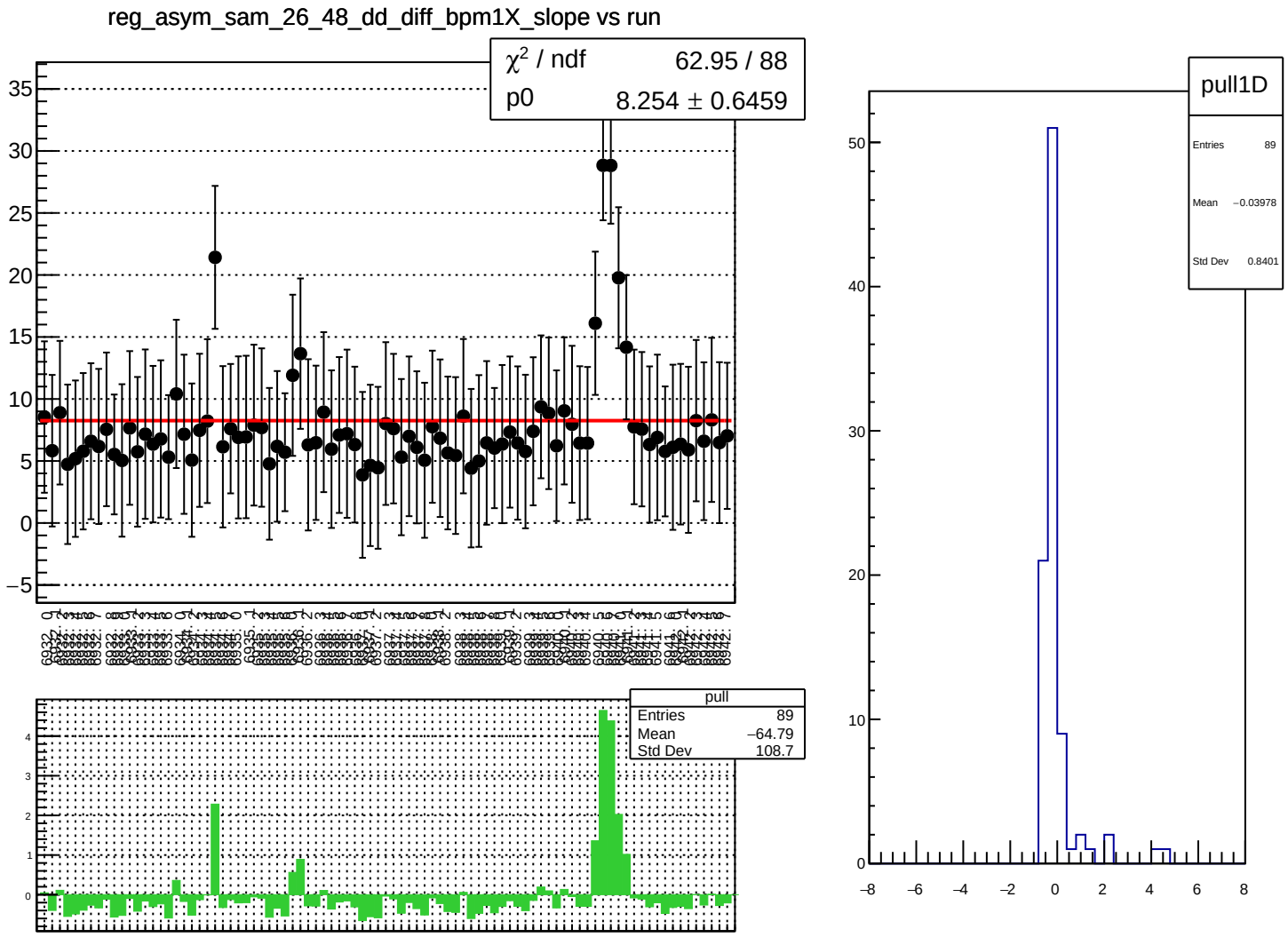

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 11.7 / 88
p0 −74.44 ± 1.144
−50
−60
−70
−80
−90
pull
Entries 89
Mean −32.26
Std Dev 64.51
2
1.5
1
0.5
0
−0.5

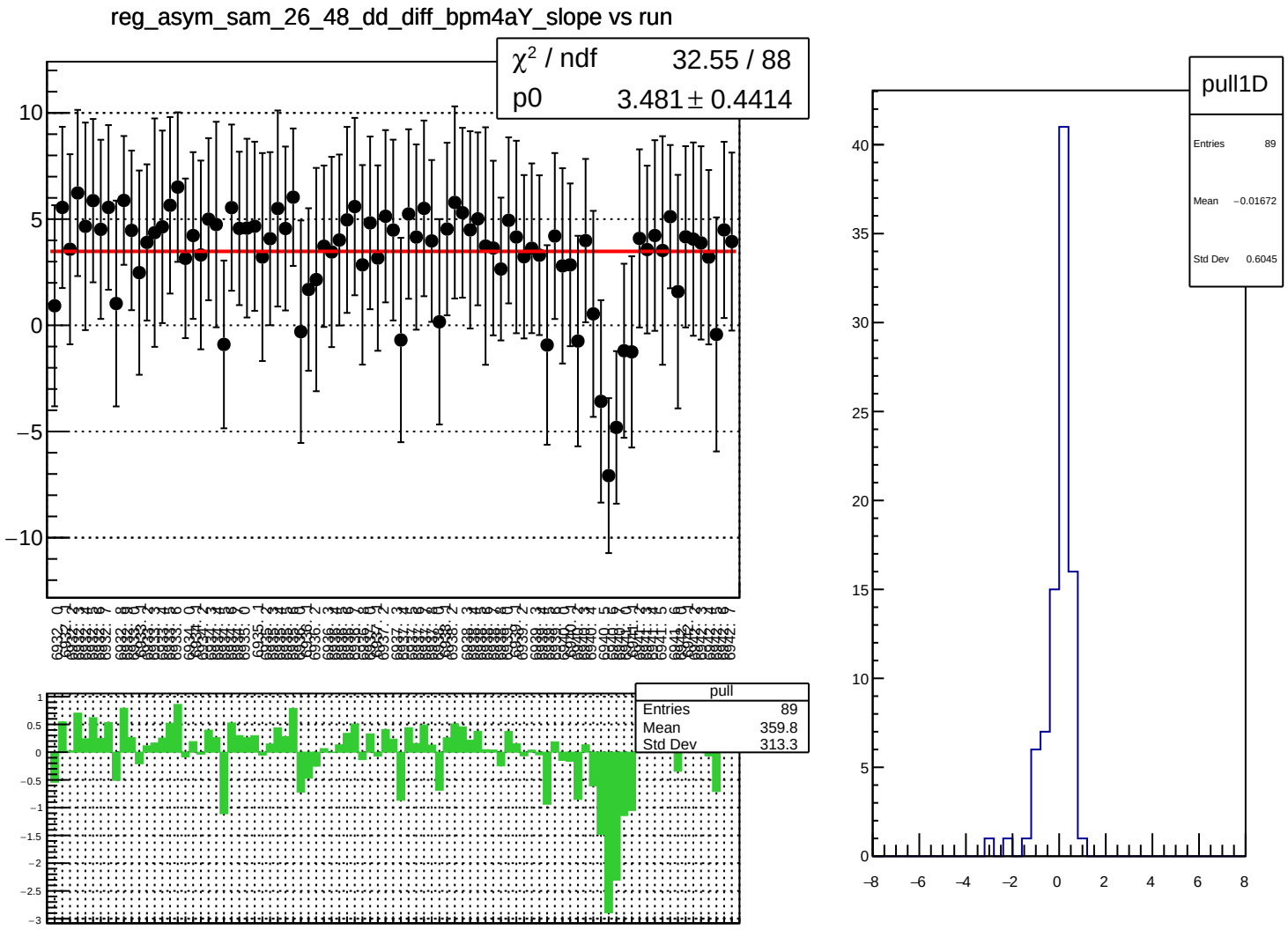

pull1D
Entries 89
Mean −0.01913
Std Dev 0.3621
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

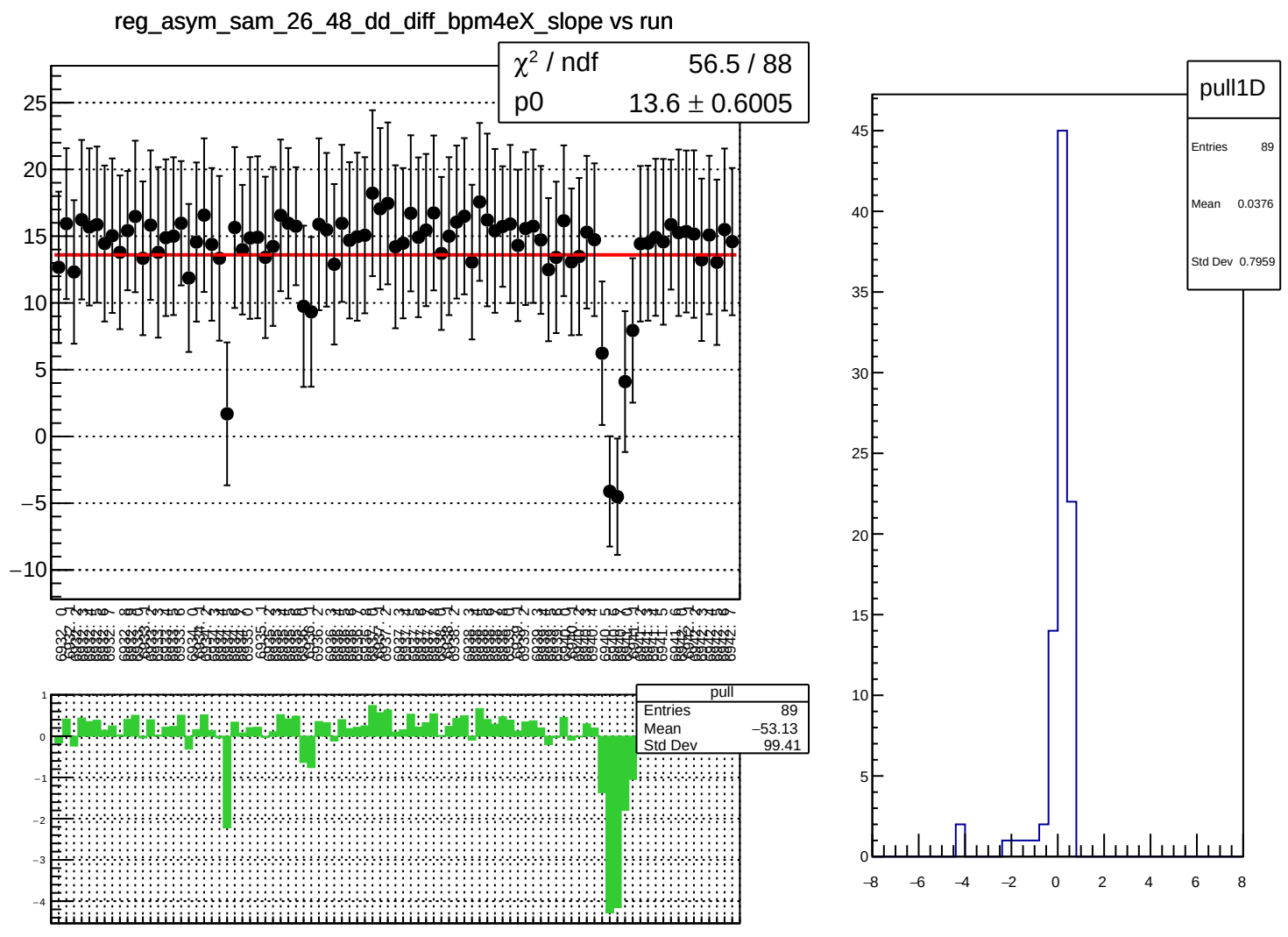

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.365 / 88
p0 −12.83 ± 0.9697
pull
Entries 89
Mean −9.615
Std Dev 44.94
pull1D
Entries 89
Mean 0.01648
Std Dev 0.2872

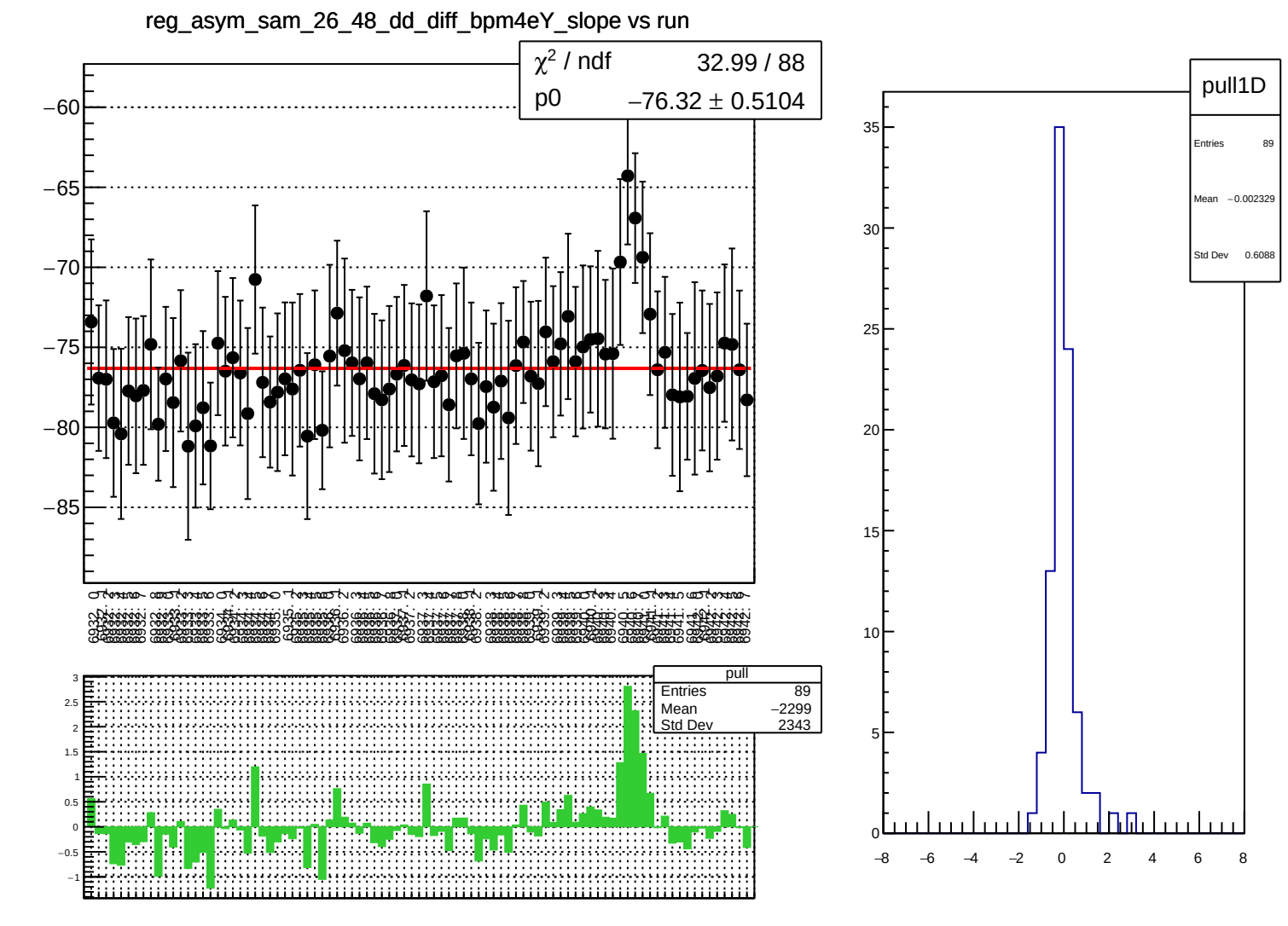

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 3.577 / 88
p0 0.2736 ± 0.04017
pull
Entries 89
Mean −4570
Std Dev 4642

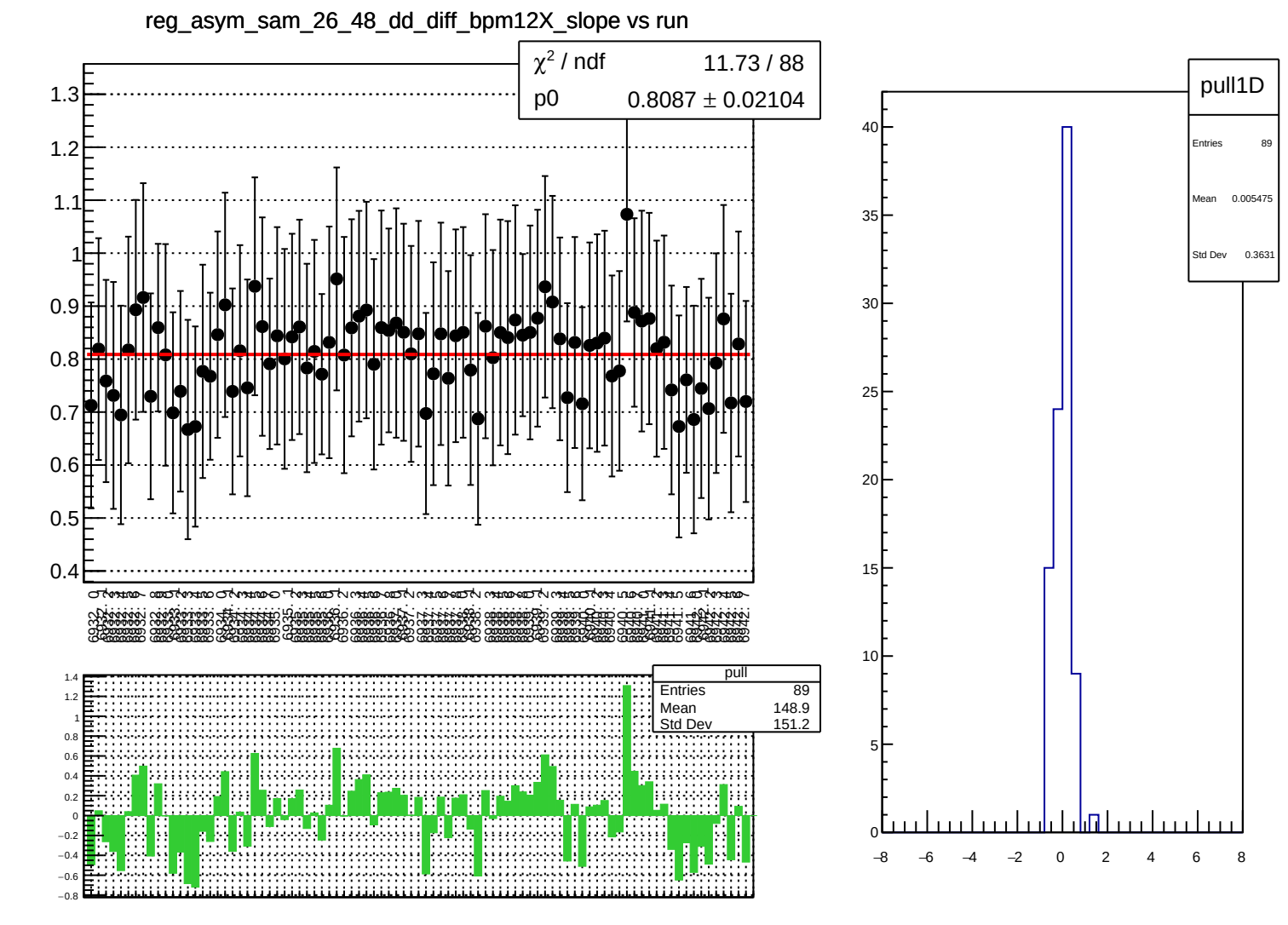

pull1D
Entries 89
Mean 8.109e−05
Std Dev 0.2005

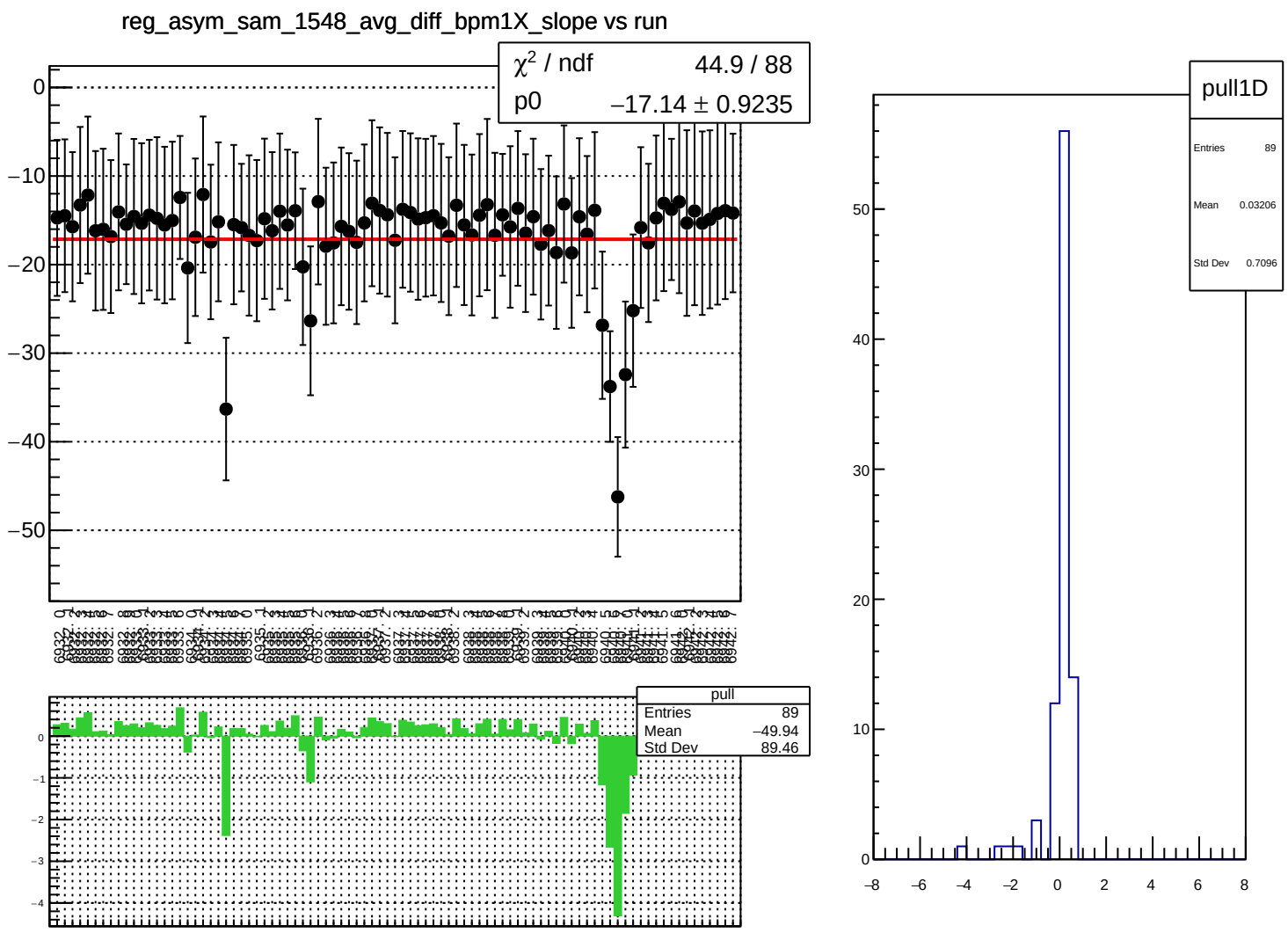

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 62.95 / 88
p0 8.254 ± 0.6459
pull
Entries 89
Mean −64.79
Std Dev 108.7
pull1D
Entries 89
Mean −0.03978
Std Dev 0.8401

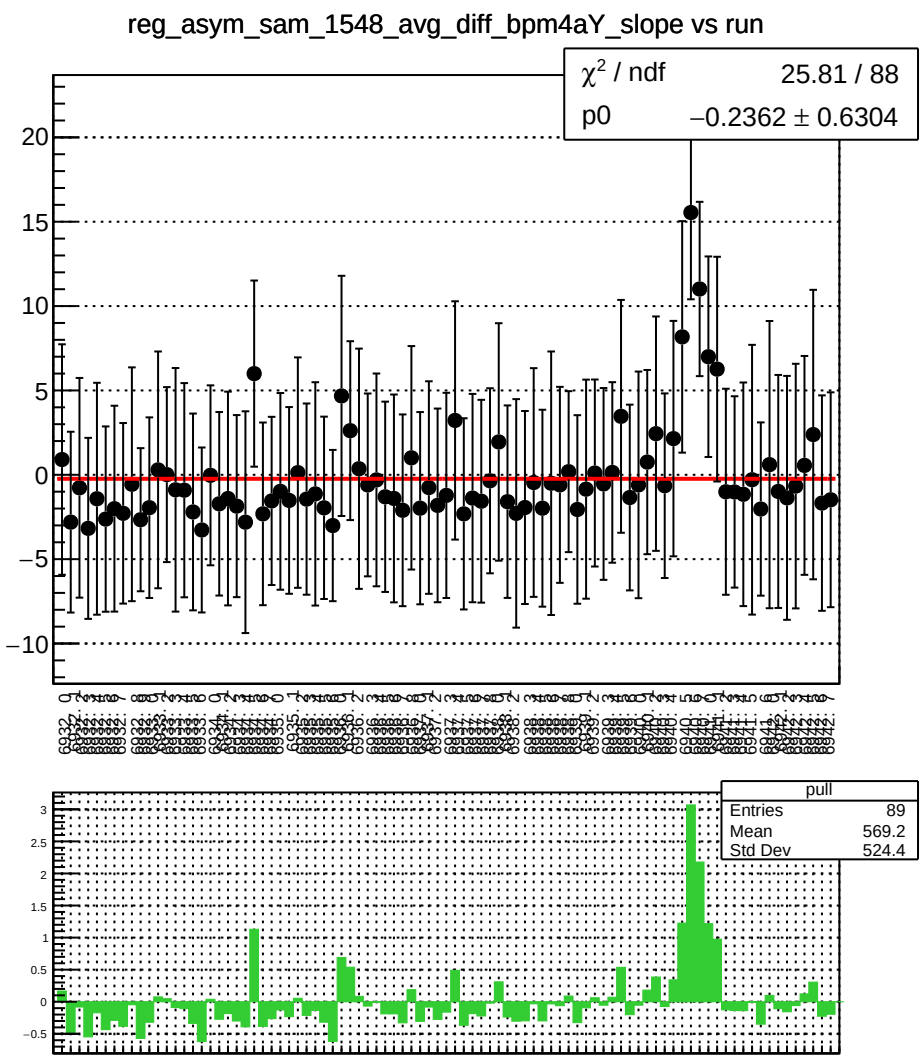

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 32.55 / 88
p0 3.481 ± 0.4414
pull
Entries 89
Mean 359.8
Std Dev 313.3
pull1D
Entries 89
Mean −0.01672
Std Dev 0.6045

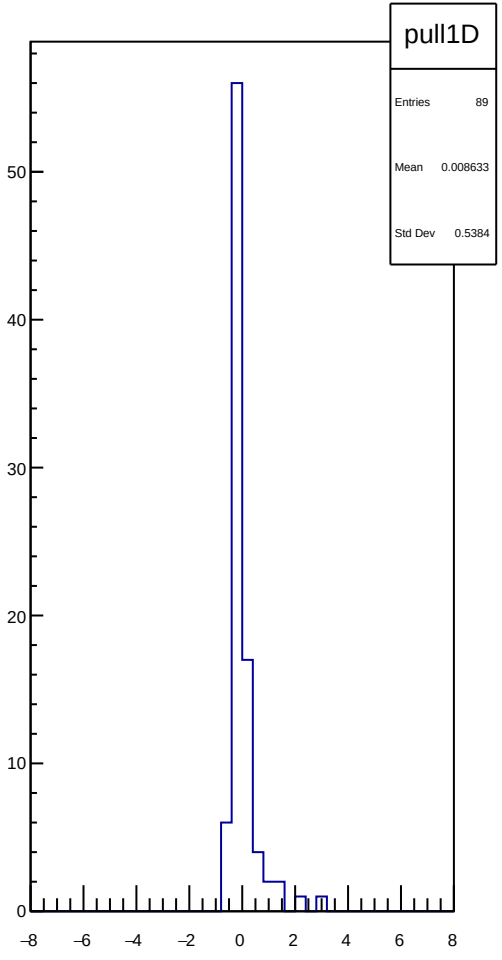

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 56.5 / 88
p0 13.6 ± 0.6005
pull
Entries 89
Mean −53.13
Std Dev 99.41
pull1D
Entries 89
Mean 0.0376
Std Dev 0.7959

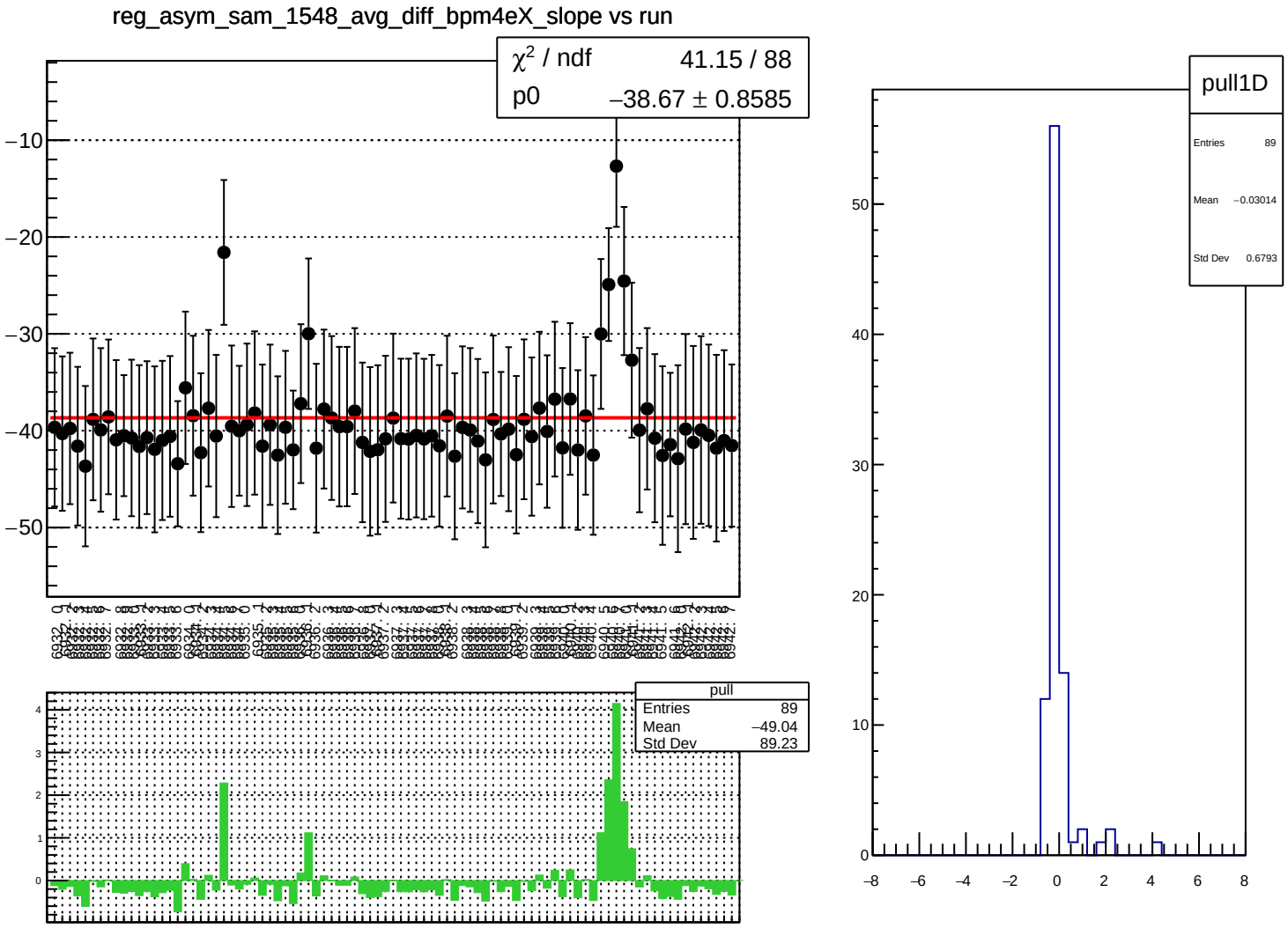

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 32.99 / 88
p0 −76.32 ± 0.5104
pull
Entries 89
Mean −2299
Std Dev 2343
pull1D
Entries 89
Mean −0.002329
Std Dev 0.6088

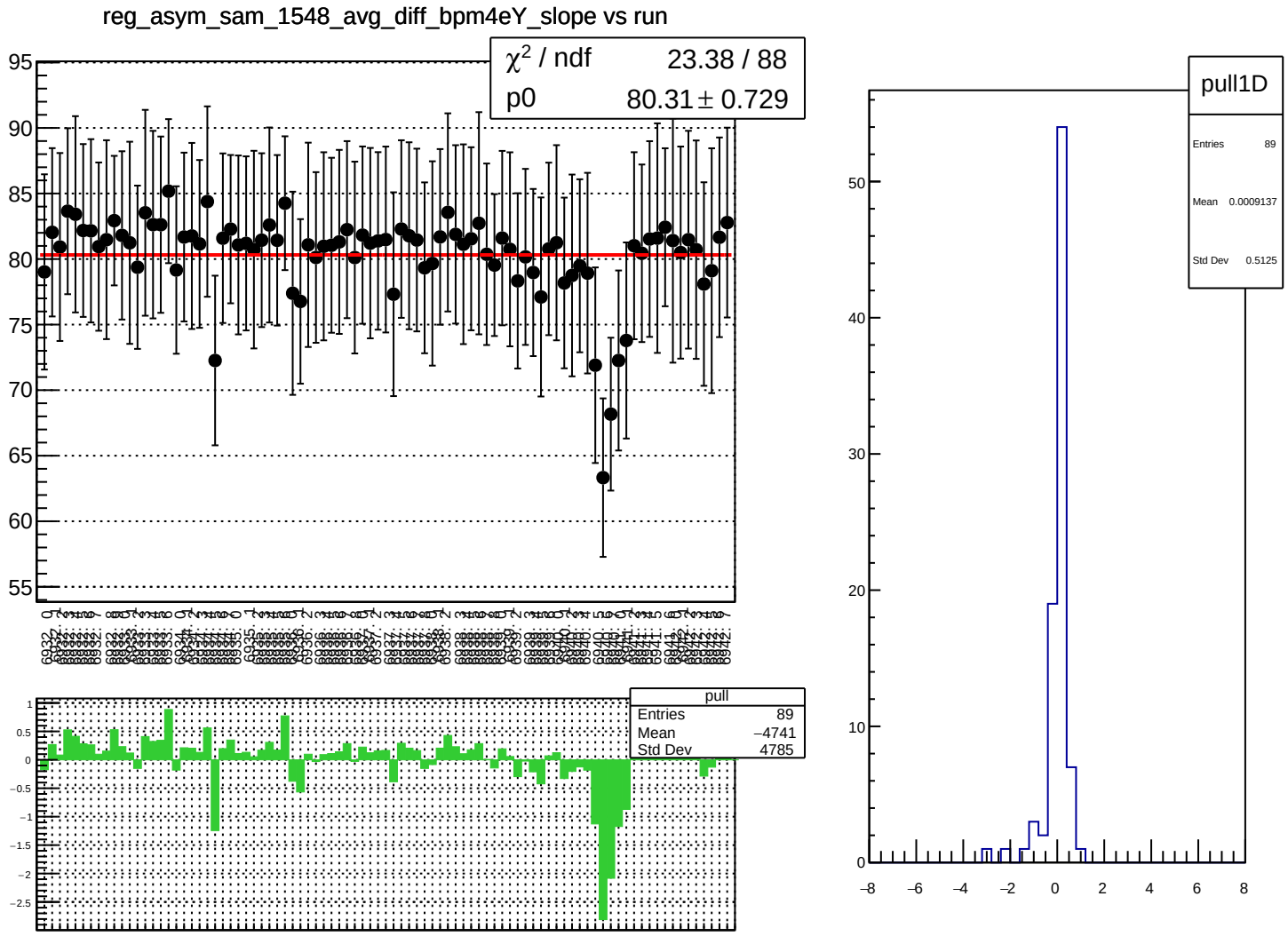

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 11.73 / 88
p0 0.8087 ± 0.02104
pull
Entries 89
Mean 148.9
Std Dev 151.2
pull1D
Entries 89
Mean 0.005475
Std Dev 0.3631

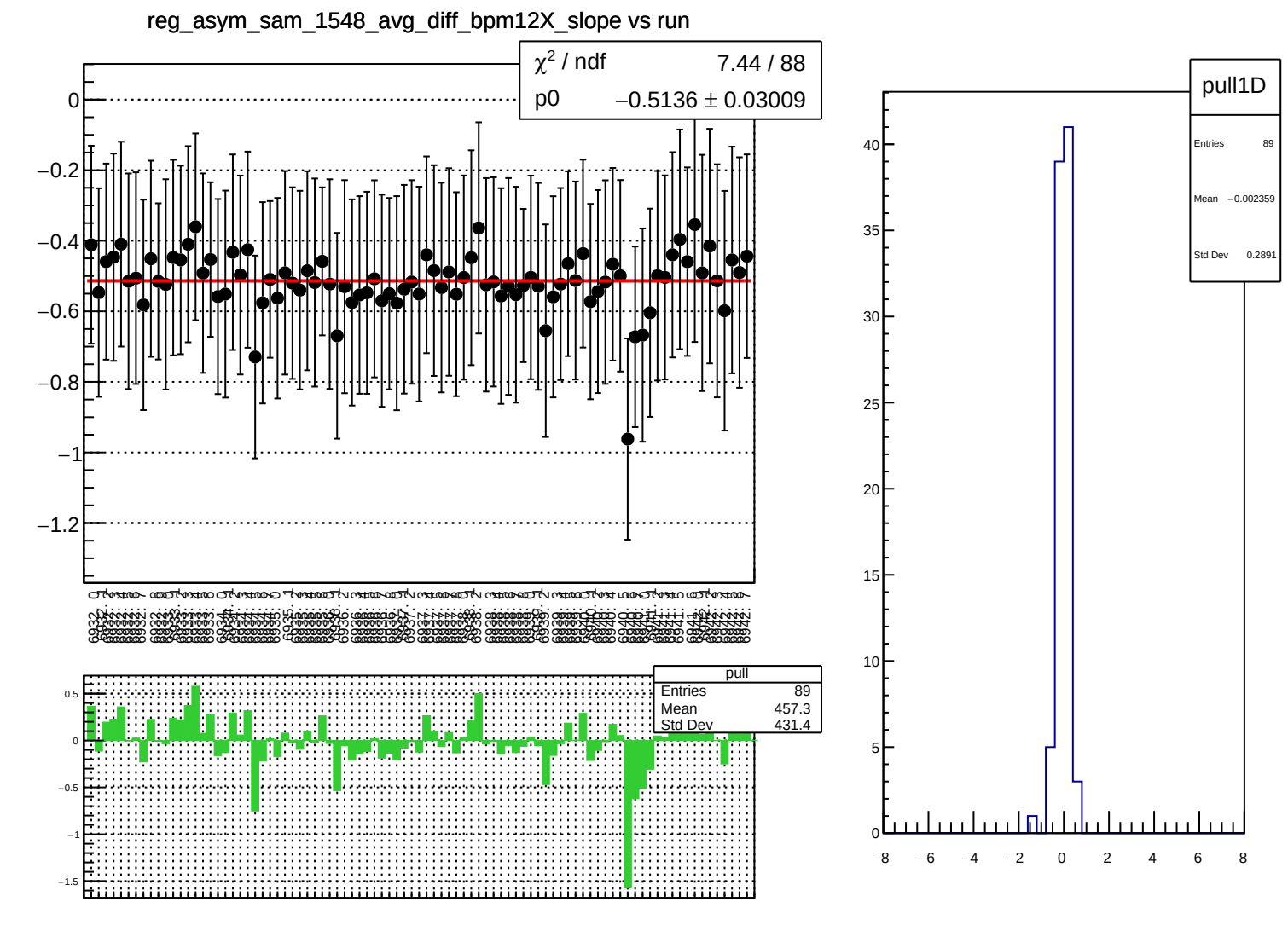

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 44.9 / 88
p0 −17.14 ± 0.9235
pull
Entries 89
Mean −49.94
Std Dev 89.46
pull1D
Entries 89
Mean 0.03206
Std Dev 0.7096

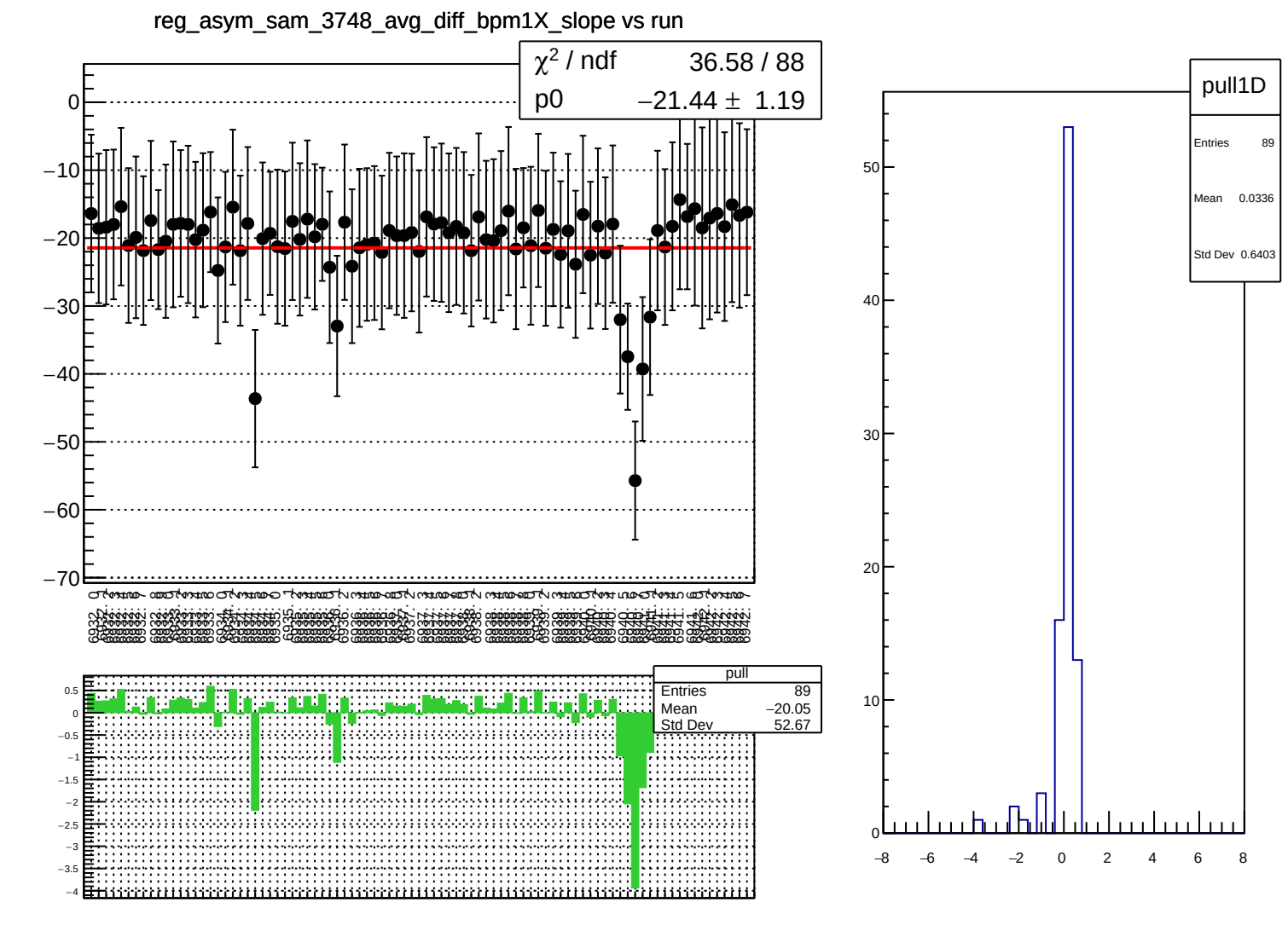

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 25.81 / 88
p0 −0.2362 ± 0.6304
pull
Entries 89
Mean 569.2
Std Dev 524.4

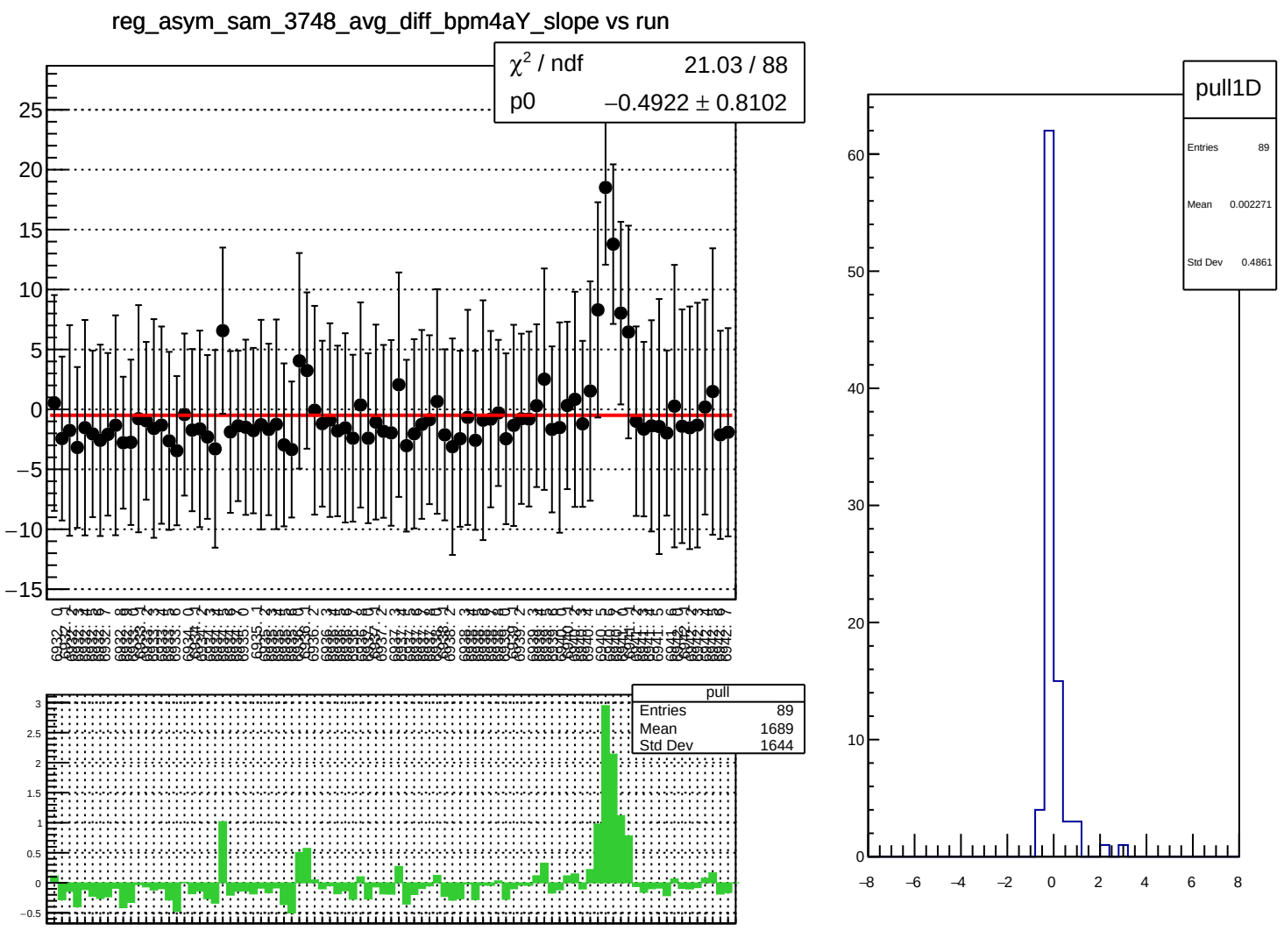

pull1D
Entries 89
Mean 0.008633
Std Dev 0.5384

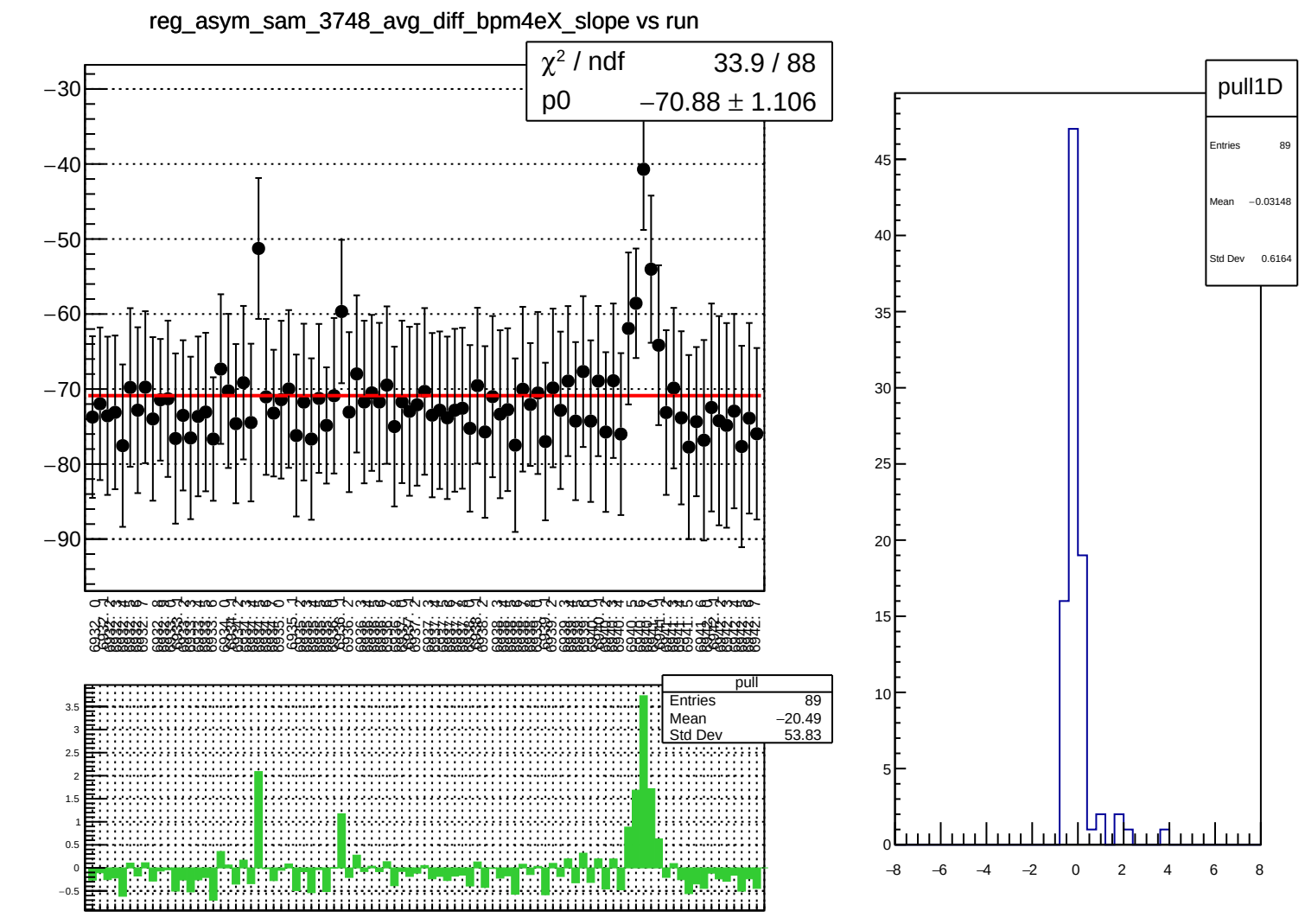

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 41.15 / 88
p0 −38.67 ± 0.8585
−10
−20
−30
−40
−50
pull
Entries 89
Mean −49.04
Std Dev 89.23
4
3
2
1
0
pull1D
Entries 89
Mean −0.03014
Std Dev 0.6793
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

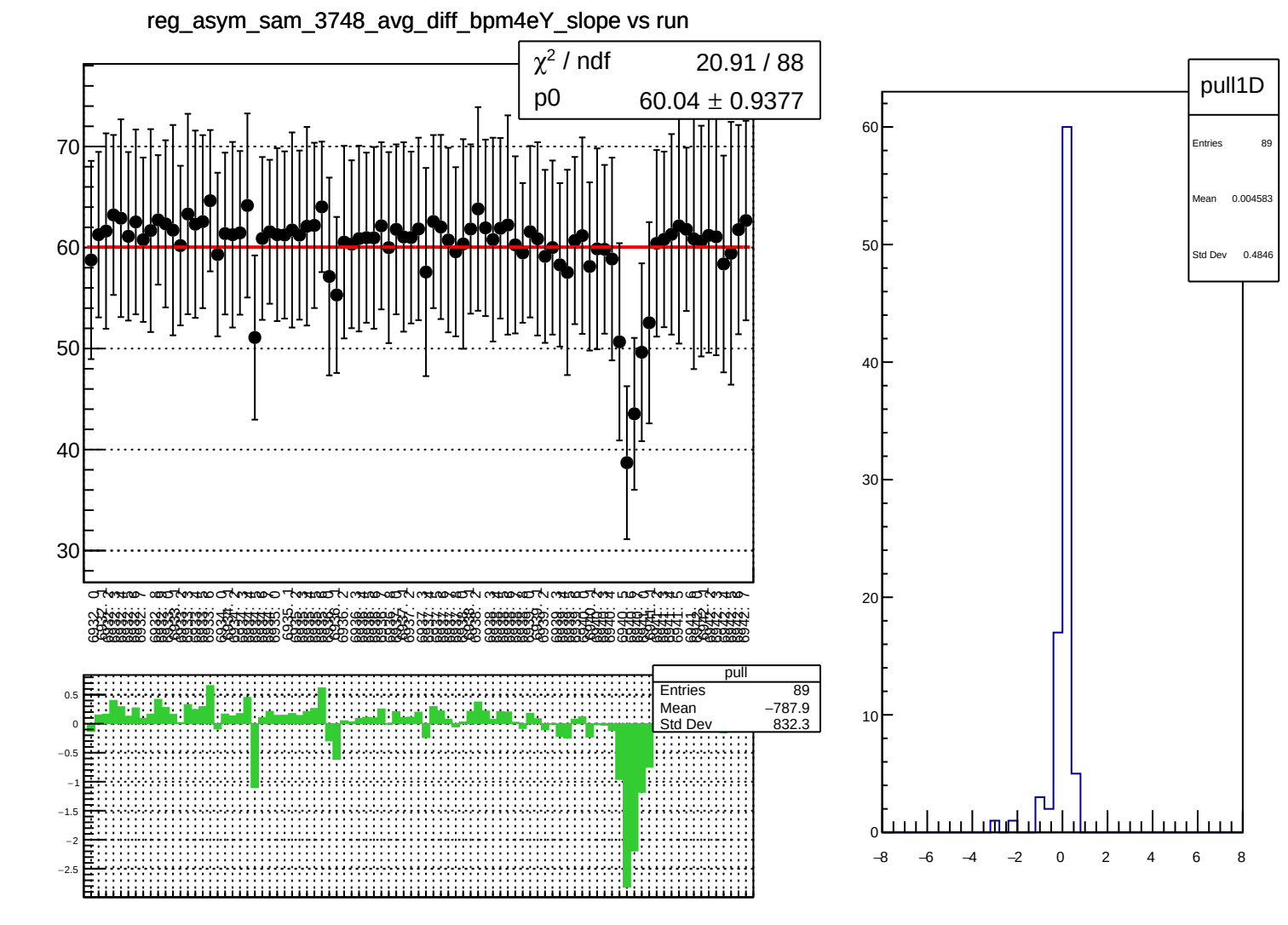

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 23.38 / 88
p0 80.31 ± 0.729
pull
Entries 89
Mean −4741
Std Dev 4785
pull1D
Entries 89
Mean 0.0009137
Std Dev 0.5125

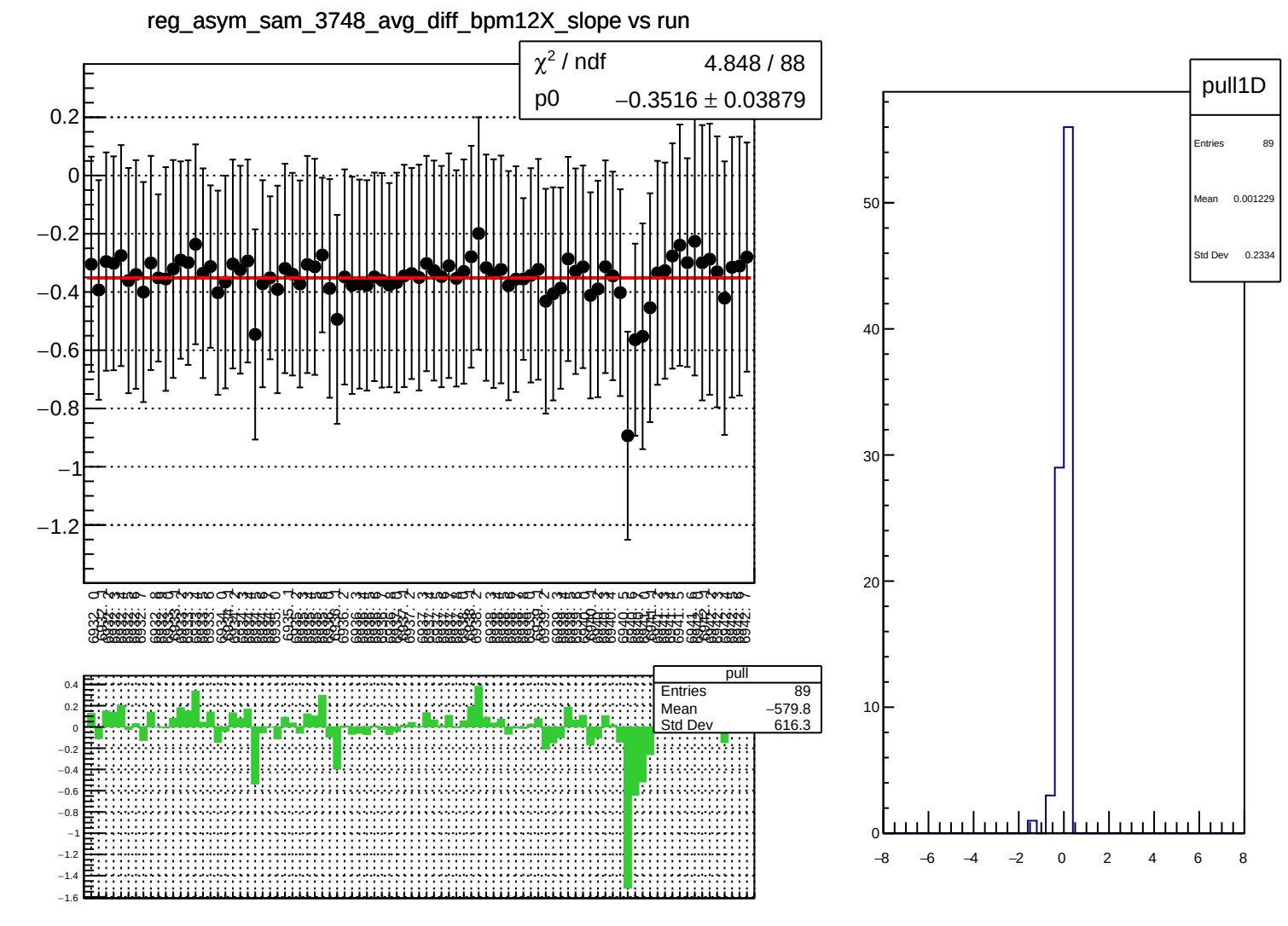

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 7.44 / 88
p0 −0.5136 ± 0.03009
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull
Entries 89
Mean 457.3
Std Dev 431.4
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean −0.002359
Std Dev 0.2891
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

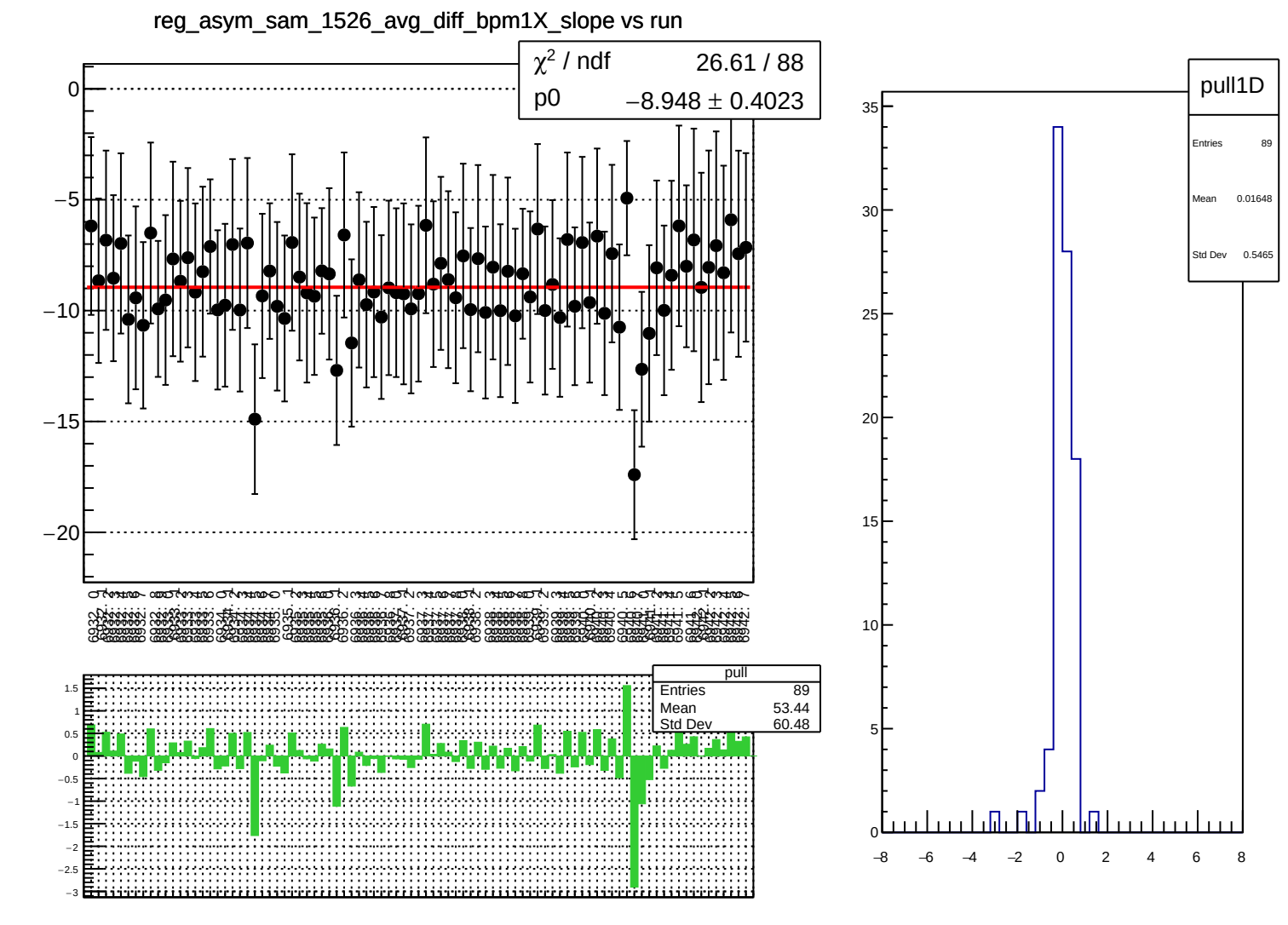

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 36.58 / 88
p0 −21.44 ± 1.19
pull
Entries 89
Mean −20.05
Std Dev 52.67
pull1D
Entries 89
Mean 0.0336
Std Dev 0.6403

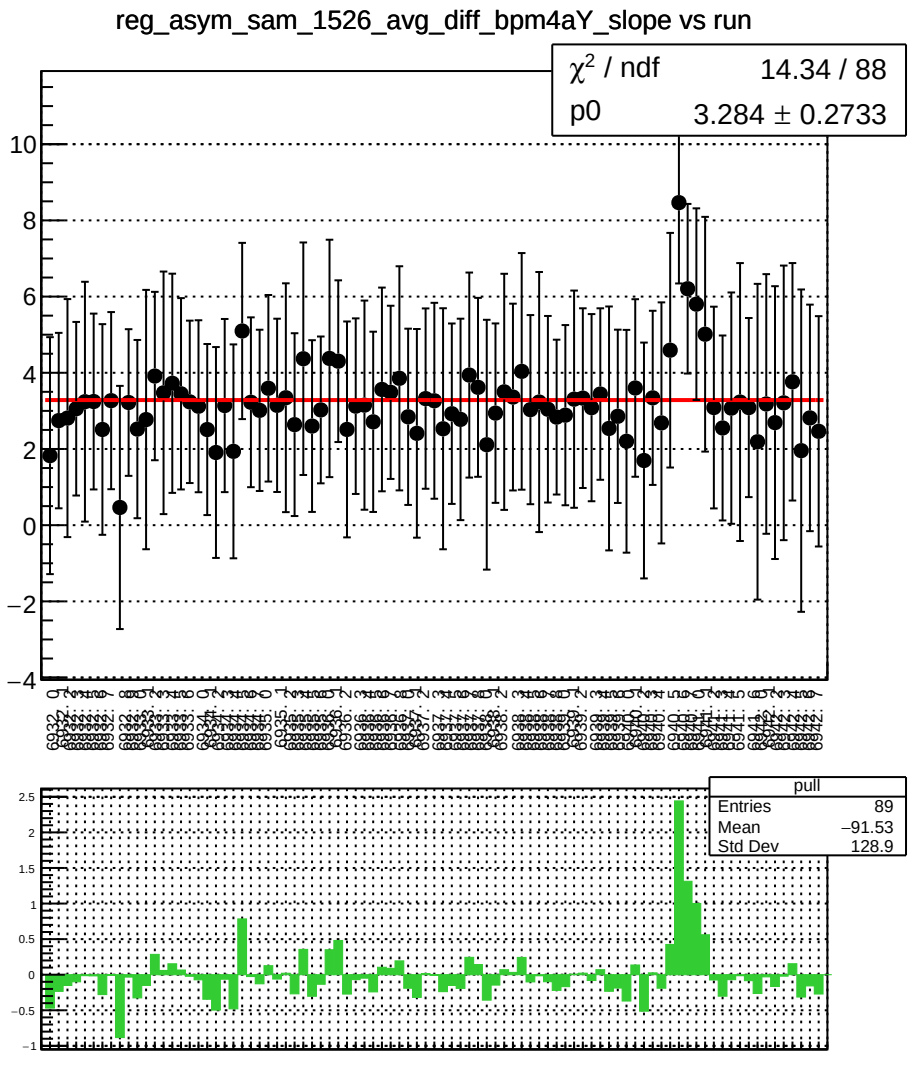

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 21.03 / 88
p0 −0.4922 ± 0.8102
pull
Entries 89
Mean 1689
Std Dev 1644
pull1D
Entries 89
Mean 0.002271
Std Dev 0.4861

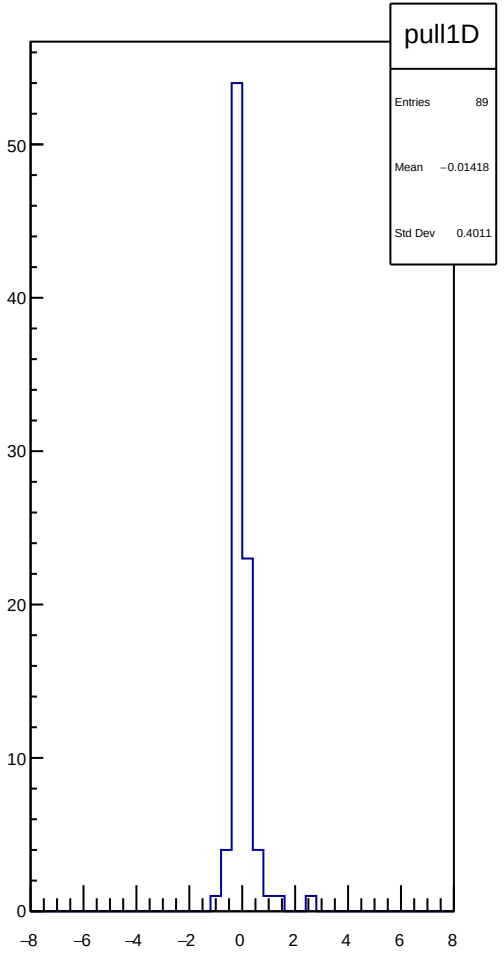

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 33.9 / 88
p0 −70.88 ± 1.106
pull
Entries 89
Mean −20.49
Std Dev 53.83
pull1D
Entries 89
Mean −0.03148
Std Dev 0.6164

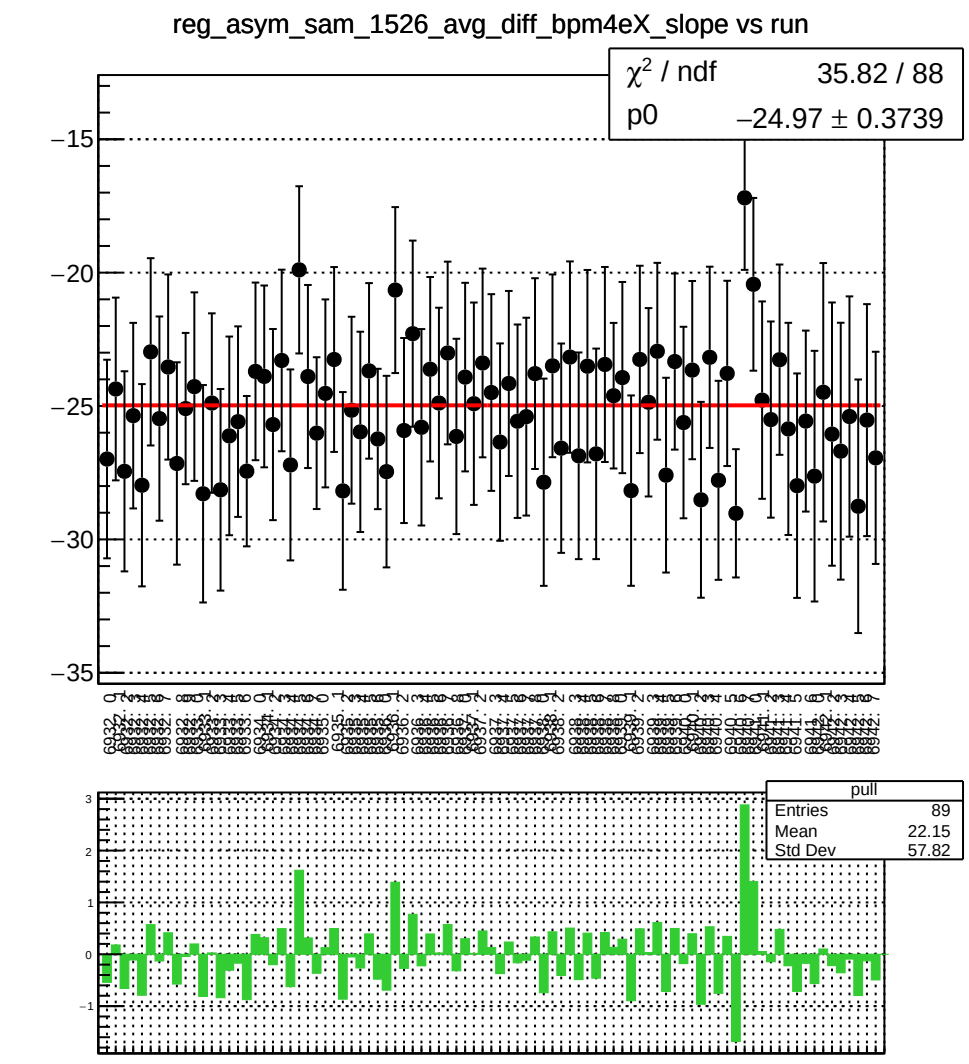

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 20.91 / 88
p0 60.04 ± 0.9377
pull
Entries 89
Mean −787.9
Std Dev 832.3
pull1D
Entries 89
Mean 0.004583
Std Dev 0.4846

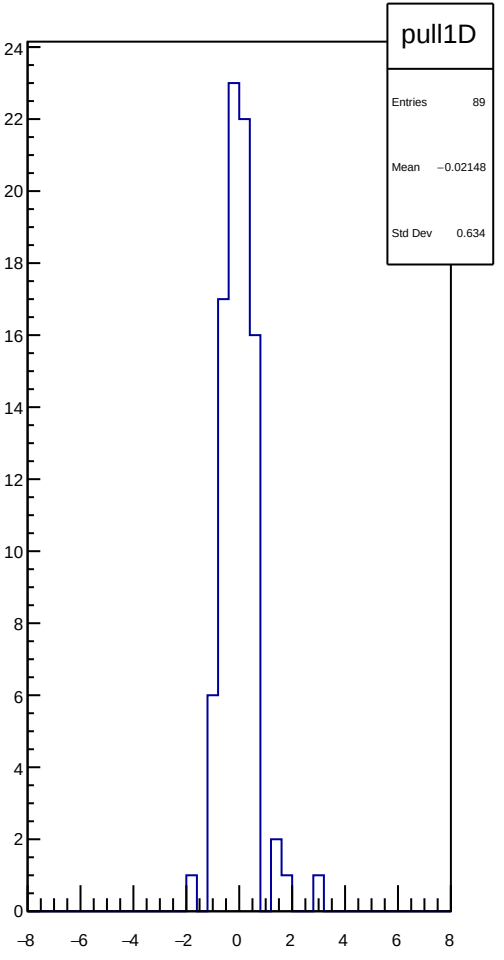

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 4.848 / 88
p0 −0.3516 ± 0.03879
pull
Entries 89
Mean −579.8
Std Dev 616.3
pull1D
Entries 89
Mean 0.001229
Std Dev 0.2334

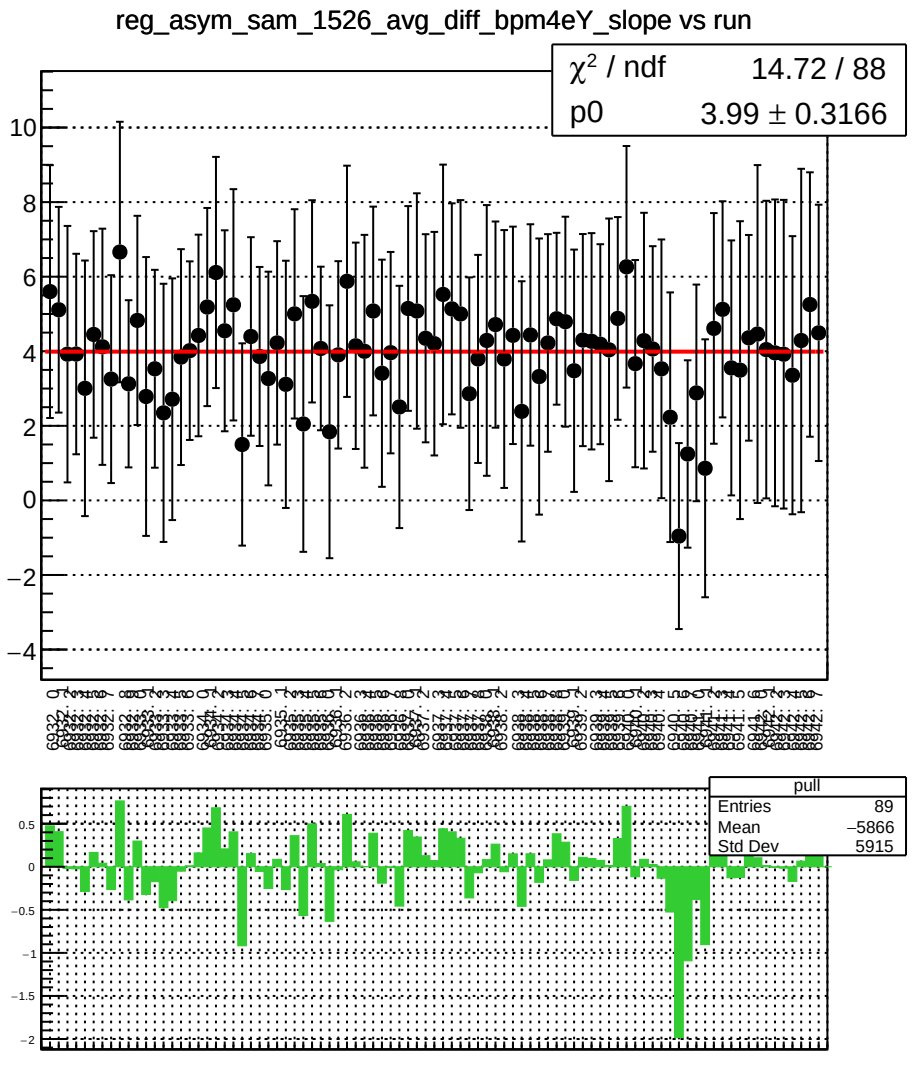

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 26.61 / 88
p0 −8.948 ± 0.4023
pull
Entries 89
Mean 53.44
Std Dev 60.48
pull1D
Entries 89
Mean 0.01648
Std Dev 0.5465

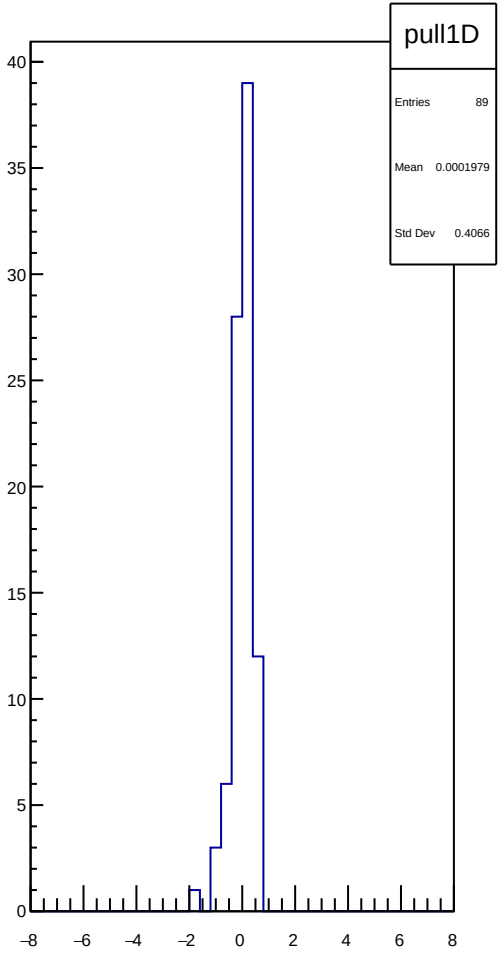

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 14.34 / 88
p0 3.284 ± 0.2733
pull
Entries 89
Mean −91.53
Std Dev 128.9

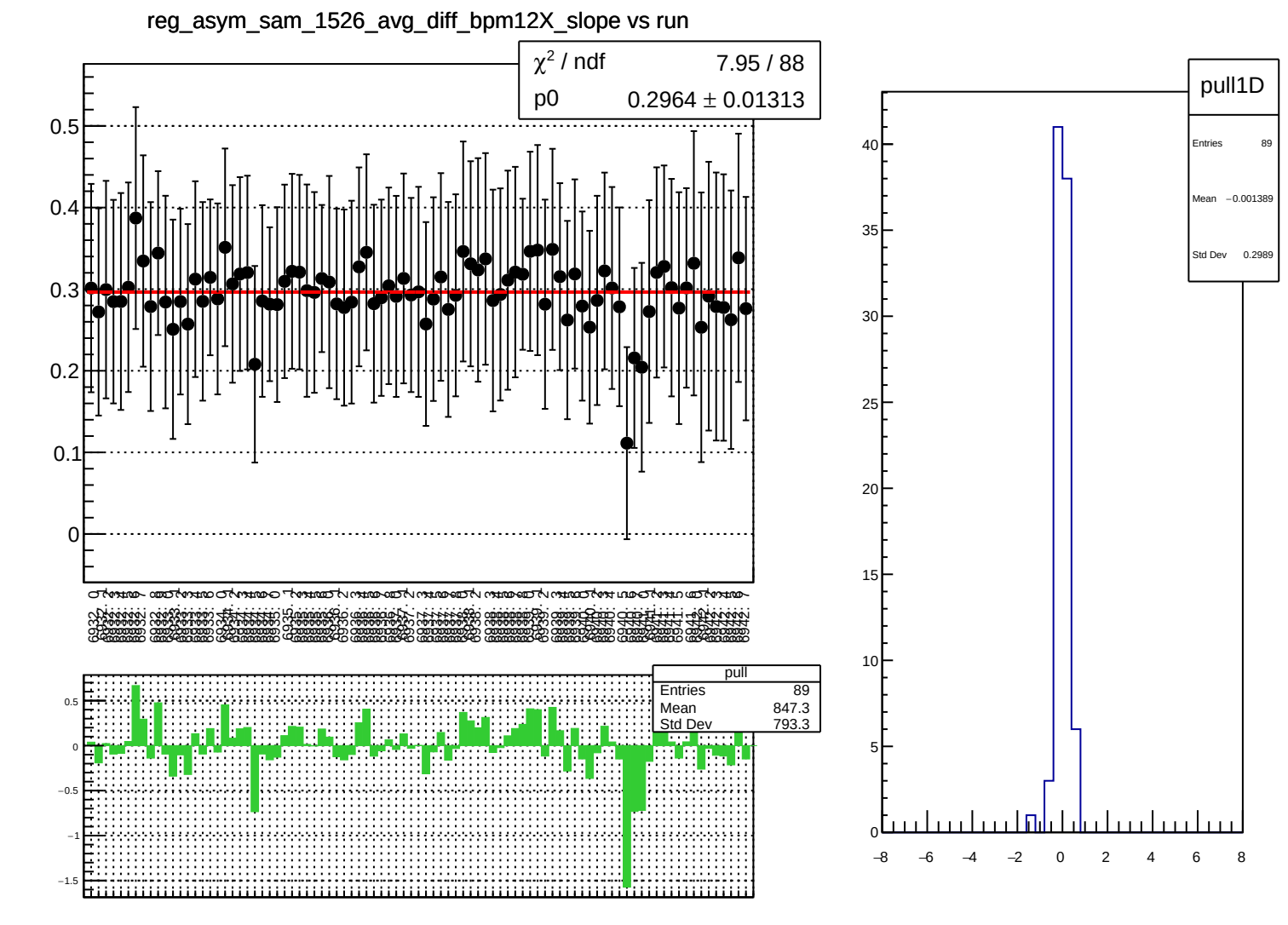

pull1D
Entries 89
Mean −0.01418
Std Dev 0.4011

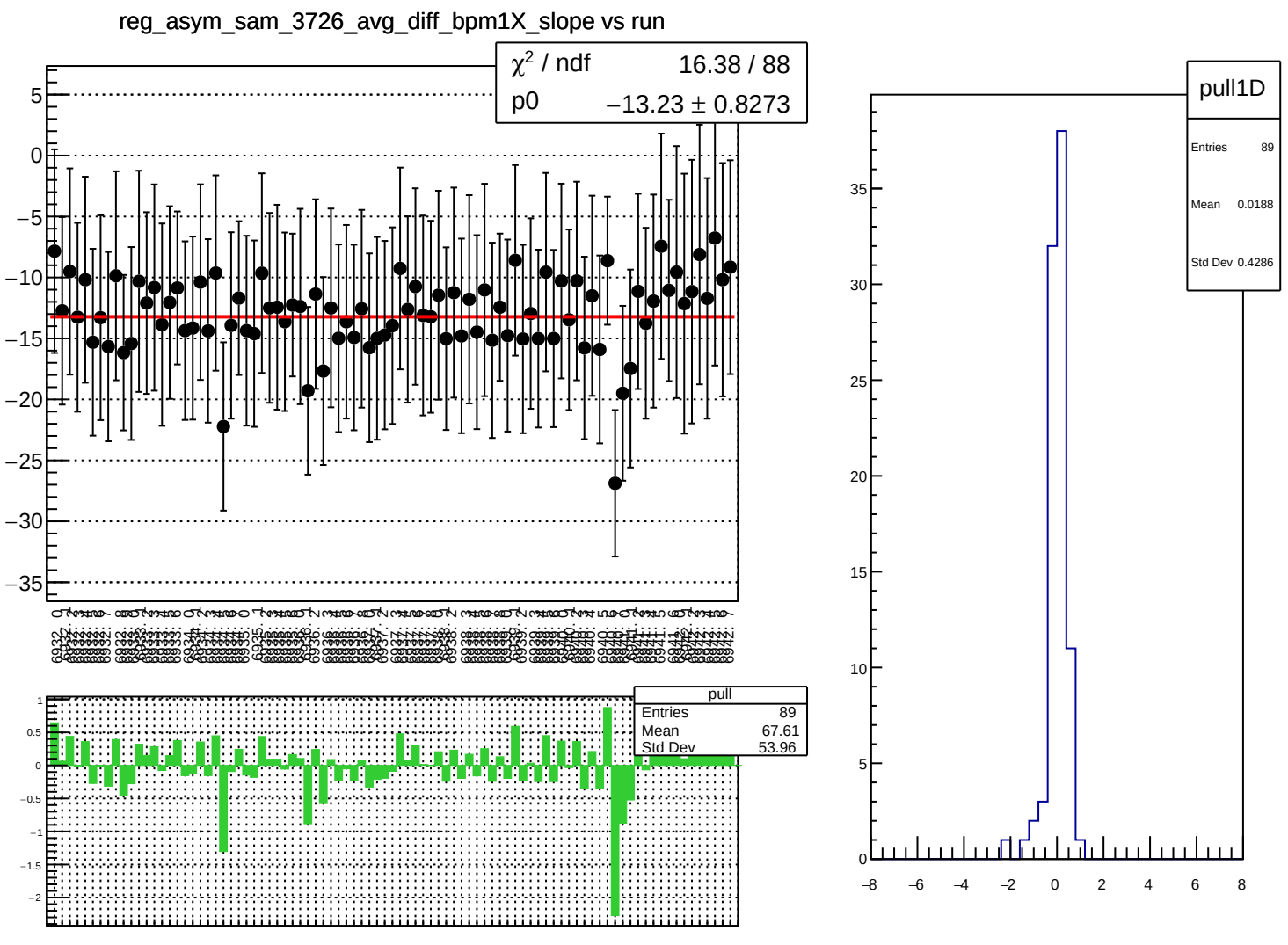

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 35.82 / 88
p0 −24.97 ± 0.3739
pull
Entries 89
Mean 22.15
Std Dev 57.82

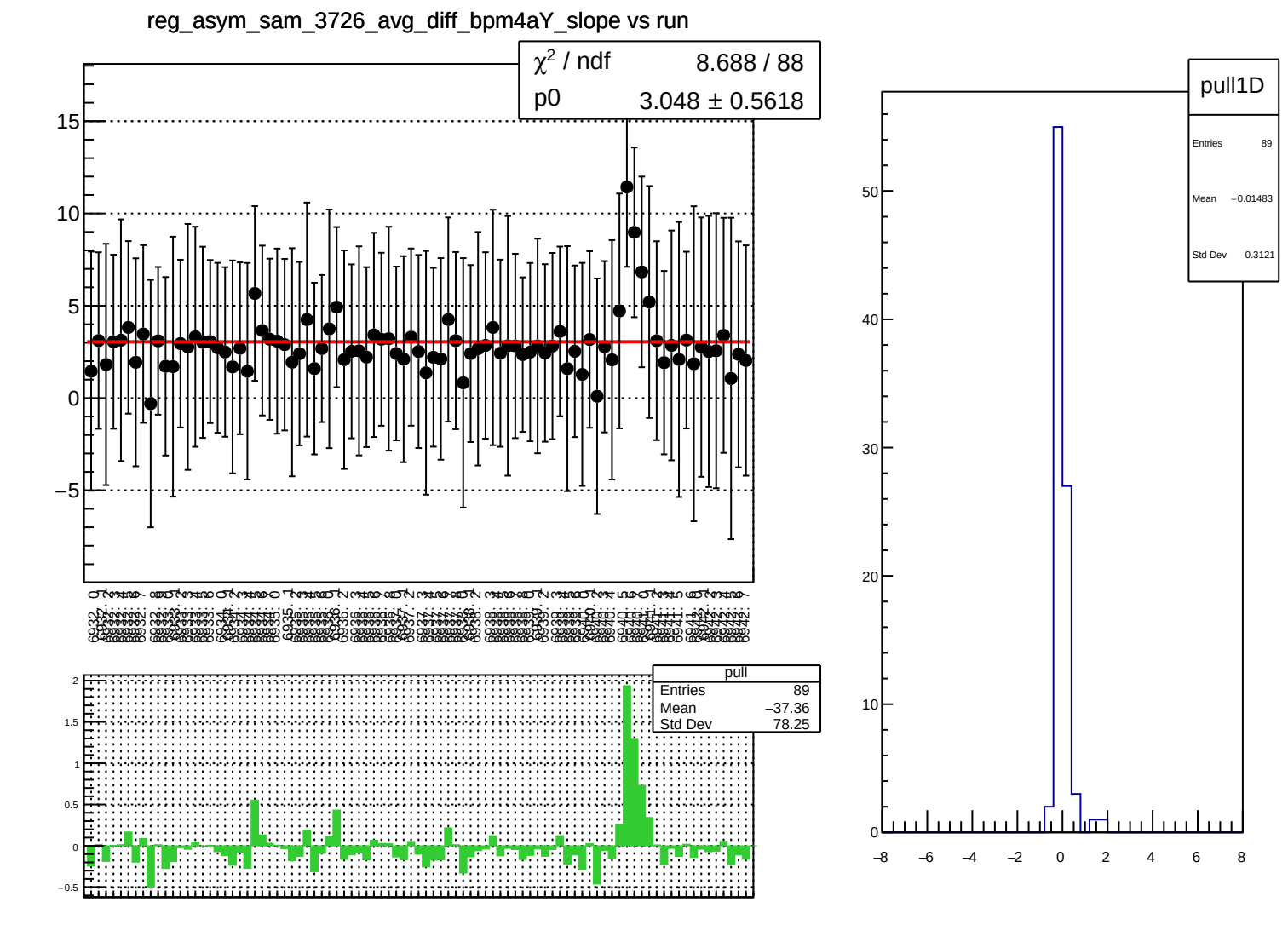

pull1D
Entries 89
Mean −0.02148
Std Dev 0.634

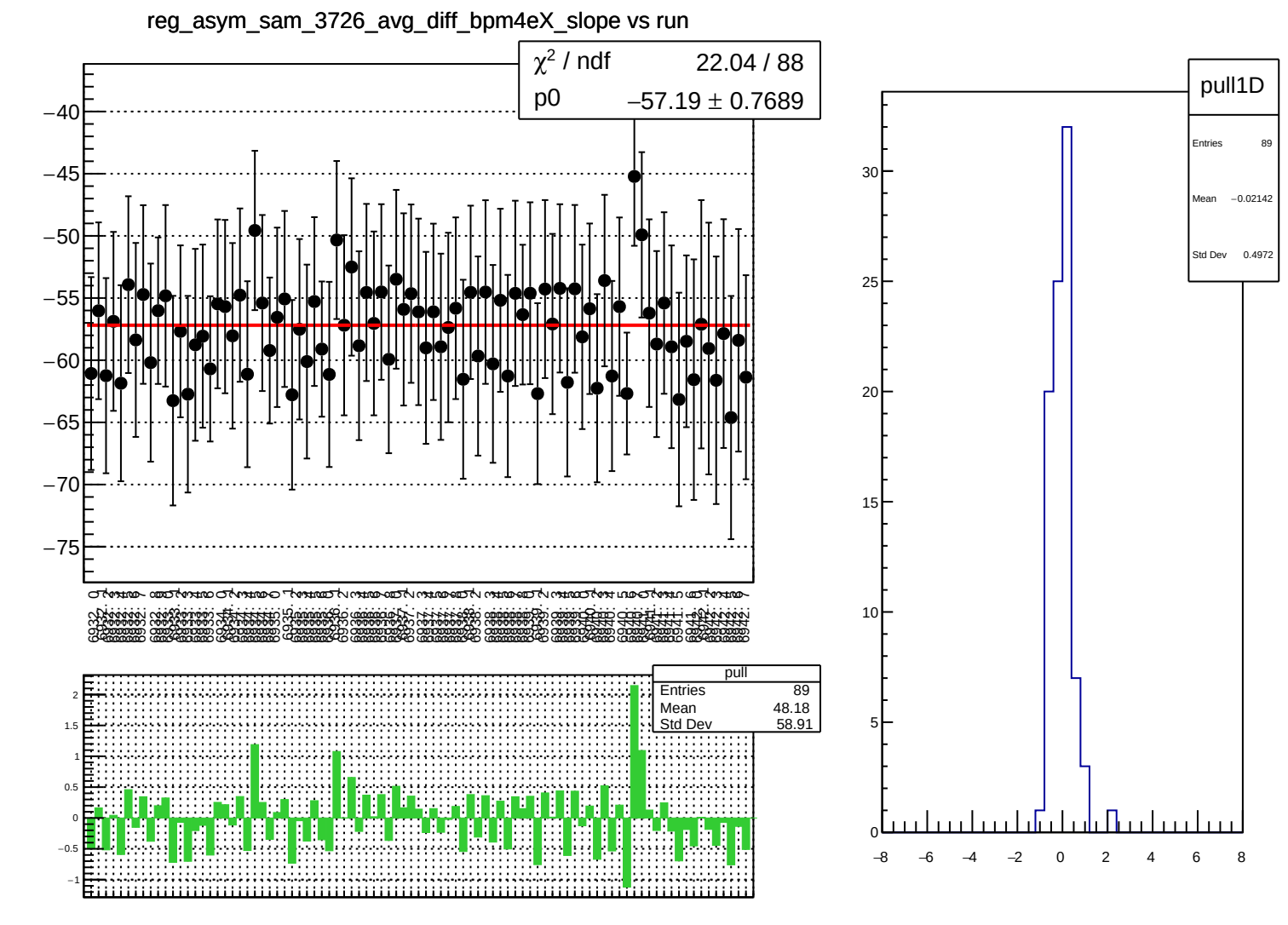

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.72 / 88
p0 3.99 ± 0.3166
pull
Entries 89
Mean −5866
Std Dev 5915

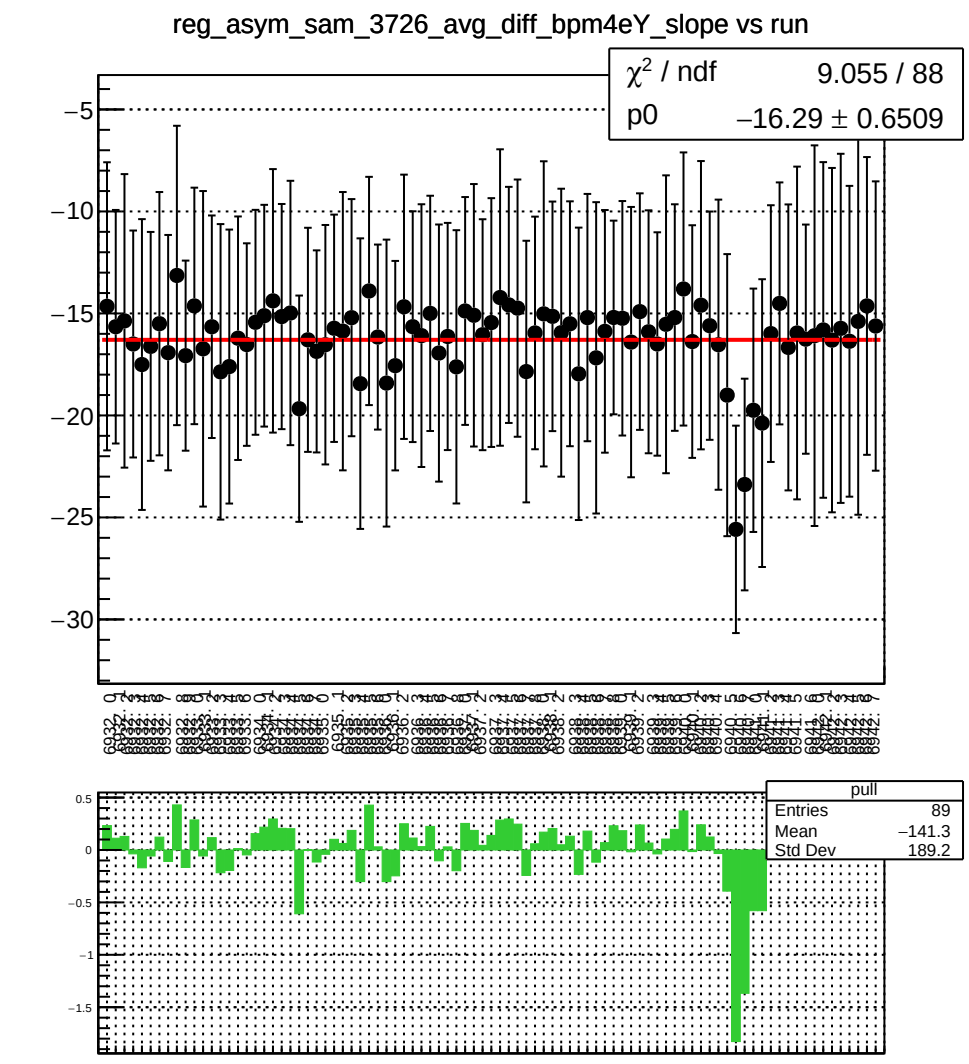

pull1D
Entries 89
Mean 0.0001979
Std Dev 0.4066

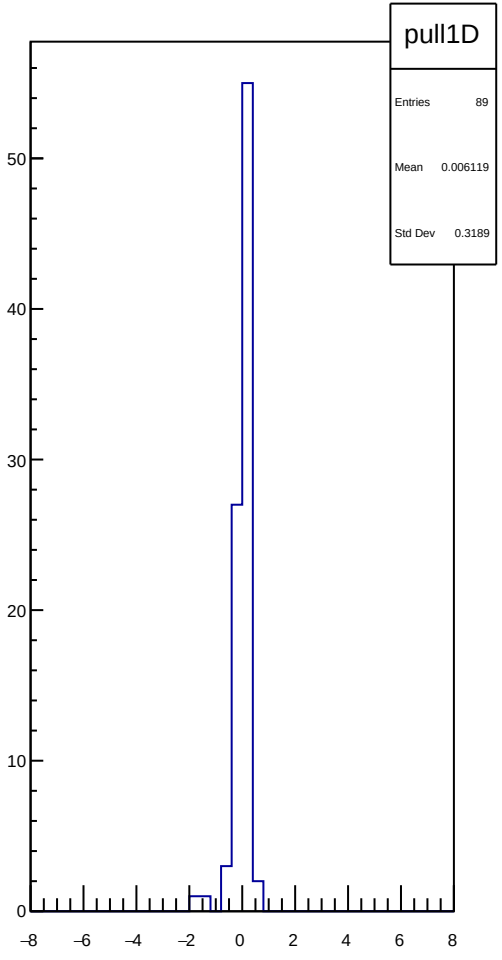

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 7.95 / 88
p0 0.2964 ± 0.01313
pull
Entries 89
Mean 847.3
Std Dev 793.3
pull1D
Entries 89
Mean −0.001389
Std Dev 0.2989

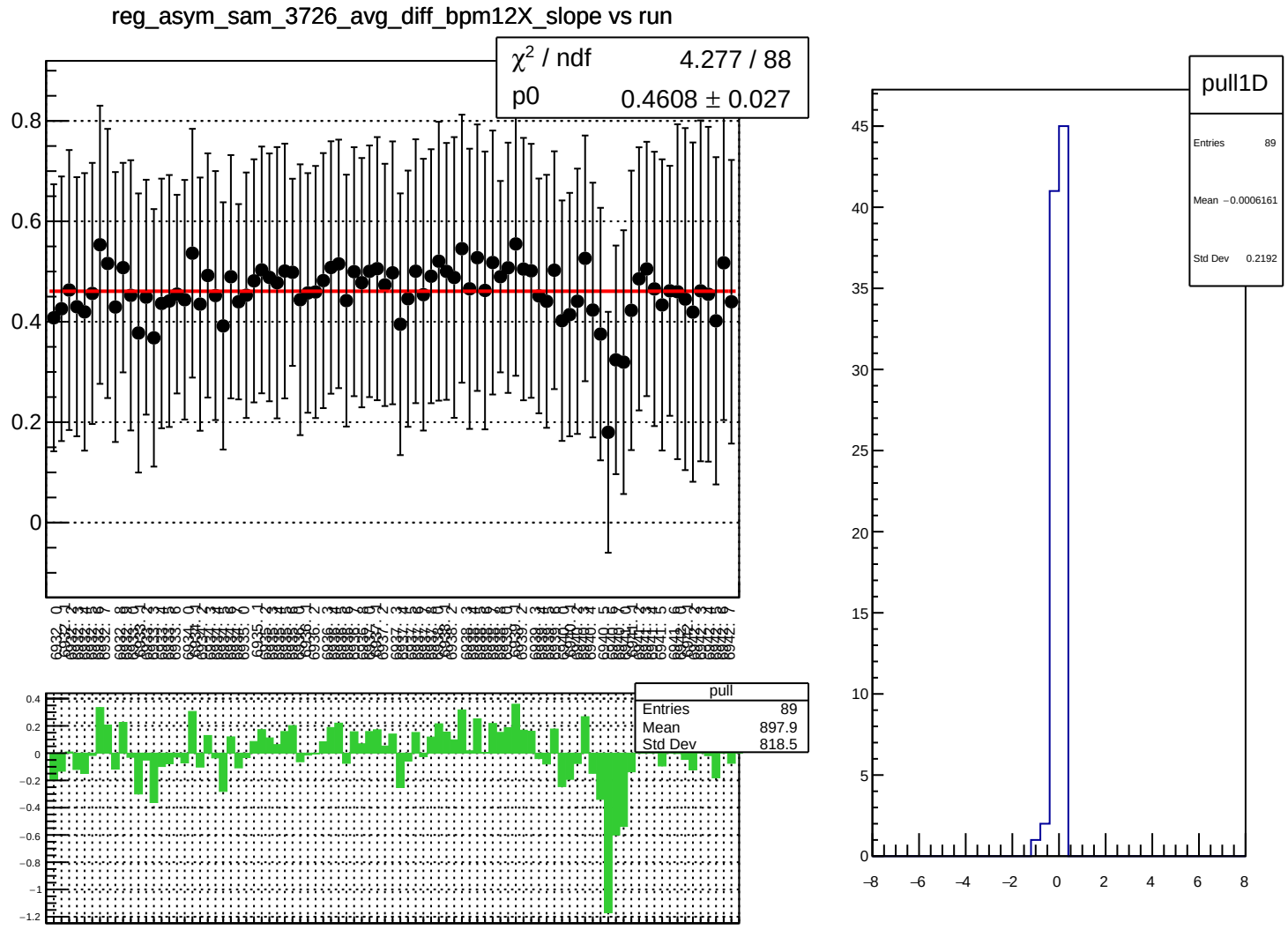

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 16.38 / 88
p0 −13.23 ± 0.8273
pull
Entries 89
Mean 67.61
Std Dev 53.96
pull1D
Entries 89
Mean 0.0188
Std Dev 0.4286

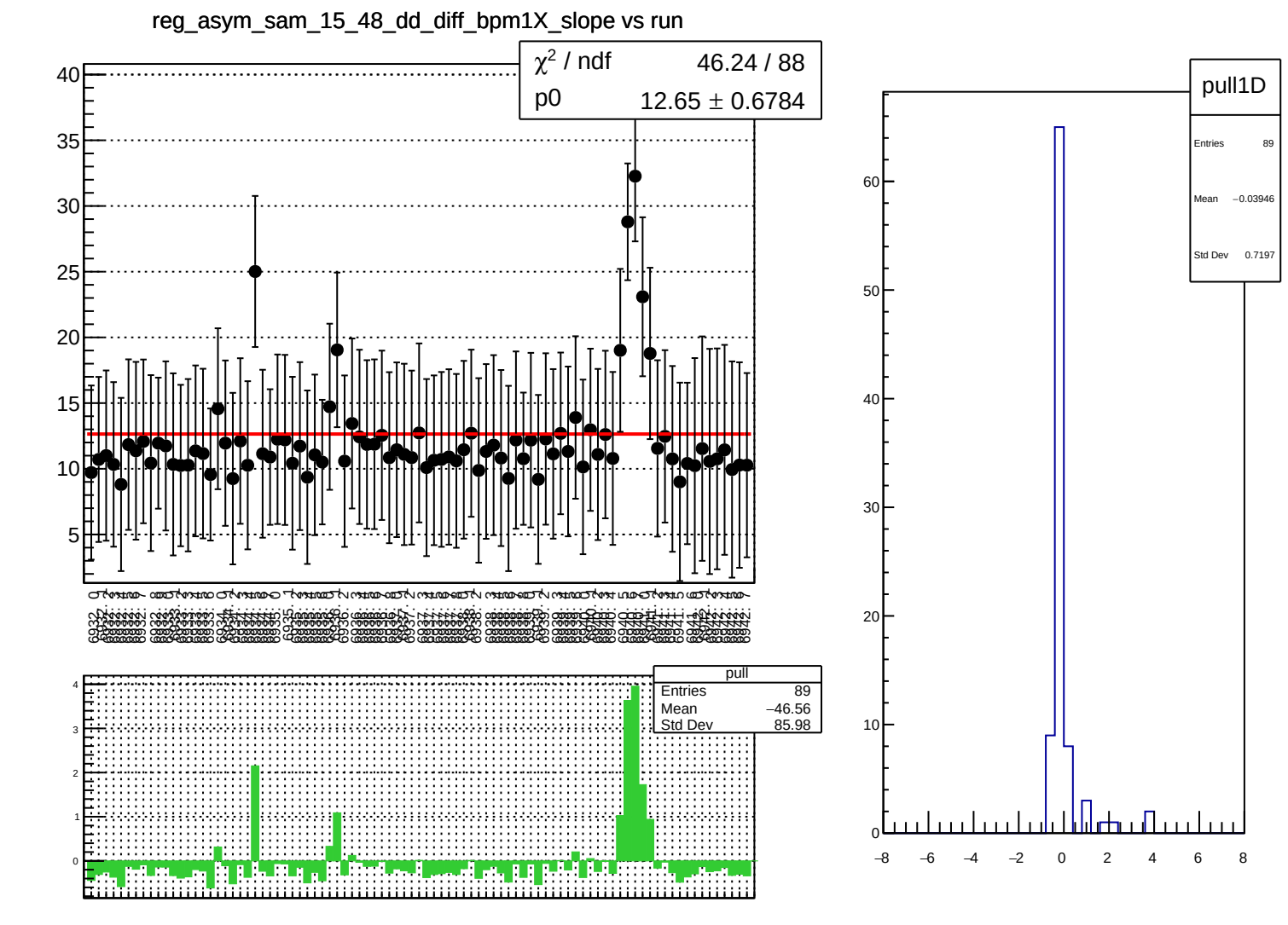

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.688 / 88
p0 3.048 ± 0.5618
pull
Entries 89
Mean −37.36
Std Dev 78.25
pull1D
Entries 89
Mean −0.01483
Std Dev 0.3121

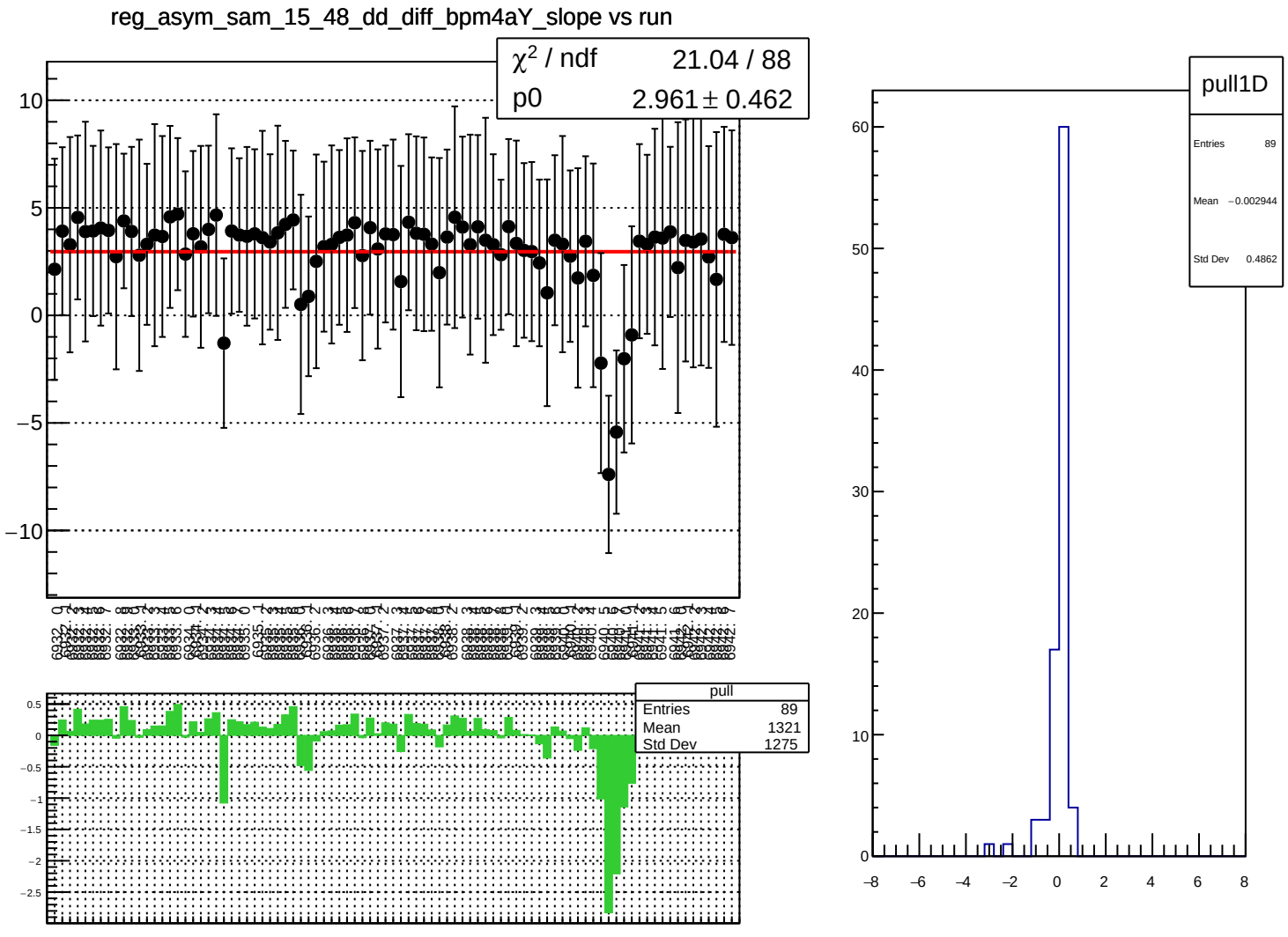

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 22.04 / 88
p0 −57.19 ± 0.7689
pull
Entries 89
Mean 48.18
Std Dev 58.91
pull1D
Entries 89
Mean −0.02142
Std Dev 0.4972

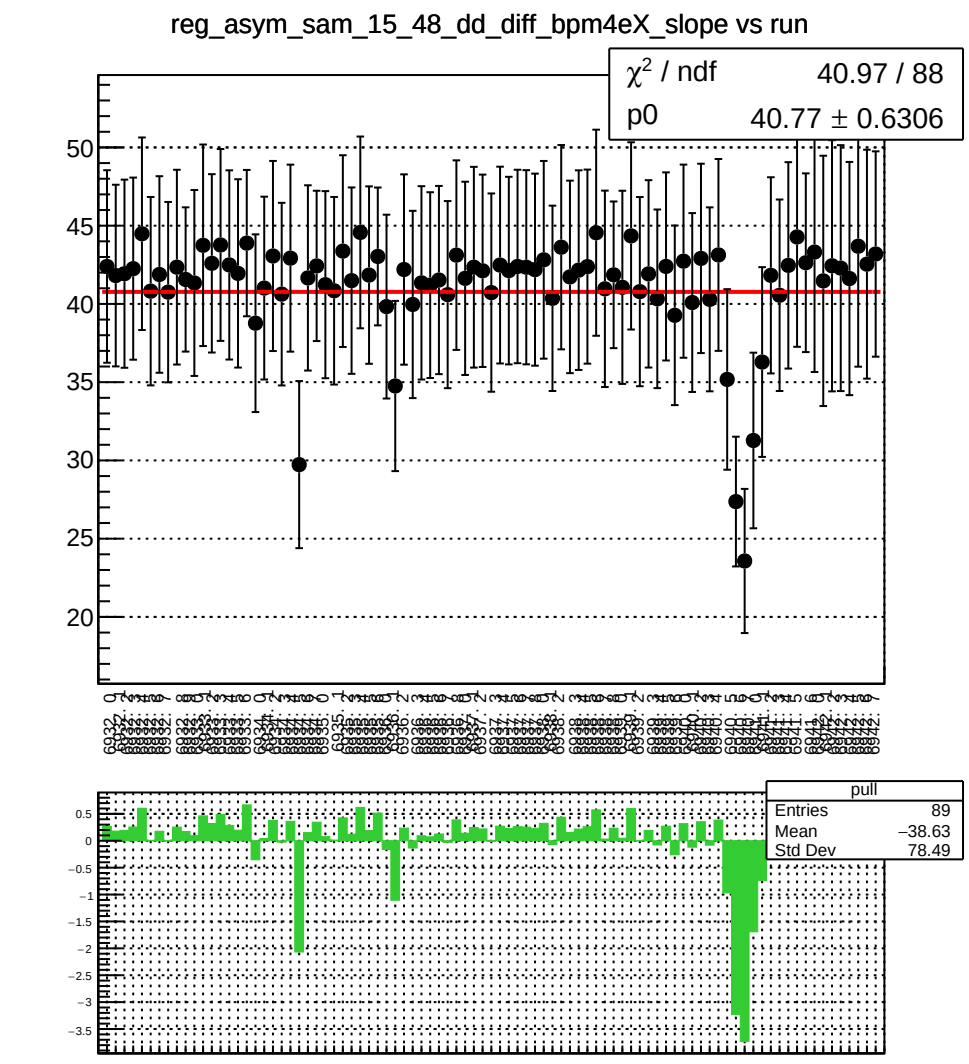

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.055 / 88
p0 −16.29 ± 0.6509
pull
Entries 89
Mean −141.3
Std Dev 189.2

