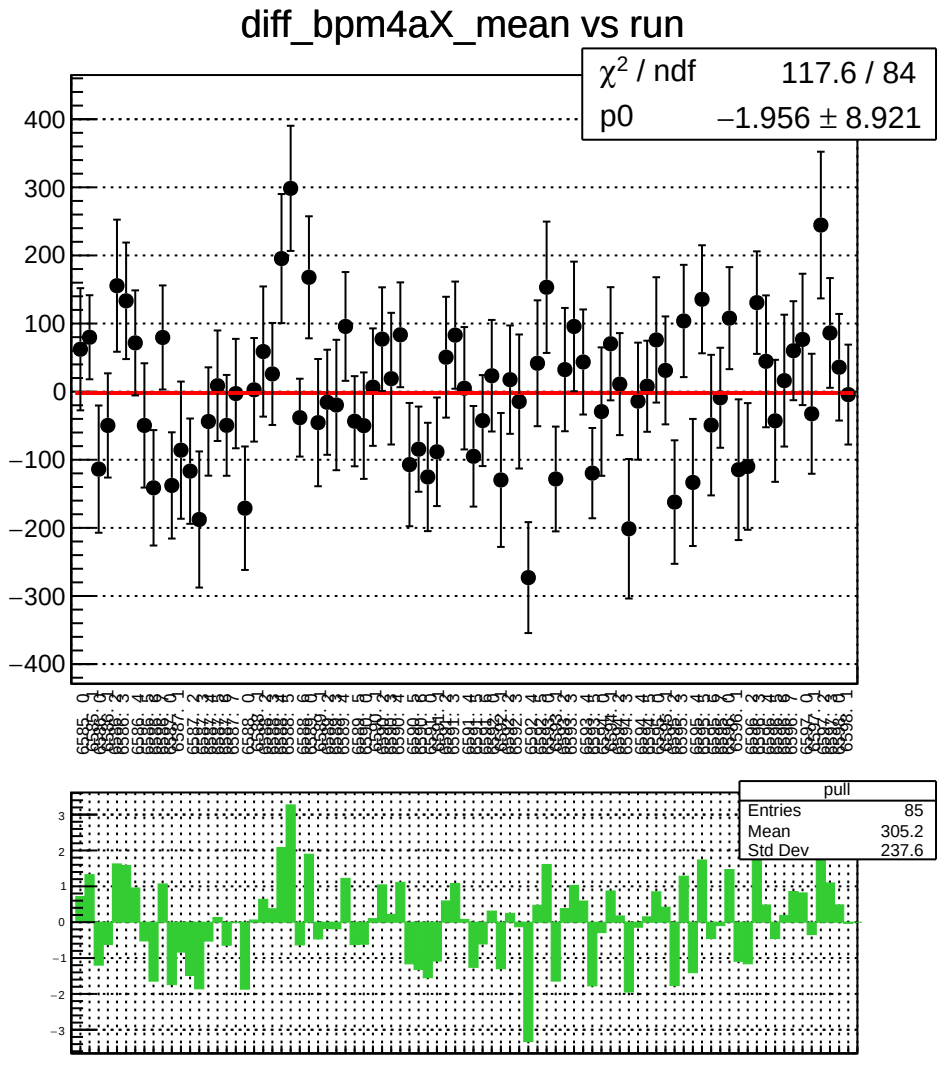
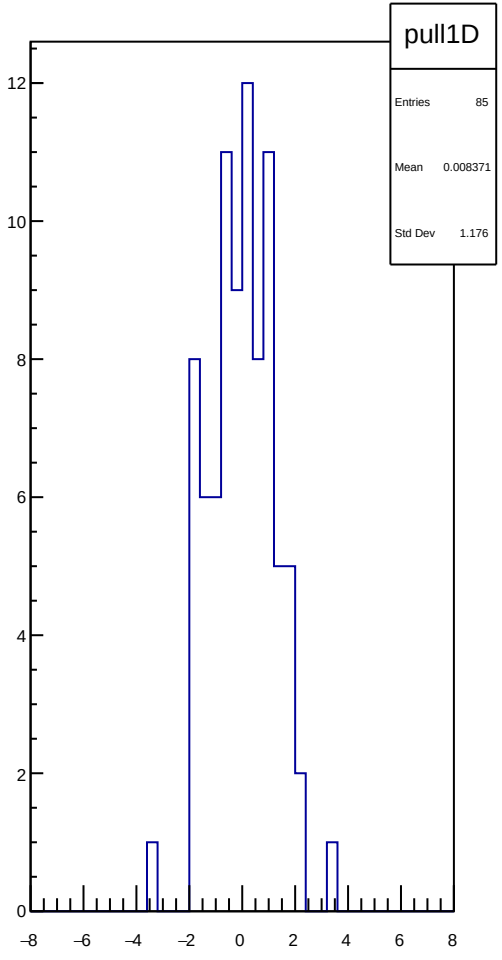
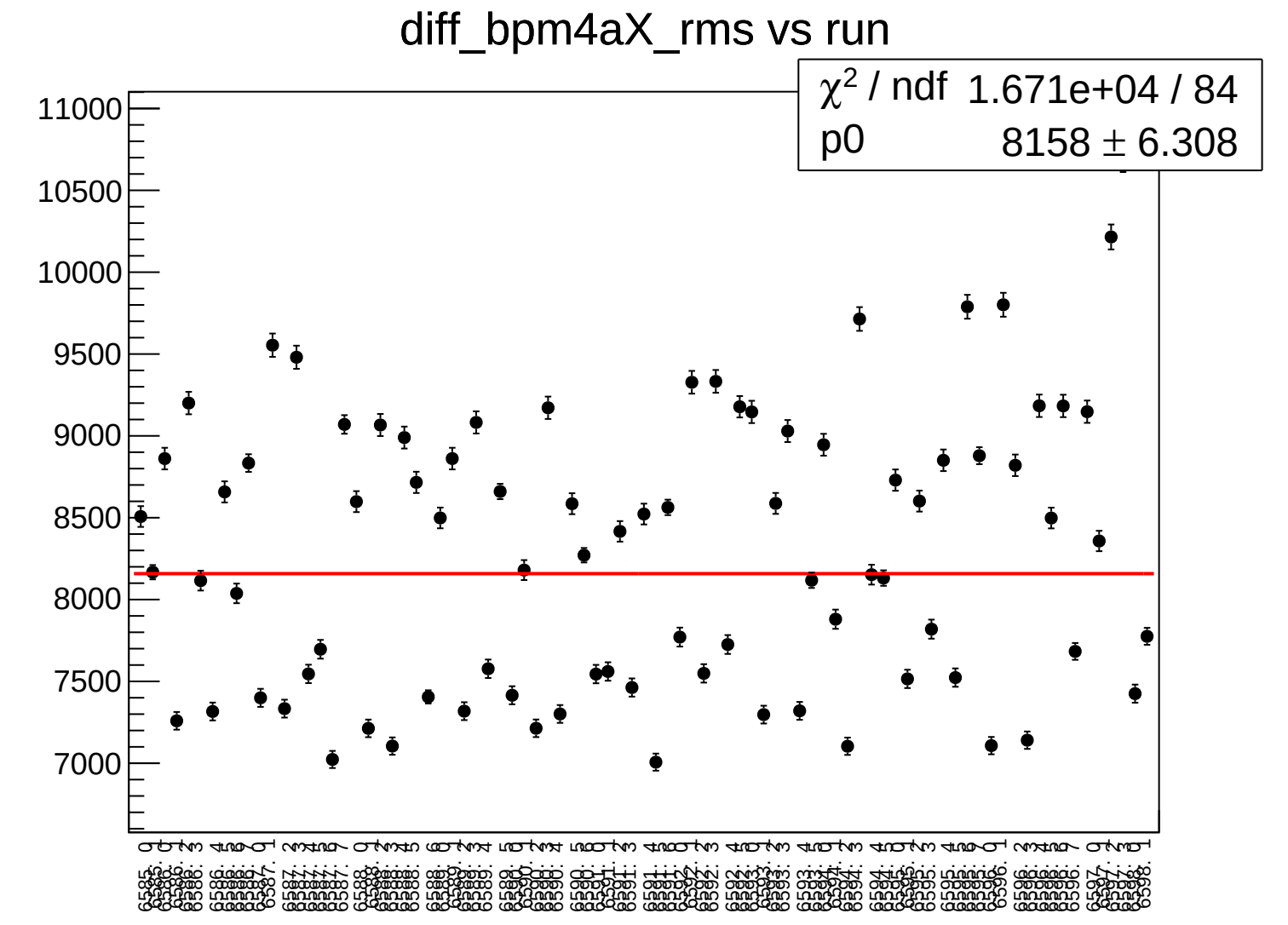
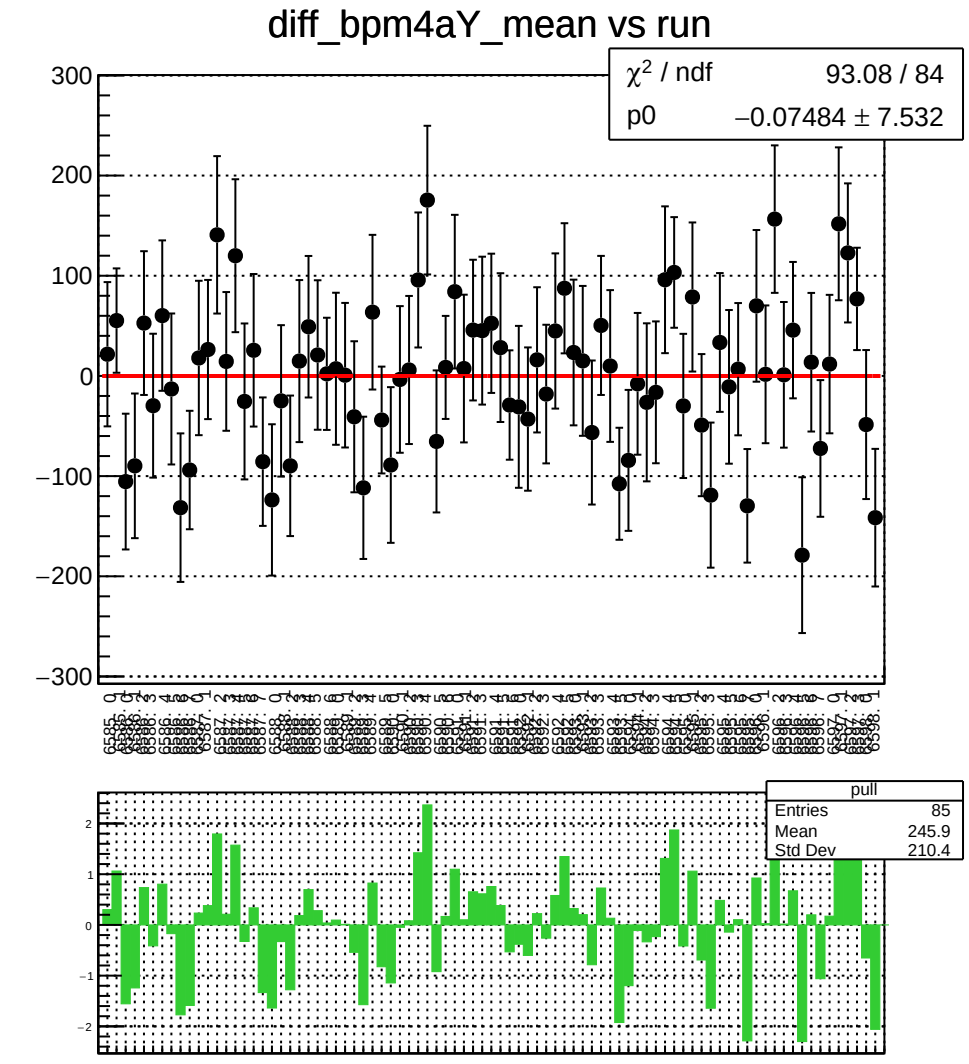
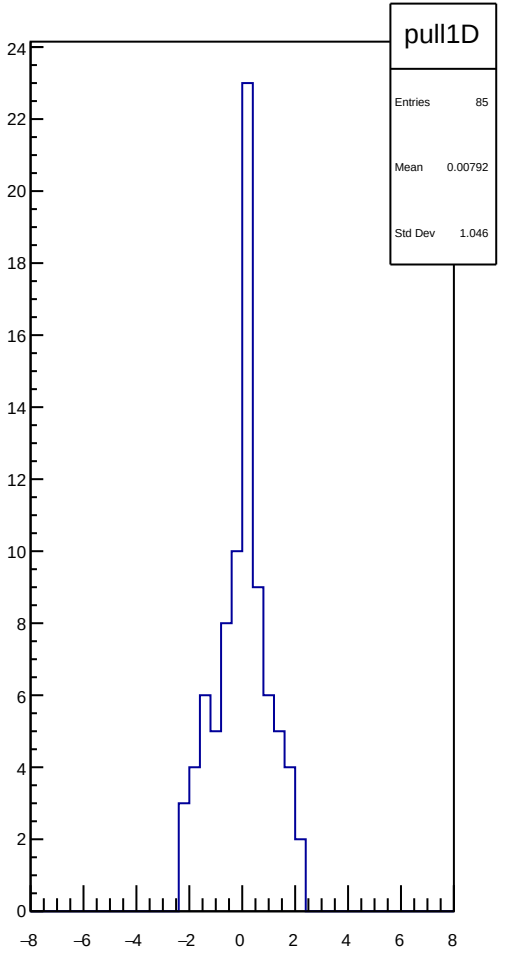
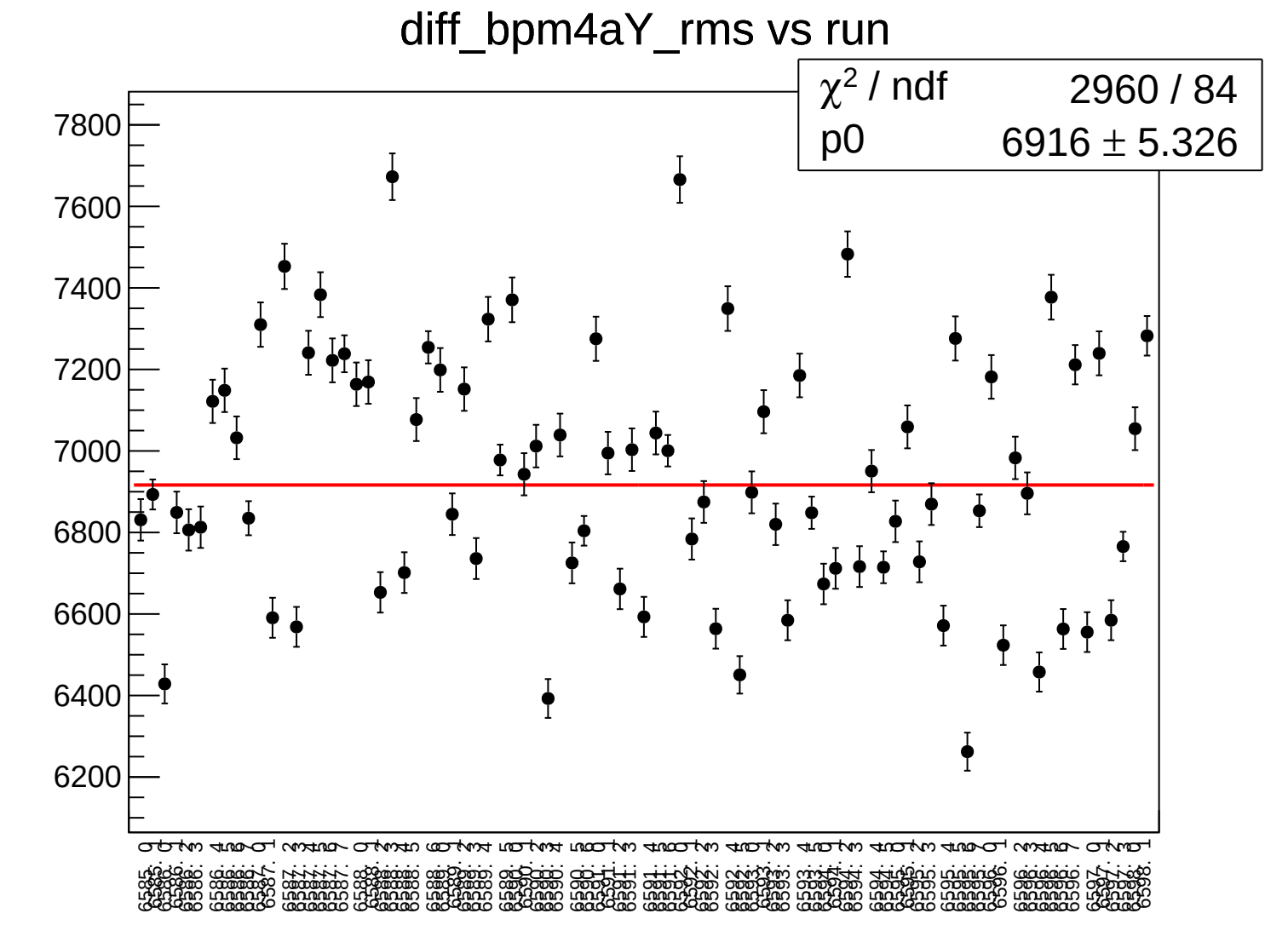

diff_bpm4aX_mean vs run
χ² / ndf 117.6 / 84
p0 −1.956 ± 8.921
pull
Entries 85
Mean 305.2
Std Dev 237.6

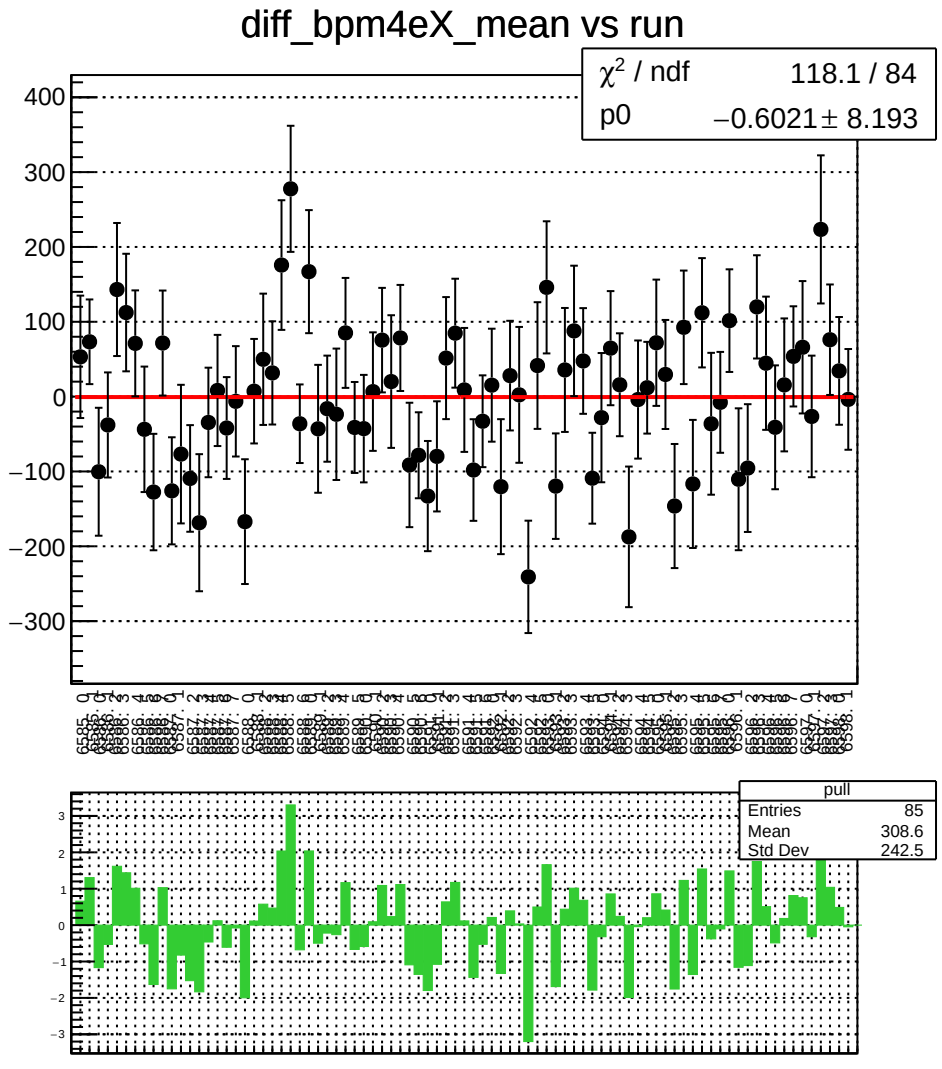

pull1D
Entries 85
Mean 0.008371
Std Dev 1.176

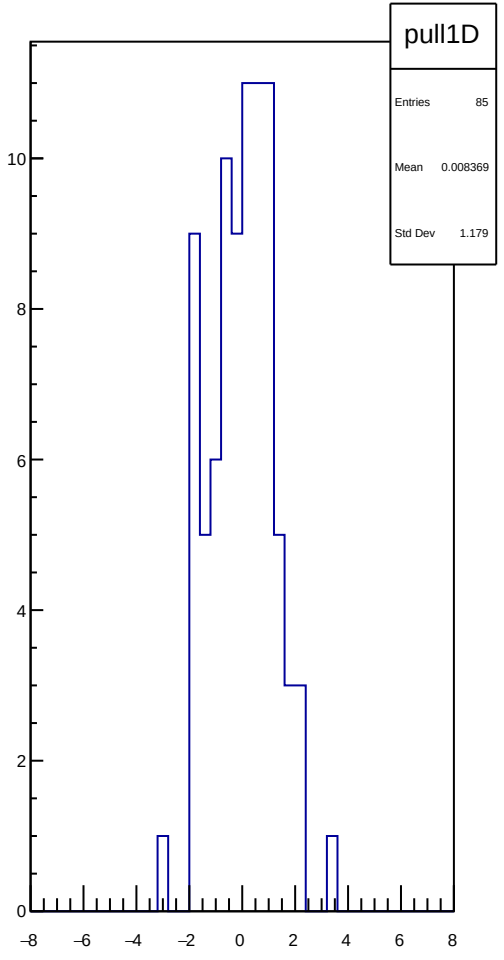

diff_bpm4aX_rms vs run
χ² / ndf 1.671e+04 / 84
p0 8158 ± 6.308
11000
10500
10000
9500
9000
8500
8000
7500
7000

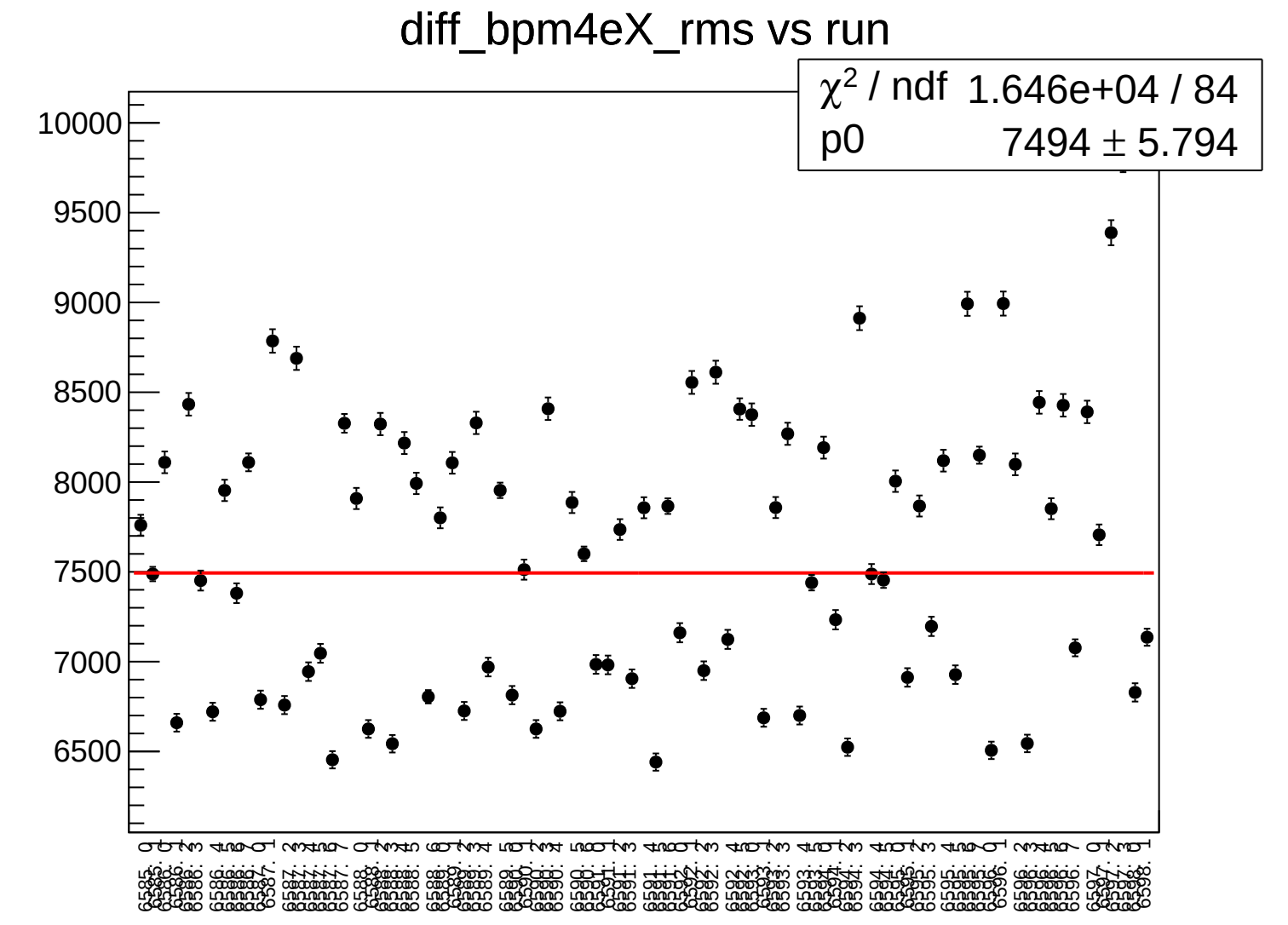

diff_bpm4aY_mean vs run
χ² / ndf 93.08 / 84
p0 −0.07484 ± 7.532
pull
Entries 85
Mean 245.9
Std Dev 210.4

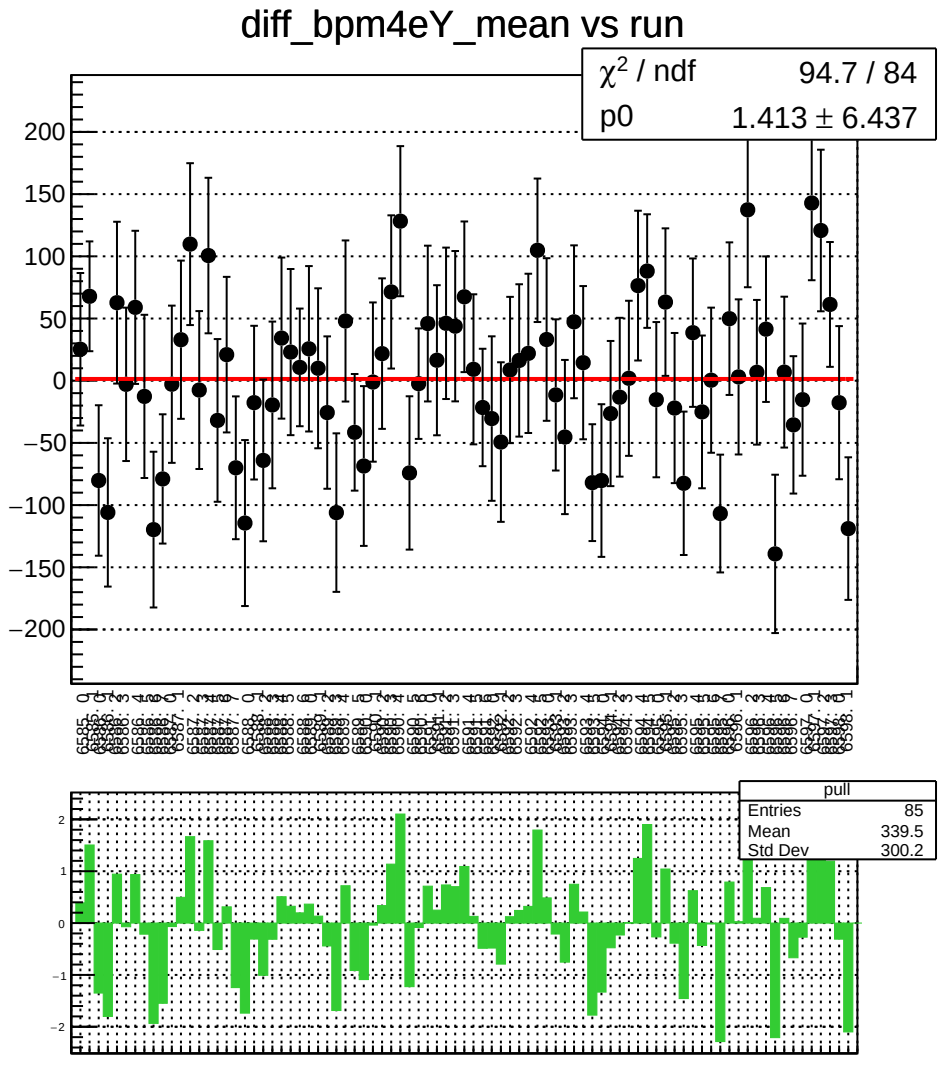

pull1D
Entries 85
Mean 0.00792
Std Dev 1.046

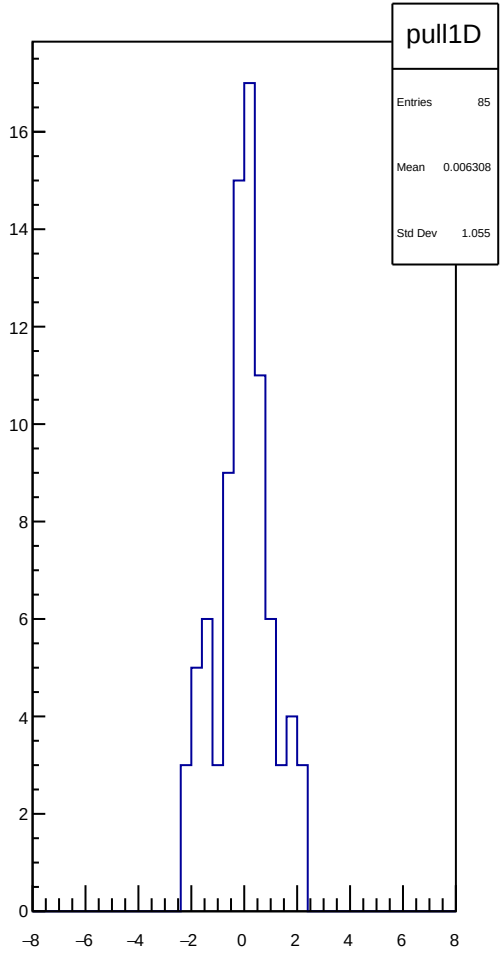

diff_bpm4aY_rms vs run
χ^2 / ndf 2960 / 84
p0 6916 ± 5.326
7800
7600
7400
7200
7000
6800
6600
6400
6200

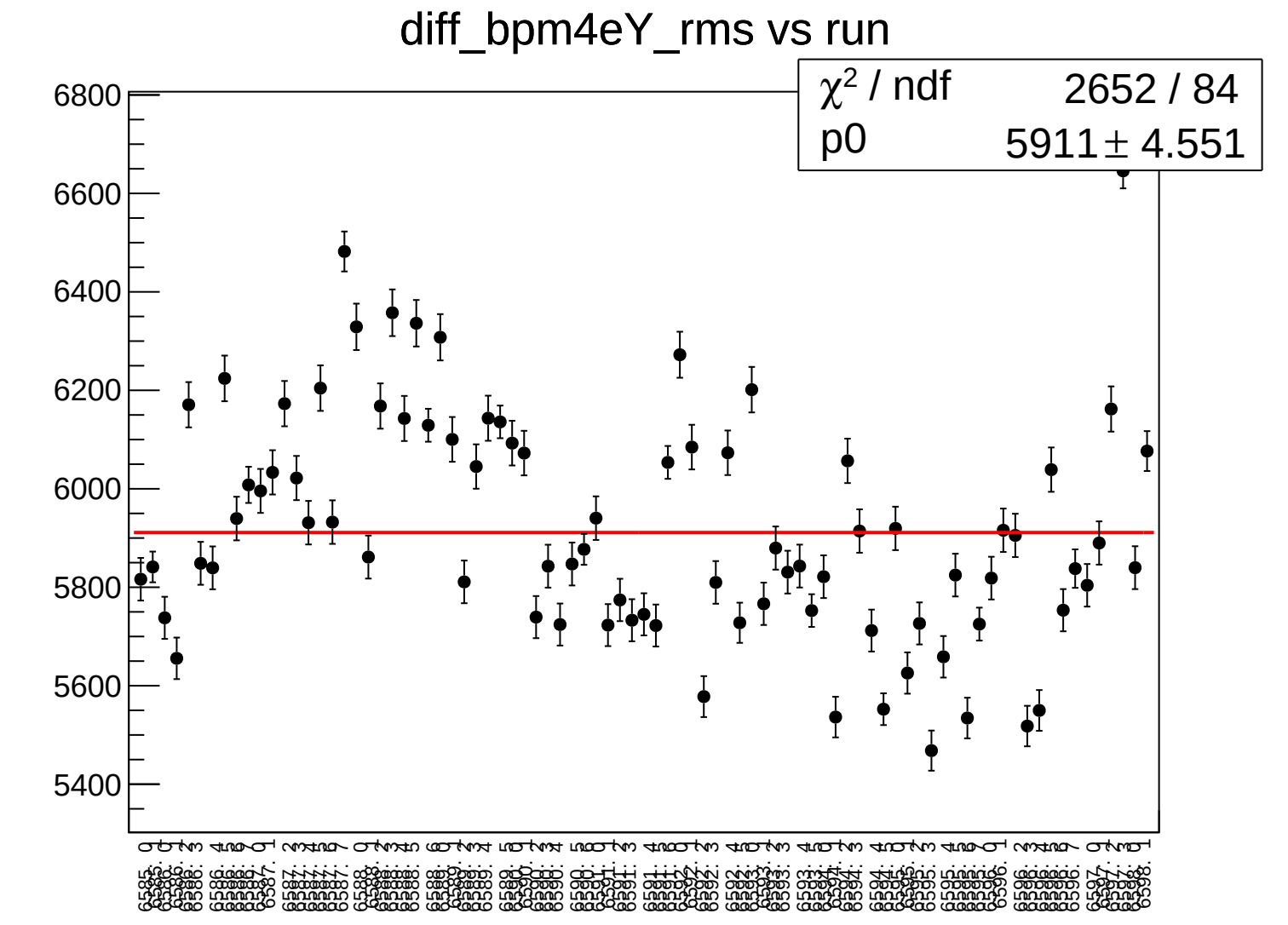

diff_bpm4eX_mean vs run
χ² / ndf 118.1 / 84
p0 −0.6021 ± 8.193
pull
Entries 85
Mean 308.6
Std Dev 242.5

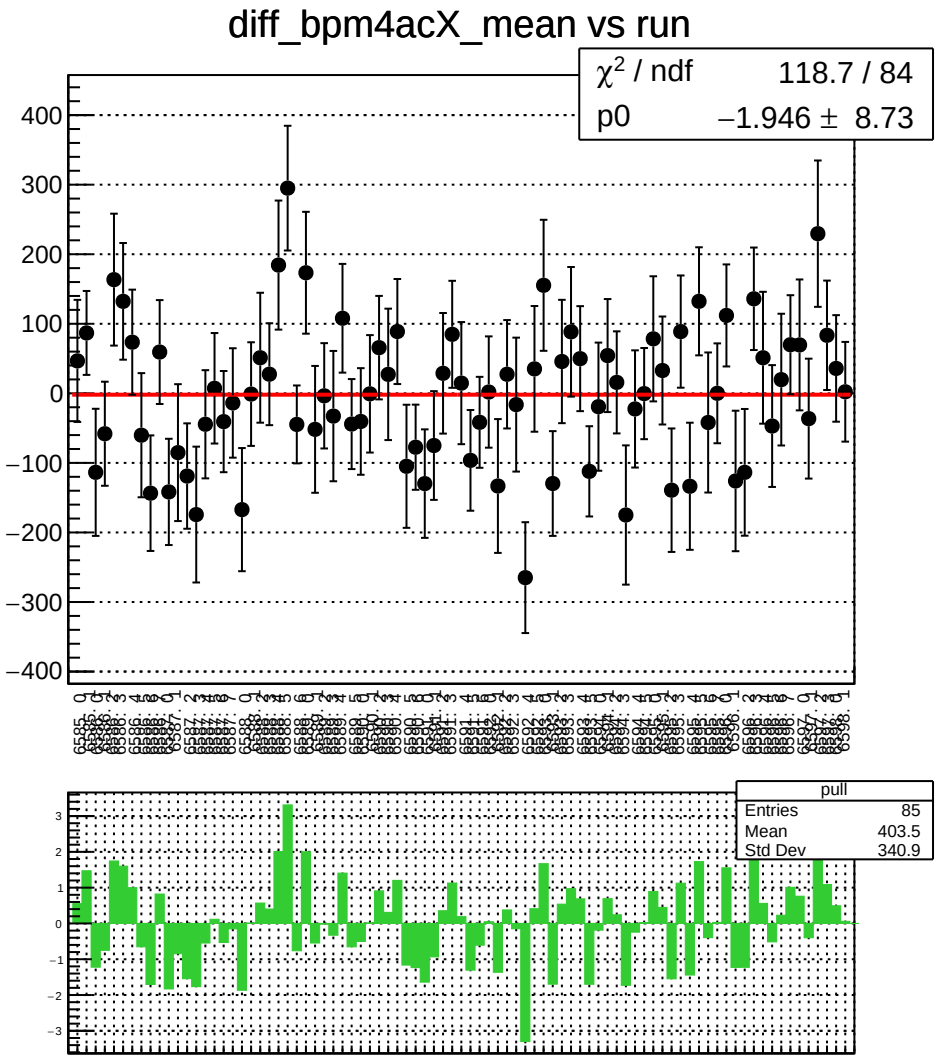

pull1D
Entries 85
Mean 0.008369
Std Dev 1.179

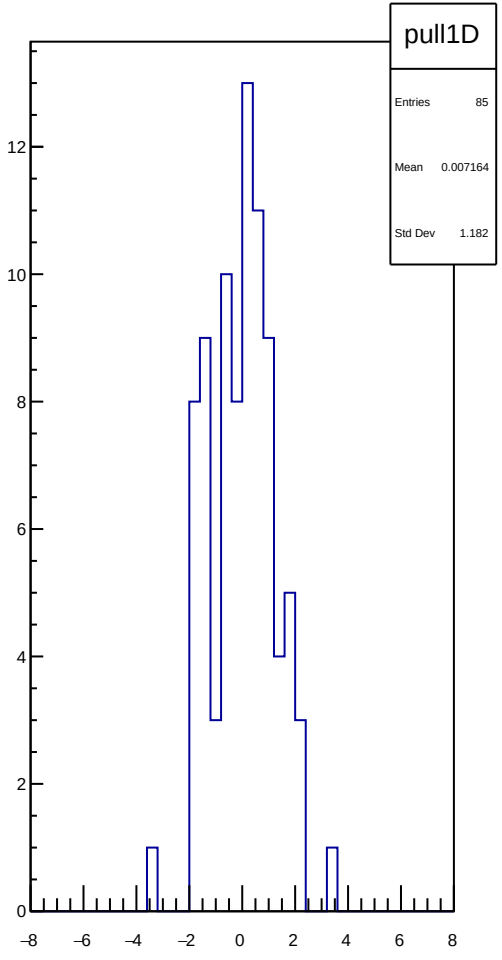

diff_bpm4eX_rms vs run
χ² / ndf 1.646e+04 / 84
p0 7494 ± 5.794
10000
9500
9000
8500
8000
7500
7000
6500

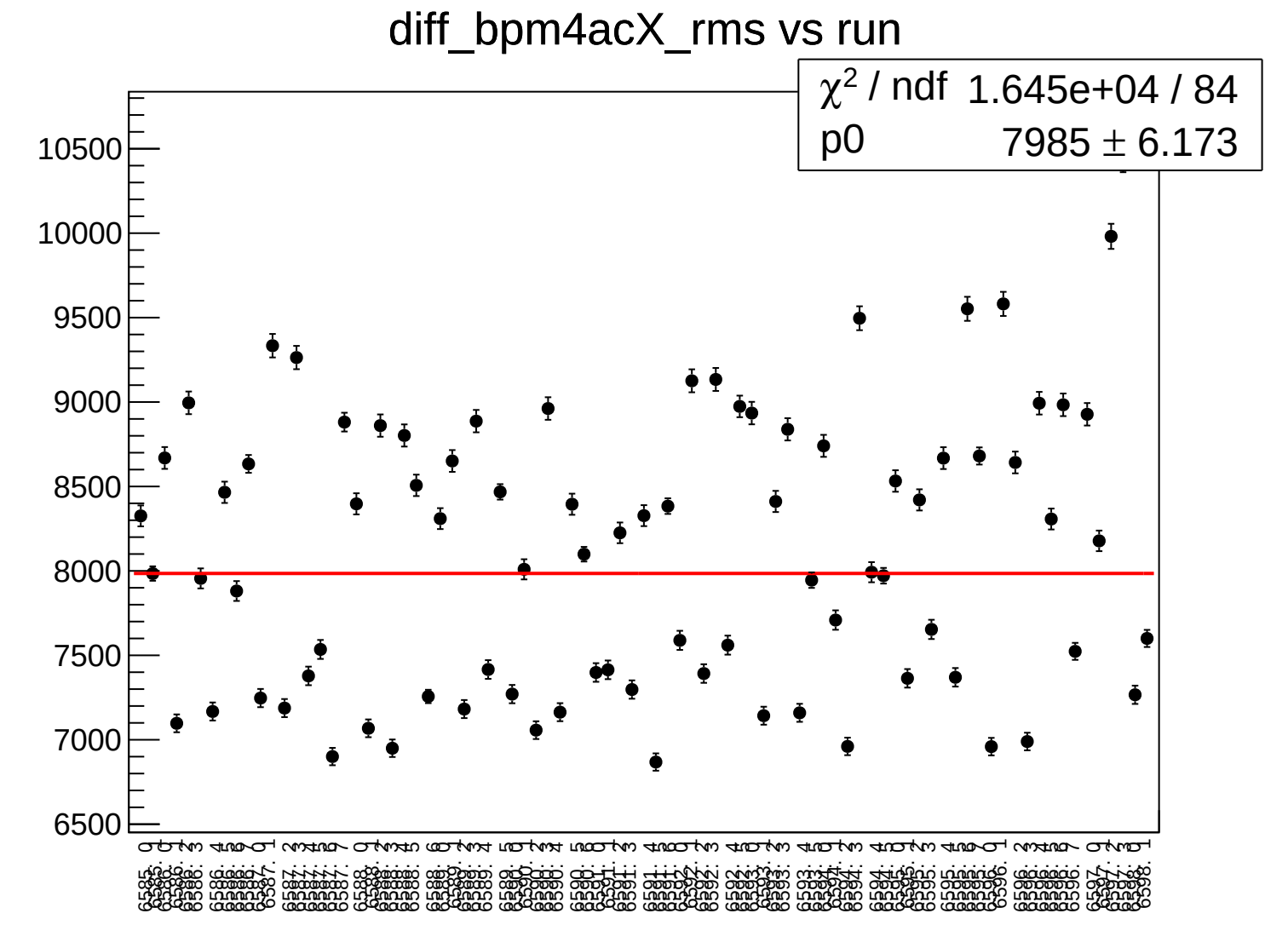

diff_bpm4eY_mean vs run
χ² / ndf 94.7 / 84
p0 1.413 ± 6.437
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 339.5
Std Dev 300.2
2
1
0
−1
−2

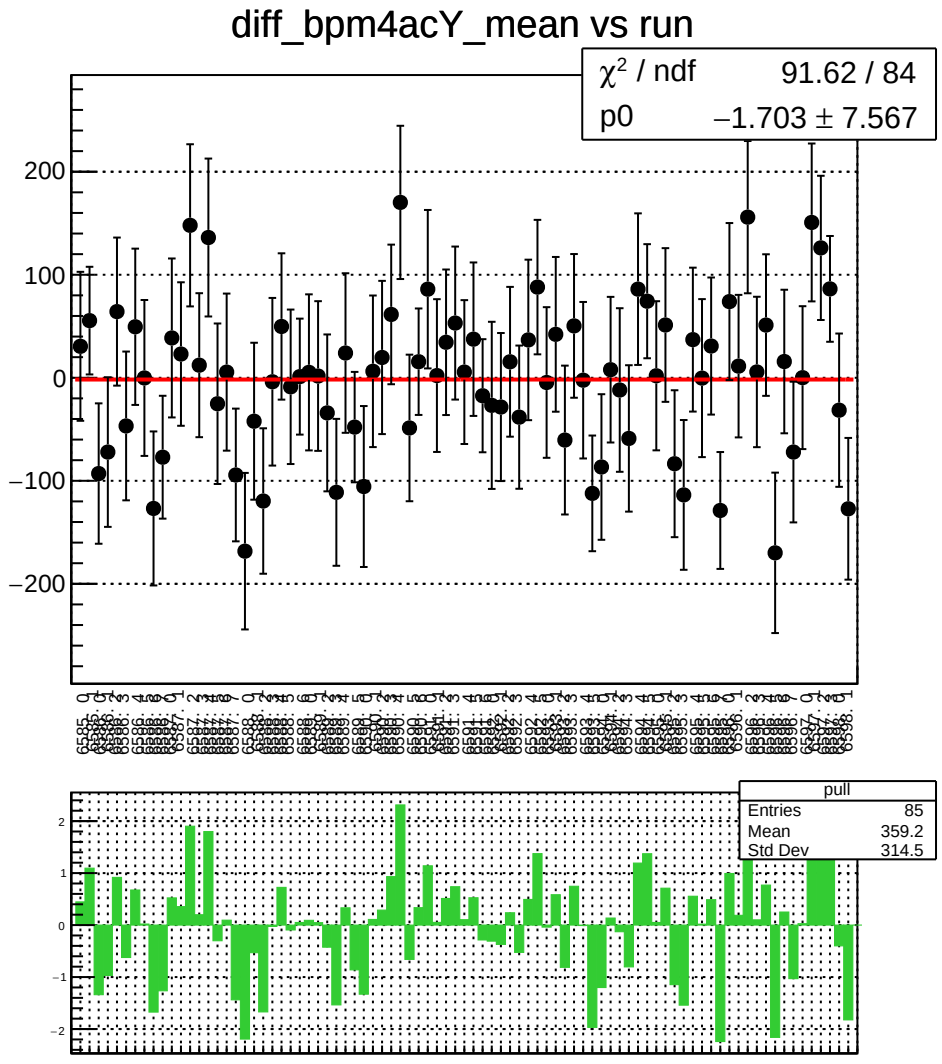

pull1D
Entries 85
Mean 0.006308
Std Dev 1.055
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

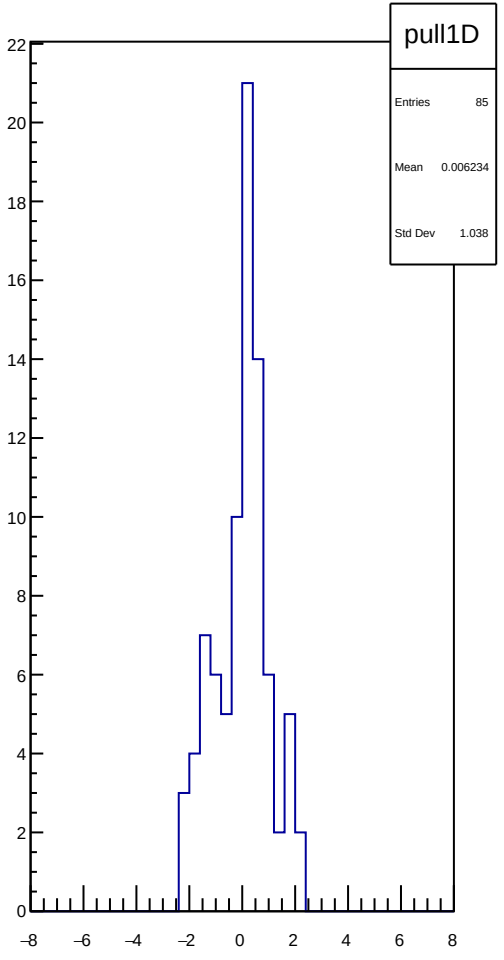

diff_bpm4eY_rms vs run
χ² / ndf 2652 / 84
p0 5911 ± 4.551
6800
6600
6400
6200
6000
5800
5600
5400

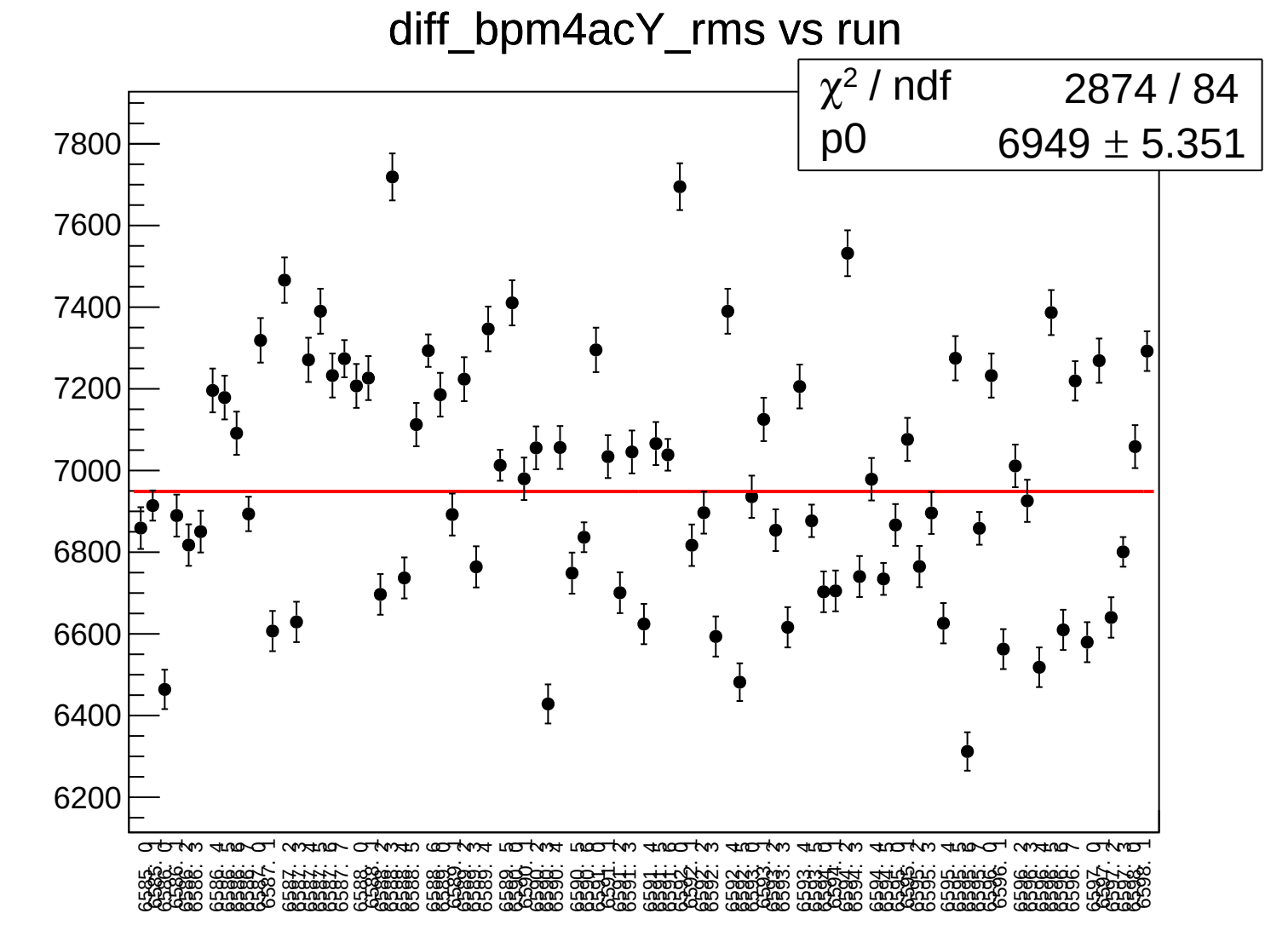

diff_bpm4acX_mean vs run
χ² / ndf 118.7 / 84
p0 −1.946 ± 8.73
pull
Entries 85
Mean 403.5
Std Dev 340.9

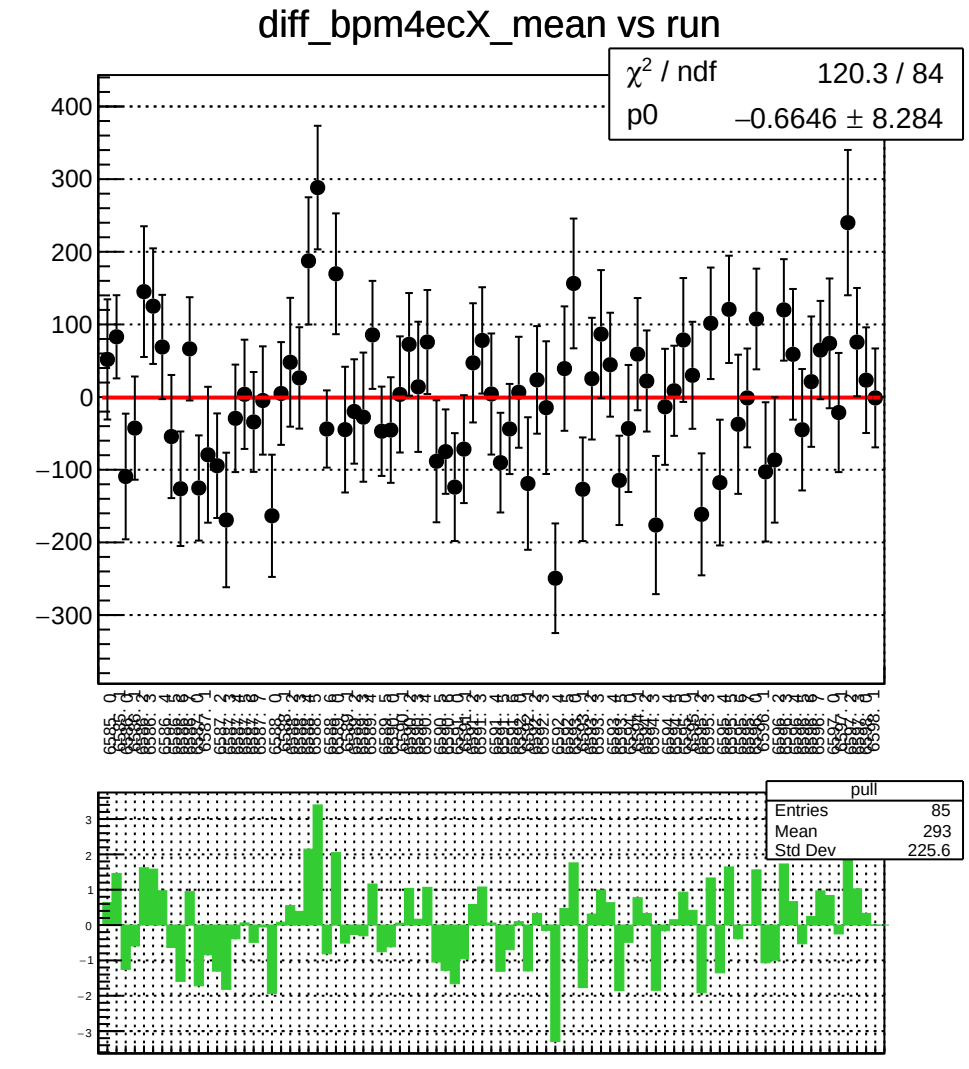

pull1D
Entries 85
Mean 0.007164
Std Dev 1.182

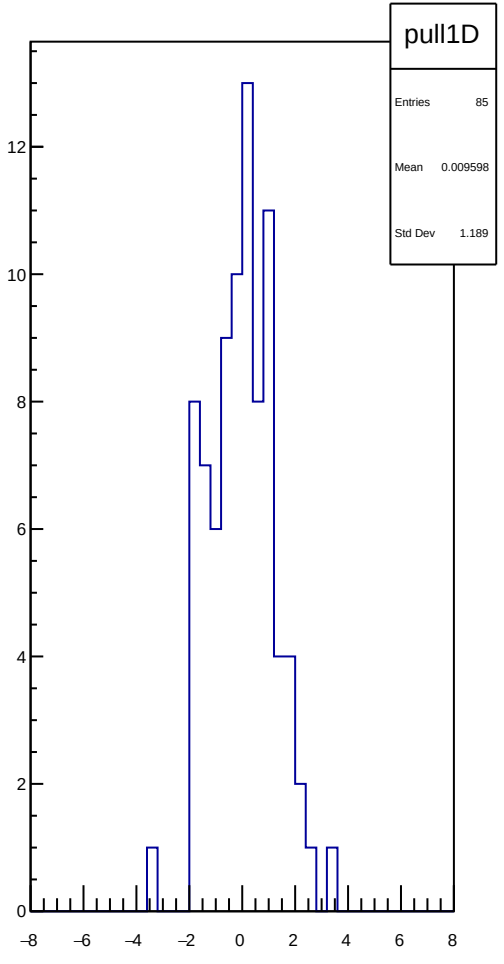

diff_bpm4acX_rms vs run
χ² / ndf 1.645e+04 / 84
p0 7985 ± 6.173
10500
10000
9500
9000
8500
8000
7500
7000
6500

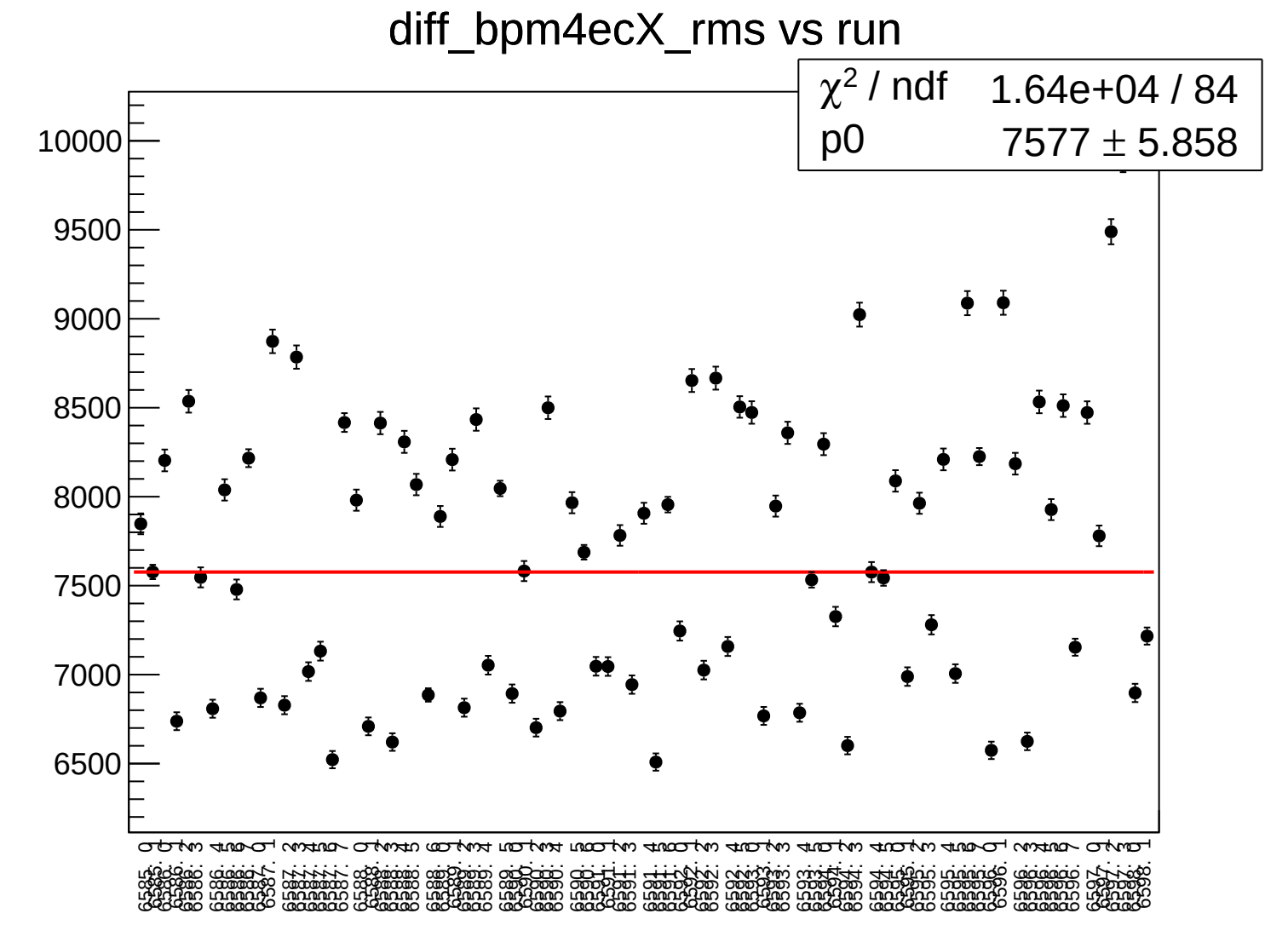

diff_bpm4acY_mean vs run
χ² / ndf 91.62 / 84
p0 −1.703 ± 7.567
200
100
0
−100
−200
pull
Entries 85
Mean 359.2
Std Dev 314.5
2
1
0
−1
−2

