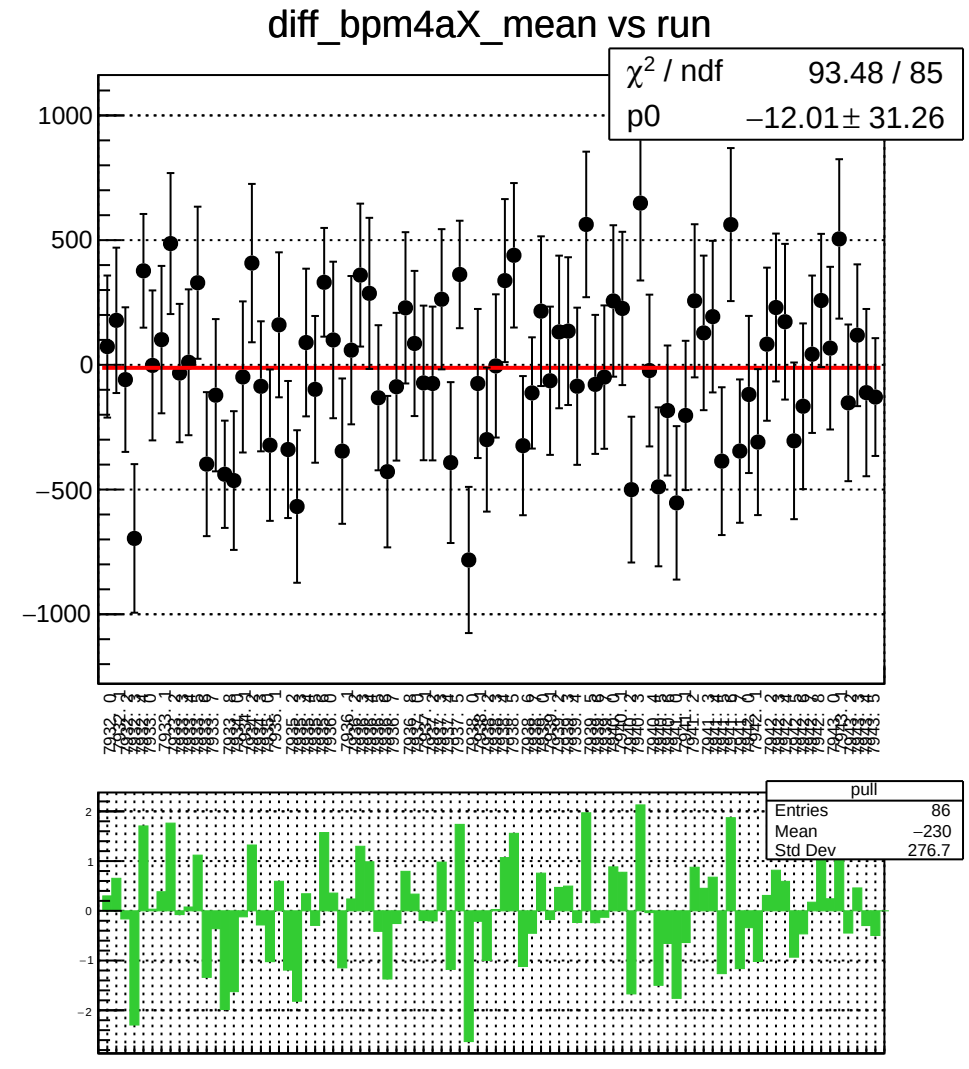
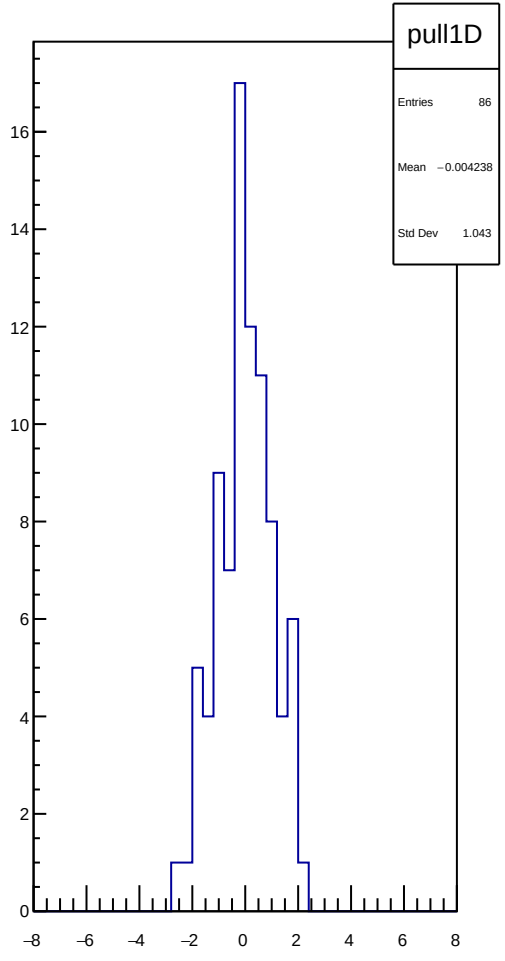
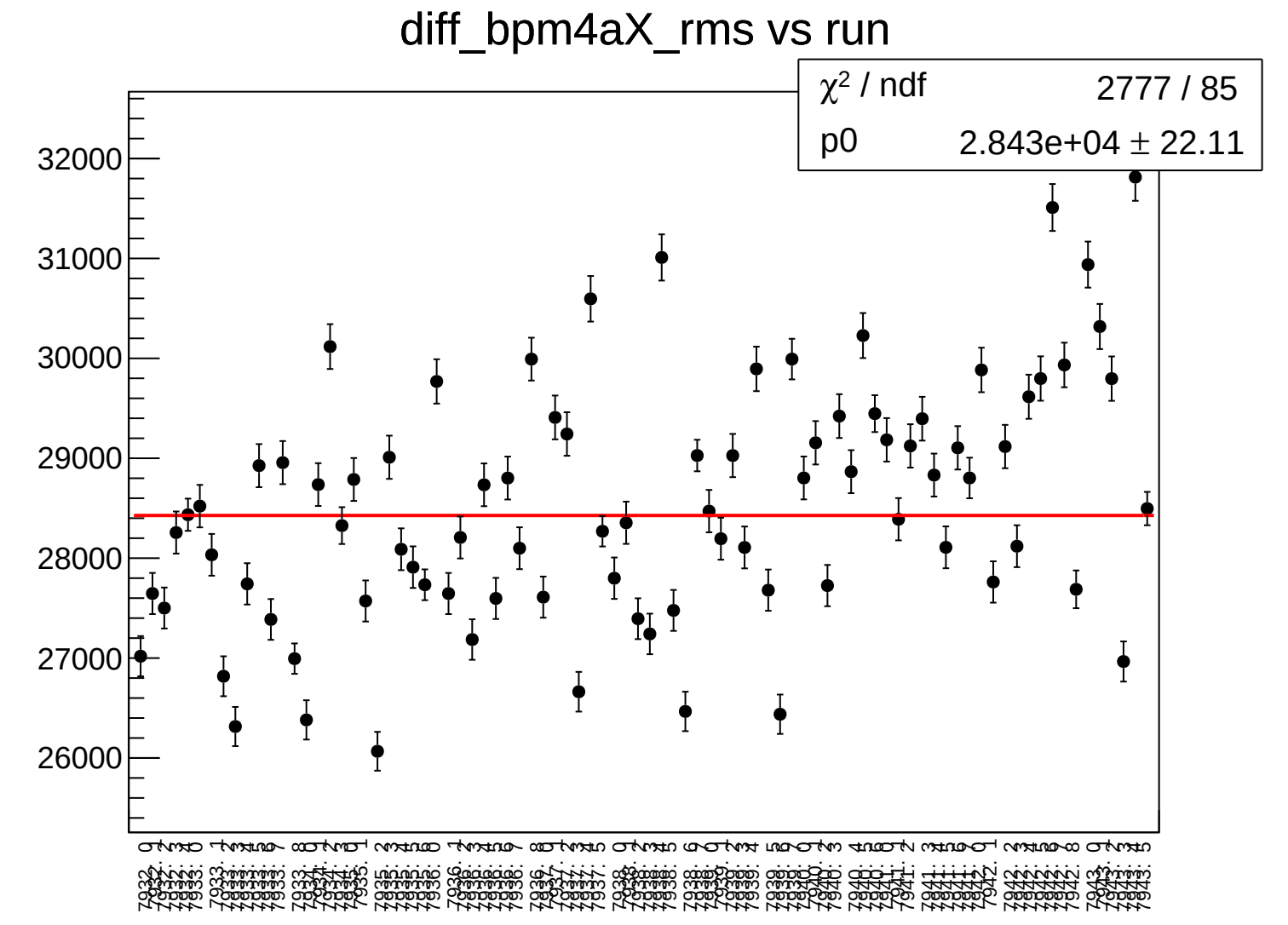
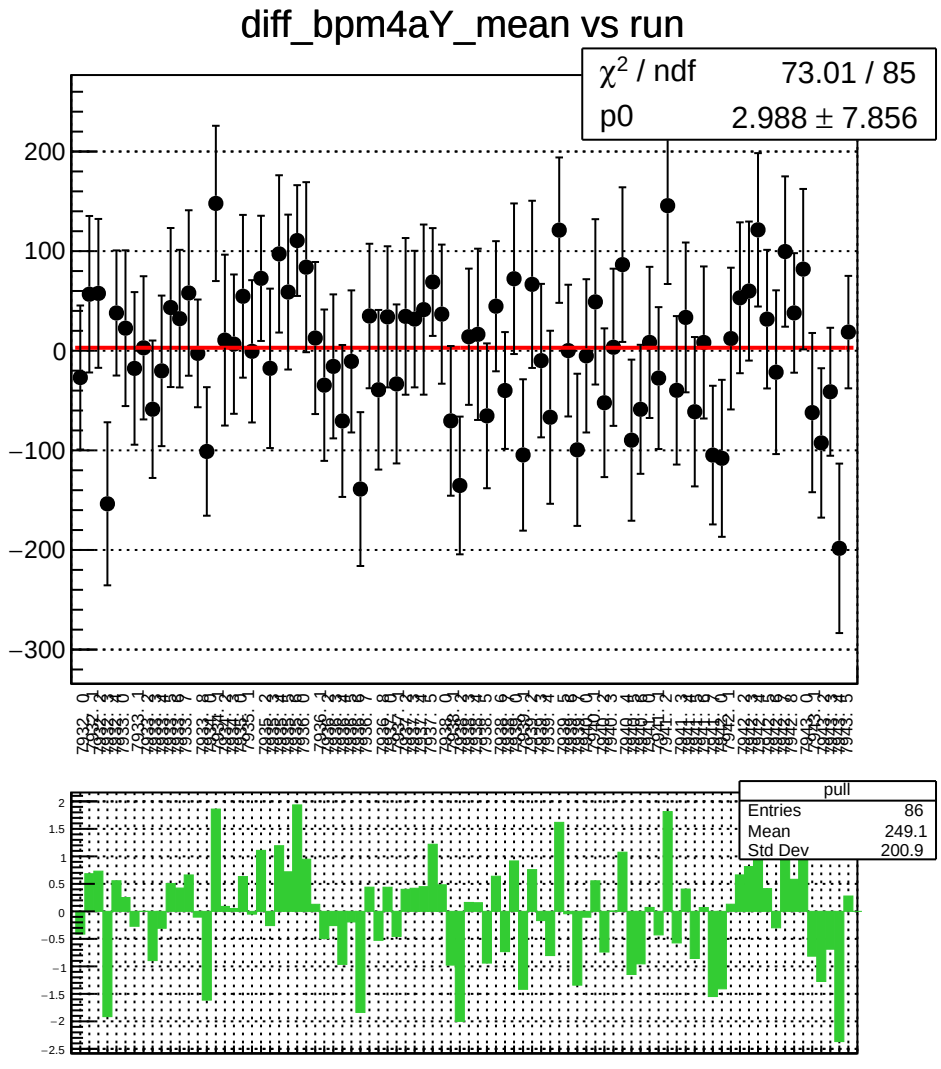
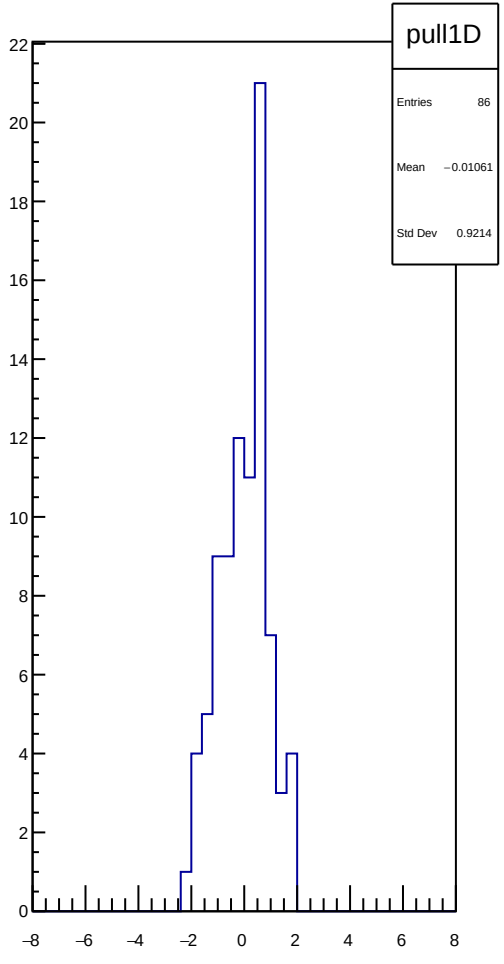
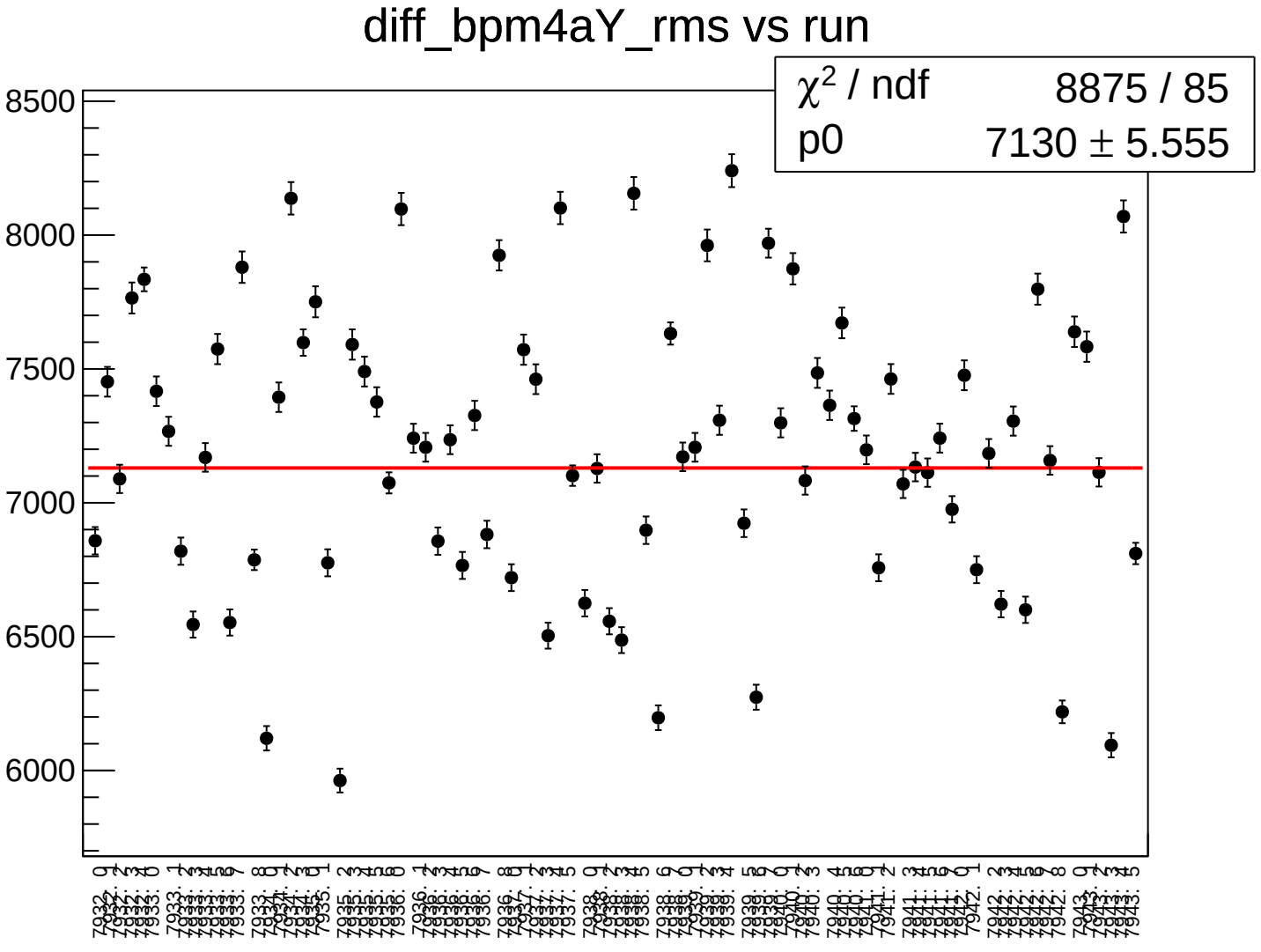

diff_bpm4aX_mean vs run
χ² / ndf 93.48 / 85
p0 −12.01± 31.26
1000
500
0
−500
−1000
pull
Entries 86
Mean −230
Std Dev 276.7
2
1
0
−1
−2

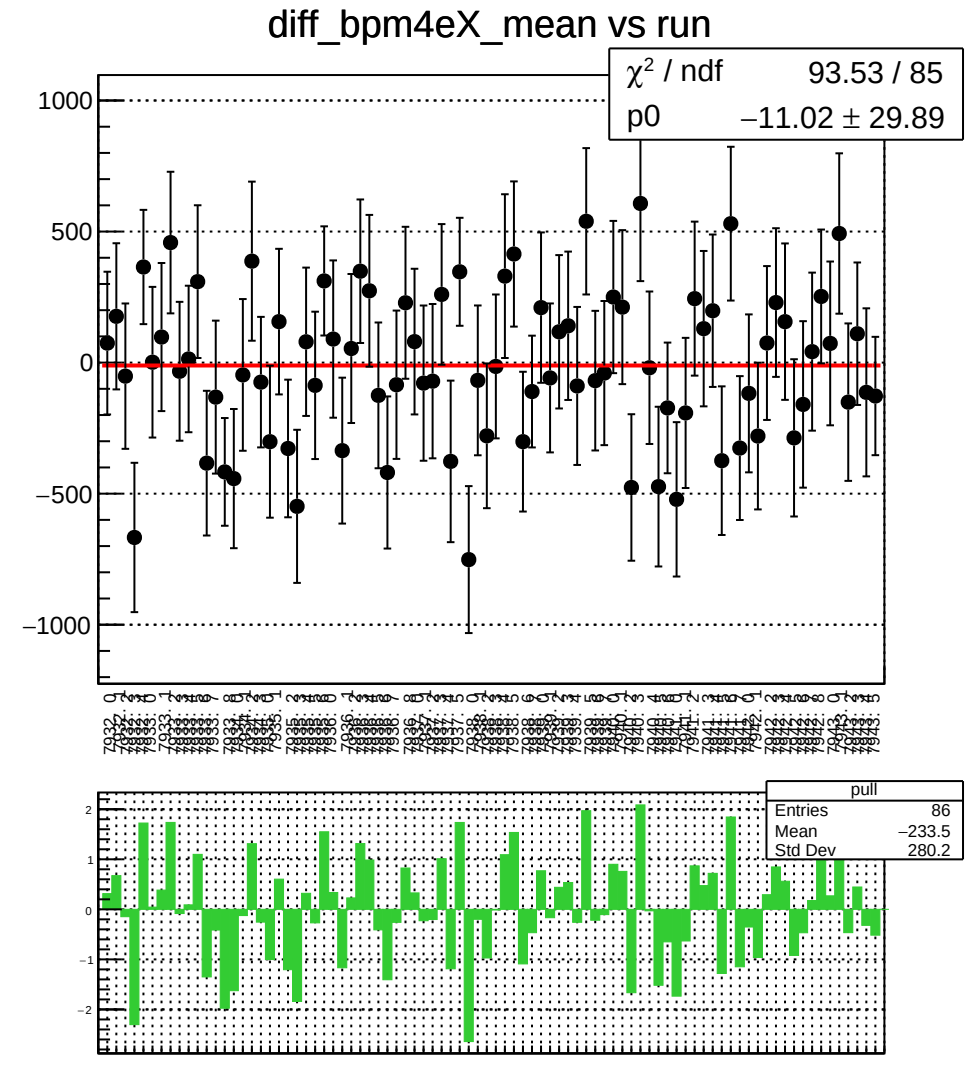

pull1D
Entries 86
Mean −0.004238
Std Dev 1.043
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

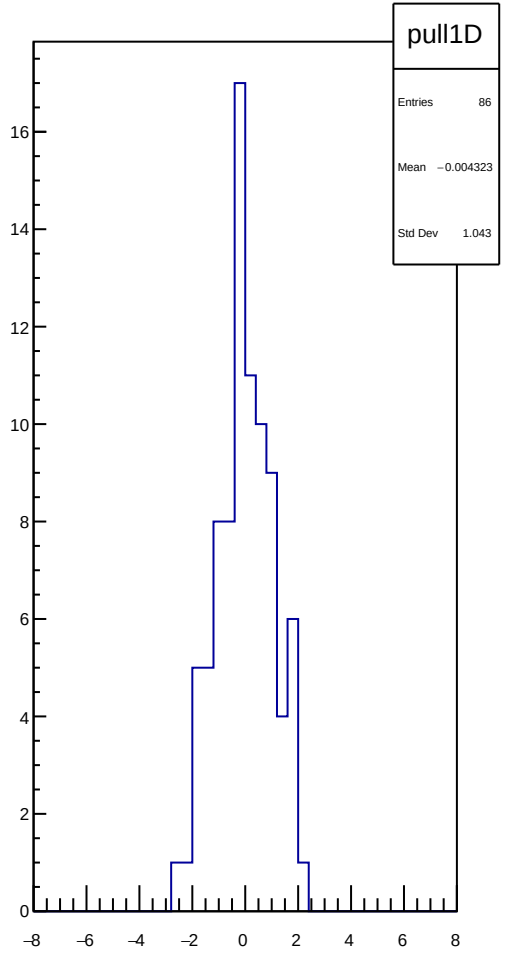

diff_bpm4aX_rms vs run
χ² / ndf 2777 / 85
p0 2.843e+04 ± 22.11
32000
31000
30000
29000
28000
27000
26000

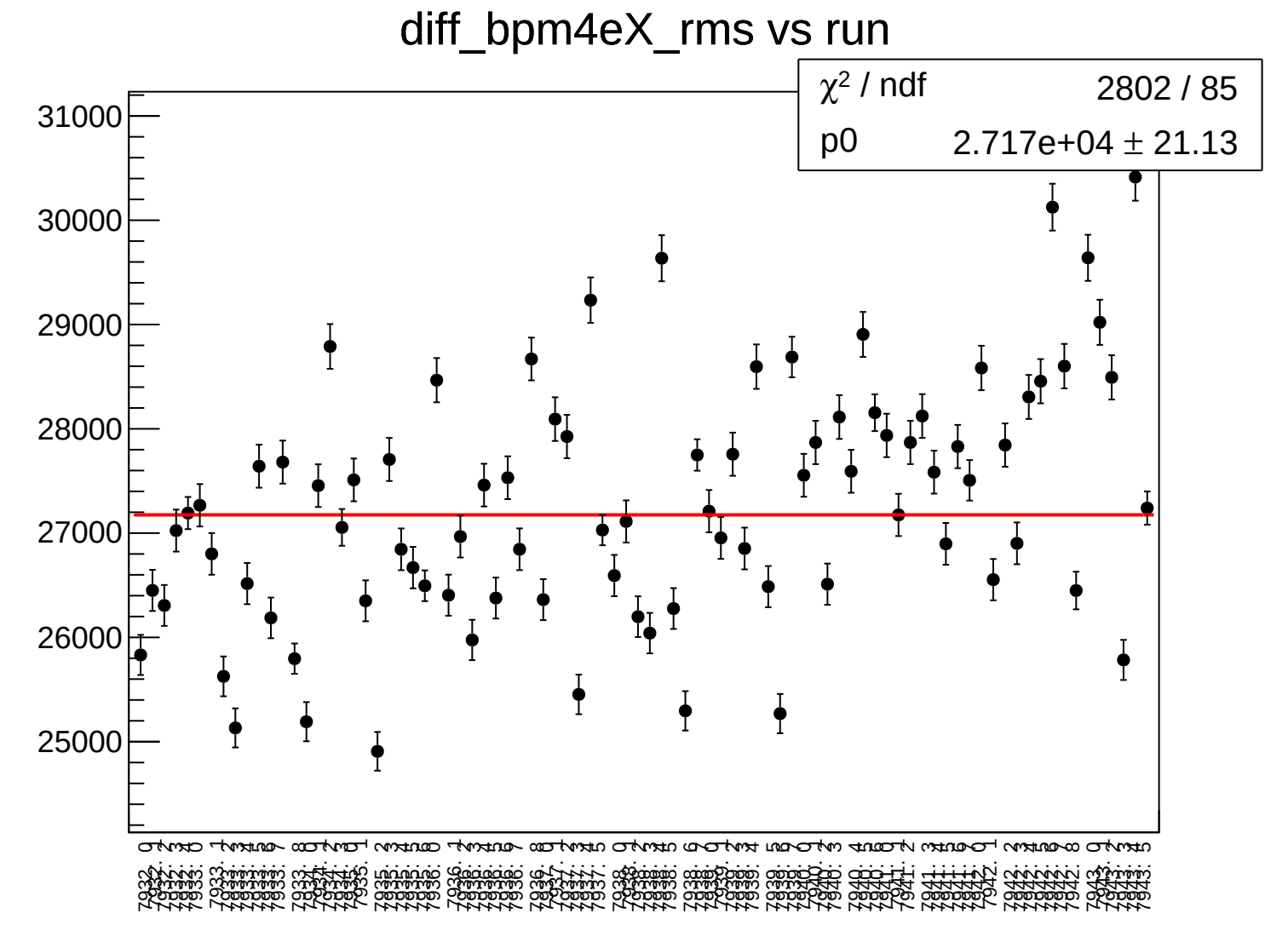

diff_bpm4aY_mean vs run
χ² / ndf 73.01 / 85
p0 2.988 ± 7.856
200
100
0
−100
−200
−300
pull
Entries 86
Mean 249.1
Std Dev 200.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

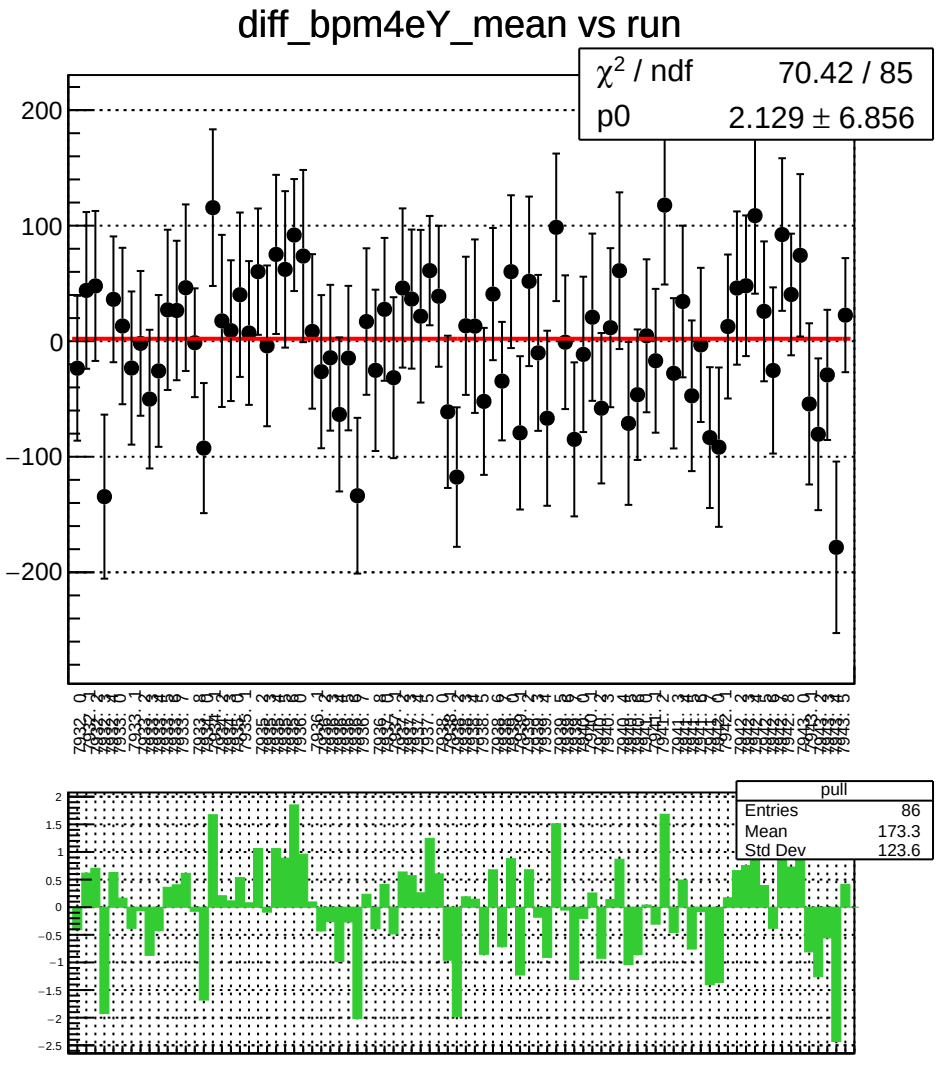

pull1D
Entries 86
Mean −0.01061
Std Dev 0.9214
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

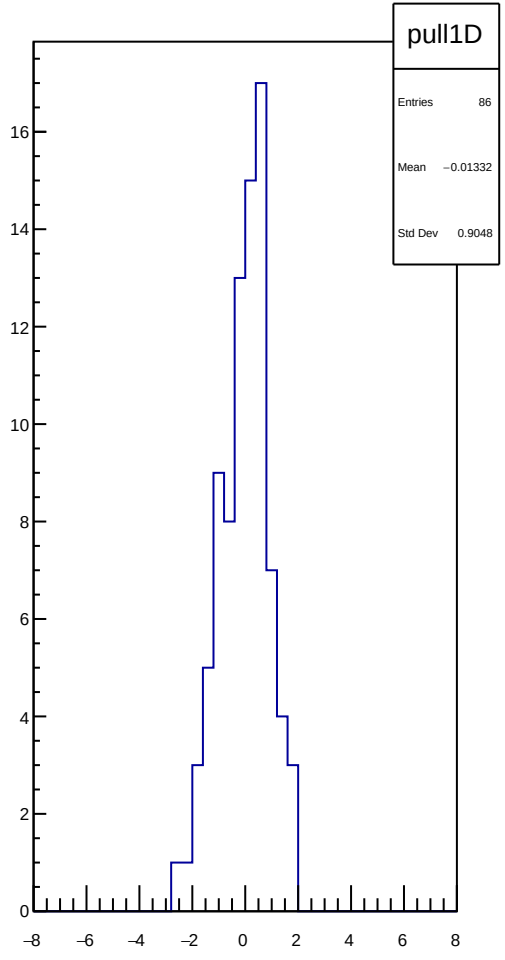

diff_bpm4aY_rms vs run
χ² / ndf 8875 / 85
p0 7130 ± 5.555
8500
8000
7500
7000
6500
6000

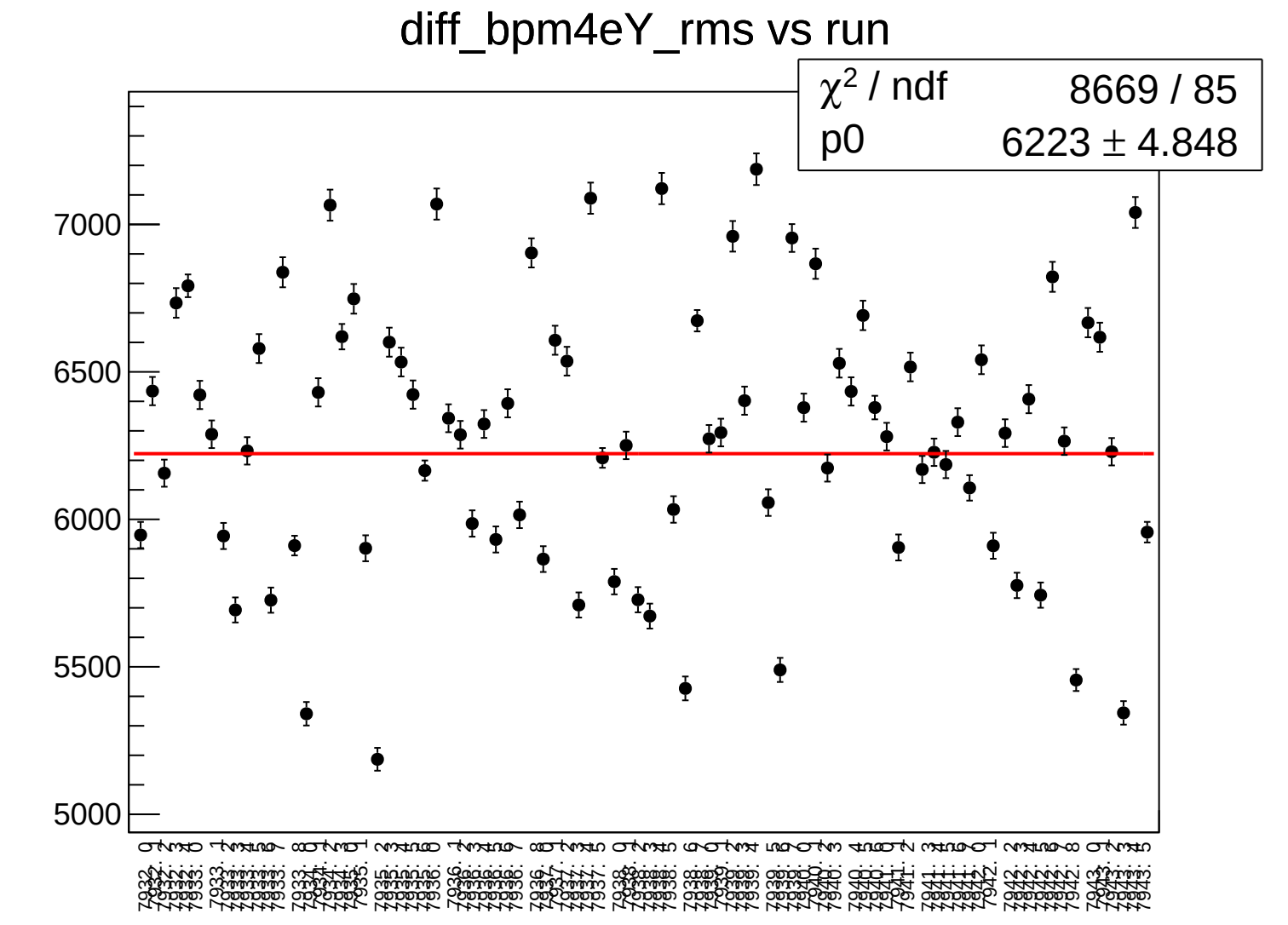

diff_bpm4eX_mean vs run
χ² / ndf 93.53 / 85
p0 −11.02 ± 29.89
1000
500
0
−500
−1000
pull
Entries 86
Mean −233.5
Std Dev 280.2
2
1
0
−1
−2

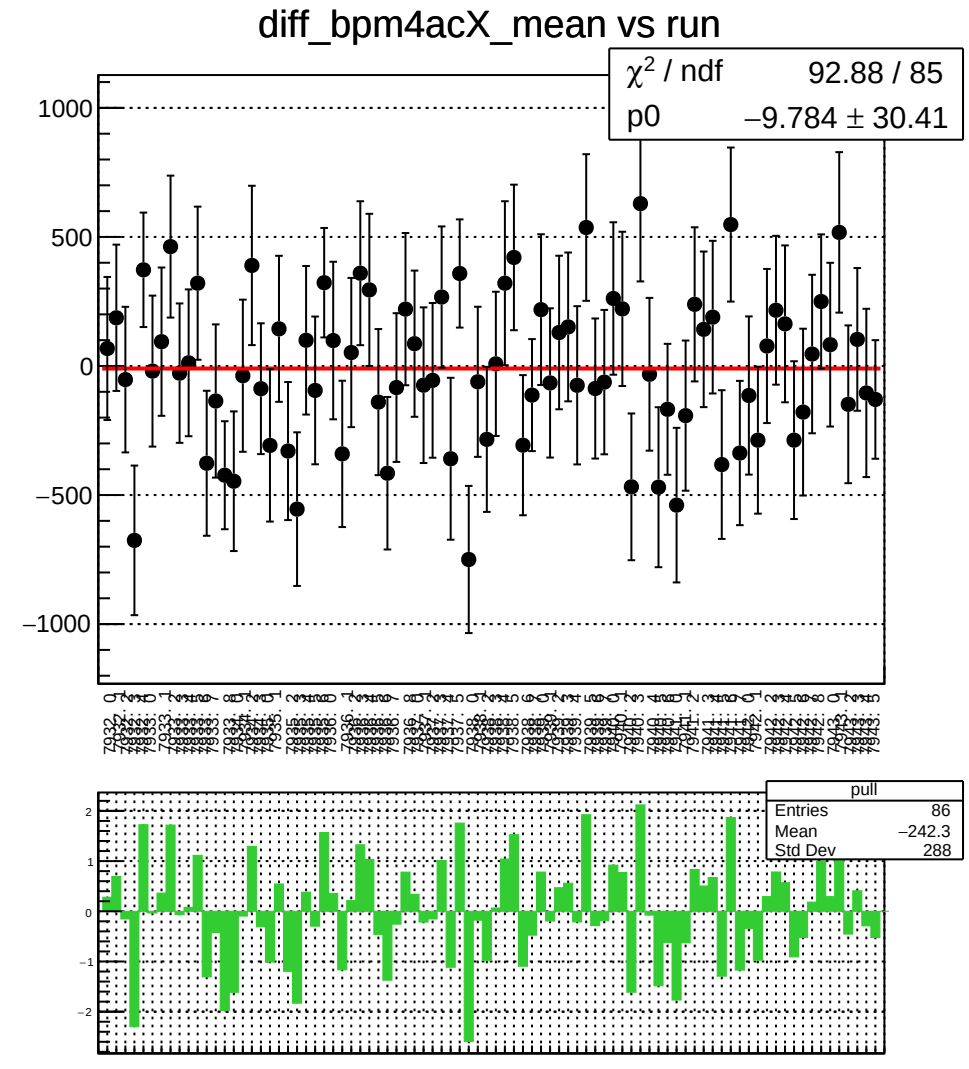

pull1D
Entries 86
Mean −0.004323
Std Dev 1.043
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

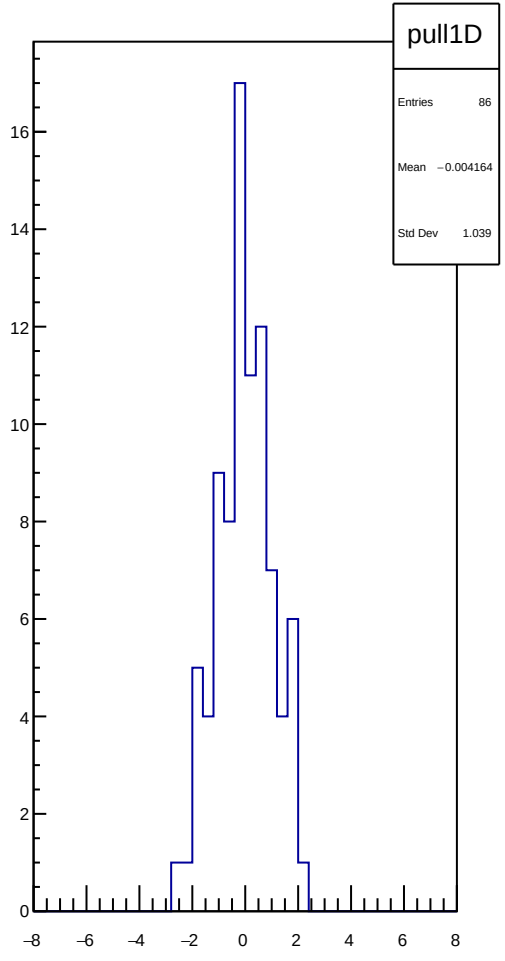

diff_bpm4eX_rms vs run
χ² / ndf 2802 / 85
p0 2.717e+04 ± 21.13
31000
30000
29000
28000
27000
26000
25000

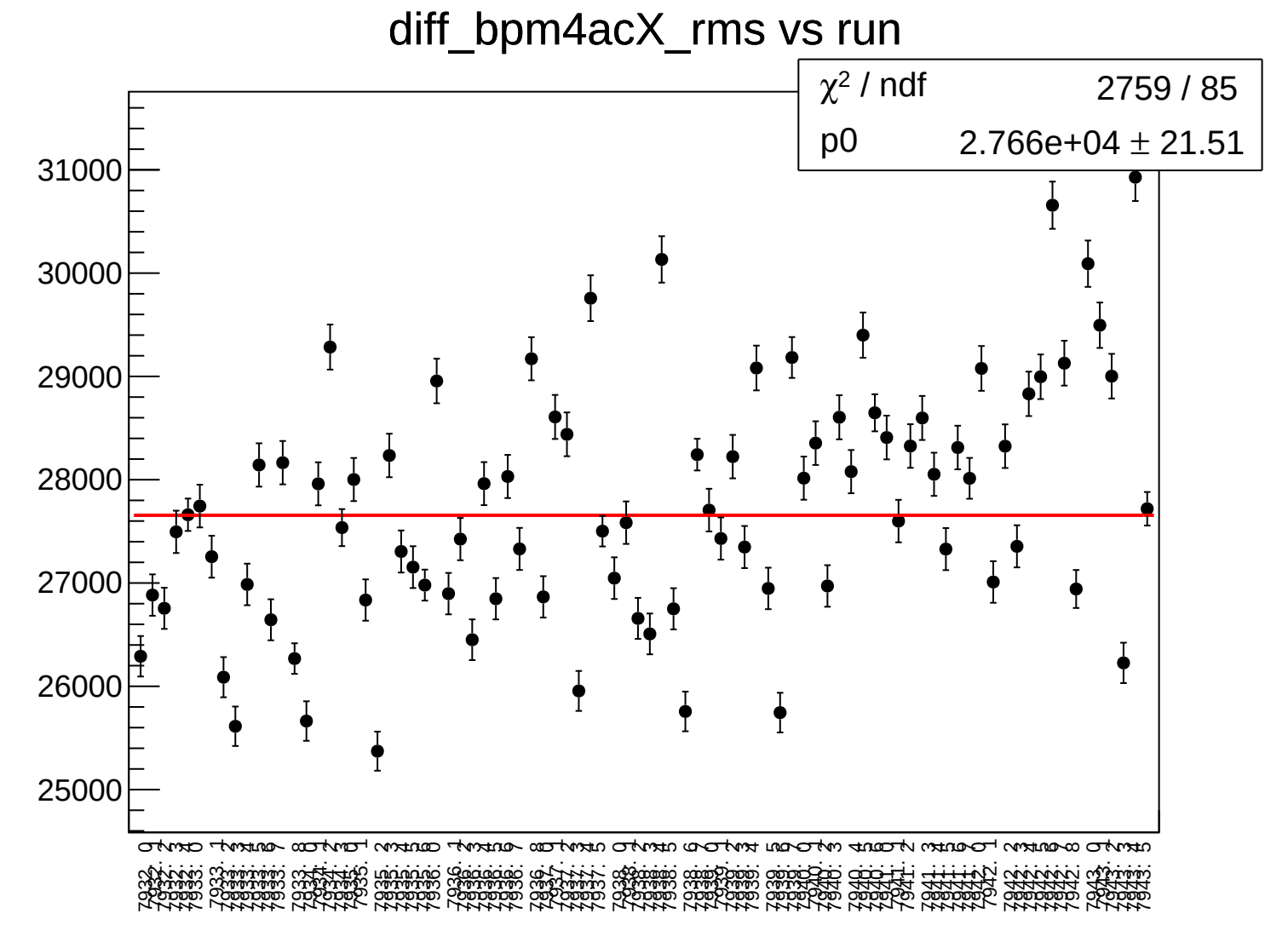

diff_bpm4eY_mean vs run
χ² / ndf 70.42 / 85
p0 2.129 ± 6.856
200
100
0
−100
−200
pull
Entries 86
Mean 173.3
Std Dev 123.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

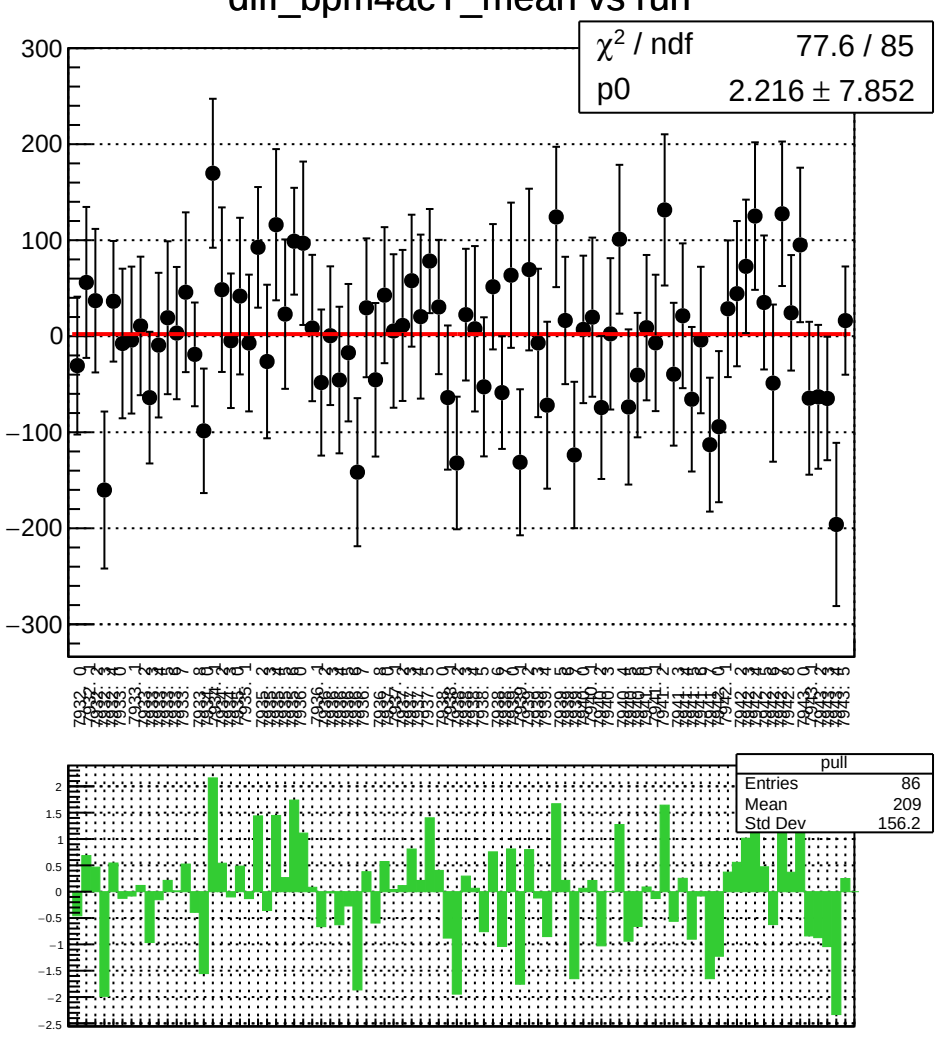

pull1D
Entries 86
Mean −0.01332
Std Dev 0.9048
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

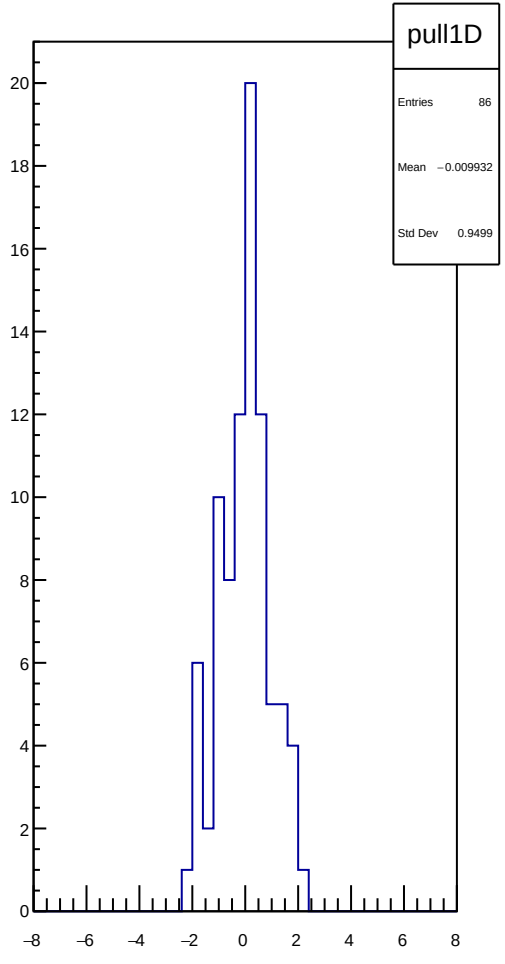

diff_bpm4eY_rms vs run
χ^2 / ndf 8669 / 85
p0 6223 ± 4.848
7000
6500
6000
5500
5000

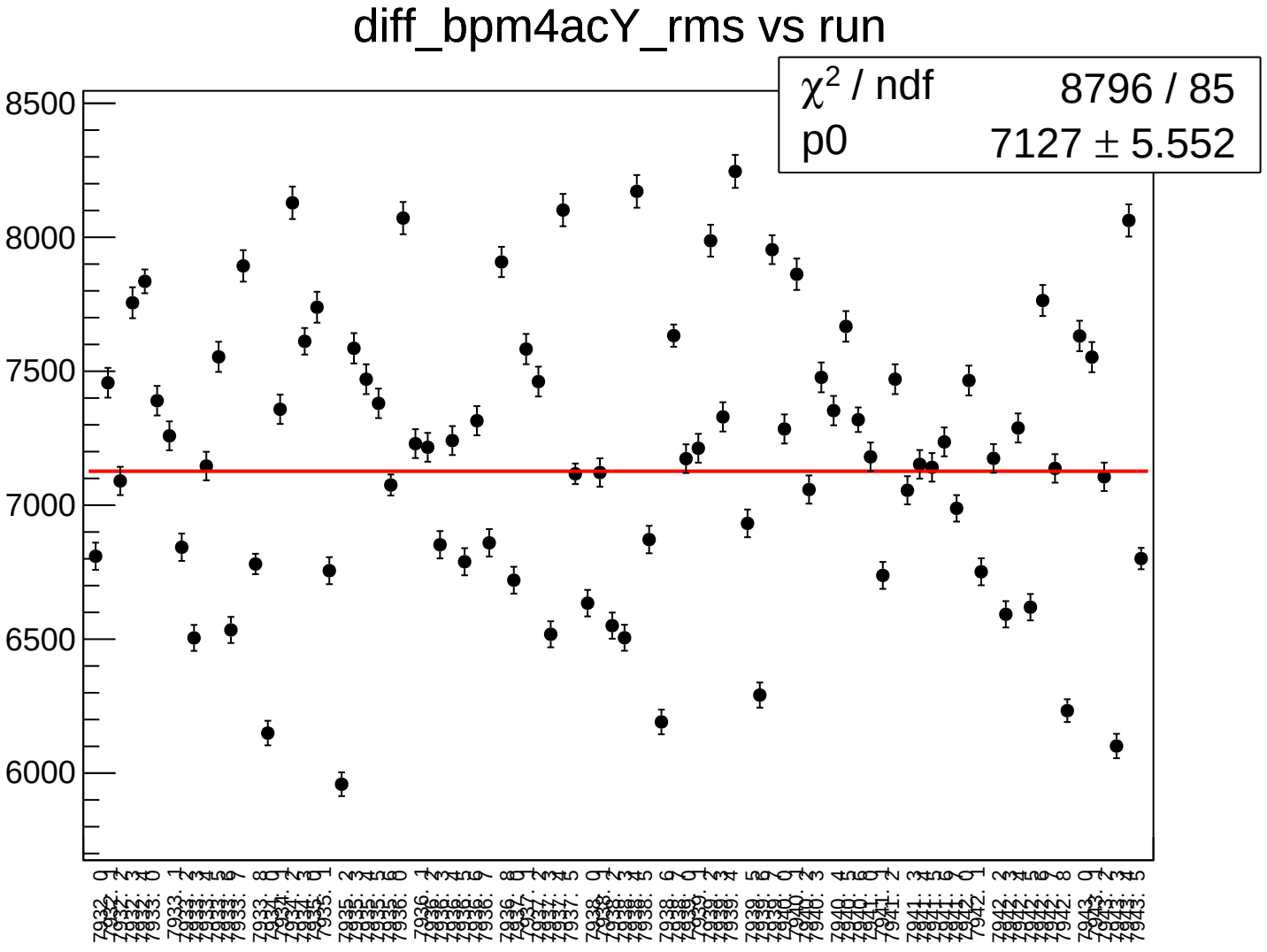

diff_bpm4acX_mean vs run
χ² / ndf 92.88 / 85
p0 −9.784 ± 30.41
1000
500
0
−500
−1000
pull
Entries 86
Mean −242.3
Std Dev 288
2
1
0
−1
−2

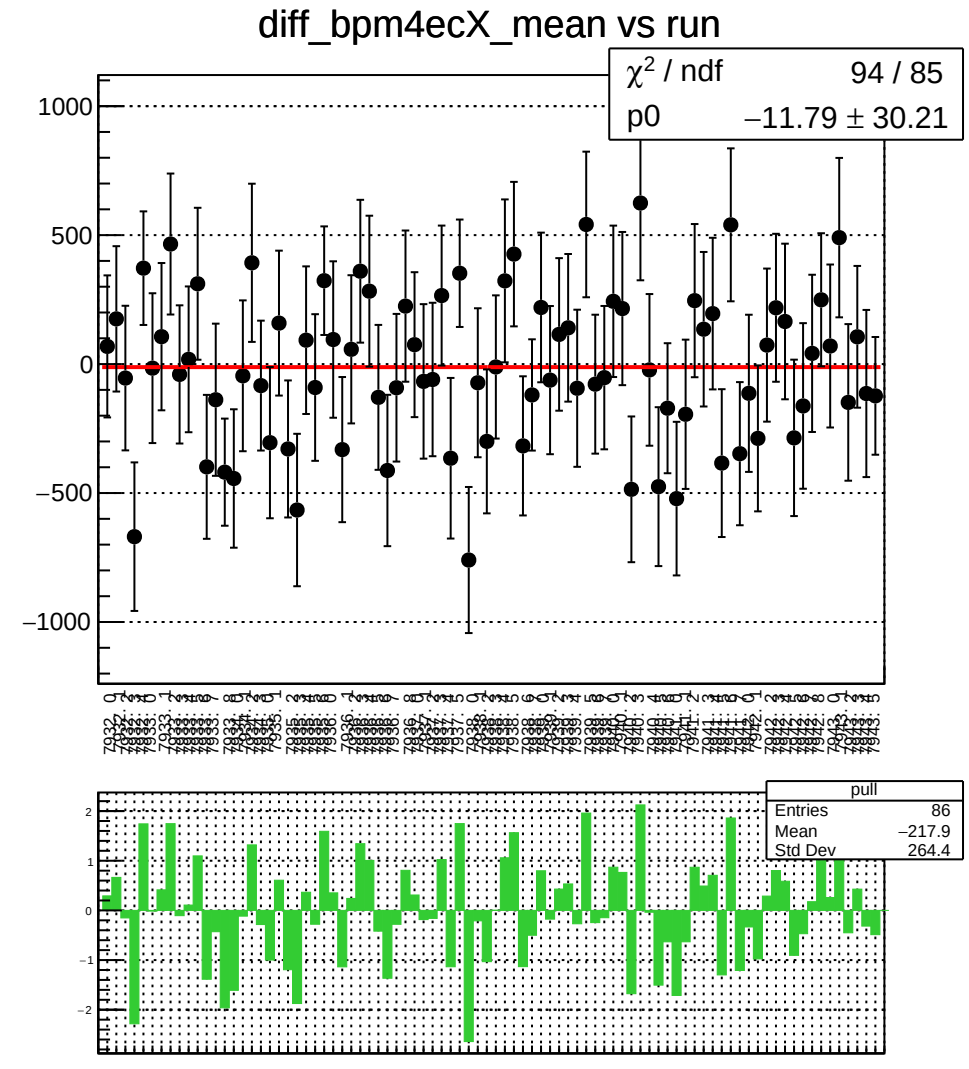

pull1D
Entries 86
Mean −0.004164
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

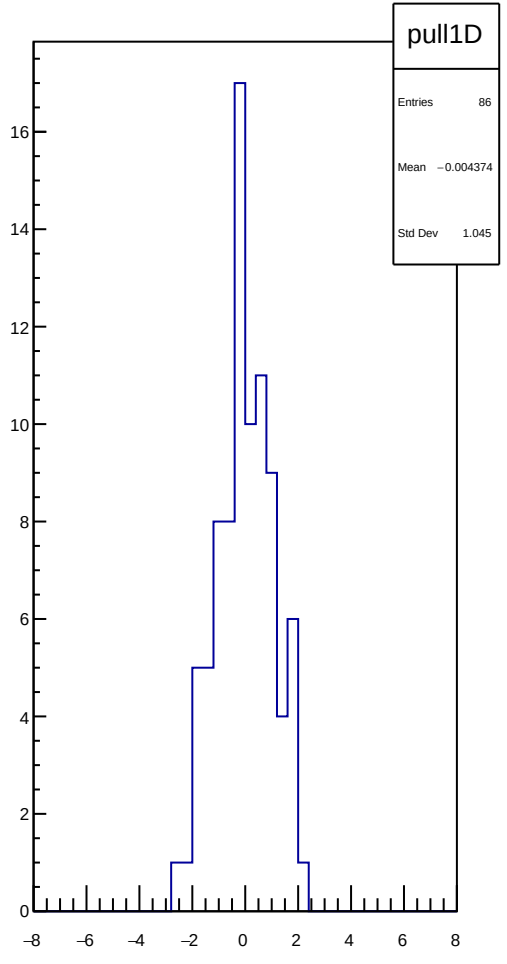

diff_bpm4acX_rms vs run
χ² / ndf 2759 / 85
p0 2.766e+04 ± 21.51
31000
30000
29000
28000
27000
26000
25000

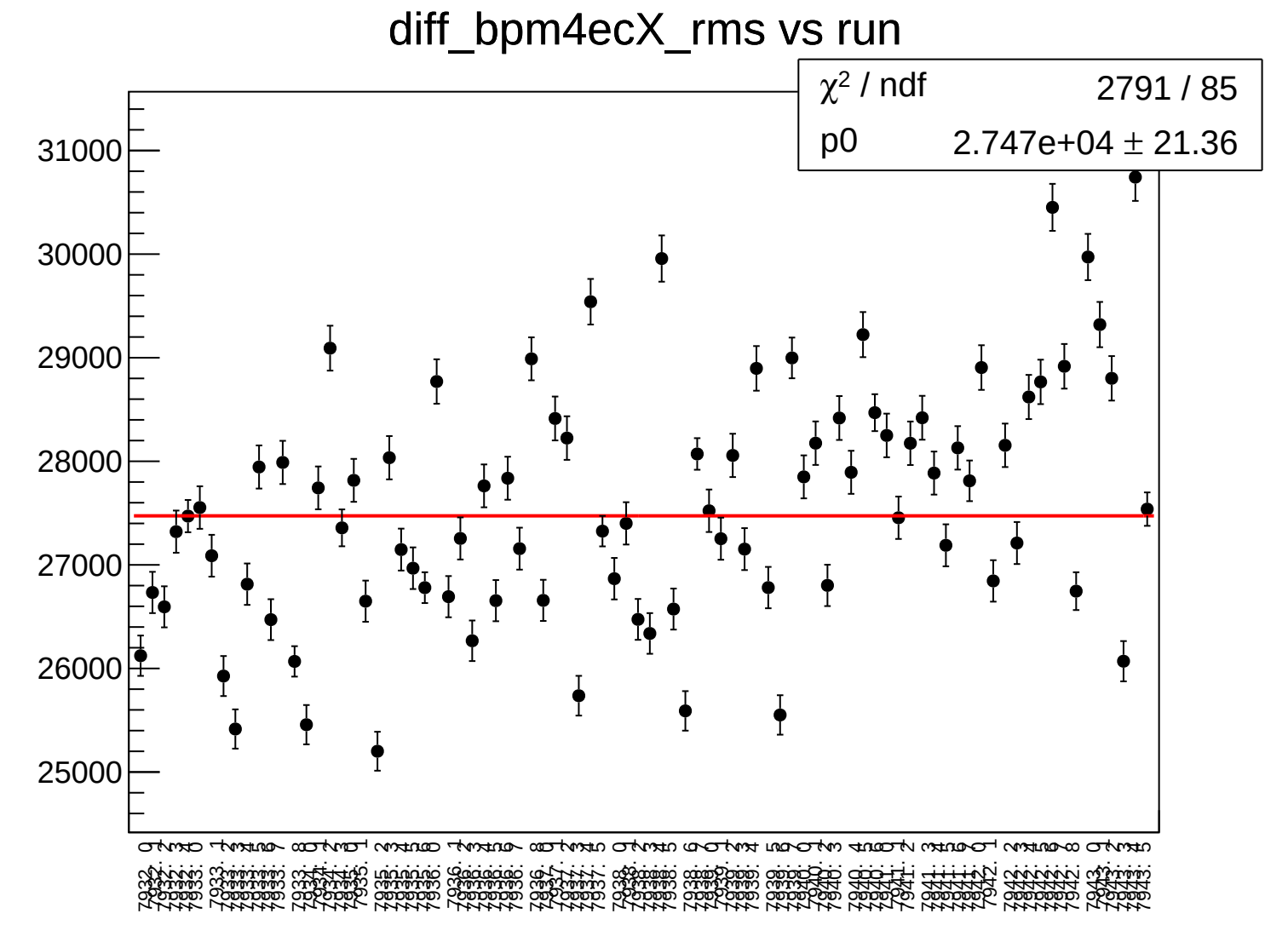

diff_bpm4acY_mean vs run
χ^2 / ndf 77.6 / 85
p0 2.216 ± 7.852
pull
Entries 86
Mean 209
Std Dev 156.2

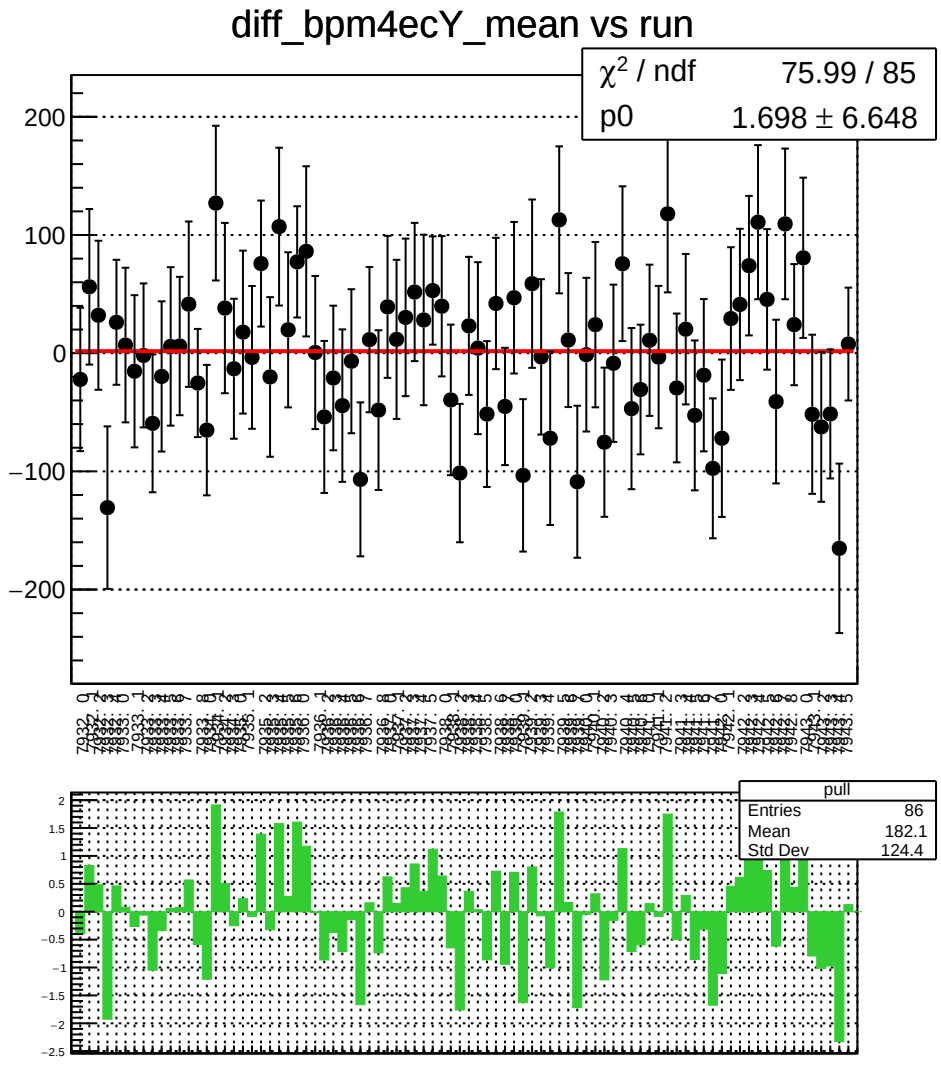

pull1D
Entries 86
Mean −0.009932
Std Dev 0.9499

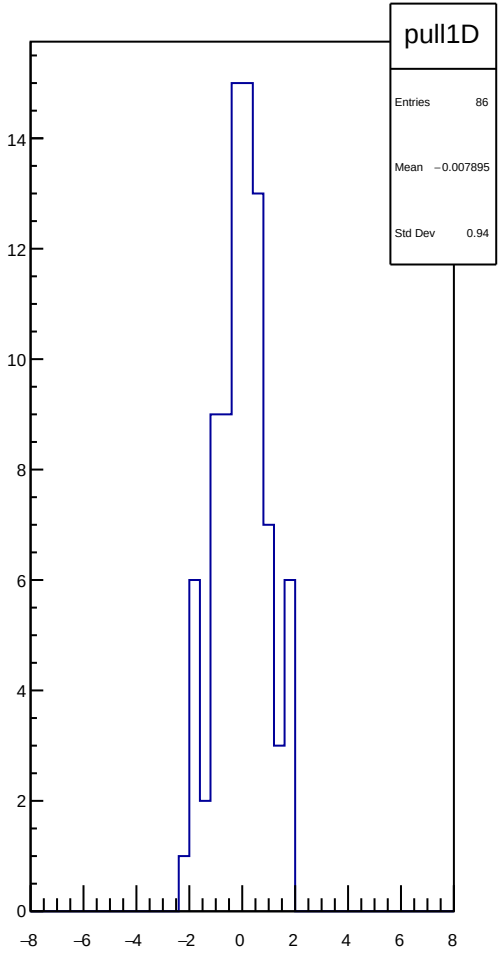

diff_bpm4acY_rms vs run
χ² / ndf 8796 / 85
p0 7127 ± 5.552
8500
8000
7500
7000
6500
6000

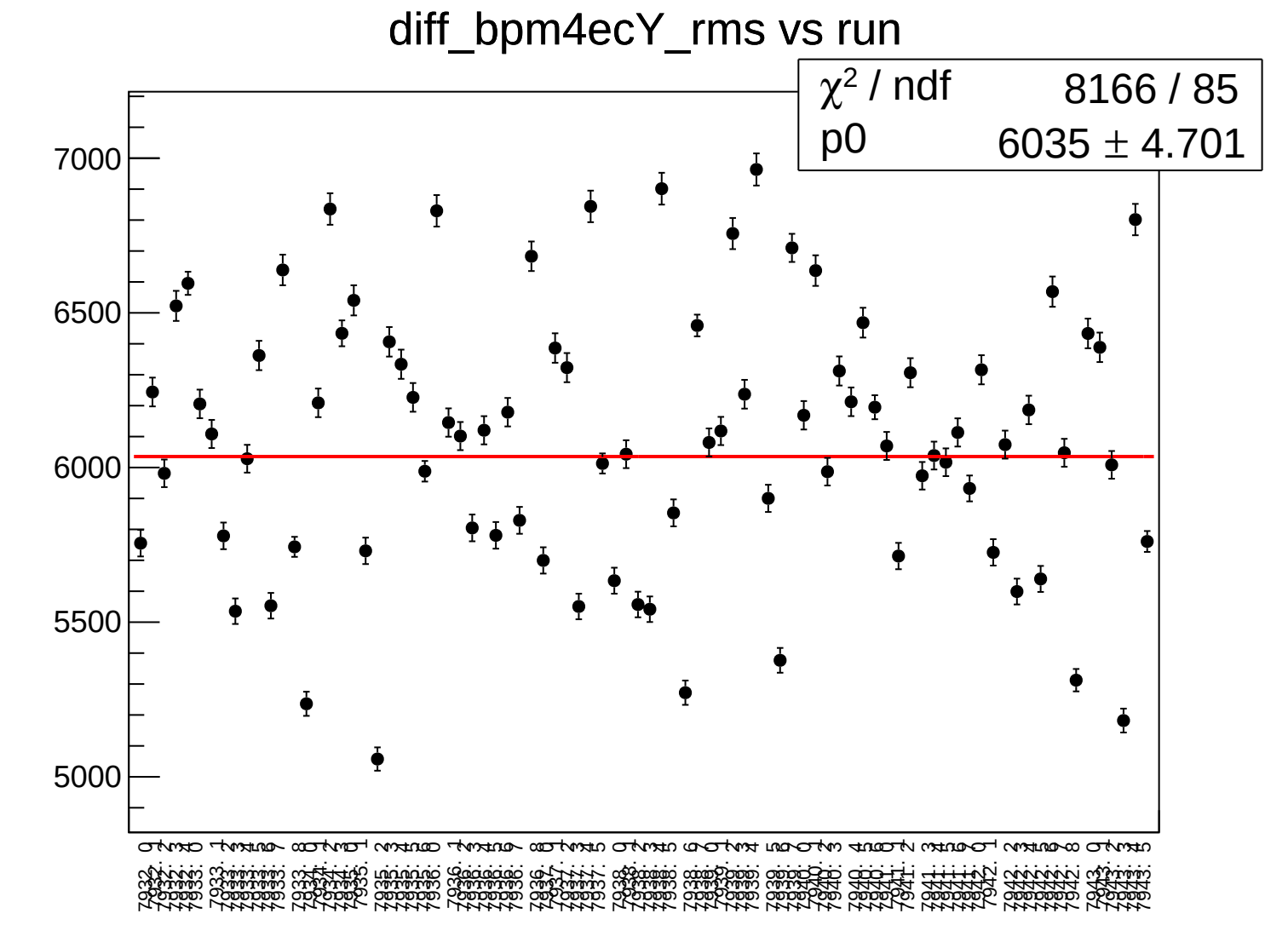

diff_bpm4ecX_mean vs run
χ² / ndf 94 / 85
p0 −11.79 ± 30.21
1000
500
0
−500
−1000
pull
Entries 86
Mean −217.9
Std Dev 264.4
2
1
0
−1
−2

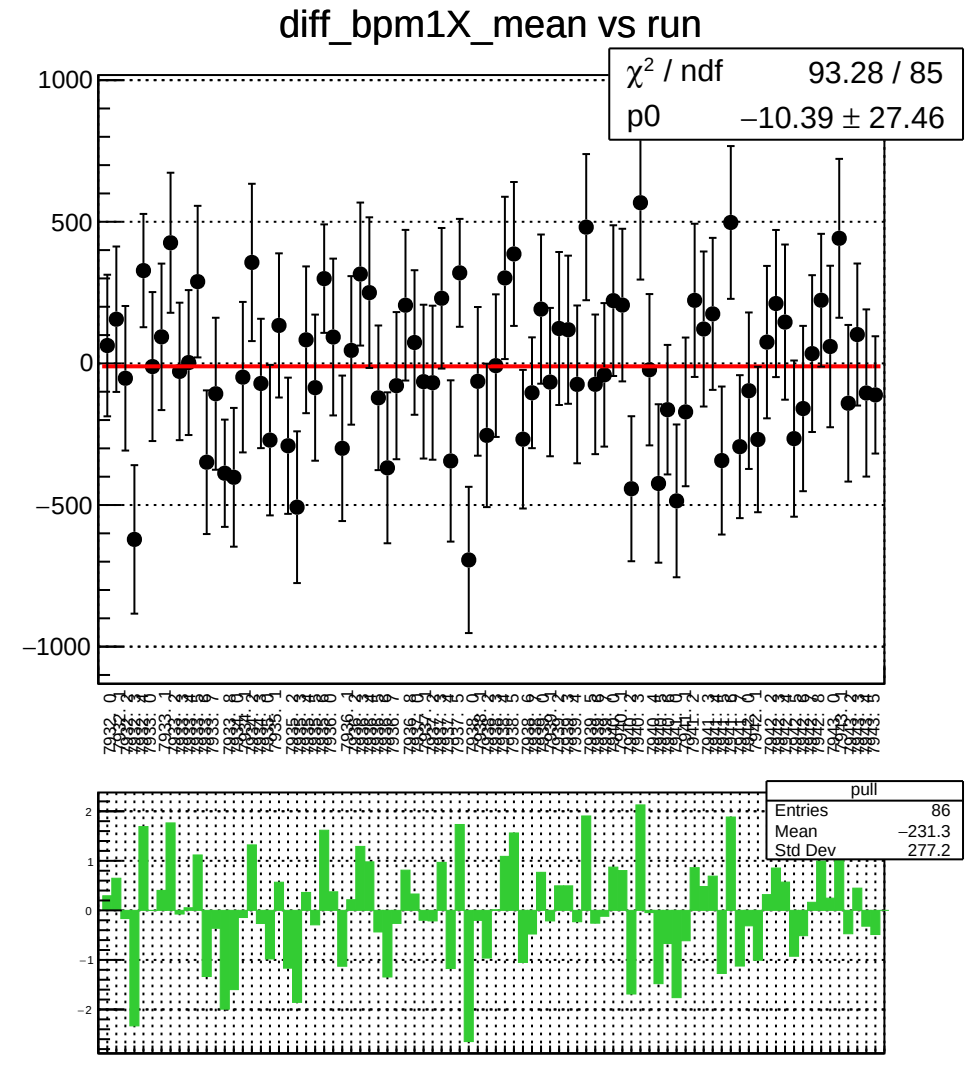

pull1D
Entries 86
Mean −0.004374
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

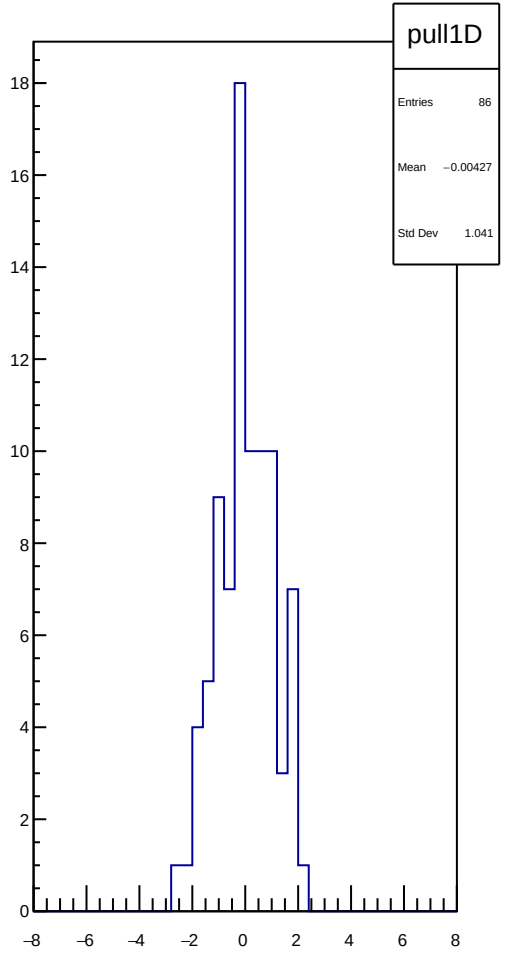

diff_bpm4ecX_rms vs run
χ² / ndf 2791 / 85
p0 2.747e+04 ± 21.36
31000
30000
29000
28000
27000
26000
25000

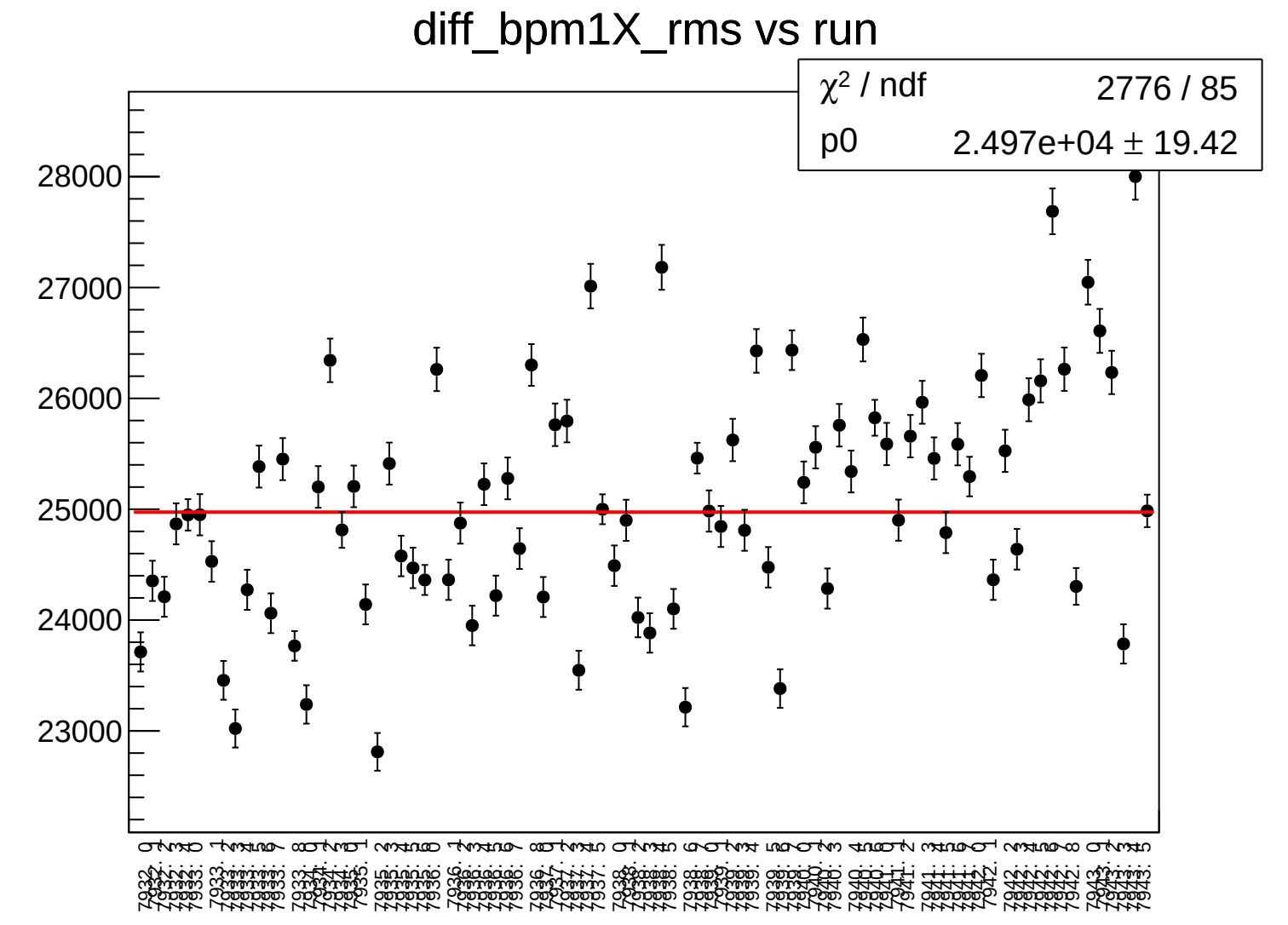

diff_bpm4ecY_mean vs run
χ^2 / ndf 75.99 / 85
p0 1.698 ± 6.648
pull
Entries 86
Mean 182.1
Std Dev 124.4

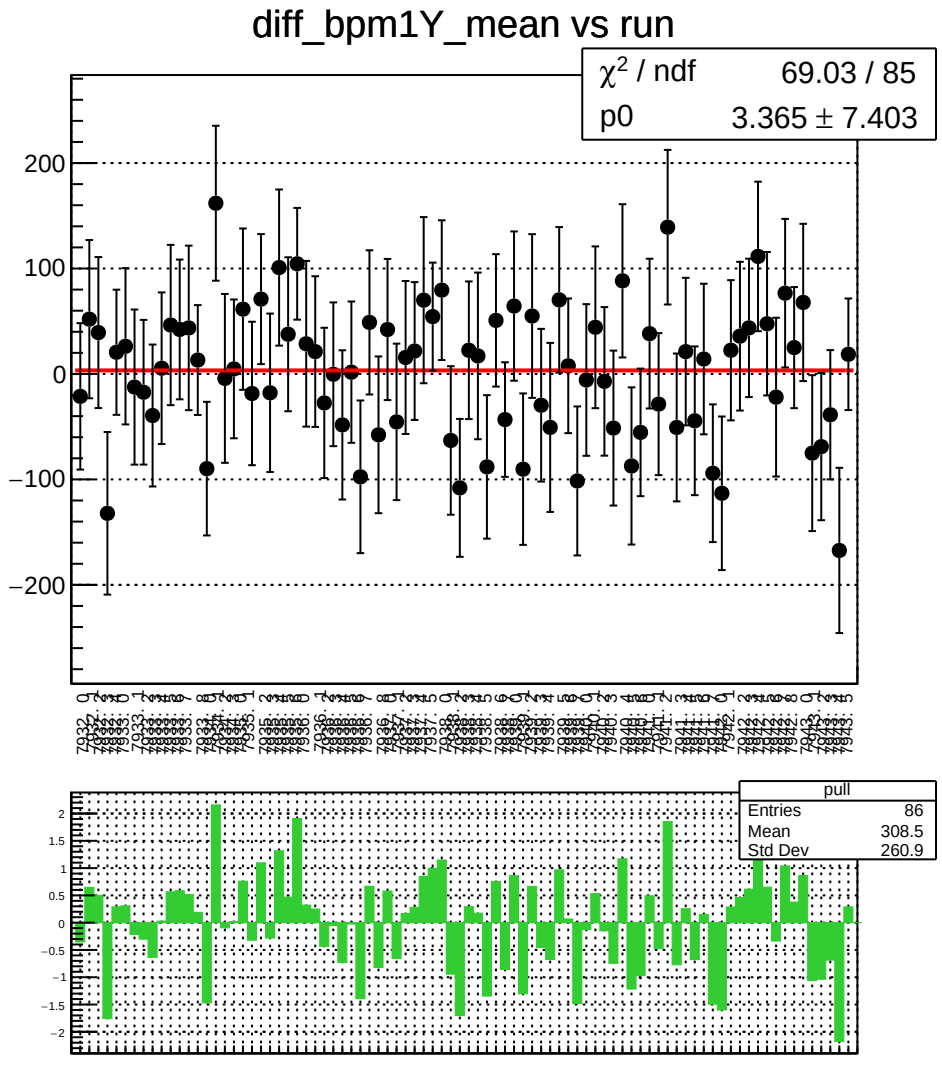

pull1D
Entries 86
Mean −0.007895
Std Dev 0.94

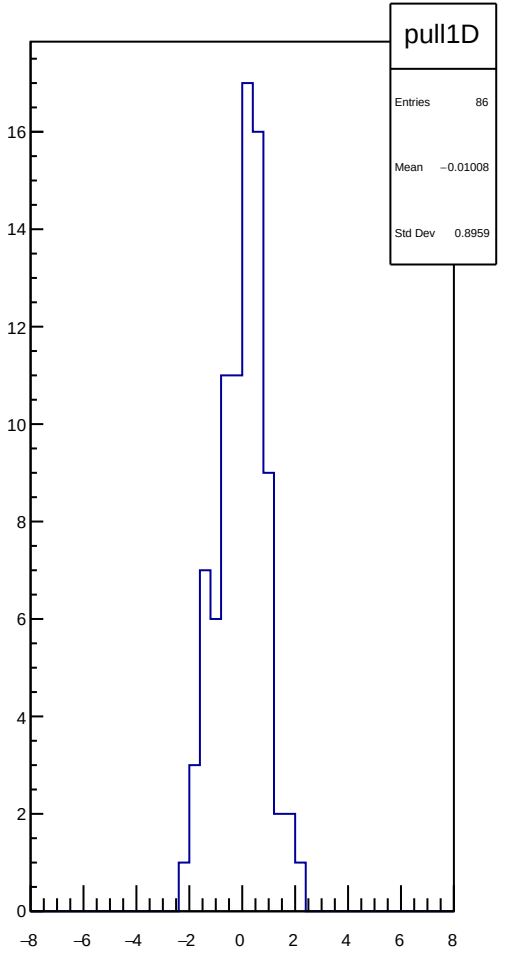

diff_bpm4ecY_rms vs run
χ² / ndf 8166 / 85
p0 6035 ± 4.701
7000
6500
6000
5500
5000

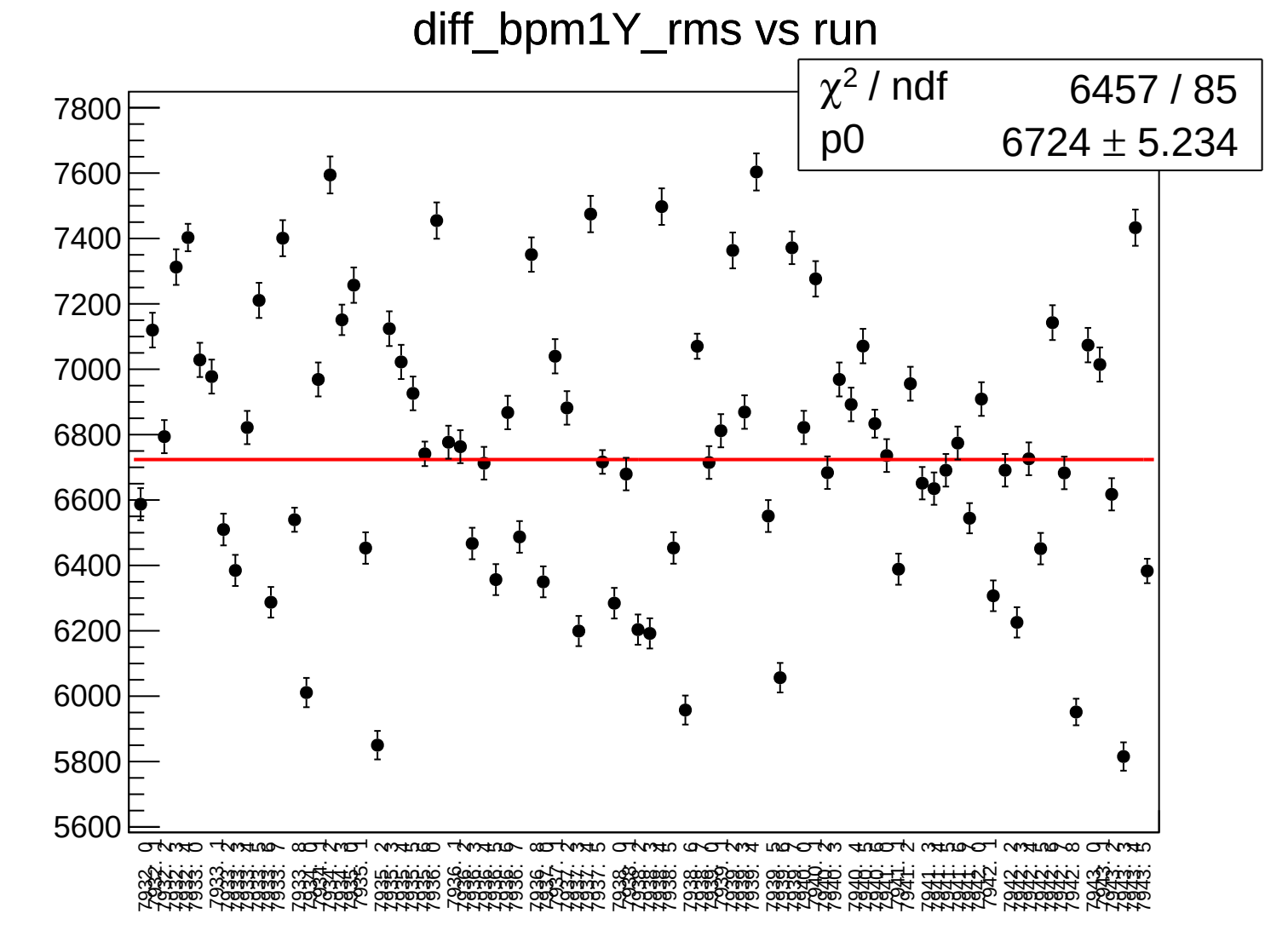

diff_bpm1X_mean vs run
χ² / ndf 93.28 / 85
p0 −10.39 ± 27.46
1000
500
0
−500
−1000
pull
Entries 86
Mean −231.3
Std Dev 277.2
2
1
0
−1
−2

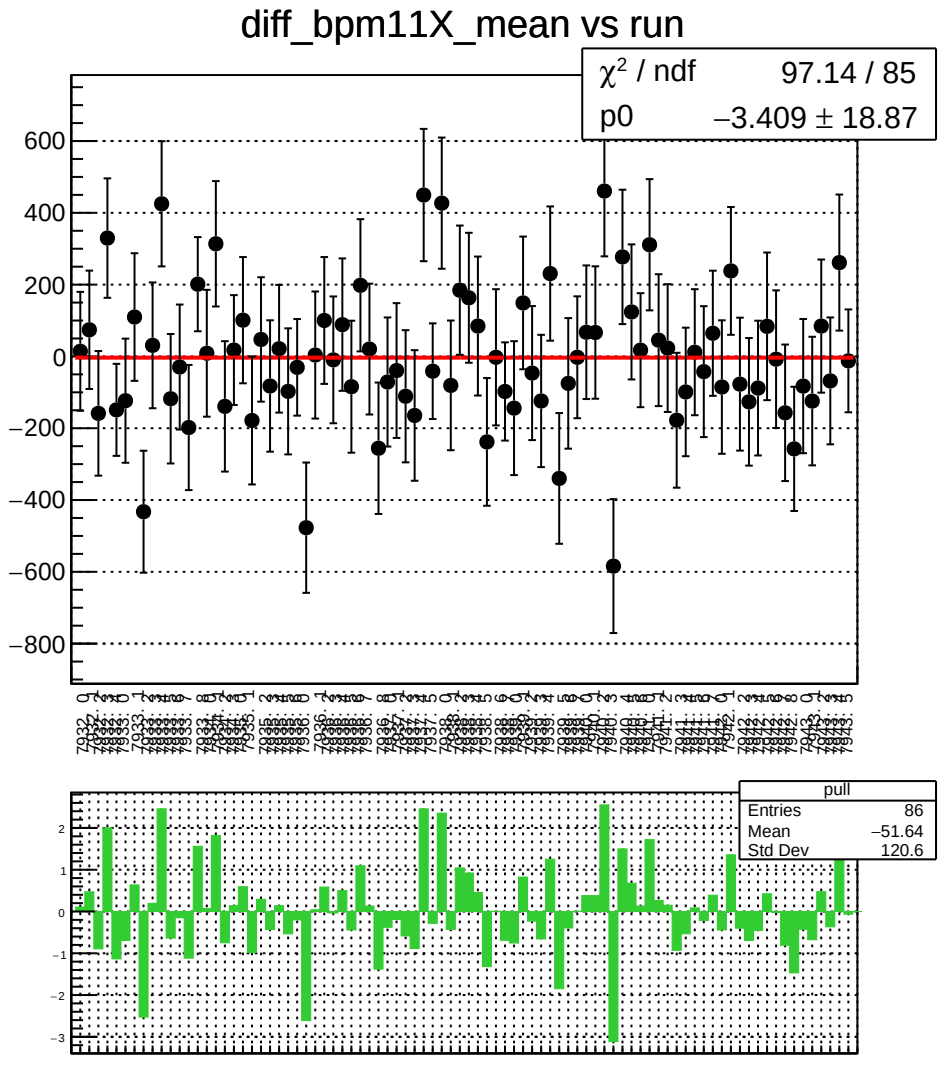

pull1D
Entries 86
Mean −0.00427
Std Dev 1.041
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

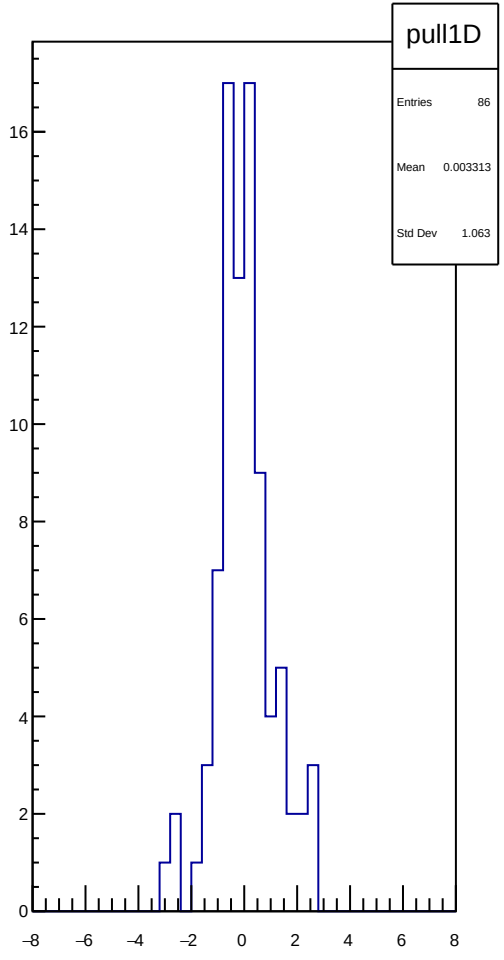

diff_bpm1X_rms vs run
χ² / ndf 2776 / 85
p0 2.497e+04 ± 19.42
28000
27000
26000
25000
24000
23000

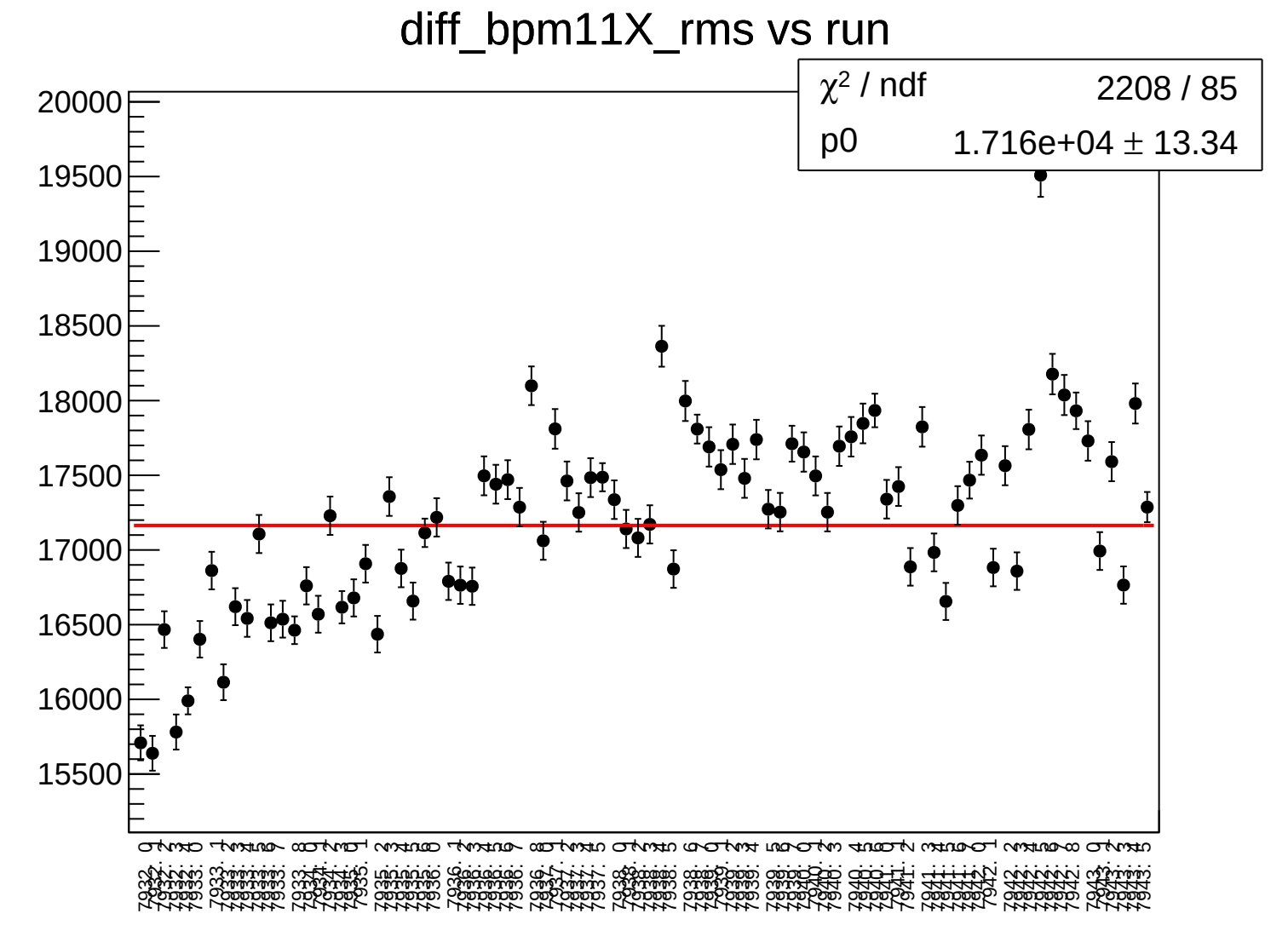

diff_bpm1Y_mean vs run
χ^2 / ndf 69.03 / 85
p0 3.365 ± 7.403
200
100
0
−100
−200
pull
Entries 86
Mean 308.5
Std Dev 260.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

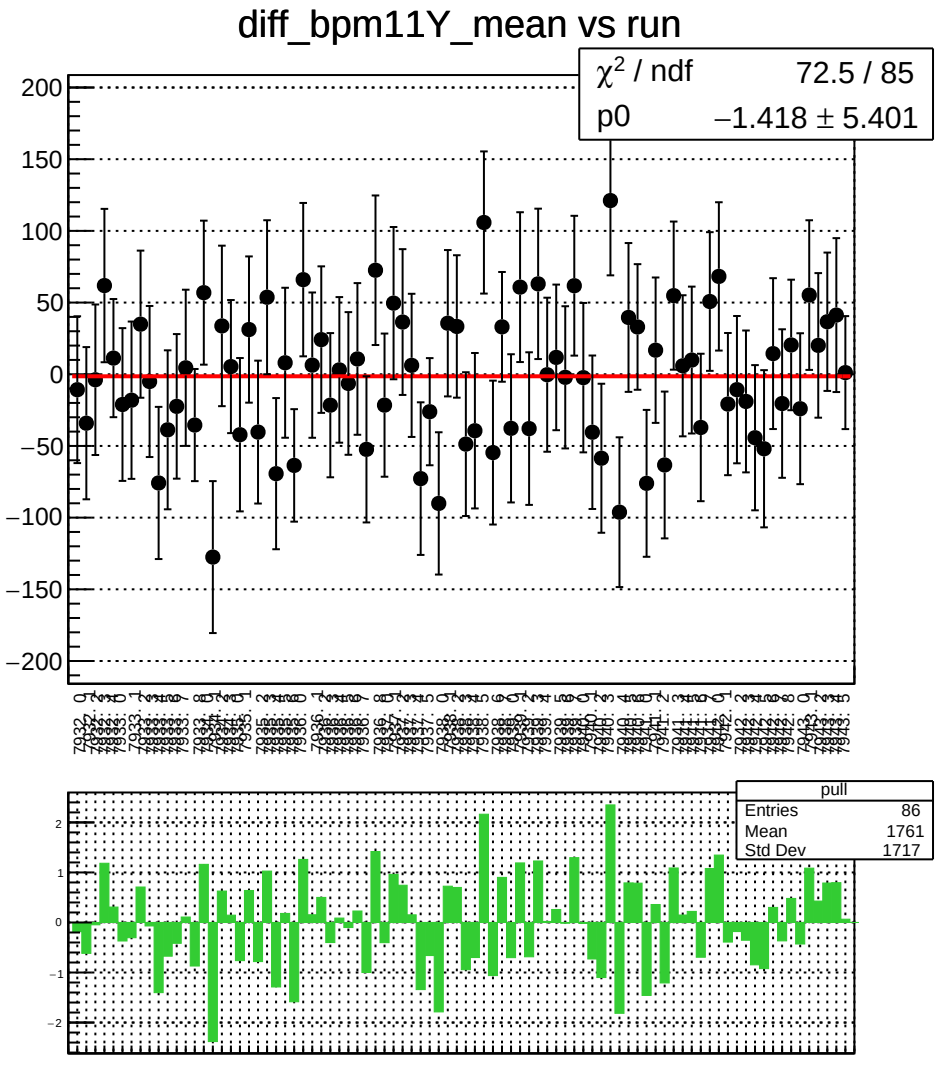

pull1D
Entries 86
Mean −0.01008
Std Dev 0.8959
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

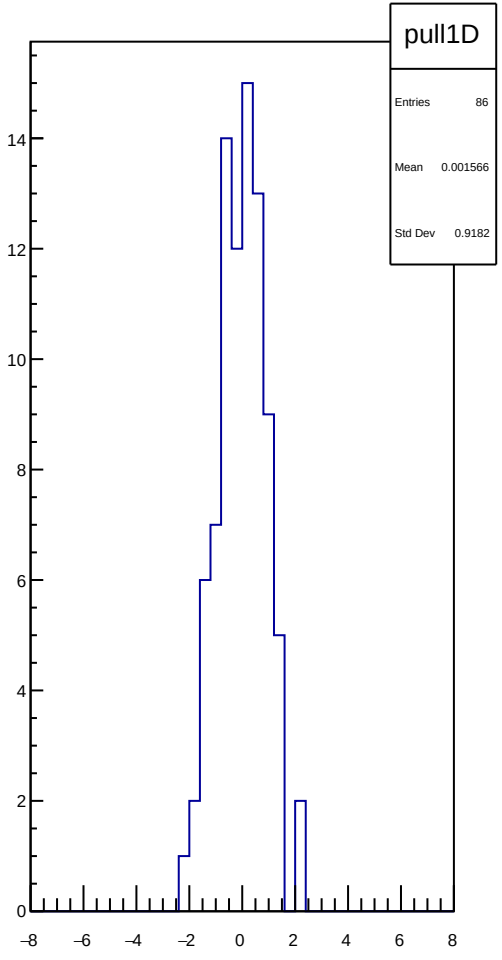

diff_bpm1Y_rms vs run
χ² / ndf 6457 / 85
p0 6724 ± 5.234
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600

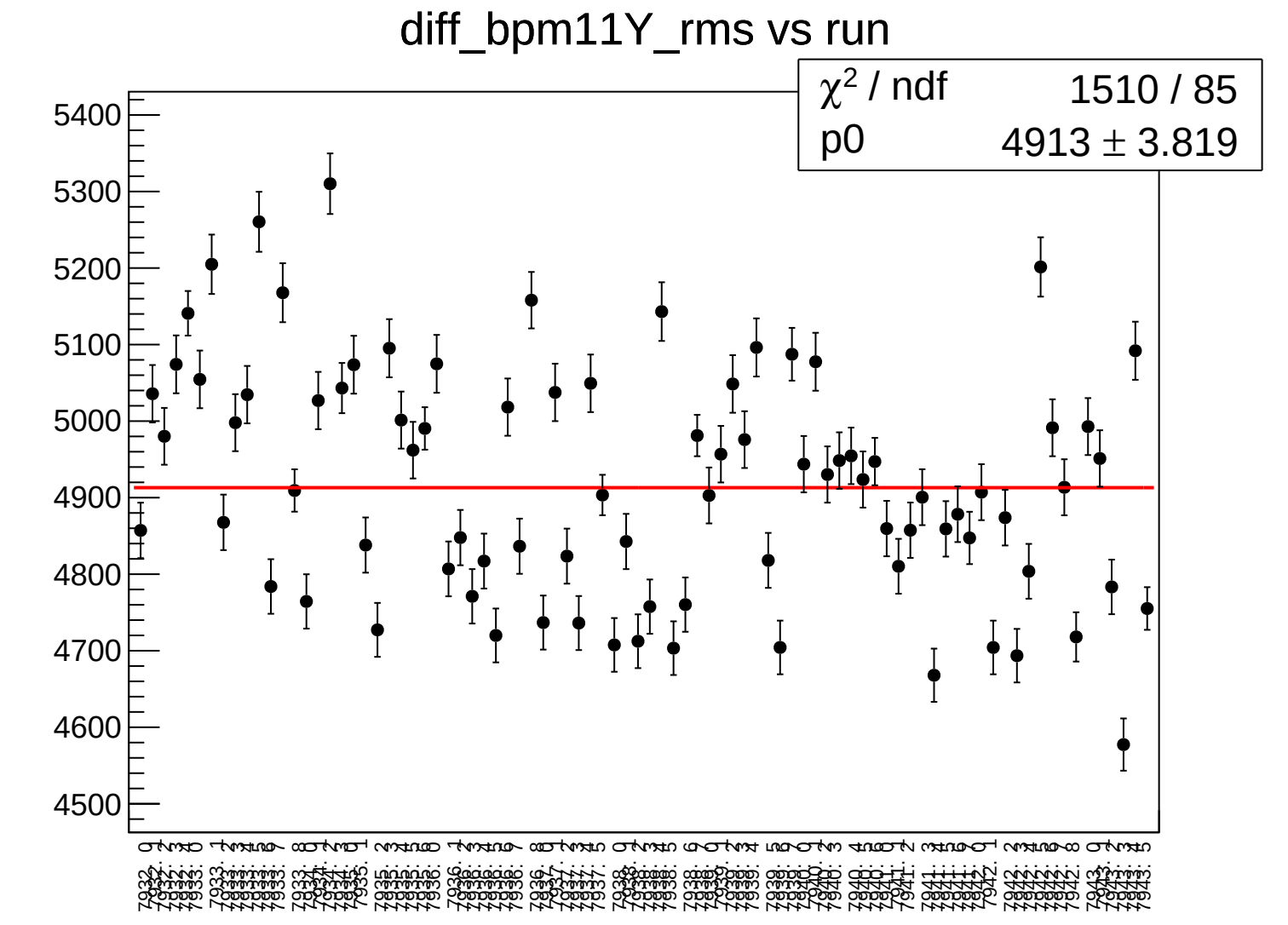

diff_bpm11X_mean vs run
χ² / ndf 97.14 / 85
p0 −3.409 ± 18.87
pull
Entries 86
Mean −51.64
Std Dev 120.6

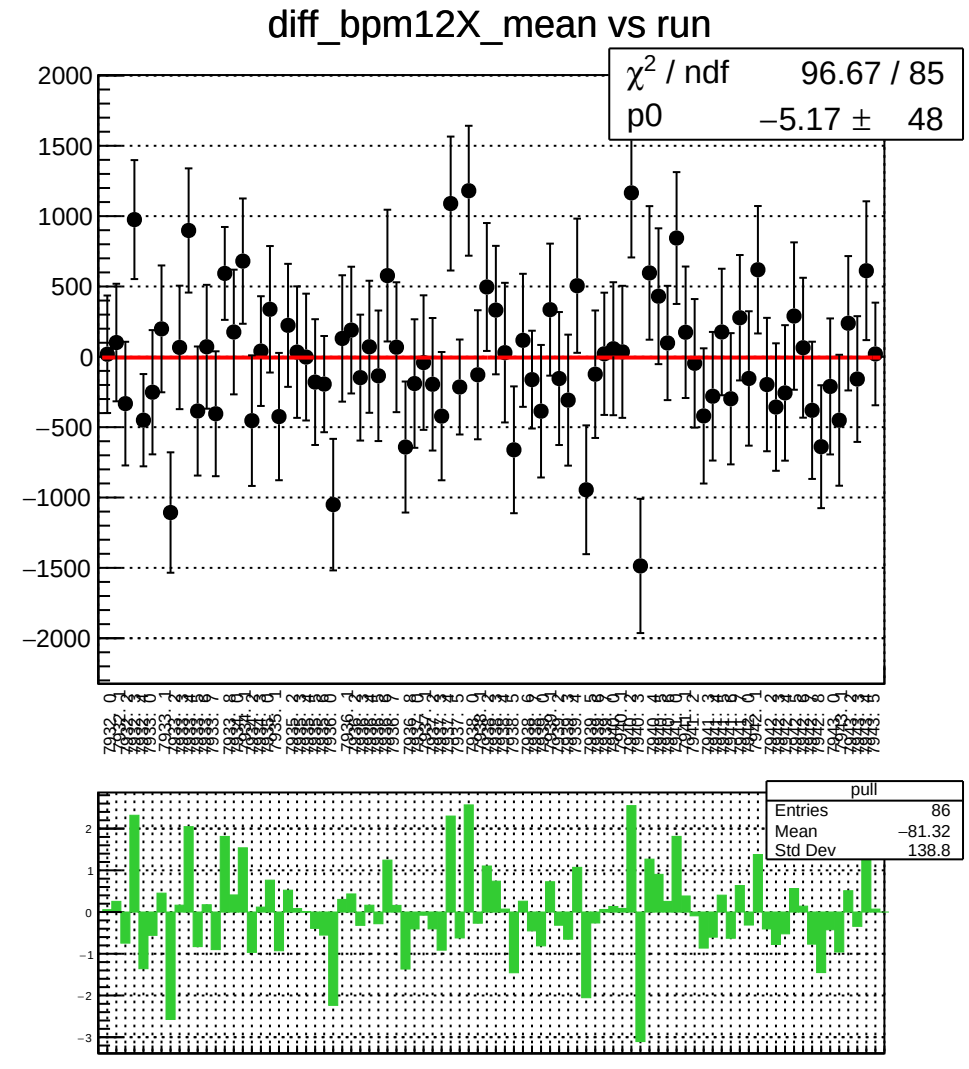

pull1D
Entries 86
Mean 0.003313
Std Dev 1.063

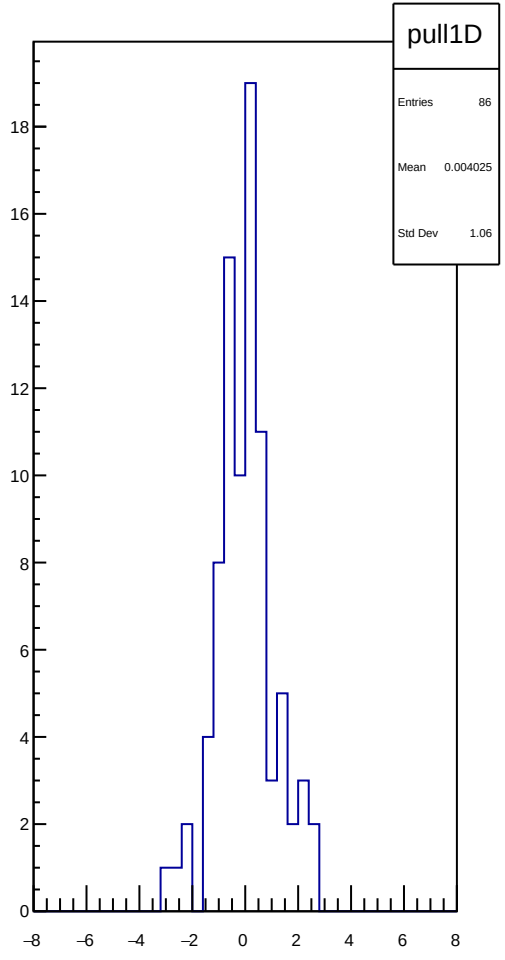

diff_bpm11X_rms vs run
χ² / ndf 2208 / 85
p0 1.716e+04 ± 13.34
20000
19500
19000
18500
18000
17500
17000
16500
16000
15500

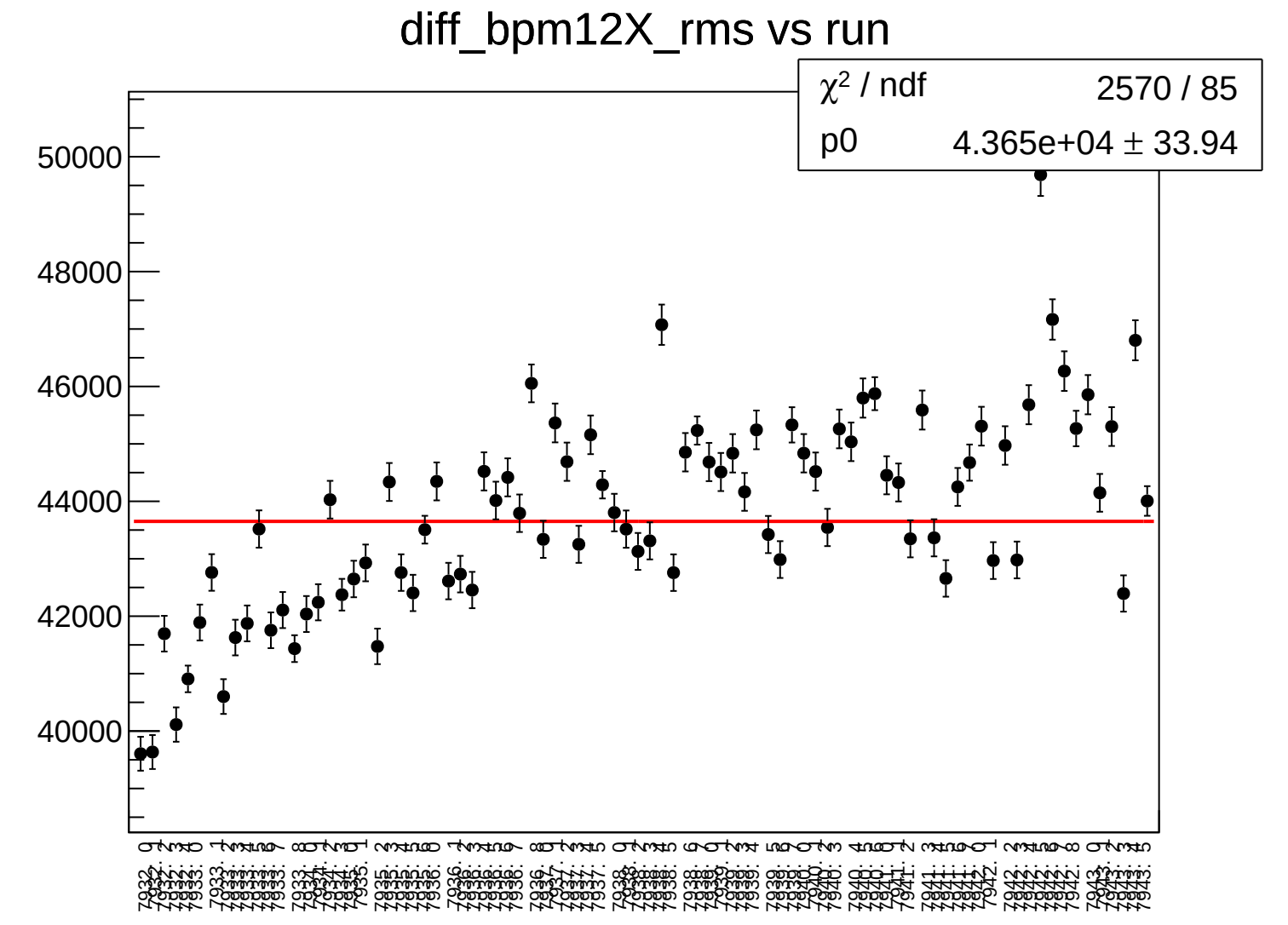

diff_bpm11Y_mean vs run
χ² / ndf 72.5 / 85
p0 −1.418 ± 5.401
pull
Entries 86
Mean 1761
Std Dev 1717

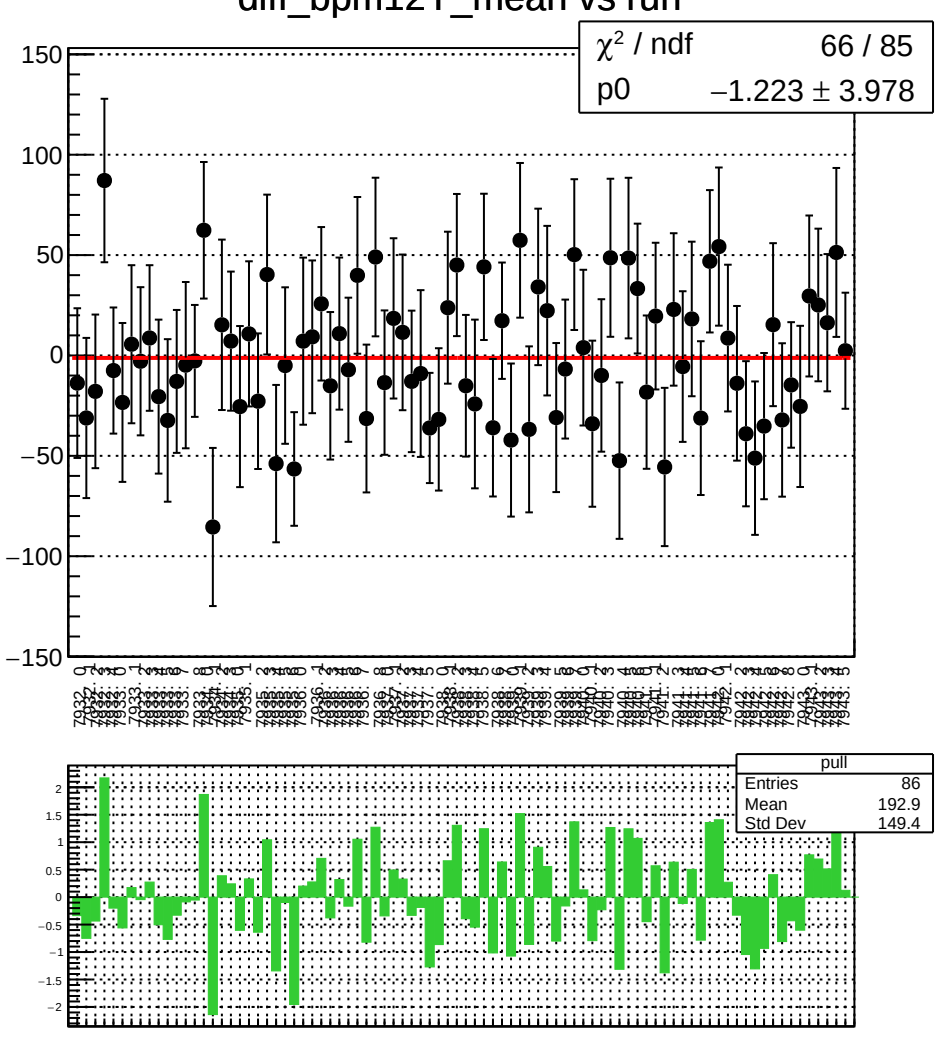

pull1D
Entries 86
Mean 0.001566
Std Dev 0.9182

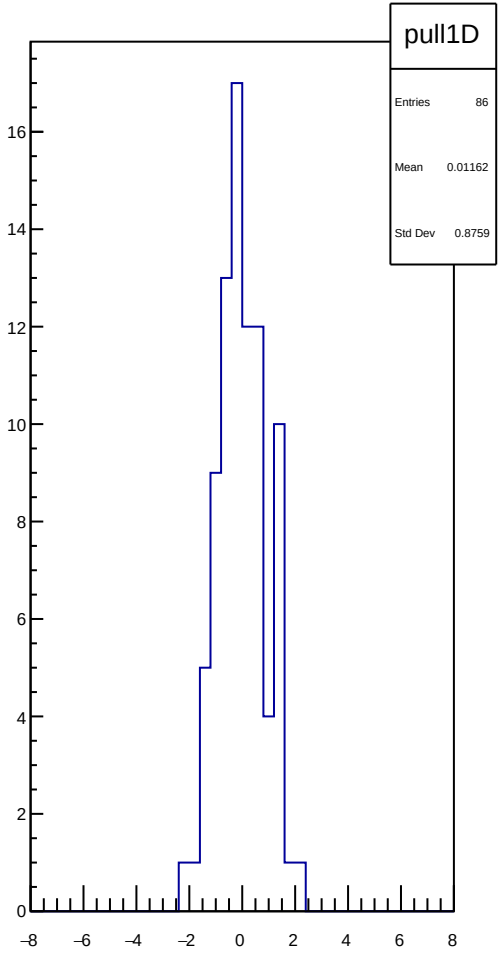

diff_bpm11Y_rms vs run
χ^2 / ndf 1510 / 85
p0 4913 ± 3.819
5400
5300
5200
5100
5000
4900
4800
4700
4600
4500

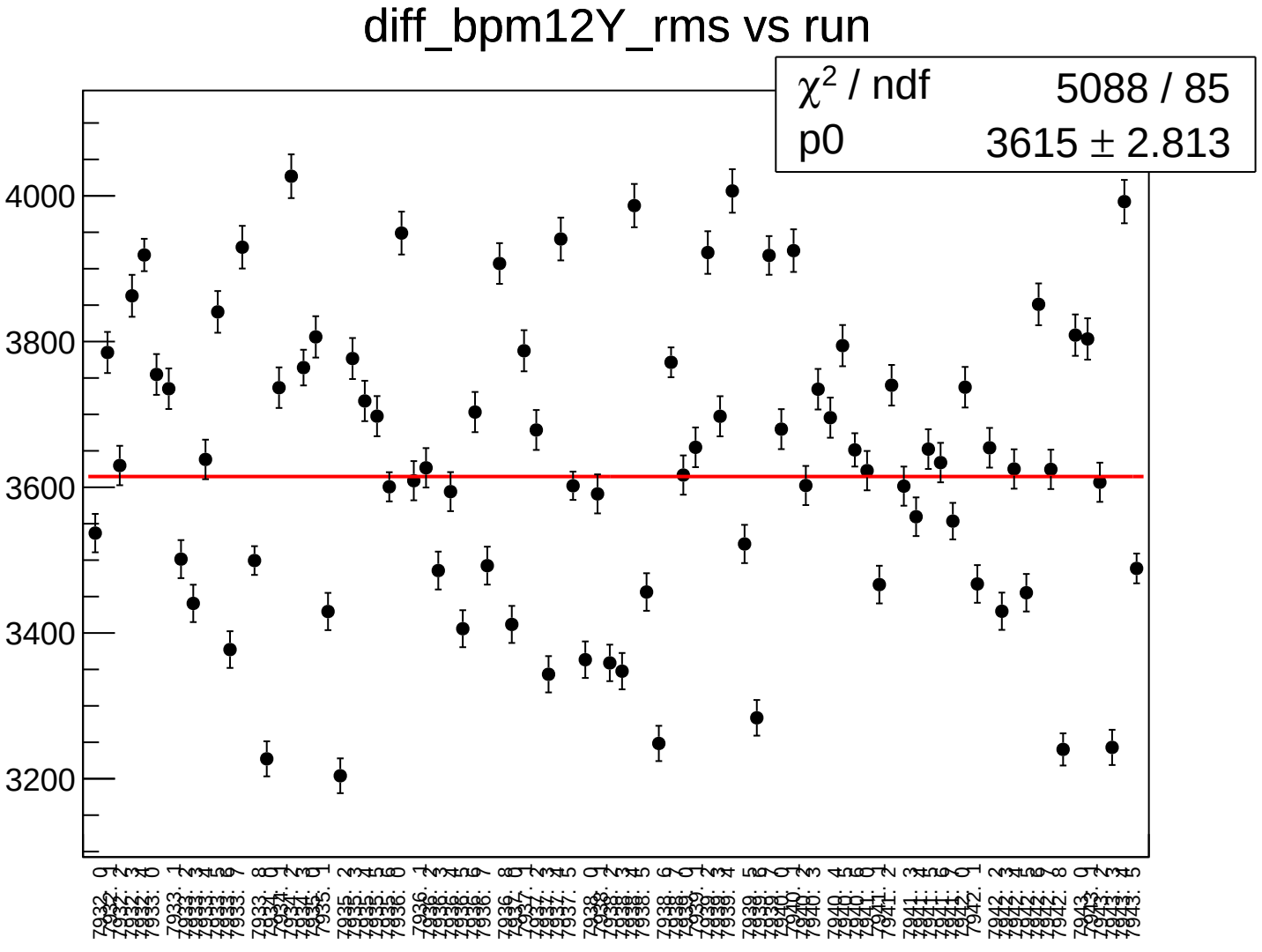

diff_bpm12X_mean vs run
χ² / ndf 96.67 / 85
p0 −5.17 ± 48
pull
Entries 86
Mean −81.32
Std Dev 138.8

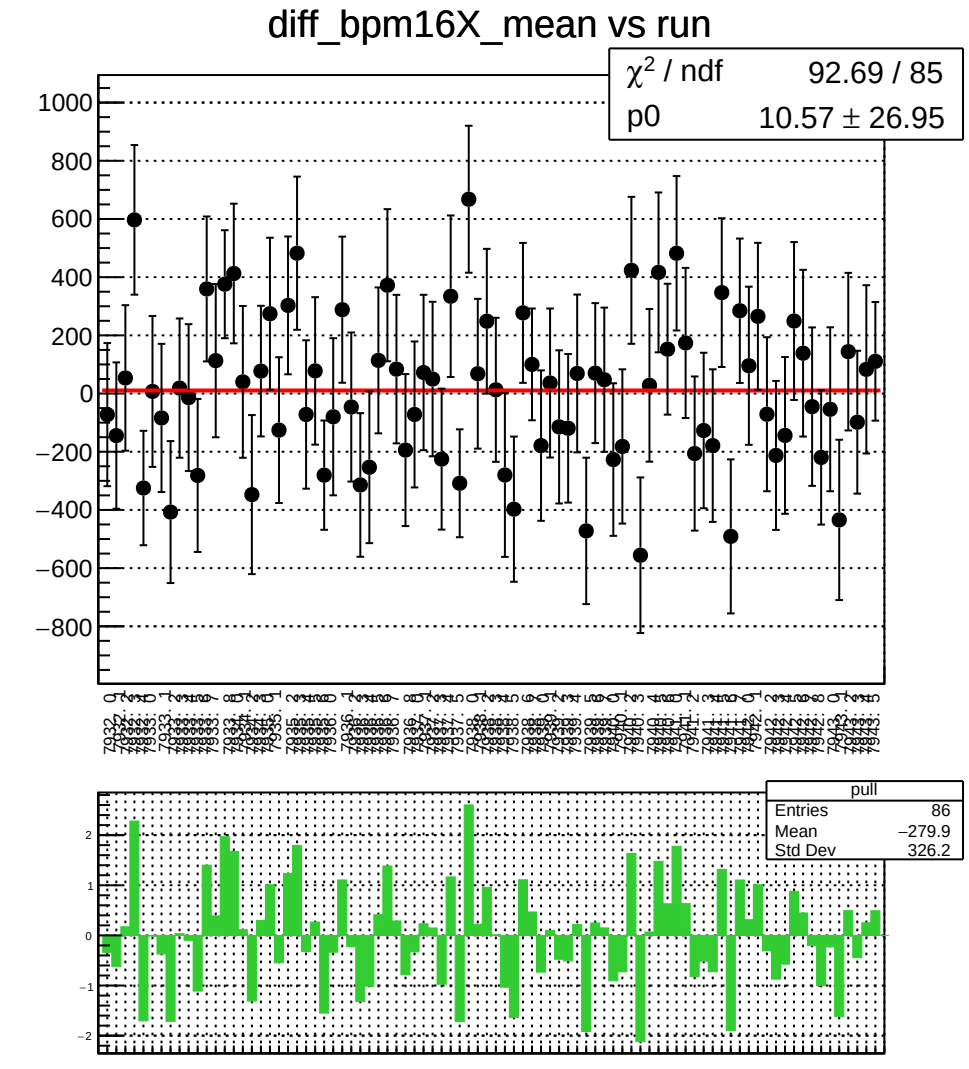

pull1D
Entries 86
Mean 0.004025
Std Dev 1.06

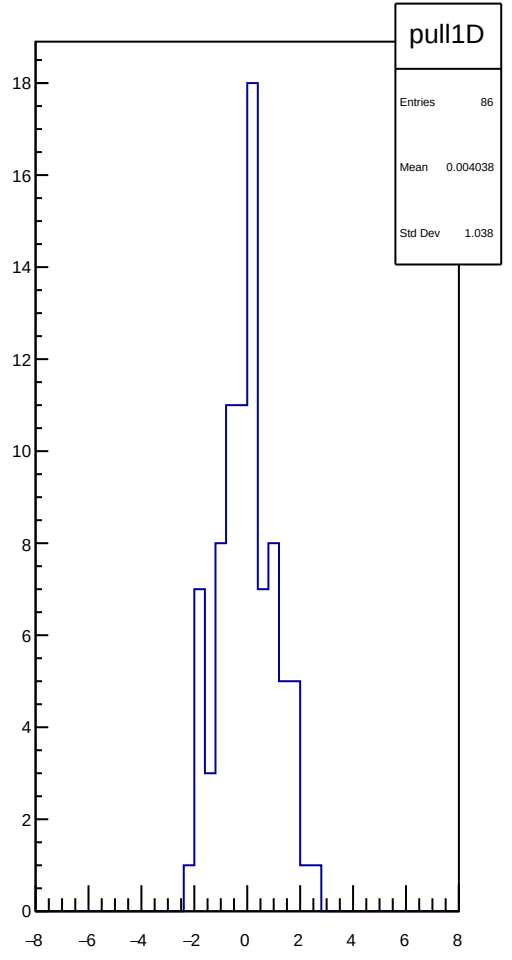

diff_bpm12X_rms vs run
χ² / ndf 2570 / 85
p0 4.365e+04 ± 33.94
50000
48000
46000
44000
42000
40000

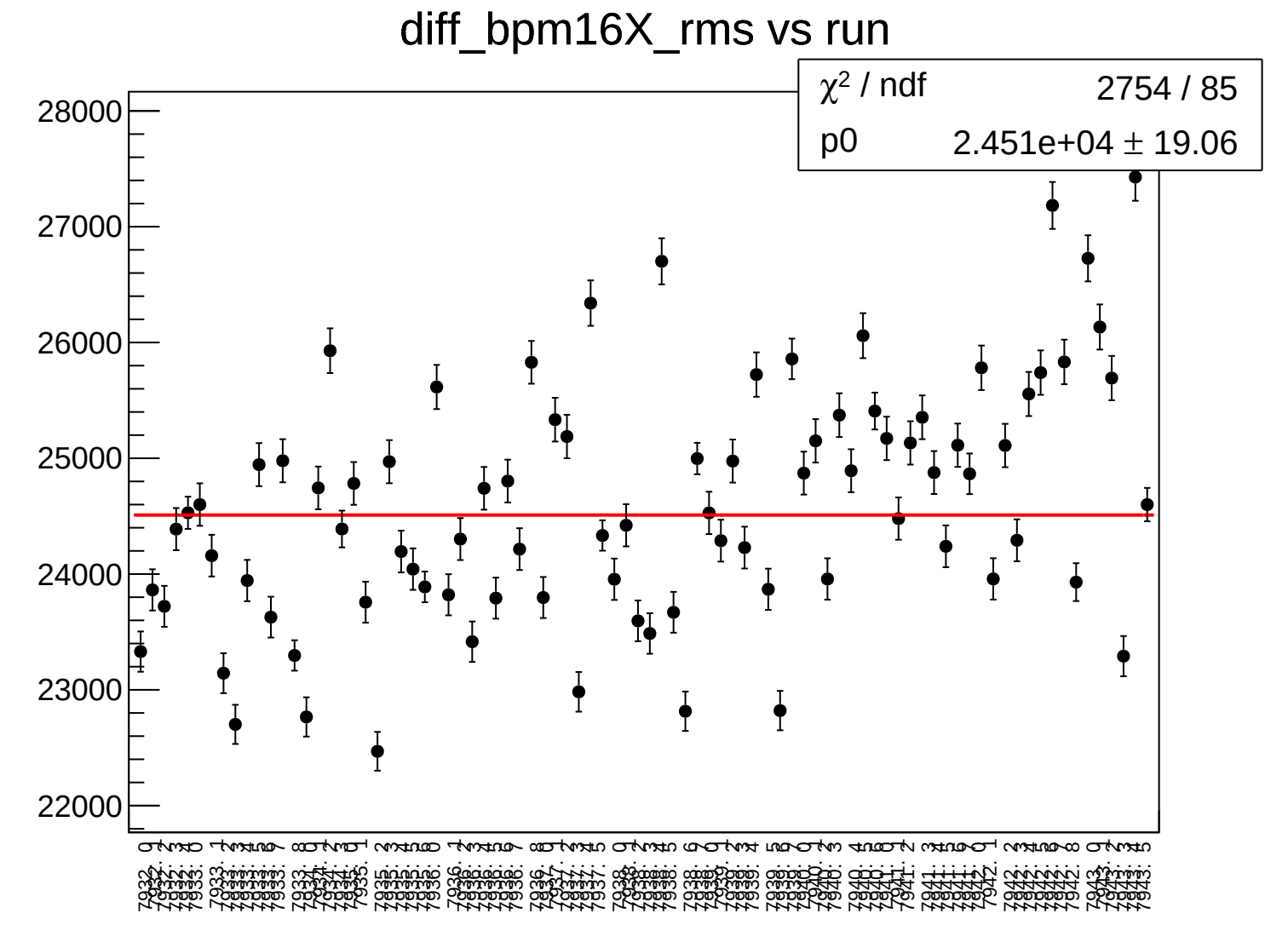

diff_bpm12Y_mean vs run
χ² / ndf 66 / 85
p0 −1.223 ± 3.978
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 192.9
Std Dev 149.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

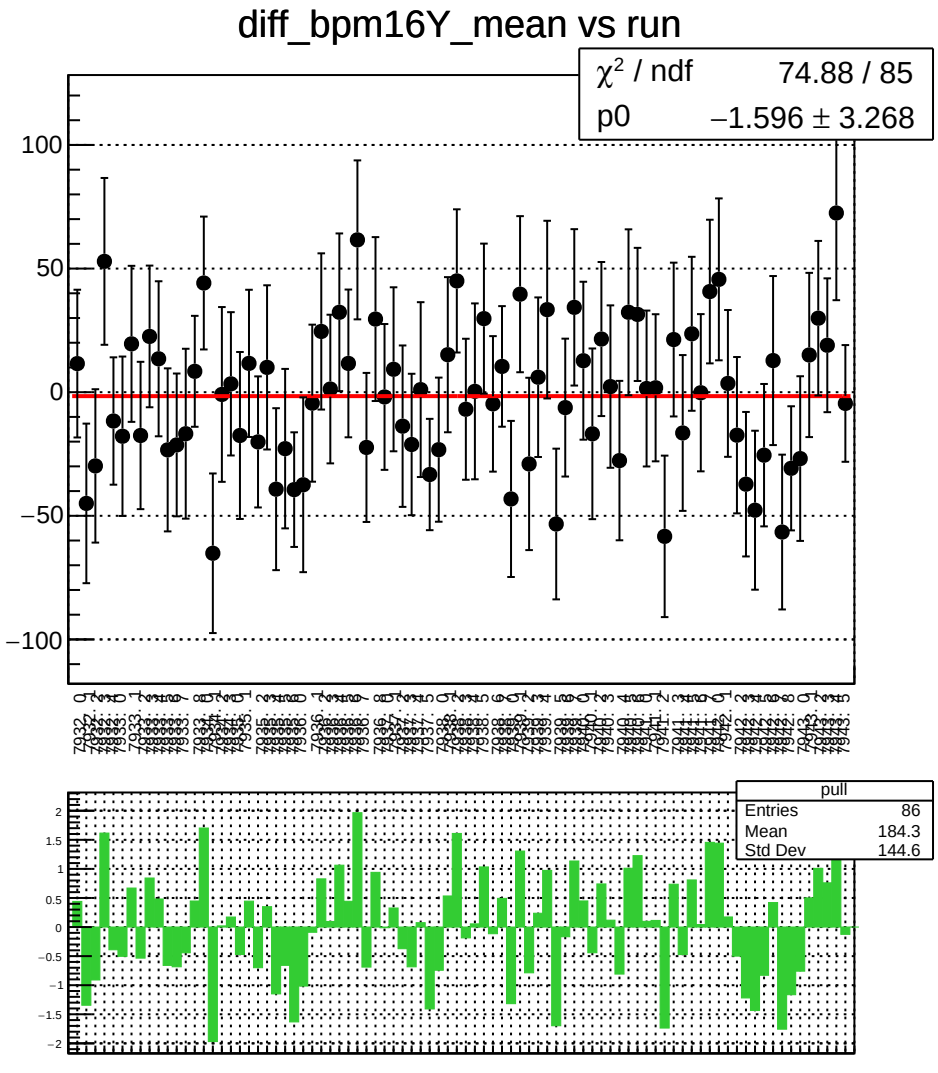

pull1D
Entries 86
Mean 0.01162
Std Dev 0.8759
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

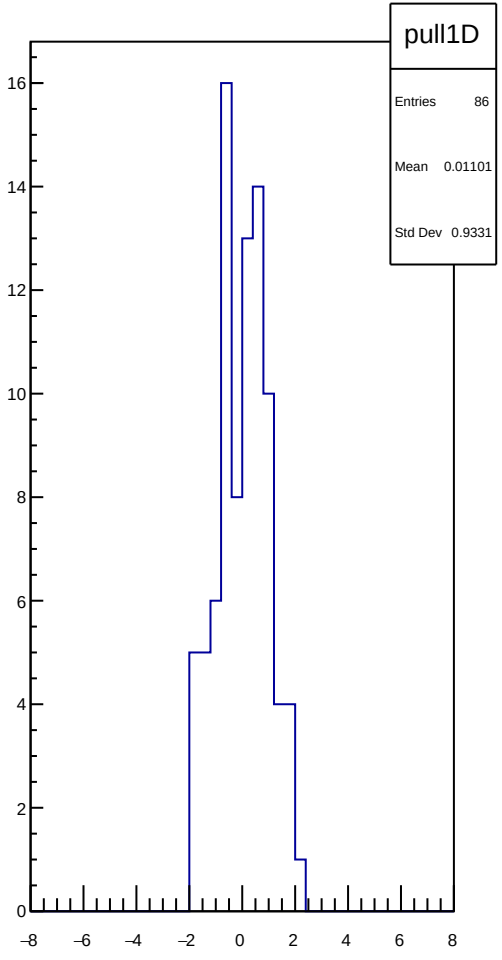

diff_bpm12Y_rms vs run
χ² / ndf 5088 / 85
p0 3615 ± 2.813
4000
3800
3600
3400
3200

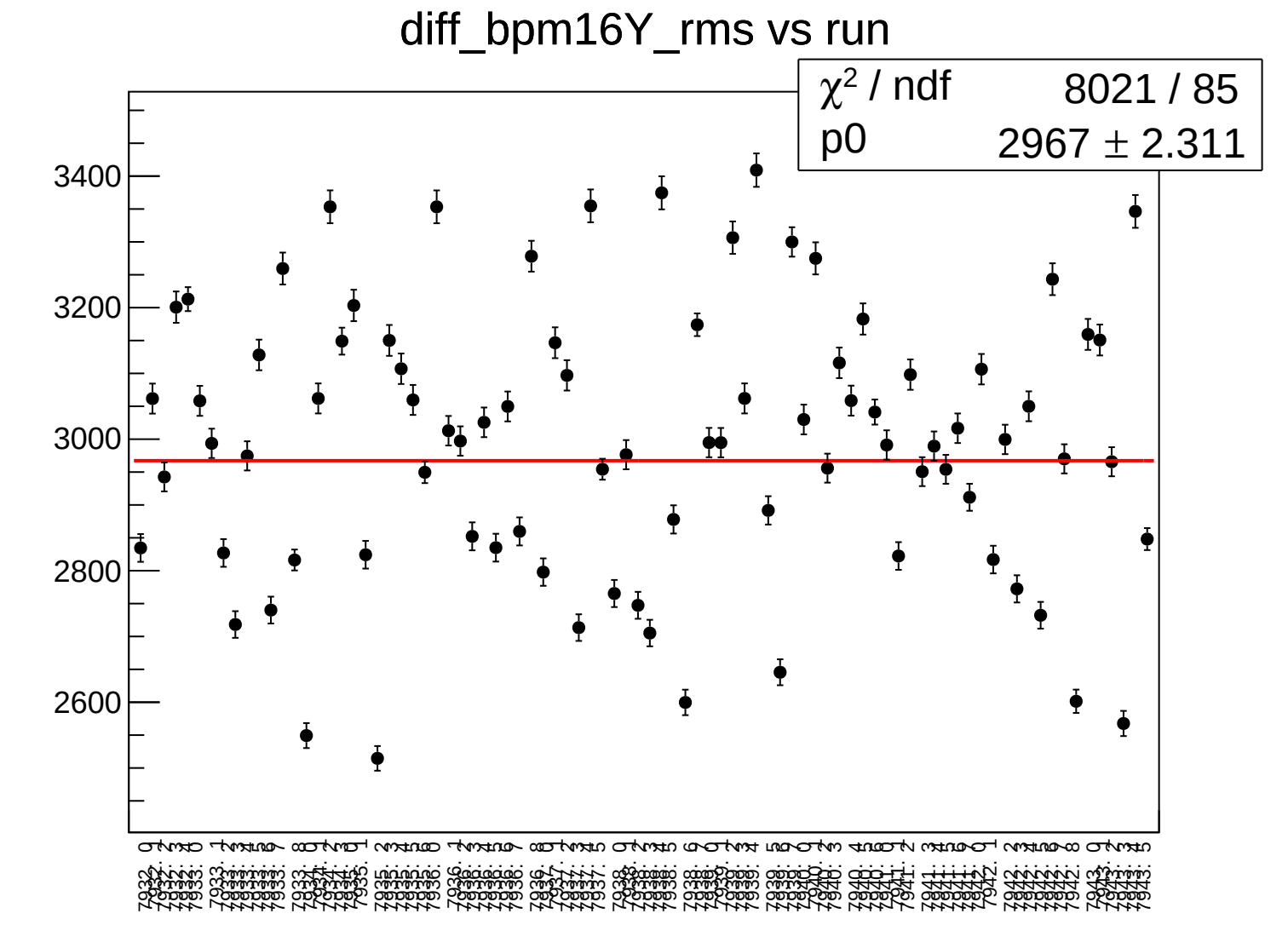

diff_bpm16X_mean vs run
χ² / ndf 92.69 / 85
p0 10.57 ± 26.95
pull
Entries 86
Mean −279.9
Std Dev 326.2

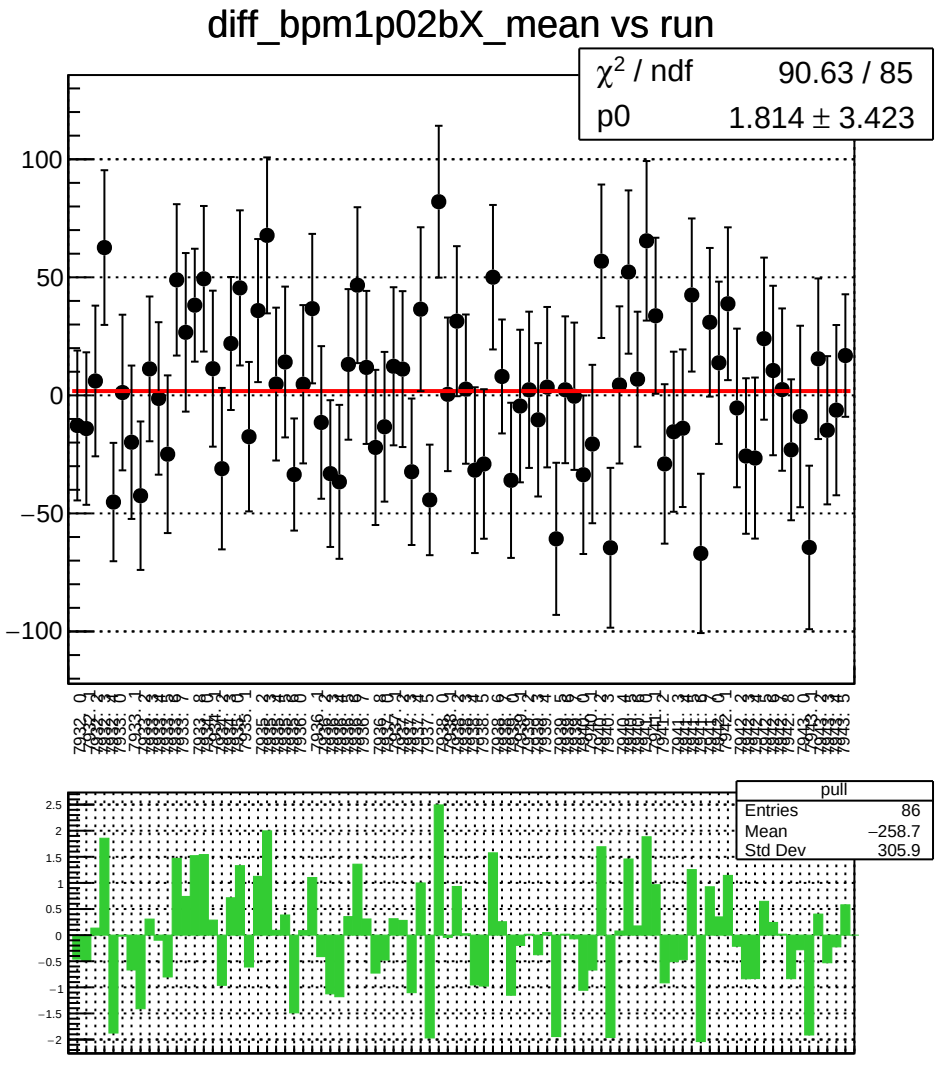

pull1D
Entries 86
Mean 0.004038
Std Dev 1.038

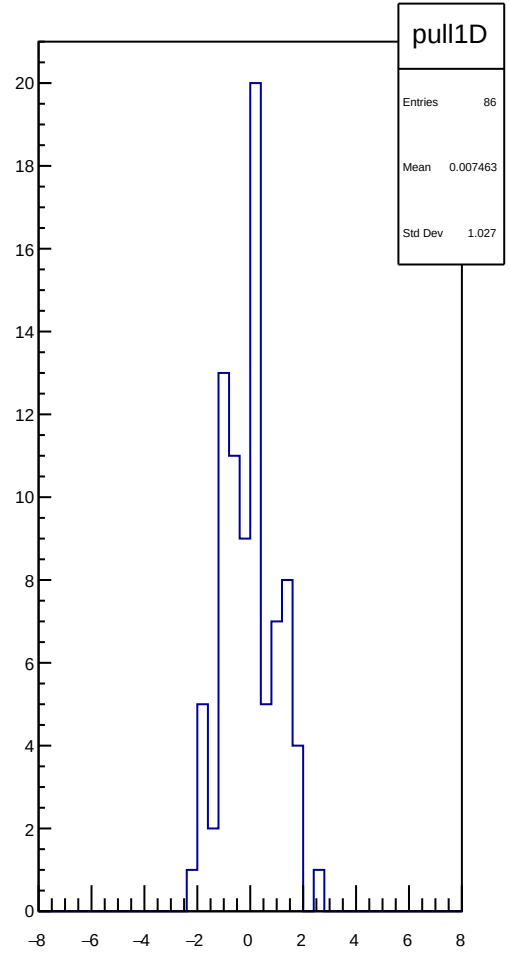

diff_bpm16X_rms vs run
χ² / ndf 2754 / 85
p0 2.451e+04 ± 19.06
28000
27000
26000
25000
24000
23000
22000

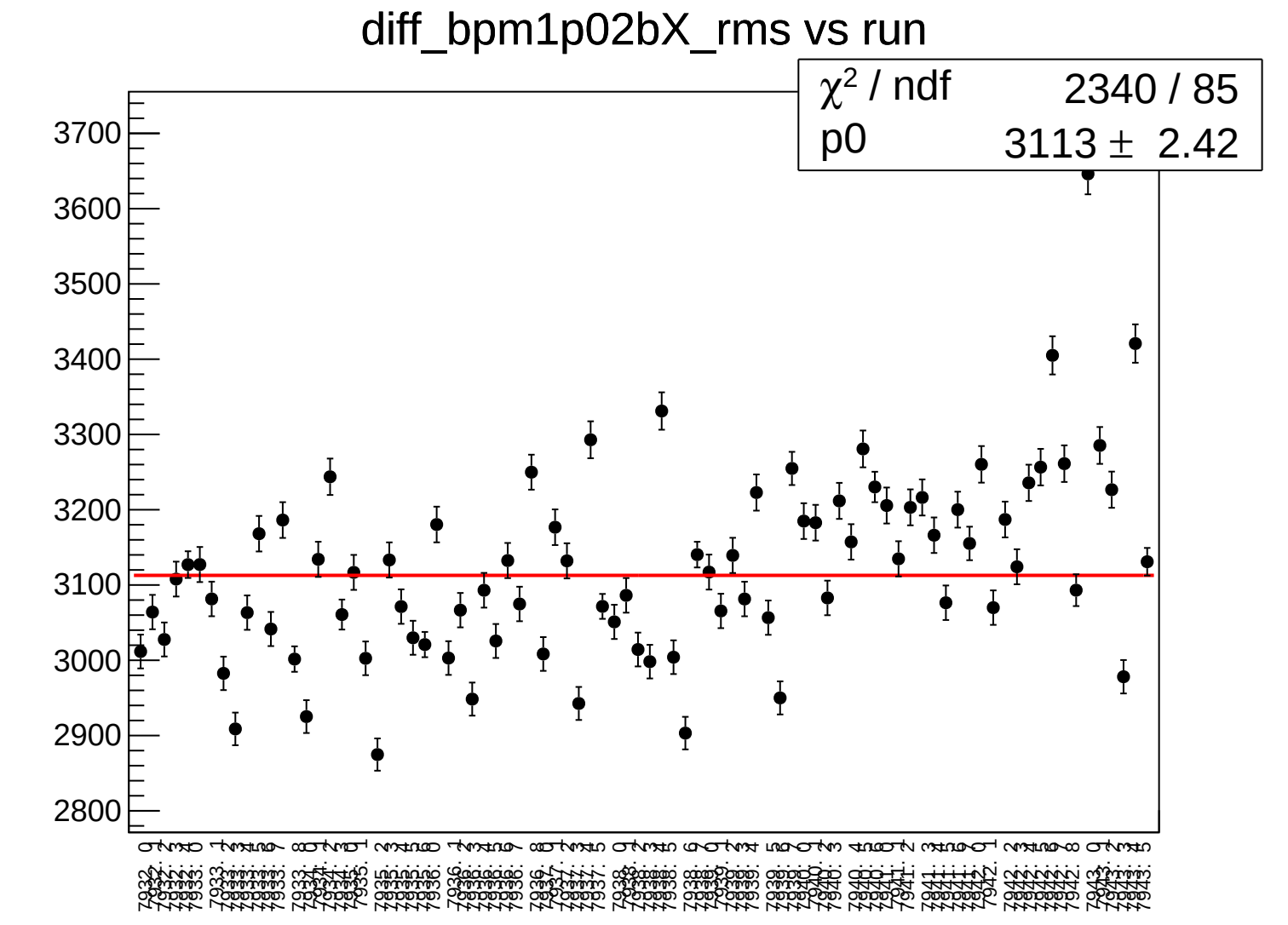

diff_bpm16Y_mean vs run
χ² / ndf 74.88 / 85
p0 −1.596 ± 3.268
pull
Entries 86
Mean 184.3
Std Dev 144.6

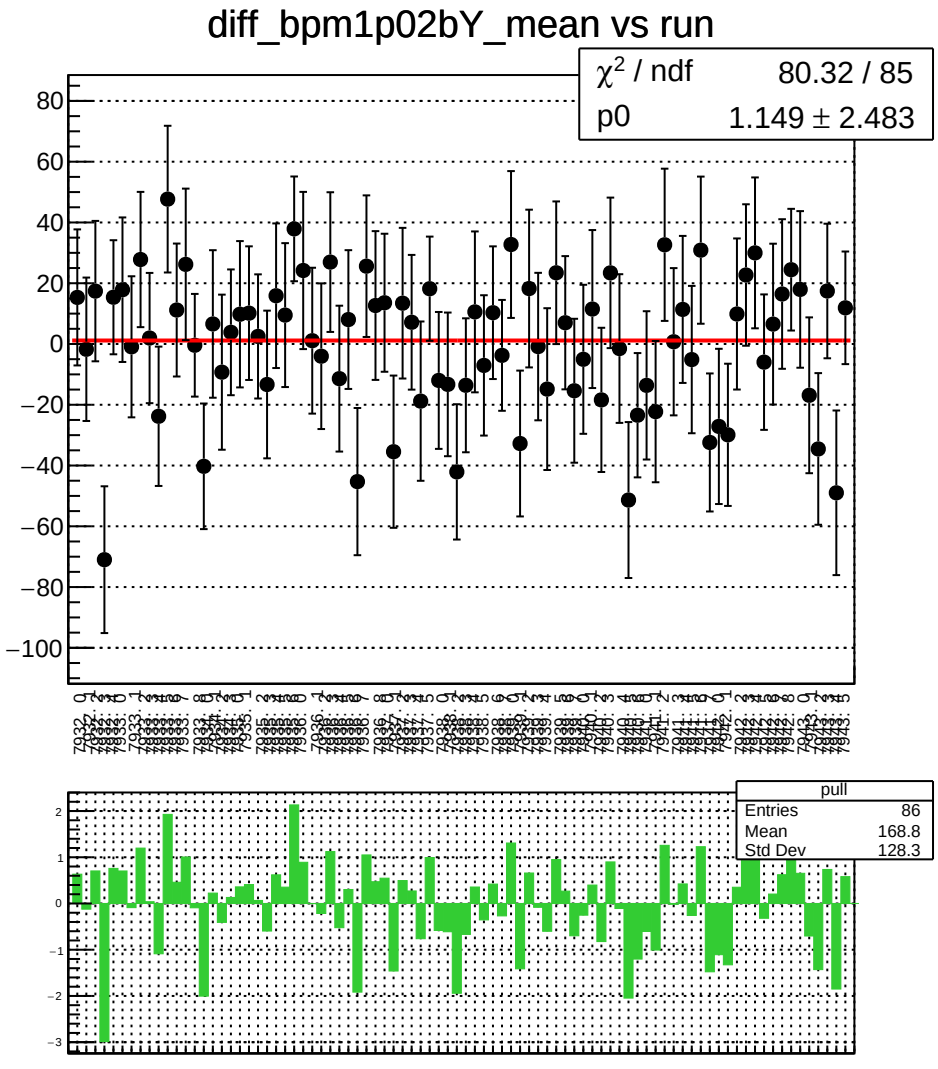

pull1D
Entries 86
Mean 0.01101
Std Dev 0.9331

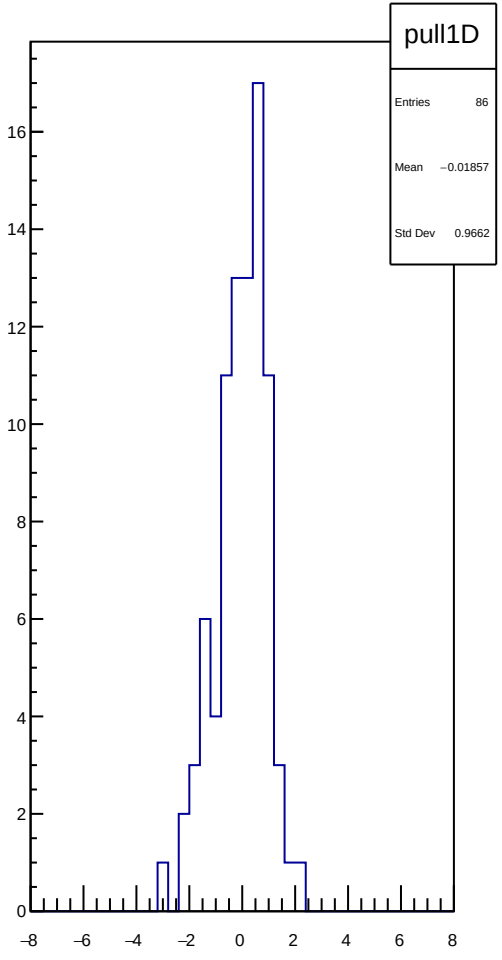

diff_bpm16Y_rms vs run
χ² / ndf 8021 / 85
p0 2967 ± 2.311
3400
3200
3000
2800
2600

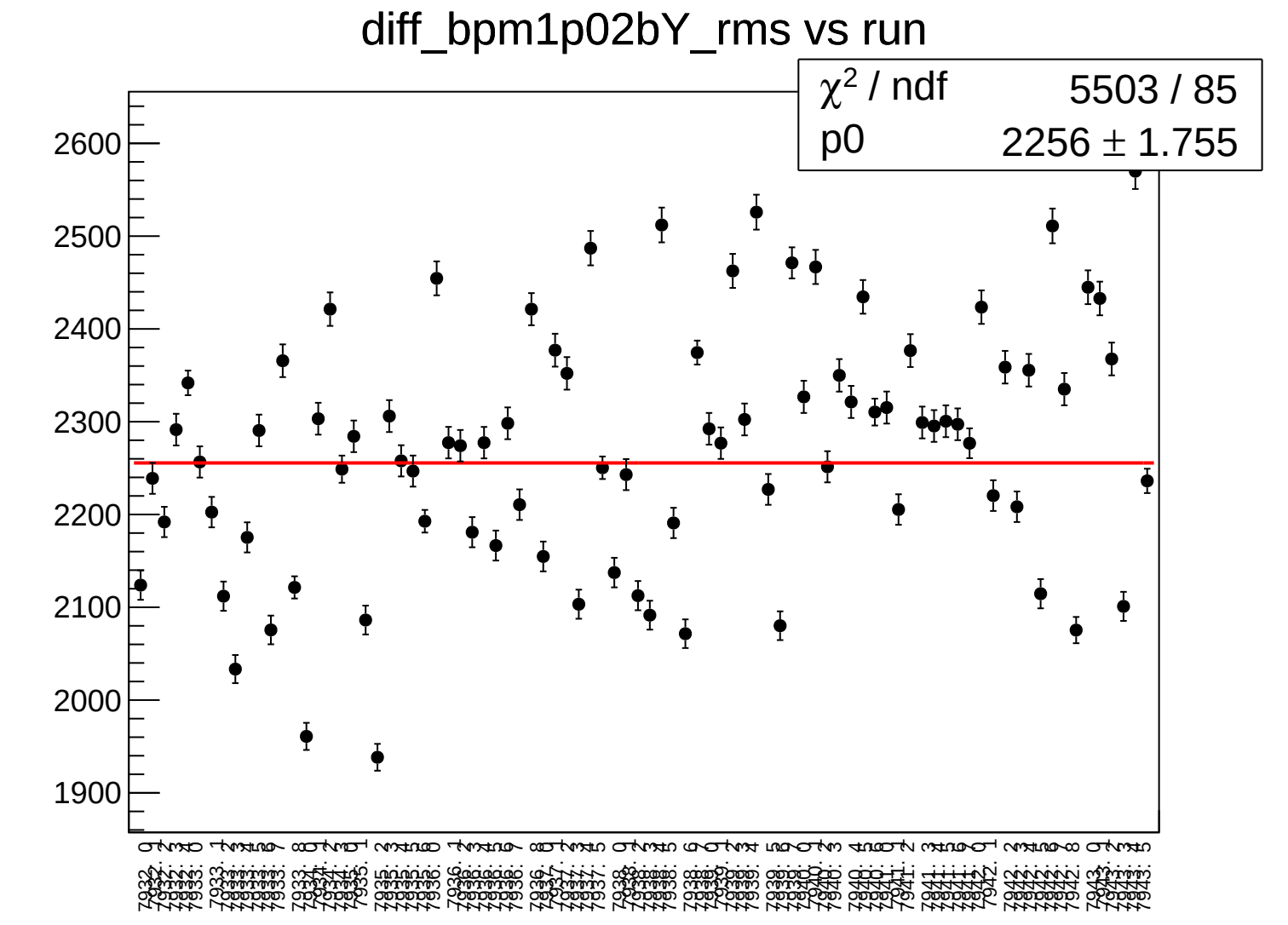

diff_bpm1p02bX_mean vs run
χ^2 / ndf 90.63 / 85
p0 1.814 ± 3.423
100
50
0
−50
−100
pull
Entries 86
Mean −258.7
Std Dev 305.9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

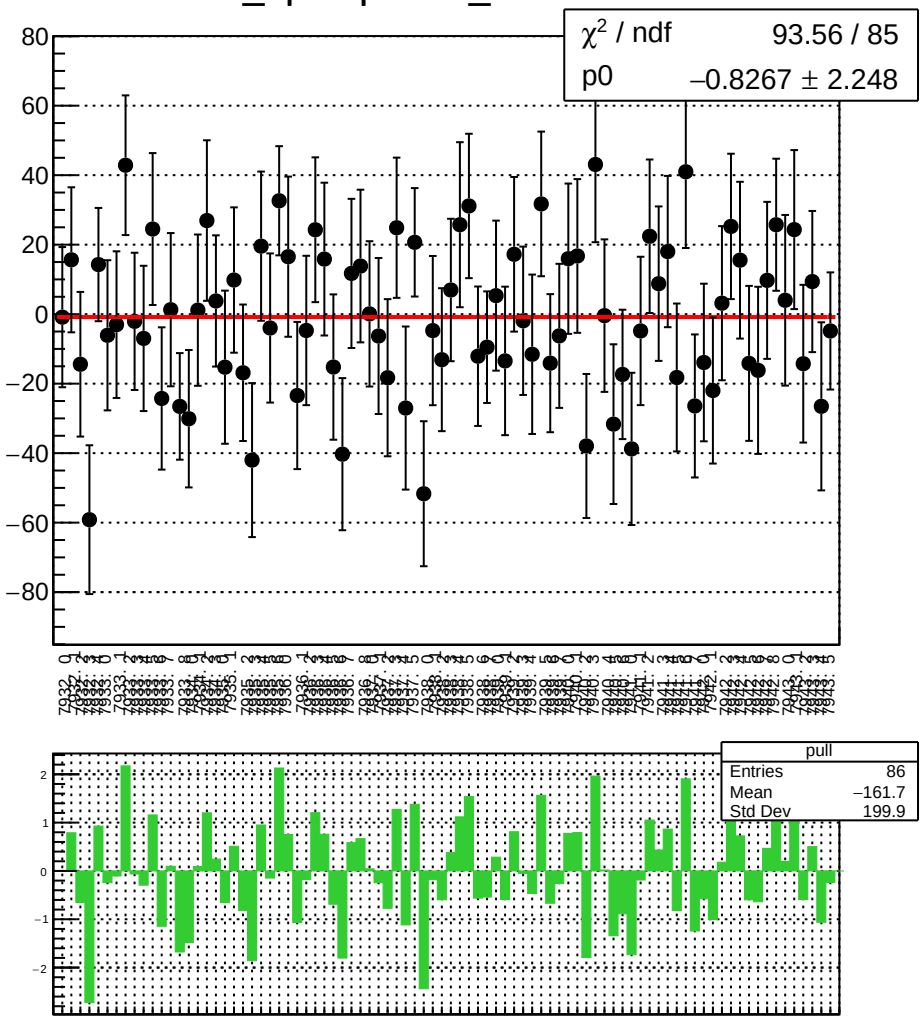

pull1D
Entries 86
Mean 0.007463
Std Dev 1.027
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

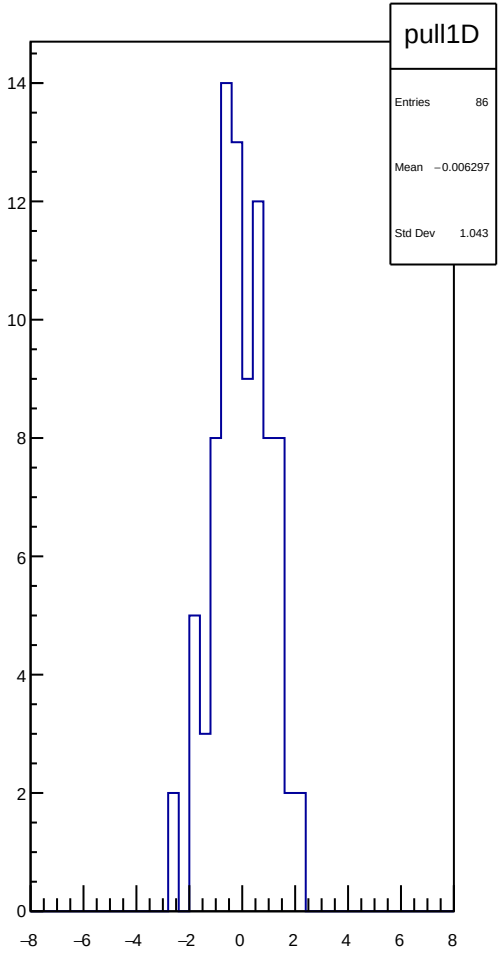

diff_bpm1p02bX_rms vs run
χ² / ndf 2340 / 85
p0 3113 ± 2.42
3700
3600
3500
3400
3300
3200
3100
3000
2900
2800

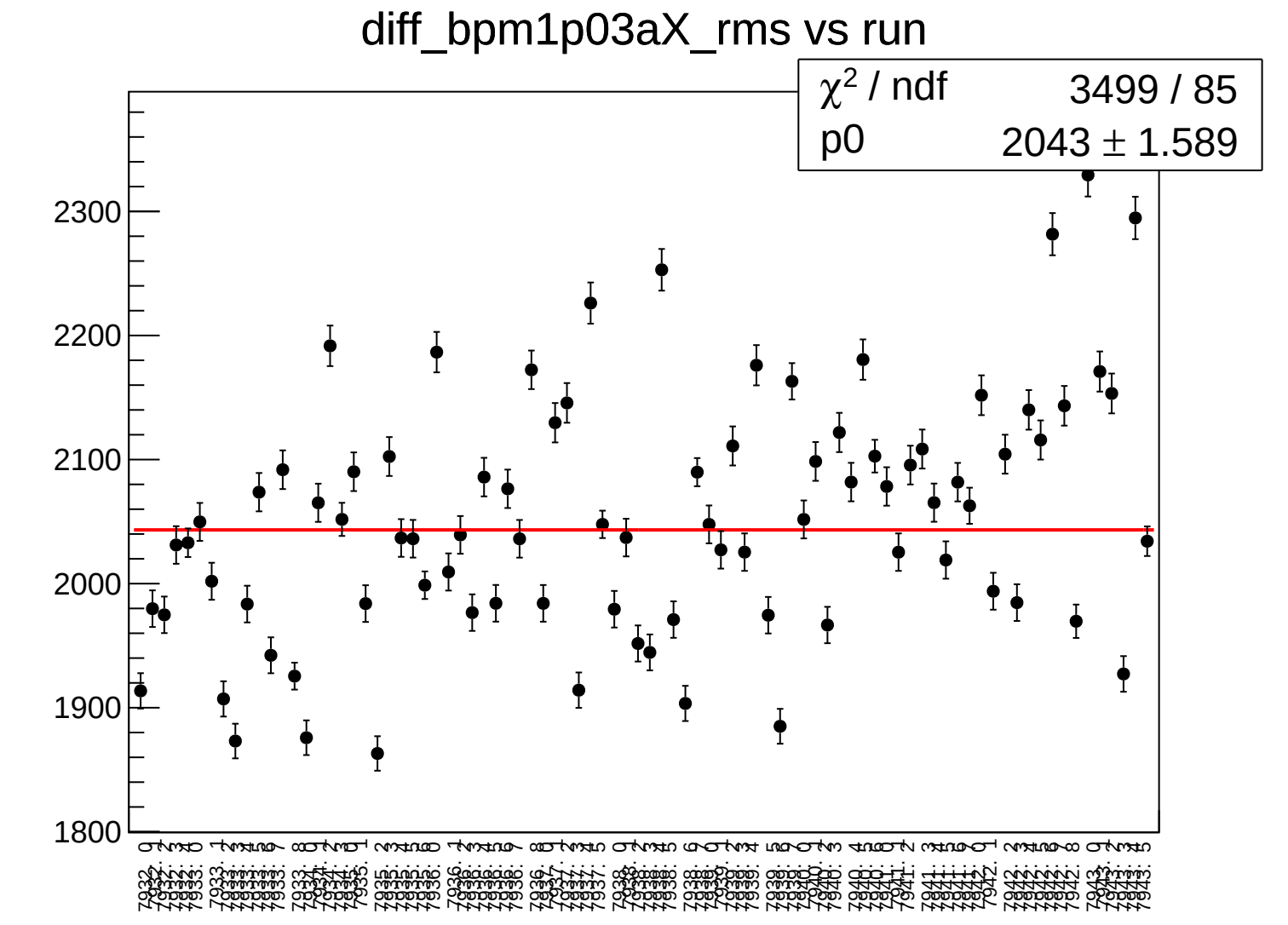

diff_bpm1p02bY_mean vs run
χ^2 / ndf 80.32 / 85
p0 1.149 ± 2.483
pull
Entries 86
Mean 168.8
Std Dev 128.3

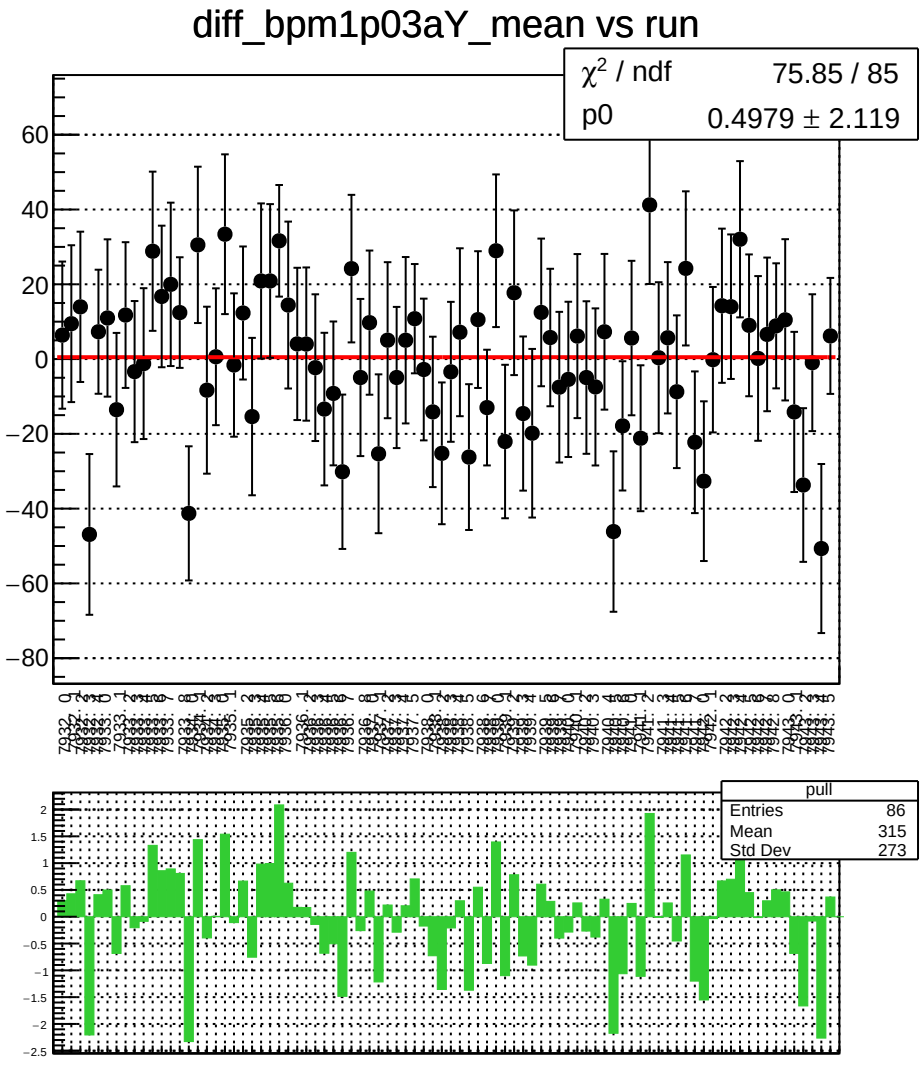

pull1D
Entries 86
Mean −0.01857
Std Dev 0.9662

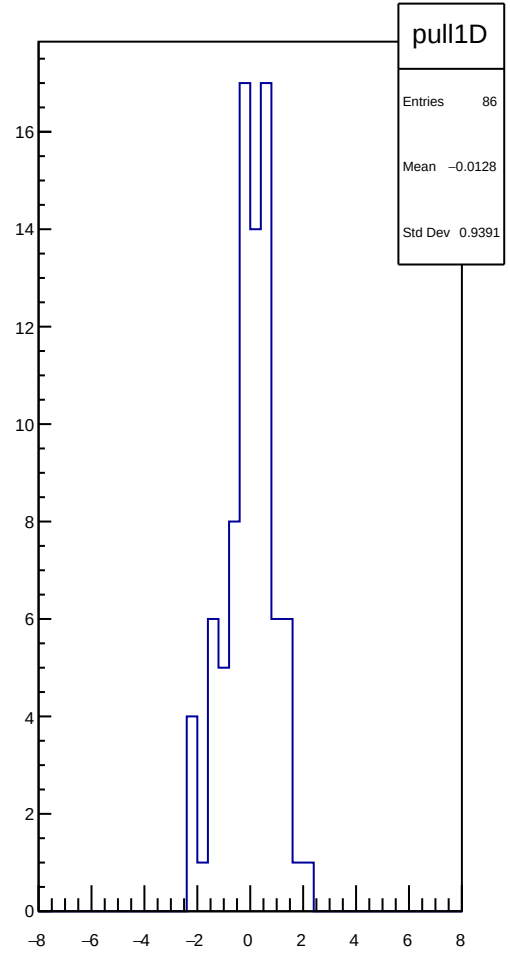

diff_bpm1p02bY_rms vs run
χ² / ndf 5503 / 85
p0 2256 ± 1.755
2600
2500
2400
2300
2200
2100
2000
1900

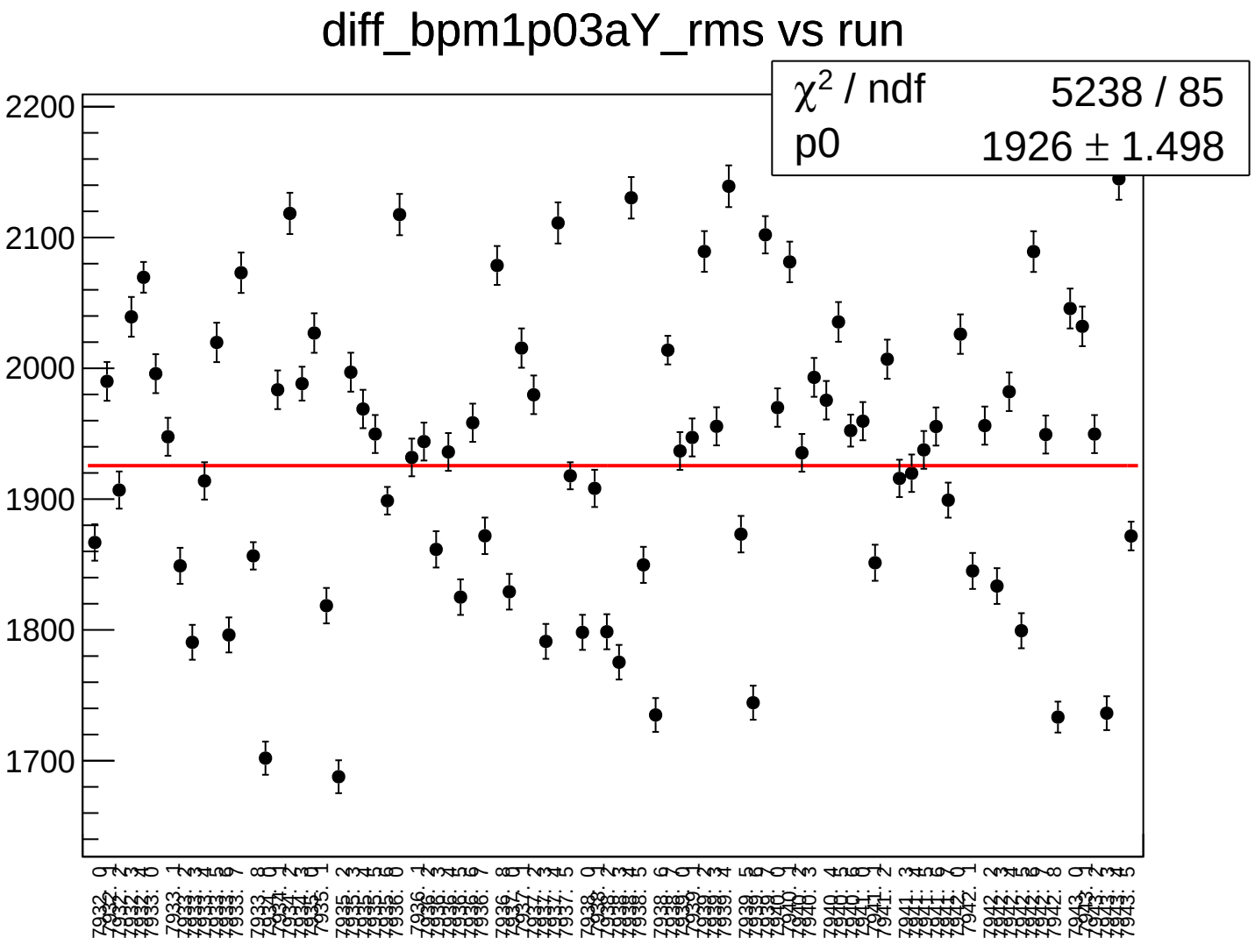

diff_bpm1p03aX_mean vs run
χ² / ndf 93.56 / 85
p0 −0.8267 ± 2.248
pull
Entries 86
Mean −161.7
Std Dev 199.9

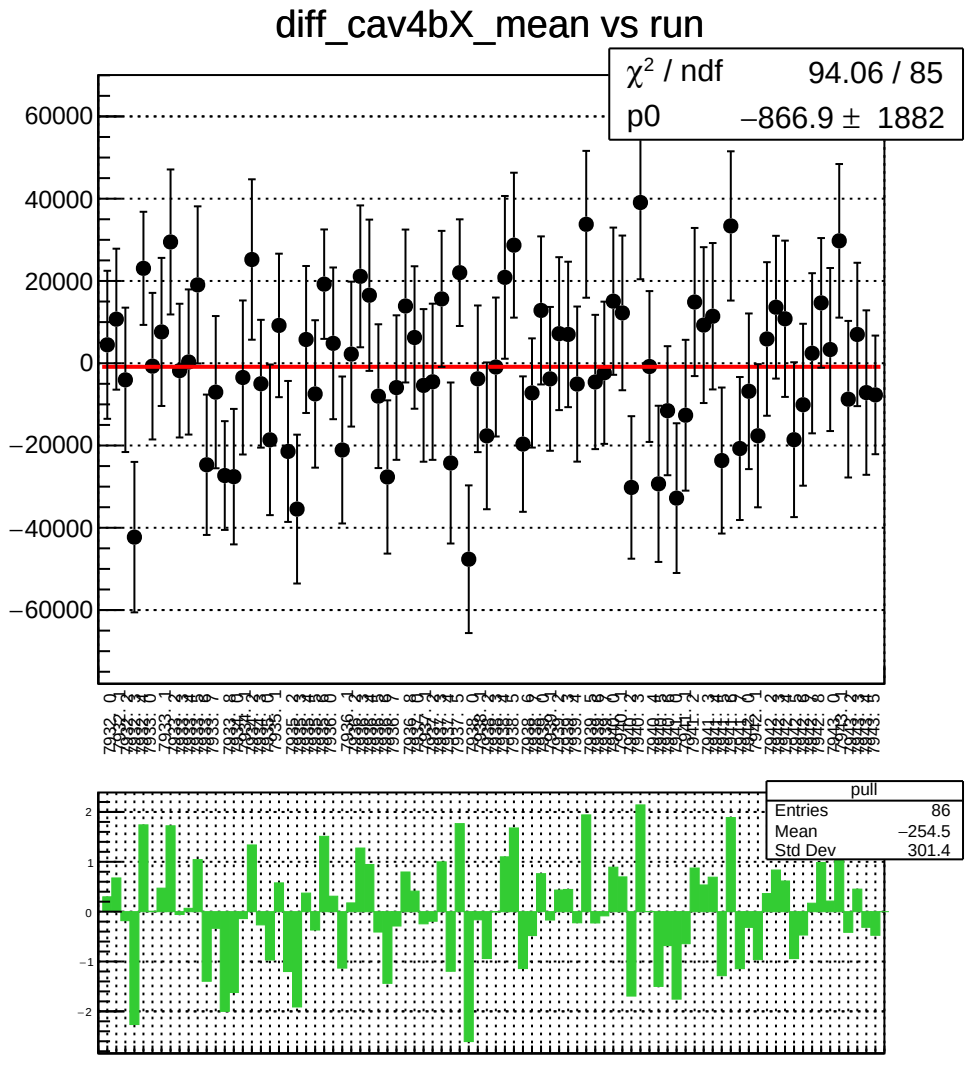

pull1D
Entries 86
Mean −0.006297
Std Dev 1.043

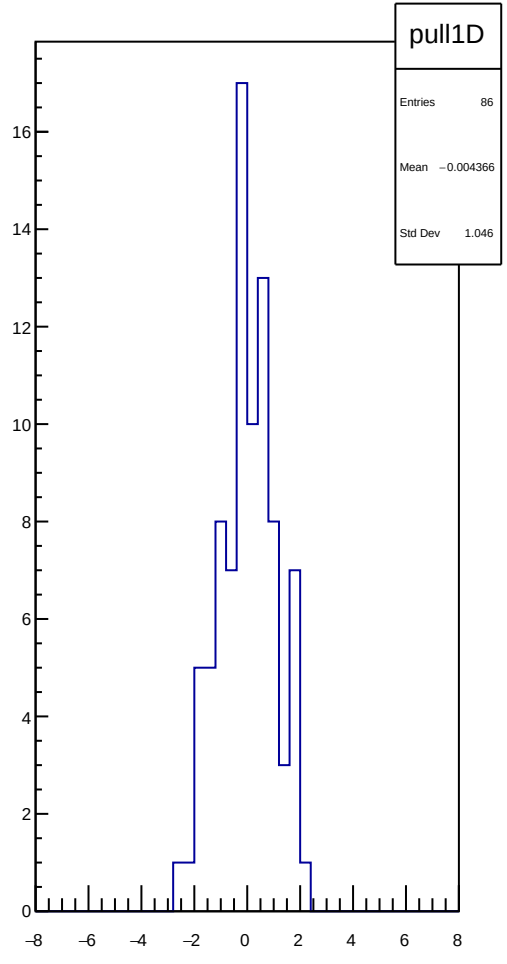

diff_bpm1p03aX_rms vs run
χ² / ndf 3499 / 85
p0 2043 ± 1.589
2300
2200
2100
2000
1900
1800

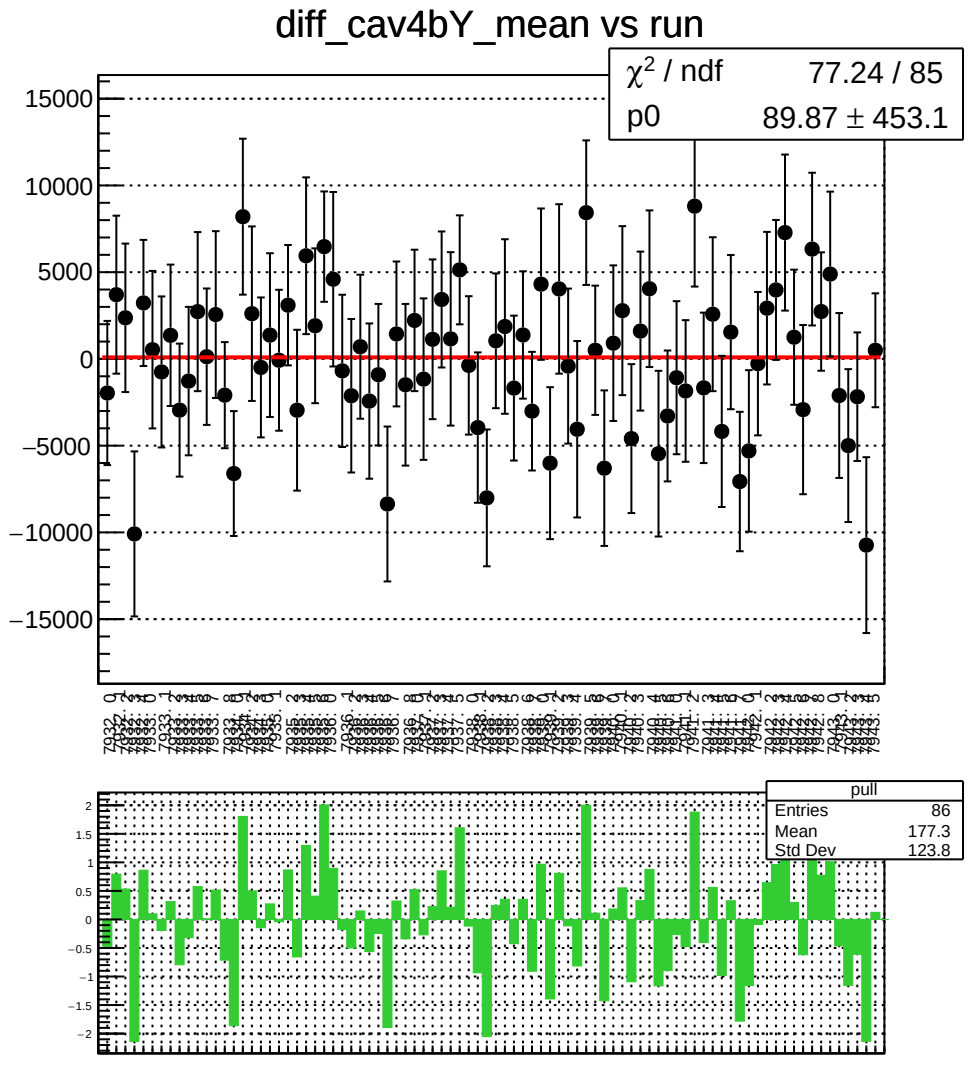

diff_bpm1p03aY_mean vs run
χ² / ndf 75.85 / 85
p0 0.4979 ± 2.119
pull
Entries 86
Mean 315
Std Dev 273

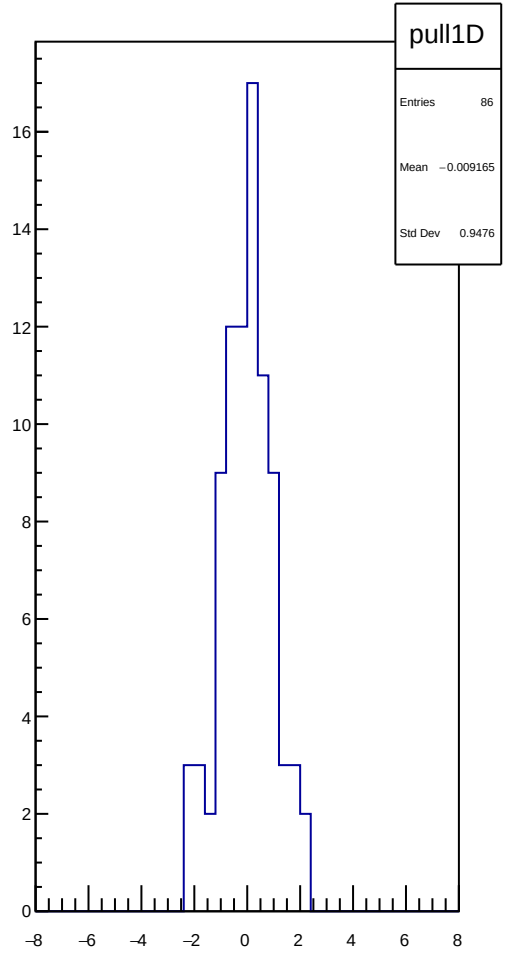

pull1D
Entries 86
Mean −0.0128
Std Dev 0.9391

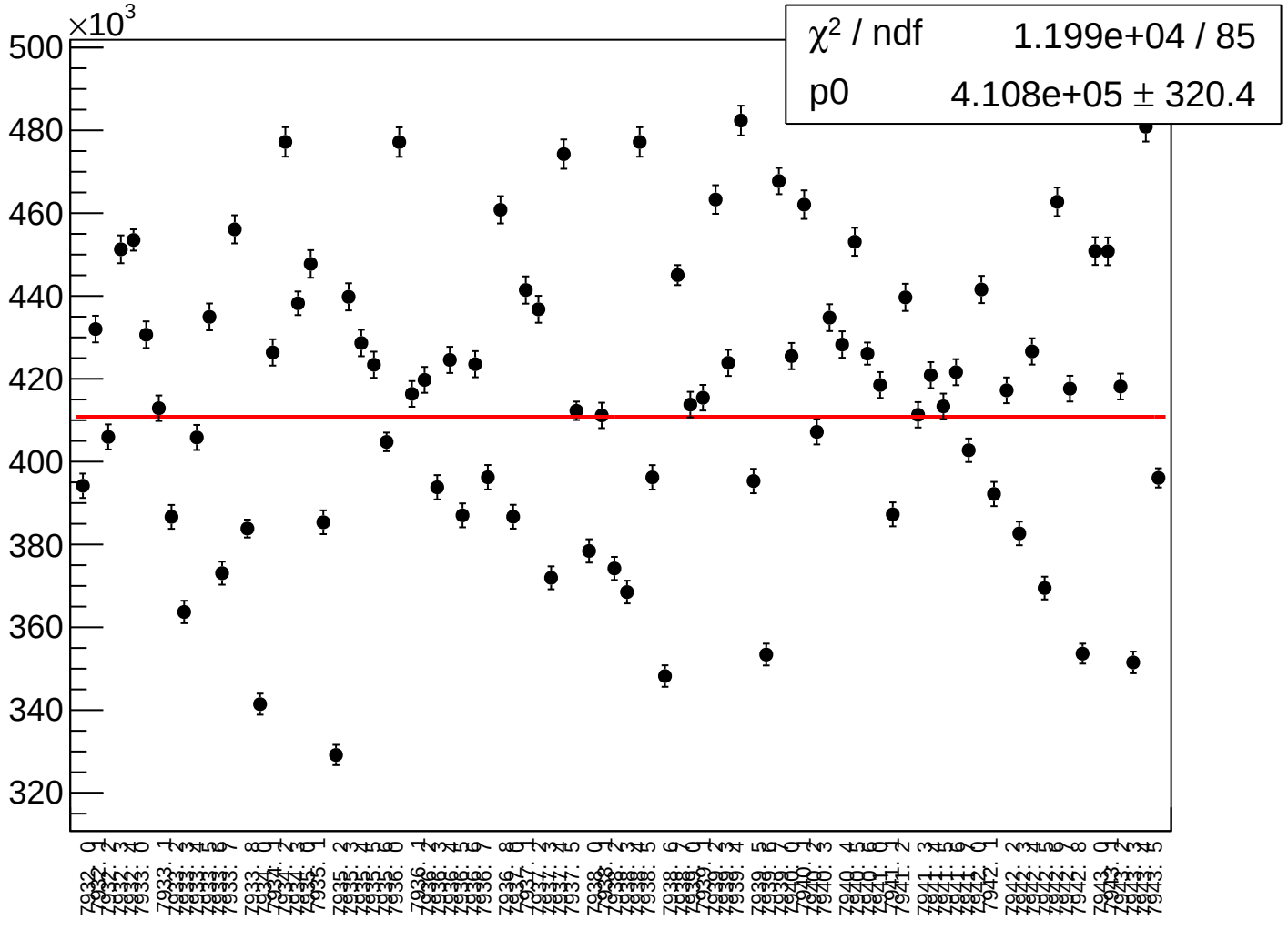

diff_bpm1p03aY_rms vs run
χ² / ndf 5238 / 85
p0 1926 ± 1.498
2200
2100
2000
1900
1800
1700

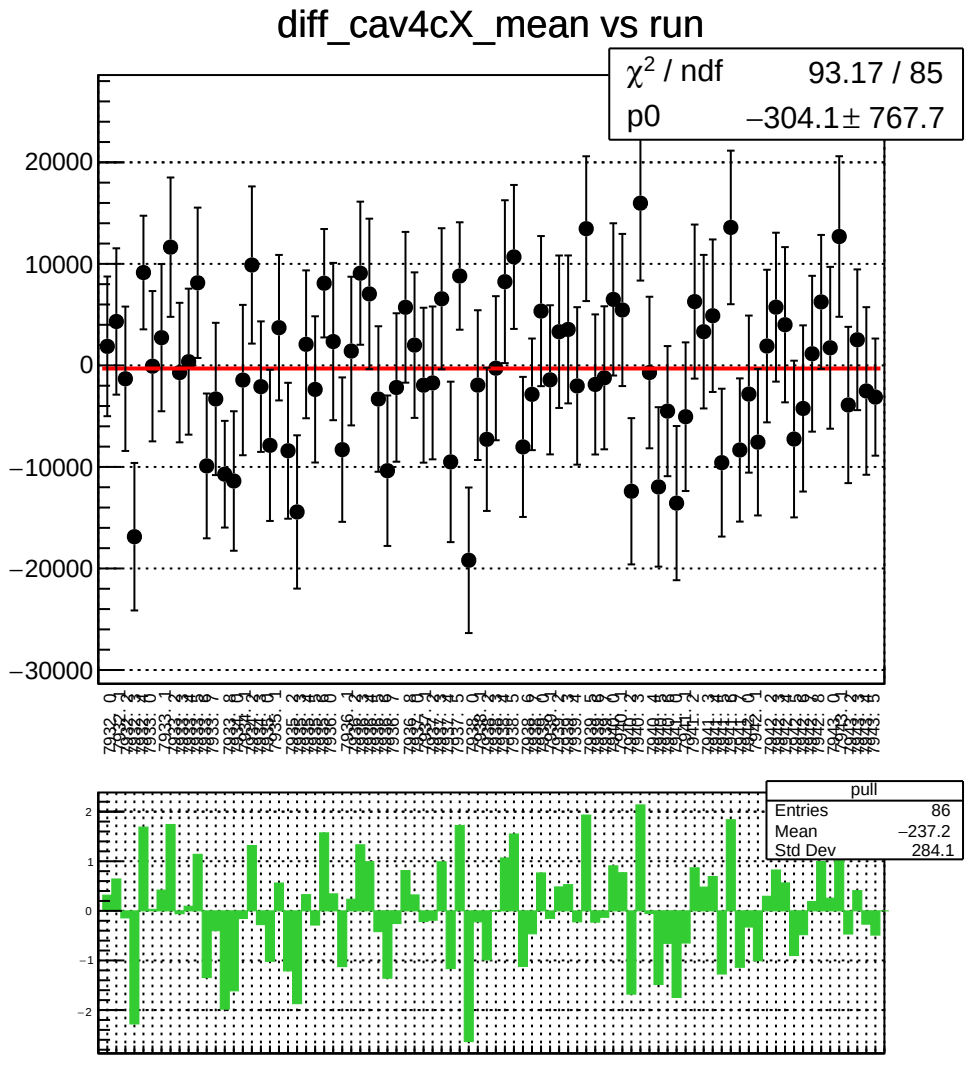

diff_cav4bX_mean vs run
χ² / ndf 94.06 / 85
p0 −866.9 ± 1882
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −254.5
Std Dev 301.4
2
1
0
−1
−2

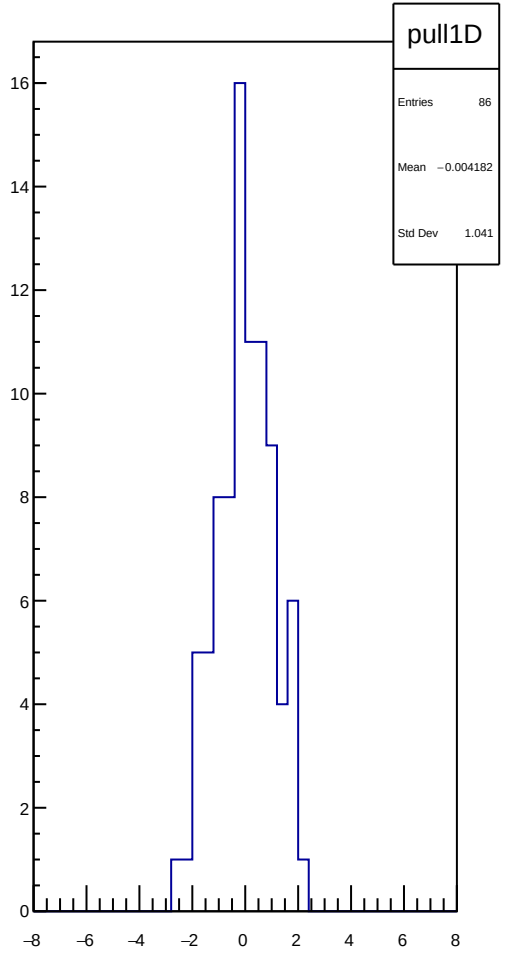

pull1D
Entries 86
Mean −0.004366
Std Dev 1.046
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

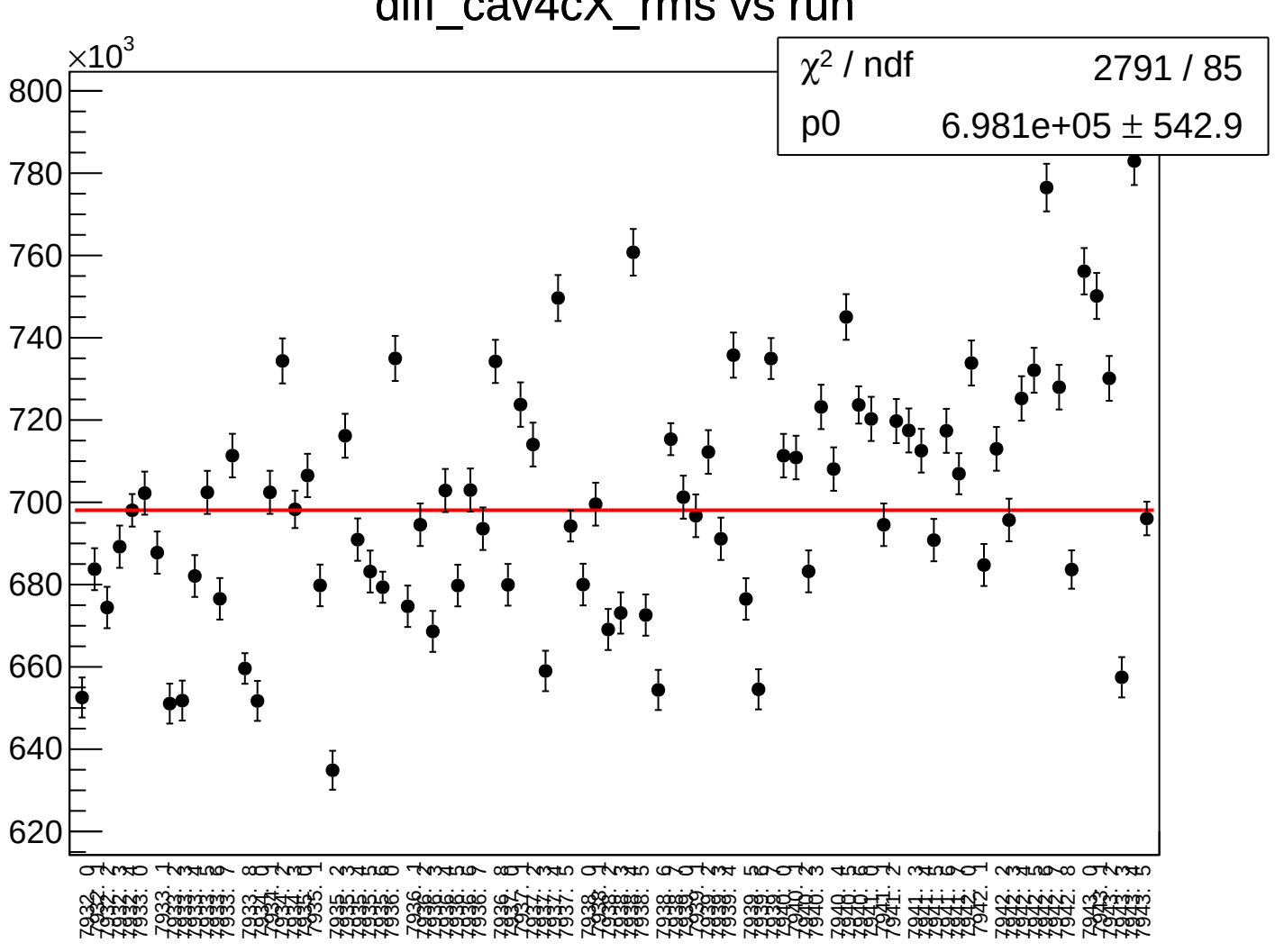

diff_cav4bY_mean vs run
χ² / ndf 77.24 / 85
p0 89.87 ± 453.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 177.3
Std Dev 123.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

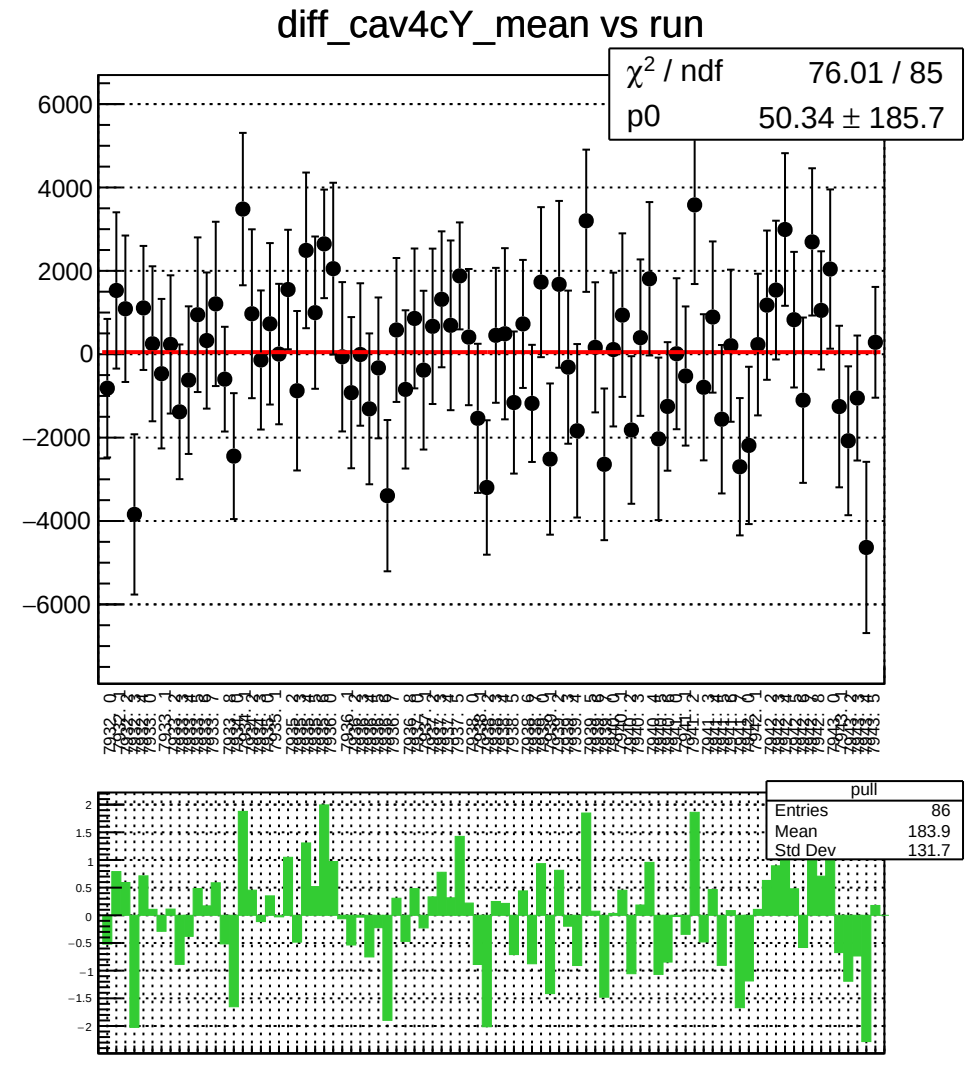

pull1D
Entries 86
Mean −0.009165
Std Dev 0.9476
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

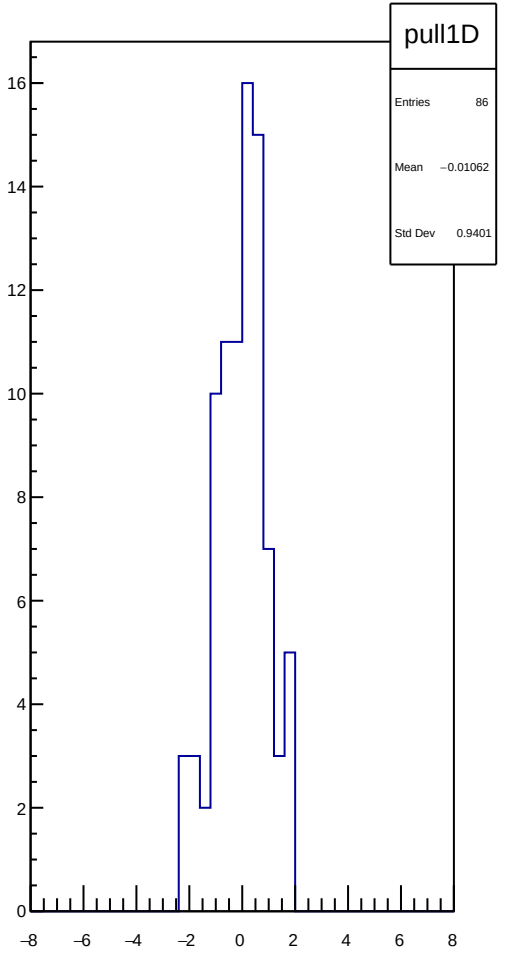

diff_cav4bY_rms vs run
χ² / ndf 1.199e+04 / 85
p0 4.108e+05 ± 320.4
×10³
500
480
460
440
420
400
380
360
340
320

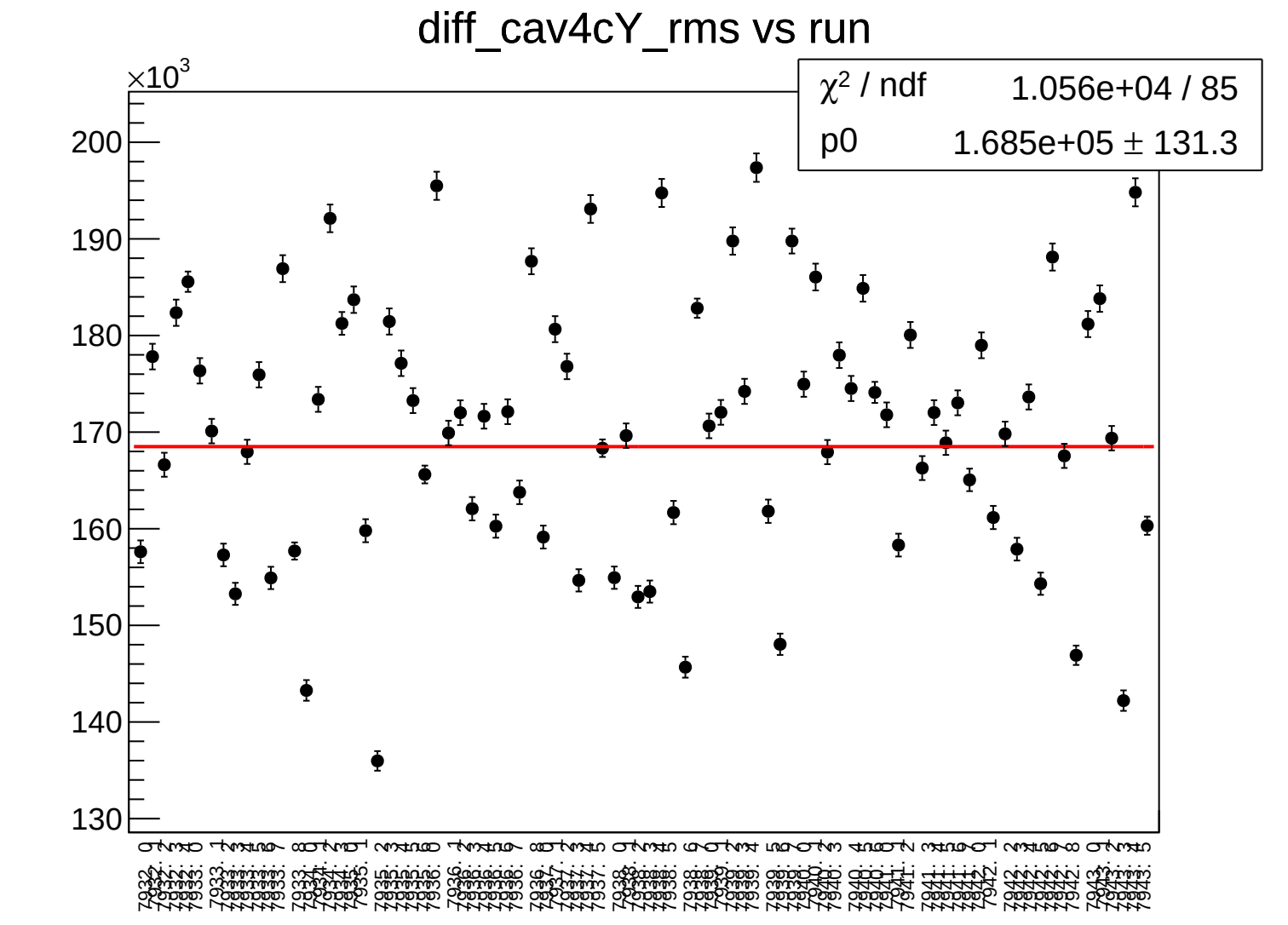

diff_cav4cX_mean vs run
χ² / ndf 93.17 / 85
p0 −304.1± 767.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −237.2
Std Dev 284.1
2
1
0
−1
−2

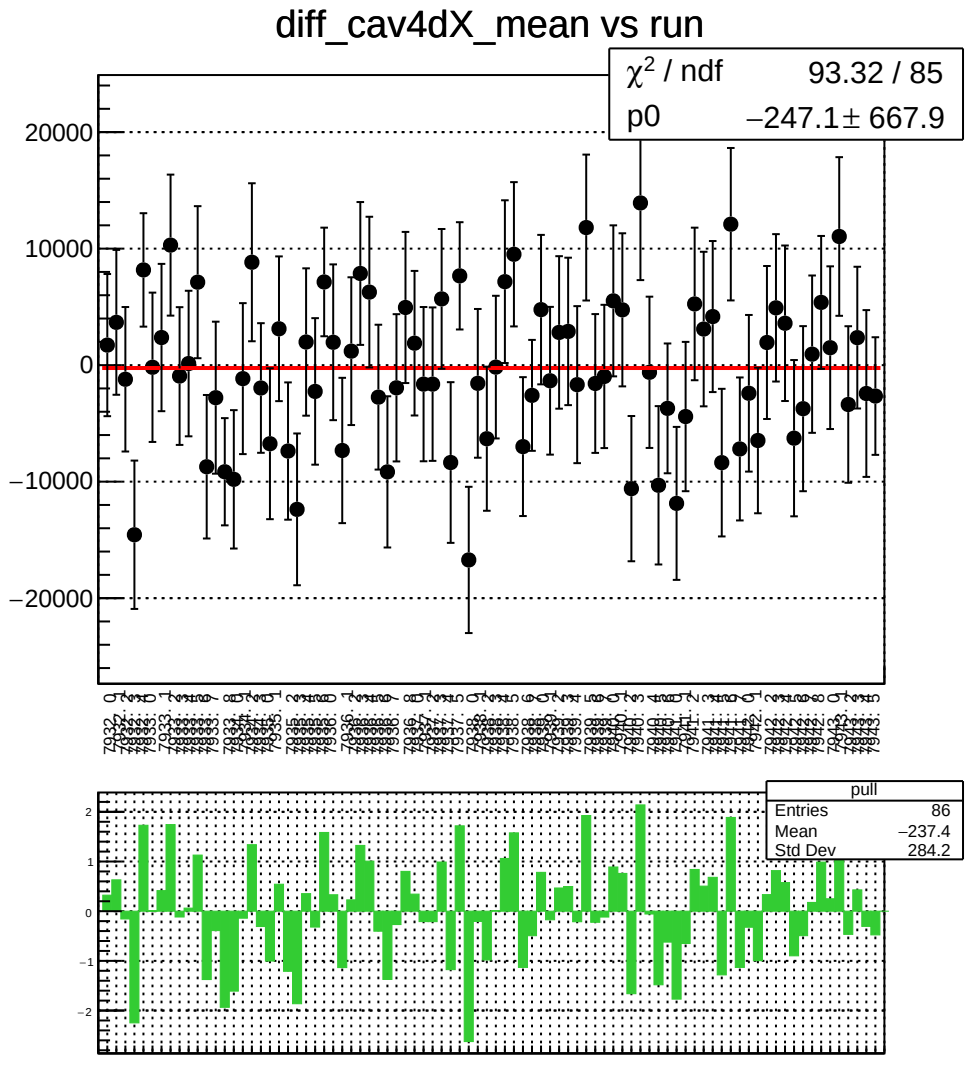

pull1D
Entries 86
Mean −0.004182
Std Dev 1.041
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

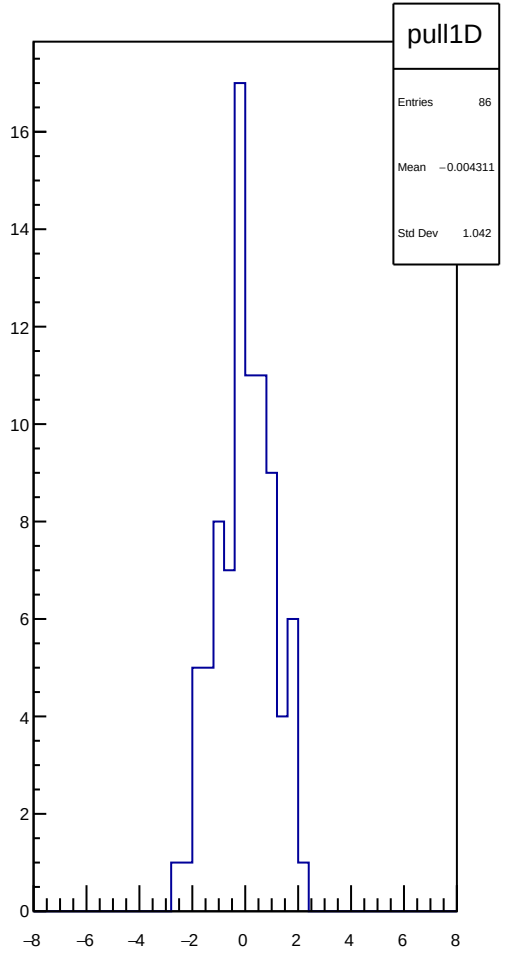

diff_cav4cX_rms vs run
×10^3
800
780
760
740
720
700
680
660
640
620
χ² / ndf 2791 / 85
p0 6.981e+05 ± 542.9

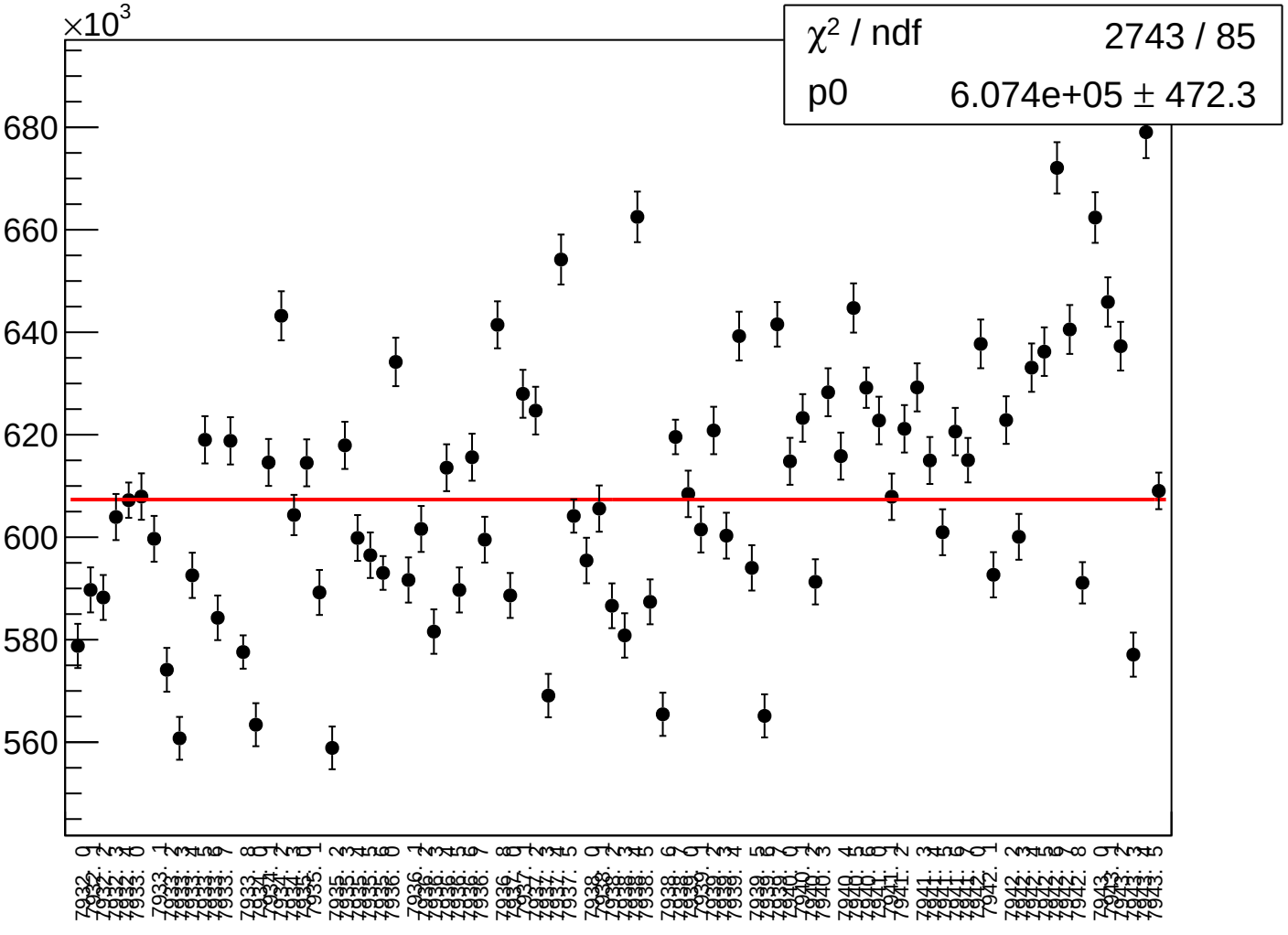

diff_cav4cY_mean vs run
χ^2 / ndf 76.01 / 85
p0 50.34 ± 185.7
pull
Entries 86
Mean 183.9
Std Dev 131.7

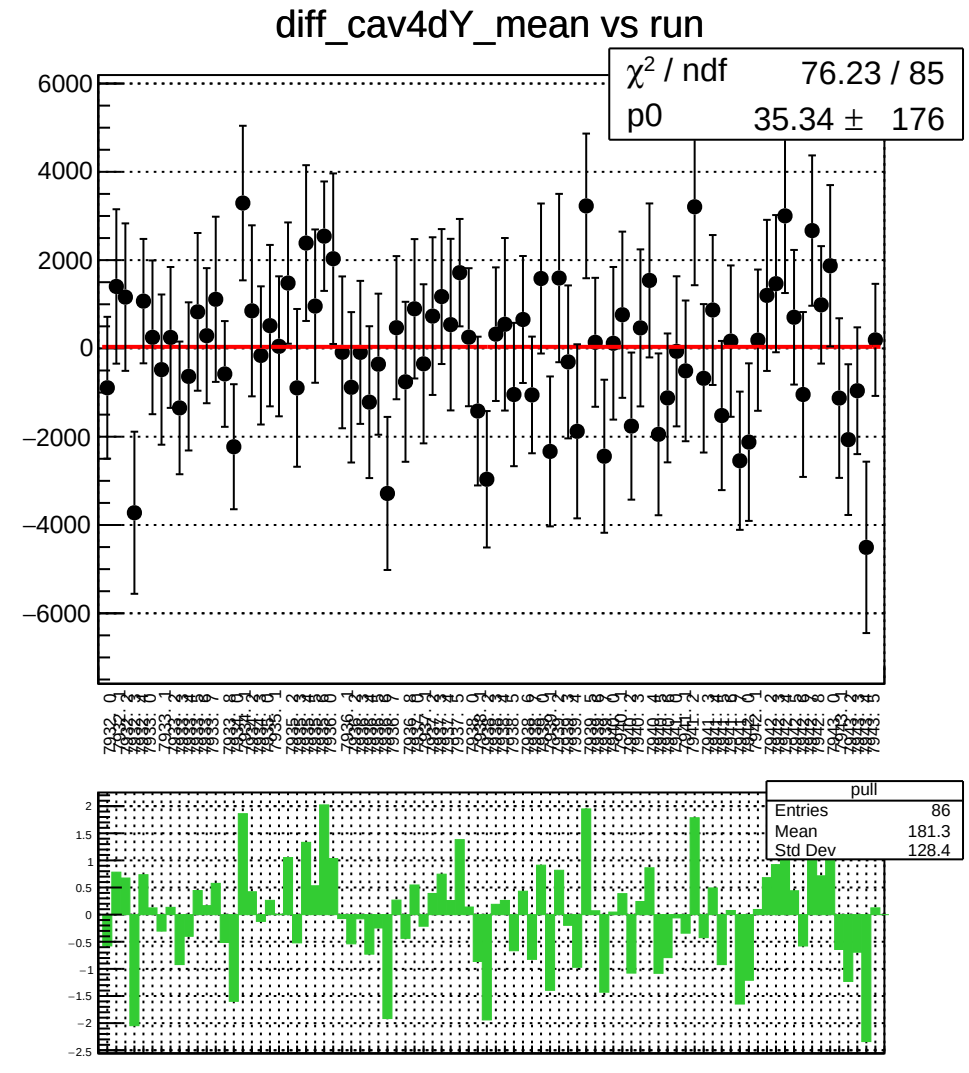

pull1D
Entries 86
Mean −0.01062
Std Dev 0.9401

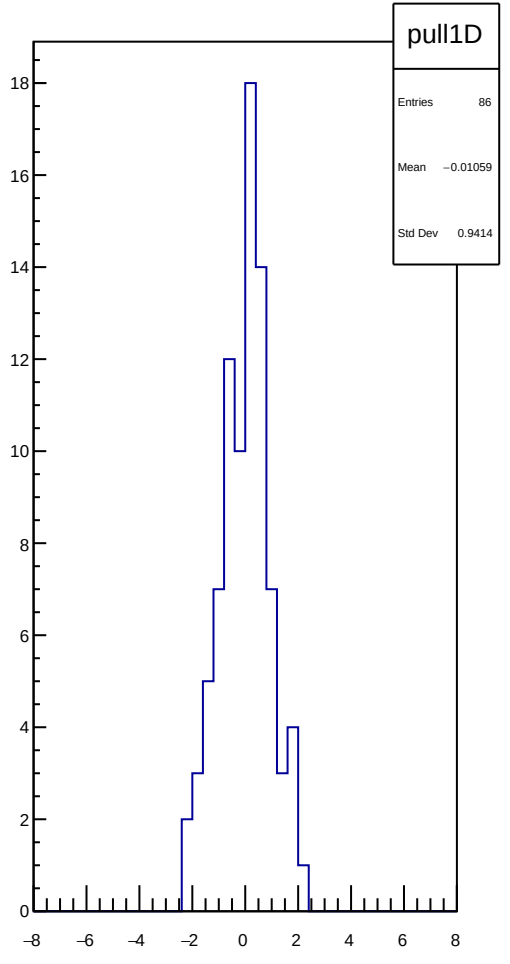

diff_cav4cY_rms vs run
×10^3
χ² / ndf 1.056e+04 / 85
p0 1.685e+05 ± 131.3
200
190
180
170
160
150
140
130

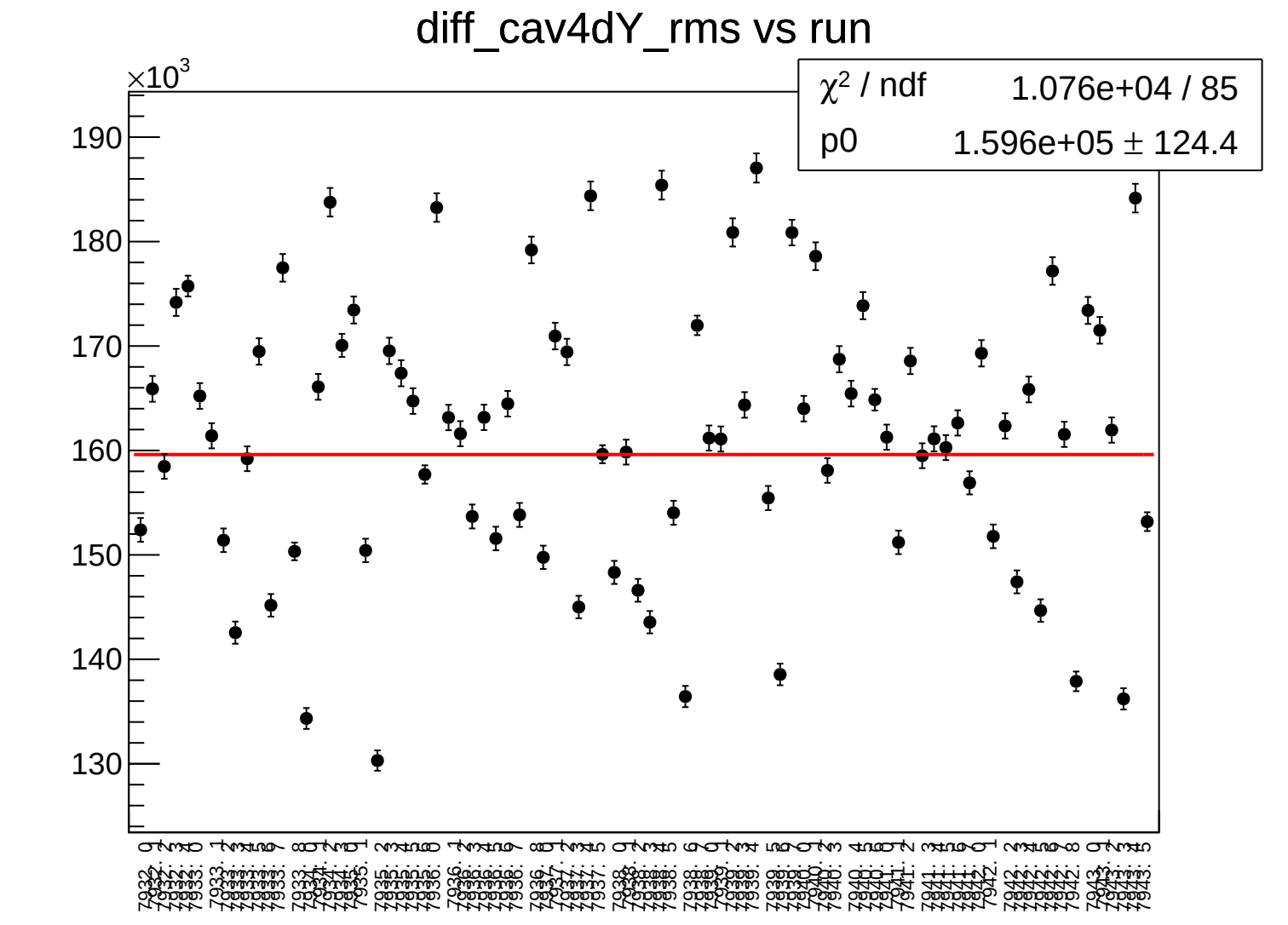

diff_cav4dX_mean vs run
χ² / ndf 93.32 / 85
p0 −247.1± 667.9
20000
10000
0
−10000
−20000
pull
Entries 86
Mean −237.4
Std Dev 284.2
2
1
0
−1
−2

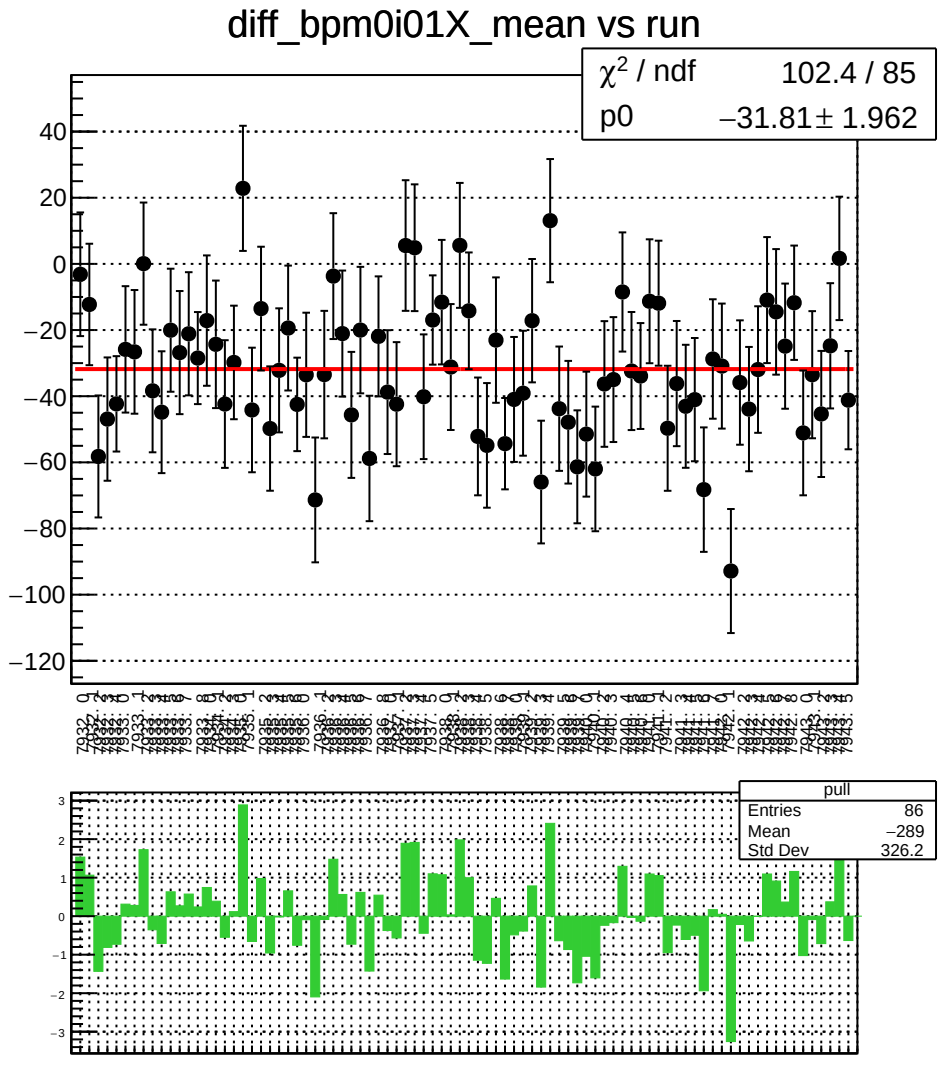

pull1D
Entries 86
Mean −0.004311
Std Dev 1.042
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

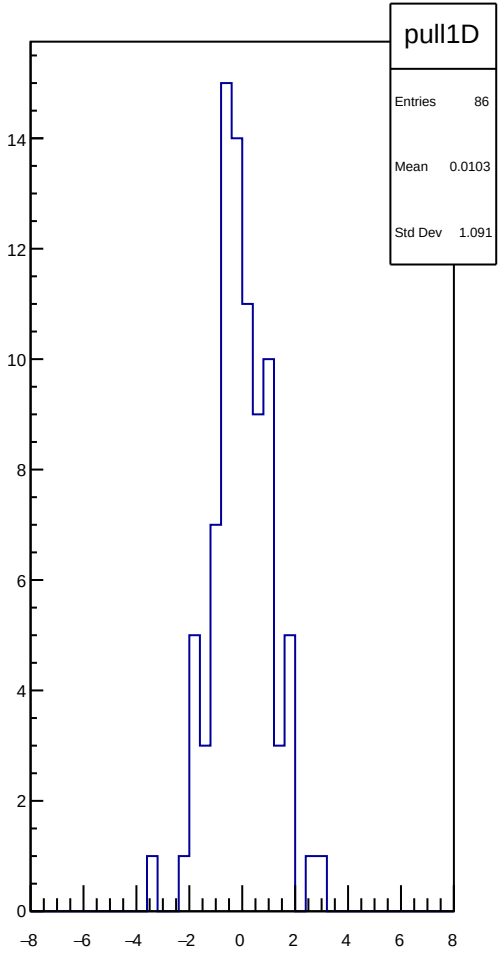

diff_cav4dX_rms vs run
×10^3
680
660
640
620
600
580
560
χ² / ndf 2743 / 85
p0 6.074e+05 ± 472.3

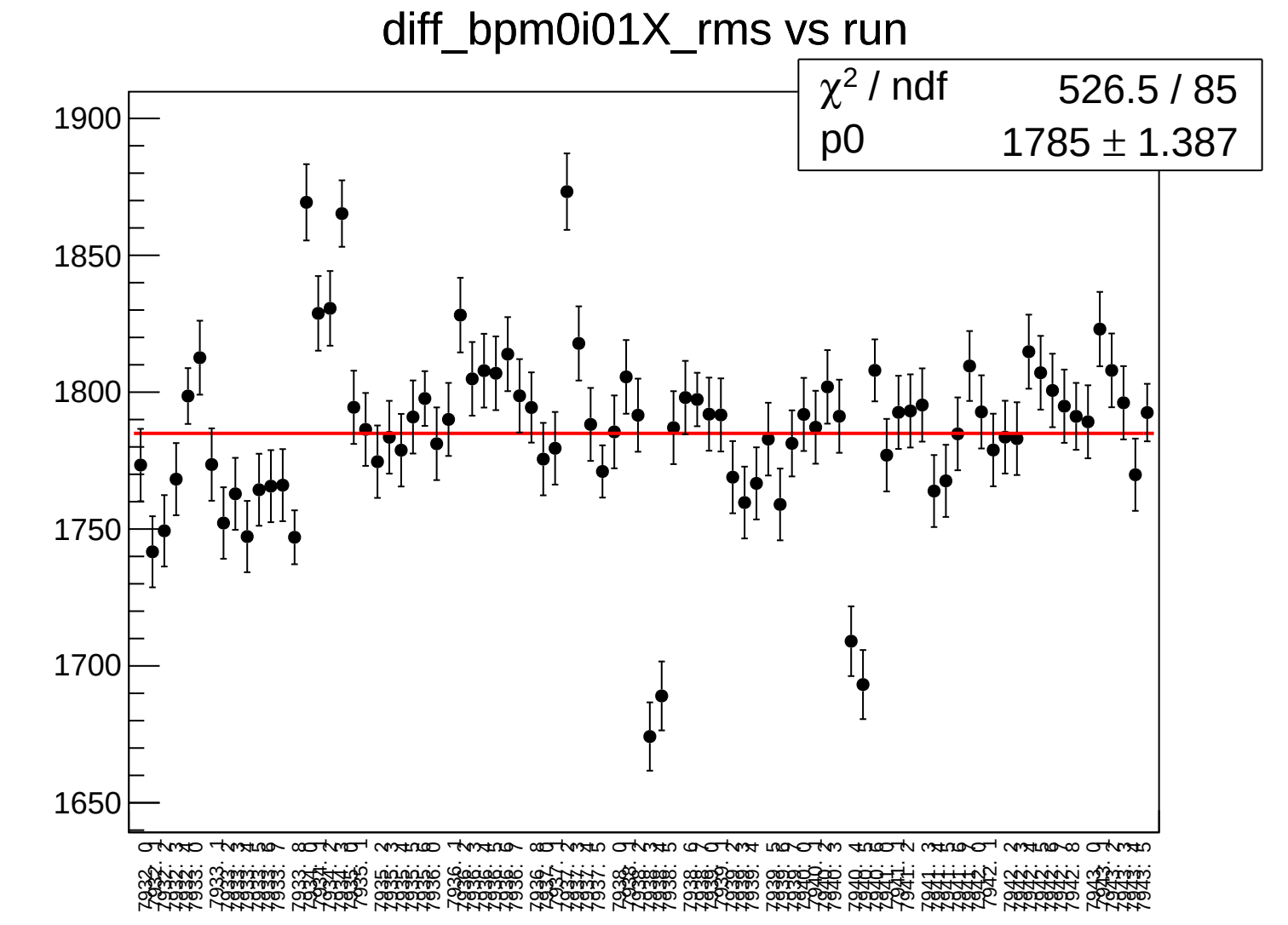

diff_cav4dY_mean vs run
χ² / ndf 76.23 / 85
p0 35.34 ± 176
pull
Entries 86
Mean 181.3
Std Dev 128.4

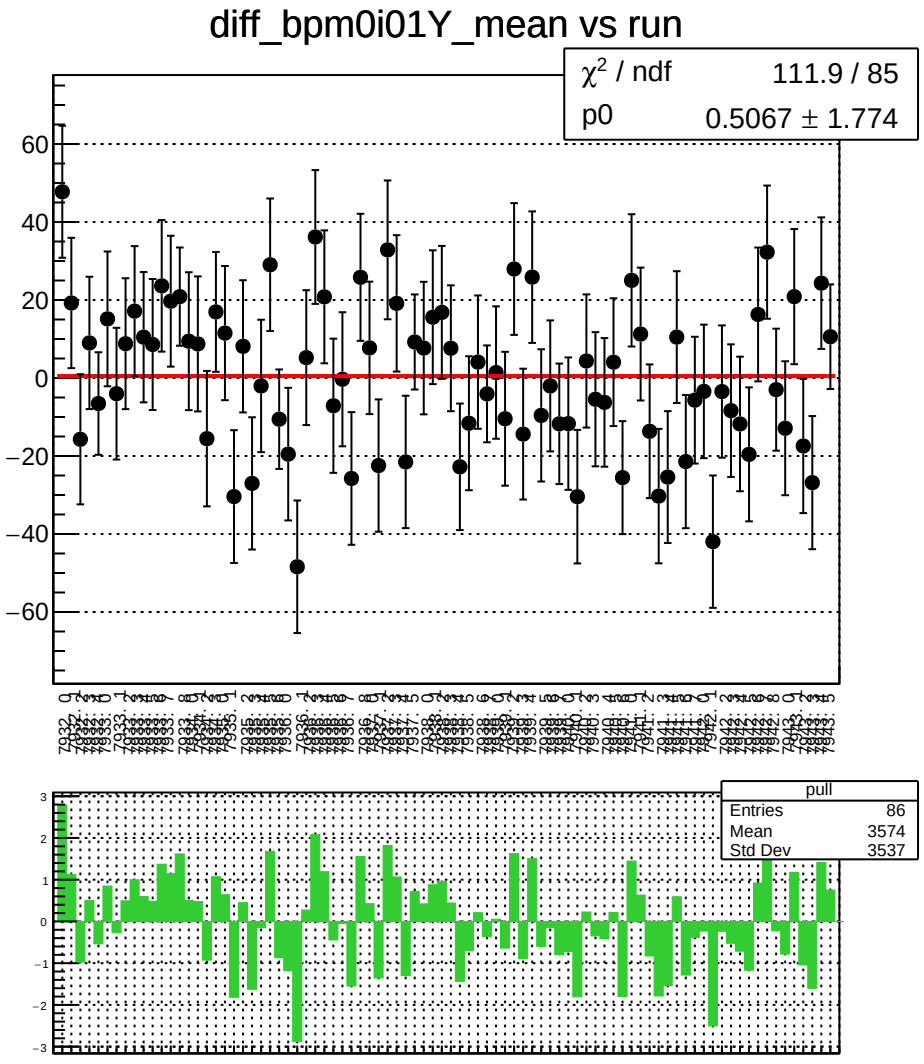

pull1D
Entries 86
Mean −0.01059
Std Dev 0.9414

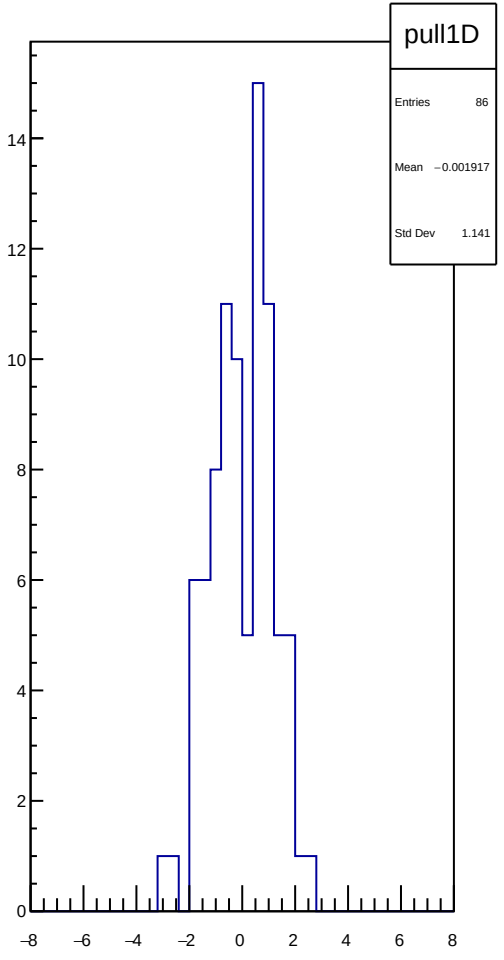

diff_cav4dY_rms vs run
×10^3
χ² / ndf 1.076e+04 / 85
p0 1.596e+05 ± 124.4
190
180
170
160
150
140
130

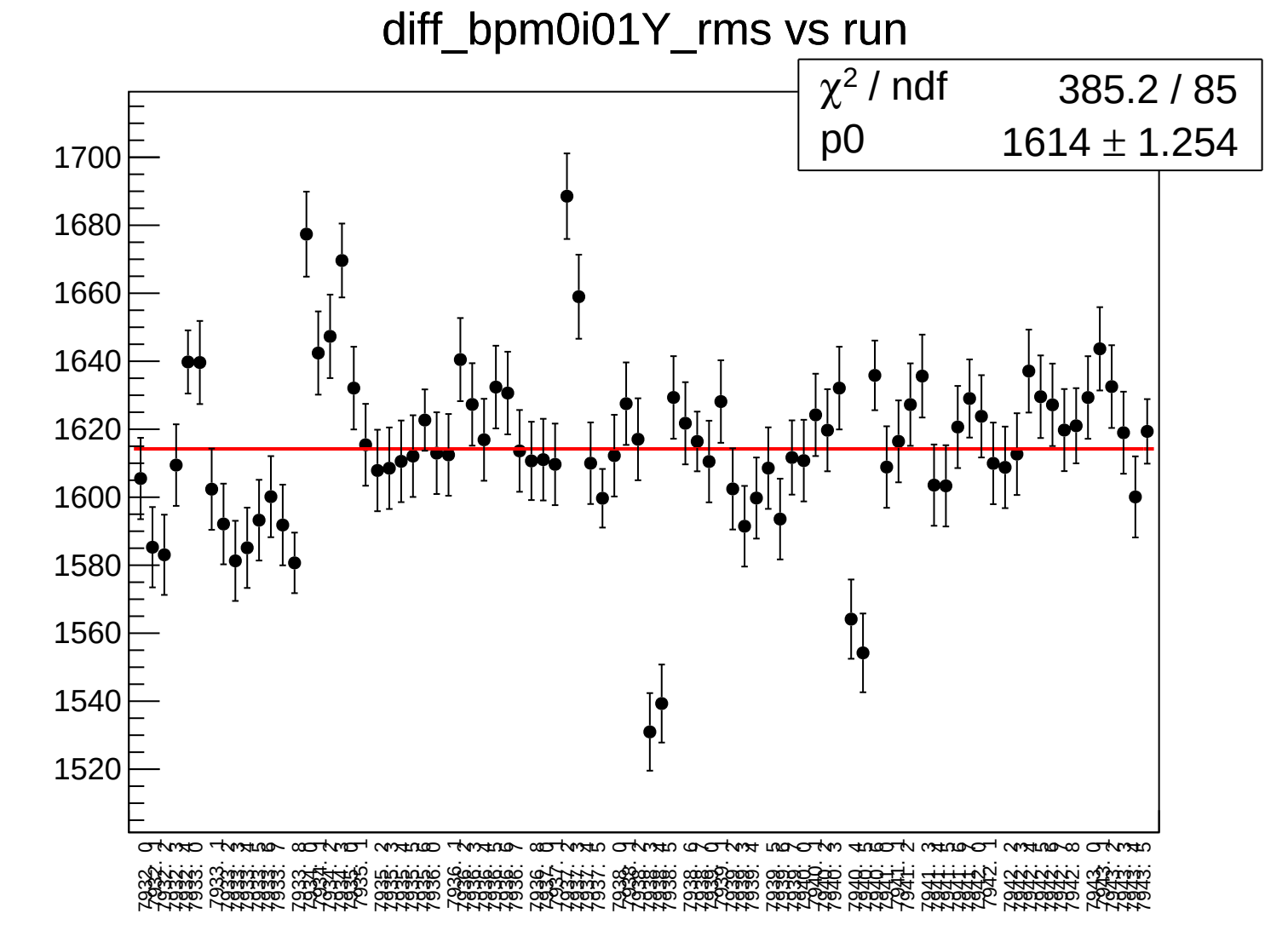

diff_bpm0i01X_mean vs run
χ² / ndf 102.4 / 85
p0 −31.81 ± 1.962
pull
Entries 86
Mean −289
Std Dev 326.2

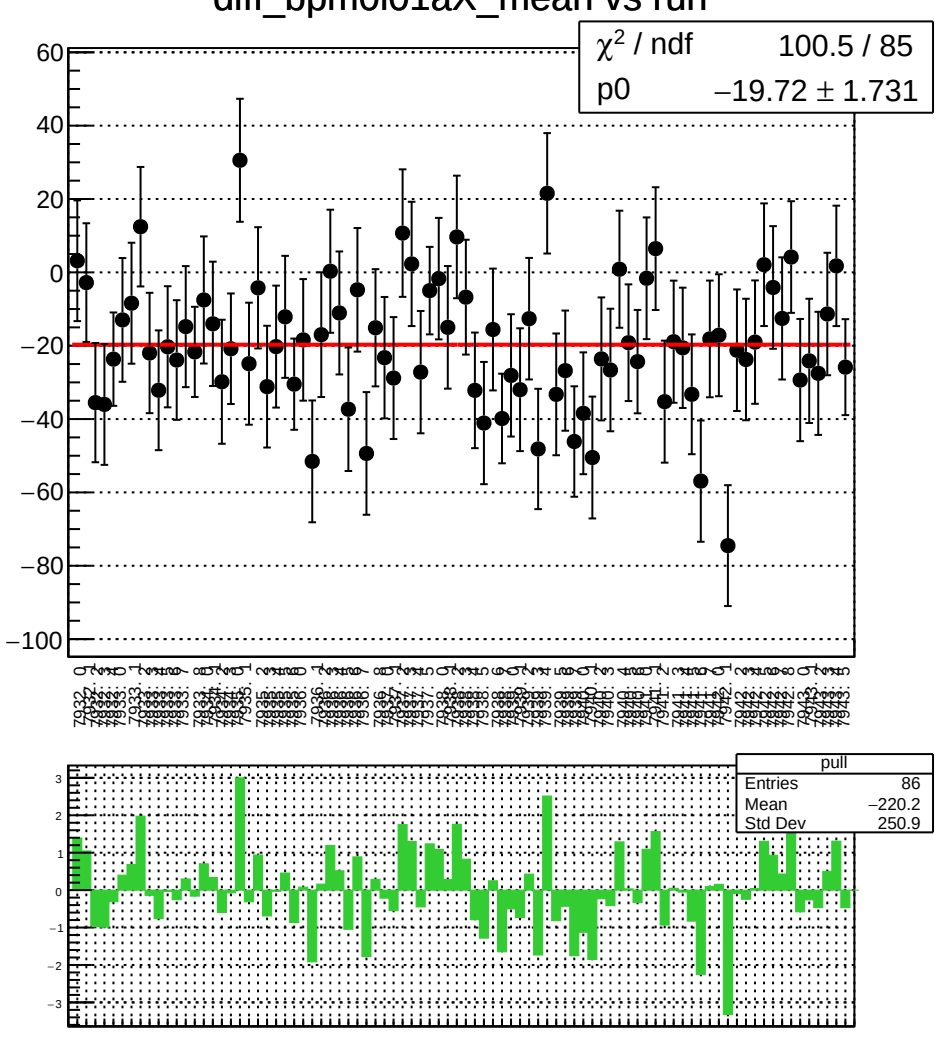

pull1D
Entries 86
Mean 0.0103
Std Dev 1.091

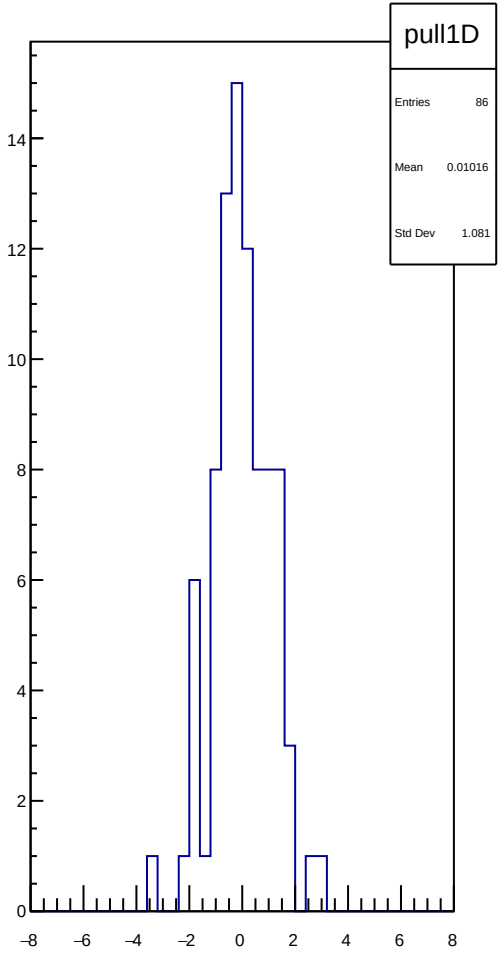

diff_bpm0i01X_rms vs run
χ² / ndf 526.5 / 85
p0 1785 ± 1.387
1900
1850
1800
1750
1700
1650

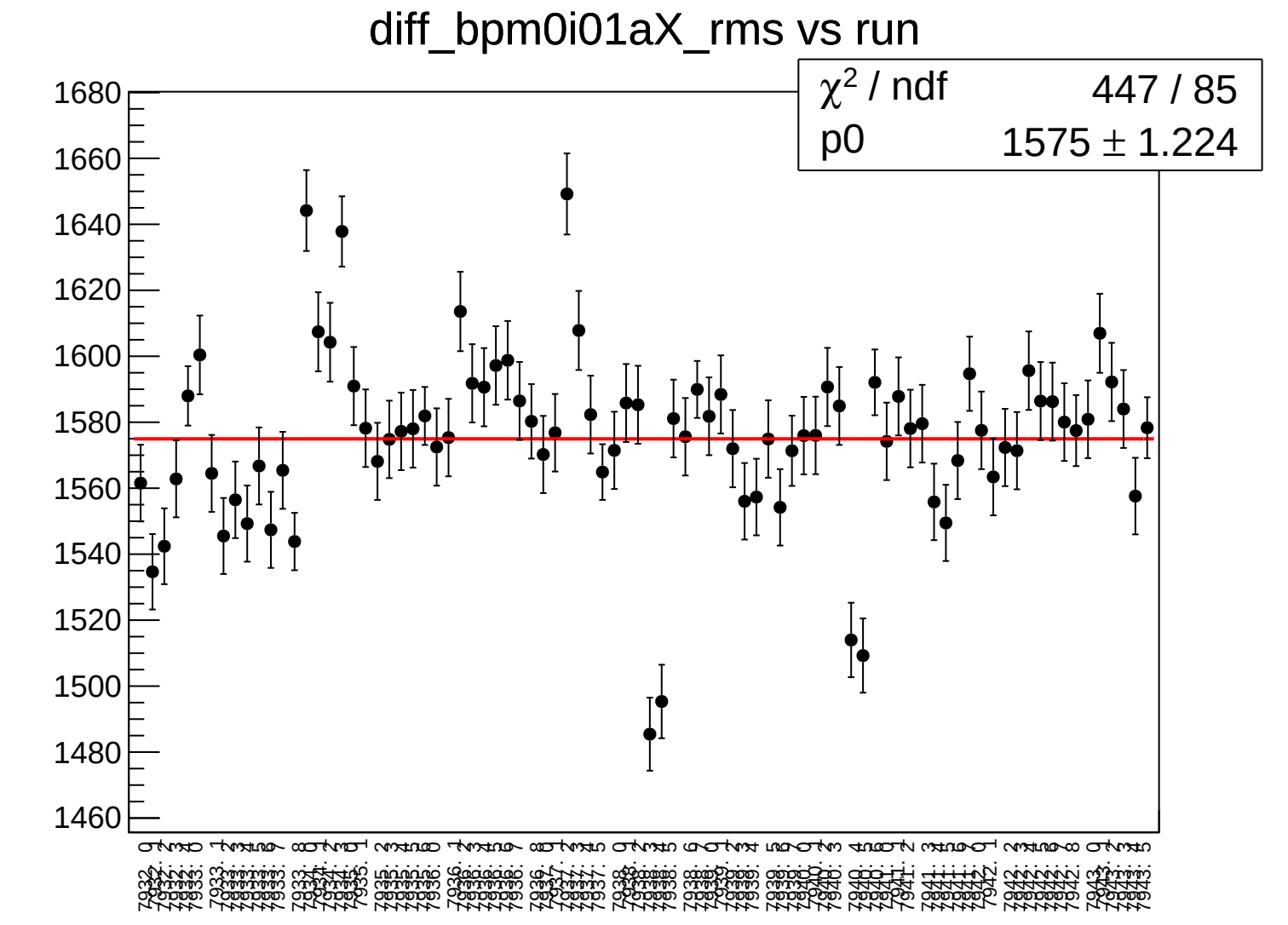

diff_bpm0i01Y_mean vs run
χ² / ndf 111.9 / 85
p0 0.5067 ± 1.774
pull
Entries 86
Mean 3574
Std Dev 3537

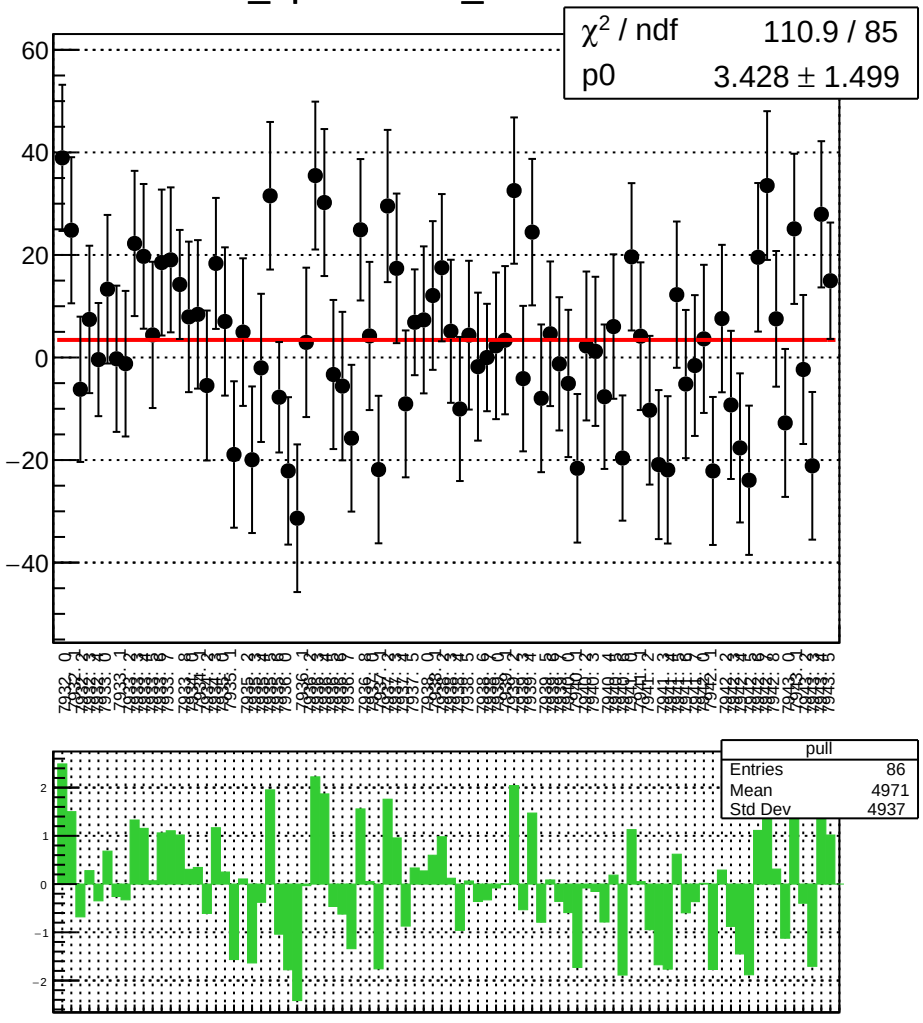

pull1D
Entries 86
Mean −0.001917
Std Dev 1.141

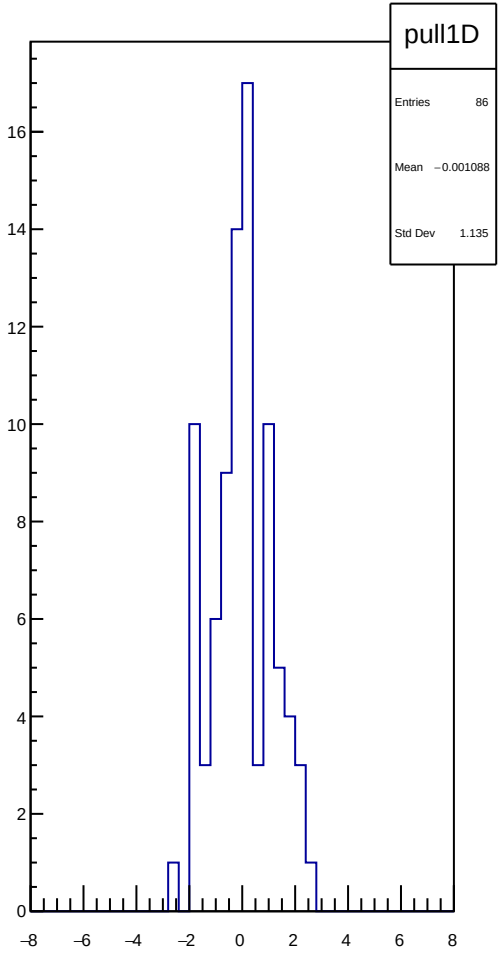

diff_bpm0i01Y_rms vs run
χ² / ndf 385.2 / 85
p0 1614 ± 1.254
1700
1680
1660
1640
1620
1600
1580
1560
1540
1520

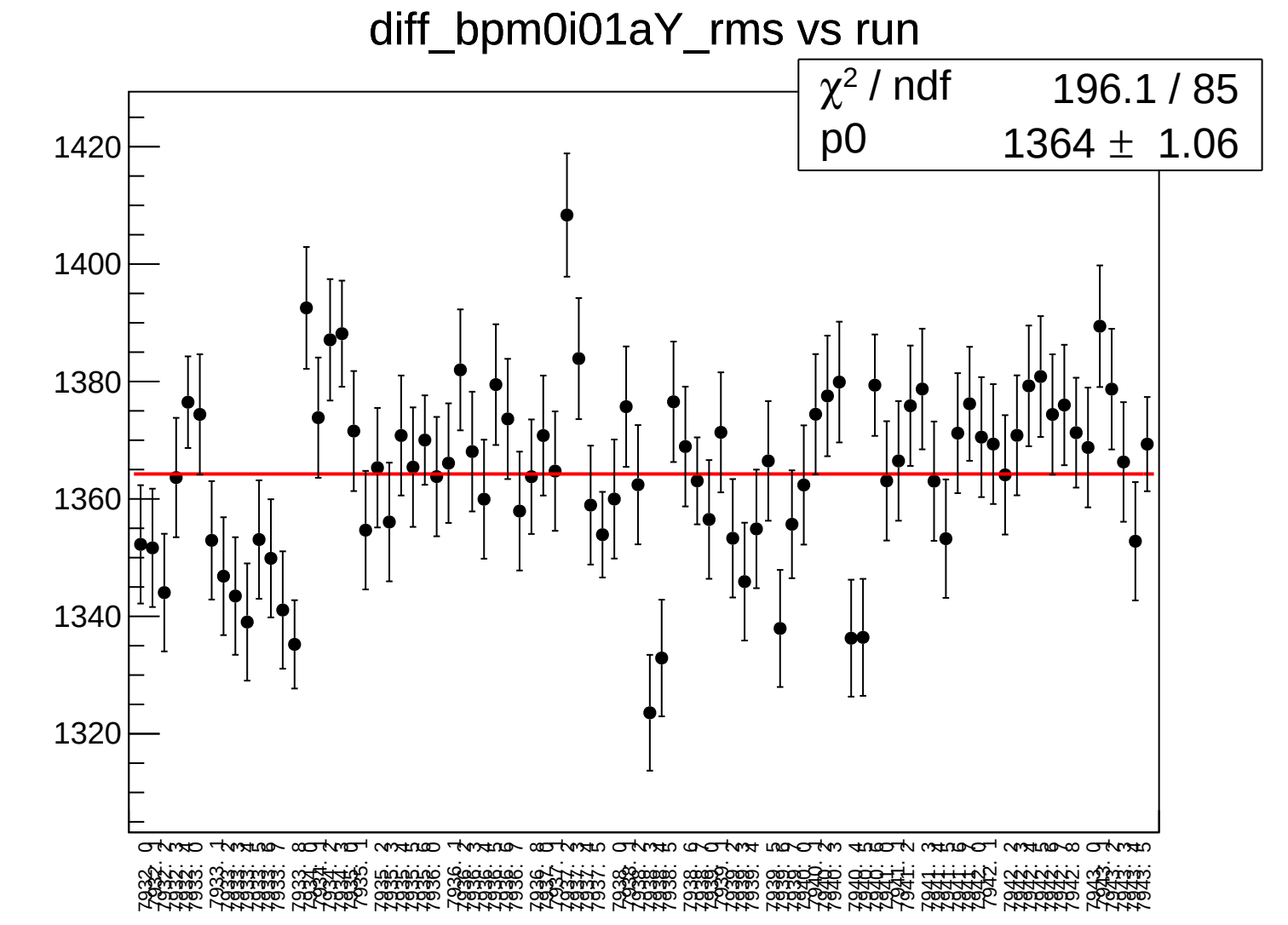

diff_bpm0i01aX_mean vs run
χ^2 / ndf 100.5 / 85
p0 −19.72 ± 1.731
pull
Entries 86
Mean −220.2
Std Dev 250.9