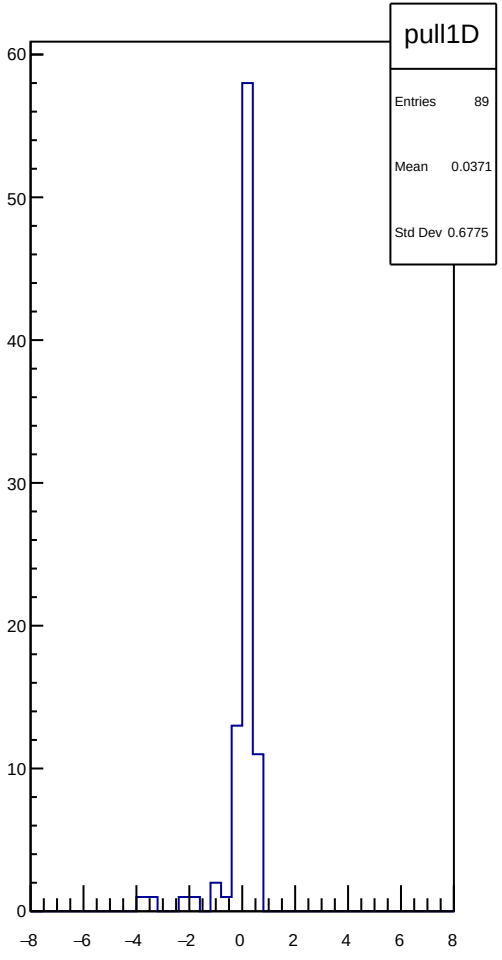

pull1D
Entries 89
Mean 0.006119
Std Dev 0.3189

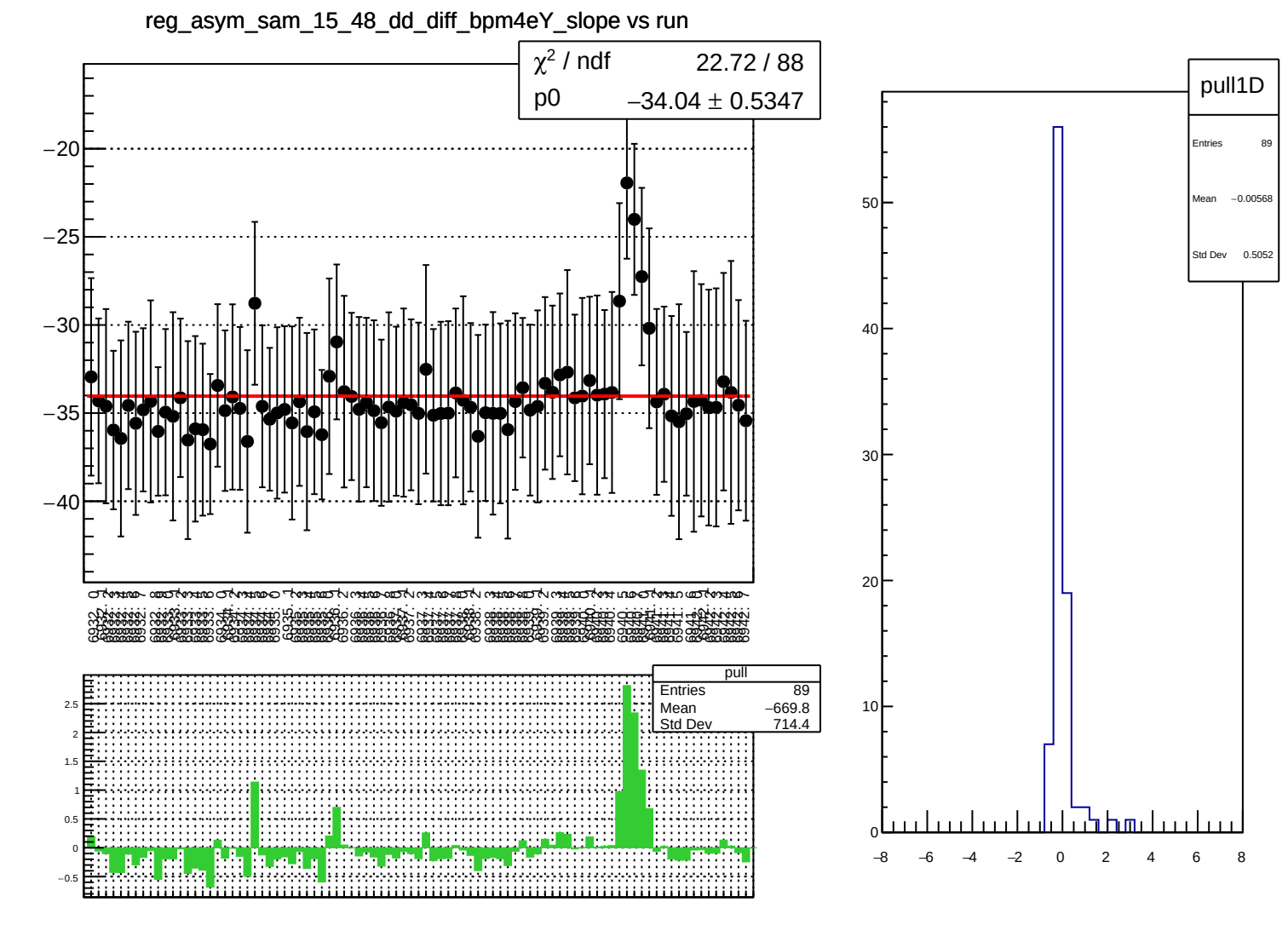

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 4.277 / 88
p0 0.4608 ± 0.027
pull
Entries 89
Mean 897.9
Std Dev 818.5
pull1D
Entries 89
Mean −0.0006161
Std Dev 0.2192

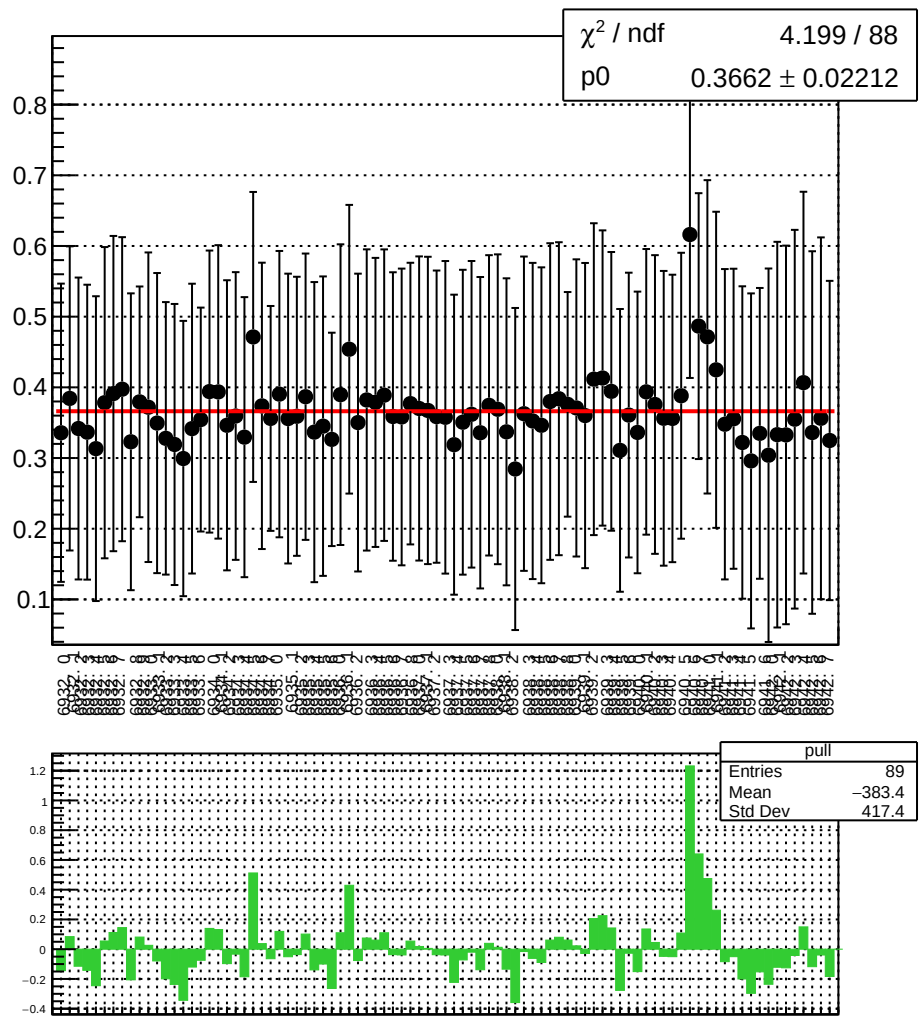

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 46.24 / 88
p0 12.65 ± 0.6784
pull
Entries 89
Mean −46.56
Std Dev 85.98
pull1D
Entries 89
Mean −0.03946
Std Dev 0.7197

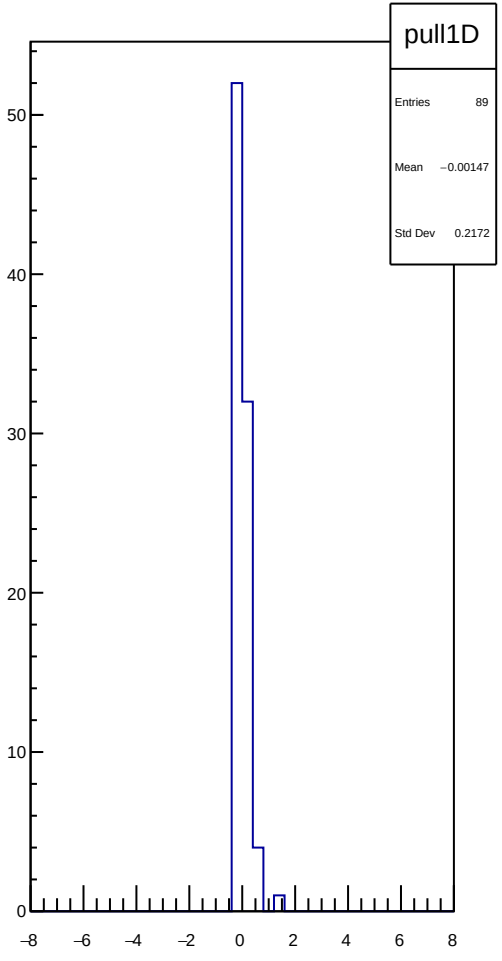

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 21.04 / 88
p0 2.961 ± 0.462
pull
Entries 89
Mean 1321
Std Dev 1275
pull1D
Entries 89
Mean −0.002944
Std Dev 0.4862

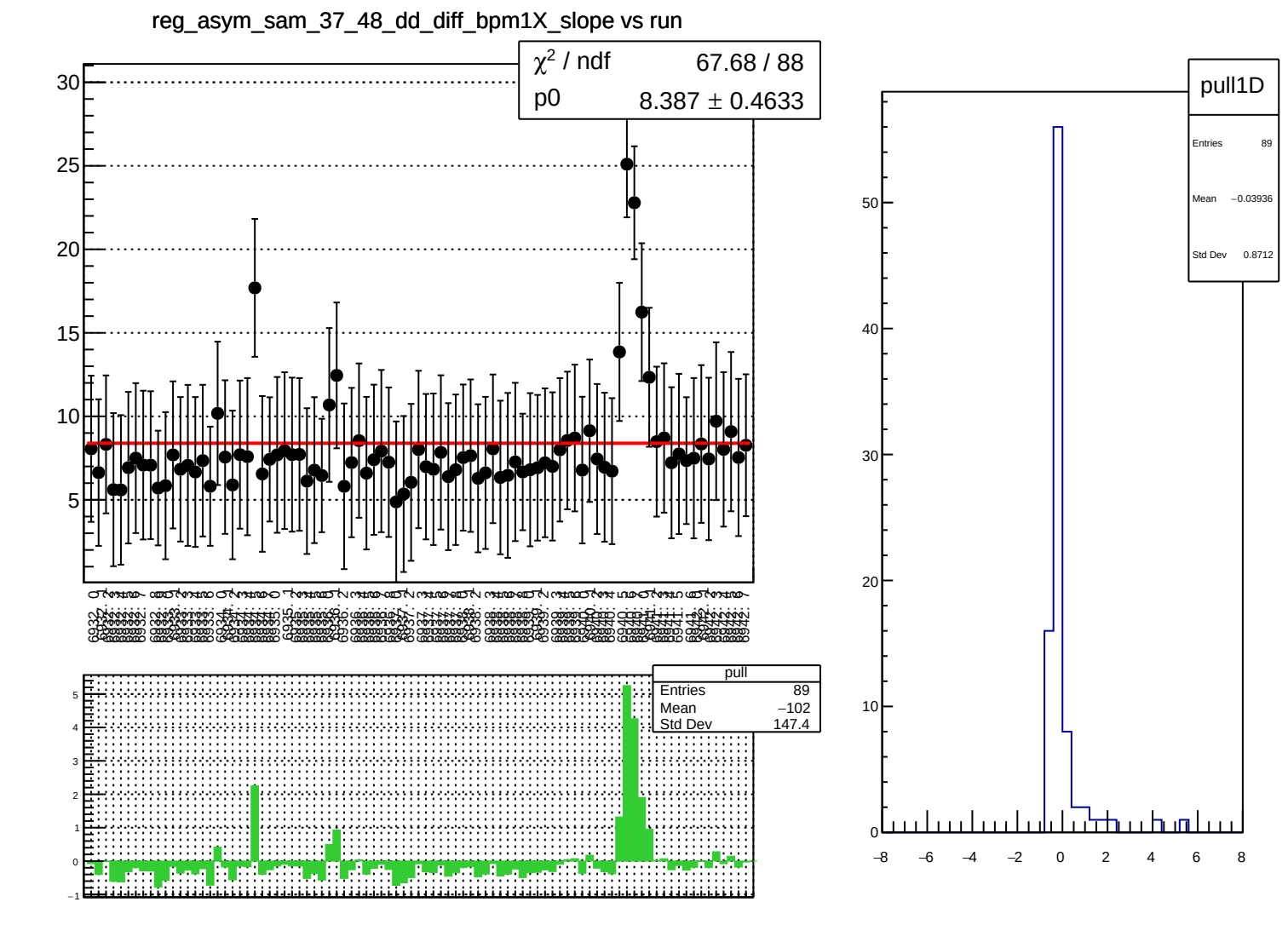

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 40.97 / 88
p0 40.77 ± 0.6306
pull
Entries 89
Mean −38.63
Std Dev 78.49

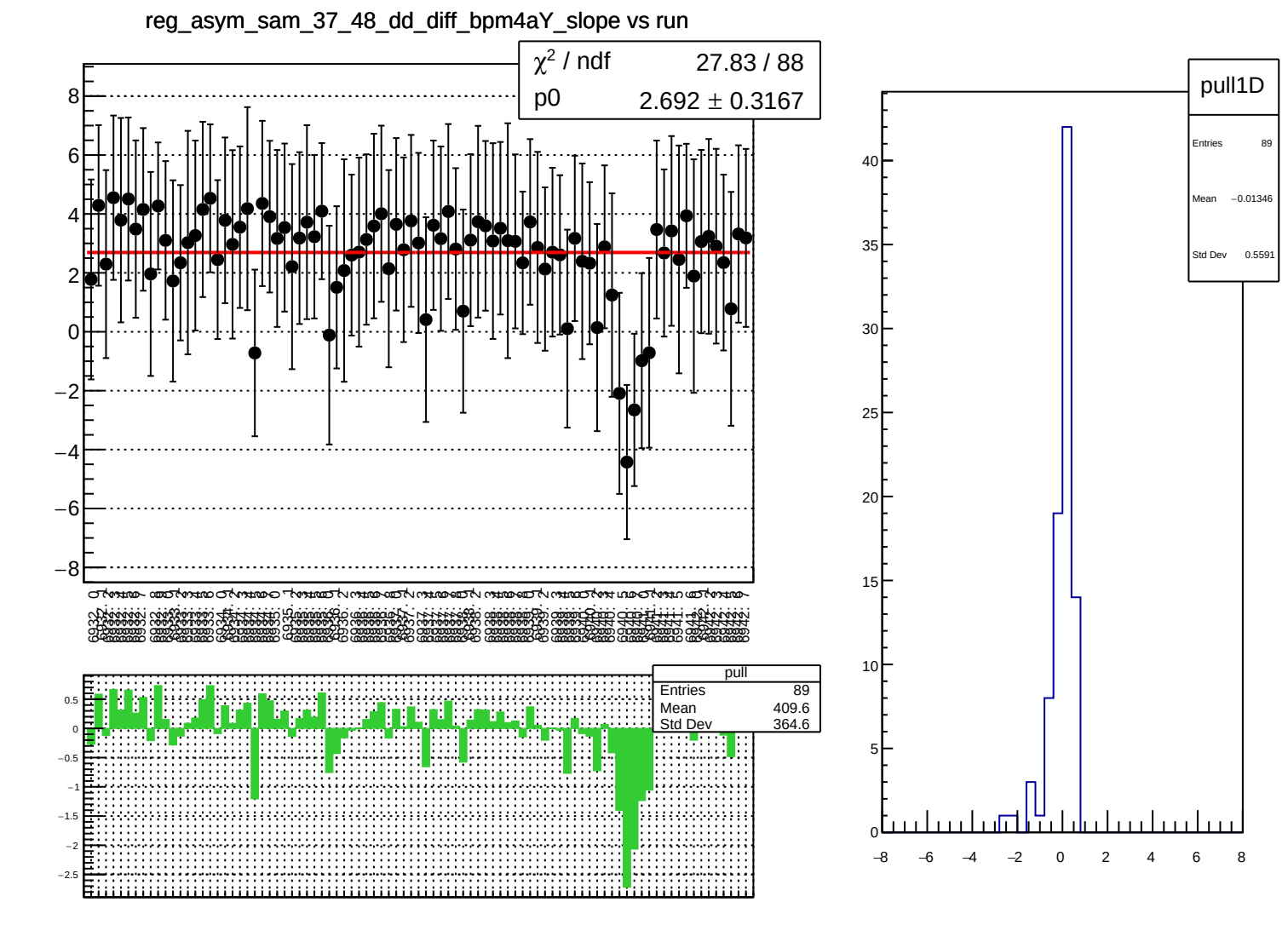

pull1D
Entries 89
Mean 0.0371
Std Dev 0.6775

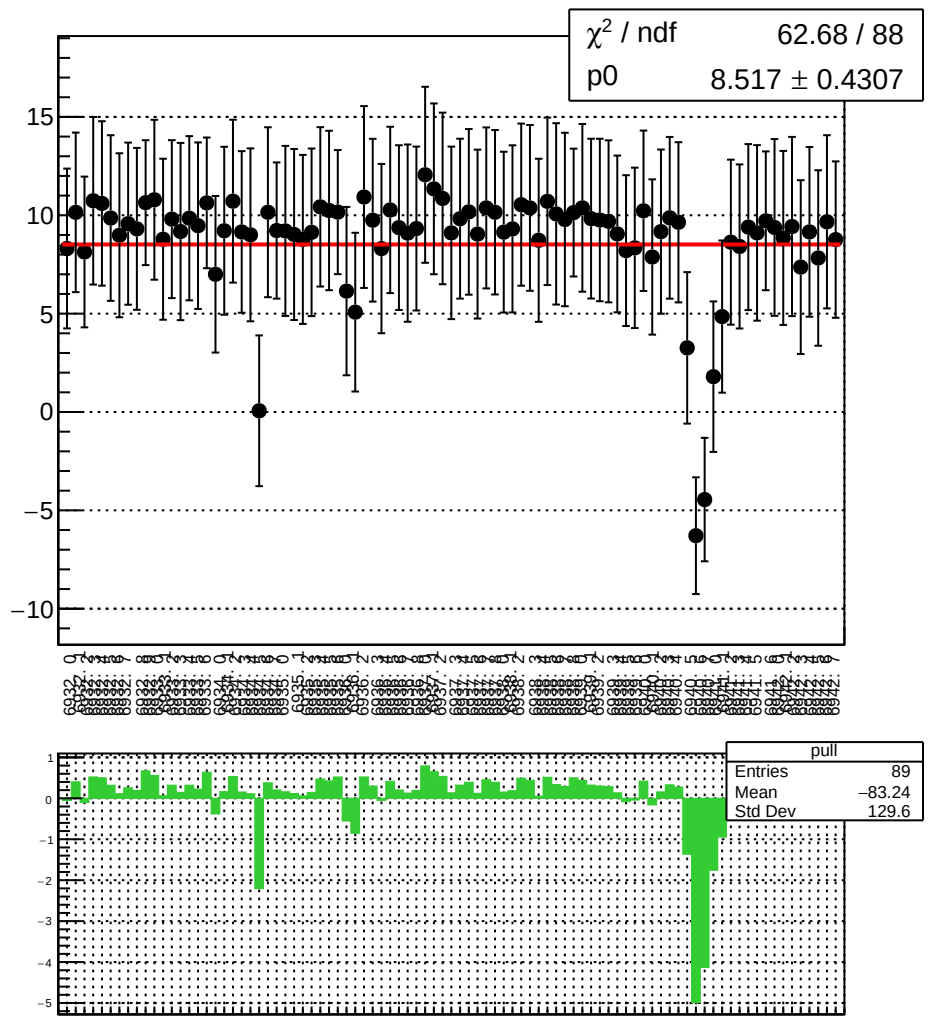

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 22.72 / 88
p0 −34.04 ± 0.5347
pull
Entries 89
Mean −669.8
Std Dev 714.4
pull1D
Entries 89
Mean −0.00568
Std Dev 0.5052

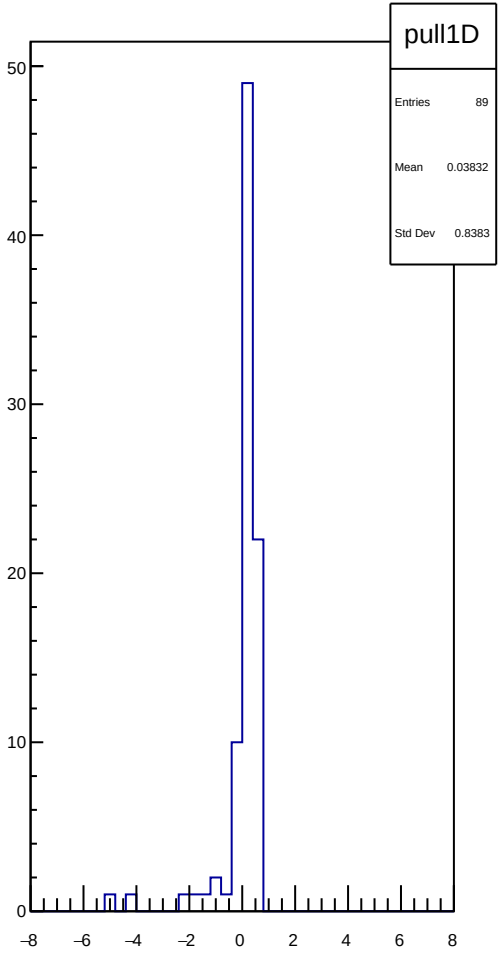

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 4.199 / 88
p0 0.3662 ± 0.02212
pull
Entries 89
Mean −383.4
Std Dev 417.4

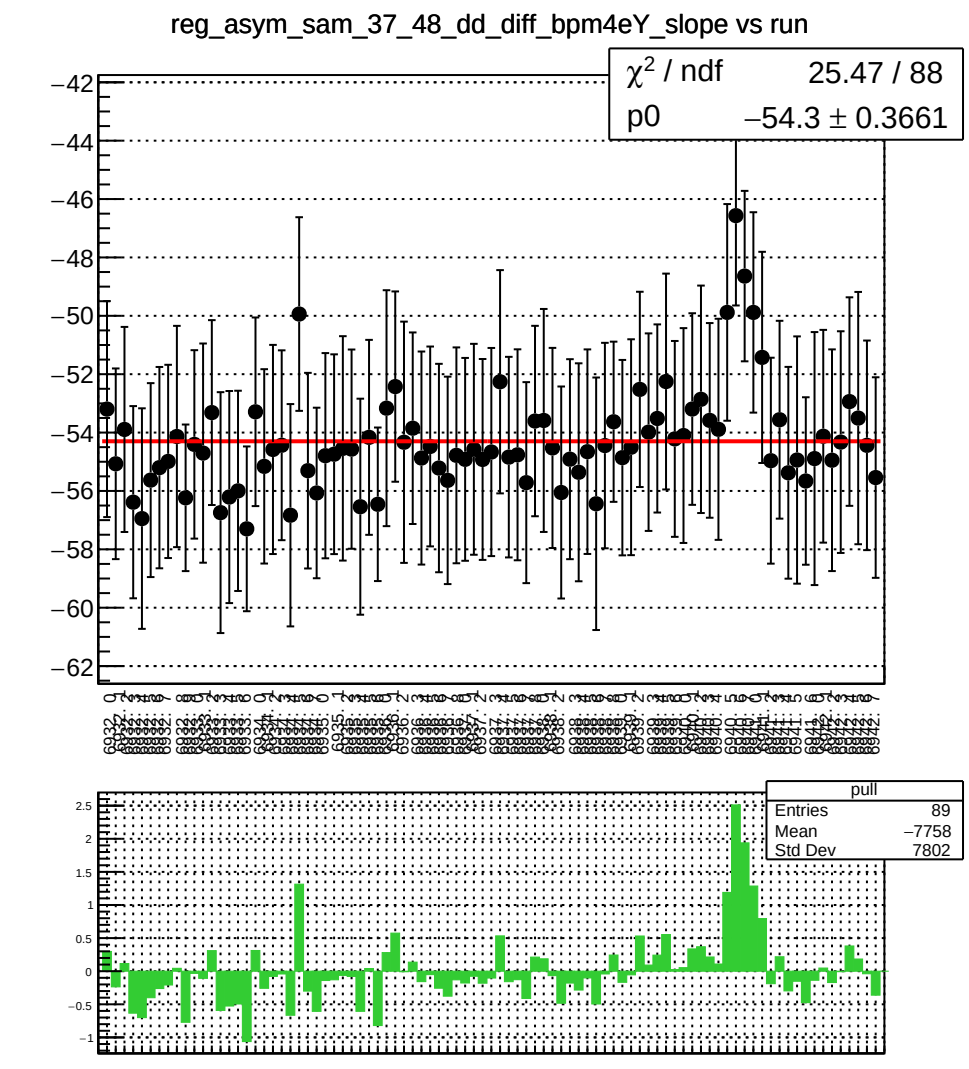

pull1D
Entries 89
Mean −0.00147
Std Dev 0.2172

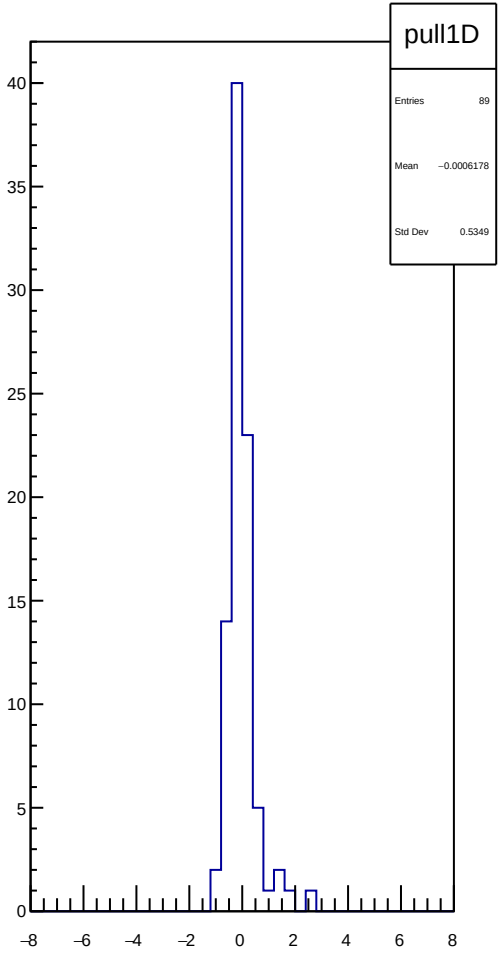

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 67.68 / 88
p0 8.387 ± 0.4633
pull
Entries 89
Mean −102
Std Dev 147.4
pull1D
Entries 89
Mean −0.03936
Std Dev 0.8712

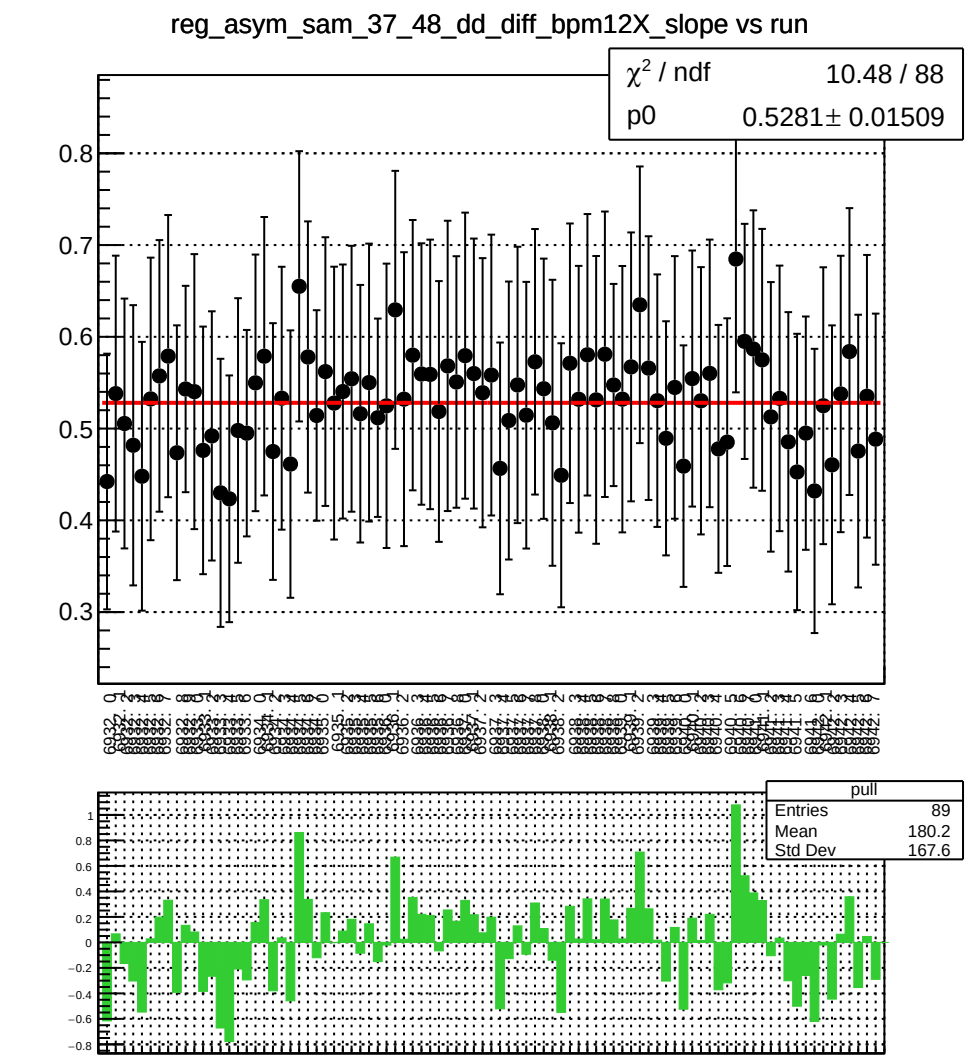

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 27.83 / 88
p0 2.692 ± 0.3167
pull
Entries 89
Mean 409.6
Std Dev 364.6
pull1D
Entries 89
Mean −0.01346
Std Dev 0.5591

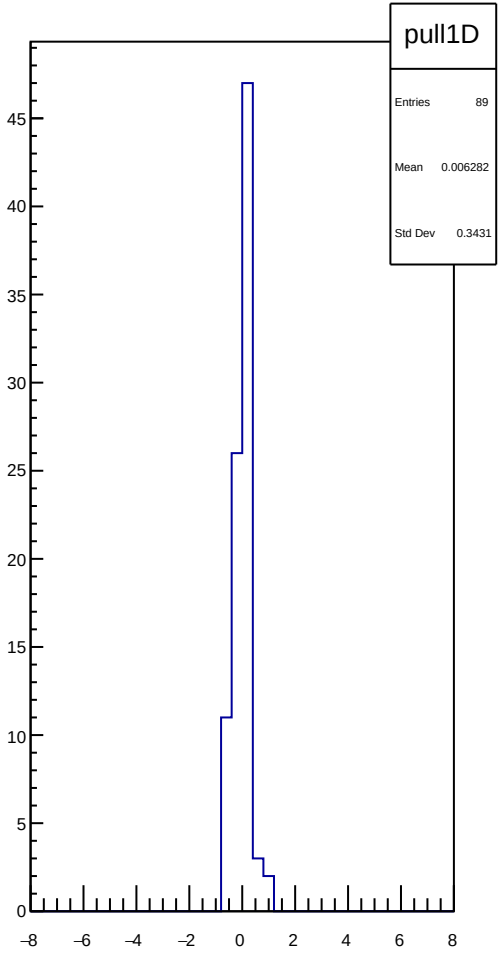

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 62.68 / 88
p0 8.517 ± 0.4307
pull
Entries 89
Mean −83.24
Std Dev 129.6

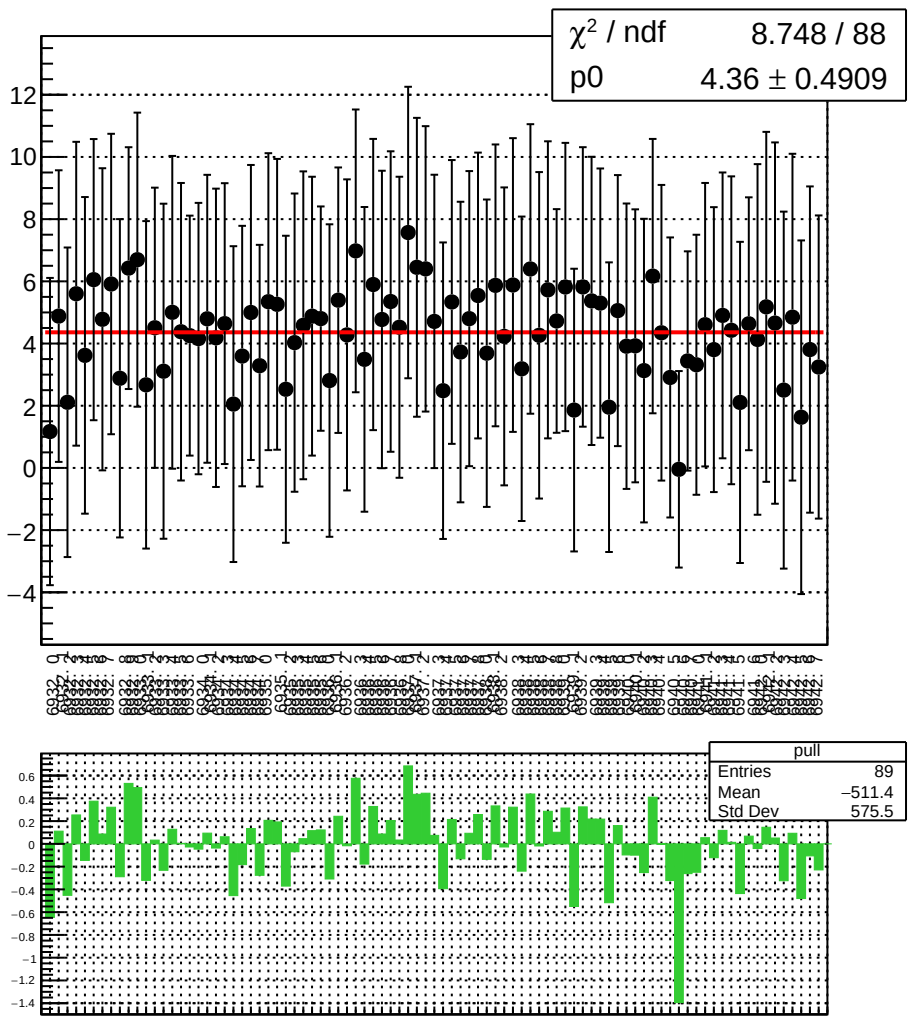

pull1D
Entries 89
Mean 0.03832
Std Dev 0.8383

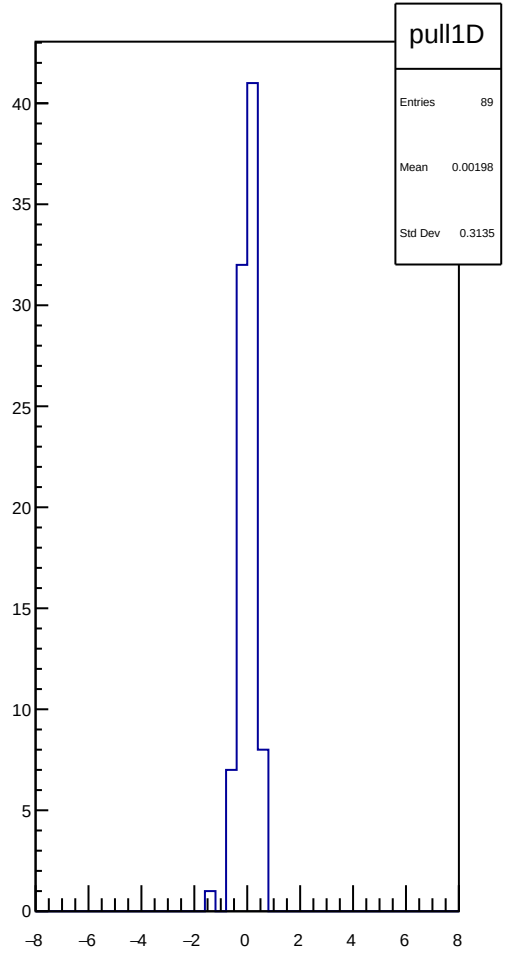

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 25.47 / 88
p0 −54.3 ± 0.3661
pull
Entries 89
Mean −7758
Std Dev 7802

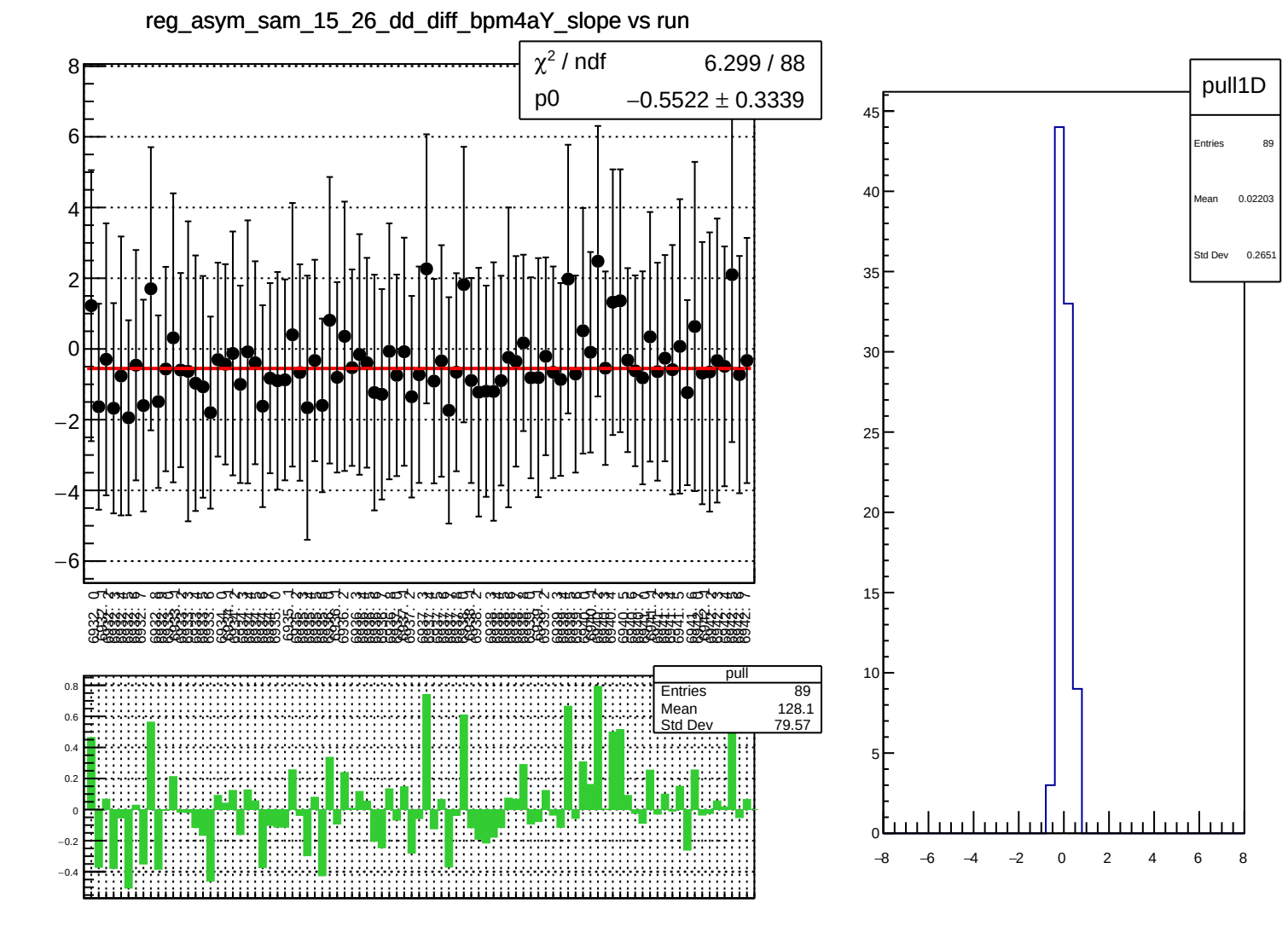

pull1D
Entries 89
Mean −0.0006178
Std Dev 0.5349

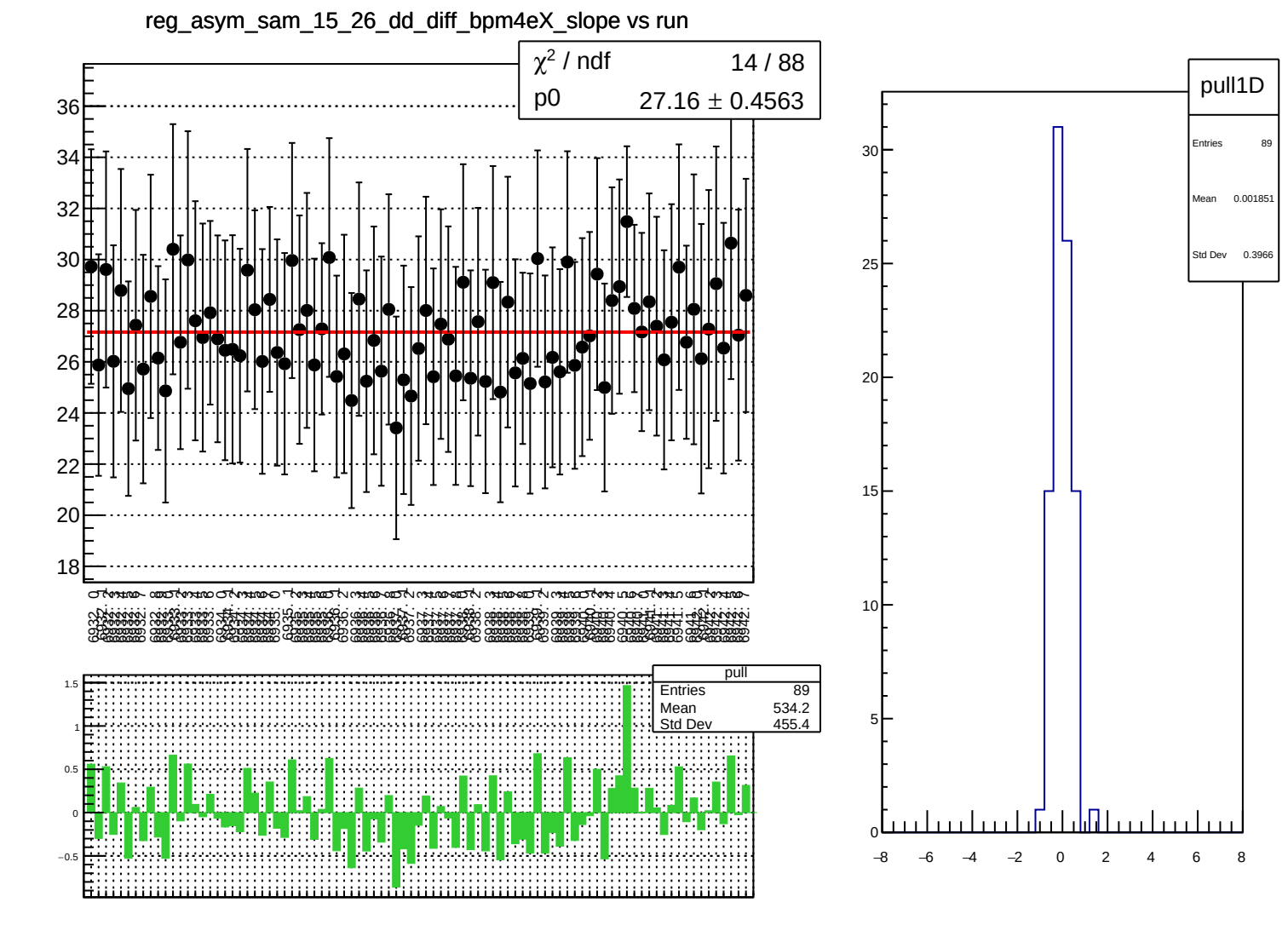

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 10.48 / 88
p0 0.5281± 0.01509
pull
Entries 89
Mean 180.2
Std Dev 167.6

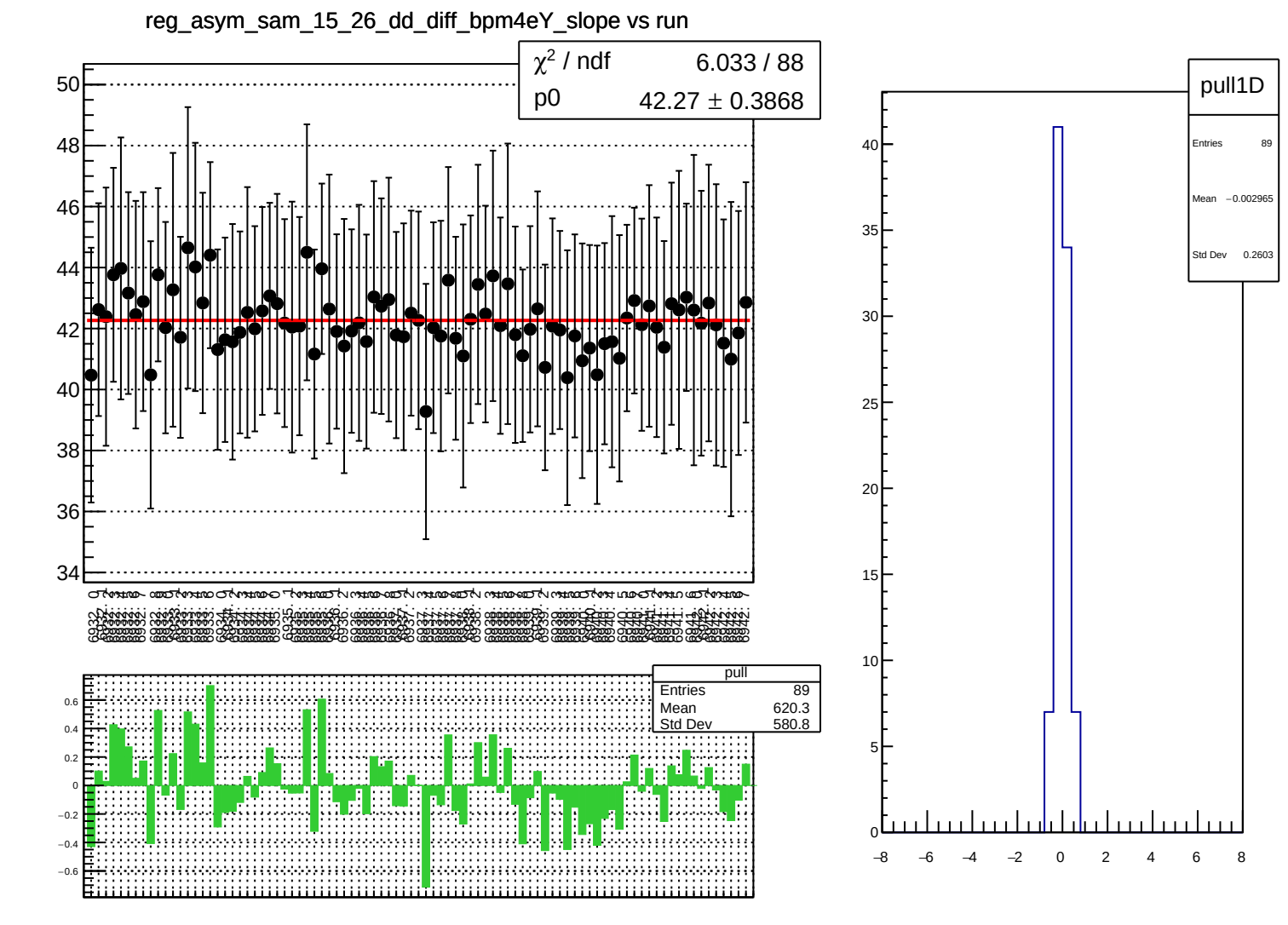

pull1D
Entries 89
Mean 0.006282
Std Dev 0.3431

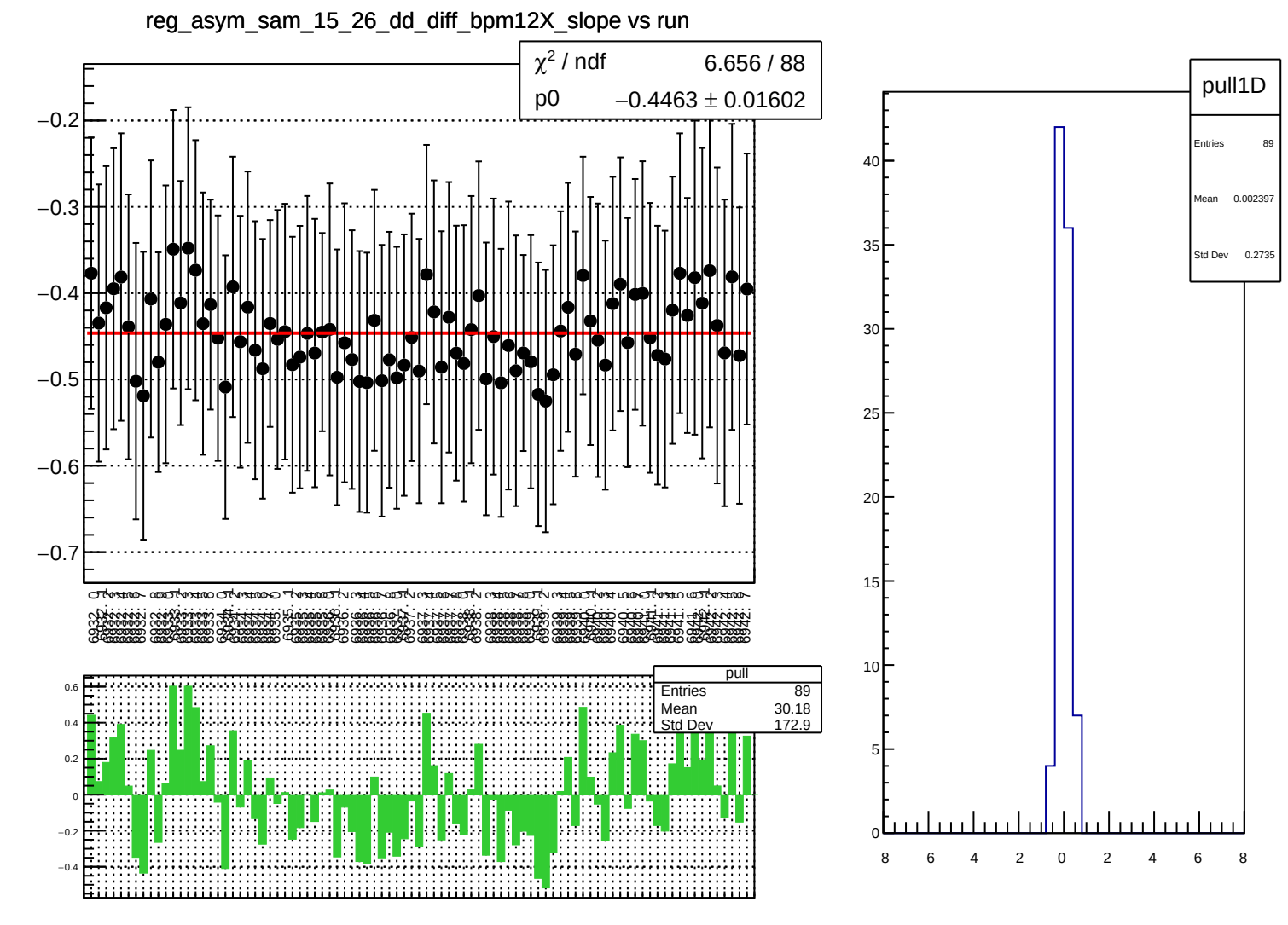

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 8.748 / 88
p0 4.36 ± 0.4909
pull
Entries 89
Mean −511.4
Std Dev 575.5

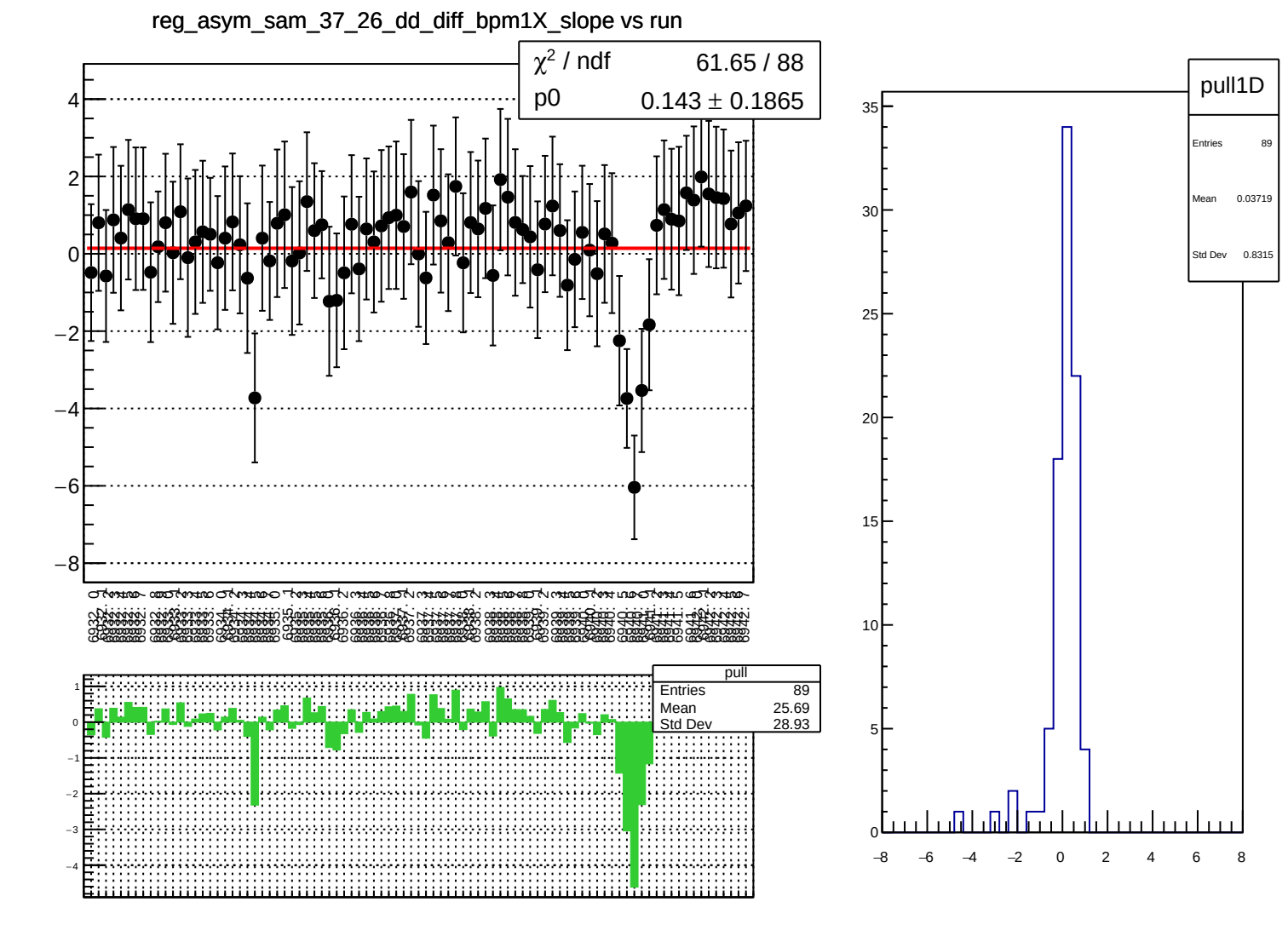

pull1D
Entries 89
Mean 0.00198
Std Dev 0.3135

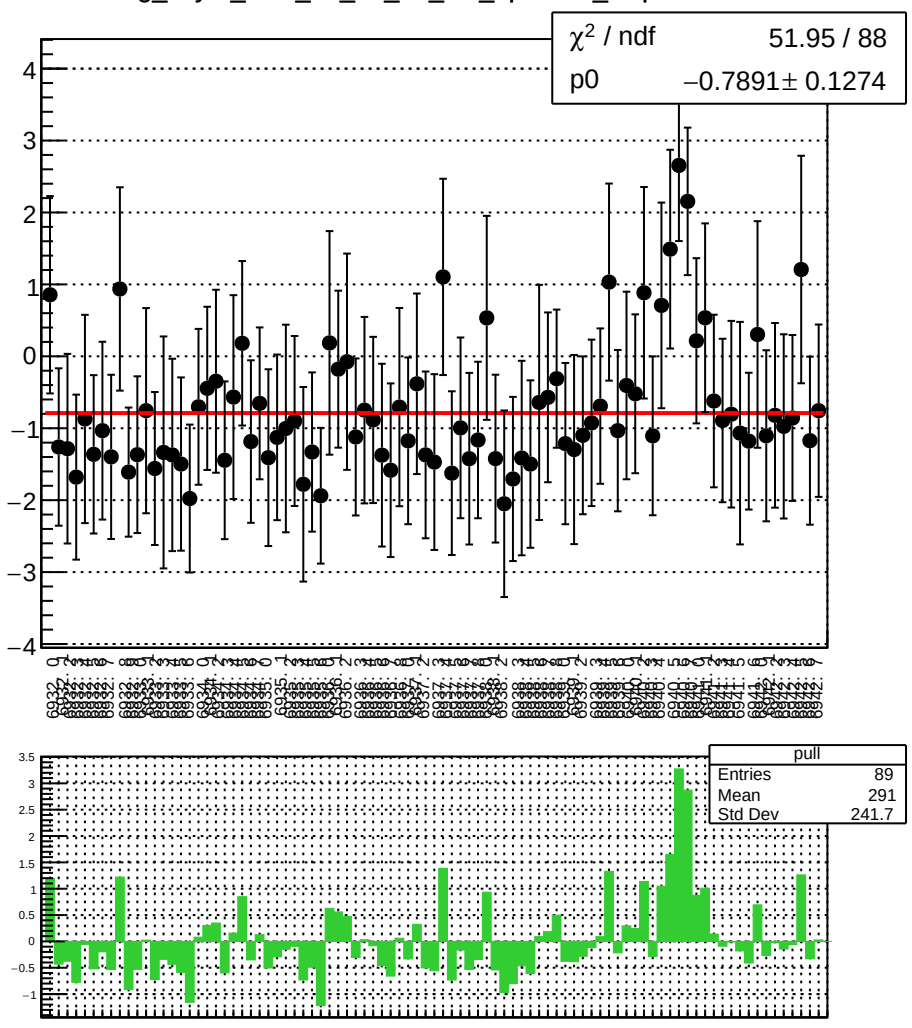

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.299 / 88
p0 −0.5522 ± 0.3339
pull
Entries 89
Mean 128.1
Std Dev 79.57
pull1D
Entries 89
Mean 0.02203
Std Dev 0.2651

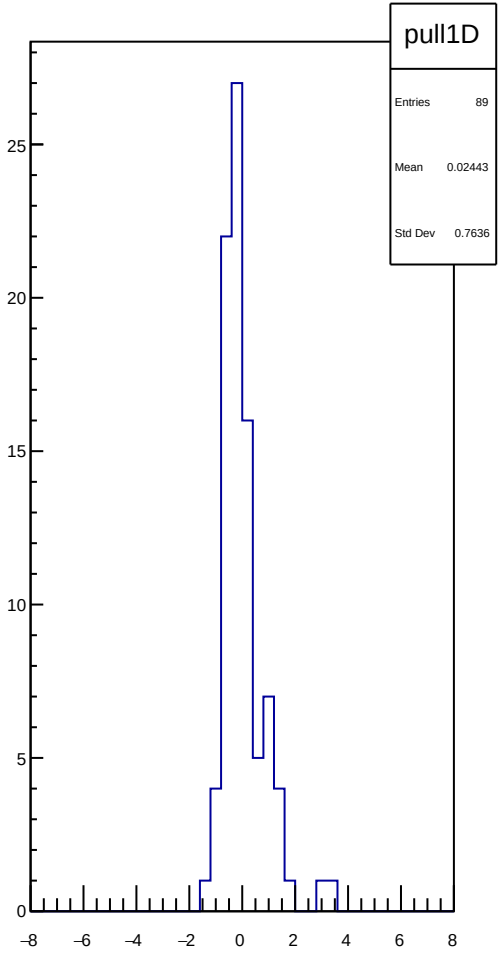

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 14 / 88
p0 27.16 ± 0.4563
pull
Entries 89
Mean 534.2
Std Dev 455.4
pull1D
Entries 89
Mean 0.001851
Std Dev 0.3966

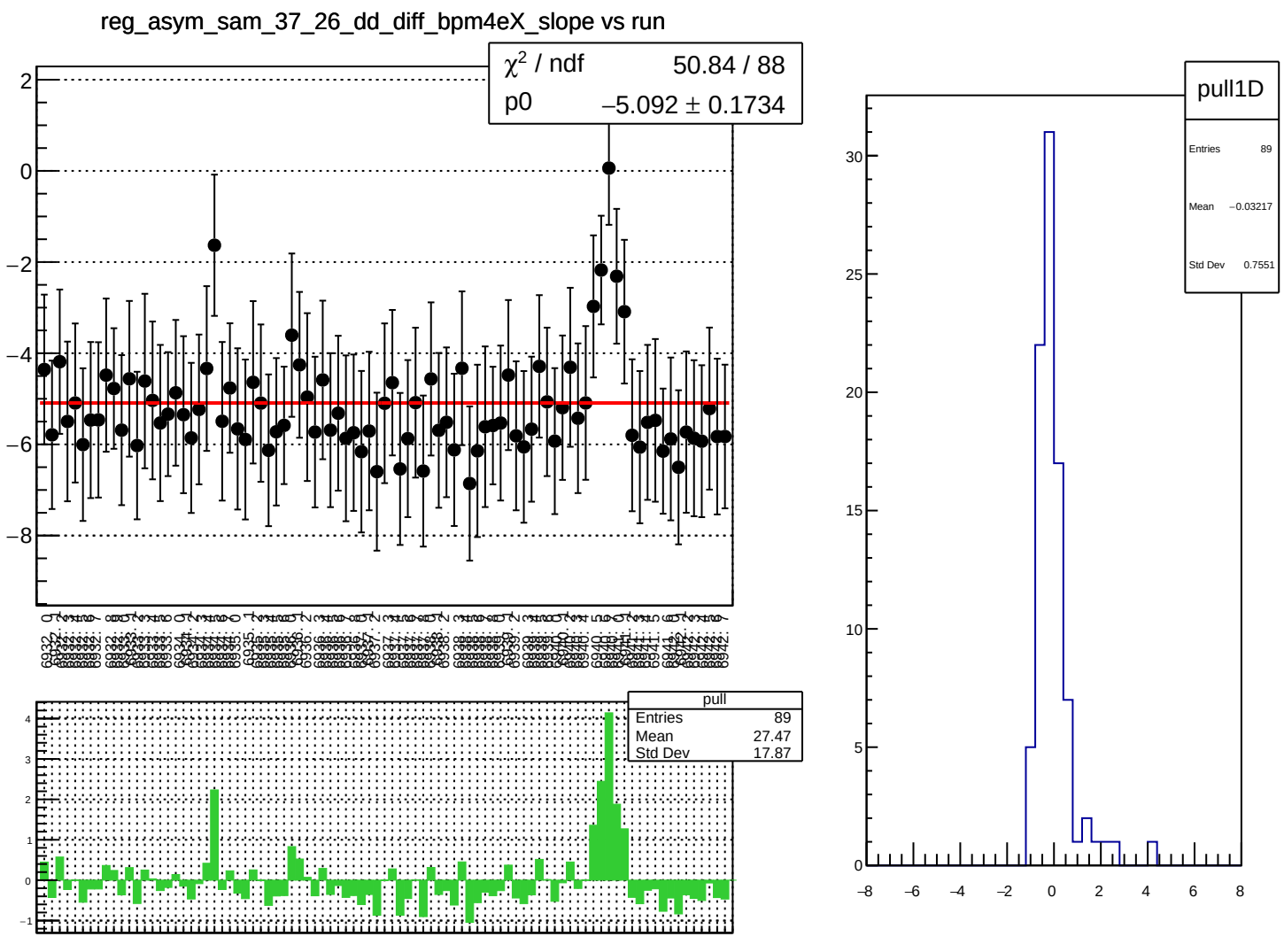

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.033 / 88
p0 42.27 ± 0.3868
pull
Entries 89
Mean 620.3
Std Dev 580.8
pull1D
Entries 89
Mean −0.002965
Std Dev 0.2603

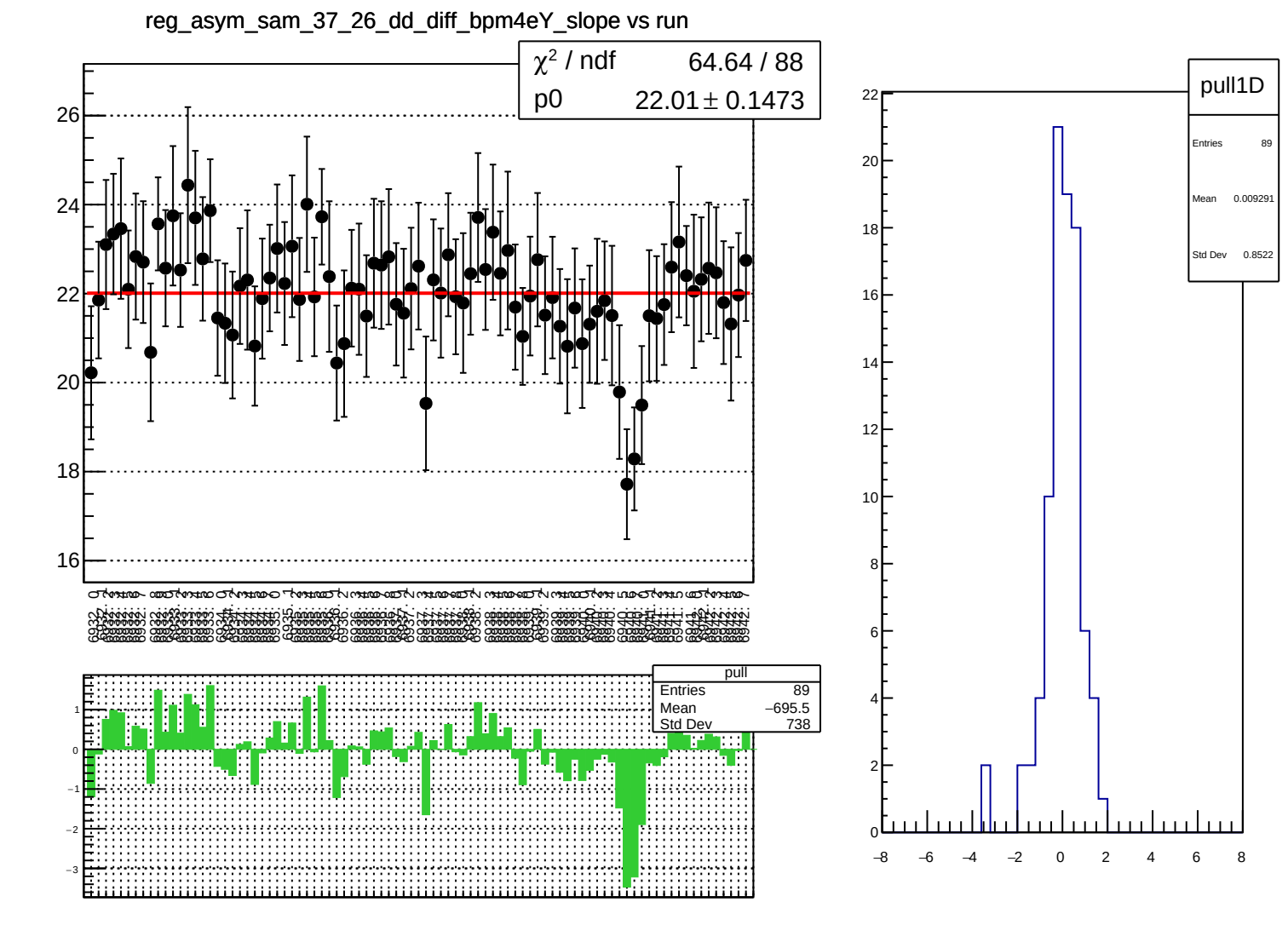

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 6.656 / 88
p0 −0.4463 ± 0.01602
pull
Entries 89
Mean 30.18
Std Dev 172.9
pull1D
Entries 89
Mean 0.002397
Std Dev 0.2735

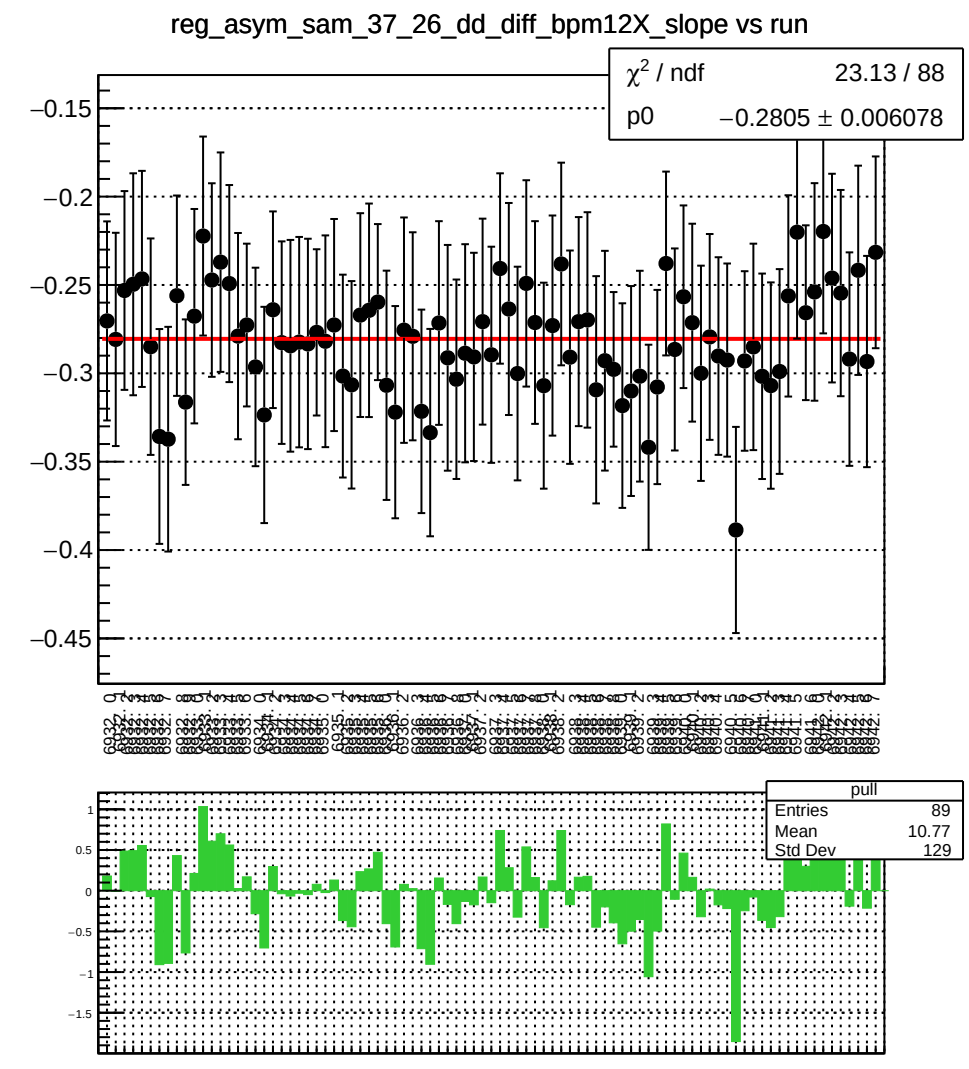

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 61.65 / 88
p0 0.143 ± 0.1865
pull
Entries 89
Mean 25.69
Std Dev 28.93
pull1D
Entries 89
Mean 0.03719
Std Dev 0.8315

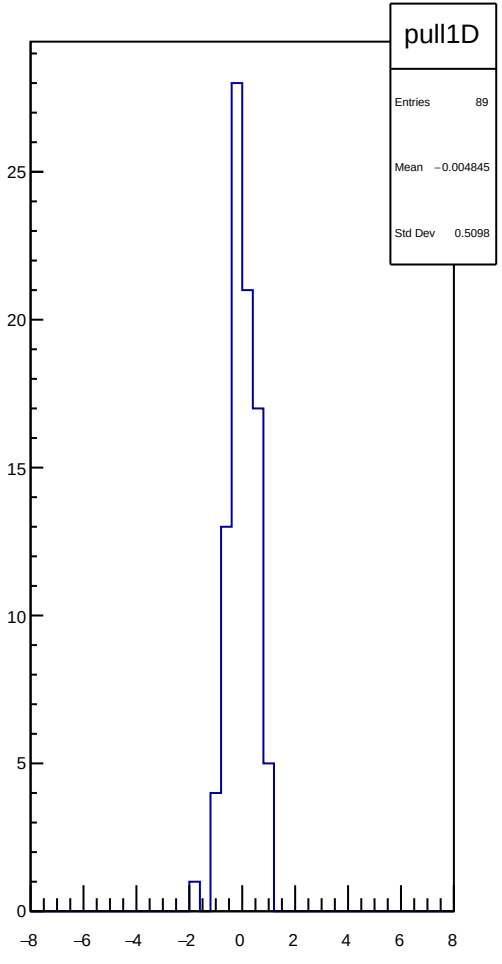

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 51.95 / 88
p0 −0.7891± 0.1274
pull
Entries 89
Mean 291
Std Dev 241.7

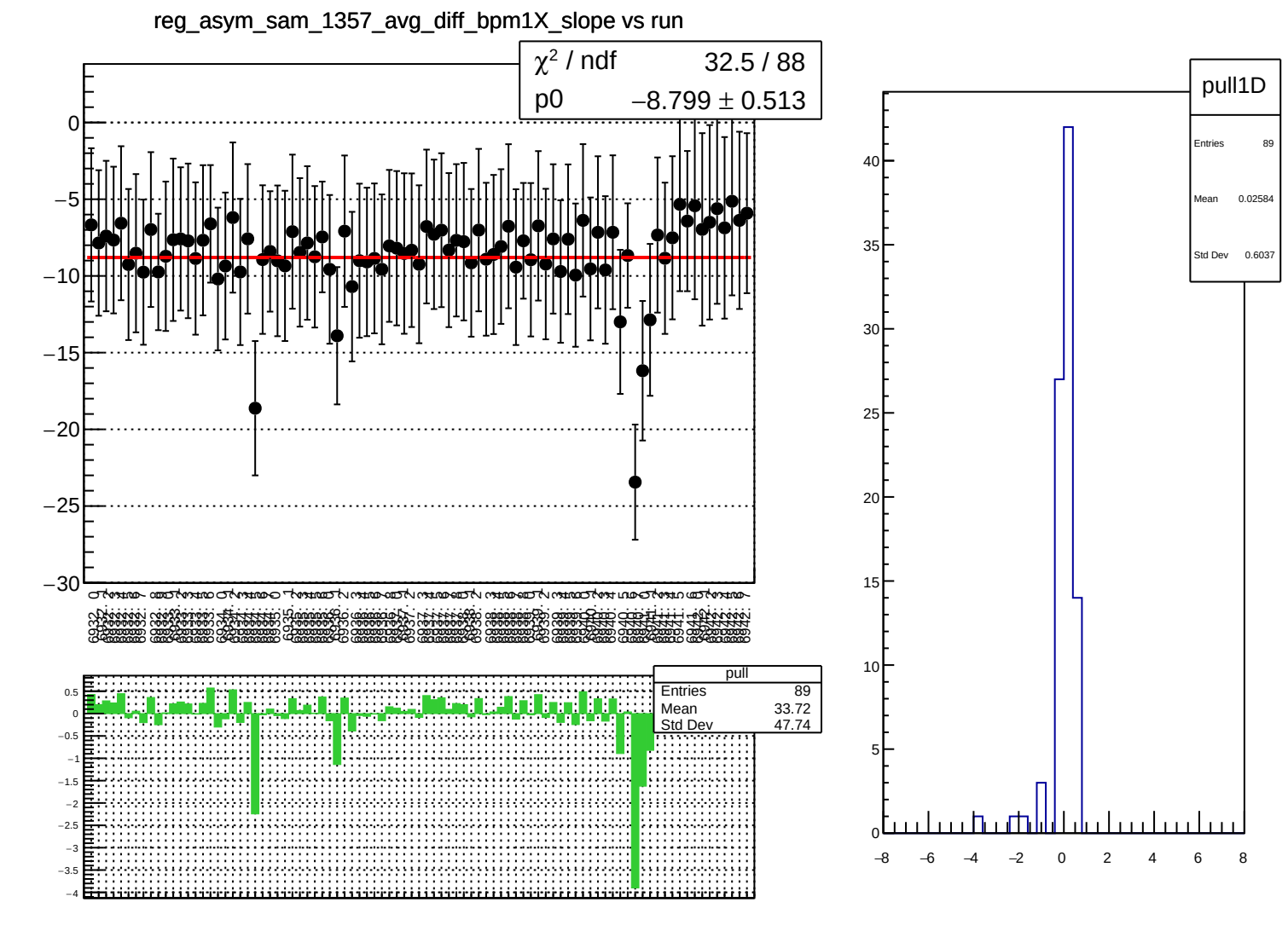

pull1D
Entries 89
Mean 0.02443
Std Dev 0.7636

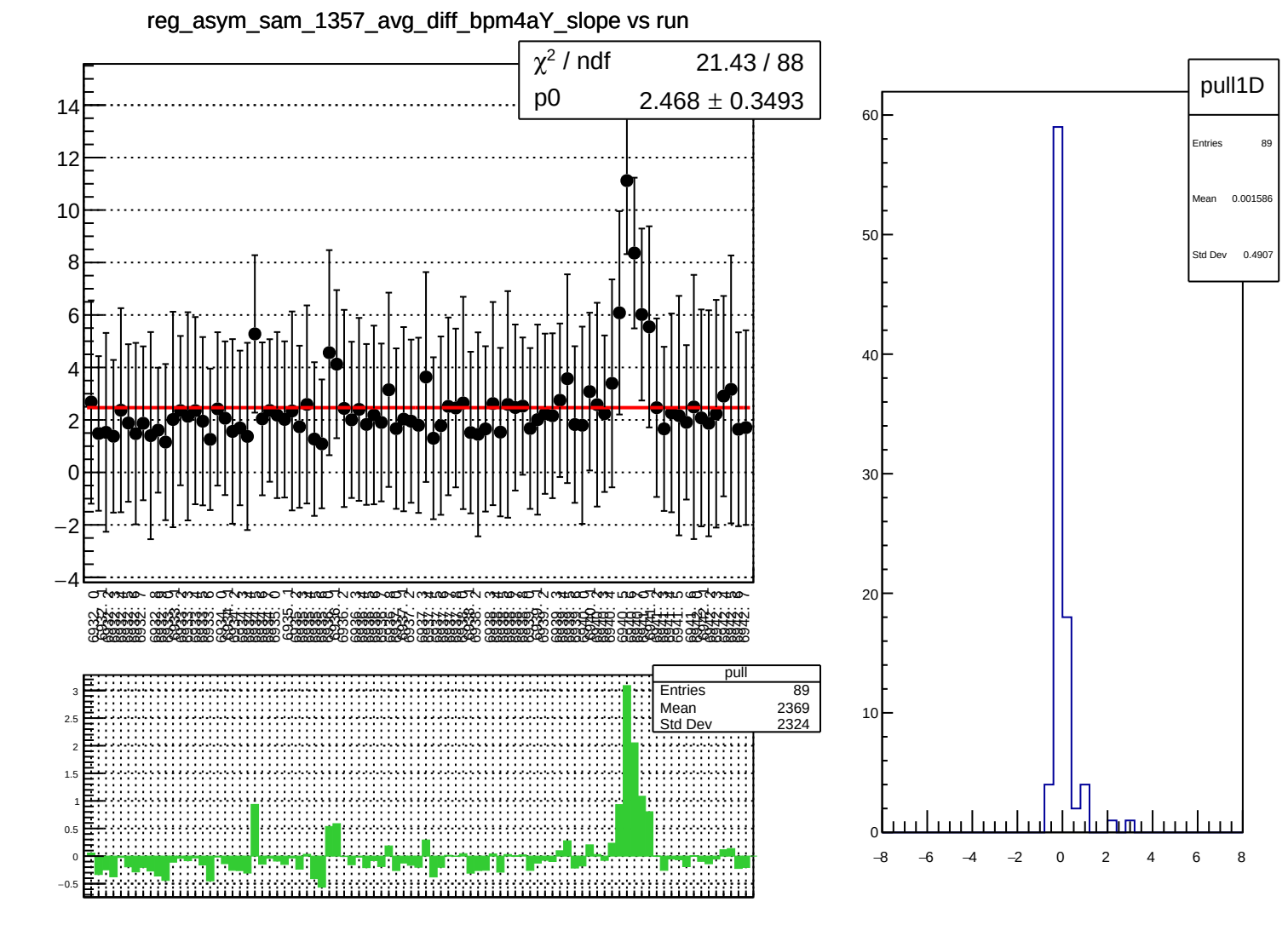

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 50.84 / 88
p0 −5.092 ± 0.1734
pull
Entries 89
Mean 27.47
Std Dev 17.87
pull1D
Entries 89
Mean −0.03217
Std Dev 0.7551

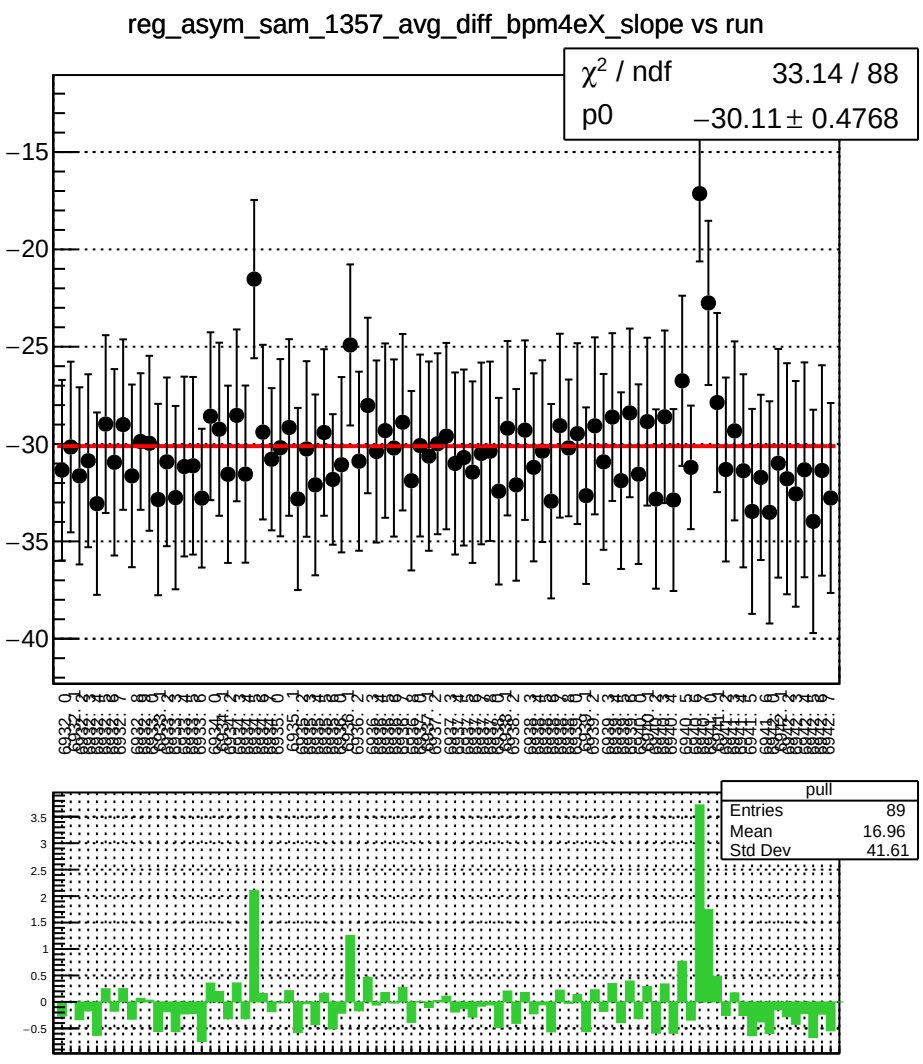

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 64.64 / 88
p0 22.01 ± 0.1473
pull
Entries 89
Mean −695.5
Std Dev 738
pull1D
Entries 89
Mean 0.009291
Std Dev 0.8522

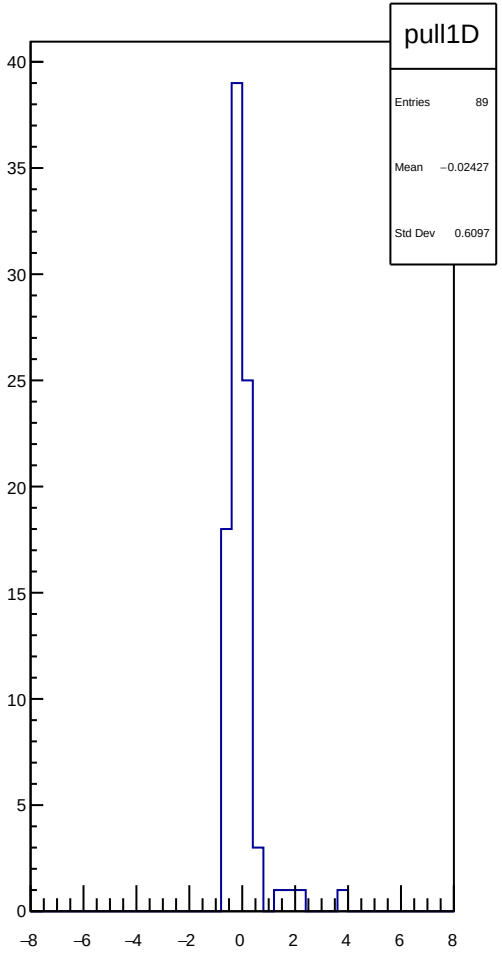

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 23.13 / 88
p0 −0.2805 ± 0.006078
−0.15
−0.2
−0.25
−0.3
−0.35
−0.4
−0.45
pull
Entries 89
Mean 10.77
Std Dev 129
1
0.5
0
−0.5
−1
−1.5

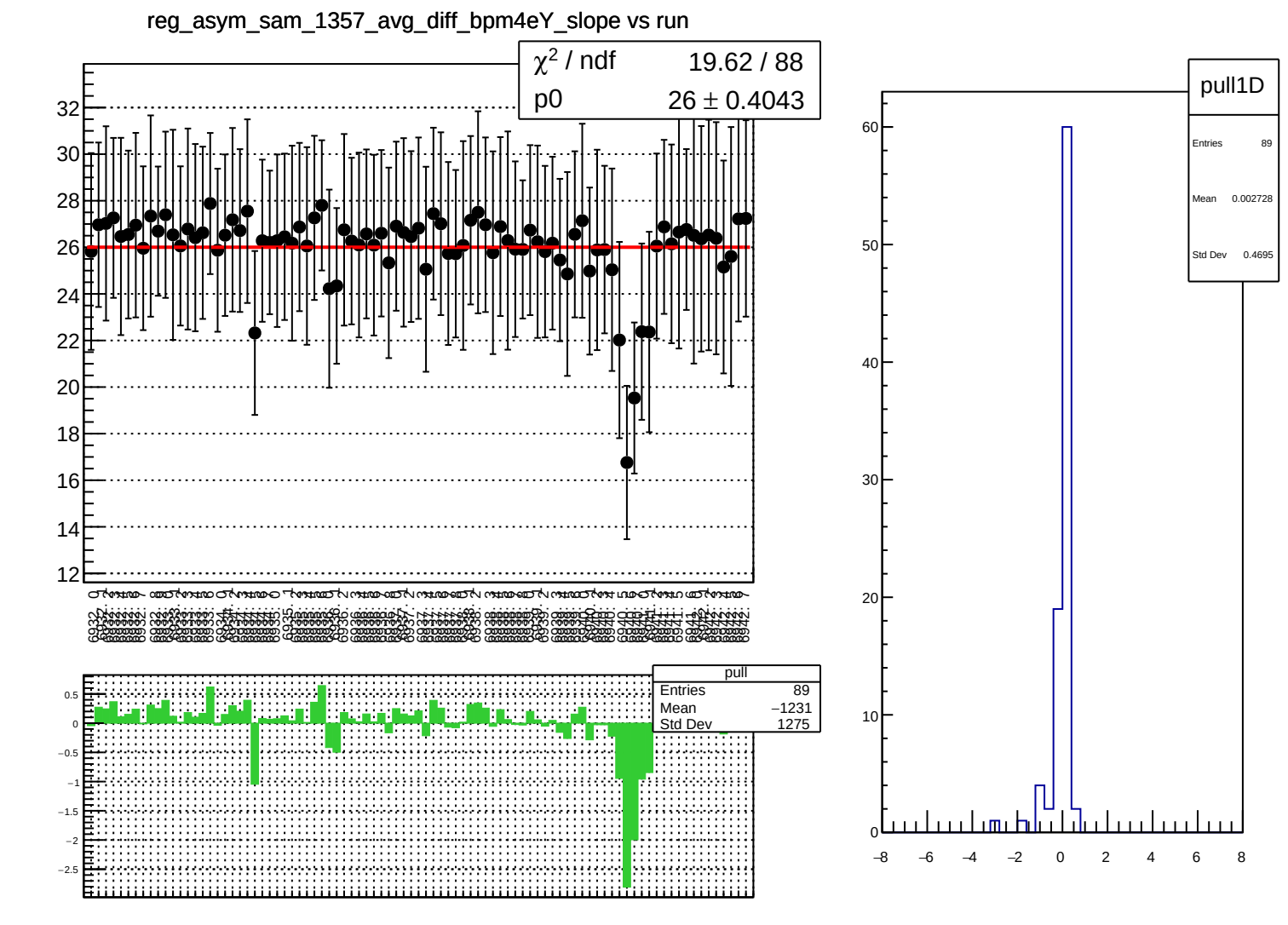

pull1D
Entries 89
Mean −0.004845
Std Dev 0.5098
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

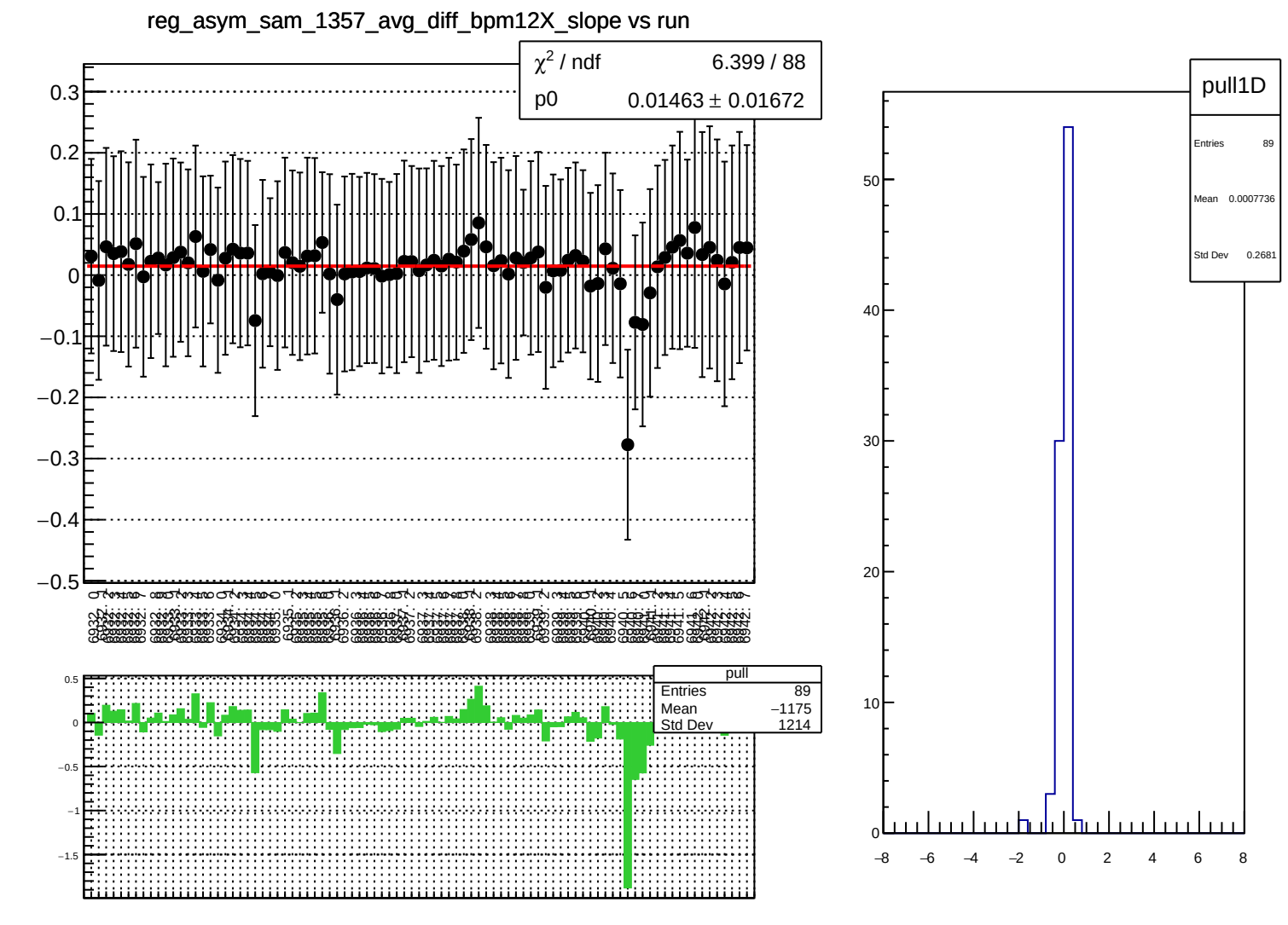

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 32.5 / 88
p0 −8.799 ± 0.513
pull
Entries 89
Mean 33.72
Std Dev 47.74
pull1D
Entries 89
Mean 0.02584
Std Dev 0.6037

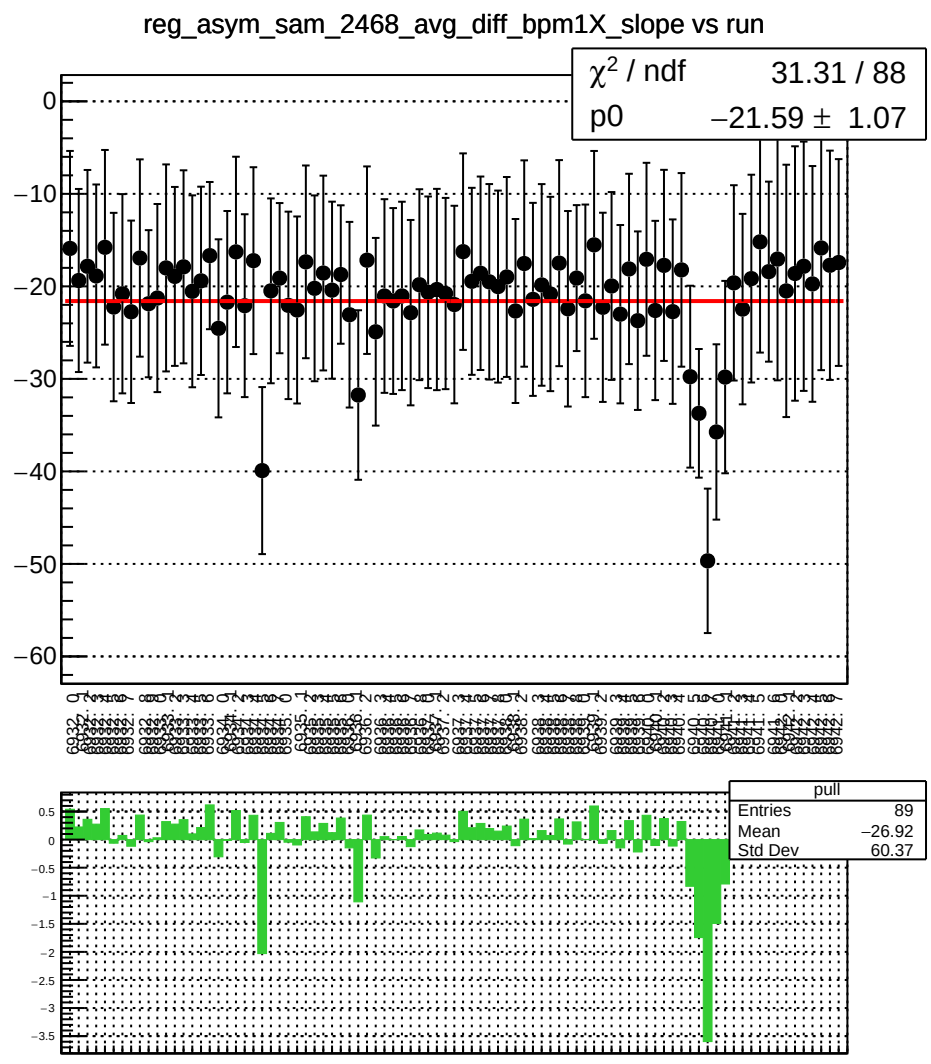

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 21.43 / 88
p0 2.468 ± 0.3493
pull
Entries 89
Mean 2369
Std Dev 2324
pull1D
Entries 89
Mean 0.001586
Std Dev 0.4907

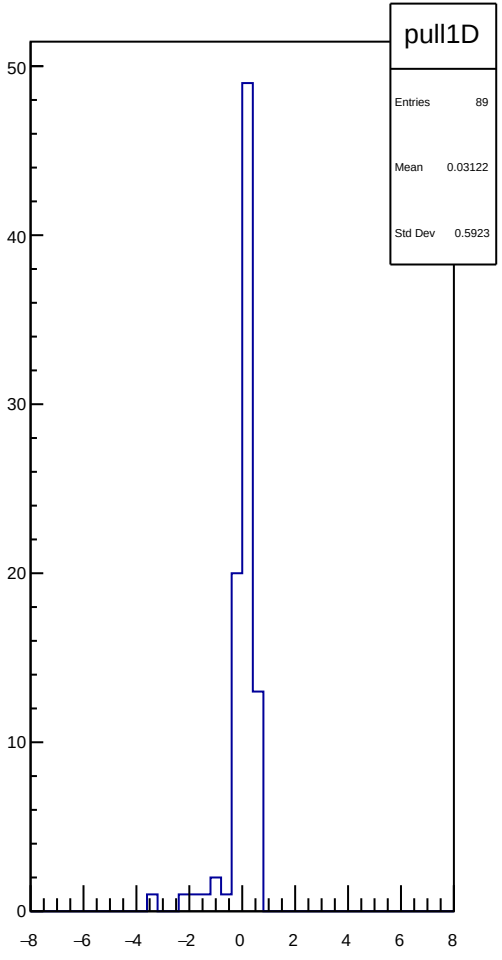

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 33.14 / 88
p0 −30.11 ± 0.4768
pull
Entries 89
Mean 16.96
Std Dev 41.61

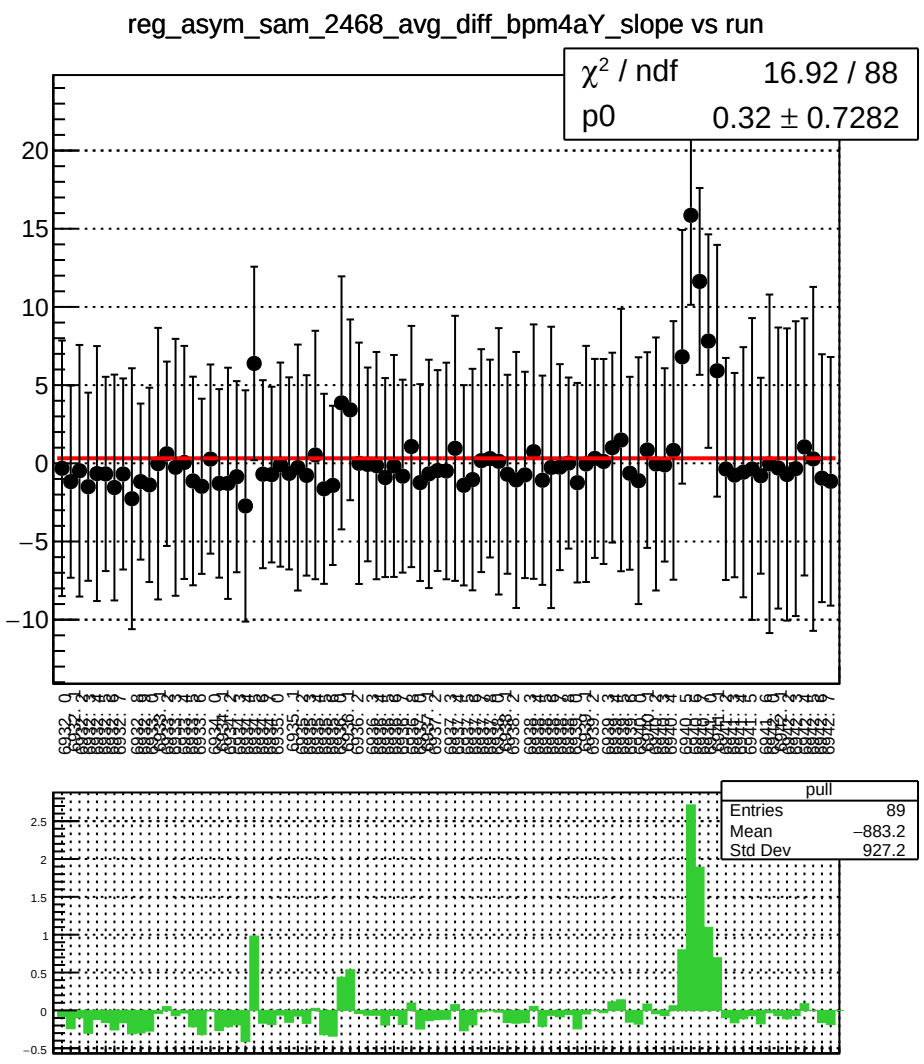

pull1D
Entries 89
Mean −0.02427
Std Dev 0.6097

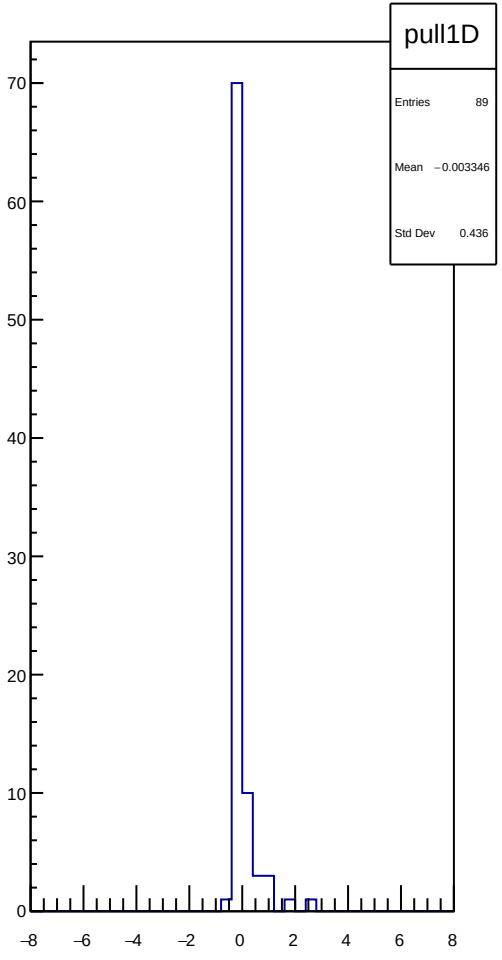

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 19.62 / 88
p0 26 ± 0.4043
pull
Entries 89
Mean −1231
Std Dev 1275
pull1D
Entries 89
Mean 0.002728
Std Dev 0.4695

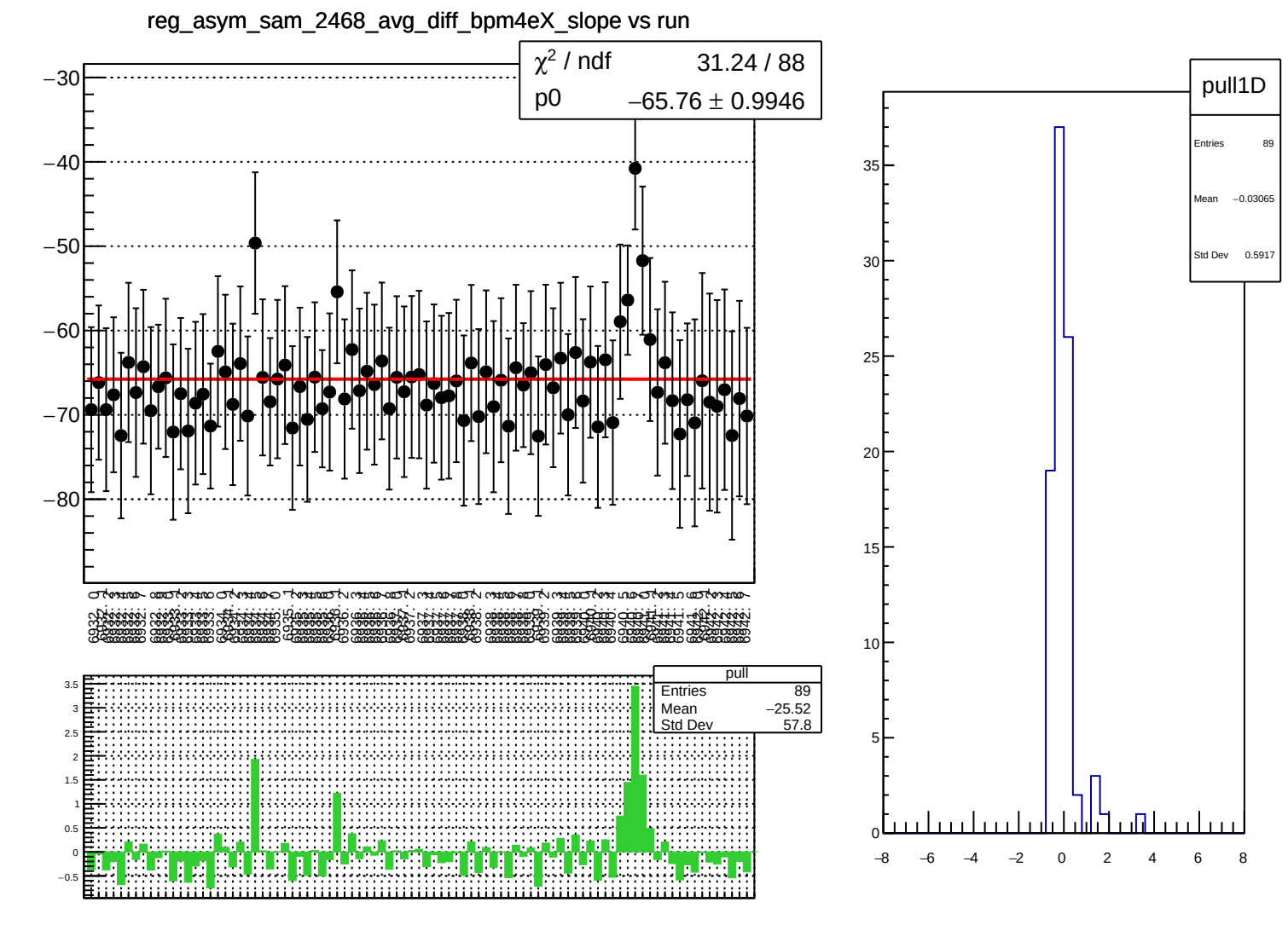

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 6.399 / 88
p0 0.01463 ± 0.01672
pull
Entries 89
Mean −1175
Std Dev 1214
pull1D
Entries 89
Mean 0.0007736
Std Dev 0.2681

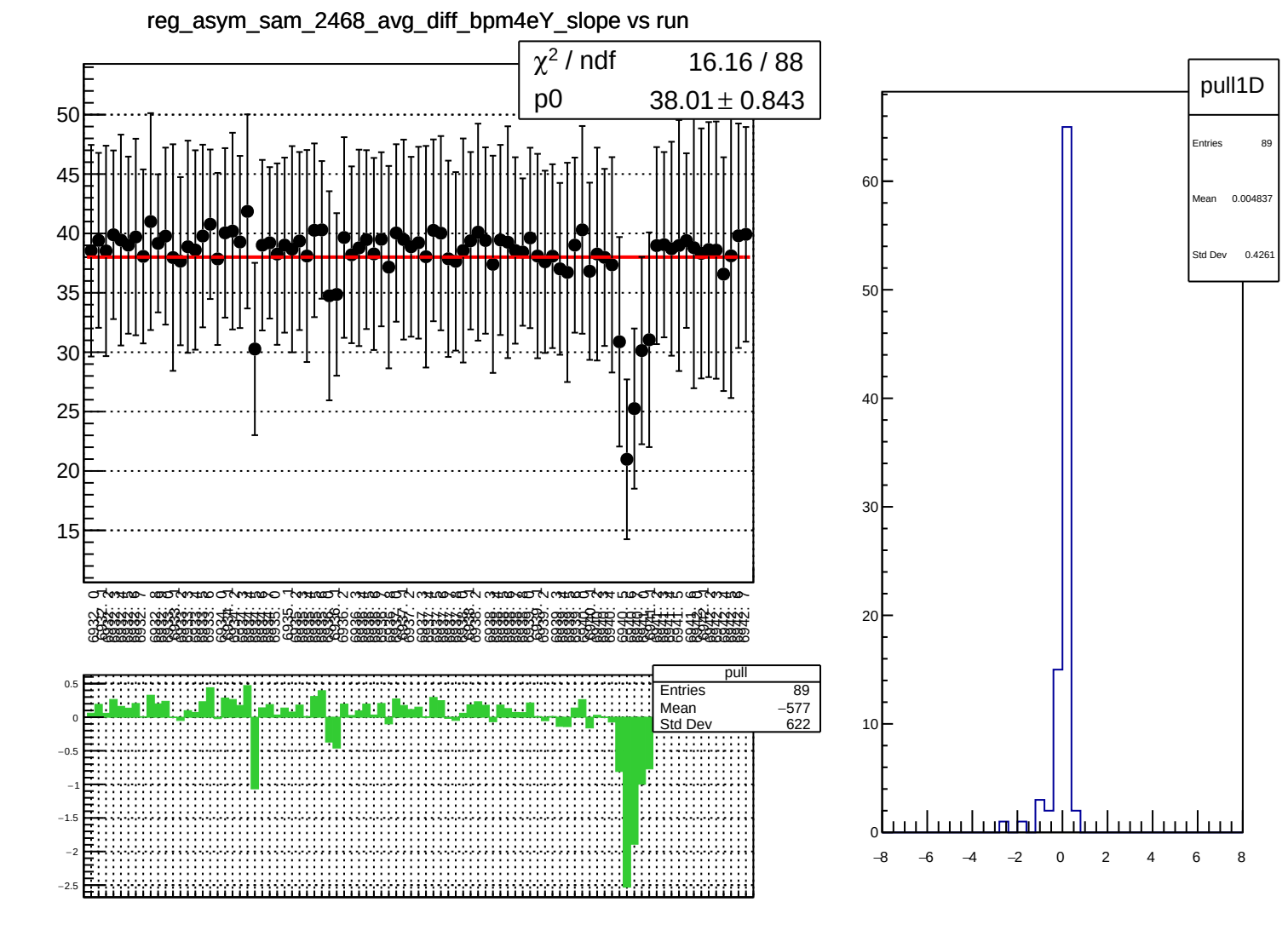

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 31.31 / 88
p0 −21.59 ± 1.07
pull
Entries 89
Mean −26.92
Std Dev 60.37