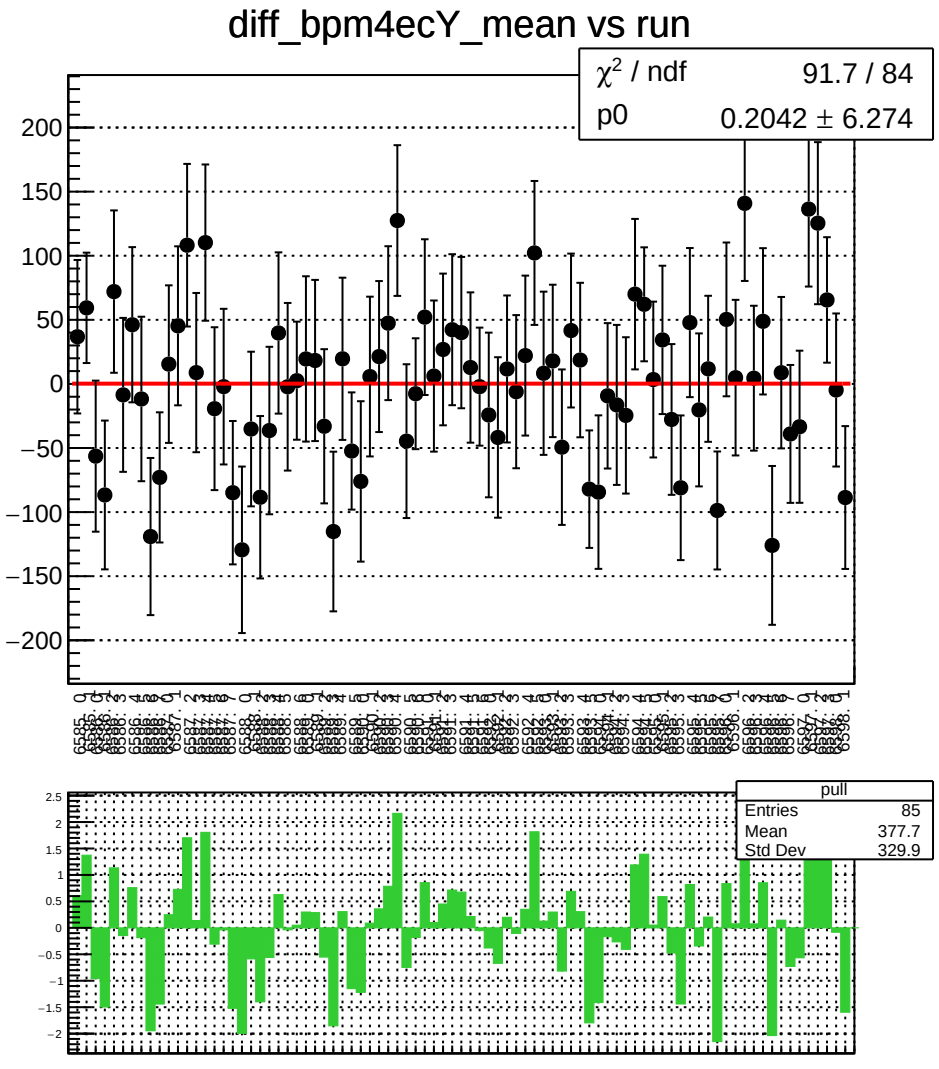

pull1D
Entries 85
Mean 0.006234
Std Dev 1.038
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

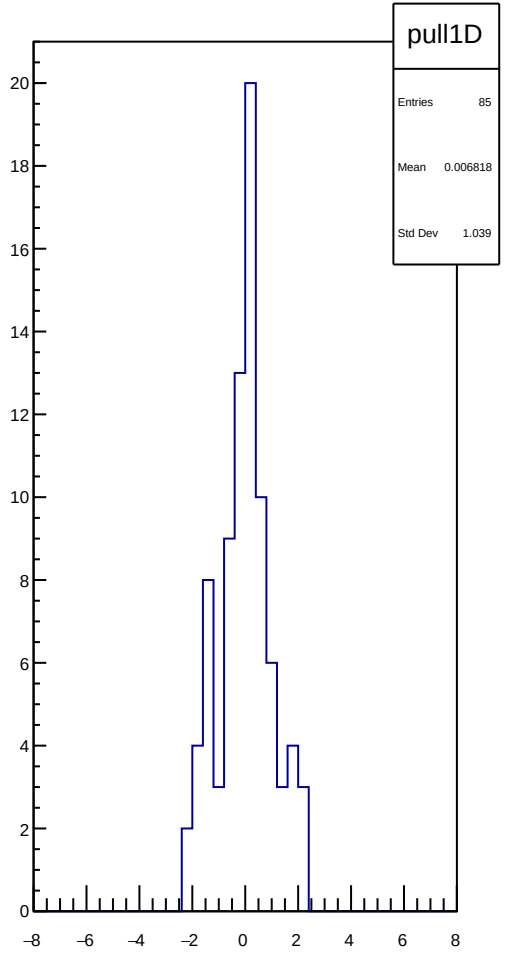

diff_bpm4acY_rms vs run
χ² / ndf 2874 / 84
p0 6949 ± 5.351
7800
7600
7400
7200
7000
6800
6600
6400
6200

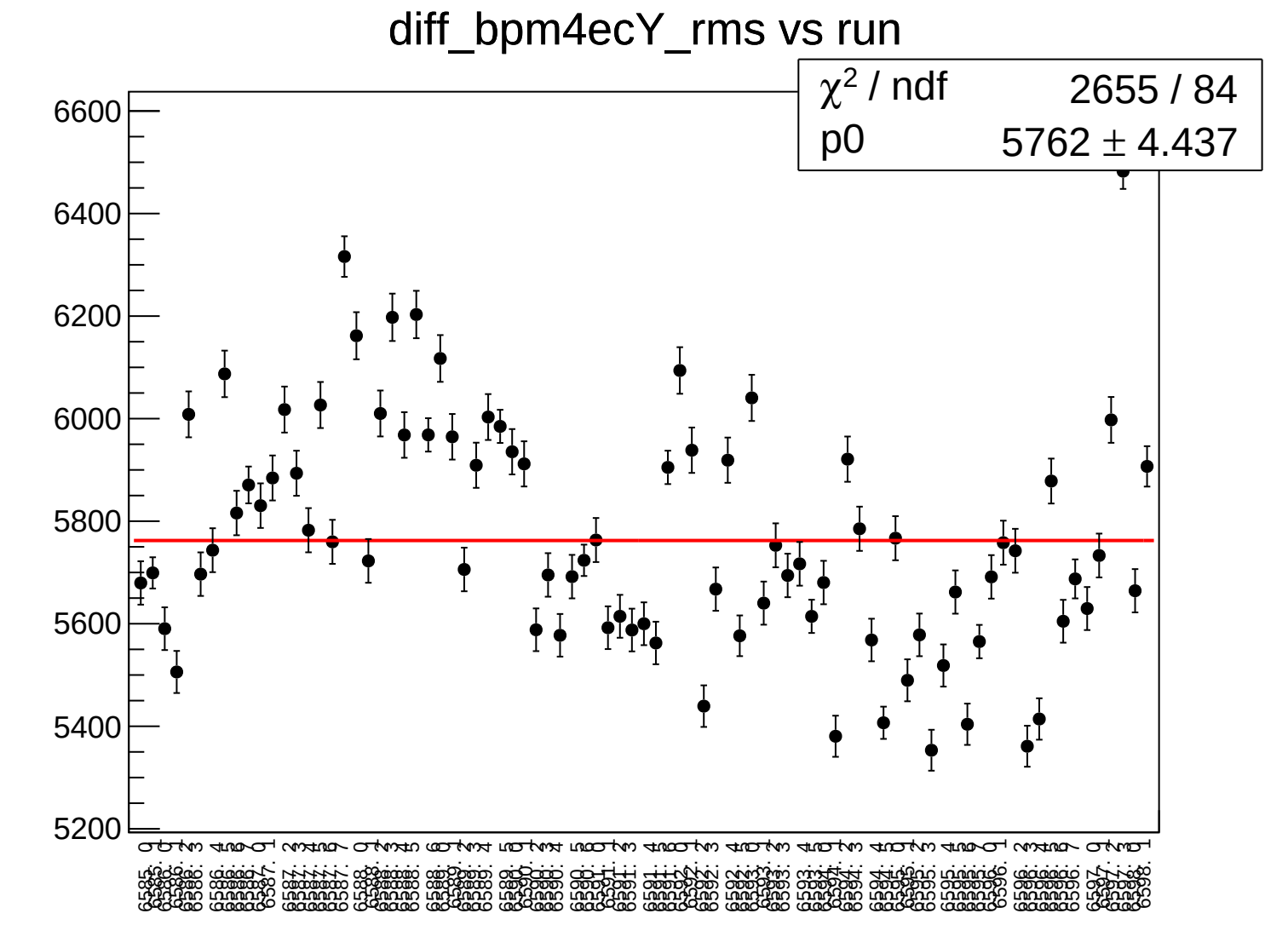

diff_bpm4ecX_mean vs run
χ² / ndf 120.3 / 84
p0 −0.6646 ± 8.284
pull
Entries 85
Mean 293
Std Dev 225.6

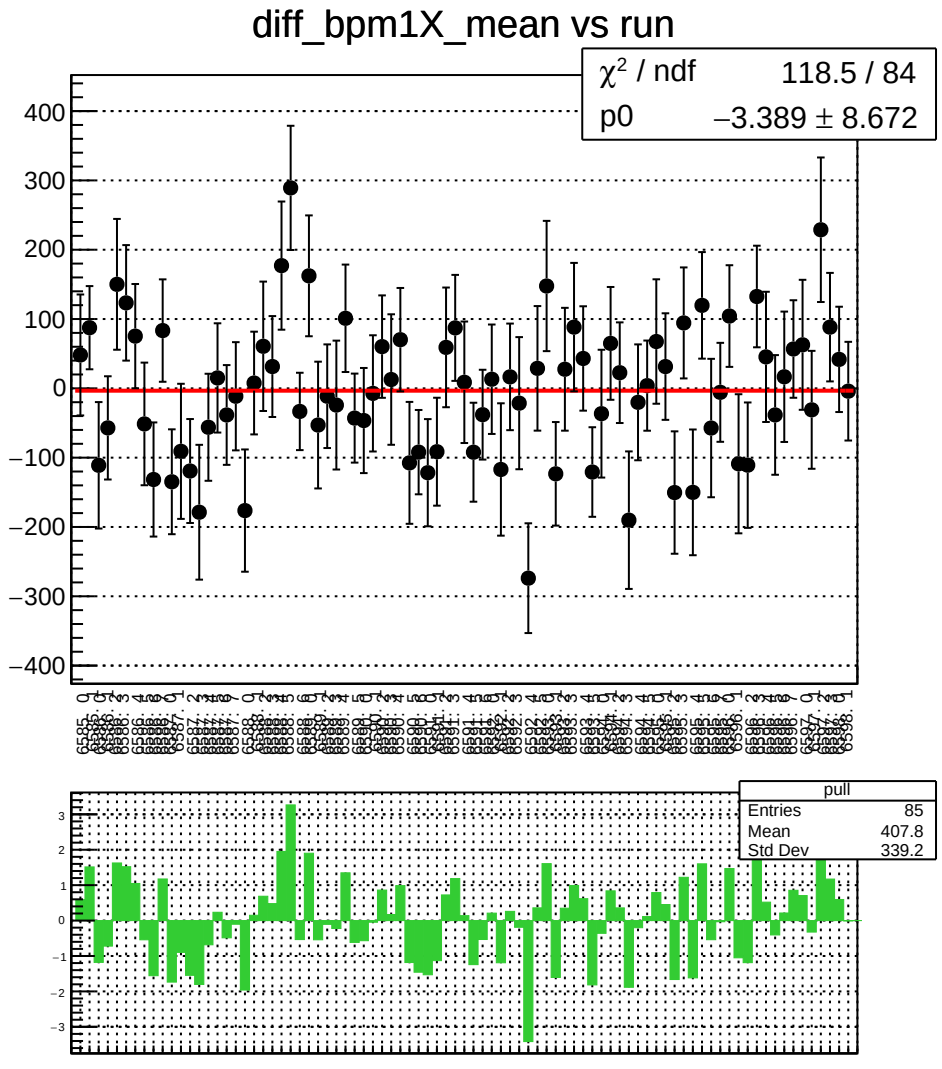

pull1D
Entries 85
Mean 0.009598
Std Dev 1.189

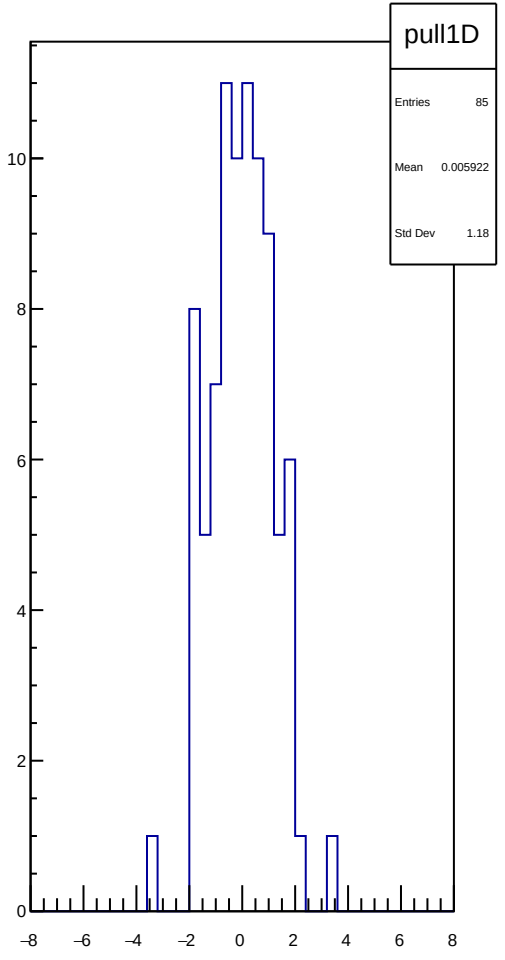

diff_bpm4ecX_rms vs run
χ² / ndf 1.64e+04 / 84
p0 7577 ± 5.858
10000
9500
9000
8500
8000
7500
7000
6500

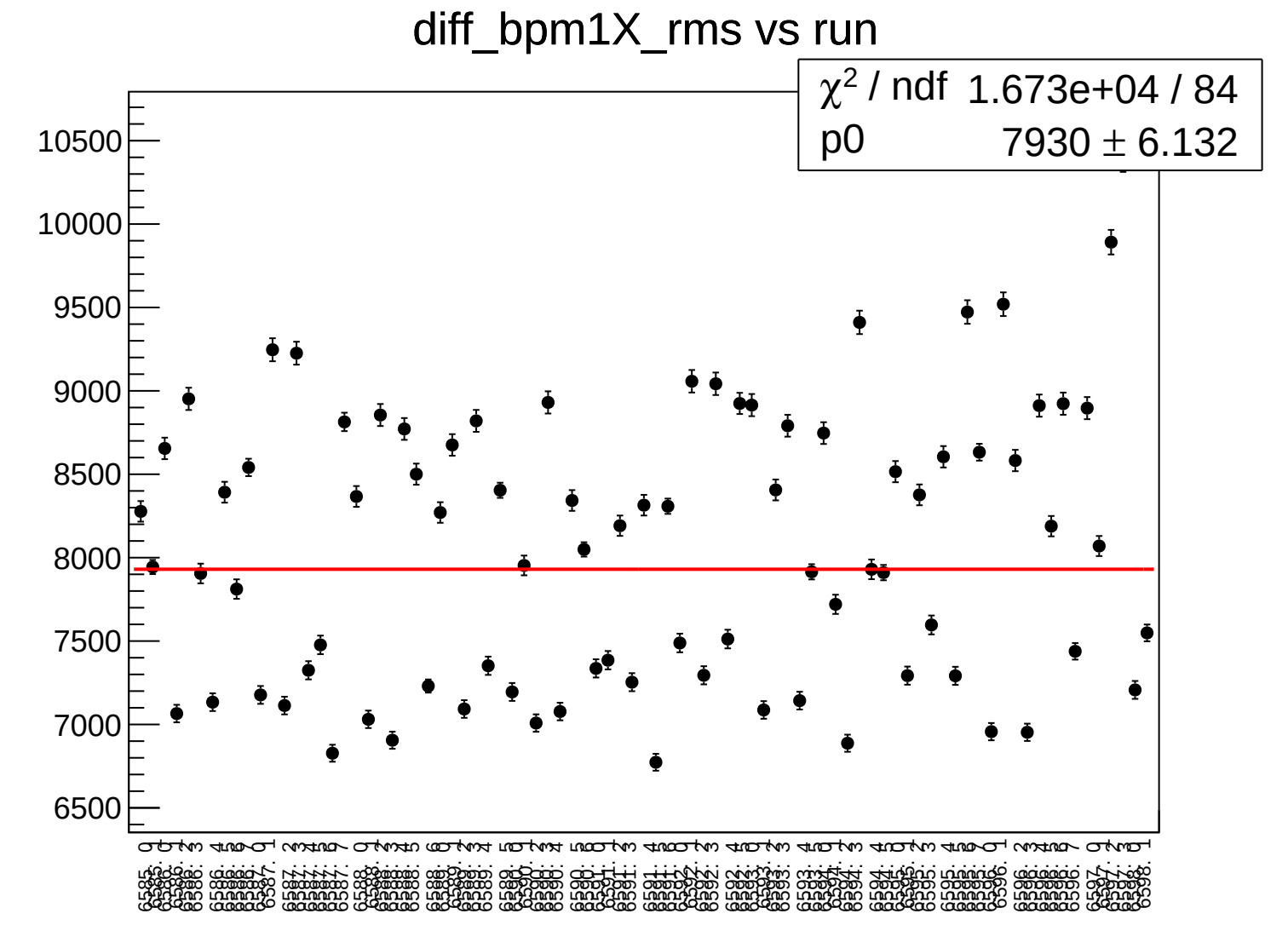

diff_bpm4ecY_mean vs run
χ² / ndf 91.7 / 84
p0 0.2042 ± 6.274
pull
Entries 85
Mean 377.7
Std Dev 329.9

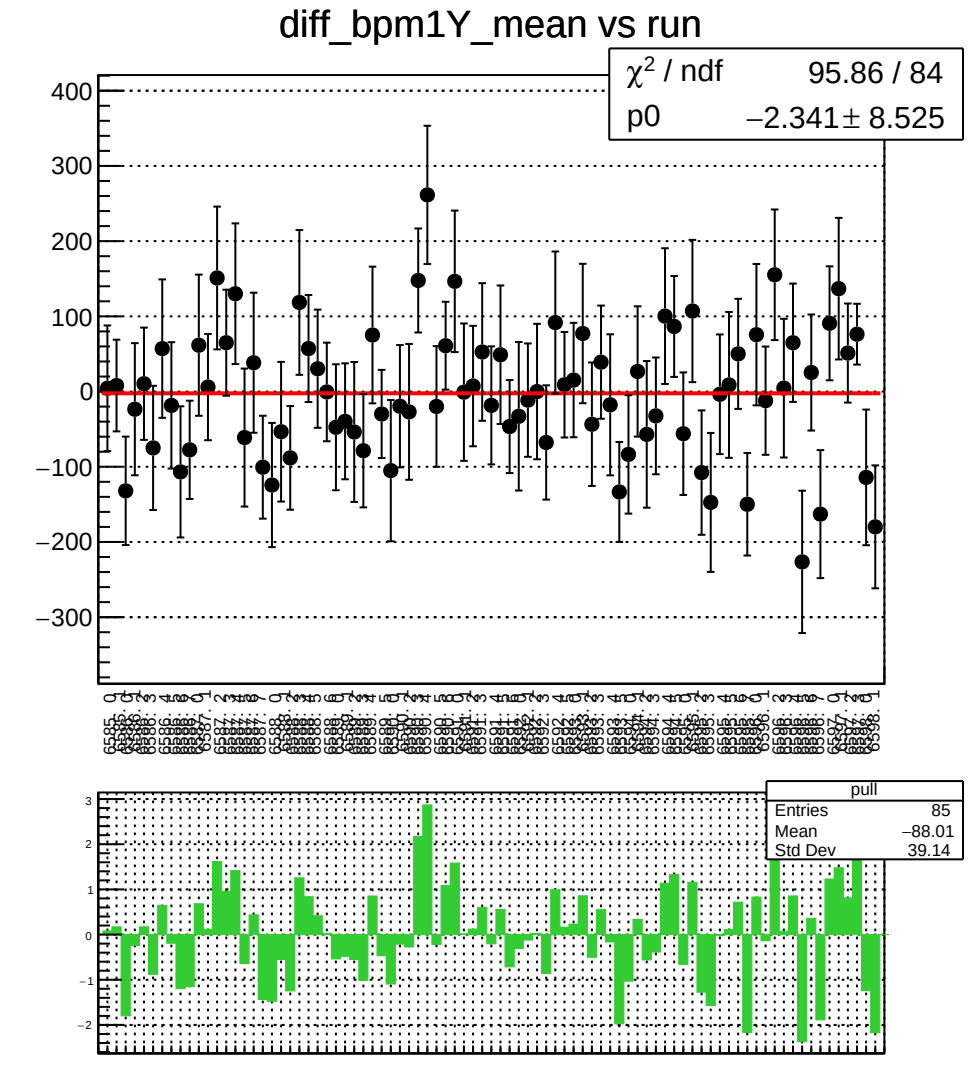

pull1D
Entries 85
Mean 0.006818
Std Dev 1.039

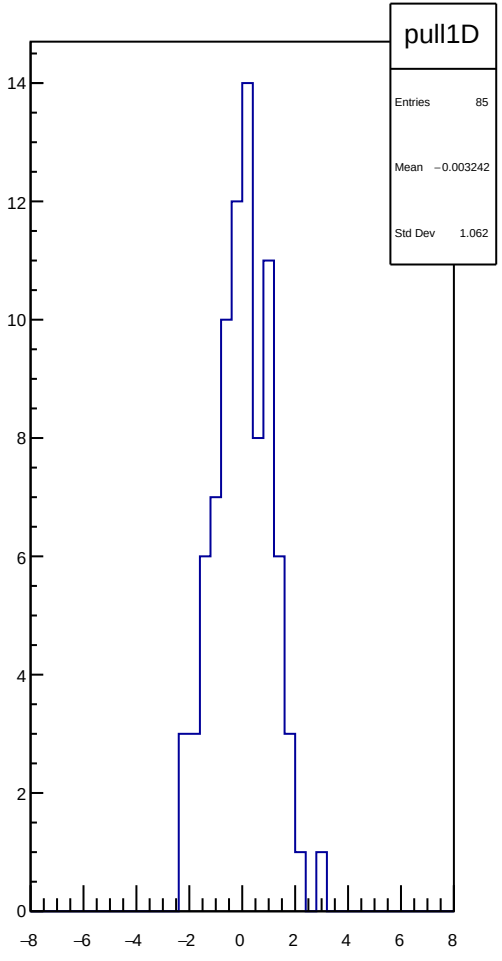

diff_bpm4ecY_rms vs run
χ² / ndf 2655 / 84
p0 5762 ± 4.437
6600
6400
6200
6000
5800
5600
5400
5200

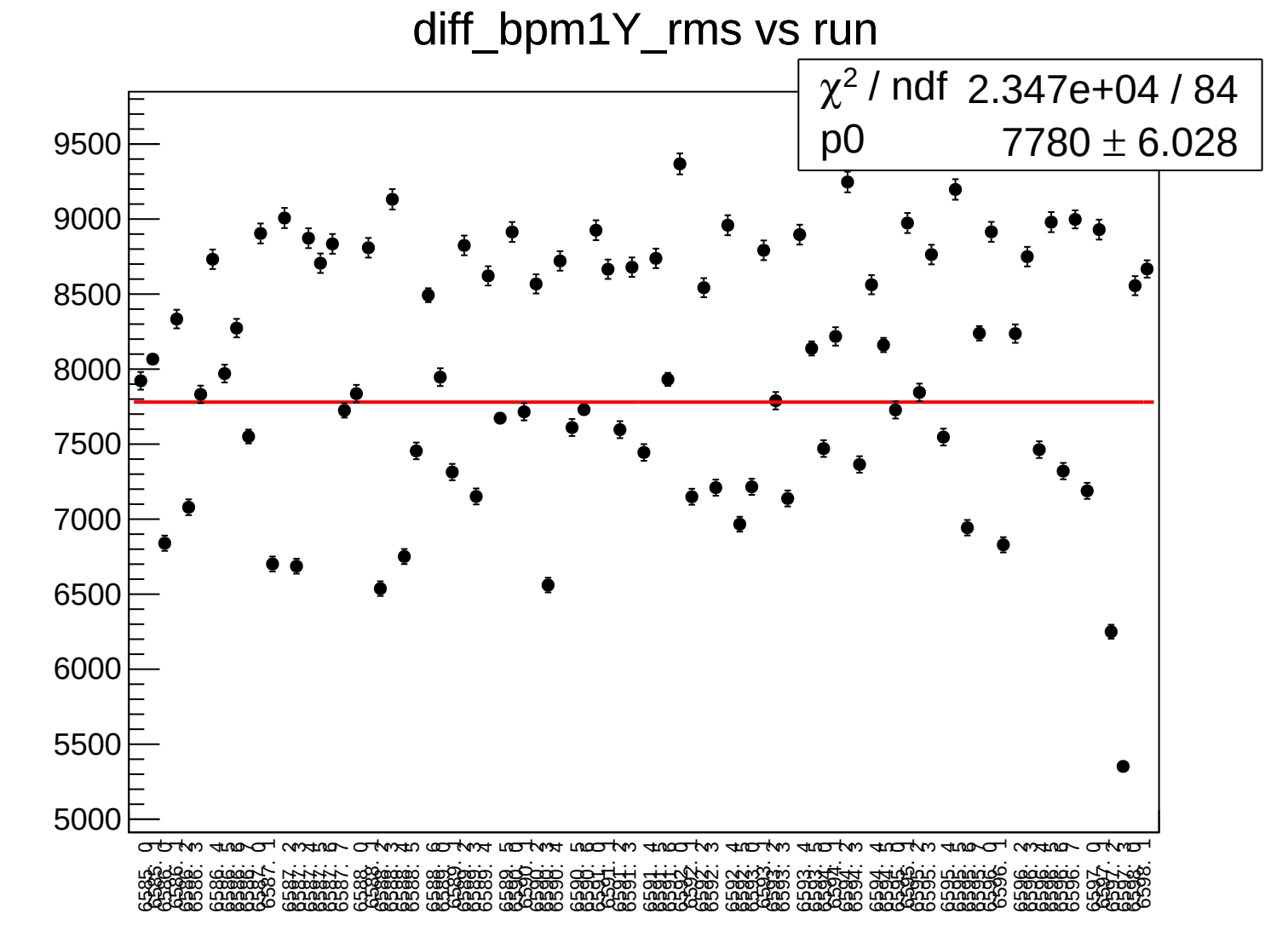

diff_bpm1X_mean vs run
χ² / ndf 118.5 / 84
p0 −3.389 ± 8.672
pull
Entries 85
Mean 407.8
Std Dev 339.2

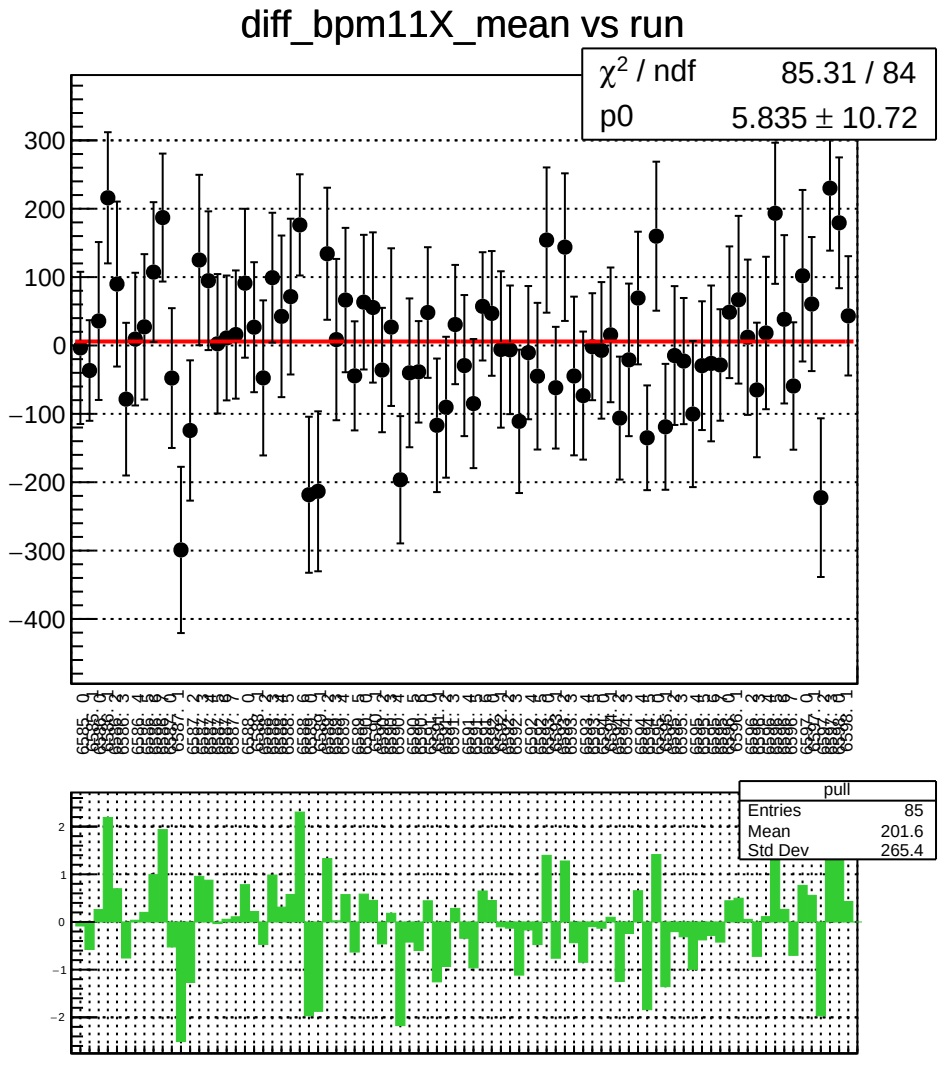

pull1D
Entries 85
Mean 0.005922
Std Dev 1.18

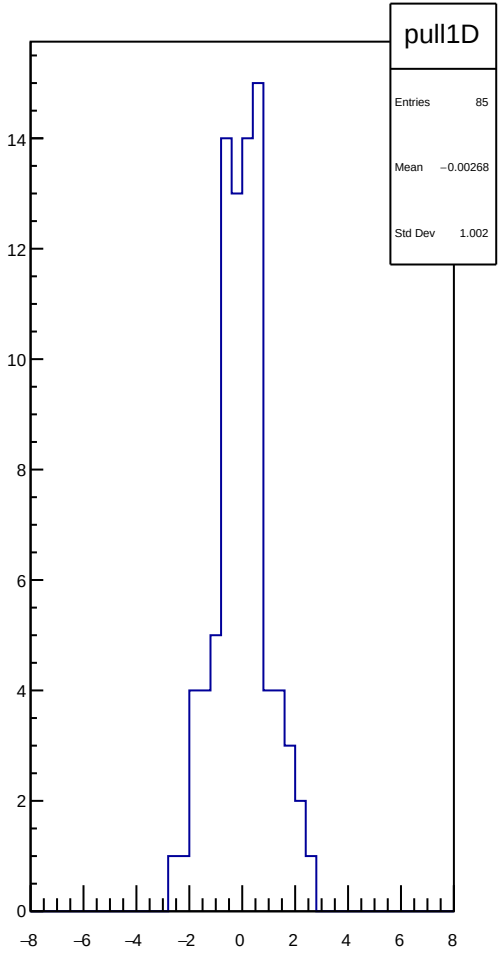

diff_bpm1X_rms vs run
χ² / ndf 1.673e+04 / 84
p0 7930 ± 6.132
10500
10000
9500
9000
8500
8000
7500
7000
6500

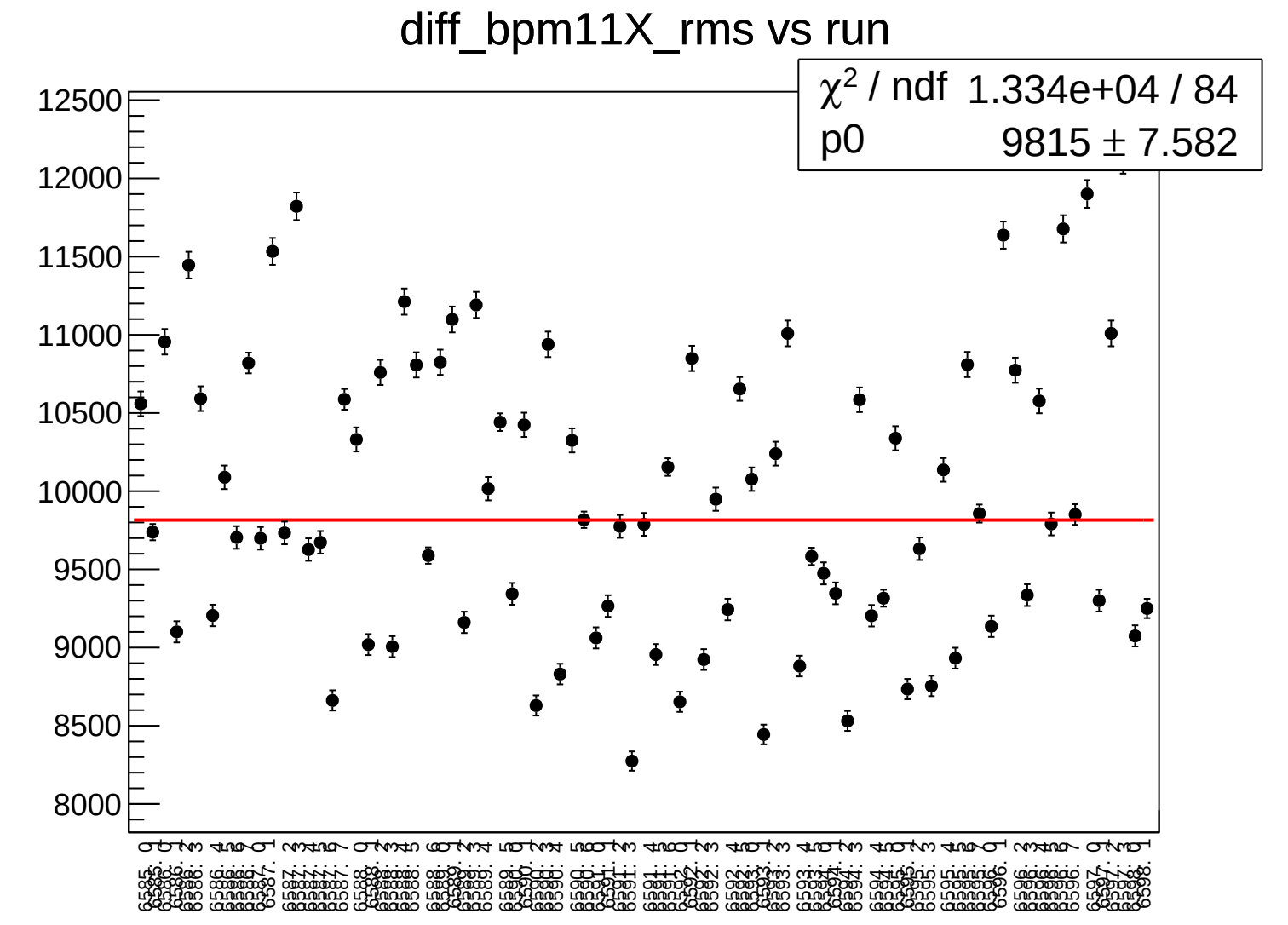

diff_bpm1Y_mean vs run
χ² / ndf 95.86 / 84
p0 −2.341 ± 8.525
pull
Entries 85
Mean −88.01
Std Dev 39.14

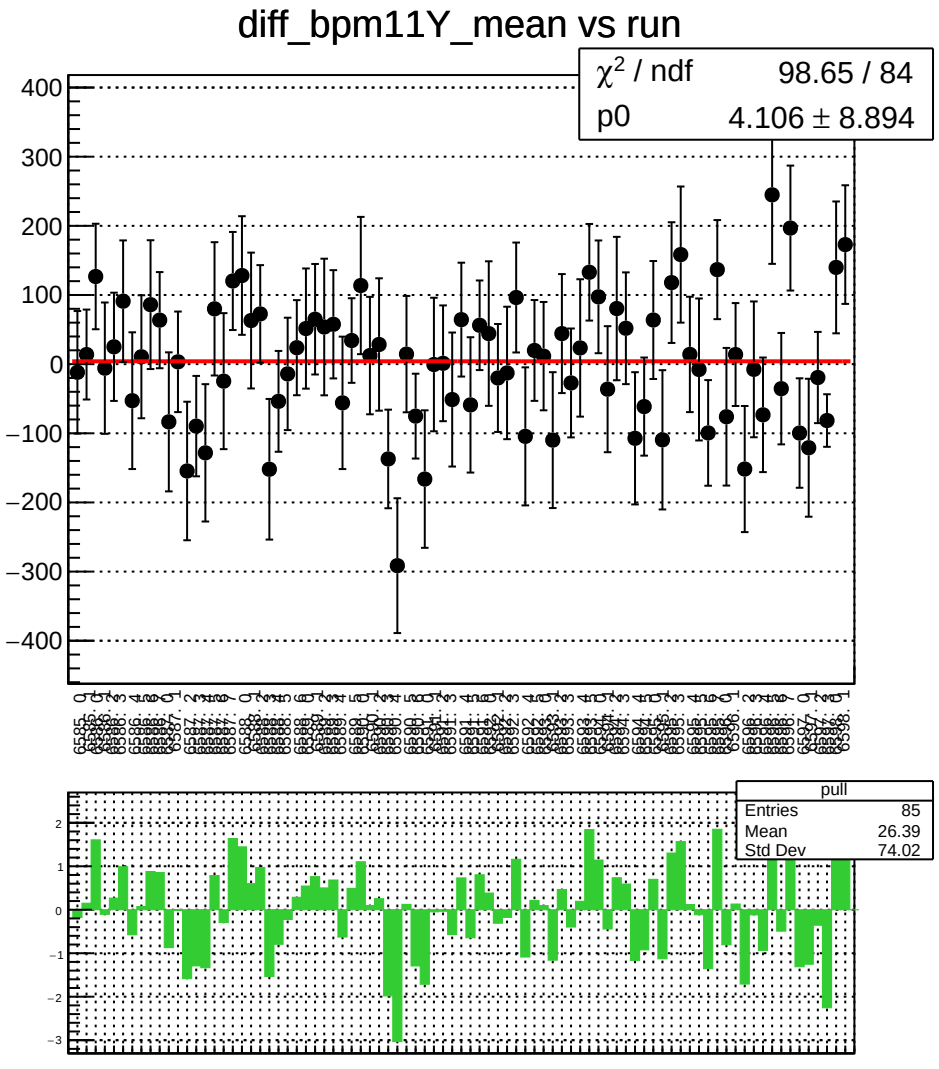

pull1D
Entries 85
Mean −0.003242
Std Dev 1.062

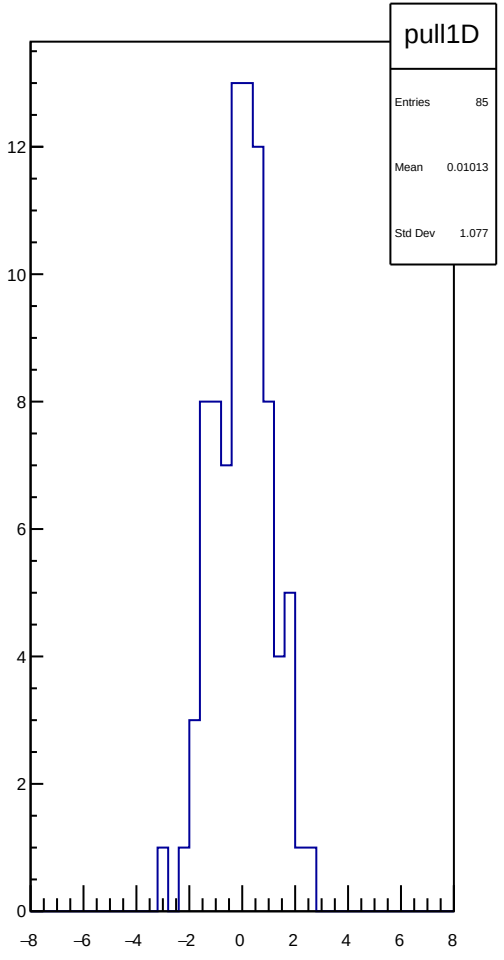

diff_bpm1Y_rms vs run
χ² / ndf 2.347e+04 / 84
p0 7780 ± 6.028
9500
9000
8500
8000
7500
7000
6500
6000
5500
5000

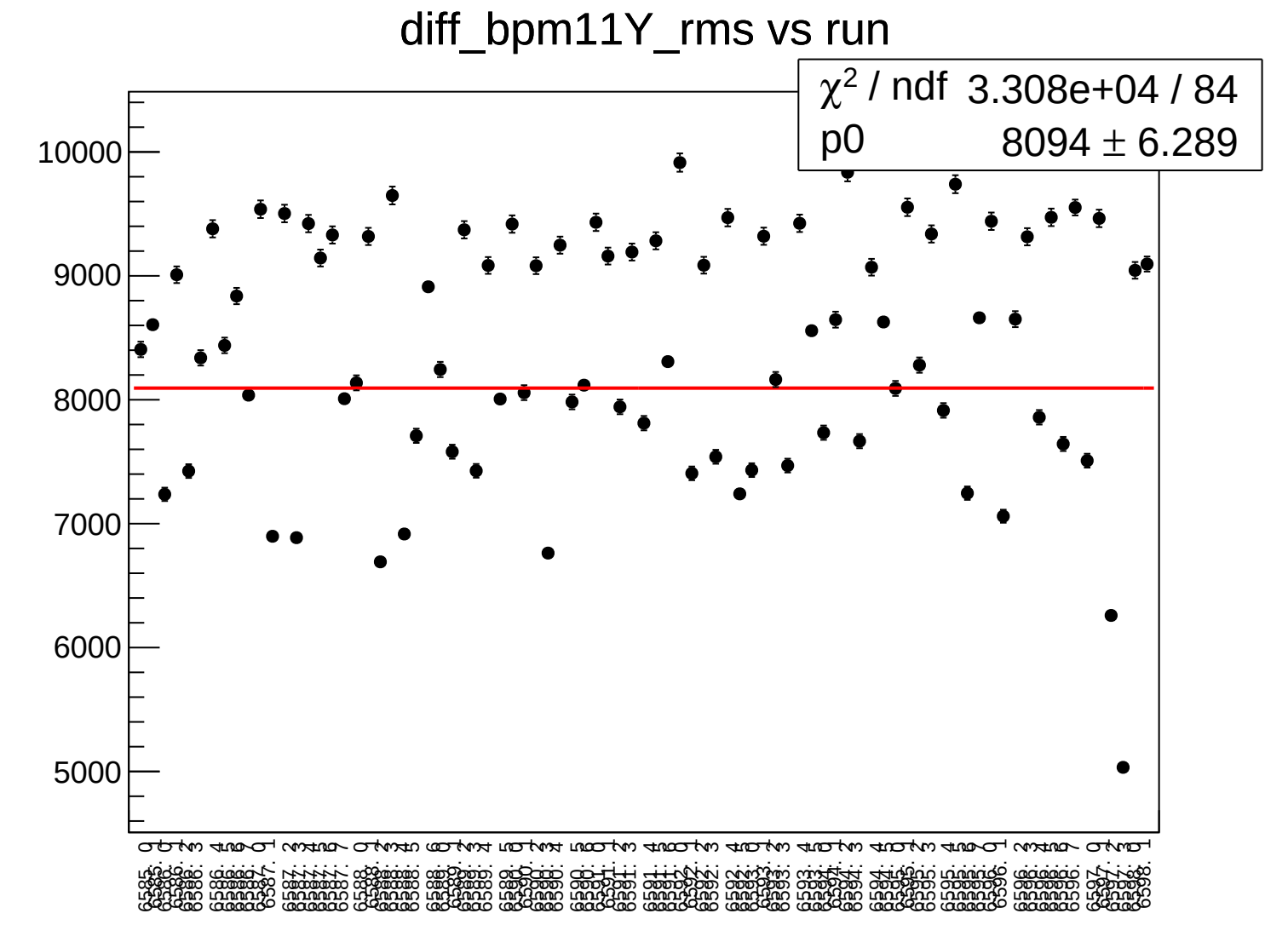

diff_bpm11X_mean vs run
χ² / ndf 85.31 / 84
p0 5.835 ± 10.72
pull
Entries 85
Mean 201.6
Std Dev 265.4

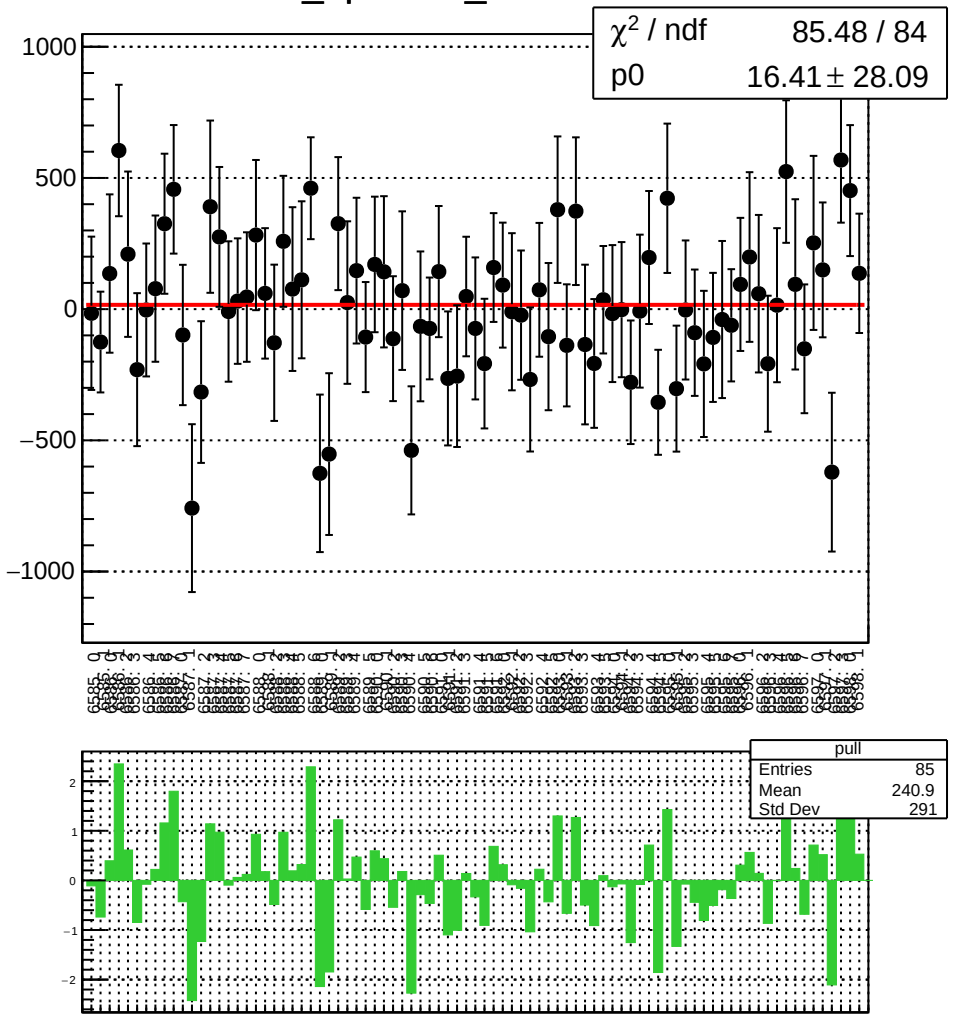

pull1D
Entries 85
Mean −0.00268
Std Dev 1.002

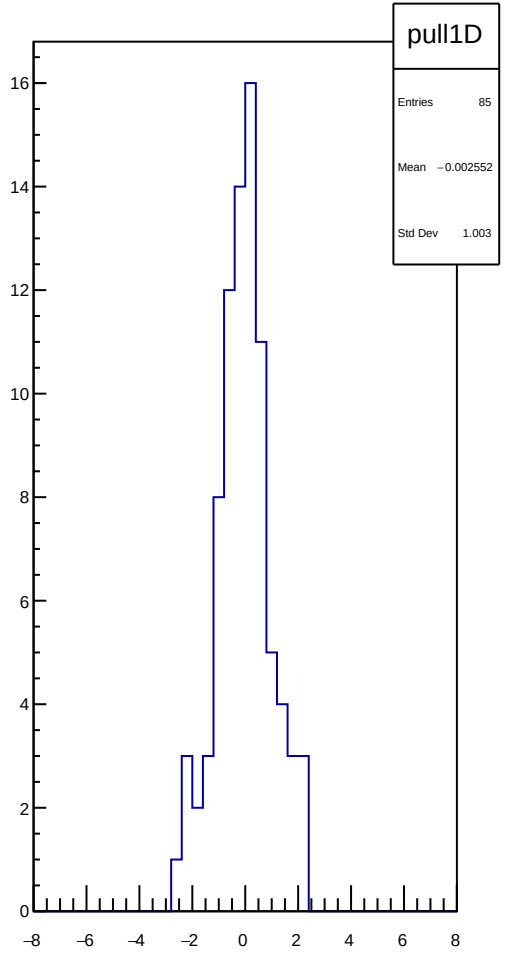

diff_bpm11X_rms vs run
χ² / ndf 1.334e+04 / 84
p0 9815 ± 7.582
12500
12000
11500
11000
10500
10000
9500
9000
8500
8000

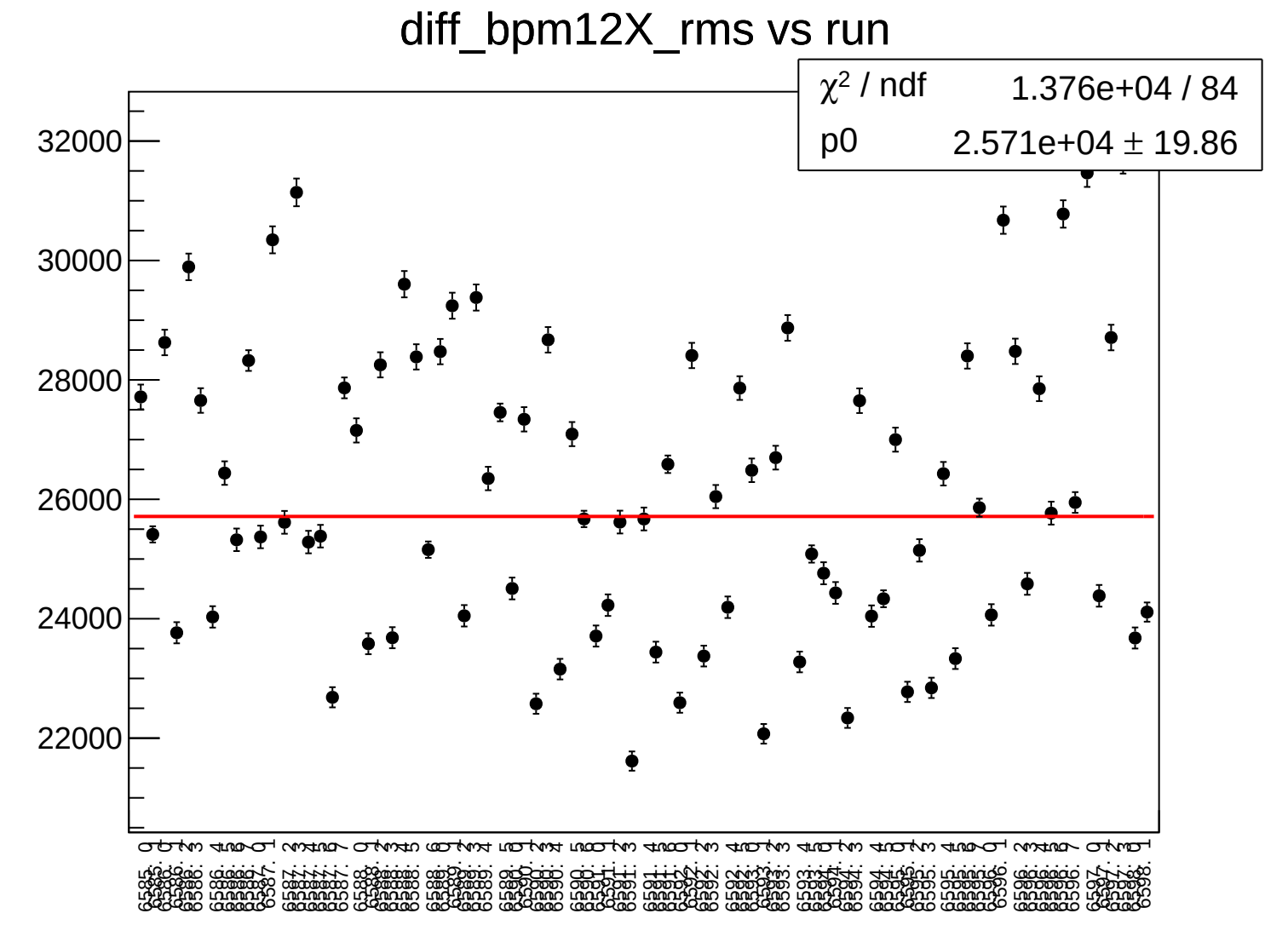

diff_bpm11Y_mean vs run
χ^2 / ndf 98.65 / 84
p0 4.106 ± 8.894
pull
Entries 85
Mean 26.39
Std Dev 74.02

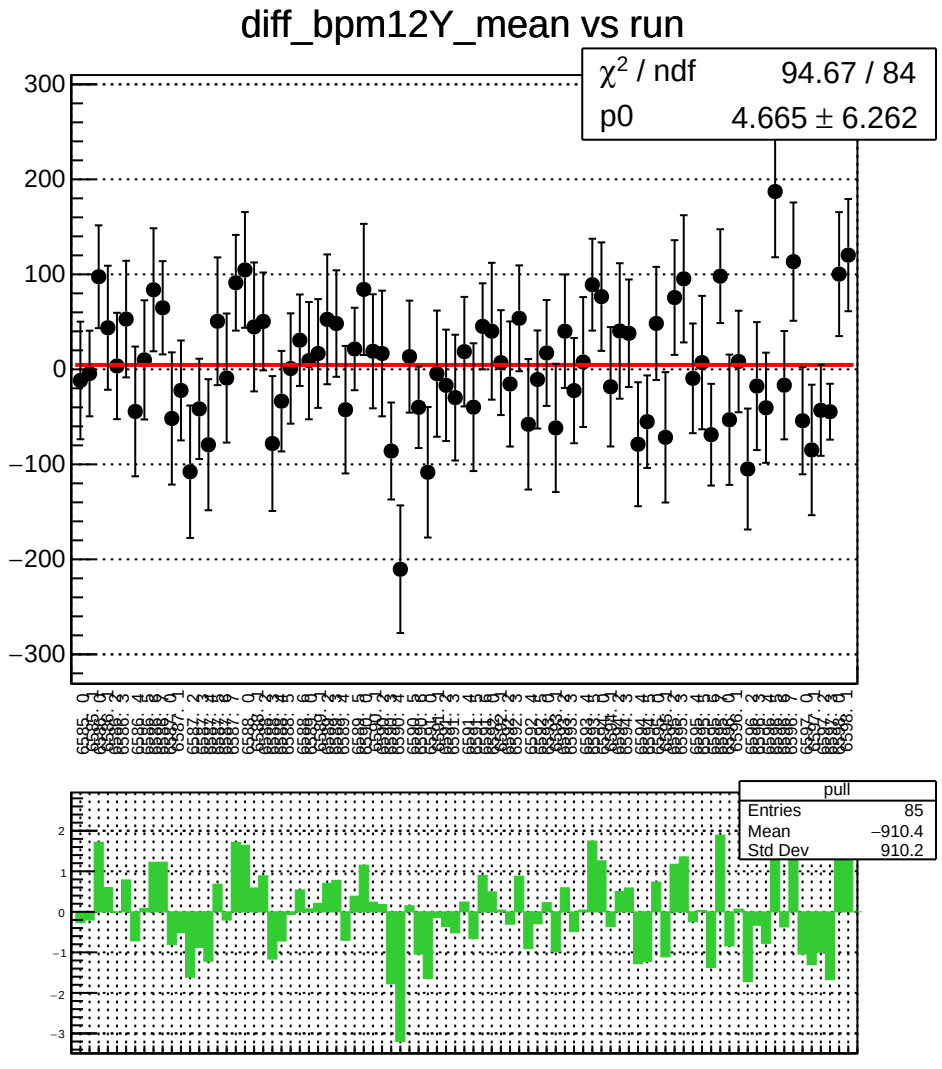

pull1D
Entries 85
Mean 0.01013
Std Dev 1.077

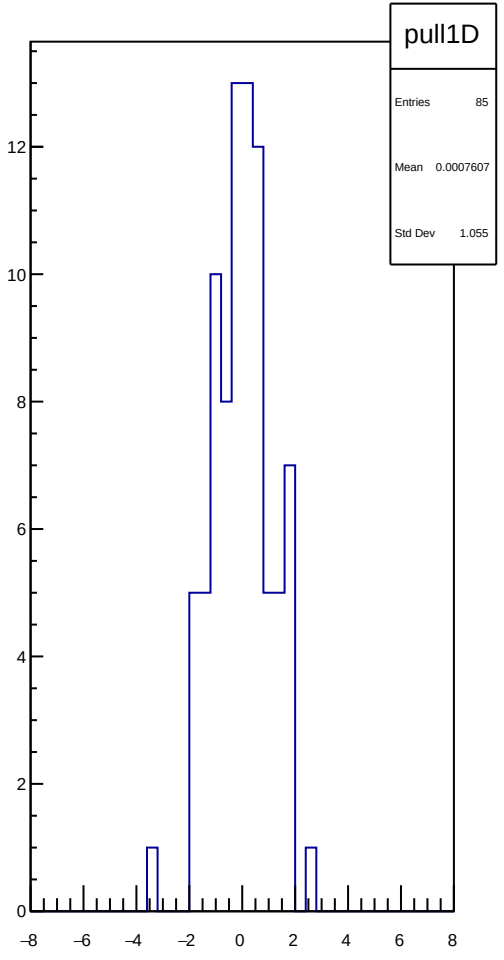

diff_bpm11Y_rms vs run
χ² / ndf 3.308e+04 / 84
p0 8094 ± 6.289
10000
9000
8000
7000
6000
5000

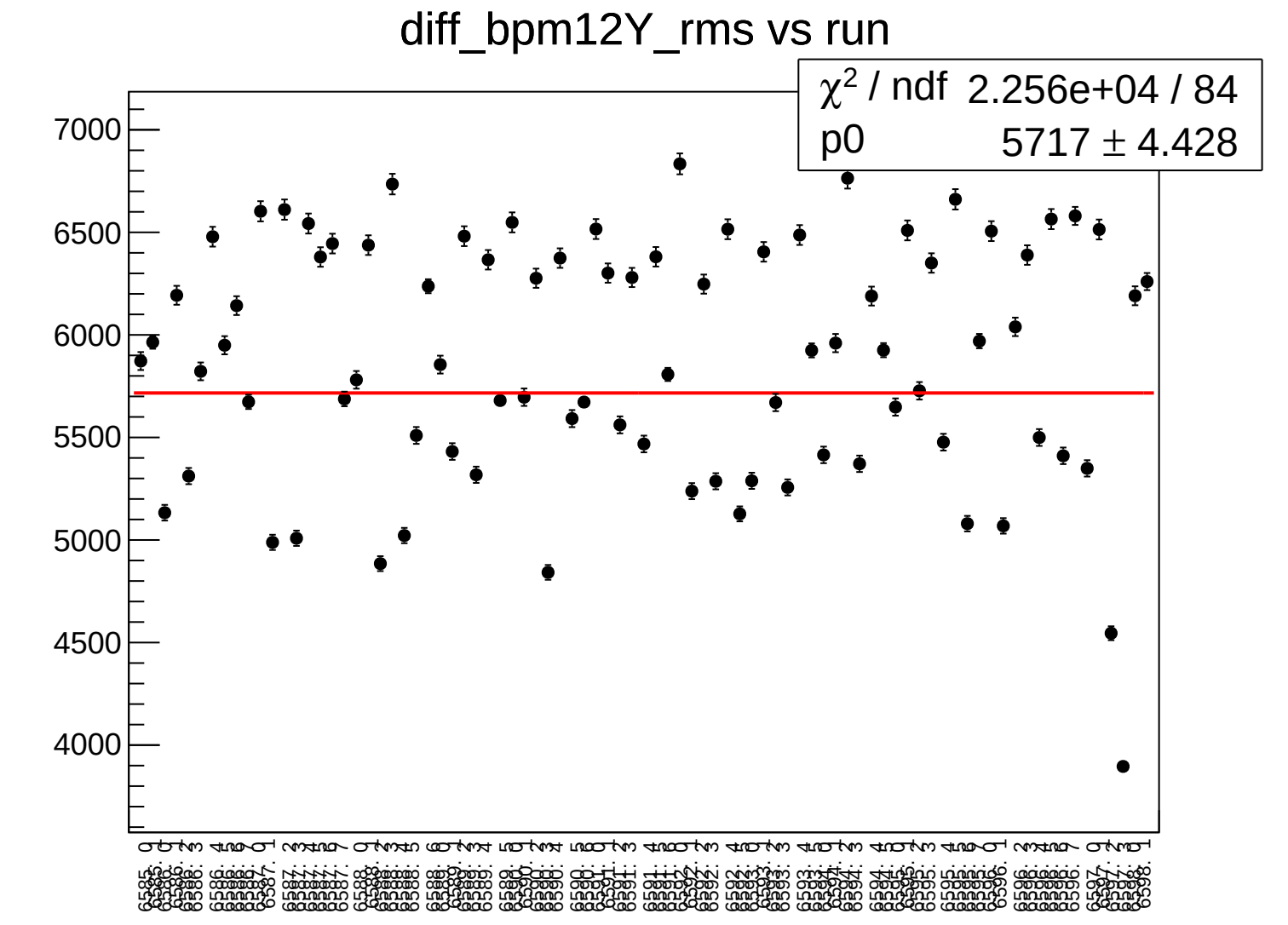

diff_bpm12X_mean vs run
χ² / ndf 85.48 / 84
p0 16.41 ± 28.09
1000
500
0
−500
−1000
pull
Entries 85
Mean 240.9
Std Dev 291
2
1
0
−1
−2