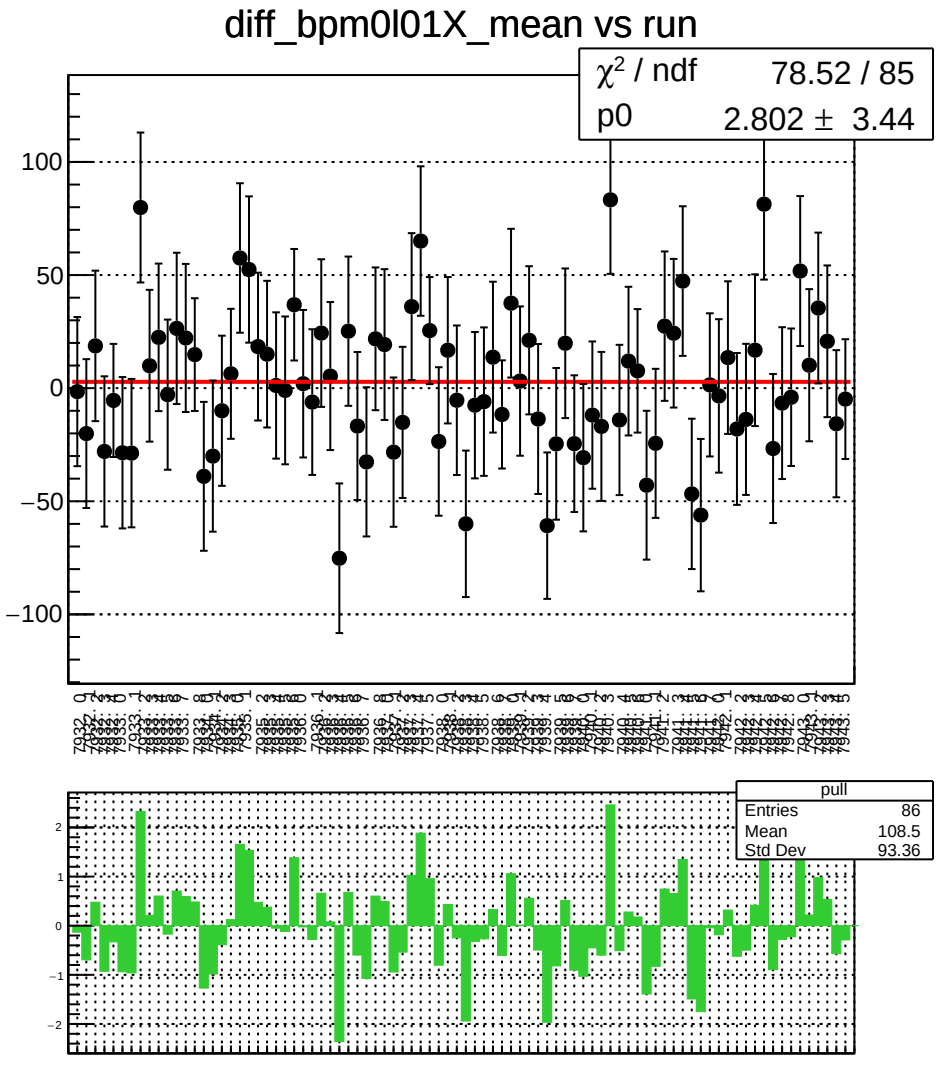

pull1D
Entries 86
Mean 0.01016
Std Dev 1.081

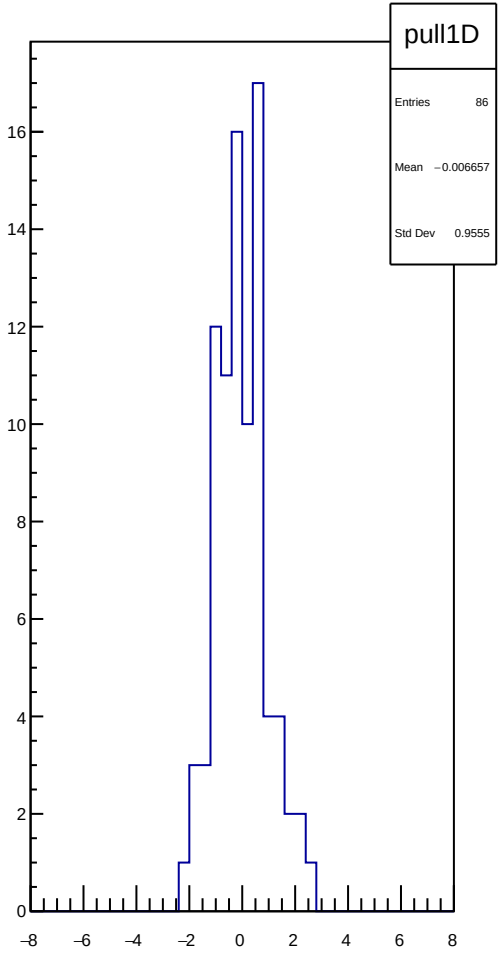

diff_bpm0i01aX_rms vs run
χ² / ndf 447 / 85
p0 1575 ± 1.224
1680
1660
1640
1620
1600
1580
1560
1540
1520
1500
1480
1460

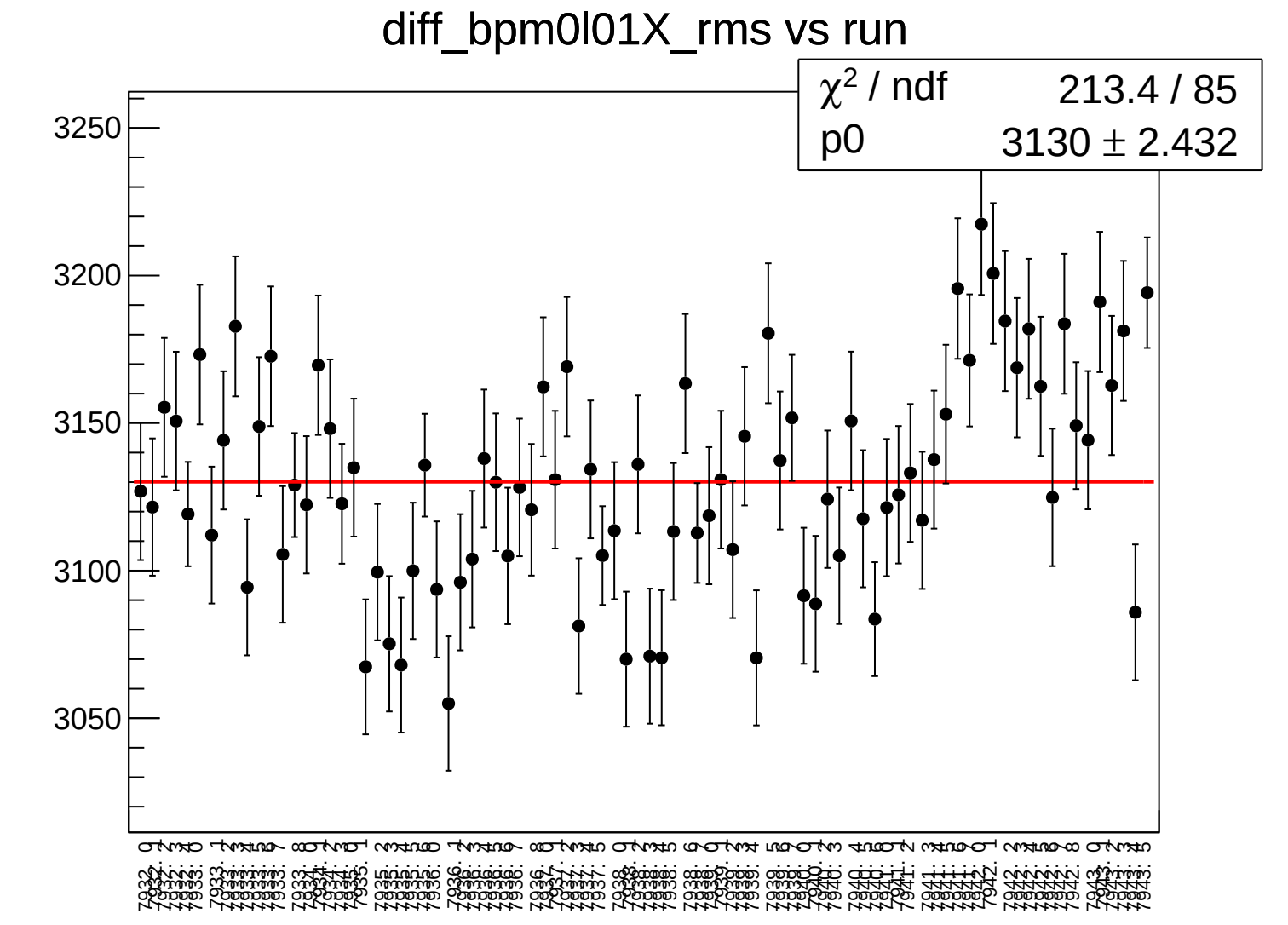

diff_bpm0i01aY_mean vs run
χ² / ndf 110.9 / 85
p0 3.428 ± 1.499
pull
Entries 86
Mean 4971
Std Dev 4937

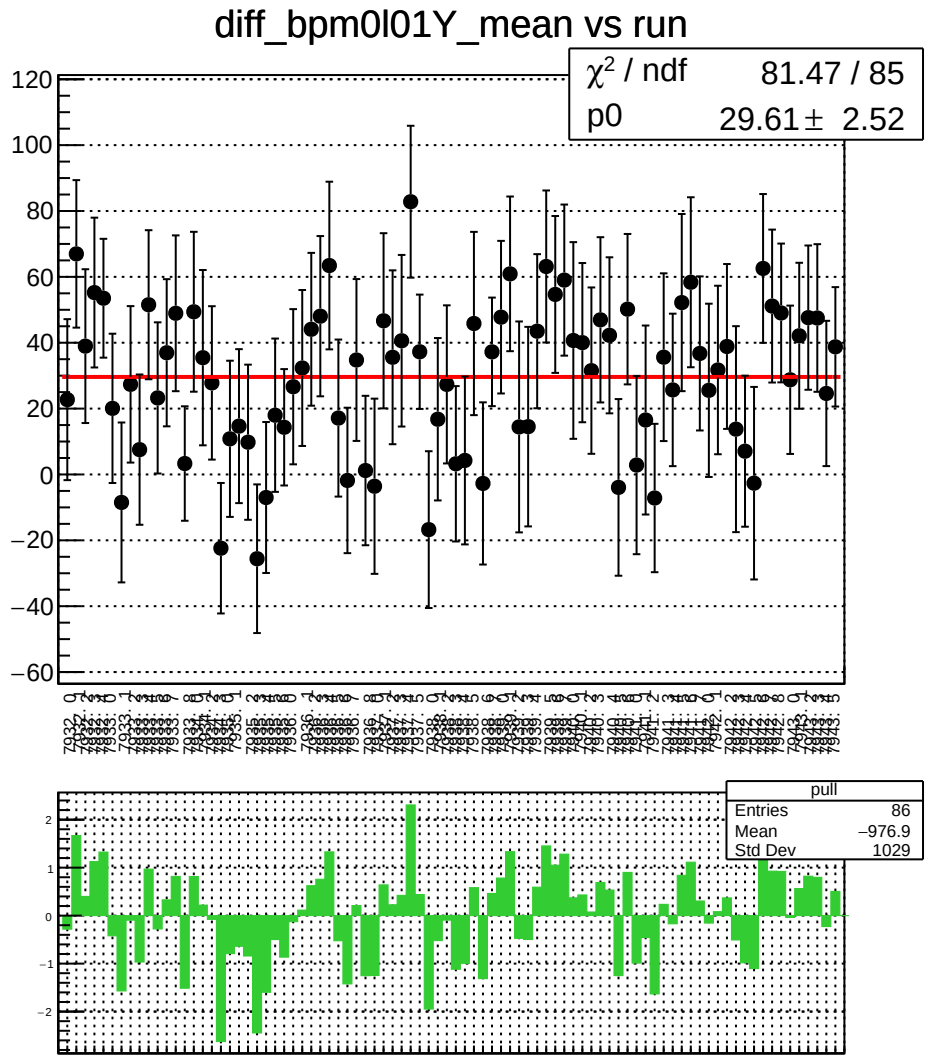

pull1D
Entries 86
Mean −0.001088
Std Dev 1.135

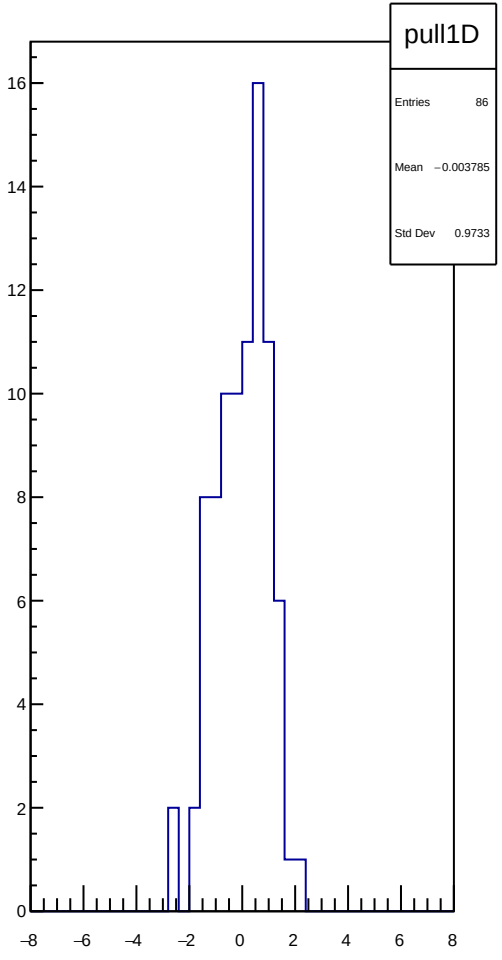

diff_bpm0i01aY_rms vs run
χ² / ndf 196.1 / 85
p0 1364 ± 1.06
1420
1400
1380
1360
1340
1320

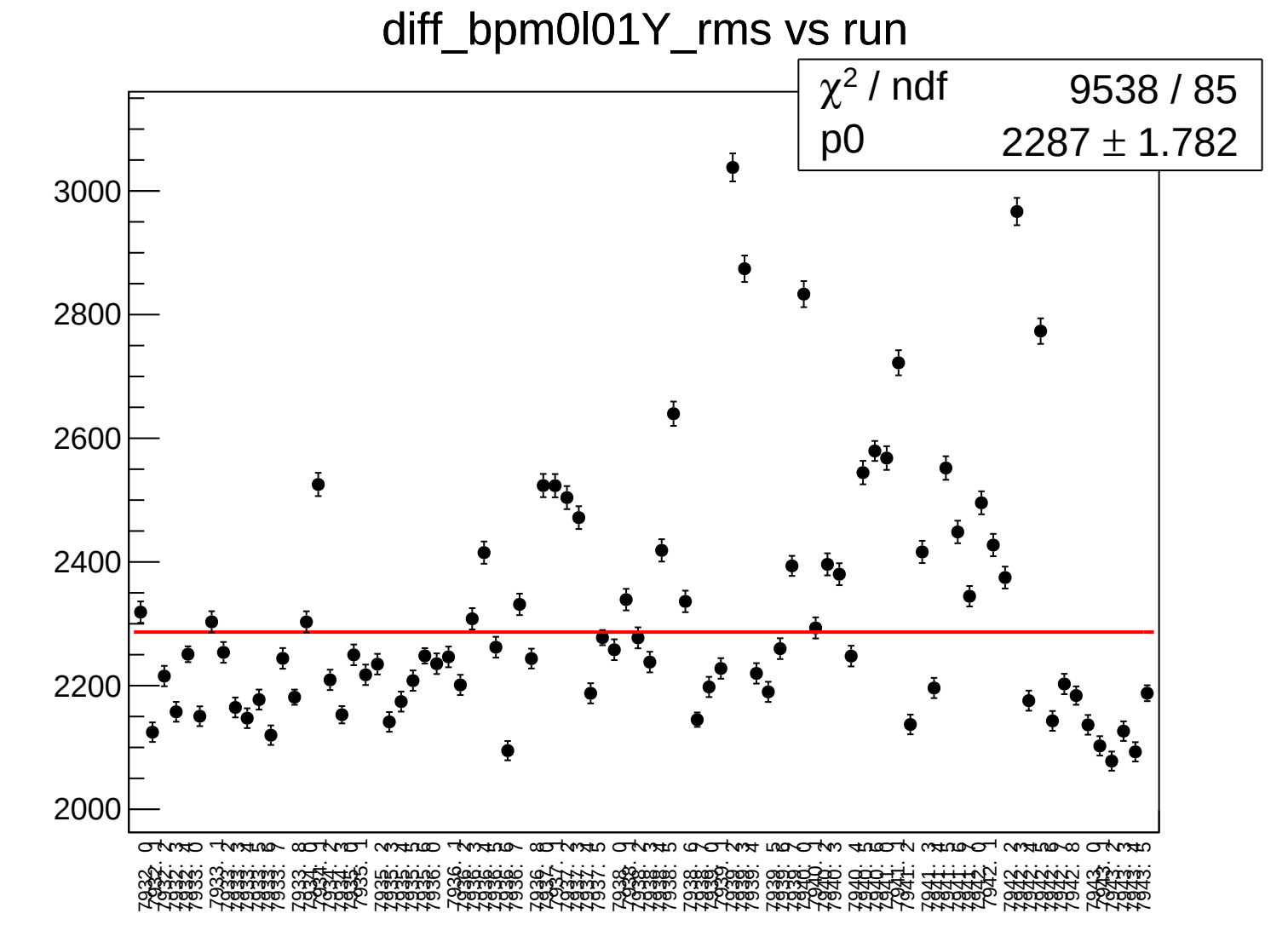

diff_bpm0l01X_mean vs run
χ² / ndf 78.52 / 85
p0 2.802 ± 3.44
100
50
0
−50
−100
pull
Entries 86
Mean 108.5
Std Dev 93.36
2
1
0
−1
−2

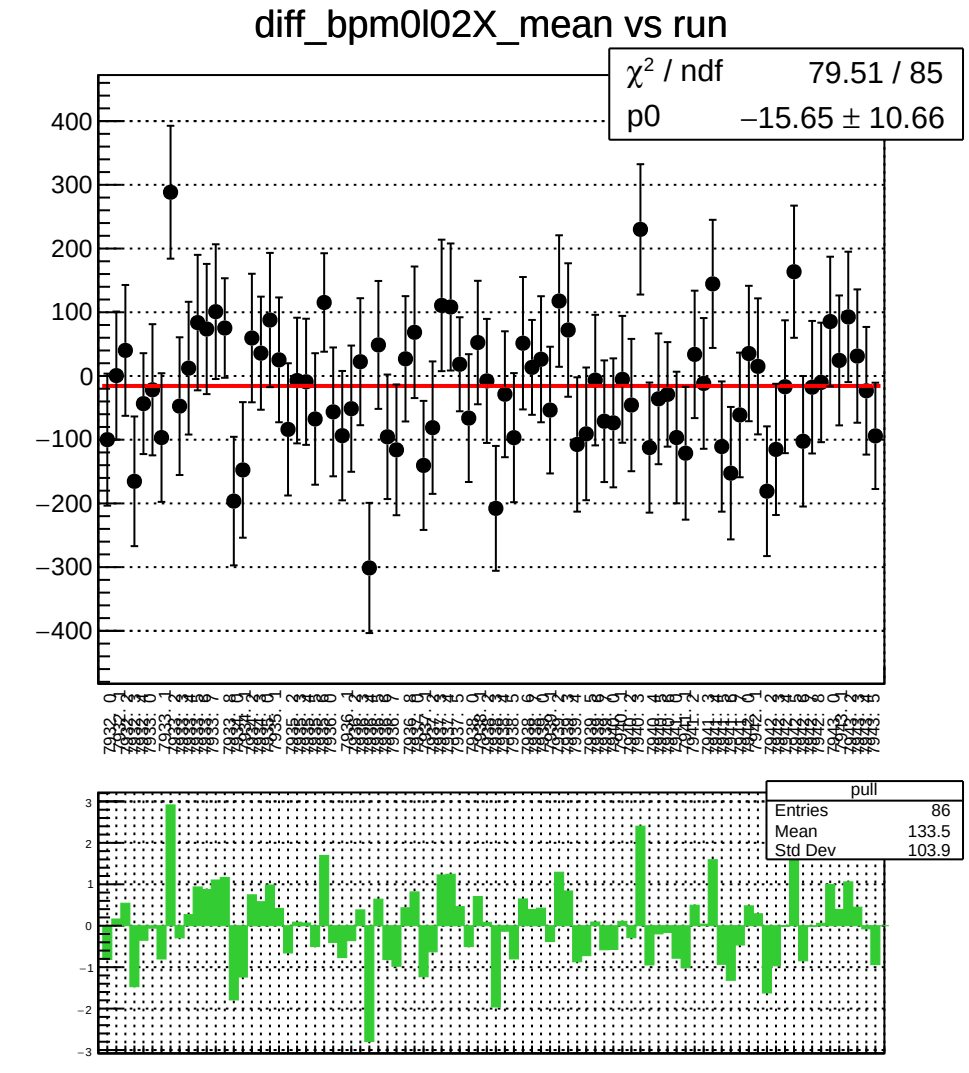

pull1D
Entries 86
Mean −0.006657
Std Dev 0.9555
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

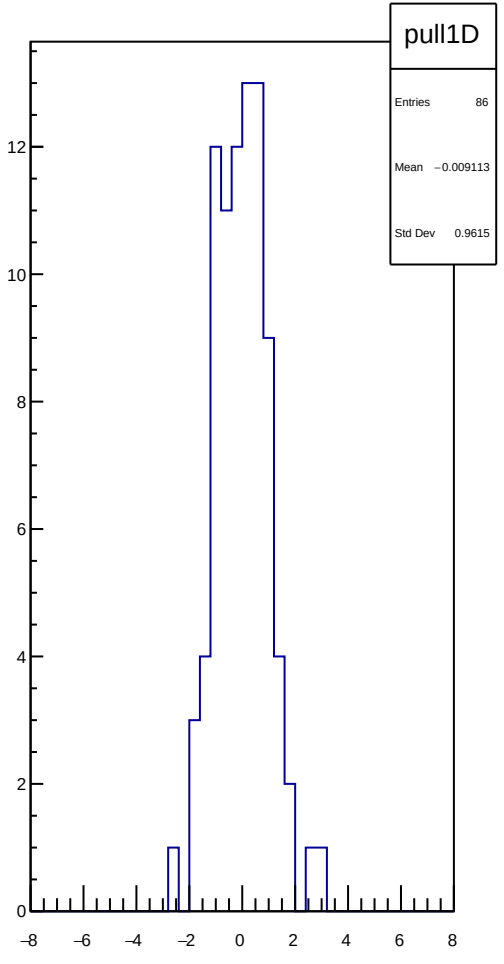

diff_bpm0l01X_rms vs run
χ² / ndf 213.4 / 85
p0 3130 ± 2.432
3250
3200
3150
3100
3050

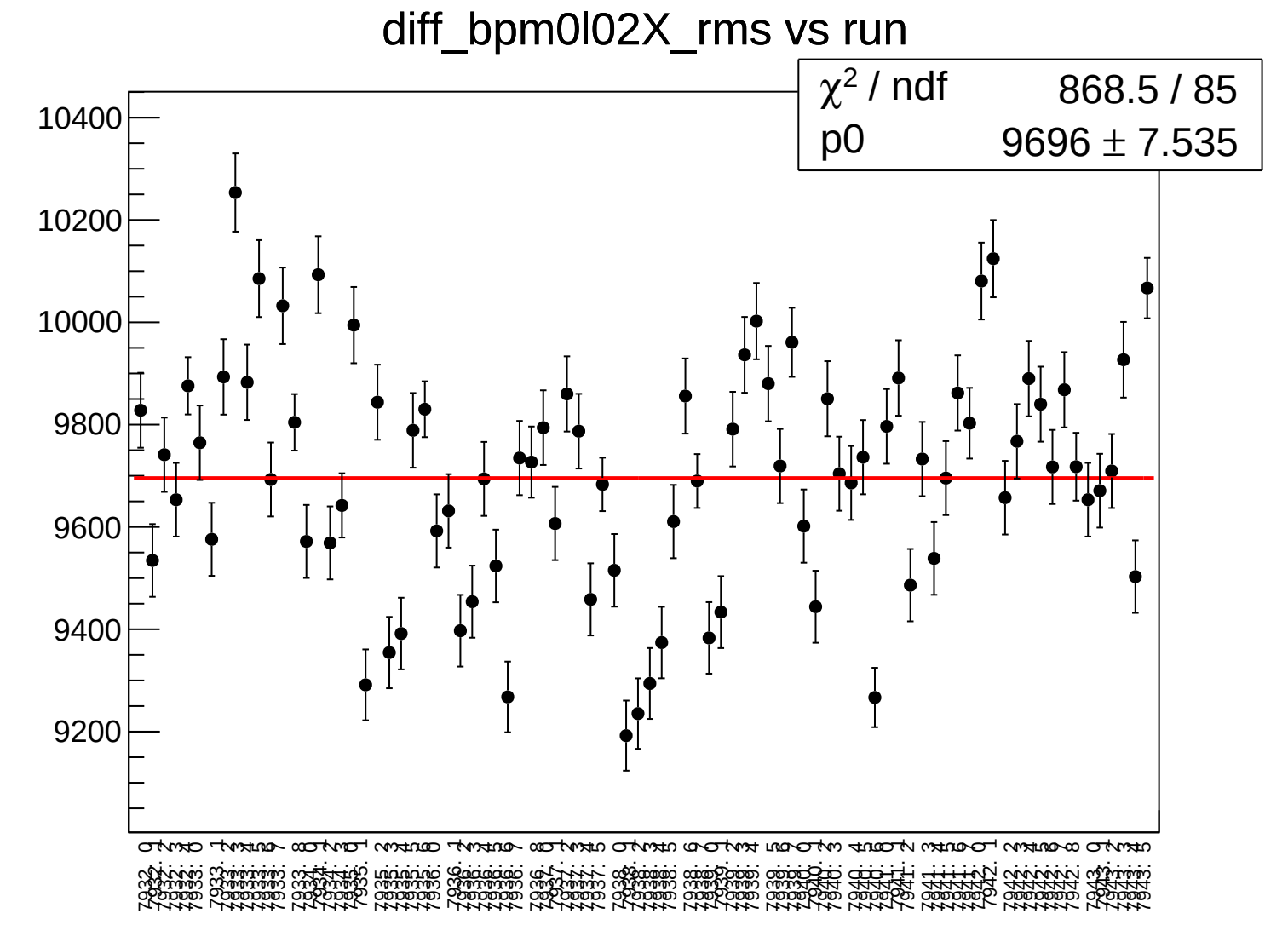

diff_bpm0l01Y_mean vs run
χ² / ndf 81.47 / 85
p0 29.61 ± 2.52
pull
Entries 86
Mean −976.9
Std Dev 1029

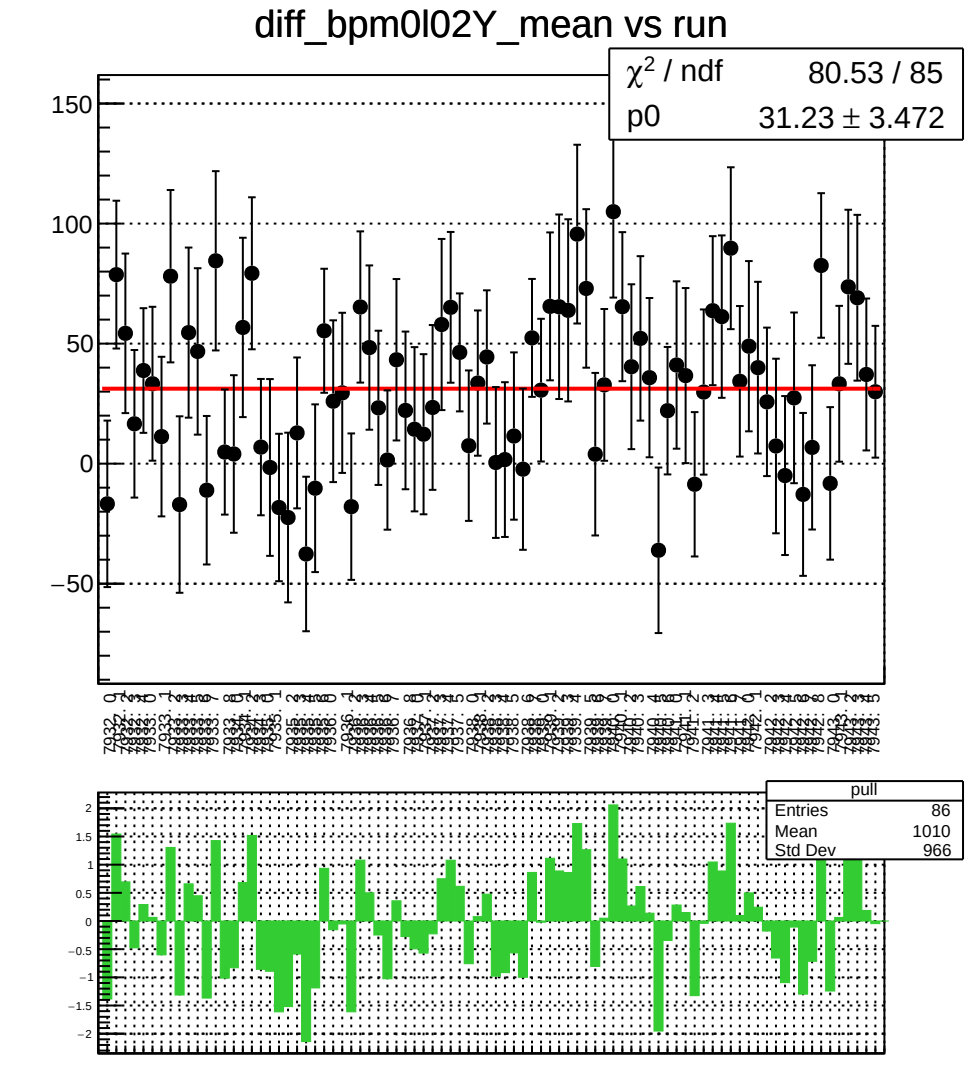

pull1D
Entries 86
Mean −0.003785
Std Dev 0.9733

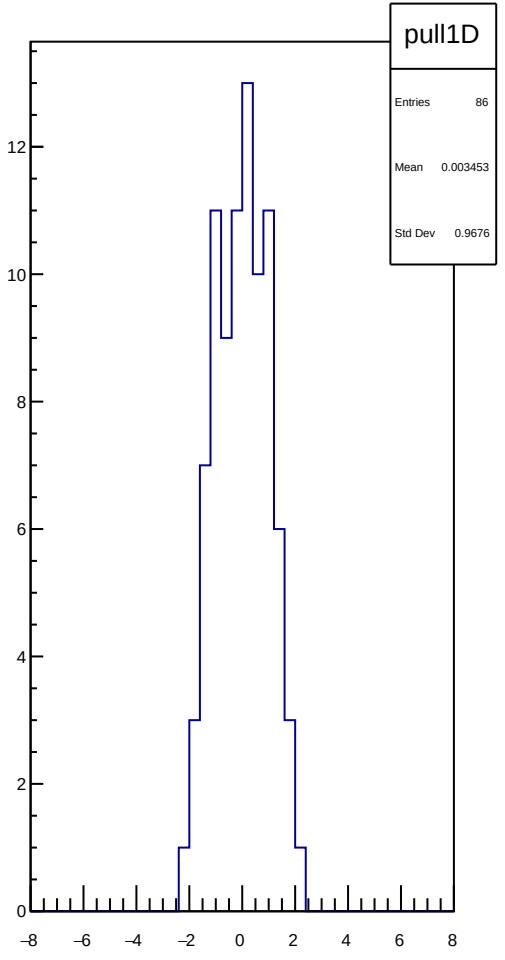

diff_bpm0l01Y_rms vs run
χ^2 / ndf 9538 / 85
p0 2287 ± 1.782
3000
2800
2600
2400
2200
2000

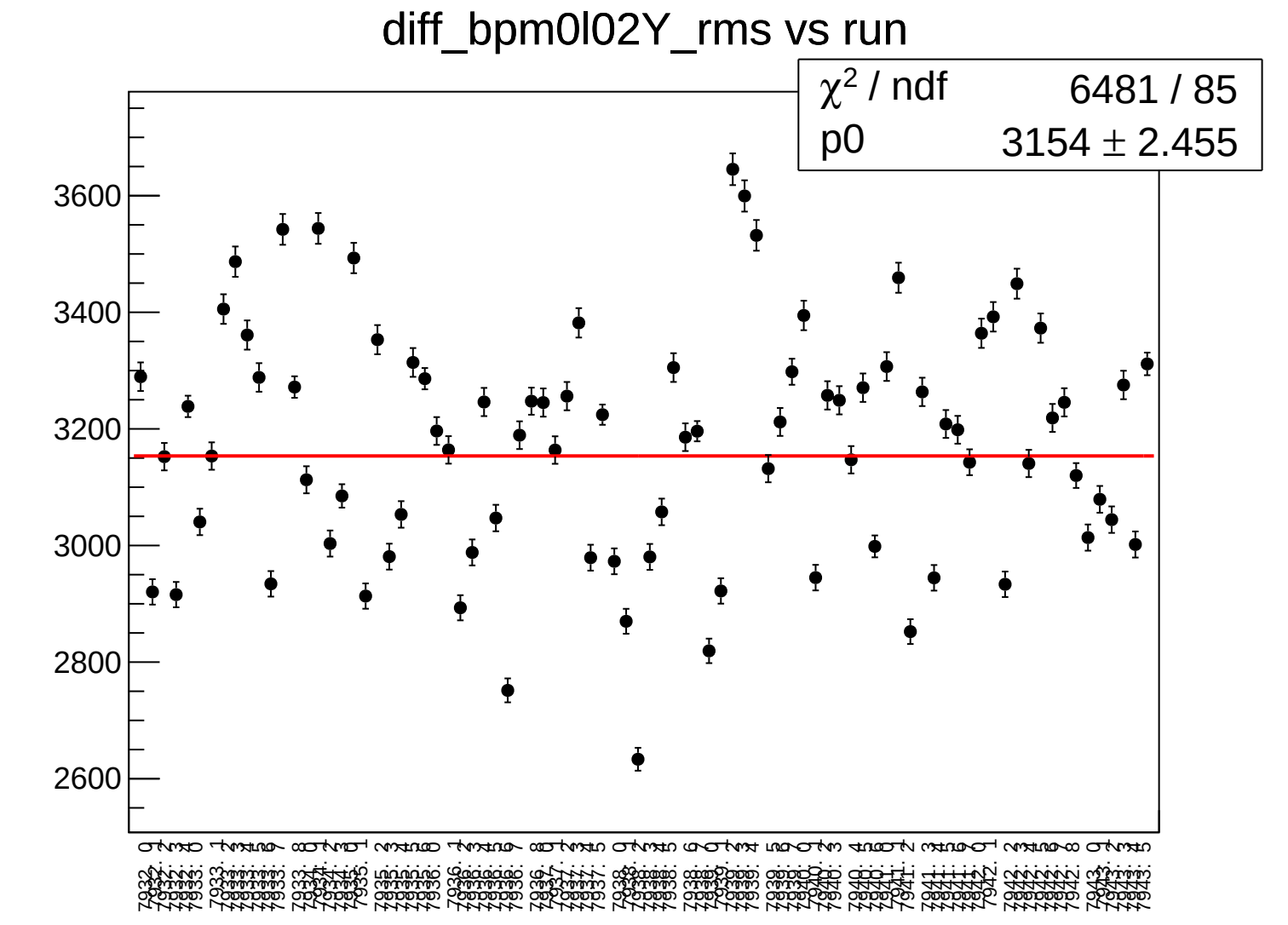

diff_bpm0l02X_mean vs run
χ² / ndf 79.51 / 85
p0 −15.65 ± 10.66
pull
Entries 86
Mean 133.5
Std Dev 103.9

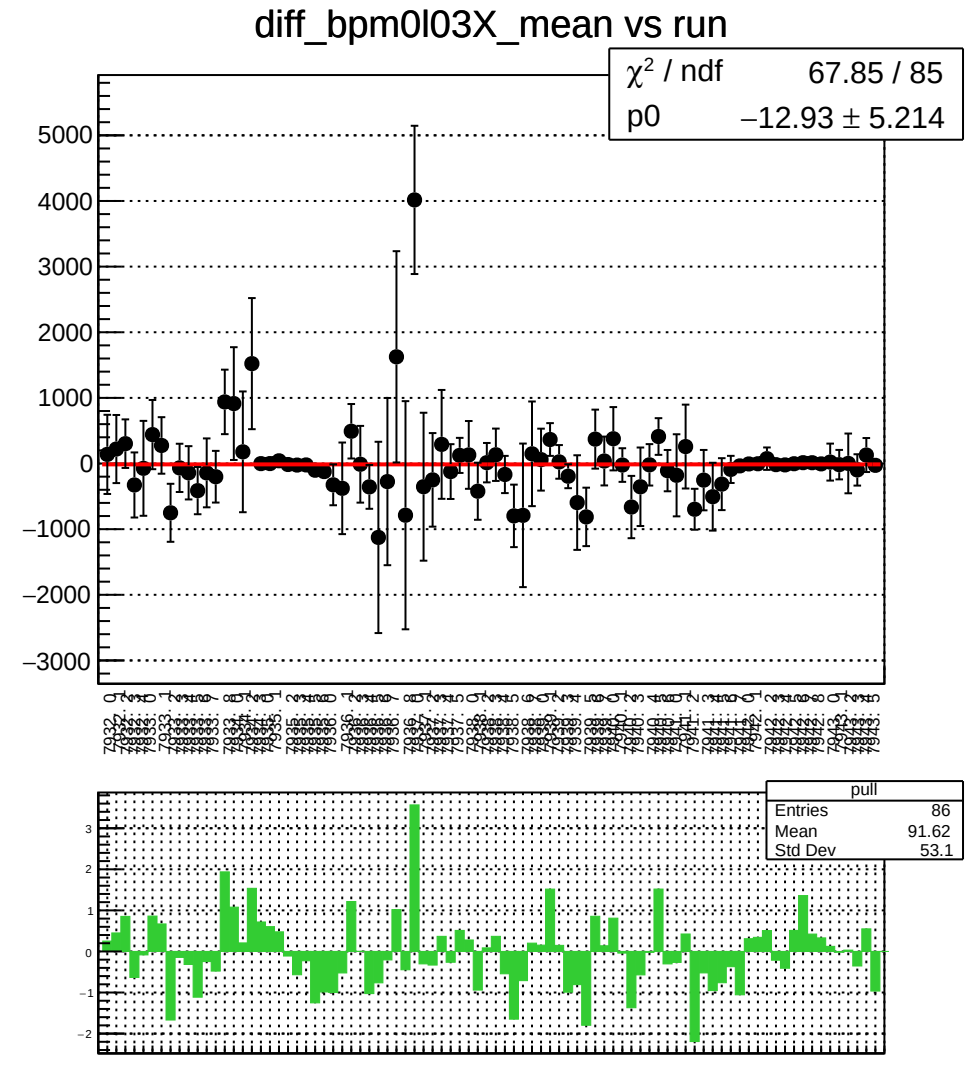

pull1D
Entries 86
Mean −0.009113
Std Dev 0.9615

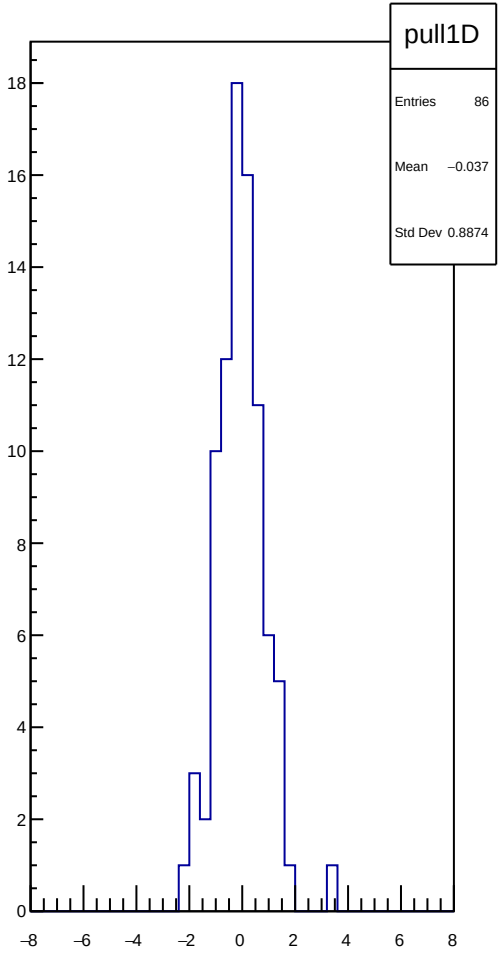

diff_bpm0l02X_rms vs run
χ^2 / ndf 868.5 / 85
p0 9696 ± 7.535
10400
10200
10000
9800
9600
9400
9200

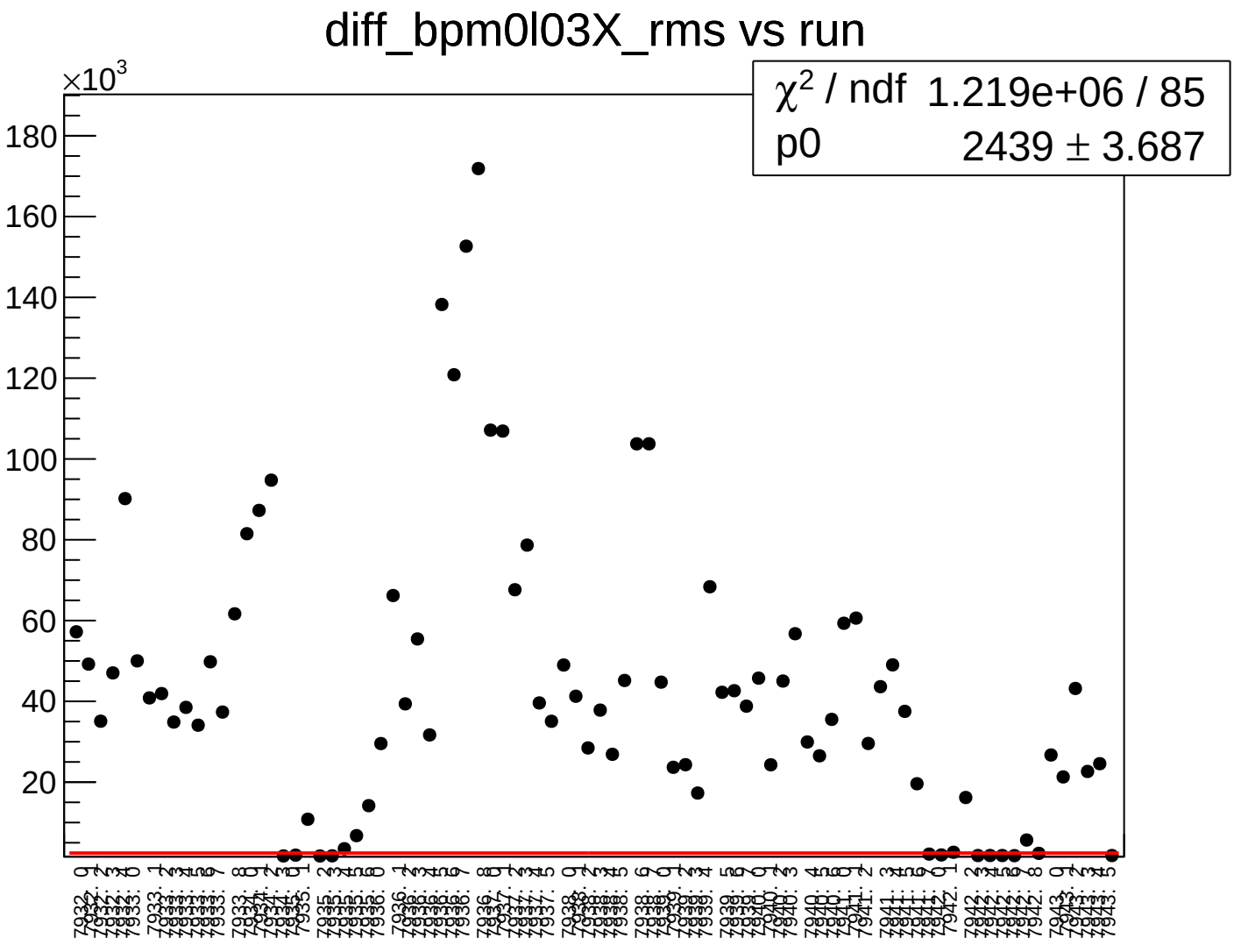

diff_bpm0l02Y_mean vs run
χ² / ndf 80.53 / 85
p0 31.23 ± 3.472
150
100
50
0
−50
pull
Entries 86
Mean 1010
Std Dev 966
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

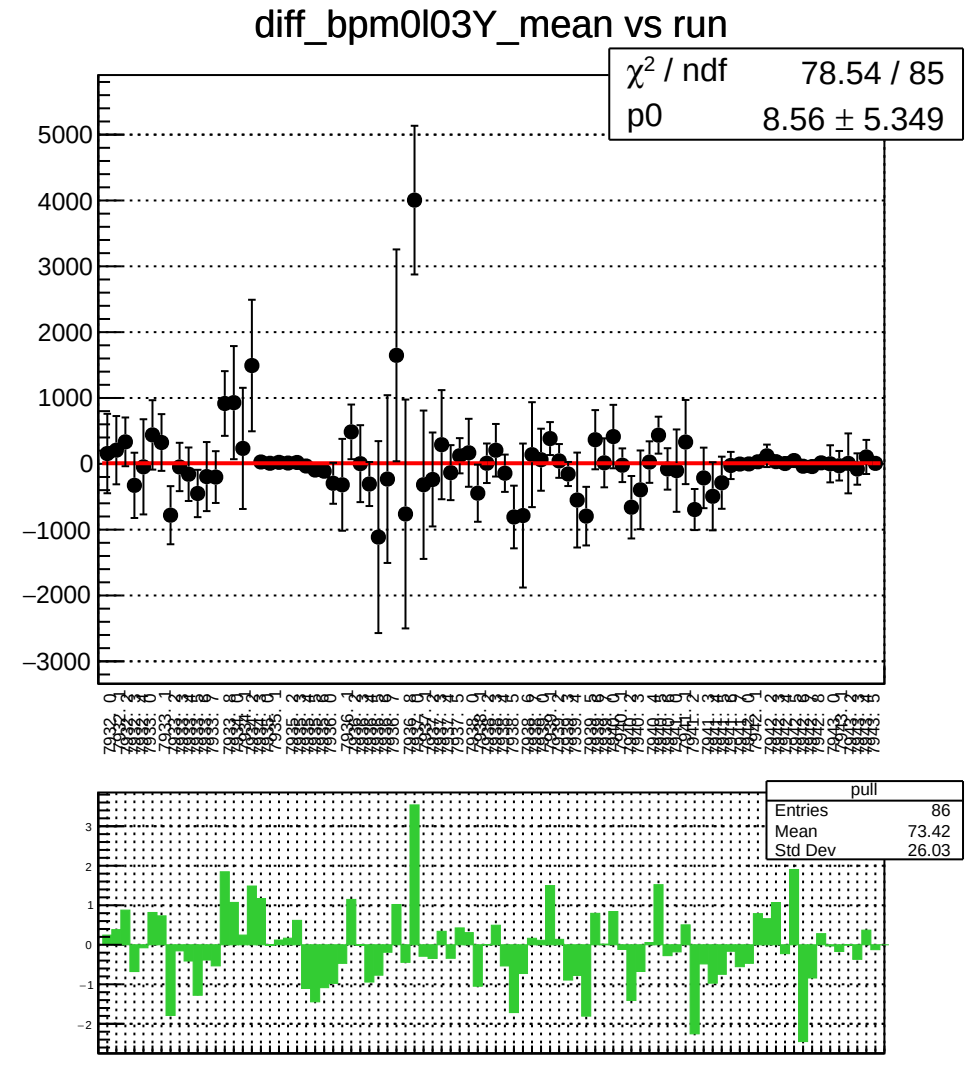

pull1D
Entries 86
Mean 0.003453
Std Dev 0.9676
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

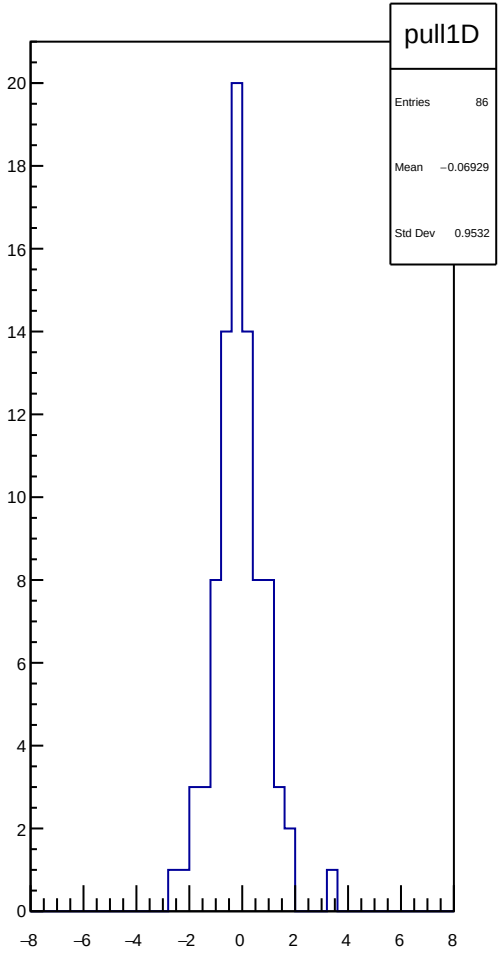

diff_bpm0l02Y_rms vs run
χ² / ndf 6481 / 85
p0 3154 ± 2.455
3600
3400
3200
3000
2800
2600

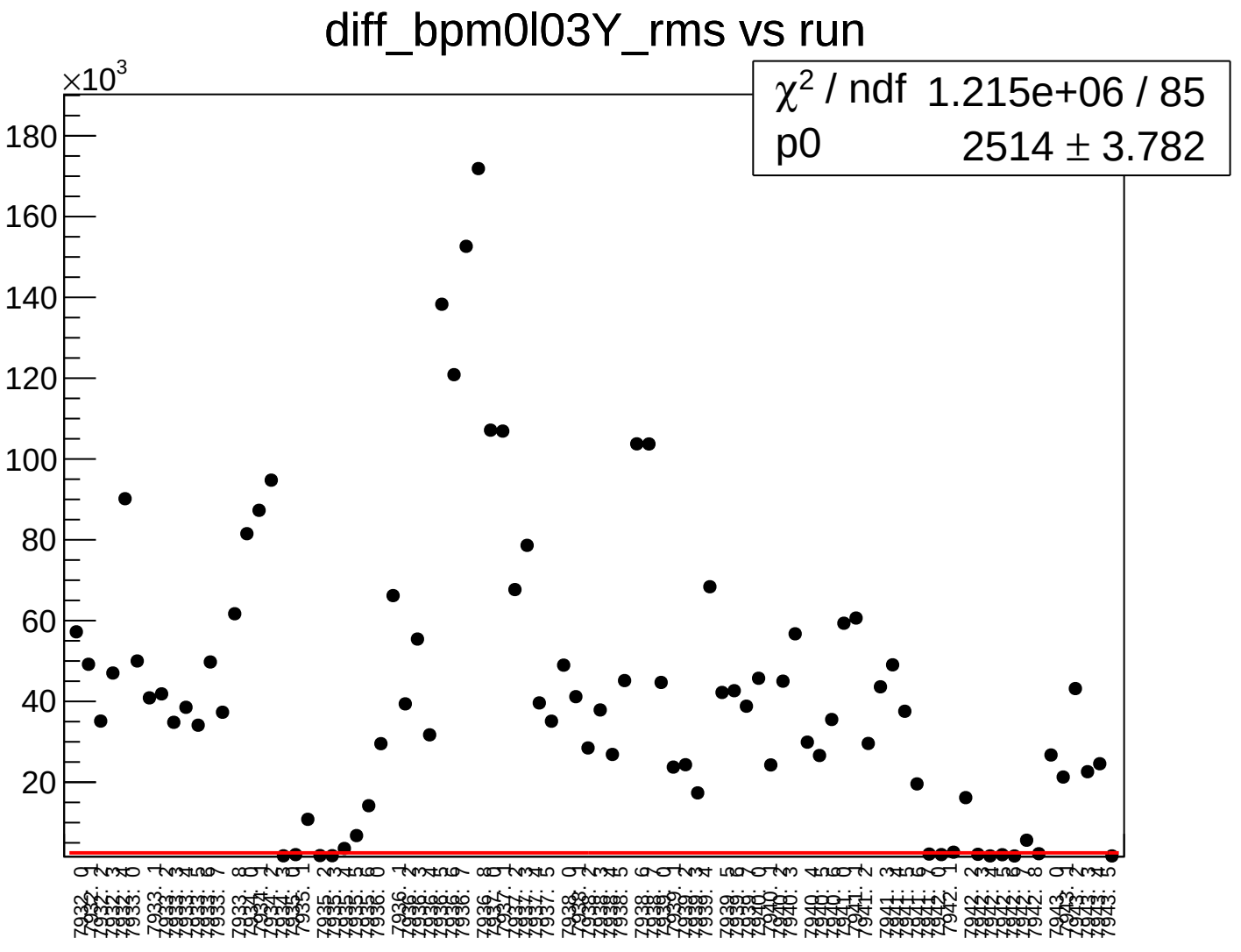

diff_bpm0l03X_mean vs run
χ² / ndf 67.85 / 85
p0 −12.93 ± 5.214
pull
Entries 86
Mean 91.62
Std Dev 53.1

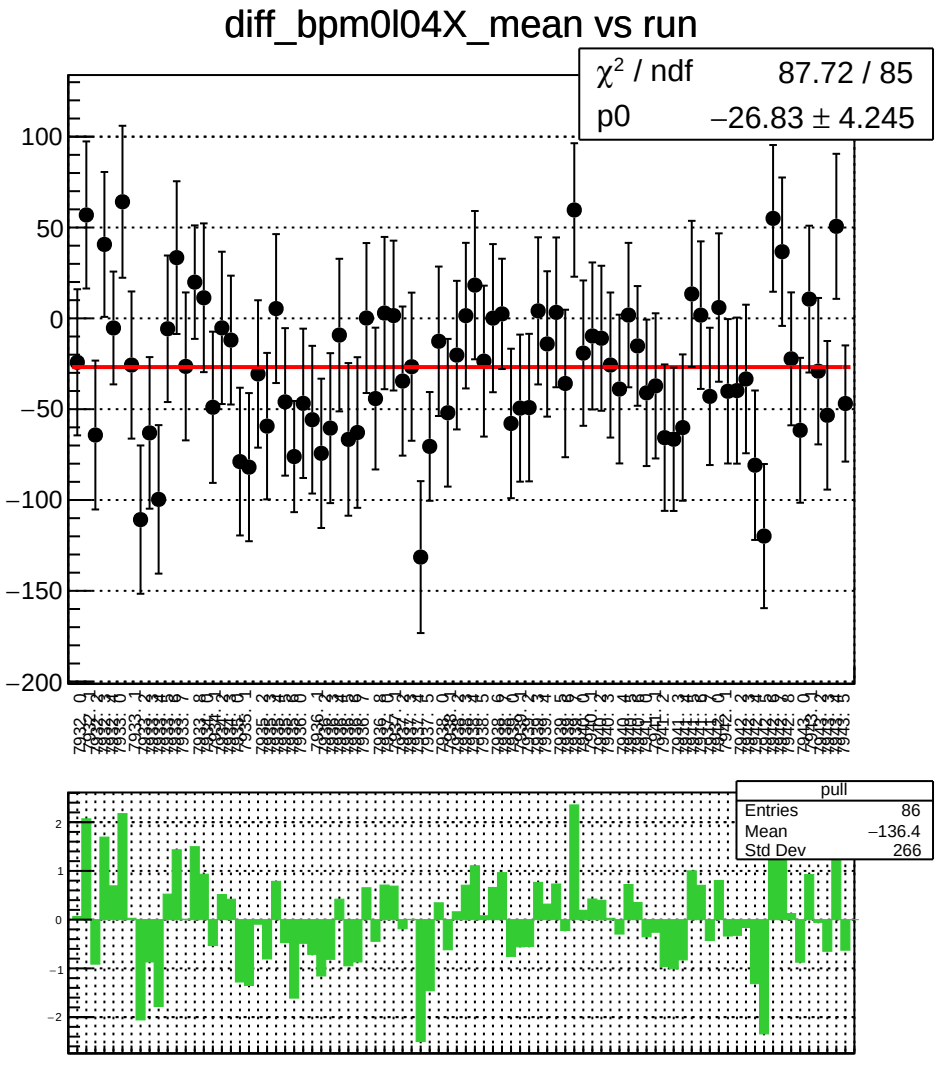

pull1D
Entries 86
Mean −0.037
Std Dev 0.8874

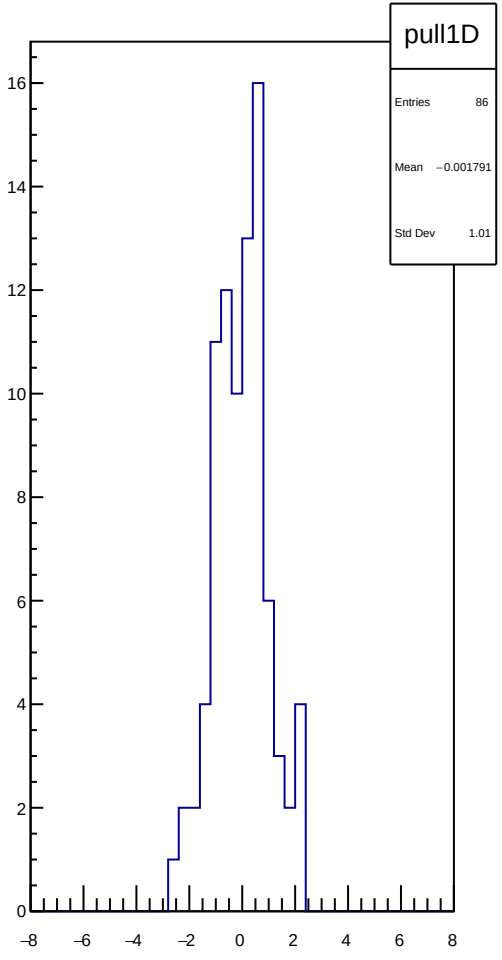

diff_bpm0l03X_rms vs run
×10^3
χ² / ndf 1.219e+06 / 85
p0 2439 ± 3.687
180
160
140
120
100
80
60
40
20

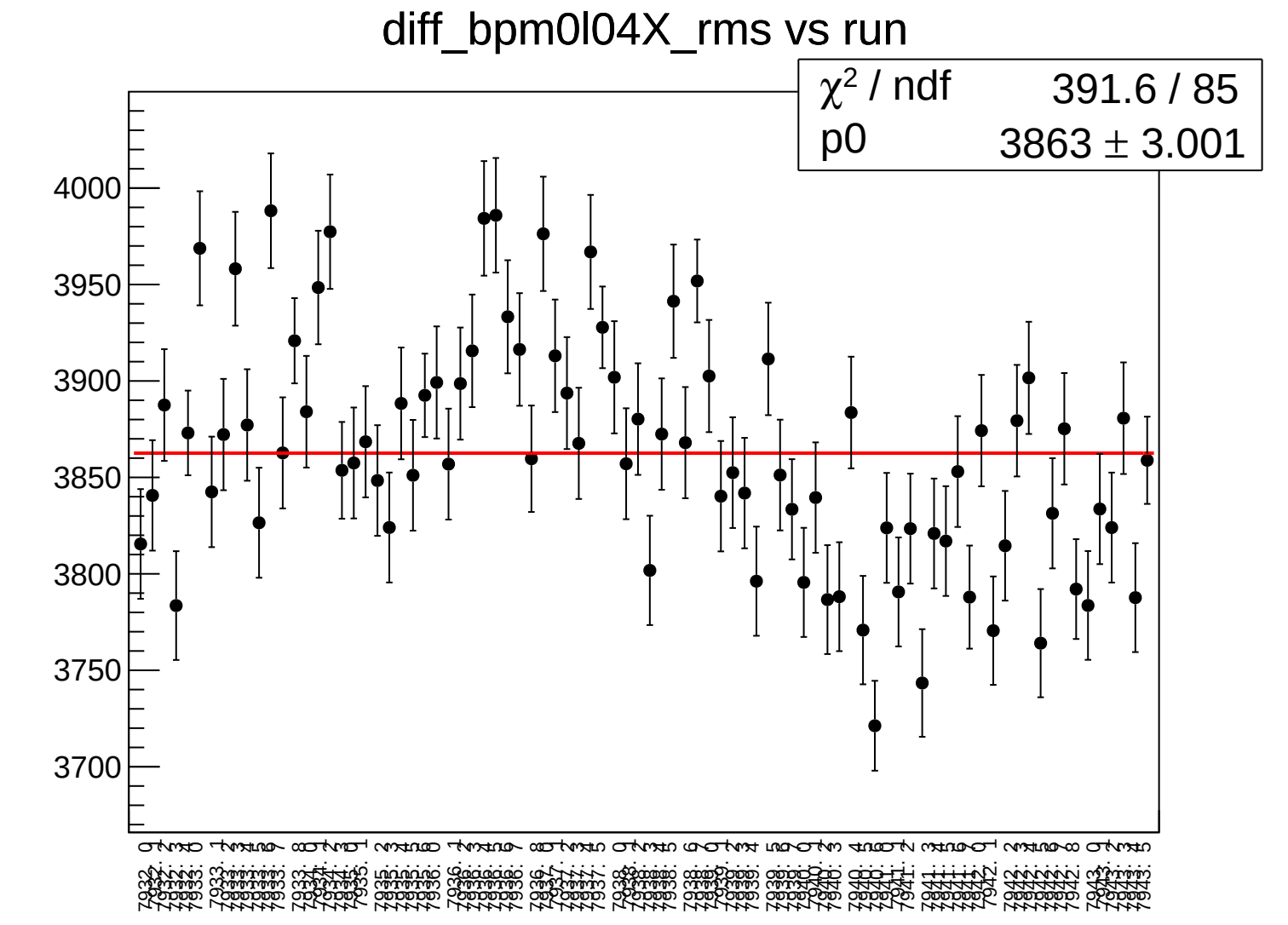

diff_bpm0l03Y_mean vs run
χ² / ndf 78.54 / 85
p0 8.56 ± 5.349
pull
Entries 86
Mean 73.42
Std Dev 26.03

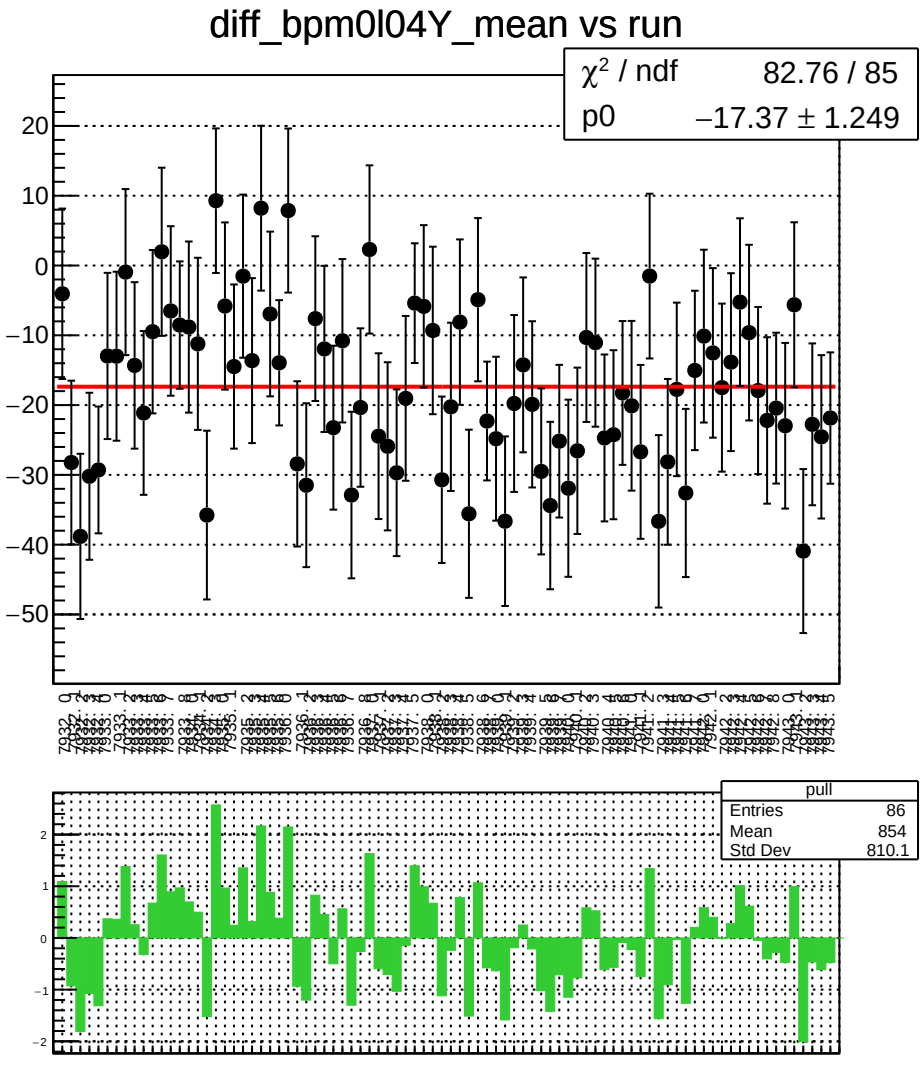

pull1D
Entries 86
Mean −0.06929
Std Dev 0.9532

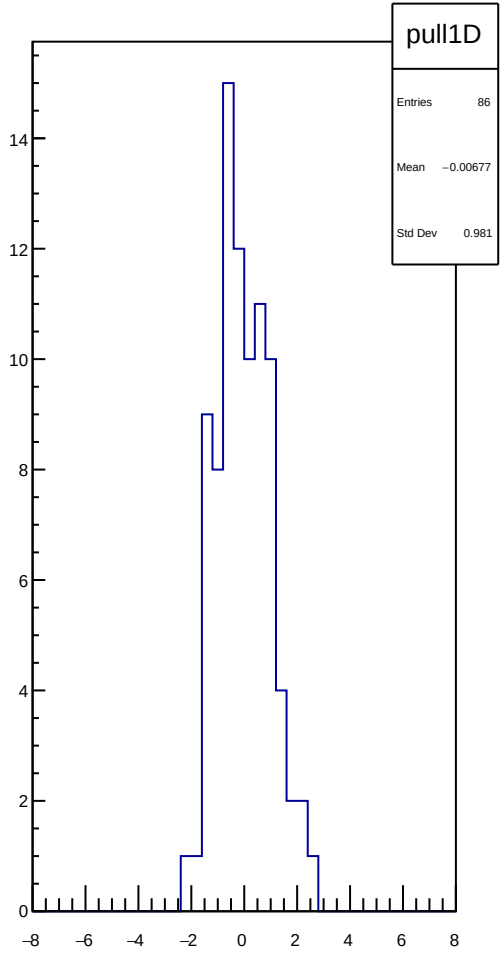

diff_bpm0l03Y_rms vs run
×10^3
χ² / ndf 1.215e+06 / 85
p0 2514 ± 3.782
180
160
140
120
100
80
60
40
20

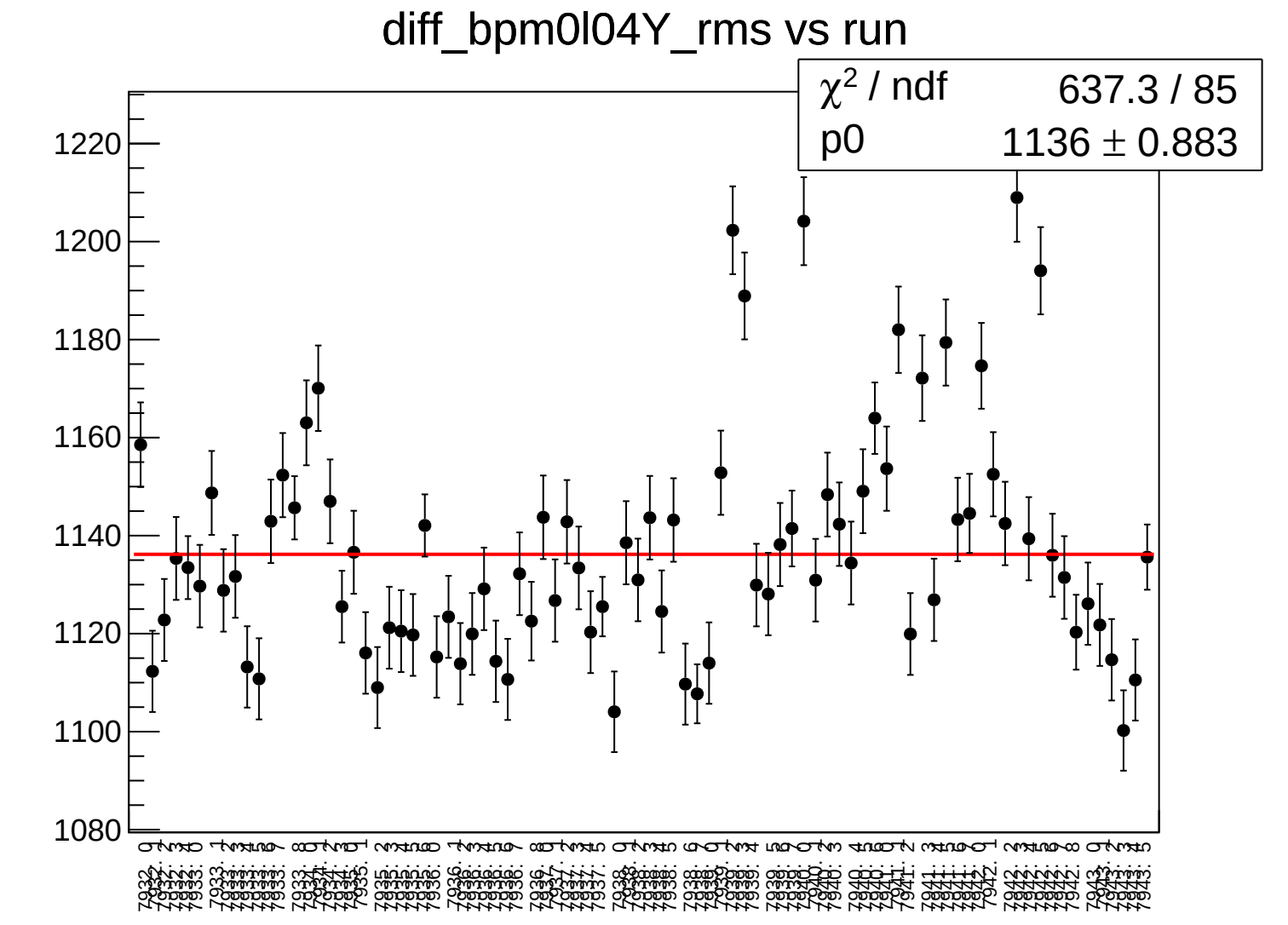

diff_bpm0l04X_mean vs run
χ² / ndf 87.72 / 85
p0 −26.83 ± 4.245
pull
Entries 86
Mean −136.4
Std Dev 266

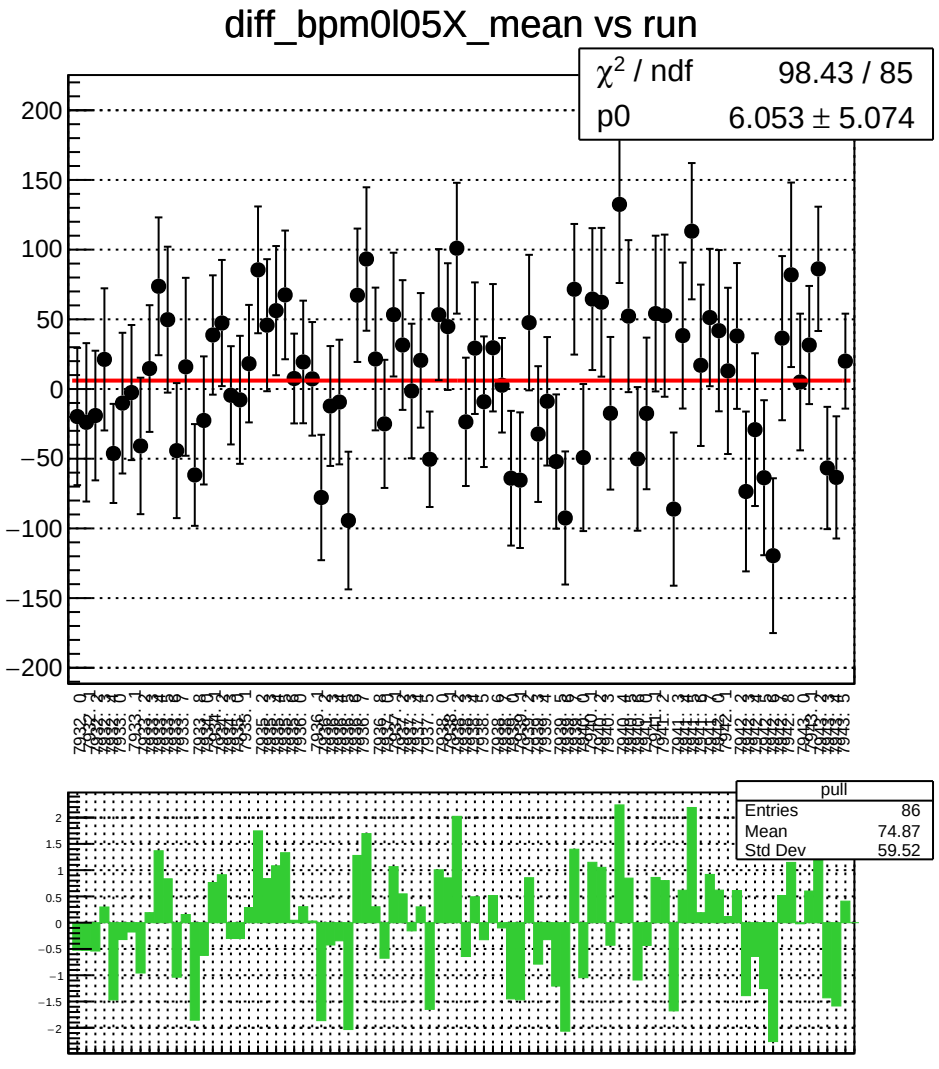

pull1D
Entries 86
Mean −0.001791
Std Dev 1.01

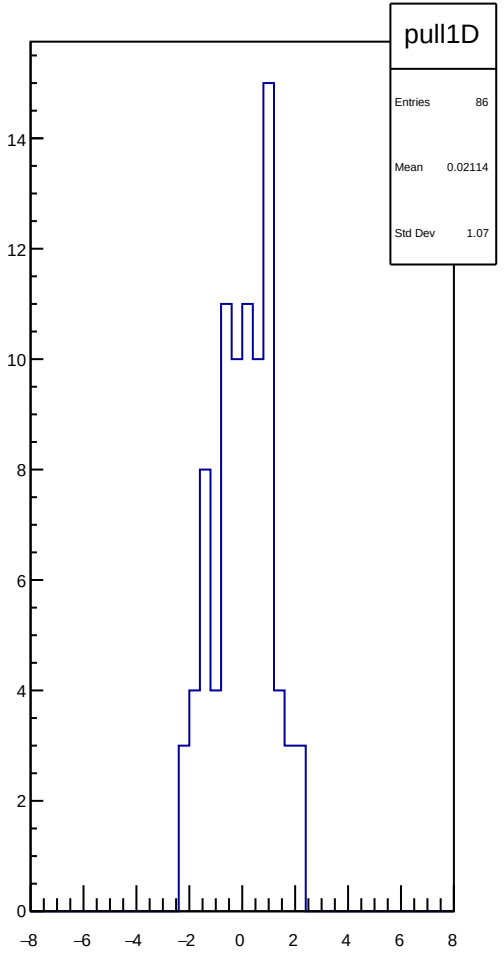

diff_bpm0l04X_rms vs run
χ² / ndf 391.6 / 85
p0 3863 ± 3.001
4000
3950
3900
3850
3800
3750
3700

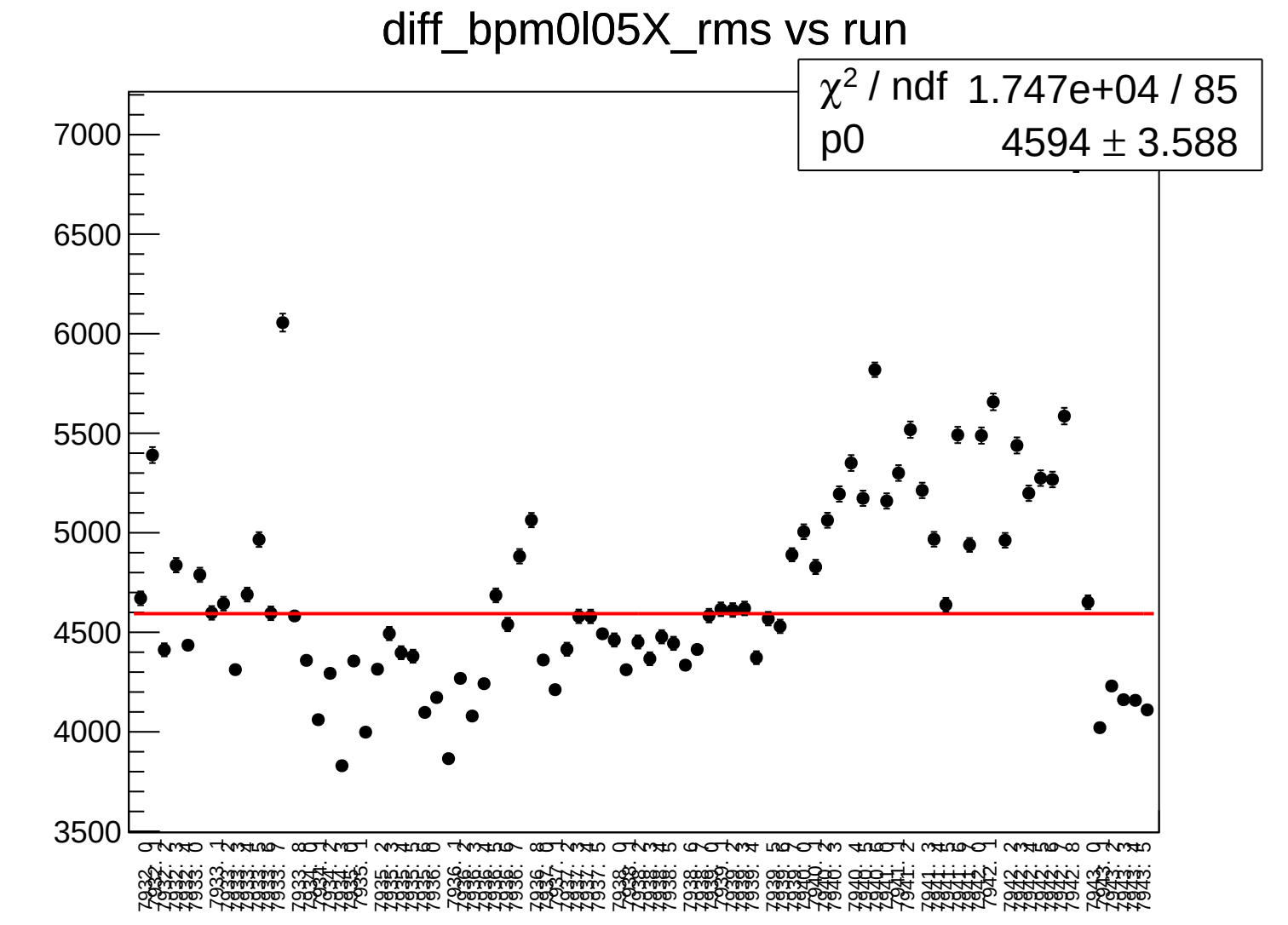

diff_bpm0l04Y_mean vs run
χ² / ndf 82.76 / 85
p0 −17.37 ± 1.249
pull
Entries 86
Mean 854
Std Dev 810.1

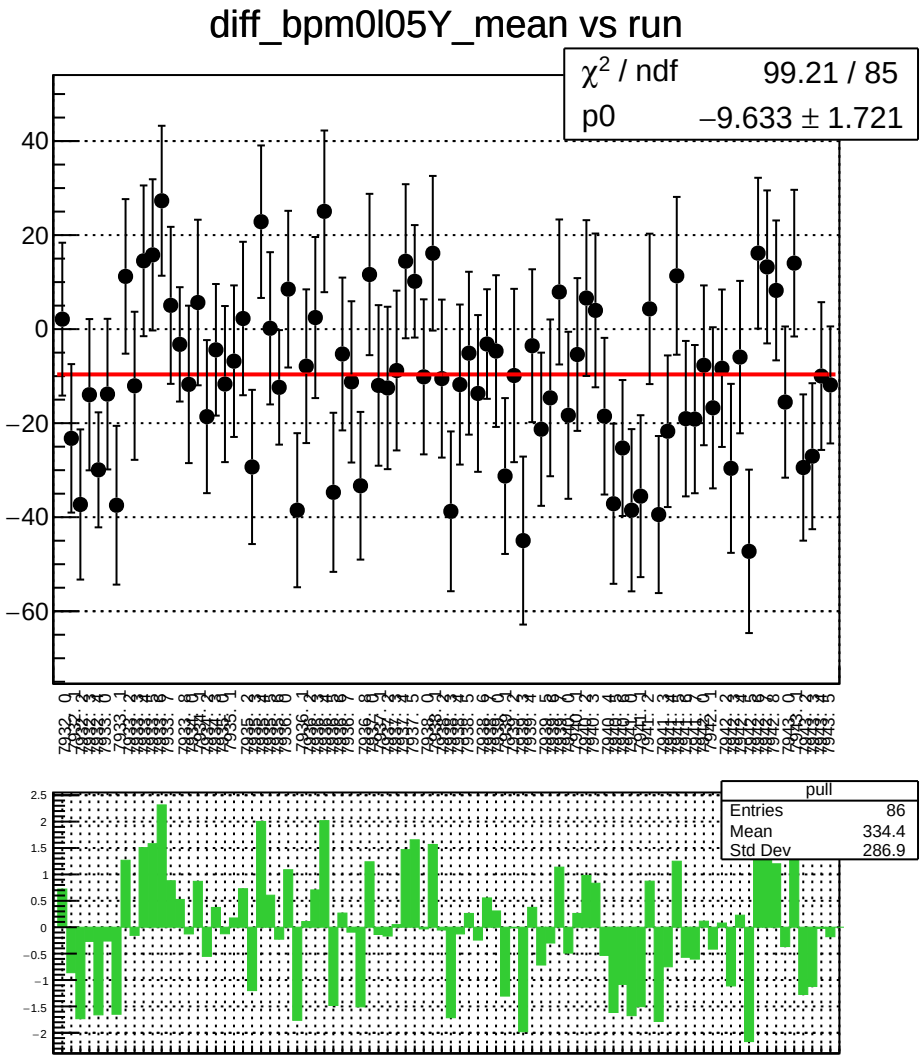

pull1D
Entries 86
Mean −0.00677
Std Dev 0.981

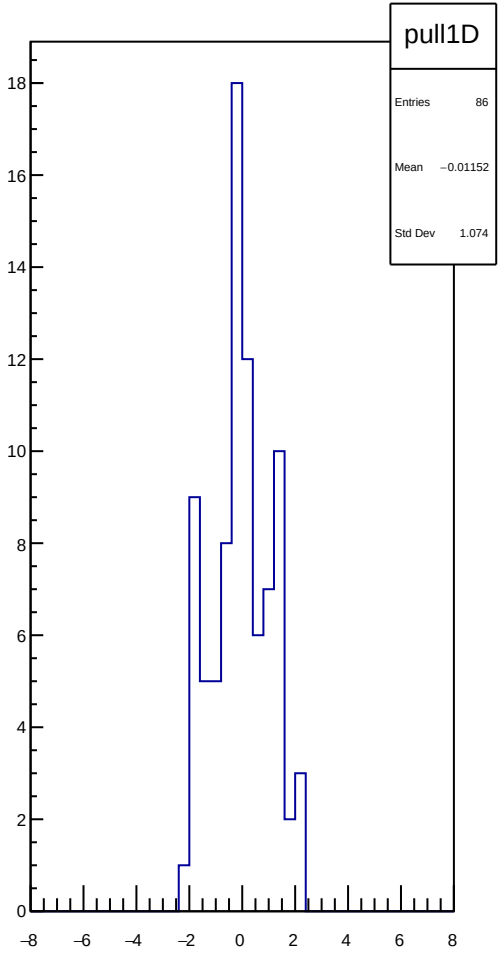

diff_bpm0l04Y_rms vs run
χ² / ndf 637.3 / 85
p0 1136 ± 0.883
1220
1200
1180
1160
1140
1120
1100
1080

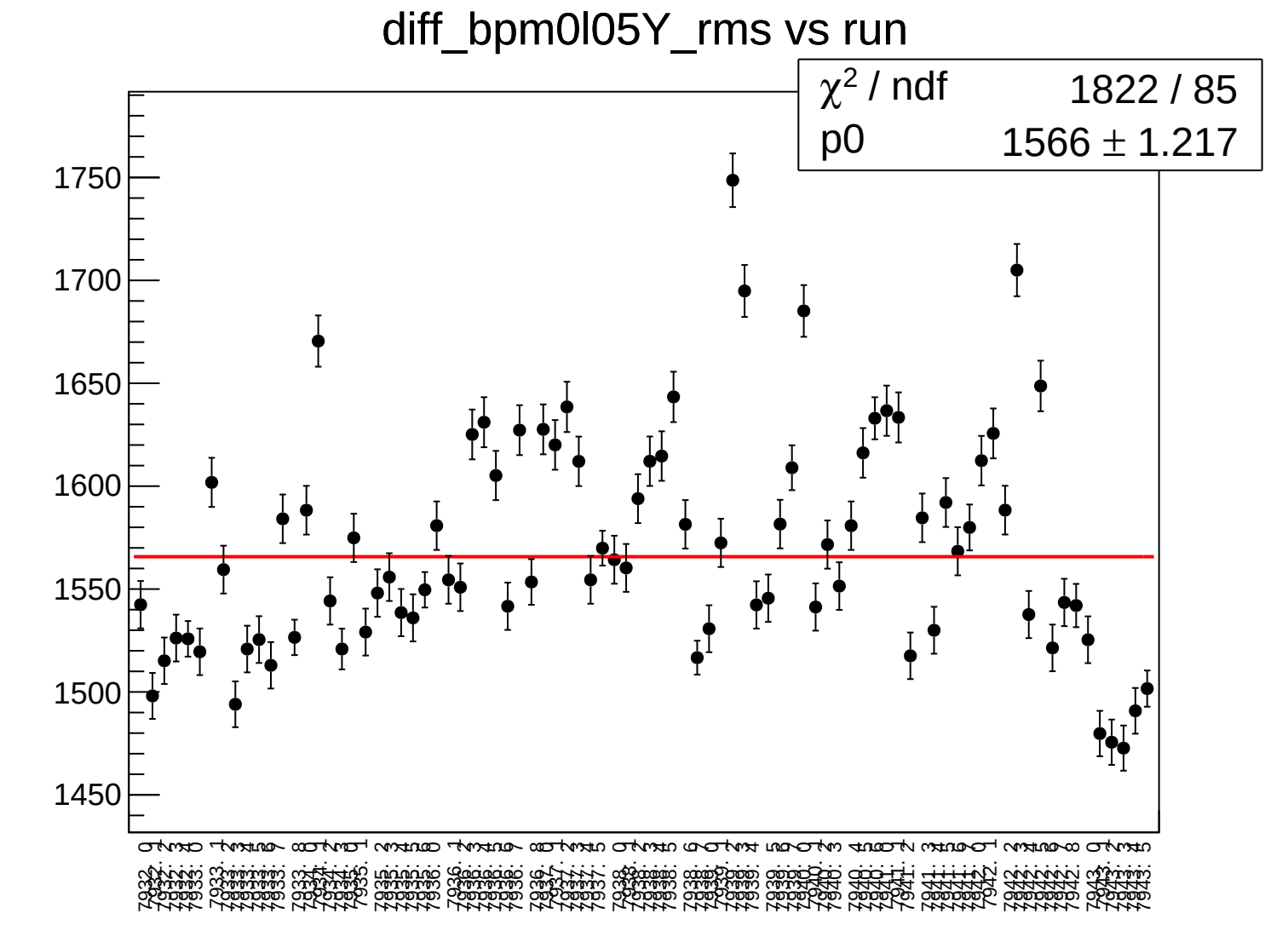

diff_bpm0l05X_mean vs run
χ^2 / ndf 98.43 / 85
p0 6.053 ± 5.074
pull
Entries 86
Mean 74.87
Std Dev 59.52

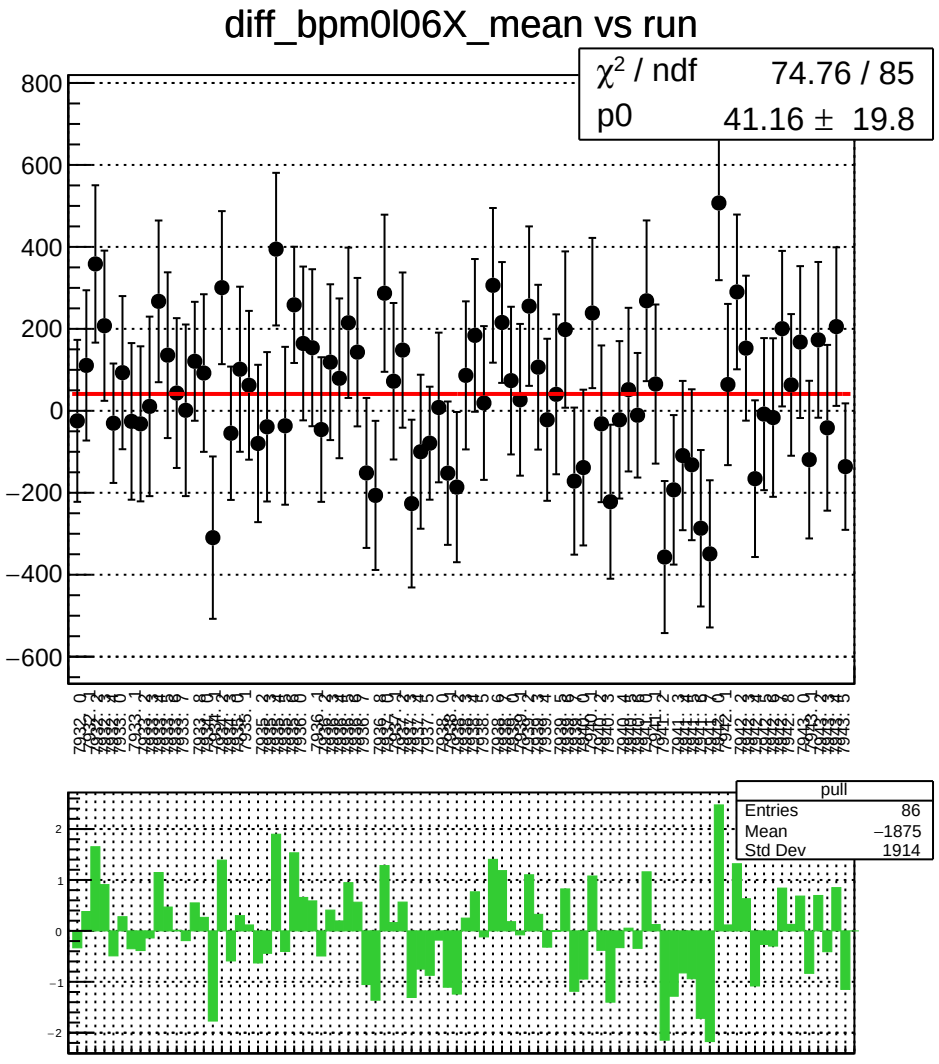

pull1D
Entries 86
Mean 0.02114
Std Dev 1.07

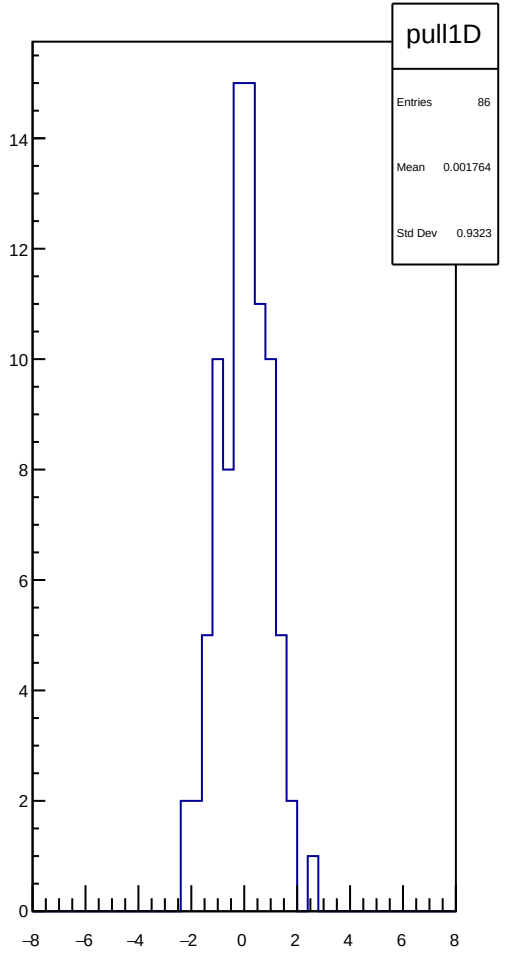

diff_bpm0l05X_rms vs run
χ^2 / ndf 1.747e+04 / 85
p0 4594 ± 3.588
7000
6500
6000
5500
5000
4500
4000
3500

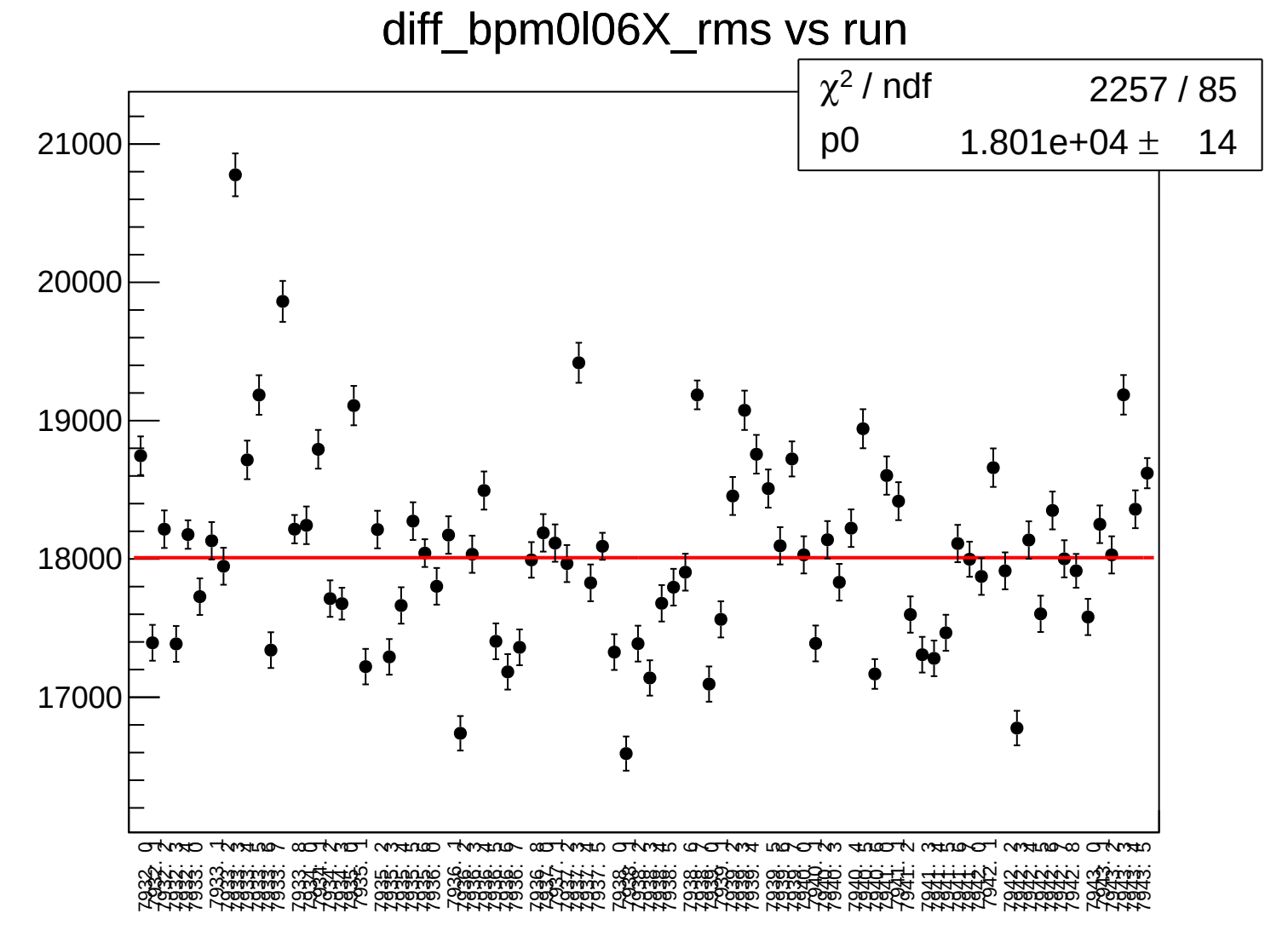

diff_bpm0l05Y_mean vs run
χ² / ndf 99.21 / 85
p0 −9.633 ± 1.721
pull
Entries 86
Mean 334.4
Std Dev 286.9

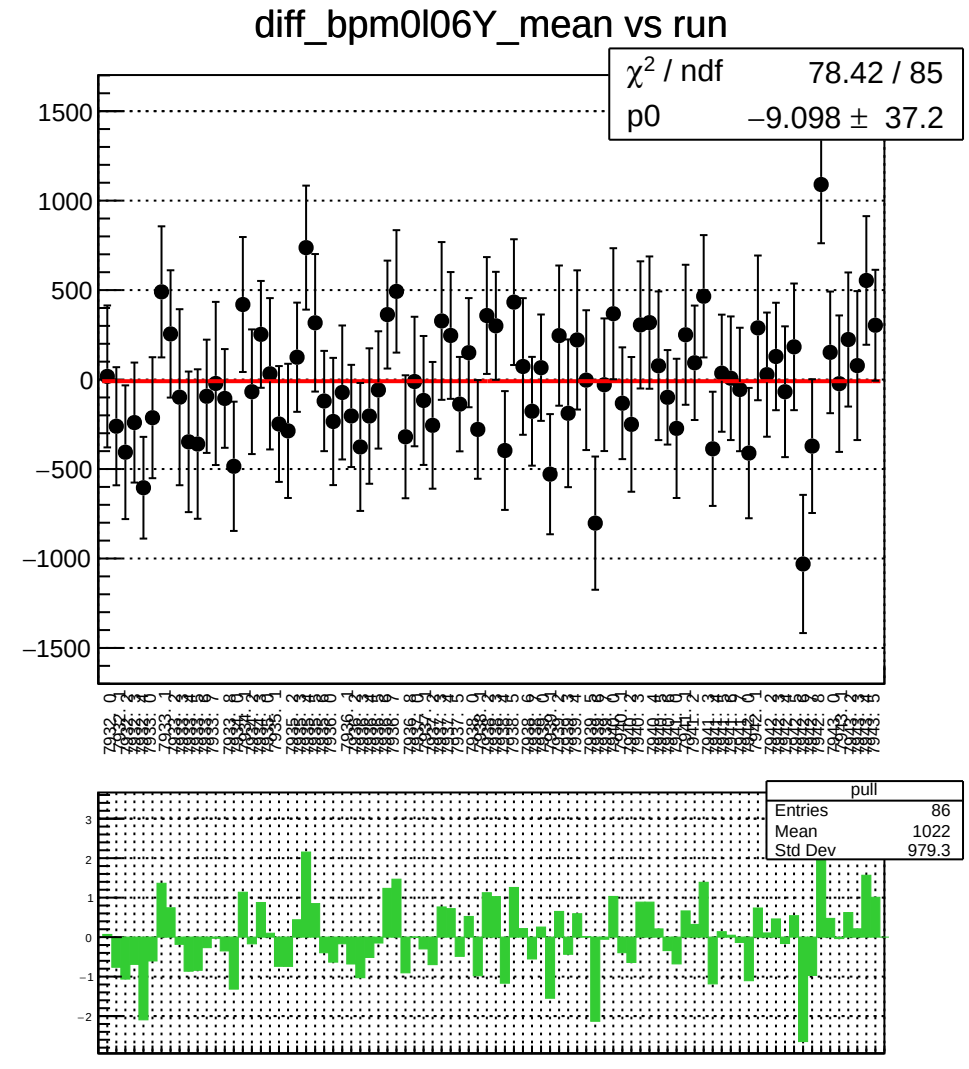

pull1D
Entries 86
Mean −0.01152
Std Dev 1.074

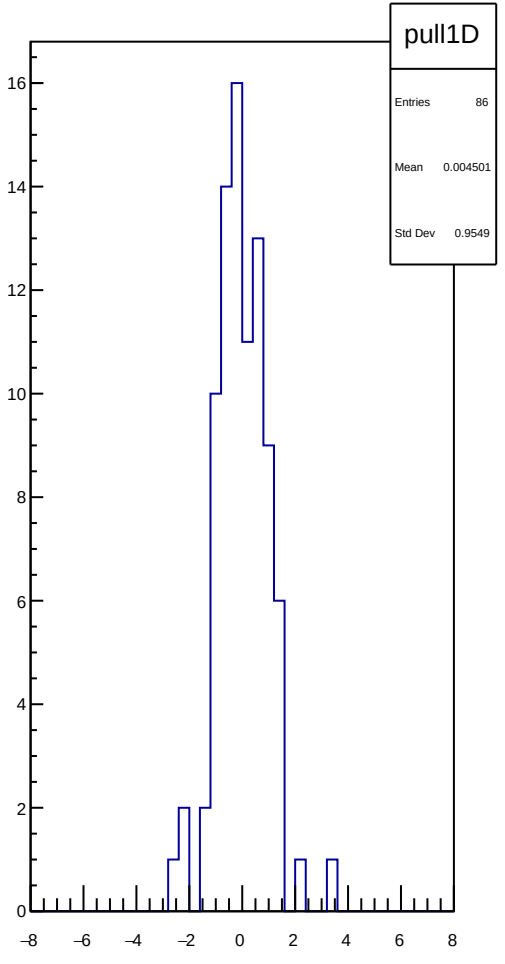

diff_bpm0l05Y_rms vs run
χ² / ndf 1822 / 85
p0 1566 ± 1.217
1750
1700
1650
1600
1550
1500
1450

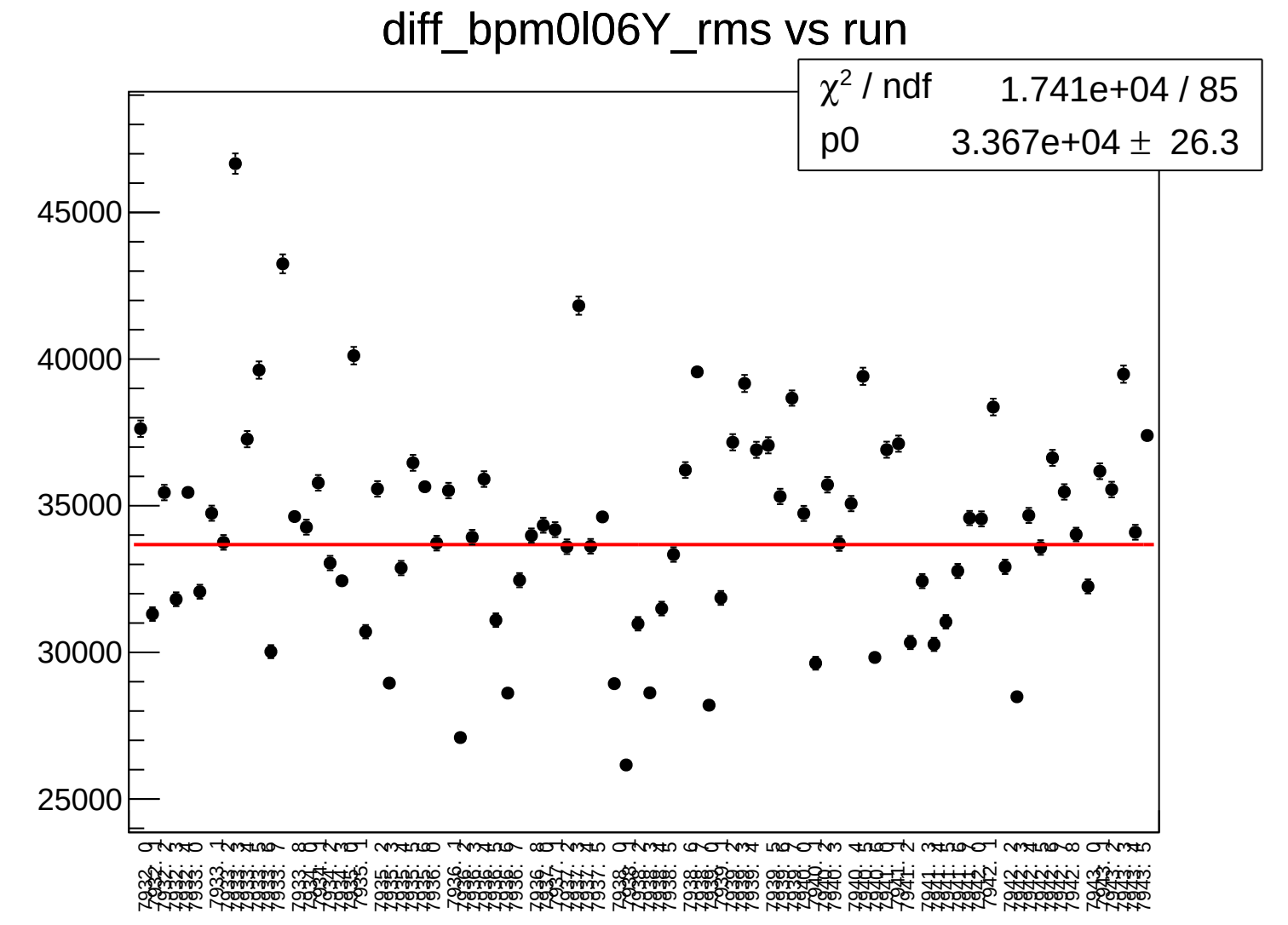

diff_bpm0l06X_mean vs run
χ² / ndf 74.76 / 85
p0 41.16 ± 19.8
pull
Entries 86
Mean −1875
Std Dev 1914

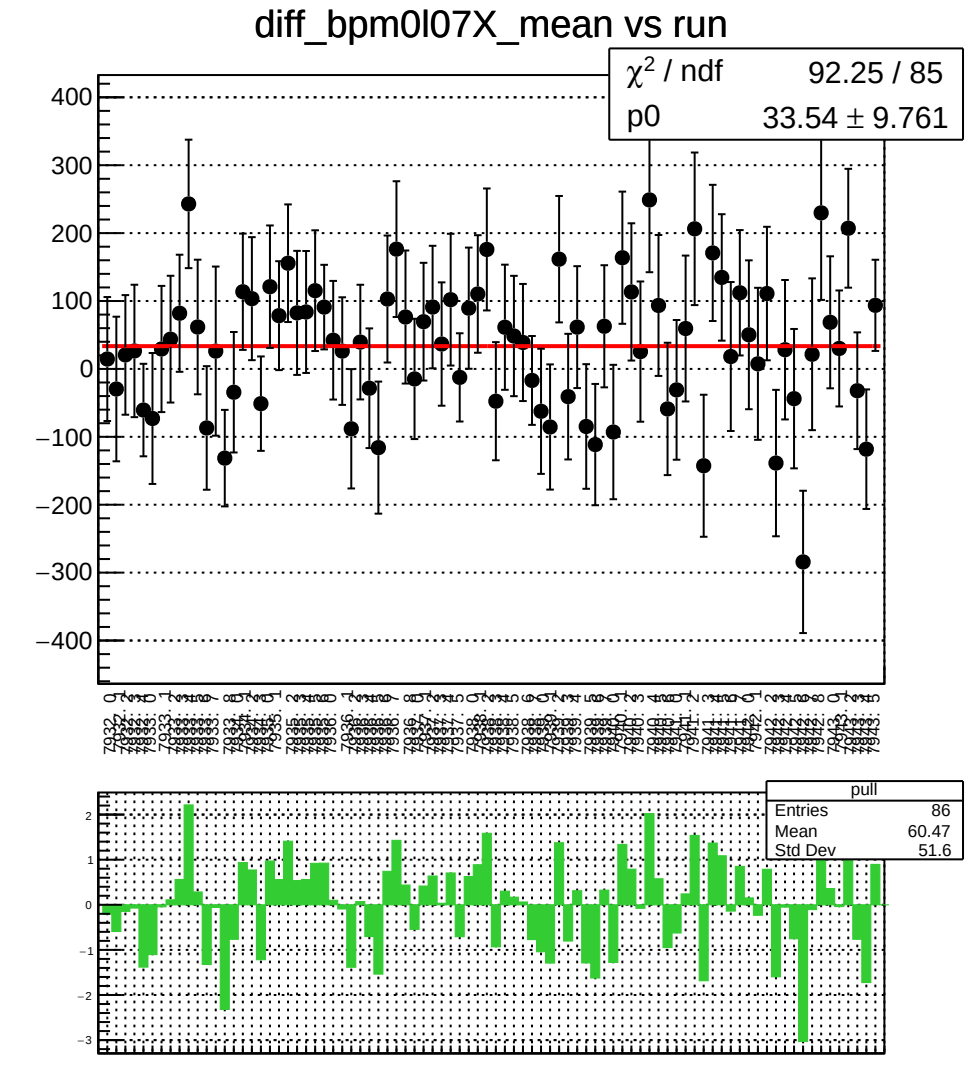

pull1D
Entries 86
Mean 0.001764
Std Dev 0.9323

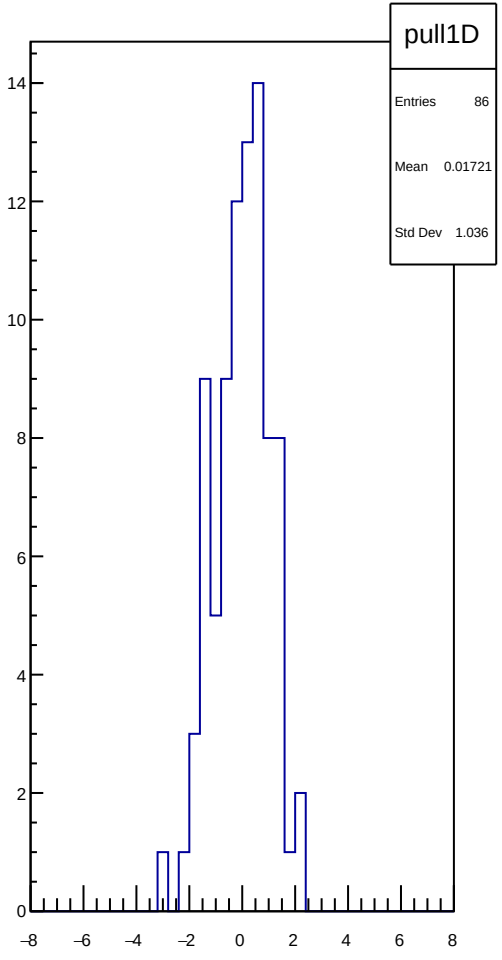

diff_bpm0l06X_rms vs run
χ² / ndf 2257 / 85
p0 1.801e+04 ± 14
21000
20000
19000
18000
17000

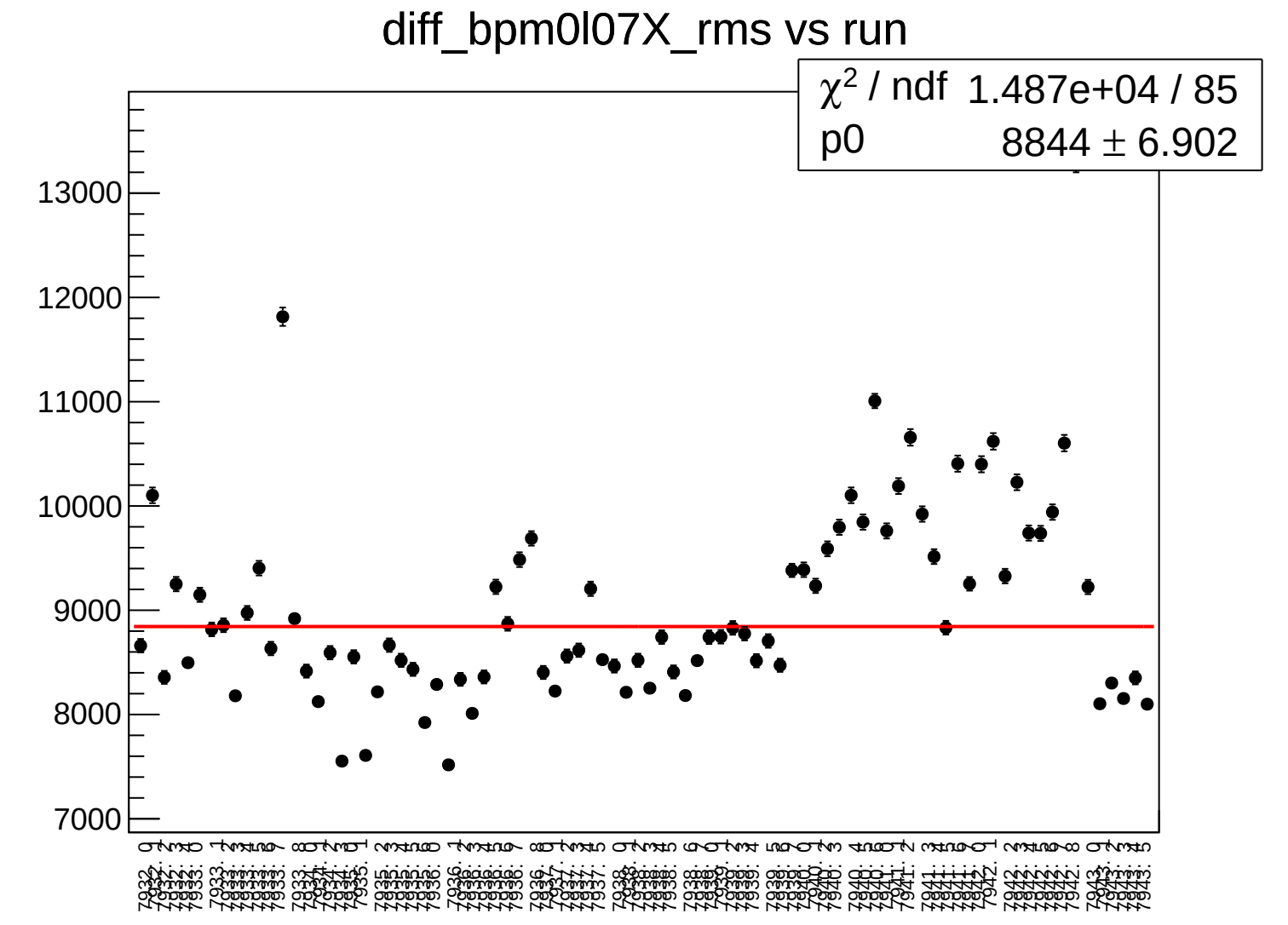

diff_bpm0l06Y_mean vs run
χ² / ndf 78.42 / 85
p0 −9.098 ± 37.2
pull
Entries 86
Mean 1022
Std Dev 979.3

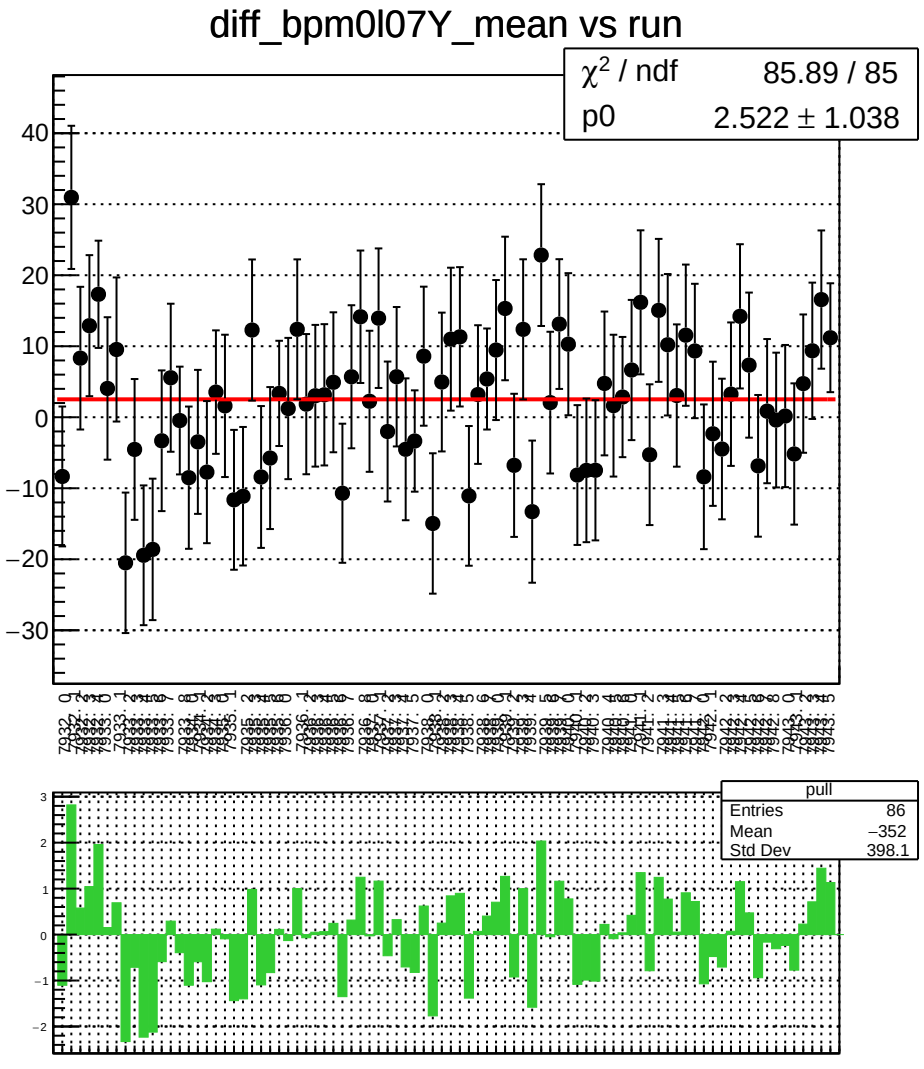

pull1D
Entries 86
Mean 0.004501
Std Dev 0.9549

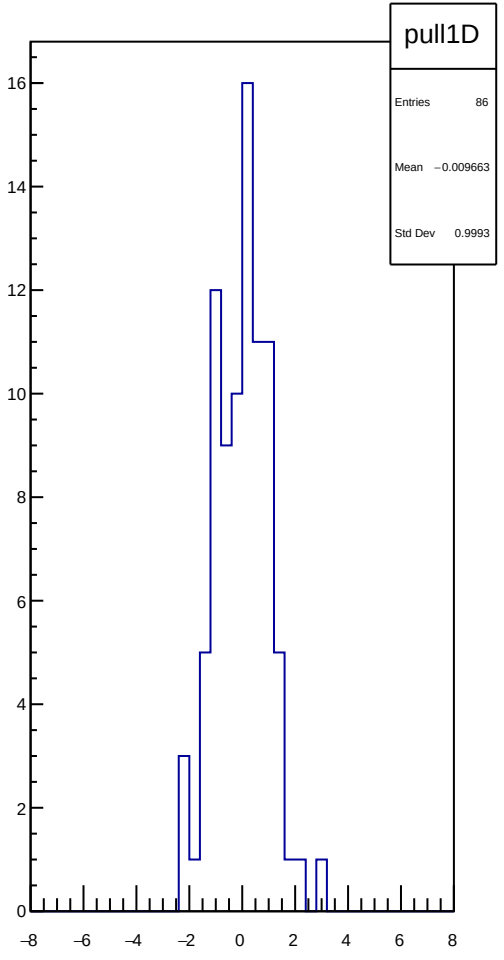

diff_bpm0l06Y_rms vs run
χ^2 / ndf 1.741e+04 / 85
p0 3.367e+04 ± 26.3
45000
40000
35000
30000
25000

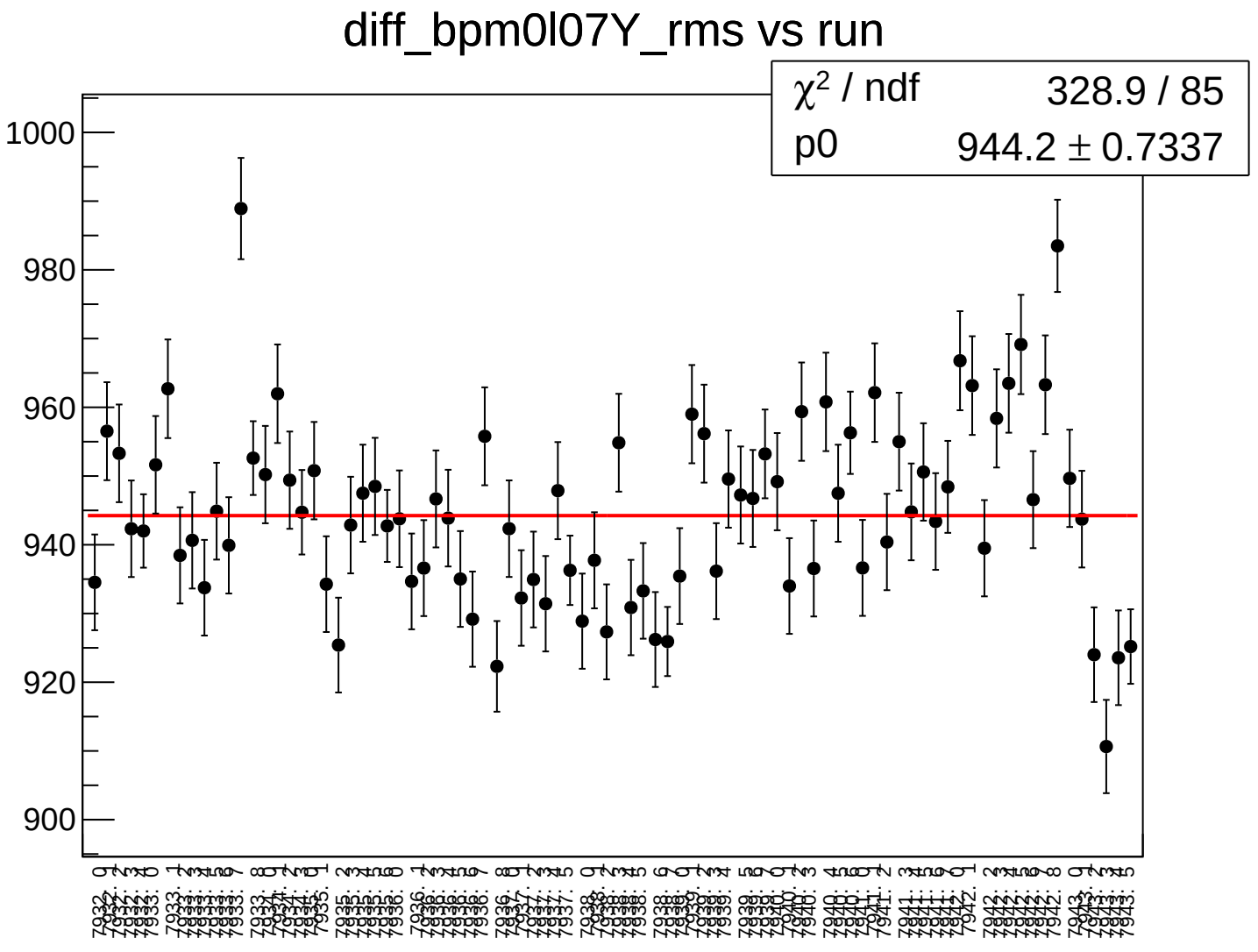

diff_bpm0l07X_mean vs run
χ² / ndf 92.25 / 85
p0 33.54 ± 9.761
pull
Entries 86
Mean 60.47
Std Dev 51.6

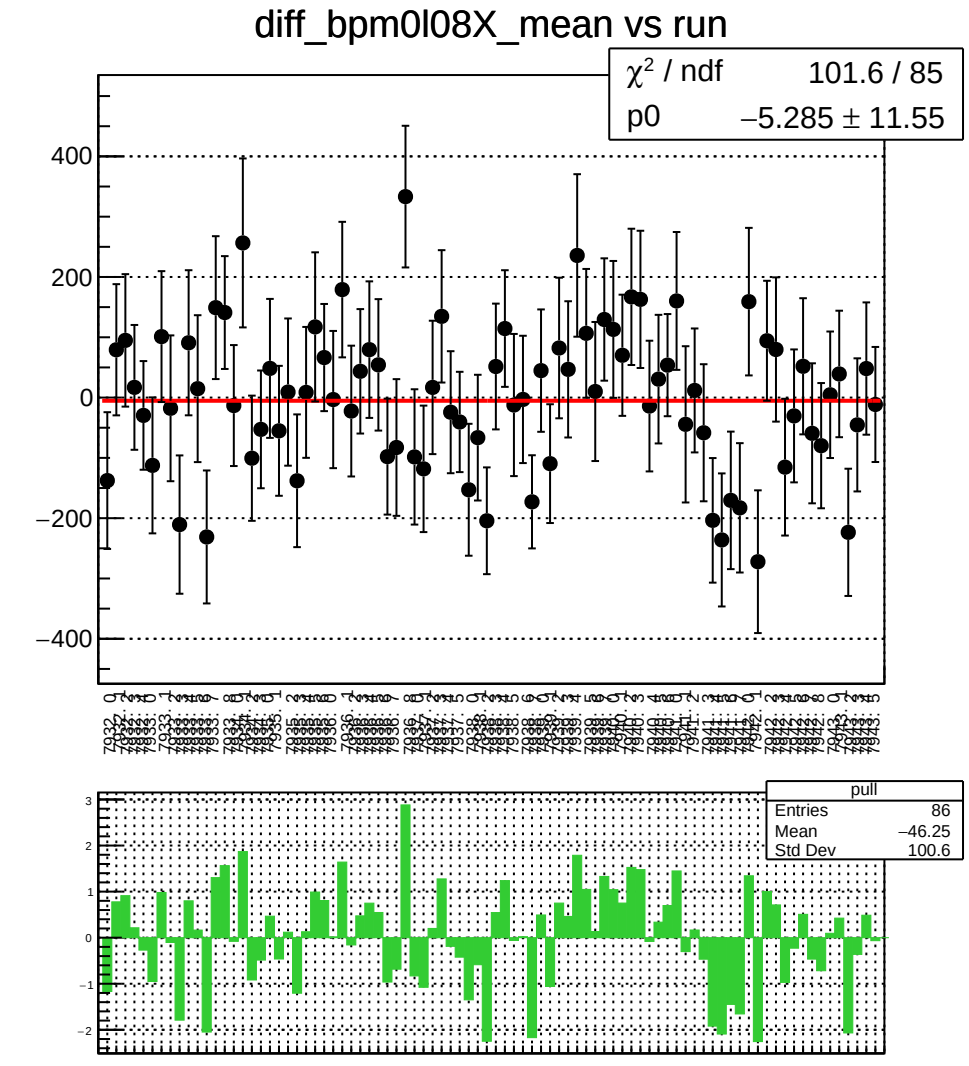

pull1D
Entries 86
Mean 0.01721
Std Dev 1.036

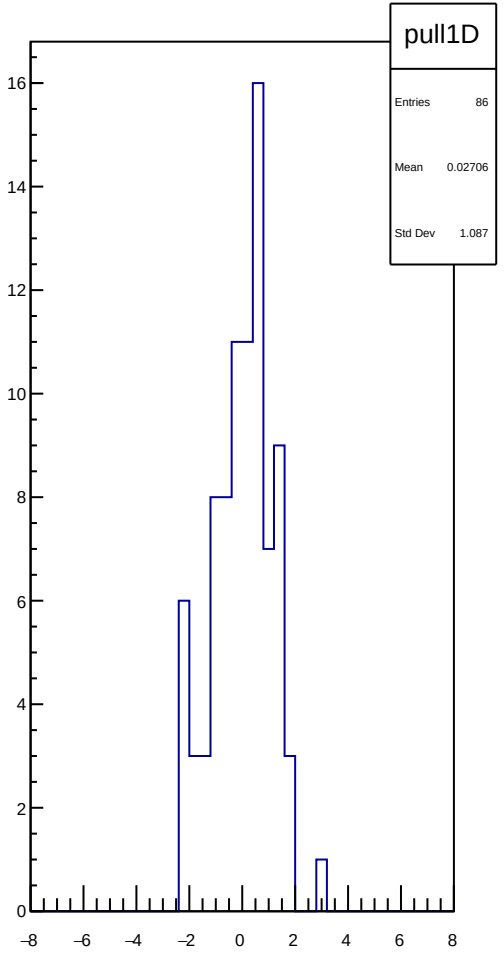

diff_bpm0l07X_rms vs run
χ² / ndf 1.487e+04 / 85
p0 8844 ± 6.902
13000
12000
11000
10000
9000
8000
7000

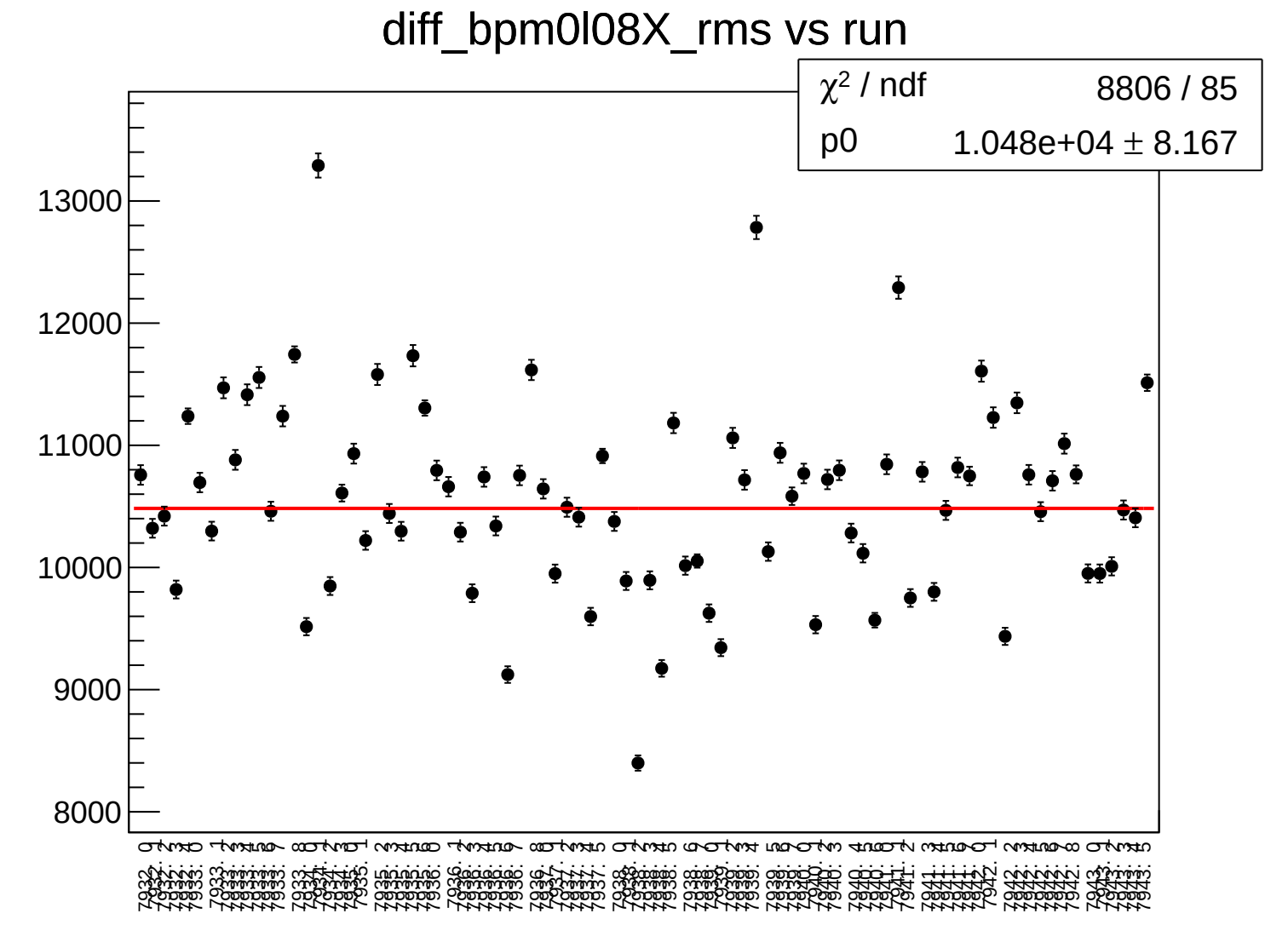

diff_bpm0l07Y_mean vs run
χ² / ndf 85.89 / 85
p0 2.522 ± 1.038
pull
Entries 86
Mean −352
Std Dev 398.1

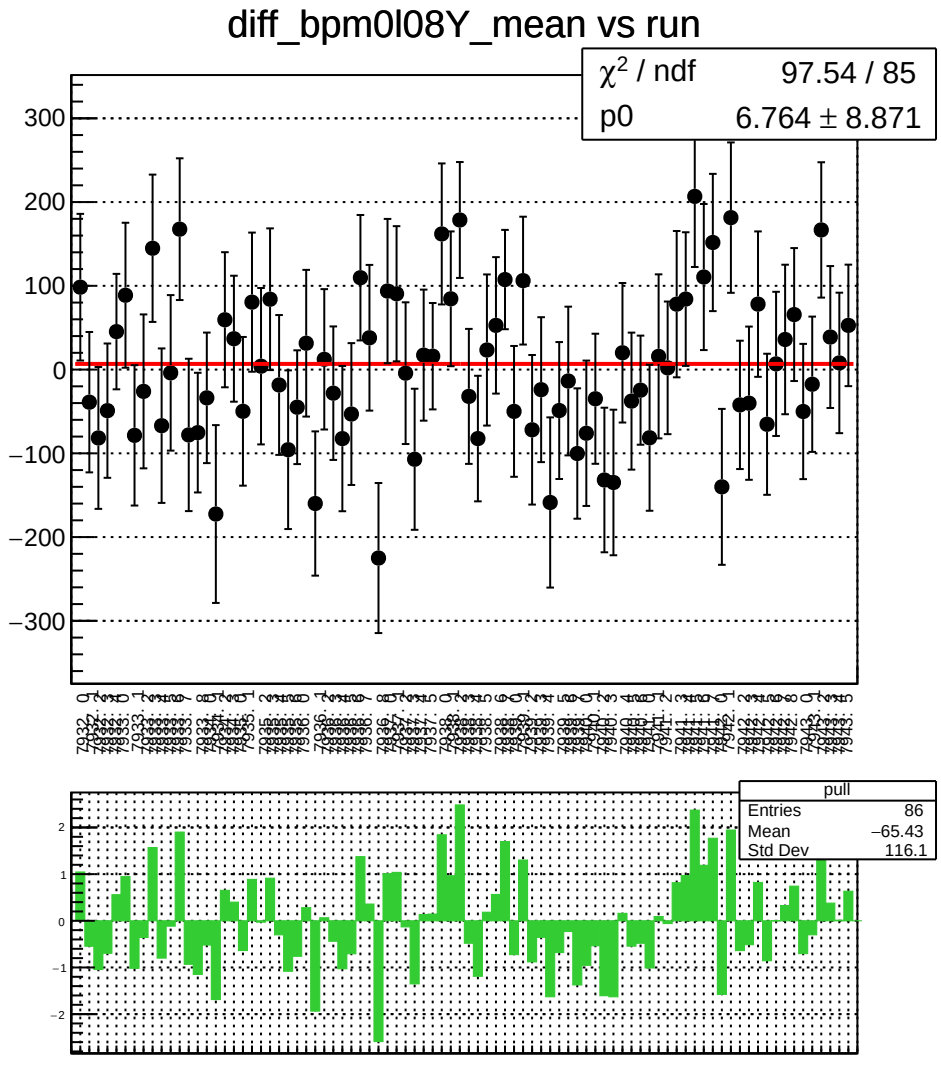

pull1D
Entries 86
Mean −0.009663
Std Dev 0.9993

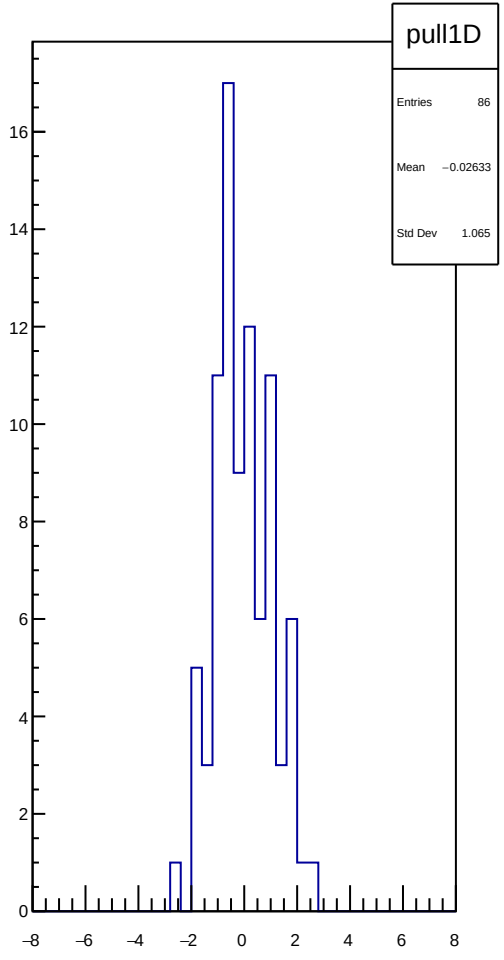

diff_bpm0l07Y_rms vs run
χ² / ndf 328.9 / 85
p0 944.2 ± 0.7337
1000
980
960
940
920
900

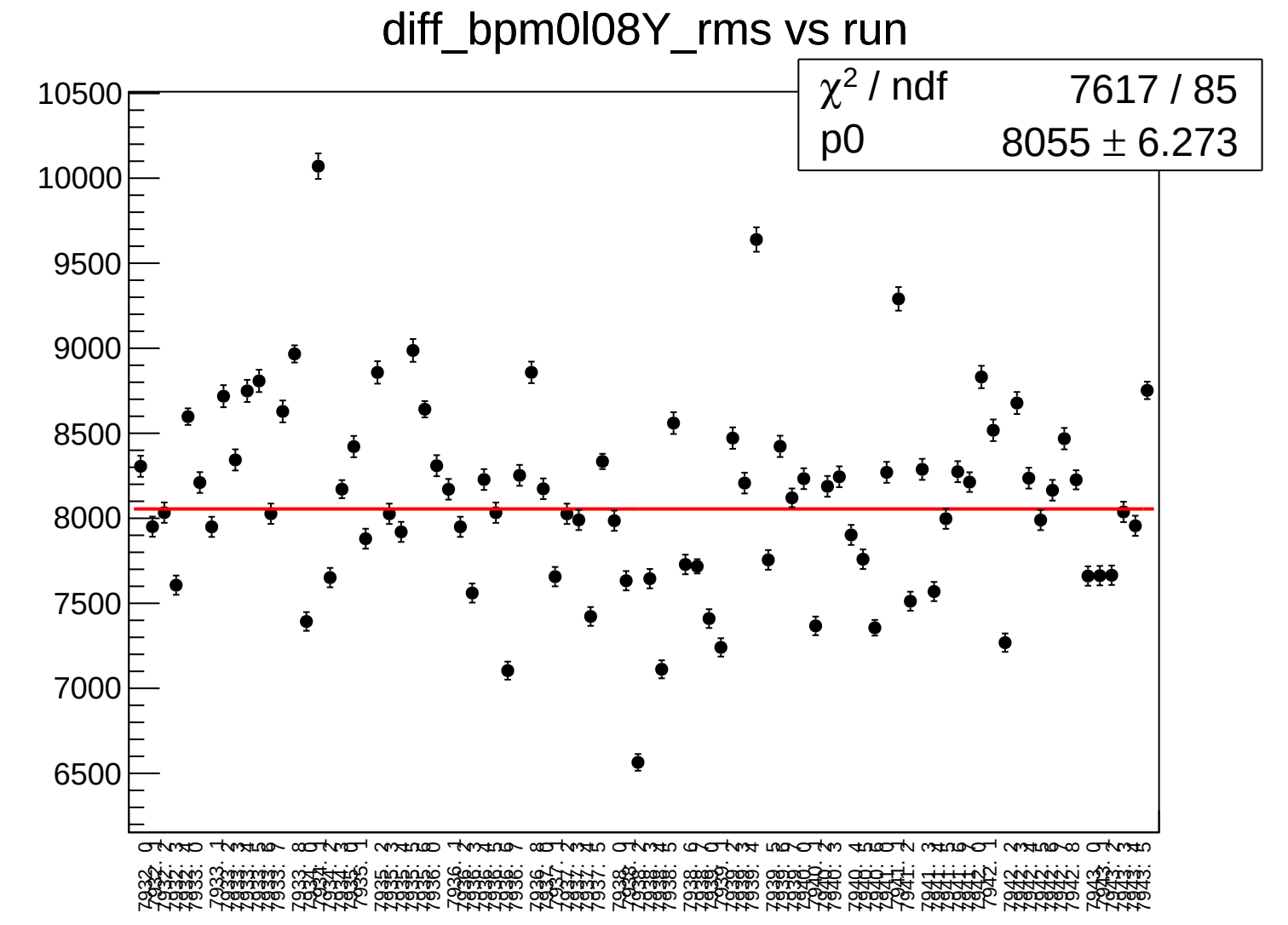

diff_bpm0l08X_mean vs run
χ² / ndf 101.6 / 85
p0 −5.285 ± 11.55
pull
Entries 86
Mean −46.25
Std Dev 100.6

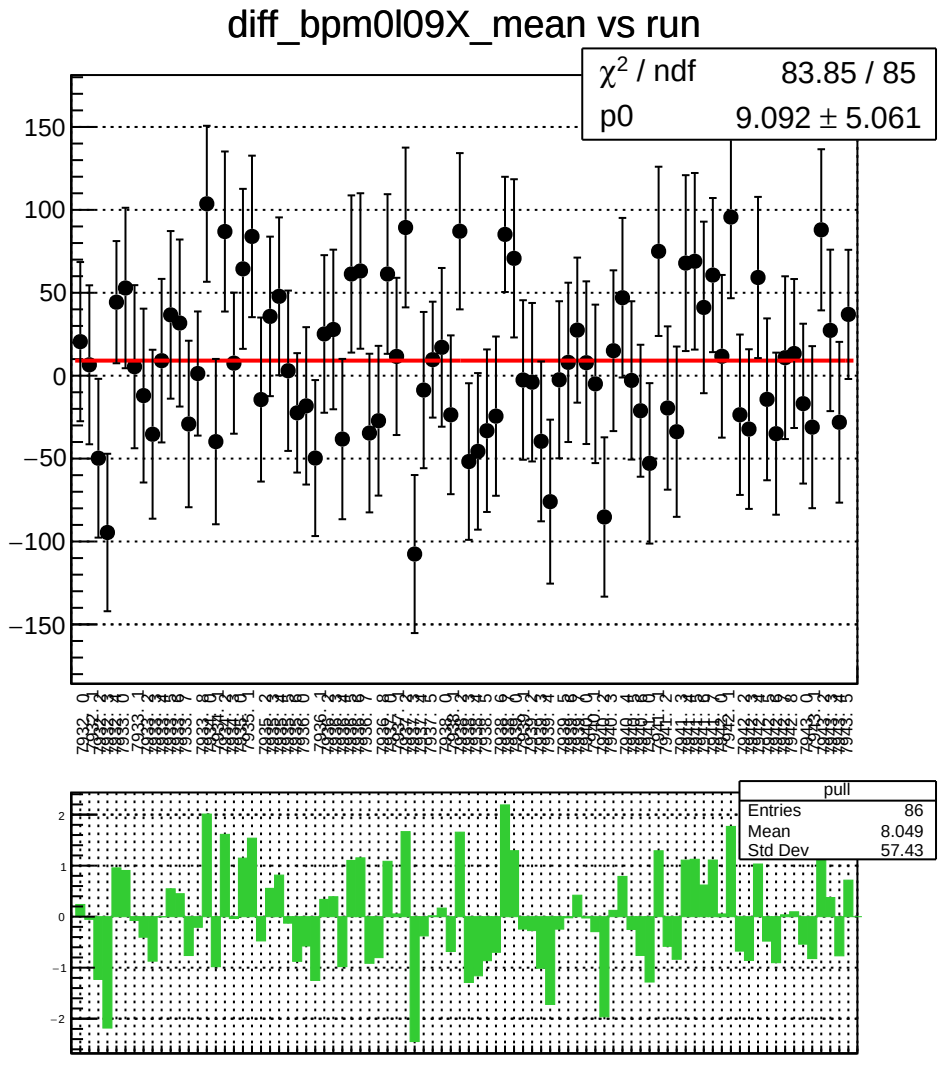

pull1D
Entries 86
Mean 0.02706
Std Dev 1.087

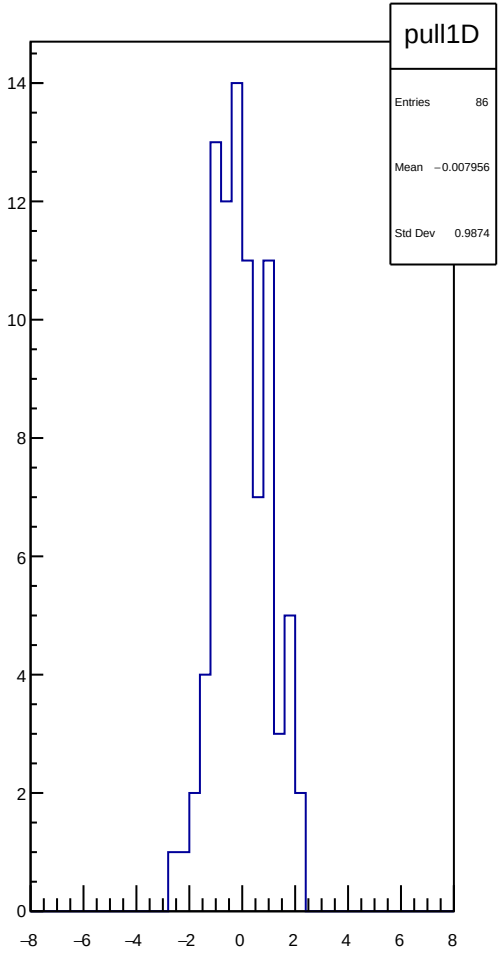

diff_bpm0l08X_rms vs run
χ² / ndf 8806 / 85
p0 1.048e+04 ± 8.167
13000
12000
11000
10000
9000
8000

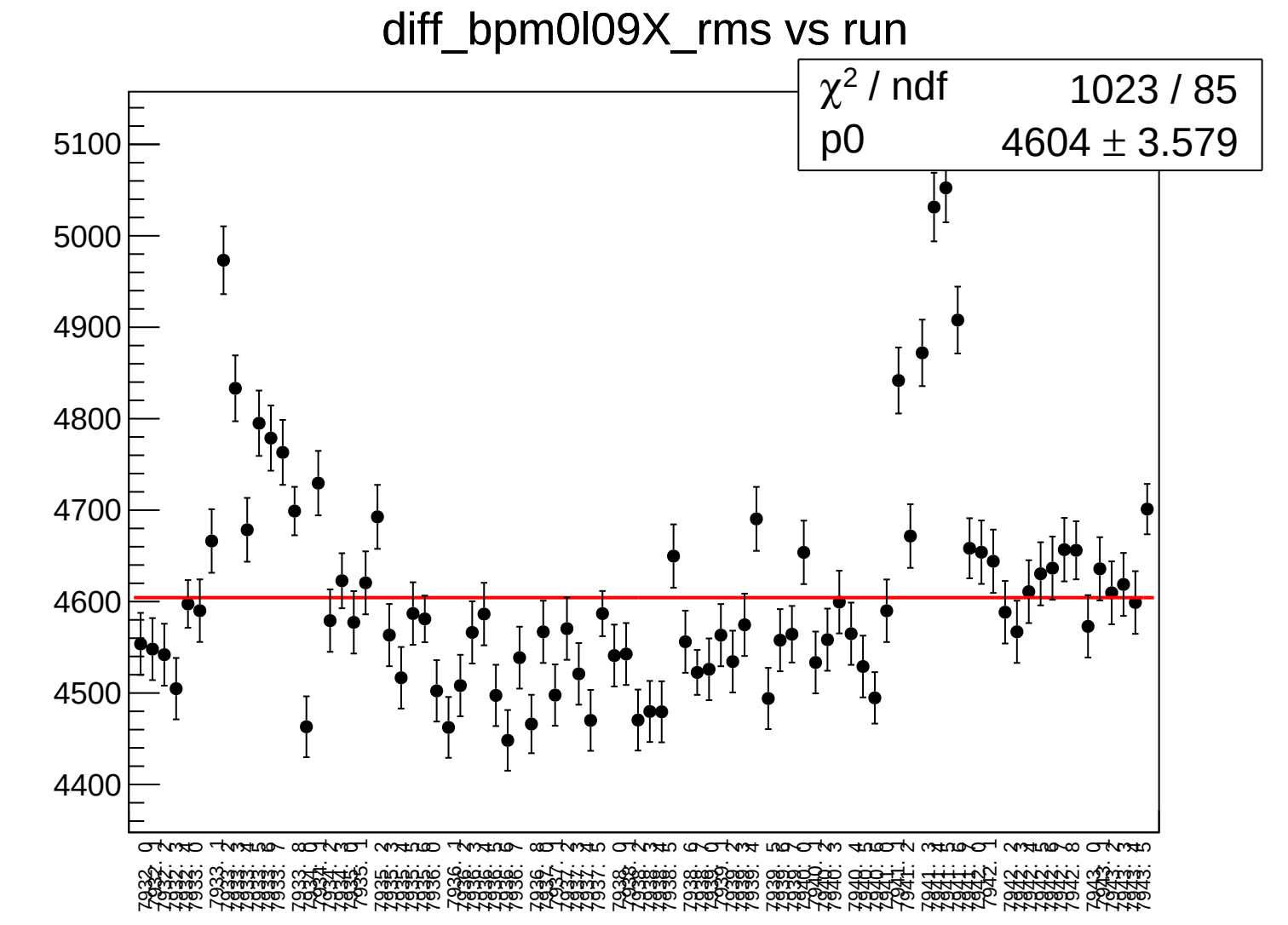

diff_bpm0l08Y_mean vs run
χ² / ndf 97.54 / 85
p0 6.764 ± 8.871
pull
Entries 86
Mean −65.43
Std Dev 116.1

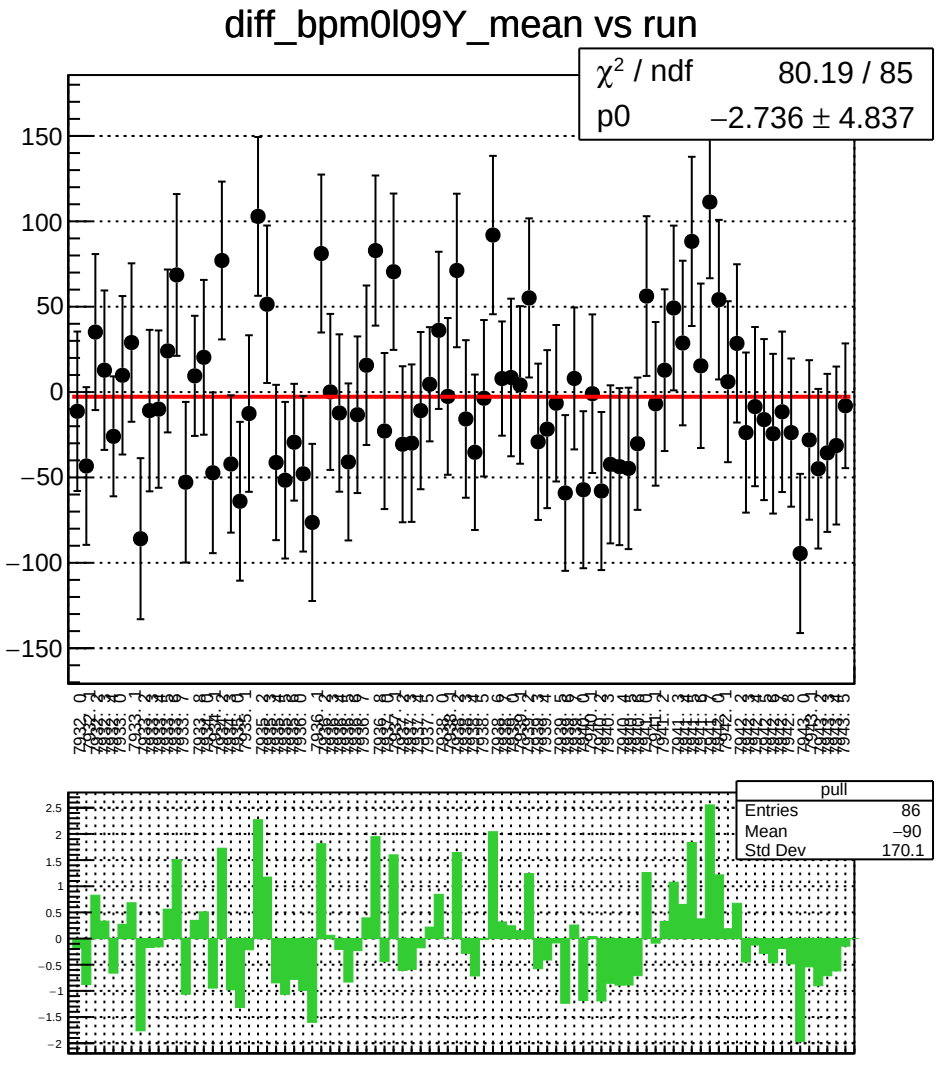

pull1D
Entries 86
Mean −0.02633
Std Dev 1.065

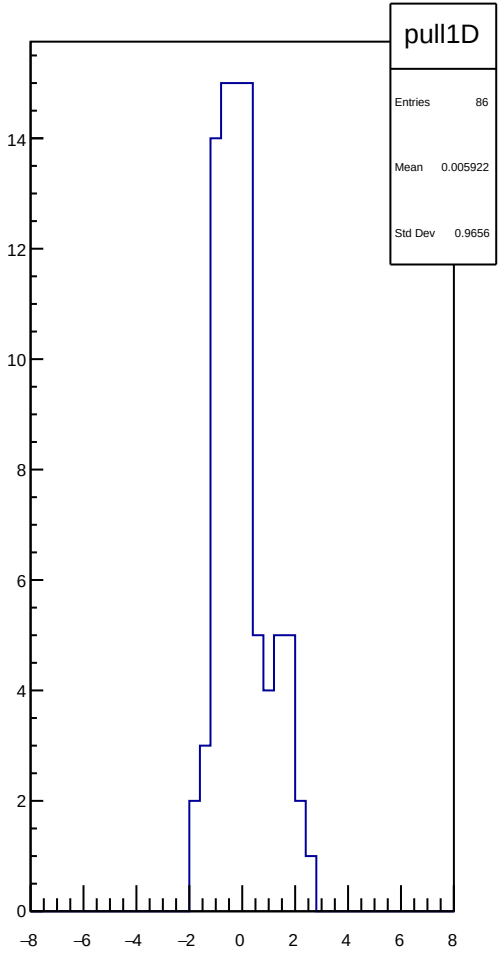

diff_bpm0l08Y_rms vs run
χ^2 / ndf 7617 / 85
p0 8055 ± 6.273
10500
10000
9500
9000
8500
8000
7500
7000
6500

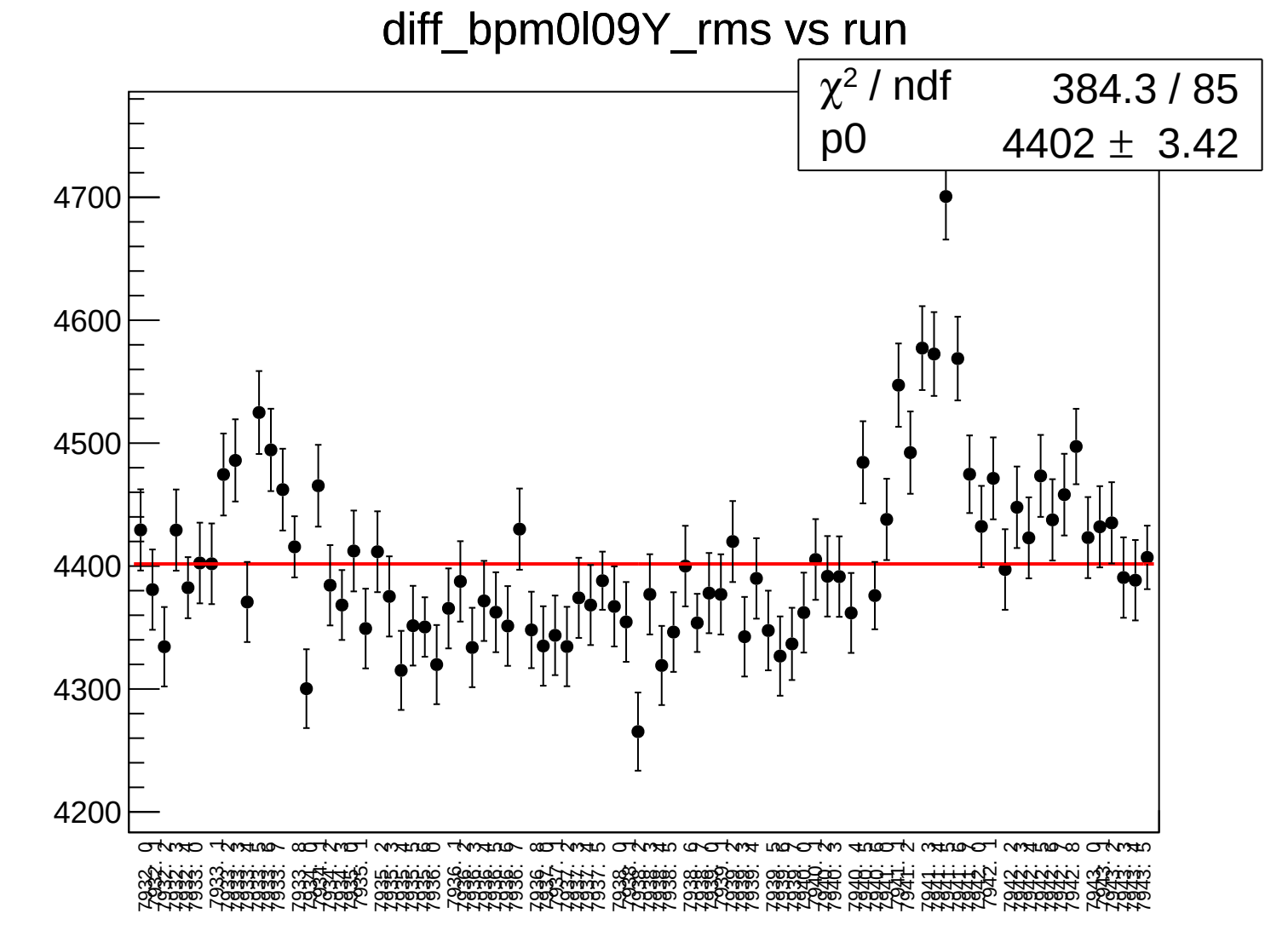

diff_bpm0l09X_mean vs run
χ^2 / ndf 83.85 / 85
p0 9.092 ± 5.061
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 8.049
Std Dev 57.43
2
1
0
−1
−2

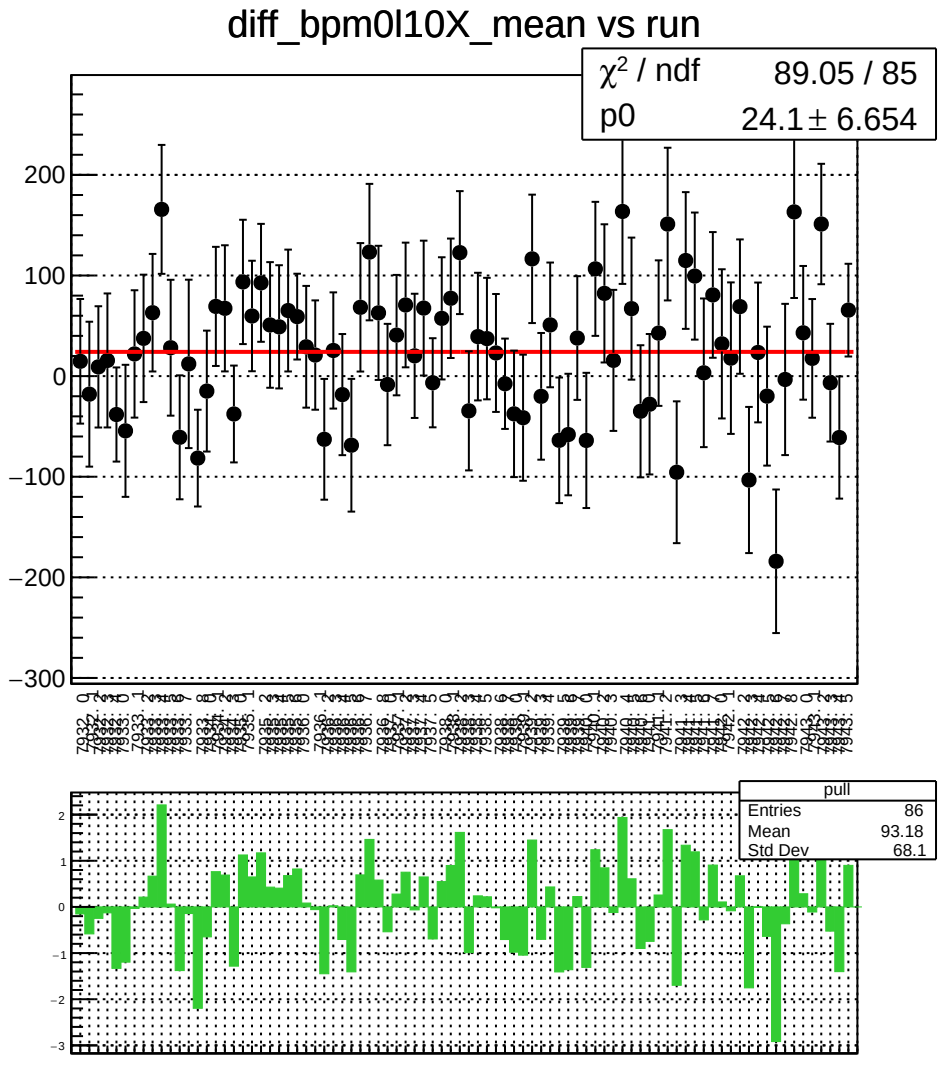

pull1D
Entries 86
Mean −0.007956
Std Dev 0.9874
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

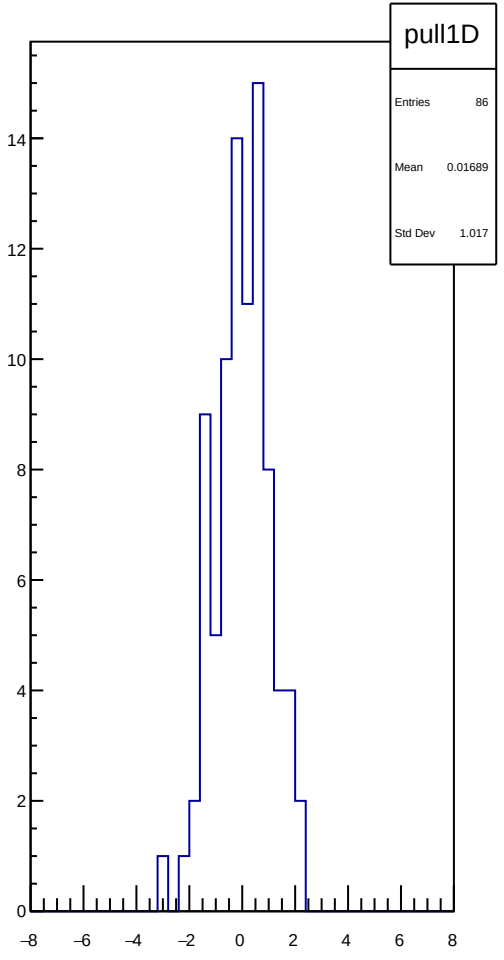

diff_bpm0l09X_rms vs run
χ^2 / ndf 1023 / 85
p0 4604 ± 3.579
5100
5000
4900
4800
4700
4600
4500
4400

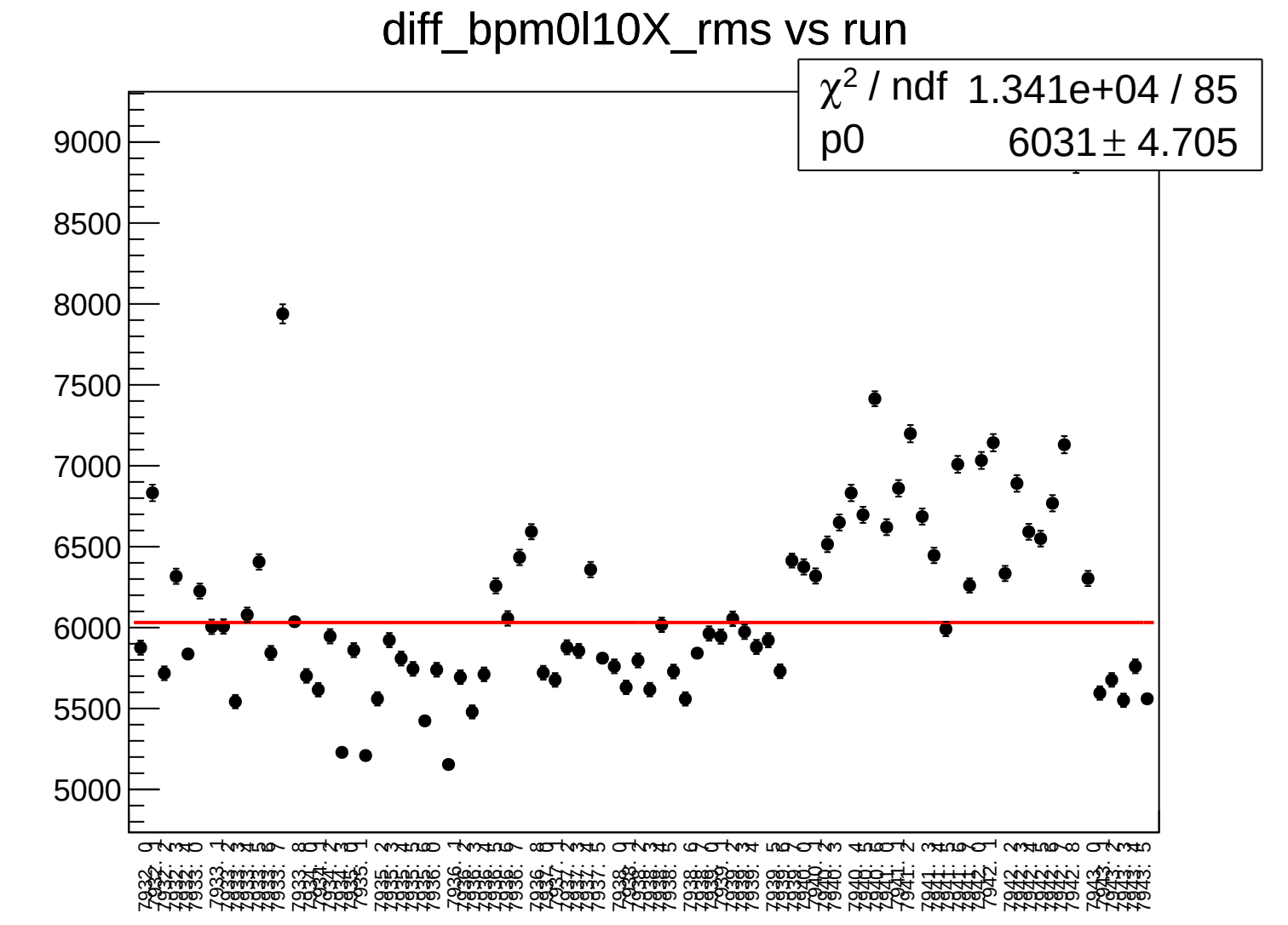

diff_bpm0l09Y_mean vs run
χ² / ndf 80.19 / 85
p0 −2.736 ± 4.837
pull
Entries 86
Mean −90
Std Dev 170.1

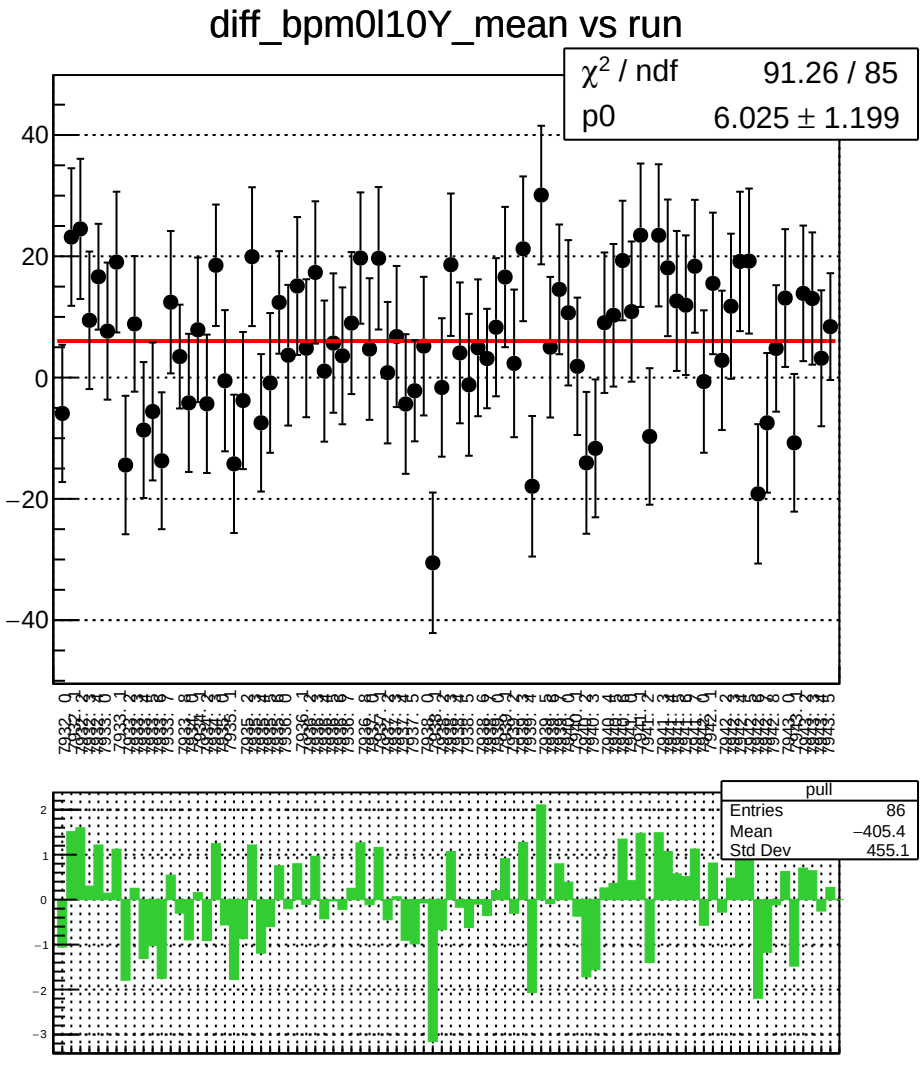

pull1D
Entries 86
Mean 0.005922
Std Dev 0.9656

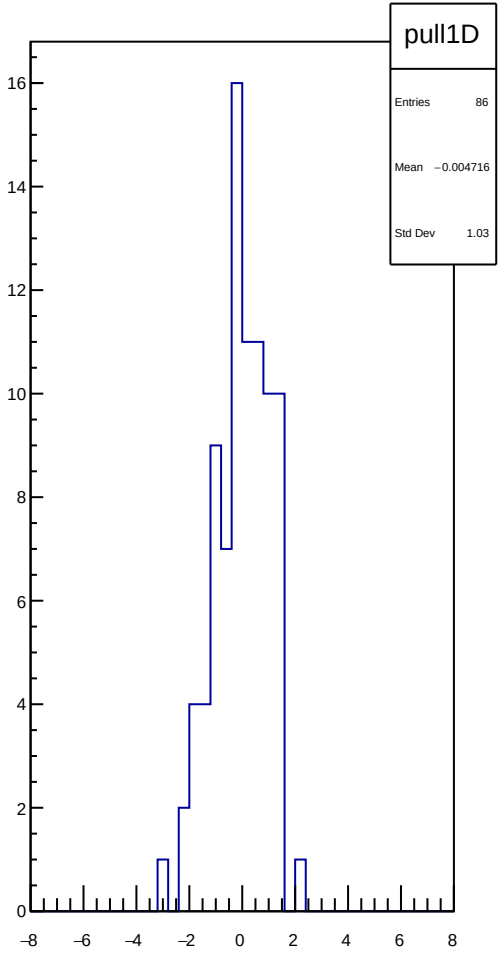

diff_bpm0l09Y_rms vs run
χ² / ndf 384.3 / 85
p0 4402 ± 3.42
4700
4600
4500
4400
4300
4200

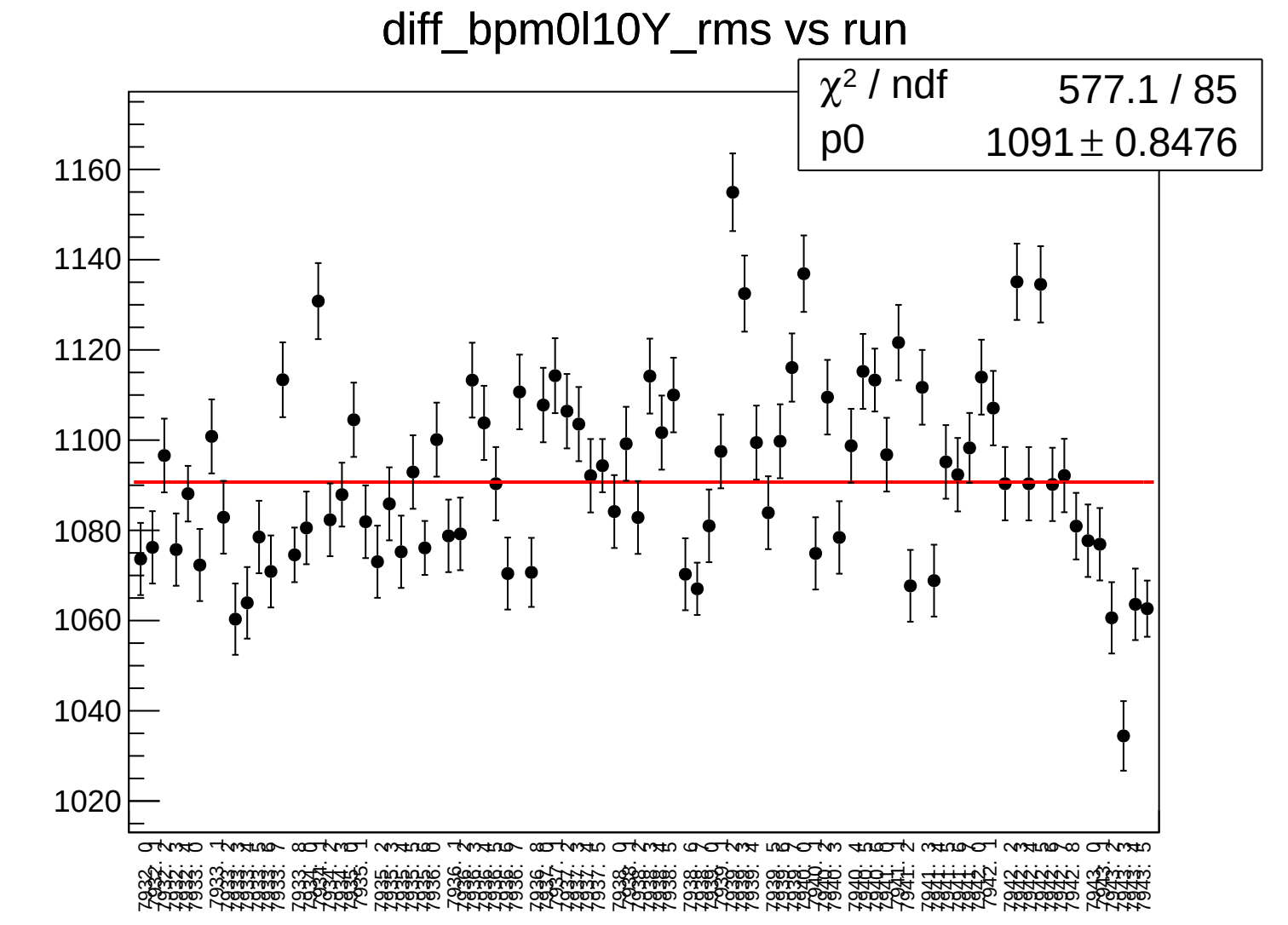

diff_bpm0l10X_mean vs run
χ² / ndf 89.05 / 85
p0 24.1 ± 6.654
pull
Entries 86
Mean 93.18
Std Dev 68.1

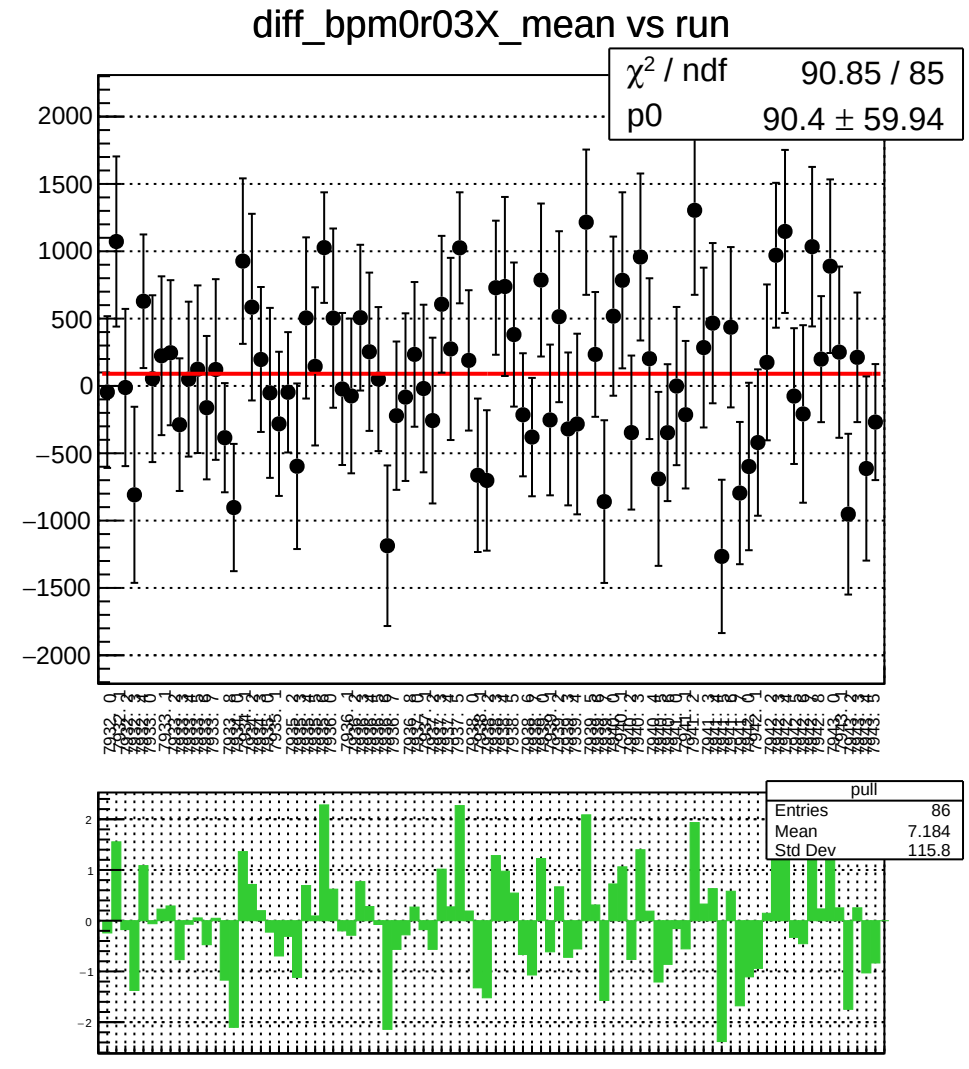

pull1D
Entries 86
Mean 0.01689
Std Dev 1.017

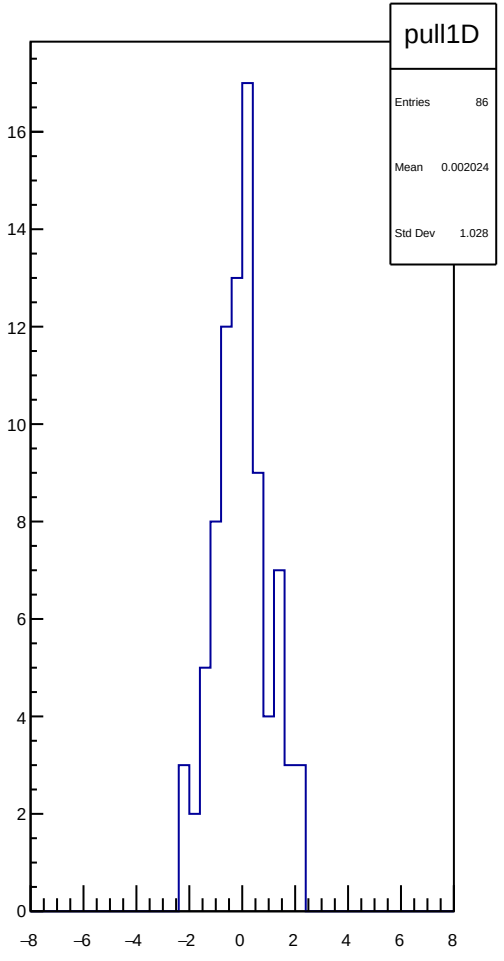

diff_bpm0l10X_rms vs run
χ^2 / ndf 1.341e+04 / 85
p0 6031 ± 4.705
9000
8500
8000
7500
7000
6500
6000
5500
5000

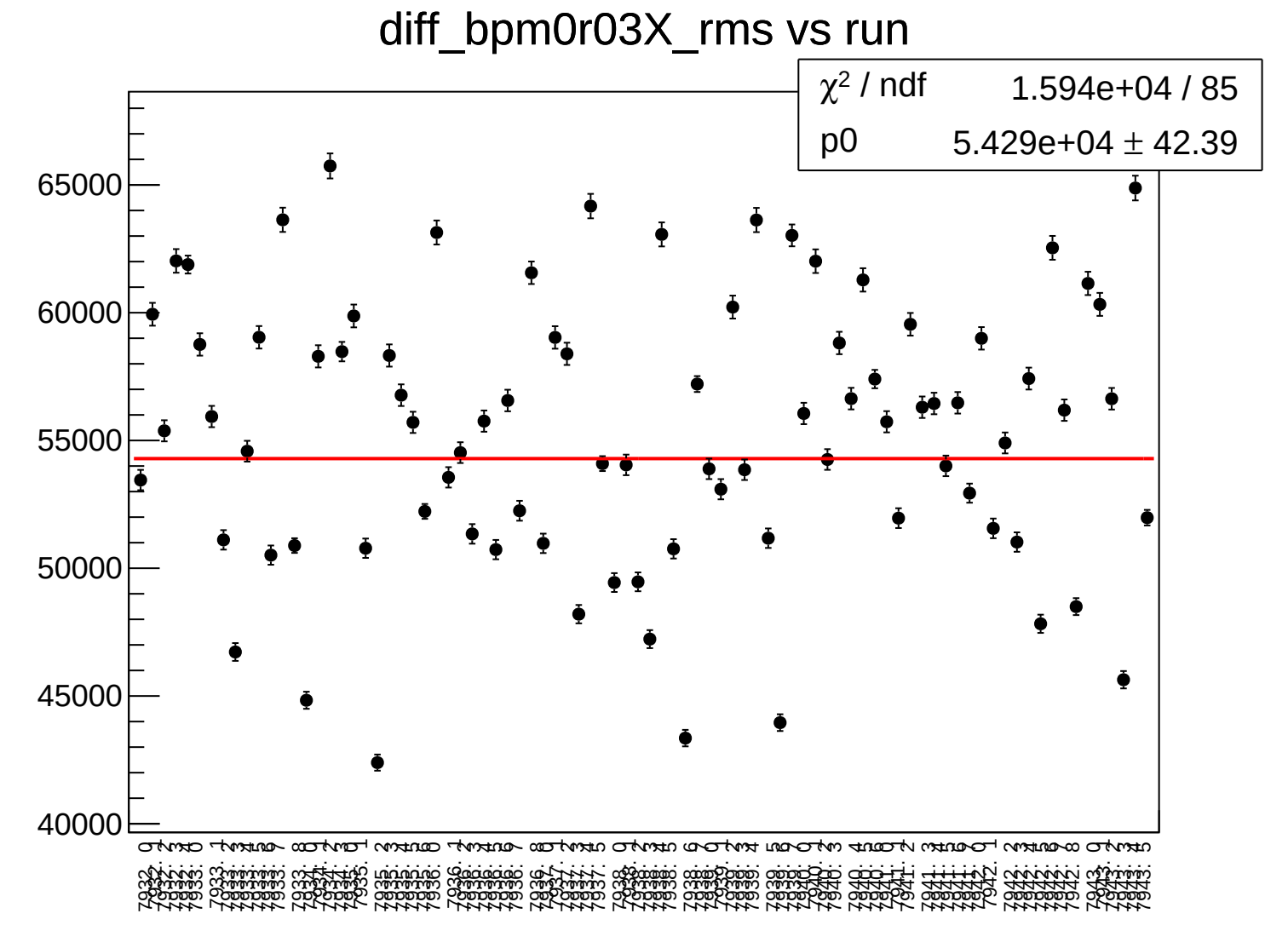

diff_bpm0l10Y_mean vs run
χ^2 / ndf 91.26 / 85
p0 6.025 ± 1.199
pull
Entries 86
Mean −405.4
Std Dev 455.1

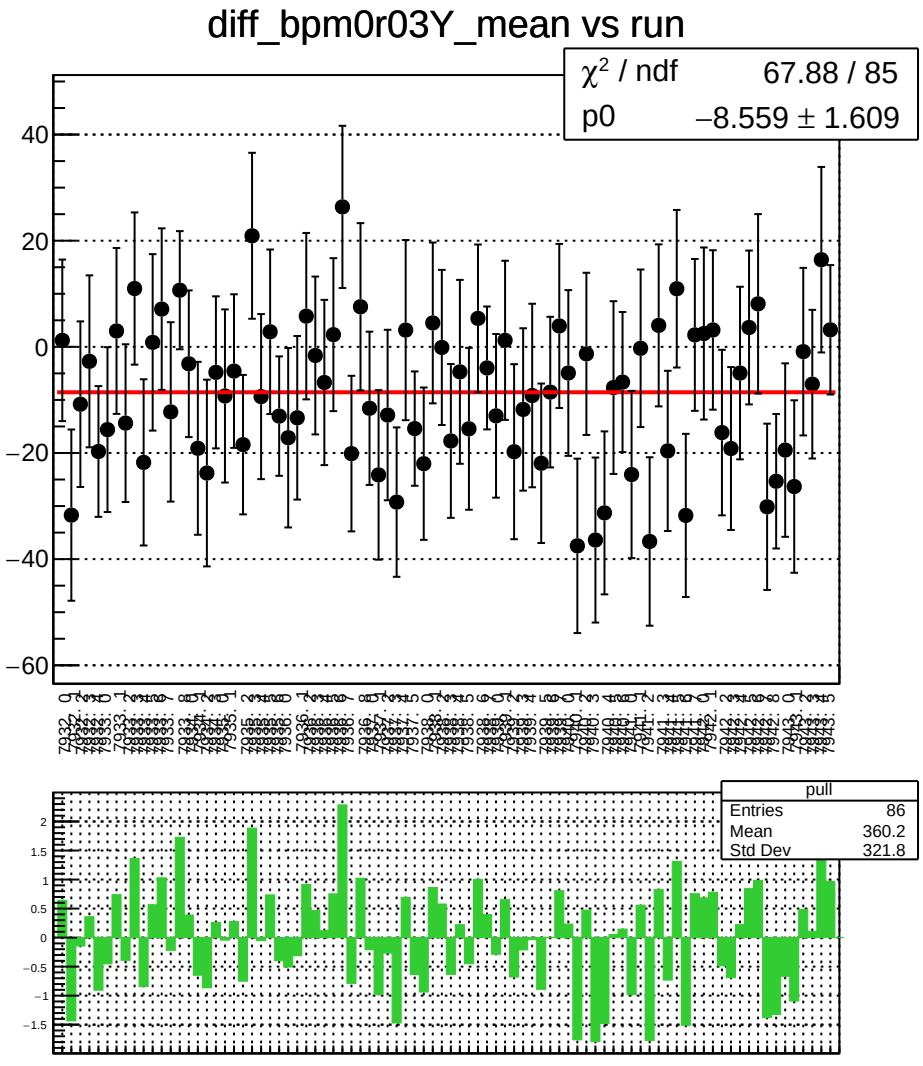

pull1D
Entries 86
Mean −0.004716
Std Dev 1.03

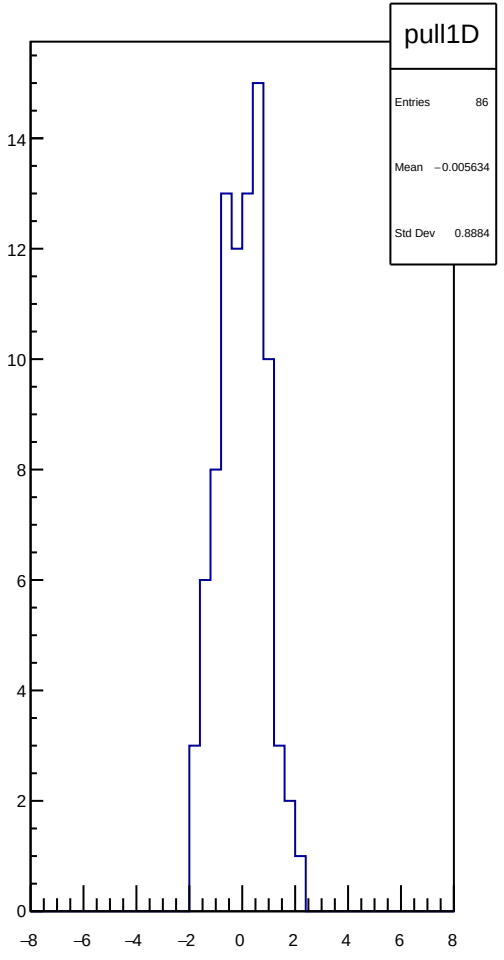

diff_bpm0l10Y_rms vs run
χ² / ndf 577.1 / 85
p0 1091 ± 0.8476
1160
1140
1120
1100
1080
1060
1040
1020

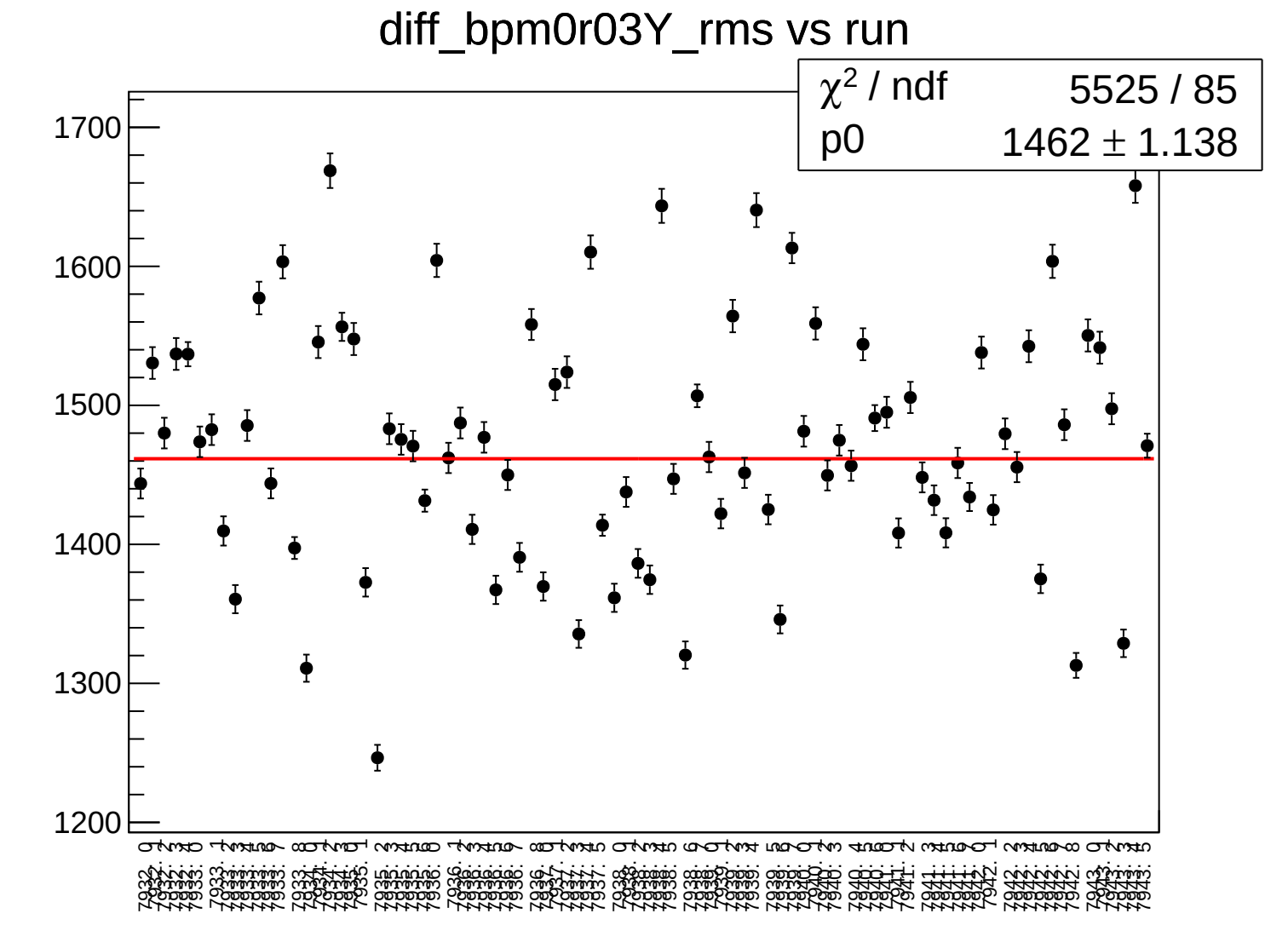

diff_bpm0r03X_mean vs run
χ² / ndf 90.85 / 85
p0 90.4 ± 59.94
pull
Entries 86
Mean 7.184
Std Dev 115.8

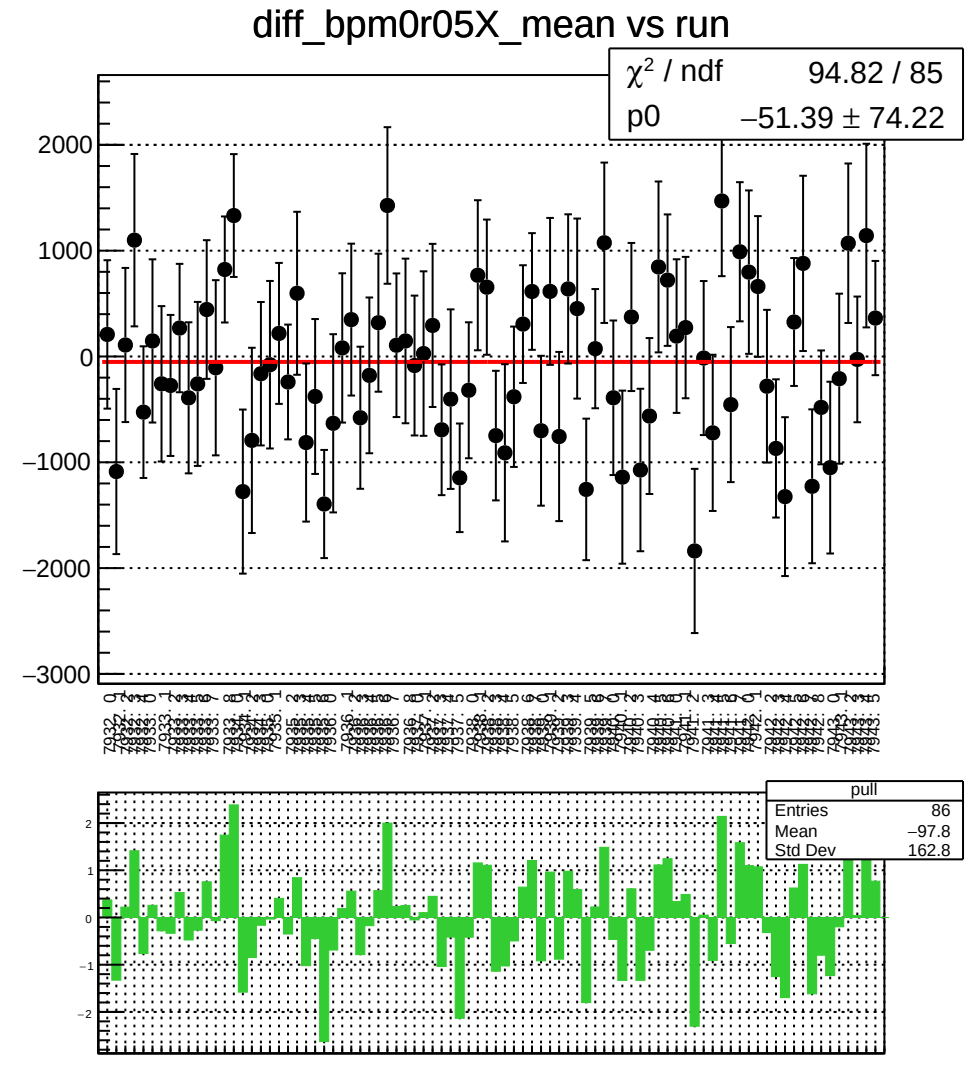

pull1D
Entries 86
Mean 0.002024
Std Dev 1.028

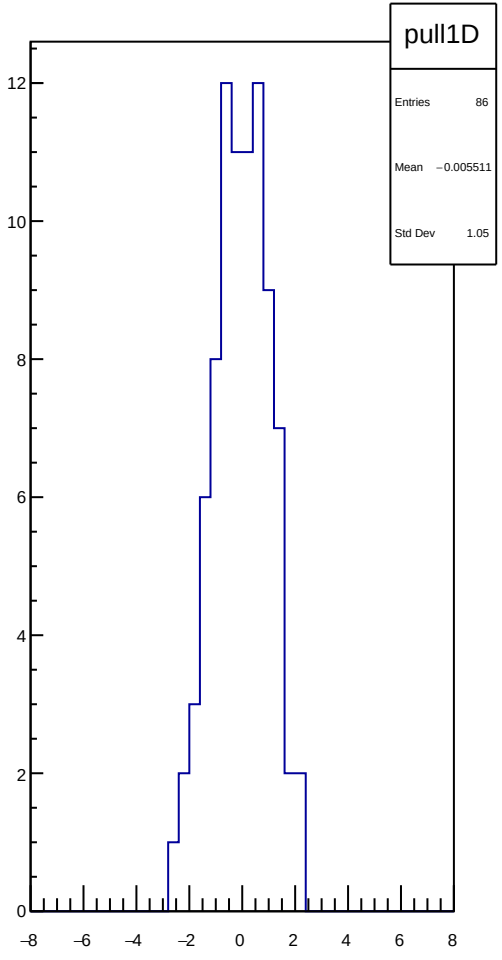

diff_bpm0r03X_rms vs run
χ² / ndf 1.594e+04 / 85
p0 5.429e+04 ± 42.39
65000
60000
55000
50000
45000
40000

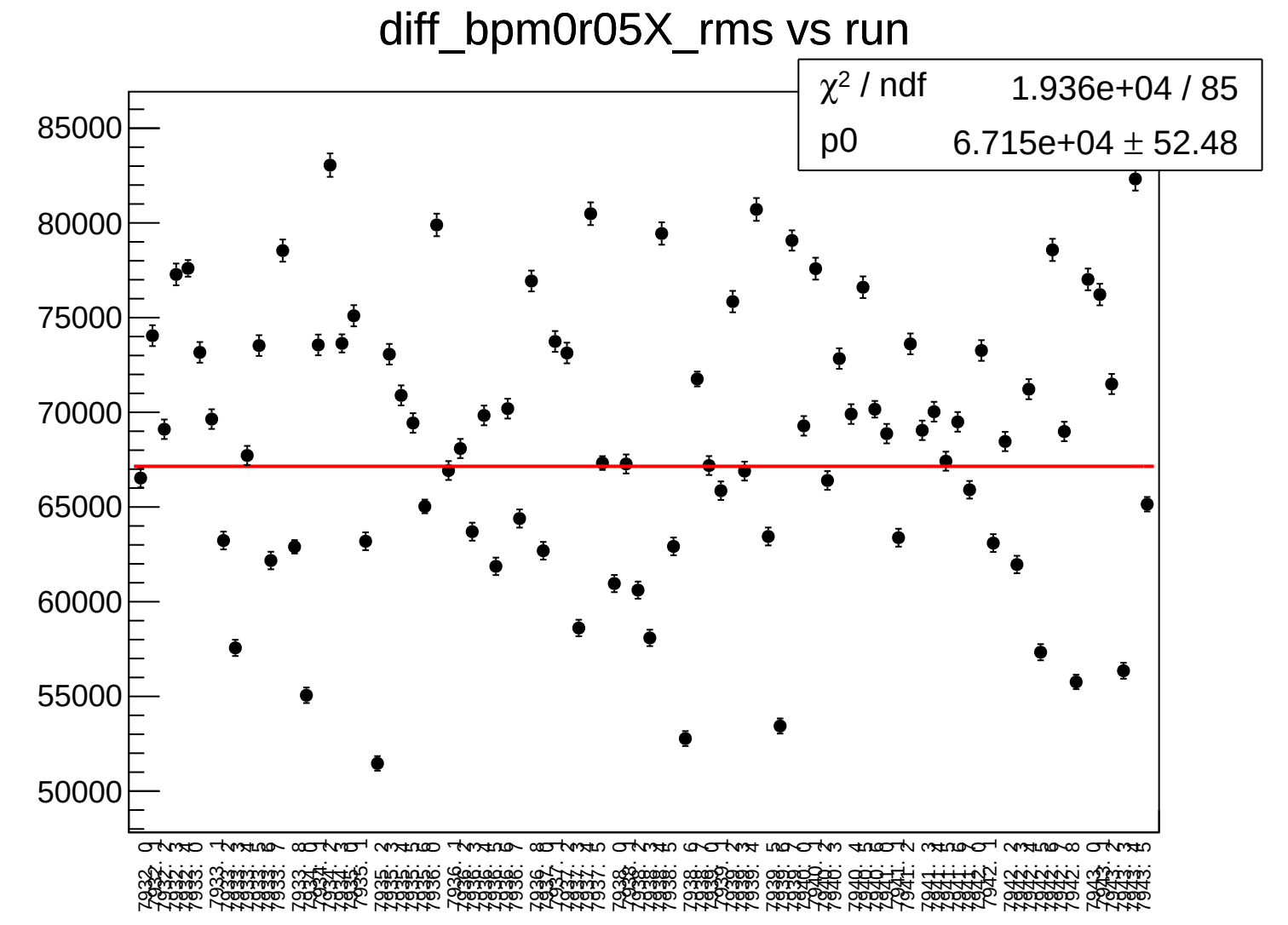

diff_bpm0r03Y_mean vs run
χ² / ndf 67.88 / 85
p0 −8.559 ± 1.609
pull
Entries 86
Mean 360.2
Std Dev 321.8

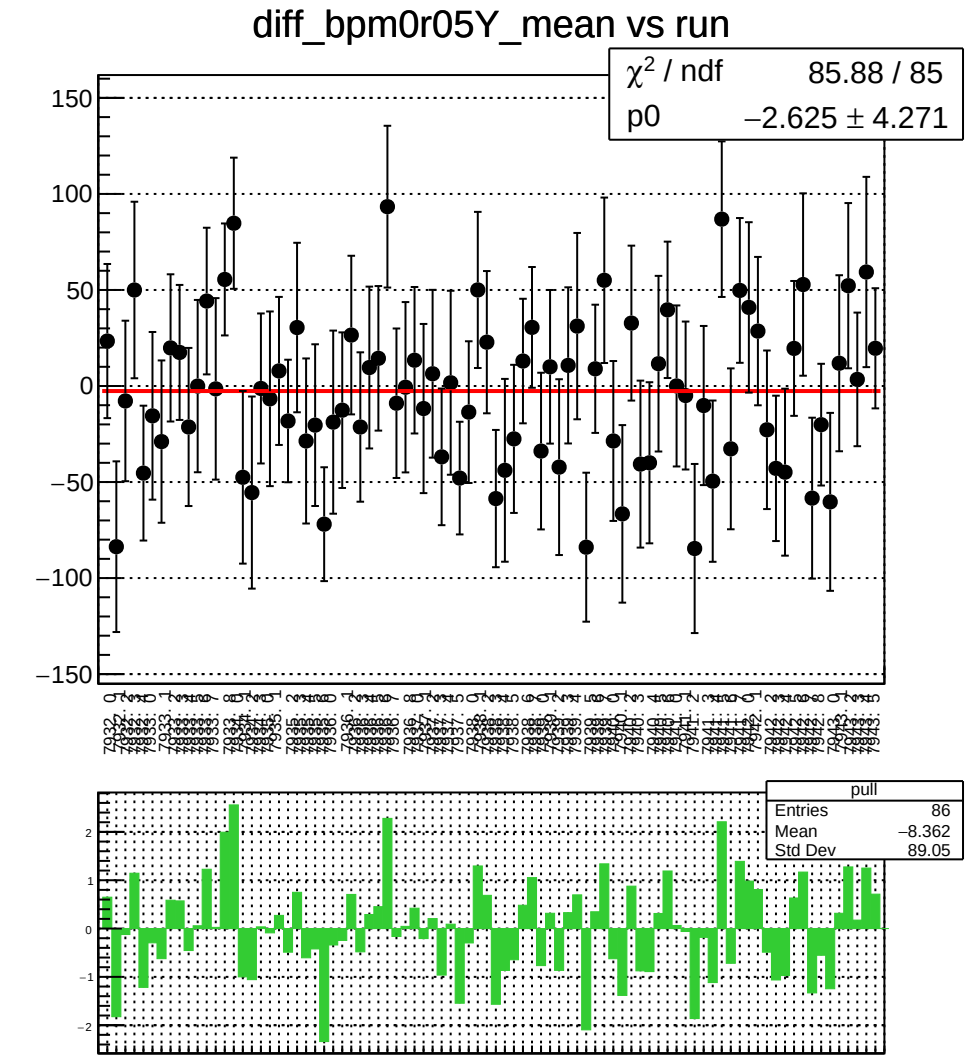

pull1D
Entries 86
Mean −0.005634
Std Dev 0.8884

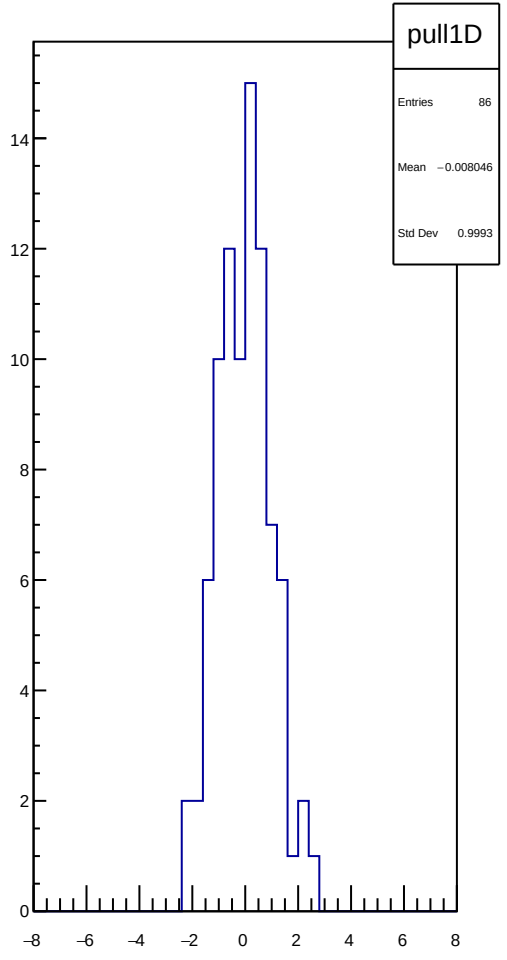

diff_bpm0r03Y_rms vs run
χ² / ndf 5525 / 85
p0 1462 ± 1.138
1700
1600
1500
1400
1300
1200

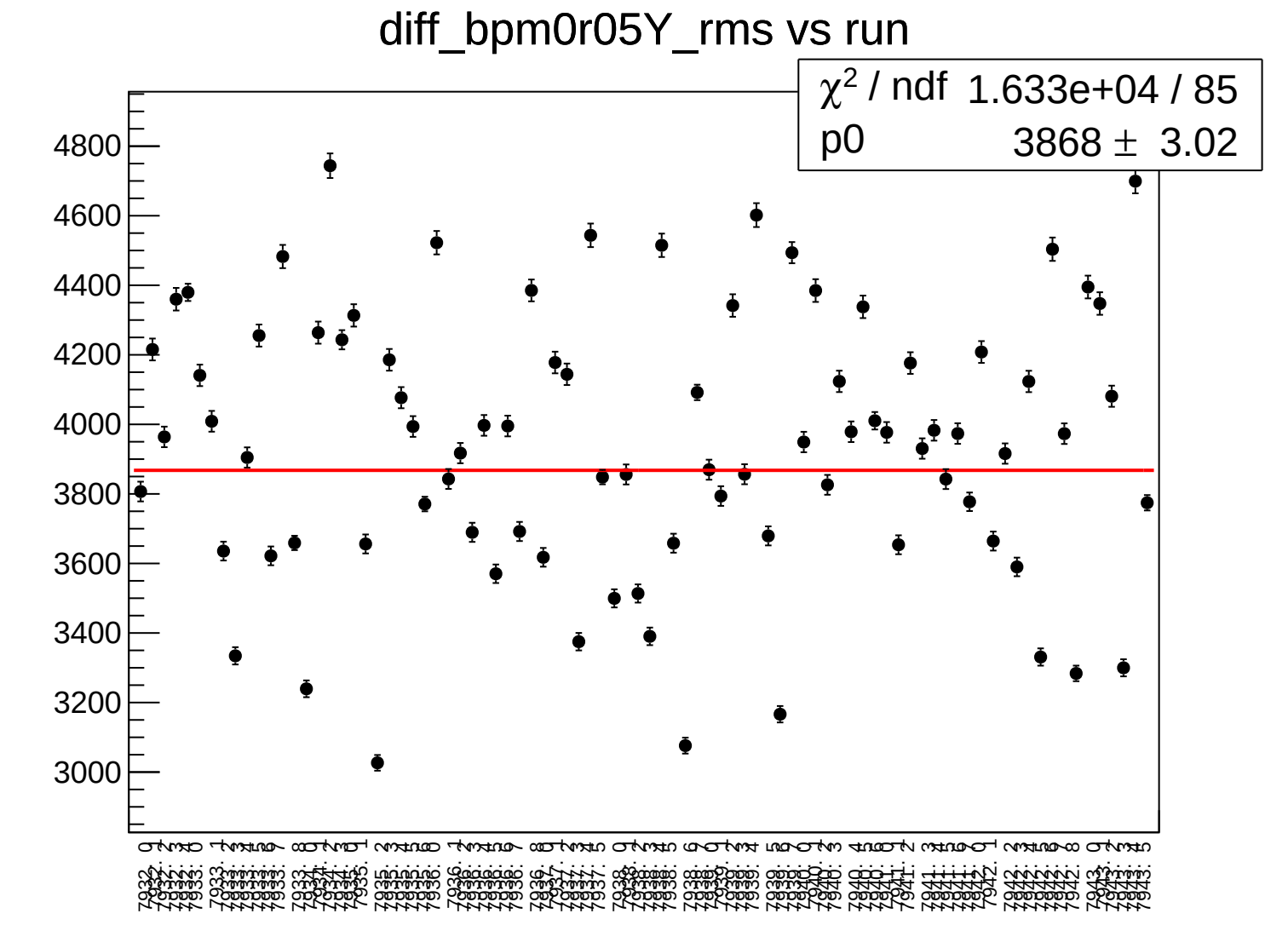

diff_bpm0r05X_mean vs run
χ² / ndf 94.82 / 85
p0 −51.39 ± 74.22
pull
Entries 86
Mean −97.8
Std Dev 162.8

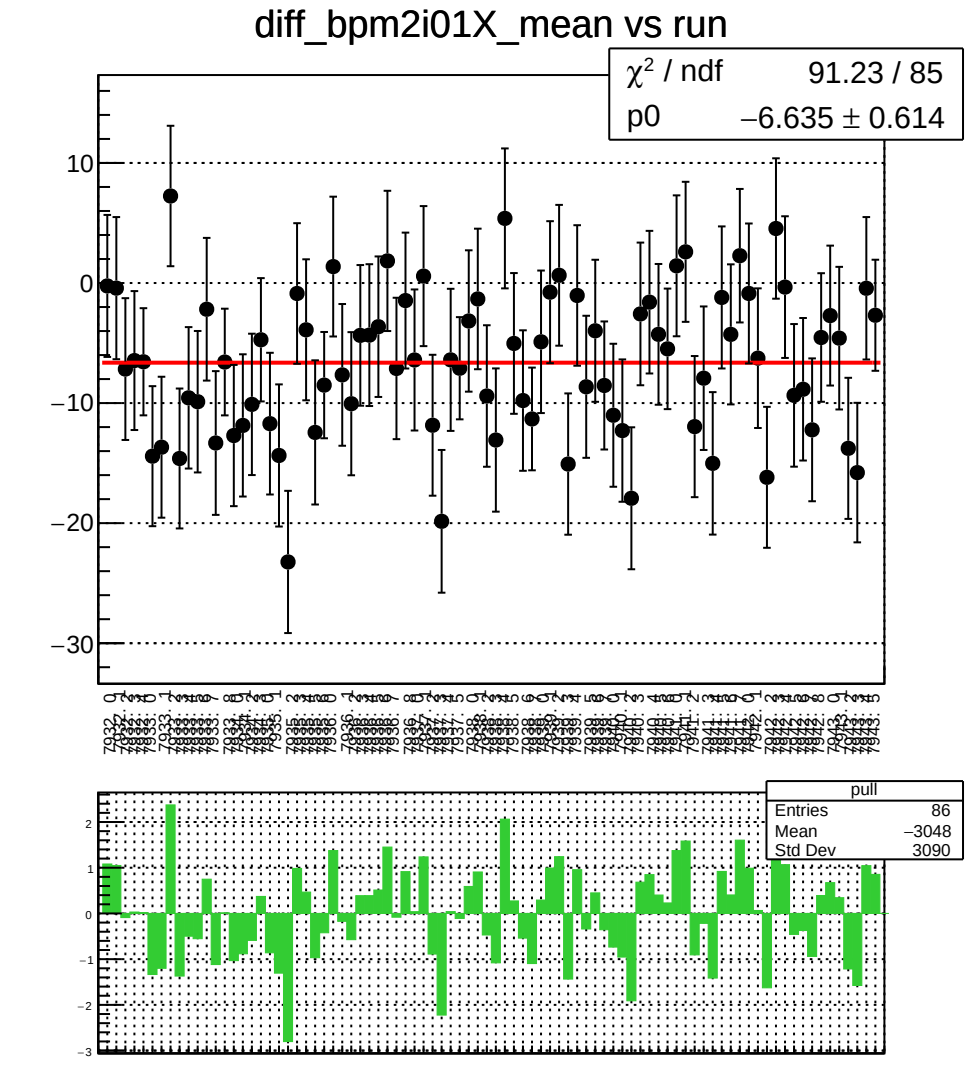

pull1D
Entries 86
Mean −0.005511
Std Dev 1.05

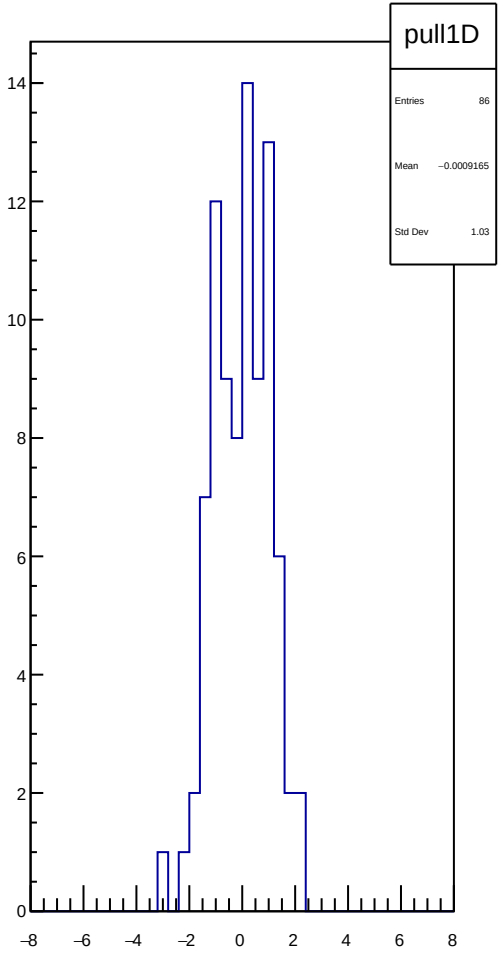

diff_bpm0r05X_rms vs run
χ² / ndf 1.936e+04 / 85
p0 6.715e+04 ± 52.48
85000
80000
75000
70000
65000
60000
55000
50000

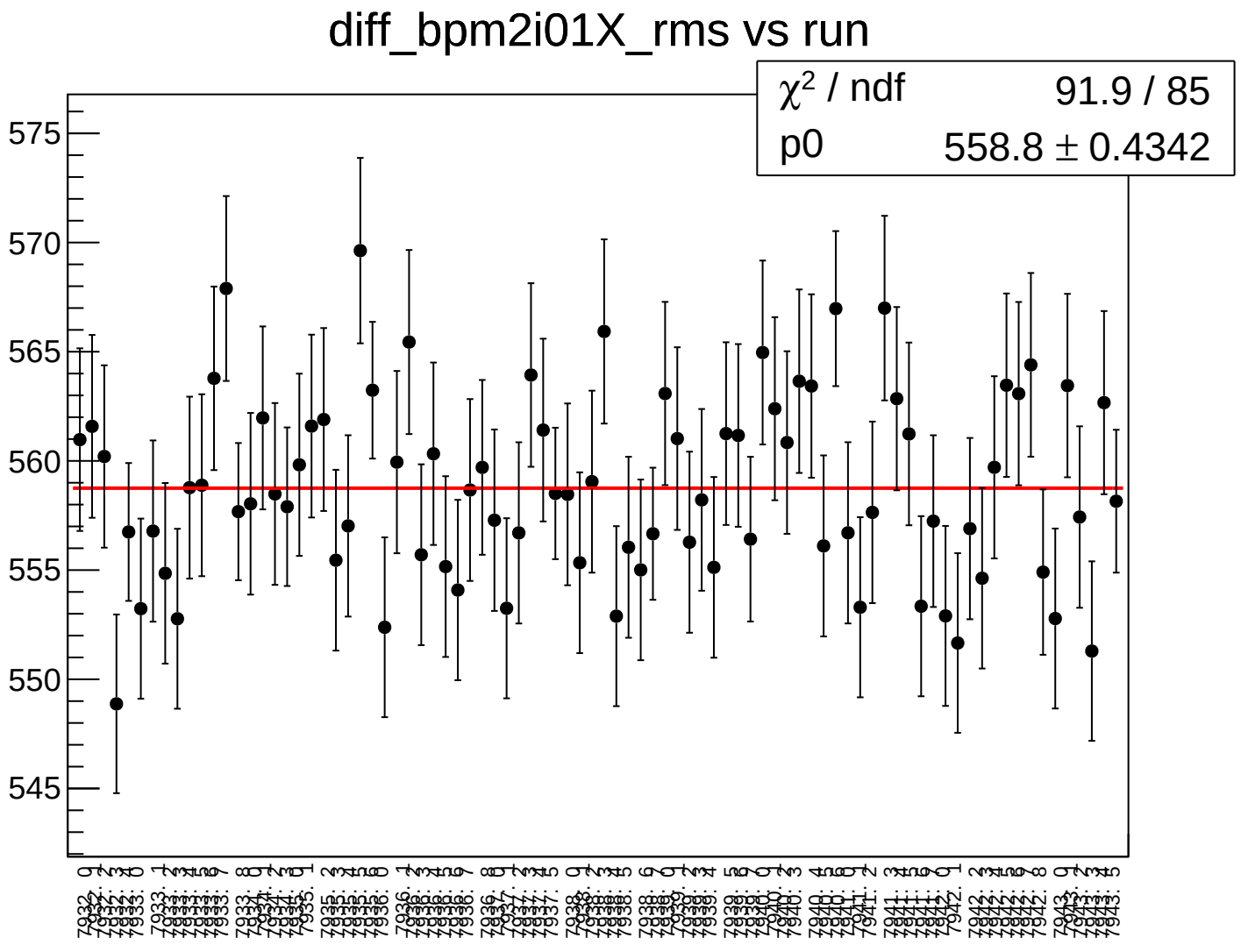

diff_bpm0r05Y_mean vs run
χ² / ndf 85.88 / 85
p0 −2.625 ± 4.271
pull
Entries 86
Mean −8.362
Std Dev 89.05

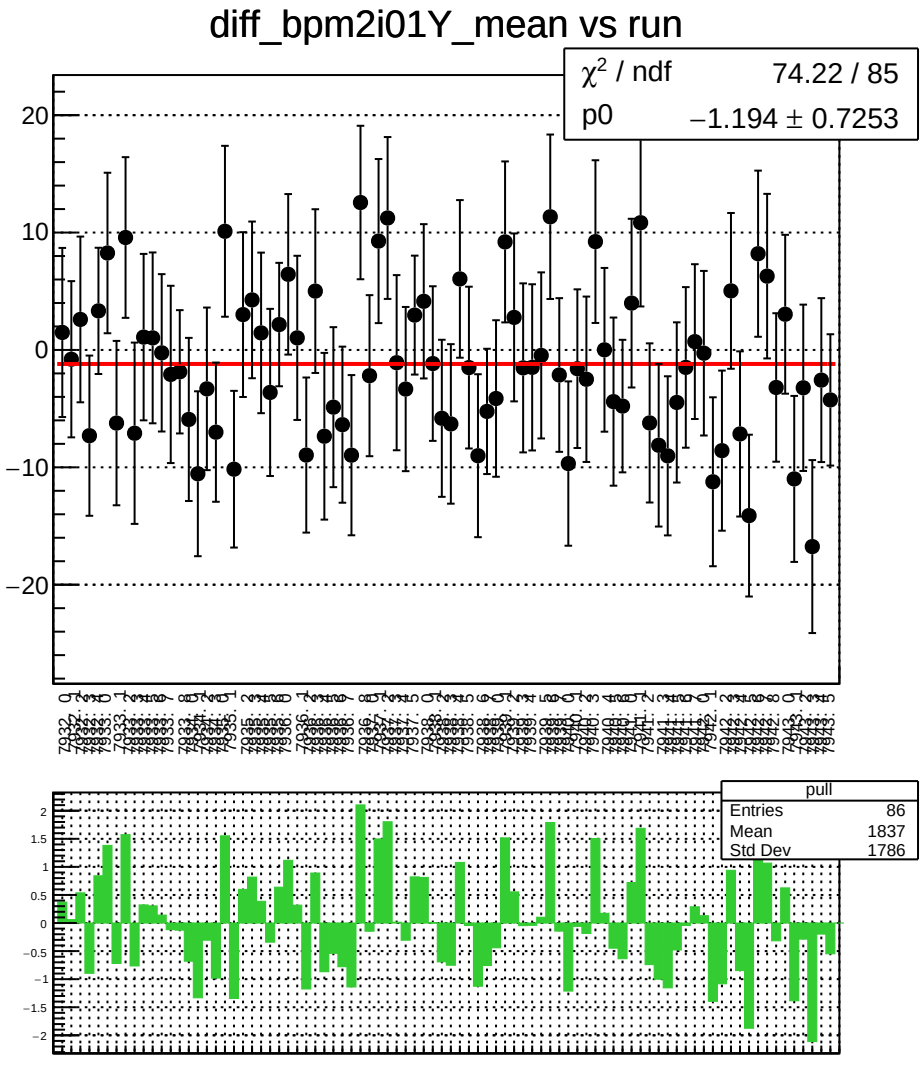

pull1D
Entries 86
Mean −0.008046
Std Dev 0.9993

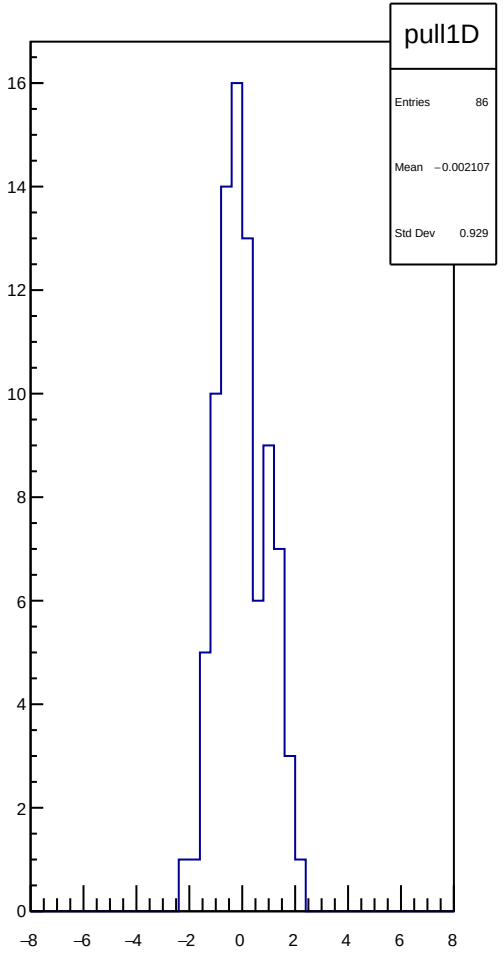

diff_bpm0r05Y_rms vs run
χ² / ndf 1.633e+04 / 85
p0 3868 ± 3.02
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000

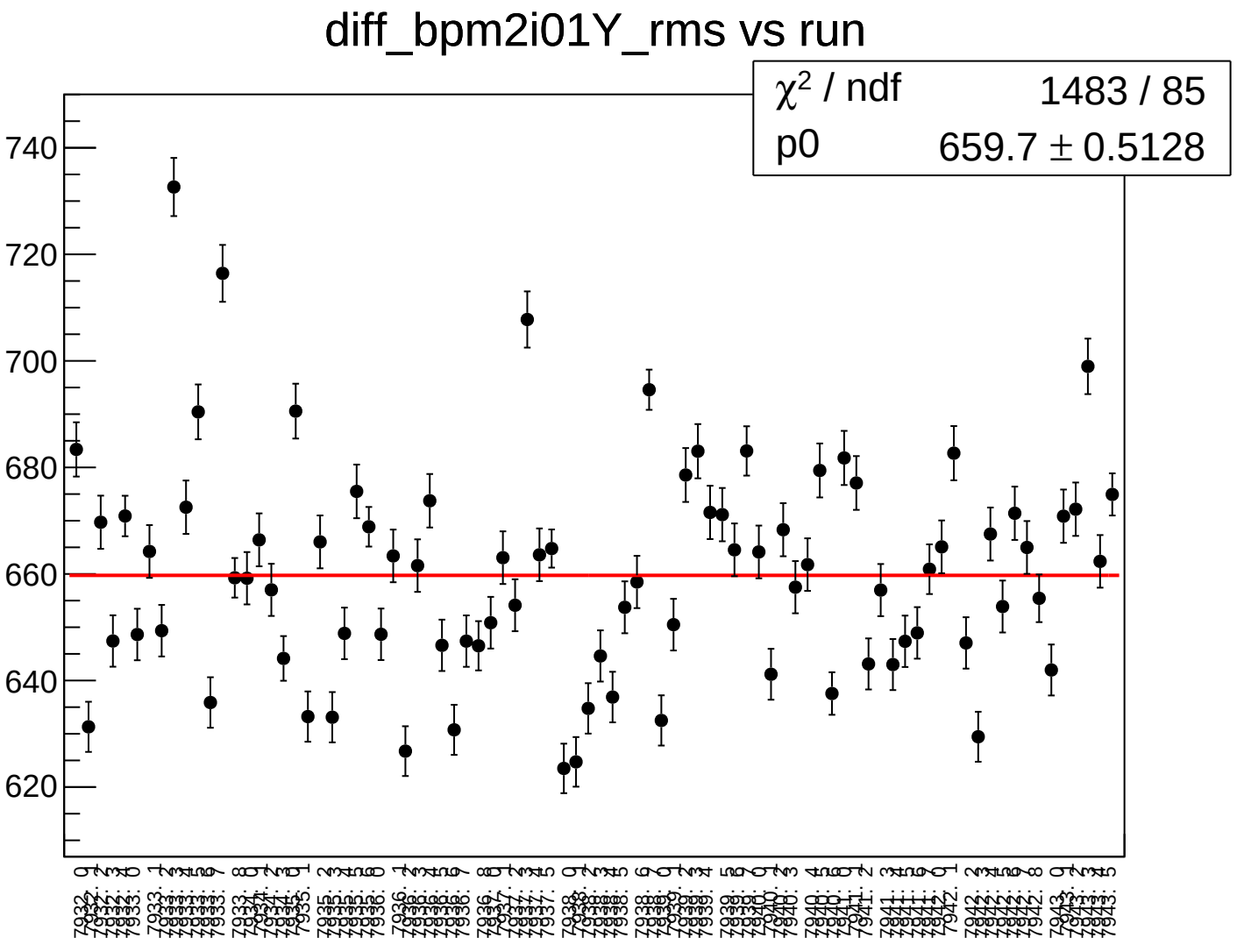

diff_bpm2i01X_mean vs run
χ² / ndf 91.23 / 85
p0 −6.635 ± 0.614
pull
Entries 86
Mean −3048
Std Dev 3090

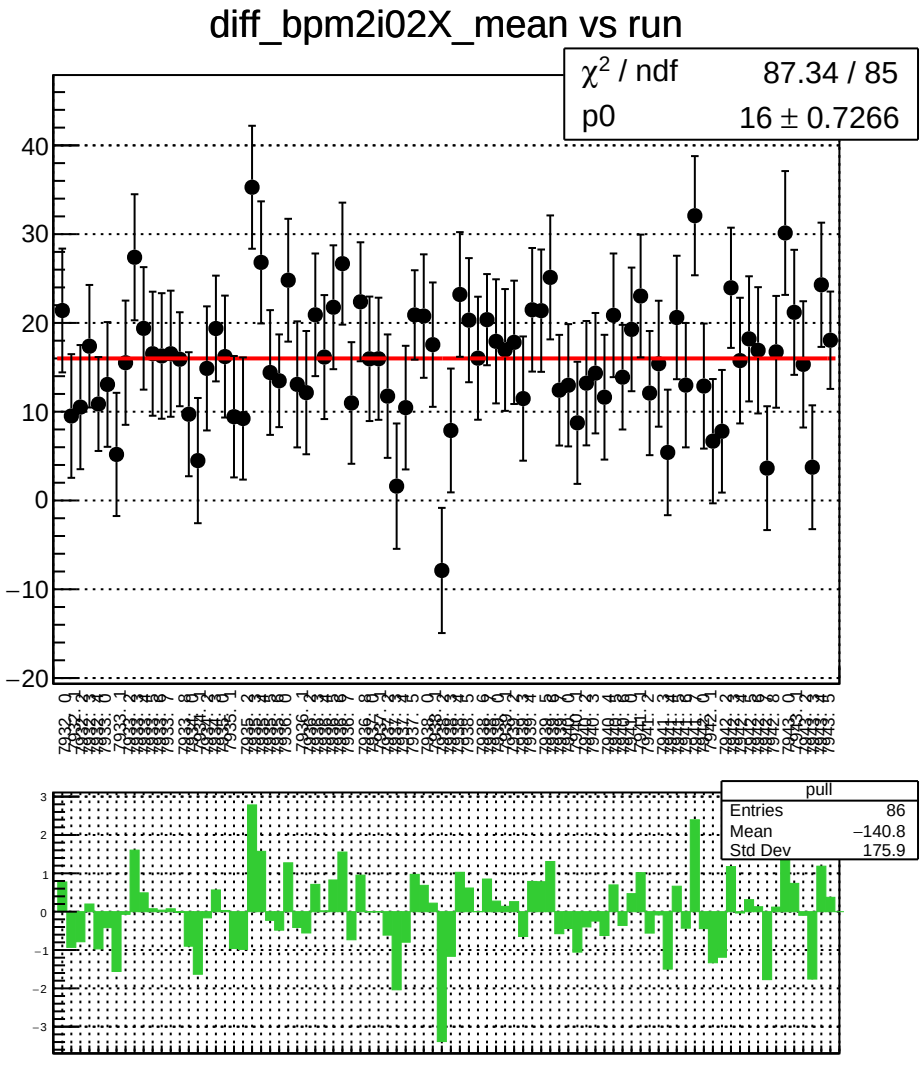

pull1D
Entries 86
Mean −0.0009165
Std Dev 1.03

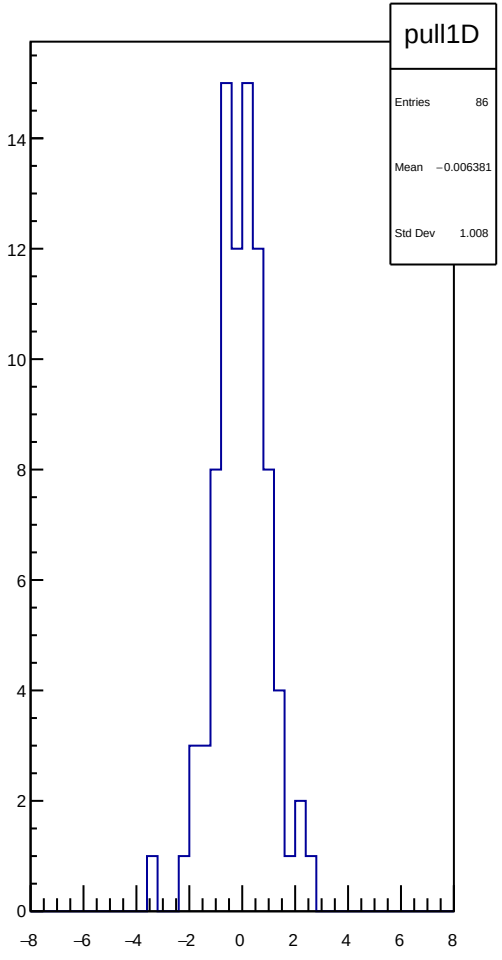

diff_bpm2i01X_rms vs run
χ² / ndf 91.9 / 85
p0 558.8 ± 0.4342
575
570
565
560
555
550
545

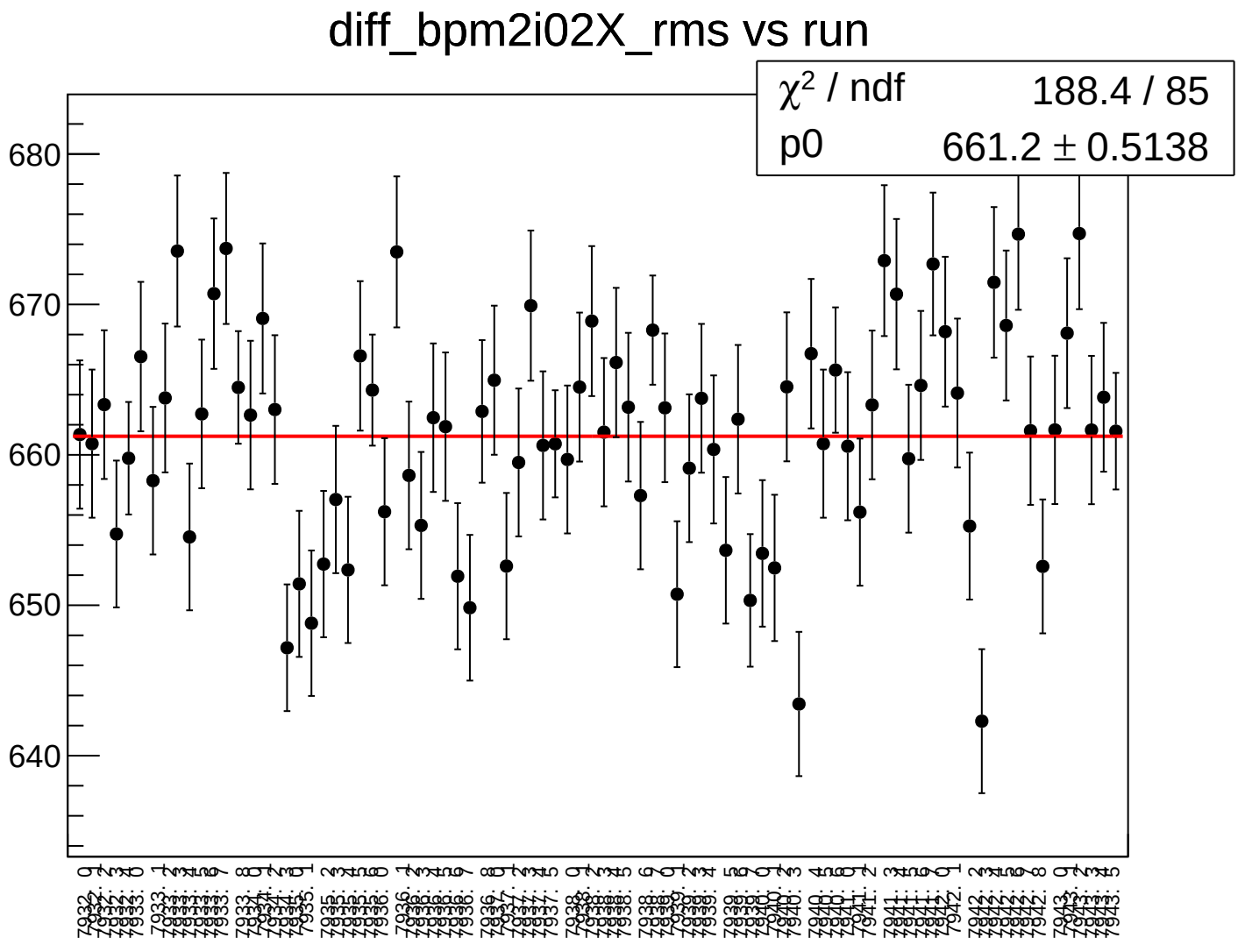

diff_bpm2i01Y_mean vs run
χ² / ndf 74.22 / 85
p0 −1.194 ± 0.7253
pull
Entries 86
Mean 1837
Std Dev 1786

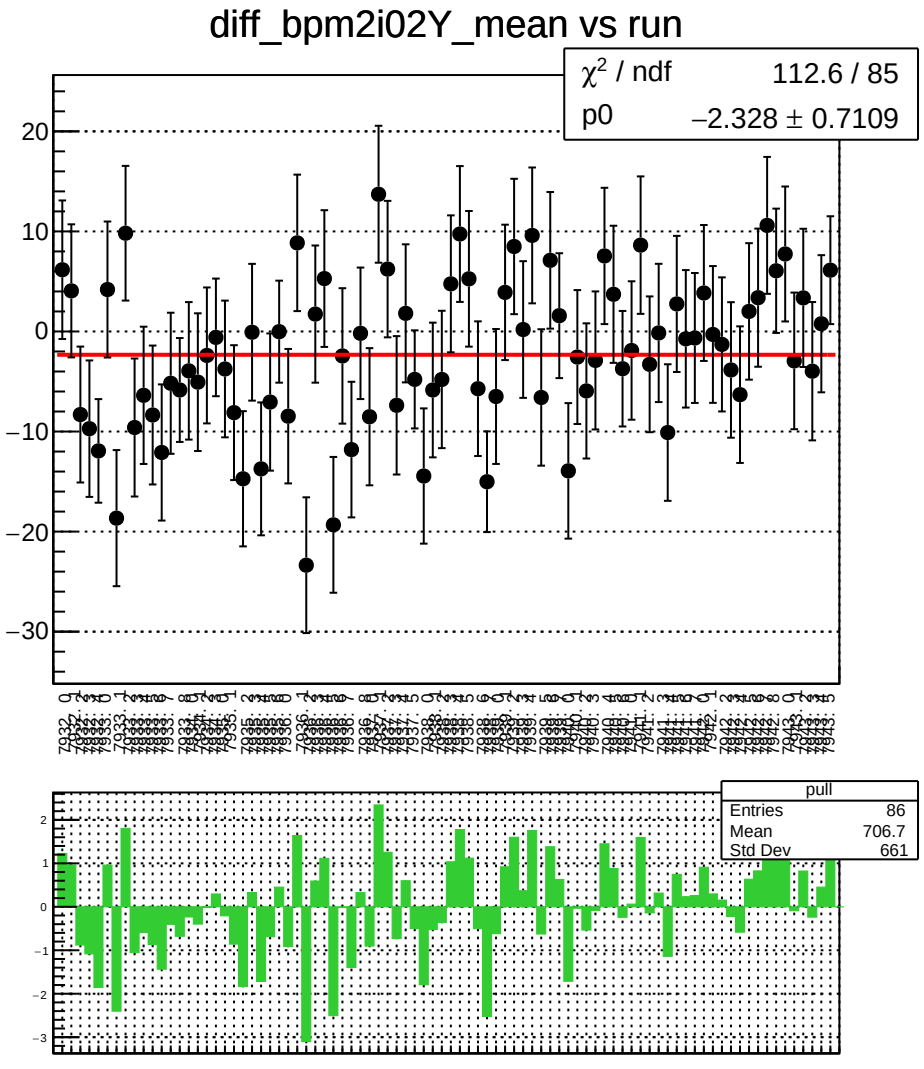

pull1D
Entries 86
Mean −0.002107
Std Dev 0.929

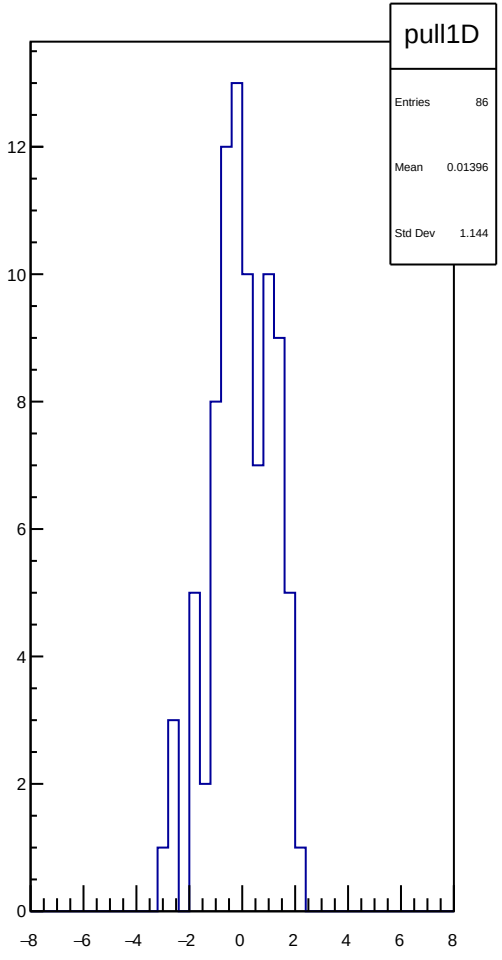

diff_bpm2i01Y_rms vs run
χ² / ndf 1483 / 85
p0 659.7 ± 0.5128
740
720
700
680
660
640
620

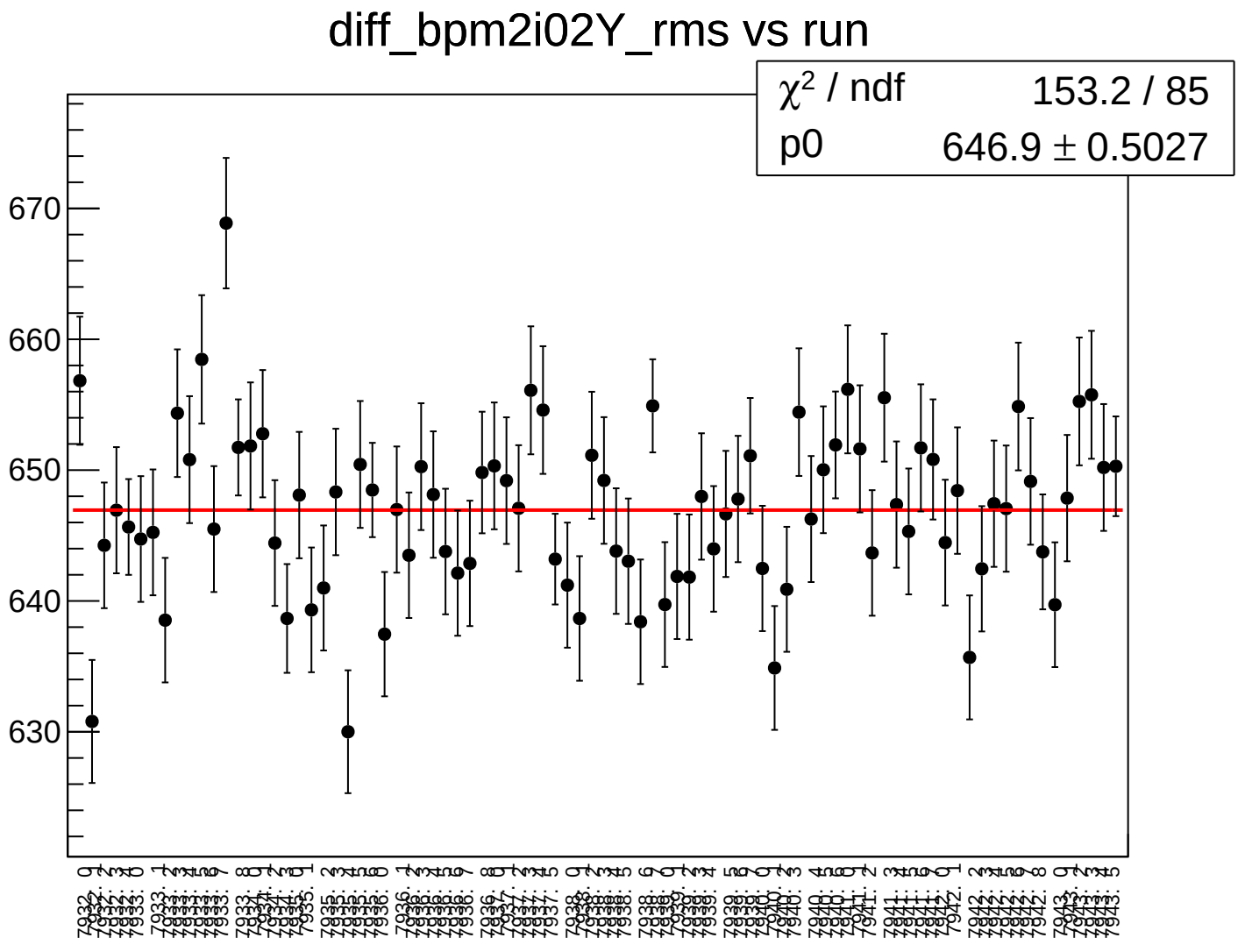

diff_bpm2i02X_mean vs run
χ^2 / ndf 87.34 / 85
p0 16 ± 0.7266
pull
Entries 86
Mean −140.8
Std Dev 175.9

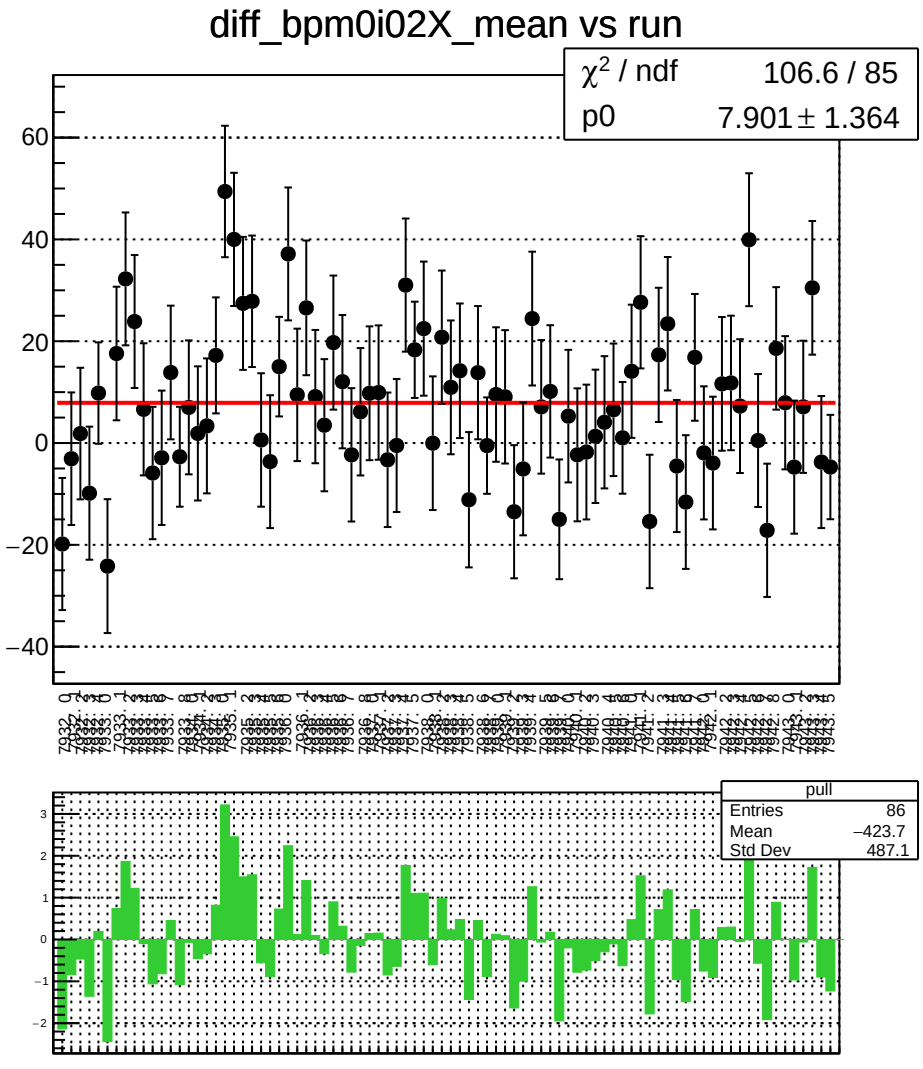

pull1D
Entries 86
Mean −0.006381
Std Dev 1.008

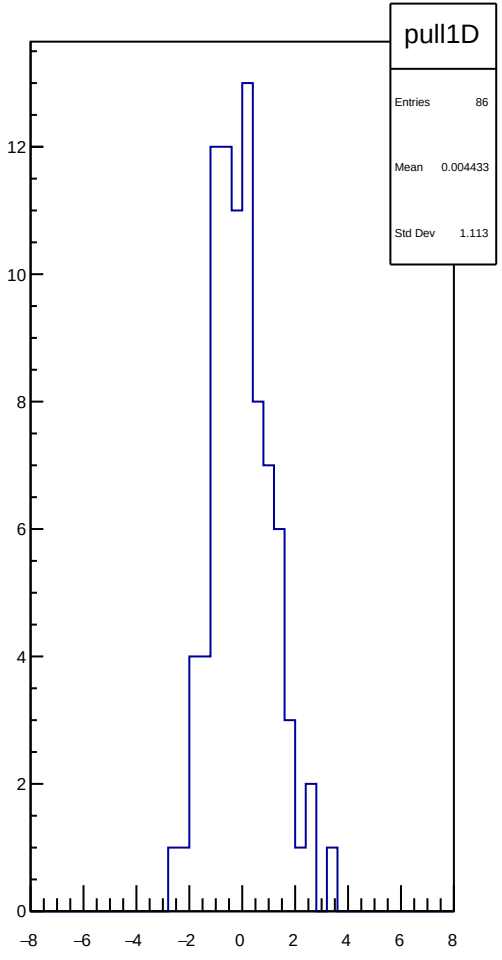

diff_bpm2i02X_rms vs run
χ² / ndf 188.4 / 85
p0 661.2 ± 0.5138
680
670
660
650
640

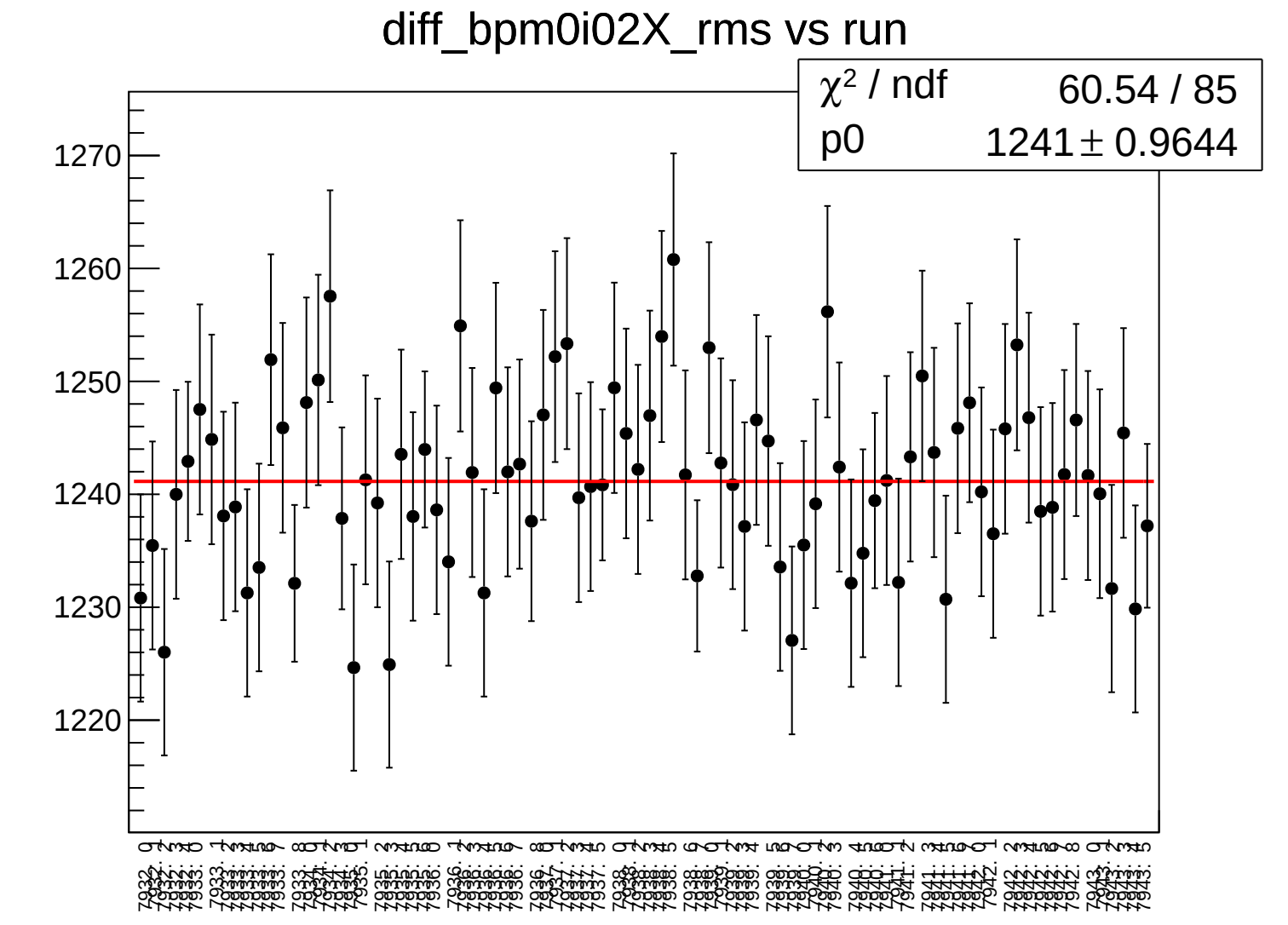

diff_bpm2i02Y_mean vs run
χ² / ndf 112.6 / 85
p0 −2.328 ± 0.7109
pull
Entries 86
Mean 706.7
Std Dev 661

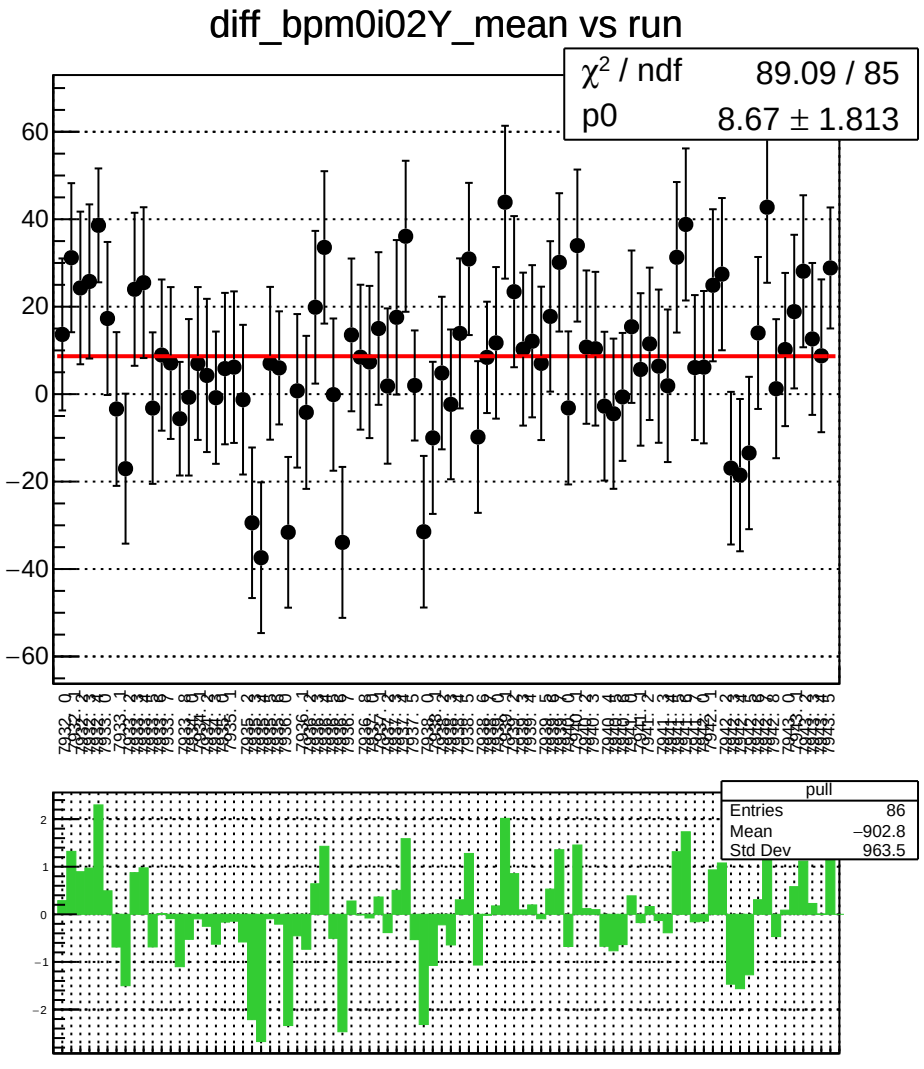

pull1D
Entries 86
Mean 0.01396
Std Dev 1.144

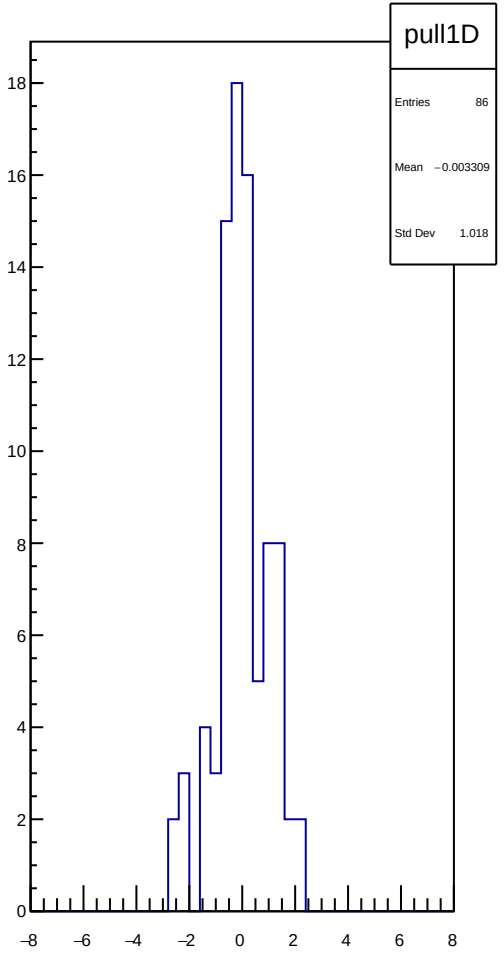

diff_bpm2i02Y_rms vs run
χ² / ndf 153.2 / 85
p0 646.9 ± 0.5027
670
660
650
640
630

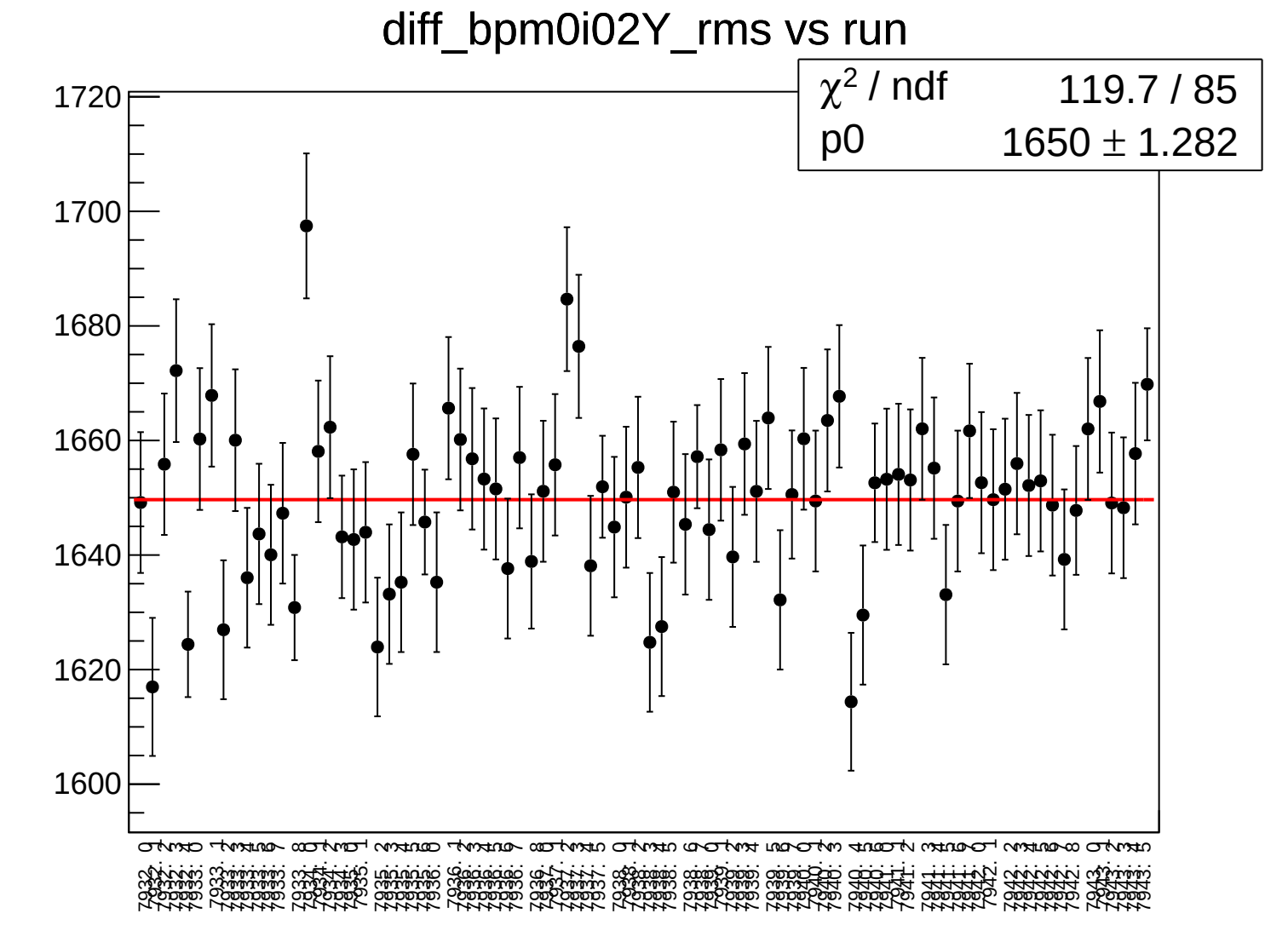

diff_bpm0i02X_mean vs run
χ² / ndf 106.6 / 85
p0 7.901 ± 1.364
pull
Entries 86
Mean −423.7
Std Dev 487.1