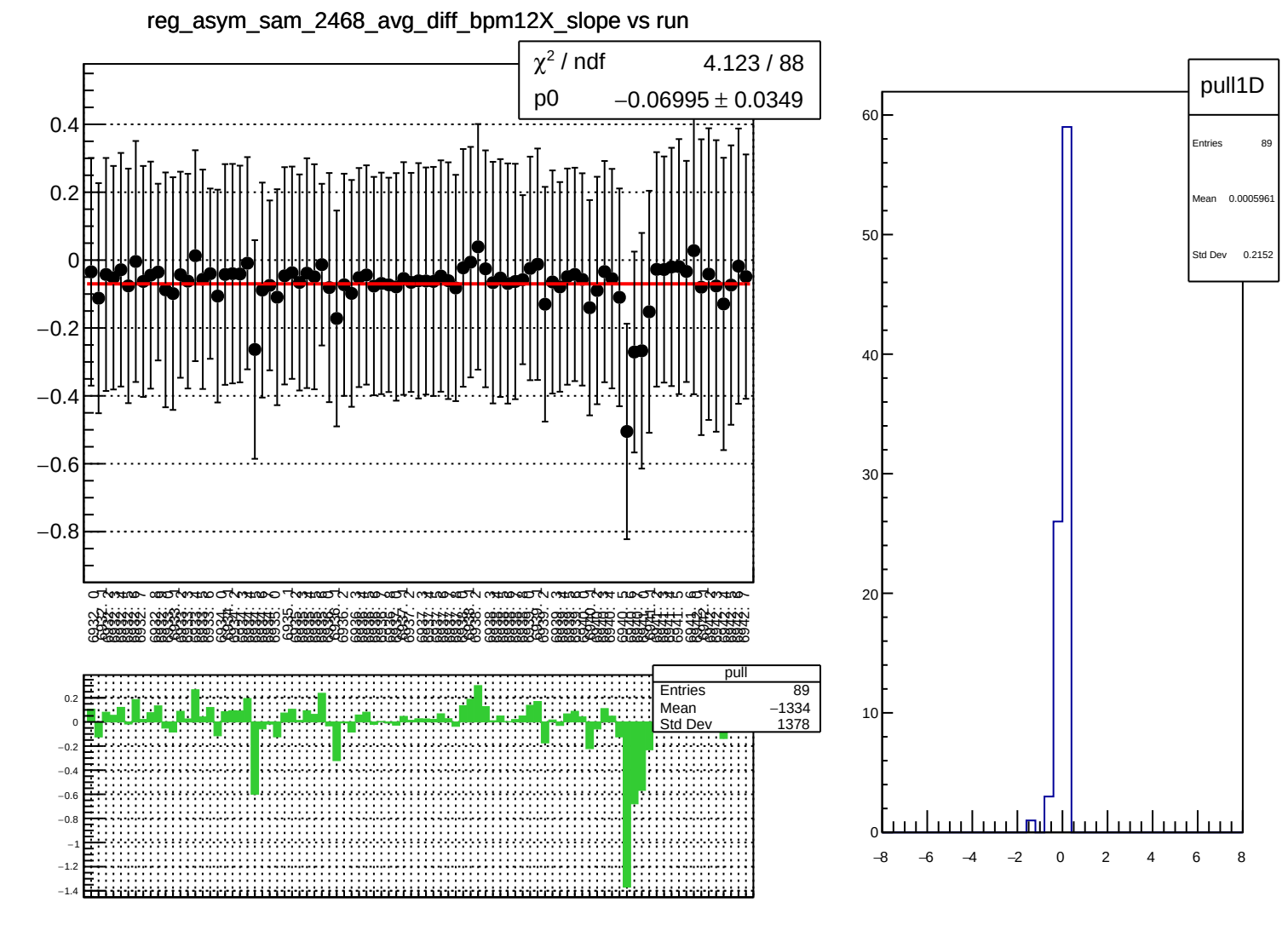

pull1D
Entries 89
Mean 0.03122
Std Dev 0.5923

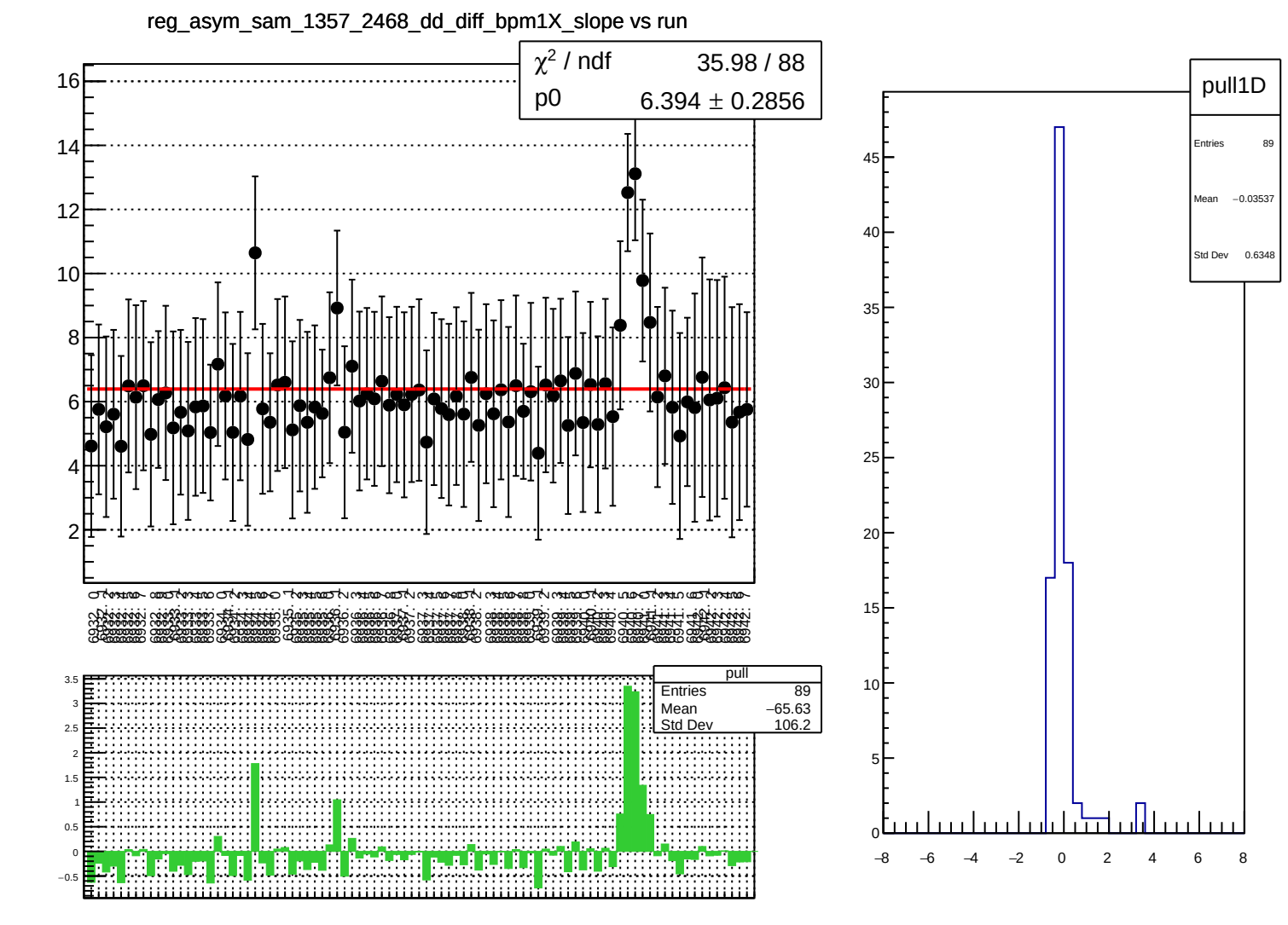

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 16.92 / 88
p0 0.32 ± 0.7282
pull
Entries 89
Mean −883.2
Std Dev 927.2

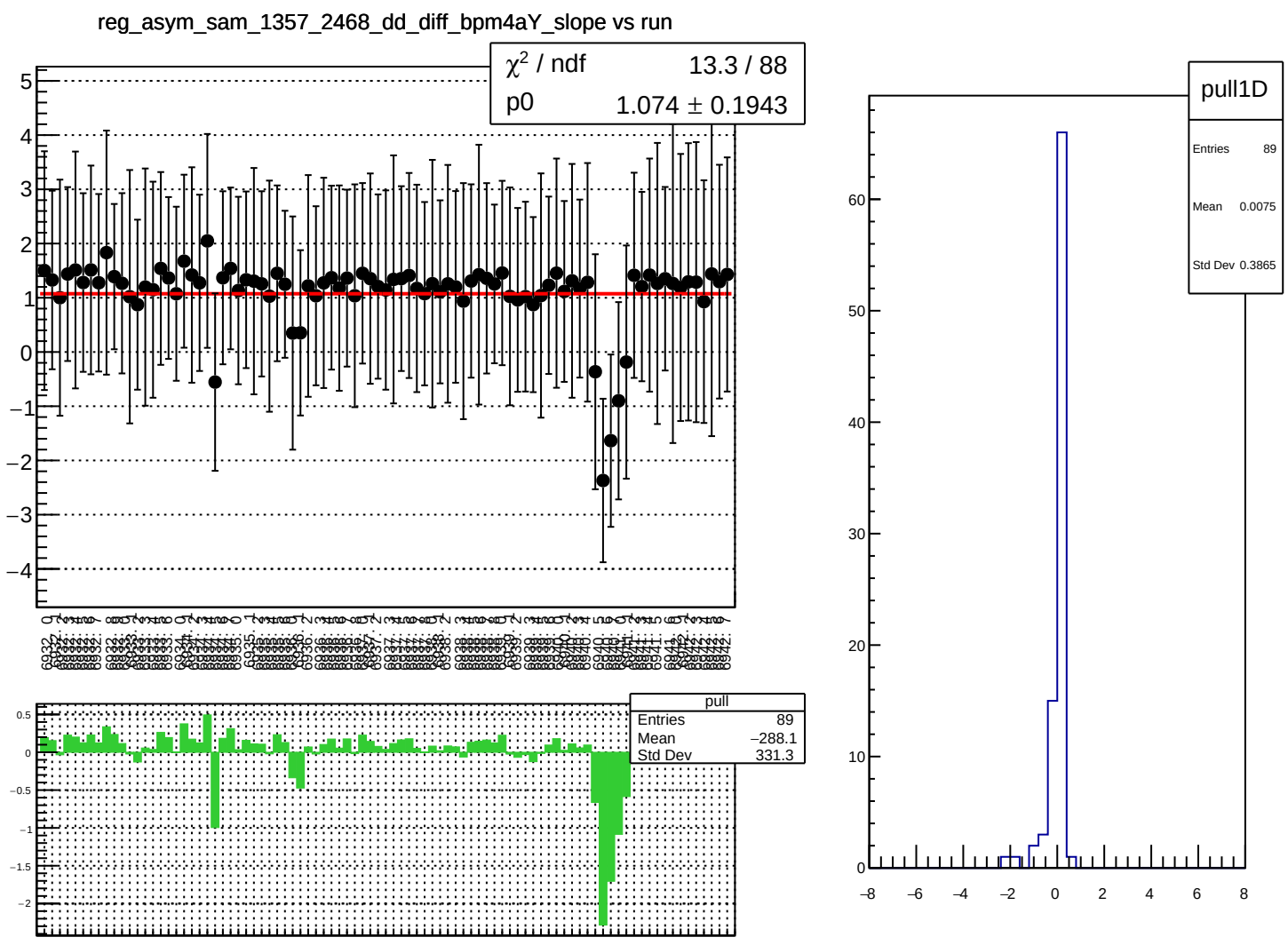

pull1D
Entries 89
Mean −0.003346
Std Dev 0.436

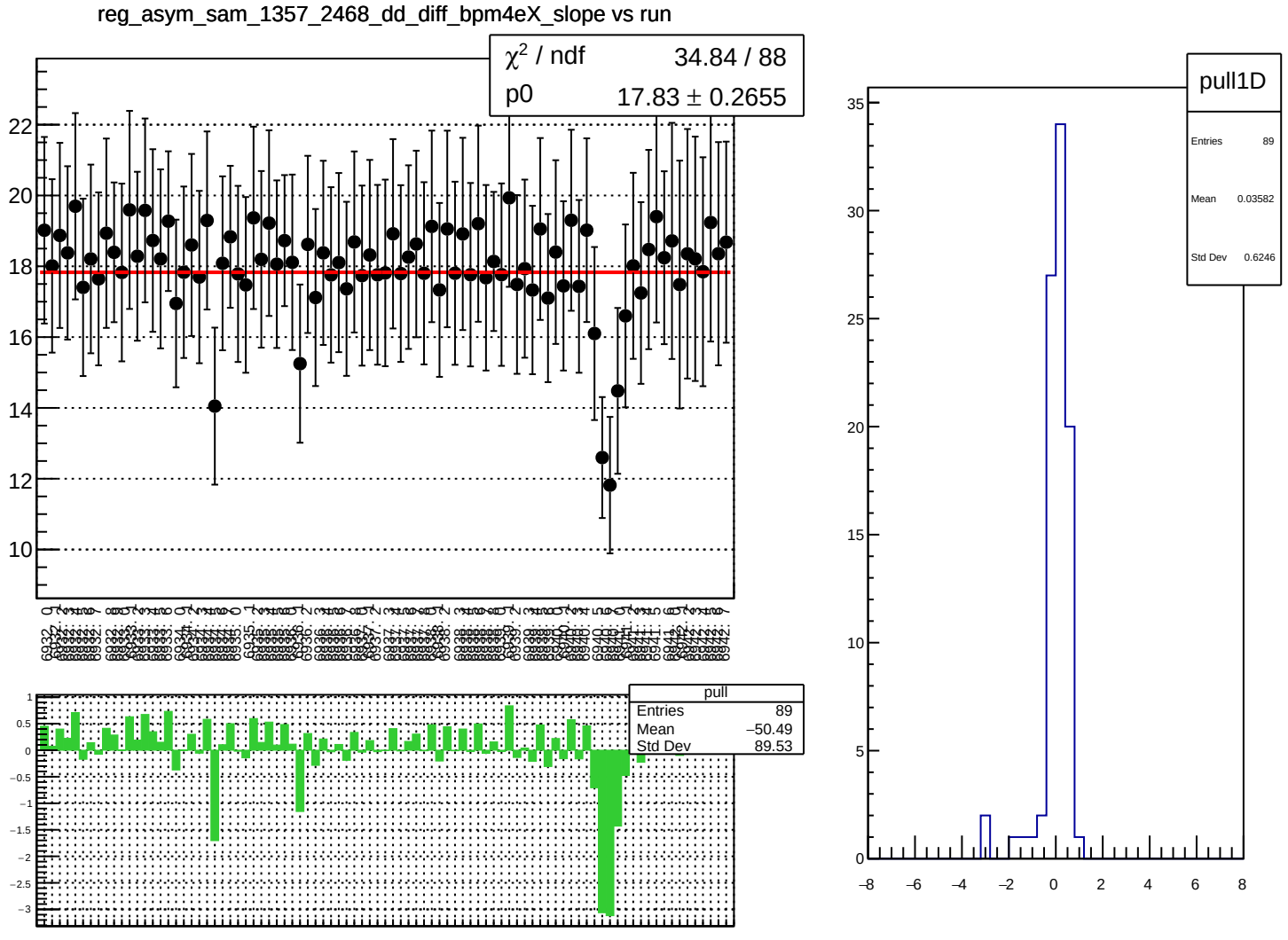

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 31.24 / 88
p0 −65.76 ± 0.9946
pull
Entries 89
Mean −25.52
Std Dev 57.8
pull1D
Entries 89
Mean −0.03065
Std Dev 0.5917

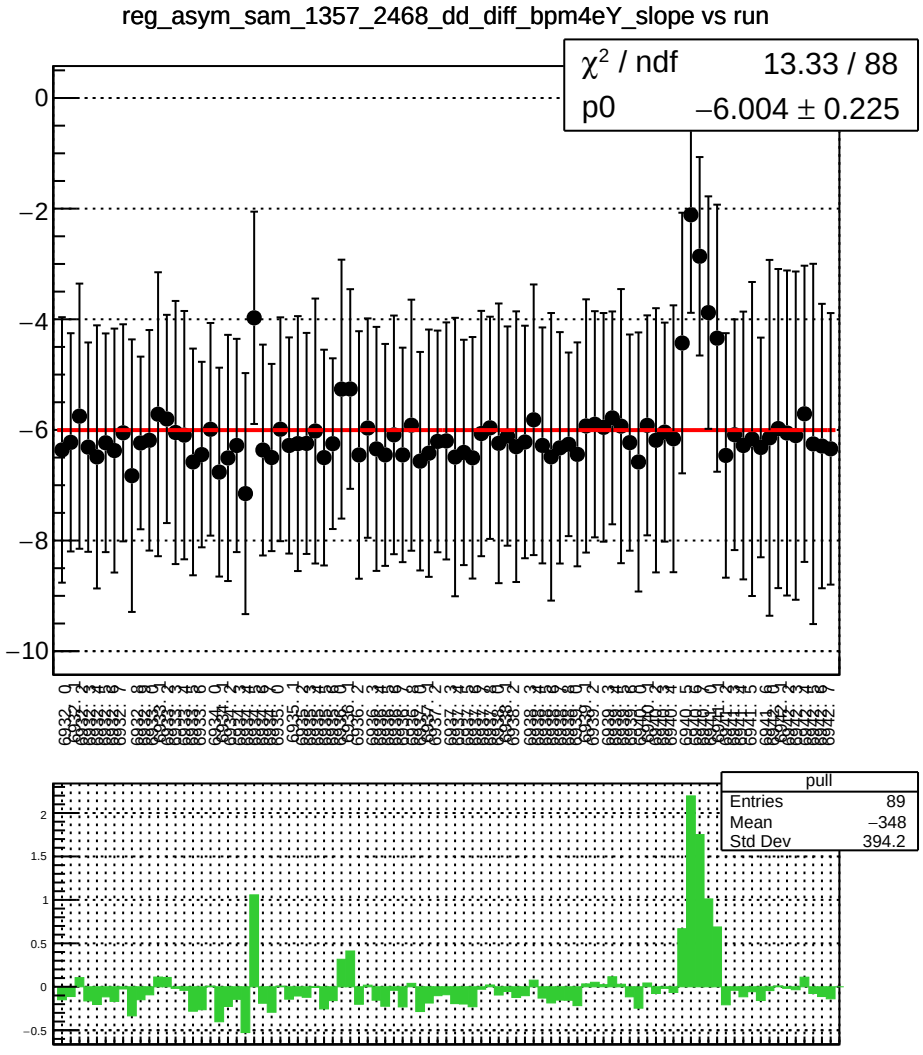

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 16.16 / 88
p0 38.01 ± 0.843
pull
Entries 89
Mean −577
Std Dev 622
pull1D
Entries 89
Mean 0.004837
Std Dev 0.4261

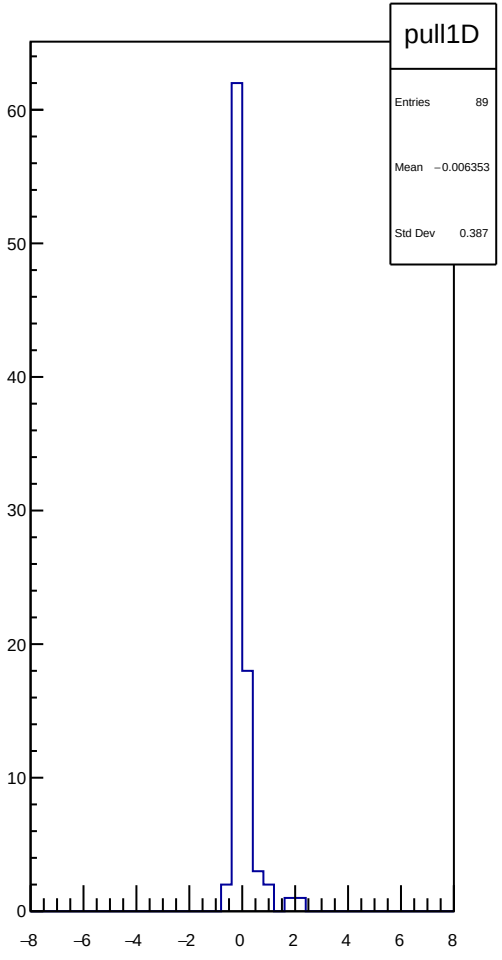

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 4.123 / 88
p0 −0.06995 ± 0.0349
pull
Entries 89
Mean −1334
Std Dev 1378
pull1D
Entries 89
Mean 0.0005961
Std Dev 0.2152

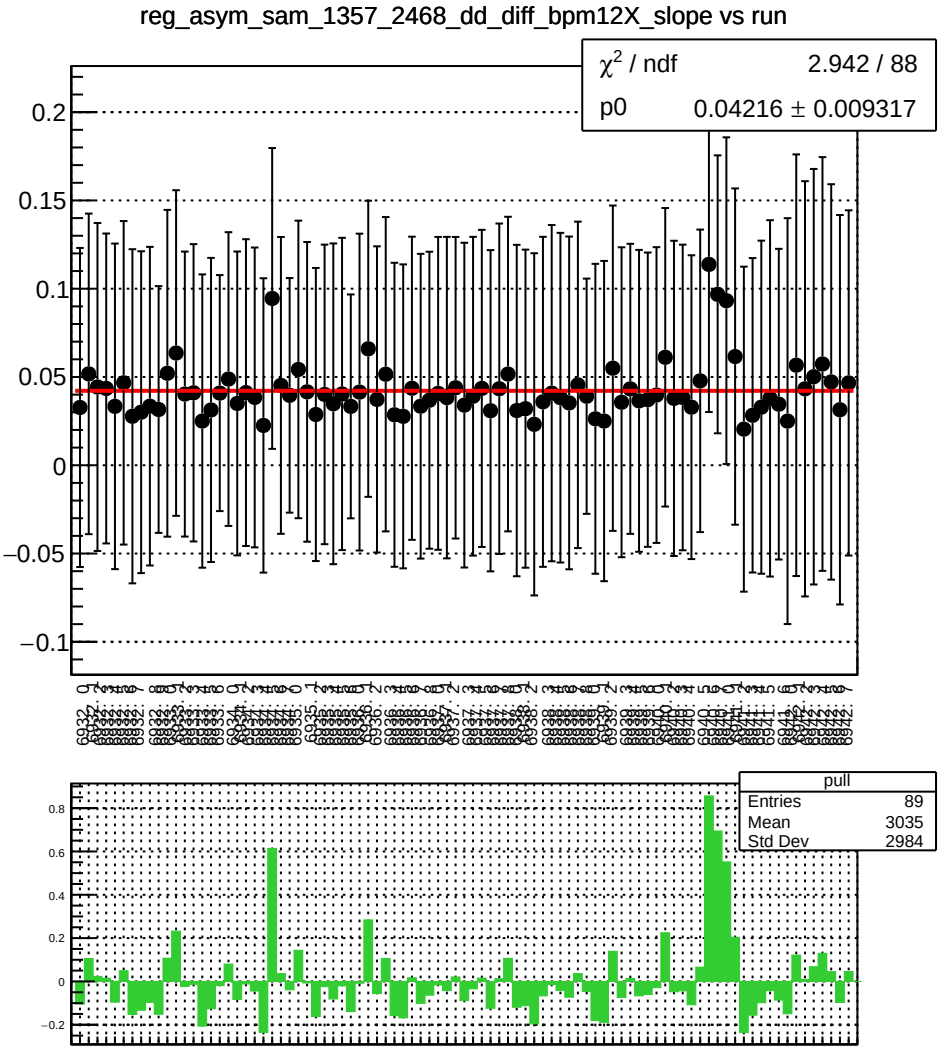

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 35.98 / 88
p0 6.394 ± 0.2856
pull
Entries 89
Mean −65.63
Std Dev 106.2
pull1D
Entries 89
Mean −0.03537
Std Dev 0.6348

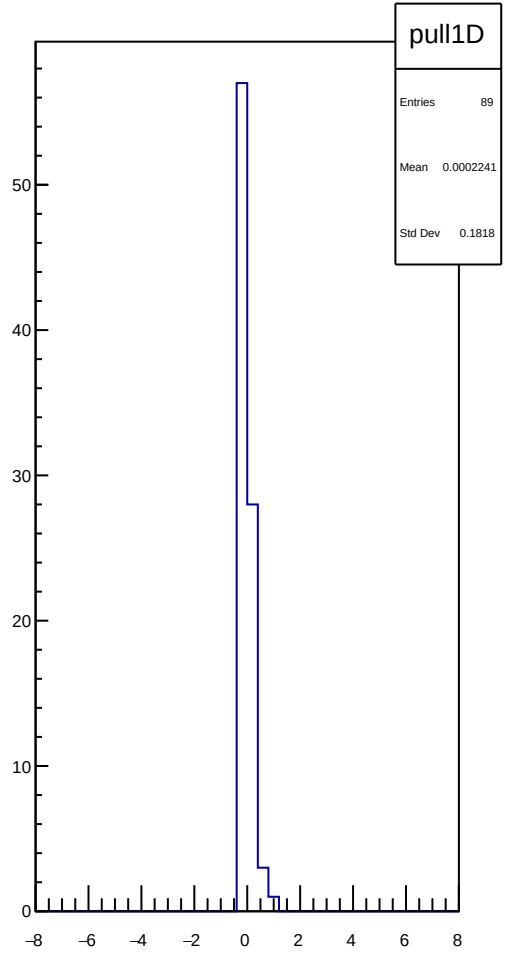

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.3 / 88
p0 1.074 ± 0.1943
pull
Entries 89
Mean −288.1
Std Dev 331.3
pull1D
Entries 89
Mean 0.0075
Std Dev 0.3865

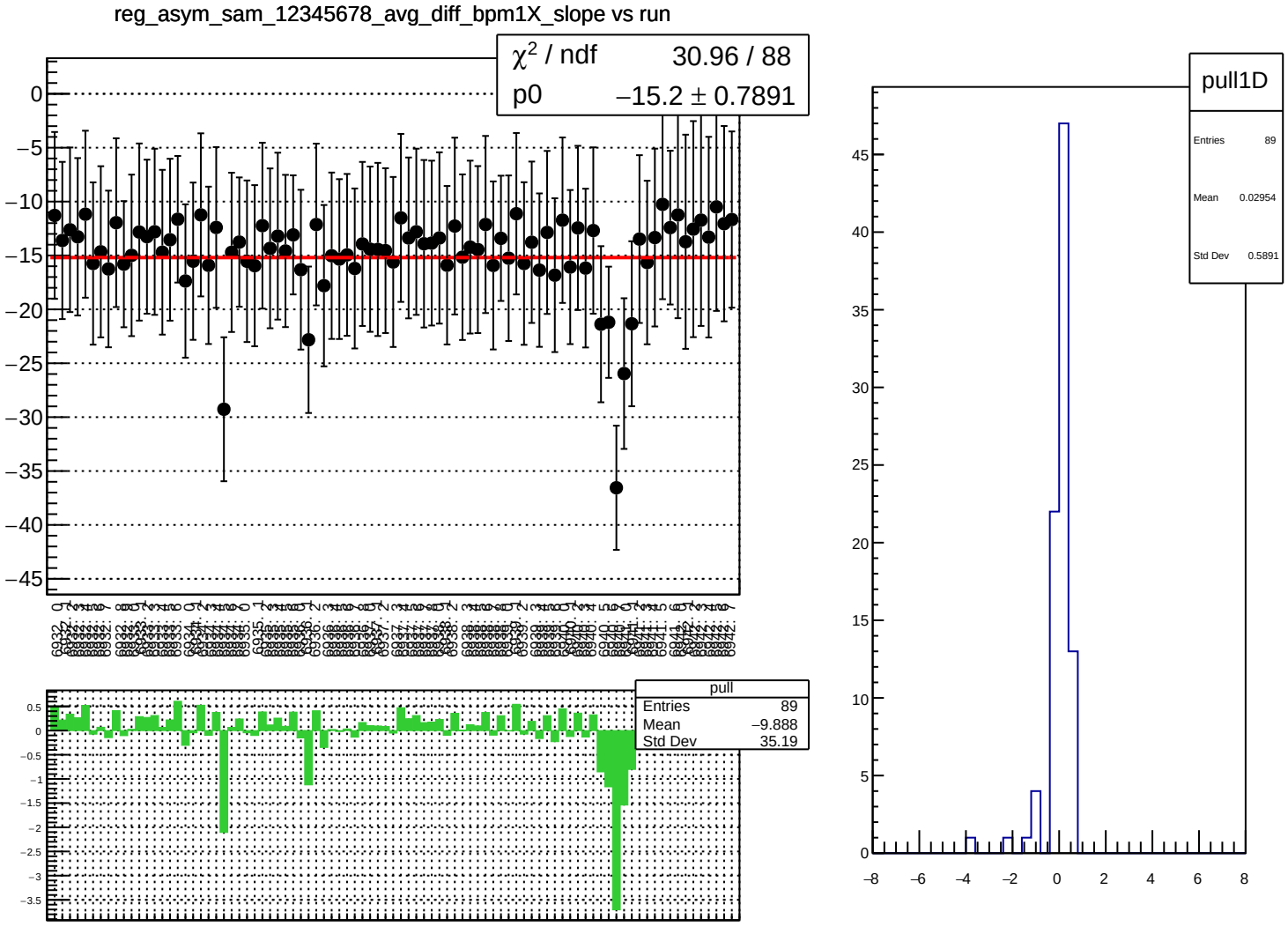

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 34.84 / 88
p0 17.83 ± 0.2655
pull
Entries 89
Mean −50.49
Std Dev 89.53
pull1D
Entries 89
Mean 0.03582
Std Dev 0.6246

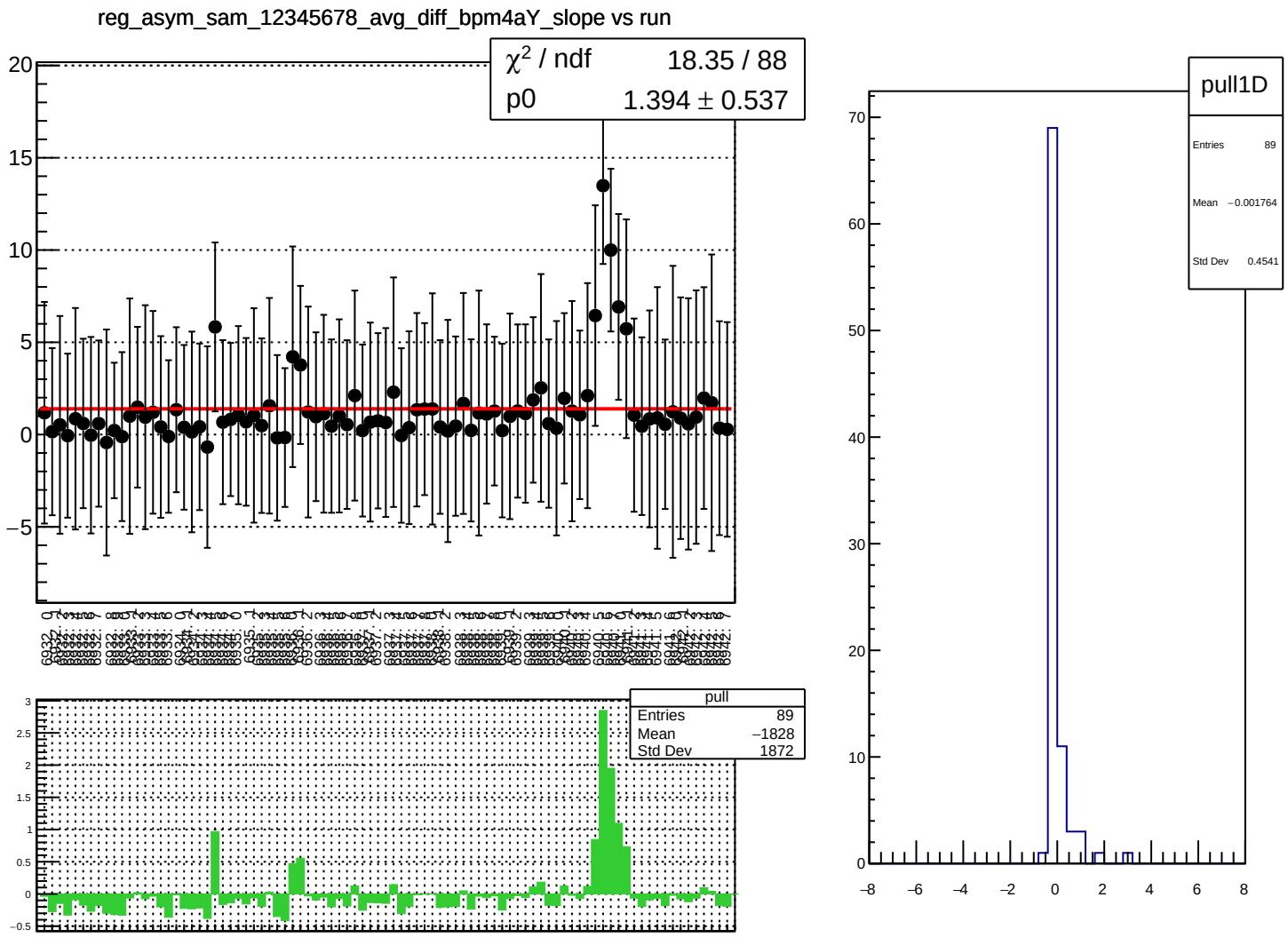

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 13.33 / 88
p0 −6.004 ± 0.225
pull
Entries 89
Mean −348
Std Dev 394.2

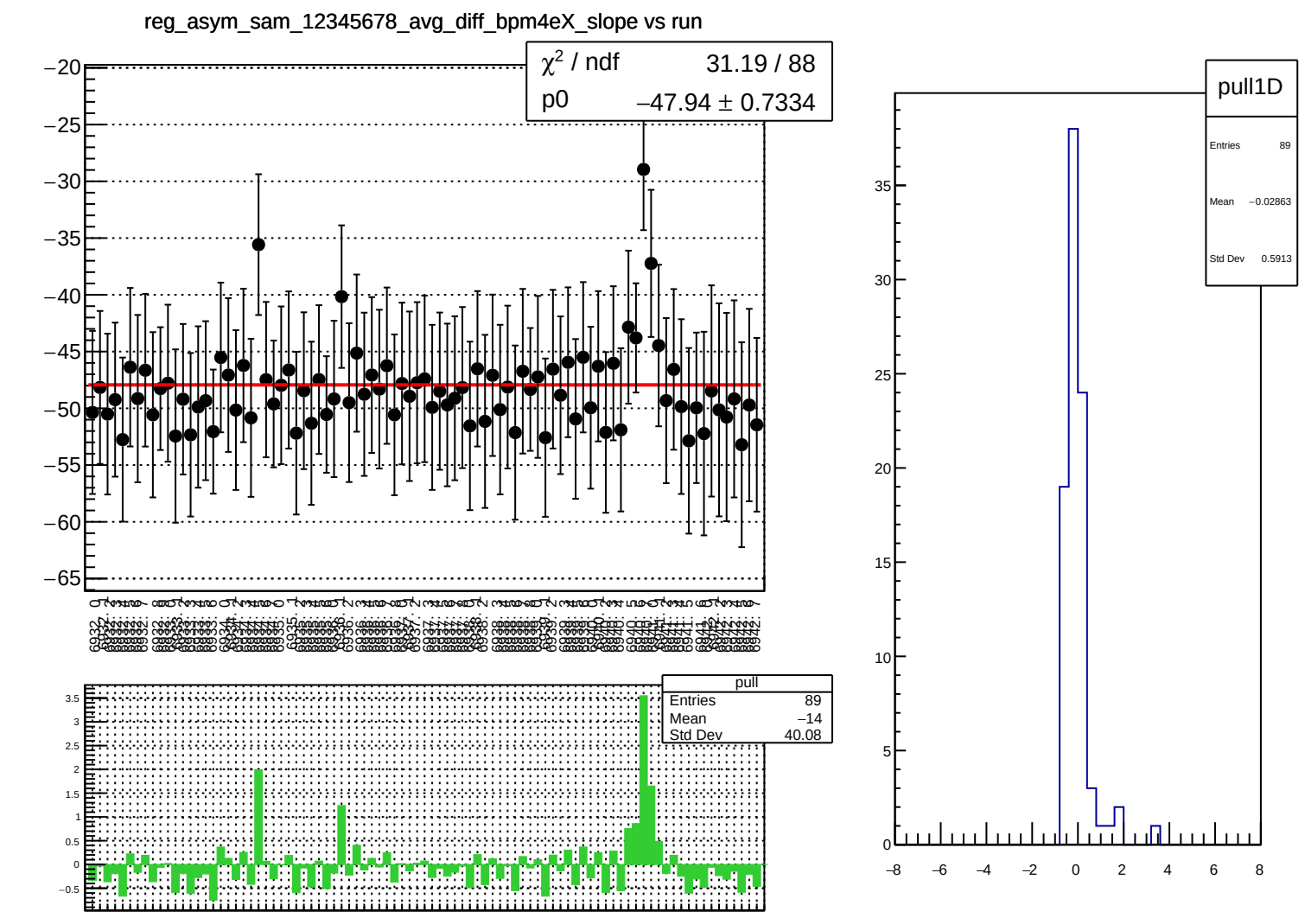

pull1D
Entries 89
Mean −0.006353
Std Dev 0.387

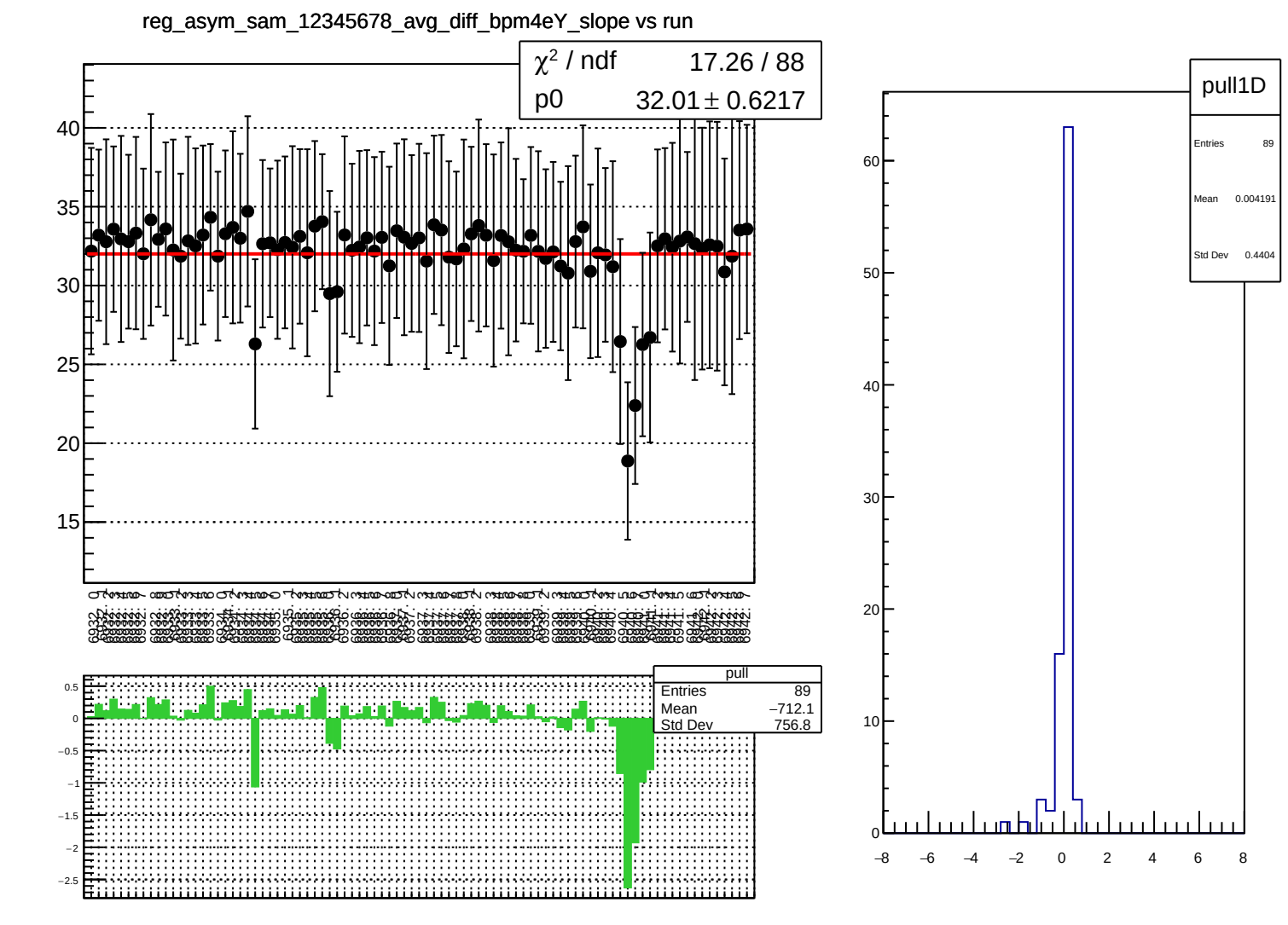

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 2.942 / 88
p0 0.04216 ± 0.009317
pull
Entries 89
Mean 3035
Std Dev 2984

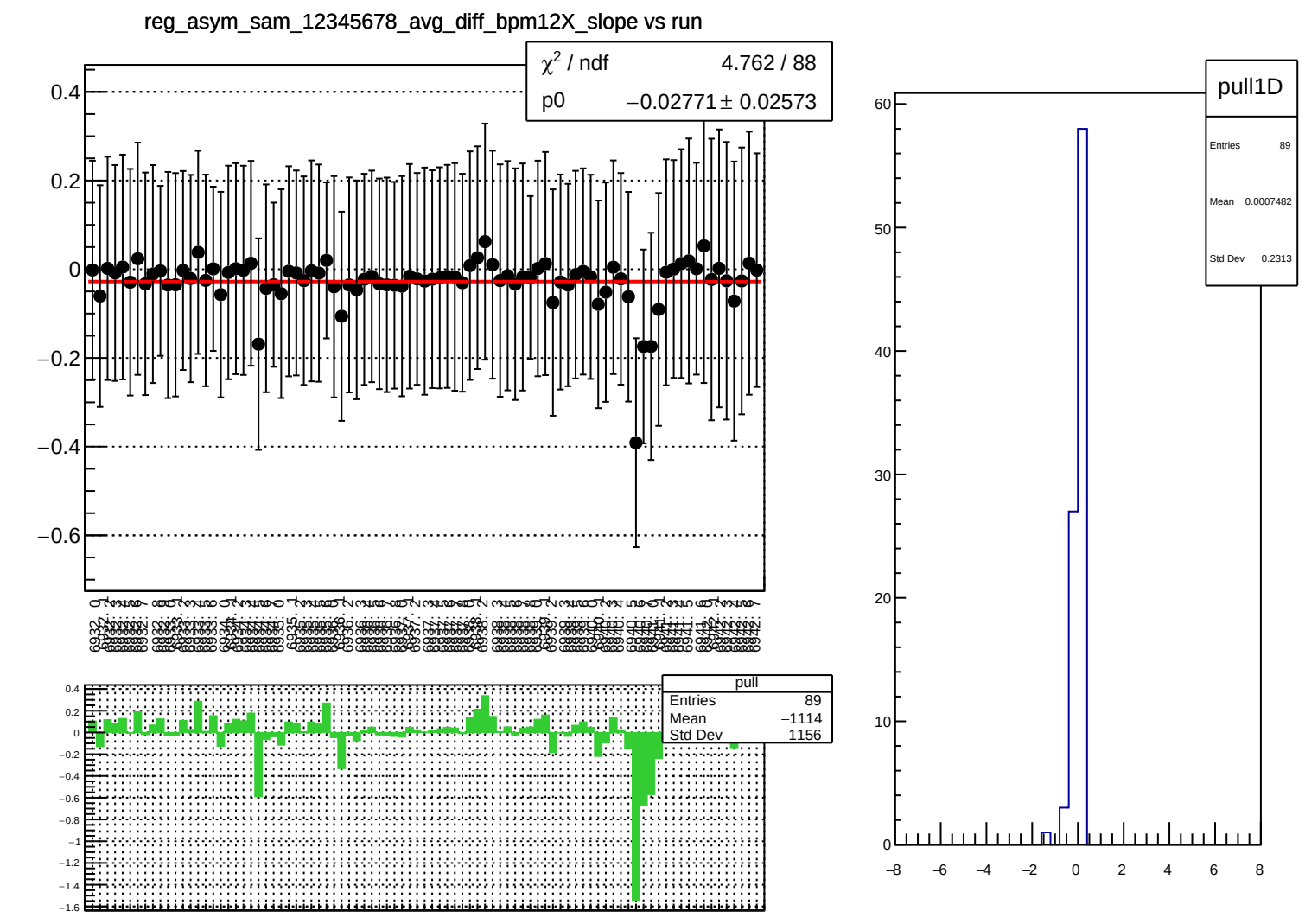

pull1D
Entries 89
Mean 0.0002241
Std Dev 0.1818

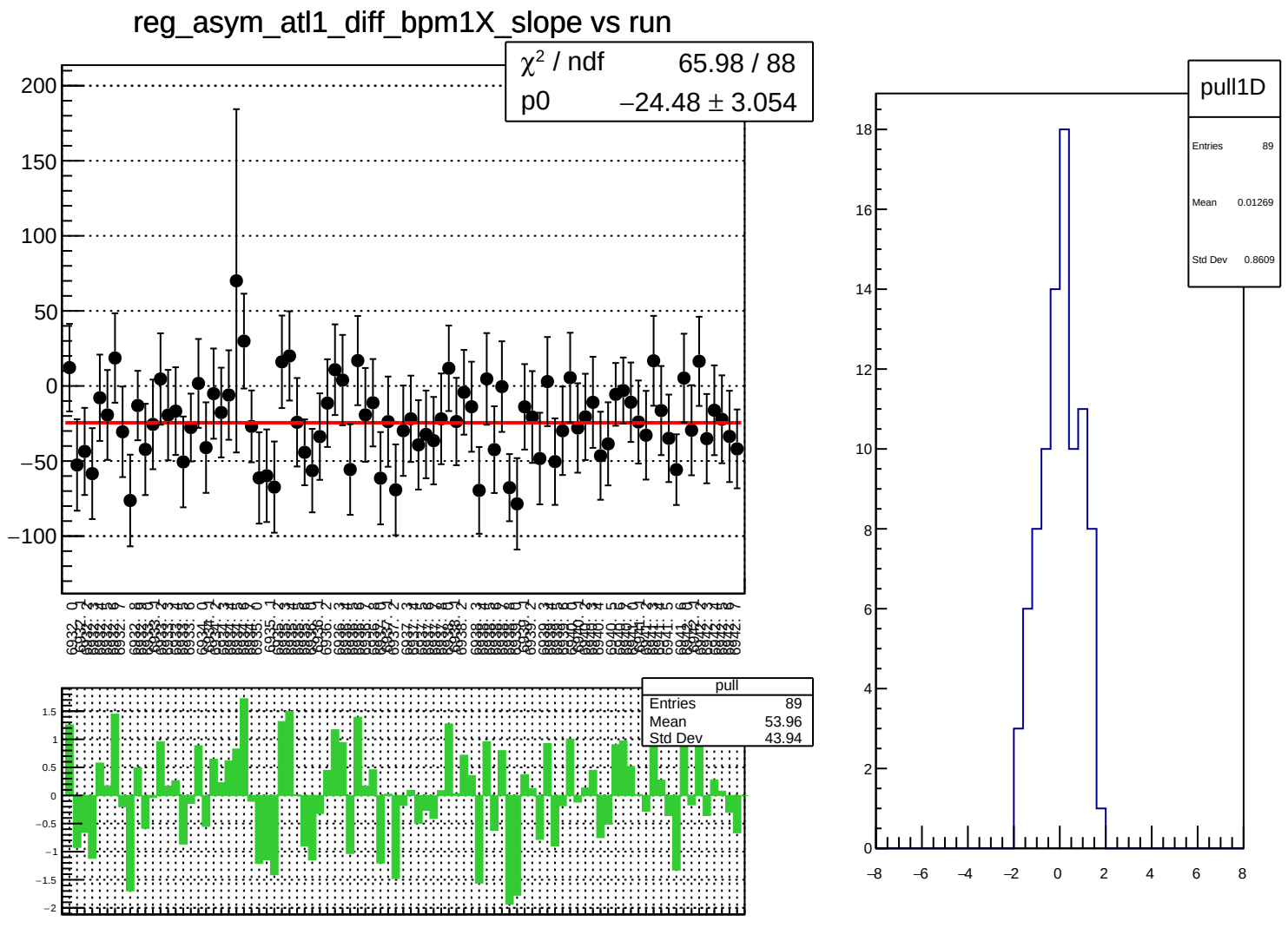

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 30.96 / 88
p0 −15.2 ± 0.7891
pull
Entries 89
Mean −9.888
Std Dev 35.19
pull1D
Entries 89
Mean 0.02954
Std Dev 0.5891

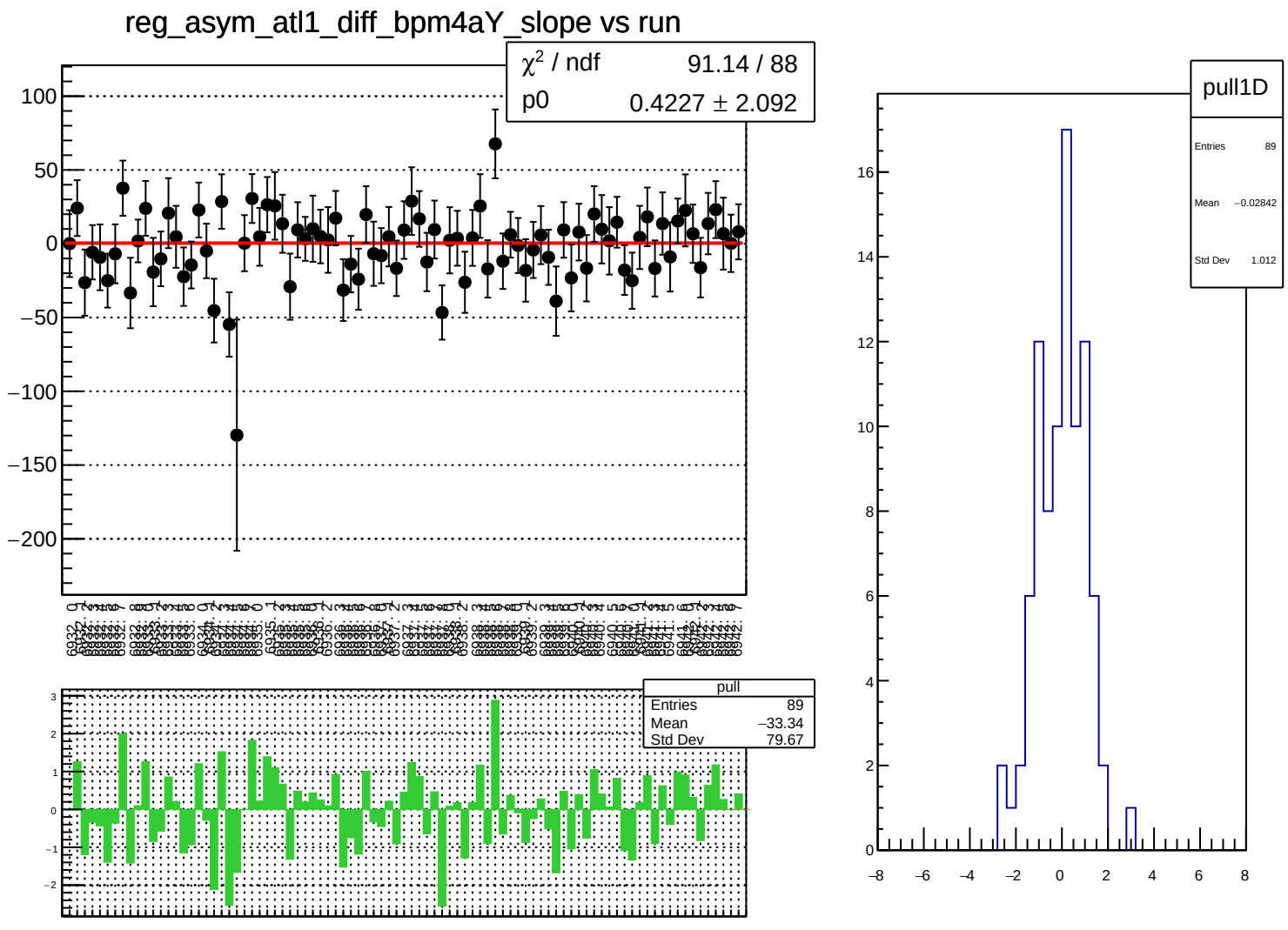

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 18.35 / 88
p0 1.394 ± 0.537
pull
Entries 89
Mean −1828
Std Dev 1872
pull1D
Entries 89
Mean −0.001764
Std Dev 0.4541

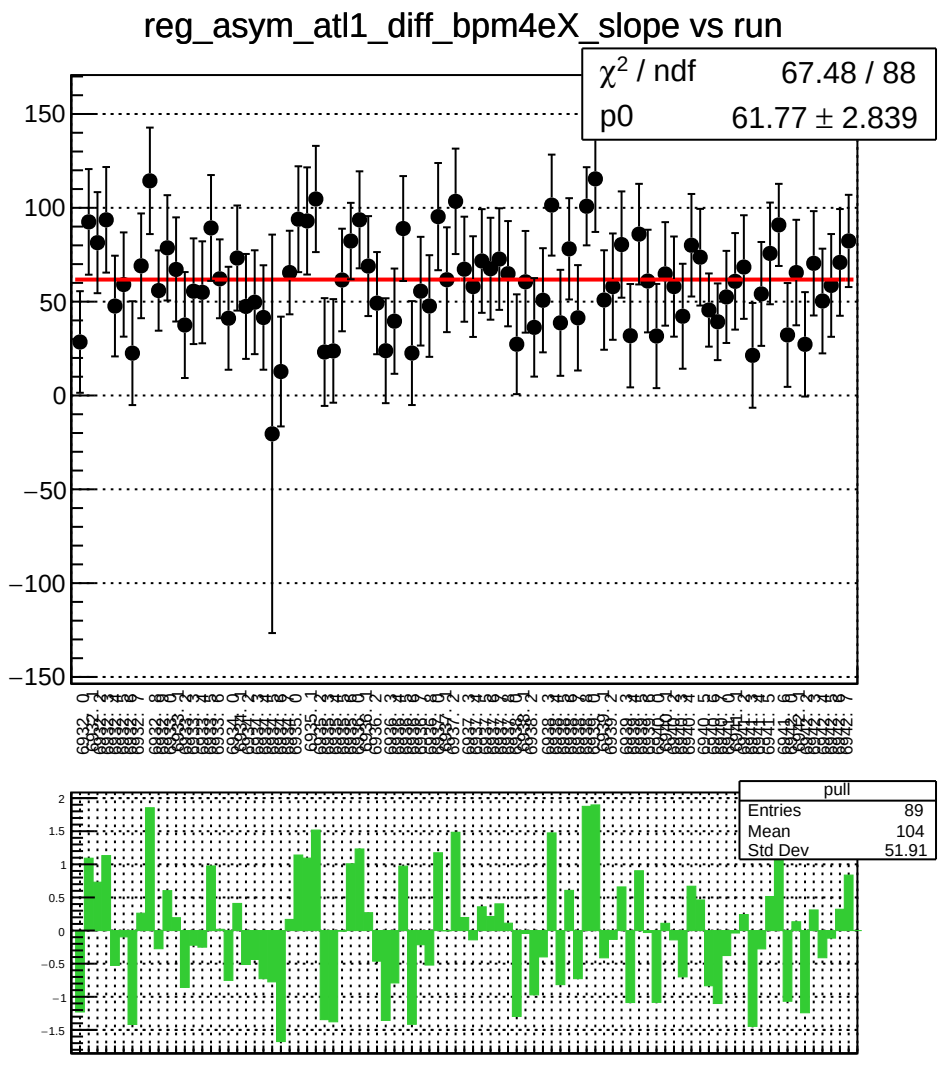

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 31.19 / 88
p0 −47.94 ± 0.7334
pull
Entries 89
Mean −14
Std Dev 40.08
pull1D
Entries 89
Mean −0.02863
Std Dev 0.5913

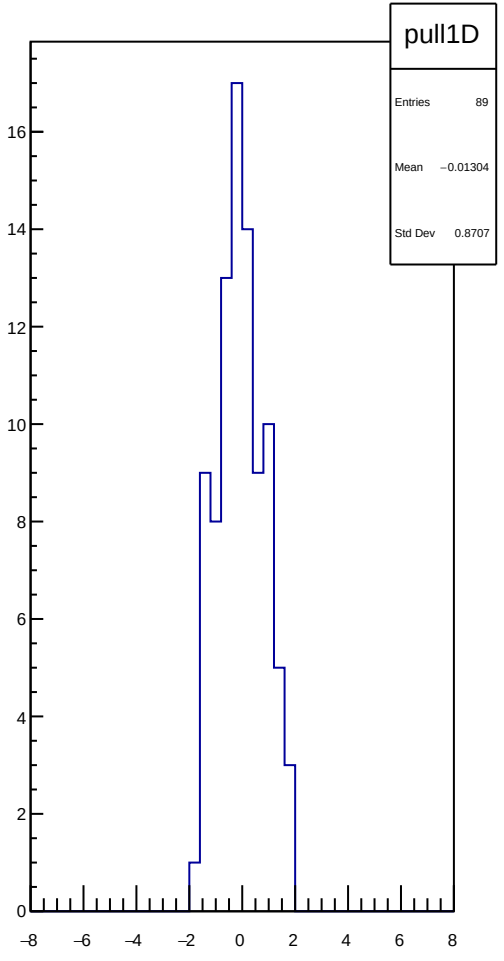

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 17.26 / 88
p0 32.01 ± 0.6217
pull
Entries 89
Mean −712.1
Std Dev 756.8
pull1D
Entries 89
Mean 0.004191
Std Dev 0.4404

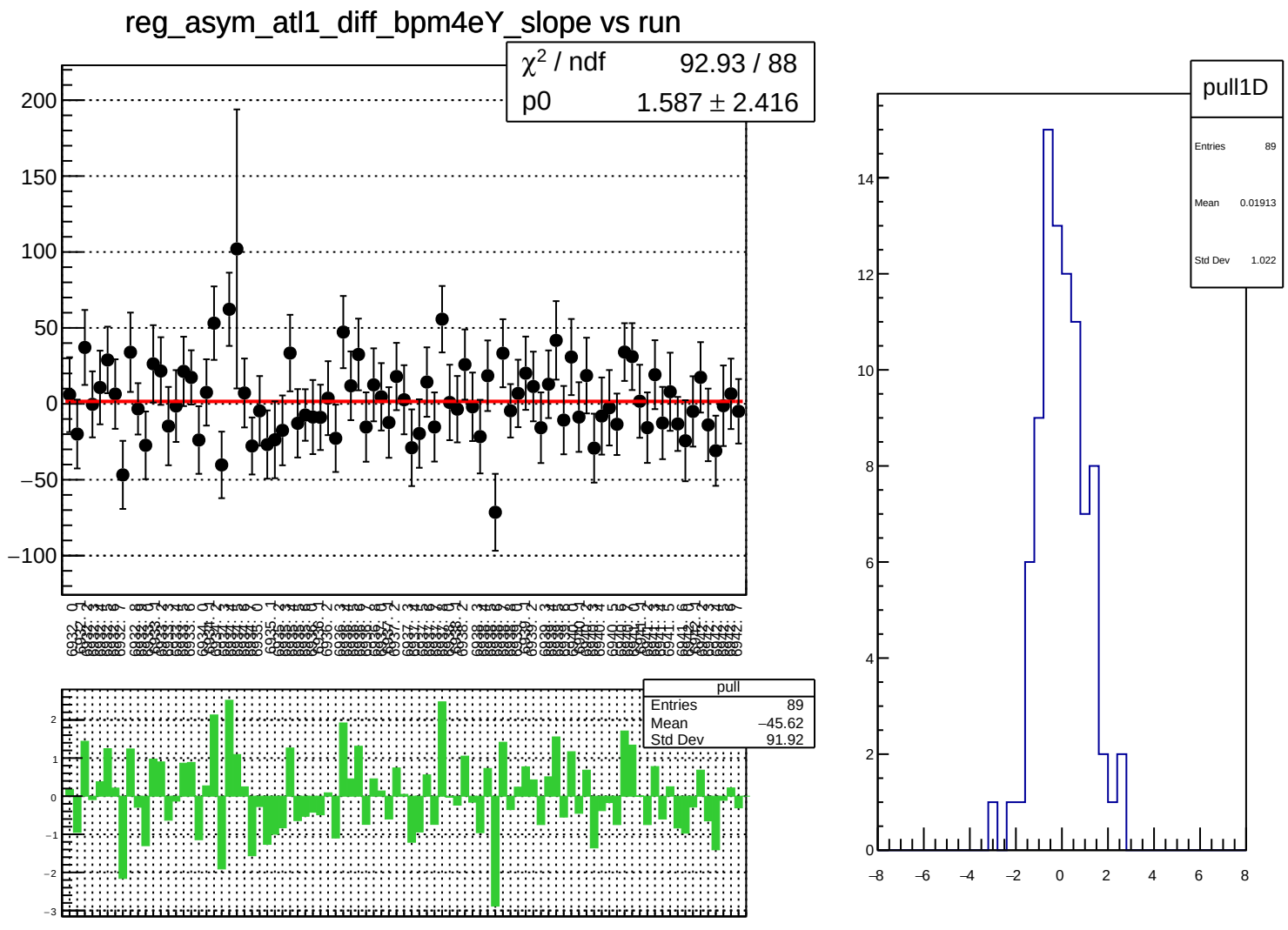

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 4.762 / 88
p0 −0.02771 ± 0.02573
pull
Entries 89
Mean −1114
Std Dev 1156
pull1D
Entries 89
Mean 0.0007482
Std Dev 0.2313

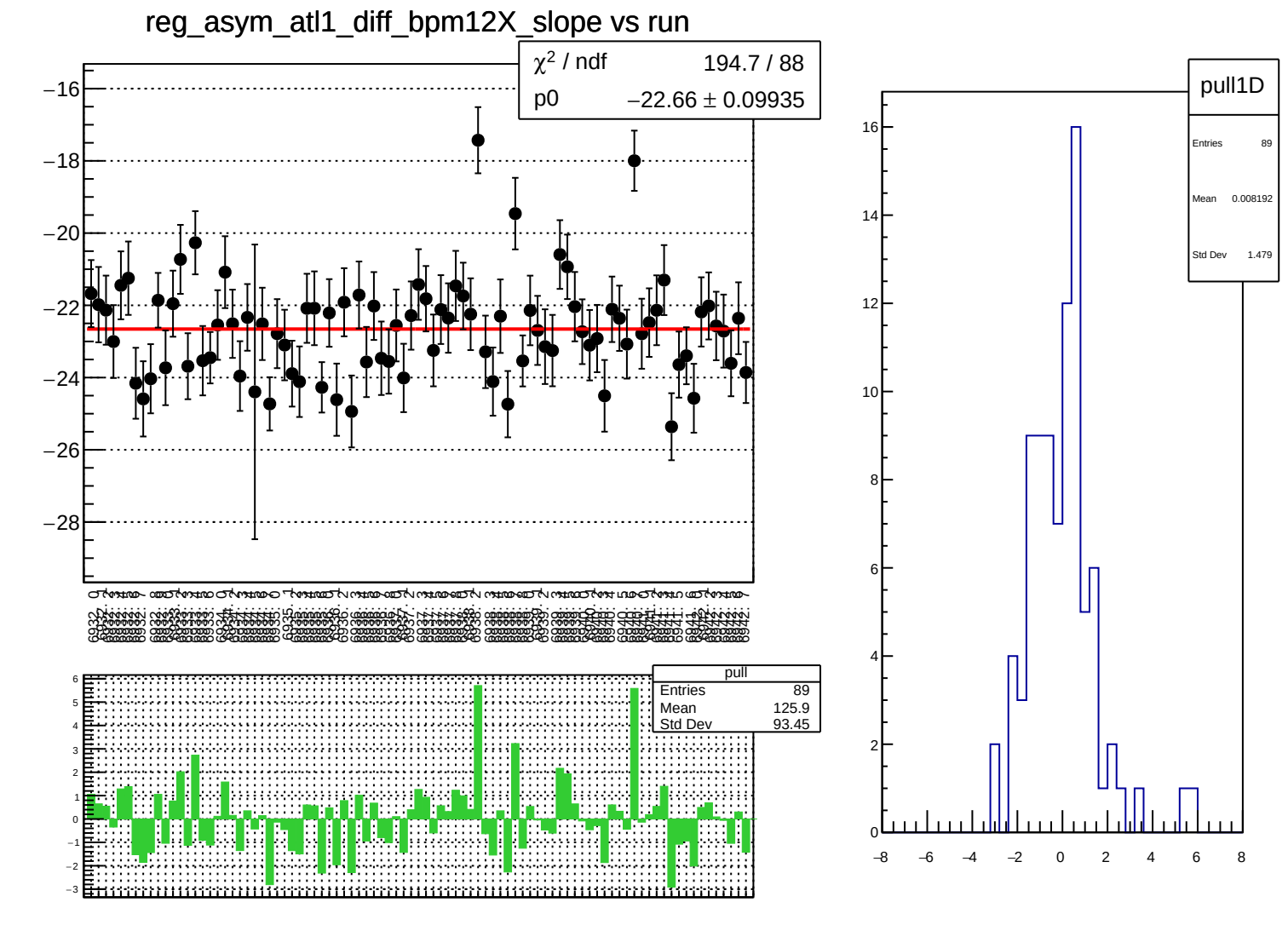

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 65.98 / 88
p0 −24.48 ± 3.054
pull
Entries 89
Mean 53.96
Std Dev 43.94
pull1D
Entries 89
Mean 0.01269
Std Dev 0.8609

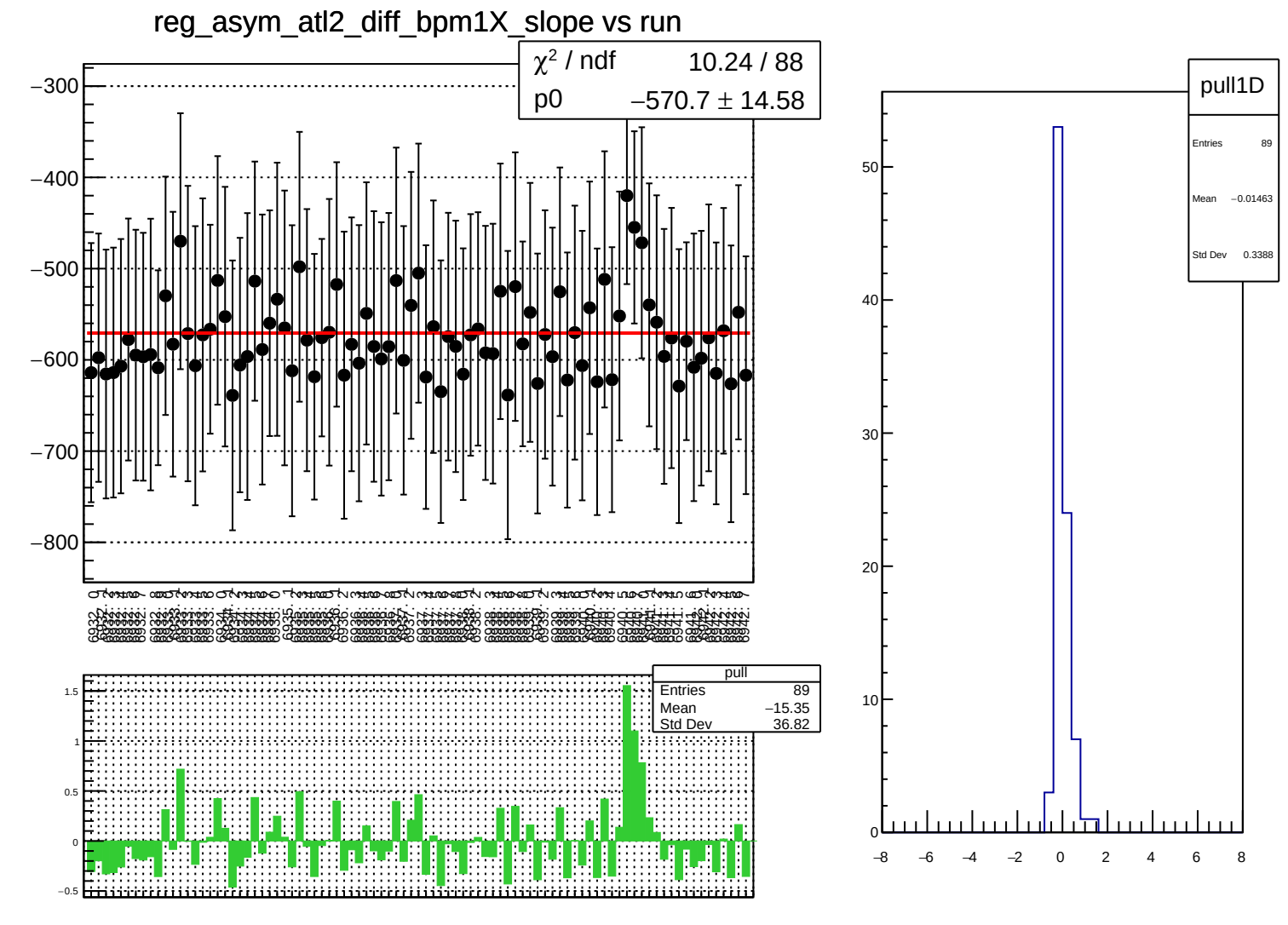

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 91.14 / 88
p0 0.4227 ± 2.092
pull
Entries 89
Mean −33.34
Std Dev 79.67
pull1D
Entries 89
Mean −0.02842
Std Dev 1.012

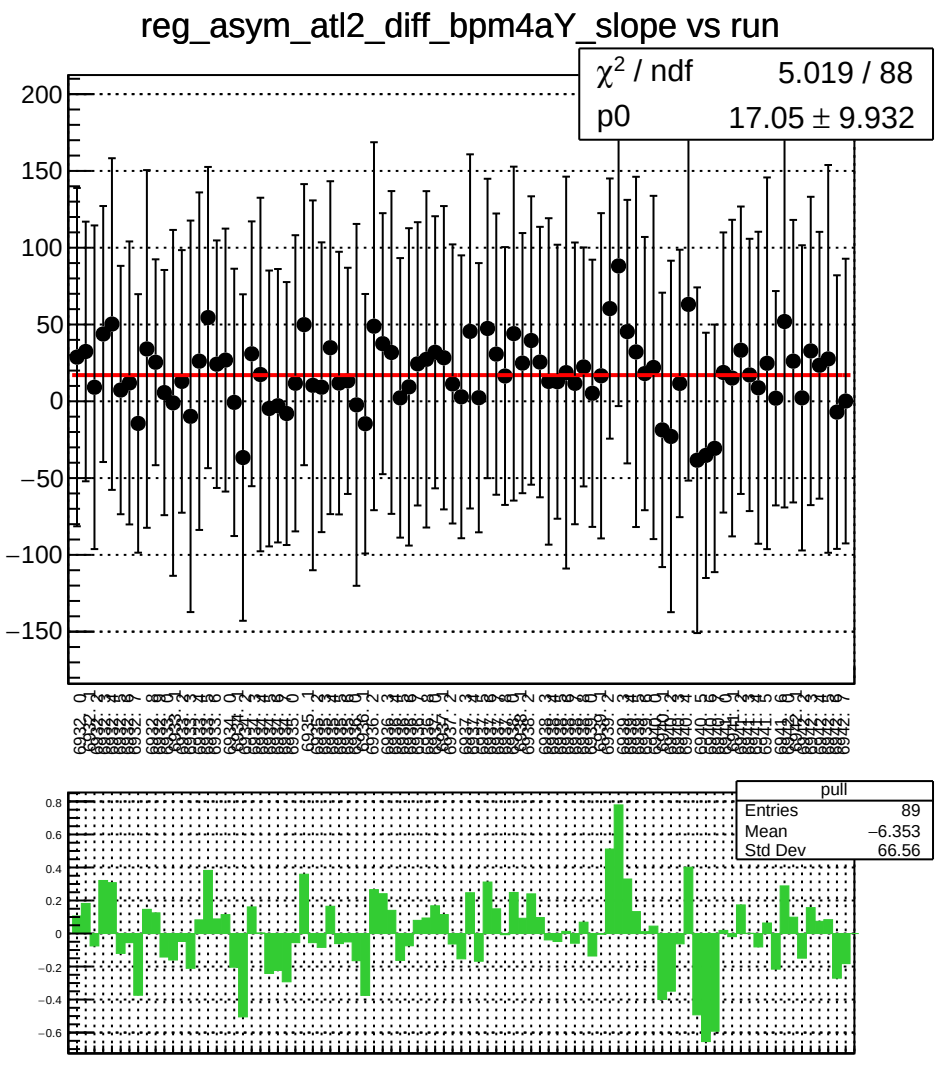

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 67.48 / 88
p0 61.77 ± 2.839
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 104
Std Dev 51.91
2
1.5
1
0.5
0
−0.5
−1
−1.5

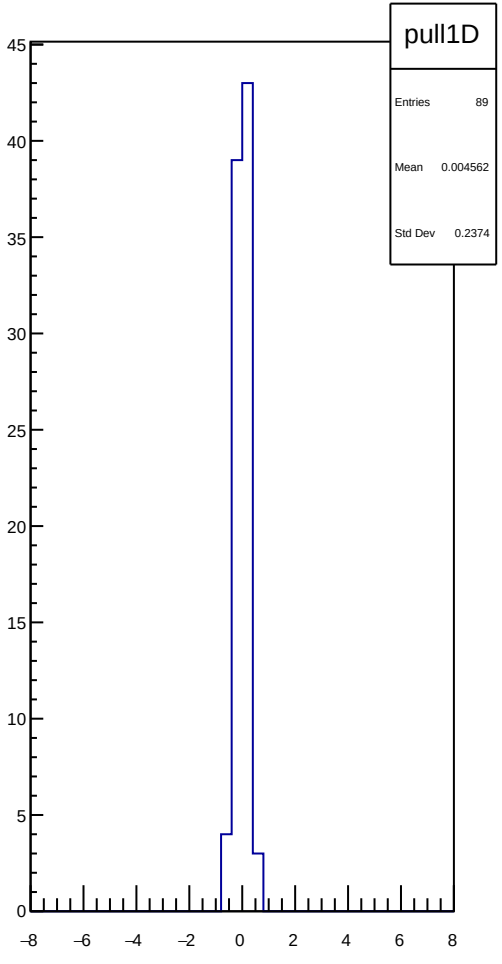

pull1D
Entries 89
Mean −0.01304
Std Dev 0.8707
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

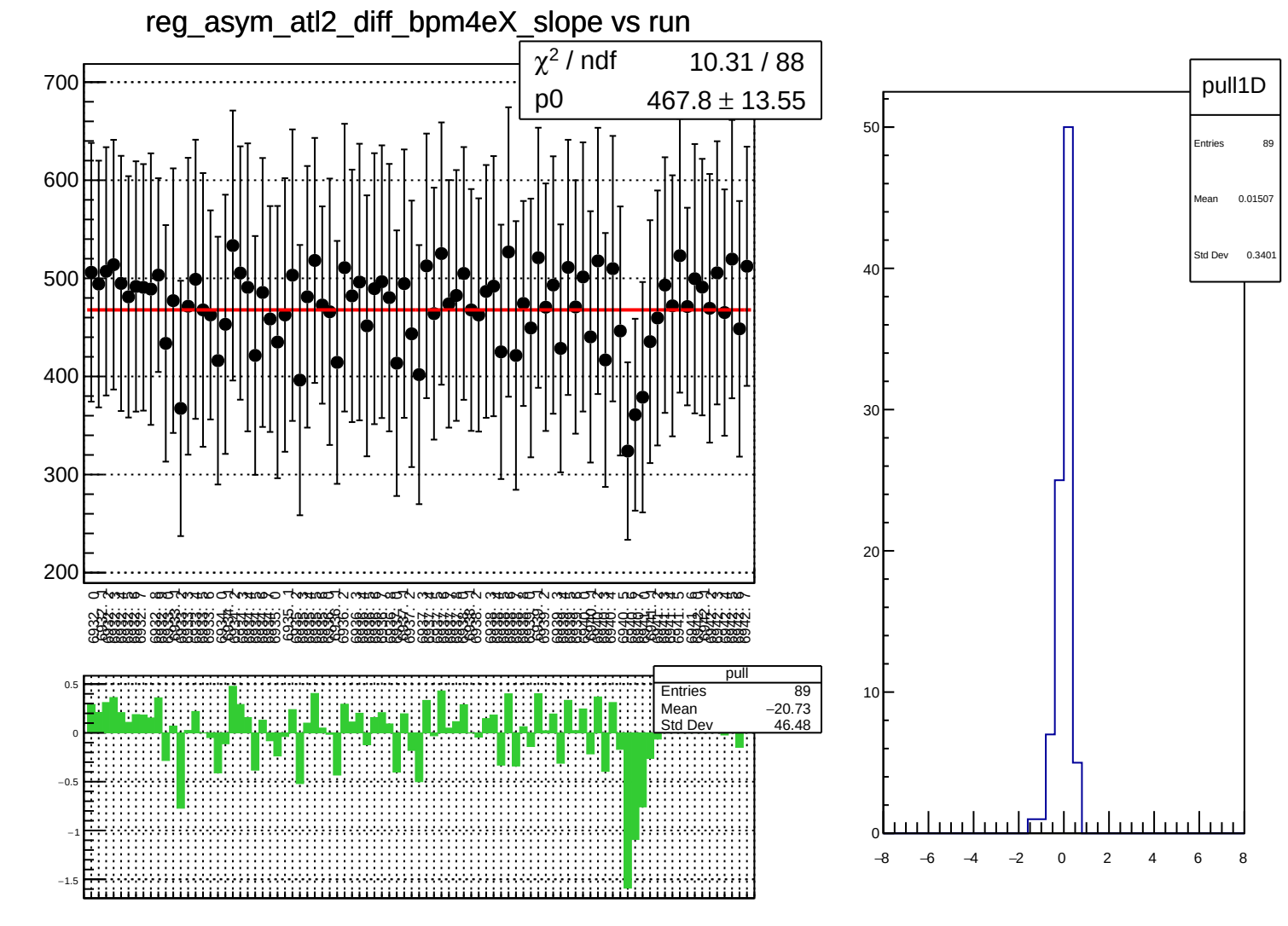

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 92.93 / 88
p0 1.587 ± 2.416
pull
Entries 89
Mean −45.62
Std Dev 91.92
pull1D
Entries 89
Mean 0.01913
Std Dev 1.022

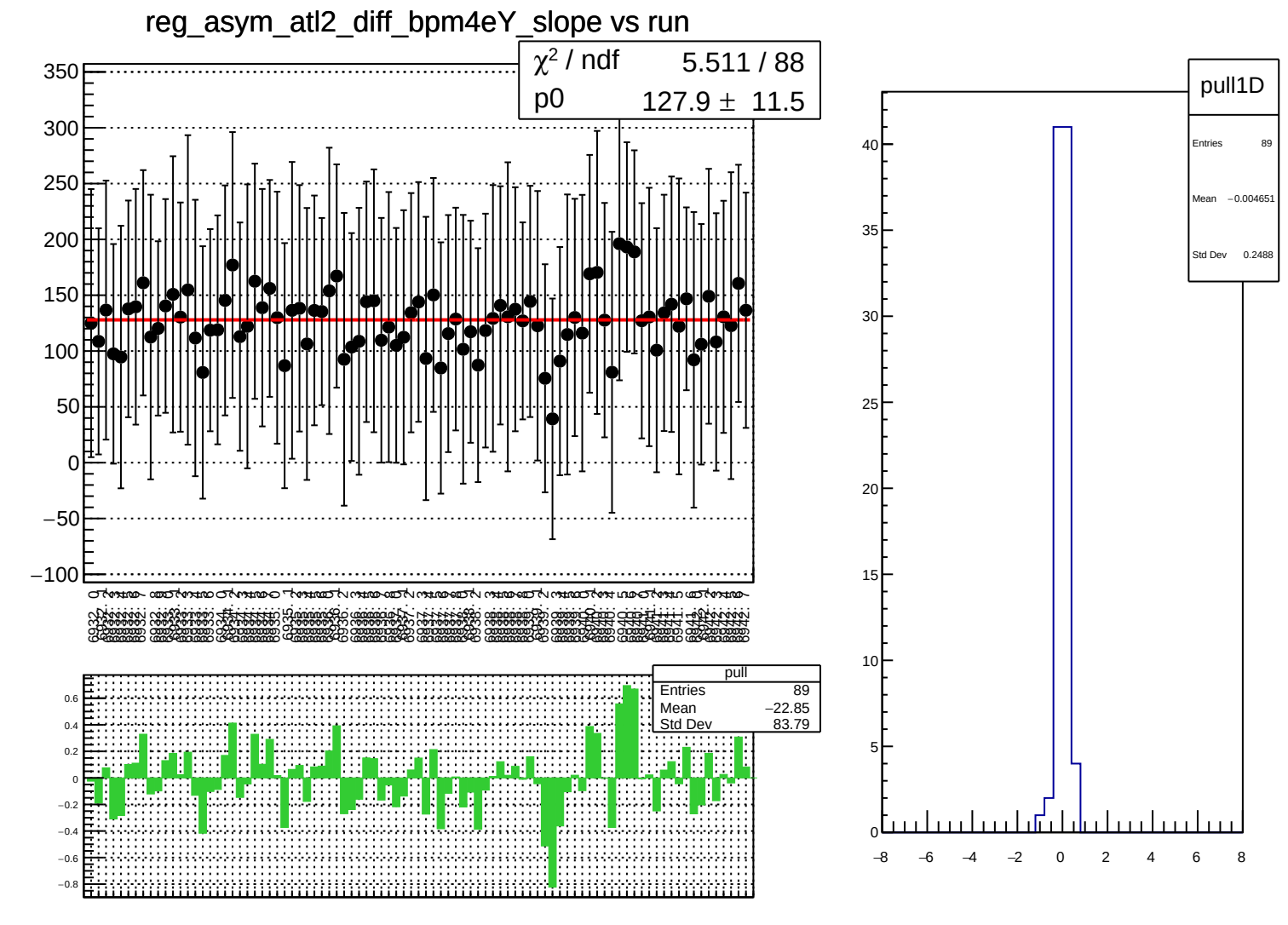

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 194.7 / 88
p0 −22.66 ± 0.09935
pull
Entries 89
Mean 125.9
Std Dev 93.45
pull1D
Entries 89
Mean 0.008192
Std Dev 1.479

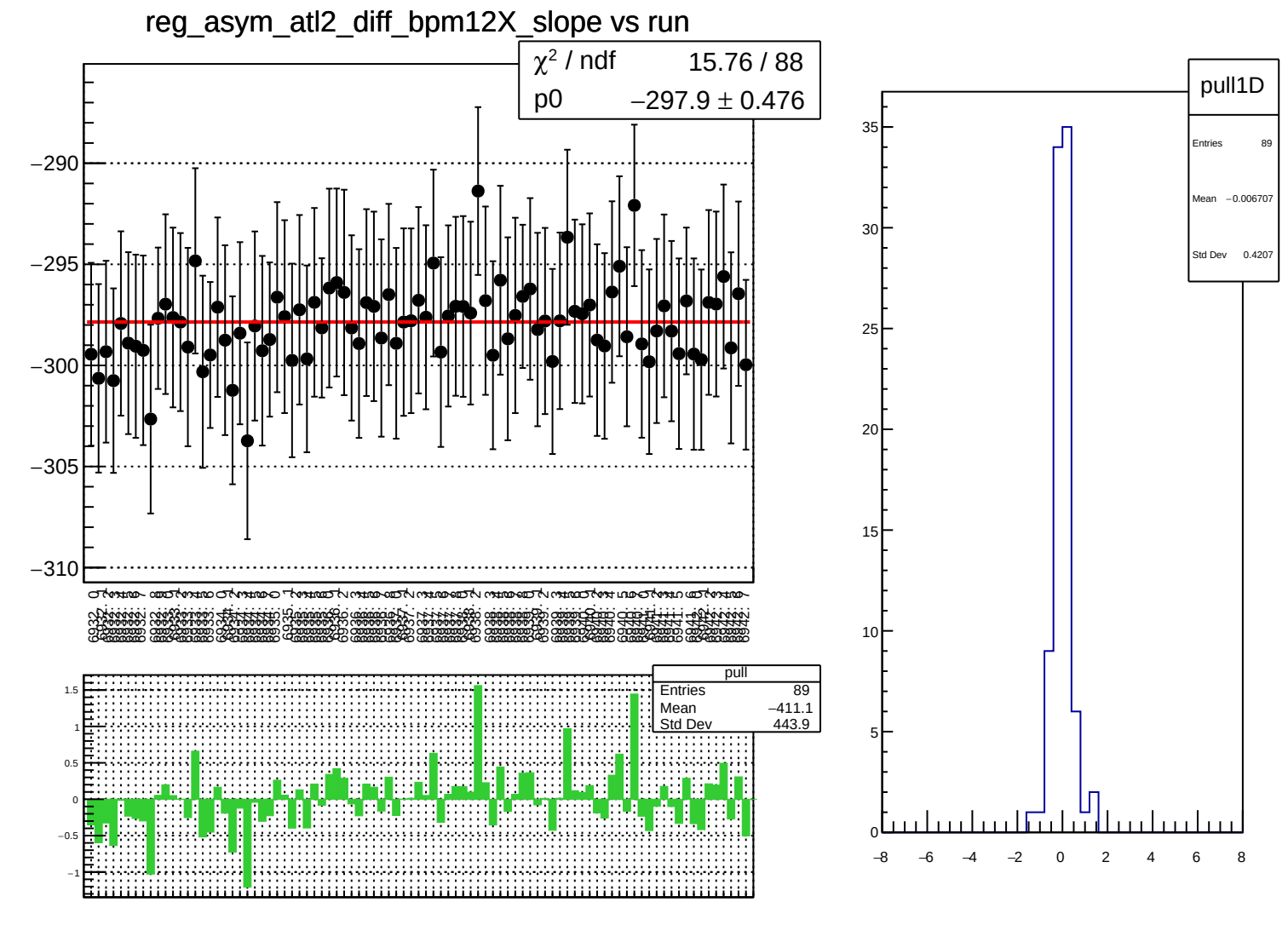

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 10.24 / 88
p0 −570.7 ± 14.58
pull
Entries 89
Mean −15.35
Std Dev 36.82
pull1D
Entries 89
Mean −0.01463
Std Dev 0.3388

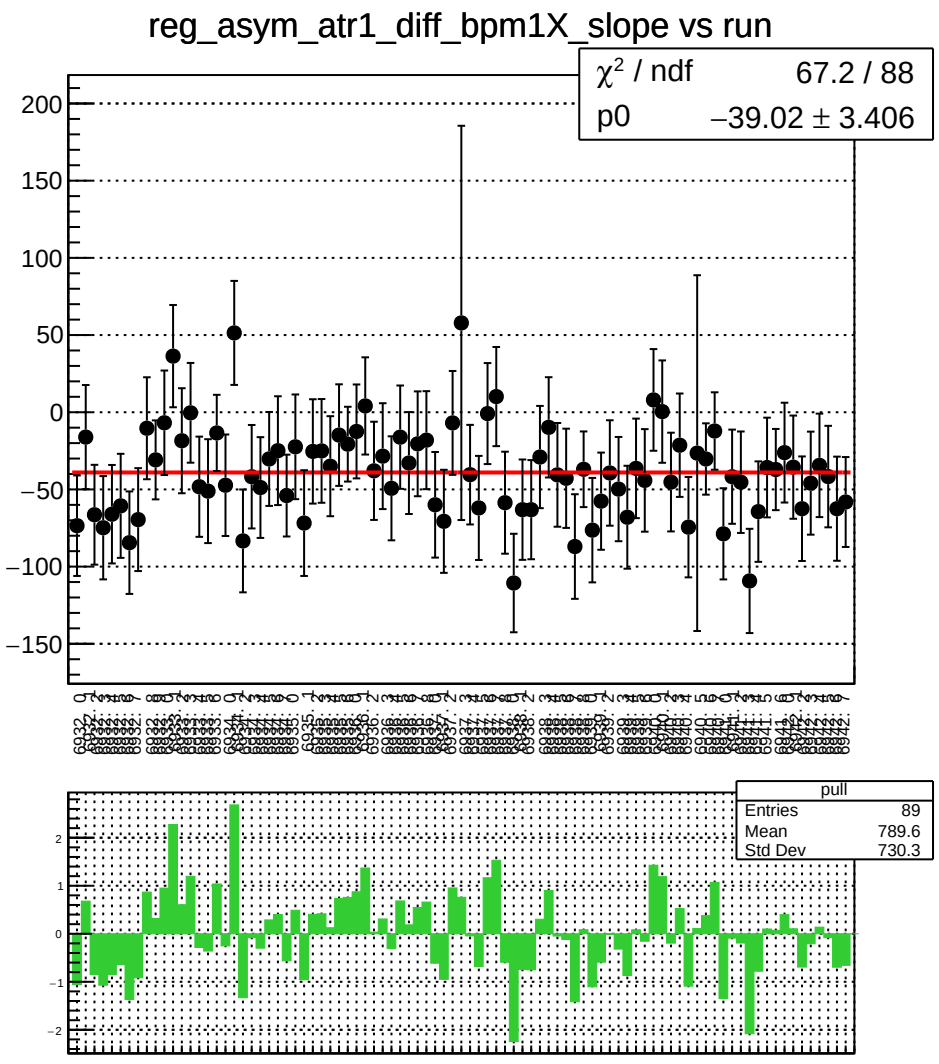

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 5.019 / 88
p0 17.05 ± 9.932
pull
Entries 89
Mean −6.353
Std Dev 66.56

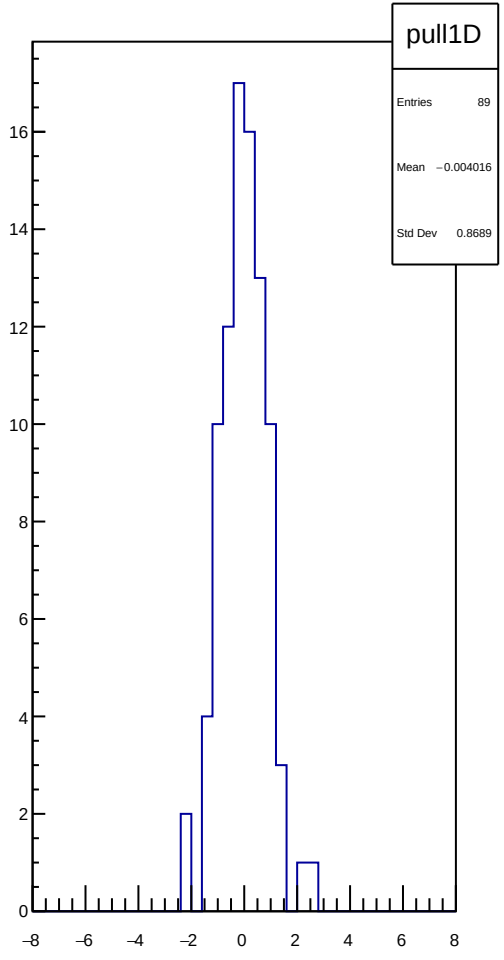

pull1D
Entries 89
Mean 0.004562
Std Dev 0.2374

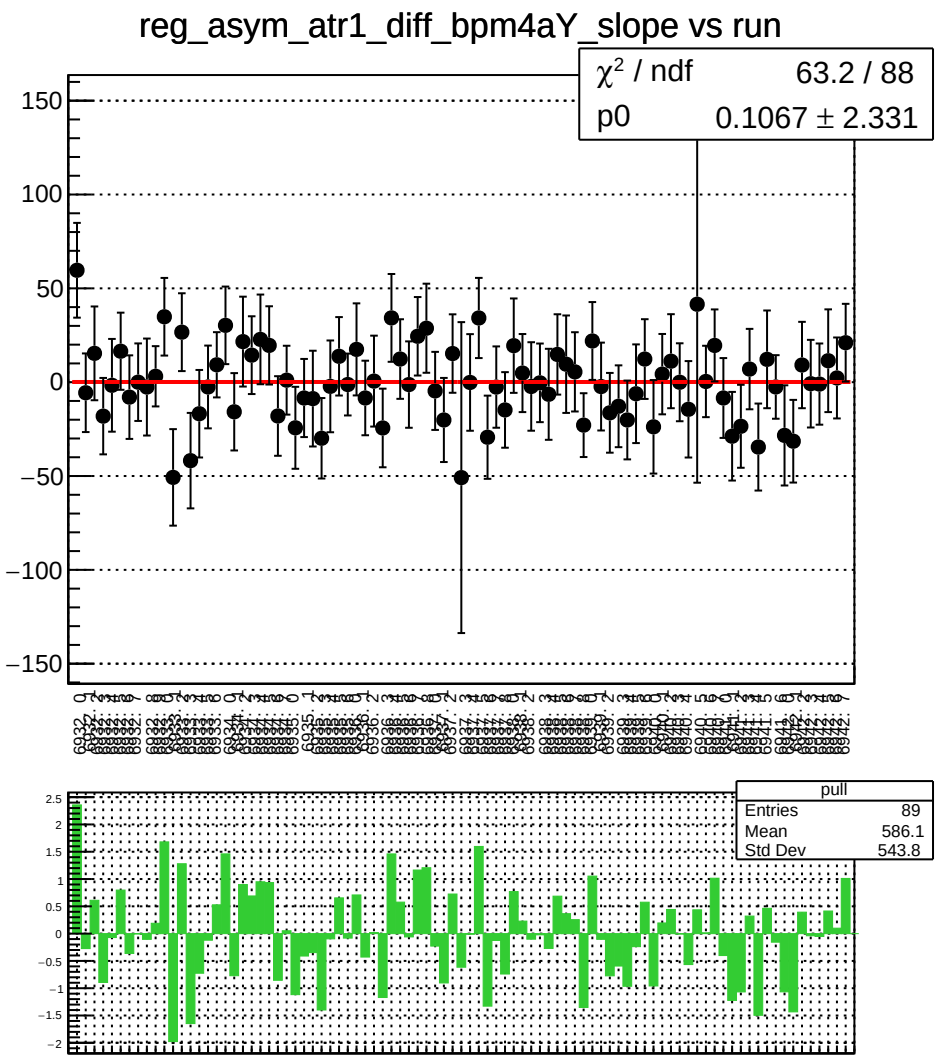

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 10.31 / 88
p0 467.8 ± 13.55
700
600
500
400
300
200
pull
Entries 89
Mean −20.73
Std Dev 46.48
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean 0.01507
Std Dev 0.3401
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

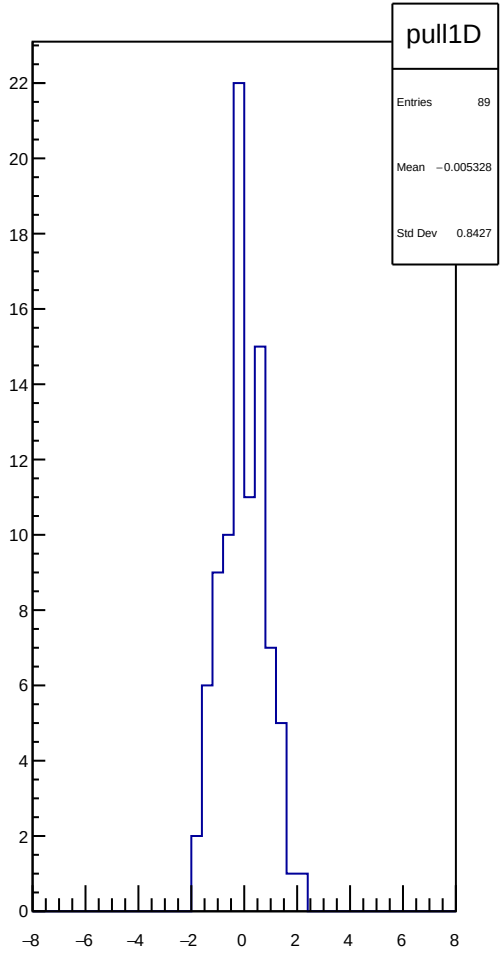

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 5.511 / 88
p0 127.9 ± 11.5
pull
Entries 89
Mean −22.85
Std Dev 83.79
pull1D
Entries 89
Mean −0.004651
Std Dev 0.2488

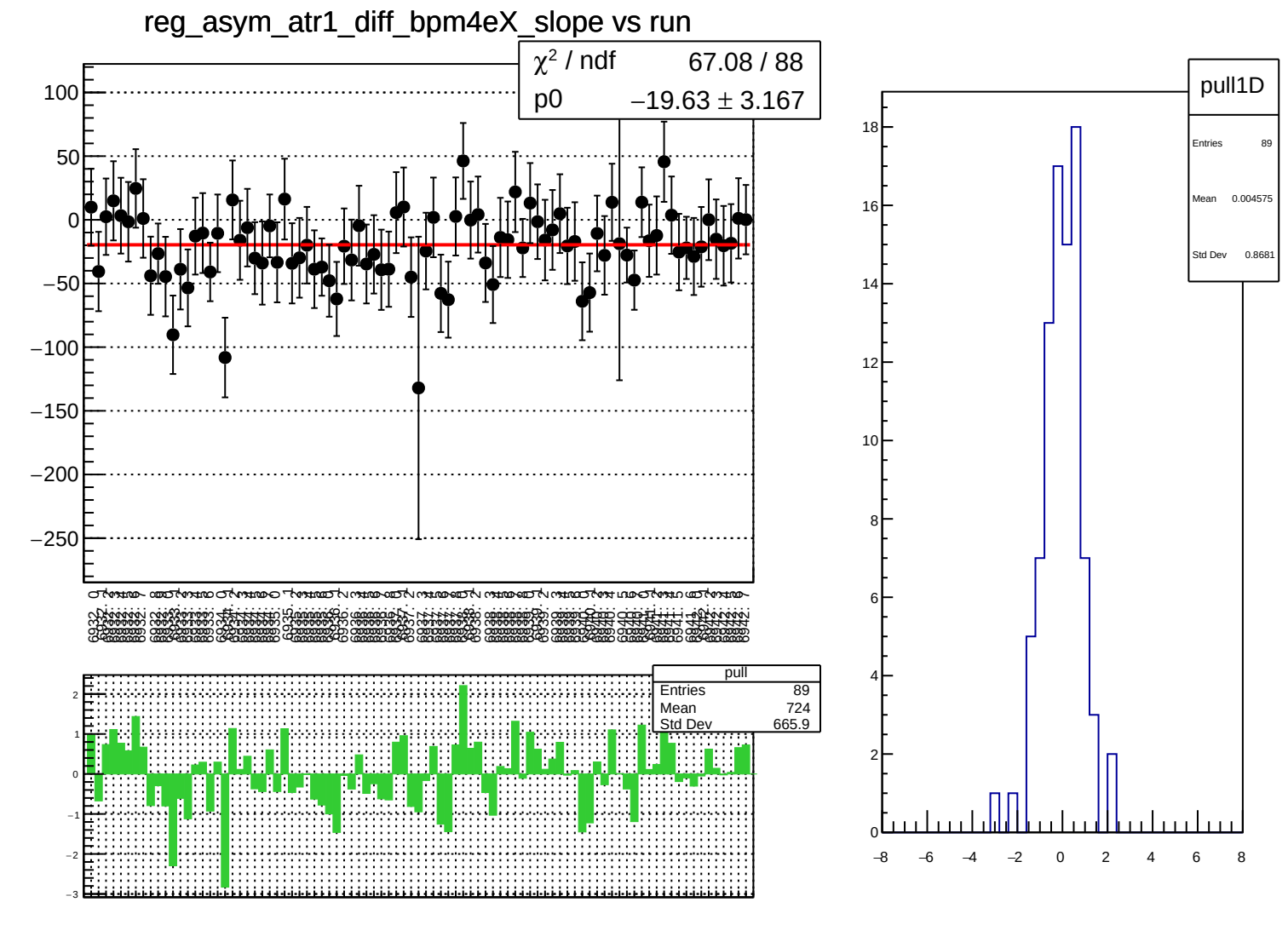

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 15.76 / 88
p0 −297.9 ± 0.476
−290
−295
−300
−305
−310
pull
Entries 89
Mean −411.1
Std Dev 443.9
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean −0.006707
Std Dev 0.4207
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

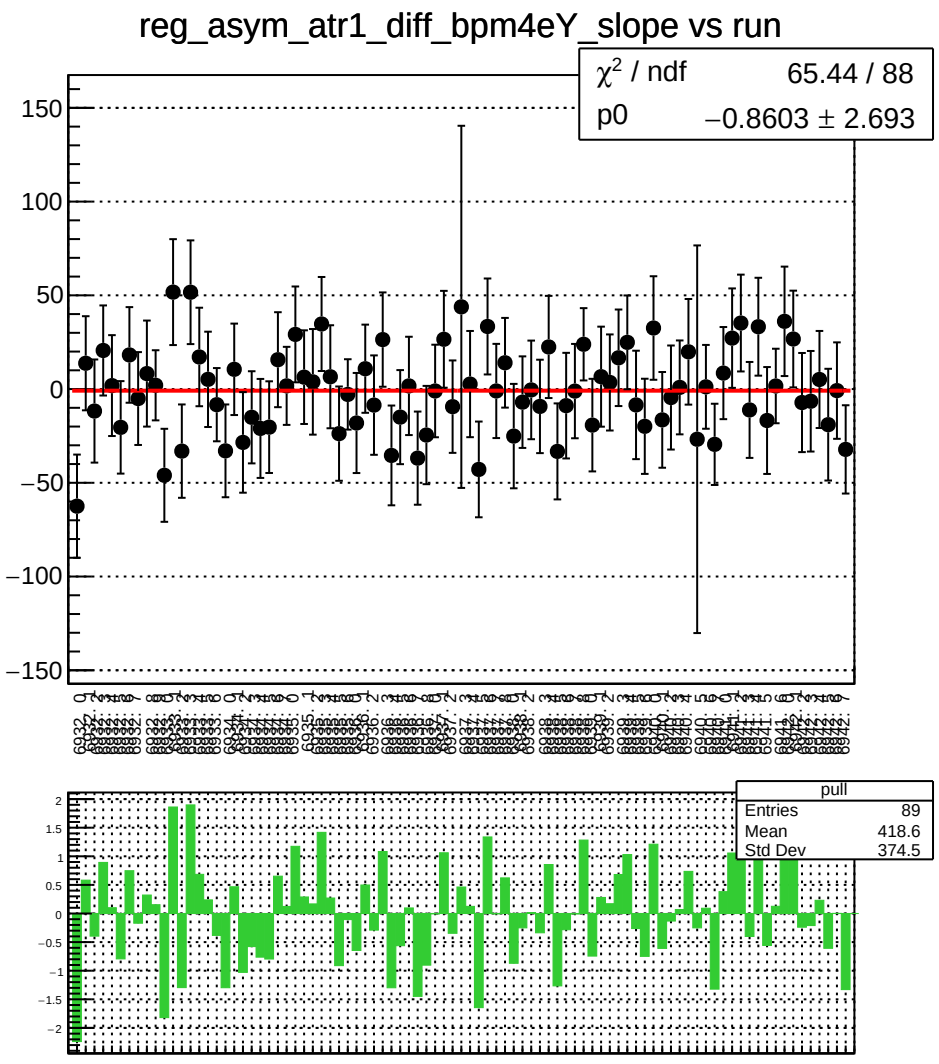

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 67.2 / 88
p0 −39.02 ± 3.406
200
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 789.6
Std Dev 730.3
2
1
0
−1
−2

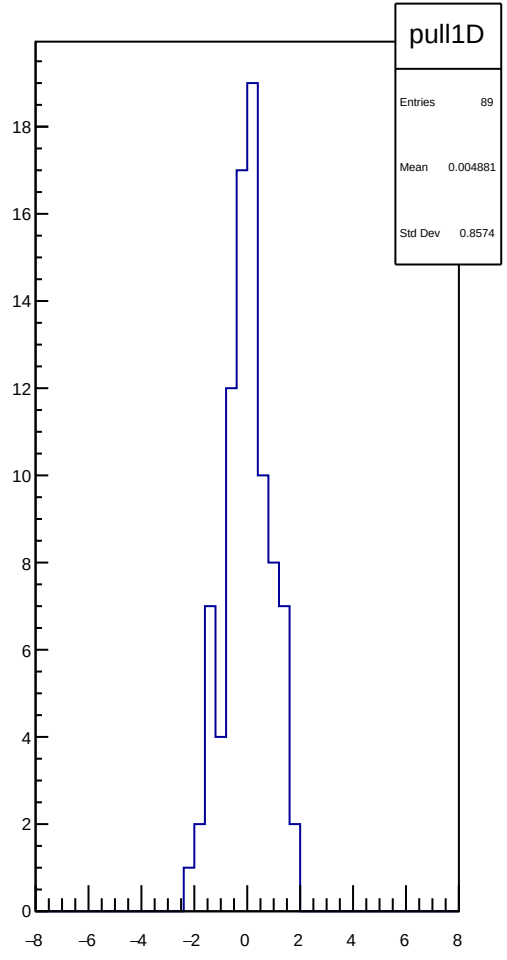

pull1D
Entries 89
Mean −0.004016
Std Dev 0.8689
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

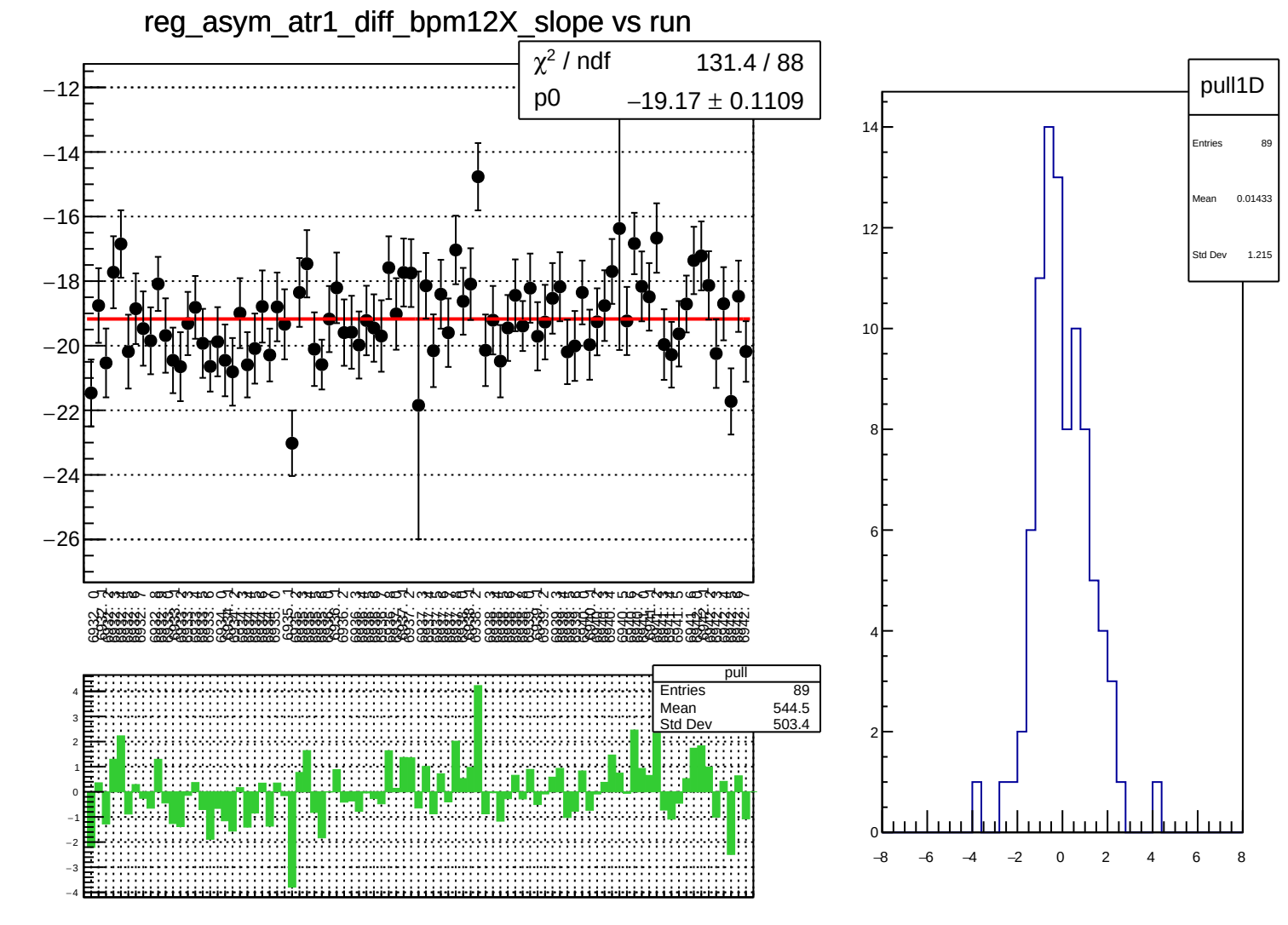

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 63.2 / 88
p0 0.1067 ± 2.331
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 586.1
Std Dev 543.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

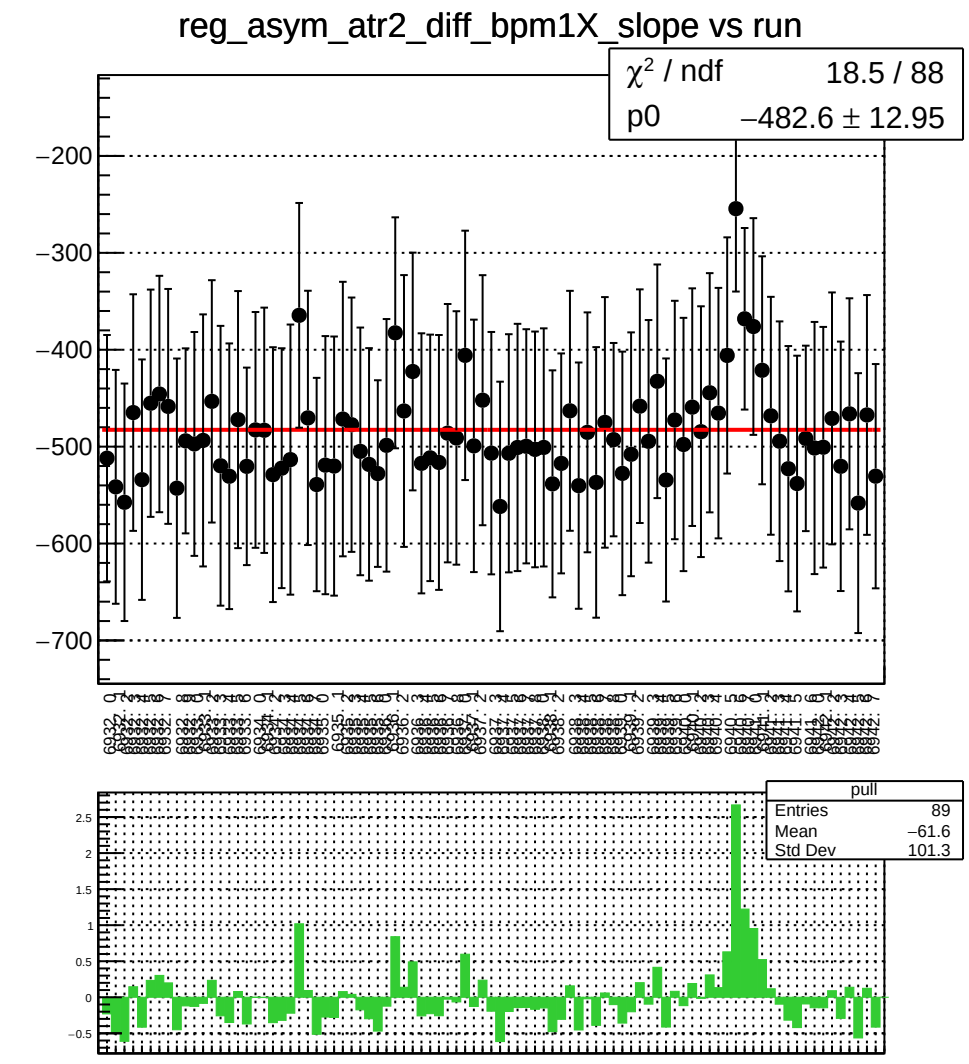

pull1D
Entries 89
Mean −0.005328
Std Dev 0.8427
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

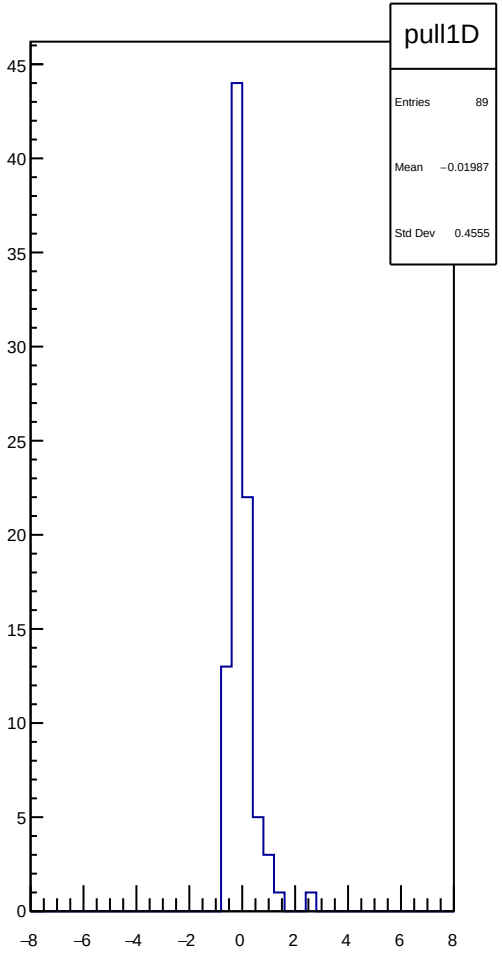

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 67.08 / 88
p0 −19.63 ± 3.167
pull
Entries 89
Mean 724
Std Dev 665.9
pull1D
Entries 89
Mean 0.004575
Std Dev 0.8681

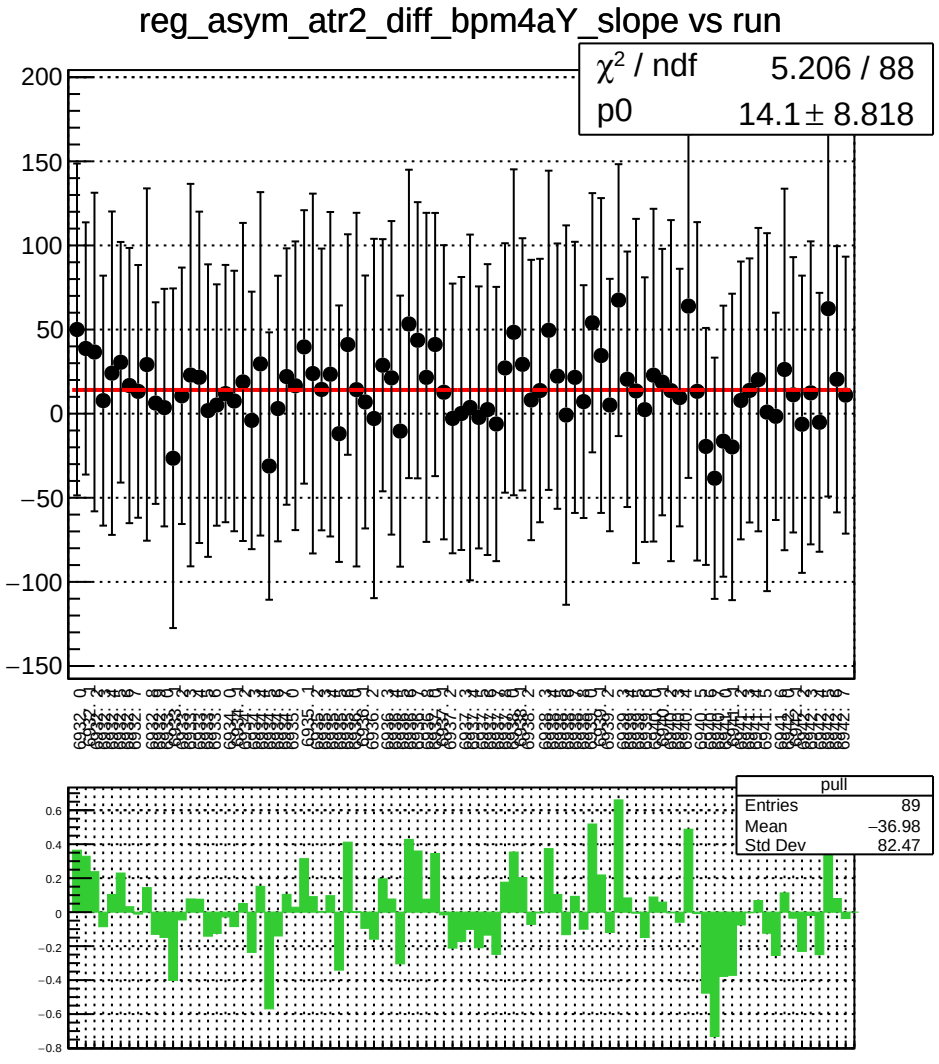

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 65.44 / 88
p0 −0.8603 ± 2.693
150
100
50
0
−50
−100
−150
pull
Entries 89
Mean 418.6
Std Dev 374.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