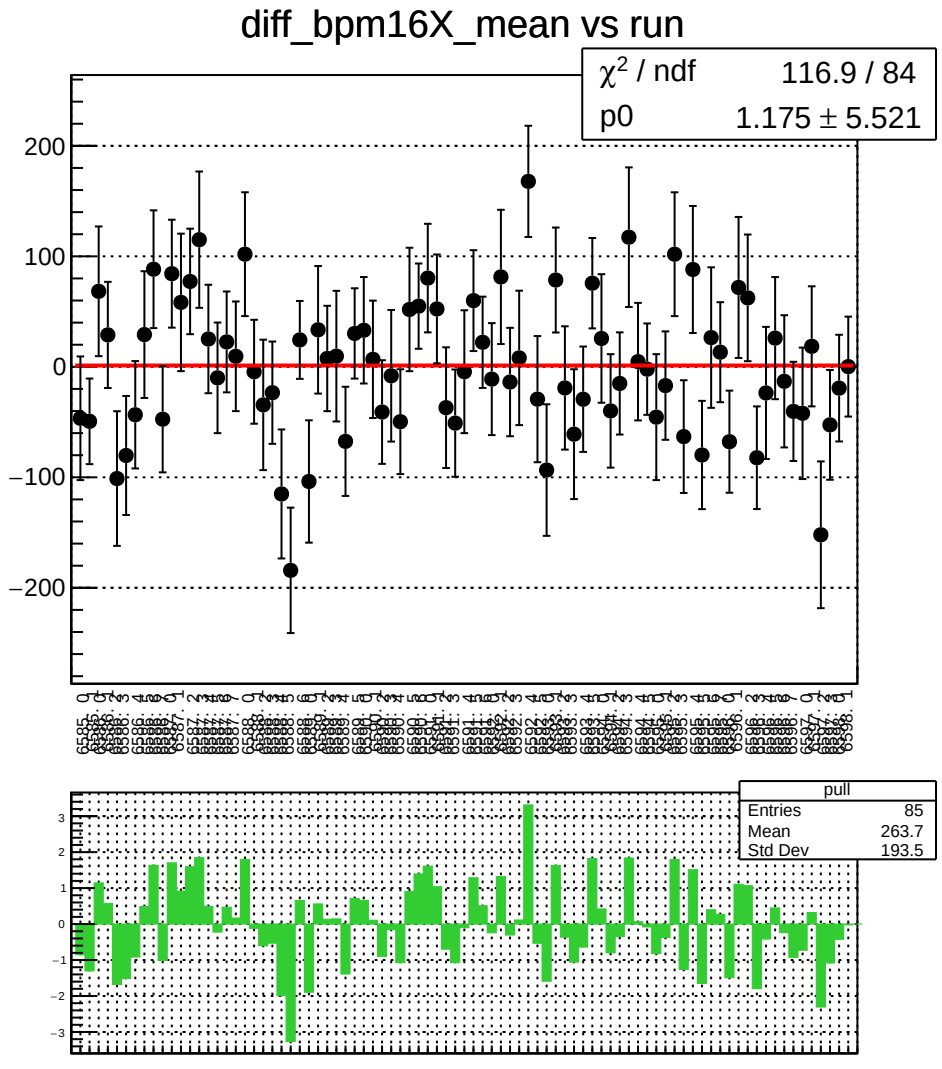

pull1D
Entries 85
Mean −0.002552
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

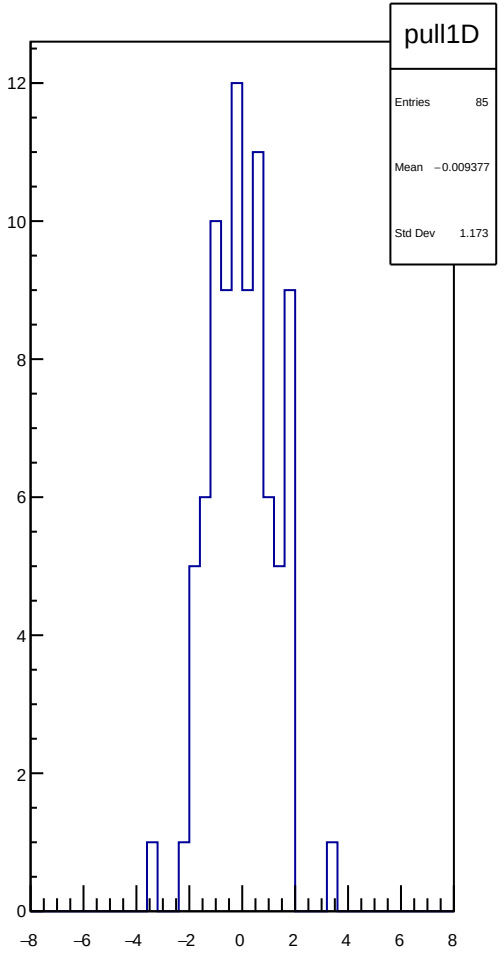

diff_bpm12X_rms vs run
χ² / ndf 1.376e+04 / 84
p0 2.571e+04 ± 19.86
32000
30000
28000
26000
24000
22000

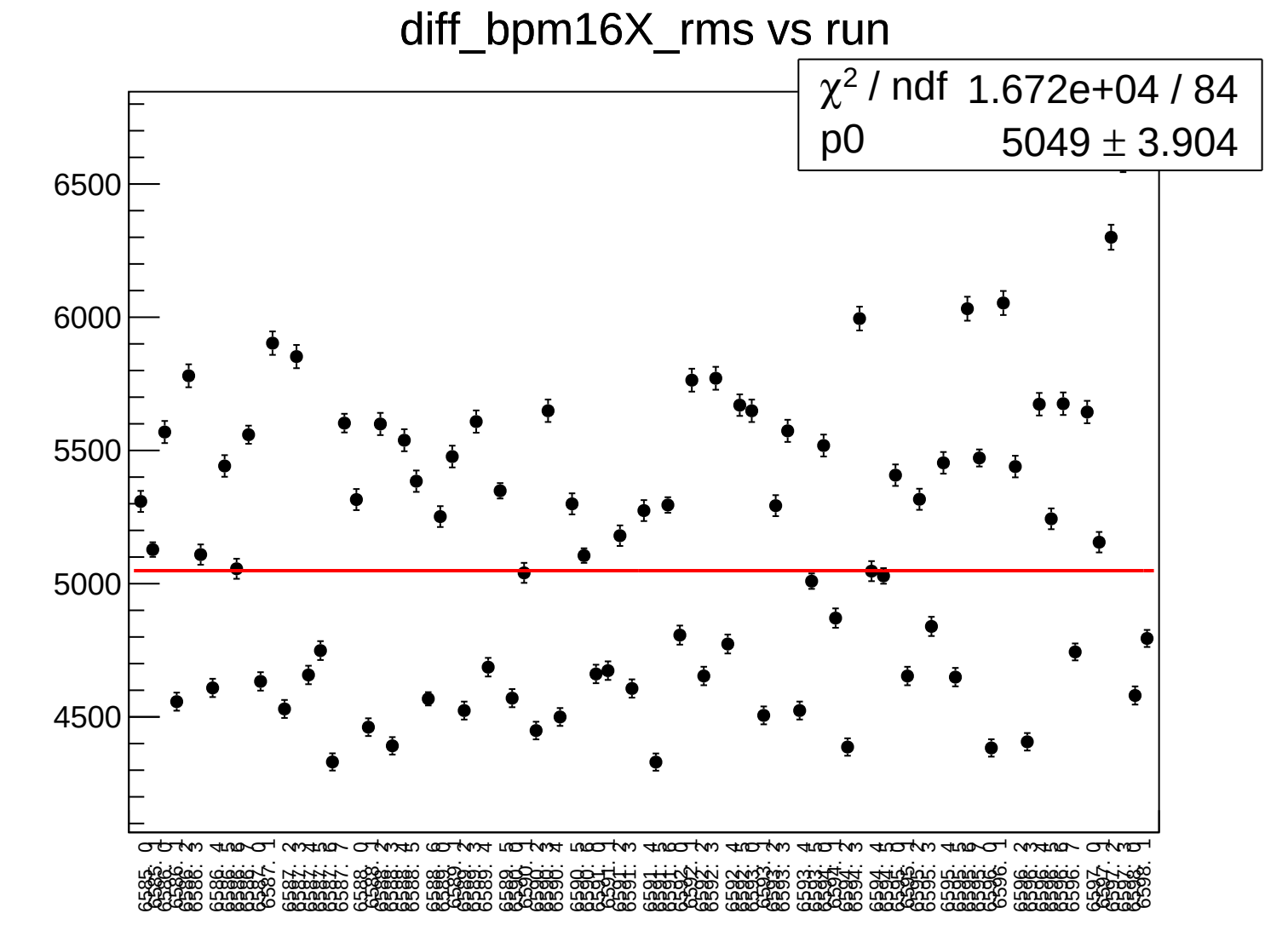

diff_bpm12Y_mean vs run
χ² / ndf 94.67 / 84
p0 4.665 ± 6.262
pull
Entries 85
Mean −910.4
Std Dev 910.2

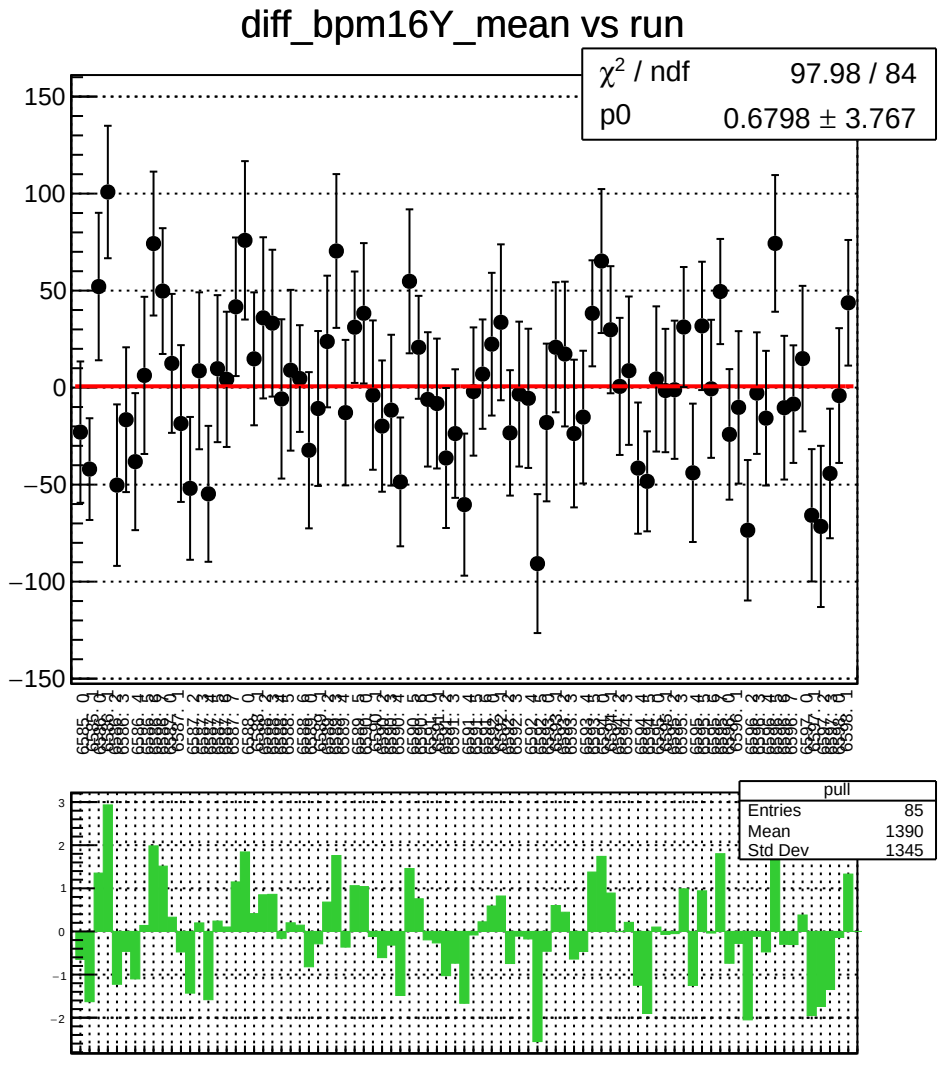

pull1D
Entries 85
Mean 0.0007607
Std Dev 1.055

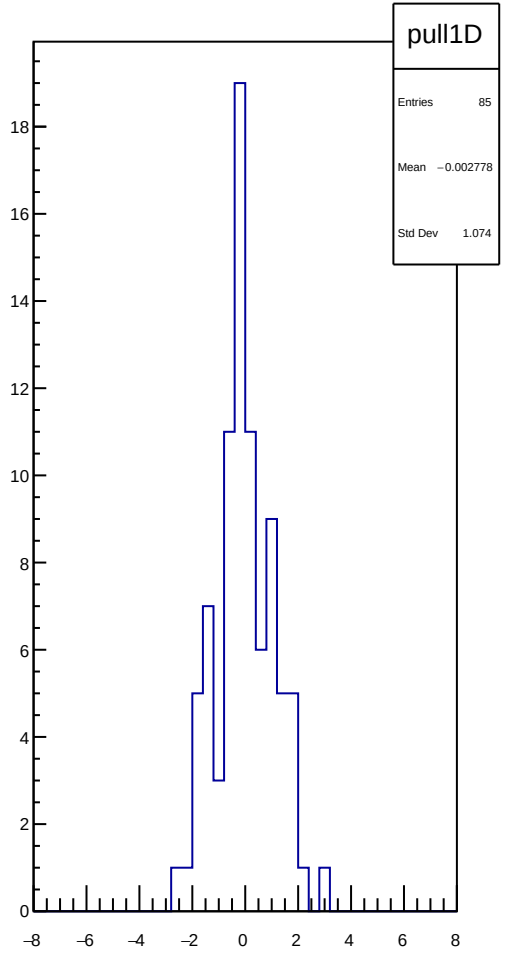

diff_bpm12Y_rms vs run
χ² / ndf 2.256e+04 / 84
p0 5717 ± 4.428
7000
6500
6000
5500
5000
4500
4000

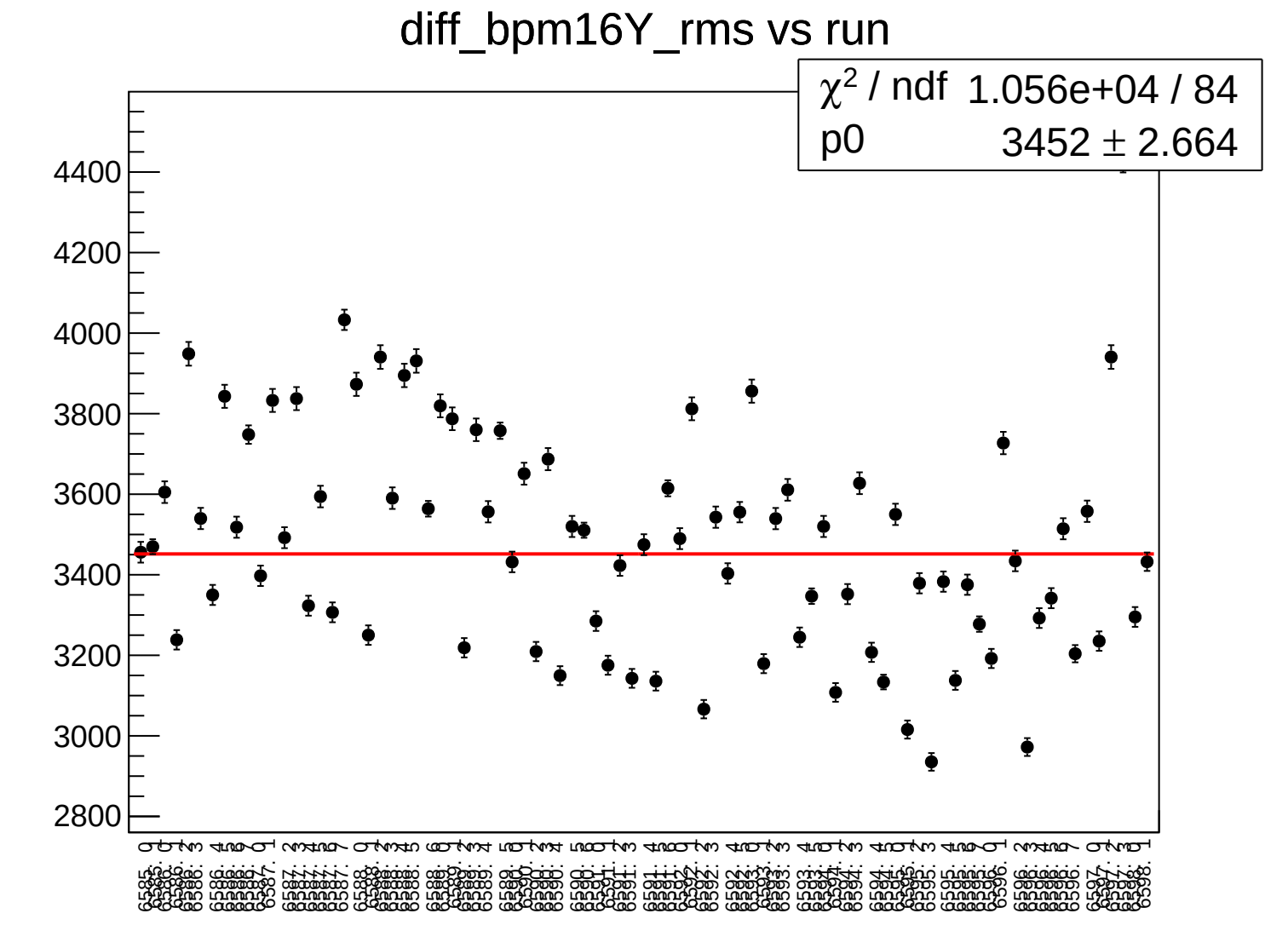

diff_bpm16X_mean vs run
χ^2 / ndf 116.9 / 84
p0 1.175 ± 5.521
200
100
0
−100
−200
pull
Entries 85
Mean 263.7
Std Dev 193.5
3
2
1
0
−1
−2
−3

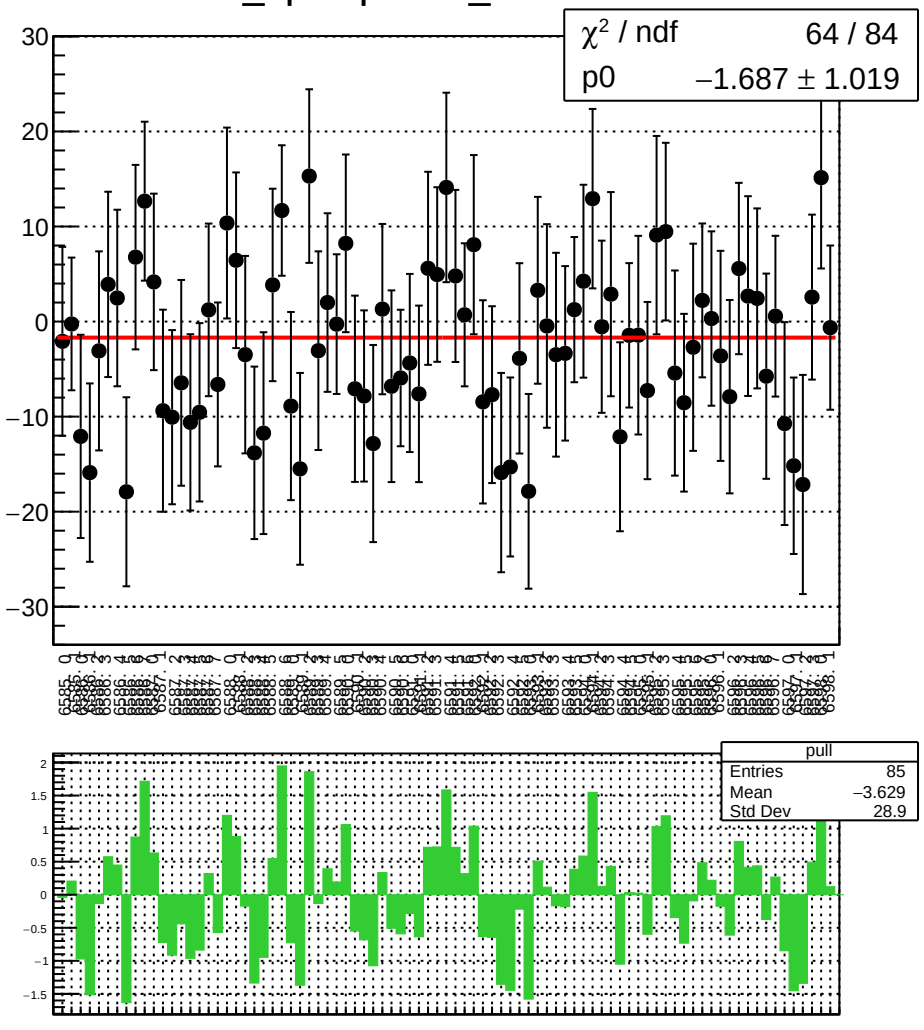

pull1D
Entries 85
Mean −0.009377
Std Dev 1.173
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

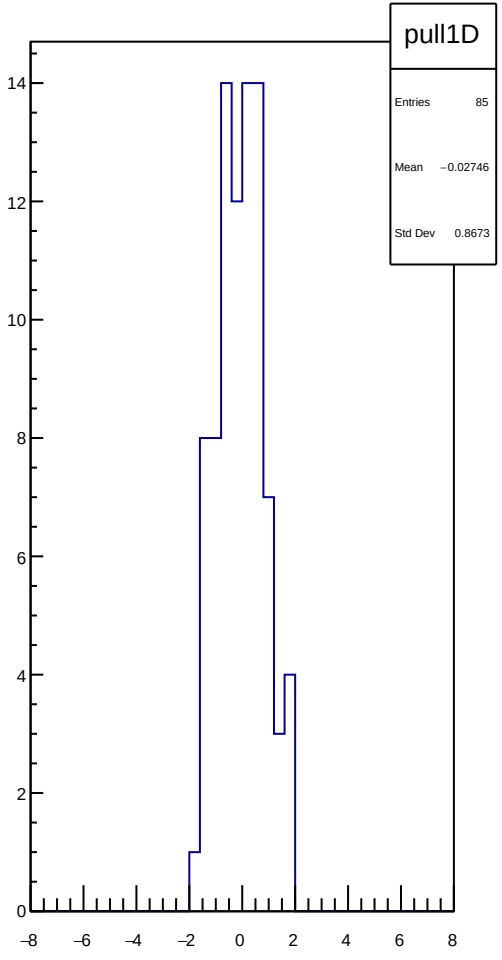

diff_bpm16X_rms vs run
χ² / ndf 1.672e+04 / 84
p0 5049 ± 3.904
6500
6000
5500
5000
4500

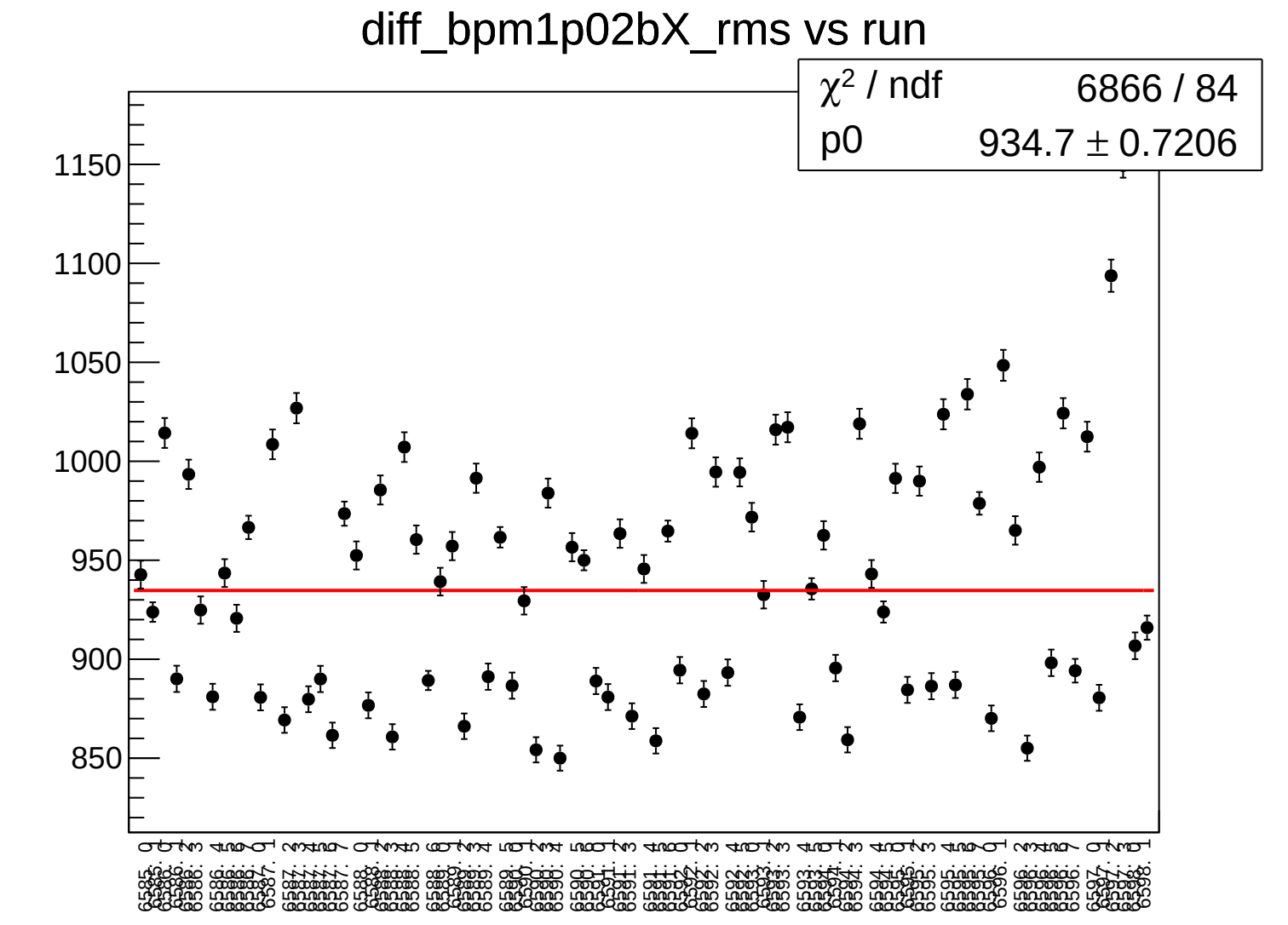

diff_bpm16Y_mean vs run
χ² / ndf 97.98 / 84
p0 0.6798 ± 3.767
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 1390
Std Dev 1345
3
2
1
0
−1
−2

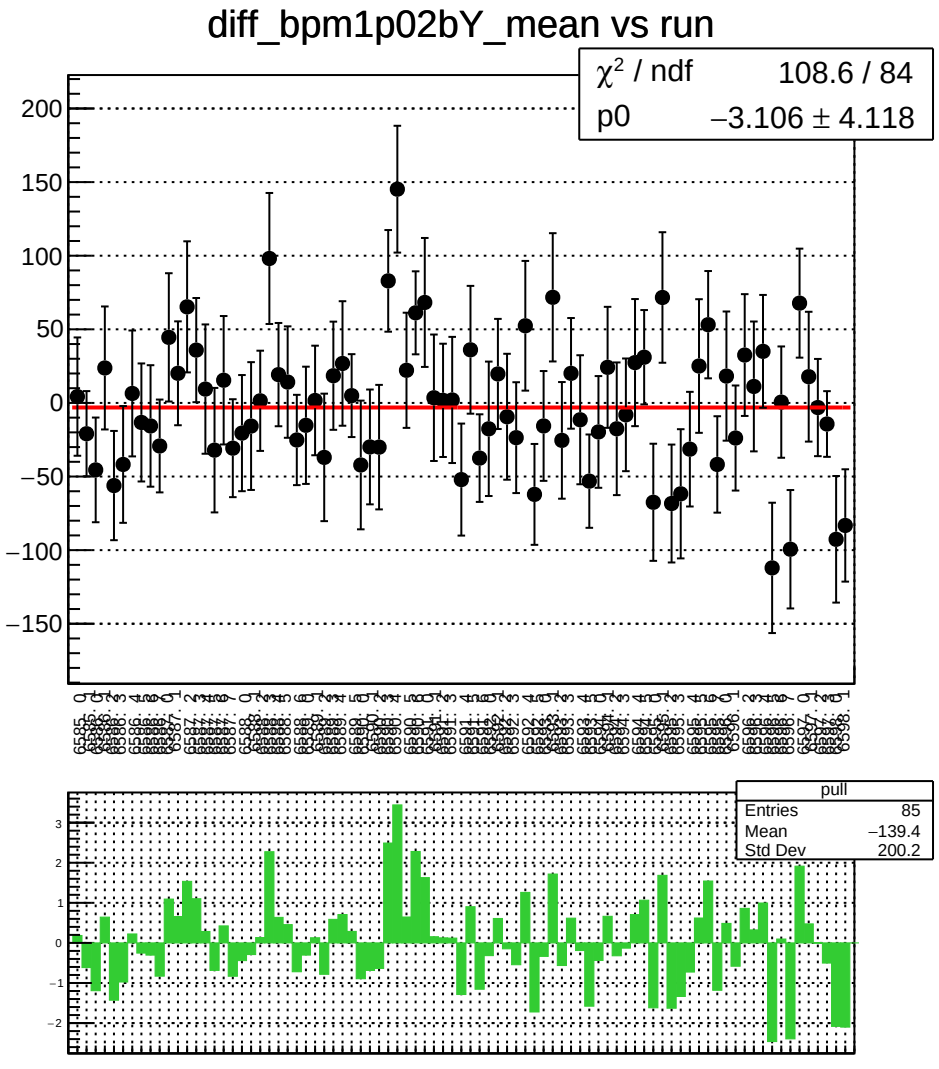

pull1D
Entries 85
Mean −0.002778
Std Dev 1.074
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

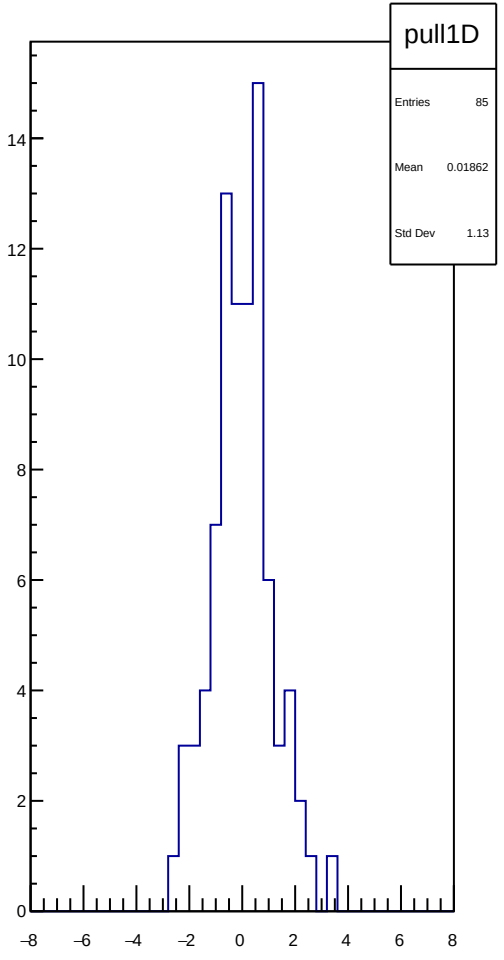

diff_bpm16Y_rms vs run
χ² / ndf 1.056e+04 / 84
p0 3452 ± 2.664
4400
4200
4000
3800
3600
3400
3200
3000
2800

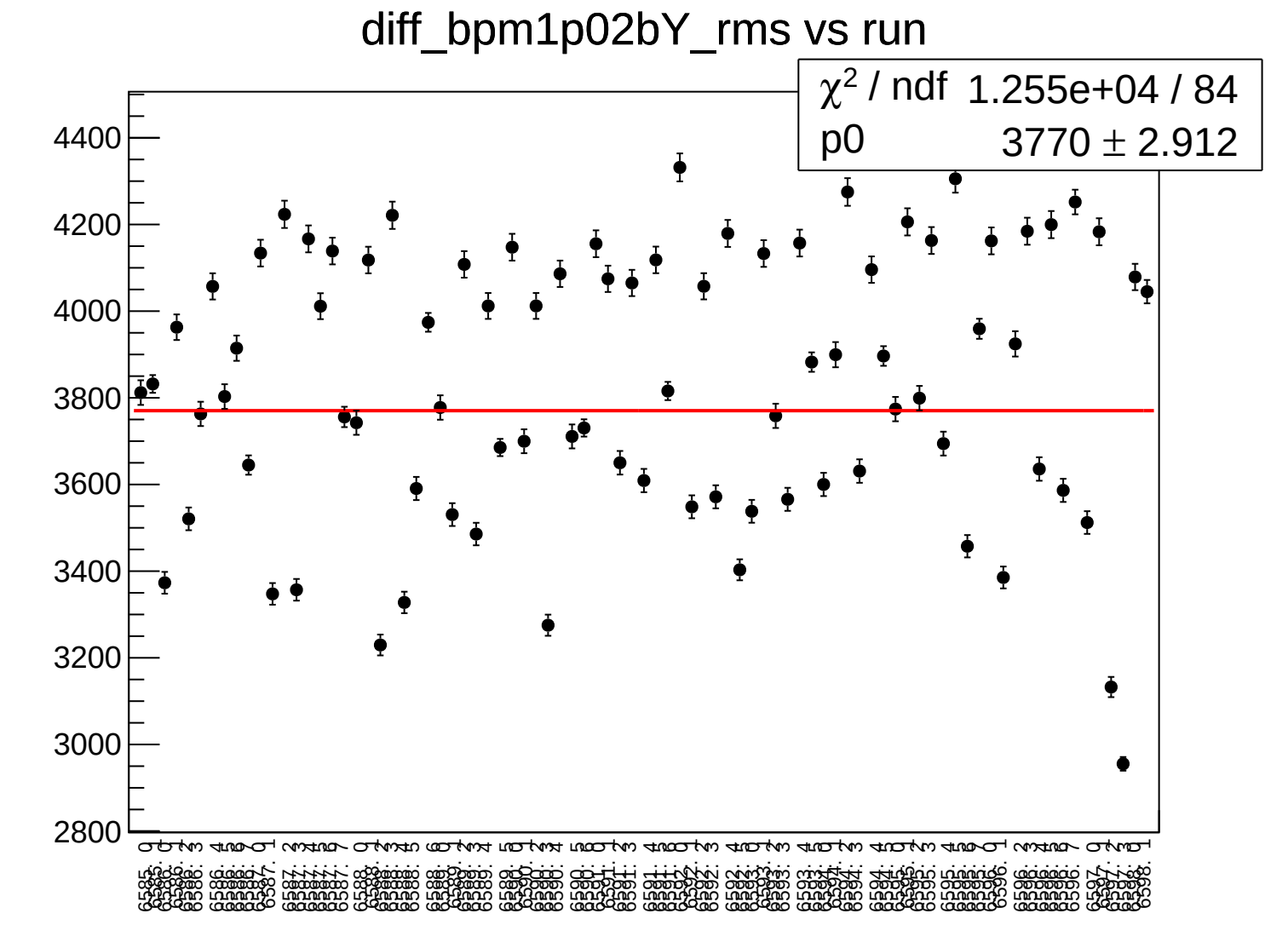

diff_bpm1p02bX_mean vs run
χ² / ndf 64 / 84
p0 −1.687 ± 1.019
pull
Entries 85
Mean −3.629
Std Dev 28.9

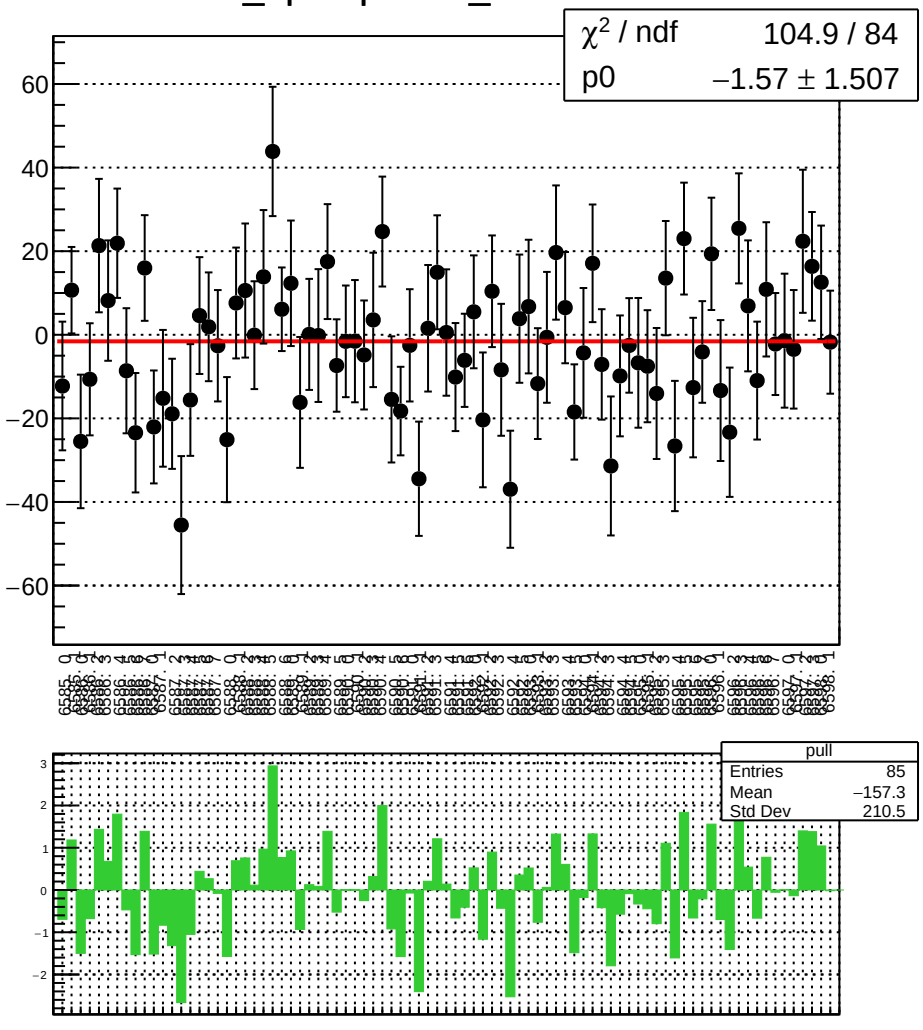

pull1D
Entries 85
Mean −0.02746
Std Dev 0.8673

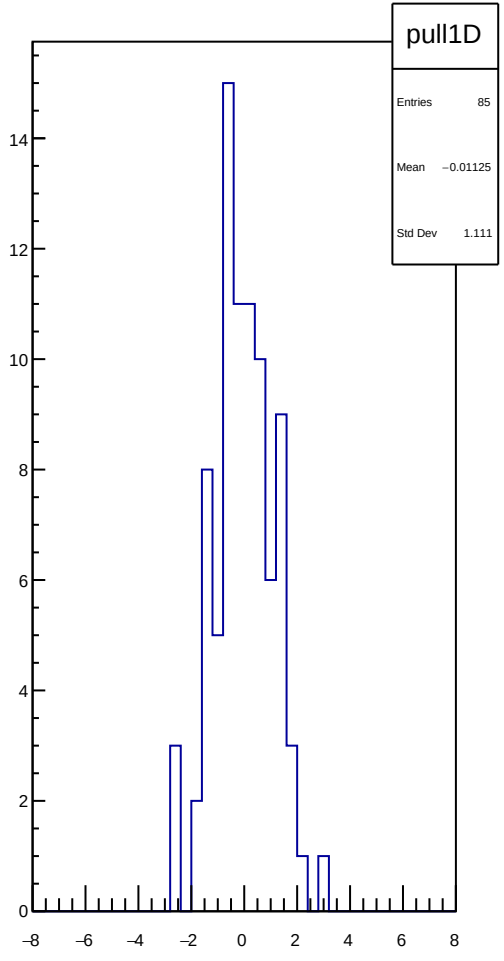

diff_bpm1p02bX_rms vs run
χ² / ndf 6866 / 84
p0 934.7 ± 0.7206
1150
1100
1050
1000
950
900
850

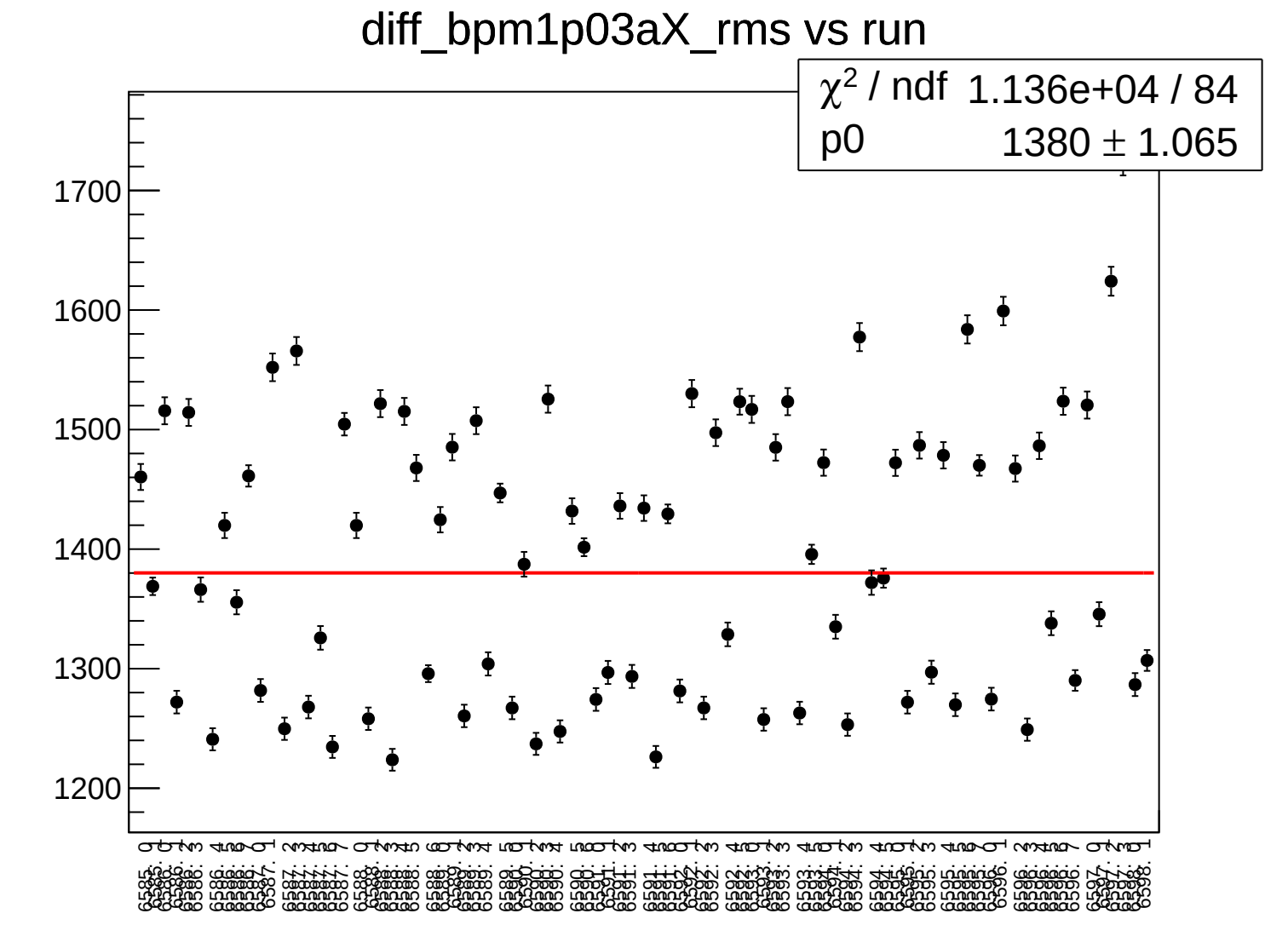

diff_bpm1p02bY_mean vs run
χ² / ndf 108.6 / 84
p0 −3.106 ± 4.118
pull
Entries 85
Mean −139.4
Std Dev 200.2

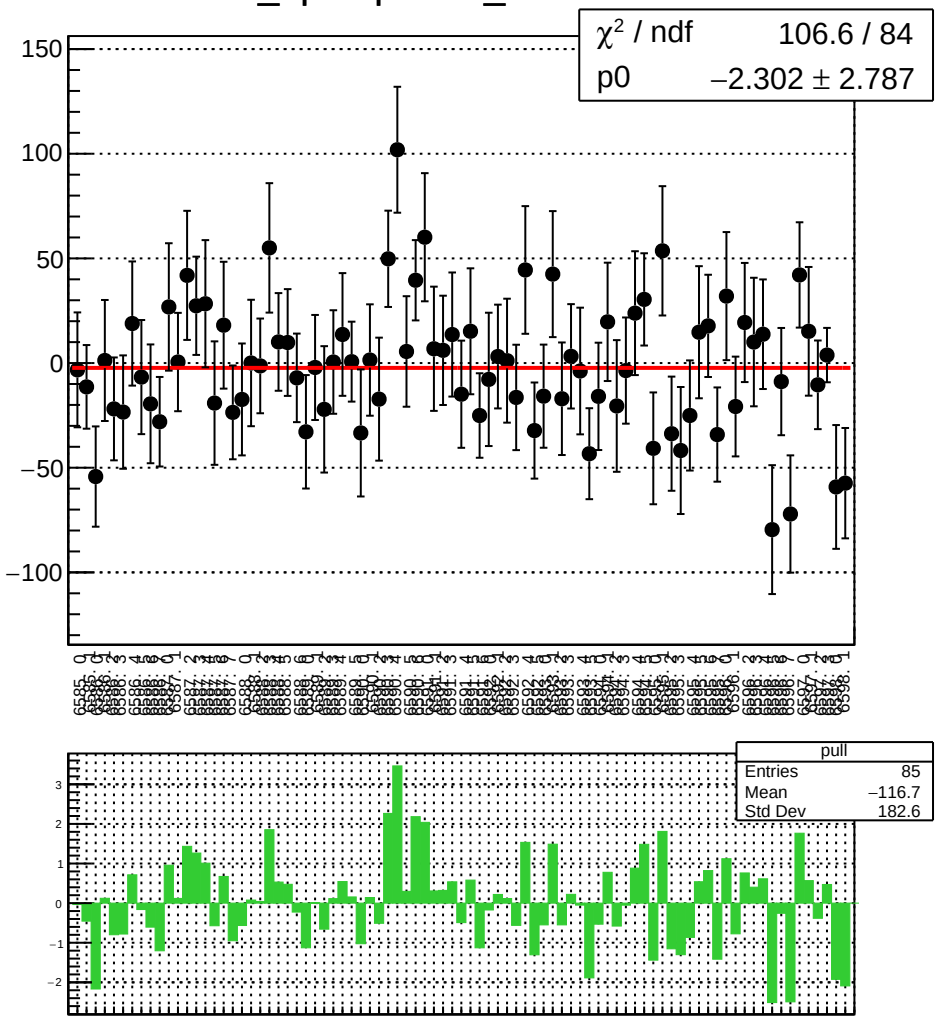

pull1D
Entries 85
Mean 0.01862
Std Dev 1.13

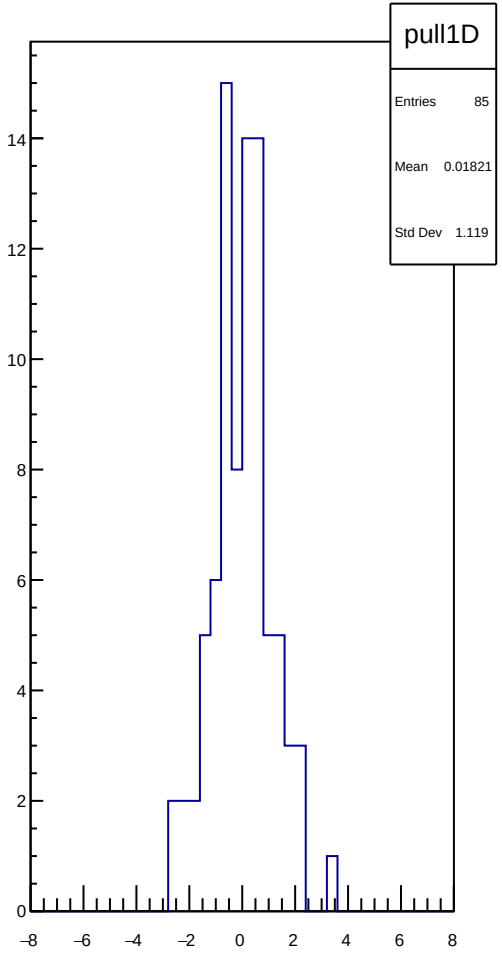

diff_bpm1p02bY_rms vs run
χ² / ndf 1.255e+04 / 84
p0 3770 ± 2.912
4400
4200
4000
3800
3600
3400
3200
3000
2800

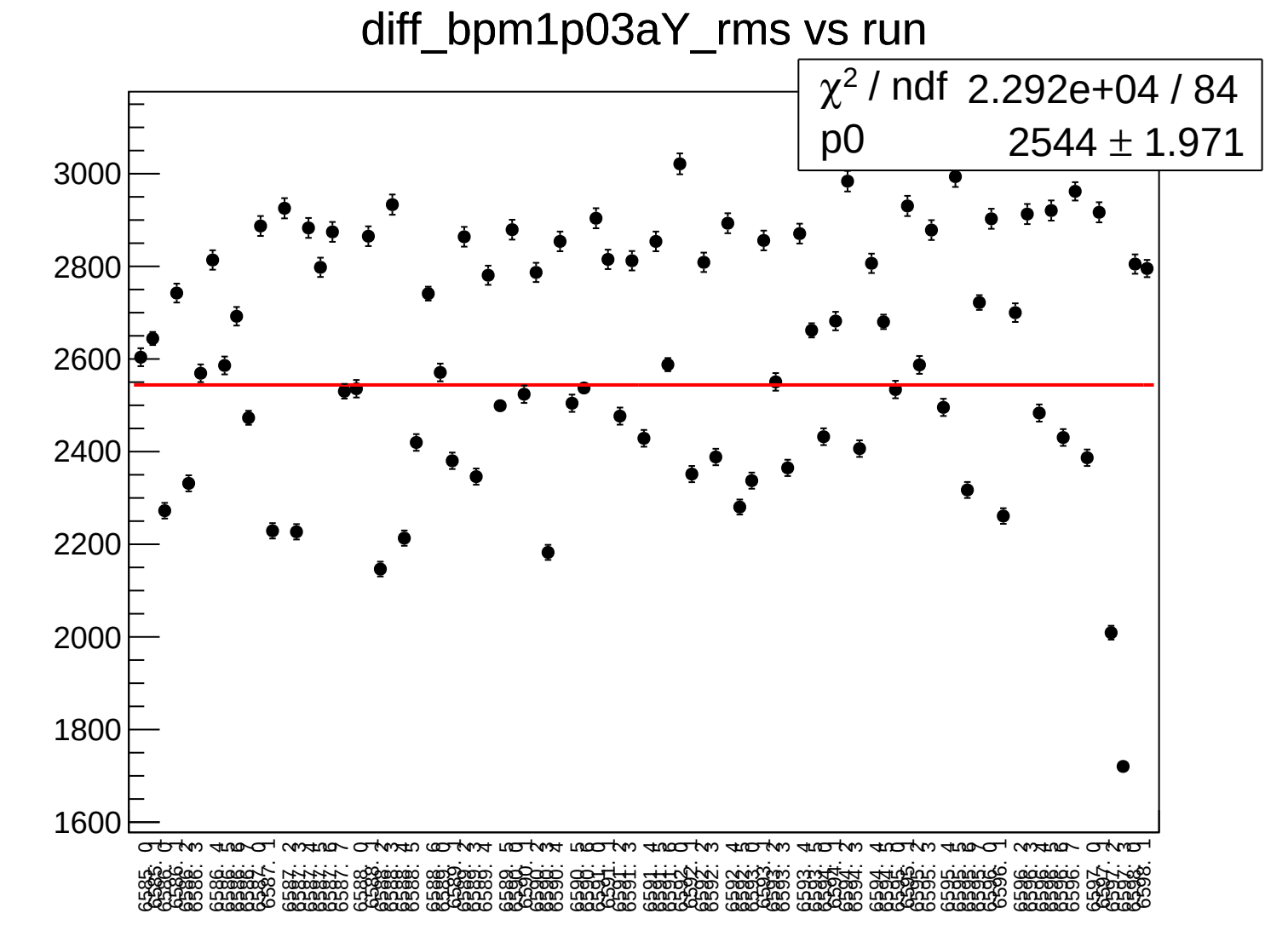

diff_bpm1p03aX_mean vs run
χ² / ndf 104.9 / 84
p0 −1.57 ± 1.507
pull
Entries 85
Mean −157.3
Std Dev 210.5

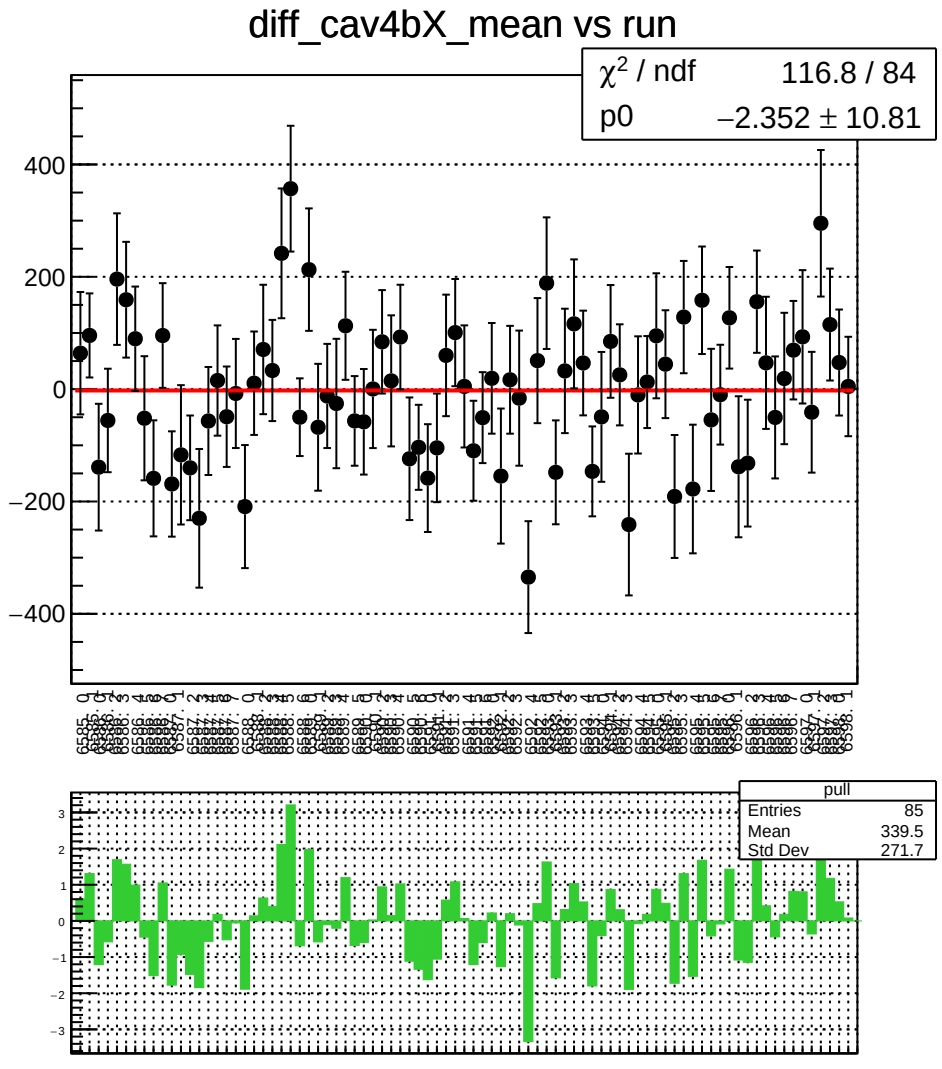

pull1D
Entries 85
Mean −0.01125
Std Dev 1.111

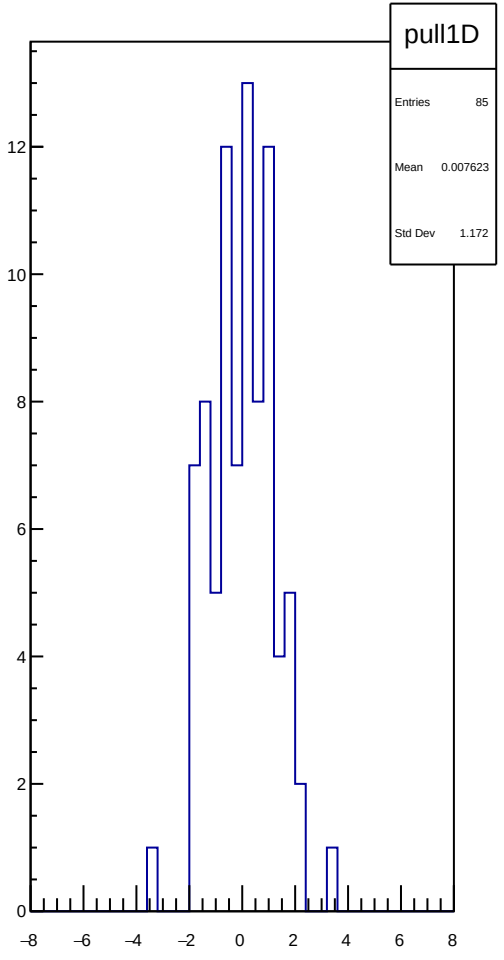

diff_bpm1p03aX_rms vs run
χ² / ndf 1.136e+04 / 84
p0 1380 ± 1.065
1700
1600
1500
1400
1300
1200

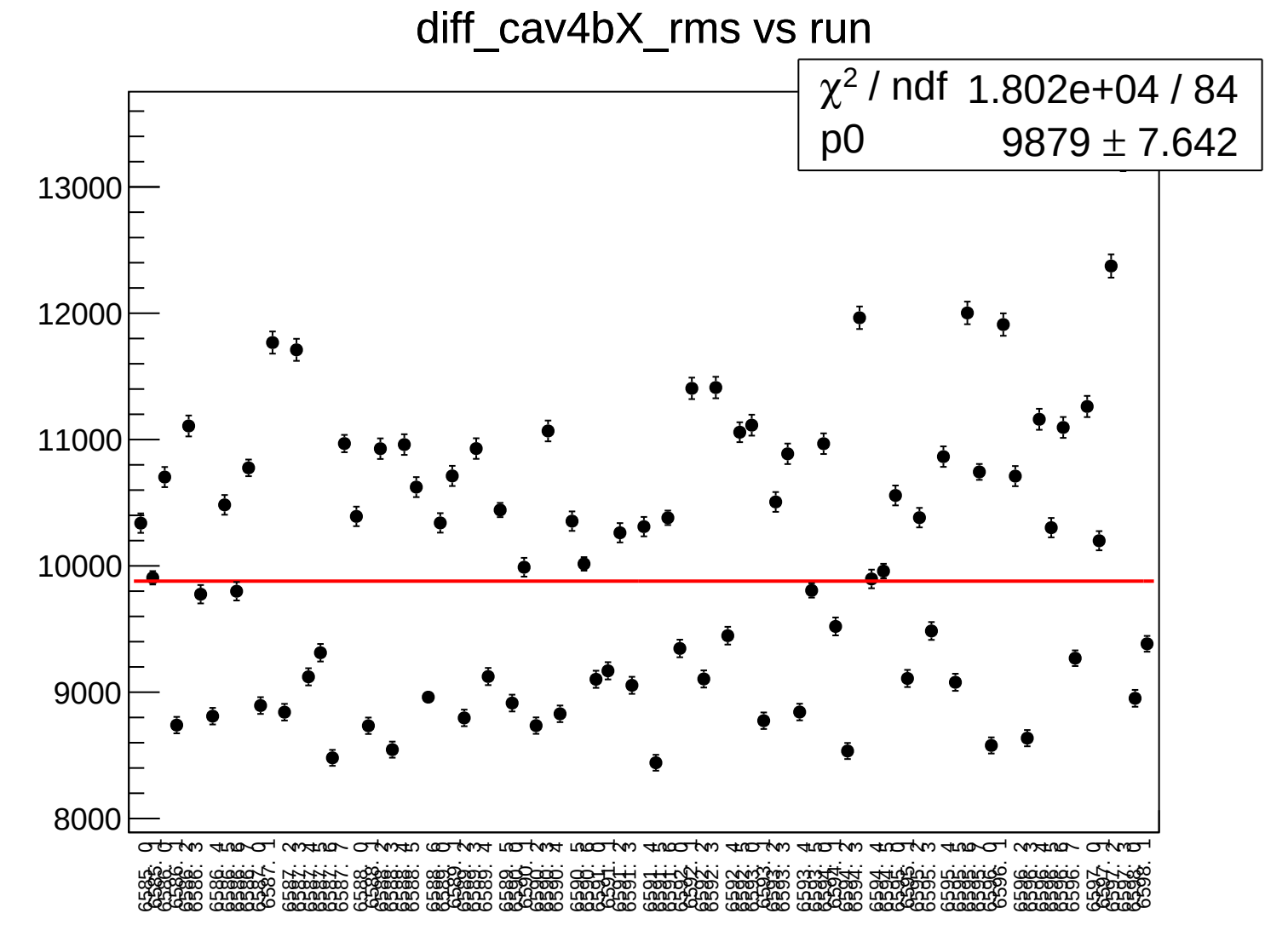

diff_bpm1p03aY_mean vs run
χ² / ndf 106.6 / 84
p0 −2.302 ± 2.787
150
100
50
0
−50
−100
pull
Entries 85
Mean −116.7
Std Dev 182.6
3
2
1
0
−1
−2