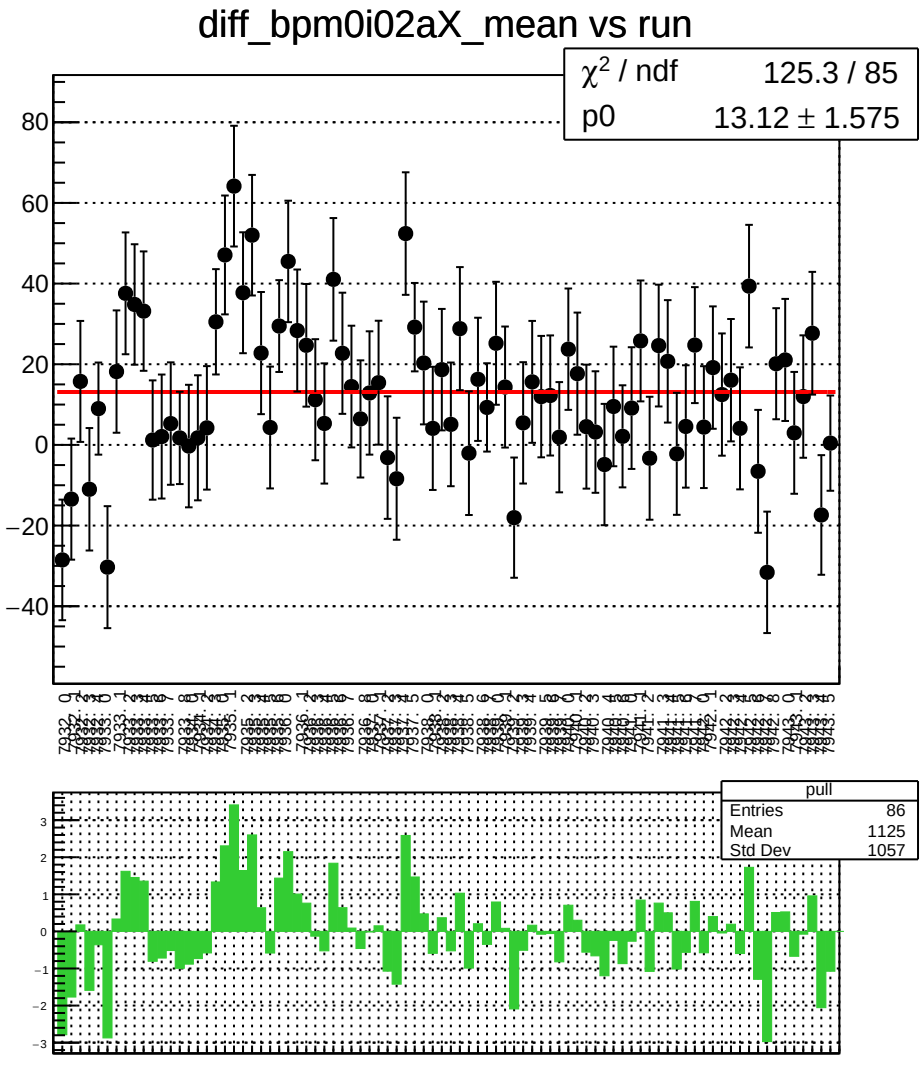

pull1D
Entries 86
Mean 0.004433
Std Dev 1.113

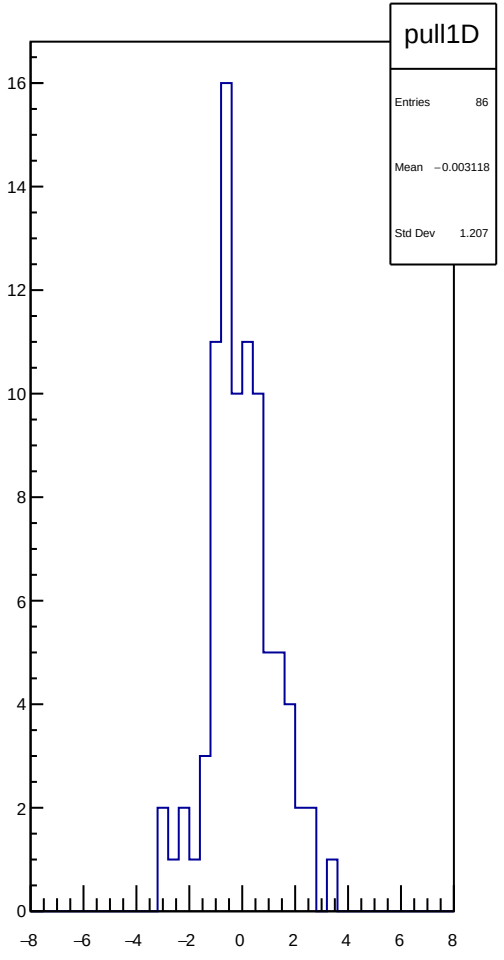

diff_bpm0i02X_rms vs run
χ² / ndf 60.54 / 85
p0 1241 ± 0.9644
1270
1260
1250
1240
1230
1220

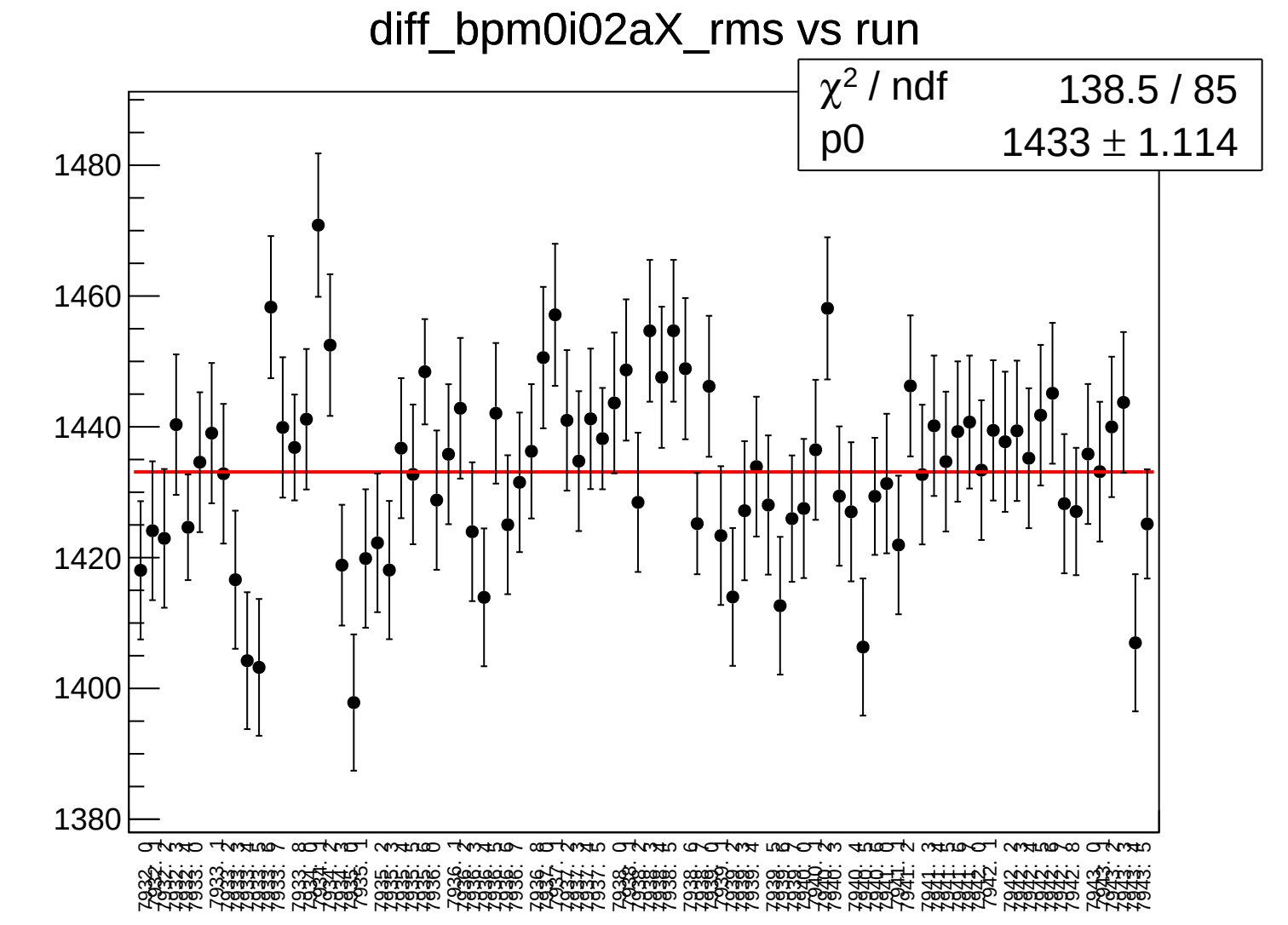

diff_bpm0i02Y_mean vs run
χ² / ndf 89.09 / 85
p0 8.67 ± 1.813
pull
Entries 86
Mean −902.8
Std Dev 963.5

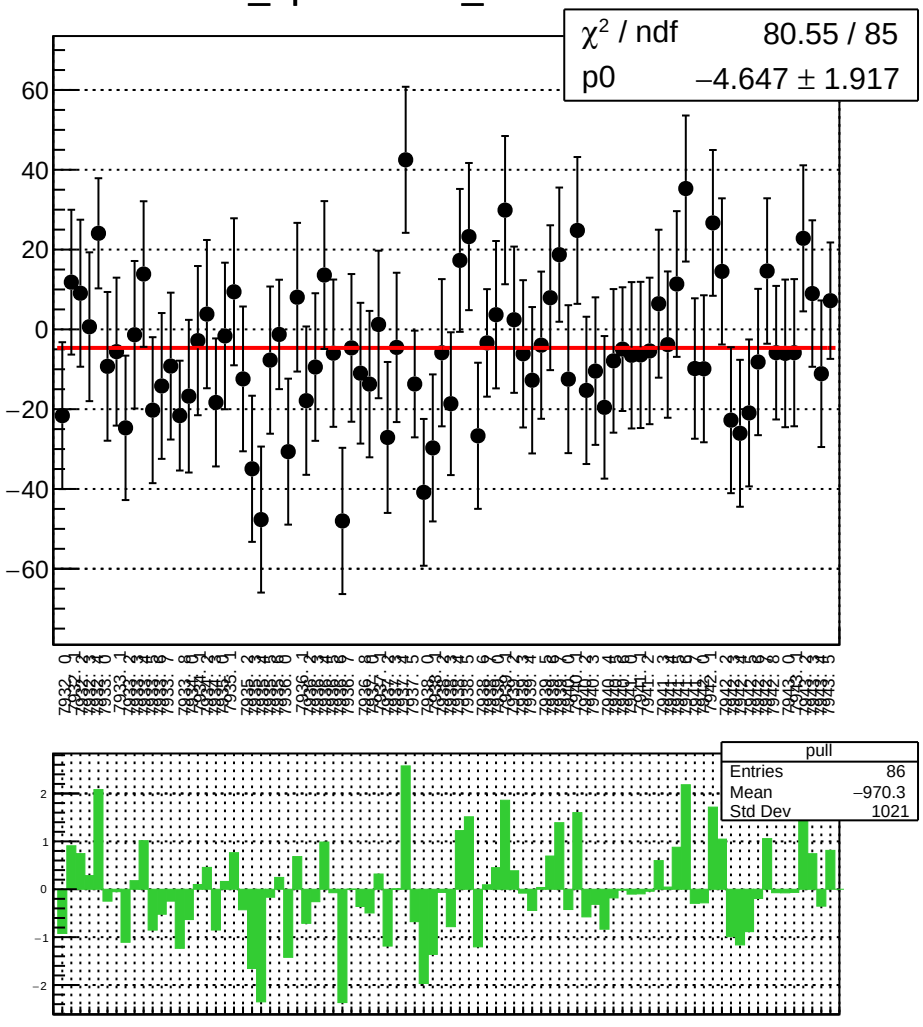

pull1D
Entries 86
Mean −0.003309
Std Dev 1.018

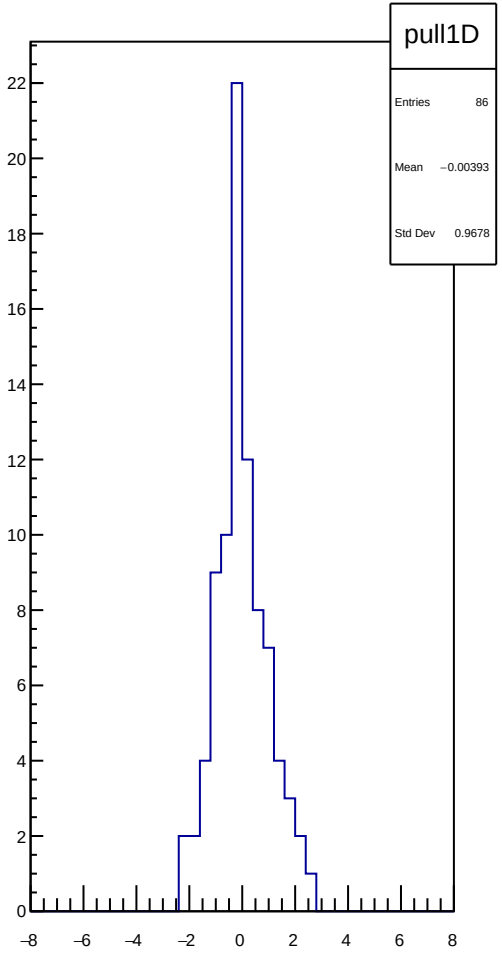

diff_bpm0i02Y_rms vs run
χ^2 / ndf 119.7 / 85
p0 1650 ± 1.282
1720
1700
1680
1660
1640
1620
1600

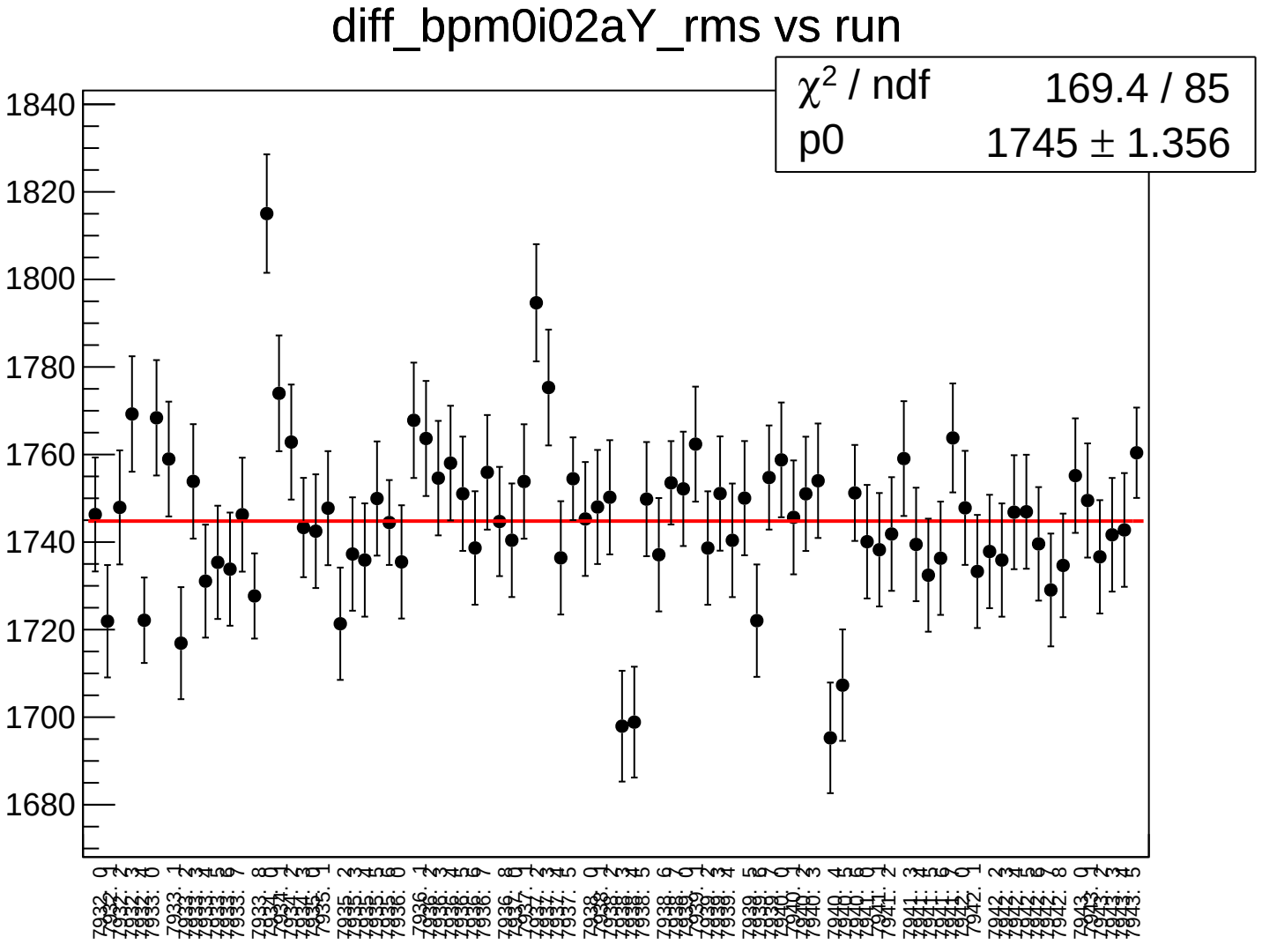

diff_bpm0i02aX_mean vs run
χ² / ndf 125.3 / 85
p0 13.12 ± 1.575
pull
Entries 86
Mean 1125
Std Dev 1057

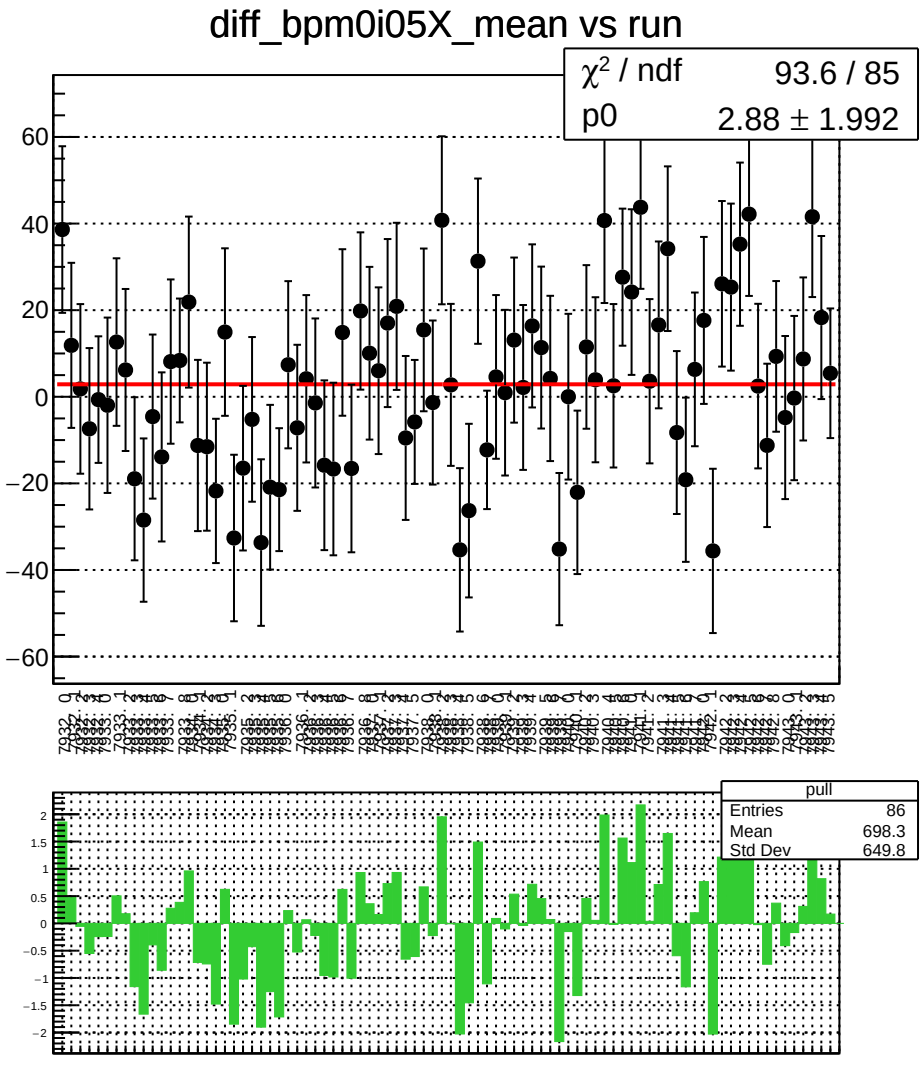

pull1D
Entries 86
Mean −0.003118
Std Dev 1.207

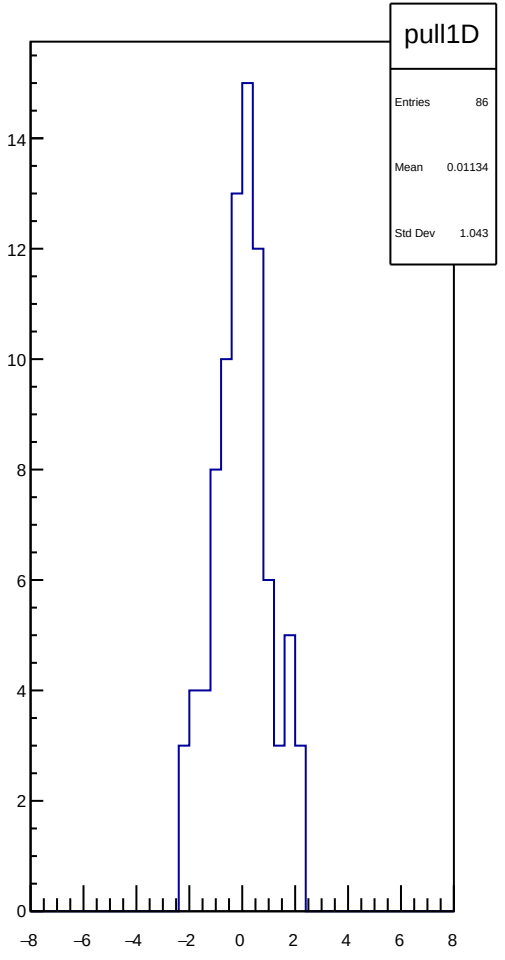

diff_bpm0i02aX_rms vs run
χ² / ndf 138.5 / 85
p0 1433 ± 1.114
1480
1460
1440
1420
1400
1380

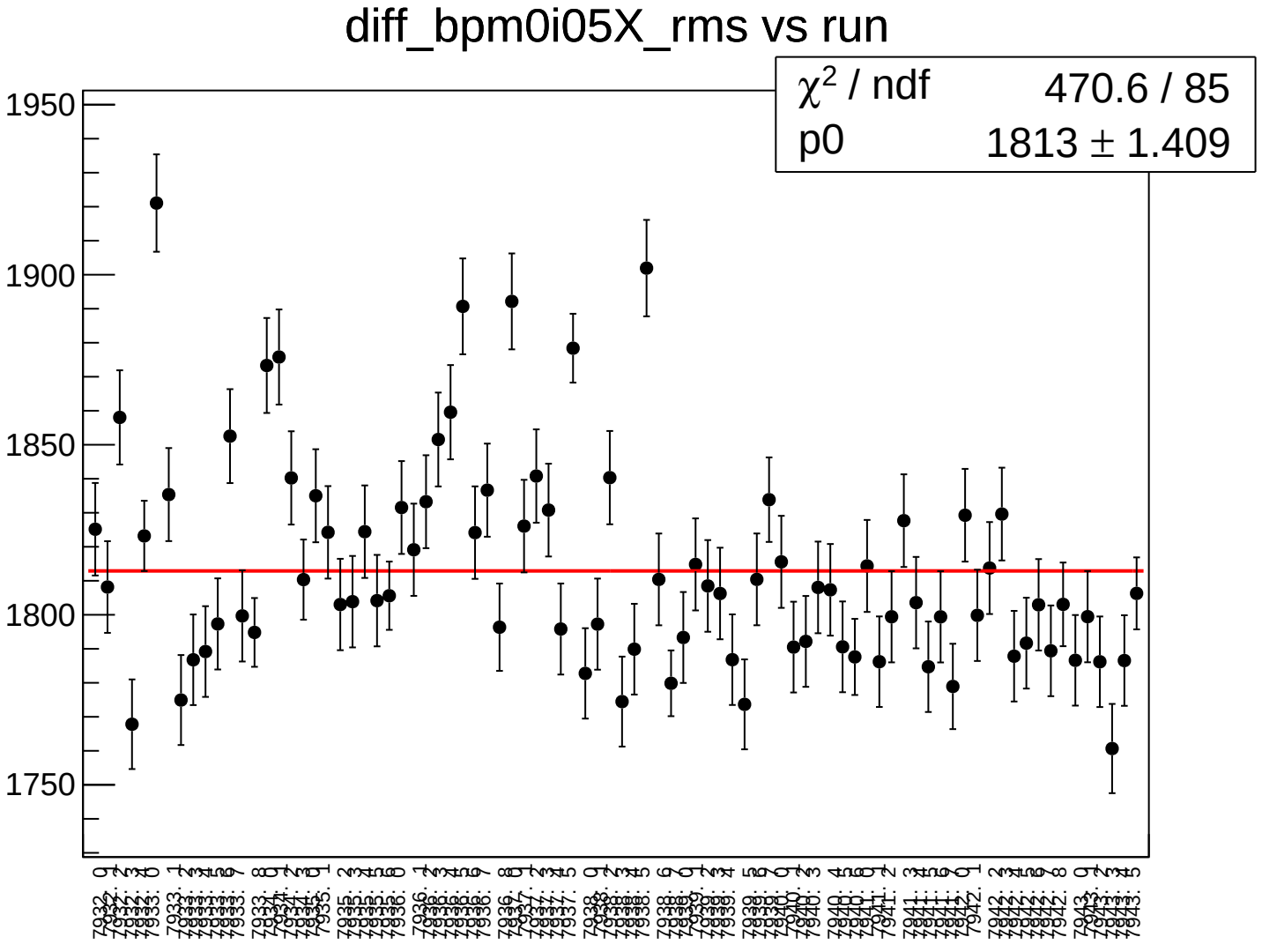

diff_bpm0i02aY_mean vs run
χ^2 / ndf 80.55 / 85
p0 −4.647 ± 1.917
pull
Entries 86
Mean −970.3
Std Dev 1021

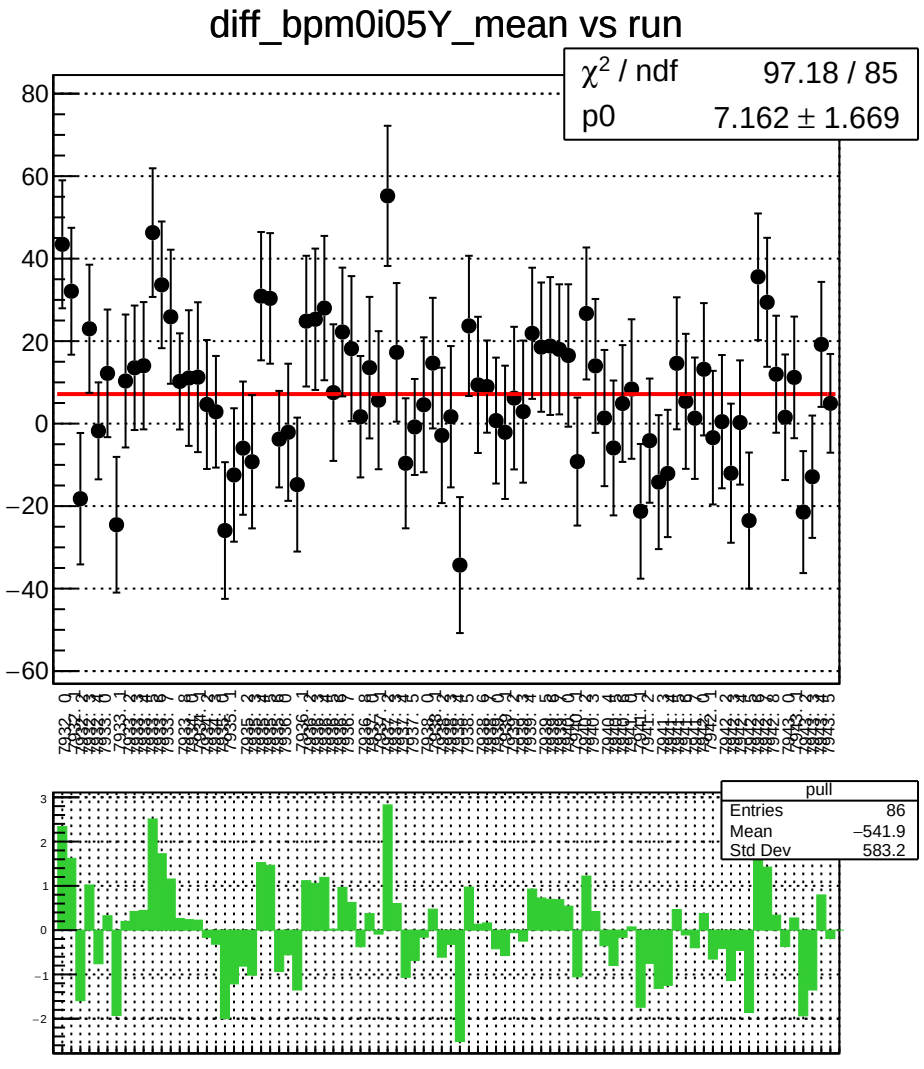

pull1D
Entries 86
Mean −0.00393
Std Dev 0.9678

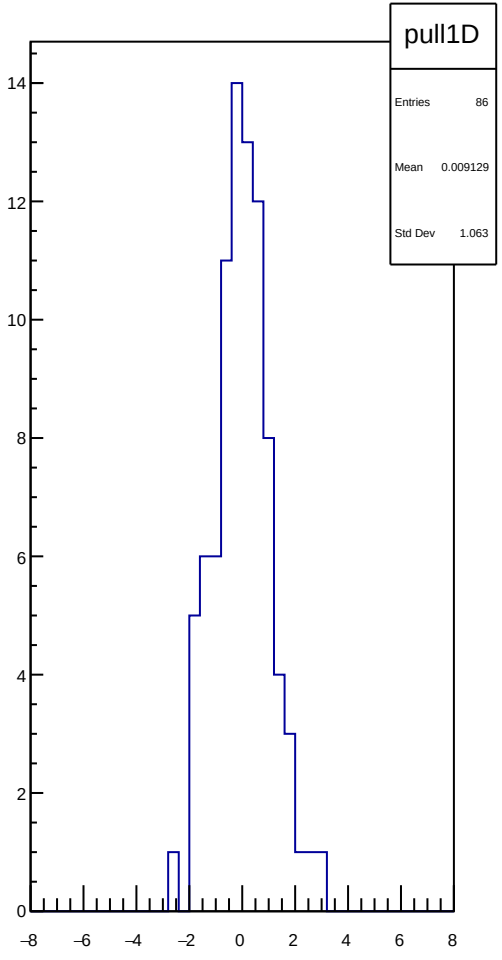

diff_bpm0i02aY_rms vs run
χ² / ndf 169.4 / 85
p0 1745 ± 1.356
1840
1820
1800
1780
1760
1740
1720
1700
1680

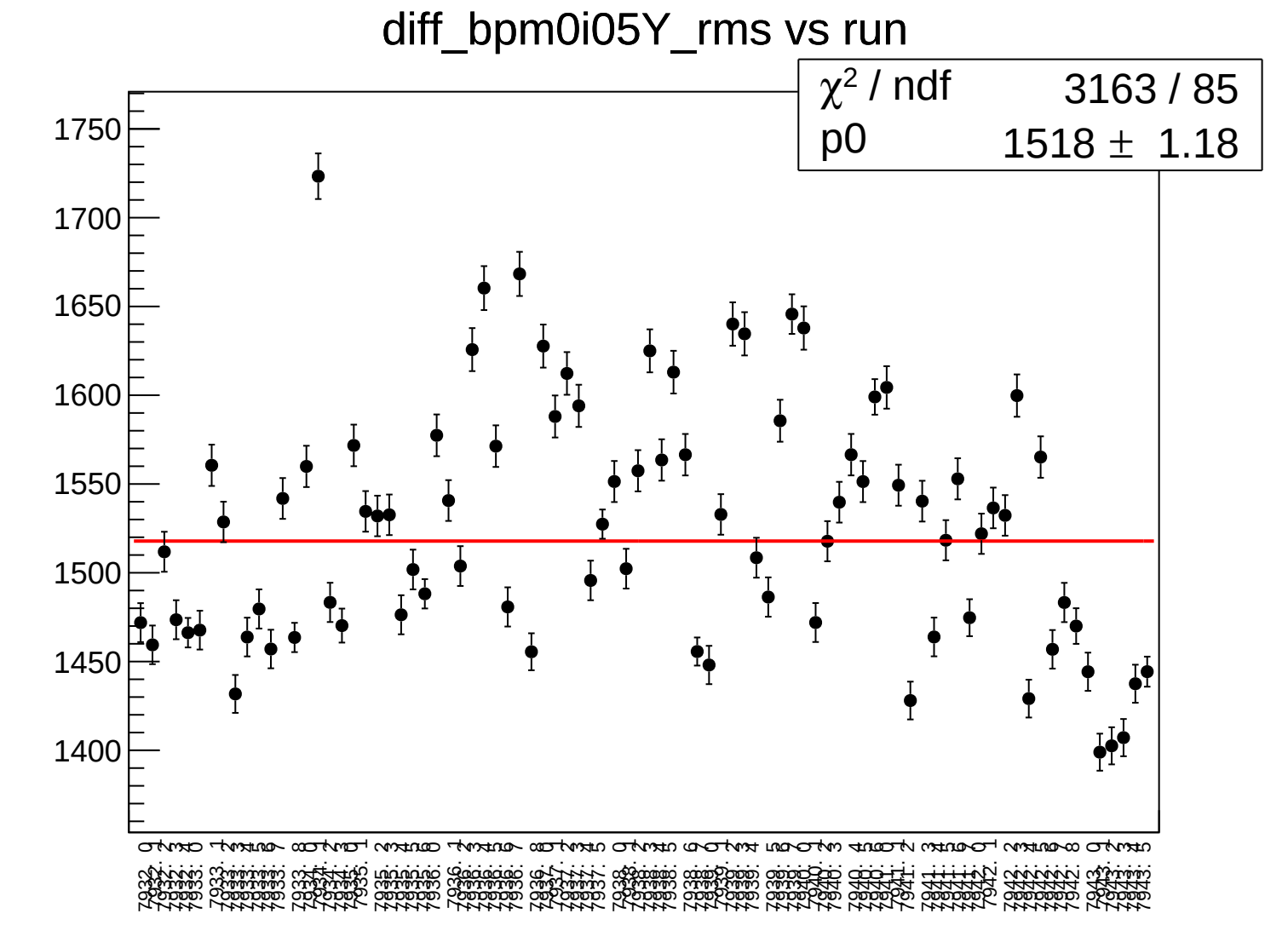

diff_bpm0i05X_mean vs run
χ² / ndf 93.6 / 85
p0 2.88 ± 1.992
pull
Entries 86
Mean 698.3
Std Dev 649.8

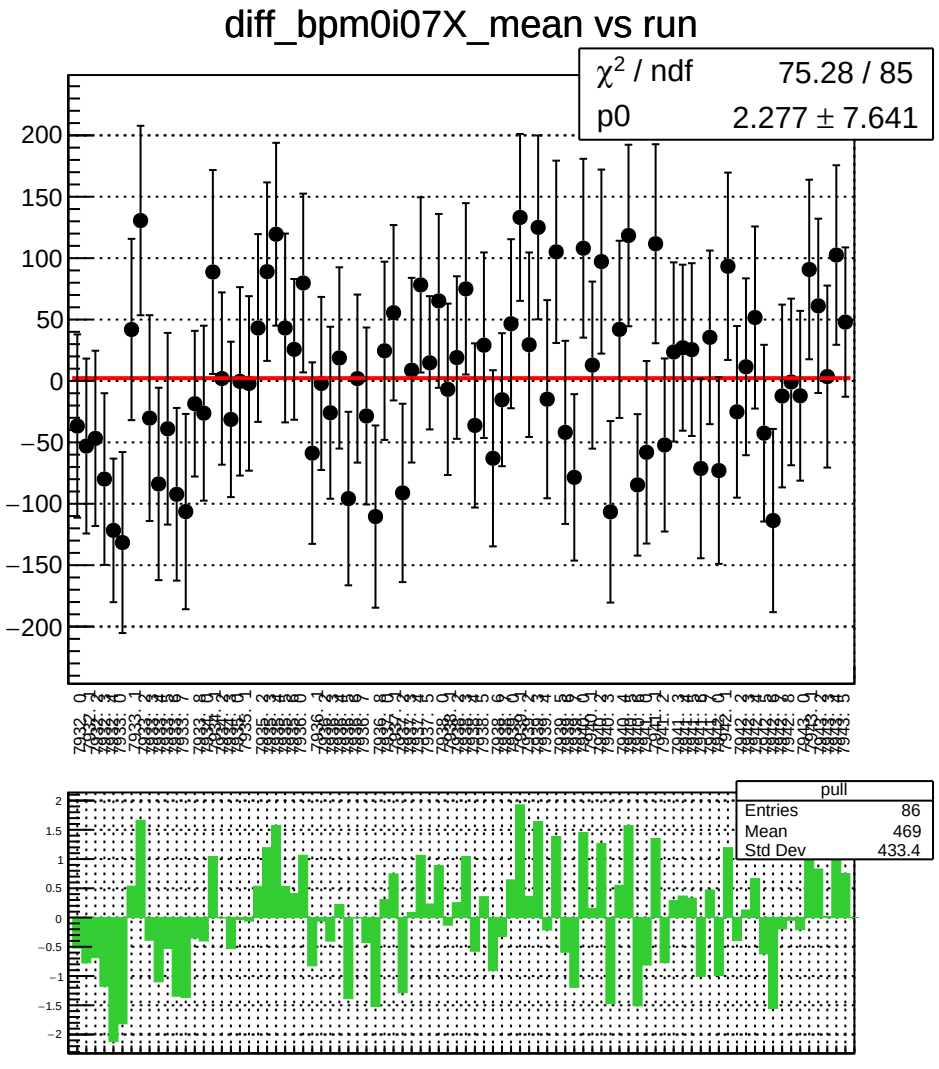

pull1D
Entries 86
Mean 0.01134
Std Dev 1.043

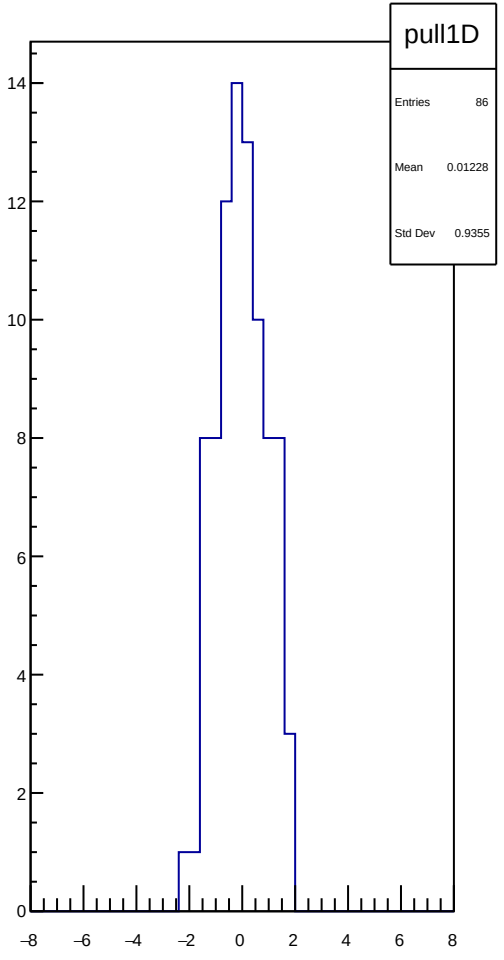

diff_bpm0i05X_rms vs run
χ² / ndf 470.6 / 85
p0 1813 ± 1.409
1950
1900
1850
1800
1750

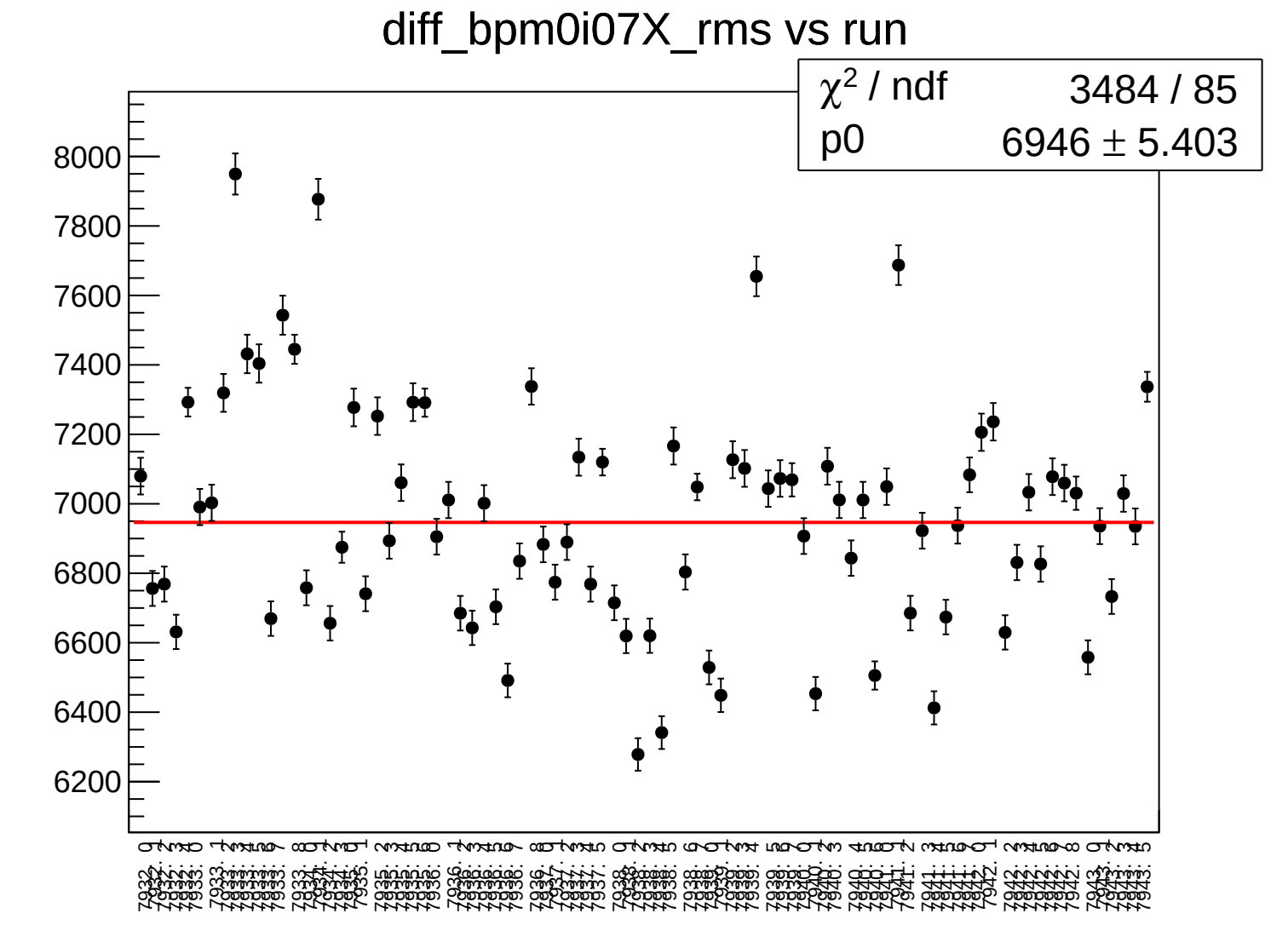

diff_bpm0i05Y_mean vs run
χ² / ndf 97.18 / 85
p0 7.162 ± 1.669
pull
Entries 86
Mean −541.9
Std Dev 583.2

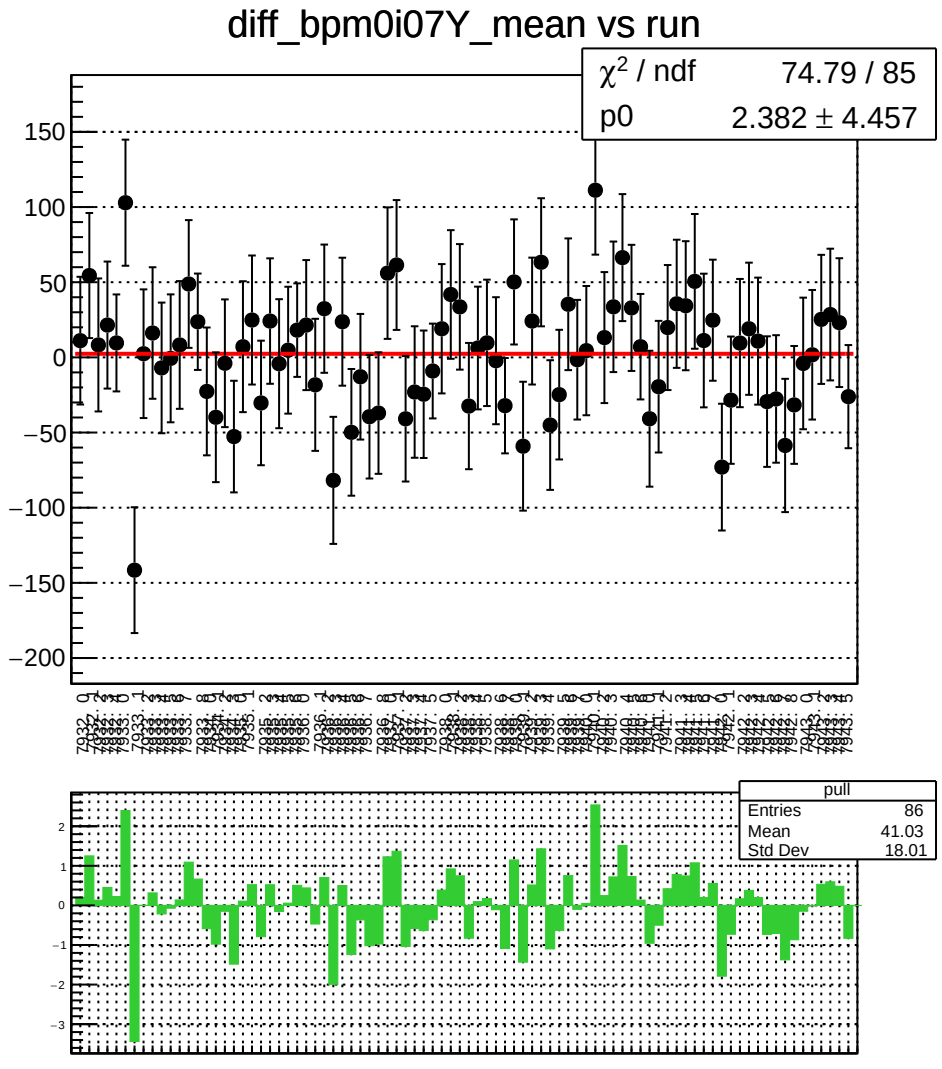

pull1D
Entries 86
Mean 0.009129
Std Dev 1.063

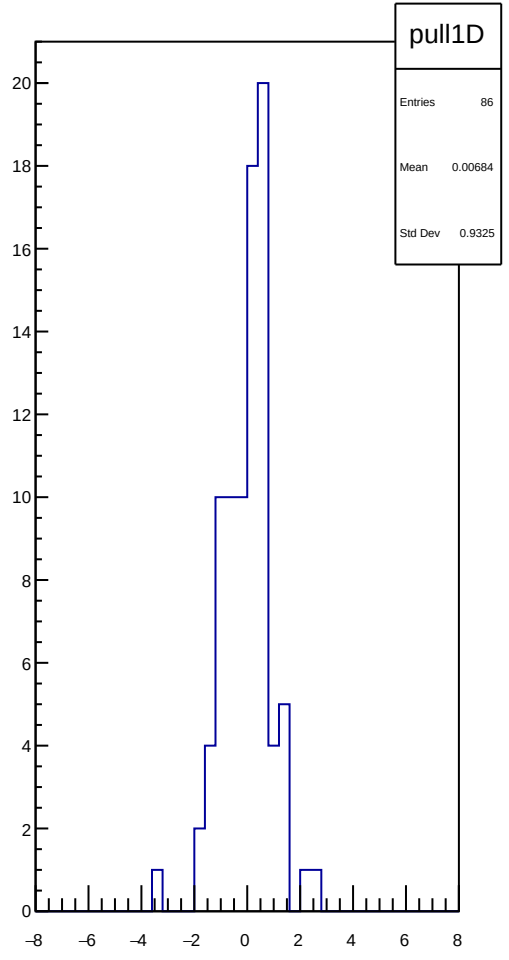

diff_bpm0i05Y_rms vs run
χ² / ndf 3163 / 85
p0 1518 ± 1.18
1750
1700
1650
1600
1550
1500
1450
1400

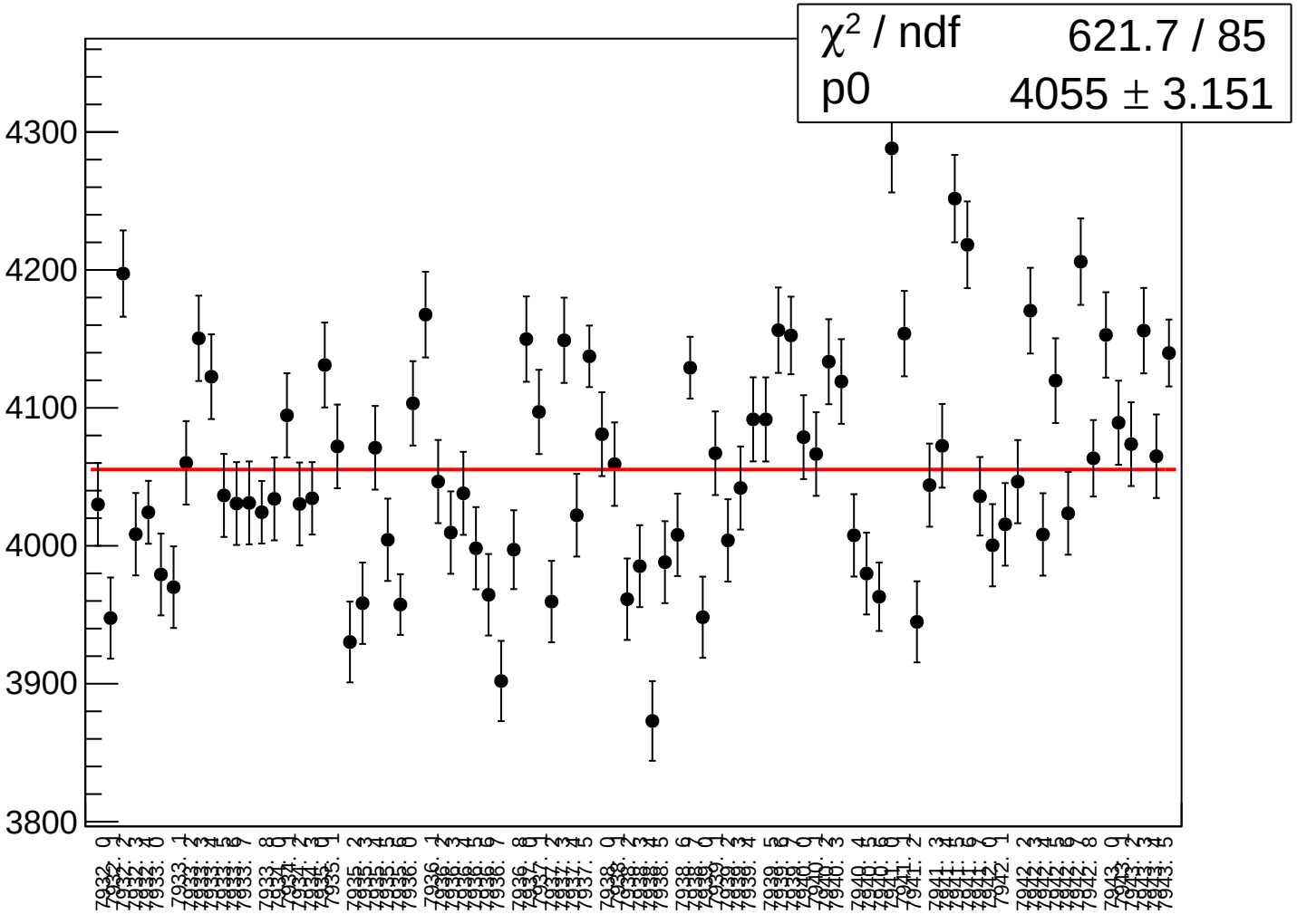

diff_bpm0i07X_mean vs run
χ² / ndf 75.28 / 85
p0 2.277 ± 7.641
pull
Entries 86
Mean 469
Std Dev 433.4

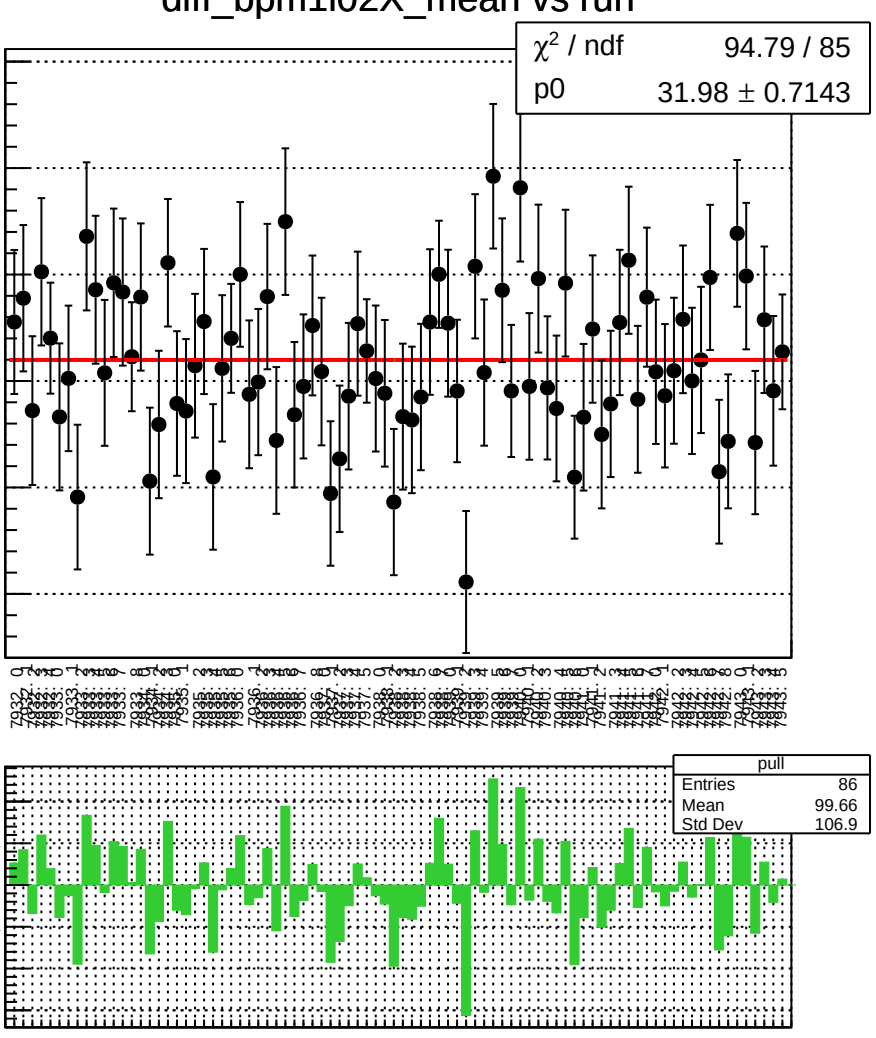

pull1D
Entries 86
Mean 0.01228
Std Dev 0.9355

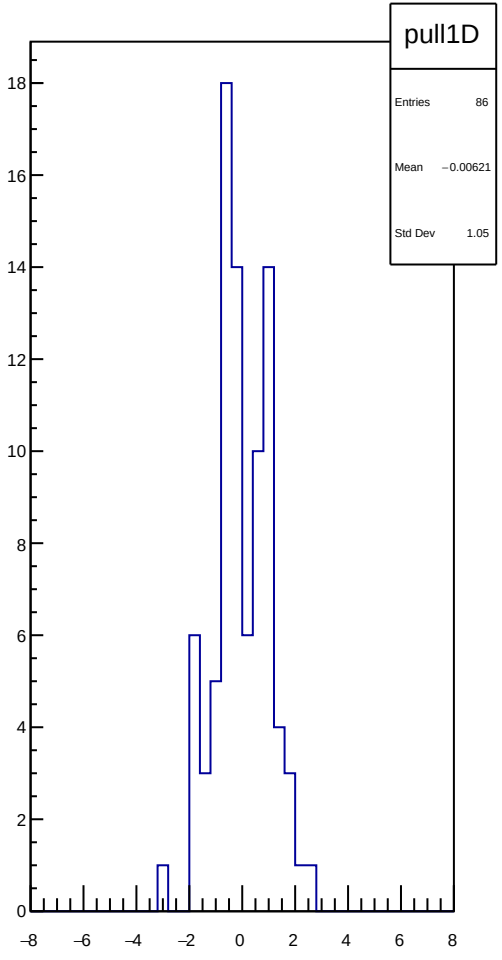

diff_bpm0i07X_rms vs run
χ² / ndf 3484 / 85
p0 6946 ± 5.403
8000
7800
7600
7400
7200
7000
6800
6600
6400
6200

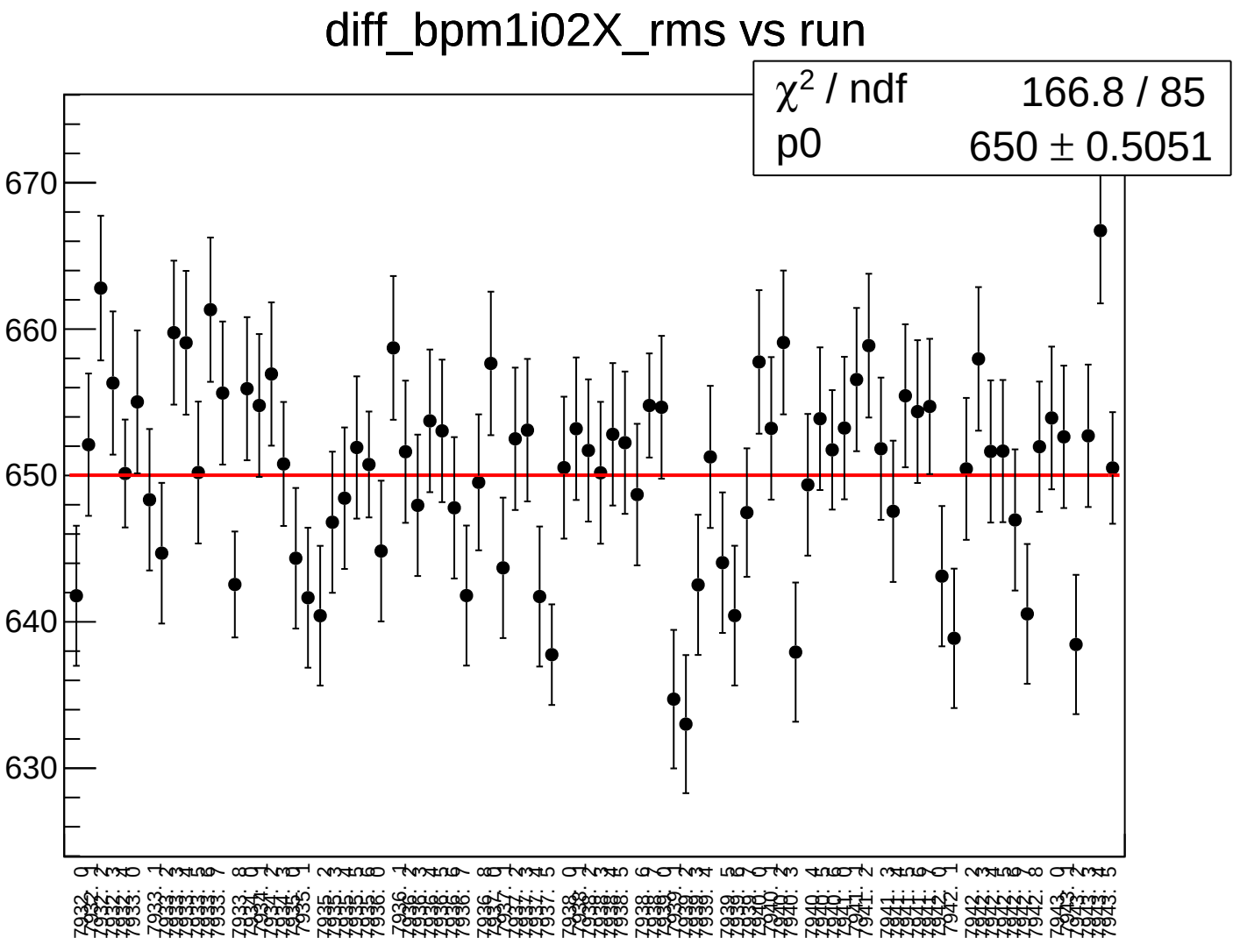

diff_bpm0i07Y_mean vs run
χ^2 / ndf 74.79 / 85
p0 2.382 ± 4.457
150
100
50
0
−50
−100
−150
−200
pull
Entries 86
Mean 41.03
Std Dev 18.01
2
1
0
−1
−2
−3

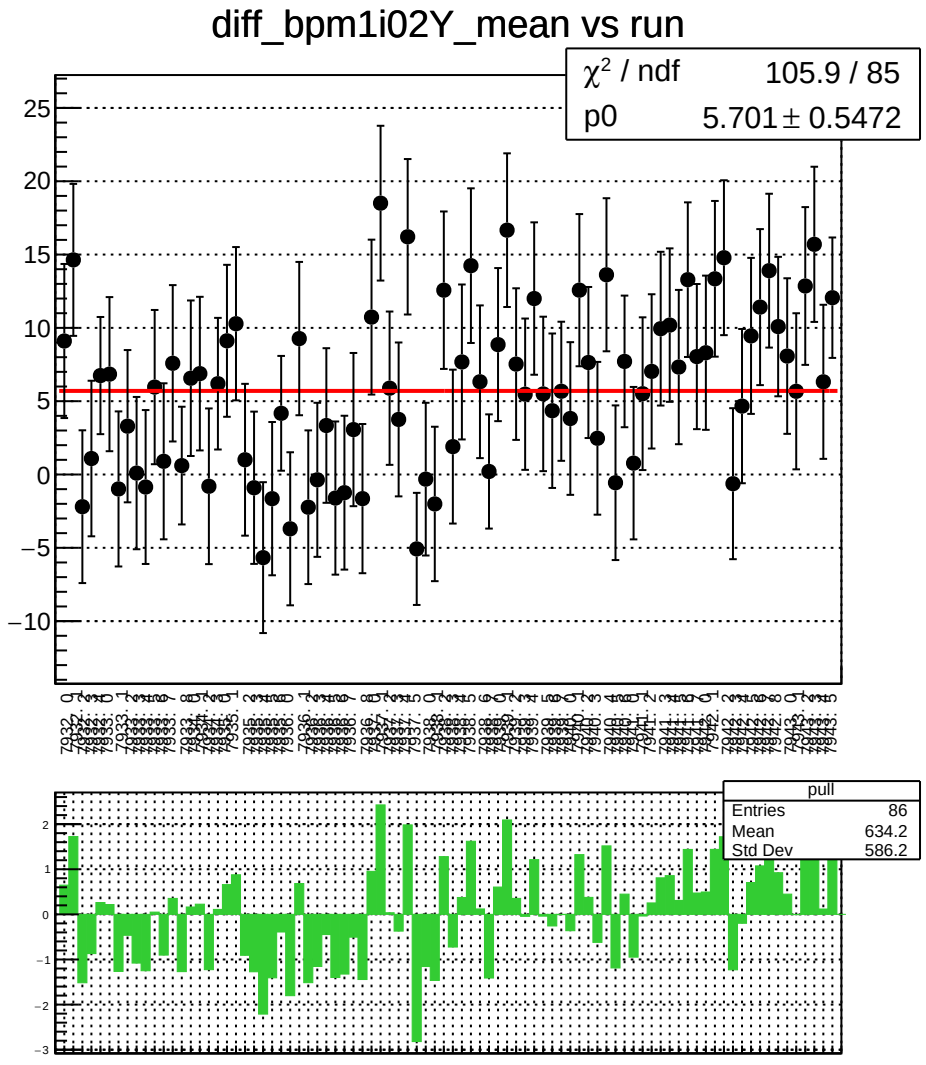

pull1D
Entries 86
Mean 0.00684
Std Dev 0.9325
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

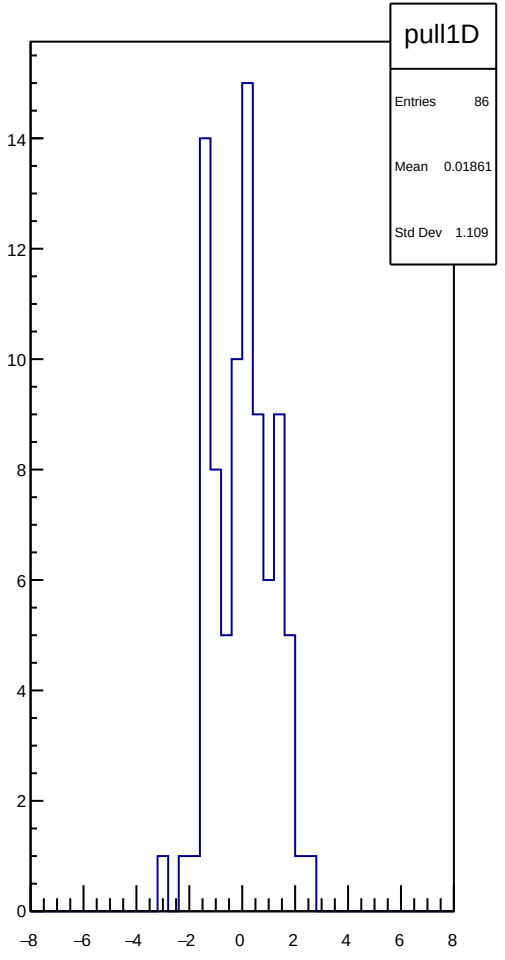

diff_bpm0i07Y_rms vs run
χ² / ndf 621.7 / 85
p0 4055 ± 3.151
4300
4200
4100
4000
3900
3800

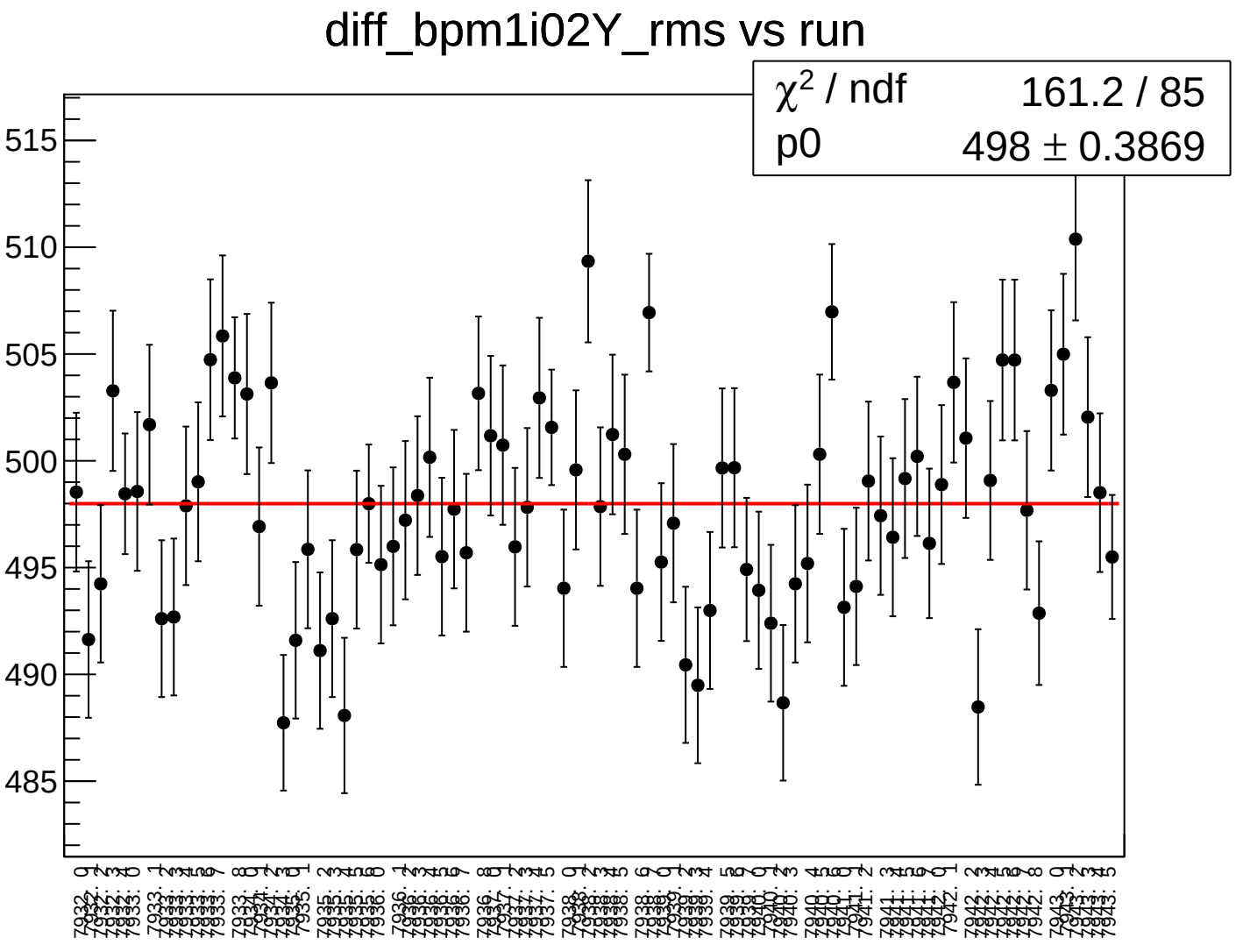

diff_bpm1i02X_mean vs run
χ² / ndf 94.79 / 85
p0 31.98 ± 0.7143
pull
Entries 86
Mean 99.66
Std Dev 106.9

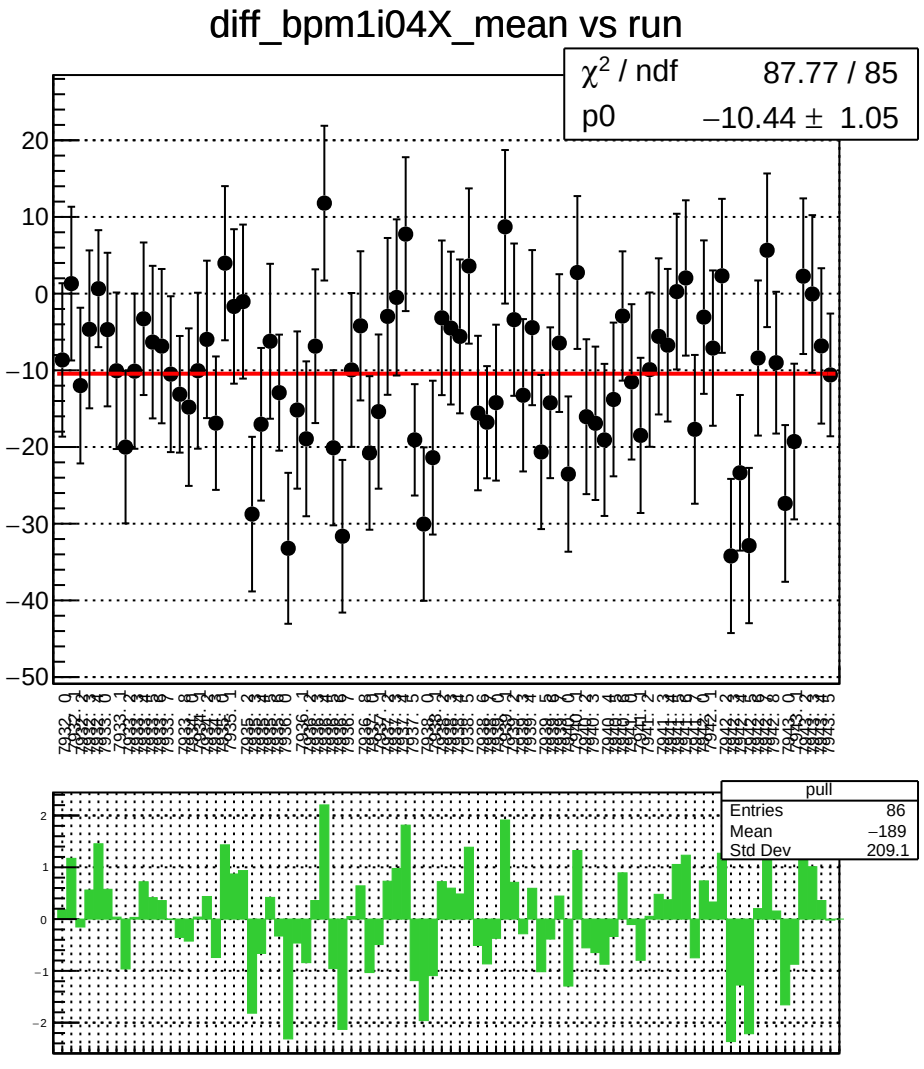

pull1D
Entries 86
Mean −0.00621
Std Dev 1.05

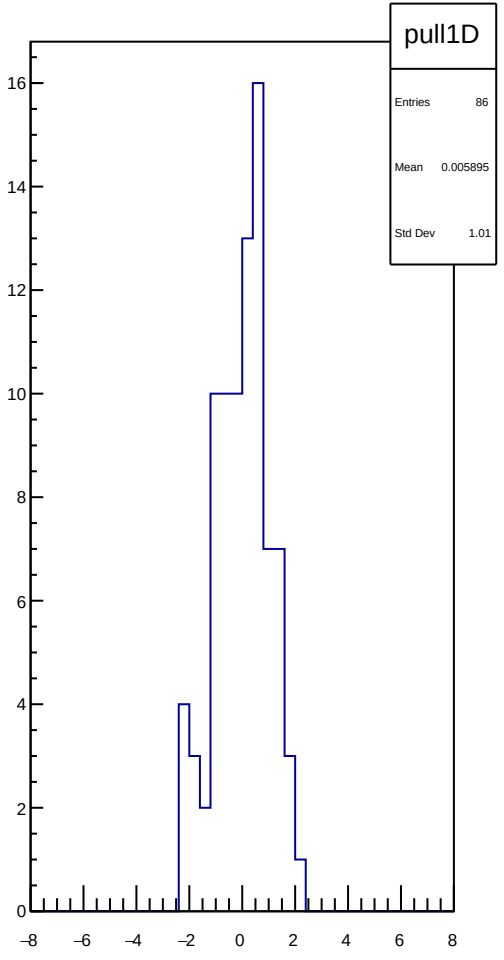

diff_bpm1i02X_rms vs run
χ² / ndf 166.8 / 85
p0 650 ± 0.5051
670
660
650
640
630

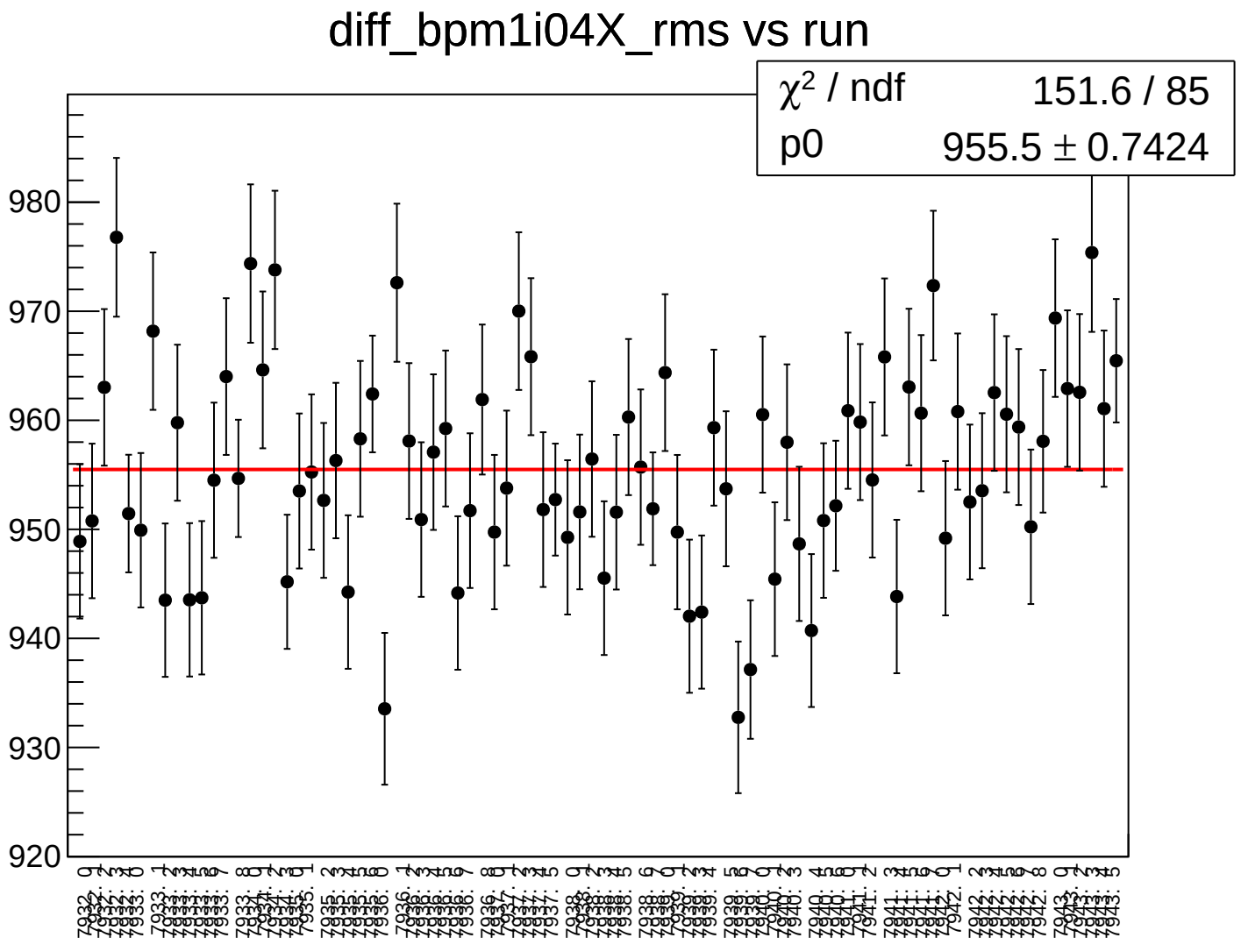

diff_bpm1i02Y_mean vs run
χ² / ndf 105.9 / 85
p0 5.701 ± 0.5472
pull
Entries 86
Mean 634.2
Std Dev 586.2

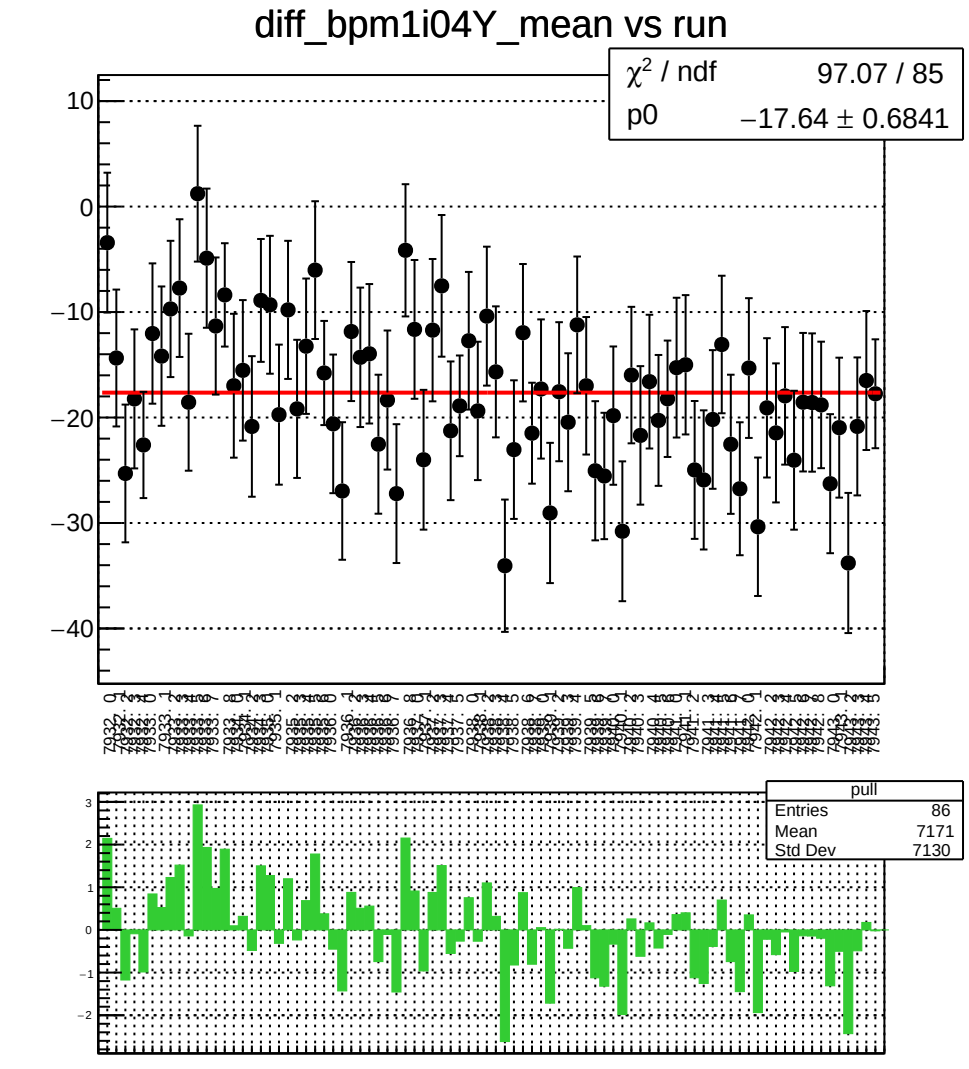

pull1D
Entries 86
Mean 0.01861
Std Dev 1.109

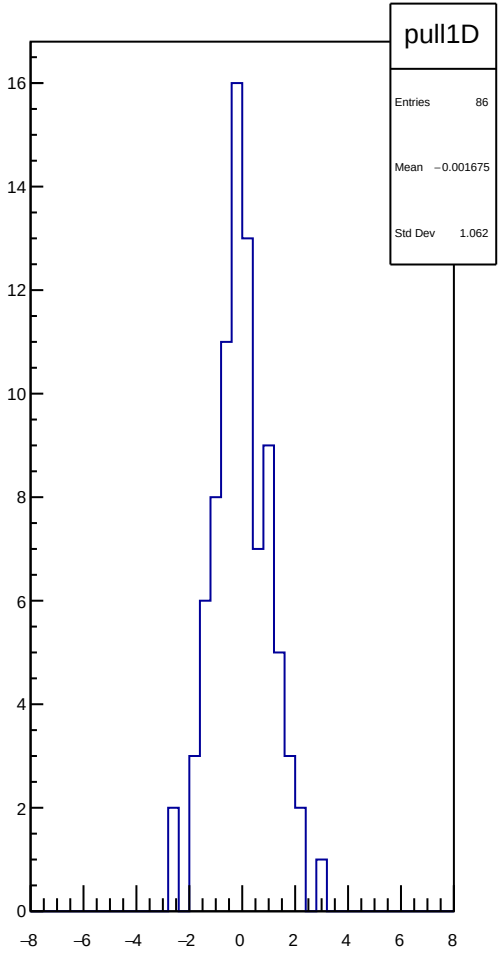

diff_bpm1i02Y_rms vs run
χ² / ndf 161.2 / 85
p0 498 ± 0.3869
515
510
505
500
495
490
485

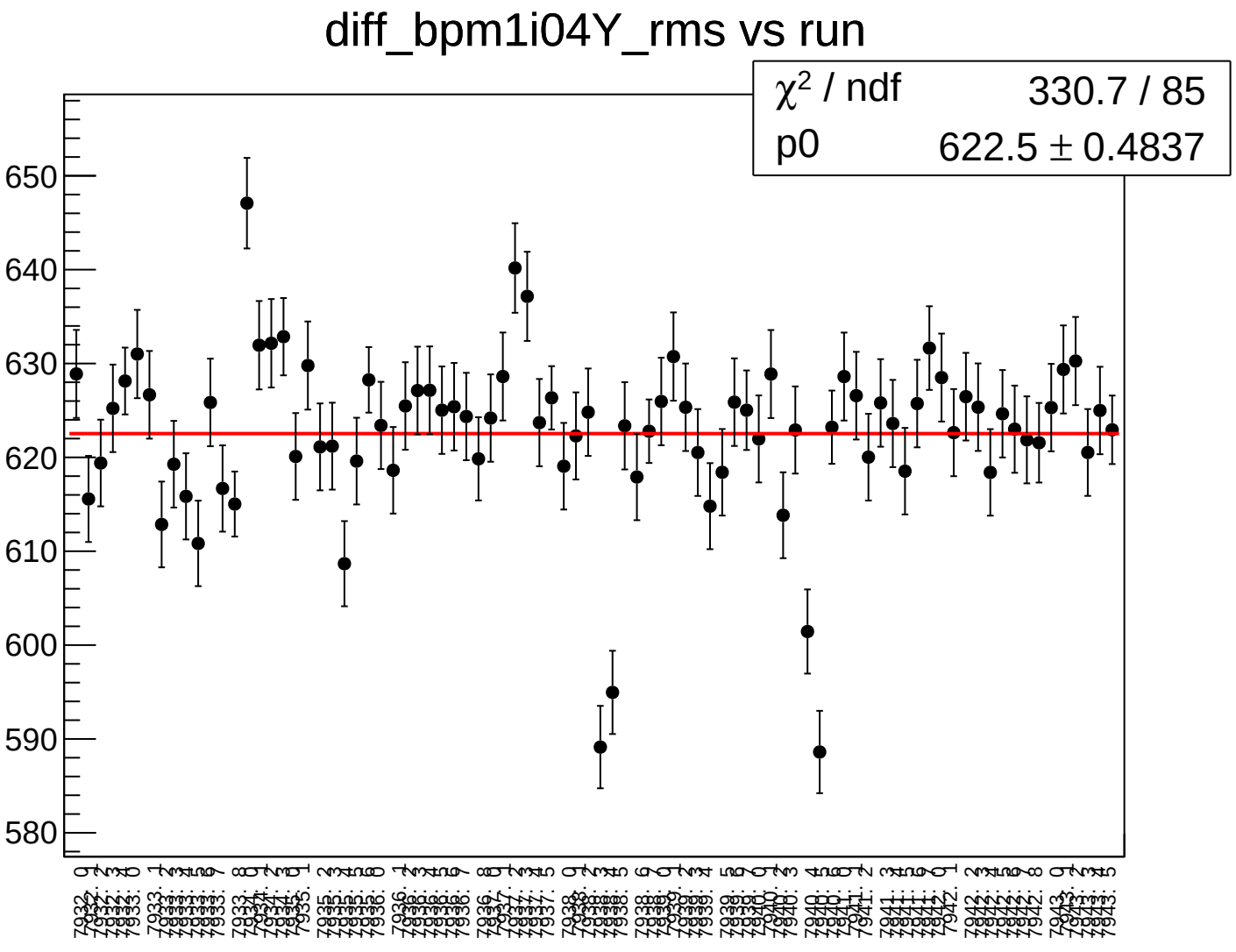

diff_bpm1i04X_mean vs run
χ² / ndf 87.77 / 85
p0 −10.44 ± 1.05
pull
Entries 86
Mean −189
Std Dev 209.1

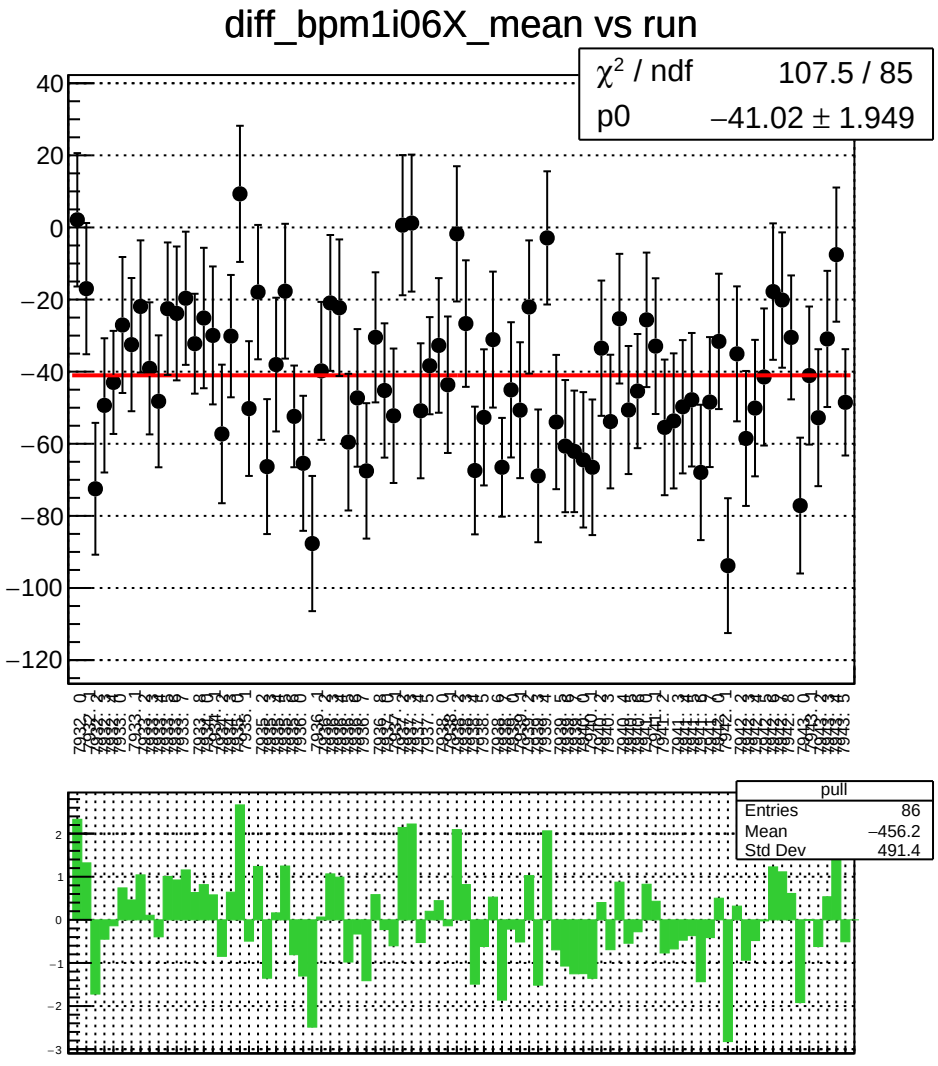

pull1D
Entries 86
Mean 0.005895
Std Dev 1.01

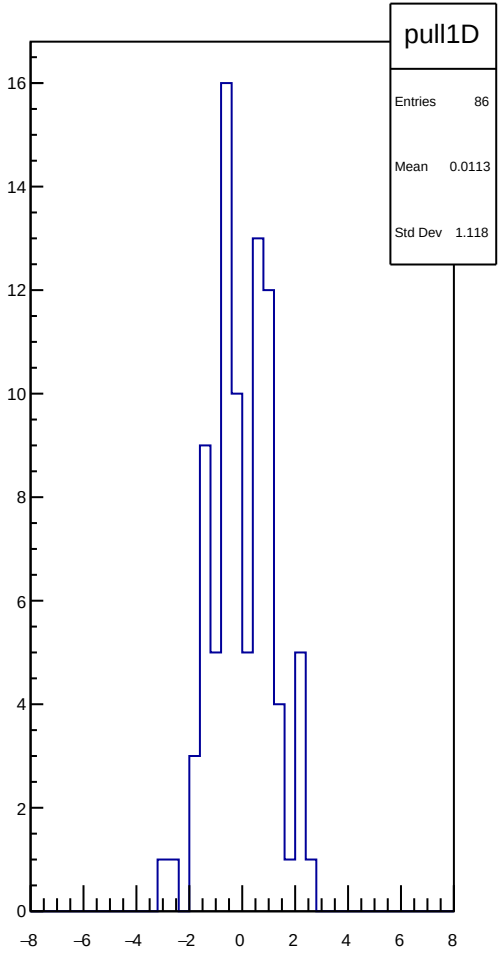

diff_bpm1i04X_rms vs run
χ² / ndf 151.6 / 85
p0 955.5 ± 0.7424
980
970
960
950
940
930
920

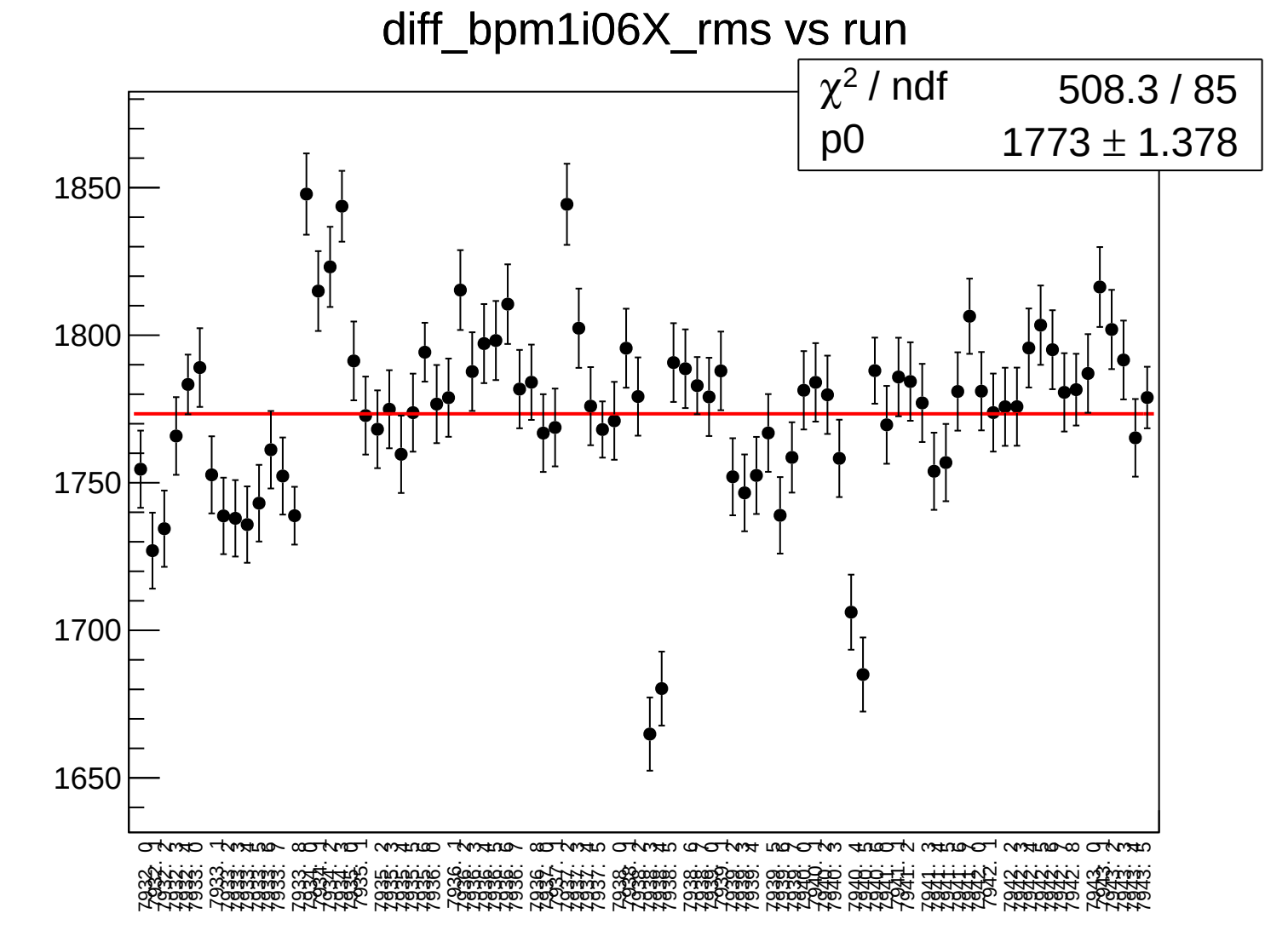

diff_bpm1i04Y_mean vs run
χ² / ndf 97.07 / 85
p0 −17.64 ± 0.6841
pull
Entries 86
Mean 7171
Std Dev 7130

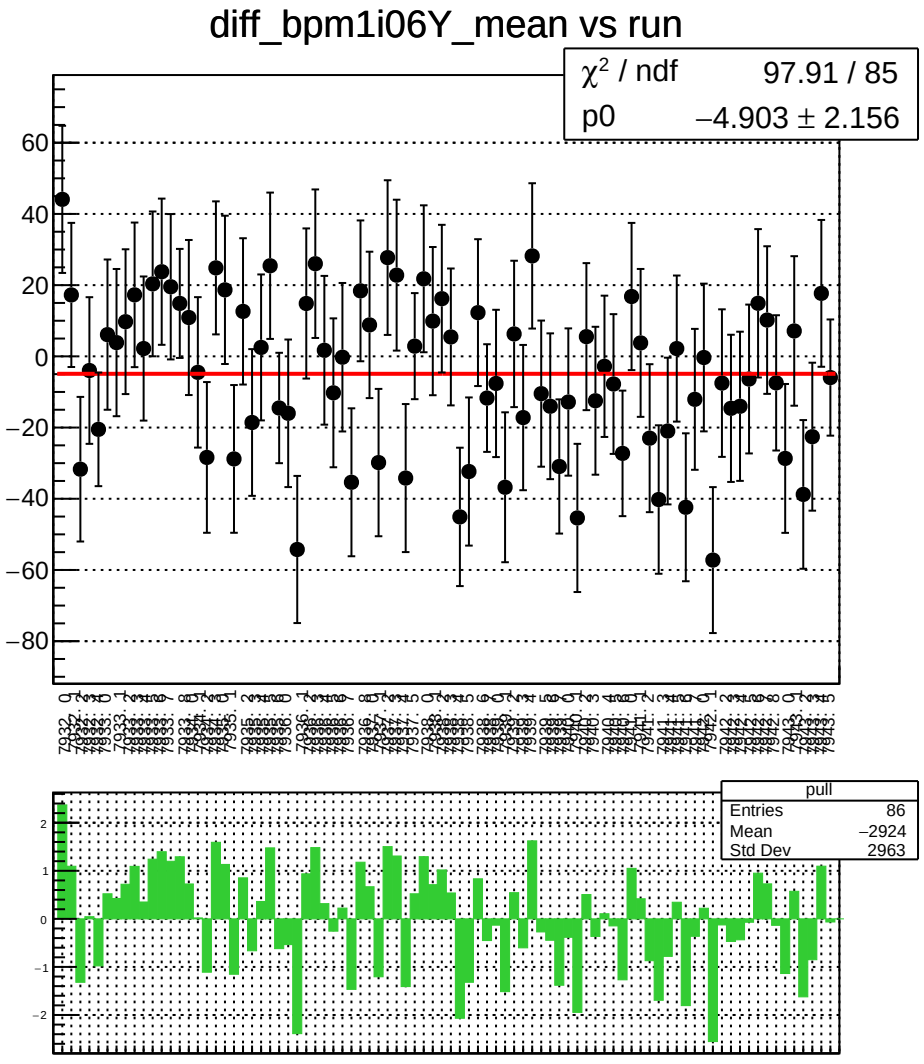

pull1D
Entries 86
Mean −0.001675
Std Dev 1.062

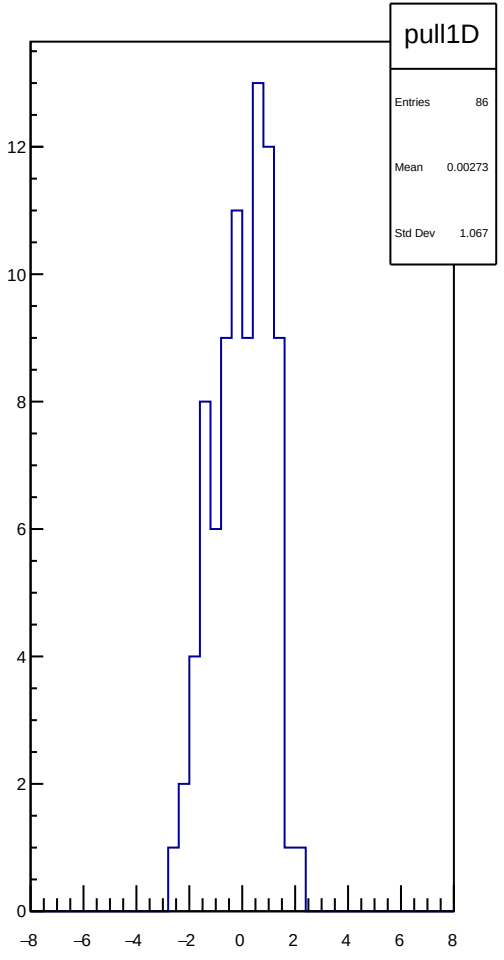

diff_bpm1i04Y_rms vs run
χ² / ndf 330.7 / 85
p0 622.5 ± 0.4837
650
640
630
620
610
600
590
580

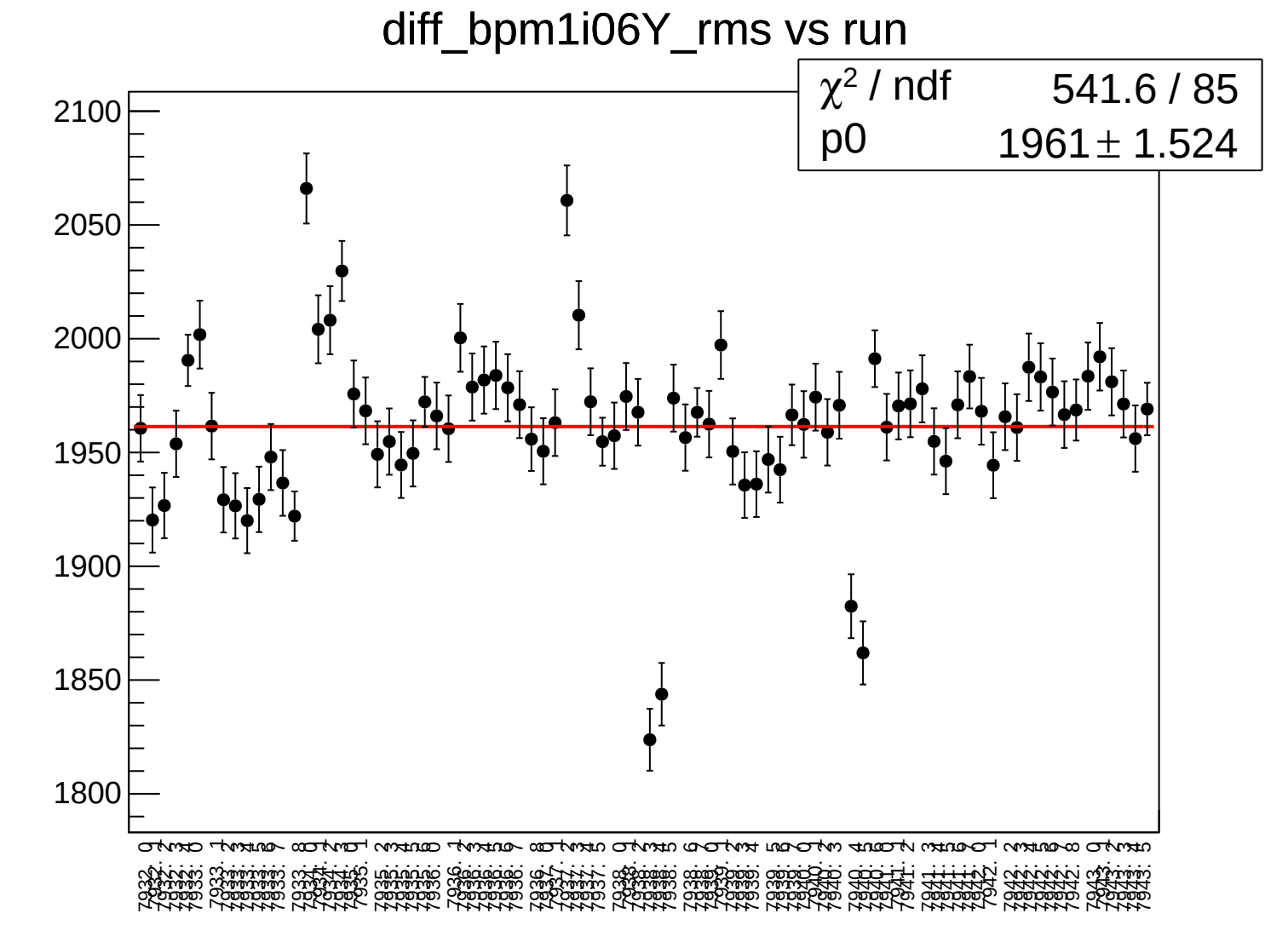

diff_bpm1i06X_mean vs run
χ² / ndf 107.5 / 85
p0 −41.02 ± 1.949
pull
Entries 86
Mean −456.2
Std Dev 491.4

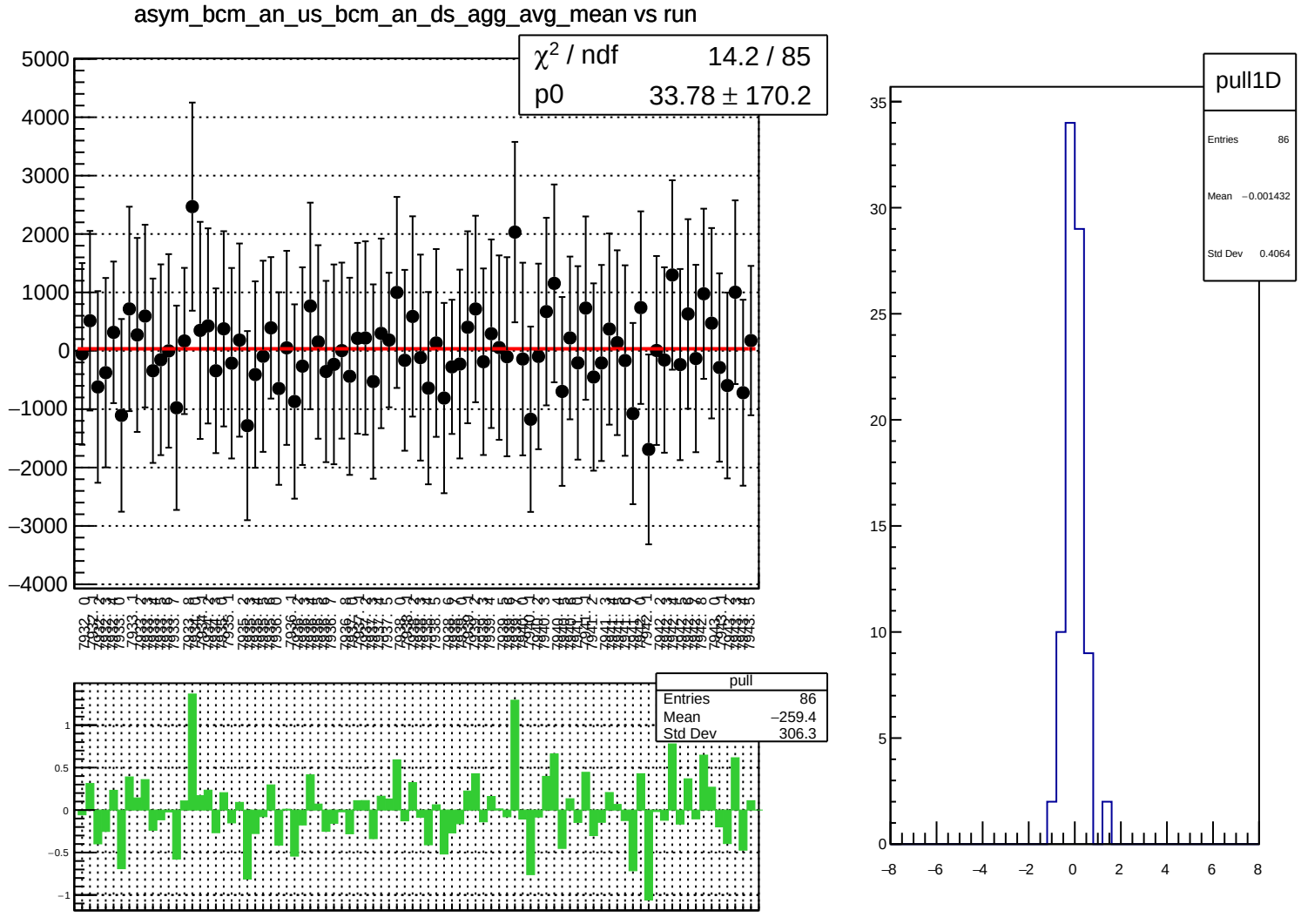

pull1D
Entries 86
Mean 0.0113
Std Dev 1.118

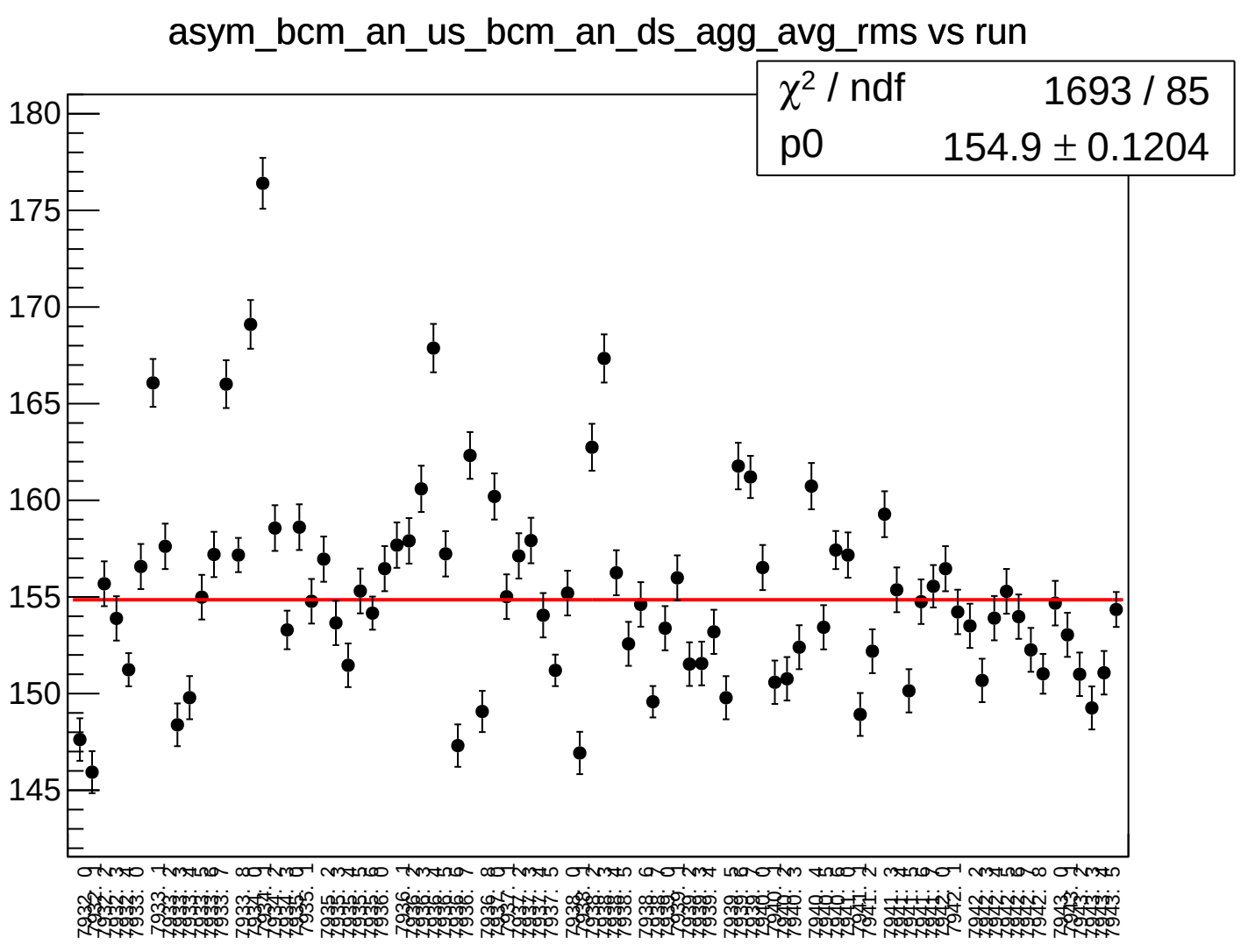

diff_bpm1i06X_rms vs run
χ² / ndf 508.3 / 85
p0 1773 ± 1.378
1850
1800
1750
1700
1650

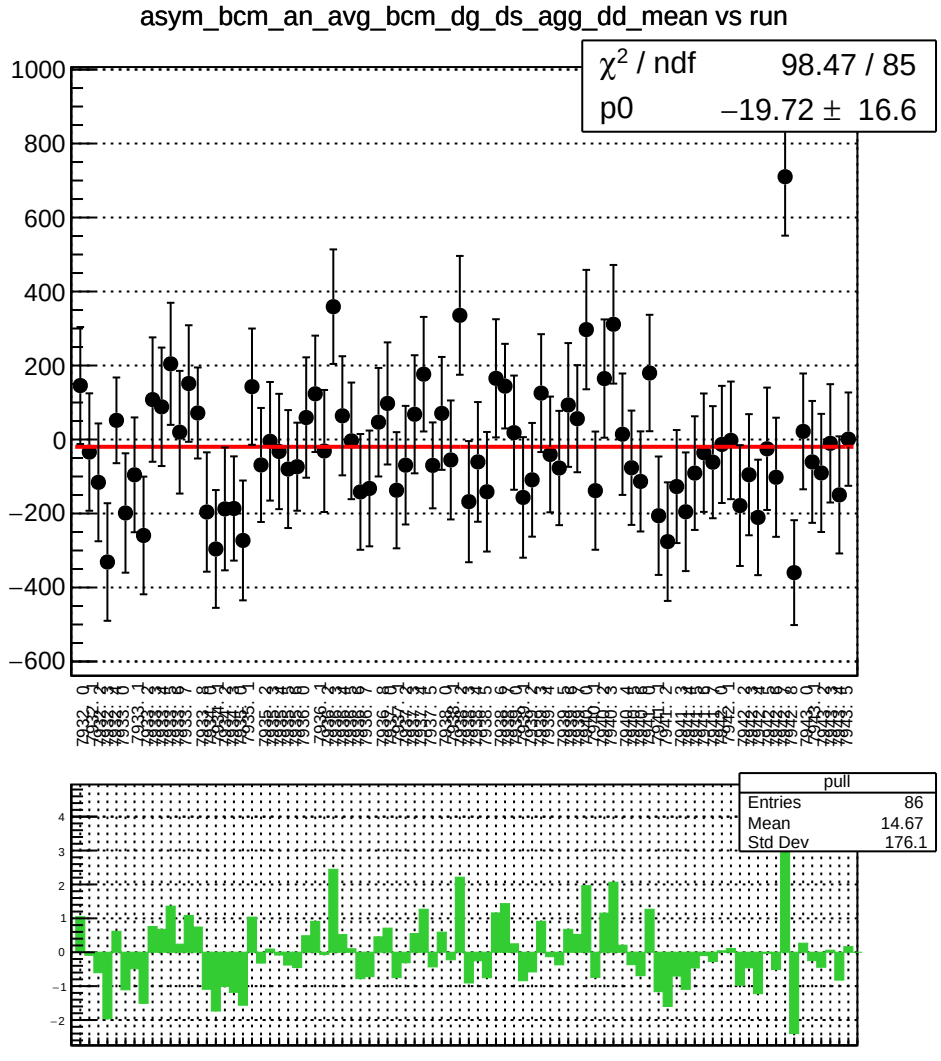

diff_bpm1i06Y_mean vs run
χ² / ndf 97.91 / 85
p0 −4.903 ± 2.156
pull
Entries 86
Mean −2924
Std Dev 2963

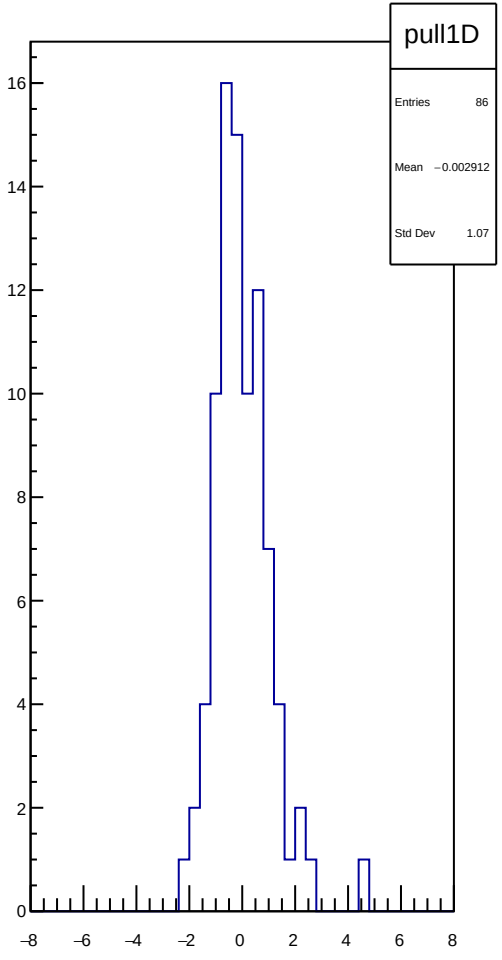

pull1D
Entries 86
Mean 0.00273
Std Dev 1.067

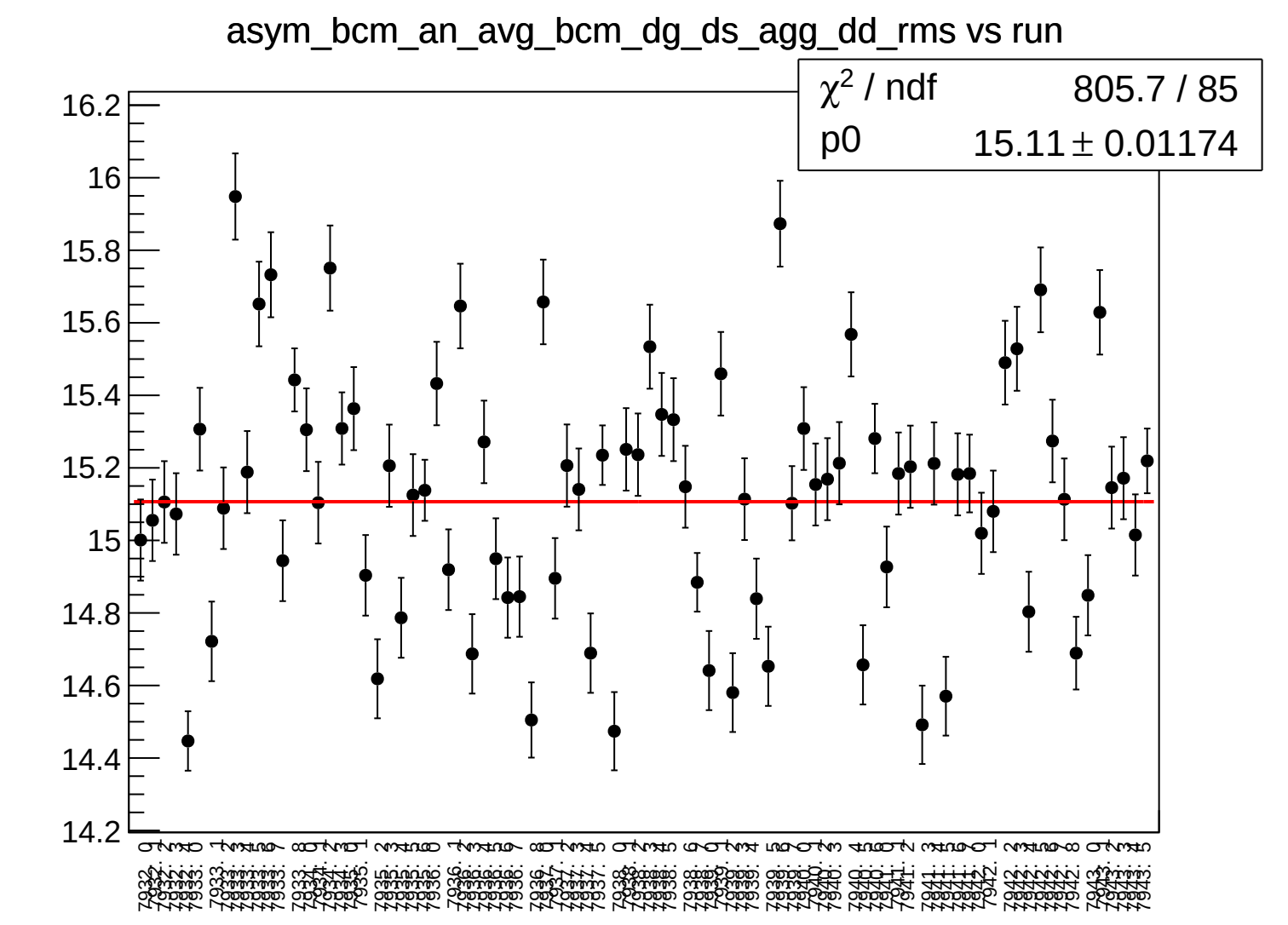

diff_bpm1i06Y_rms vs run
χ² / ndf 541.6 / 85
p0 1961 ± 1.524
2100
2050
2000
1950
1900
1850
1800

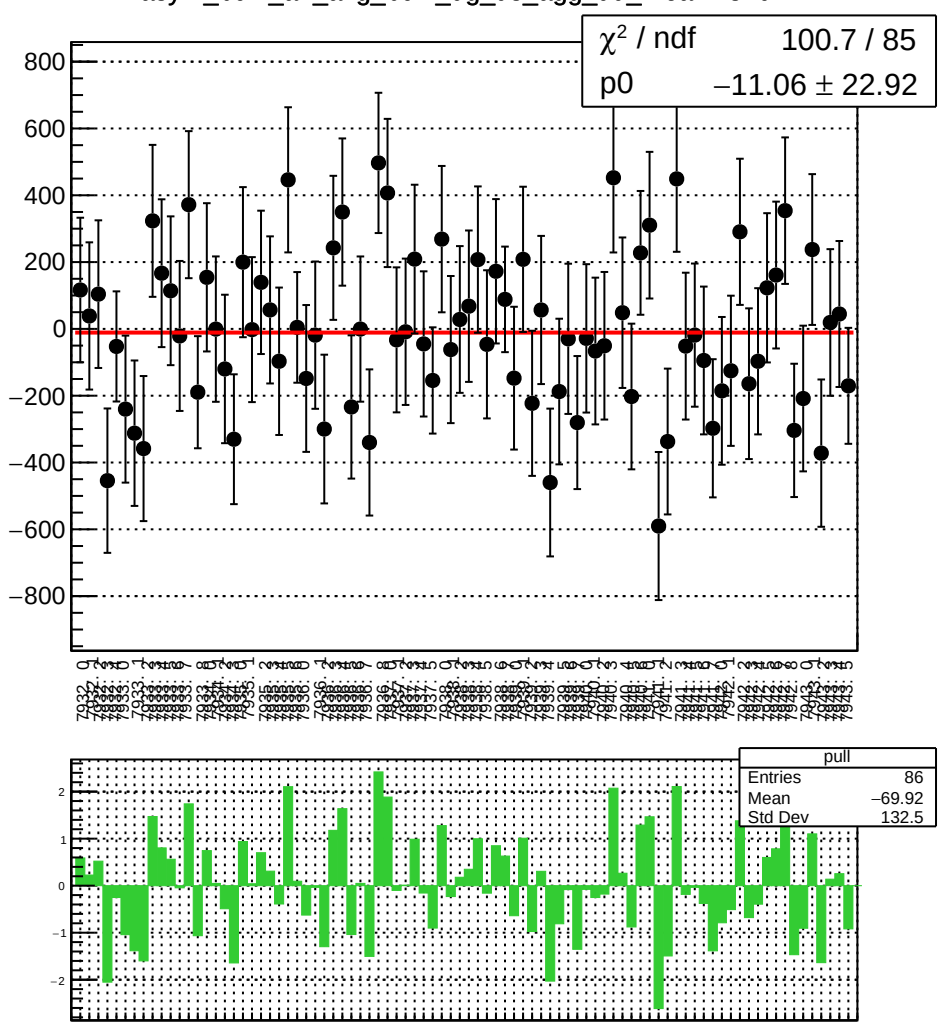

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.2 / 85
p0 33.78 ± 170.2
pull
Entries 86
Mean −259.4
Std Dev 306.3
pull1D
Entries 86
Mean −0.001432
Std Dev 0.4064

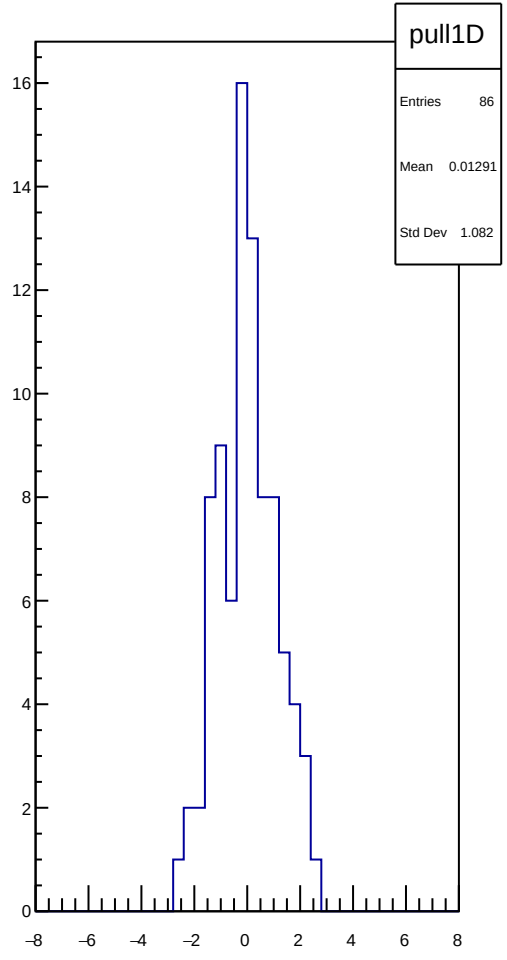

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1693 / 85
p0 154.9 ± 0.1204
180
175
170
165
160
155
150
145

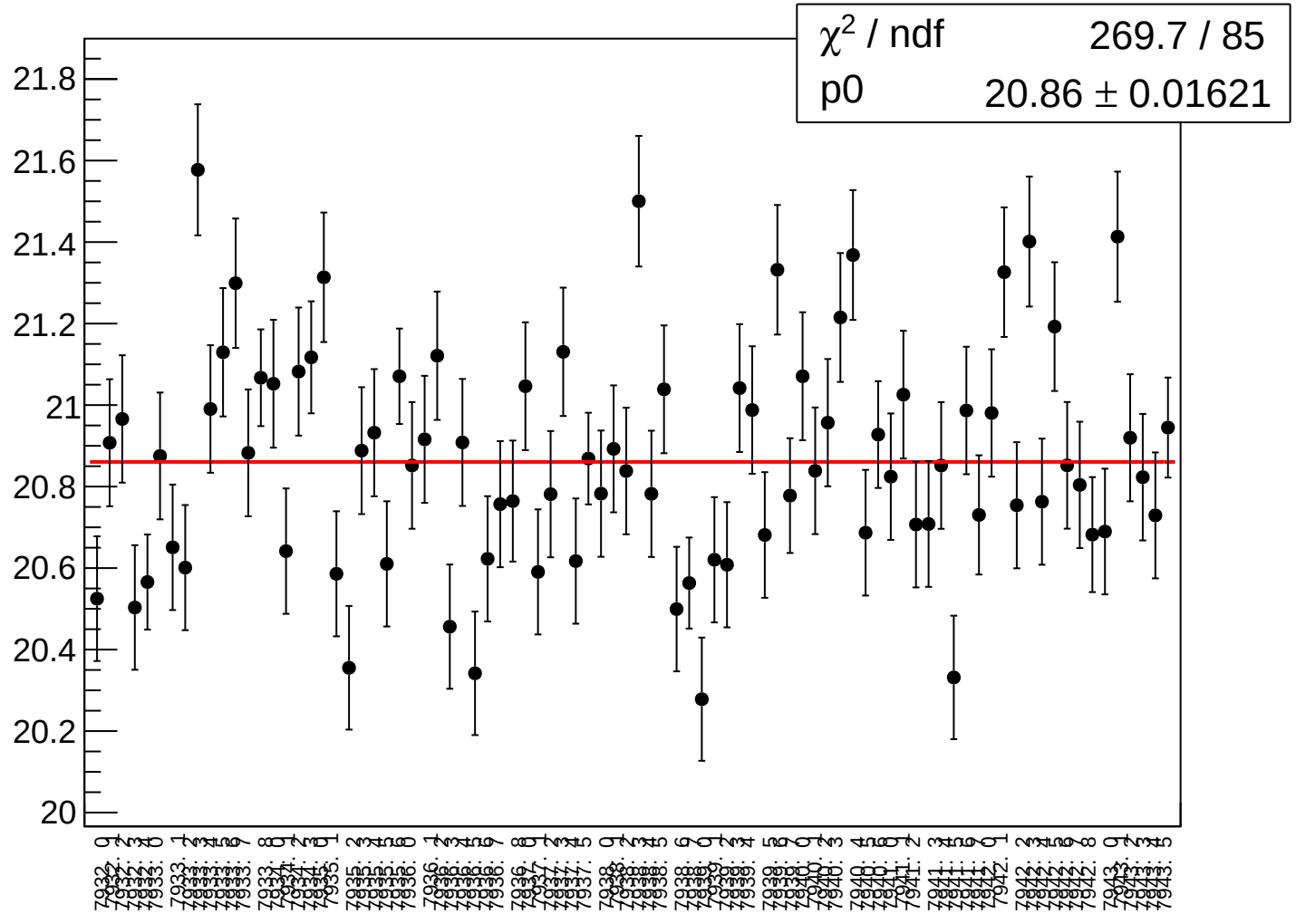

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 98.47 / 85
p0 −19.72 ± 16.6
pull
Entries 86
Mean 14.67
Std Dev 176.1

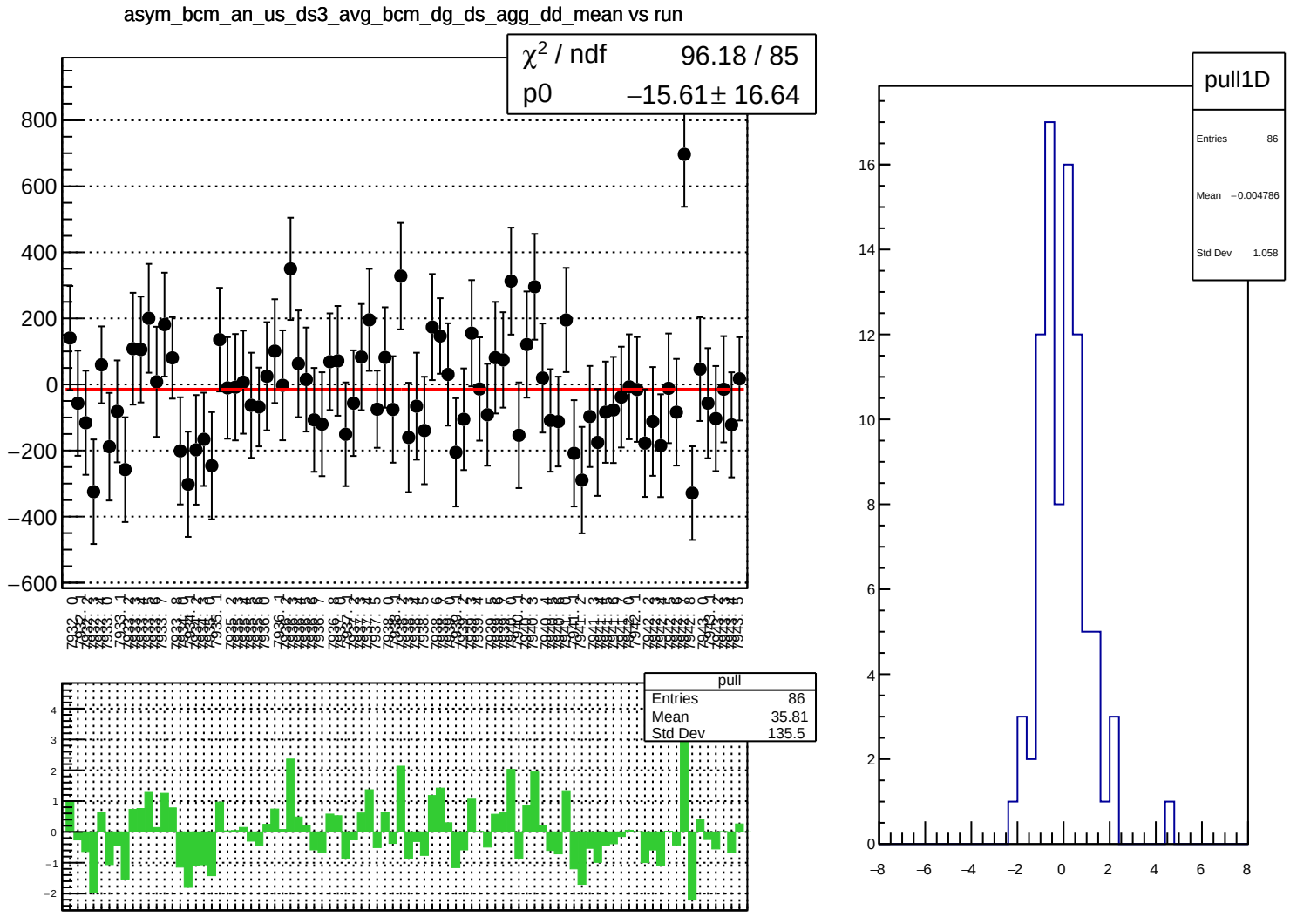

pull1D
Entries 86
Mean −0.002912
Std Dev 1.07

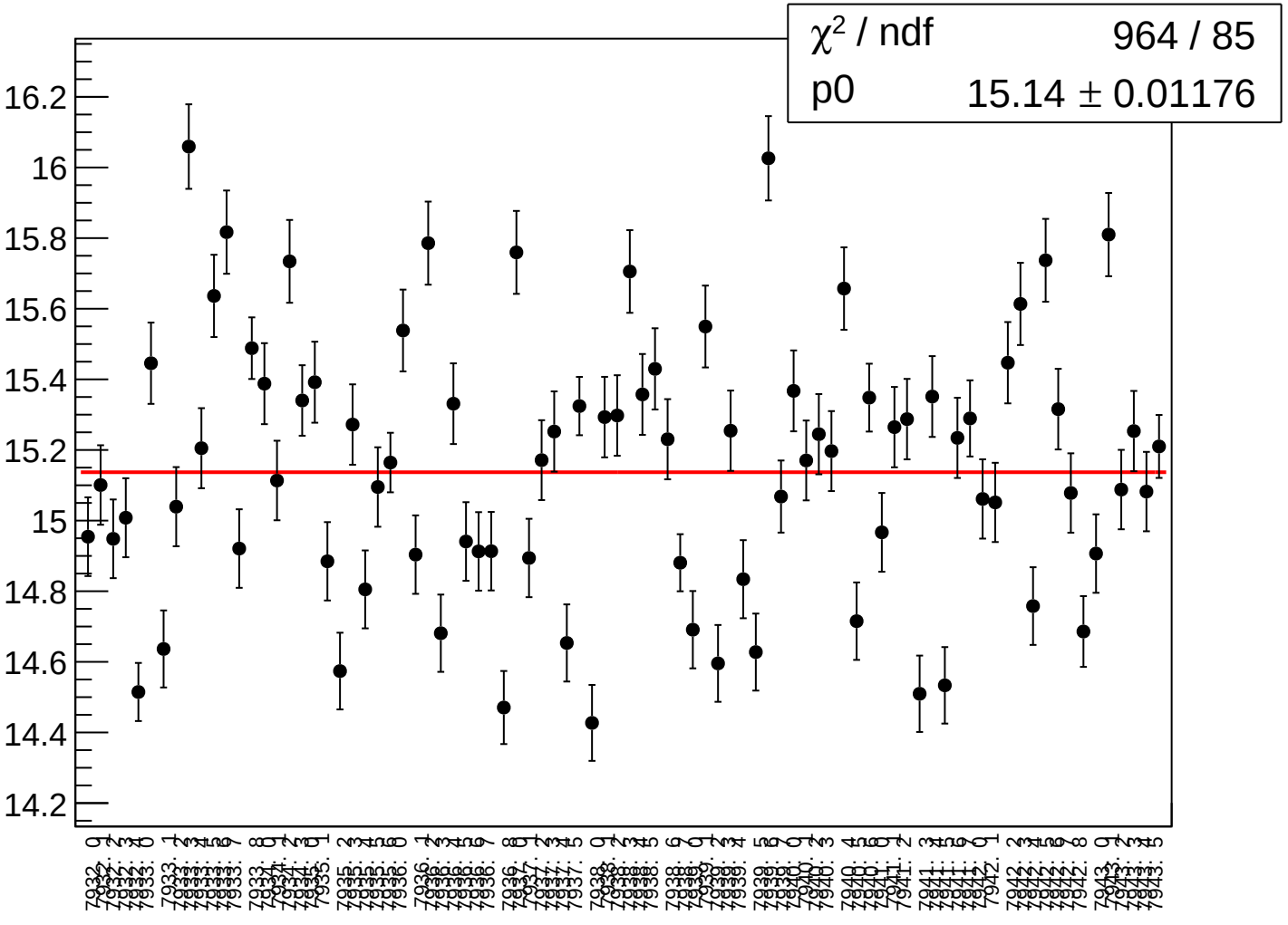

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 805.7 / 85
p0 15.11 ± 0.01174
16.2
16
15.8
15.6
15.4
15.2
15
14.8
14.6
14.4
14.2

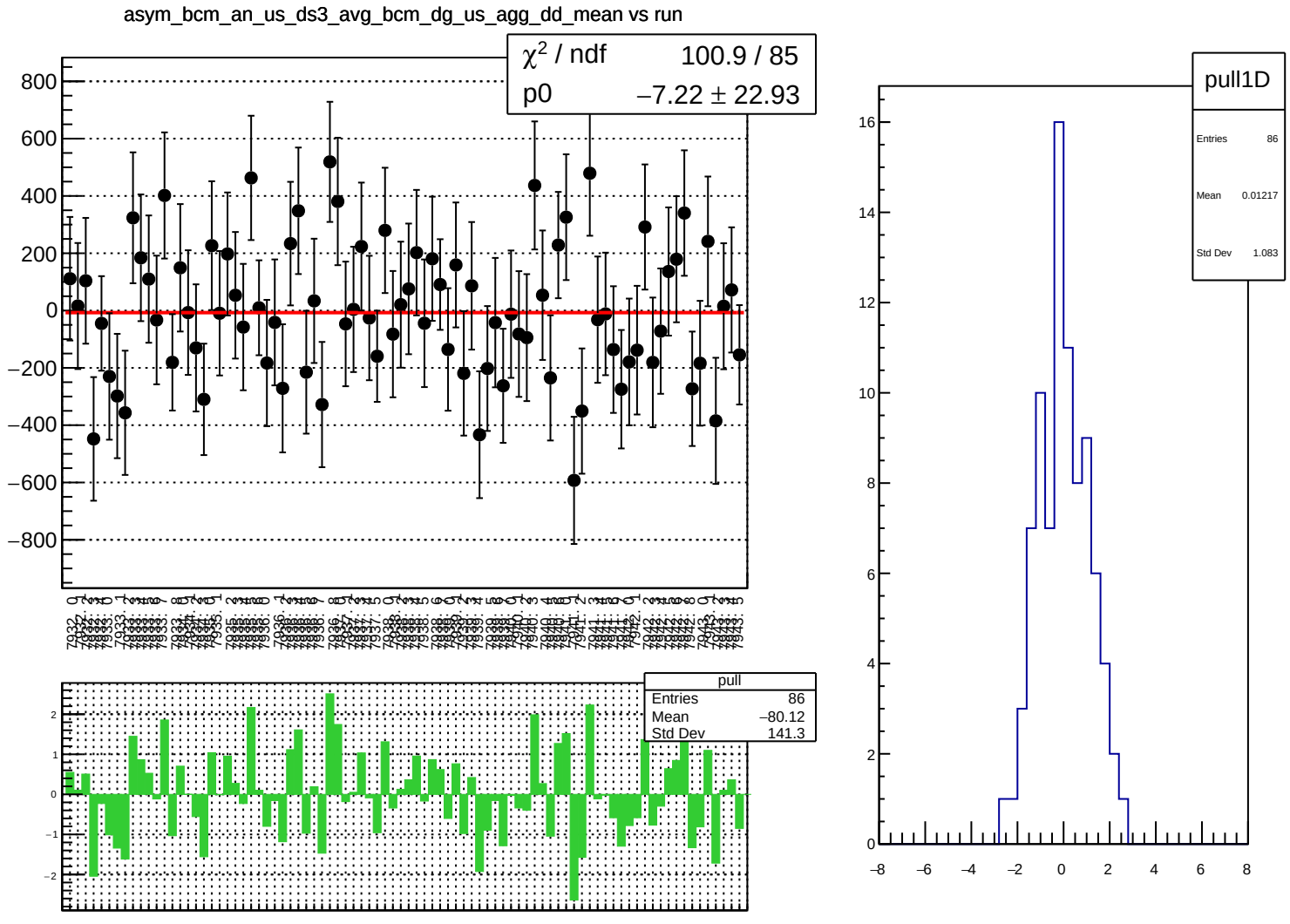

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 100.7 / 85
p0 −11.06 ± 22.92
pull
Entries 86
Mean −69.92
Std Dev 132.5

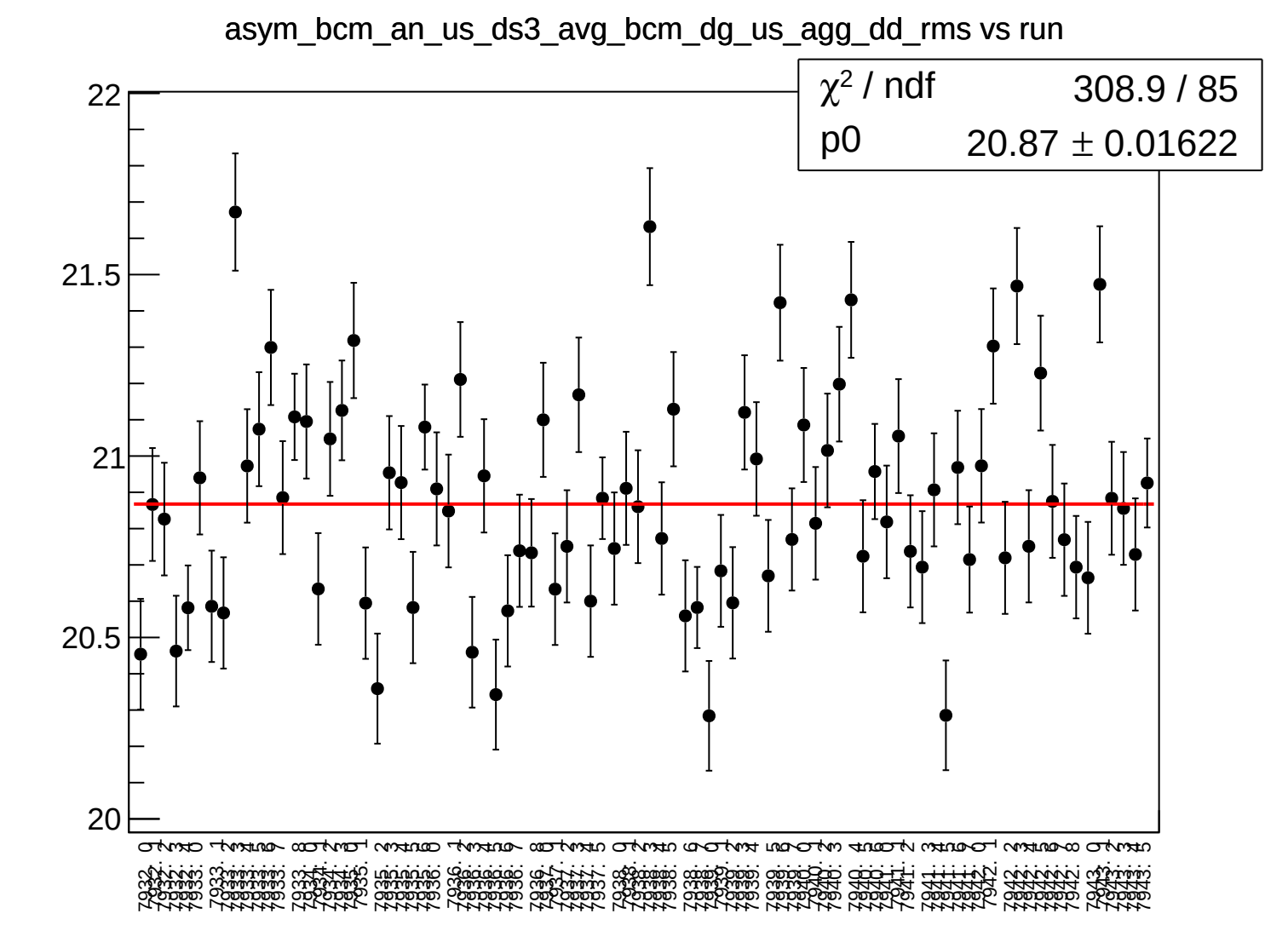

pull1D
Entries 86
Mean 0.01291
Std Dev 1.082

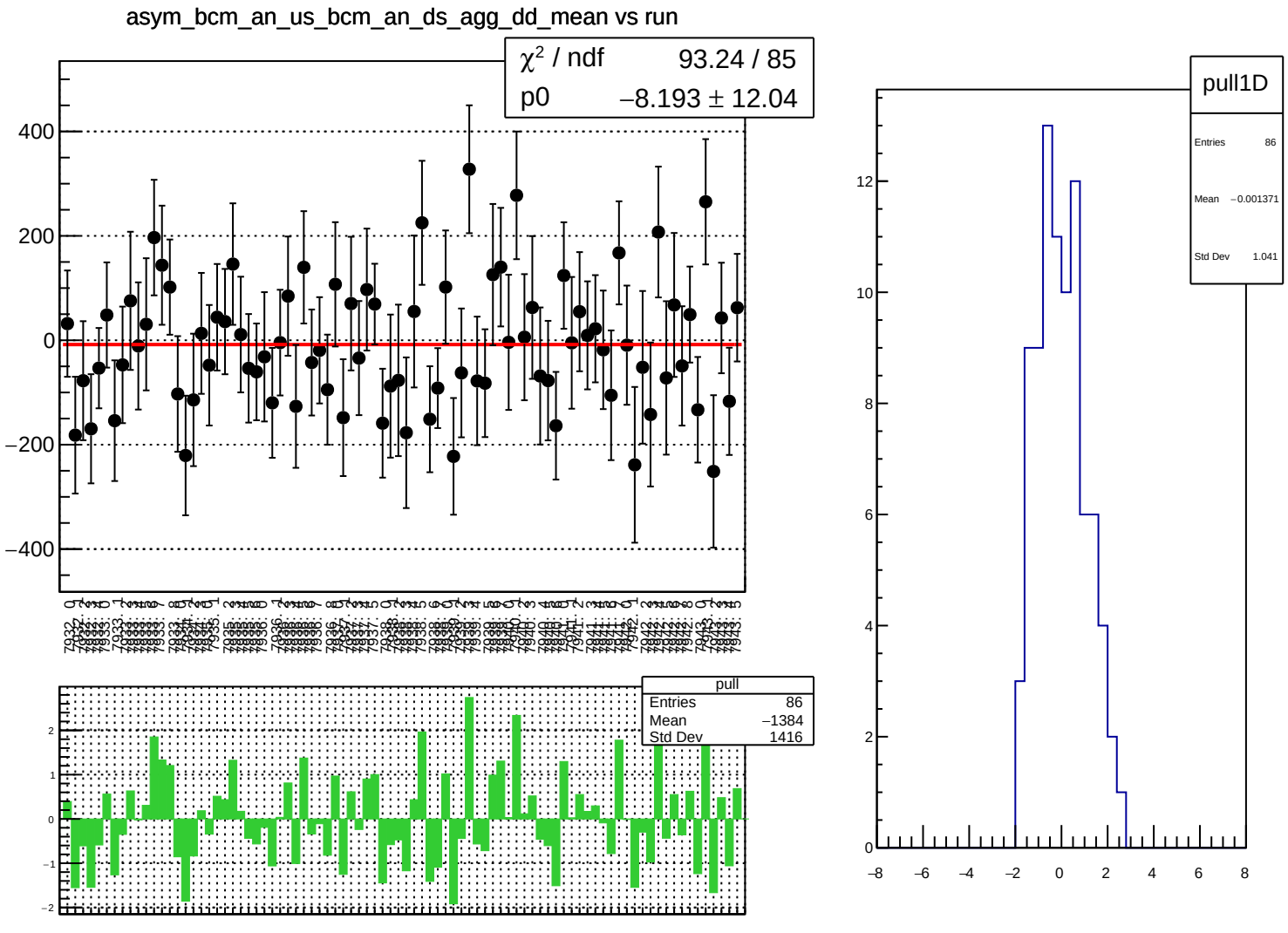

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 269.7 / 85
p0 20.86 ± 0.01621
21.8
21.6
21.4
21.2
21
20.8
20.6
20.4
20.2
20

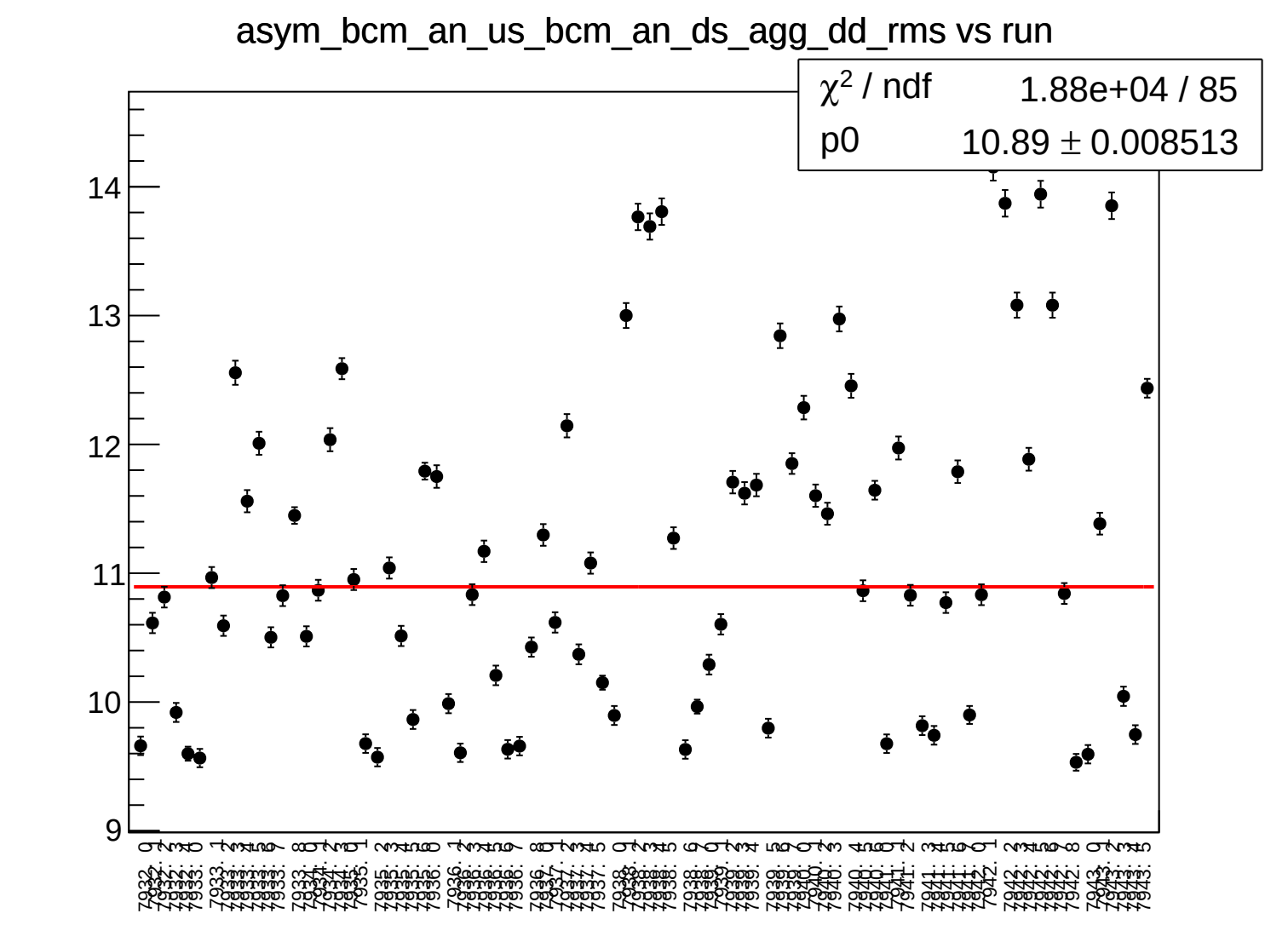

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 96.18 / 85
p0 −15.61 ± 16.64
pull
Entries 86
Mean 35.81
Std Dev 135.5
pull1D
Entries 86
Mean −0.004786
Std Dev 1.058

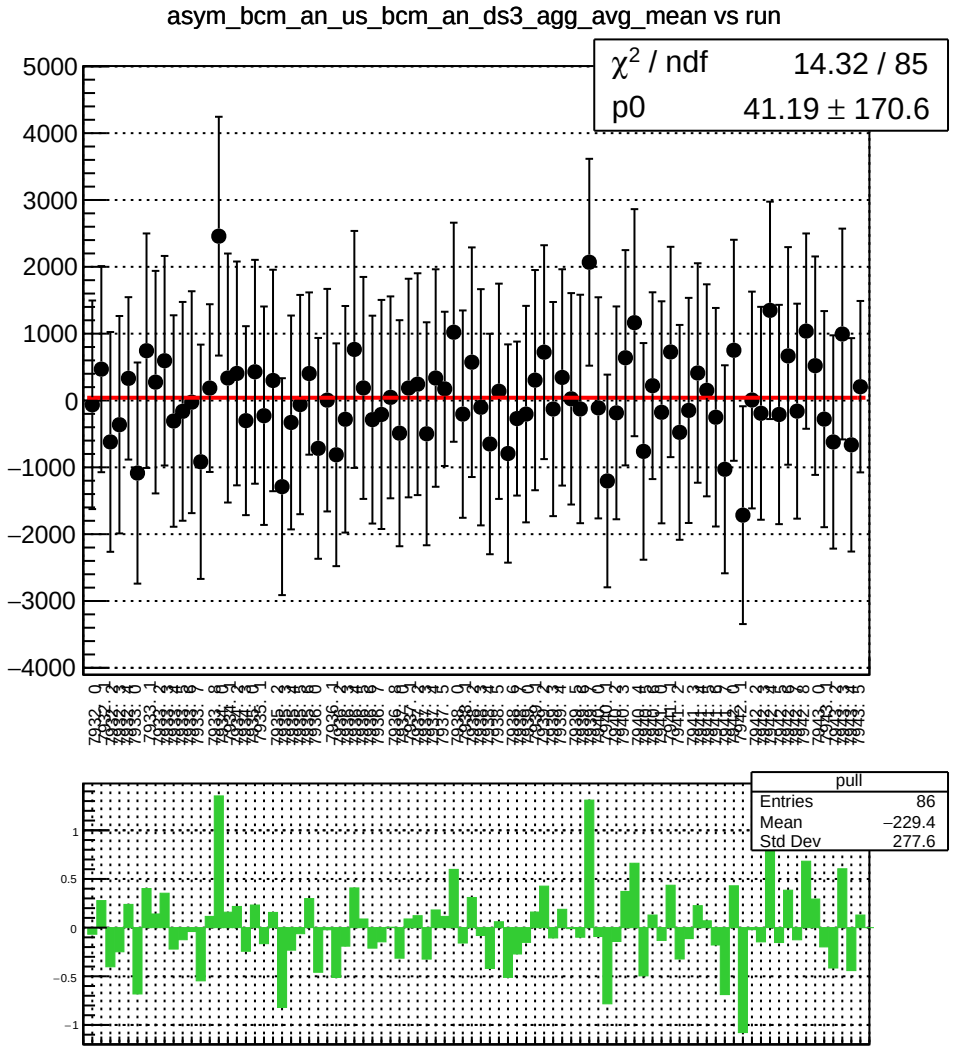

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 964 / 85
p0 15.14 ± 0.01176
16.2
16
15.8
15.6
15.4
15.2
15
14.8
14.6
14.4
14.2

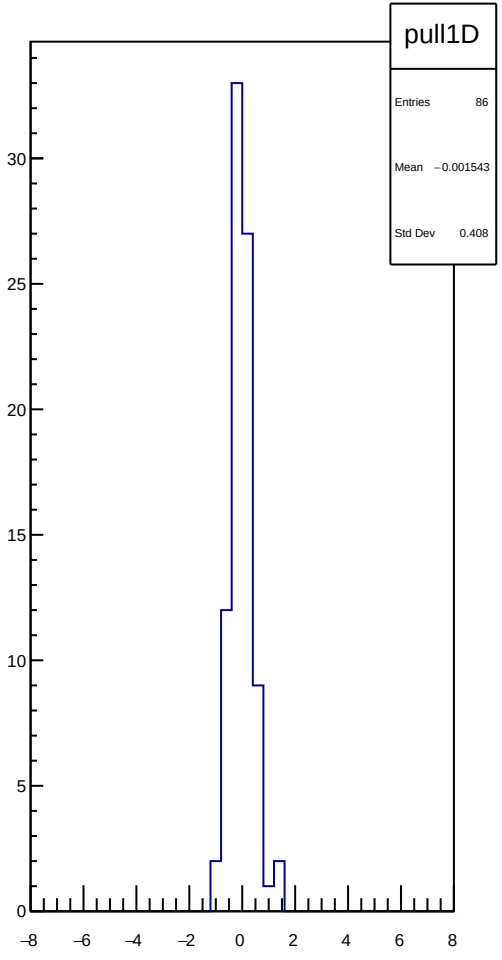

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 100.9 / 85
p0 −7.22 ± 22.93
pull
Entries 86
Mean −80.12
Std Dev 141.3
pull1D
Entries 86
Mean 0.01217
Std Dev 1.083

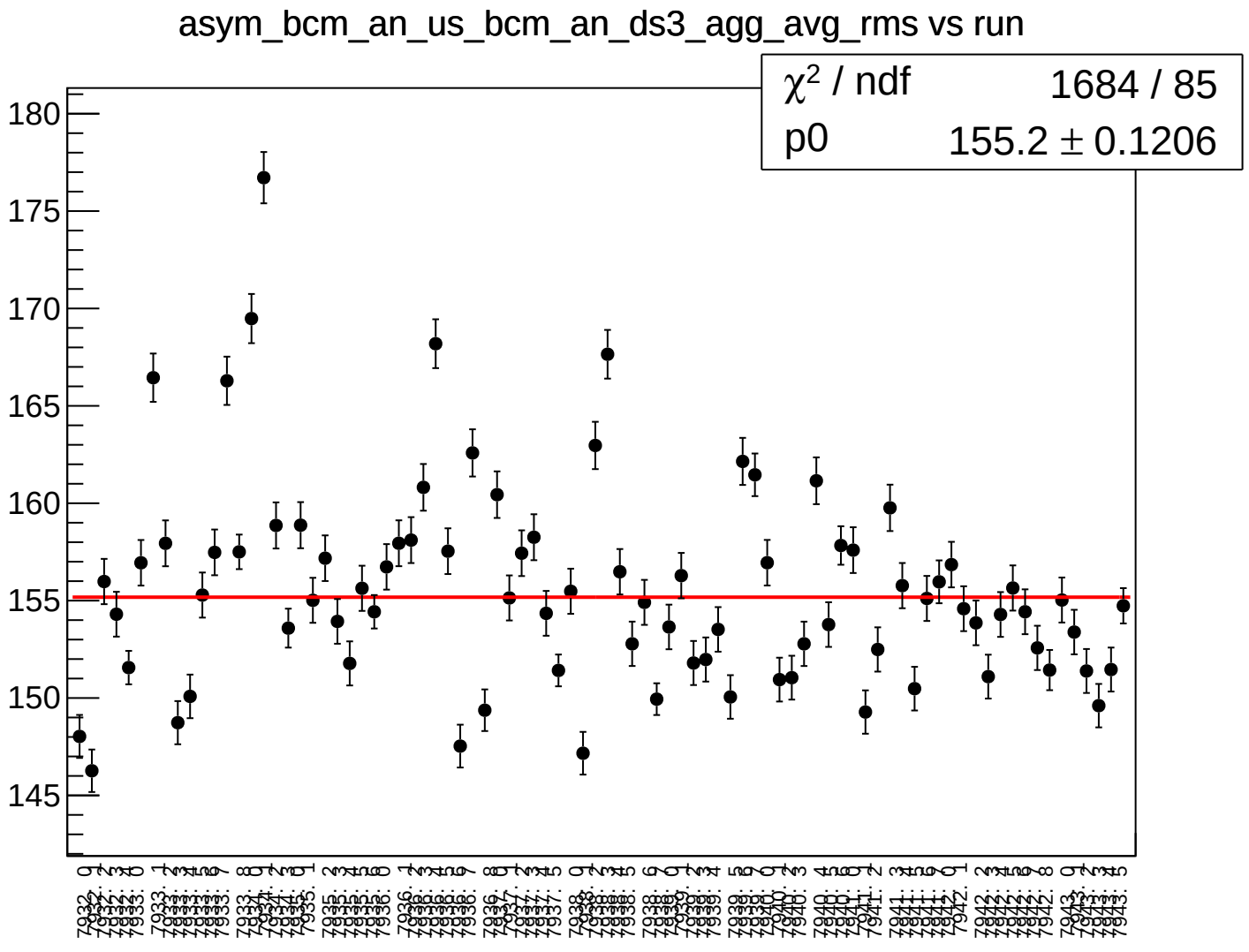

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 308.9 / 85
p0 20.87 ± 0.01622
22
21.5
21
20.5
20

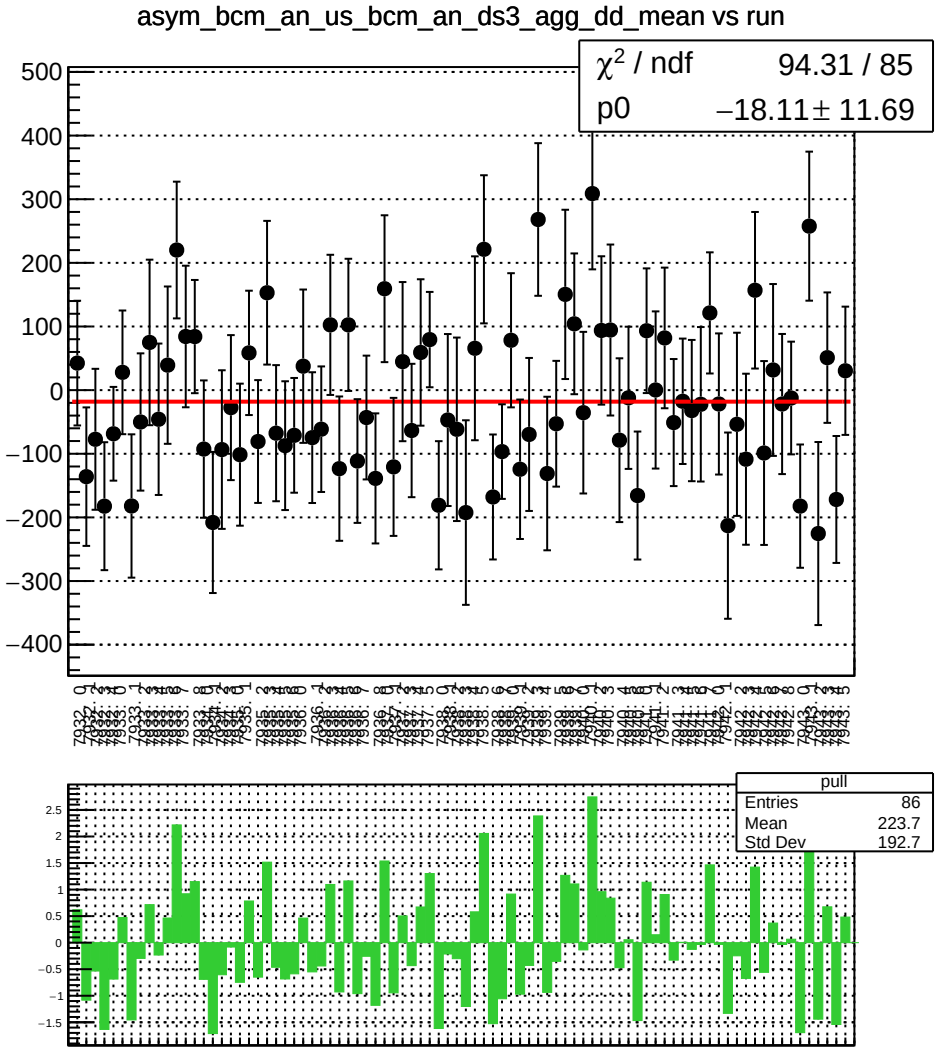

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 93.24 / 85
p0 −8.193 ± 12.04
400
200
0
−200
−400
pull
Entries 86
Mean −1384
Std Dev 1416
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.001371
Std Dev 1.041
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

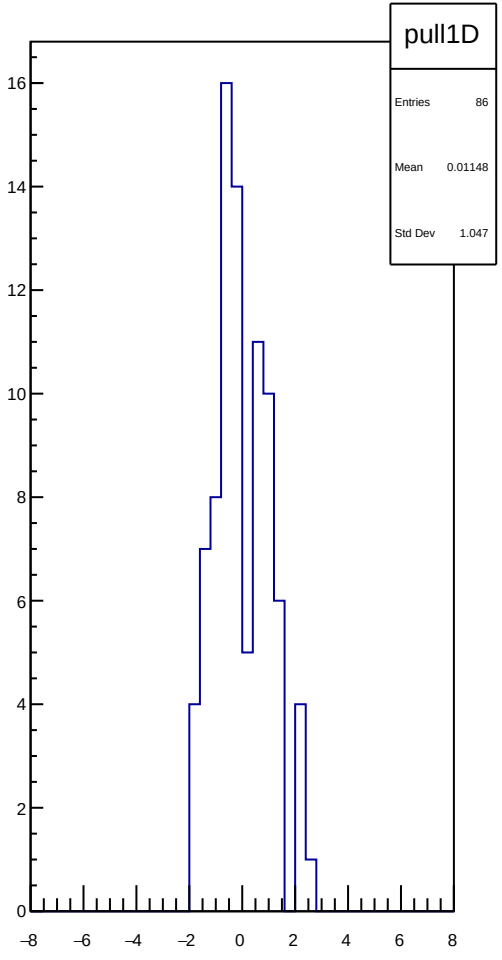

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.88e+04 / 85
p0 10.89 ± 0.008513
14
13
12
11
10
9

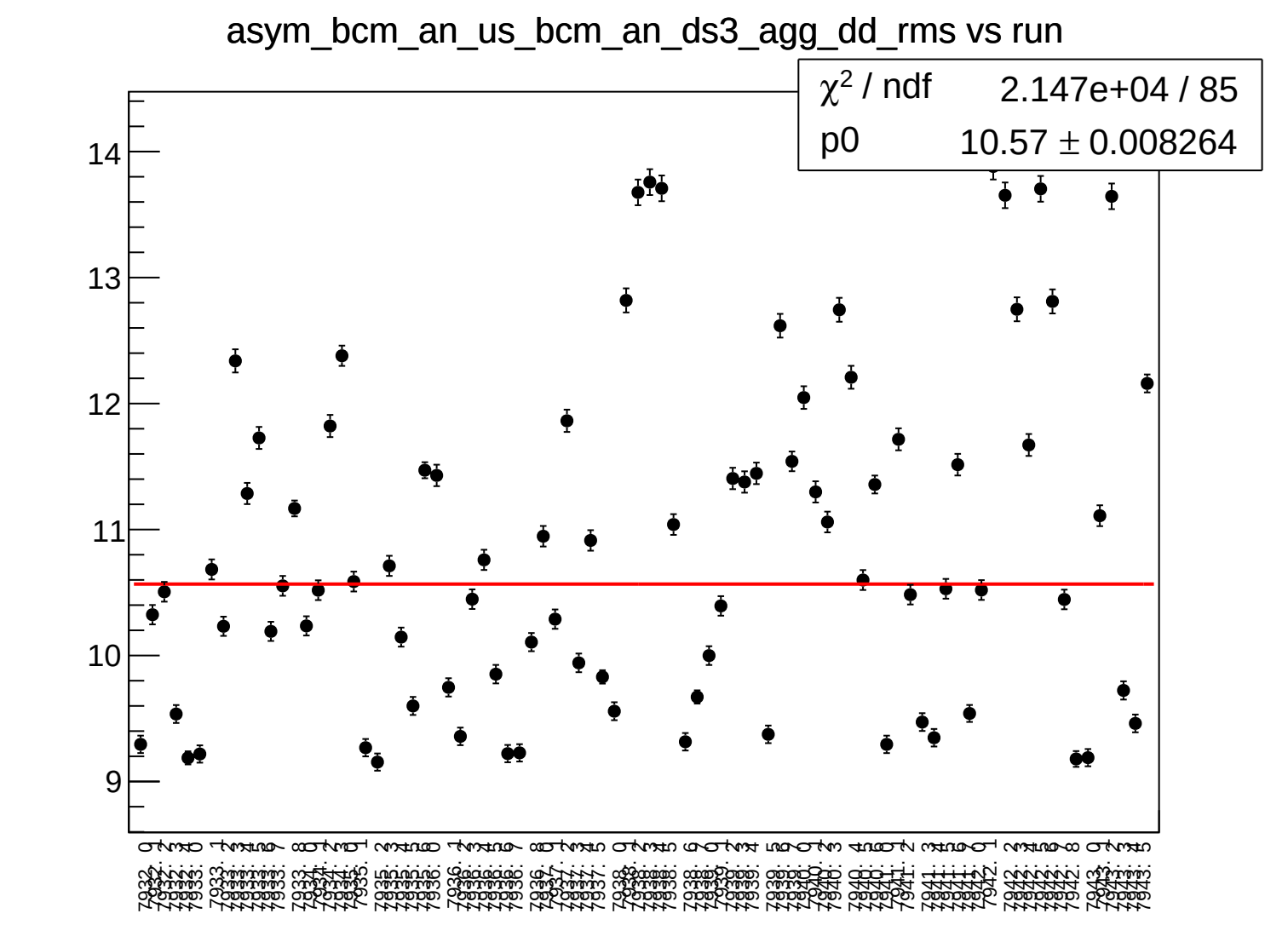

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.32 / 85
p0 41.19 ± 170.6
pull
Entries 86
Mean −229.4
Std Dev 277.6

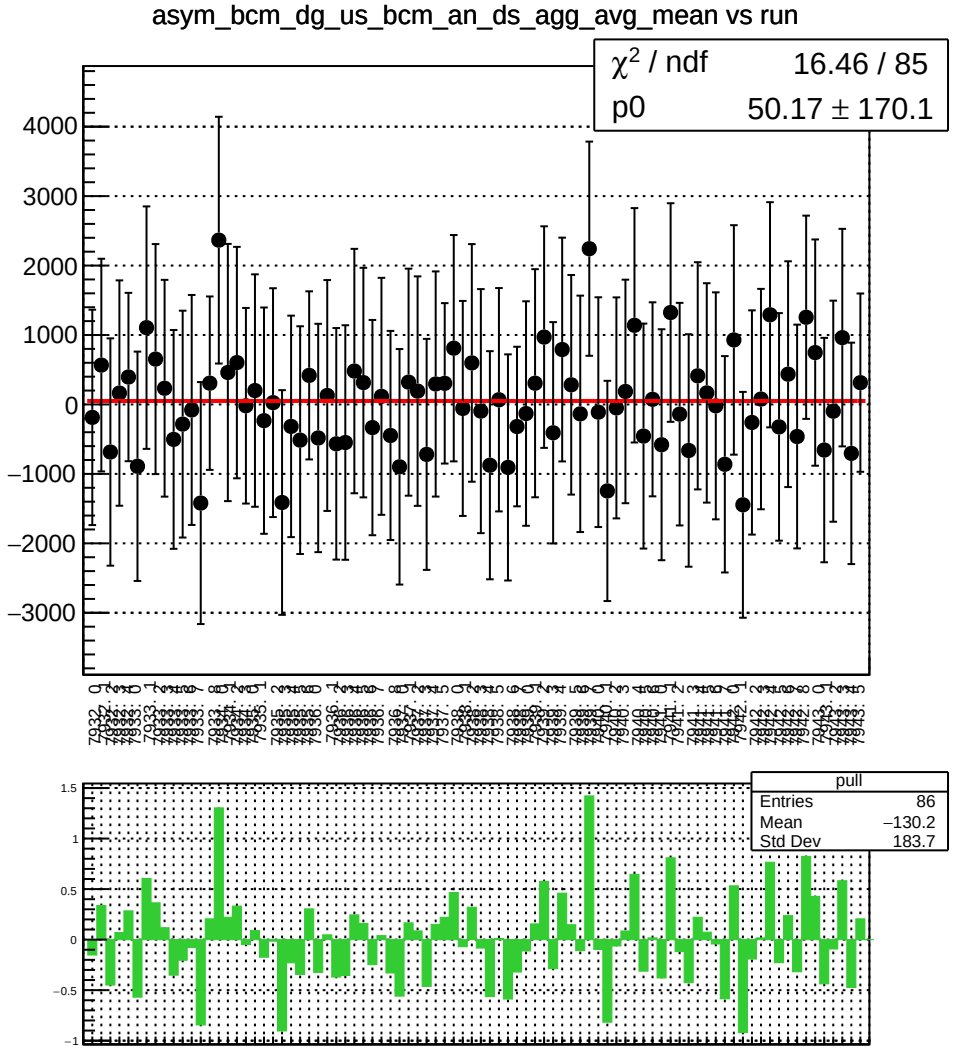

pull1D
Entries 86
Mean −0.001543
Std Dev 0.408

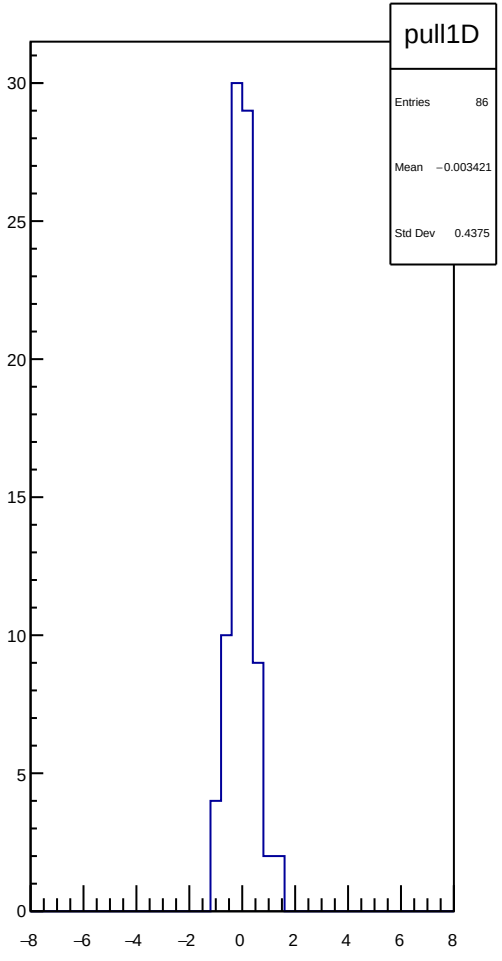

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1684 / 85
p0 155.2 ± 0.1206
180
175
170
165
160
155
150
145

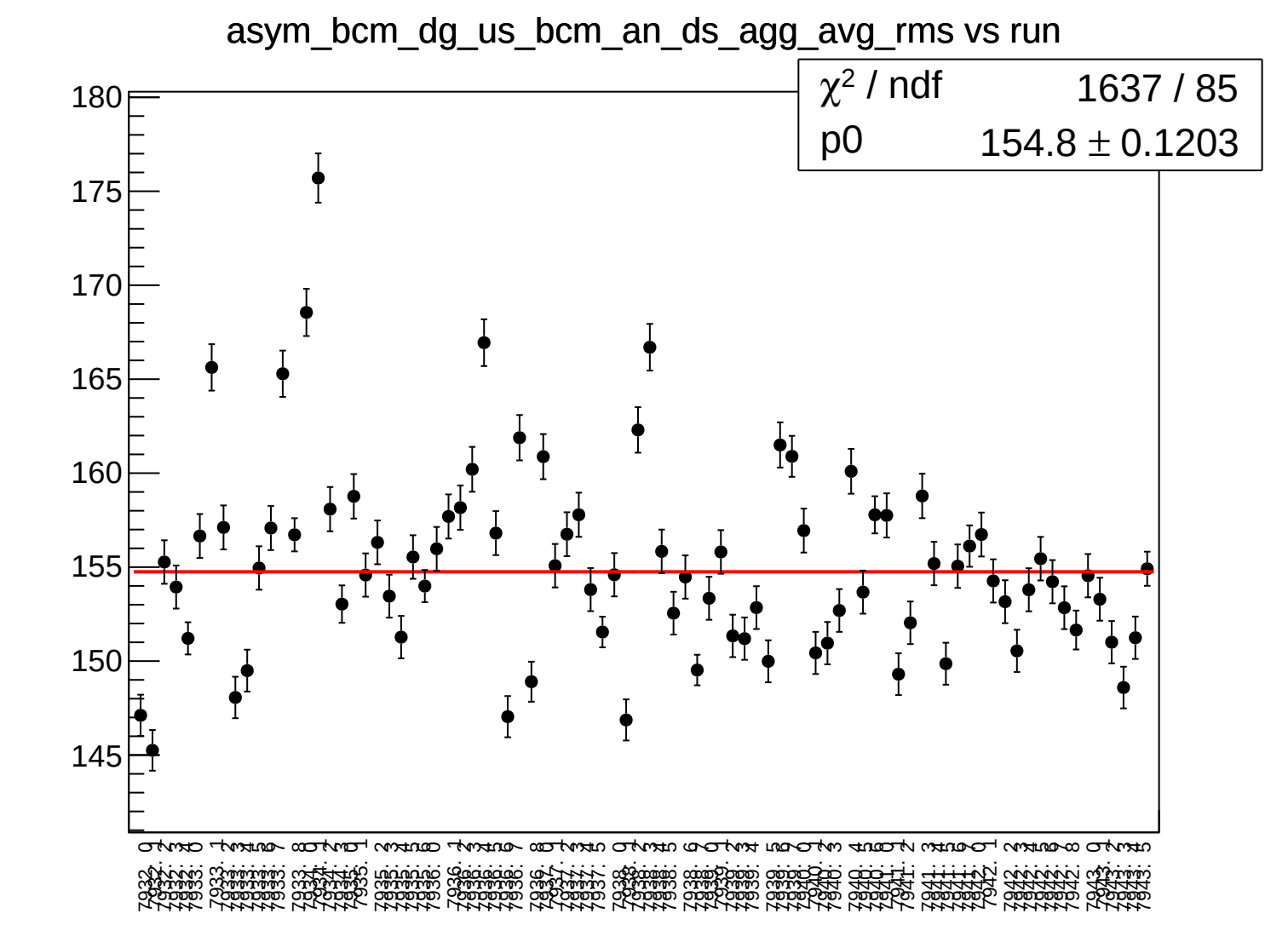

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 94.31 / 85
p0 −18.11± 11.69
pull
Entries 86
Mean 223.7
Std Dev 192.7

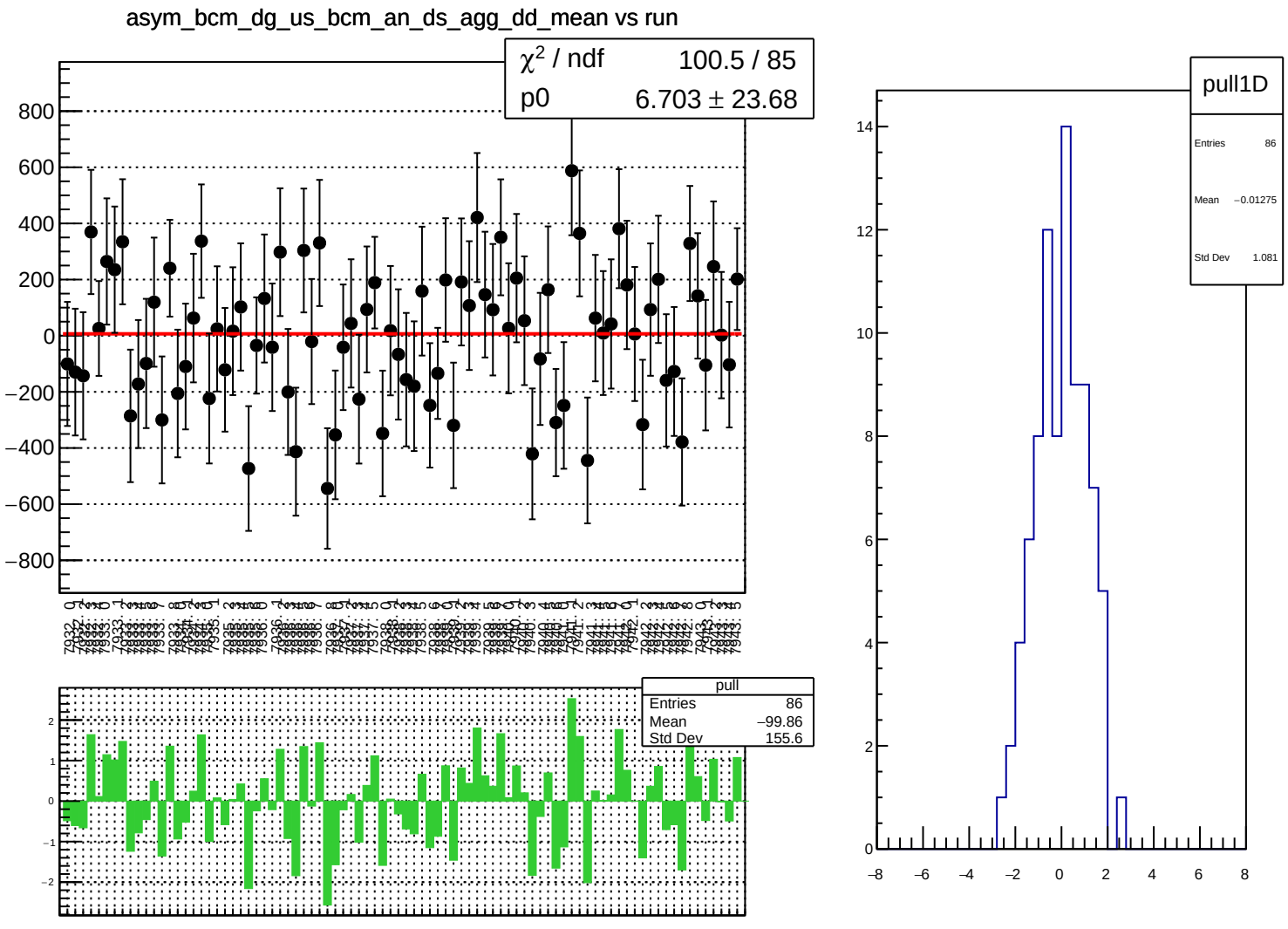

pull1D
Entries 86
Mean 0.01148
Std Dev 1.047

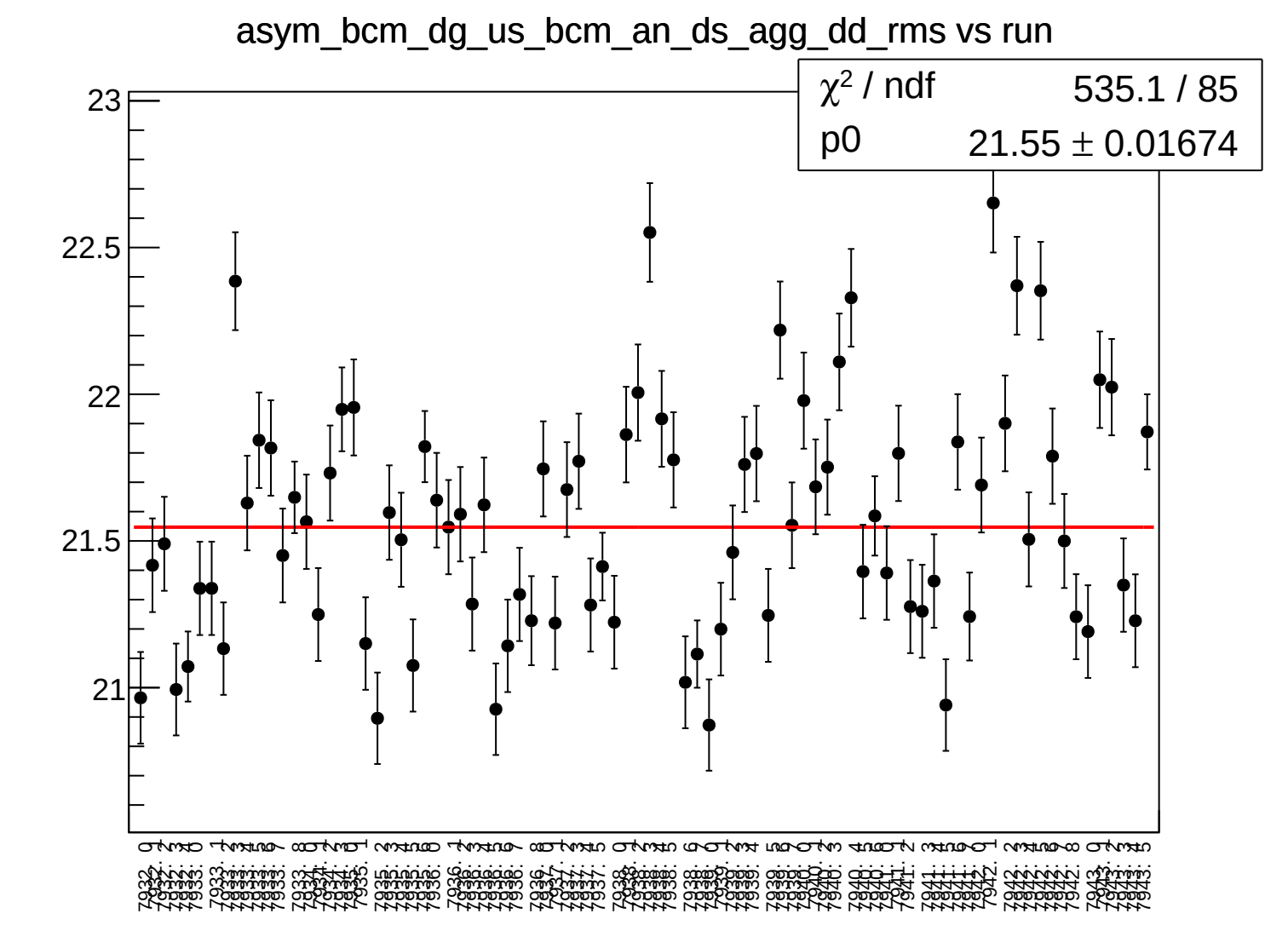

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.147e+04 / 85
p0 10.57 ± 0.008264
14
13
12
11
10
9

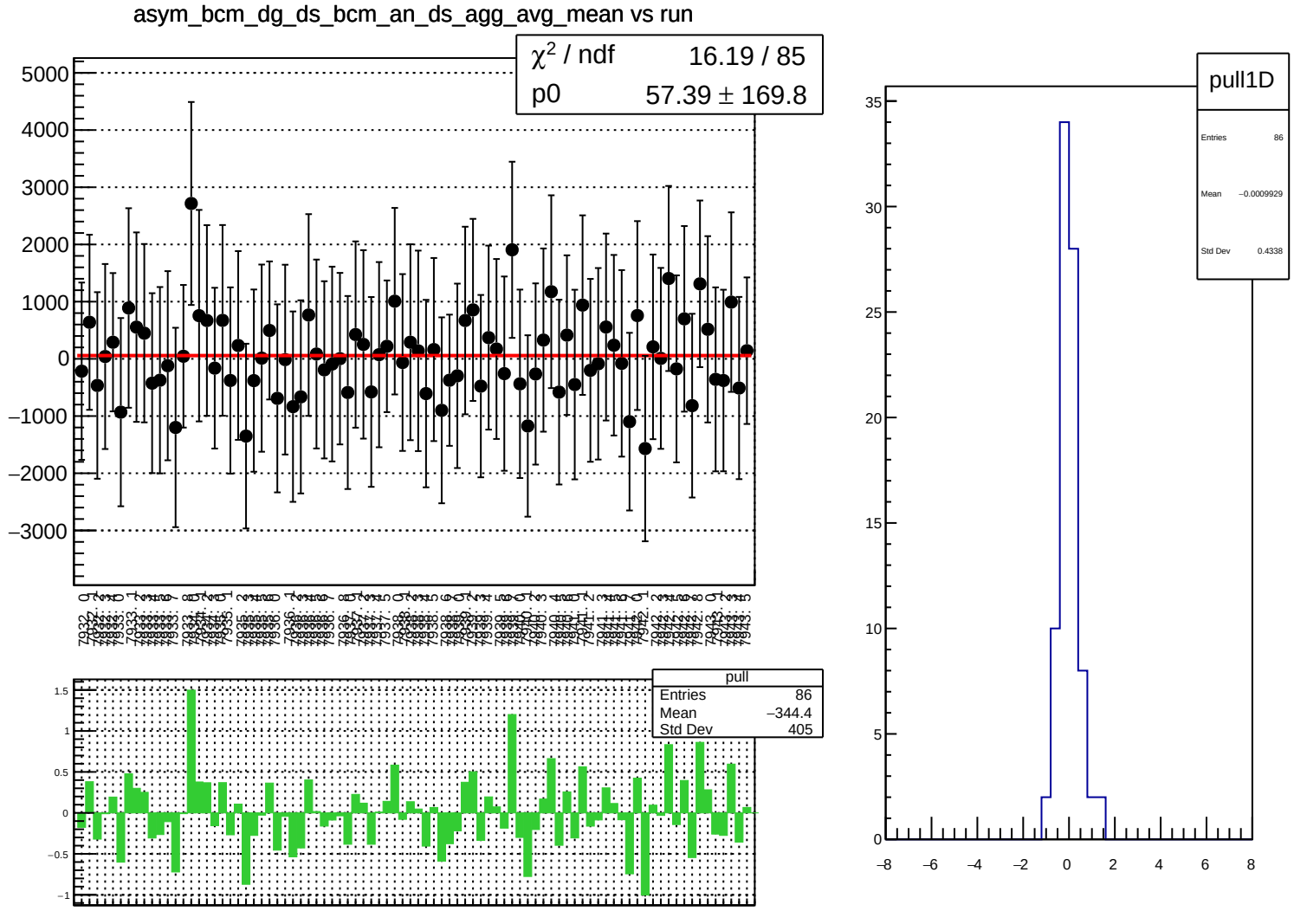

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.46 / 85
p0 50.17 ± 170.1
pull
Entries 86
Mean −130.2
Std Dev 183.7

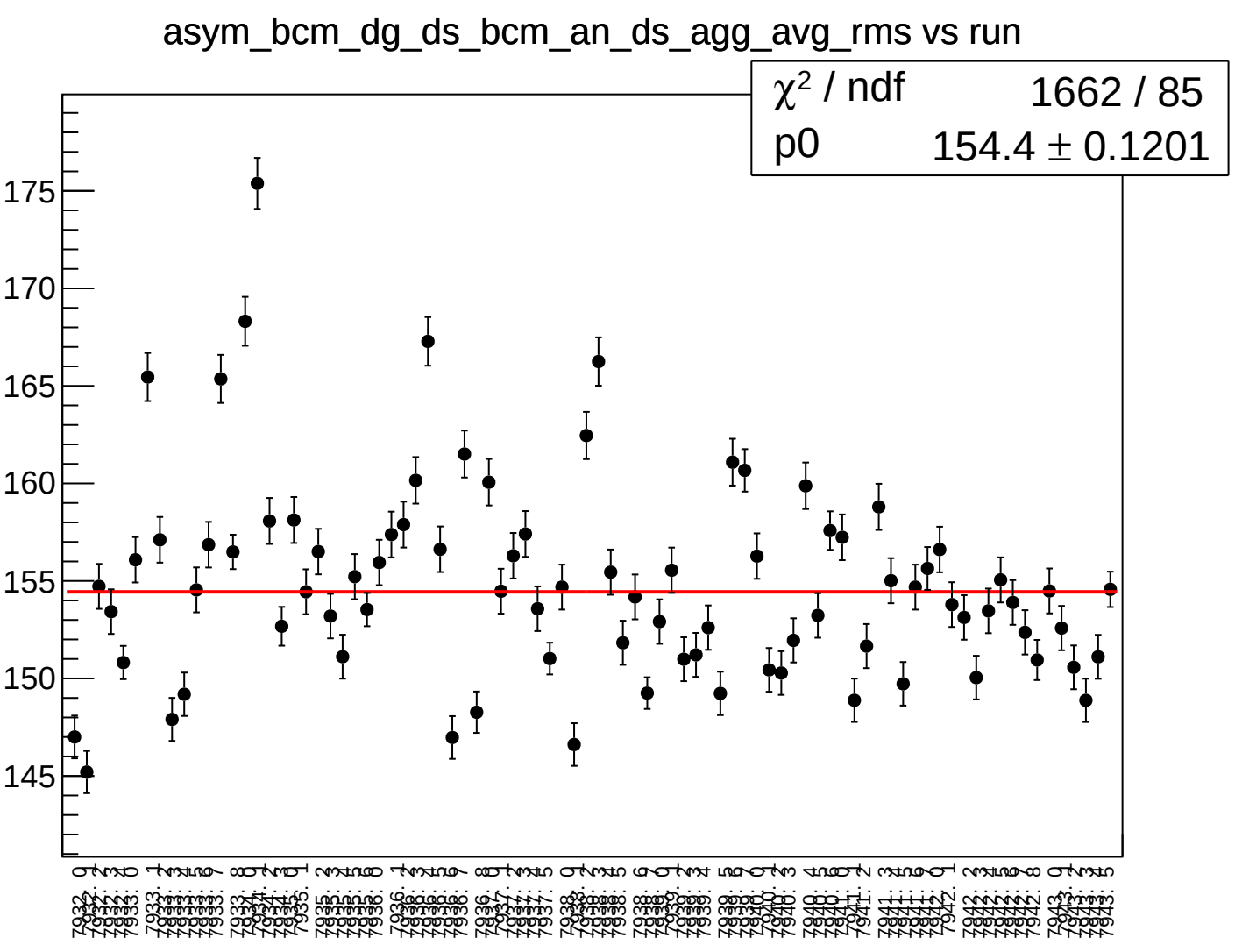

pull1D
Entries 86
Mean −0.003421
Std Dev 0.4375

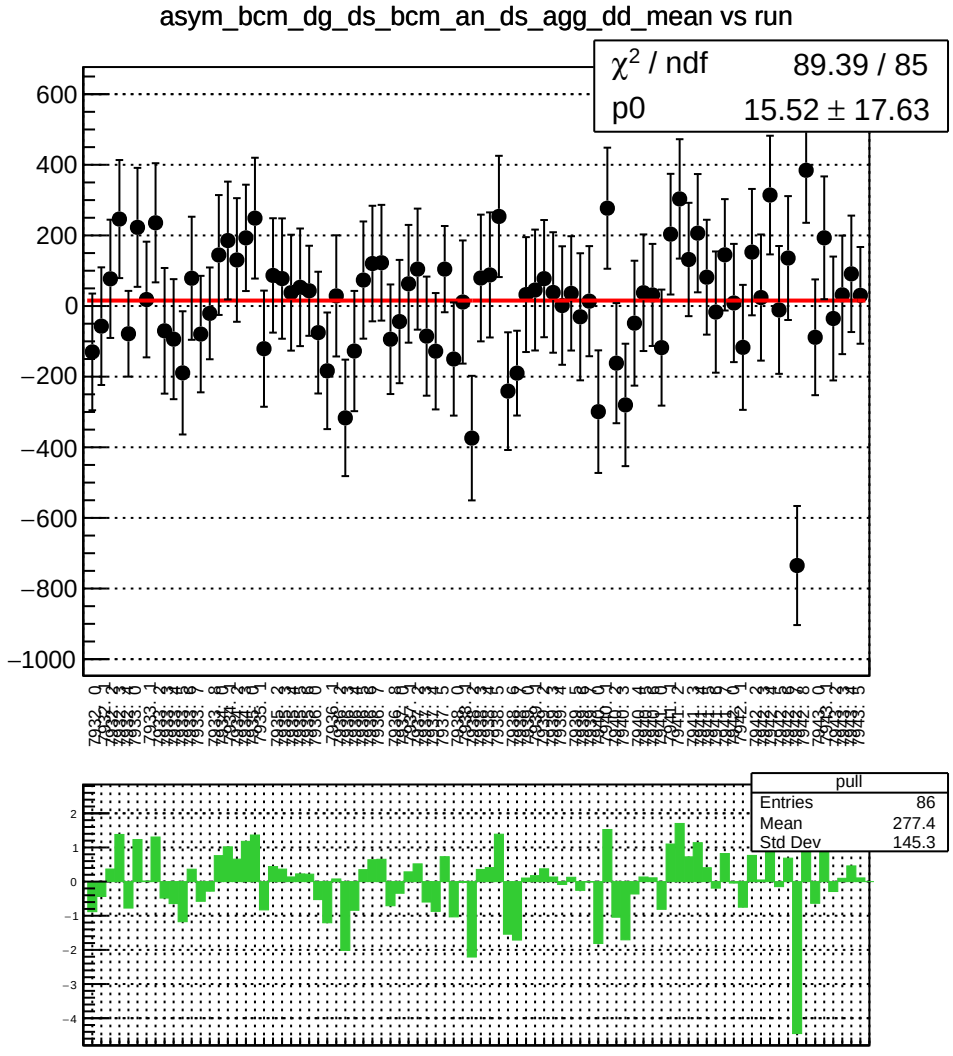

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1637 / 85
p0 154.8 ± 0.1203
180
175
170
165
160
155
150
145

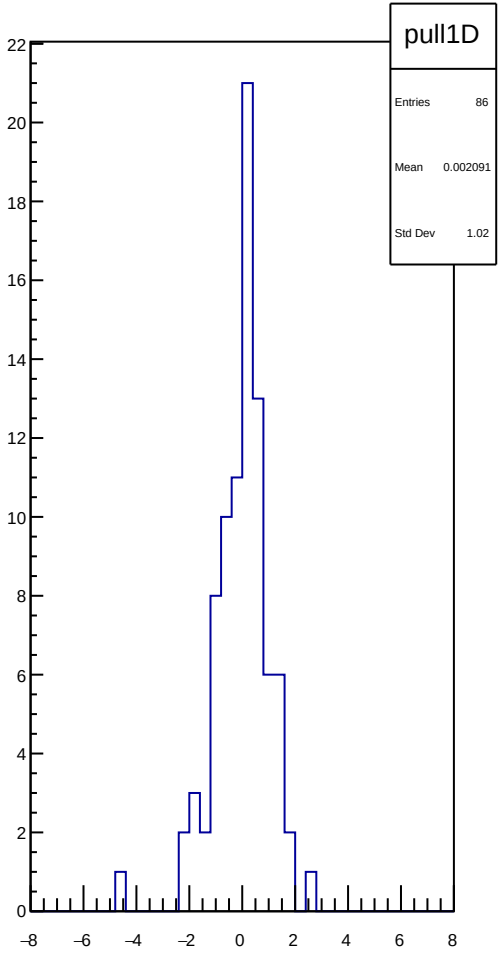

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 100.5 / 85
p0 6.703 ± 23.68
pull
Entries 86
Mean −99.86
Std Dev 155.6
pull1D
Entries 86
Mean −0.01275
Std Dev 1.081

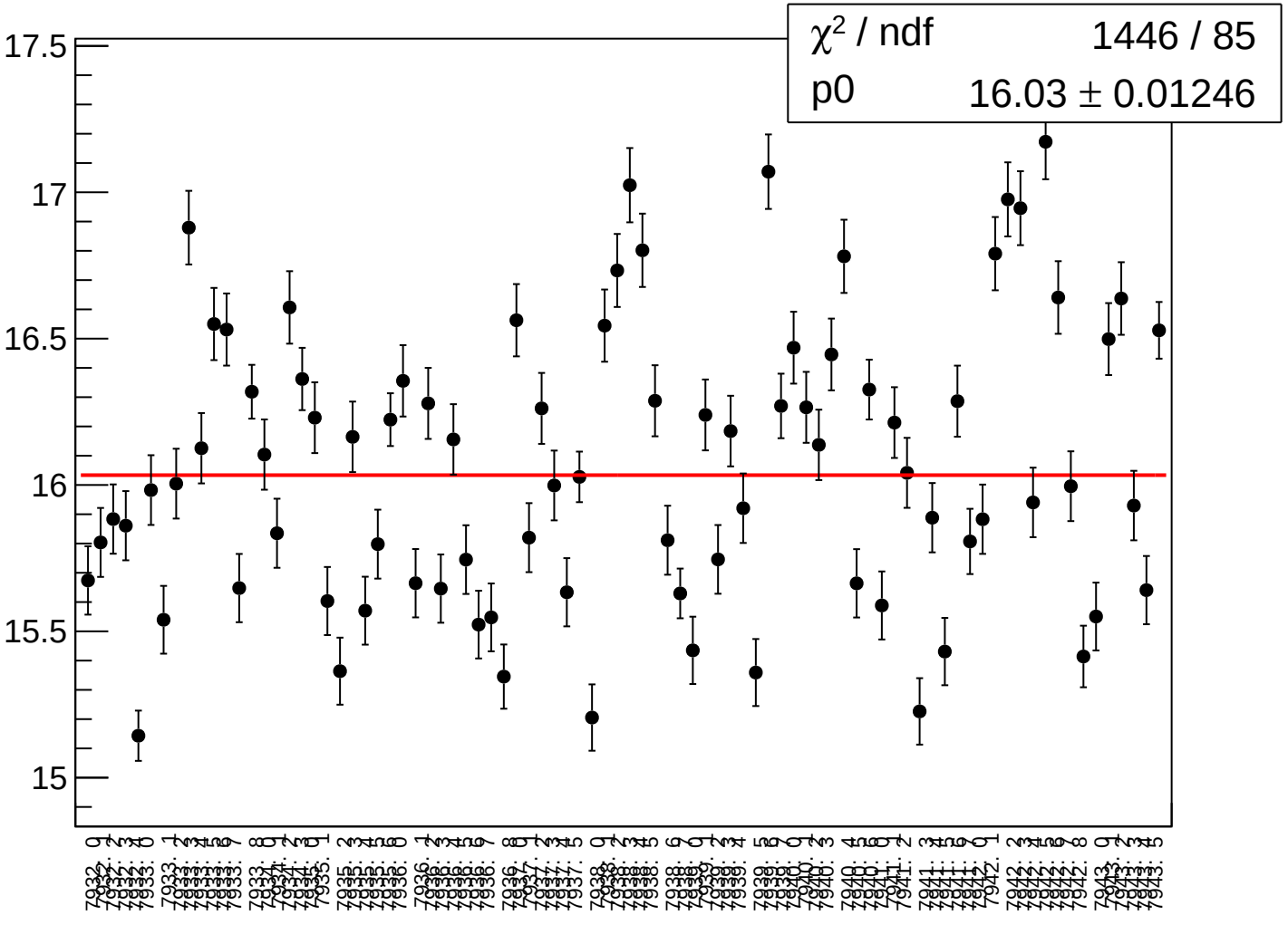

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 535.1 / 85
p0 21.55 ± 0.01674
23
22.5
22
21.5
21

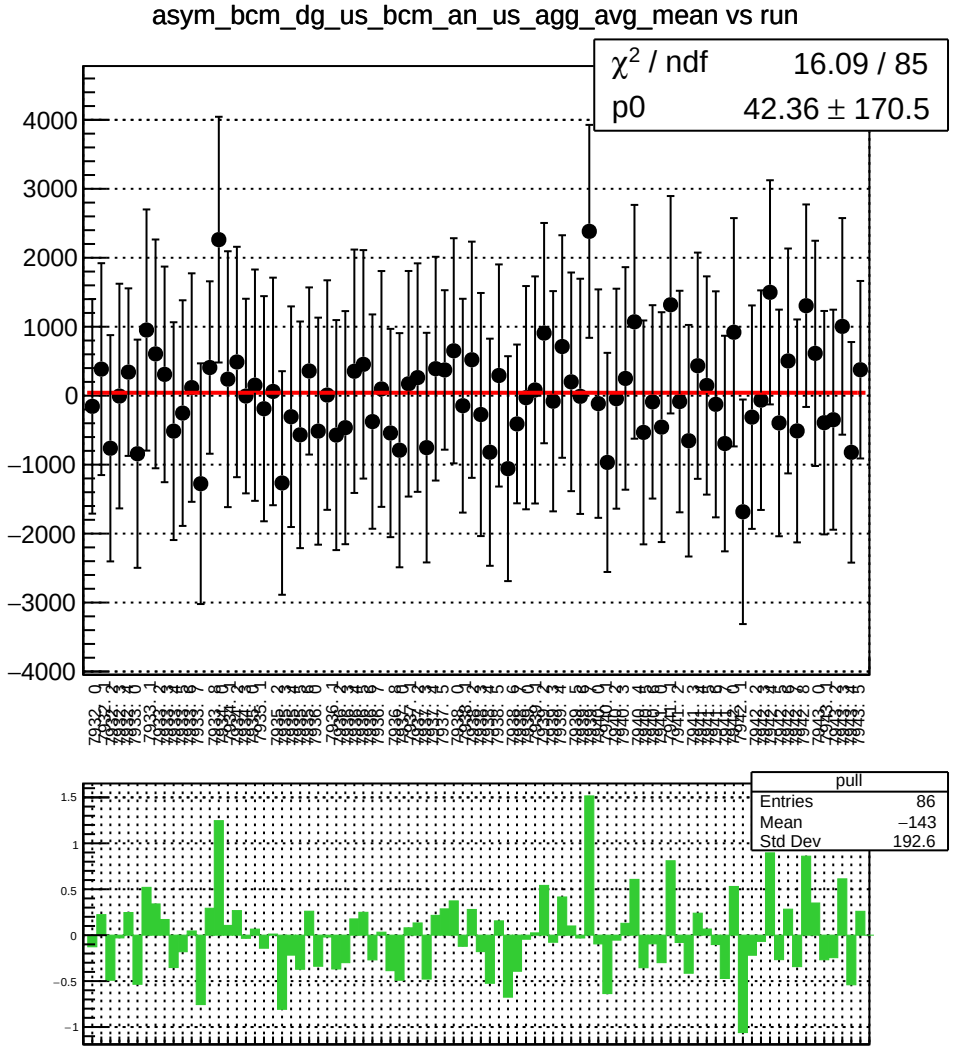

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.19 / 85
p0 57.39 ± 169.8
pull
Entries 86
Mean −344.4
Std Dev 405
pull1D
Entries 86
Mean −0.0009929
Std Dev 0.4338

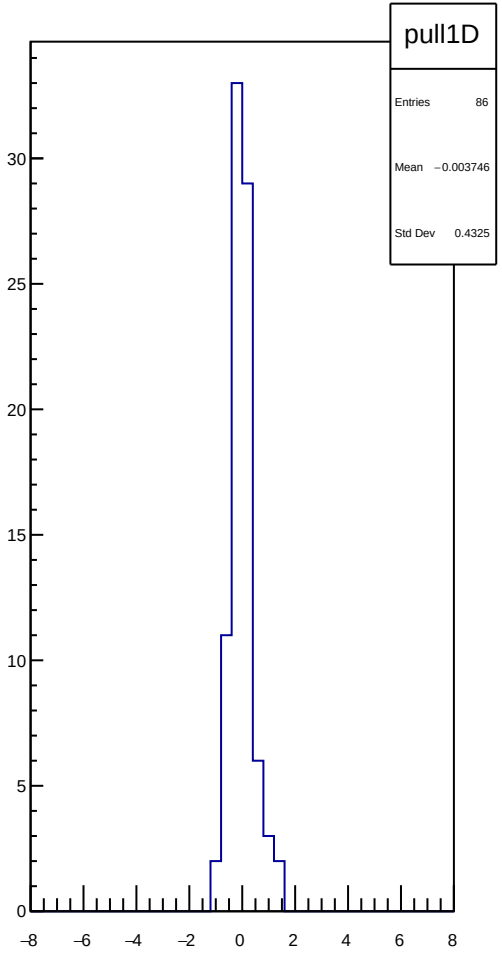

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1662 / 85
p0 154.4 ± 0.1201
175
170
165
160
155
150
145

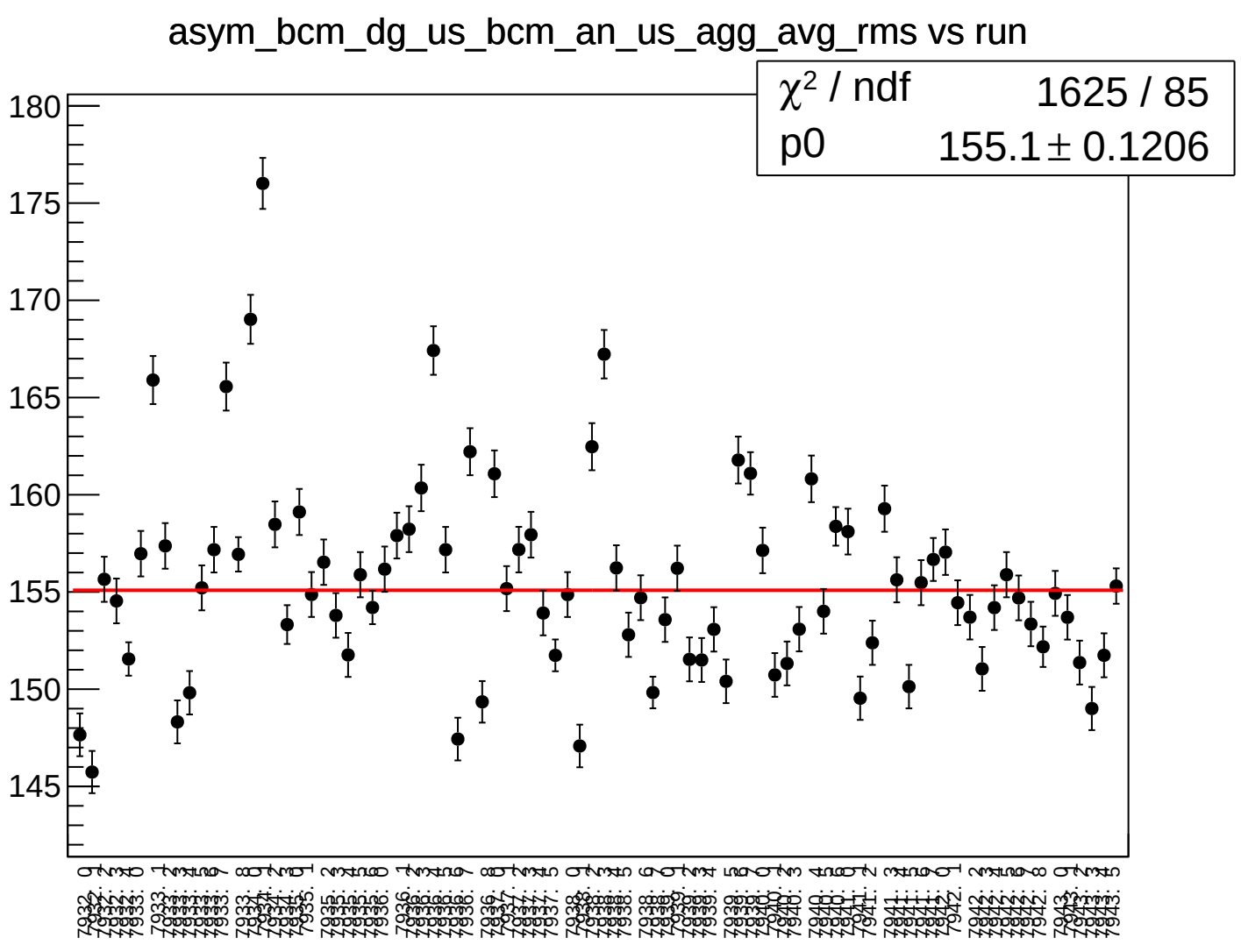

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 89.39 / 85
p0 15.52 ± 17.63
pull
Entries 86
Mean 277.4
Std Dev 145.3

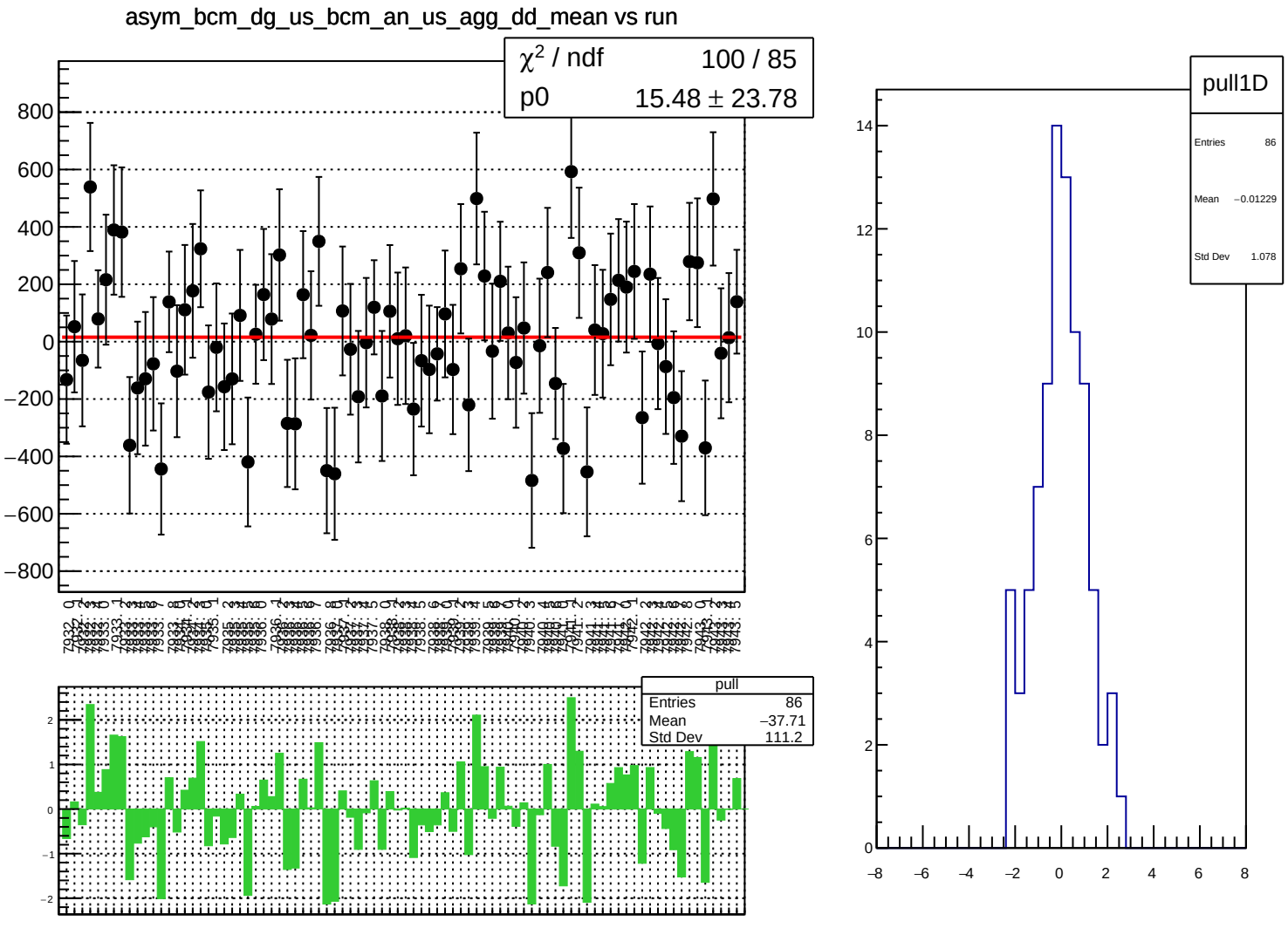

pull1D
Entries 86
Mean 0.002091
Std Dev 1.02

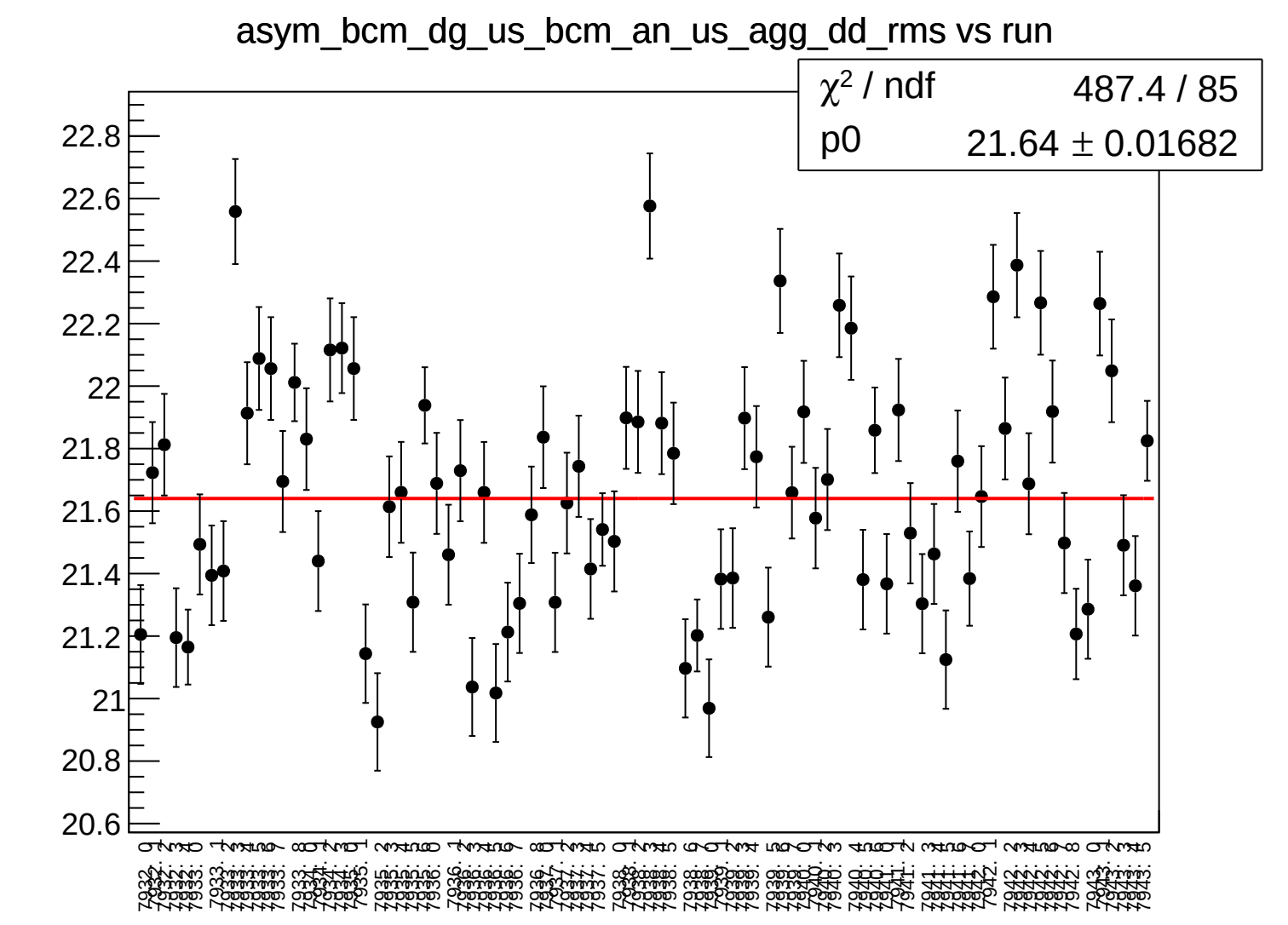

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1446 / 85
p0 16.03 ± 0.01246
17.5
17
16.5
16
15.5
15

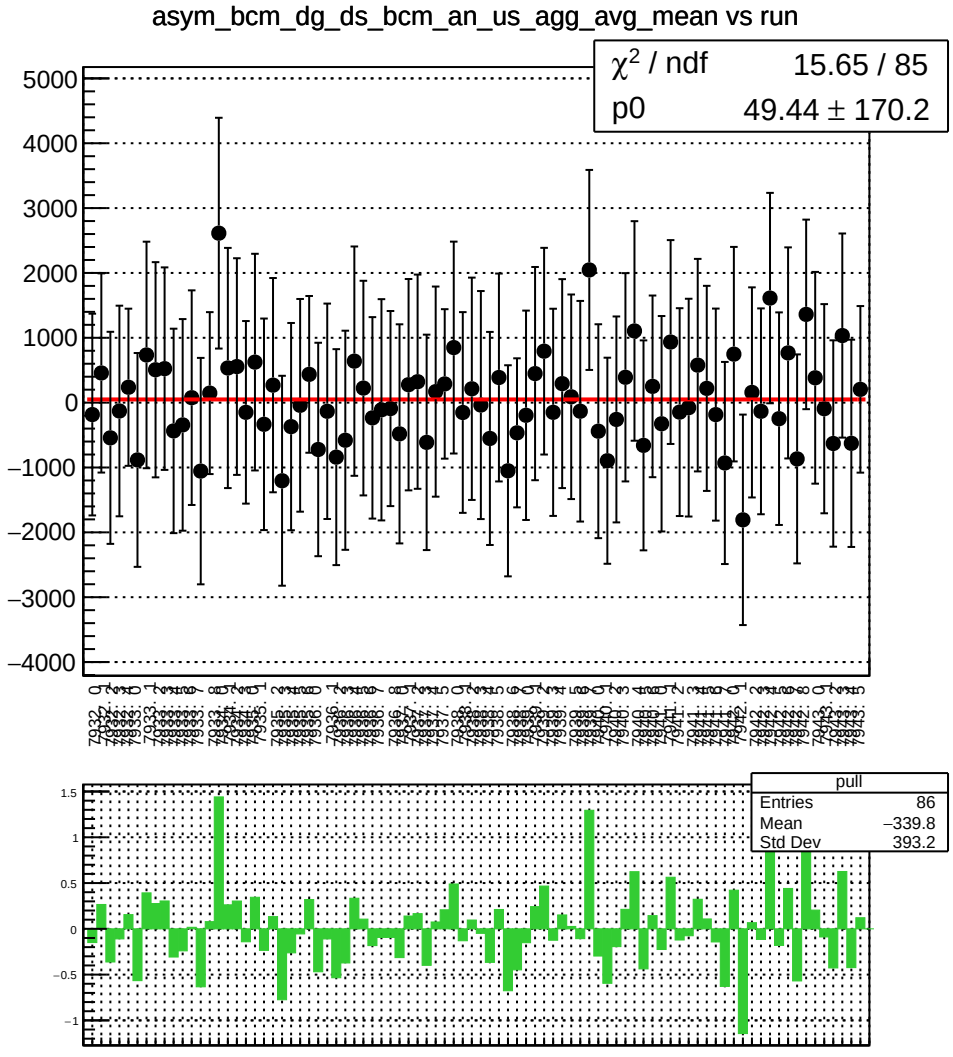

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.09 / 85
p0 42.36 ± 170.5
pull
Entries 86
Mean −143
Std Dev 192.6

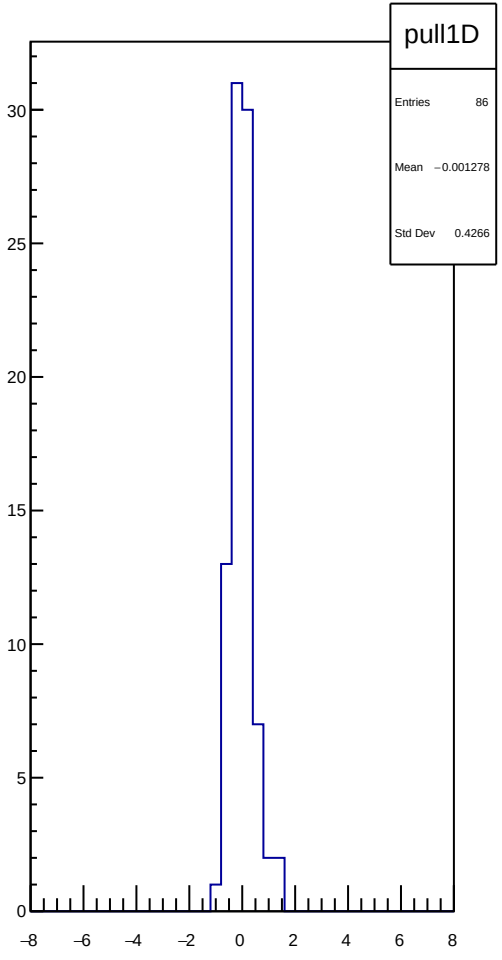

pull1D
Entries 86
Mean −0.003746
Std Dev 0.4325

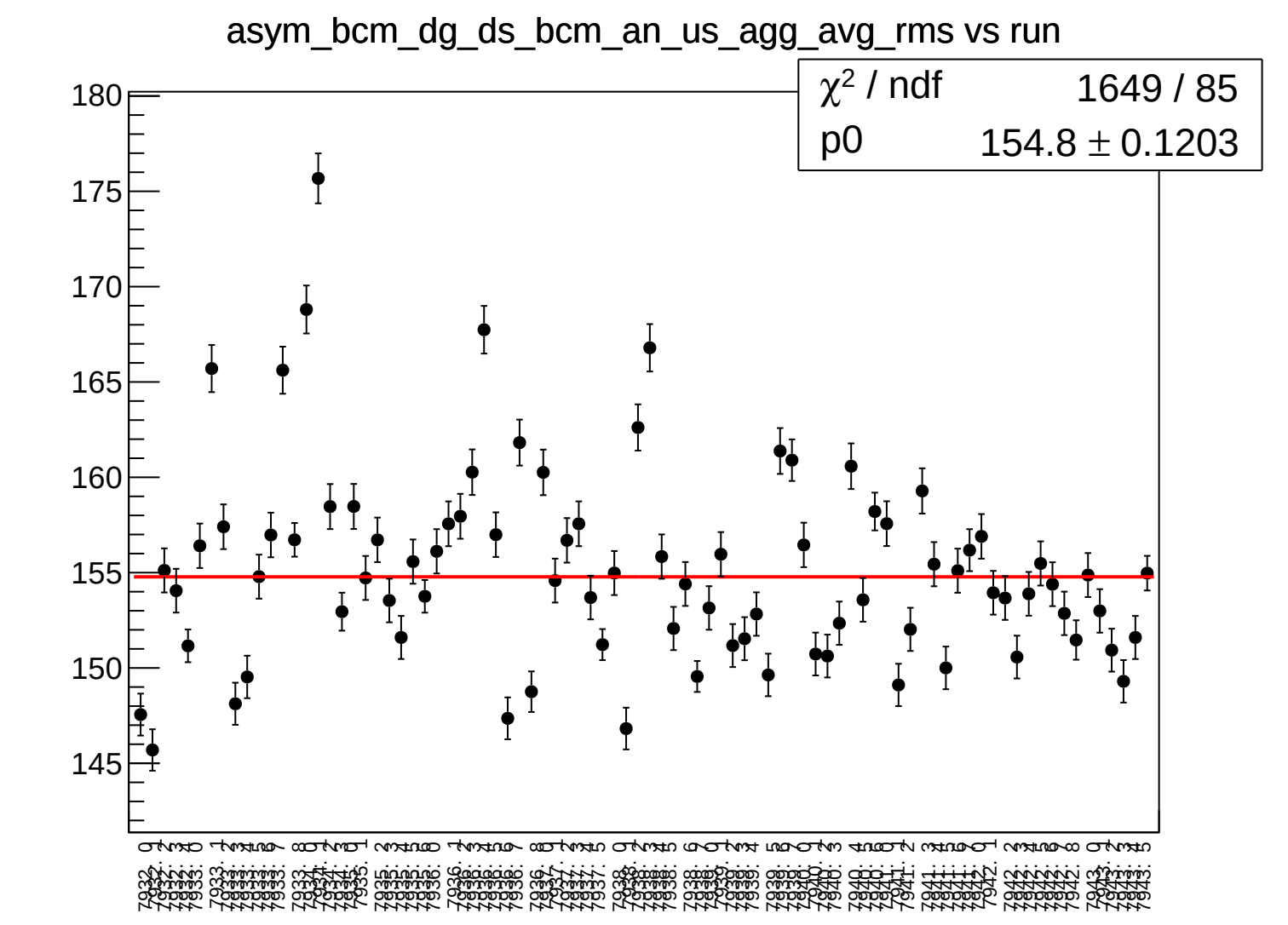

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1625 / 85
p0 155.1 ± 0.1206
180
175
170
165
160
155
150
145

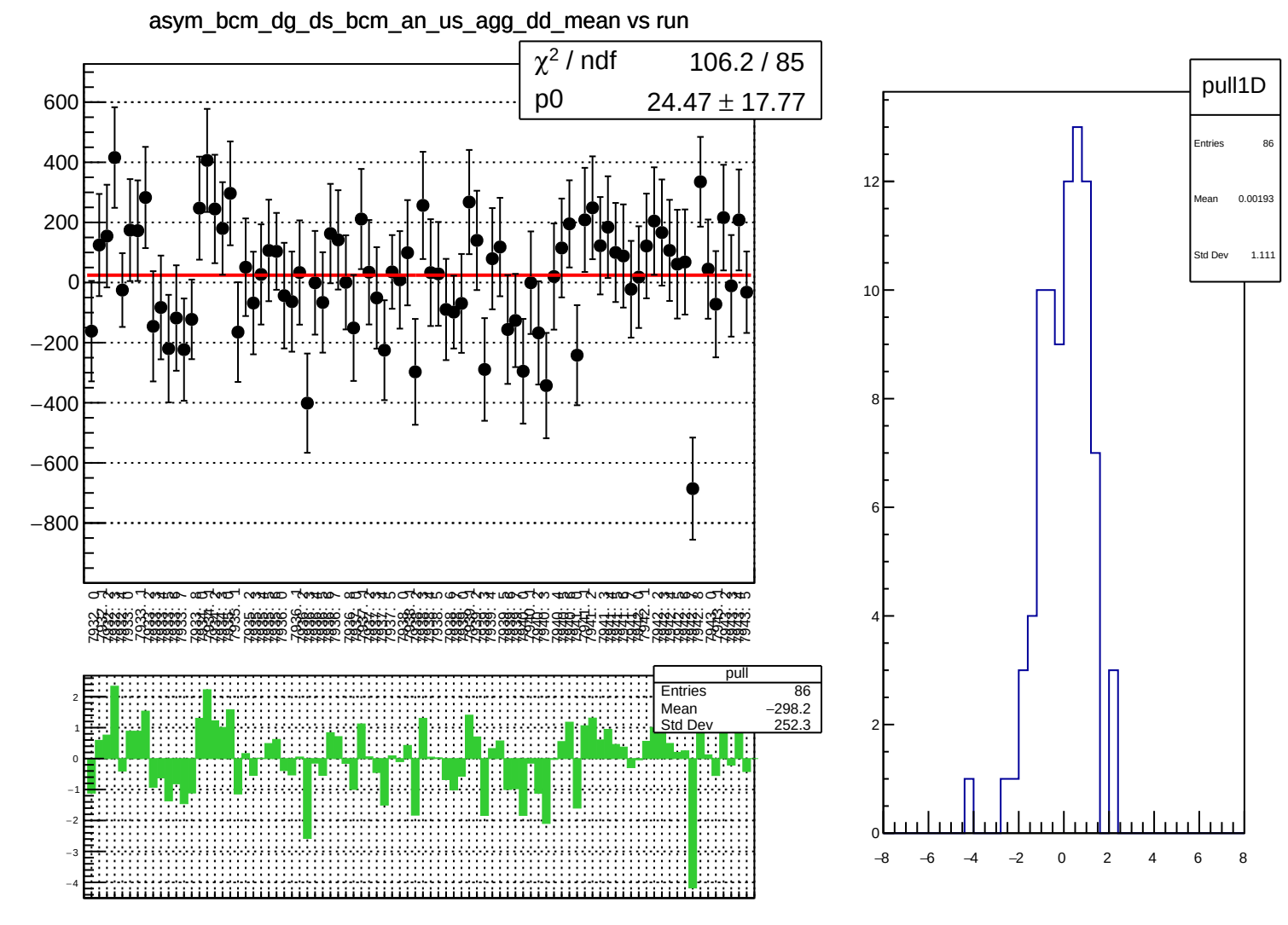

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 100 / 85
p0 15.48 ± 23.78
pull
Entries 86
Mean −37.71
Std Dev 111.2
pull1D
Entries 86
Mean −0.01229
Std Dev 1.078

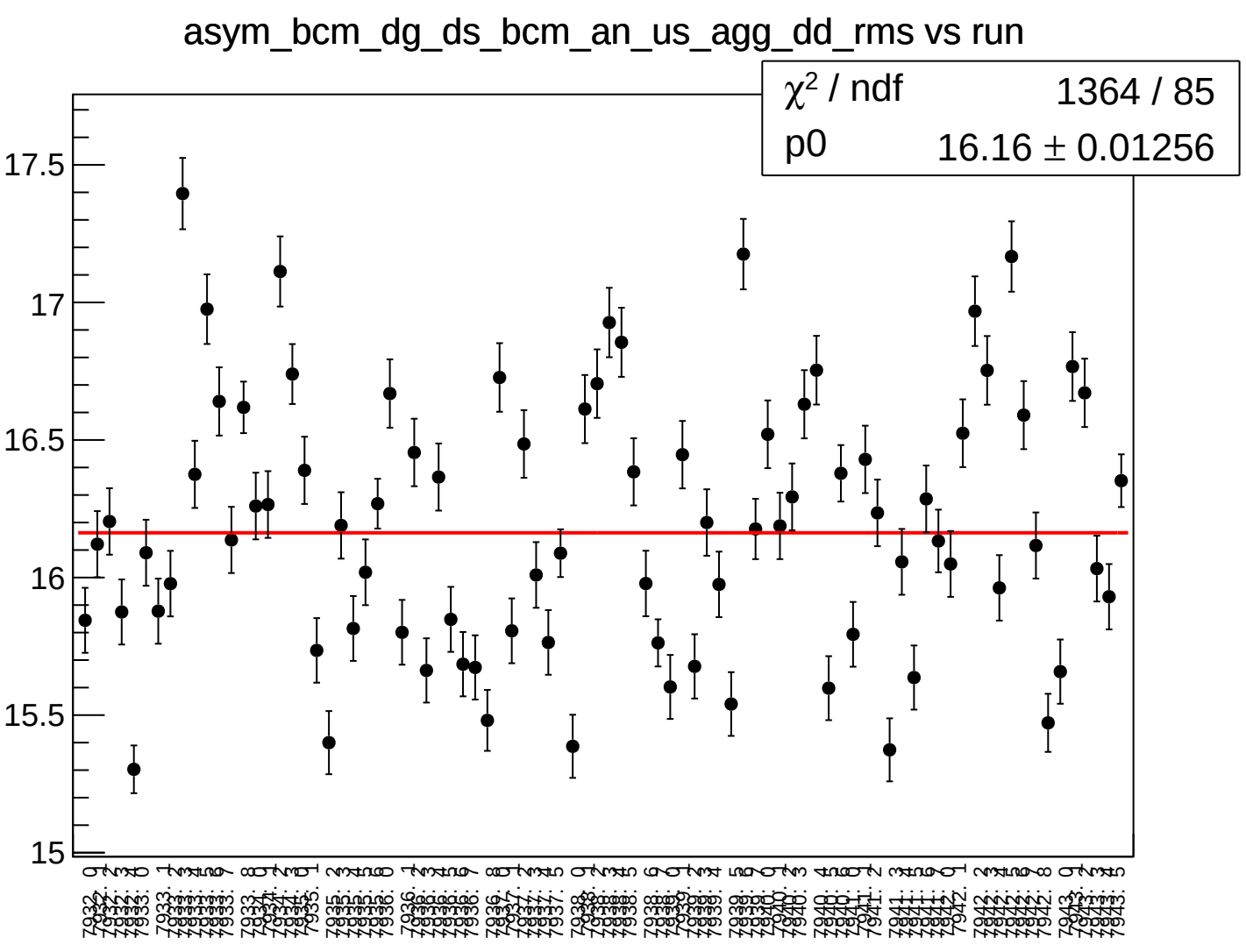

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 487.4 / 85
p0 21.64 ± 0.01682
22.8
22.6
22.4
22.2
22
21.8
21.6
21.4
21.2
21
20.8
20.6

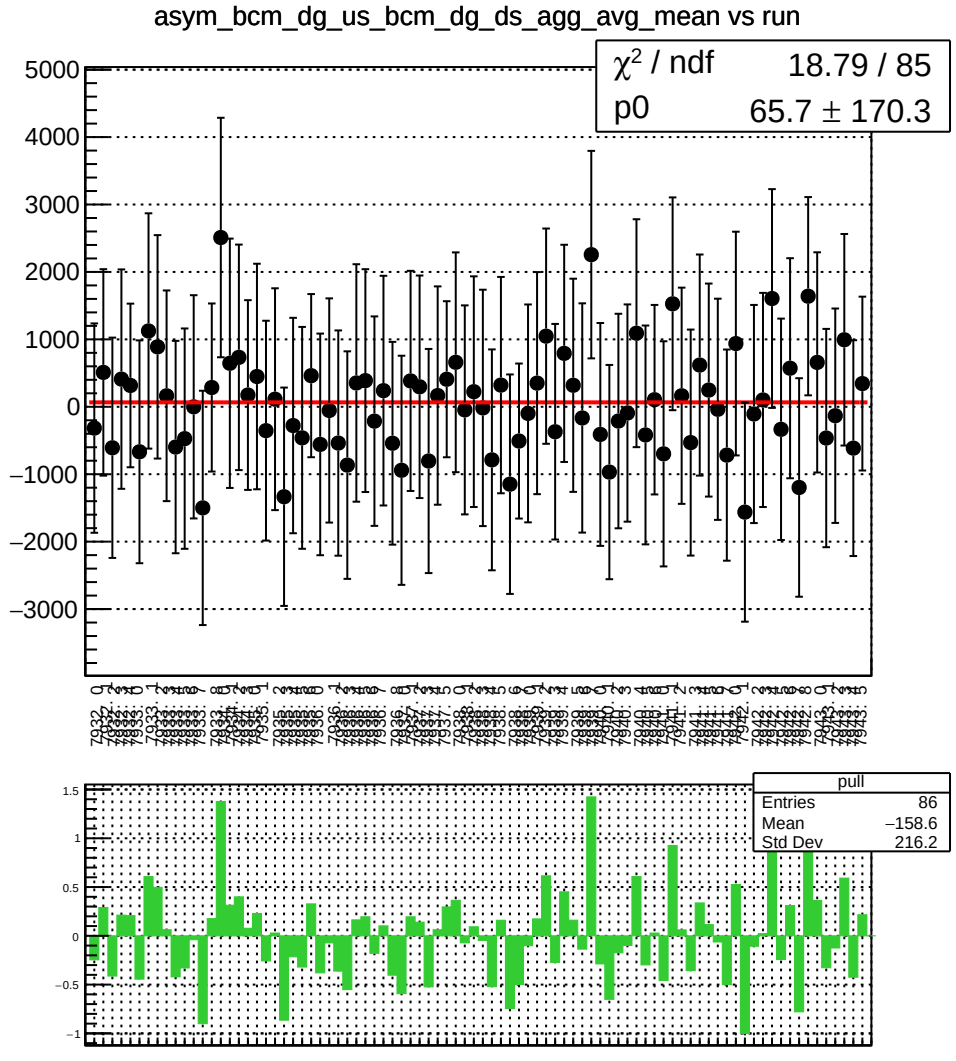

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.65 / 85
p0 49.44 ± 170.2
pull
Entries 86
Mean −339.8
Std Dev 393.2

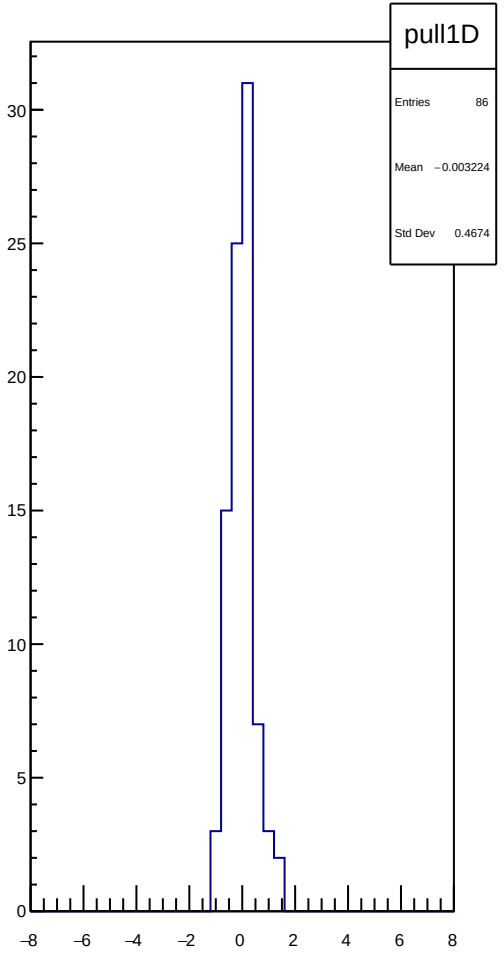

pull1D
Entries 86
Mean −0.001278
Std Dev 0.4266

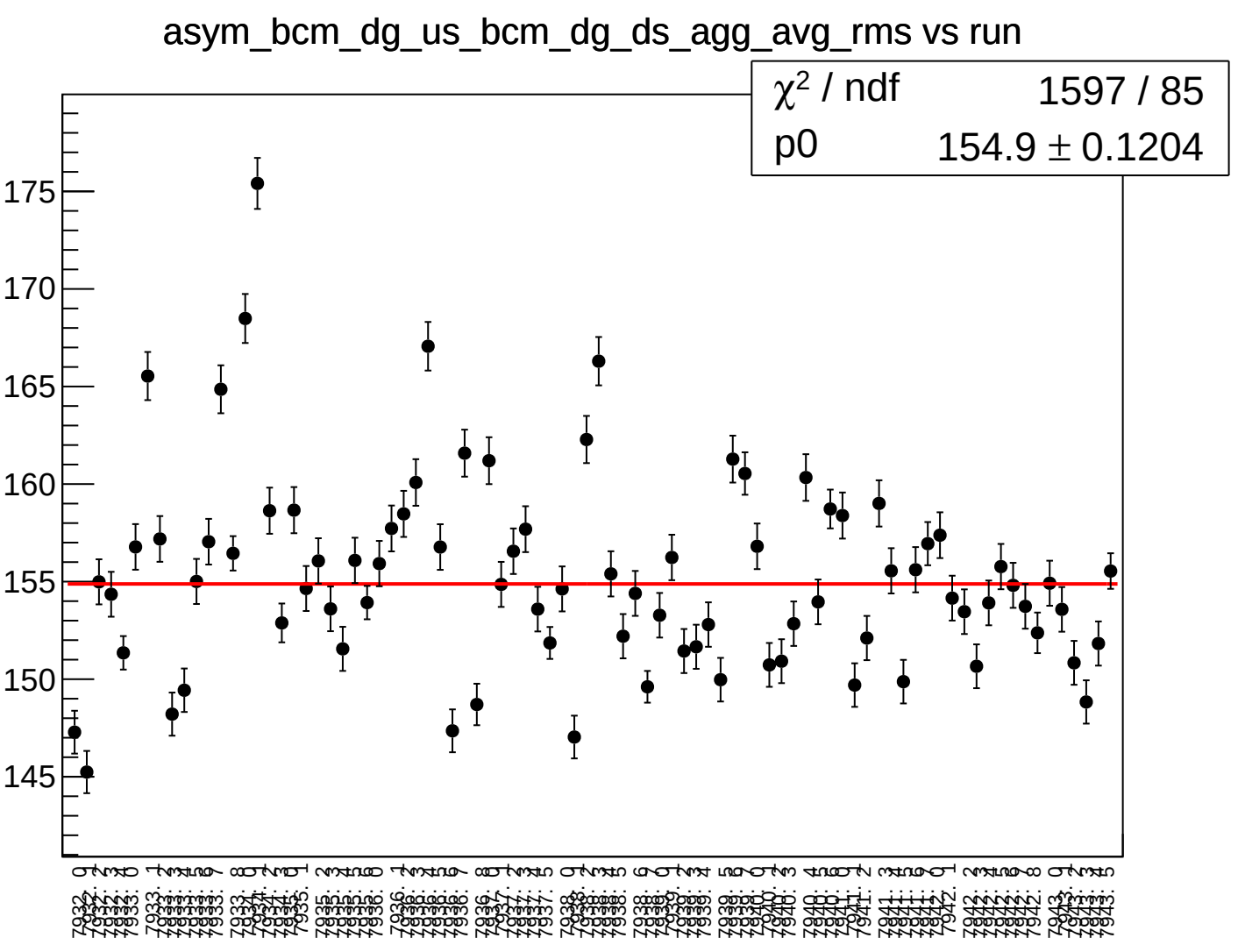

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1649 / 85
p0 154.8 ± 0.1203
180
175
170
165
160
155
150
145

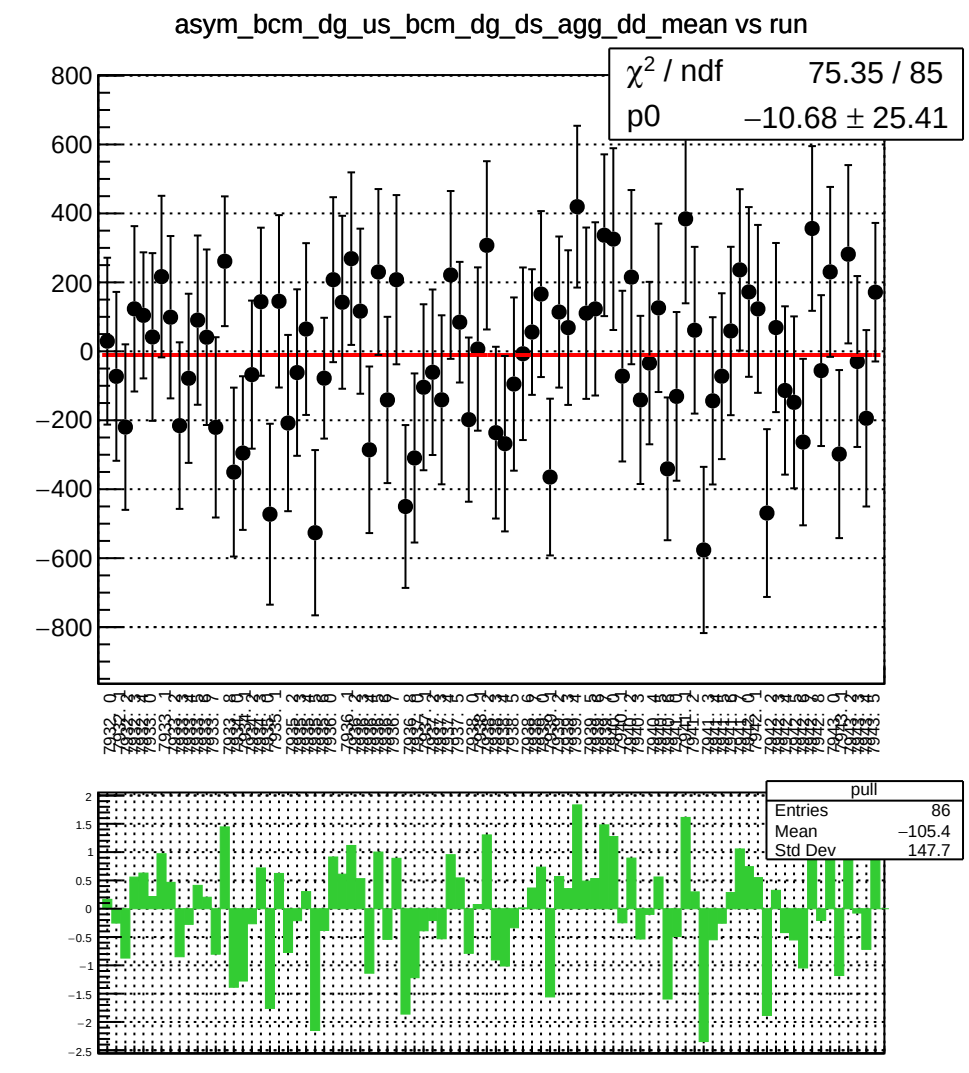

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 106.2 / 85
p0 24.47 ± 17.77
pull
Entries 86
Mean −298.2
Std Dev 252.3
pull1D
Entries 86
Mean 0.00193
Std Dev 1.111

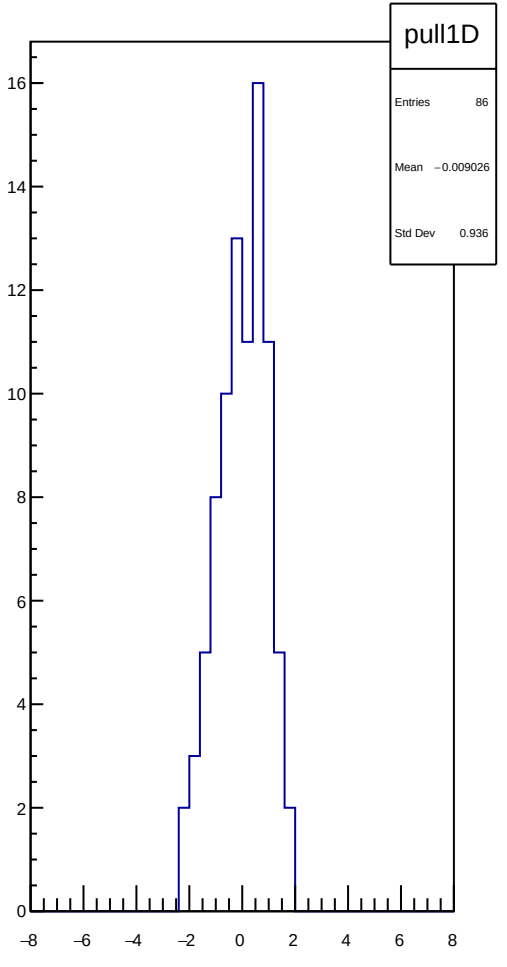

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1364 / 85
p0 16.16 ± 0.01256
17.5
17
16.5
16
15.5
15

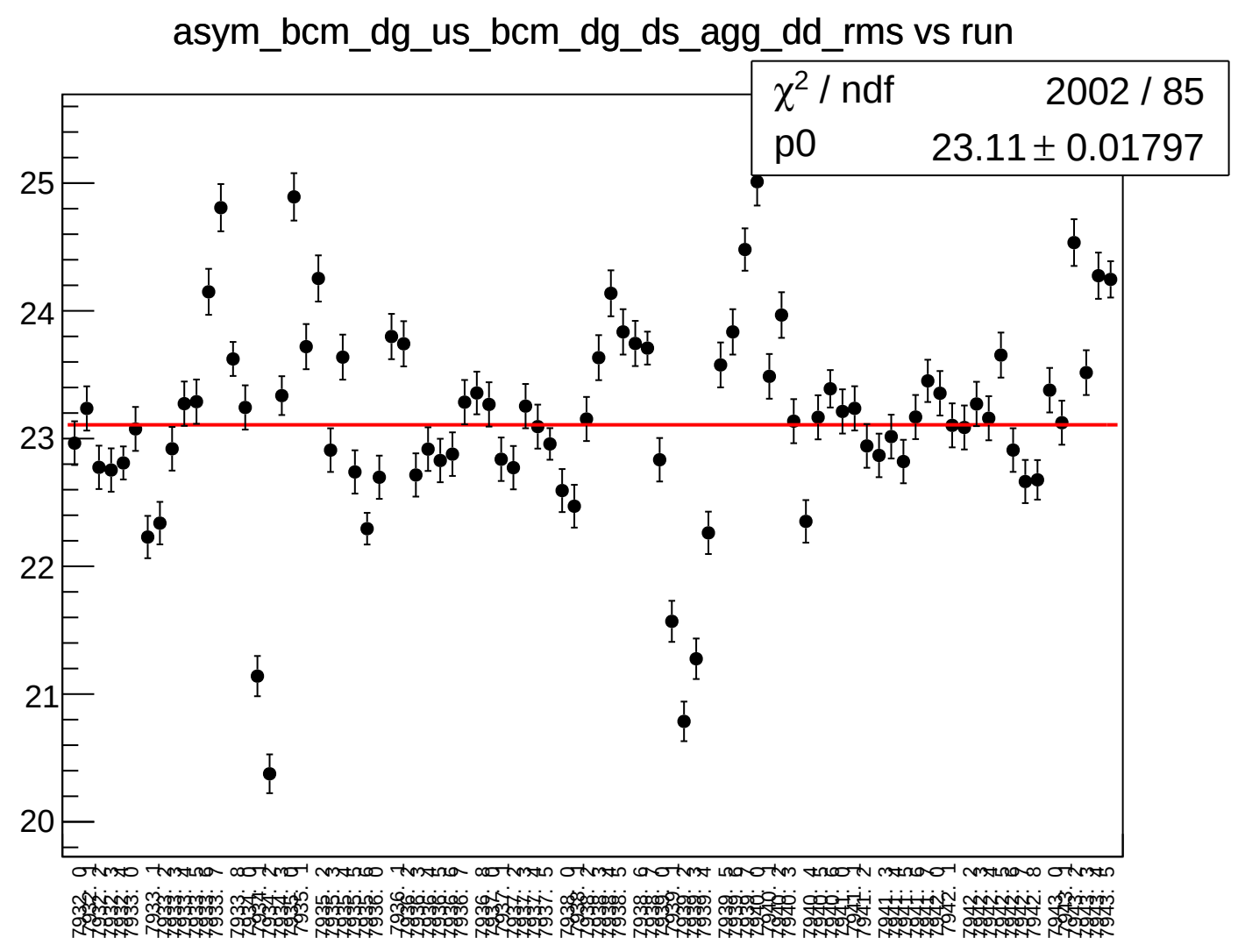

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.79 / 85
p0 65.7 ± 170.3
pull
Entries 86
Mean −158.6
Std Dev 216.2

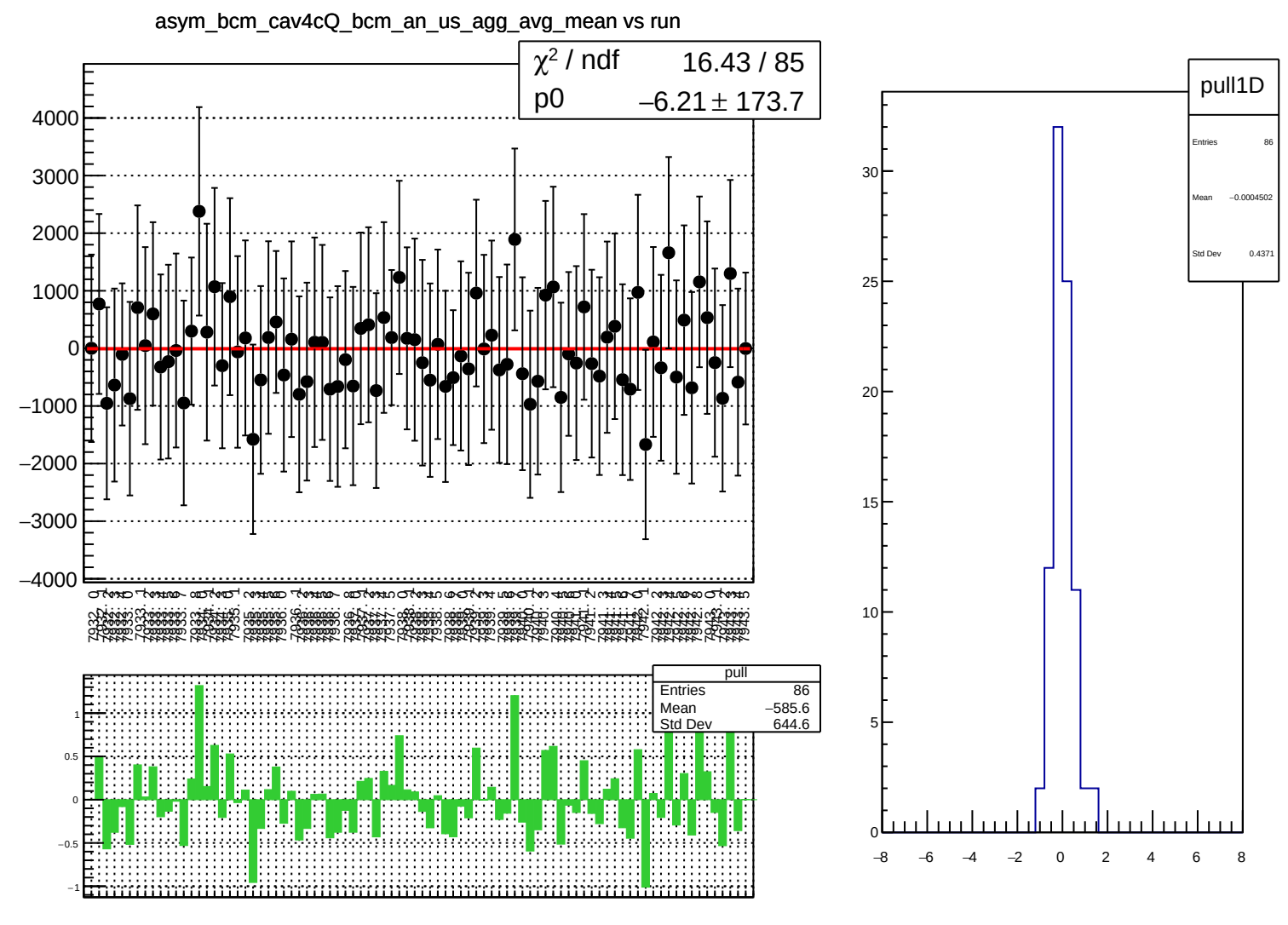

pull1D
Entries 86
Mean −0.003224
Std Dev 0.4674

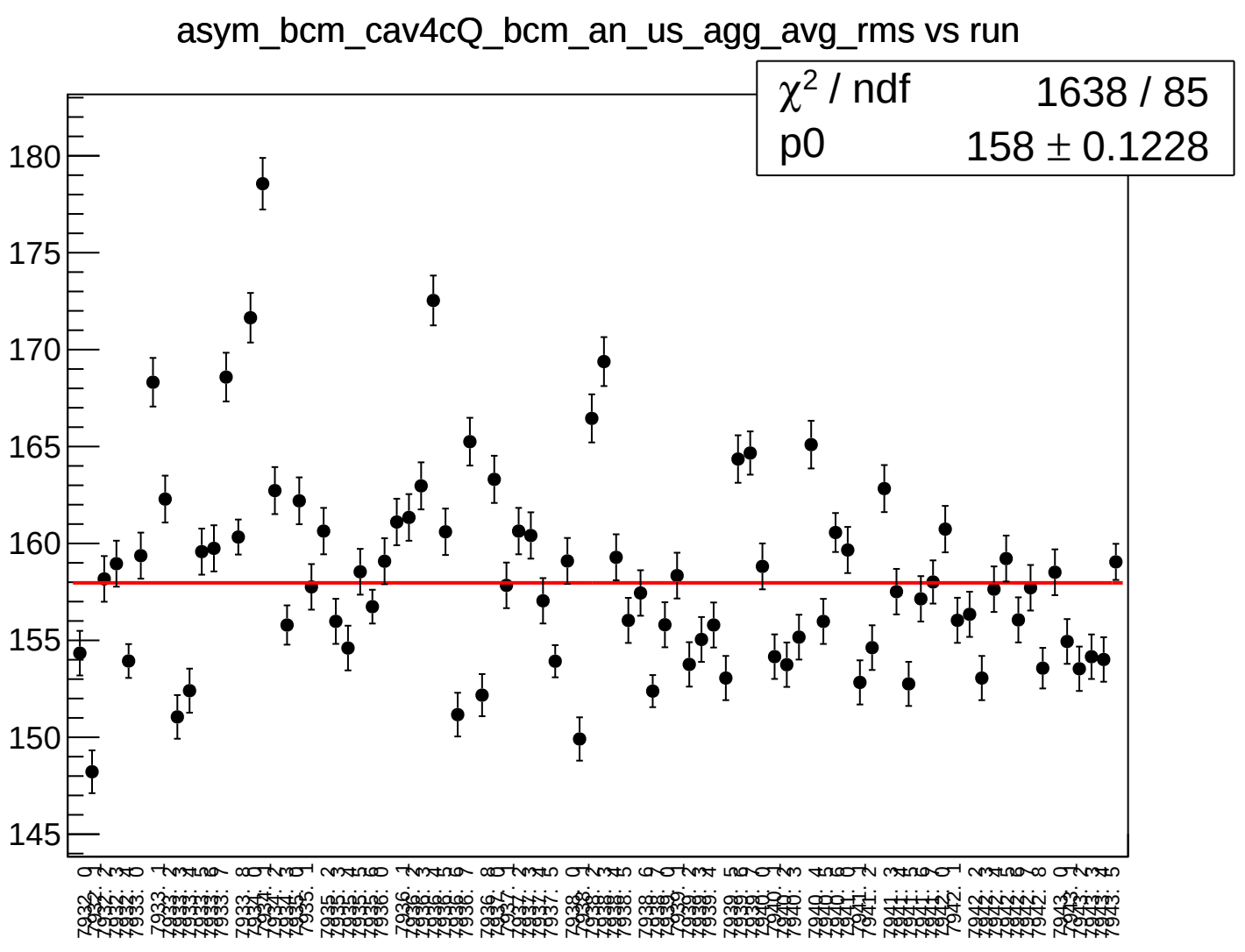

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1597 / 85
p0 154.9 ± 0.1204
175
170
165
160
155
150
145

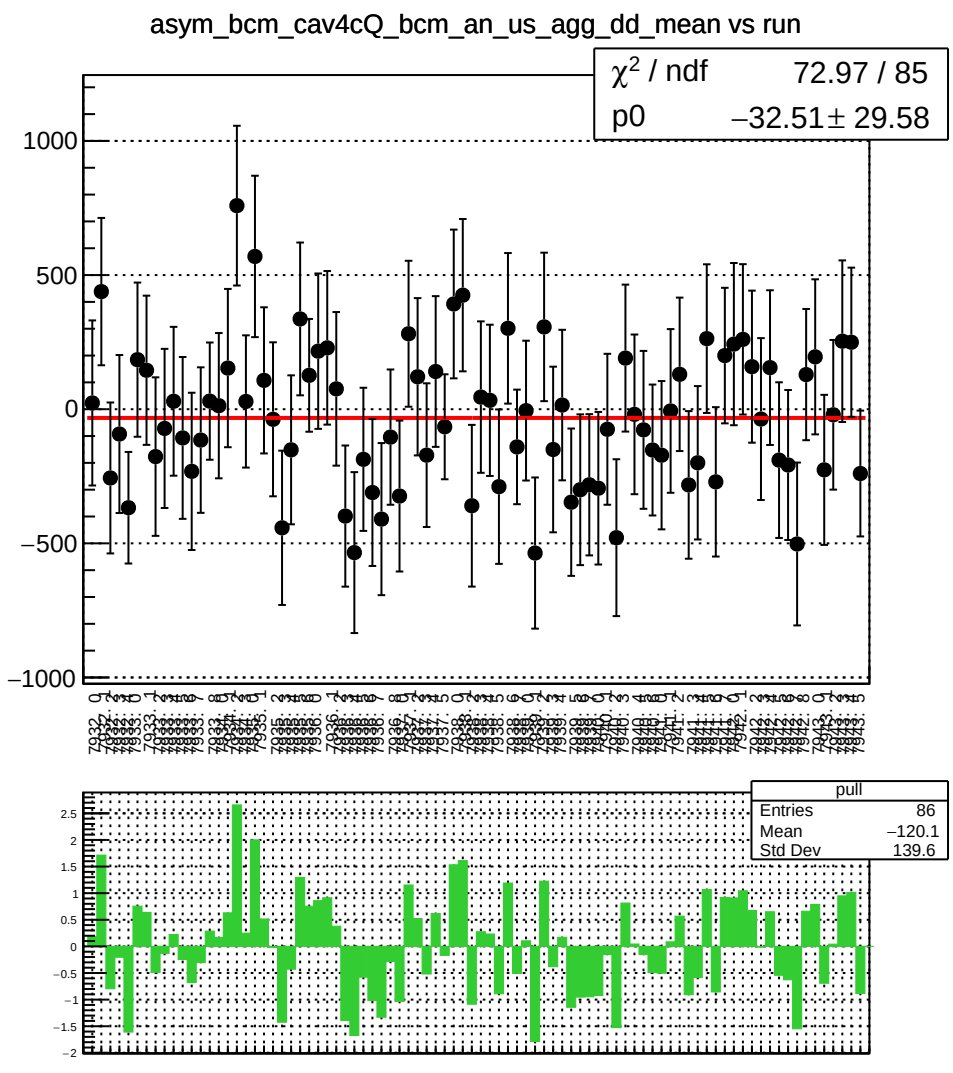

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 75.35 / 85
p0 −10.68 ± 25.41
pull
Entries 86
Mean −105.4
Std Dev 147.7