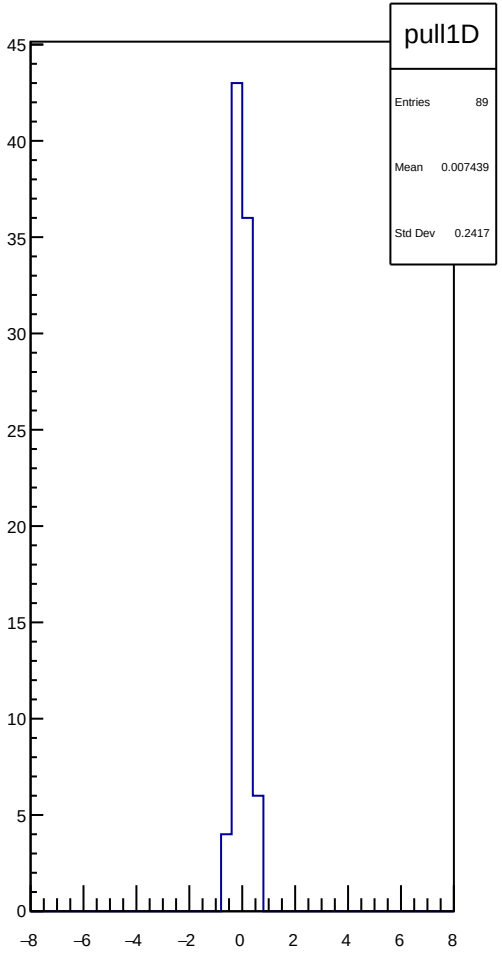

pull1D
Entries 89
Mean 0.004881
Std Dev 0.8574
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

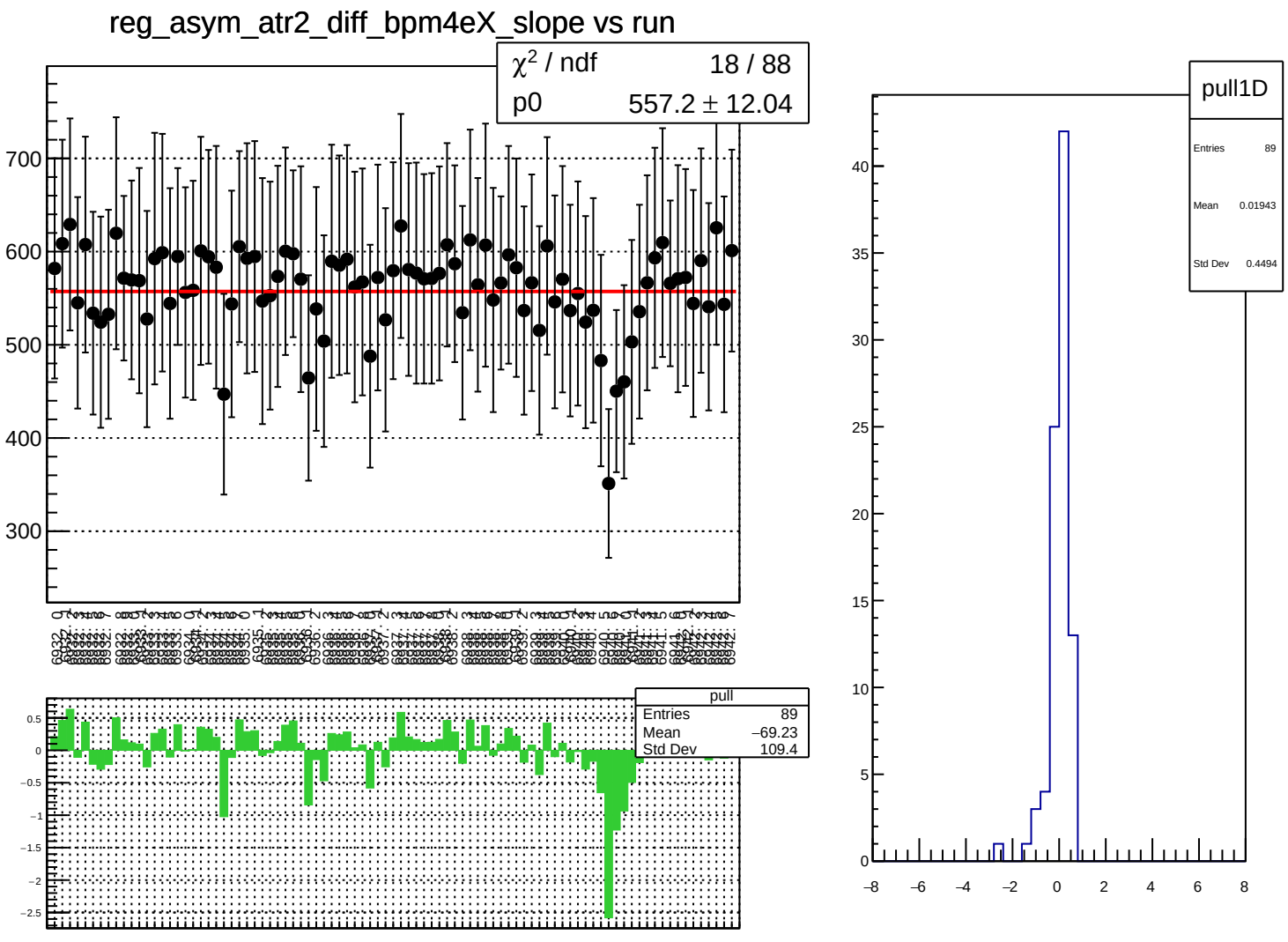

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 131.4 / 88
p0 −19.17 ± 0.1109
pull
Entries 89
Mean 544.5
Std Dev 503.4
pull1D
Entries 89
Mean 0.01433
Std Dev 1.215

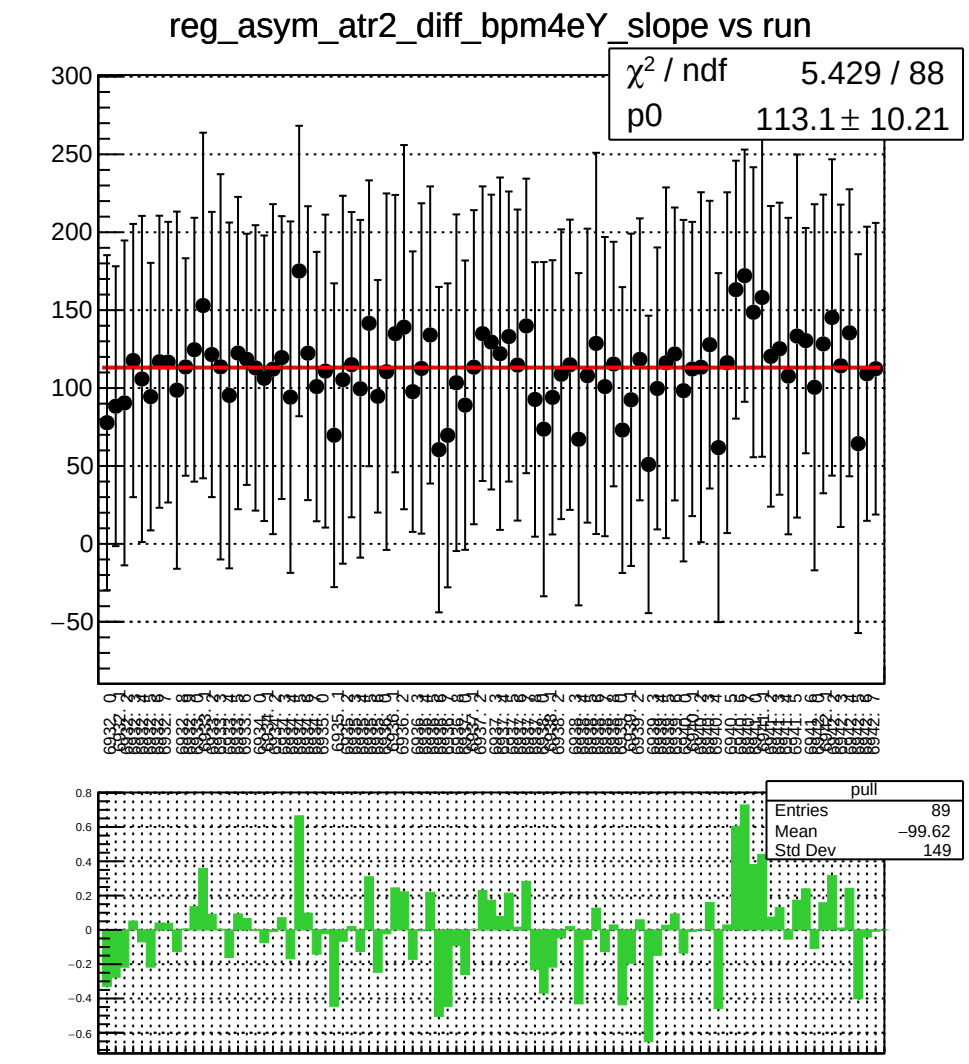

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 18.5 / 88
p0 −482.6 ± 12.95
pull
Entries 89
Mean −61.6
Std Dev 101.3

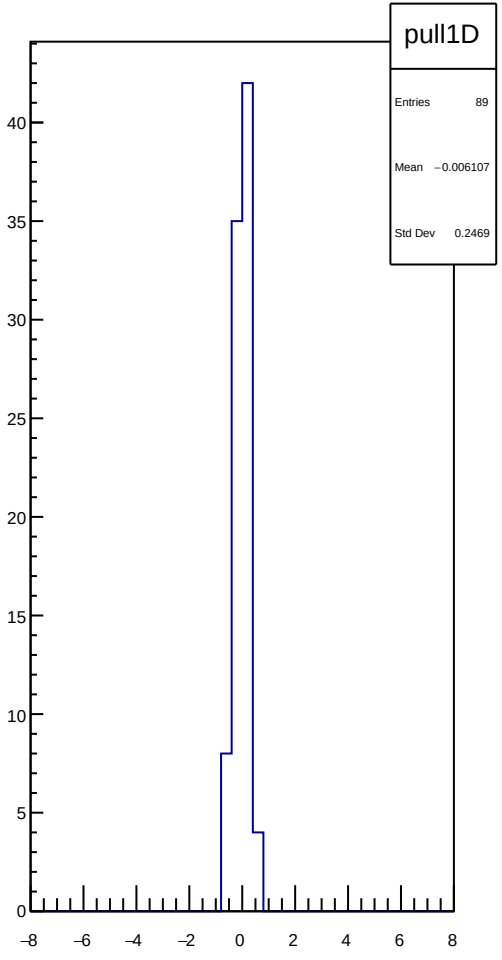

pull1D
Entries 89
Mean −0.01987
Std Dev 0.4555

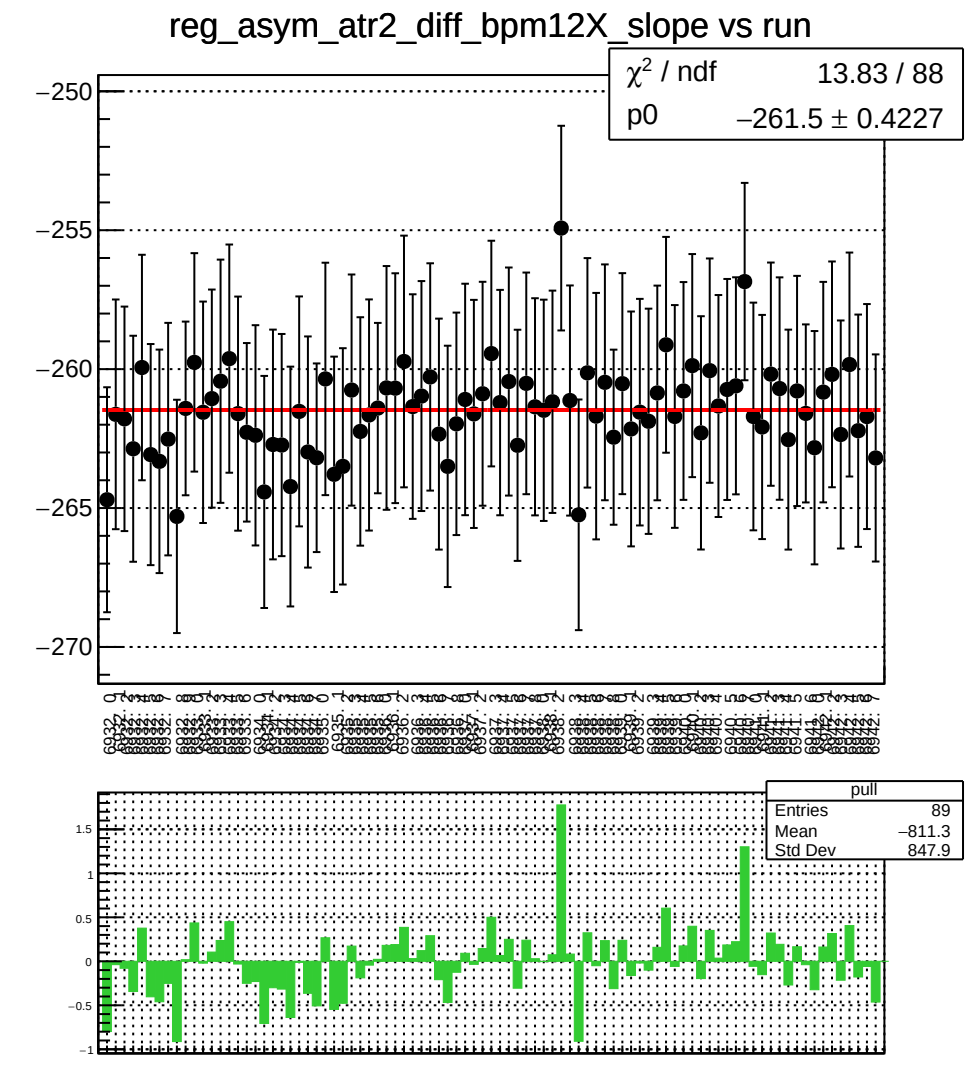

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 5.206 / 88
p0 14.1 ± 8.818
pull
Entries 89
Mean −36.98
Std Dev 82.47

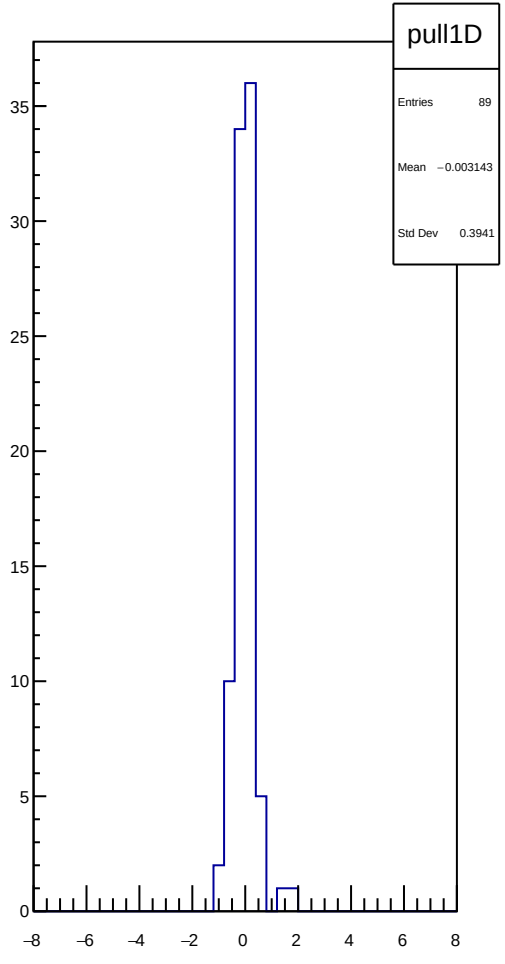

pull1D
Entries 89
Mean 0.007439
Std Dev 0.2417

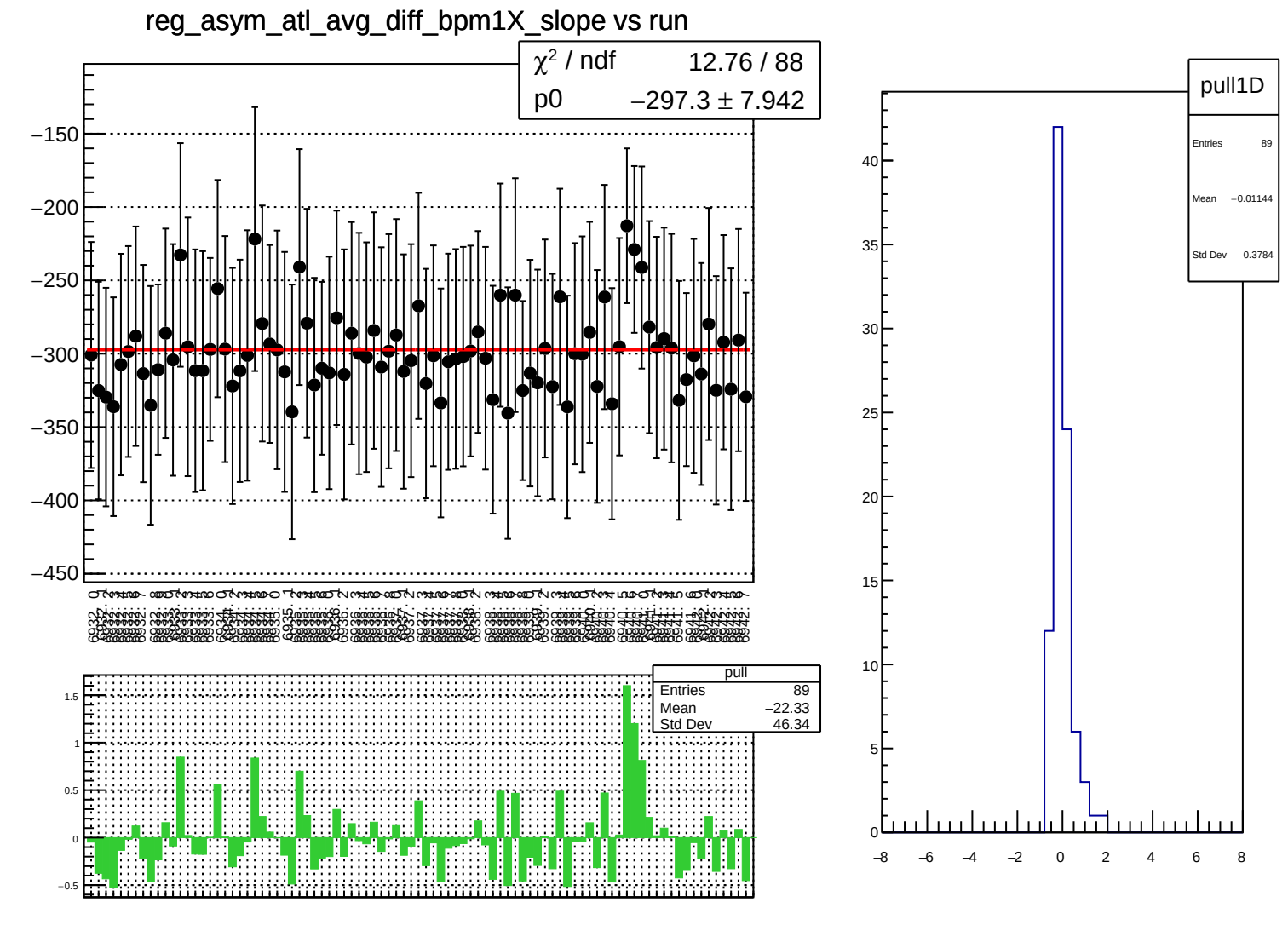

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 18 / 88
p0 557.2 ± 12.04
700
600
500
400
300
pull
Entries 89
Mean −69.23
Std Dev 109.4
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 89
Mean 0.01943
Std Dev 0.4494
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

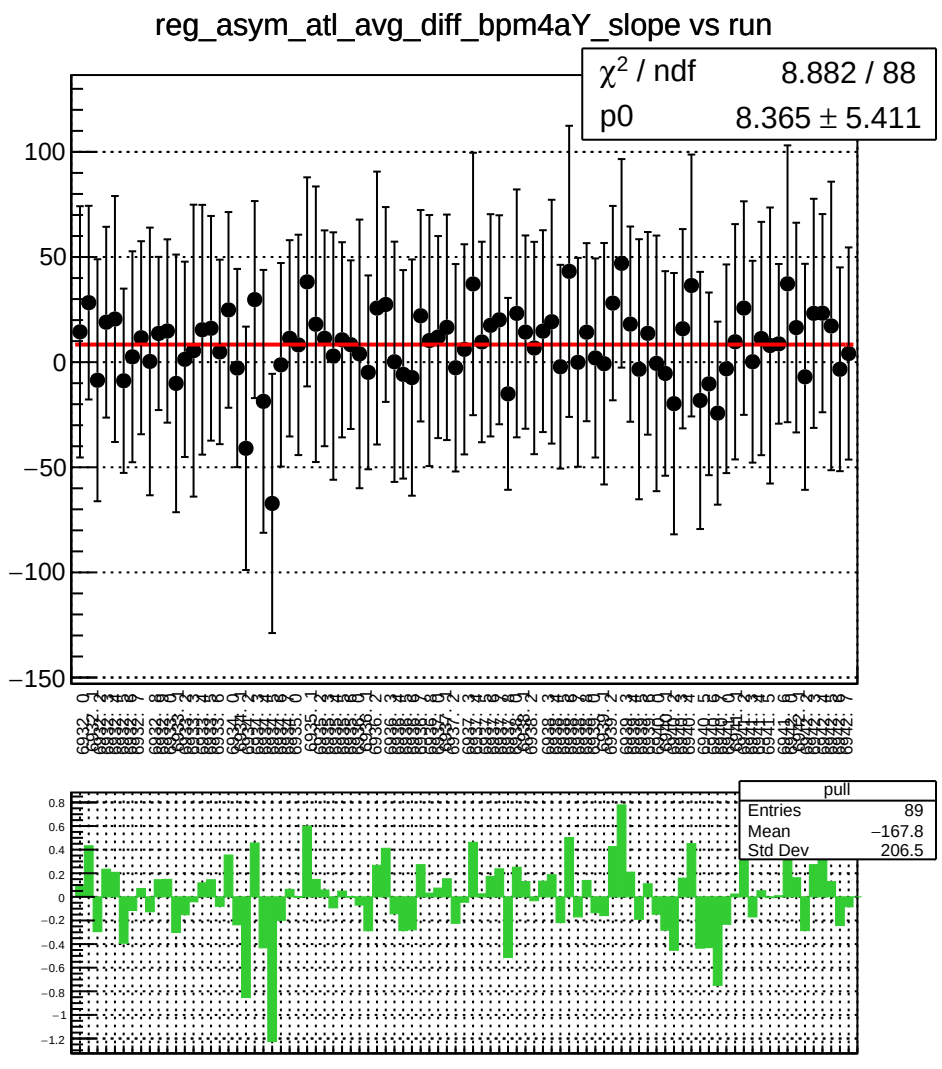

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 5.429 / 88
p0 113.1 ± 10.21
pull
Entries 89
Mean −99.62
Std Dev 149

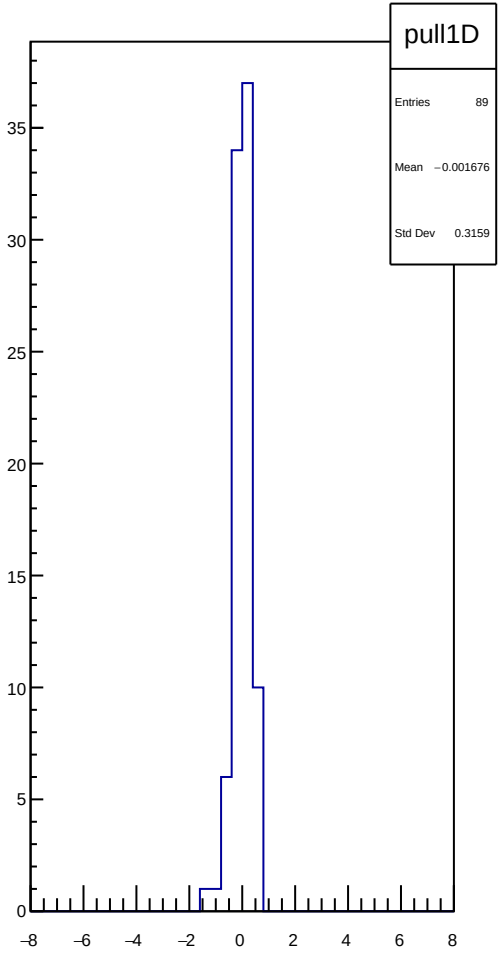

pull1D
Entries 89
Mean −0.006107
Std Dev 0.2469

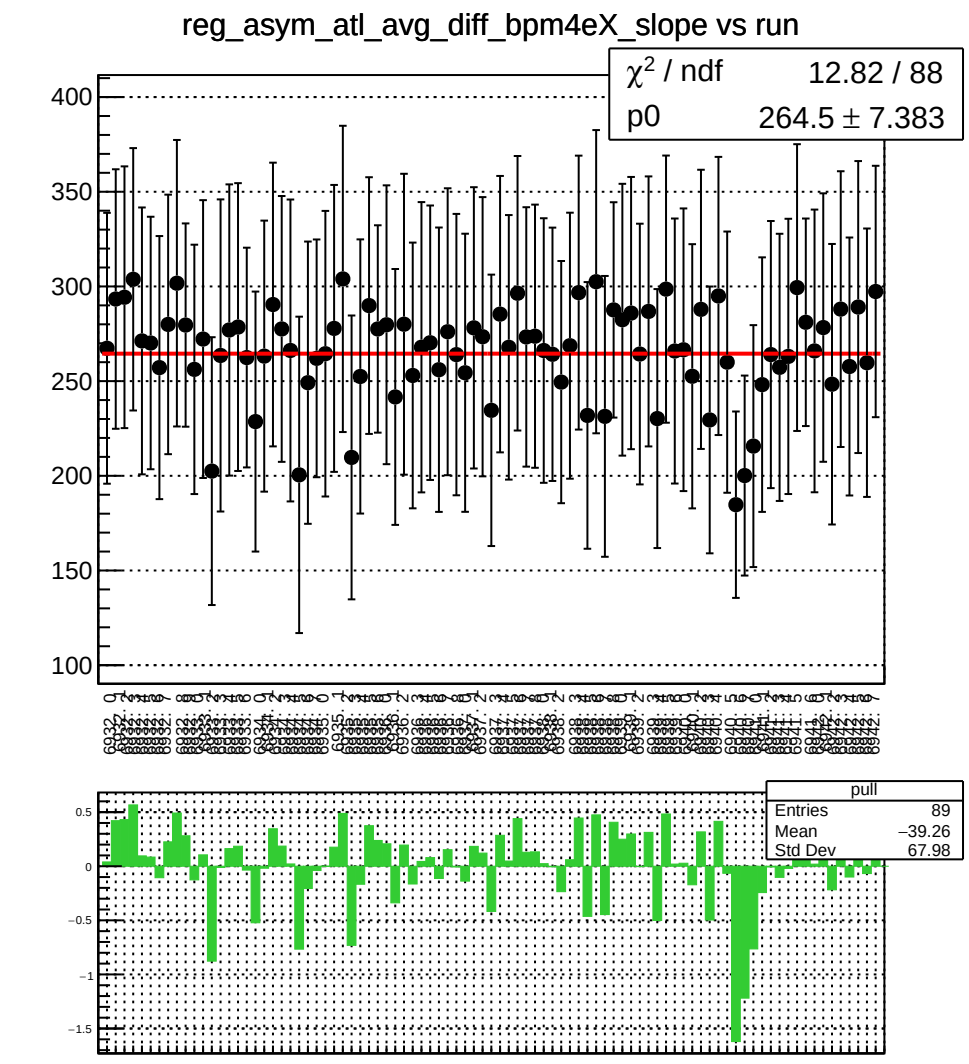

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 13.83 / 88
p0 −261.5 ± 0.4227
−250
−255
−260
−265
−270
pull
Entries 89
Mean −811.3
Std Dev 847.9
1.5
1
0.5
0
−0.5
−1

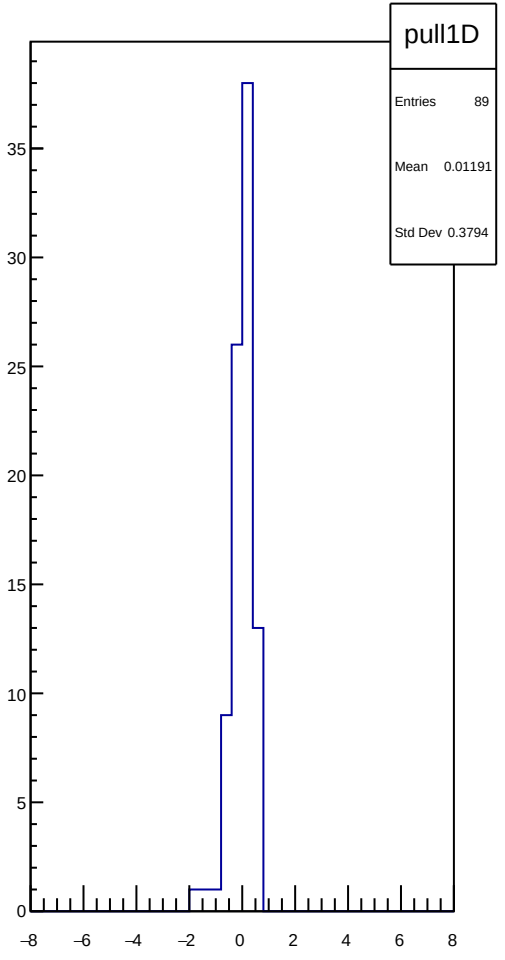

pull1D
Entries 89
Mean −0.003143
Std Dev 0.3941
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

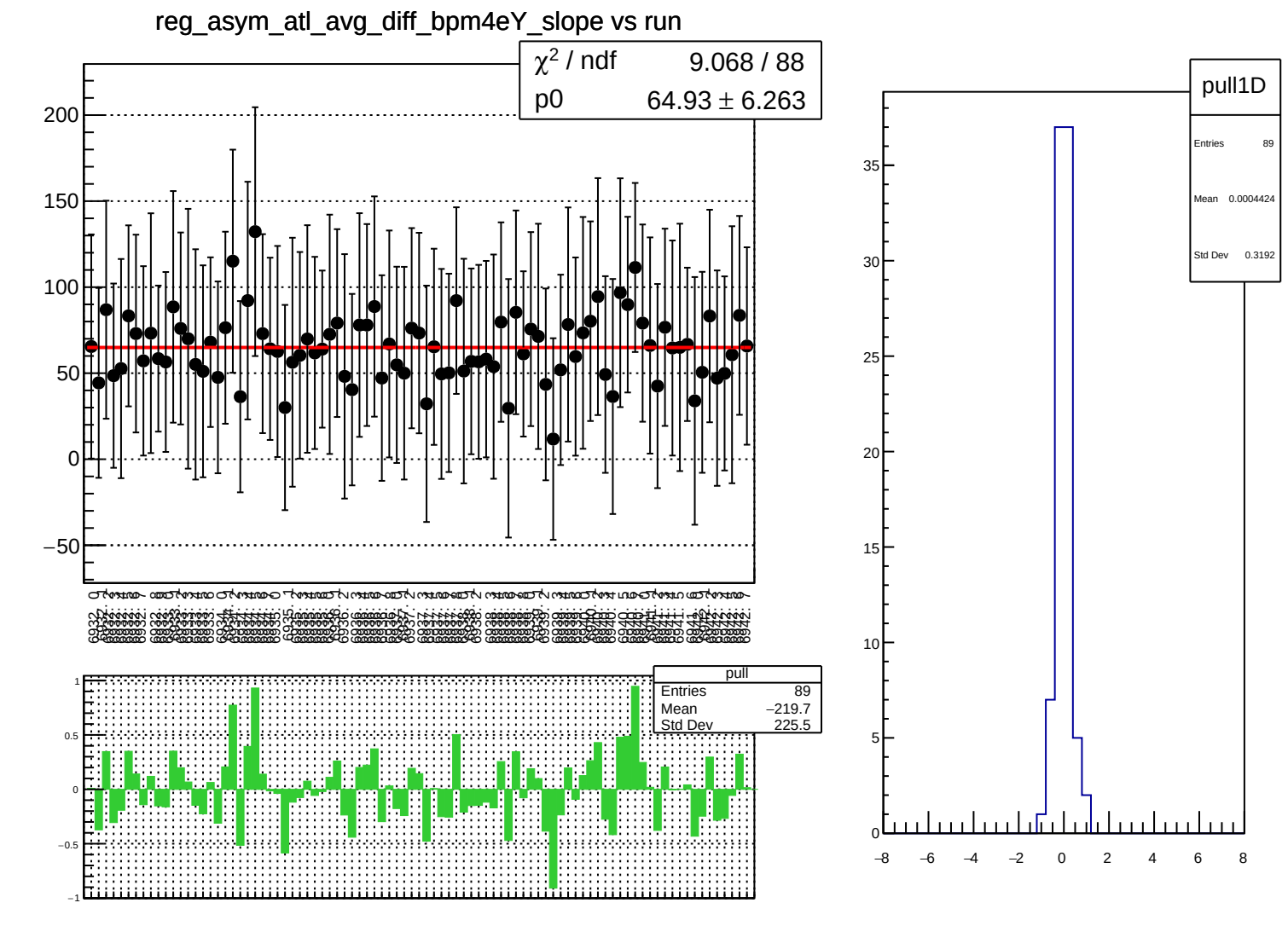

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 12.76 / 88
p0 −297.3 ± 7.942
pull
Entries 89
Mean −22.33
Std Dev 46.34
pull1D
Entries 89
Mean −0.01144
Std Dev 0.3784

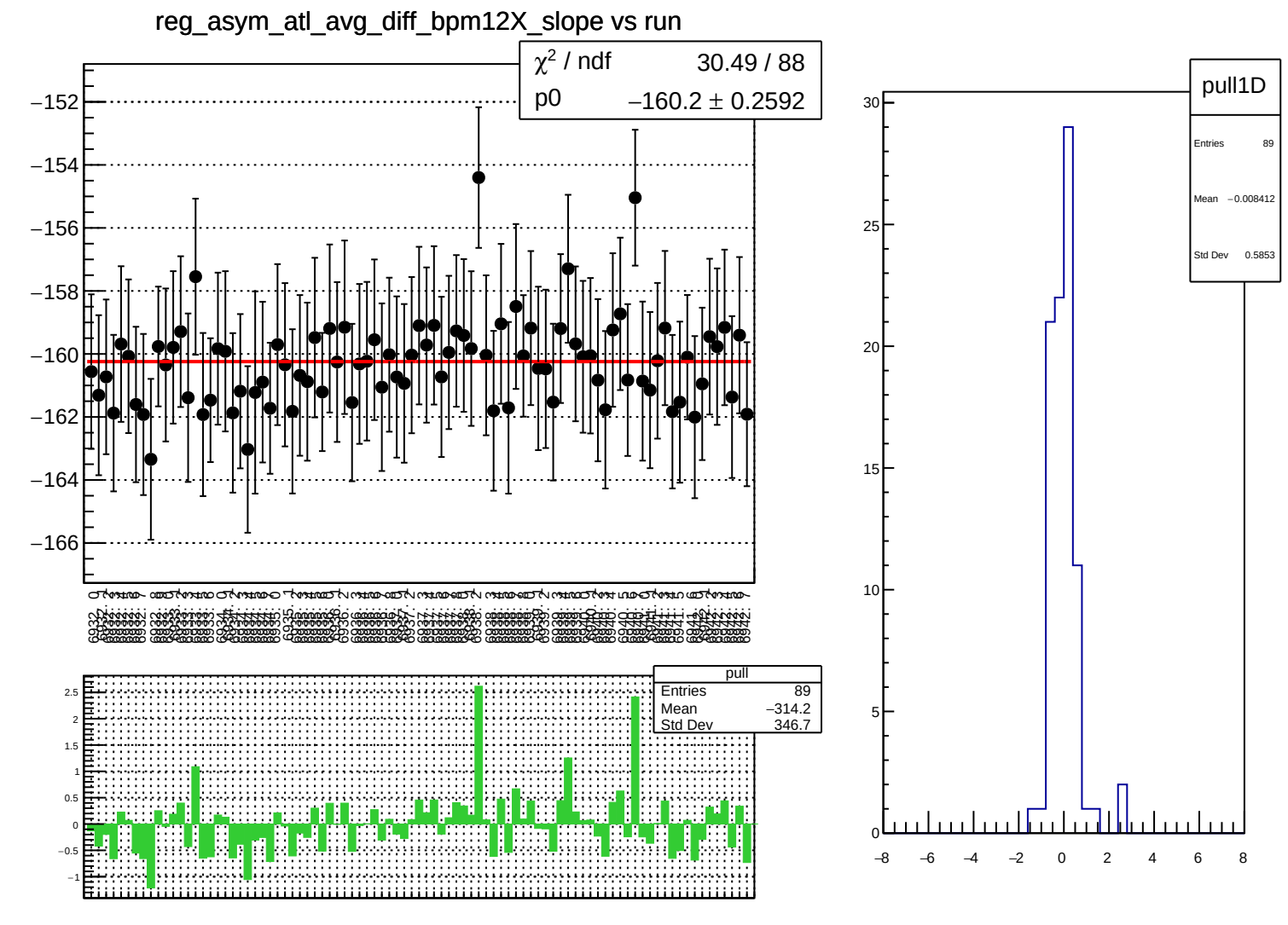

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.882 / 88
p0 8.365 ± 5.411
pull
Entries 89
Mean −167.8
Std Dev 206.5

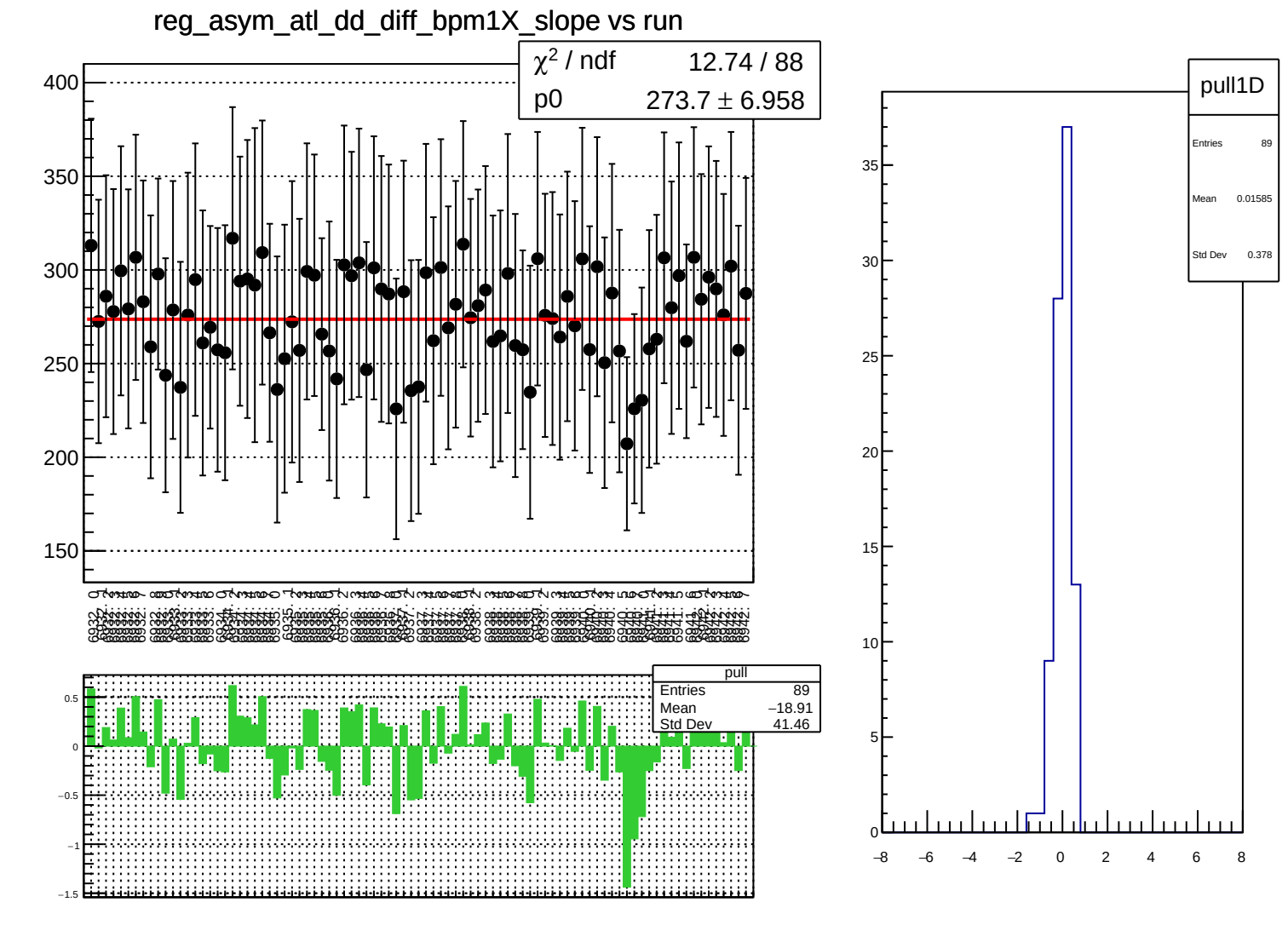

pull1D
Entries 89
Mean −0.001676
Std Dev 0.3159

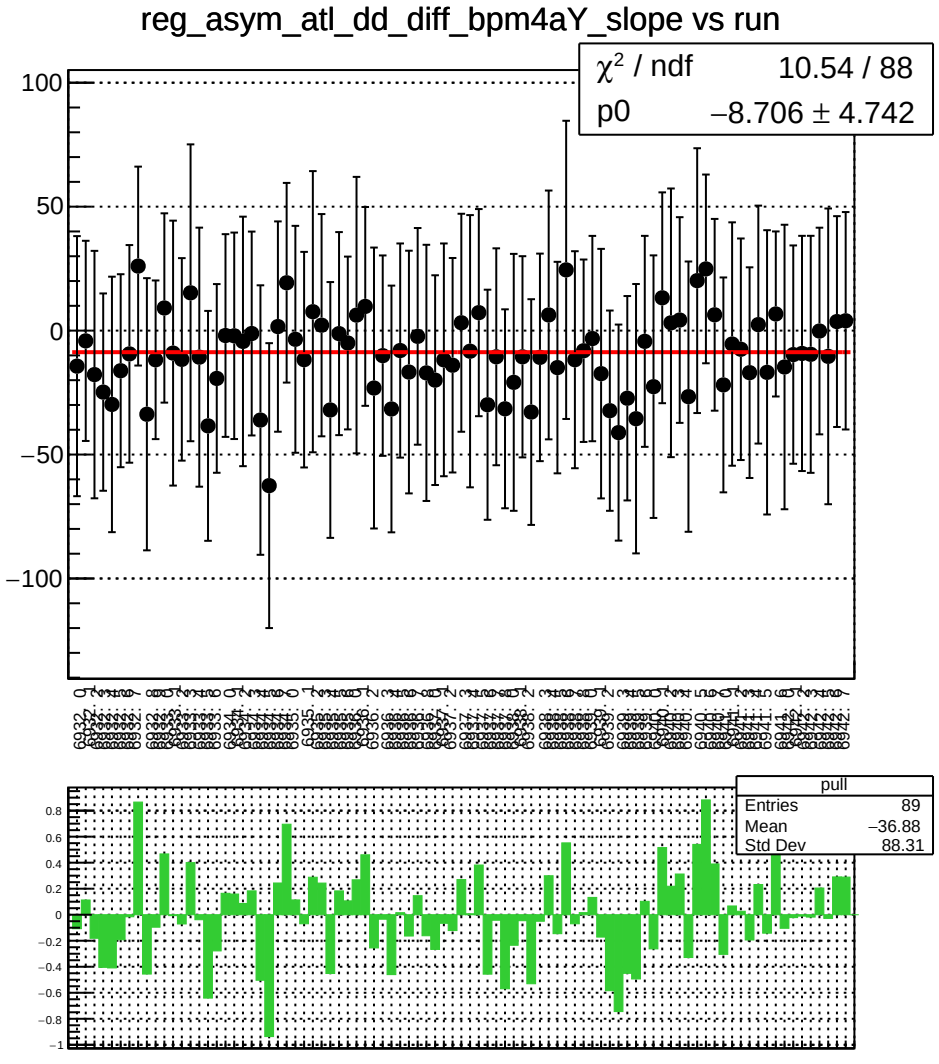

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.82 / 88
p0 264.5 ± 7.383
pull
Entries 89
Mean −39.26
Std Dev 67.98

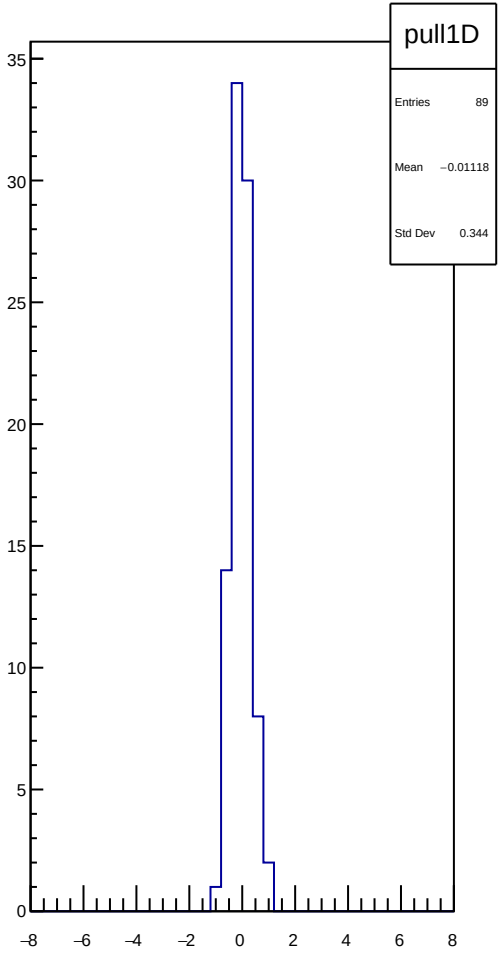

pull1D
Entries 89
Mean 0.01191
Std Dev 0.3794

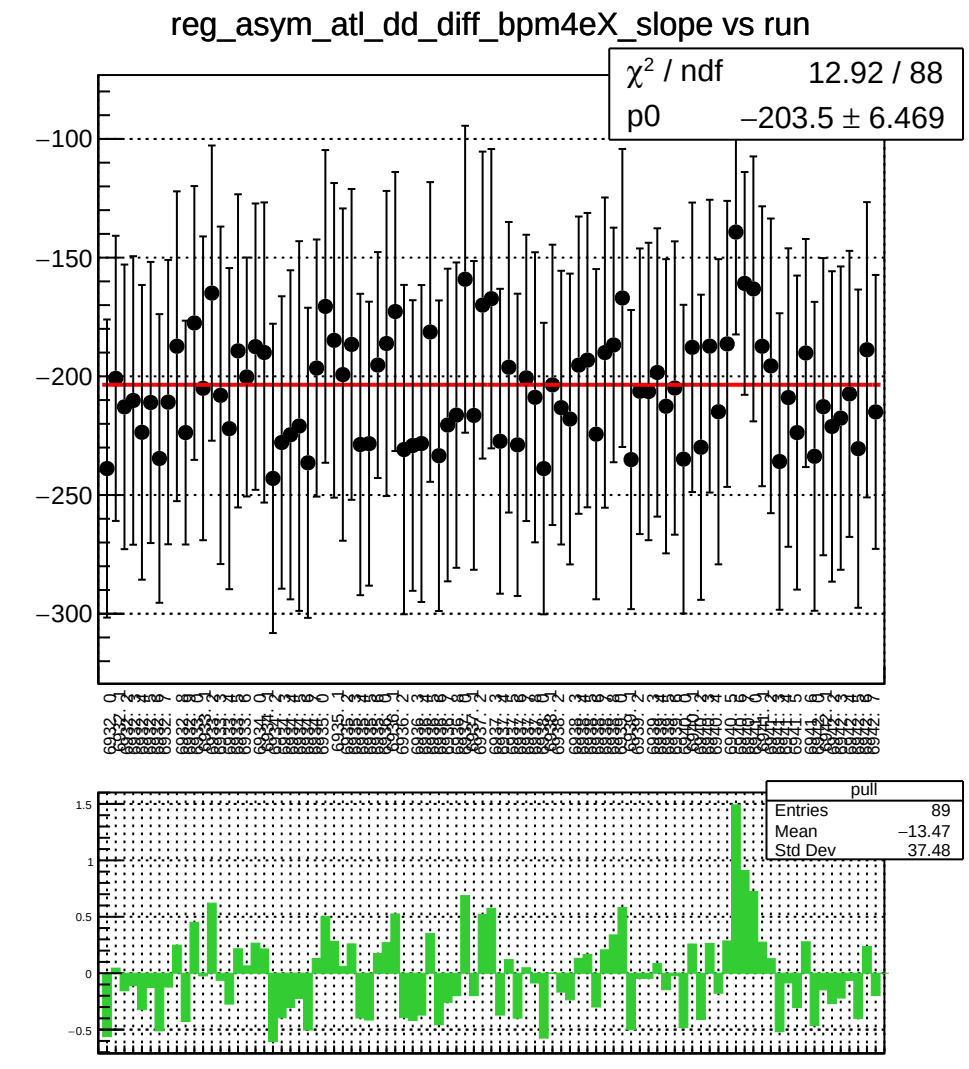

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.068 / 88
p0 64.93 ± 6.263
200
150
100
50
0
−50
pull
Entries 89
Mean −219.7
Std Dev 225.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.0004424
Std Dev 0.3192
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

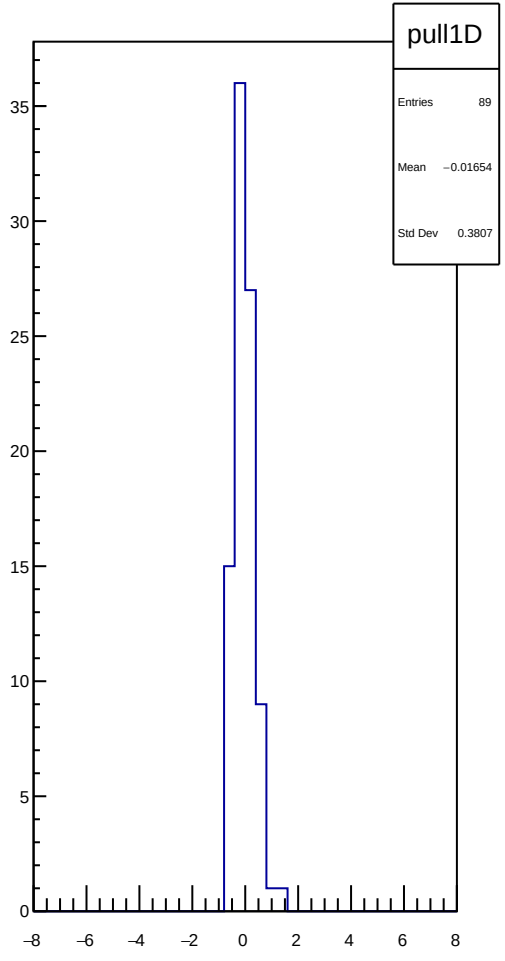

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 30.49 / 88
p0 −160.2 ± 0.2592
−152
−154
−156
−158
−160
−162
−164
−166
pull
Entries 89
Mean −314.2
Std Dev 346.7
2.5
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean −0.008412
Std Dev 0.5853
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

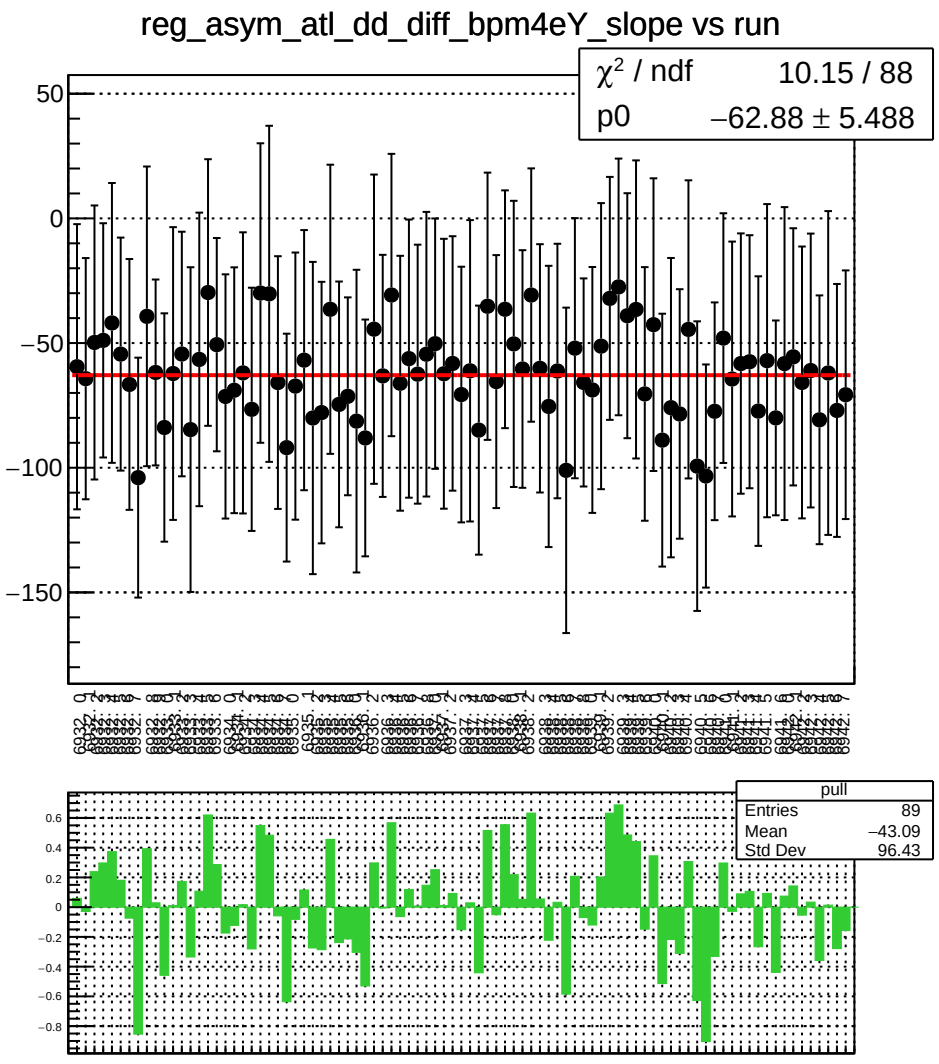

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 12.74 / 88
p0 273.7 ± 6.958
400
350
300
250
200
150
pull
Entries 89
Mean −18.91
Std Dev 41.46
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean 0.01585
Std Dev 0.378
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

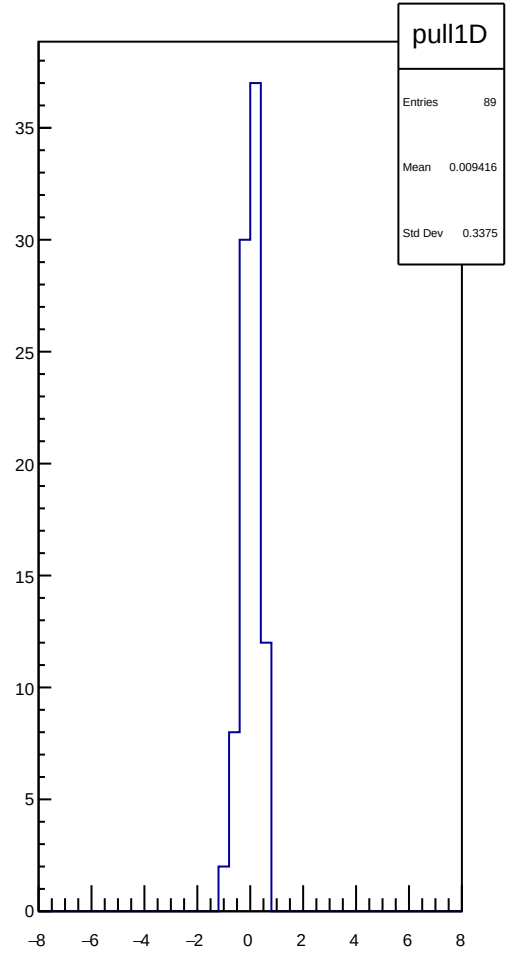

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.54 / 88
p0 −8.706 ± 4.742
100
50
0
−50
−100
pull
Entries 89
Mean −36.88
Std Dev 88.31
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

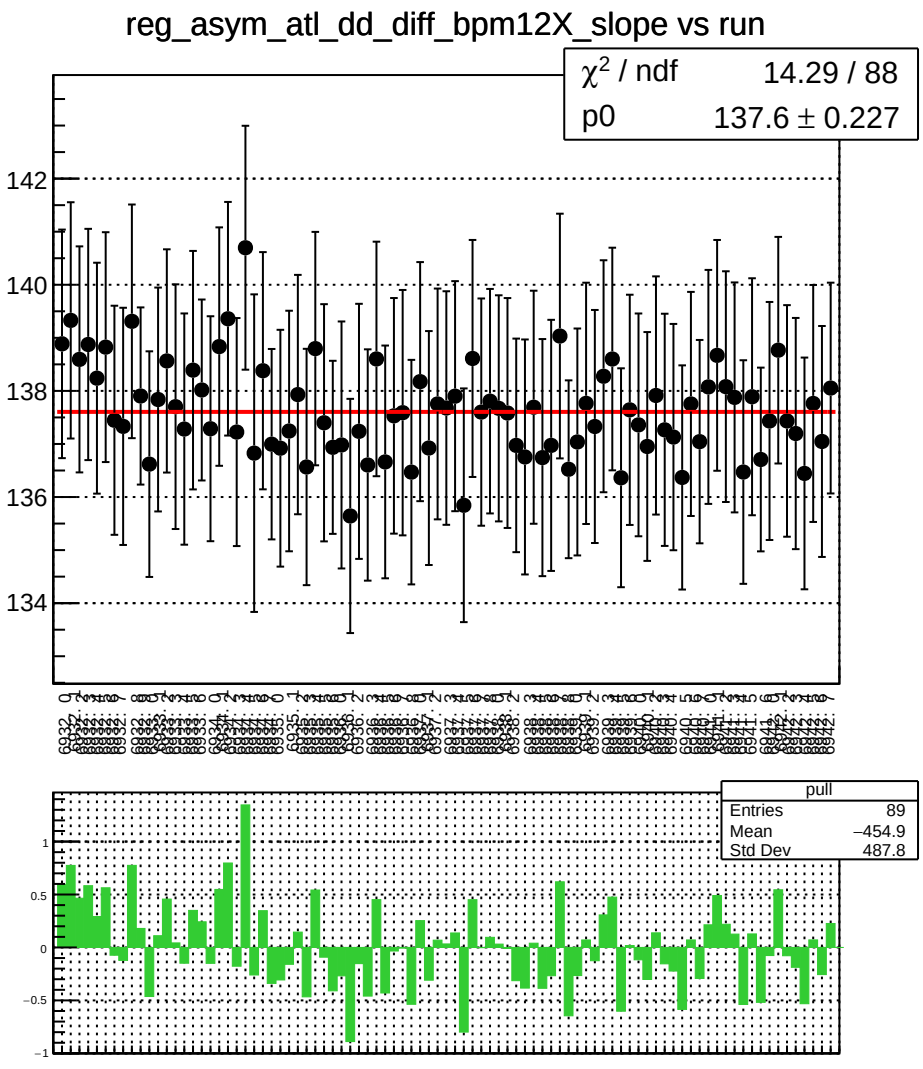

pull1D
Entries 89
Mean −0.01118
Std Dev 0.344
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

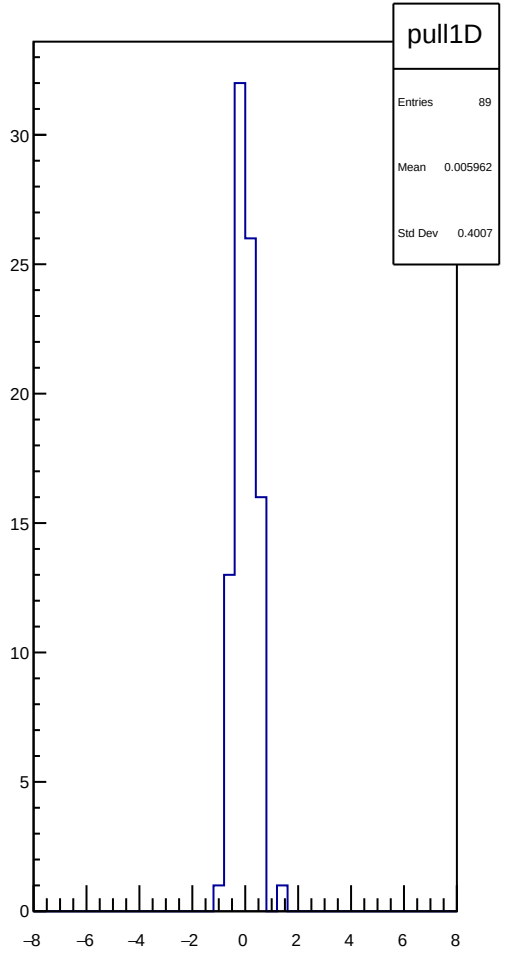

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.92 / 88
p0 −203.5 ± 6.469
−100
−150
−200
−250
−300
pull
Entries 89
Mean −13.47
Std Dev 37.48
1.5
1
0.5
0
−0.5

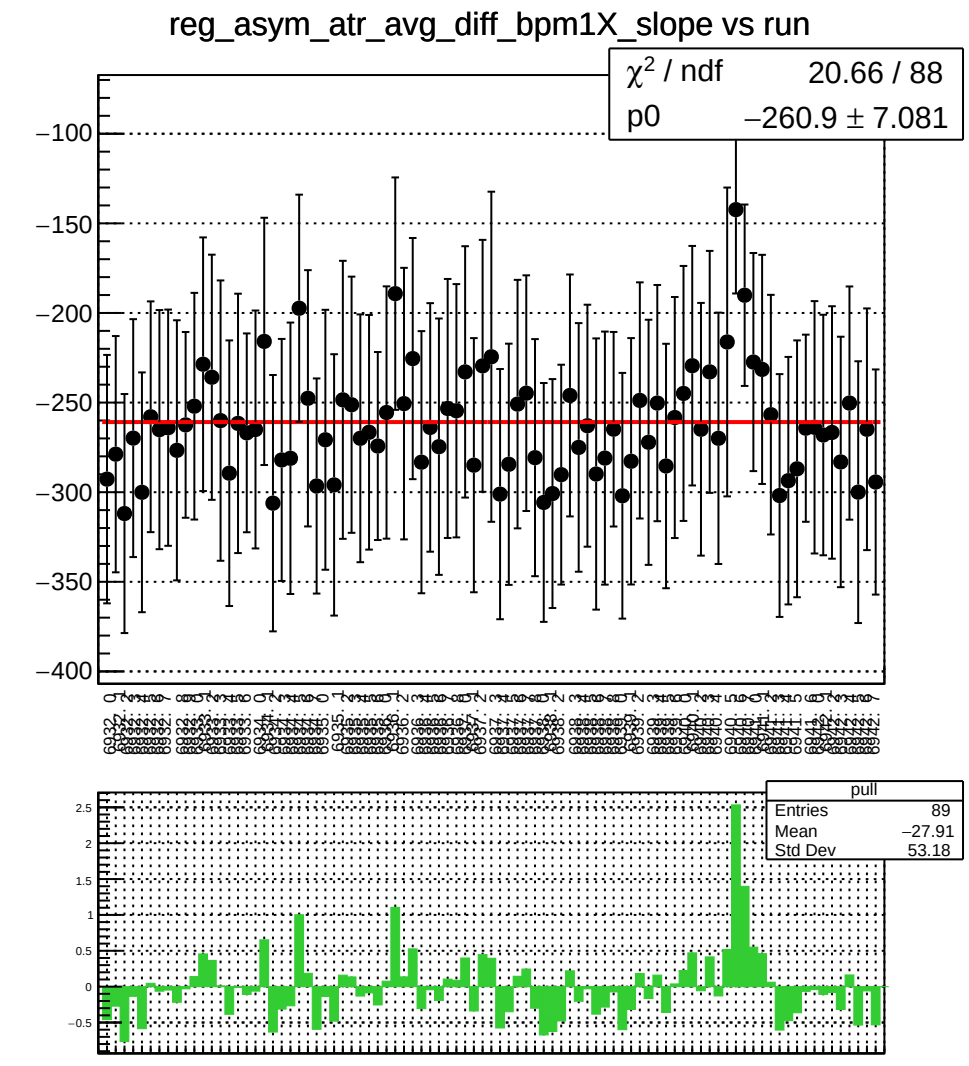

pull1D
Entries 89
Mean −0.01654
Std Dev 0.3807
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

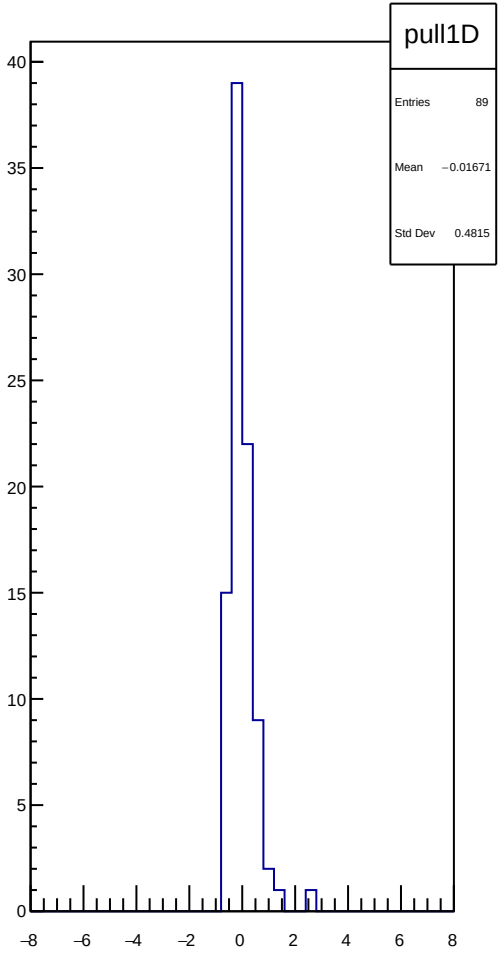

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.15 / 88
p0 −62.88 ± 5.488
50
0
−50
−100
−150
pull
Entries 89
Mean −43.09
Std Dev 96.43
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

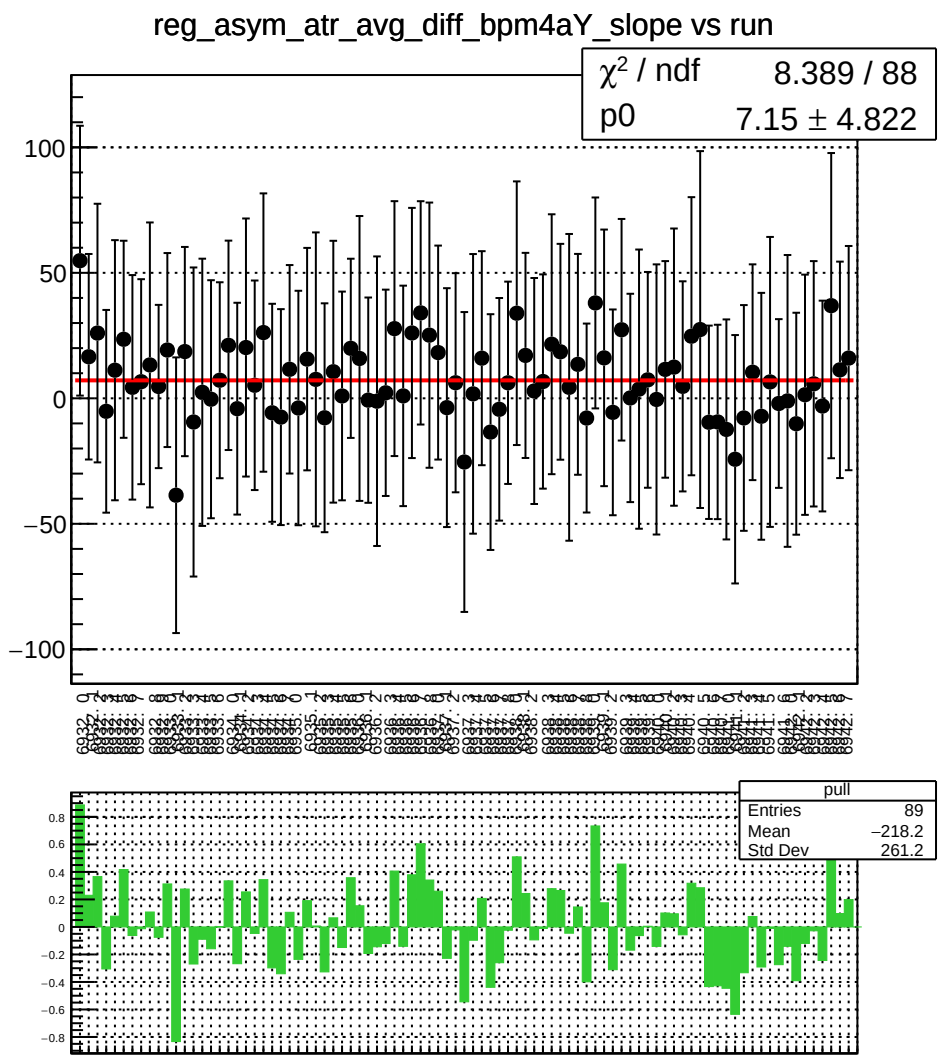

pull1D
Entries 89
Mean 0.009416
Std Dev 0.3375
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

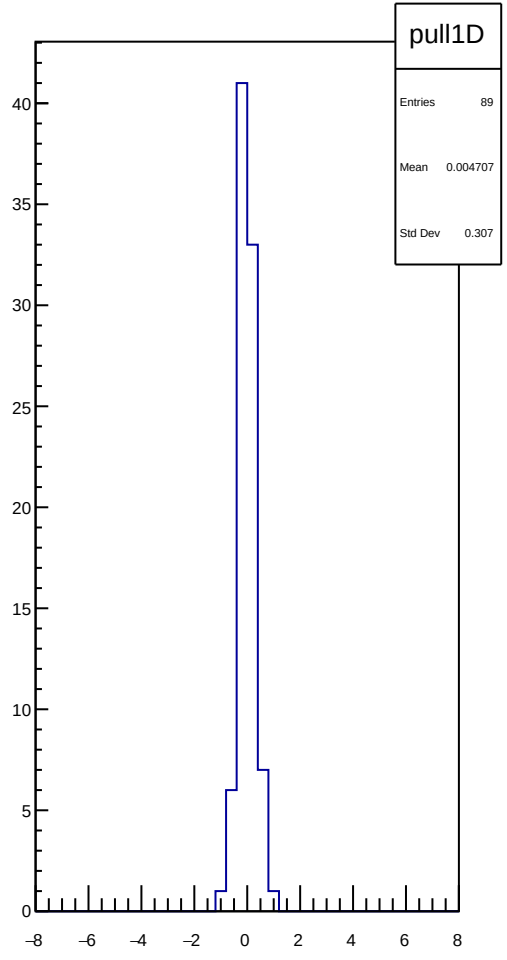

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 14.29 / 88
p0 137.6 ± 0.227
142
140
138
136
134
pull
Entries 89
Mean −454.9
Std Dev 487.8
1
0.5
0
−0.5
−1

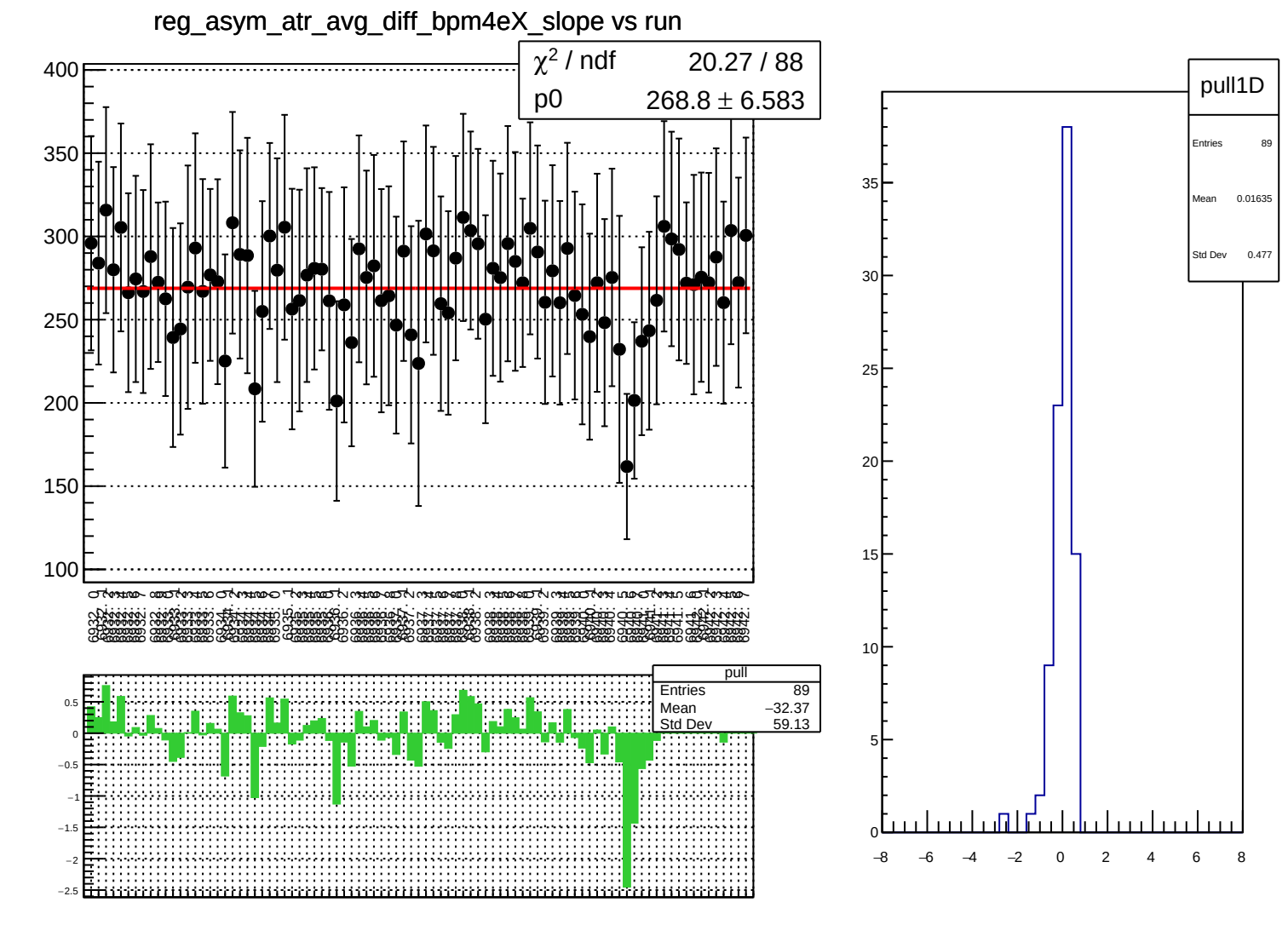

pull1D
Entries 89
Mean 0.005962
Std Dev 0.4007
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

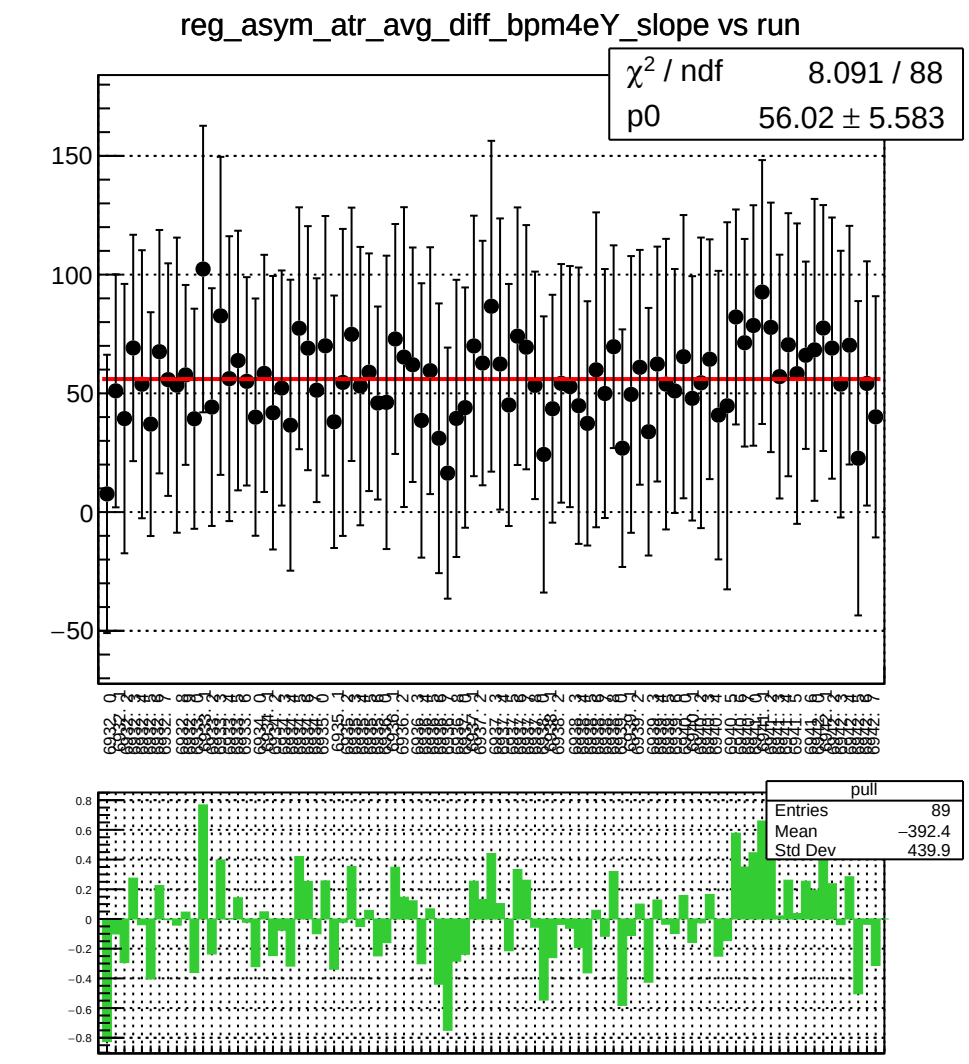

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 20.66 / 88
p0 −260.9 ± 7.081
pull
Entries 89
Mean −27.91
Std Dev 53.18

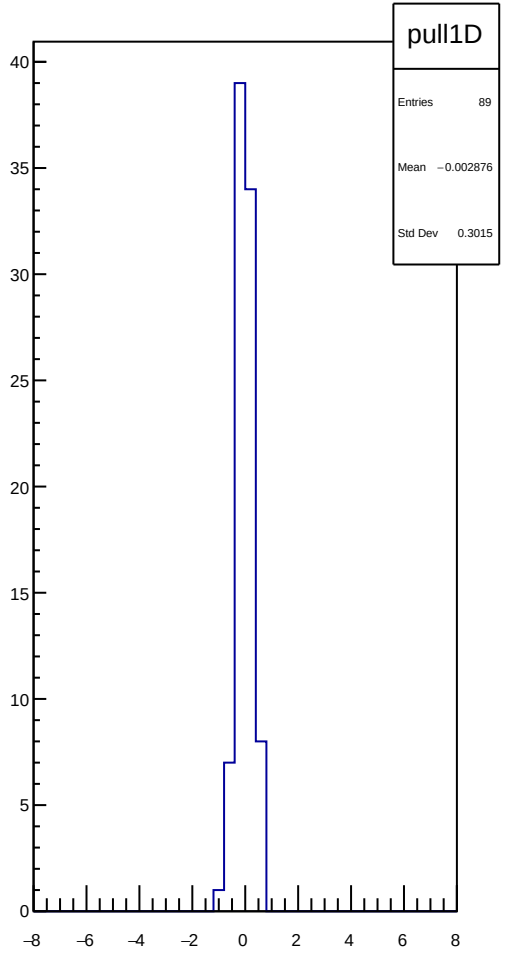

pull1D
Entries 89
Mean −0.01671
Std Dev 0.4815

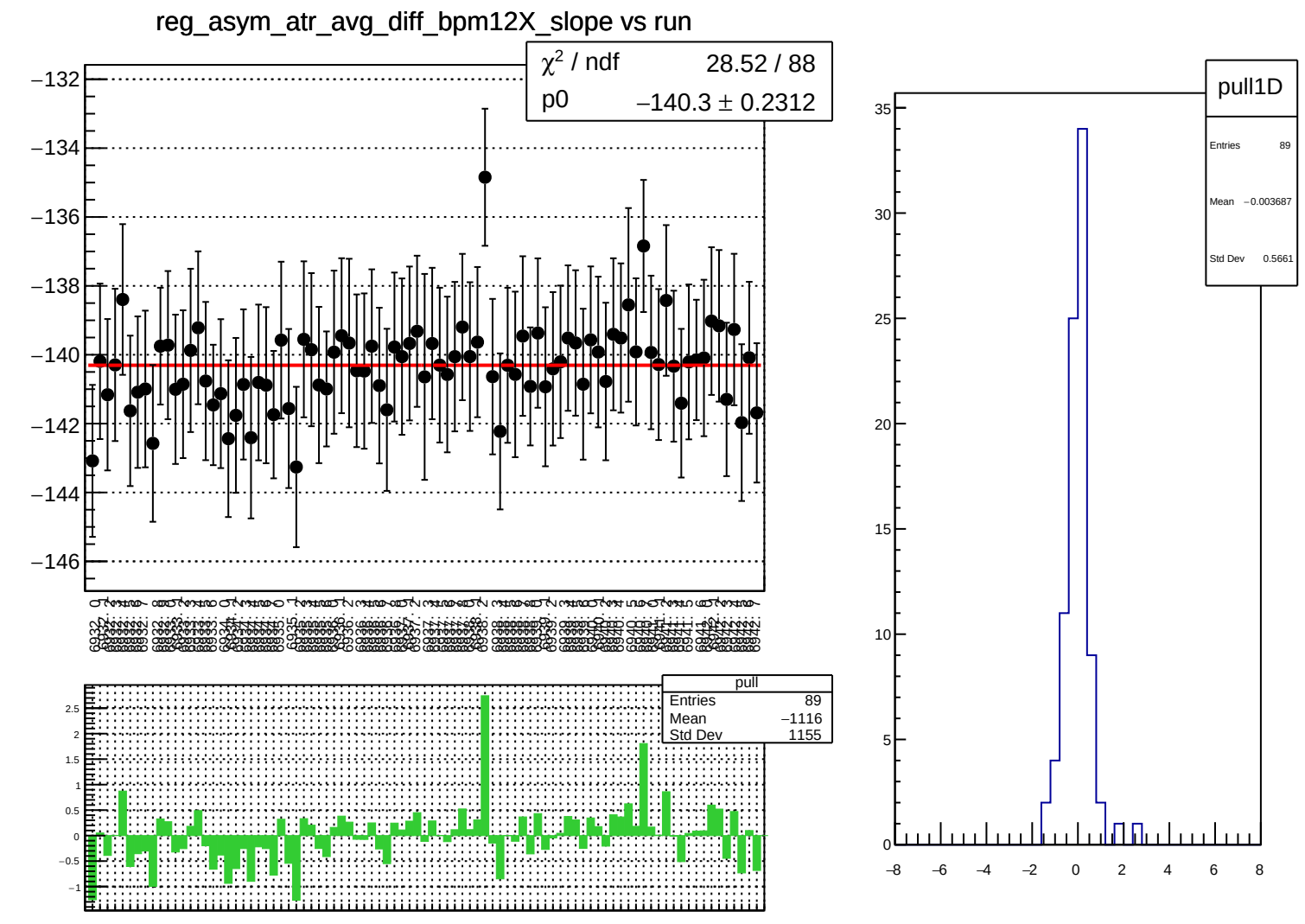

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 8.389 / 88
p0 7.15 ± 4.822
100
50
0
−50
−100
pull
Entries 89
Mean −218.2
Std Dev 261.2
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

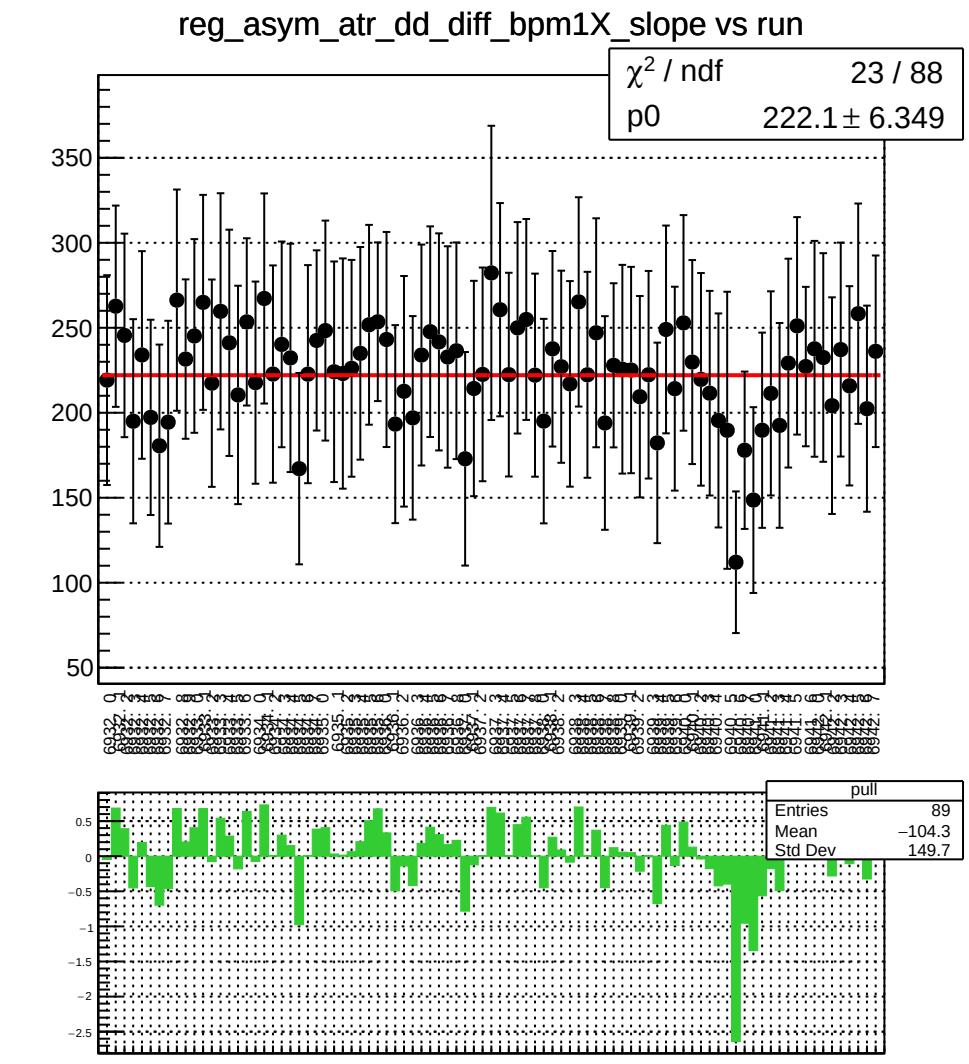

pull1D
Entries 89
Mean 0.004707
Std Dev 0.307
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

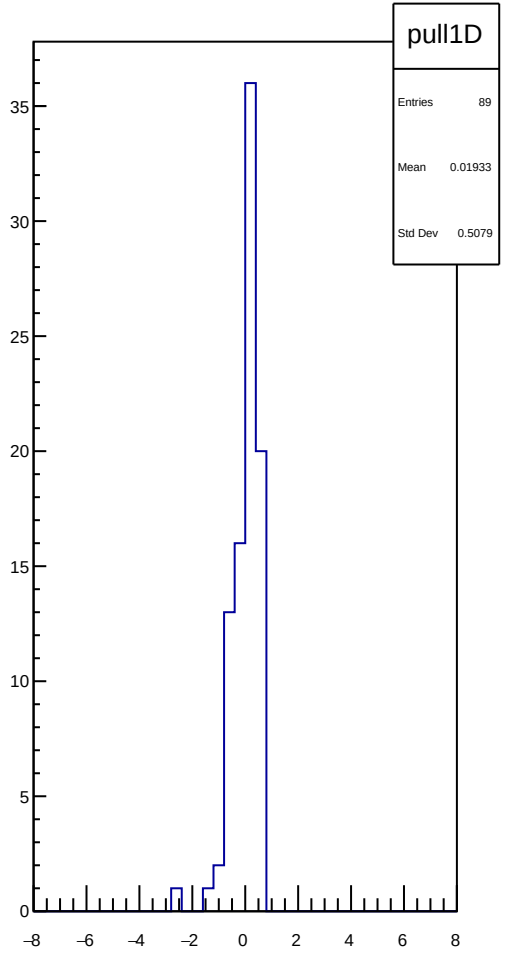

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 20.27 / 88
p0 268.8 ± 6.583
pull
Entries 89
Mean −32.37
Std Dev 59.13
pull1D
Entries 89
Mean 0.01635
Std Dev 0.477

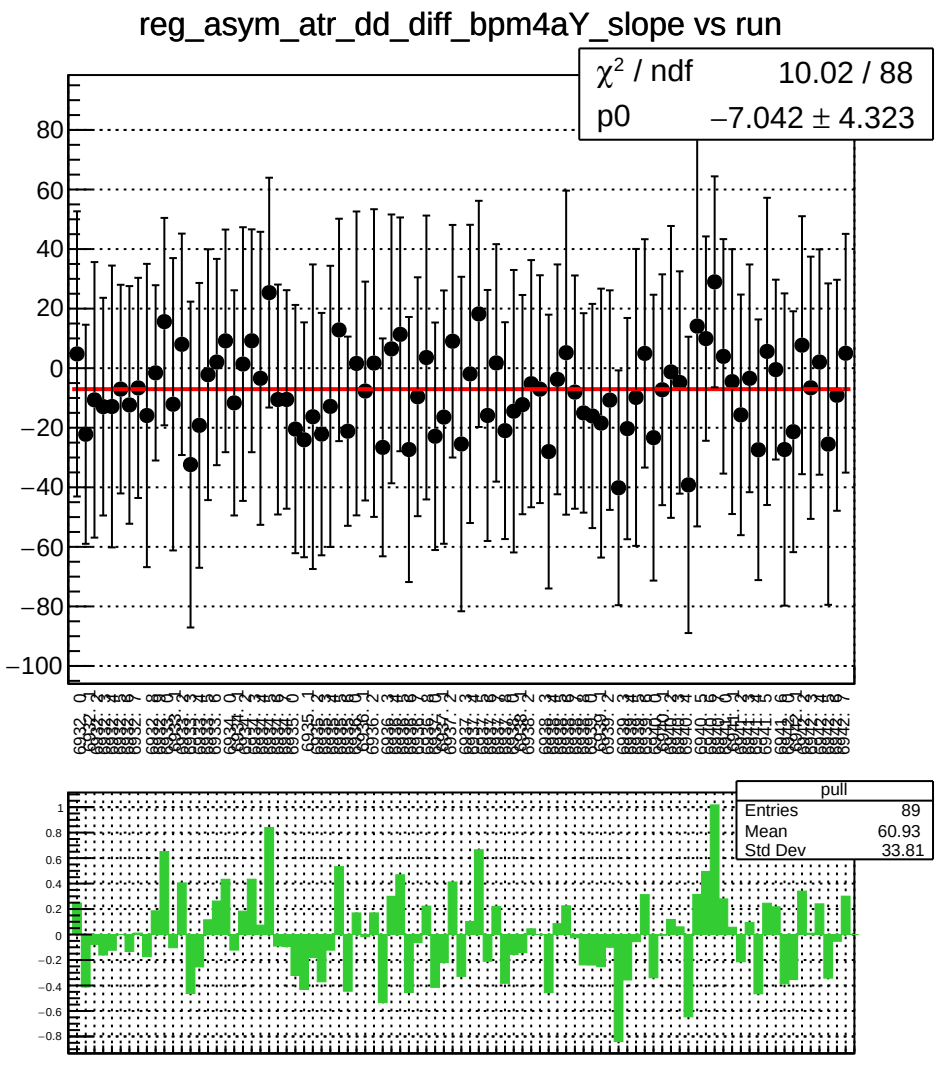

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.091 / 88
p0 56.02 ± 5.583
150
100
50
0
−50
pull
Entries 89
Mean −392.4
Std Dev 439.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

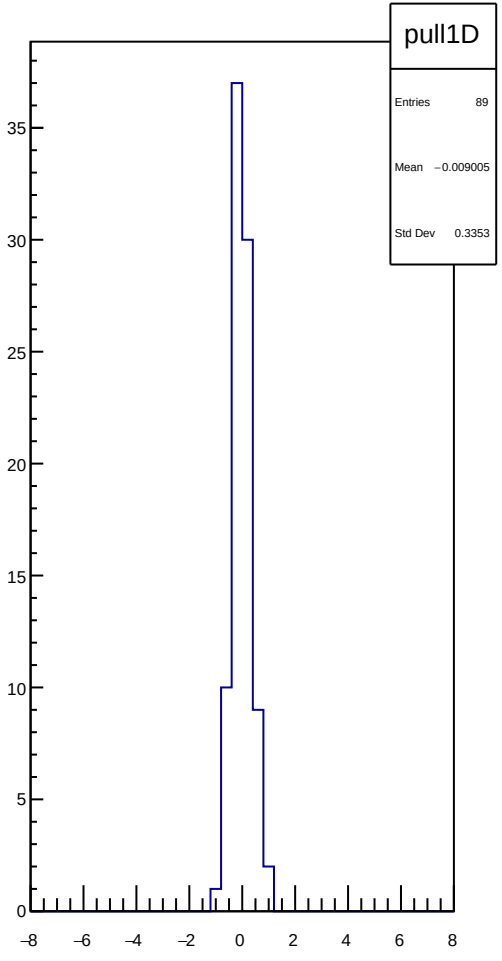

pull1D
Entries 89
Mean −0.002876
Std Dev 0.3015
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

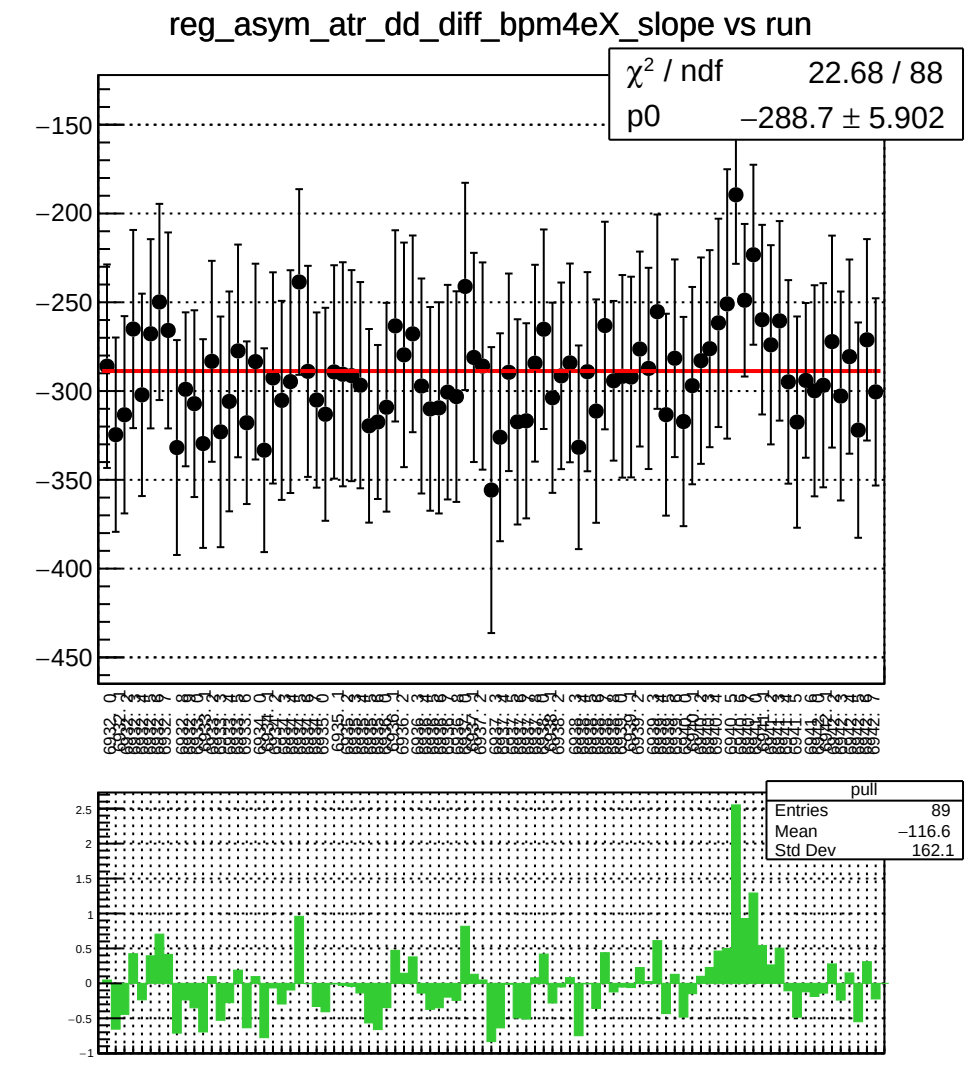

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 28.52 / 88
p0 −140.3 ± 0.2312
pull
Entries 89
Mean −1116
Std Dev 1155
pull1D
Entries 89
Mean −0.003687
Std Dev 0.5661

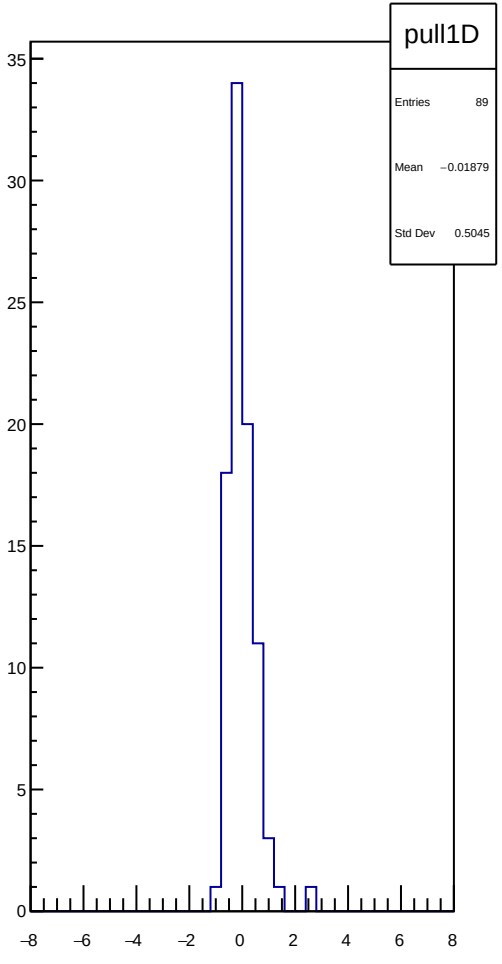

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 23 / 88
p0 222.1 ± 6.349
pull
Entries 89
Mean −104.3
Std Dev 149.7

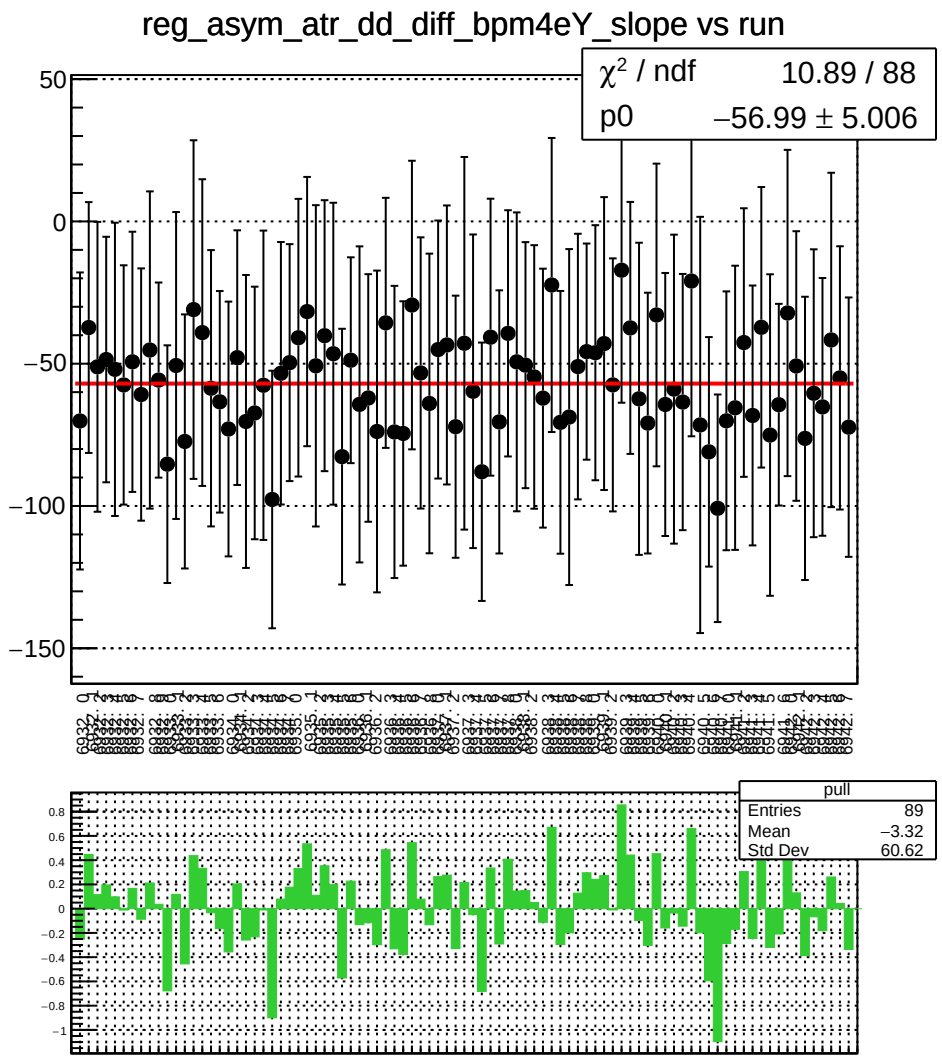

pull1D
Entries 89
Mean 0.01933
Std Dev 0.5079

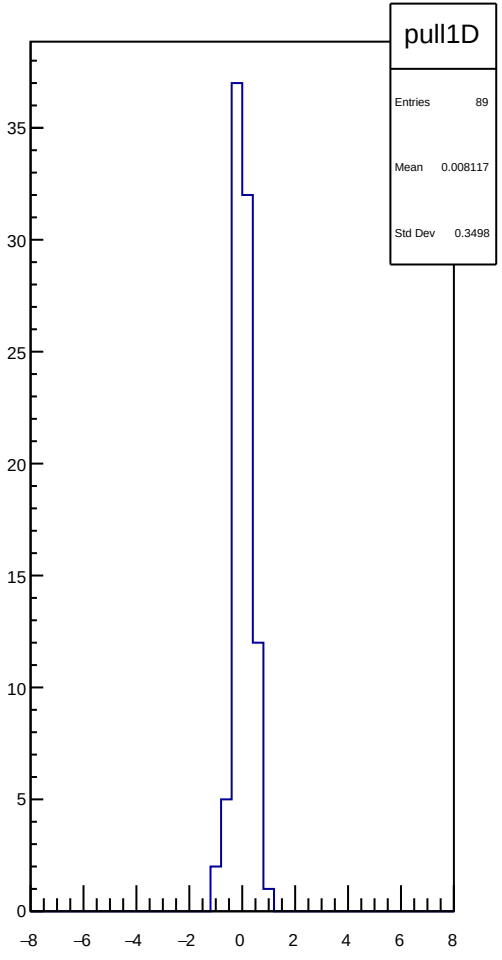

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.02 / 88
p0 −7.042 ± 4.323
pull
Entries 89
Mean 60.93
Std Dev 33.81

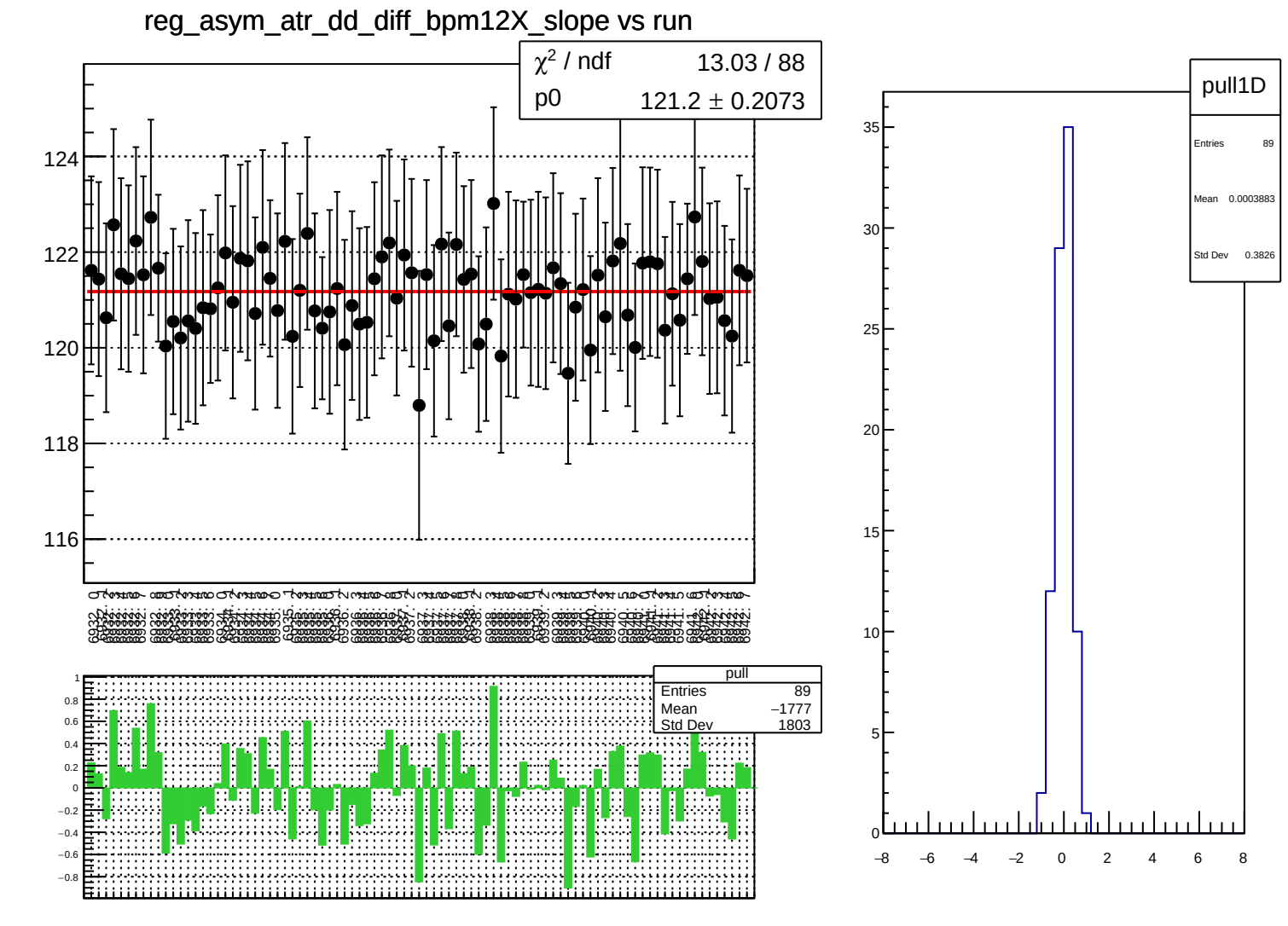

pull1D
Entries 89
Mean −0.009005
Std Dev 0.3353

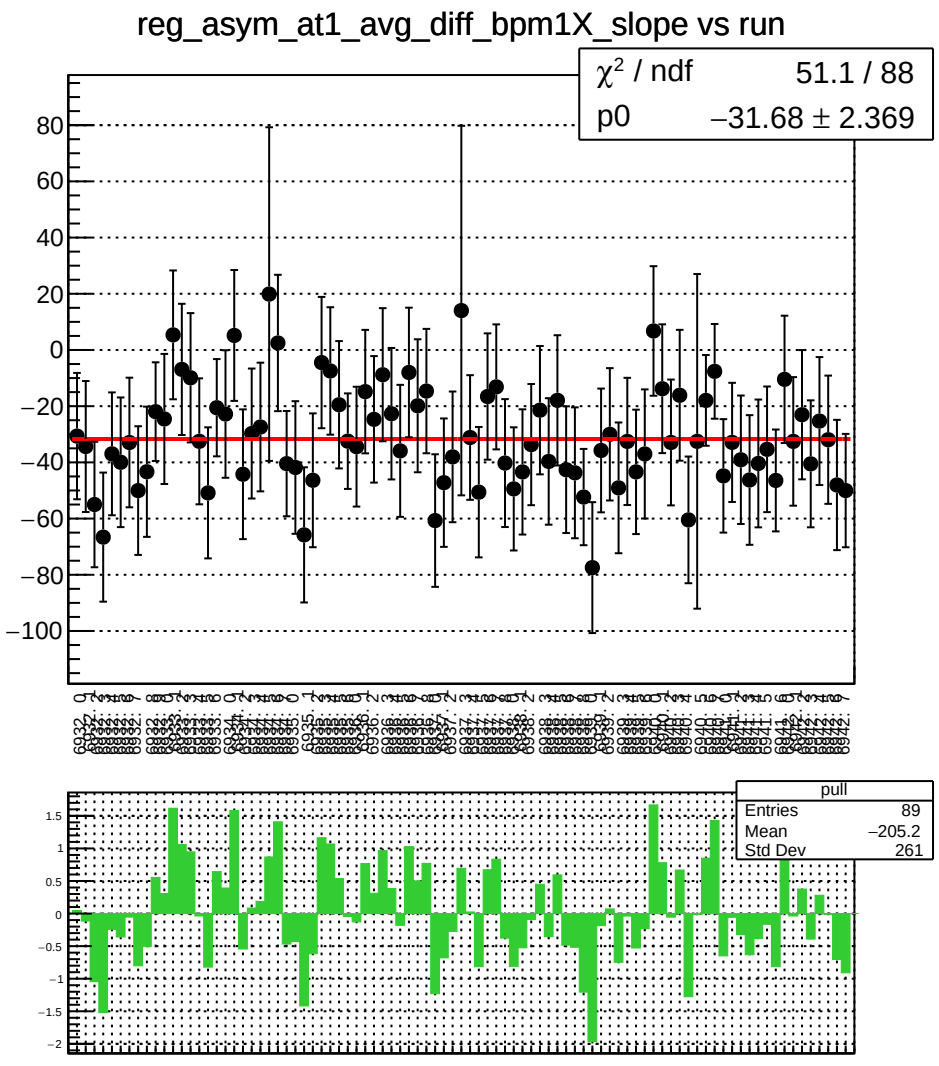

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 22.68 / 88
p0 −288.7 ± 5.902
pull
Entries 89
Mean −116.6
Std Dev 162.1

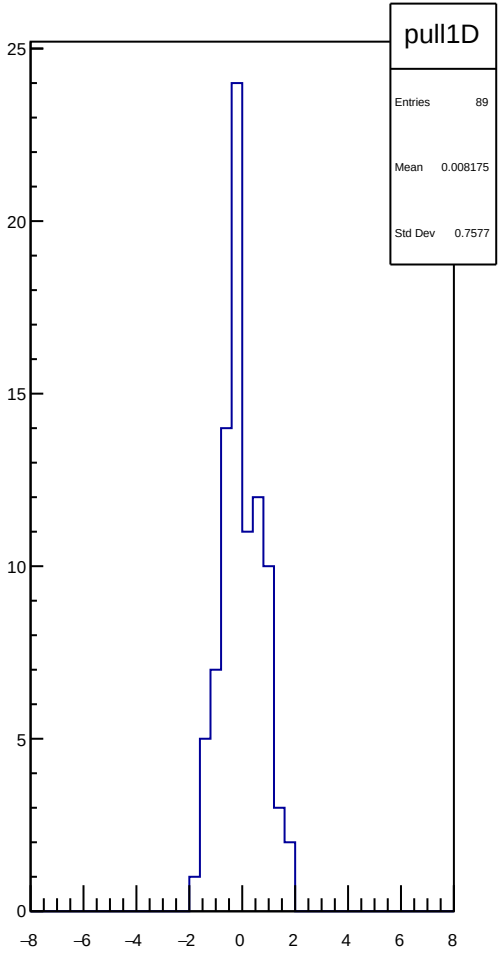

pull1D
Entries 89
Mean −0.01879
Std Dev 0.5045

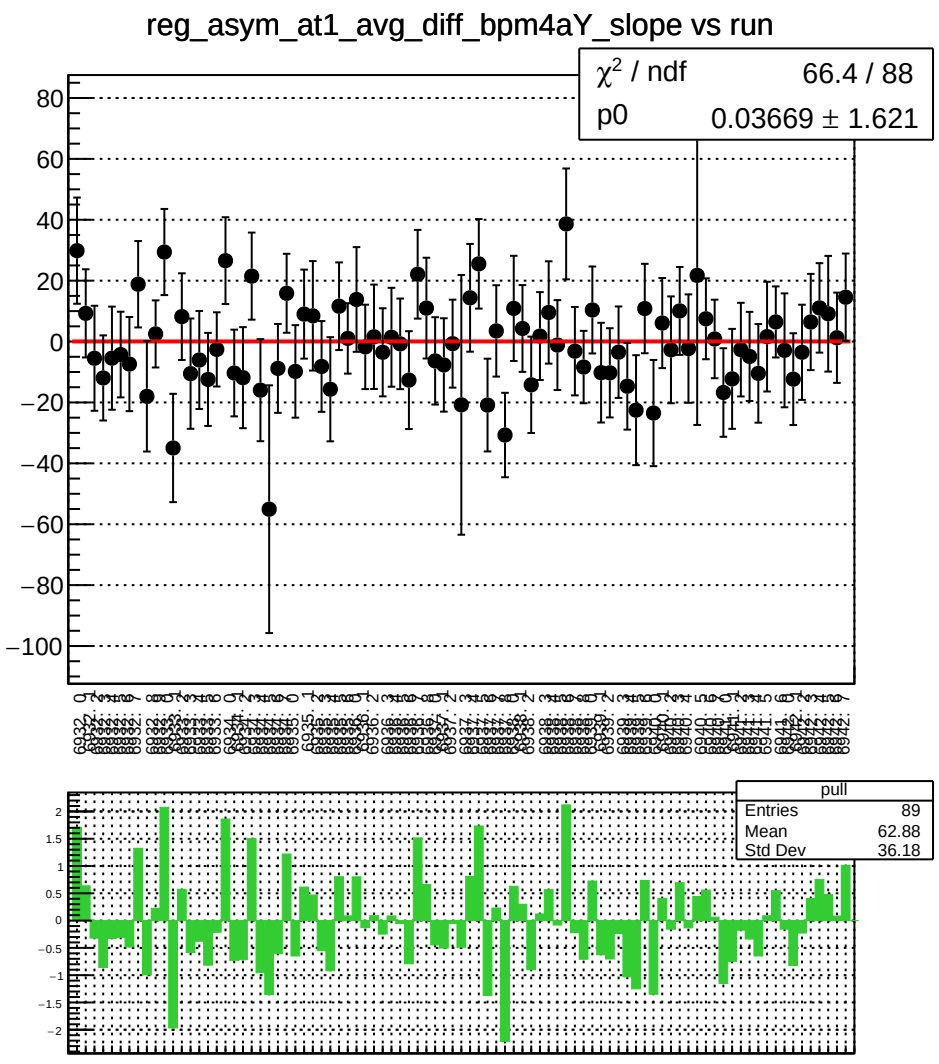

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.89 / 88
p0 −56.99 ± 5.006
pull
Entries 89
Mean −3.32
Std Dev 60.62