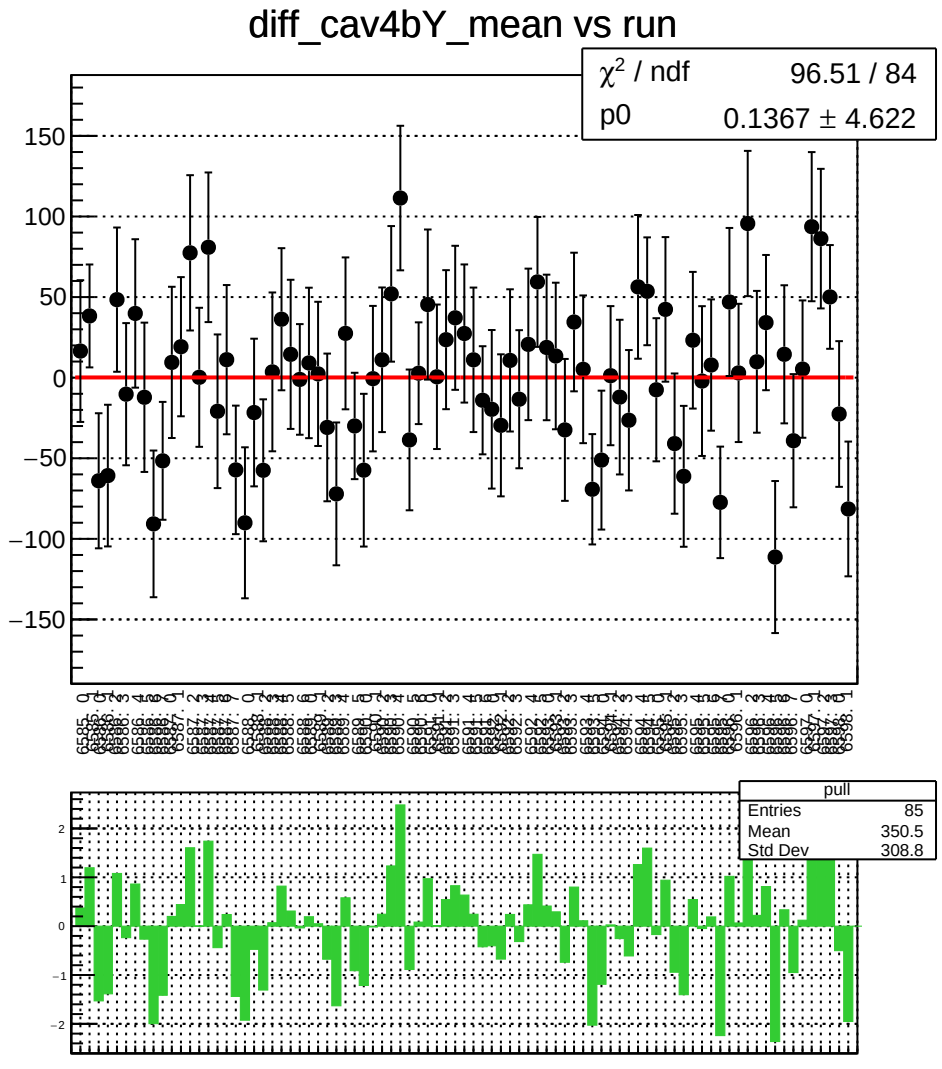

pull1D
Entries 85
Mean 0.01821
Std Dev 1.119
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

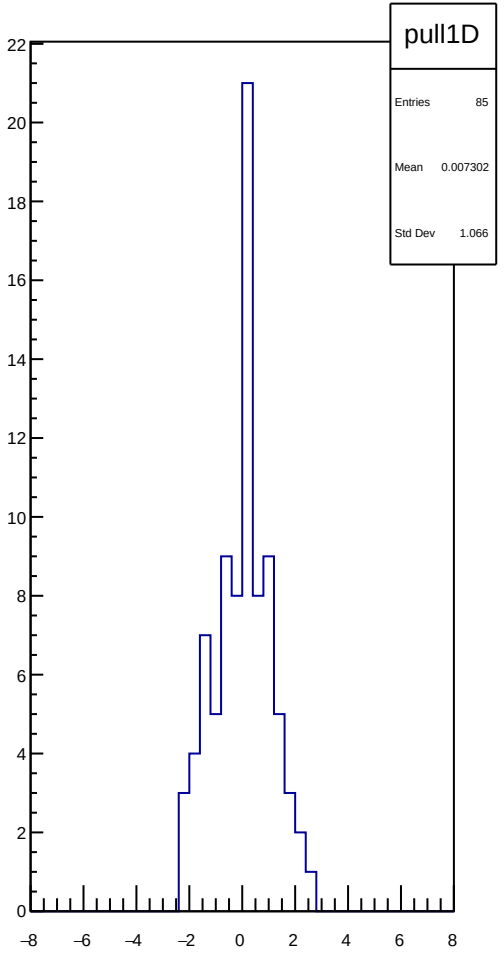

diff_bpm1p03aY_rms vs run
χ² / ndf 2.292e+04 / 84
p0 2544 ± 1.971
3000
2800
2600
2400
2200
2000
1800
1600

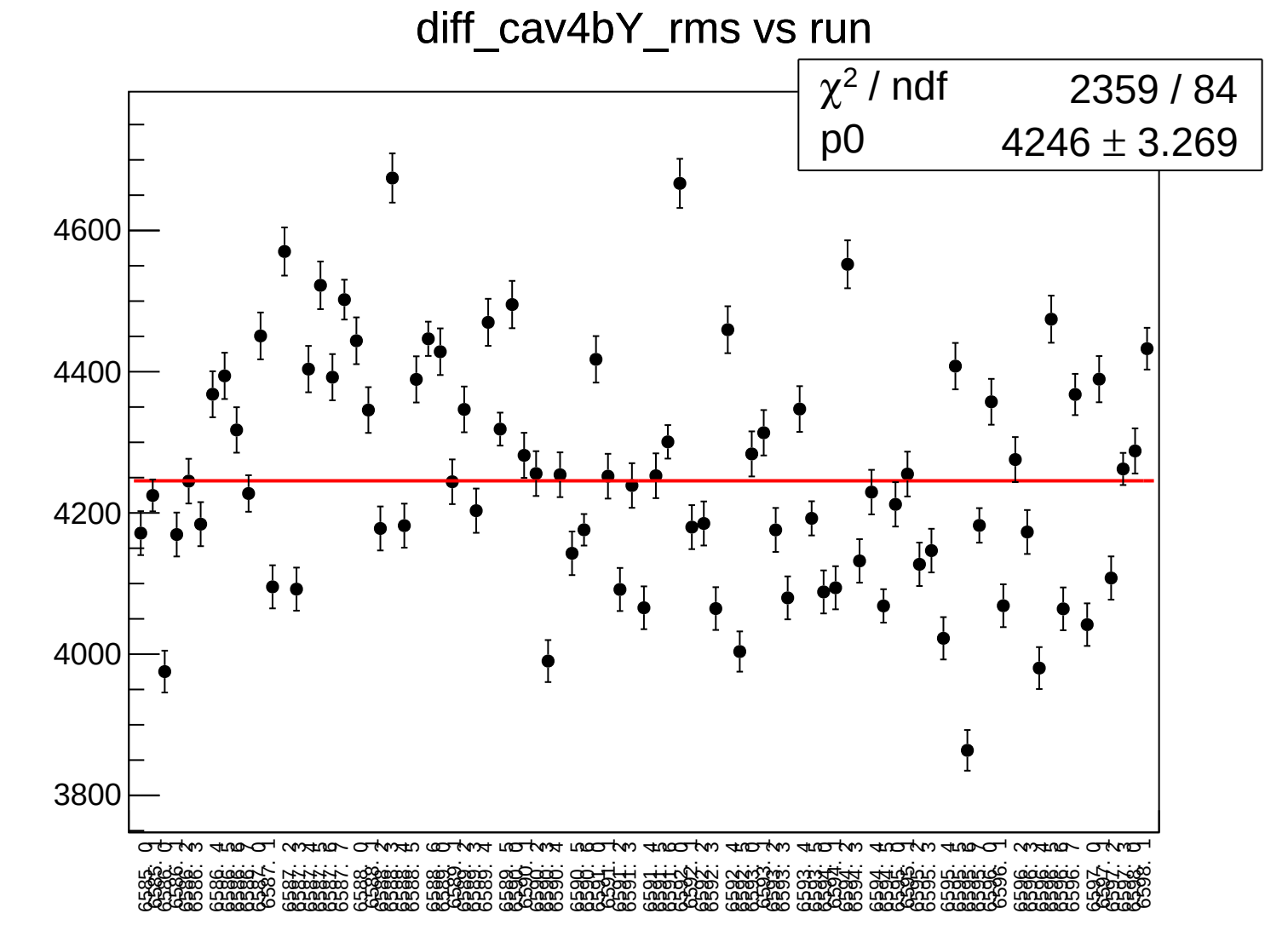

diff_cav4bX_mean vs run
χ² / ndf 116.8 / 84
p0 −2.352 ± 10.81
400
200
0
−200
−400
pull
Entries 85
Mean 339.5
Std Dev 271.7
3
2
1
0
−1
−2
−3

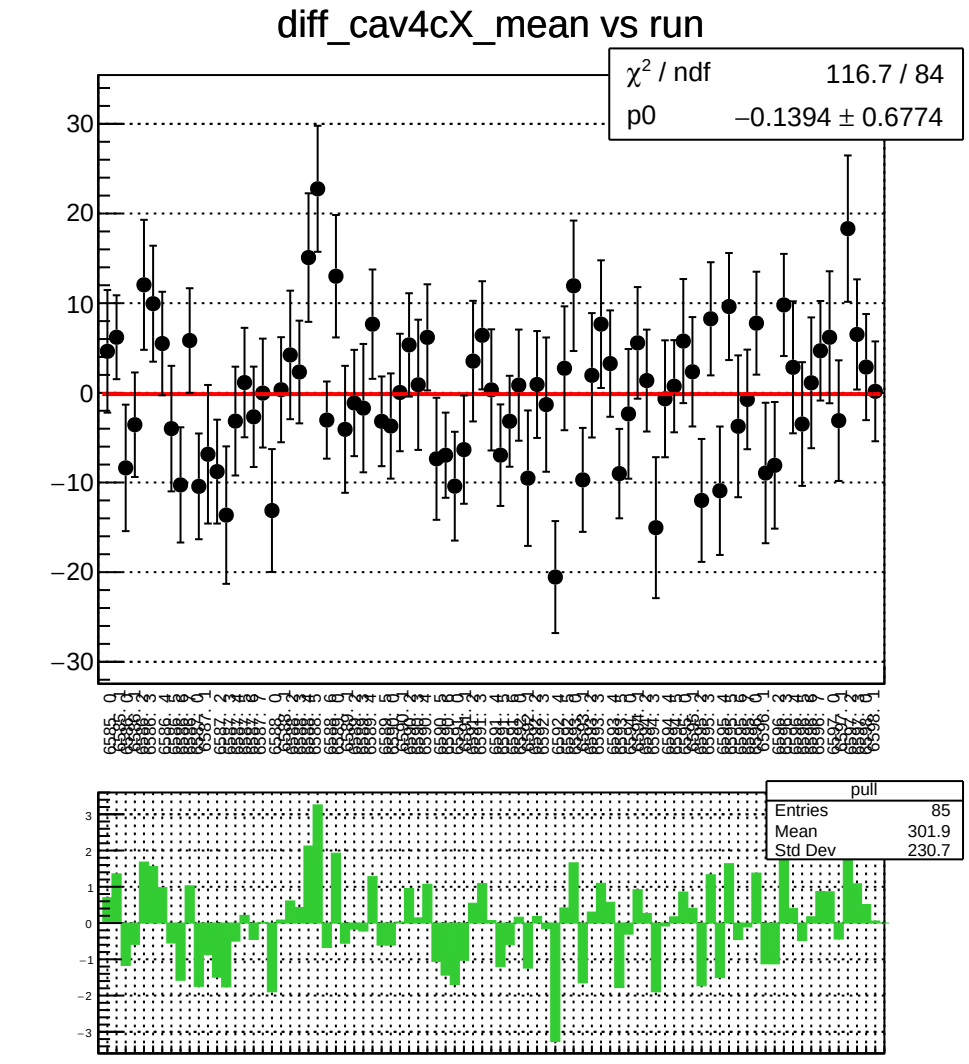

pull1D
Entries 85
Mean 0.007623
Std Dev 1.172
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

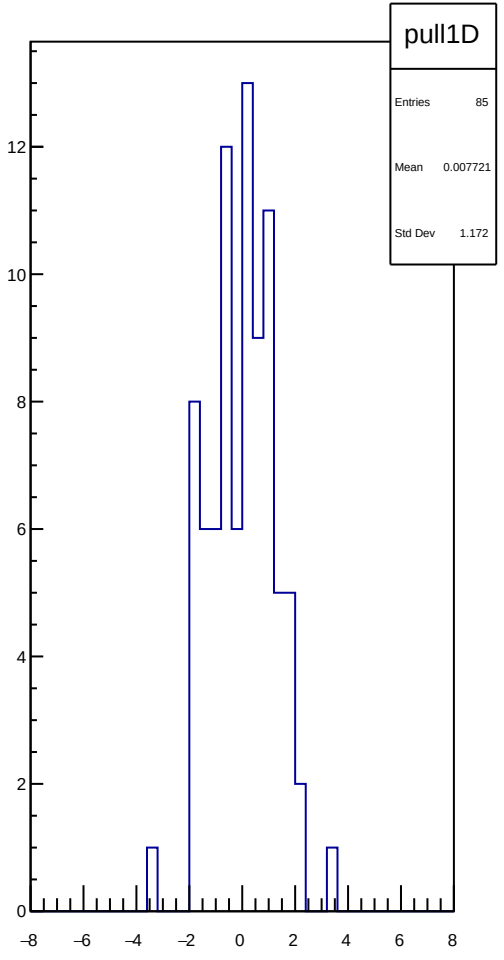

diff_cav4bX_rms vs run
χ² / ndf 1.802e+04 / 84
p0 9879 ± 7.642
13000
12000
11000
10000
9000
8000

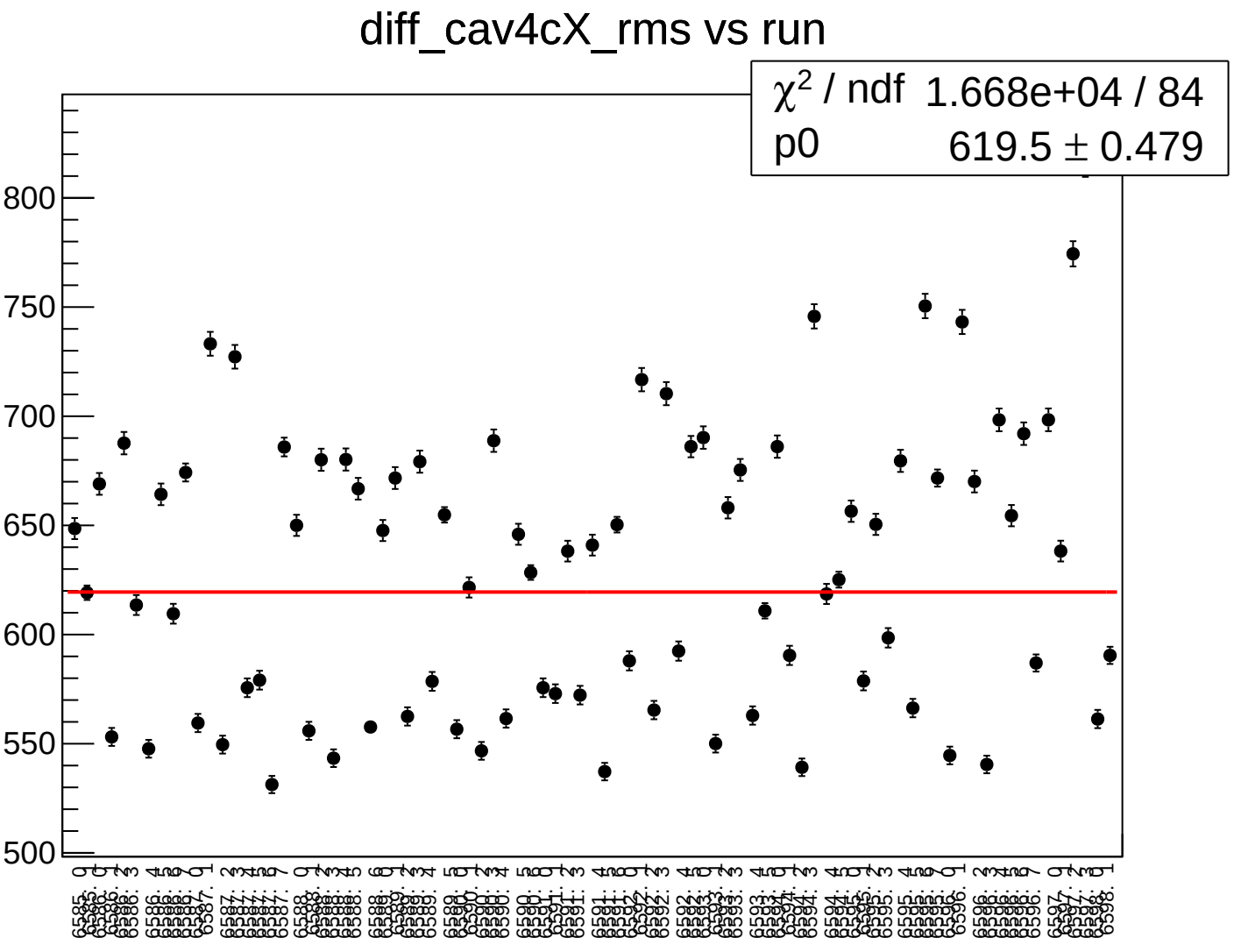

diff_cav4bY_mean vs run
χ^2 / ndf 96.51 / 84
p0 0.1367 ± 4.622
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 350.5
Std Dev 308.8
2
1
0
−1
−2

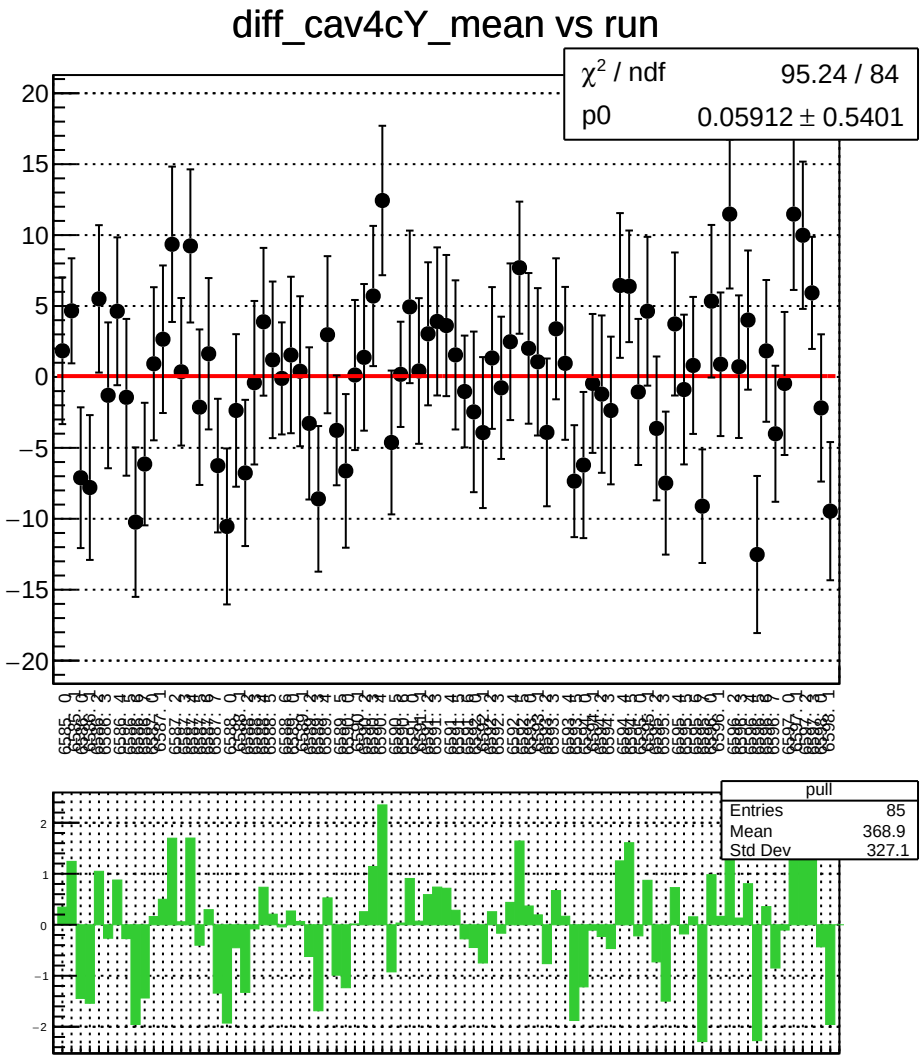

pull1D
Entries 85
Mean 0.007302
Std Dev 1.066
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

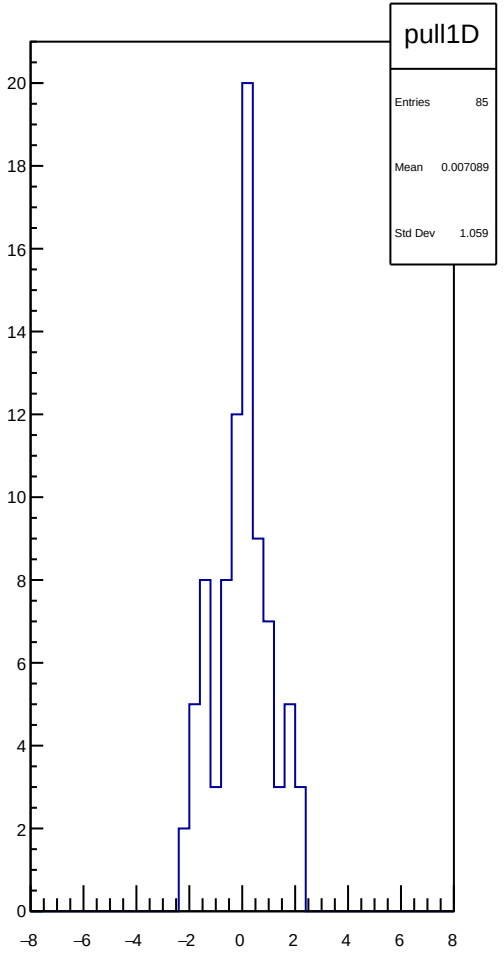

diff_cav4bY_rms vs run
χ² / ndf 2359 / 84
p0 4246 ± 3.269
4600
4400
4200
4000
3800

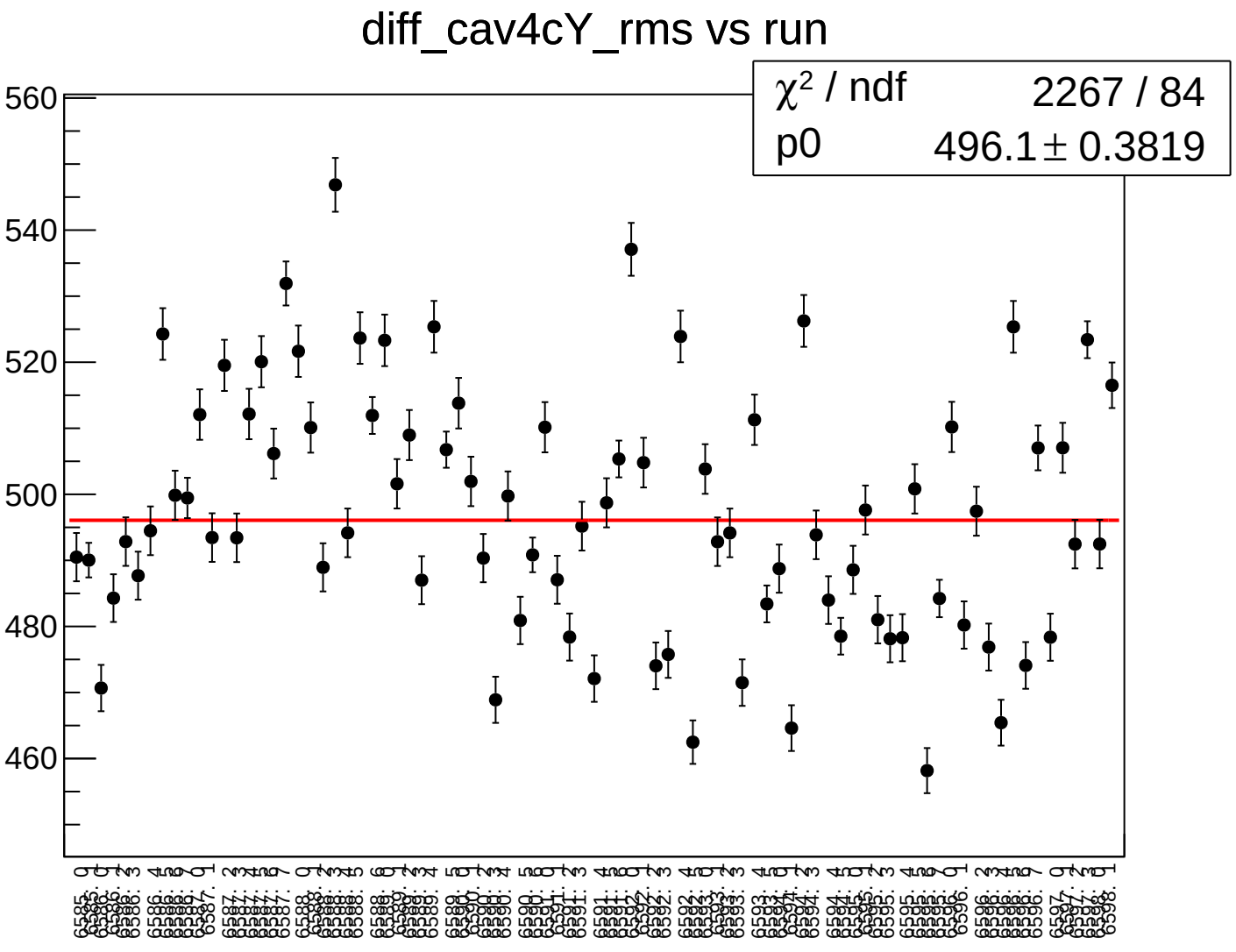

diff_cav4cX_mean vs run
χ² / ndf 116.7 / 84
p0 −0.1394 ± 0.6774
pull
Entries 85
Mean 301.9
Std Dev 230.7

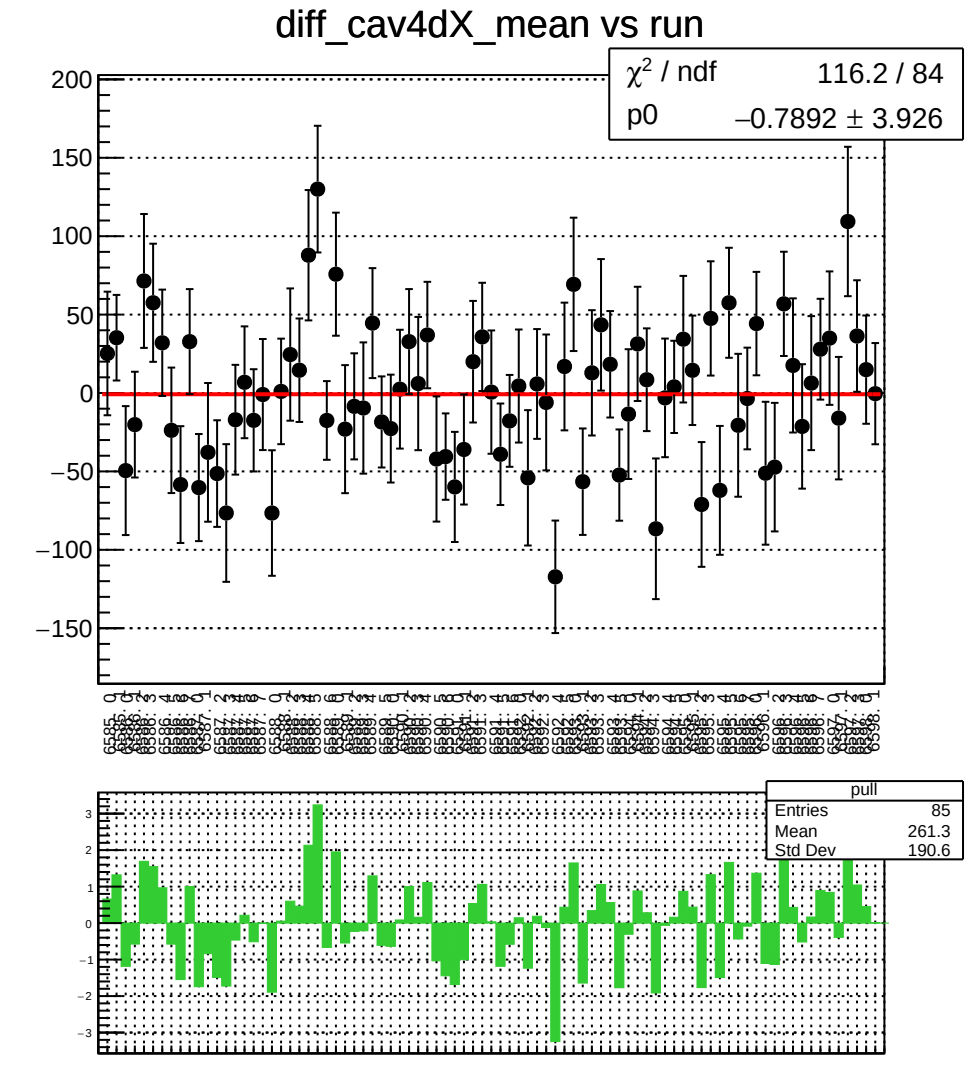

pull1D
Entries 85
Mean 0.007721
Std Dev 1.172

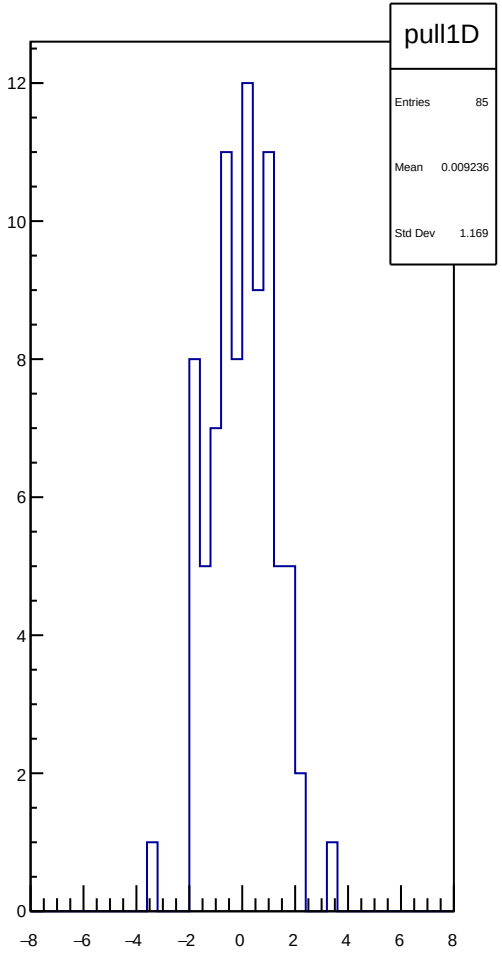

diff_cav4cX_rms vs run
χ² / ndf 1.668e+04 / 84
p0 619.5 ± 0.479
800
750
700
650
600
550
500

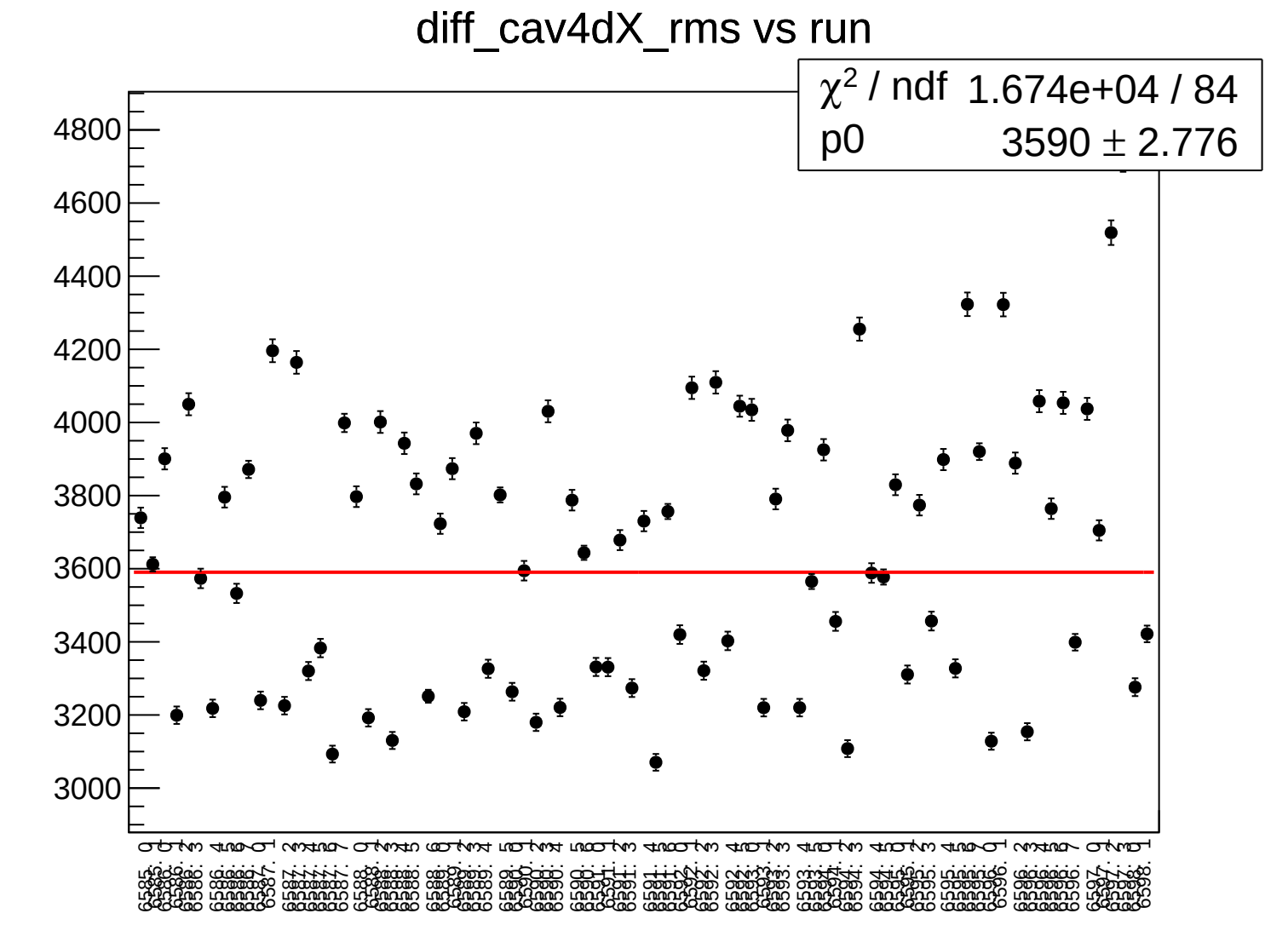

diff_cav4cY_mean vs run
χ² / ndf 95.24 / 84
p0 0.05912 ± 0.5401
pull
Entries 85
Mean 368.9
Std Dev 327.1

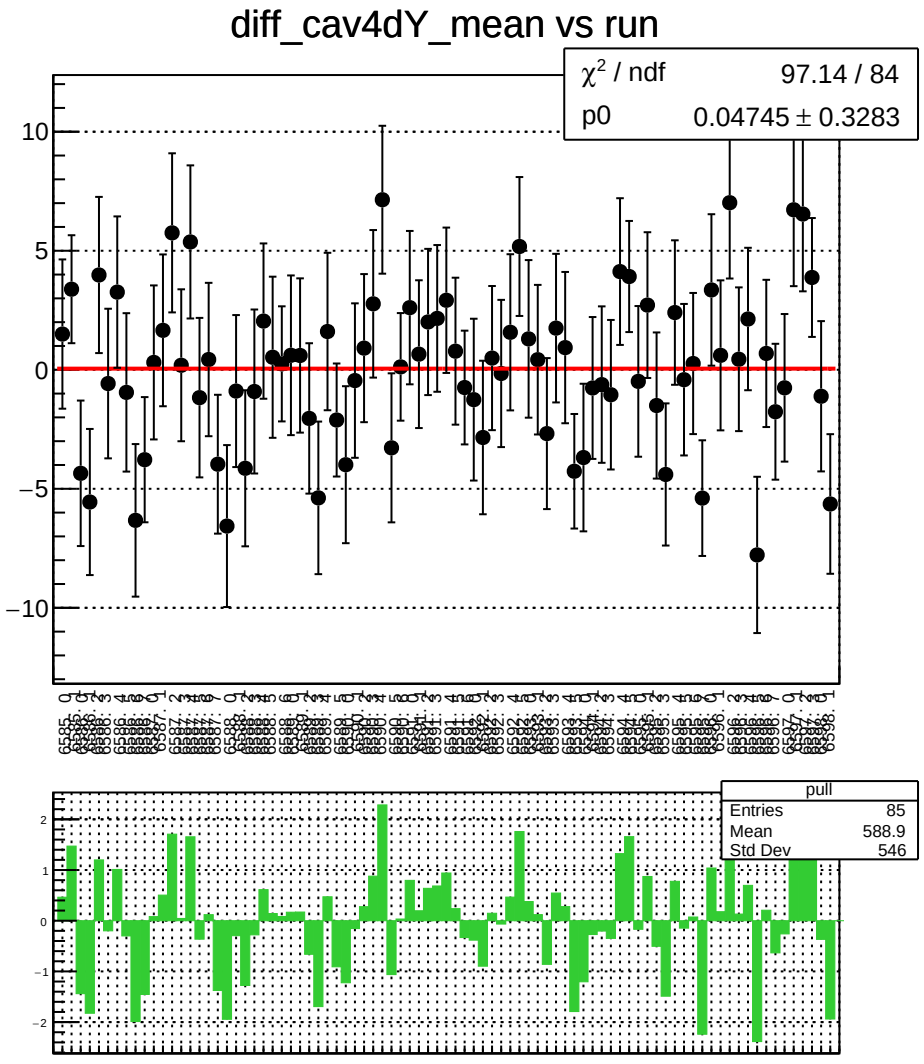

pull1D
Entries 85
Mean 0.007089
Std Dev 1.059

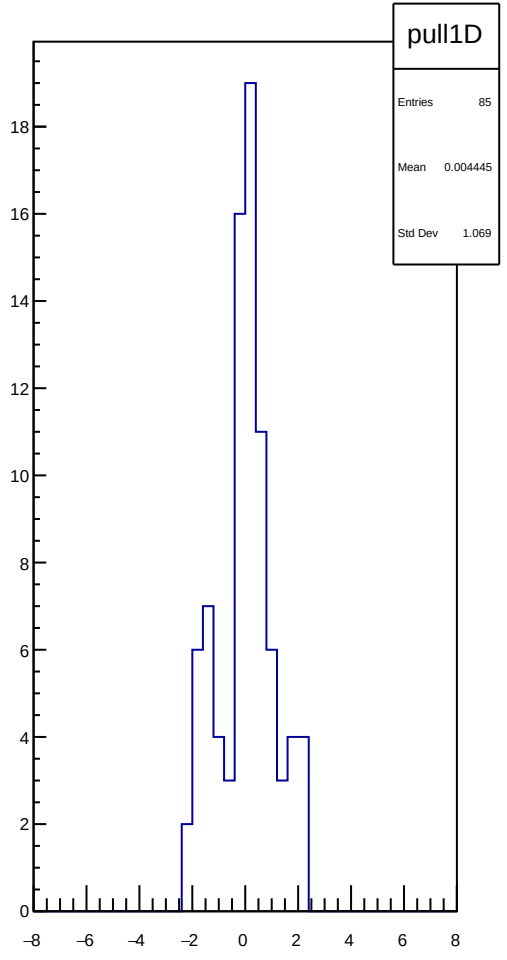

diff_cav4cY_rms vs run
χ² / ndf 2267 / 84
p0 496.1 ± 0.3819
560
540
520
500
480
460

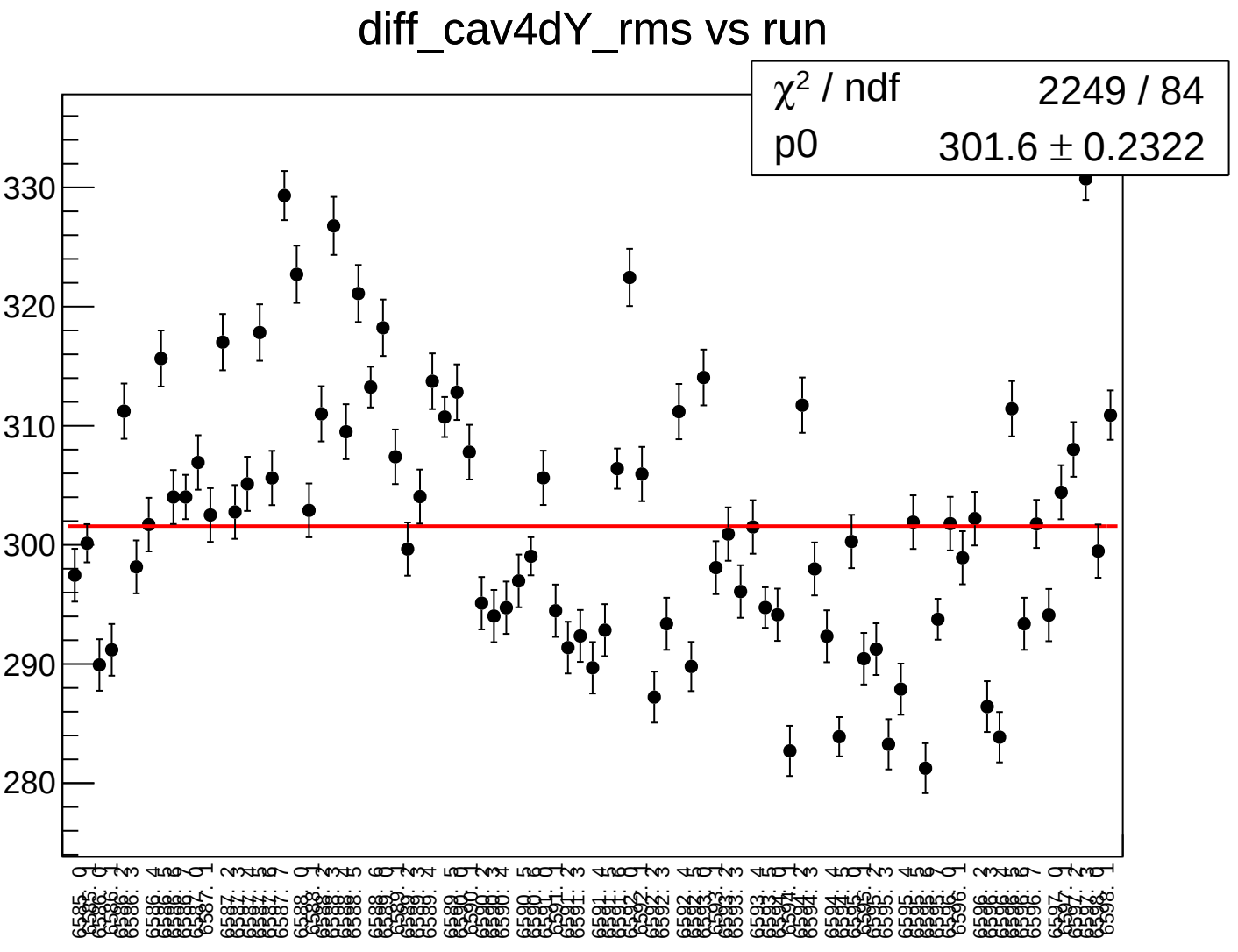

diff_cav4dX_mean vs run
χ² / ndf 116.2 / 84
p0 −0.7892 ± 3.926
pull
Entries 85
Mean 261.3
Std Dev 190.6

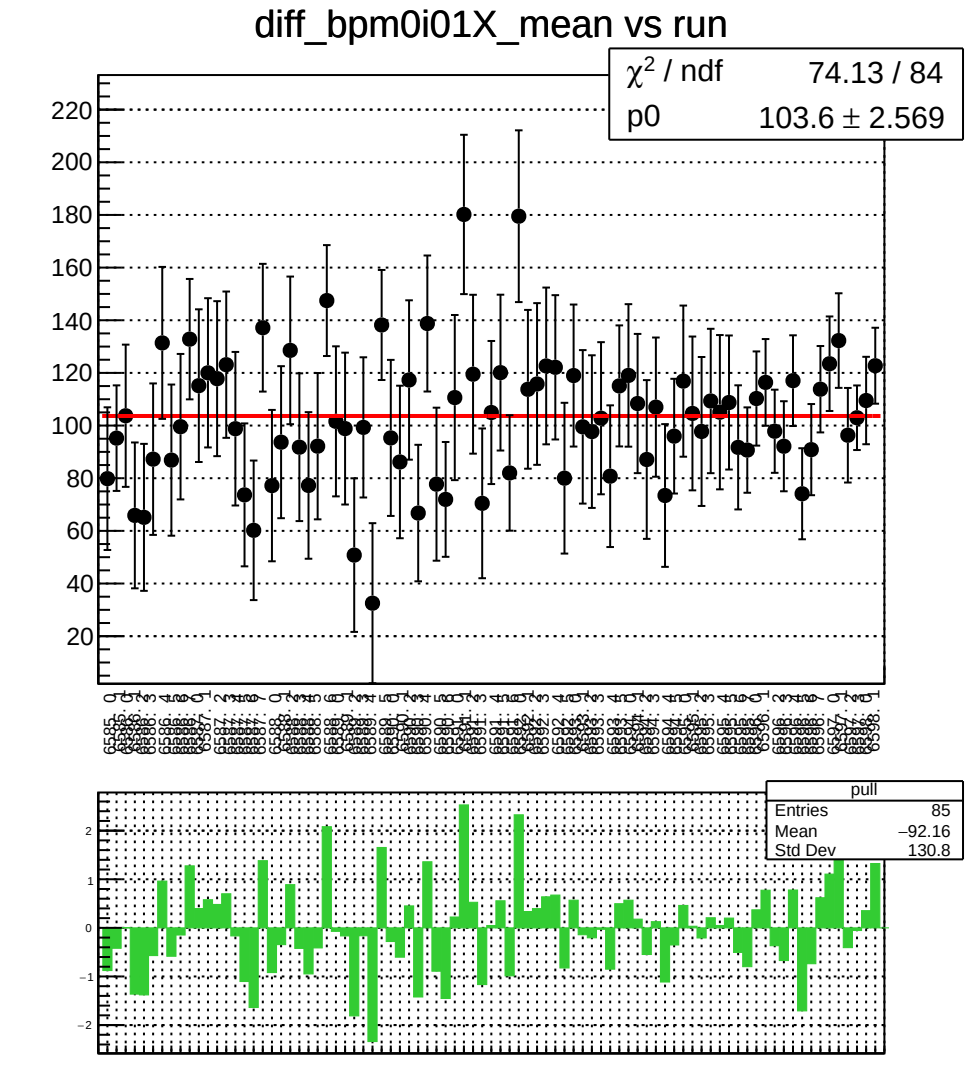

pull1D
Entries 85
Mean 0.009236
Std Dev 1.169

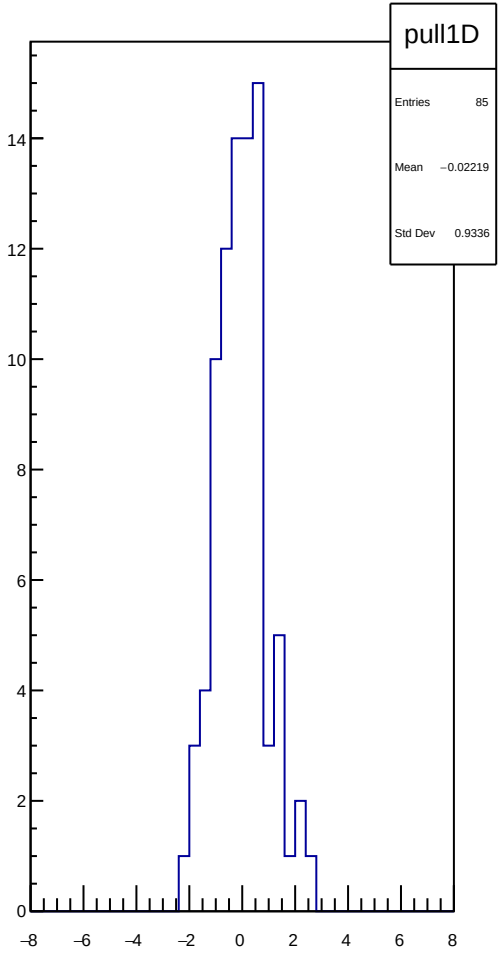

diff_cav4dX_rms vs run
χ² / ndf 1.674e+04 / 84
p0 3590 ± 2.776
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000

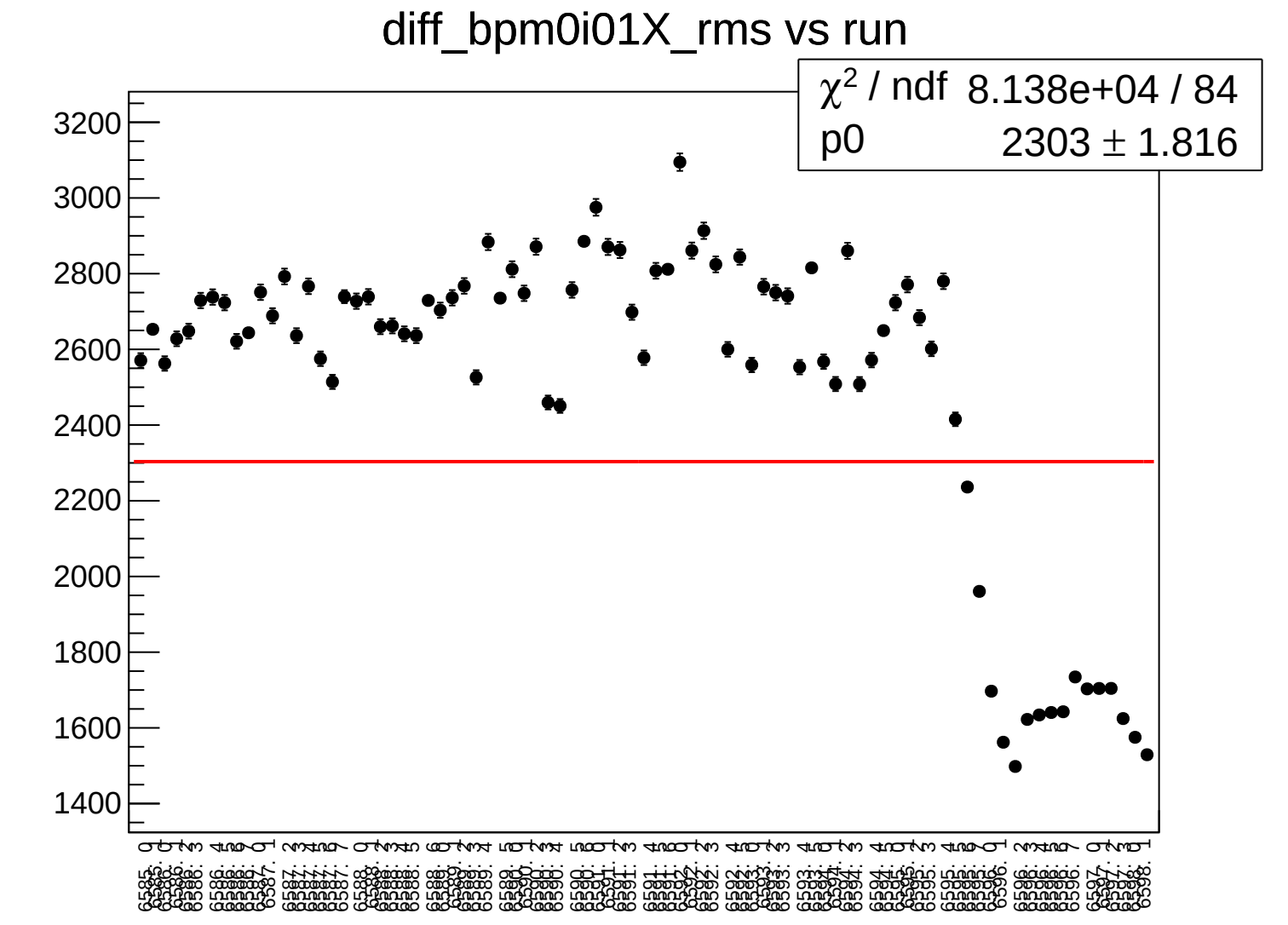

diff_cav4dY_mean vs run
χ² / ndf 97.14 / 84
p0 0.04745 ± 0.3283
pull
Entries 85
Mean 588.9
Std Dev 546

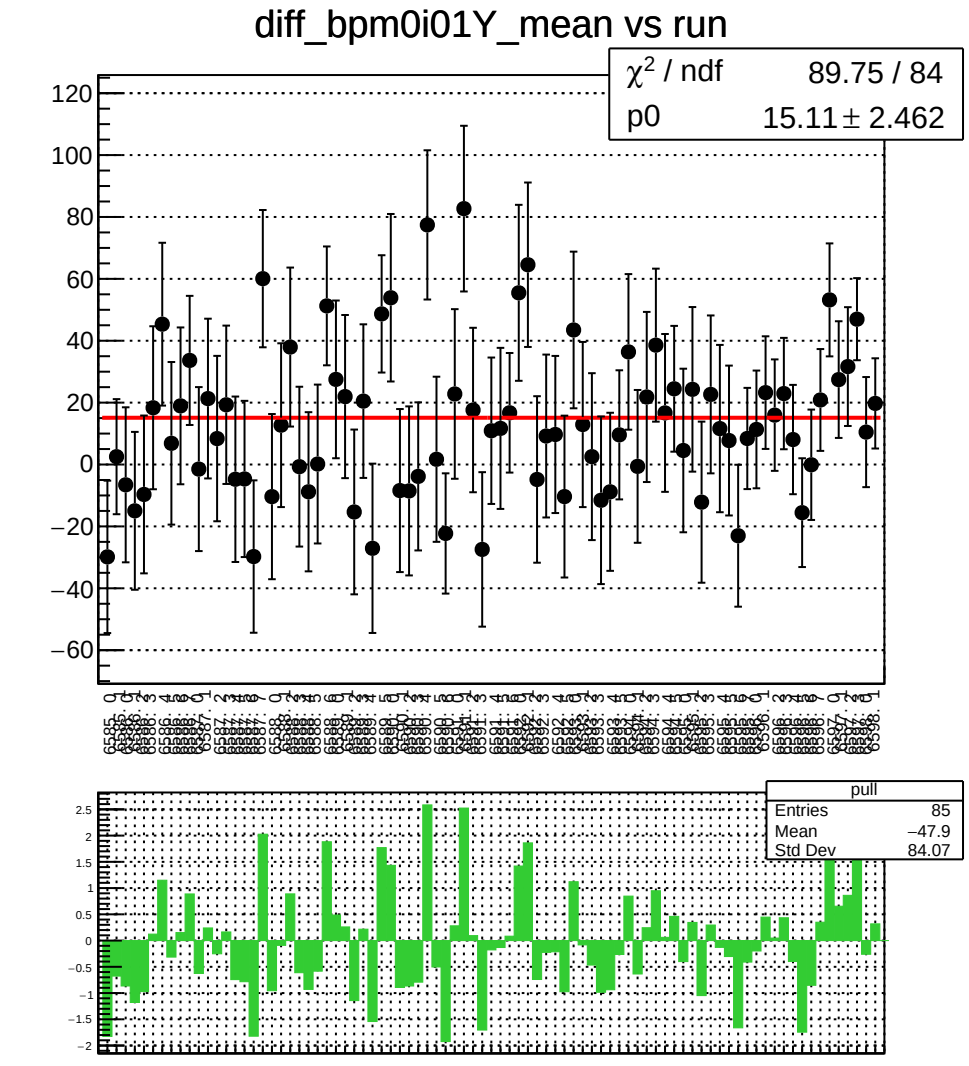

pull1D
Entries 85
Mean 0.004445
Std Dev 1.069

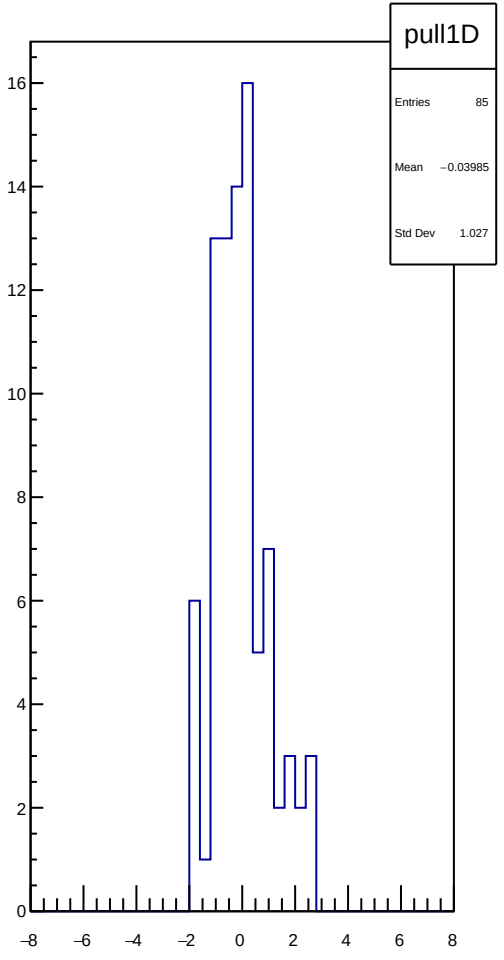

diff_cav4dY_rms vs run
χ² / ndf 2249 / 84
p0 301.6 ± 0.2322
330
320
310
300
290
280

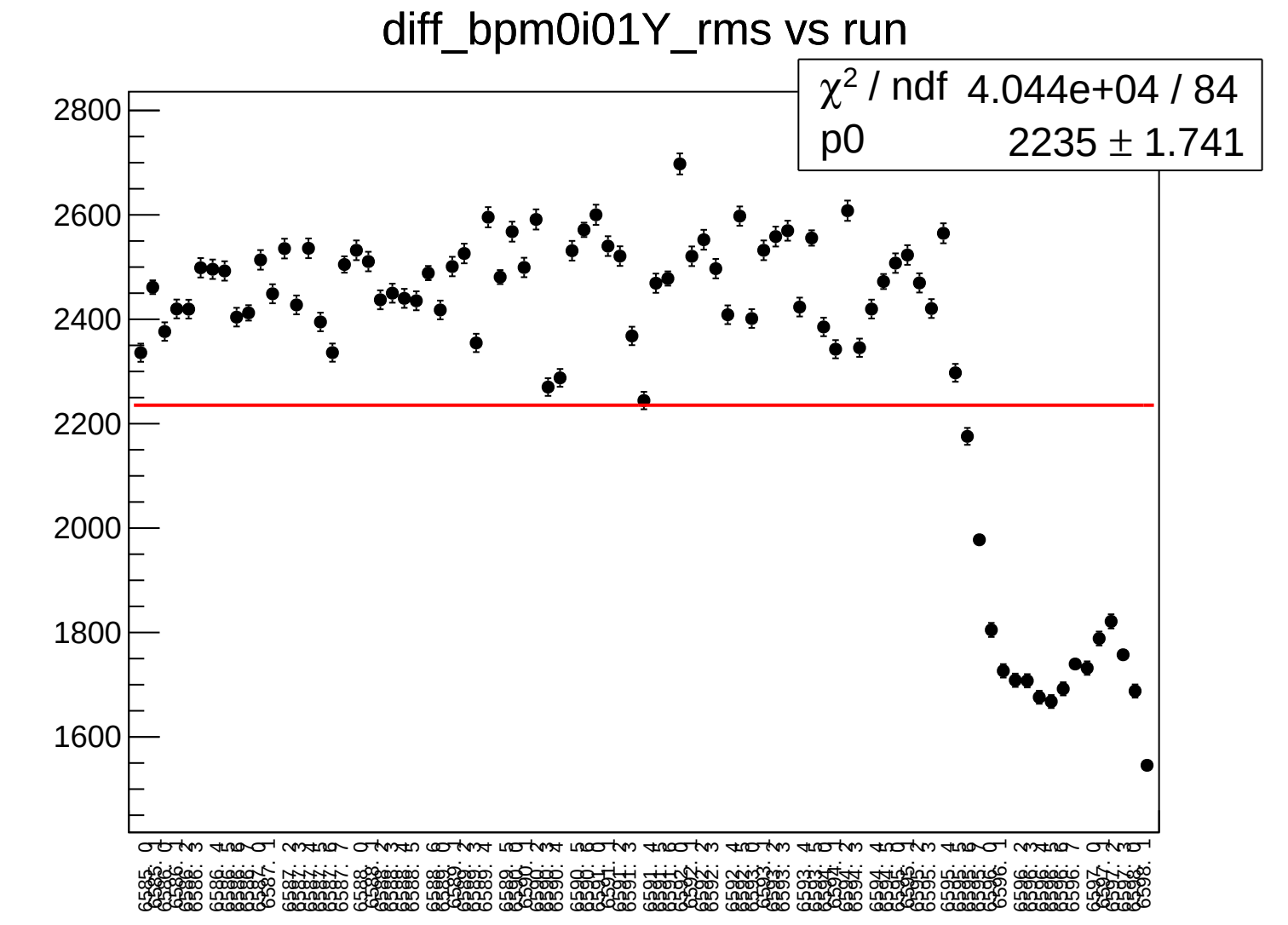

diff_bpm0i01X_mean vs run
χ² / ndf 74.13 / 84
p0 103.6 ± 2.569
pull
Entries 85
Mean −92.16
Std Dev 130.8