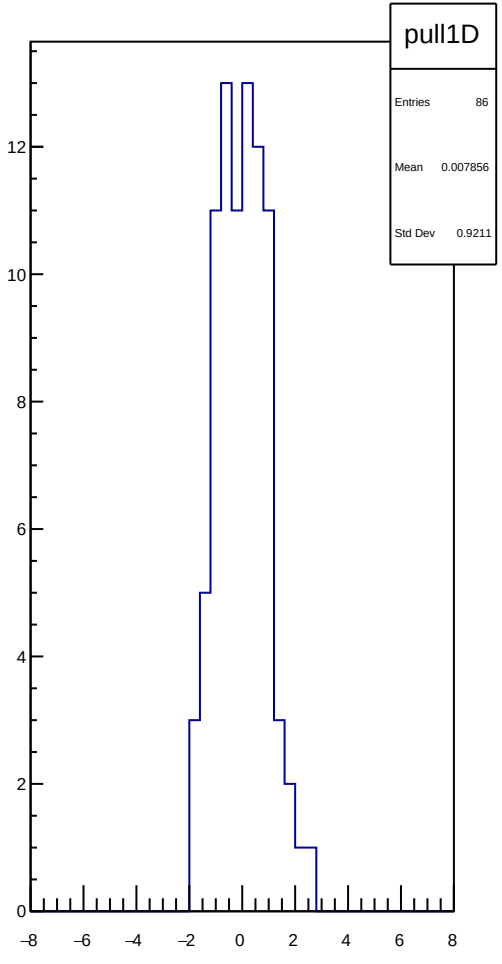

pull1D
Entries 86
Mean −0.009026
Std Dev 0.936

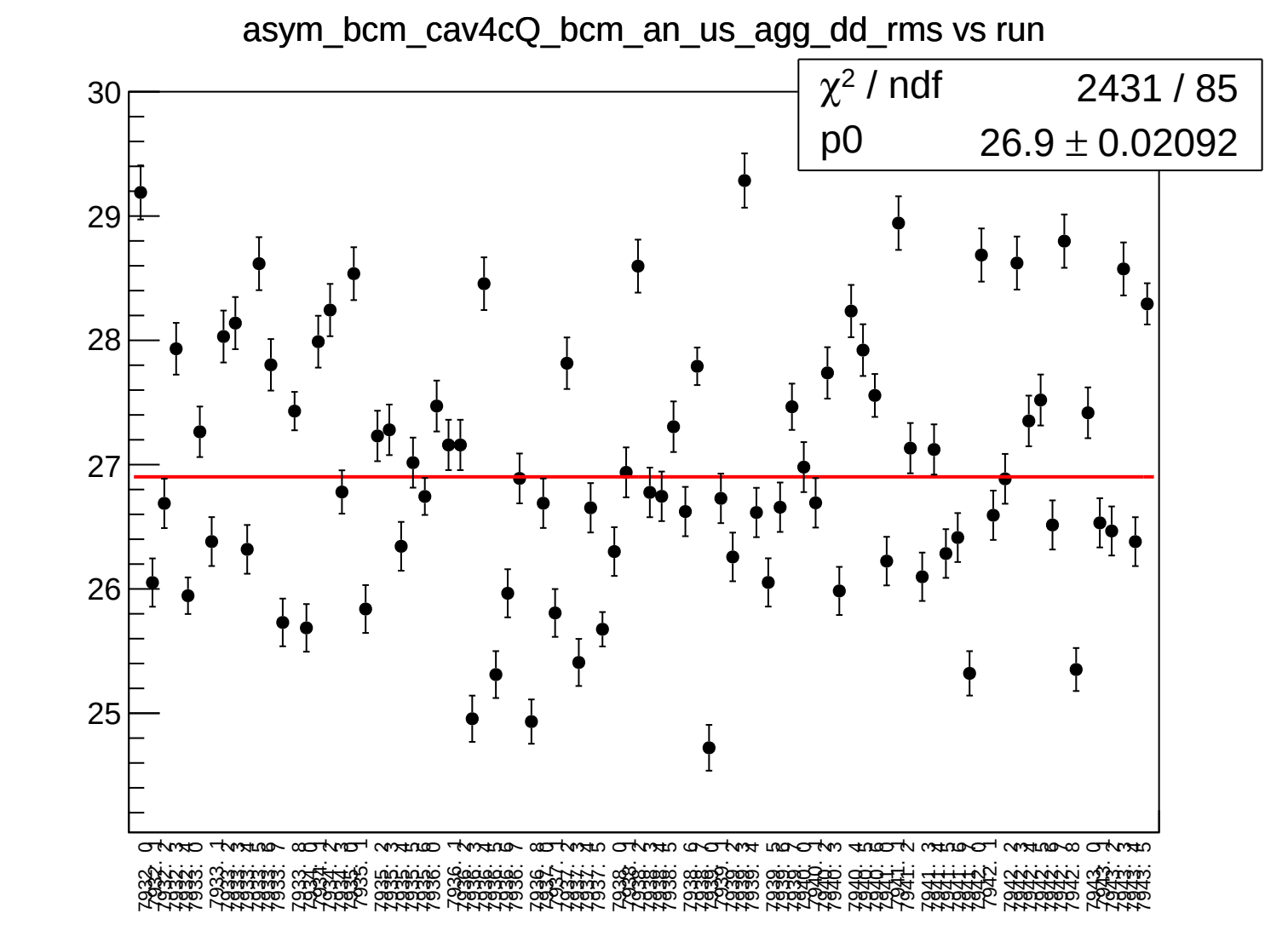

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2002 / 85
p0 23.11 ± 0.01797
25
24
23
22
21
20

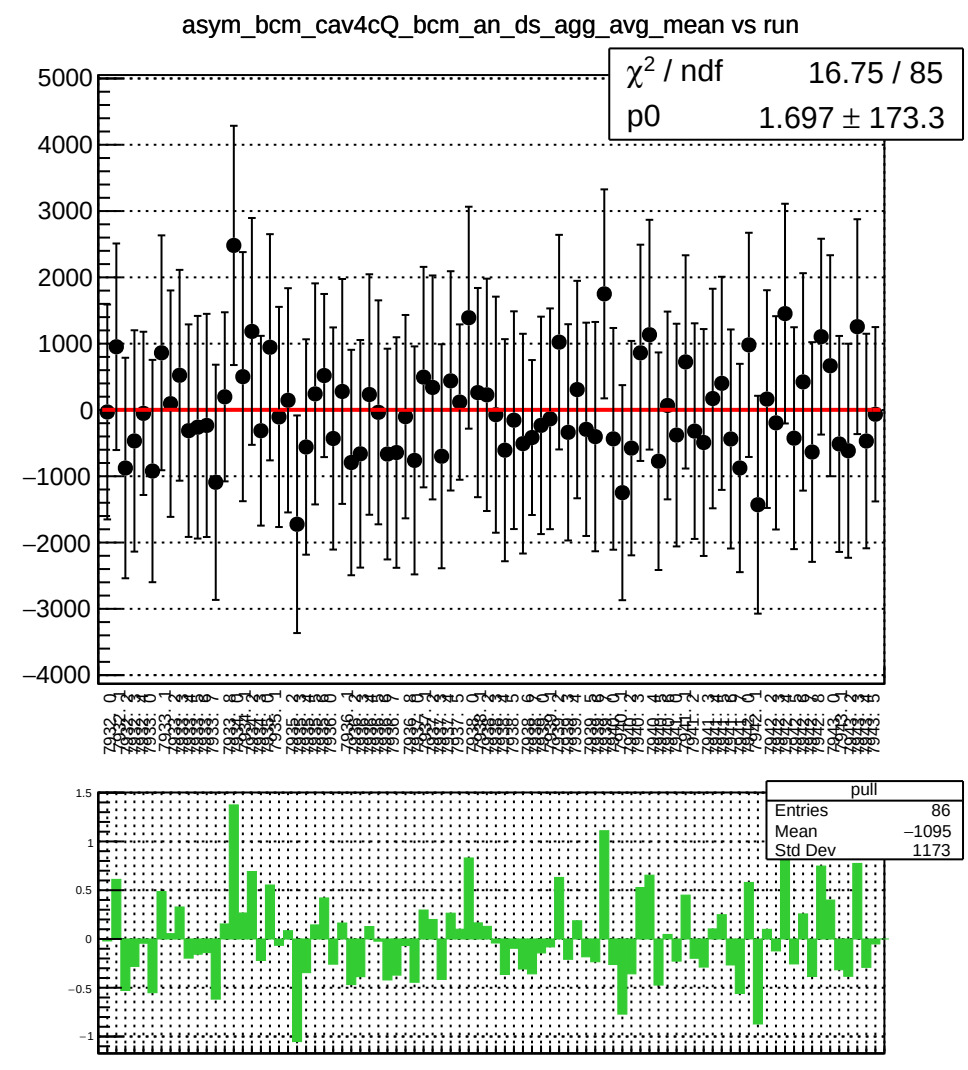

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.43 / 85
p0 −6.21 ± 173.7
pull
Entries 86
Mean −585.6
Std Dev 644.6
pull1D
Entries 86
Mean −0.0004502
Std Dev 0.4371

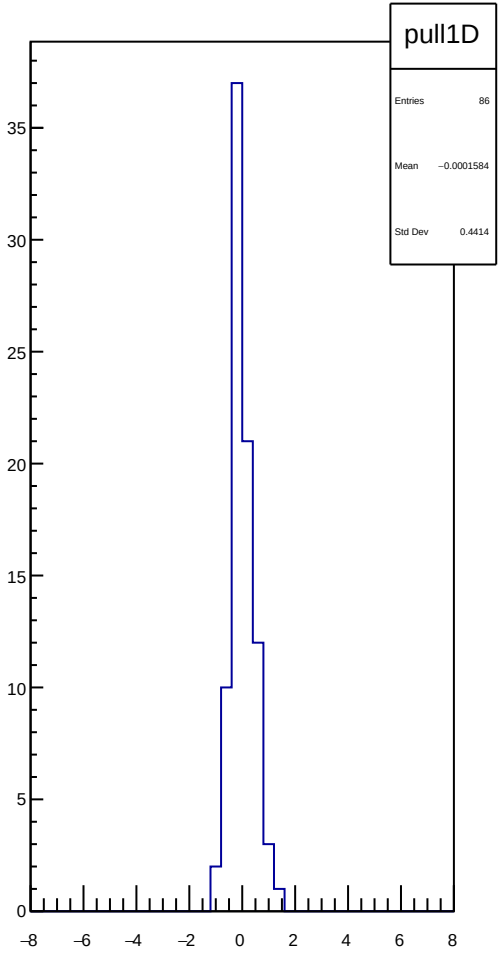

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1638 / 85
p0 158 ± 0.1228
180
175
170
165
160
155
150
145

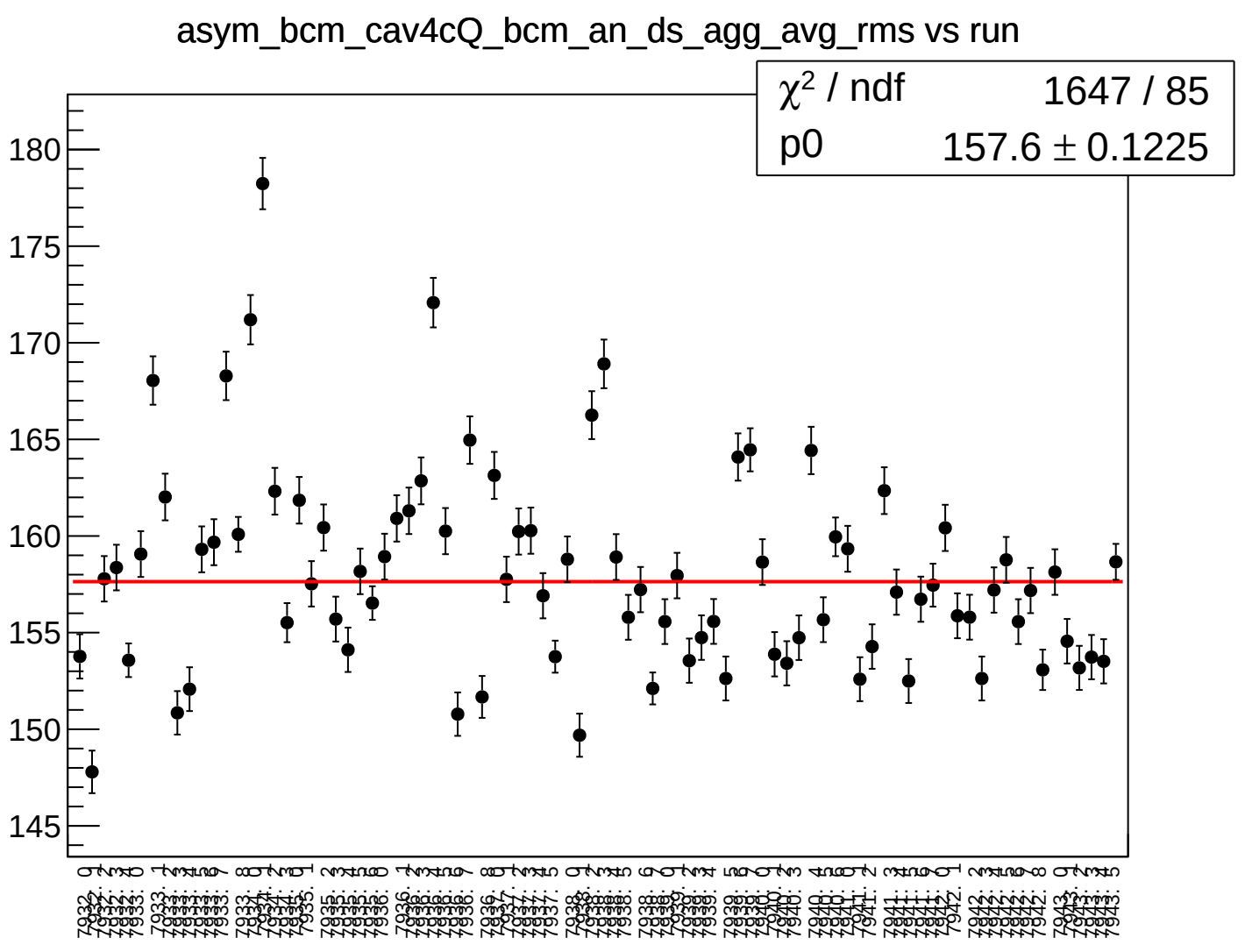

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 72.97 / 85
p0 −32.51 ± 29.58
1000
500
0
−500
−1000
pull
Entries 86
Mean −120.1
Std Dev 139.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

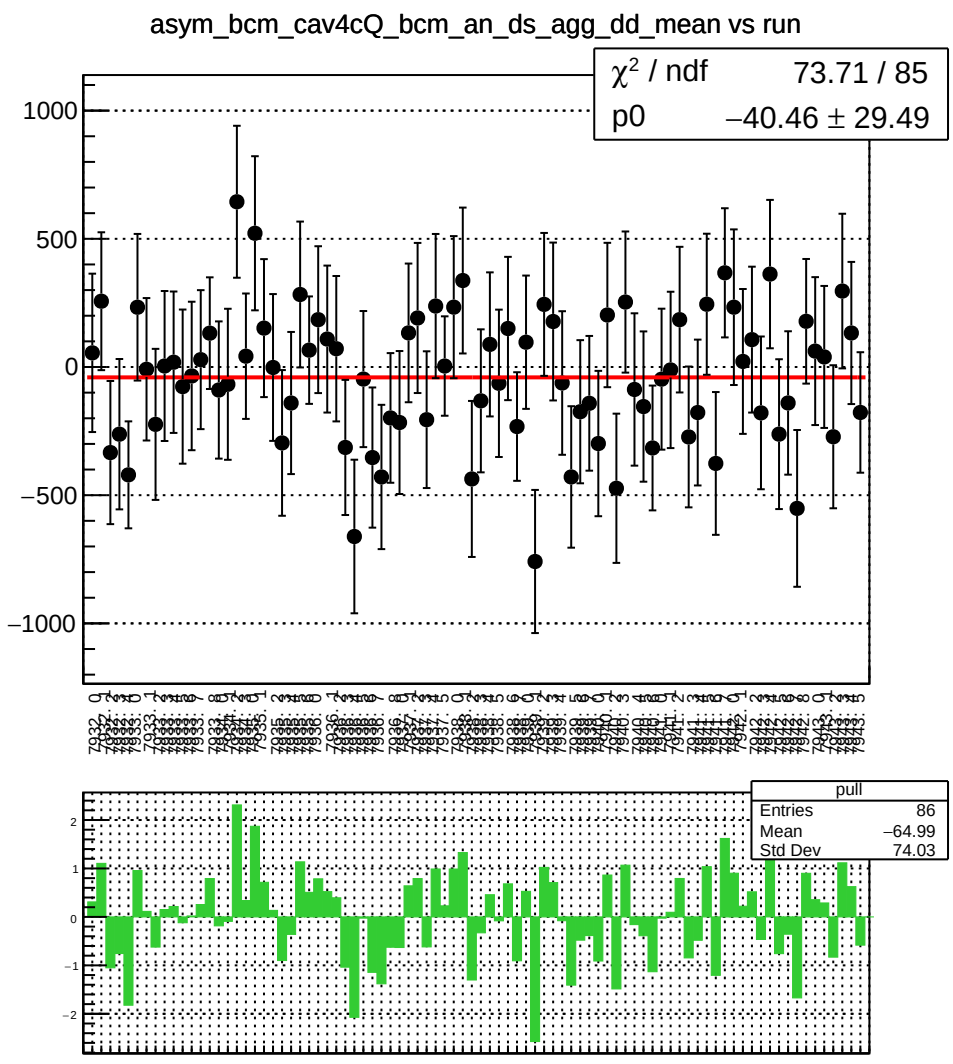

pull1D
Entries 86
Mean 0.007856
Std Dev 0.9211
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

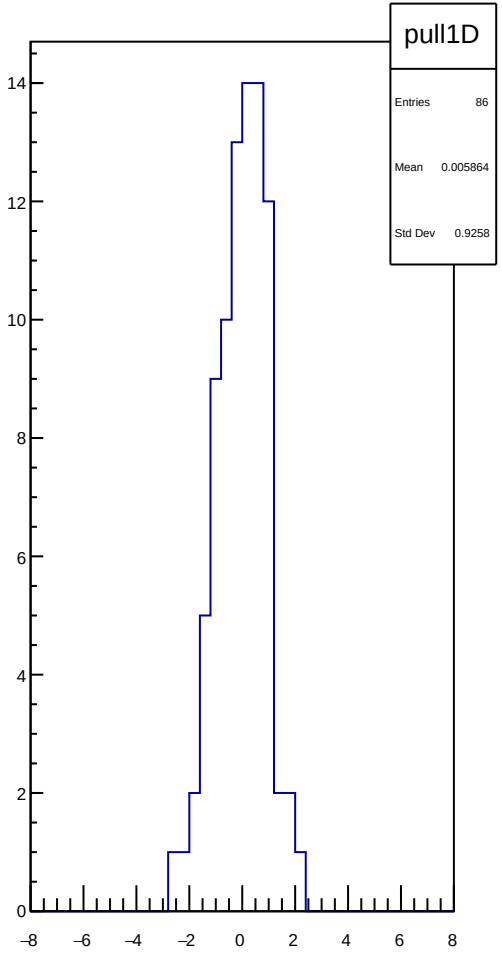

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2431 / 85
p0 26.9 ± 0.02092
30
29
28
27
26
25

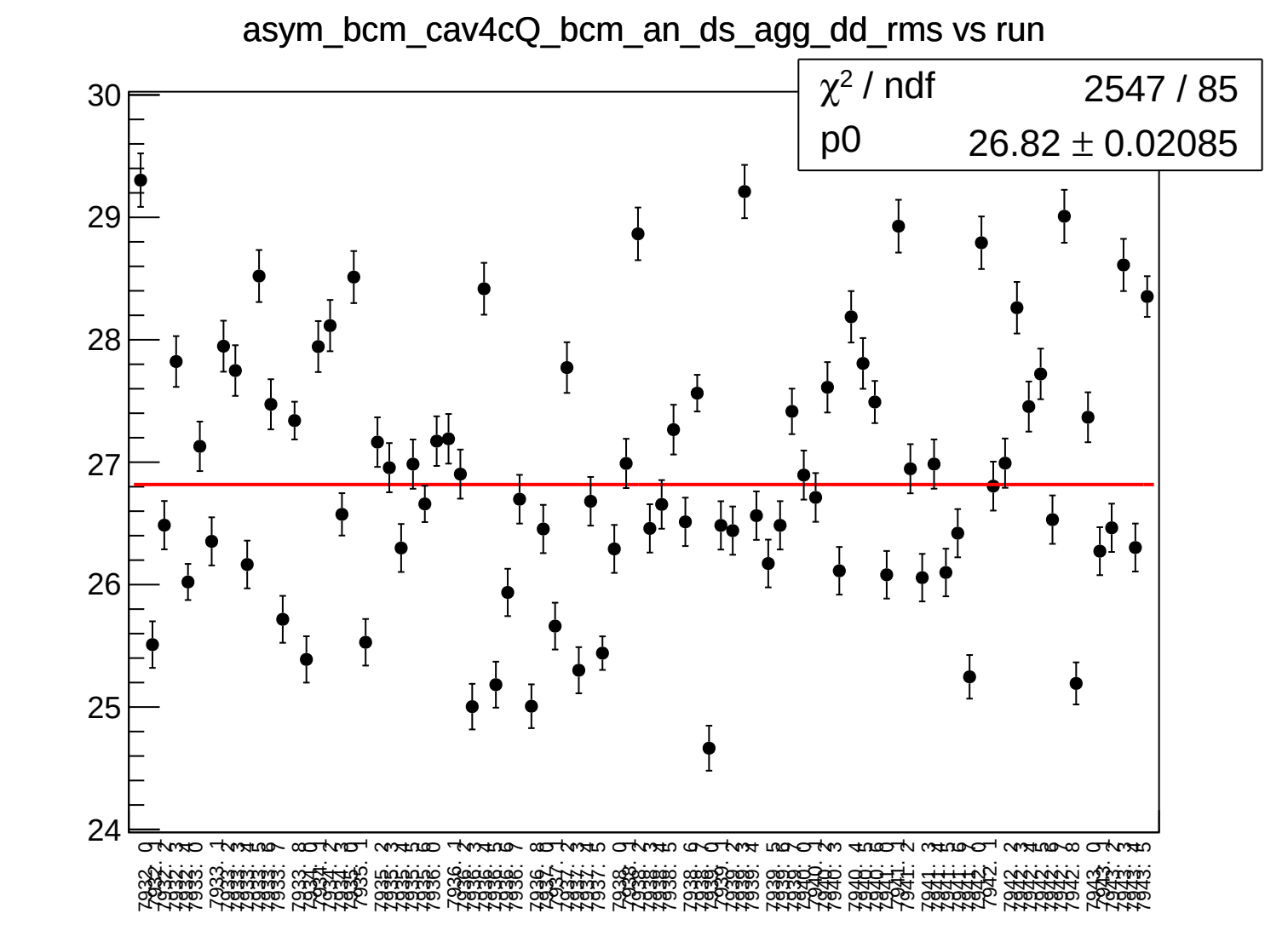

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.75 / 85
p0 1.697 ± 173.3
pull
Entries 86
Mean −1095
Std Dev 1173

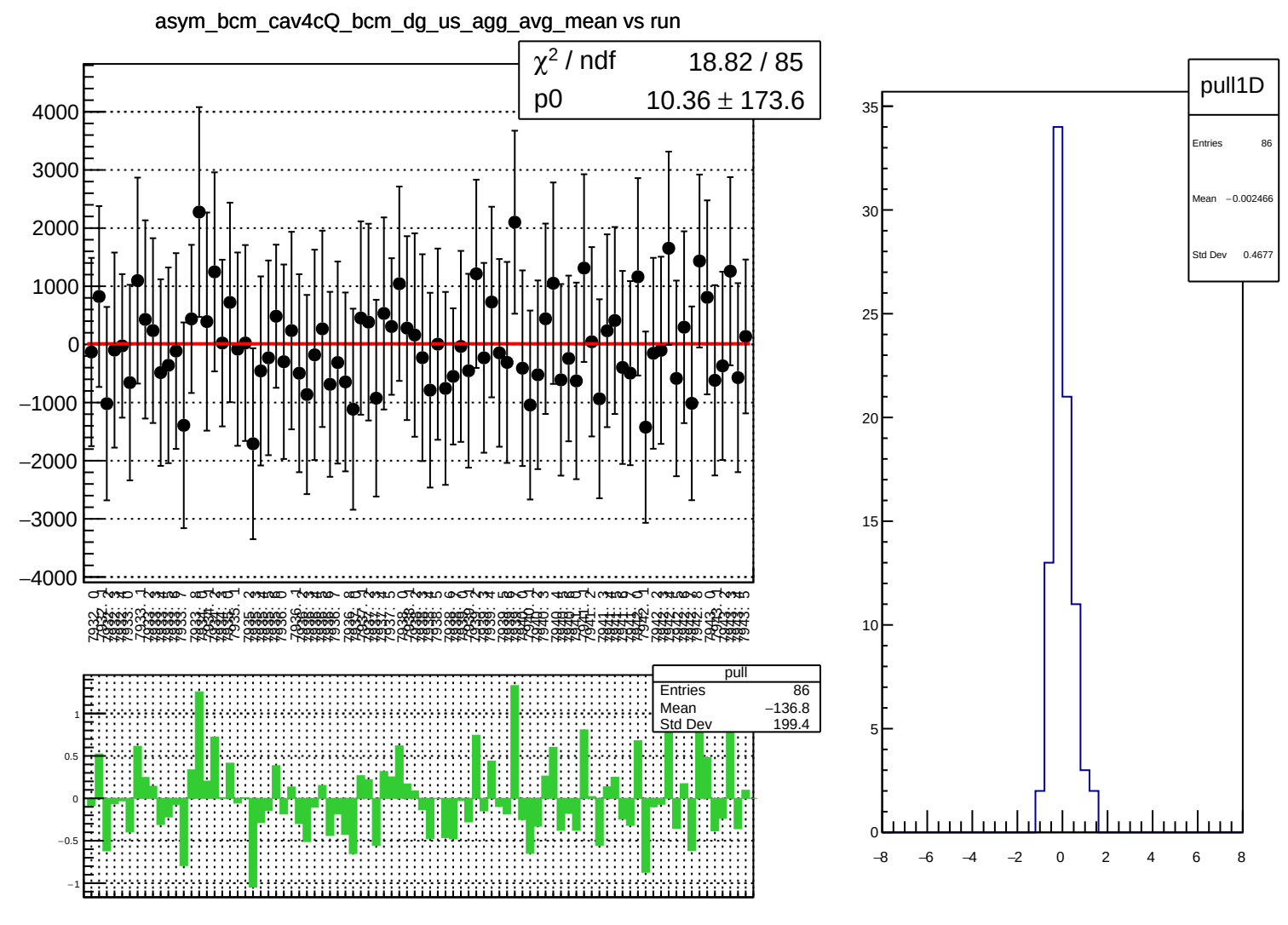

pull1D
Entries 86
Mean −0.0001584
Std Dev 0.4414

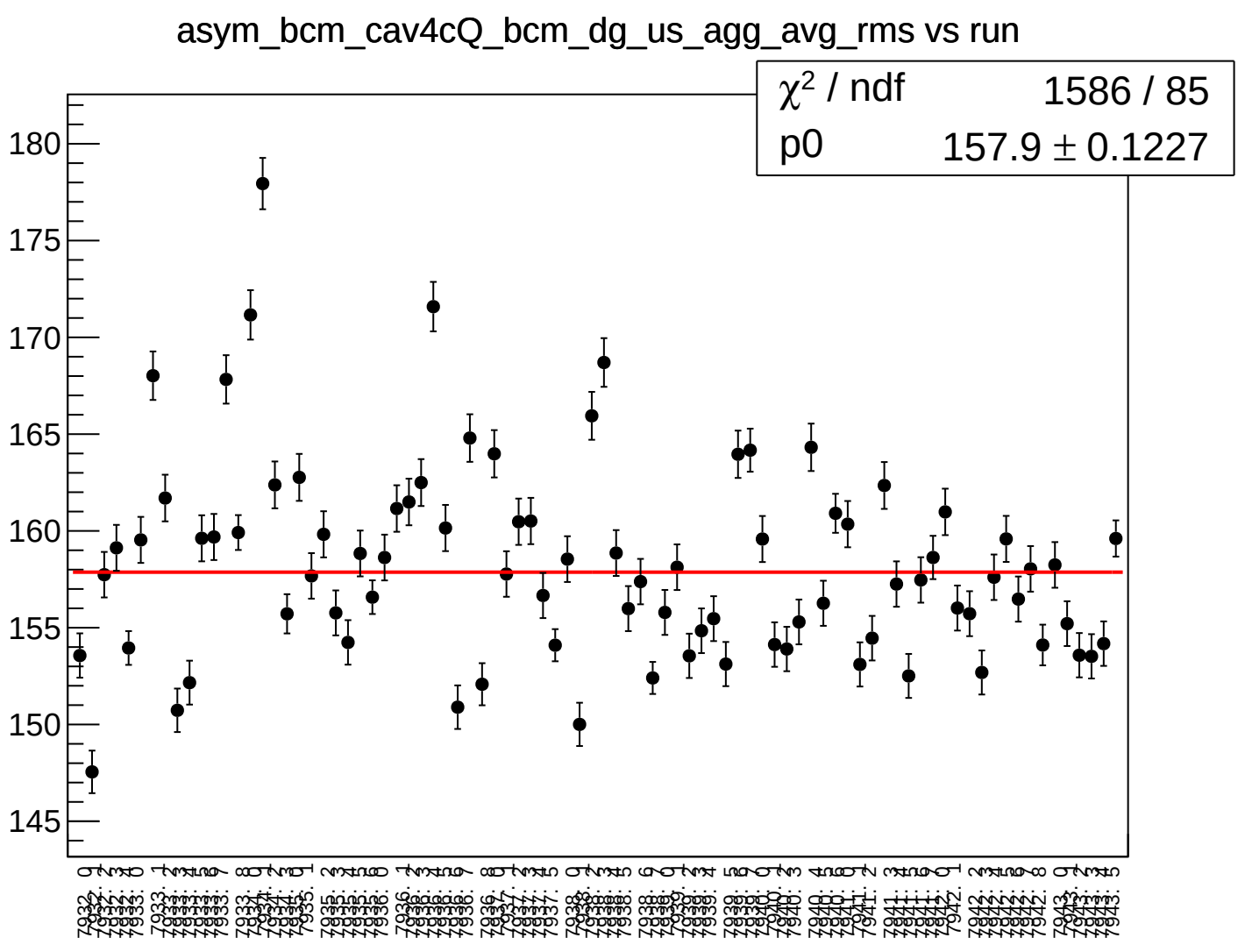

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1647 / 85
p0 157.6 ± 0.1225
180
175
170
165
160
155
150
145

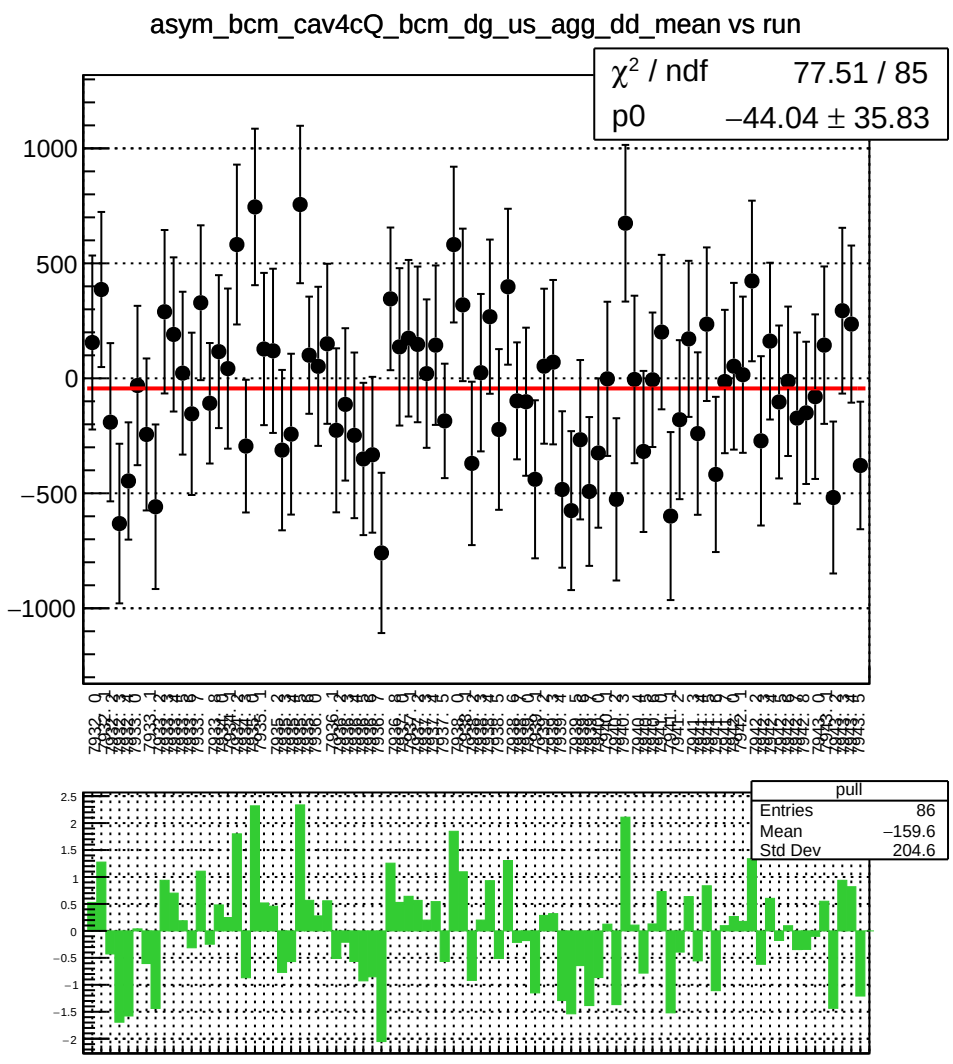

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 73.71 / 85
p0 −40.46 ± 29.49
1000
500
0
−500
−1000
pull
Entries 86
Mean −64.99
Std Dev 74.03
2
1
0
−1
−2

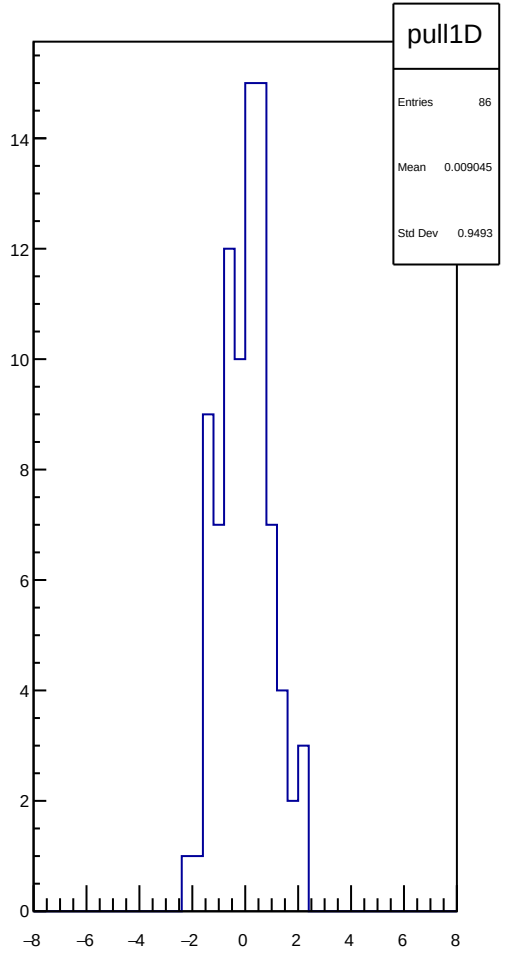

pull1D
Entries 86
Mean 0.005864
Std Dev 0.9258
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

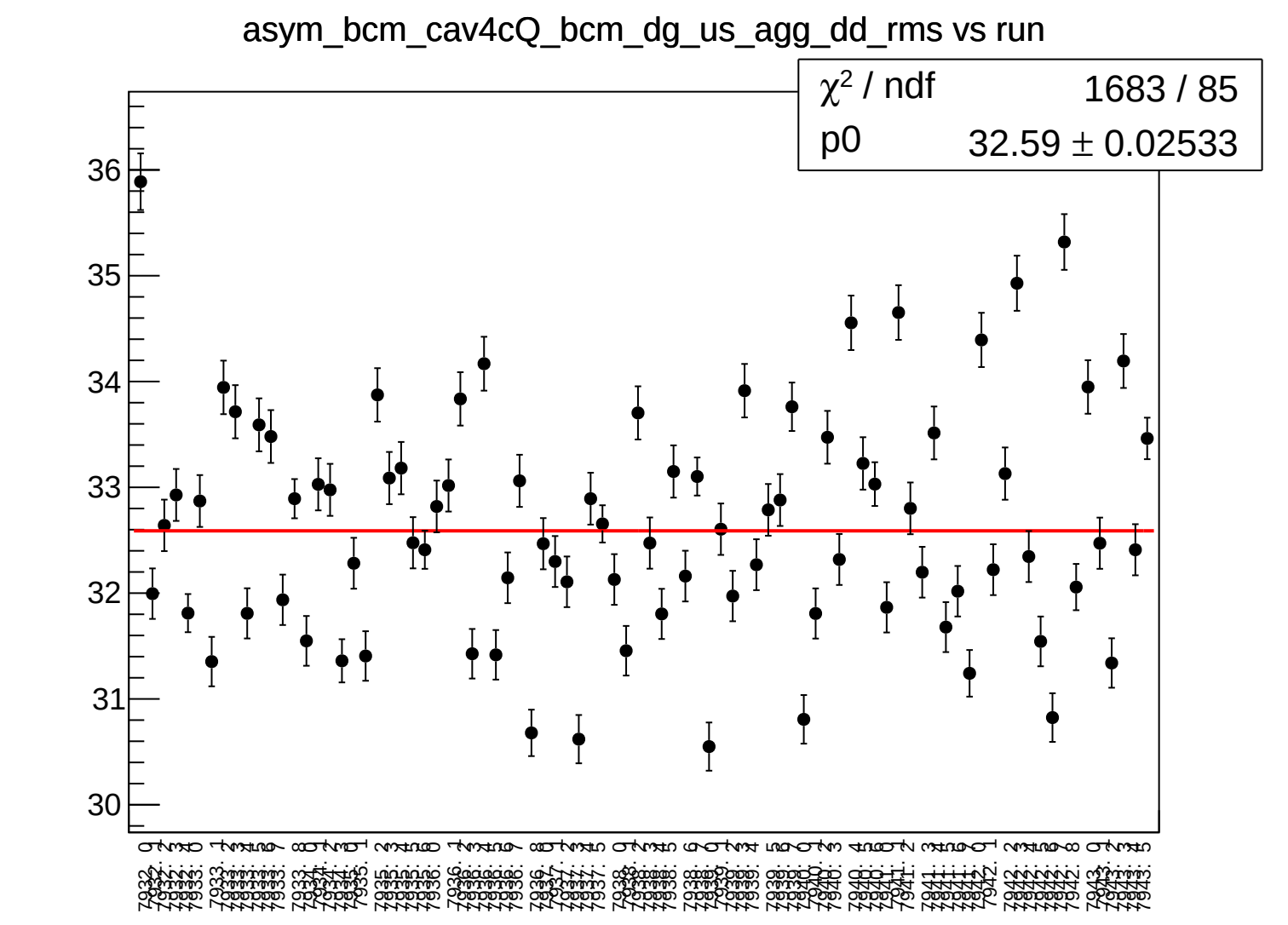

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2547 / 85
p0 26.82 ± 0.02085
30
29
28
27
26
25
24

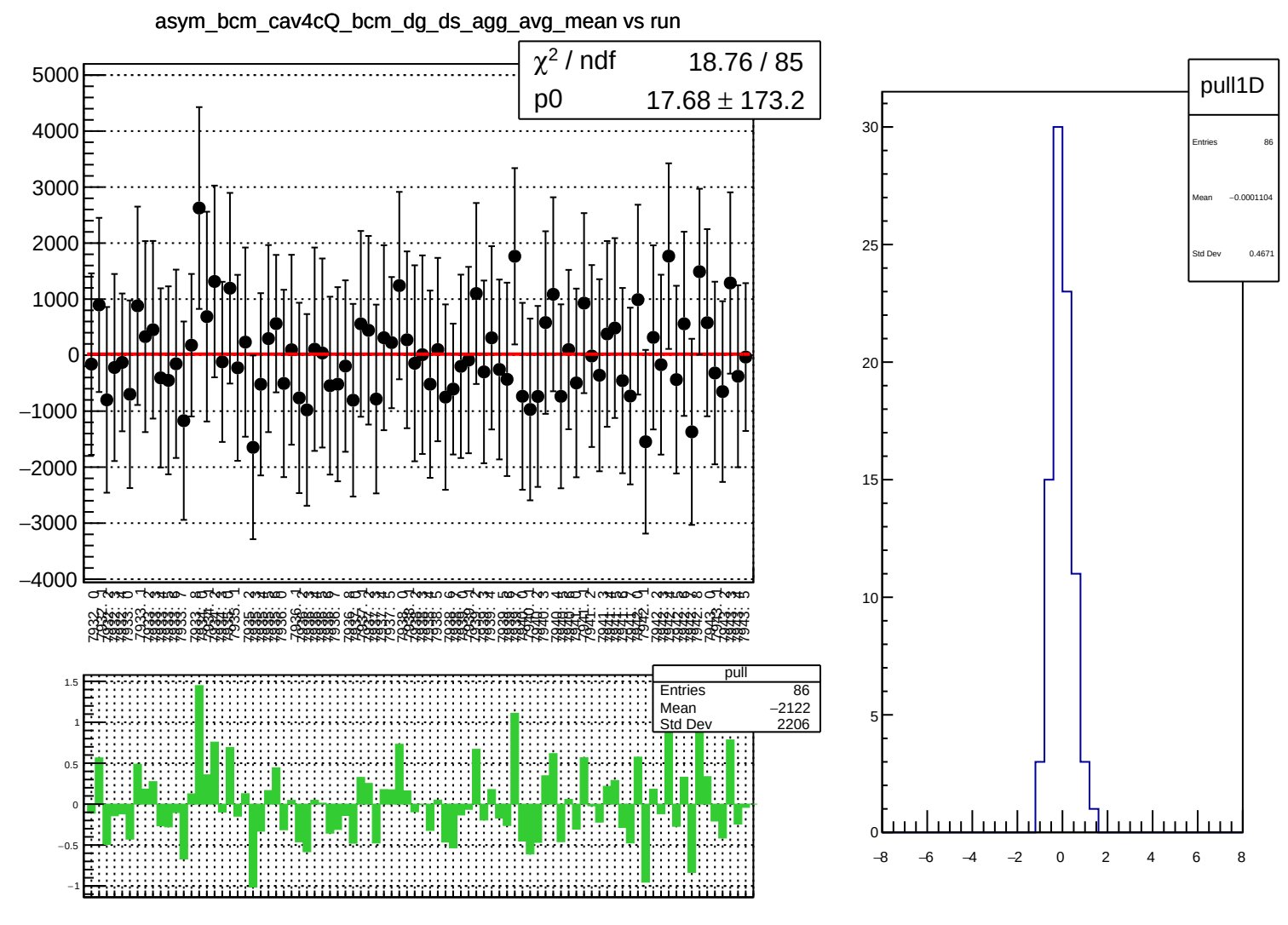

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 18.82 / 85
p0 10.36 ± 173.6
pull
Entries 86
Mean −136.8
Std Dev 199.4
pull1D
Entries 86
Mean −0.002466
Std Dev 0.4677

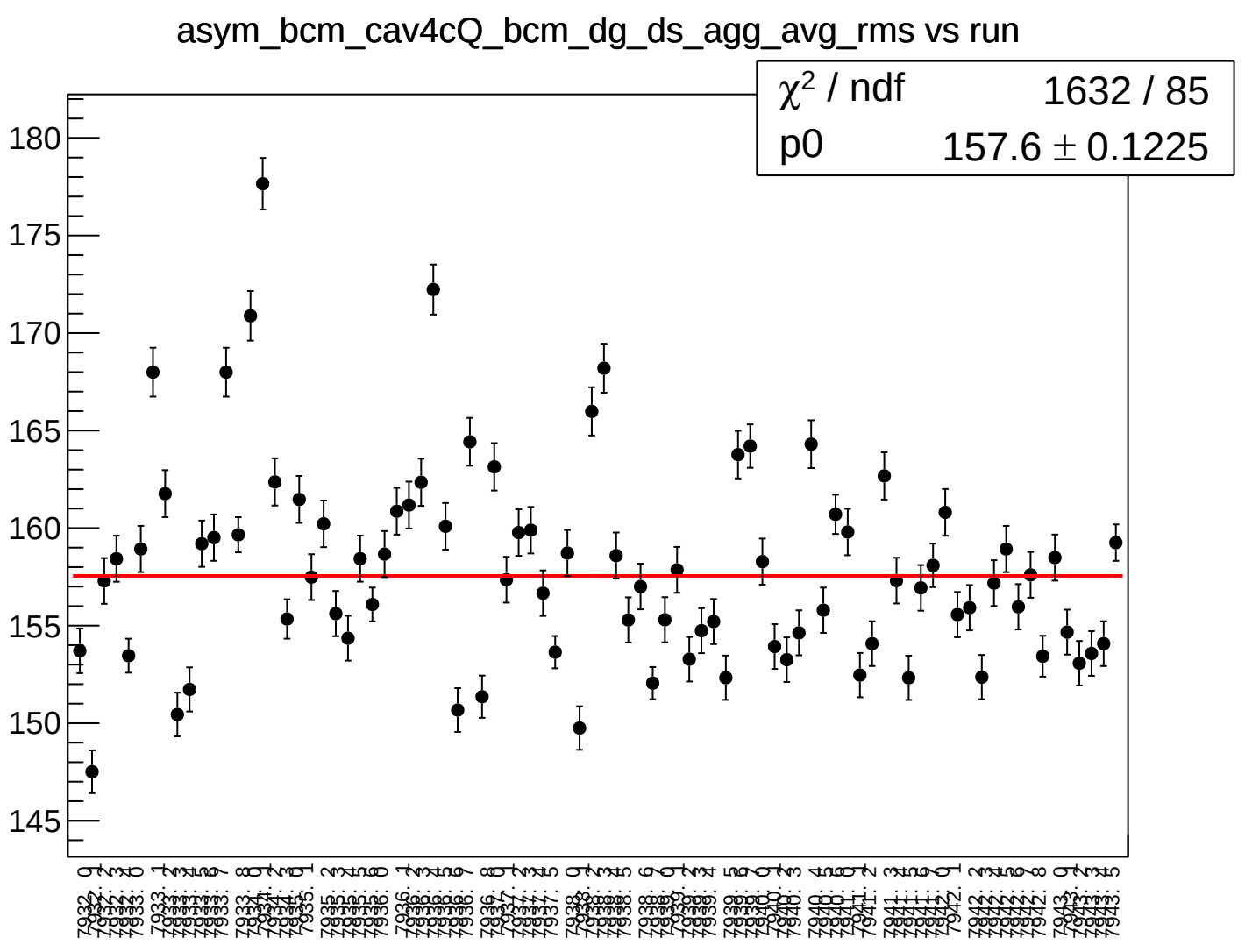

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1586 / 85
p0 157.9 ± 0.1227
180
175
170
165
160
155
150
145

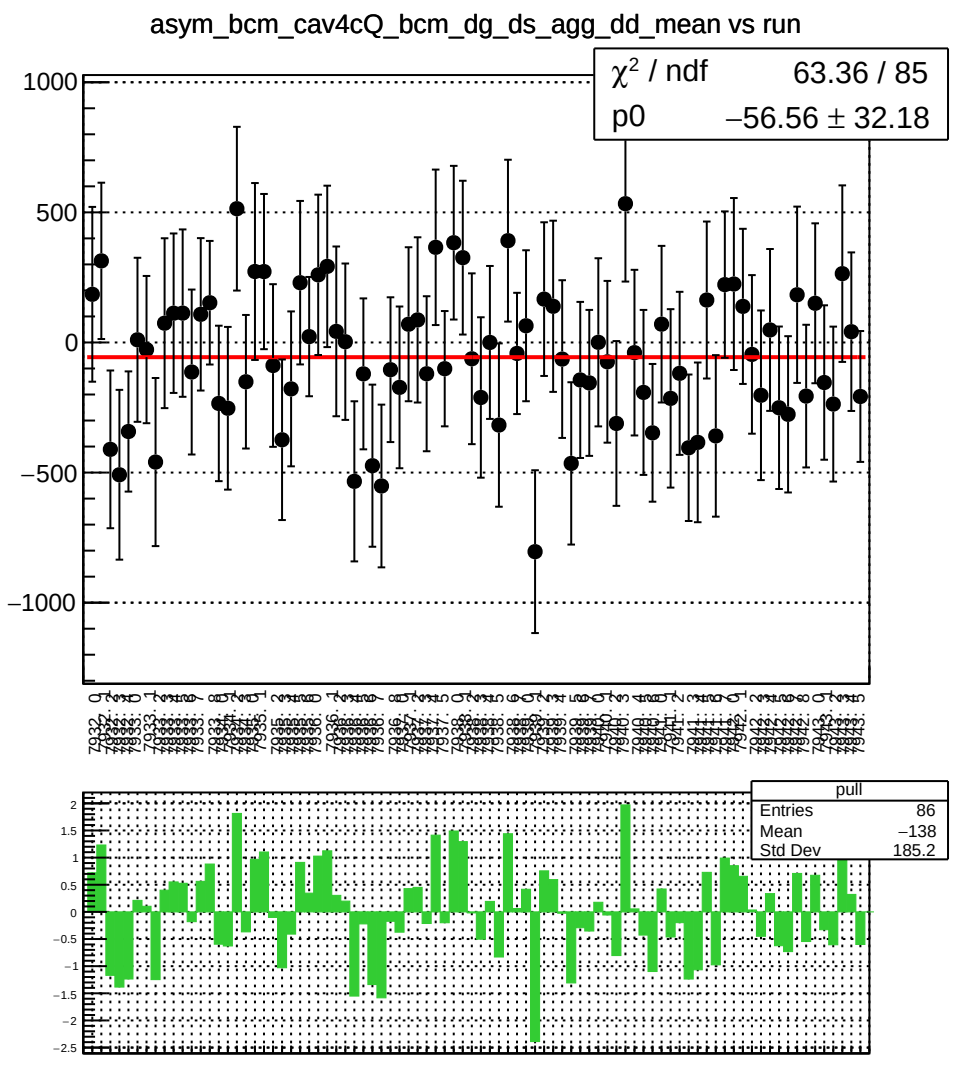

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 77.51 / 85
p0 −44.04 ± 35.83
1000
500
0
−500
−1000
pull
Entries 86
Mean −159.6
Std Dev 204.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

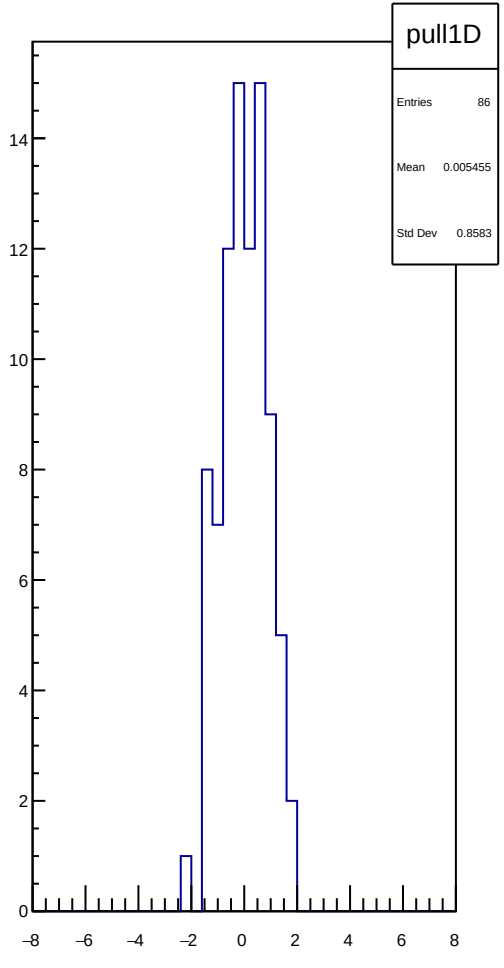

pull1D
Entries 86
Mean 0.009045
Std Dev 0.9493
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

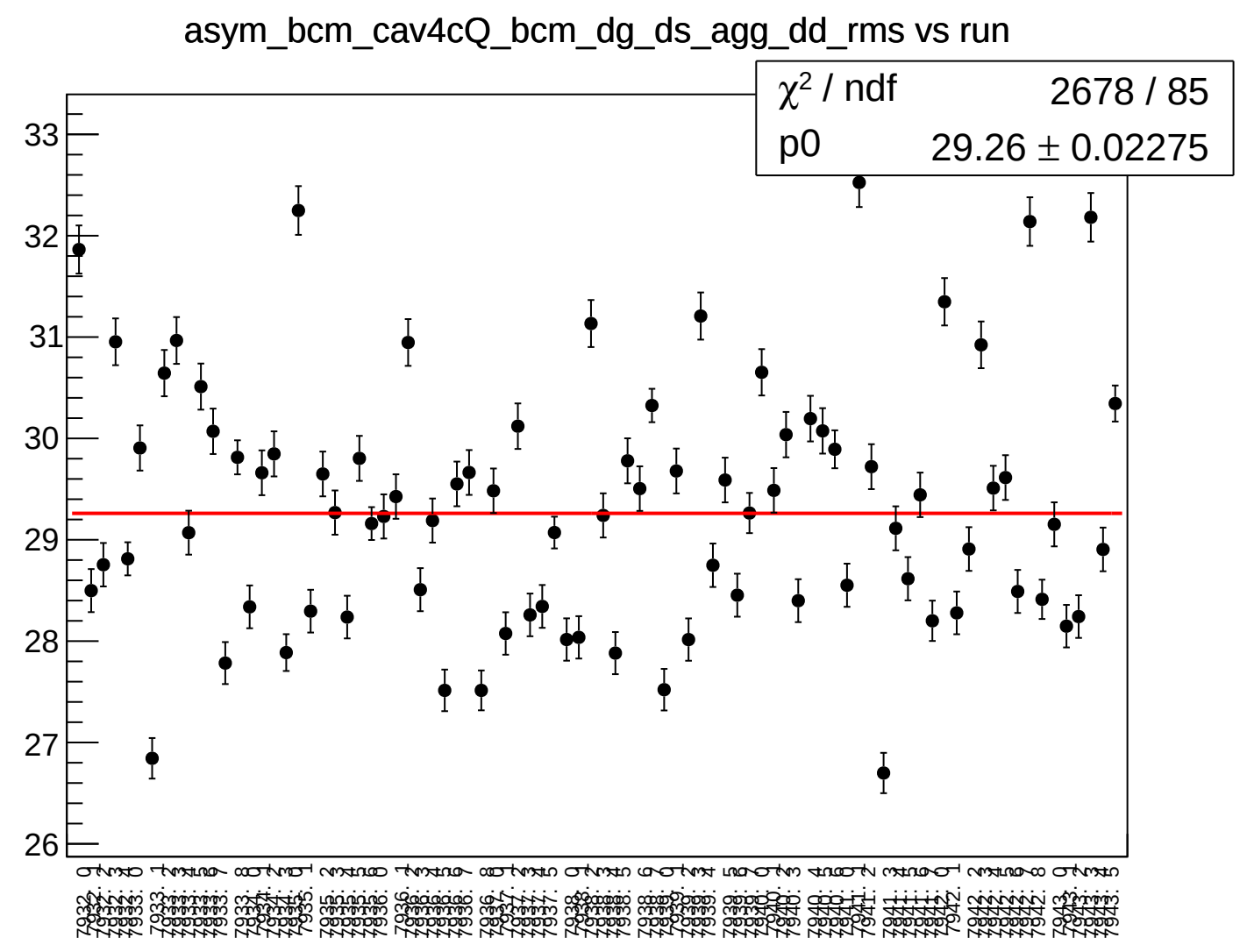

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1683 / 85
p0 32.59 ± 0.02533
36
35
34
33
32
31
30

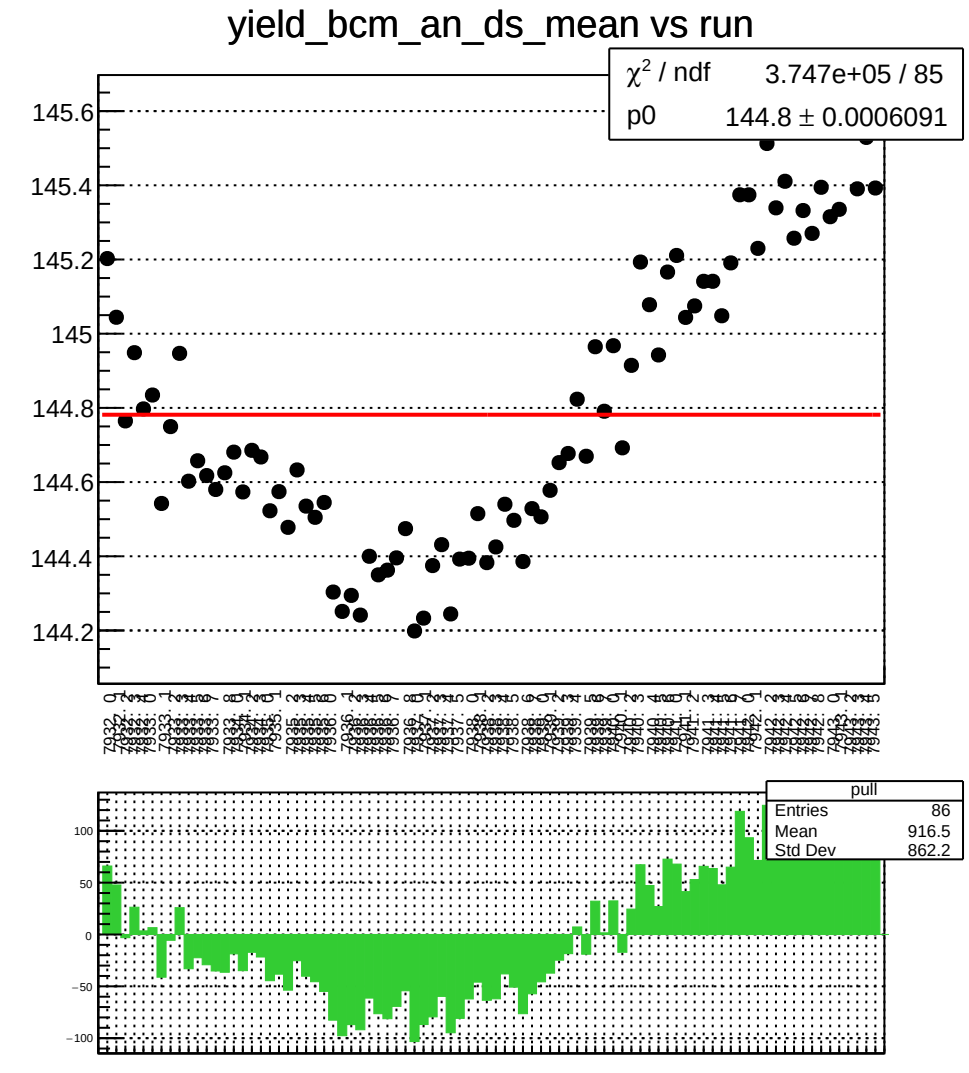

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.76 / 85
p0 17.68 ± 173.2
pull
Entries 86
Mean −2122
Std Dev 2206
pull1D
Entries 86
Mean −0.0001104
Std Dev 0.4671

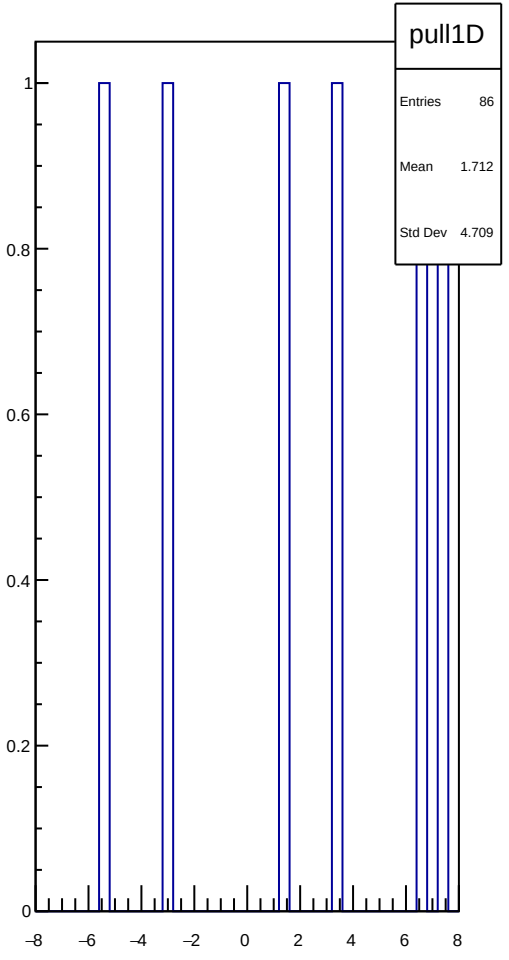

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1632 / 85
p0 157.6 ± 0.1225
180
175
170
165
160
155
150
145

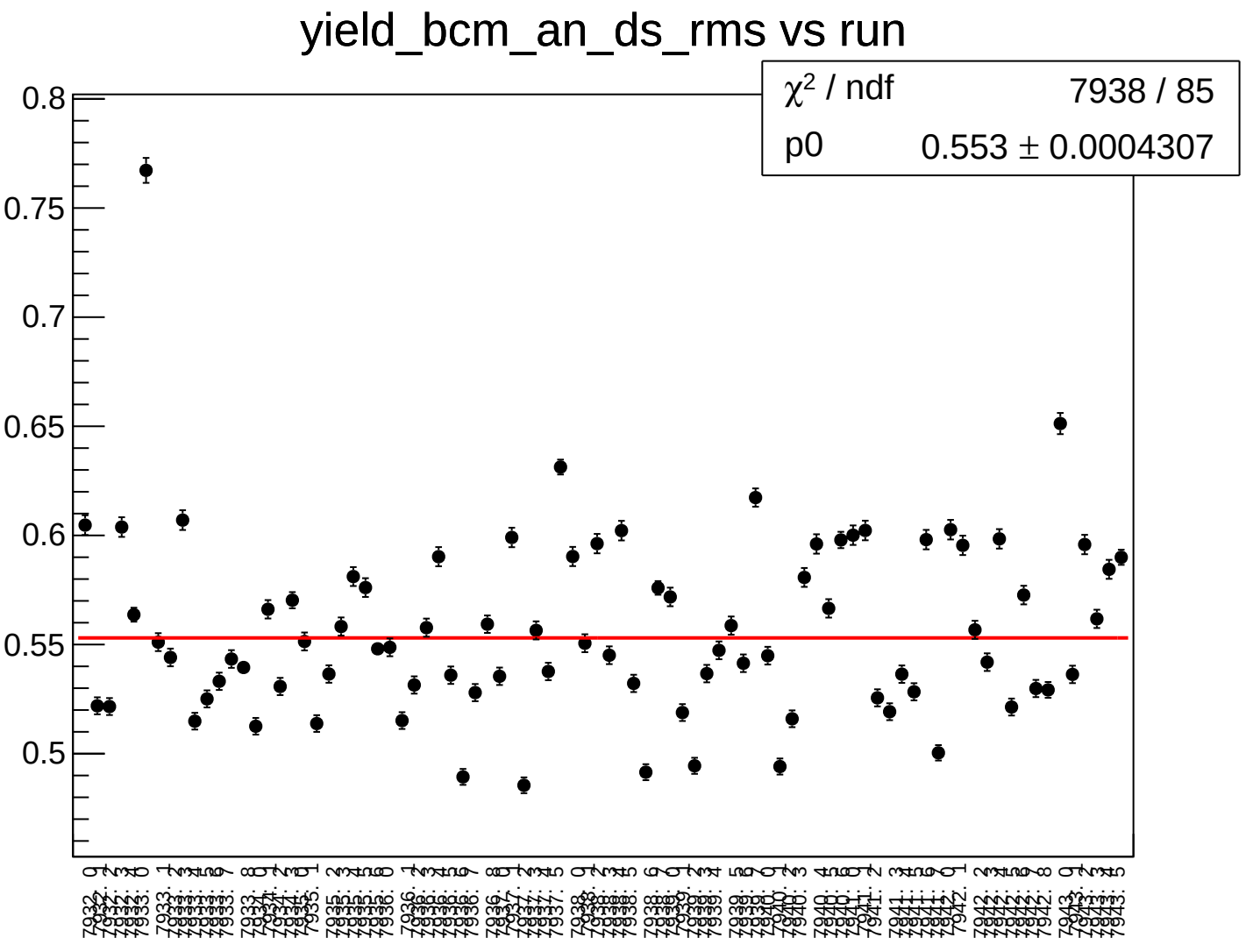

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 63.36 / 85
p0 −56.56 ± 32.18
1000
500
0
−500
−1000
pull
Entries 86
Mean −138
Std Dev 185.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

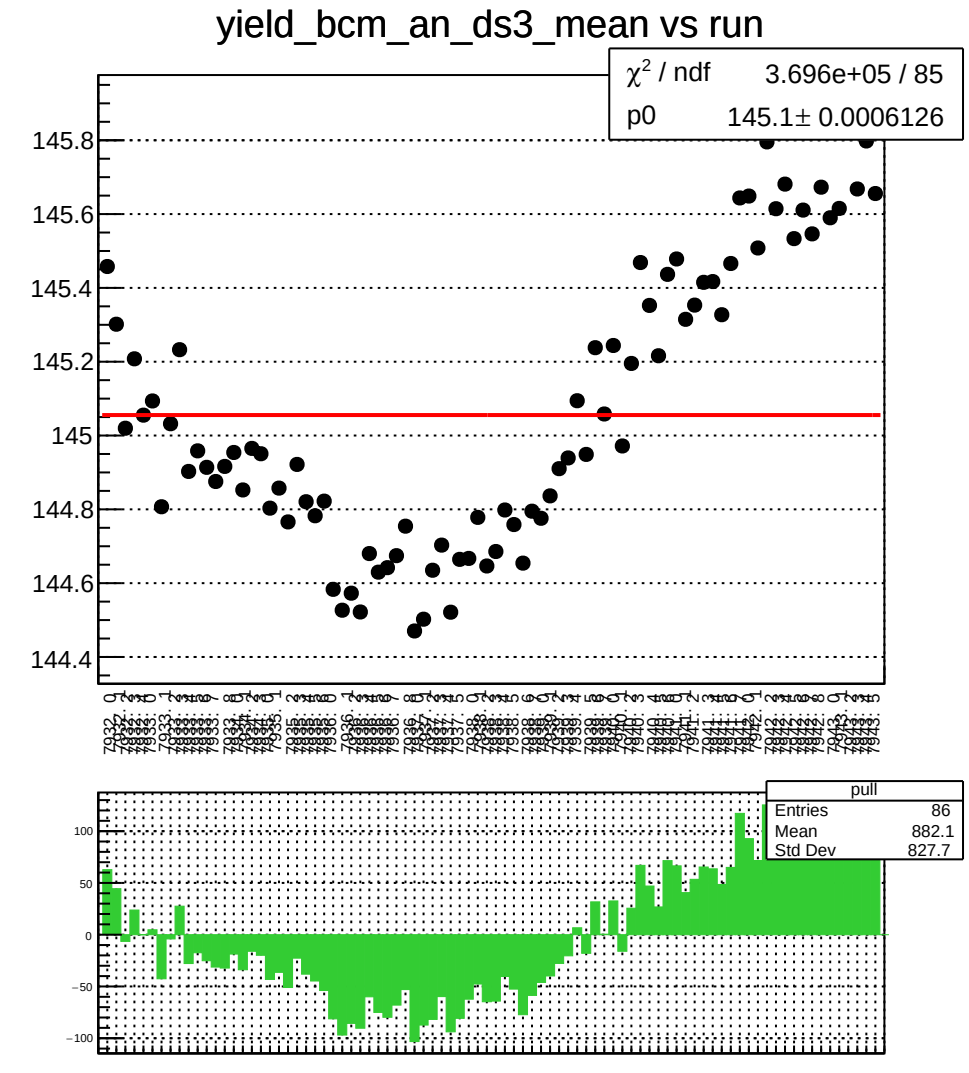

pull1D
Entries 86
Mean 0.005455
Std Dev 0.8583
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

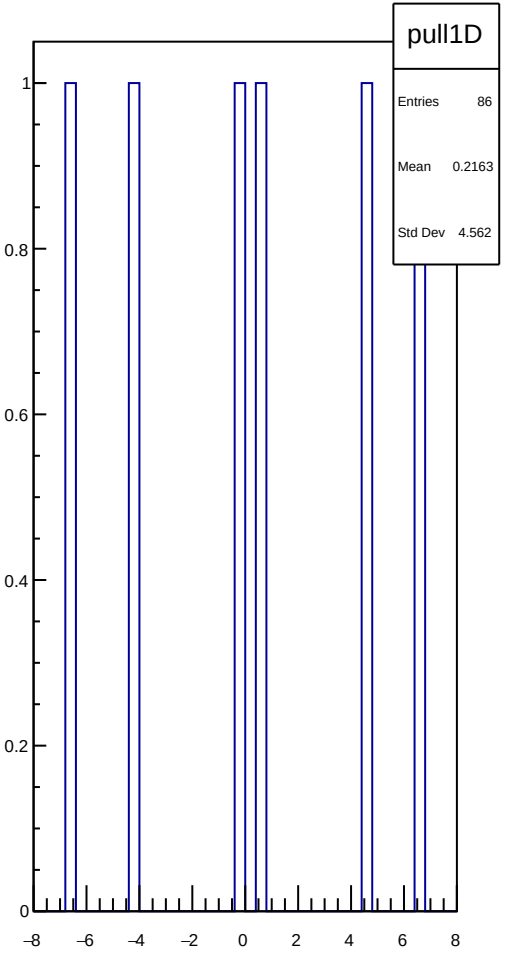

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2678 / 85
p0 29.26 ± 0.02275
33
32
31
30
29
28
27
26

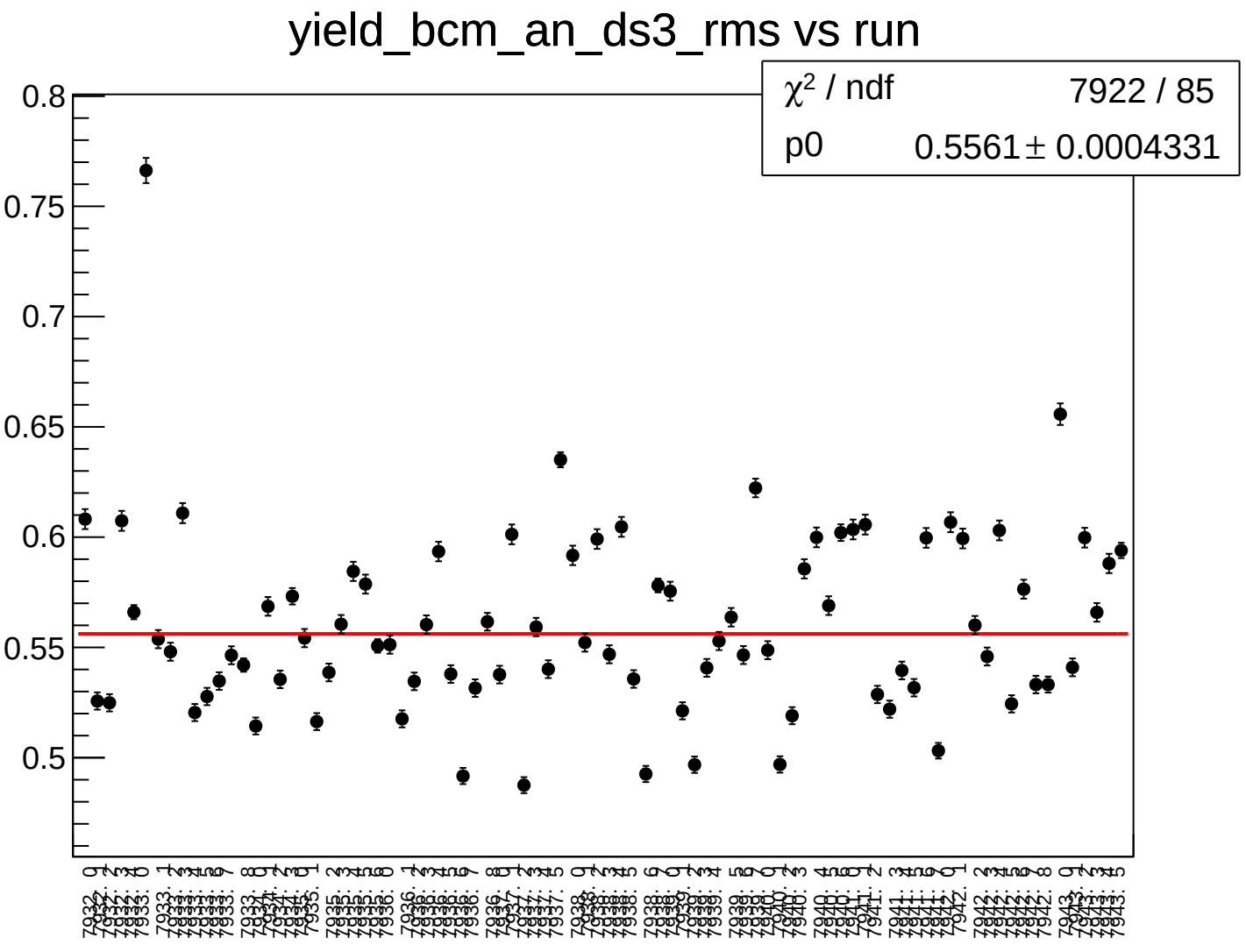

yield_bcm_an_ds_mean vs run
χ² / ndf 3.747e+05 / 85
p0 144.8 ± 0.0006091
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
pull
Entries 86
Mean 916.5
Std Dev 862.2
100
50
0
−50
−100

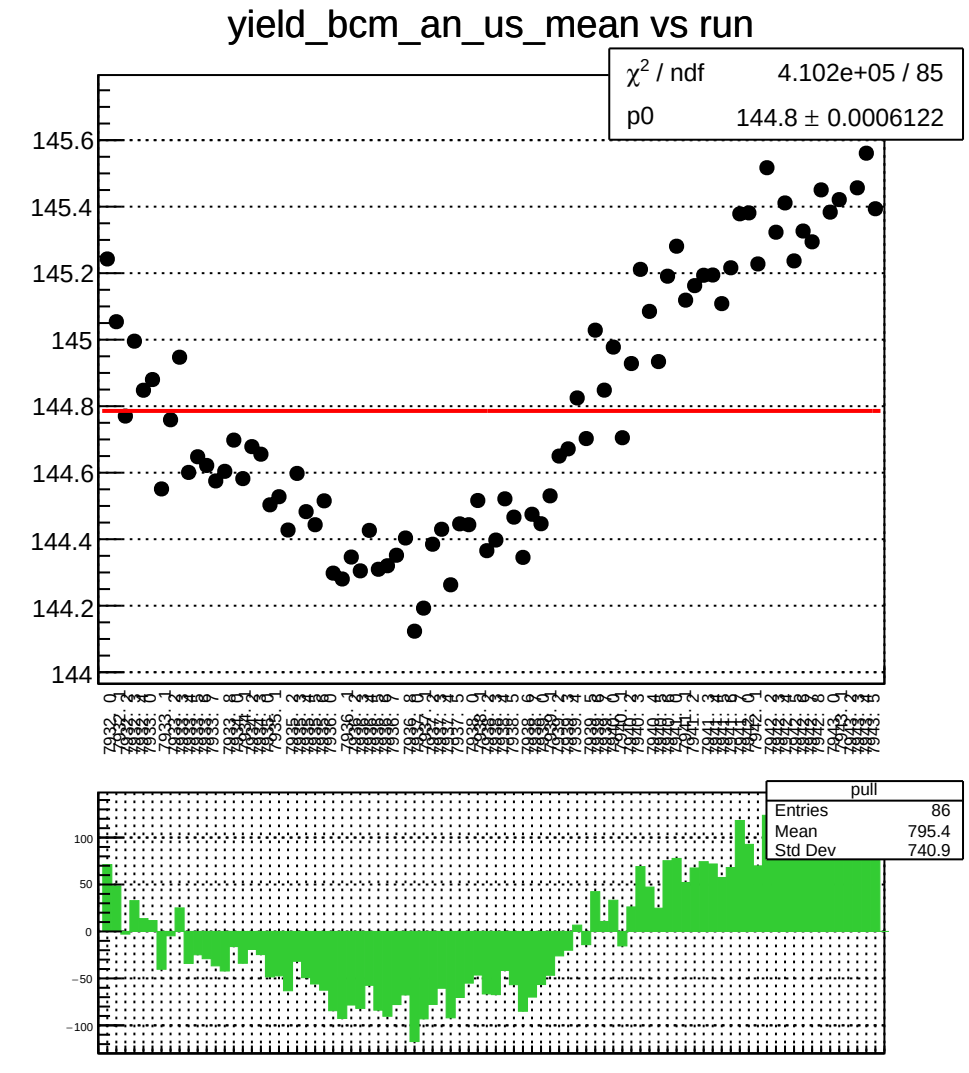

pull1D
Entries 86
Mean 1.712
Std Dev 4.709
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

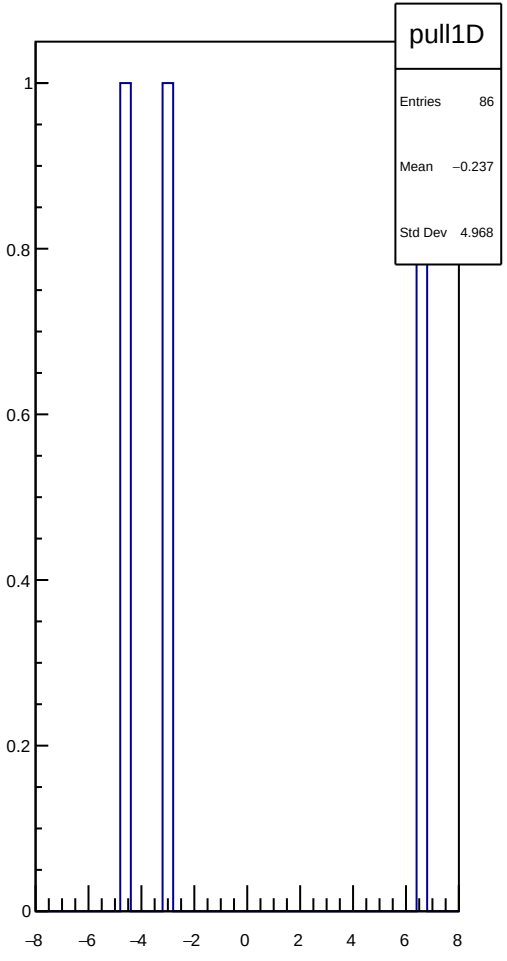

yield_bcm_an_ds_rms vs run
χ² / ndf 7938 / 85
p0 0.553 ± 0.0004307
0.8
0.75
0.7
0.65
0.6
0.55
0.5

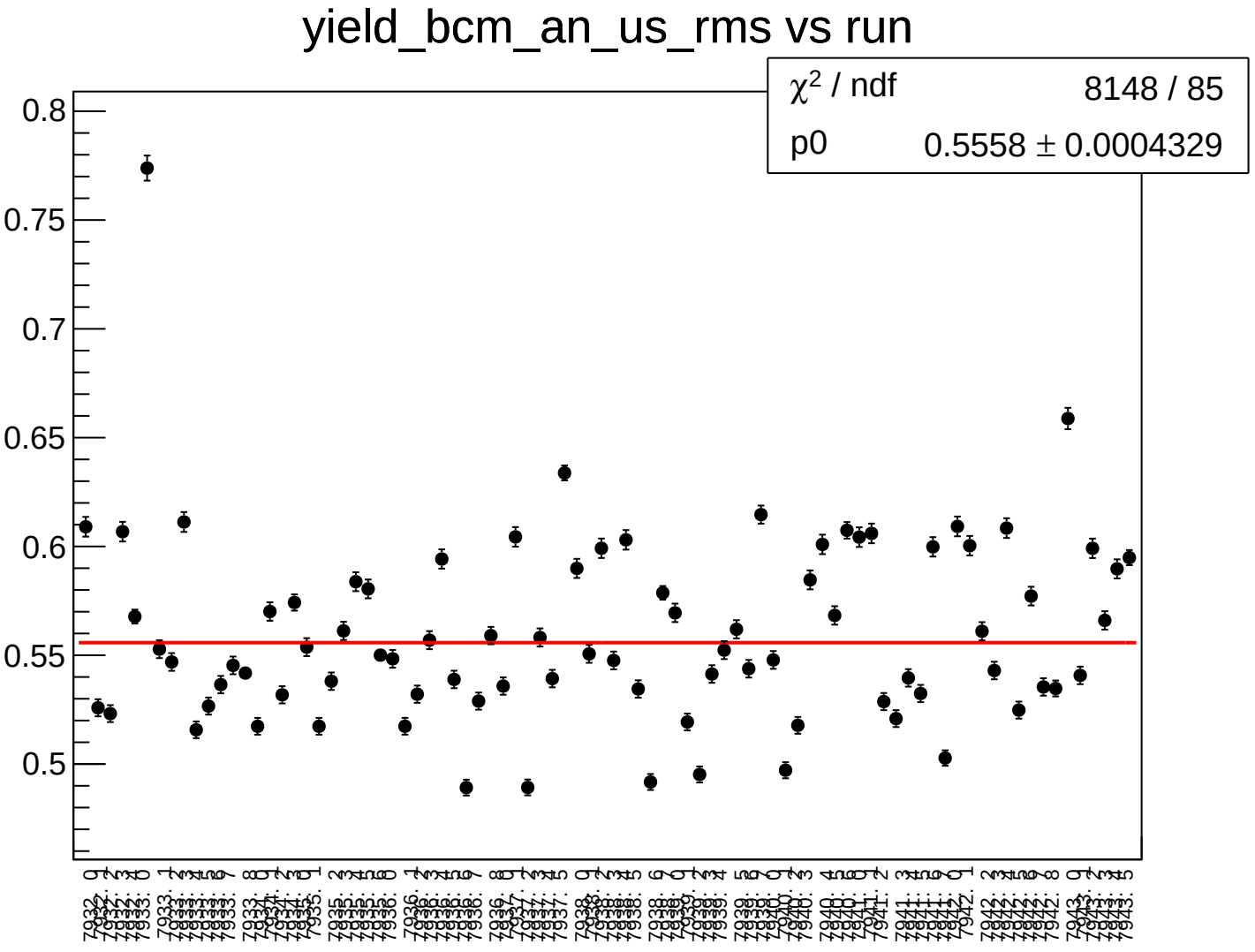

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.696e+05 / 85
p0 145.1± 0.0006126
145.8
145.6
145.4
145.2
145
144.8
144.6
144.4
pull
Entries 86
Mean 882.1
Std Dev 827.7
100
50
0
−50
−100

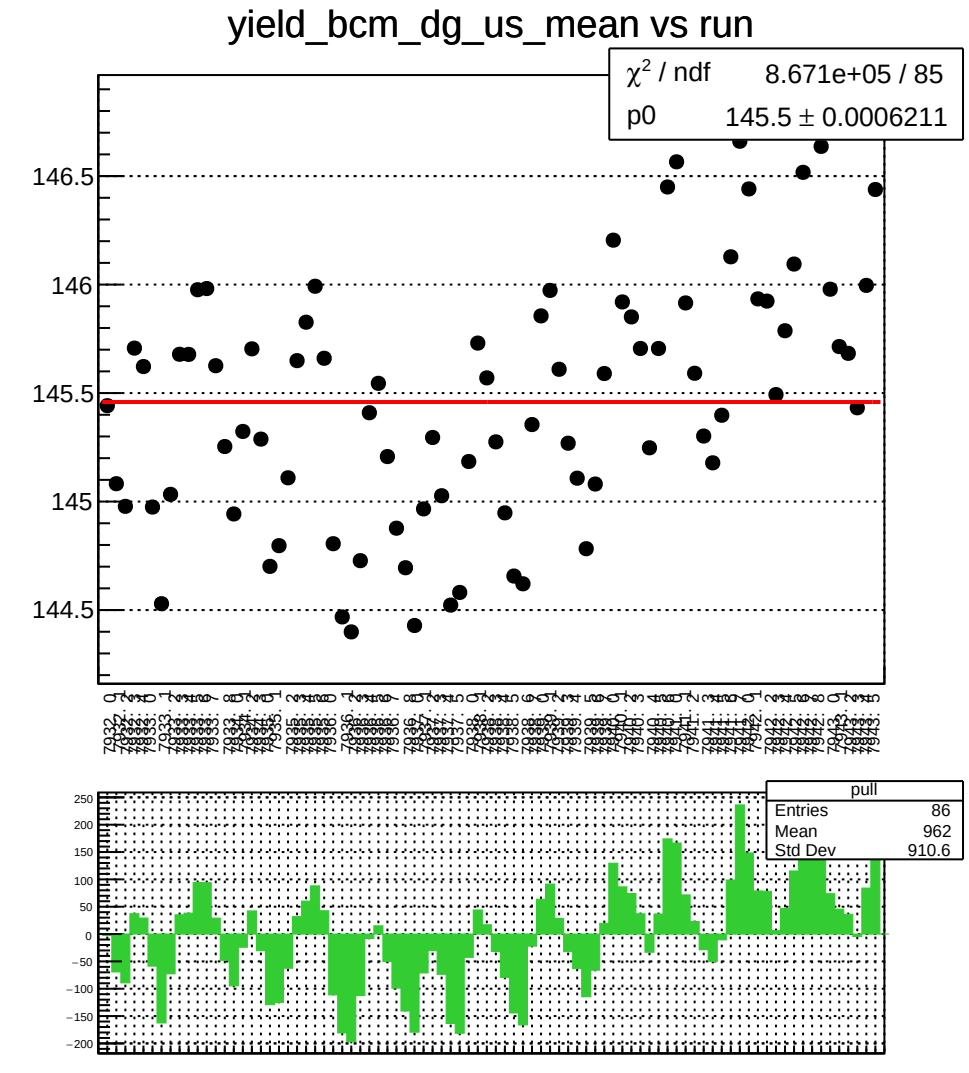

pull1D
Entries 86
Mean 0.2163
Std Dev 4.562
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

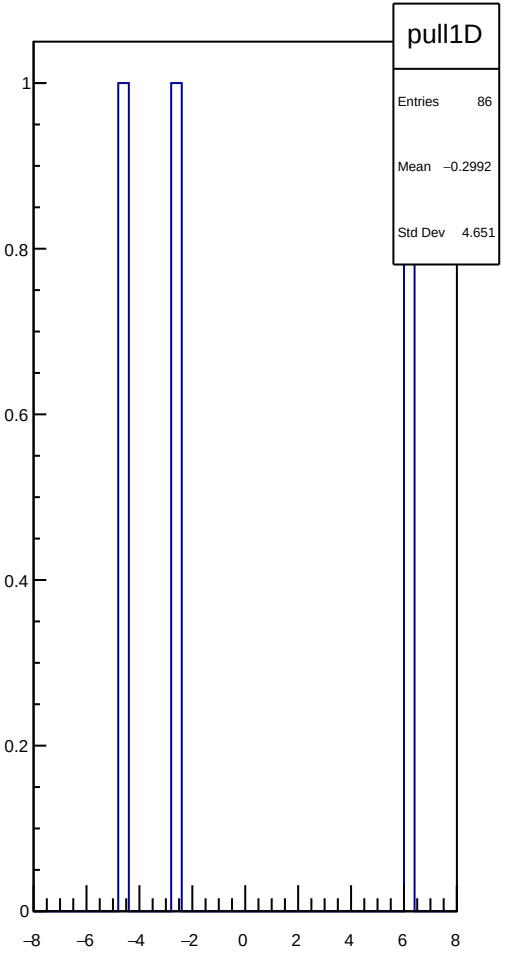

yield_bcm_an_ds3_rms vs run
χ² / ndf 7922 / 85
p0 0.5561 ± 0.0004331
0.8
0.75
0.7
0.65
0.6
0.55
0.5

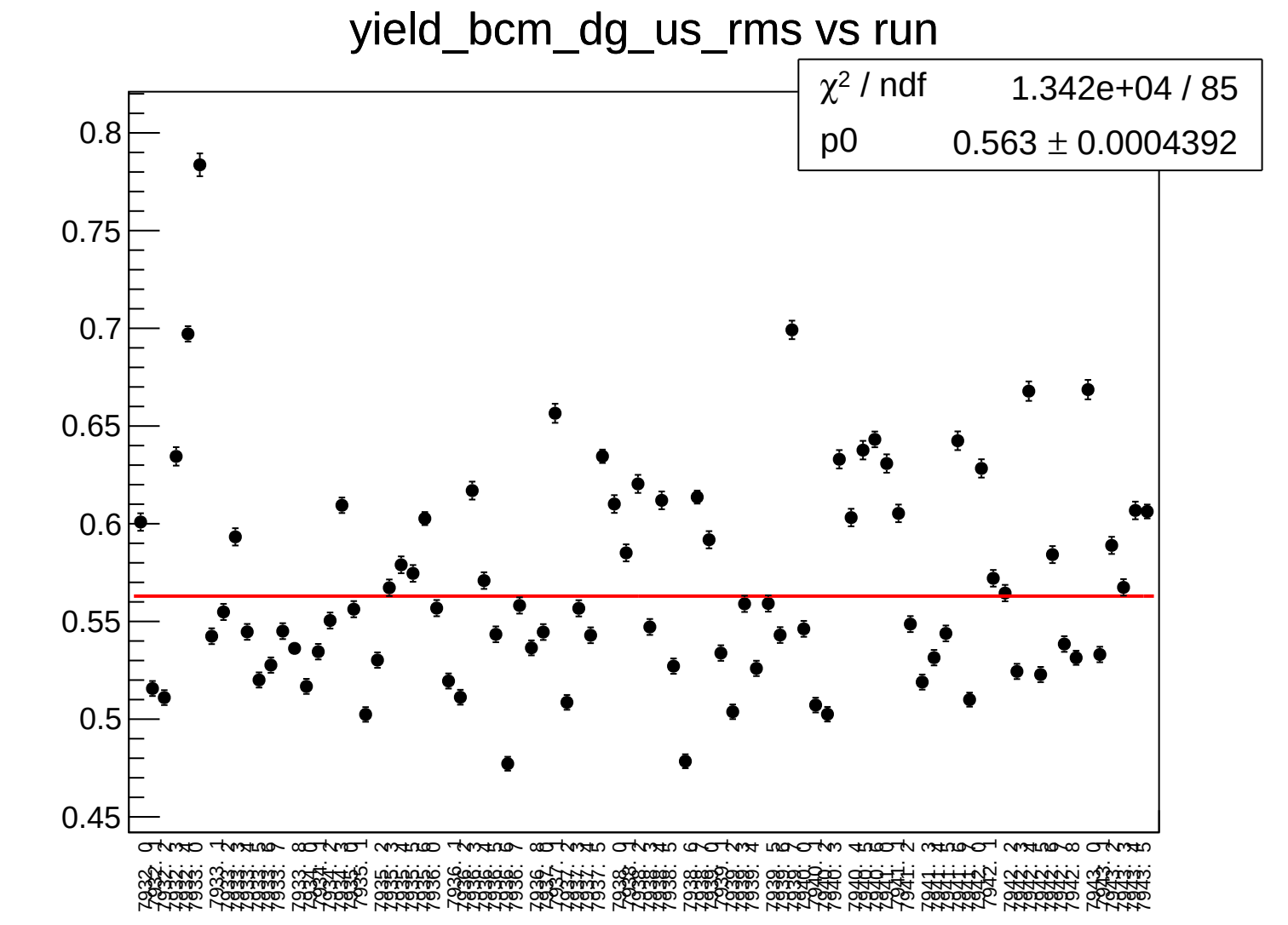

yield_bcm_an_us_mean vs run
χ² / ndf 4.102e+05 / 85
p0 144.8 ± 0.0006122
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
144
pull
Entries 86
Mean 795.4
Std Dev 740.9
100
50
0
−50
−100

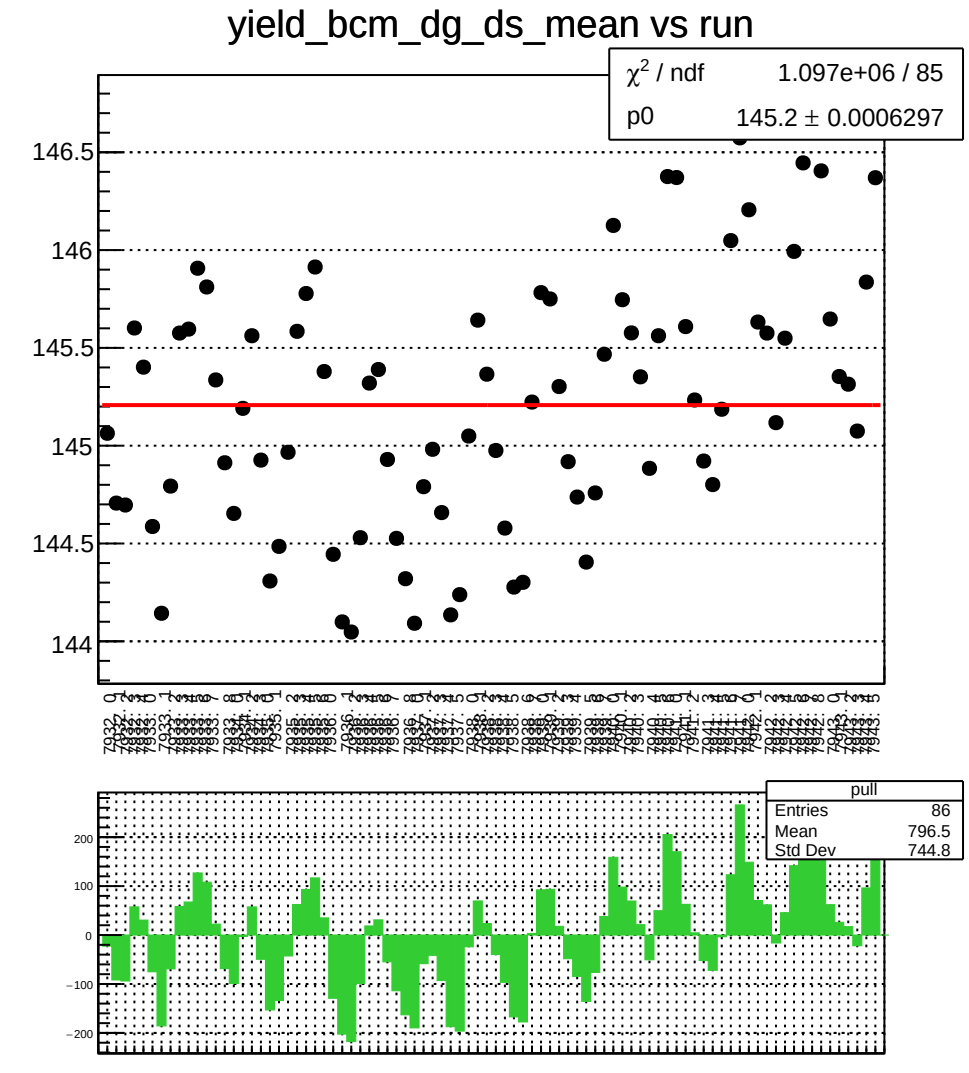

pull1D
Entries 86
Mean −0.237
Std Dev 4.968
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

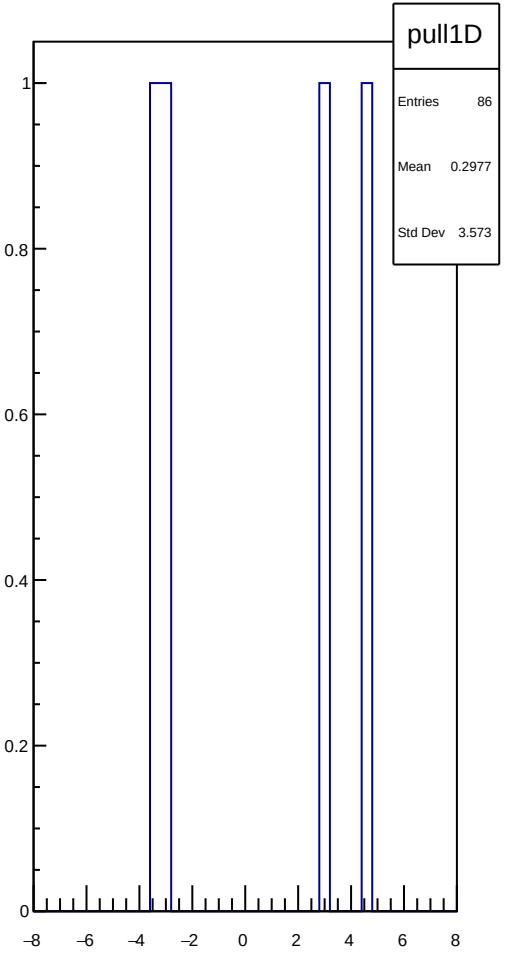

yield_bcm_an_us_rms vs run
χ² / ndf 8148 / 85
p0 0.5558 ± 0.0004329
0.8
0.75
0.7
0.65
0.6
0.55
0.5

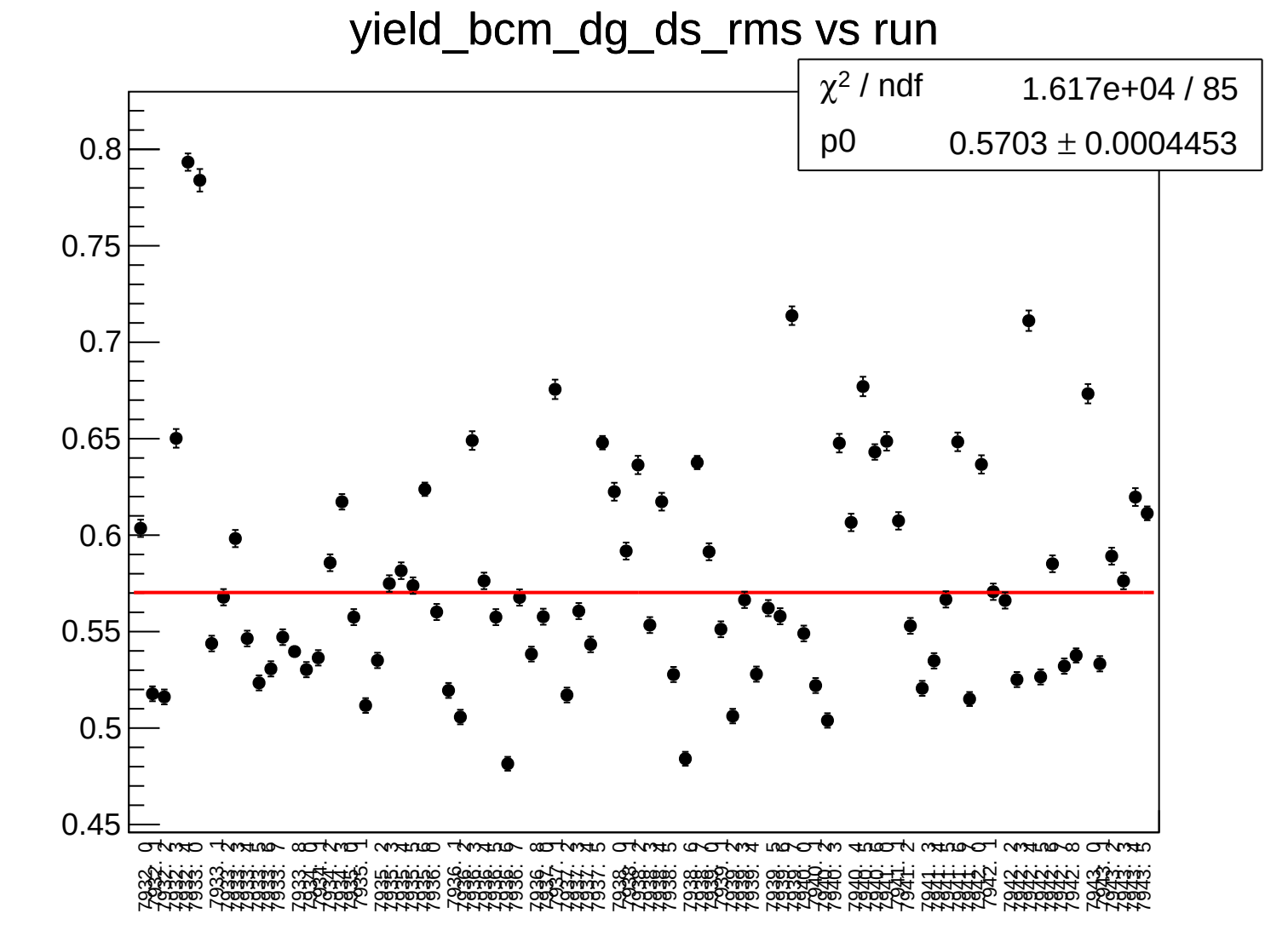

yield_bcm_dg_us_mean vs run
χ² / ndf 8.671e+05 / 85
p0 145.5 ± 0.0006211
146.5
146
145.5
145
144.5
pull
Entries 86
Mean 962
Std Dev 910.6
250
200
150
100
50
0
−50
−100
−150
−200

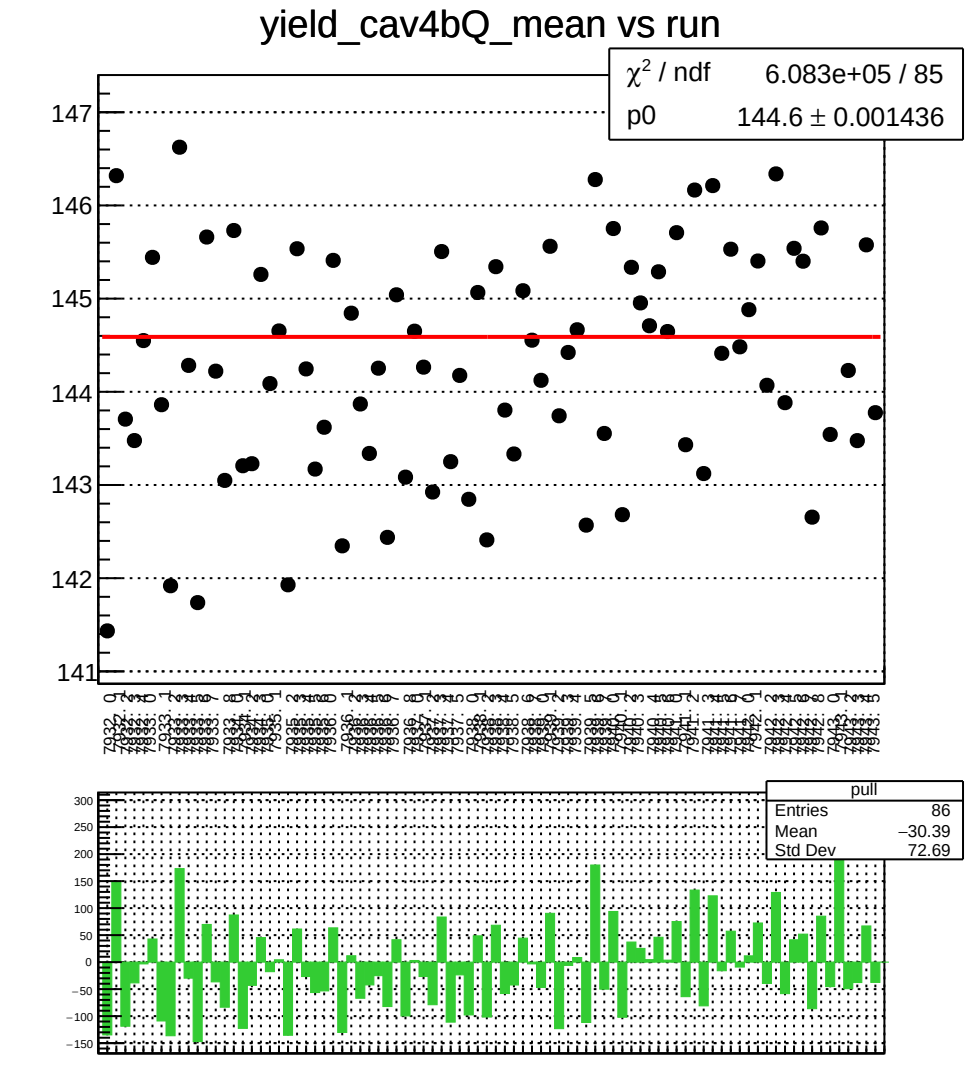

pull1D
Entries 86
Mean −0.2992
Std Dev 4.651
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

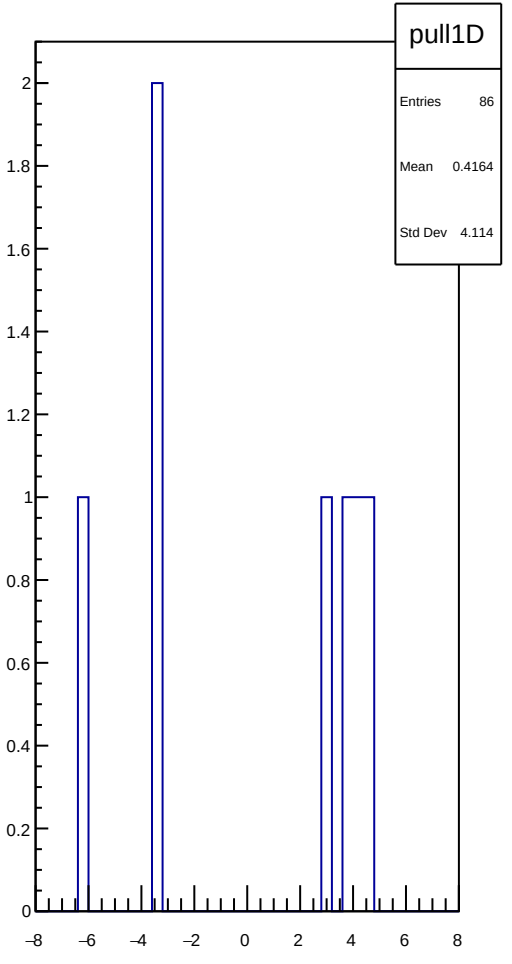

yield_bcm_dg_us_rms vs run
χ² / ndf 1.342e+04 / 85
p0 0.563 ± 0.0004392
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

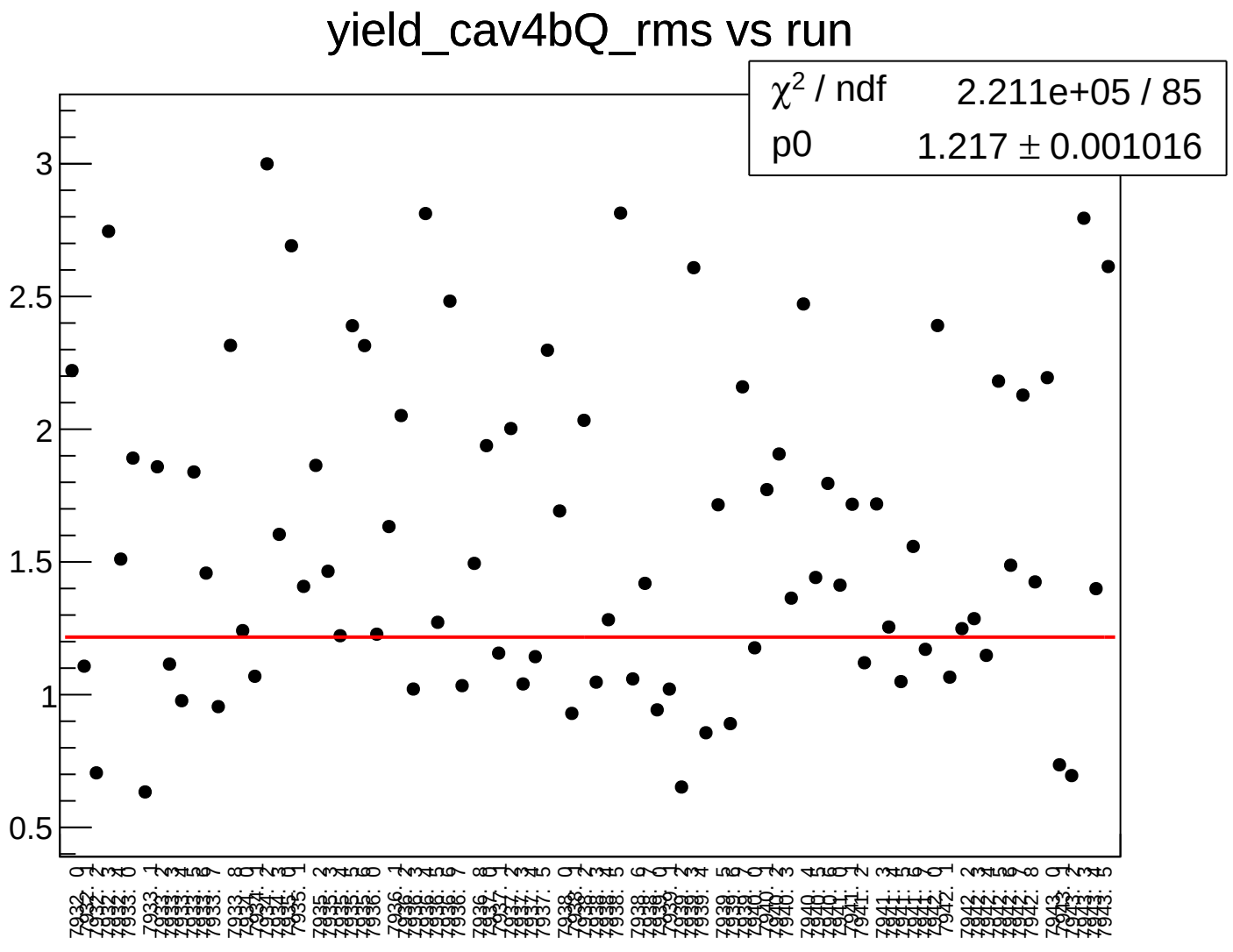

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.097e+06 / 85
p0 145.2 ± 0.0006297
146.5
146
145.5
145
144.5
144
pull
Entries 86
Mean 796.5
Std Dev 744.8
200
100
0
−100
−200

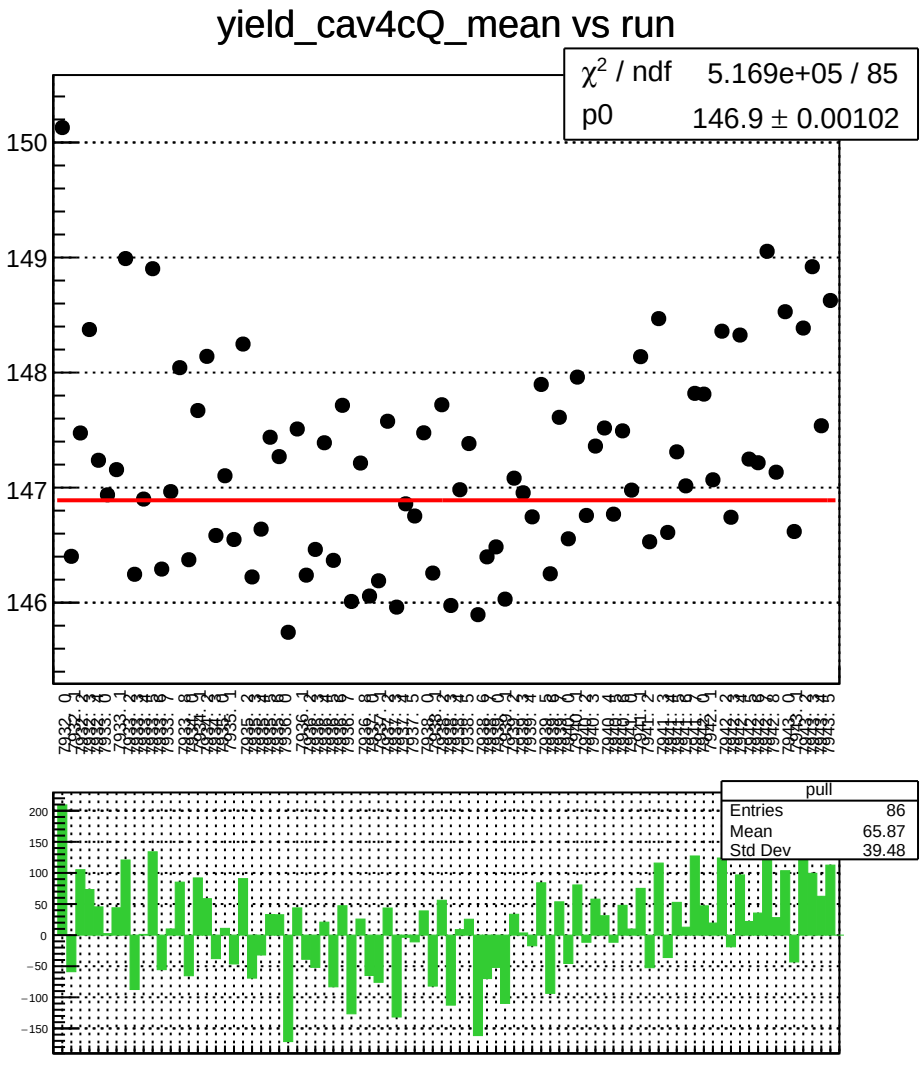

pull1D
Entries 86
Mean 0.2977
Std Dev 3.573
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

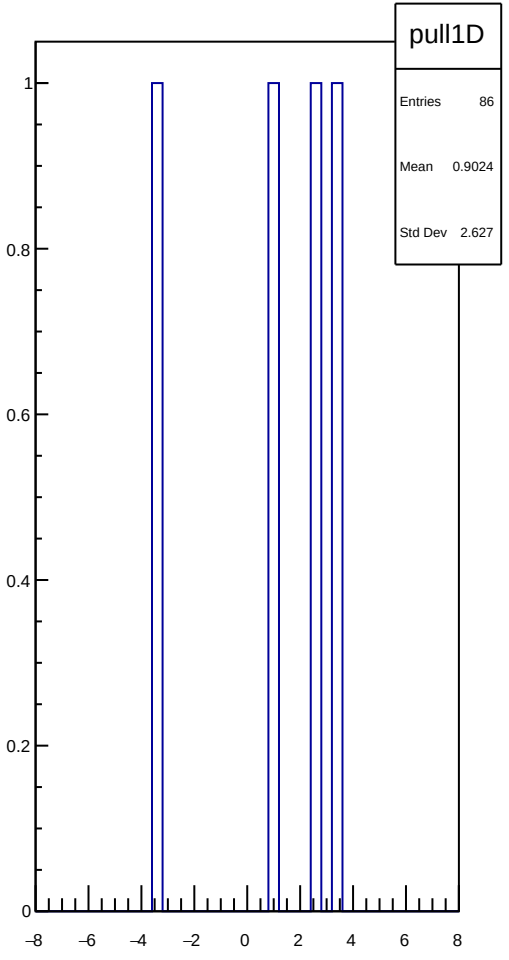

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.617e+04 / 85
p0 0.5703 ± 0.0004453
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

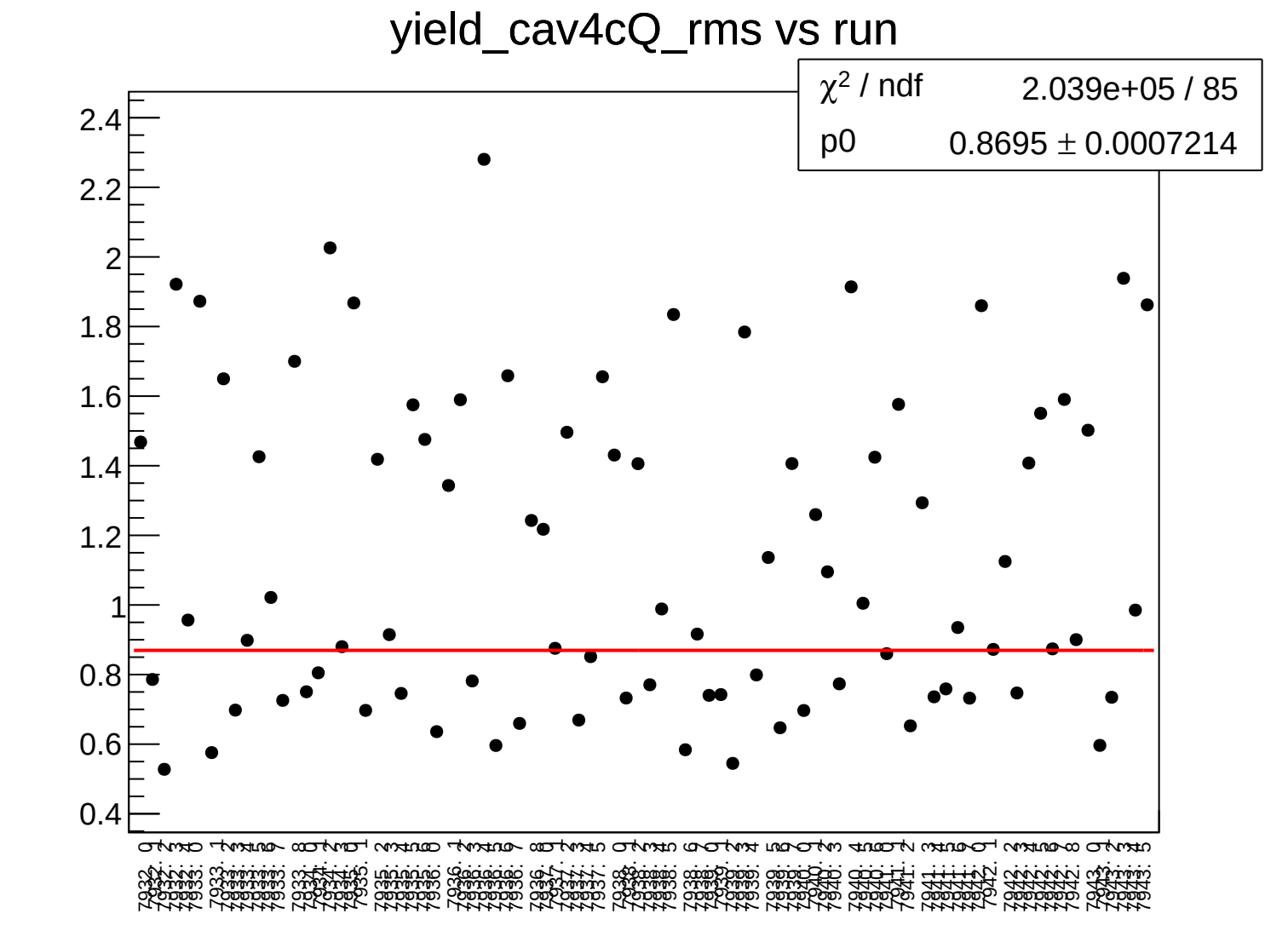

yield_cav4bQ_mean vs run
χ² / ndf 6.083e+05 / 85
p0 144.6 ± 0.001436
147
146
145
144
143
142
141
pull
Entries 86
Mean −30.39
Std Dev 72.69
300
250
200
150
100
50
0
−50
−100
−150

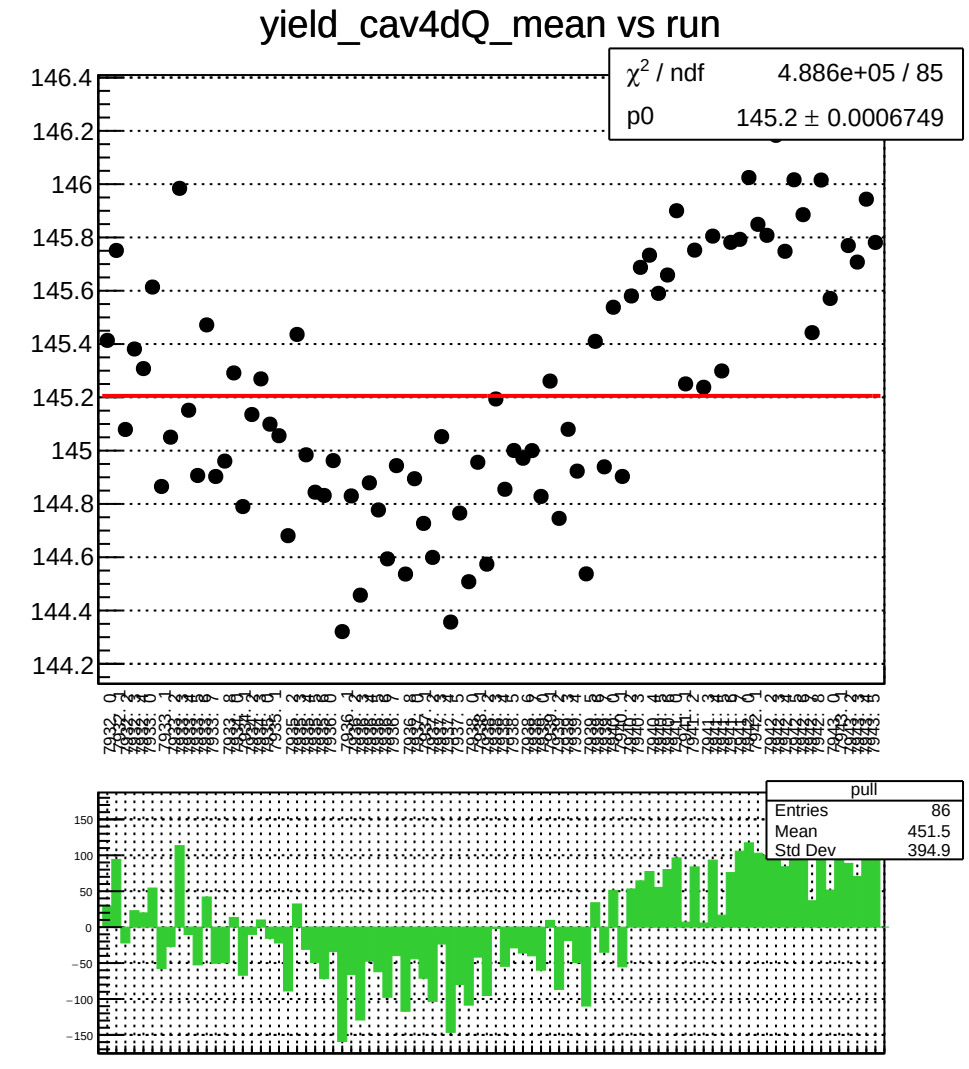

pull1D
Entries 86
Mean 0.4164
Std Dev 4.114
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

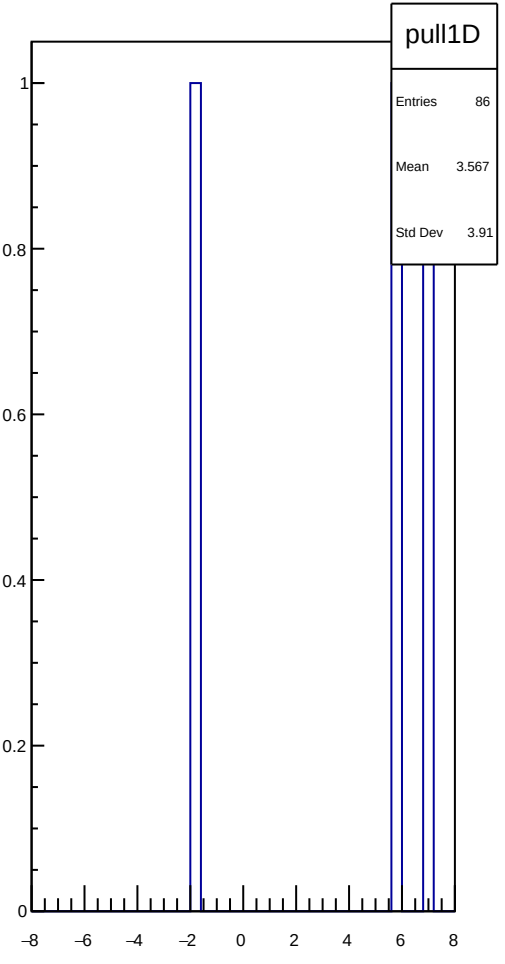

yield_cav4bQ_rms vs run
χ^2 / ndf 2.211e+05 / 85
p0 1.217 ± 0.001016
3
2.5
2
1.5
1
0.5

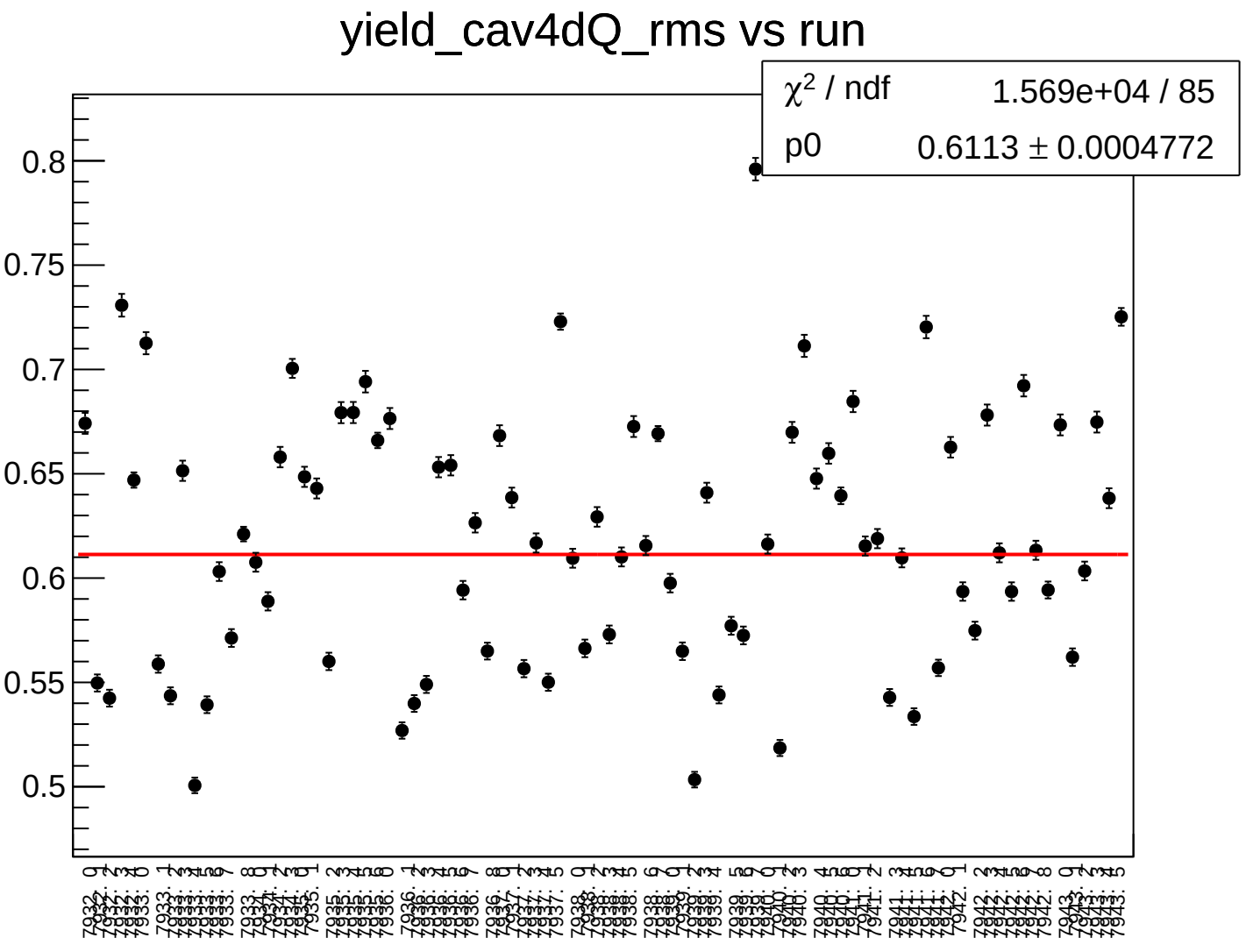

yield_cav4cQ_mean vs run
χ² / ndf 5.169e+05 / 85
p0 146.9 ± 0.00102
150
149
148
147
146
pull
Entries 86
Mean 65.87
Std Dev 39.48
200
150
100
50
0
−50
−100
−150

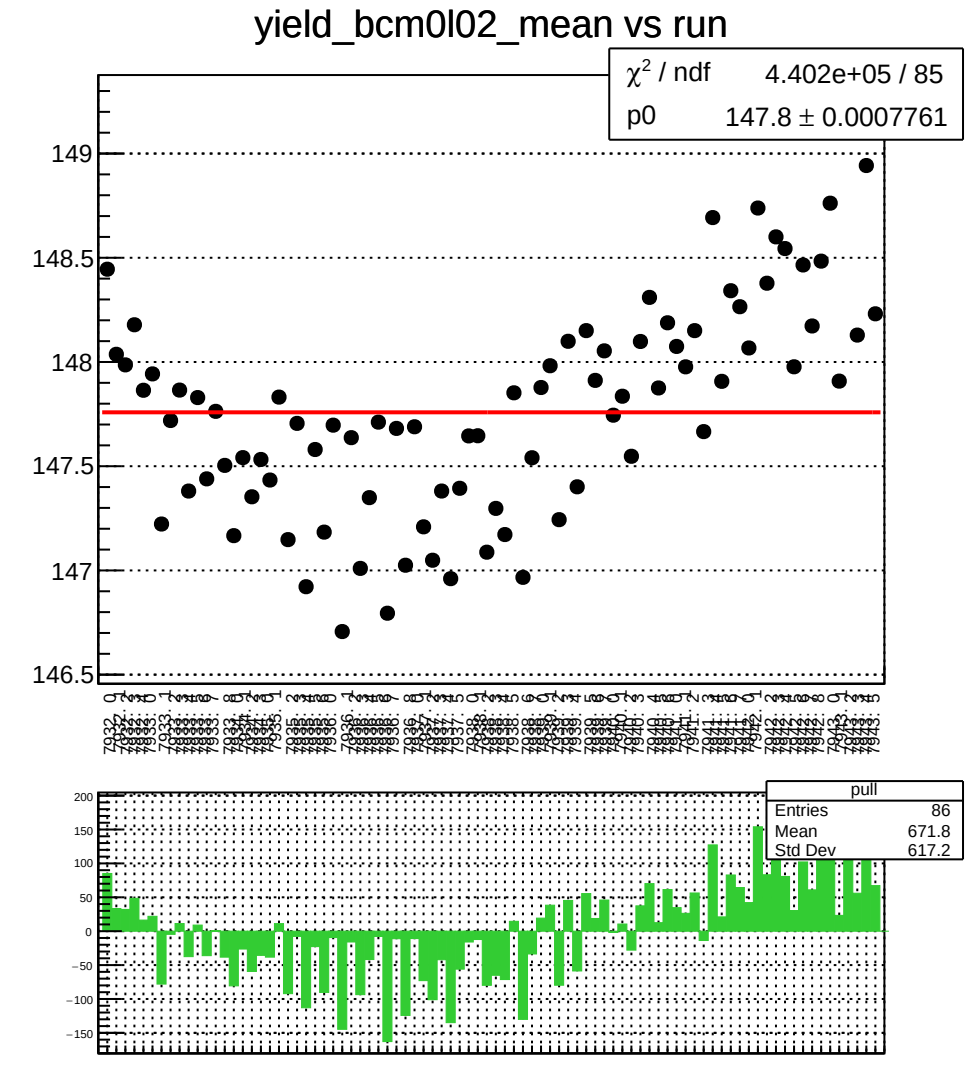

pull1D
Entries 86
Mean 0.9024
Std Dev 2.627
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

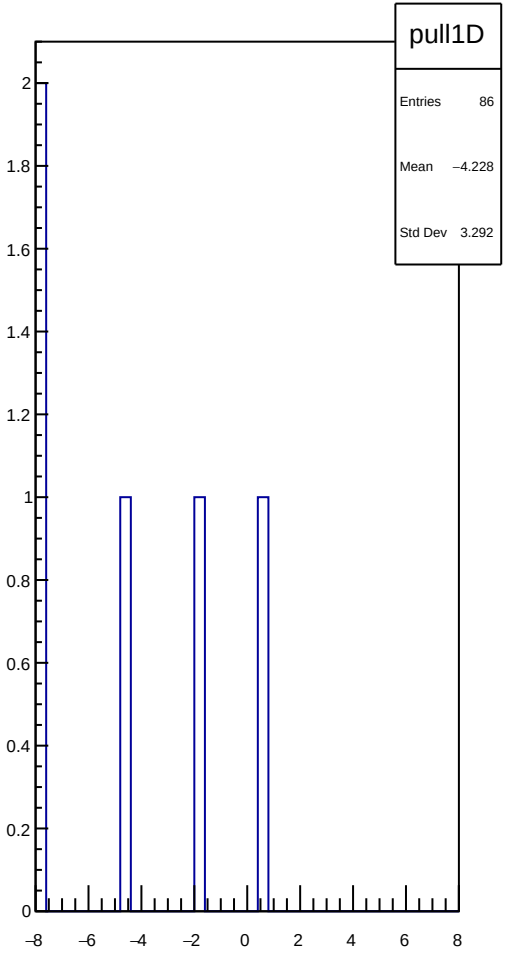

yield_cav4cQ_rms vs run
χ² / ndf 2.039e+05 / 85
p0 0.8695 ± 0.0007214
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4

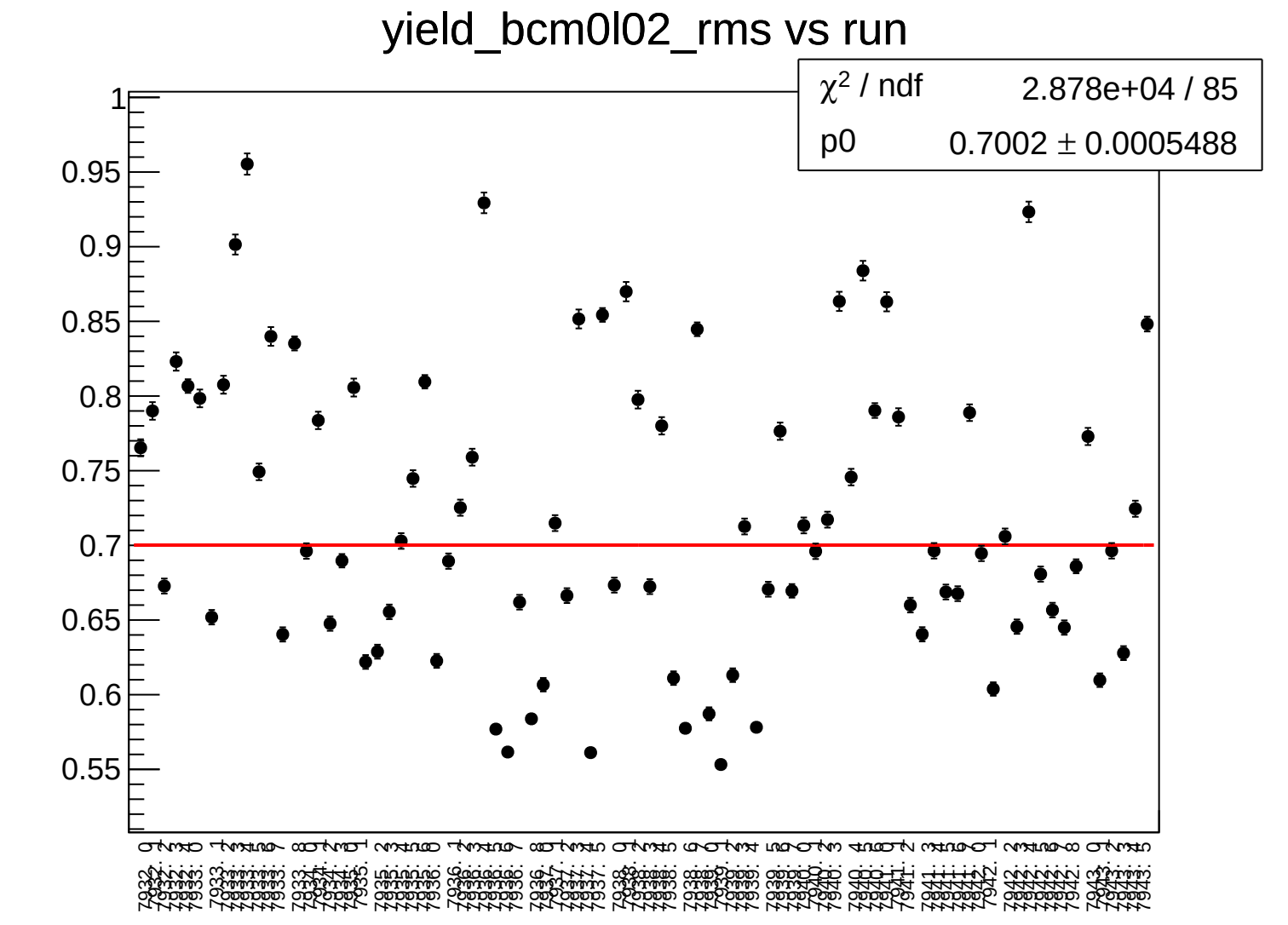

yield_cav4dQ_mean vs run
χ² / ndf 4.886e+05 / 85
p0 145.2 ± 0.0006749
146.4
146.2
146
145.8
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
pull
Entries 86
Mean 451.5
Std Dev 394.9
150
100
50
0
−50
−100
−150

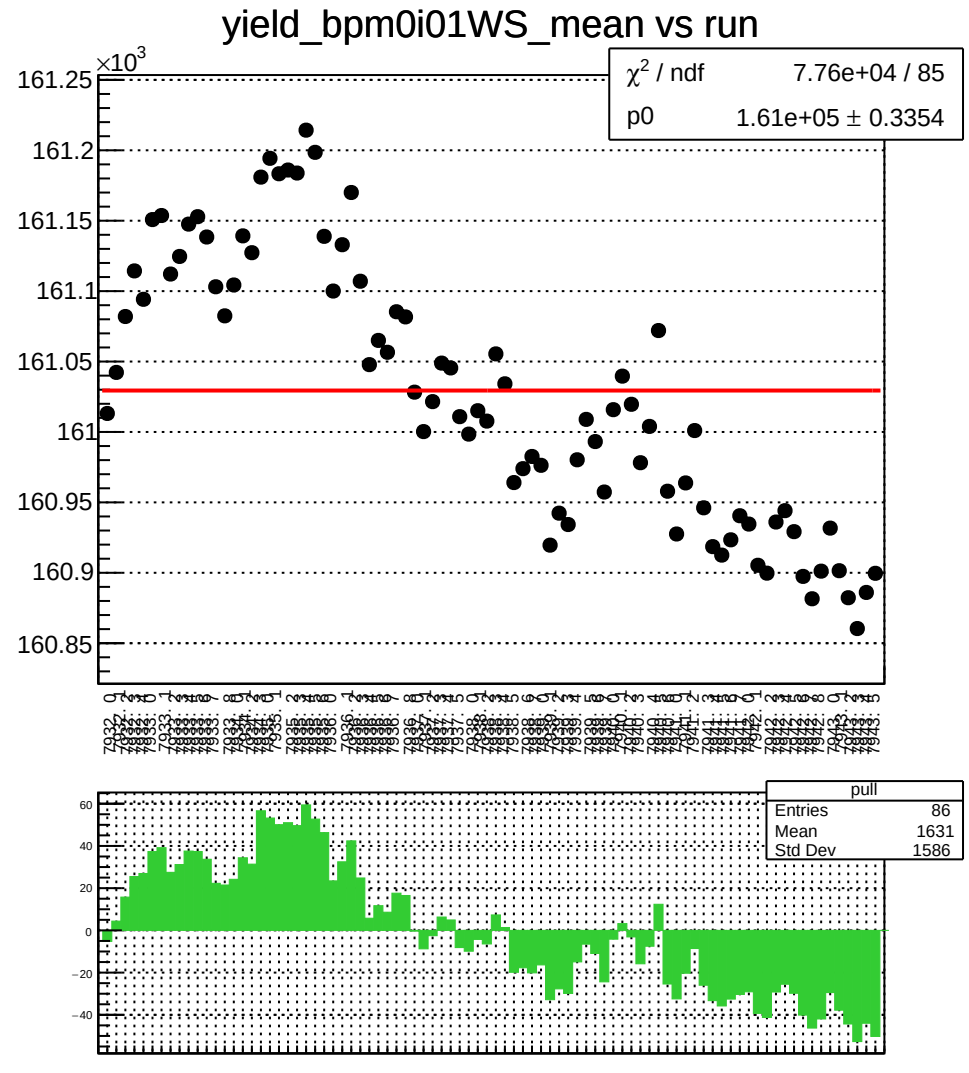

pull1D
Entries 86
Mean 3.567
Std Dev 3.91
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

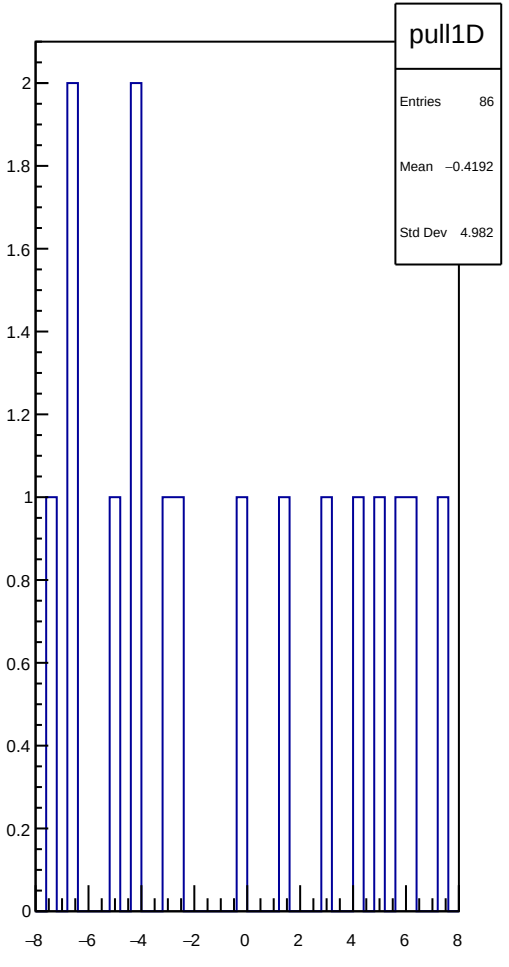

yield_cav4dQ_rms vs run
χ² / ndf 1.569e+04 / 85
p0 0.6113 ± 0.0004772
0.8
0.75
0.7
0.65
0.6
0.55
0.5

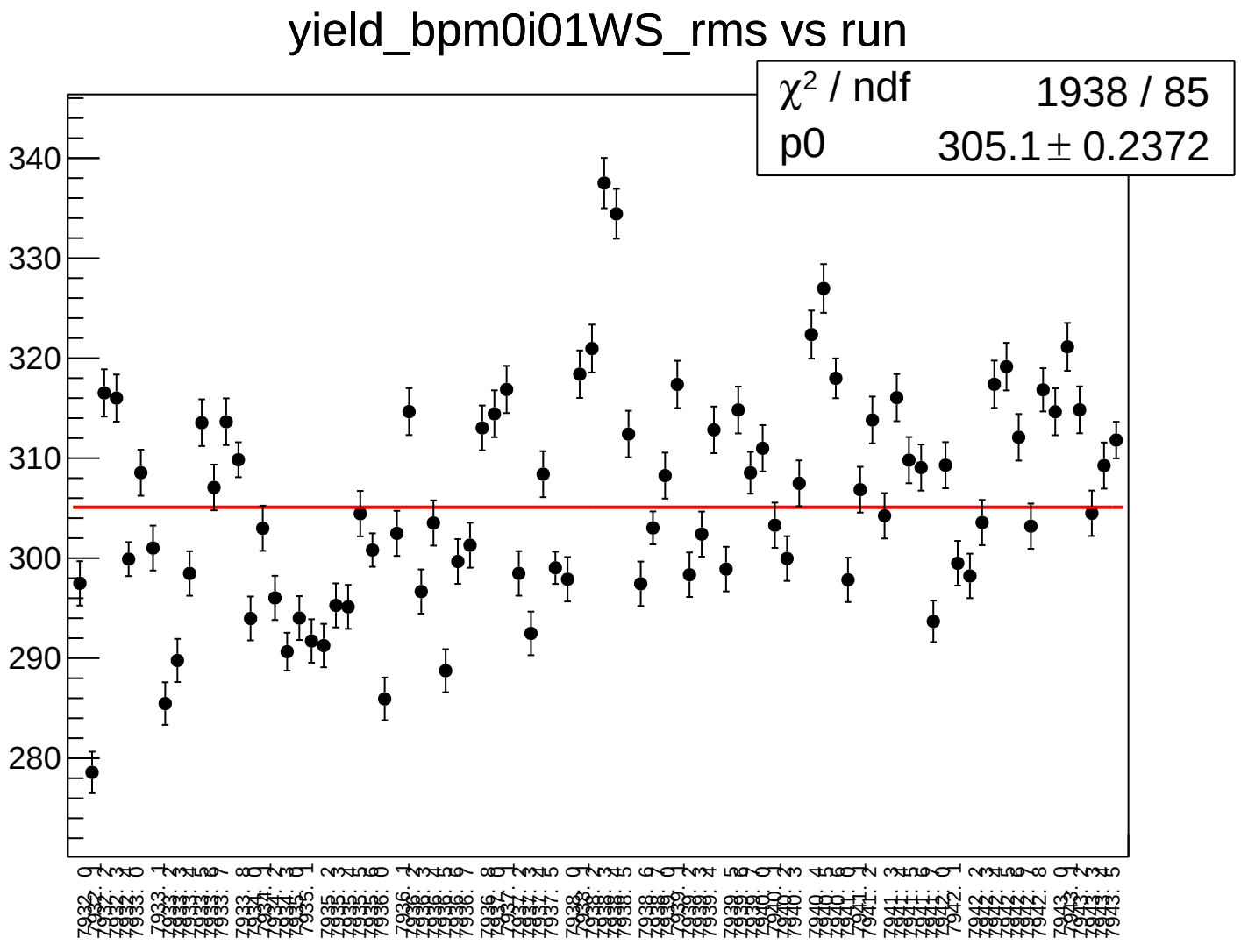

yield_bcm0l02_mean vs run
χ² / ndf 4.402e+05 / 85
p0 147.8 ± 0.0007761
149
148.5
148
147.5
147
146.5
pull
Entries 86
Mean 671.8
Std Dev 617.2
200
150
100
50
0
−50
−100
−150

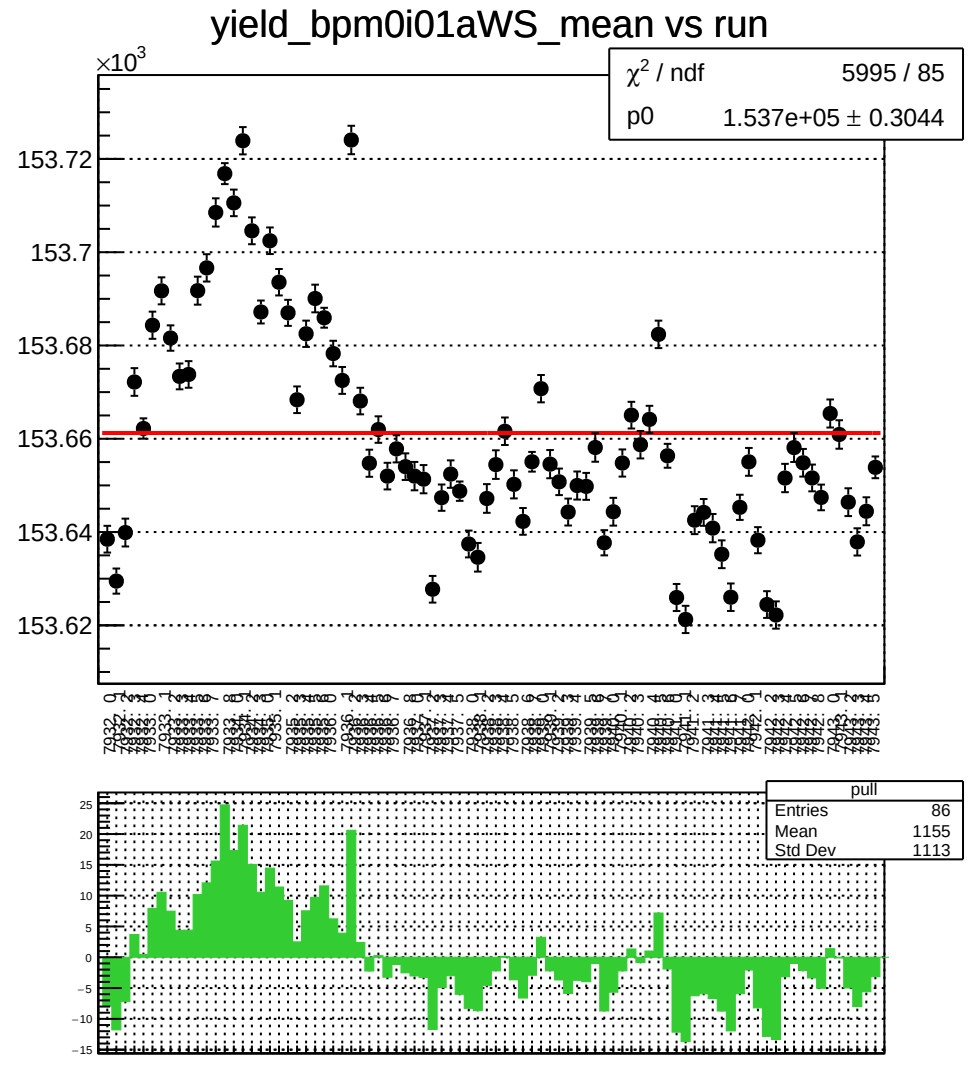

pull1D
Entries 86
Mean −4.228
Std Dev 3.292
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

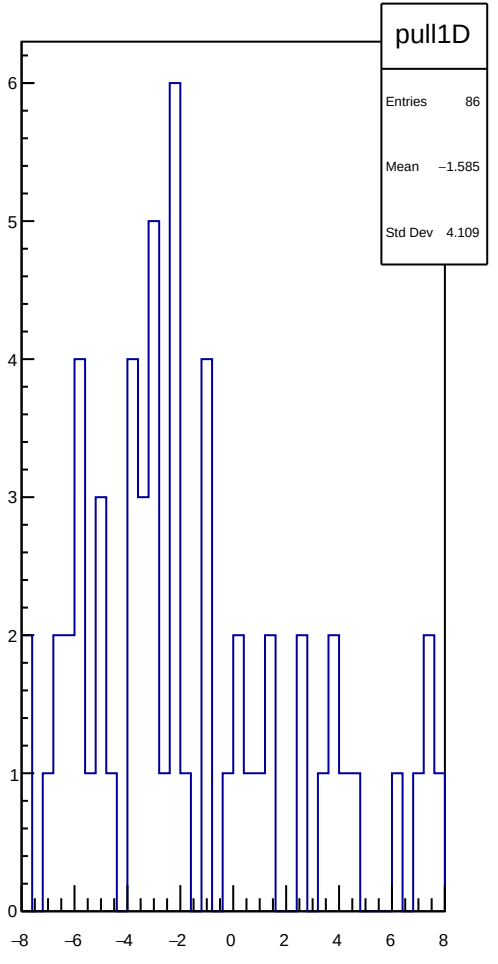

yield_bcm0l02_rms vs run
χ² / ndf 2.878e+04 / 85
p0 0.7002 ± 0.0005488
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

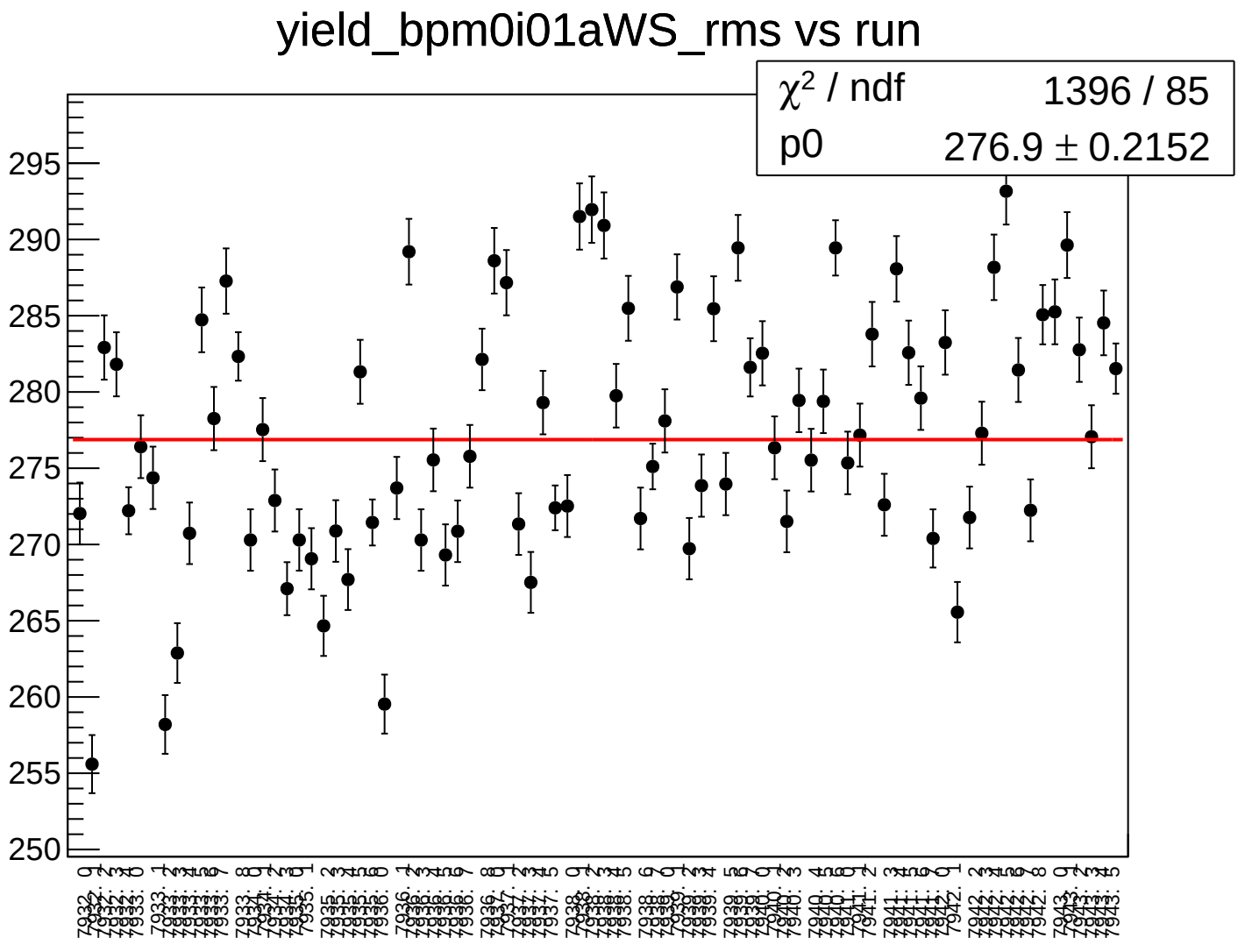

yield_bpm0i01WS_mean vs run
χ² / ndf 7.76e+04 / 85
p0 1.61e+05 ± 0.3354
×10³
161.25
161.2
161.15
161.1
161.05
161
160.95
160.9
160.85
pull
Entries 86
Mean 1631
Std Dev 1586
60
40
20
0
−20
−40

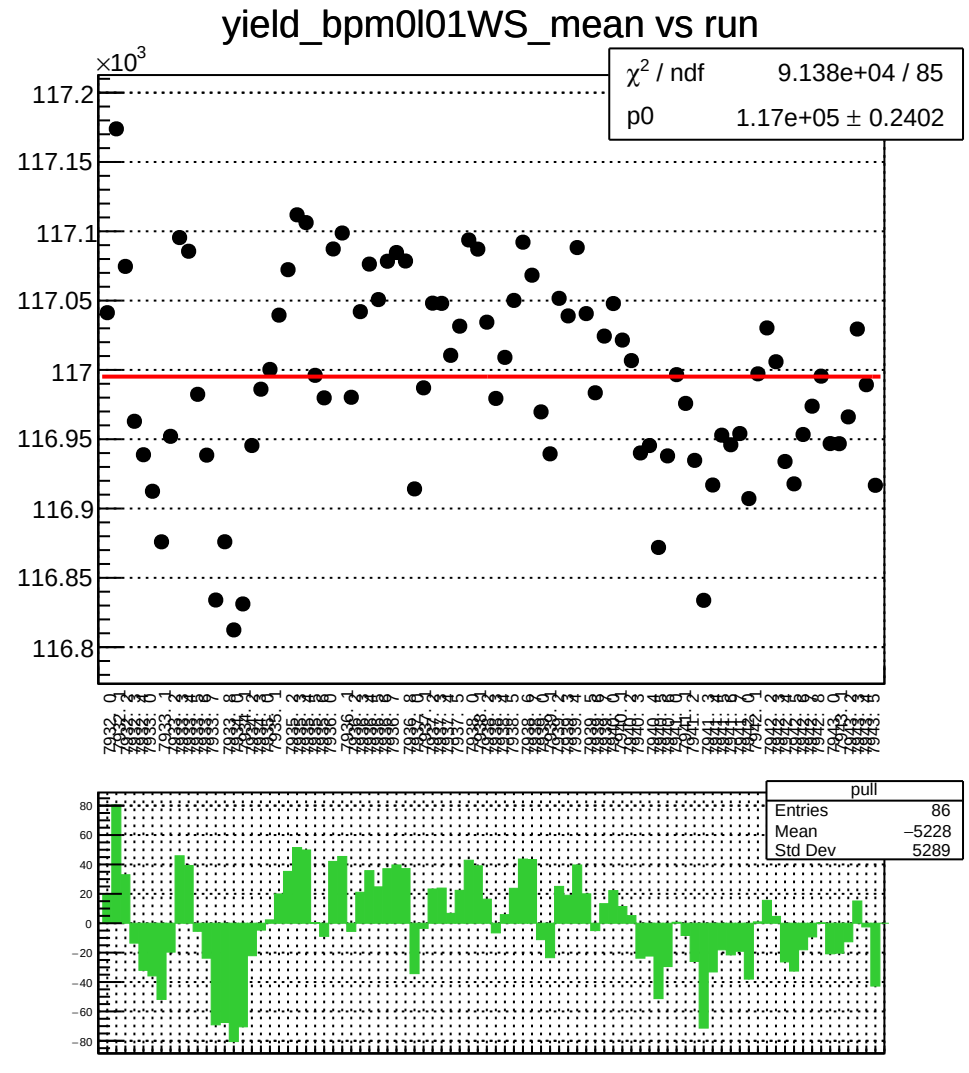

pull1D
Entries 86
Mean −0.4192
Std Dev 4.982
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

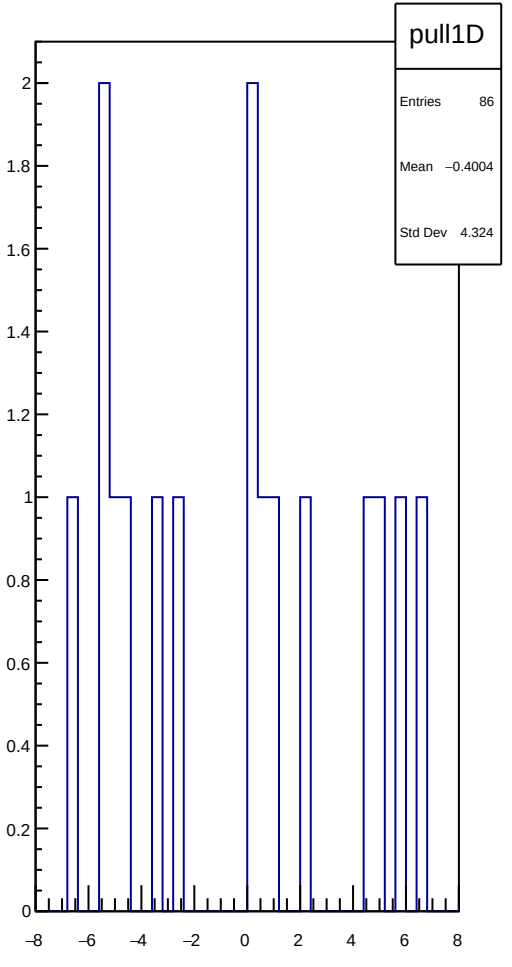

yield_bpm0i01WS_rms vs run
χ² / ndf 1938 / 85
p0 305.1 ± 0.2372
340
330
320
310
300
290
280

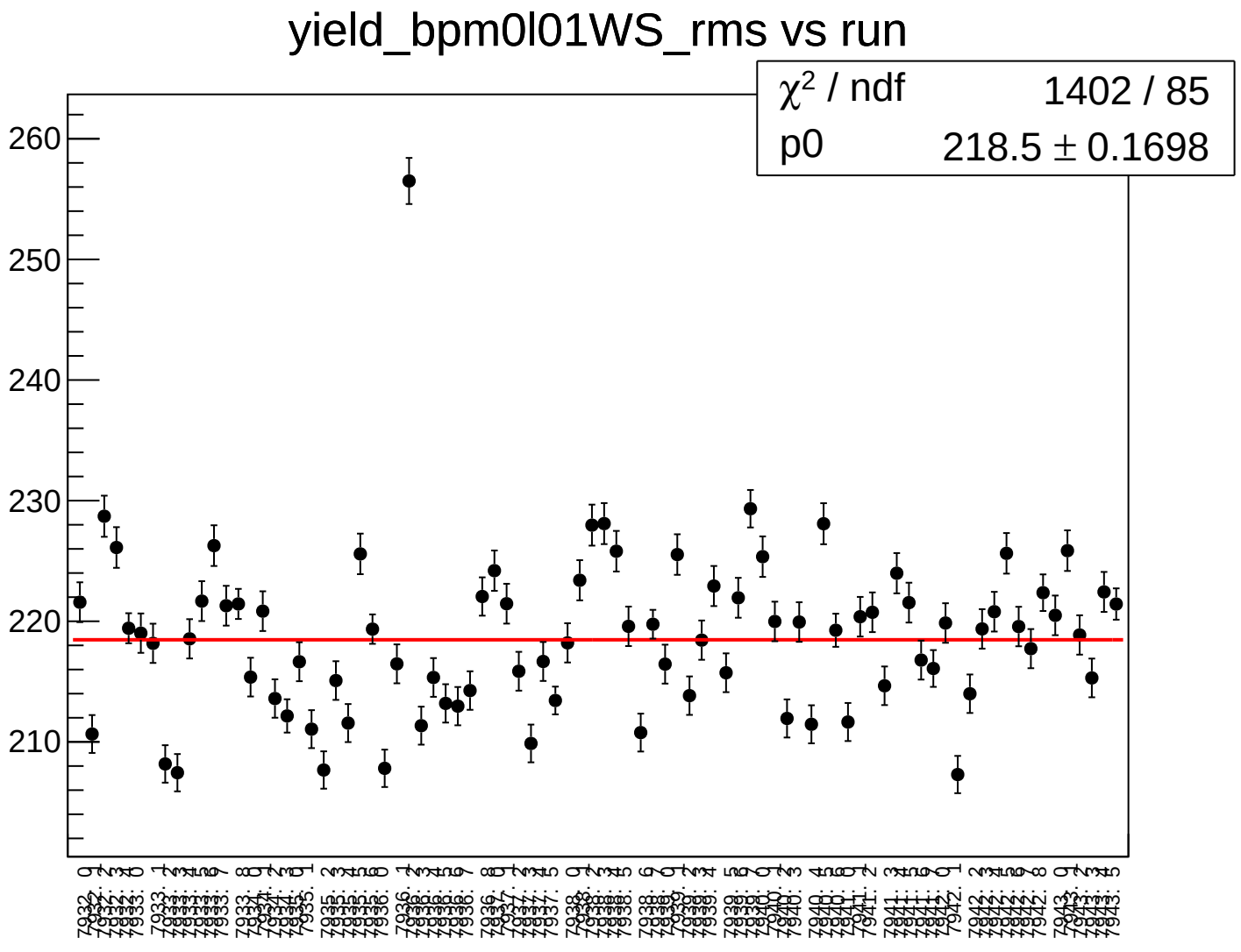

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 5995 / 85
p0 1.537e+05 ± 0.3044
153.72
153.7
153.68
153.66
153.64
153.62
pull
Entries 86
Mean 1155
Std Dev 1113

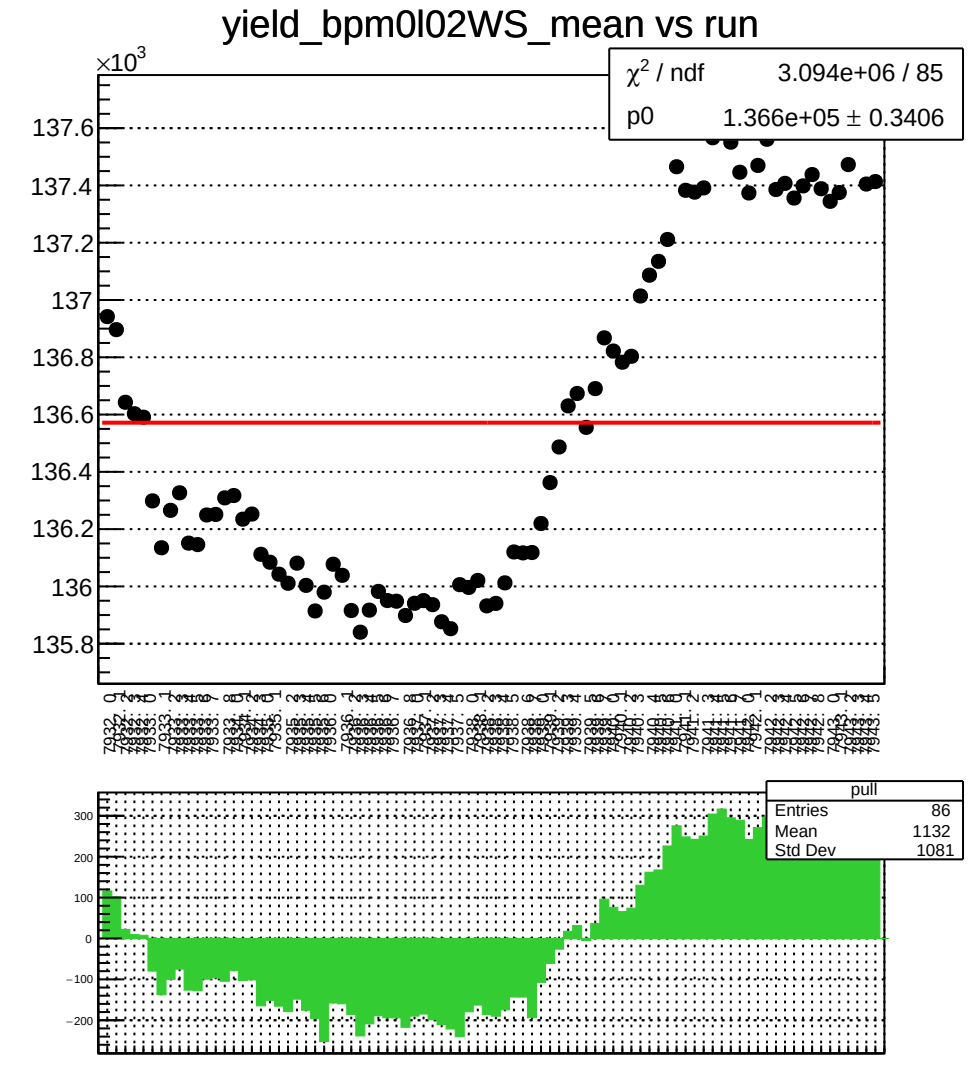

pull1D
Entries 86
Mean −1.585
Std Dev 4.109

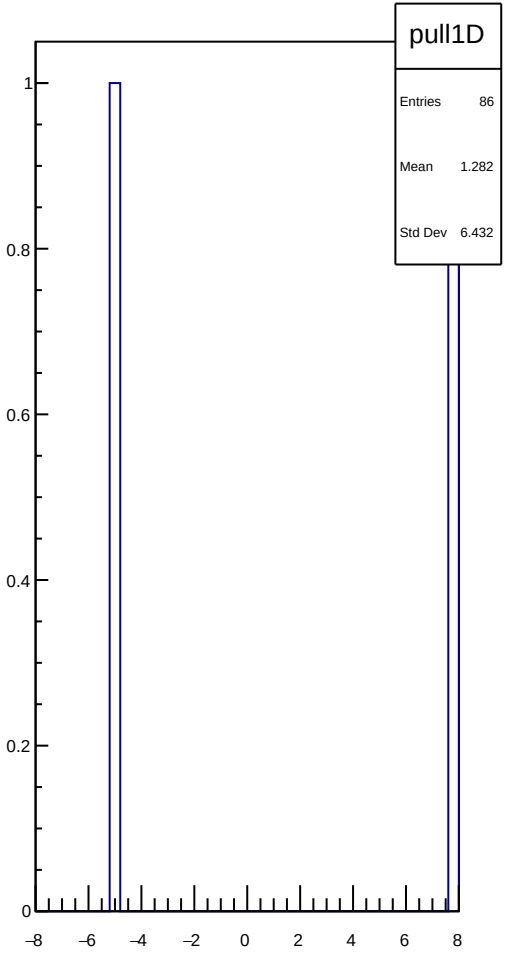

yield_bpm0i01aWS_rms vs run
χ² / ndf 1396 / 85
p0 276.9 ± 0.2152
295
290
285
280
275
270
265
260
255
250

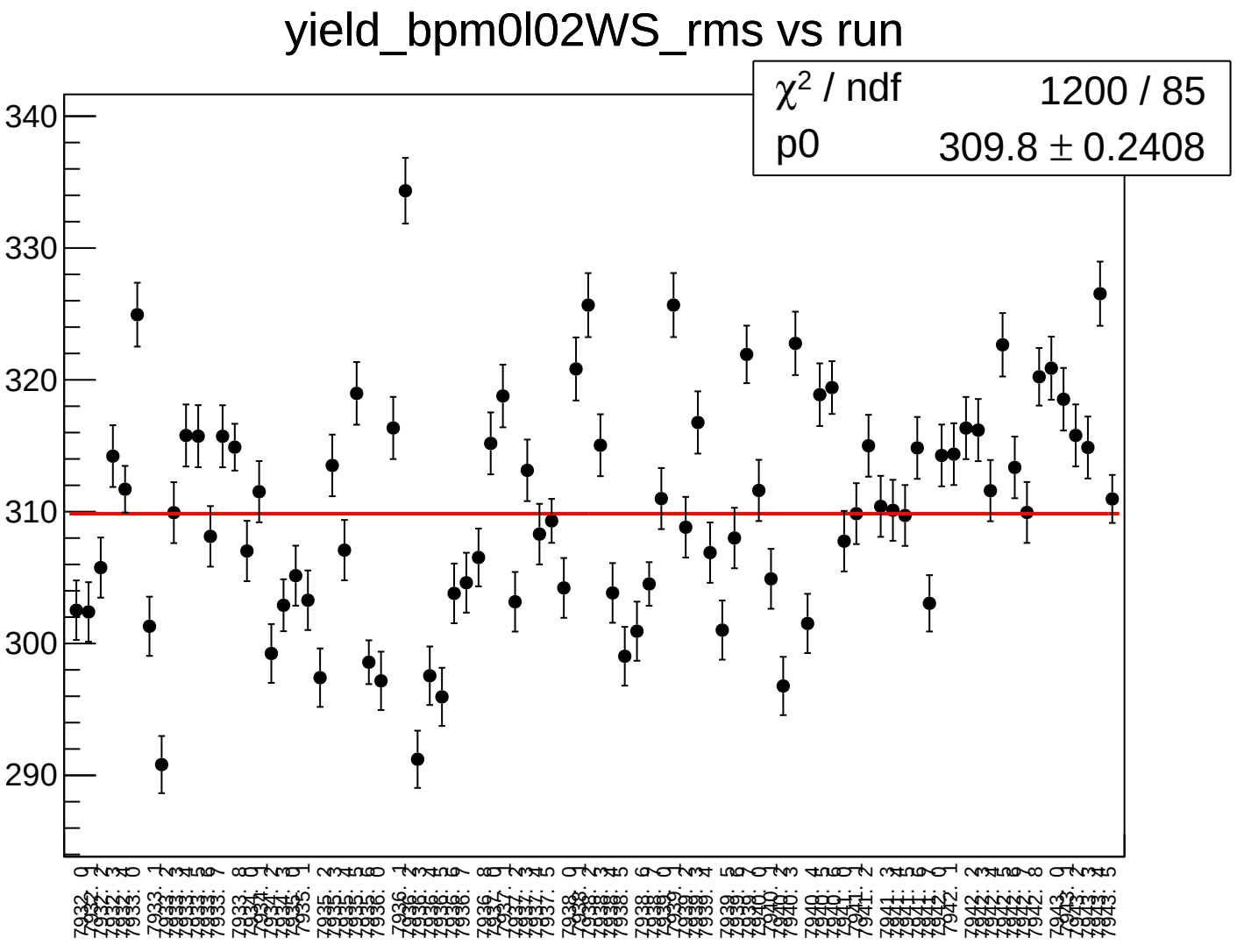

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 9.138e+04 / 85
p0 1.17e+05 ± 0.2402
117.2
117.15
117.1
117.05
117
116.95
116.9
116.85
116.8
pull
Entries 86
Mean −5228
Std Dev 5289
80
60
40
20
0
−20
−40
−60
−80

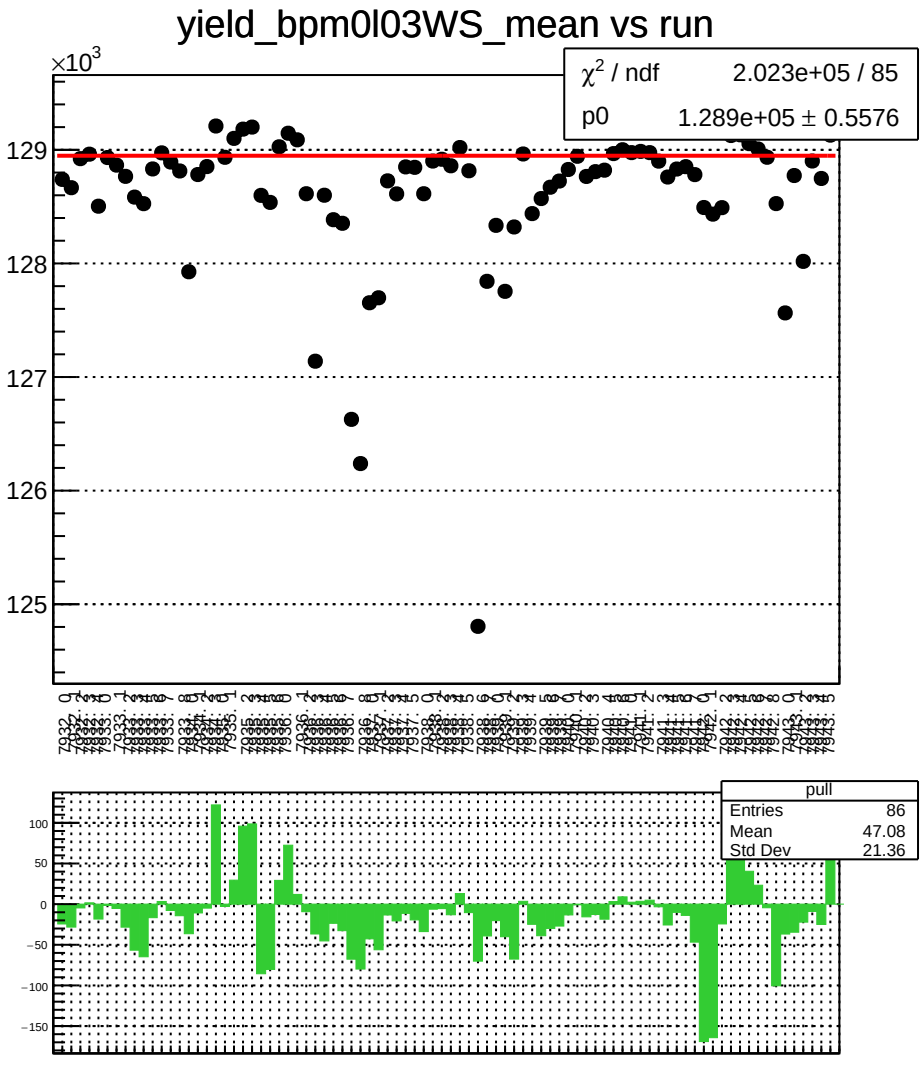

pull1D
Entries 86
Mean −0.4004
Std Dev 4.324
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

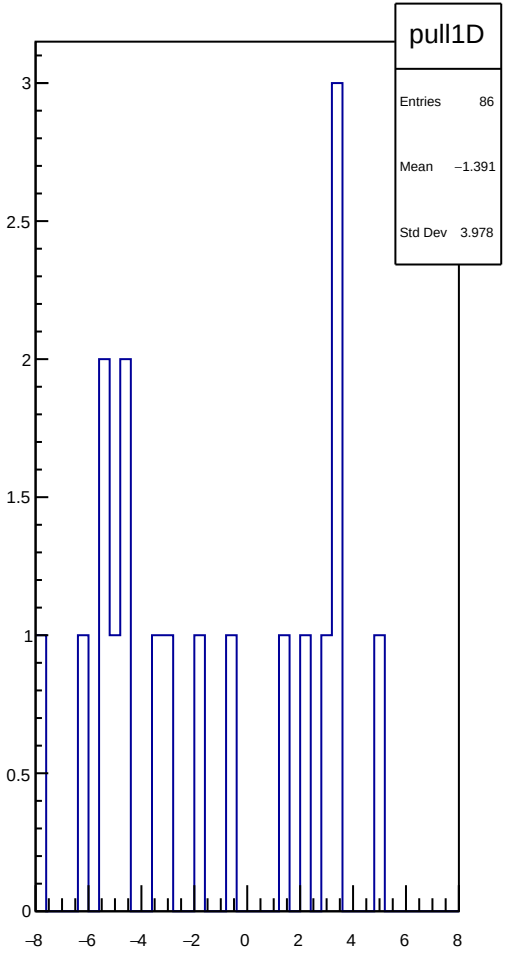

yield_bpm0l01WS_rms vs run
χ² / ndf 1402 / 85
p0 218.5 ± 0.1698
260
250
240
230
220
210

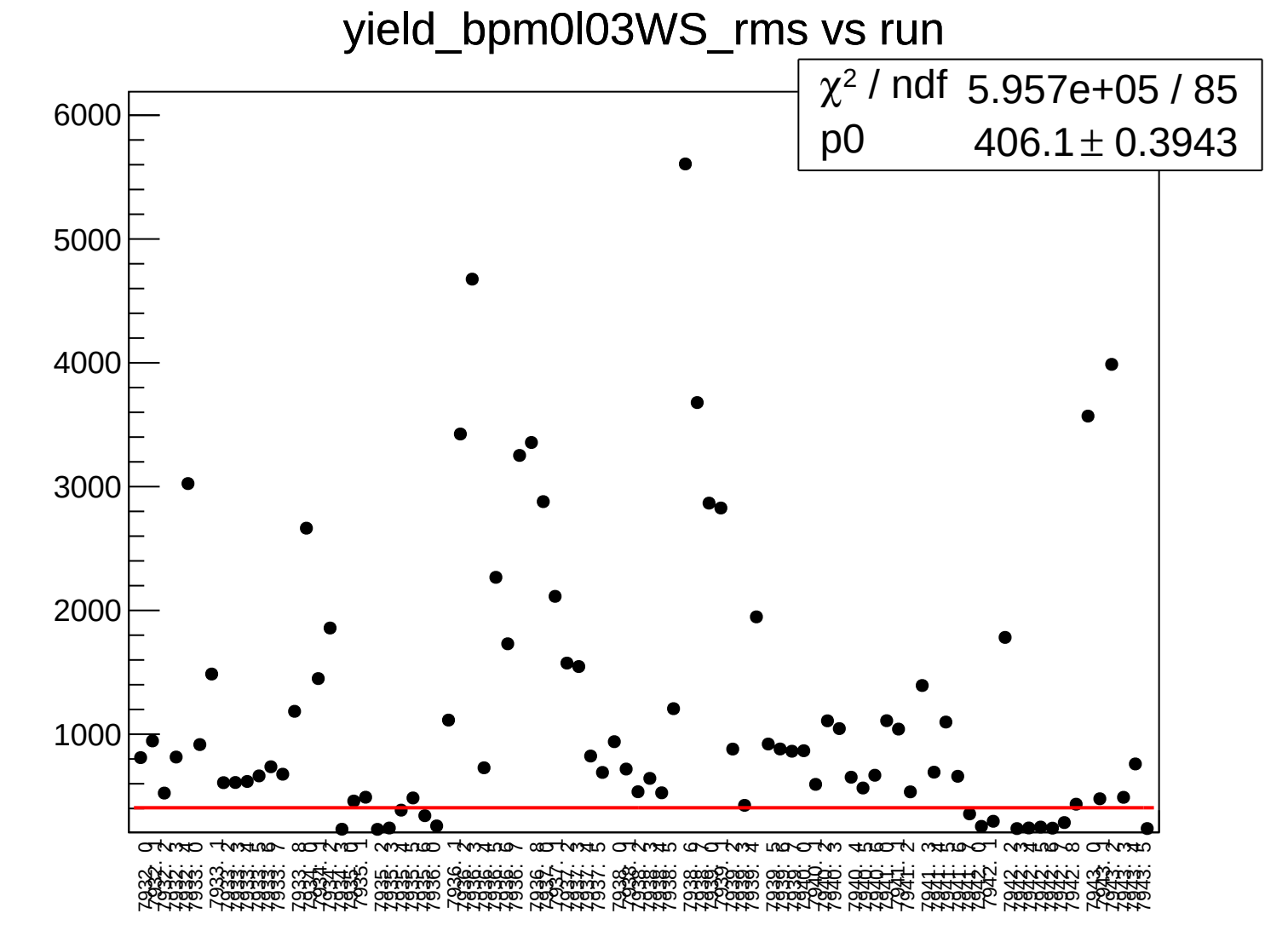

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 3.094e+06 / 85
p0 1.366e+05 ± 0.3406
137.6
137.4
137.2
137
136.8
136.6
136.4
136.2
136
135.8
pull
Entries 86
Mean 1132
Std Dev 1081
300
200
100
0
−100
−200

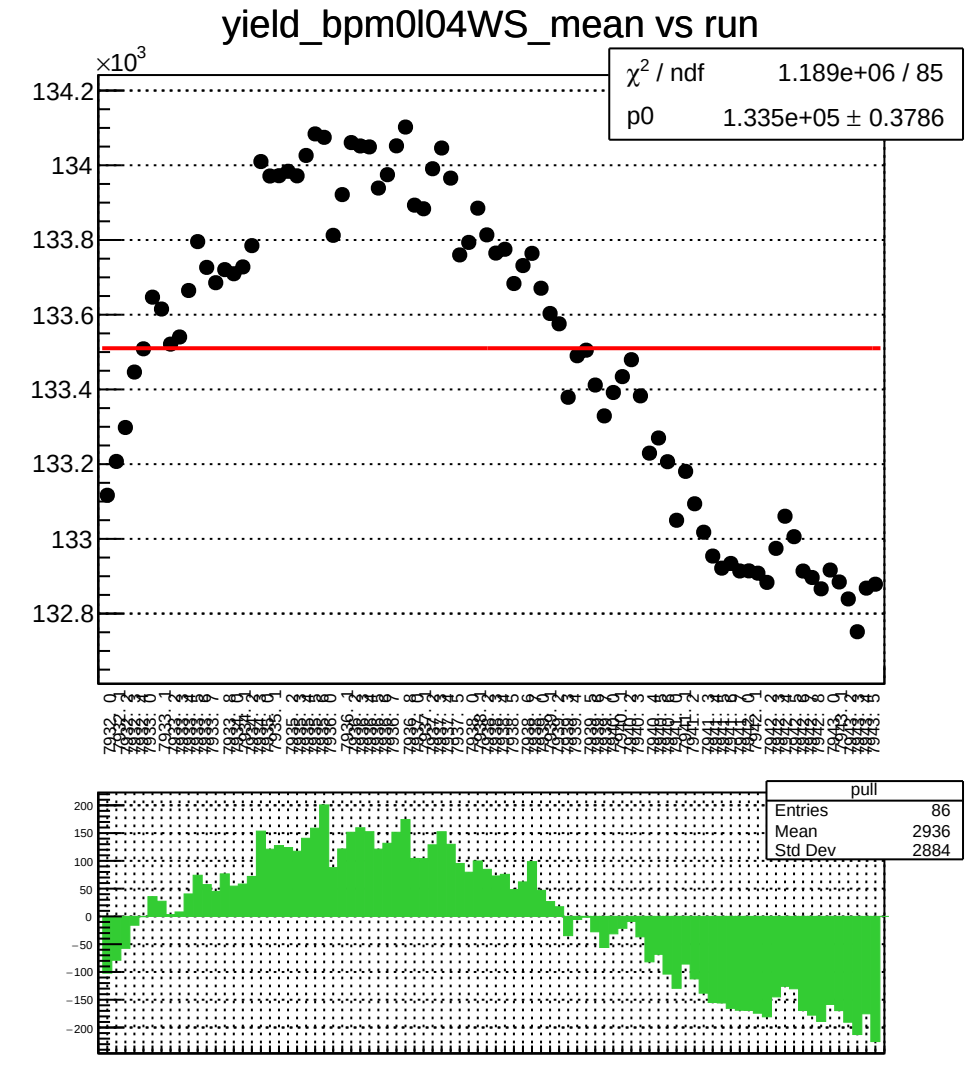

pull1D
Entries 86
Mean 1.282
Std Dev 6.432
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

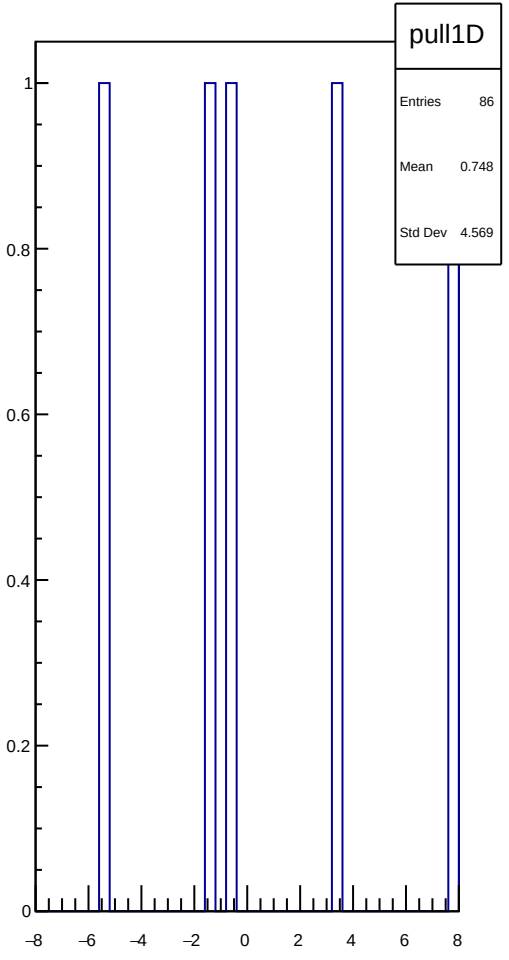

yield_bpm0l02WS_rms vs run
χ² / ndf 1200 / 85
p0 309.8 ± 0.2408
340
330
320
310
300
290

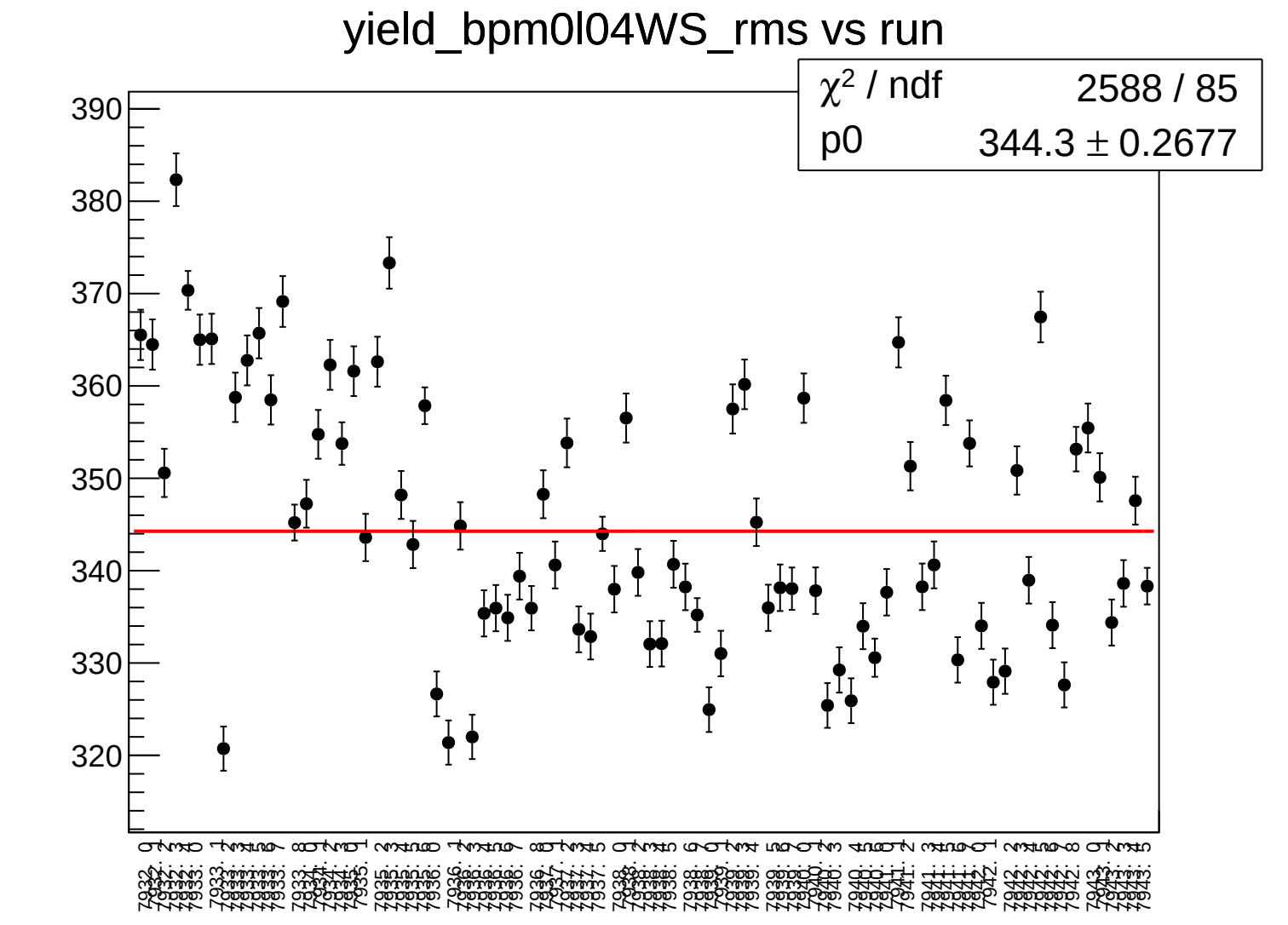

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 2.023e+05 / 85
p0 1.289e+05 ± 0.5576
129
128
127
126
125
pull
Entries 86
Mean 47.08
Std Dev 21.36
100
50
0
−50
−100
−150

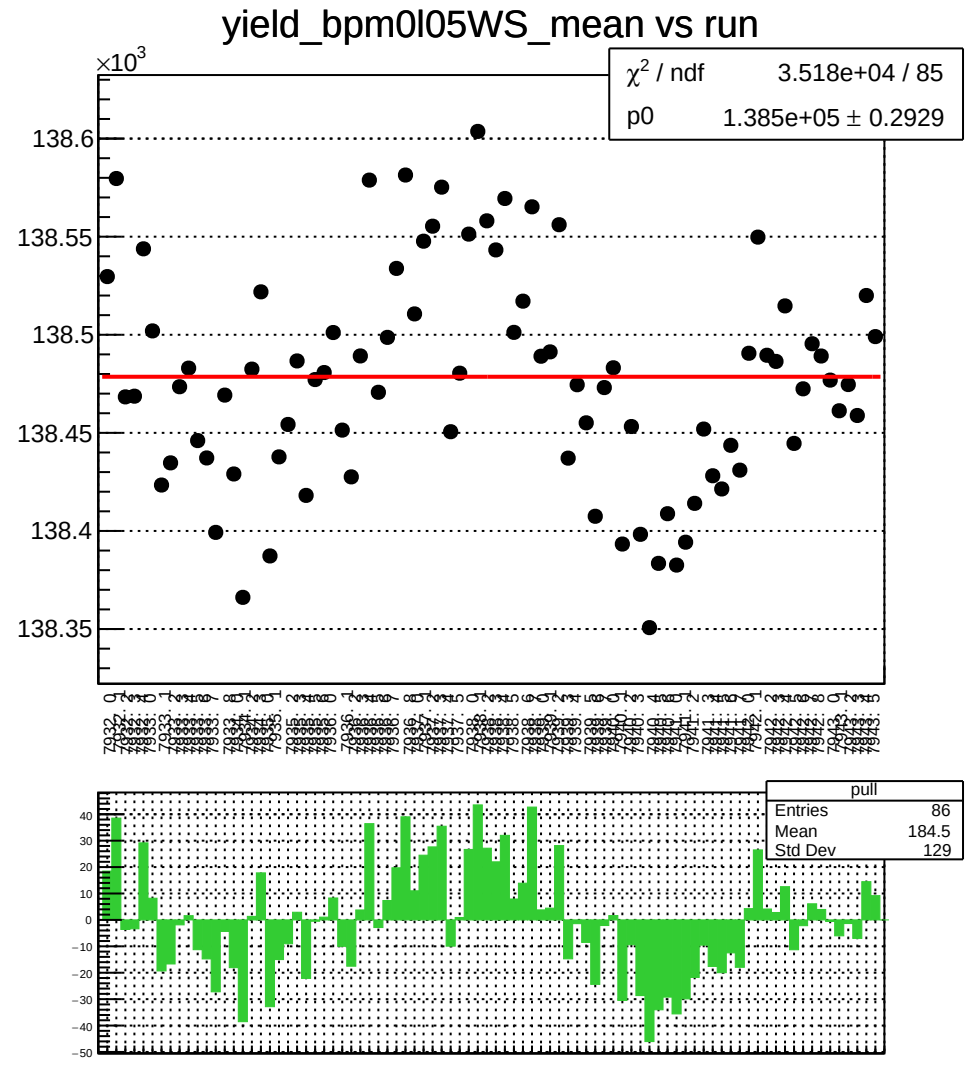

pull1D
Entries 86
Mean −1.391
Std Dev 3.978
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

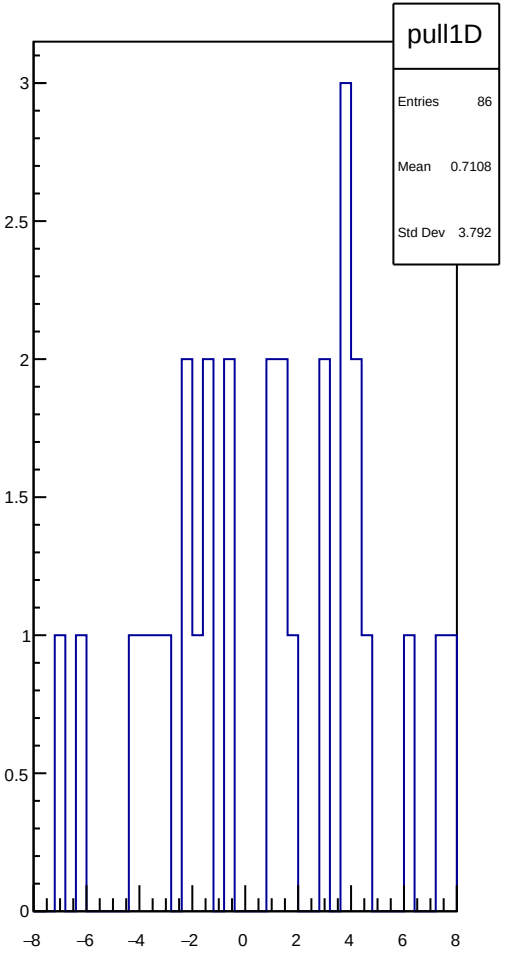

yield_bpm0l03WS_rms vs run
χ² / ndf 5.957e+05 / 85
p0 406.1 ± 0.3943
6000
5000
4000
3000
2000
1000

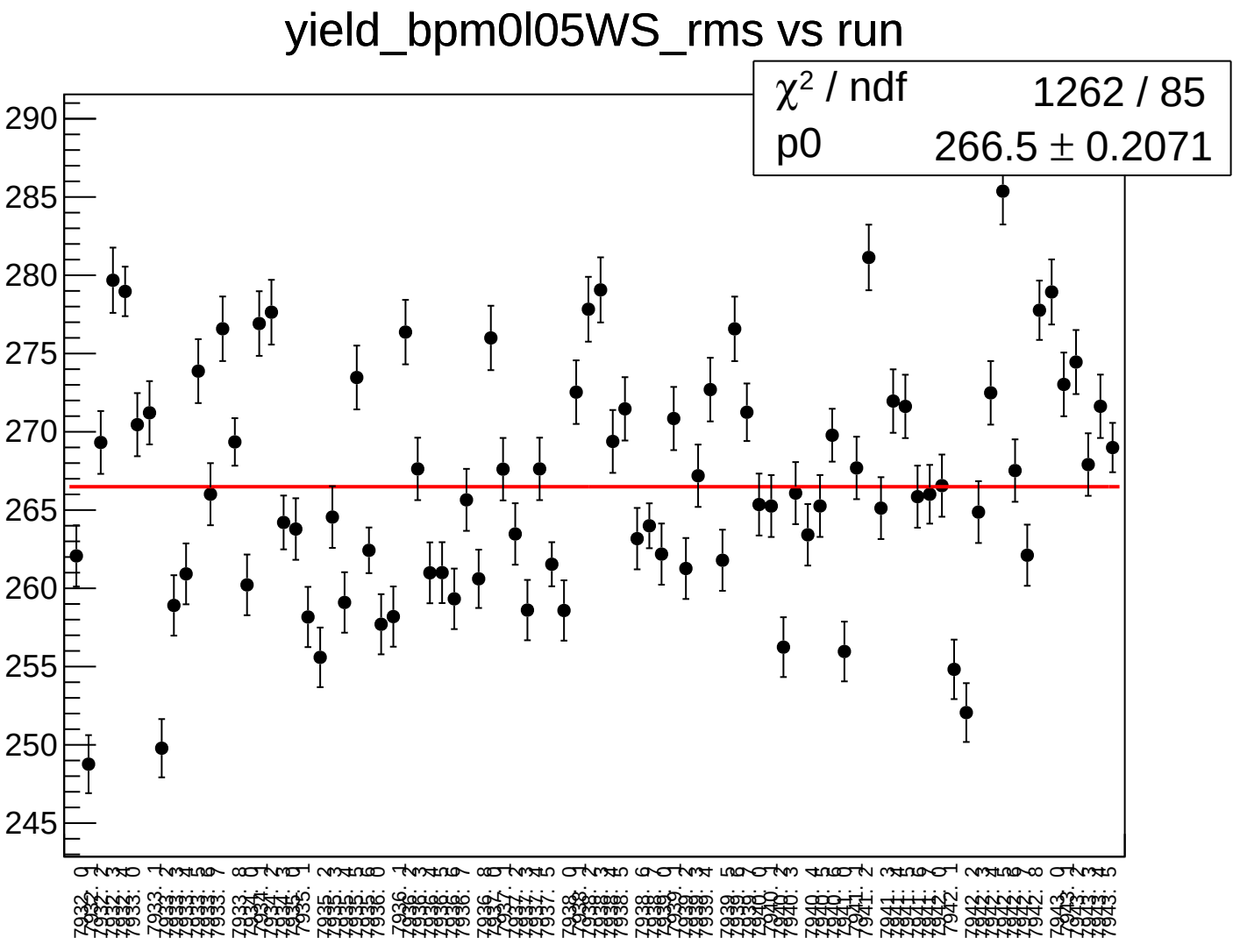

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 1.189e+06 / 85
p0 1.335e+05 ± 0.3786
134.2
134
133.8
133.6
133.4
133.2
133
132.8
pull
Entries 86
Mean 2936
Std Dev 2884
200
150
100
50
0
−50
−100
−150
−200

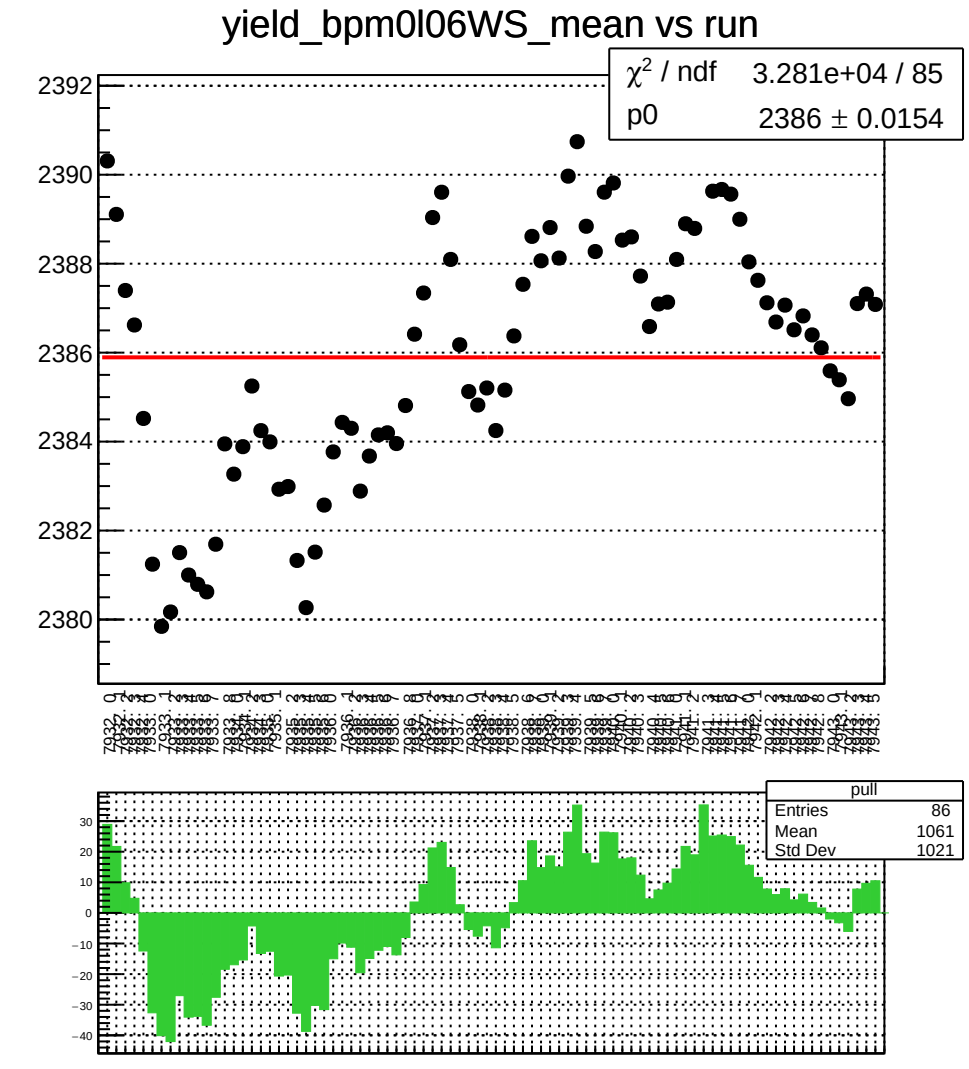

pull1D
Entries 86
Mean 0.748
Std Dev 4.569
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

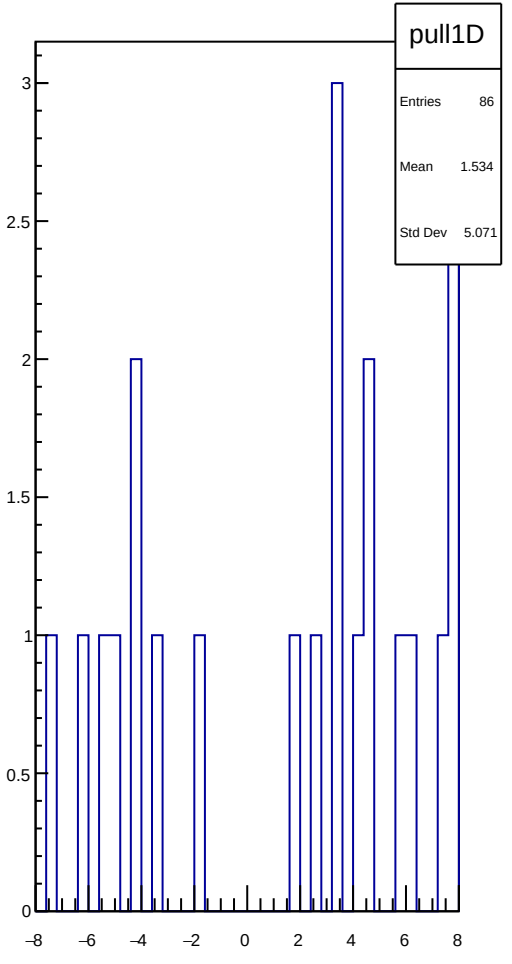

yield_bpm0l04WS_rms vs run
χ² / ndf 2588 / 85
p0 344.3 ± 0.2677
390
380
370
360
350
340
330
320

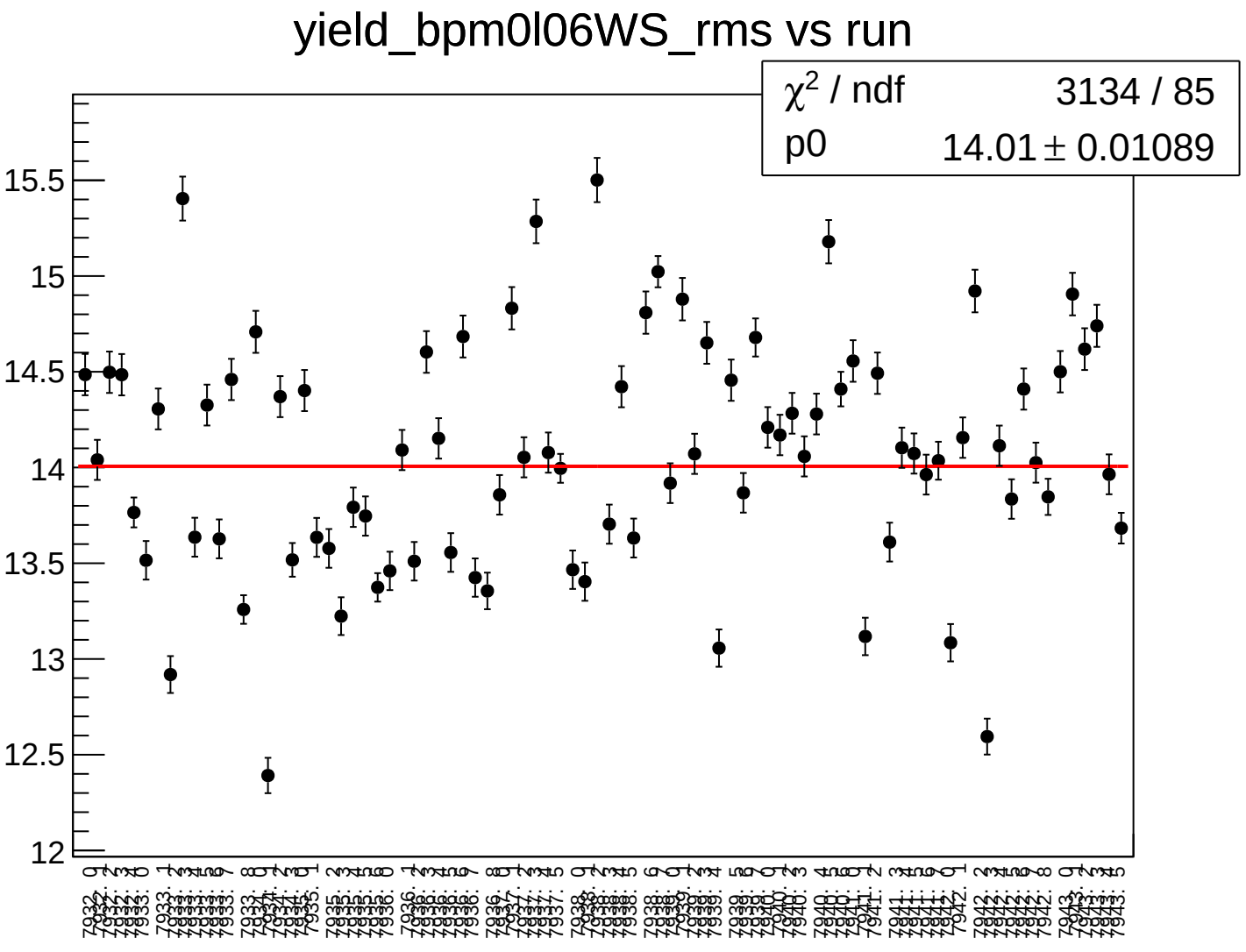

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 3.518e+04 / 85
p0 1.385e+05 ± 0.2929
138.6
138.55
138.5
138.45
138.4
138.35
pull
Entries 86
Mean 184.5
Std Dev 129
40
30
20
10
0
−10
−20
−30
−40
−50

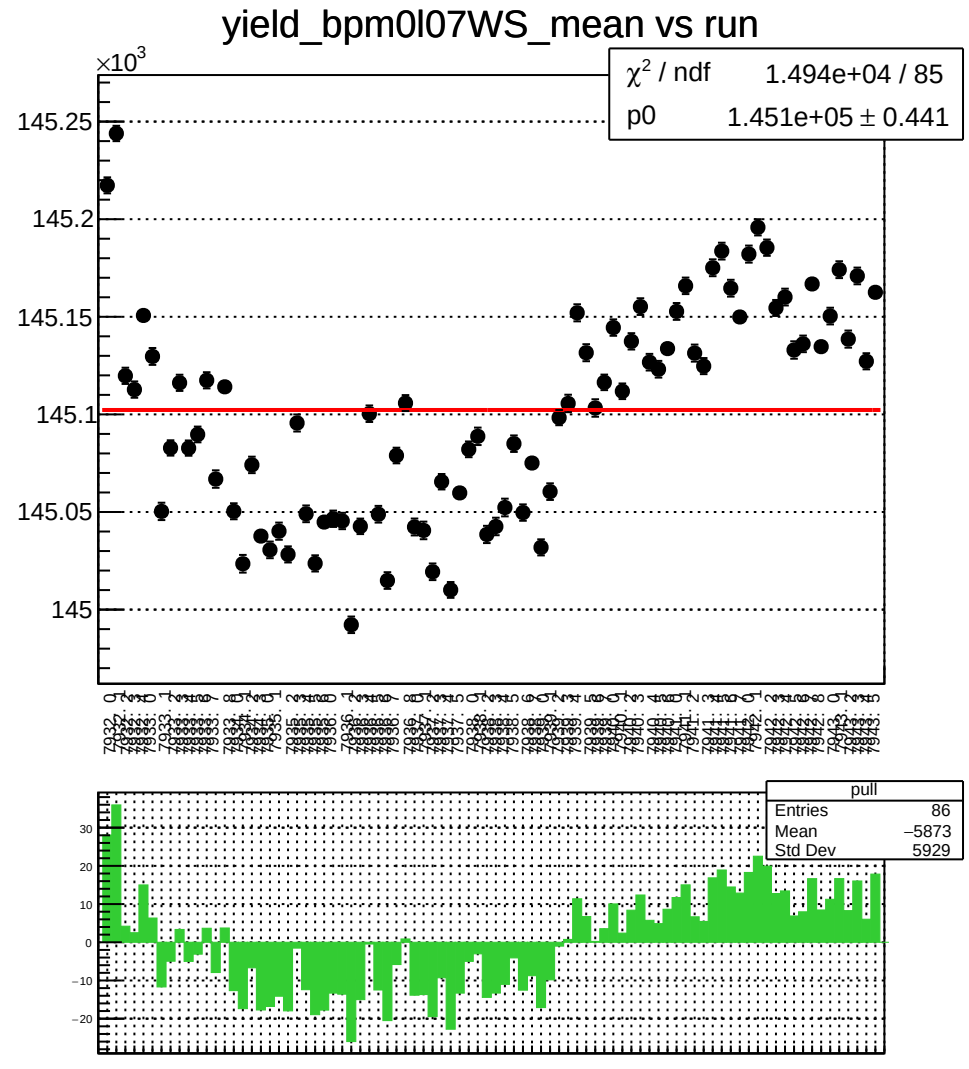

pull1D
Entries 86
Mean 0.7108
Std Dev 3.792
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

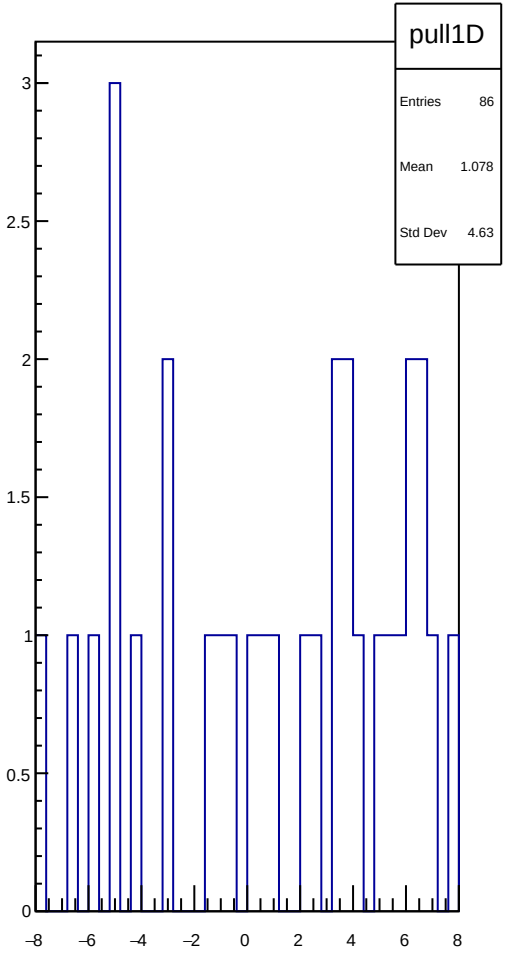

yield_bpm0l05WS_rms vs run
χ² / ndf 1262 / 85
p0 266.5 ± 0.2071
290
285
280
275
270
265
260
255
250
245

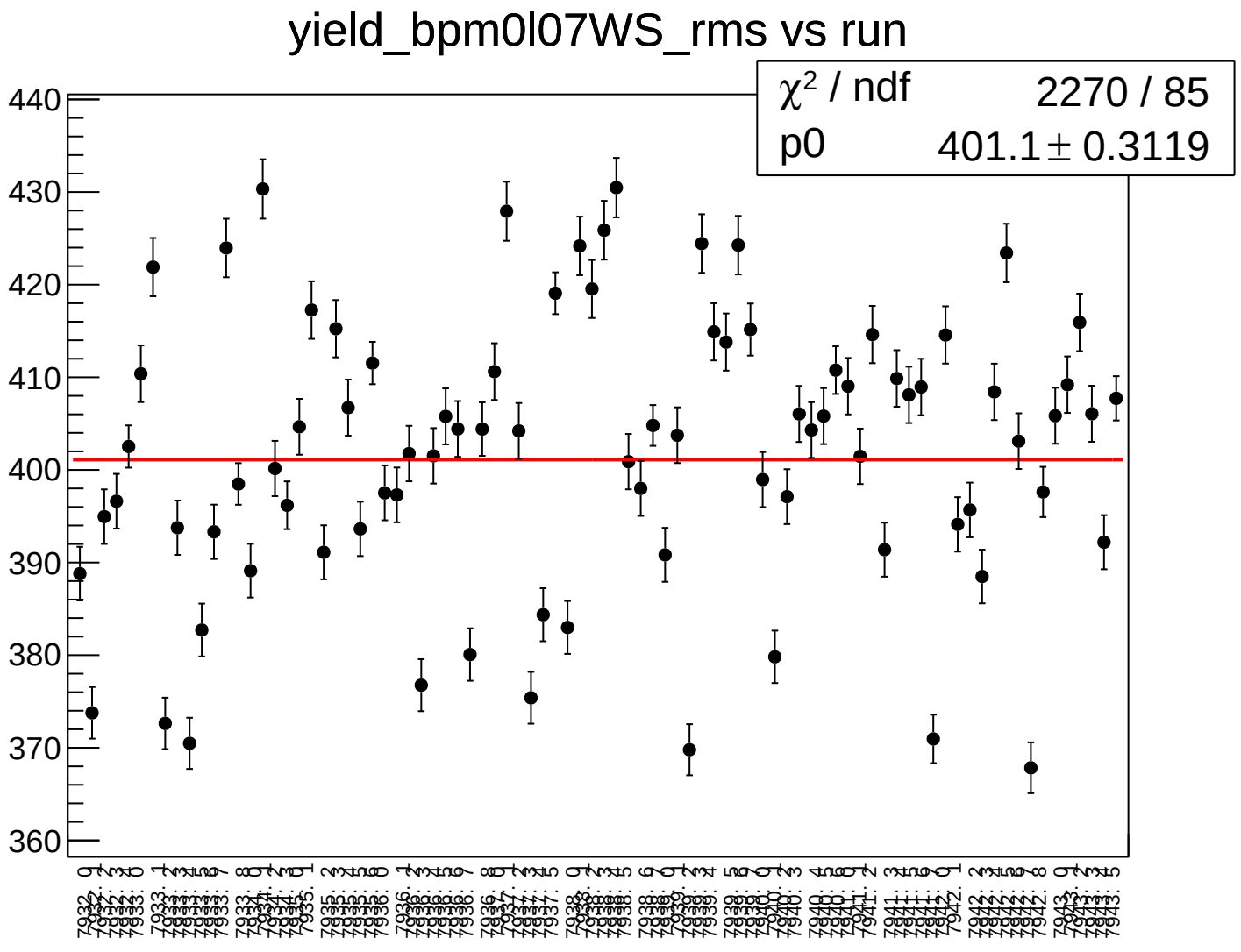

yield_bpm0l06WS_mean vs run
χ² / ndf 3.281e+04 / 85
p0 2386 ± 0.0154
2392
2390
2388
2386
2384
2382
2380
pull
Entries 86
Mean 1061
Std Dev 1021
30
20
10
0
−10
−20
−30
−40

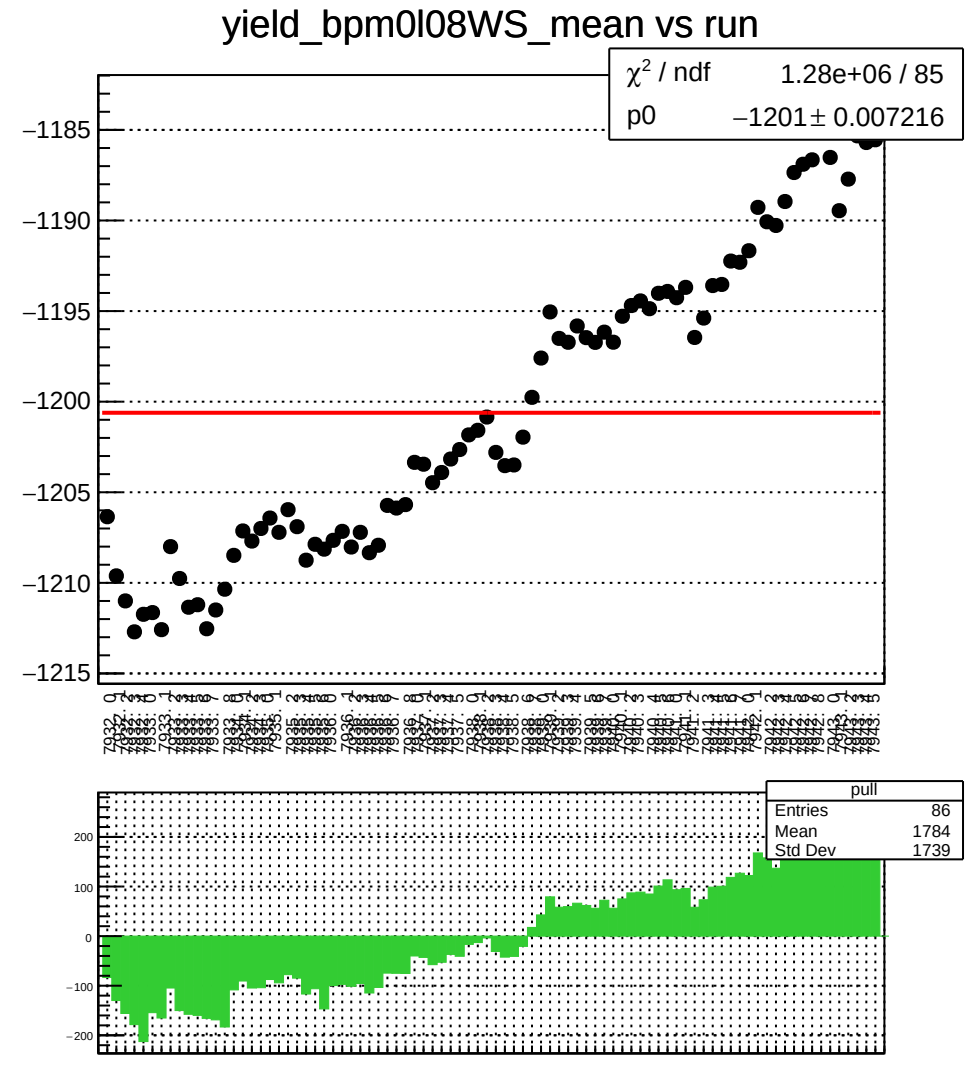

pull1D
Entries 86
Mean 1.534
Std Dev 5.071
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

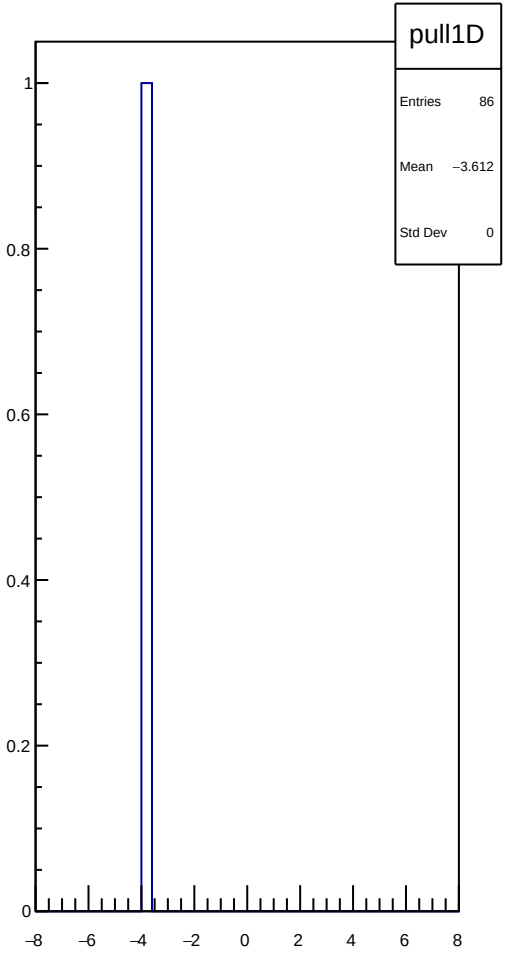

yield_bpm0l06WS_rms vs run
χ² / ndf 3134 / 85
p0 14.01 ± 0.01089
15.5
15
14.5
14
13.5
13
12.5
12

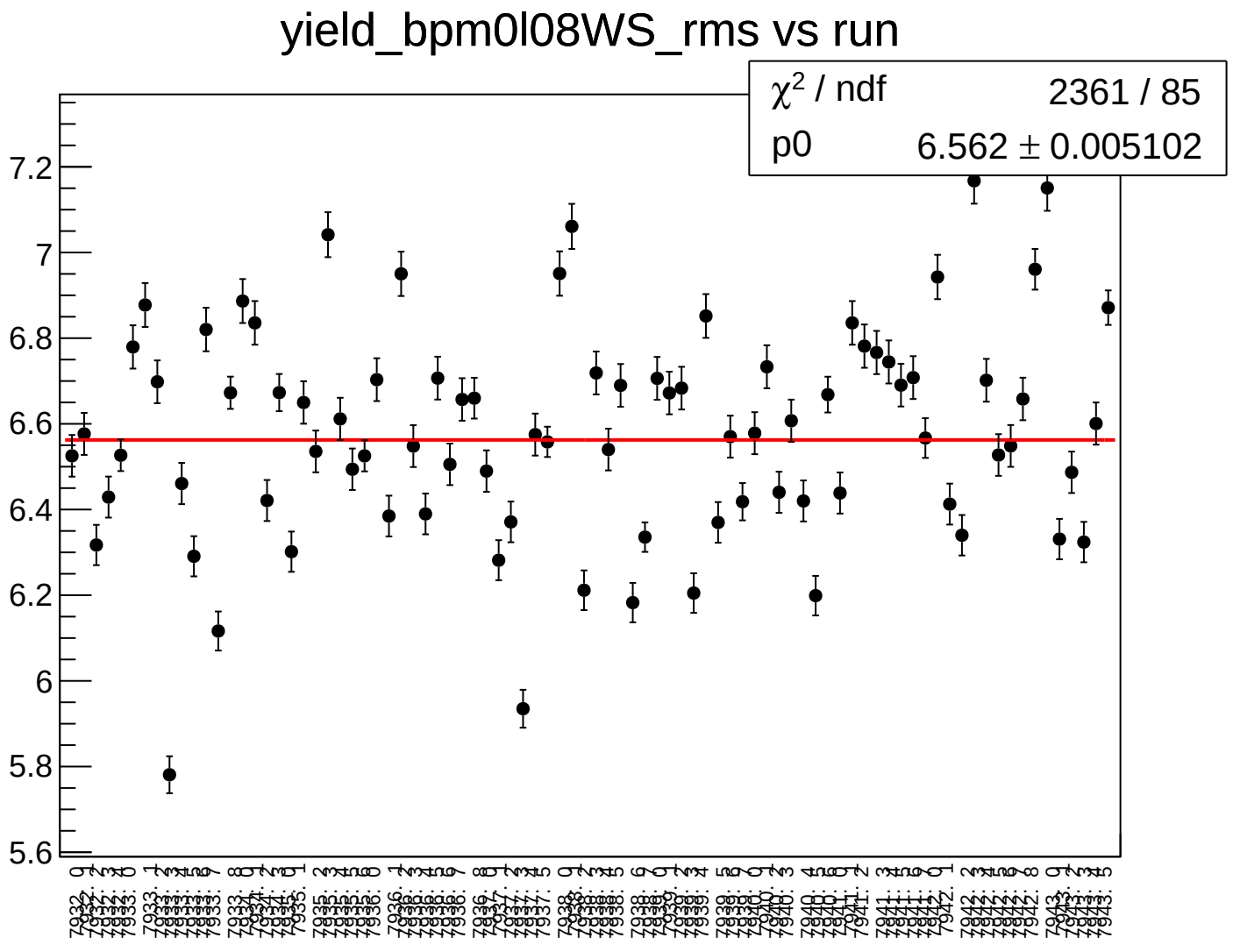

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.494e+04 / 85
p0 1.451e+05 ± 0.441
145.25
145.2
145.15
145.1
145.05
145
pull
Entries 86
Mean −5873
Std Dev 5929
30
20
10
0
−10
−20

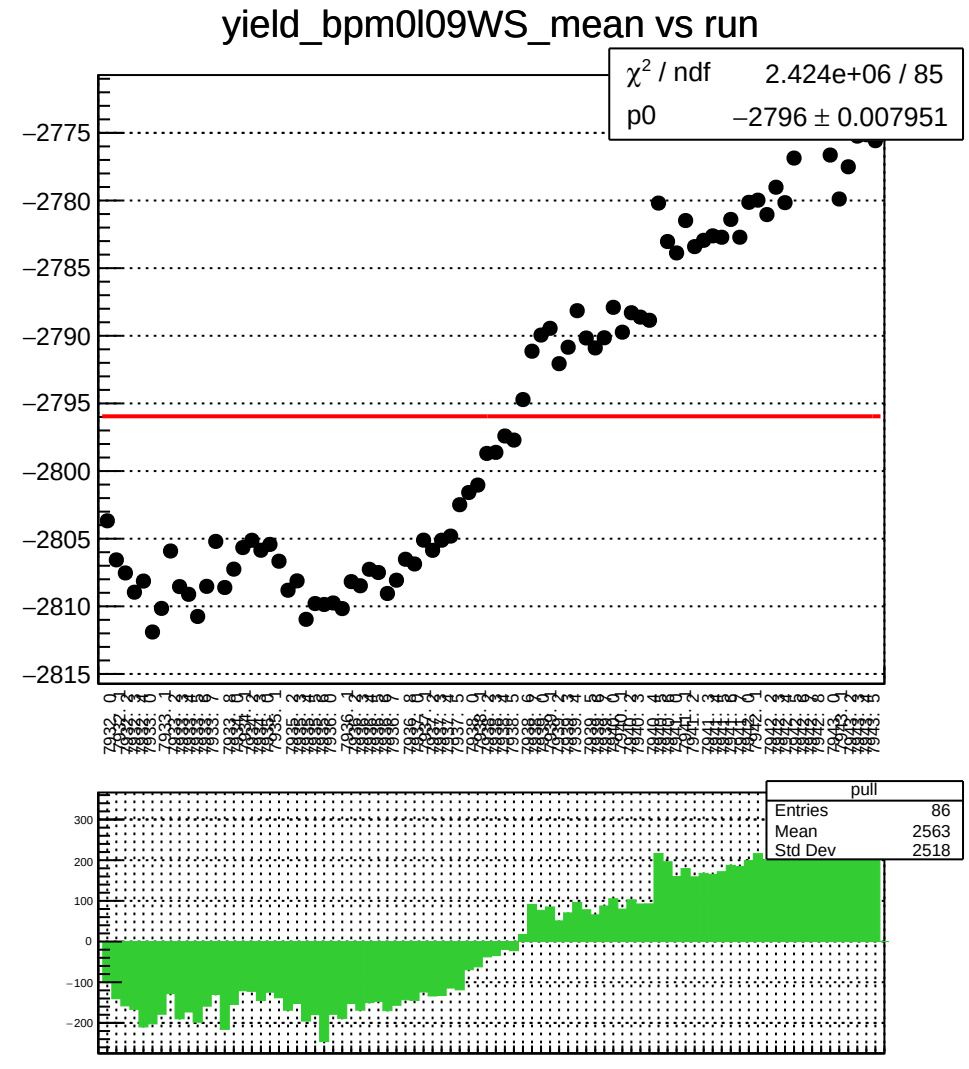

pull1D
Entries 86
Mean 1.078
Std Dev 4.63
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

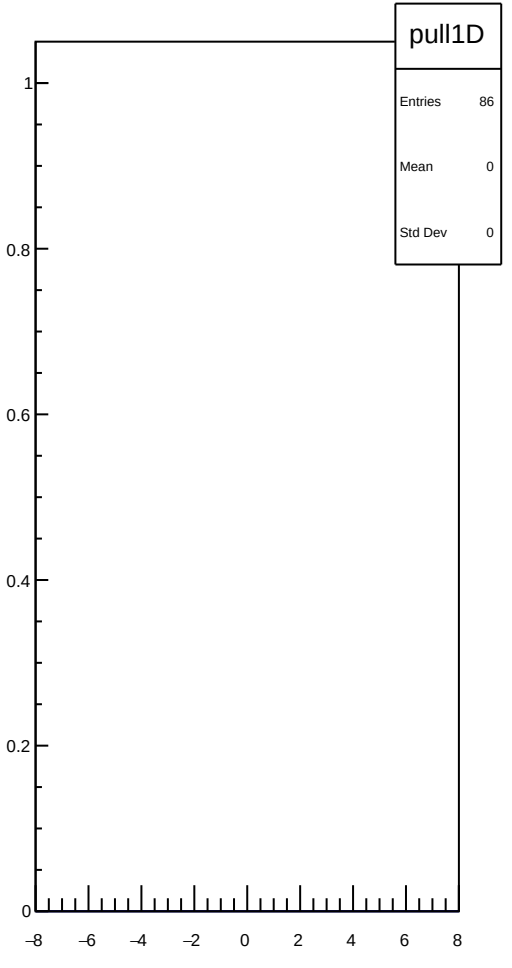

yield_bpm0l07WS_rms vs run
χ² / ndf 2270 / 85
p0 401.1 ± 0.3119
440
430
420
410
400
390
380
370
360

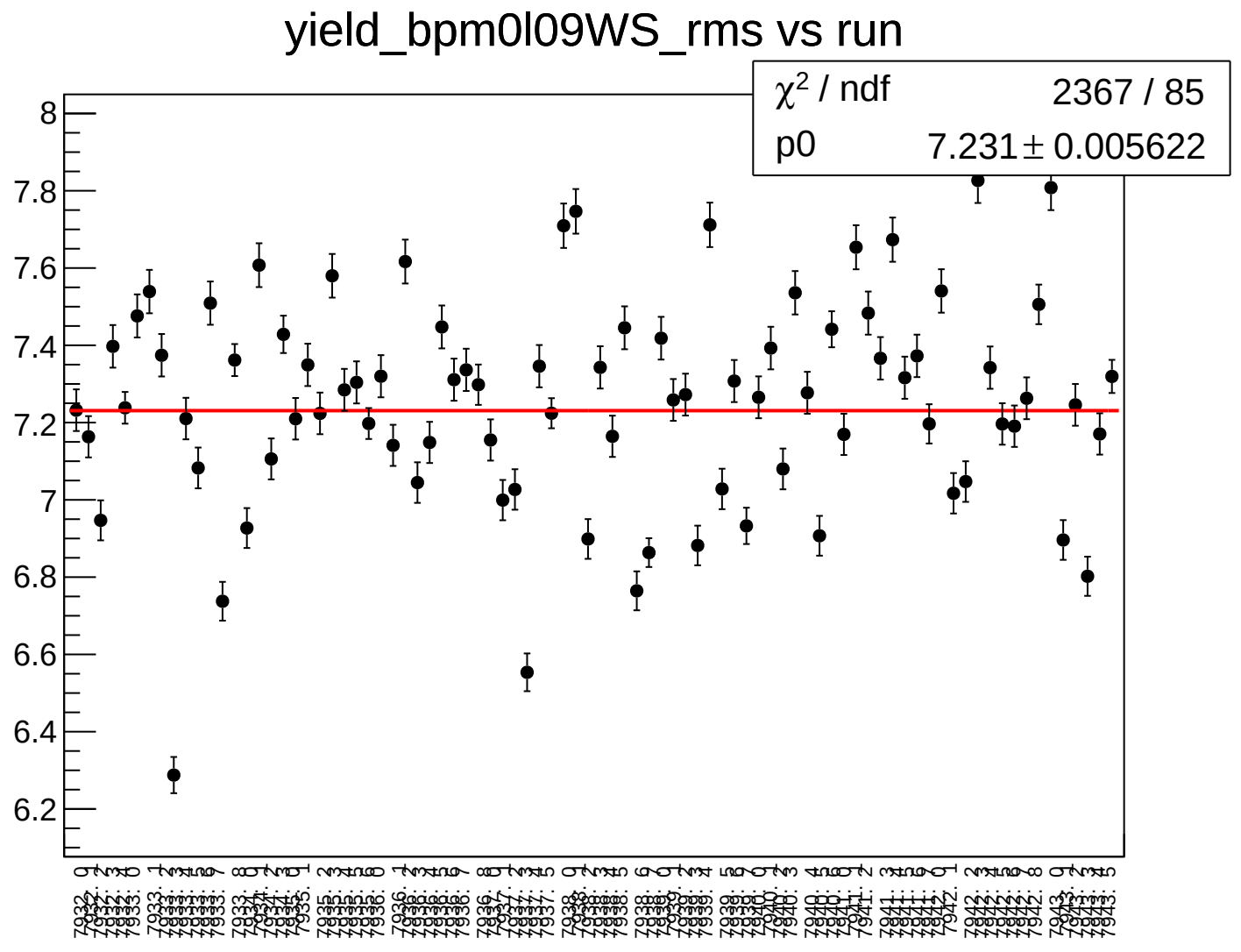

yield_bpm0l08WS_mean vs run
χ² / ndf 1.28e+06 / 85
p0 −1201 ± 0.007216
−1185
−1190
−1195
−1200
−1205
−1210
−1215
pull
Entries 86
Mean 1784
Std Dev 1739
200
100
0
−100
−200

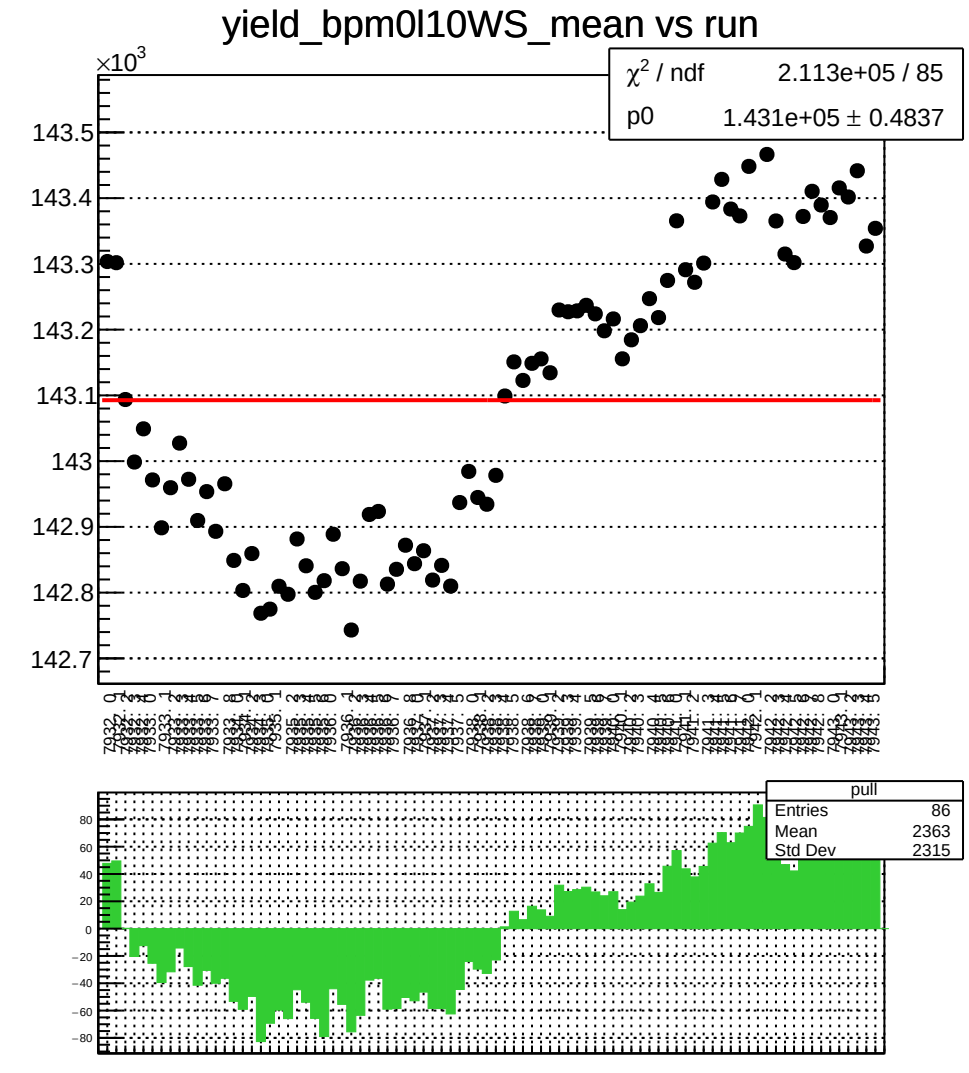

pull1D
Entries 86
Mean −3.612
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

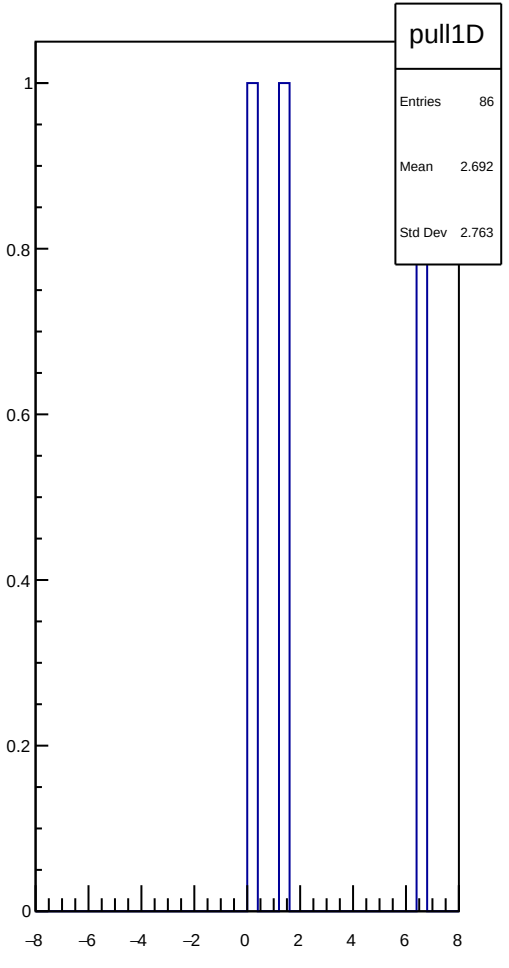

yield_bpm0l08WS_rms vs run
χ^2 / ndf 2361 / 85
p0 6.562 ± 0.005102
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6

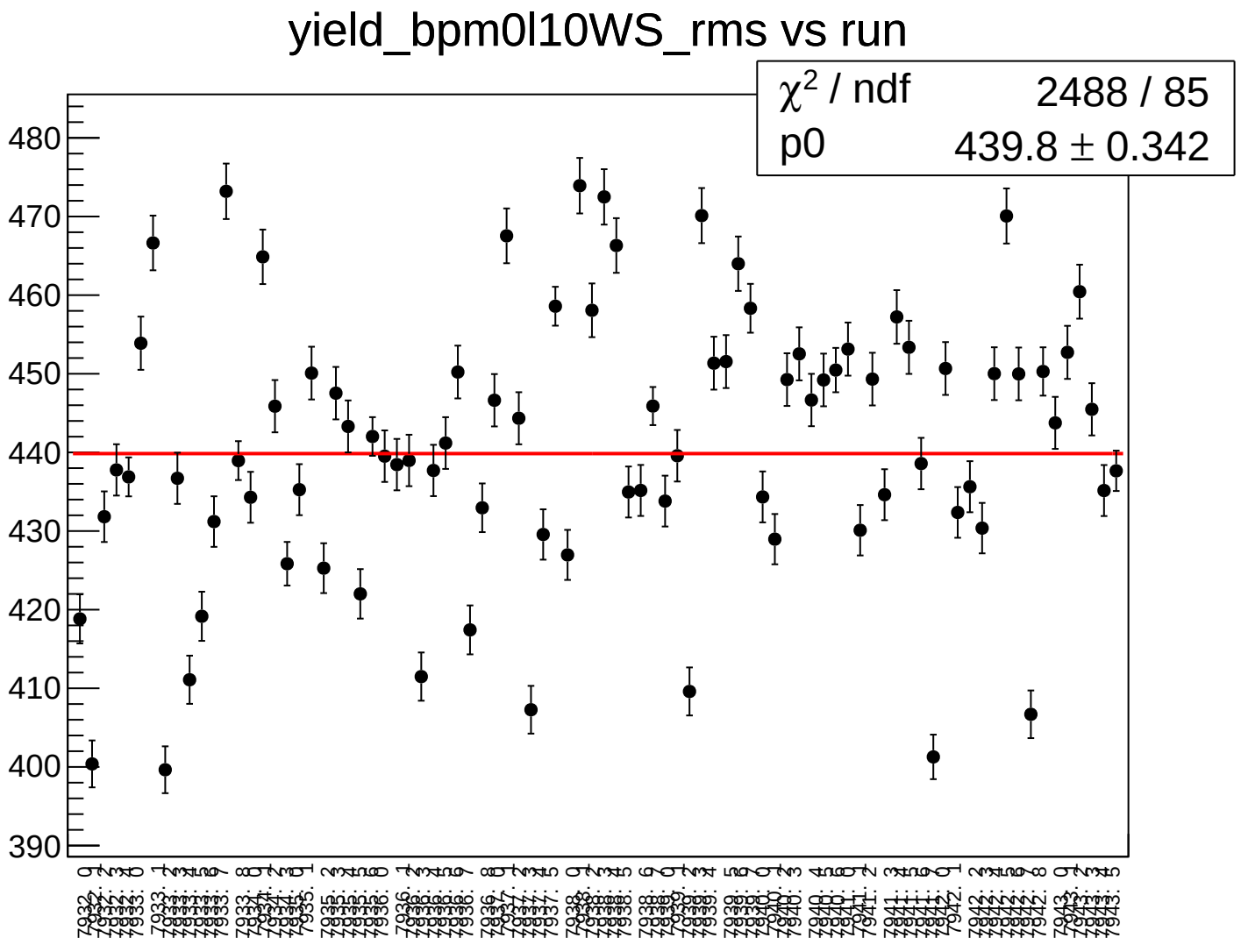

yield_bpm0l09WS_mean vs run
χ² / ndf 2.424e+06 / 85
p0 −2796 ± 0.007951
−2775
−2780
−2785
−2790
−2795
−2800
−2805
−2810
−2815
pull
Entries 86
Mean 2563
Std Dev 2518
300
200
100
0
−100
−200

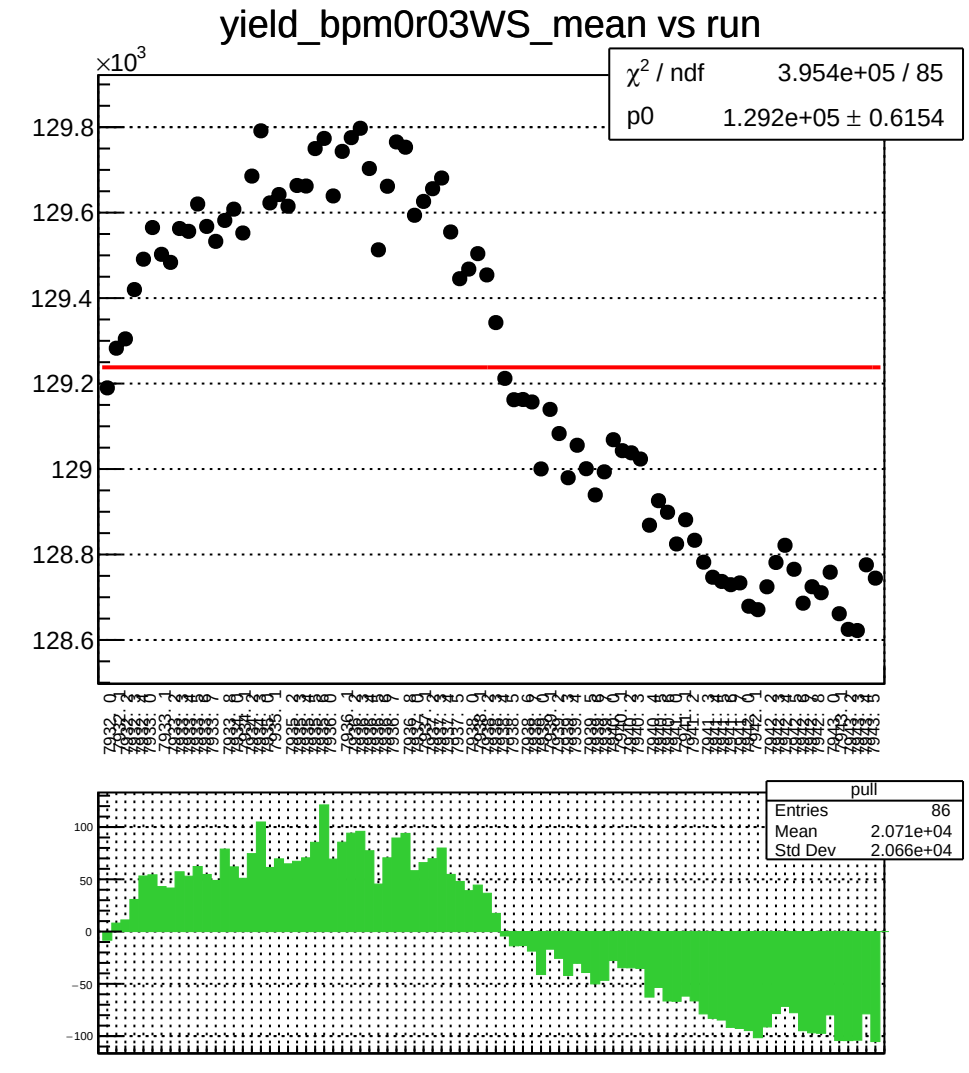

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

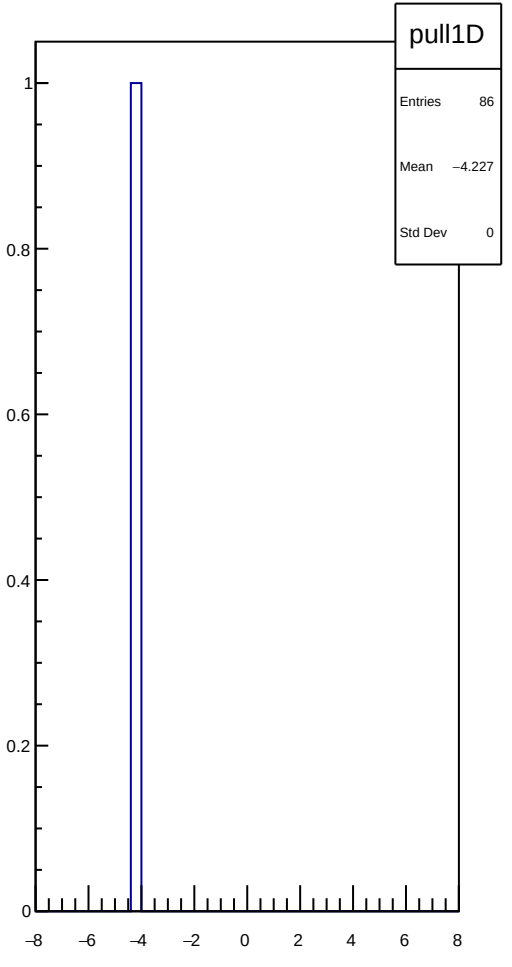

yield_bpm0l09WS_rms vs run
χ² / ndf 2367 / 85
p0 7.231 ± 0.005622
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2

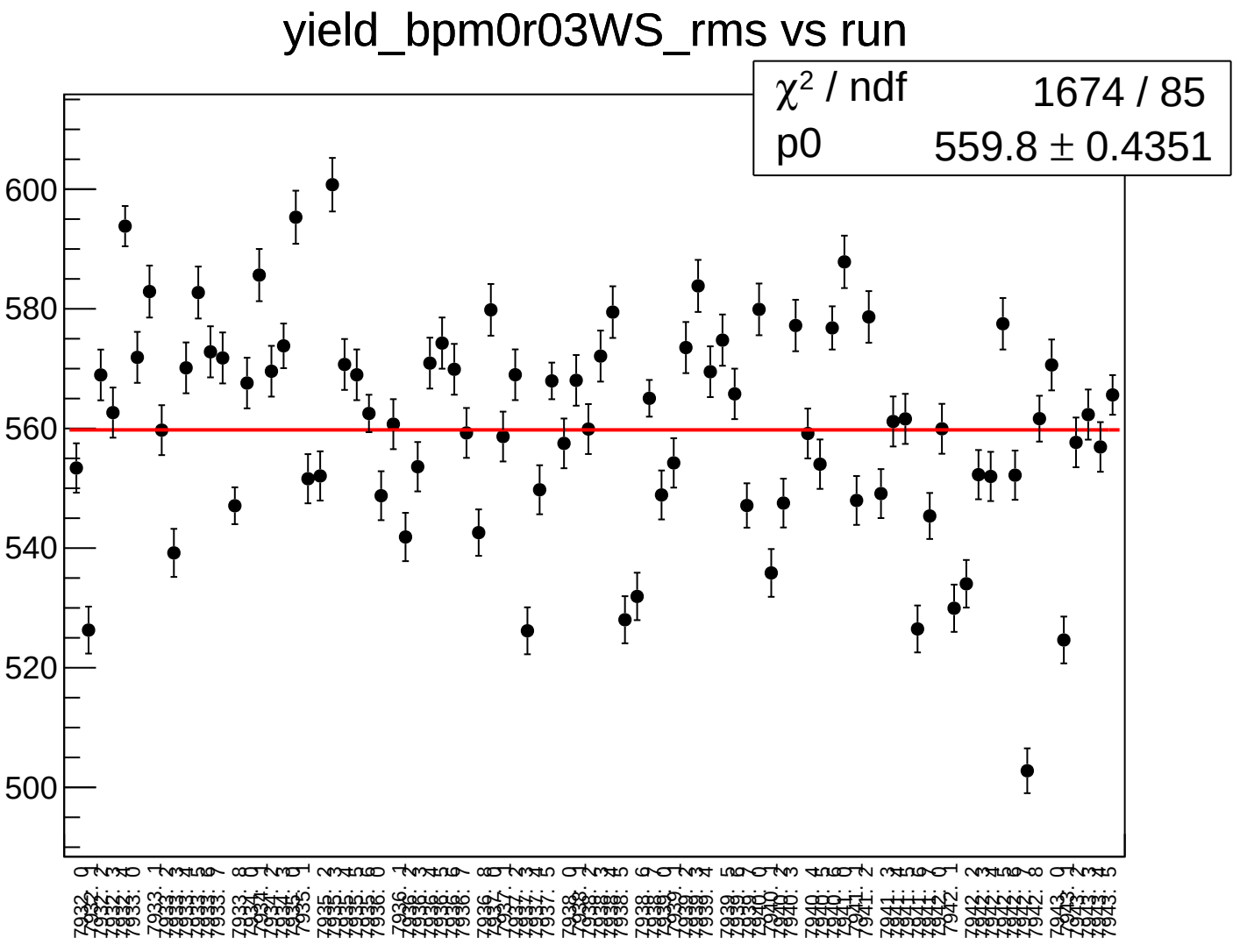

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 2.113e+05 / 85
p0 1.431e+05 ± 0.4837
143.5
143.4
143.3
143.2
143.1
143
142.9
142.8
142.7
pull
Entries 86
Mean 2363
Std Dev 2315
80
60
40
20
0
−20
−40
−60
−80

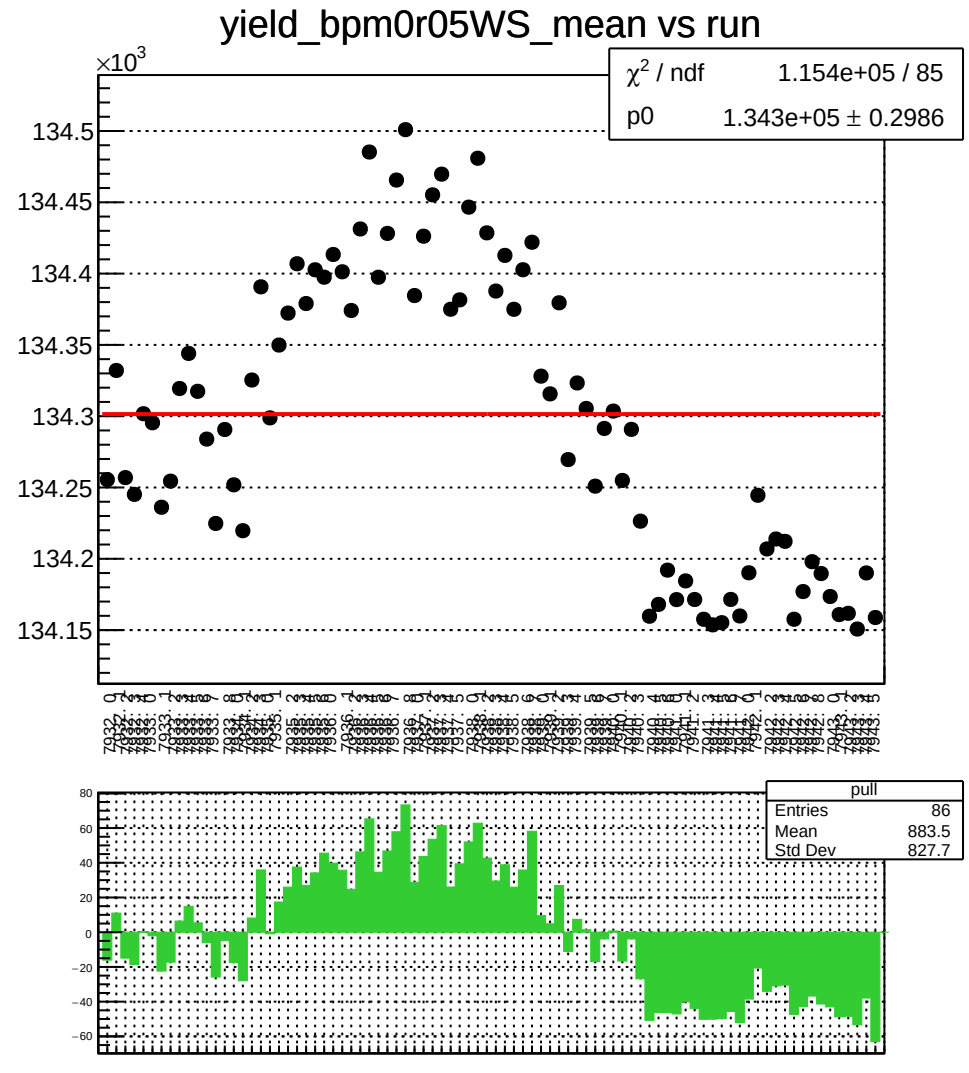

pull1D
Entries 86
Mean 2.692
Std Dev 2.763
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

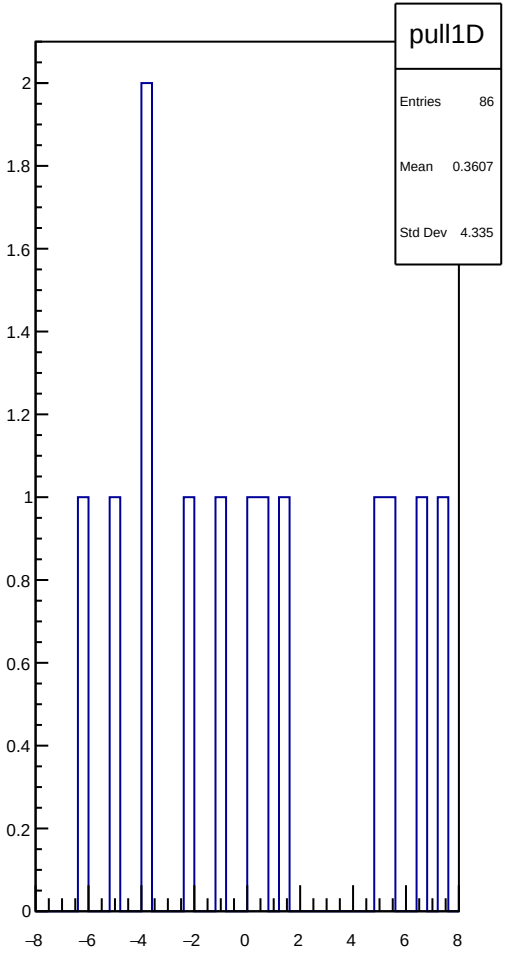

yield_bpm0l10WS_rms vs run
χ² / ndf 2488 / 85
p0 439.8 ± 0.342
480
470
460
450
440
430
420
410
400
390

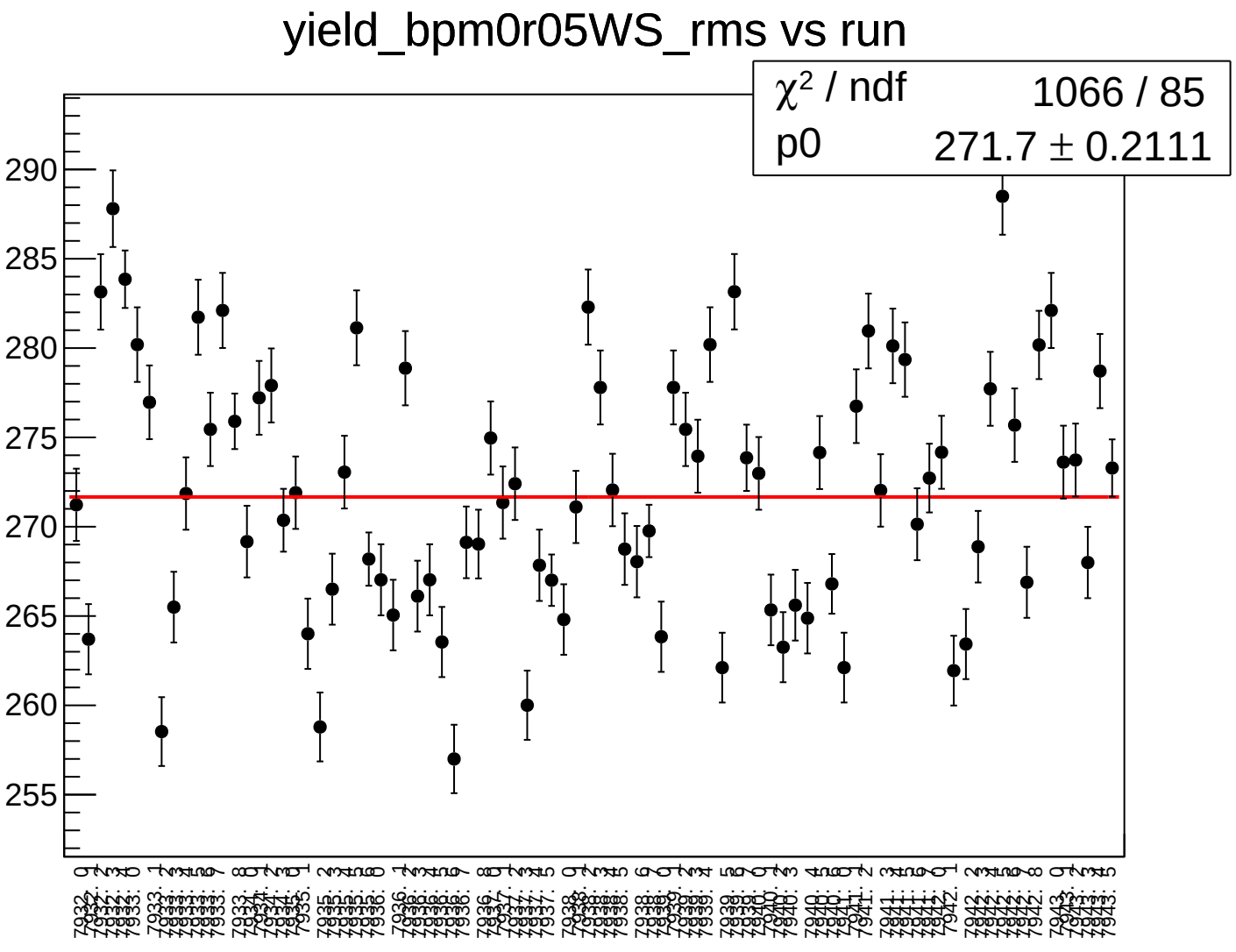

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 3.954e+05 / 85
p0 1.292e+05 ± 0.6154
129.8
129.6
129.4
129.2
129
128.8
128.6
pull
Entries 86
Mean 2.071e+04
Std Dev 2.066e+04
100
50
0
−50
−100