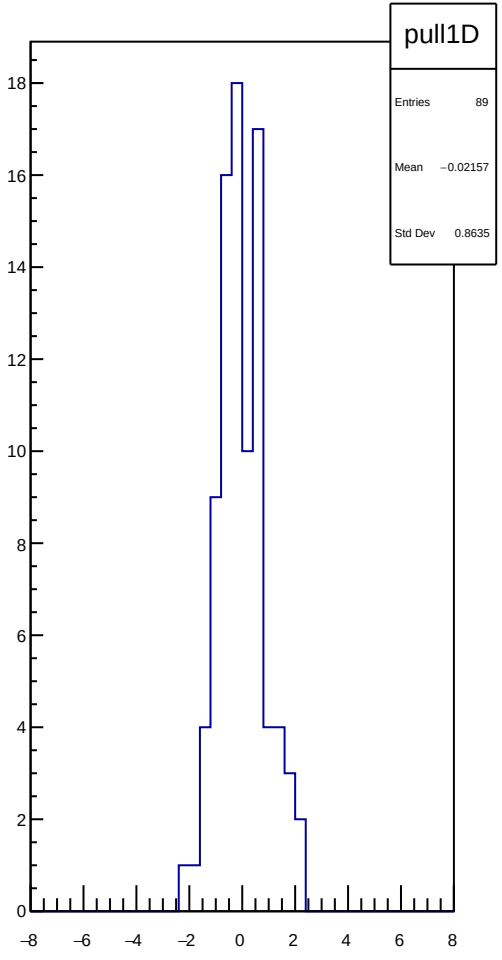

pull1D
Entries 89
Mean 0.008117
Std Dev 0.3498

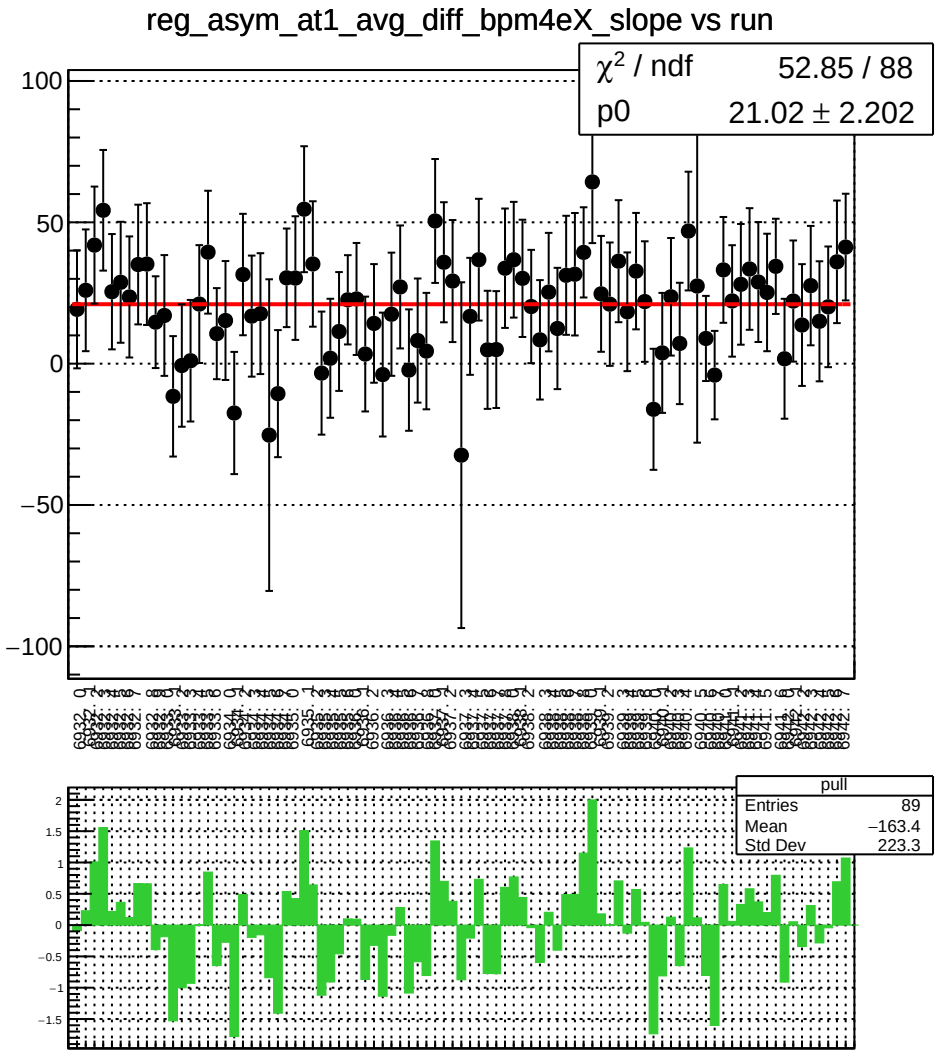

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 13.03 / 88
p0 121.2 ± 0.2073
124
122
120
118
116
pull
Entries 89
Mean −1777
Std Dev 1803
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 89
Mean 0.0003883
Std Dev 0.3826
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

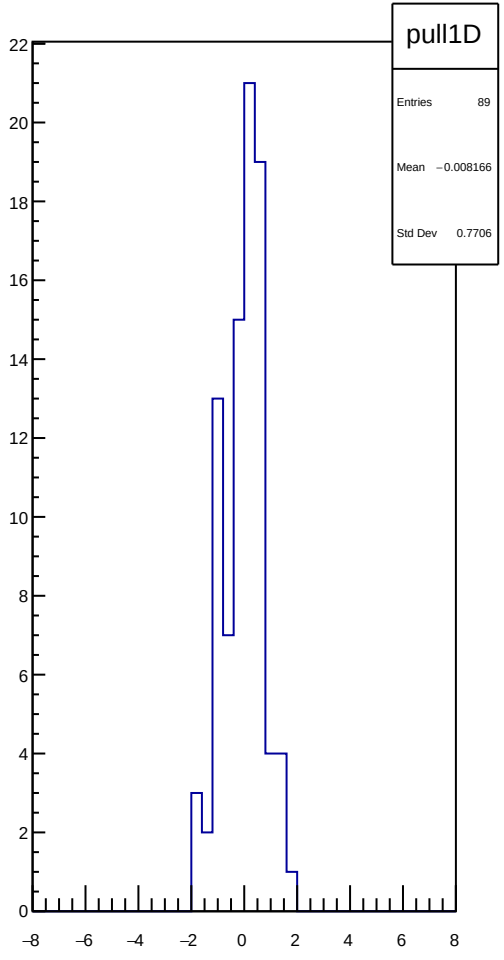

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 51.1 / 88
p0 −31.68 ± 2.369
pull
Entries 89
Mean −205.2
Std Dev 261

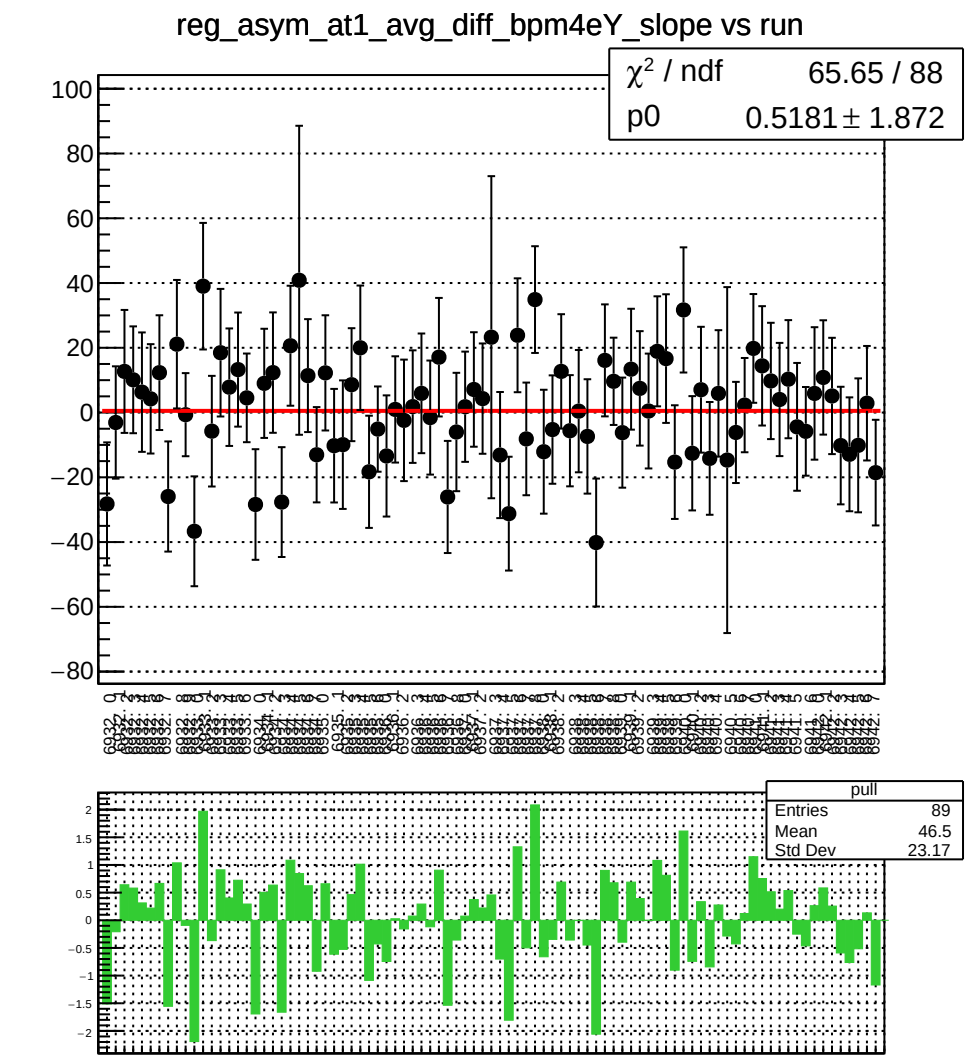

pull1D
Entries 89
Mean 0.008175
Std Dev 0.7577

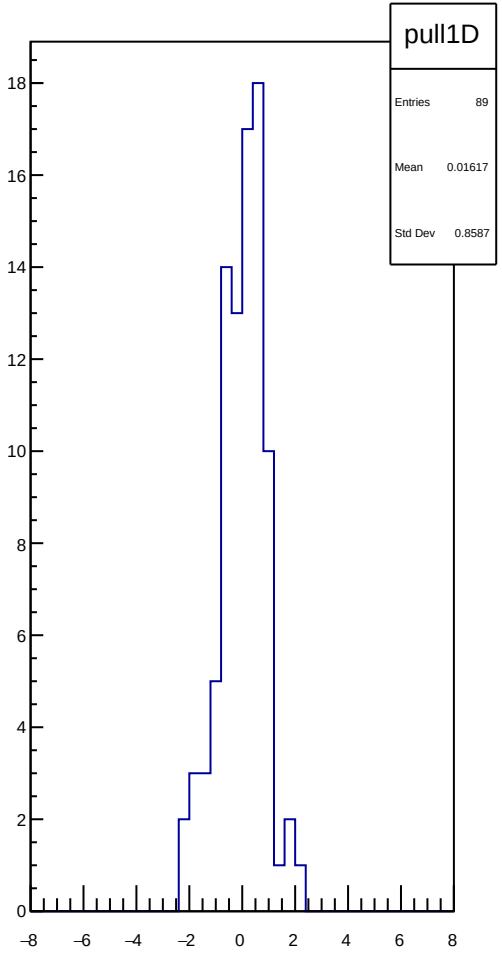

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 66.4 / 88
p0 0.03669 ± 1.621
pull
Entries 89
Mean 62.88
Std Dev 36.18

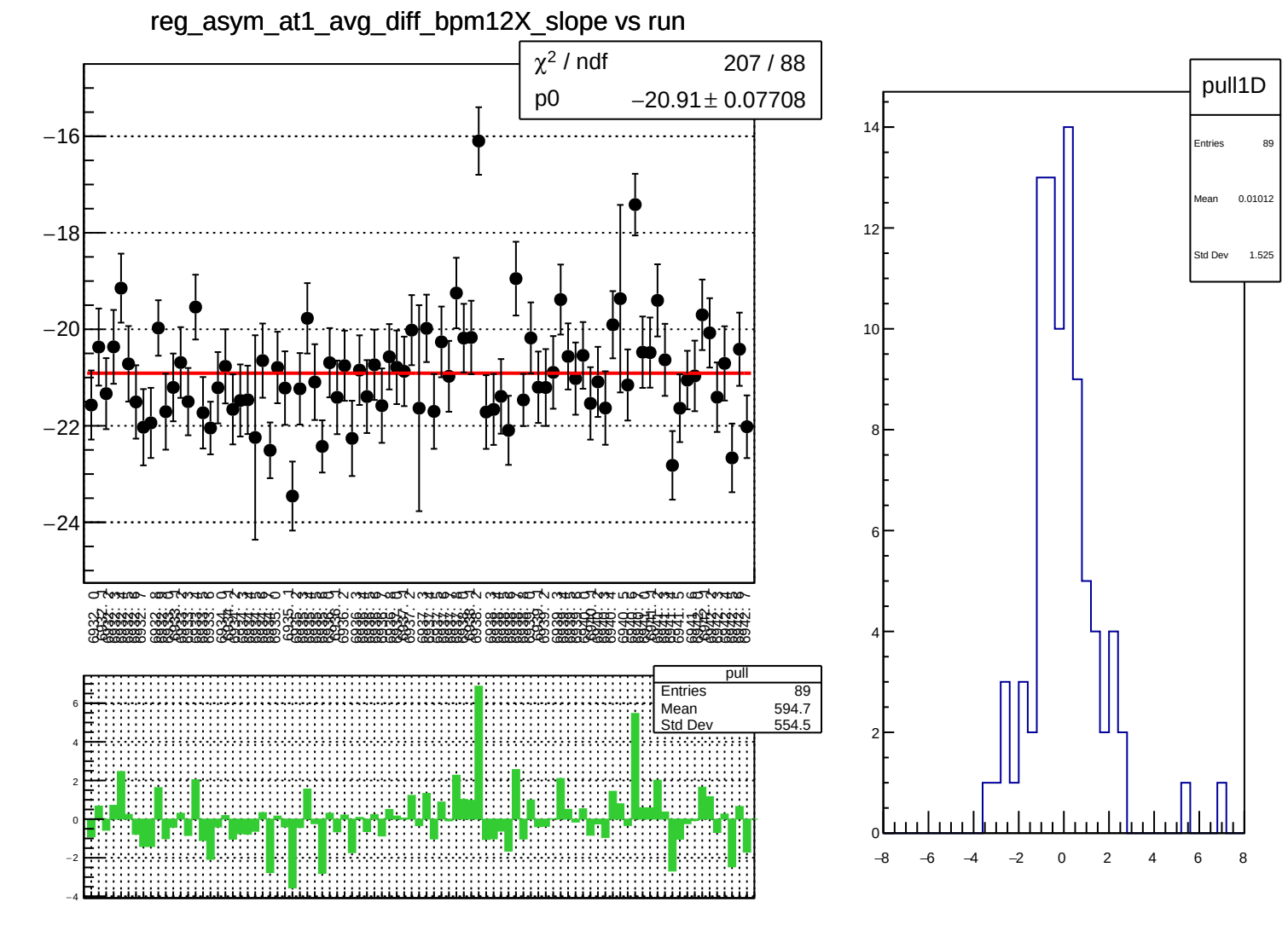

pull1D
Entries 89
Mean −0.02157
Std Dev 0.8635

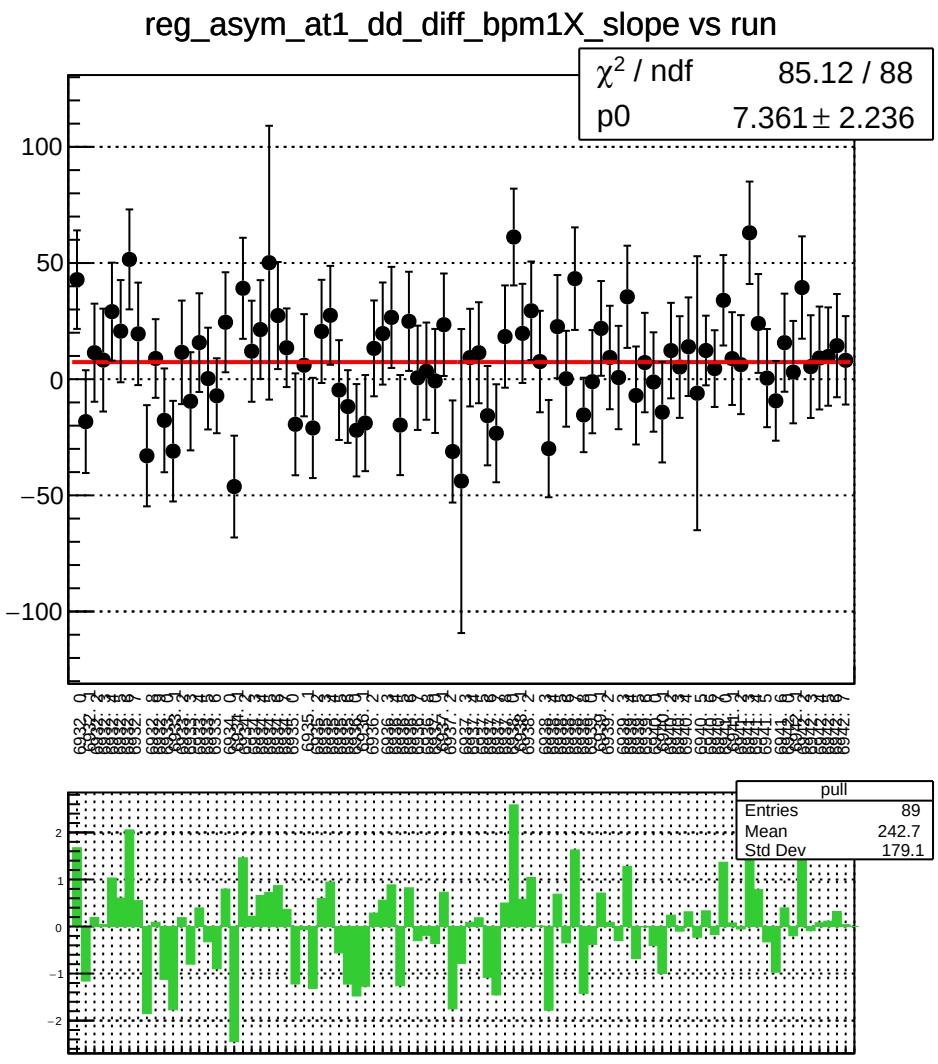

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 52.85 / 88
p0 21.02 ± 2.202
100
50
0
−50
−100
pull
Entries 89
Mean −163.4
Std Dev 223.3
2
1.5
1
0.5
0
−0.5
−1
−1.5

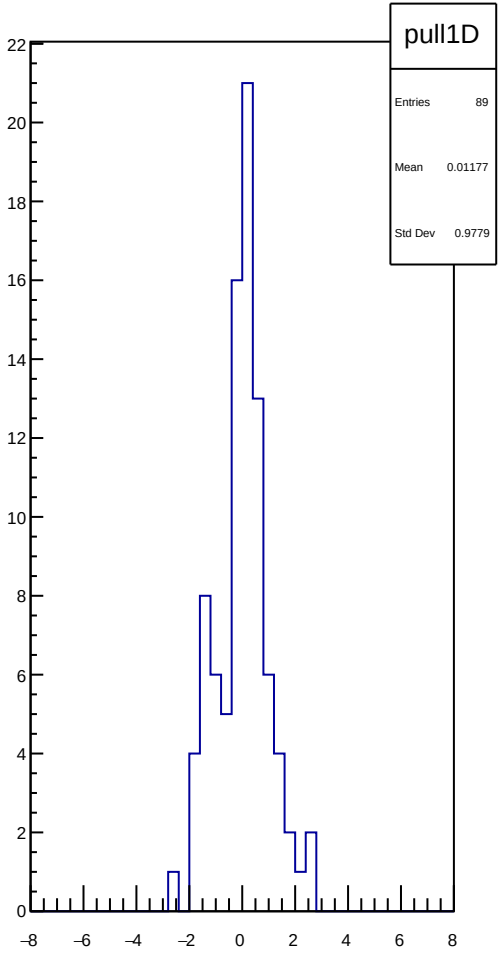

pull1D
Entries 89
Mean −0.008166
Std Dev 0.7706
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

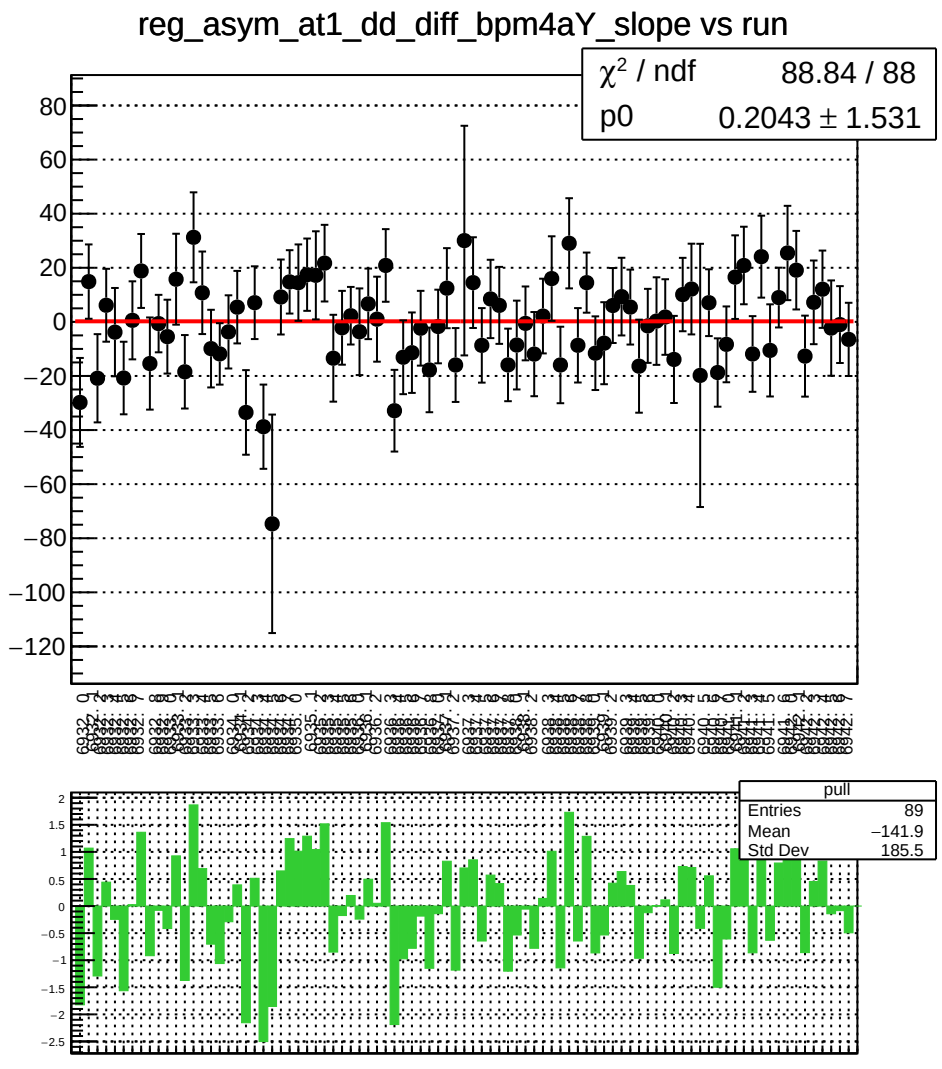

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 65.65 / 88
p0 0.5181 ± 1.872
pull
Entries 89
Mean 46.5
Std Dev 23.17

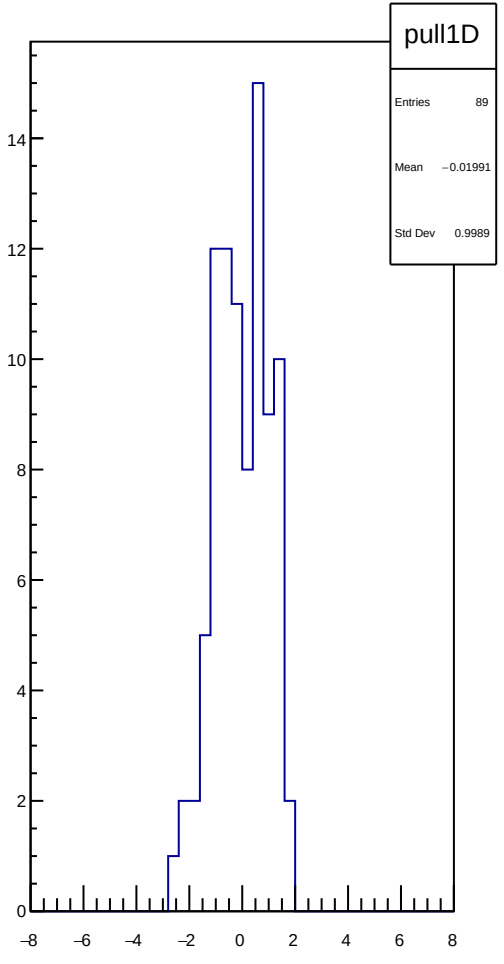

pull1D
Entries 89
Mean 0.01617
Std Dev 0.8587

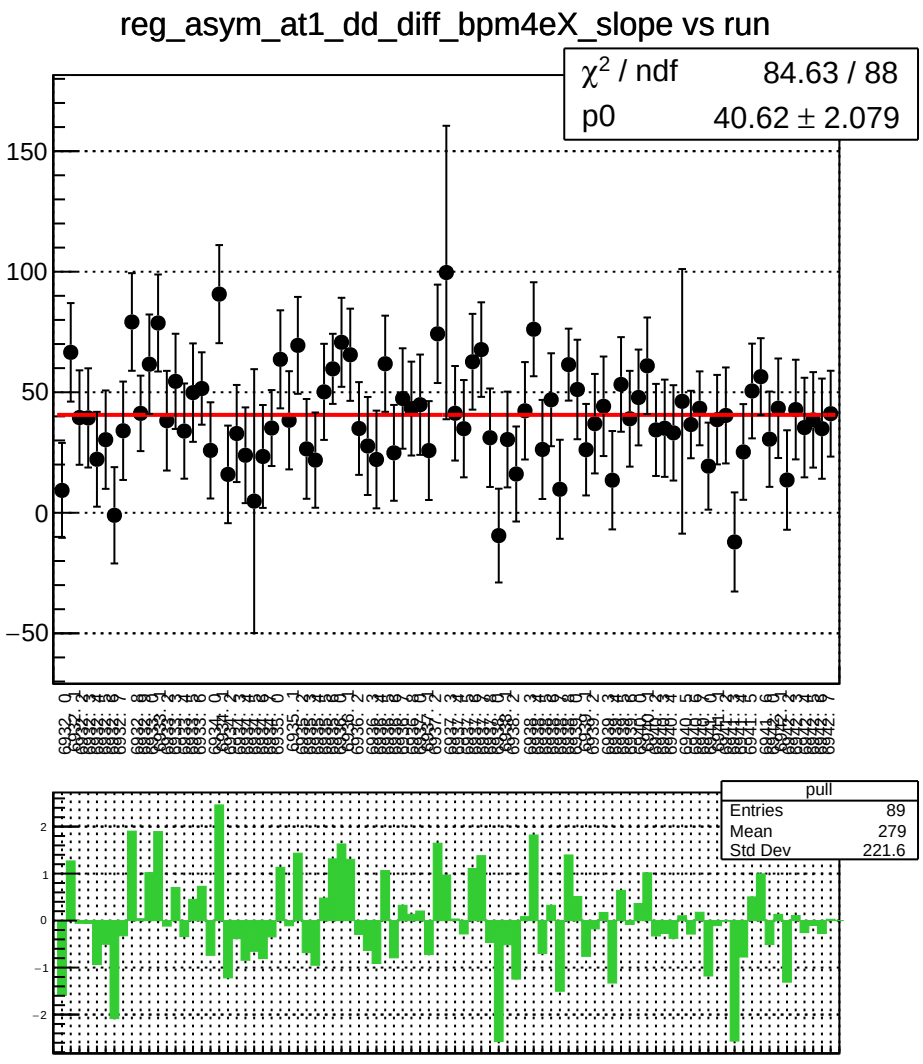

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 207 / 88
p0 −20.91 ± 0.07708
−16
−18
−20
−22
−24
pull
Entries 89
Mean 594.7
Std Dev 554.5
6
4
2
0
−2
−4
pull1D
Entries 89
Mean 0.01012
Std Dev 1.525
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

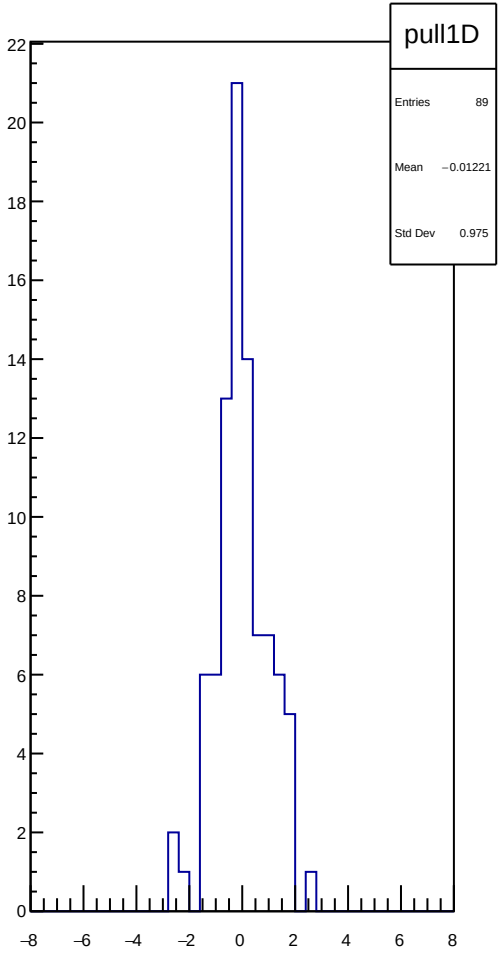

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 85.12 / 88
p0 7.361 ± 2.236
pull
Entries 89
Mean 242.7
Std Dev 179.1

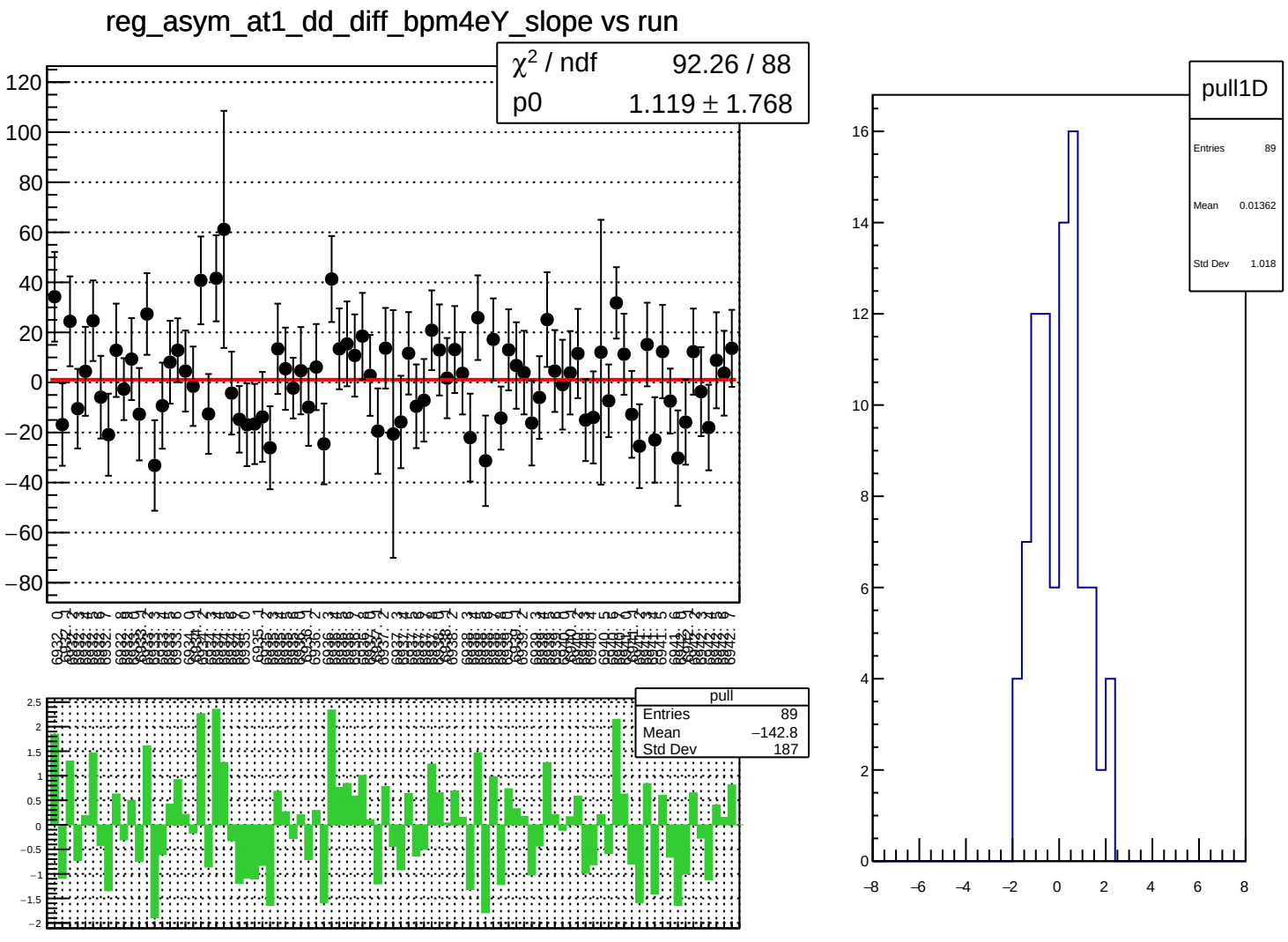

pull1D
Entries 89
Mean 0.01177
Std Dev 0.9779

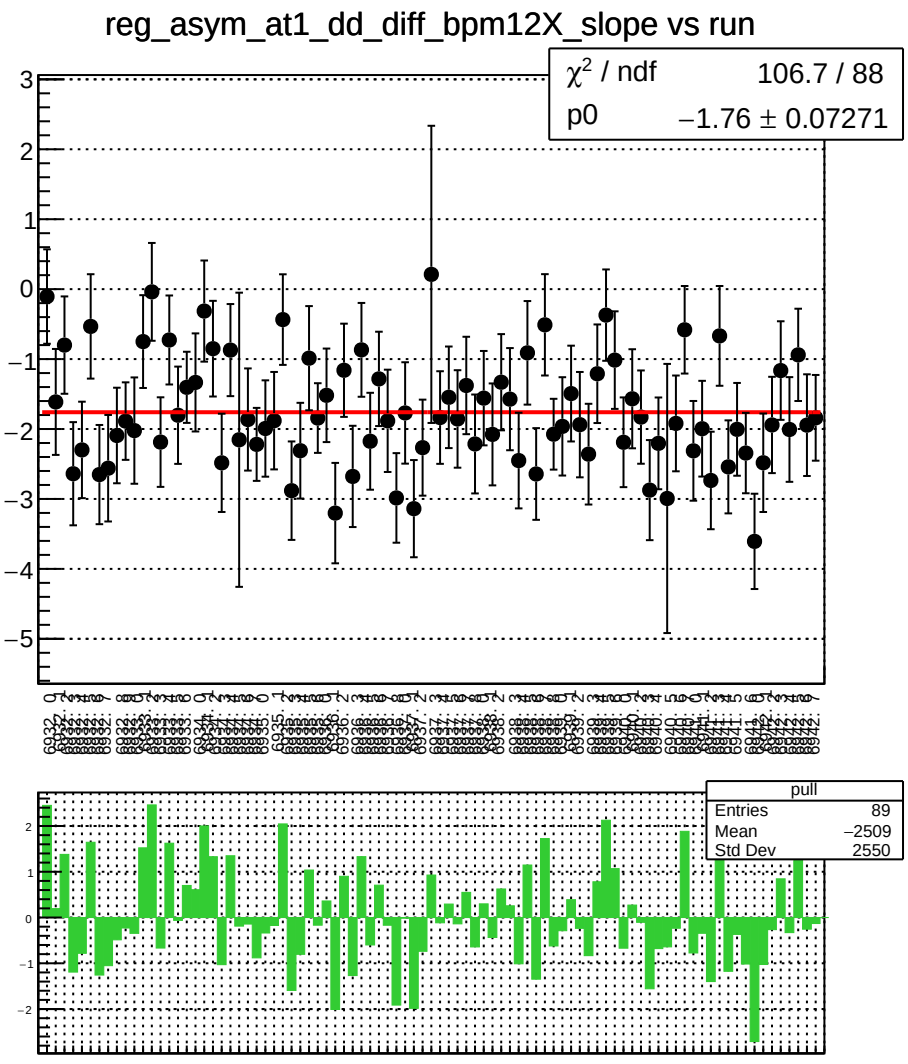

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 88.84 / 88
p0 0.2043 ± 1.531
pull
Entries 89
Mean −141.9
Std Dev 185.5

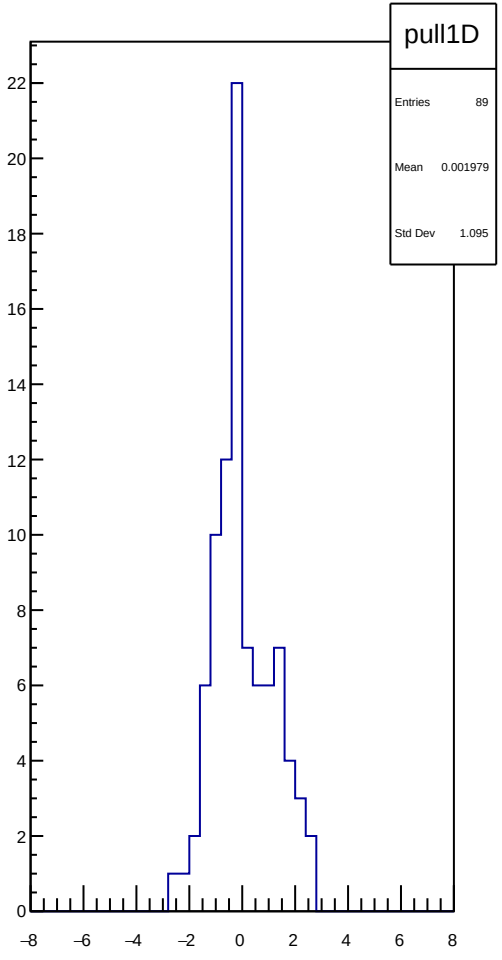

pull1D
Entries 89
Mean −0.01991
Std Dev 0.9989

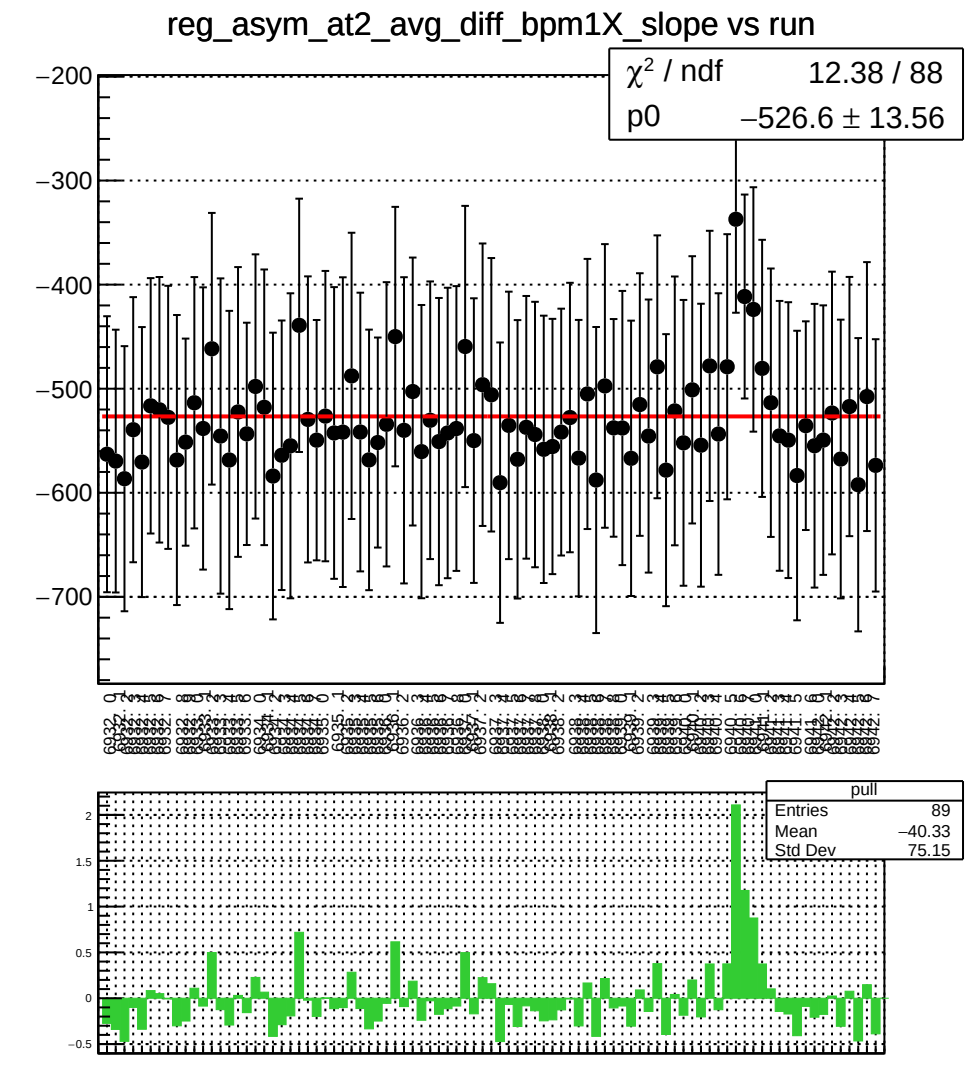

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 84.63 / 88
p0 40.62 ± 2.079
150
100
50
0
−50
pull
Entries 89
Mean 279
Std Dev 221.6
2
1
0
−1
−2

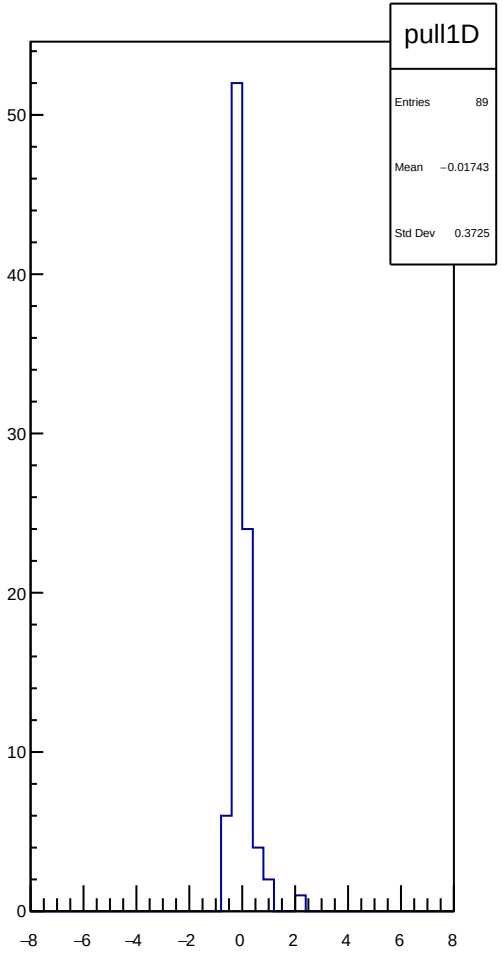

pull1D
Entries 89
Mean −0.01221
Std Dev 0.975
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

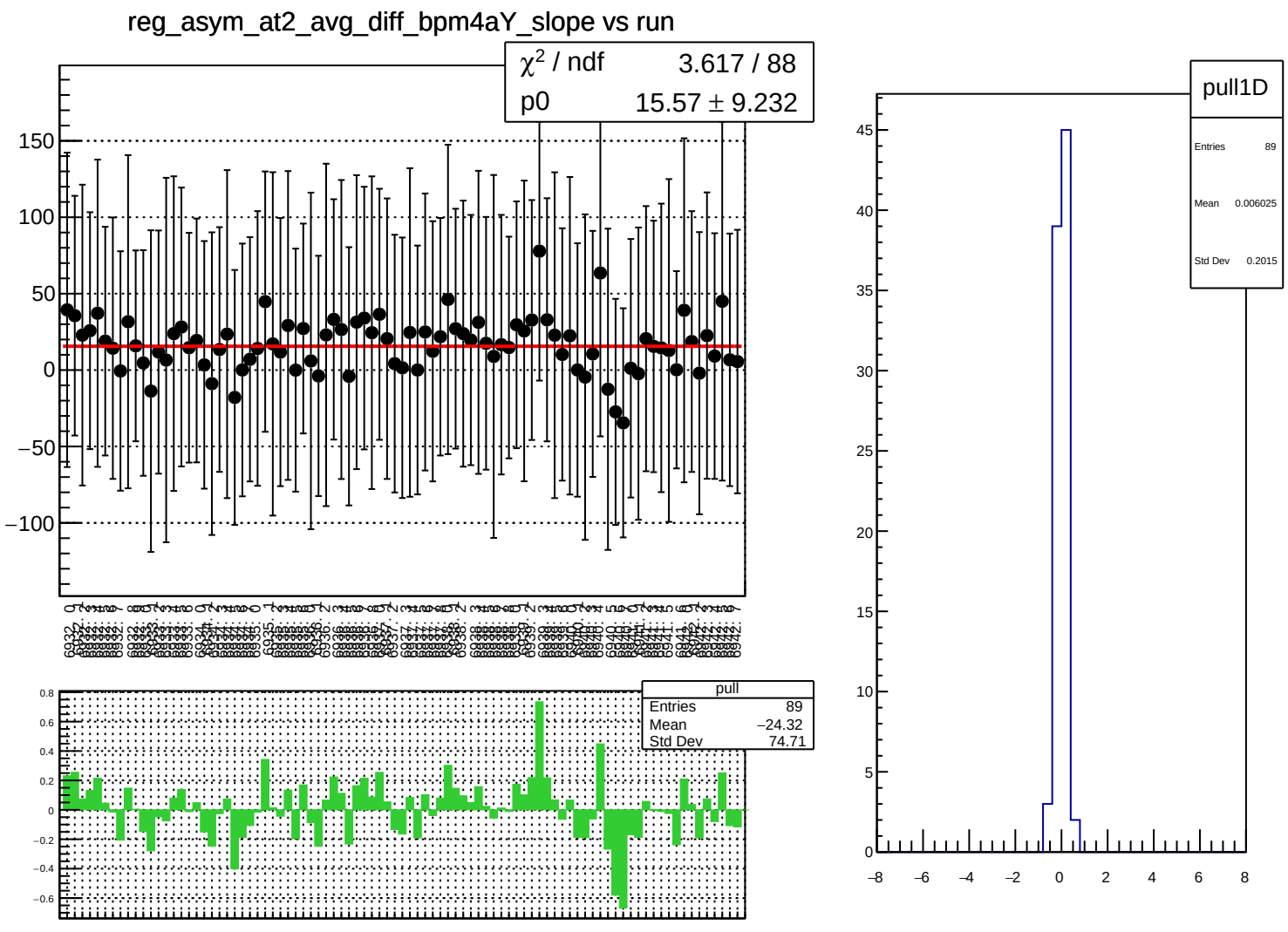

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 92.26 / 88
p0 1.119 ± 1.768
pull
Entries 89
Mean −142.8
Std Dev 187
pull1D
Entries 89
Mean 0.01362
Std Dev 1.018

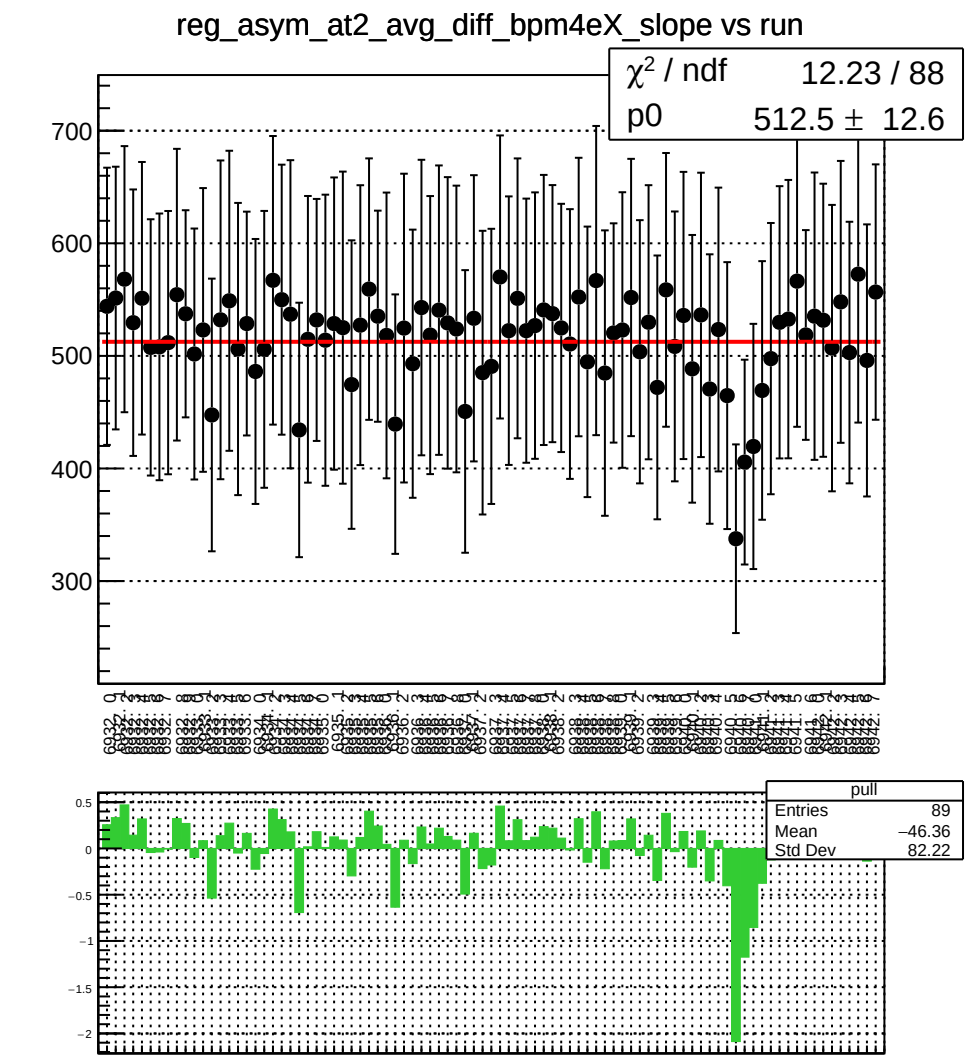

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 106.7 / 88
p0 −1.76 ± 0.07271
pull
Entries 89
Mean −2509
Std Dev 2550

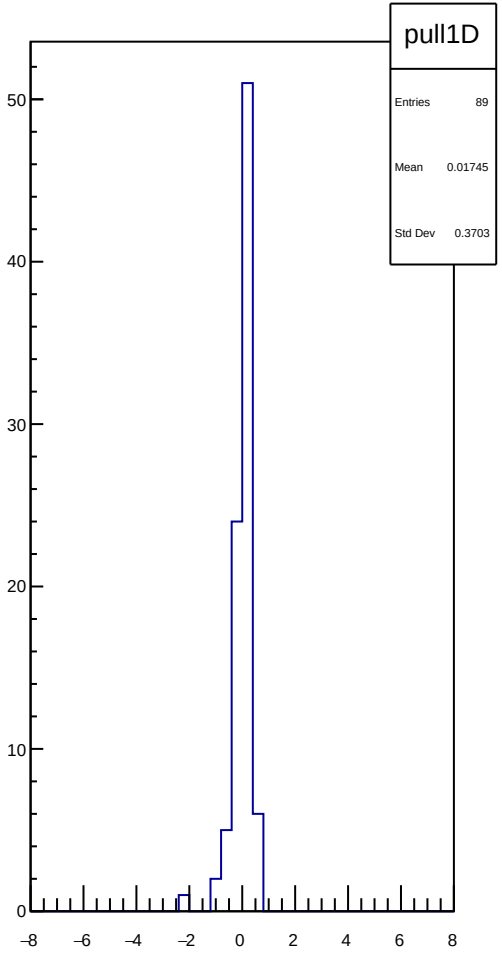

pull1D
Entries 89
Mean 0.001979
Std Dev 1.095

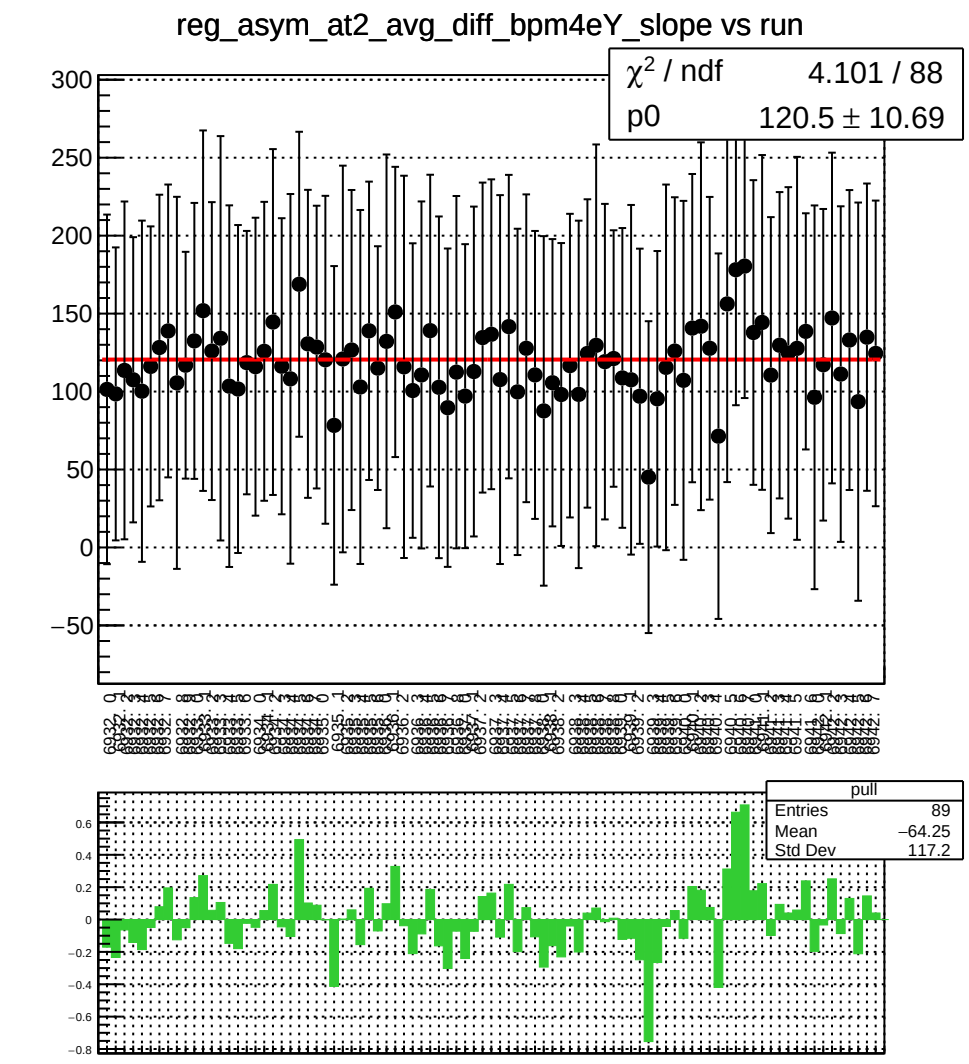

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 12.38 / 88
p0 −526.6 ± 13.56
pull
Entries 89
Mean −40.33
Std Dev 75.15

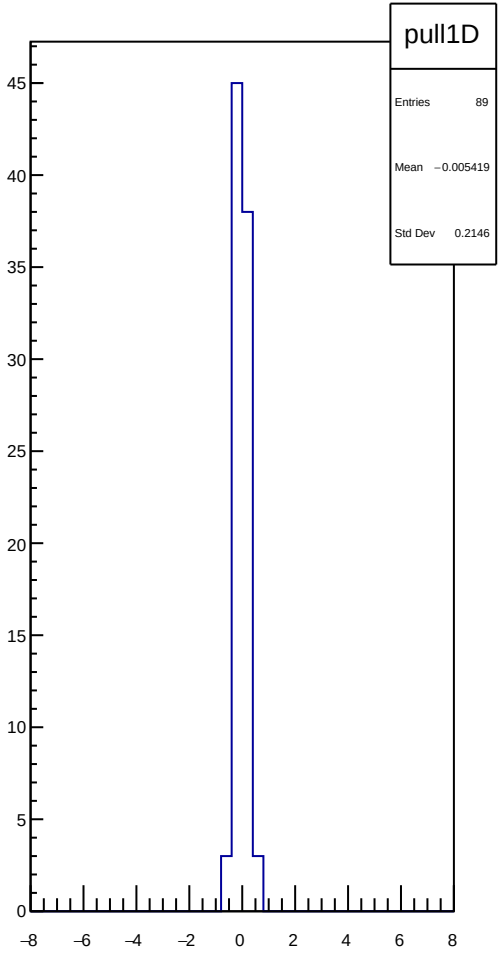

pull1D
Entries 89
Mean −0.01743
Std Dev 0.3725

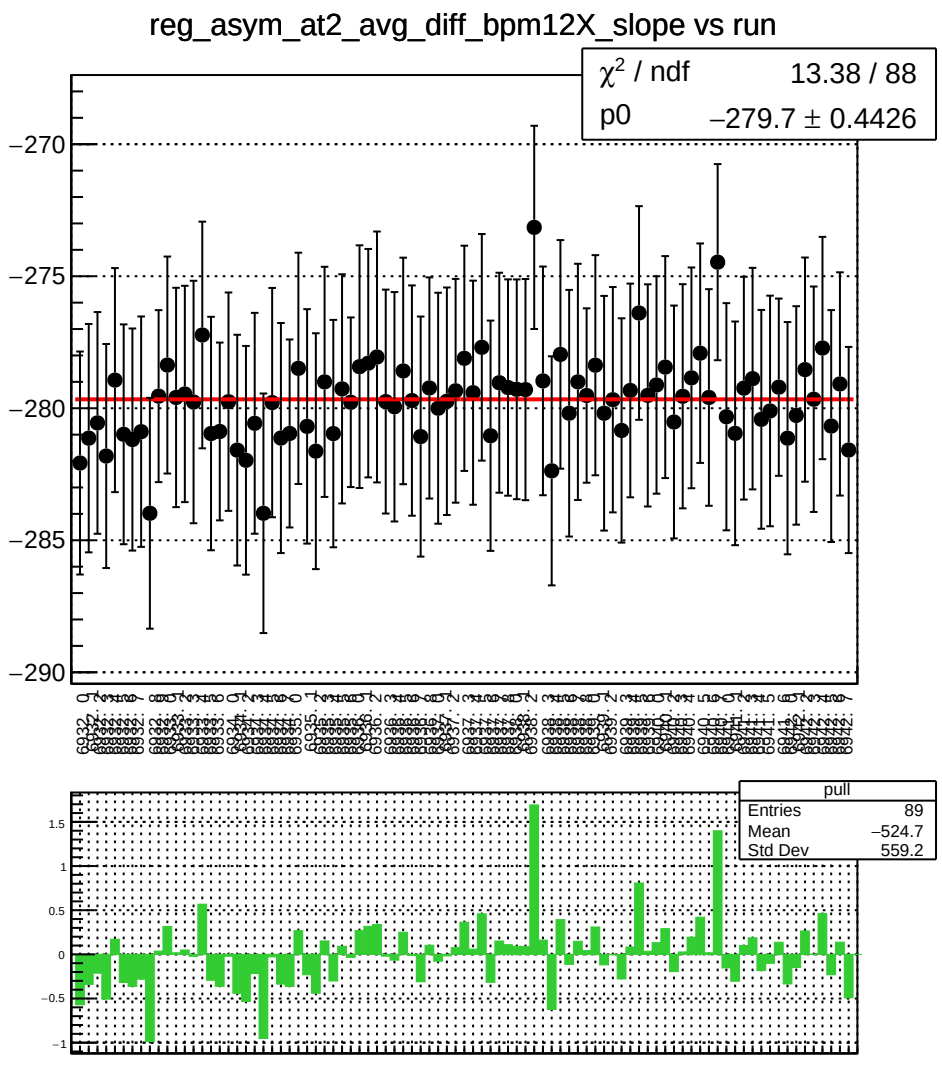

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.617 / 88
p0 15.57 ± 9.232
150
100
50
0
−50
−100
pull
Entries 89
Mean −24.32
Std Dev 74.71
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 89
Mean 0.006025
Std Dev 0.2015
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

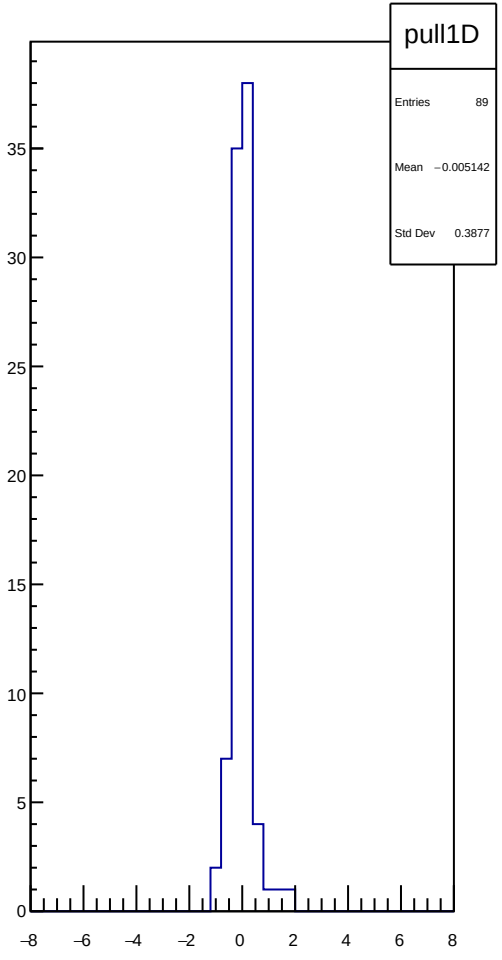

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.23 / 88
p0 512.5 ± 12.6
700
600
500
400
300
pull
Entries 89
Mean −46.36
Std Dev 82.22
0.5
0
−0.5
−1
−1.5
−2

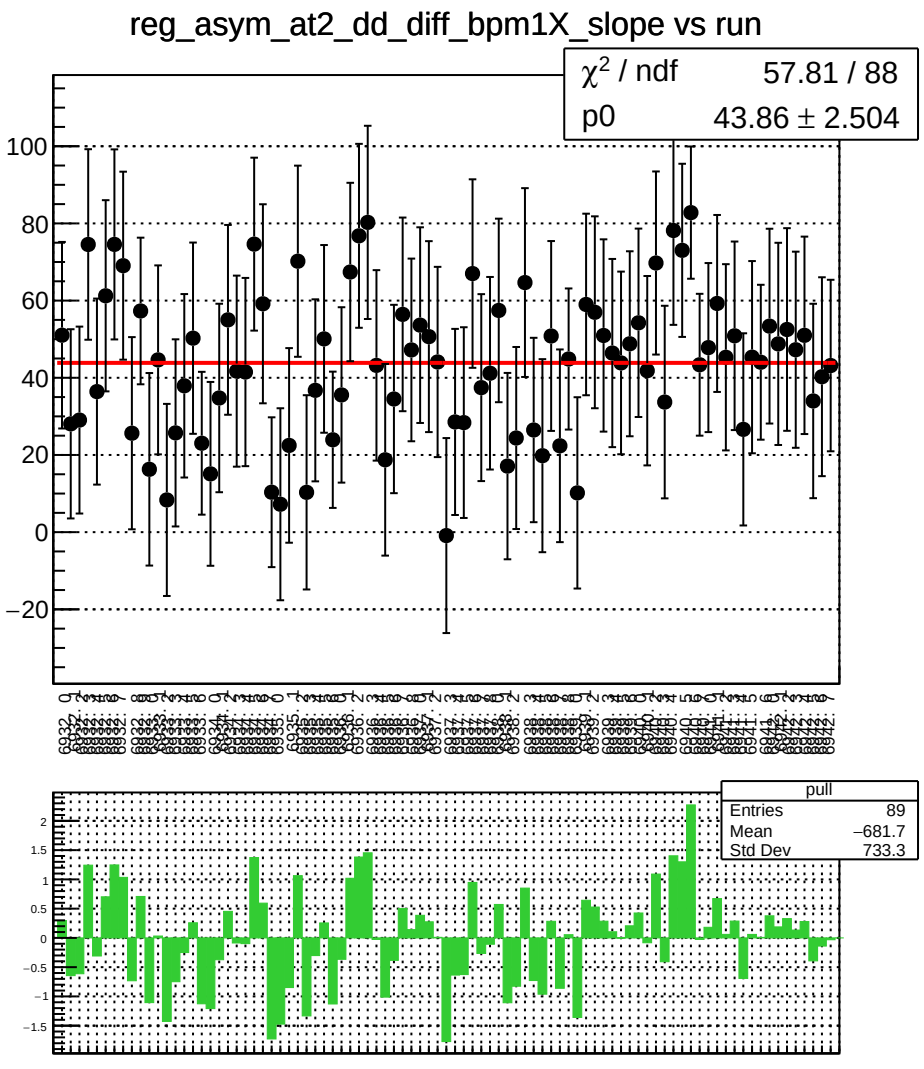

pull1D
Entries 89
Mean 0.01745
Std Dev 0.3703
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

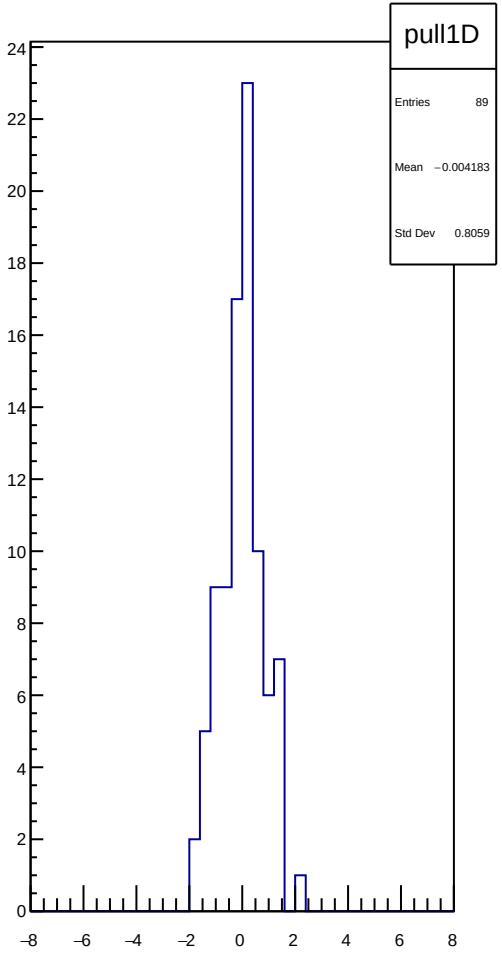

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.101 / 88
p0 120.5 ± 10.69
pull
Entries 89
Mean −64.25
Std Dev 117.2

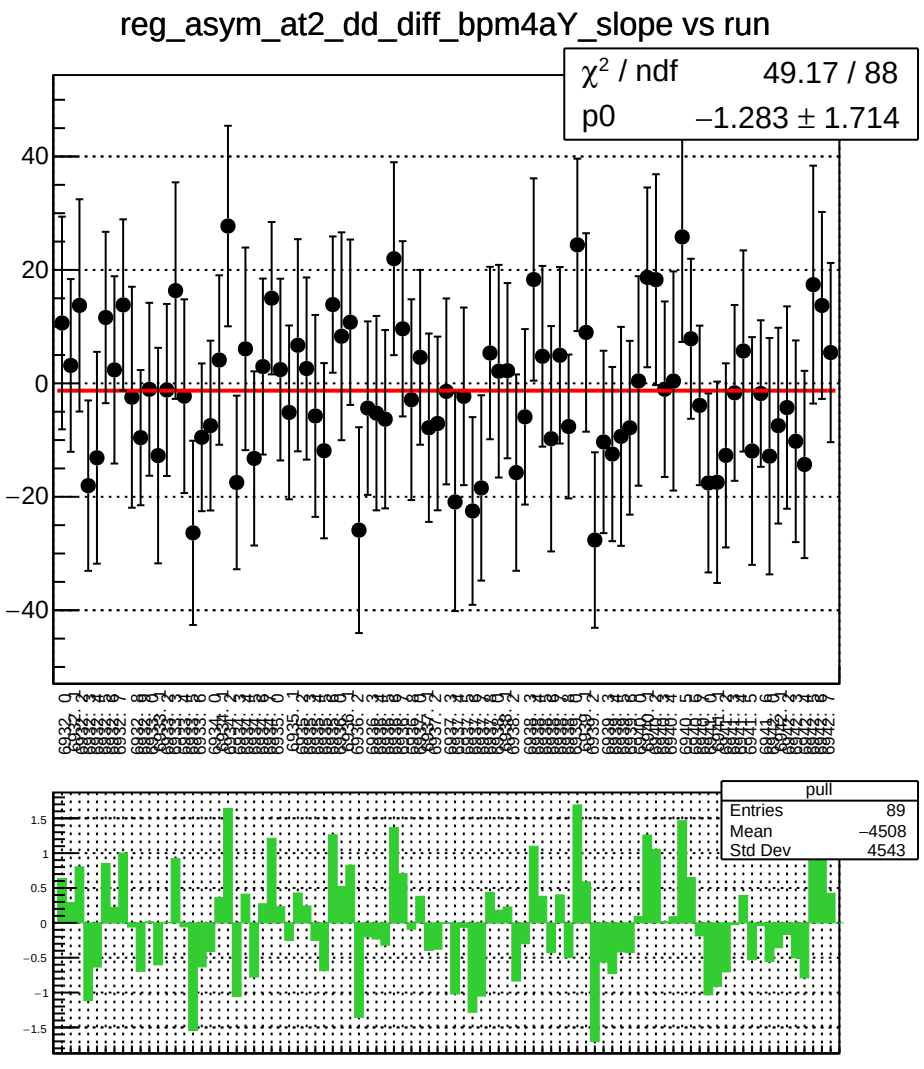

pull1D
Entries 89
Mean −0.005419
Std Dev 0.2146

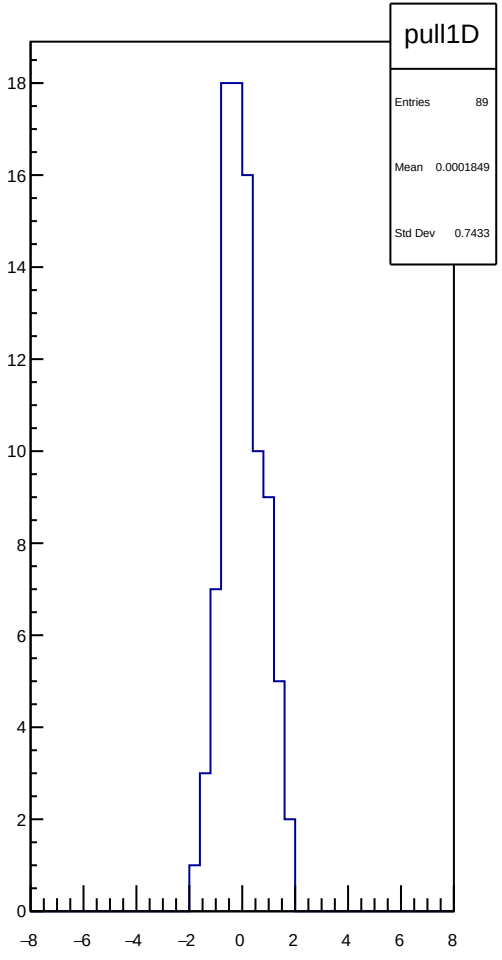

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 13.38 / 88
p0 −279.7 ± 0.4426
−270
−275
−280
−285
−290
pull
Entries 89
Mean −524.7
Std Dev 559.2
1.5
1
0.5
0
−0.5
−1

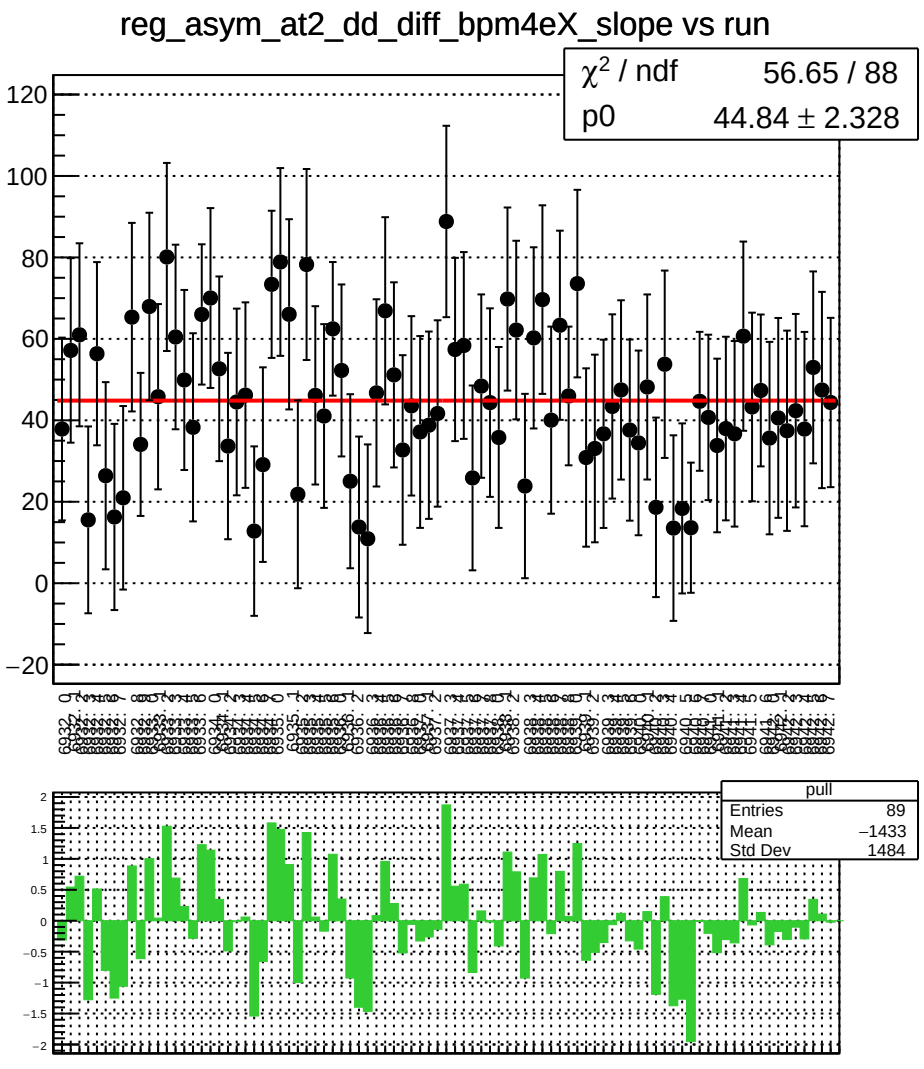

pull1D
Entries 89
Mean −0.005142
Std Dev 0.3877
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

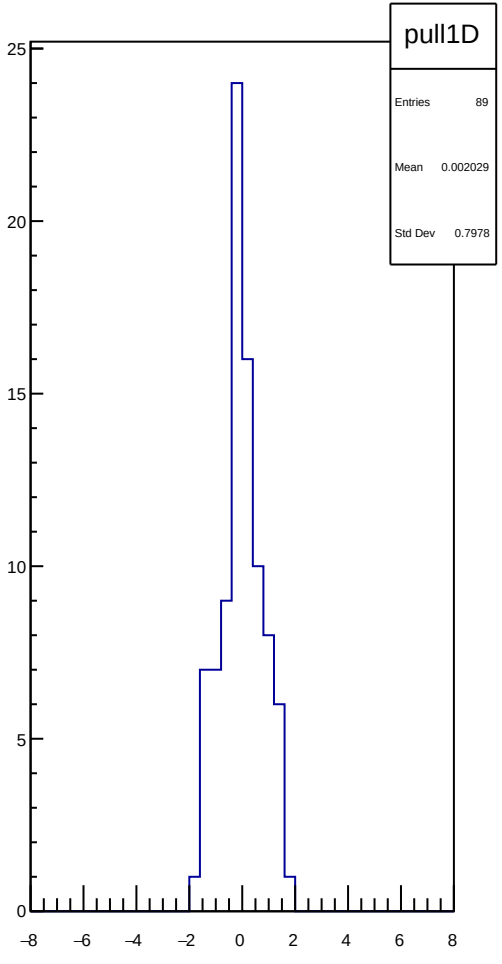

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 57.81 / 88
p0 43.86 ± 2.504
pull
Entries 89
Mean −681.7
Std Dev 733.3

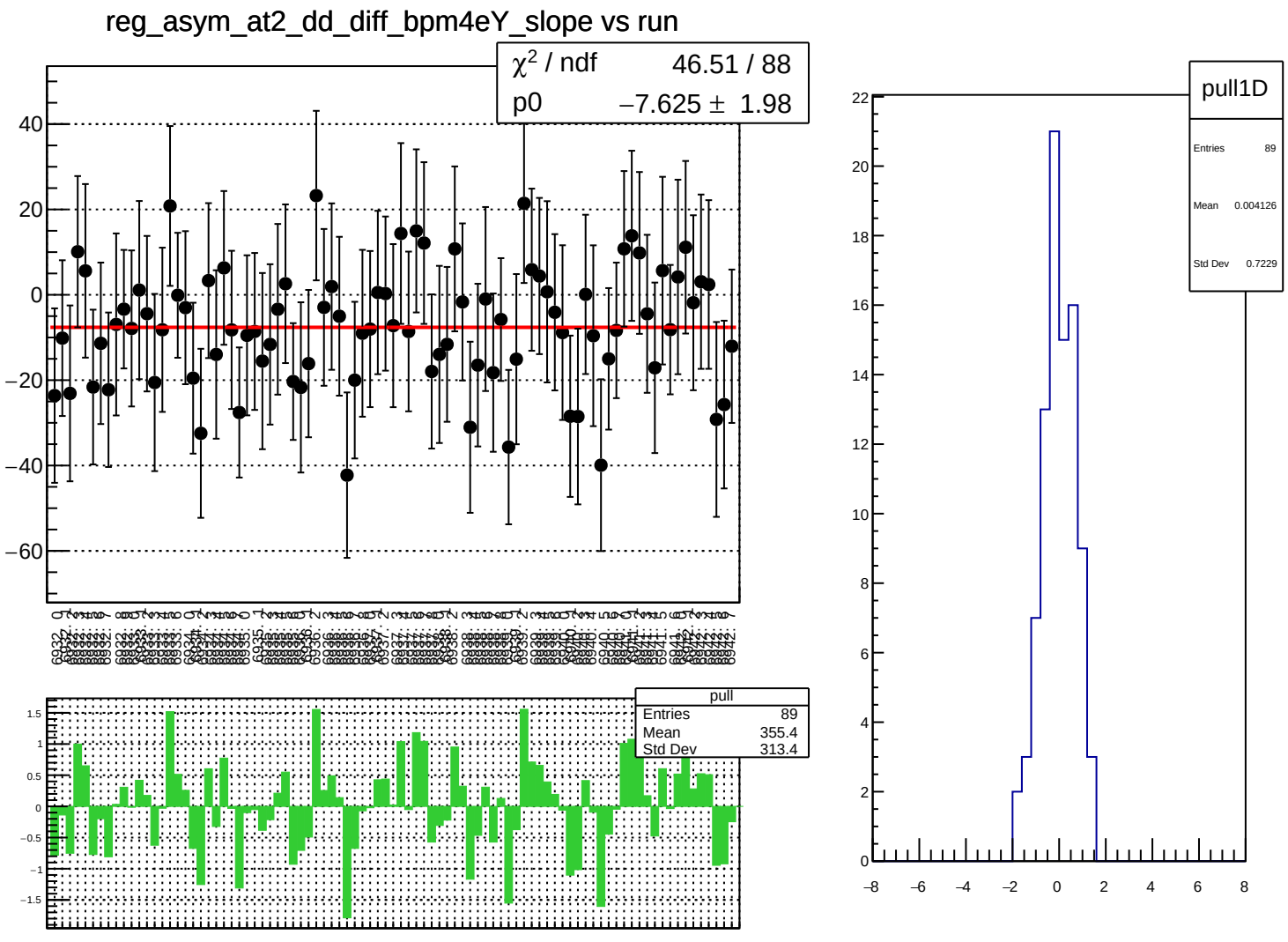

pull1D
Entries 89
Mean −0.004183
Std Dev 0.8059

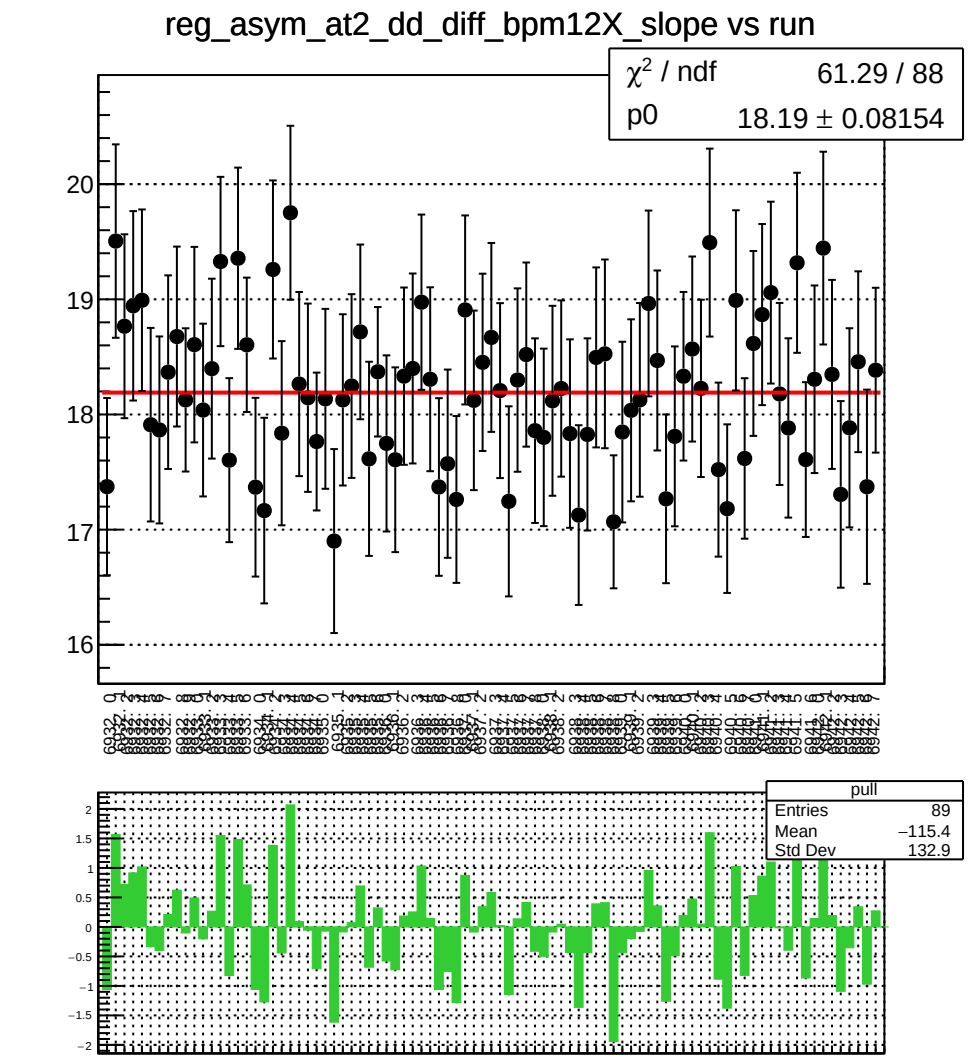

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 49.17 / 88
p0 −1.283 ± 1.714
pull
Entries 89
Mean −4508
Std Dev 4543

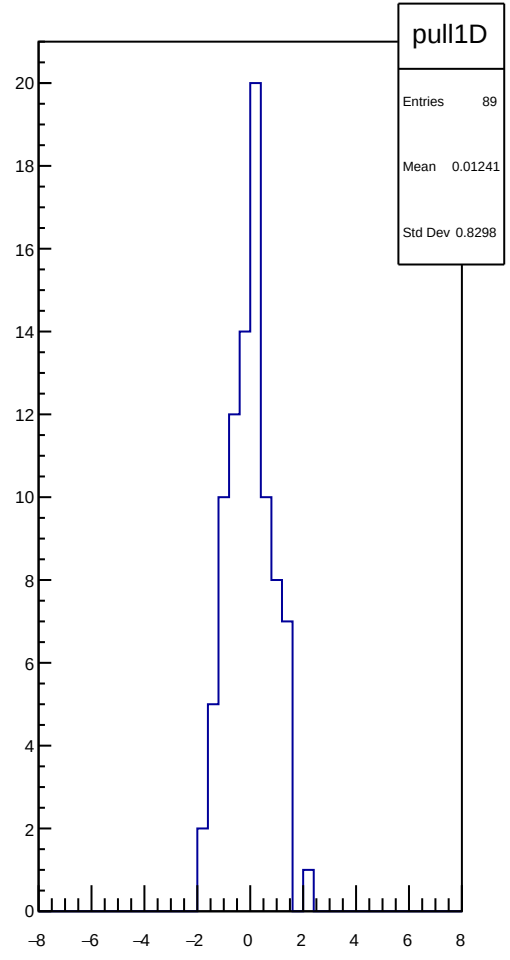

pull1D
Entries 89
Mean 0.0001849
Std Dev 0.7433

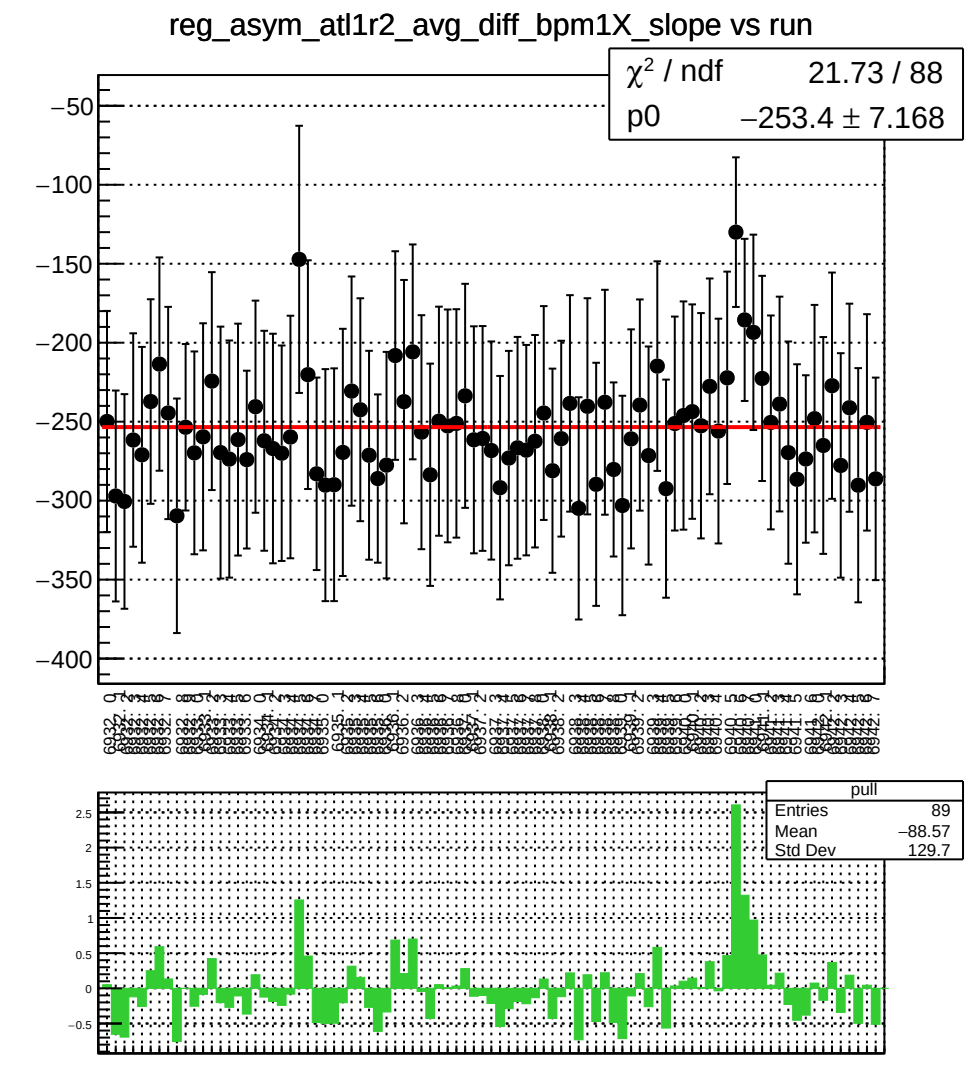

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 56.65 / 88
p0 44.84 ± 2.328
pull
Entries 89
Mean −1433
Std Dev 1484

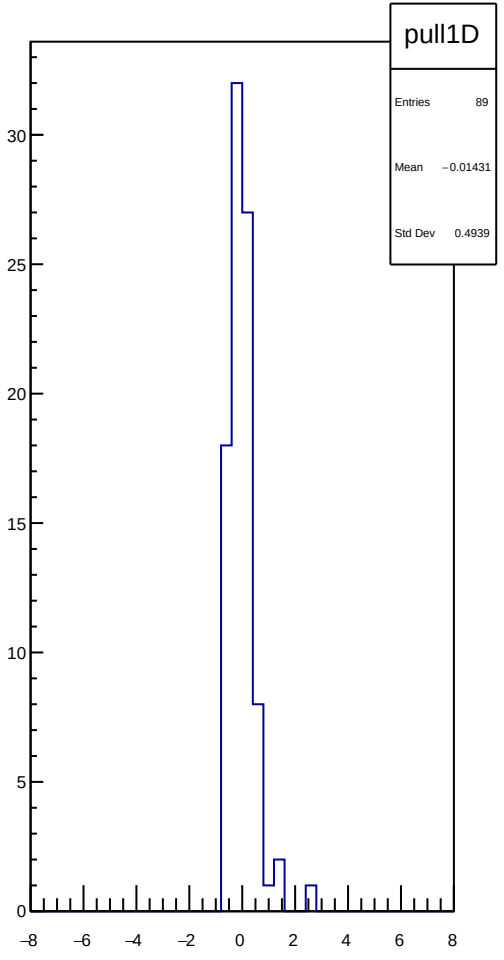

pull1D
Entries 89
Mean 0.002029
Std Dev 0.7978

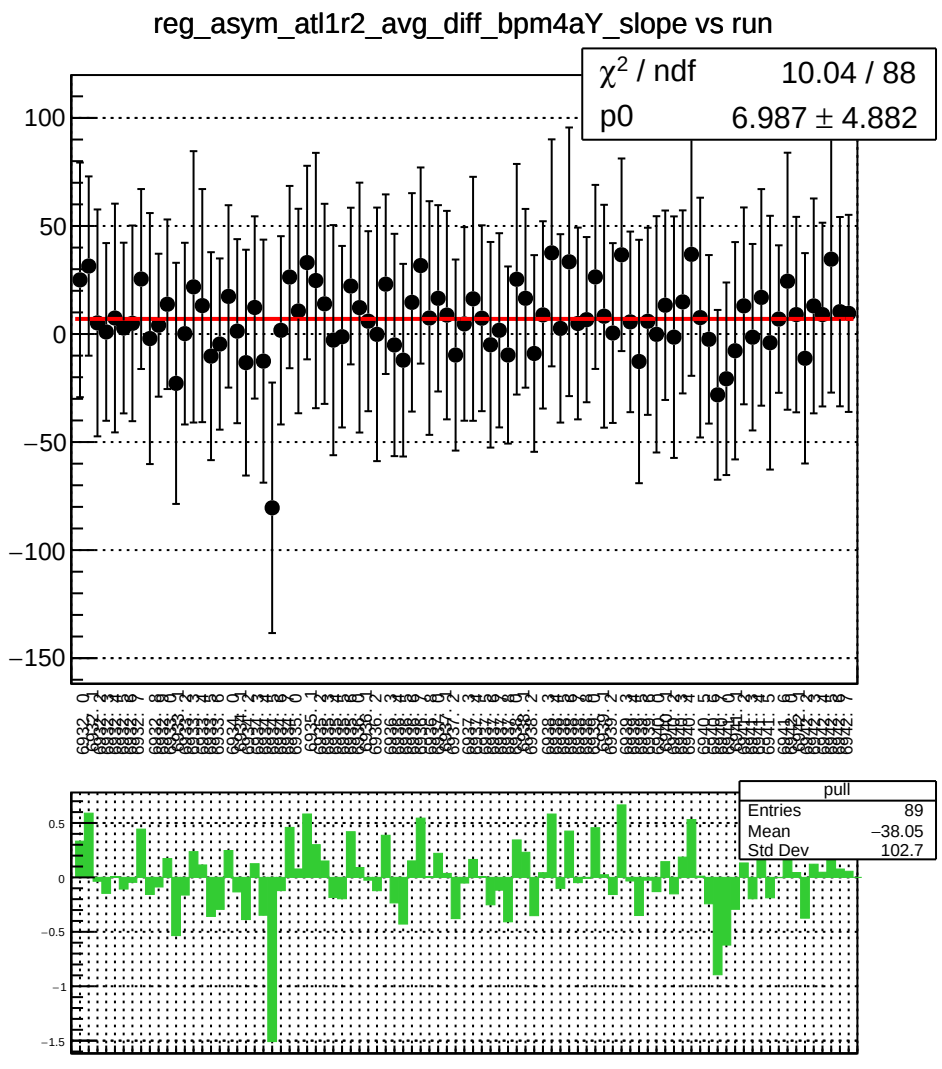

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 46.51 / 88
p0 −7.625 ± 1.98
pull
Entries 89
Mean 355.4
Std Dev 313.4
pull1D
Entries 89
Mean 0.004126
Std Dev 0.7229

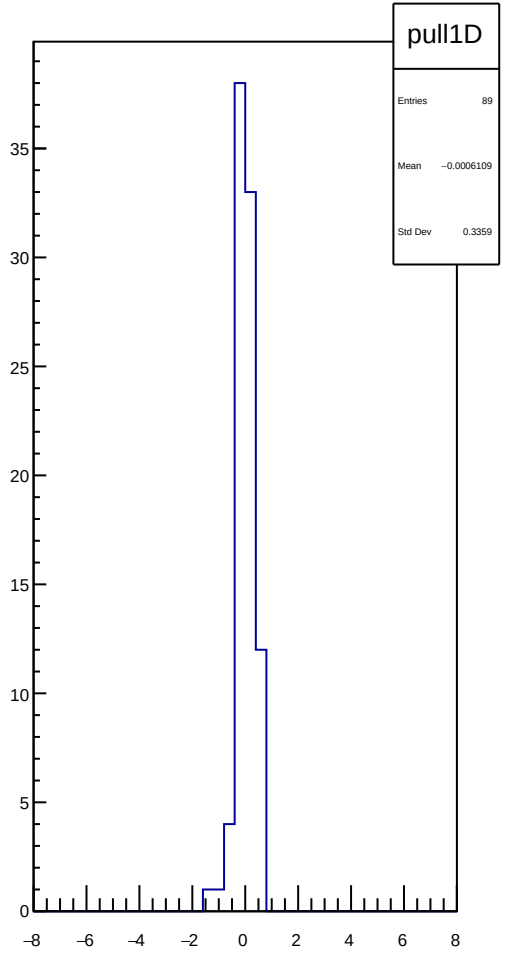

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 61.29 / 88
p0 18.19 ± 0.08154
pull
Entries 89
Mean −115.4
Std Dev 132.9

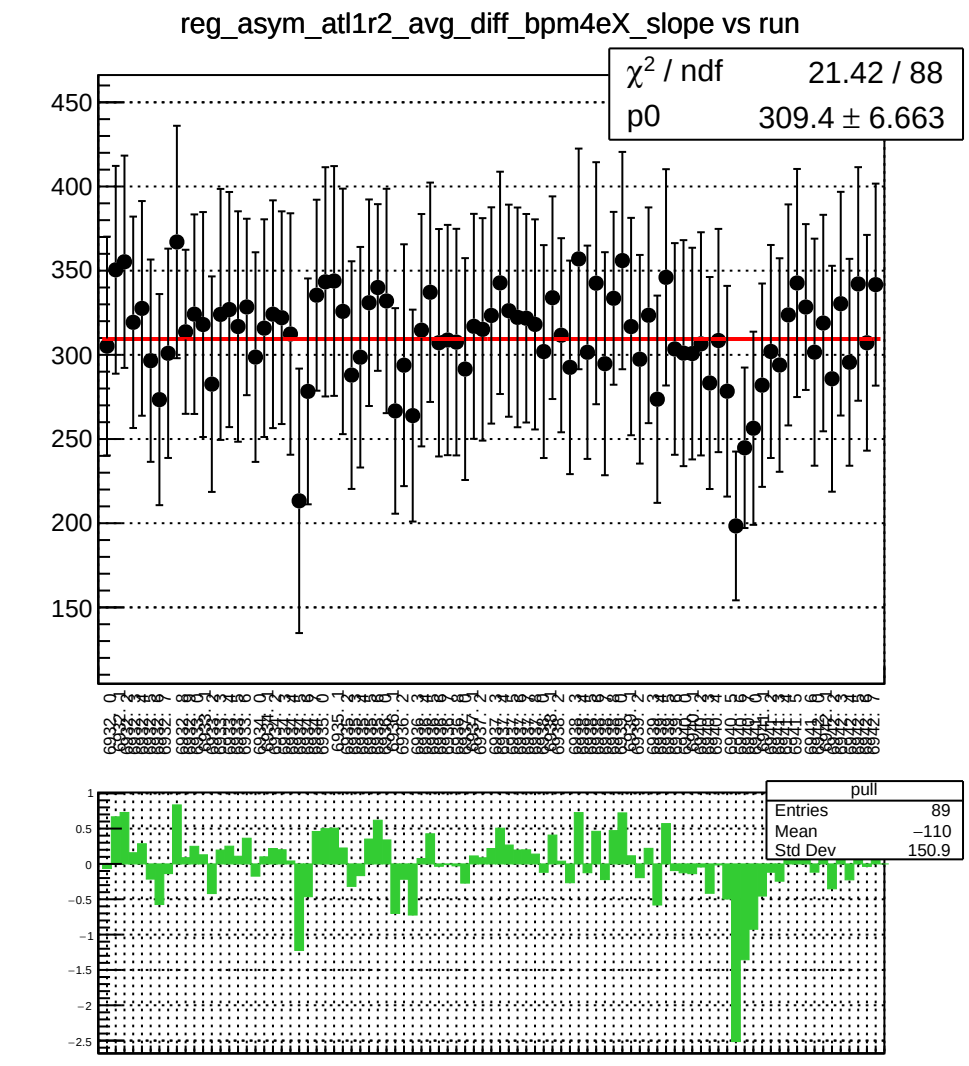

pull1D
Entries 89
Mean 0.01241
Std Dev 0.8298

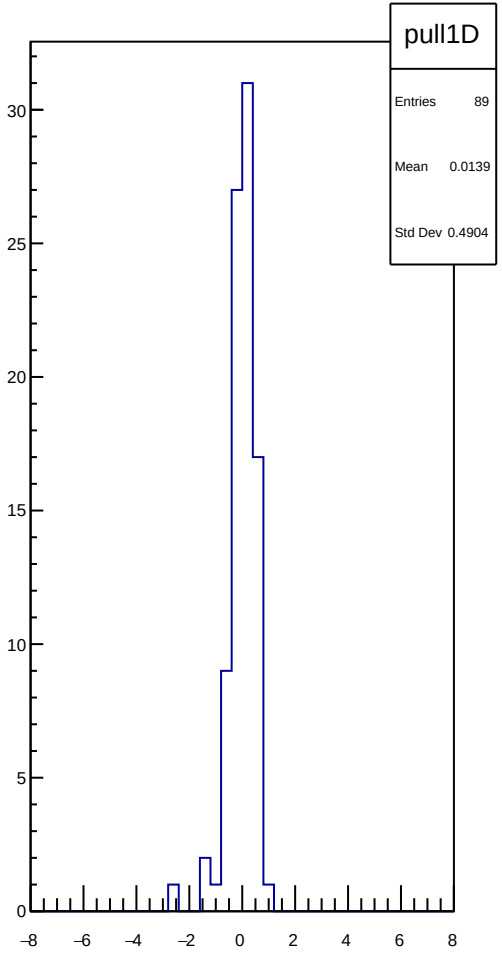

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 21.73 / 88
p0 −253.4 ± 7.168
pull
Entries 89
Mean −88.57
Std Dev 129.7

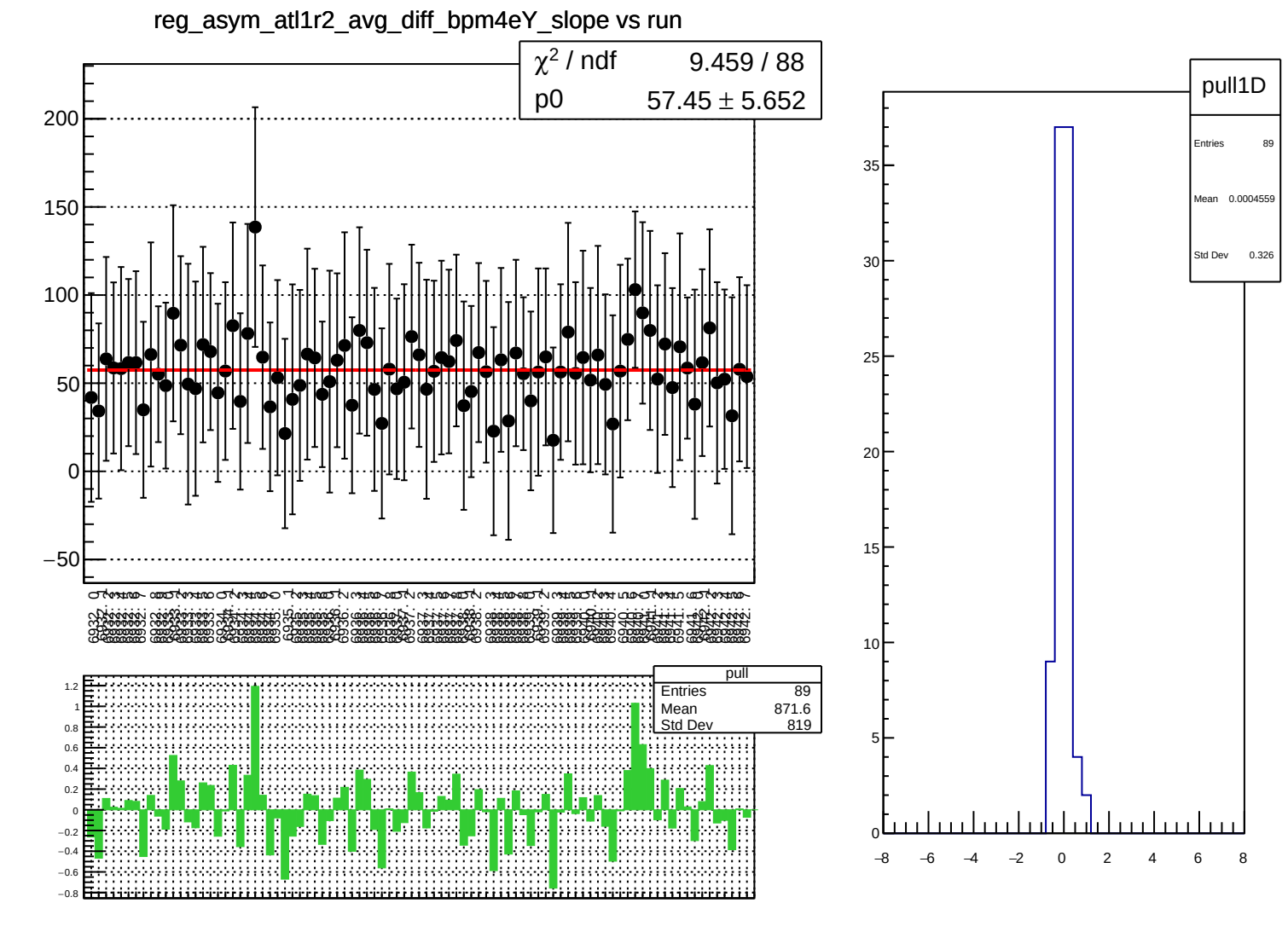

pull1D
Entries 89
Mean −0.01431
Std Dev 0.4939

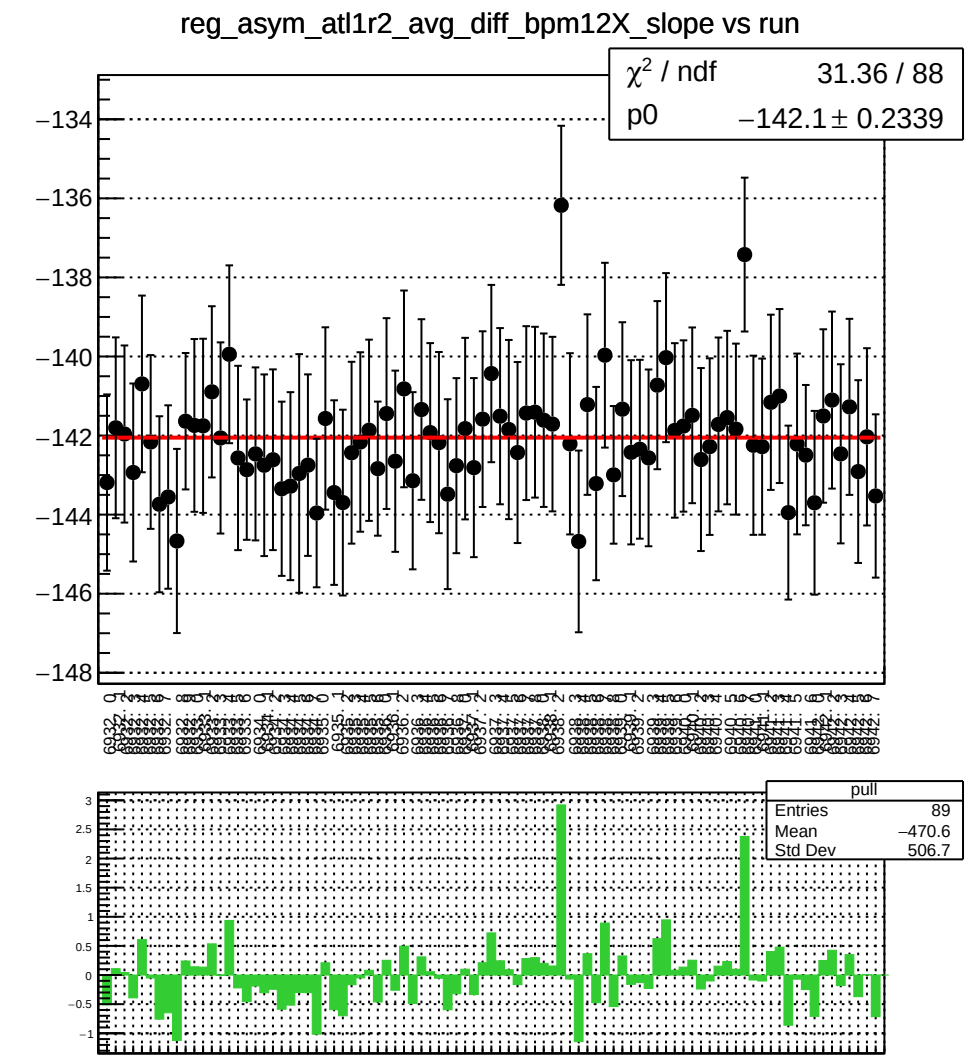

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.04 / 88
p0 6.987 ± 4.882
pull
Entries 89
Mean −38.05
Std Dev 102.7

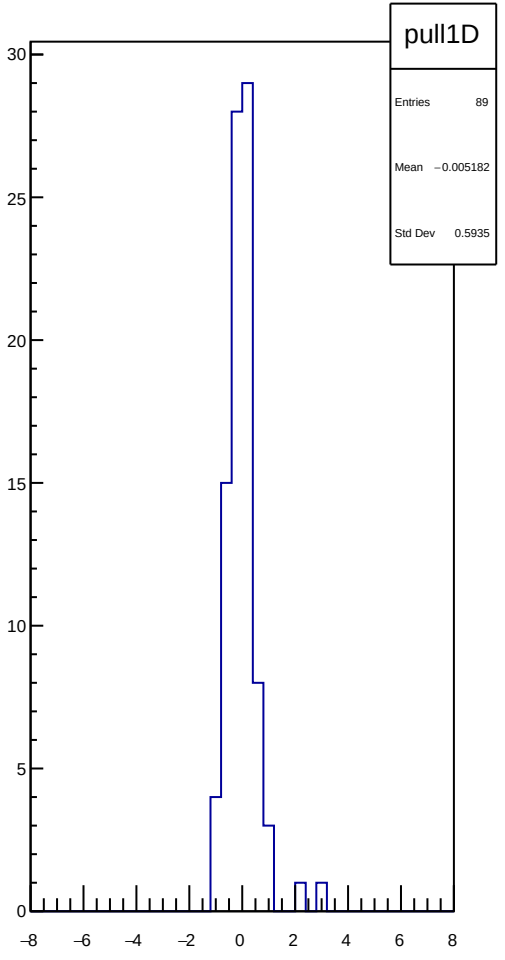

pull1D
Entries 89
Mean −0.0006109
Std Dev 0.3359

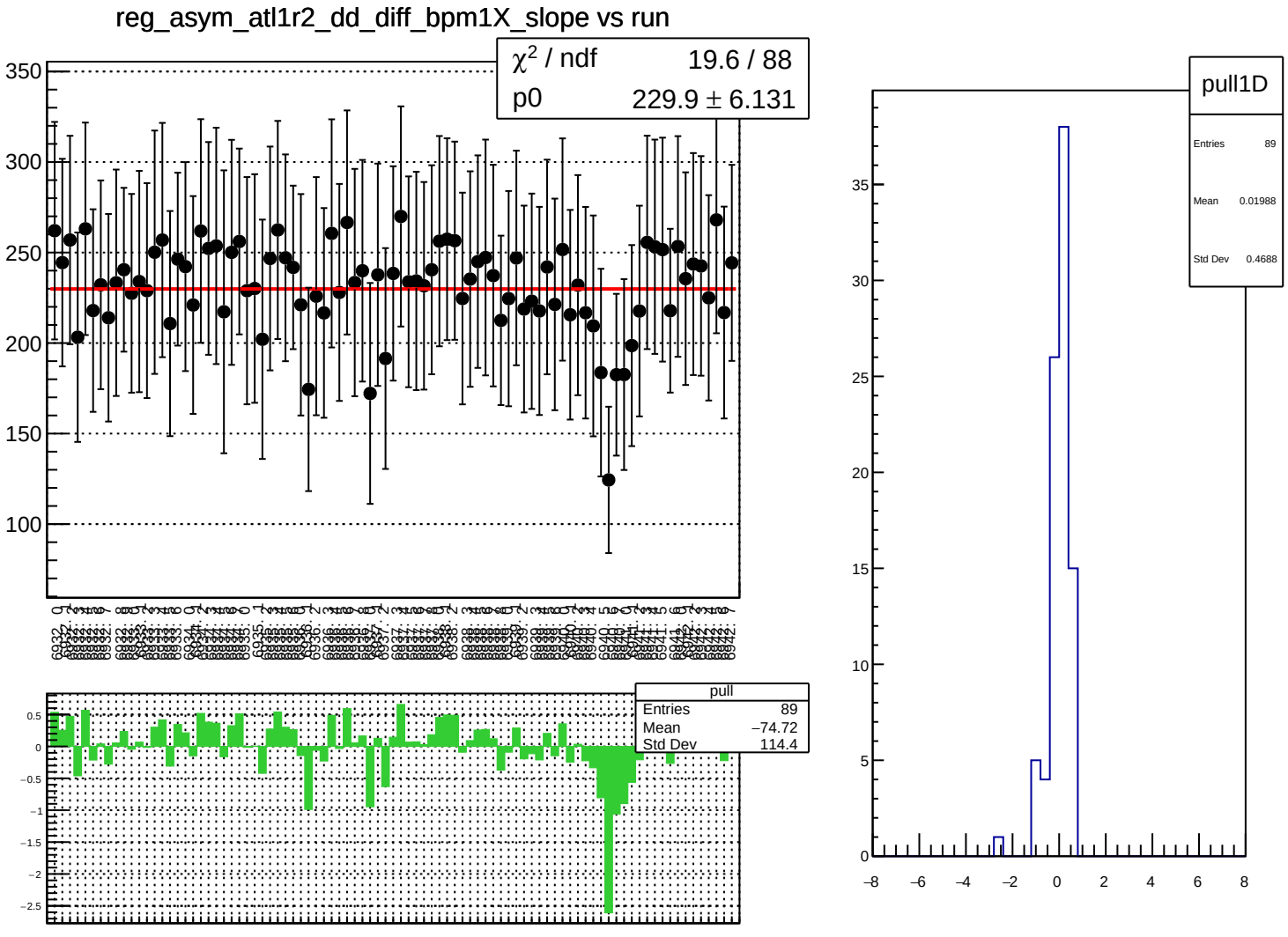

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 21.42 / 88
p0 309.4 ± 6.663
pull
Entries 89
Mean −110
Std Dev 150.9