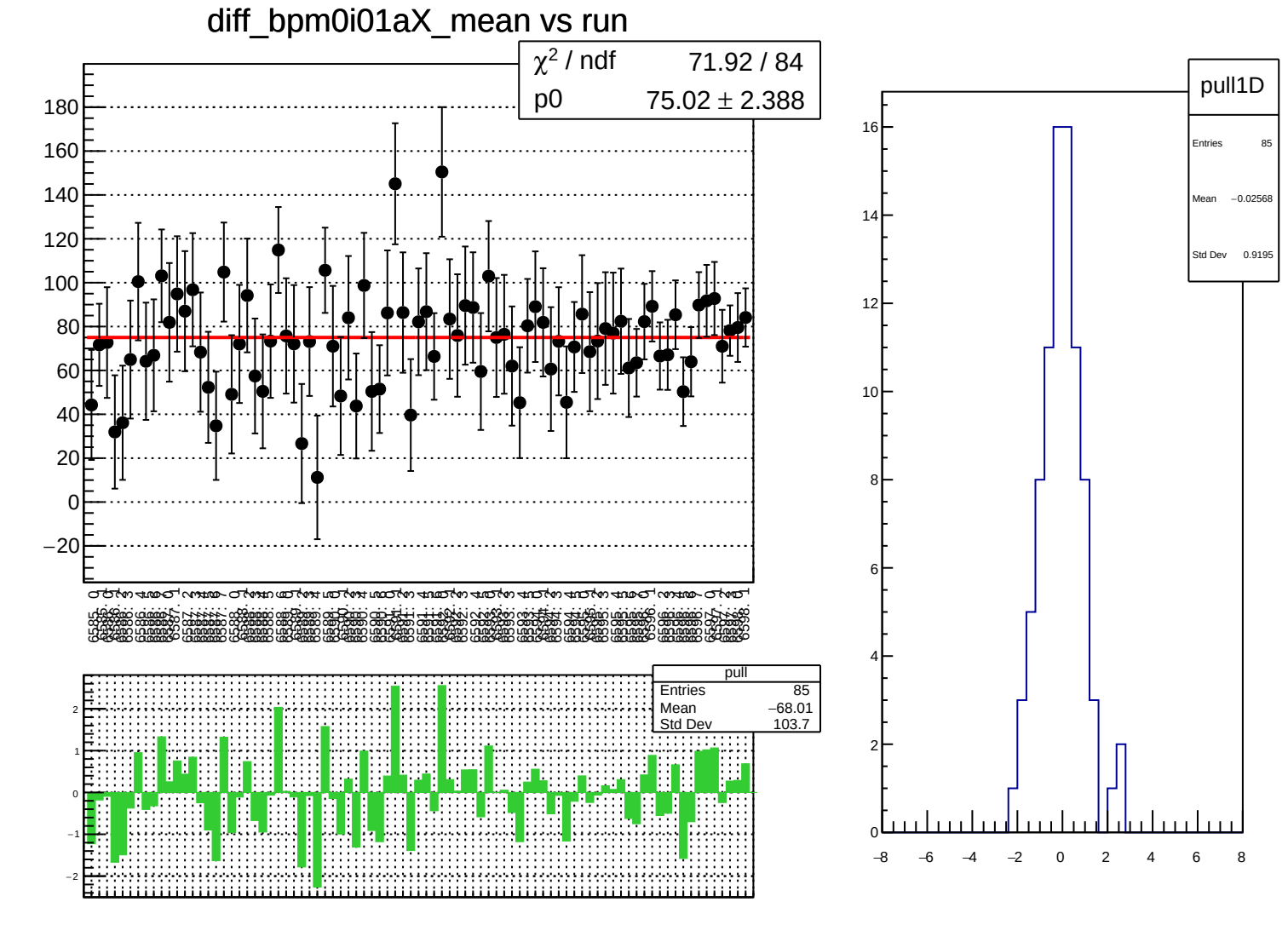

pull1D
Entries 85
Mean −0.02219
Std Dev 0.9336

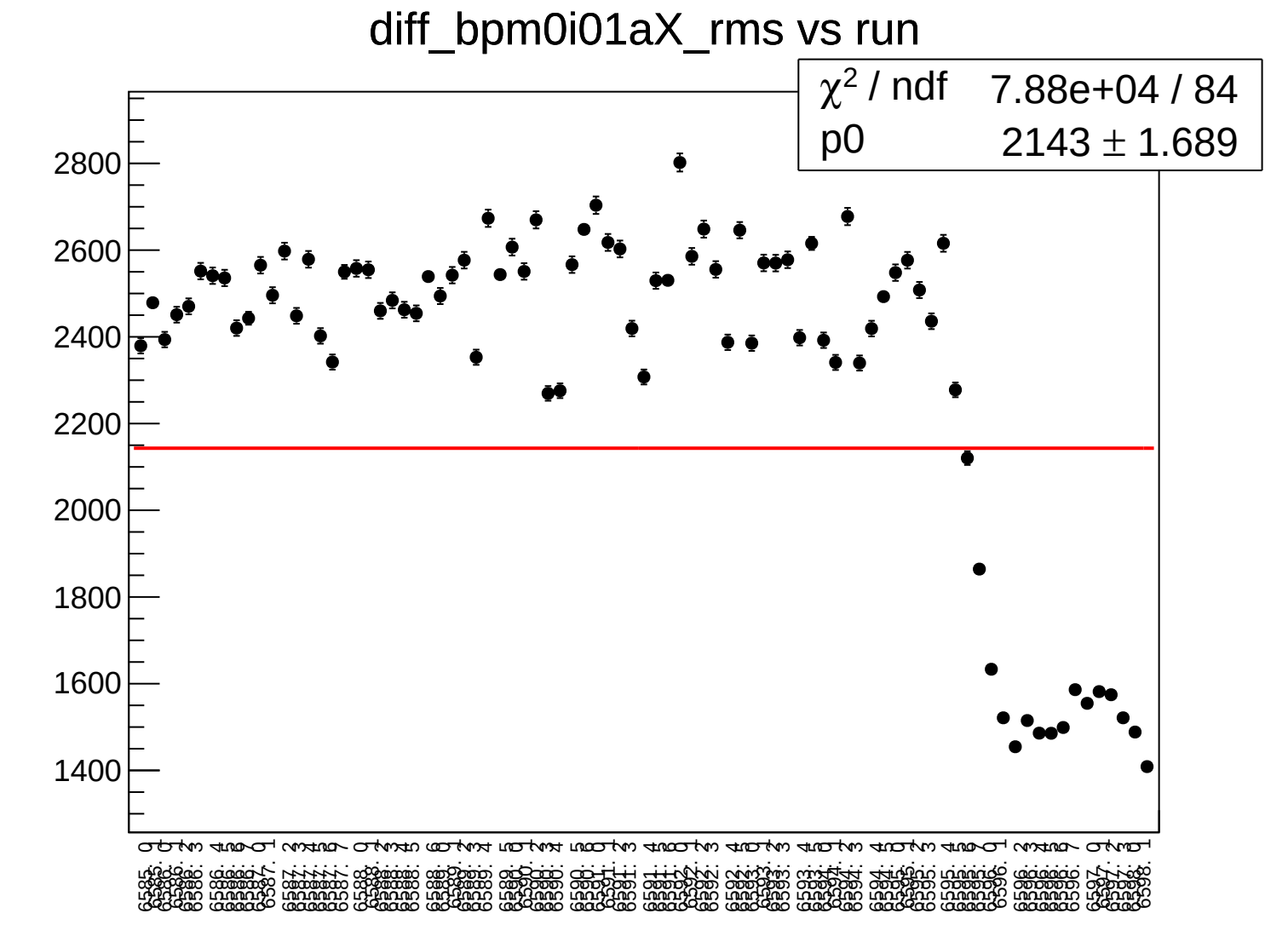

diff_bpm0i01X_rms vs run
χ² / ndf 8.138e+04 / 84
p0 2303 ± 1.816
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

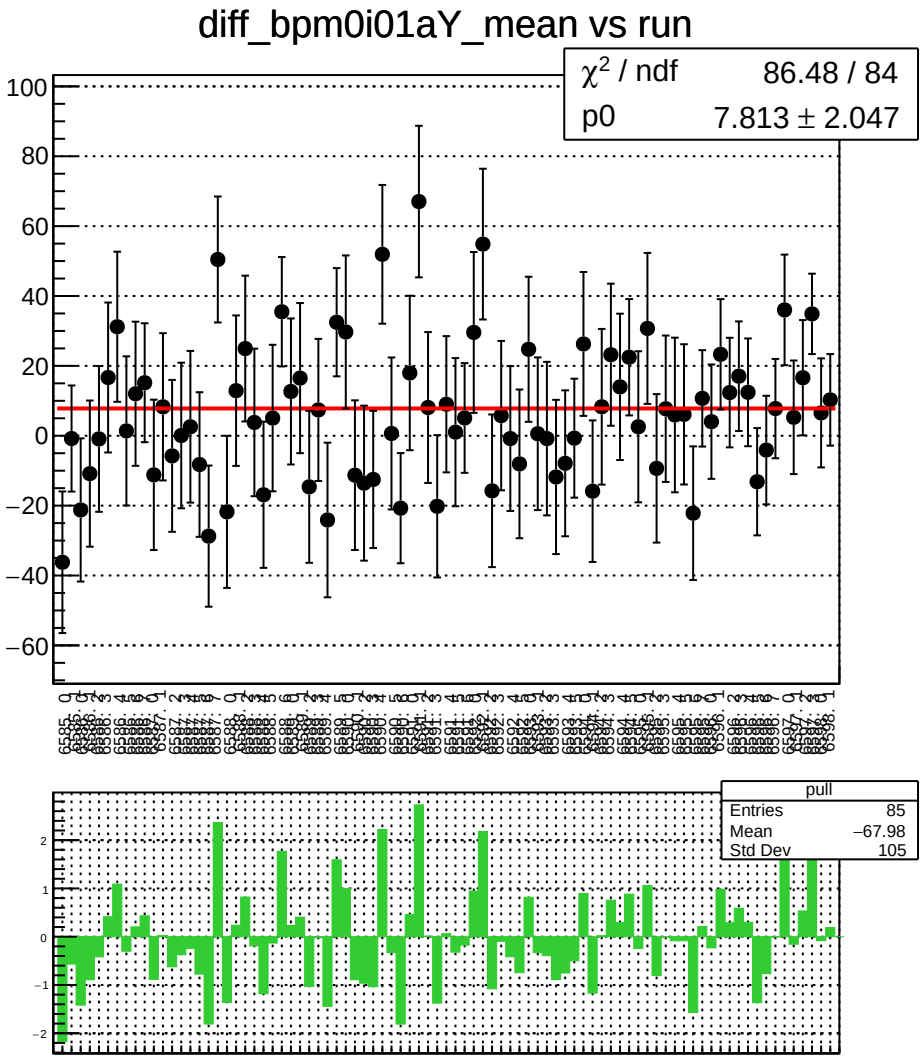

diff_bpm0i01Y_mean vs run
χ^2 / ndf 89.75 / 84
p0 15.11 ± 2.462
pull
Entries 85
Mean −47.9
Std Dev 84.07

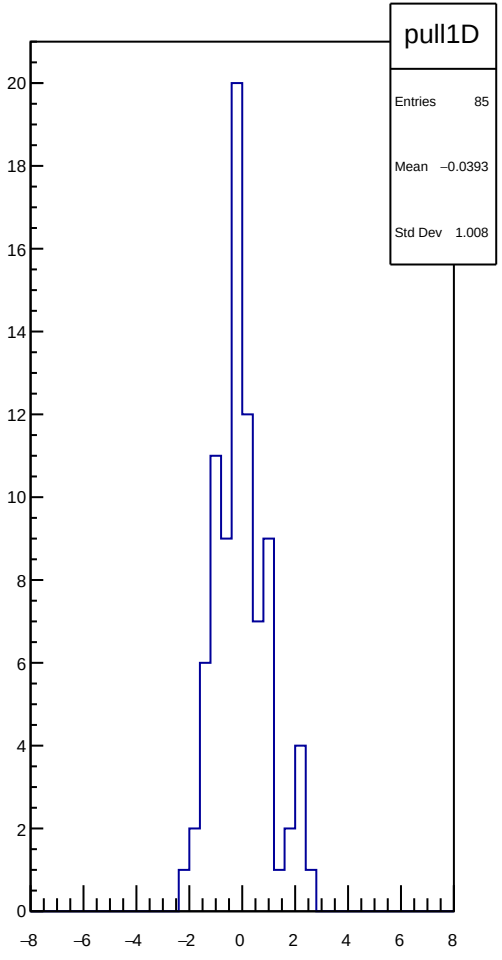

pull1D
Entries 85
Mean −0.03985
Std Dev 1.027

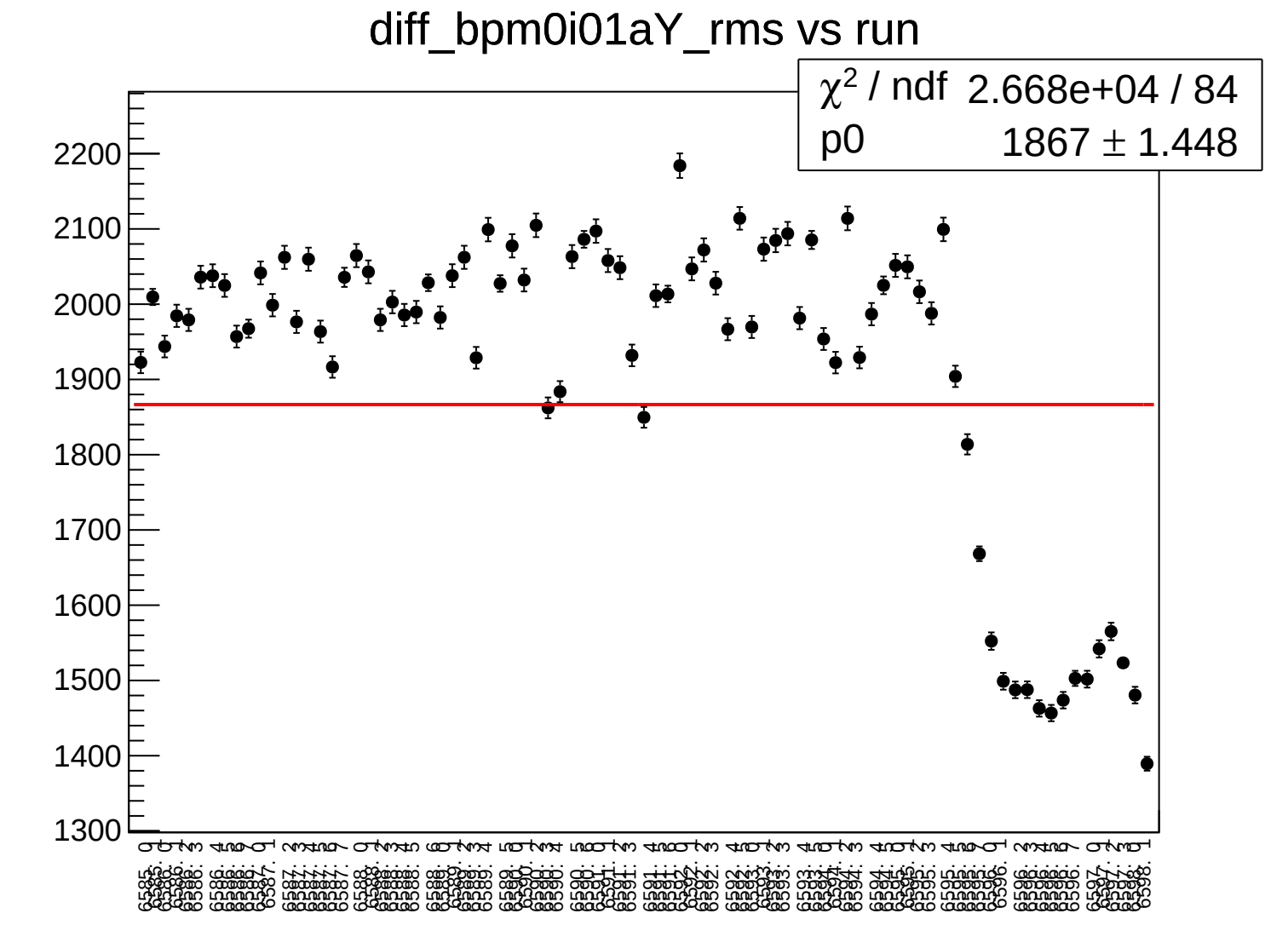

diff_bpm0i01Y_rms vs run
χ² / ndf 4.044e+04 / 84
p0 2235 ± 1.741
2800
2600
2400
2200
2000
1800
1600

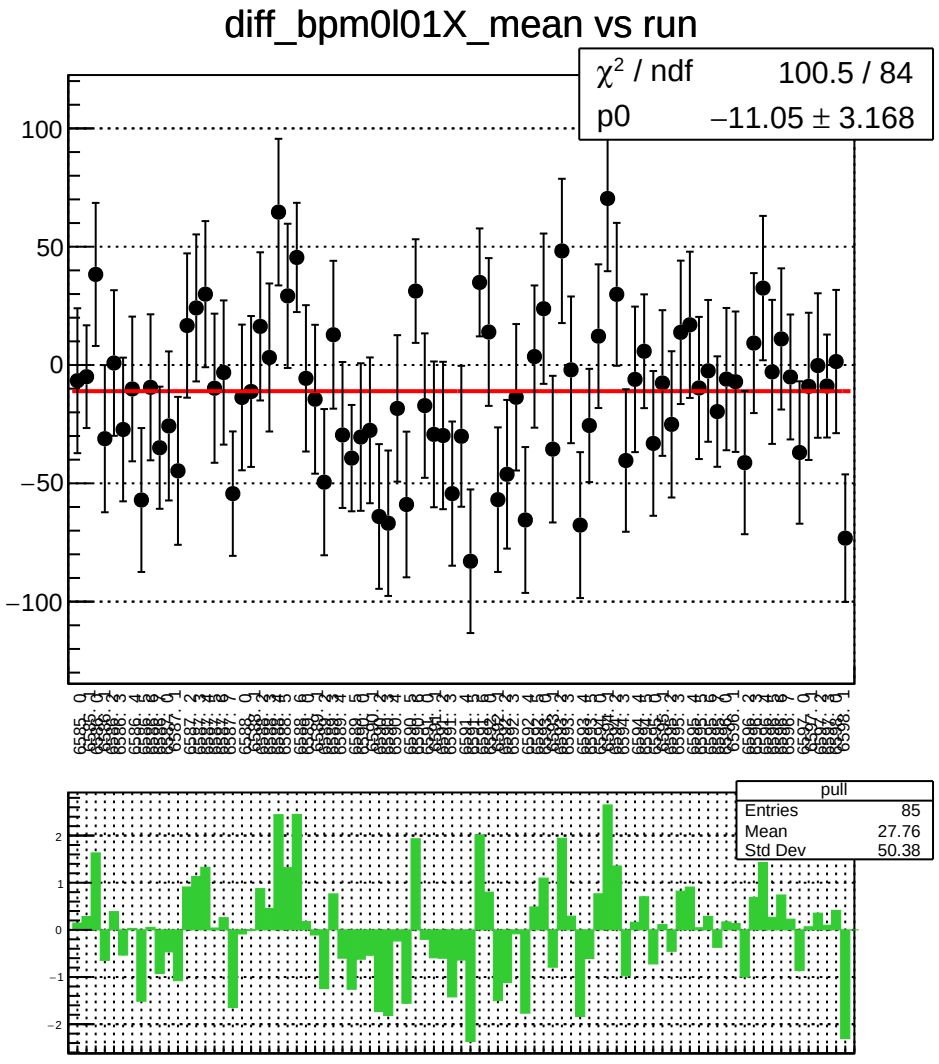

diff_bpm0i01aX_mean vs run
χ² / ndf 71.92 / 84
p0 75.02 ± 2.388
pull
Entries 85
Mean −68.01
Std Dev 103.7
pull1D
Entries 85
Mean −0.02568
Std Dev 0.9195

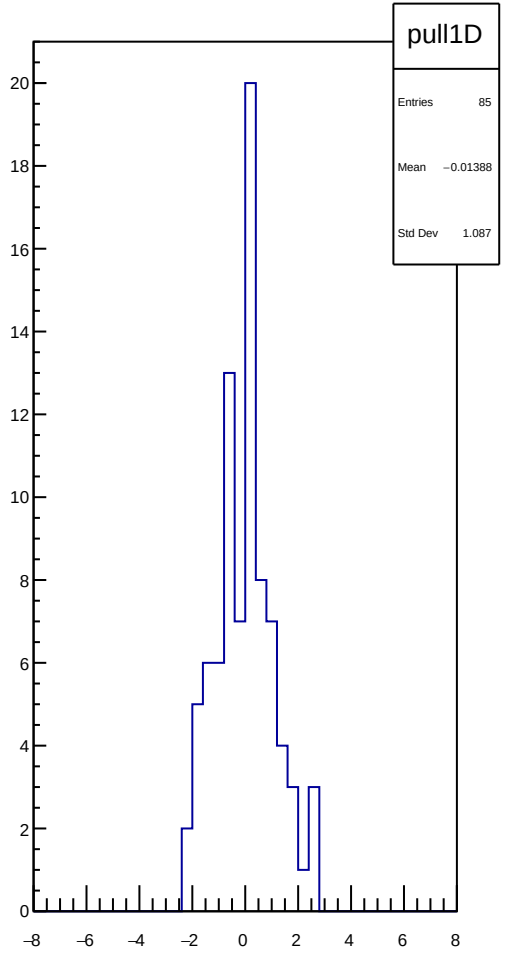

diff_bpm0i01aX_rms vs run
χ² / ndf 7.88e+04 / 84
p0 2143 ± 1.689
2800
2600
2400
2200
2000
1800
1600
1400

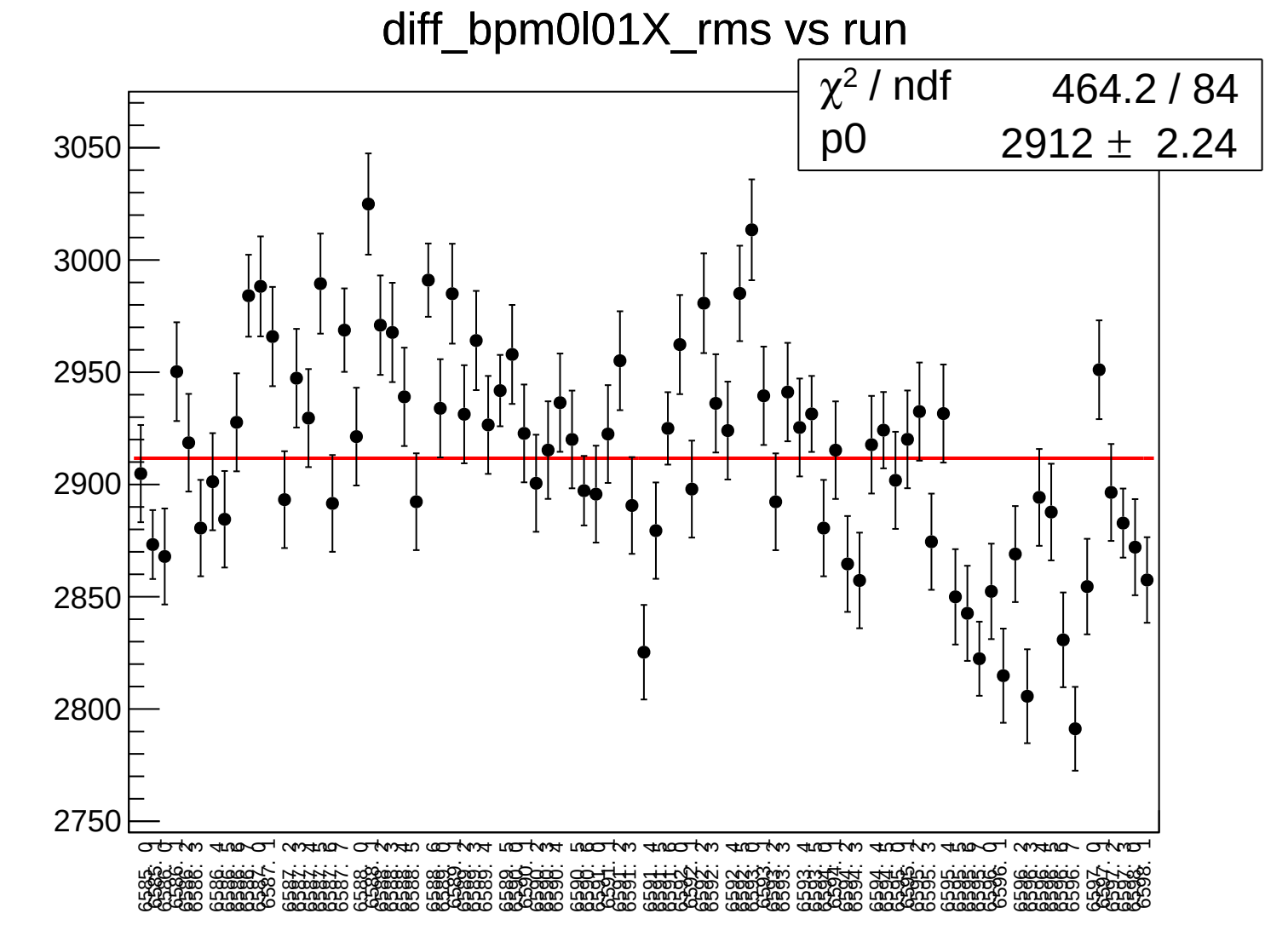

diff_bpm0i01aY_mean vs run
χ² / ndf 86.48 / 84
p0 7.813 ± 2.047
pull
Entries 85
Mean −67.98
Std Dev 105

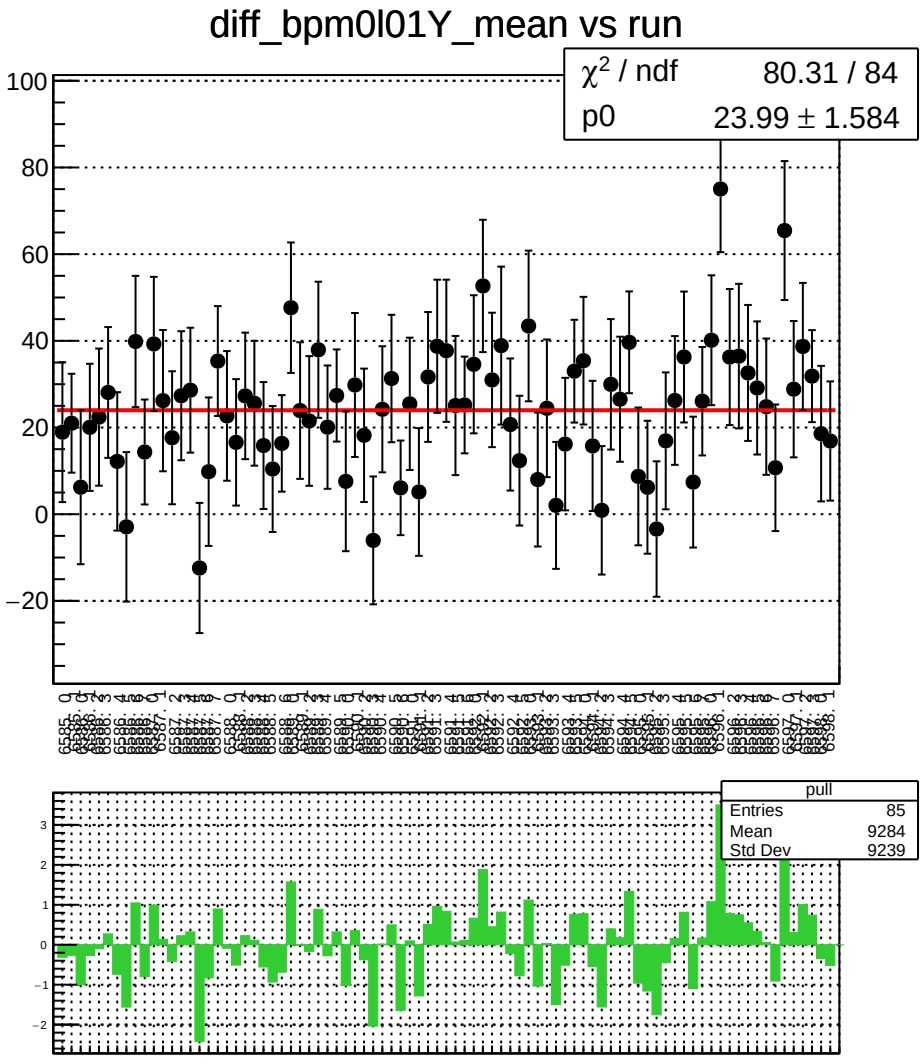

pull1D
Entries 85
Mean −0.0393
Std Dev 1.008

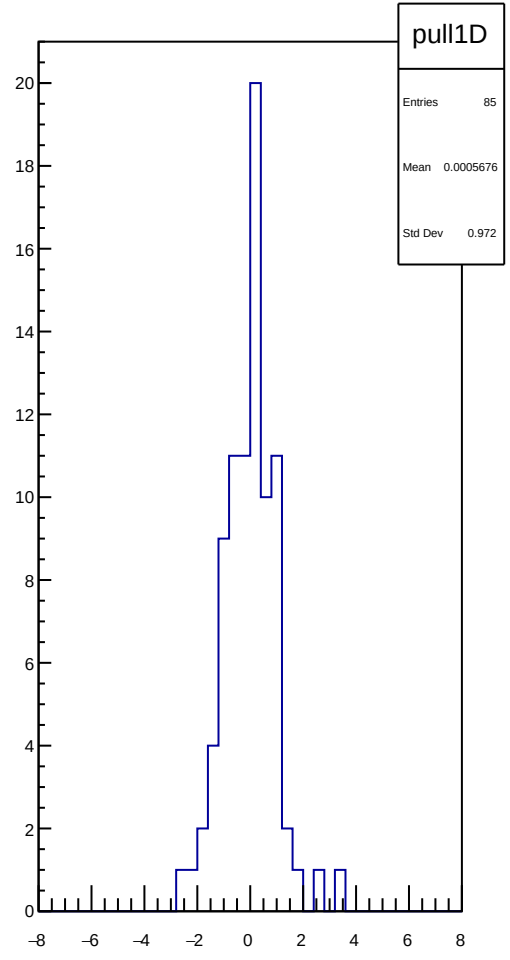

diff_bpm0i01aY_rms vs run
χ² / ndf 2.668e+04 / 84
p0 1867 ± 1.448
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300

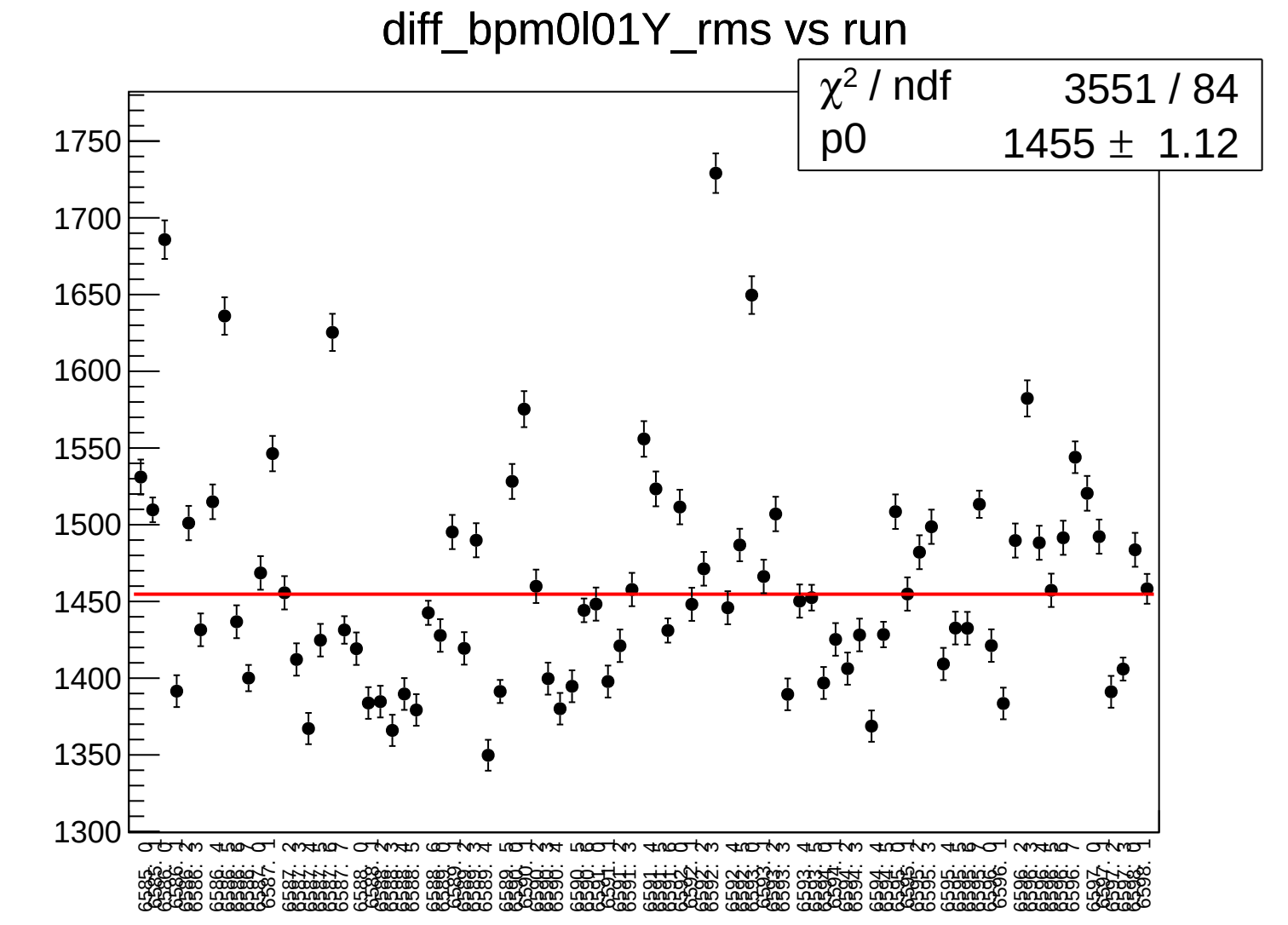

diff_bpm0l01X_mean vs run
χ² / ndf 100.5 / 84
p0 −11.05 ± 3.168
100
50
0
−50
−100
pull
Entries 85
Mean 27.76
Std Dev 50.38
2
1
0
−1
−2

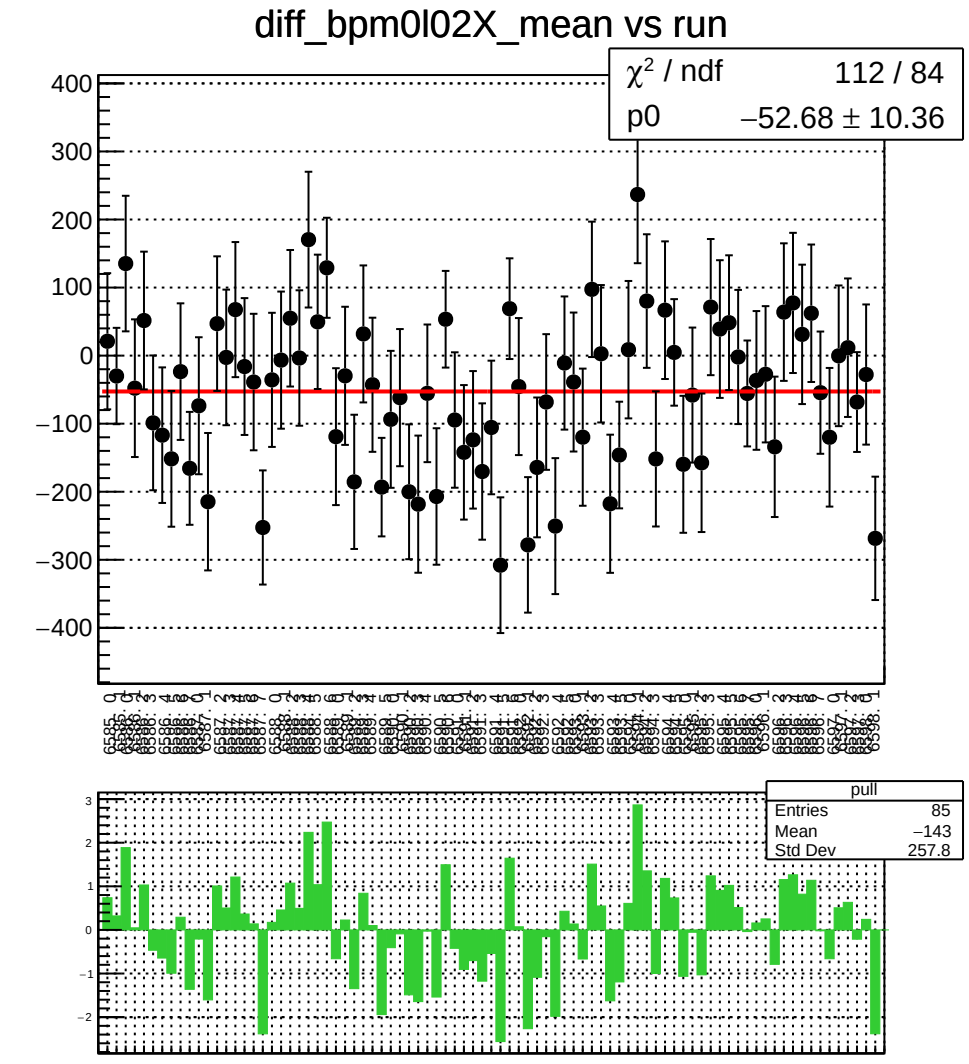

pull1D
Entries 85
Mean −0.01388
Std Dev 1.087
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

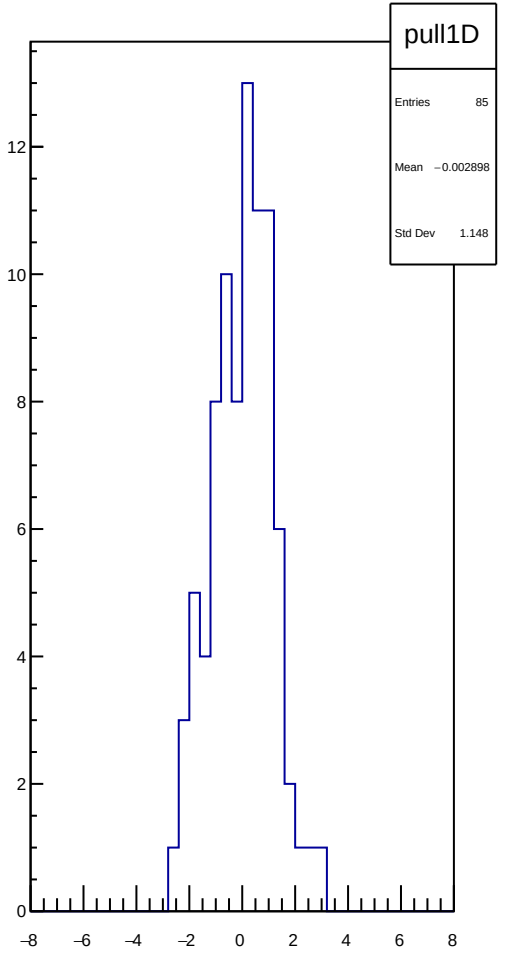

diff_bpm0l01X_rms vs run
χ² / ndf 464.2 / 84
p0 2912 ± 2.24
3050
3000
2950
2900
2850
2800
2750

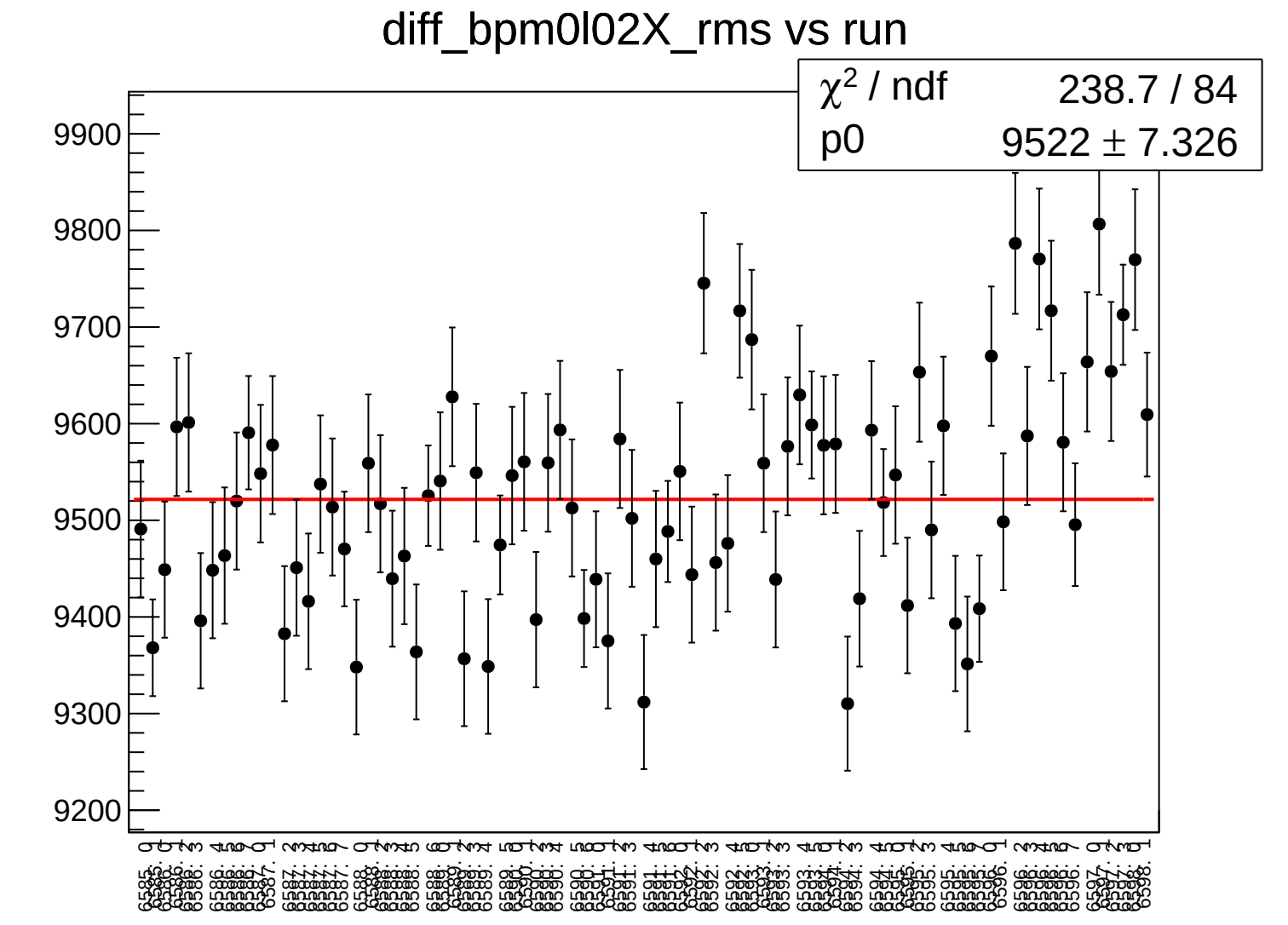

diff_bpm0l01Y_mean vs run
χ² / ndf 80.31 / 84
p0 23.99 ± 1.584
pull
Entries 85
Mean 9284
Std Dev 9239

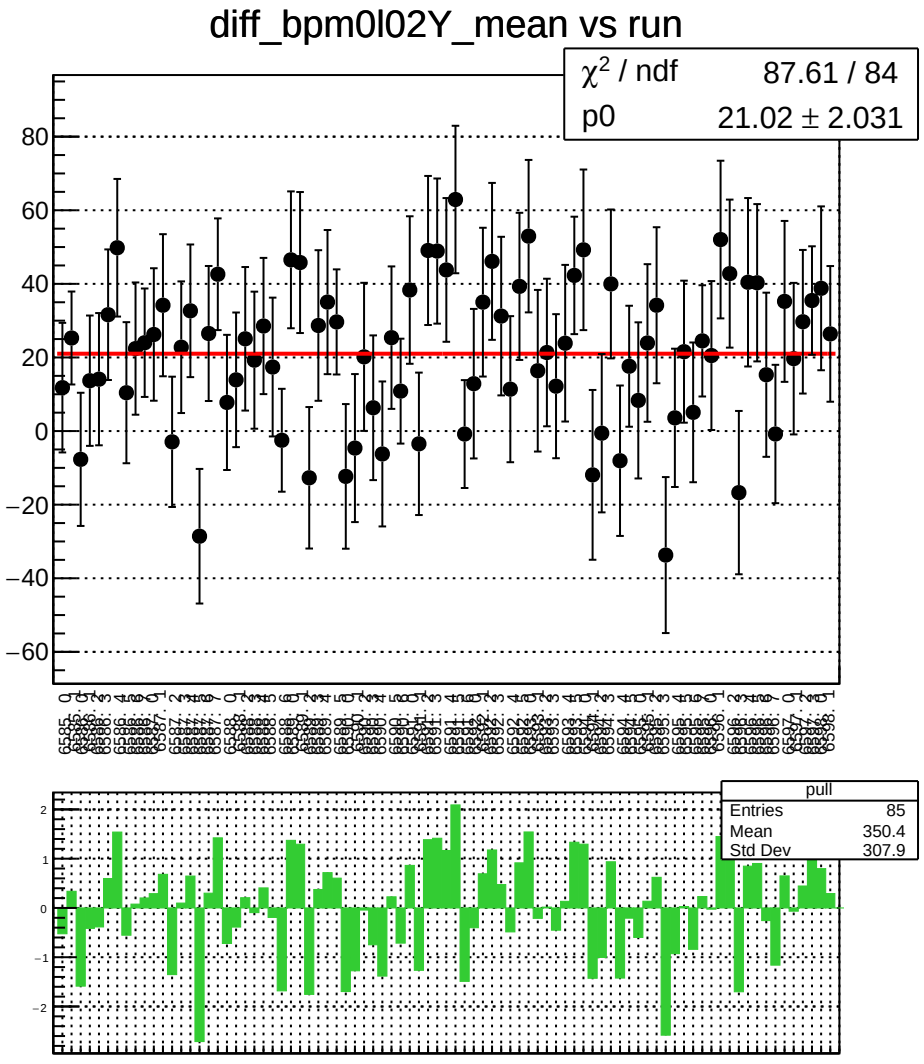

pull1D
Entries 85
Mean 0.0005676
Std Dev 0.972

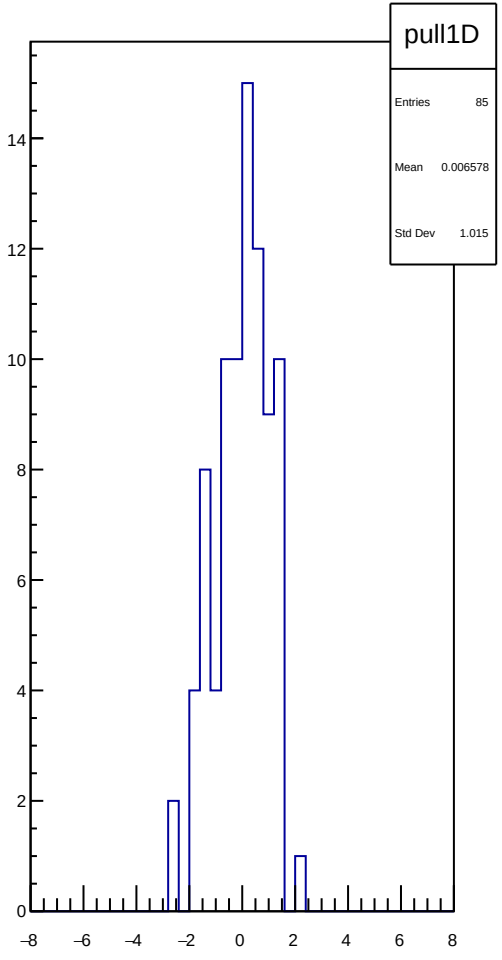

diff_bpm0l01Y_rms vs run
χ² / ndf 3551 / 84
p0 1455 ± 1.12
1750
1700
1650
1600
1550
1500
1450
1400
1350
1300

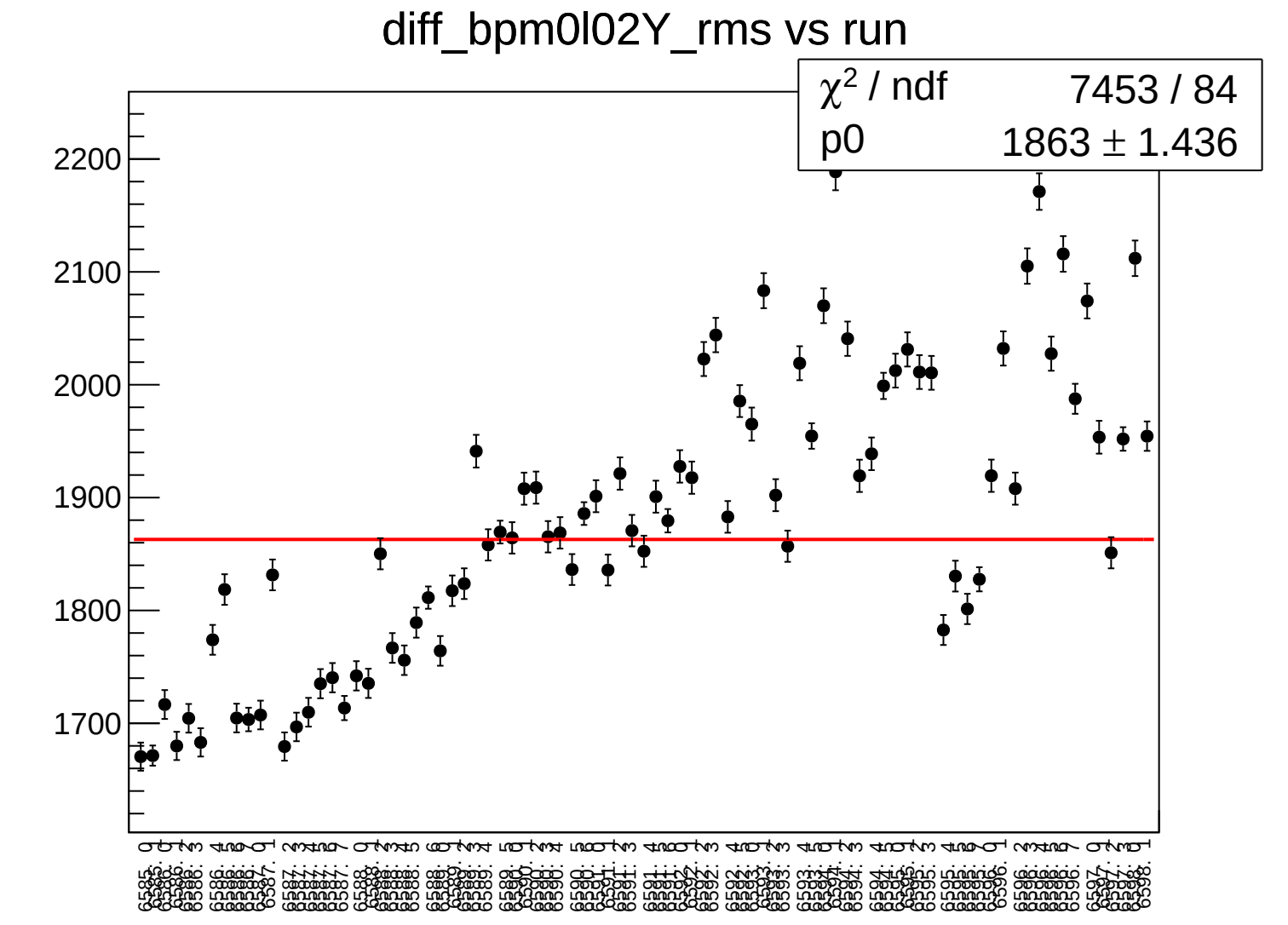

diff_bpm0l02X_mean vs run
χ² / ndf 112 / 84
p0 −52.68 ± 10.36
pull
Entries 85
Mean −143
Std Dev 257.8

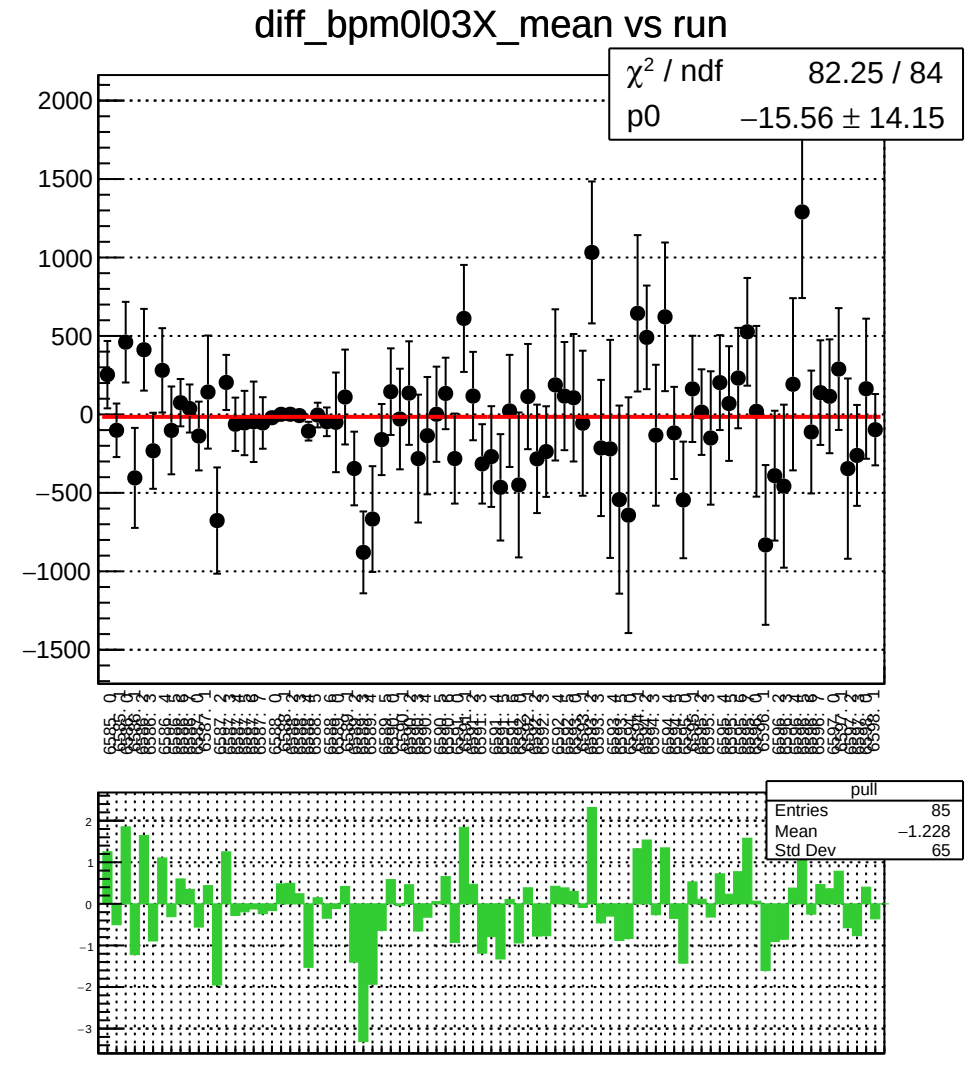

pull1D
Entries 85
Mean −0.002898
Std Dev 1.148

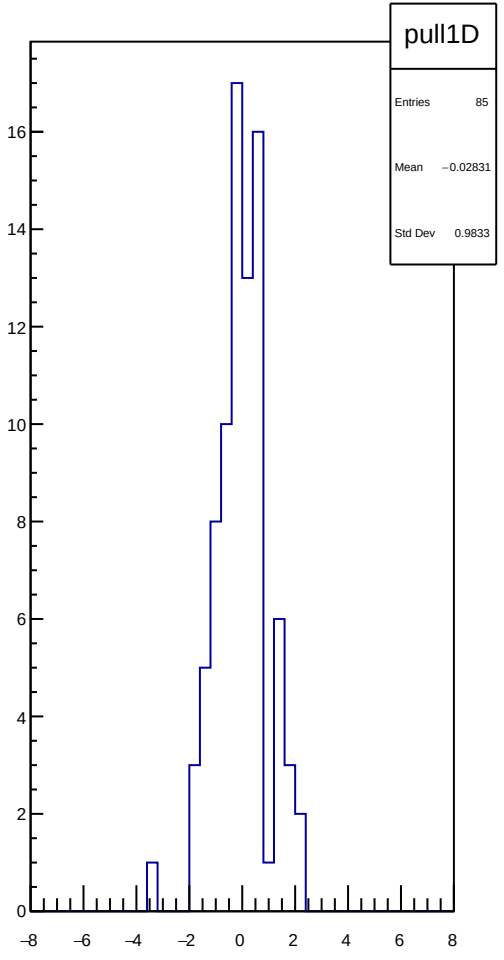

diff_bpm0l02X_rms vs run
χ² / ndf 238.7 / 84
p0 9522 ± 7.326
9900
9800
9700
9600
9500
9400
9300
9200

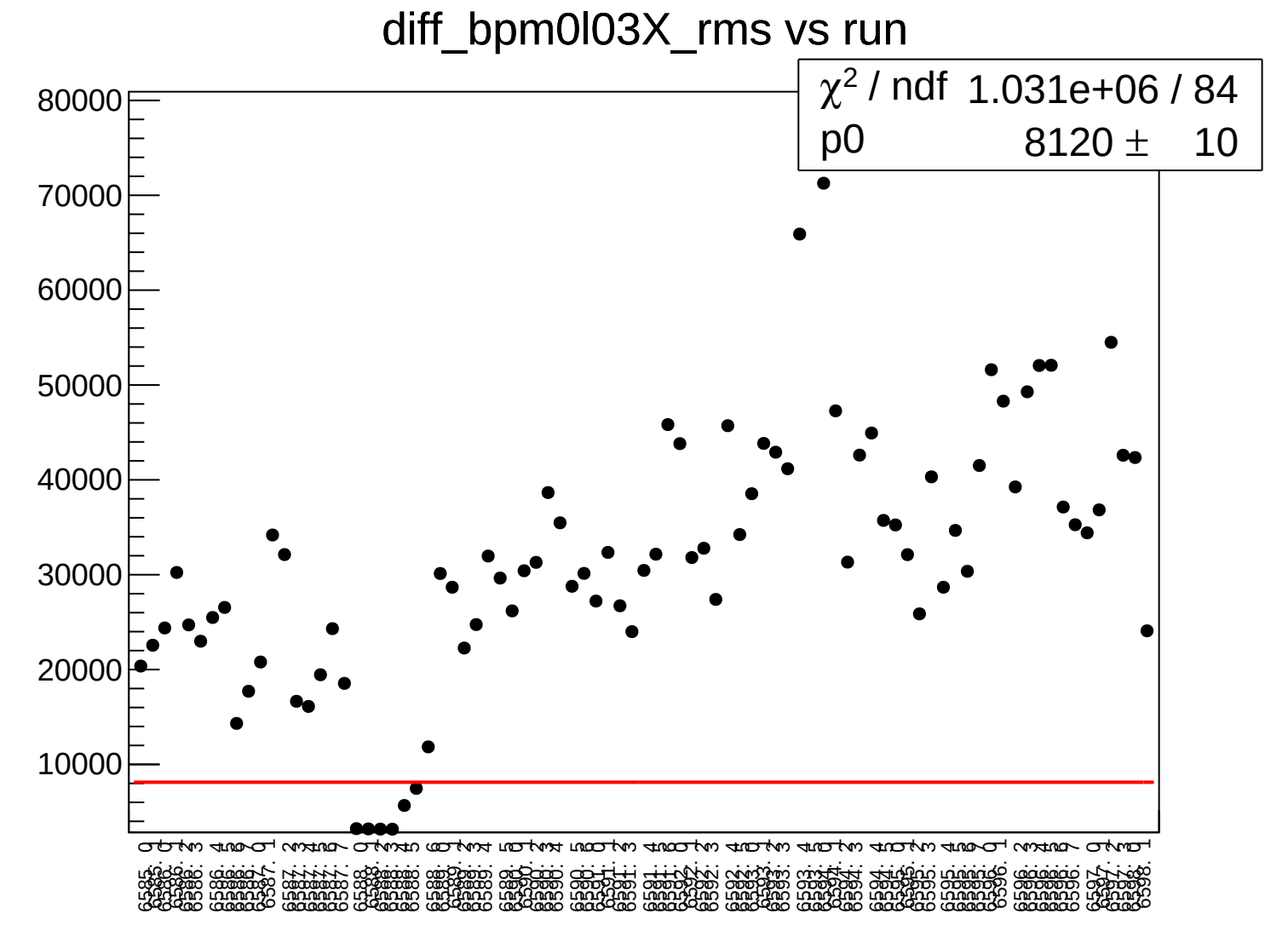

diff_bpm0l02Y_mean vs run
χ² / ndf 87.61 / 84
p0 21.02 ± 2.031
pull
Entries 85
Mean 350.4
Std Dev 307.9