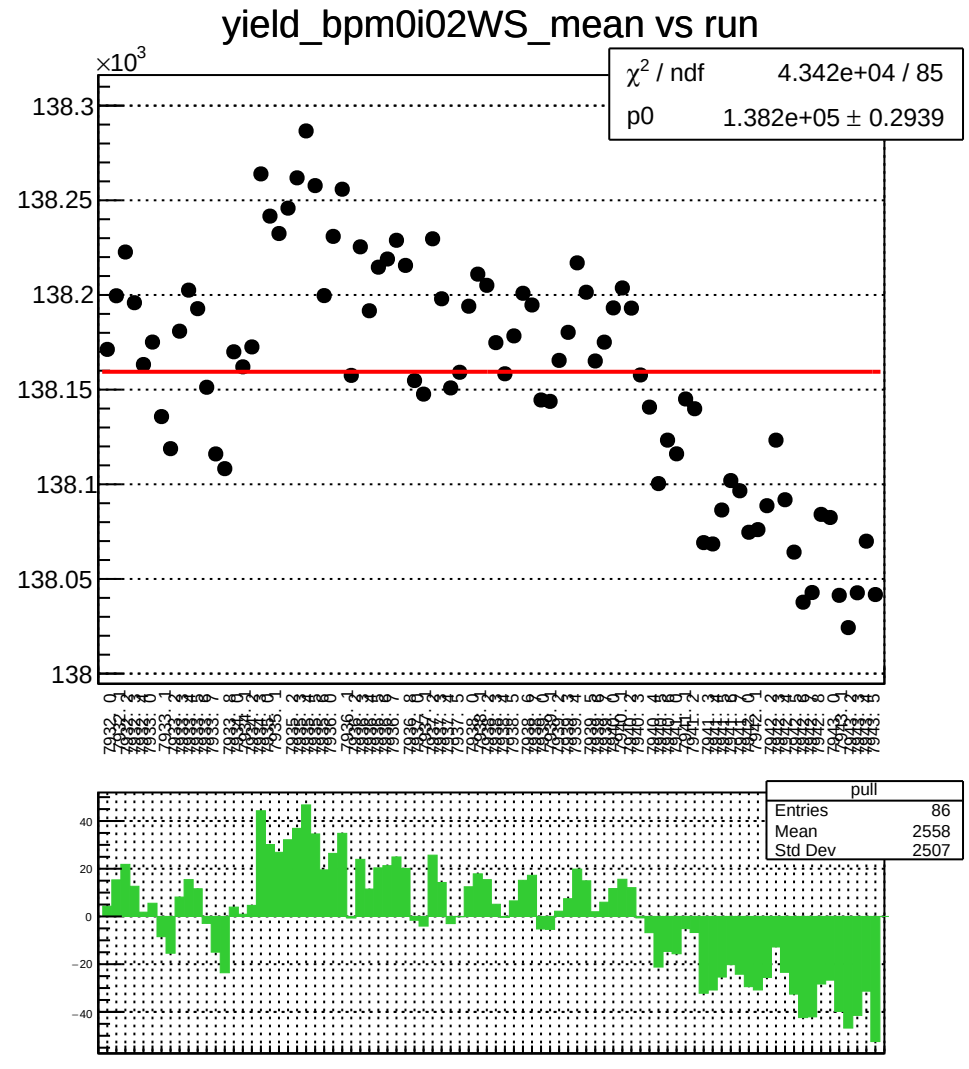

pull1D
Entries 86
Mean −4.227
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

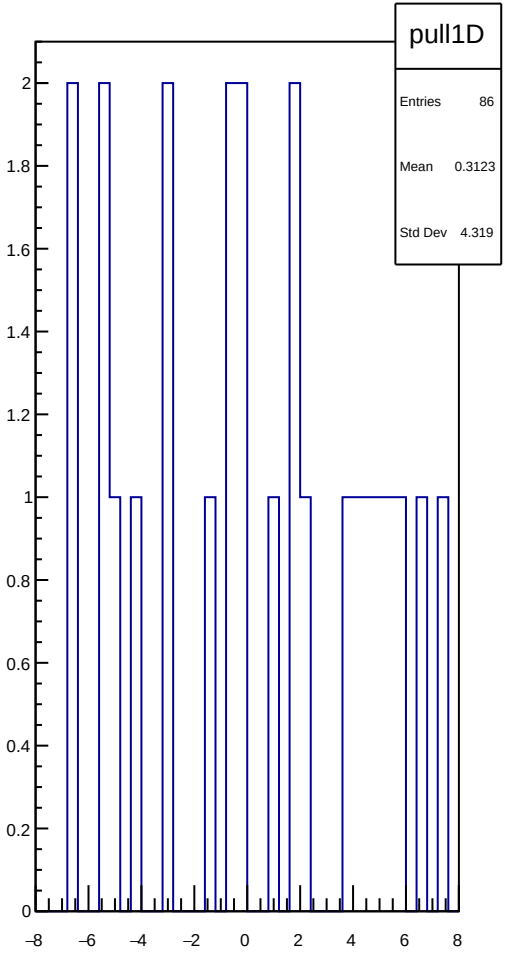

yield_bpm0r03WS_rms vs run
χ² / ndf 1674 / 85
p0 559.8 ± 0.4351
600
580
560
540
520
500

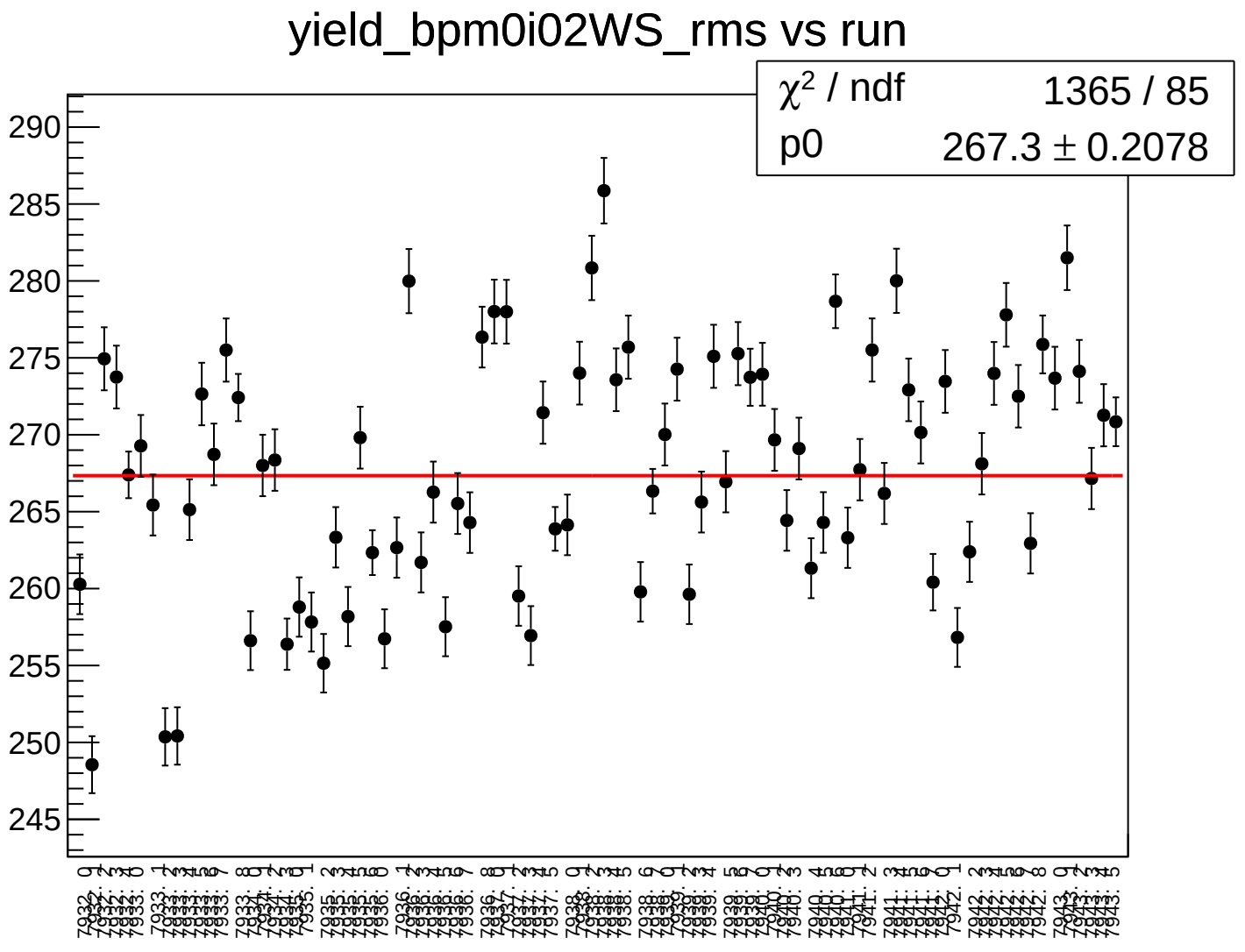

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 1.154e+05 / 85
p0 1.343e+05 ± 0.2986
134.5
134.45
134.4
134.35
134.3
134.25
134.2
134.15
pull
Entries 86
Mean 883.5
Std Dev 827.7
80
60
40
20
0
−20
−40
−60

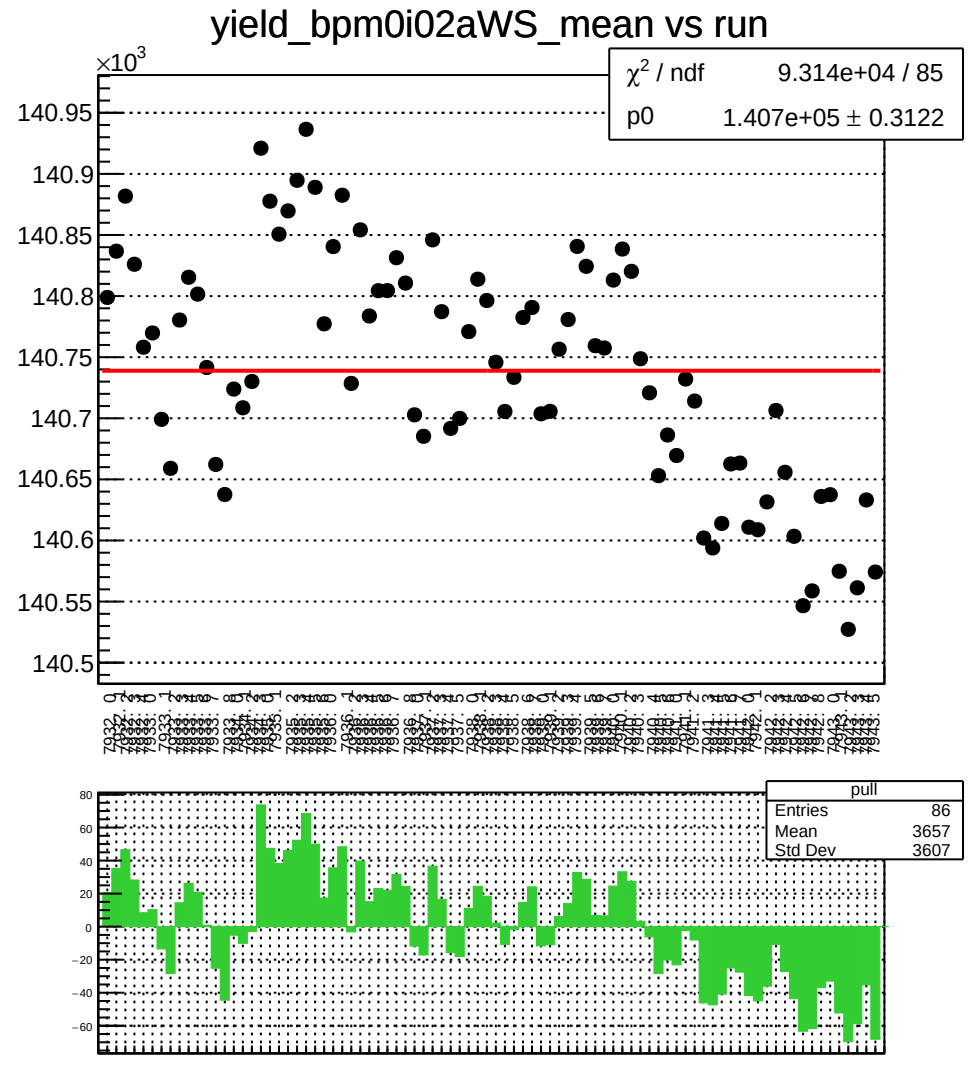

pull1D
Entries 86
Mean 0.3607
Std Dev 4.335
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

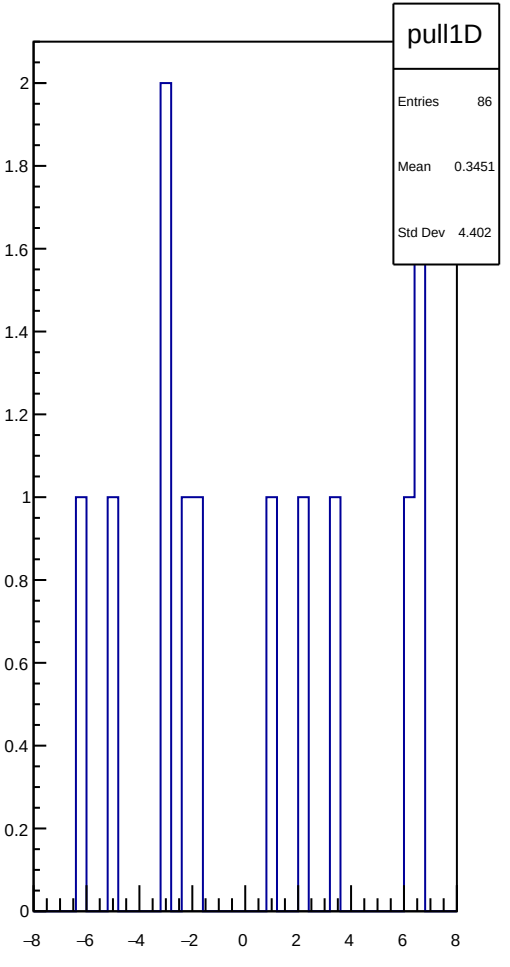

yield_bpm0r05WS_rms vs run
χ² / ndf 1066 / 85
p0 271.7 ± 0.2111
290
285
280
275
270
265
260
255

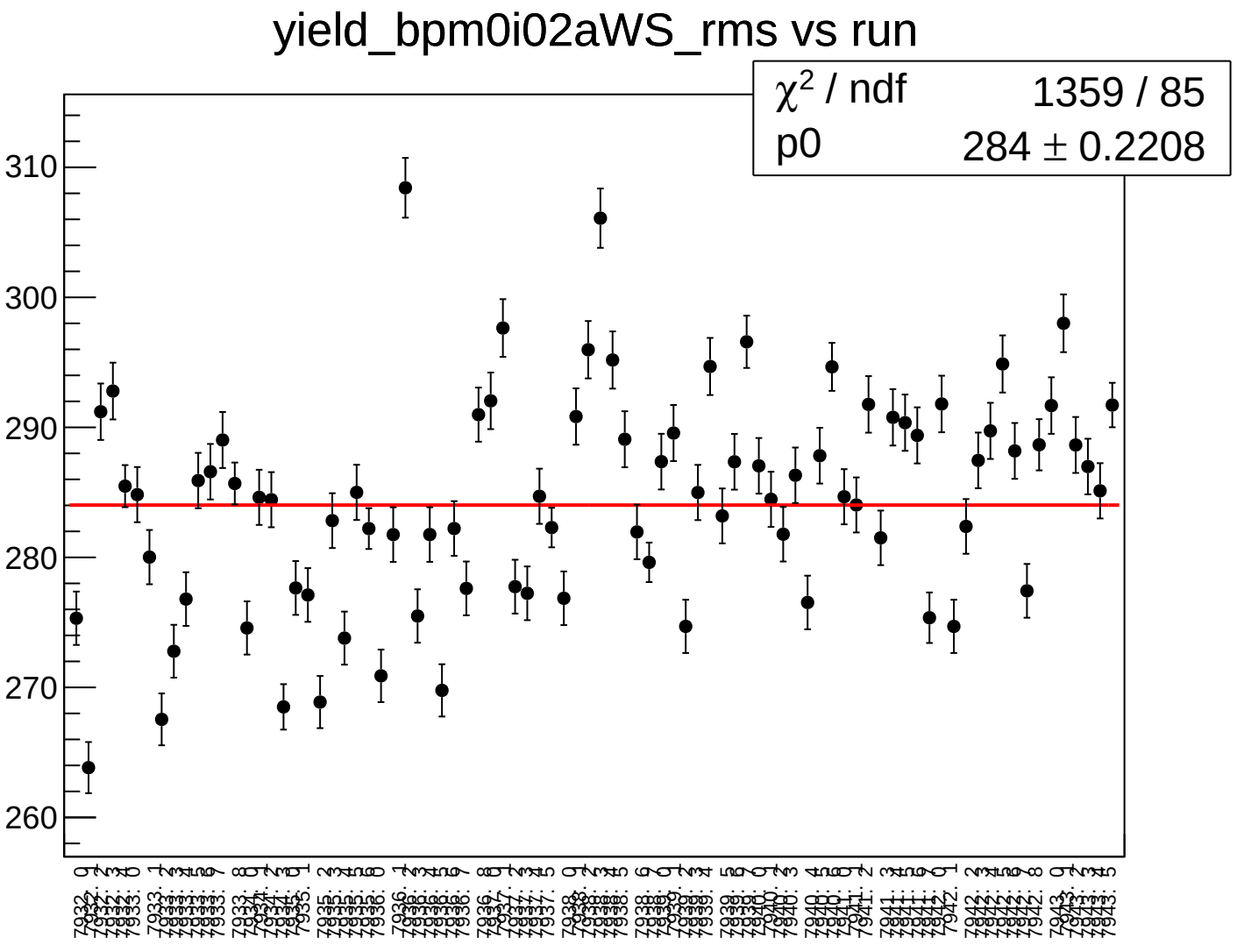

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 4.342e+04 / 85
p0 1.382e+05 ± 0.2939
138.3
138.25
138.2
138.15
138.1
138.05
138
pull
Entries 86
Mean 2558
Std Dev 2507
40
20
0
−20
−40

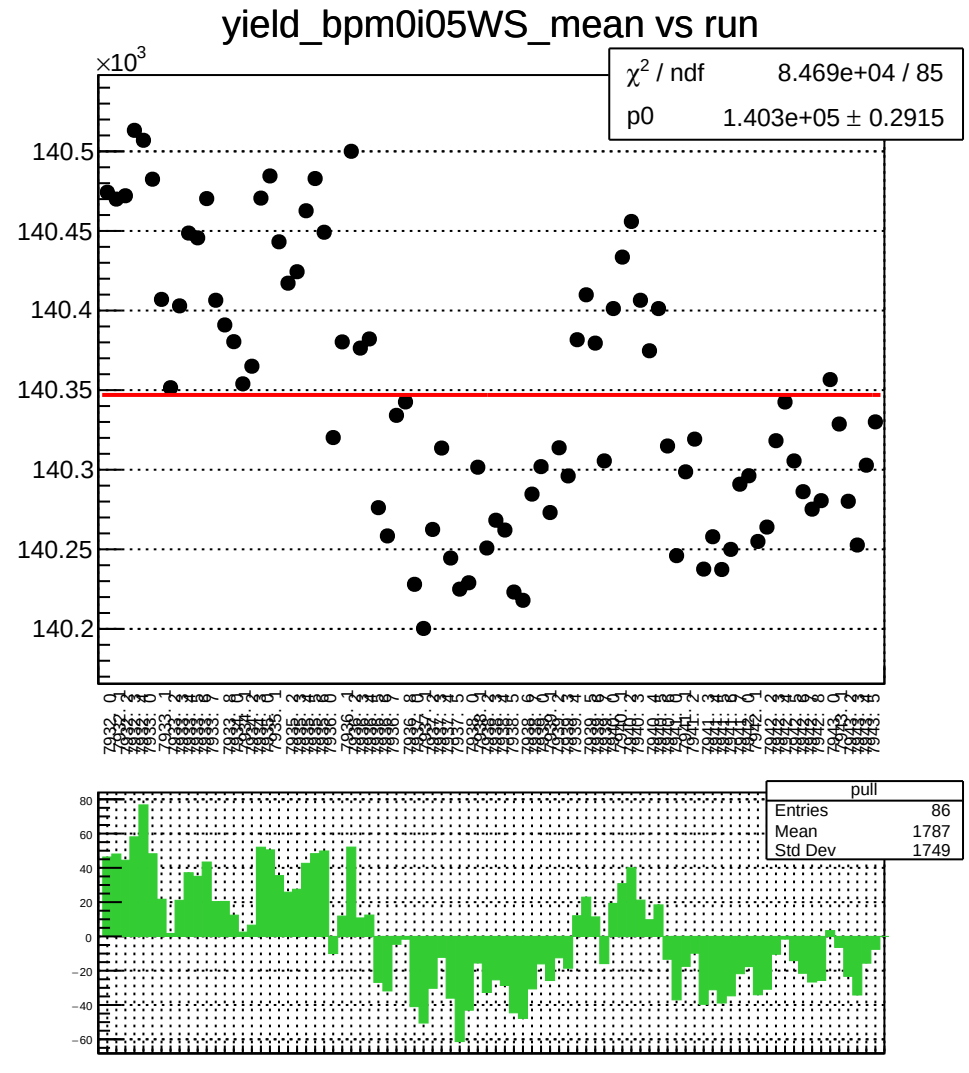

pull1D
Entries 86
Mean 0.3123
Std Dev 4.319
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

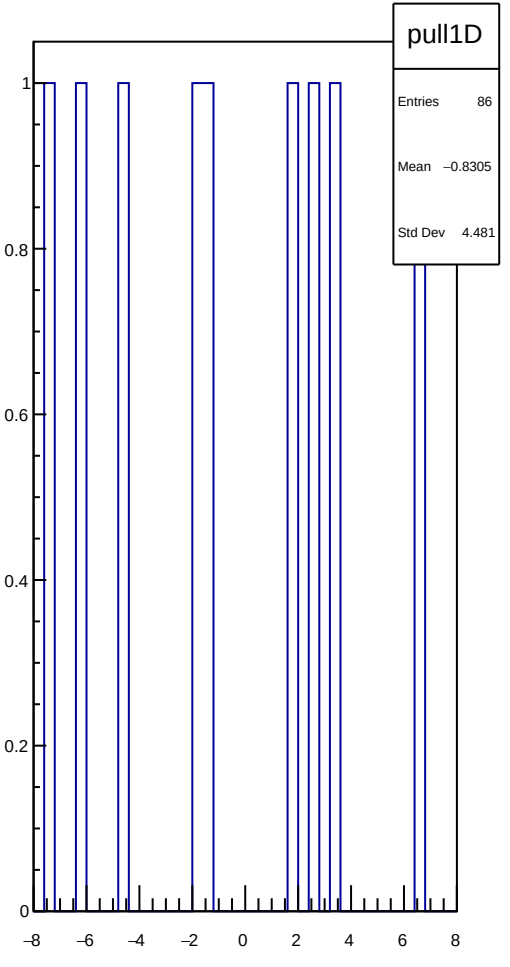

yield_bpm0i02WS_rms vs run
χ² / ndf 1365 / 85
p0 267.3 ± 0.2078
290
285
280
275
270
265
260
255
250
245

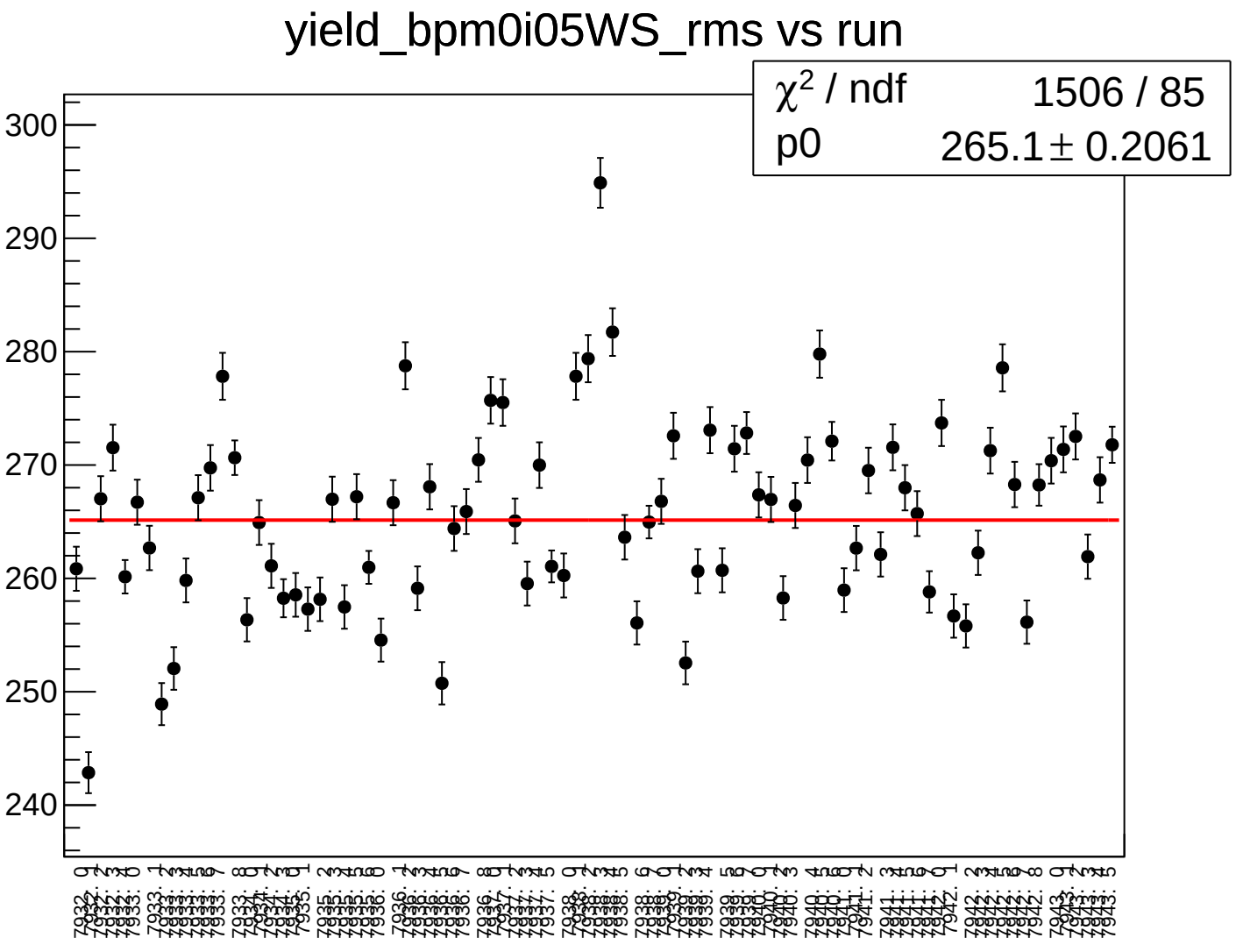

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 9.314e+04 / 85
p0 1.407e+05 ± 0.3122
140.95
140.9
140.85
140.8
140.75
140.7
140.65
140.6
140.55
140.5
pull
Entries 86
Mean 3657
Std Dev 3607
80
60
40
20
0
−20
−40
−60

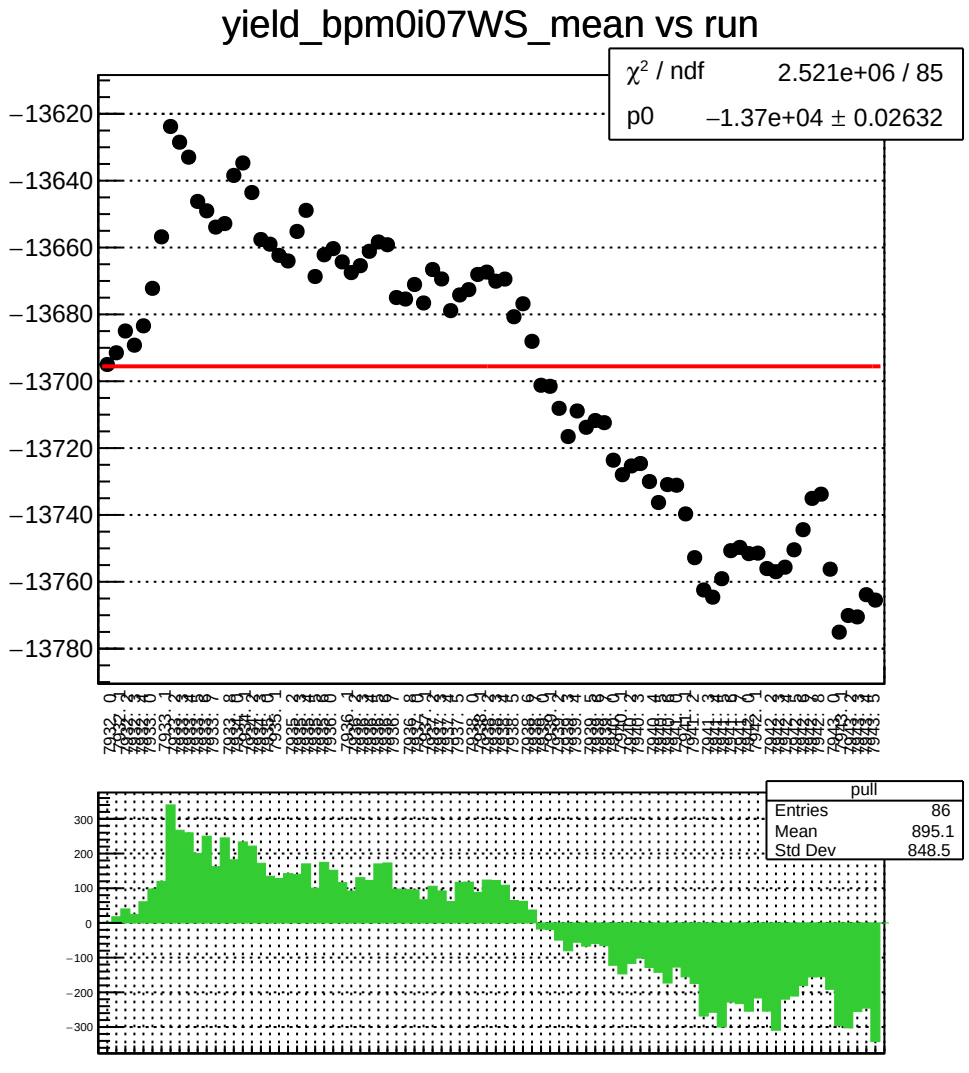

pull1D
Entries 86
Mean 0.3451
Std Dev 4.402
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

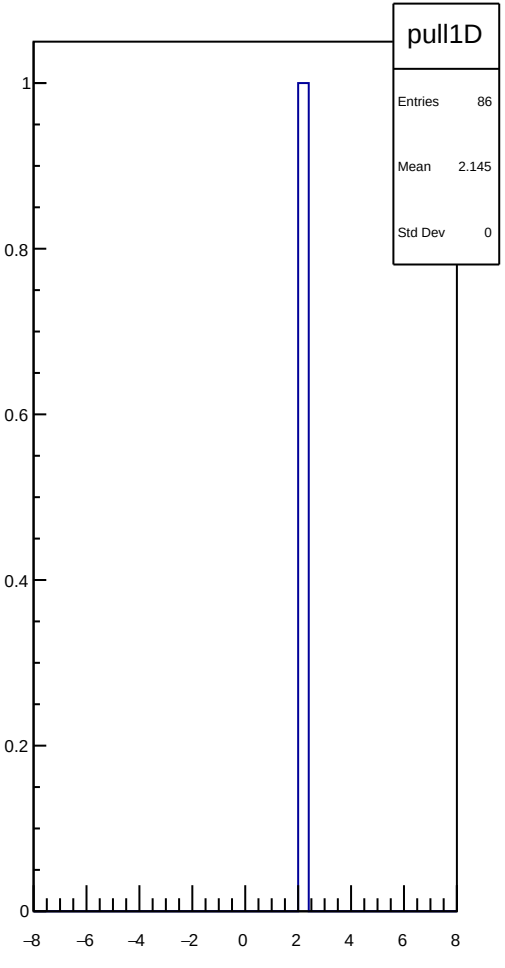

yield_bpm0i02aWS_rms vs run
χ² / ndf 1359 / 85
p0 284 ± 0.2208
310
300
290
280
270
260

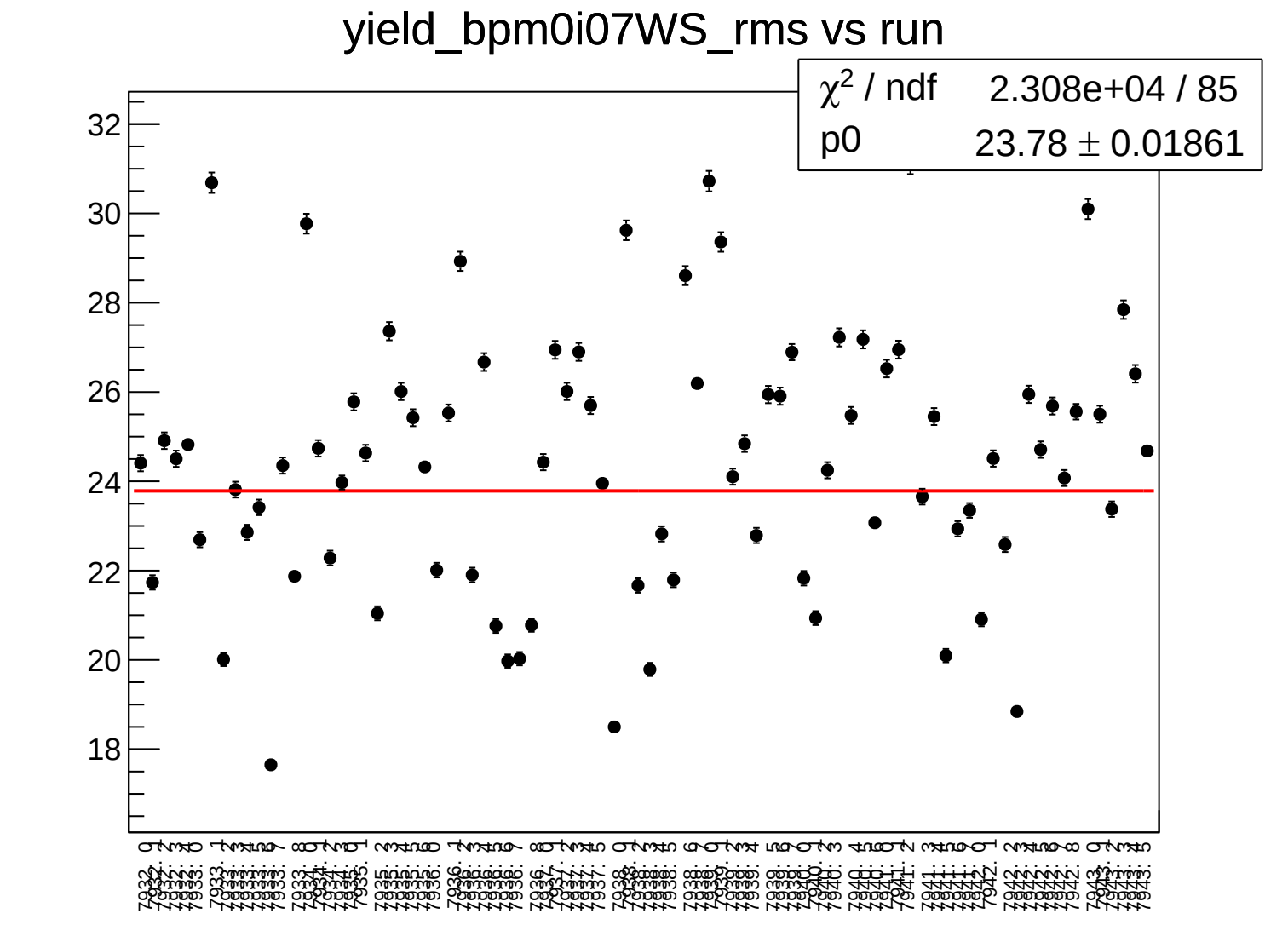

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 8.469e+04 / 85
p0 1.403e+05 ± 0.2915
140.5
140.45
140.4
140.35
140.3
140.25
140.2
pull
Entries 86
Mean 1787
Std Dev 1749
80
60
40
20
0
−20
−40
−60

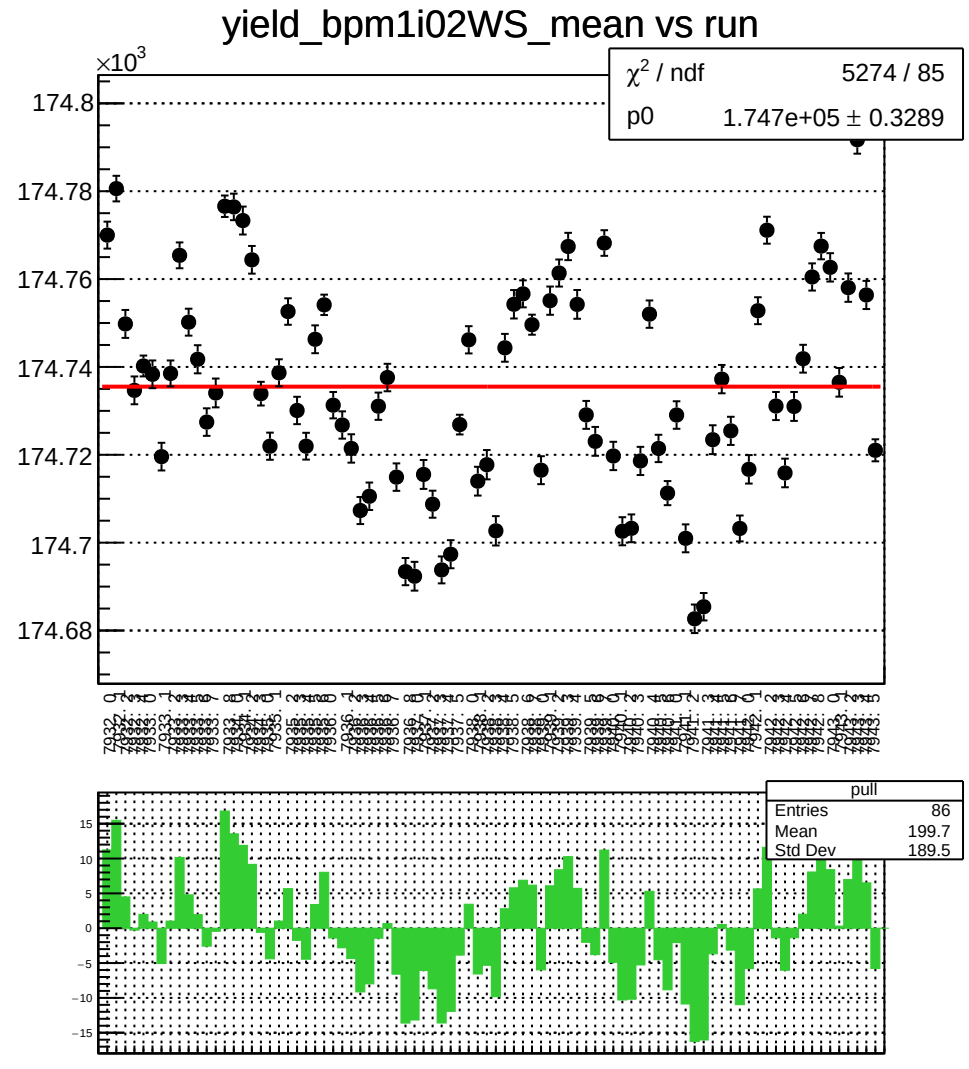

pull1D
Entries 86
Mean −0.8305
Std Dev 4.481
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

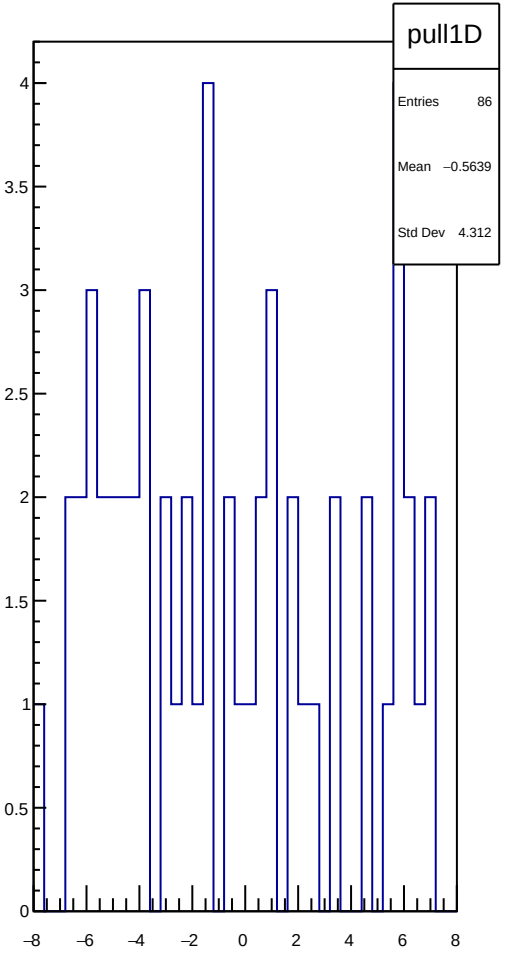

yield_bpm0i05WS_rms vs run
χ² / ndf 1506 / 85
p0 265.1 ± 0.2061
300
290
280
270
260
250
240

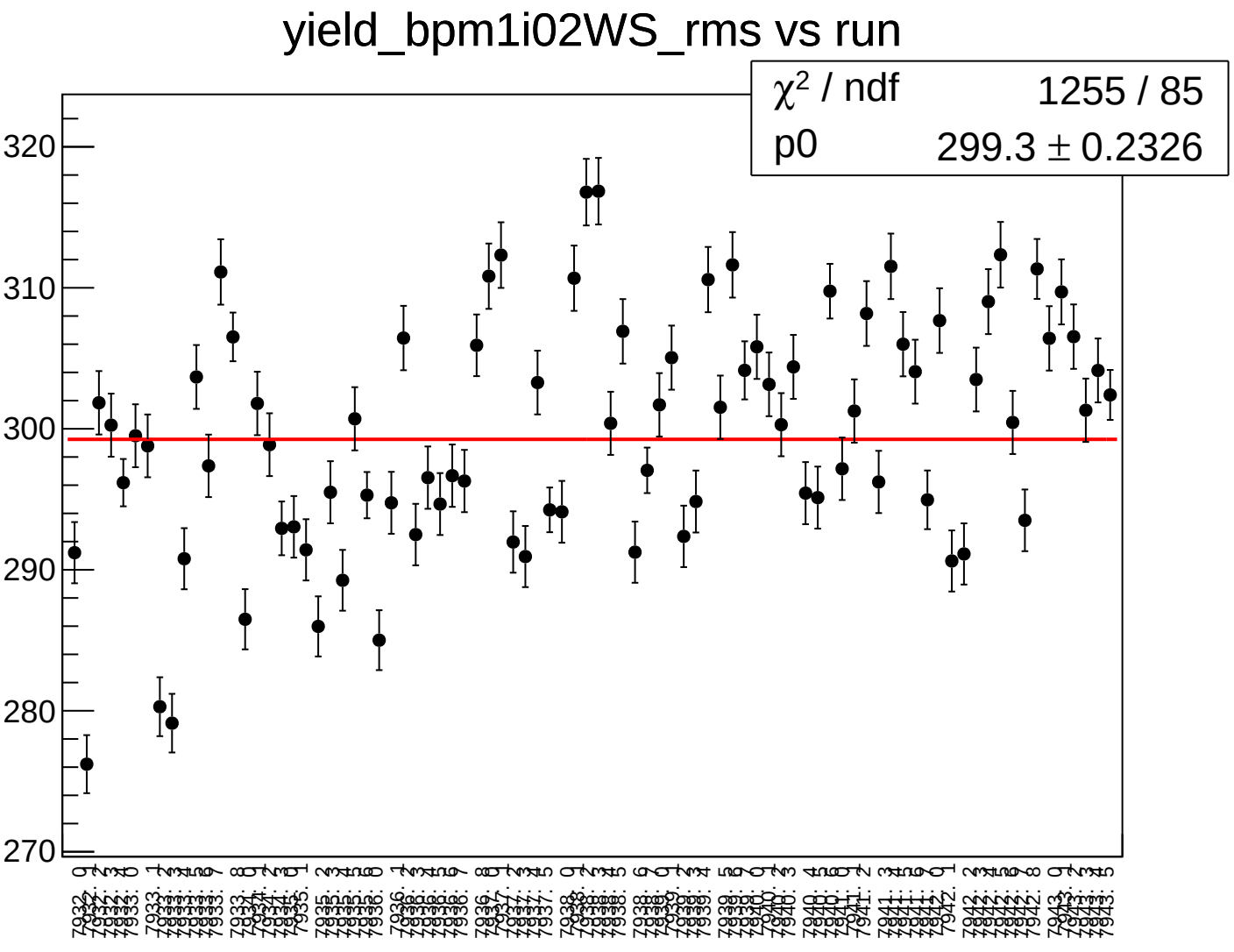

yield_bpm0i07WS_mean vs run
χ² / ndf 2.521e+06 / 85
p0 −1.37e+04 ± 0.02632
−13620
−13640
−13660
−13680
−13700
−13720
−13740
−13760
−13780
pull
Entries 86
Mean 895.1
Std Dev 848.5
300
200
100
0
−100
−200
−300

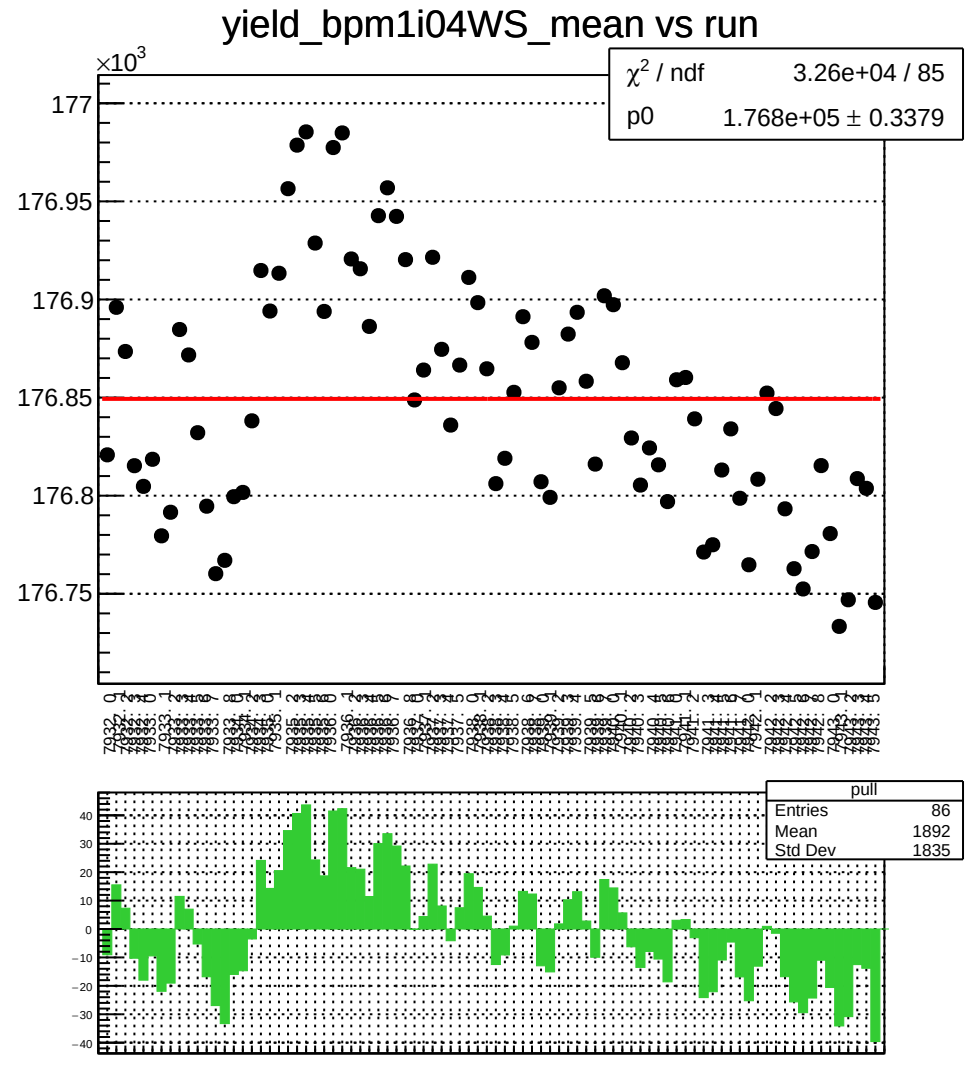

pull1D
Entries 86
Mean 2.145
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

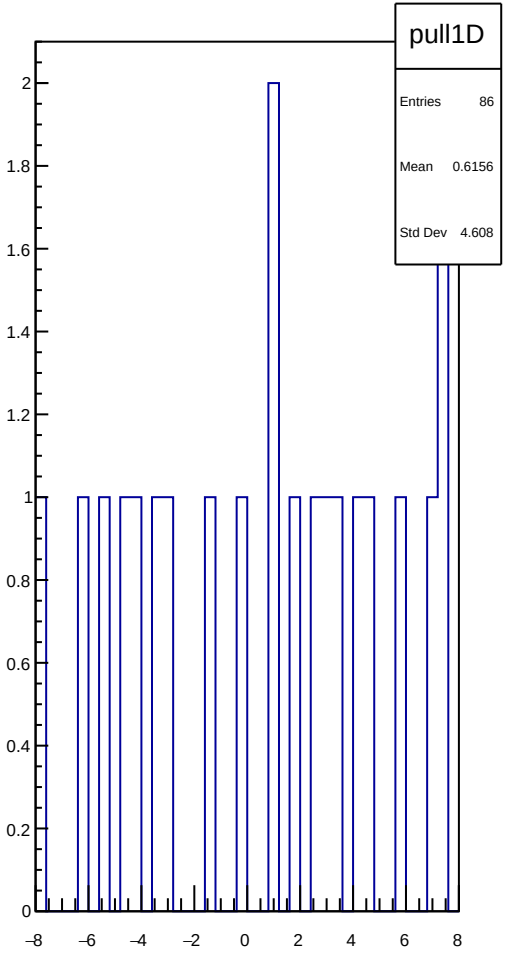

yield_bpm0i07WS_rms vs run
χ² / ndf 2.308e+04 / 85
p0 23.78 ± 0.01861
32
30
28
26
24
22
20
18

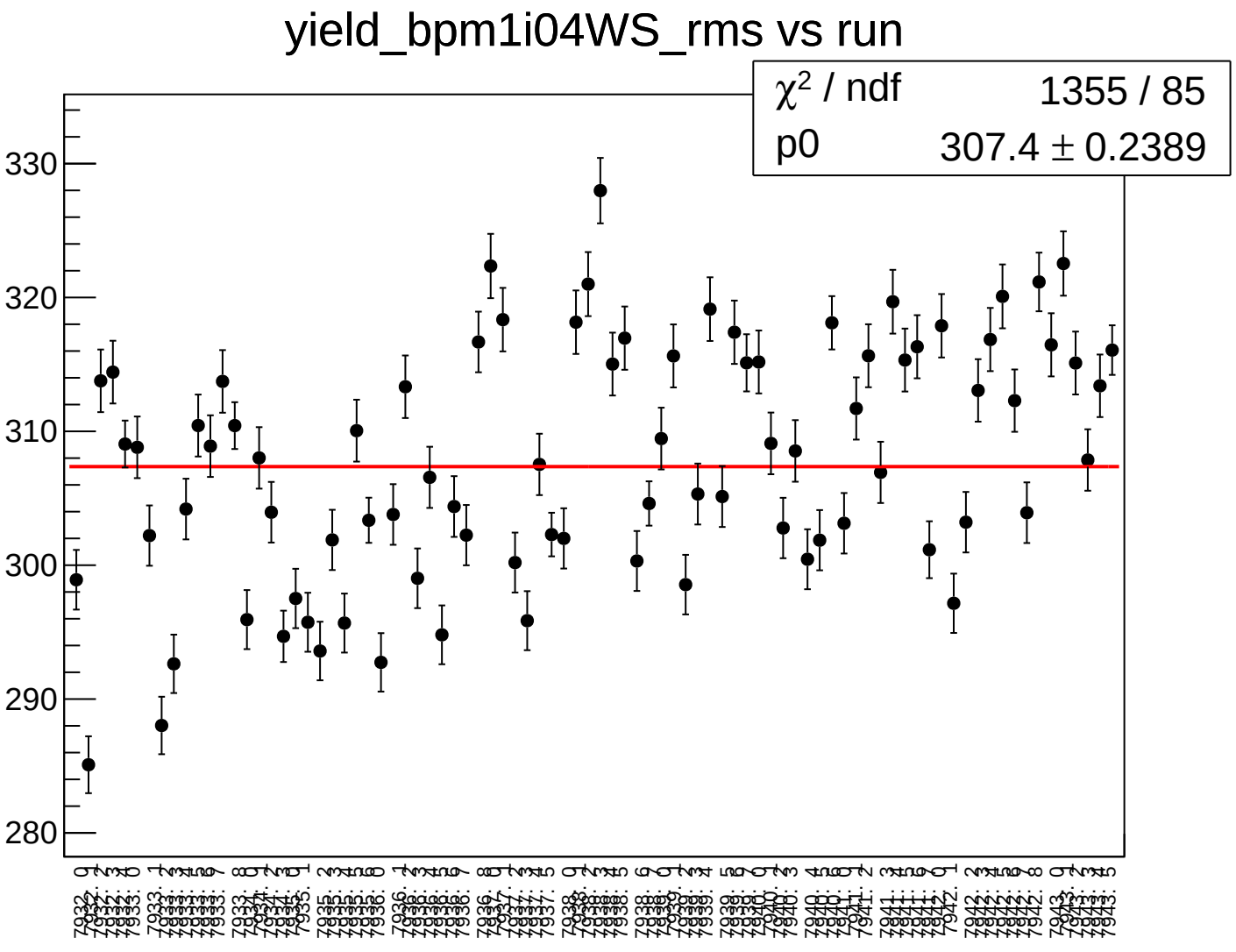

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 5274 / 85
p0 1.747e+05 ± 0.3289
174.8
174.78
174.76
174.74
174.72
174.7
174.68
pull
Entries 86
Mean 199.7
Std Dev 189.5
15
10
5
0
−5
−10
−15

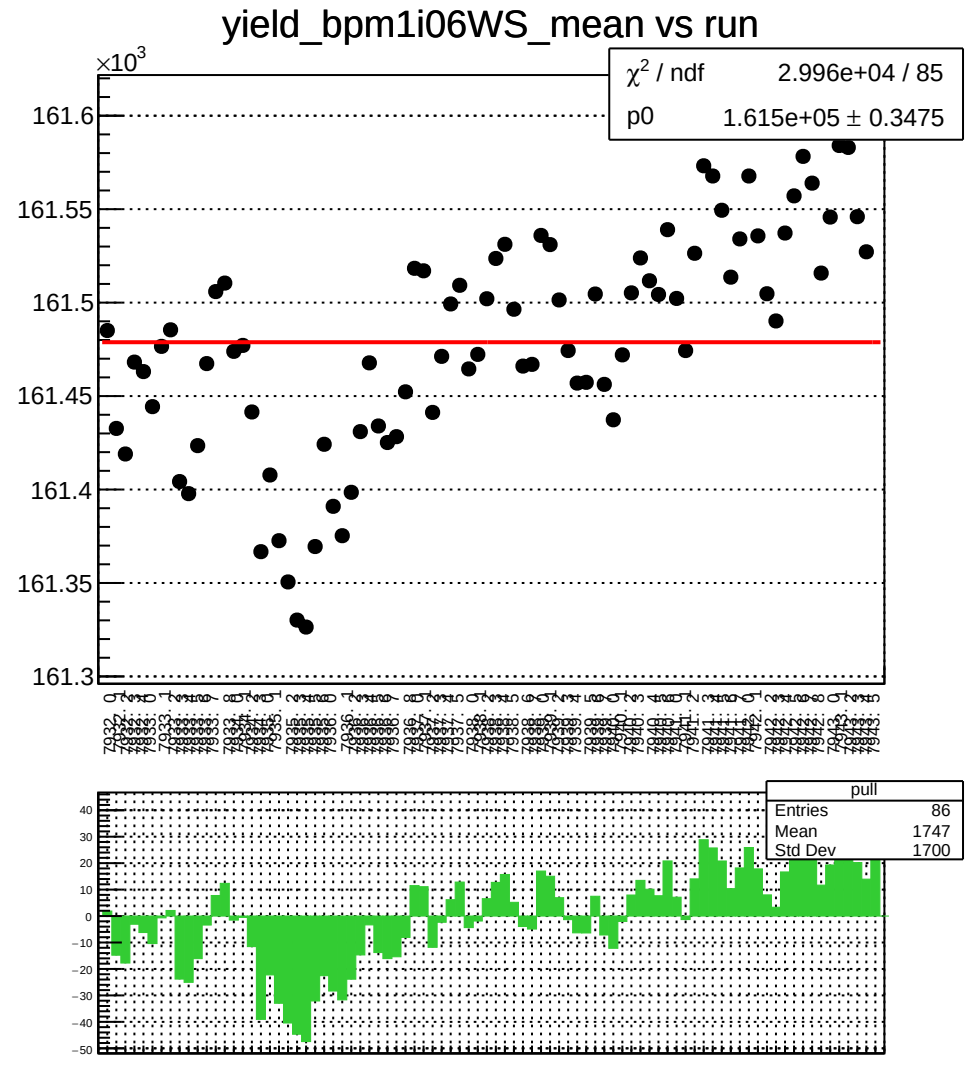

pull1D
Entries 86
Mean −0.5639
Std Dev 4.312
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

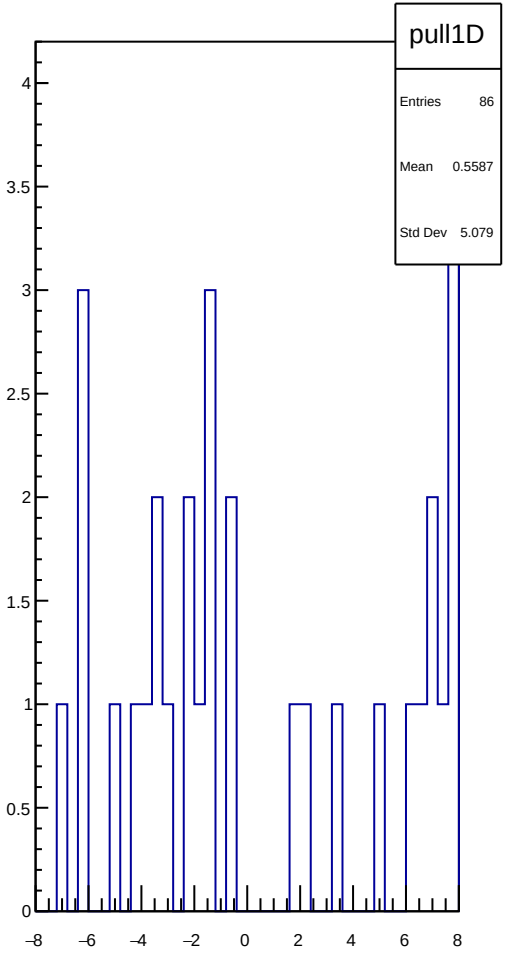

yield_bpm1i02WS_rms vs run
χ² / ndf 1255 / 85
p0 299.3 ± 0.2326
320
310
300
290
280
270

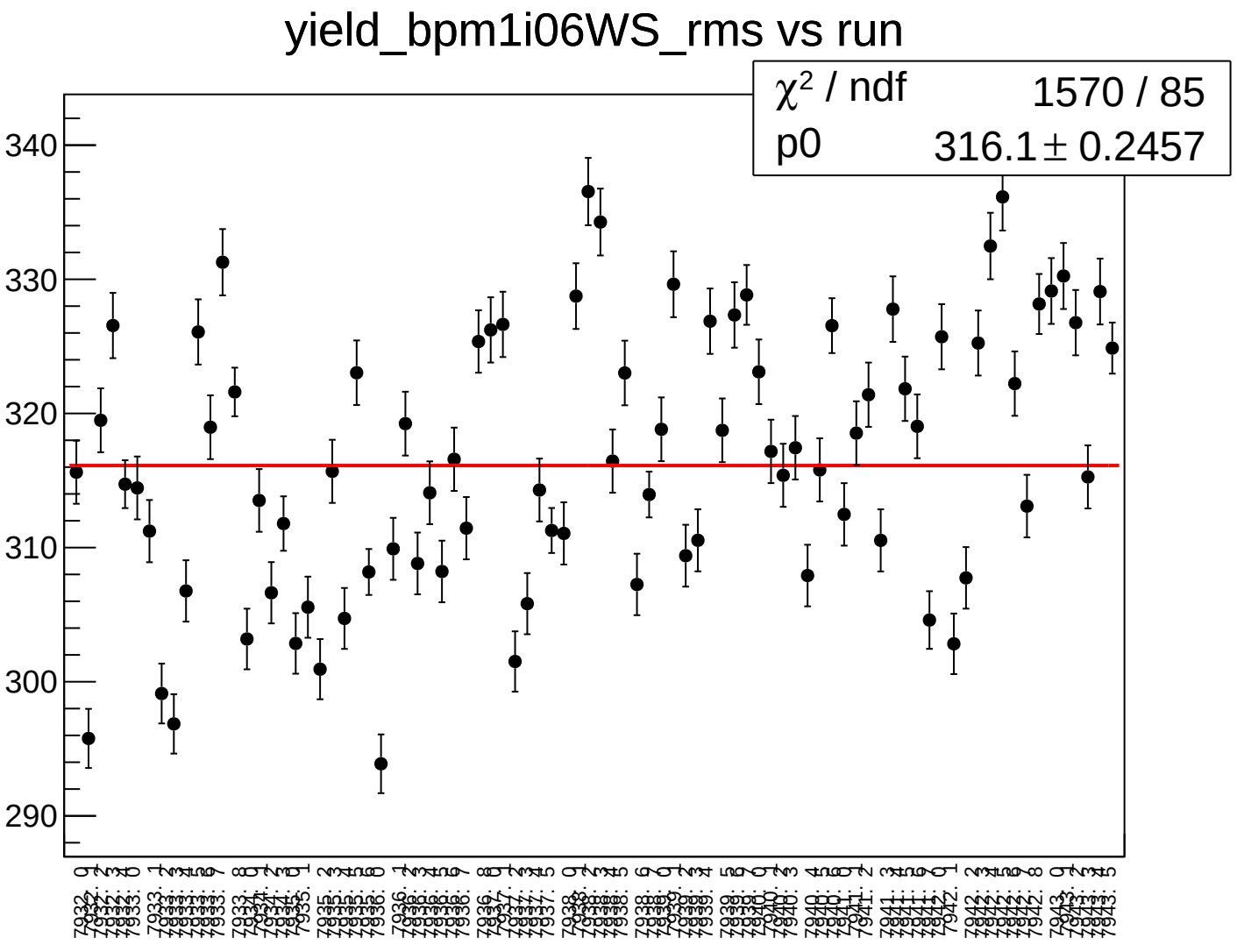

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 3.26e+04 / 85
p0 1.768e+05 ± 0.3379
177
176.95
176.9
176.85
176.8
176.75
pull
Entries 86
Mean 1892
Std Dev 1835
40
30
20
10
0
−10
−20
−30
−40

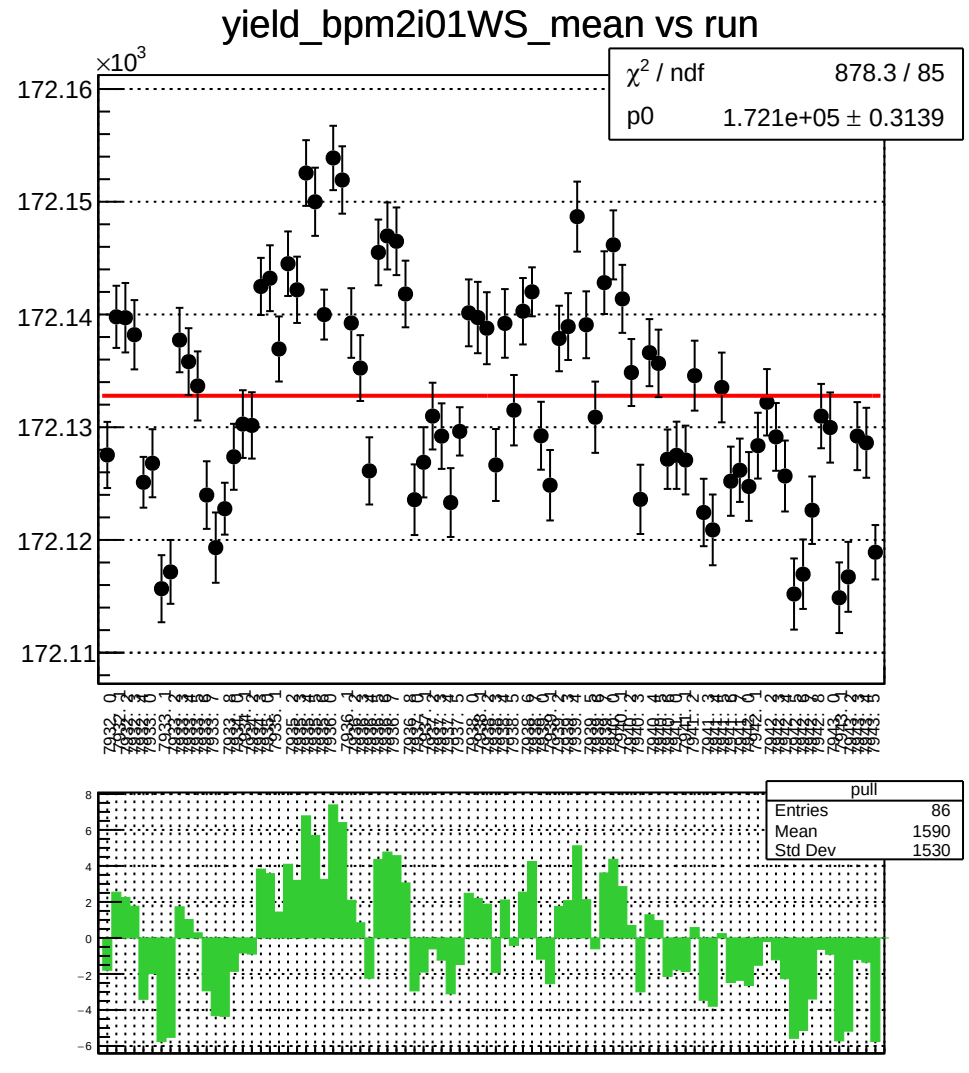

pull1D
Entries 86
Mean 0.6156
Std Dev 4.608
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

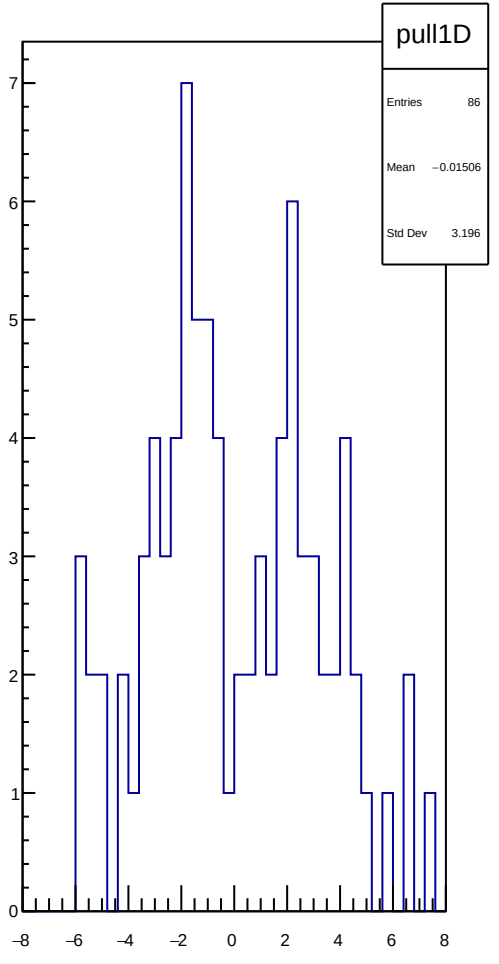

yield_bpm1i04WS_rms vs run
χ² / ndf 1355 / 85
p0 307.4 ± 0.2389
330
320
310
300
290
280

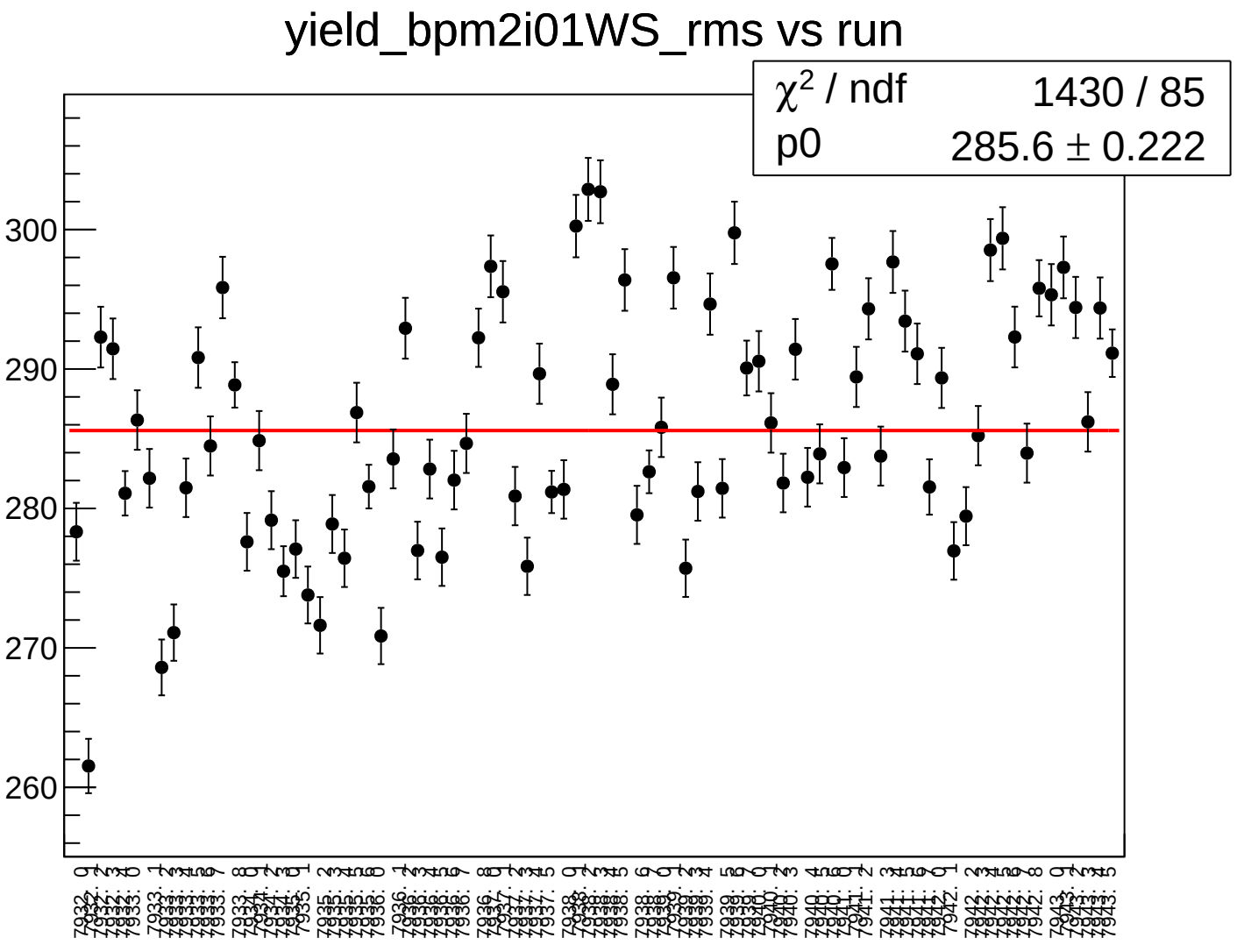

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 2.996e+04 / 85
p0 1.615e+05 ± 0.3475
161.6
161.55
161.5
161.45
161.4
161.35
161.3
pull
Entries 86
Mean 1747
Std Dev 1700
40
30
20
10
0
−10
−20
−30
−40
−50

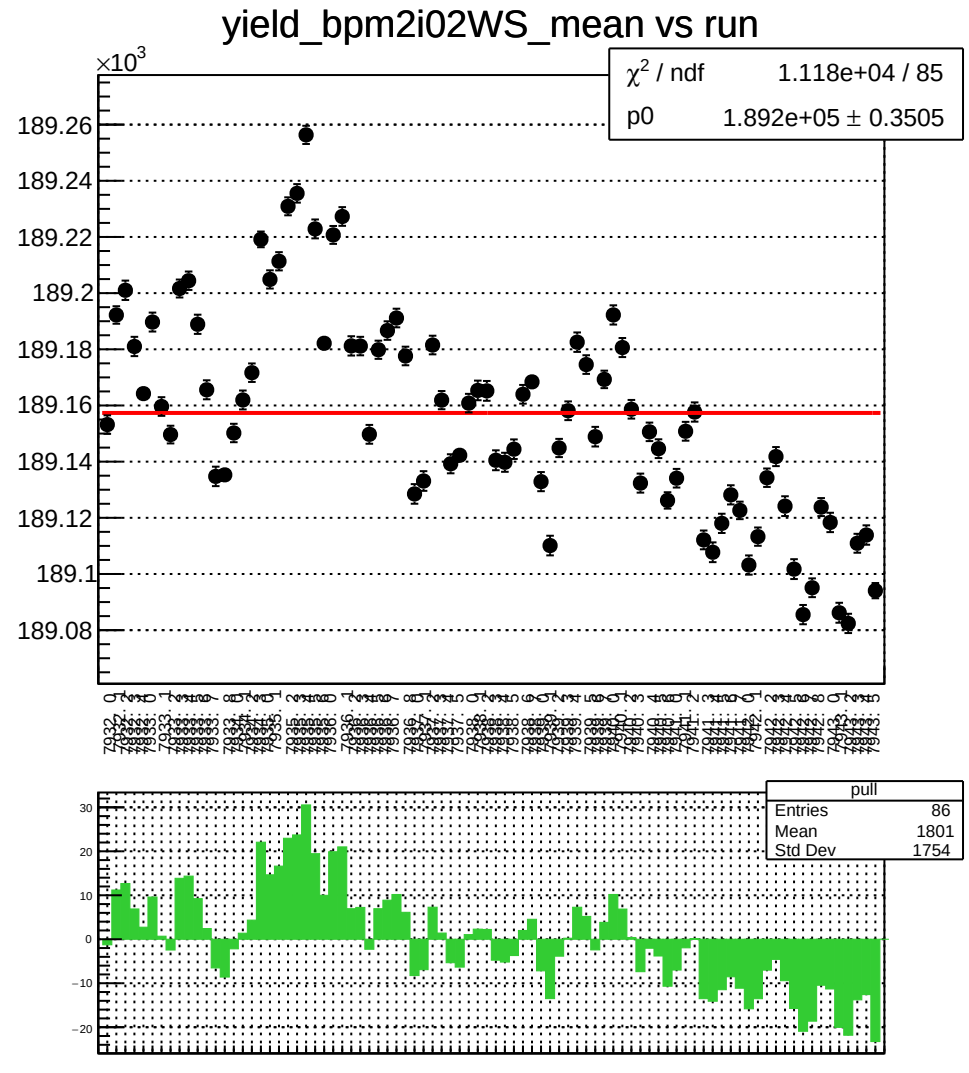

pull1D
Entries 86
Mean 0.5587
Std Dev 5.079
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

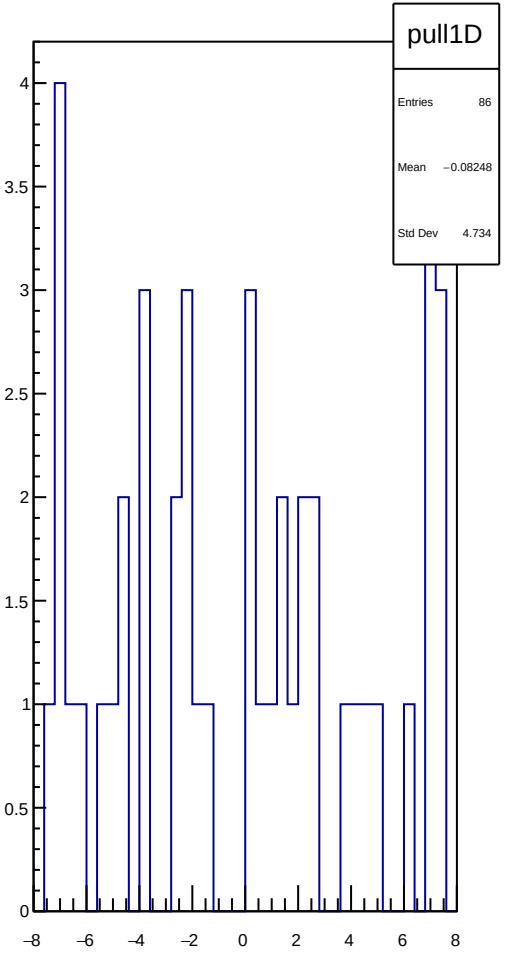

yield_bpm1i06WS_rms vs run
χ² / ndf 1570 / 85
p0 316.1 ± 0.2457
340
330
320
310
300
290

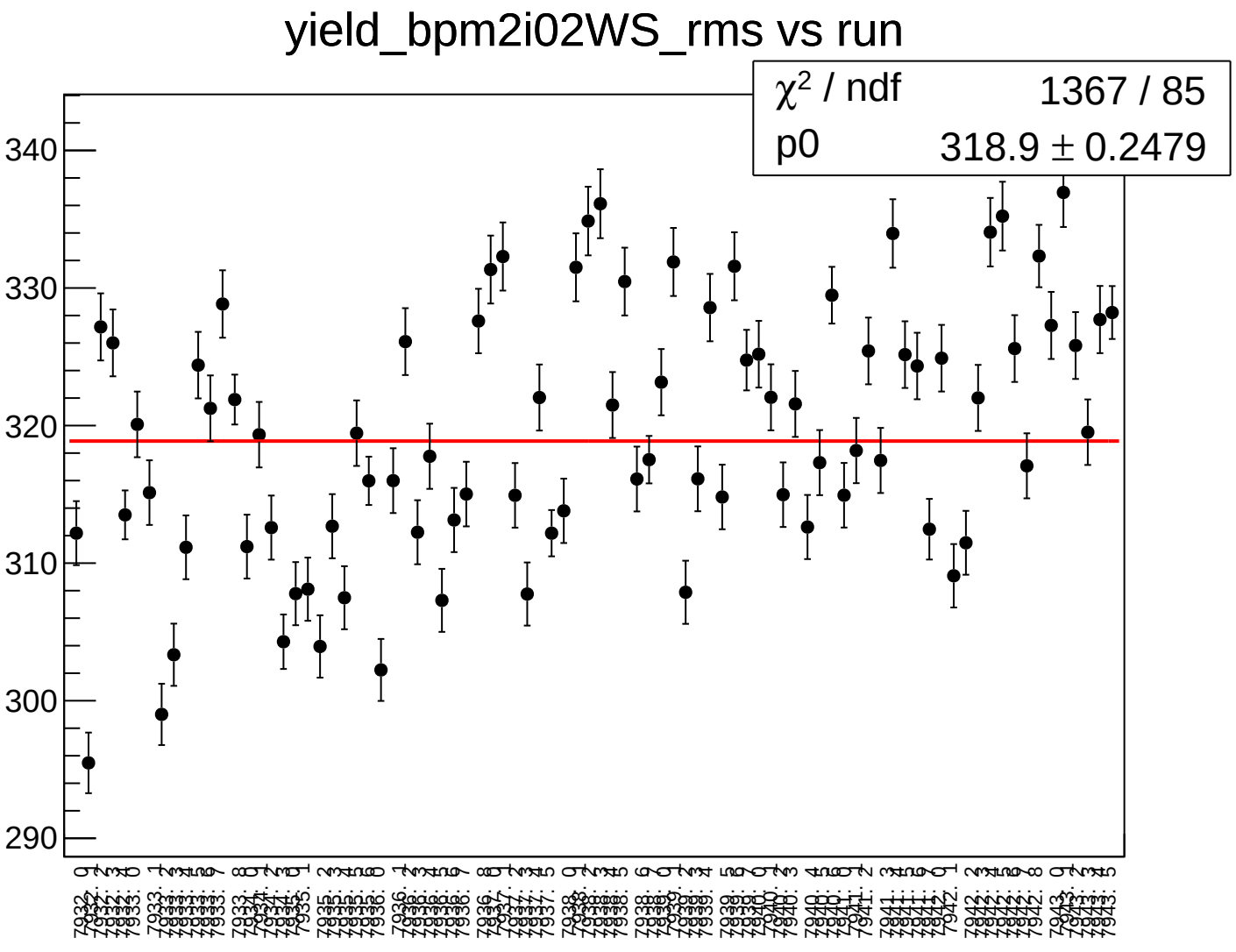

yield_bpm2i01WS_mean vs run
×10^3
172.16
172.15
172.14
172.13
172.12
172.11
χ² / ndf 878.3 / 85
p0 1.721e+05 ± 0.3139
pull
Entries 86
Mean 1590
Std Dev 1530
8
6
4
2
0
−2
−4
−6

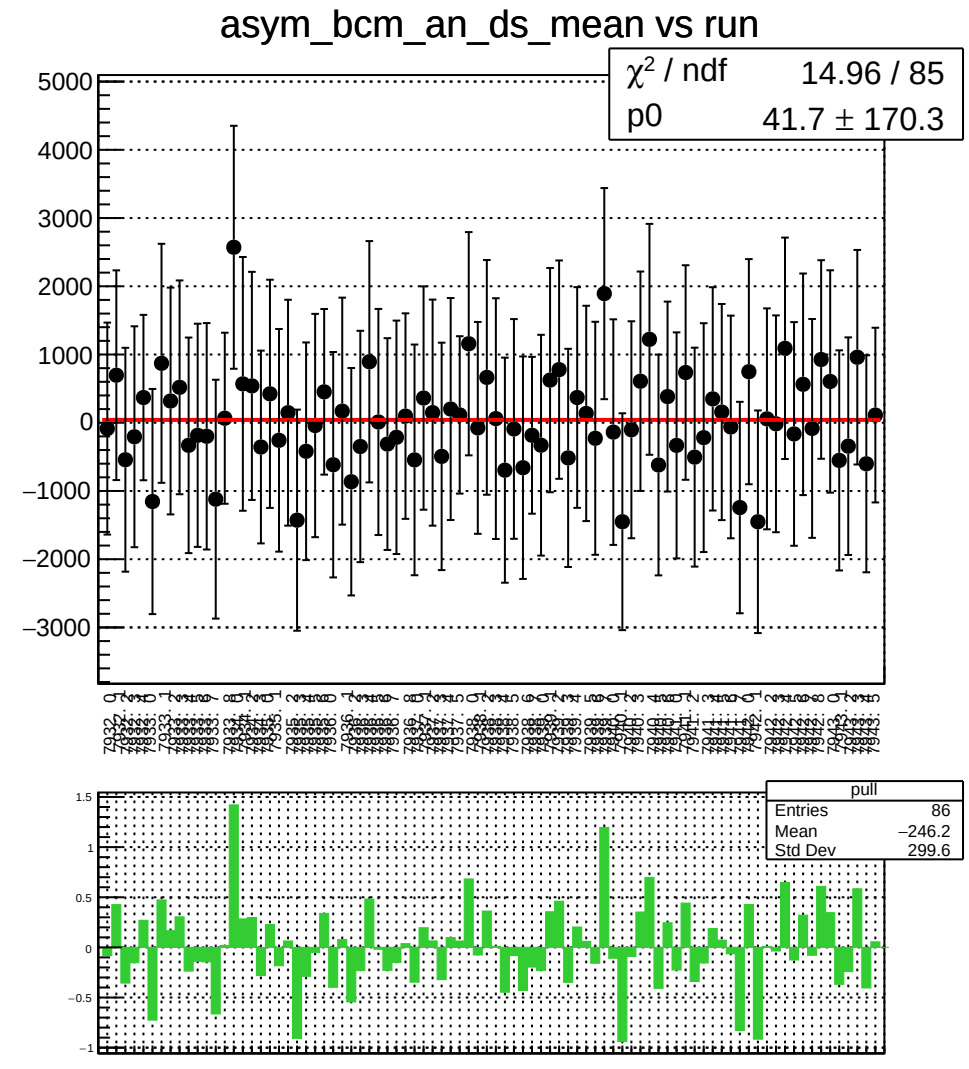

pull1D
Entries 86
Mean −0.01506
Std Dev 3.196
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

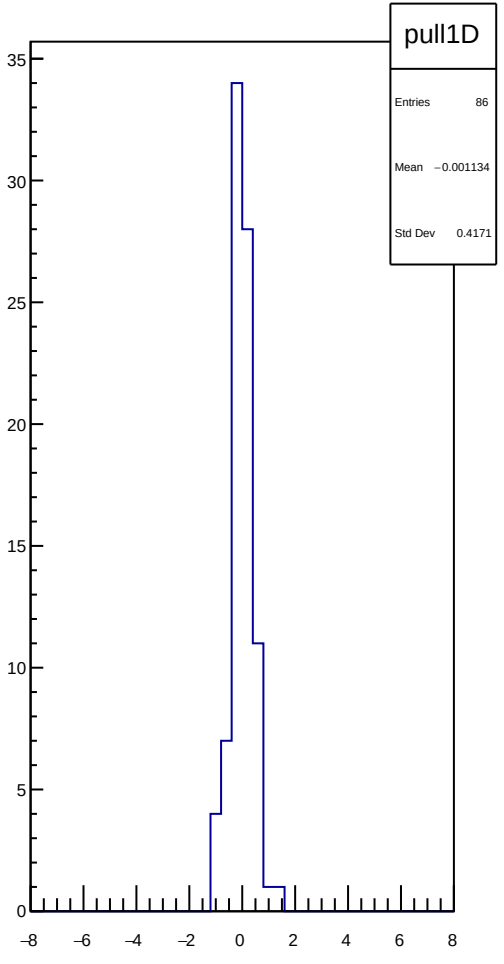

yield_bpm2i01WS_rms vs run
χ² / ndf 1430 / 85
p0 285.6 ± 0.222
300
290
280
270
260

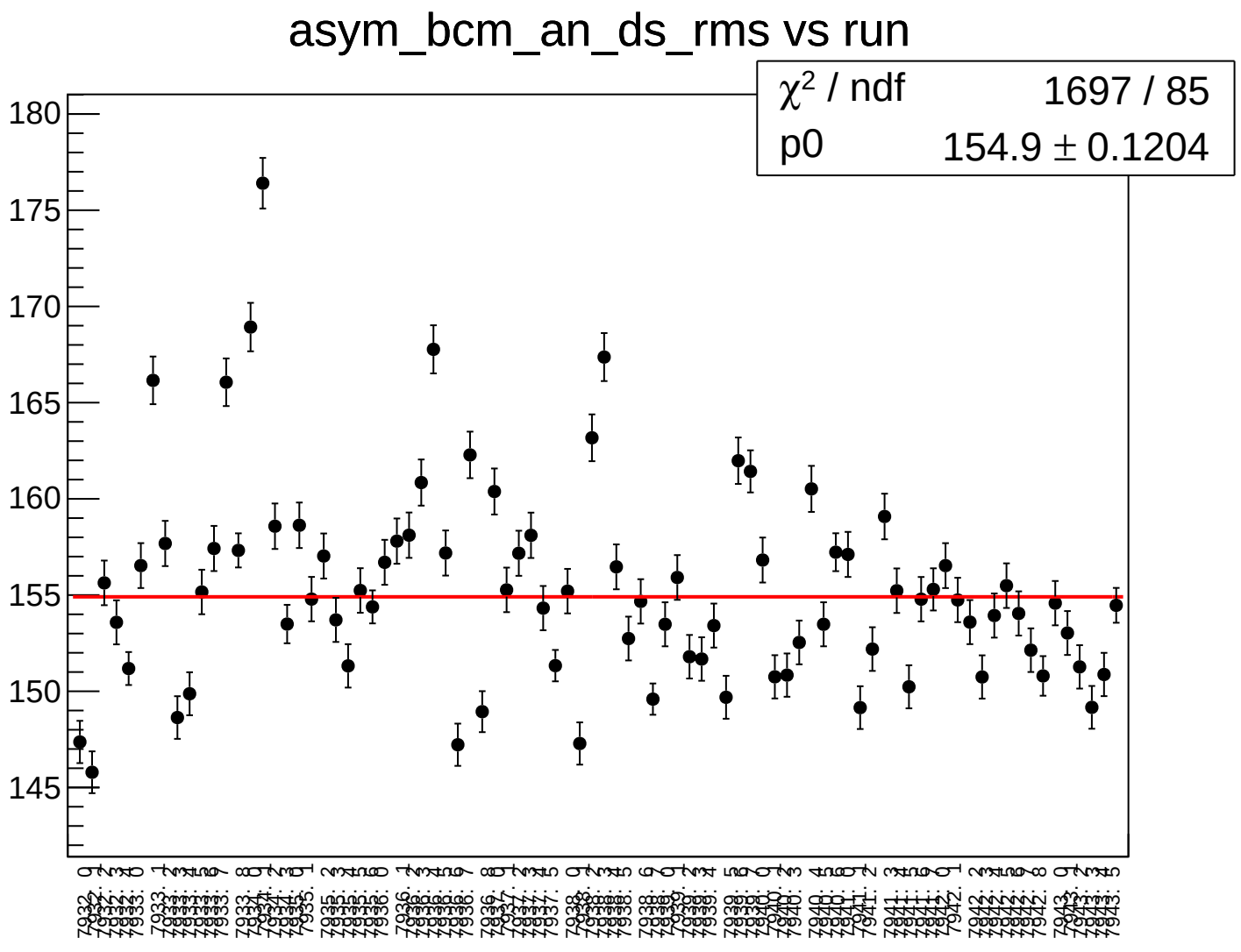

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 1.118e+04 / 85
p0 1.892e+05 ± 0.3505
189.26
189.24
189.22
189.2
189.18
189.16
189.14
189.12
189.1
189.08
pull
Entries 86
Mean 1801
Std Dev 1754
30
20
10
0
−10
−20

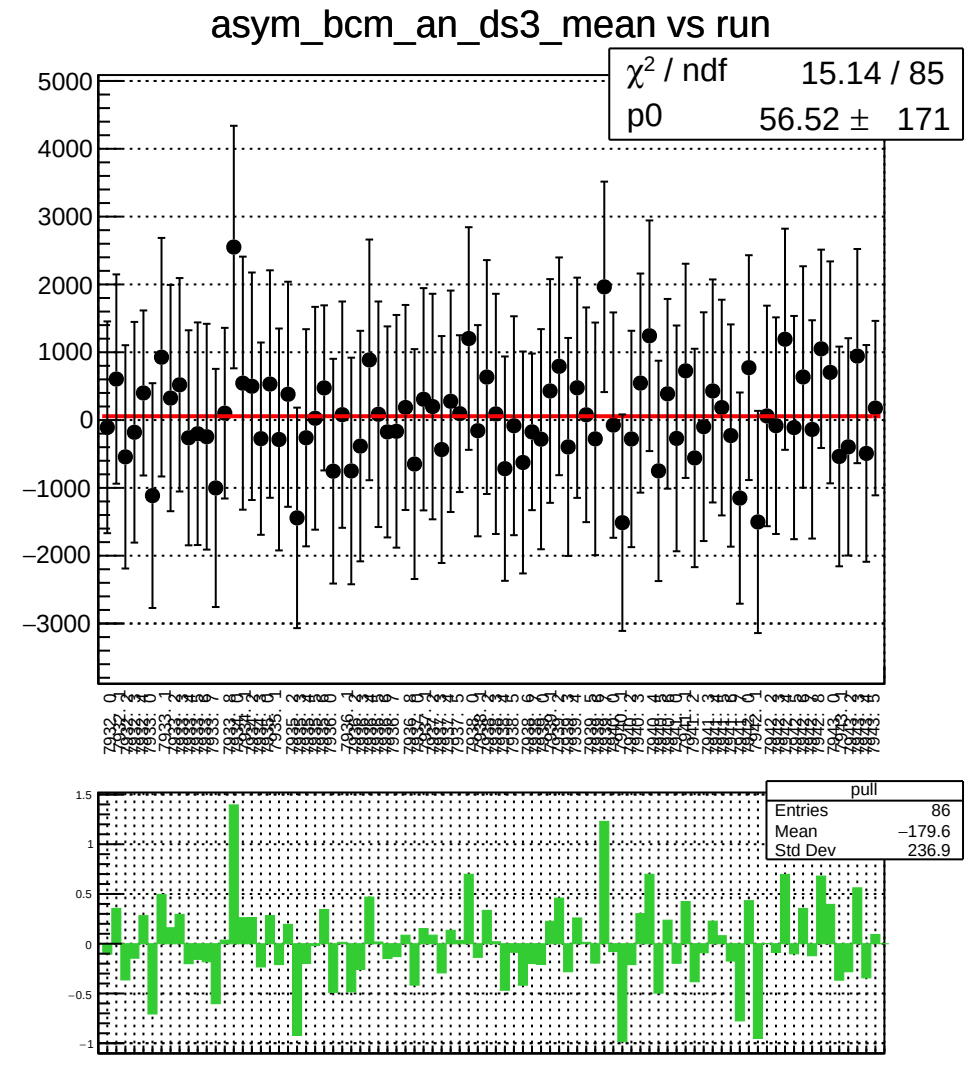

pull1D
Entries 86
Mean −0.08248
Std Dev 4.734
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

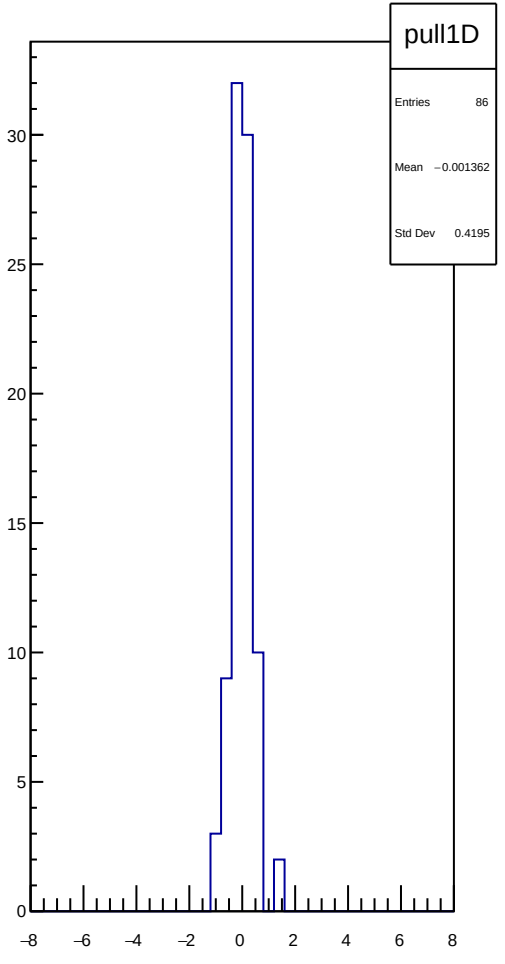

yield_bpm2i02WS_rms vs run
χ² / ndf 1367 / 85
p0 318.9 ± 0.2479
340
330
320
310
300
290

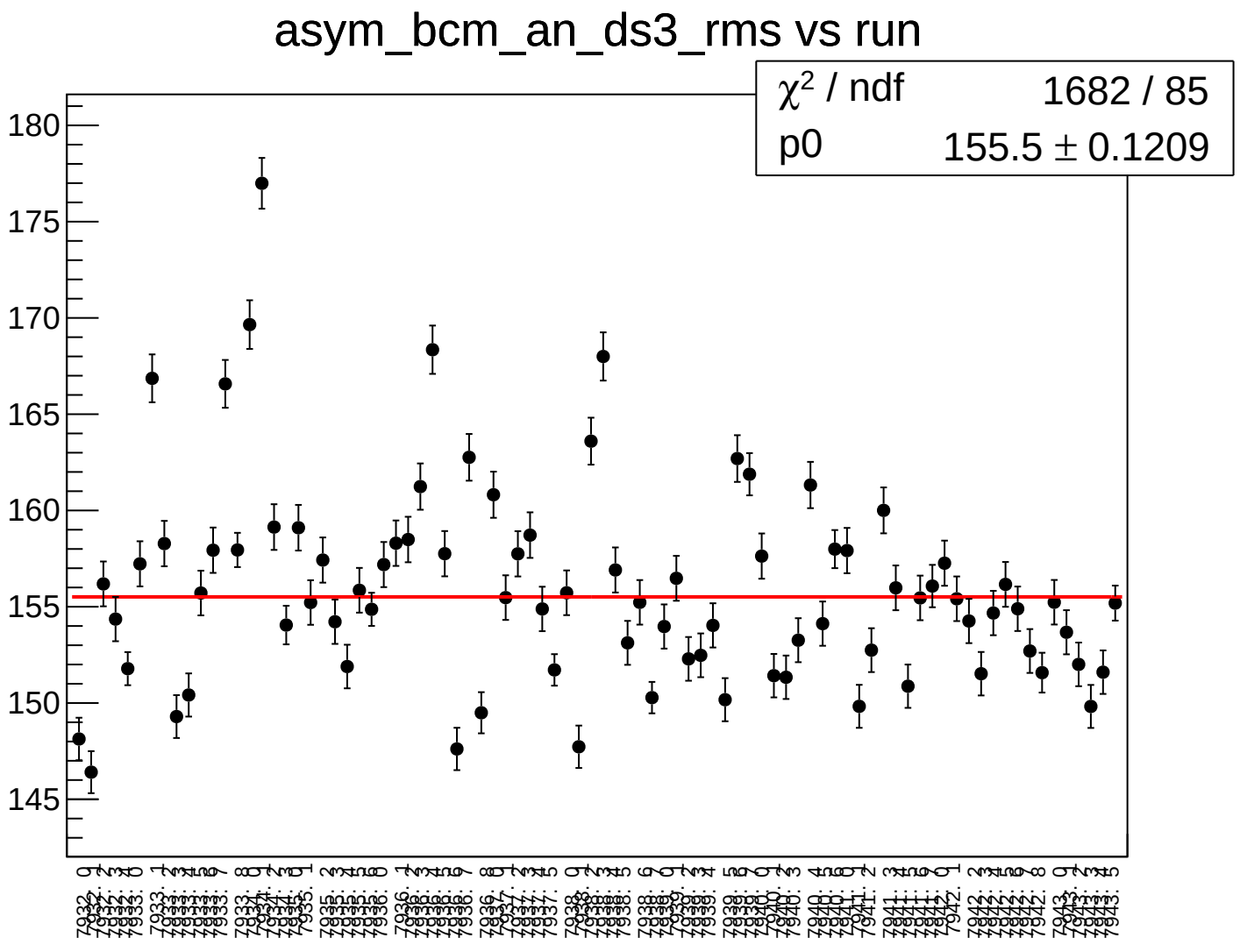

asym_bcm_an_ds_mean vs run
χ² / ndf 14.96 / 85
p0 41.7 ± 170.3
pull
Entries 86
Mean −246.2
Std Dev 299.6

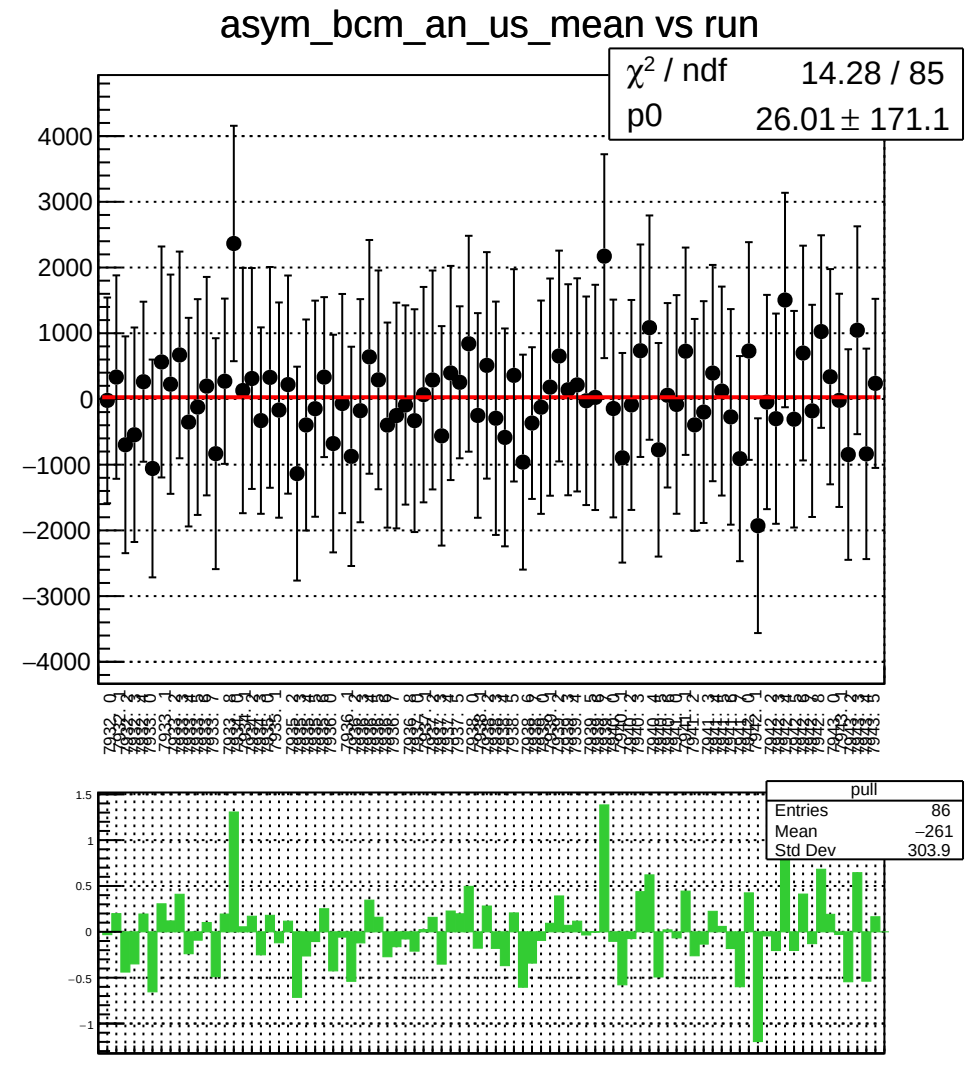

pull1D
Entries 86
Mean −0.001134
Std Dev 0.4171

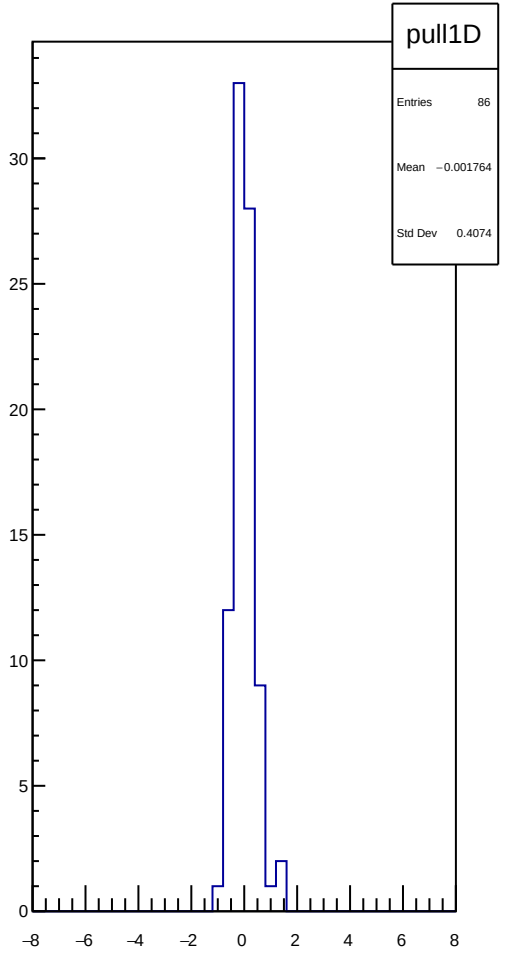

asym_bcm_an_ds_rms vs run
χ² / ndf 1697 / 85
p0 154.9 ± 0.1204
180
175
170
165
160
155
150
145

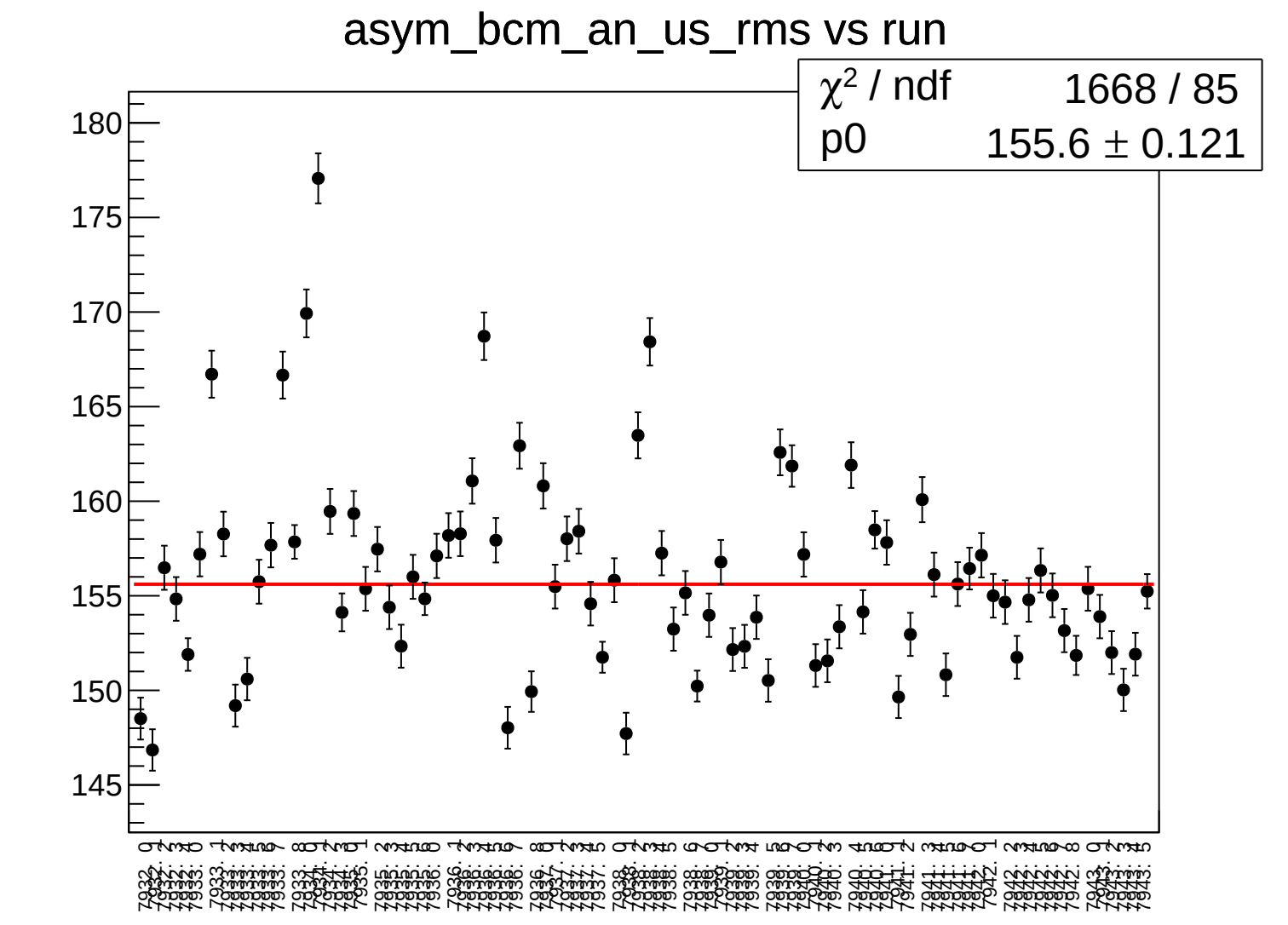

asym_bcm_an_ds3_mean vs run
χ² / ndf 15.14 / 85
p0 56.52 ± 171
pull
Entries 86
Mean −179.6
Std Dev 236.9

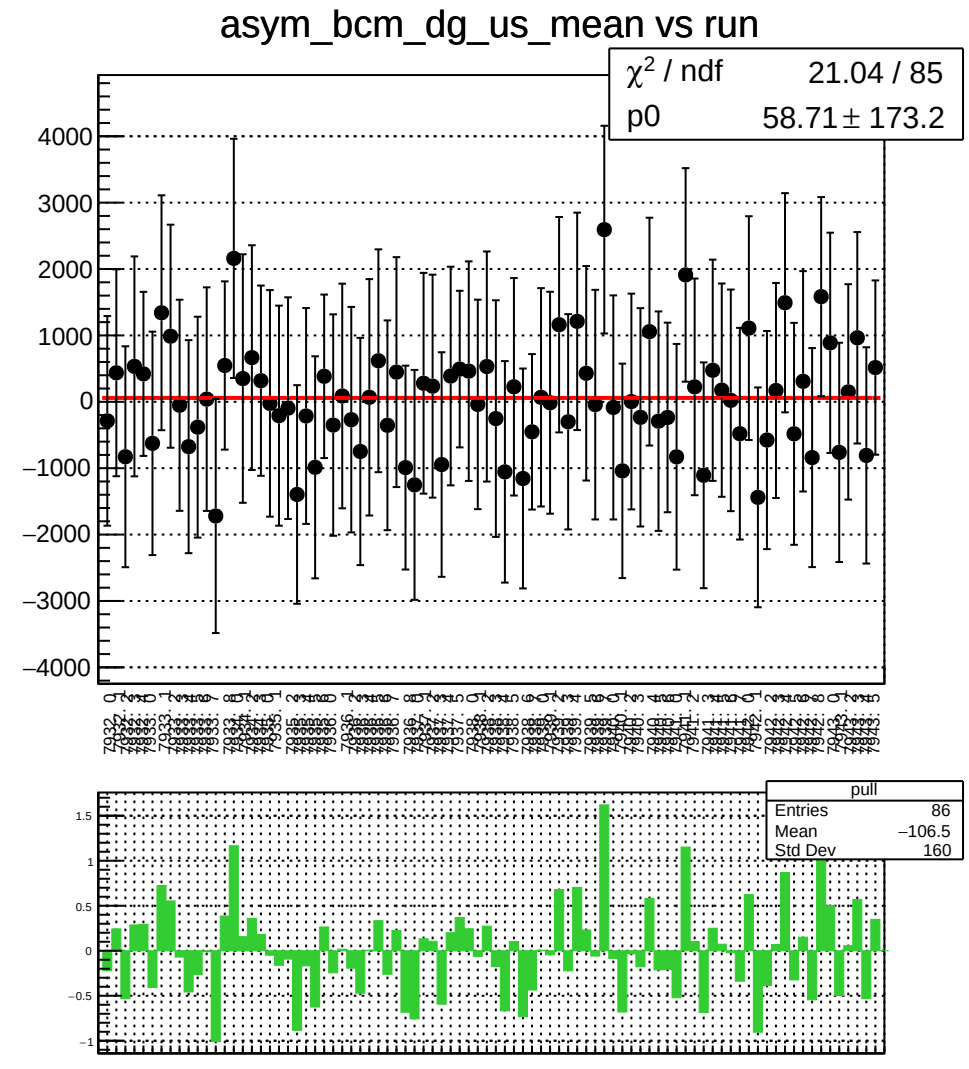

pull1D
Entries 86
Mean −0.001362
Std Dev 0.4195

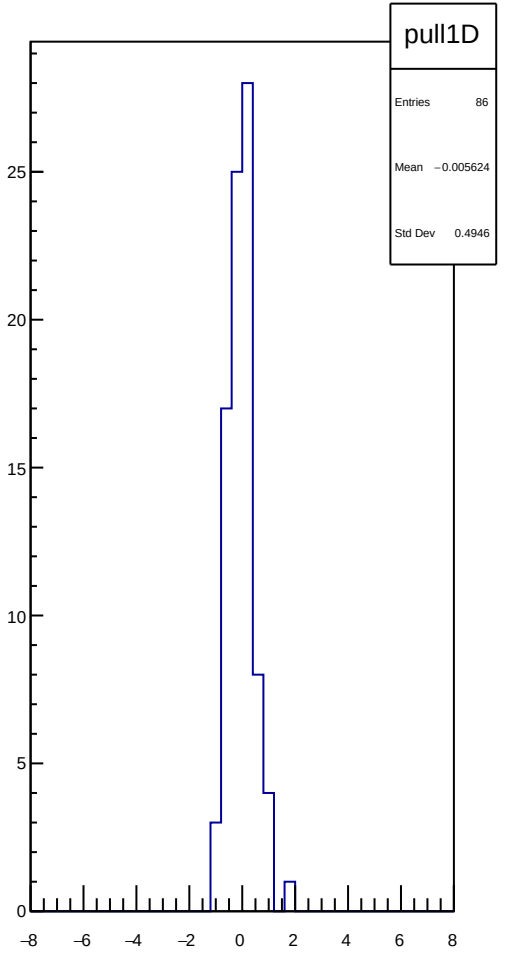

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 1682 / 85
p0 155.5 ± 0.1209
180
175
170
165
160
155
150
145

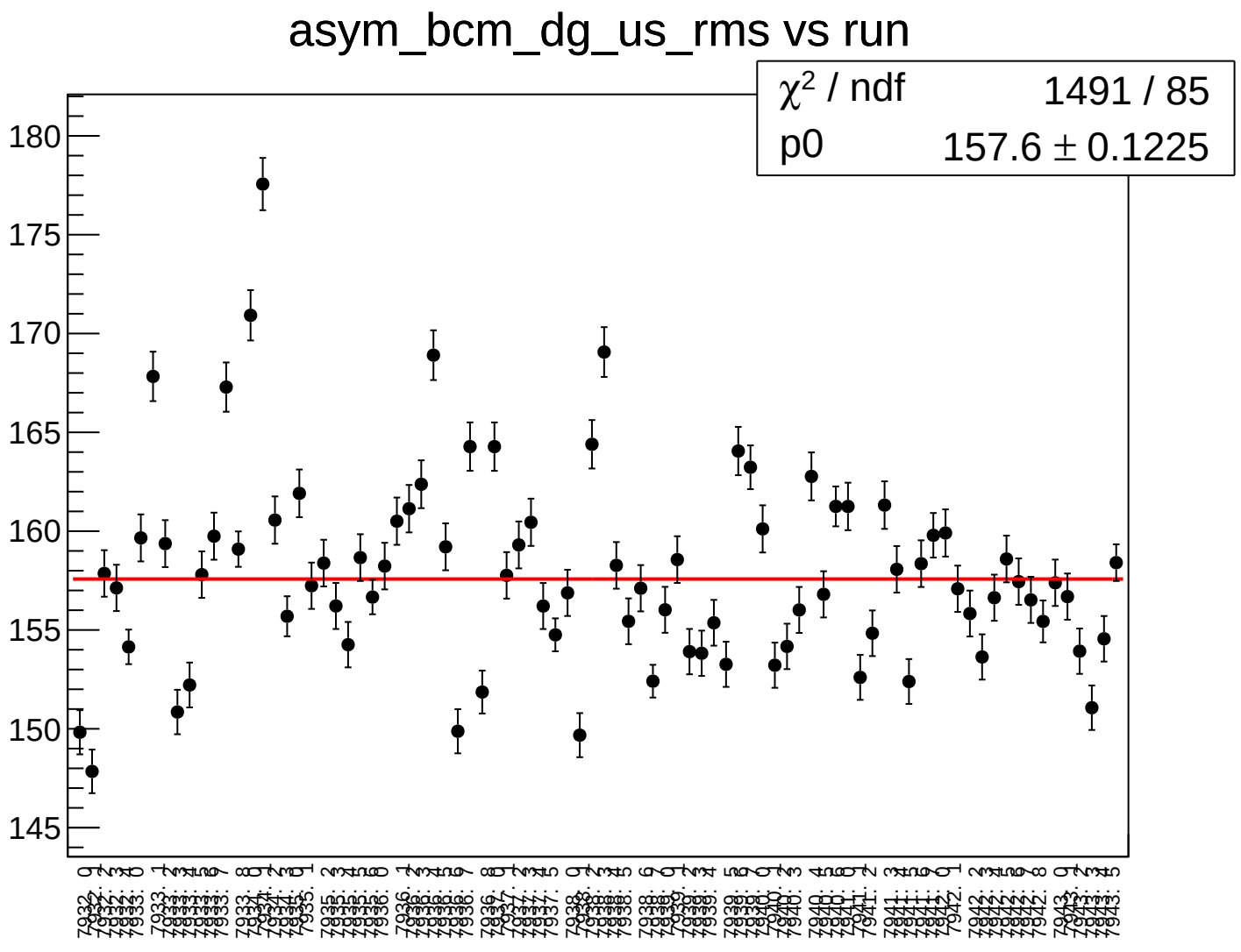

asym_bcm_an_us_mean vs run
χ² / ndf 14.28 / 85
p0 26.01 ± 171.1
pull
Entries 86
Mean −261
Std Dev 303.9

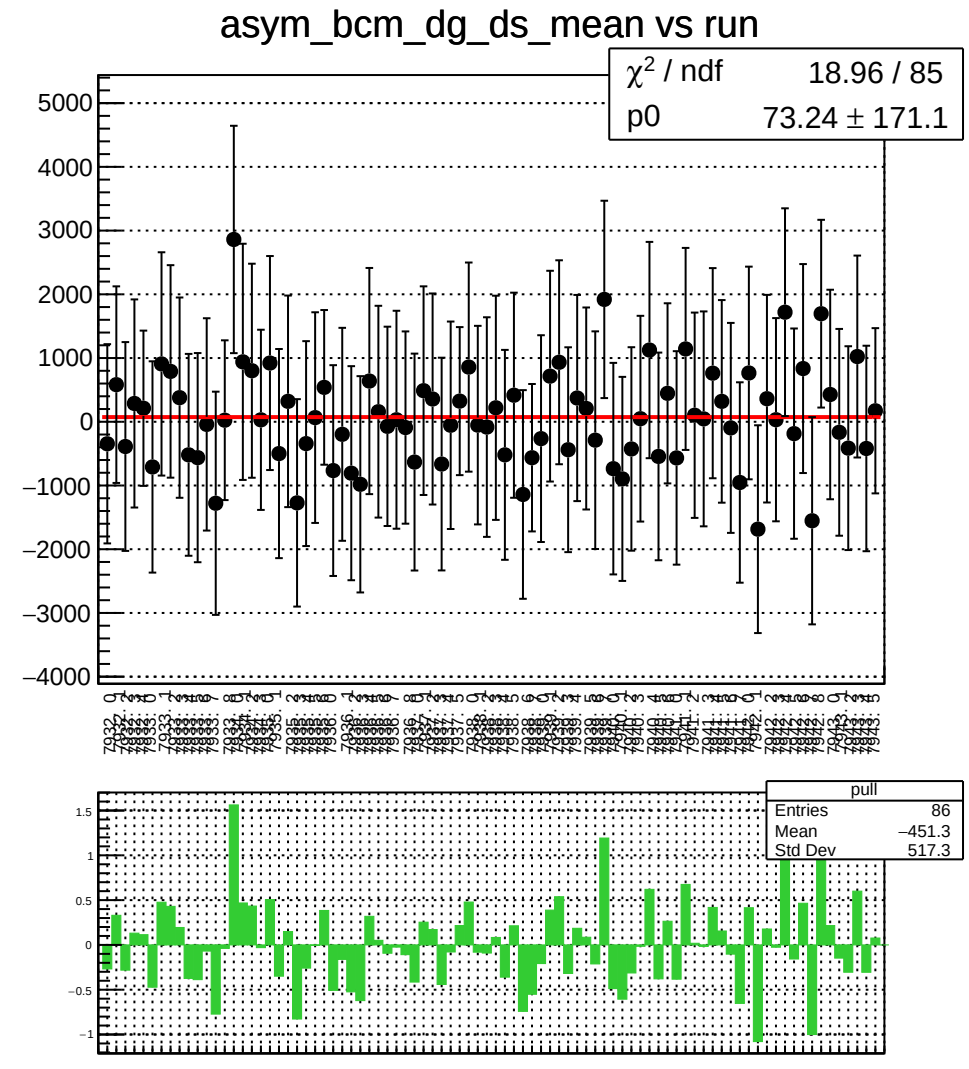

pull1D
Entries 86
Mean −0.001764
Std Dev 0.4074

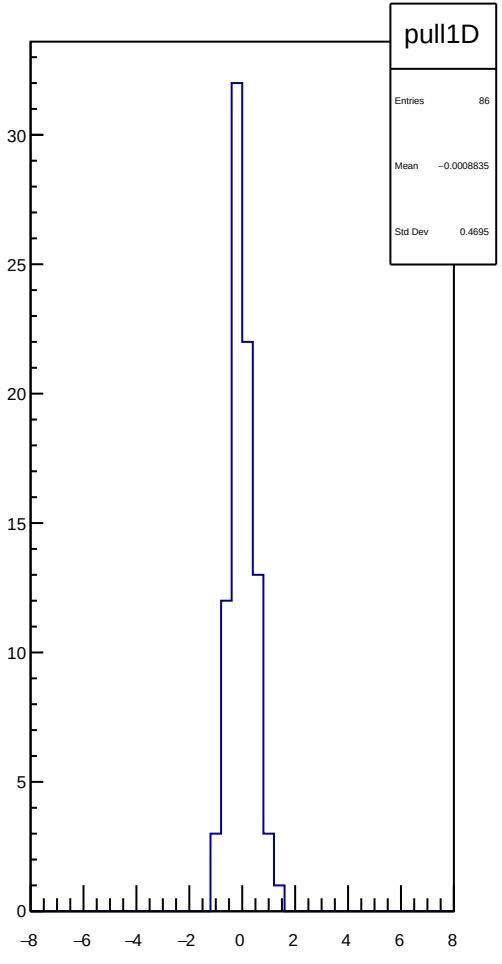

asym_bcm_an_us_rms vs run
χ² / ndf 1668 / 85
p0 155.6 ± 0.121
180
175
170
165
160
155
150
145

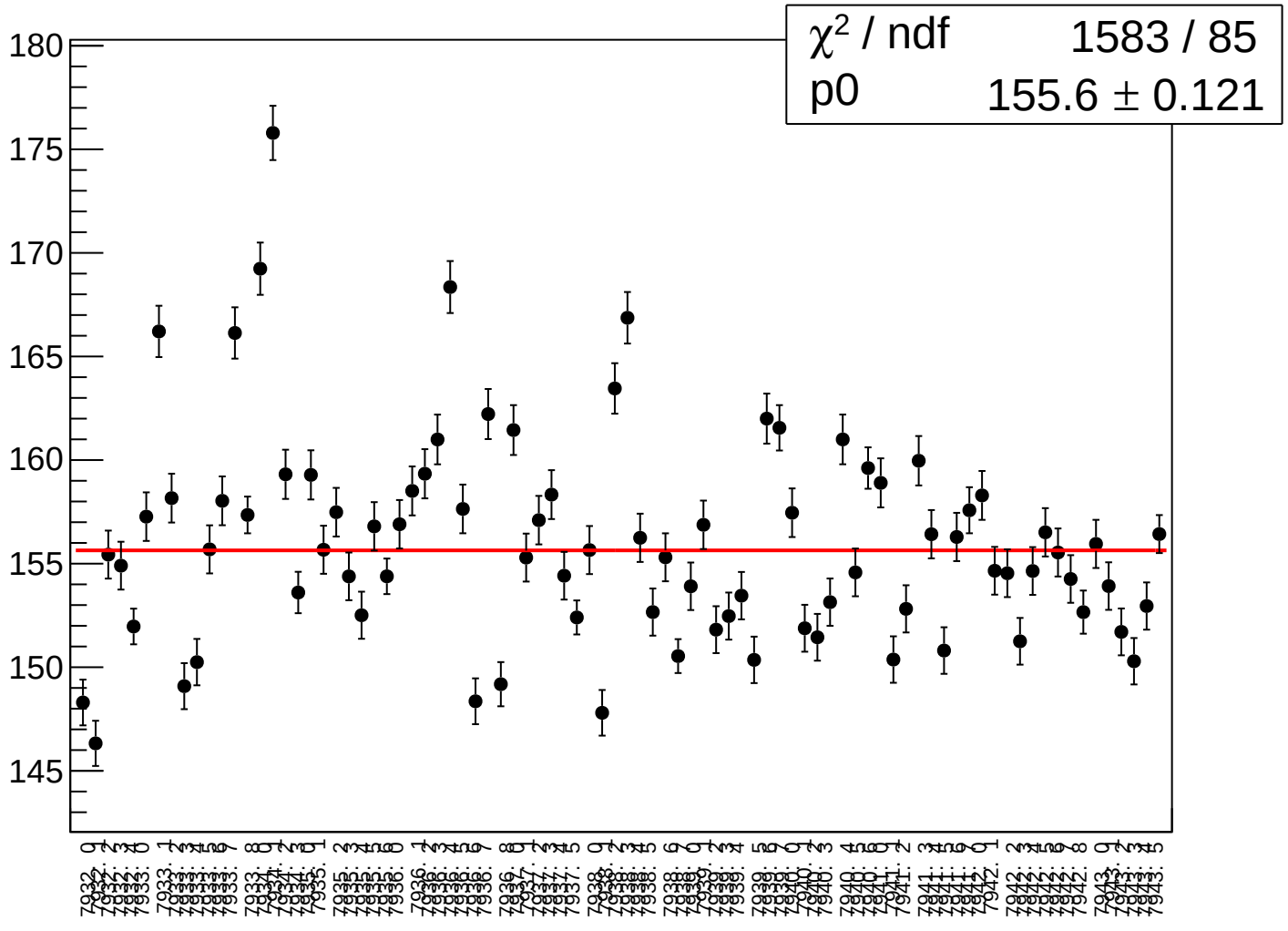

asym_bcm_dg_us_mean vs run
χ² / ndf 21.04 / 85
p0 58.71 ± 173.2
pull
Entries 86
Mean −106.5
Std Dev 160

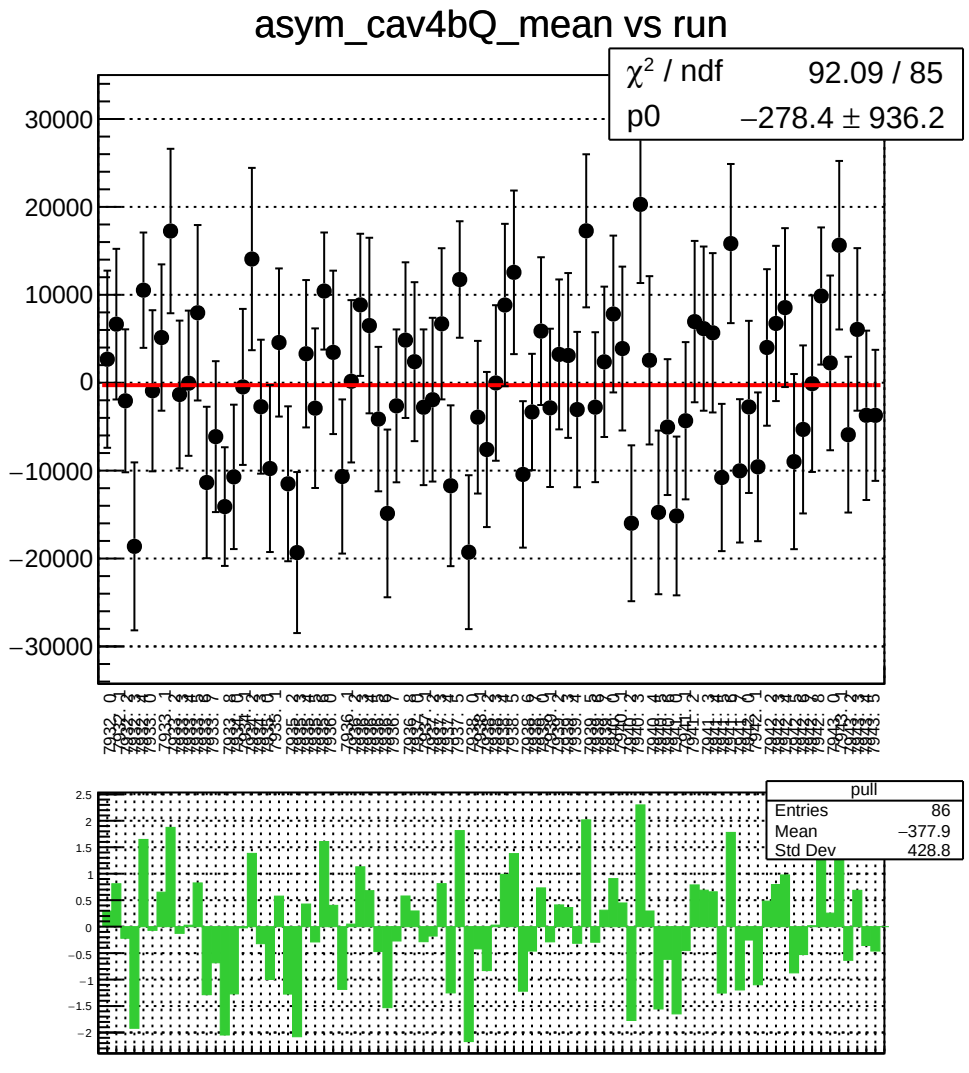

pull1D
Entries 86
Mean −0.005624
Std Dev 0.4946

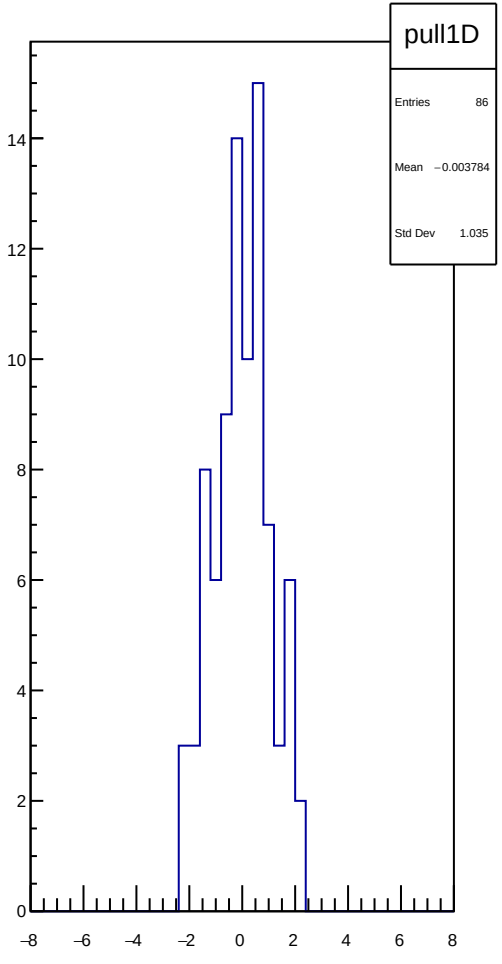

asym_bcm_dg_us_rms vs run
χ² / ndf 1491 / 85
p0 157.6 ± 0.1225
180
175
170
165
160
155
150
145

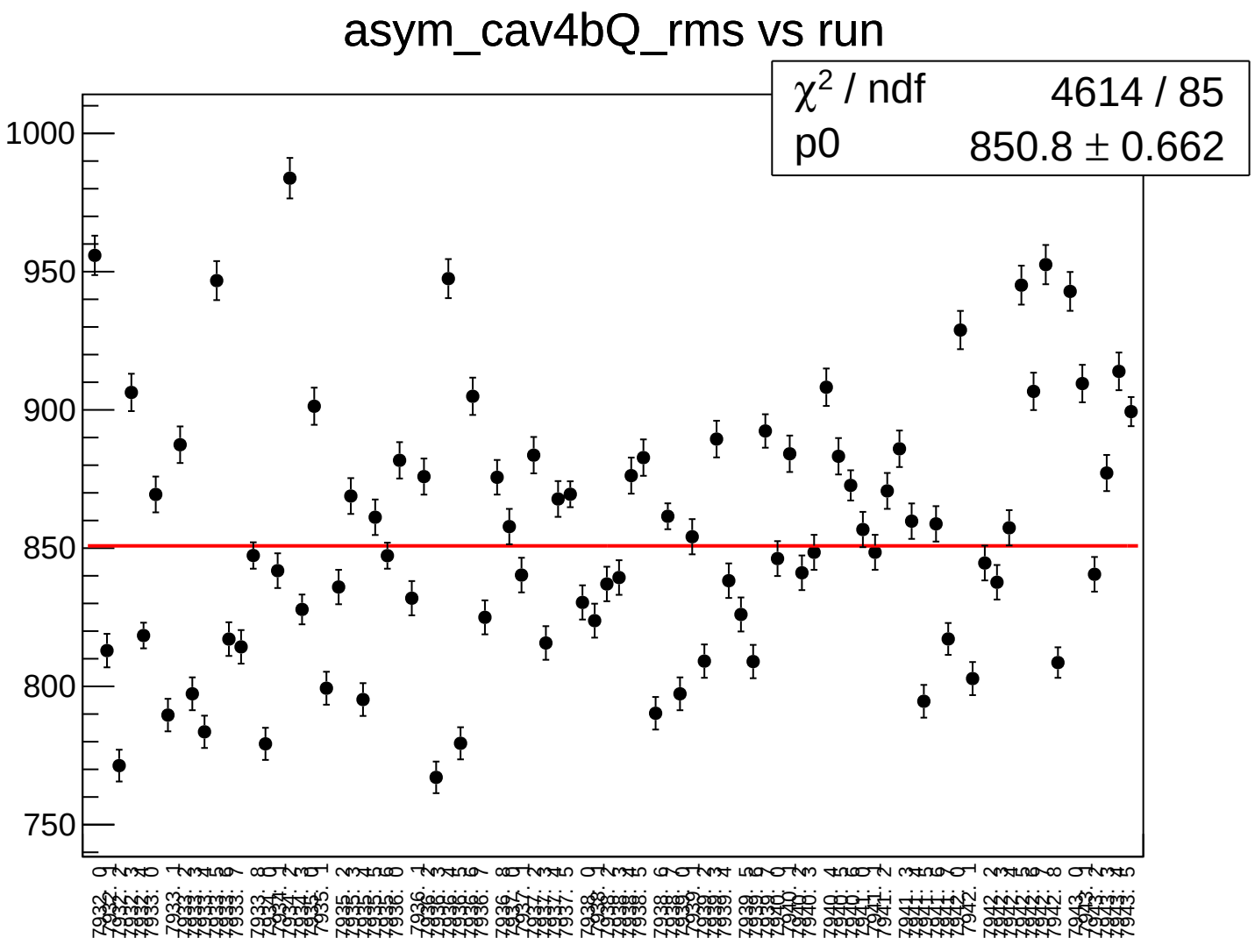

asym_bcm_dg_ds_mean vs run
χ² / ndf 18.96 / 85
p0 73.24 ± 171.1
pull
Entries 86
Mean −451.3
Std Dev 517.3

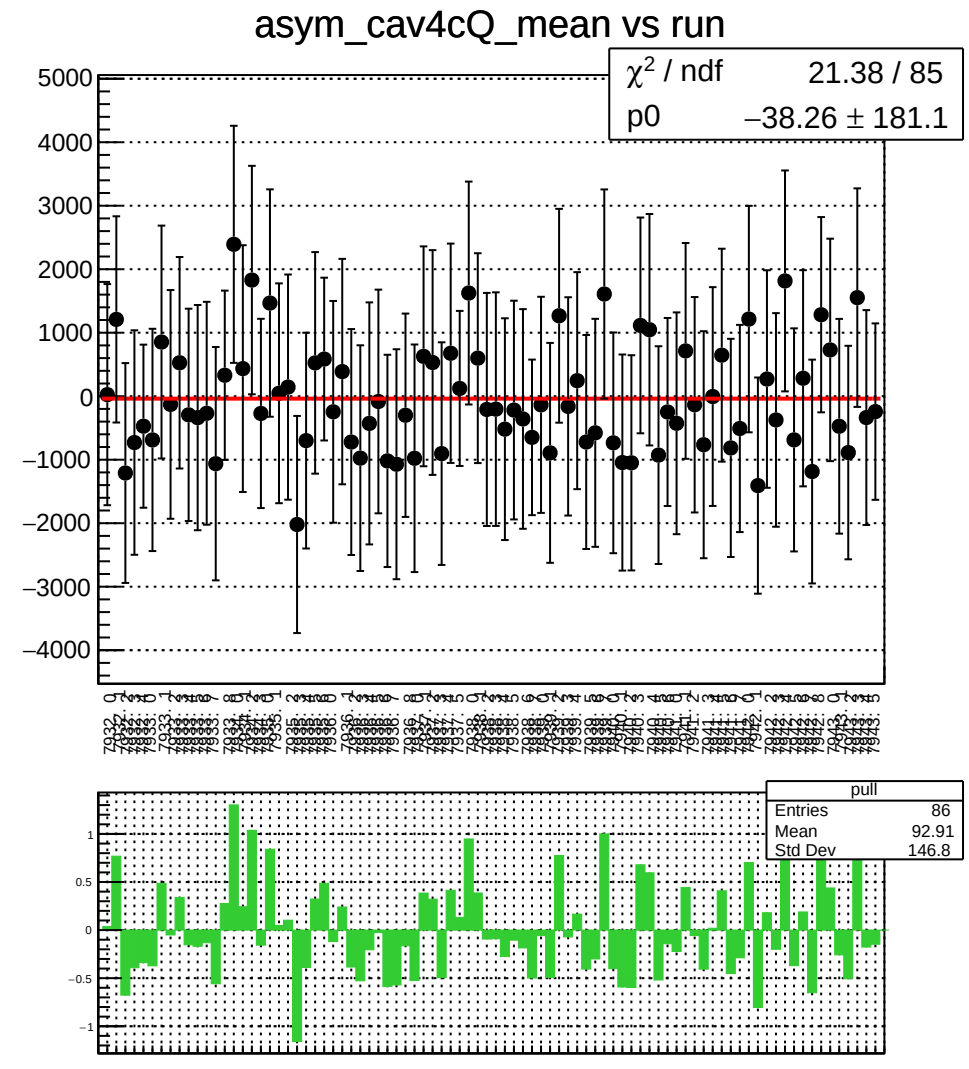

pull1D
Entries 86
Mean −0.0008835
Std Dev 0.4695

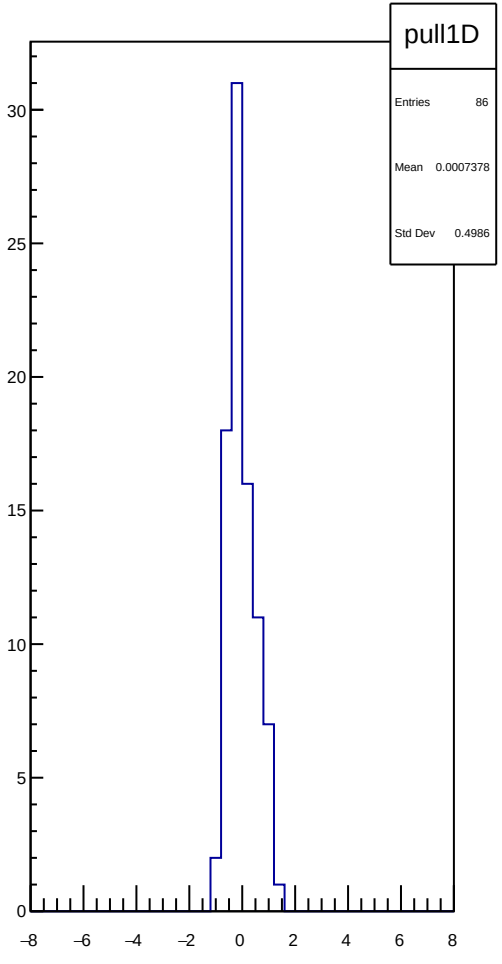

asym_bcm_dg_ds_rms vs run
χ² / ndf 1583 / 85
p0 155.6 ± 0.121
180
175
170
165
160
155
150
145

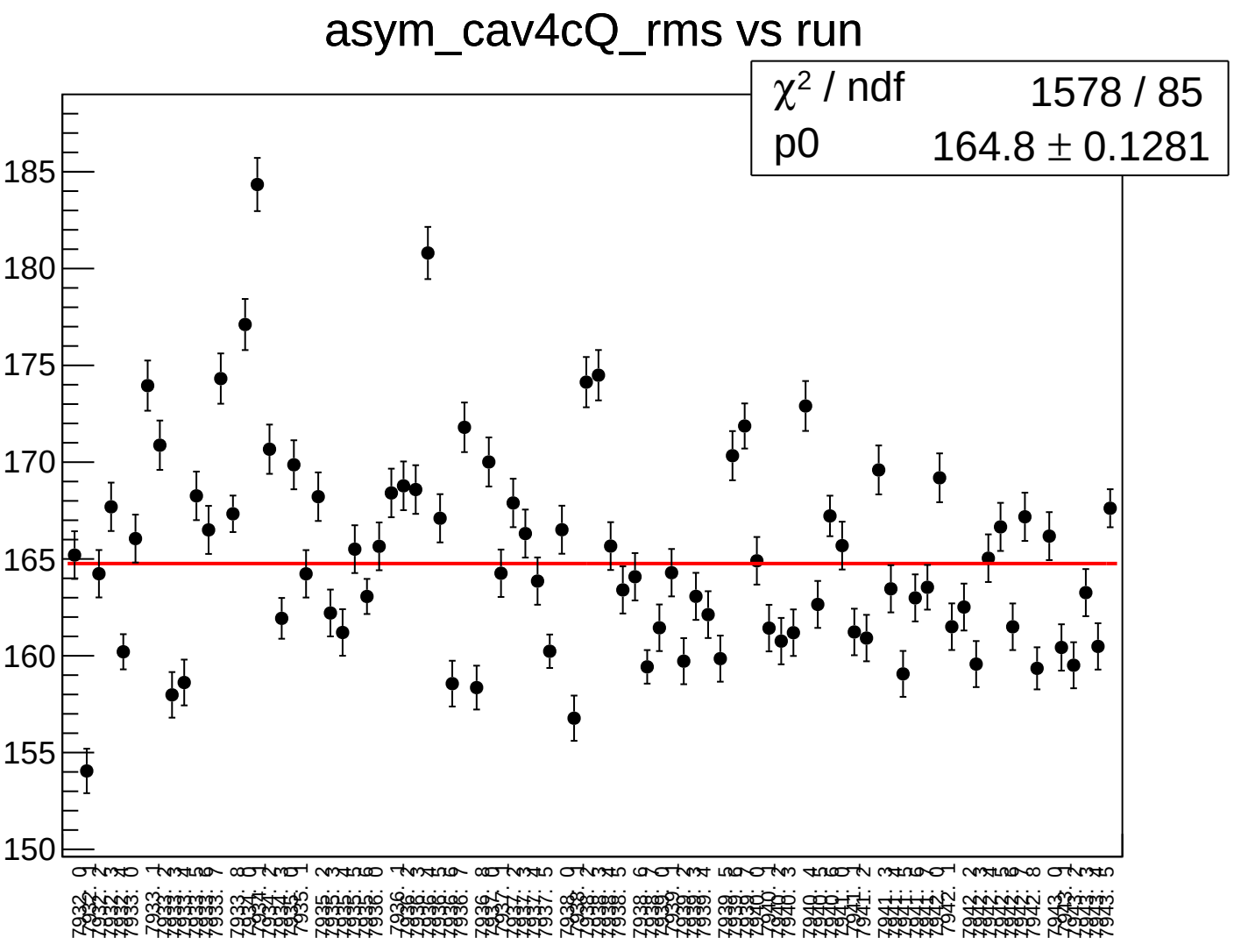

asym_cav4bQ_mean vs run
χ² / ndf 92.09 / 85
p0 −278.4 ± 936.2
pull
Entries 86
Mean −377.9
Std Dev 428.8

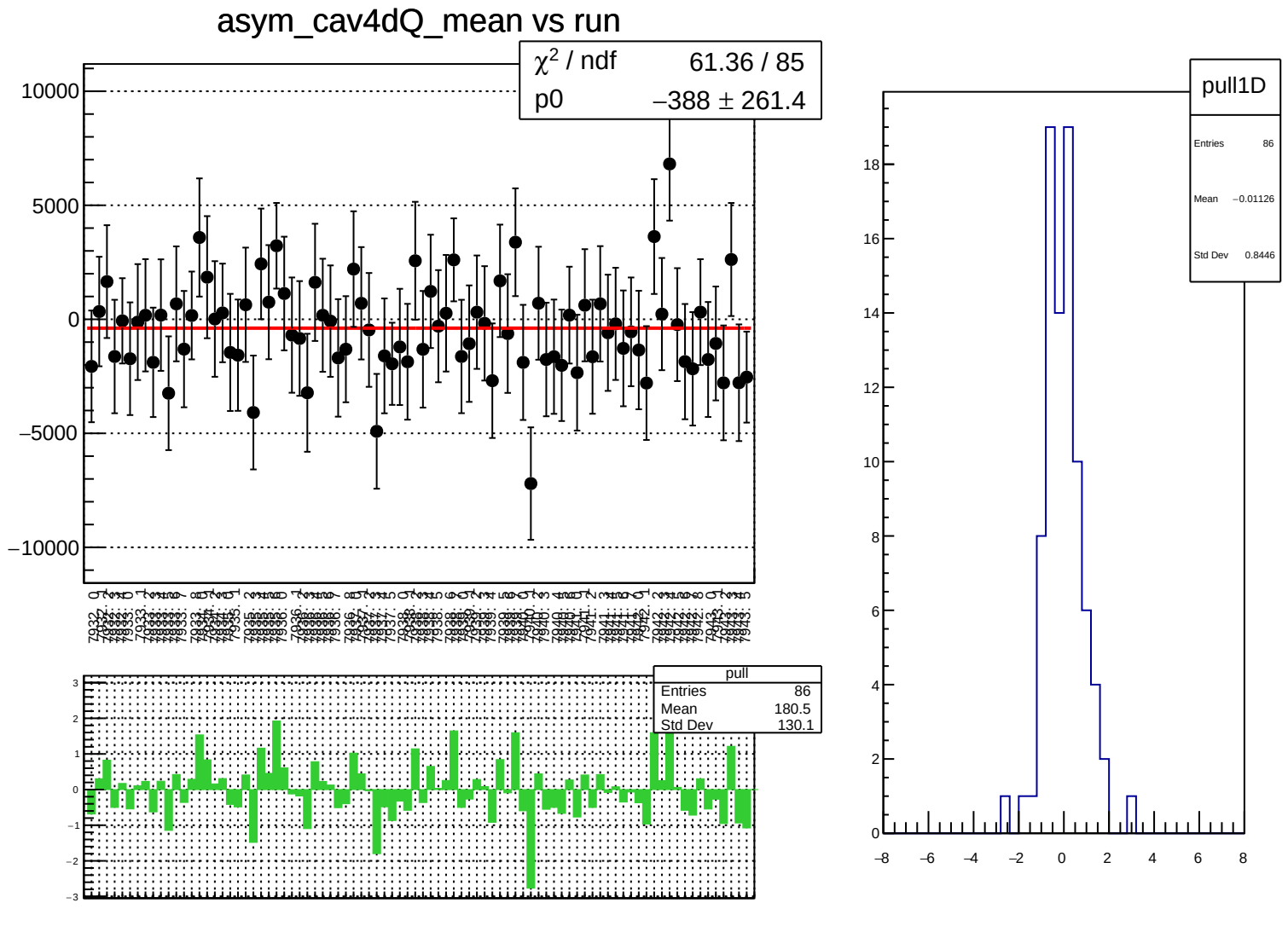

pull1D
Entries 86
Mean −0.003784
Std Dev 1.035

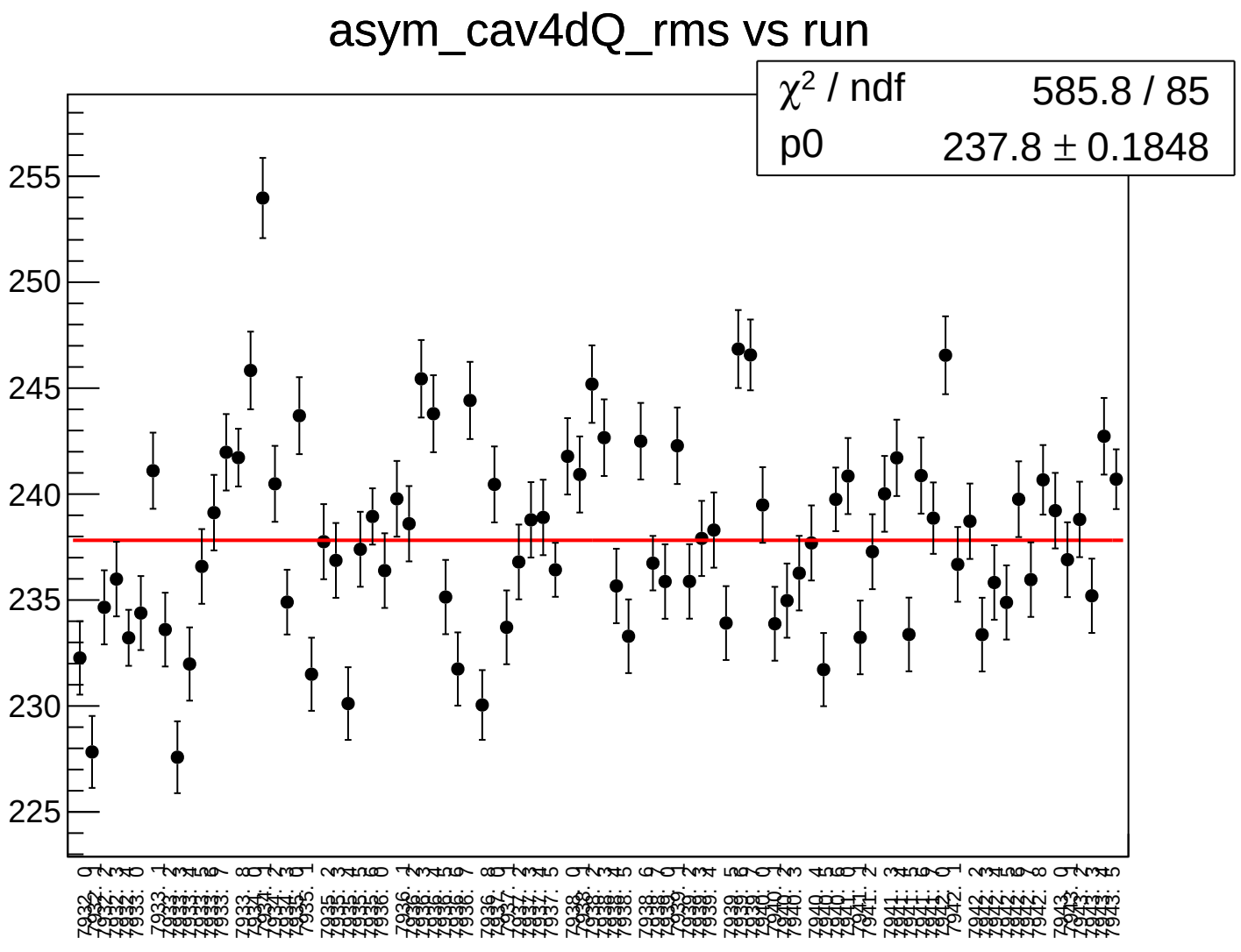

asym_cav4bQ_rms vs run
χ² / ndf 4614 / 85
p0 850.8 ± 0.662
1000
950
900
850
800
750

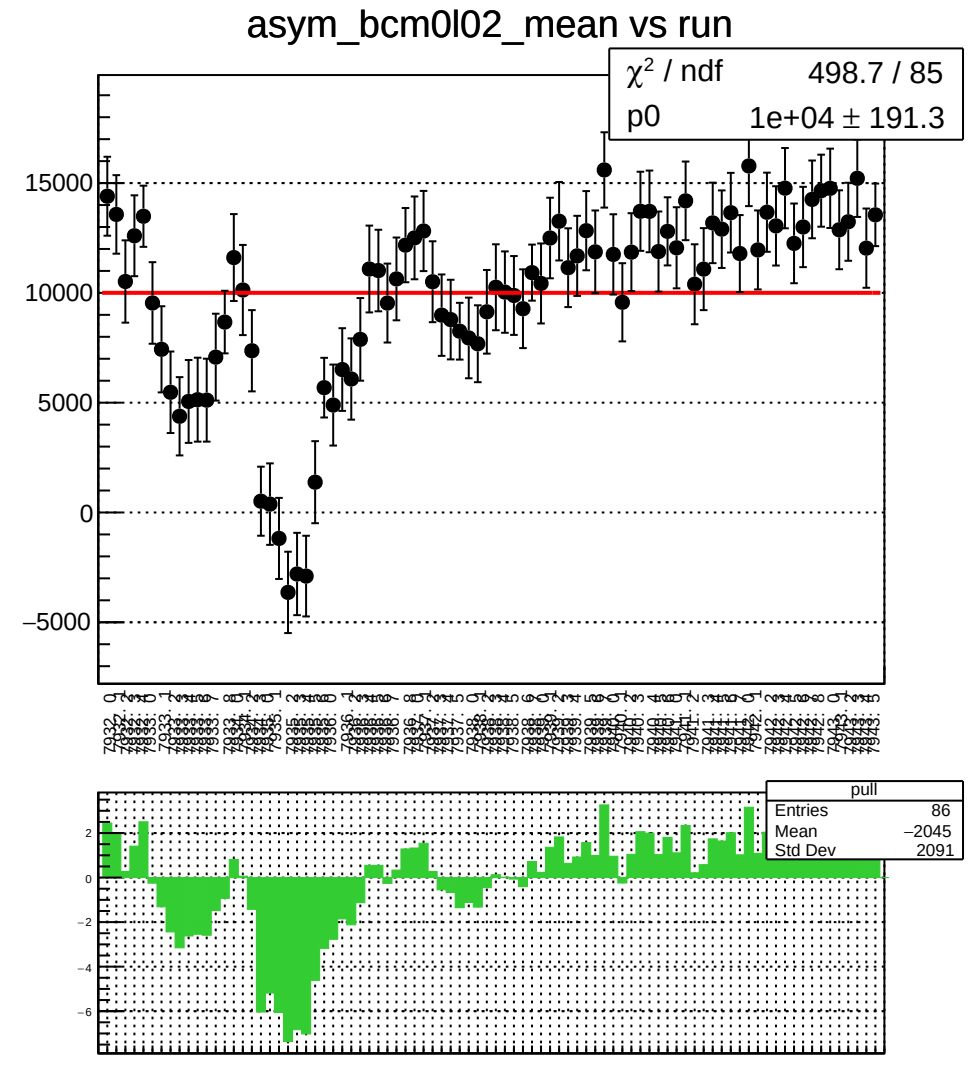

asym_cav4cQ_mean vs run
χ² / ndf 21.38 / 85
p0 −38.26 ± 181.1
pull
Entries 86
Mean 92.91
Std Dev 146.8

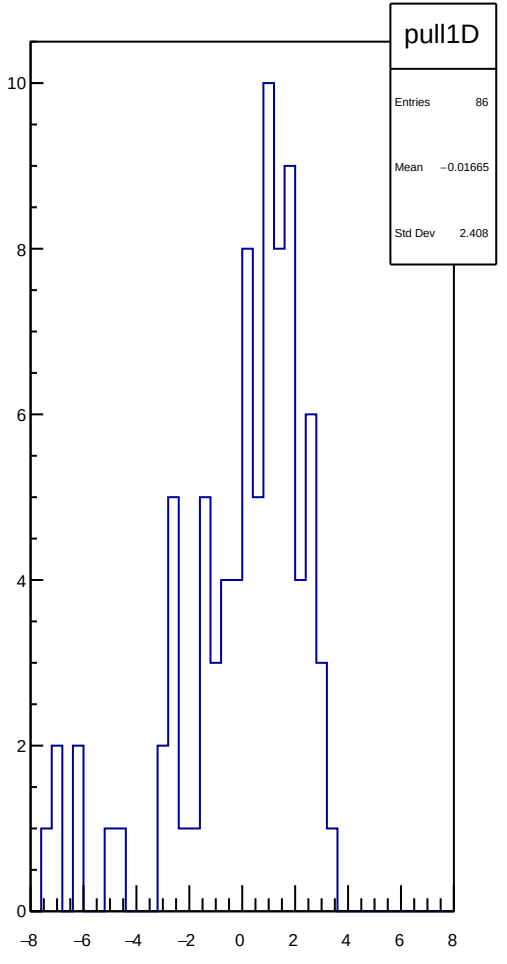

pull1D
Entries 86
Mean 0.0007378
Std Dev 0.4986

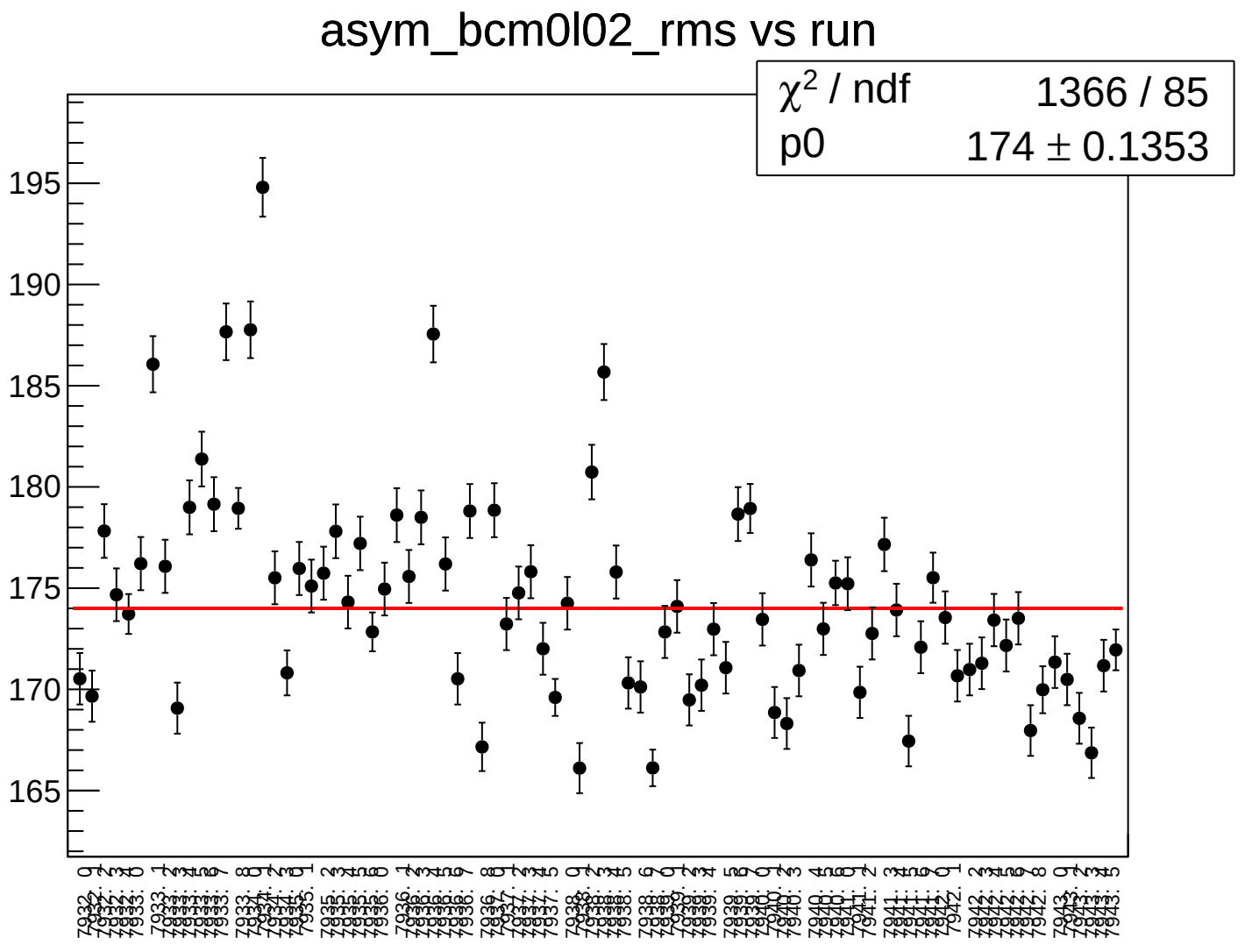

asym_cav4cQ_rms vs run
χ² / ndf 1578 / 85
p0 164.8 ± 0.1281
185
180
175
170
165
160
155
150

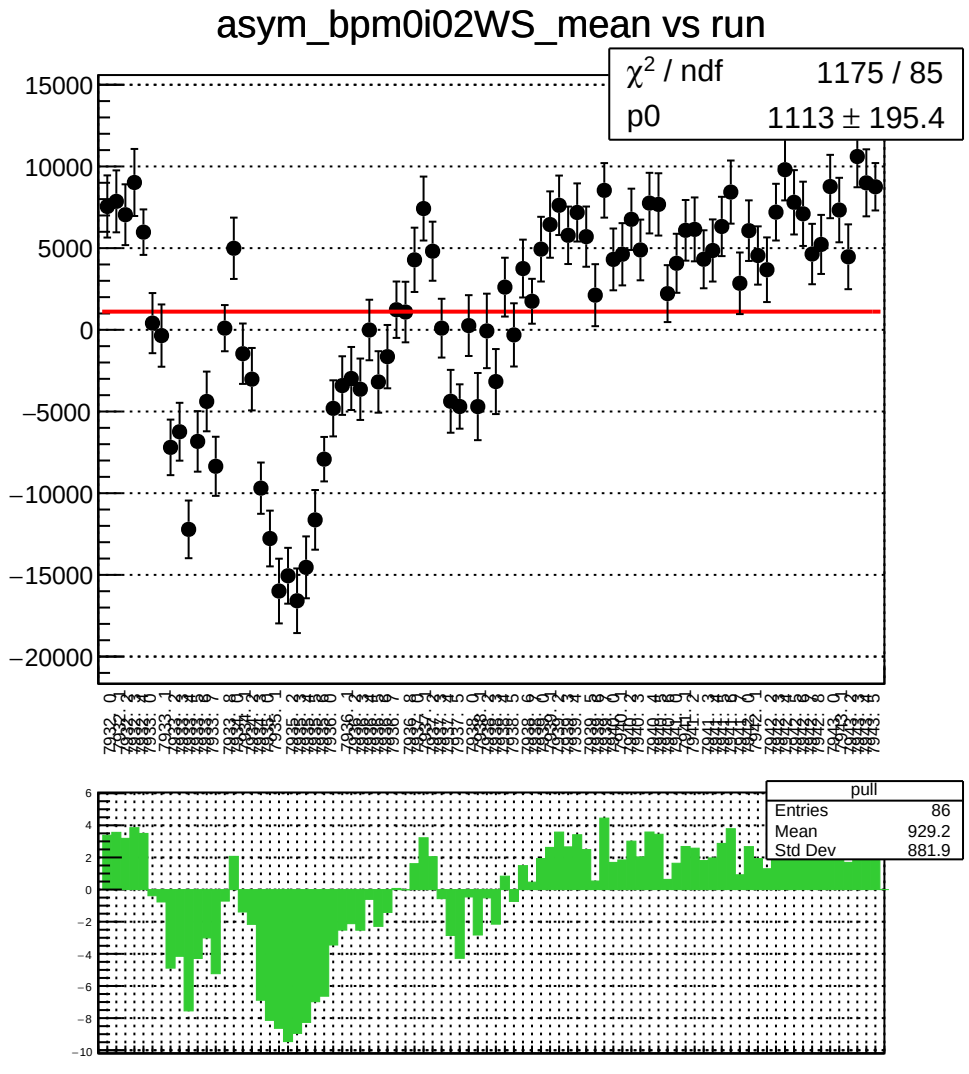

asym_cav4dQ_mean vs run
χ² / ndf 61.36 / 85
p0 −388 ± 261.4
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 180.5
Std Dev 130.1
3
2
1
0
−1
−2
−3
pull1D
Entries 86
Mean −0.01126
Std Dev 0.8446
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

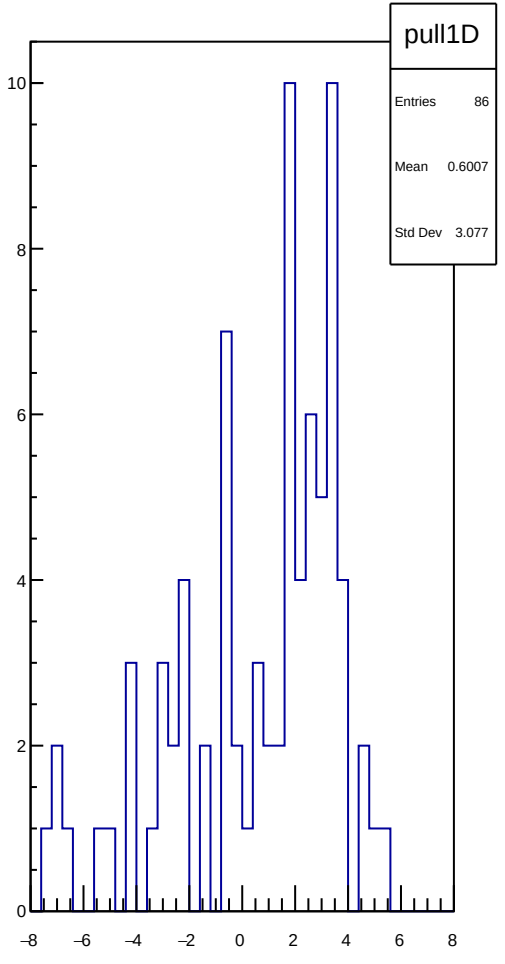

asym_cav4dQ_rms vs run
χ² / ndf 585.8 / 85
p0 237.8 ± 0.1848
255
250
245
240
235
230
225

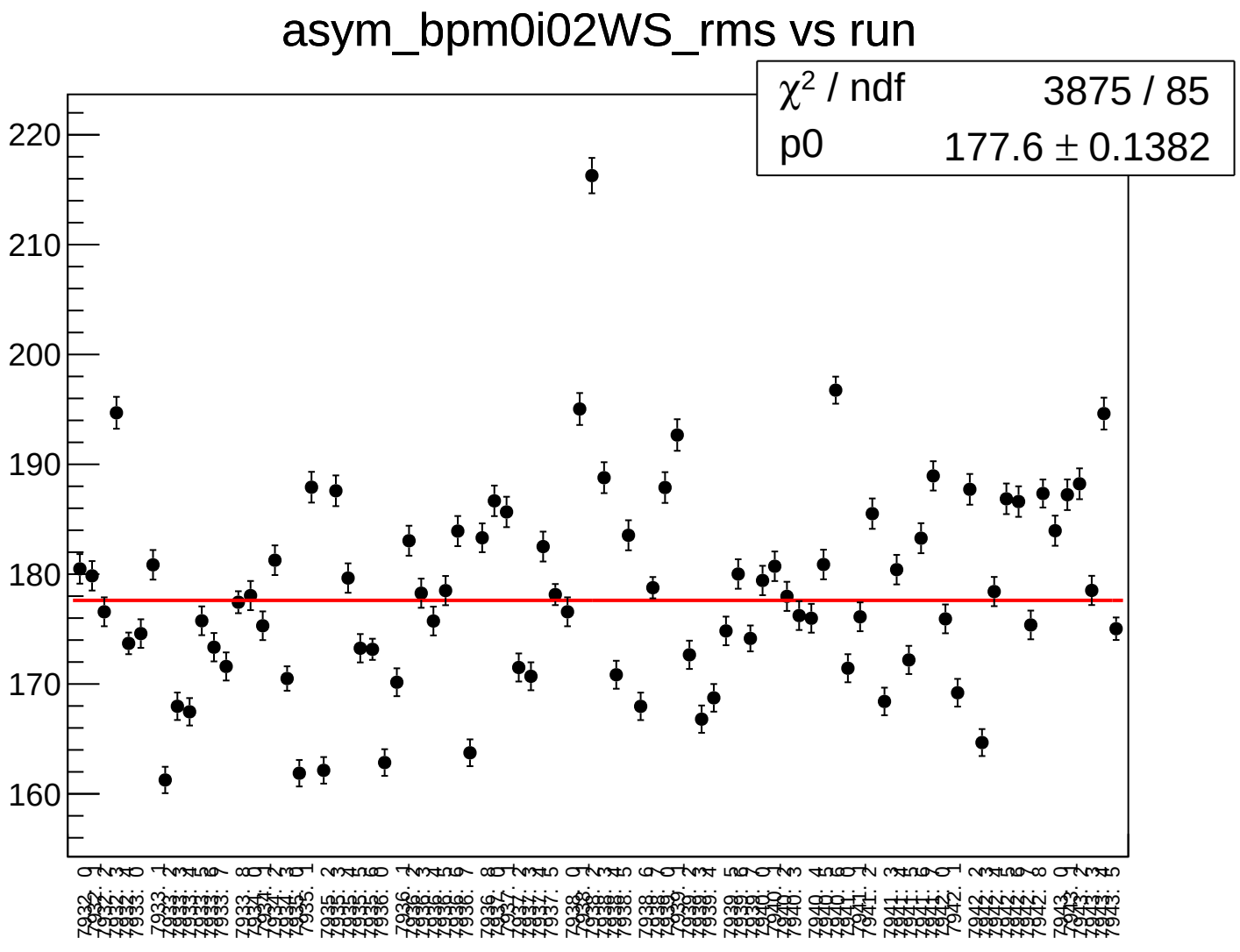

asym_bcm0l02_mean vs run
χ² / ndf 498.7 / 85
p0 1e+04 ± 191.3
15000
10000
5000
0
−5000
pull
Entries 86
Mean −2045
Std Dev 2091
2
0
−2
−4
−6

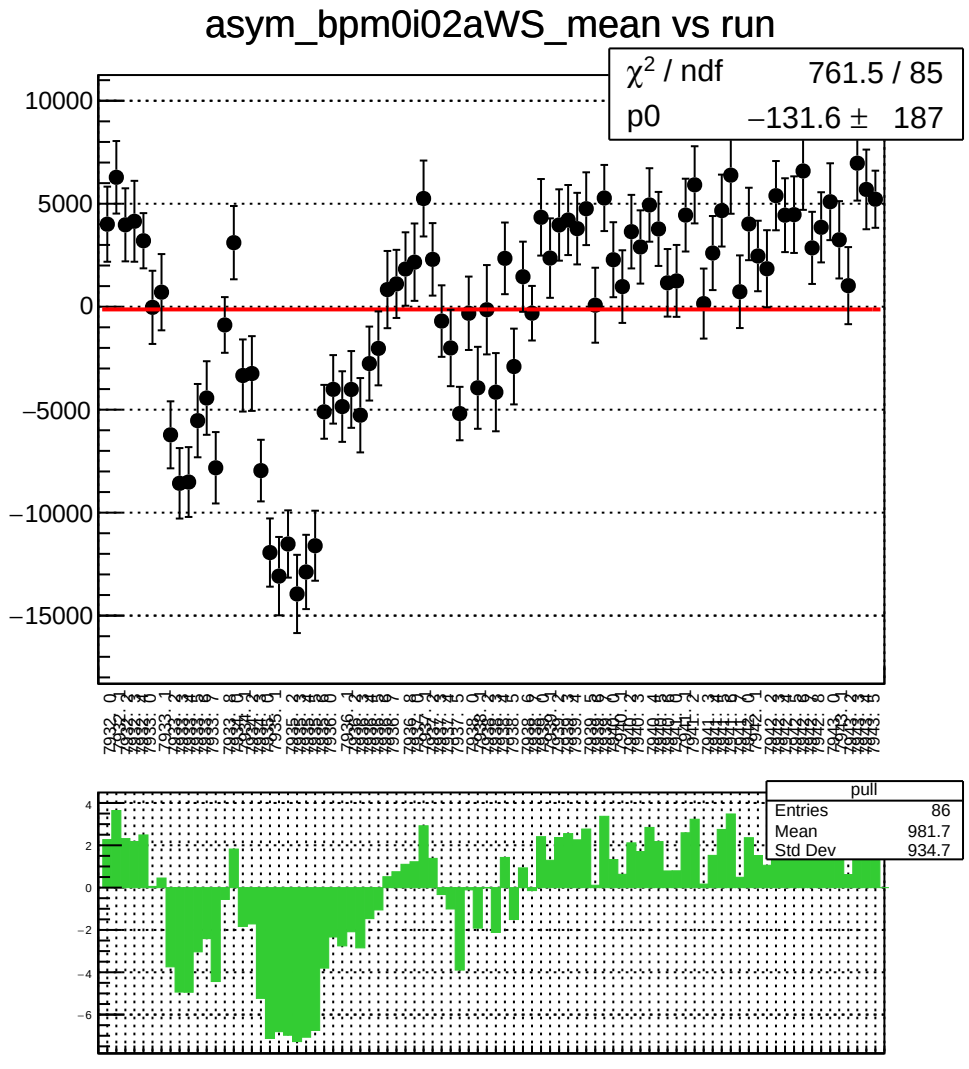

pull1D
Entries 86
Mean −0.01665
Std Dev 2.408
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

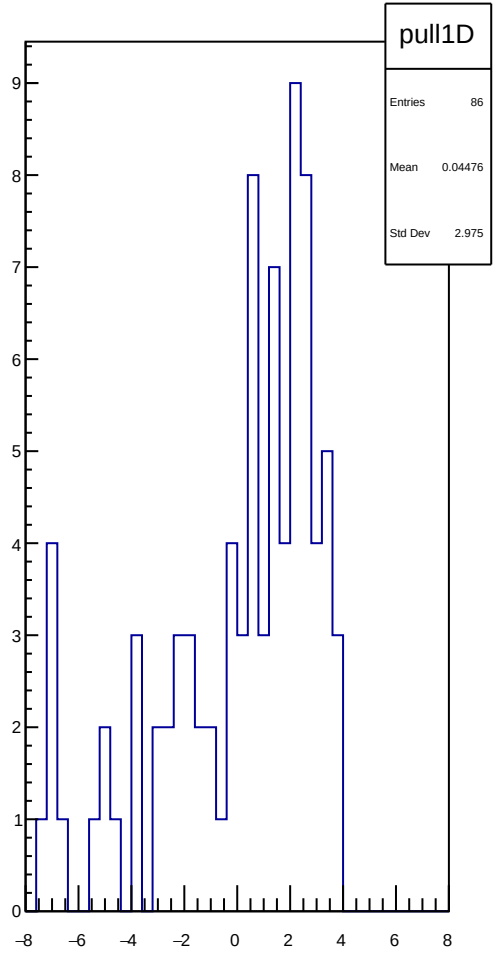

asym_bcm0l02_rms vs run
χ² / ndf 1366 / 85
p0 174 ± 0.1353
195
190
185
180
175
170
165

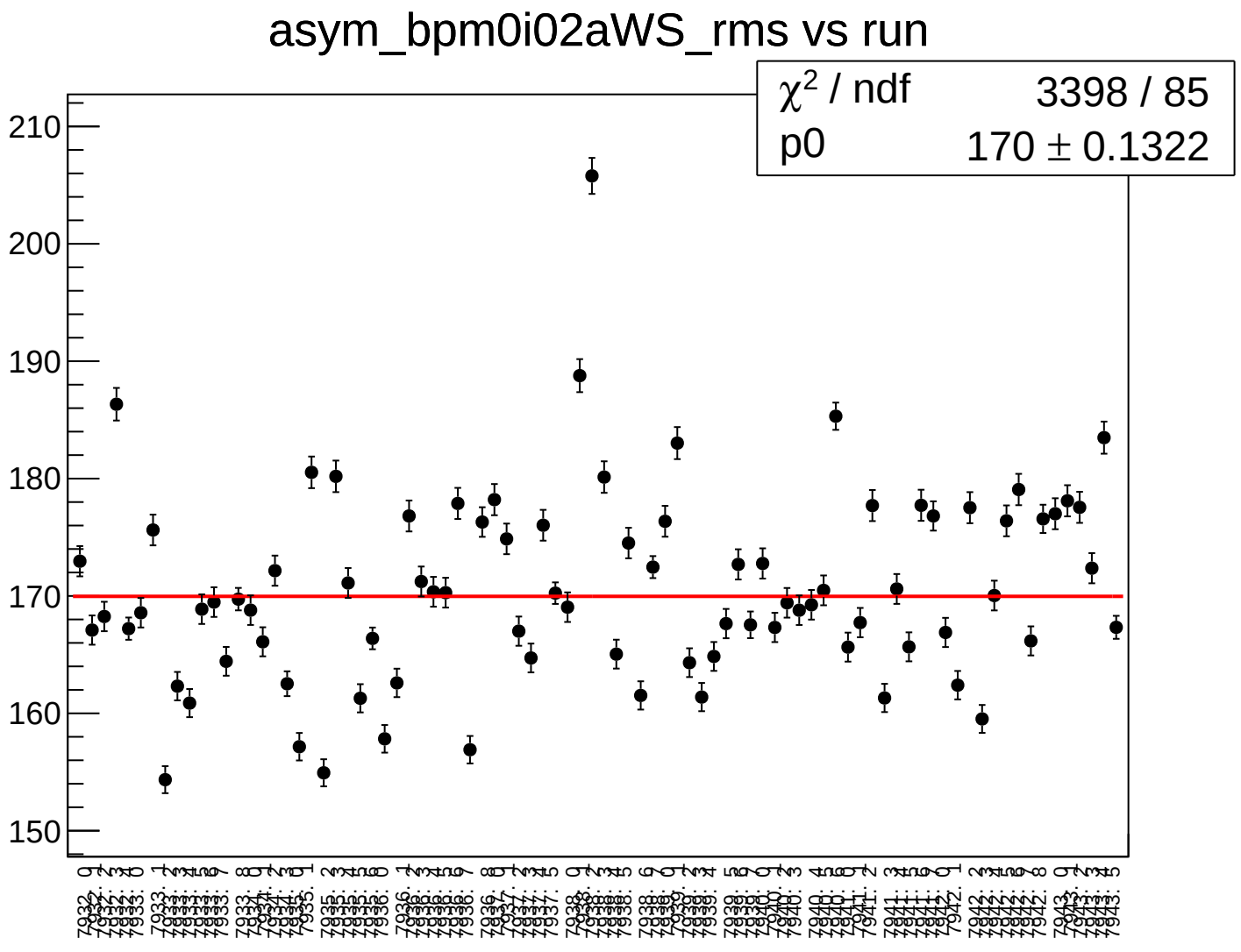

asym_bpm0i02WS_mean vs run
χ² / ndf 1175 / 85
p0 1113 ± 195.4
pull
Entries 86
Mean 929.2
Std Dev 881.9

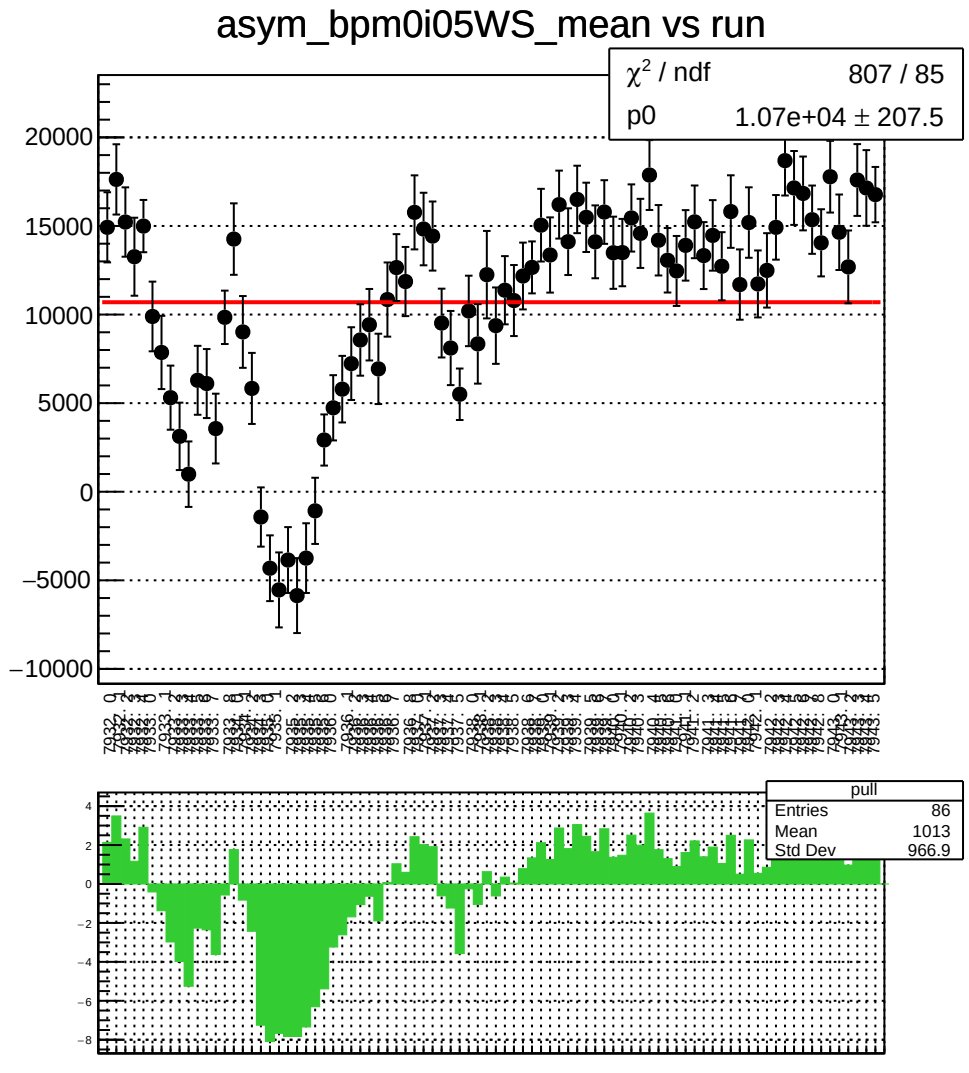

pull1D
Entries 86
Mean 0.6007
Std Dev 3.077

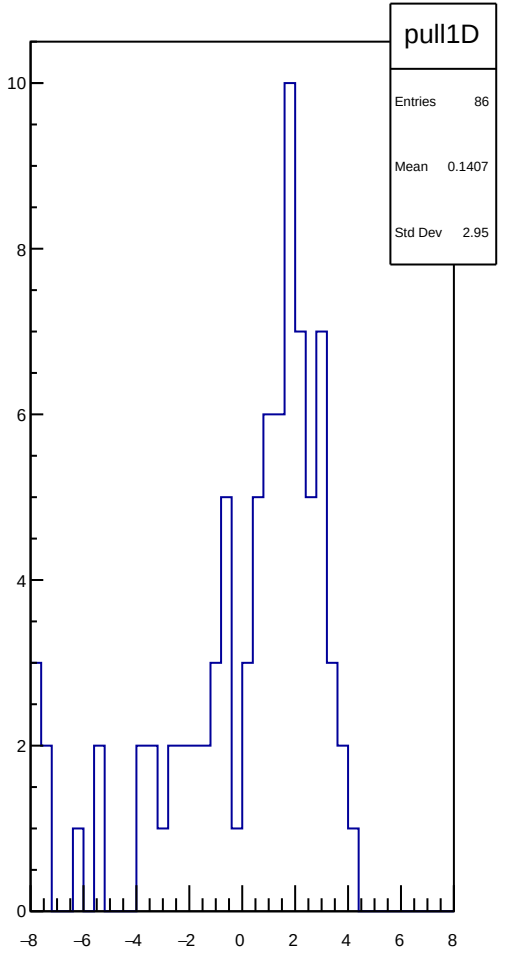

asym_bpm0i02WS_rms vs run
χ^2 / ndf 3875 / 85
p0 177.6 ± 0.1382
220
210
200
190
180
170
160

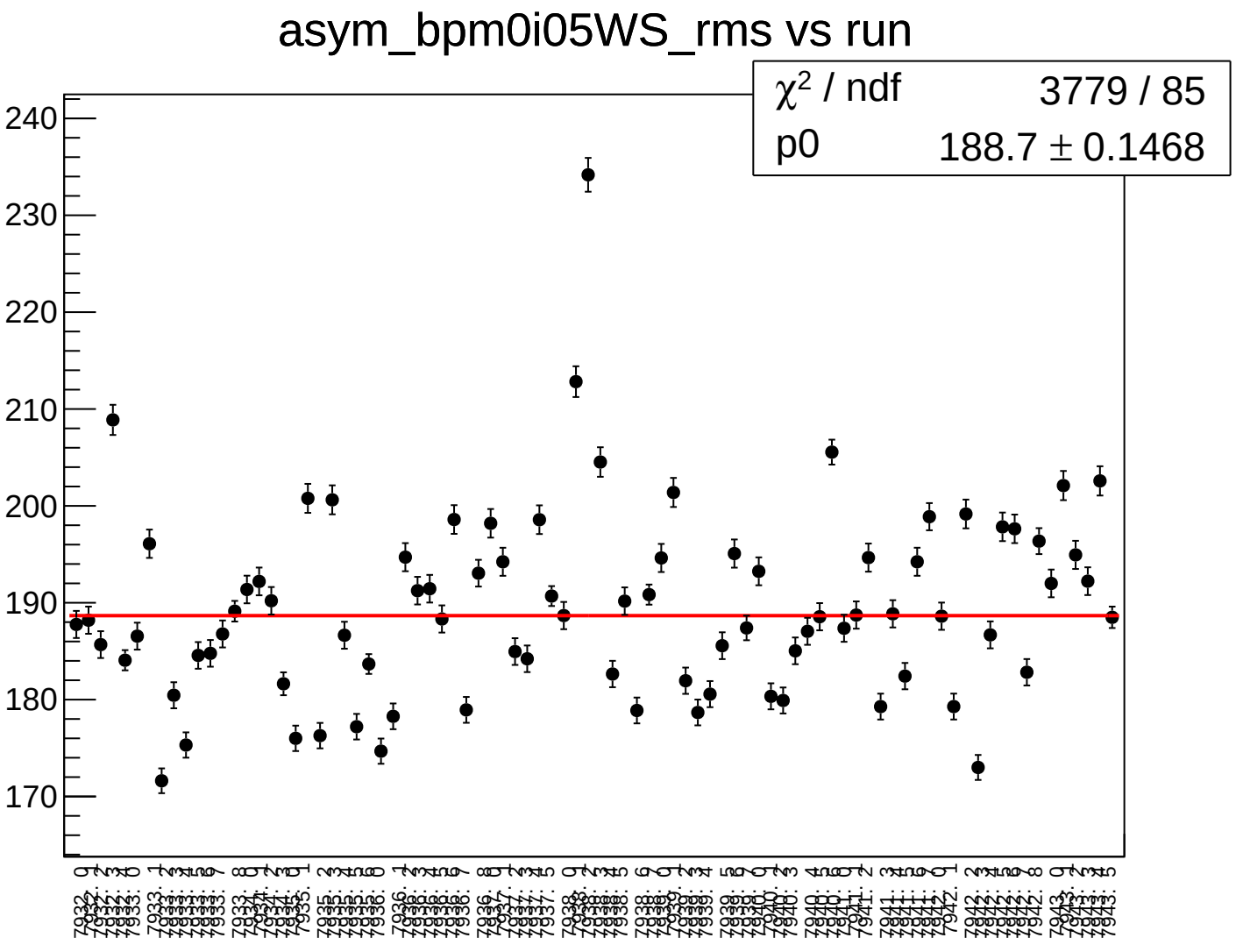

asym_bpm0i02aWS_mean vs run
χ² / ndf 761.5 / 85
p0 −131.6 ± 187
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 981.7
Std Dev 934.7
4
2
0
−2
−4
−6

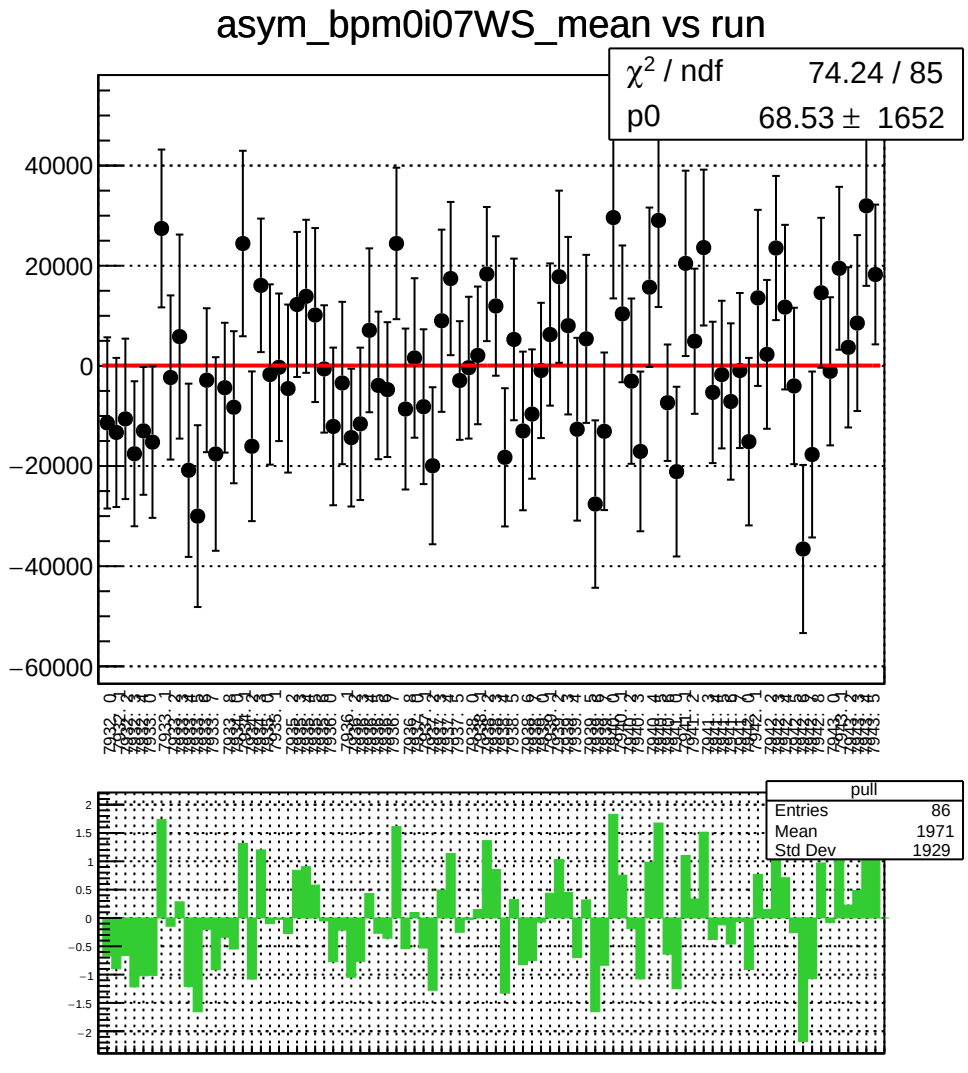

pull1D
Entries 86
Mean 0.04476
Std Dev 2.975
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

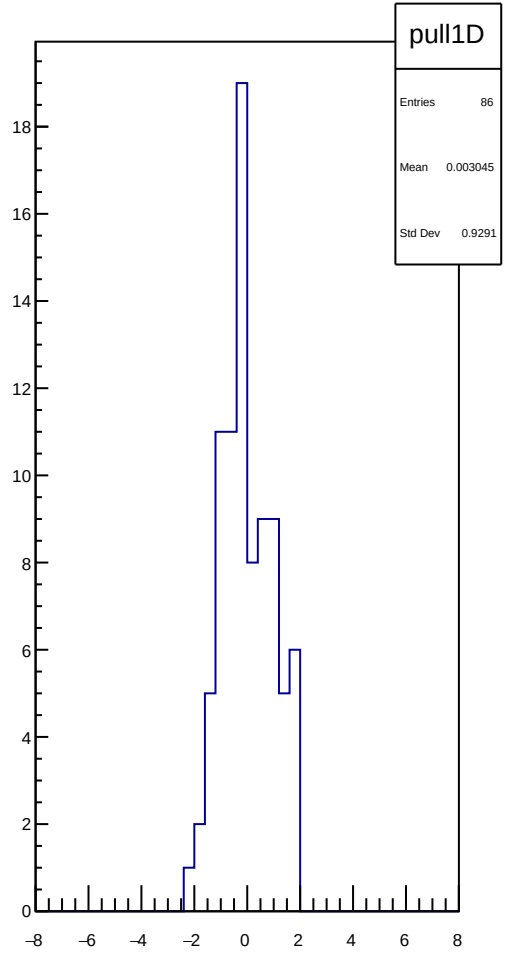

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 3398 / 85
p0 170 ± 0.1322
210
200
190
180
170
160
150

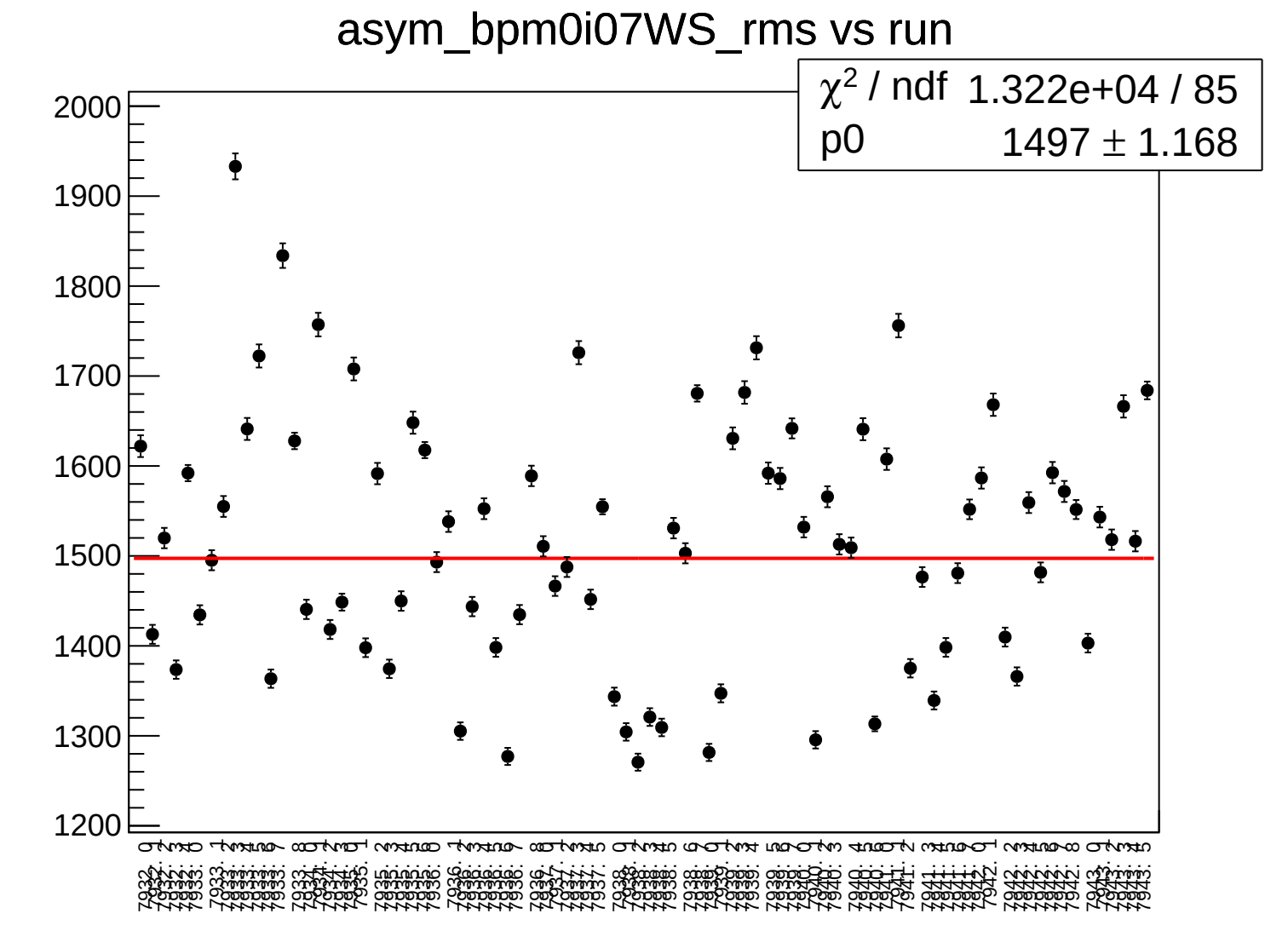

asym_bpm0i05WS_mean vs run
χ² / ndf 807 / 85
p0 1.07e+04 ± 207.5
pull
Entries 86
Mean 1013
Std Dev 966.9

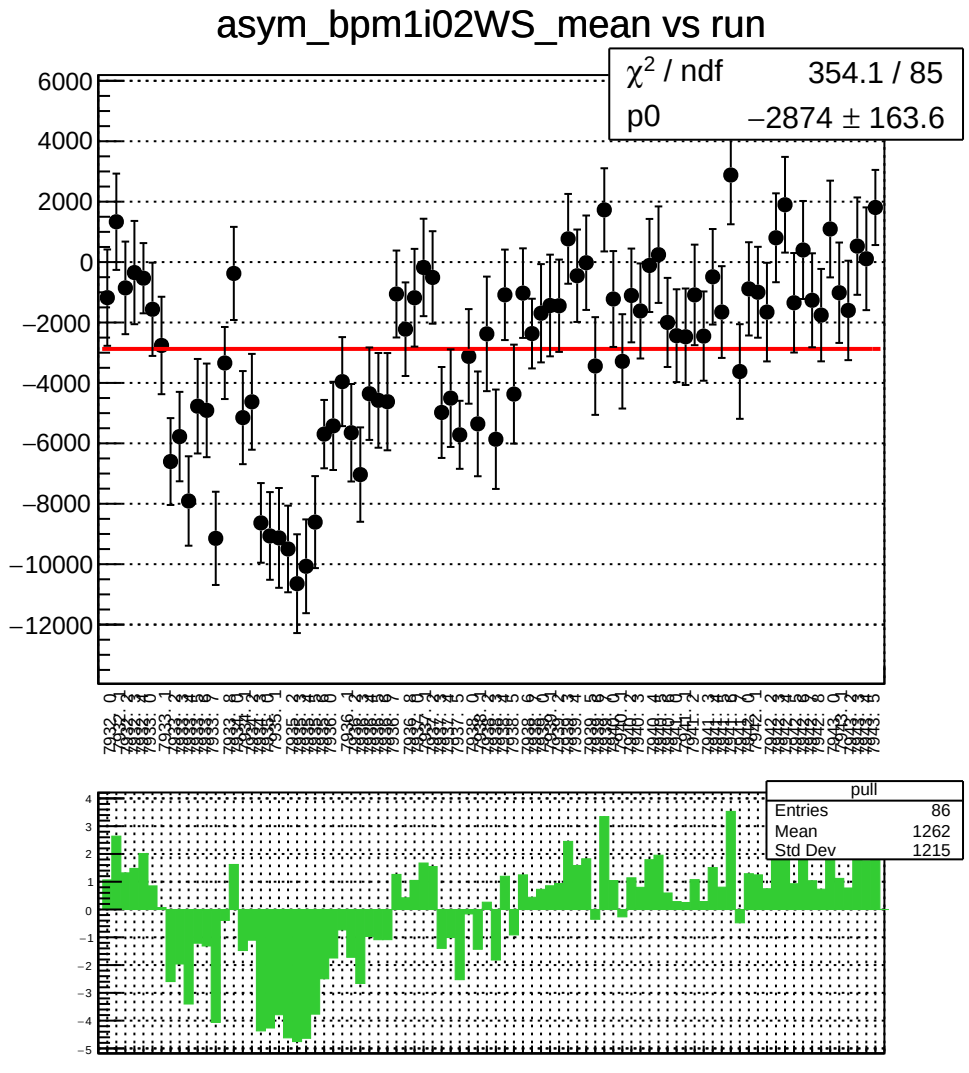

pull1D
Entries 86
Mean 0.1407
Std Dev 2.95

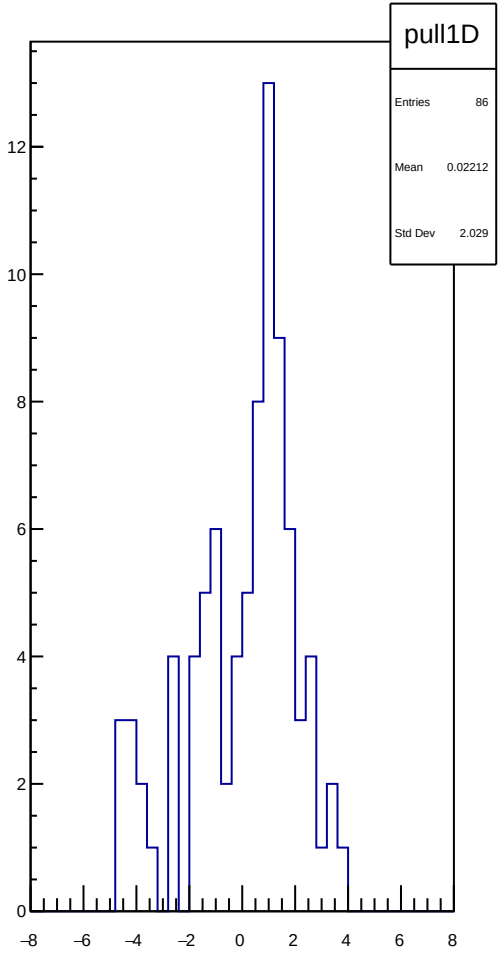

asym_bpm0i05WS_rms vs run
χ² / ndf 3779 / 85
p0 188.7 ± 0.1468
240
230
220
210
200
190
180
170

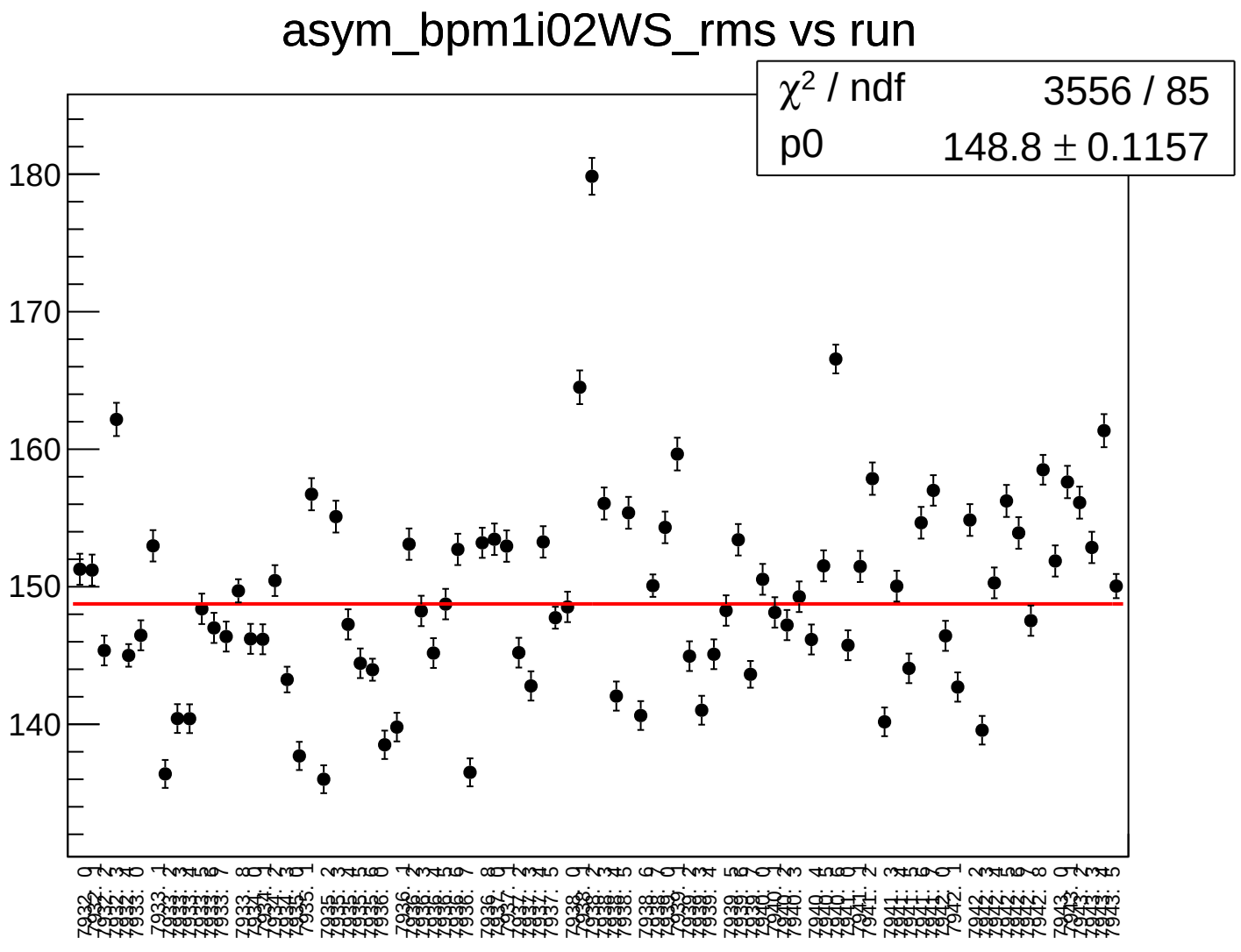

asym_bpm0i07WS_mean vs run
χ² / ndf 74.24 / 85
p0 68.53 ± 1652
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean 1971
Std Dev 1929
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

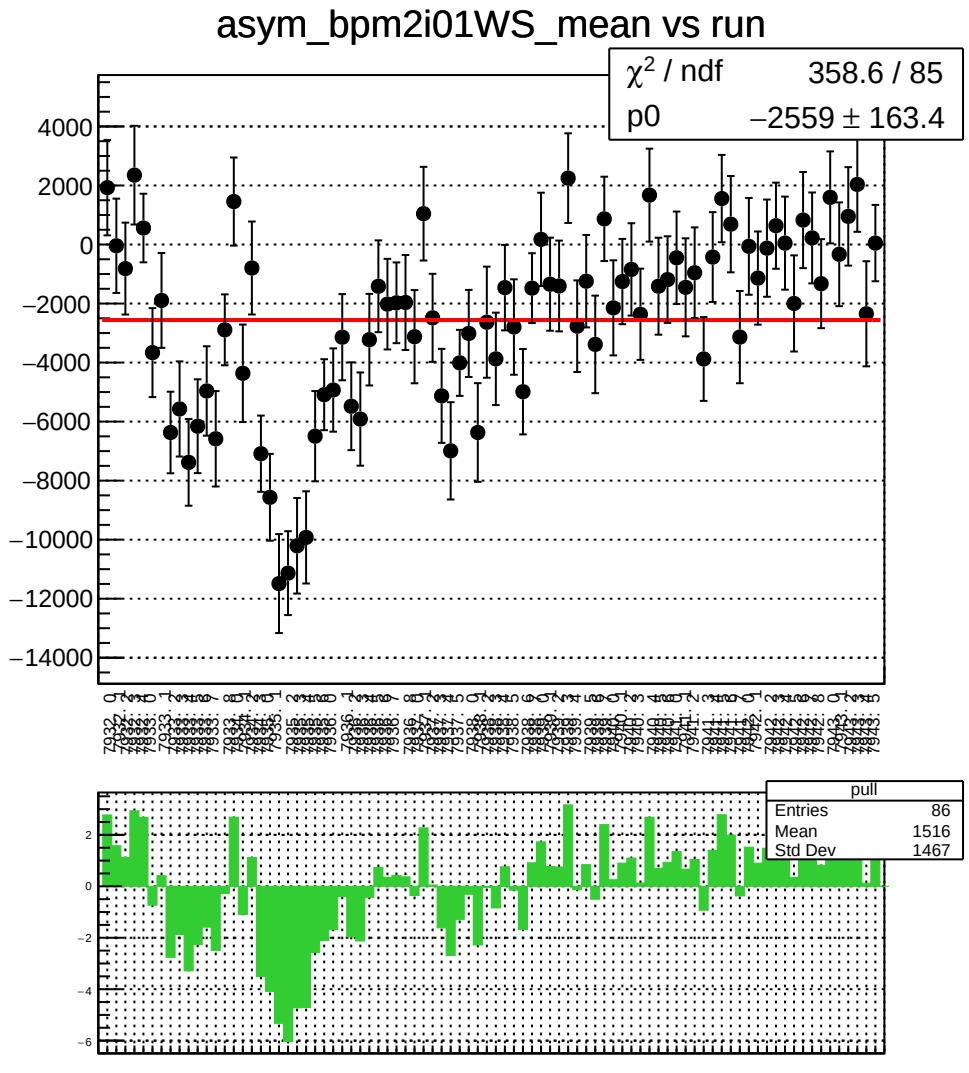

pull1D
Entries 86
Mean 0.003045
Std Dev 0.9291
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

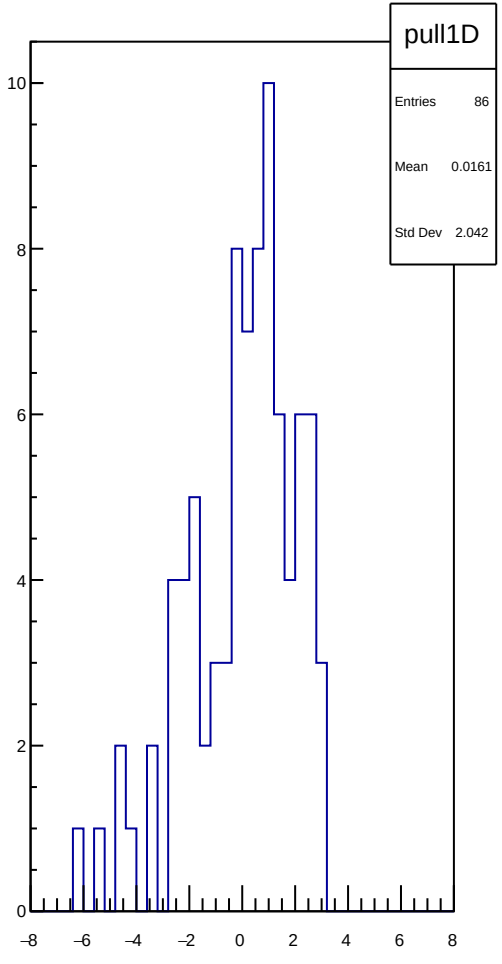

asym_bpm0i07WS_rms vs run
χ² / ndf 1.322e+04 / 85
p0 1497 ± 1.168
2000
1900
1800
1700
1600
1500
1400
1300
1200

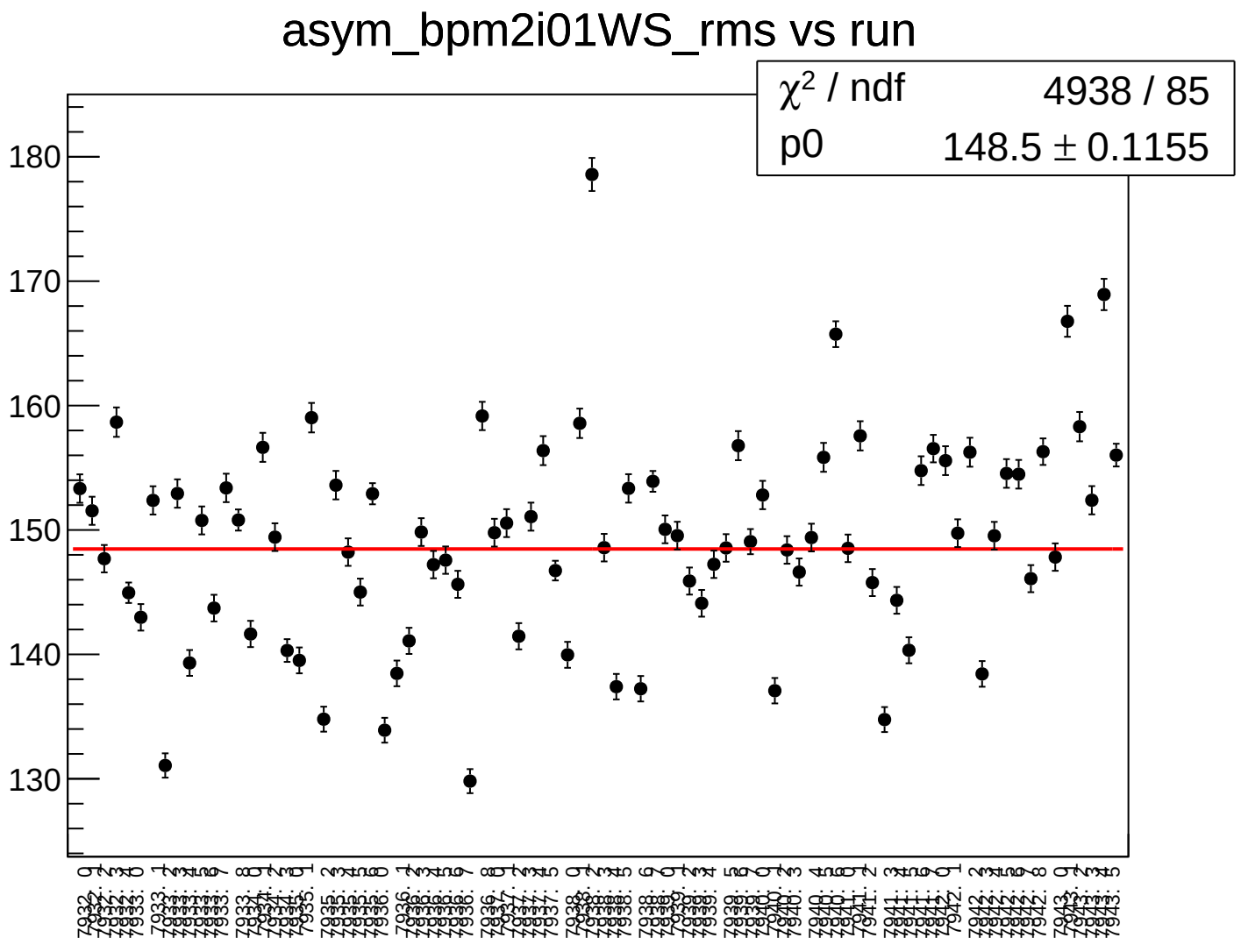

asym_bpm1i02WS_mean vs run
χ² / ndf 354.1 / 85
p0 −2874 ± 163.6
pull
Entries 86
Mean 1262
Std Dev 1215

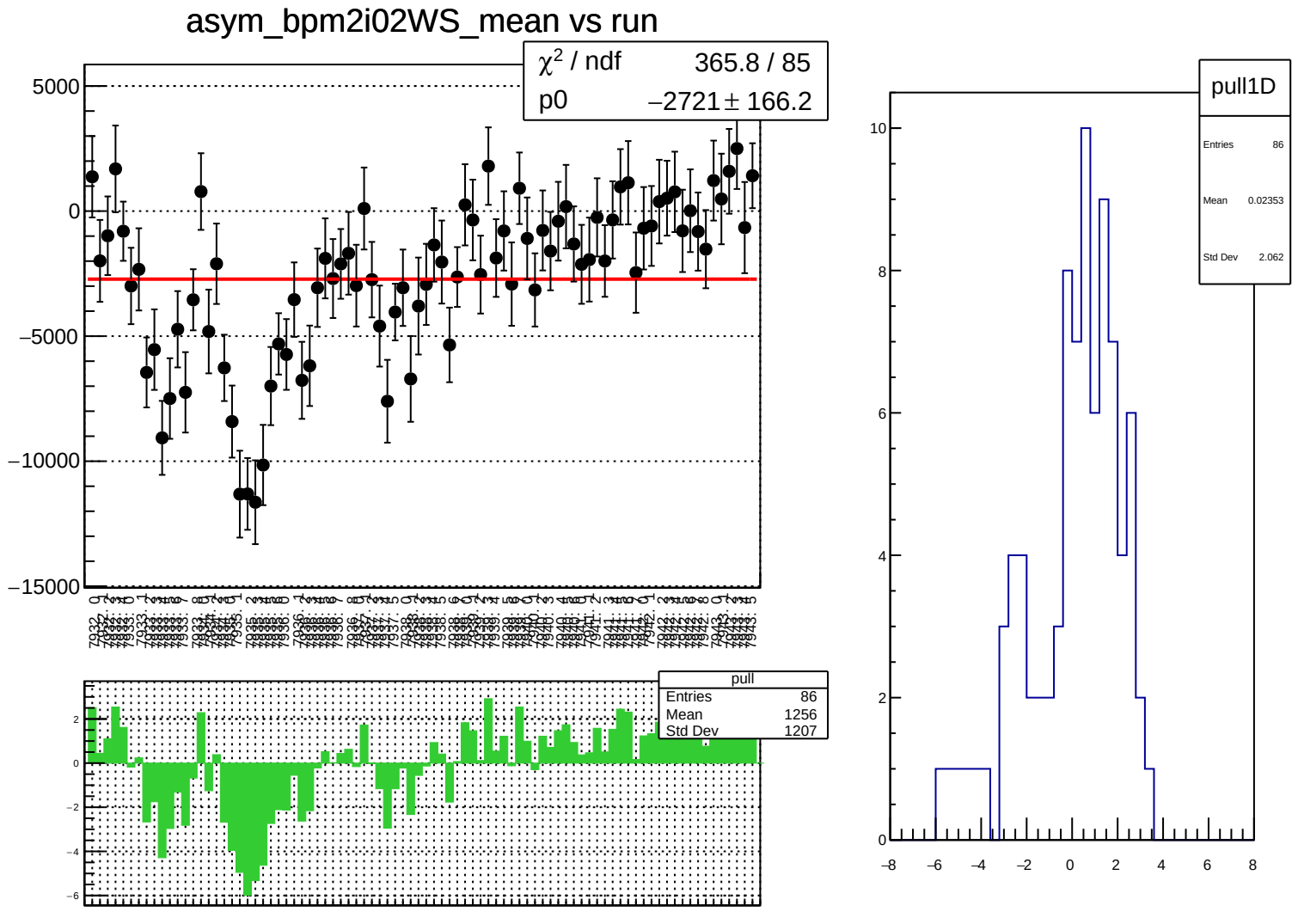

pull1D
Entries 86
Mean 0.02212
Std Dev 2.029

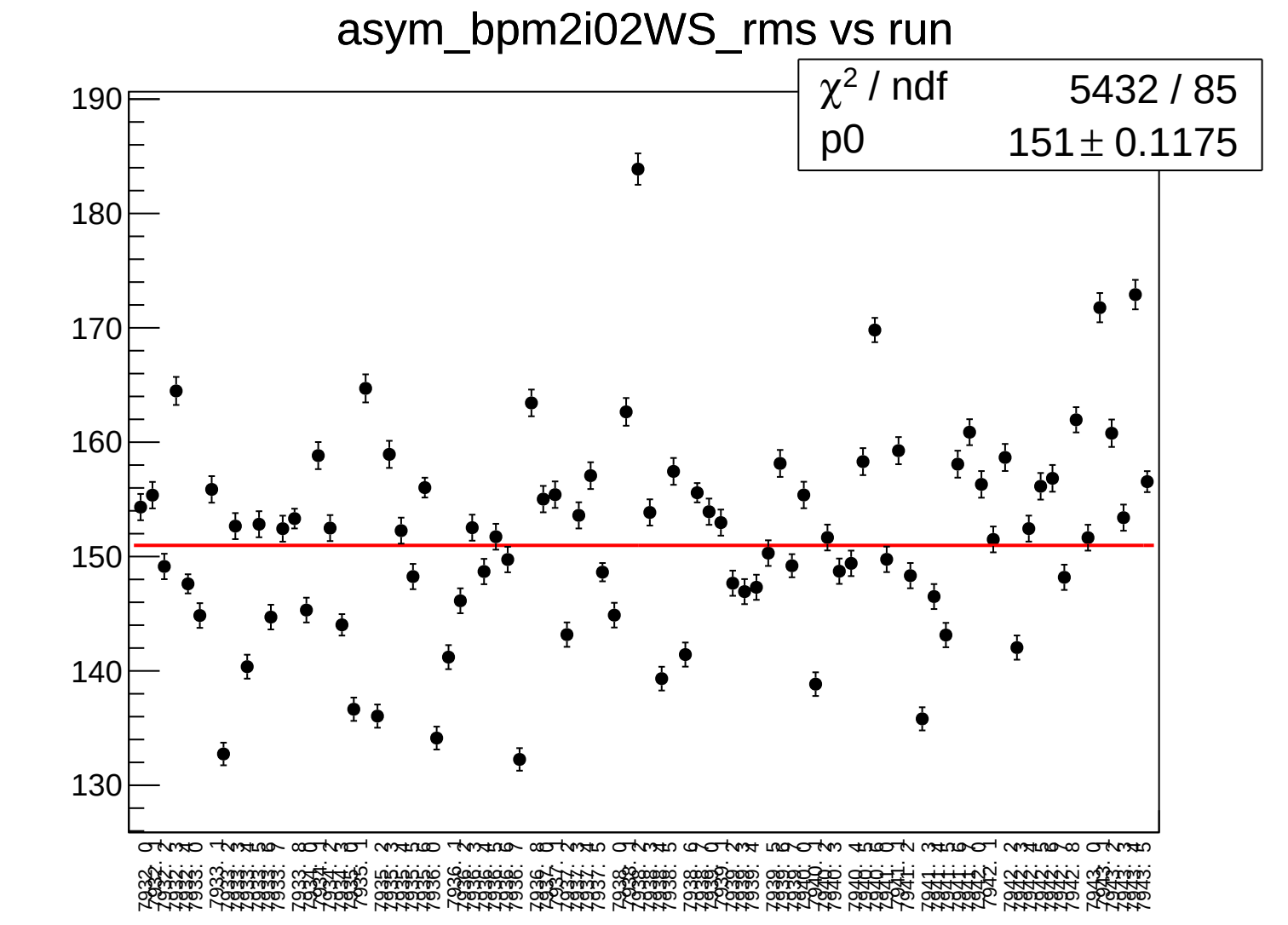

asym_bpm1i02WS_rms vs run
χ² / ndf 3556 / 85
p0 148.8 ± 0.1157
180
170
160
150
140

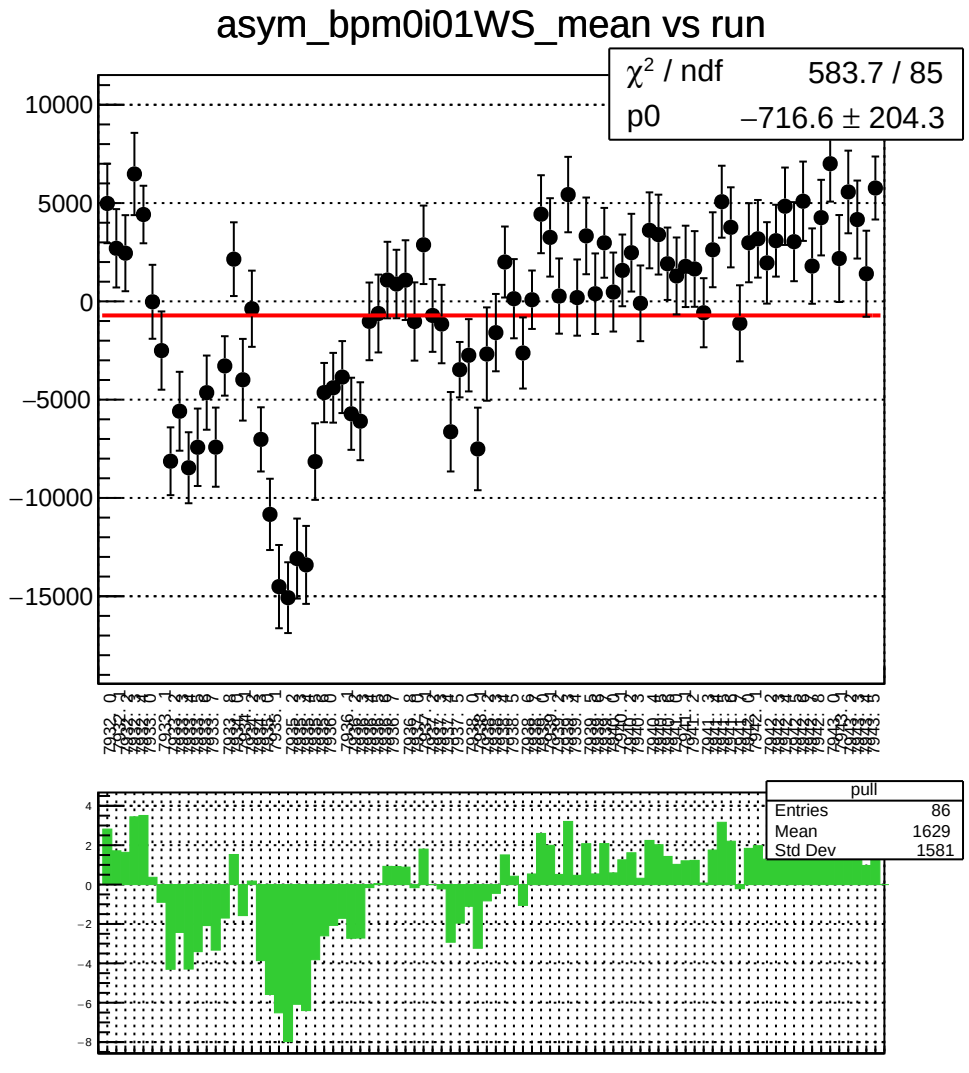

asym_bpm2i01WS_mean vs run
χ² / ndf 358.6 / 85
p0 −2559 ± 163.4
pull
Entries 86
Mean 1516
Std Dev 1467

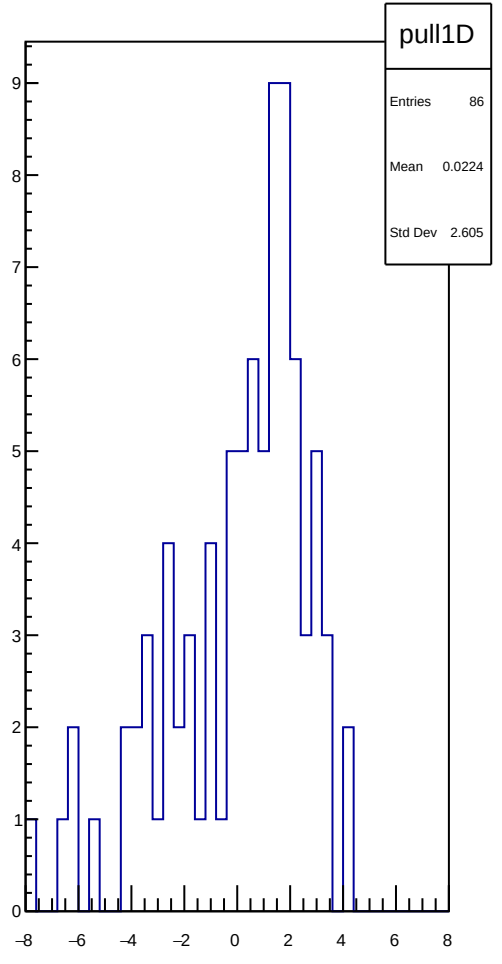

pull1D
Entries 86
Mean 0.0161
Std Dev 2.042

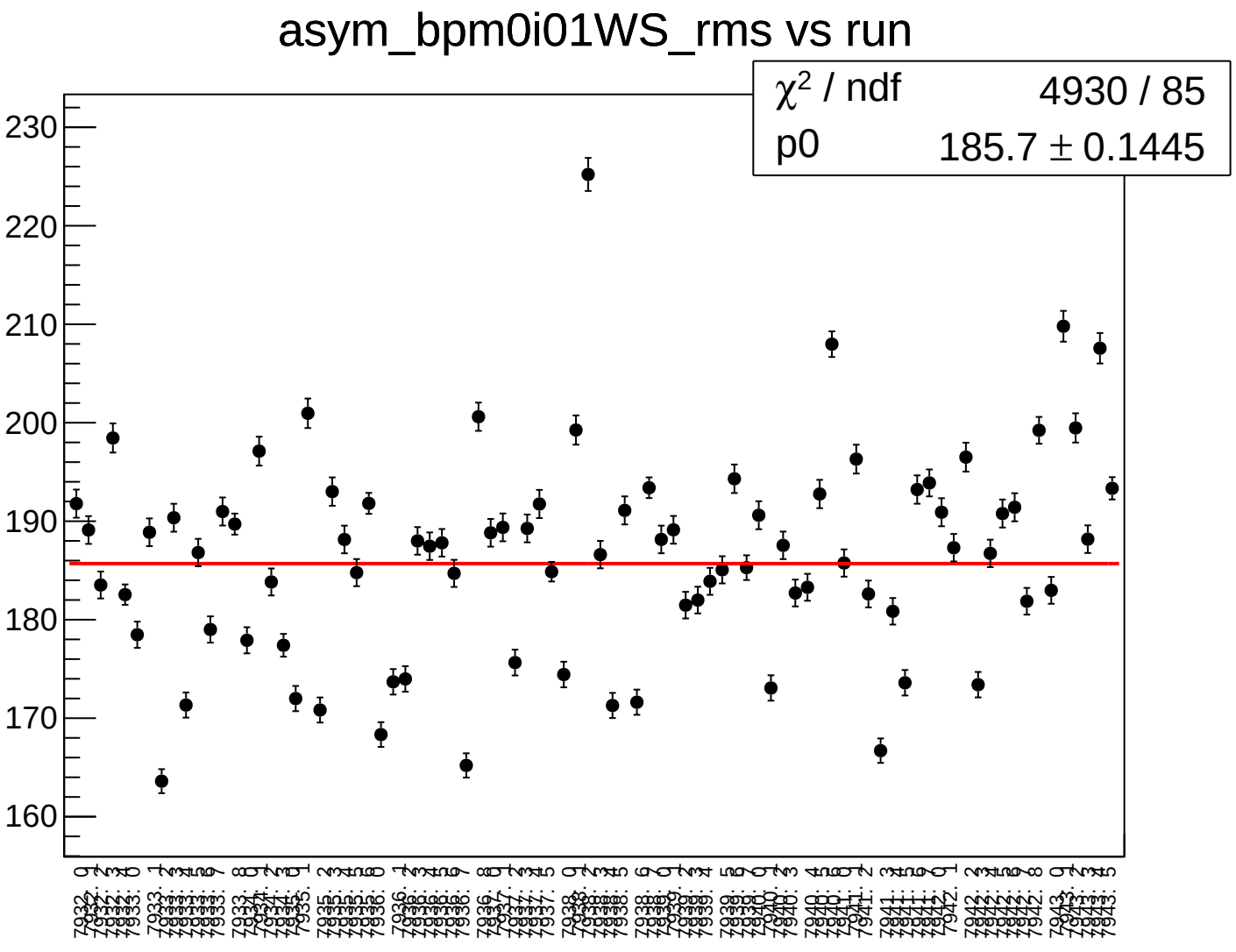

asym_bpm2i01WS_rms vs run
χ² / ndf 4938 / 85
p0 148.5 ± 0.1155
180
170
160
150
140
130

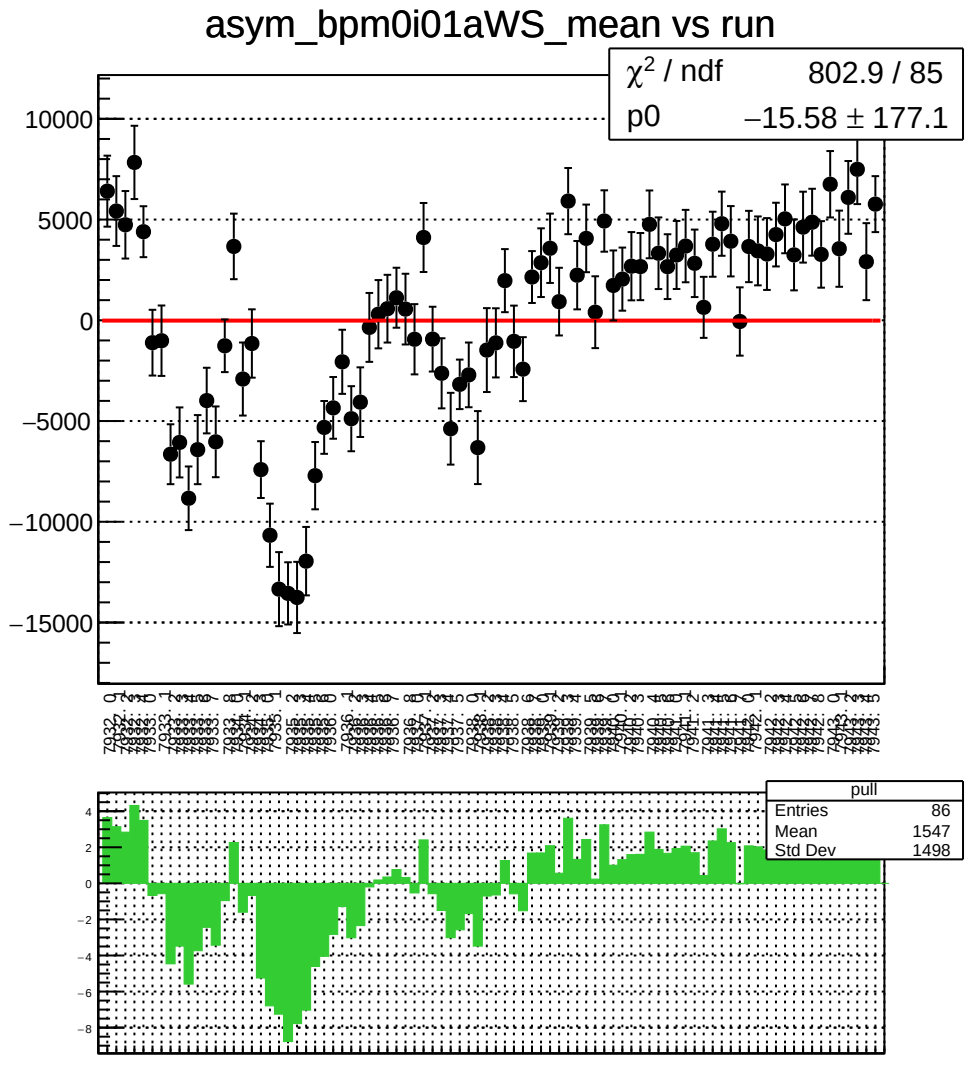

asym_bpm2i02WS_mean vs run
χ² / ndf 365.8 / 85
p0 −2721 ± 166.2
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 1256
Std Dev 1207
pull1D
Entries 86
Mean 0.02353
Std Dev 2.062

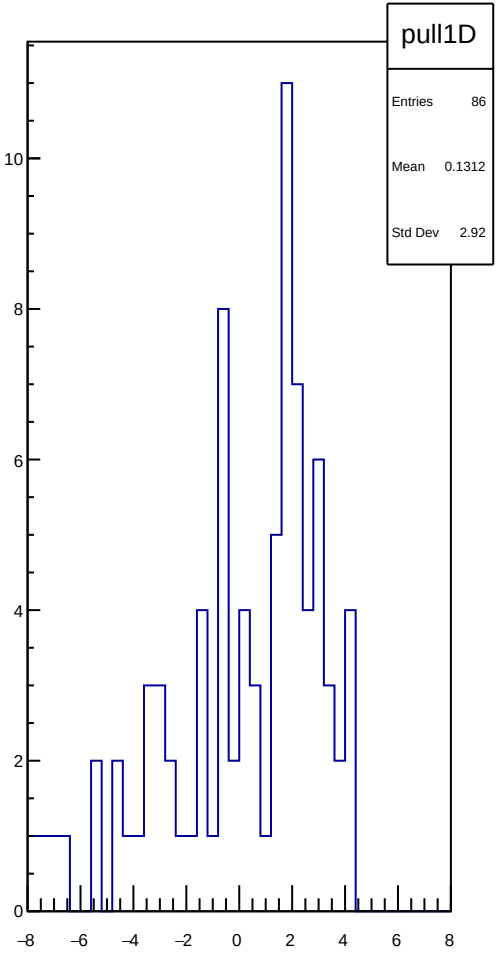

asym_bpm2i02WS_rms vs run
χ^2 / ndf 5432 / 85
p0 151 ± 0.1175
190
180
170
160
150
140
130

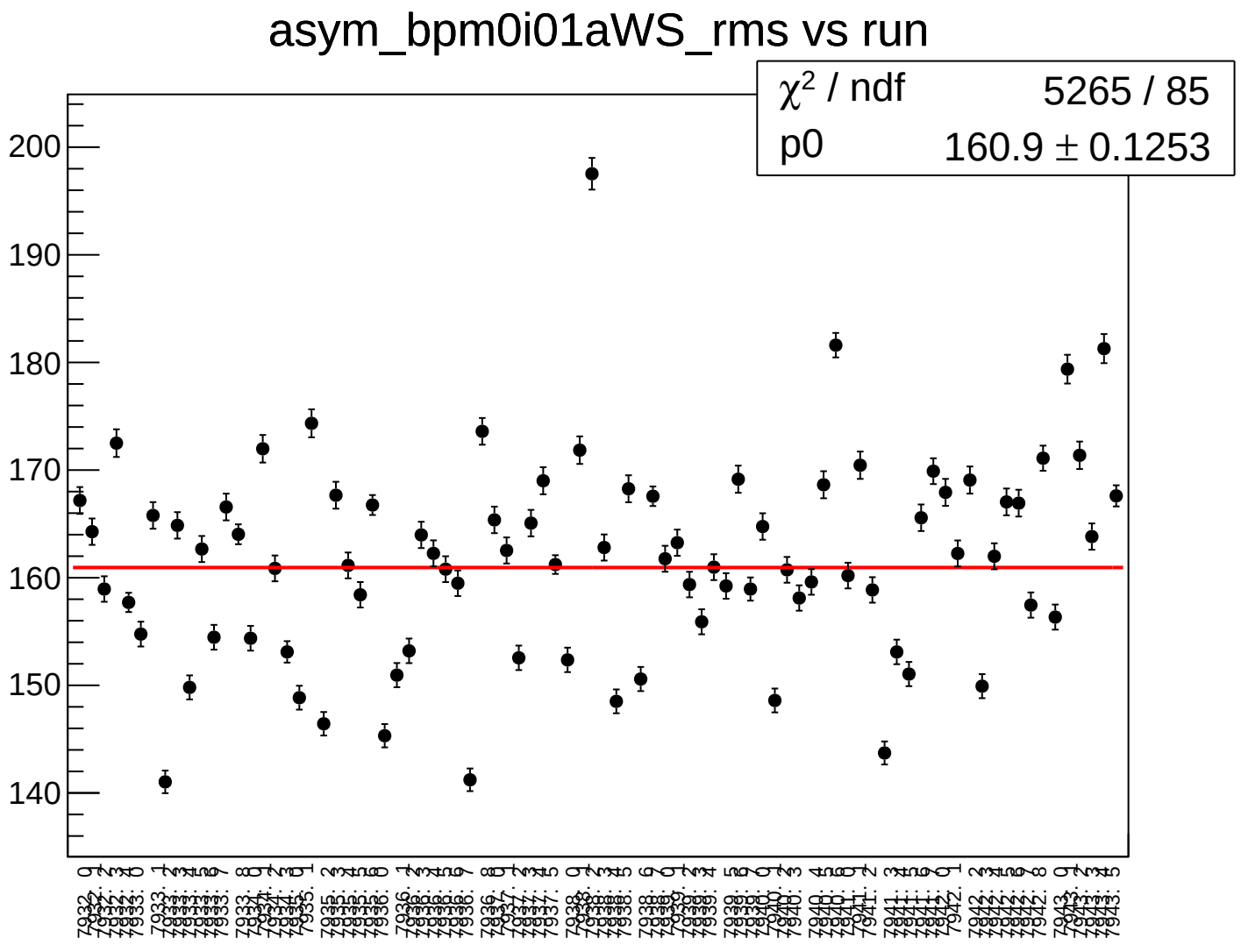

asym_bpm0i01WS_mean vs run
χ² / ndf 583.7 / 85
p0 −716.6 ± 204.3
pull
Entries 86
Mean 1629
Std Dev 1581

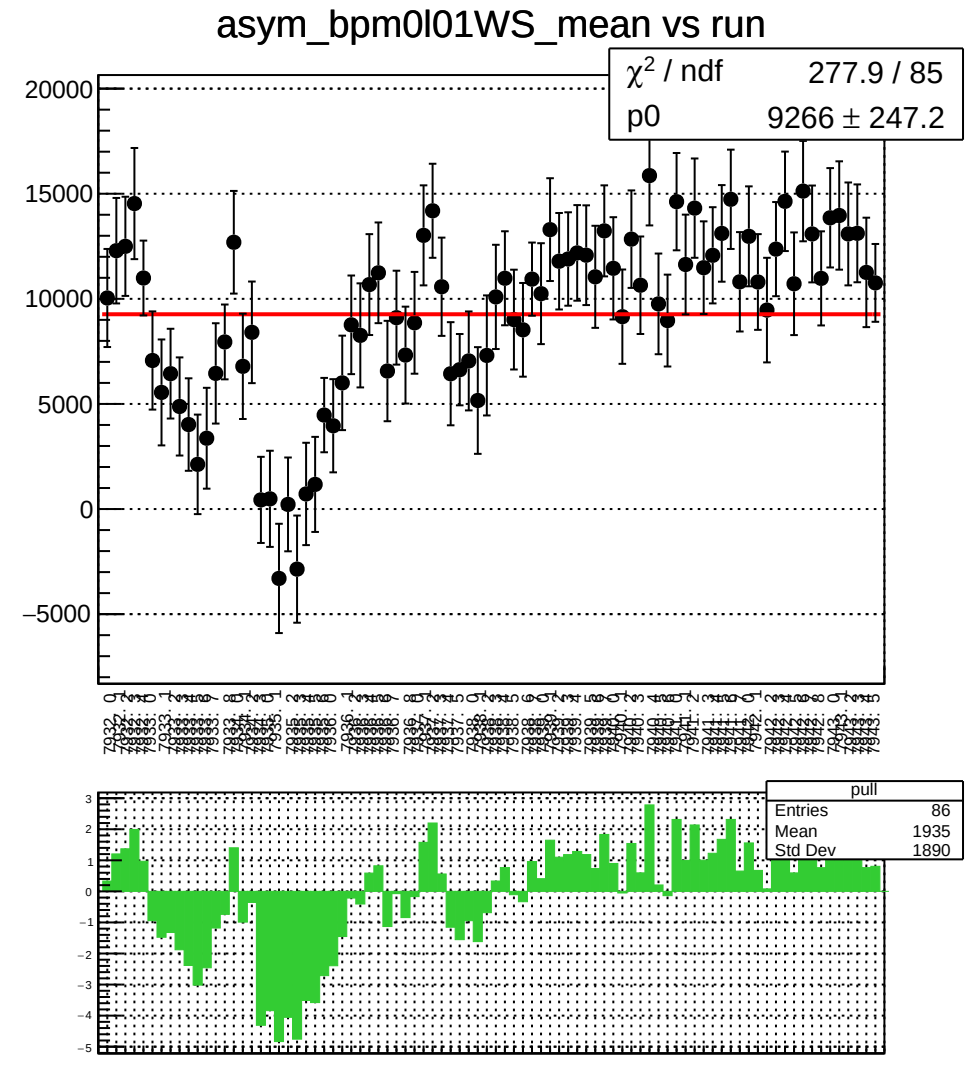

pull1D
Entries 86
Mean 0.0224
Std Dev 2.605

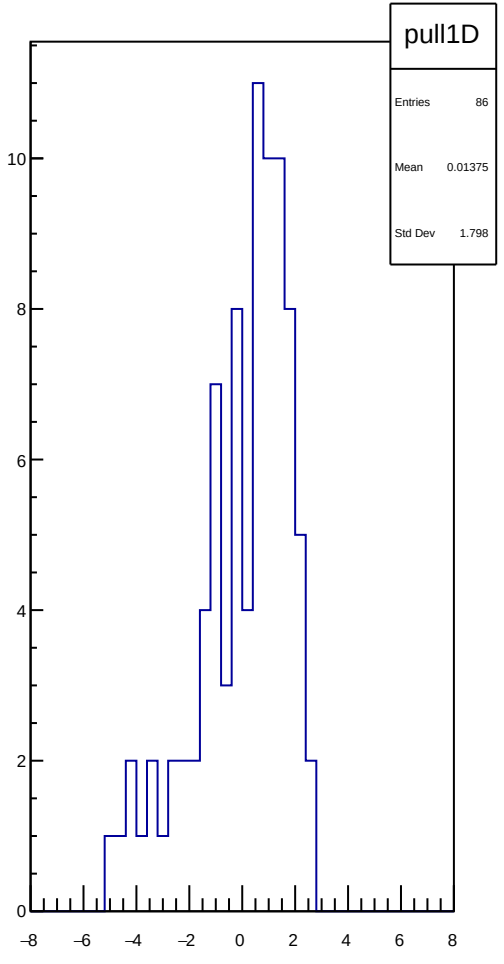

asym_bpm0i01WS_rms vs run
χ² / ndf 4930 / 85
p0 185.7 ± 0.1445
230
220
210
200
190
180
170
160

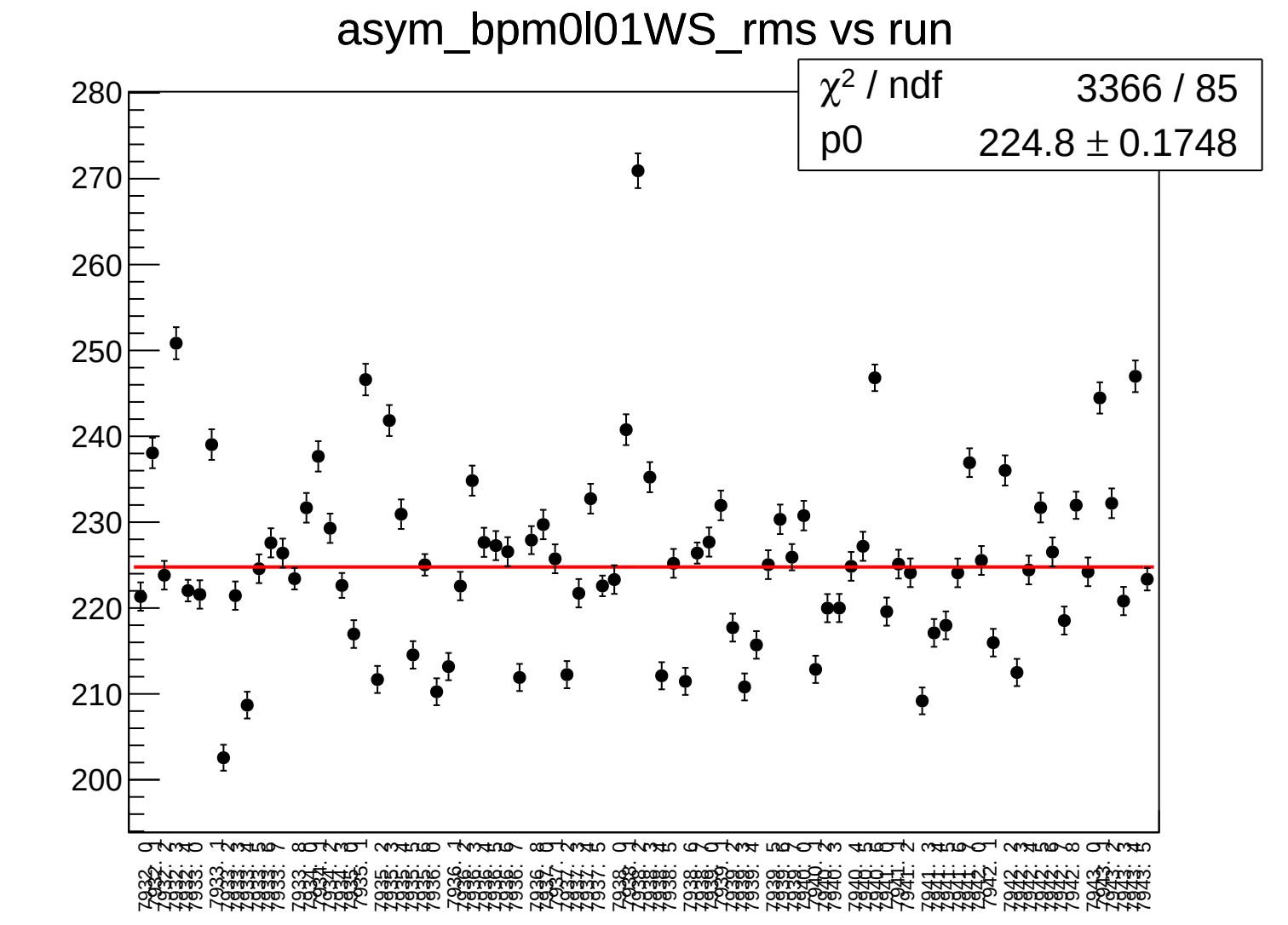

asym_bpm0i01aWS_mean vs run
χ² / ndf 802.9 / 85
p0 −15.58 ± 177.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 1547
Std Dev 1498
4
2
0
−2
−4
−6
−8

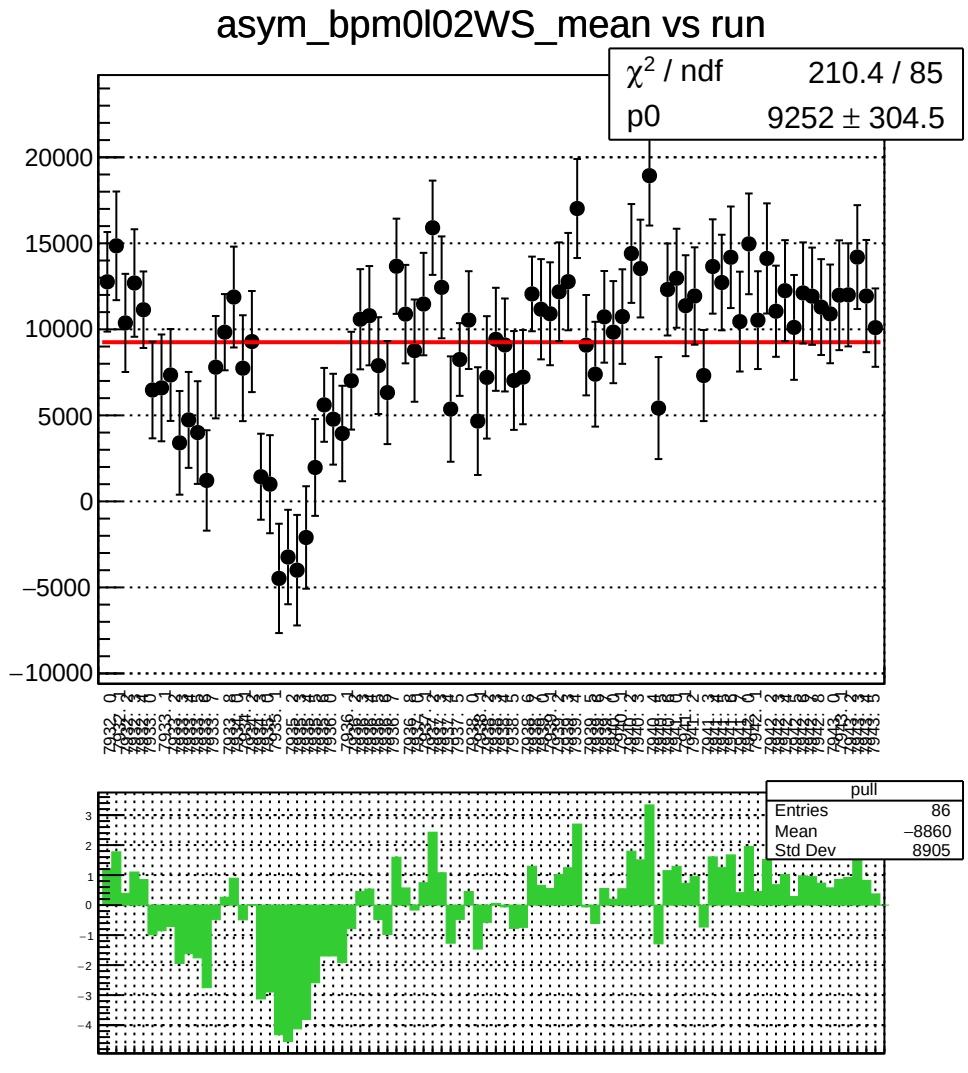

pull1D
Entries 86
Mean 0.1312
Std Dev 2.92
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

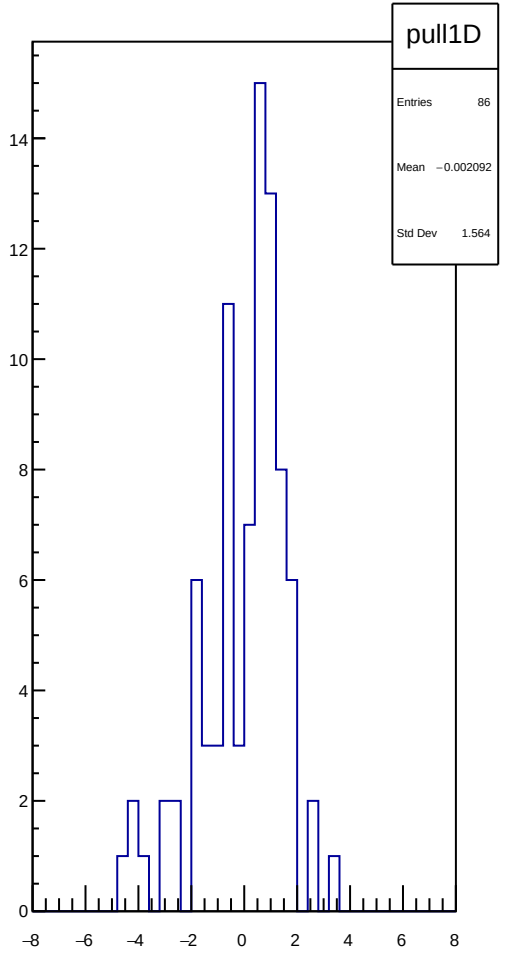

asym_bpm0i01aWS_rms vs run
χ² / ndf 5265 / 85
p0 160.9 ± 0.1253
200
190
180
170
160
150
140

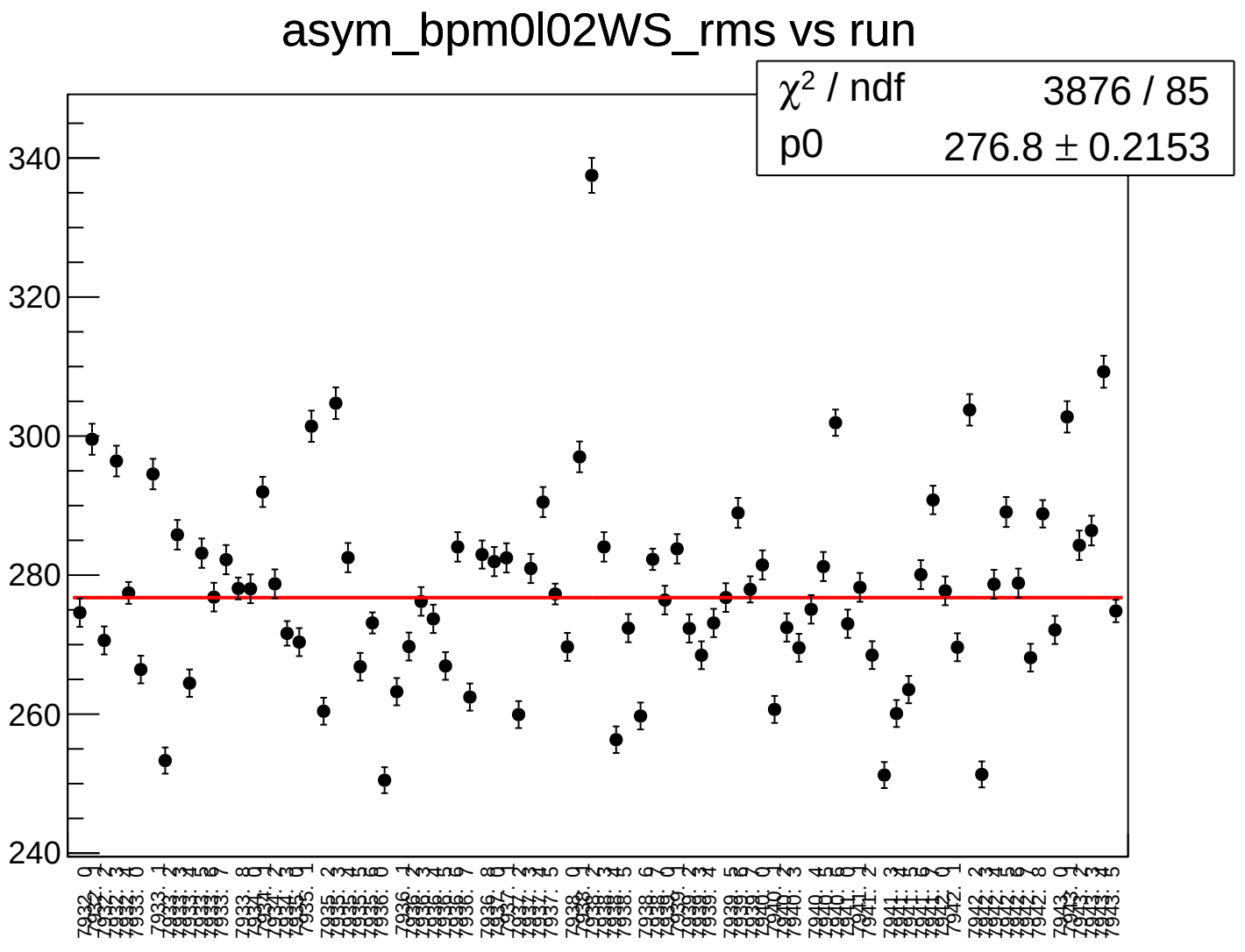

asym_bpm0l01WS_mean vs run
χ² / ndf 277.9 / 85
p0 9266 ± 247.2
20000
15000
10000
5000
0
−5000
pull
Entries 86
Mean 1935
Std Dev 1890
3
2
1
0
−1
−2
−3
−4
−5

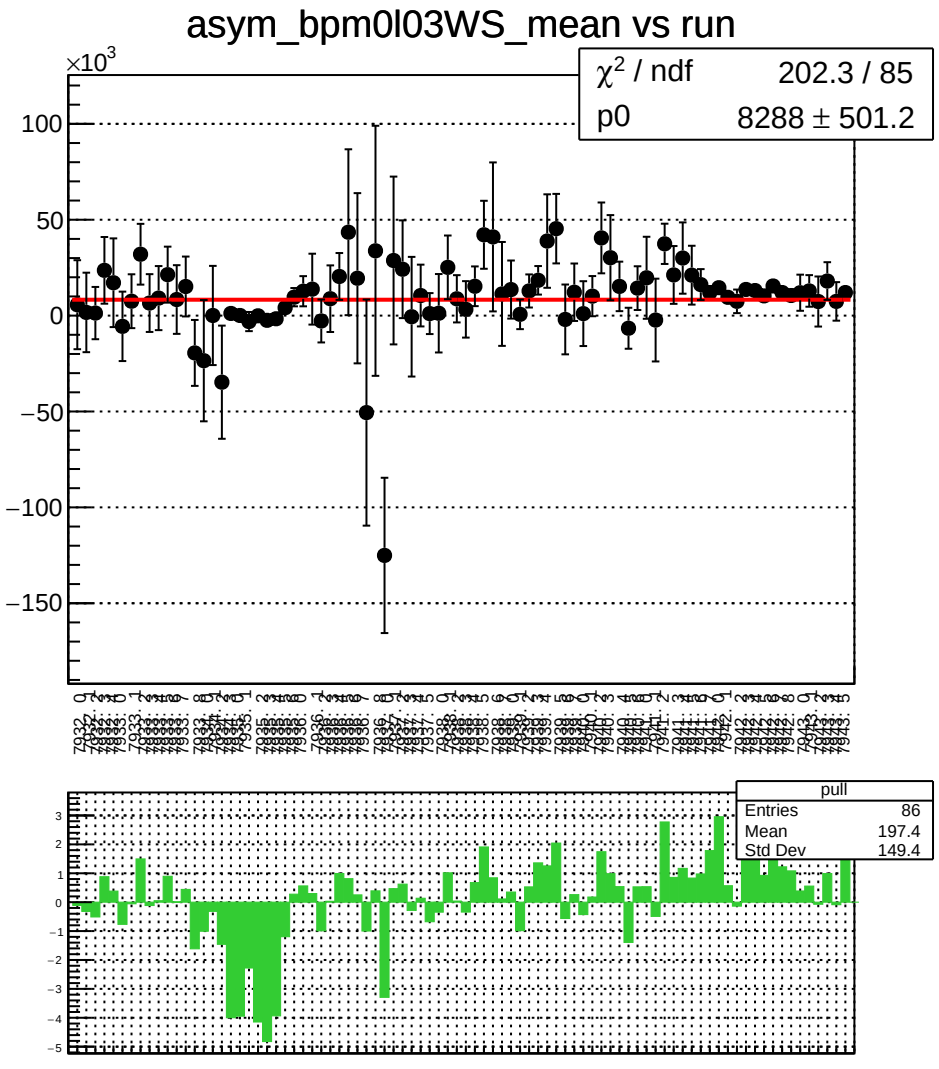

pull1D
Entries 86
Mean 0.01375
Std Dev 1.798
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

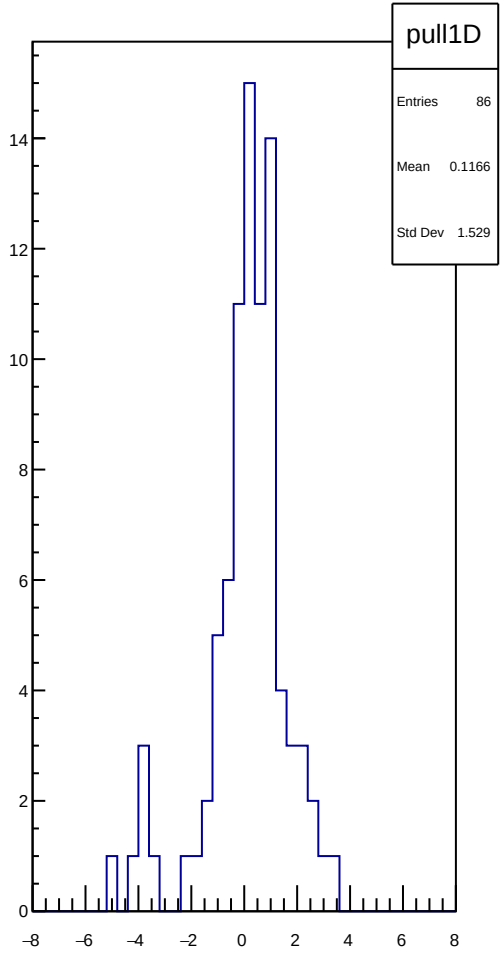

asym_bpm0l01WS_rms vs run
χ^2 / ndf 3366 / 85
p0 224.8 ± 0.1748
280
270
260
250
240
230
220
210
200

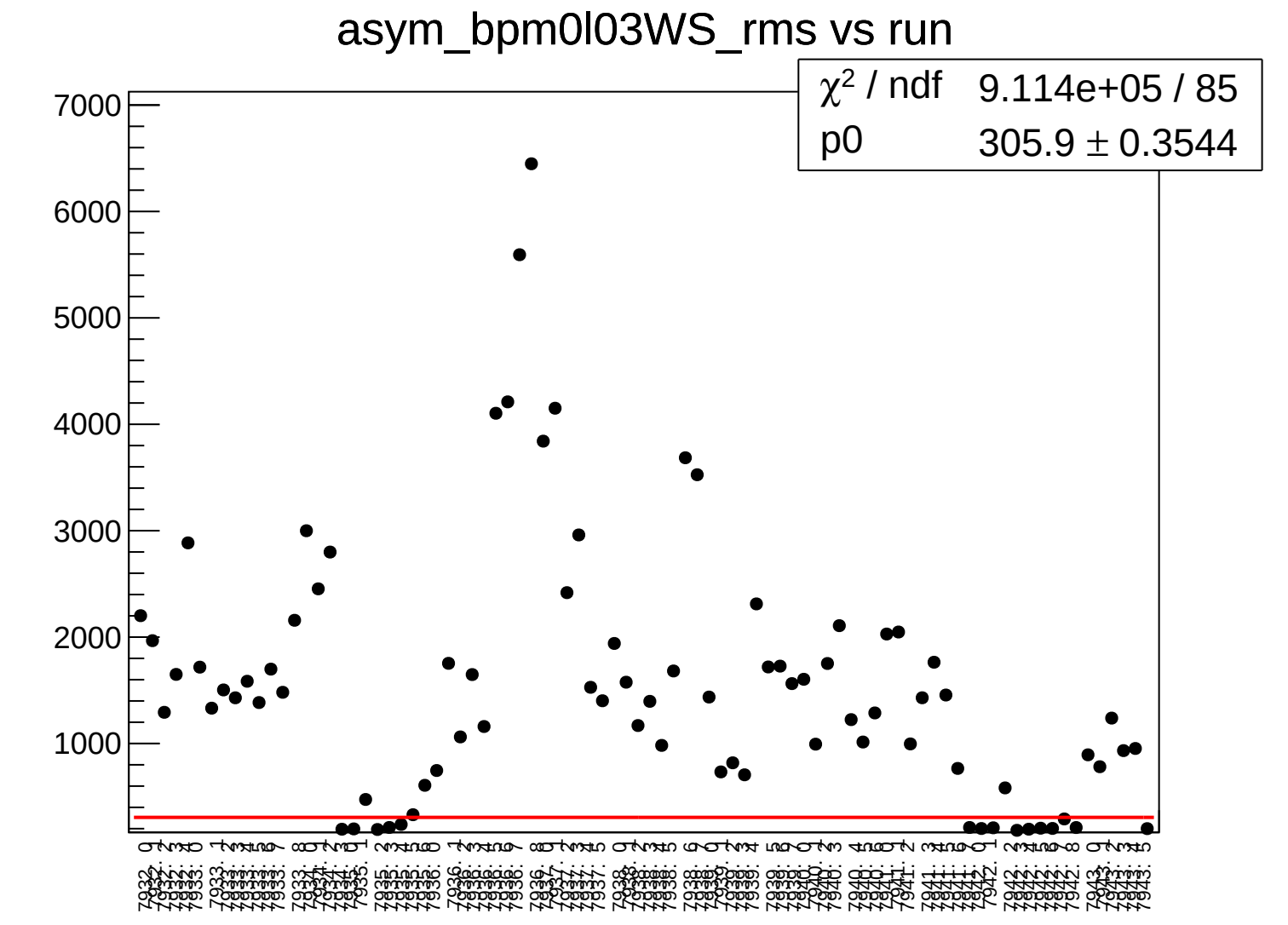

asym_bpm0l02WS_mean vs run
χ² / ndf 210.4 / 85
p0 9252 ± 304.5
pull
Entries 86
Mean −8860
Std Dev 8905