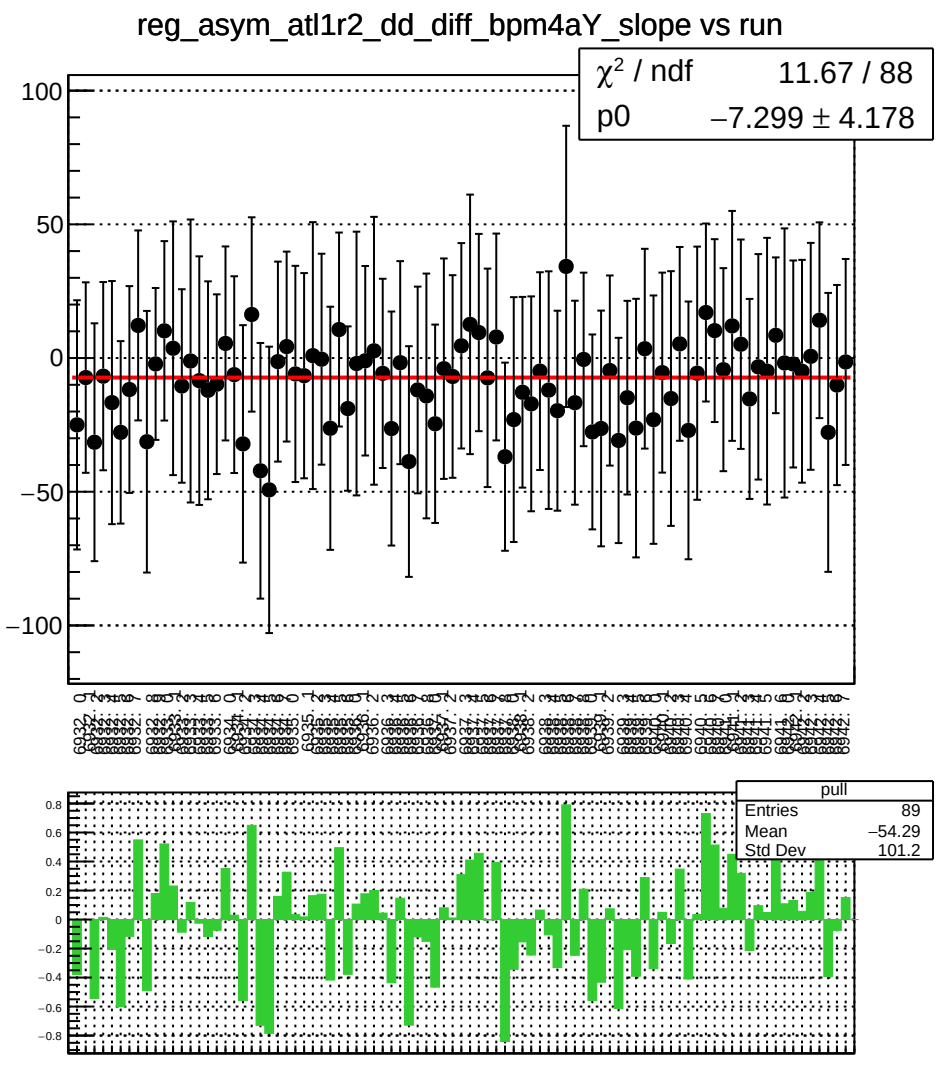

pull1D
Entries 89
Mean 0.0139
Std Dev 0.4904

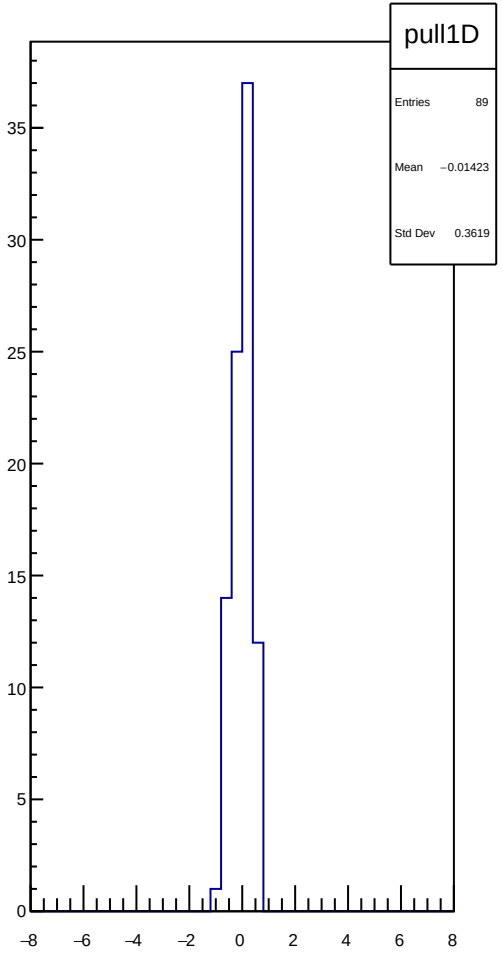

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.459 / 88
p0 57.45 ± 5.652
200
150
100
50
0
−50
pull
Entries 89
Mean 871.6
Std Dev 819
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 89
Mean 0.0004559
Std Dev 0.326
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

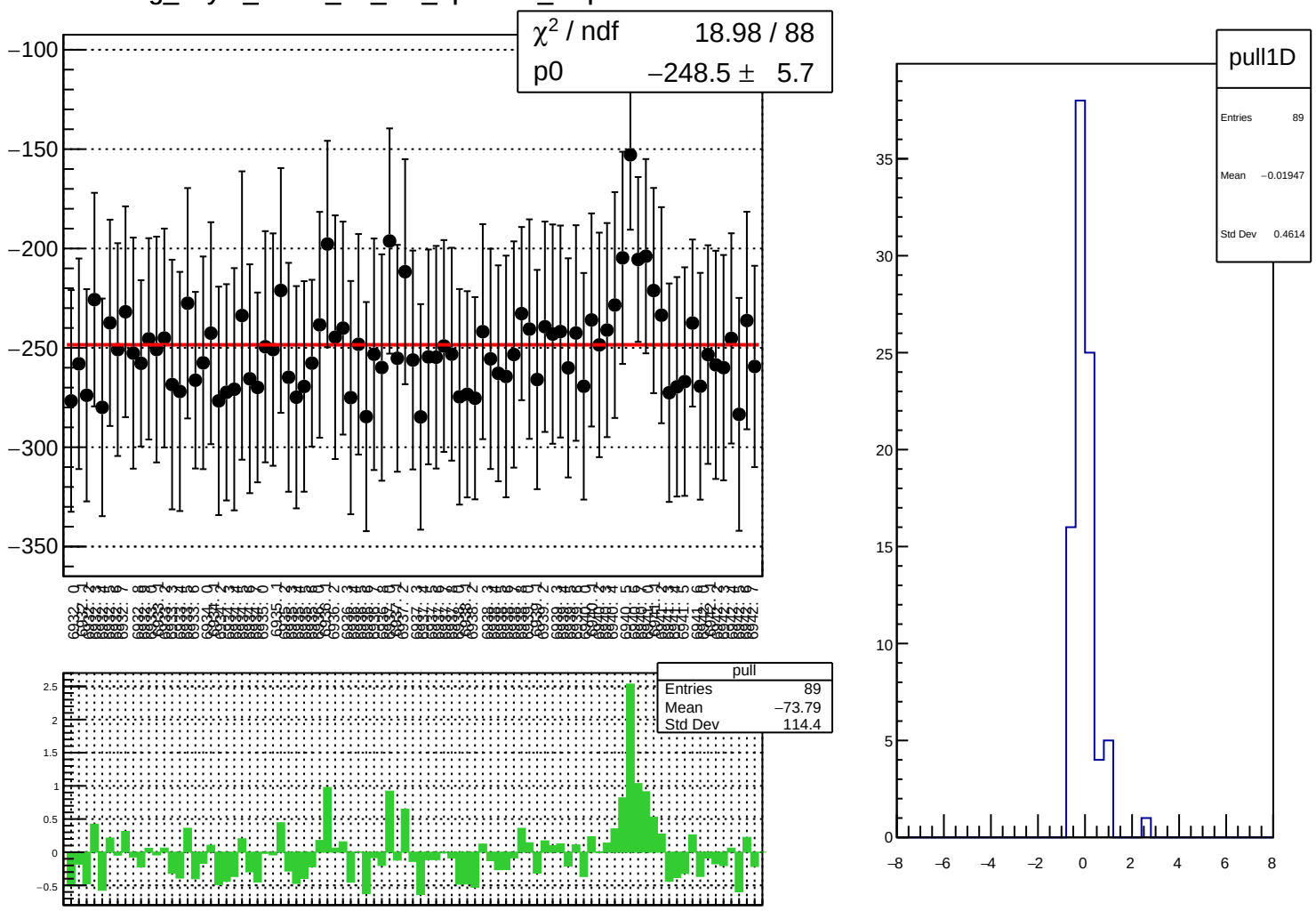

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 31.36 / 88
p0 −142.1 ± 0.2339
−134
−136
−138
−140
−142
−144
−146
−148
pull
Entries 89
Mean −470.6
Std Dev 506.7
3
2.5
2
1.5
1
0.5
0
−0.5
−1

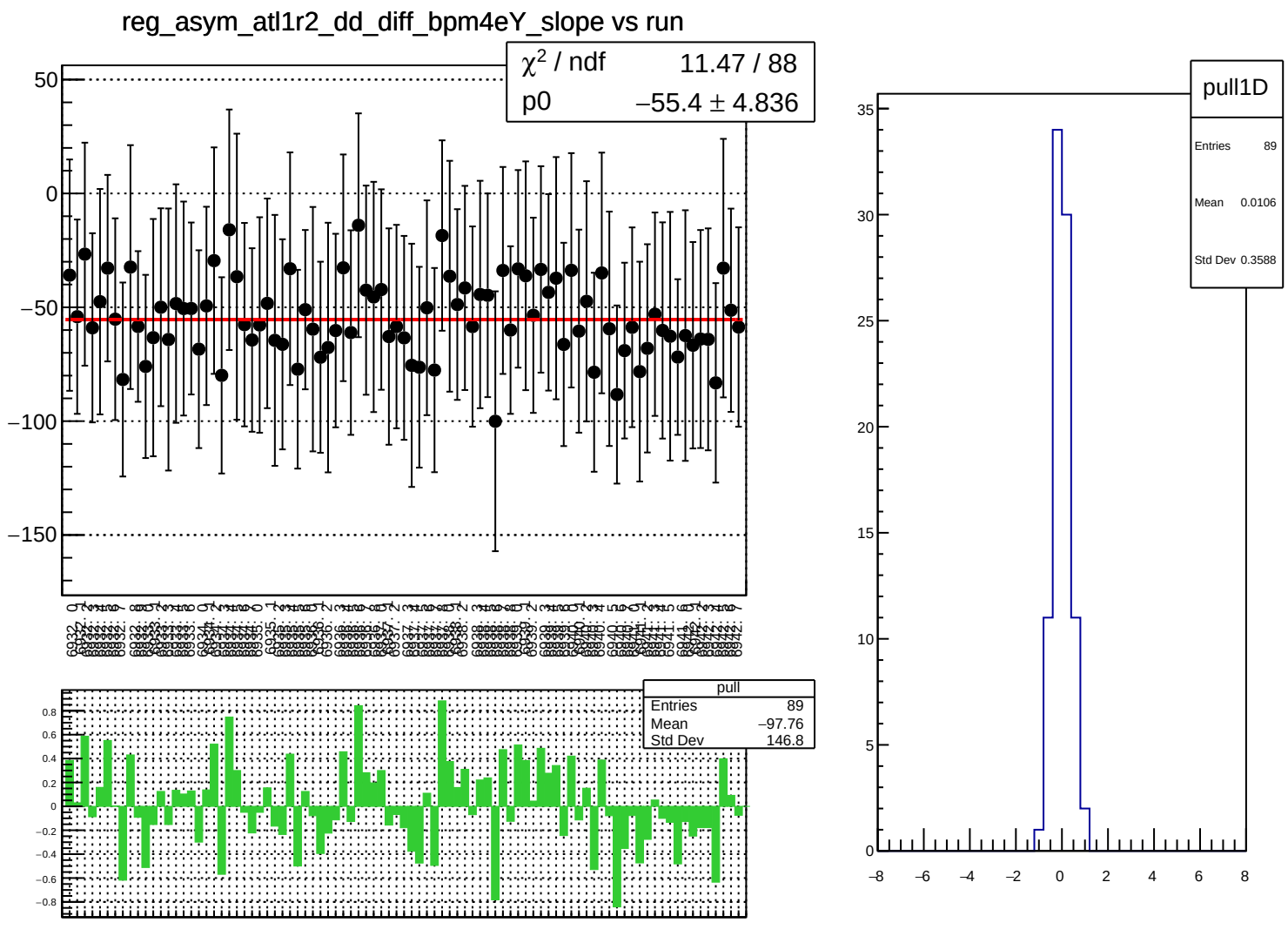

pull1D
Entries 89
Mean −0.005182
Std Dev 0.5935
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

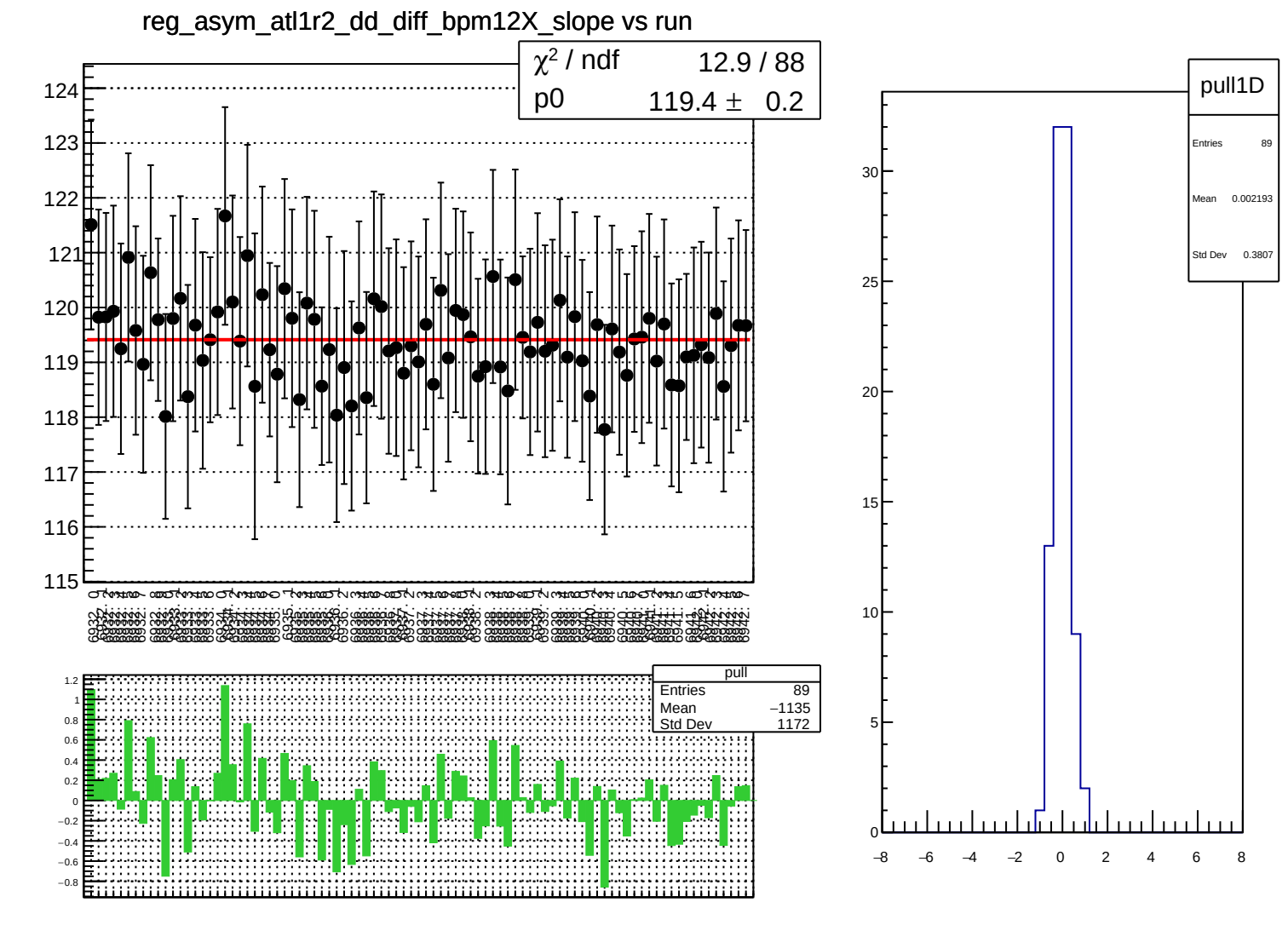

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ^2 / ndf 19.6 / 88
p0 229.9 ± 6.131
350
300
250
200
150
100
pull
Entries 89
Mean −74.72
Std Dev 114.4
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 89
Mean 0.01988
Std Dev 0.4688
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

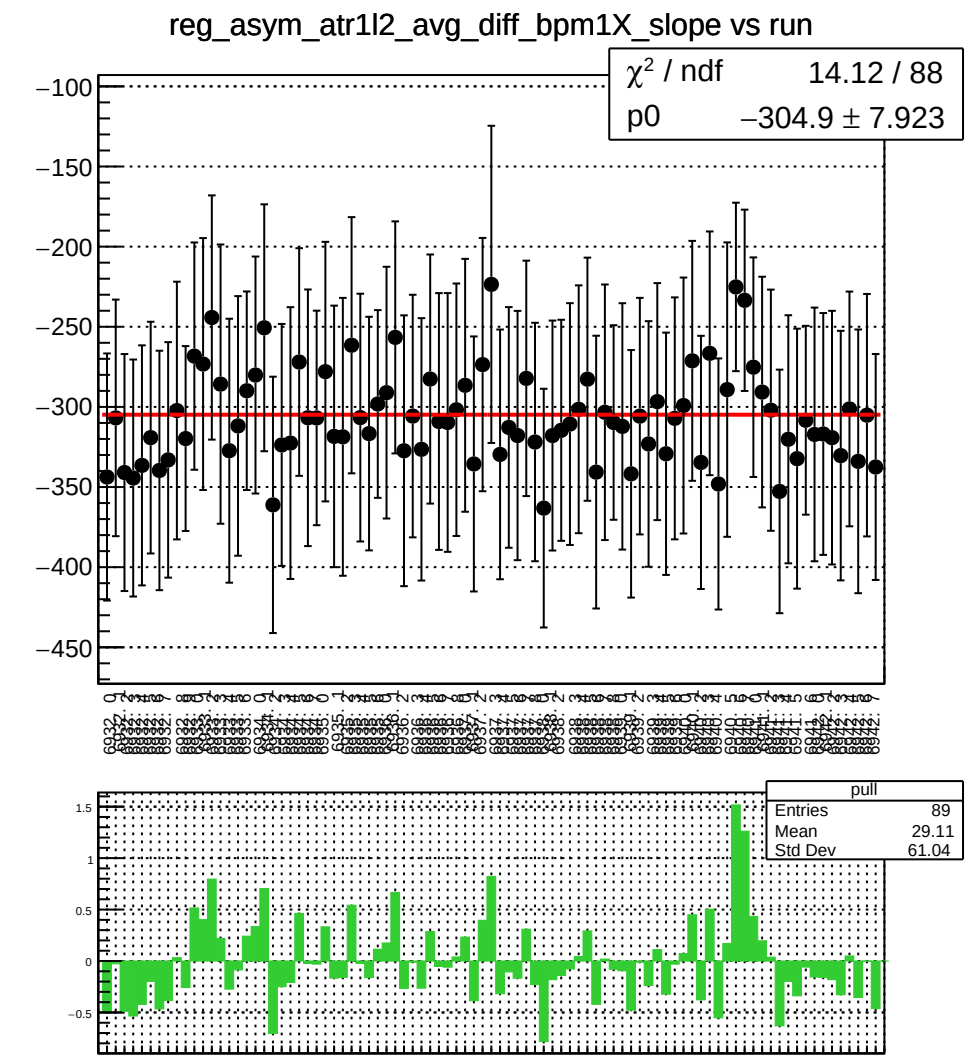

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.67 / 88
p0 −7.299 ± 4.178
pull
Entries 89
Mean −54.29
Std Dev 101.2

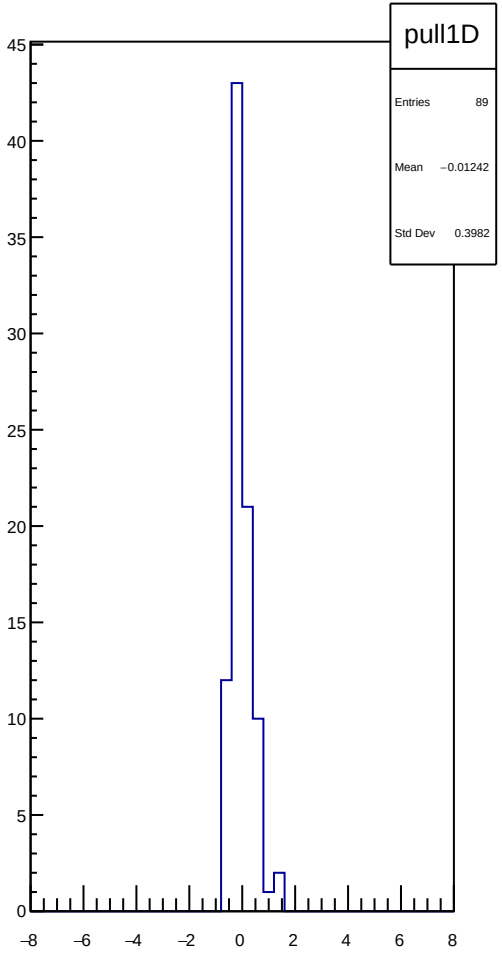

pull1D
Entries 89
Mean −0.01423
Std Dev 0.3619

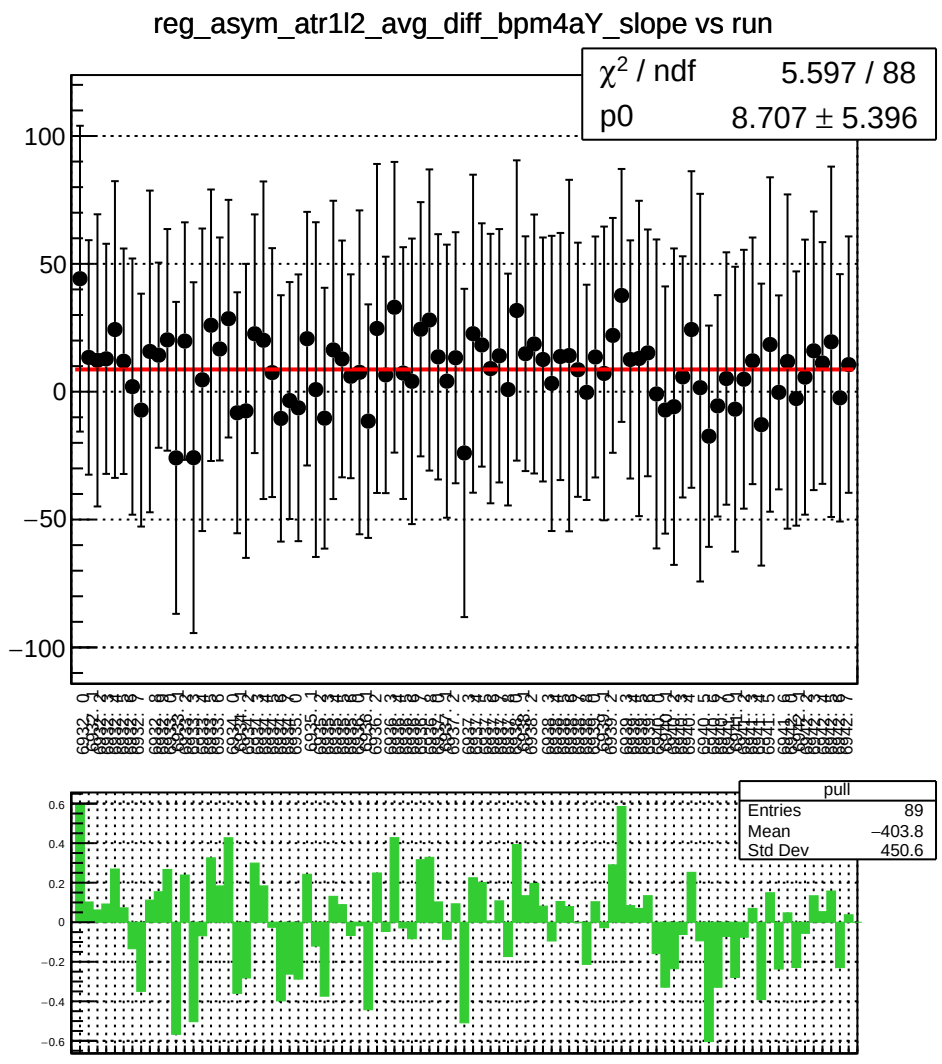

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 18.98 / 88
p0 −248.5 ± 5.7
−100
−150
−200
−250
−300
−350
pull
Entries 89
Mean −73.79
Std Dev 114.4
2.5
2
1.5
1
0.5
0
−0.5
pull1D
Entries 89
Mean −0.01947
Std Dev 0.4614
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

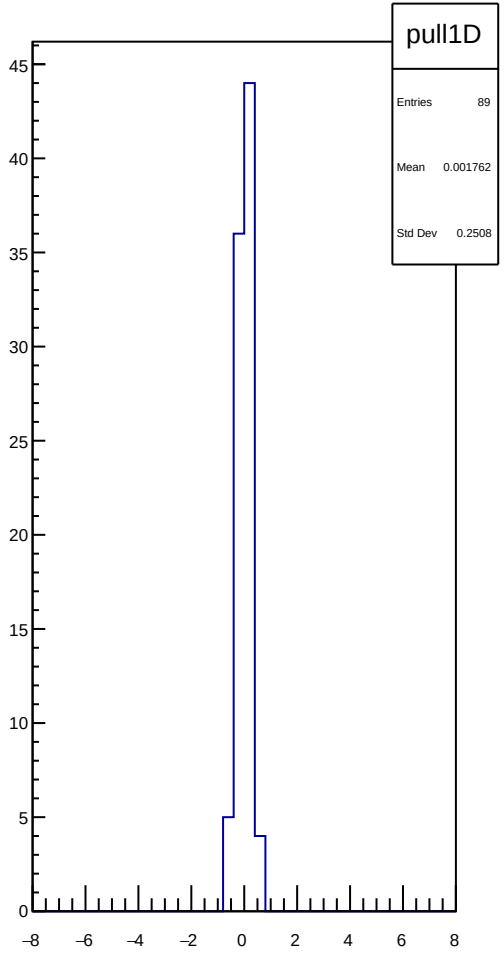

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 11.47 / 88
p0 −55.4 ± 4.836
50
0
−50
−100
−150
pull
Entries 89
Mean −97.76
Std Dev 146.8
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 89
Mean 0.0106
Std Dev 0.3588
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

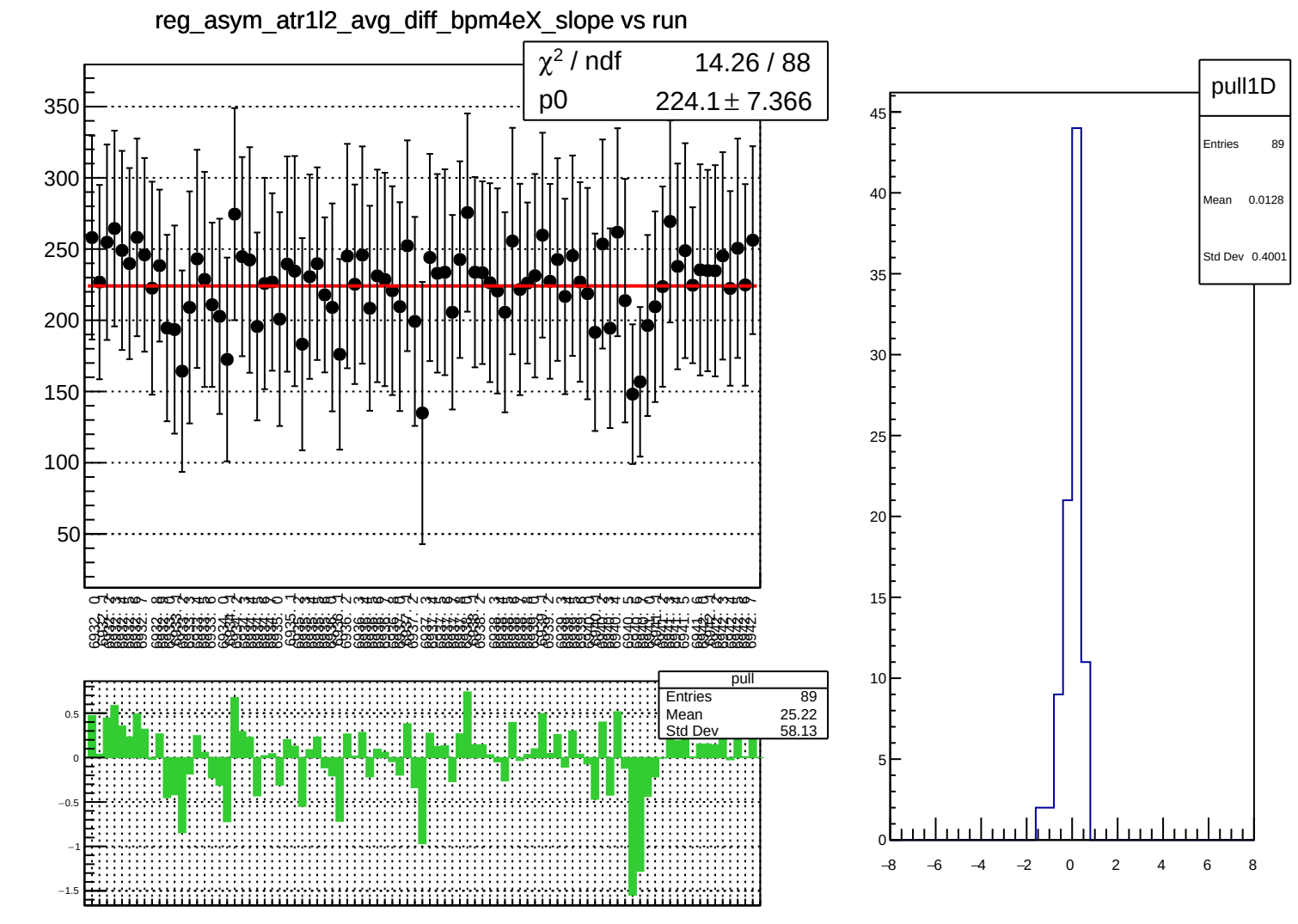

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 12.9 / 88
p0 119.4 ± 0.2
pull
Entries 89
Mean −1135
Std Dev 1172
pull1D
Entries 89
Mean 0.002193
Std Dev 0.3807

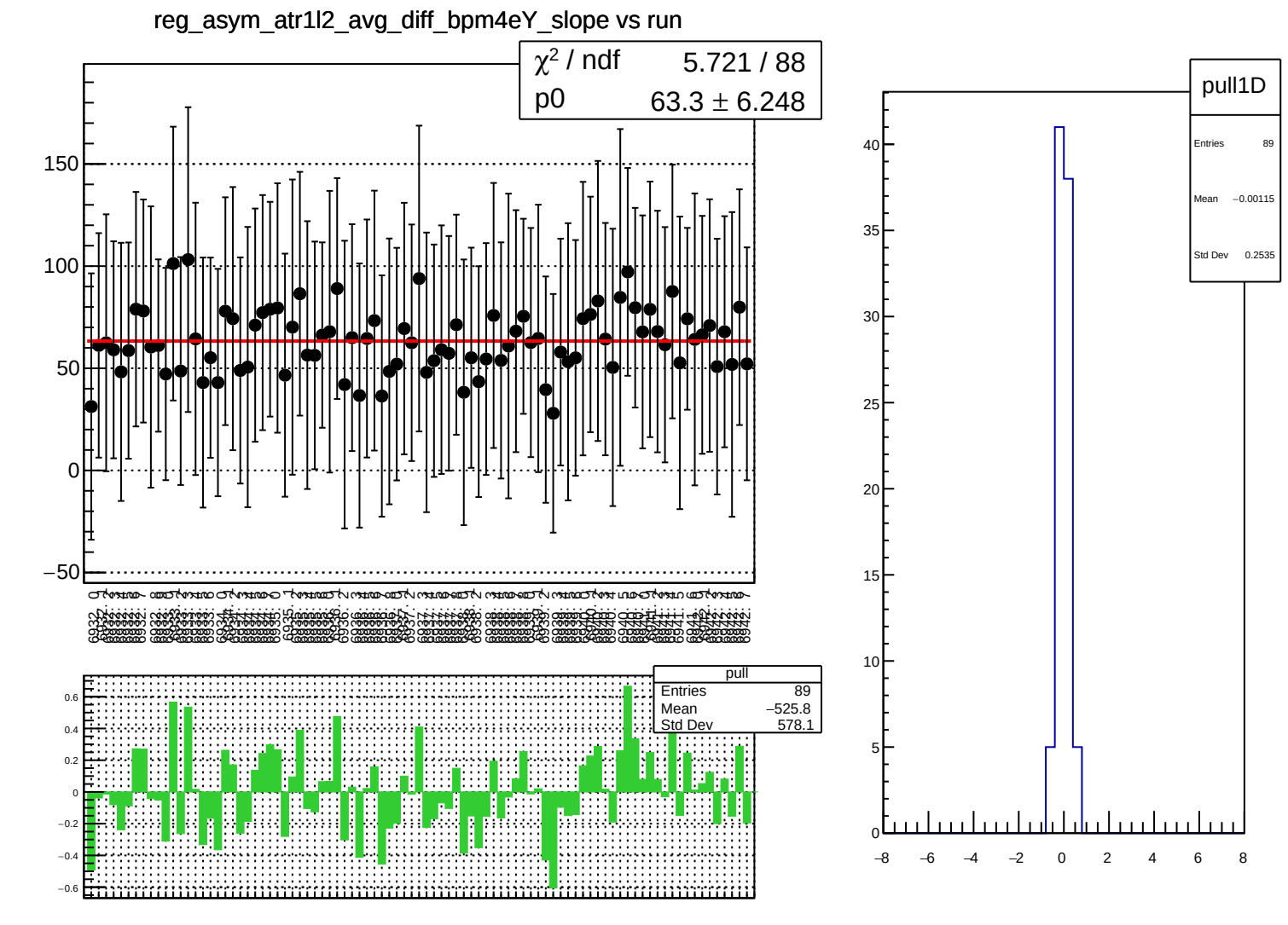

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 14.12 / 88
p0 −304.9 ± 7.923
pull
Entries 89
Mean 29.11
Std Dev 61.04

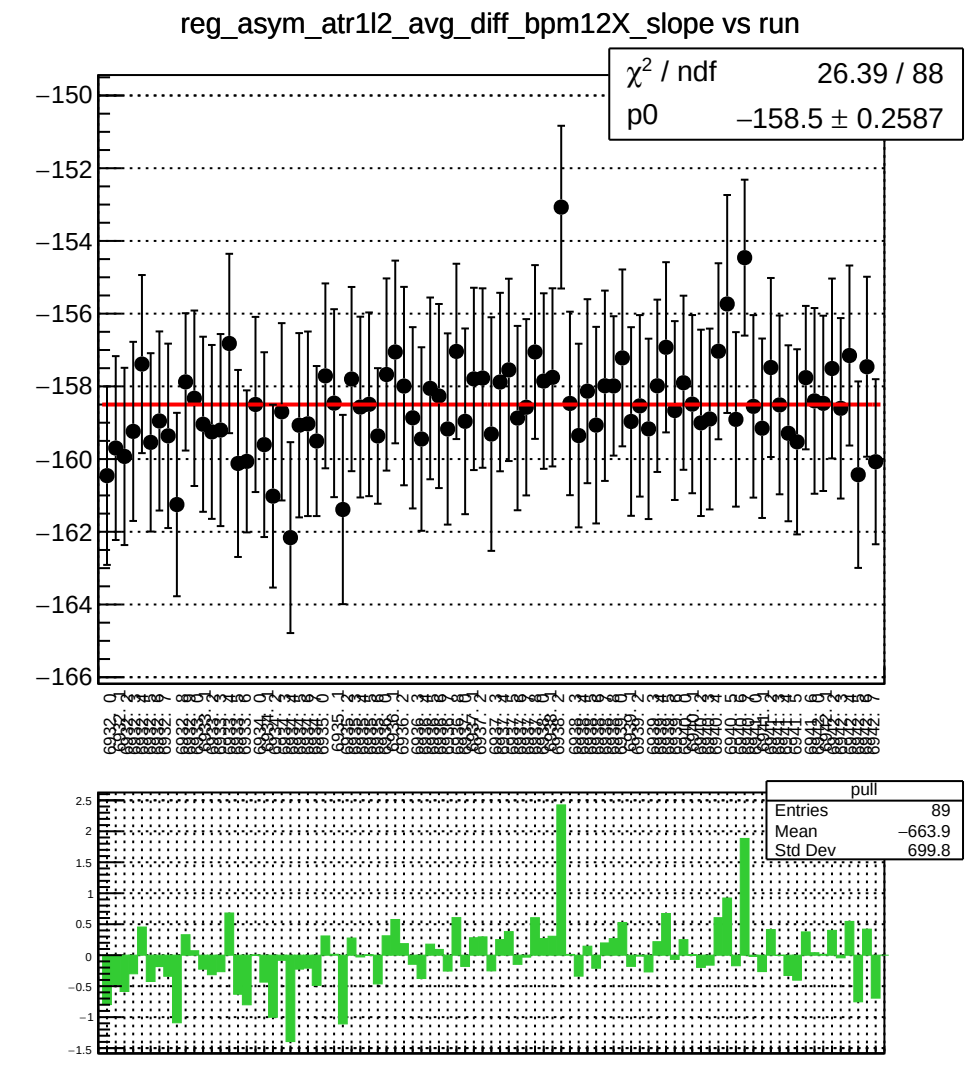

pull1D
Entries 89
Mean −0.01242
Std Dev 0.3982

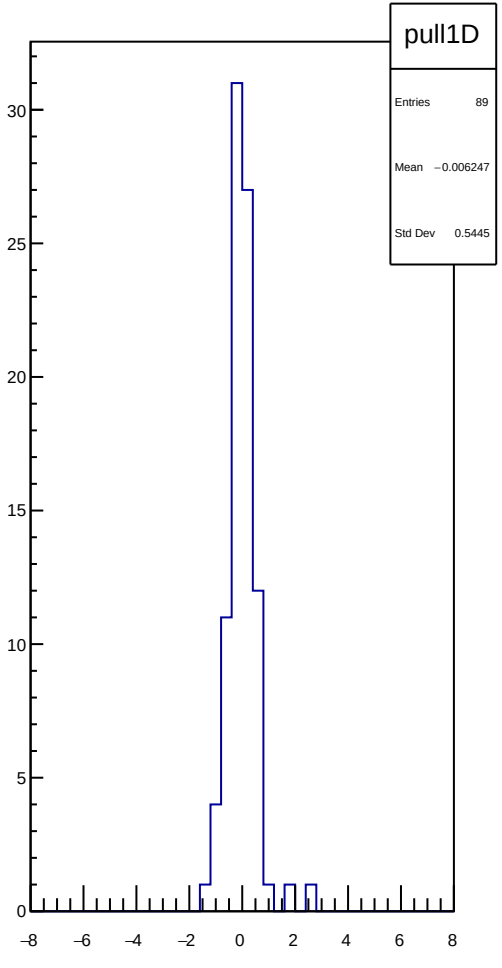

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.597 / 88
p0 8.707 ± 5.396
100
50
0
−50
−100
pull
Entries 89
Mean −403.8
Std Dev 450.6
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

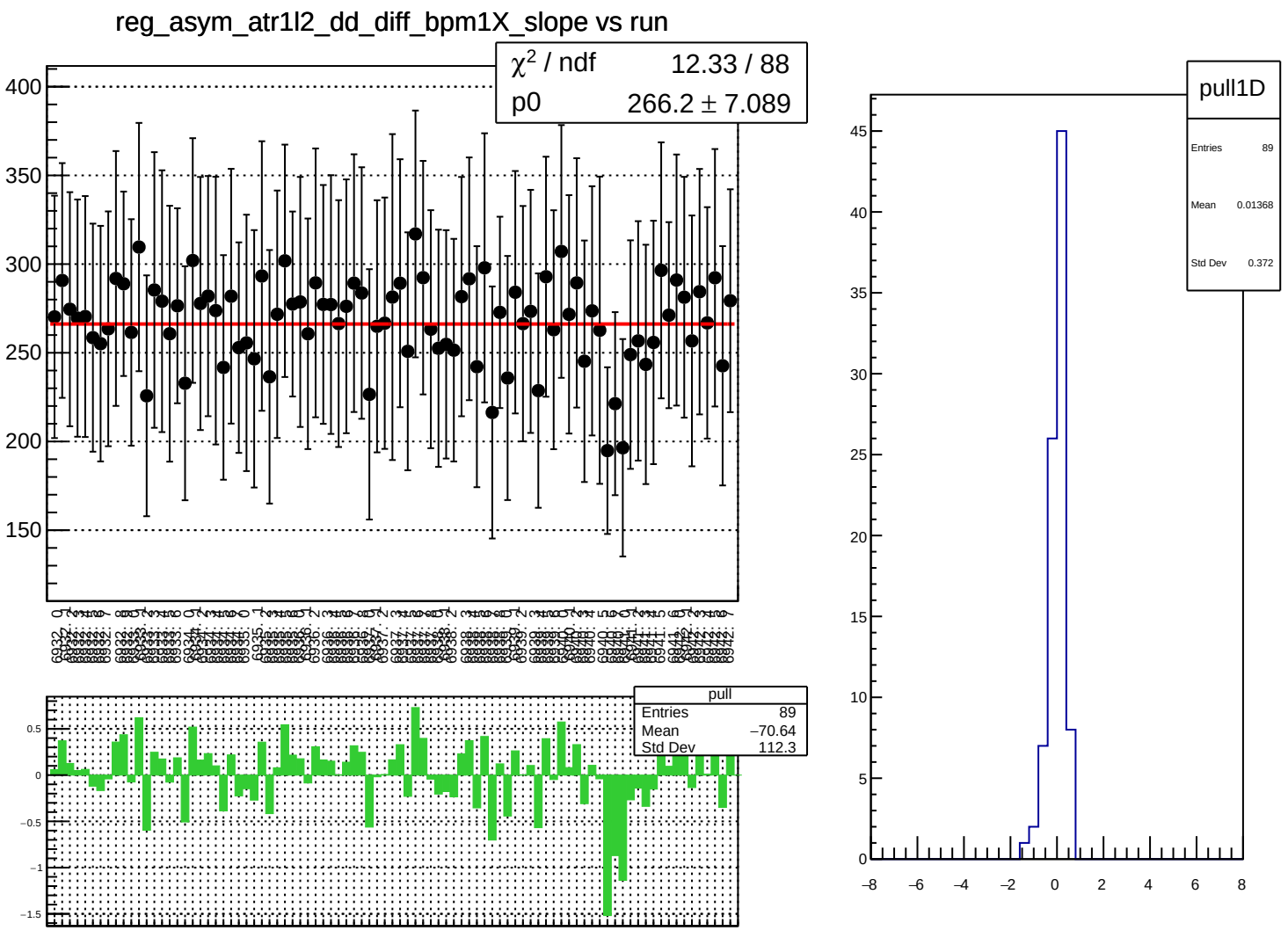

pull1D
Entries 89
Mean 0.001762
Std Dev 0.2508
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

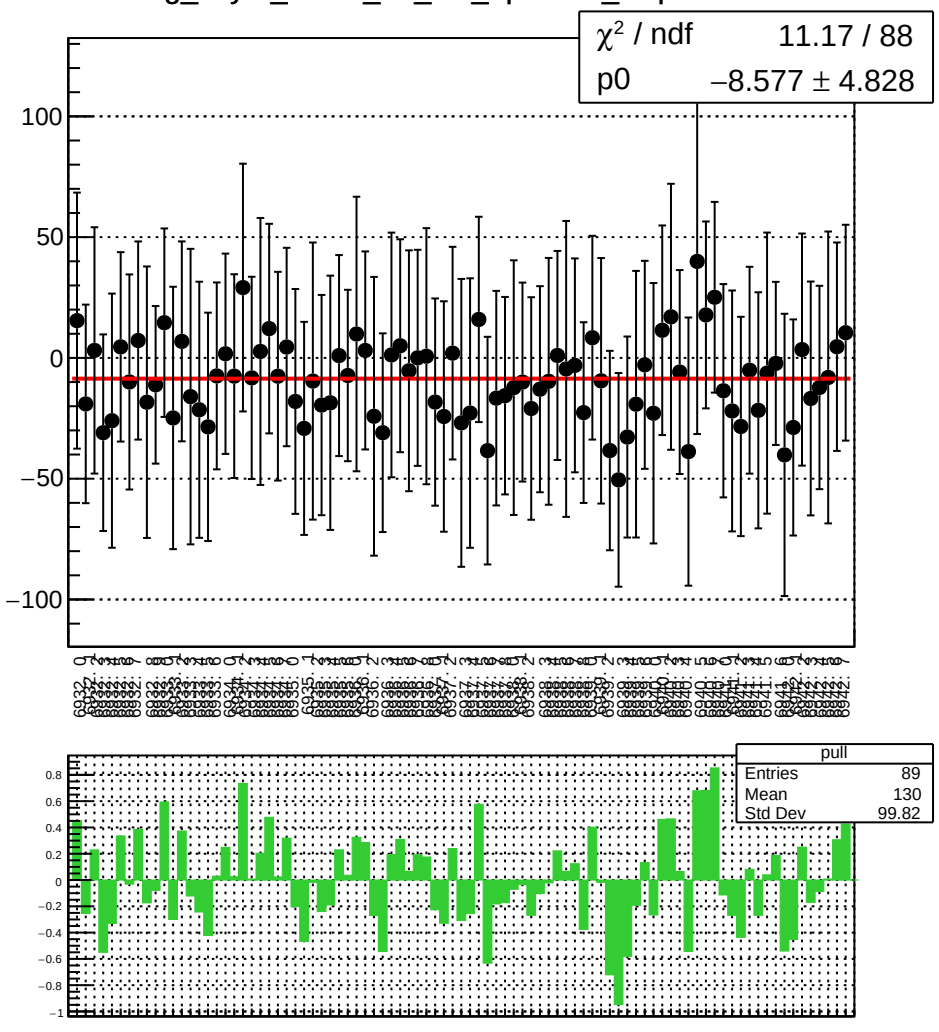

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.26 / 88
p0 224.1 ± 7.366
pull
Entries 89
Mean 25.22
Std Dev 58.13
pull1D
Entries 89
Mean 0.0128
Std Dev 0.4001

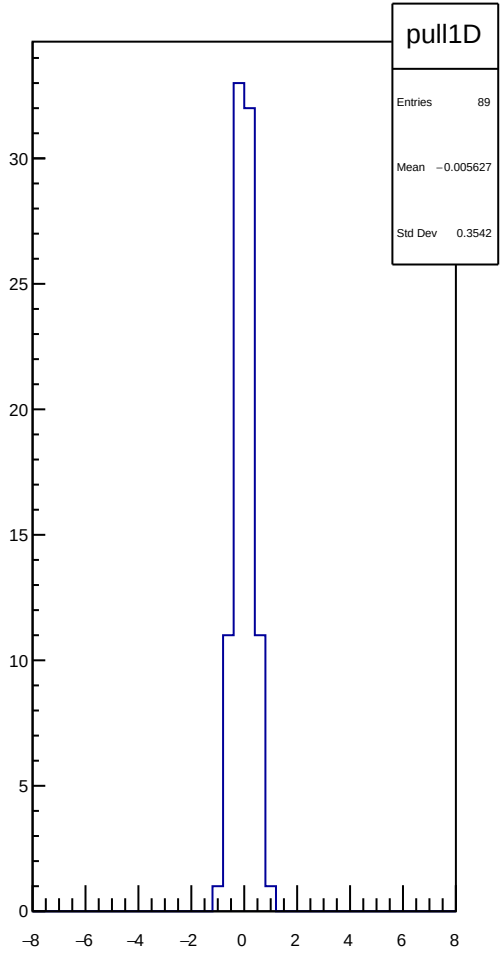

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.721 / 88
p0 63.3 ± 6.248
150
100
50
0
−50
pull
Entries 89
Mean −525.8
Std Dev 578.1
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 89
Mean −0.00115
Std Dev 0.2535
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

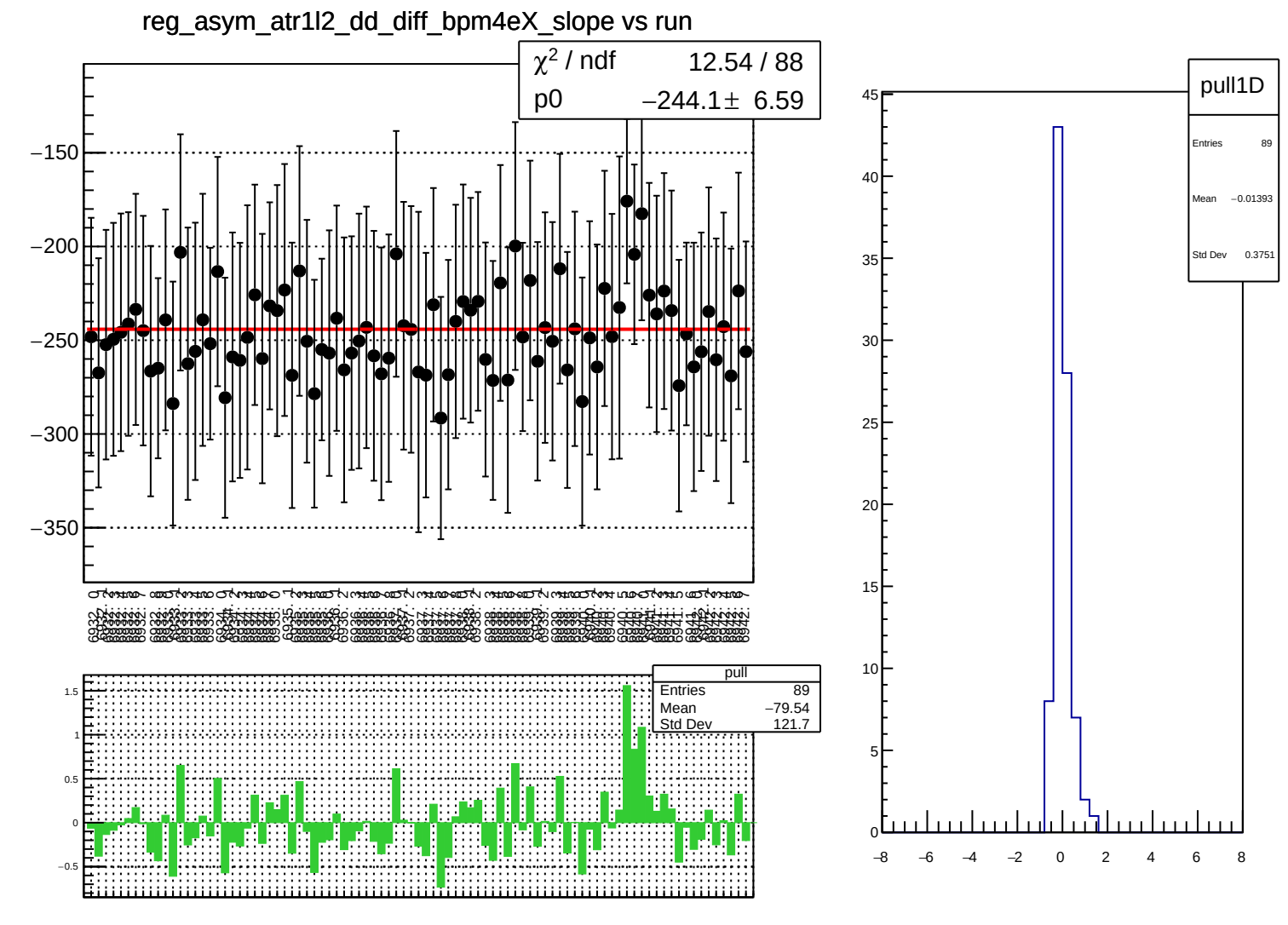

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 26.39 / 88
p0 −158.5 ± 0.2587
pull
Entries 89
Mean −663.9
Std Dev 699.8

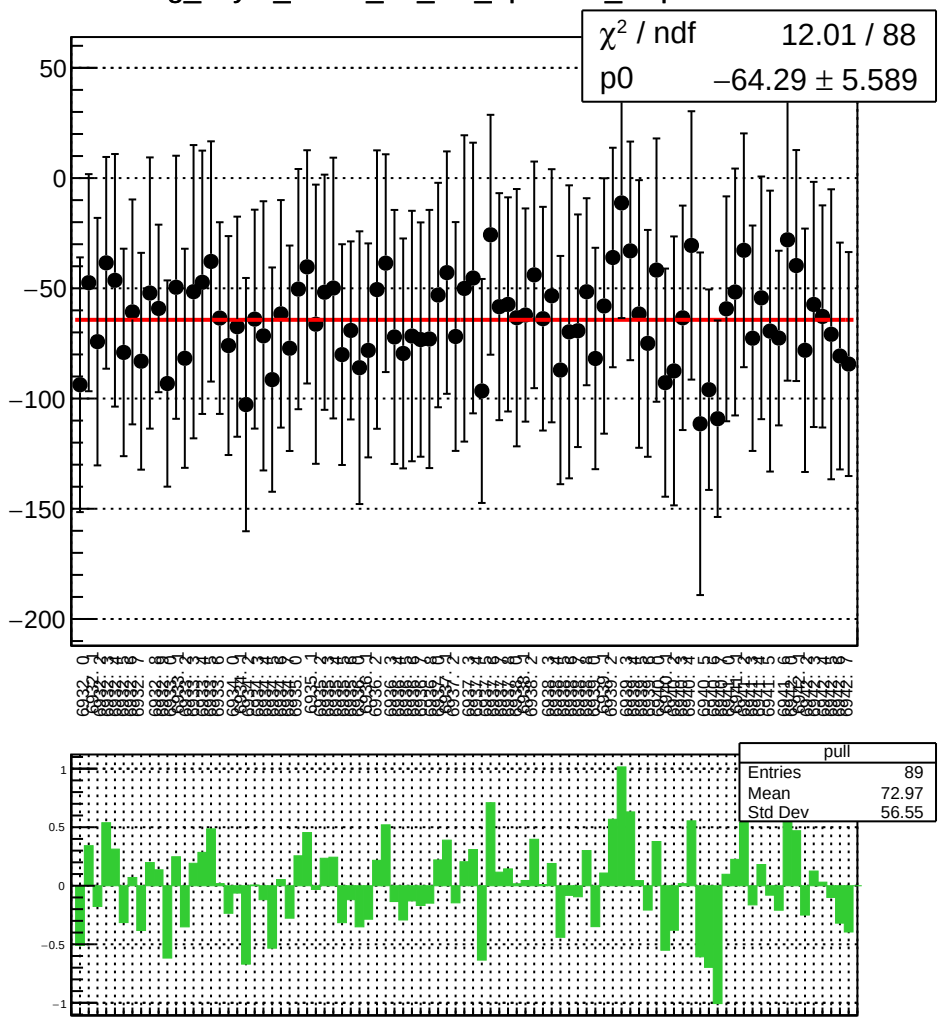

pull1D
Entries 89
Mean −0.006247
Std Dev 0.5445

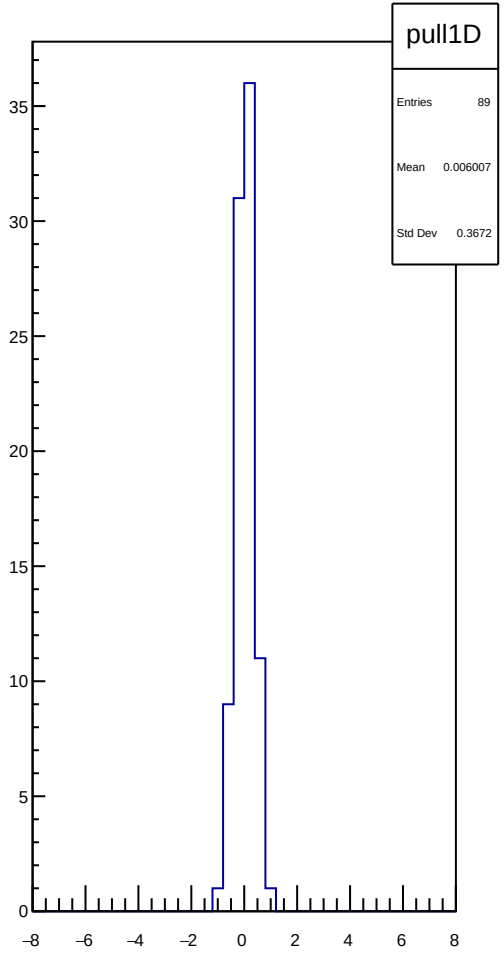

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 12.33 / 88
p0 266.2 ± 7.089
400
350
300
250
200
150
pull
Entries 89
Mean −70.64
Std Dev 112.3
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean 0.01368
Std Dev 0.372
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

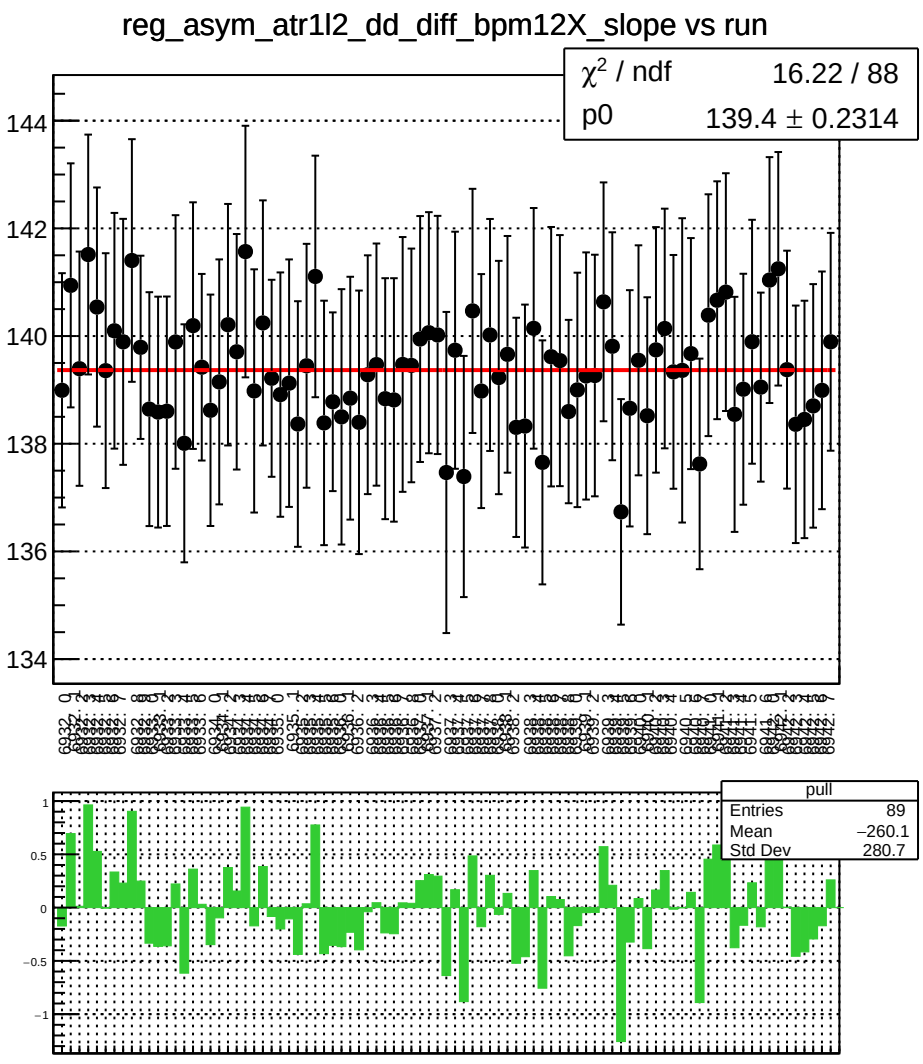

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.17 / 88
p0 −8.577 ± 4.828
pull
Entries 89
Mean 130
Std Dev 99.82

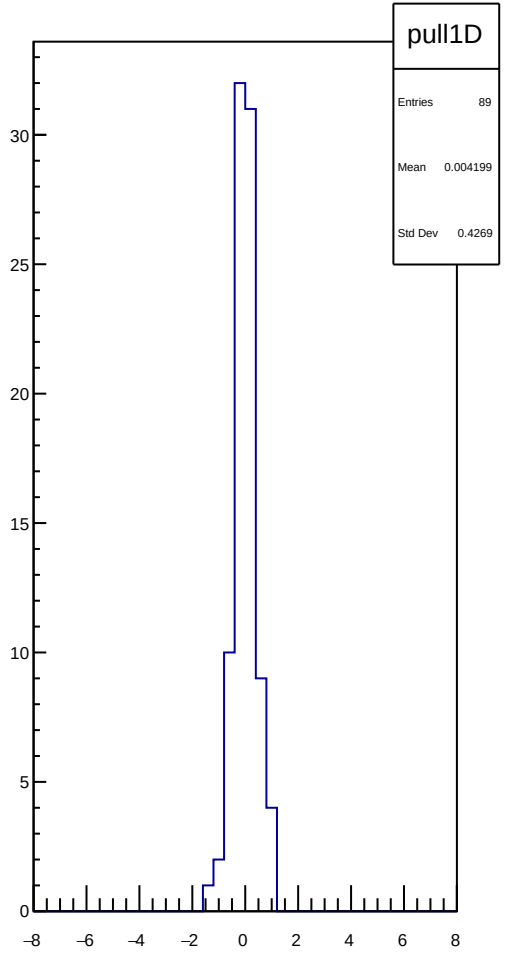

pull1D
Entries 89
Mean −0.005627
Std Dev 0.3542

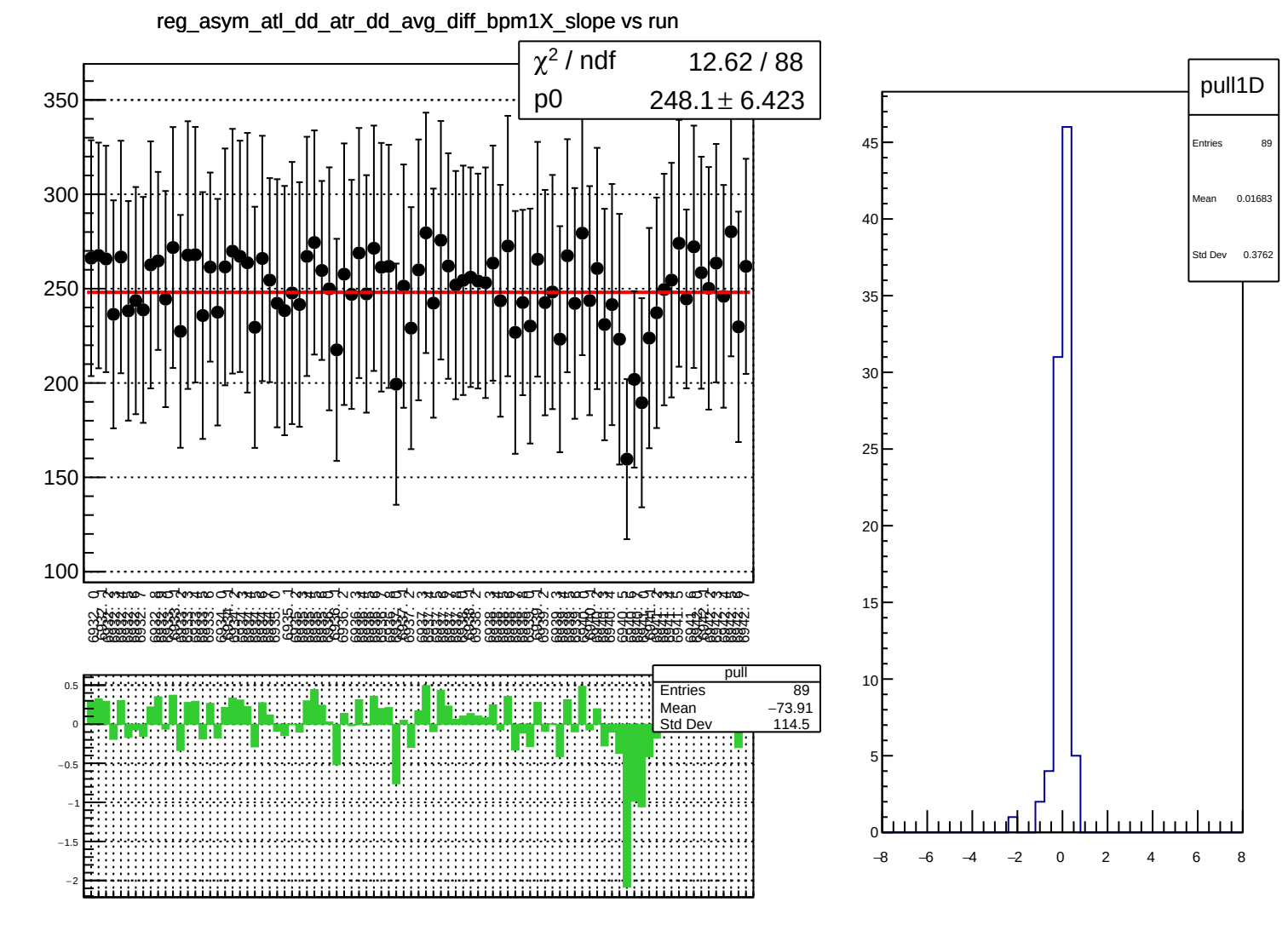

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.54 / 88
p0 −244.1± 6.59
−150
−200
−250
−300
−350
pull
Entries 89
Mean −79.54
Std Dev 121.7
1.5
1
0.5
0
−0.5
pull1D
Entries 89
Mean −0.01393
Std Dev 0.3751
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

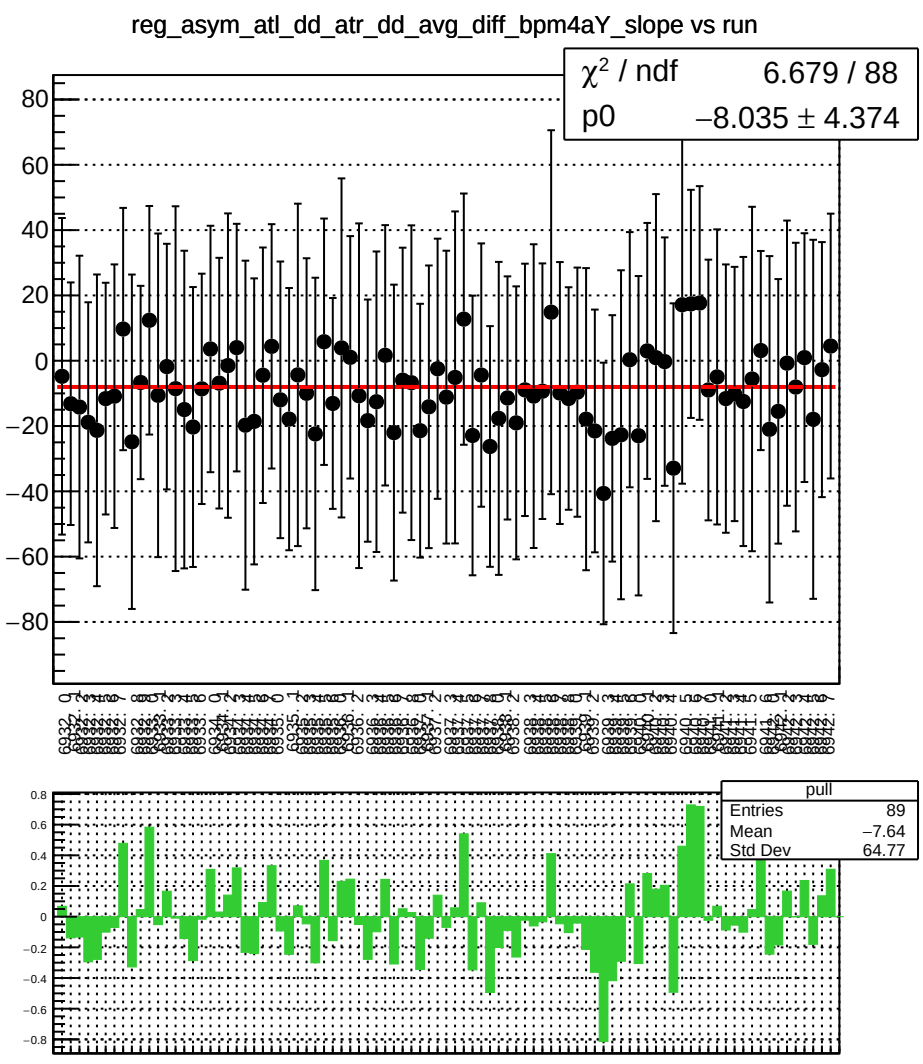

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 12.01 / 88
p0 −64.29 ± 5.589
pull
Entries 89
Mean 72.97
Std Dev 56.55

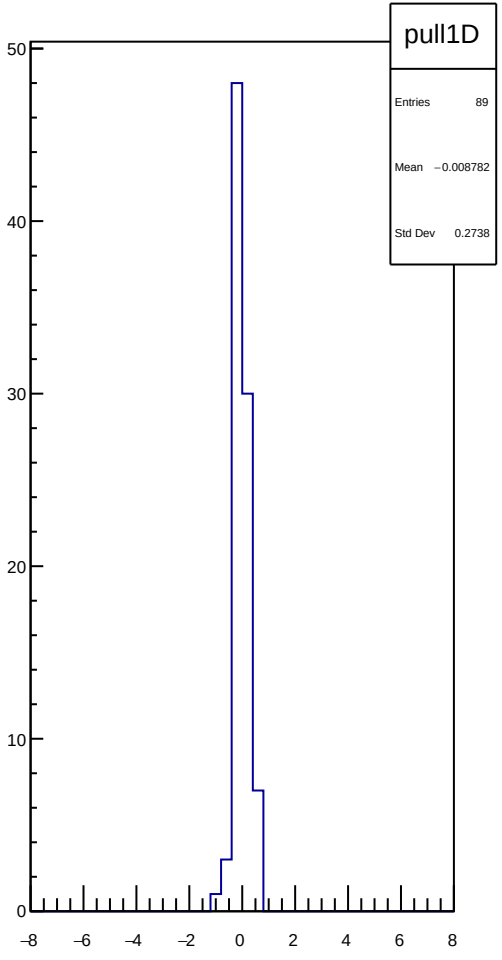

pull1D
Entries 89
Mean 0.006007
Std Dev 0.3672

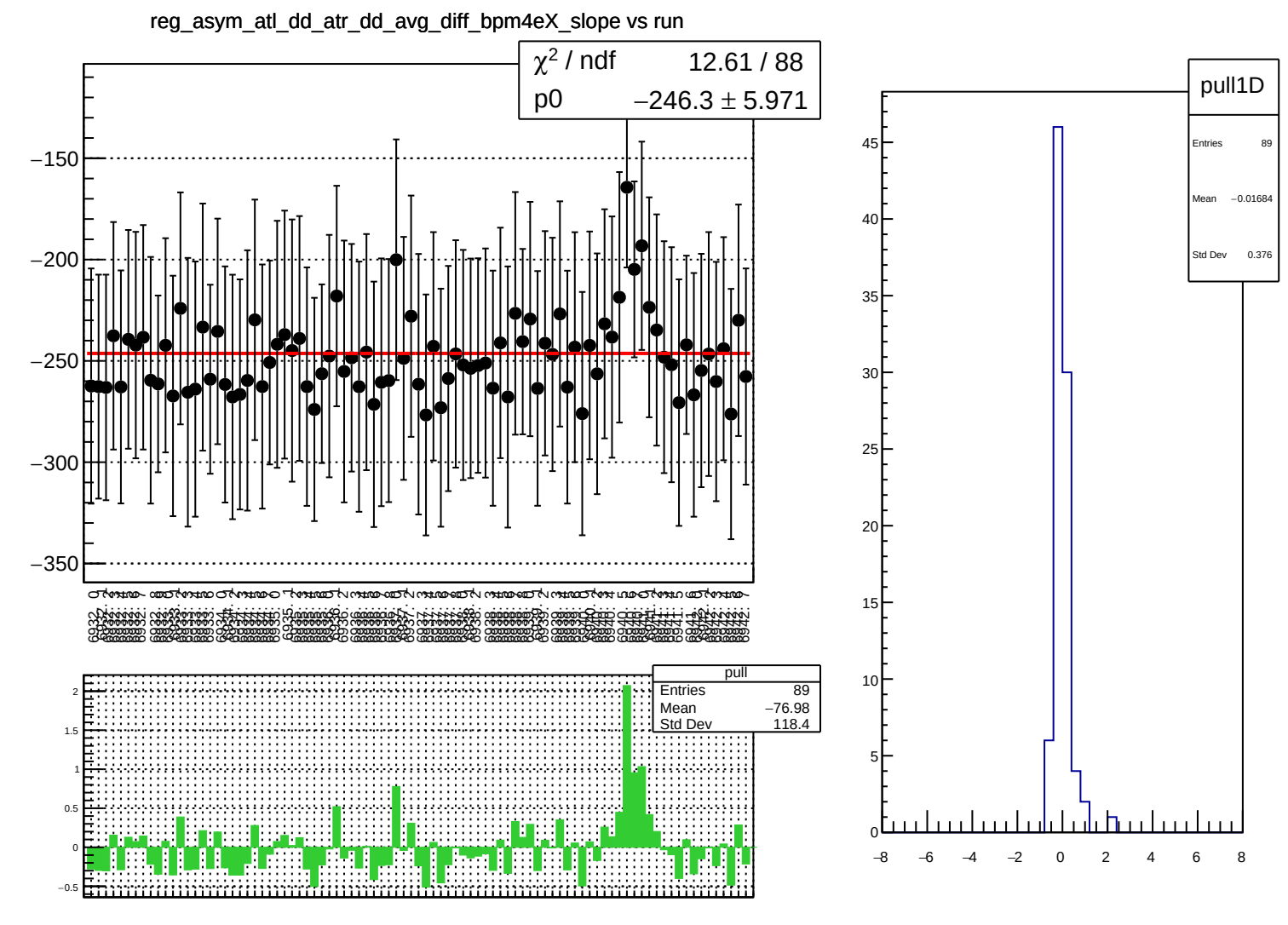

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 16.22 / 88
p0 139.4 ± 0.2314
144
142
140
138
136
134
pull
Entries 89
Mean −260.1
Std Dev 280.7
1
0.5
0
−0.5
−1

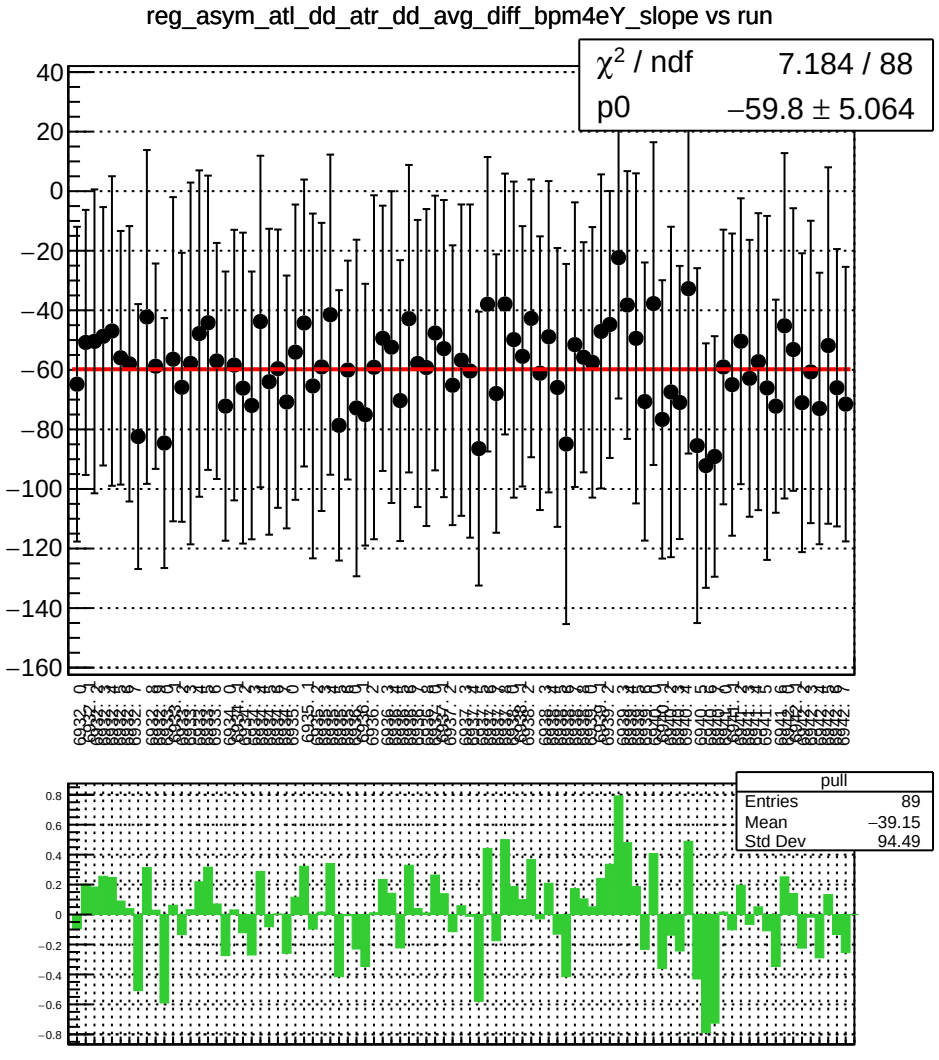

pull1D
Entries 89
Mean 0.004199
Std Dev 0.4269
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

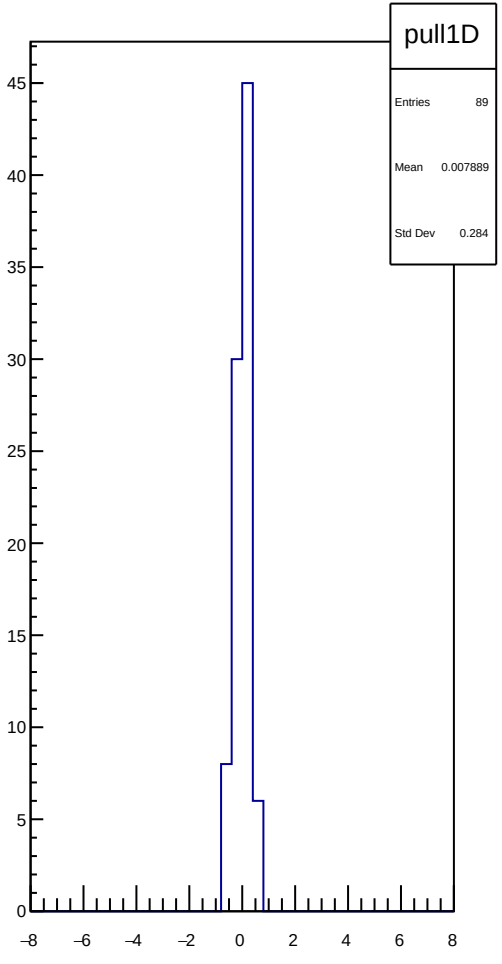

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 12.62 / 88
p0 248.1 ± 6.423
pull
Entries 89
Mean −73.91
Std Dev 114.5
pull1D
Entries 89
Mean 0.01683
Std Dev 0.3762

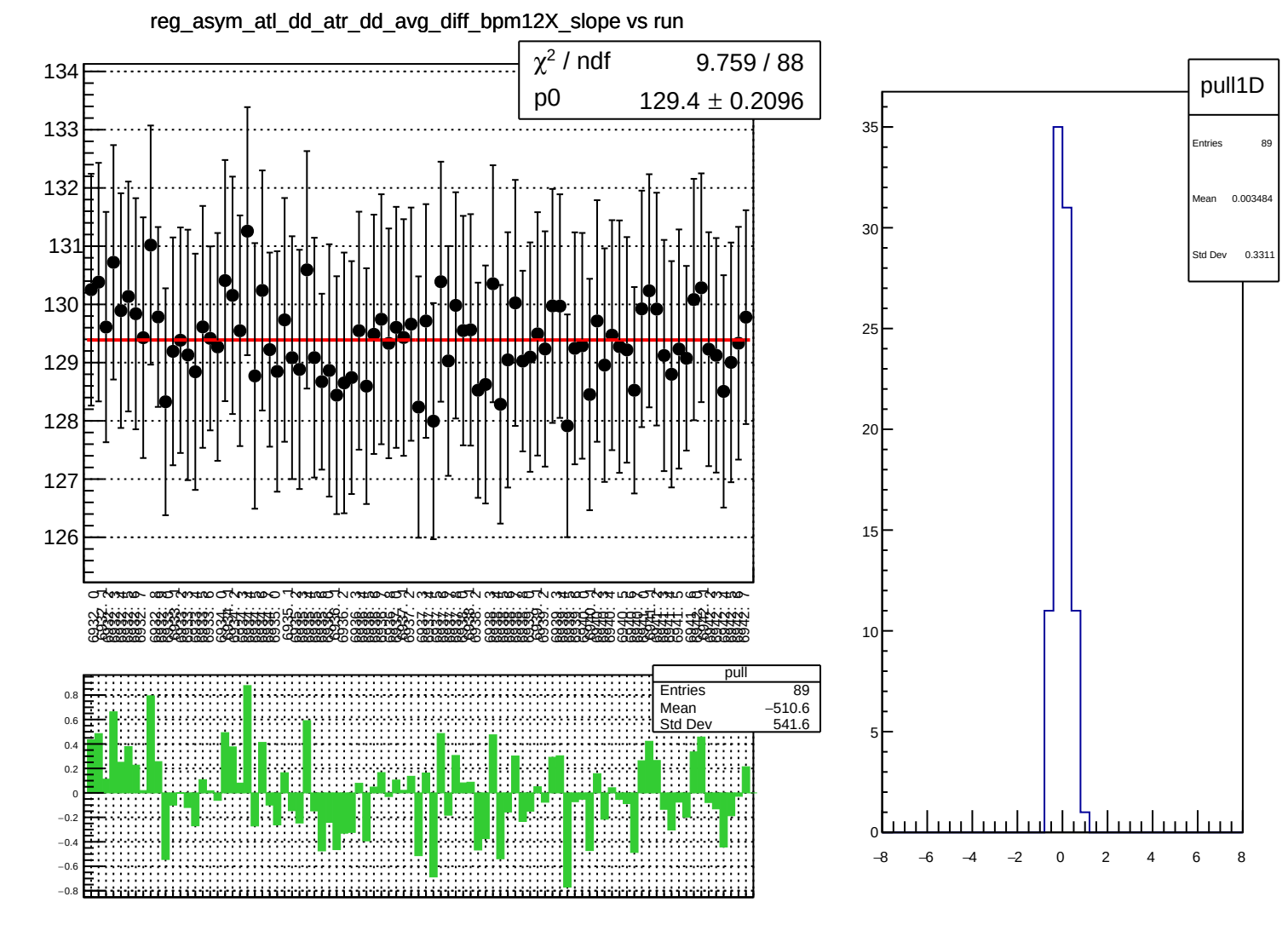

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.679 / 88
p0 −8.035 ± 4.374
pull
Entries 89
Mean −7.64
Std Dev 64.77

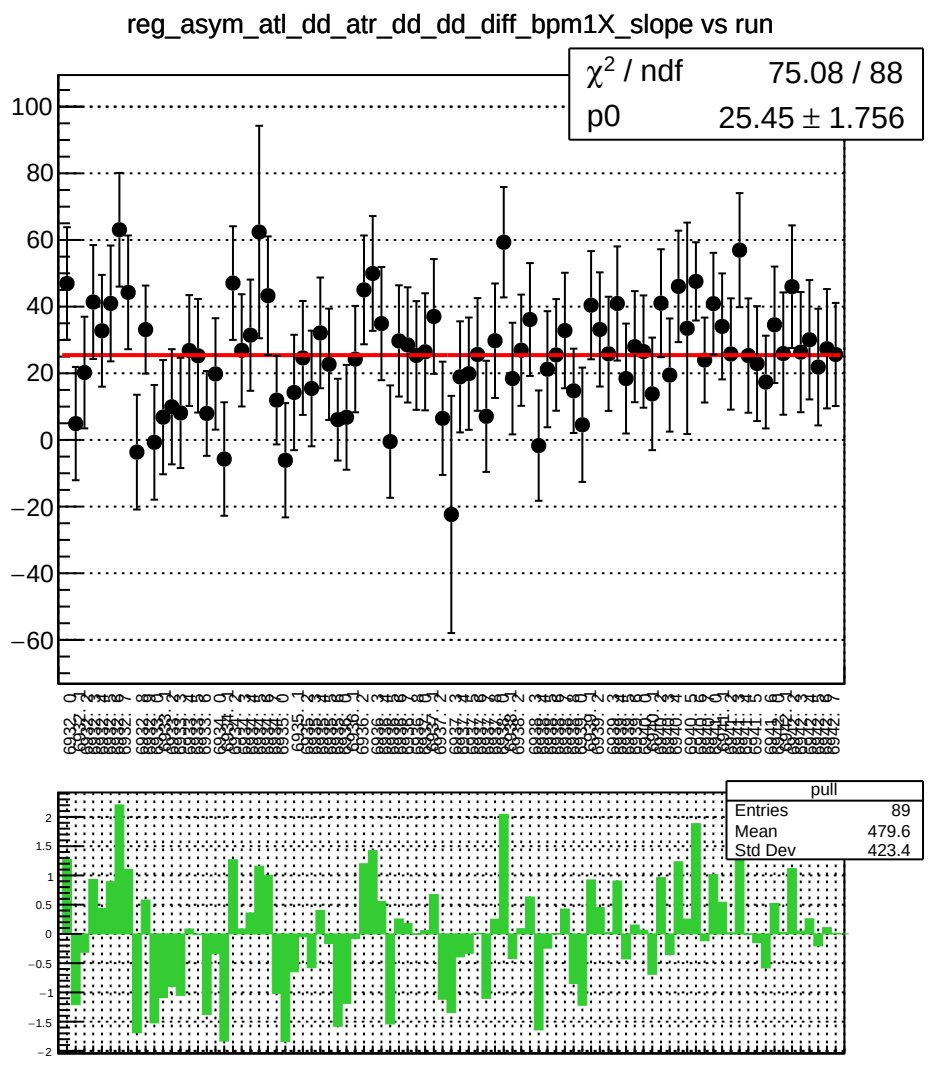

pull1D
Entries 89
Mean −0.008782
Std Dev 0.2738

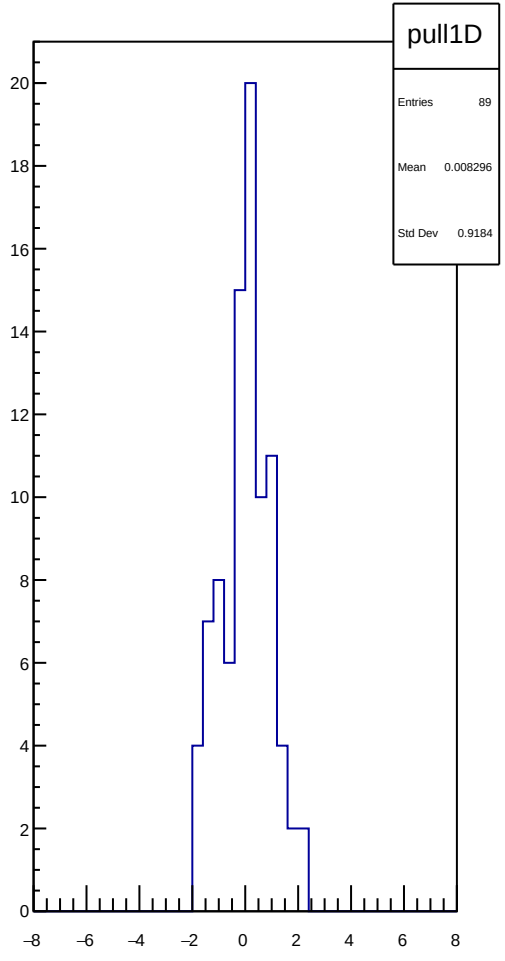

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 12.61 / 88
p0 −246.3 ± 5.971
−150
−200
−250
−300
−350
pull
Entries 89
Mean −76.98
Std Dev 118.4
2
1.5
1
0.5
0
−0.5
pull1D
Entries 89
Mean −0.01684
Std Dev 0.376
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

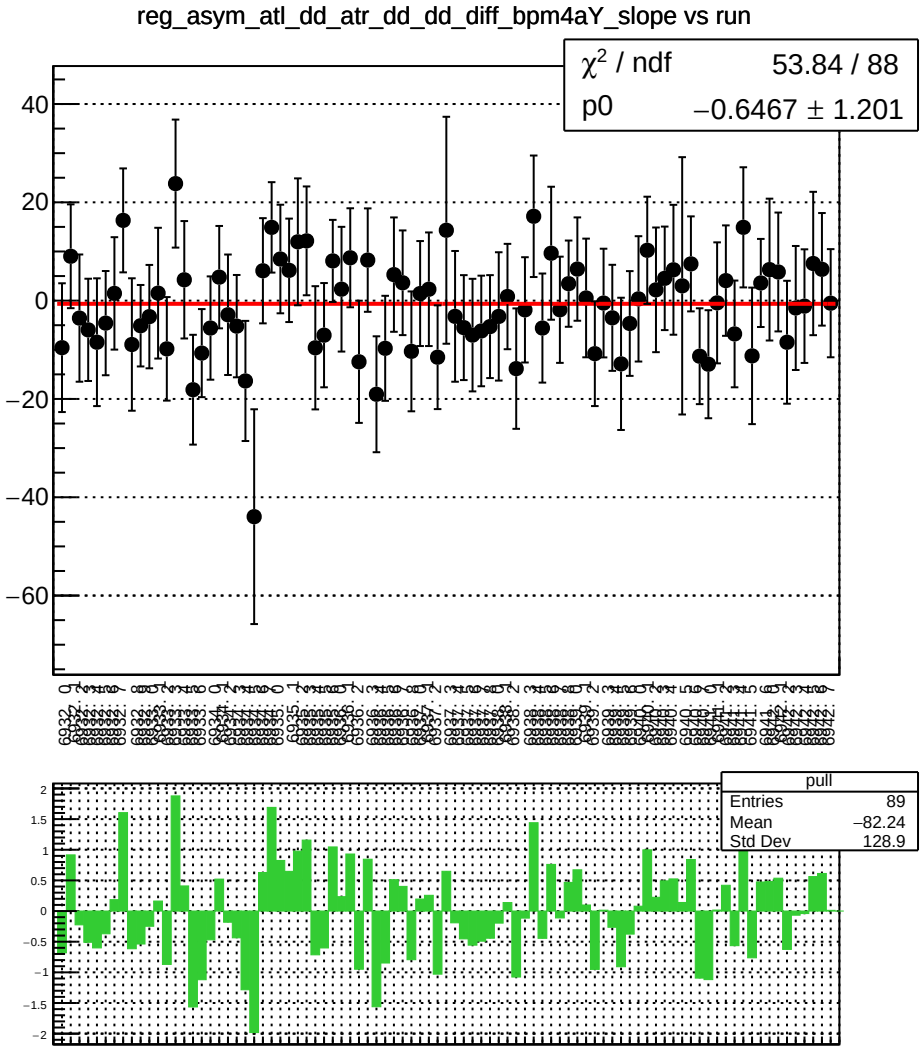

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.184 / 88
p0 −59.8 ± 5.064
pull
Entries 89
Mean −39.15
Std Dev 94.49

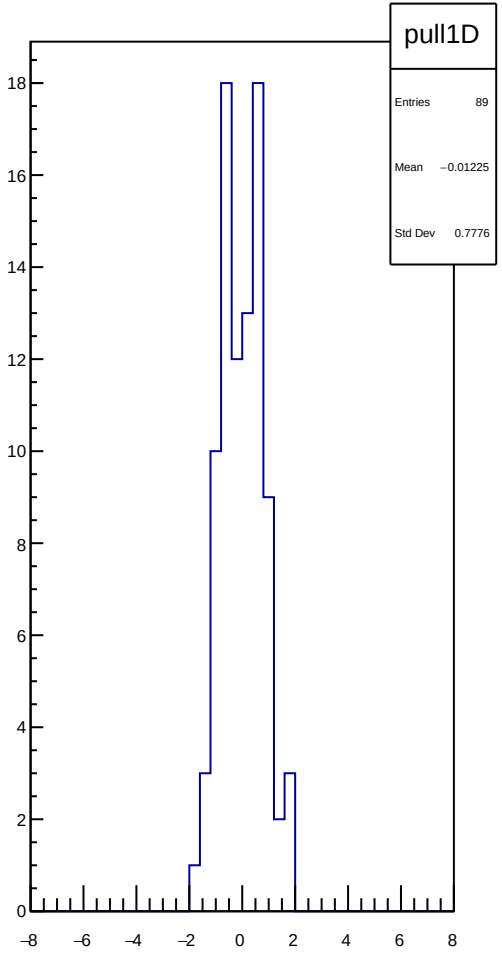

pull1D
Entries 89
Mean 0.007889
Std Dev 0.284

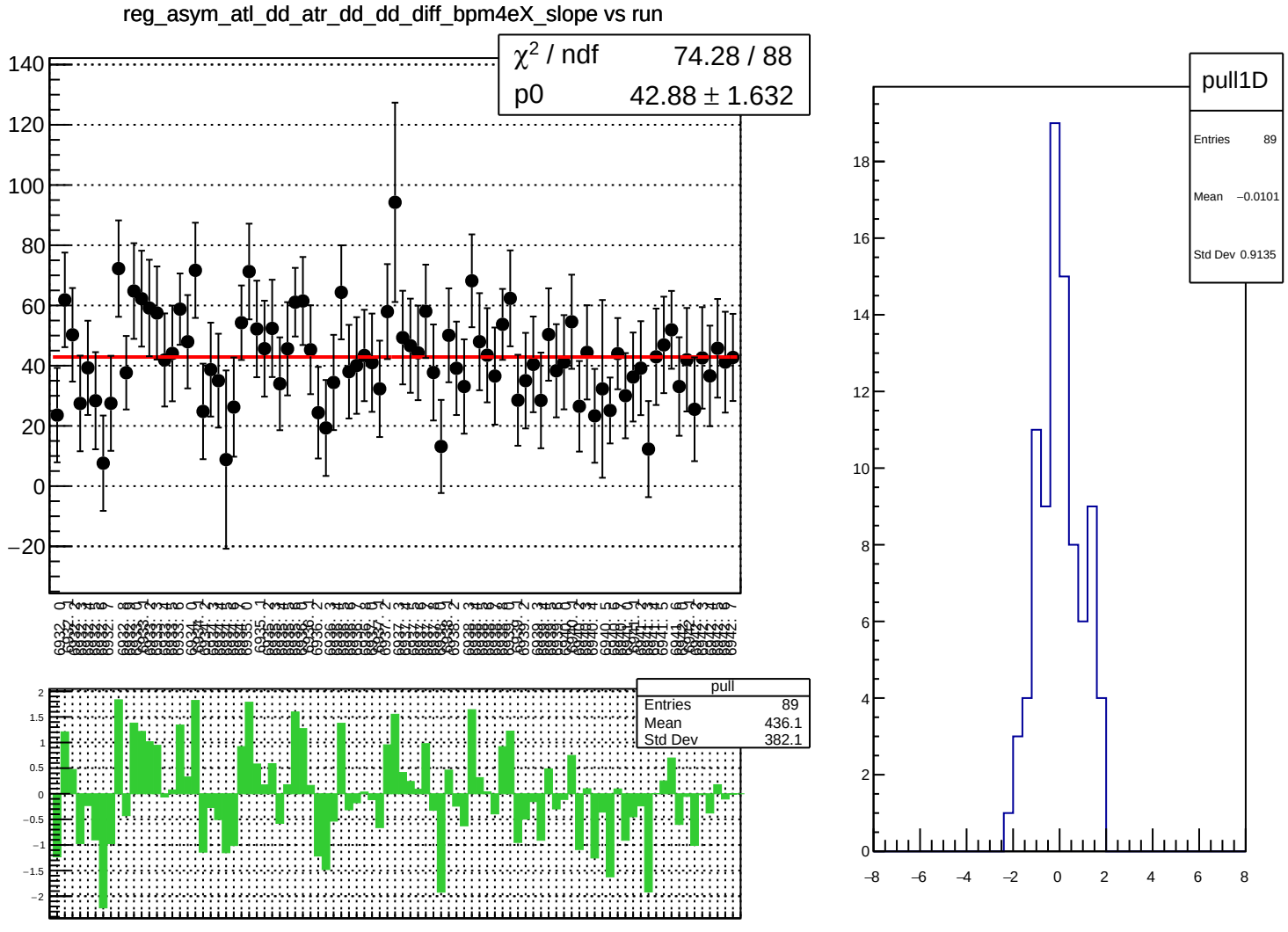

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 9.759 / 88
p0 129.4 ± 0.2096
pull
Entries 89
Mean −510.6
Std Dev 541.6
pull1D
Entries 89
Mean 0.003484
Std Dev 0.3311

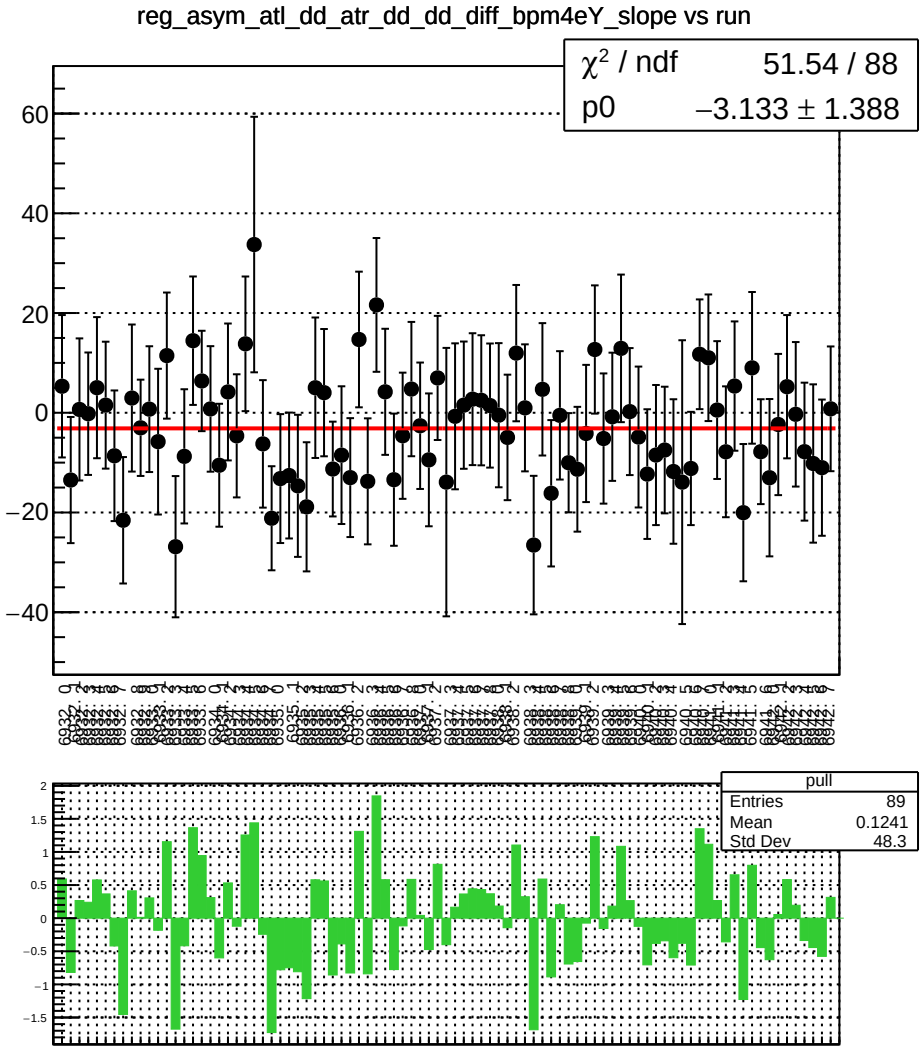

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ^2 / ndf 75.08 / 88
p0 25.45 ± 1.756
pull
Entries 89
Mean 479.6
Std Dev 423.4

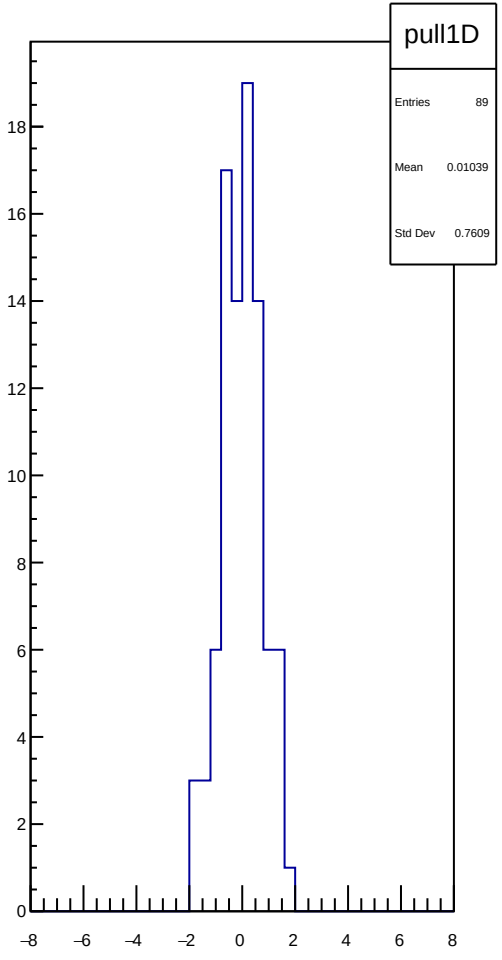

pull1D
Entries 89
Mean 0.008296
Std Dev 0.9184

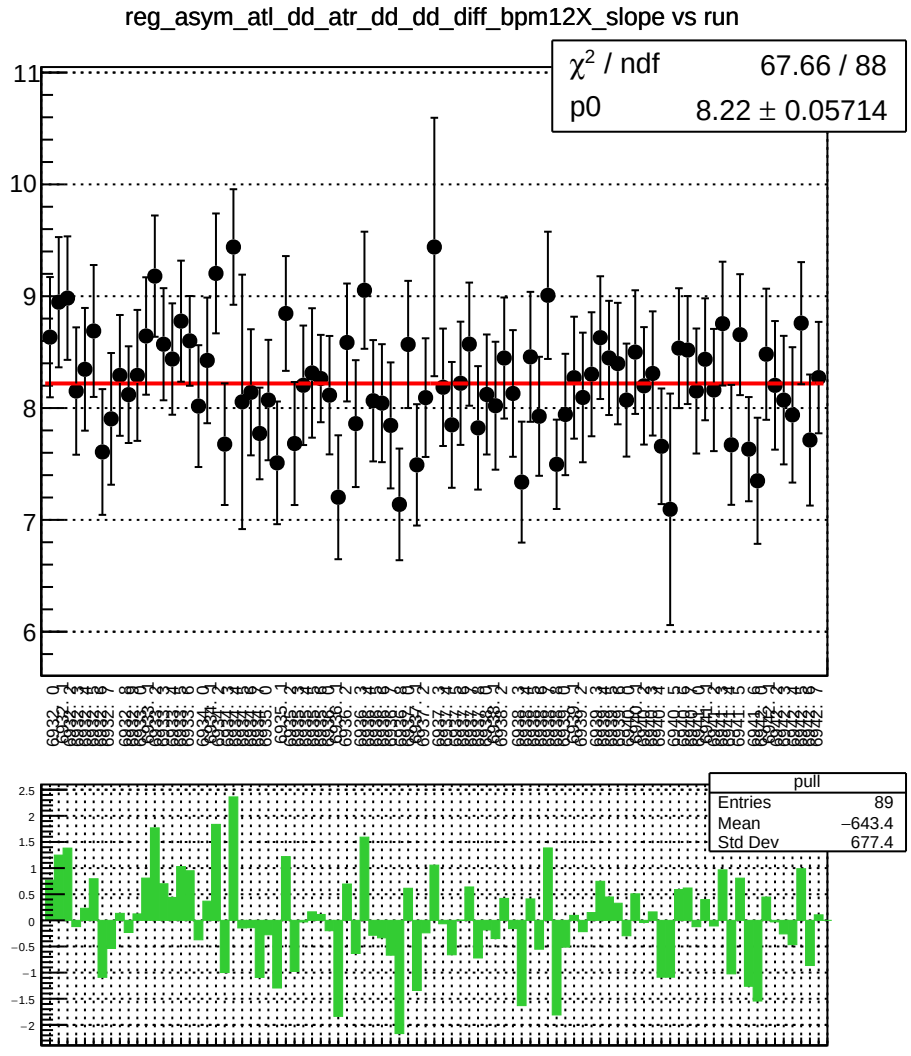

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 53.84 / 88
p0 −0.6467 ± 1.201
pull
Entries 89
Mean −82.24
Std Dev 128.9

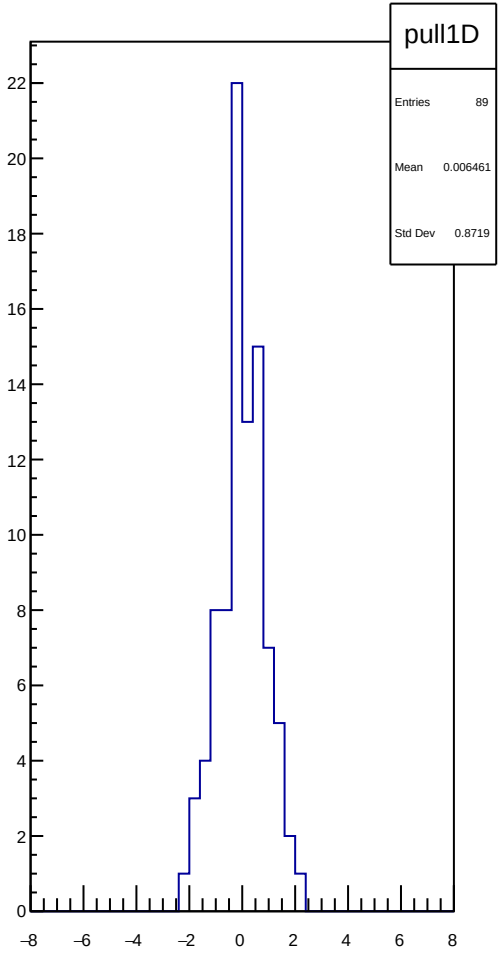

pull1D
Entries 89
Mean −0.01225
Std Dev 0.7776

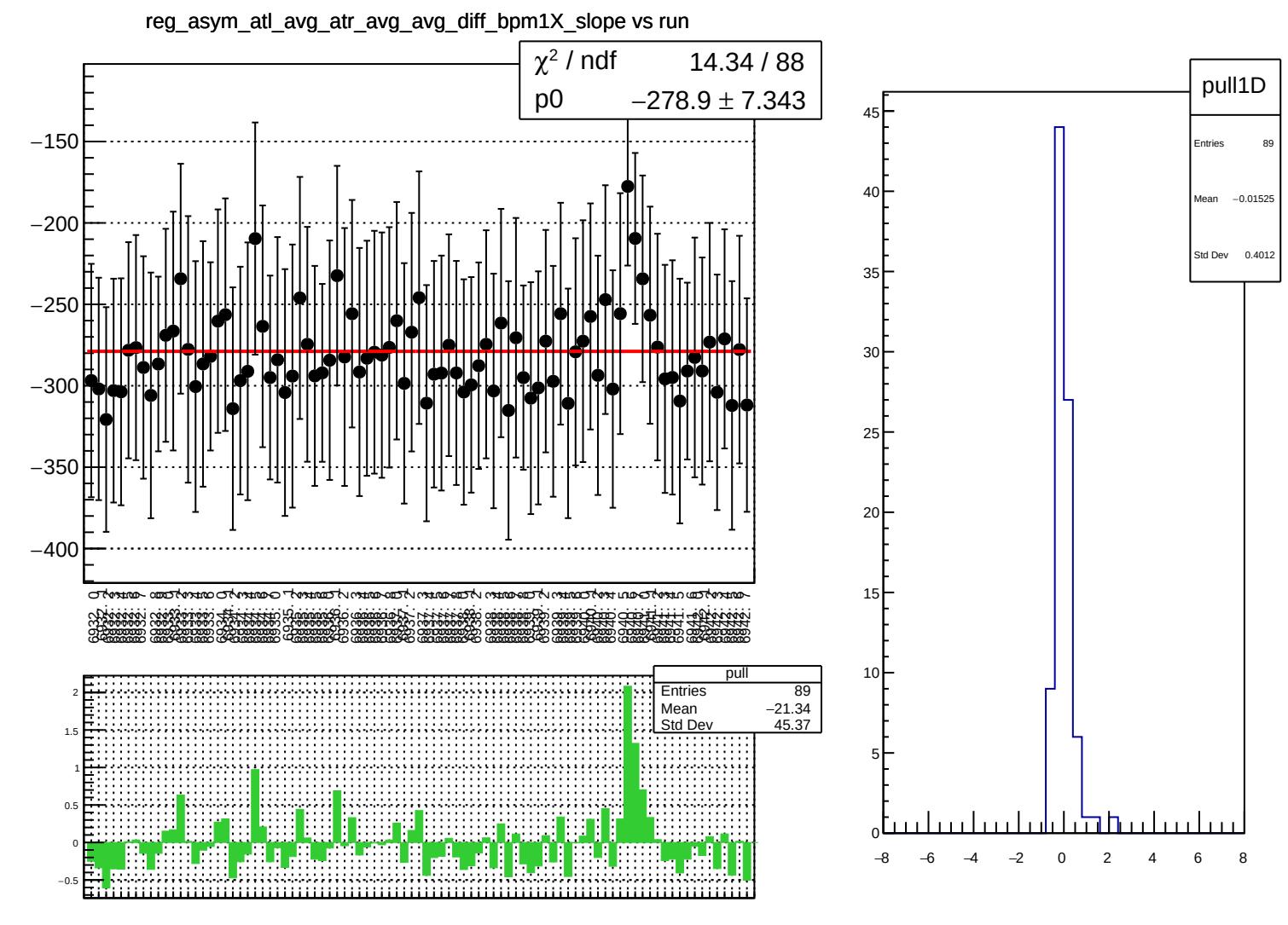

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 74.28 / 88
p0 42.88 ± 1.632
pull
Entries 89
Mean 436.1
Std Dev 382.1
pull1D
Entries 89
Mean −0.0101
Std Dev 0.9135

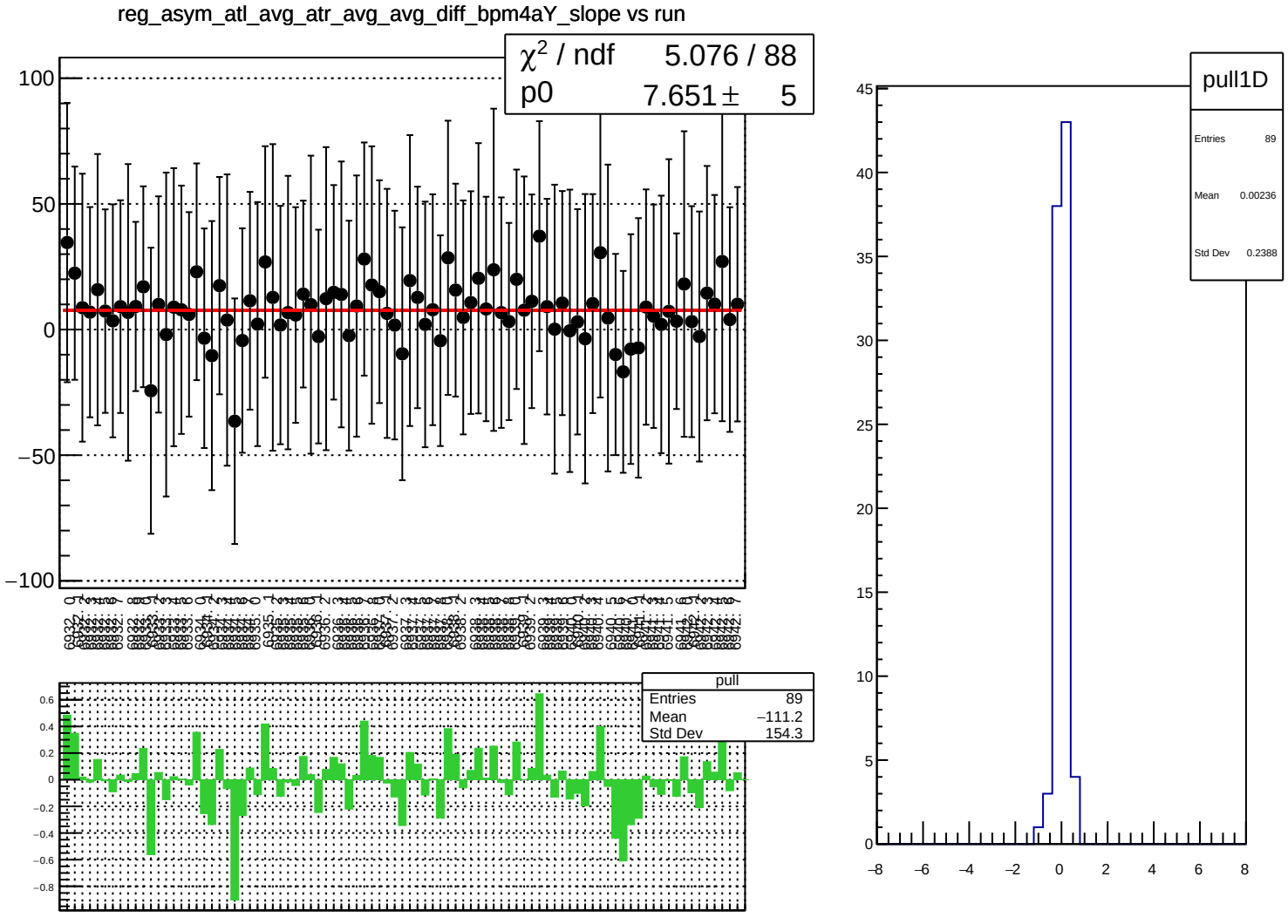

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 51.54 / 88
p0 −3.133 ± 1.388
pull
Entries 89
Mean 0.1241
Std Dev 48.3