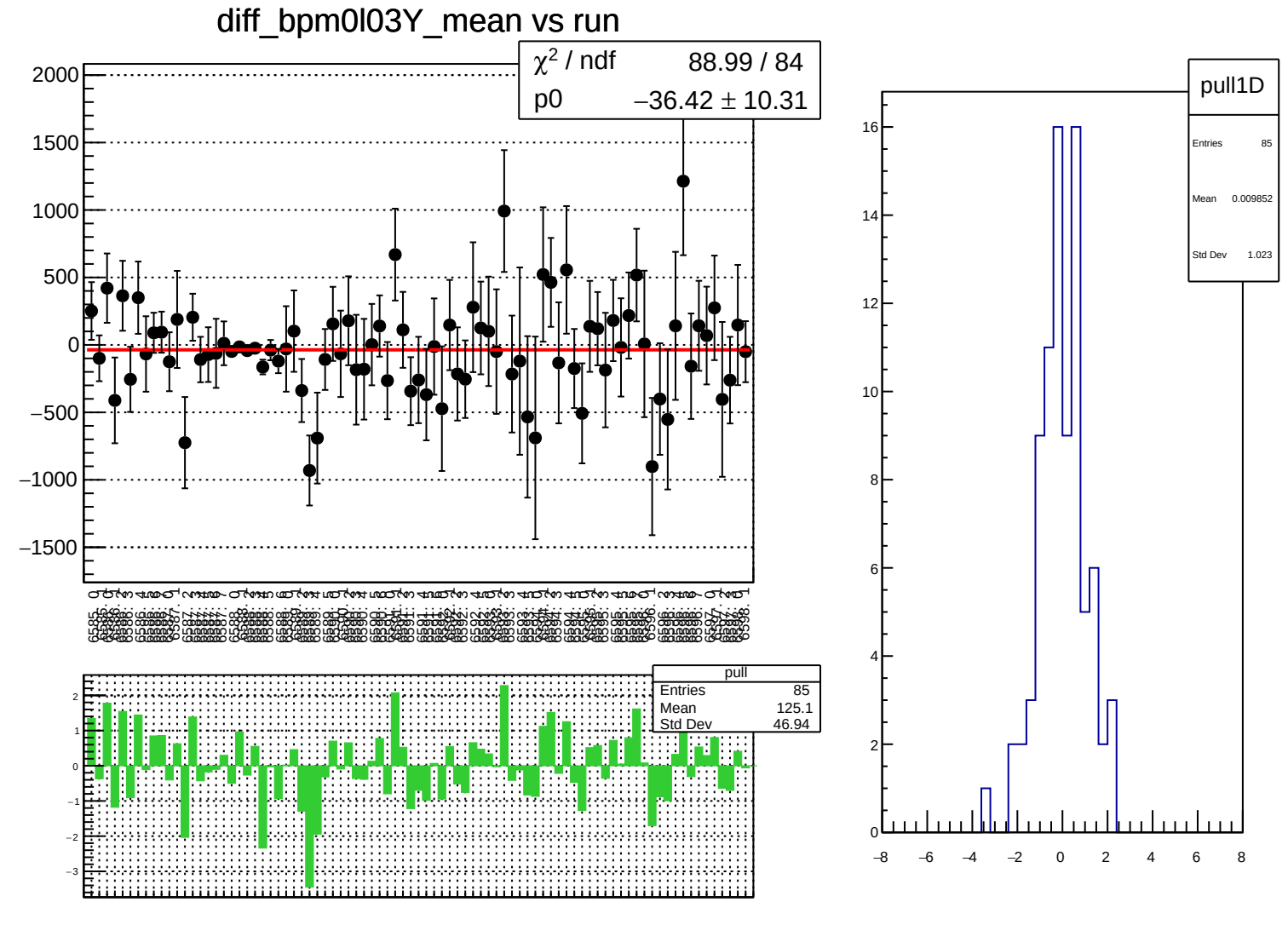

pull1D
Entries 85
Mean 0.006578
Std Dev 1.015

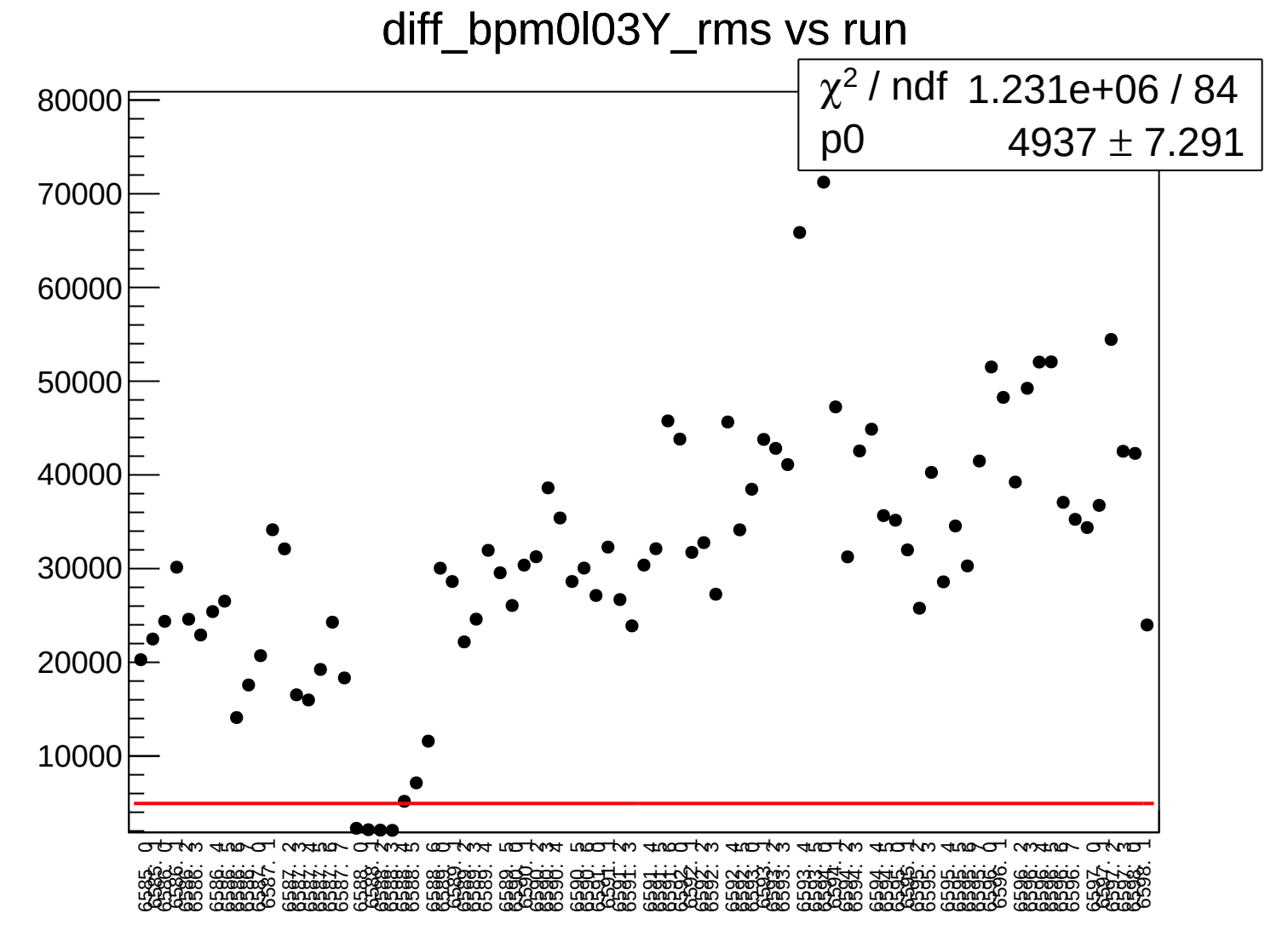

diff_bpm0l02Y_rms vs run
χ² / ndf 7453 / 84
p0 1863 ± 1.436
2200
2100
2000
1900
1800
1700

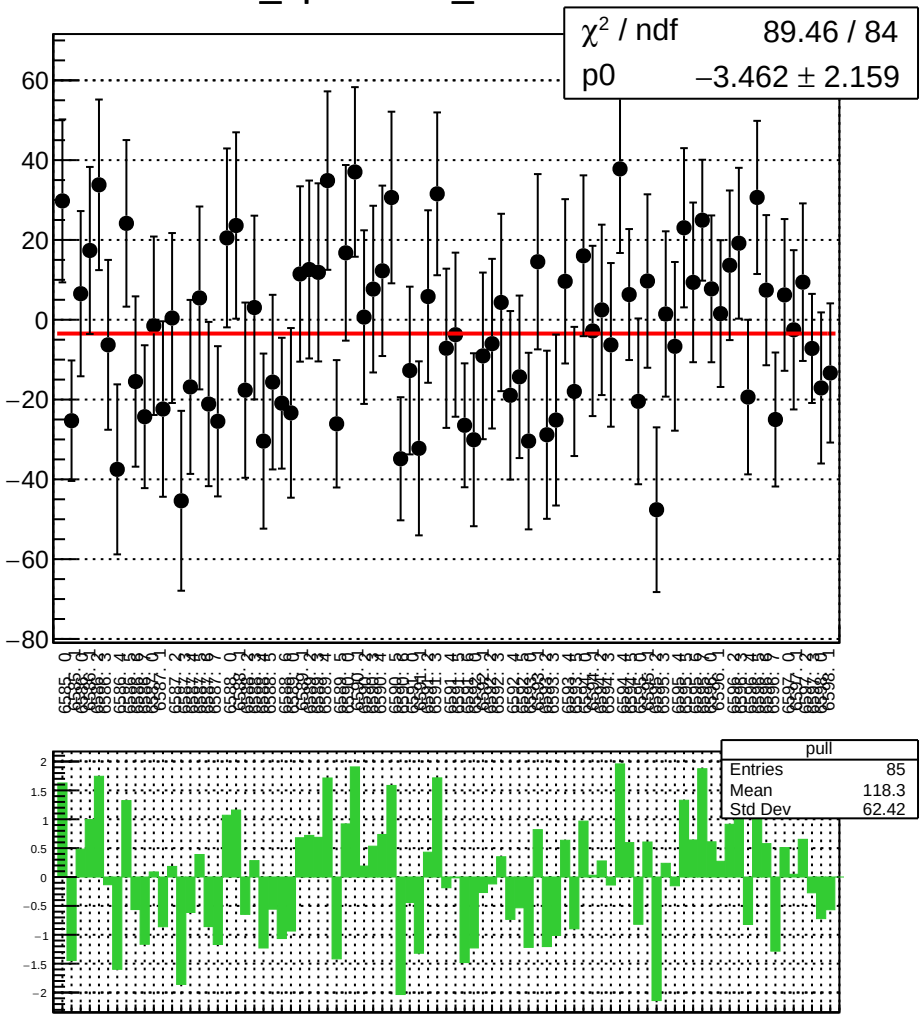

diff_bpm0l03X_mean vs run
χ² / ndf 82.25 / 84
p0 −15.56 ± 14.15
pull
Entries 85
Mean −1.228
Std Dev 65

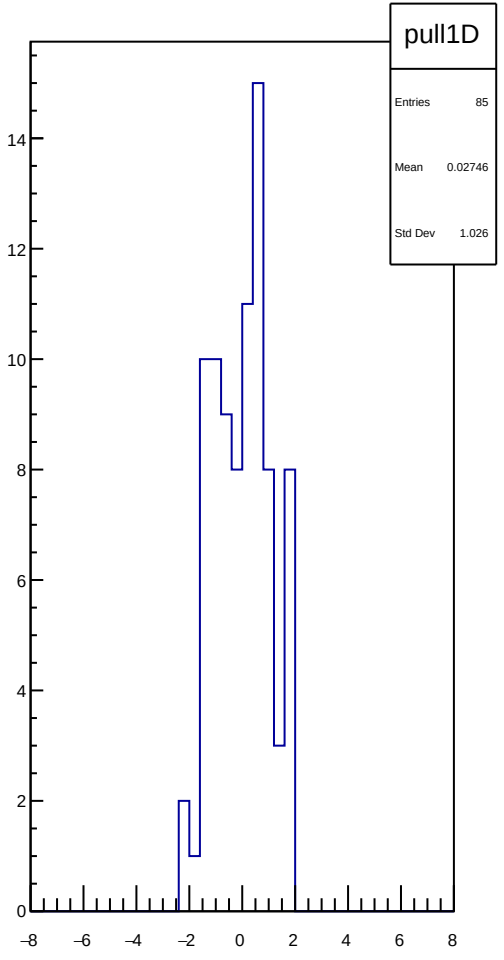

pull1D
Entries 85
Mean −0.02831
Std Dev 0.9833

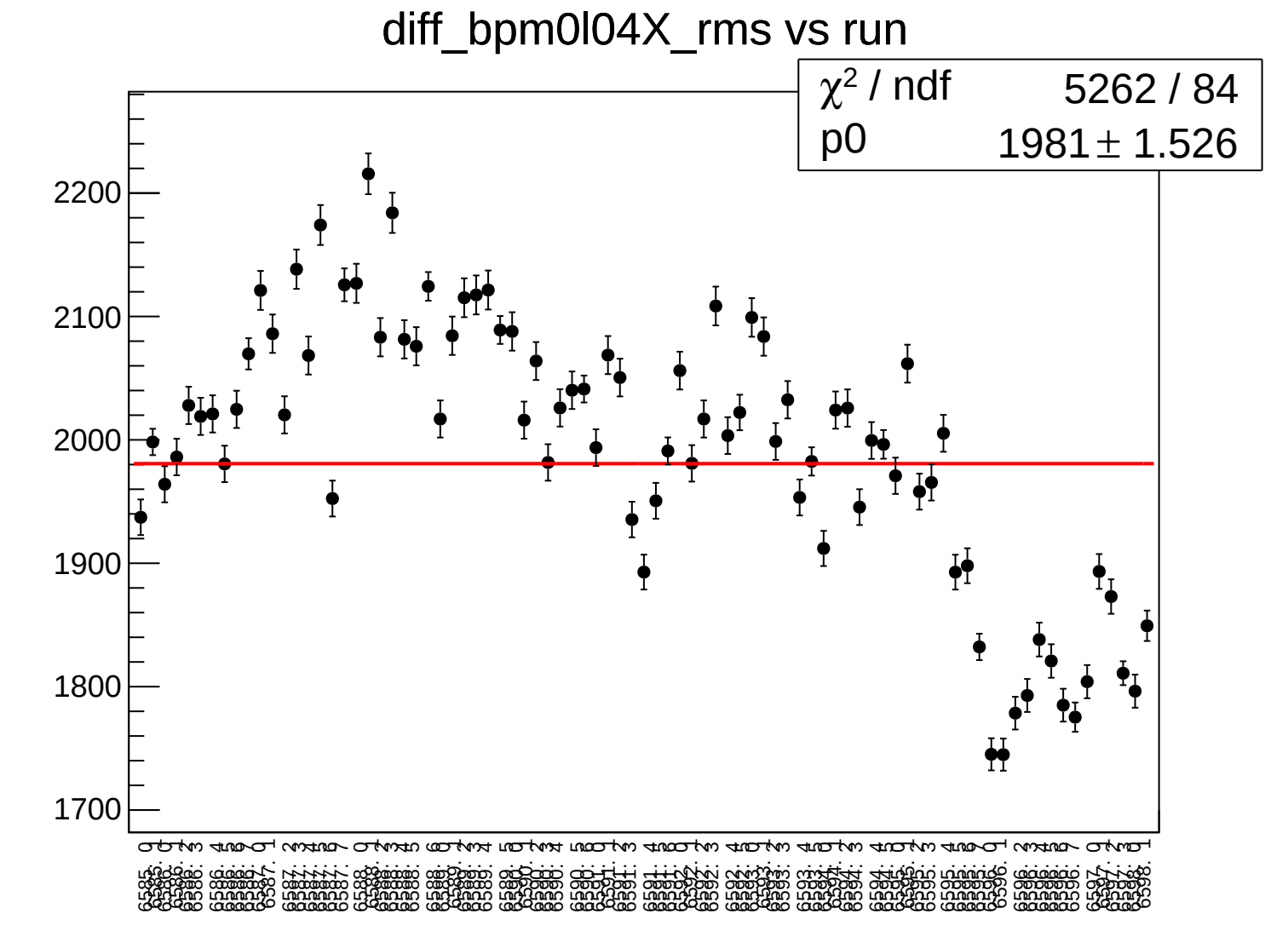

diff_bpm0l03X_rms vs run
χ² / ndf 1.031e+06 / 84
p0 8120 ± 10
80000
70000
60000
50000
40000
30000
20000
10000

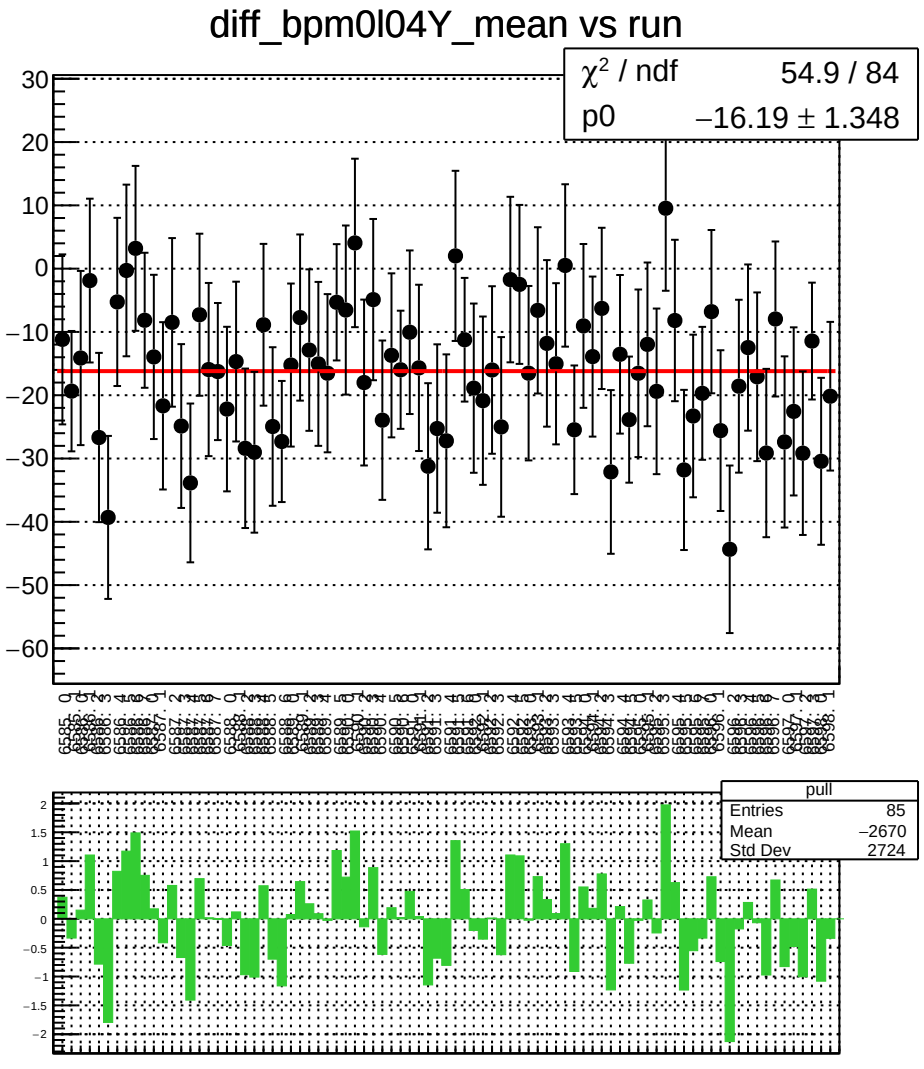

diff_bpm0l03Y_mean vs run
χ² / ndf 88.99 / 84
p0 −36.42 ± 10.31
pull
Entries 85
Mean 125.1
Std Dev 46.94
pull1D
Entries 85
Mean 0.009852
Std Dev 1.023

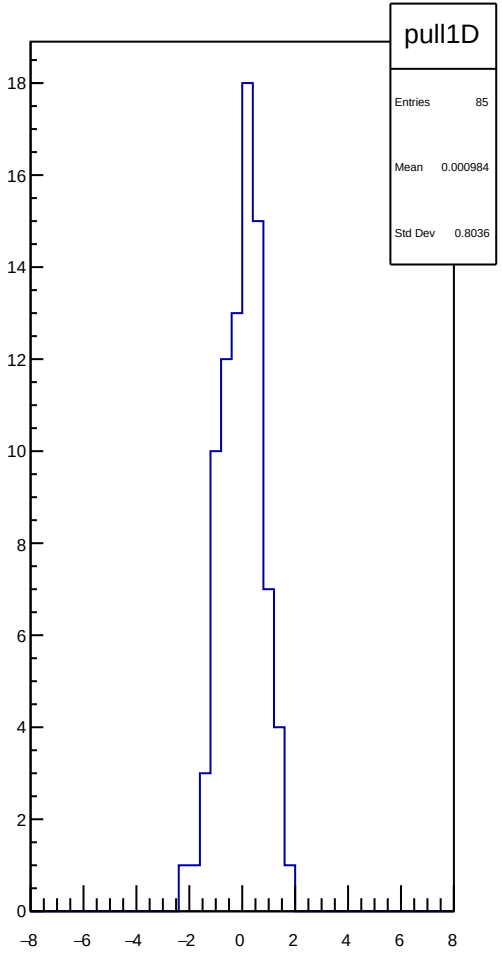

diff_bpm0l03Y_rms vs run
χ² / ndf 1.231e+06 / 84
p0 4937 ± 7.291
80000
70000
60000
50000
40000
30000
20000
10000

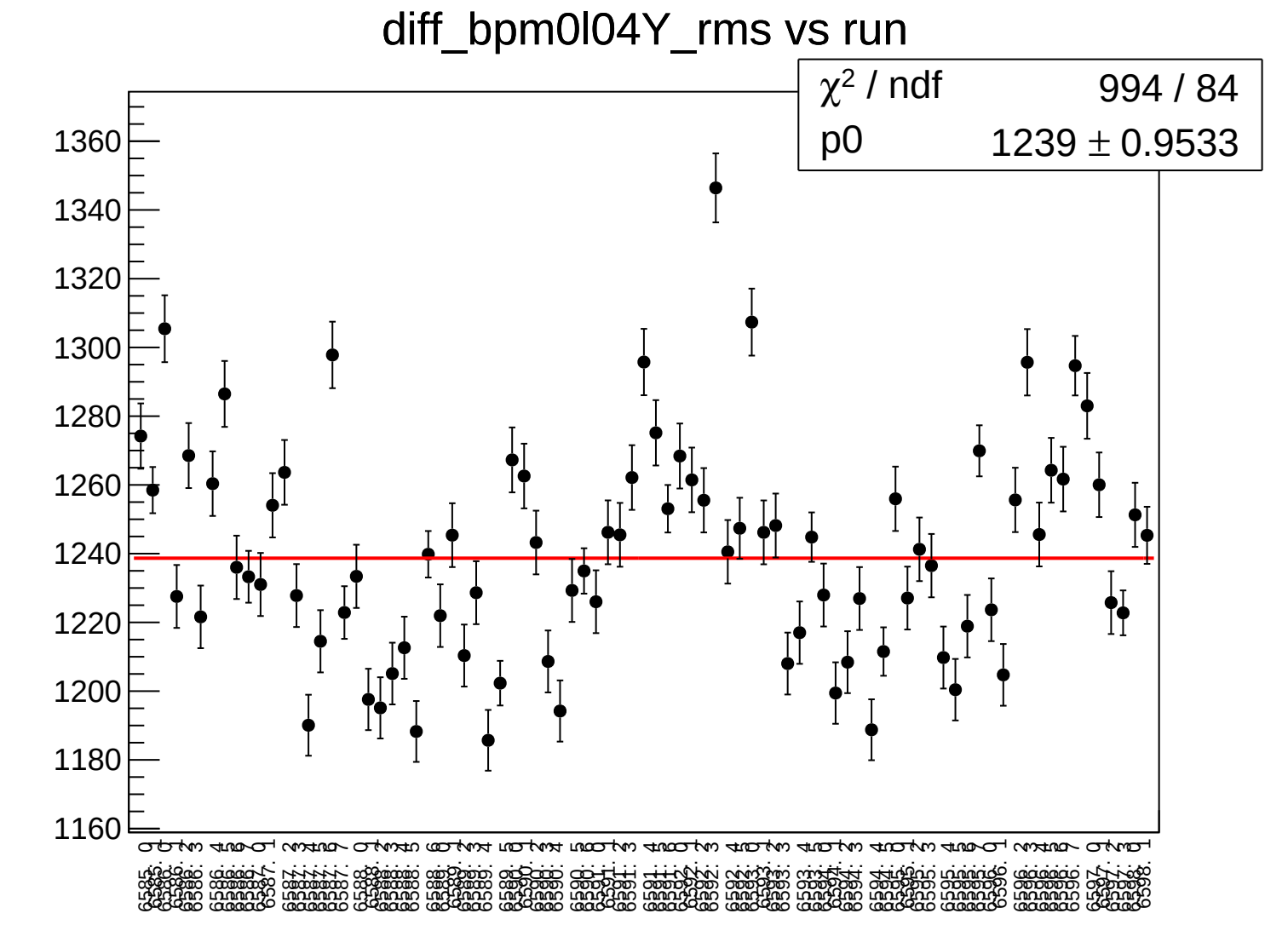

diff_bpm0l04X_mean vs run
χ² / ndf 89.46 / 84
p0 −3.462 ± 2.159
pull
Entries 85
Mean 118.3
Std Dev 62.42

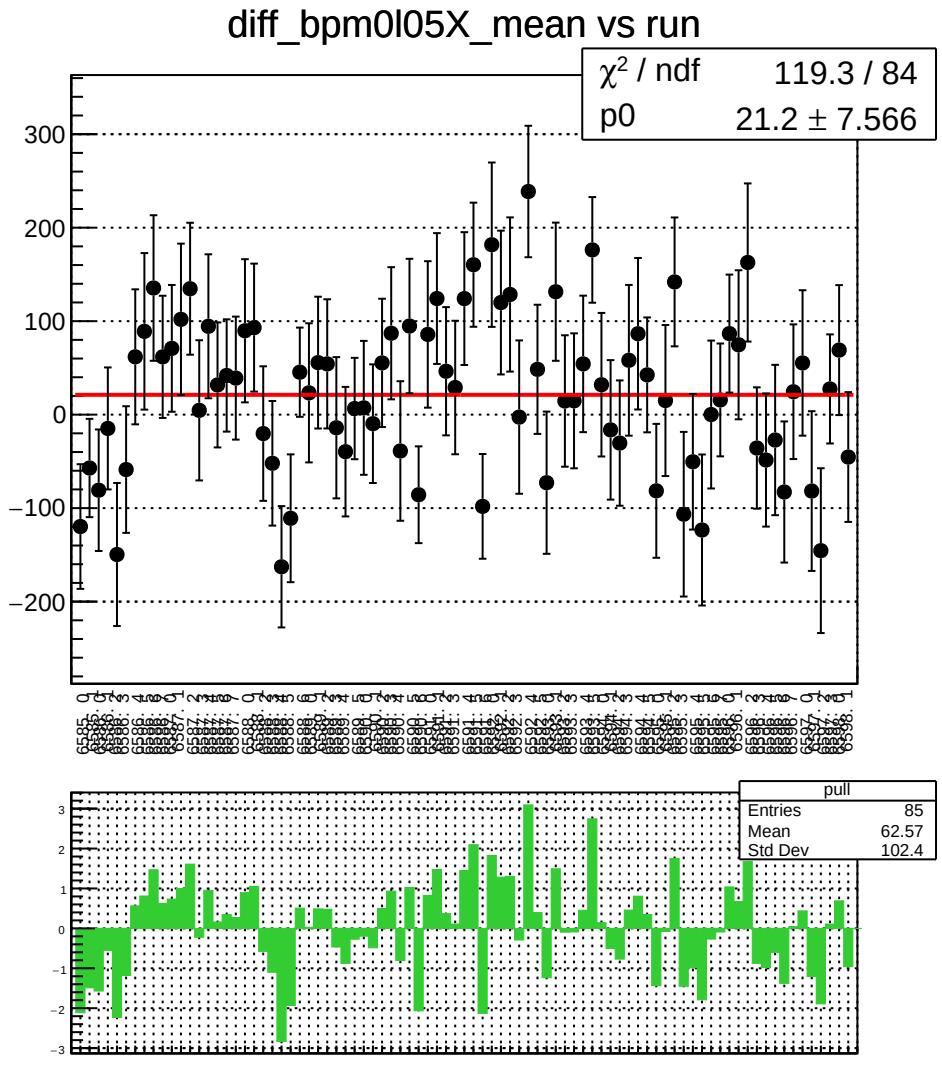

pull1D
Entries 85
Mean 0.02746
Std Dev 1.026

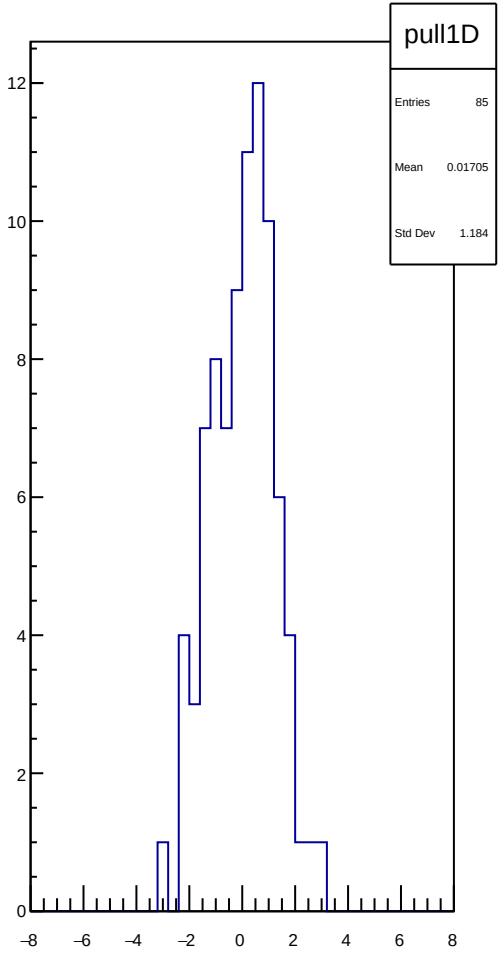

diff_bpm0l04X_rms vs run
χ² / ndf 5262 / 84
p0 1981 ± 1.526
2200
2100
2000
1900
1800
1700

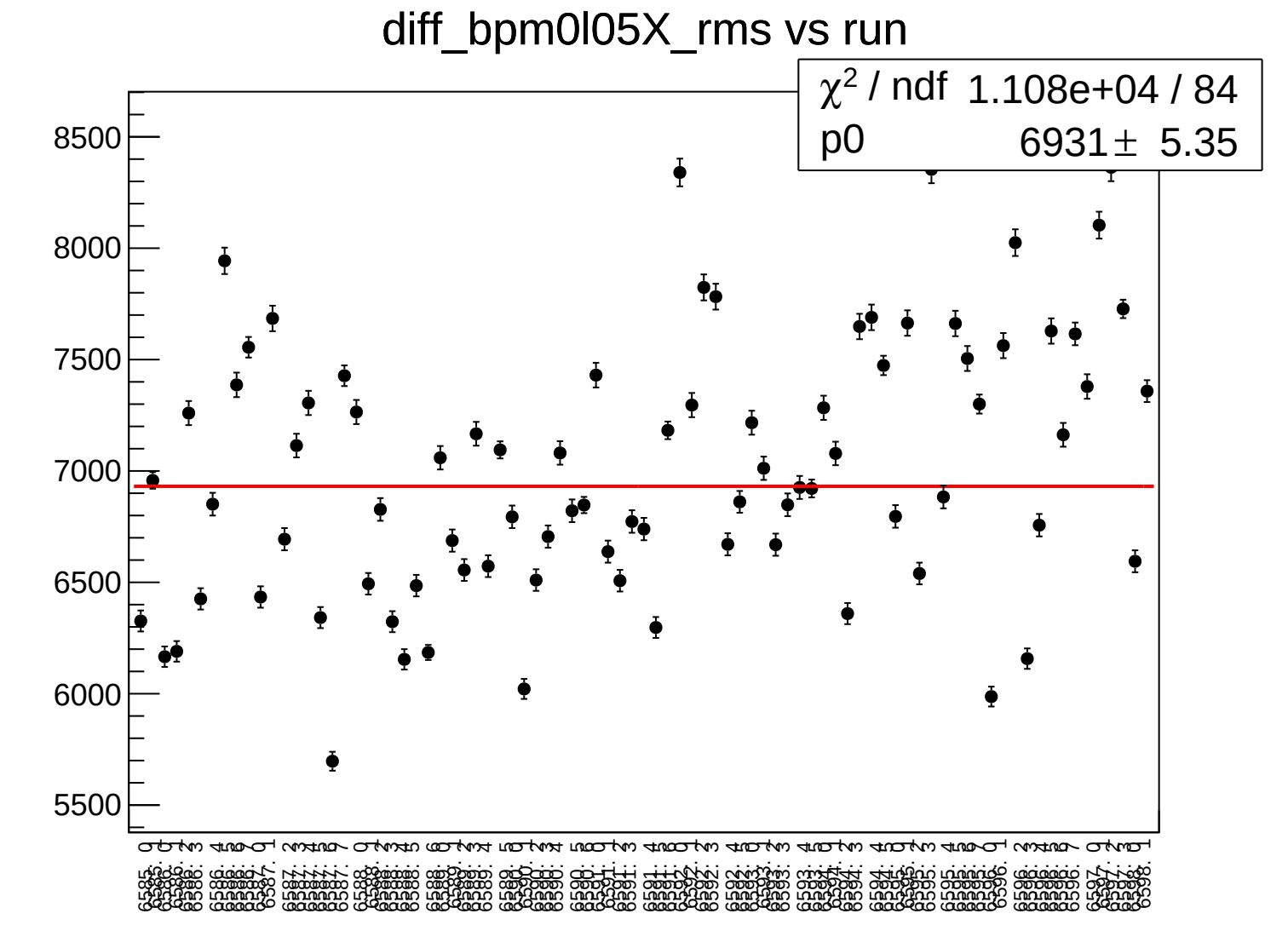

diff_bpm0l04Y_mean vs run
χ² / ndf 54.9 / 84
p0 −16.19 ± 1.348
pull
Entries 85
Mean −2670
Std Dev 2724

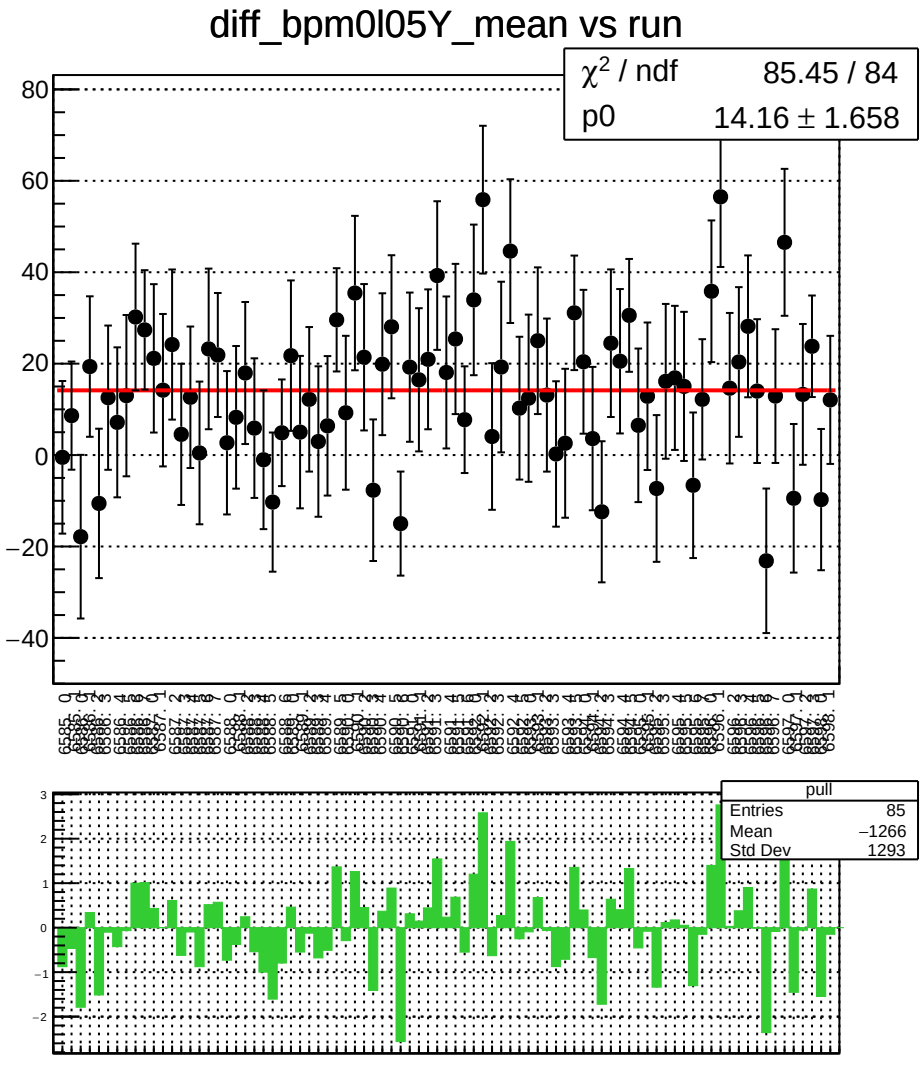

pull1D
Entries 85
Mean 0.000984
Std Dev 0.8036

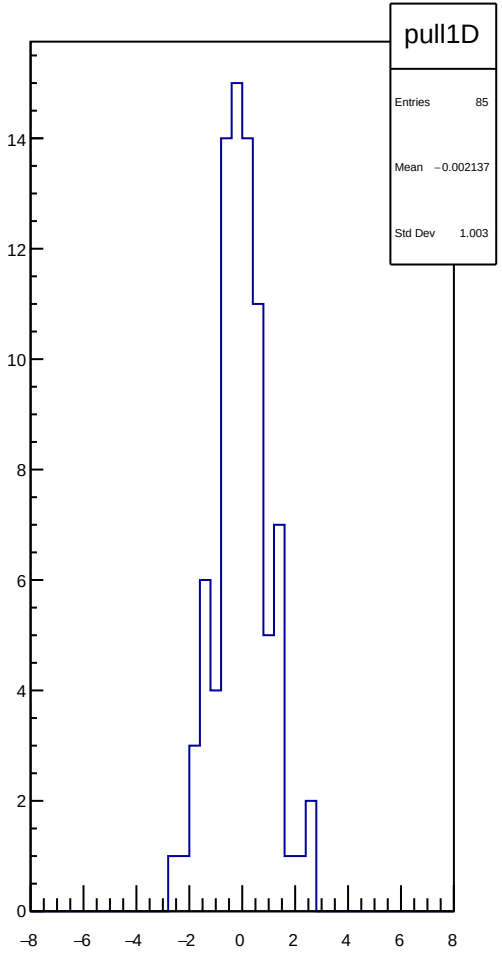

diff_bpm0l04Y_rms vs run
χ² / ndf 994 / 84
p0 1239 ± 0.9533
1360
1340
1320
1300
1280
1260
1240
1220
1200
1180
1160

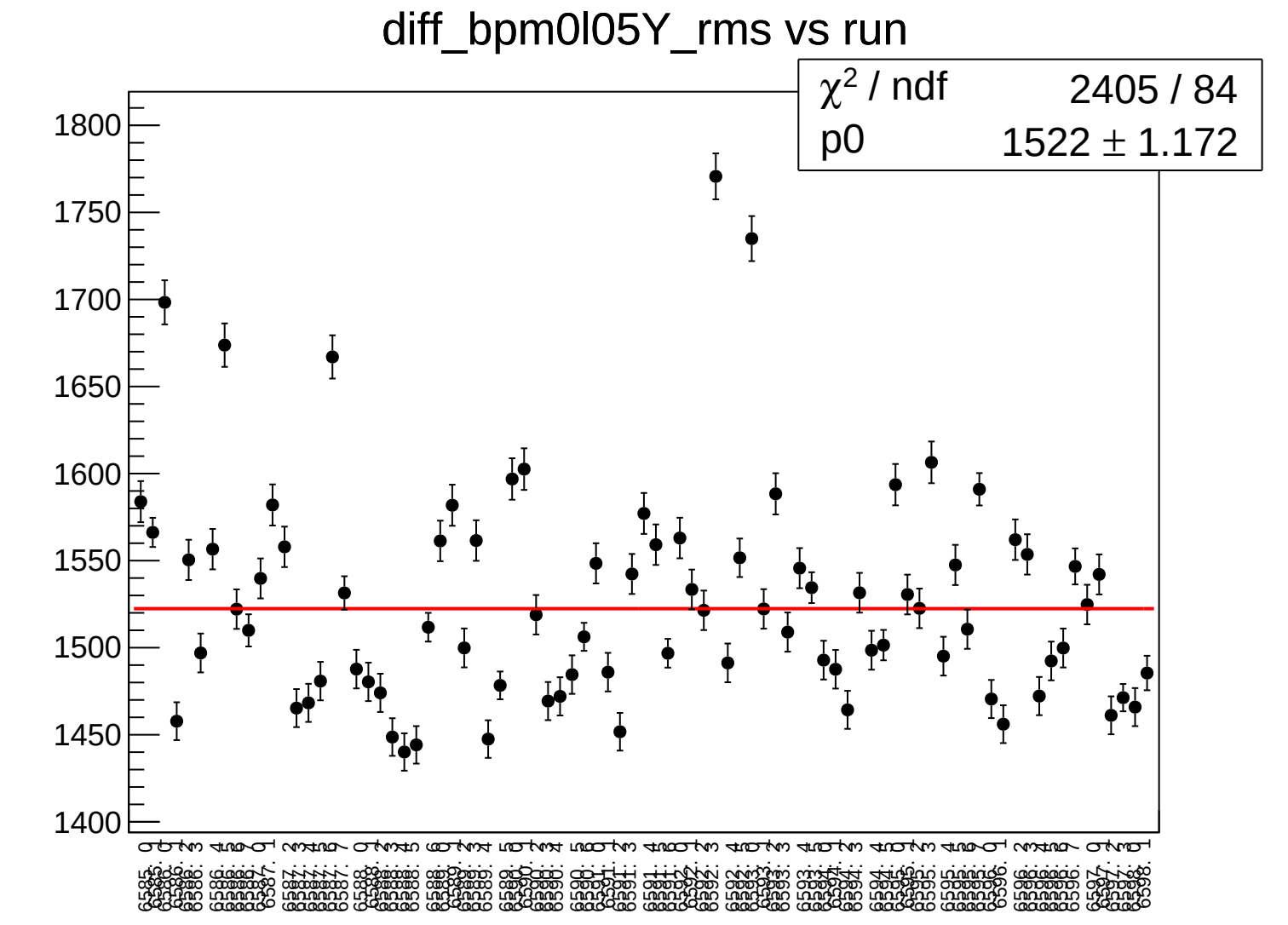

diff_bpm0l05X_mean vs run
χ² / ndf 119.3 / 84
p0 21.2 ± 7.566
300
200
100
0
−100
−200
pull
Entries 85
Mean 62.57
Std Dev 102.4
3
2
1
0
−1
−2
−3

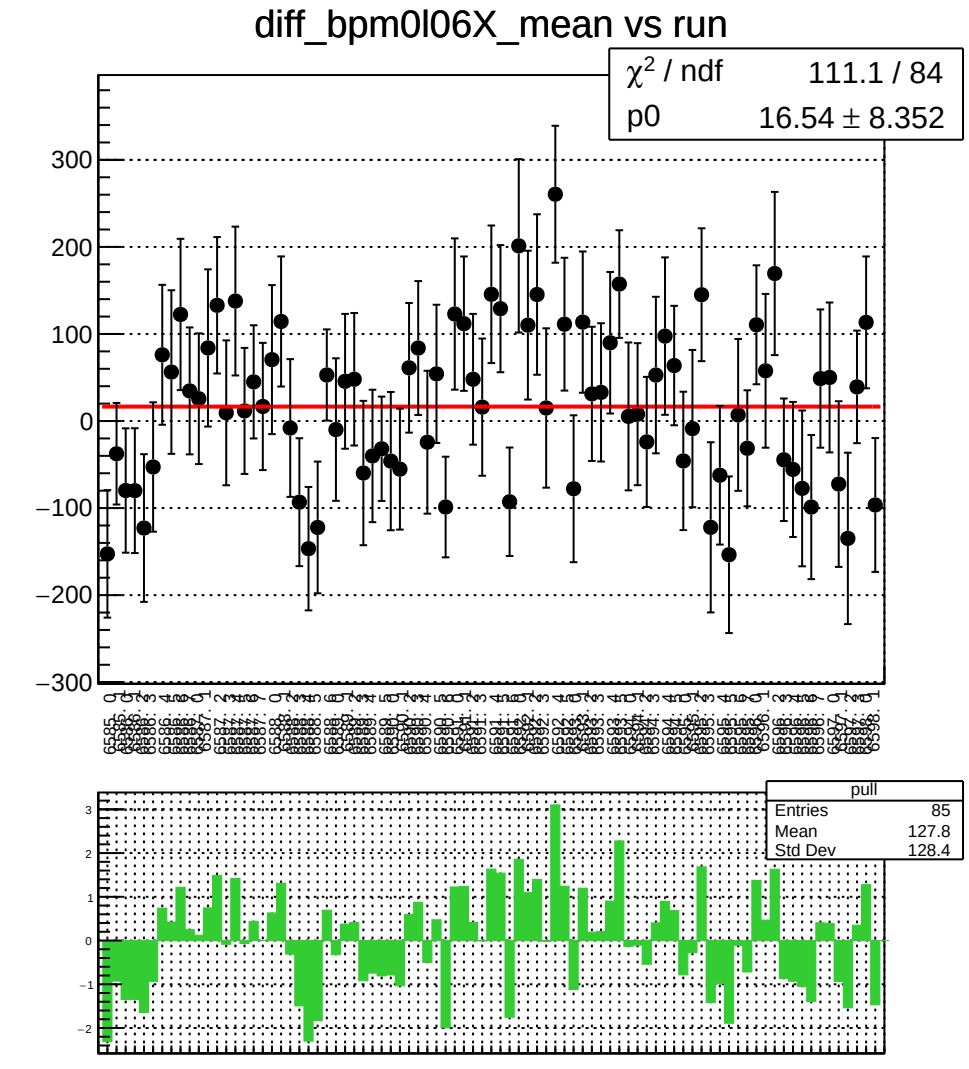

pull1D
Entries 85
Mean 0.01705
Std Dev 1.184
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

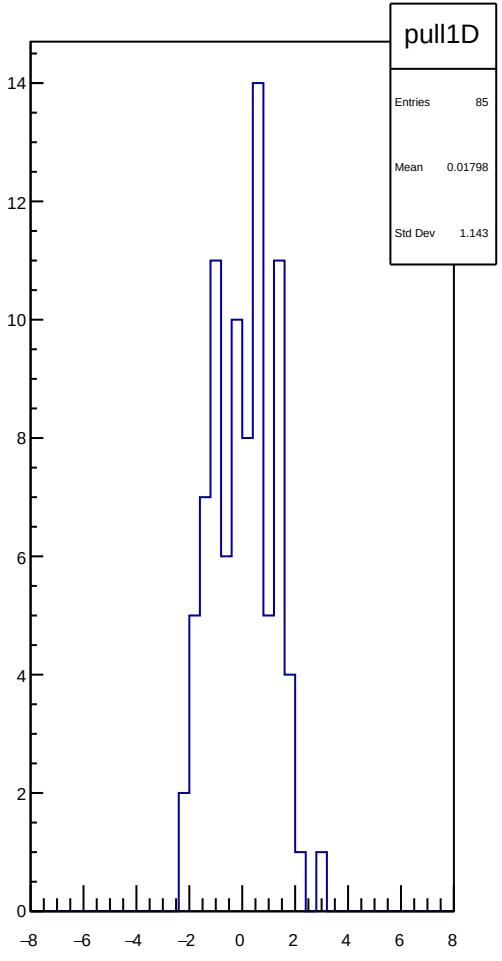

diff_bpm0l05X_rms vs run
χ² / ndf 1.108e+04 / 84
p0 6931 ± 5.35
8500
8000
7500
7000
6500
6000
5500

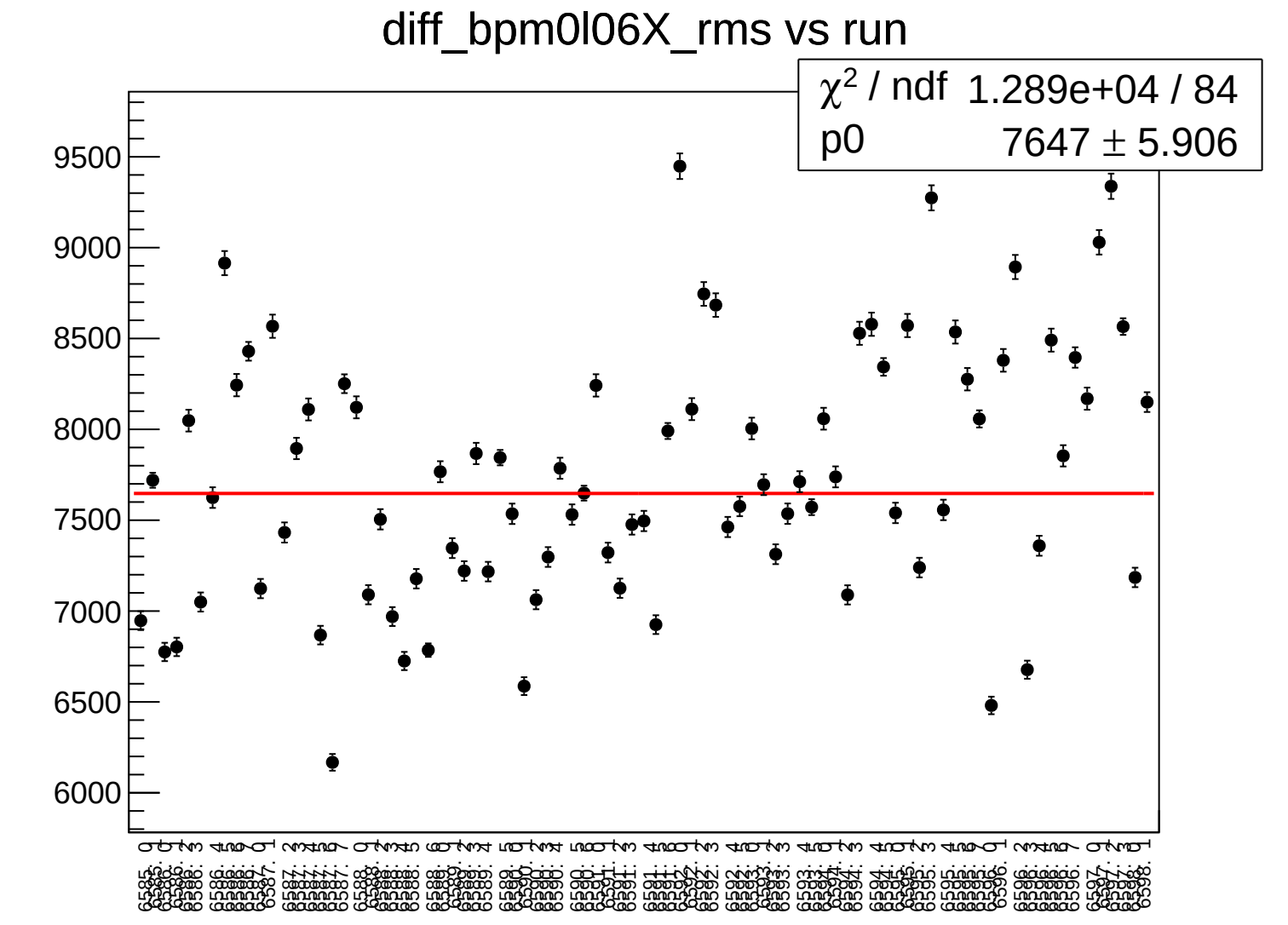

diff_bpm0l05Y_mean vs run
χ² / ndf 85.45 / 84
p0 14.16 ± 1.658
pull
Entries 85
Mean −1266
Std Dev 1293

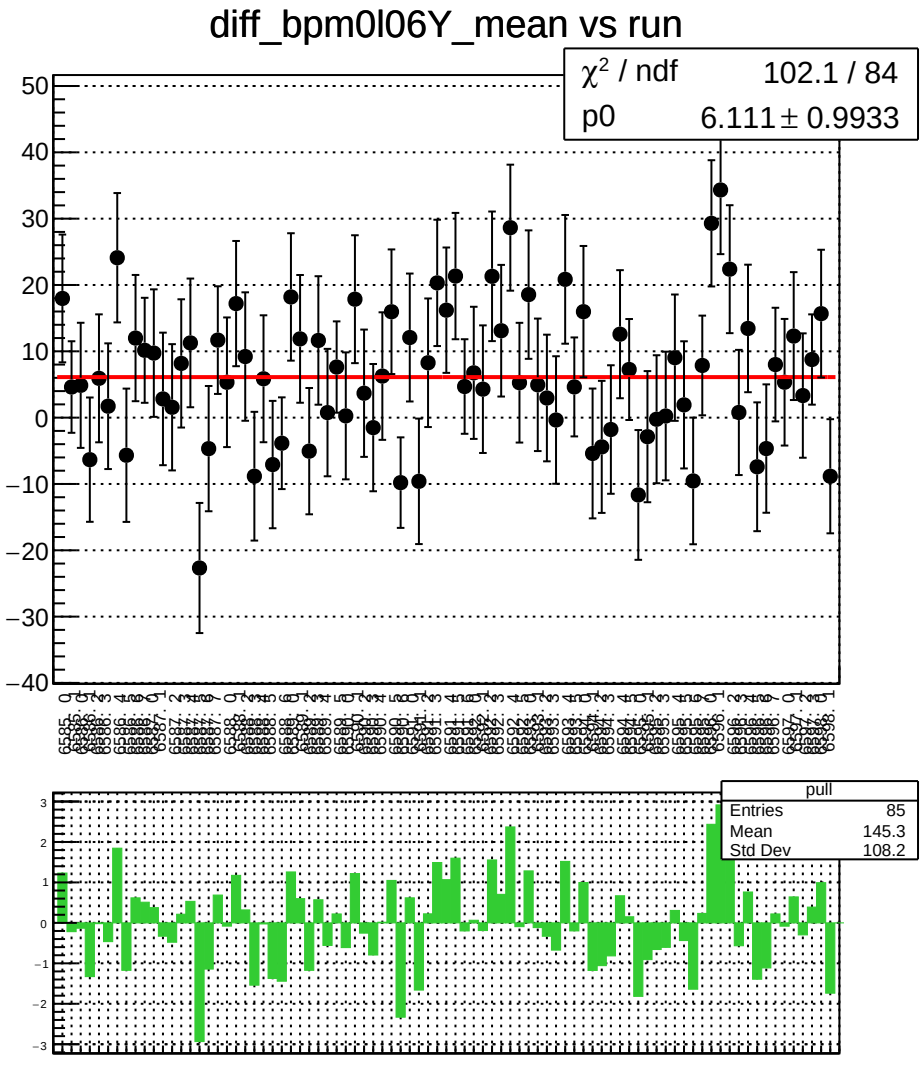

pull1D
Entries 85
Mean −0.002137
Std Dev 1.003

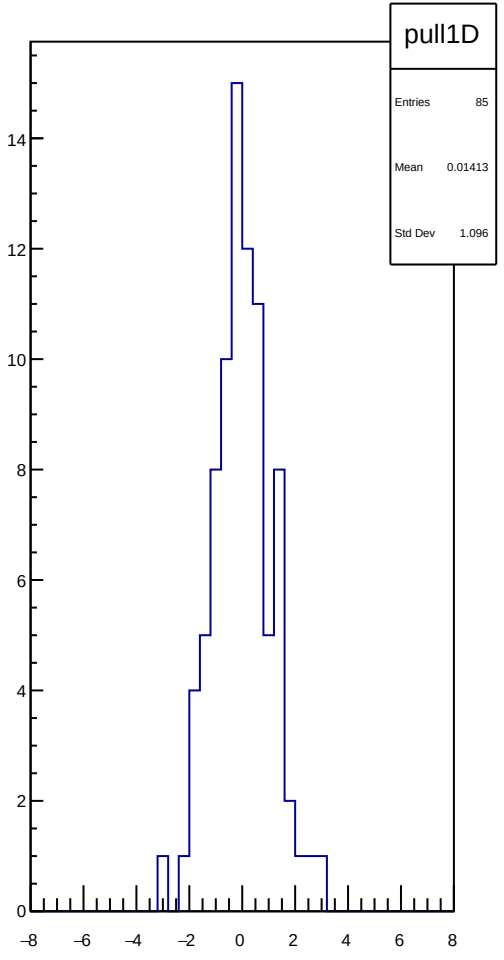

diff_bpm0l05Y_rms vs run
χ² / ndf 2405 / 84
p0 1522 ± 1.172
1800
1750
1700
1650
1600
1550
1500
1450
1400

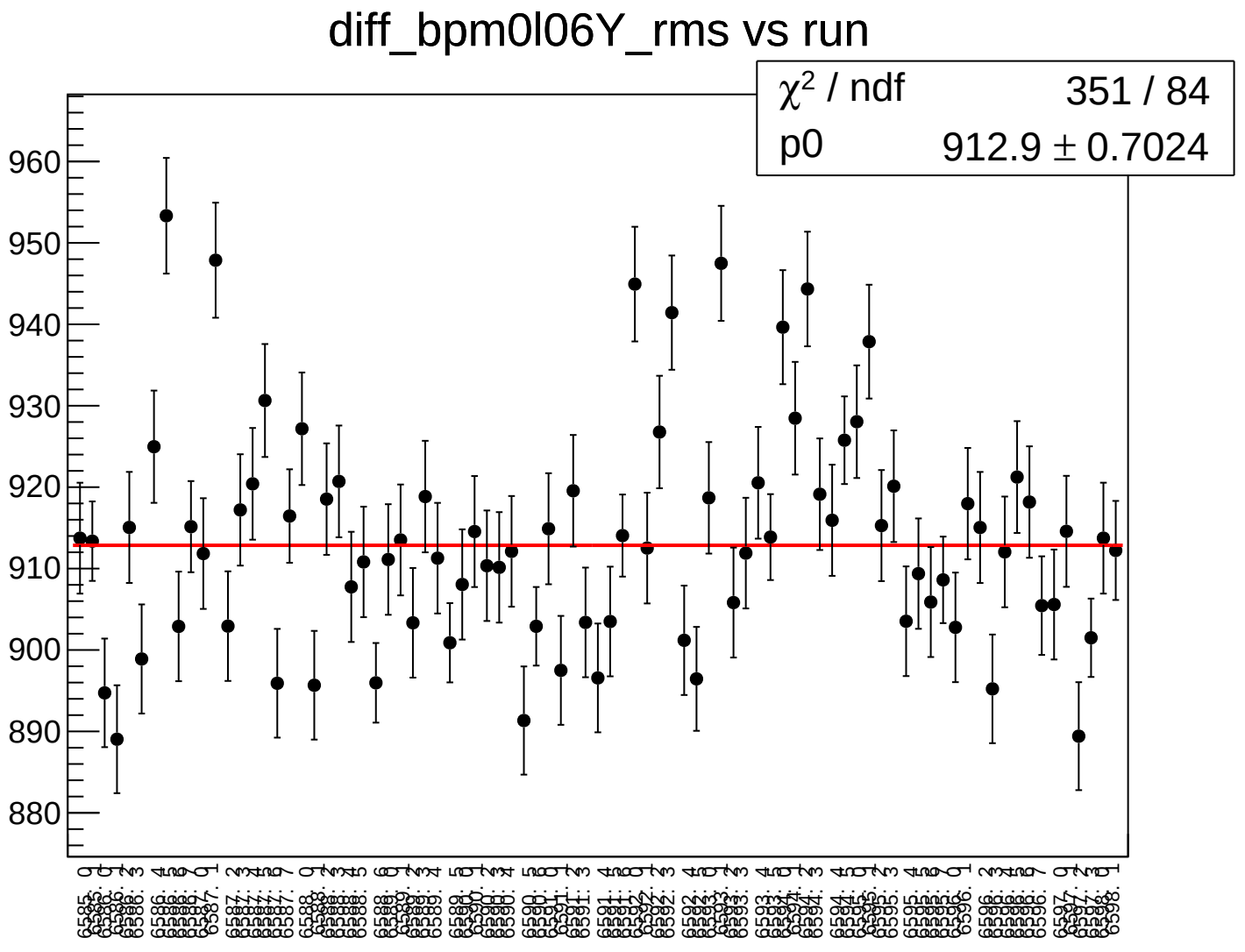

diff_bpm0l06X_mean vs run
χ^2 / ndf 111.1 / 84
p0 16.54 ± 8.352
pull
Entries 85
Mean 127.8
Std Dev 128.4