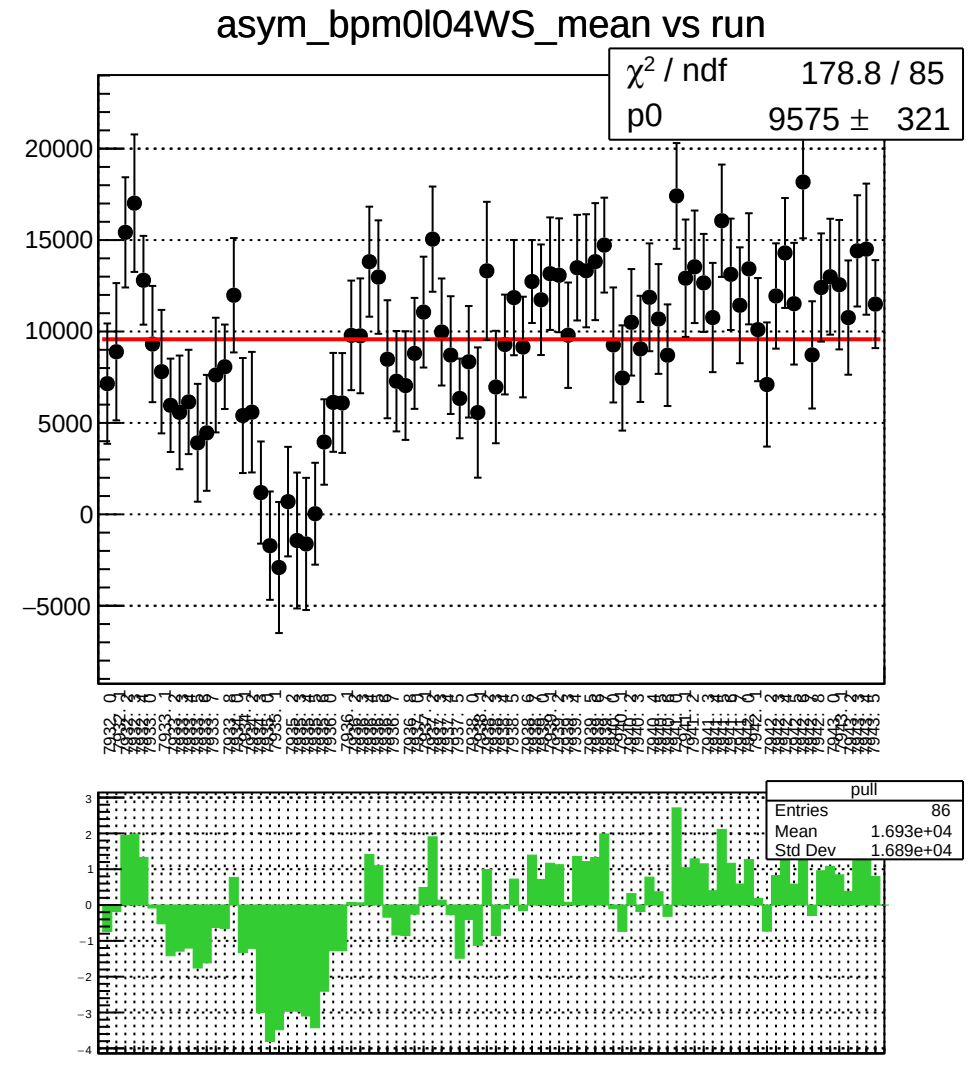

pull1D
Entries 86
Mean −0.002092
Std Dev 1.564

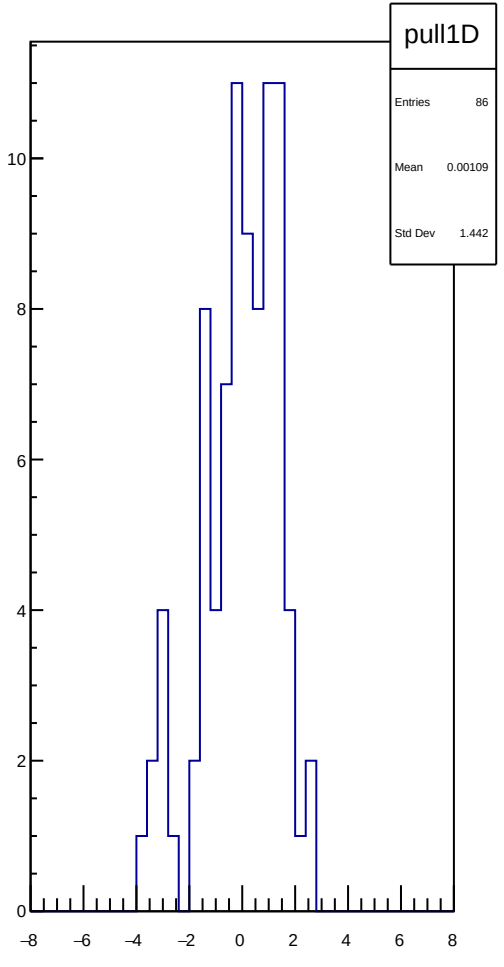

asym_bpm0l02WS_rms vs run
χ² / ndf 3876 / 85
p0 276.8 ± 0.2153
340
320
300
280
260
240

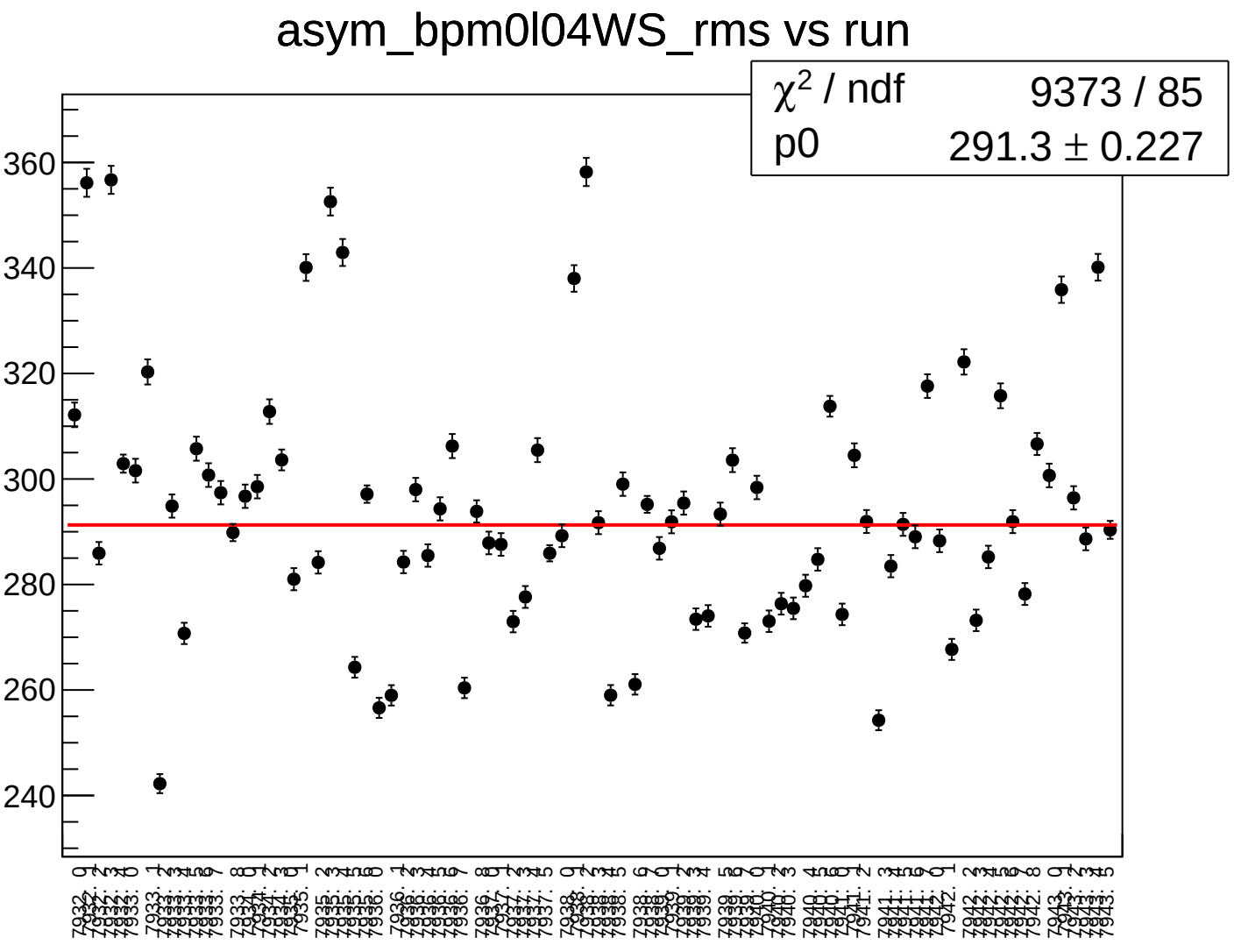

asym_bpm0l03WS_mean vs run
×10^3
χ^2 / ndf 202.3 / 85
p0 8288 ± 501.2
100
50
0
−50
−100
−150
pull
Entries 86
Mean 197.4
Std Dev 149.4
3
2
1
0
−1
−2
−3
−4
−5

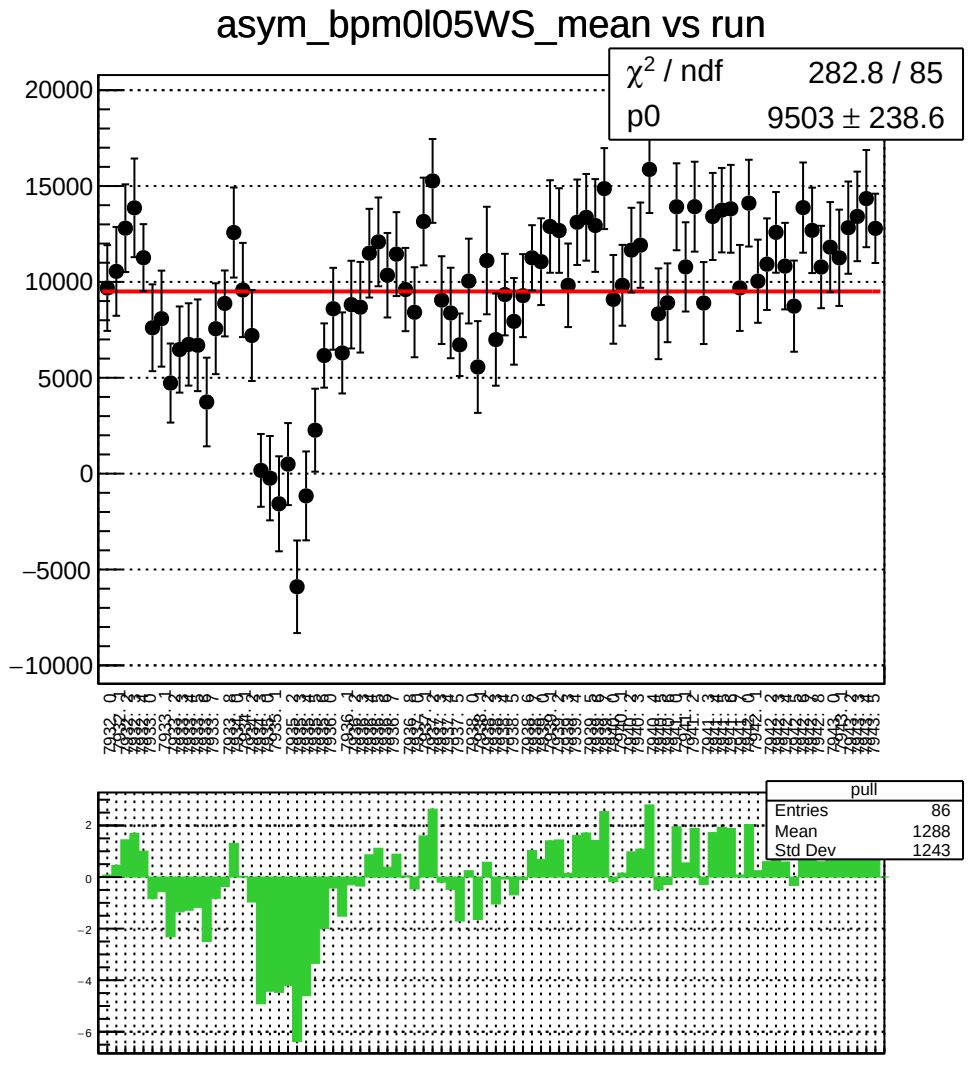

pull1D
Entries 86
Mean 0.1166
Std Dev 1.529
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

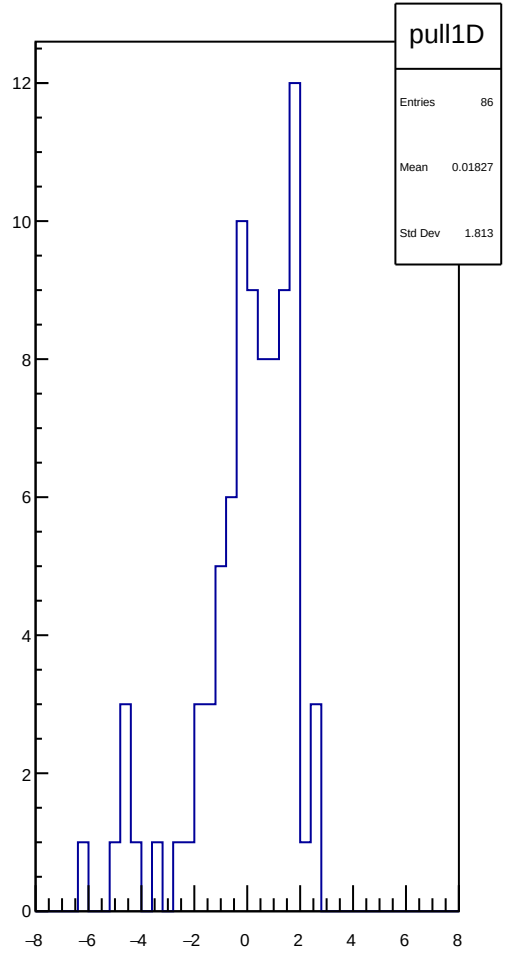

asym_bpm0l03WS_rms vs run
χ^2 / ndf 9.114e+05 / 85
p0 305.9 ± 0.3544
7000
6000
5000
4000
3000
2000
1000

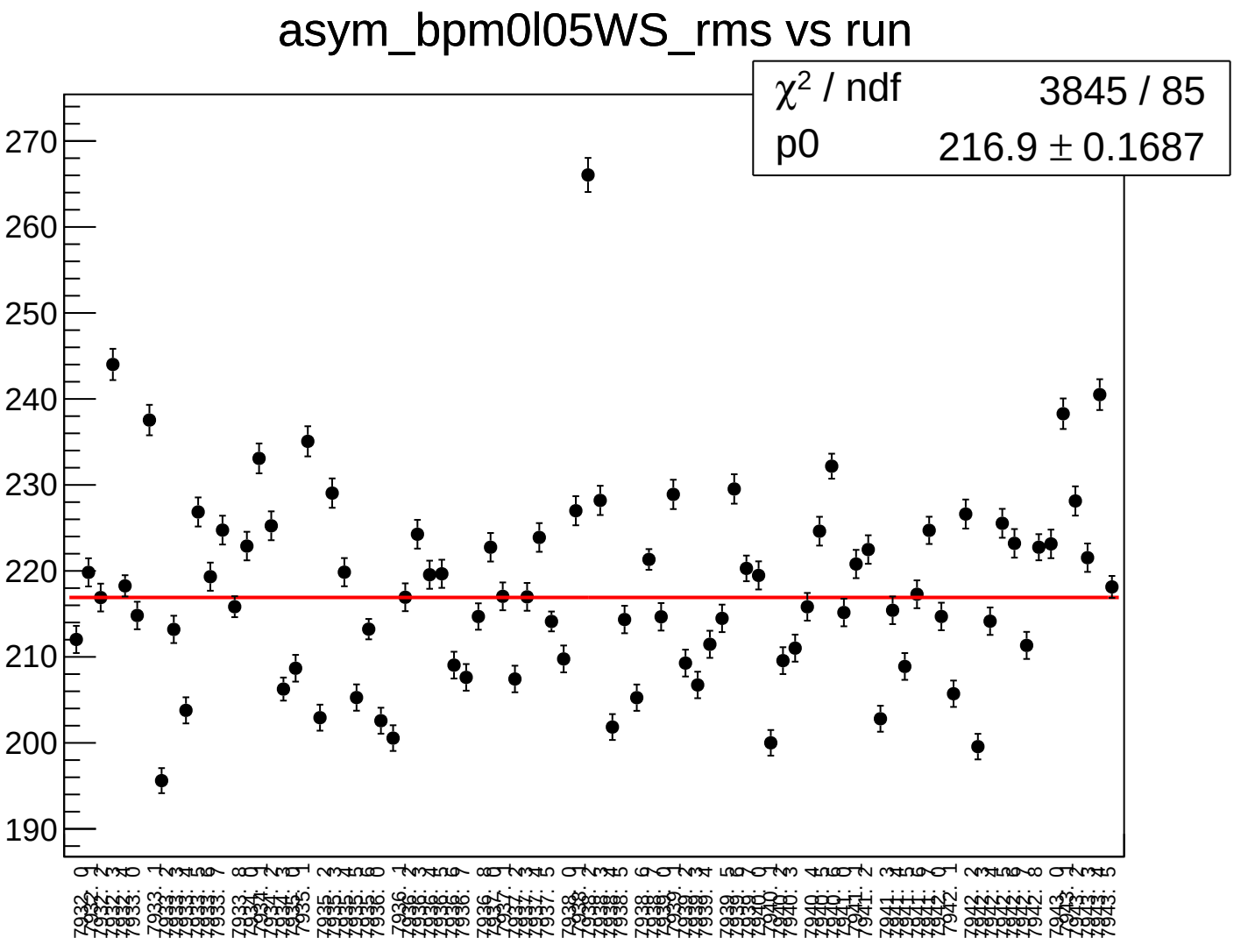

asym_bpm0l04WS_mean vs run
χ² / ndf 178.8 / 85
p0 9575 ± 321
20000
15000
10000
5000
0
−5000
pull
Entries 86
Mean 1.693e+04
Std Dev 1.689e+04
3
2
1
0
−1
−2
−3
−4

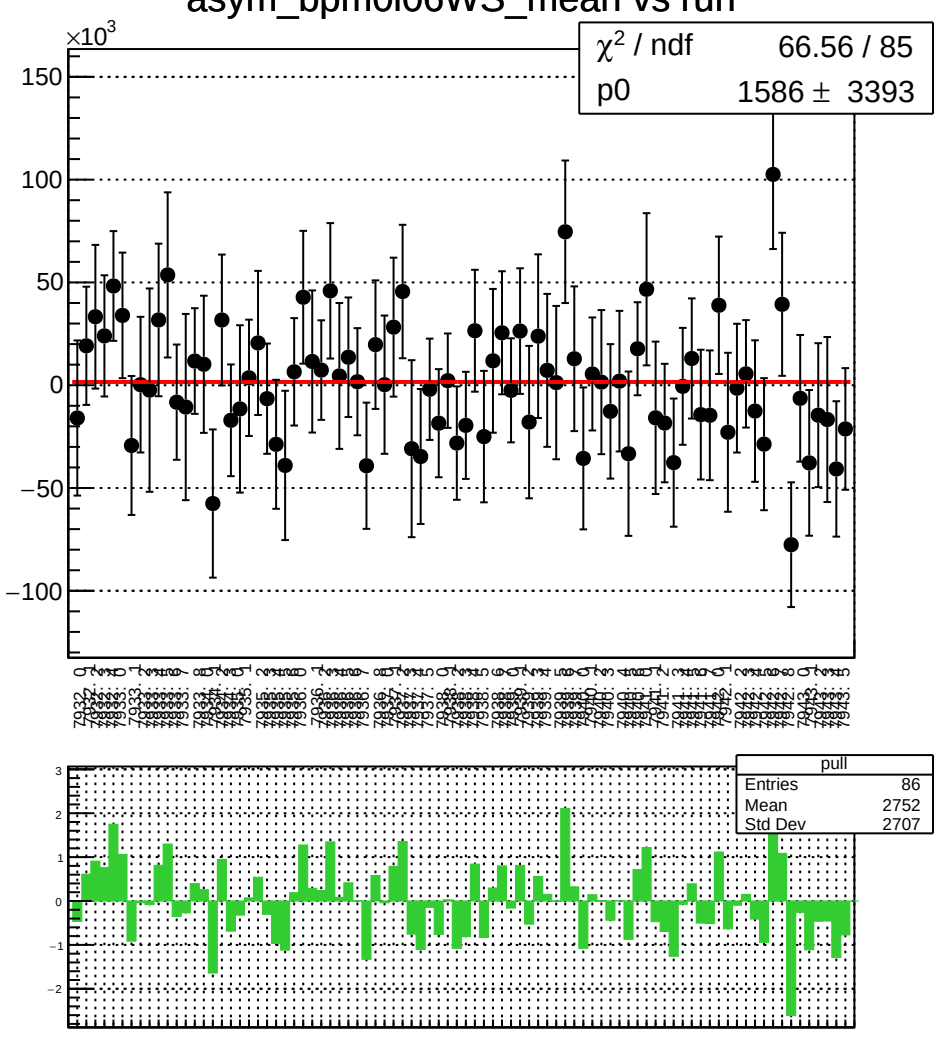

pull1D
Entries 86
Mean 0.00109
Std Dev 1.442
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

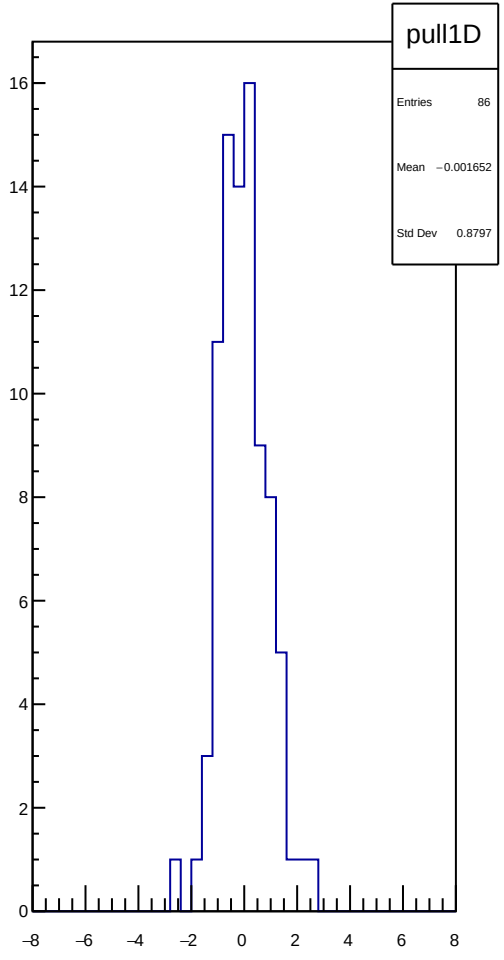

asym_bpm0l04WS_rms vs run
χ^2 / ndf 9373 / 85
p0 291.3 ± 0.227
360
340
320
300
280
260
240

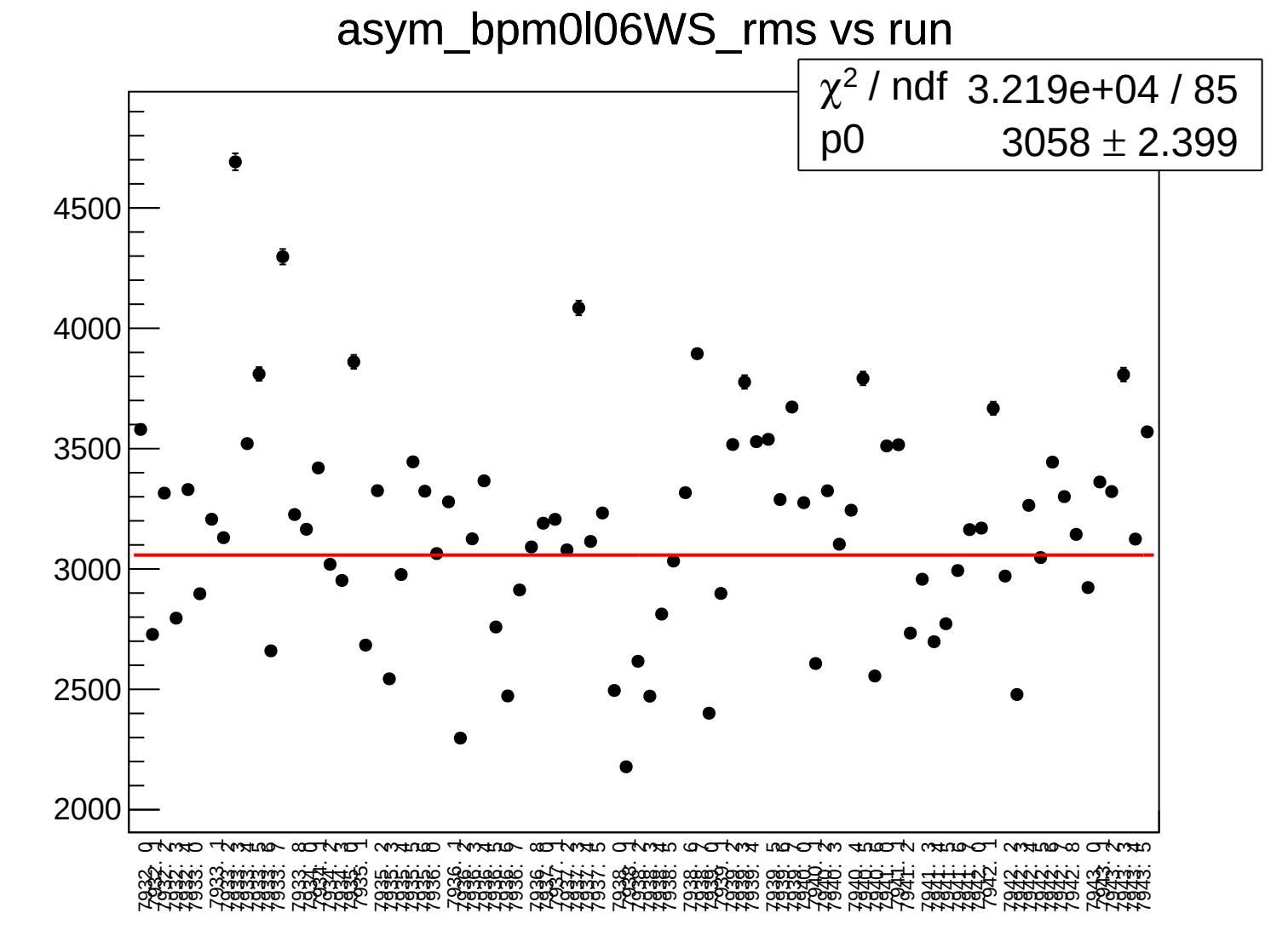

asym_bpm0l05WS_mean vs run
χ^2 / ndf 282.8 / 85
p0 9503 ± 238.6
pull
Entries 86
Mean 1288
Std Dev 1243

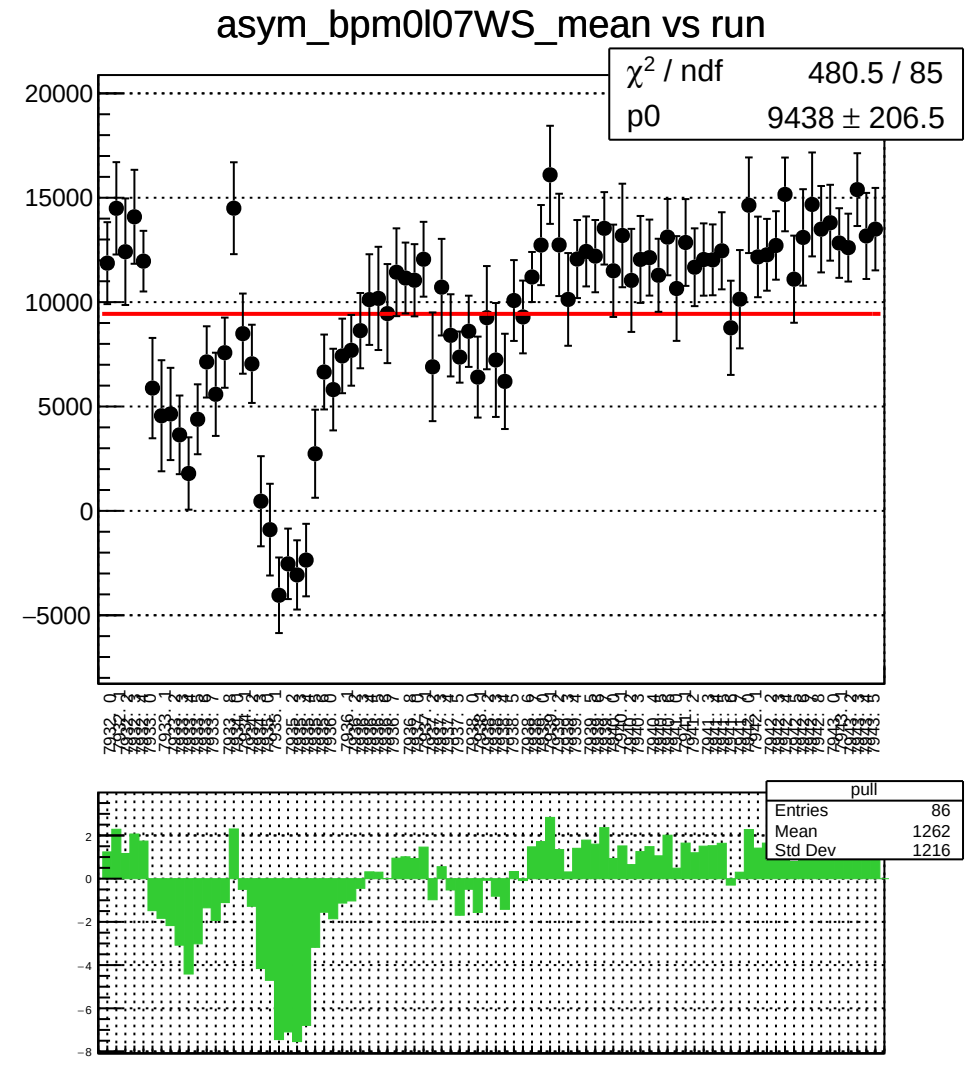

pull1D
Entries 86
Mean 0.01827
Std Dev 1.813

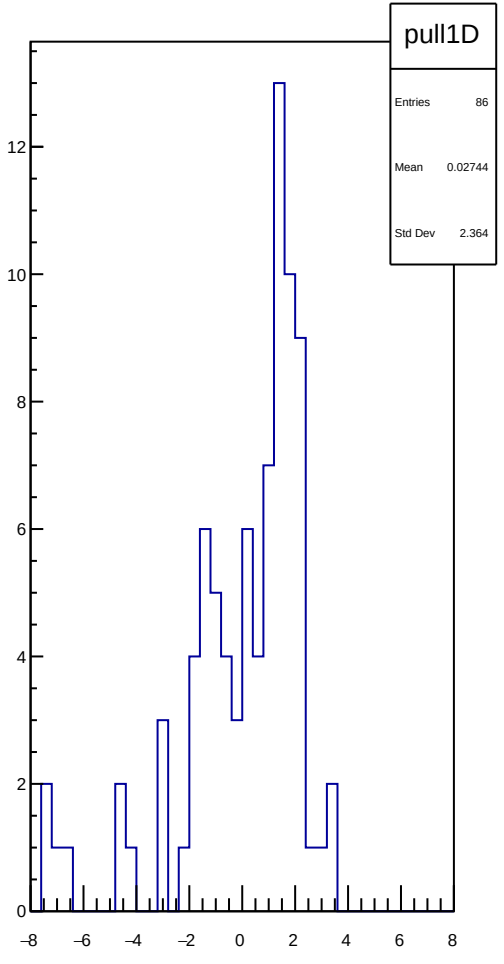

asym_bpm0l05WS_rms vs run
χ² / ndf 3845 / 85
p0 216.9 ± 0.1687
270
260
250
240
230
220
210
200
190

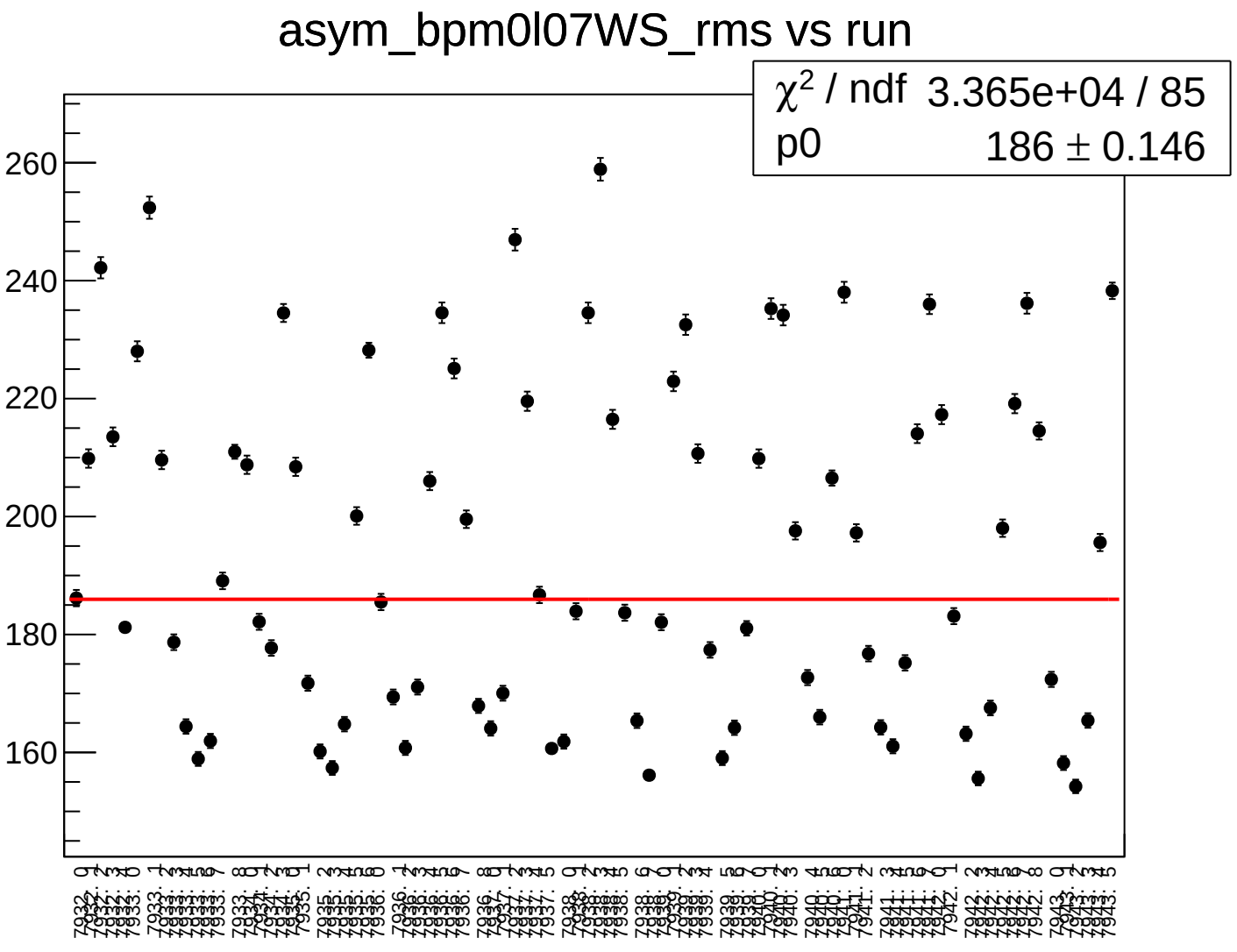

asym_bpm0l06WS_mean vs run
×10^3
χ^2 / ndf 66.56 / 85
p0 1586 ± 3393
150
100
50
0
−50
−100
pull
Entries 86
Mean 2752
Std Dev 2707
3
2
1
0
−1
−2

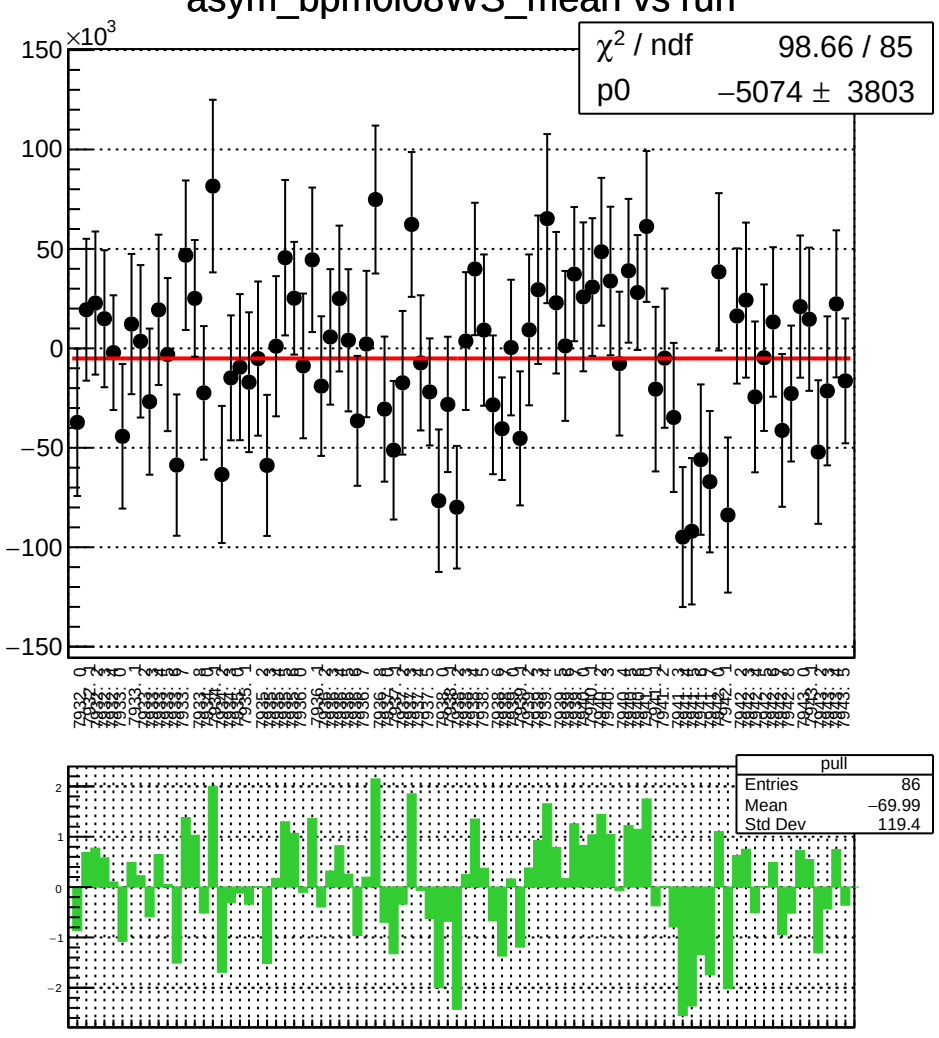

pull1D
Entries 86
Mean −0.001652
Std Dev 0.8797
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

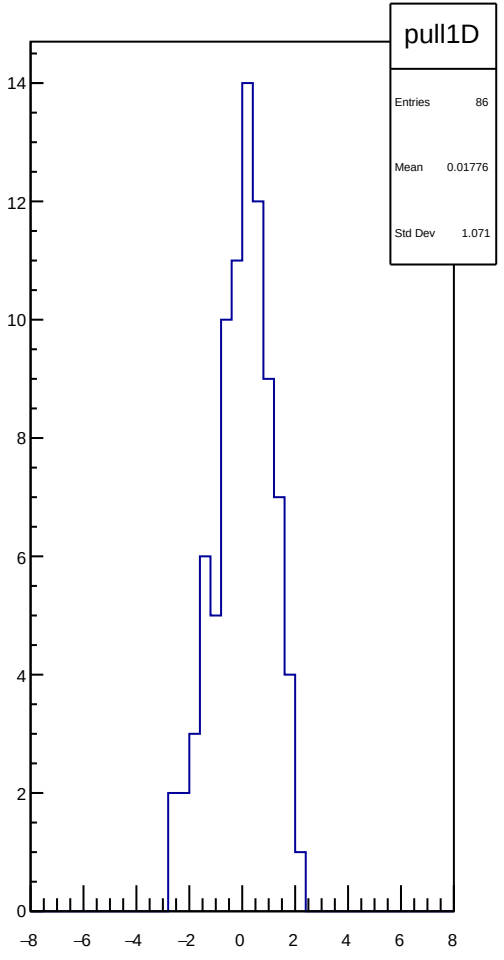

asym_bpm0l06WS_rms vs run
χ² / ndf 3.219e+04 / 85
p0 3058 ± 2.399
4500
4000
3500
3000
2500
2000

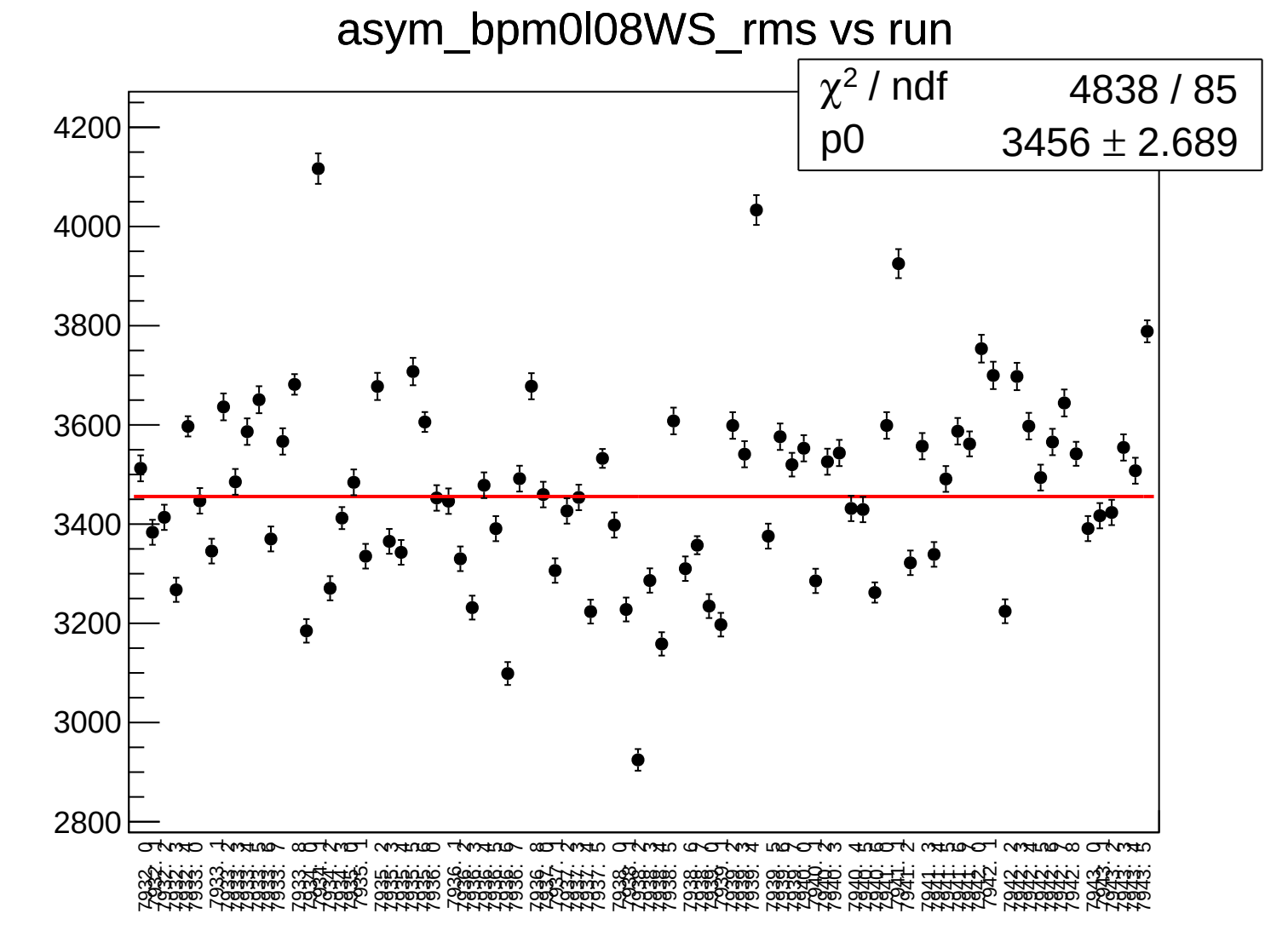

asym_bpm0l07WS_mean vs run
χ² / ndf 480.5 / 85
p0 9438 ± 206.5
20000
15000
10000
5000
0
−5000
pull
Entries 86
Mean 1262
Std Dev 1216
2
0
−2
−4
−6
−8

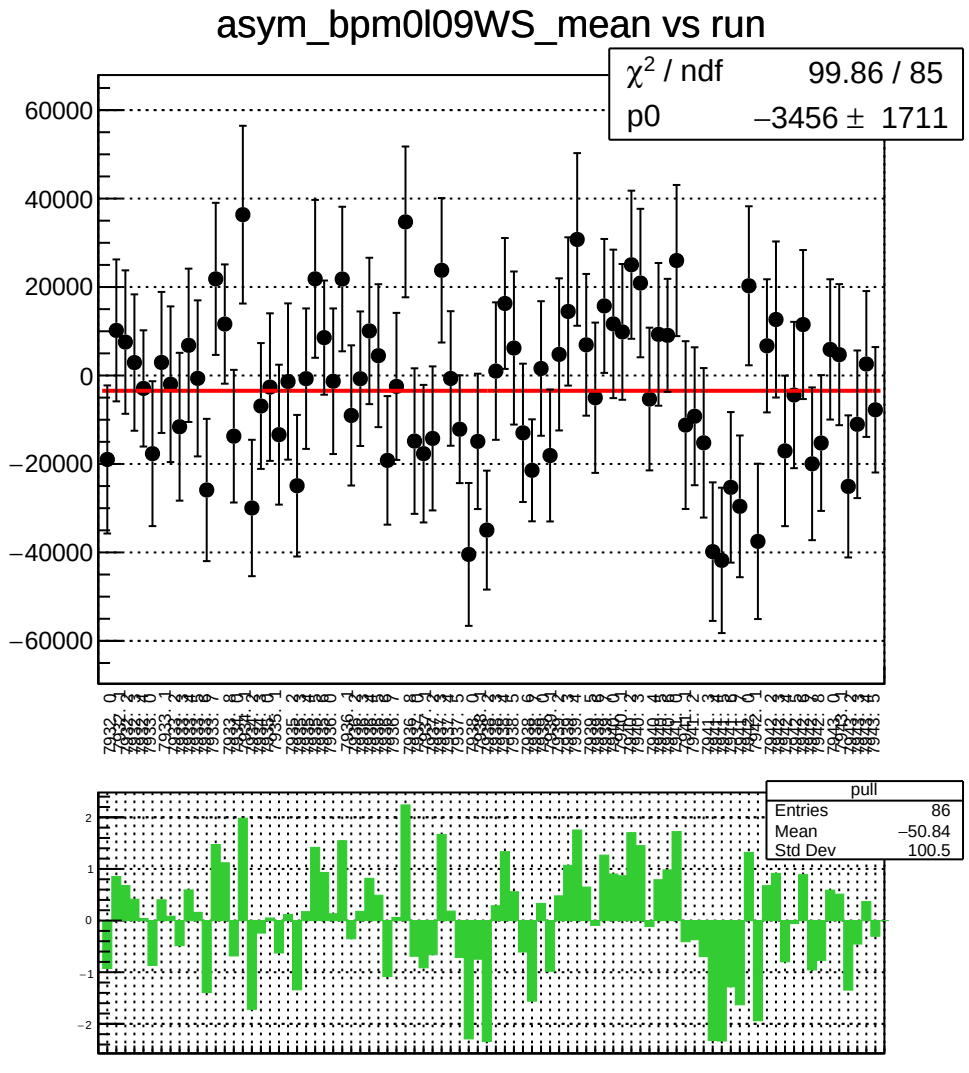

pull1D
Entries 86
Mean 0.02744
Std Dev 2.364
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

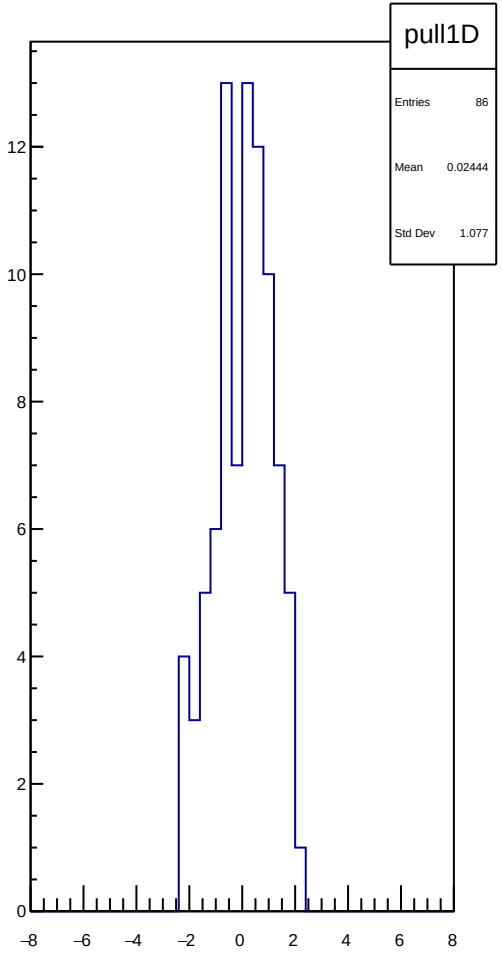

asym_bpm0l07WS_rms vs run
χ² / ndf 3.365e+04 / 85
p0 186 ± 0.146
260
240
220
200
180
160

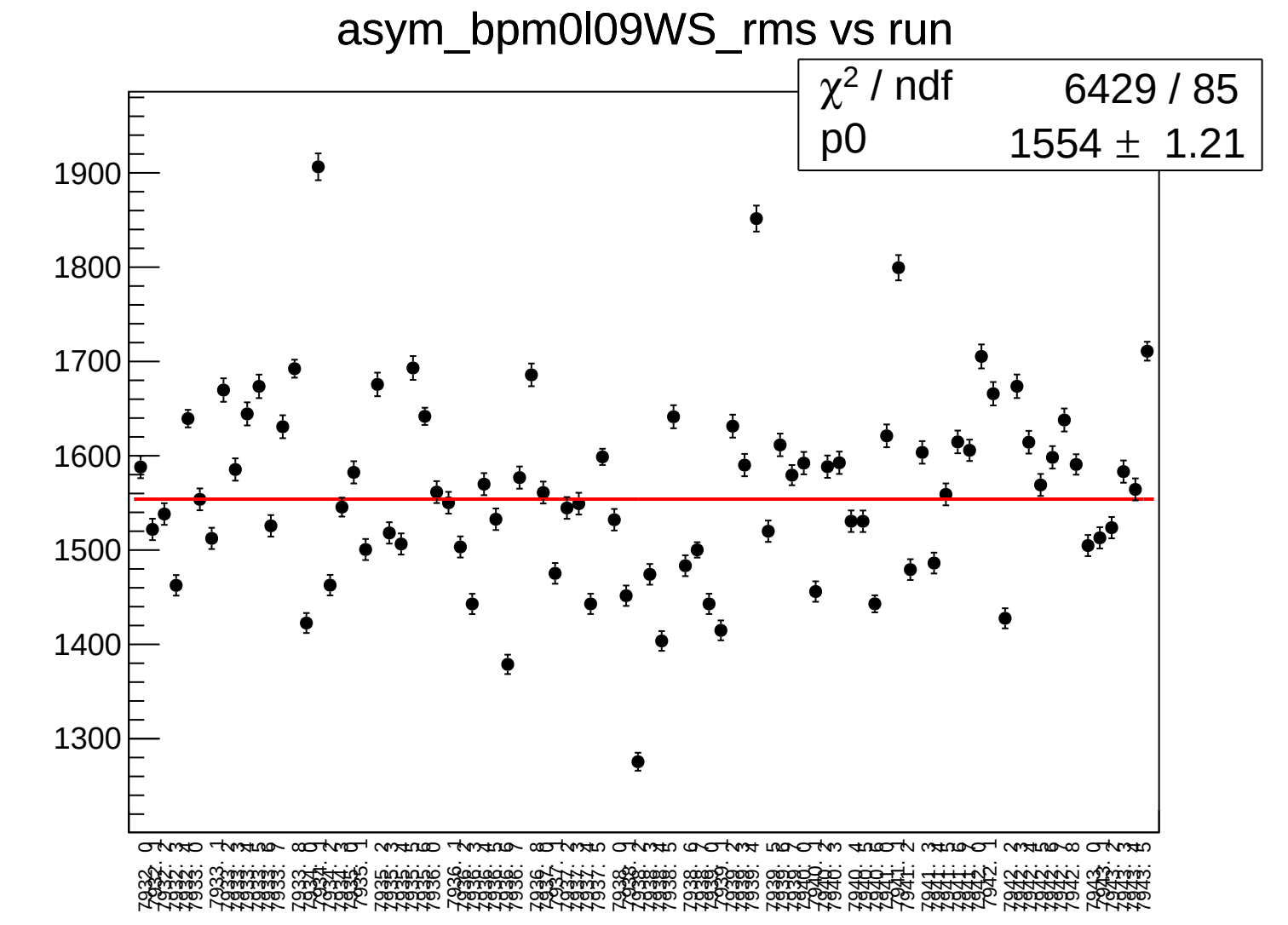

asym_bpm0l08WS_mean vs run
×10^3
χ² / ndf 98.66 / 85
p0 −5074 ± 3803
pull
Entries 86
Mean −69.99
Std Dev 119.4

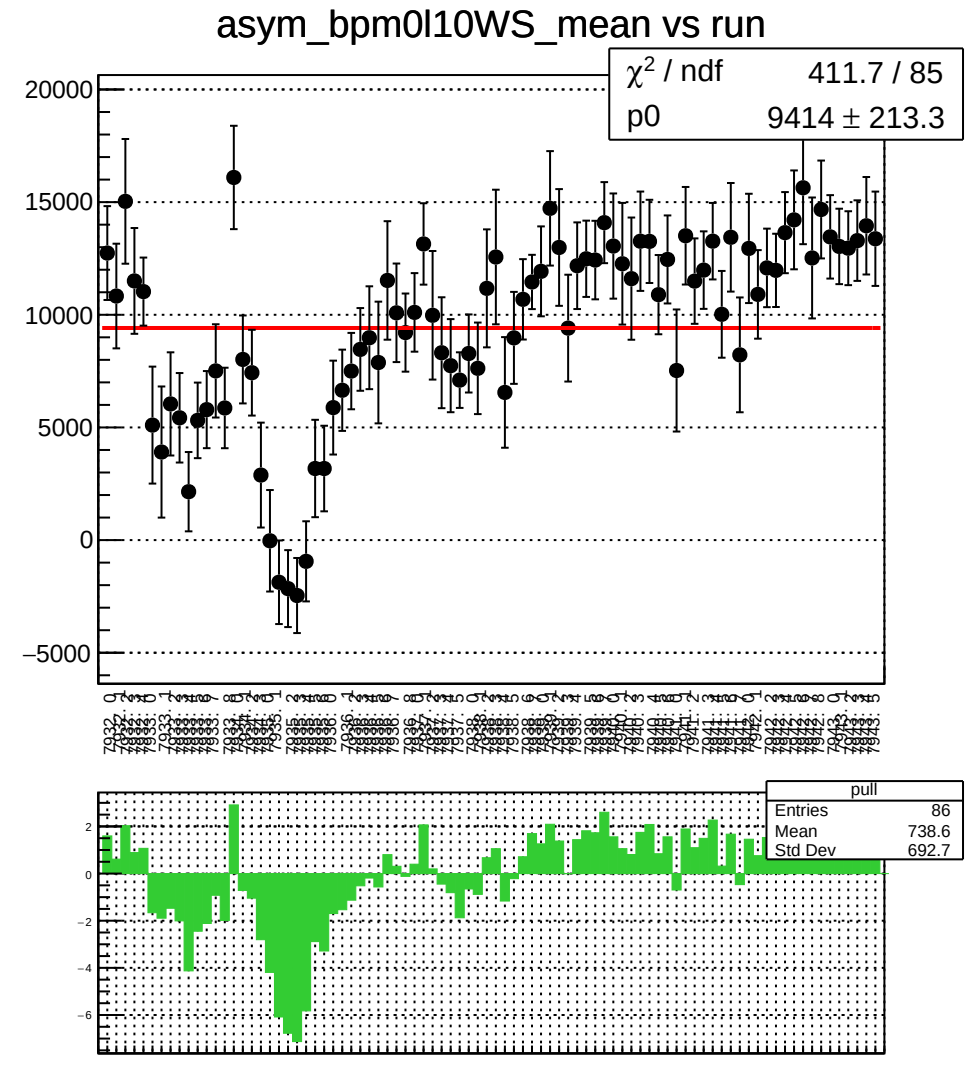

pull1D
Entries 86
Mean 0.01776
Std Dev 1.071

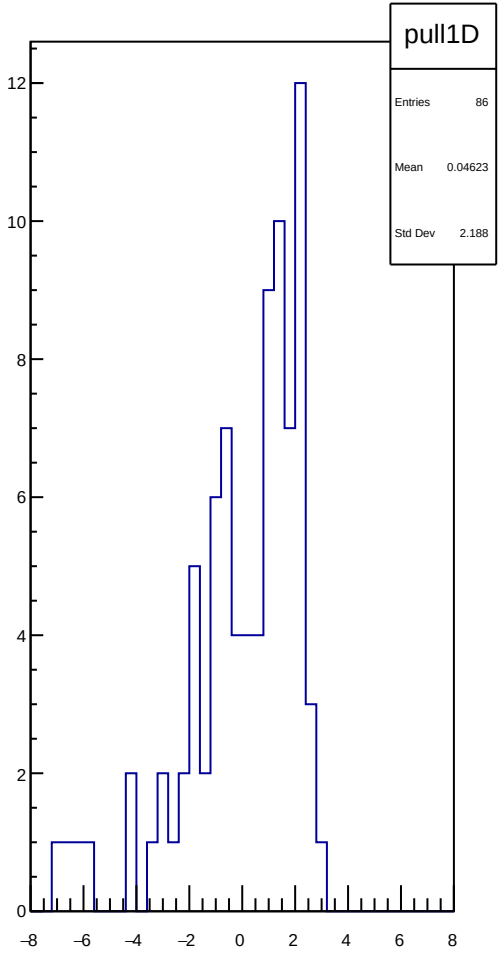

asym_bpm0l08WS_rms vs run
χ^2 / ndf 4838 / 85
p0 3456 ± 2.689
4200
4000
3800
3600
3400
3200
3000
2800

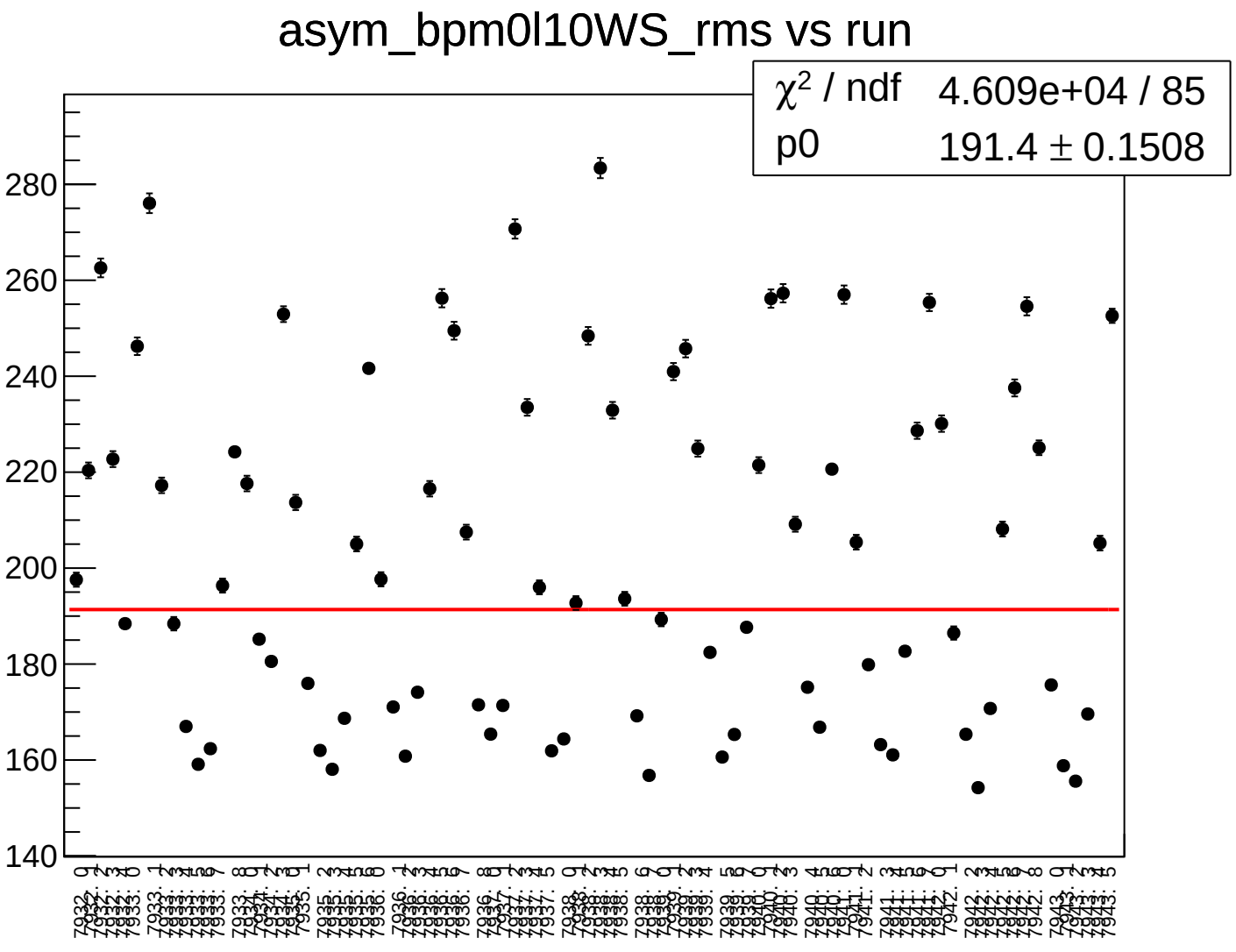

asym_bpm0l09WS_mean vs run
χ² / ndf 99.86 / 85
p0 −3456 ± 1711
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean −50.84
Std Dev 100.5
2
1
0
−1
−2

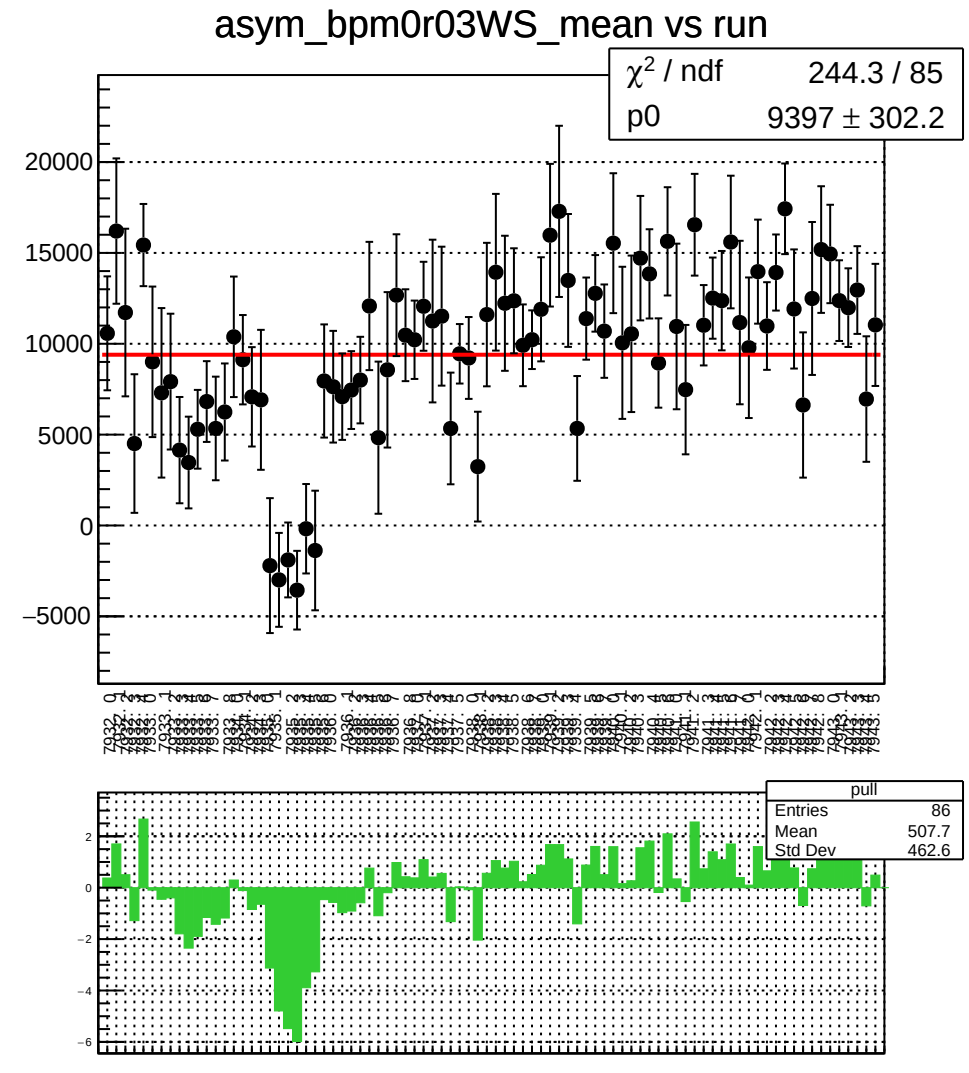

pull1D
Entries 86
Mean 0.02444
Std Dev 1.077
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

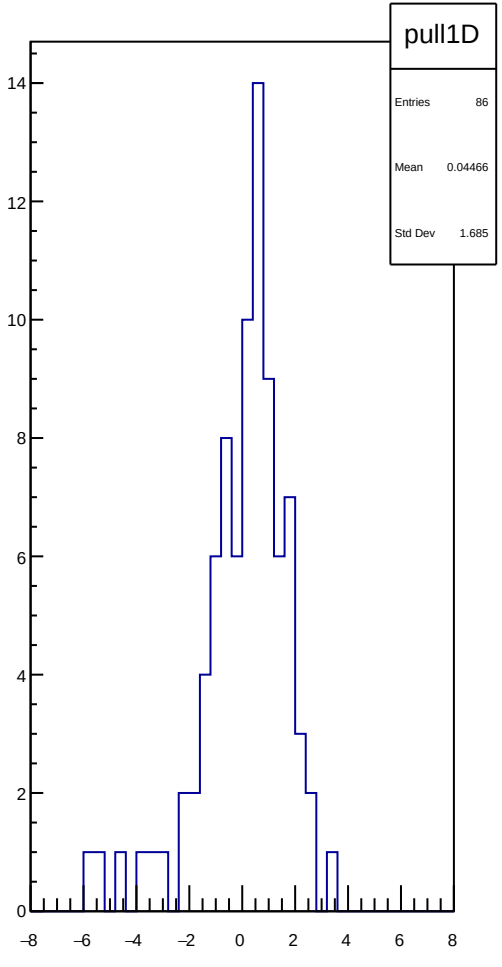

asym_bpm0l09WS_rms vs run
χ² / ndf 6429 / 85
p0 1554 ± 1.21
1900
1800
1700
1600
1500
1400
1300

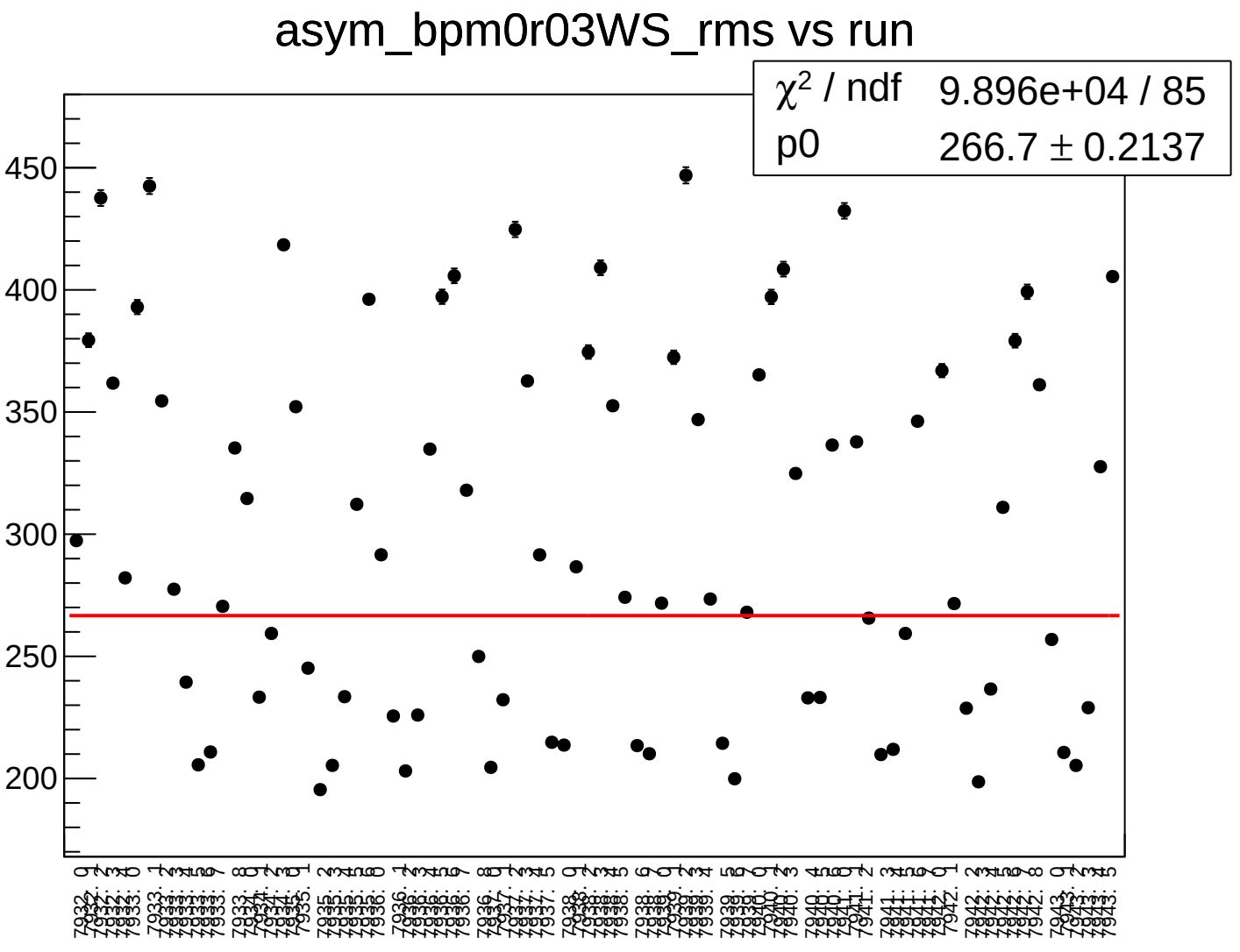

asym_bpm0l10WS_mean vs run
χ^2 / ndf 411.7 / 85
p0 9414 ± 213.3
pull
Entries 86
Mean 738.6
Std Dev 692.7

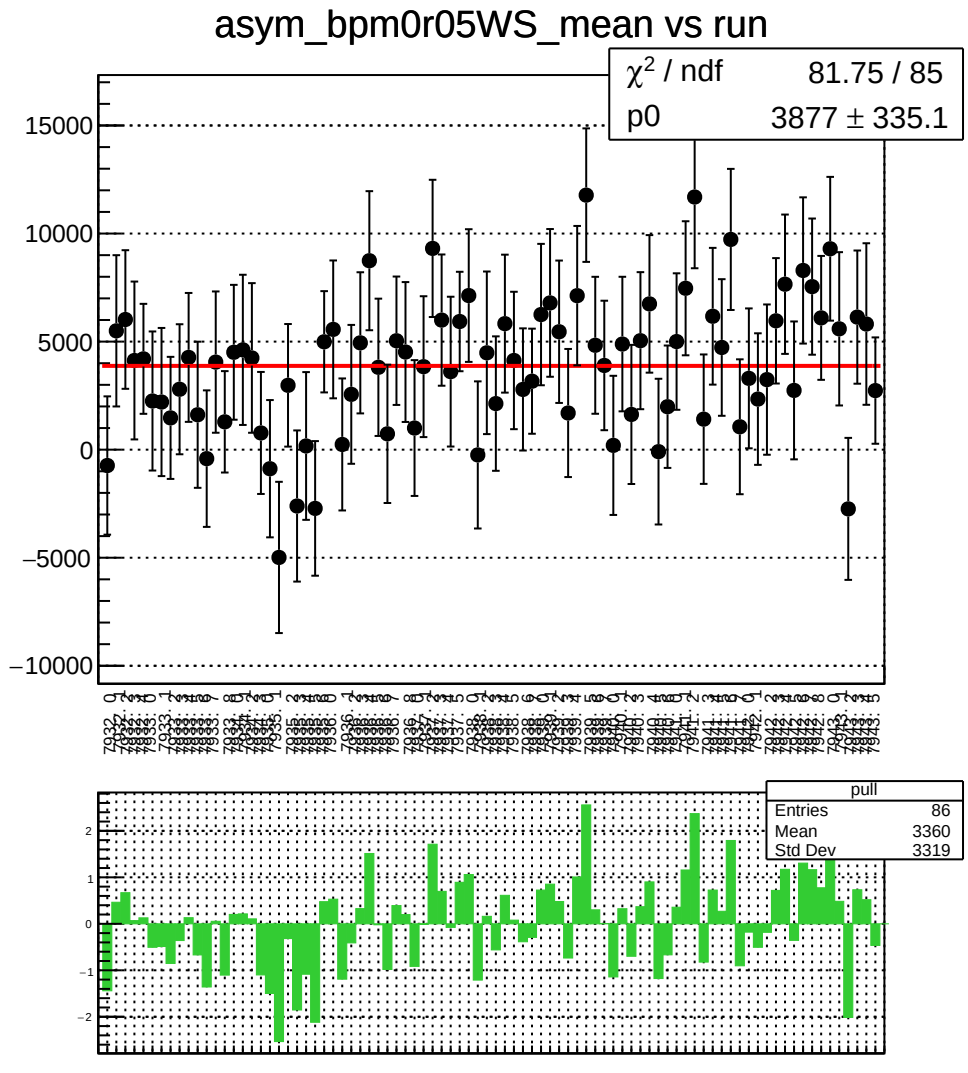

pull1D
Entries 86
Mean 0.04623
Std Dev 2.188

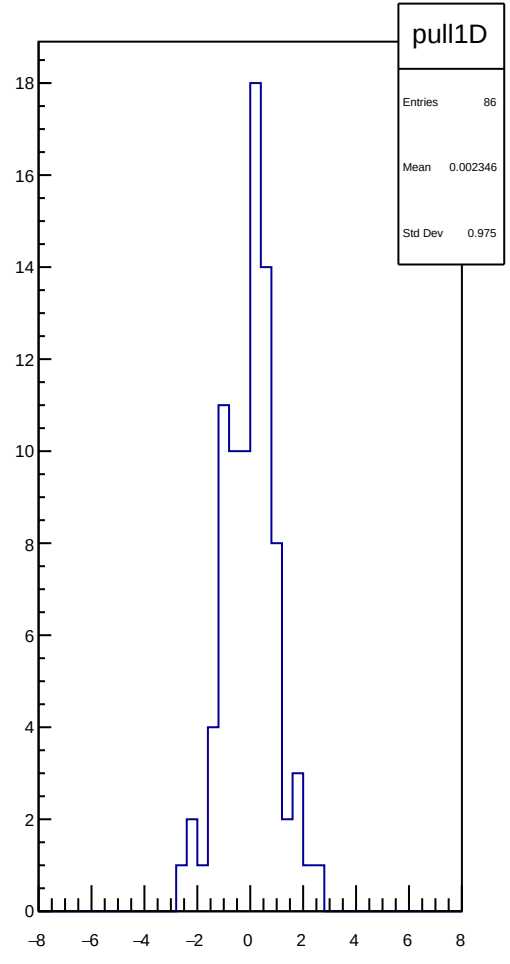

asym_bpm0l10WS_rms vs run
χ^2 / ndf 4.609e+04 / 85
p0 191.4 ± 0.1508
280
260
240
220
200
180
160
140

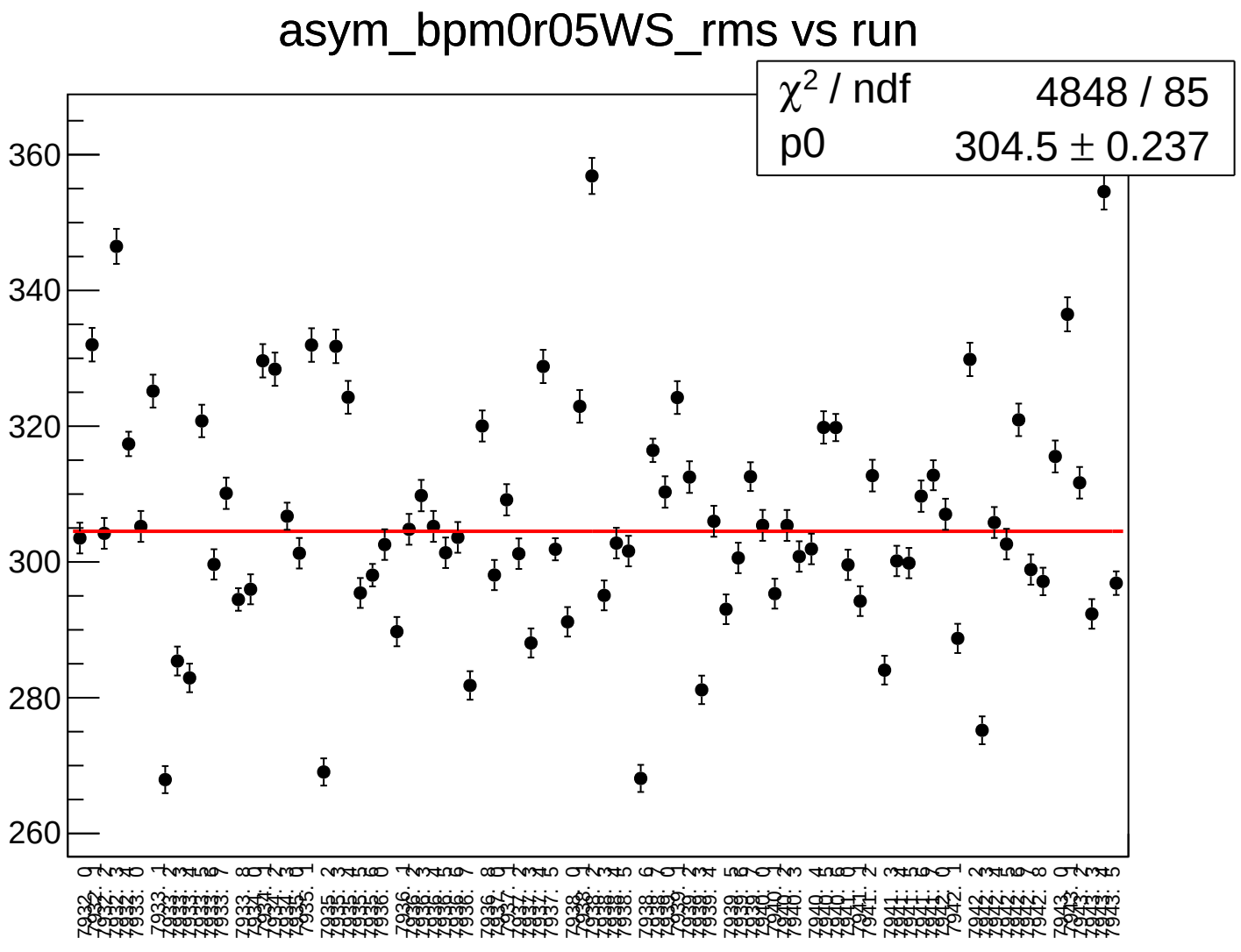

asym_bpm0r03WS_mean vs run
χ² / ndf 244.3 / 85
p0 9397 ± 302.2
20000
15000
10000
5000
0
−5000
pull
Entries 86
Mean 507.7
Std Dev 462.6
2
0
−2
−4
−6

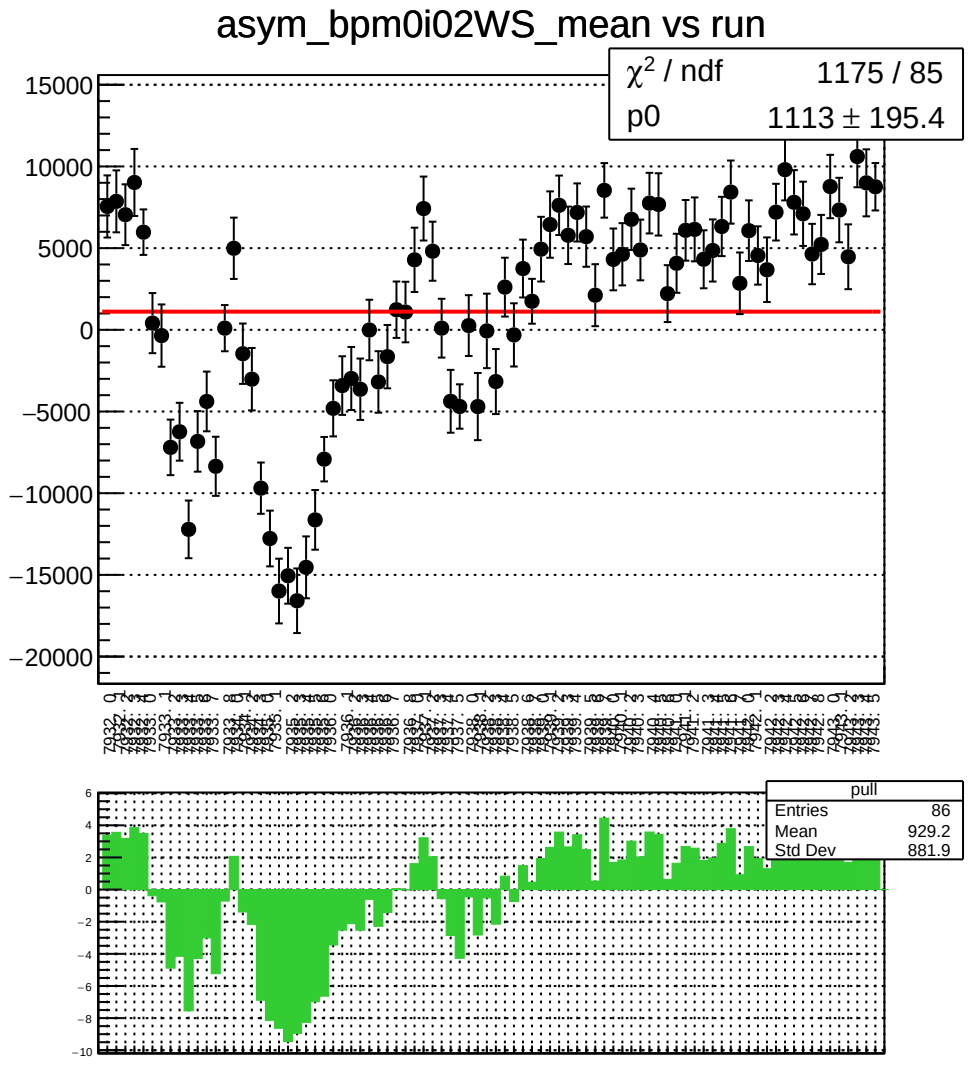

pull1D
Entries 86
Mean 0.04466
Std Dev 1.685
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

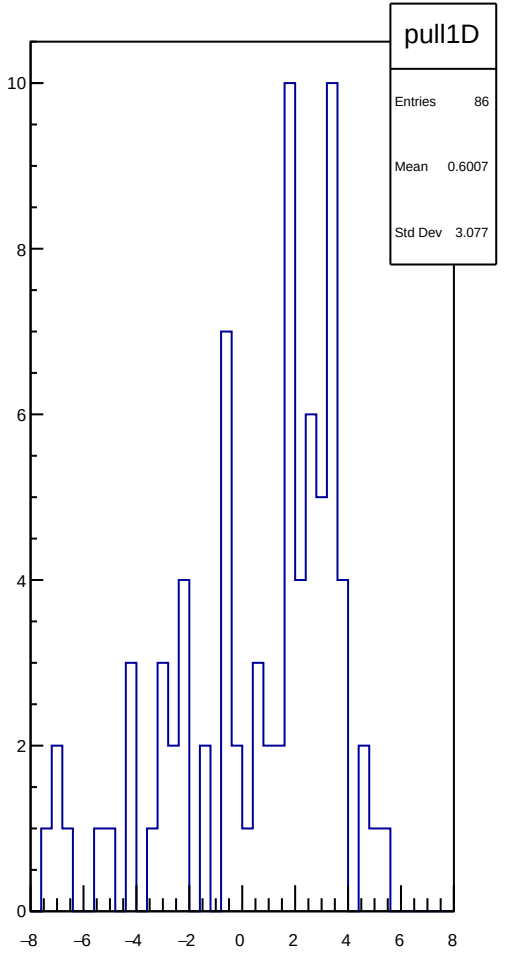

asym_bpm0r03WS_rms vs run
χ^2 / ndf 9.896e+04 / 85
p0 266.7 ± 0.2137
450
400
350
300
250
200

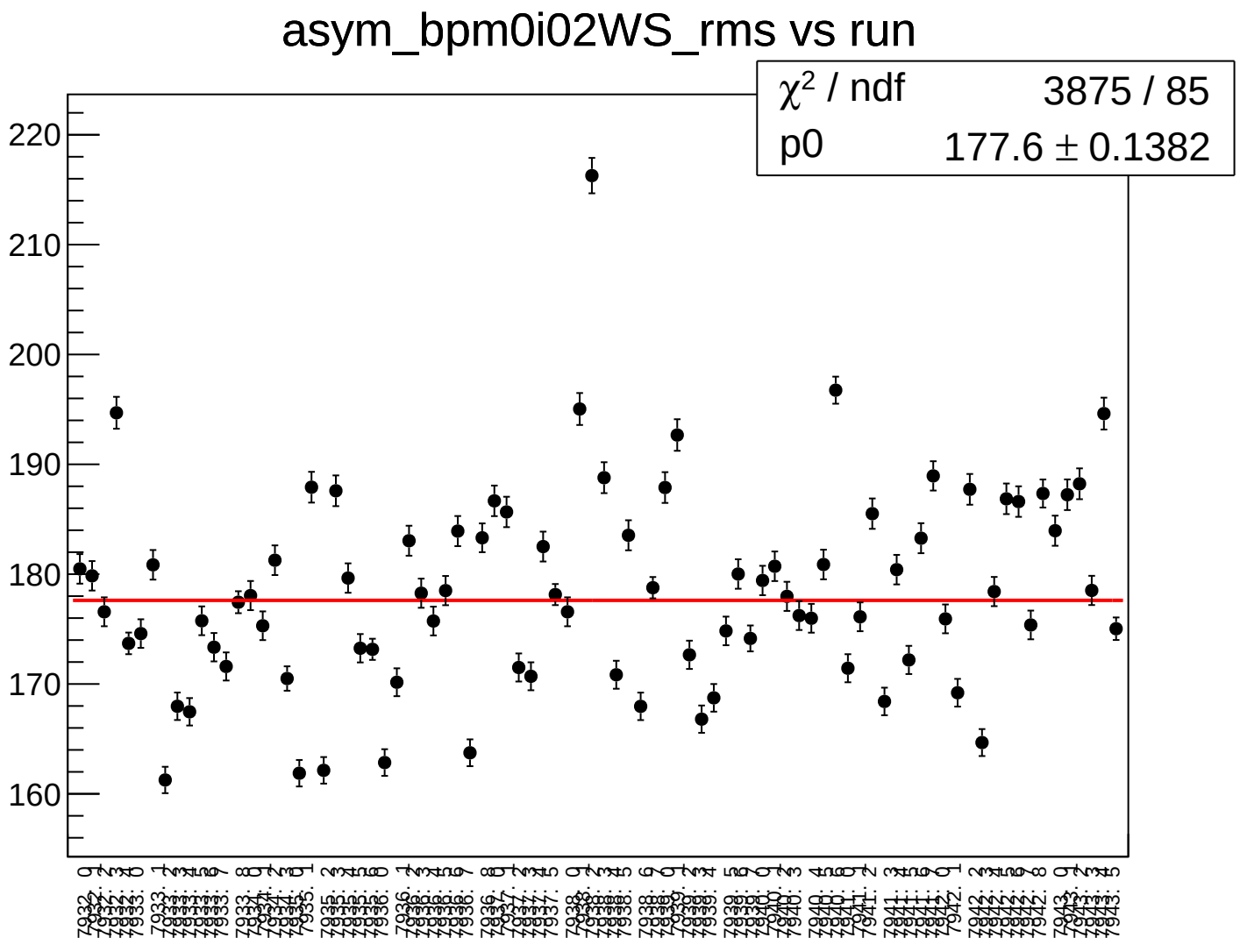

asym_bpm0r05WS_mean vs run
χ² / ndf 81.75 / 85
p0 3877 ± 335.1
15000
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 3360
Std Dev 3319
2
1
0
−1
−2

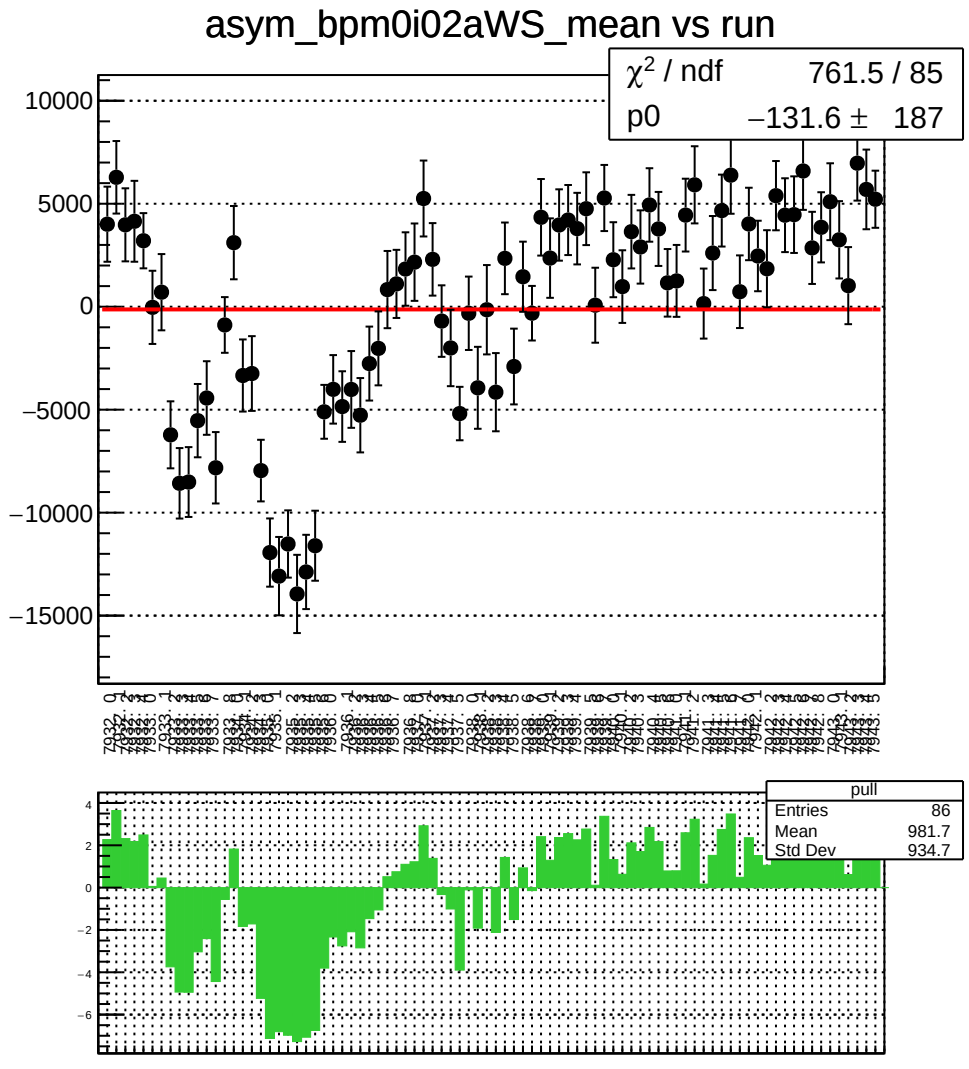

pull1D
Entries 86
Mean 0.002346
Std Dev 0.975
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

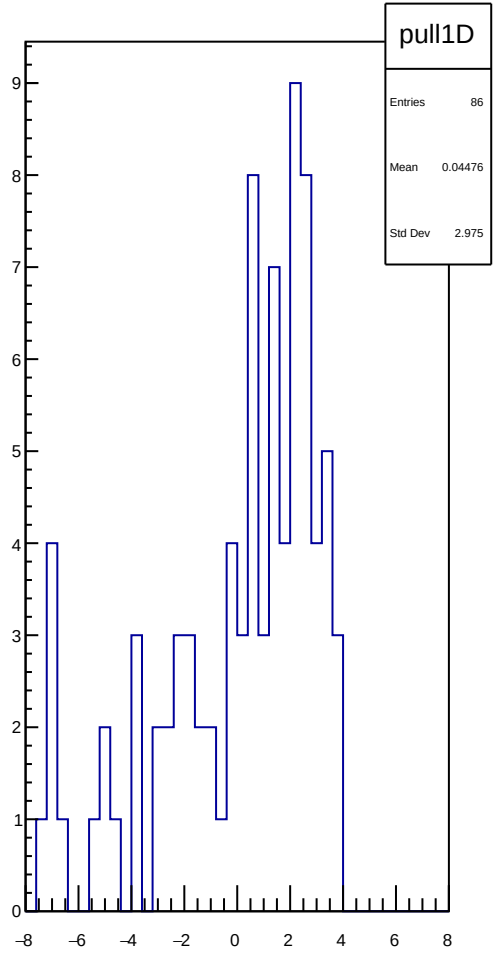

asym_bpm0r05WS_rms vs run
χ^2 / ndf 4848 / 85
p0 304.5 ± 0.237
360
340
320
300
280
260

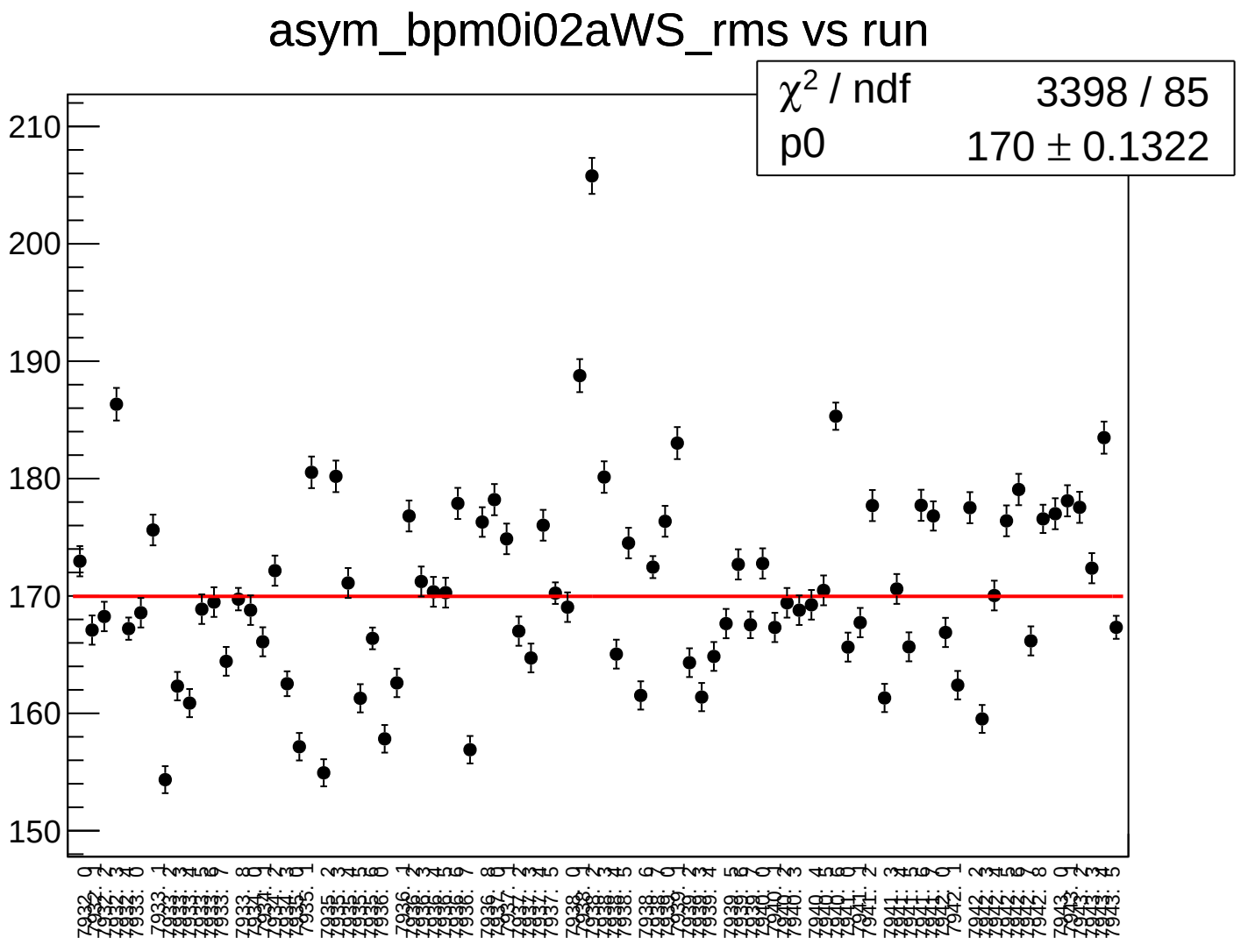

asym_bpm0i02WS_mean vs run
χ² / ndf 1175 / 85
p0 1113 ± 195.4
pull
Entries 86
Mean 929.2
Std Dev 881.9

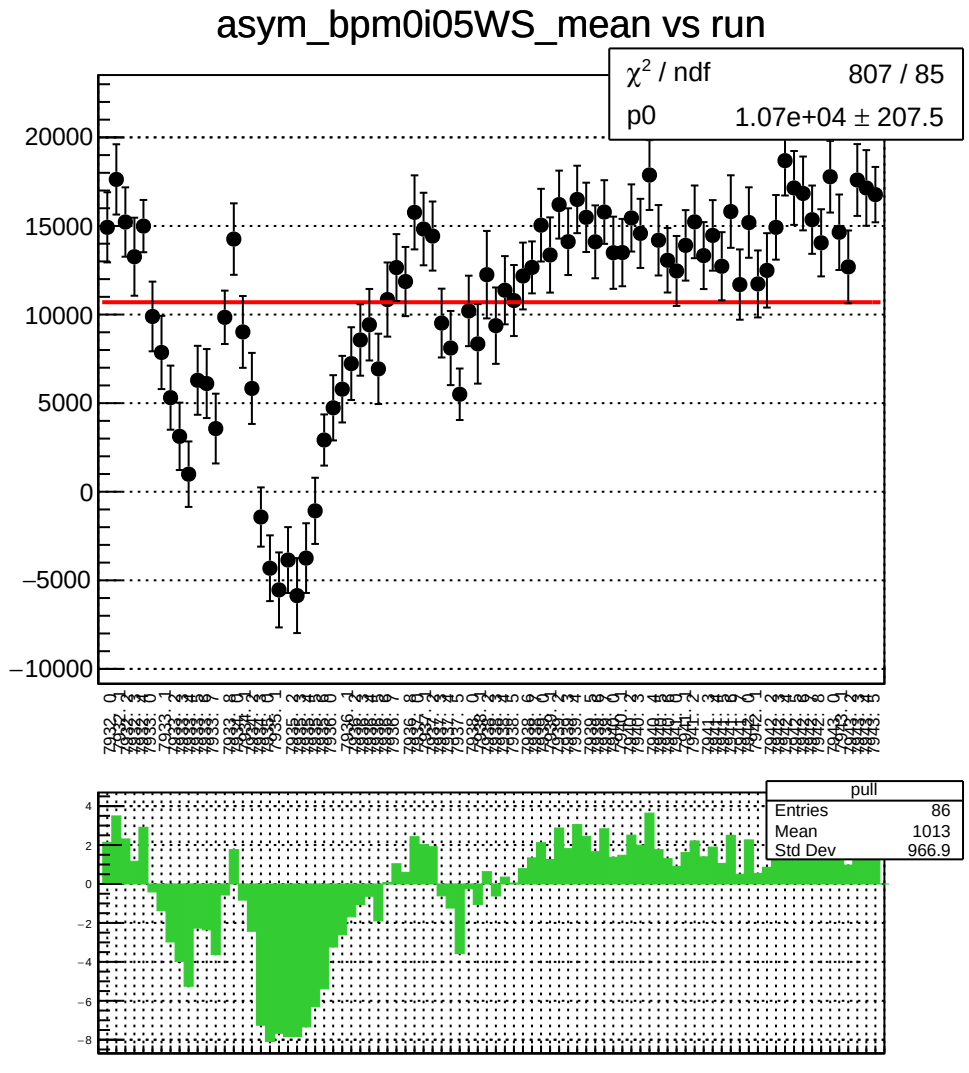

pull1D
Entries 86
Mean 0.6007
Std Dev 3.077

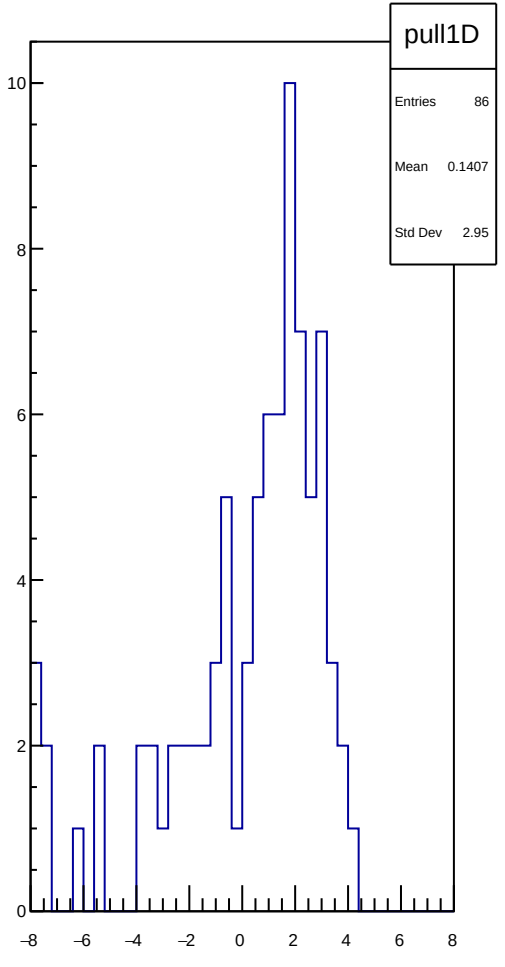

asym_bpm0i02WS_rms vs run
χ^2 / ndf 3875 / 85
p0 177.6 ± 0.1382
220
210
200
190
180
170
160

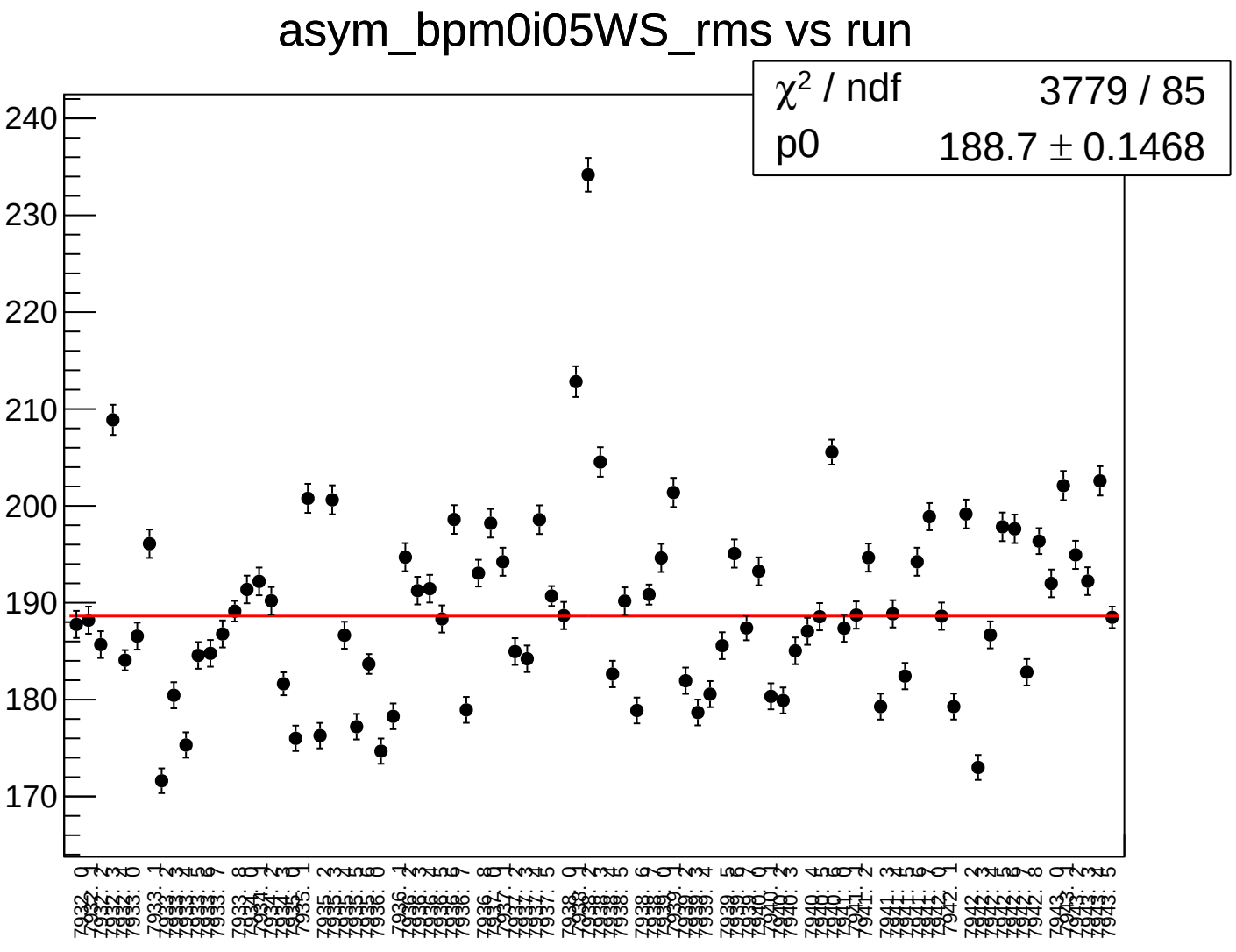

asym_bpm0i02aWS_mean vs run
χ² / ndf 761.5 / 85
p0 −131.6 ± 187
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 981.7
Std Dev 934.7
4
2
0
−2
−4
−6

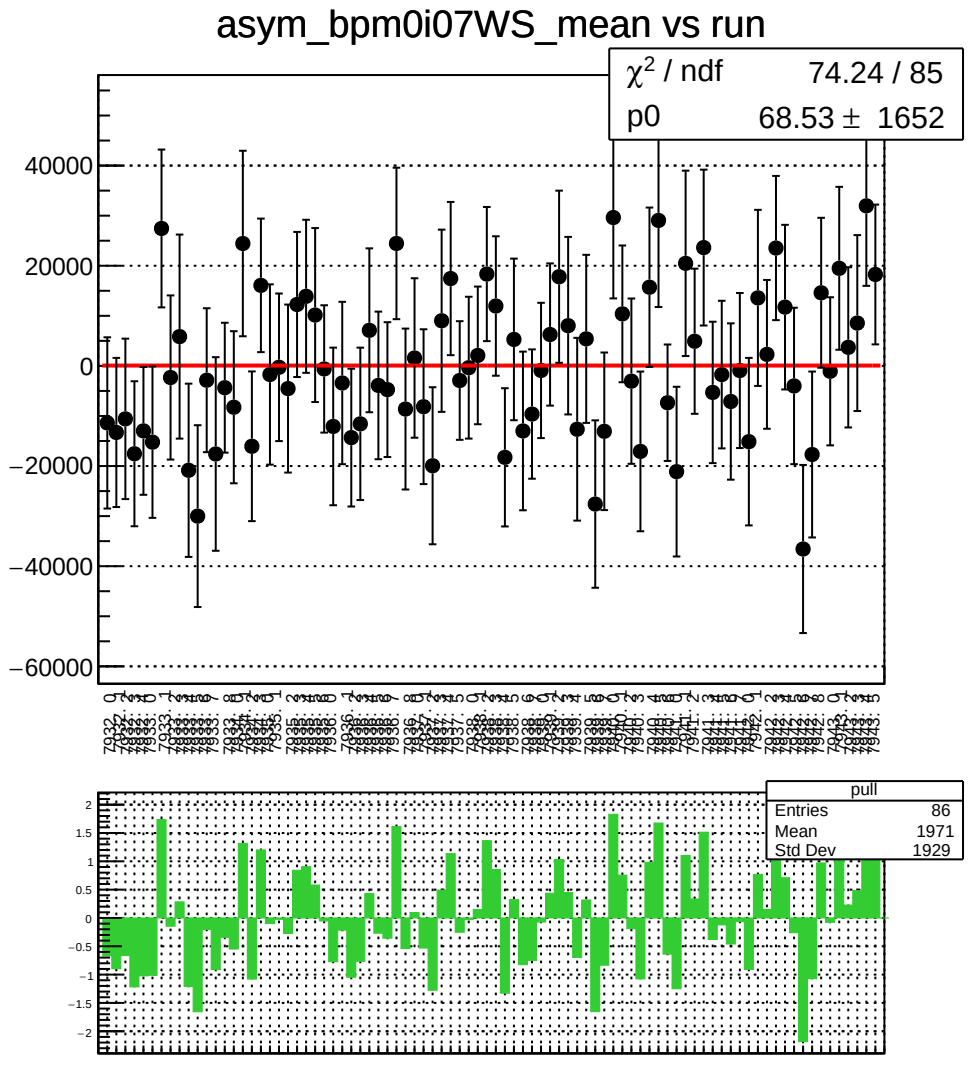

pull1D
Entries 86
Mean 0.04476
Std Dev 2.975
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

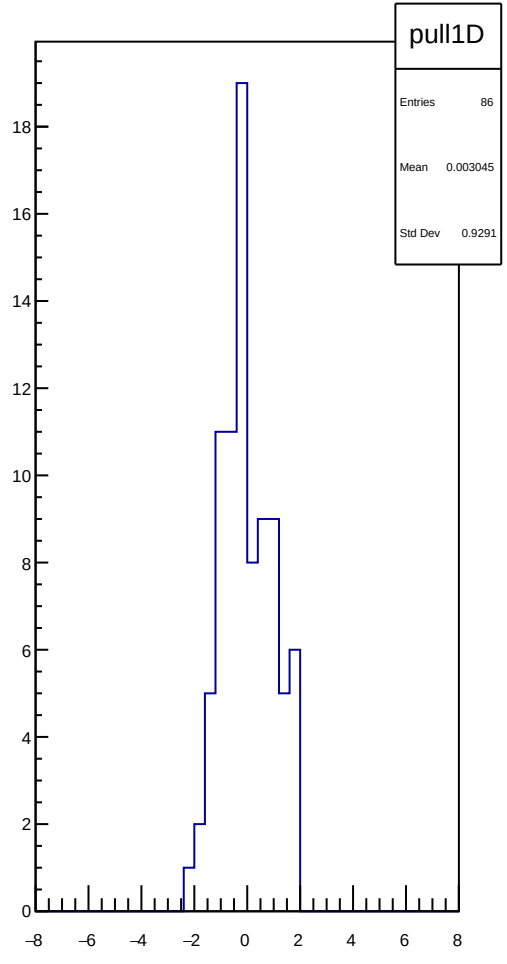

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 3398 / 85
p0 170 ± 0.1322
210
200
190
180
170
160
150

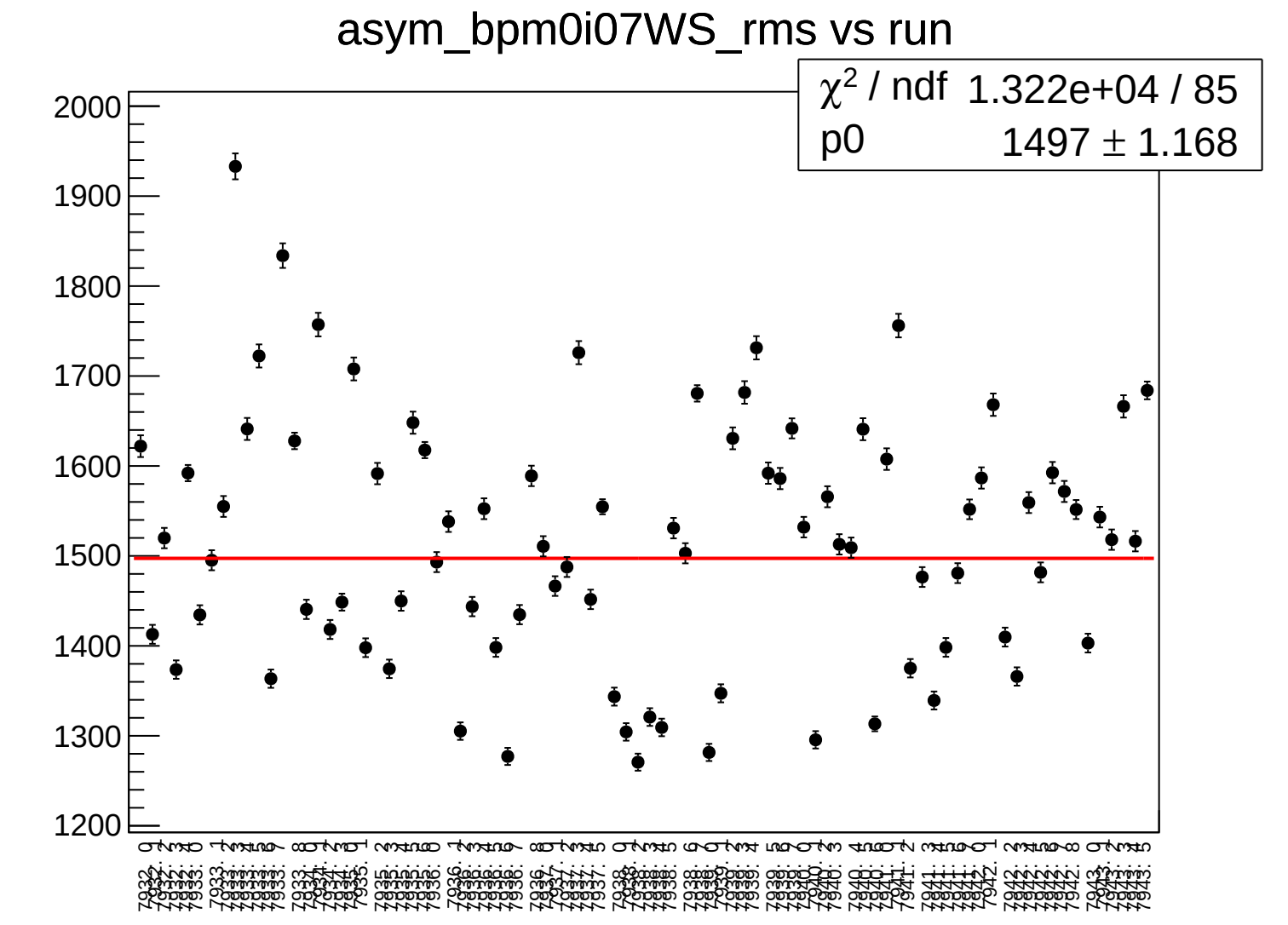

asym_bpm0i05WS_mean vs run
χ² / ndf 807 / 85
p0 1.07e+04 ± 207.5
pull
Entries 86
Mean 1013
Std Dev 966.9

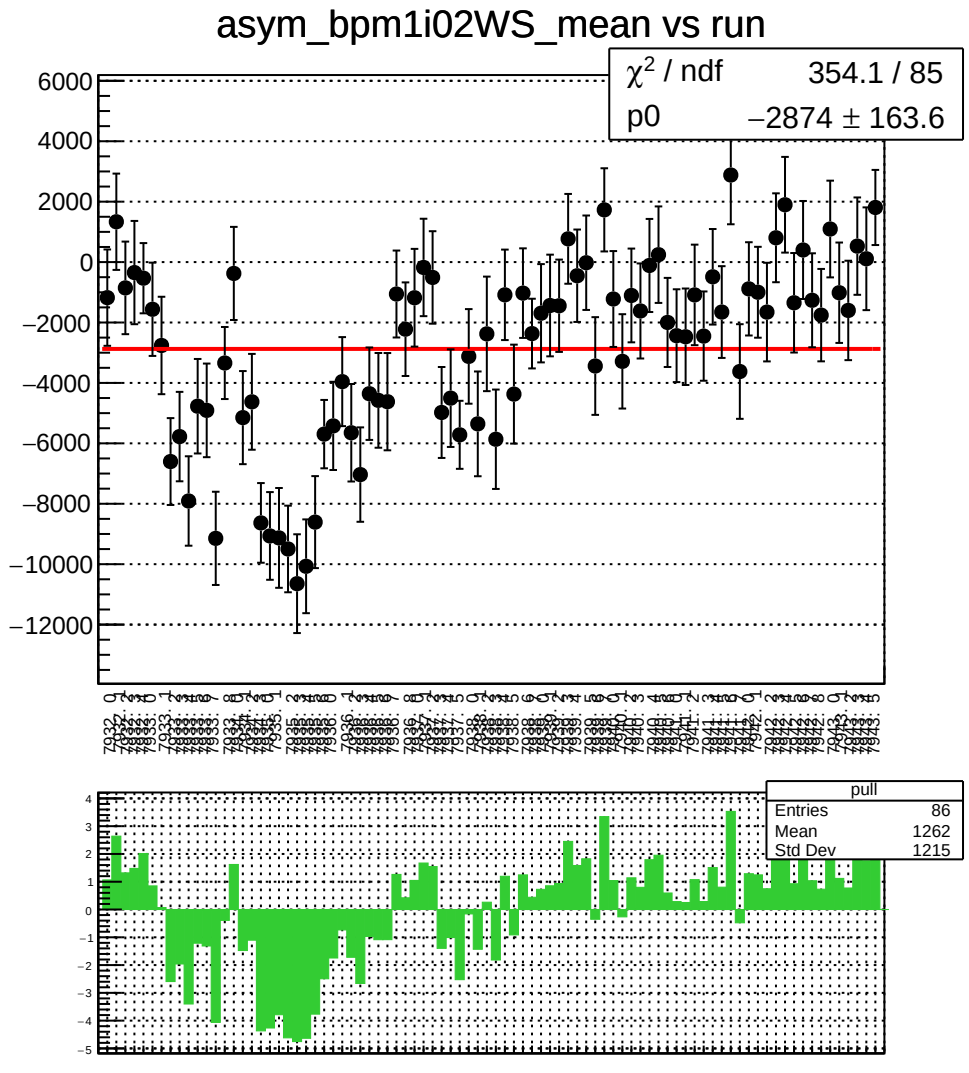

pull1D
Entries 86
Mean 0.1407
Std Dev 2.95

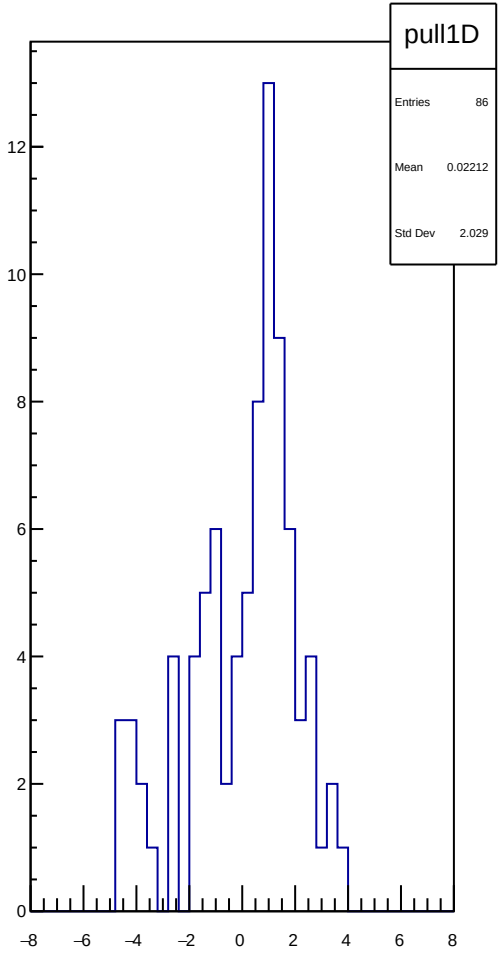

asym_bpm0i05WS_rms vs run
χ² / ndf 3779 / 85
p0 188.7 ± 0.1468
240
230
220
210
200
190
180
170

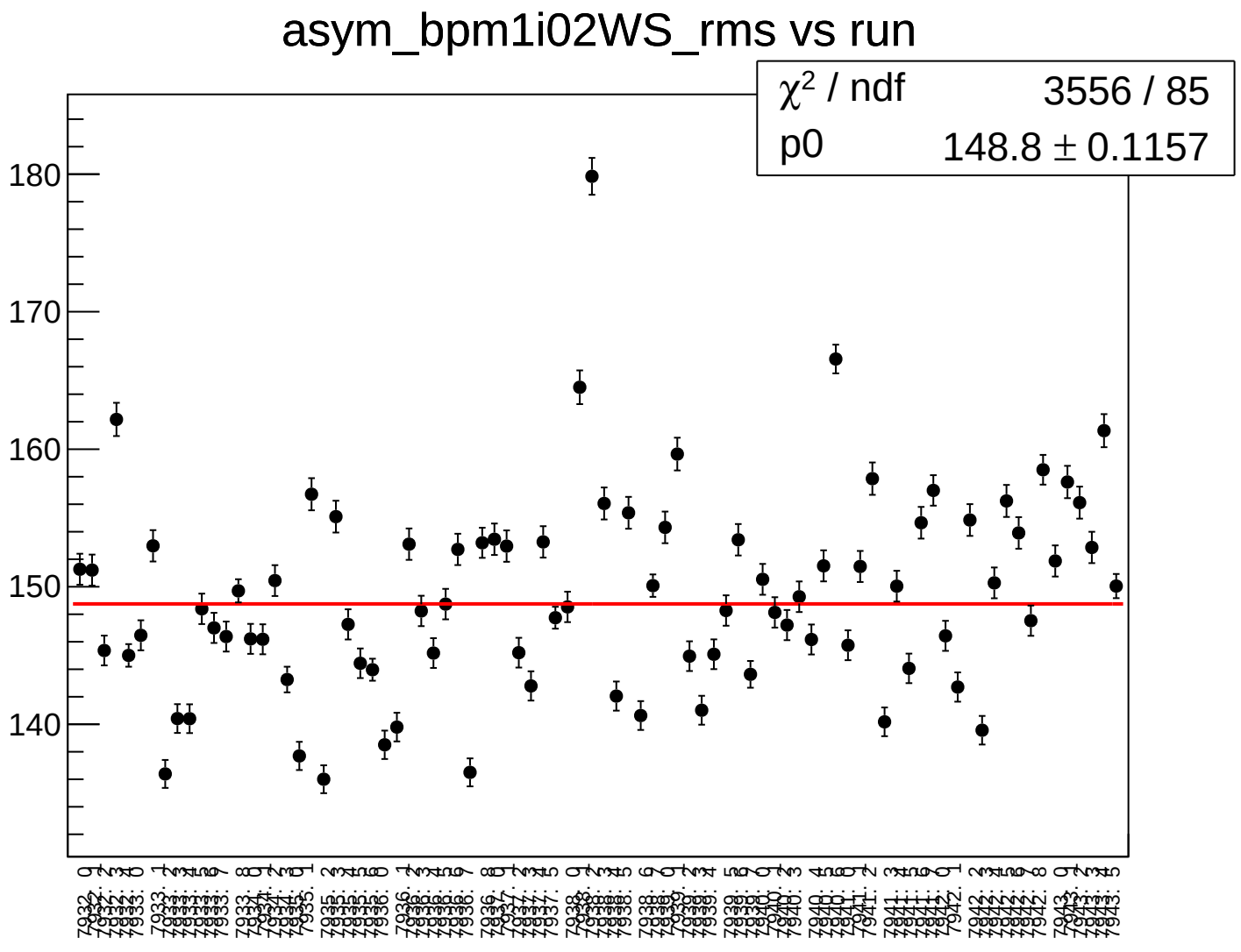

asym_bpm0i07WS_mean vs run
χ² / ndf 74.24 / 85
p0 68.53 ± 1652
40000
20000
0
−20000
−40000
−60000
pull
Entries 86
Mean 1971
Std Dev 1929
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

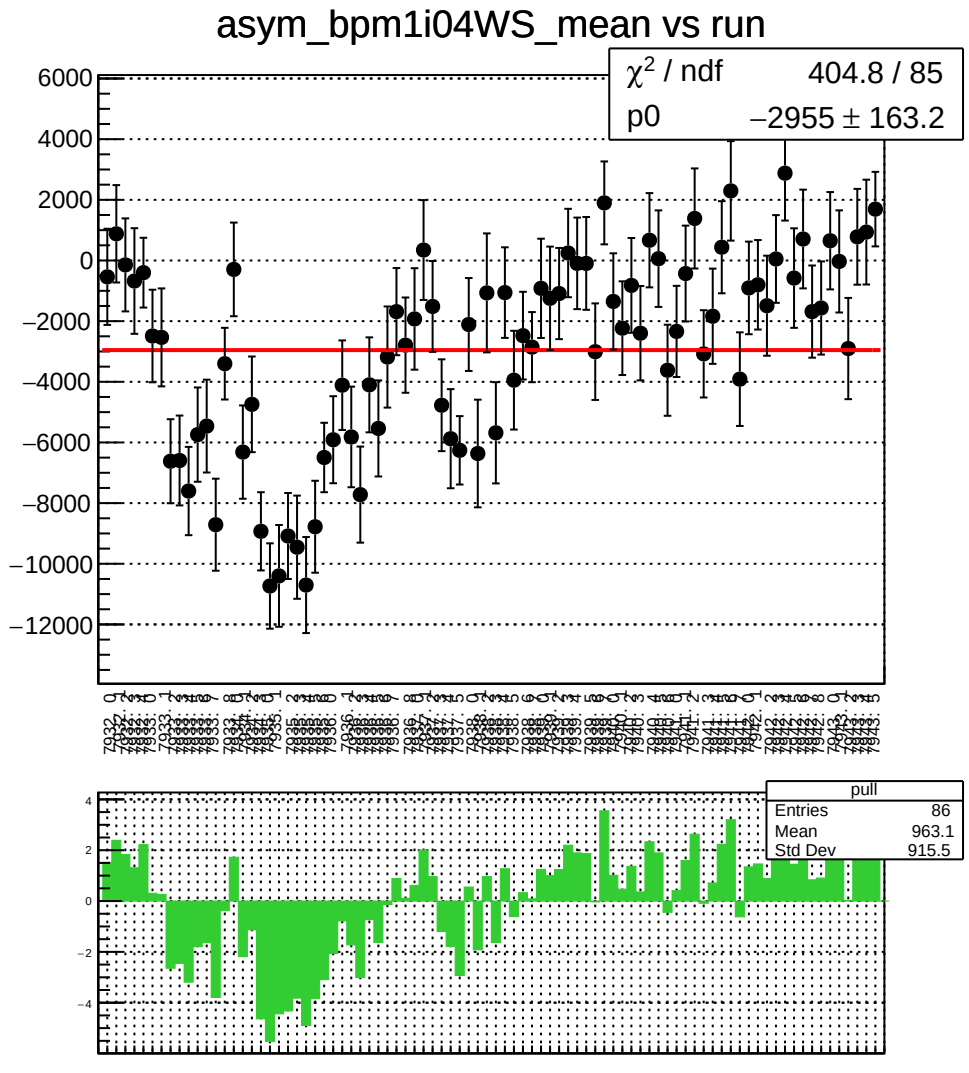

pull1D
Entries 86
Mean 0.003045
Std Dev 0.9291
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

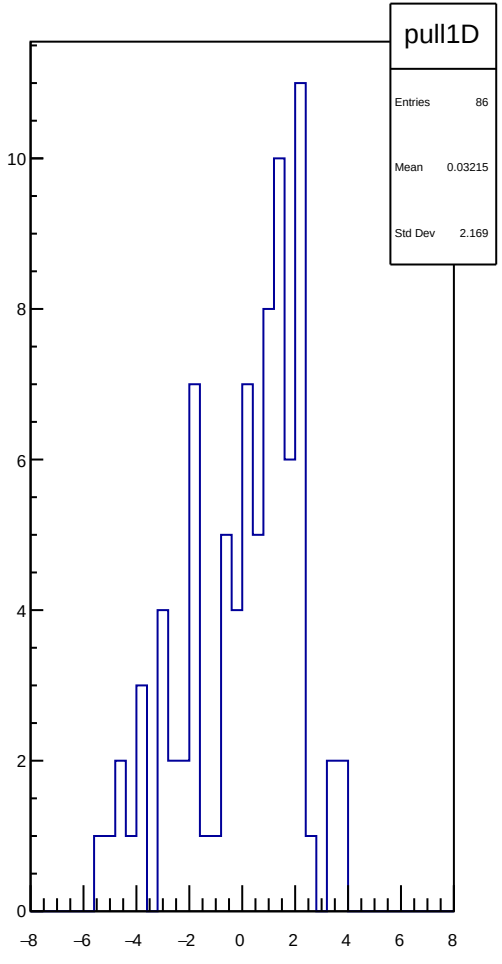

asym_bpm0i07WS_rms vs run
χ² / ndf 1.322e+04 / 85
p0 1497 ± 1.168
2000
1900
1800
1700
1600
1500
1400
1300
1200

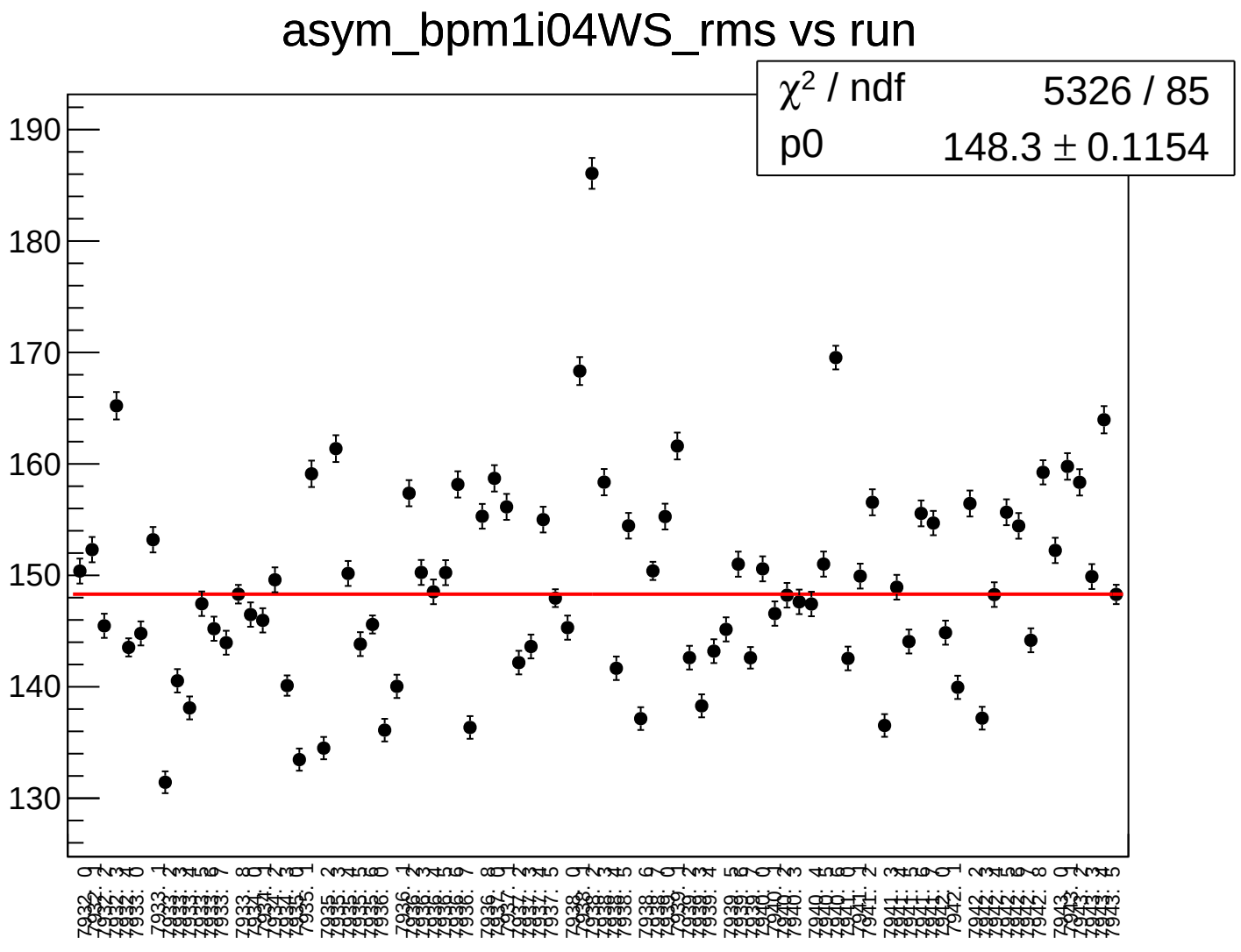

asym_bpm1i02WS_mean vs run
χ² / ndf 354.1 / 85
p0 −2874 ± 163.6
pull
Entries 86
Mean 1262
Std Dev 1215

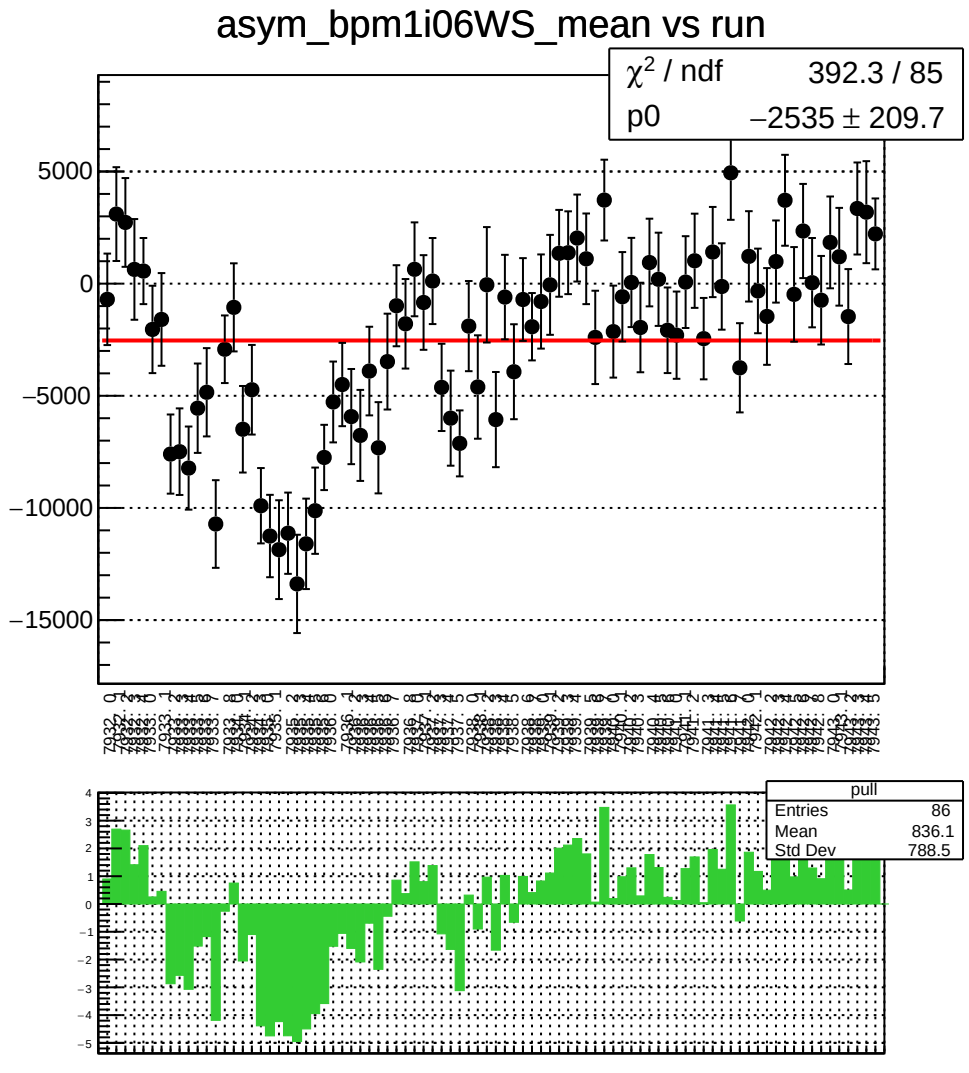

pull1D
Entries 86
Mean 0.02212
Std Dev 2.029

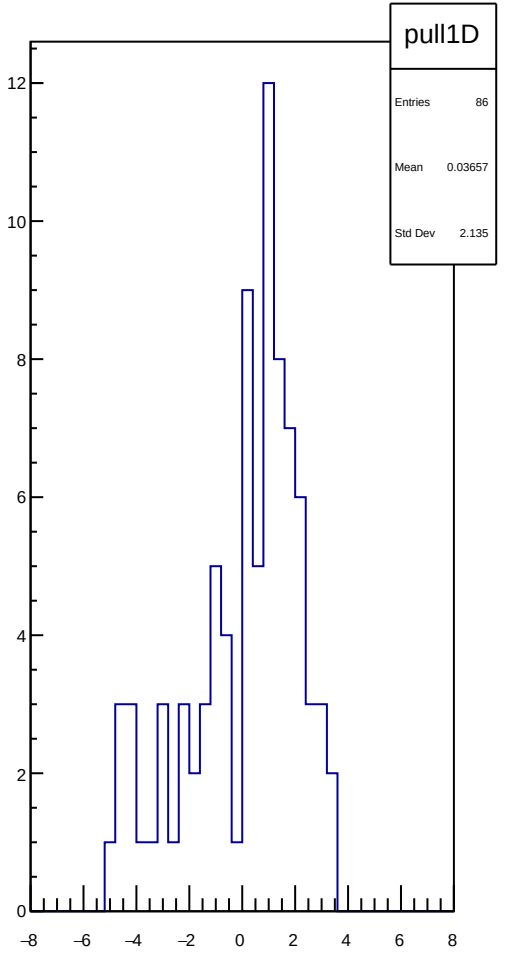

asym_bpm1i02WS_rms vs run
χ² / ndf 3556 / 85
p0 148.8 ± 0.1157
180
170
160
150
140

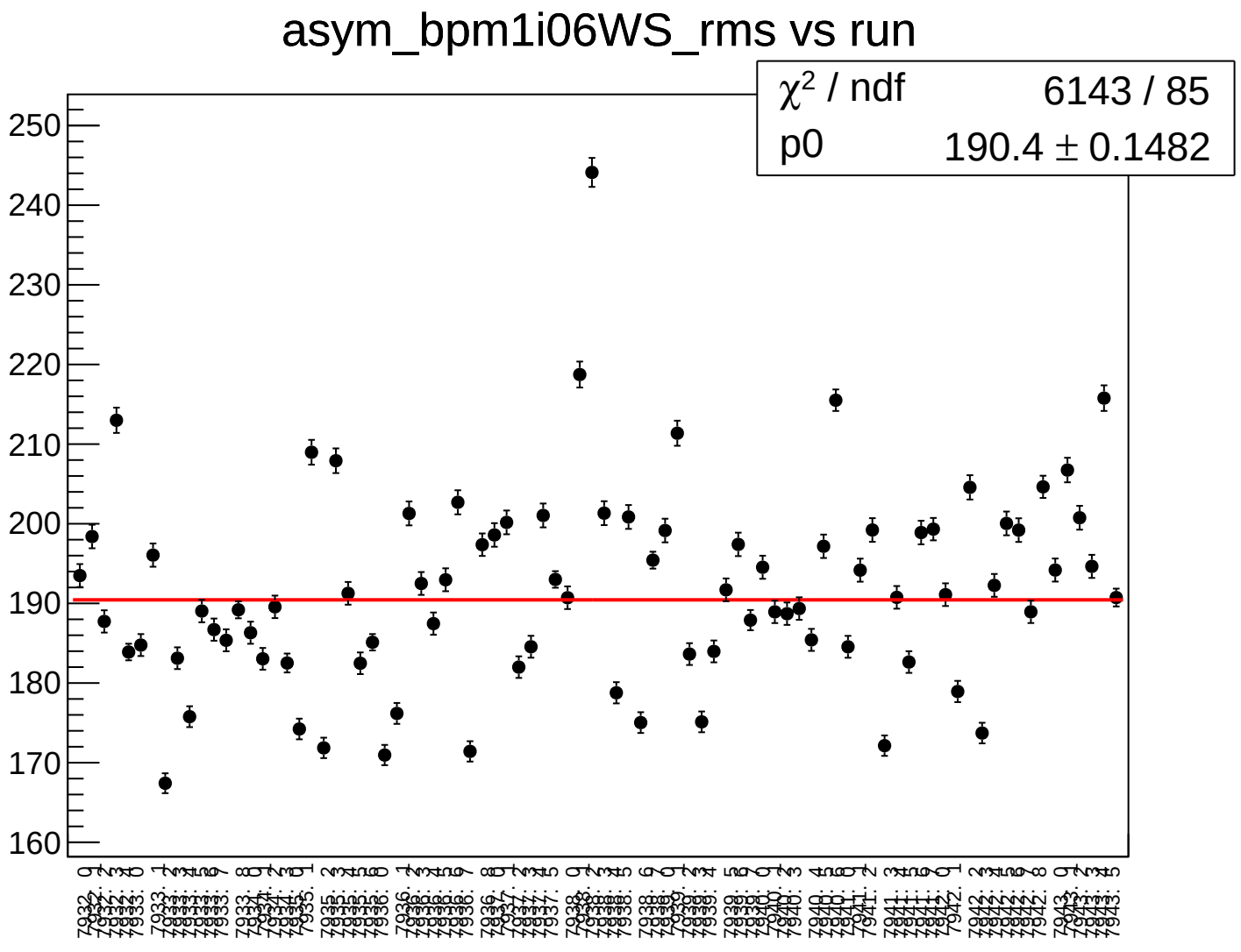

asym_bpm1i04WS_mean vs run
χ² / ndf 404.8 / 85
p0 −2955 ± 163.2
pull
Entries 86
Mean 963.1
Std Dev 915.5

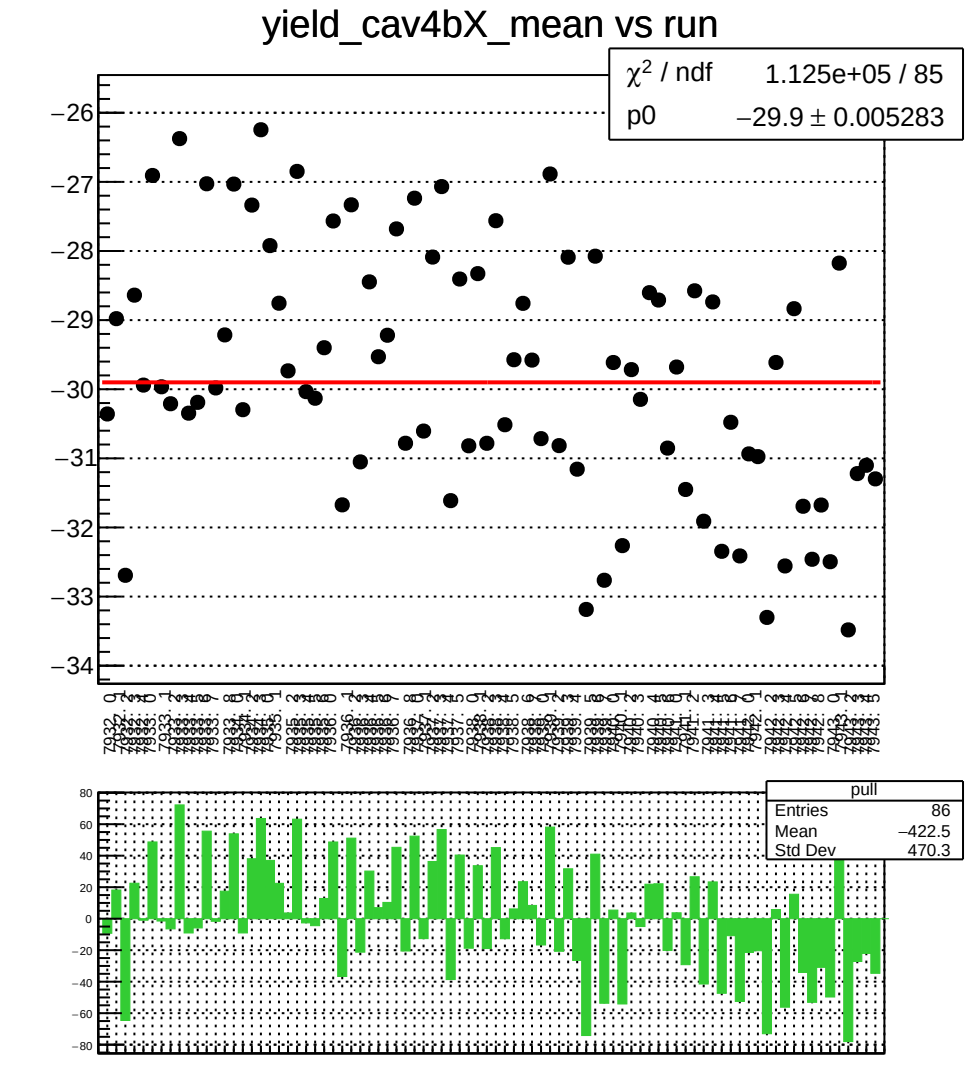

pull1D
Entries 86
Mean 0.03215
Std Dev 2.169

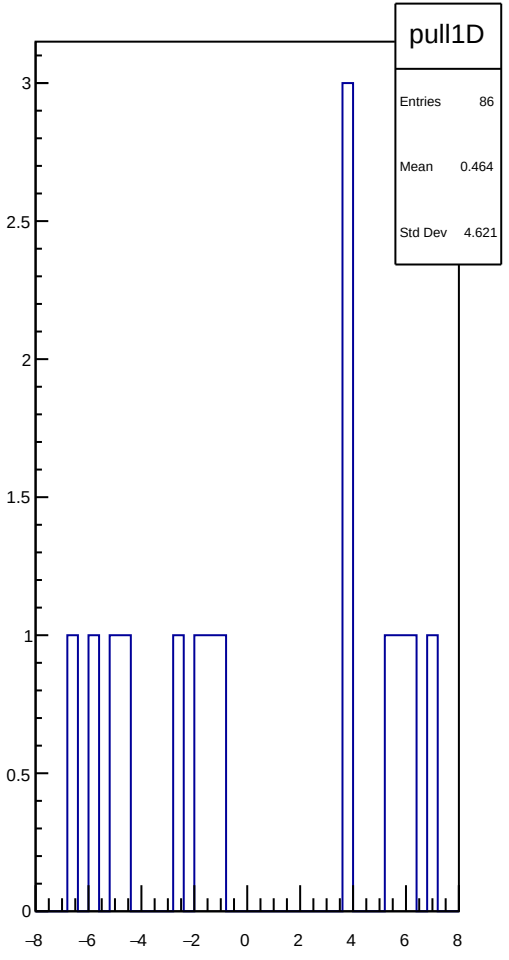

asym_bpm1i04WS_rms vs run
χ² / ndf 5326 / 85
p0 148.3 ± 0.1154
190
180
170
160
150
140
130

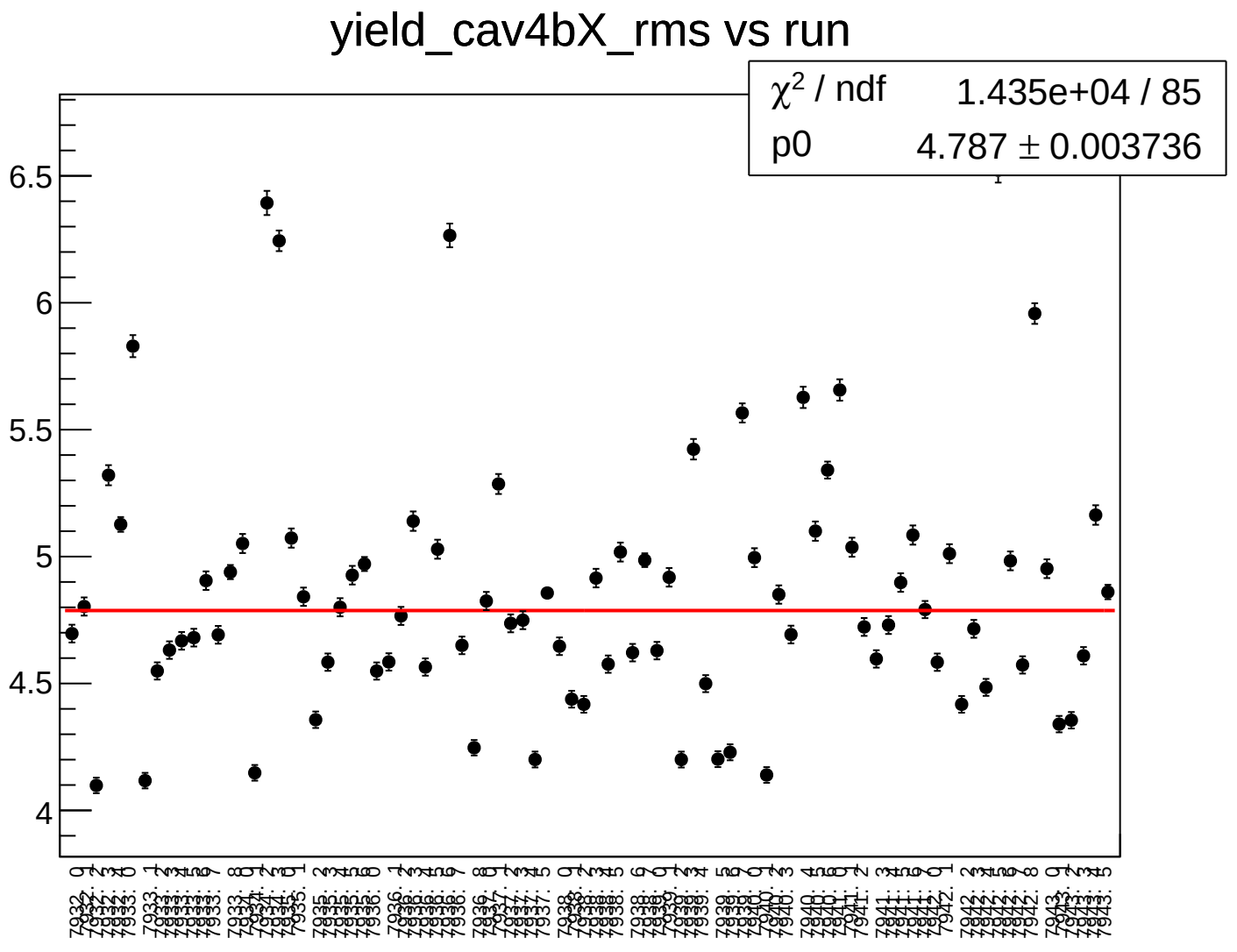

asym_bpm1i06WS_mean vs run
χ² / ndf 392.3 / 85
p0 −2535 ± 209.7
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 836.1
Std Dev 788.5
4
3
2
1
0
−1
−2
−3
−4
−5

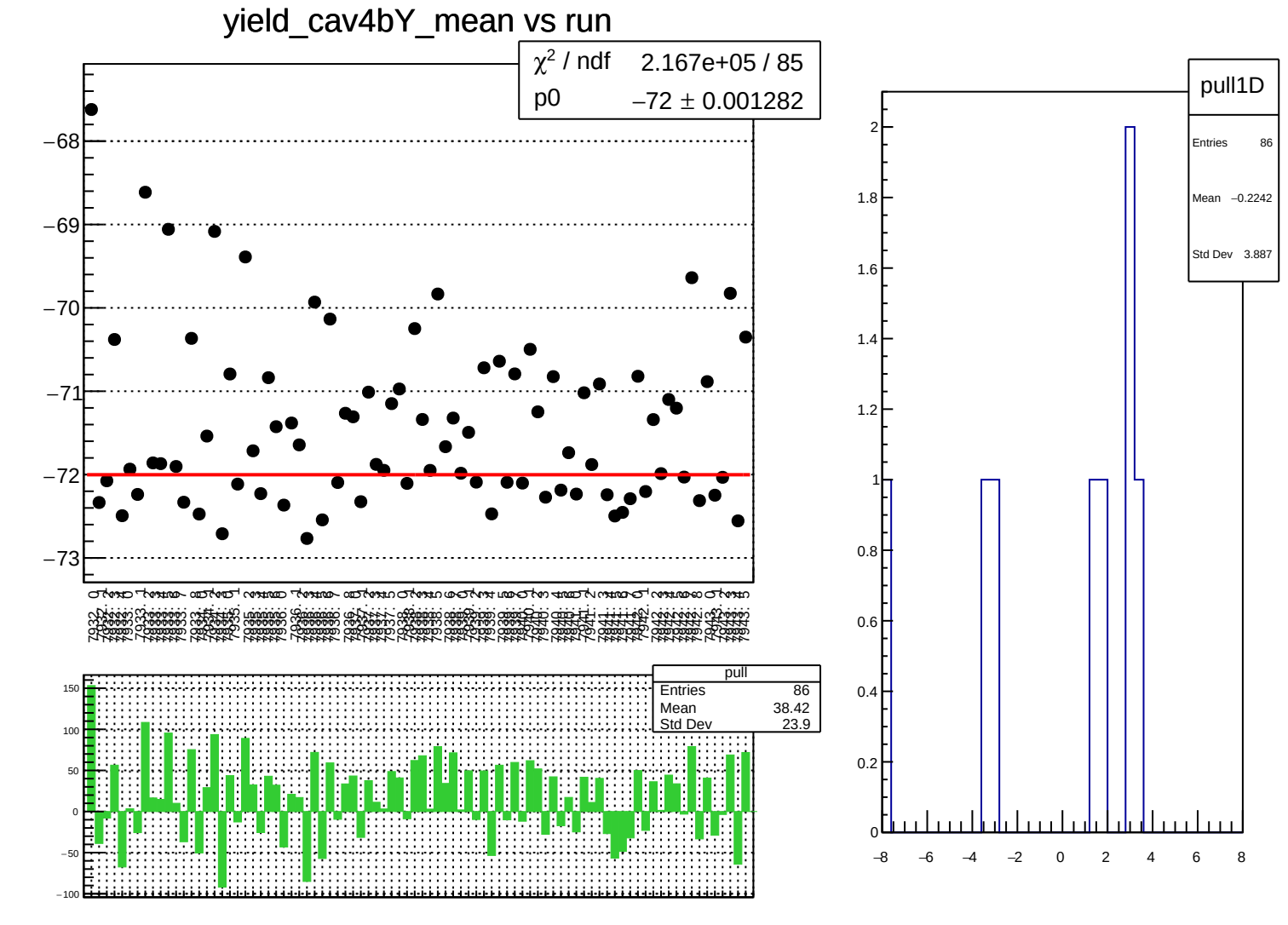

pull1D
Entries 86
Mean 0.03657
Std Dev 2.135
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

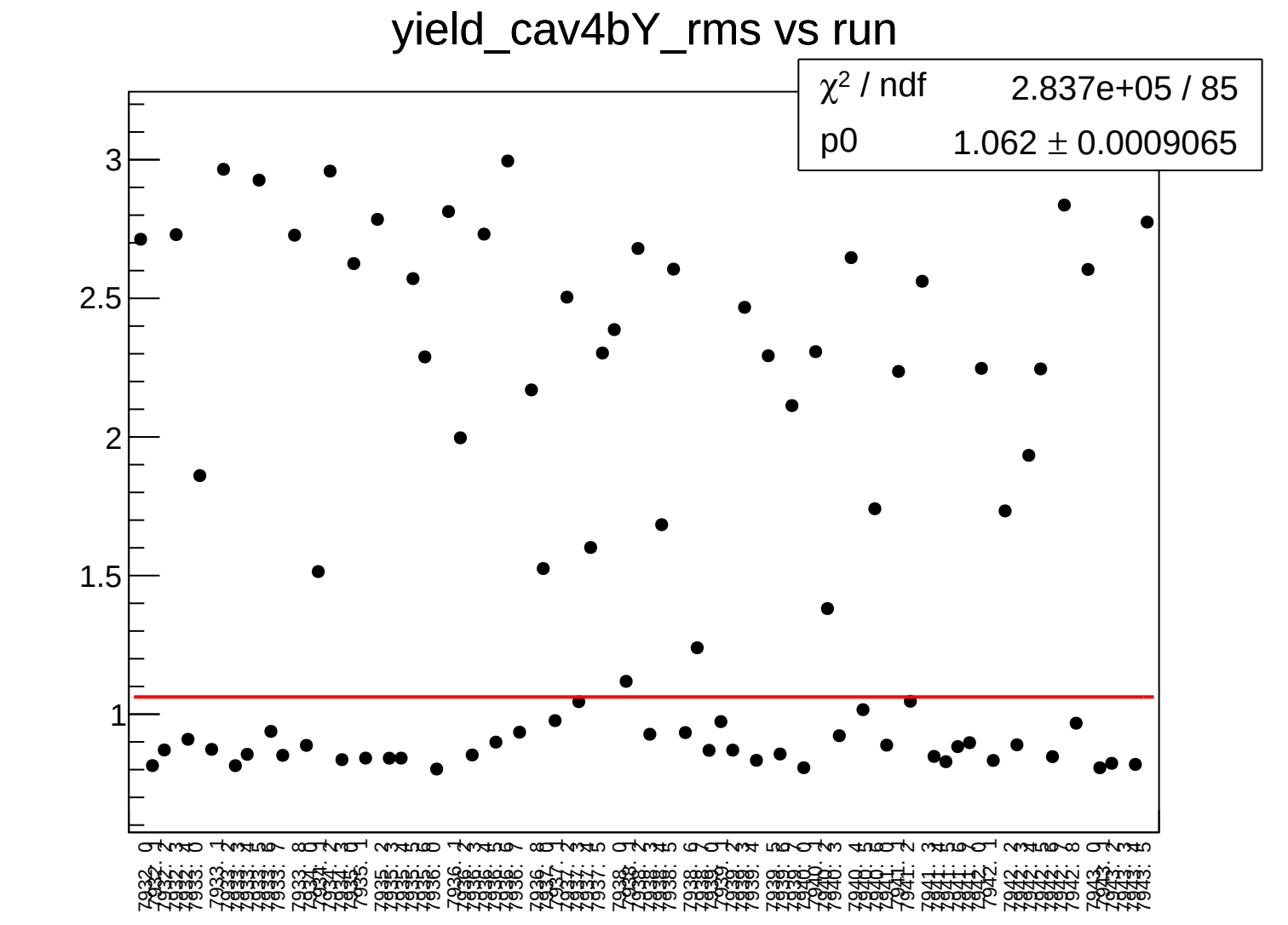

asym_bpm1i06WS_rms vs run
χ² / ndf 6143 / 85
p0 190.4 ± 0.1482
250
240
230
220
210
200
190
180
170
160

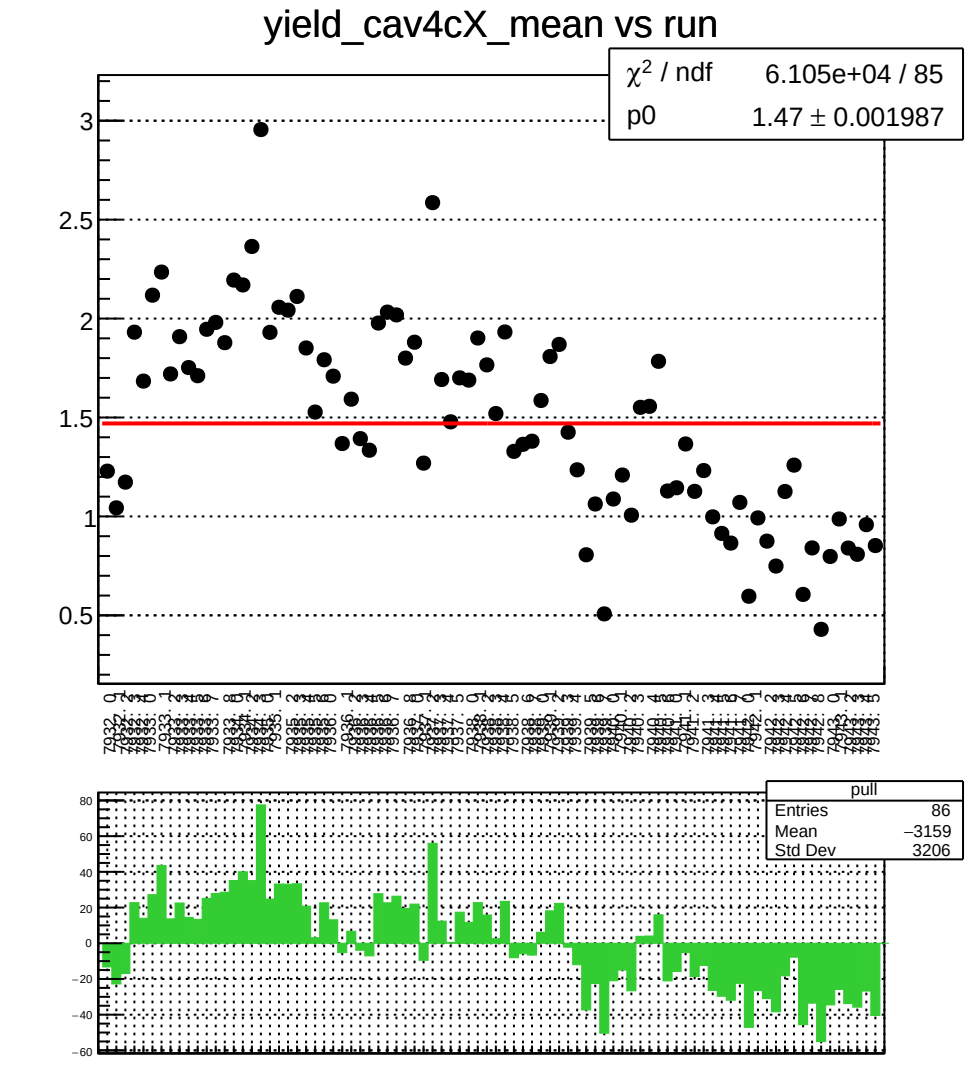

yield_cav4bX_mean vs run
χ² / ndf 1.125e+05 / 85
p0 −29.9 ± 0.005283
pull
Entries 86
Mean −422.5
Std Dev 470.3

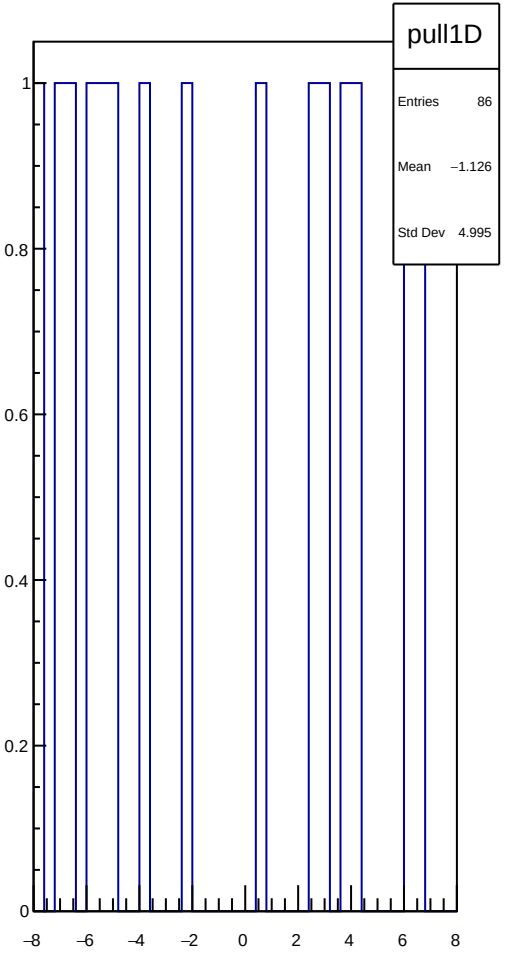

pull1D
Entries 86
Mean 0.464
Std Dev 4.621

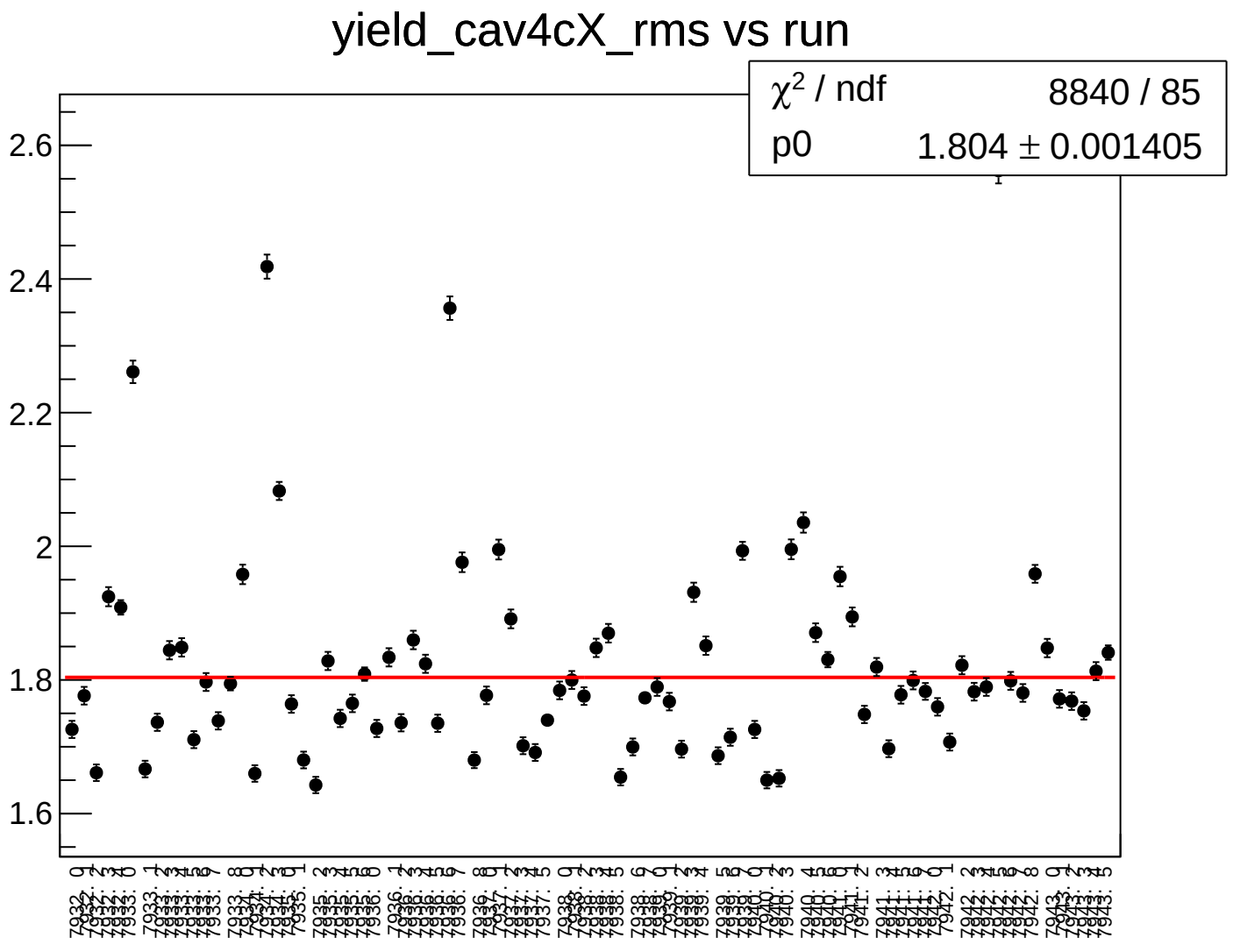

yield_cav4bX_rms vs run
χ^2 / ndf 1.435e+04 / 85
p0 4.787 ± 0.003736
6.5
6
5.5
5
4.5
4

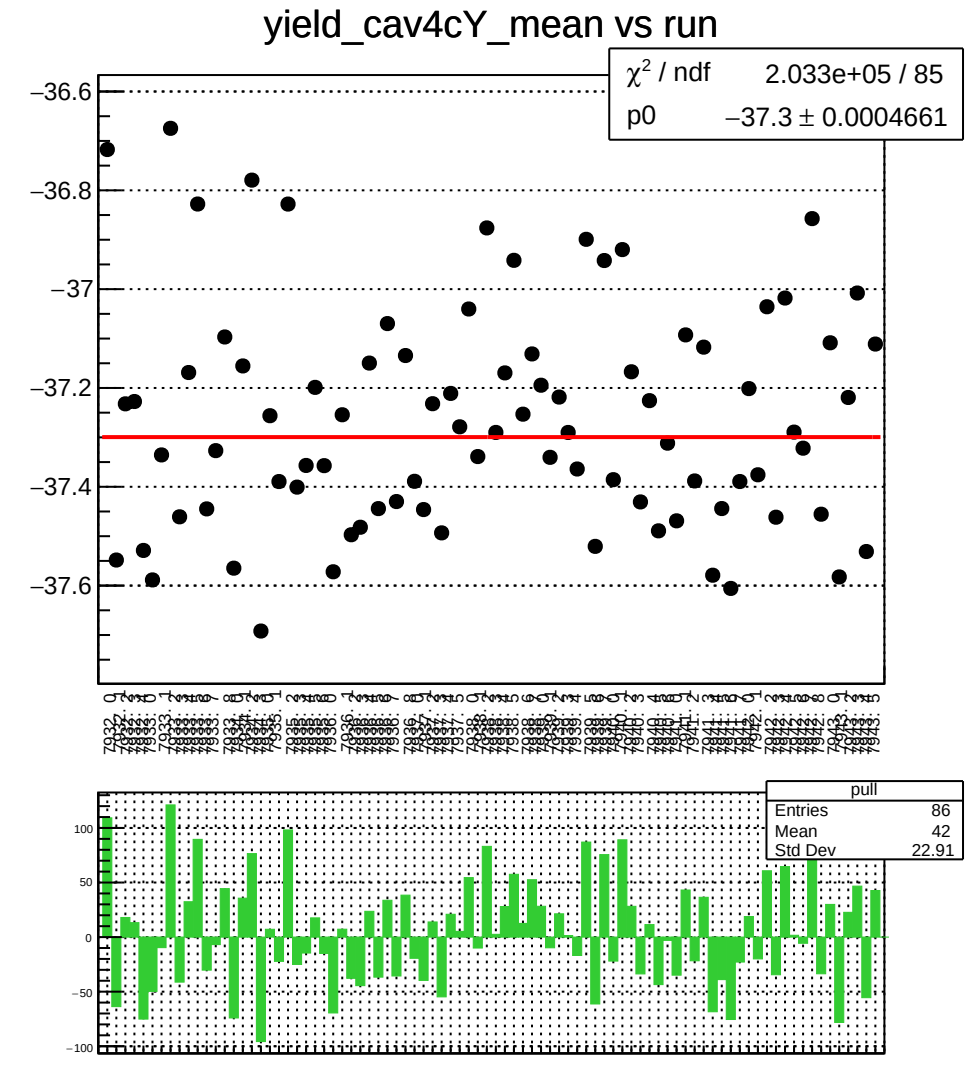

yield_cav4bY_mean vs run
χ² / ndf 2.167e+05 / 85
p0 −72 ± 0.001282
−68
−69
−70
−71
−72
−73
pull
Entries 86
Mean 38.42
Std Dev 23.9
150
100
50
0
−50
−100
pull1D
Entries 86
Mean −0.2242
Std Dev 3.887
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

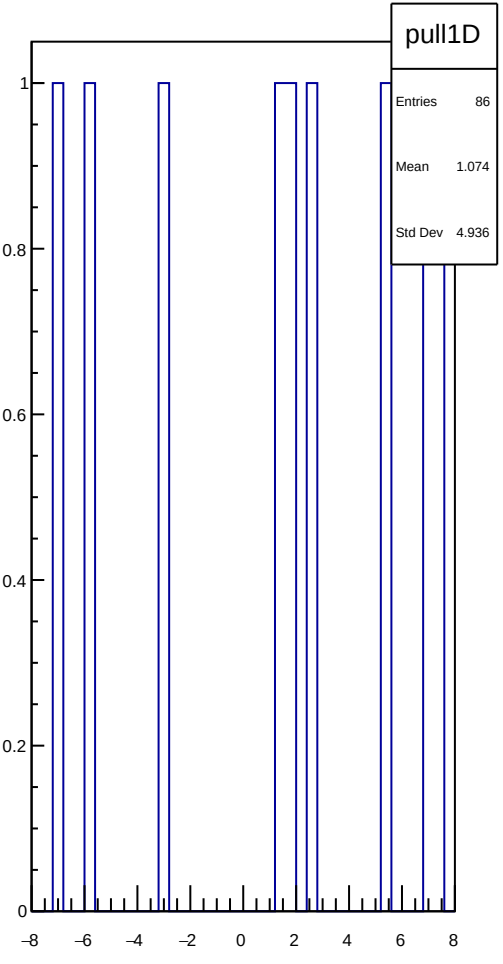

yield_cav4bY_rms vs run
χ² / ndf 2.837e+05 / 85
p0 1.062 ± 0.0009065
3
2.5
2
1.5
1

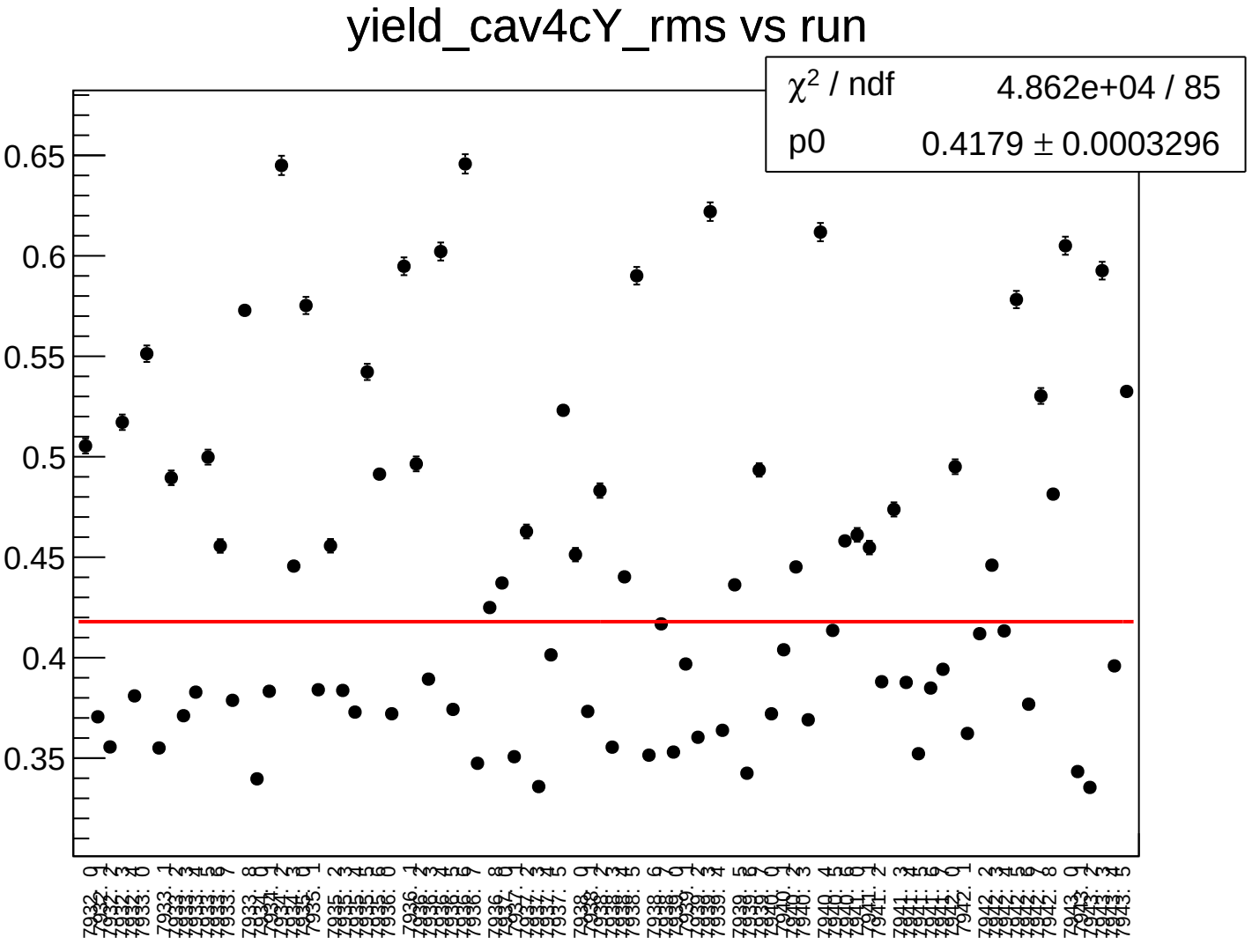

yield_cav4cX_mean vs run
χ² / ndf 6.105e+04 / 85
p0 1.47 ± 0.001987
pull
Entries 86
Mean −3159
Std Dev 3206

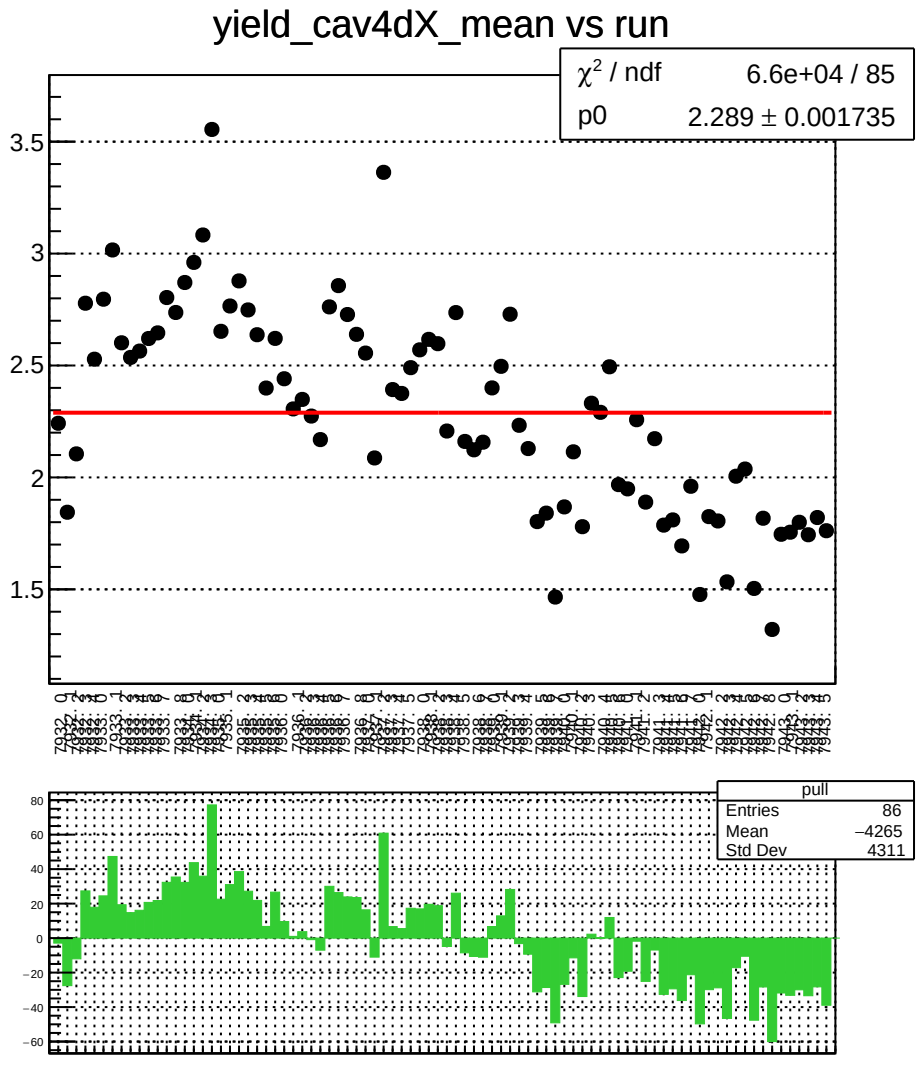

pull1D
Entries 86
Mean −1.126
Std Dev 4.995

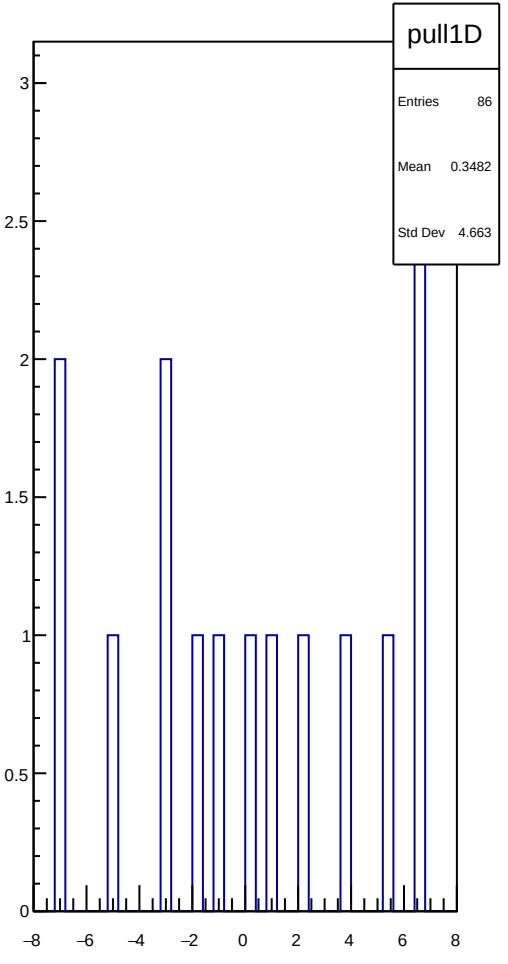

yield_cav4cX_rms vs run
χ² / ndf 8840 / 85
p0 1.804 ± 0.001405
2.6
2.4
2.2
2
1.8
1.6

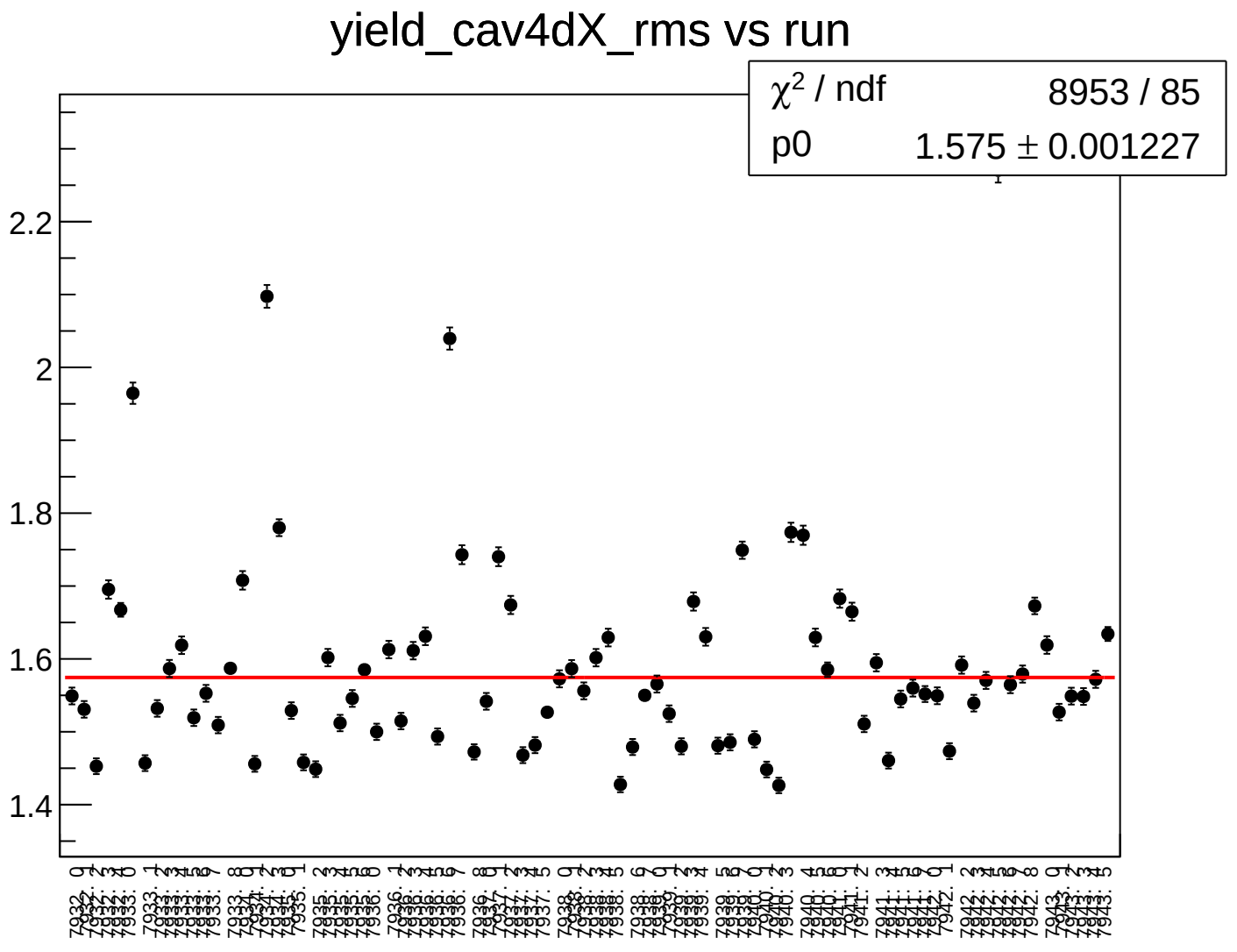

yield_cav4cY_mean vs run
χ² / ndf 2.033e+05 / 85
p0 −37.3 ± 0.0004661
−36.6
−36.8
−37
−37.2
−37.4
−37.6
pull
Entries 86
Mean 42
Std Dev 22.91
100
50
0
−50
−100

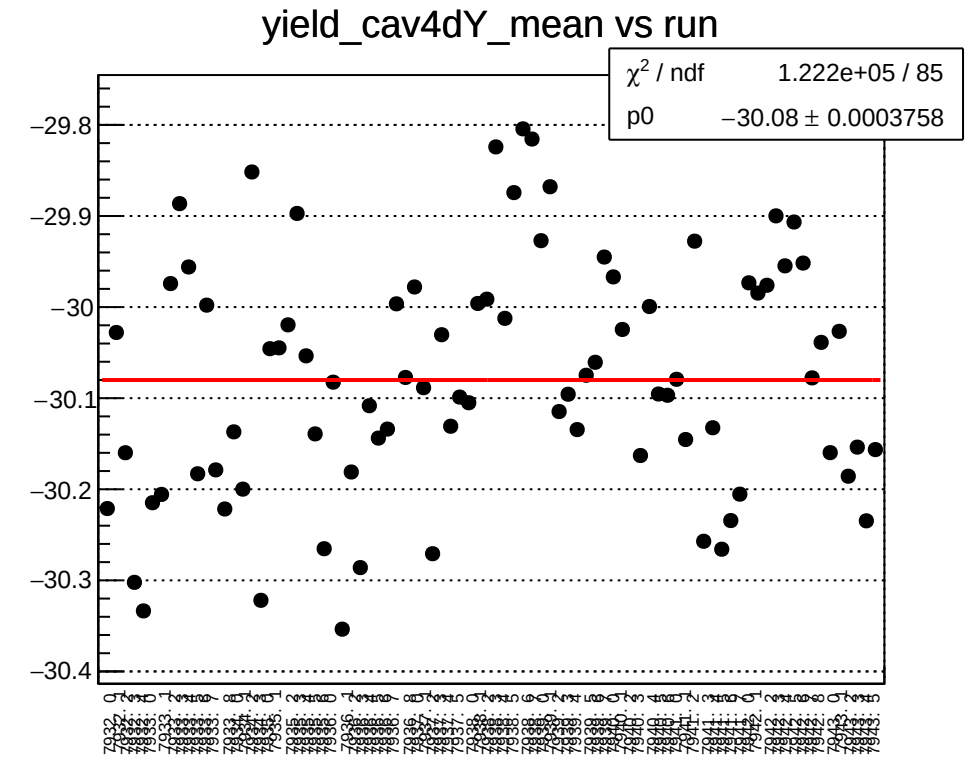

pull1D
Entries 86
Mean 1.074
Std Dev 4.936
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

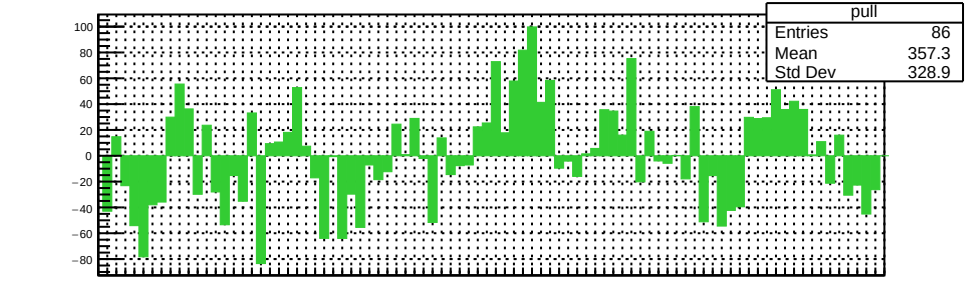

yield_cav4cY_rms vs run
χ² / ndf 4.862e+04 / 85
p0 0.4179 ± 0.0003296
0.65
0.6
0.55
0.5
0.45
0.4
0.35

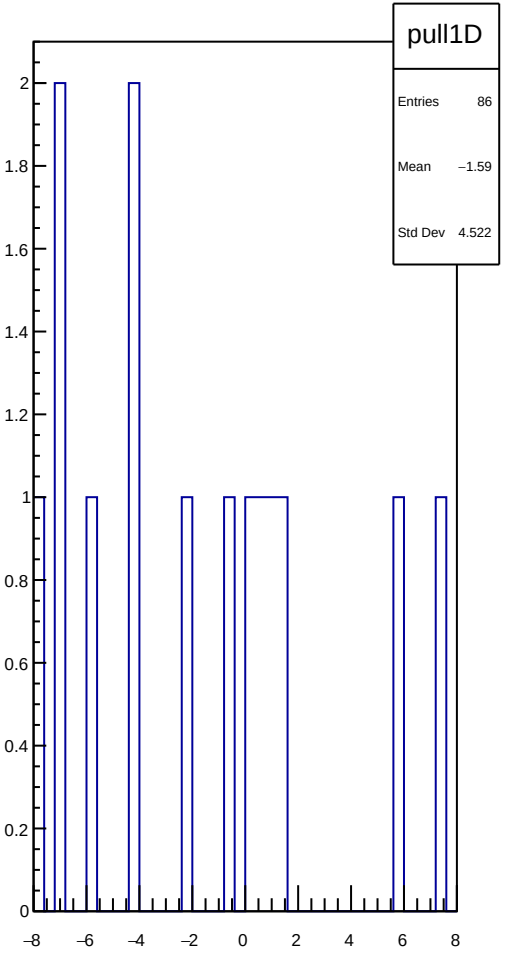

yield_cav4dX_mean vs run
χ² / ndf 6.6e+04 / 85
p0 2.289 ± 0.001735
pull
Entries 86
Mean −4265
Std Dev 4311

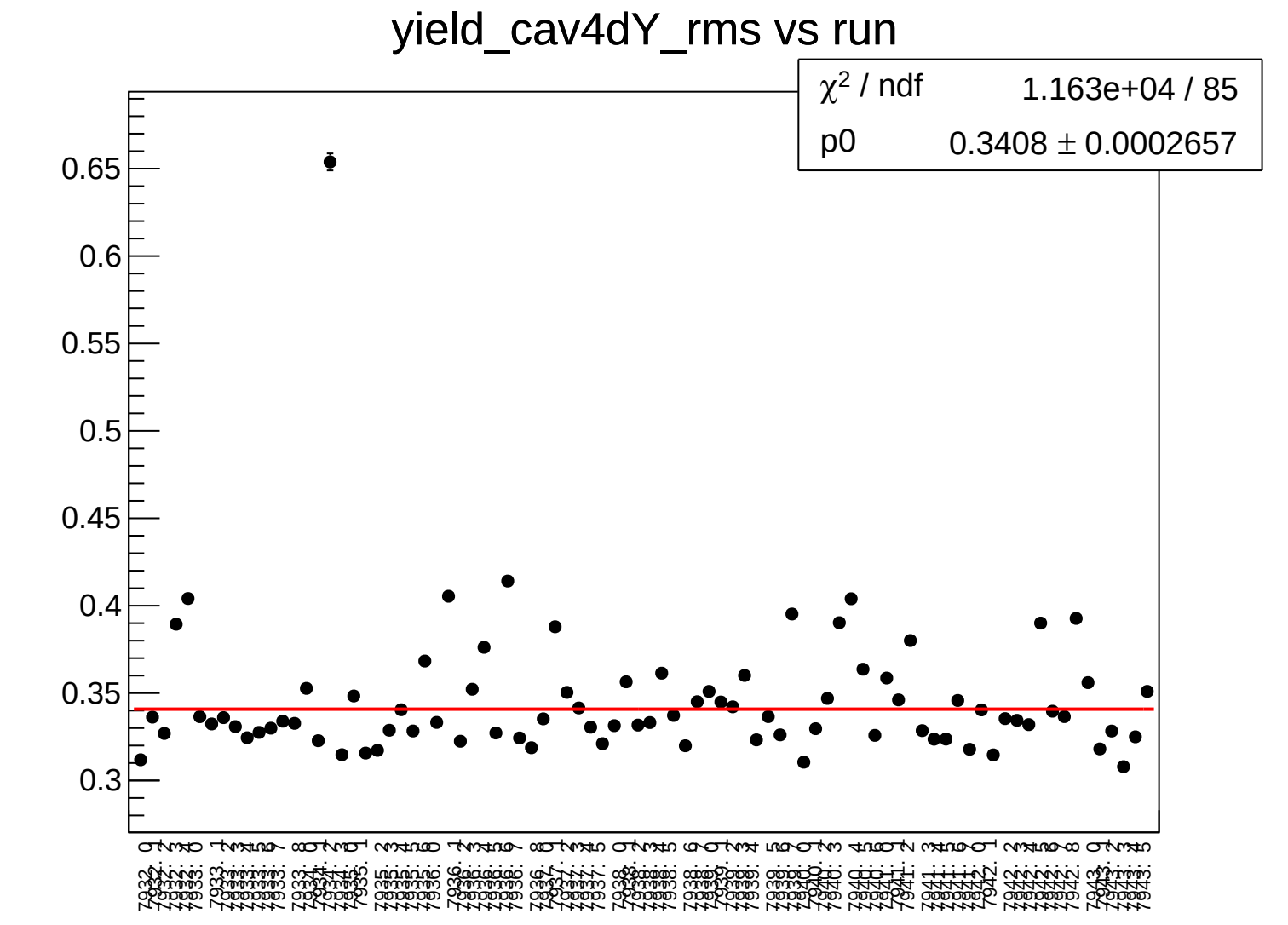

pull1D
Entries 86
Mean 0.3482
Std Dev 4.663

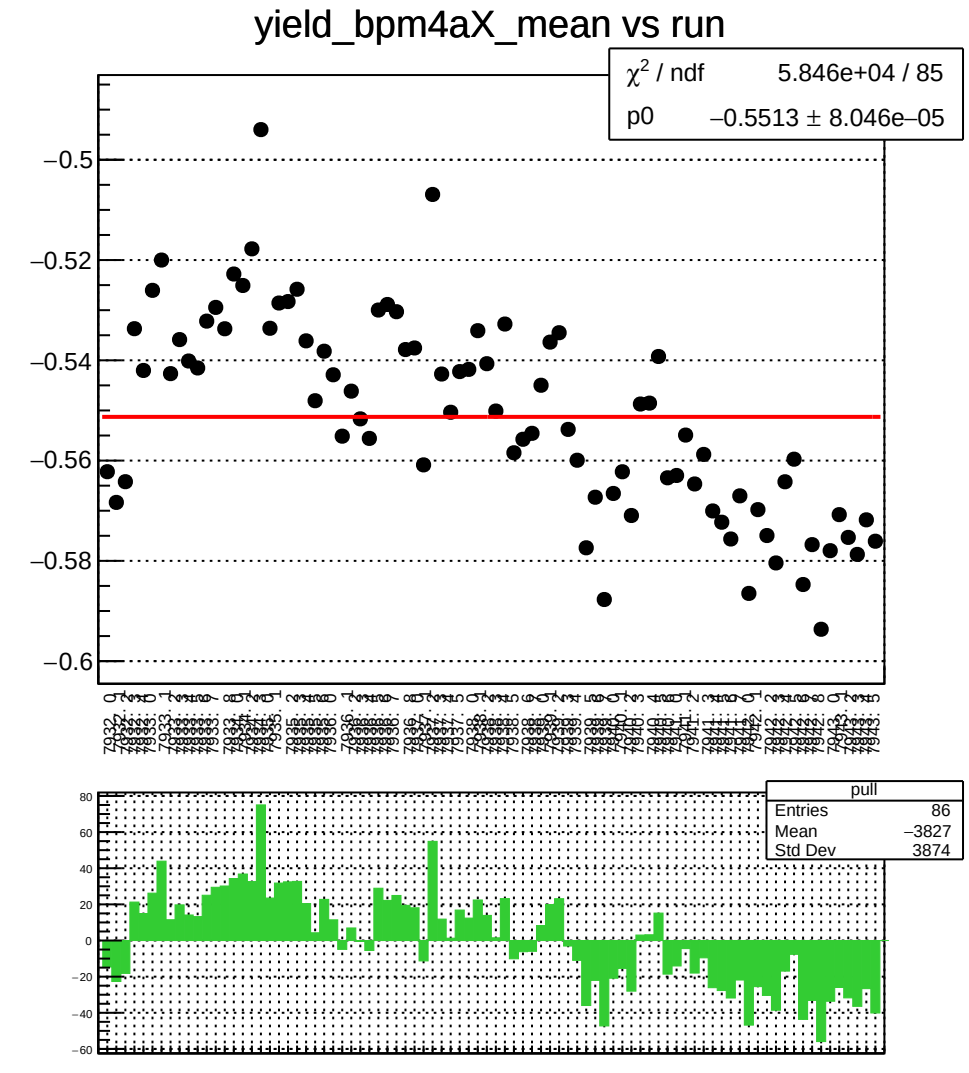

yield_cav4dX_rms vs run
χ^2 / ndf 8953 / 85
p0 1.575 ± 0.001227
2.2
2
1.8
1.6
1.4

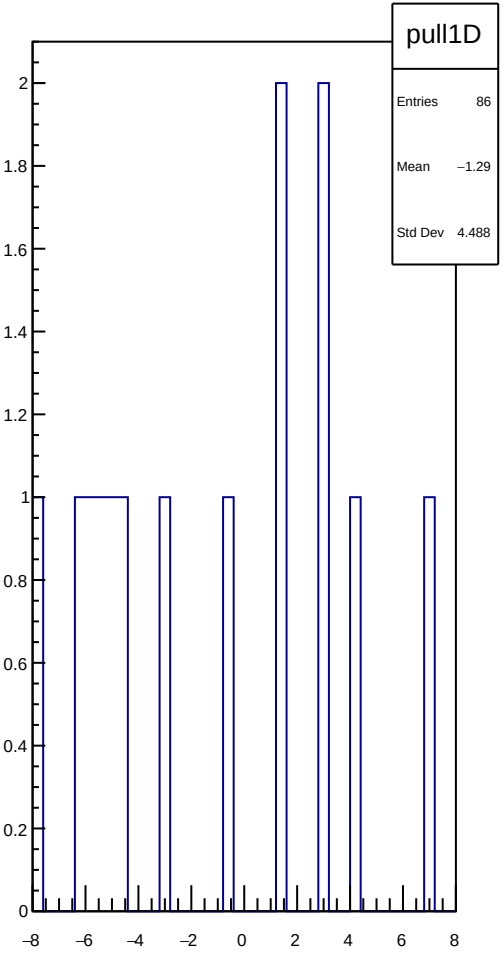

yield_cav4dY_mean vs run
χ² / ndf 1.222e+05 / 85
p0 −30.08 ± 0.0003758
−29.8
−29.9
−30
−30.1
−30.2
−30.3
−30.4

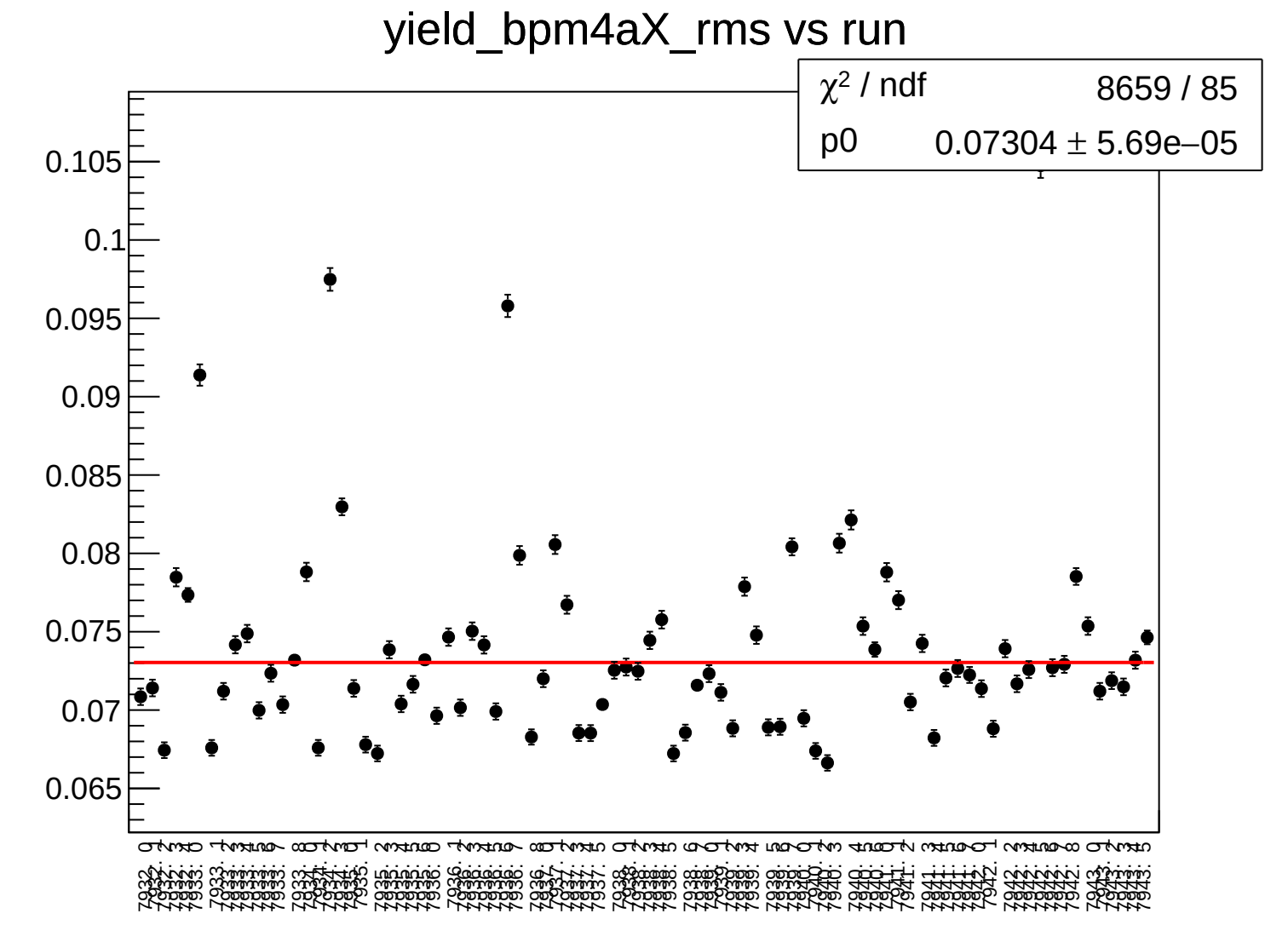

pull
Entries 86
Mean 357.3
Std Dev 328.9
100
80
60
40
20
0
−20
−40
−60
−80

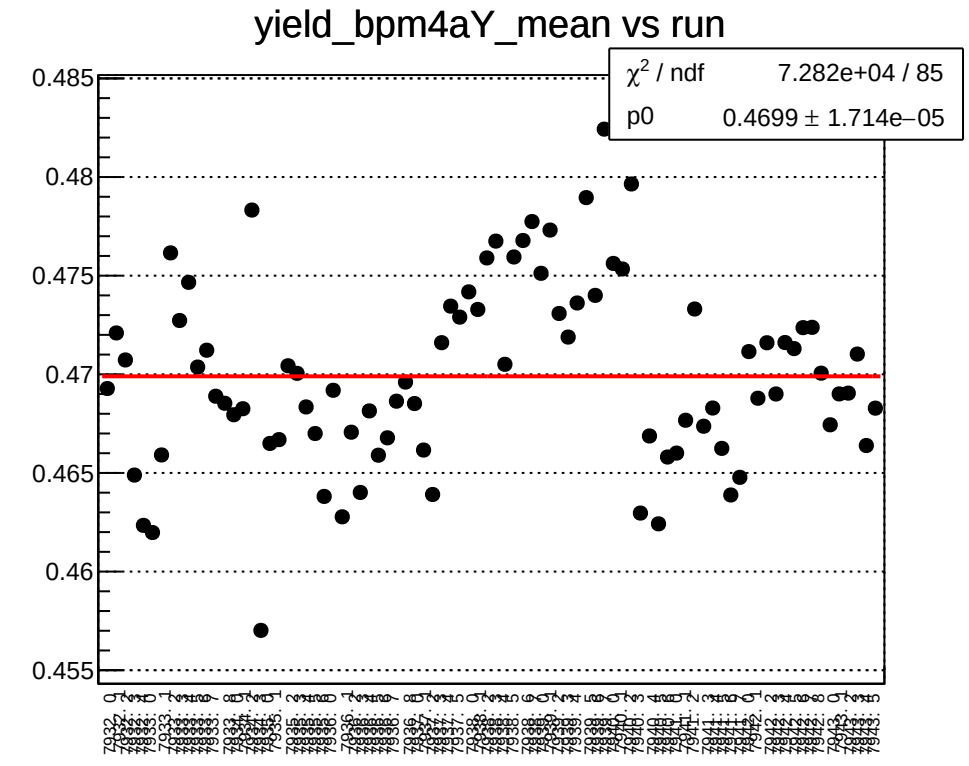

pull1D
Entries 86
Mean −1.59
Std Dev 4.522
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

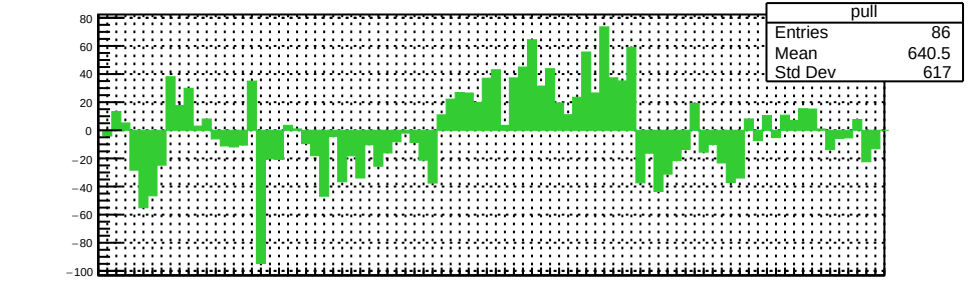

yield_cav4dY_rms vs run
χ² / ndf 1.163e+04 / 85
p0 0.3408 ± 0.0002657
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

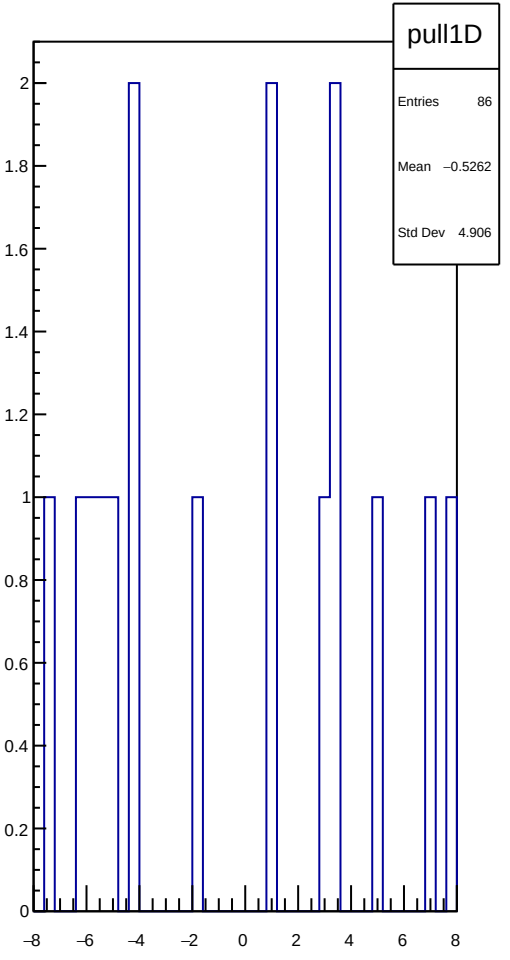

yield_bpm4aX_mean vs run
χ² / ndf 5.846e+04 / 85
p0 −0.5513 ± 8.046e−05
−0.5
−0.52
−0.54
−0.56
−0.58
−0.6
pull
Entries 86
Mean −3827
Std Dev 3874
80
60
40
20
0
−20
−40
−60

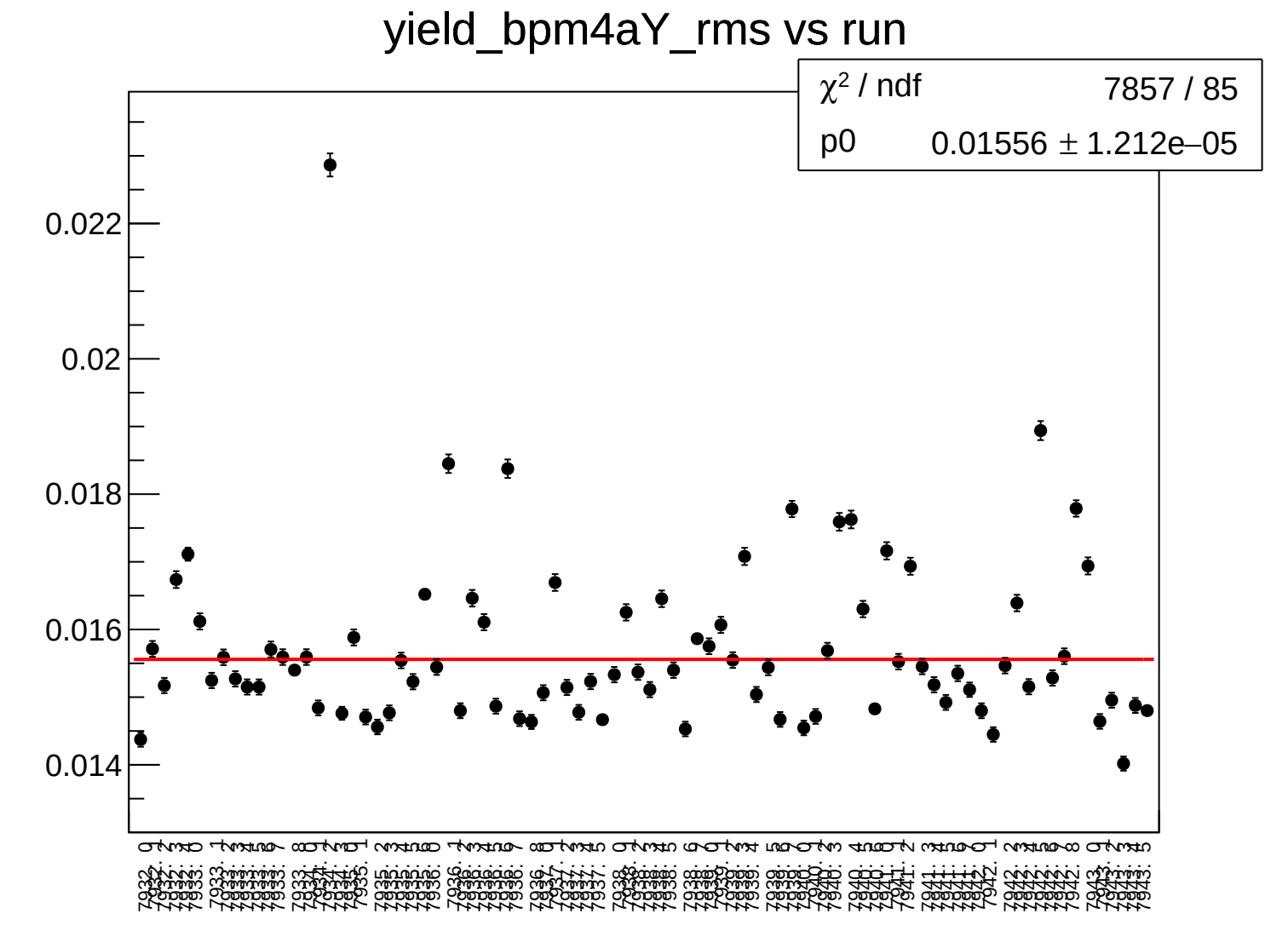

pull1D
Entries 86
Mean −1.29
Std Dev 4.488
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

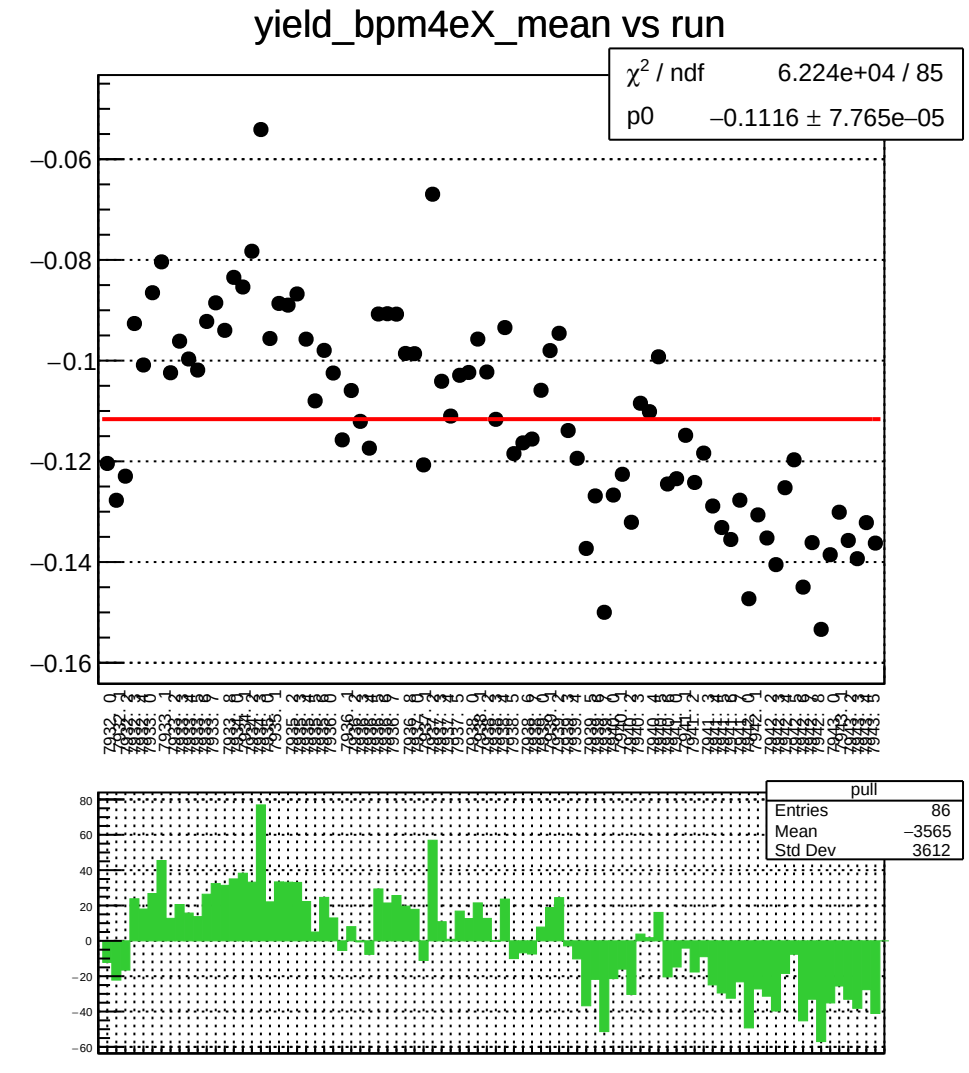

yield_bpm4aX_rms vs run
χ² / ndf 8659 / 85
p0 0.07304 ± 5.69e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

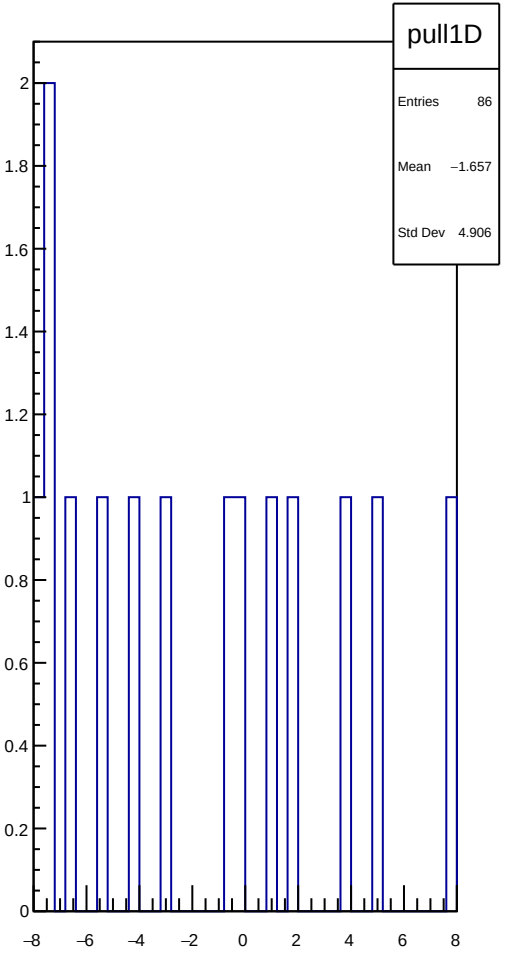

yield_bpm4aY_mean vs run
χ² / ndf 7.282e+04 / 85
p0 0.4699 ± 1.714e−05
0.485
0.48
0.475
0.47
0.465
0.46
0.455

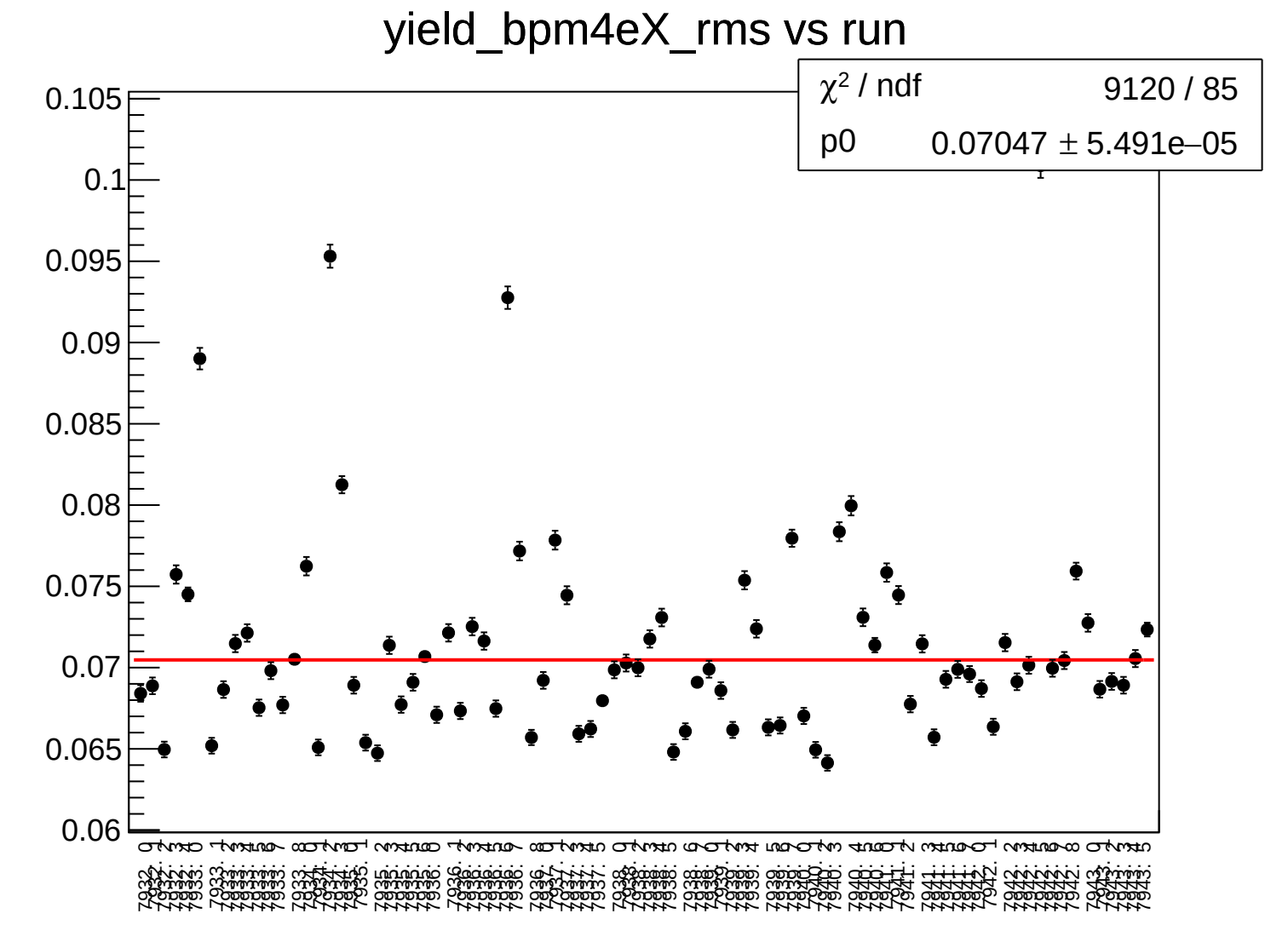

pull
Entries 86
Mean 640.5
Std Dev 617
80
60
40
20
0
−20
−40
−60
−80
−100

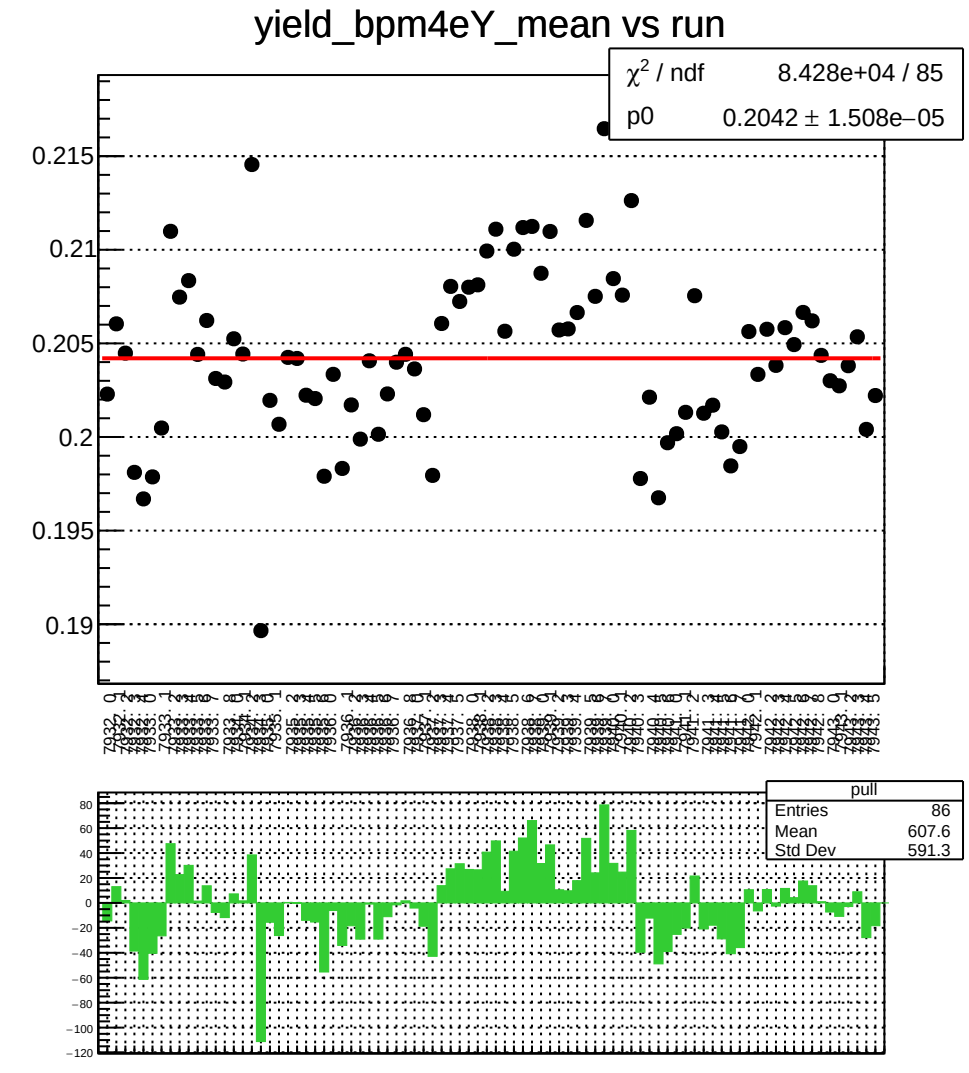

pull1D
Entries 86
Mean −0.5262
Std Dev 4.906
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

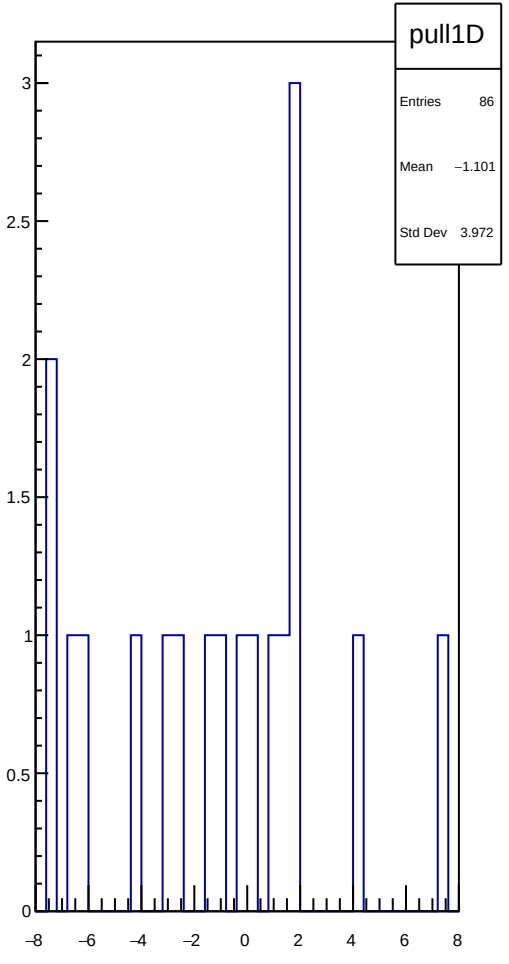

yield_bpm4aY_rms vs run
χ² / ndf 7857 / 85
p0 0.01556 ± 1.212e–05
0.022
0.02
0.018
0.016
0.014

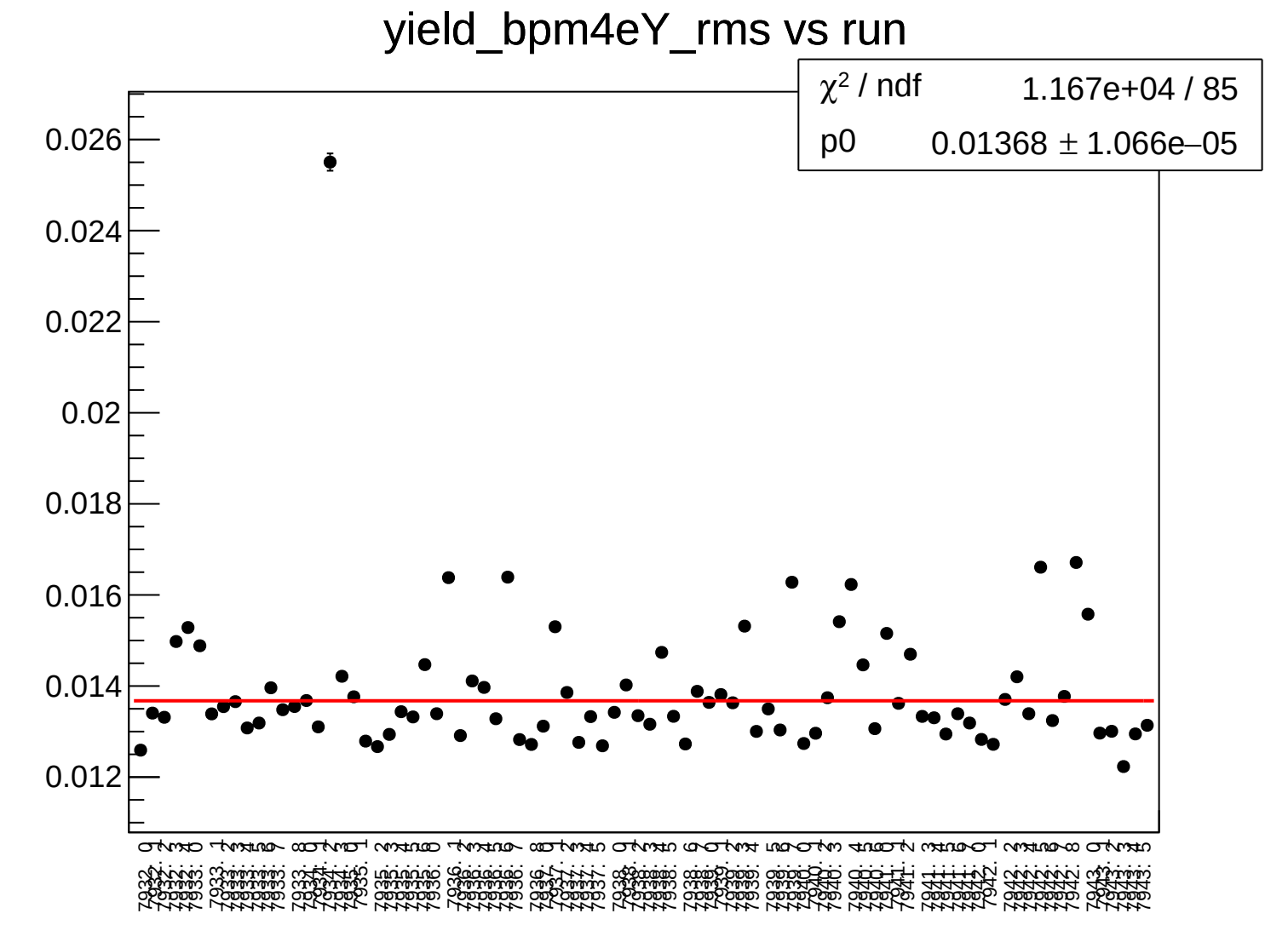

yield_bpm4eX_mean vs run
χ² / ndf 6.224e+04 / 85
p0 −0.1116 ± 7.765e−05
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
pull
Entries 86
Mean −3565
Std Dev 3612
80
60
40
20
0
−20
−40
−60

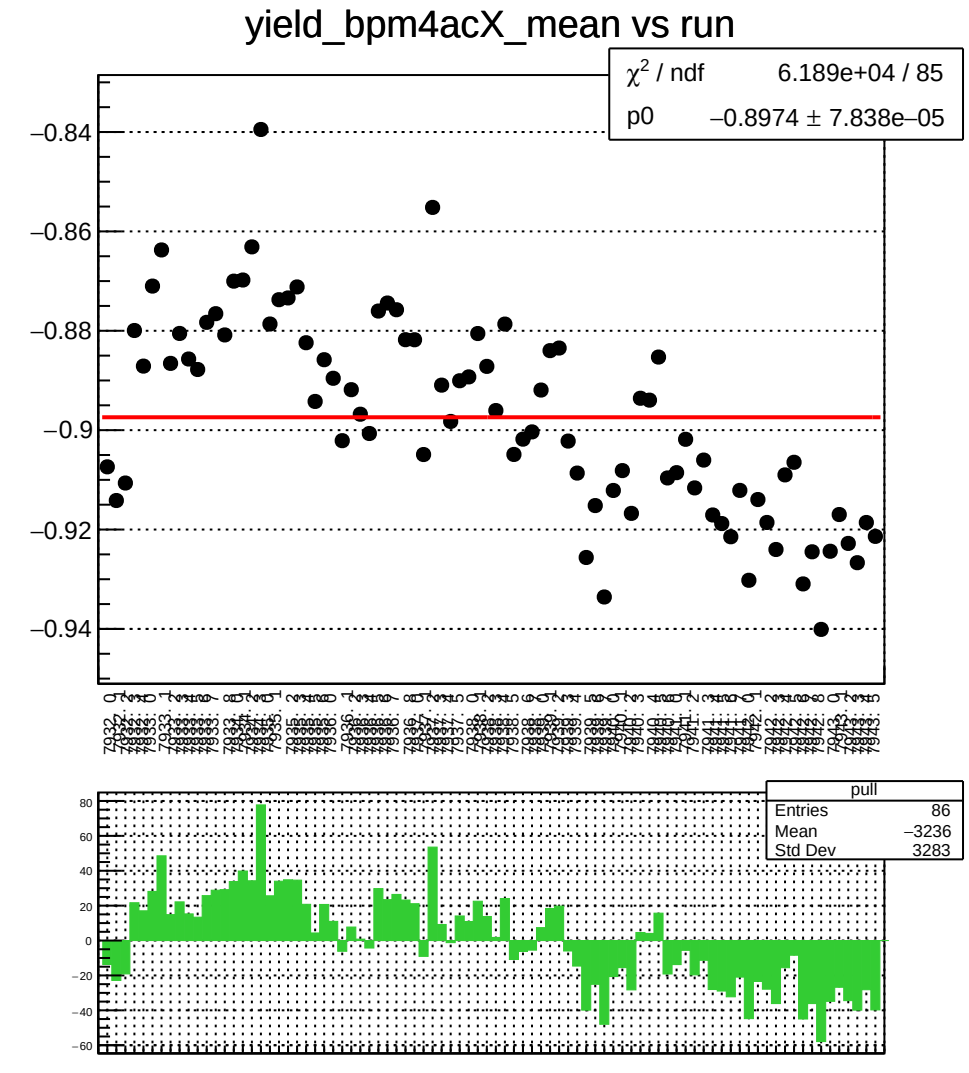

pull1D
Entries 86
Mean −1.657
Std Dev 4.906
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

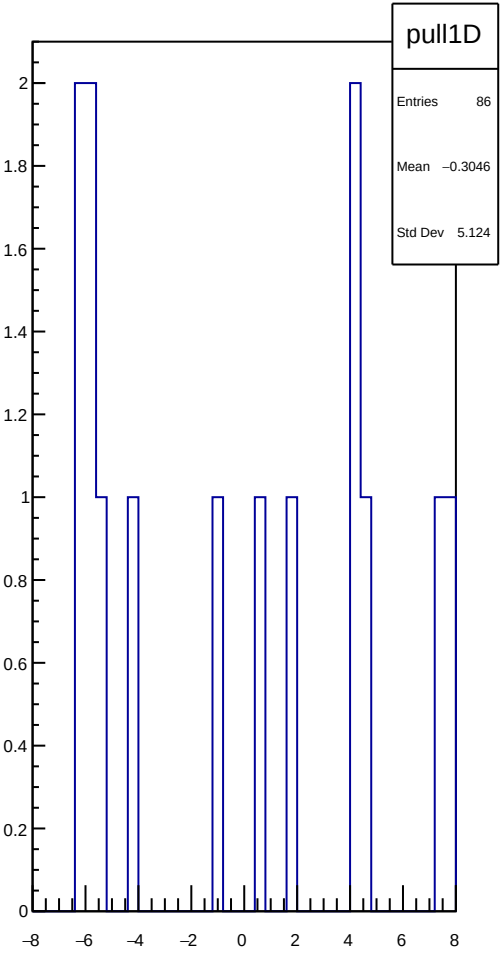

yield_bpm4eX_rms vs run
χ² / ndf 9120 / 85
p0 0.07047 ± 5.491e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065
0.06

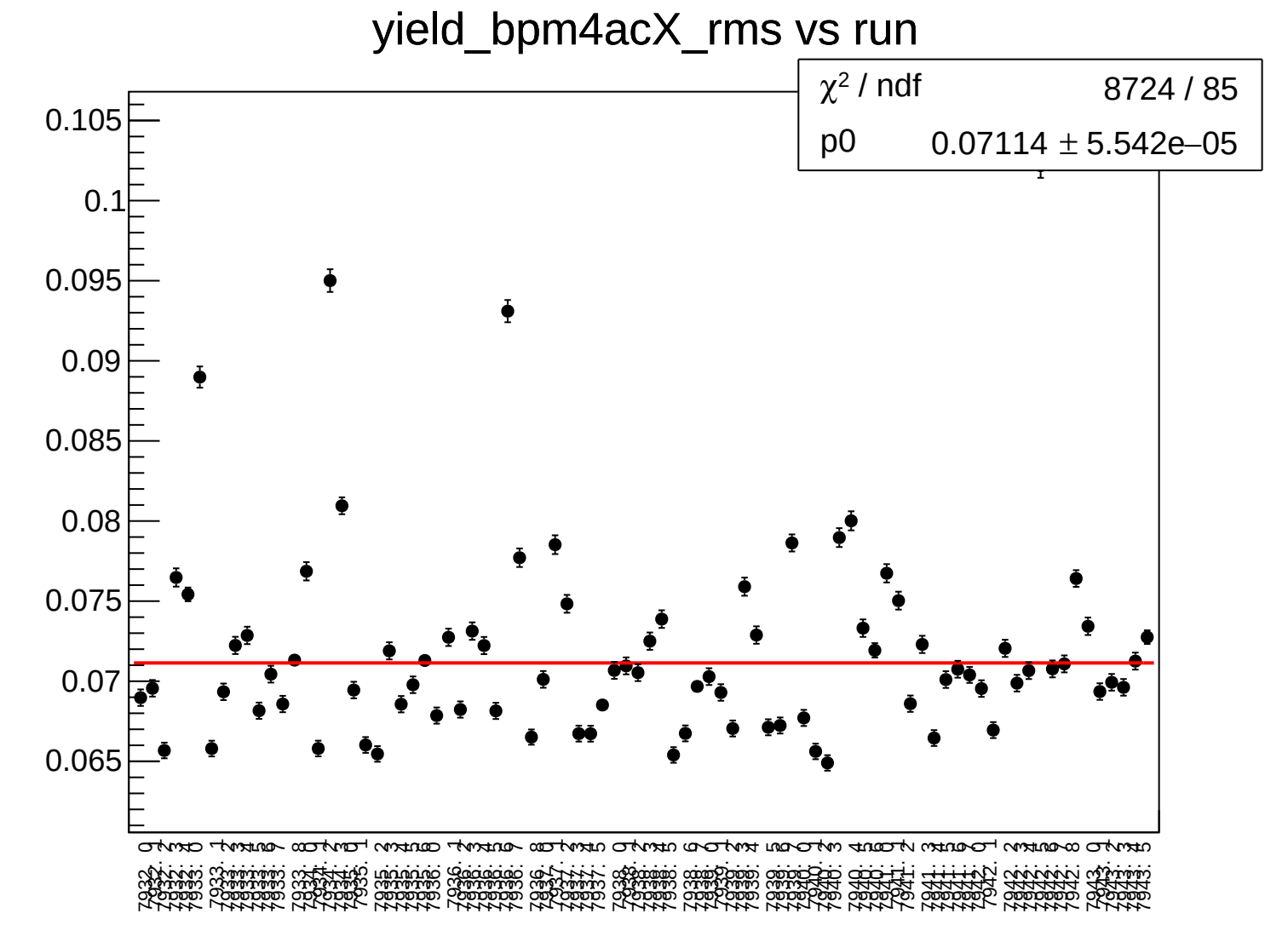

yield_bpm4eY_mean vs run
χ² / ndf 8.428e+04 / 85
p0 0.2042 ± 1.508e−05
0.215
0.21
0.205
0.2
0.195
0.19
pull
Entries 86
Mean 607.6
Std Dev 591.3
80
60
40
20
0
−20
−40
−60
−80
−100
−120

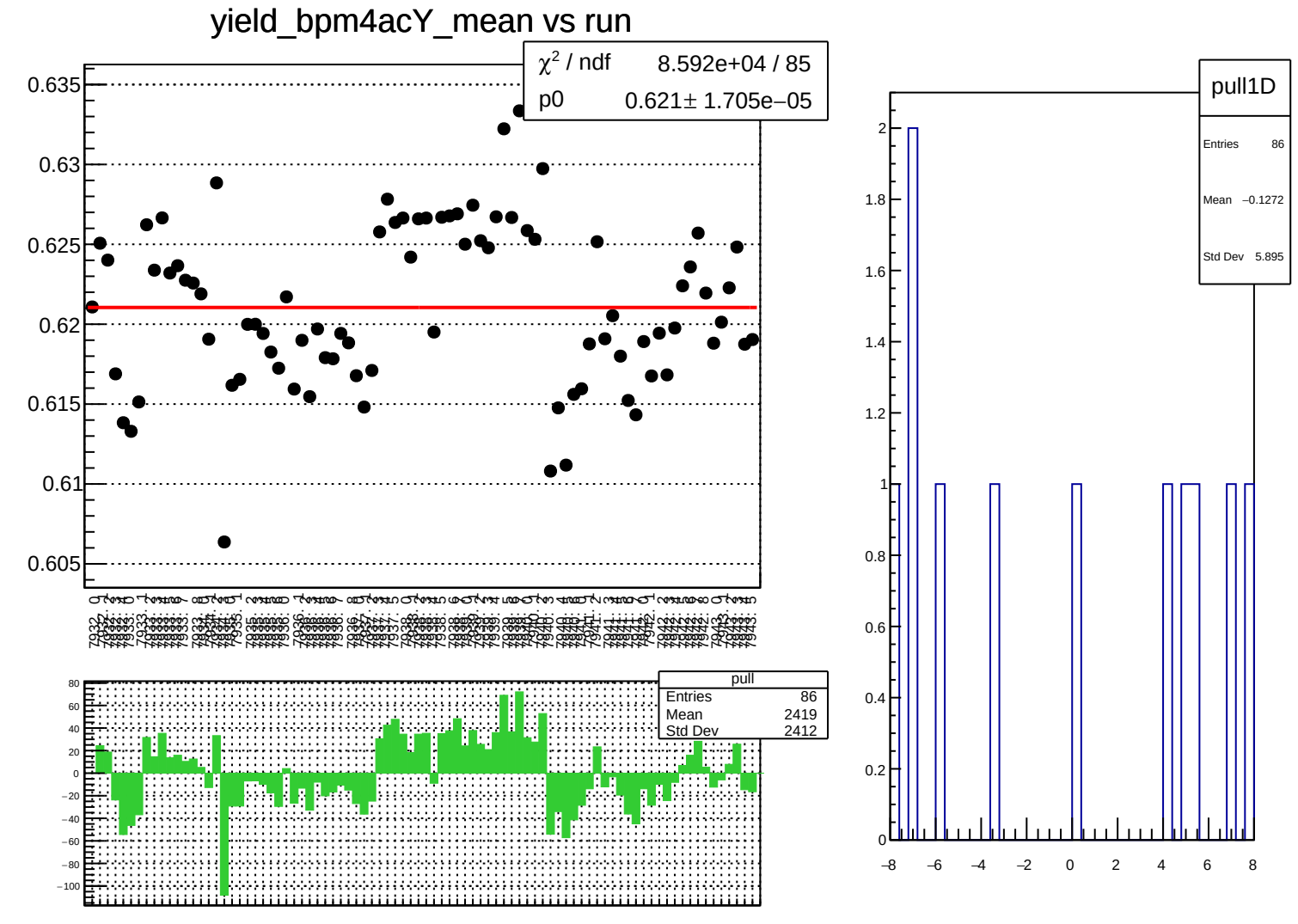

pull1D
Entries 86
Mean −1.101
Std Dev 3.972
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

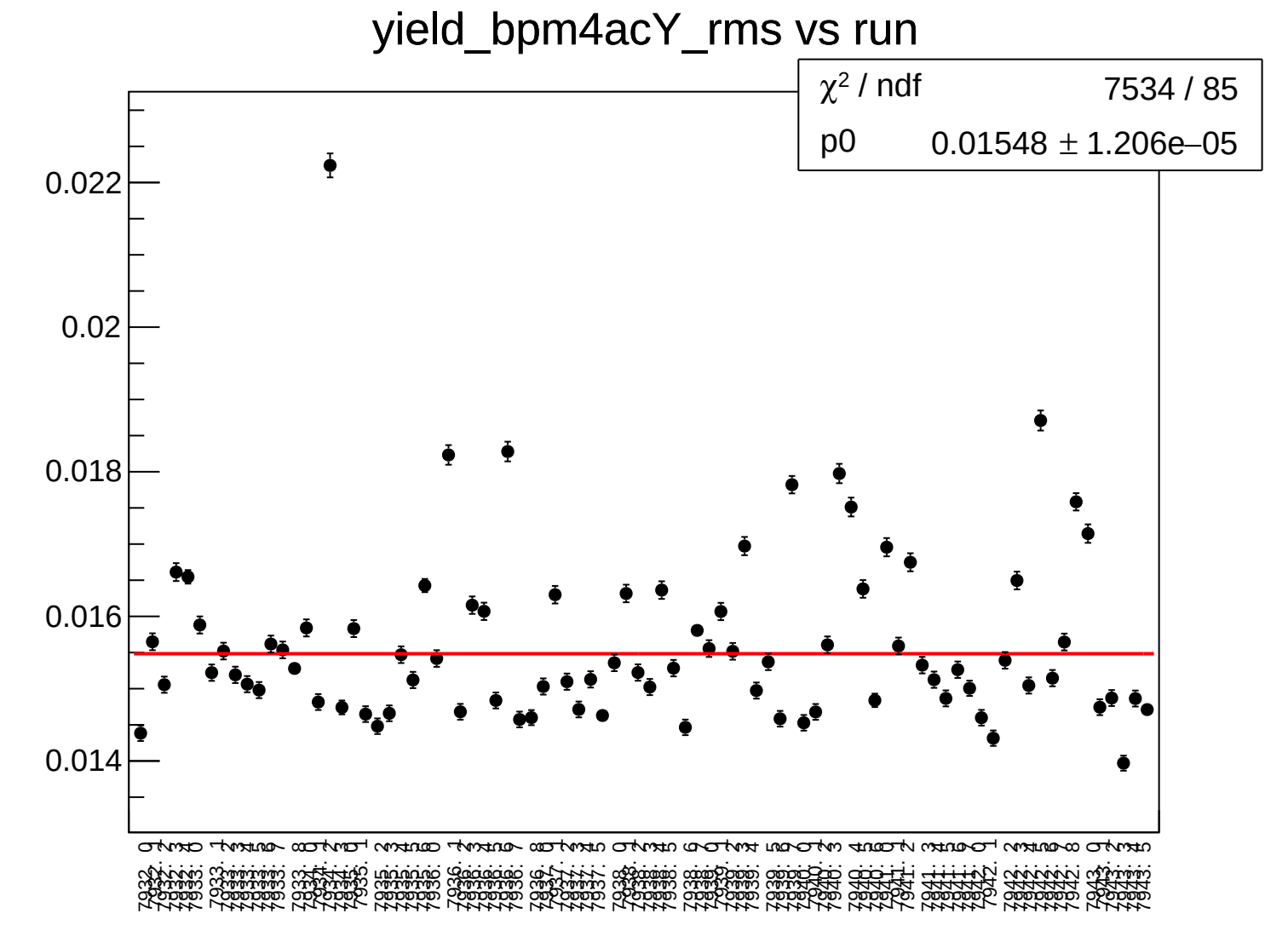

yield_bpm4eY_rms vs run
χ² / ndf 1.167e+04 / 85
p0 0.01368 ± 1.066e−05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

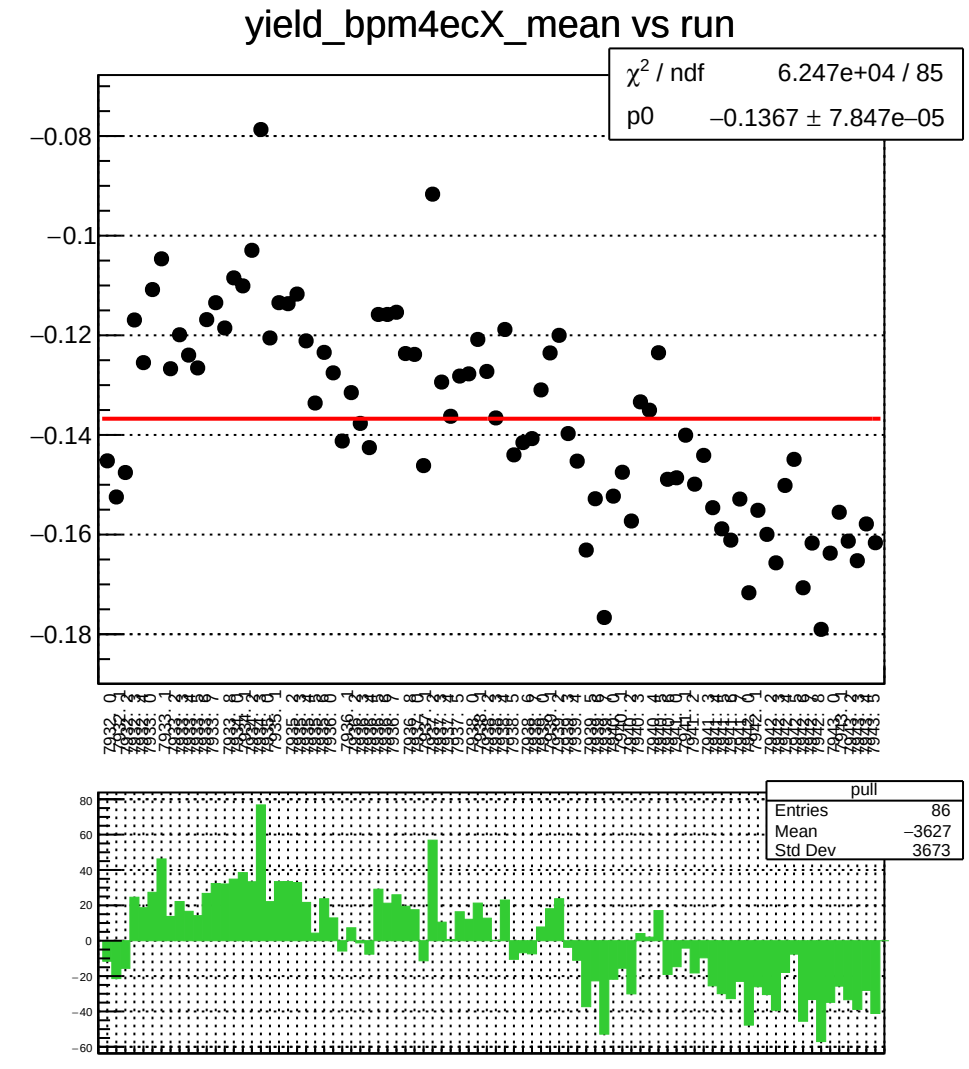

yield_bpm4acX_mean vs run
χ² / ndf 6.189e+04 / 85
p0 −0.8974 ± 7.838e−05
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 86
Mean −3236
Std Dev 3283
80
60
40
20
0
−20
−40
−60

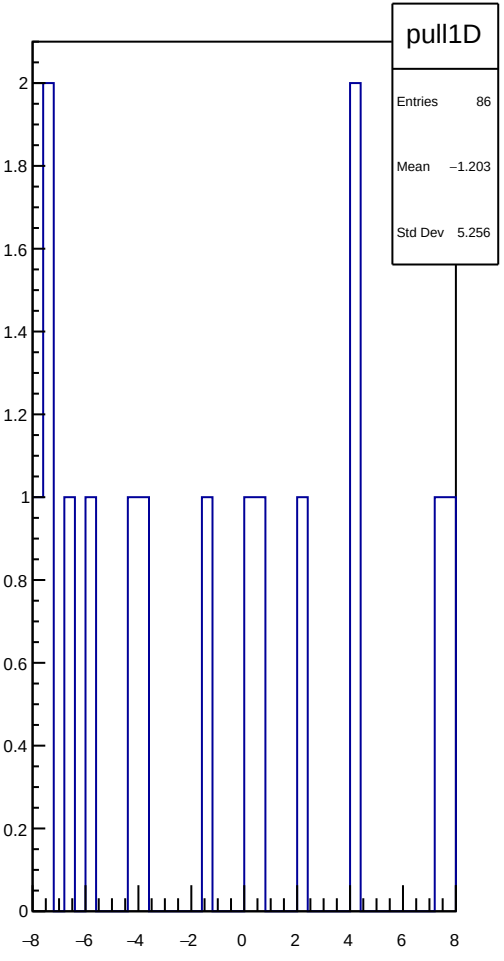

pull1D
Entries 86
Mean −0.3046
Std Dev 5.124
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

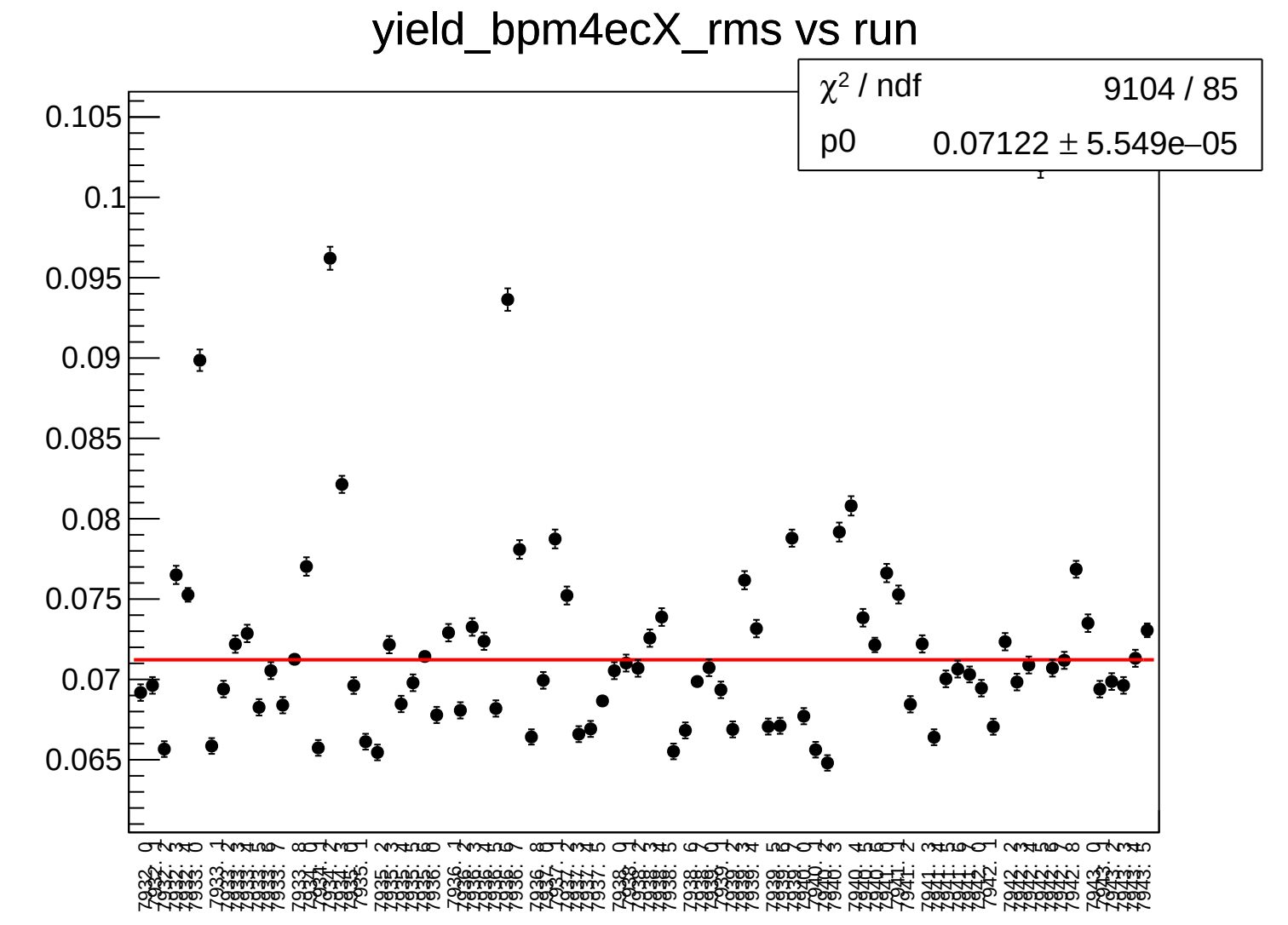

yield_bpm4acX_rms vs run
χ² / ndf 8724 / 85
p0 0.07114 ± 5.542e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

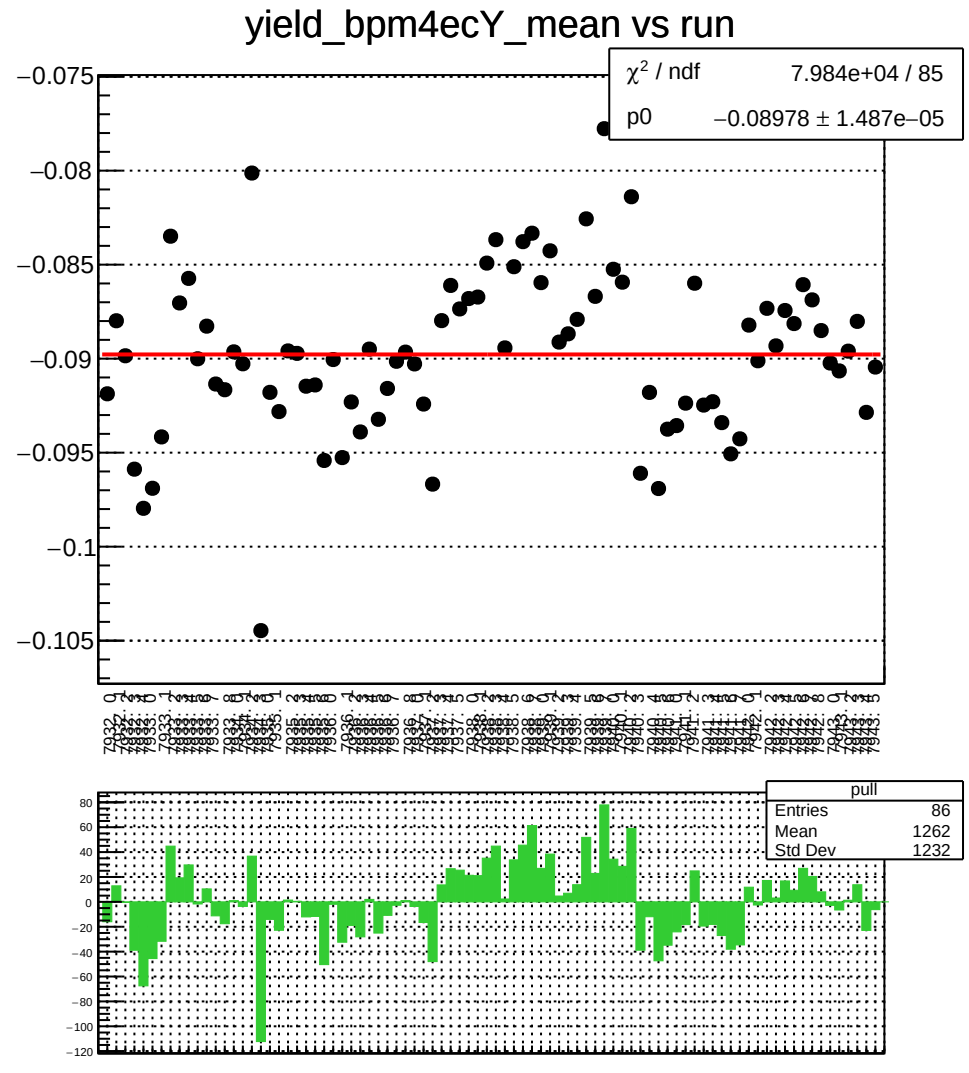

yield_bpm4acY_mean vs run
χ² / ndf 8.592e+04 / 85
p0 0.621± 1.705e−05
0.635
0.63
0.625
0.62
0.615
0.61
0.605
pull
Entries 86
Mean 2419
Std Dev 2412
80
60
40
20
0
−20
−40
−60
−80
−100
pull1D
Entries 86
Mean −0.1272
Std Dev 5.895
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

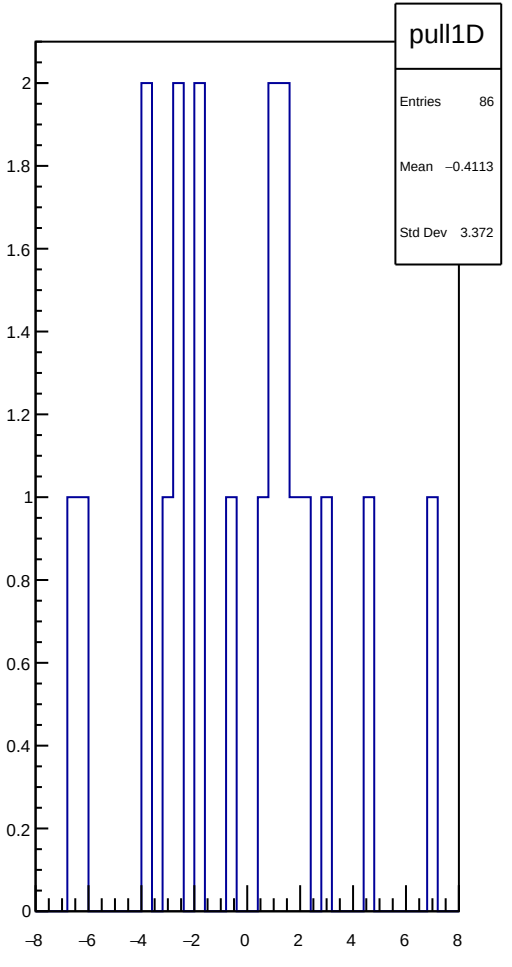

yield_bpm4acY_rms vs run
χ² / ndf 7534 / 85
p0 0.01548 ± 1.206e–05
0.022
0.02
0.018
0.016
0.014