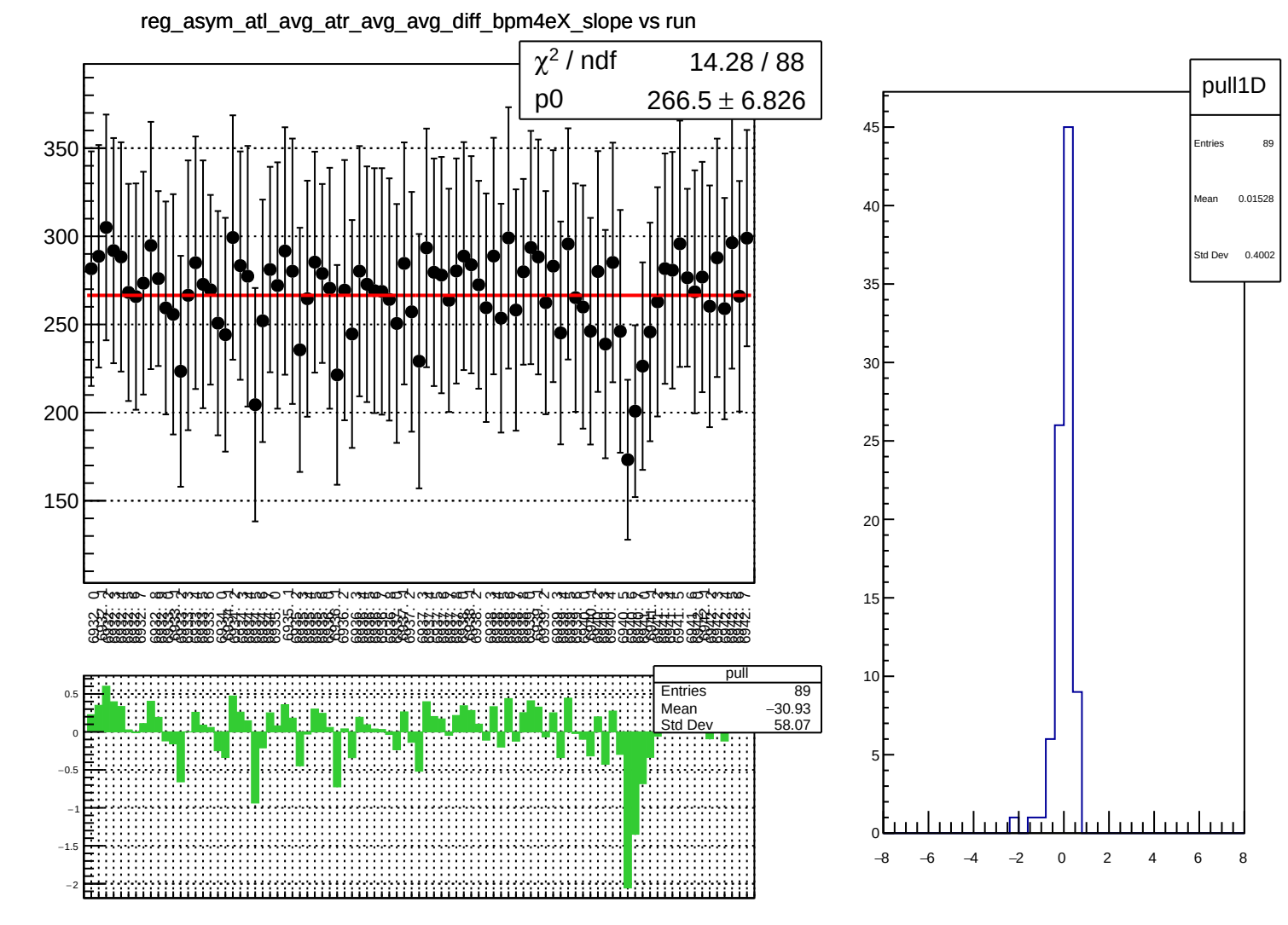

pull1D
Entries 89
Mean 0.01039
Std Dev 0.7609

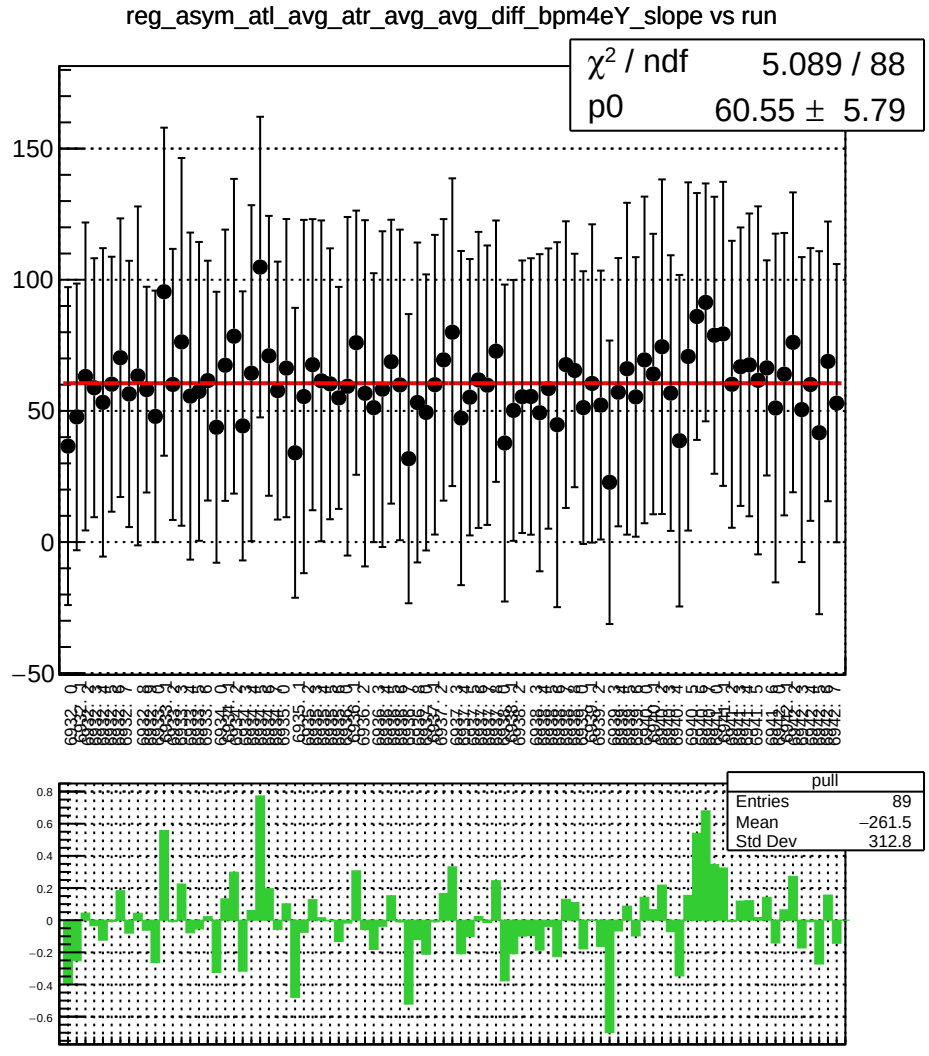

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 67.66 / 88
p0 8.22 ± 0.05714
pull
Entries 89
Mean −643.4
Std Dev 677.4

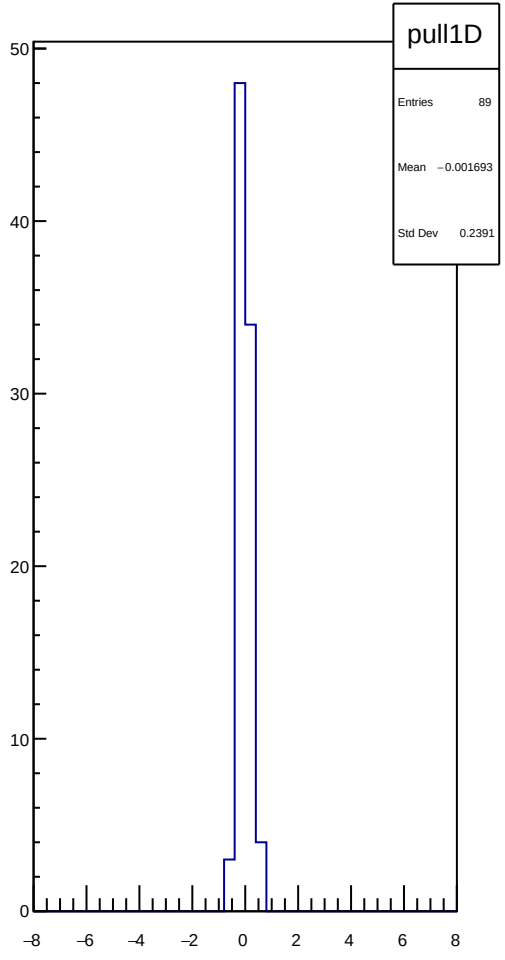

pull1D
Entries 89
Mean 0.006461
Std Dev 0.8719

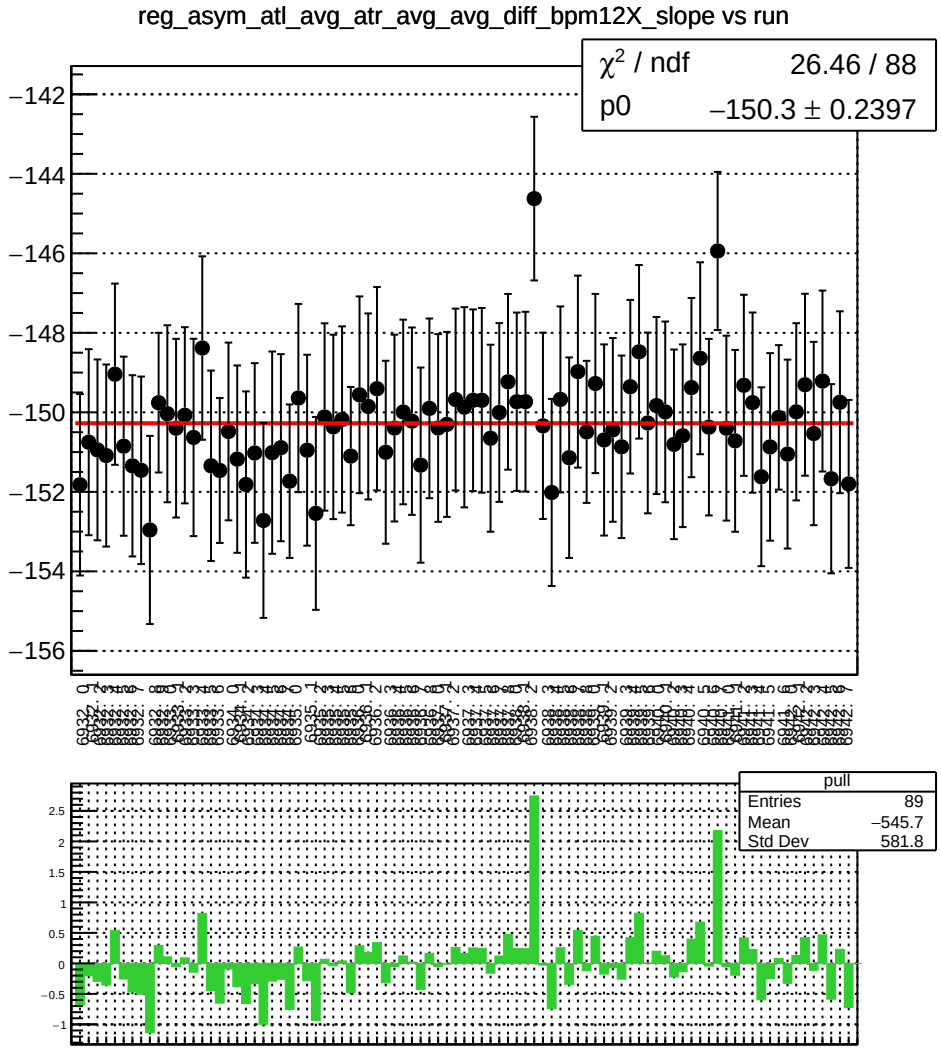

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 14.34 / 88
p0 −278.9 ± 7.343
−150
−200
−250
−300
−350
−400
pull
Entries 89
Mean −21.34
Std Dev 45.37
2
1.5
1
0.5
0
−0.5
pull1D
Entries 89
Mean −0.01525
Std Dev 0.4012
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

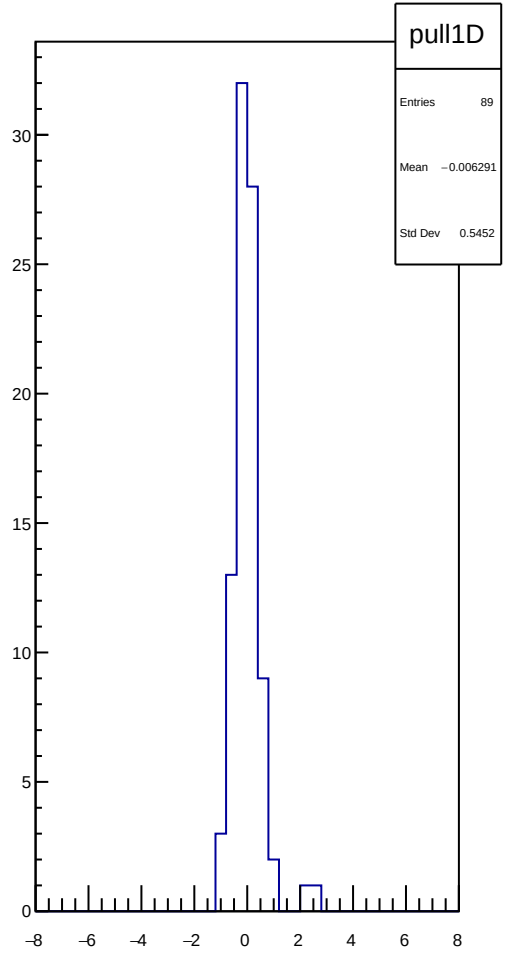

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.076 / 88
p0 7.651 ± 5
100
50
0
−50
−100
pull
Entries 89
Mean −111.2
Std Dev 154.3
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 89
Mean 0.00236
Std Dev 0.2388
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

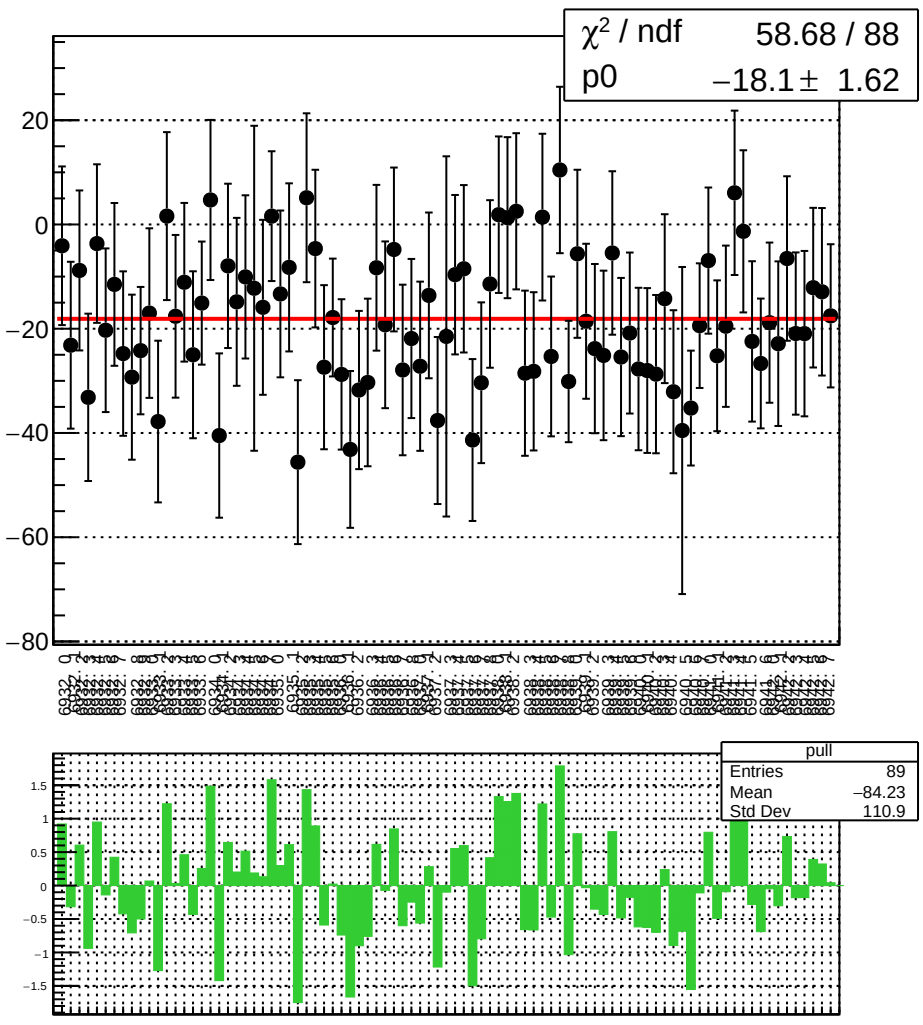

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.28 / 88
p0 266.5 ± 6.826
350
300
250
200
150
pull
Entries 89
Mean −30.93
Std Dev 58.07
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 89
Mean 0.01528
Std Dev 0.4002
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

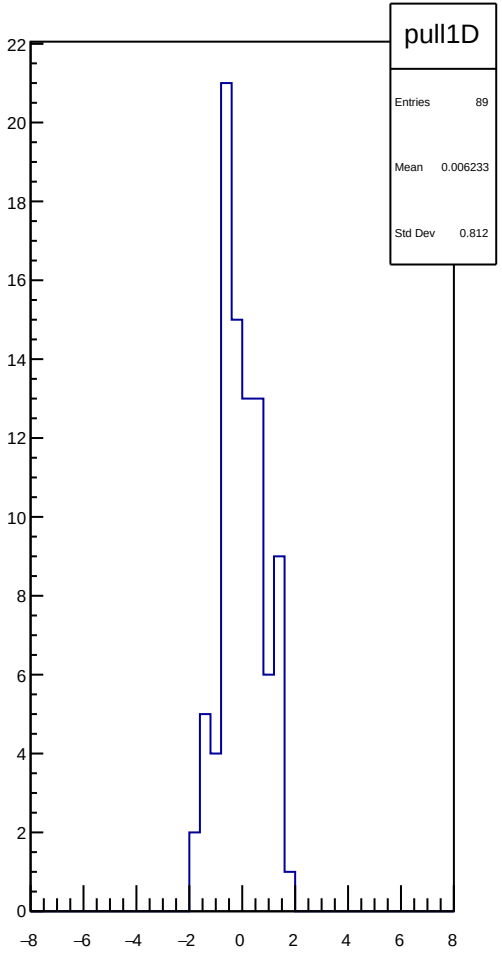

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.089 / 88
p0 60.55 ± 5.79
150
100
50
0
−50
pull
Entries 89
Mean −261.5
Std Dev 312.8
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

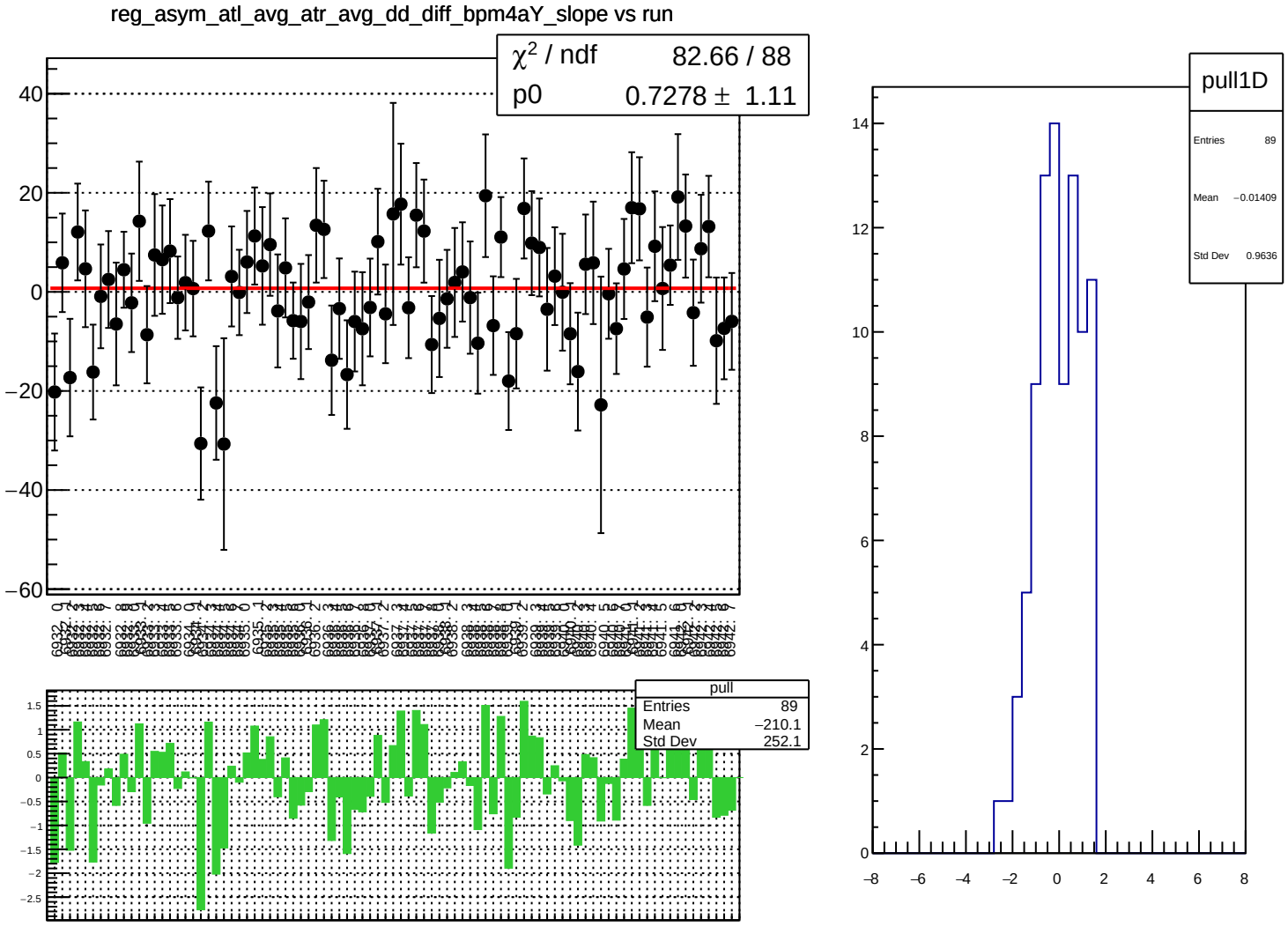

pull1D
Entries 89
Mean −0.001693
Std Dev 0.2391
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

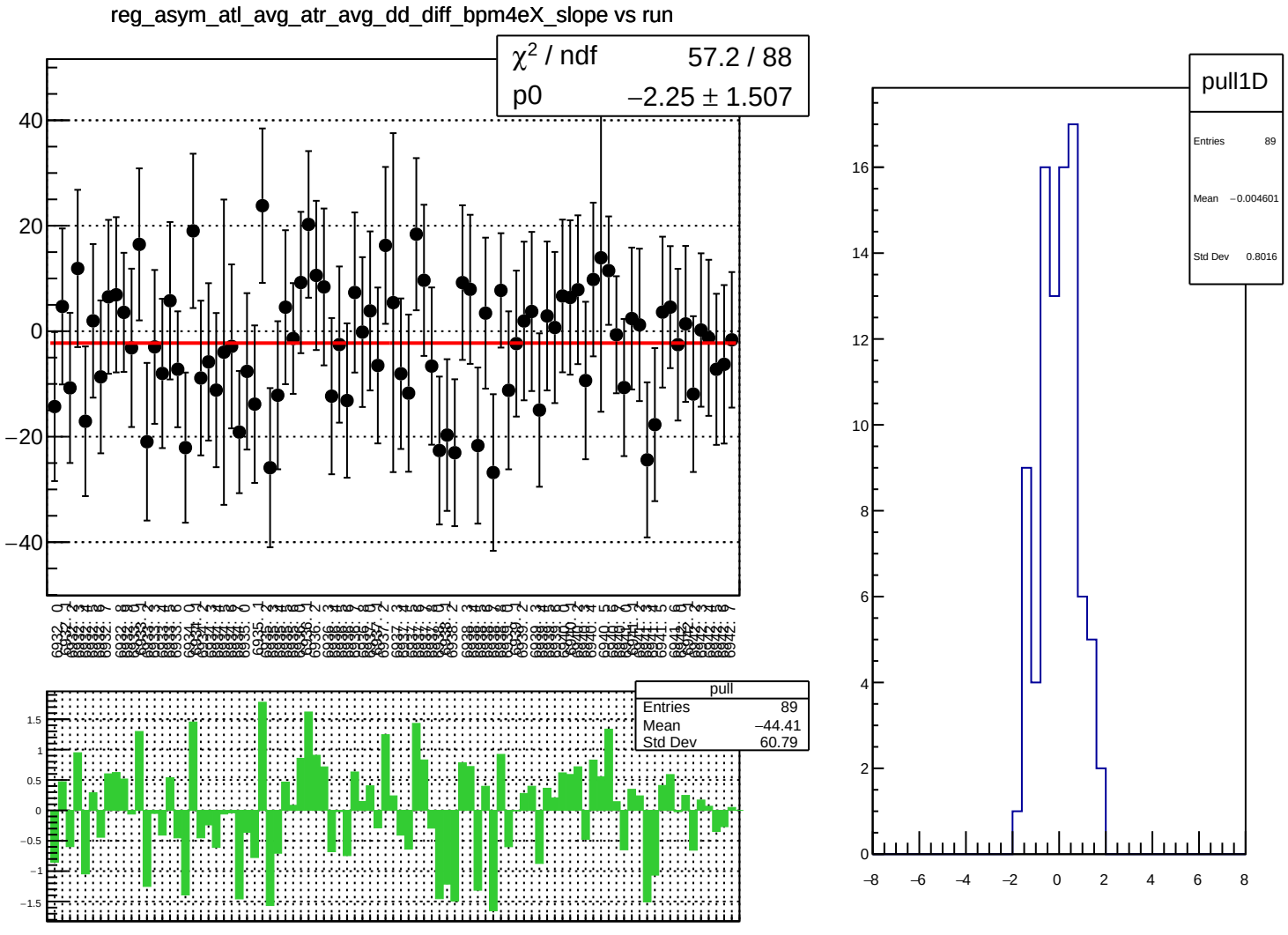

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 26.46 / 88
p0 −150.3 ± 0.2397
pull
Entries 89
Mean −545.7
Std Dev 581.8

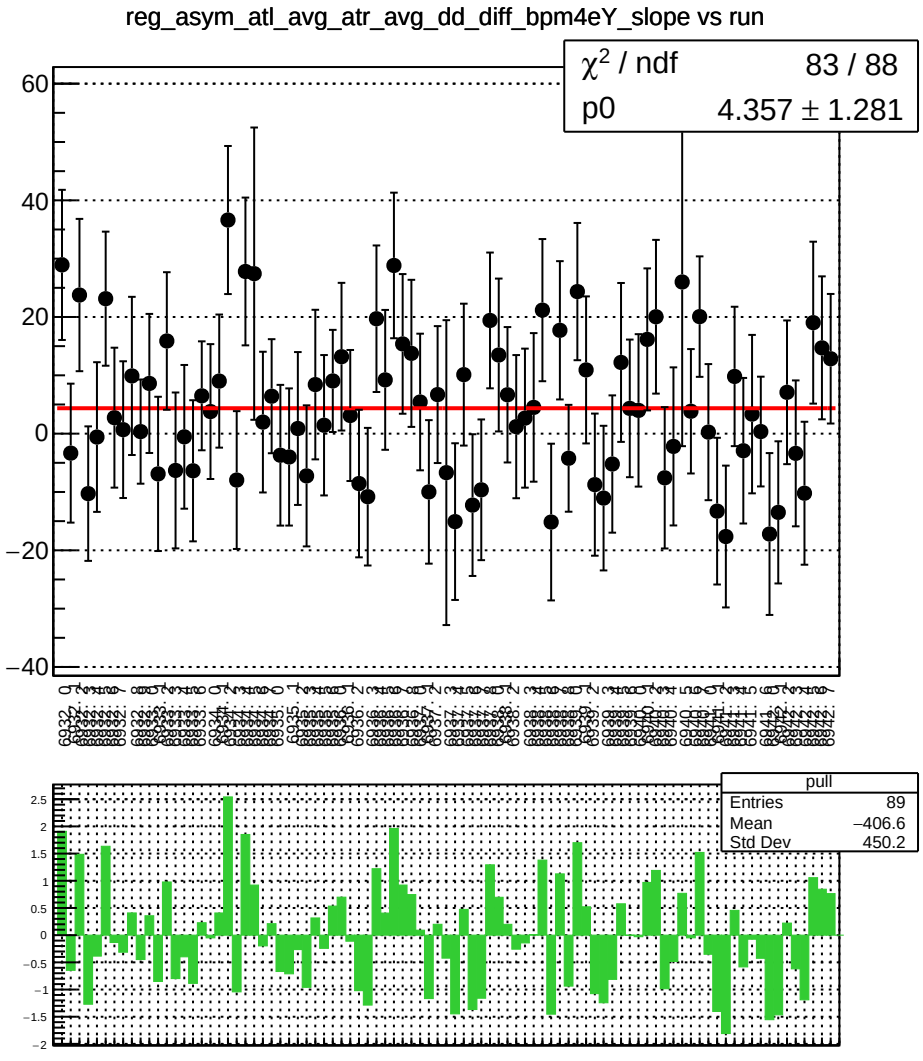

pull1D
Entries 89
Mean −0.006291
Std Dev 0.5452

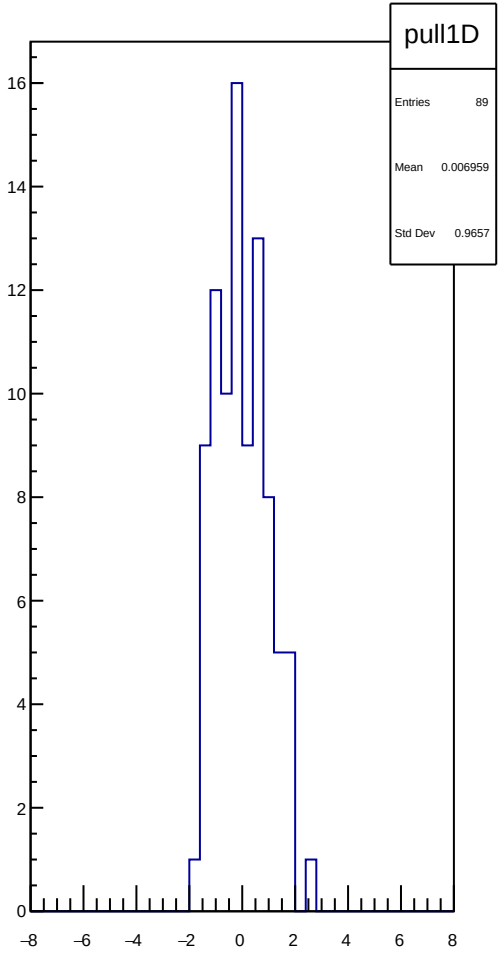

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 58.68 / 88
p0 −18.1 ± 1.62
pull
Entries 89
Mean −84.23
Std Dev 110.9

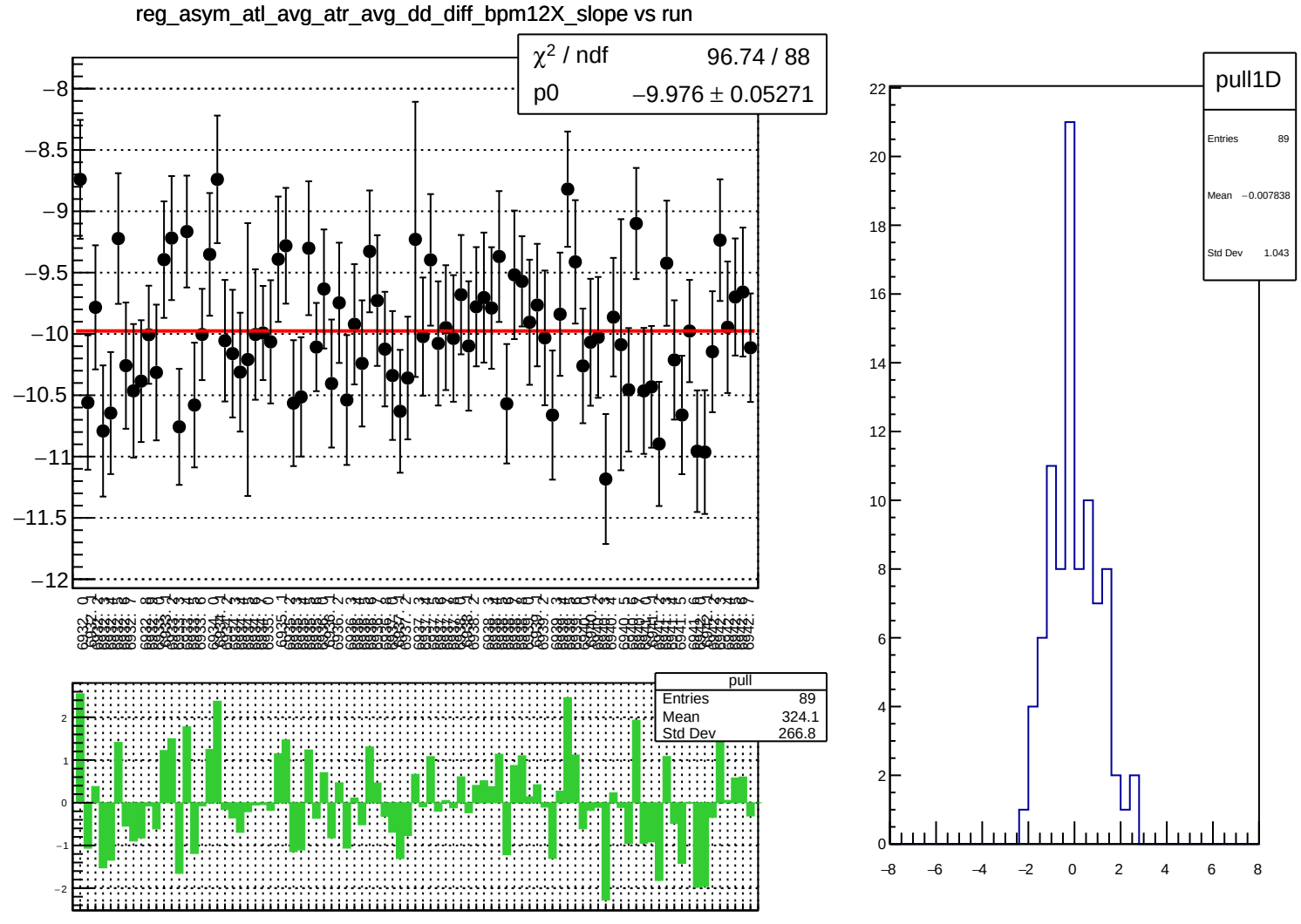

pull1D
Entries 89
Mean 0.006233
Std Dev 0.812

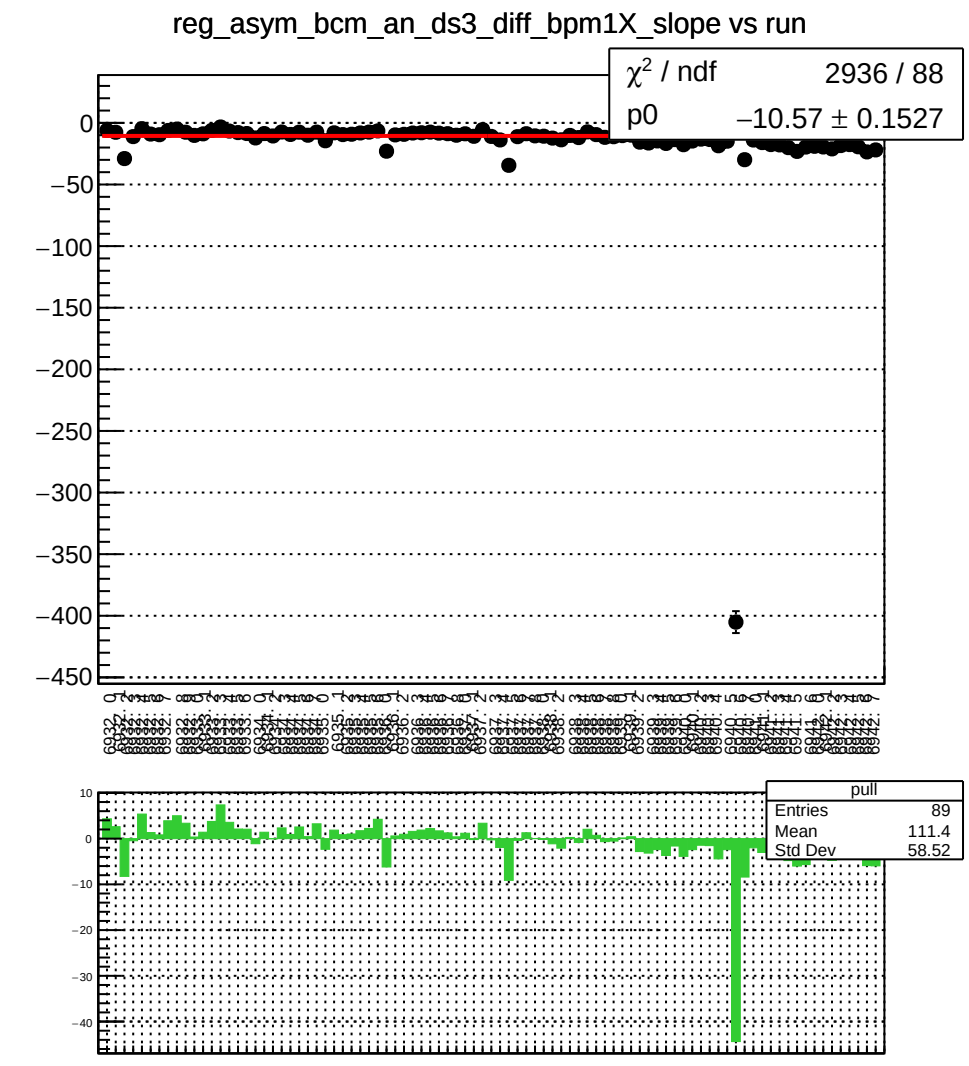

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 82.66 / 88
p0 0.7278 ± 1.11
pull
Entries 89
Mean −210.1
Std Dev 252.1
pull1D
Entries 89
Mean −0.01409
Std Dev 0.9636

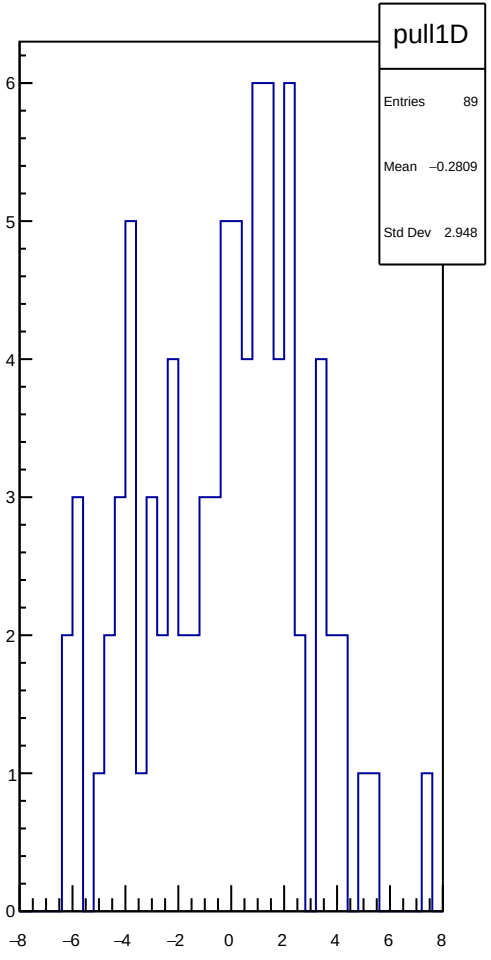

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 57.2 / 88
p0 −2.25 ± 1.507
pull
Entries 89
Mean −44.41
Std Dev 60.79
pull1D
Entries 89
Mean −0.004601
Std Dev 0.8016

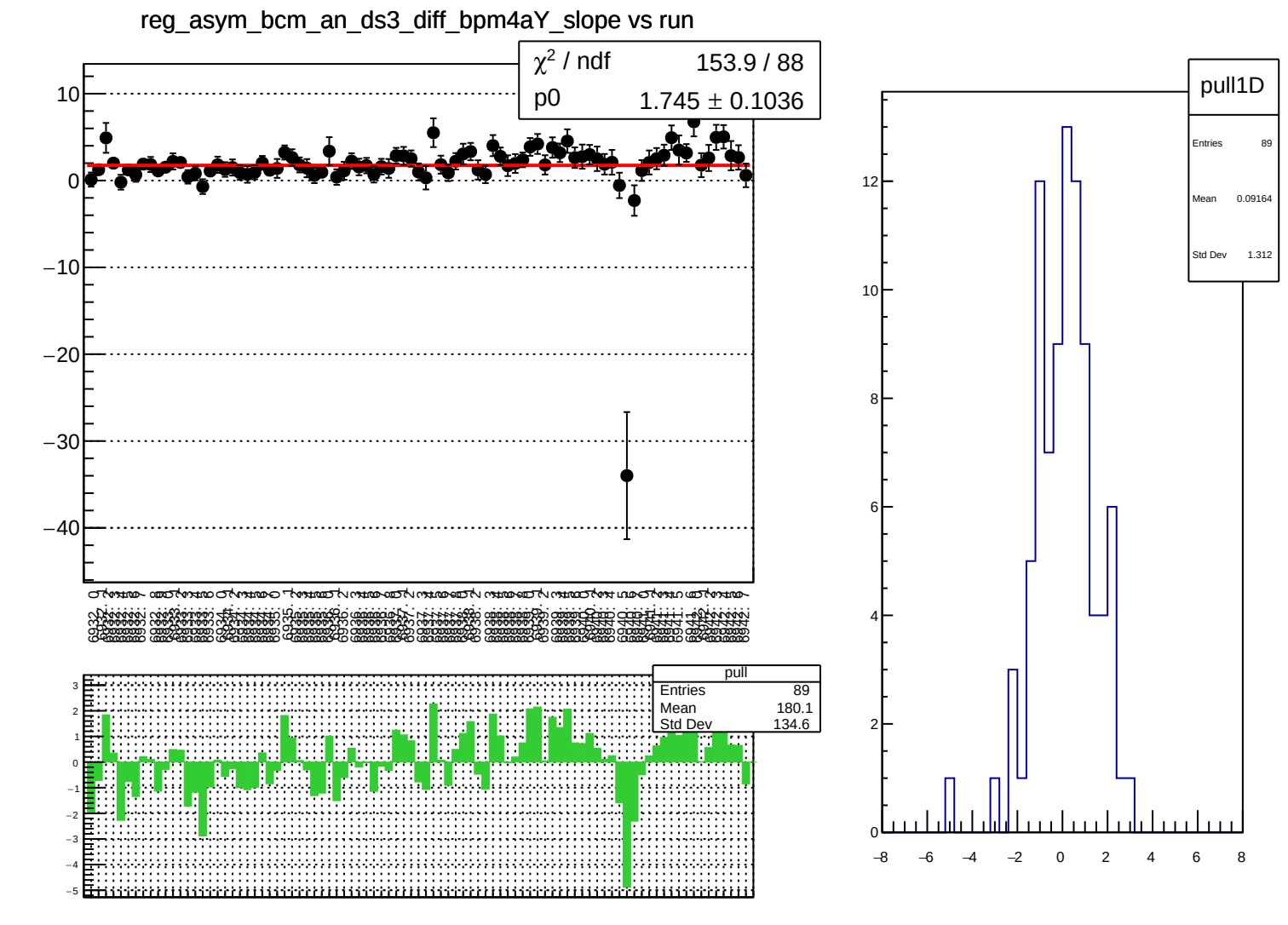

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 83 / 88
p0 4.357 ± 1.281
pull
Entries 89
Mean −406.6
Std Dev 450.2

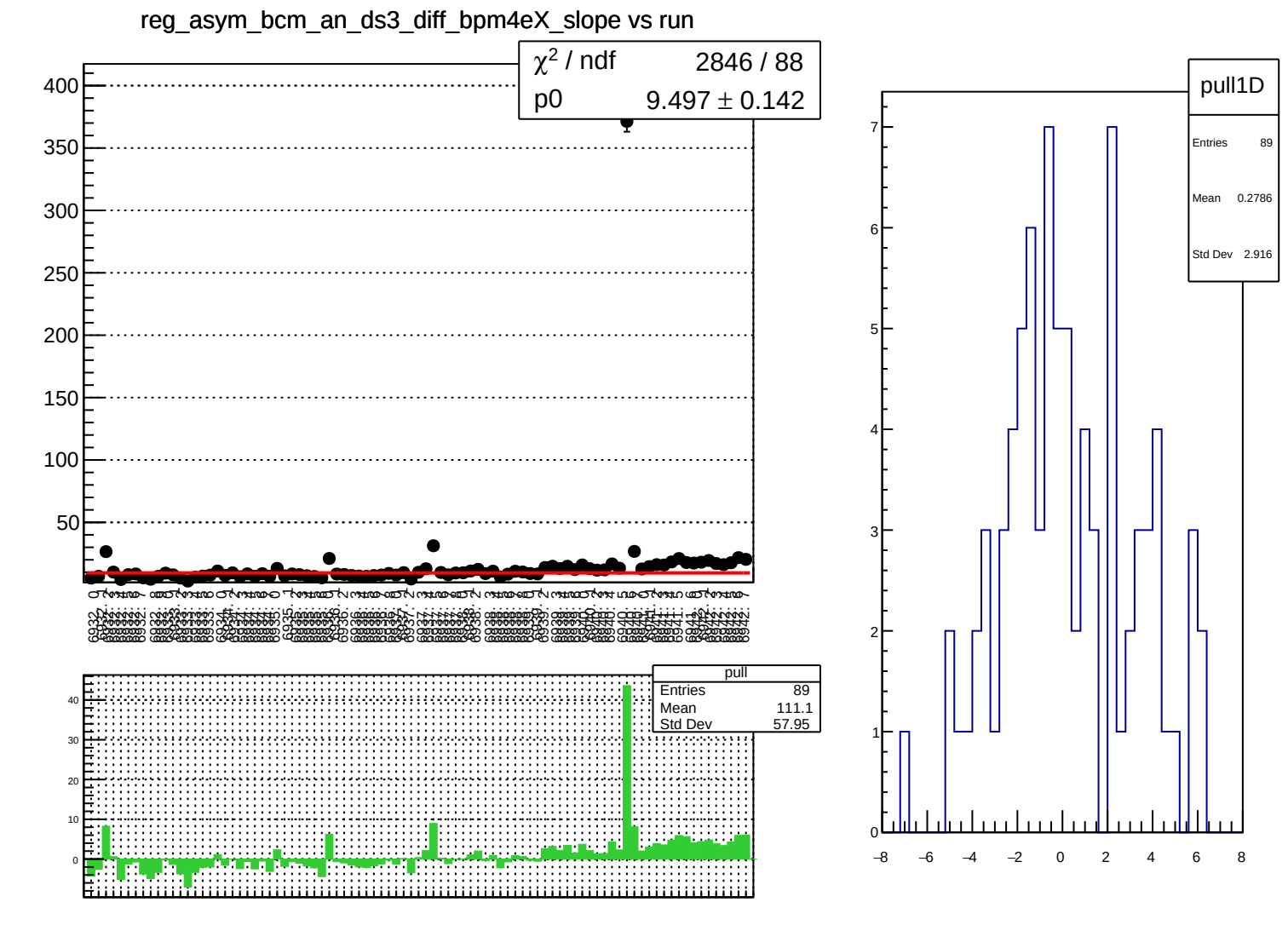

pull1D
Entries 89
Mean 0.006959
Std Dev 0.9657

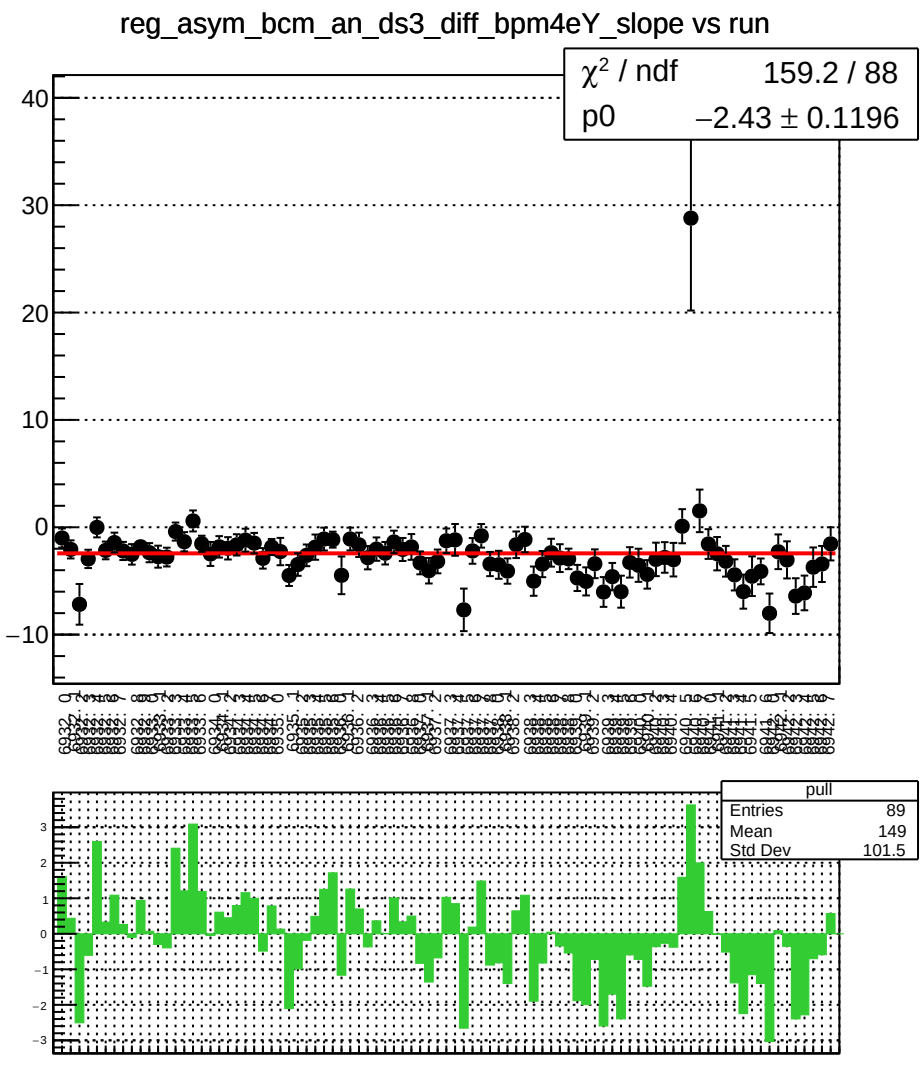

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 96.74 / 88
p0 −9.976 ± 0.05271
pull
Entries 89
Mean 324.1
Std Dev 266.8
pull1D
Entries 89
Mean −0.007838
Std Dev 1.043

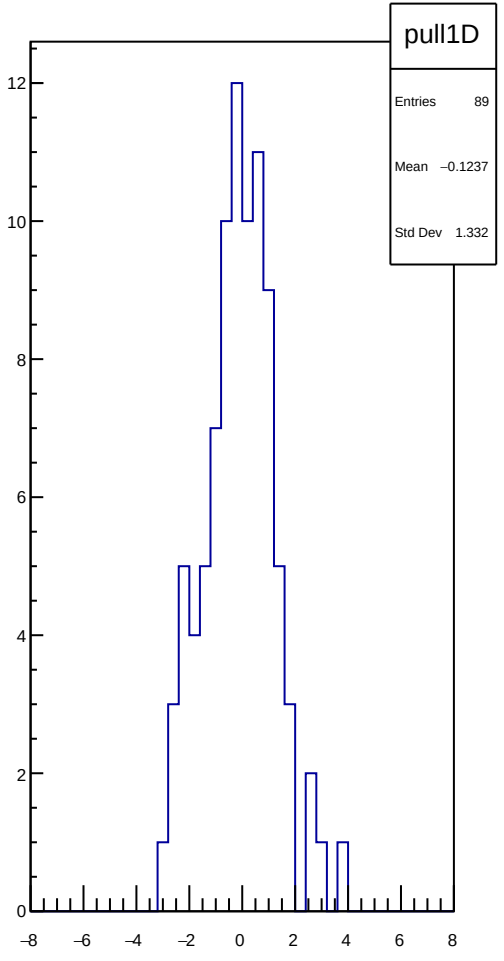

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 2936 / 88
p0 −10.57 ± 0.1527
pull
Entries 89
Mean 111.4
Std Dev 58.52

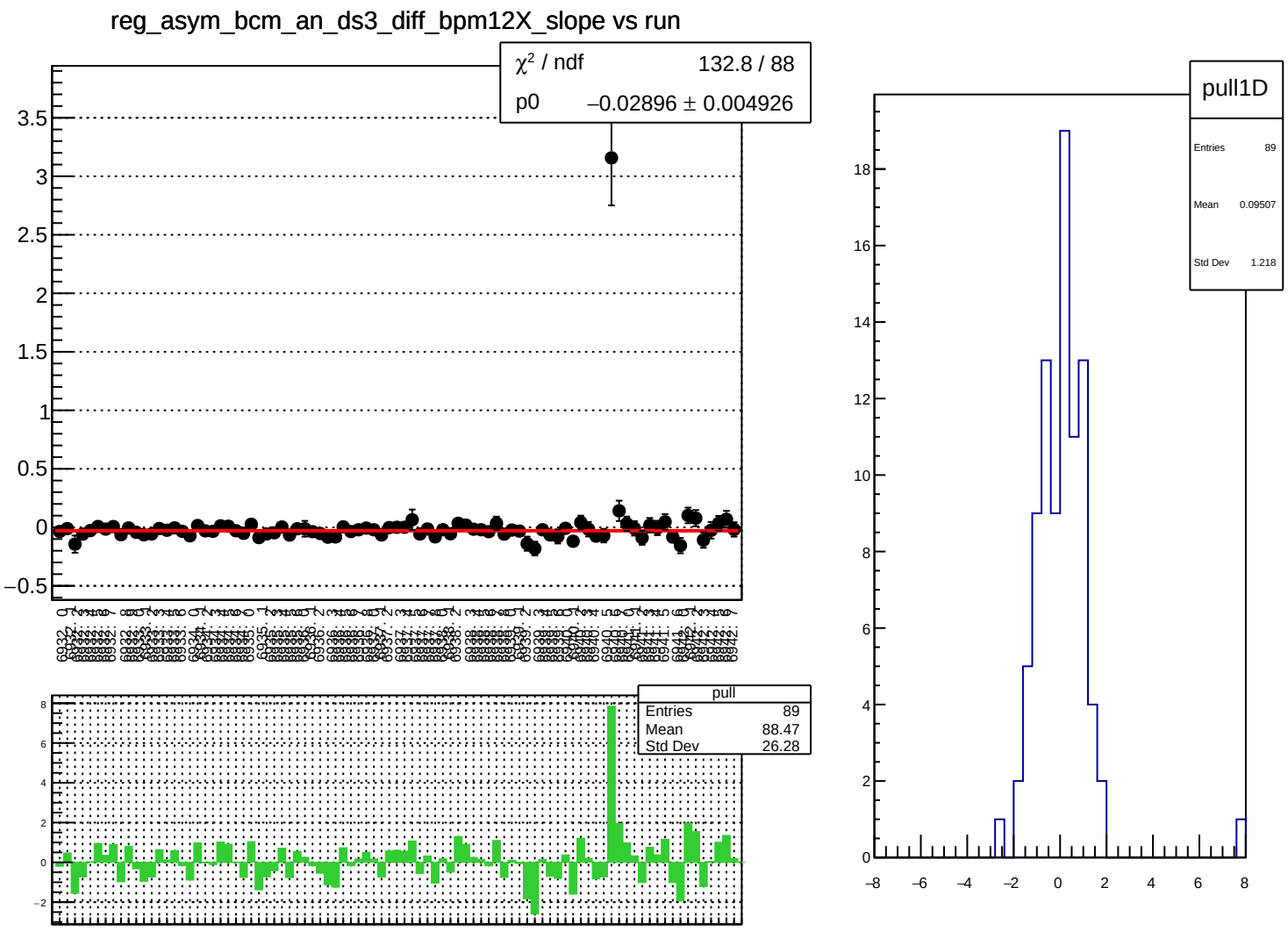

pull1D
Entries 89
Mean −0.2809
Std Dev 2.948

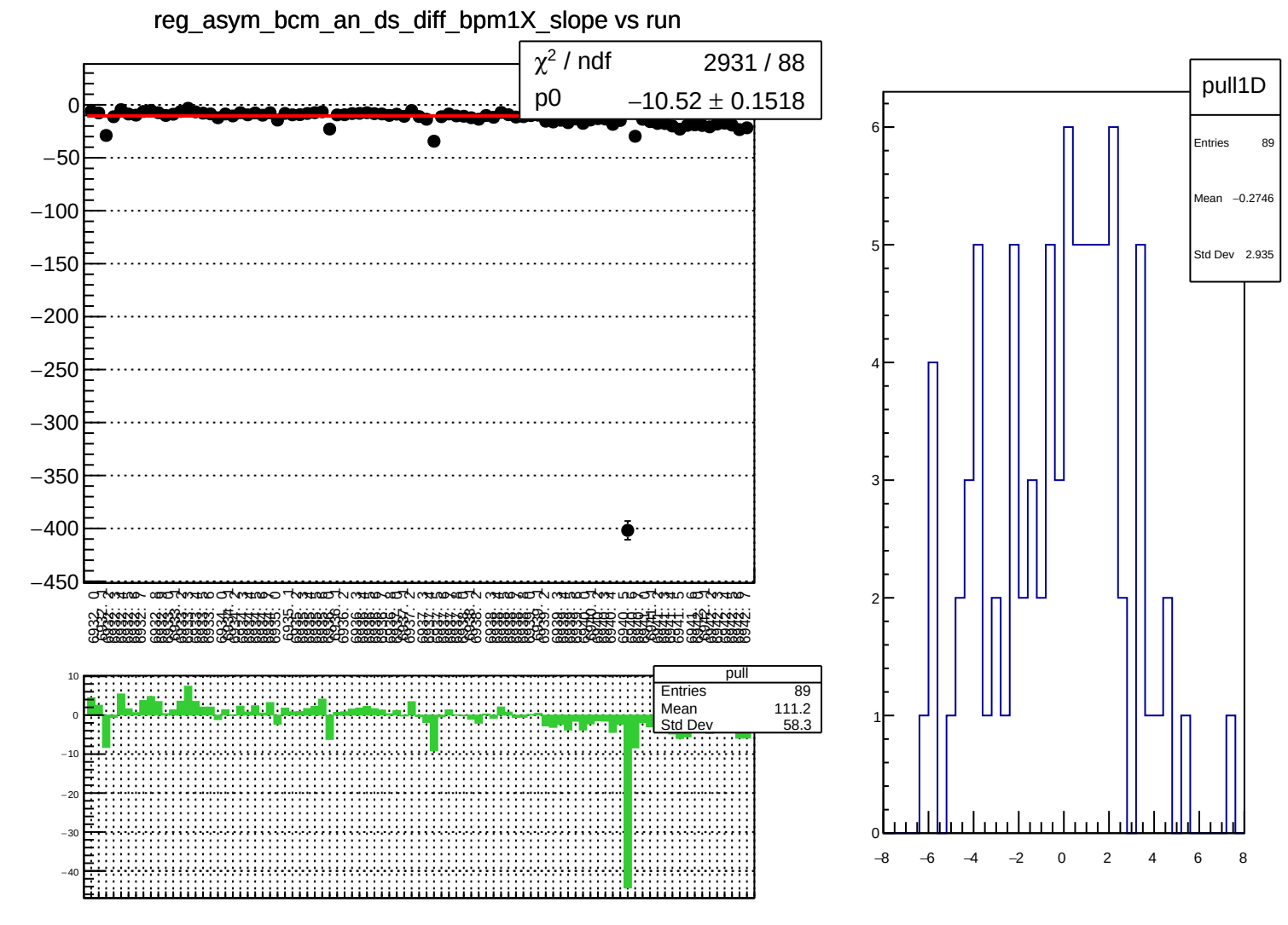

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 153.9 / 88
p0 1.745 ± 0.1036
pull
Entries 89
Mean 180.1
Std Dev 134.6
pull1D
Entries 89
Mean 0.09164
Std Dev 1.312

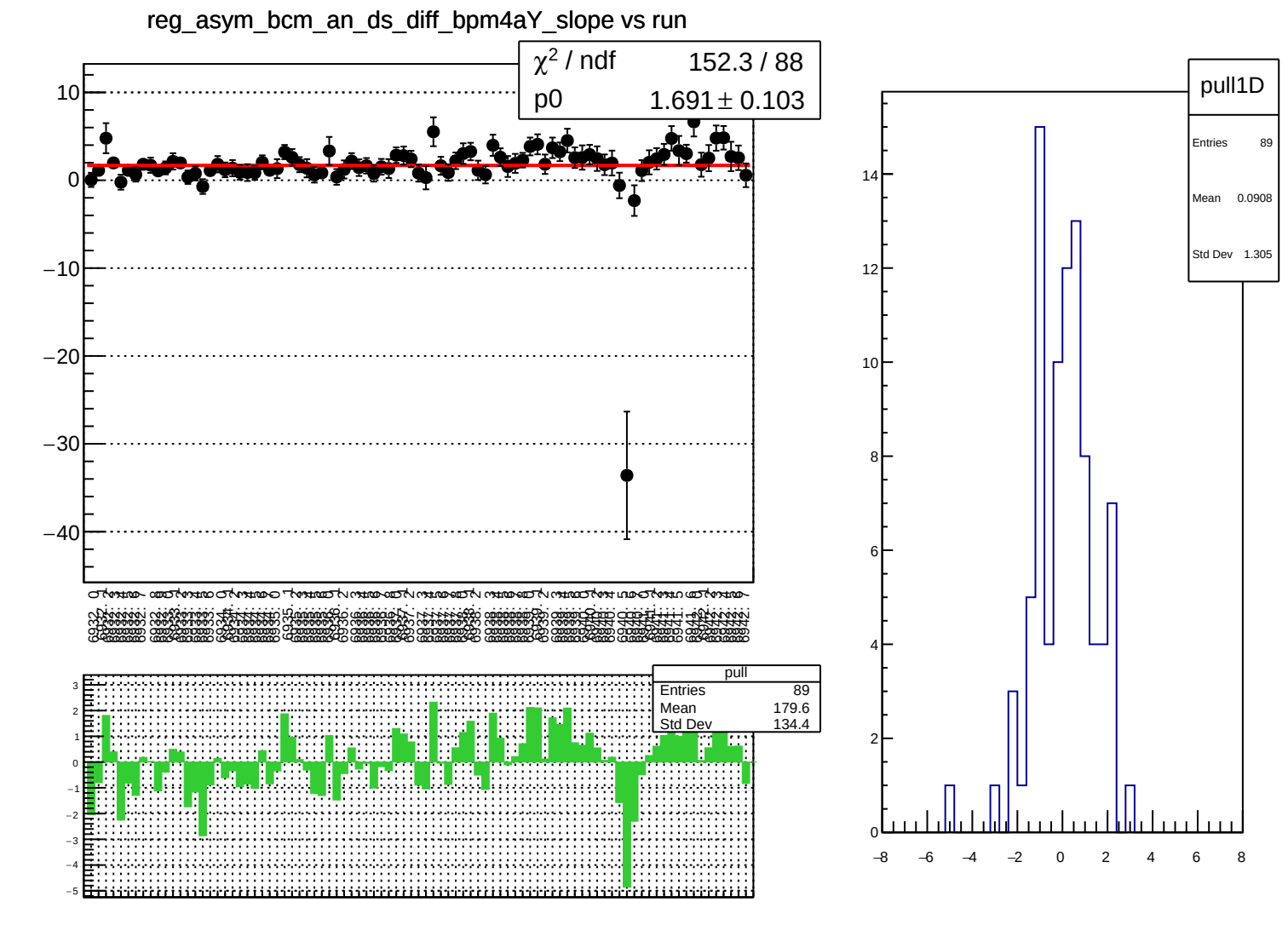

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 2846 / 88
p0 9.497 ± 0.142
pull
Entries 89
Mean 111.1
Std Dev 57.95
pull1D
Entries 89
Mean 0.2786
Std Dev 2.916

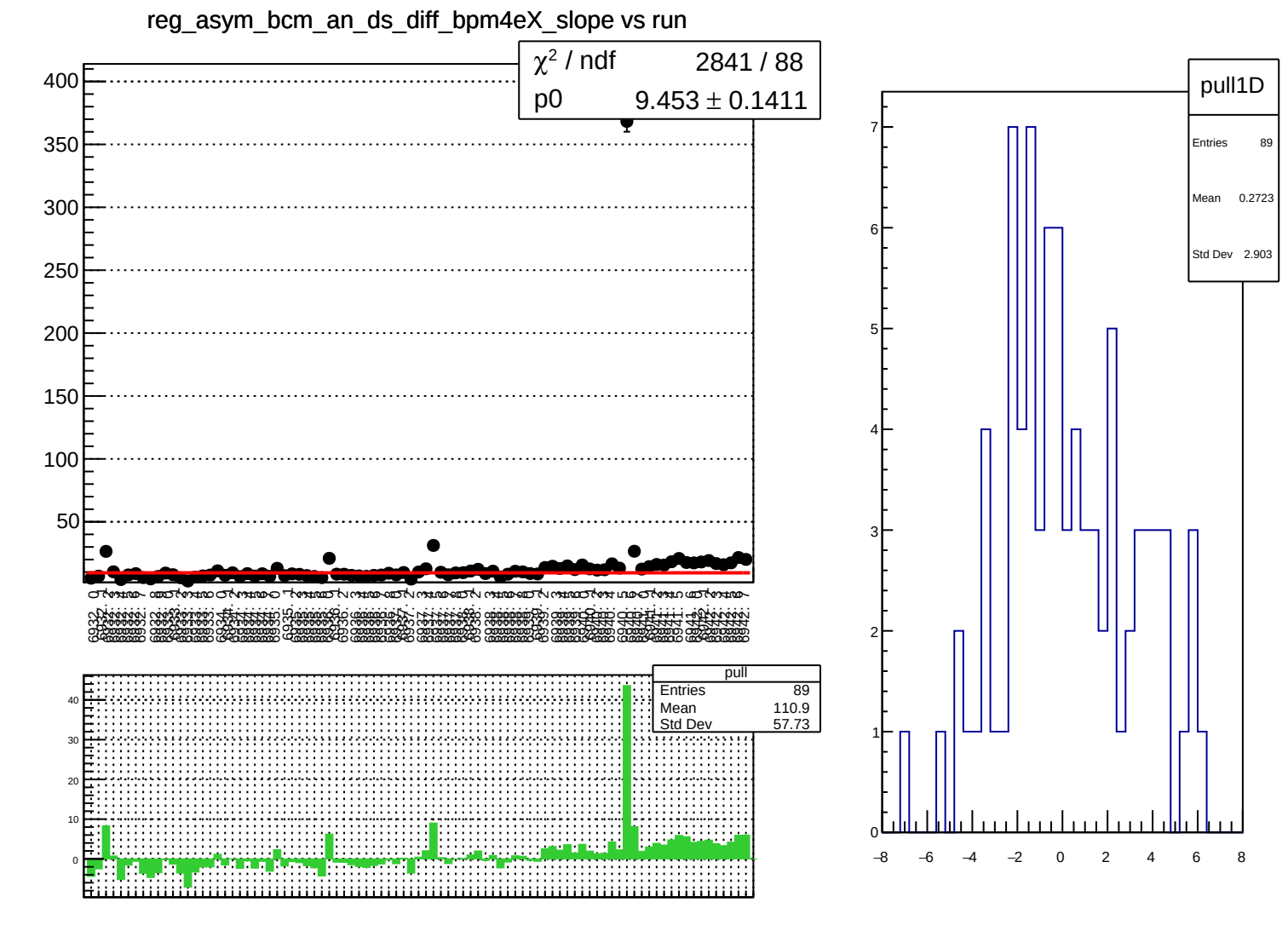

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 159.2 / 88
p0 −2.43 ± 0.1196
pull
Entries 89
Mean 149
Std Dev 101.5

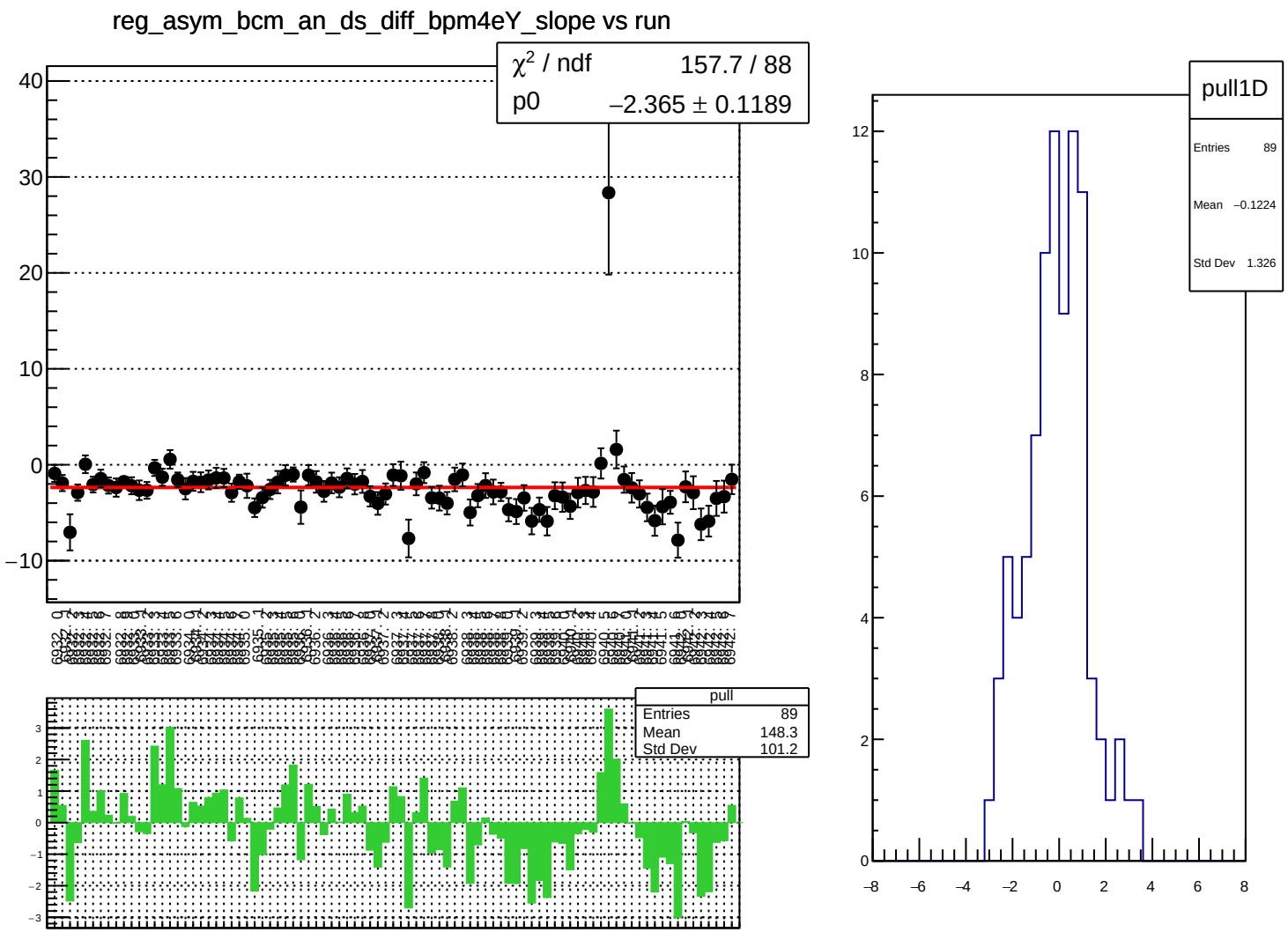

pull1D
Entries 89
Mean −0.1237
Std Dev 1.332

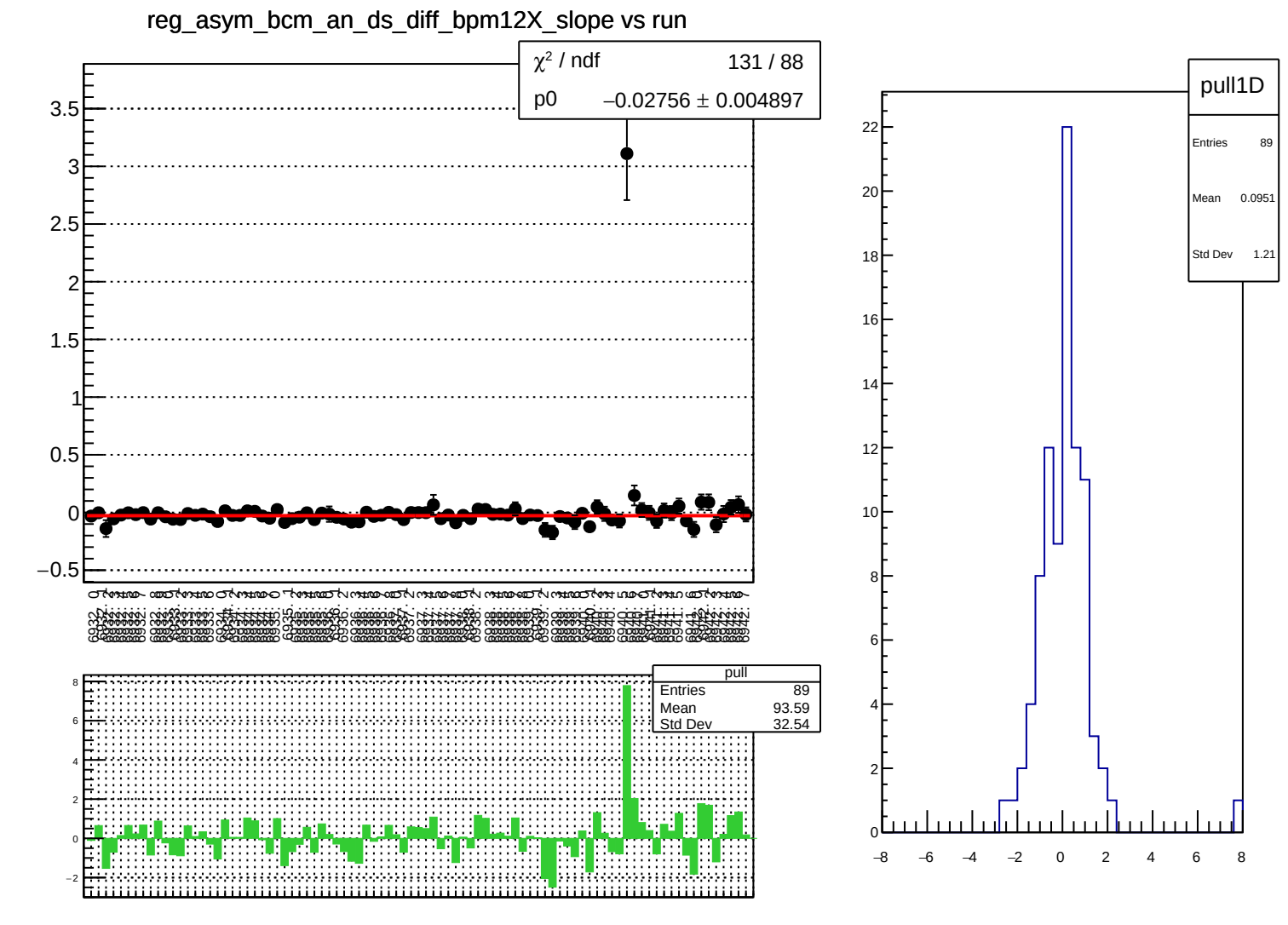

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 132.8 / 88
p0 −0.02896 ± 0.004926
pull
Entries 89
Mean 88.47
Std Dev 26.28
pull1D
Entries 89
Mean 0.09507
Std Dev 1.218

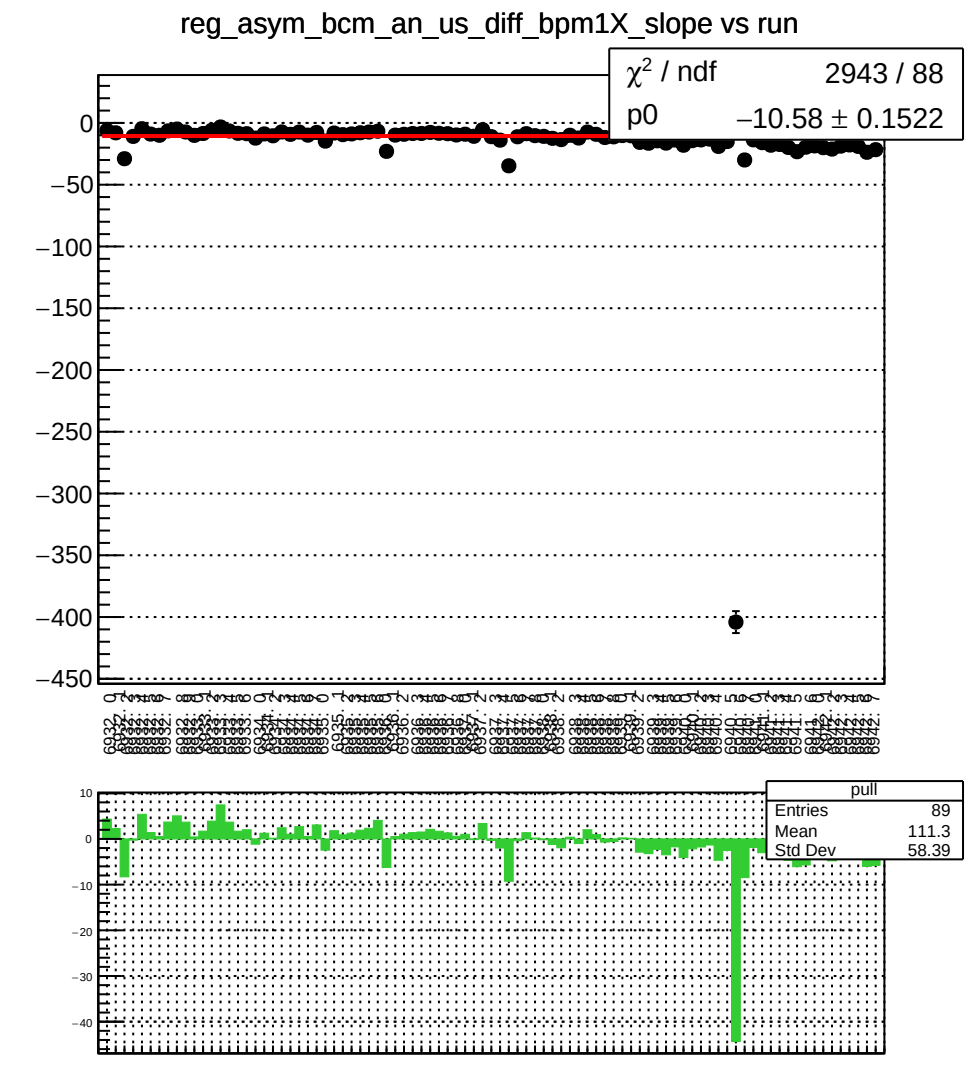

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 2931 / 88
p0 −10.52 ± 0.1518
pull
Entries 89
Mean 111.2
Std Dev 58.3
pull1D
Entries 89
Mean −0.2746
Std Dev 2.935

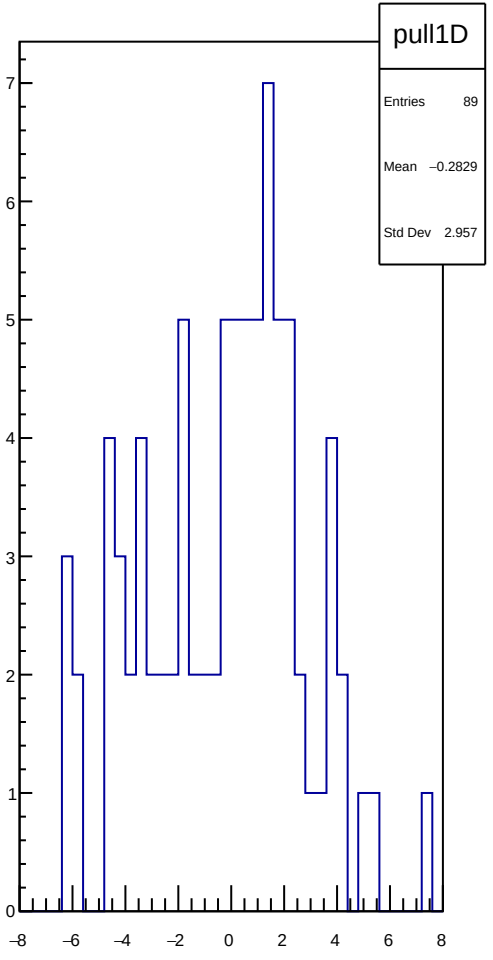

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 152.3 / 88
p0 1.691 ± 0.103
pull
Entries 89
Mean 179.6
Std Dev 134.4
pull1D
Entries 89
Mean 0.0908
Std Dev 1.305

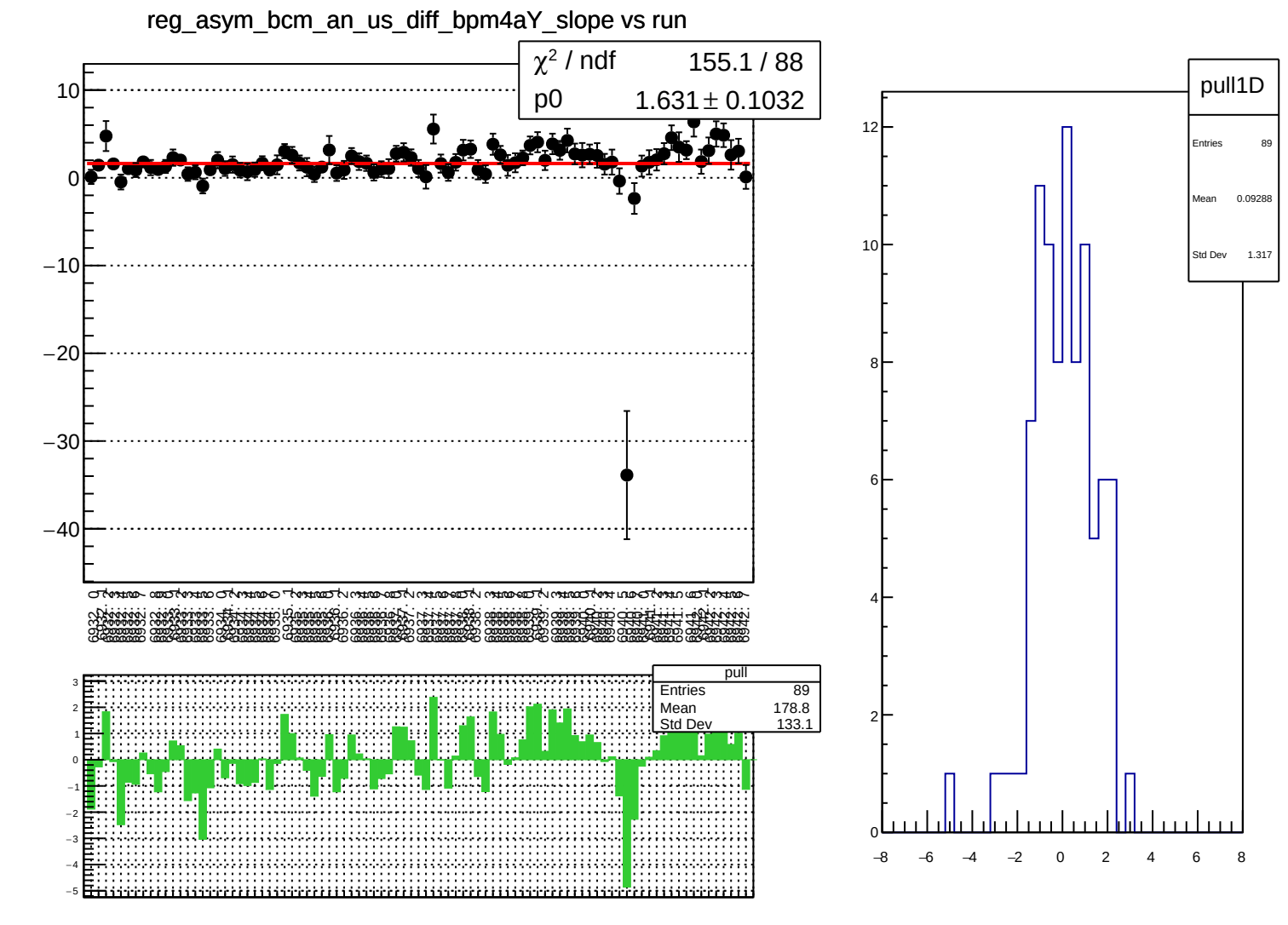

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 2841 / 88
p0 9.453 ± 0.1411
pull
Entries 89
Mean 110.9
Std Dev 57.73
pull1D
Entries 89
Mean 0.2723
Std Dev 2.903

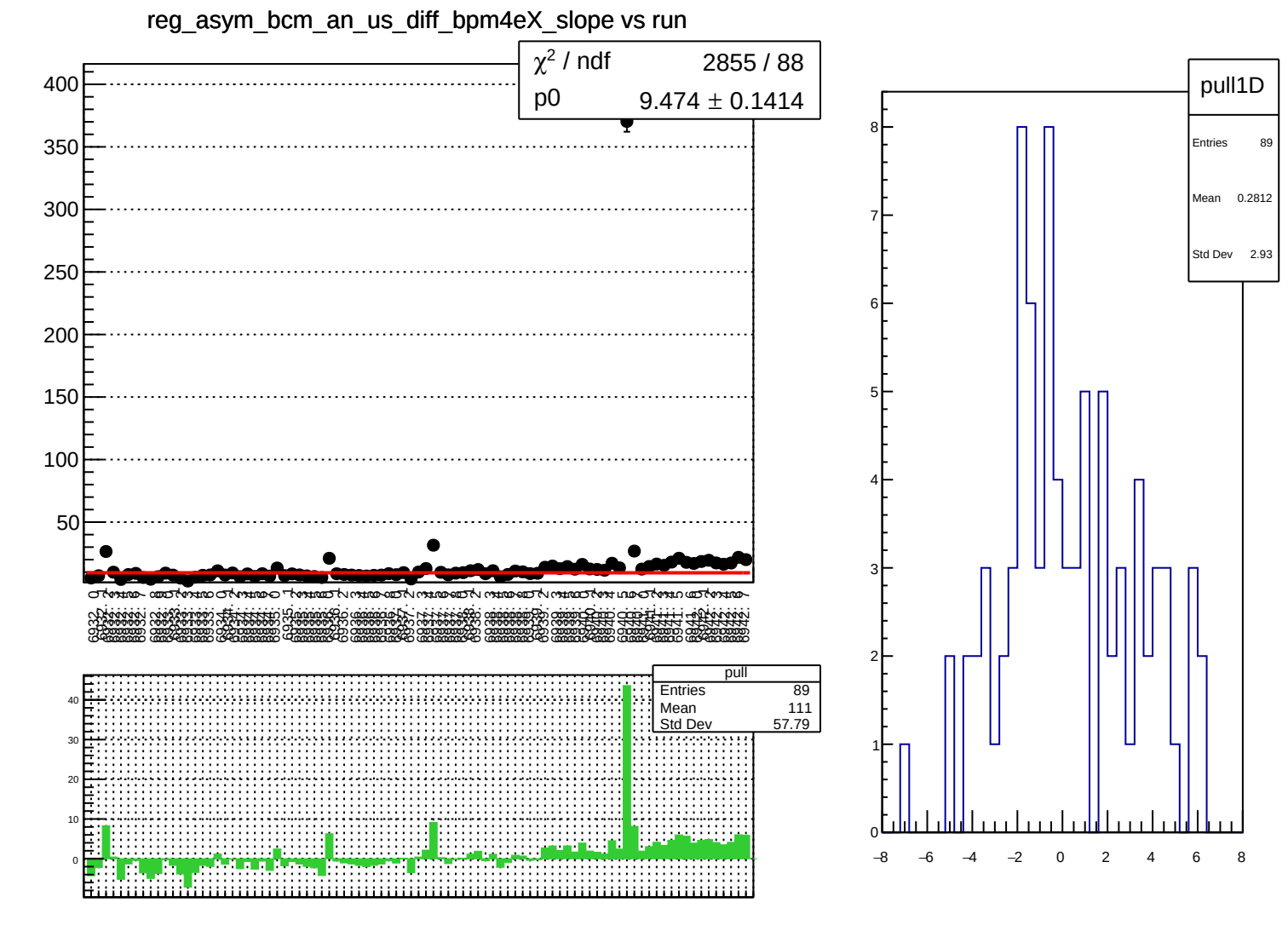

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 157.7 / 88
p0 −2.365 ± 0.1189
pull
Entries 89
Mean 148.3
Std Dev 101.2
pull1D
Entries 89
Mean −0.1224
Std Dev 1.326

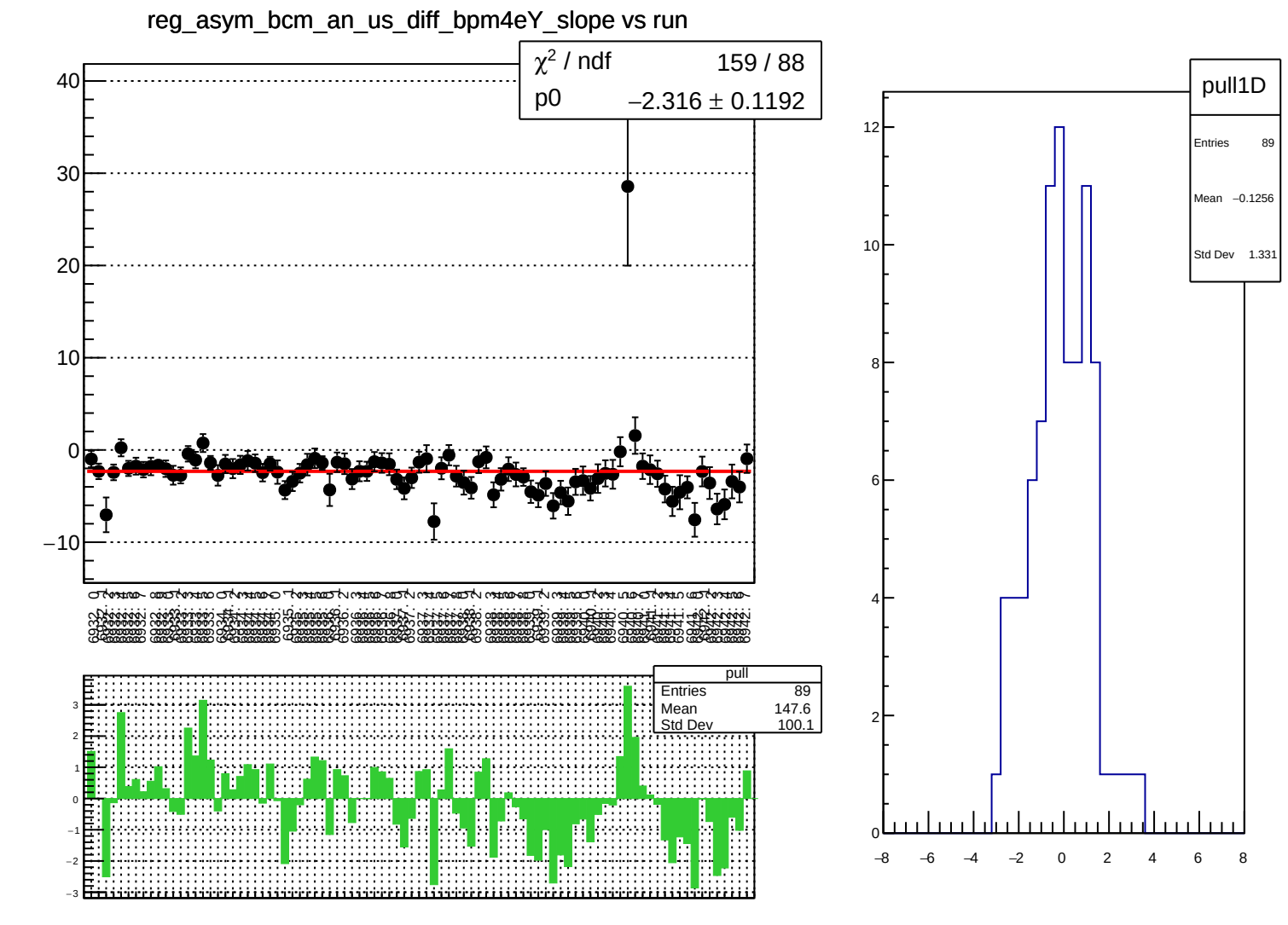

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 131 / 88
p0 −0.02756 ± 0.004897
pull
Entries 89
Mean 93.59
Std Dev 32.54
pull1D
Entries 89
Mean 0.0951
Std Dev 1.21

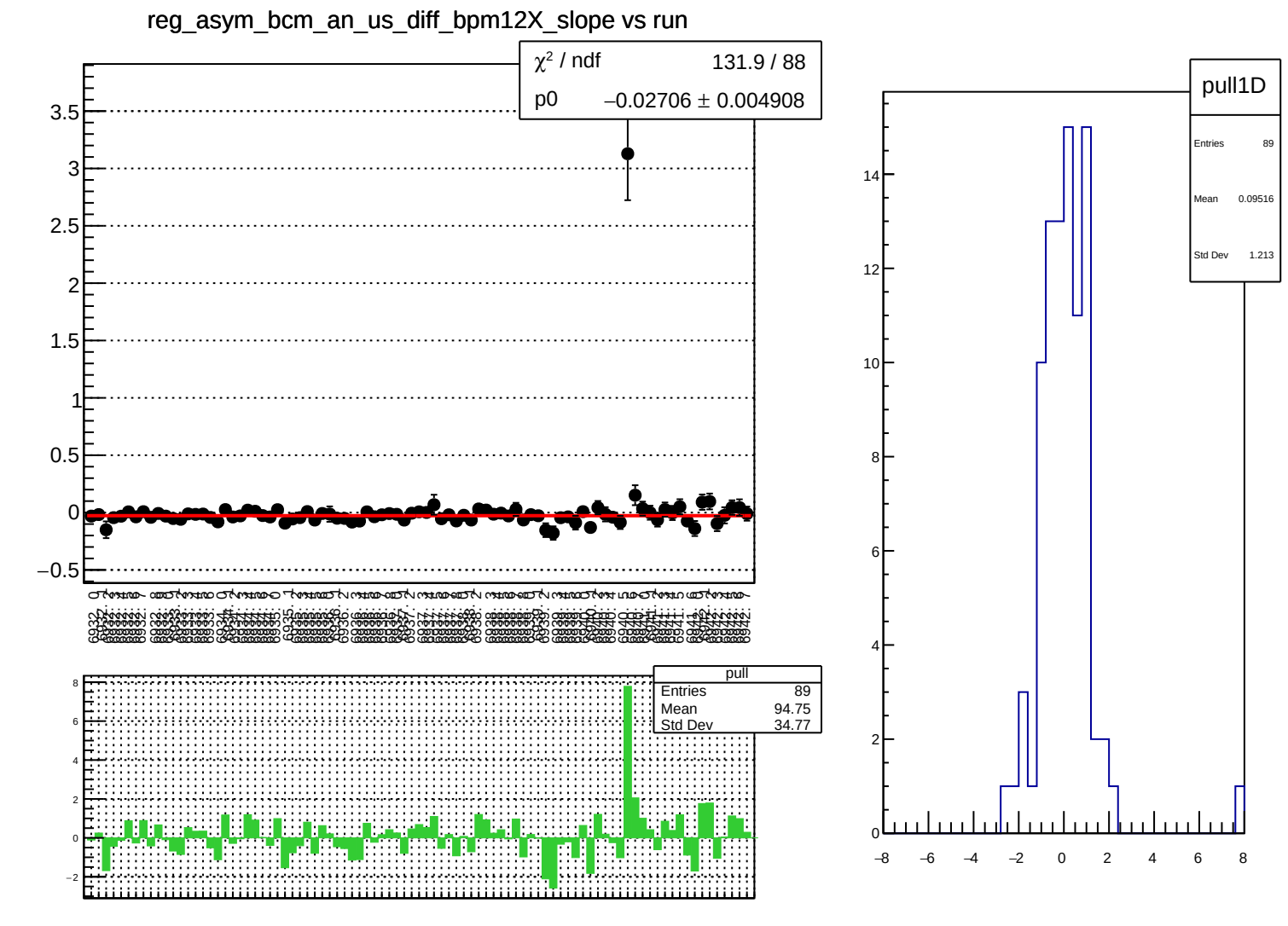

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 2943 / 88
p0 −10.58 ± 0.1522
pull
Entries 89
Mean 111.3
Std Dev 58.39

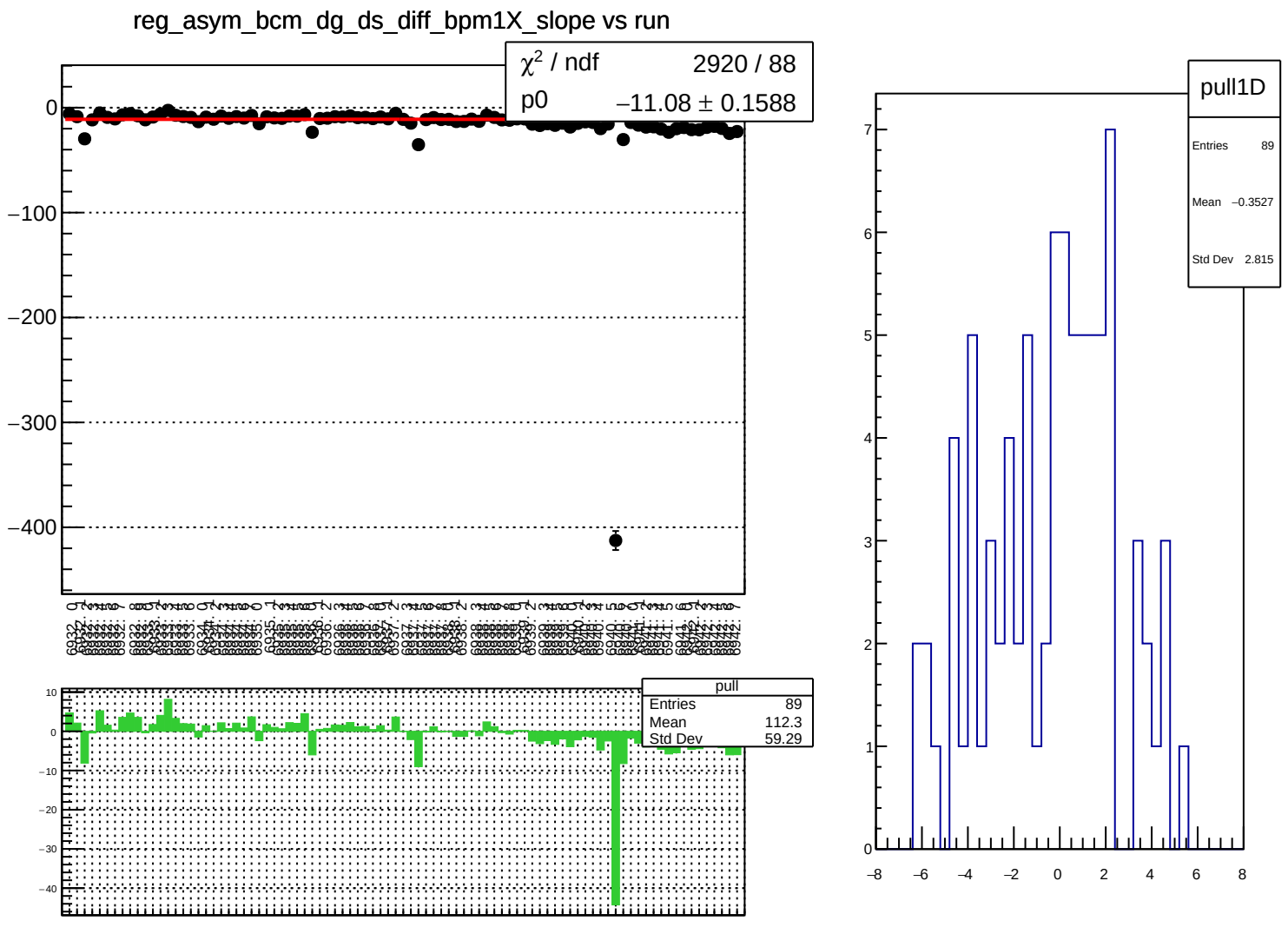

pull1D
Entries 89
Mean −0.2829
Std Dev 2.957

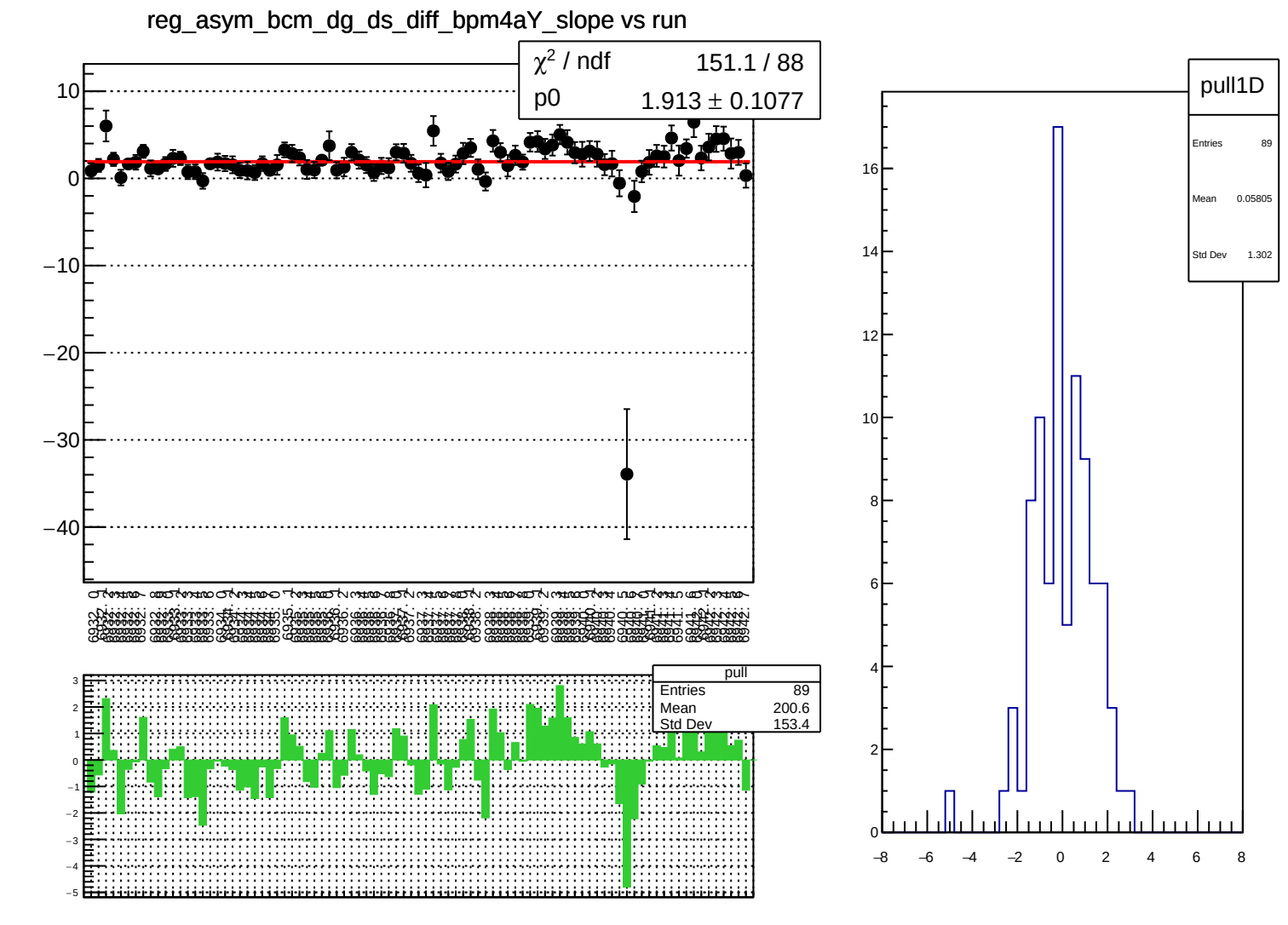

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 155.1 / 88
p0 1.631 ± 0.1032
pull
Entries 89
Mean 178.8
Std Dev 133.1
pull1D
Entries 89
Mean 0.09288
Std Dev 1.317

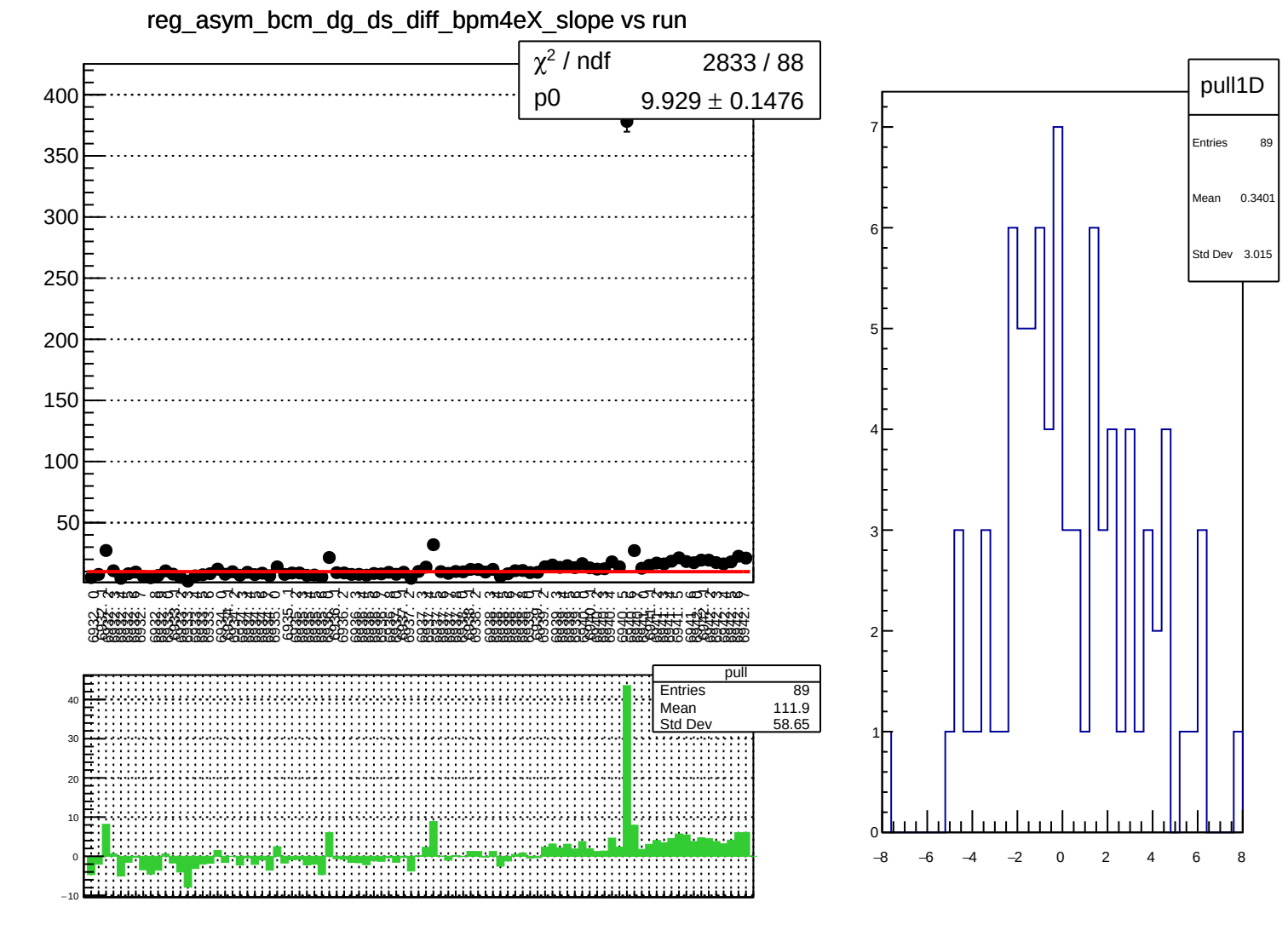

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 2855 / 88
p0 9.474 ± 0.1414
pull
Entries 89
Mean 111
Std Dev 57.79
pull1D
Entries 89
Mean 0.2812
Std Dev 2.93

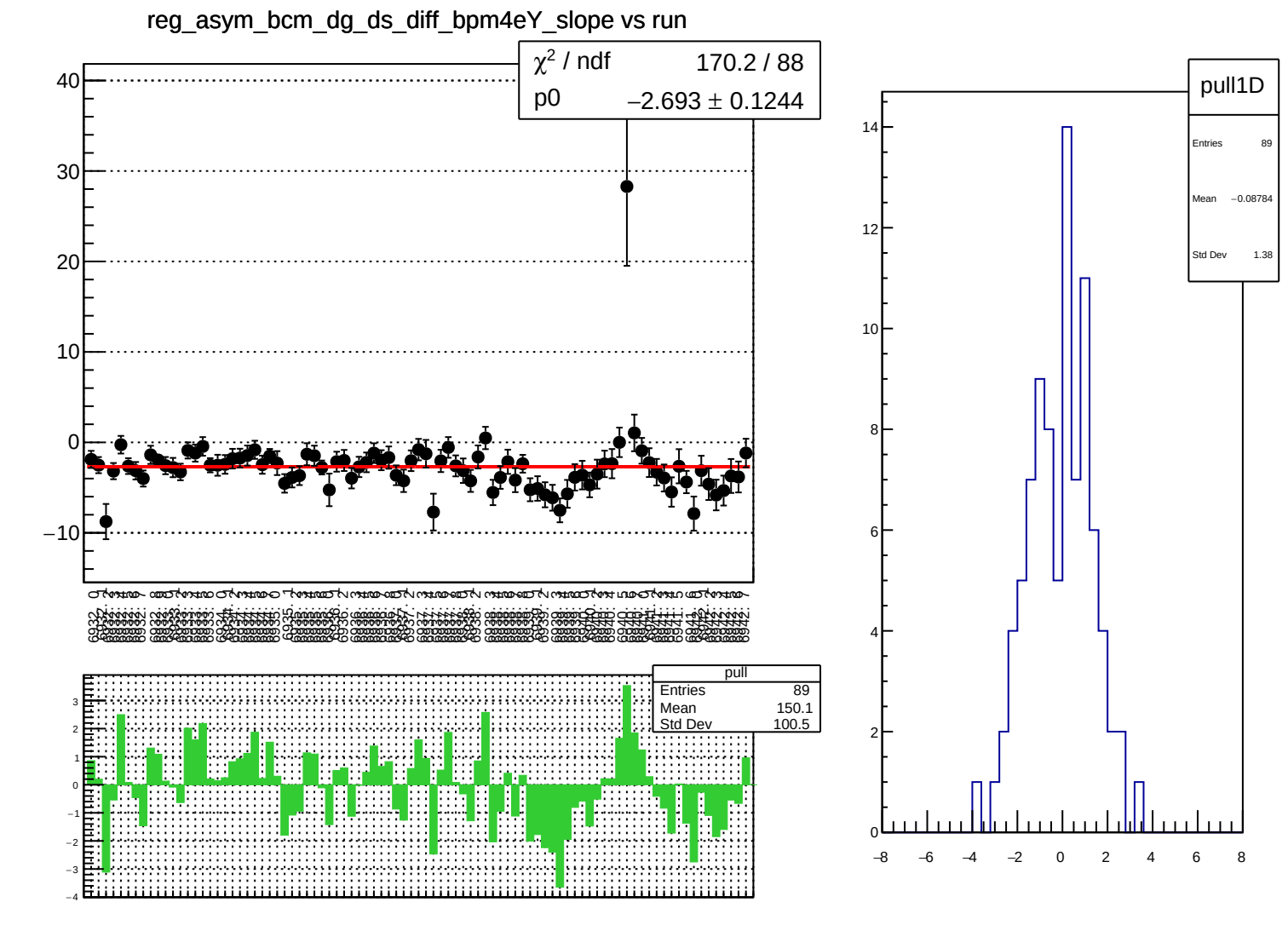

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 159 / 88
p0 −2.316 ± 0.1192
pull
Entries 89
Mean 147.6
Std Dev 100.1
pull1D
Entries 89
Mean −0.1256
Std Dev 1.331

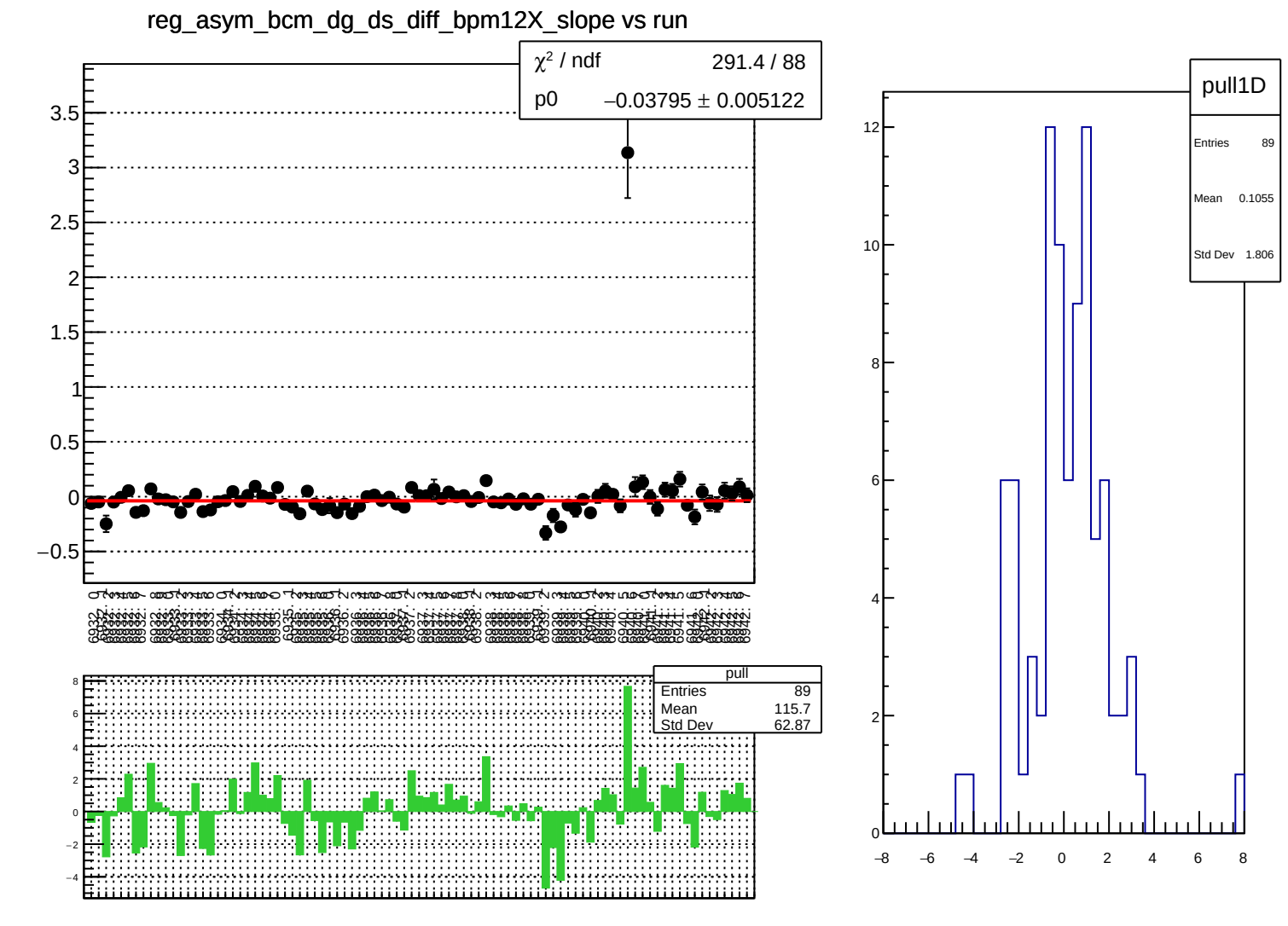

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 131.9 / 88
p0 −0.02706 ± 0.004908
pull
Entries 89
Mean 94.75
Std Dev 34.77
pull1D
Entries 89
Mean 0.09516
Std Dev 1.213