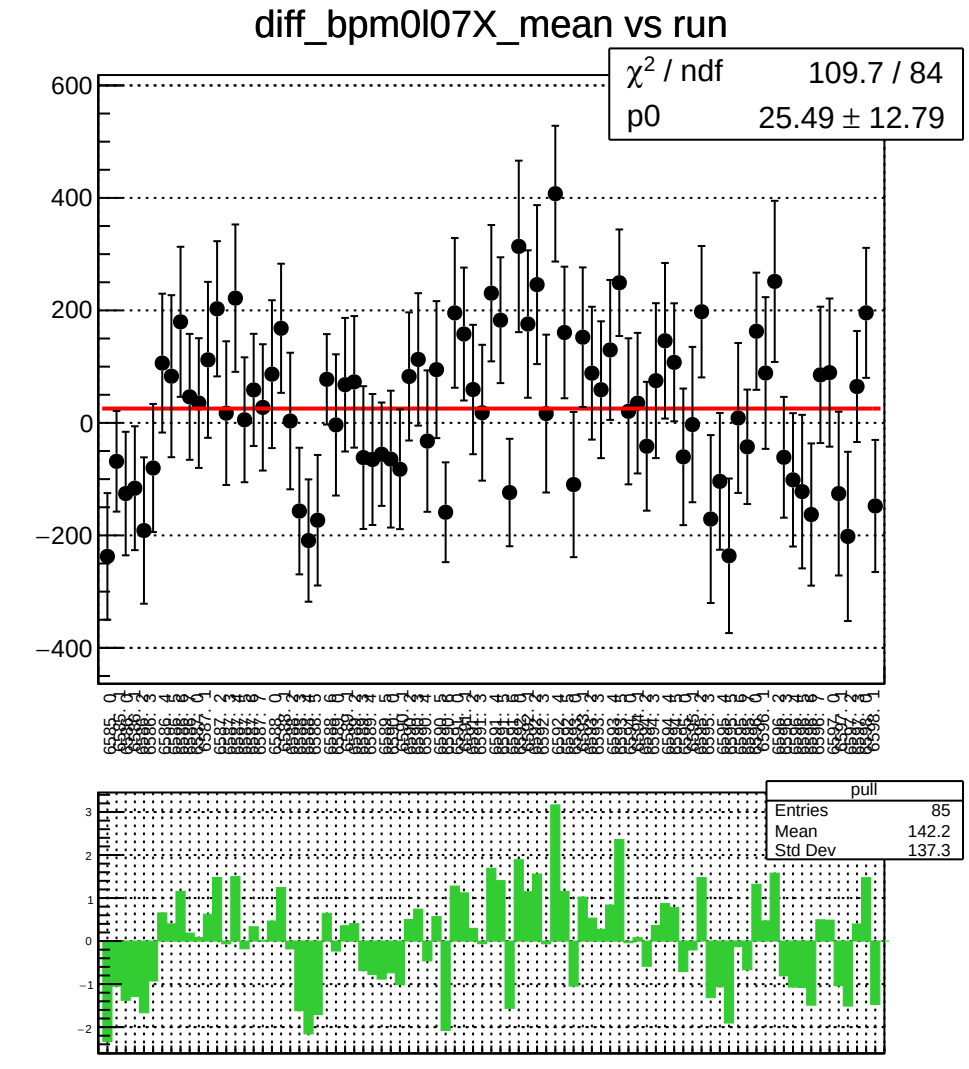

pull1D
Entries 85
Mean 0.01798
Std Dev 1.143

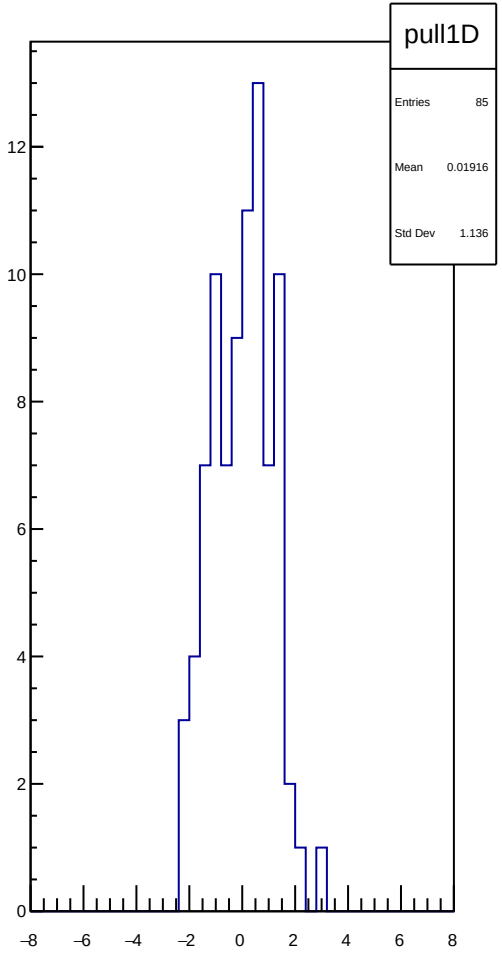

diff_bpm0l06X_rms vs run
χ² / ndf 1.289e+04 / 84
p0 7647 ± 5.906
9500
9000
8500
8000
7500
7000
6500
6000

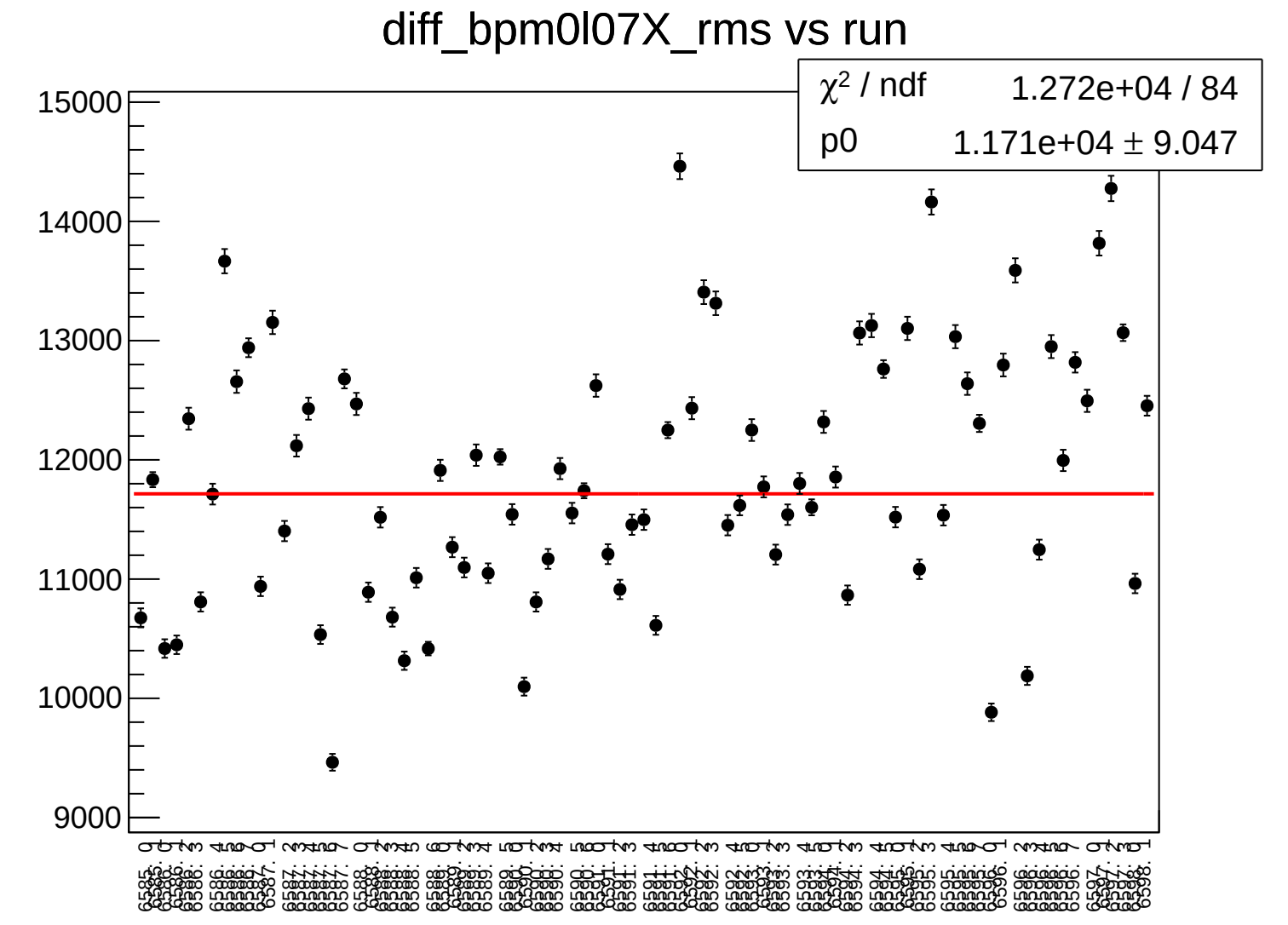

diff_bpm0l06Y_mean vs run
χ² / ndf 102.1 / 84
p0 6.111 ± 0.9933
pull
Entries 85
Mean 145.3
Std Dev 108.2

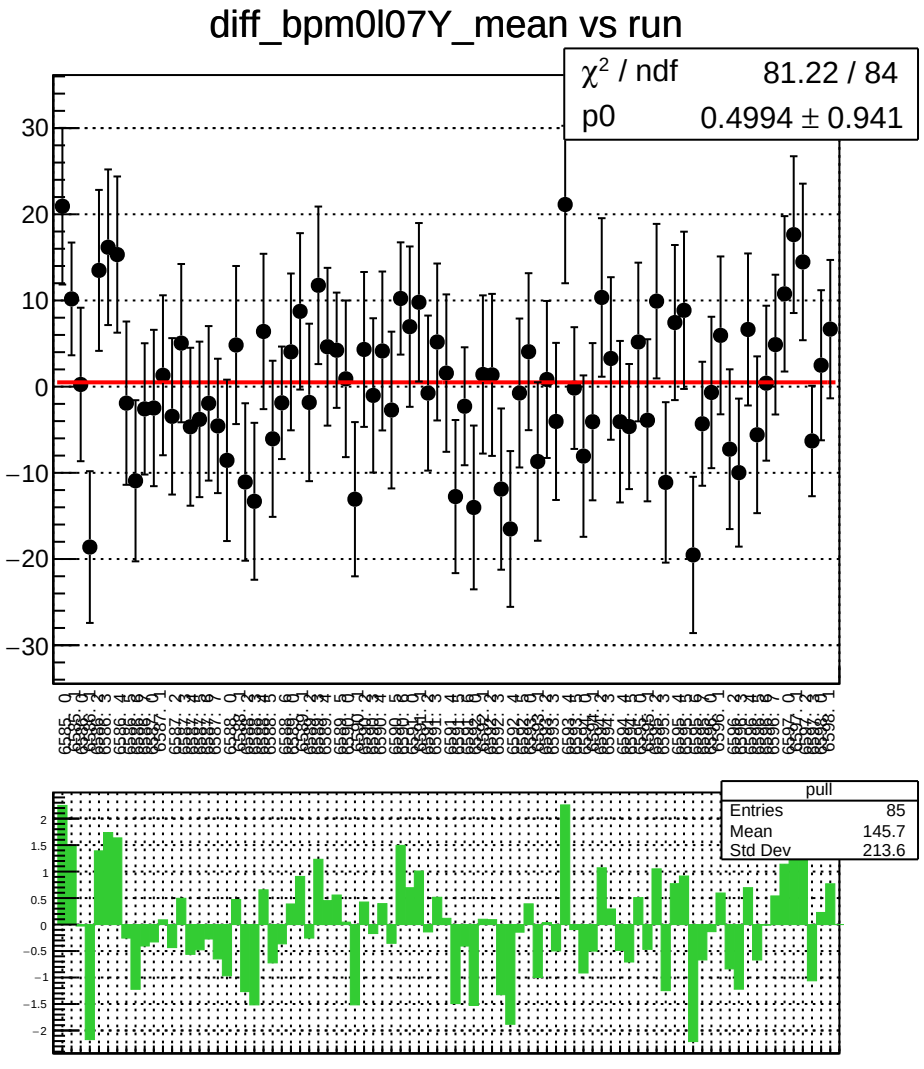

pull1D
Entries 85
Mean 0.01413
Std Dev 1.096

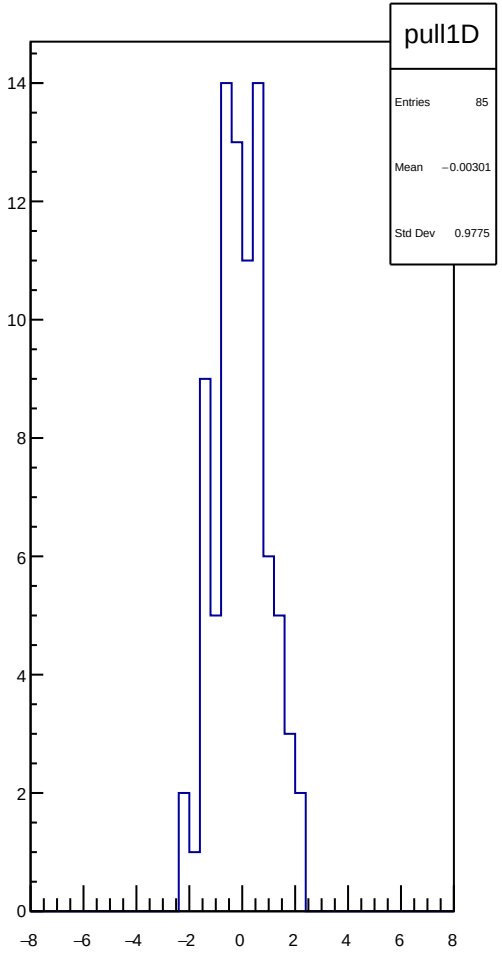

diff_bpm0l06Y_rms vs run
χ² / ndf 351 / 84
p0 912.9 ± 0.7024
960
950
940
930
920
910
900
890
880

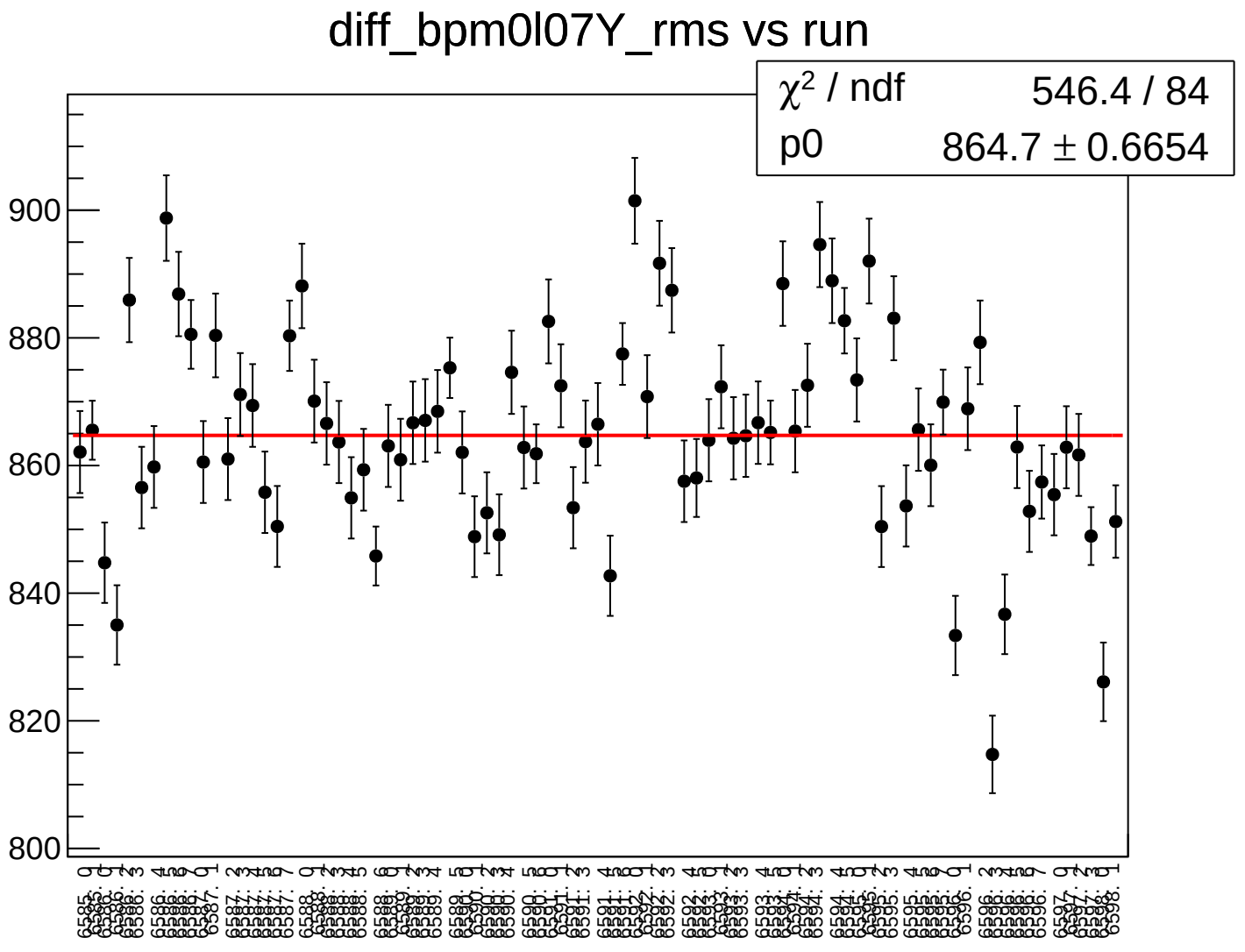

diff_bpm0l07X_mean vs run
χ^2 / ndf 109.7 / 84
p0 25.49 ± 12.79
pull
Entries 85
Mean 142.2
Std Dev 137.3

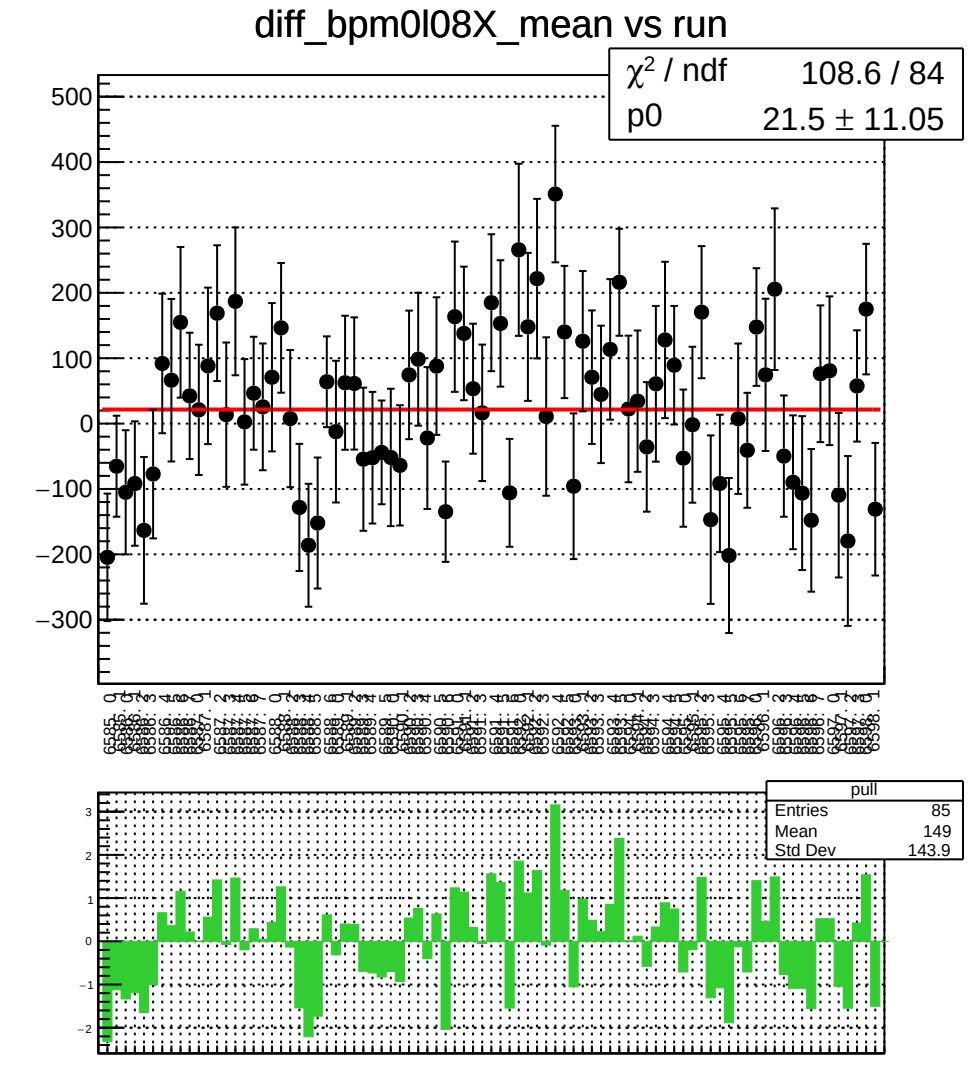

pull1D
Entries 85
Mean 0.01916
Std Dev 1.136

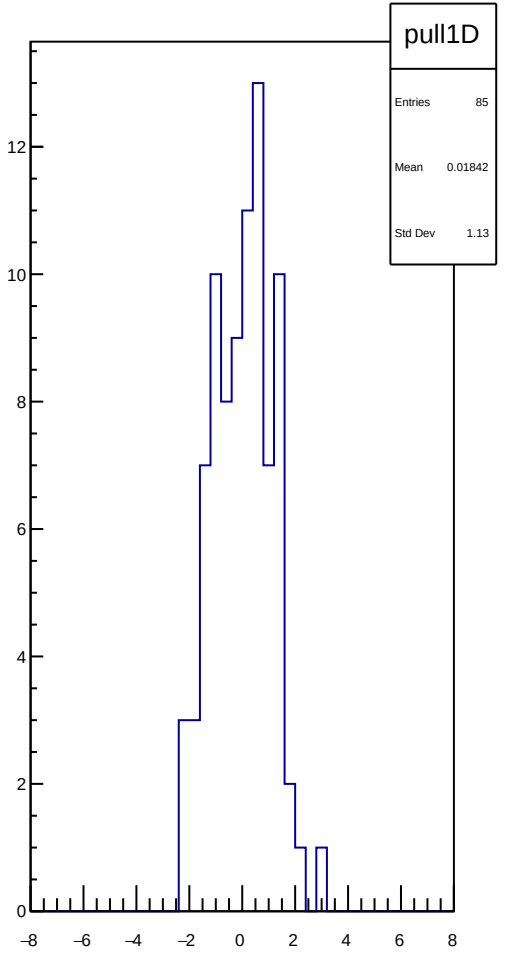

diff_bpm0l07X_rms vs run
χ² / ndf 1.272e+04 / 84
p0 1.171e+04 ± 9.047
15000
14000
13000
12000
11000
10000
9000

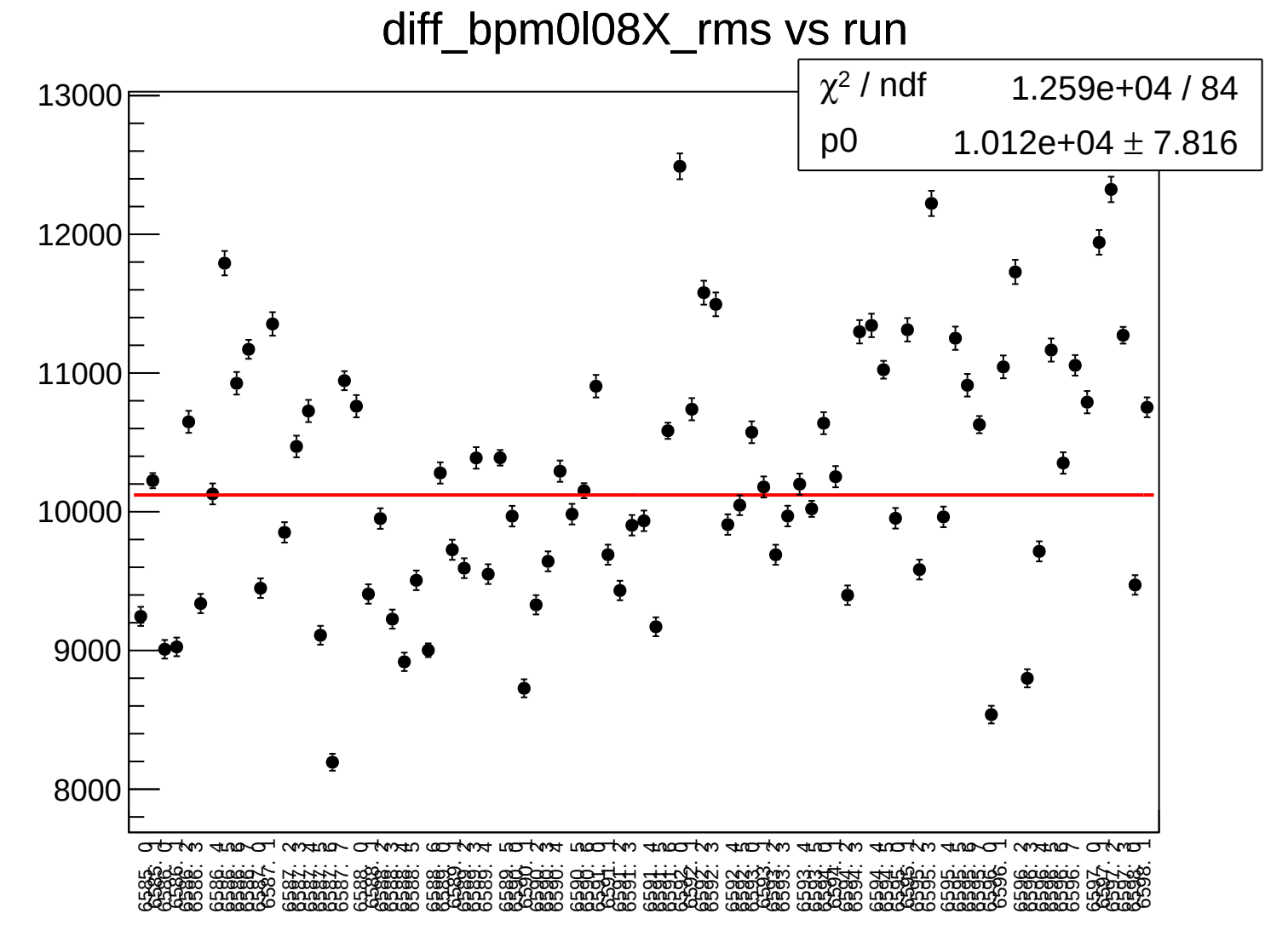

diff_bpm0l07Y_mean vs run
χ^2 / ndf 81.22 / 84
p0 0.4994 ± 0.941
pull
Entries 85
Mean 145.7
Std Dev 213.6

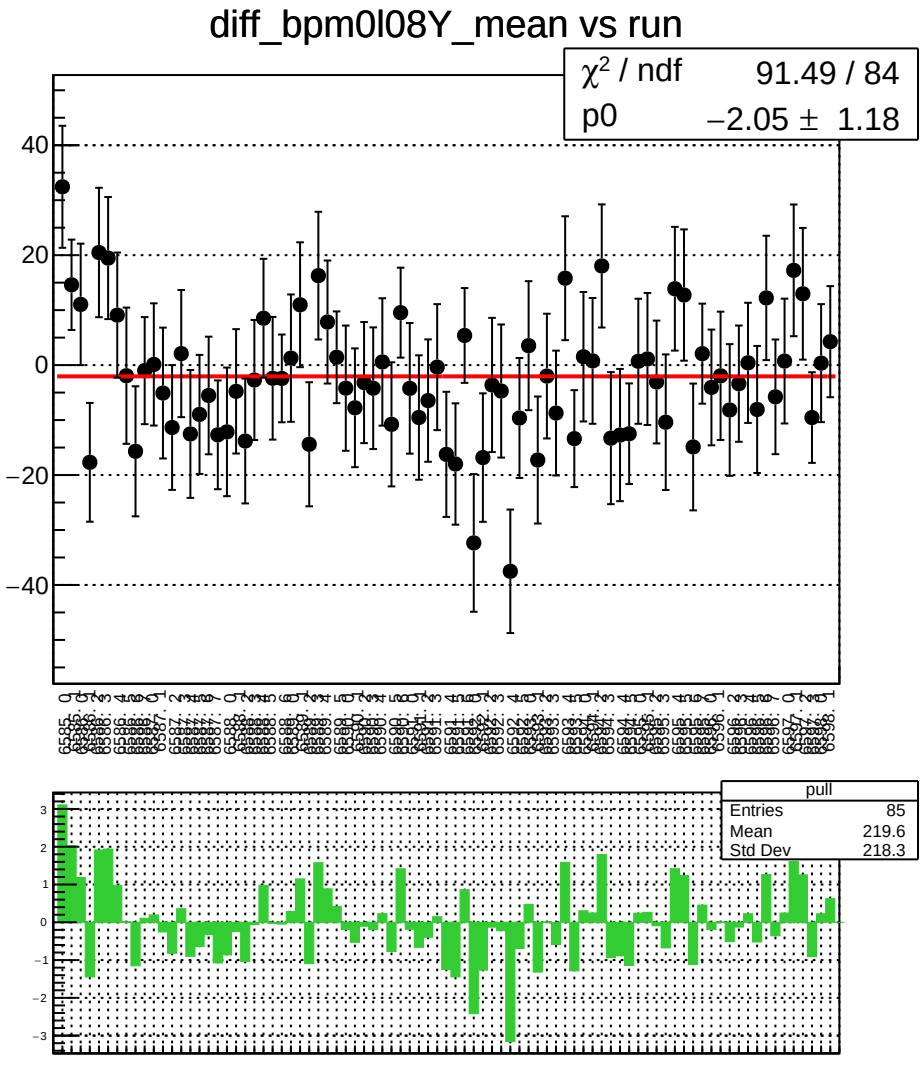

pull1D
Entries 85
Mean −0.00301
Std Dev 0.9775

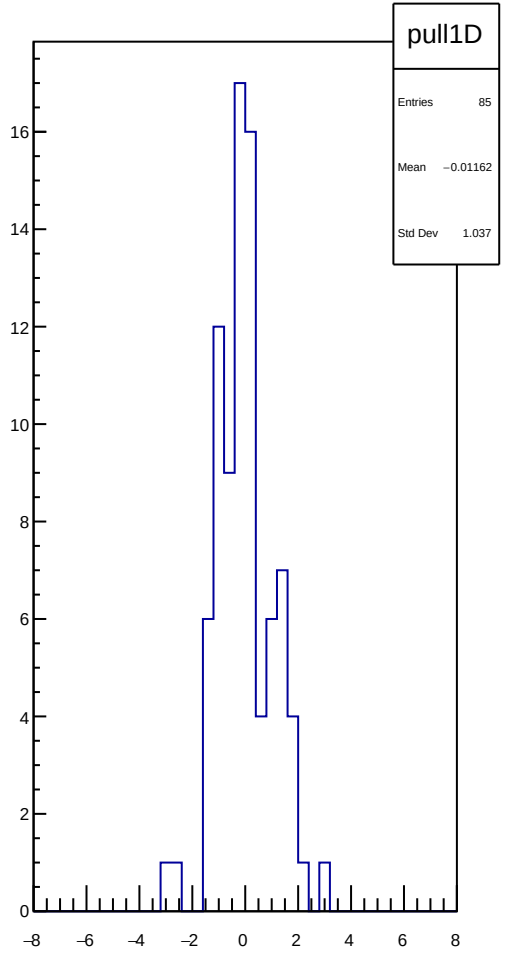

diff_bpm0l07Y_rms vs run
χ² / ndf 546.4 / 84
p0 864.7 ± 0.6654
900
880
860
840
820
800

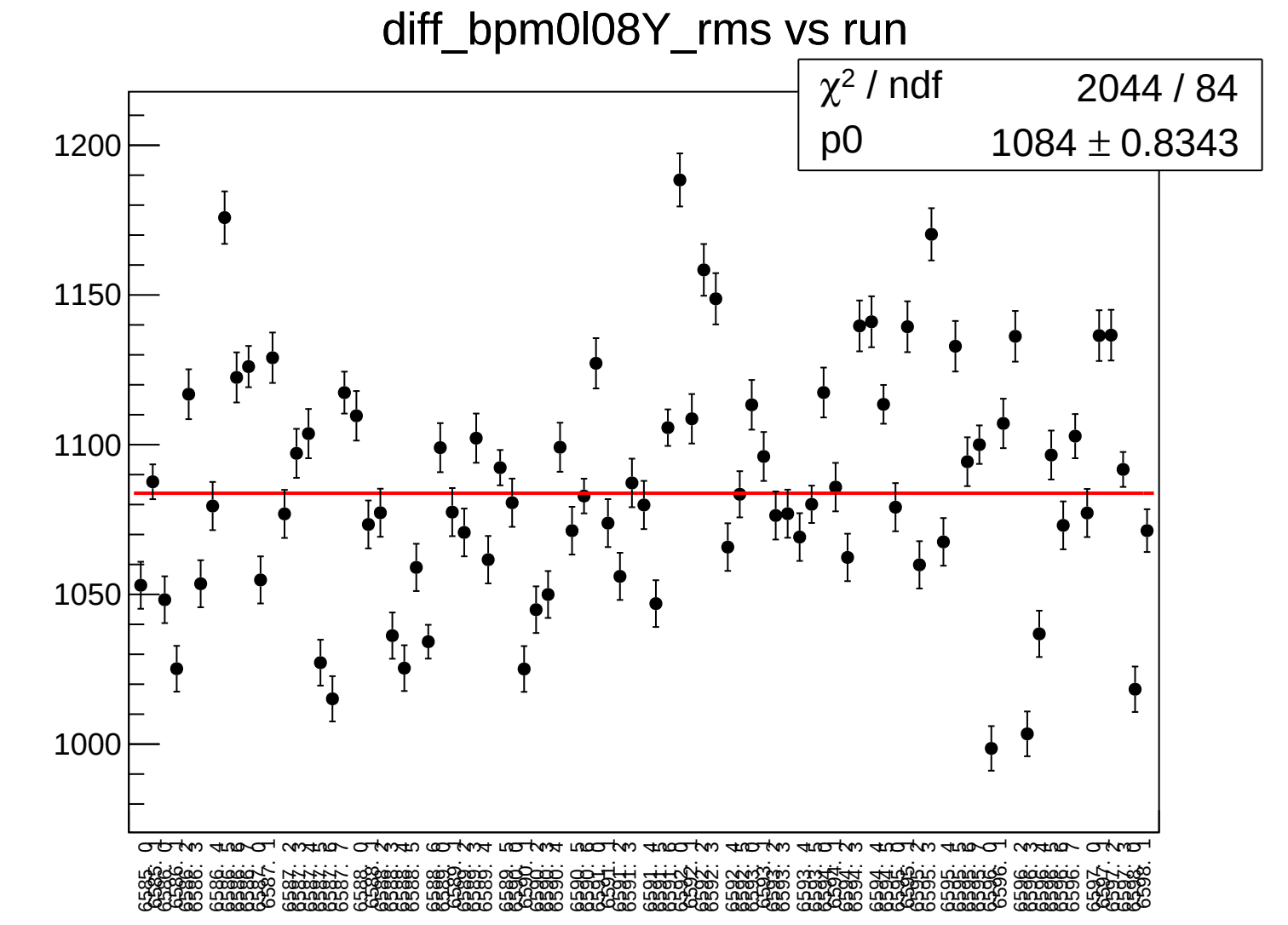

diff_bpm0l08X_mean vs run
χ² / ndf 108.6 / 84
p0 21.5 ± 11.05
pull
Entries 85
Mean 149
Std Dev 143.9

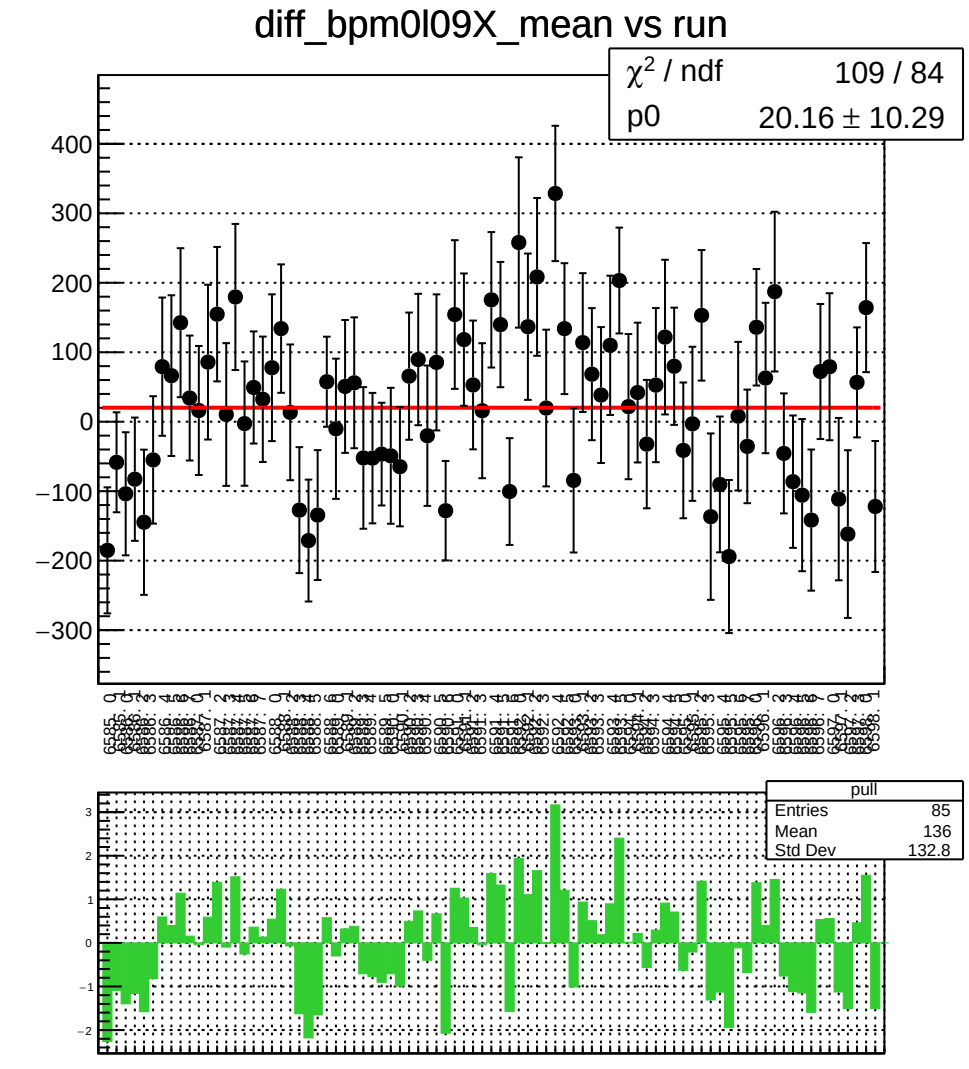

pull1D
Entries 85
Mean 0.01842
Std Dev 1.13

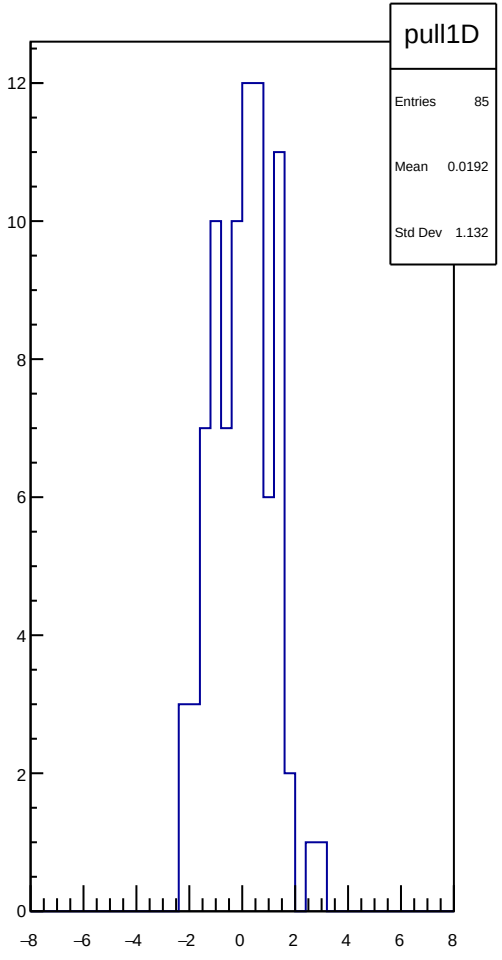

diff_bpm0l08X_rms vs run
χ² / ndf 1.259e+04 / 84
p0 1.012e+04 ± 7.816
13000
12000
11000
10000
9000
8000

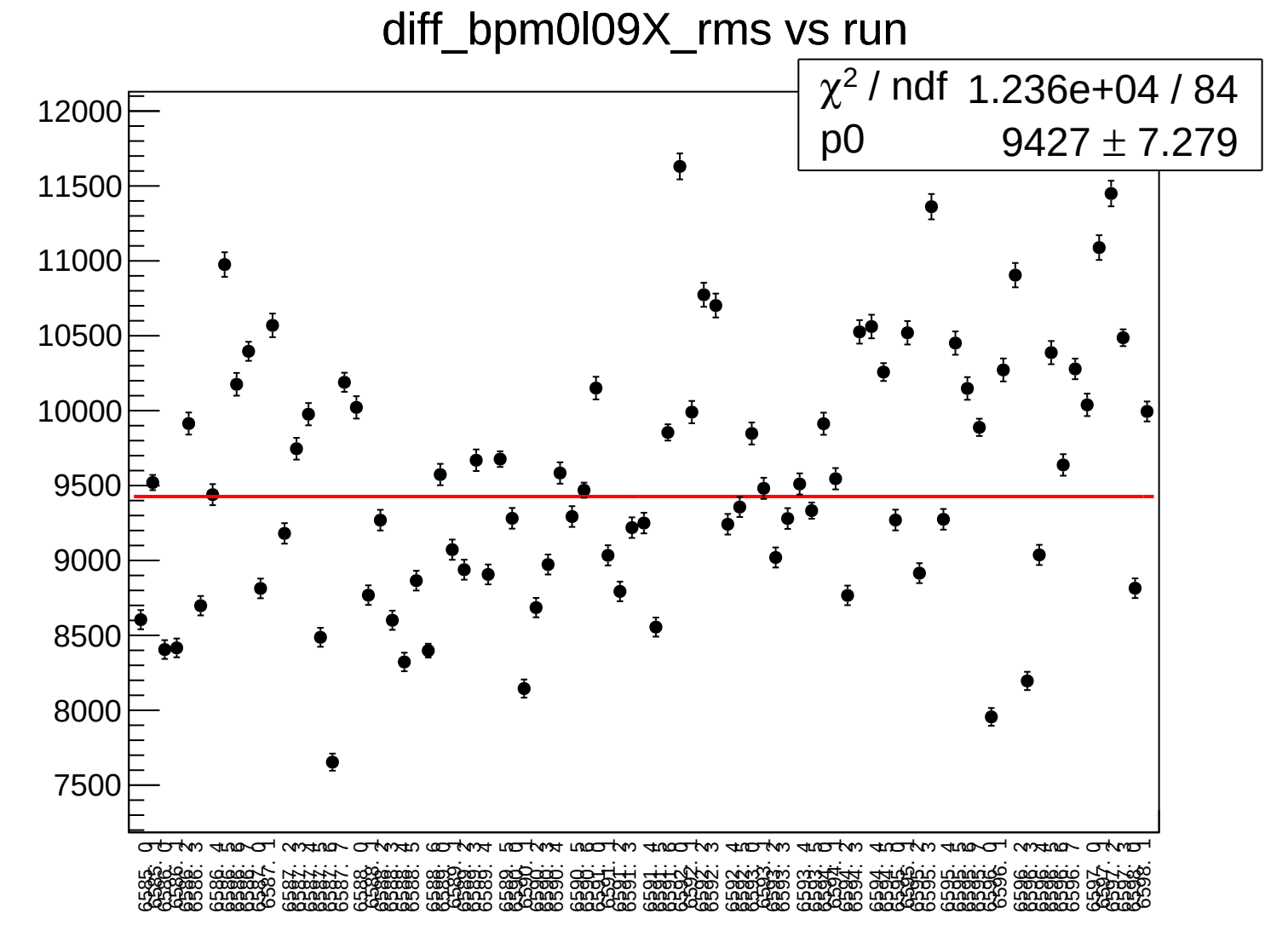

diff_bpm0l08Y_mean vs run
χ² / ndf 91.49 / 84
p0 −2.05 ± 1.18
40
20
0
−20
−40
pull
Entries 85
Mean 219.6
Std Dev 218.3
3
2
1
0
−1
−2
−3

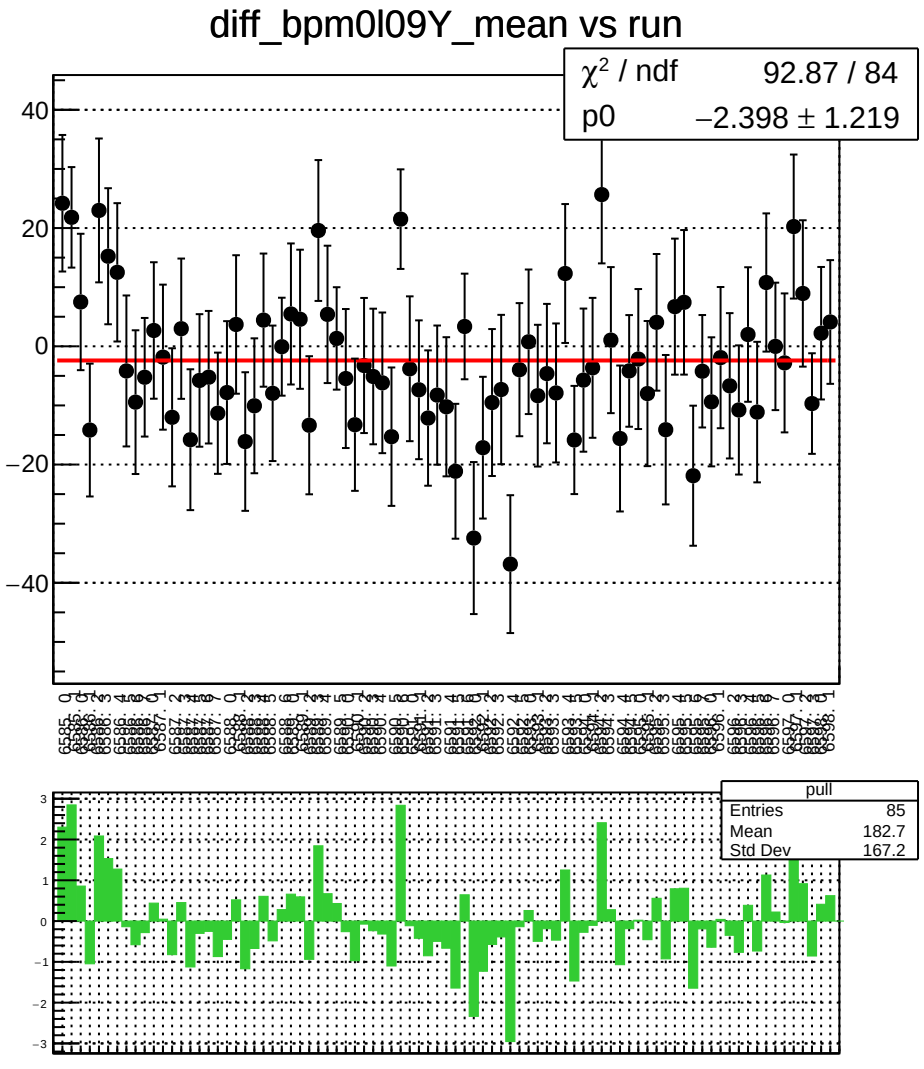

pull1D
Entries 85
Mean −0.01162
Std Dev 1.037
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

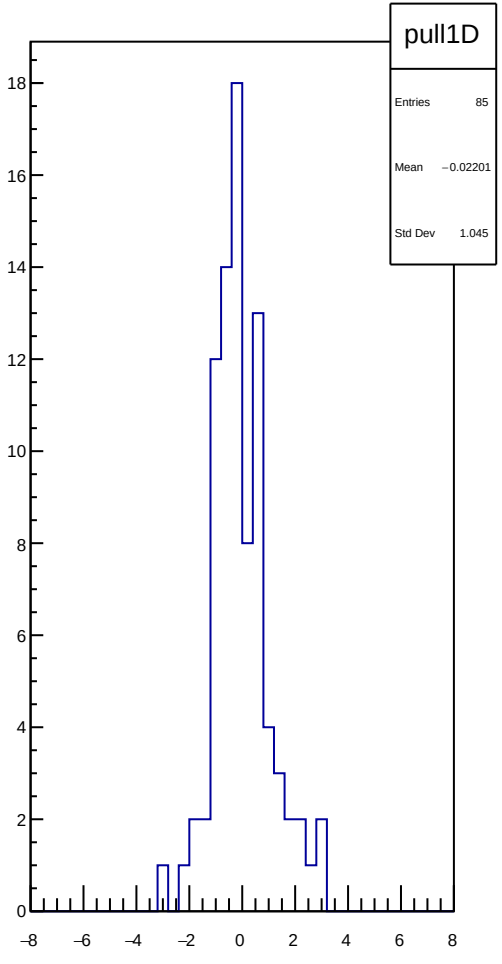

diff_bpm0l08Y_rms vs run
χ² / ndf 2044 / 84
p0 1084 ± 0.8343
1200
1150
1100
1050
1000

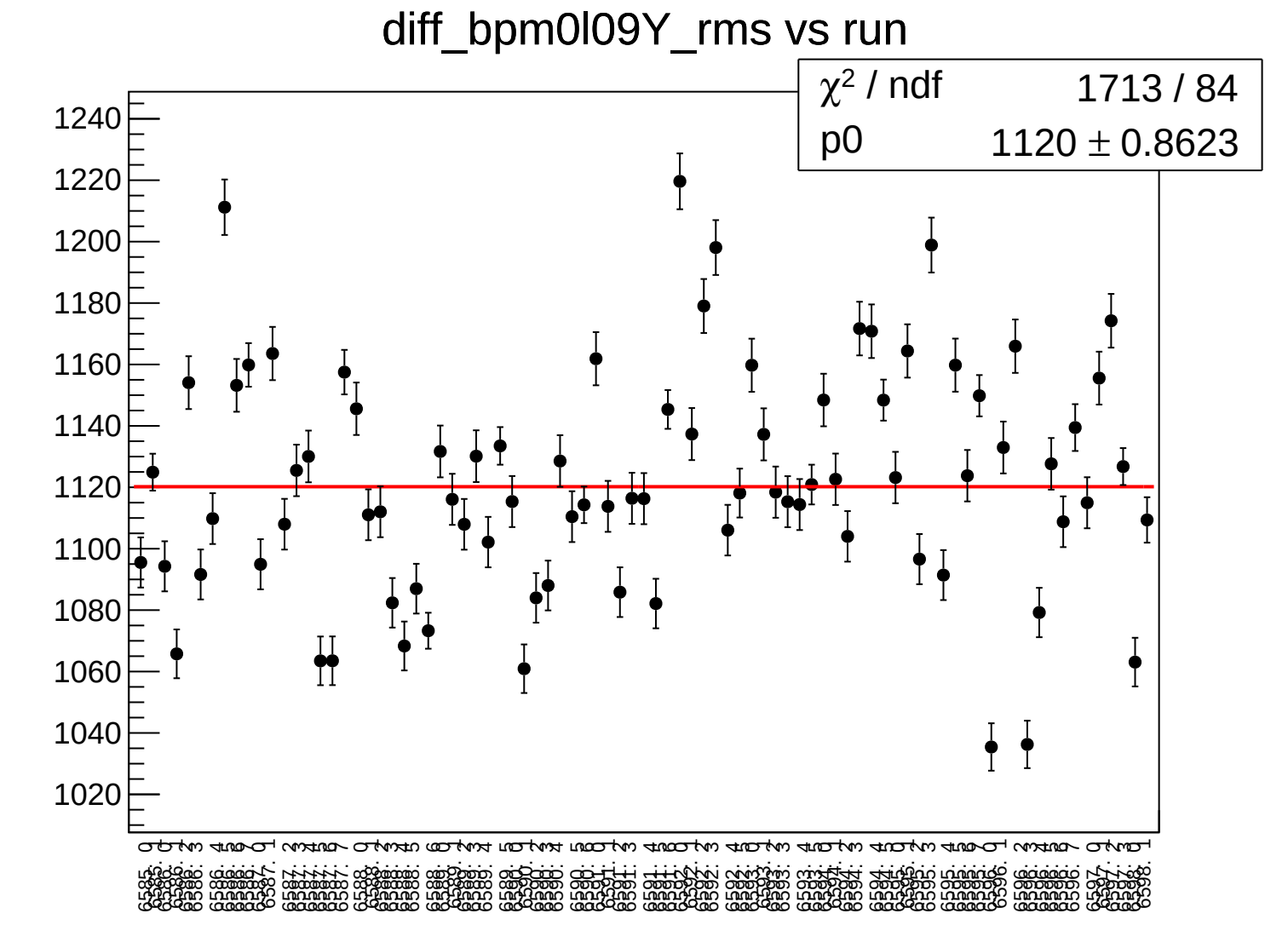

diff_bpm0l09X_mean vs run
χ² / ndf 109 / 84
p0 20.16 ± 10.29
pull
Entries 85
Mean 136
Std Dev 132.8

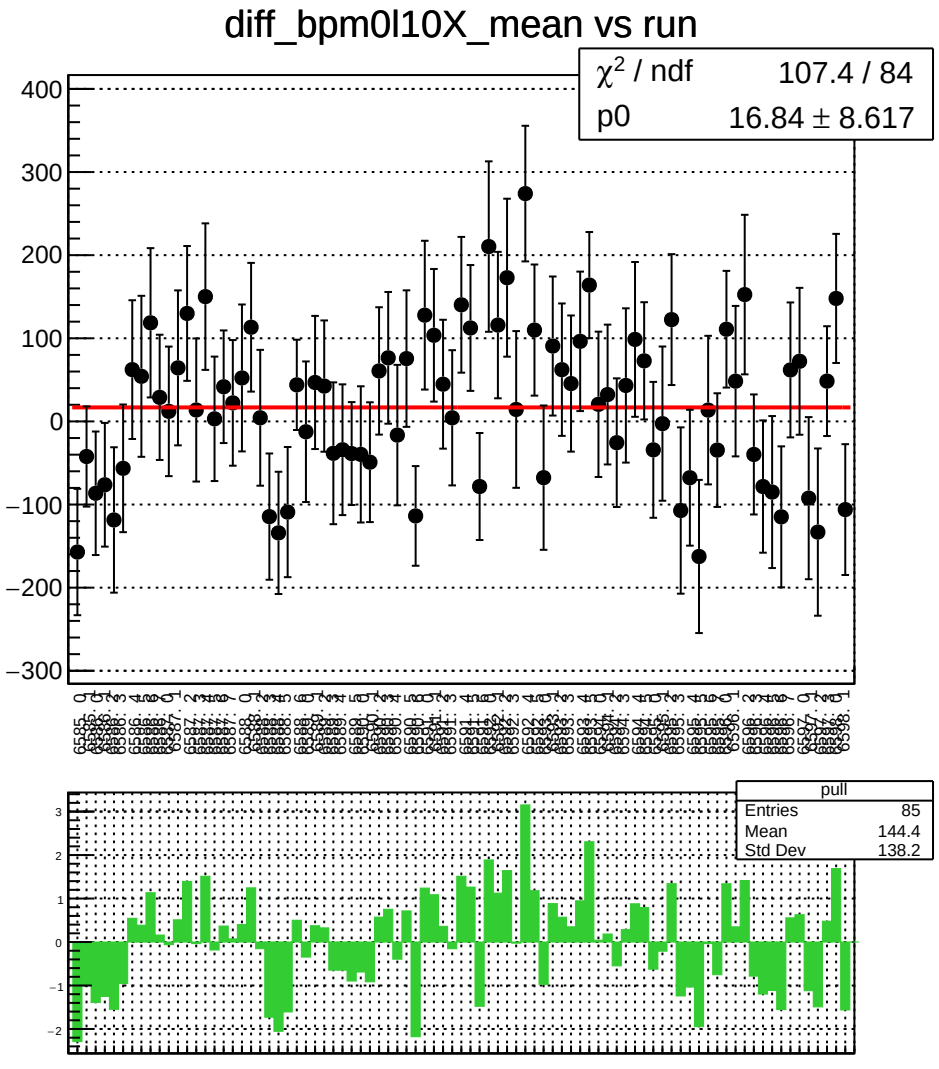

pull1D
Entries 85
Mean 0.0192
Std Dev 1.132

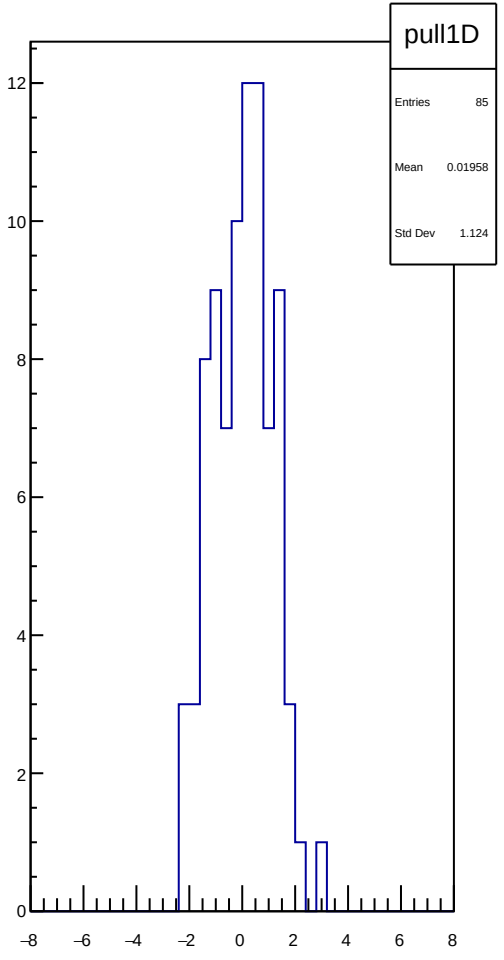

diff_bpm0l09X_rms vs run
χ² / ndf 1.236e+04 / 84
p0 9427 ± 7.279
12000
11500
11000
10500
10000
9500
9000
8500
8000
7500

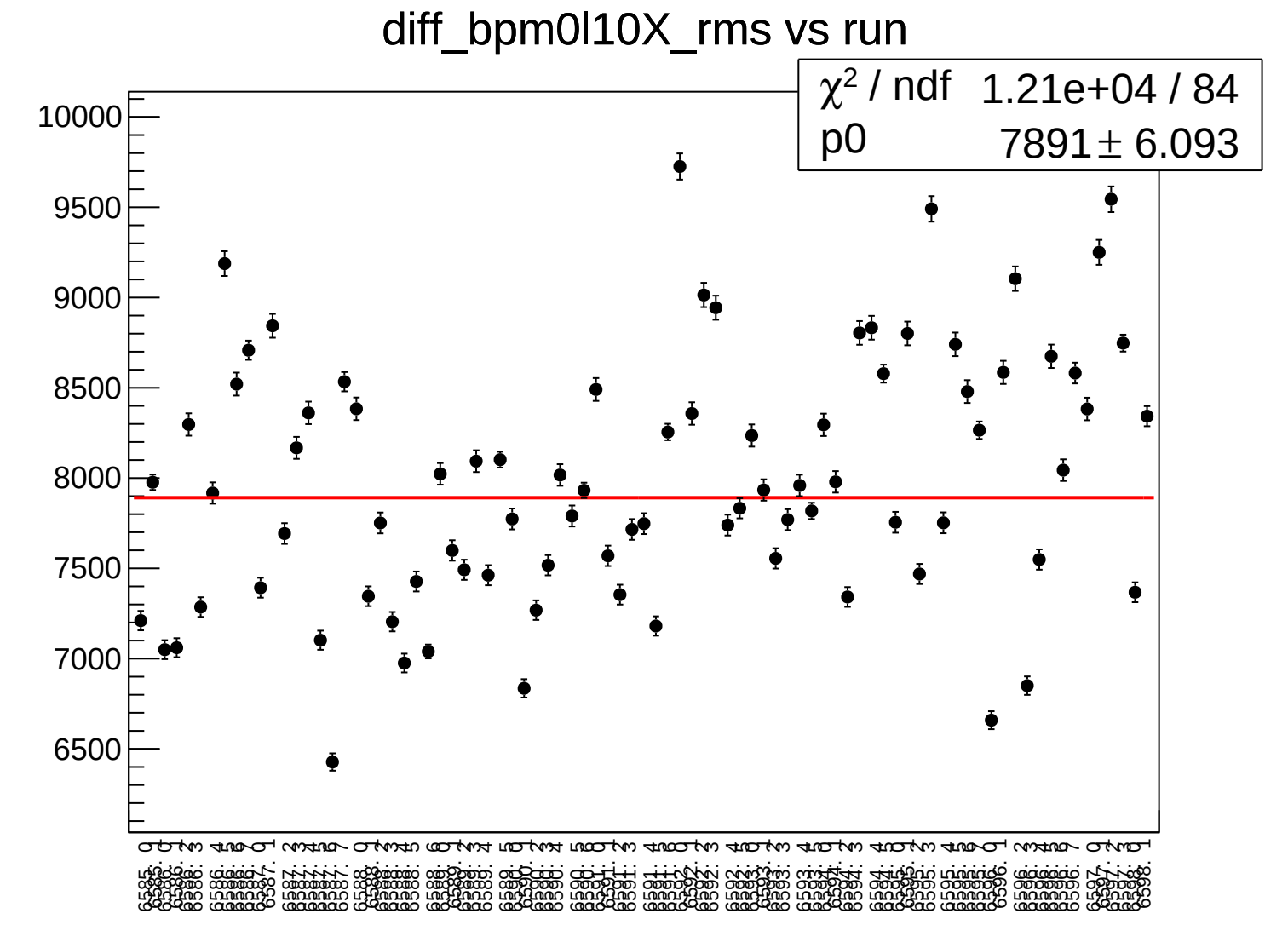

diff_bpm0l09Y_mean vs run
χ² / ndf 92.87 / 84
p0 −2.398 ± 1.219
pull
Entries 85
Mean 182.7
Std Dev 167.2