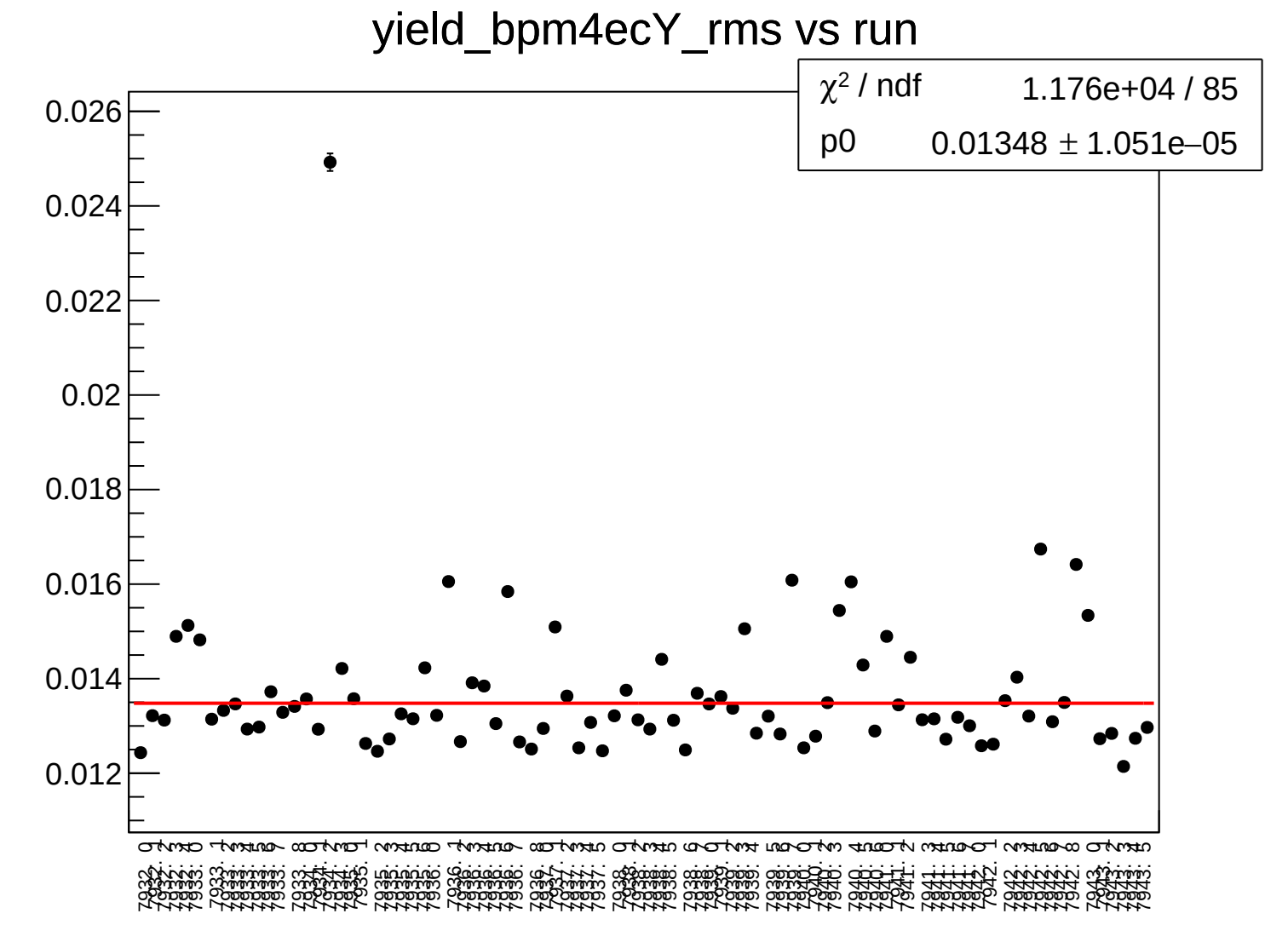

yield_bpm4ecX_mean vs run
χ² / ndf 6.247e+04 / 85
p0 −0.1367 ± 7.847e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 86
Mean −3627
Std Dev 3673
80
60
40
20
0
−20
−40
−60

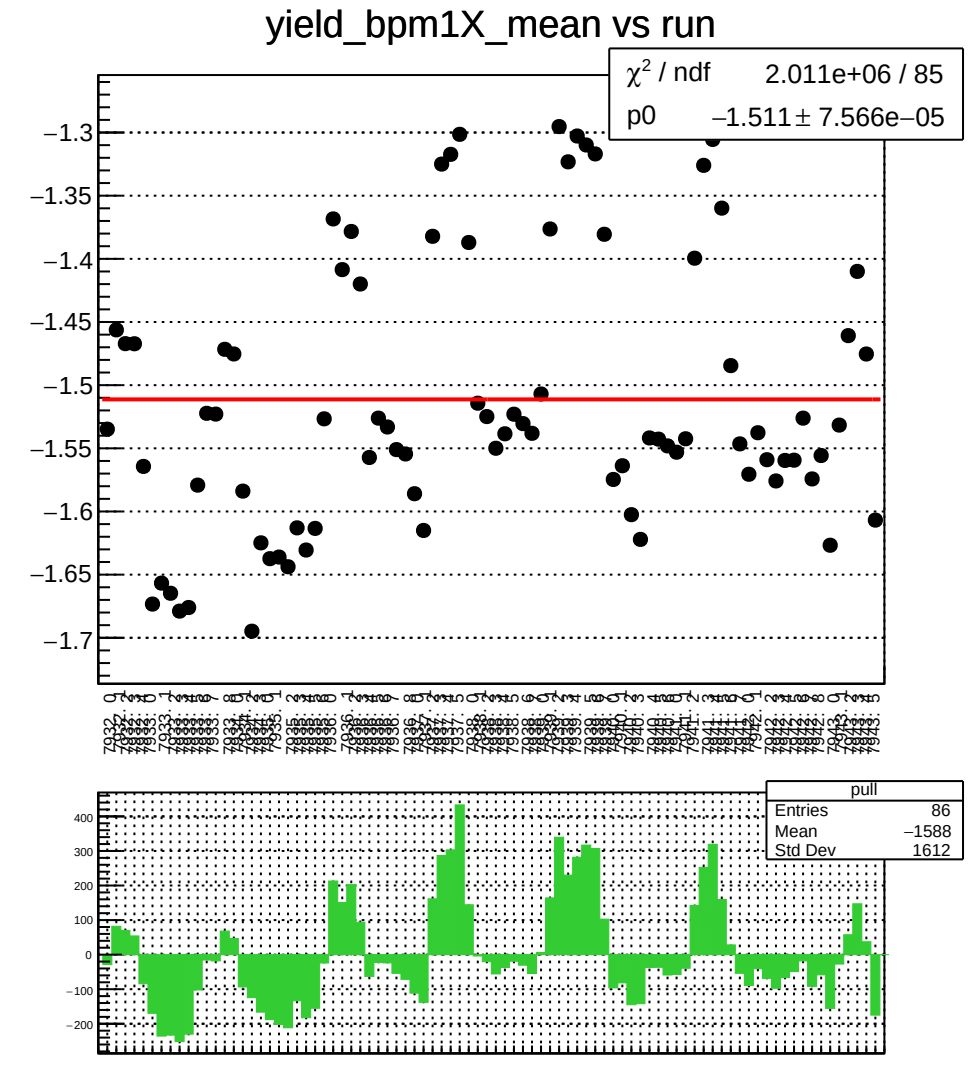

pull1D
Entries 86
Mean −1.203
Std Dev 5.256
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

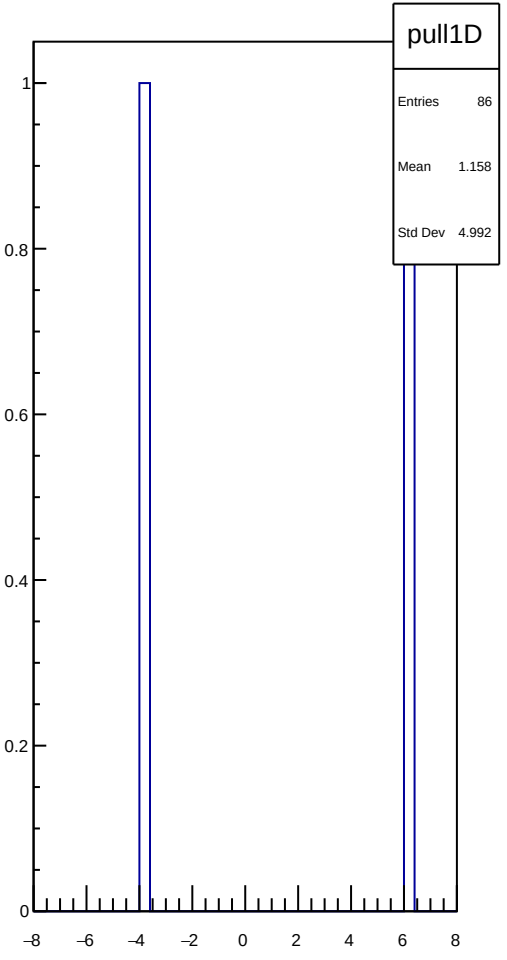

yield_bpm4ecX_rms vs run
χ² / ndf 9104 / 85
p0 0.07122 ± 5.549e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

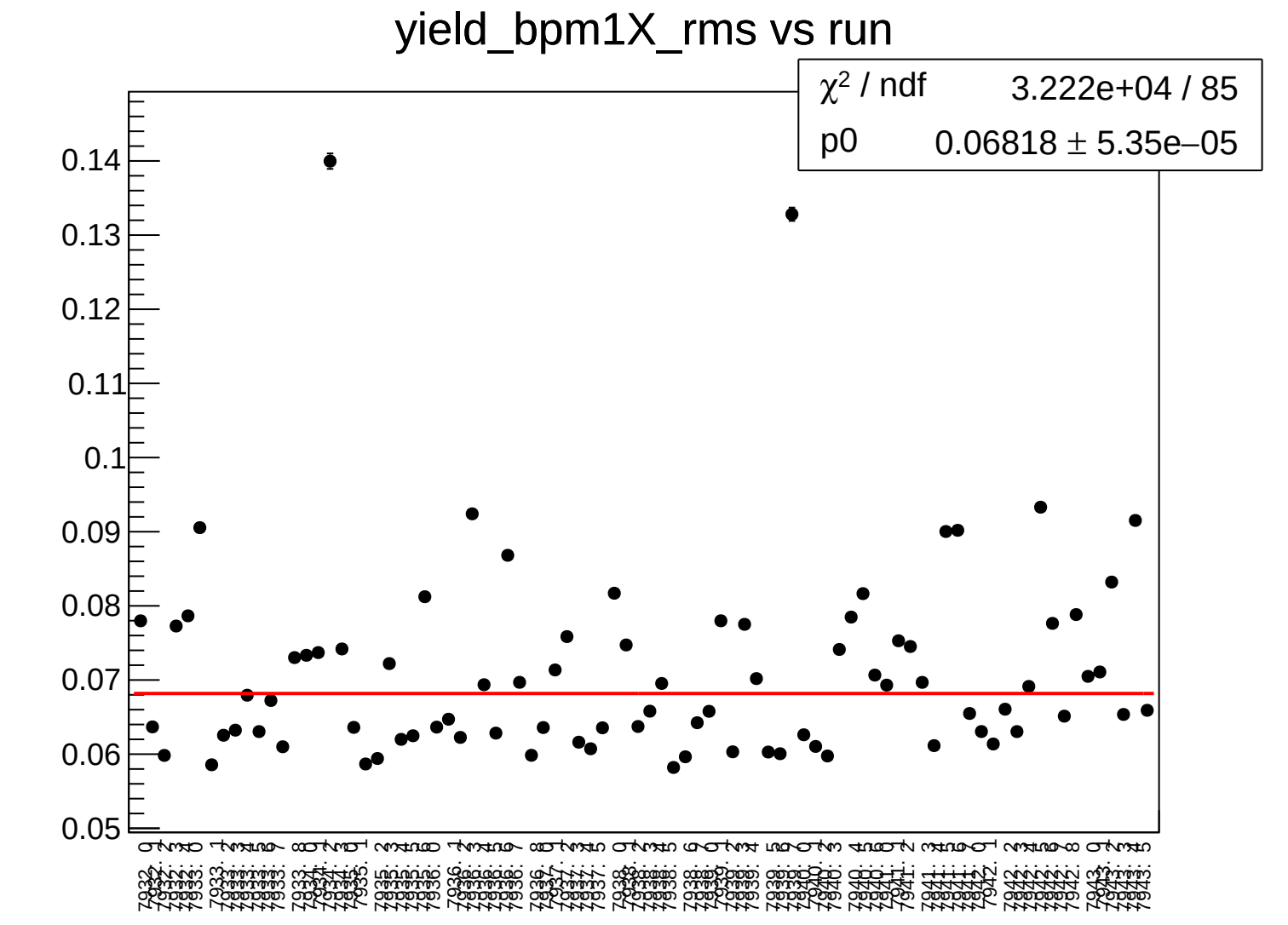

yield_bpm4ecY_mean vs run
χ² / ndf 7.984e+04 / 85
p0 −0.08978 ± 1.487e−05
−0.075
−0.08
−0.085
−0.09
−0.095
−0.1
−0.105
pull
Entries 86
Mean 1262
Std Dev 1232
80
60
40
20
0
−20
−40
−60
−80
−100
−120

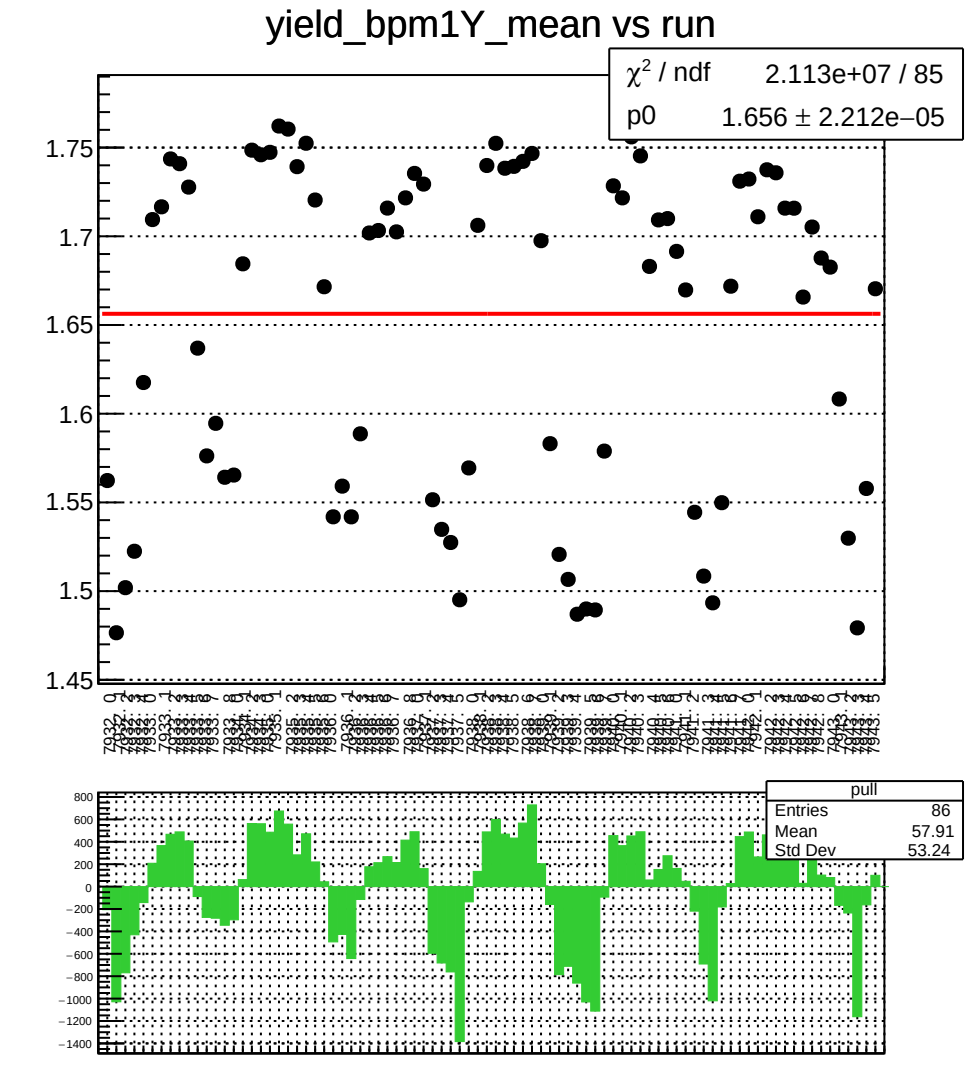

pull1D
Entries 86
Mean −0.4113
Std Dev 3.372
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

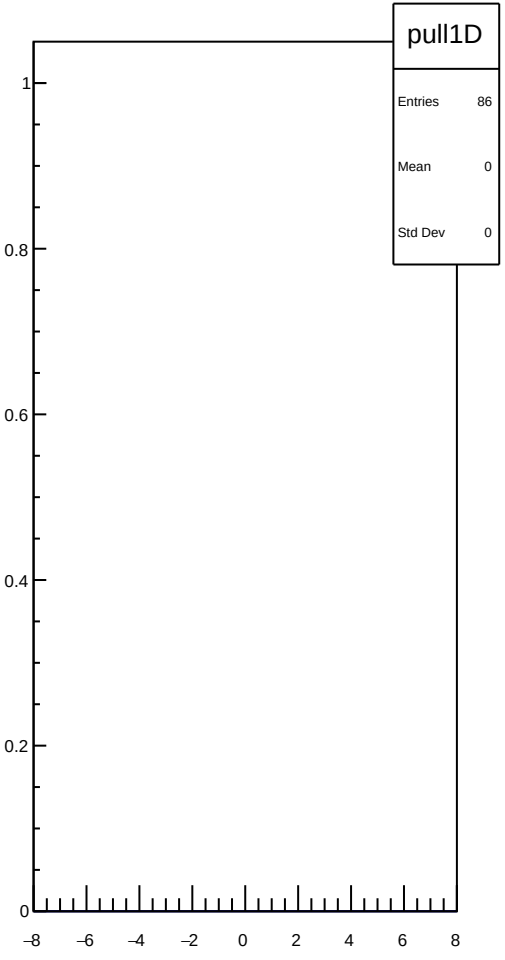

yield_bpm4ecY_rms vs run
χ² / ndf 1.176e+04 / 85
p0 0.01348 ± 1.051e–05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

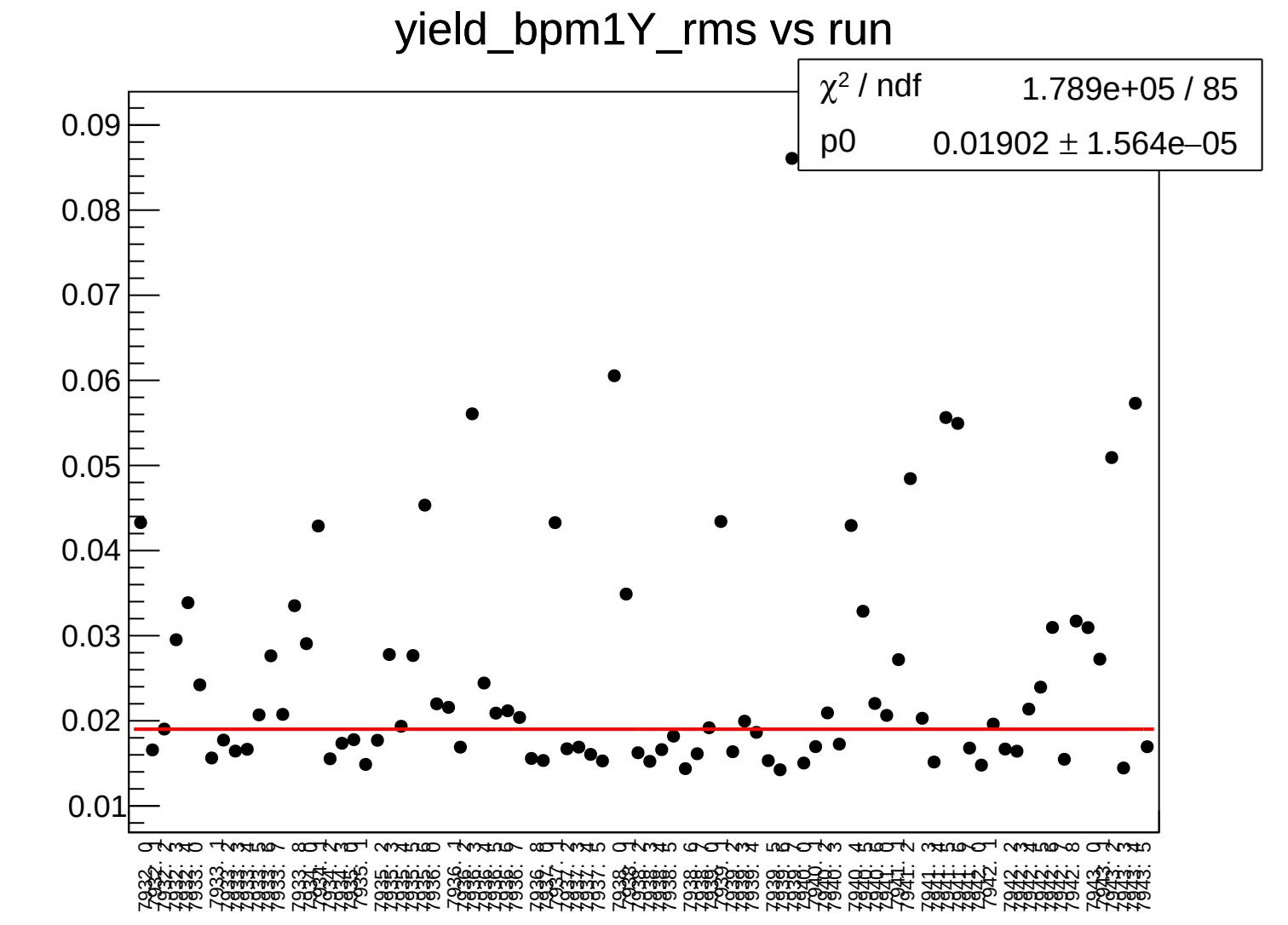

yield_bpm1X_mean vs run
χ² / ndf 2.011e+06 / 85
p0 −1.511 ± 7.566e−05
pull
Entries 86
Mean −1588
Std Dev 1612

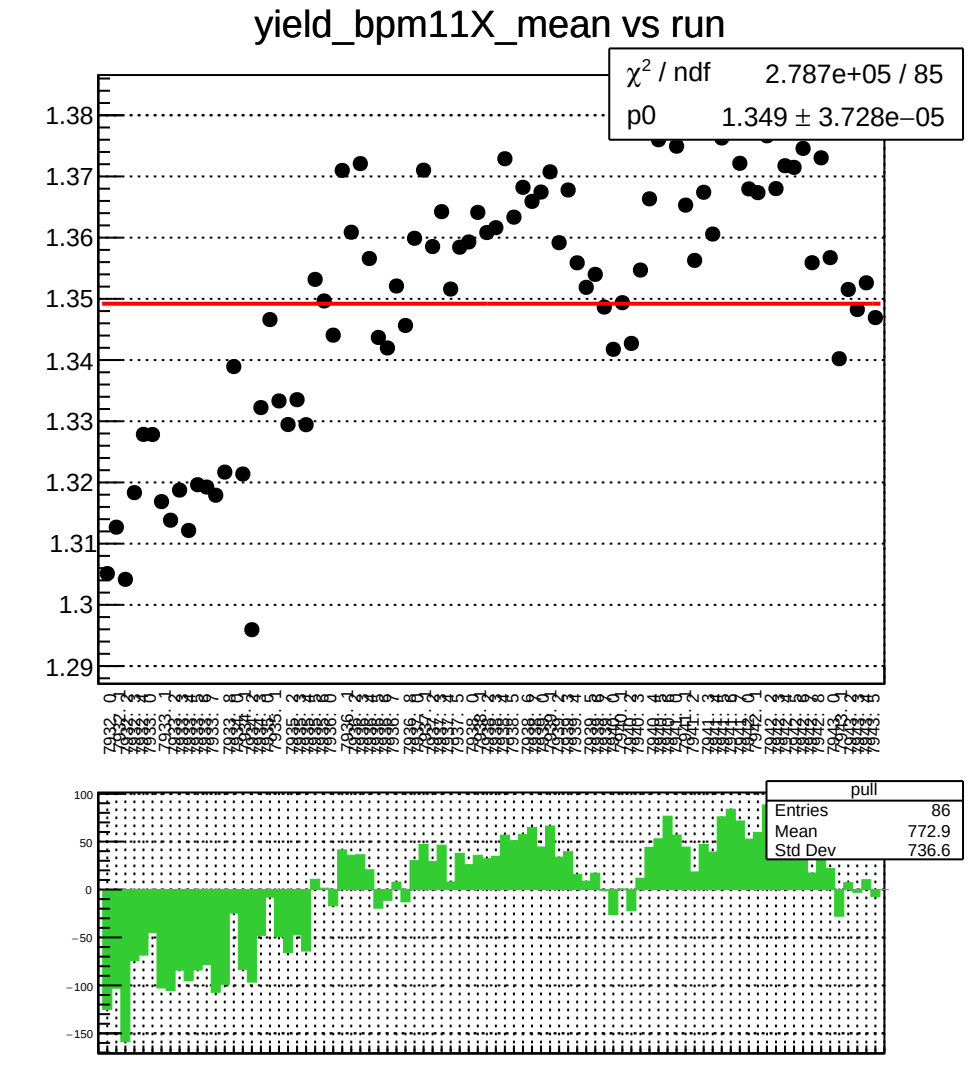

pull1D
Entries 86
Mean 1.158
Std Dev 4.992

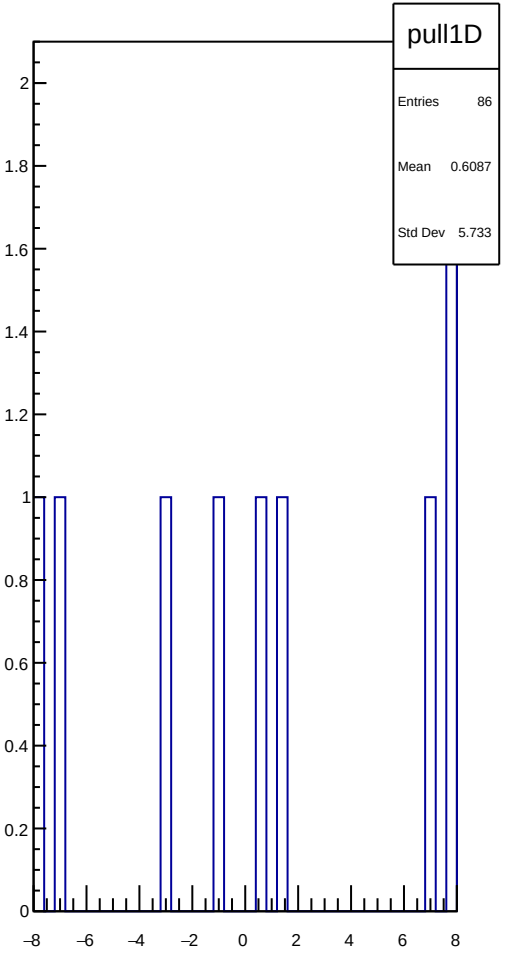

yield_bpm1X_rms vs run
χ² / ndf 3.222e+04 / 85
p0 0.06818 ± 5.35e−05
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05

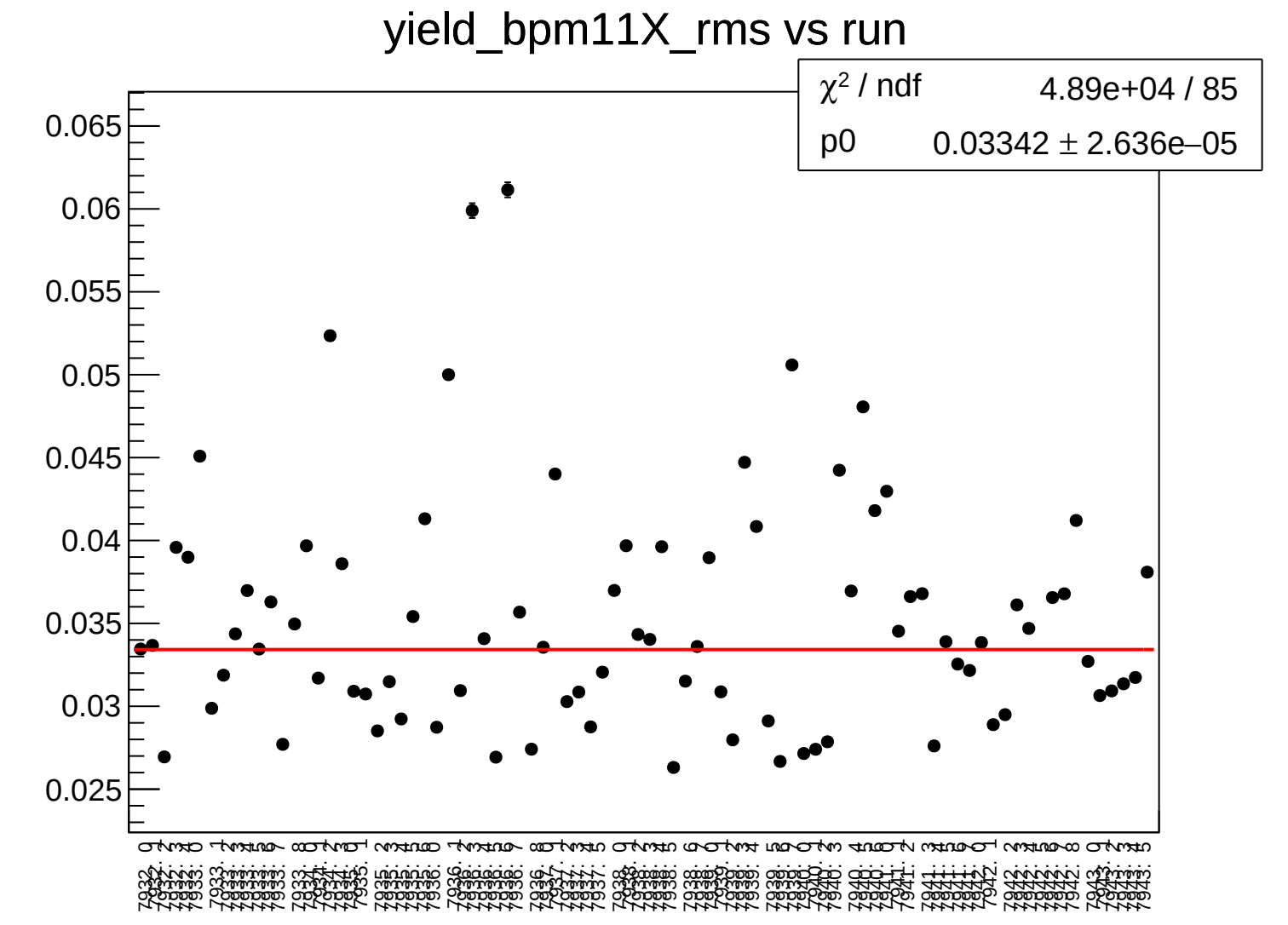

yield_bpm1Y_mean vs run
χ² / ndf 2.113e+07 / 85
p0 1.656 ± 2.212e−05
1.75
1.7
1.65
1.6
1.55
1.5
1.45
pull
Entries 86
Mean 57.91
Std Dev 53.24
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

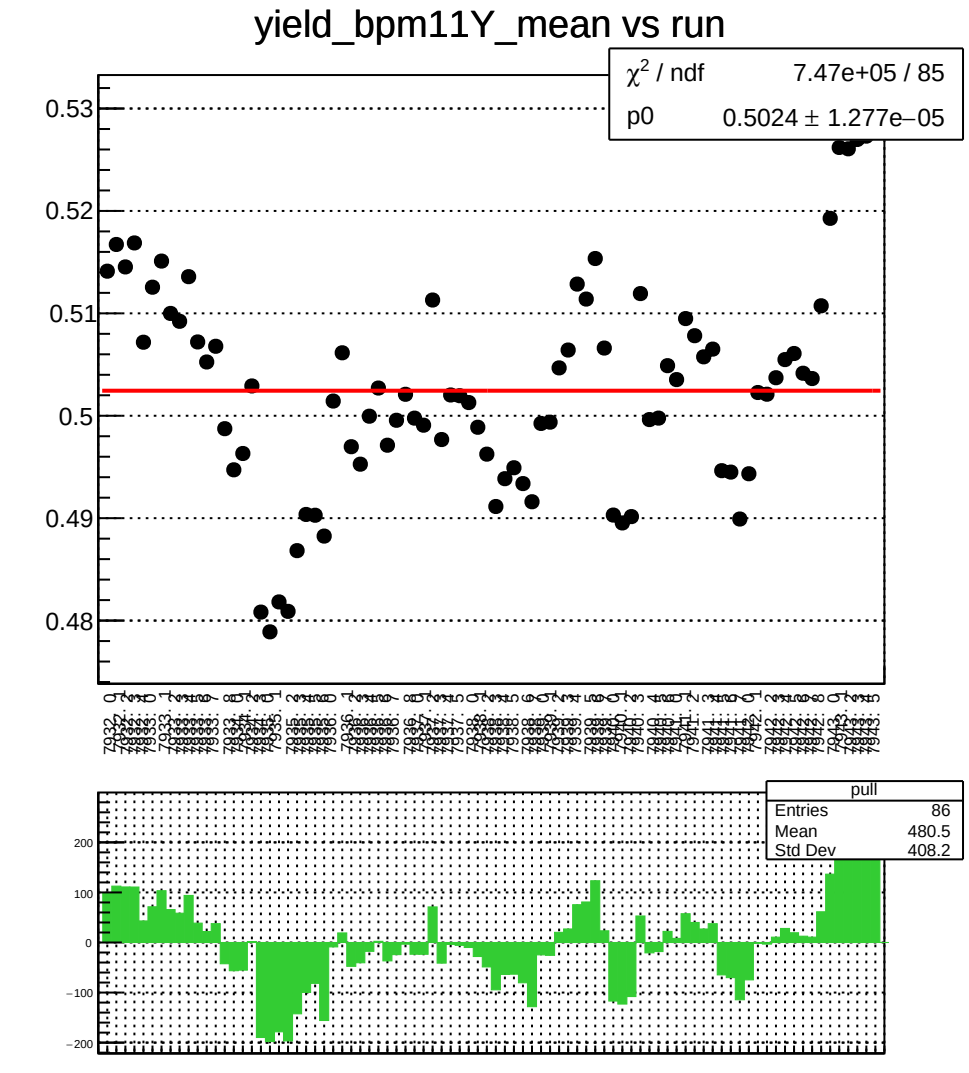

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

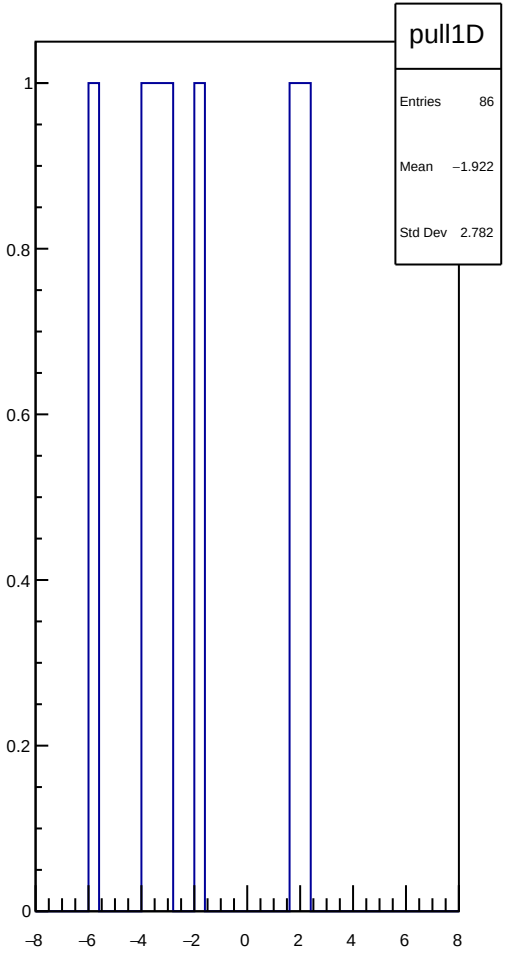

yield_bpm1Y_rms vs run
χ² / ndf 1.789e+05 / 85
p0 0.01902 ± 1.564e–05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

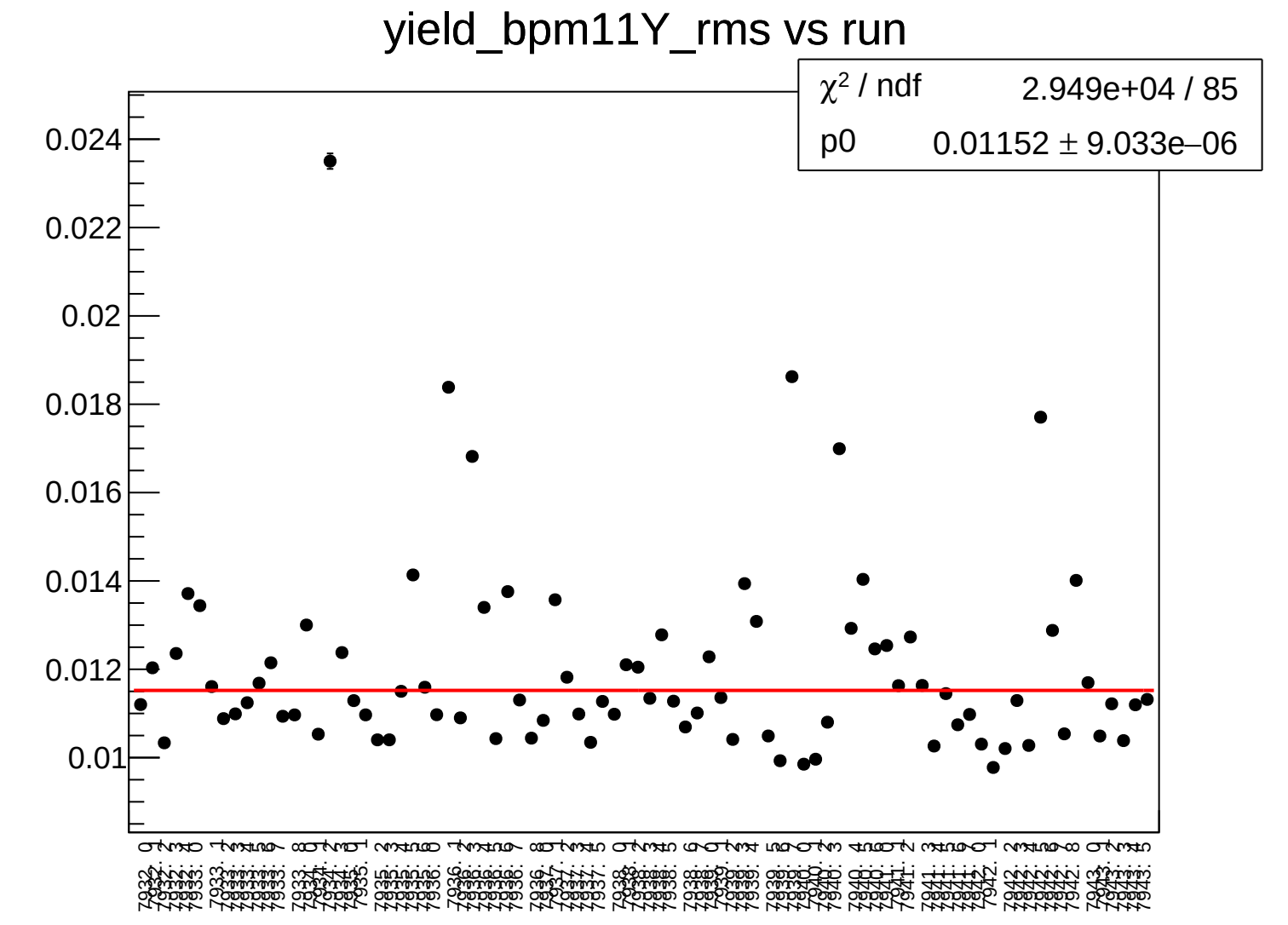

yield_bpm11X_mean vs run
χ^2 / ndf 2.787e+05 / 85
p0 1.349 ± 3.728e−05
1.38
1.37
1.36
1.35
1.34
1.33
1.32
1.31
1.3
1.29
pull
Entries 86
Mean 772.9
Std Dev 736.6
100
50
0
−50
−100
−150

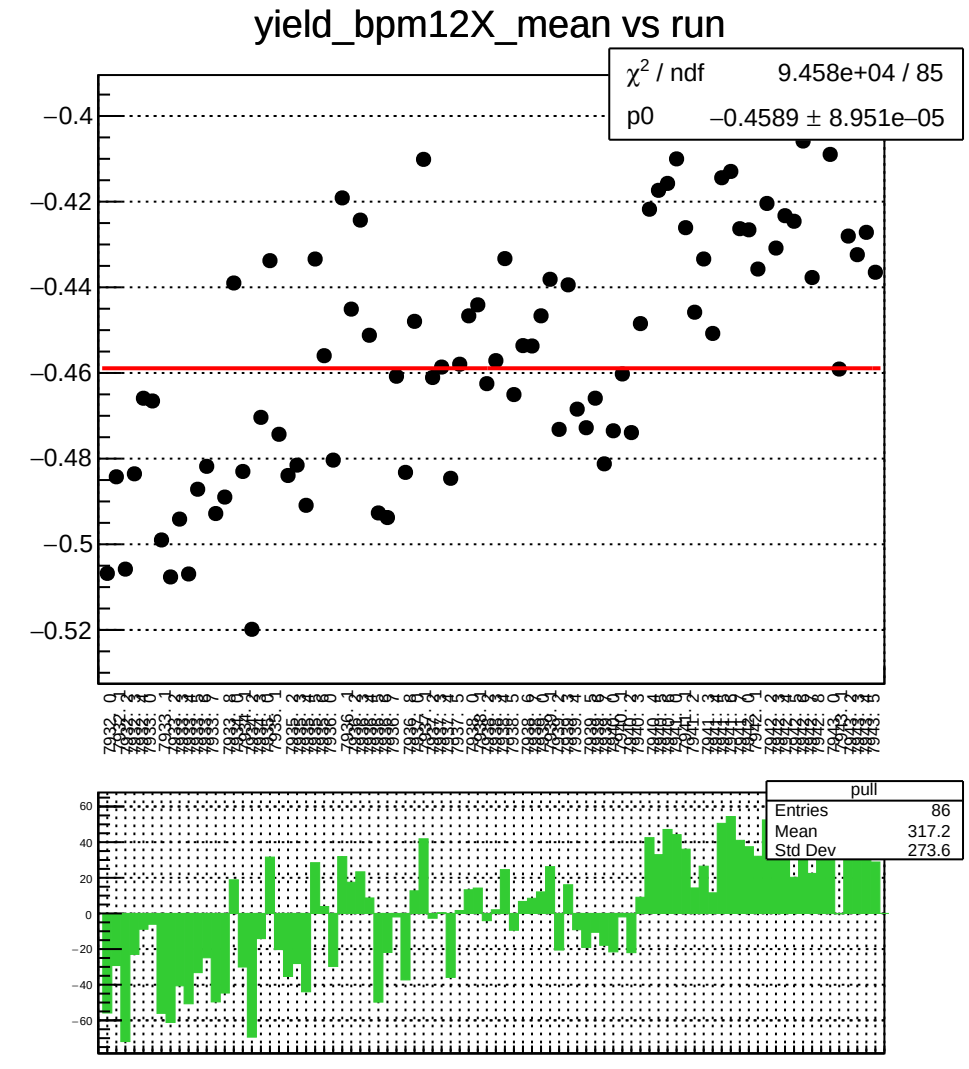

pull1D
Entries 86
Mean 0.6087
Std Dev 5.733
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

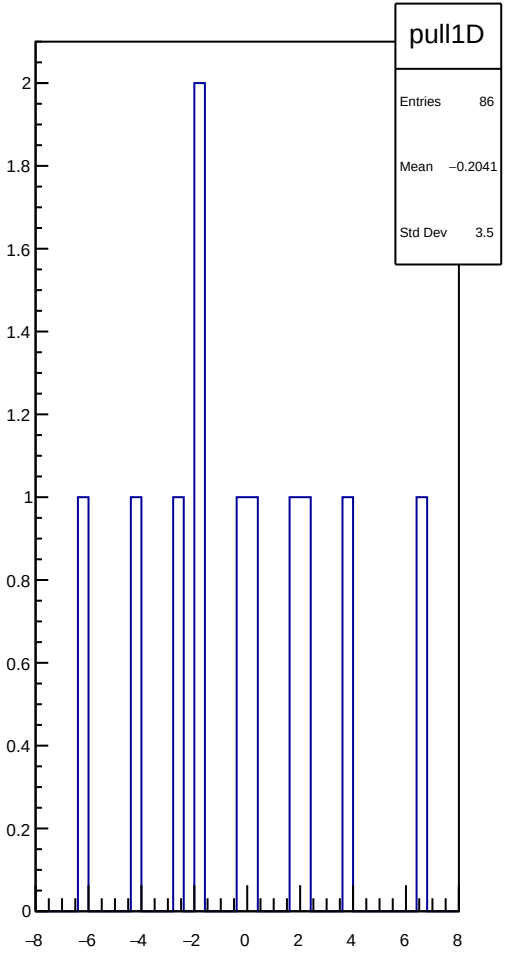

yield_bpm11X_rms vs run
χ² / ndf 4.89e+04 / 85
p0 0.03342 ± 2.636e–05
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025

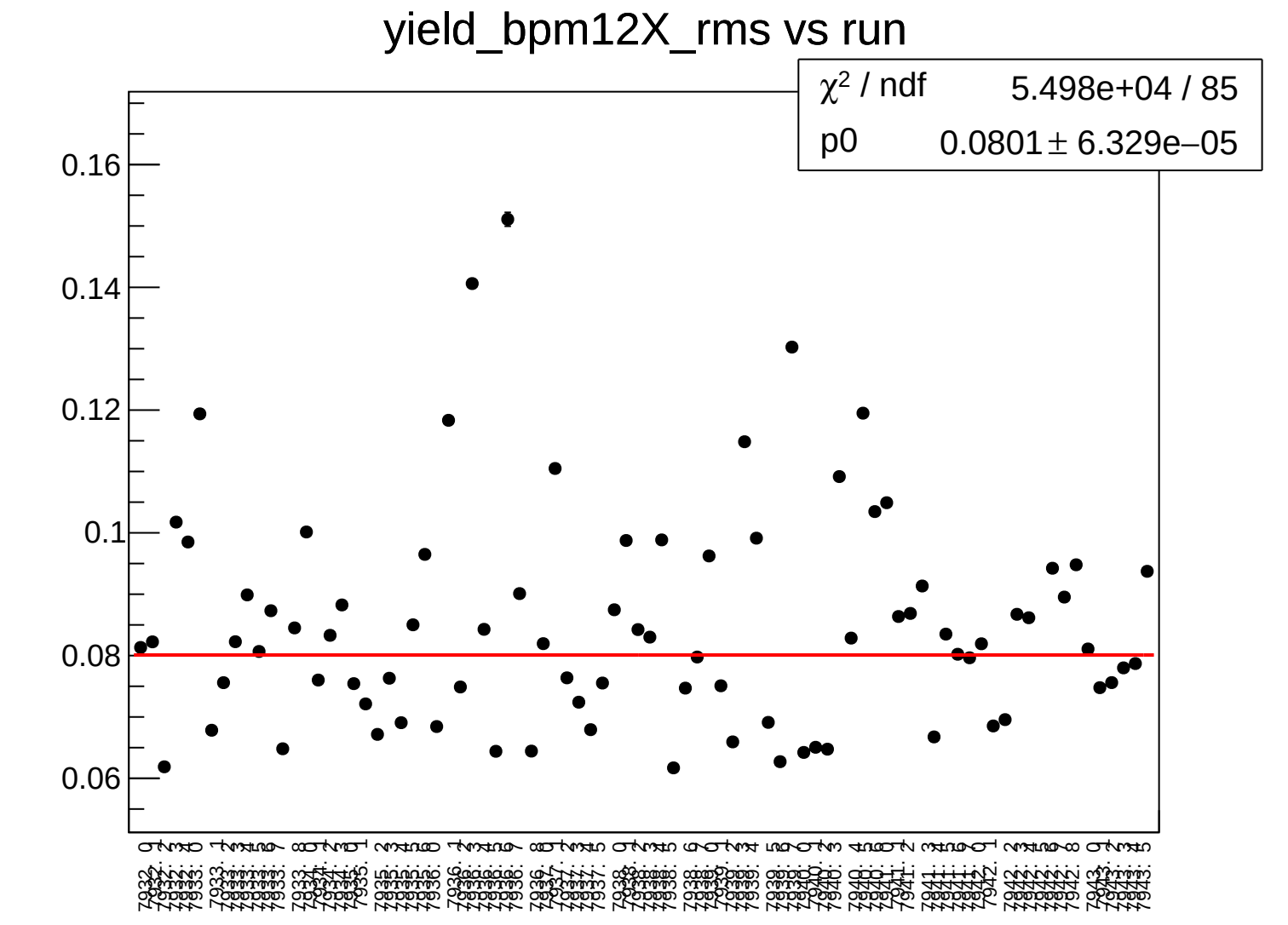

yield_bpm11Y_mean vs run
χ² / ndf 7.47e+05 / 85
p0 0.5024 ± 1.277e−05
0.53
0.52
0.51
0.5
0.49
0.48
pull
Entries 86
Mean 480.5
Std Dev 408.2
200
100
0
−100
−200

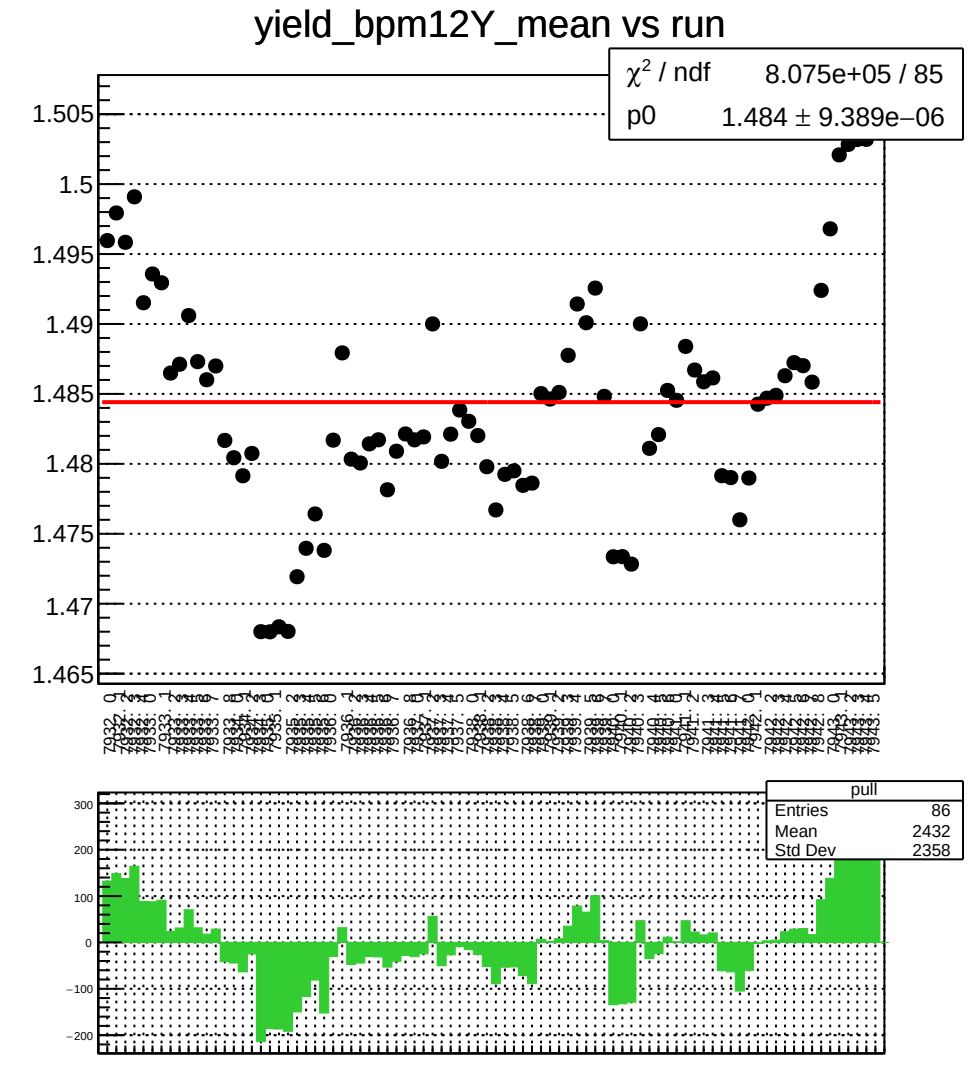

pull1D
Entries 86
Mean −1.922
Std Dev 2.782
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

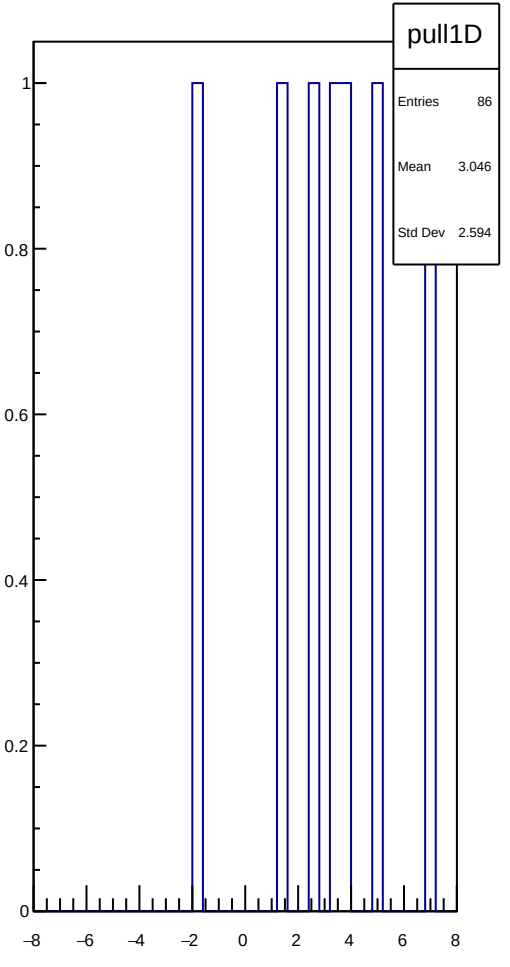

yield_bpm11Y_rms vs run
χ² / ndf 2.949e+04 / 85
p0 0.01152 ± 9.033e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

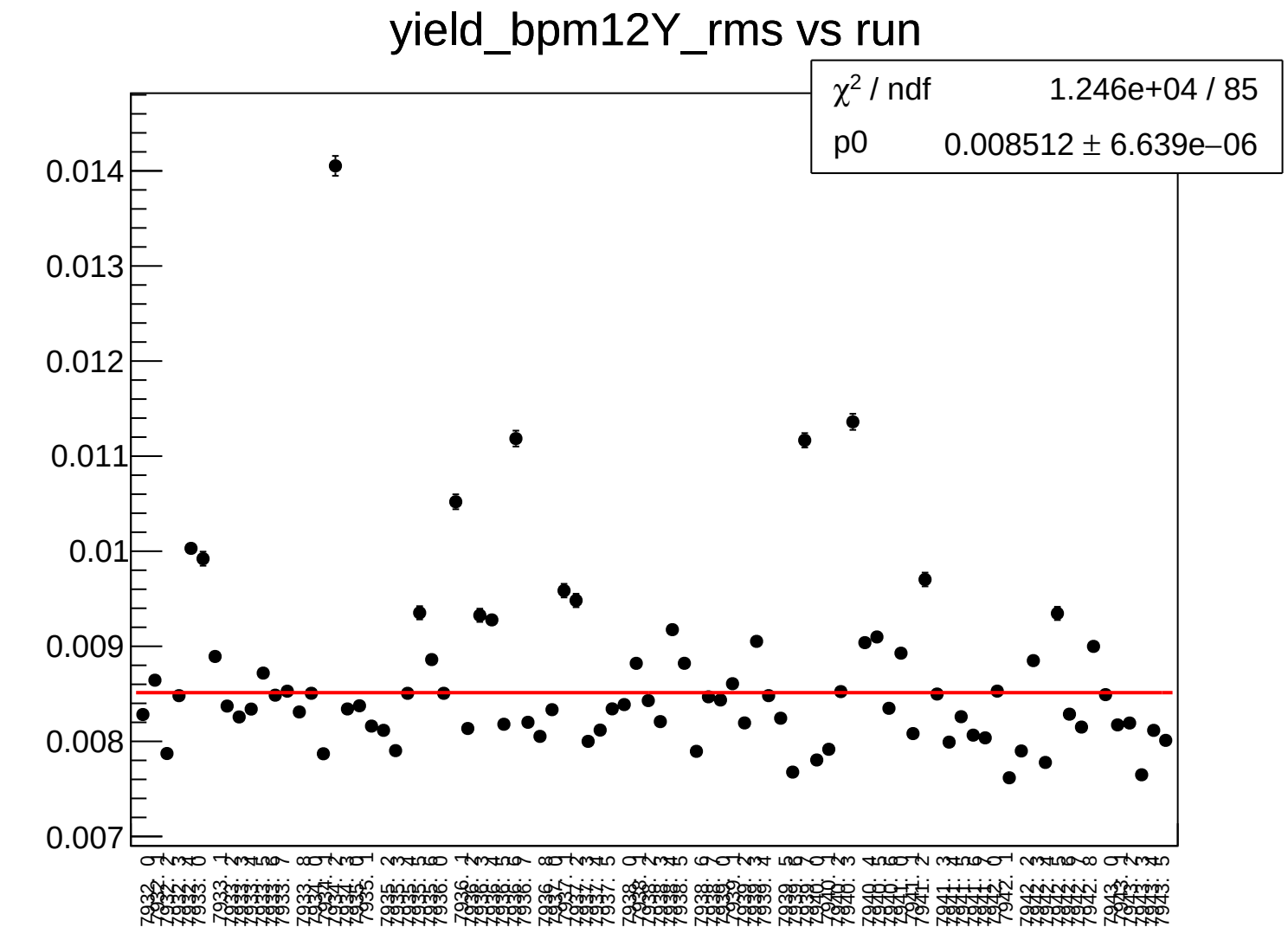

yield_bpm12X_mean vs run
χ² / ndf 9.458e+04 / 85
p0 −0.4589 ± 8.951e−05
−0.4
−0.42
−0.44
−0.46
−0.48
−0.5
−0.52
pull
Entries 86
Mean 317.2
Std Dev 273.6
60
40
20
0
−20
−40
−60

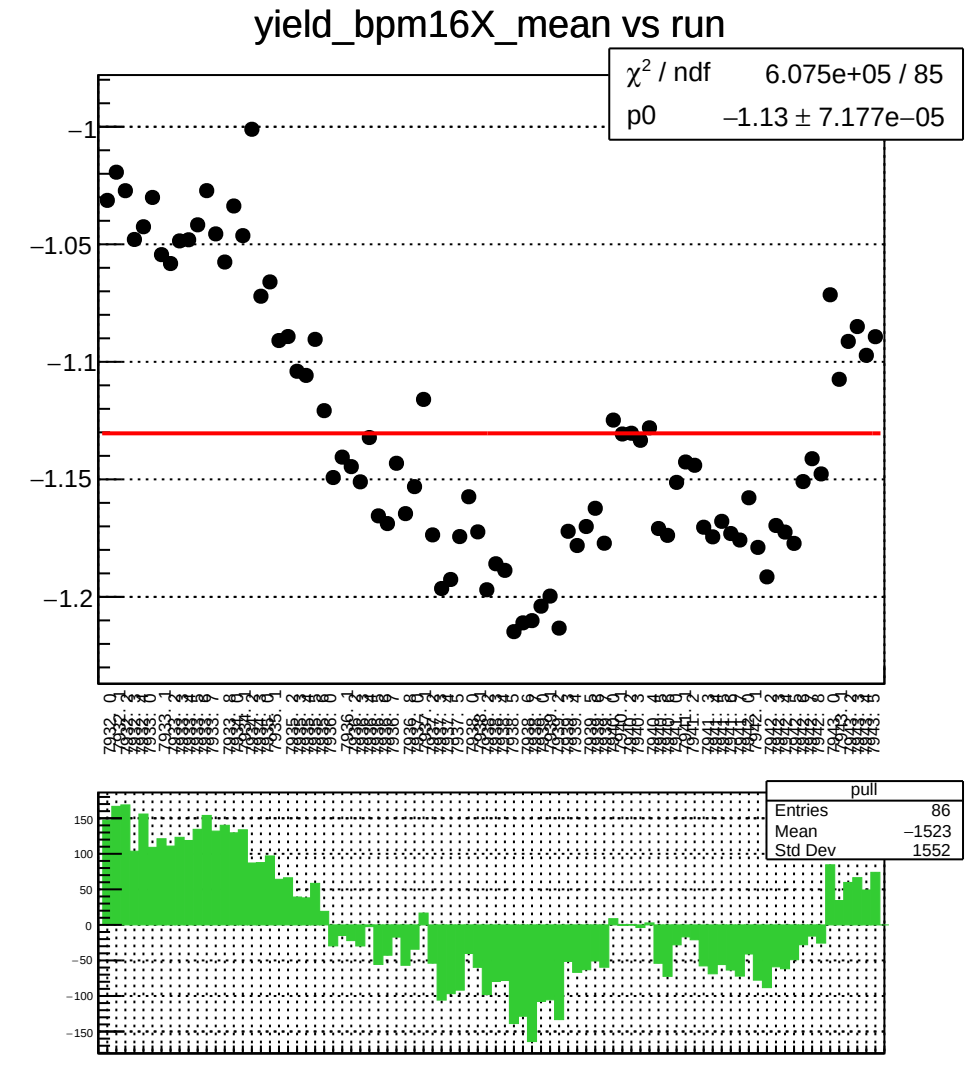

pull1D
Entries 86
Mean −0.2041
Std Dev 3.5
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

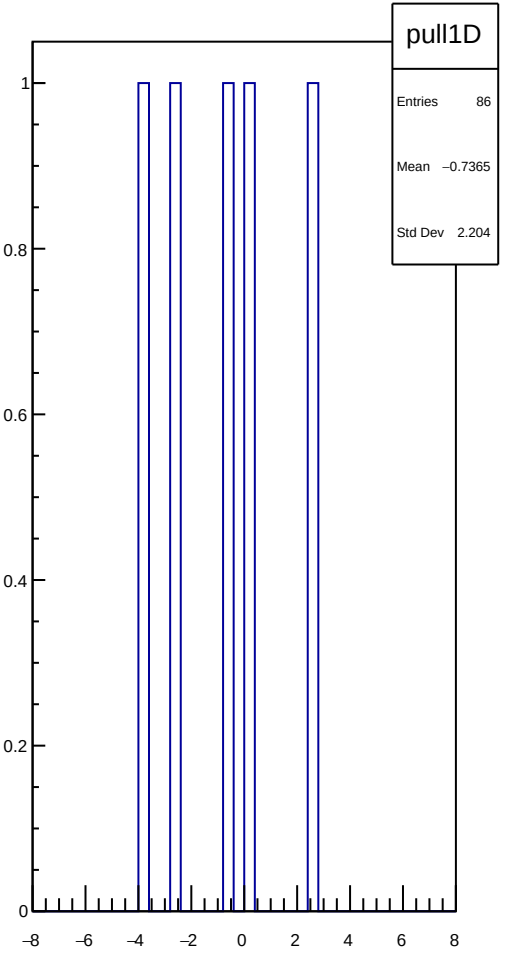

yield_bpm12X_rms vs run
χ² / ndf 5.498e+04 / 85
p0 0.0801 ± 6.329e−05
0.16
0.14
0.12
0.1
0.08
0.06

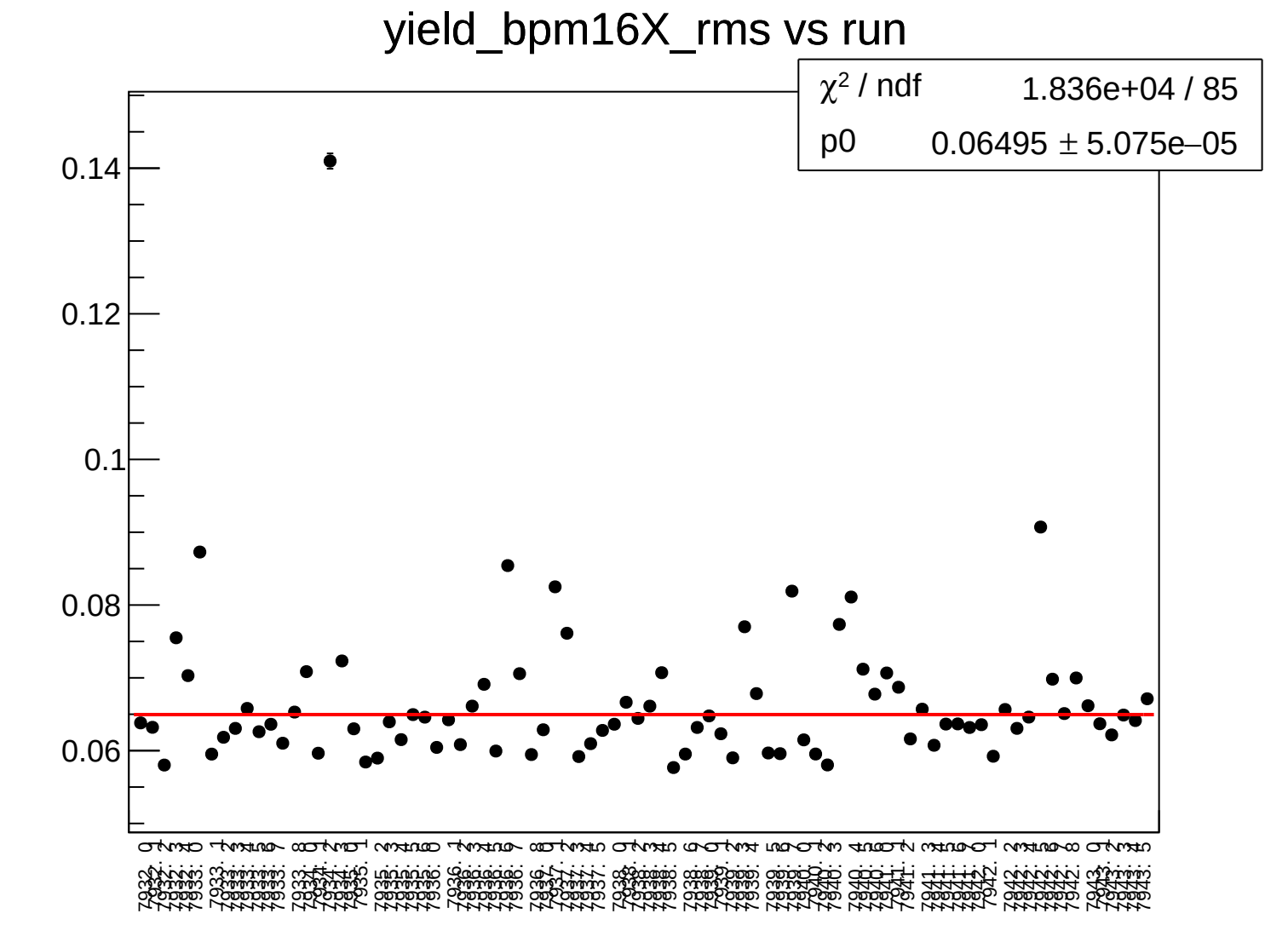

yield_bpm12Y_mean vs run
χ² / ndf 8.075e+05 / 85
p0 1.484 ± 9.389e−06
1.505
1.5
1.495
1.49
1.485
1.48
1.475
1.47
1.465
pull
Entries 86
Mean 2432
Std Dev 2358
300
200
100
0
−100
−200

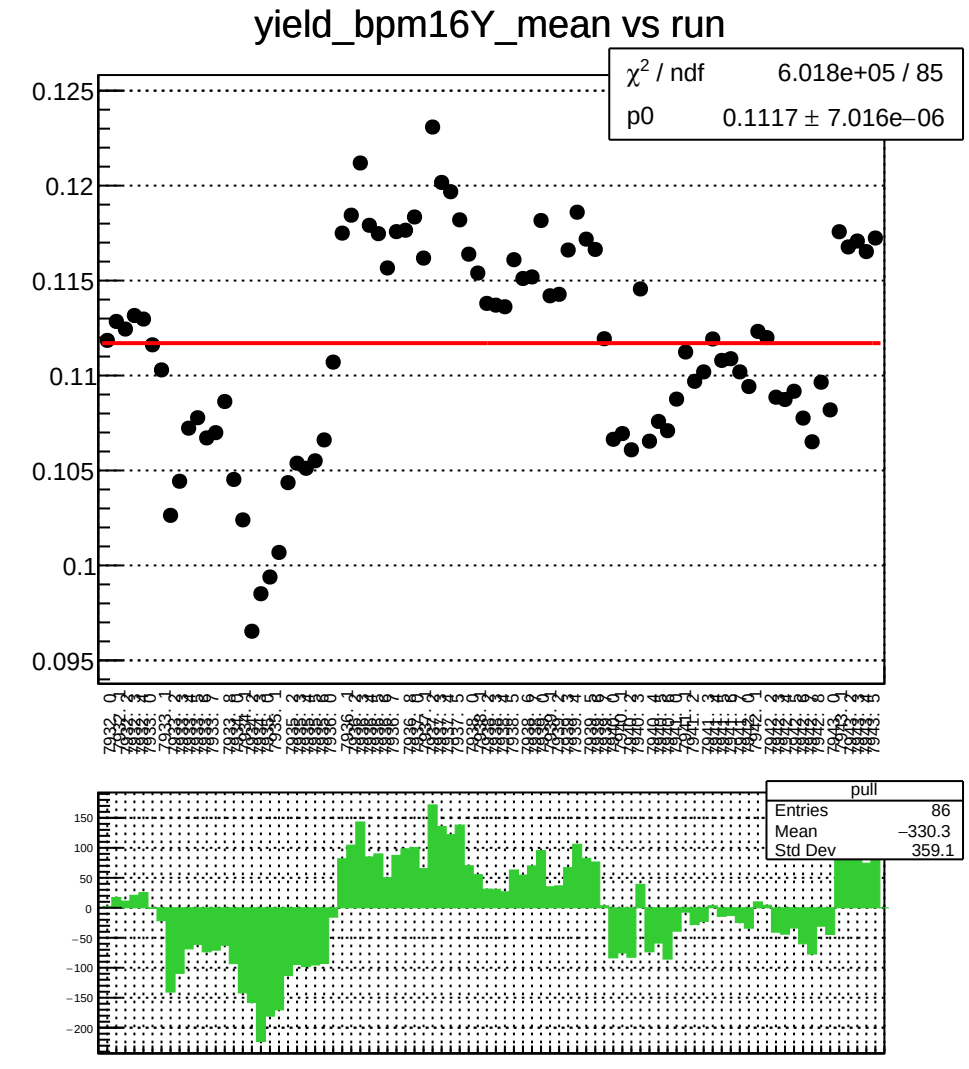

pull1D
Entries 86
Mean 3.046
Std Dev 2.594
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

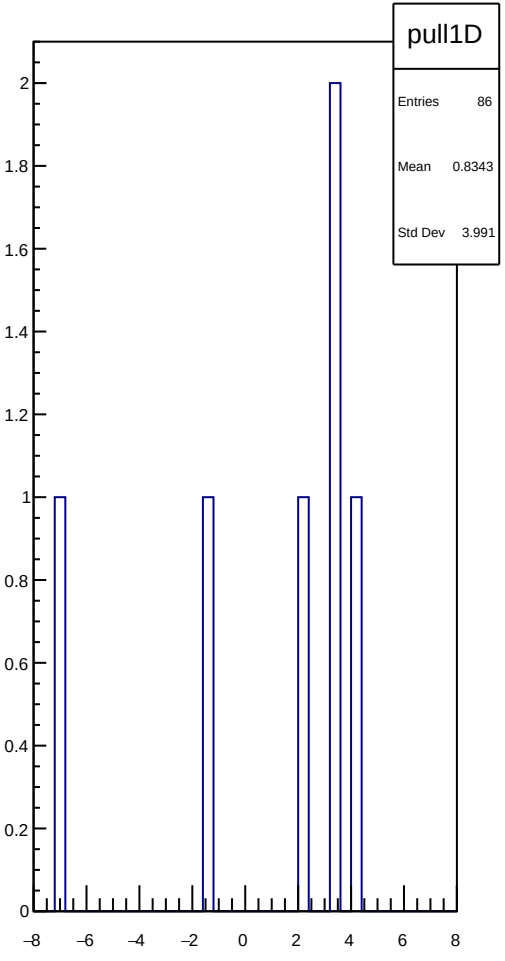

yield_bpm12Y_rms vs run
χ² / ndf 1.246e+04 / 85
p0 0.008512 ± 6.639e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

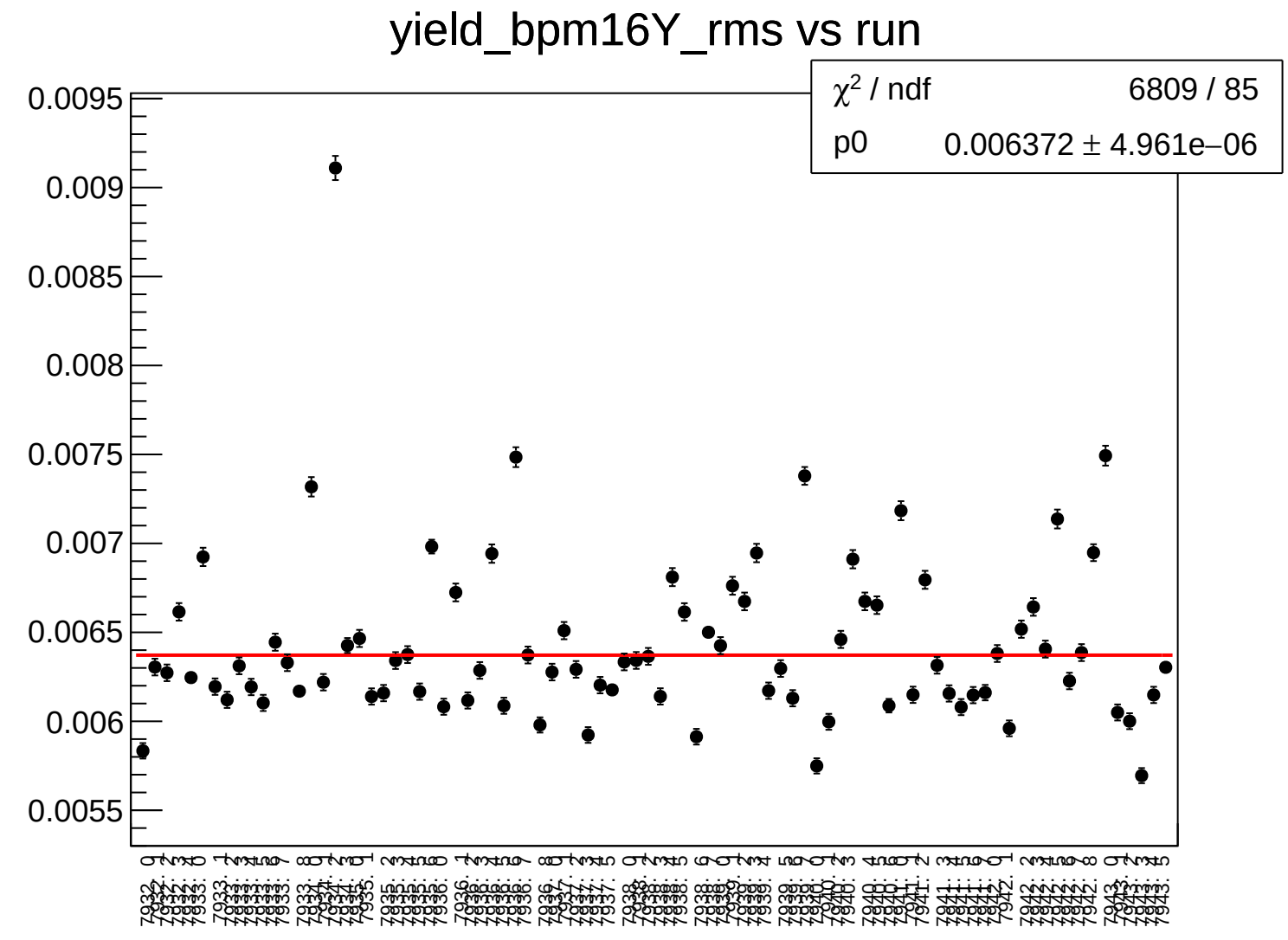

yield_bpm16X_mean vs run
χ² / ndf 6.075e+05 / 85
p0 −1.13 ± 7.177e−05
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 86
Mean −1523
Std Dev 1552
150
100
50
0
−50
−100
−150

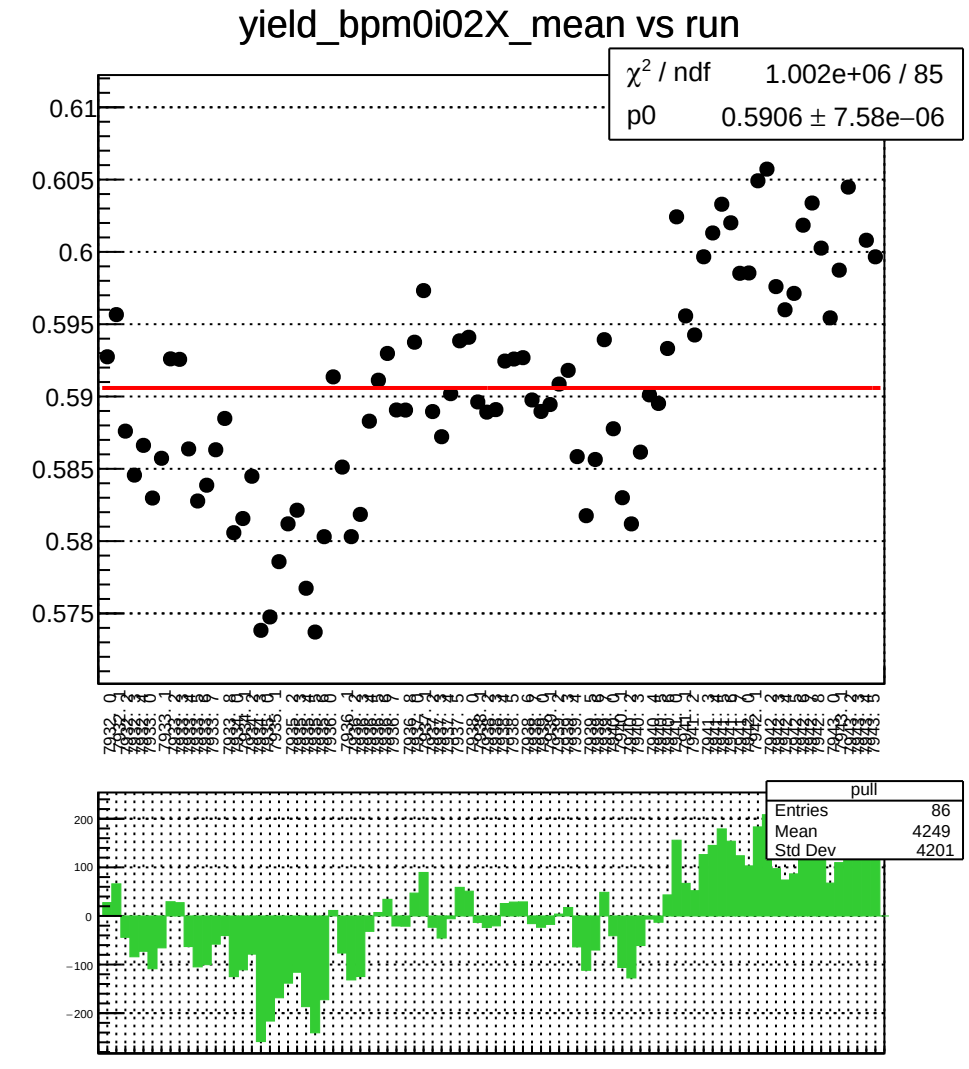

pull1D
Entries 86
Mean −0.7365
Std Dev 2.204
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

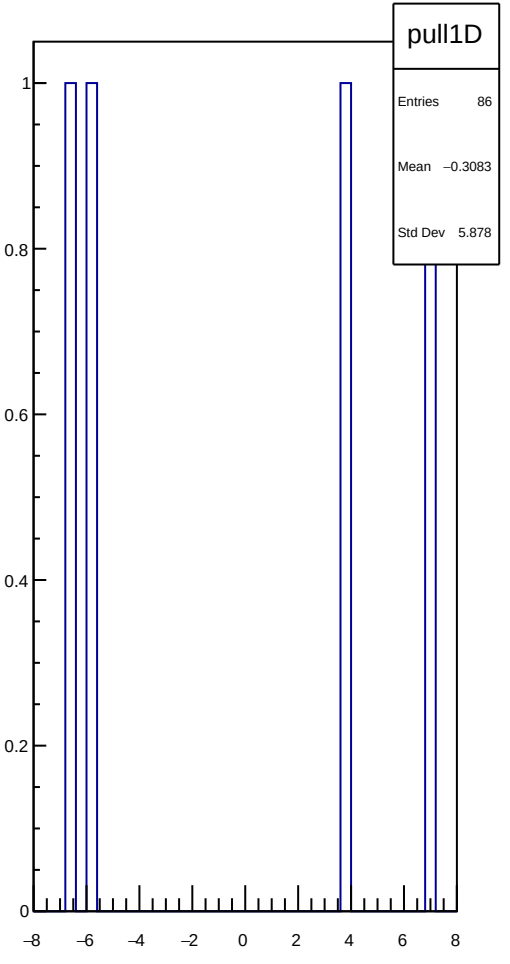

yield_bpm16X_rms vs run
χ² / ndf 1.836e+04 / 85
p0 0.06495 ± 5.075e–05
0.14
0.12
0.1
0.08
0.06

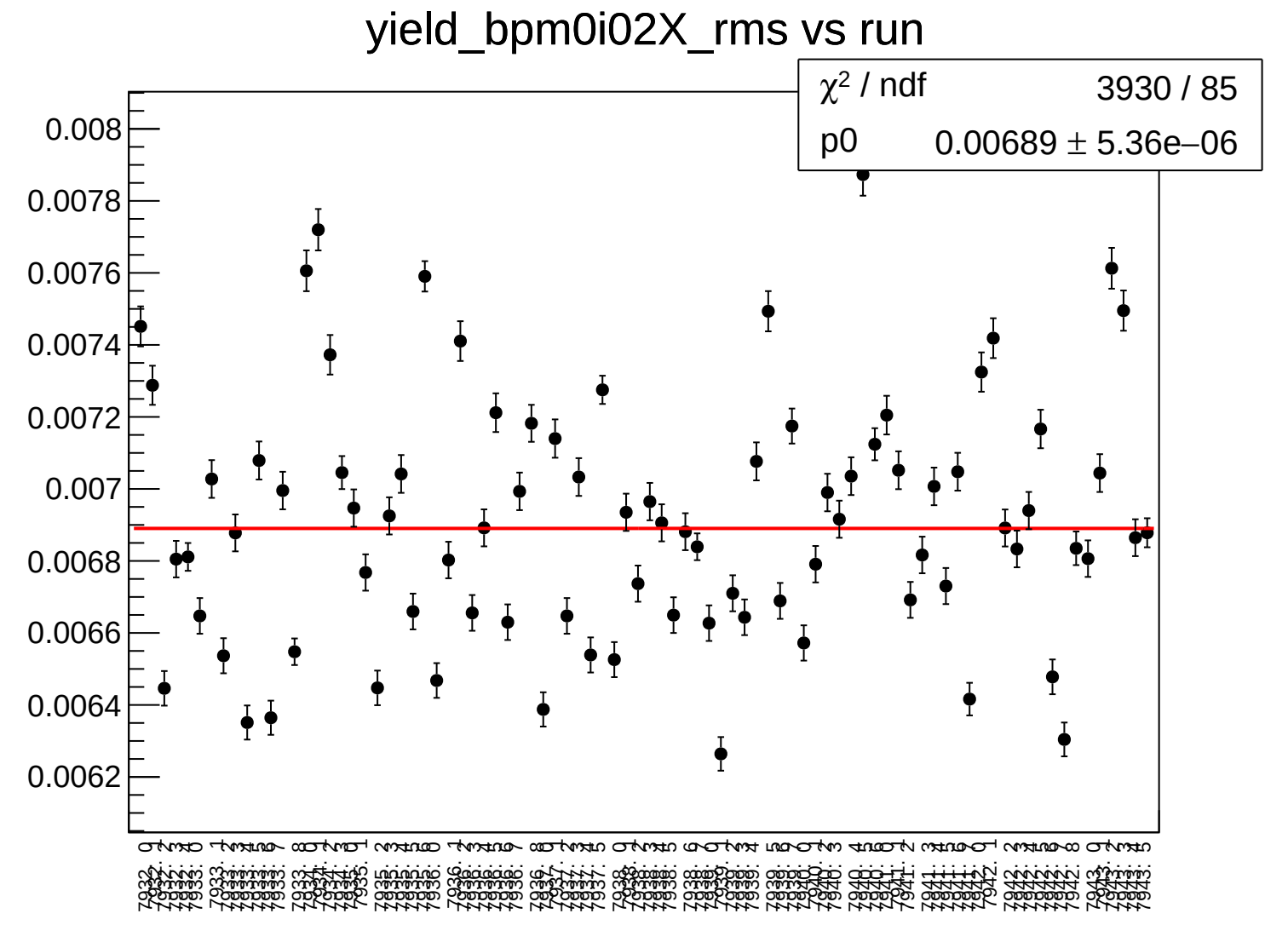

yield_bpm16Y_mean vs run
χ² / ndf 6.018e+05 / 85
p0 0.1117 ± 7.016e−06
0.125
0.12
0.115
0.11
0.105
0.1
0.095
pull
Entries 86
Mean −330.3
Std Dev 359.1
150
100
50
0
−50
−100
−150
−200

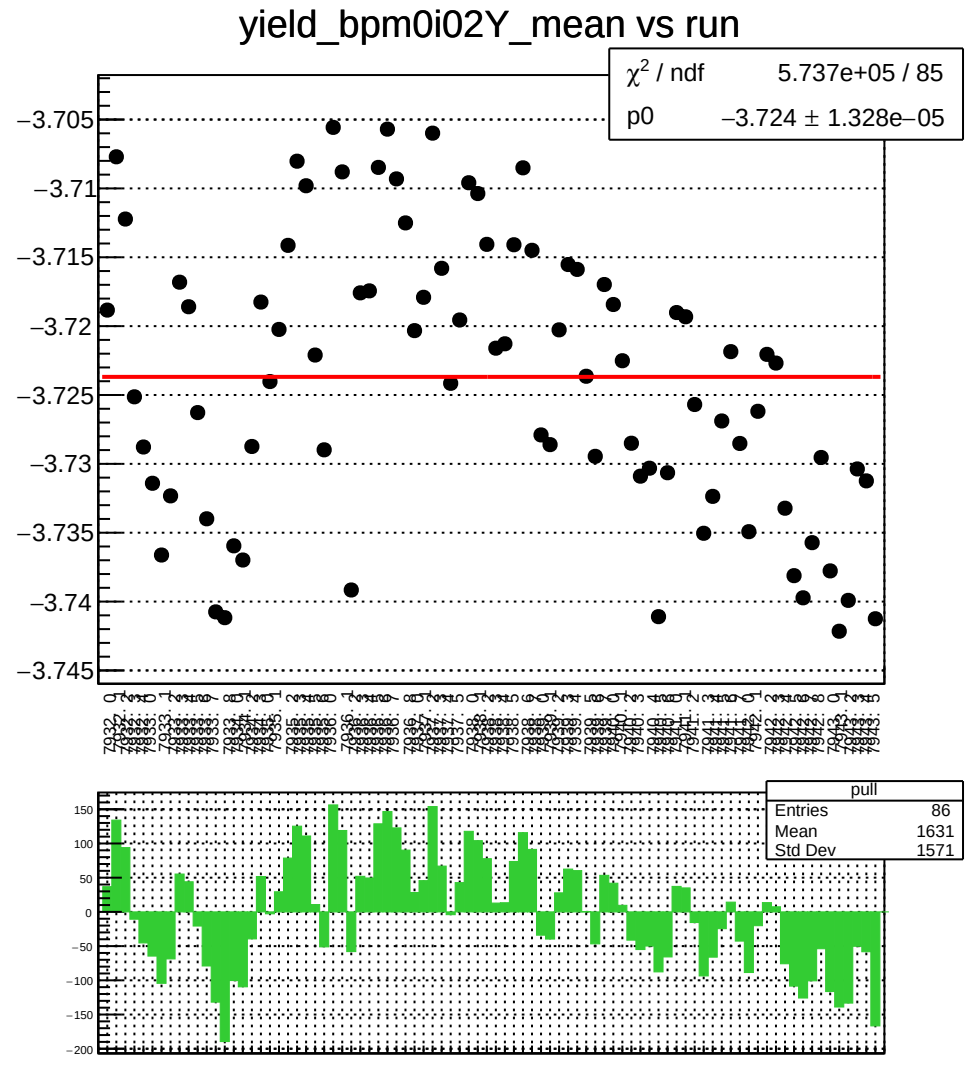

pull1D
Entries 86
Mean 0.8343
Std Dev 3.991
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

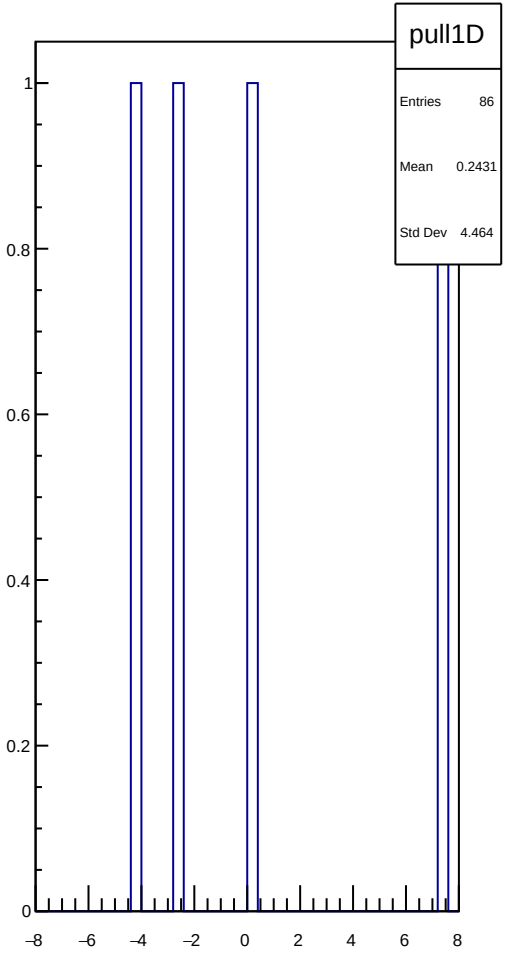

yield_bpm16Y_rms vs run
χ2 / ndf 6809 / 85
p0 0.006372 ± 4.961e−06
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006
0.0055

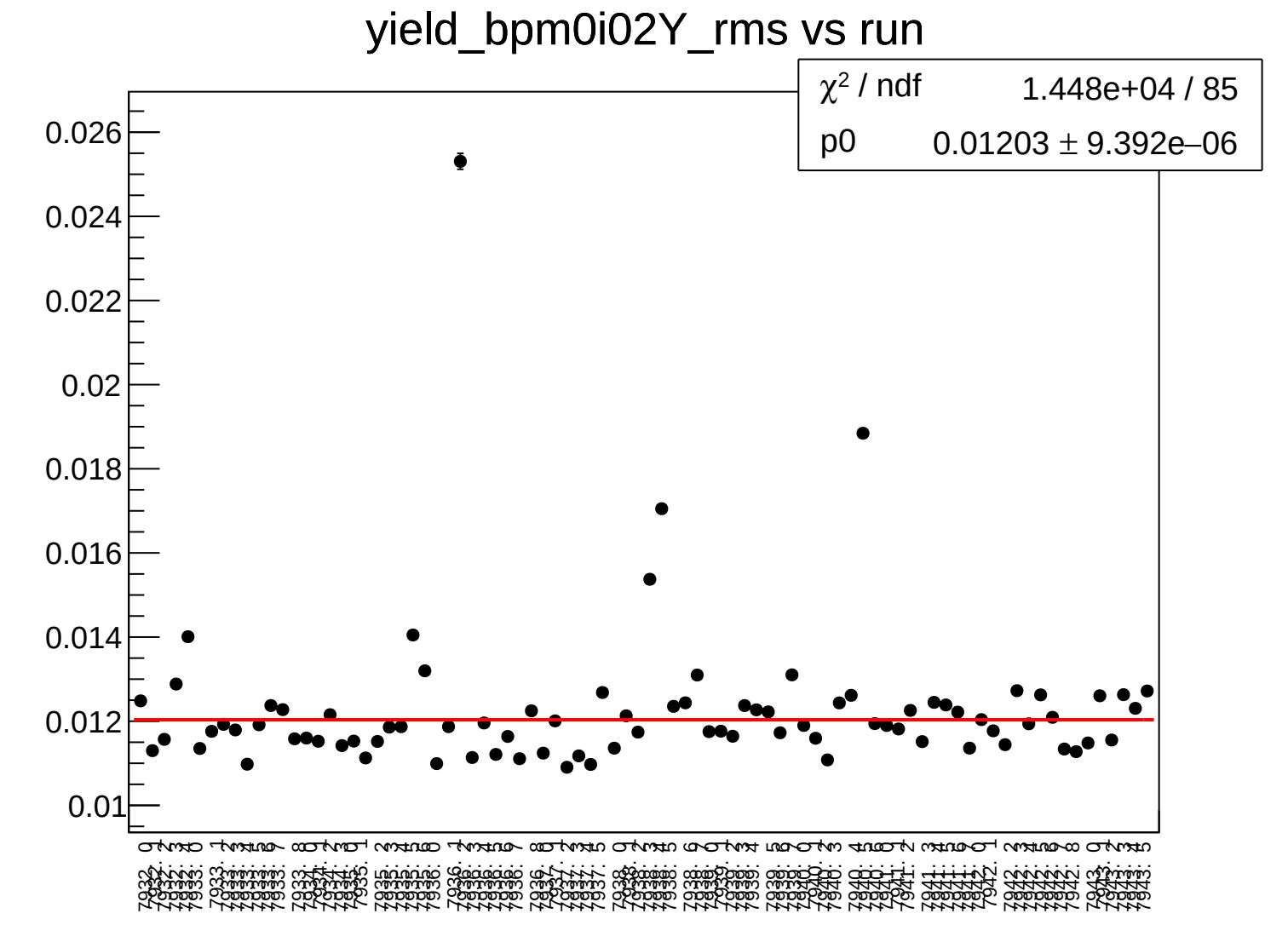

yield_bpm0i02X_mean vs run
χ² / ndf 1.002e+06 / 85
p0 0.5906 ± 7.58e−06
0.61
0.605
0.6
0.595
0.59
0.585
0.58
0.575
pull
Entries 86
Mean 4249
Std Dev 4201
200
100
0
−100
−200

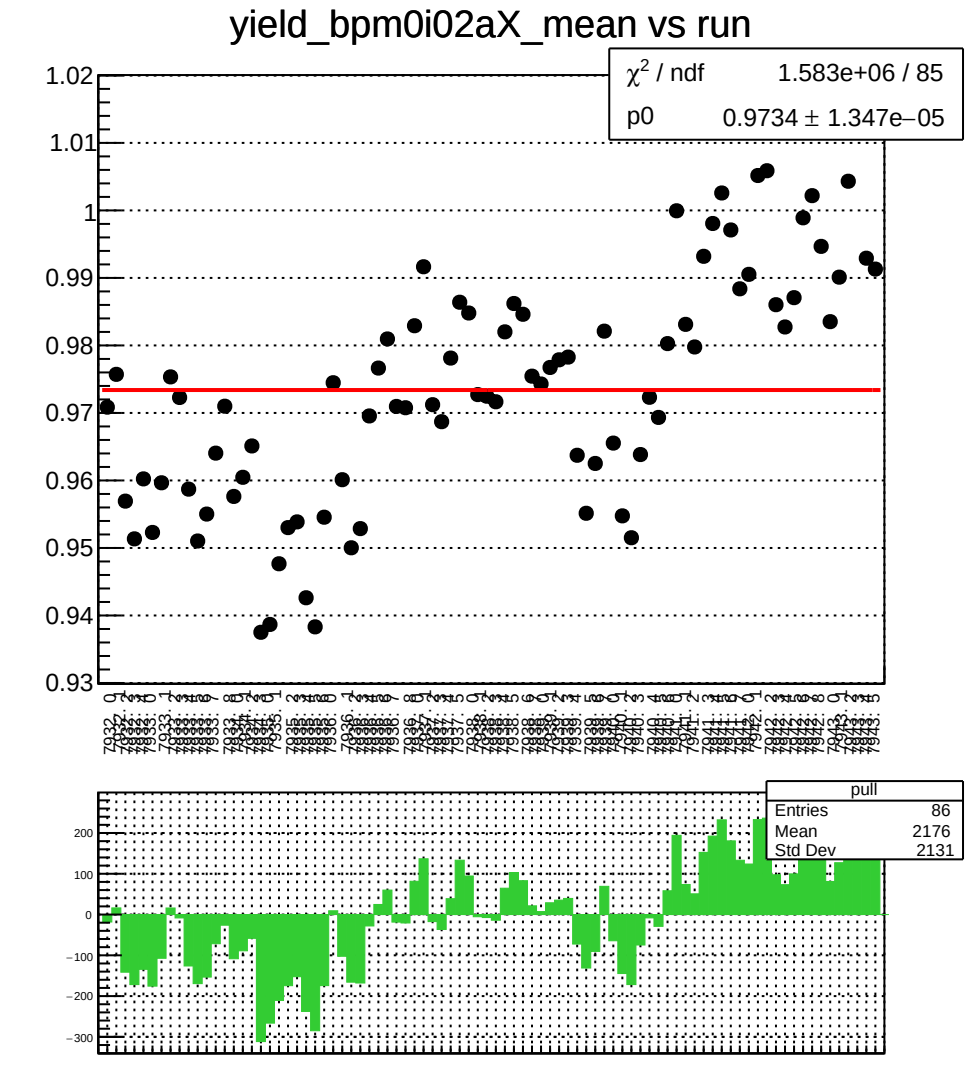

pull1D
Entries 86
Mean −0.3083
Std Dev 5.878
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

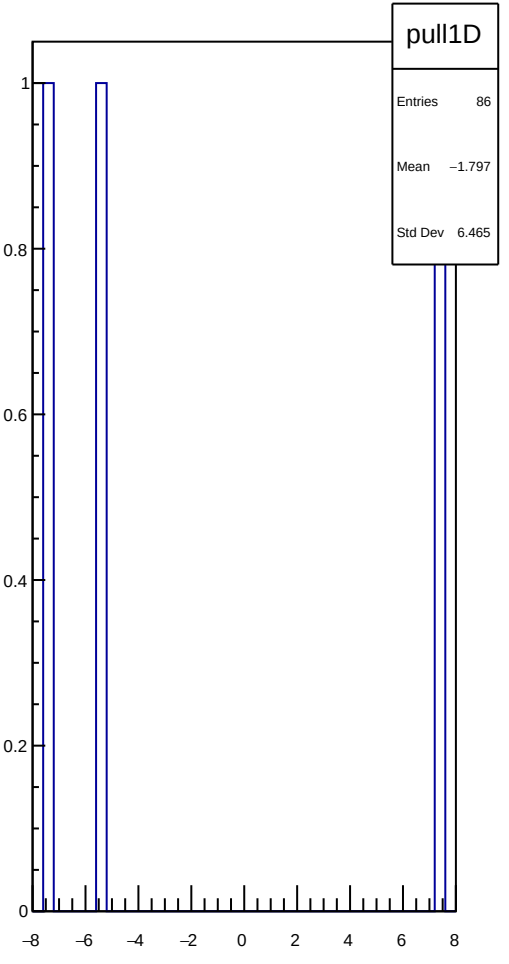

yield_bpm0i02X_rms vs run
χ² / ndf 3930 / 85
p0 0.00689 ± 5.36e−06
0.008
0.0078
0.0076
0.0074
0.0072
0.007
0.0068
0.0066
0.0064
0.0062

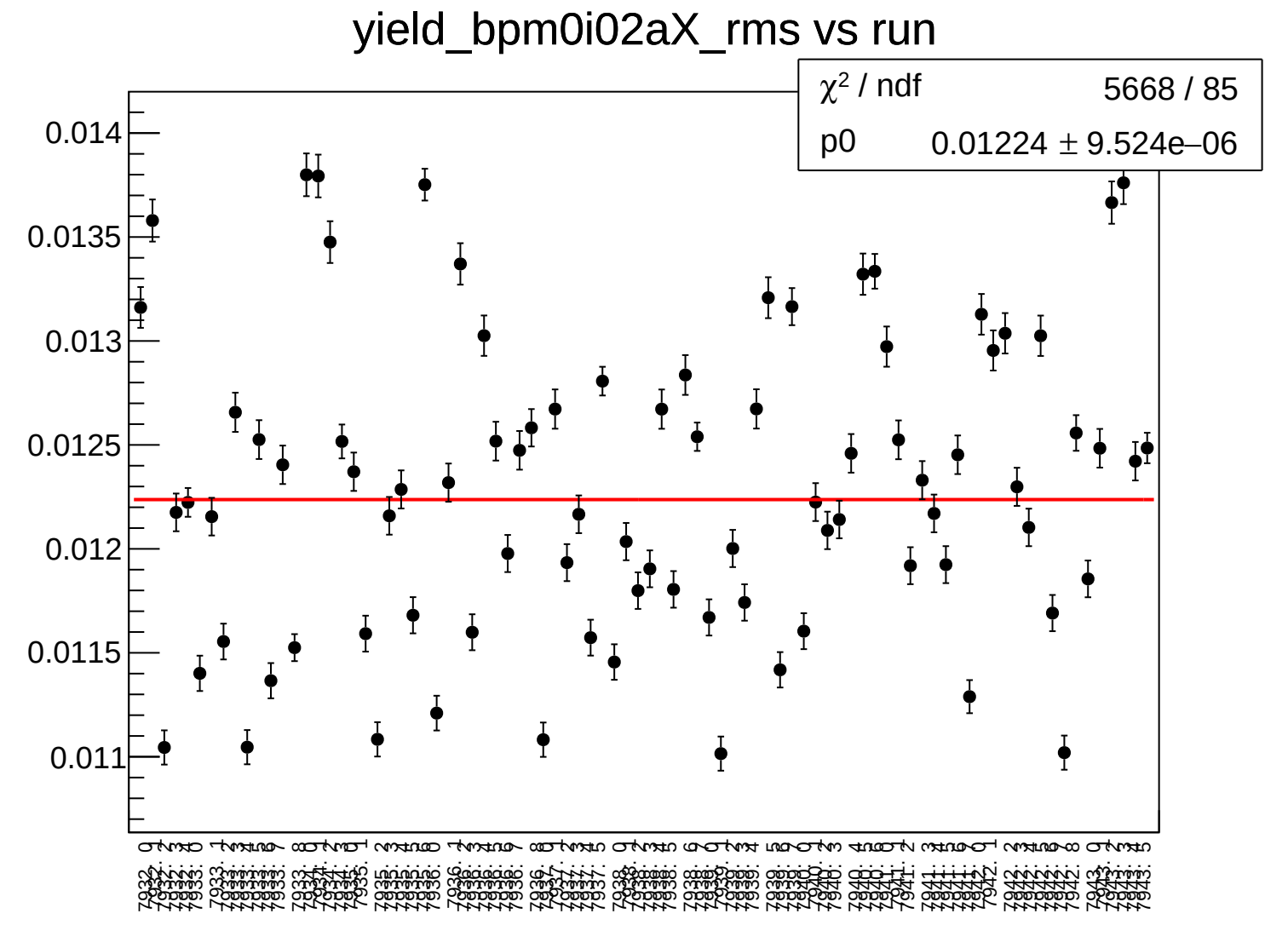

yield_bpm0i02Y_mean vs run
χ² / ndf 5.737e+05 / 85
p0 −3.724 ± 1.328e−05
−3.705
−3.71
−3.715
−3.72
−3.725
−3.73
−3.735
−3.74
−3.745
pull
Entries 86
Mean 1631
Std Dev 1571
150
100
50
0
−50
−100
−150
−200

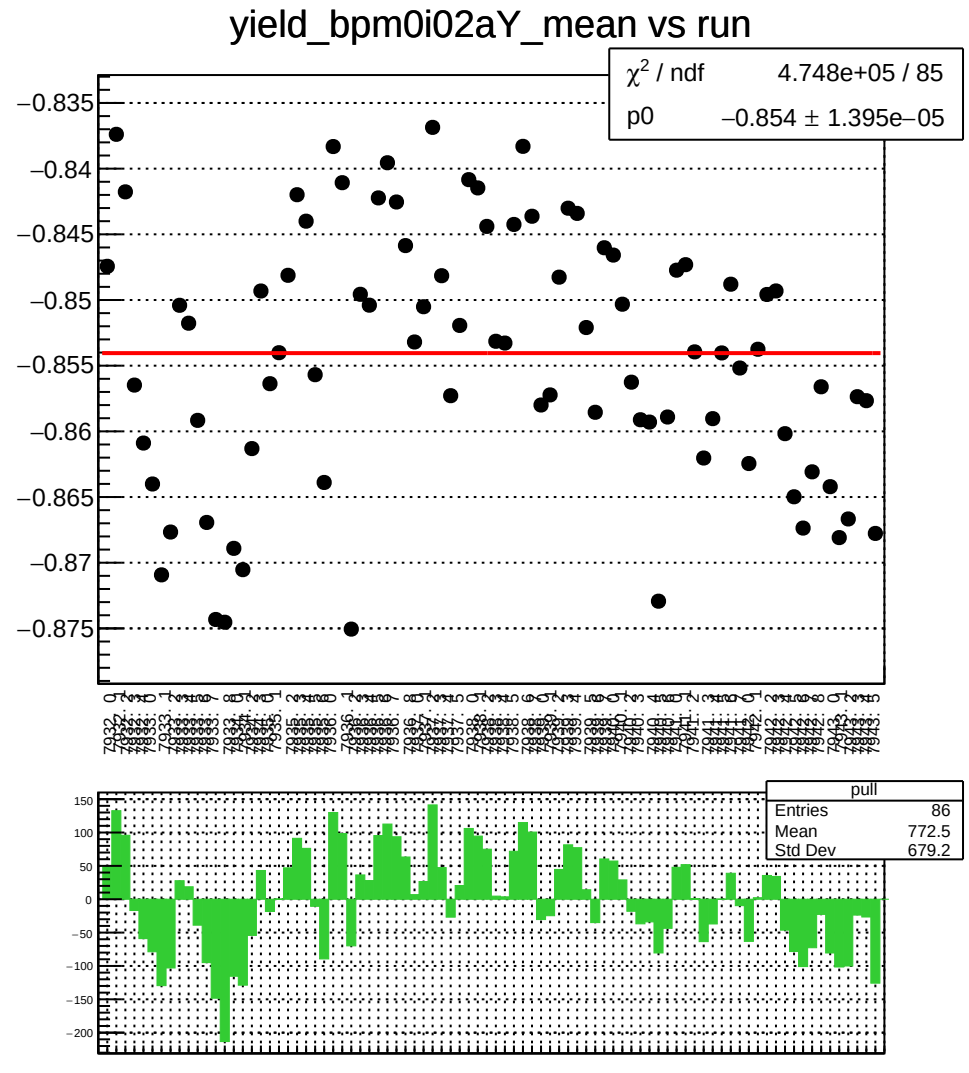

pull1D
Entries 86
Mean 0.2431
Std Dev 4.464
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

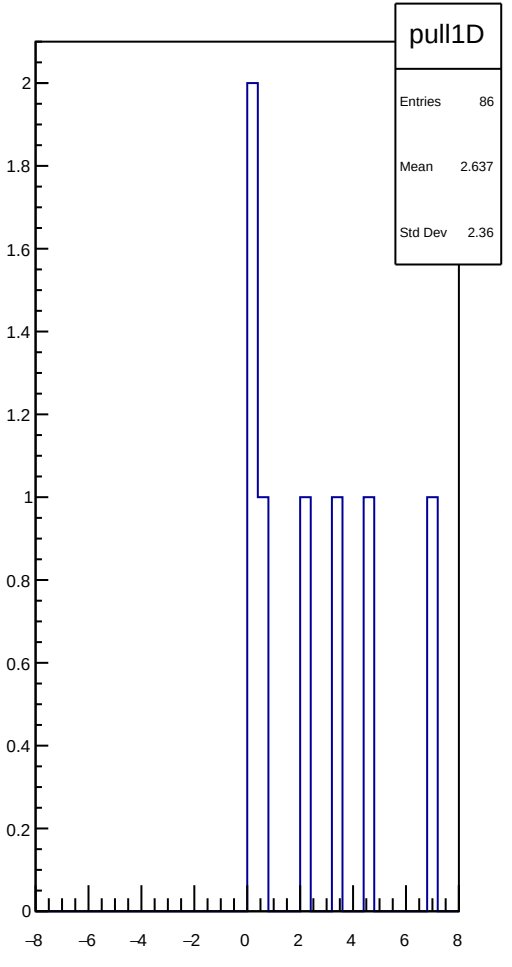

yield_bpm0i02Y_rms vs run
χ² / ndf 1.448e+04 / 85
p0 0.01203 ± 9.392e–06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

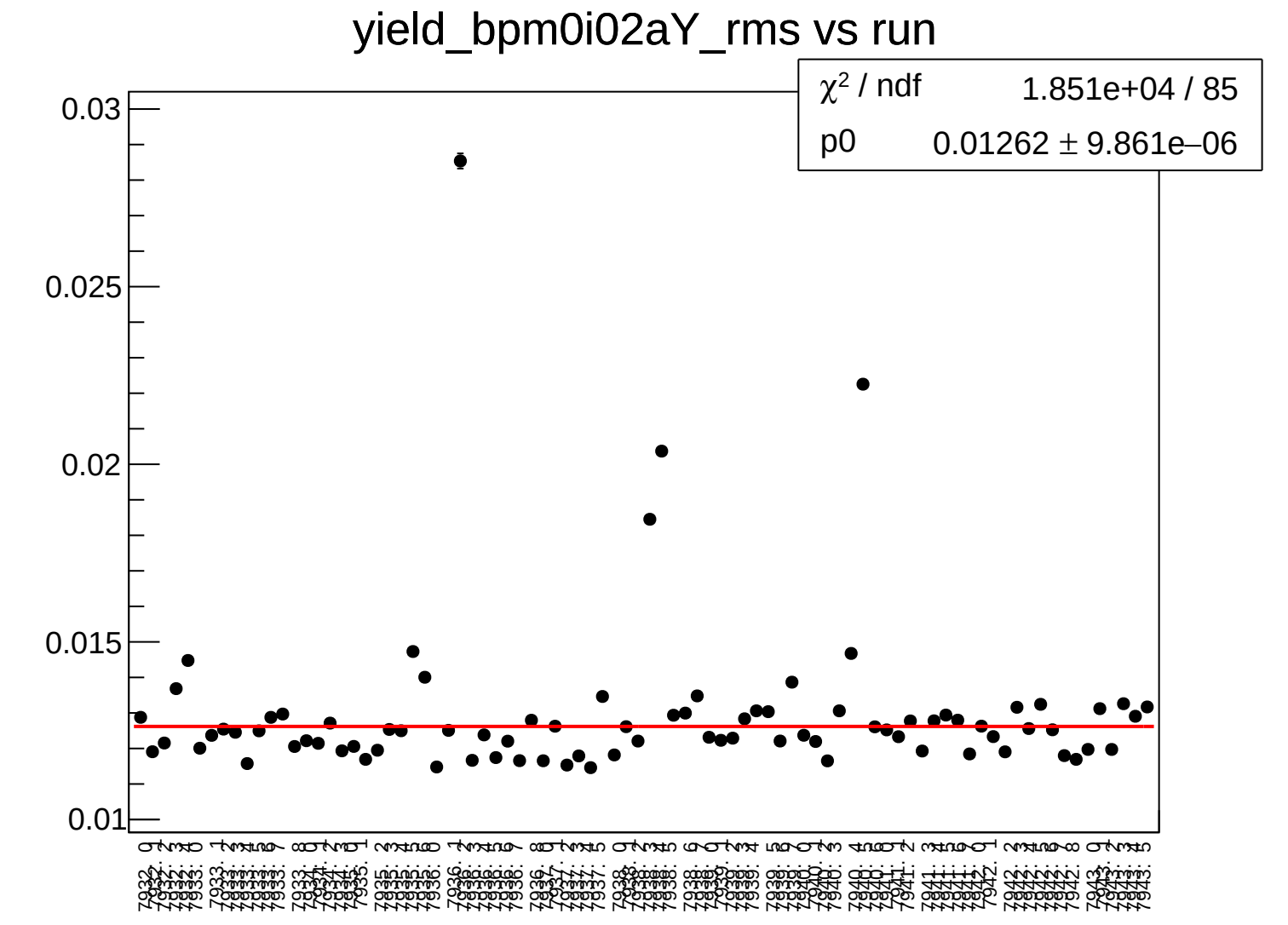

yield_bpm0i02aX_mean vs run
χ² / ndf 1.583e+06 / 85
p0 0.9734 ± 1.347e−05
1.02
1.01
1
0.99
0.98
0.97
0.96
0.95
0.94
0.93
pull
Entries 86
Mean 2176
Std Dev 2131
200
100
0
−100
−200
−300

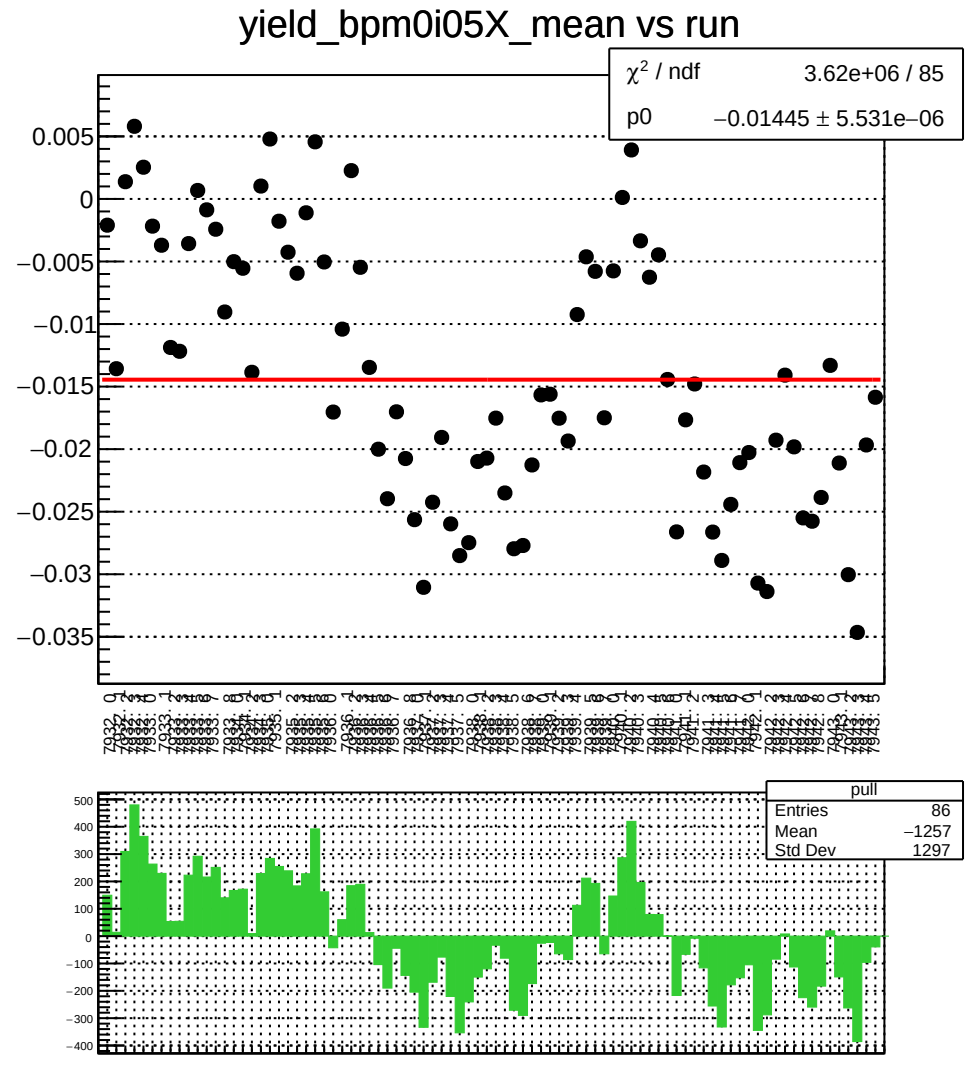

pull1D
Entries 86
Mean −1.797
Std Dev 6.465
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

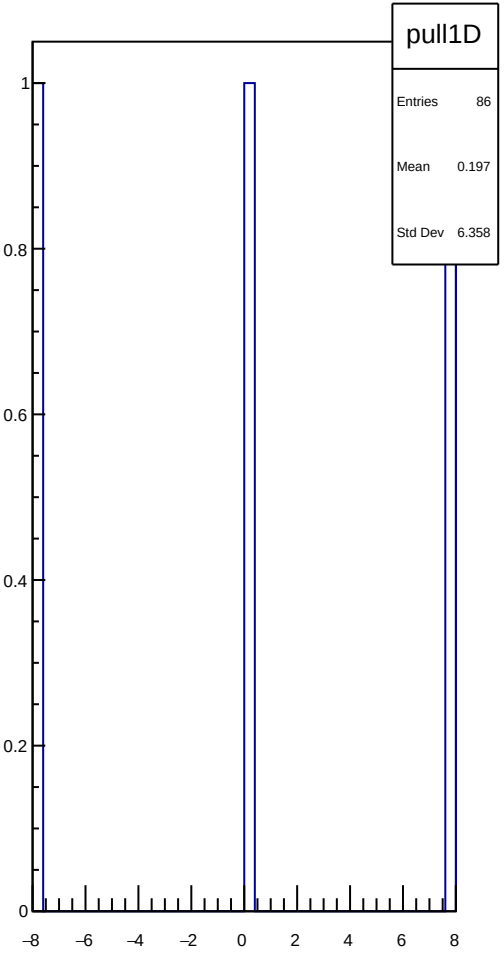

yield_bpm0i02aX_rms vs run
χ² / ndf 5668 / 85
p0 0.01224 ± 9.524e–06
0.014
0.0135
0.013
0.0125
0.012
0.0115
0.011

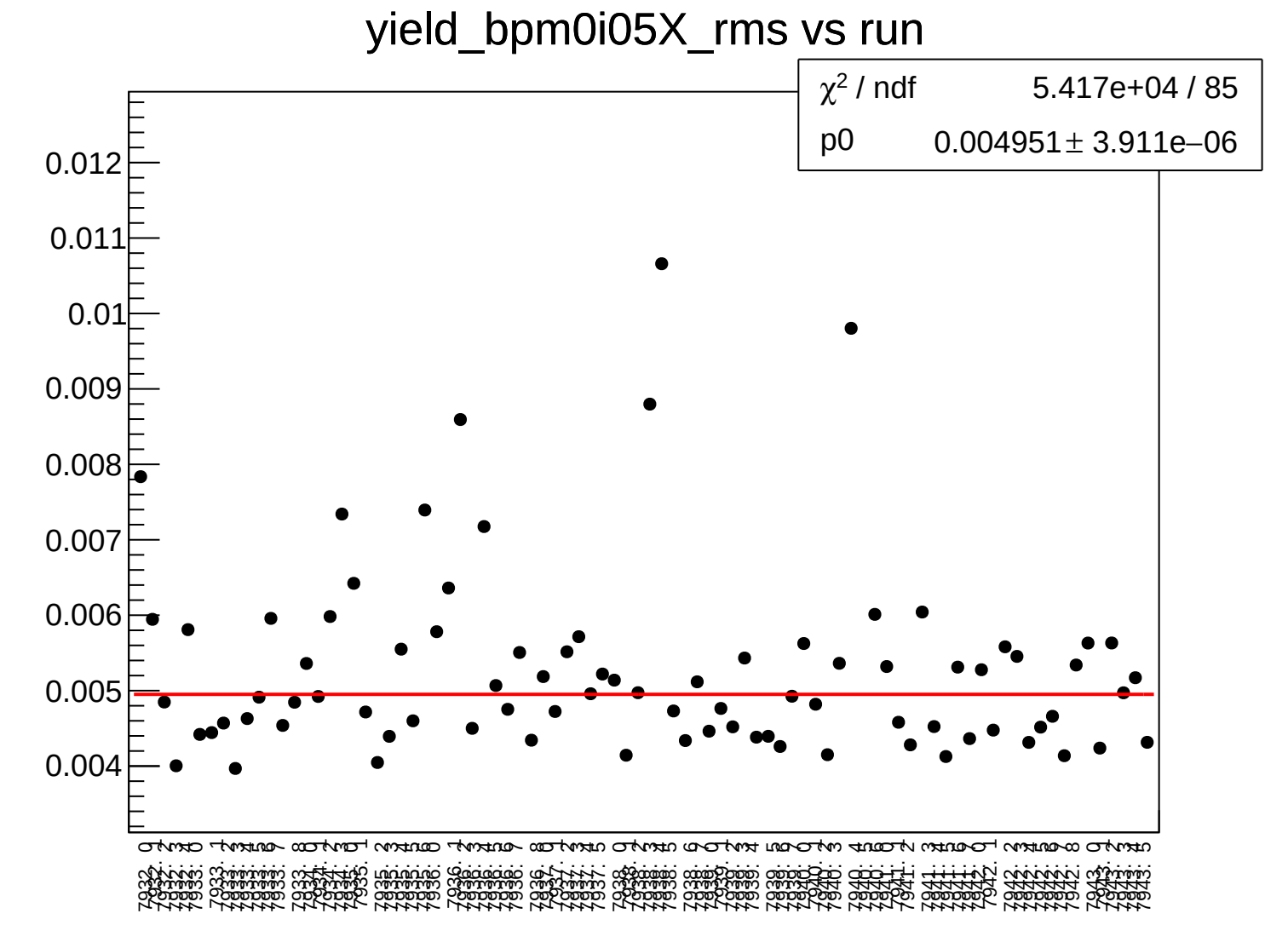

yield_bpm0i02aY_mean vs run
χ² / ndf 4.748e+05 / 85
p0 −0.854 ± 1.395e−05
−0.835
−0.84
−0.845
−0.85
−0.855
−0.86
−0.865
−0.87
−0.875
pull
Entries 86
Mean 772.5
Std Dev 679.2
150
100
50
0
−50
−100
−150
−200

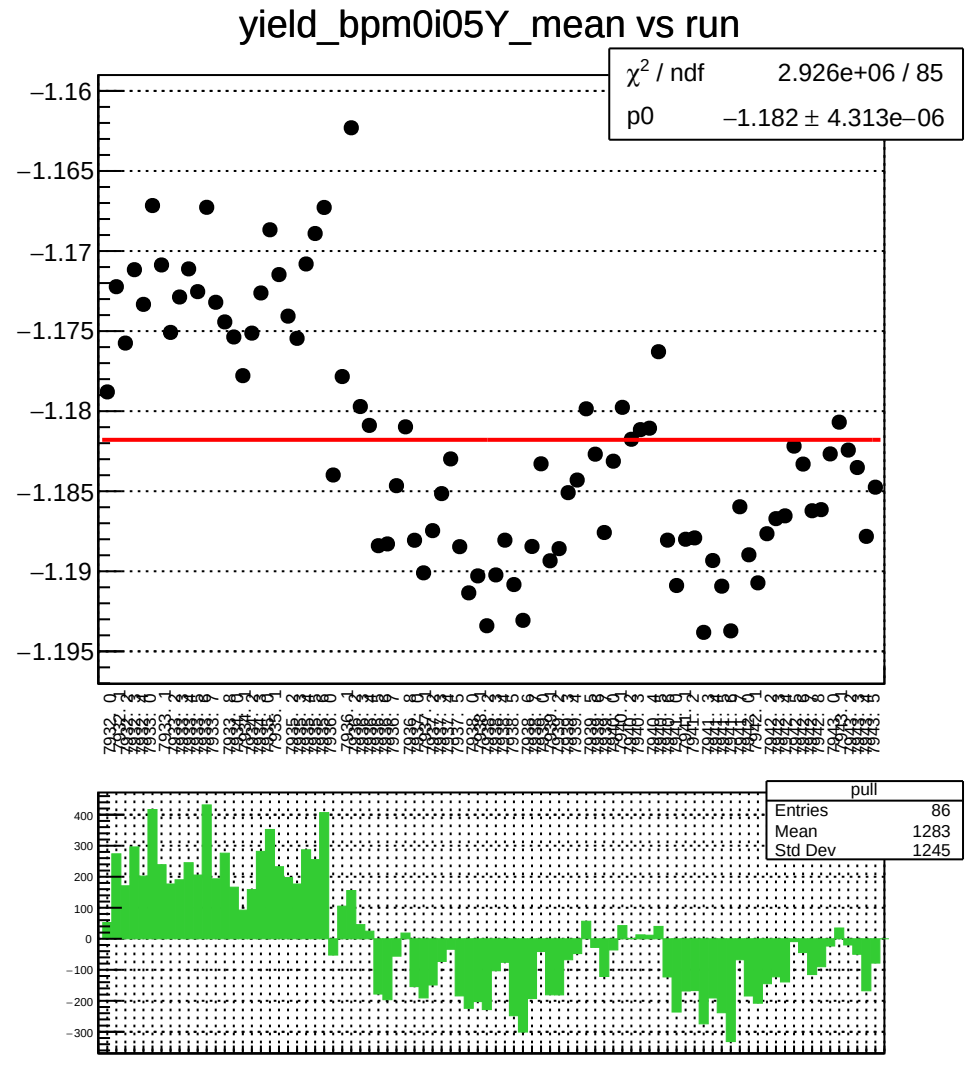

pull1D
Entries 86
Mean 2.637
Std Dev 2.36
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

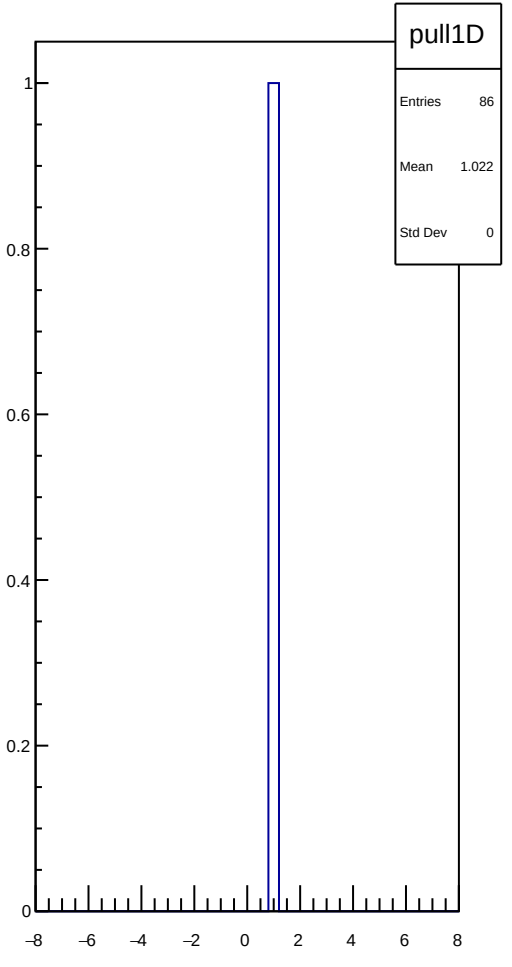

yield_bpm0i02aY_rms vs run
χ² / ndf 1.851e+04 / 85
p0 0.01262 ± 9.861e–06
0.03
0.025
0.02
0.015
0.01

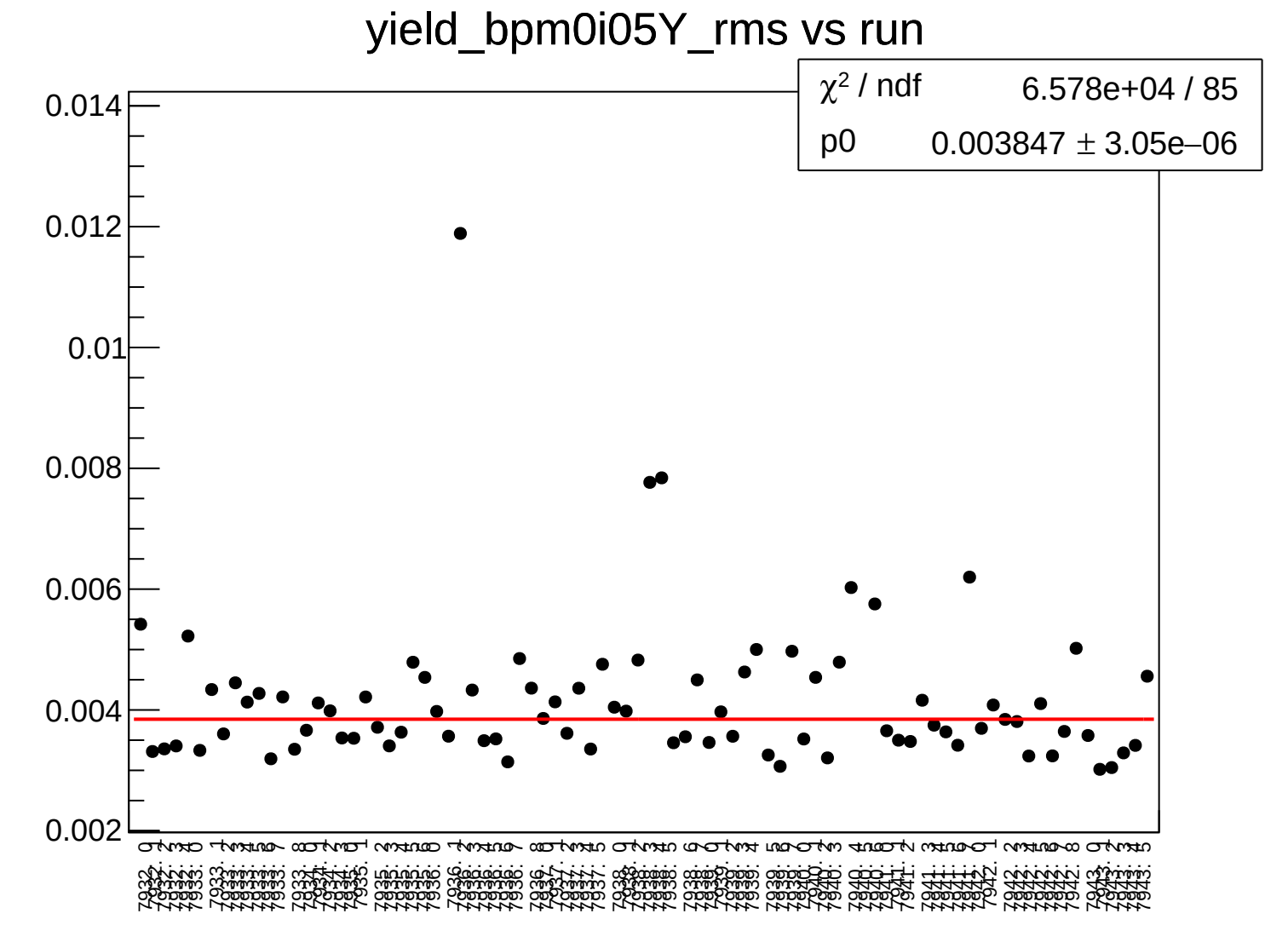

yield_bpm0i05X_mean vs run
χ² / ndf 3.62e+06 / 85
p0 −0.01445 ± 5.531e−06
pull
Entries 86
Mean −1257
Std Dev 1297

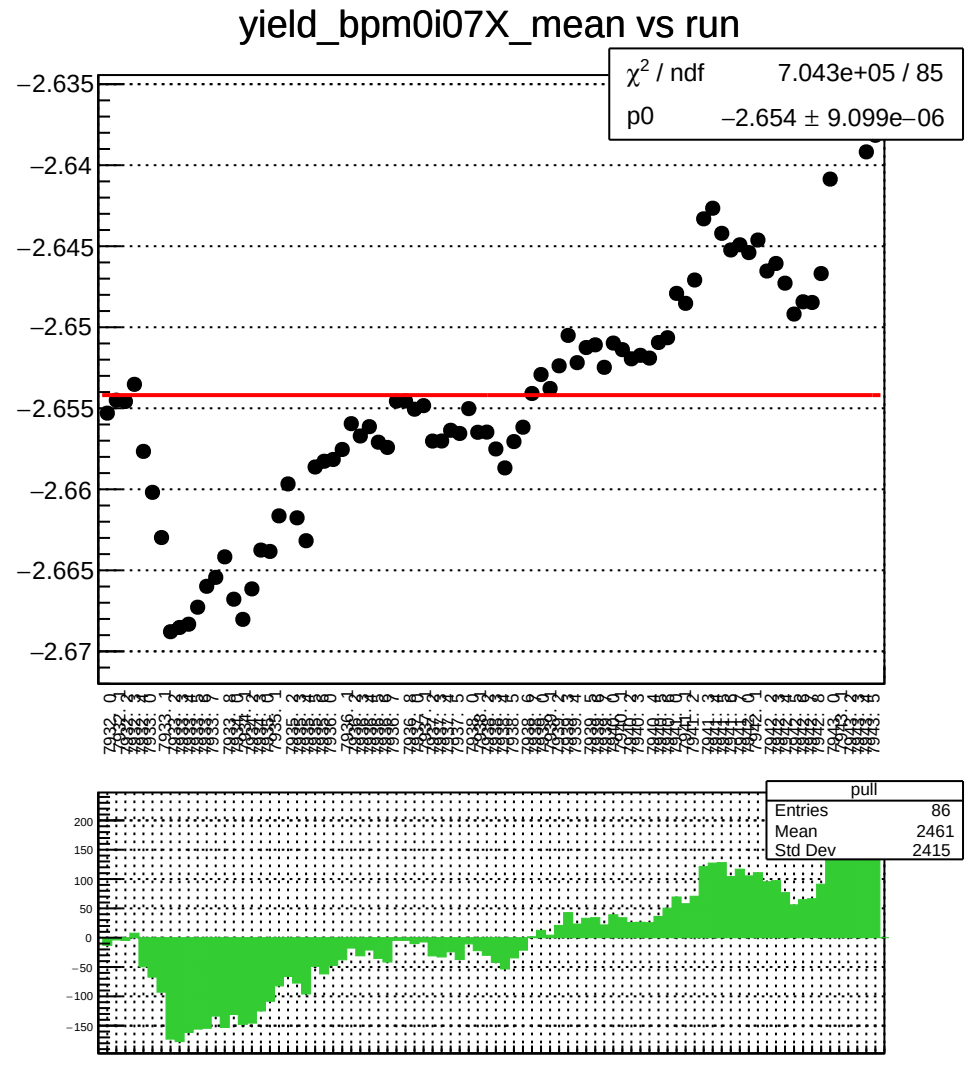

pull1D
Entries 86
Mean 0.197
Std Dev 6.358

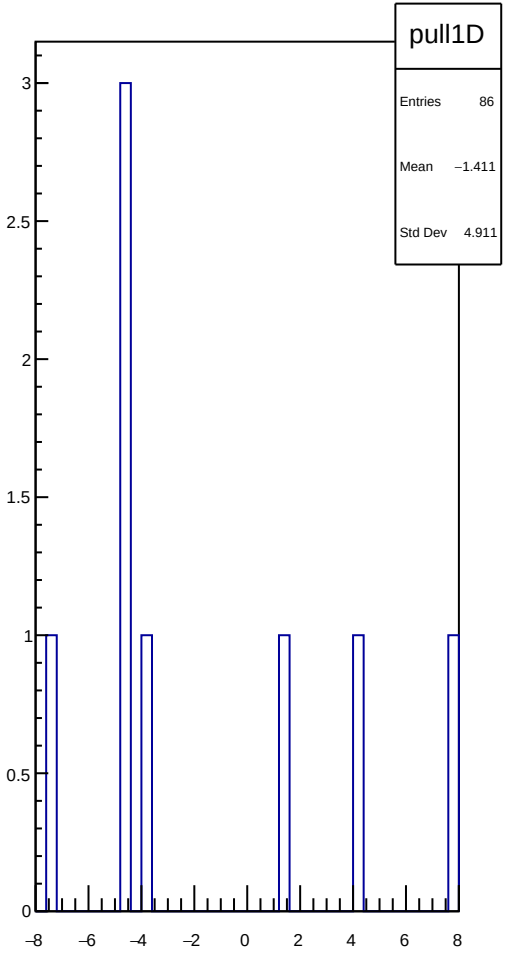

yield_bpm0i05X_rms vs run
χ^2 / ndf 5.417e+04 / 85
p0 0.004951 ± 3.911e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

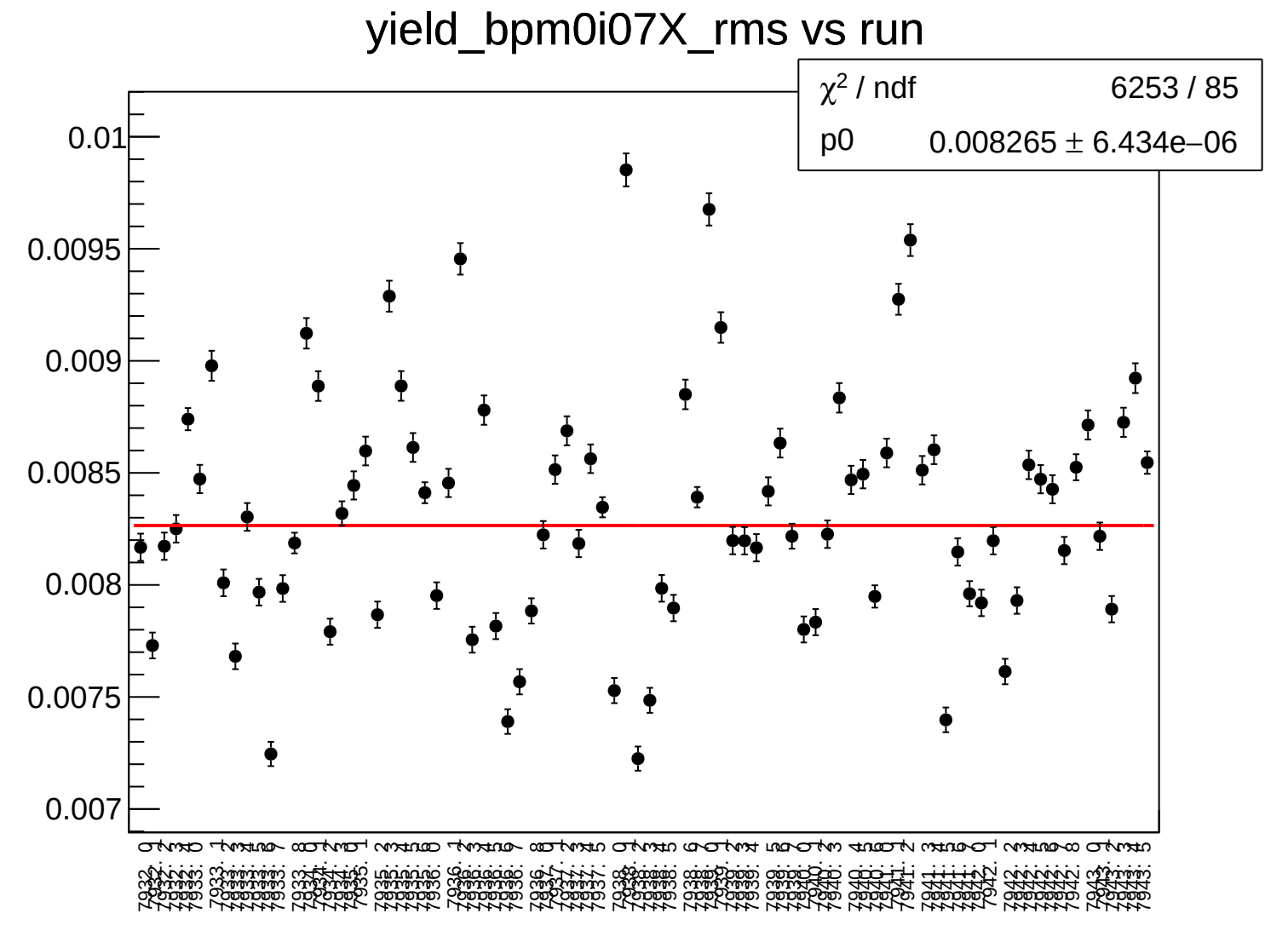

yield_bpm0i05Y_mean vs run
χ² / ndf 2.926e+06 / 85
p0 −1.182 ± 4.313e−06
−1.16
−1.165
−1.17
−1.175
−1.18
−1.185
−1.19
−1.195
pull
Entries 86
Mean 1283
Std Dev 1245
400
300
200
100
0
−100
−200
−300

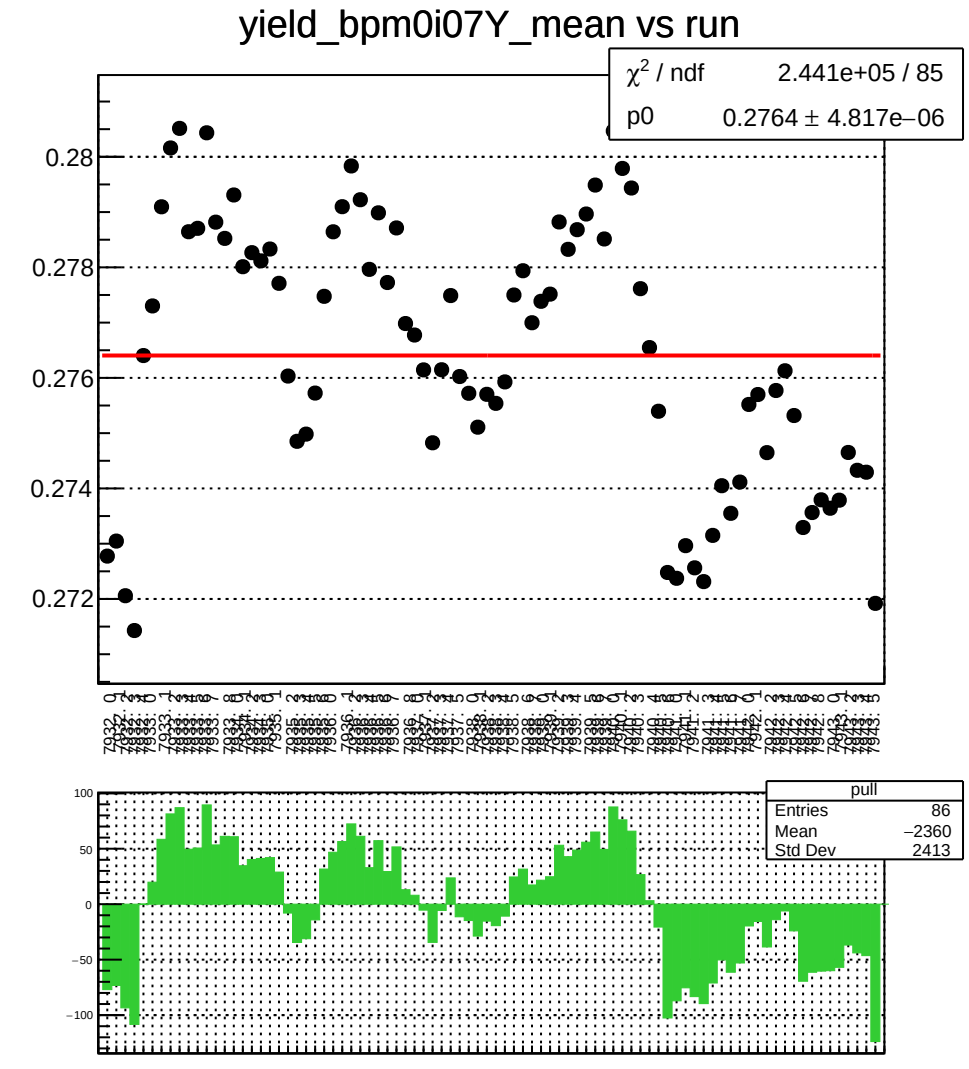

pull1D
Entries 86
Mean 1.022
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

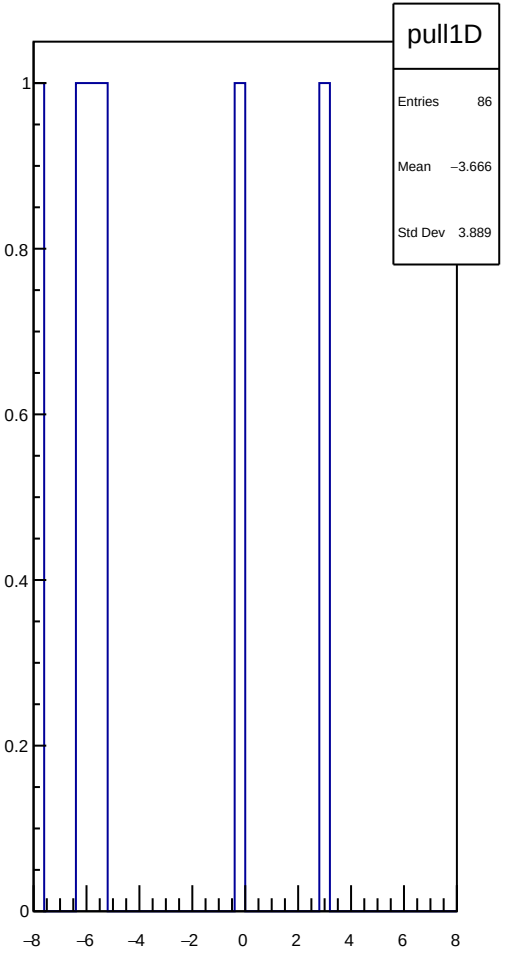

yield_bpm0i05Y_rms vs run
χ² / ndf 6.578e+04 / 85
p0 0.003847 ± 3.05e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

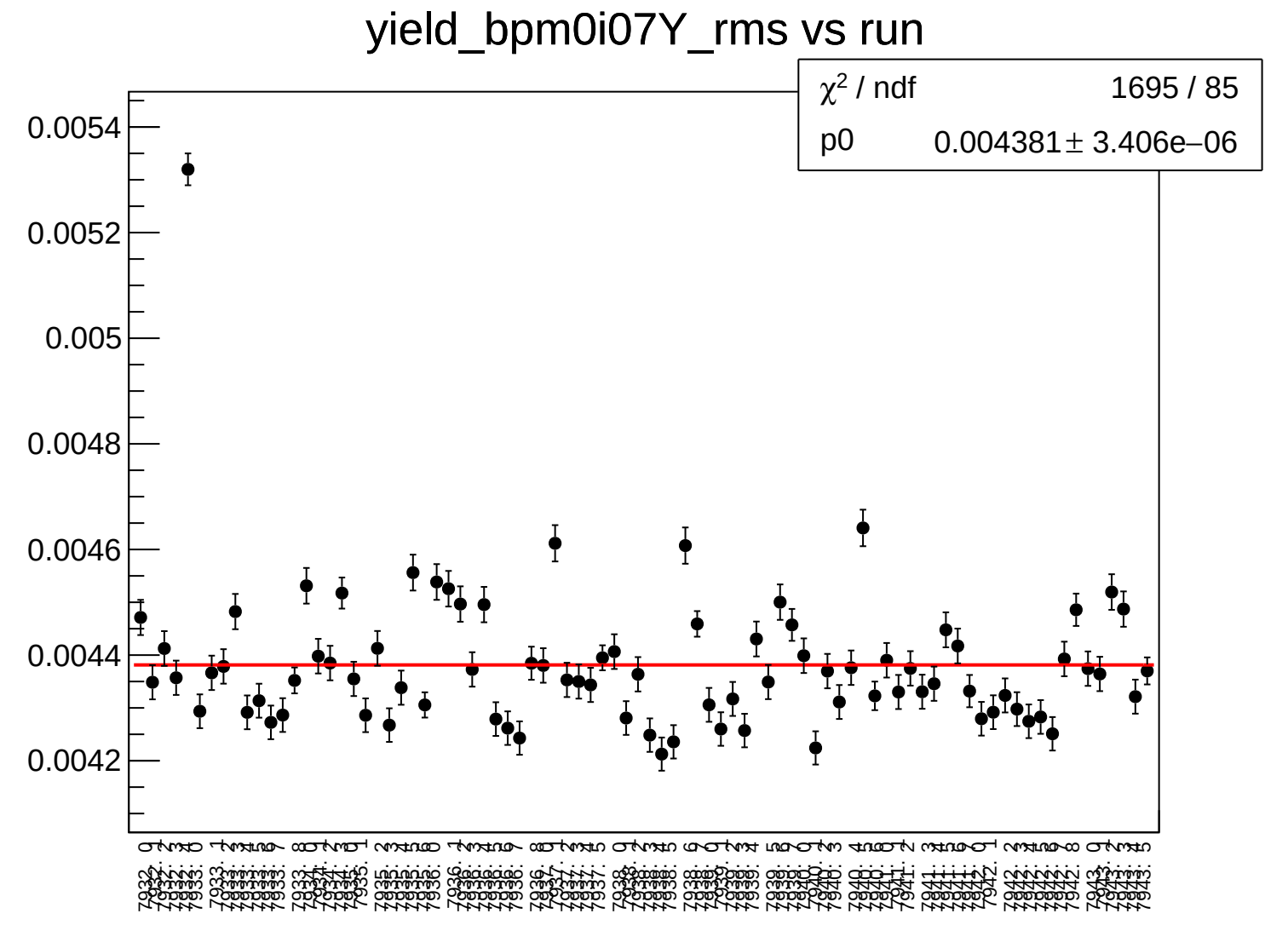

yield_bpm0i07X_mean vs run
χ² / ndf 7.043e+05 / 85
p0 −2.654 ± 9.099e−06
−2.635
−2.64
−2.645
−2.65
−2.655
−2.66
−2.665
−2.67
pull
Entries 86
Mean 2461
Std Dev 2415
200
150
100
50
0
−50
−100
−150

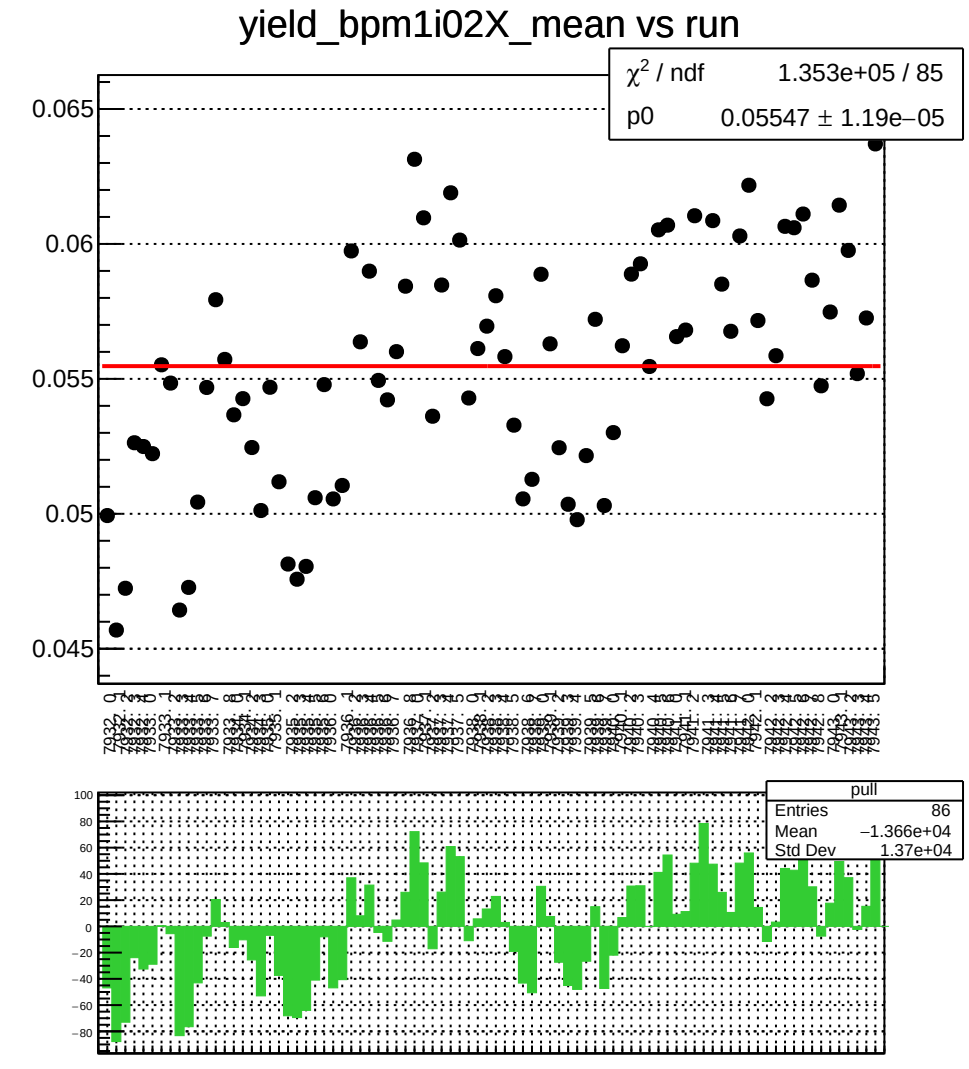

pull1D
Entries 86
Mean −1.411
Std Dev 4.911
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

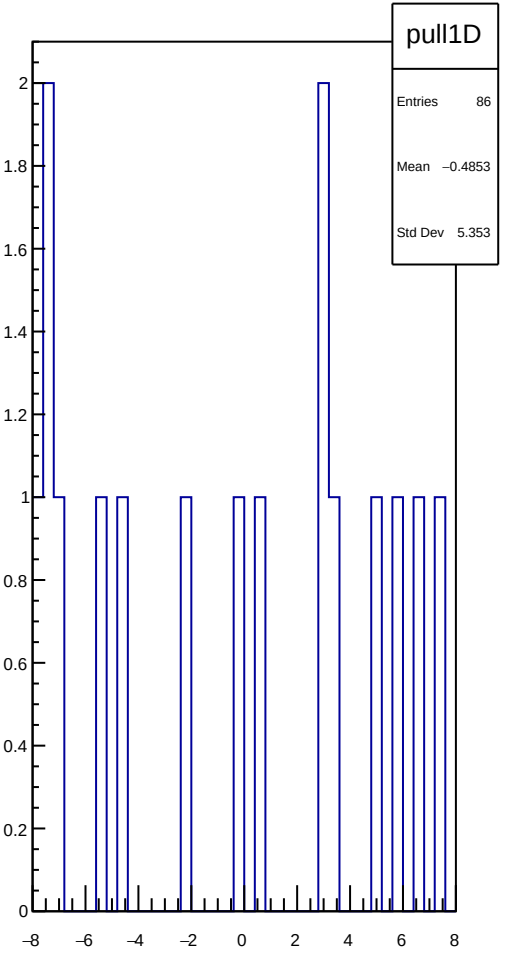

yield_bpm0i07X_rms vs run
χ² / ndf 6253 / 85
p0 0.008265 ± 6.434e−06
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007

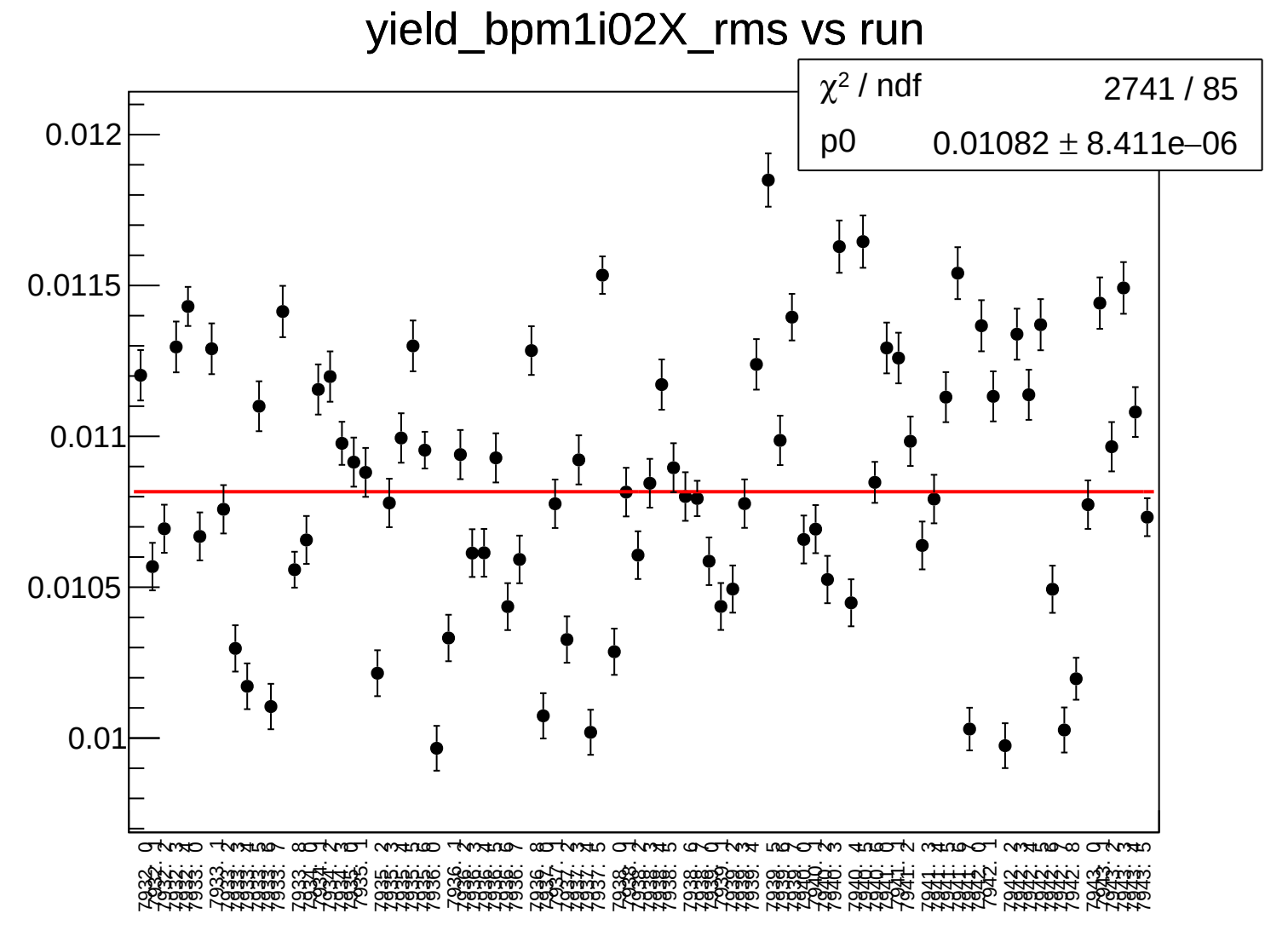

yield_bpm0i07Y_mean vs run
χ² / ndf 2.441e+05 / 85
p0 0.2764 ± 4.817e−06
0.28
0.278
0.276
0.274
0.272
pull
Entries 86
Mean −2360
Std Dev 2413
100
50
0
−50
−100

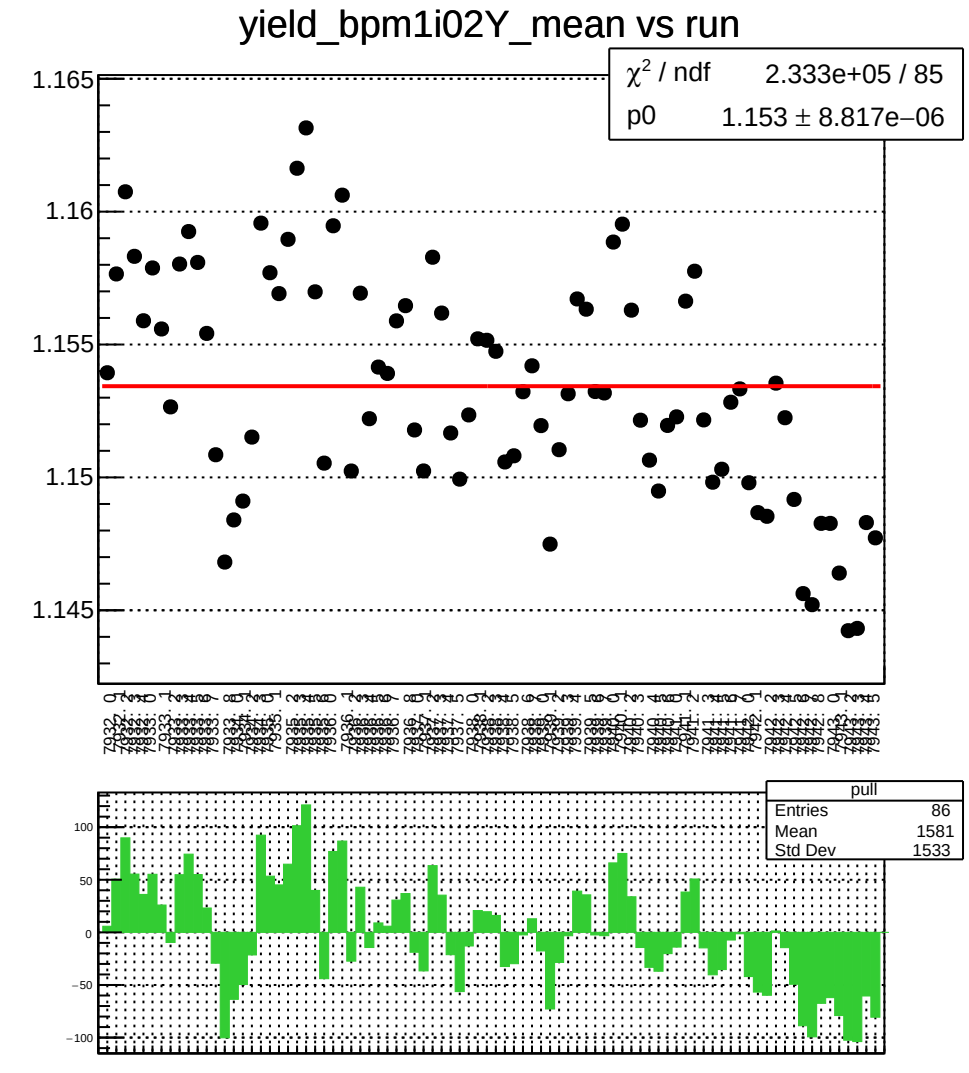

pull1D
Entries 86
Mean −3.666
Std Dev 3.889
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

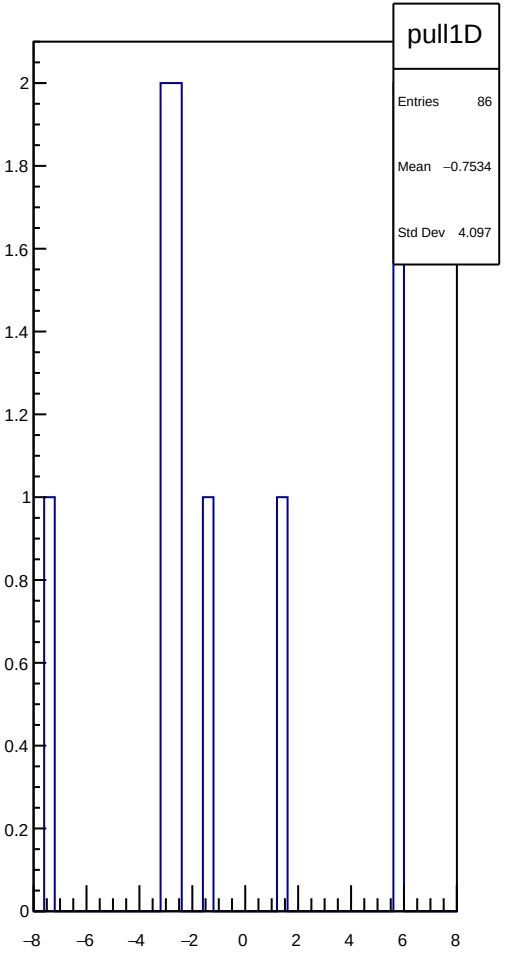

yield_bpm0i07Y_rms vs run
χ² / ndf 1695 / 85
p0 0.004381 ± 3.406e−06
0.0054
0.0052
0.005
0.0048
0.0046
0.0044
0.0042

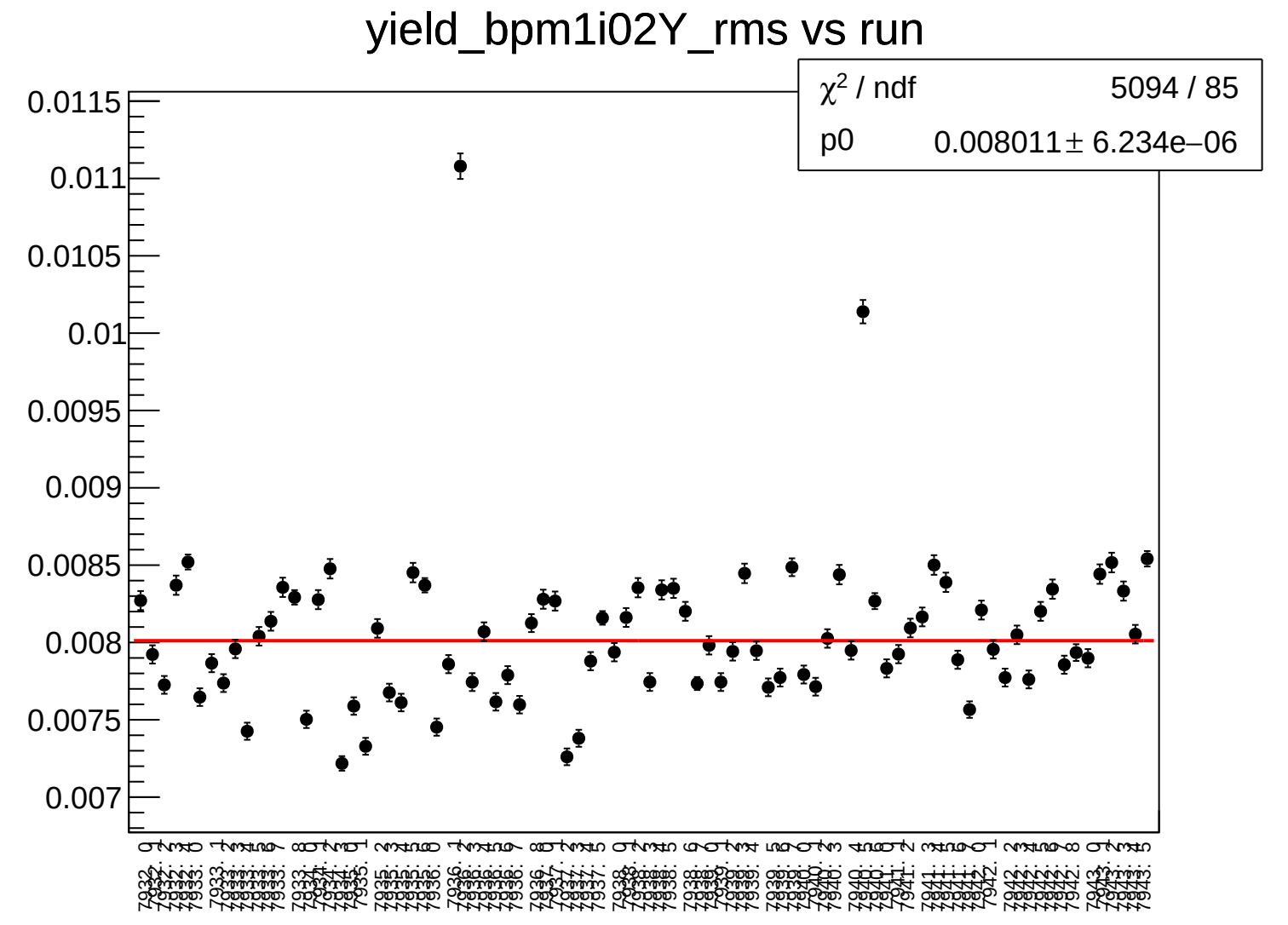

yield_bpm1i02X_mean vs run
χ² / ndf 1.353e+05 / 85
p0 0.05547 ± 1.19e−05
0.065
0.06
0.055
0.05
0.045
pull
Entries 86
Mean −1.366e+04
Std Dev 1.37e+04
100
80
60
40
20
0
−20
−40
−60
−80

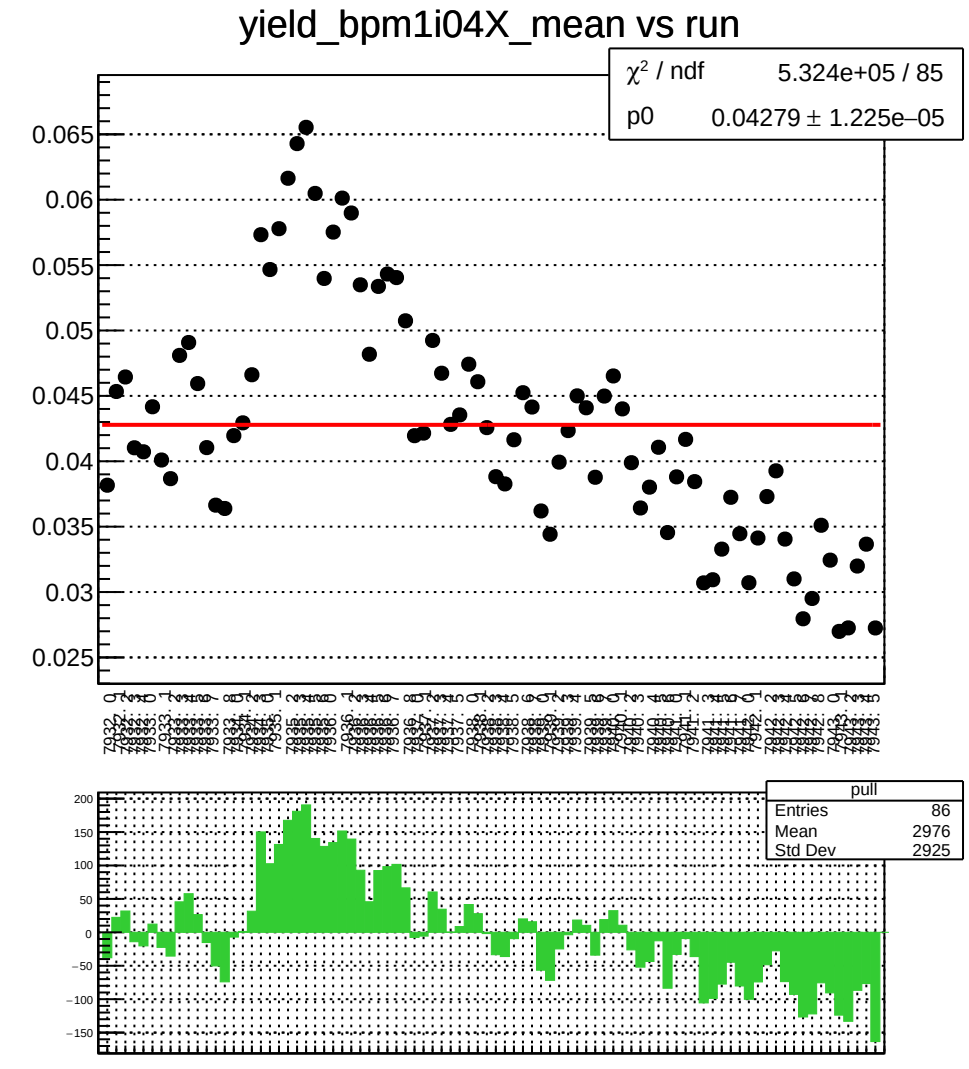

pull1D
Entries 86
Mean −0.4853
Std Dev 5.353
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

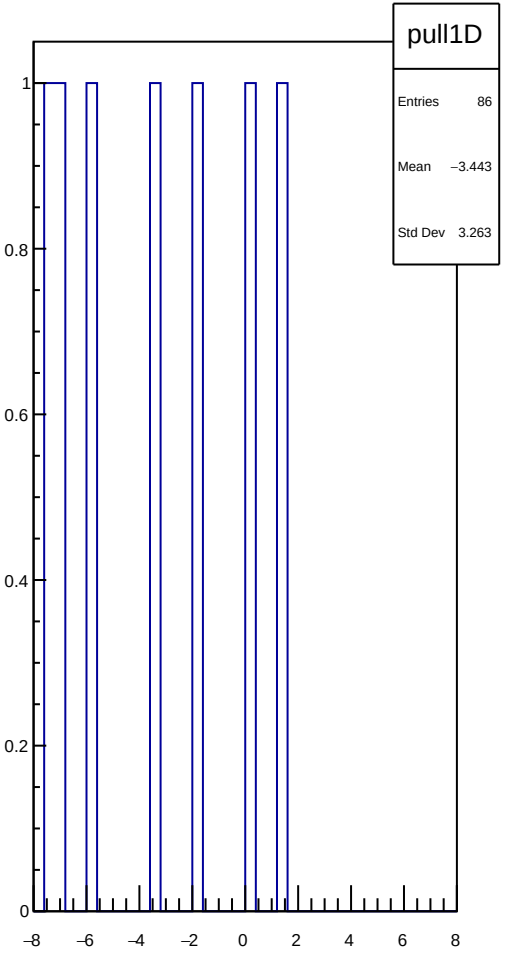

yield_bpm1i02X_rms vs run
χ² / ndf 2741 / 85
p0 0.01082 ± 8.411e–06
0.012
0.0115
0.011
0.0105
0.01

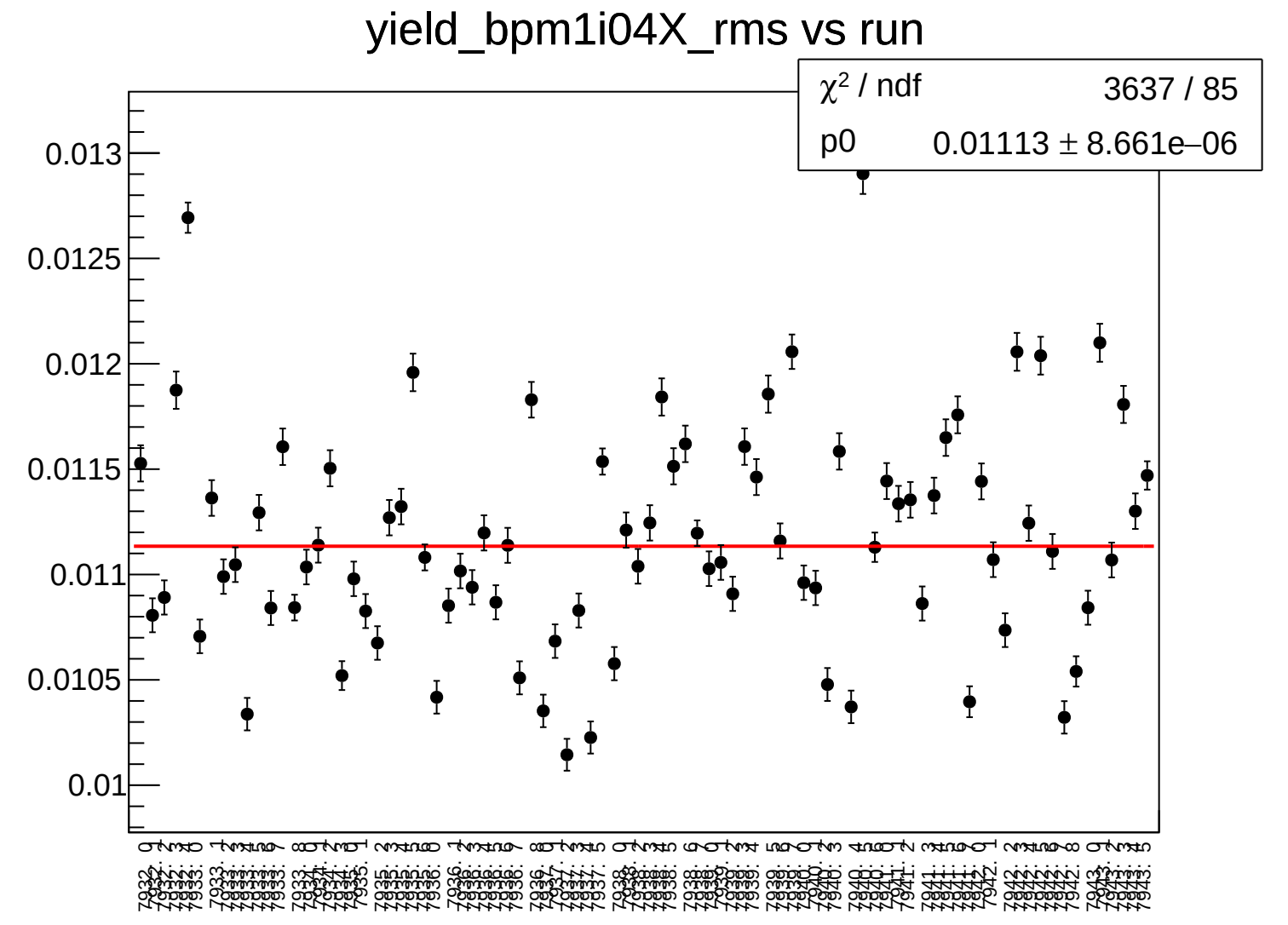

yield_bpm1i02Y_mean vs run
χ² / ndf 2.333e+05 / 85
p0 1.153 ± 8.817e−06
1.165
1.16
1.155
1.15
1.145
pull
Entries 86
Mean 1581
Std Dev 1533
100
50
0
−50
−100

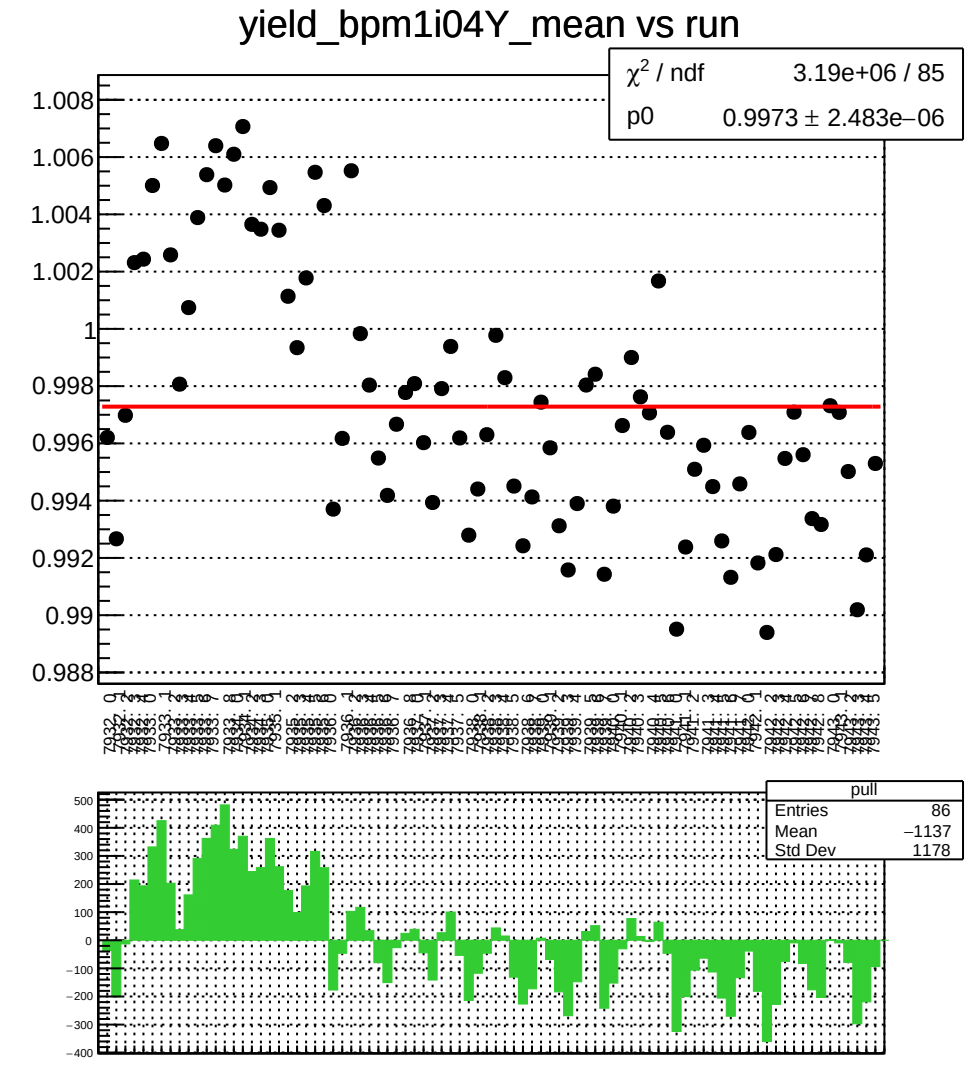

pull1D
Entries 86
Mean −0.7534
Std Dev 4.097
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

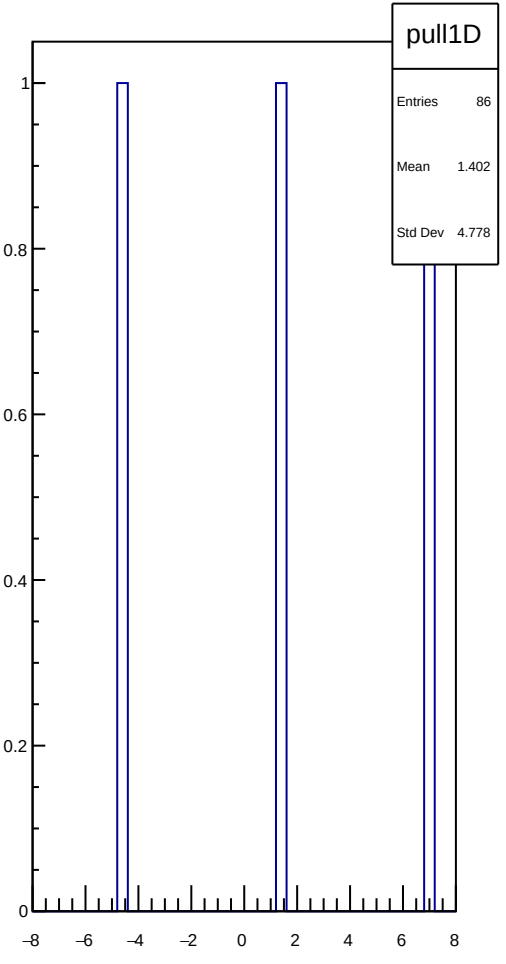

yield_bpm1i02Y_rms vs run
χ² / ndf 5094 / 85
p0 0.008011 ± 6.234e−06
0.0115
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007

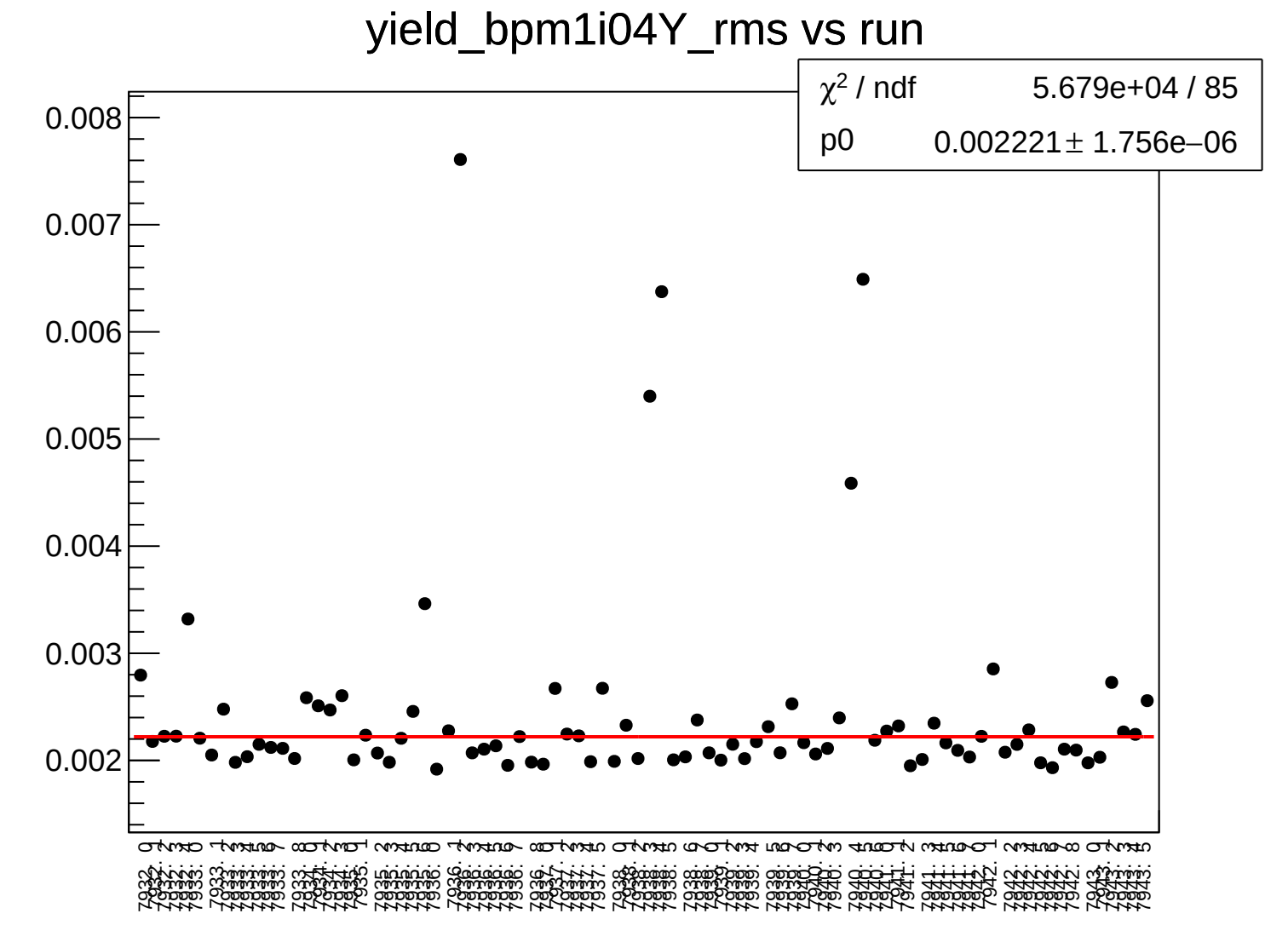

yield_bpm1i04X_mean vs run
χ² / ndf 5.324e+05 / 85
p0 0.04279 ± 1.225e−05
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
pull
Entries 86
Mean 2976
Std Dev 2925
200
150
100
50
0
−50
−100
−150

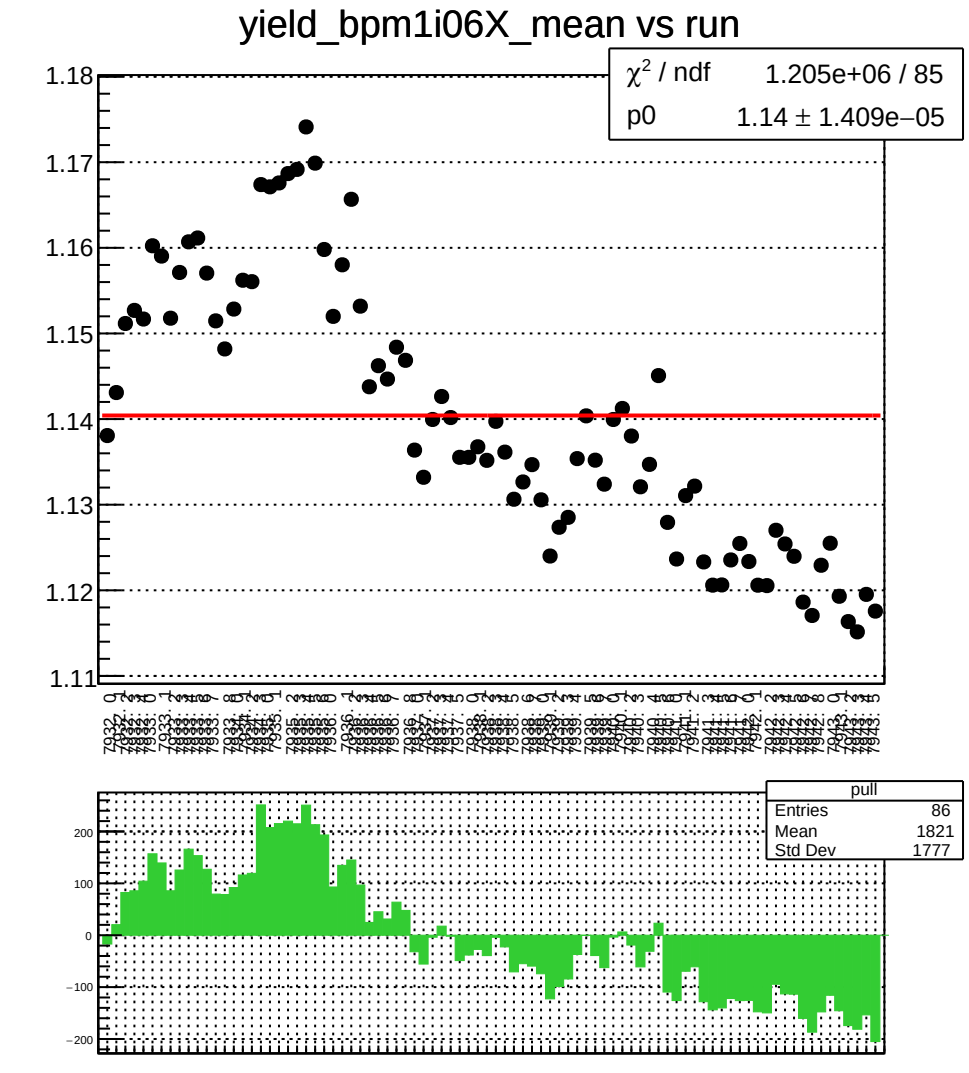

pull1D
Entries 86
Mean −3.443
Std Dev 3.263
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

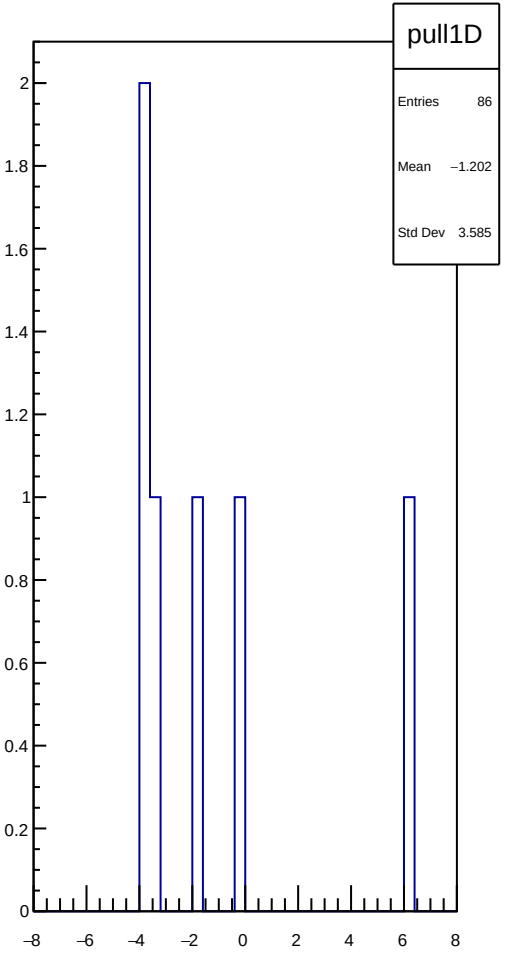

yield_bpm1i04X_rms vs run
χ² / ndf 3637 / 85
p0 0.01113 ± 8.661e–06
0.013
0.0125
0.012
0.0115
0.011
0.0105
0.01

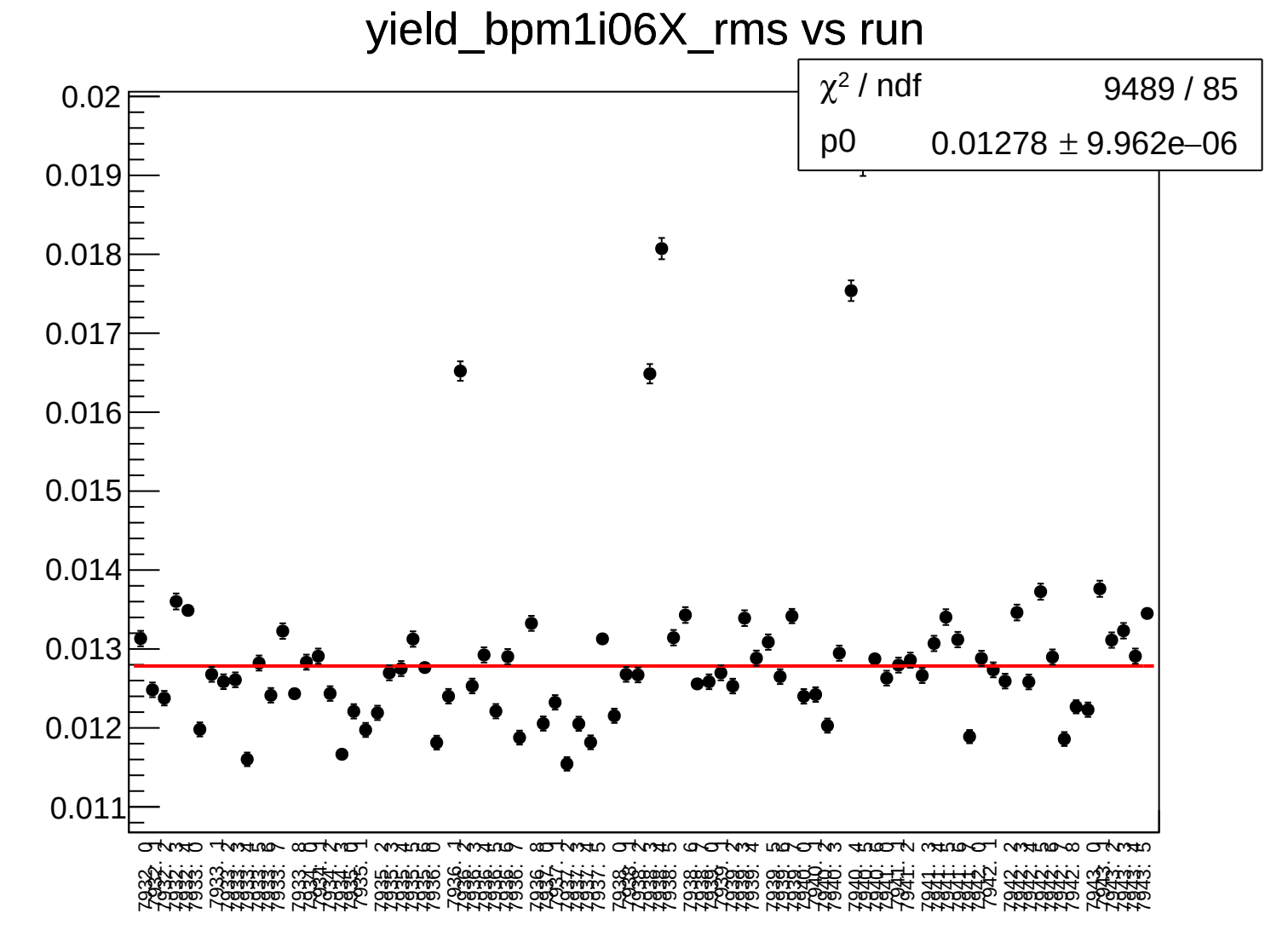

yield_bpm1i04Y_mean vs run
χ² / ndf 3.19e+06 / 85
p0 0.9973 ± 2.483e−06
1.008
1.006
1.004
1.002
1
0.998
0.996
0.994
0.992
0.99
0.988
pull
Entries 86
Mean −1137
Std Dev 1178
500
400
300
200
100
0
−100
−200
−300
−400

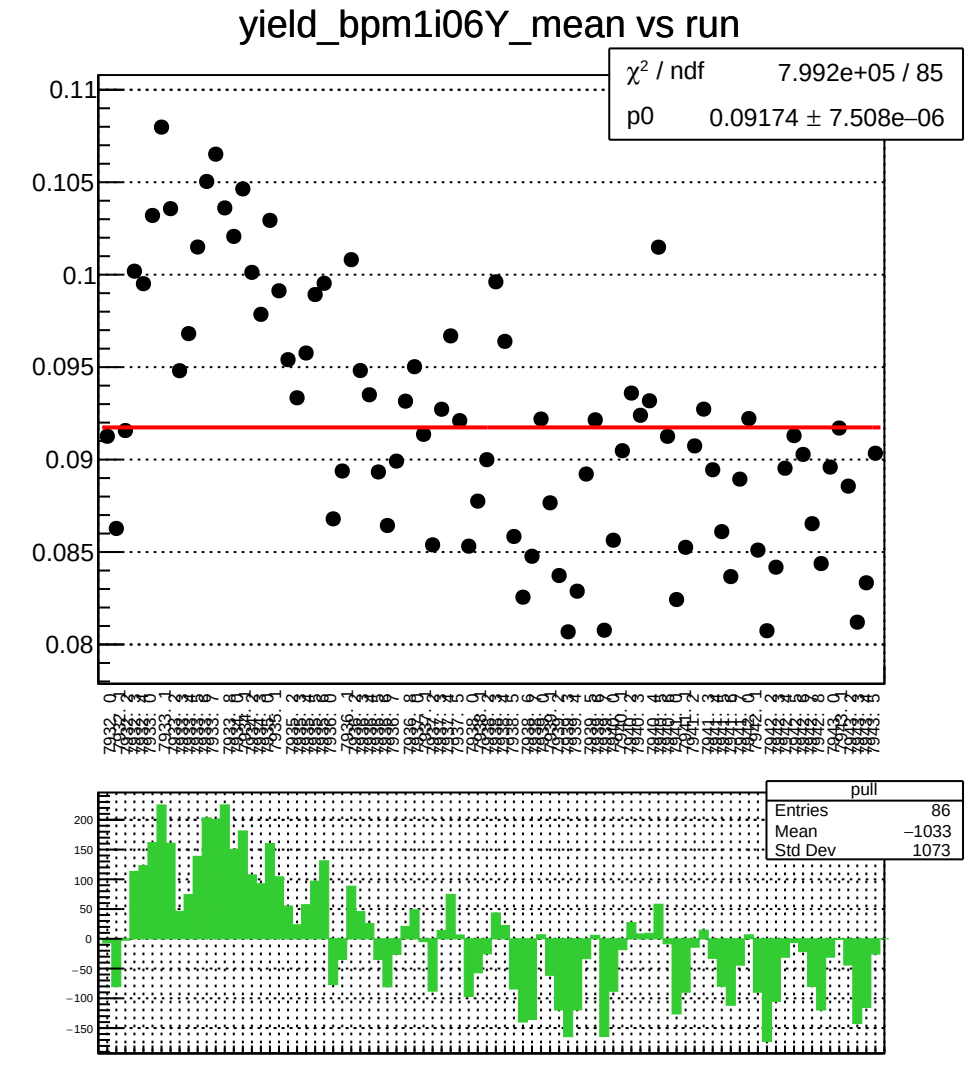

pull1D
Entries 86
Mean 1.402
Std Dev 4.778
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

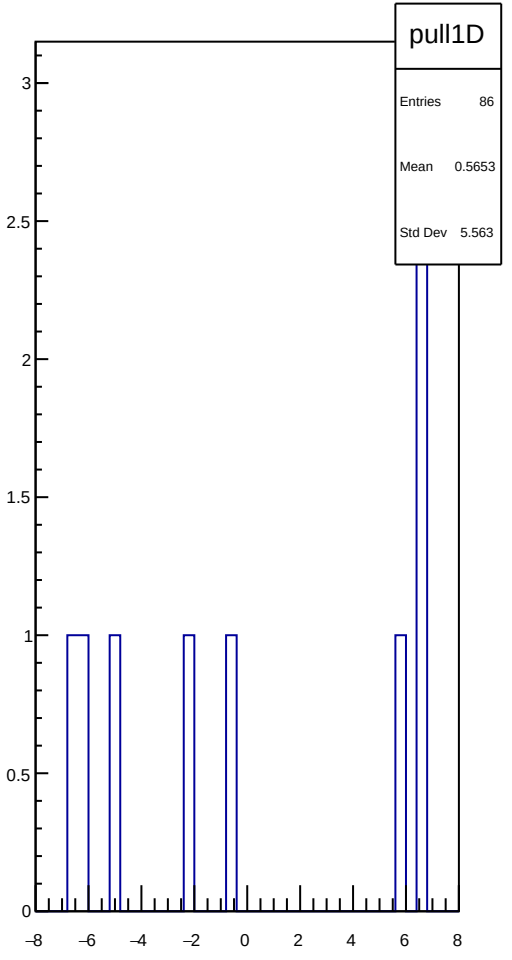

yield_bpm1i04Y_rms vs run
χ^2 / ndf 5.679e+04 / 85
p0 0.002221 ± 1.756e−06
0.008
0.007
0.006
0.005
0.004
0.003
0.002

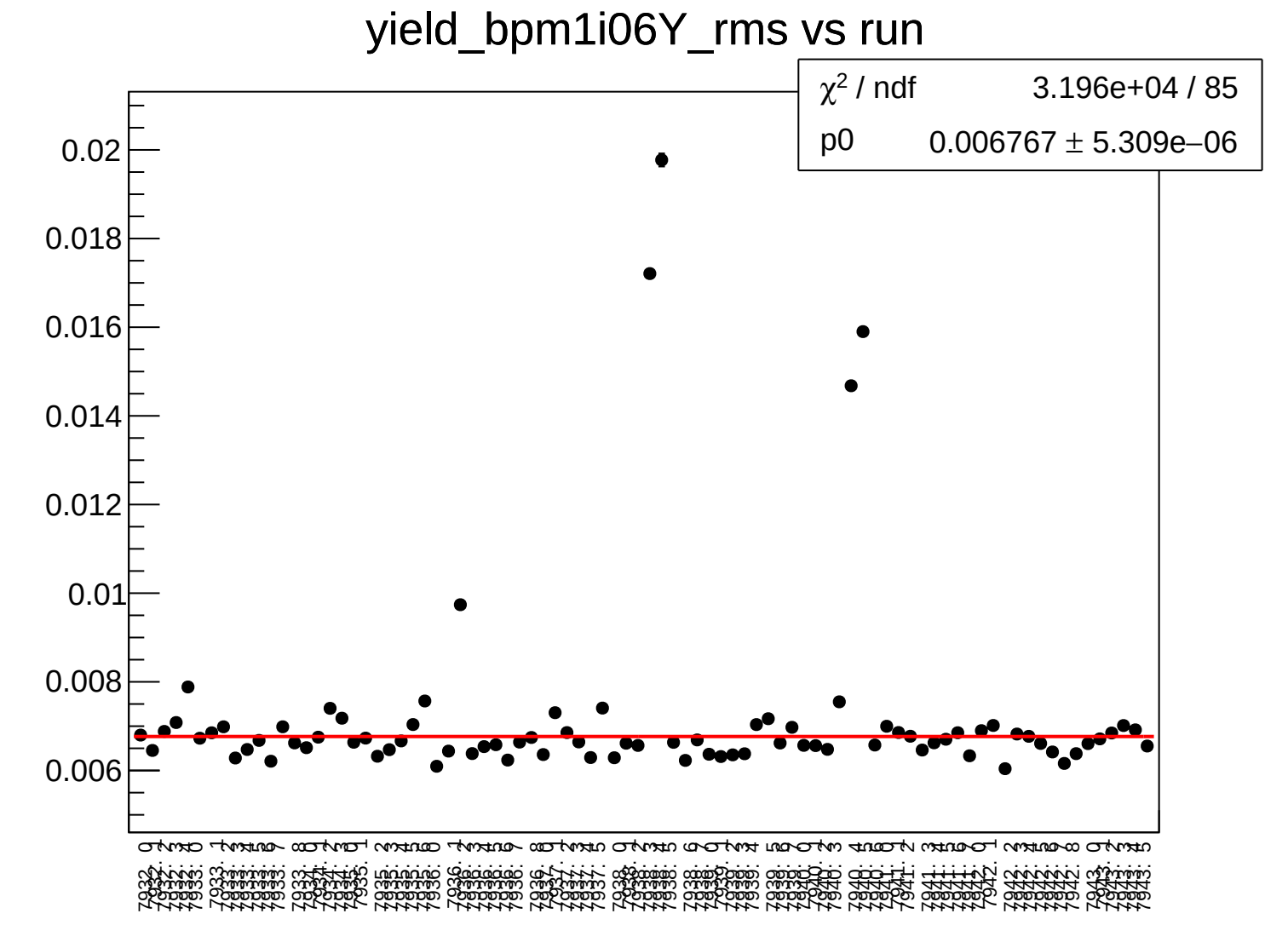

yield_bpm1i06X_mean vs run
χ² / ndf 1.205e+06 / 85
p0 1.14 ± 1.409e−05
1.18
1.17
1.16
1.15
1.14
1.13
1.12
1.11
pull
Entries 86
Mean 1821
Std Dev 1777
200
100
0
−100
−200

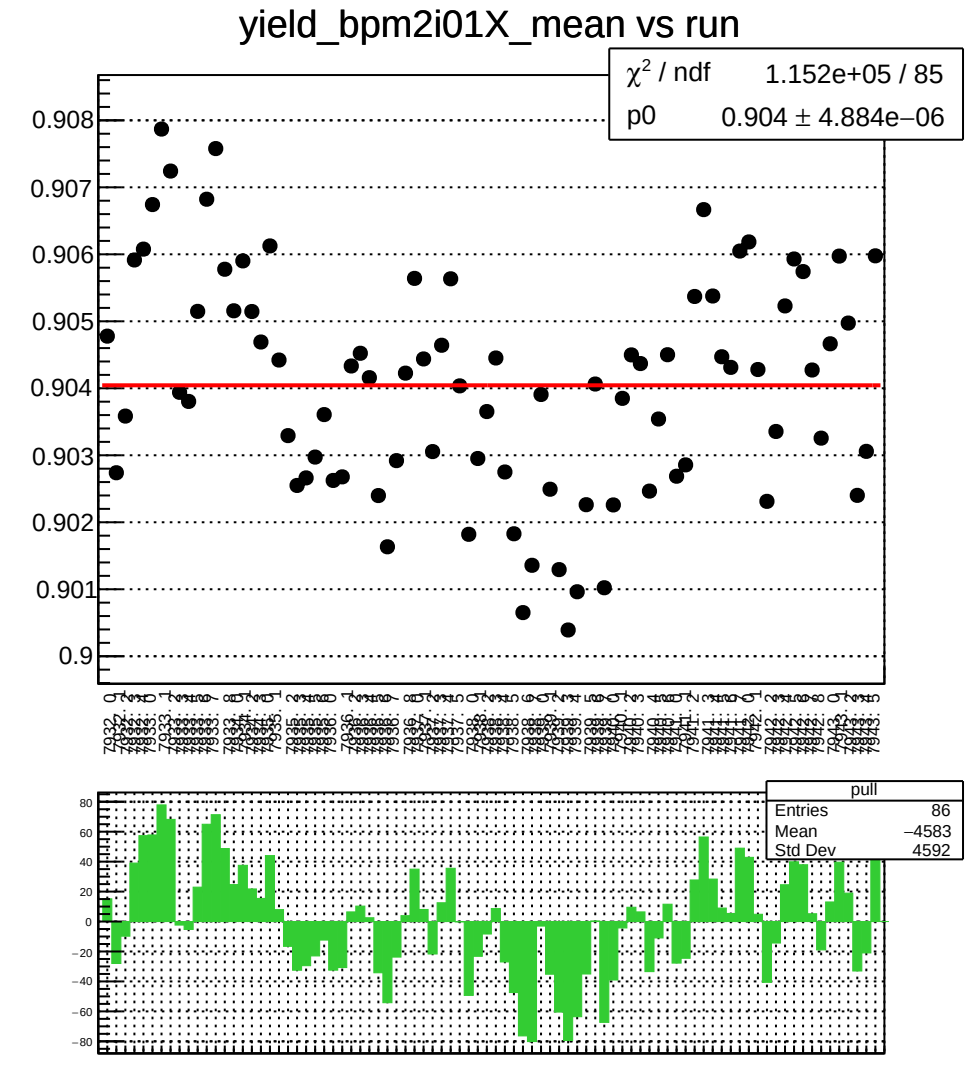

pull1D
Entries 86
Mean −1.202
Std Dev 3.585
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

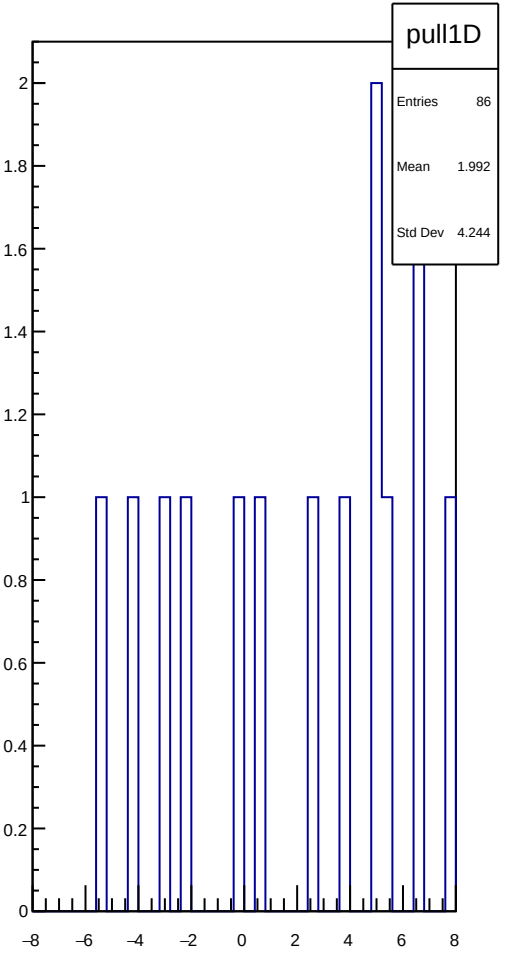

yield_bpm1i06X_rms vs run
χ² / ndf 9489 / 85
p0 0.01278 ± 9.962e–06
0.02
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011

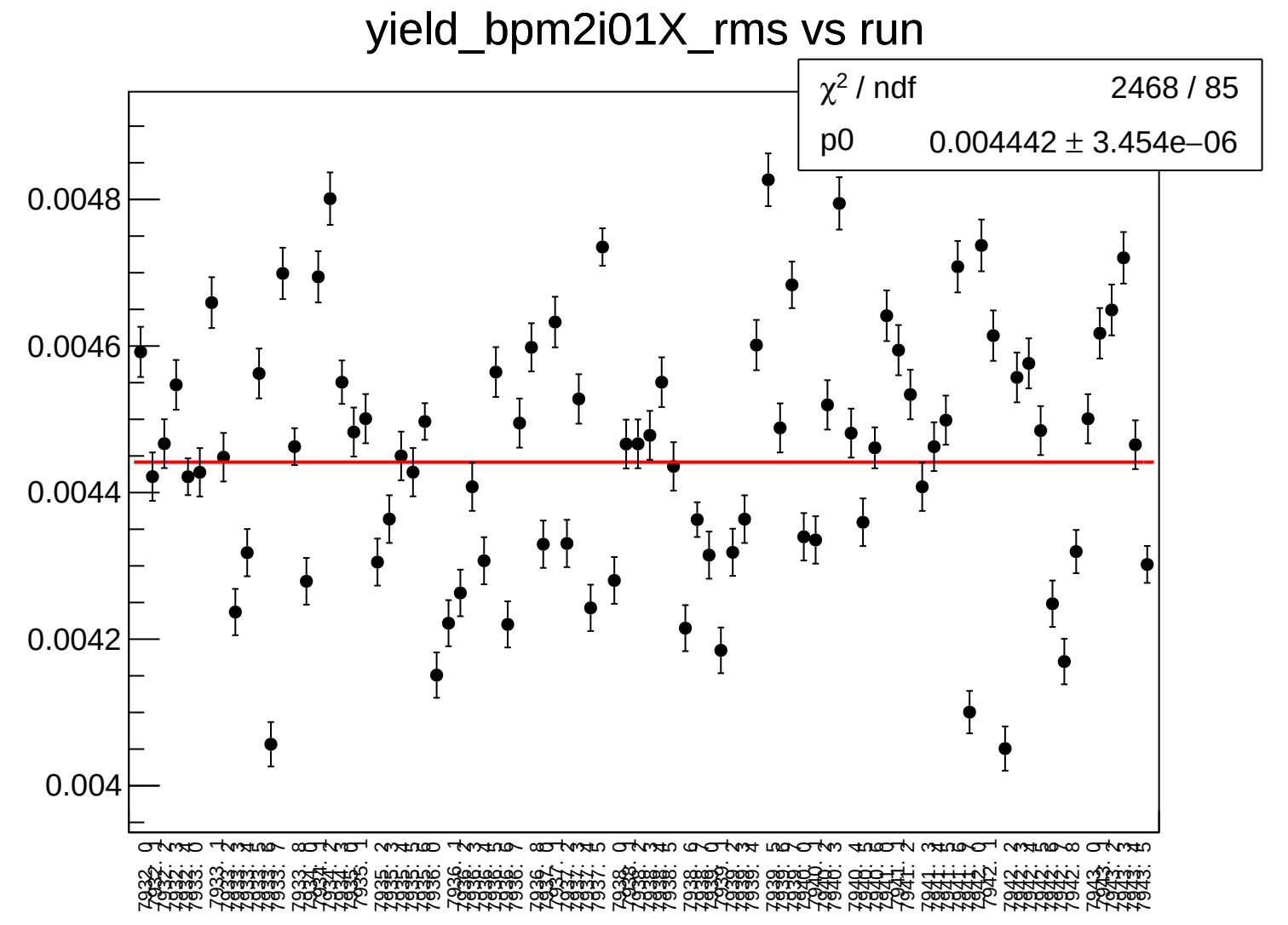

yield_bpm1i06Y_mean vs run
χ² / ndf 7.992e+05 / 85
p0 0.09174 ± 7.508e−06
0.11
0.105
0.1
0.095
0.09
0.085
0.08
pull
Entries 86
Mean −1033
Std Dev 1073
200
150
100
50
0
−50
−100
−150

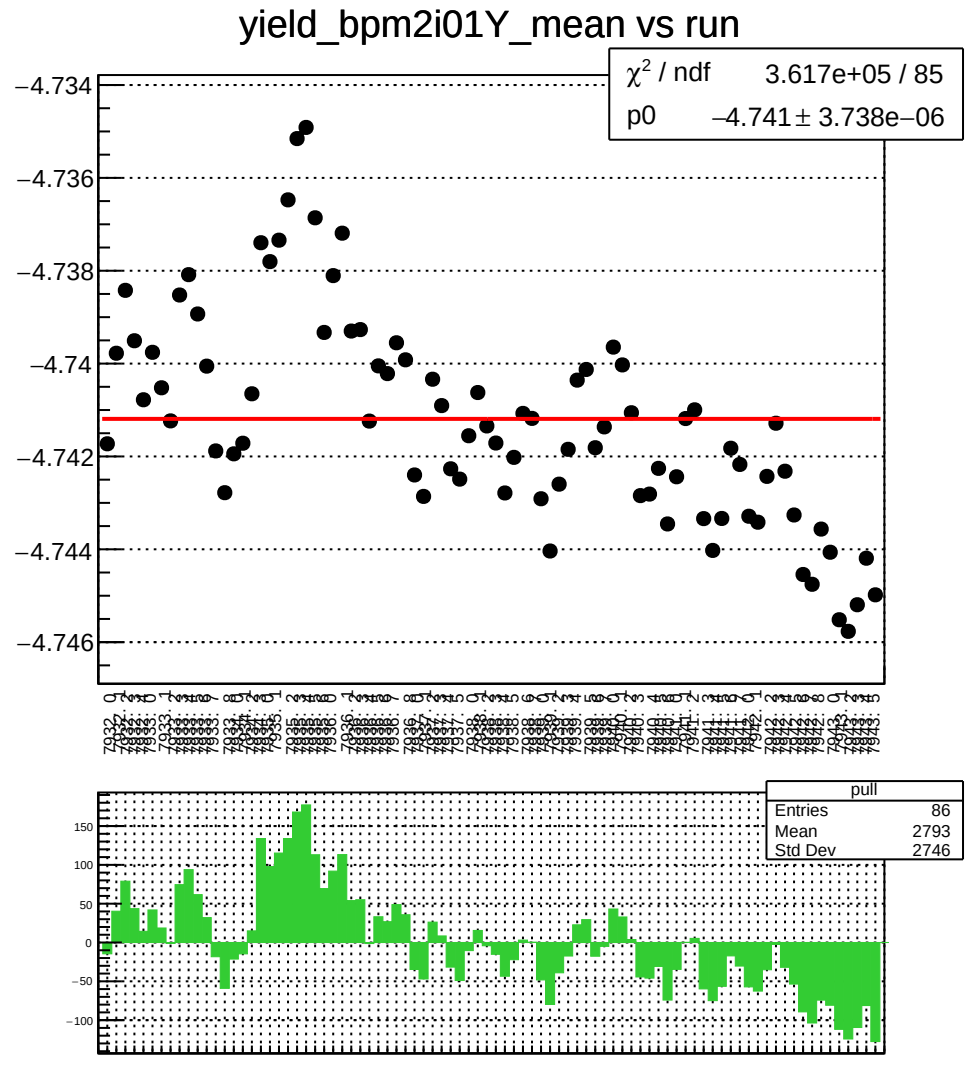

pull1D
Entries 86
Mean 0.5653
Std Dev 5.563
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

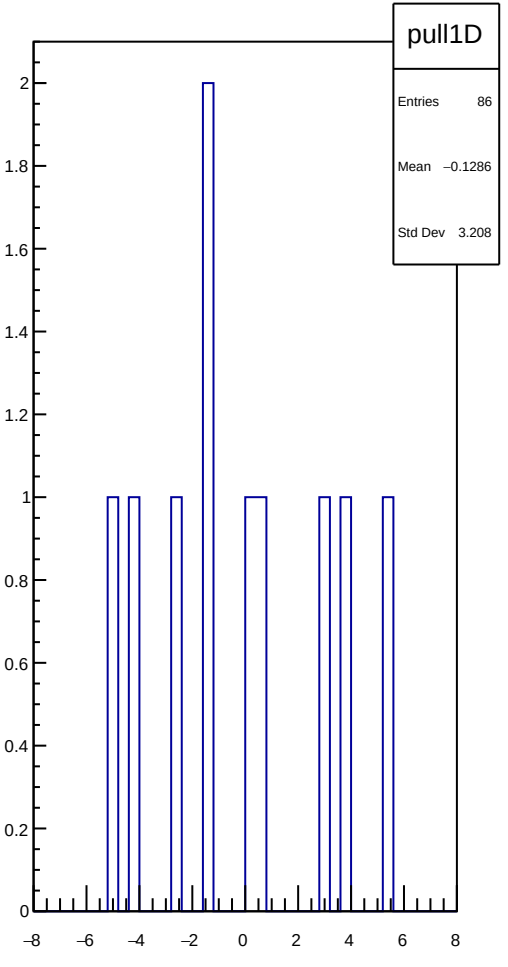

yield_bpm1i06Y_rms vs run
χ² / ndf 3.196e+04 / 85
p0 0.006767 ± 5.309e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

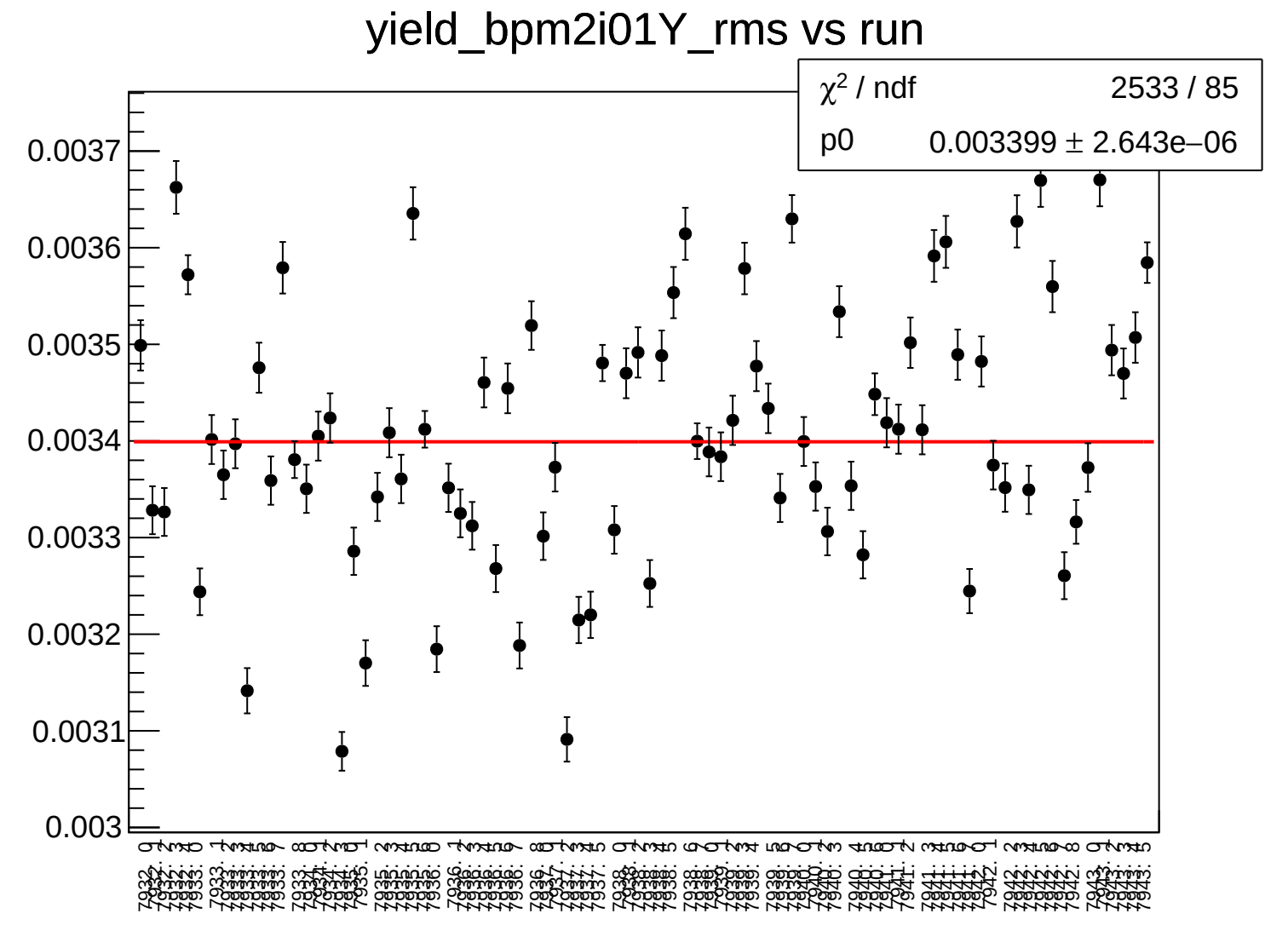

yield_bpm2i01X_mean vs run
χ² / ndf 1.152e+05 / 85
p0 0.904 ± 4.884e−06
0.908
0.907
0.906
0.905
0.904
0.903
0.902
0.901
0.9
pull
Entries 86
Mean −4583
Std Dev 4592
80
60
40
20
0
−20
−40
−60
−80

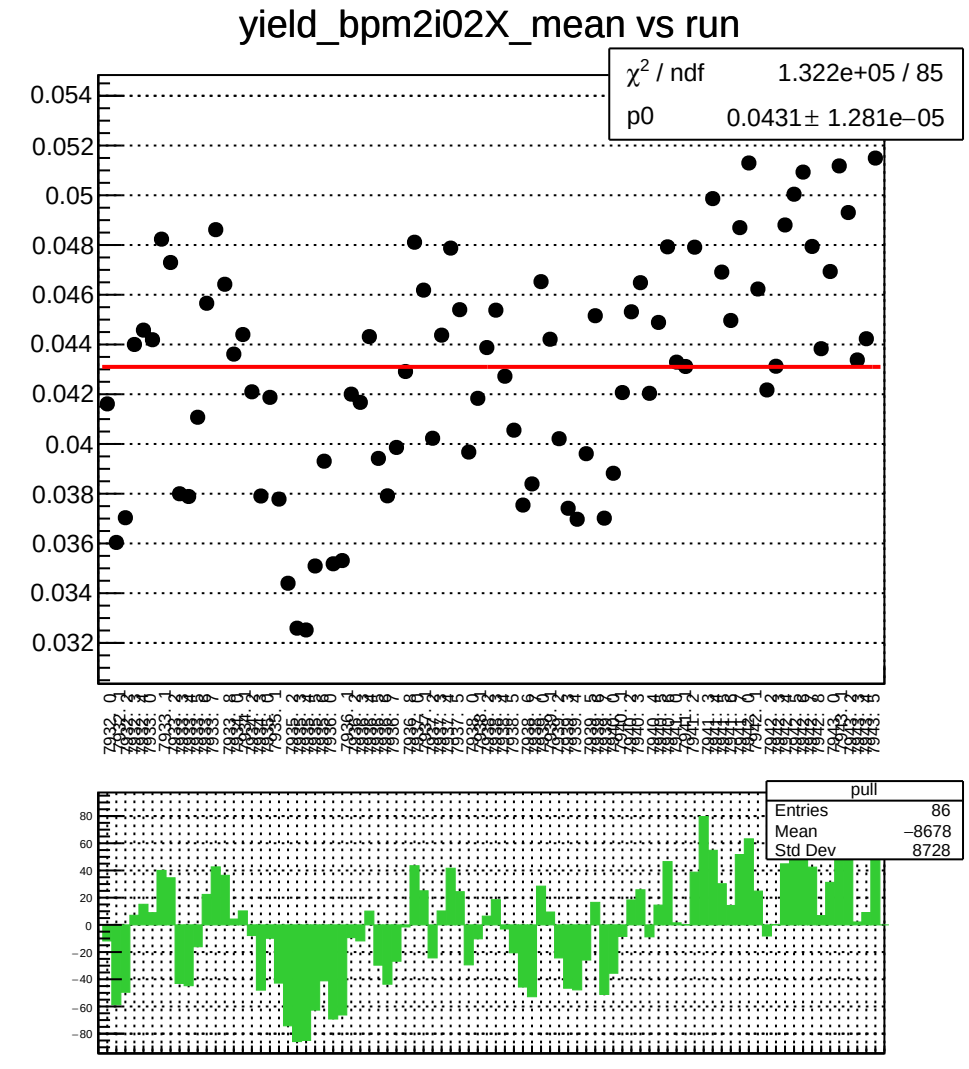

pull1D
Entries 86
Mean 1.992
Std Dev 4.244
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

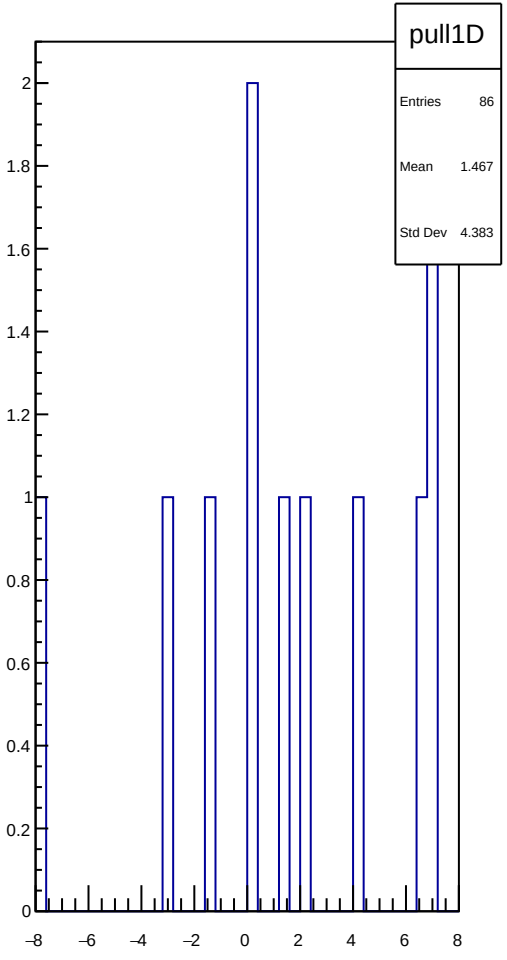

yield_bpm2i01X_rms vs run
χ² / ndf 2468 / 85
p0 0.004442 ± 3.454e−06
0.0048
0.0046
0.0044
0.0042
0.004

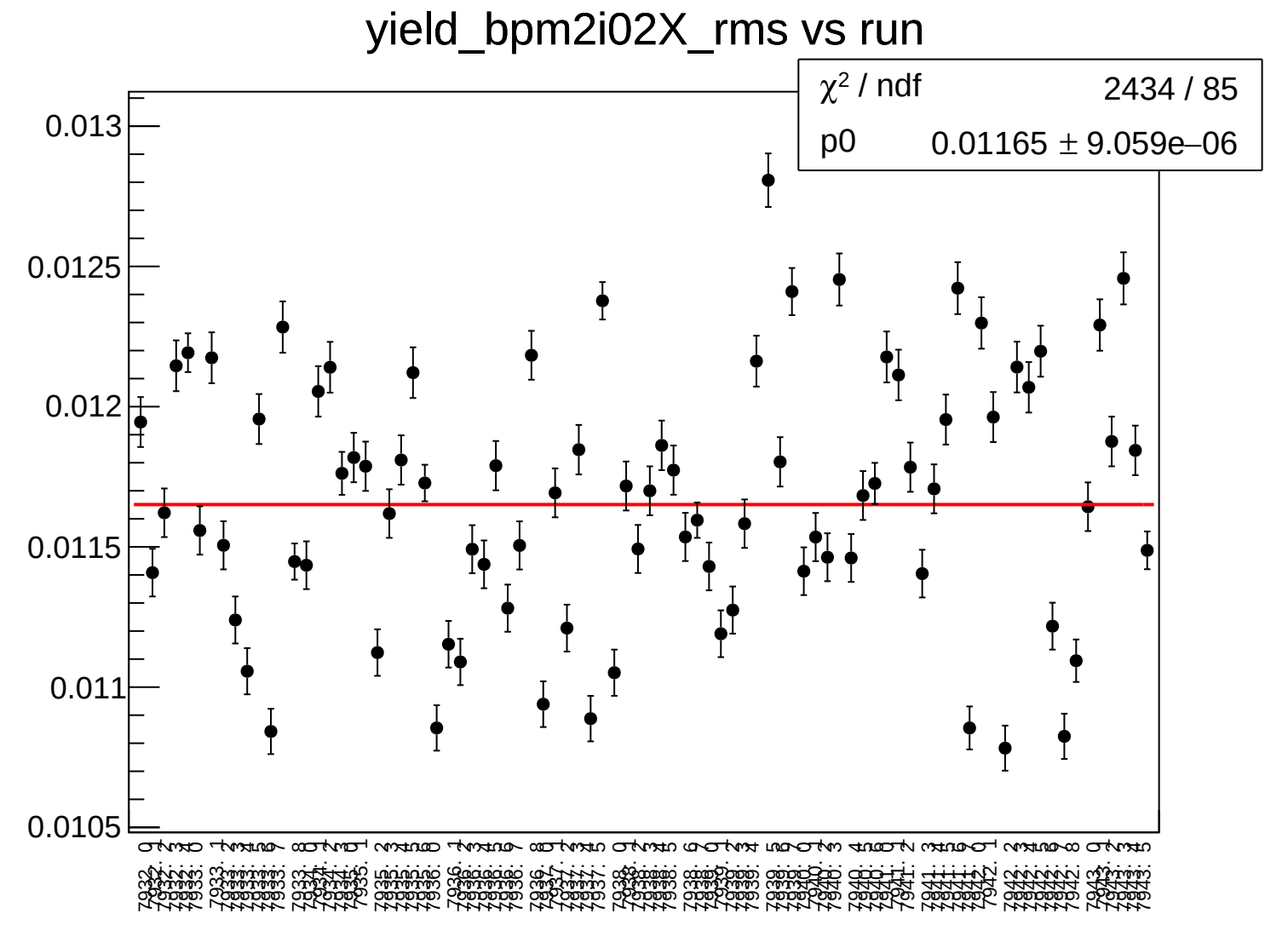

yield_bpm2i01Y_mean vs run
χ² / ndf 3.617e+05 / 85
p0 −4.741 ± 3.738e−06
−4.734
−4.736
−4.738
−4.74
−4.742
−4.744
−4.746
pull
Entries 86
Mean 2793
Std Dev 2746
150
100
50
0
−50
−100

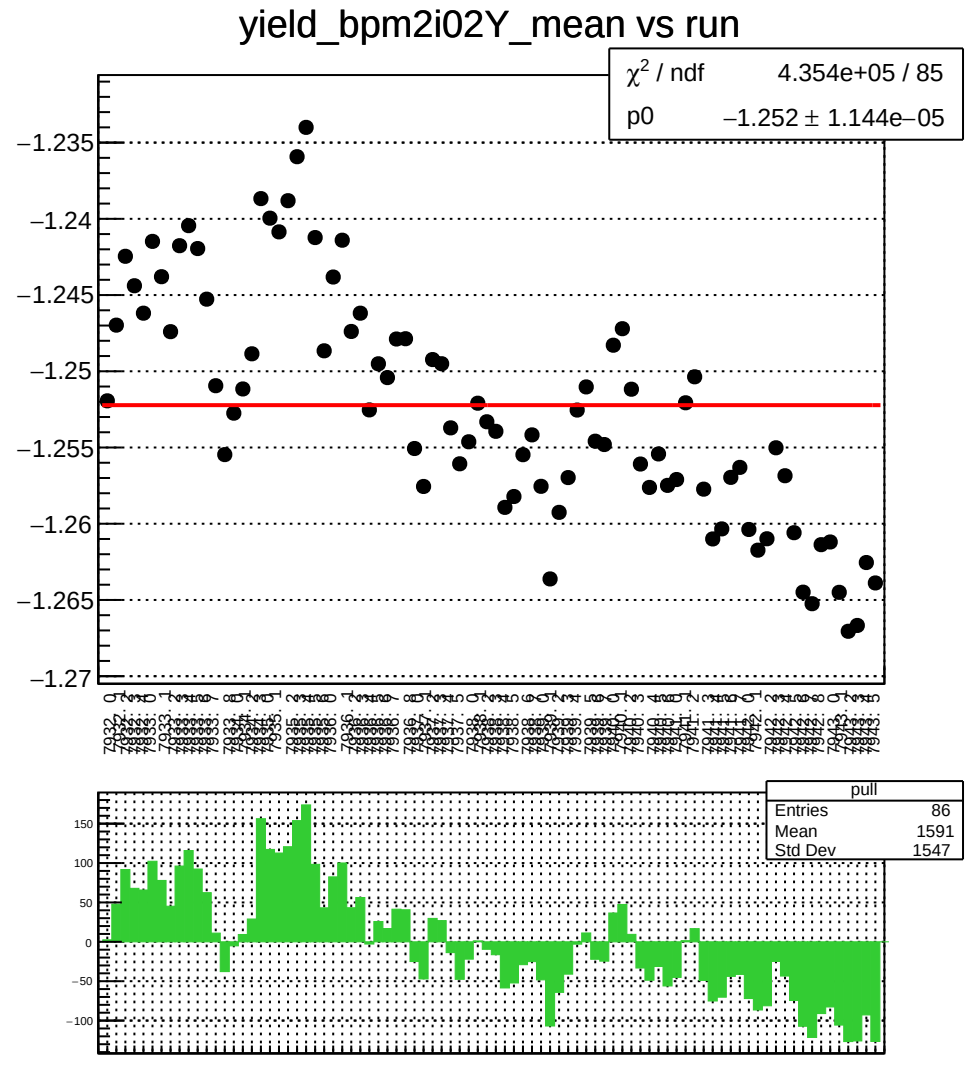

pull1D
Entries 86
Mean −0.1286
Std Dev 3.208
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

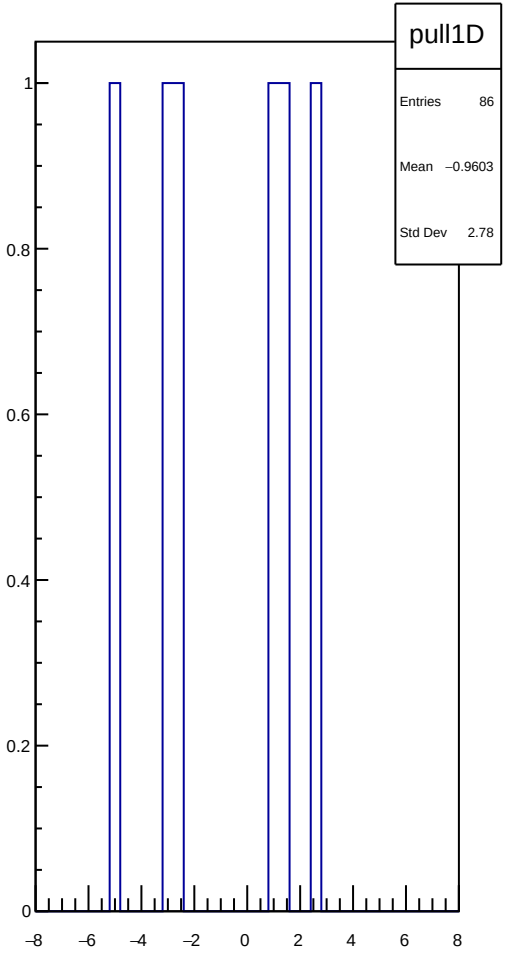

yield_bpm2i01Y_rms vs run
χ² / ndf 2533 / 85
p0 0.003399 ± 2.643e−06
0.0037
0.0036
0.0035
0.0034
0.0033
0.0032
0.0031
0.003

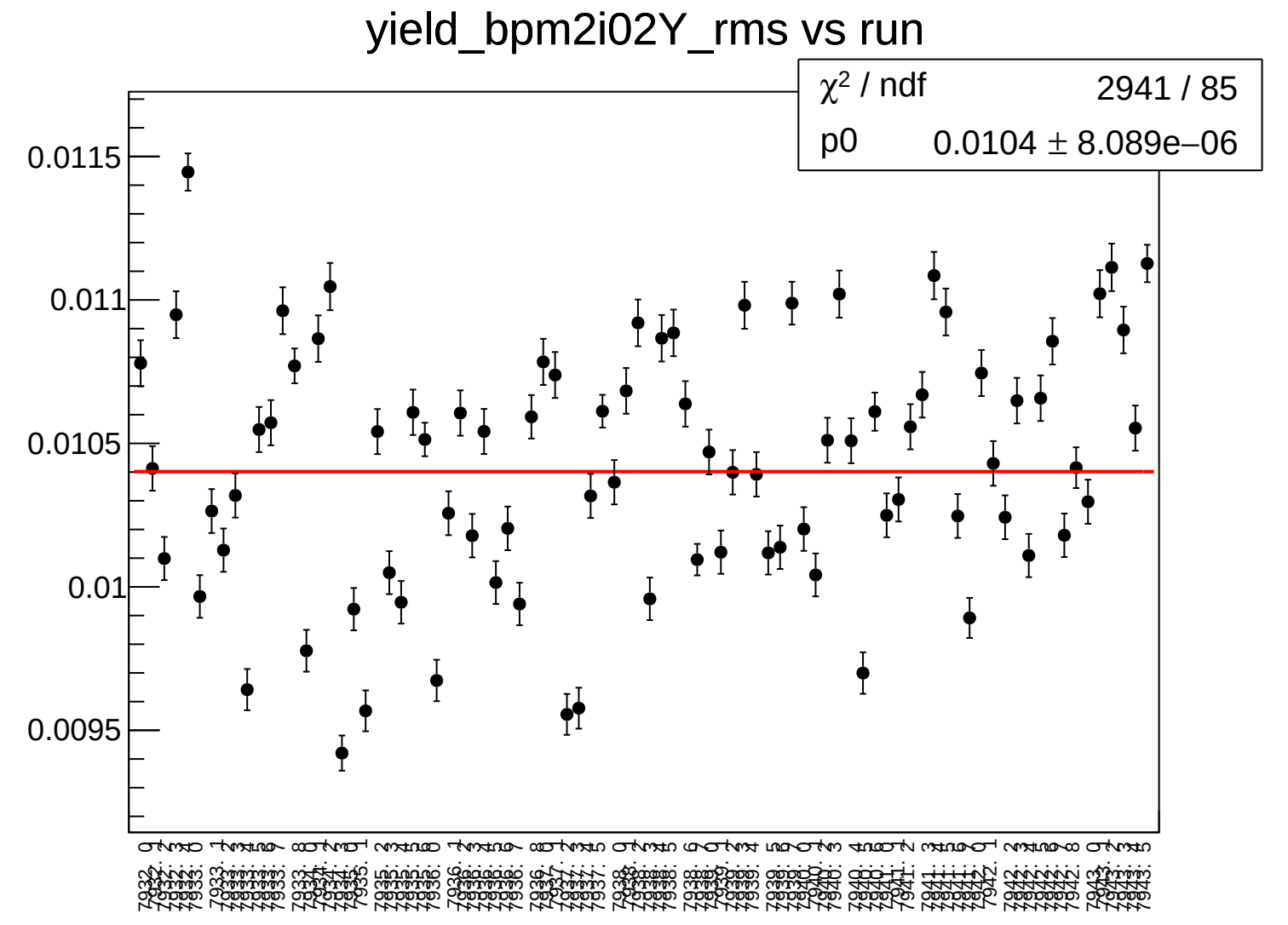

yield_bpm2i02X_mean vs run
χ² / ndf 1.322e+05 / 85
p0 0.0431 ± 1.281e−05
pull
Entries 86
Mean −8678
Std Dev 8728

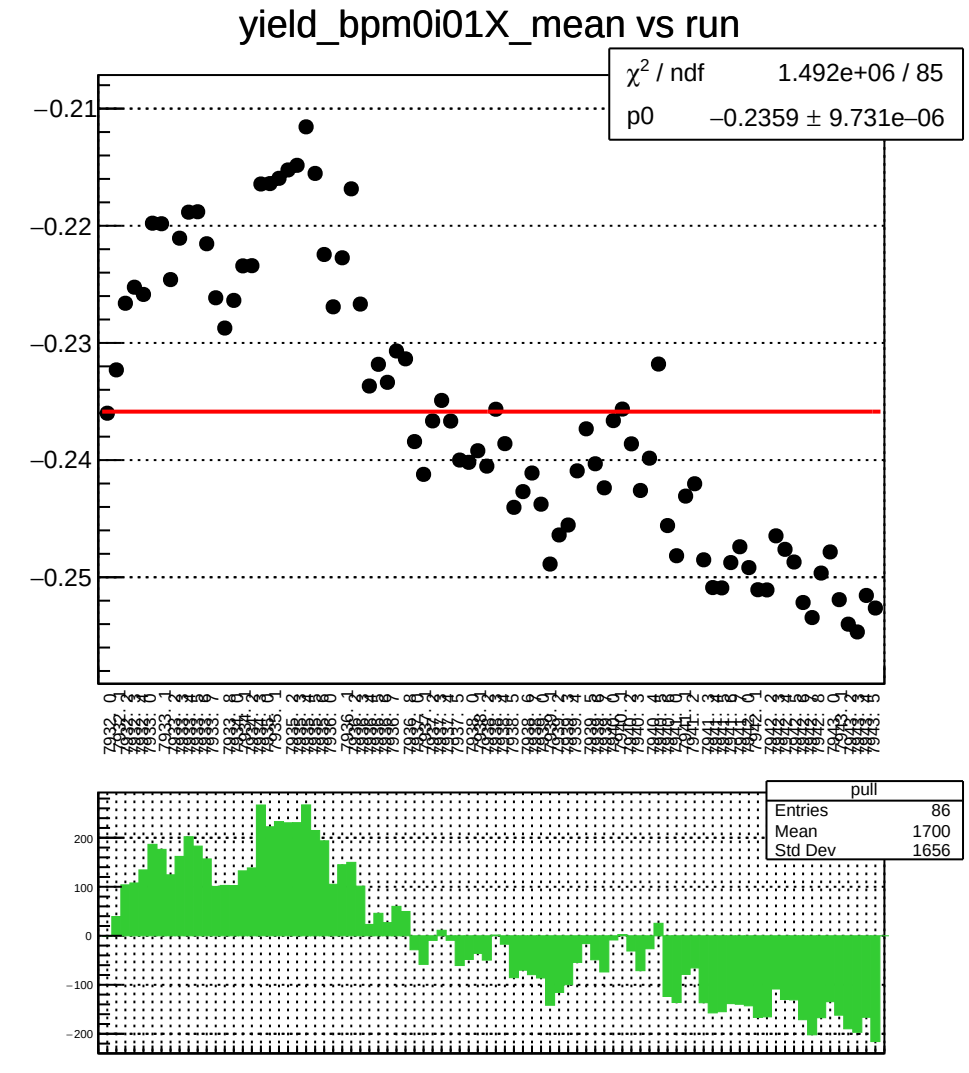

pull1D
Entries 86
Mean 1.467
Std Dev 4.383

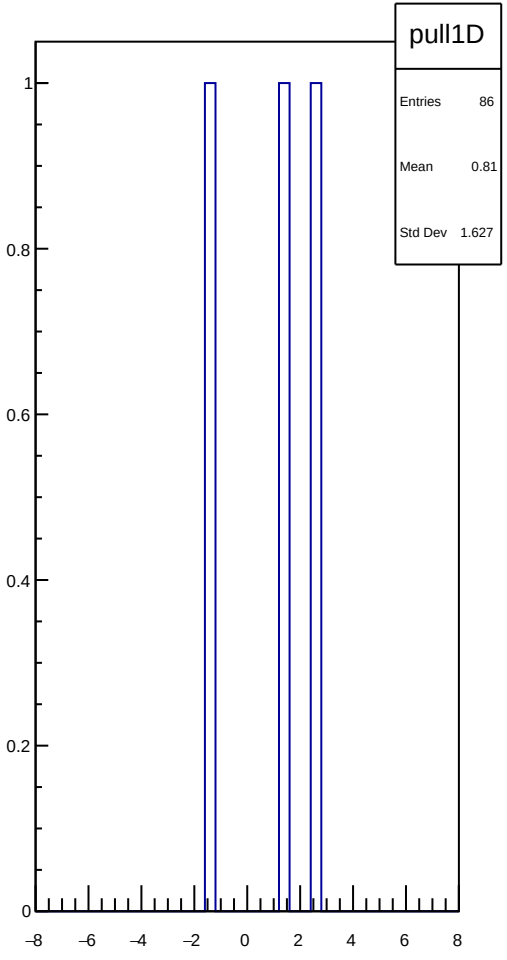

yield_bpm2i02X_rms vs run
χ² / ndf 2434 / 85
p0 0.01165 ± 9.059e–06
0.013
0.0125
0.012
0.0115
0.011
0.0105

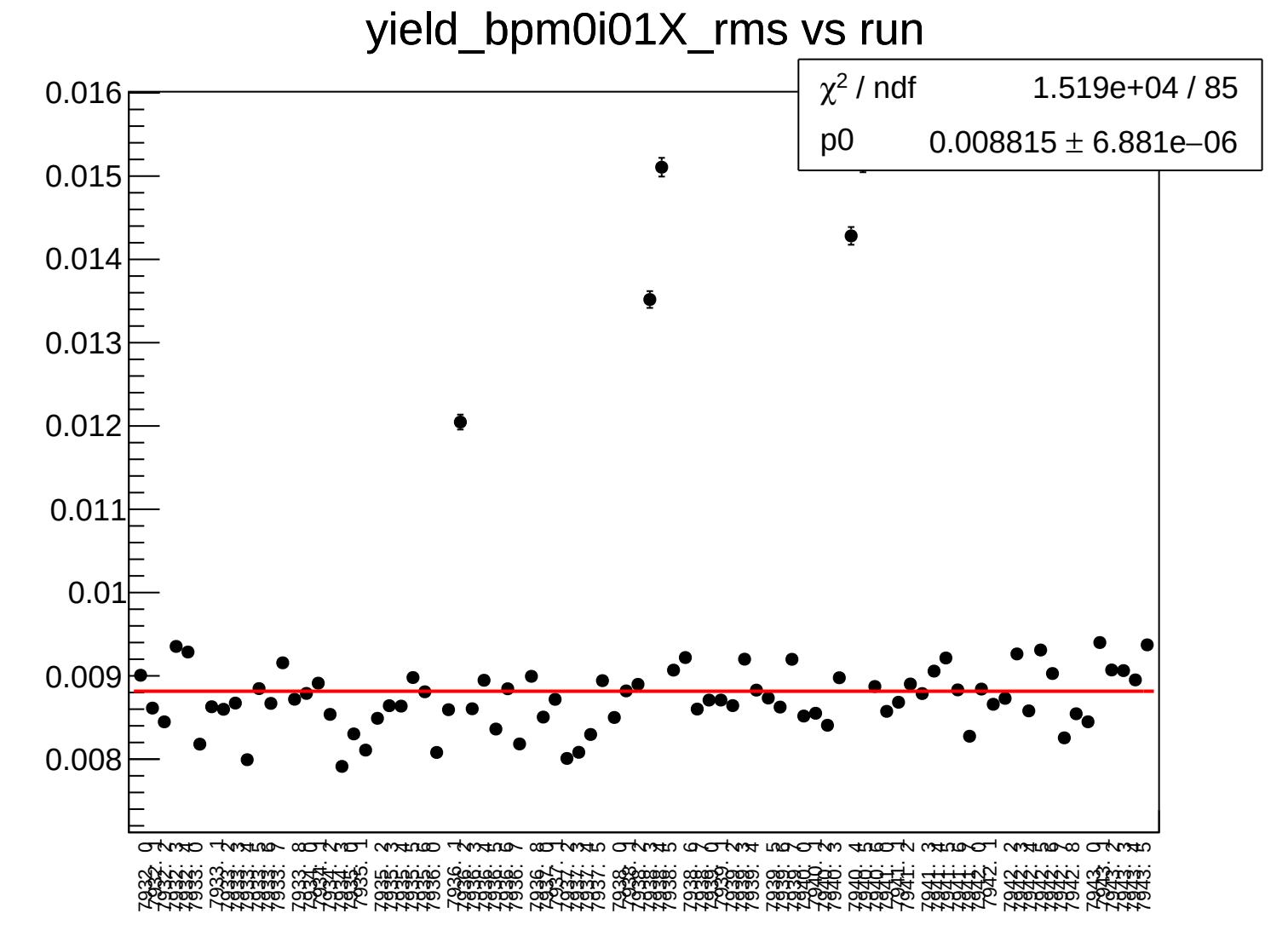

yield_bpm2i02Y_mean vs run
χ² / ndf 4.354e+05 / 85
p0 −1.252 ± 1.144e−05
−1.235
−1.24
−1.245
−1.25
−1.255
−1.26
−1.265
−1.27
pull
Entries 86
Mean 1591
Std Dev 1547
150
100
50
0
−50
−100

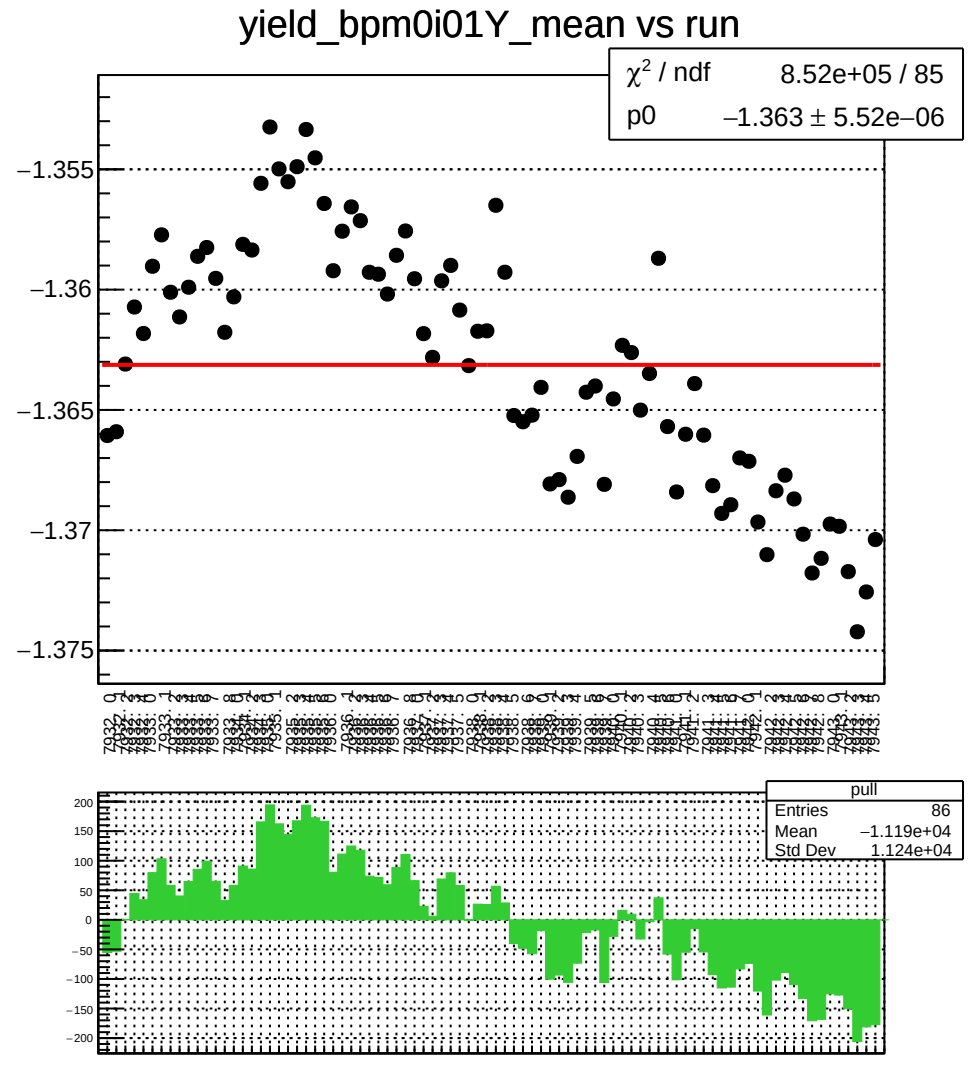

pull1D
Entries 86
Mean −0.9603
Std Dev 2.78
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

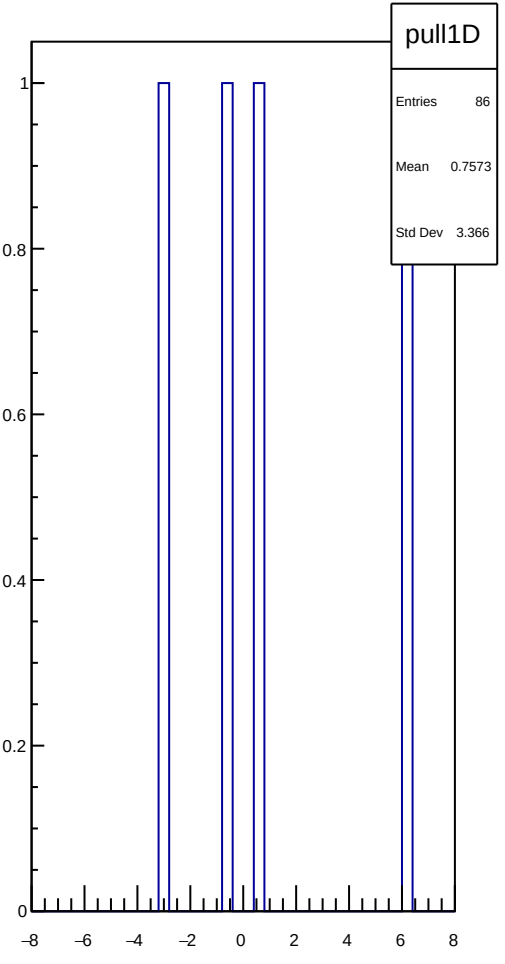

yield_bpm2i02Y_rms vs run
χ² / ndf 2941 / 85
p0 0.0104 ± 8.089e−06
0.0115
0.011
0.0105
0.01
0.0095

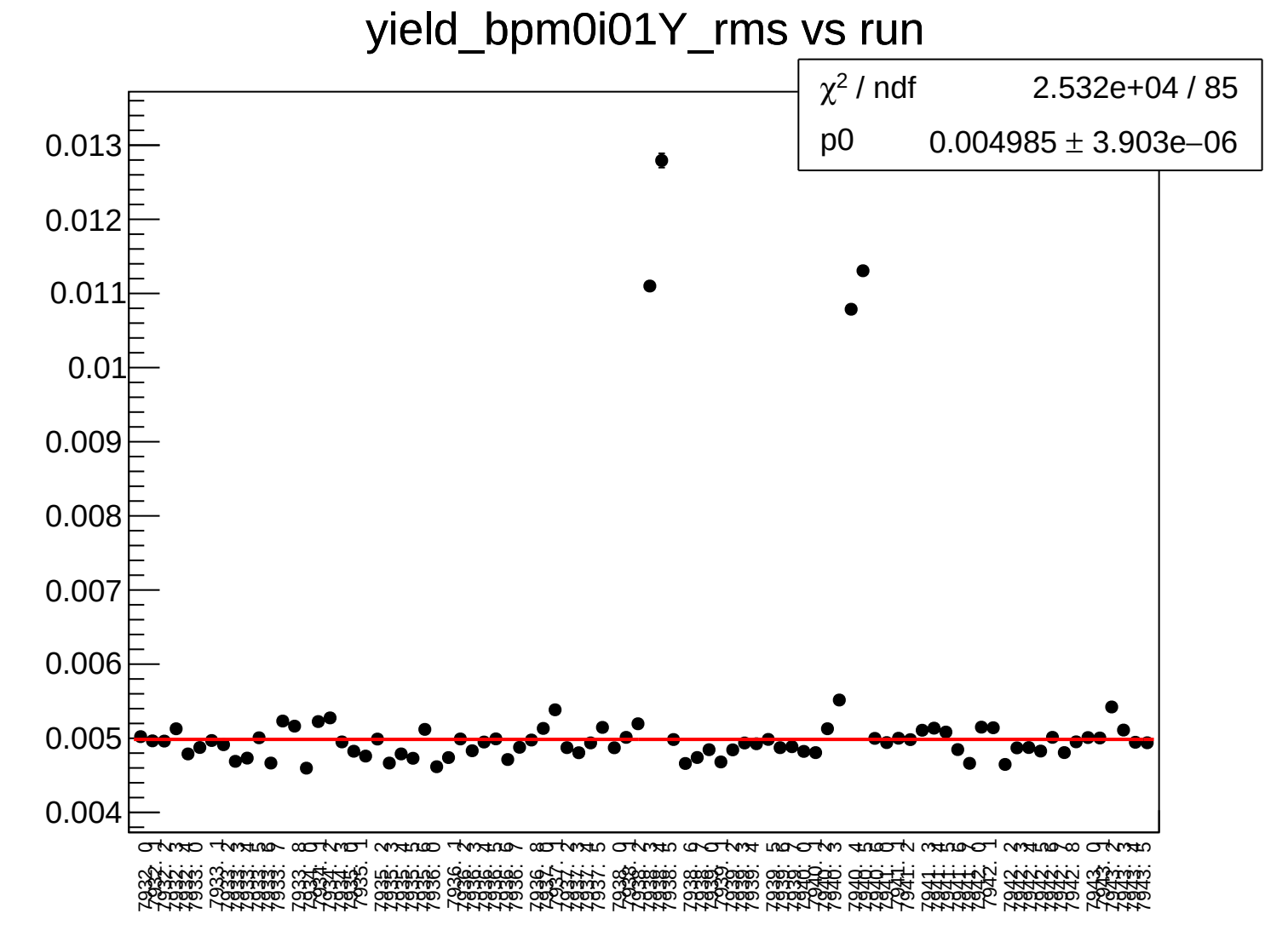

yield_bpm0i01X_mean vs run
χ² / ndf 1.492e+06 / 85
p0 −0.2359 ± 9.731e−06
−0.21
−0.22
−0.23
−0.24
−0.25
pull
Entries 86
Mean 1700
Std Dev 1656
200
100
0
−100
−200

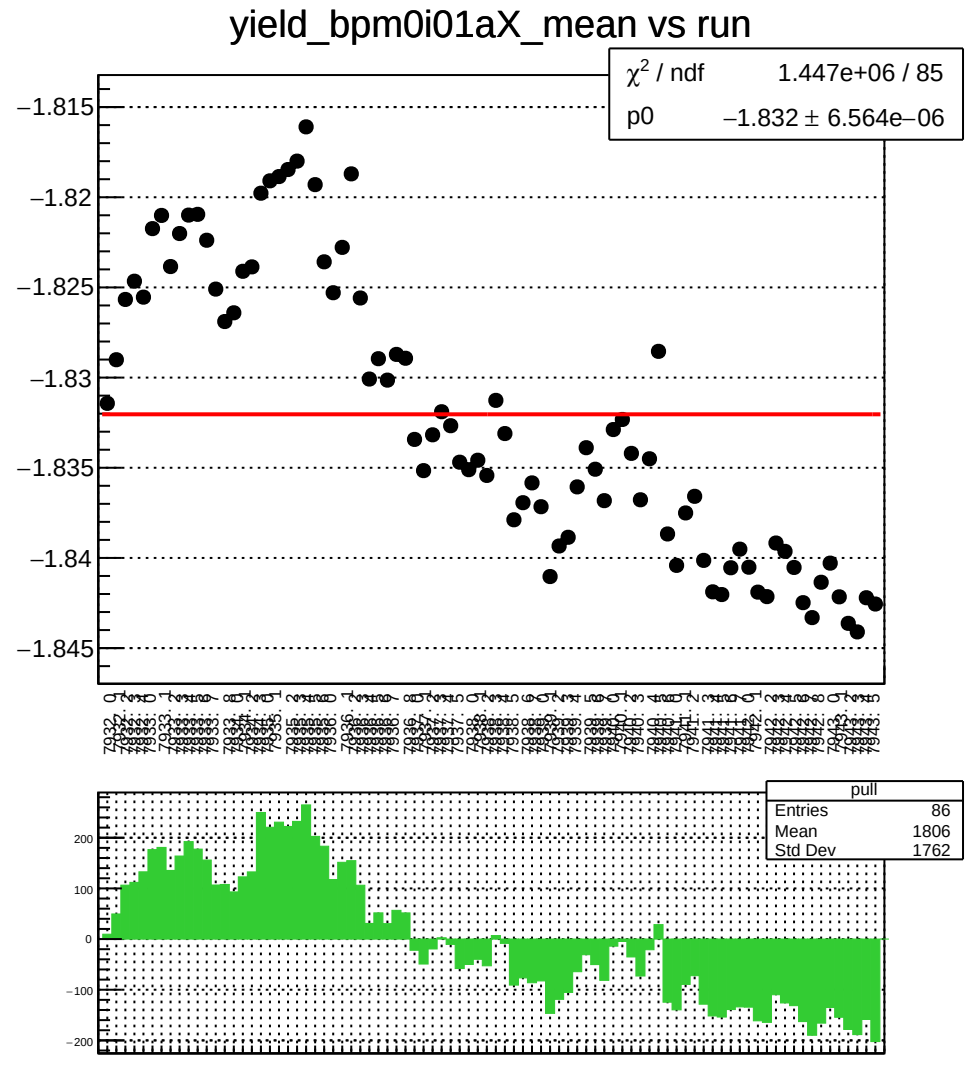

pull1D
Entries 86
Mean 0.81
Std Dev 1.627
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

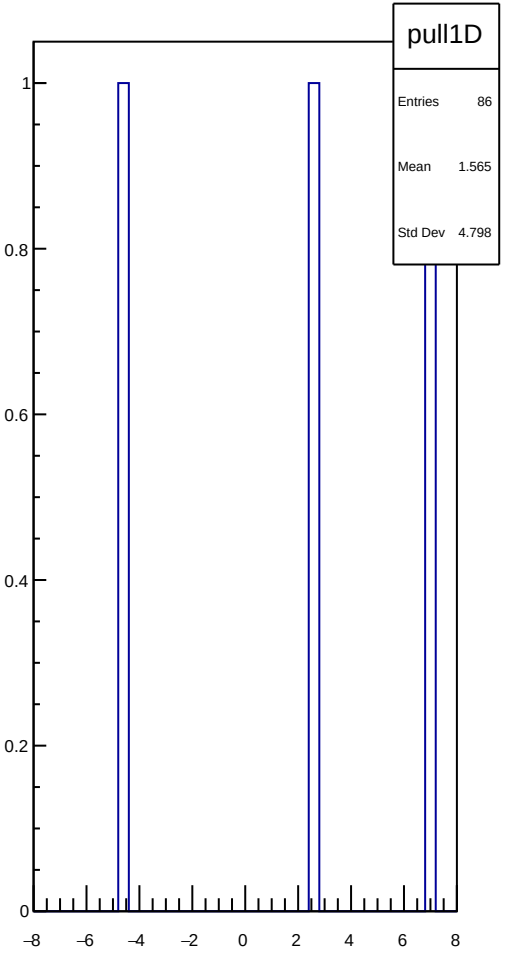

yield_bpm0i01X_rms vs run
χ² / ndf 1.519e+04 / 85
p0 0.008815 ± 6.881e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