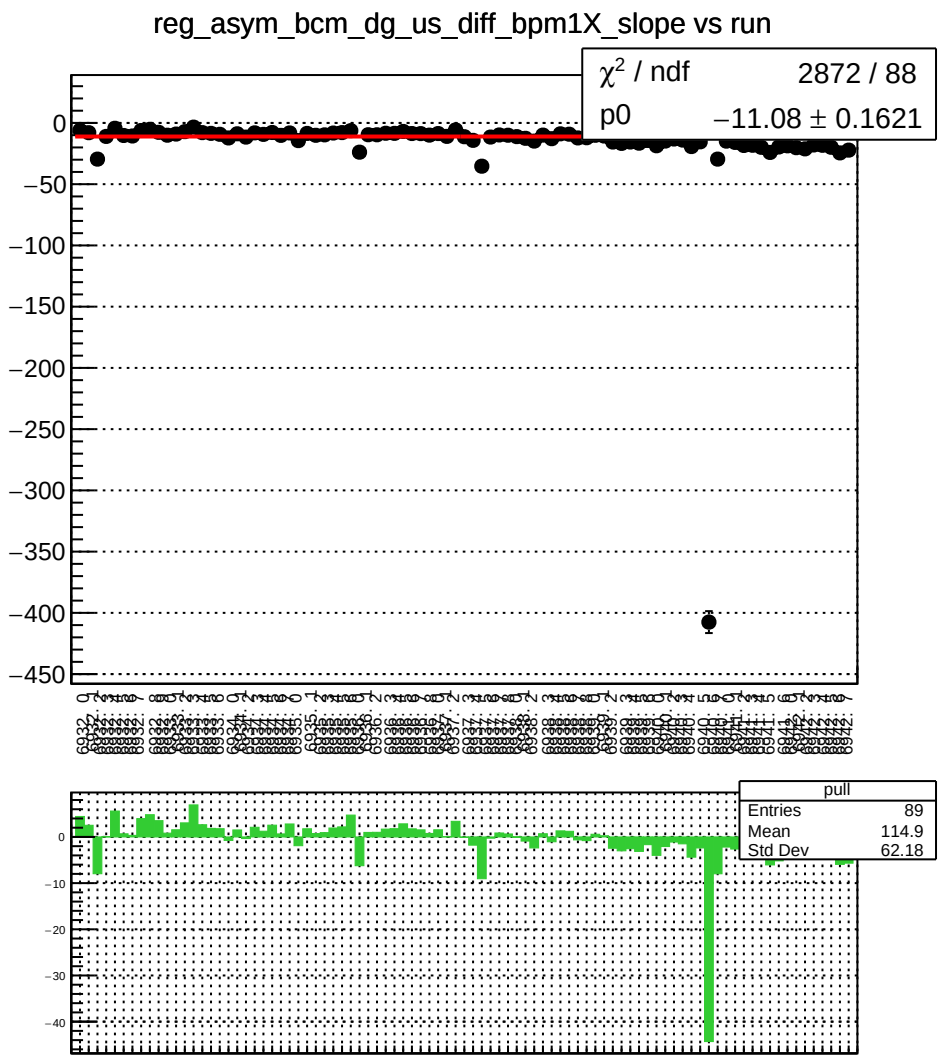

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 2920 / 88
p0 −11.08 ± 0.1588
0
−100
−200
−300
−400
pull
Entries 89
Mean 112.3
Std Dev 59.29
10
0
−10
−20
−30
−40
pull1D
Entries 89
Mean −0.3527
Std Dev 2.815
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

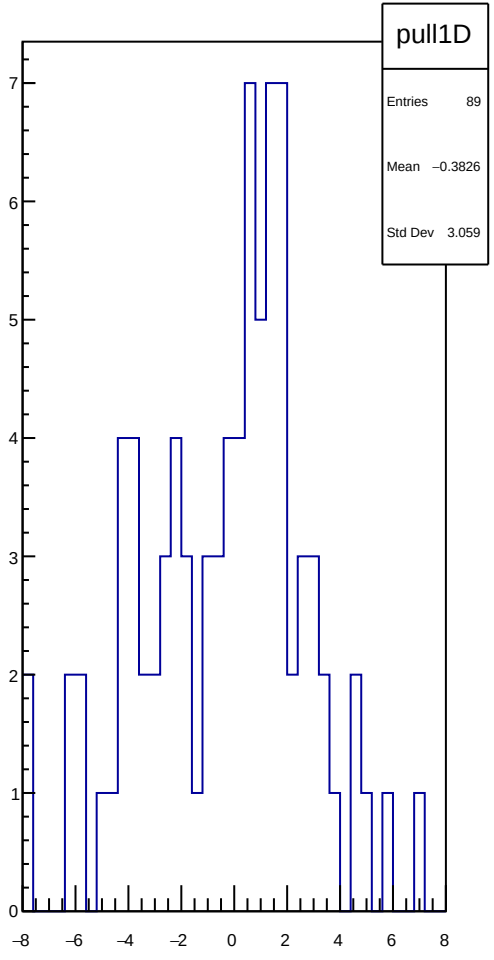

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 151.1 / 88
p0 1.913 ± 0.1077
pull
Entries 89
Mean 200.6
Std Dev 153.4
pull1D
Entries 89
Mean 0.05805
Std Dev 1.302

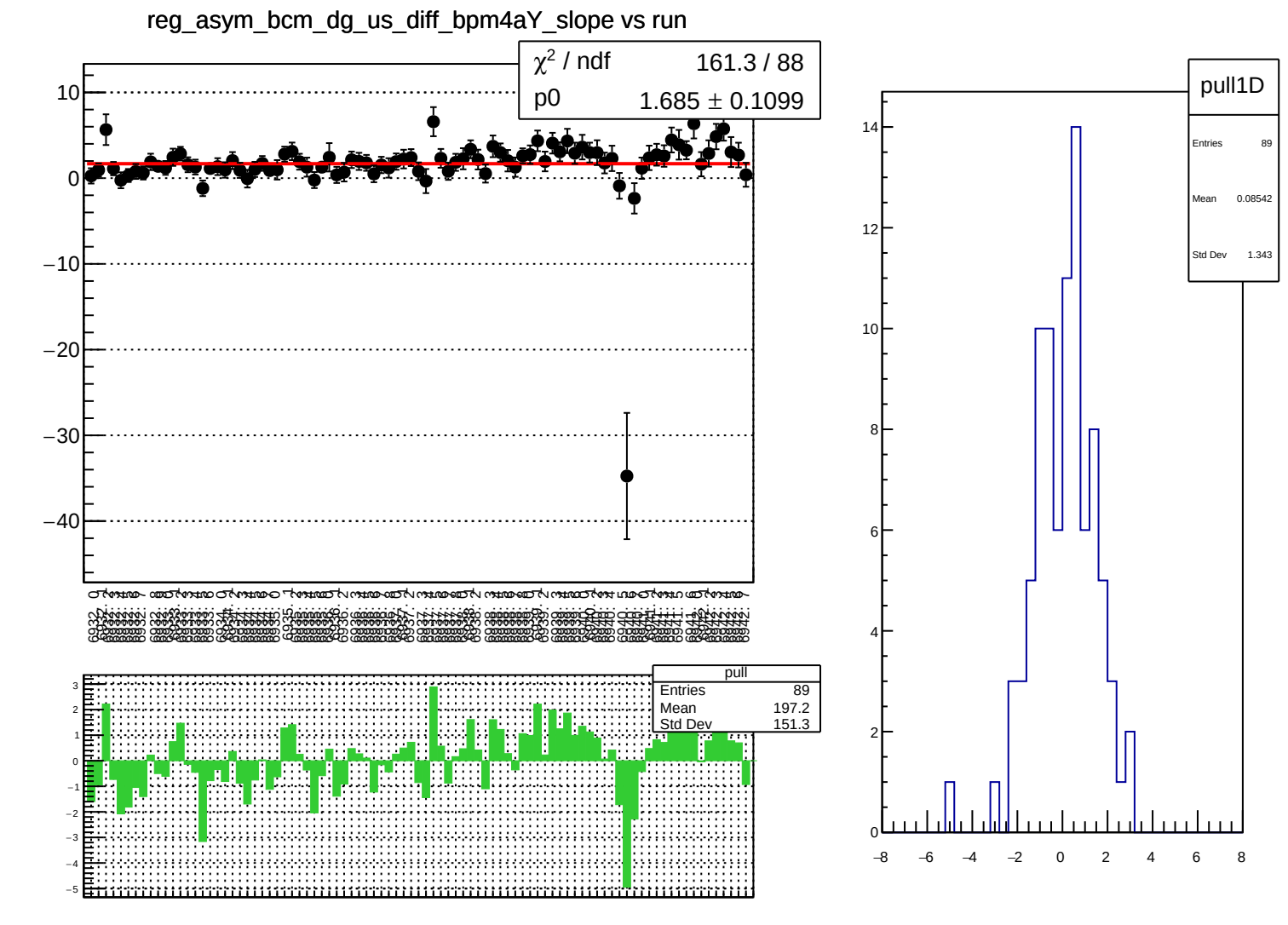

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 2833 / 88
p0 9.929 ± 0.1476
pull
Entries 89
Mean 111.9
Std Dev 58.65
pull1D
Entries 89
Mean 0.3401
Std Dev 3.015

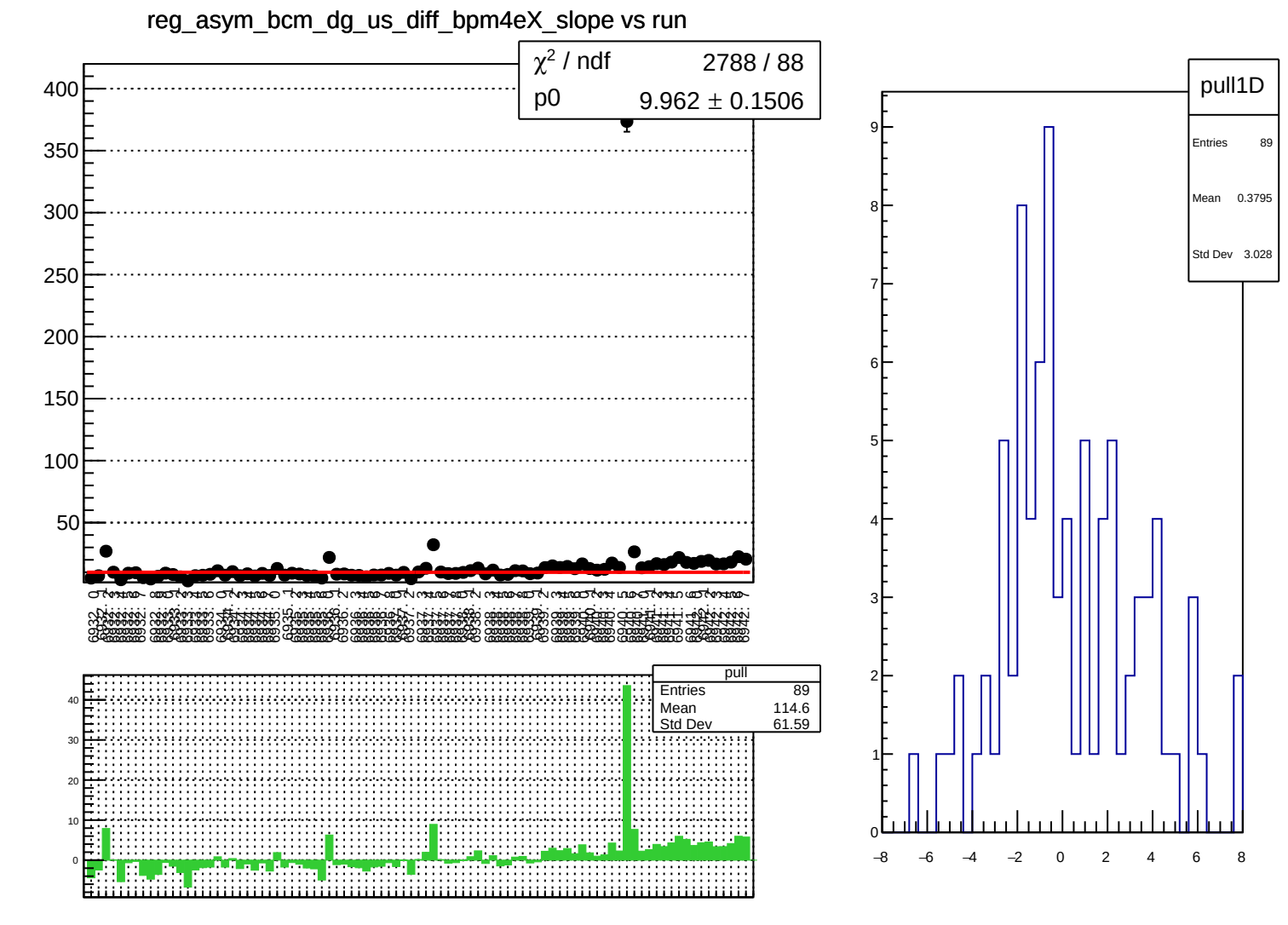

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 170.2 / 88
p0 −2.693 ± 0.1244
pull
Entries 89
Mean 150.1
Std Dev 100.5
pull1D
Entries 89
Mean −0.08784
Std Dev 1.38

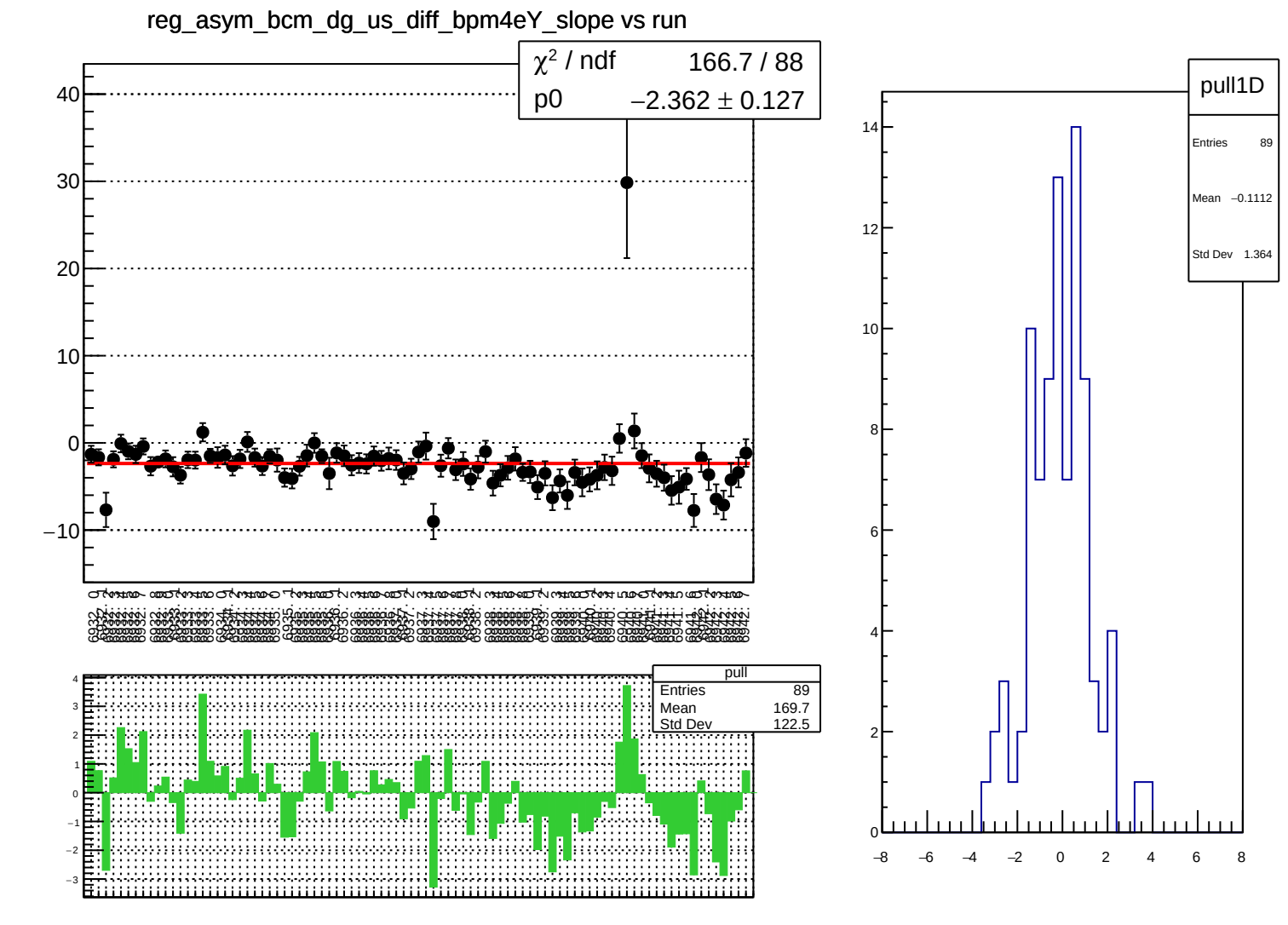

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 291.4 / 88
p0 −0.03795 ± 0.005122
pull
Entries 89
Mean 115.7
Std Dev 62.87
pull1D
Entries 89
Mean 0.1055
Std Dev 1.806

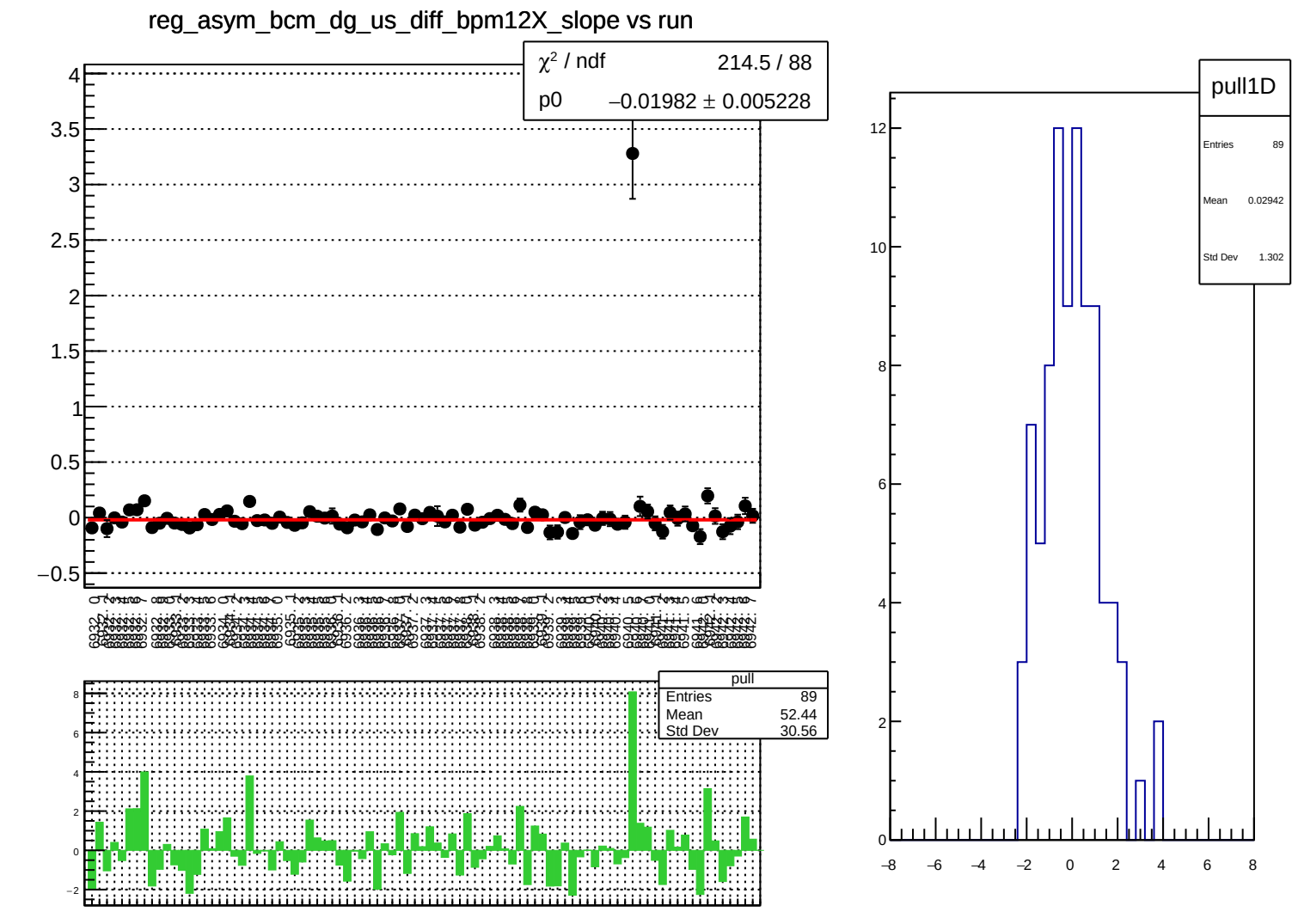

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 2872 / 88
p0 −11.08 ± 0.1621
pull
Entries 89
Mean 114.9
Std Dev 62.18

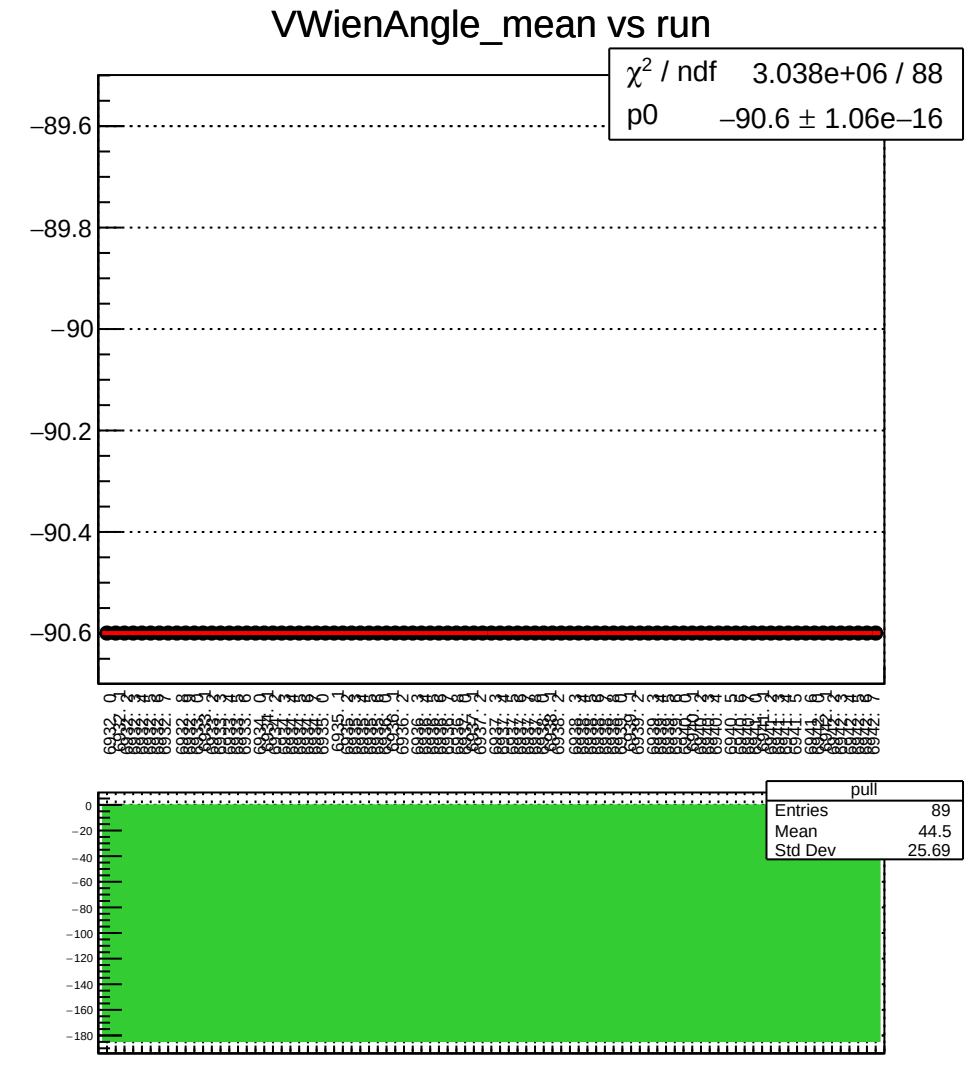

pull1D
Entries 89
Mean −0.3826
Std Dev 3.059

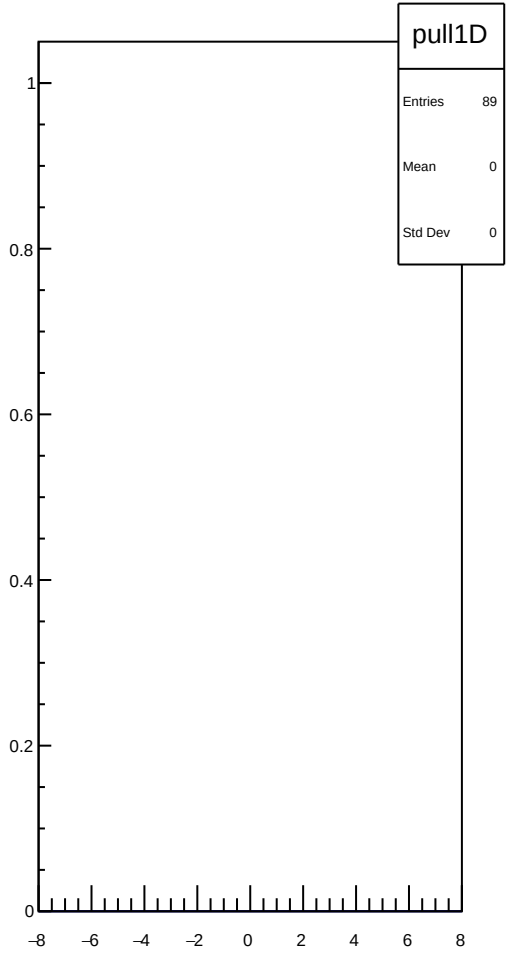

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 161.3 / 88
p0 1.685 ± 0.1099
pull
Entries 89
Mean 197.2
Std Dev 151.3
pull1D
Entries 89
Mean 0.08542
Std Dev 1.343

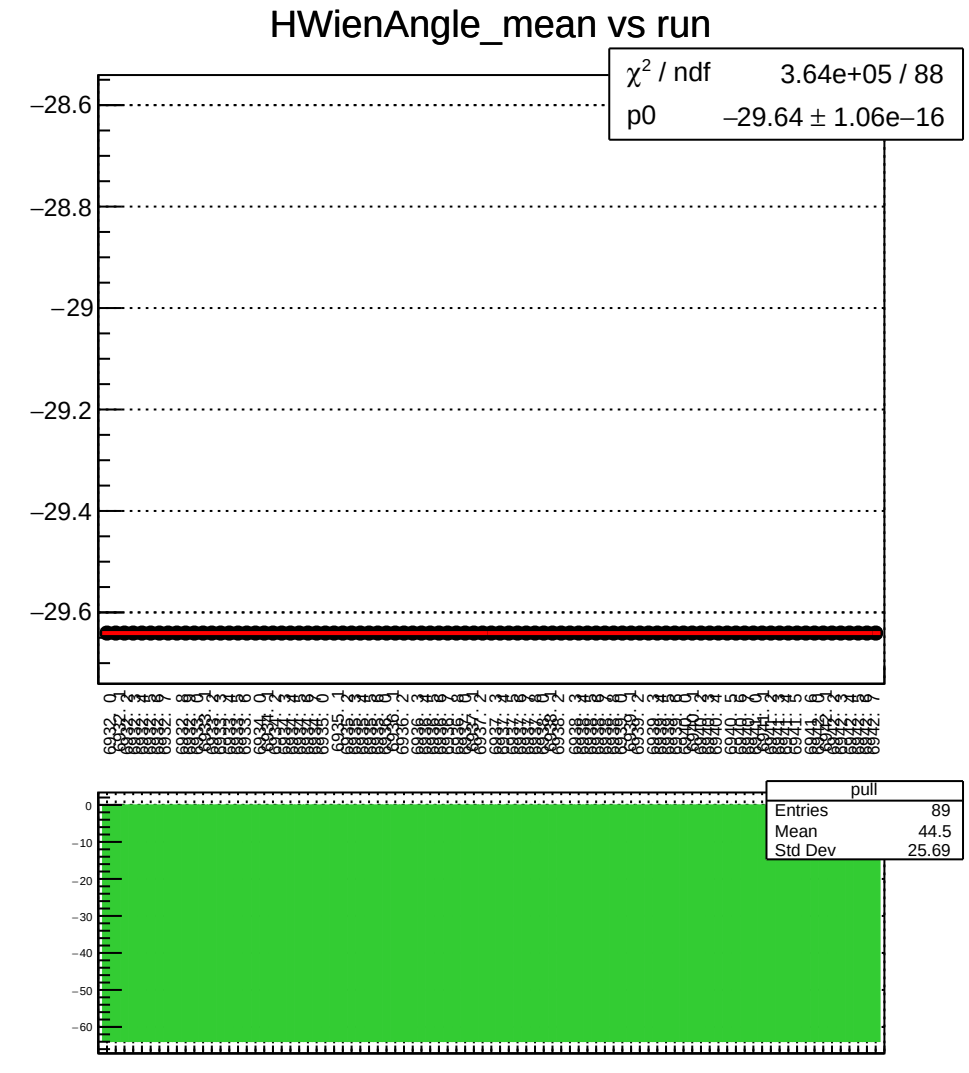

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 2788 / 88
p0 9.962 ± 0.1506
pull
Entries 89
Mean 114.6
Std Dev 61.59
pull1D
Entries 89
Mean 0.3795
Std Dev 3.028

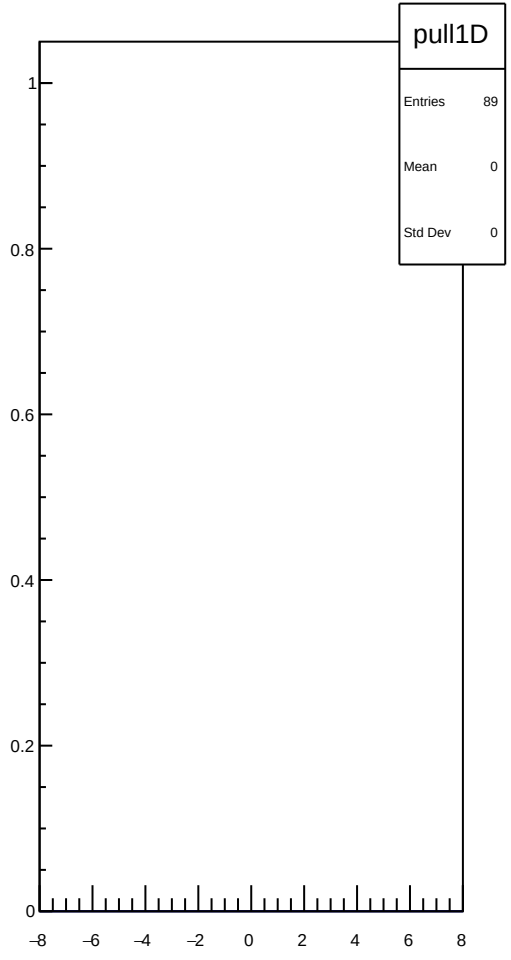

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 166.7 / 88
p0 −2.362 ± 0.127
pull
Entries 89
Mean 169.7
Std Dev 122.5
pull1D
Entries 89
Mean −0.1112
Std Dev 1.364

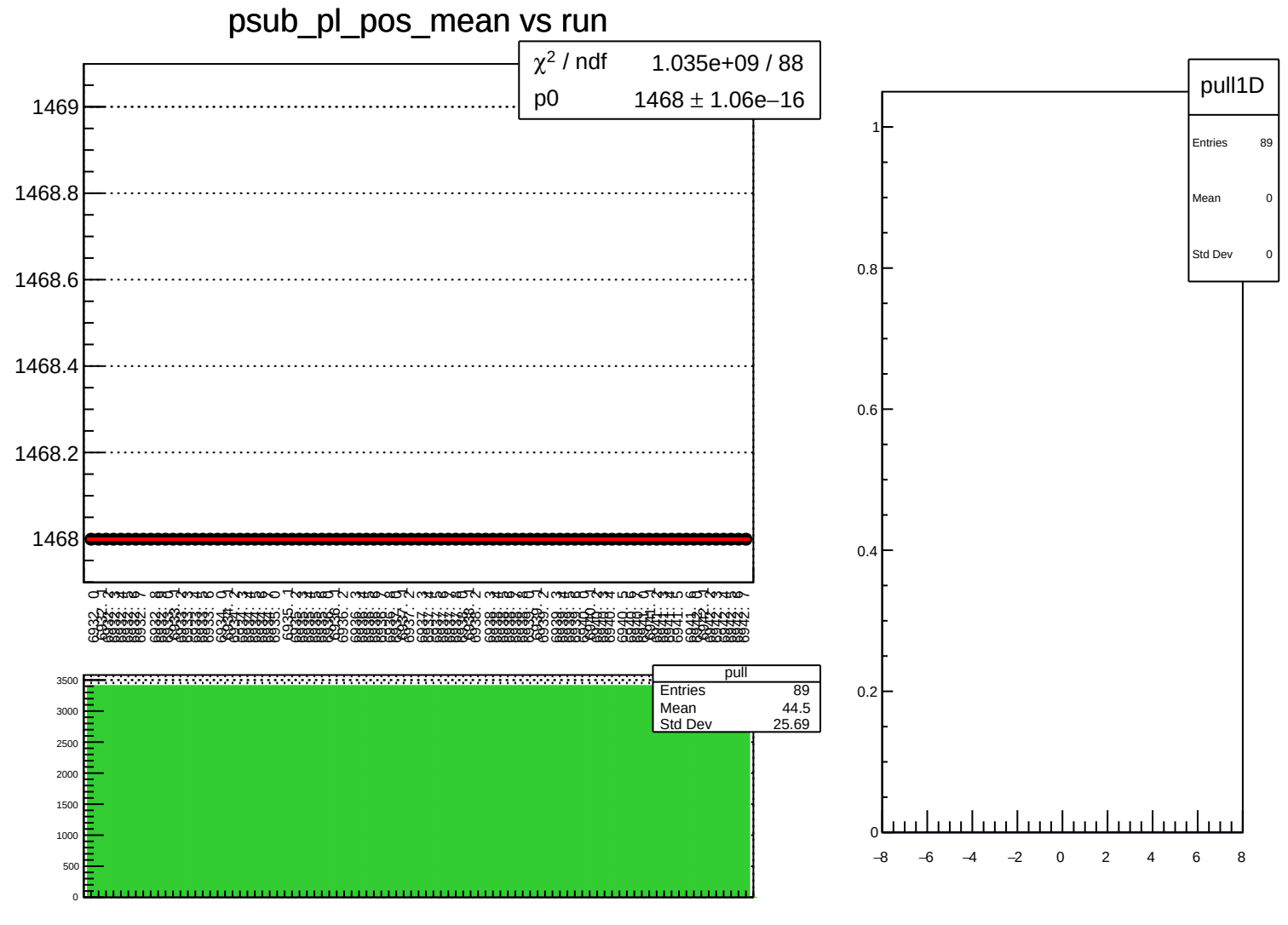

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 214.5 / 88
p0 −0.01982 ± 0.005228
pull
Entries 89
Mean 52.44
Std Dev 30.56
pull1D
Entries 89
Mean 0.02942
Std Dev 1.302

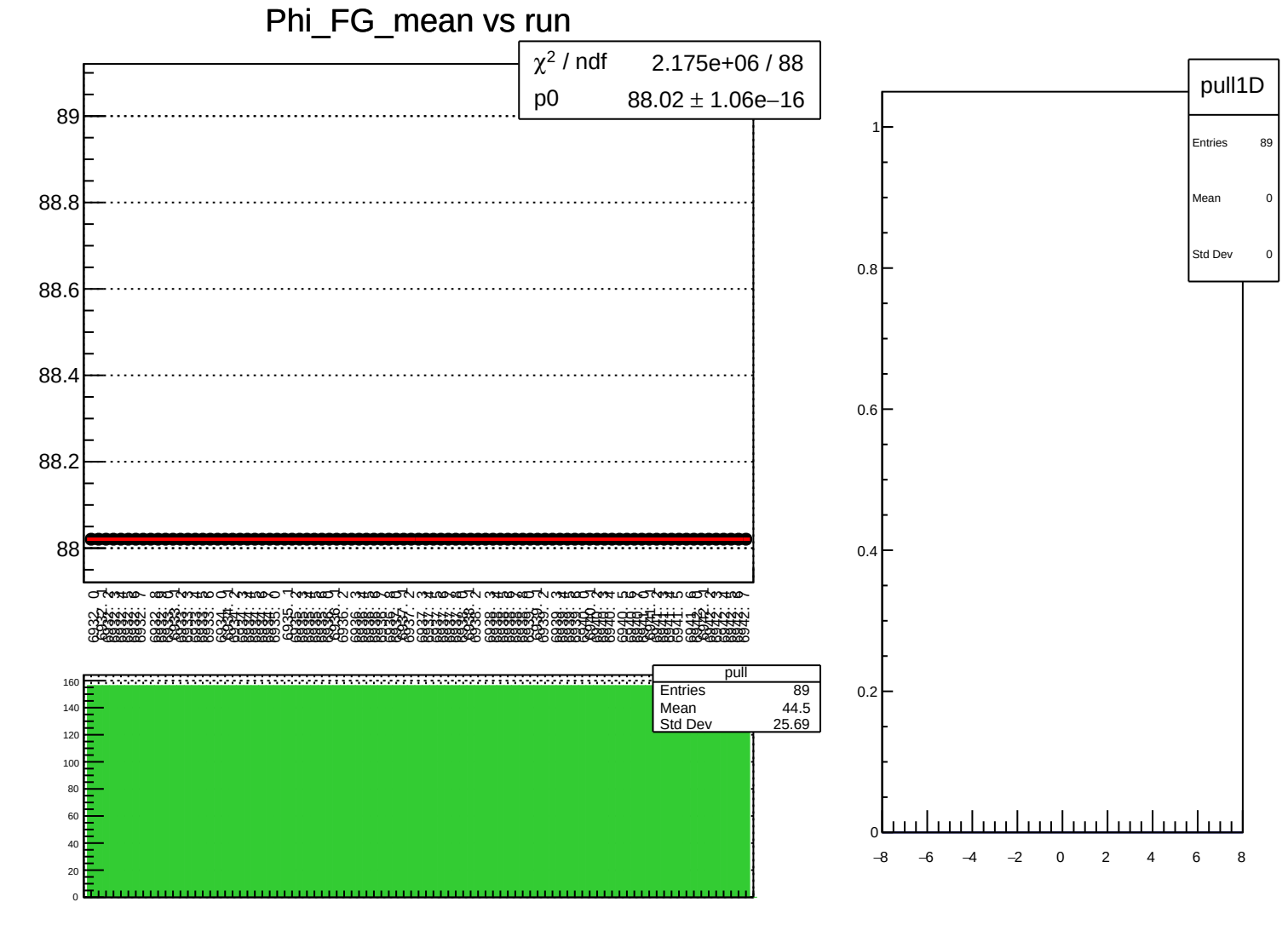

VWienAngle_mean vs run
χ² / ndf 3.038e+06 / 88
p0 −90.6 ± 1.06e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 89
Mean 44.5
Std Dev 25.69
0
−20
−40
−60
−80
−100
−120
−140
−160
−180

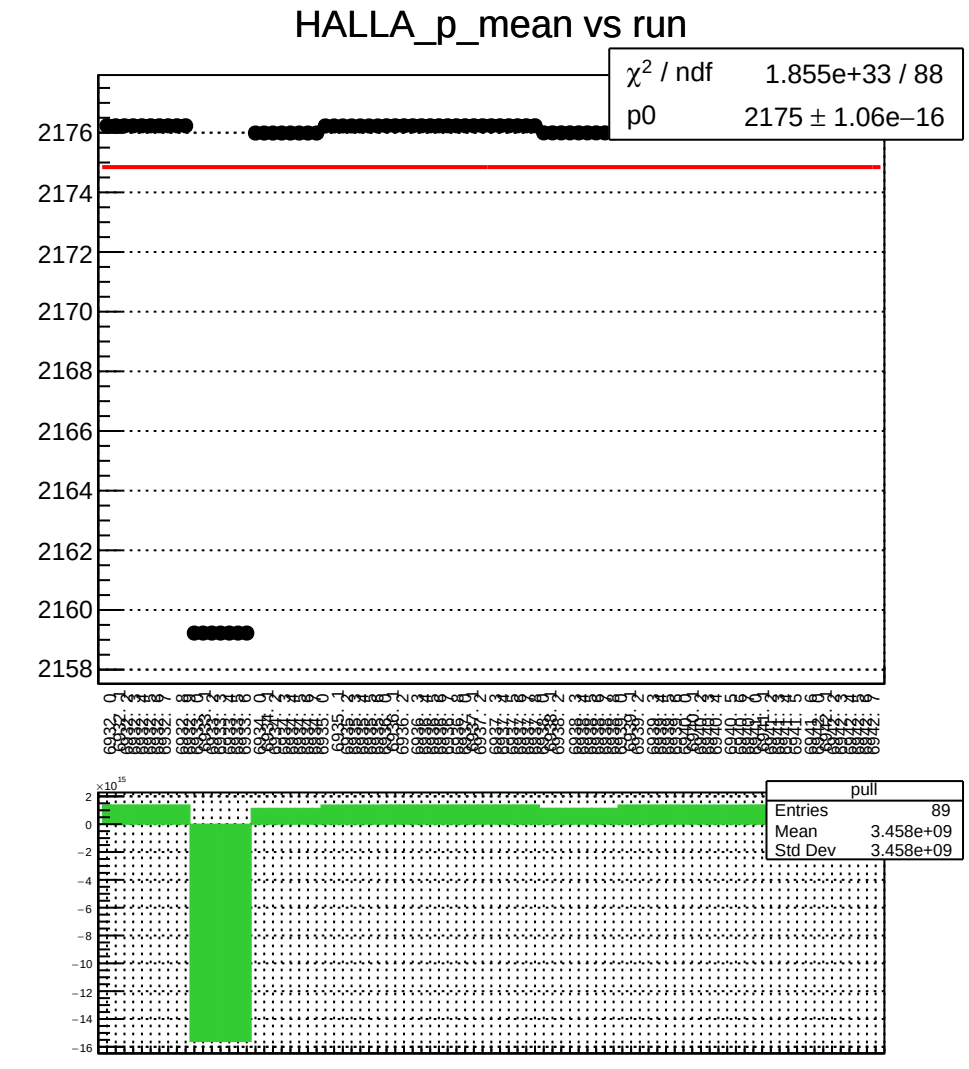

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

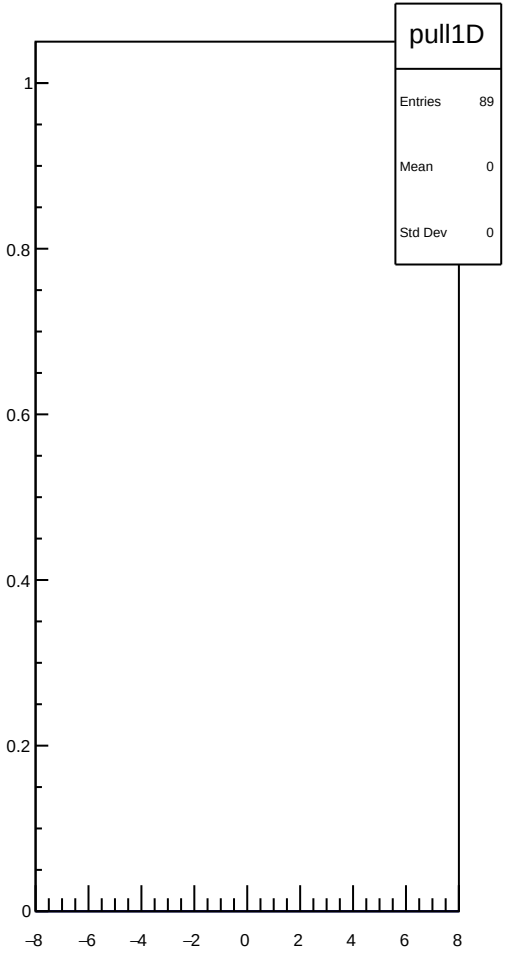

HWienAngle_mean vs run
χ² / ndf 3.64e+05 / 88
p0 −29.64 ± 1.06e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 89
Mean 44.5
Std Dev 25.69
0
−10
−20
−30
−40
−50
−60

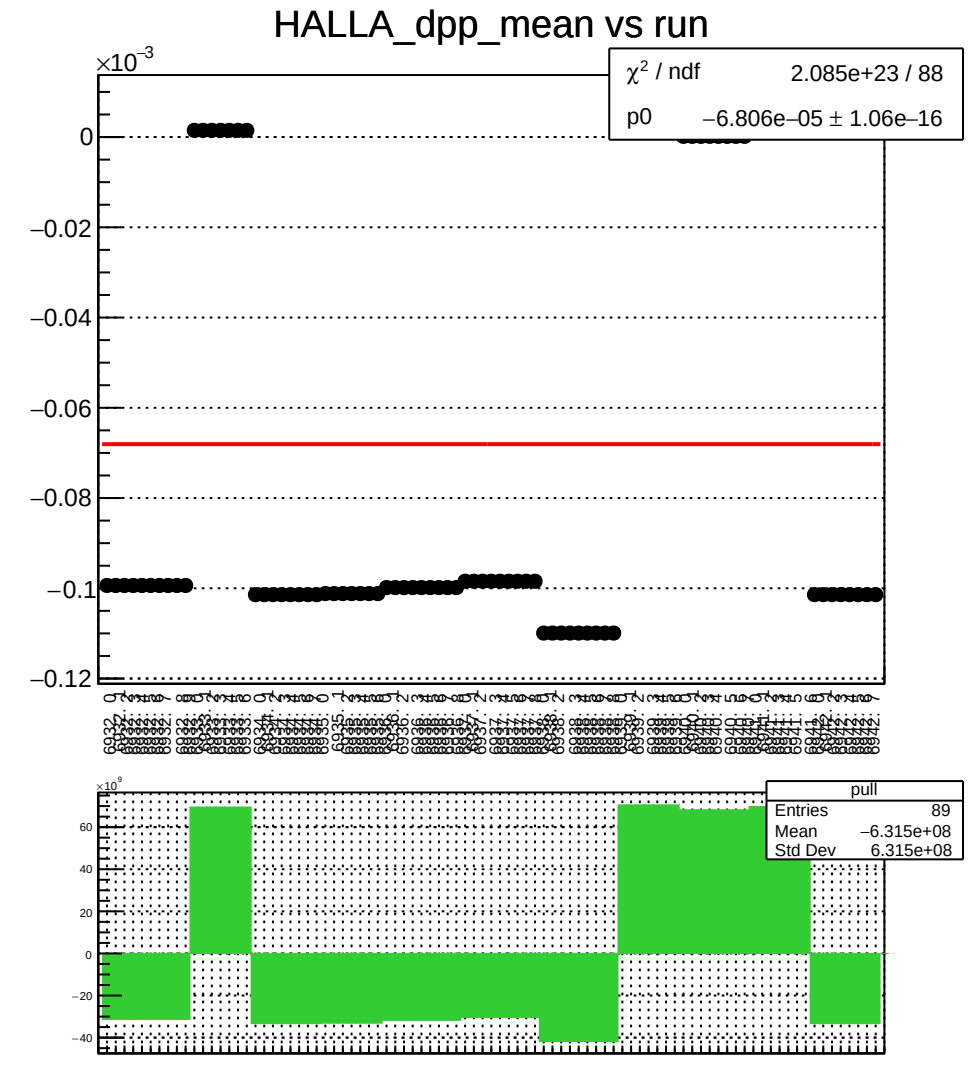

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

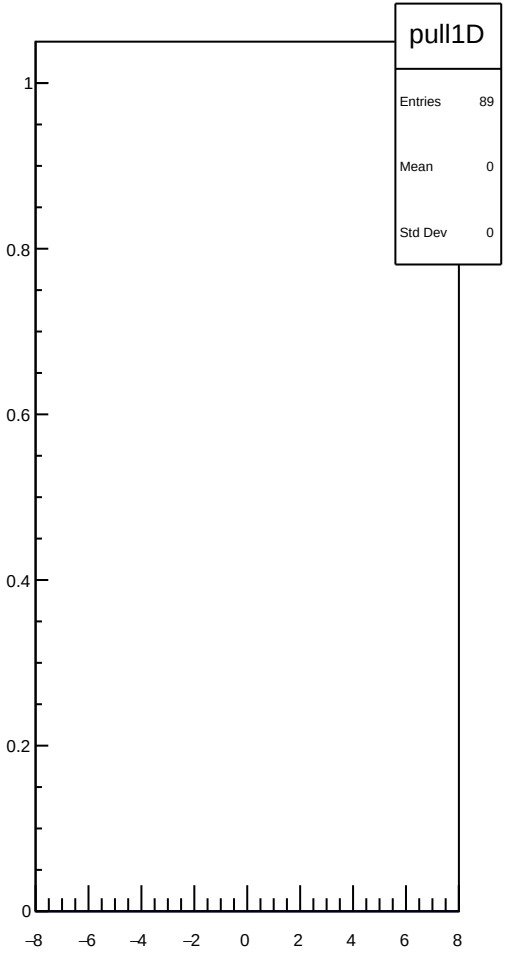

psub_pl_pos_mean vs run
χ² / ndf 1.035e+09 / 88
p0 1468 ± 1.06e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 89
Mean 44.5
Std Dev 25.69
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

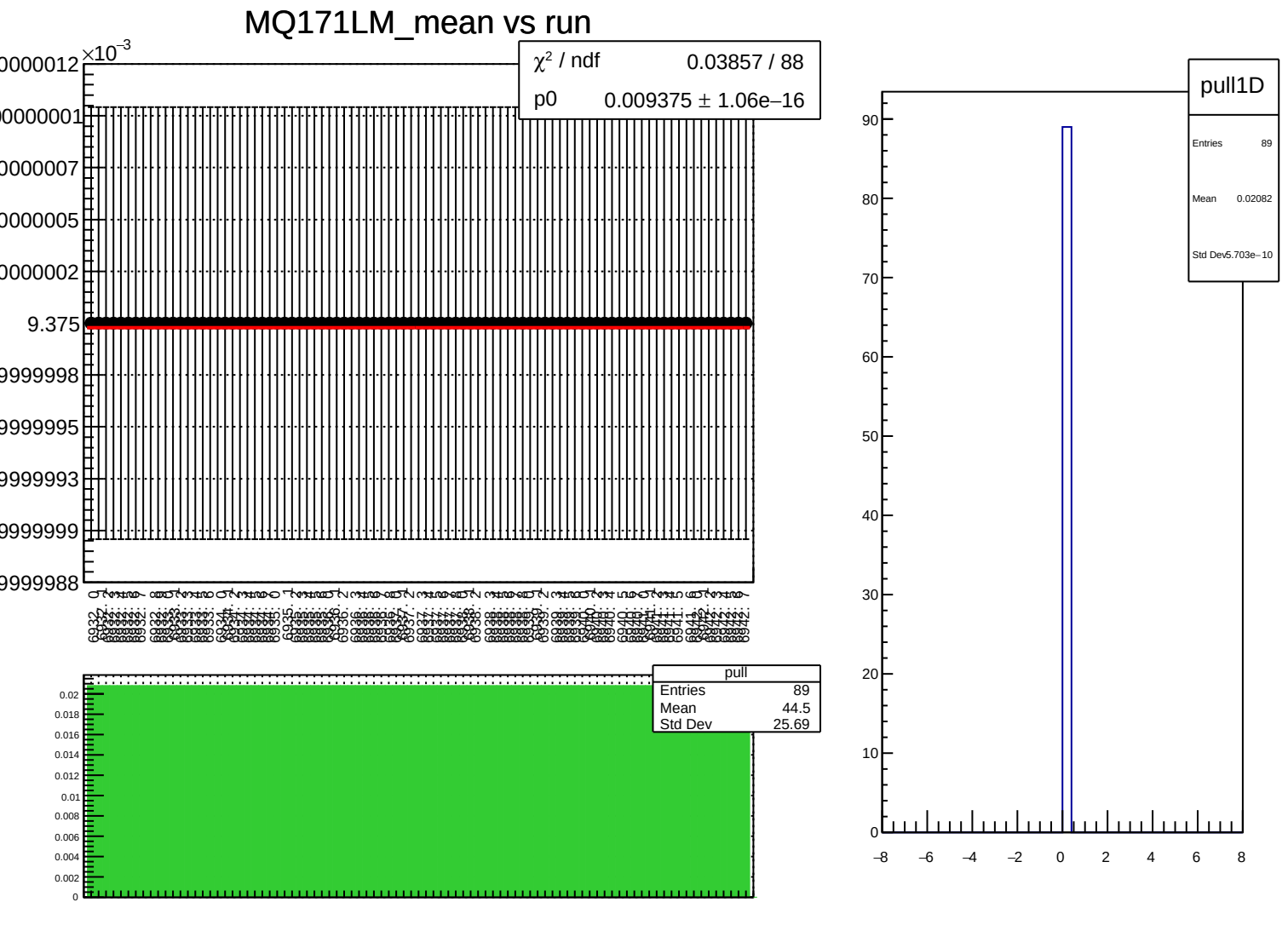

Phi_FG_mean vs run
χ² / ndf 2.175e+06 / 88
p0 88.02 ± 1.06e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 89
Mean 44.5
Std Dev 25.69
160
140
120
100
80
60
40
20
0
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

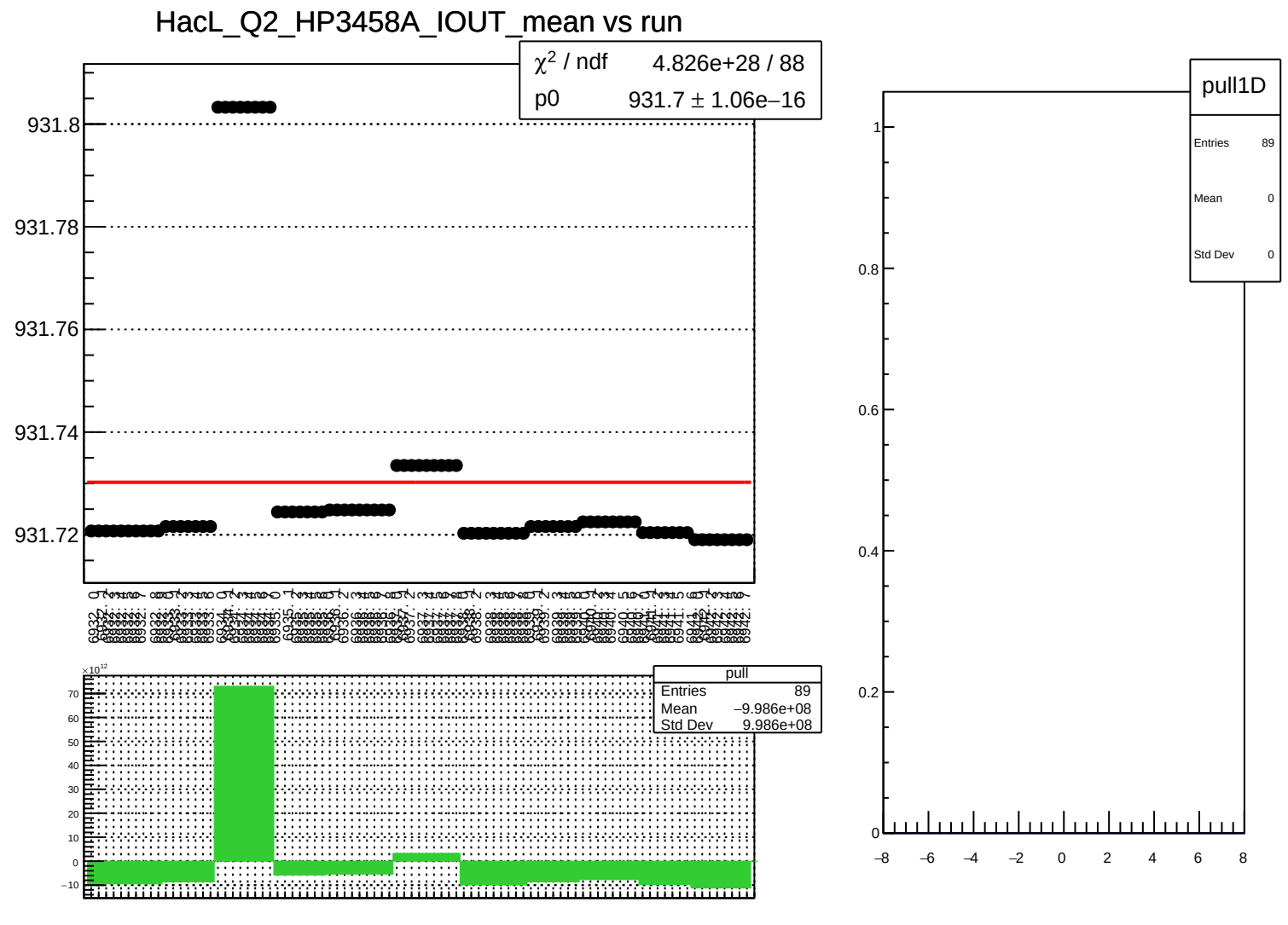

HALLA_p_mean vs run
χ² / ndf 1.855e+33 / 88
p0 2175 ± 1.06e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 89
Mean 3.458e+09
Std Dev 3.458e+09
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14
−16

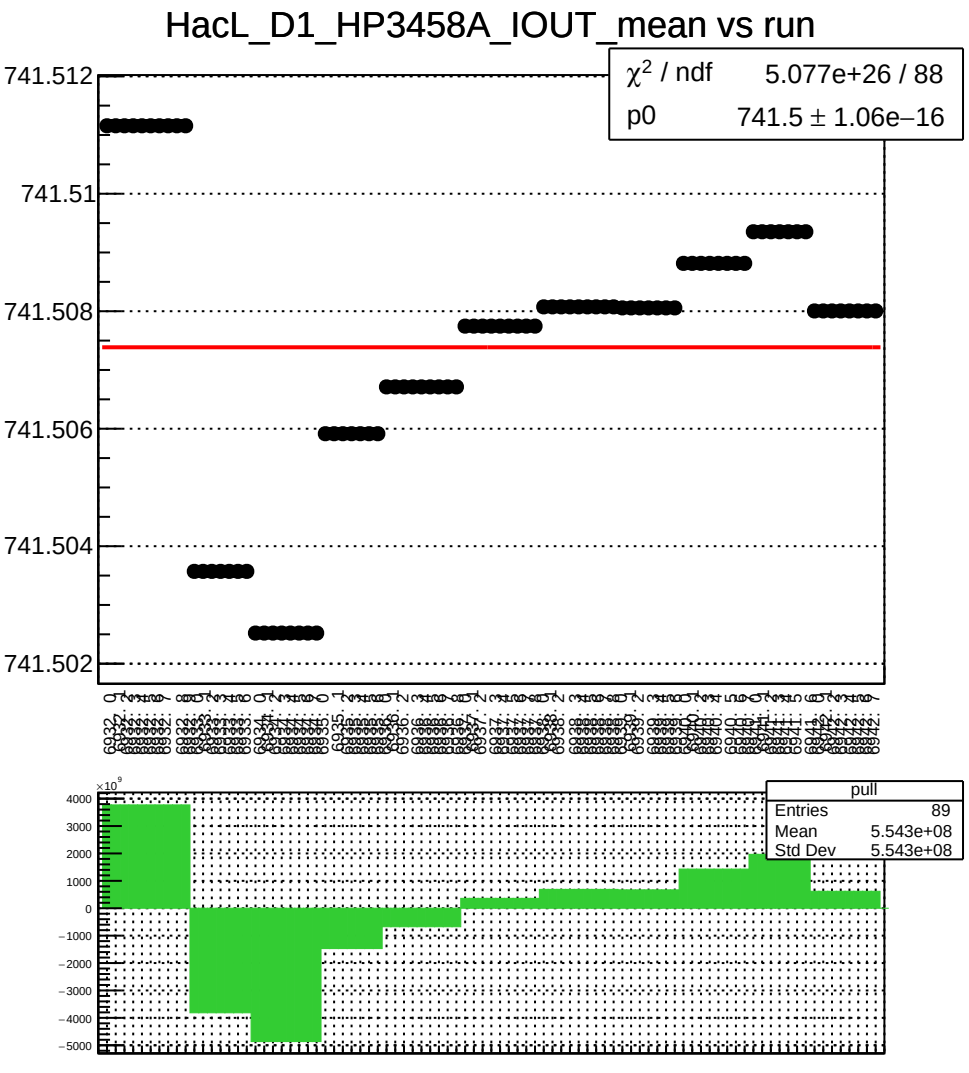

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

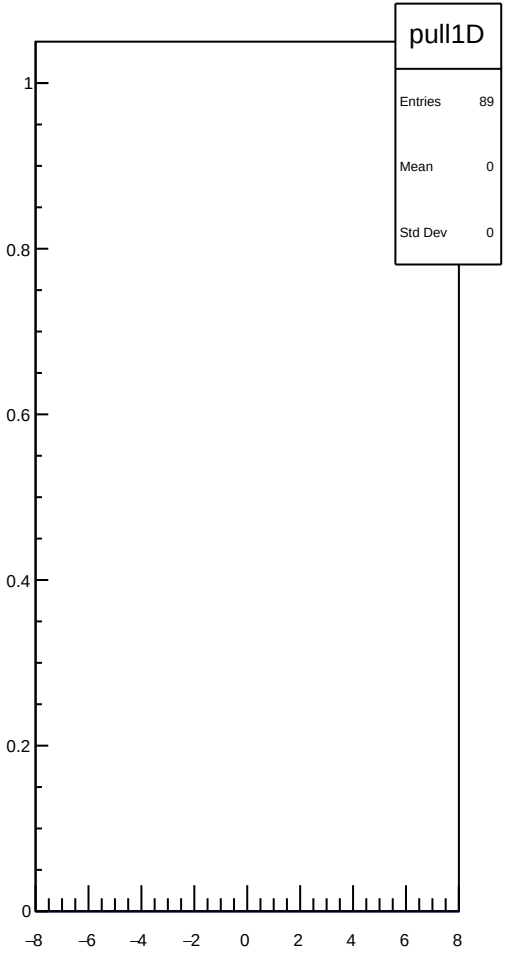

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 2.085e+23 / 88
p0 −6.806e−05 ± 1.06e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
×10⁹
pull
Entries 89
Mean −6.315e+08
Std Dev 6.315e+08
60
40
20
0
−20
−40

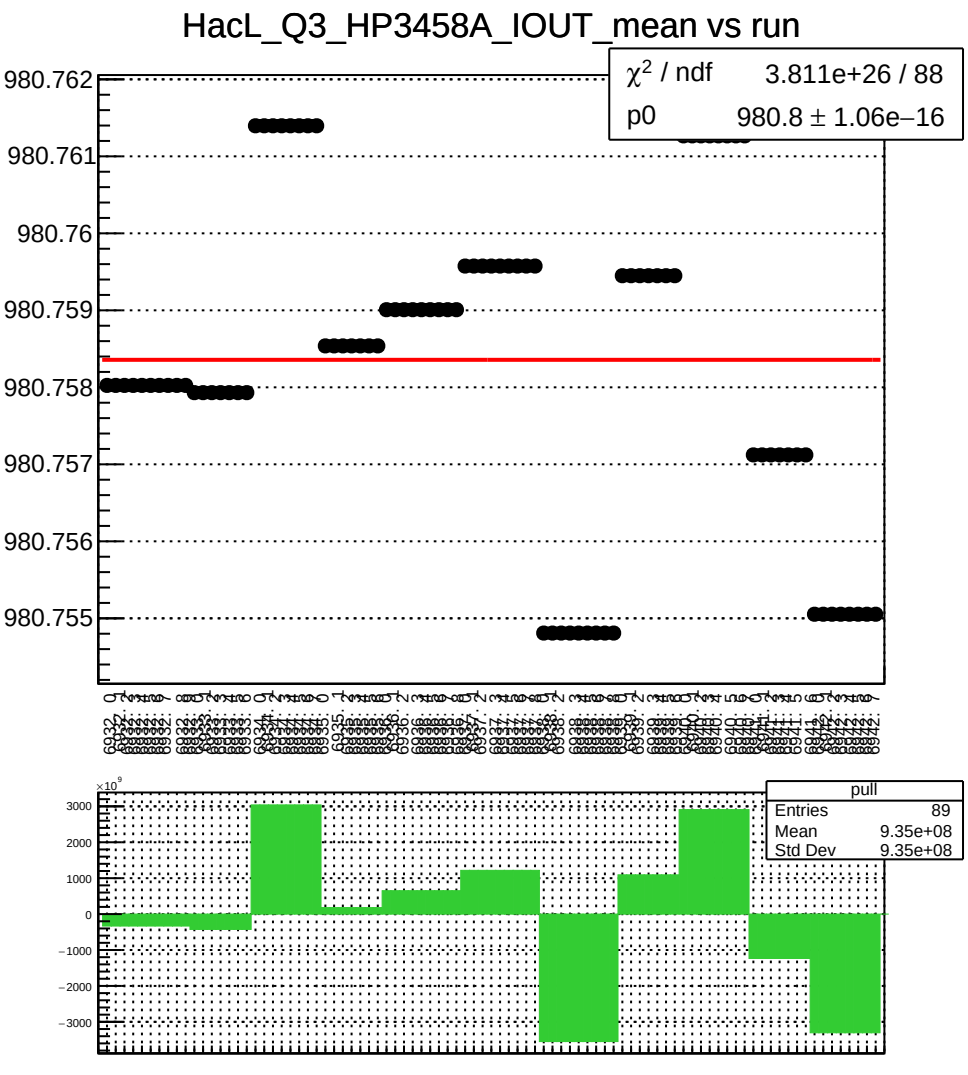

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

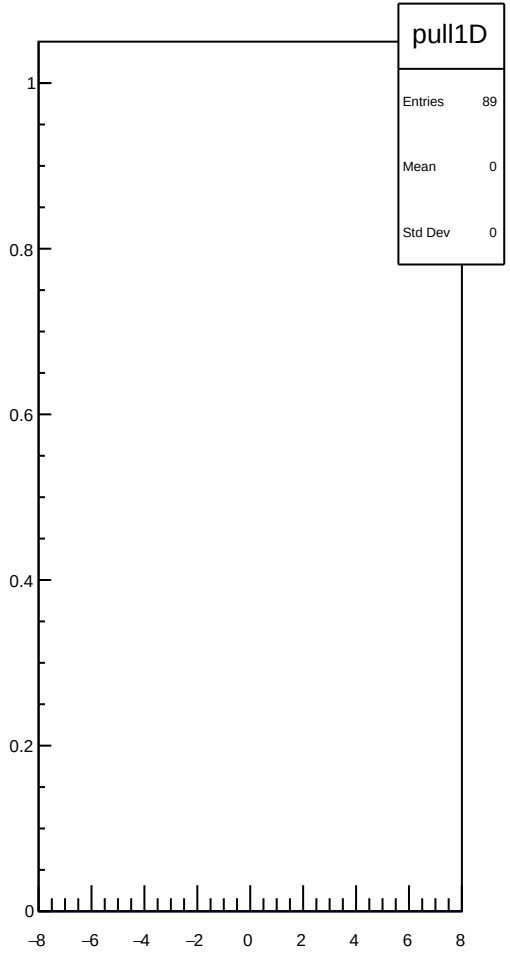

MQ171LM_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
pull
Entries 89
Mean 44.5
Std Dev 25.69
pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

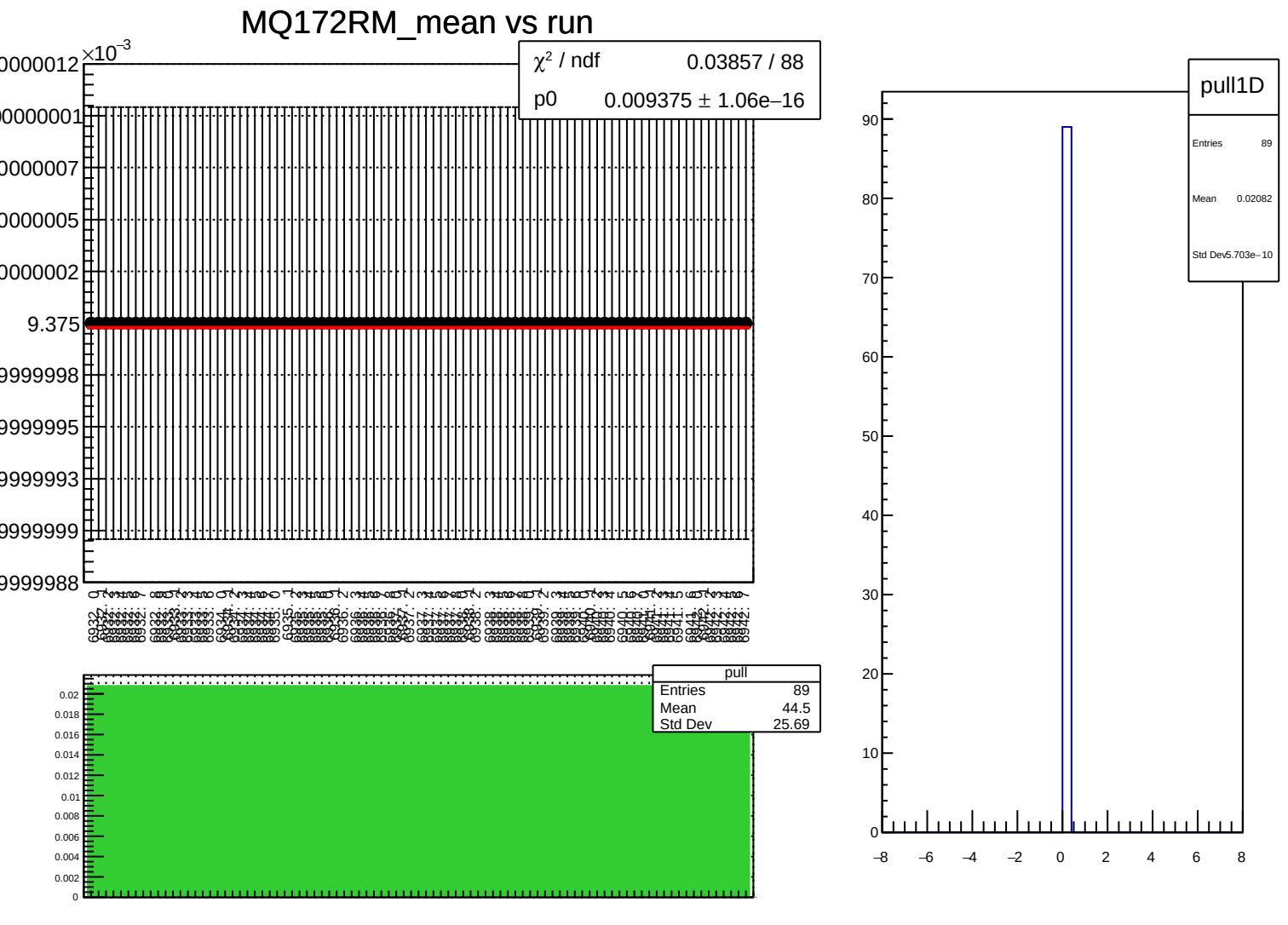

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 4.826e+28 / 88
p0 931.7 ± 1.06e−16
931.8
931.78
931.76
931.74
931.72
pull
Entries 89
Mean −9.986e+08
Std Dev 9.986e+08
×10¹²
70
60
50
40
30
20
10
0
−10
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

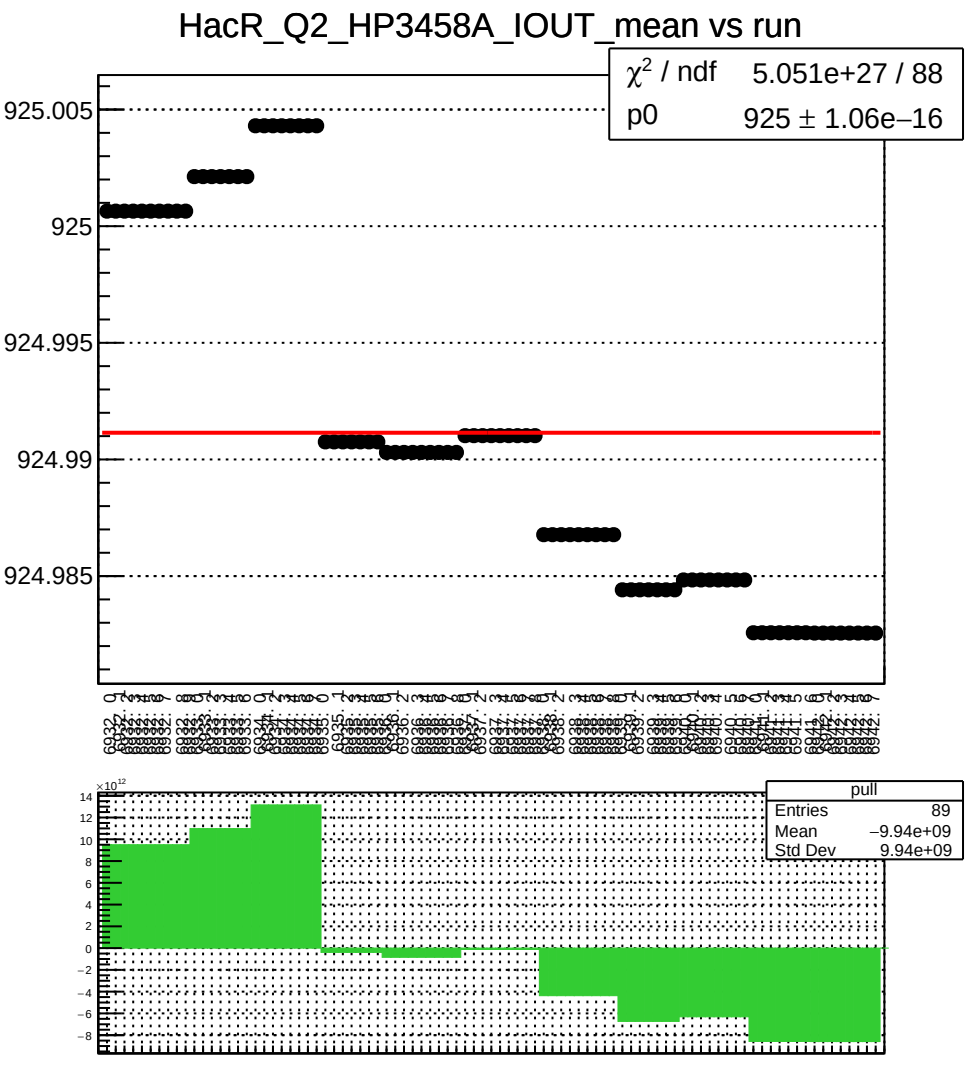

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 5.077e+26 / 88
p0 741.5 ± 1.06e−16
741.512
741.51
741.508
741.506
741.504
741.502
pull
Entries 89
Mean 5.543e+08
Std Dev 5.543e+08
×10⁹
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000

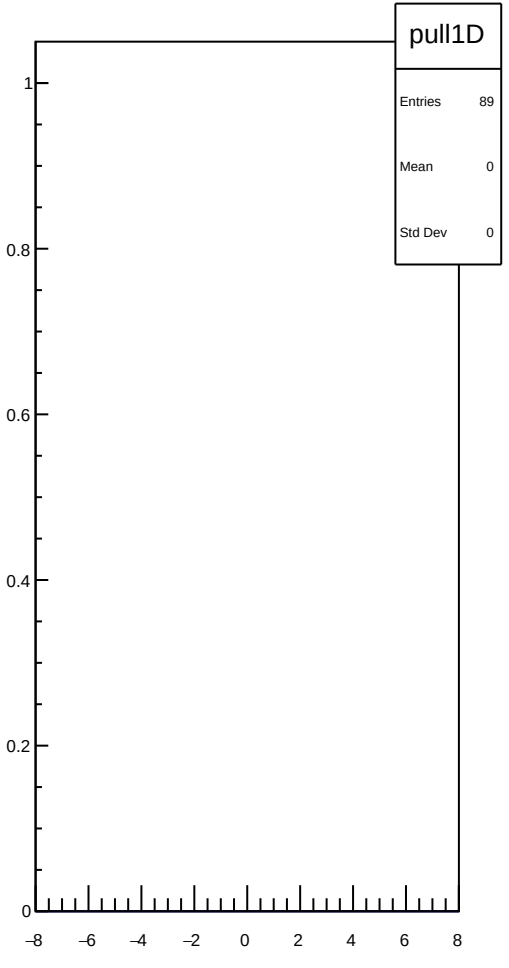

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

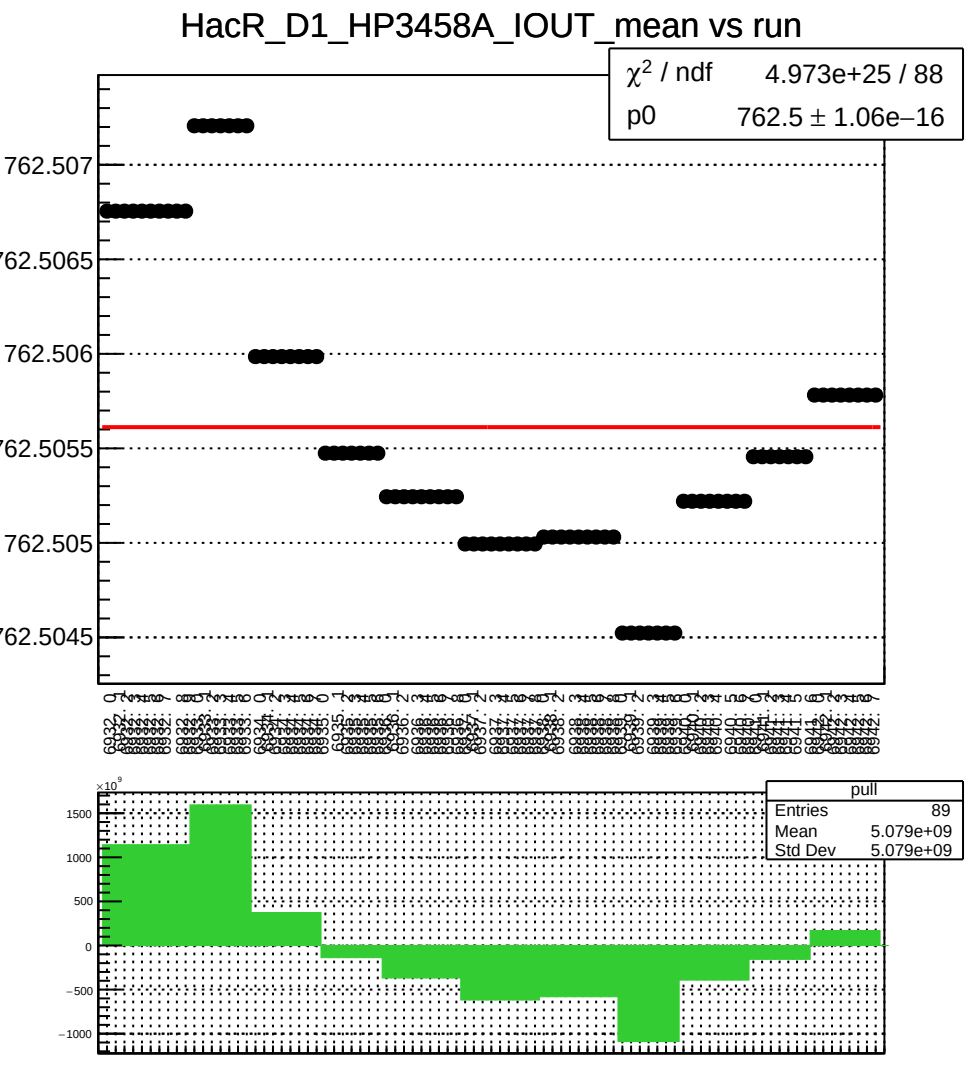

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 3.811e+26 / 88
p0 980.8 ± 1.06e−16
980.762
980.761
980.76
980.759
980.758
980.757
980.756
980.755
pull
Entries 89
Mean 9.35e+08
Std Dev 9.35e+08
×10⁹
3000
2000
1000
0
−1000
−2000
−3000

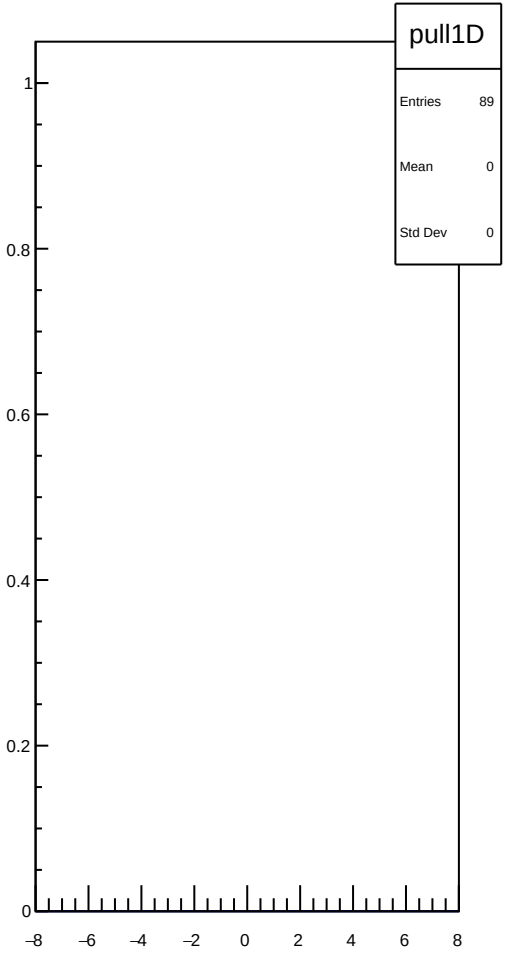

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

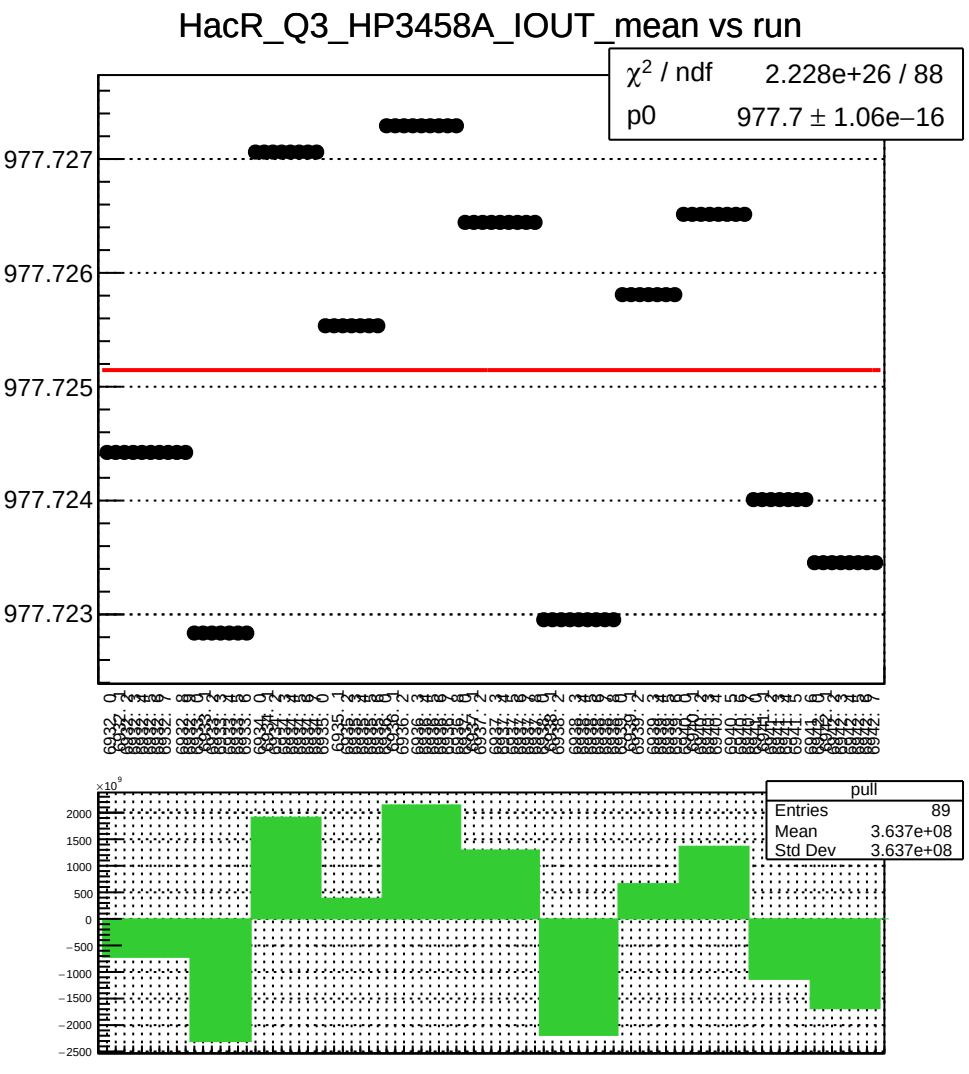

MQ172RM_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
pull
Entries 89
Mean 44.5
Std Dev 25.69
pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

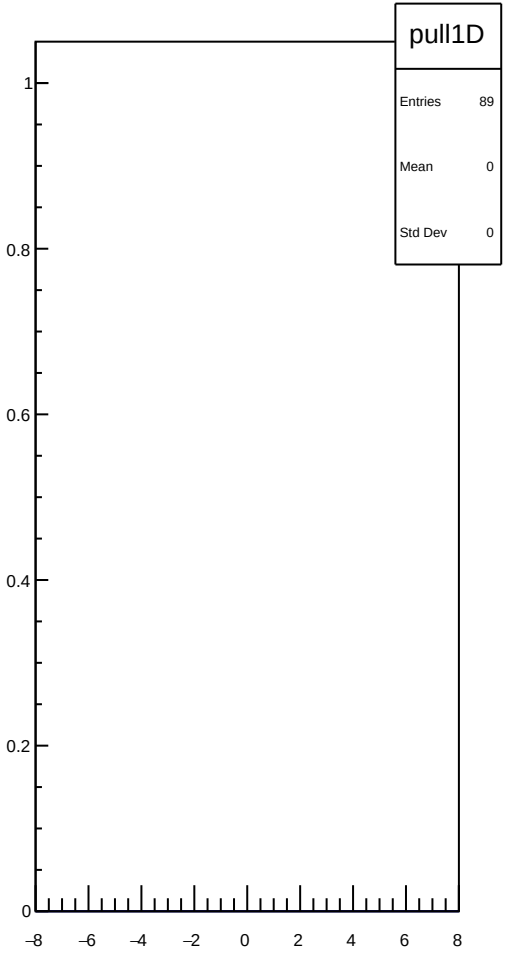

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 5.051e+27 / 88
p0 925 ± 1.06e−16
925.005
925
924.995
924.99
924.985
pull
Entries 89
Mean −9.94e+09
Std Dev 9.94e+09
×10¹²
14
12
10
8
6
4
2
0
−2
−4
−6
−8

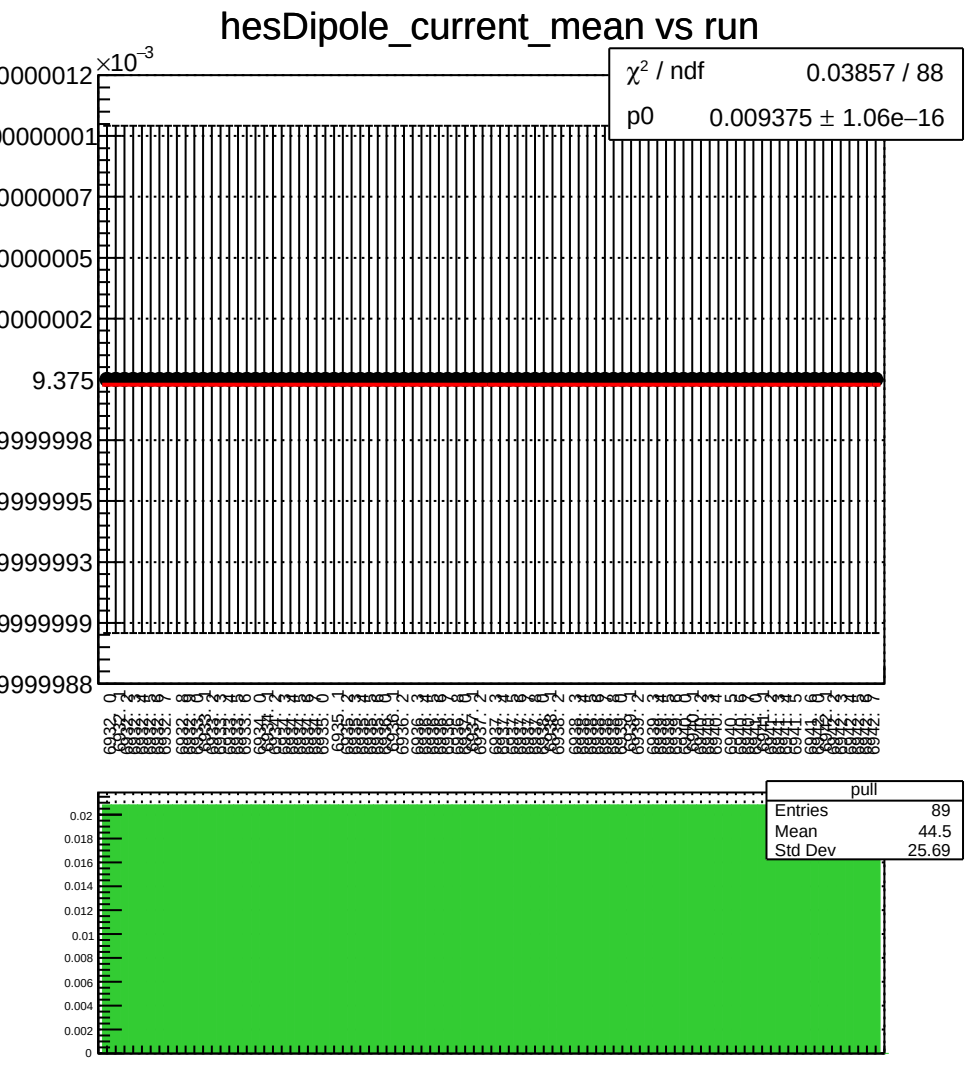

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

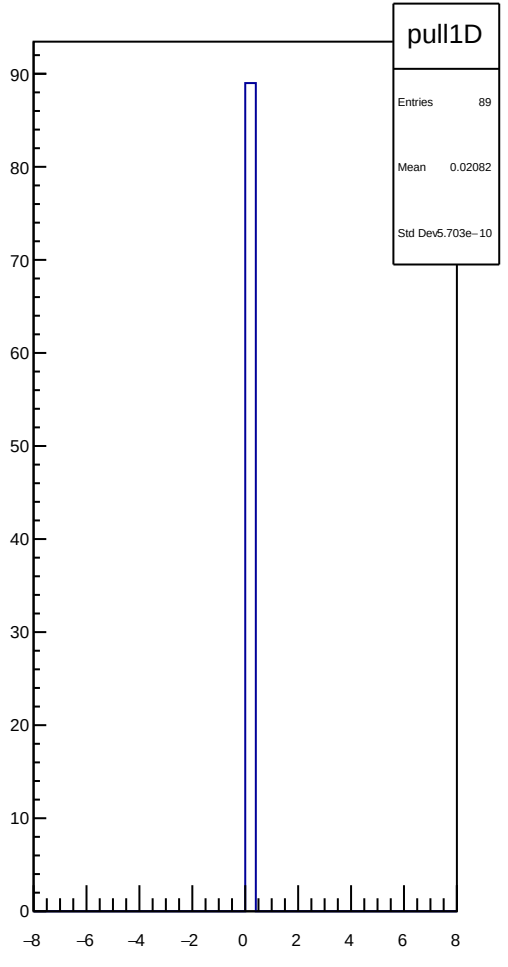

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 4.973e+25 / 88
p0 762.5 ± 1.06e−16
762.507
762.5065
762.506
762.5055
762.505
762.5045
pull
Entries 89
Mean 5.079e+09
Std Dev 5.079e+09
×10⁹
1500
1000
500
0
−500
−1000

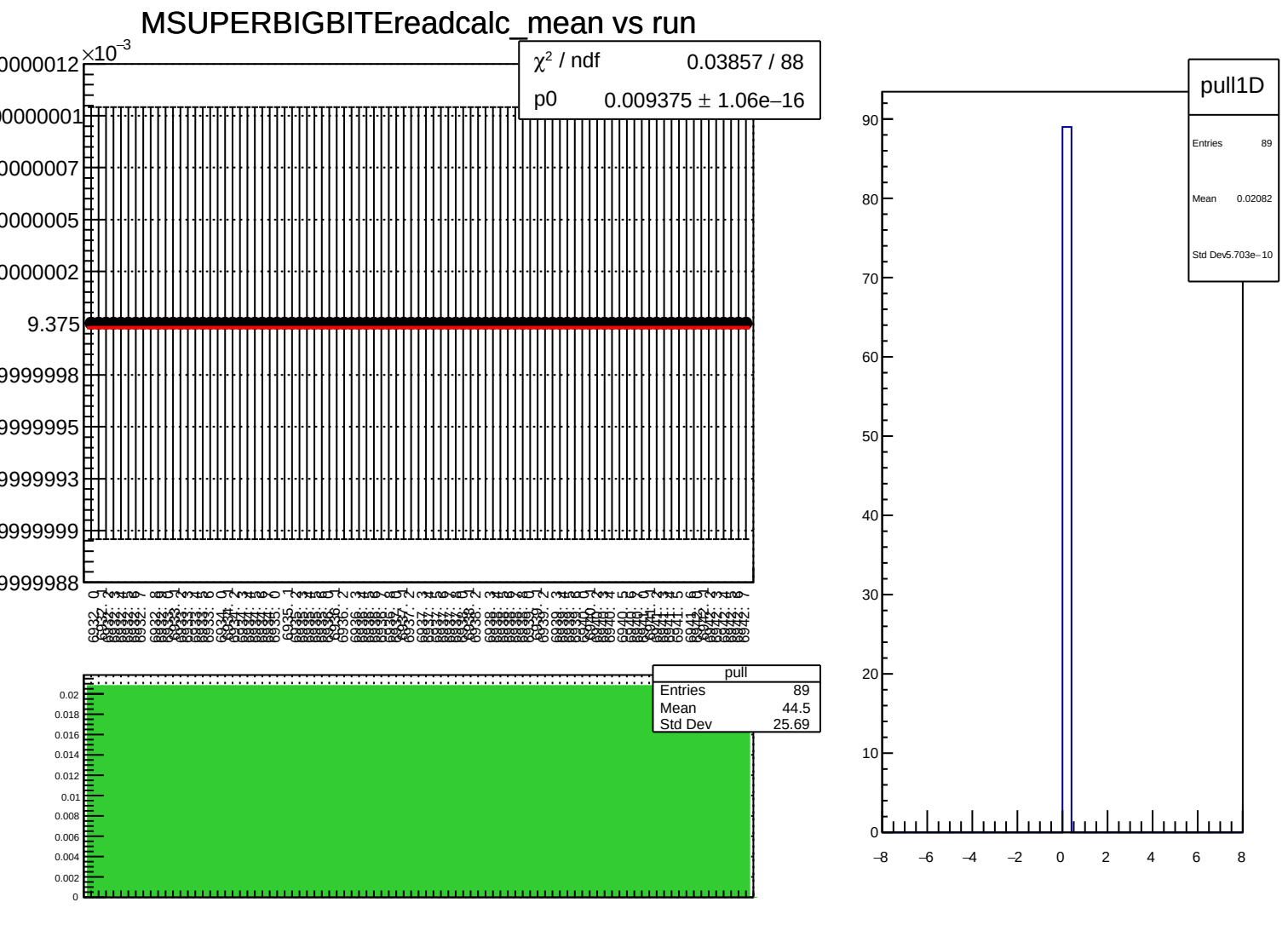

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

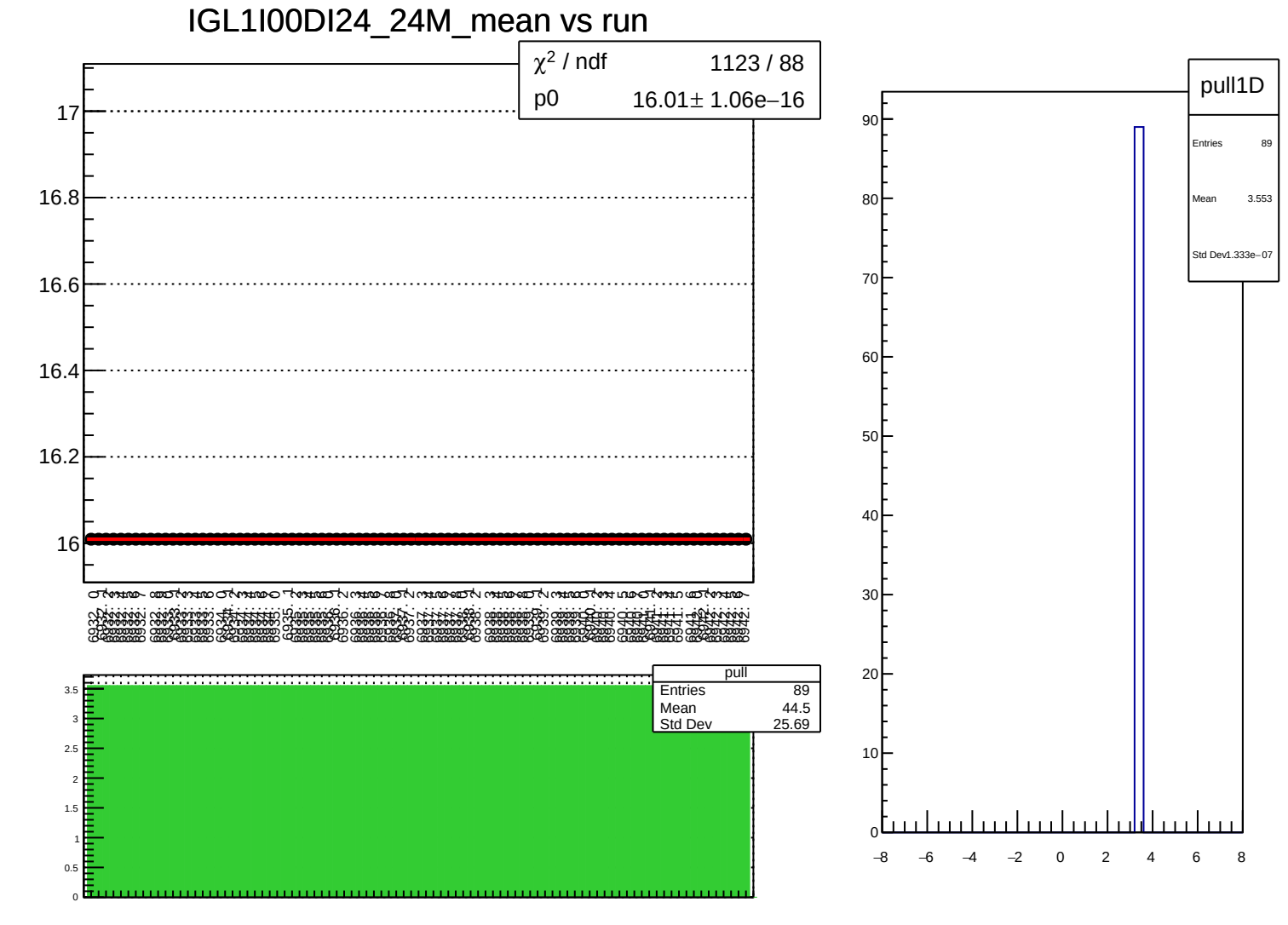

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.228e+26 / 88
p0 977.7 ± 1.06e−16
977.727
977.726
977.725
977.724
977.723
pull
Entries 89
Mean 3.637e+08
Std Dev 3.637e+08
×10⁹
2000
1500
1000
500
0
−500
−1000
−1500
−2000
−2500

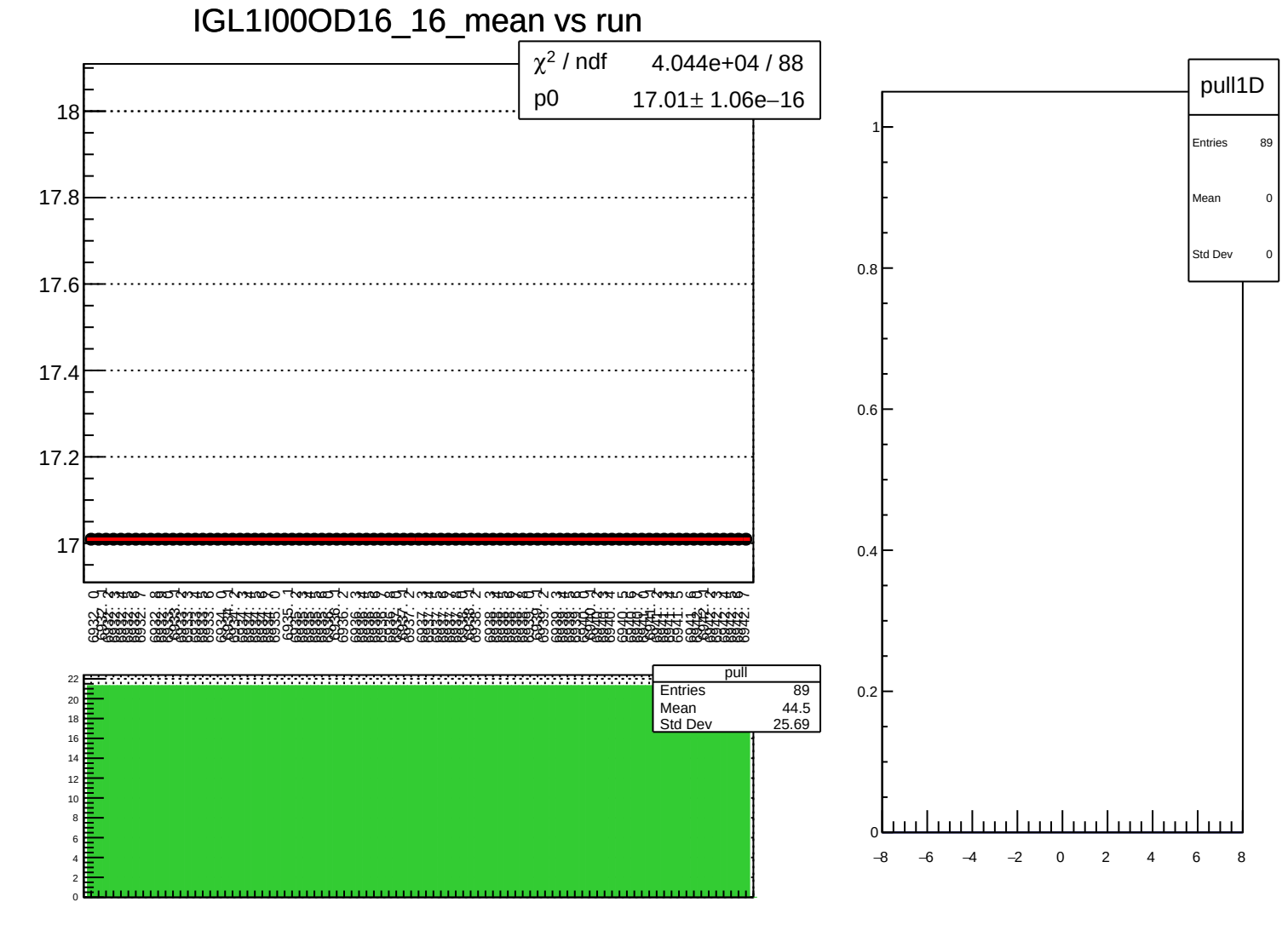

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

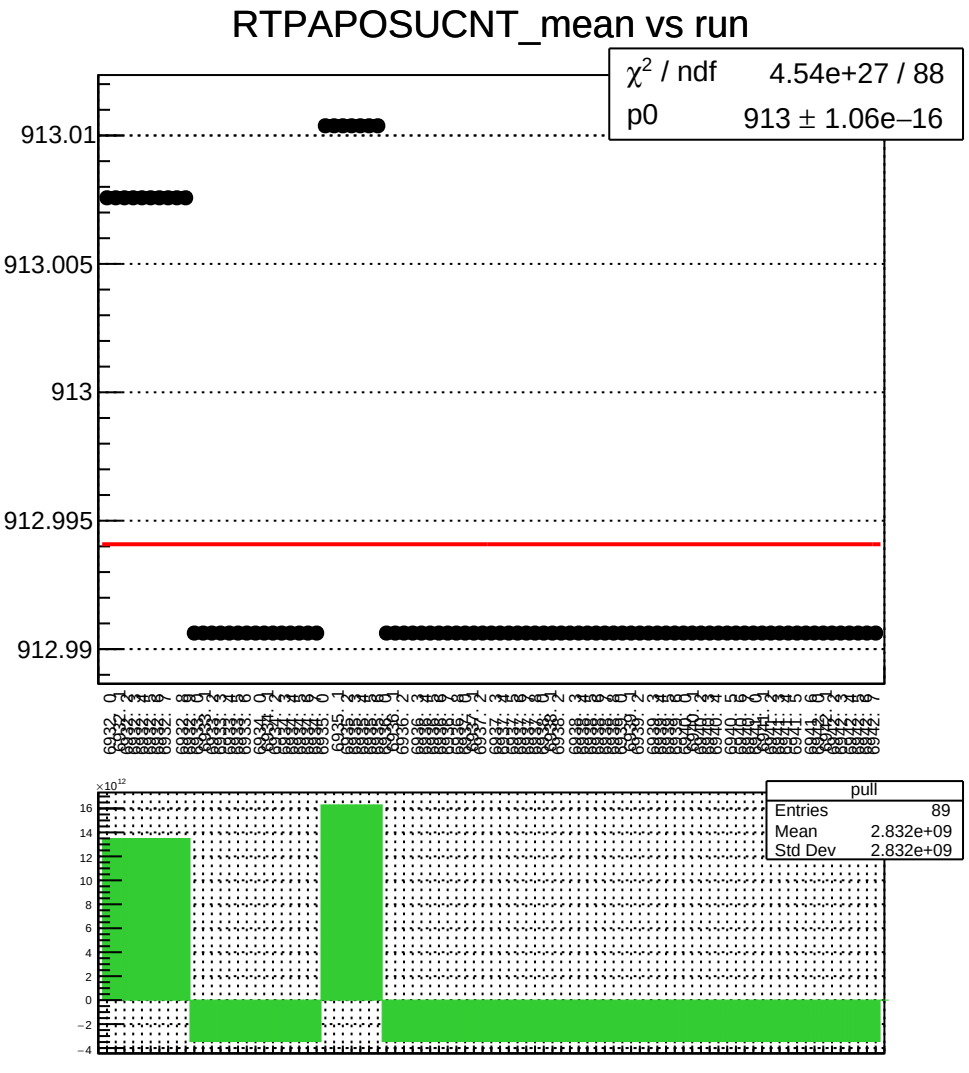

hesDipole_current_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
pull
Entries 89
Mean 44.5
Std Dev 25.69

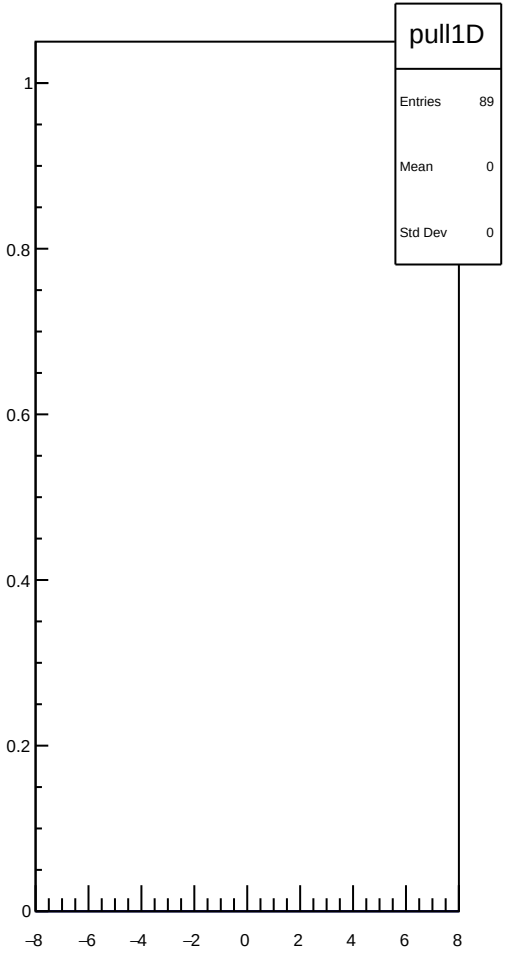

pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10

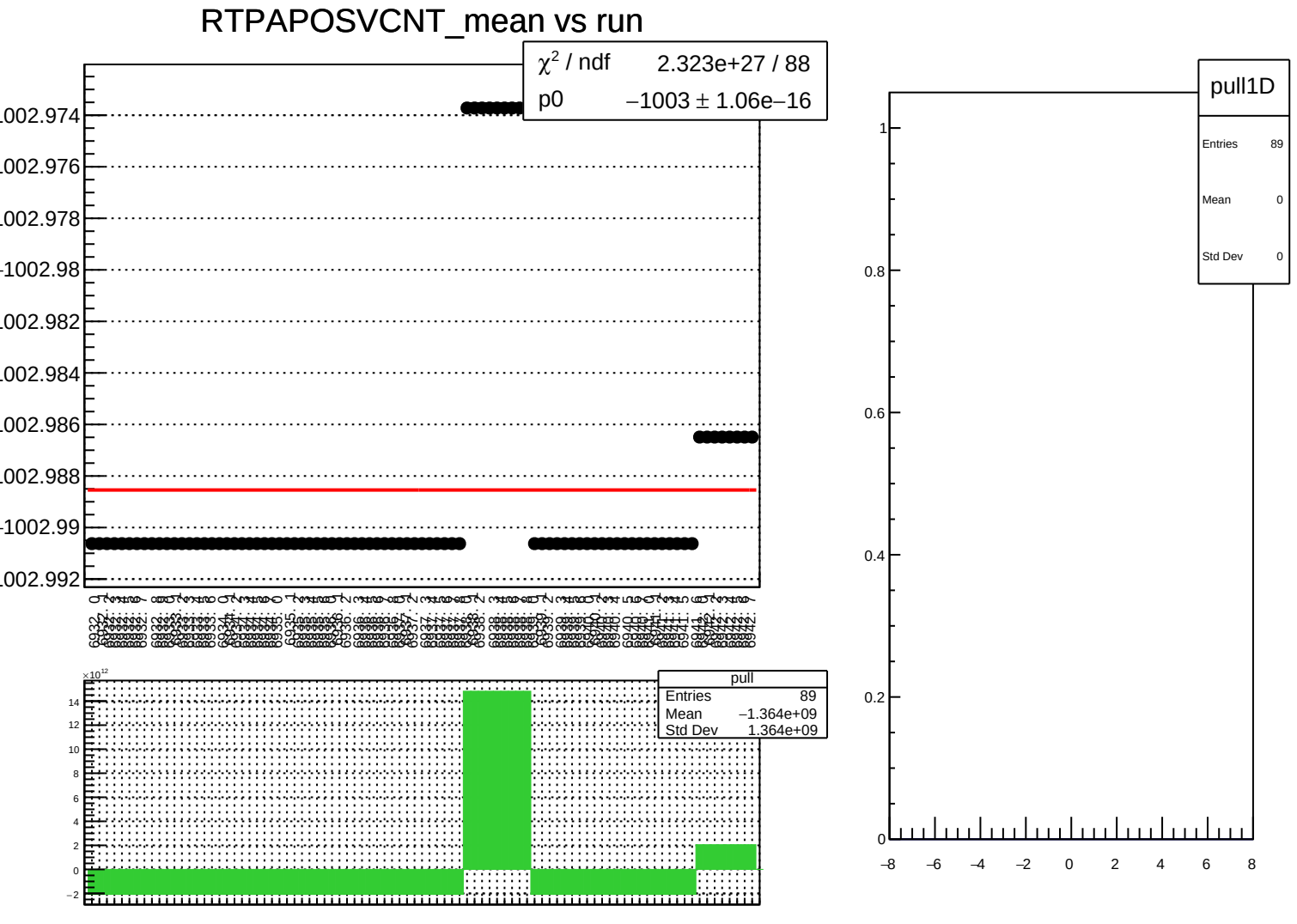

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.03857 / 88
p0 0.009375 ± 1.06e−16
×10⁻³
pull
Entries 89
Mean 44.5
Std Dev 25.69
pull1D
Entries 89
Mean 0.02082
Std Dev 5.703e−10


IGL1I00DI24_24M_mean vs run
χ² / ndf 1123 / 88
p0 16.01± 1.06e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 89
Mean 44.5
Std Dev 25.69
3.5
3
2.5
2
1.5
1
0.5
0
pull1D
Entries 89
Mean 3.553
Std Dev1.333e−07
90
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 4.044e+04 / 88
p0 17.01± 1.06e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 89
Mean 44.5
Std Dev 25.69
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 4.54e+27 / 88
p0 913 ± 1.06e−16
913.01
913.005
913
912.995
912.99
pull
Entries 89
Mean 2.832e+09
Std Dev 2.832e+09
×10¹²
16
14
12
10
8
6
4
2
0
−2
−4


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


RTPAPOSVCNT_mean vs run
χ² / ndf 2.323e+27 / 88
p0 −1003 ± 1.06e−16
−1002.974
−1002.976
−1002.978
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
−1002.992
pull
Entries 89
Mean −1.364e+09
Std Dev 1.364e+09
×10¹²
14
12
10
8
6
4
2
0
−2
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8