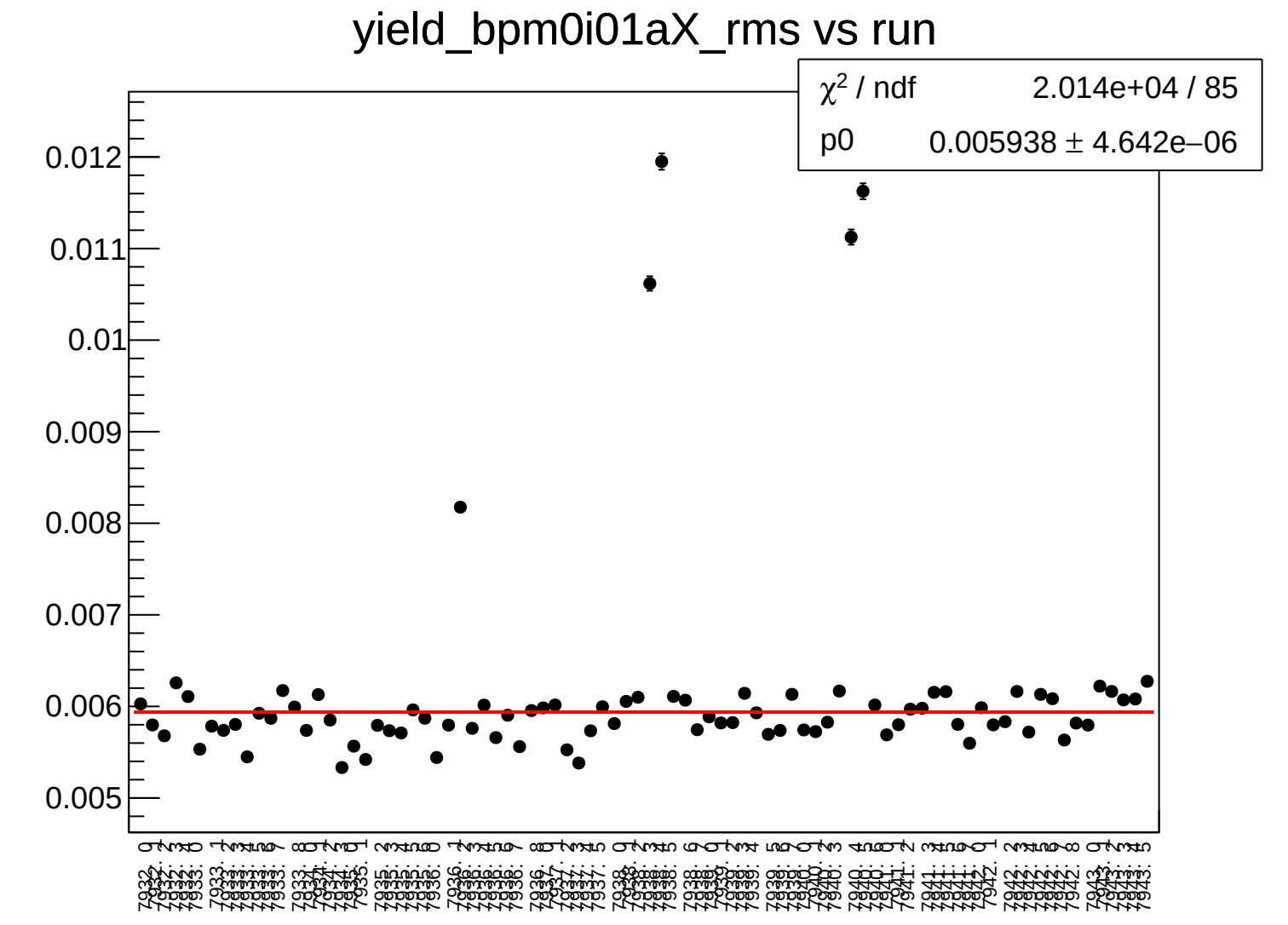

yield_bpm0i01Y_mean vs run
χ² / ndf 8.52e+05 / 85
p0 −1.363 ± 5.52e−06
−1.355
−1.36
−1.365
−1.37
−1.375
pull
Entries 86
Mean −1.119e+04
Std Dev 1.124e+04
200
150
100
50
0
−50
−100
−150
−200

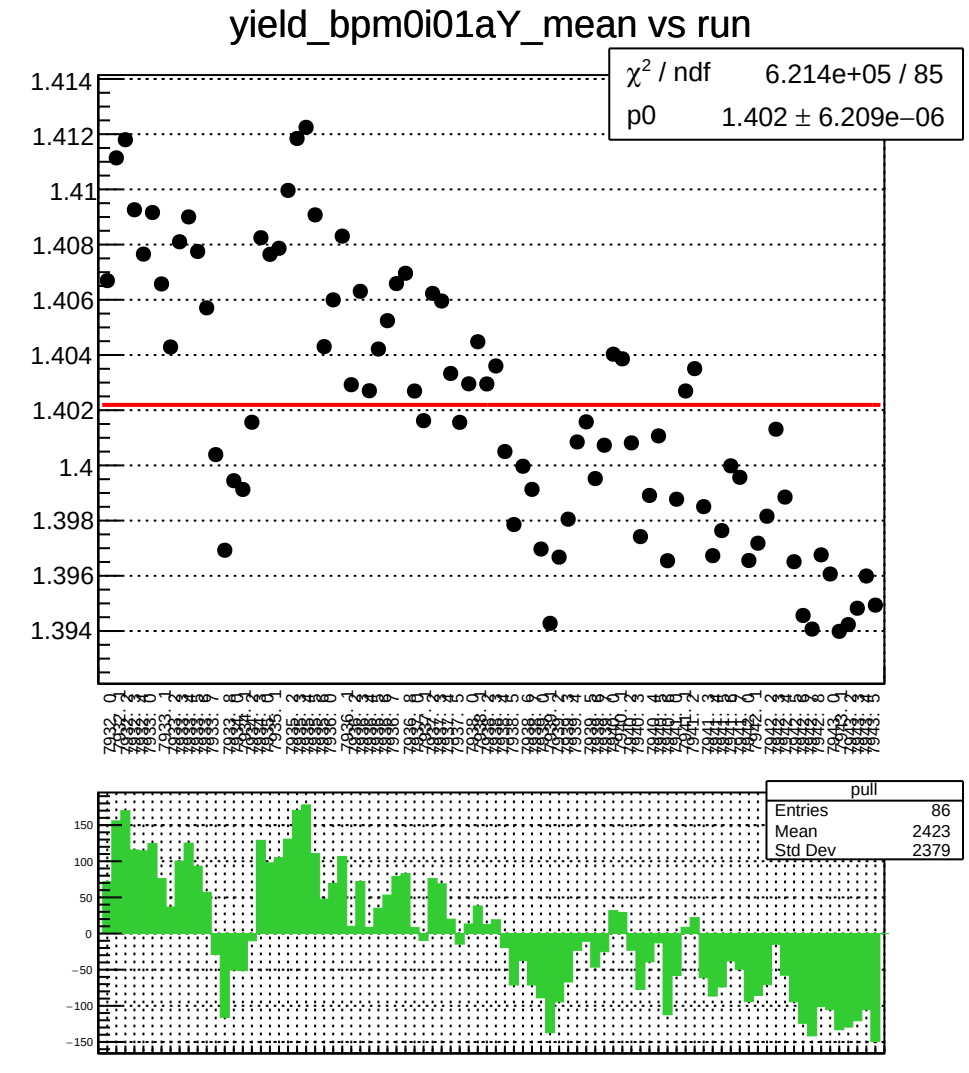

pull1D
Entries 86
Mean 0.7573
Std Dev 3.366
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

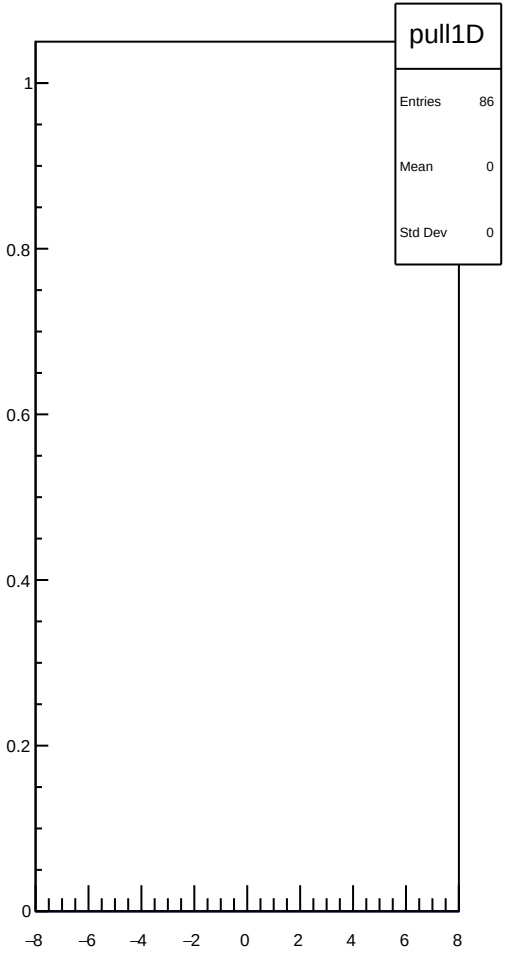

yield_bpm0i01Y_rms vs run
χ² / ndf 2.532e+04 / 85
p0 0.004985 ± 3.903e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

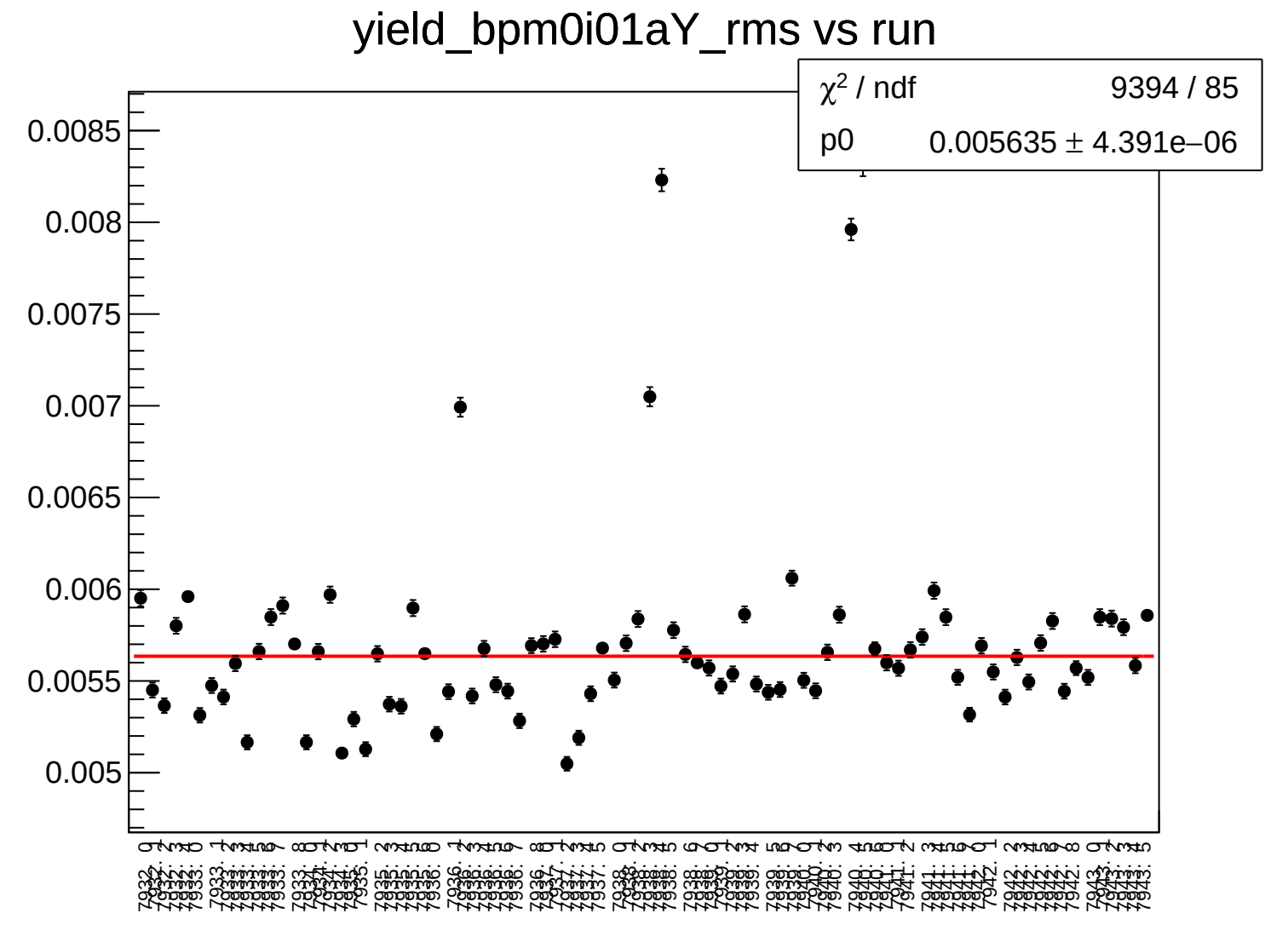

yield_bpm0i01aX_mean vs run
χ² / ndf 1.447e+06 / 85
p0 −1.832 ± 6.564e−06
−1.815
−1.82
−1.825
−1.83
−1.835
−1.84
−1.845
pull
Entries 86
Mean 1806
Std Dev 1762
200
100
0
−100
−200

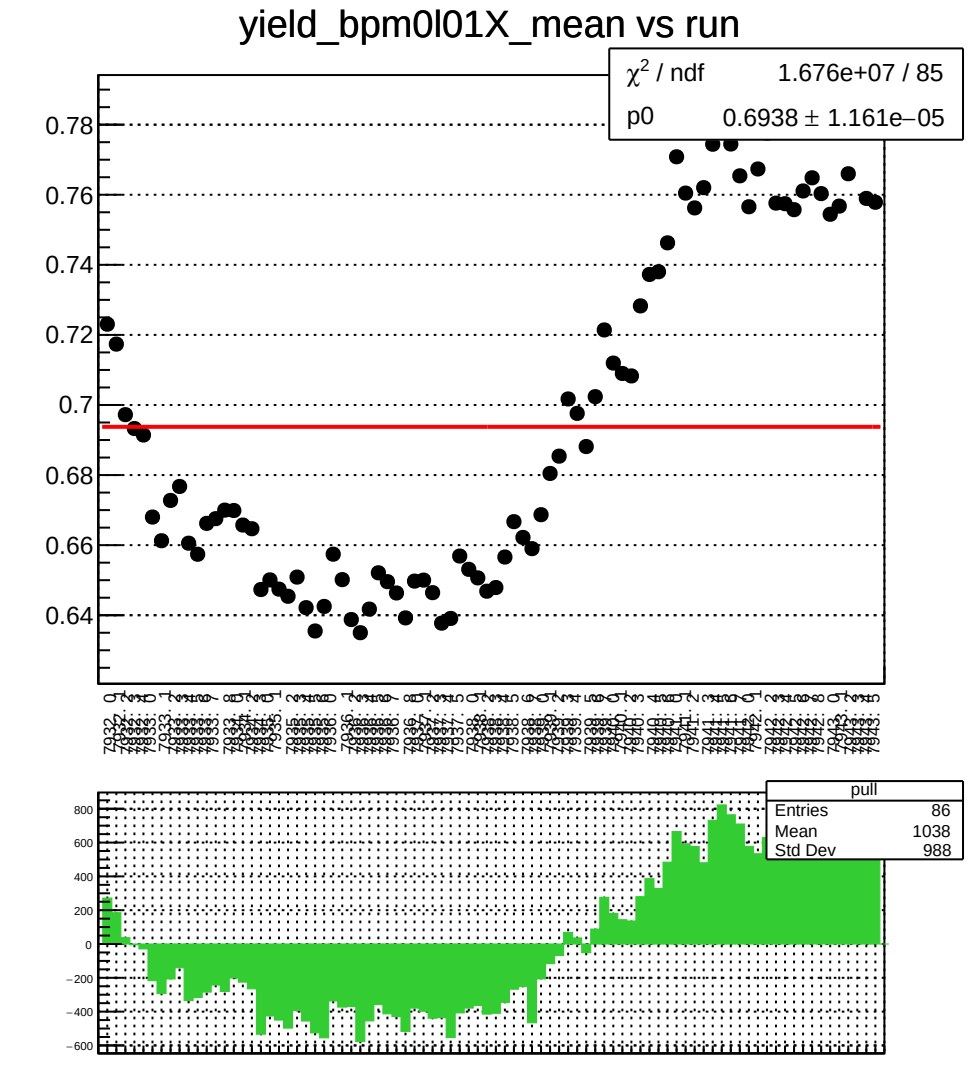

pull1D
Entries 86
Mean 1.565
Std Dev 4.798
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

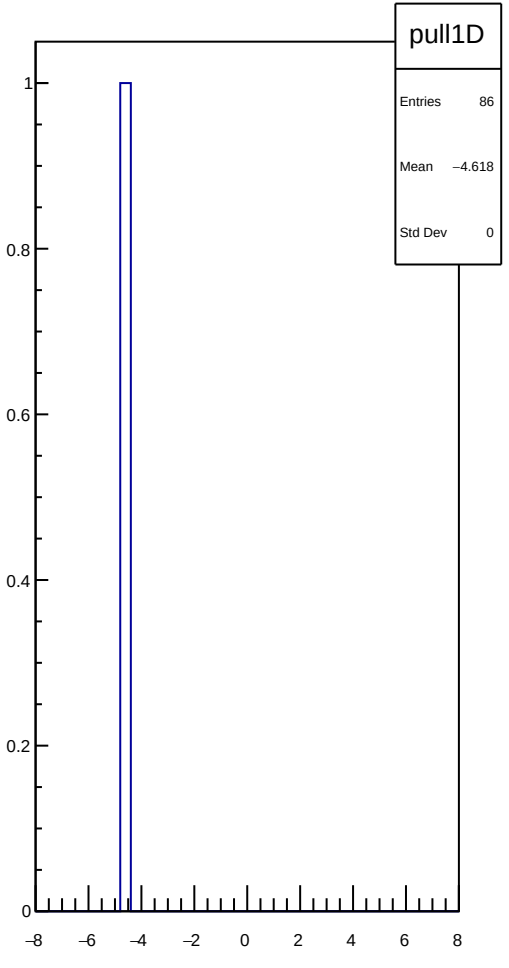

yield_bpm0i01aX_rms vs run
χ² / ndf 2.014e+04 / 85
p0 0.005938 ± 4.642e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005

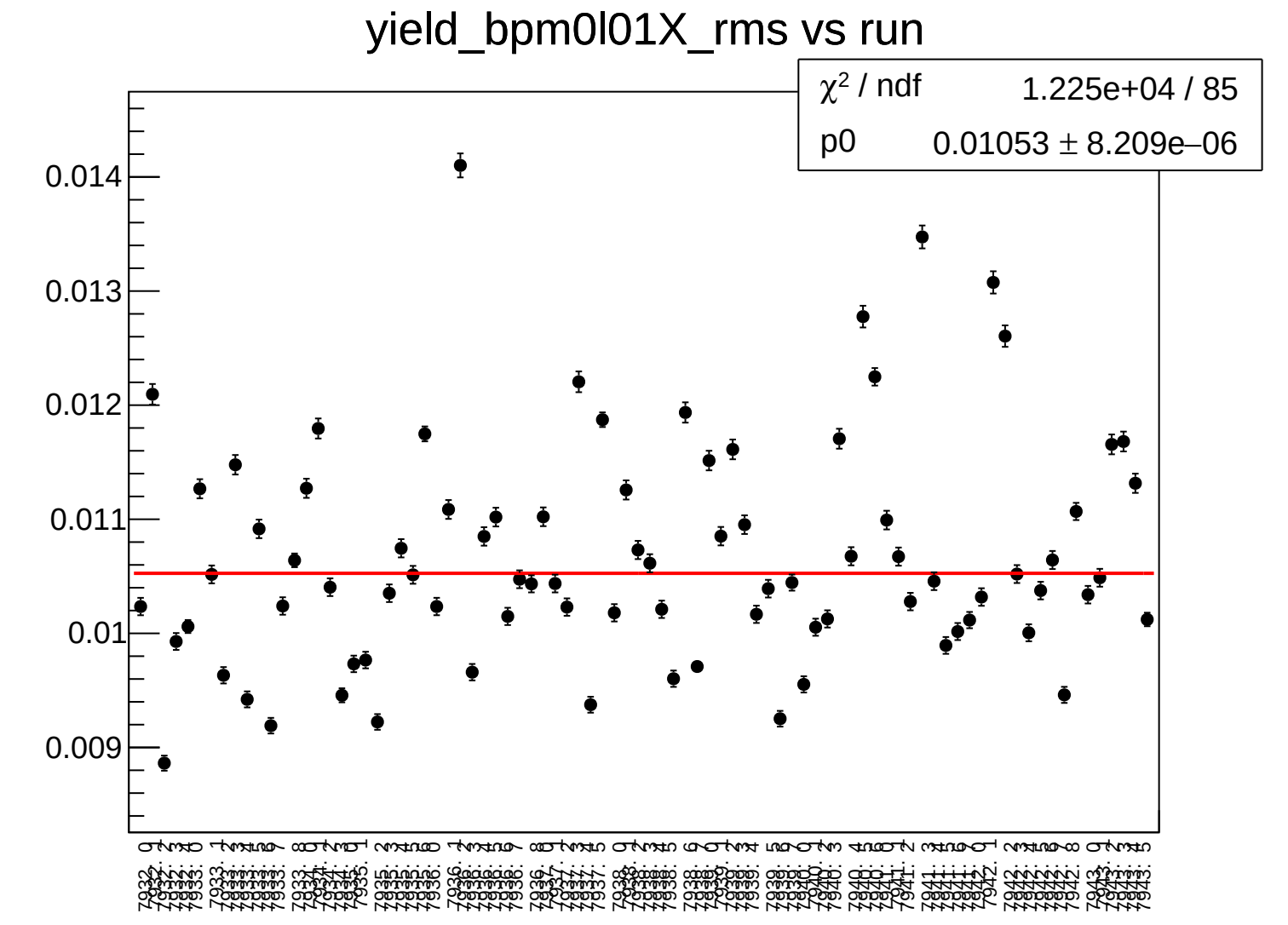

yield_bpm0i01aY_mean vs run
χ² / ndf 6.214e+05 / 85
p0 1.402 ± 6.209e−06
1.414
1.412
1.41
1.408
1.406
1.404
1.402
1.4
1.398
1.396
1.394
pull
Entries 86
Mean 2423
Std Dev 2379
150
100
50
0
−50
−100
−150

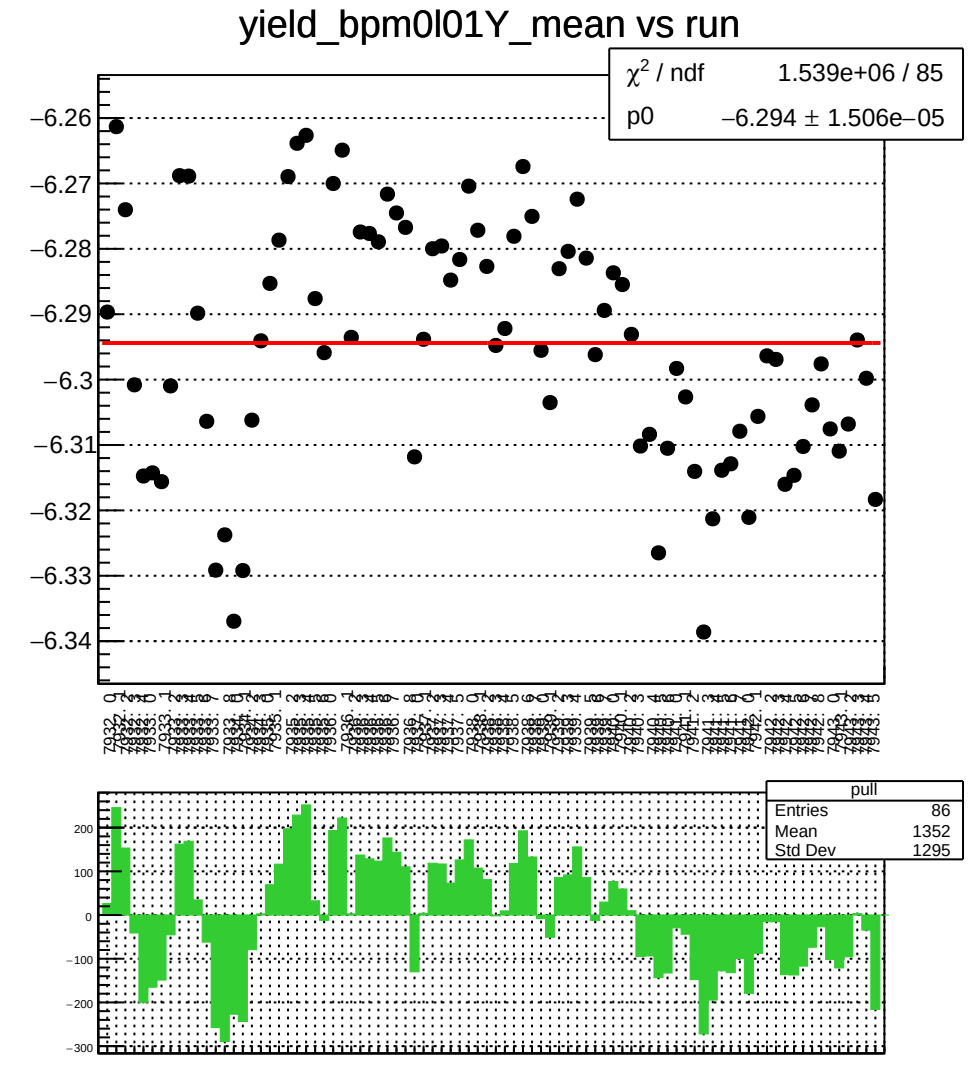

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

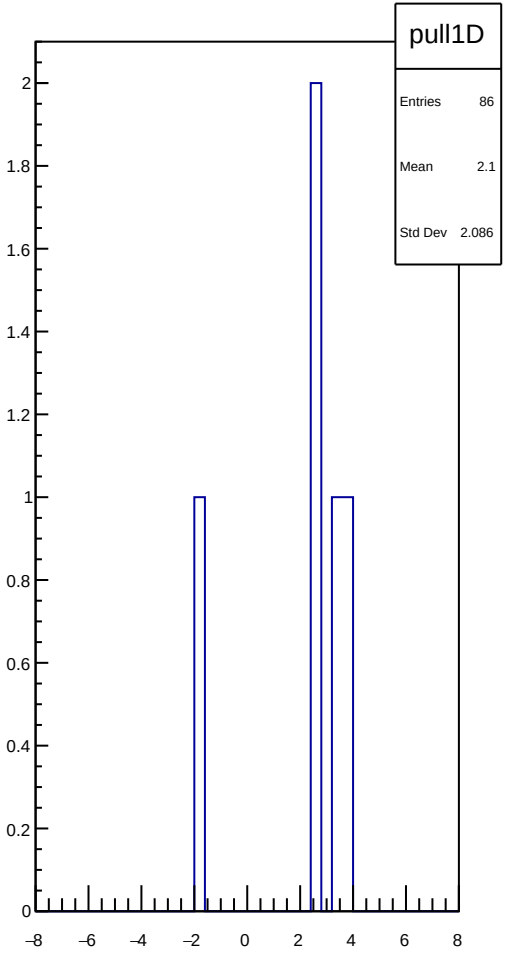

yield_bpm0i01aY_rms vs run
χ² / ndf 9394 / 85
p0 0.005635 ± 4.391e−06
0.0085
0.008
0.0075
0.007
0.0065
0.006
0.0055
0.005

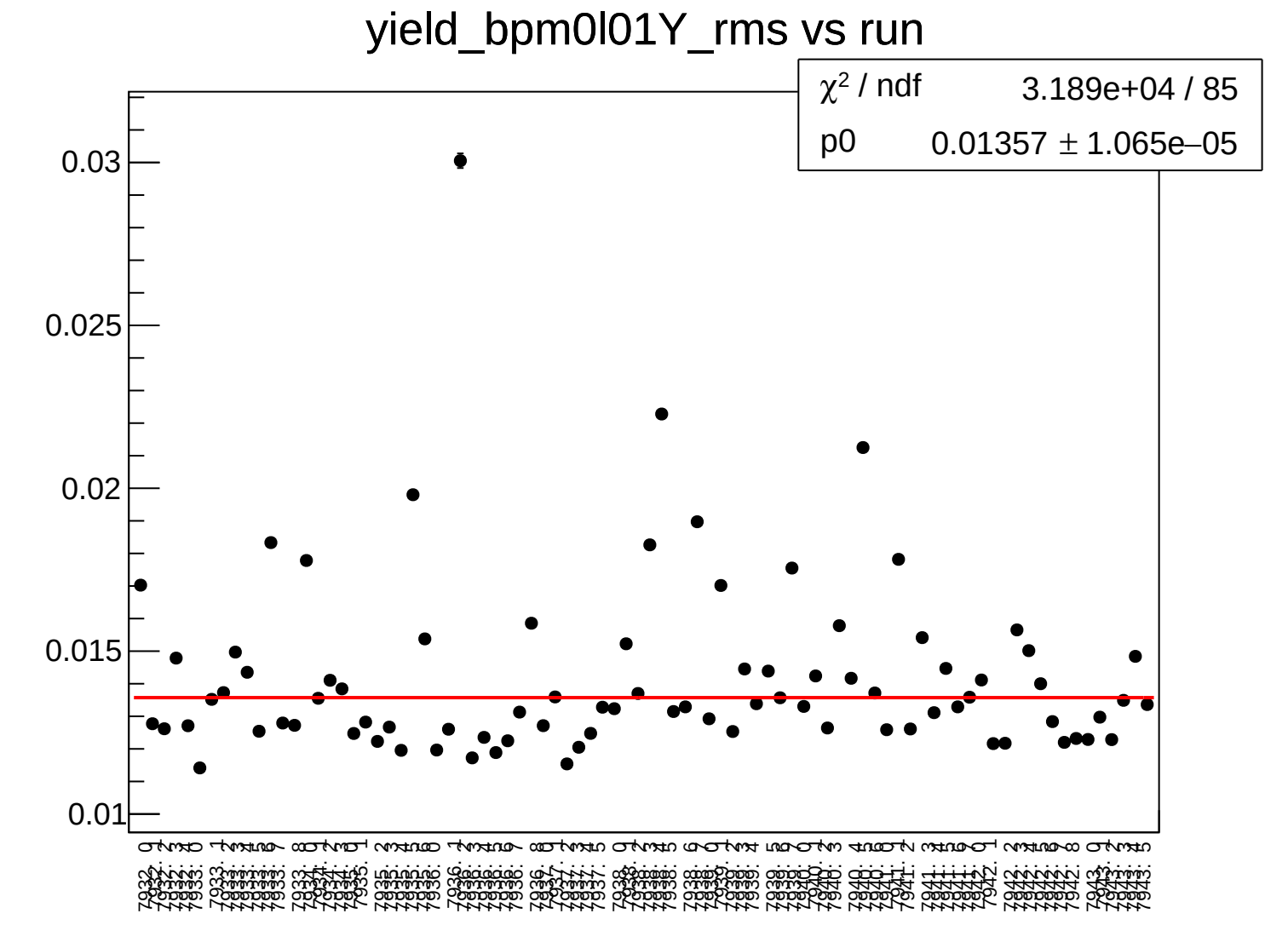

yield_bpm0l01X_mean vs run
χ² / ndf 1.676e+07 / 85
p0 0.6938 ± 1.161e−05
0.78
0.76
0.74
0.72
0.7
0.68
0.66
0.64
pull
Entries 86
Mean 1038
Std Dev 988
800
600
400
200
0
−200
−400
−600

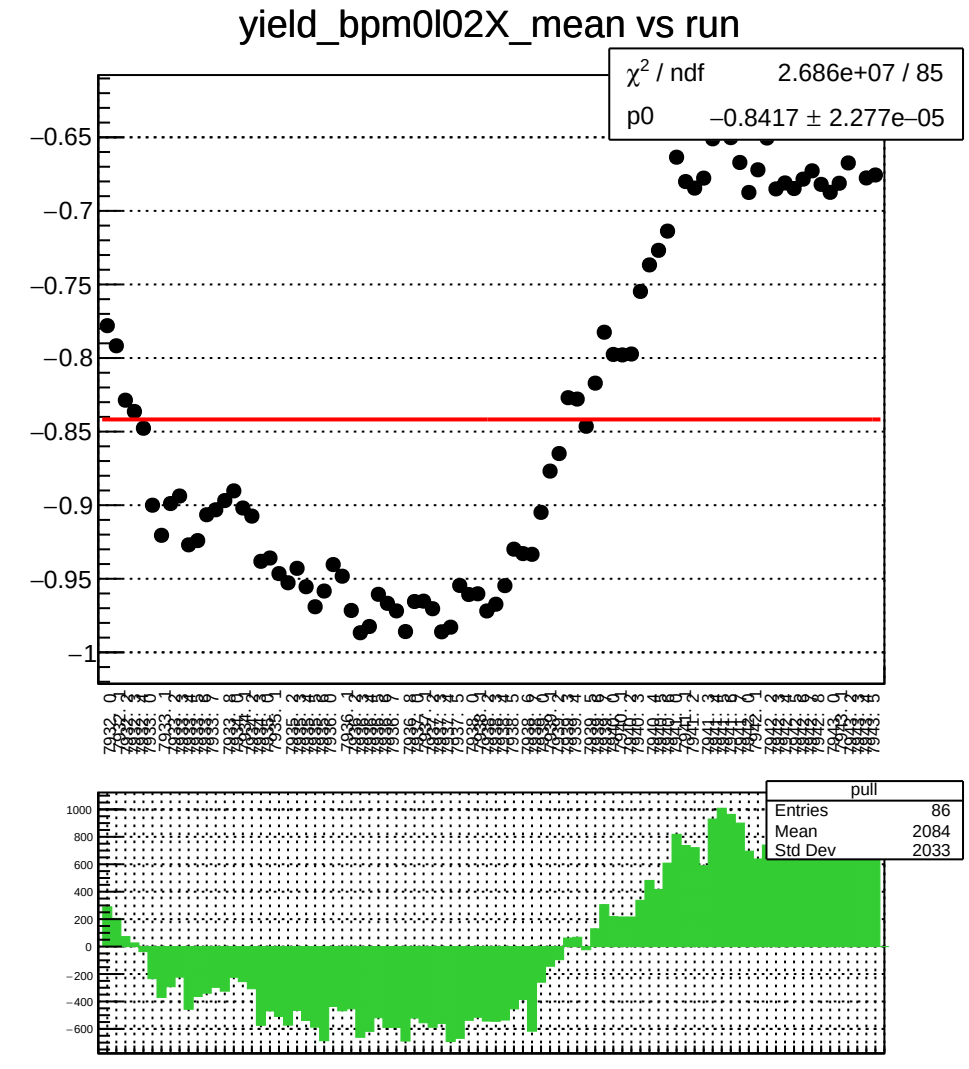

pull1D
Entries 86
Mean −4.618
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

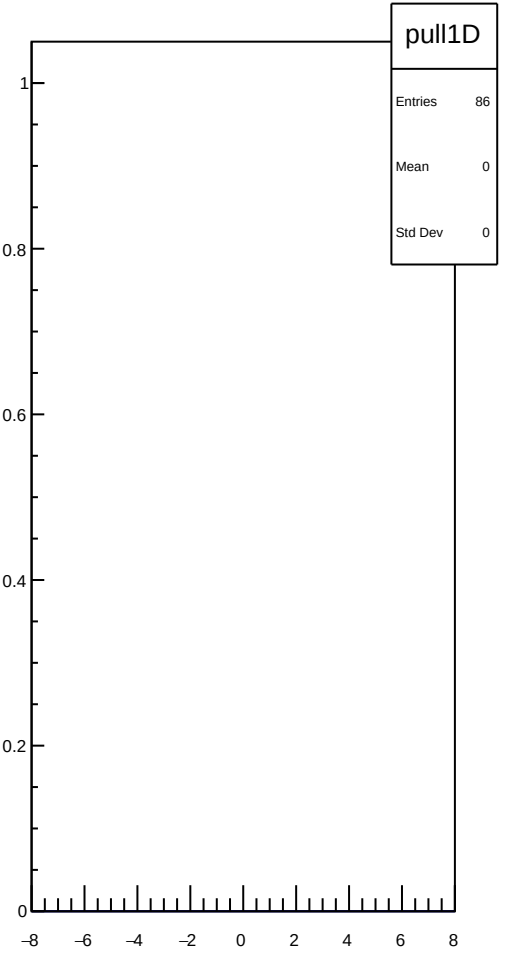

yield_bpm0l01X_rms vs run
χ² / ndf 1.225e+04 / 85
p0 0.01053 ± 8.209e–06
0.014
0.013
0.012
0.011
0.01
0.009

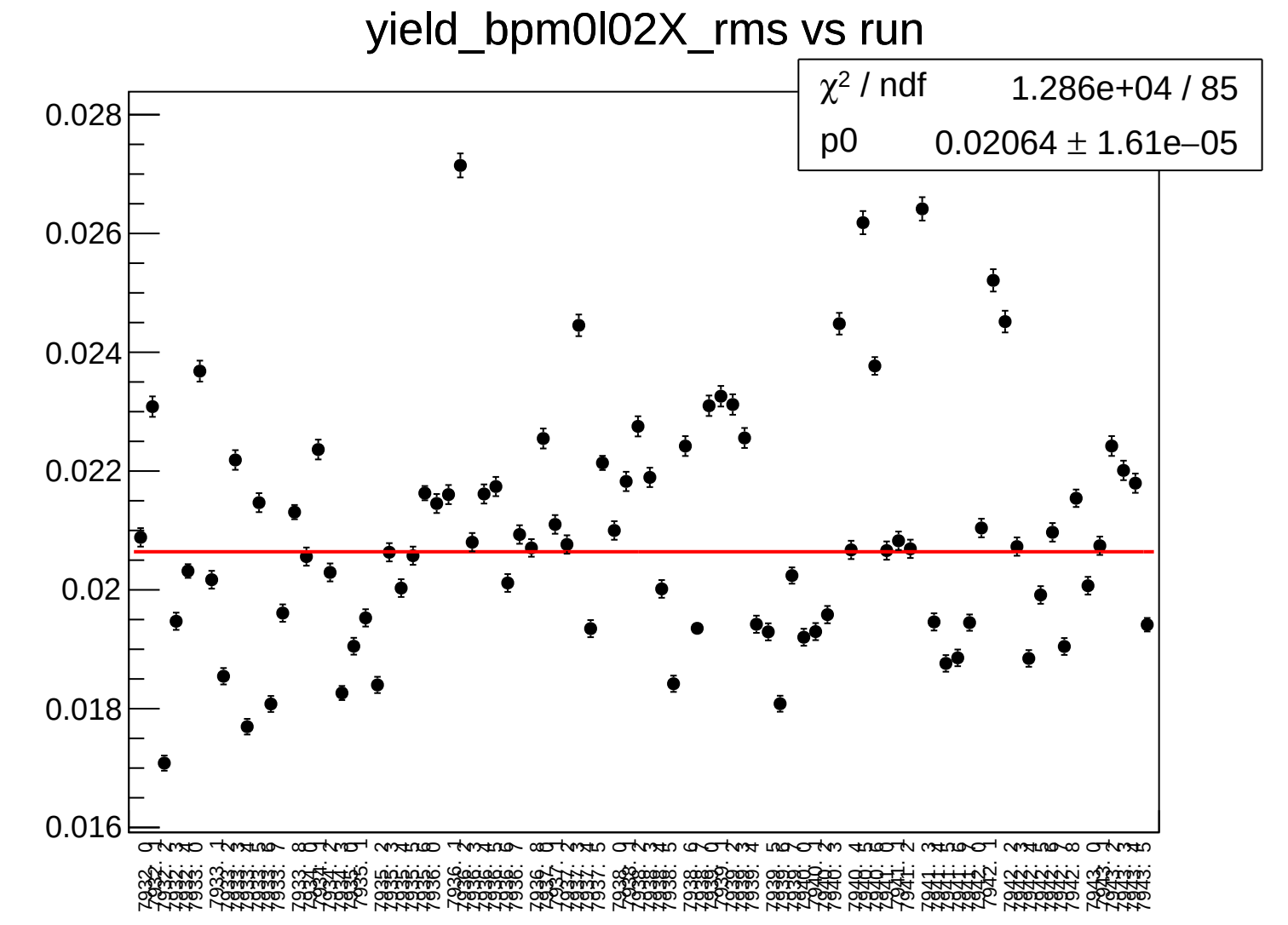

yield_bpm0l01Y_mean vs run
χ² / ndf 1.539e+06 / 85
p0 −6.294 ± 1.506e−05
−6.26
−6.27
−6.28
−6.29
−6.3
−6.31
−6.32
−6.33
−6.34
pull
Entries 86
Mean 1352
Std Dev 1295
200
100
0
−100
−200
−300

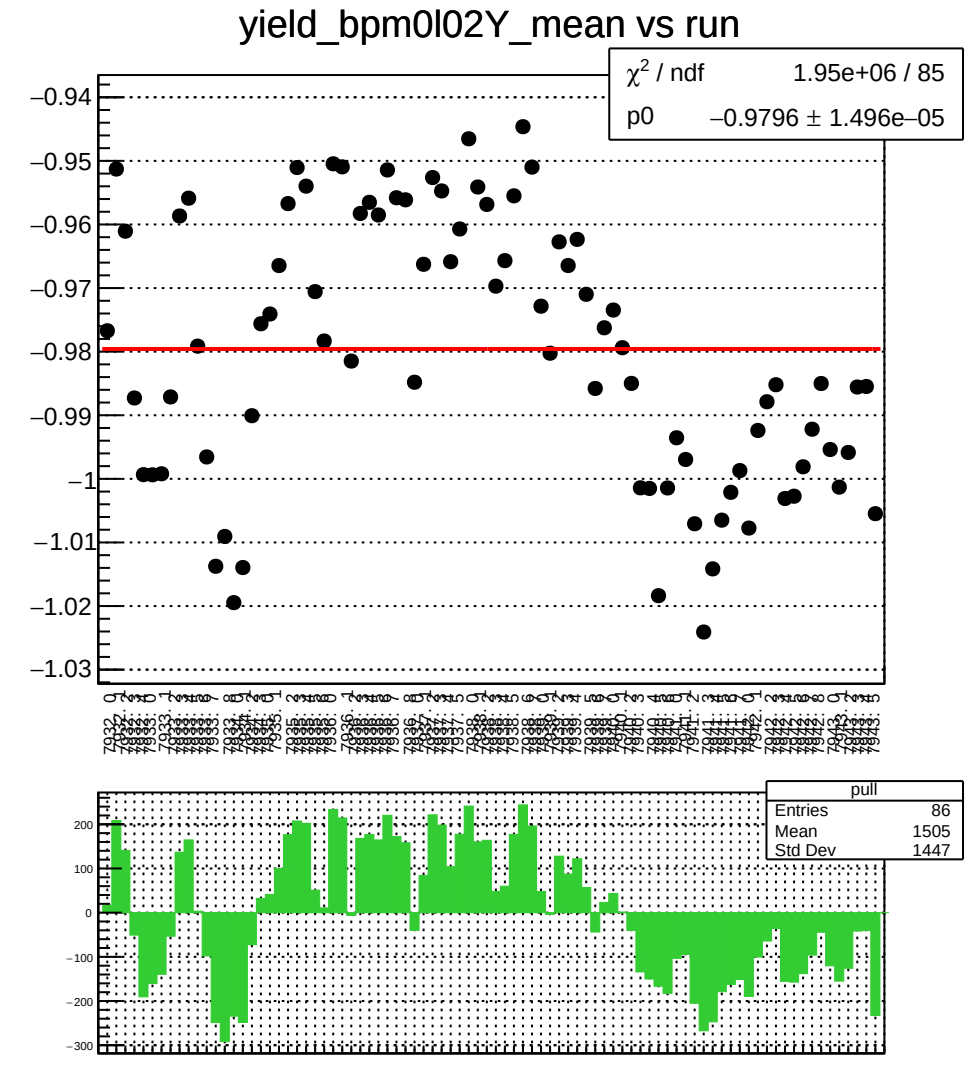

pull1D
Entries 86
Mean 2.1
Std Dev 2.086
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

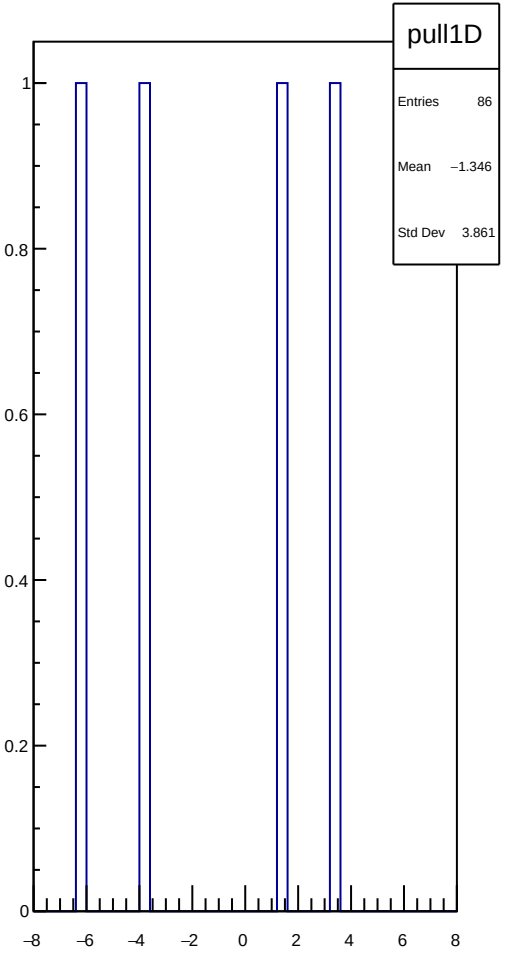

yield_bpm0l01Y_rms vs run
χ² / ndf 3.189e+04 / 85
p0 0.01357 ± 1.065e−05
0.03
0.025
0.02
0.015
0.01

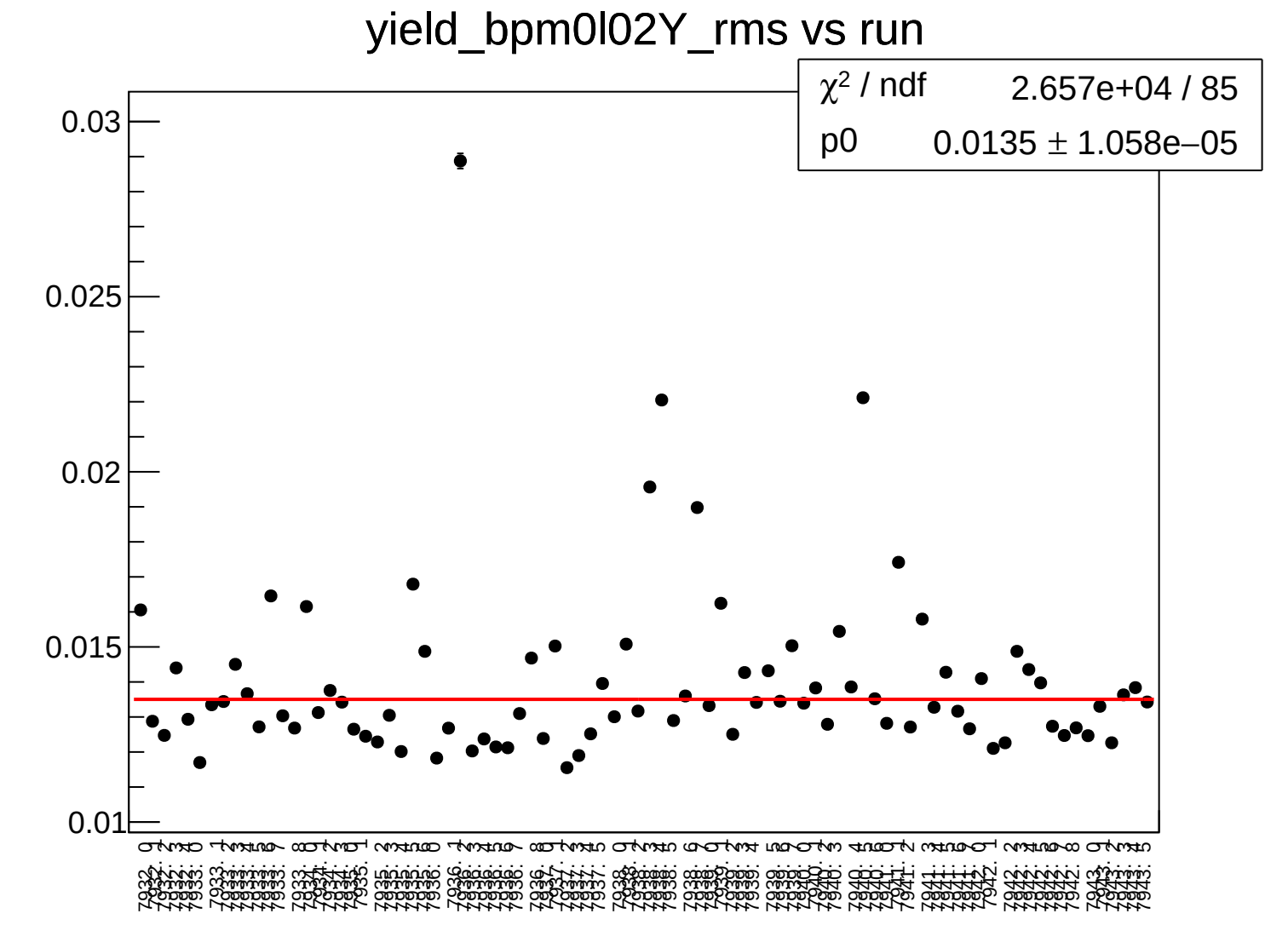

yield_bpm0l02X_mean vs run
χ² / ndf 2.686e+07 / 85
p0 −0.8417 ± 2.277e−05
−0.65
−0.7
−0.75
−0.8
−0.85
−0.9
−0.95
−1
pull
Entries 86
Mean 2084
Std Dev 2033
1000
800
600
400
200
0
−200
−400
−600

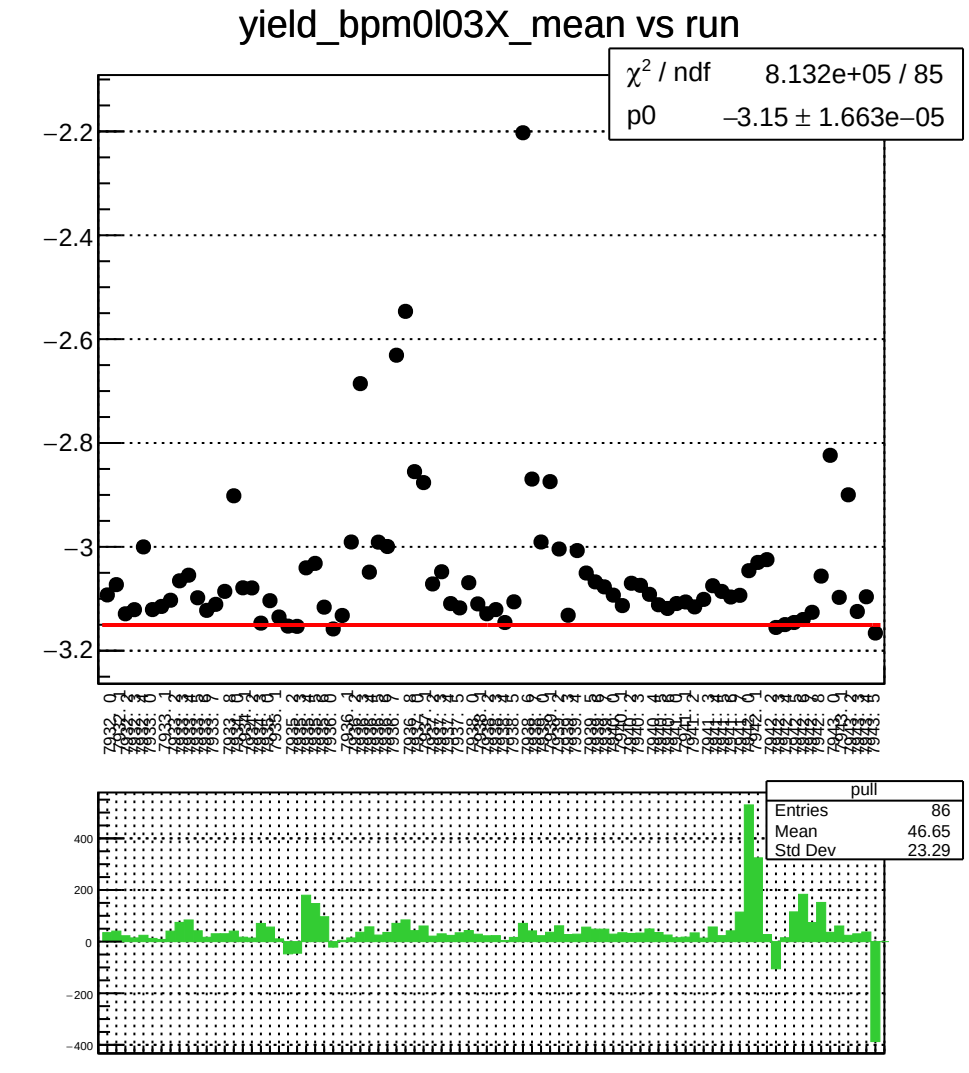

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

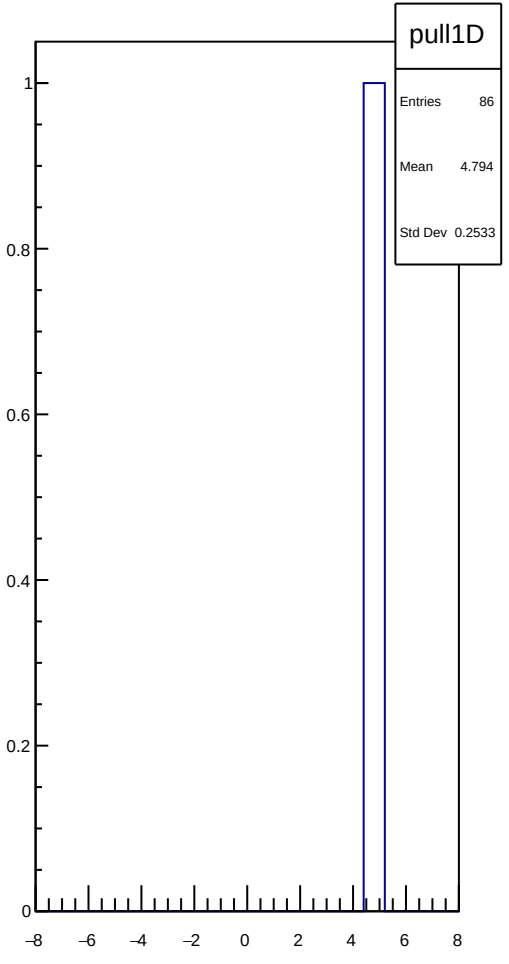

yield_bpm0l02X_rms vs run
χ² / ndf 1.286e+04 / 85
p0 0.02064 ± 1.61e−05
0.028
0.026
0.024
0.022
0.02
0.018
0.016

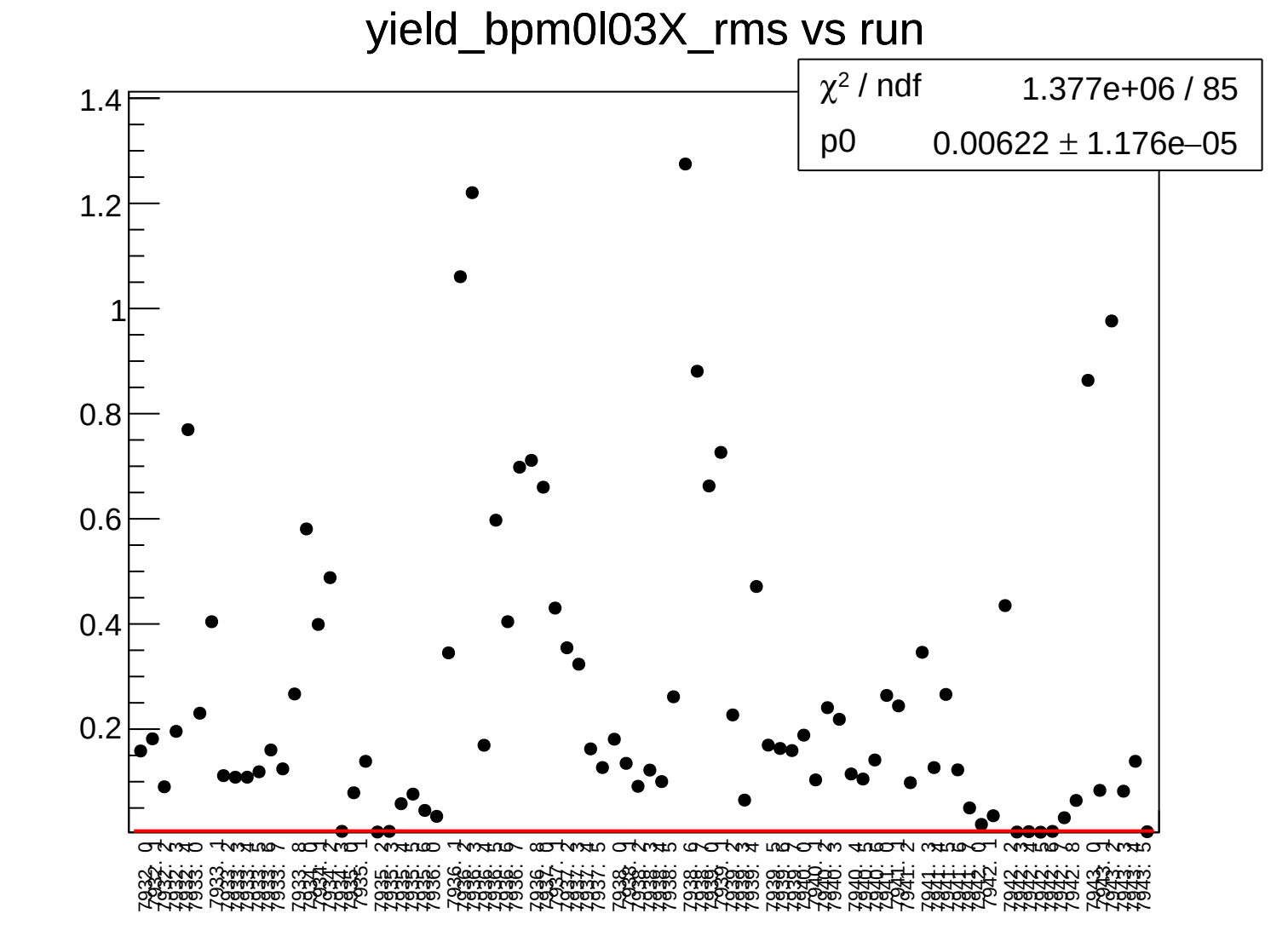

yield_bpm0l02Y_mean vs run
χ² / ndf 1.95e+06 / 85
p0 −0.9796 ± 1.496e−05
pull
Entries 86
Mean 1505
Std Dev 1447

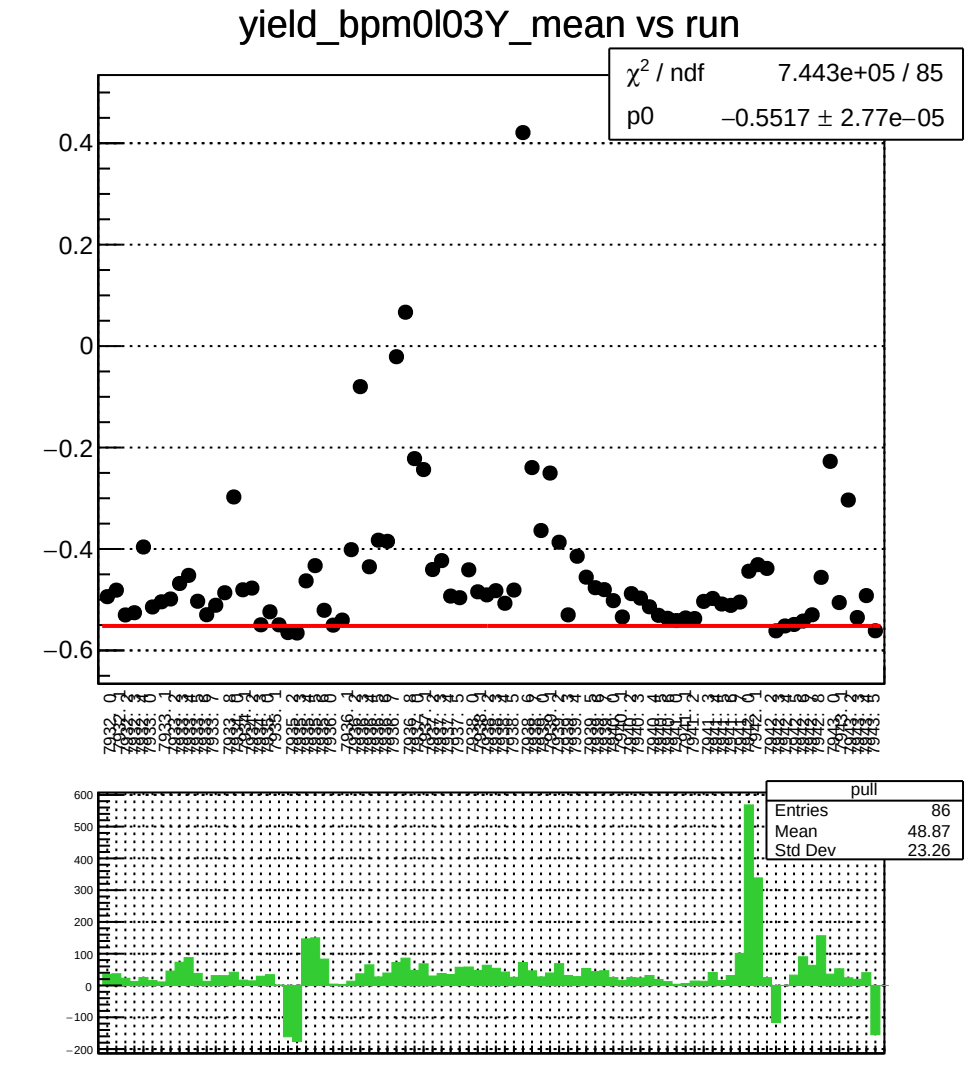

pull1D
Entries 86
Mean −1.346
Std Dev 3.861

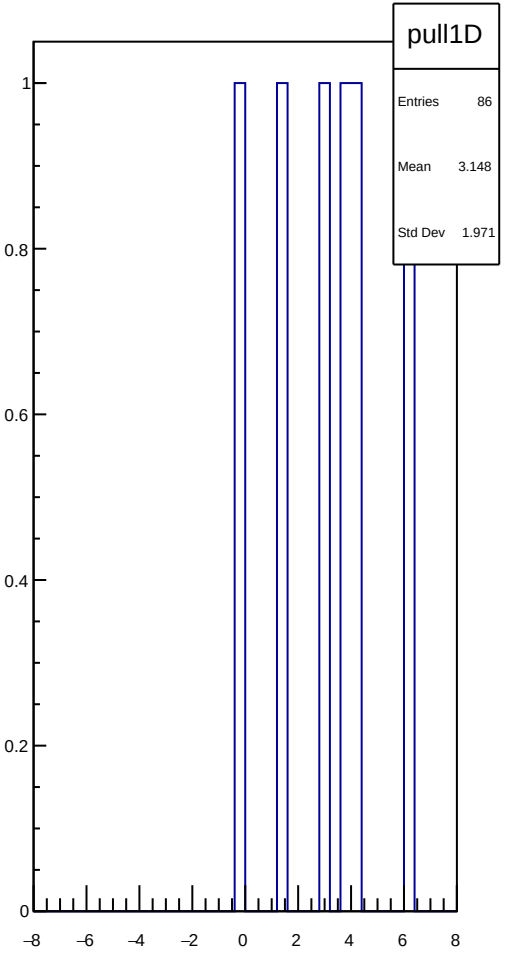

yield_bpm0l02Y_rms vs run
χ² / ndf 2.657e+04 / 85
p0 0.0135 ± 1.058e−05
0.03
0.025
0.02
0.015
0.01

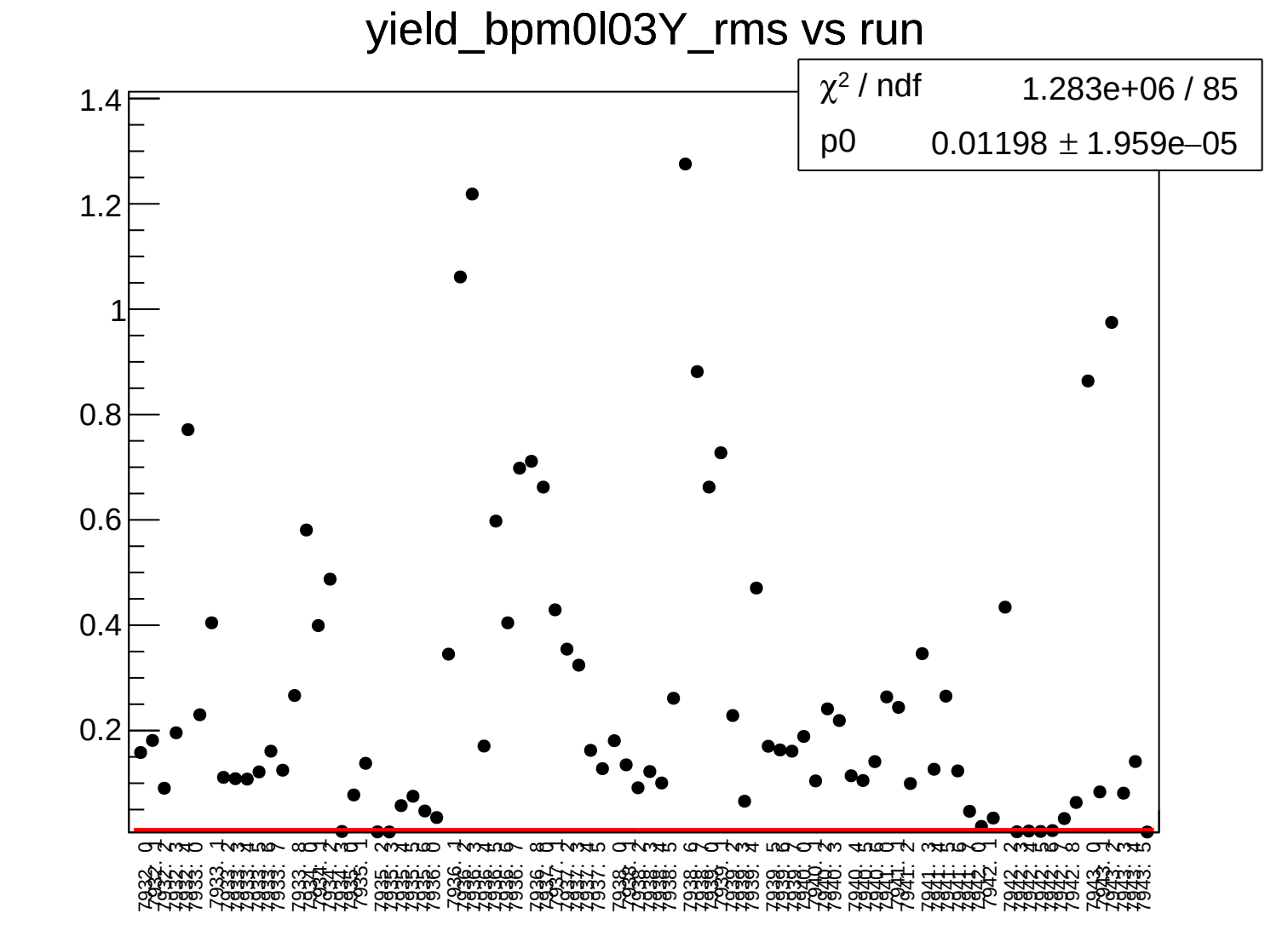

yield_bpm0l03X_mean vs run
χ² / ndf 8.132e+05 / 85
p0 −3.15 ± 1.663e−05
−2.2
−2.4
−2.6
−2.8
−3
−3.2
pull
Entries 86
Mean 46.65
Std Dev 23.29
400
200
0
−200
−400

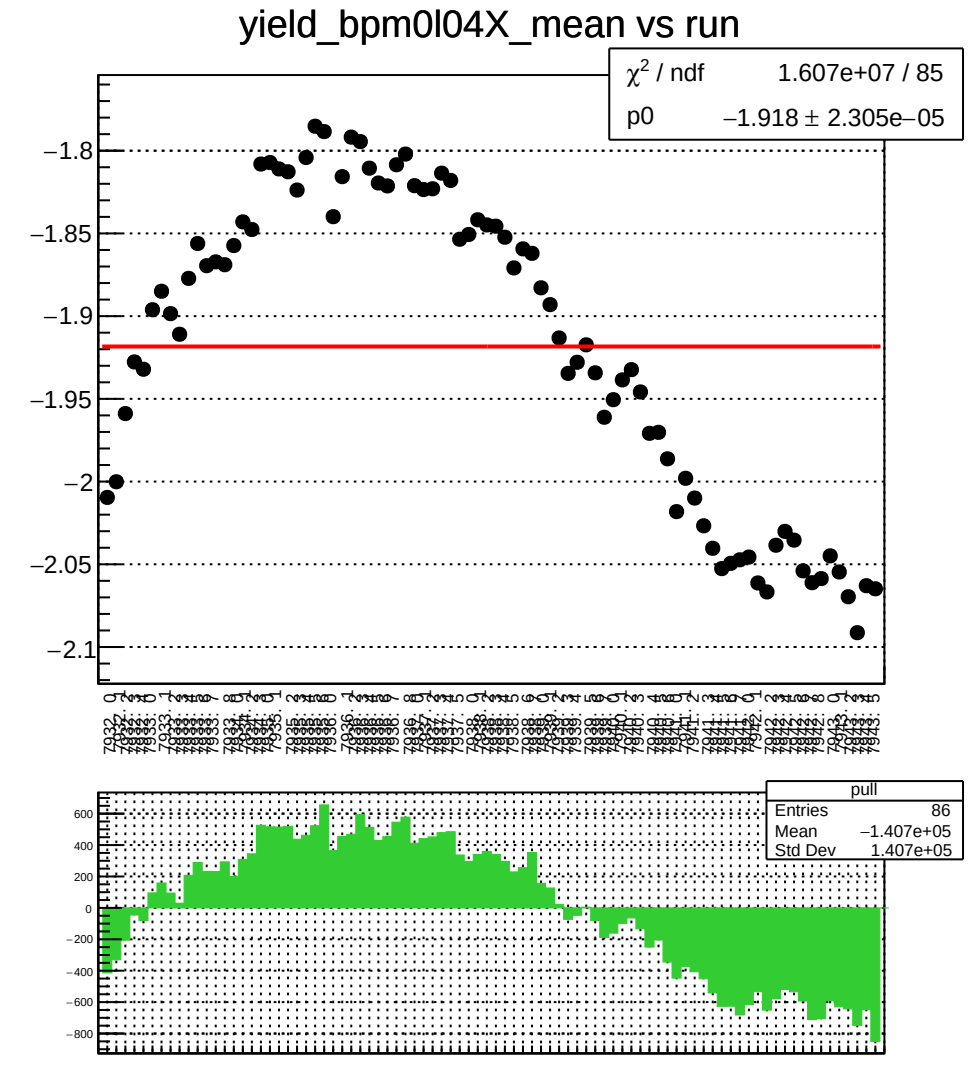

pull1D
Entries 86
Mean 4.794
Std Dev 0.2533
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

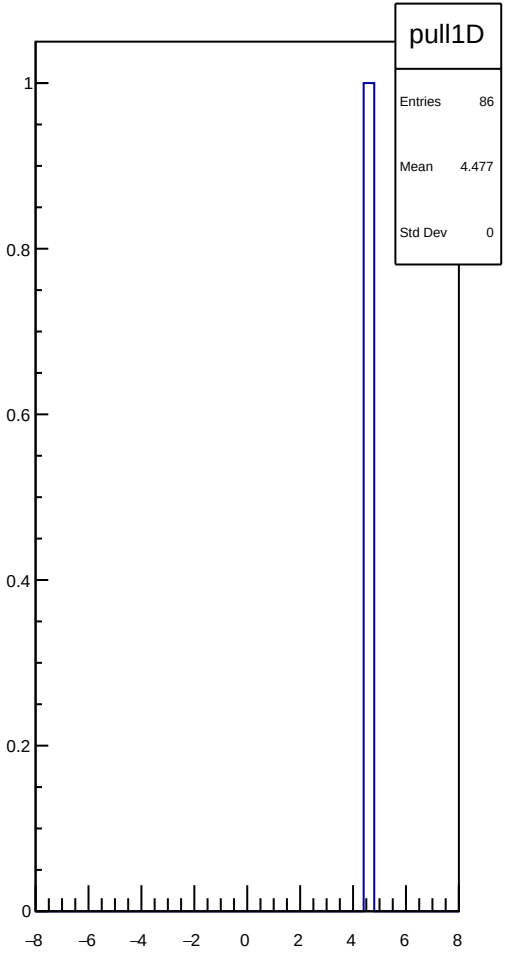

yield_bpm0l03X_rms vs run
χ² / ndf 1.377e+06 / 85
p0 0.00622 ± 1.176e–05
1.4
1.2
1
0.8
0.6
0.4
0.2

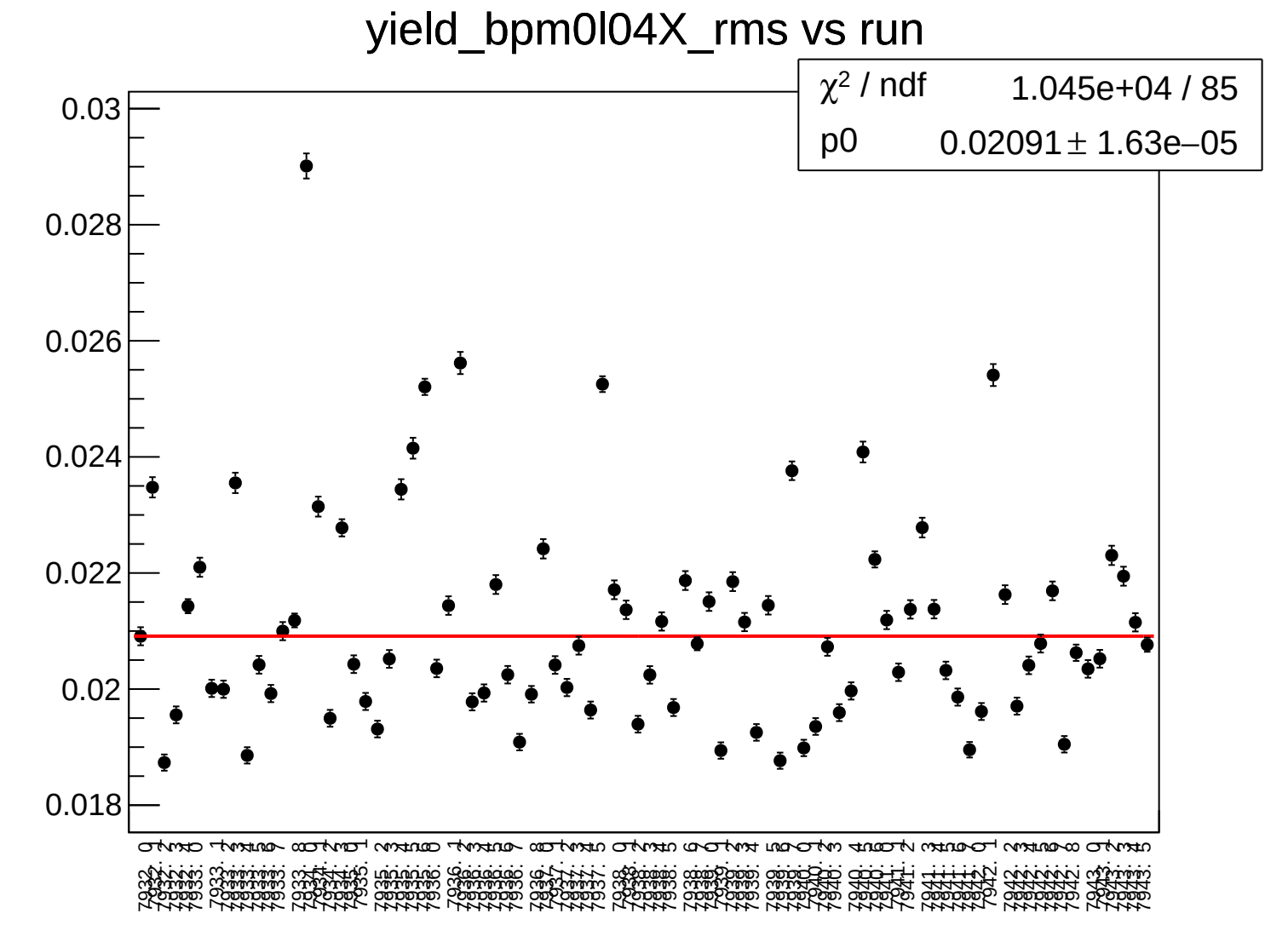

yield_bpm0l03Y_mean vs run
χ² / ndf 7.443e+05 / 85
p0 −0.5517 ± 2.77e−05
pull
Entries 86
Mean 48.87
Std Dev 23.26

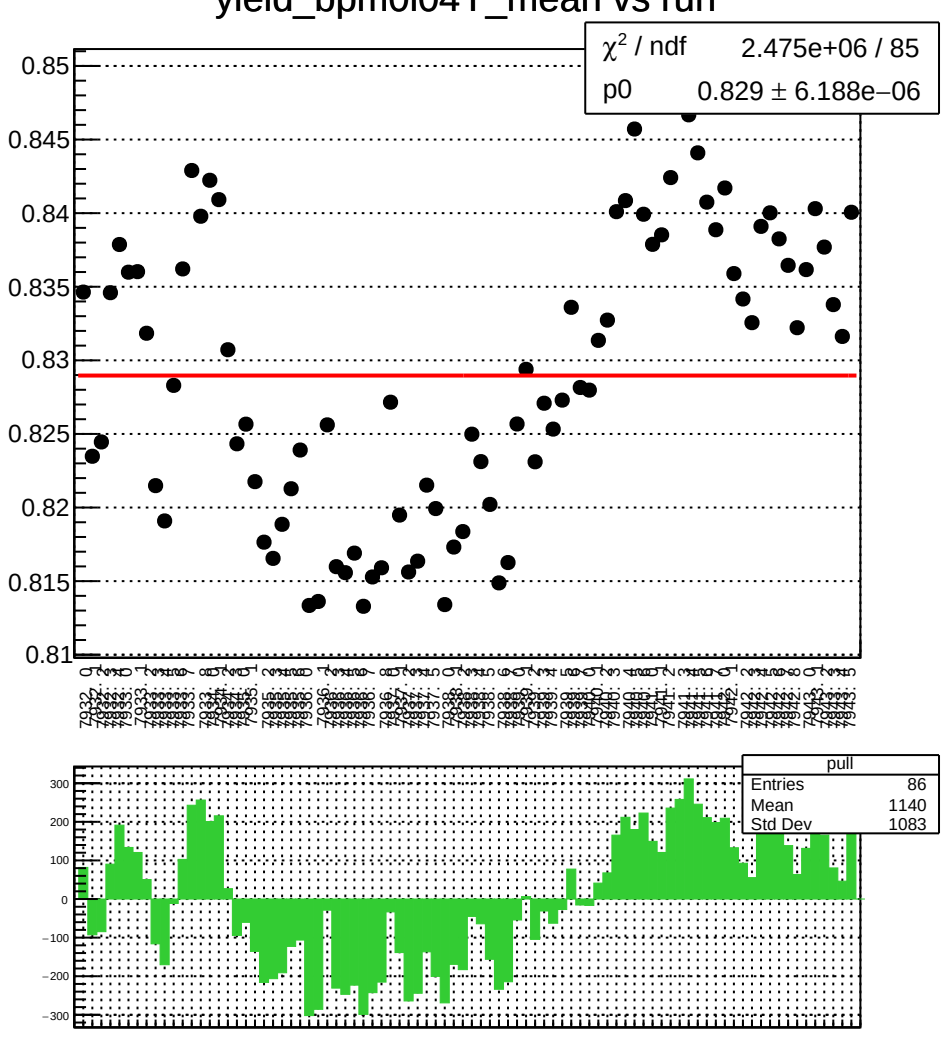

pull1D
Entries 86
Mean 3.148
Std Dev 1.971

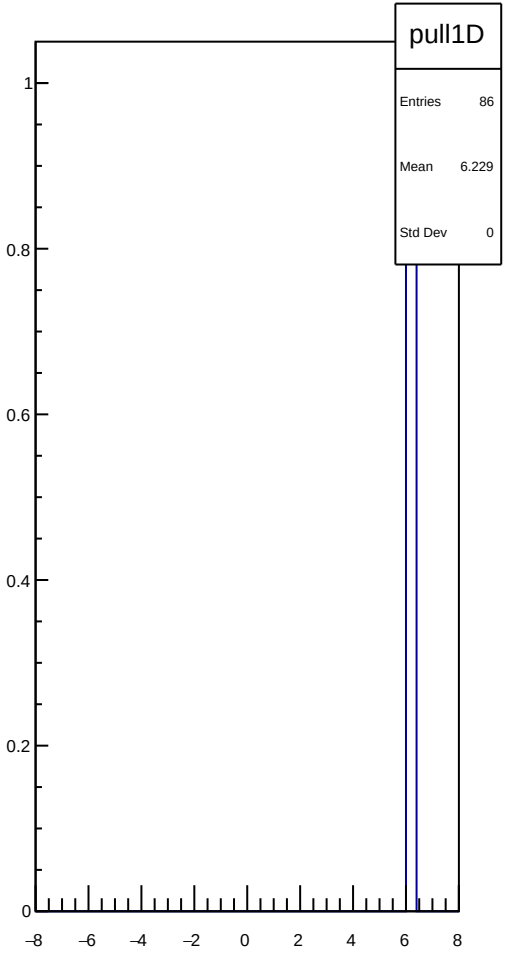

yield_bpm0l03Y_rms vs run
χ² / ndf 1.283e+06 / 85
p0 0.01198 ± 1.959e–05
1.4
1.2
1
0.8
0.6
0.4
0.2

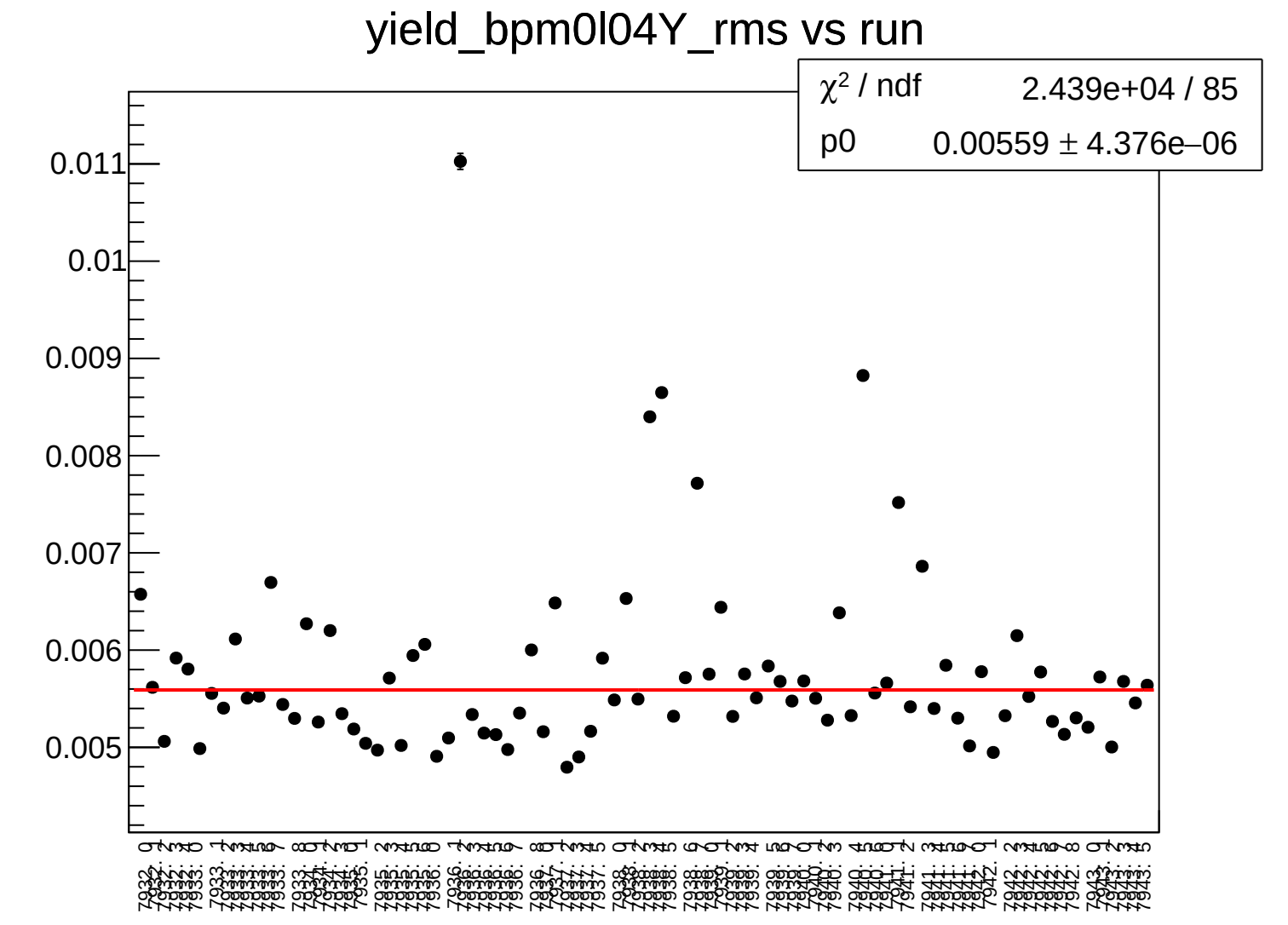

yield_bpm0l04X_mean vs run
χ² / ndf 1.607e+07 / 85
p0 −1.918 ± 2.305e−05
−1.8
−1.85
−1.9
−1.95
−2
−2.05
−2.1
pull
Entries 86
Mean −1.407e+05
Std Dev 1.407e+05
600
400
200
0
−200
−400
−600
−800

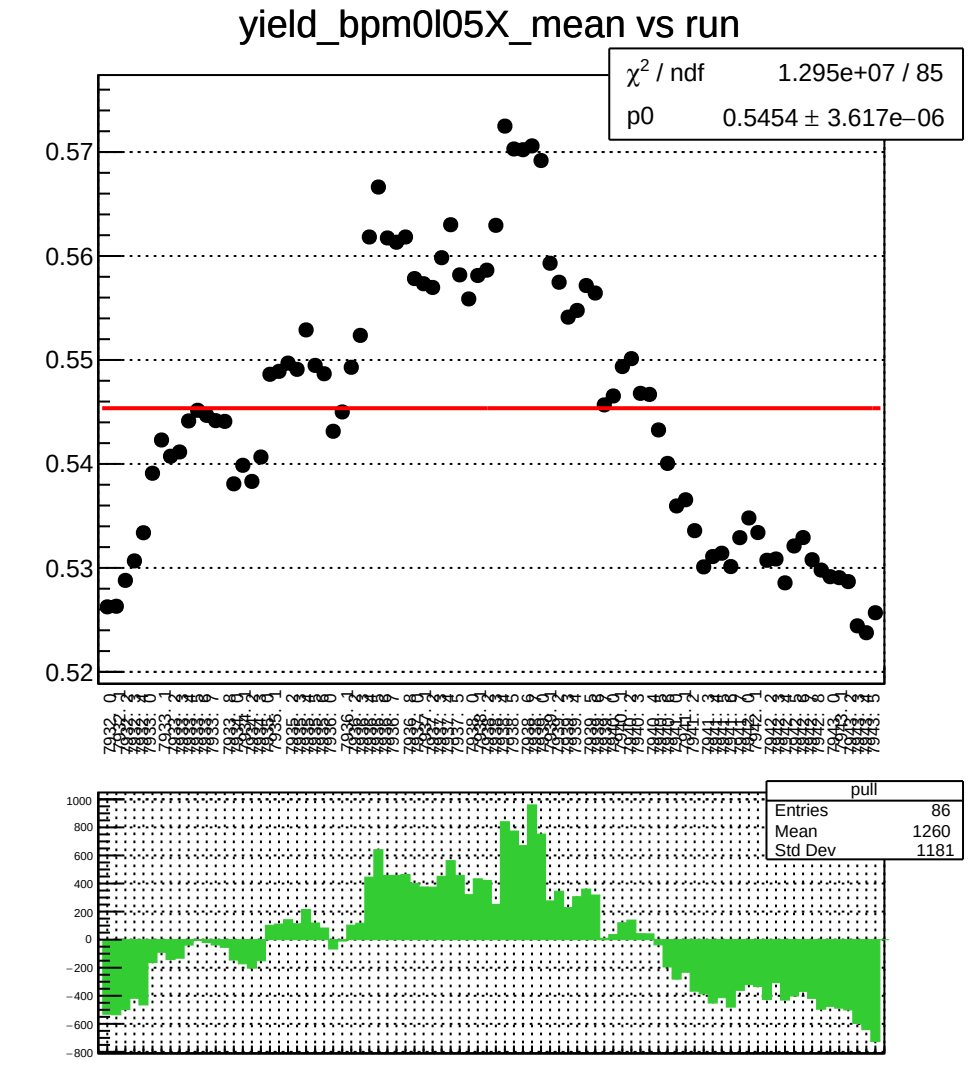

pull1D
Entries 86
Mean 4.477
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

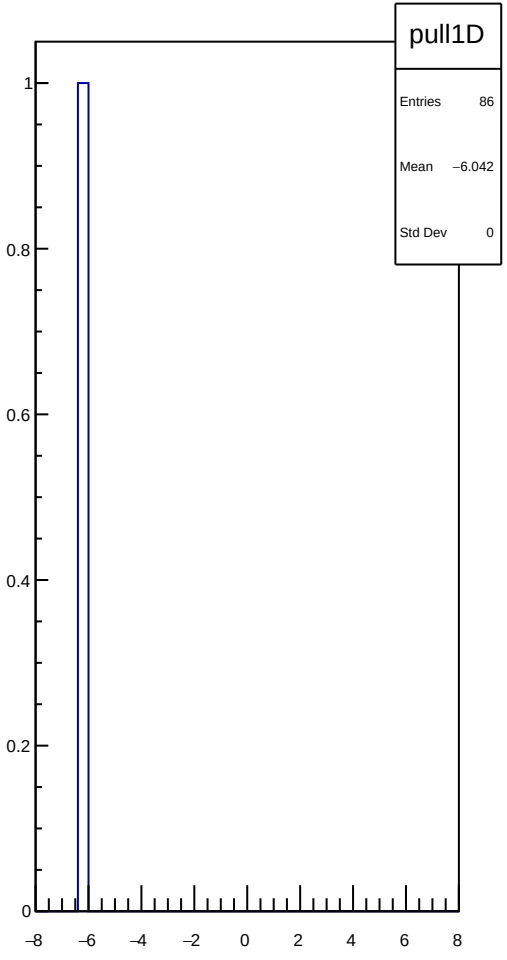

yield_bpm0l04X_rms vs run
χ² / ndf 1.045e+04 / 85
p0 0.02091 ± 1.63e−05
0.03
0.028
0.026
0.024
0.022
0.02
0.018

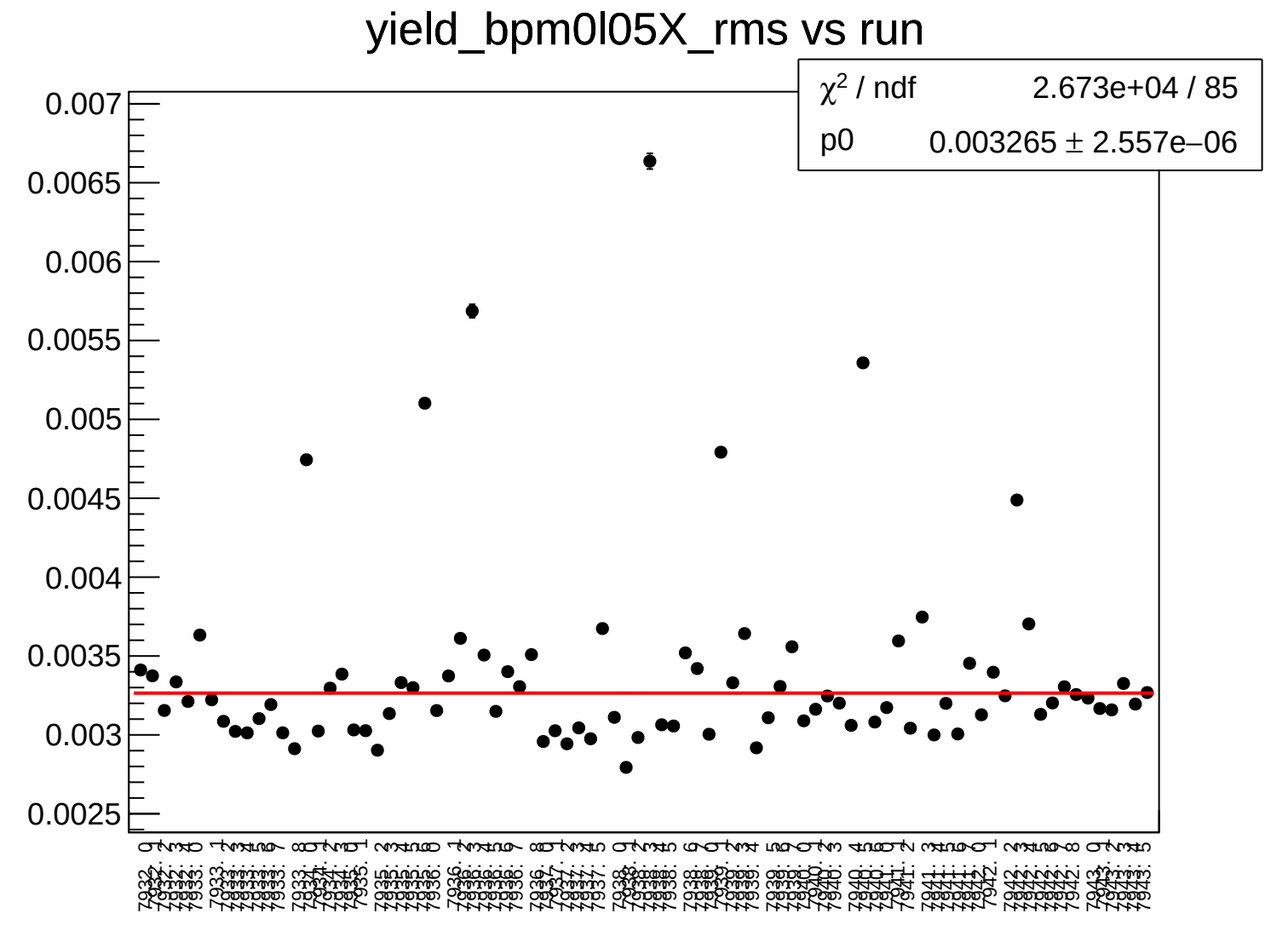

yield_bpm0l04Y_mean vs run
χ² / ndf 2.475e+06 / 85
p0 0.829 ± 6.188e−06
pull
Entries 86
Mean 1140
Std Dev 1083

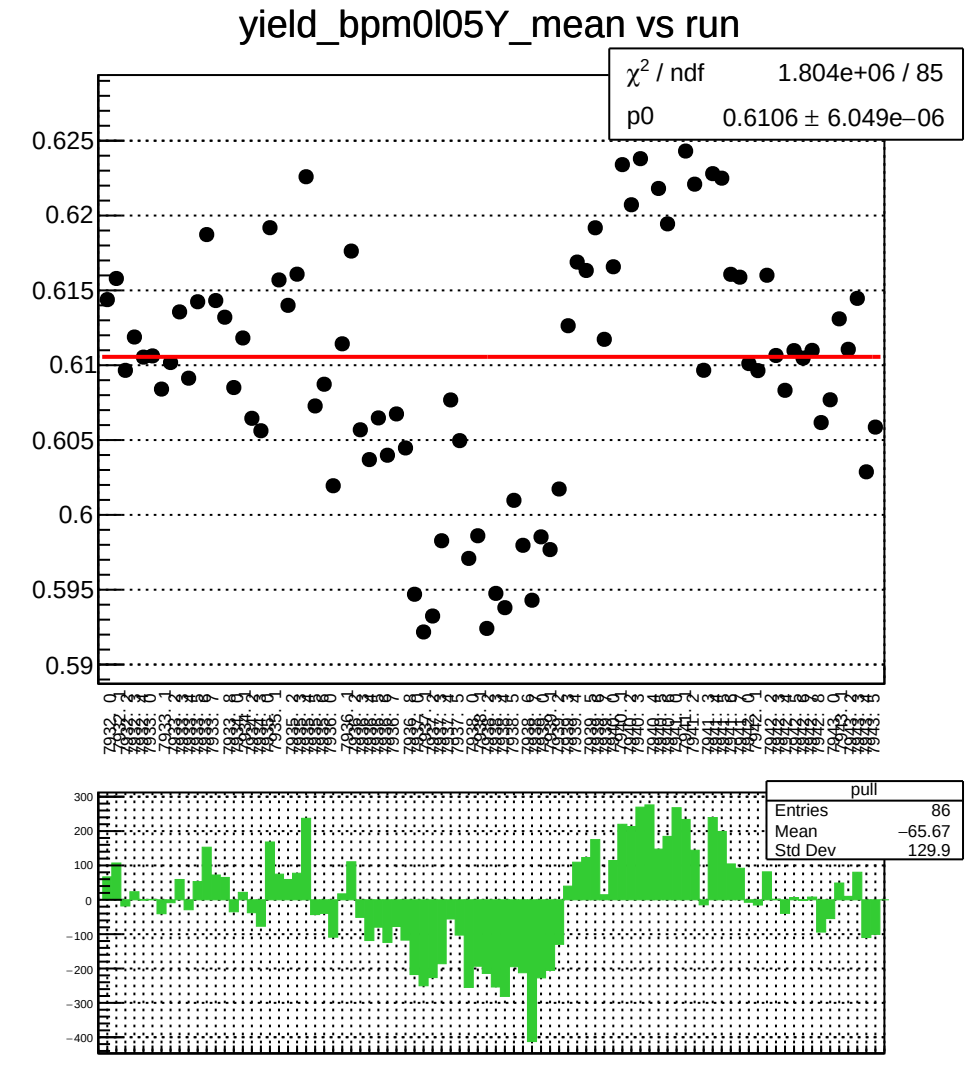

pull1D
Entries 86
Mean 6.229
Std Dev 0

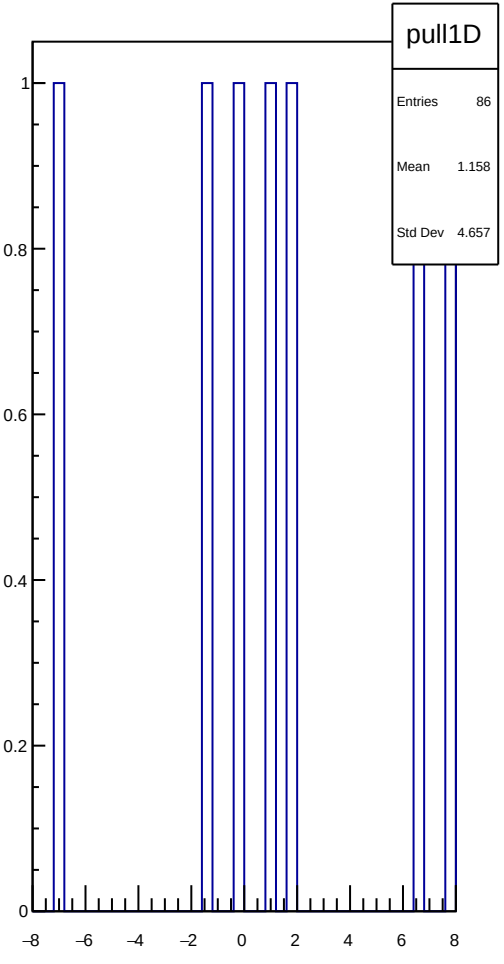

yield_bpm0l04Y_rms vs run
χ² / ndf 2.439e+04 / 85
p0 0.00559 ± 4.376e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005

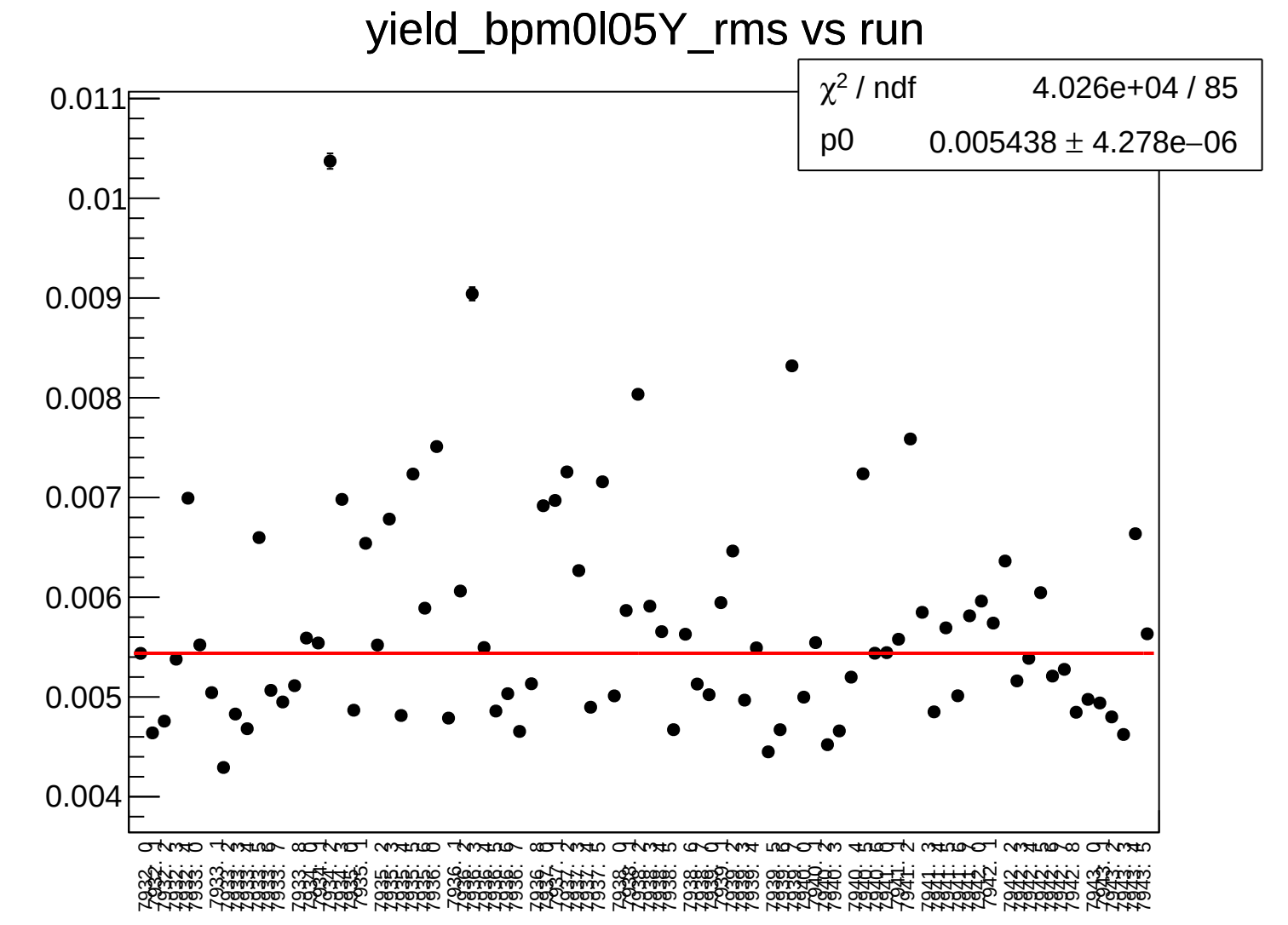

yield_bpm0l05X_mean vs run
χ² / ndf 1.295e+07 / 85
p0 0.5454 ± 3.617e−06
0.57
0.56
0.55
0.54
0.53
0.52
pull
Entries 86
Mean 1260
Std Dev 1181
1000
800
600
400
200
0
−200
−400
−600
−800

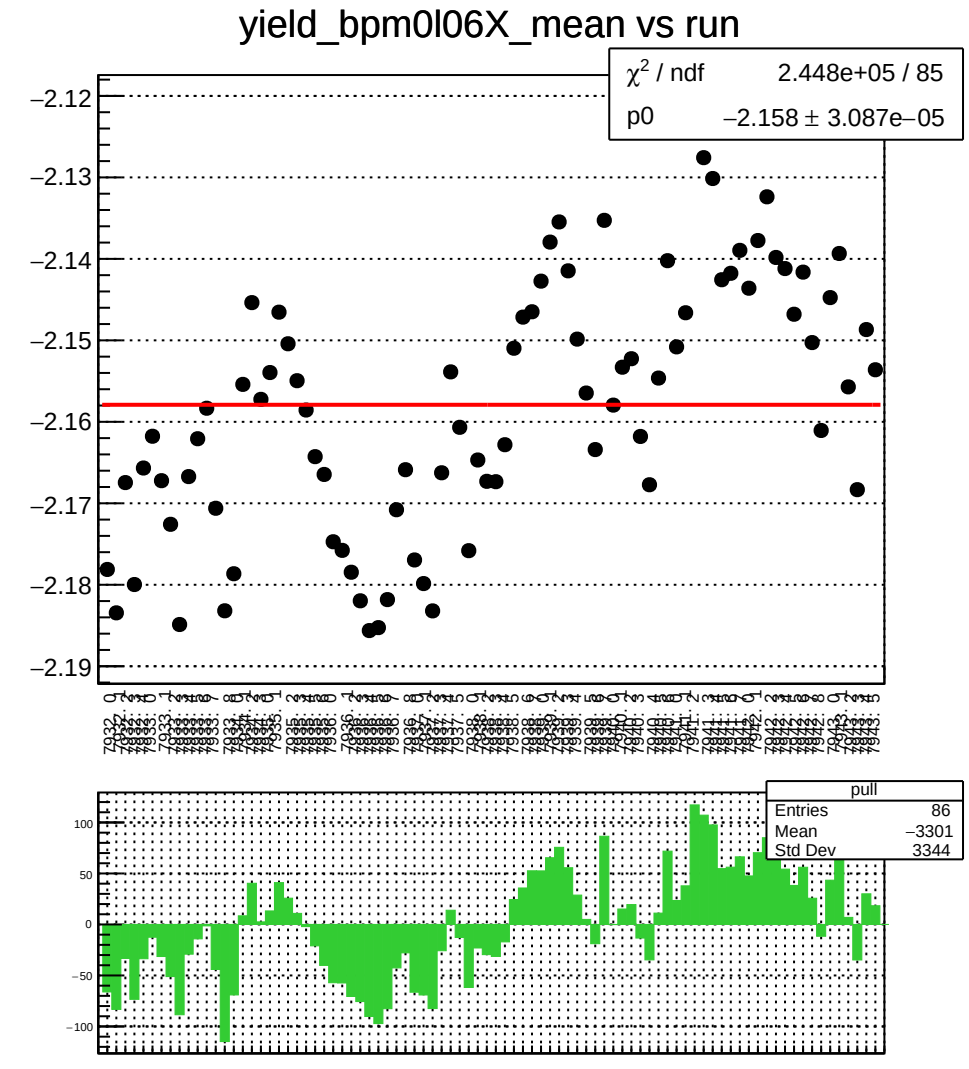

pull1D
Entries 86
Mean −6.042
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

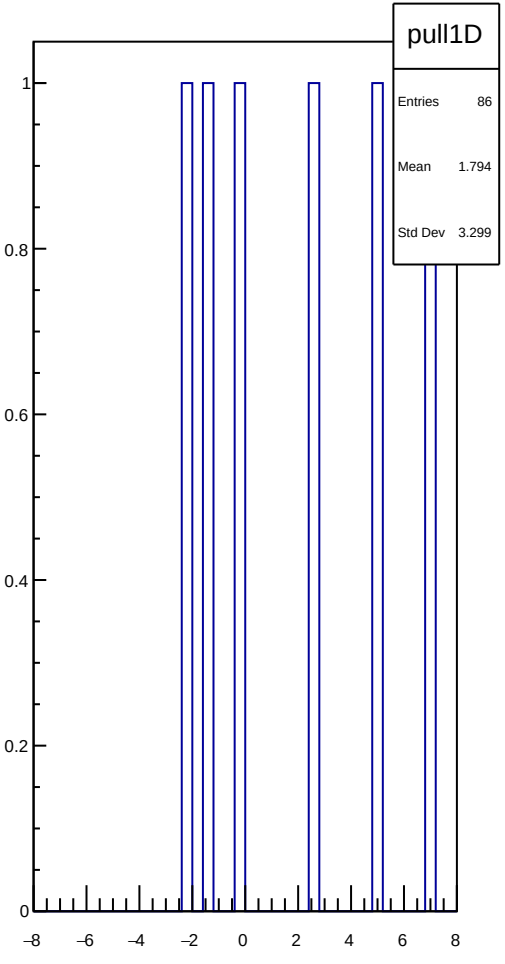

yield_bpm0l05X_rms vs run
χ² / ndf 2.673e+04 / 85
p0 0.003265 ± 2.557e−06
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025

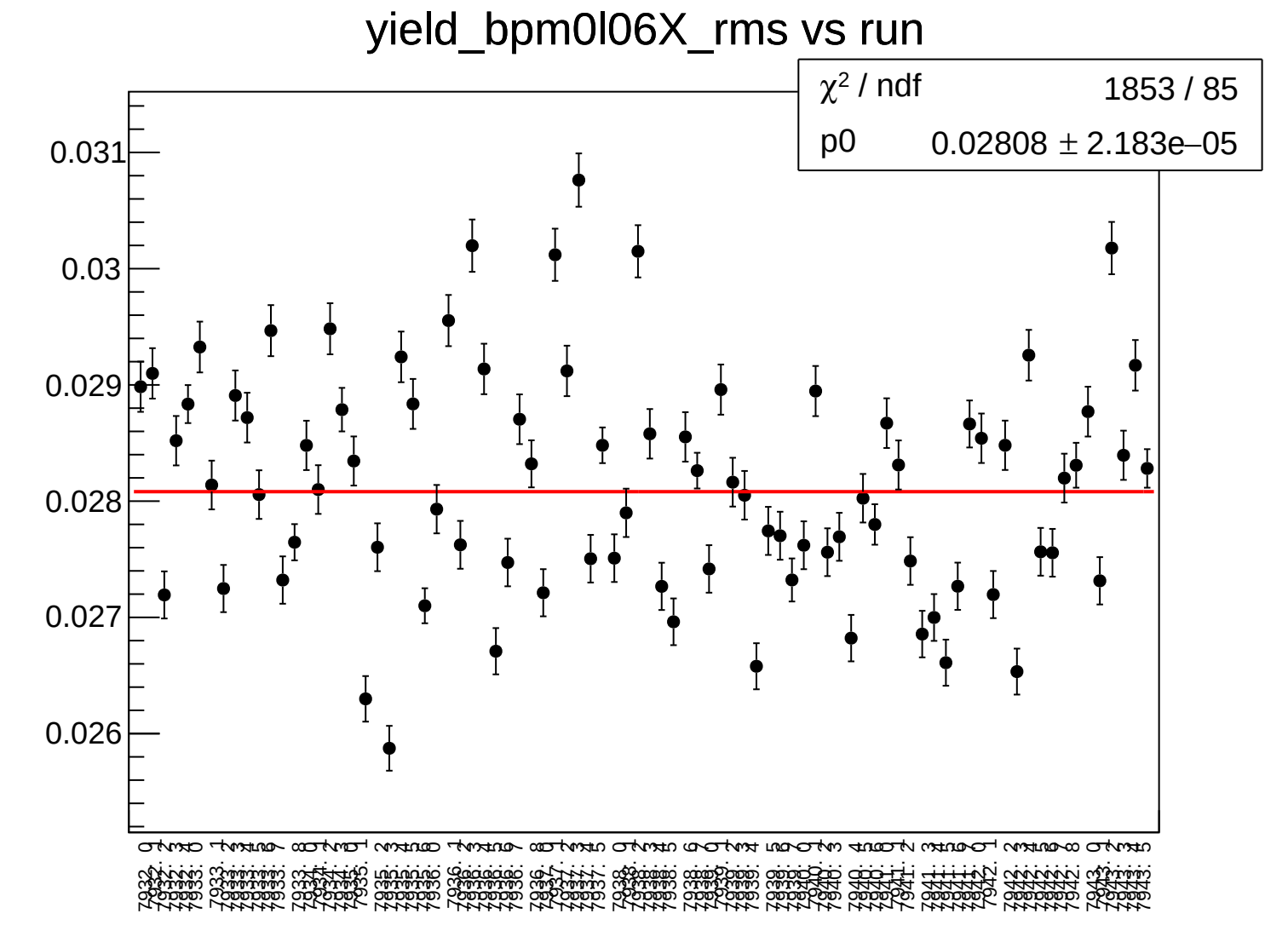

yield_bpm0l05Y_mean vs run
χ² / ndf 1.804e+06 / 85
p0 0.6106 ± 6.049e−06
0.625
0.62
0.615
0.61
0.605
0.6
0.595
0.59
pull
Entries 86
Mean −65.67
Std Dev 129.9
300
200
100
0
−100
−200
−300
−400

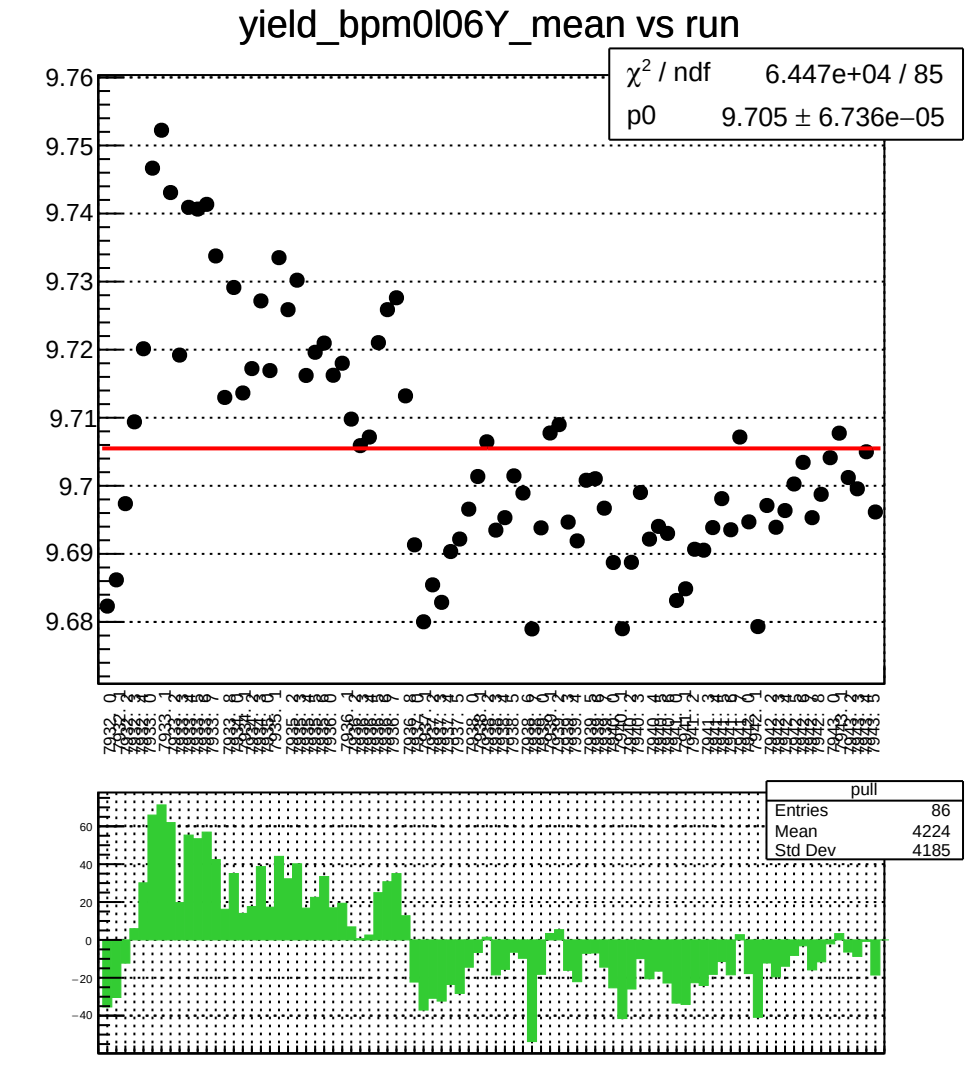

pull1D
Entries 86
Mean 1.158
Std Dev 4.657
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

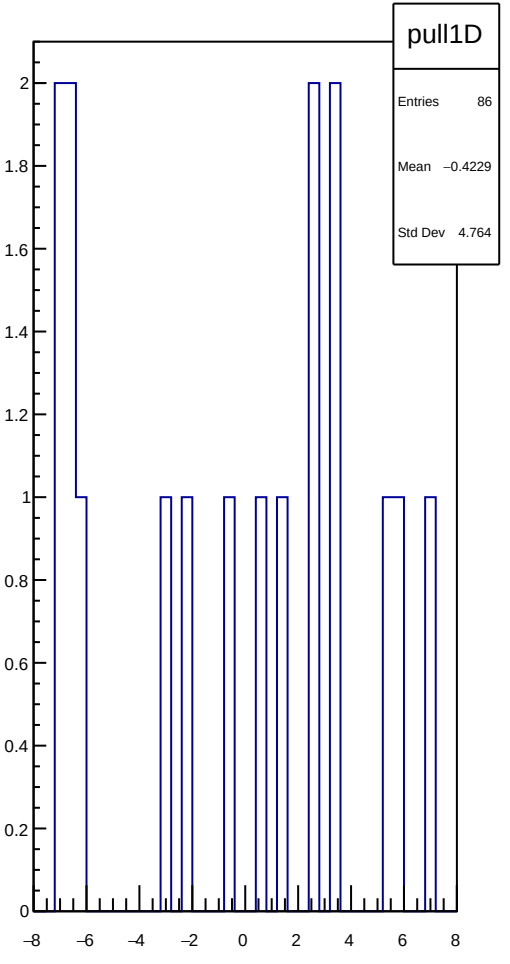

yield_bpm0l05Y_rms vs run
χ² / ndf 4.026e+04 / 85
p0 0.005438 ± 4.278e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

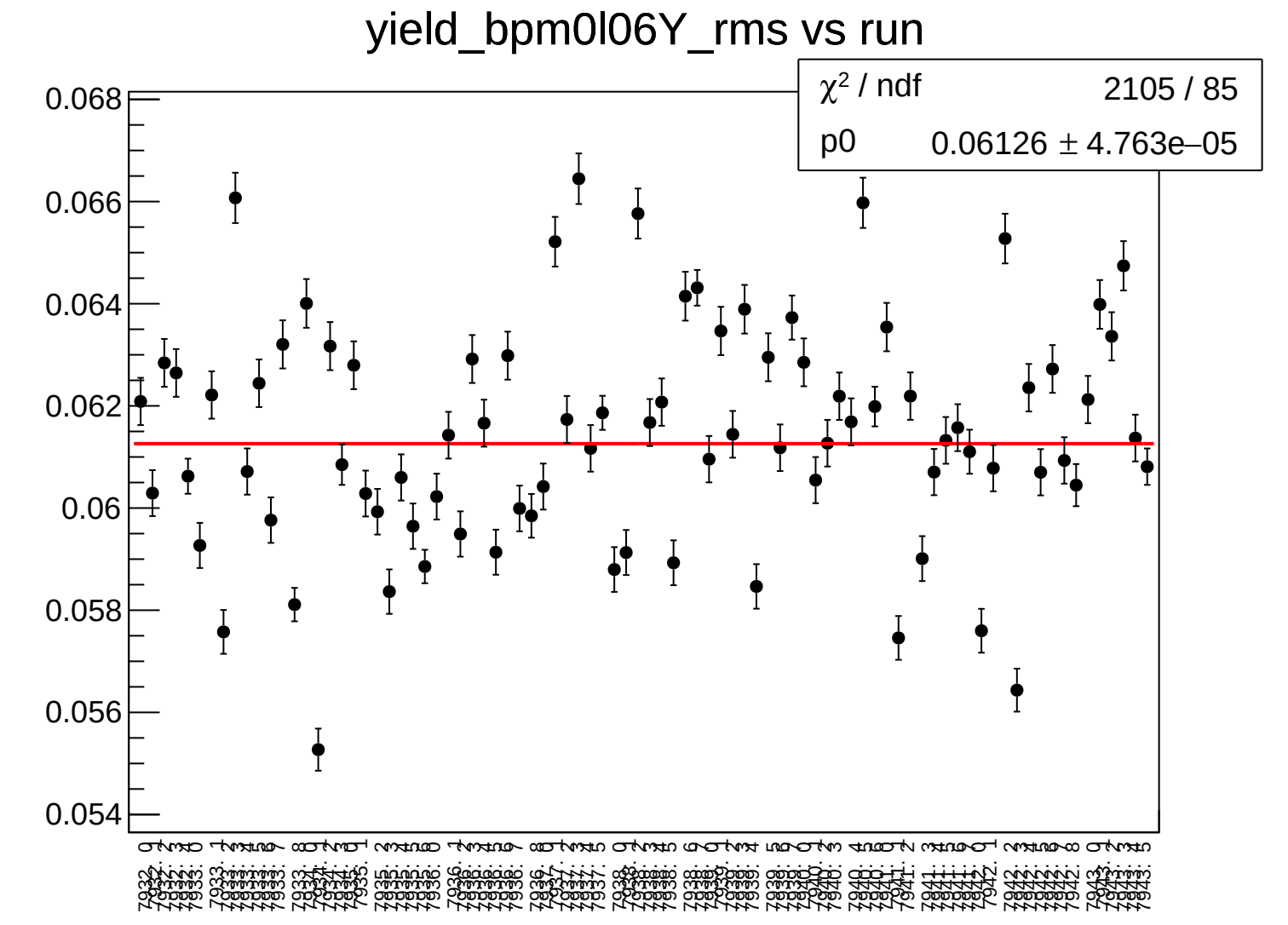

yield_bpm0l06X_mean vs run
χ² / ndf 2.448e+05 / 85
p0 −2.158 ± 3.087e−05
−2.12
−2.13
−2.14
−2.15
−2.16
−2.17
−2.18
−2.19
pull
Entries 86
Mean −3301
Std Dev 3344
100
50
0
−50
−100

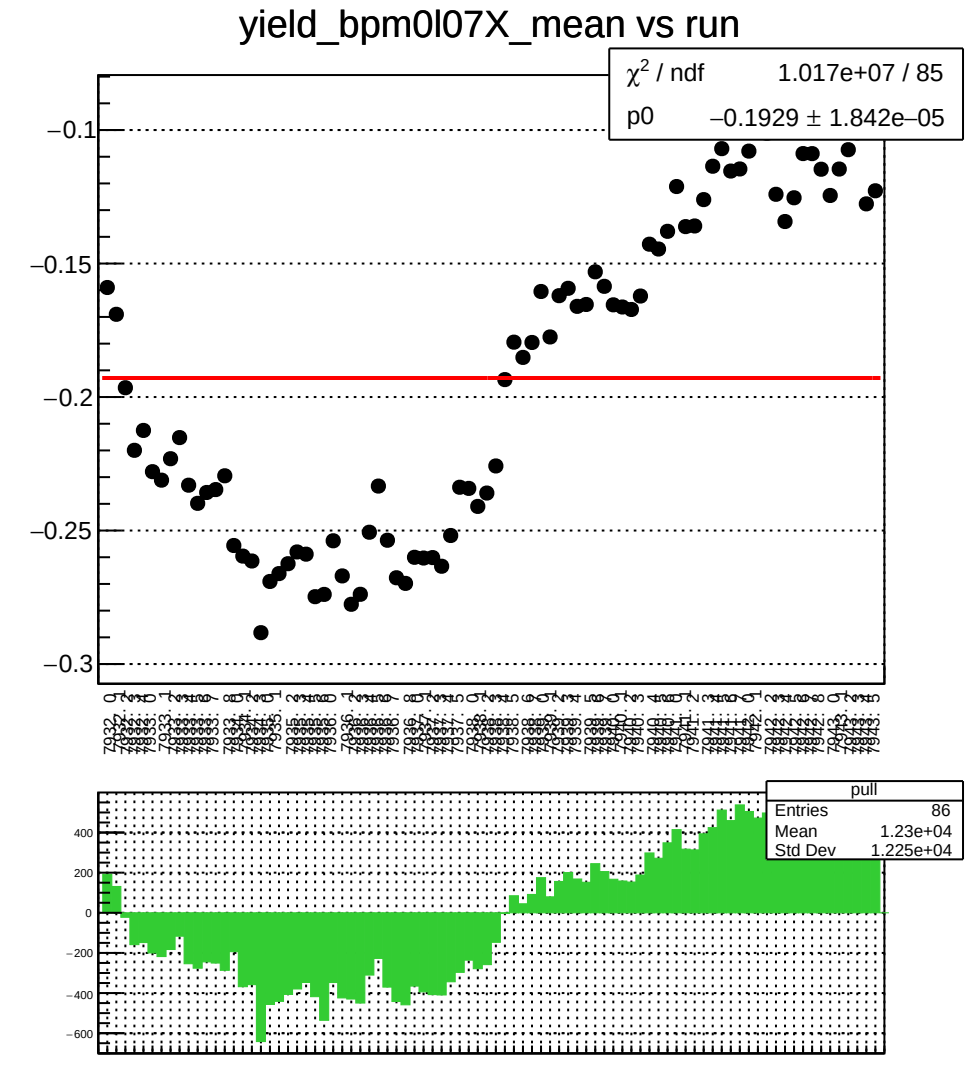

pull1D
Entries 86
Mean 1.794
Std Dev 3.299
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

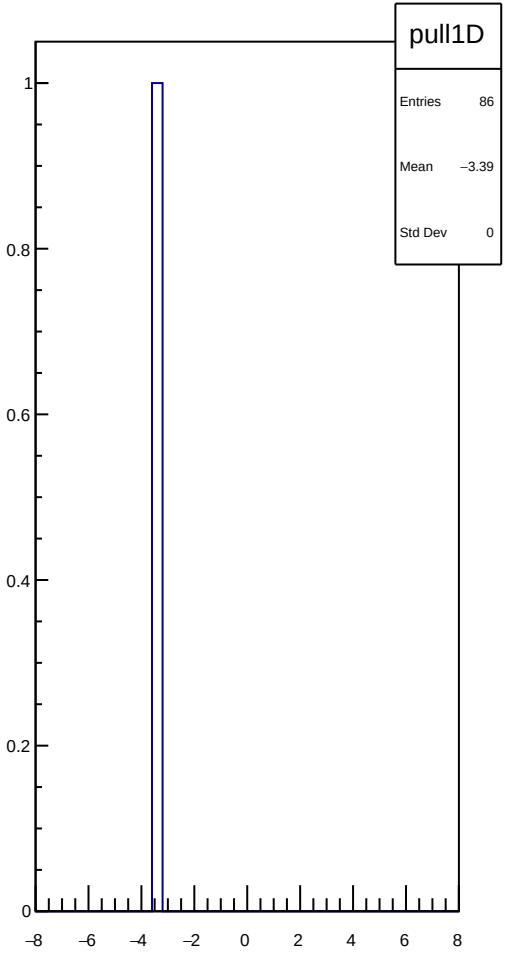

yield_bpm0l06X_rms vs run
χ² / ndf 1853 / 85
p0 0.02808 ± 2.183e–05
0.031
0.03
0.029
0.028
0.027
0.026

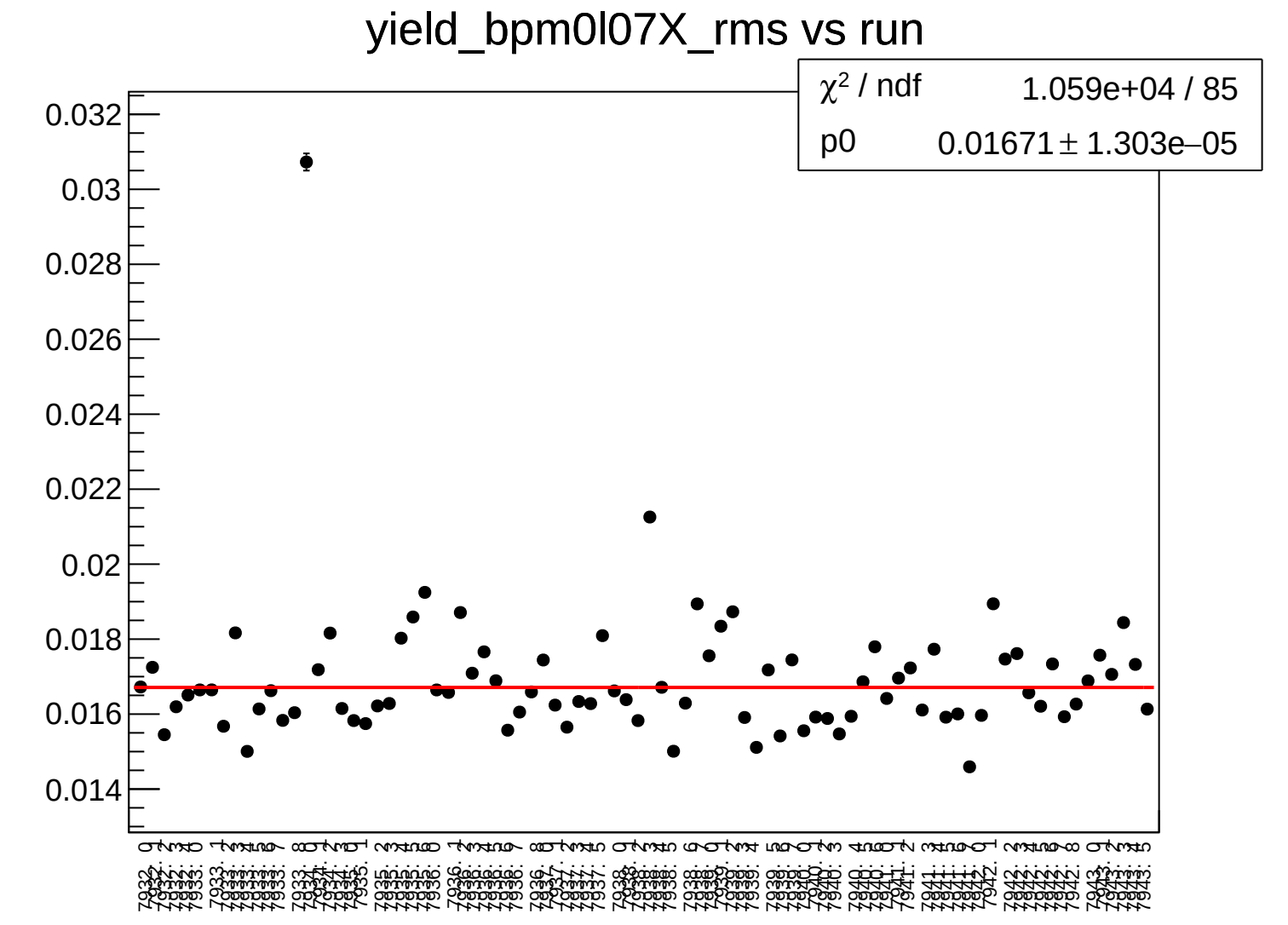

yield_bpm0l06Y_mean vs run
χ² / ndf 6.447e+04 / 85
p0 9.705 ± 6.736e−05
9.76
9.75
9.74
9.73
9.72
9.71
9.7
9.69
9.68
pull
Entries 86
Mean 4224
Std Dev 4185
60
40
20
0
−20
−40

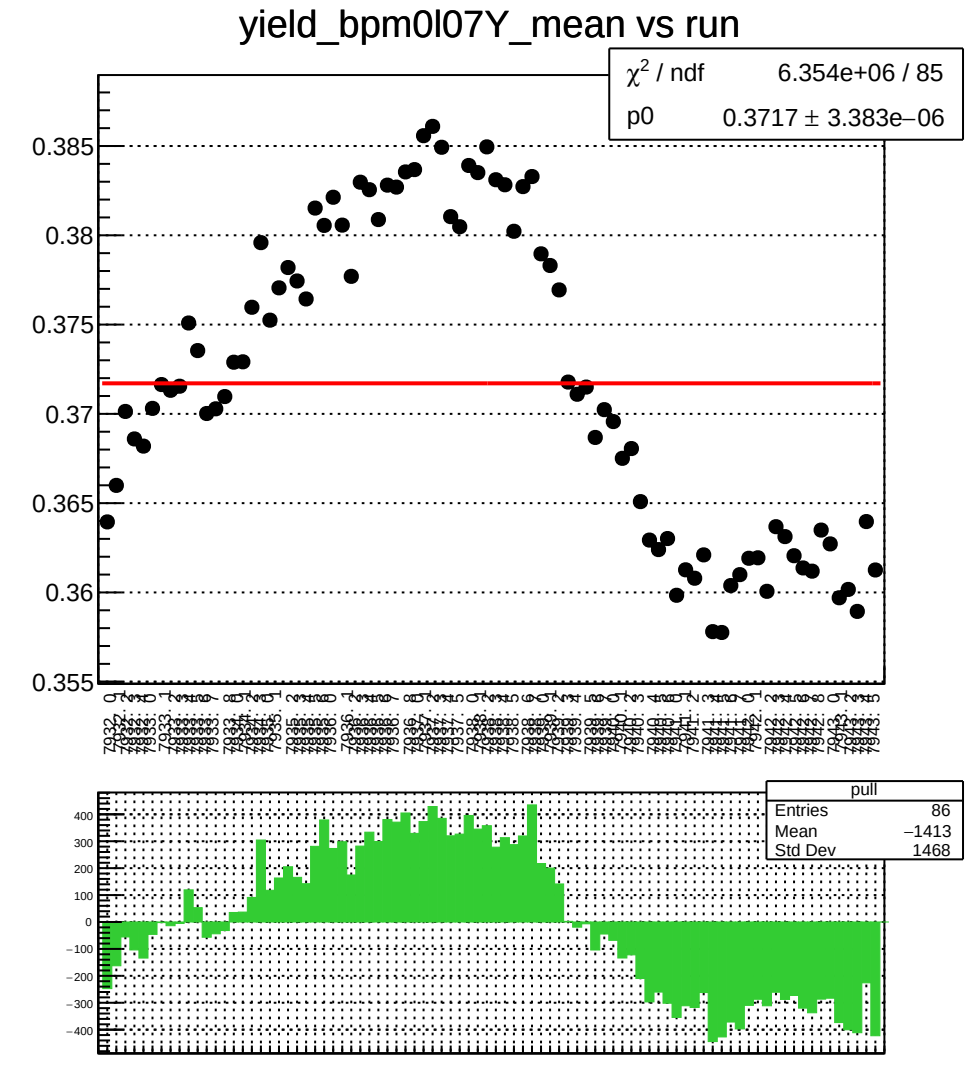

pull1D
Entries 86
Mean −0.4229
Std Dev 4.764
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

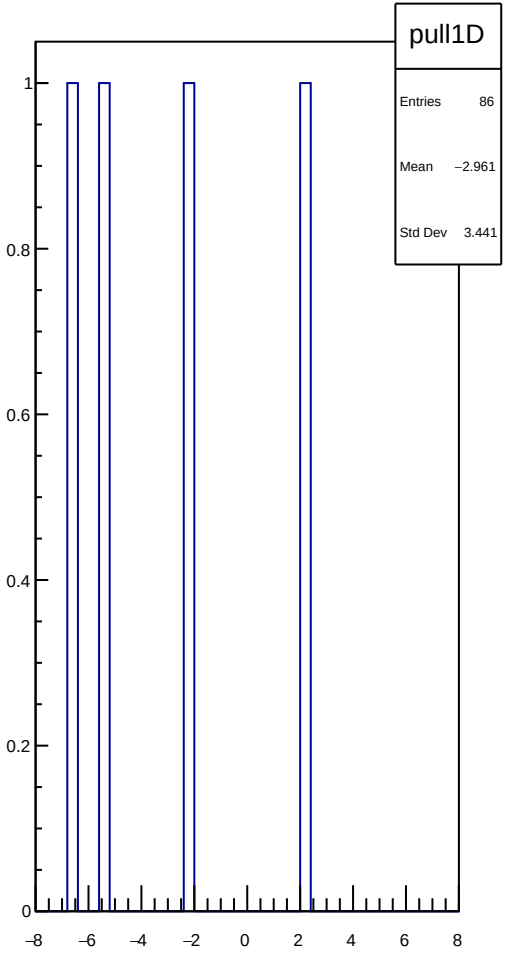

yield_bpm0l06Y_rms vs run
χ² / ndf 2105 / 85
p0 0.06126 ± 4.763e–05
0.068
0.066
0.064
0.062
0.06
0.058
0.056
0.054

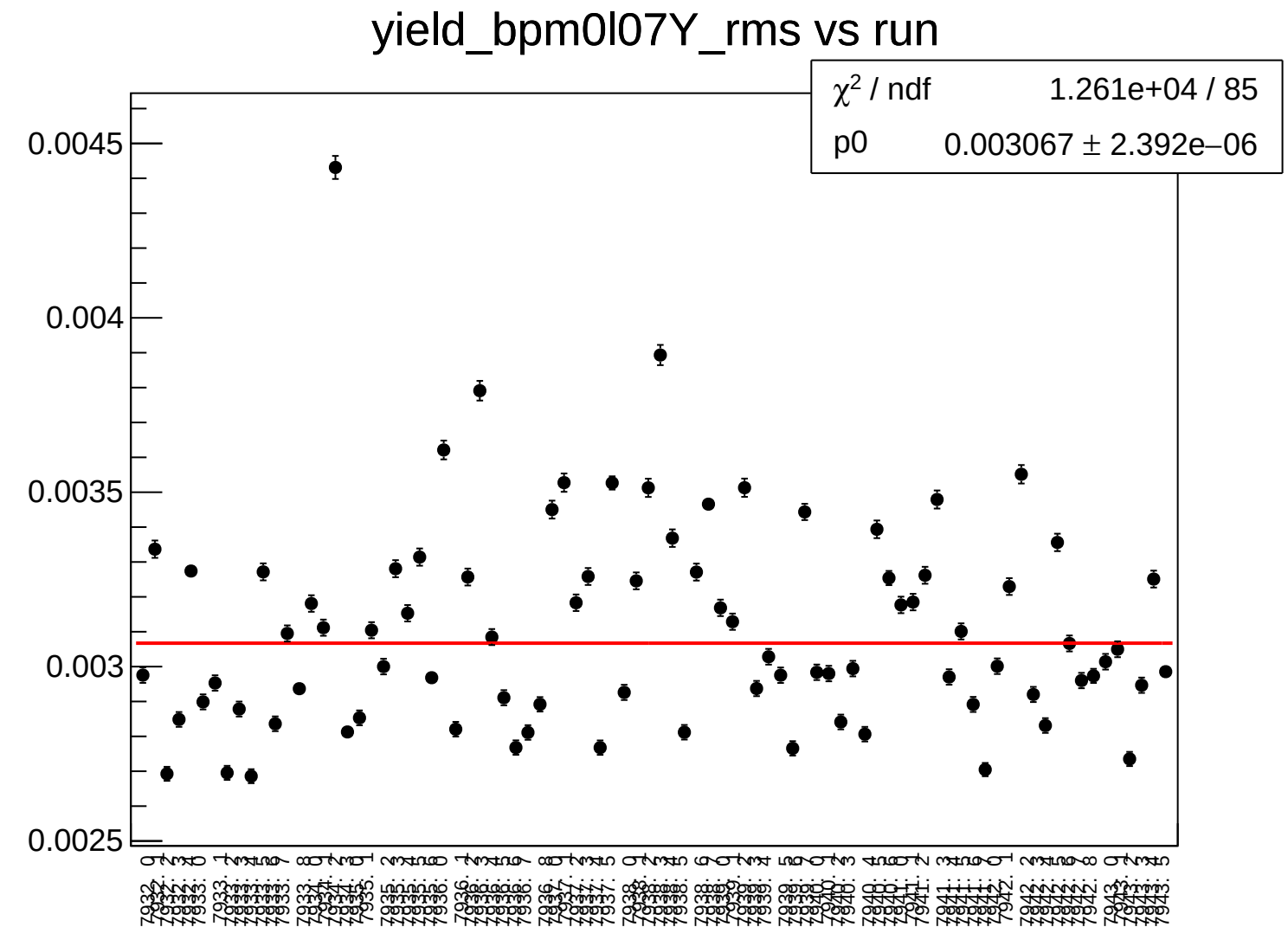

yield_bpm0l07X_mean vs run
χ² / ndf 1.017e+07 / 85
p0 −0.1929 ± 1.842e−05
−0.1
−0.15
−0.2
−0.25
−0.3
pull
Entries 86
Mean 1.23e+04
Std Dev 1.225e+04
400
200
0
−200
−400
−600

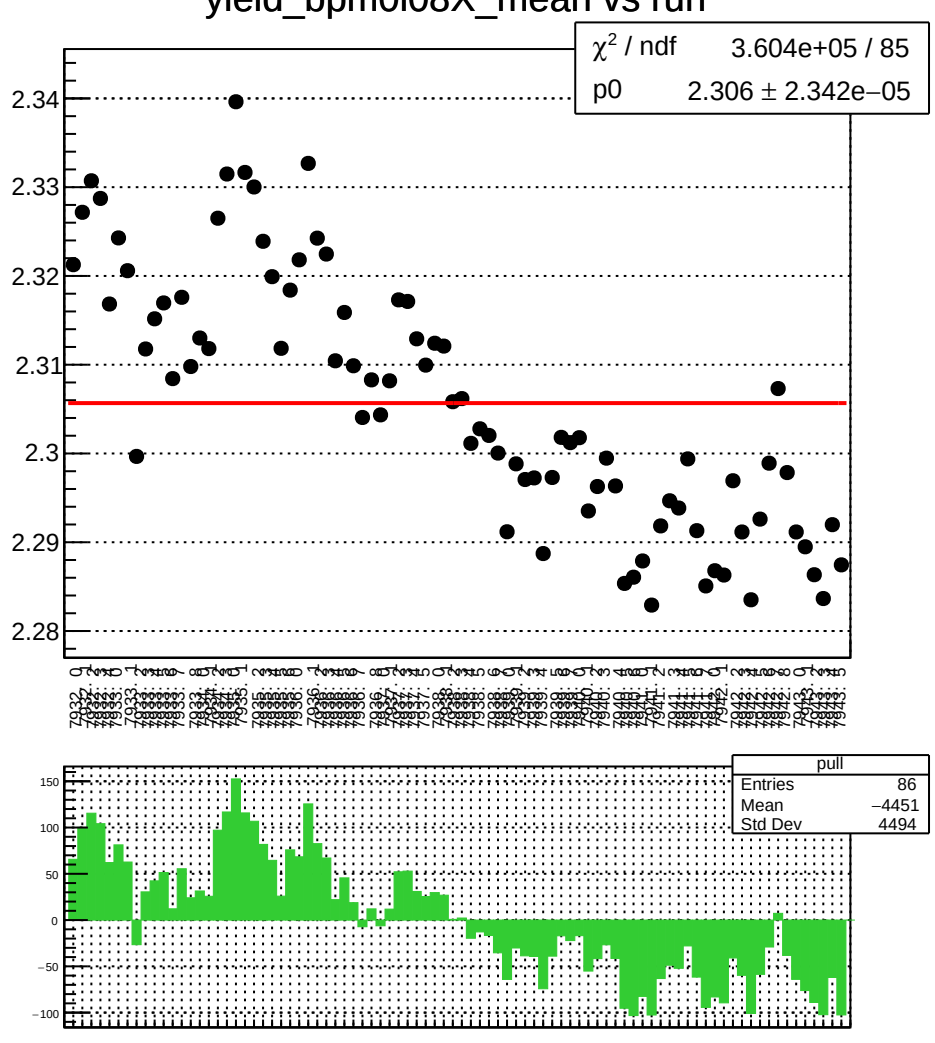

pull1D
Entries 86
Mean −3.39
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

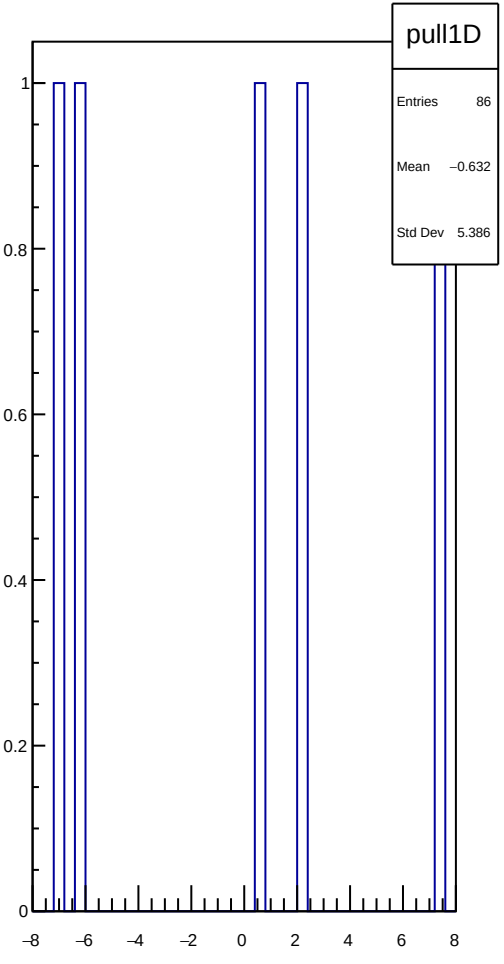

yield_bpm0l07X_rms vs run
χ² / ndf 1.059e+04 / 85
p0 0.01671 ± 1.303e–05
0.032
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014

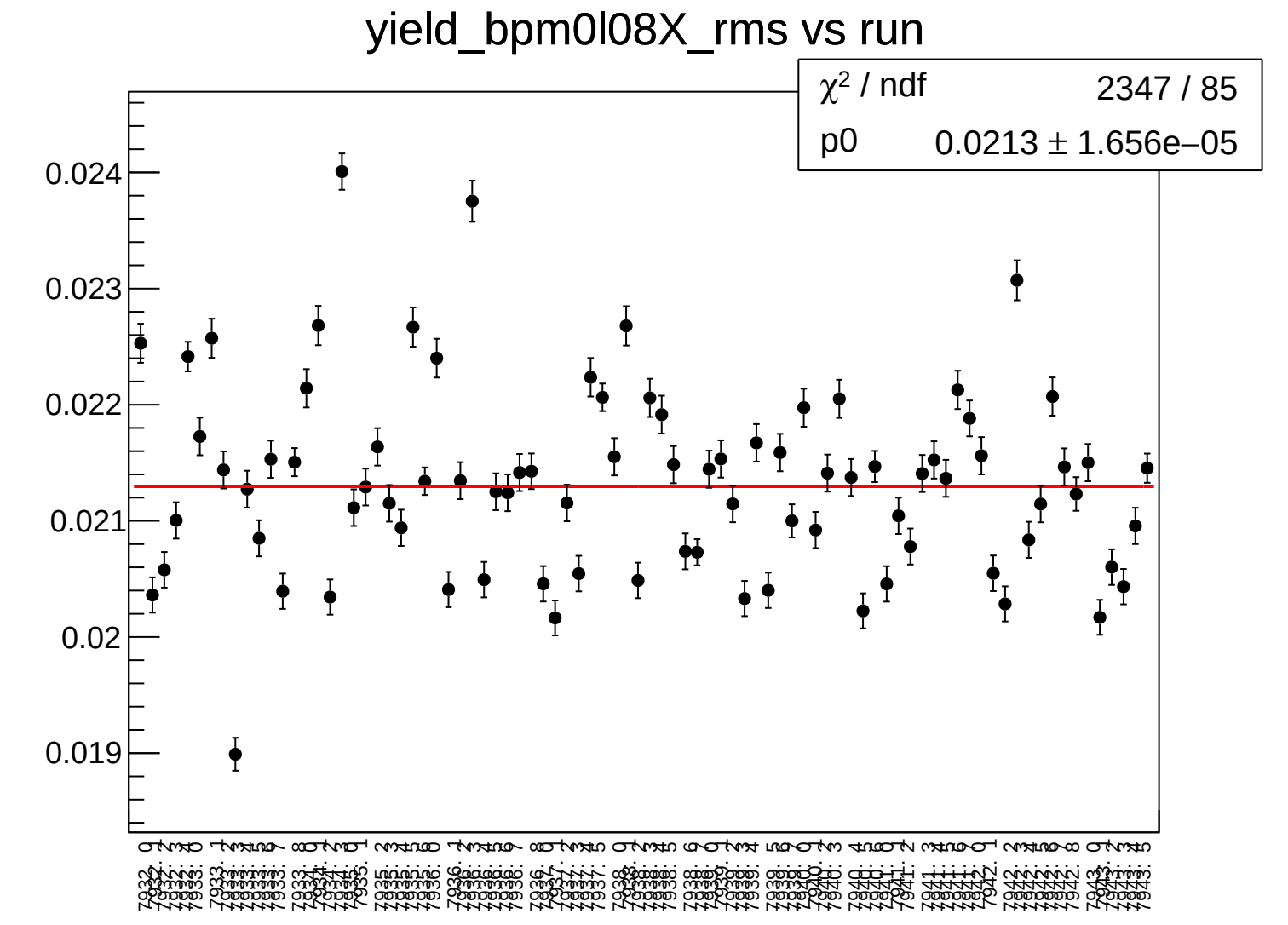

yield_bpm0l07Y_mean vs run
χ² / ndf 6.354e+06 / 85
p0 0.3717 ± 3.383e−06
0.385
0.38
0.375
0.37
0.365
0.36
0.355
pull
Entries 86
Mean −1413
Std Dev 1468
400
300
200
100
0
−100
−200
−300
−400

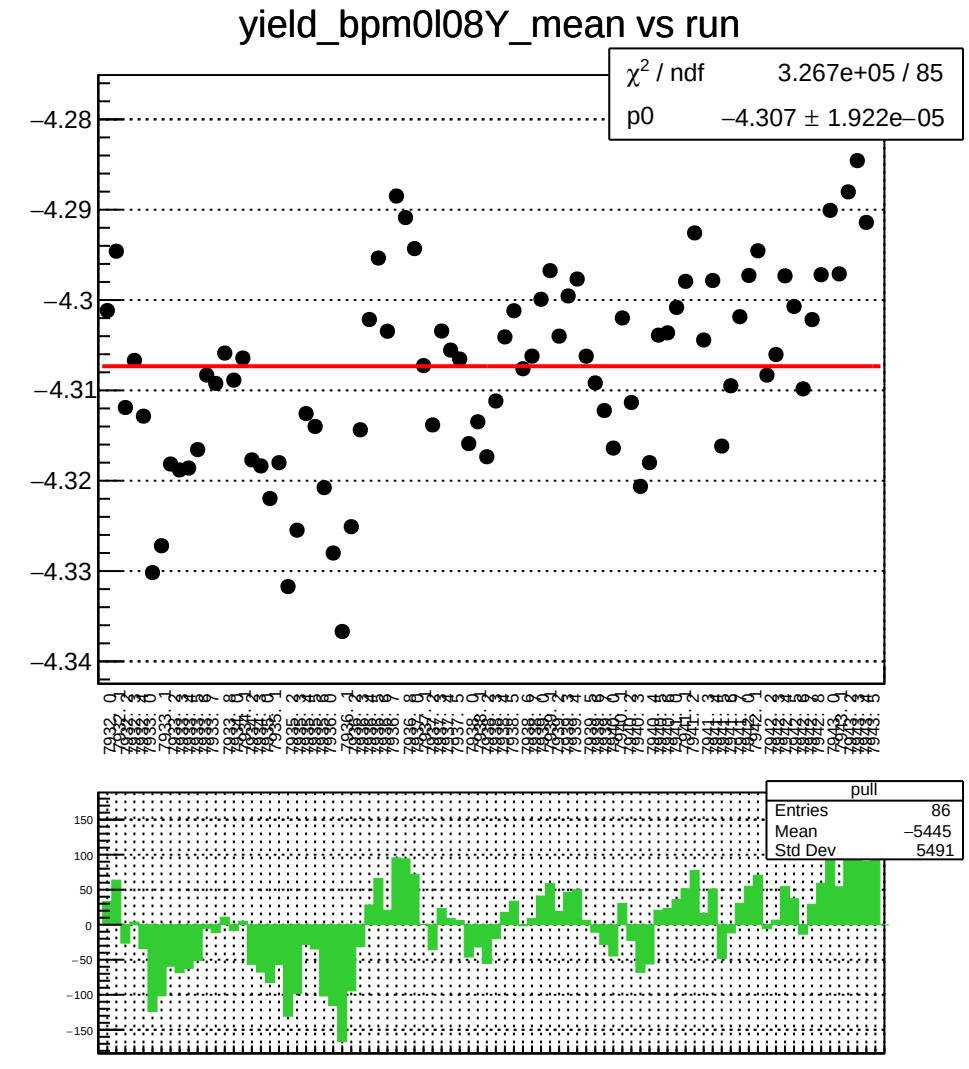

pull1D
Entries 86
Mean −2.961
Std Dev 3.441
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

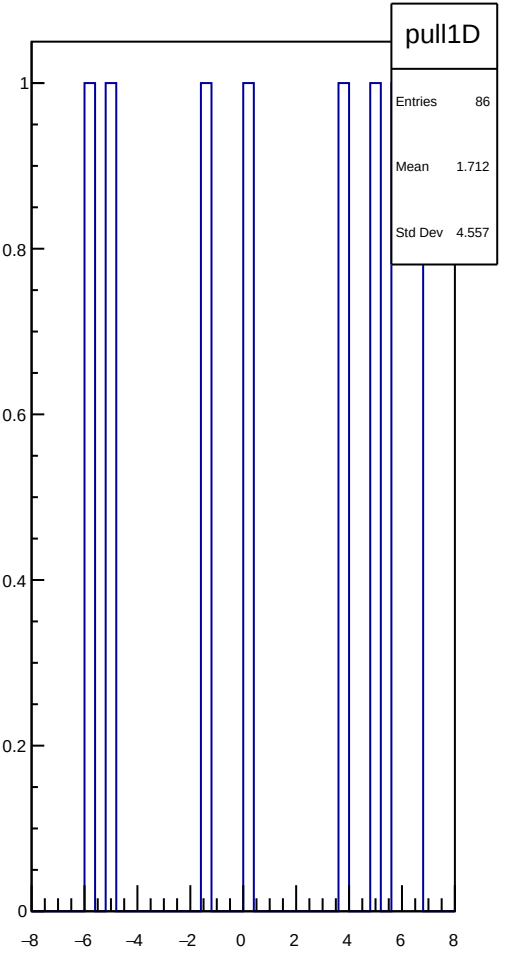

yield_bpm0l07Y_rms vs run
χ² / ndf 1.261e+04 / 85
p0 0.003067 ± 2.392e−06
0.0045
0.004
0.0035
0.003
0.0025

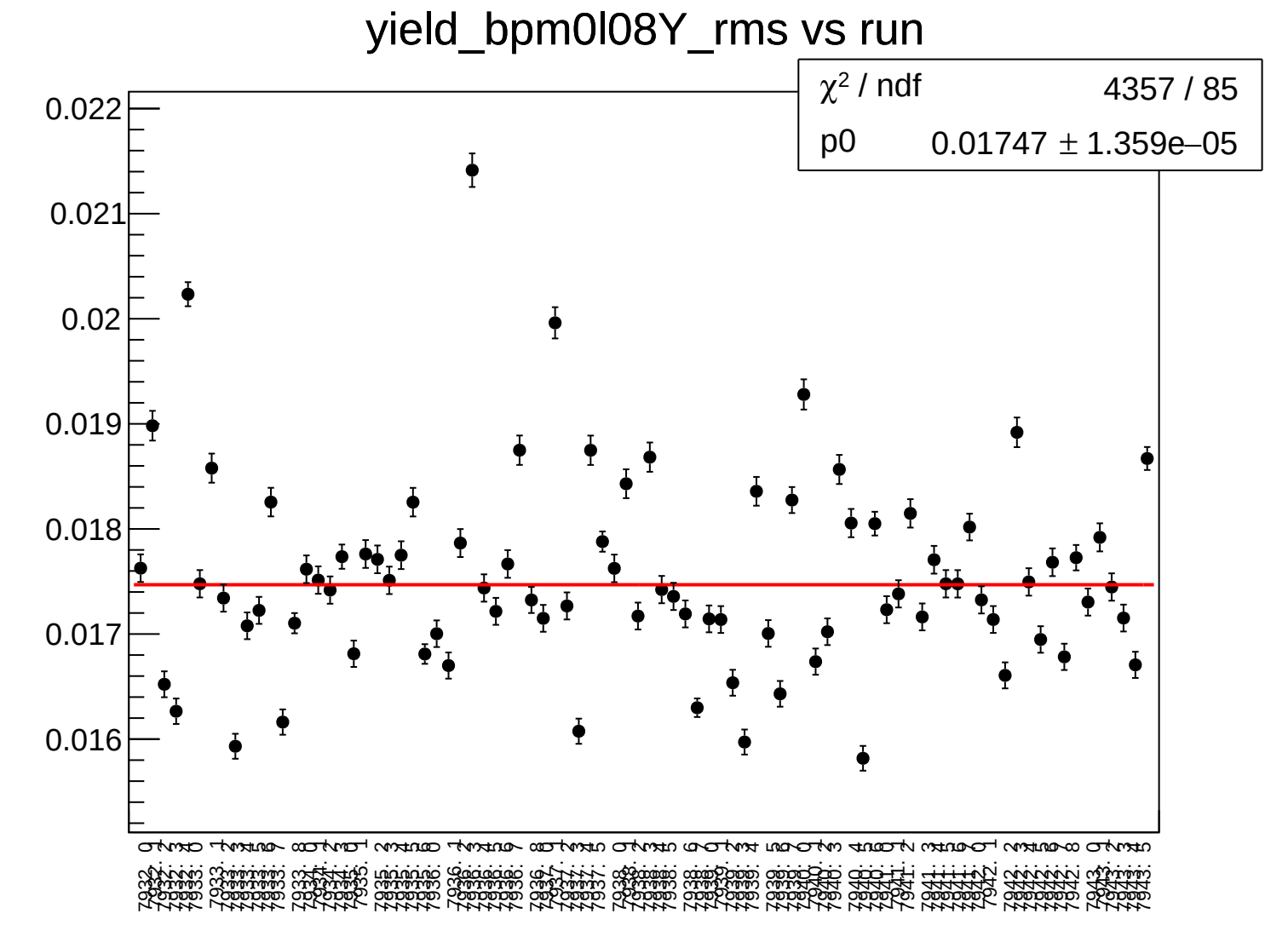

yield_bpm0l08X_mean vs run
χ² / ndf 3.604e+05 / 85
p0 2.306 ± 2.342e−05
2.34
2.33
2.32
2.31
2.3
2.29
2.28
pull
Entries 86
Mean −4451
Std Dev 4494
150
100
50
0
−50
−100

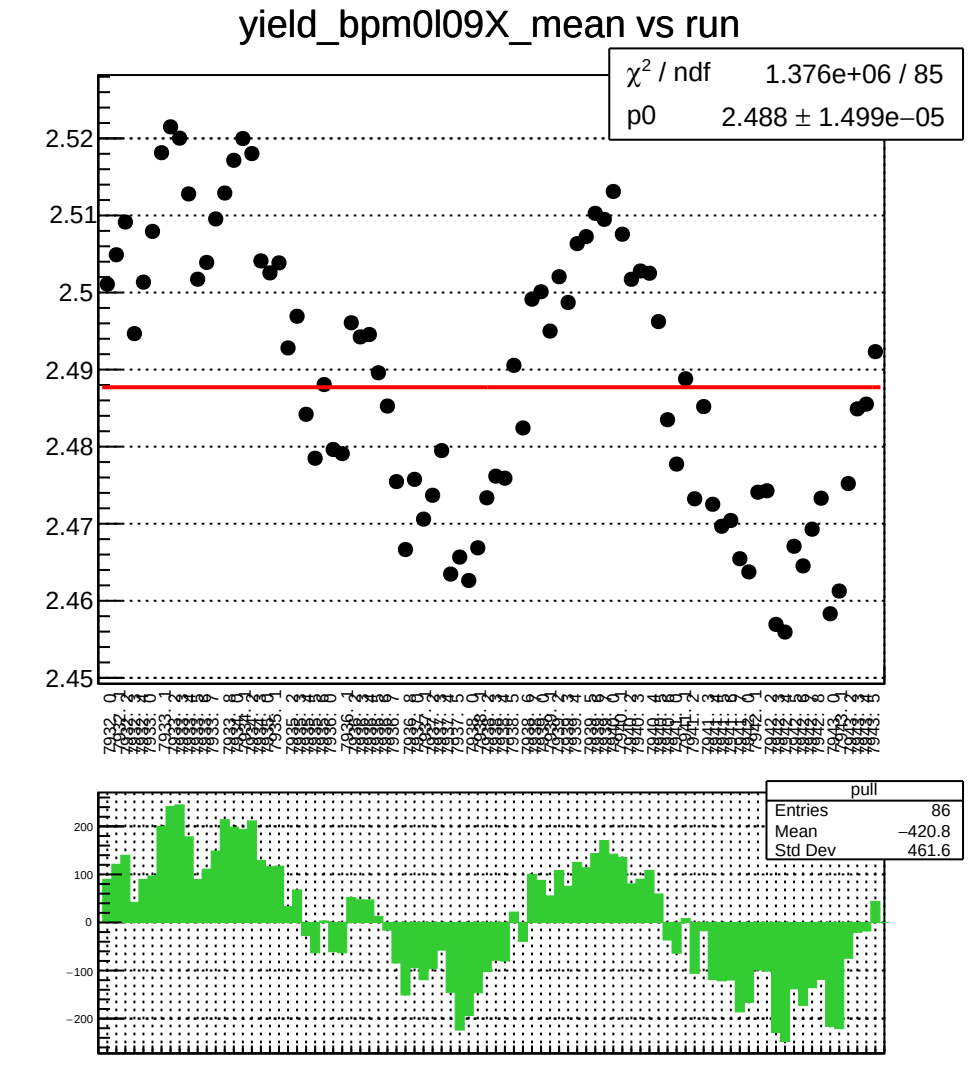

pull1D
Entries 86
Mean −0.632
Std Dev 5.386
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

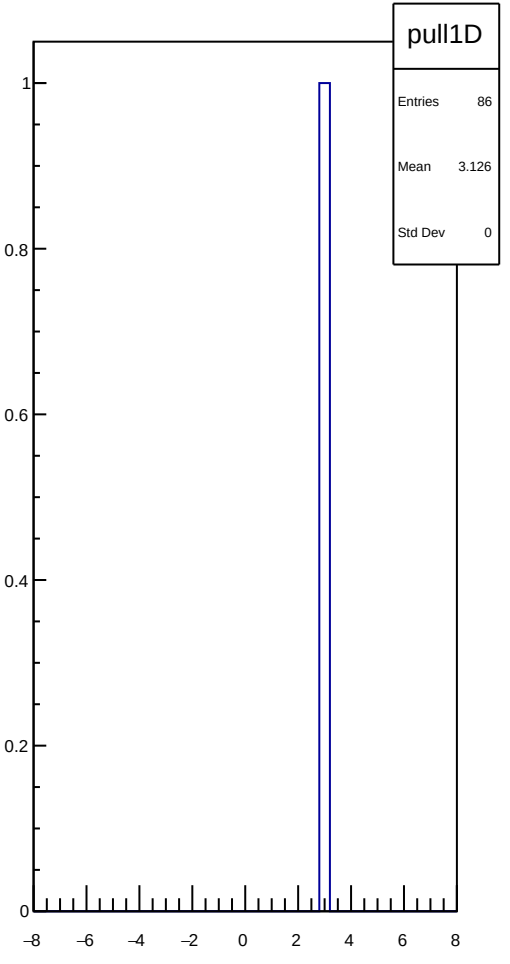

yield_bpm0l08X_rms vs run
χ² / ndf 2347 / 85
p0 0.0213 ± 1.656e−05
0.024
0.023
0.022
0.021
0.02
0.019

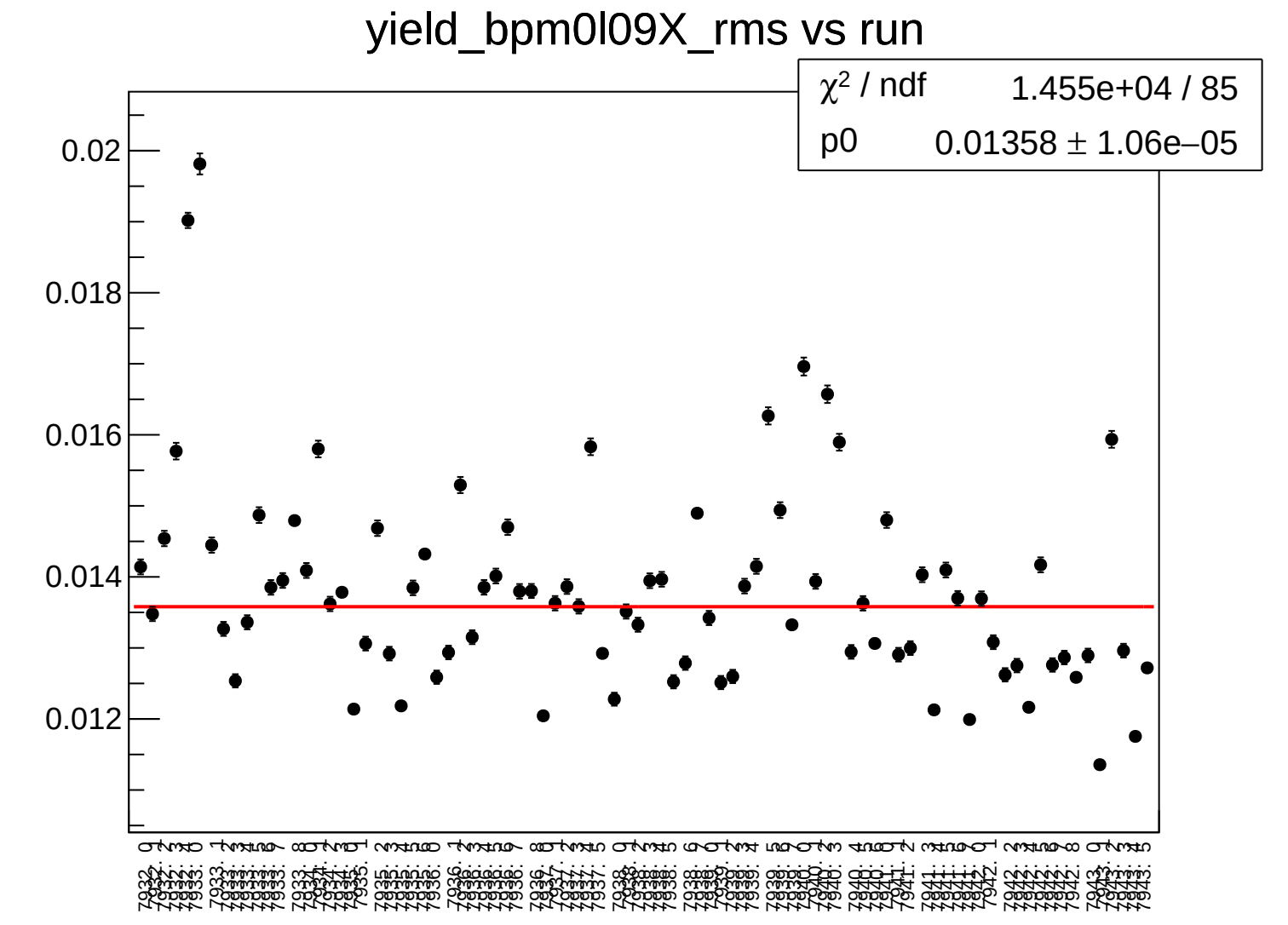

yield_bpm0l08Y_mean vs run
χ² / ndf 3.267e+05 / 85
p0 −4.307 ± 1.922e−05
−4.28
−4.29
−4.3
−4.31
−4.32
−4.33
−4.34
pull
Entries 86
Mean −5445
Std Dev 5491
150
100
50
0
−50
−100
−150

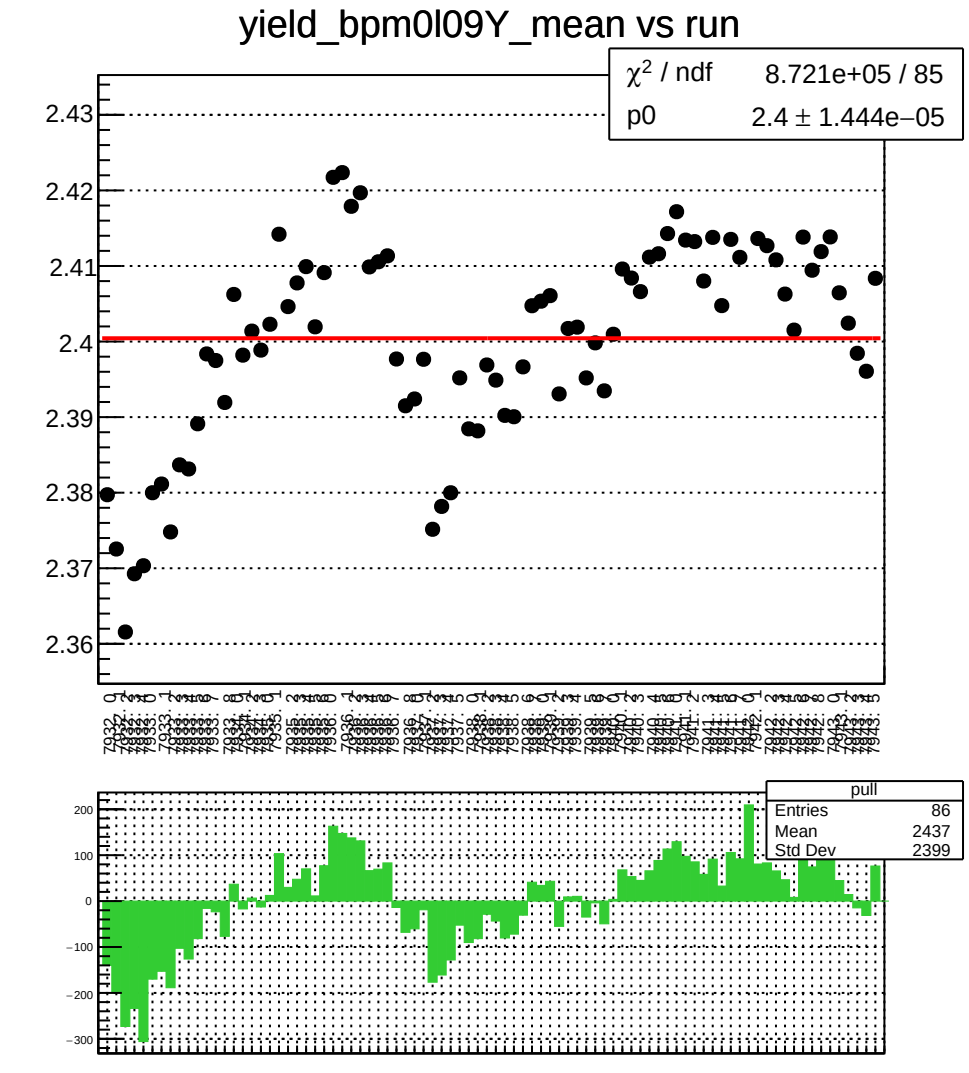

pull1D
Entries 86
Mean 1.712
Std Dev 4.557
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

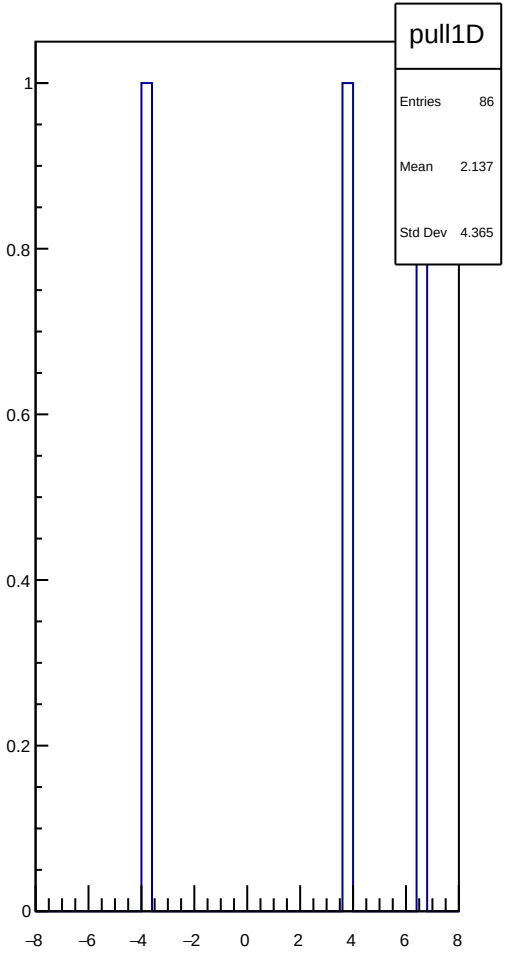

yield_bpm0l08Y_rms vs run
χ² / ndf 4357 / 85
p0 0.01747 ± 1.359e−05
0.022
0.021
0.02
0.019
0.018
0.017
0.016

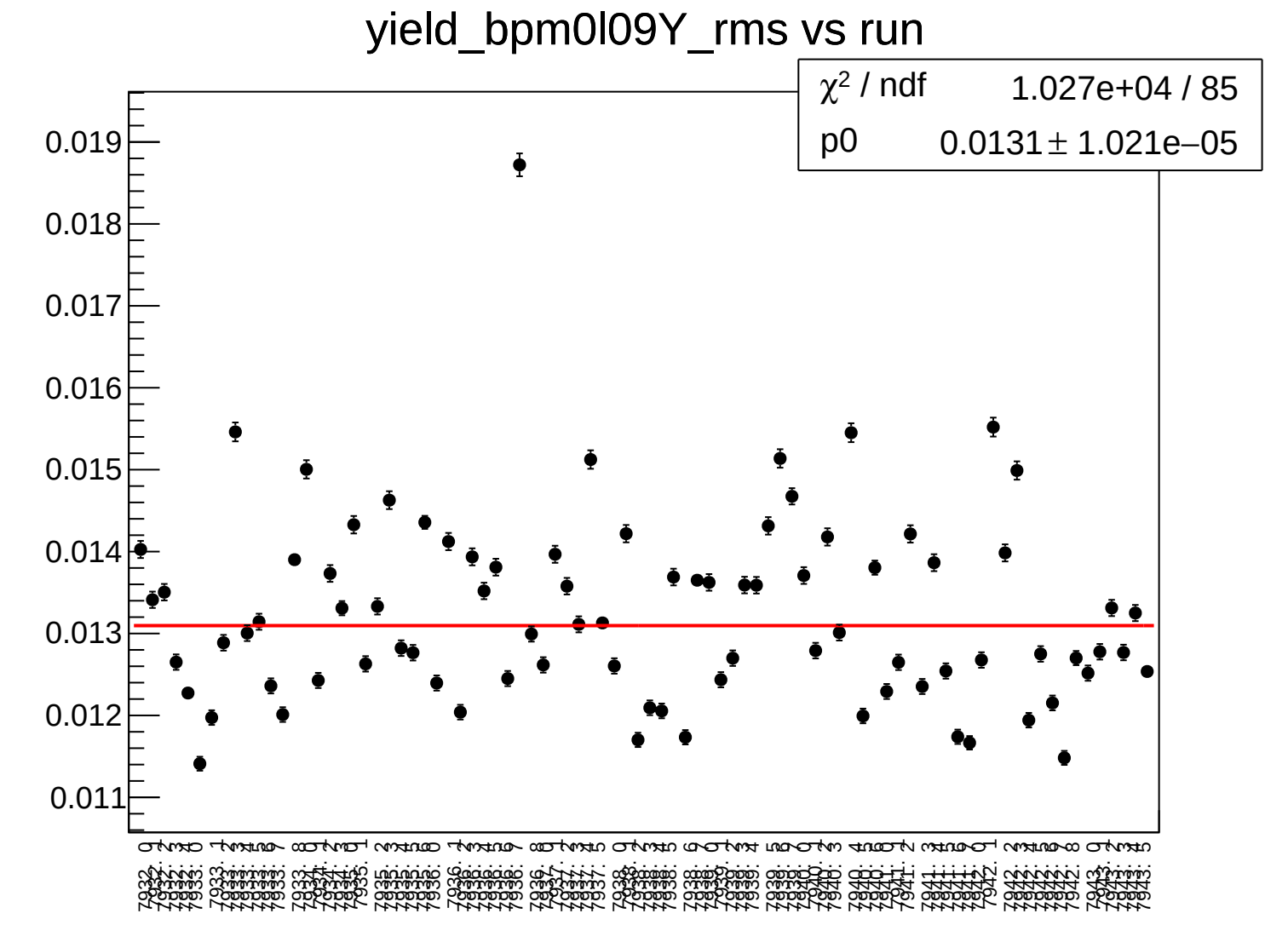

yield_bpm0l09X_mean vs run
χ² / ndf 1.376e+06 / 85
p0 2.488 ± 1.499e−05
2.52
2.51
2.5
2.49
2.48
2.47
2.46
2.45
pull
Entries 86
Mean −420.8
Std Dev 461.6
200
100
0
−100
−200

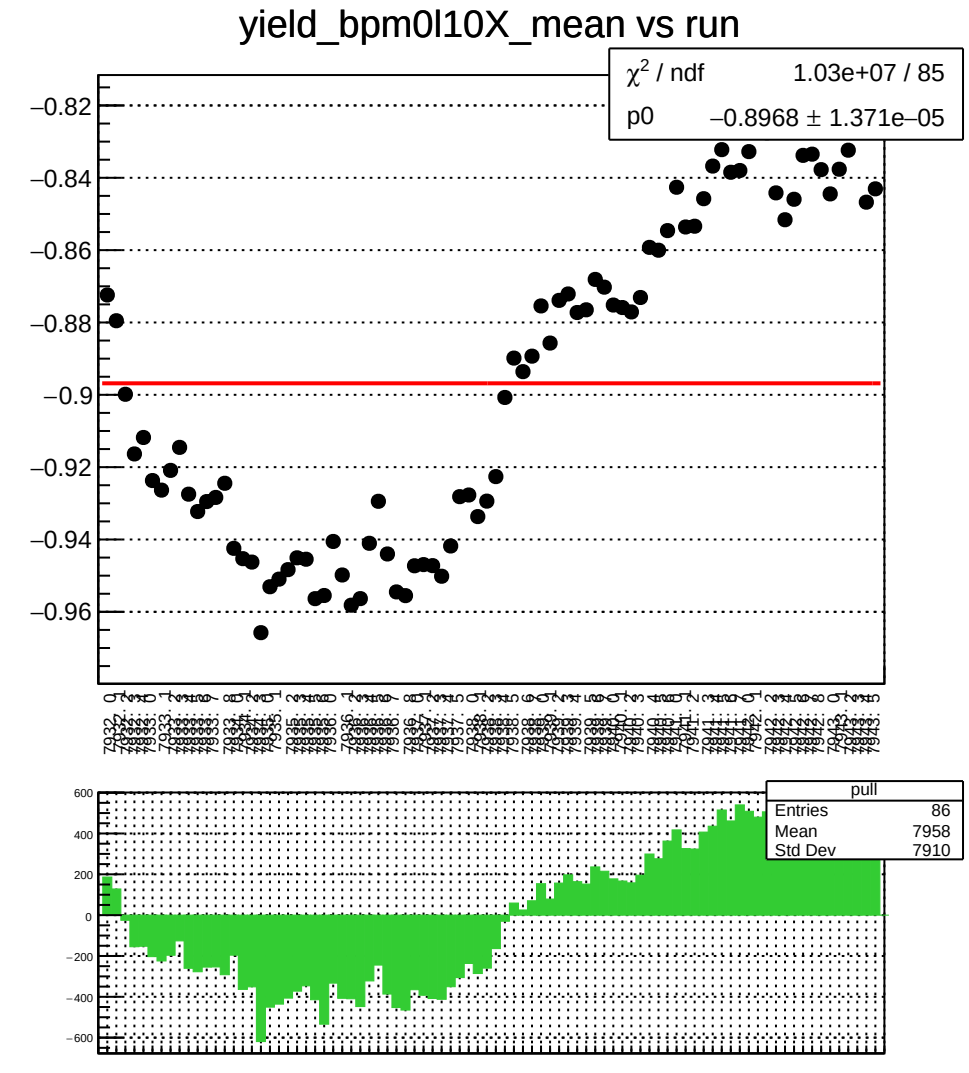

pull1D
Entries 86
Mean 3.126
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

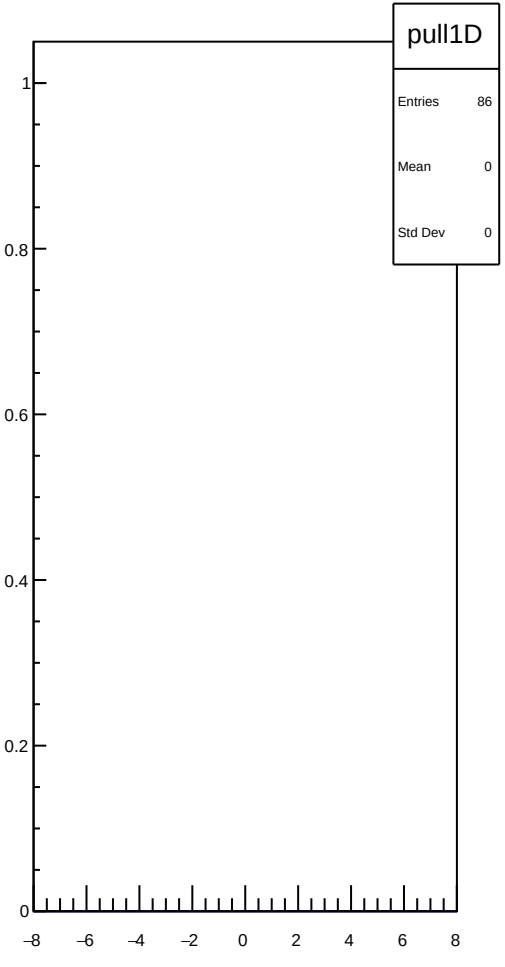

yield_bpm0l09X_rms vs run
χ² / ndf 1.455e+04 / 85
p0 0.01358 ± 1.06e−05
0.02
0.018
0.016
0.014
0.012

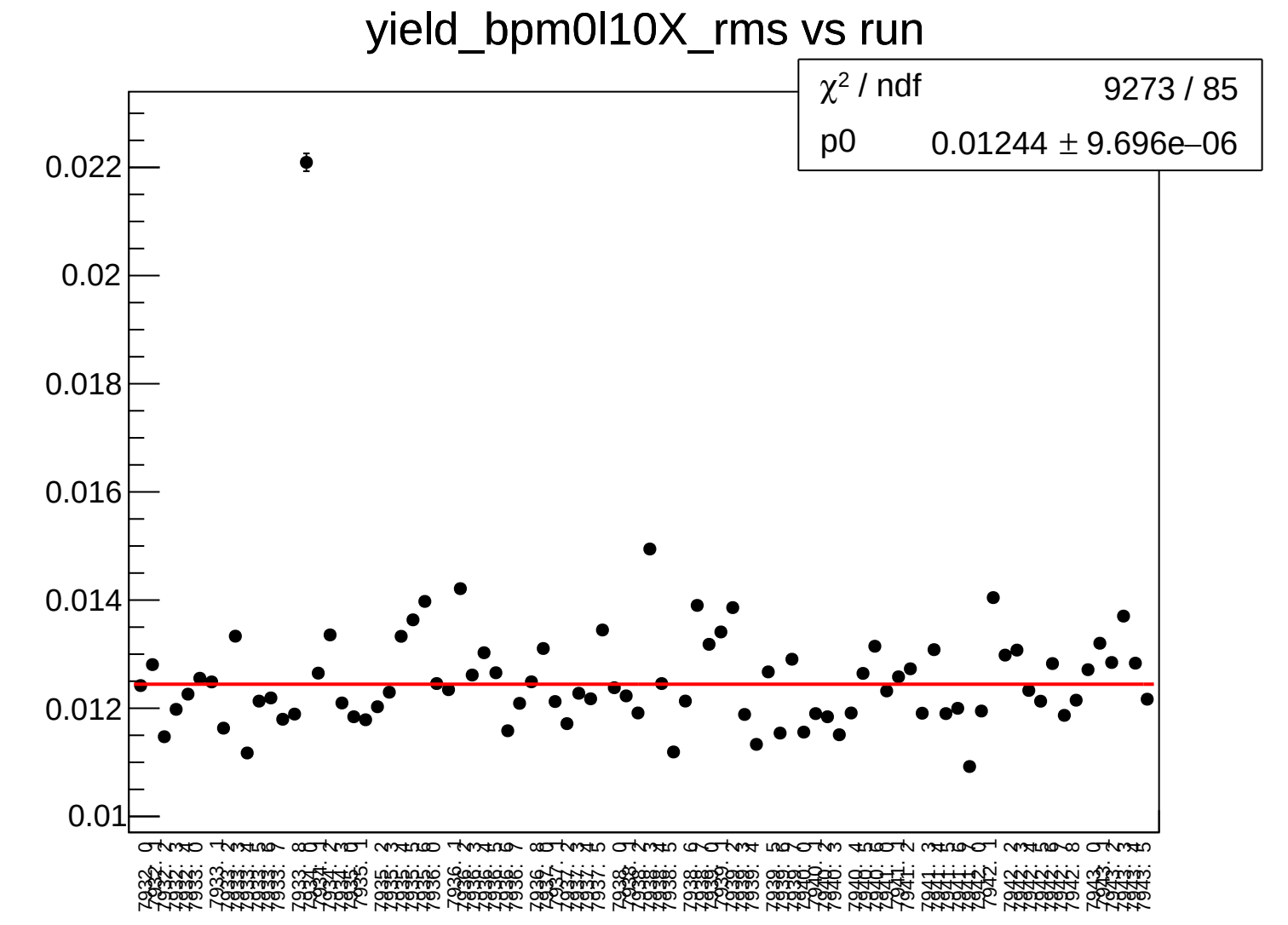

yield_bpm0l09Y_mean vs run
χ² / ndf 8.721e+05 / 85
p0 2.4 ± 1.444e−05
2.43
2.42
2.41
2.4
2.39
2.38
2.37
2.36
pull
Entries 86
Mean 2437
Std Dev 2399
200
100
0
−100
−200
−300

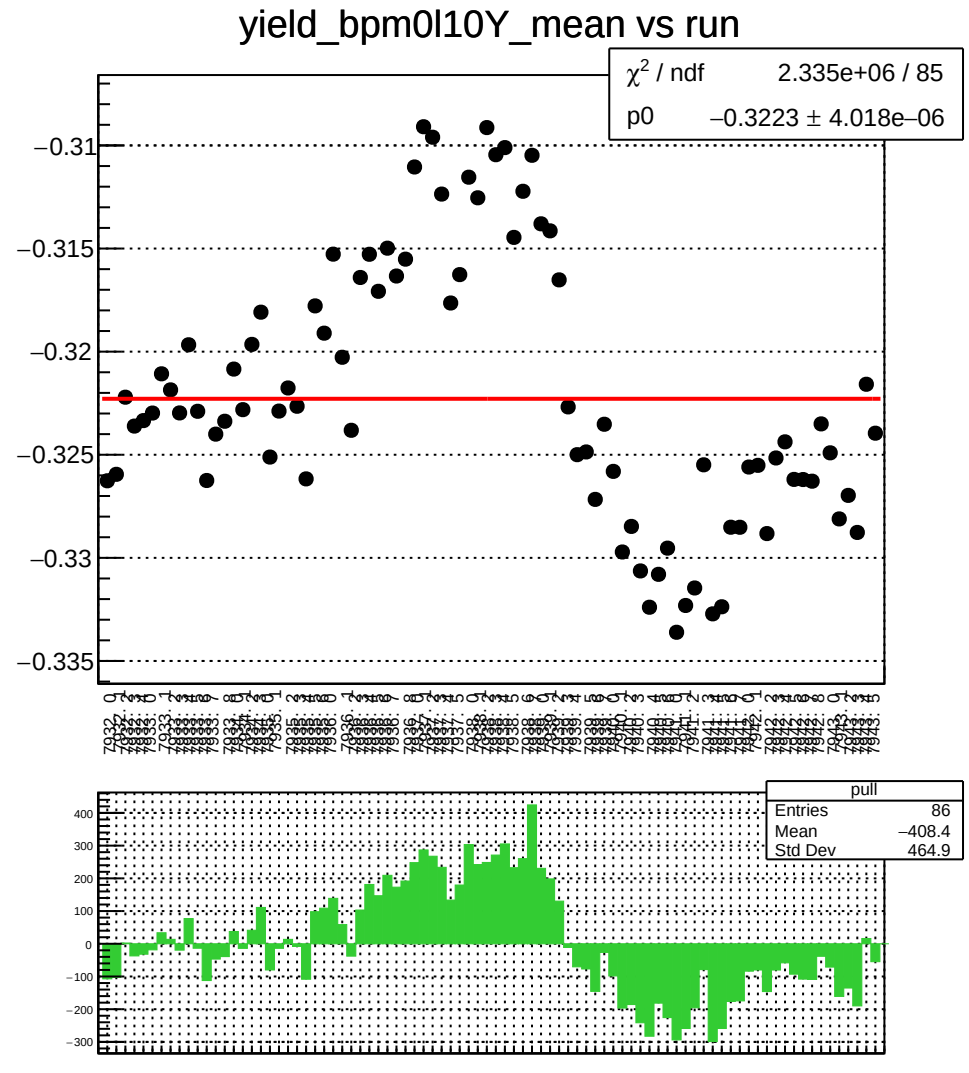

pull1D
Entries 86
Mean 2.137
Std Dev 4.365
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

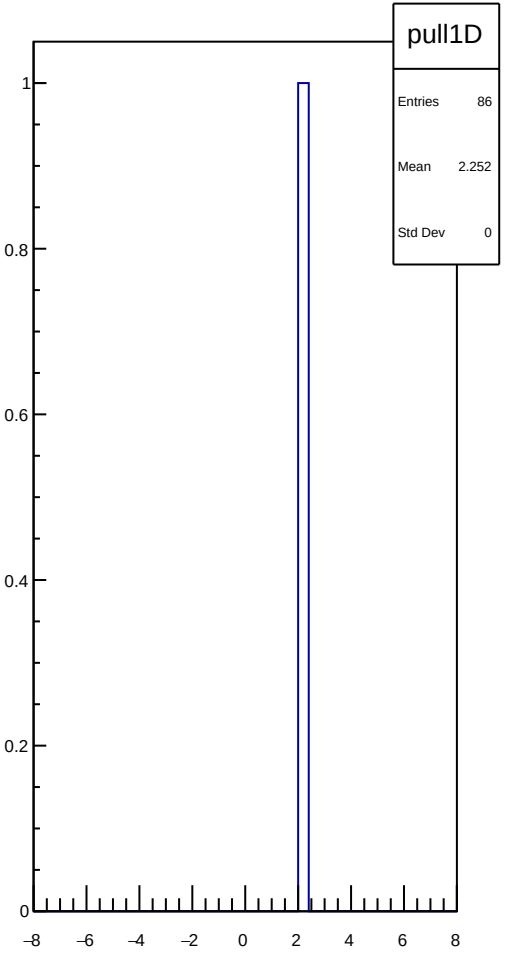

yield_bpm0l09Y_rms vs run
χ² / ndf 1.027e+04 / 85
p0 0.0131 ± 1.021e−05
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011

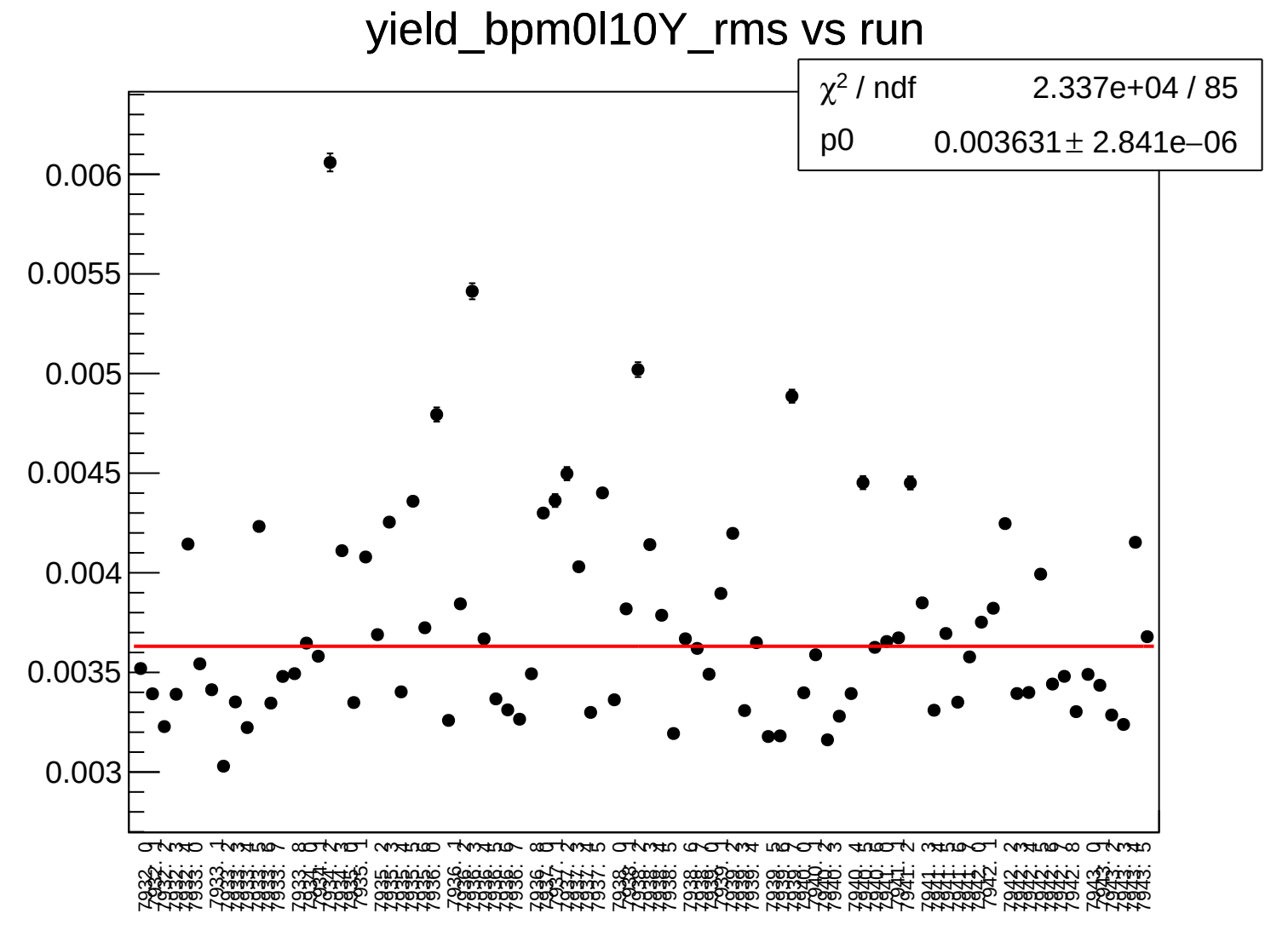

yield_bpm0l10X_mean vs run
χ² / ndf 1.03e+07 / 85
p0 −0.8968 ± 1.371e−05
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
−0.96
pull
Entries 86
Mean 7958
Std Dev 7910
600
400
200
0
−200
−400
−600

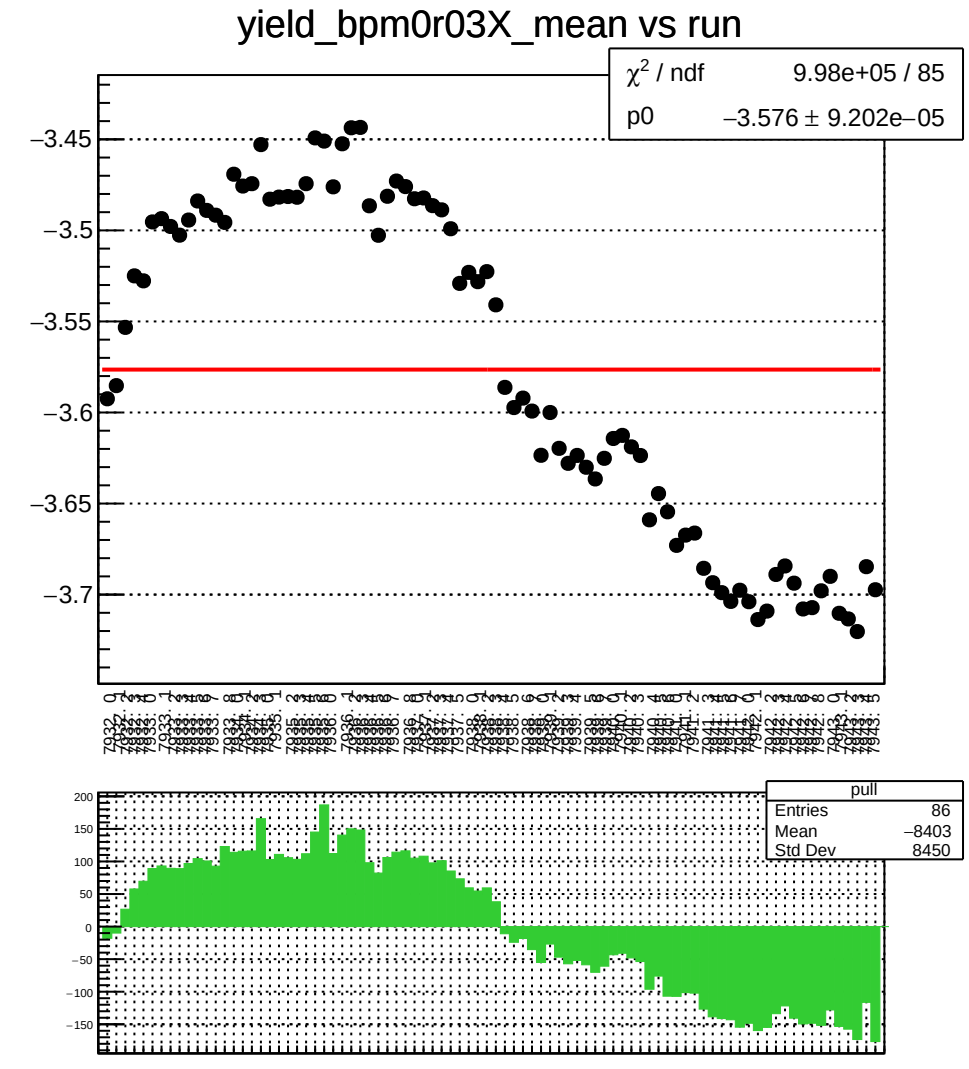

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

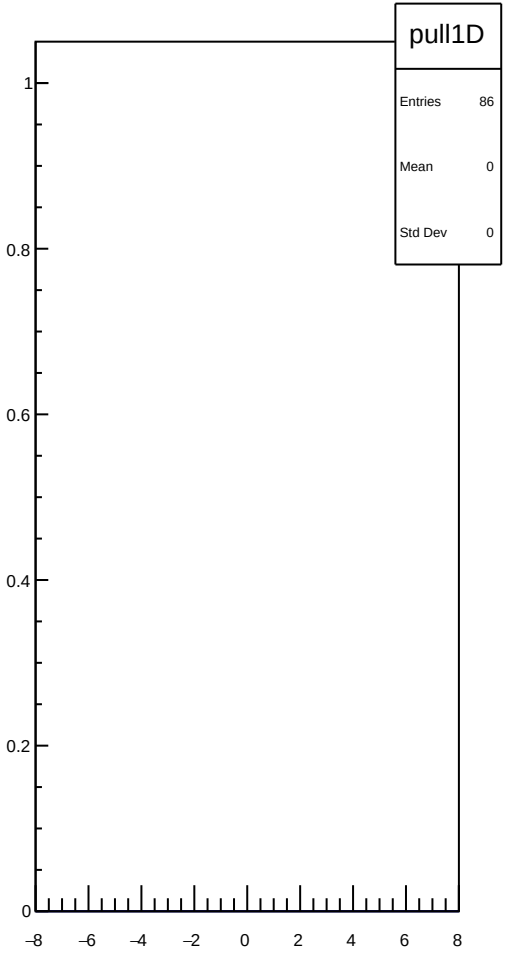

yield_bpm0l10X_rms vs run
χ^2 / ndf 9273 / 85
p0 0.01244 ± 9.696e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

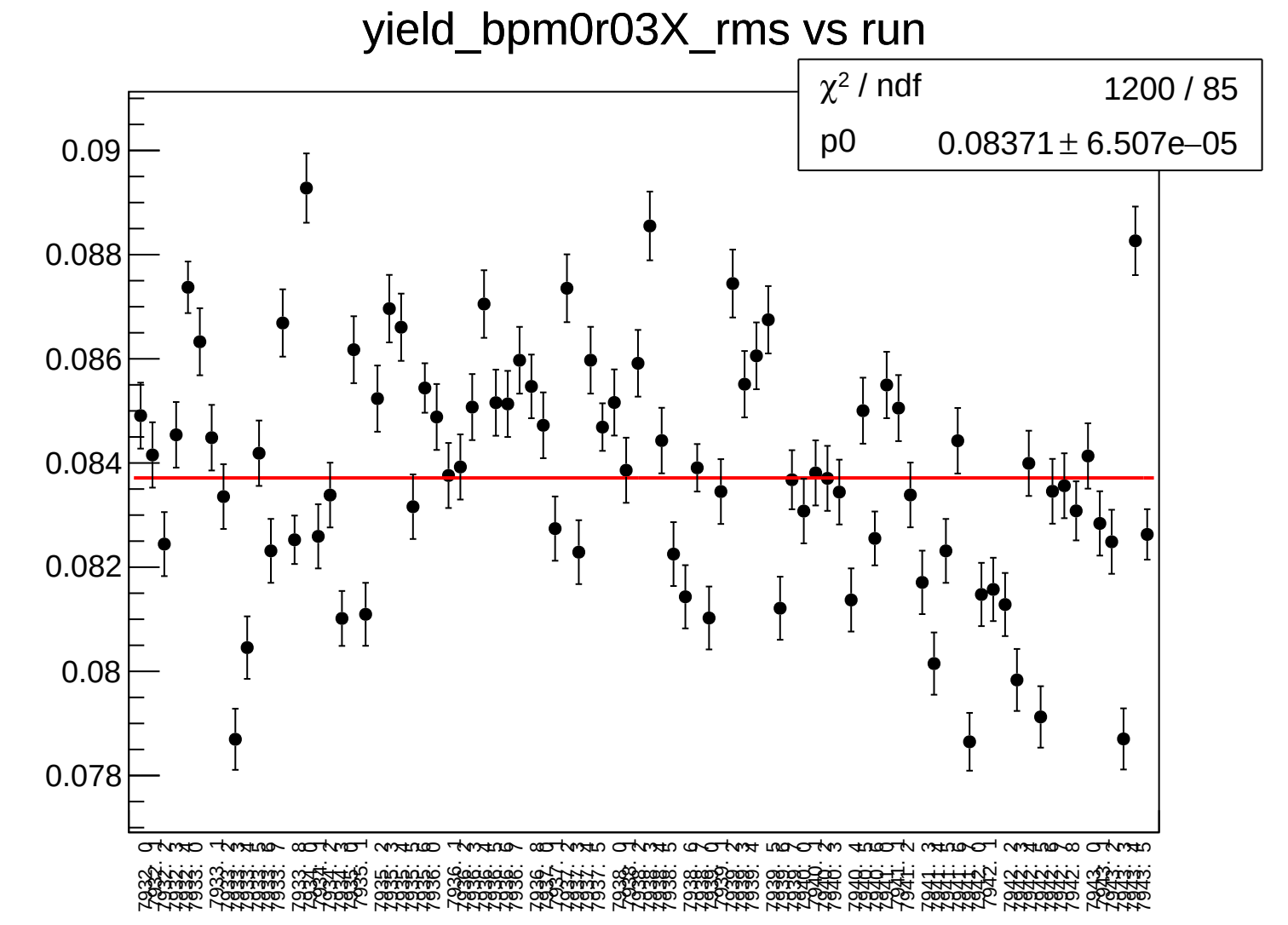

yield_bpm0l10Y_mean vs run
χ² / ndf 2.335e+06 / 85
p0 −0.3223 ± 4.018e−06
−0.31
−0.315
−0.32
−0.325
−0.33
−0.335
pull
Entries 86
Mean −408.4
Std Dev 464.9
400
300
200
100
0
−100
−200
−300

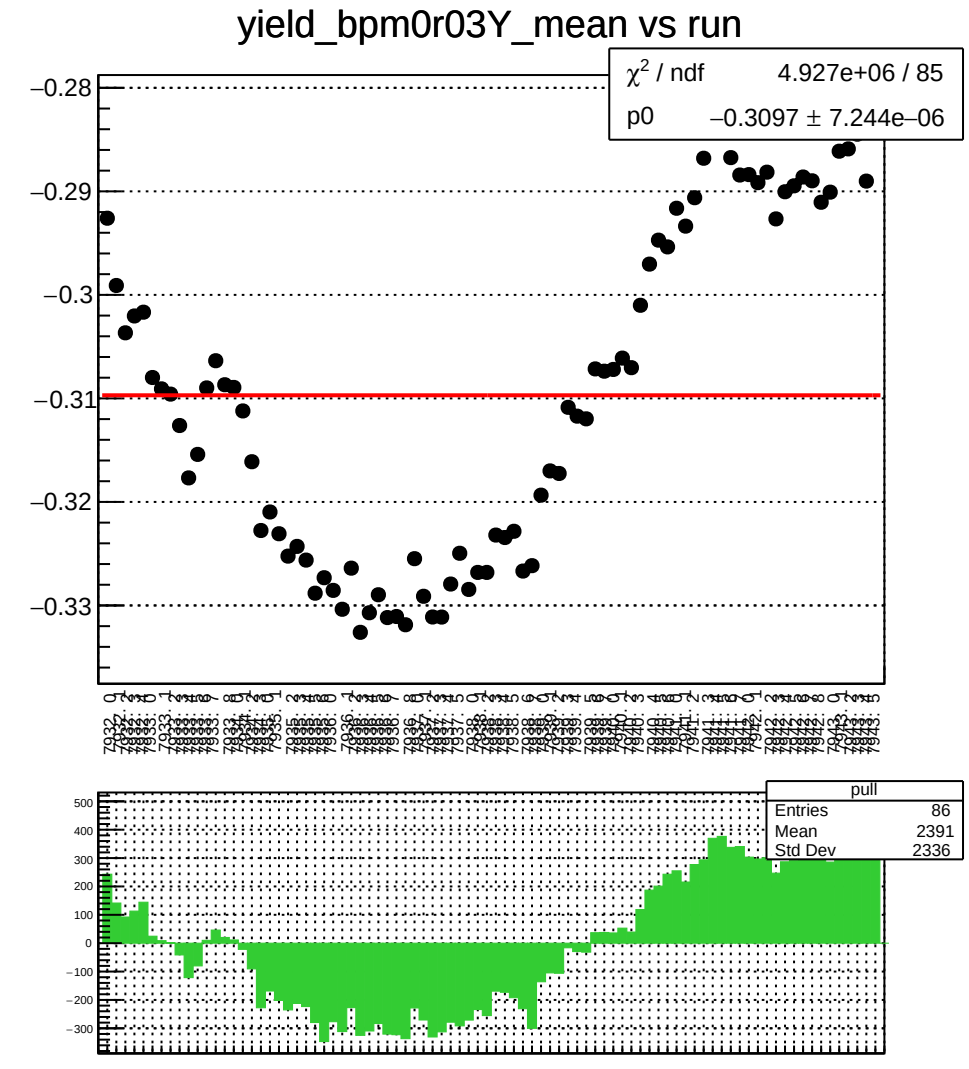

pull1D
Entries 86
Mean 2.252
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

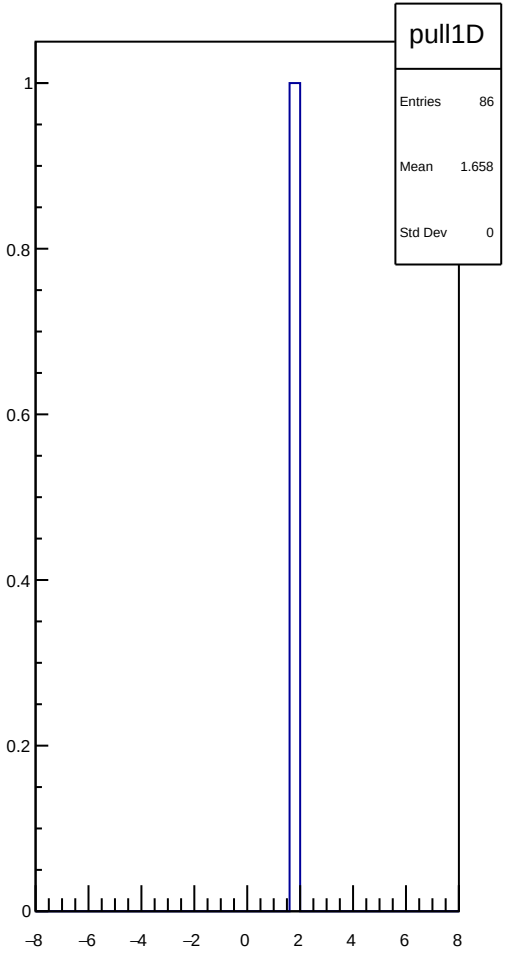

yield_bpm0l10Y_rms vs run
χ² / ndf 2.337e+04 / 85
p0 0.003631 ± 2.841e−06
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

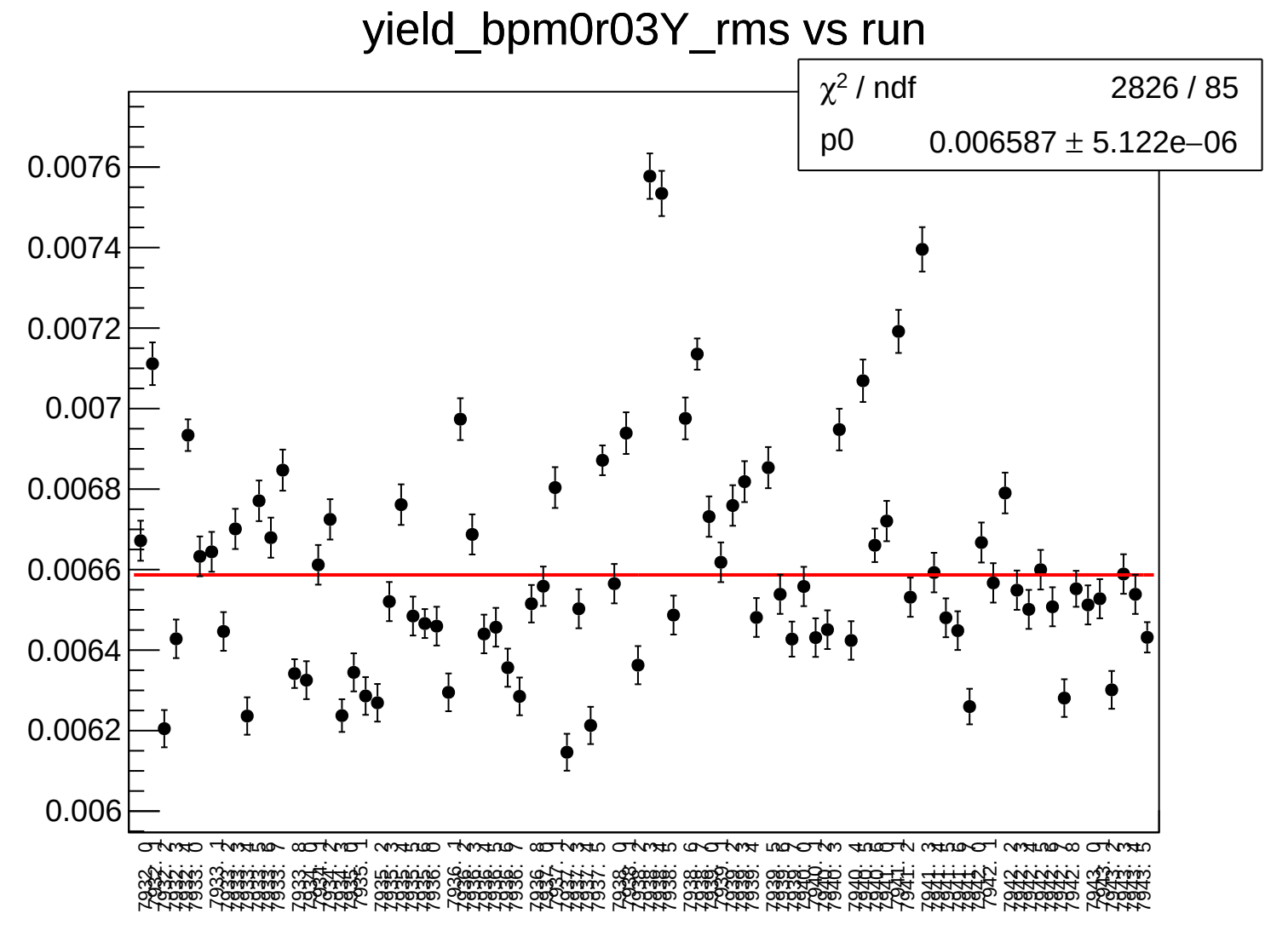

yield_bpm0r03X_mean vs run
χ² / ndf 9.98e+05 / 85
p0 −3.576 ± 9.202e−05
−3.45
−3.5
−3.55
−3.6
−3.65
−3.7
pull
Entries 86
Mean −8403
Std Dev 8450
200
150
100
50
0
−50
−100
−150

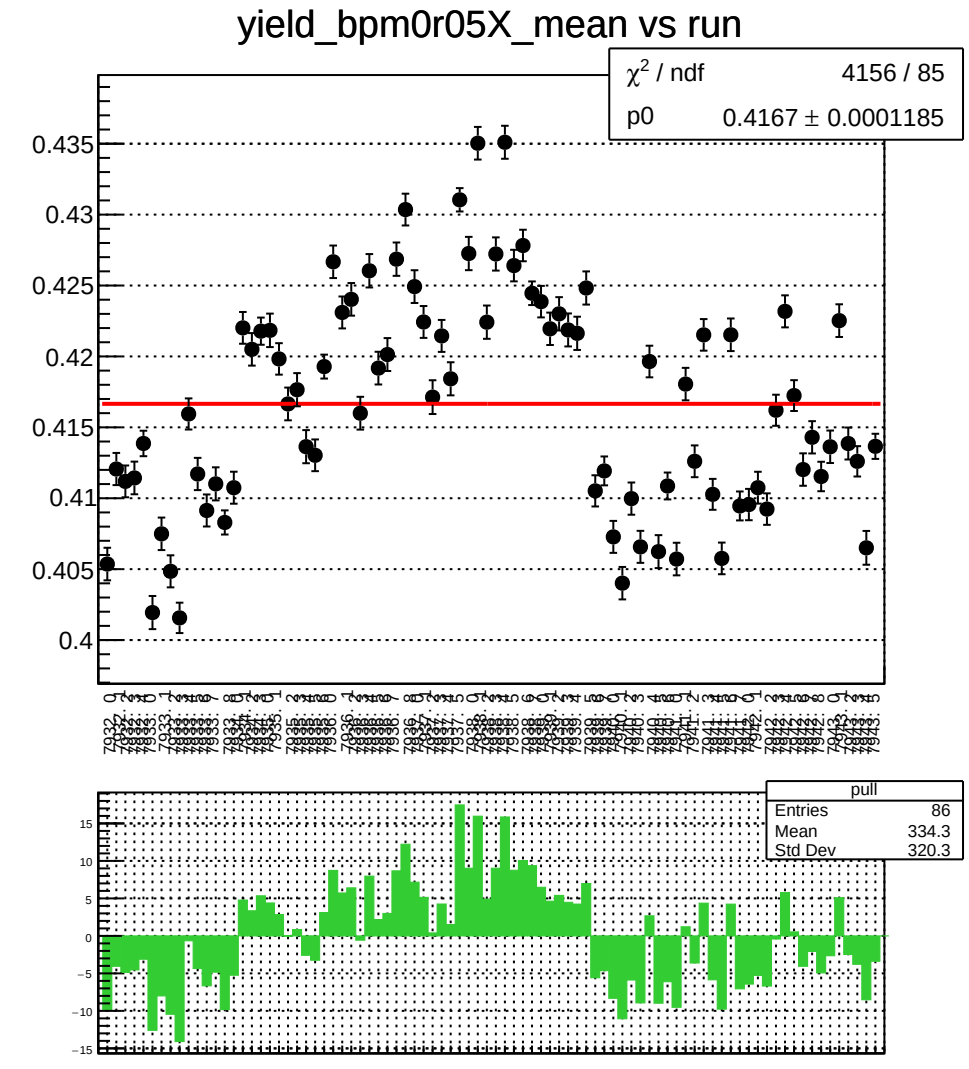

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

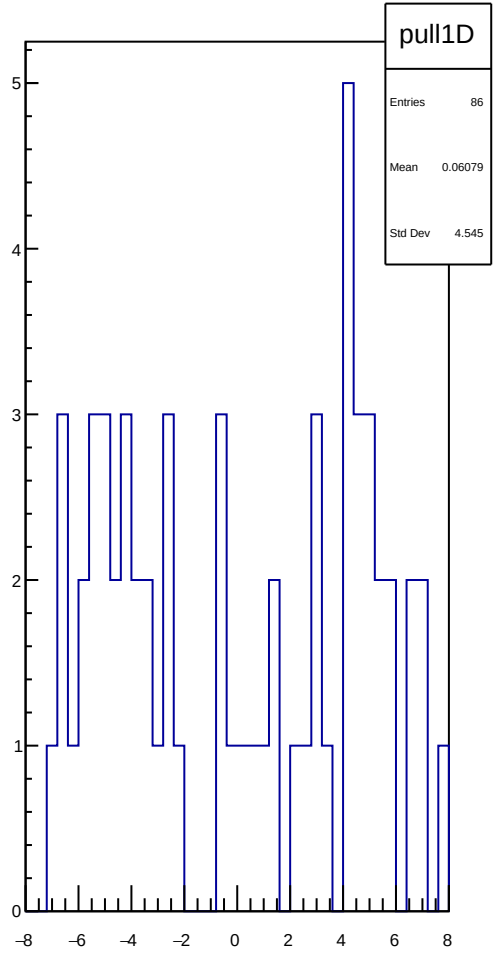

yield_bpm0r03X_rms vs run
χ² / ndf 1200 / 85
p0 0.08371 ± 6.507e–05
0.09
0.088
0.086
0.084
0.082
0.08
0.078

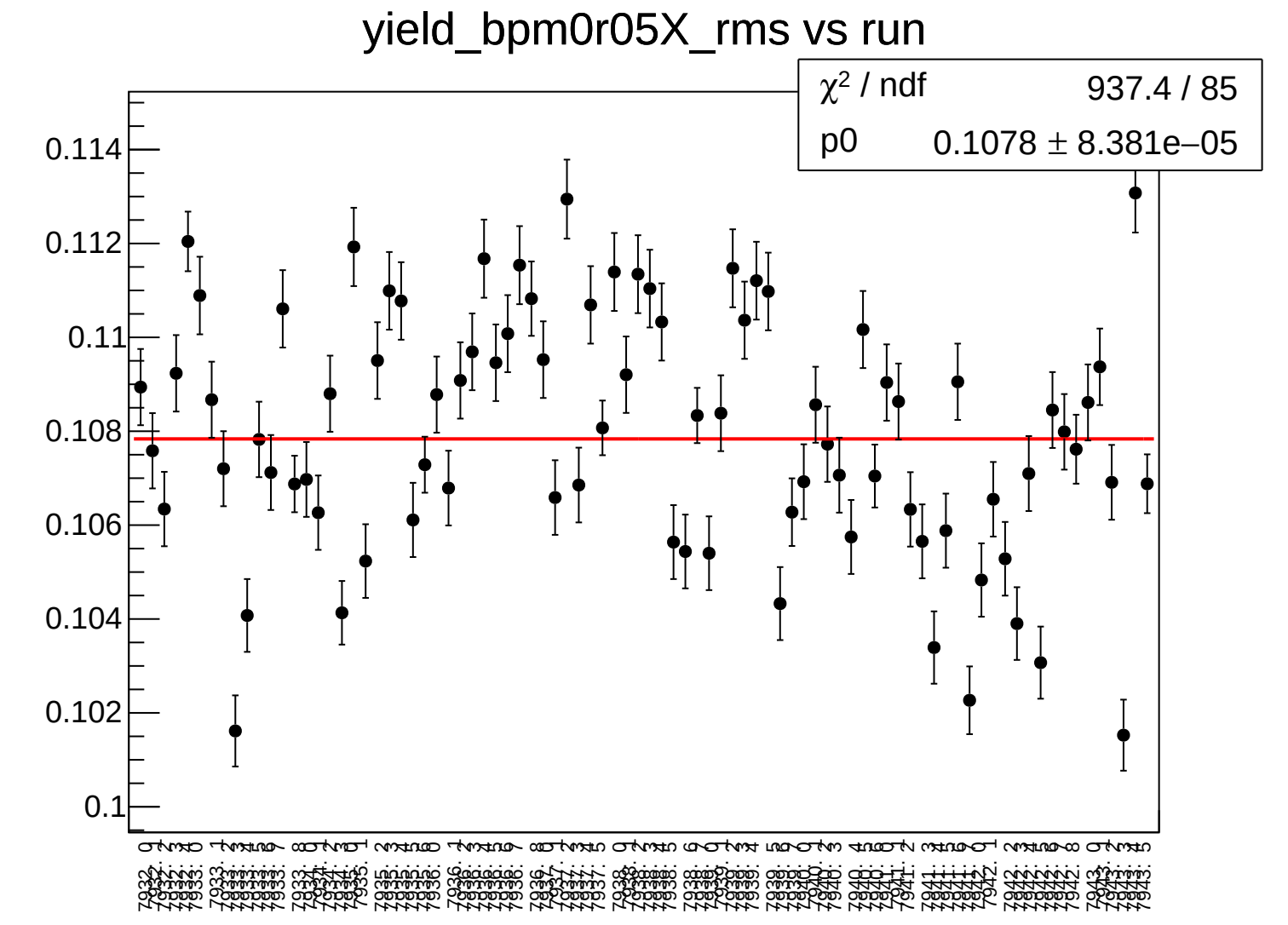

yield_bpm0r03Y_mean vs run
χ² / ndf 4.927e+06 / 85
p0 −0.3097 ± 7.244e−06
−0.28
−0.29
−0.3
−0.31
−0.32
−0.33
pull
Entries 86
Mean 2391
Std Dev 2336
500
400
300
200
100
0
−100
−200
−300

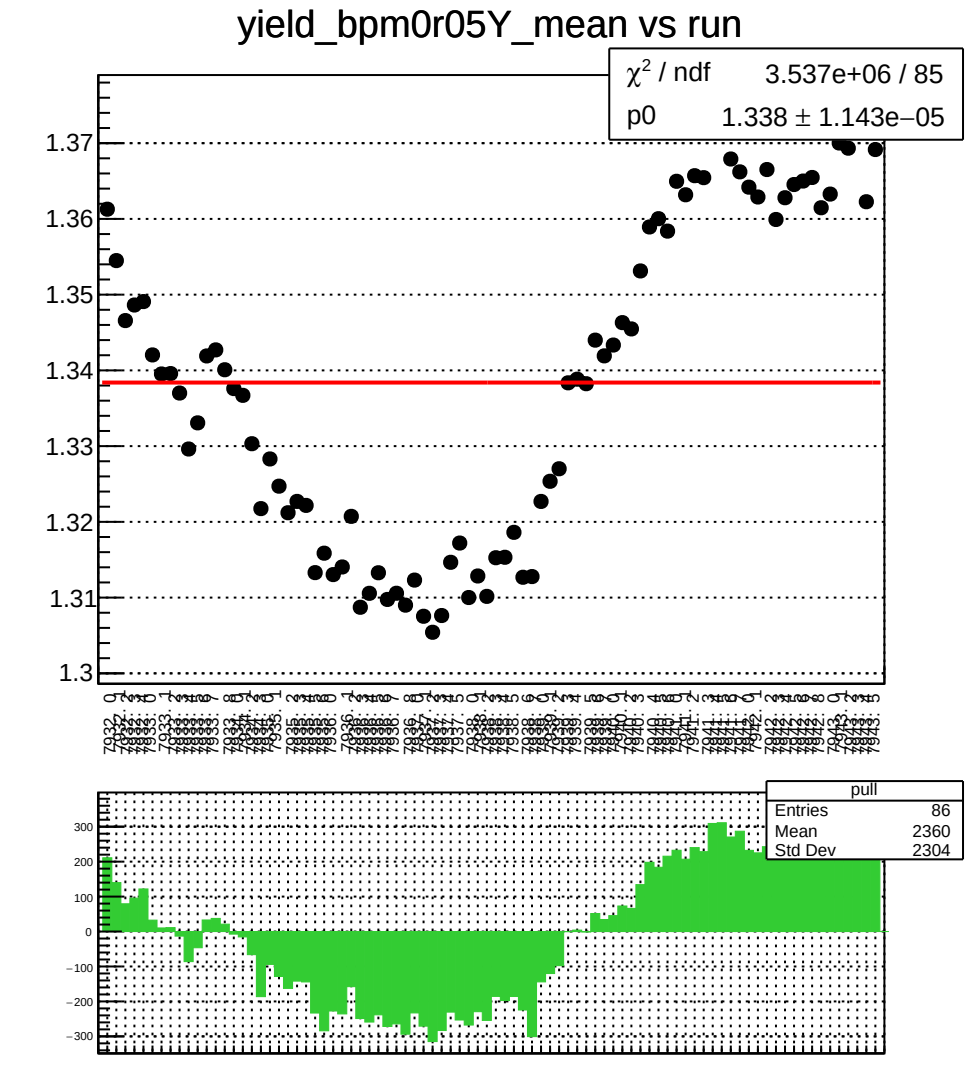

pull1D
Entries 86
Mean 1.658
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

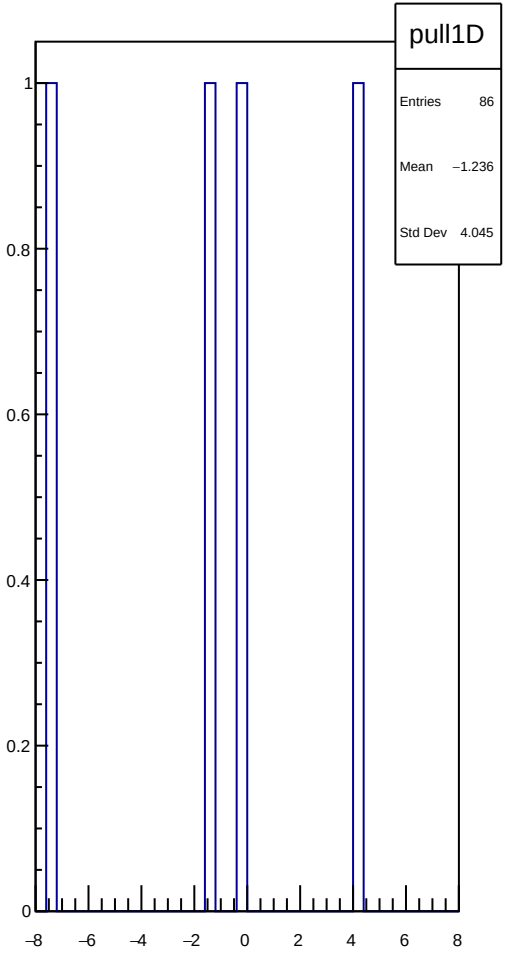

yield_bpm0r03Y_rms vs run
χ² / ndf 2826 / 85
p0 0.006587 ± 5.122e−06
0.0076
0.0074
0.0072
0.007
0.0068
0.0066
0.0064
0.0062
0.006

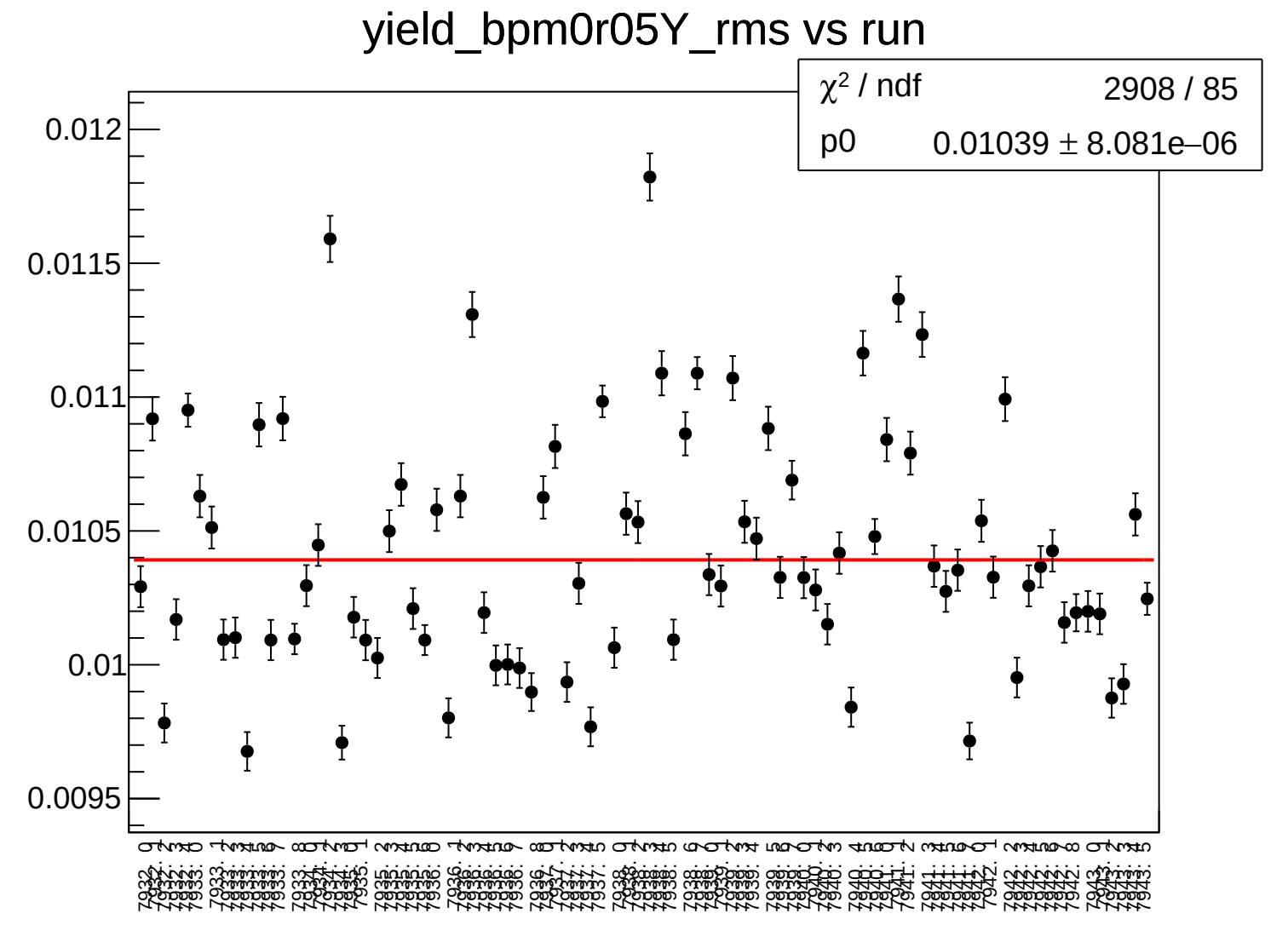

yield_bpm0r05X_mean vs run
χ² / ndf 4156 / 85
p0 0.4167 ± 0.0001185
pull
Entries 86
Mean 334.3
Std Dev 320.3

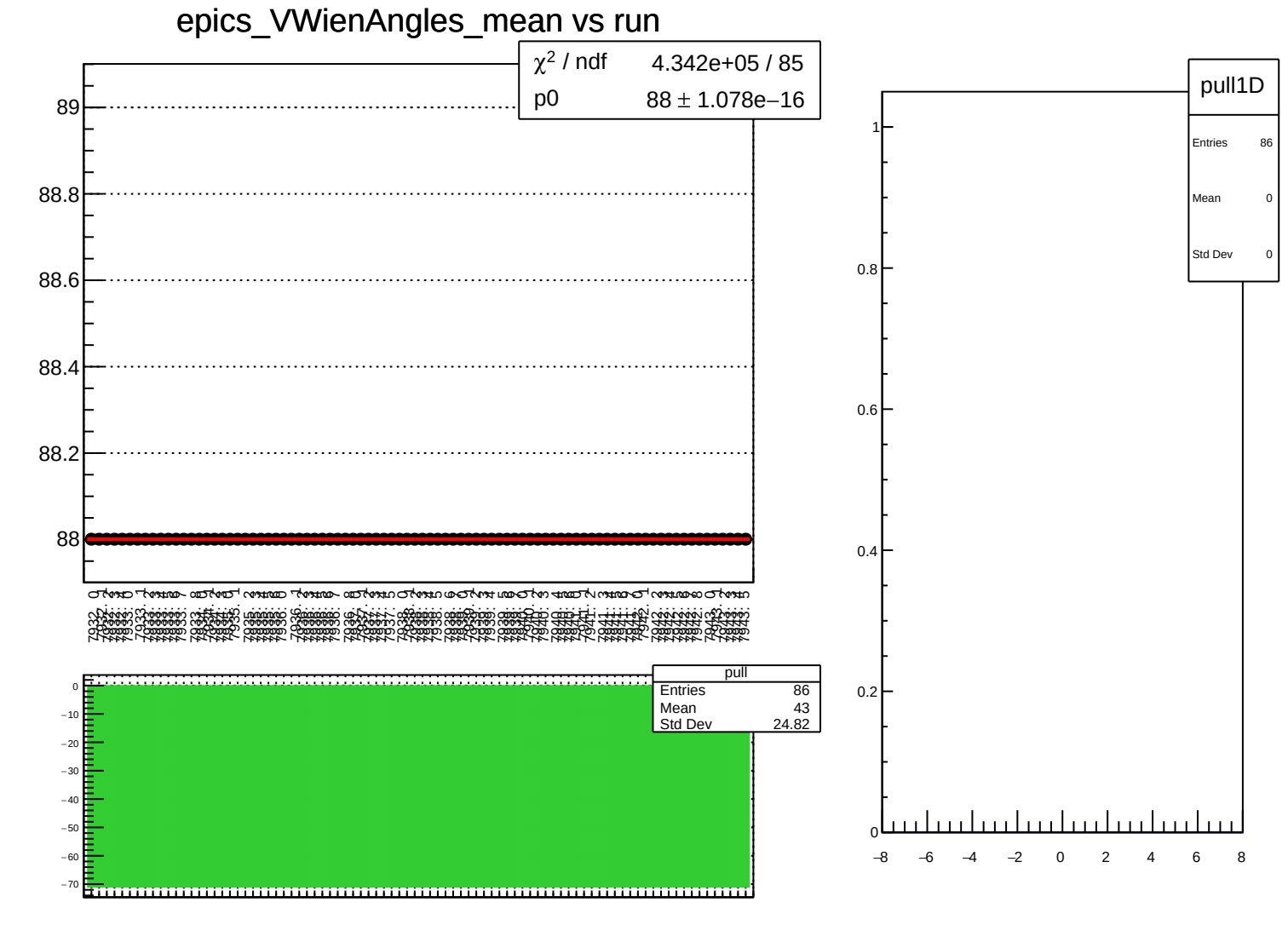

pull1D
Entries 86
Mean 0.06079
Std Dev 4.545

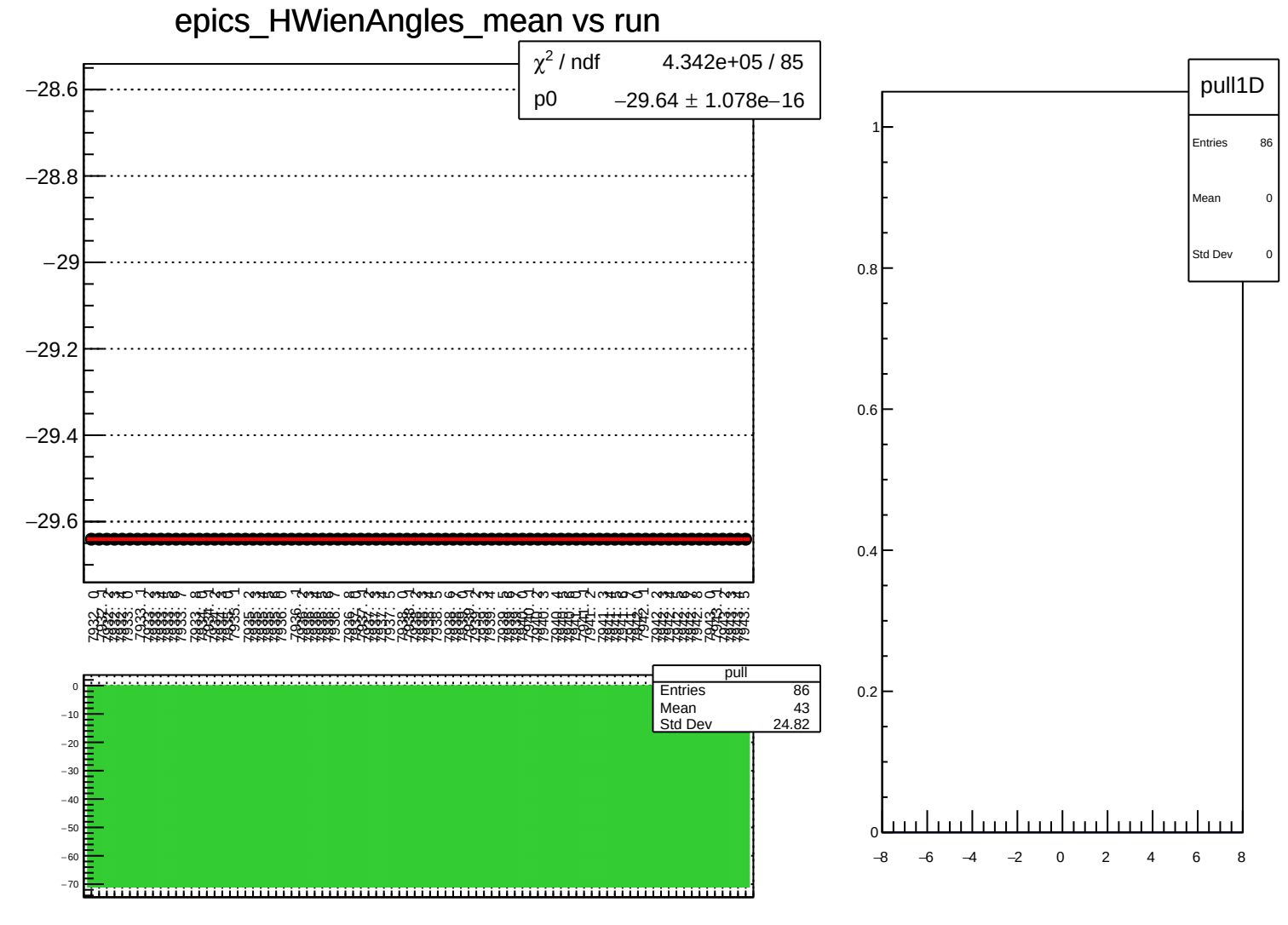

yield_bpm0r05X_rms vs run
χ² / ndf 937.4 / 85
p0 0.1078 ± 8.381e−05
0.114
0.112
0.11
0.108
0.106
0.104
0.102
0.1

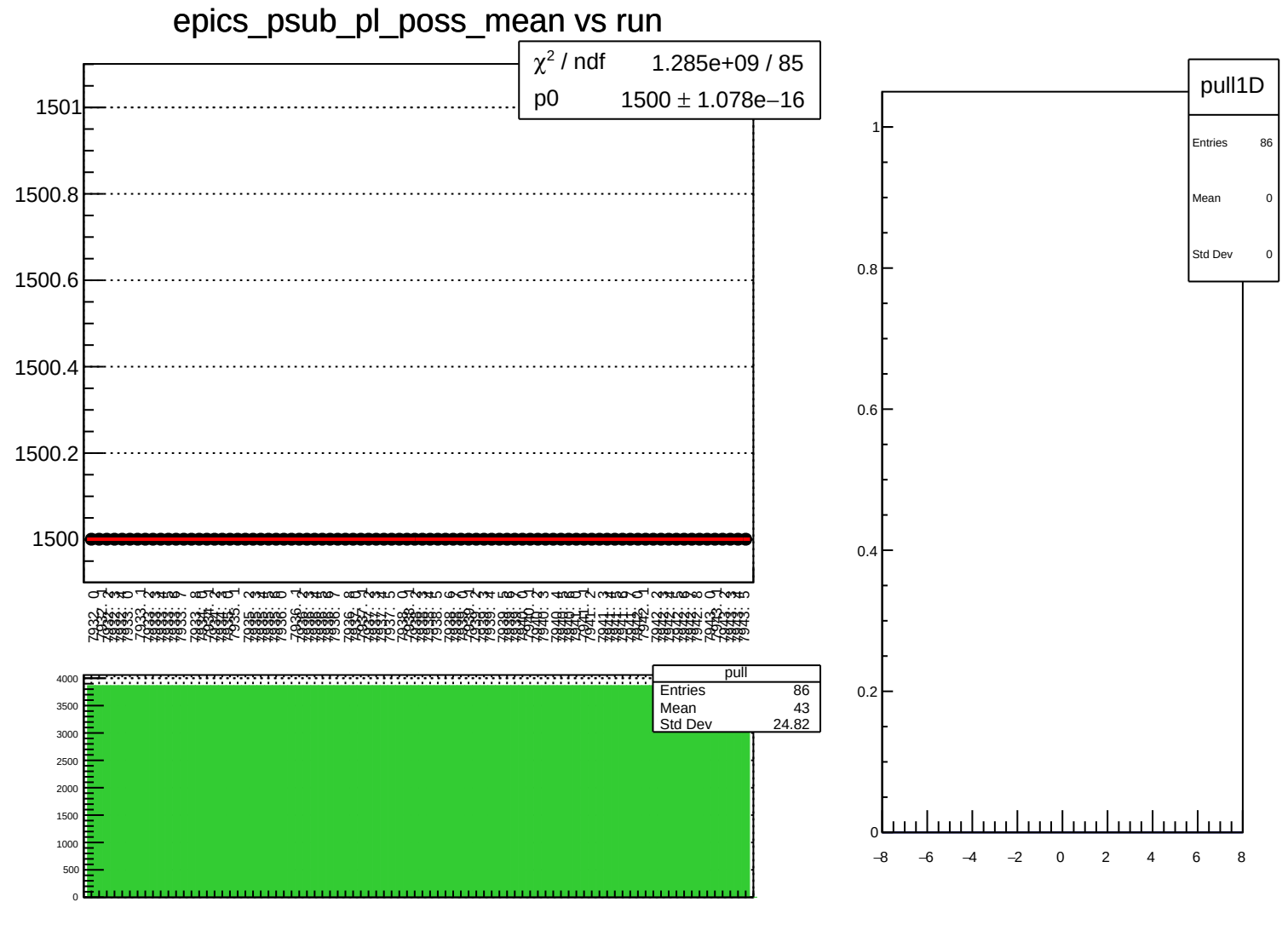

yield_bpm0r05Y_mean vs run
χ² / ndf 3.537e+06 / 85
p0 1.338 ± 1.143e−05
1.37
1.36
1.35
1.34
1.33
1.32
1.31
1.3
pull
Entries 86
Mean 2360
Std Dev 2304
300
200
100
0
−100
−200
−300

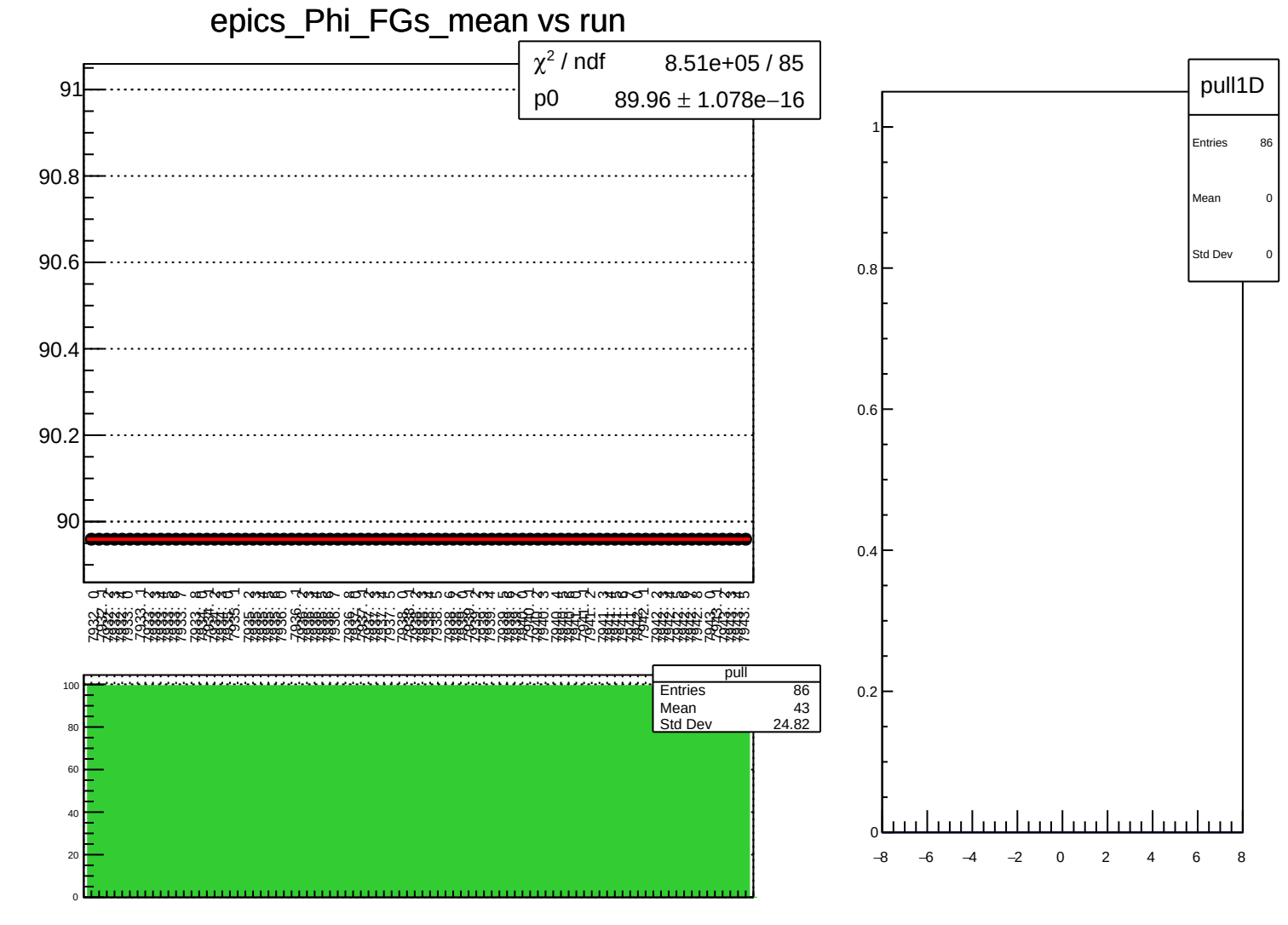

pull1D
Entries 86
Mean −1.236
Std Dev 4.045
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

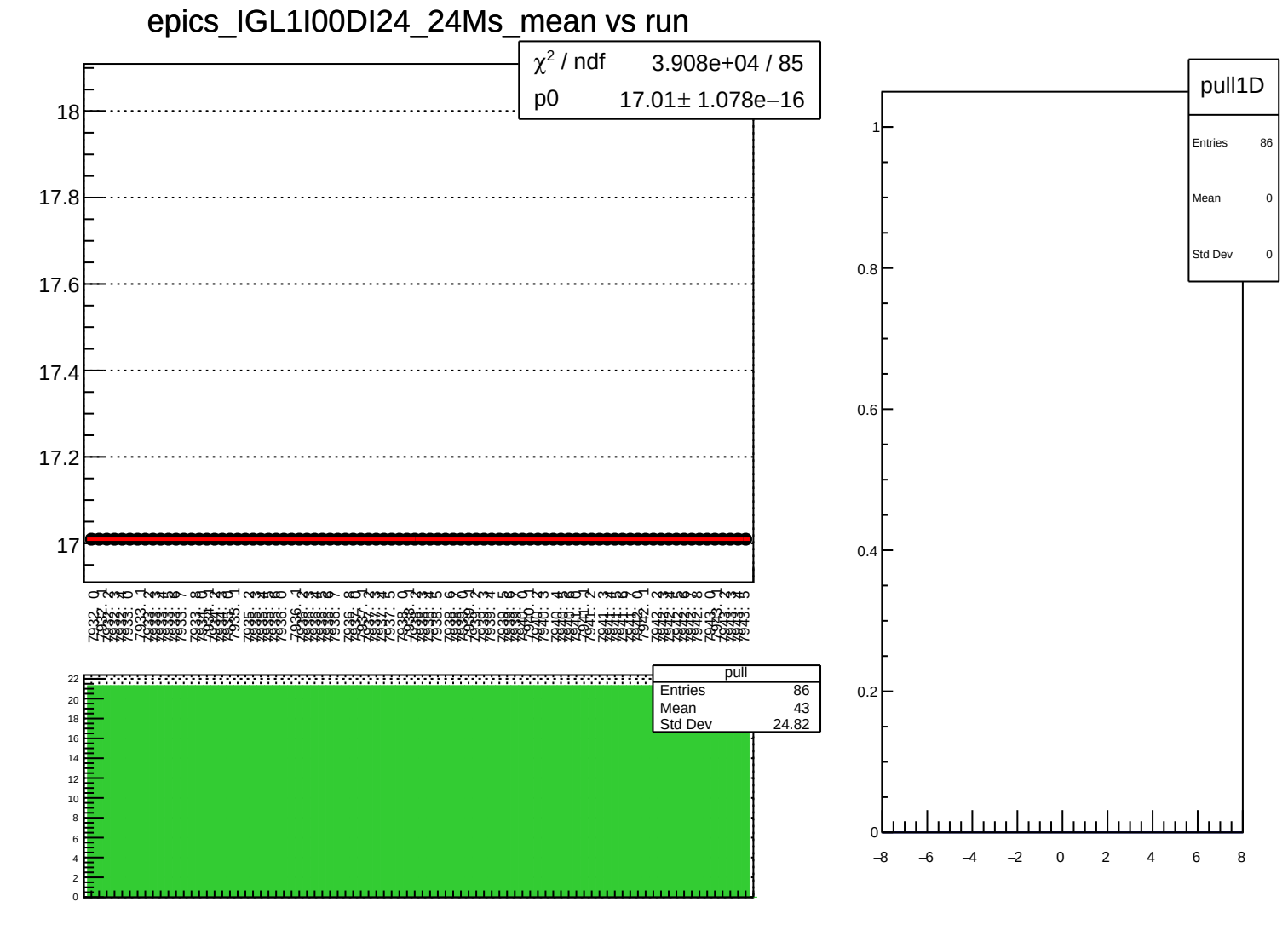

yield_bpm0r05Y_rms vs run
χ² / ndf 2908 / 85
p0 0.01039 ± 8.081e–06
0.012
0.0115
0.011
0.0105
0.01
0.0095

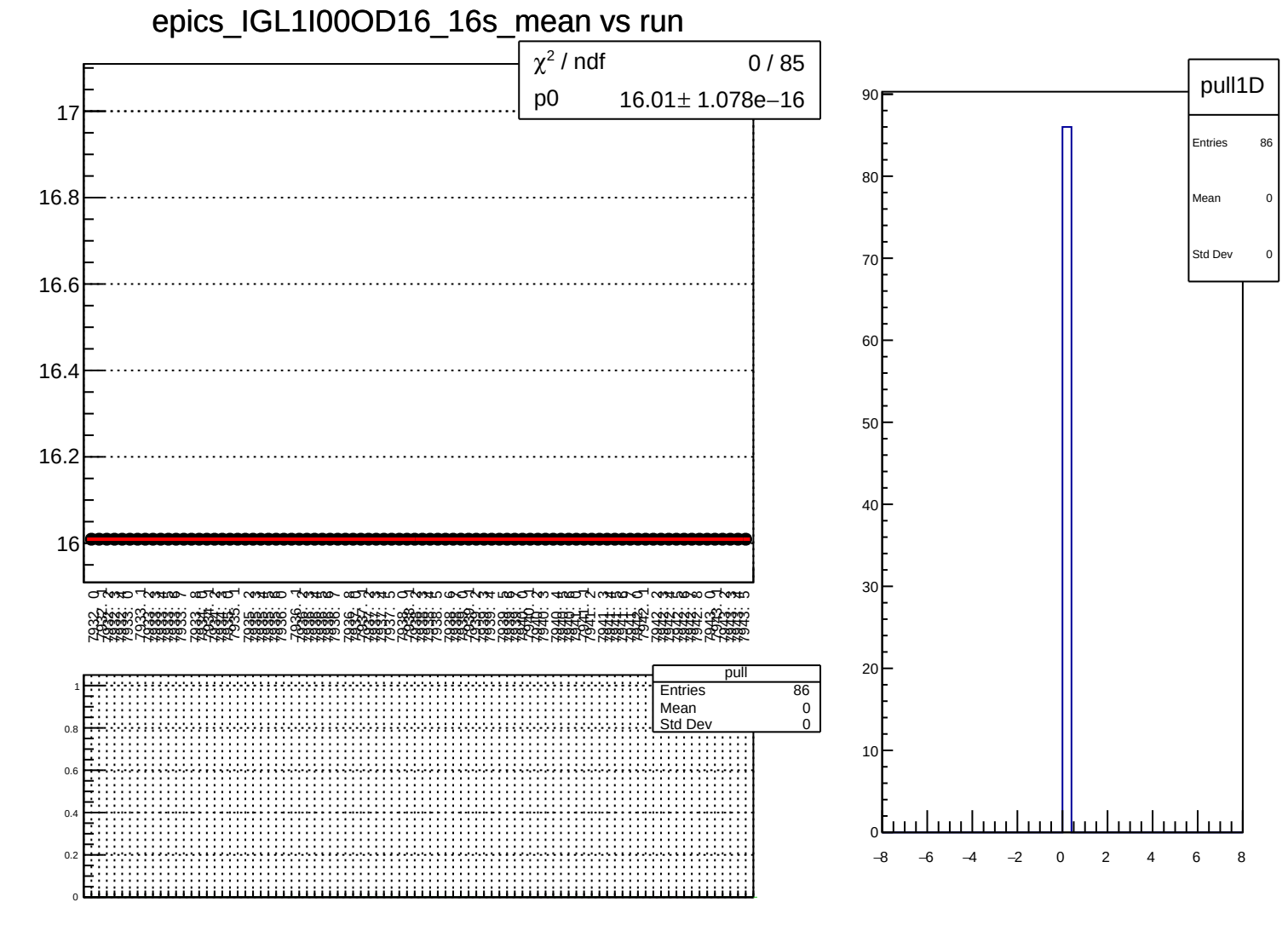

epics_VWienAngles_mean vs run
χ² / ndf 4.342e+05 / 85
p0 88 ± 1.078e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 86
Mean 43
Std Dev 24.82
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

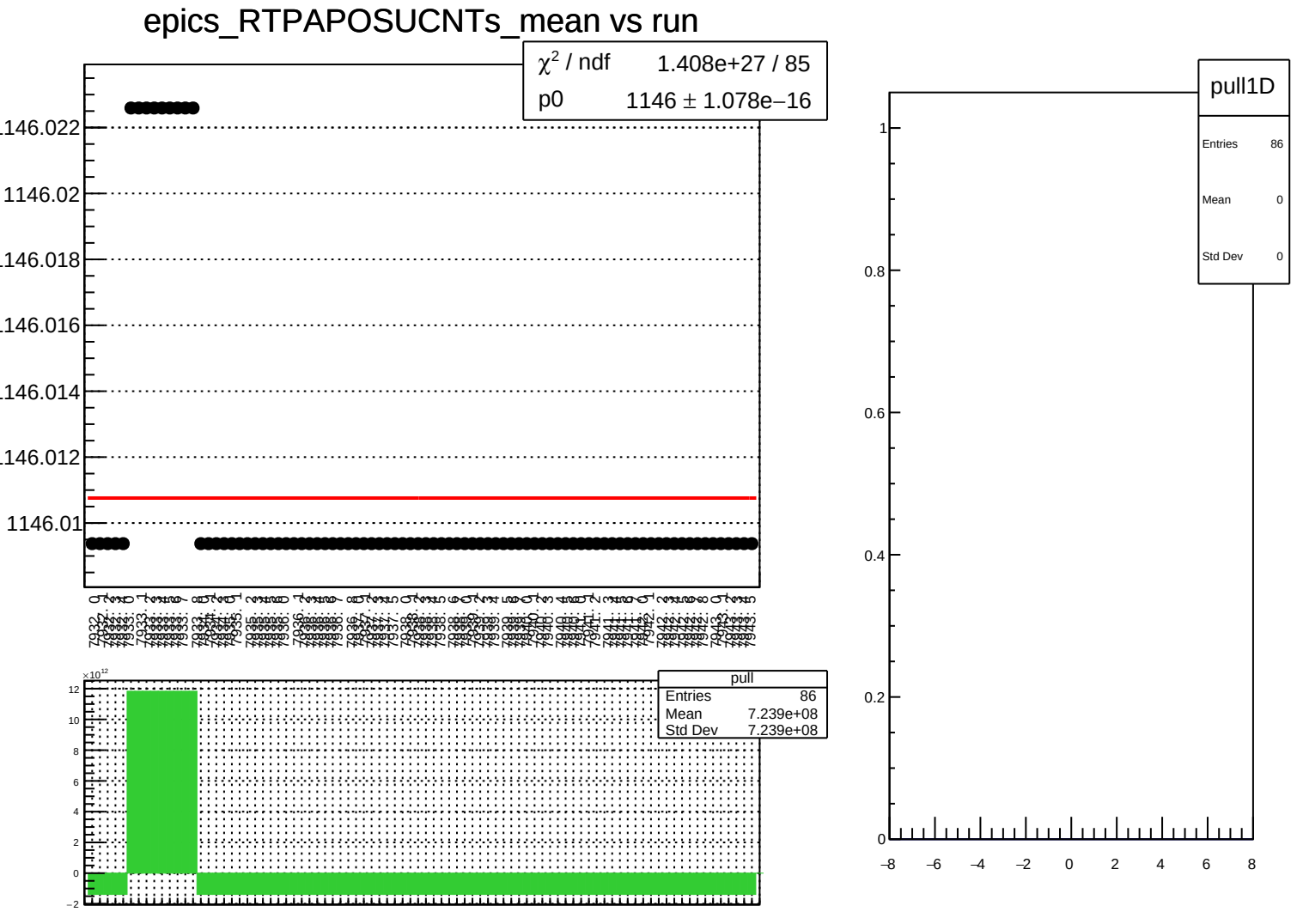

epics_HWienAngles_mean vs run
χ² / ndf 4.342e+05 / 85
p0 −29.64 ± 1.078e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 86
Mean 43
Std Dev 24.82
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

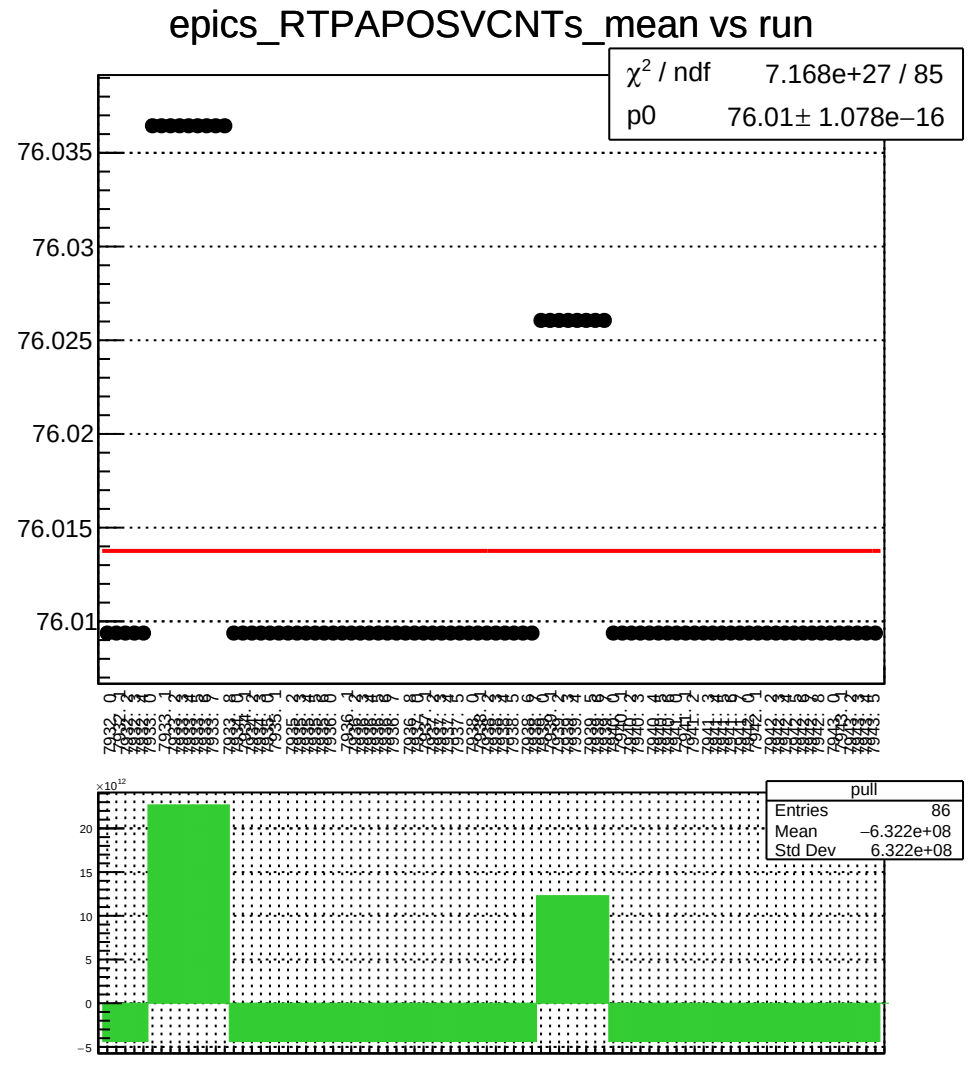

epics_psub_pl_poss_mean vs run
χ² / ndf 1.285e+09 / 85
p0 1500 ± 1.078e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 86
Mean 43
Std Dev 24.82
4000
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

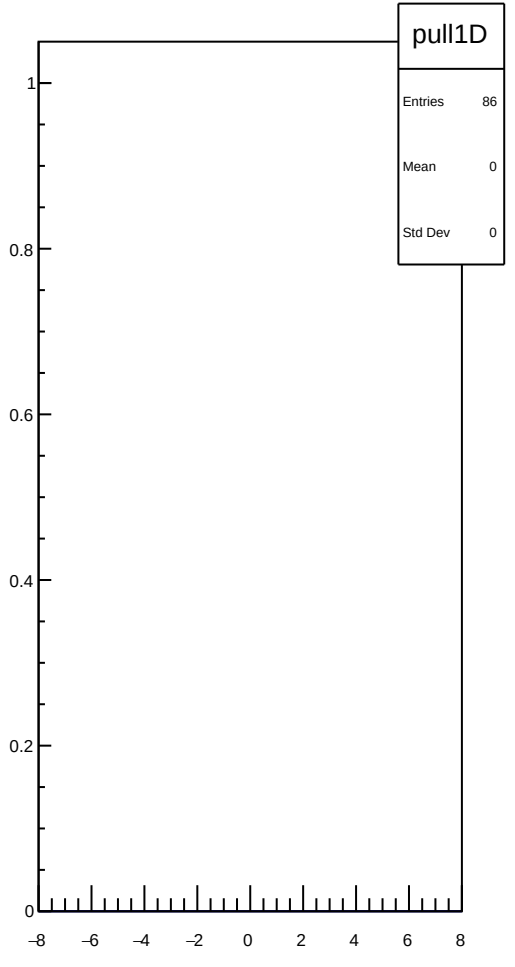

epics_Phi_FGs_mean vs run
χ² / ndf 8.51e+05 / 85
p0 89.96 ± 1.078e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 86
Mean 43
Std Dev 24.82
100
80
60
40
20
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 3.908e+04 / 85
p0 17.01± 1.078e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 86
Mean 43
Std Dev 24.82
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 0 / 85
p0 16.01± 1.078e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 86
Mean 0
Std Dev 0
90
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 1.408e+27 / 85
p0 1146 ± 1.078e−16
1146.022
1146.02
1146.018
1146.016
1146.014
1146.012
1146.01
pull
Entries 86
Mean 7.239e+08
Std Dev 7.239e+08
×10¹²
12
10
8
6
4
2
0
−2
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 7.168e+27 / 85
p0 76.01± 1.078e−16
76.035
76.03
76.025
76.02
76.015
76.01
pull
Entries 86
Mean −6.322e+08
Std Dev 6.322e+08
×10¹²
20
15
10
5
0
−5


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