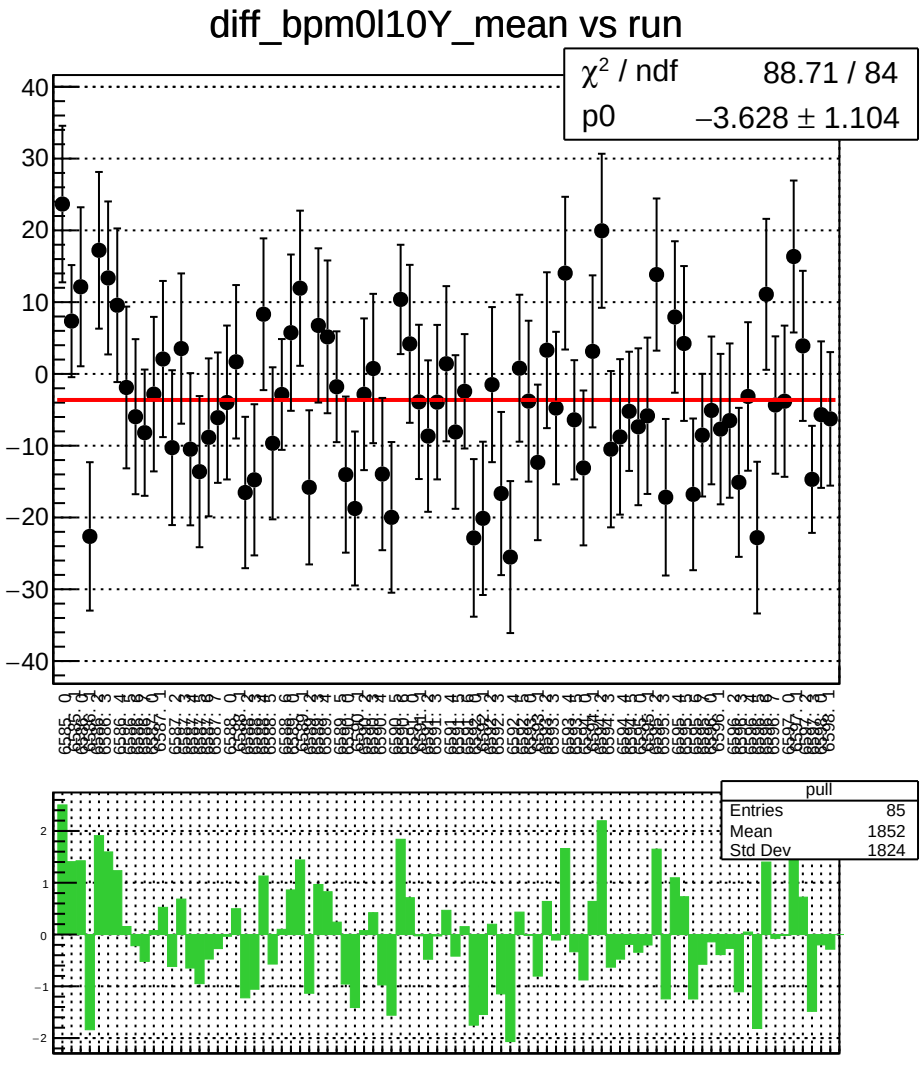

pull1D
Entries 85
Mean −0.02201
Std Dev 1.045

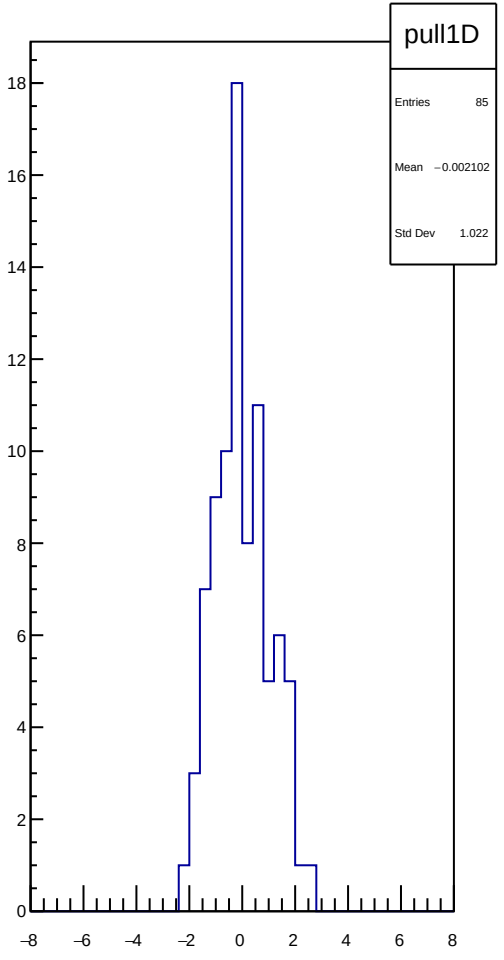

diff_bpm0l09Y_rms vs run
χ² / ndf 1713 / 84
p0 1120 ± 0.8623
1240
1220
1200
1180
1160
1140
1120
1100
1080
1060
1040
1020

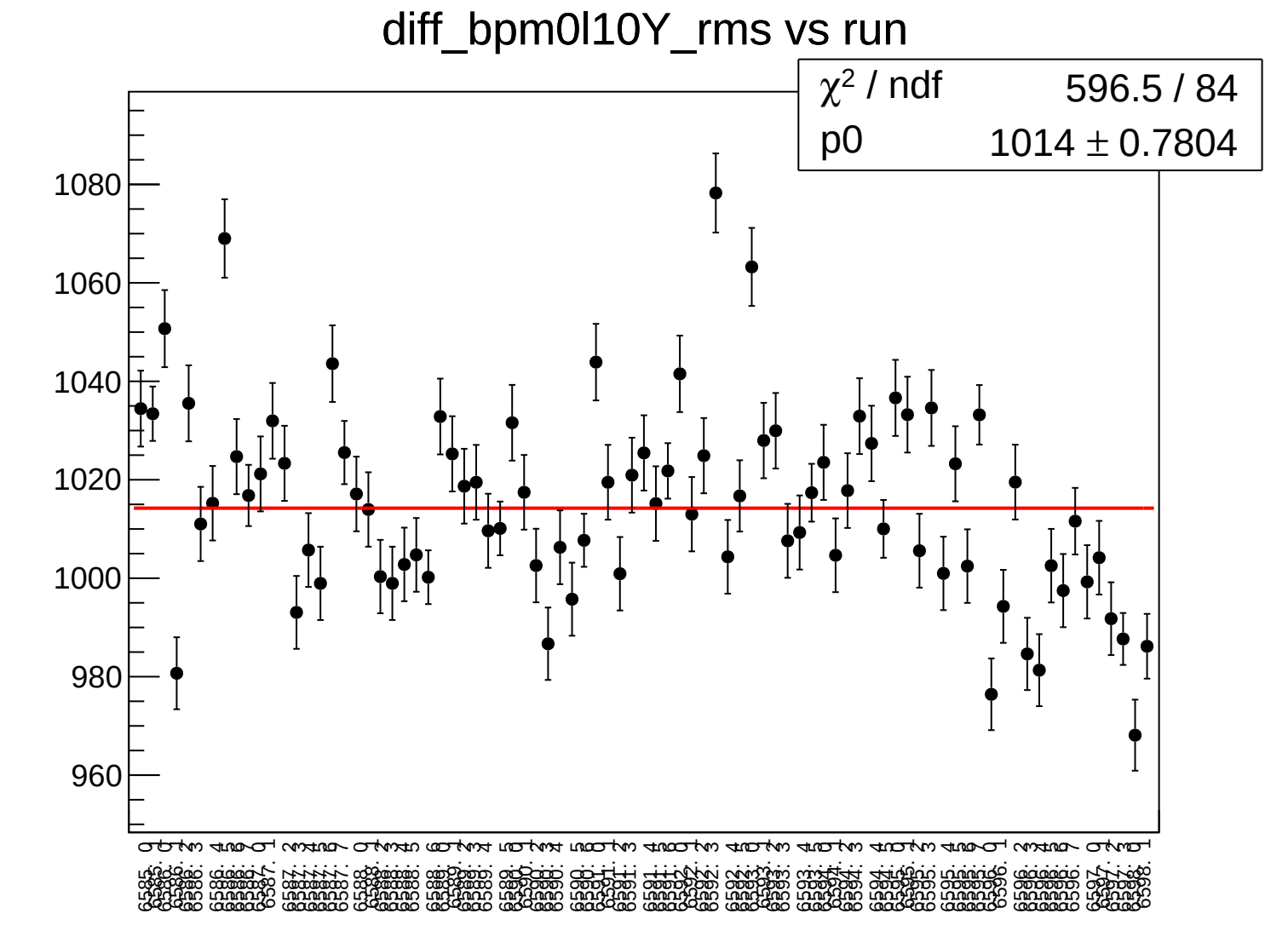

diff_bpm0l10X_mean vs run
χ^2 / ndf 107.4 / 84
p0 16.84 ± 8.617
pull
Entries 85
Mean 144.4
Std Dev 138.2

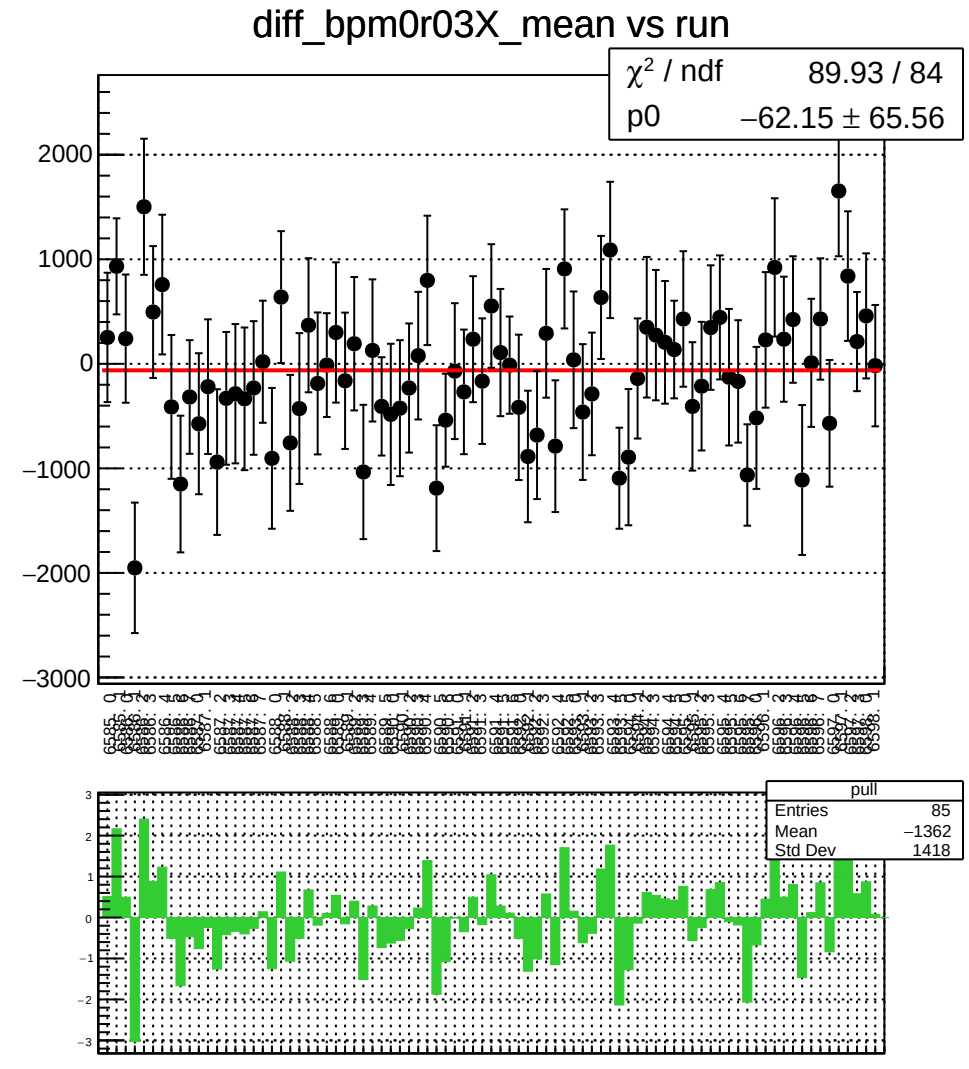

pull1D
Entries 85
Mean 0.01958
Std Dev 1.124

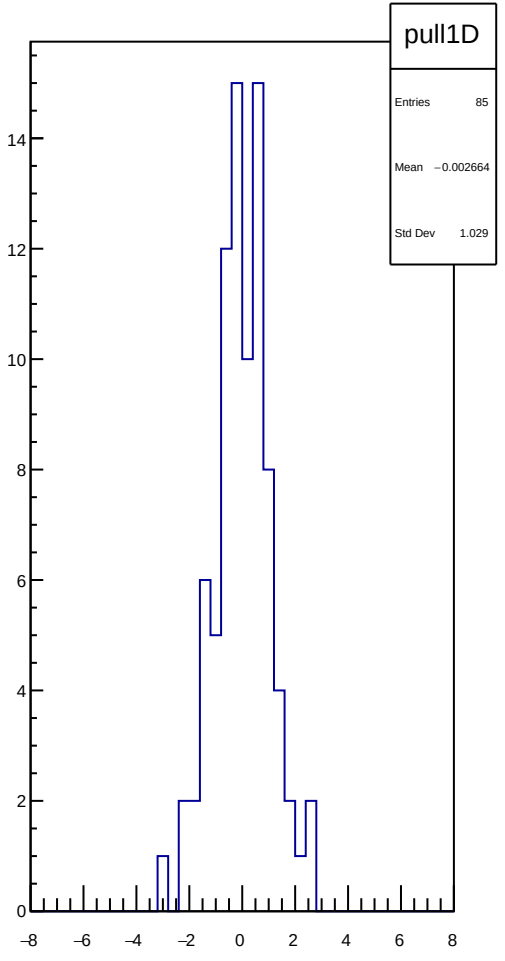

diff_bpm0l10X_rms vs run
χ² / ndf 1.21e+04 / 84
p0 7891 ± 6.093
10000
9500
9000
8500
8000
7500
7000
6500

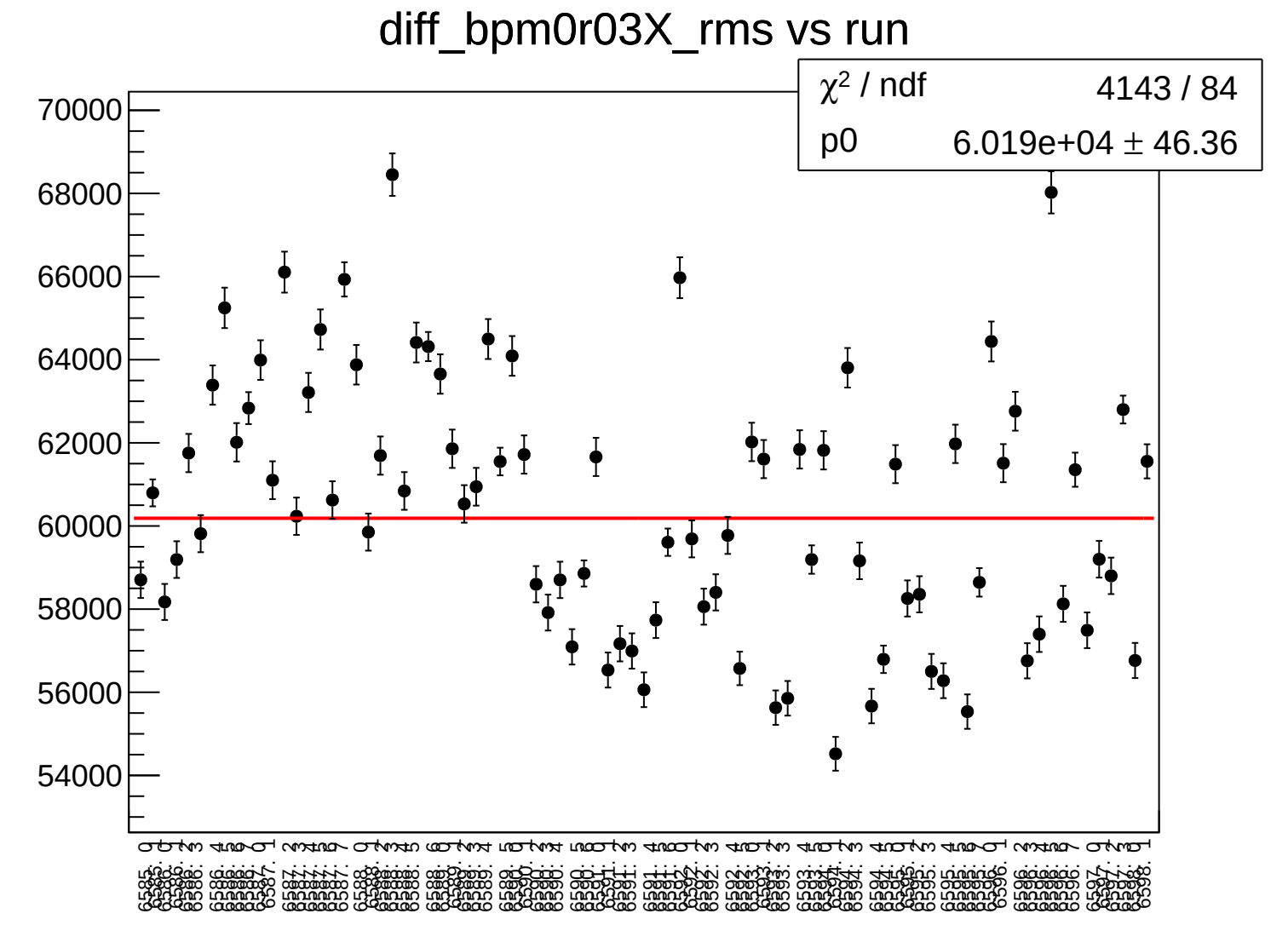

diff_bpm0l10Y_mean vs run
χ² / ndf 88.71 / 84
p0 −3.628 ± 1.104
pull
Entries 85
Mean 1852
Std Dev 1824

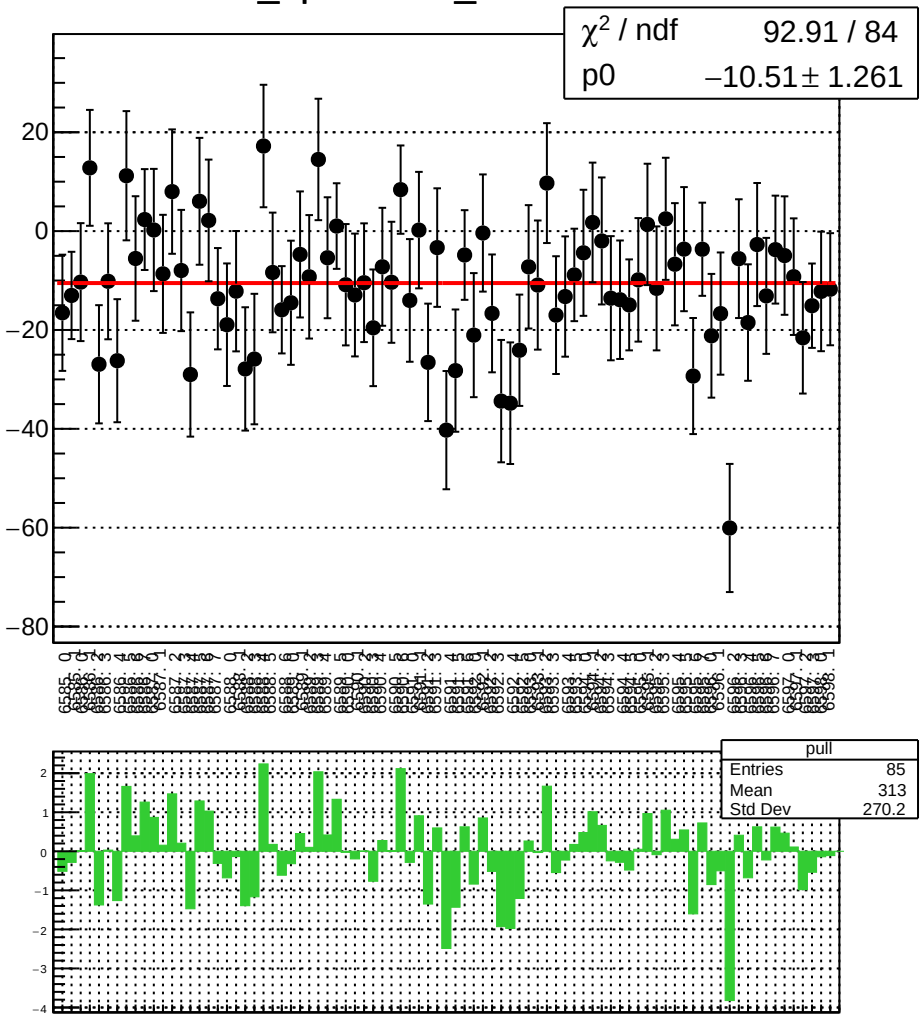

pull1D
Entries 85
Mean −0.002102
Std Dev 1.022

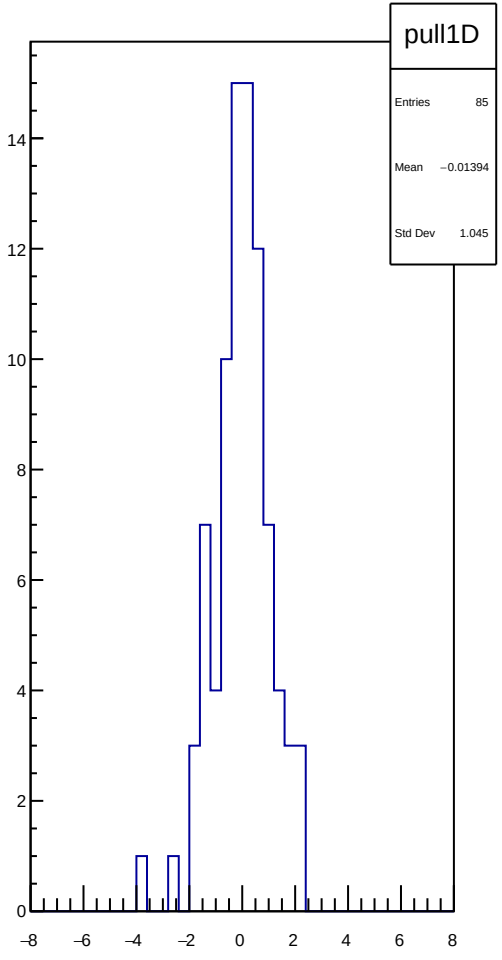

diff_bpm0l10Y_rms vs run
χ² / ndf 596.5 / 84
p0 1014 ± 0.7804
1080
1060
1040
1020
1000
980
960

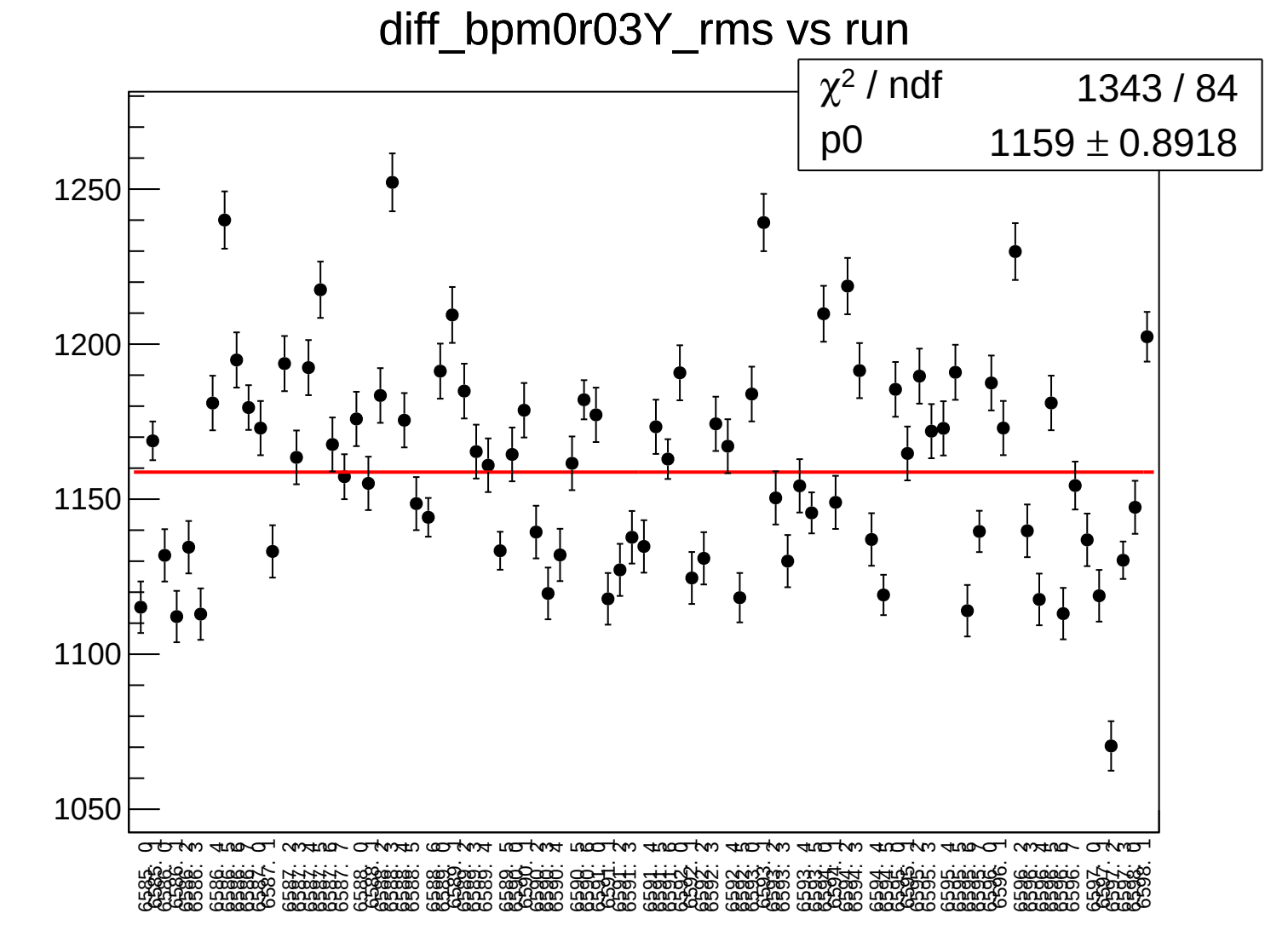

diff_bpm0r03X_mean vs run
χ² / ndf 89.93 / 84
p0 −62.15 ± 65.56
pull
Entries 85
Mean −1362
Std Dev 1418

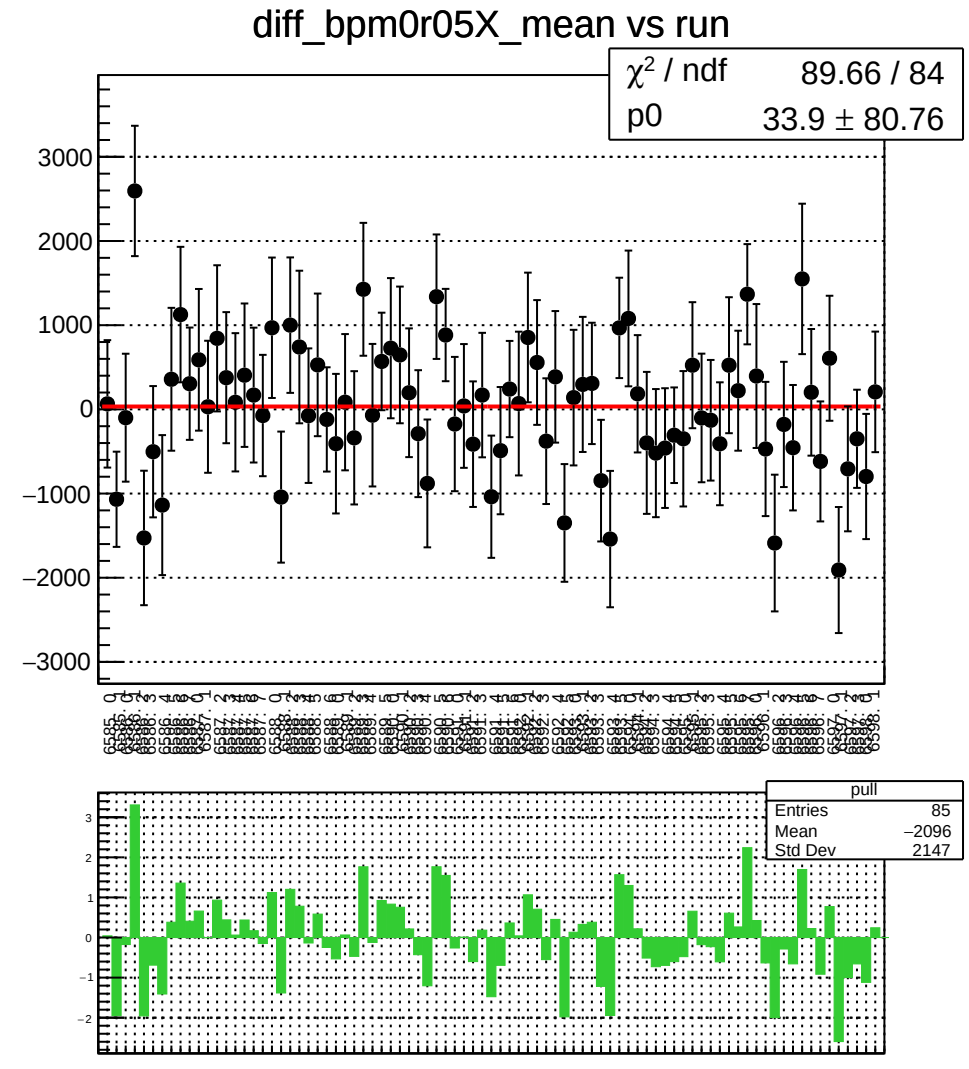

pull1D
Entries 85
Mean −0.002664
Std Dev 1.029

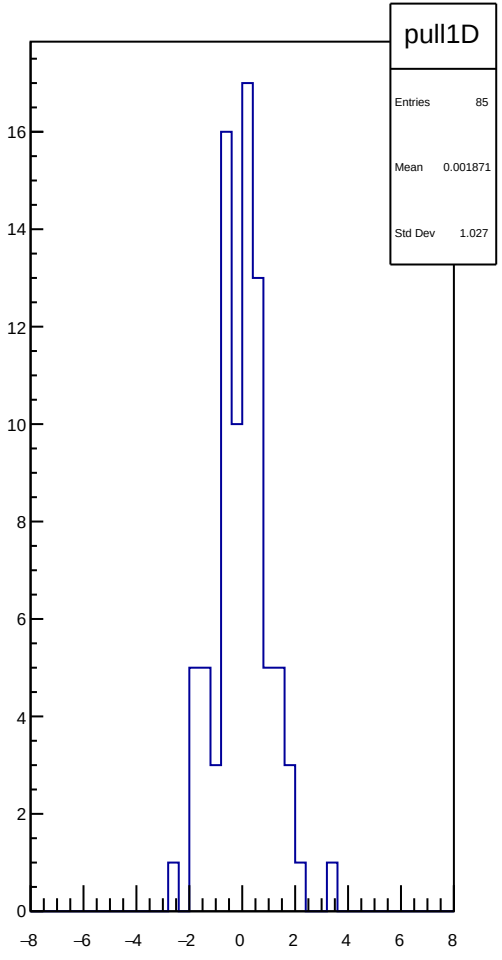

diff_bpm0r03X_rms vs run
χ² / ndf 4143 / 84
p0 6.019e+04 ± 46.36
70000
68000
66000
64000
62000
60000
58000
56000
54000

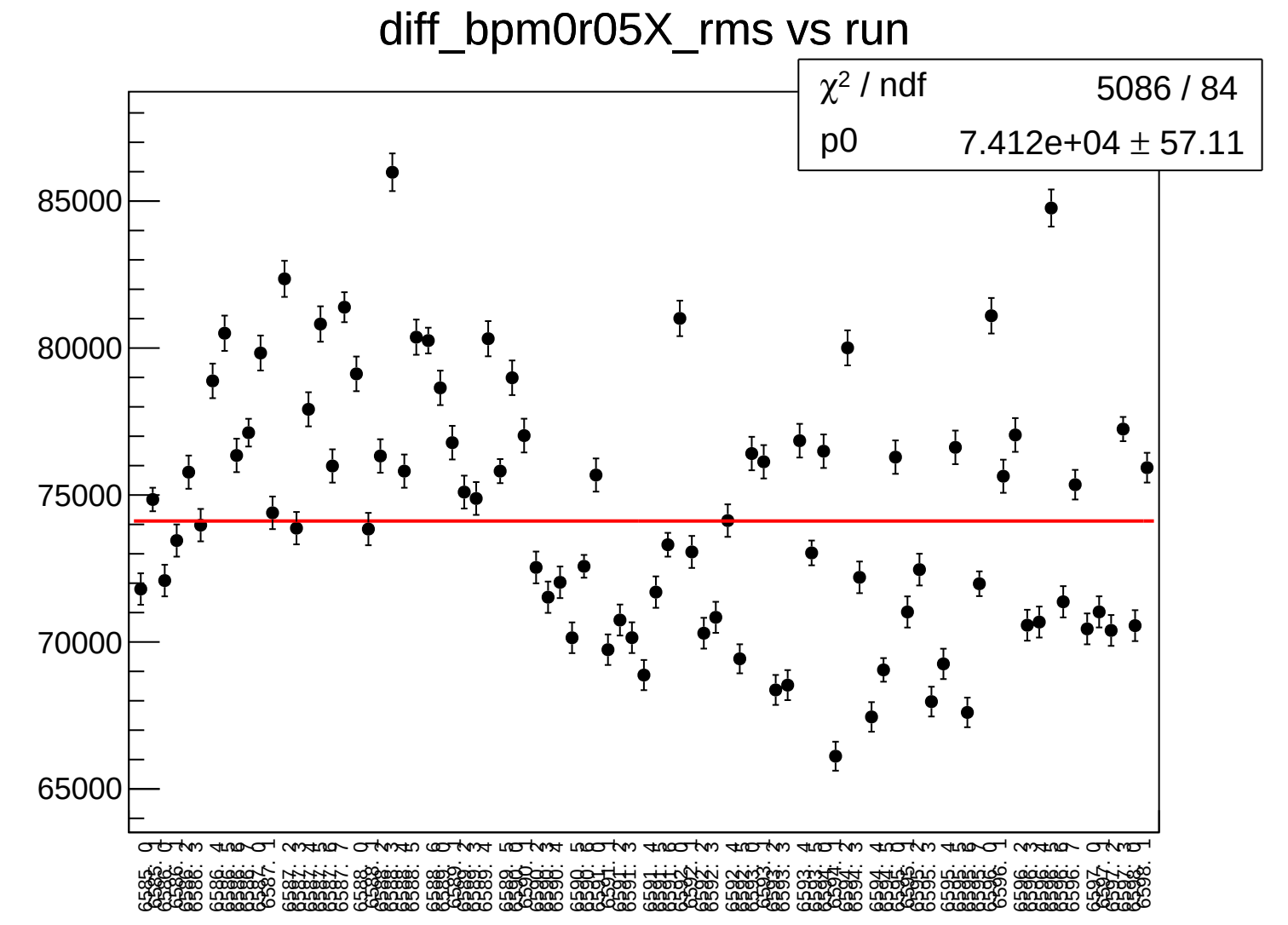

diff_bpm0r03Y_mean vs run
χ² / ndf 92.91 / 84
p0 −10.51 ± 1.261
pull
Entries 85
Mean 313
Std Dev 270.2

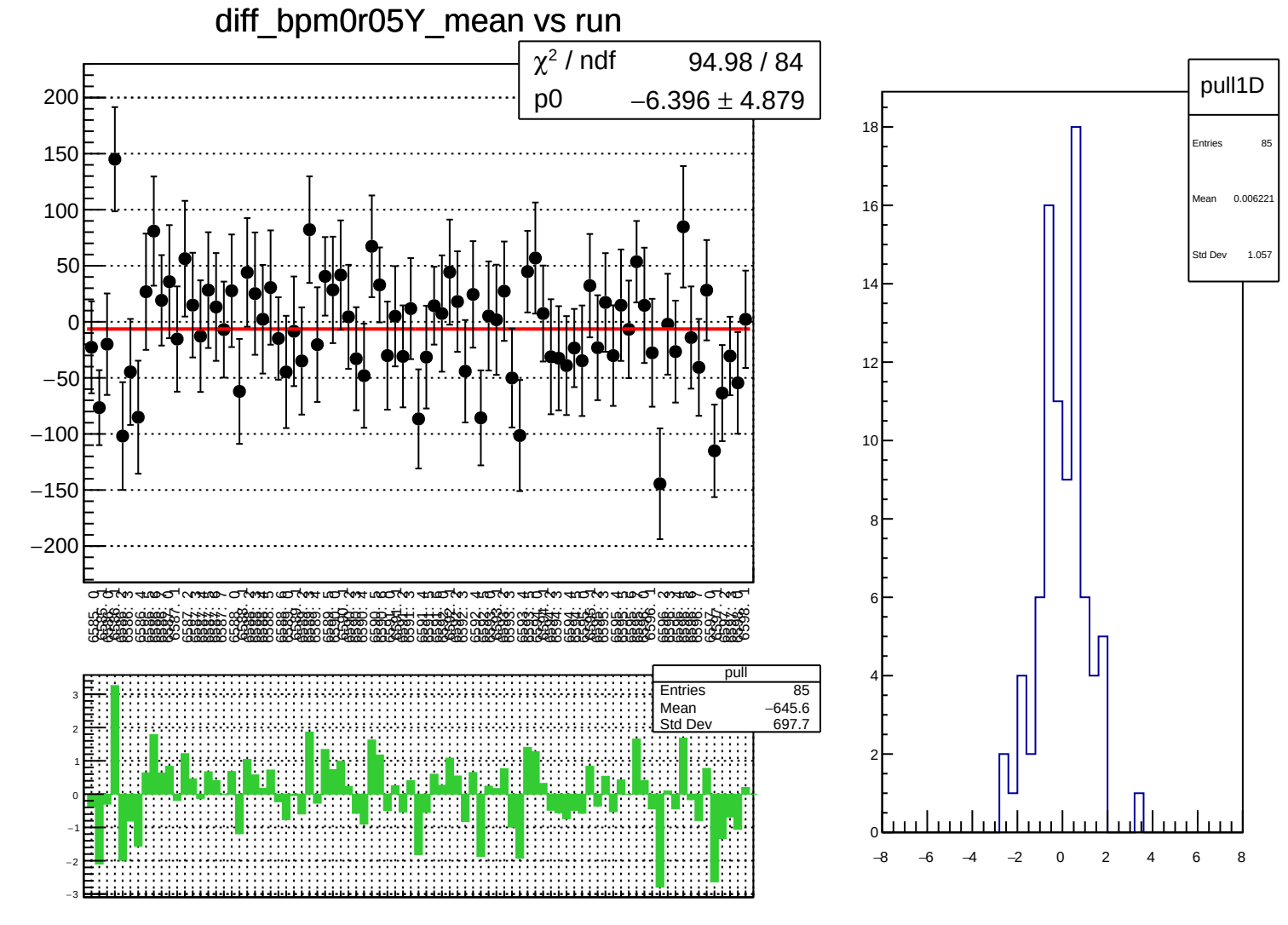

pull1D
Entries 85
Mean −0.01394
Std Dev 1.045

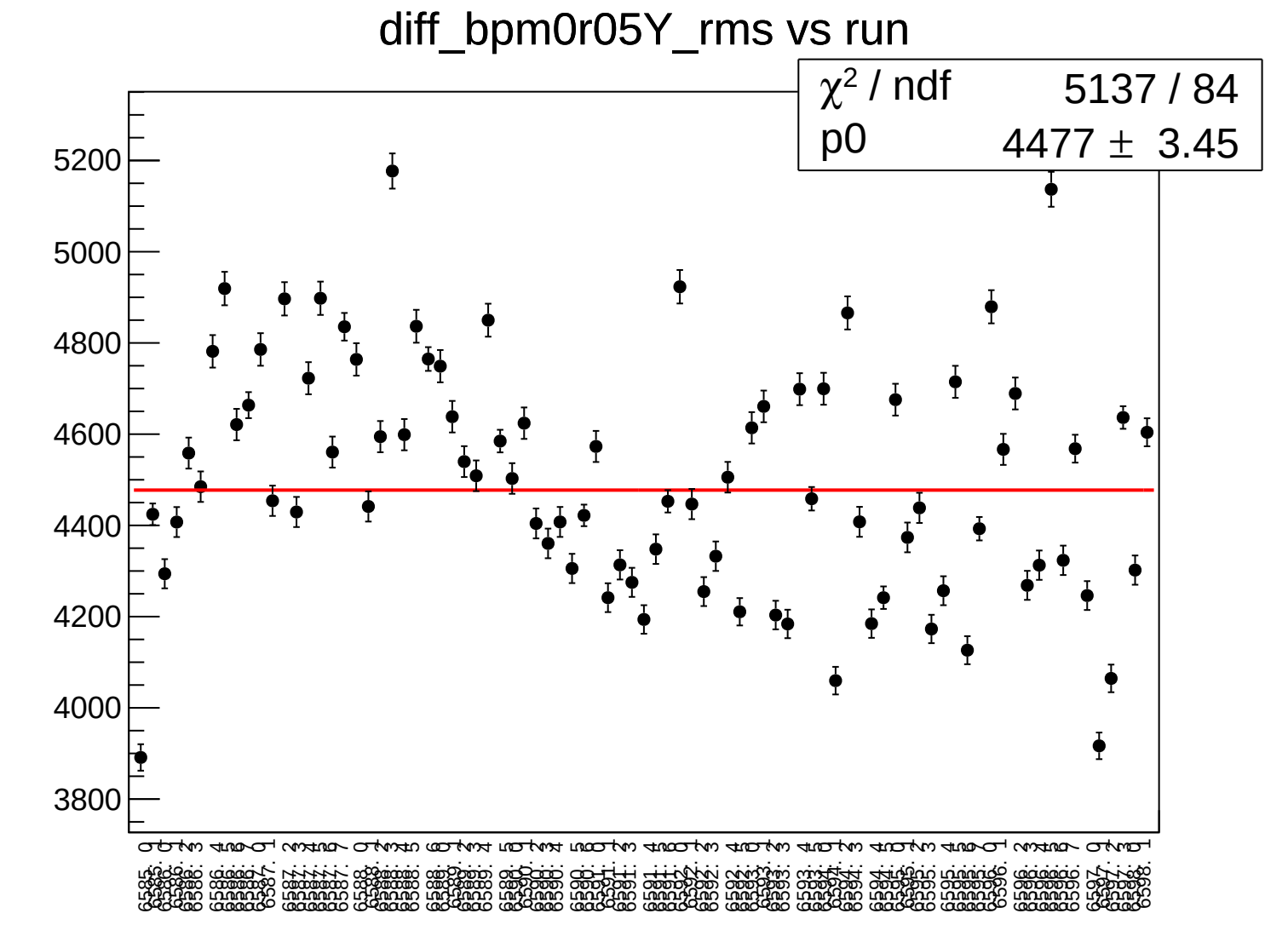

diff_bpm0r03Y_rms vs run
χ² / ndf 1343 / 84
p0 1159 ± 0.8918
1250
1200
1150
1100
1050

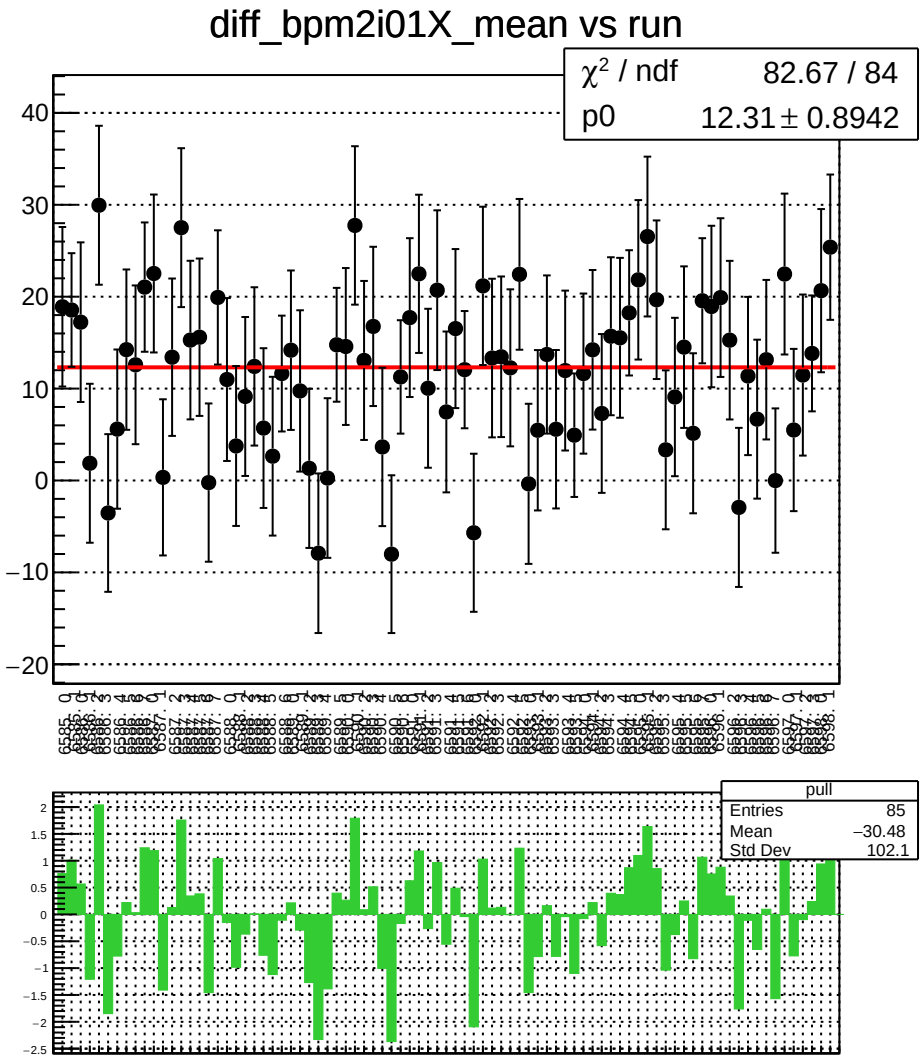

diff_bpm0r05X_mean vs run
χ² / ndf 89.66 / 84
p0 33.9 ± 80.76
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 85
Mean −2096
Std Dev 2147
3
2
1
0
−1
−2

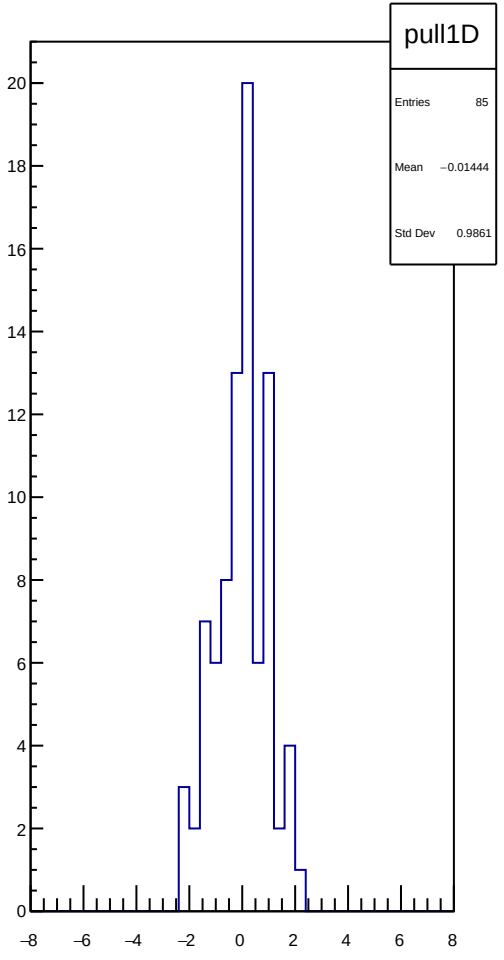

pull1D
Entries 85
Mean 0.001871
Std Dev 1.027
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

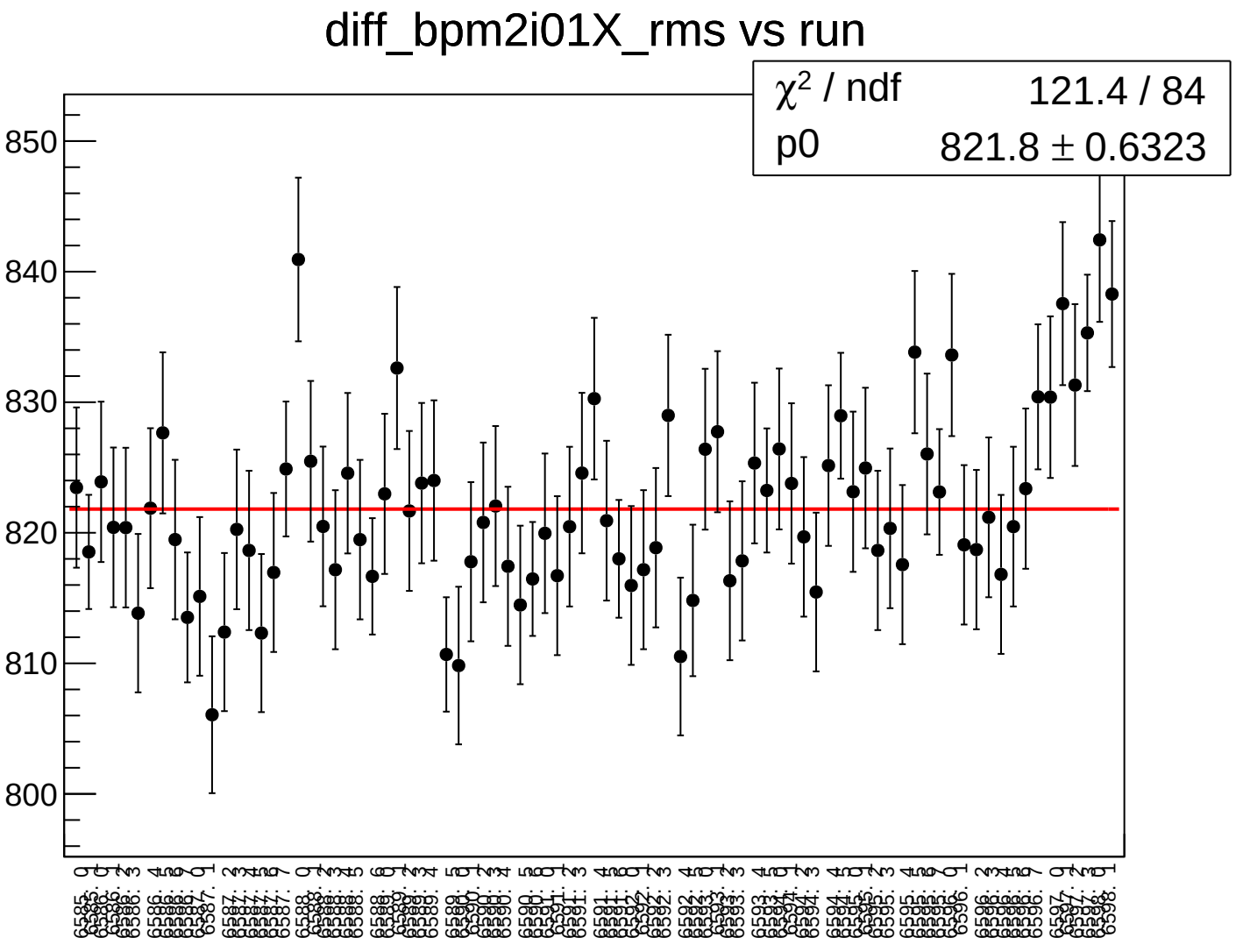

diff_bpm0r05X_rms vs run
χ² / ndf 5086 / 84
p0 7.412e+04 ± 57.11
85000
80000
75000
70000
65000

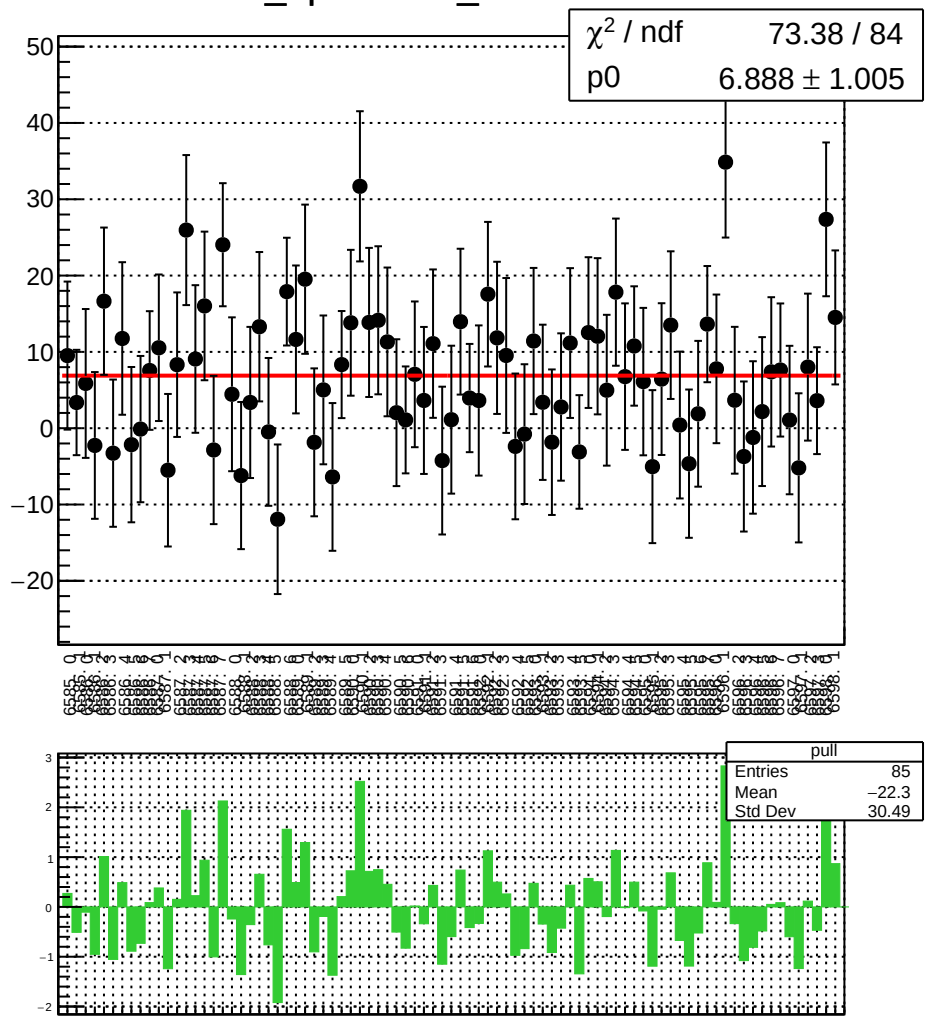

diff_bpm0r05Y_mean vs run
χ² / ndf 94.98 / 84
p0 −6.396 ± 4.879
pull
Entries 85
Mean −645.6
Std Dev 697.7
pull1D
Entries 85
Mean 0.006221
Std Dev 1.057

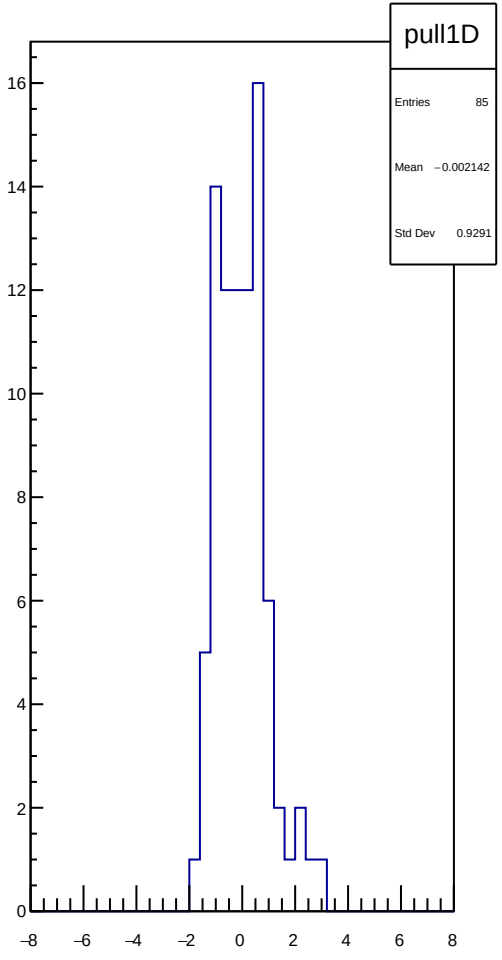

diff_bpm0r05Y_rms vs run
χ² / ndf 5137 / 84
p0 4477 ± 3.45
5200
5000
4800
4600
4400
4200
4000
3800

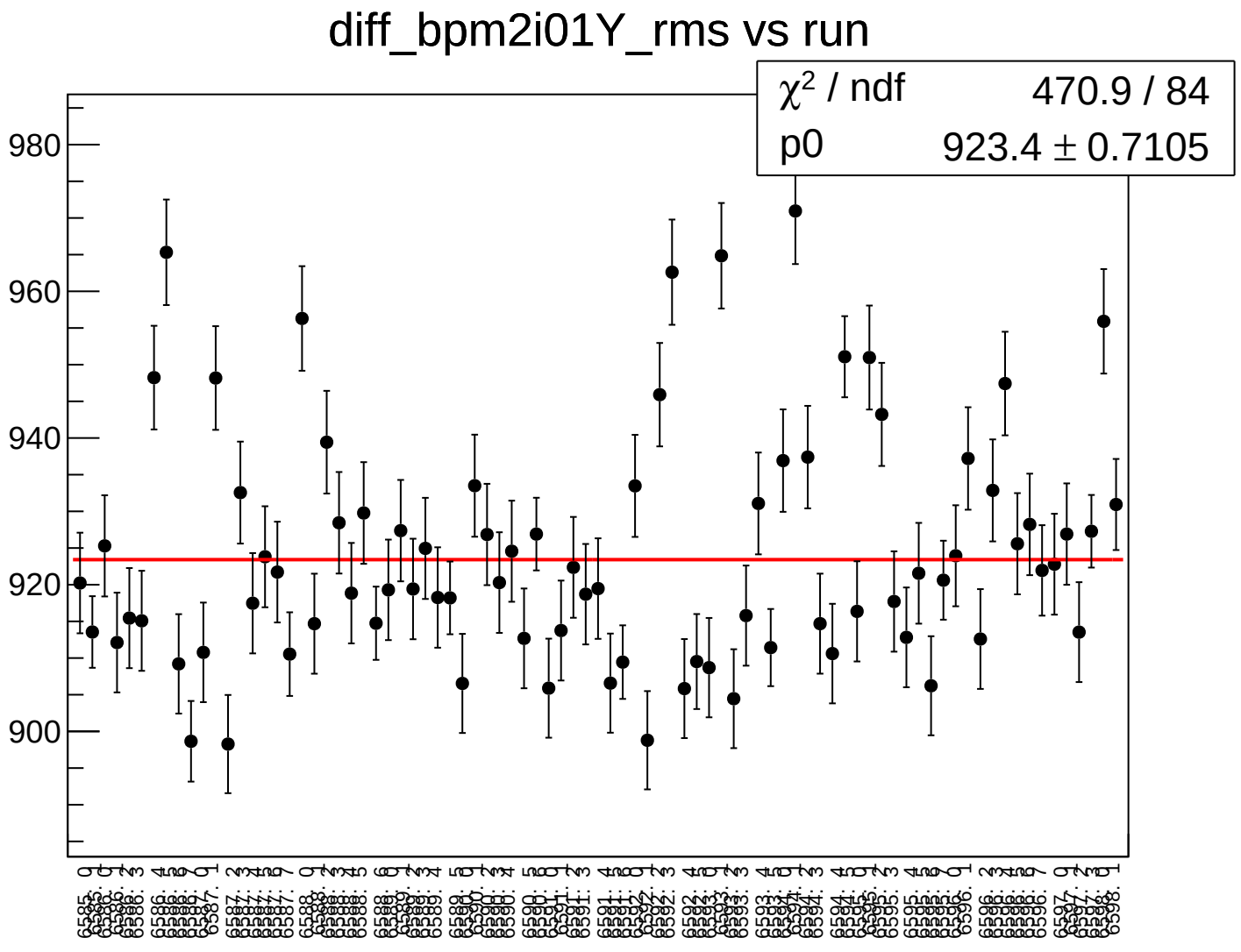

diff_bpm2i01X_mean vs run
χ^2 / ndf 82.67 / 84
p0 12.31 ± 0.8942
pull
Entries 85
Mean −30.48
Std Dev 102.1

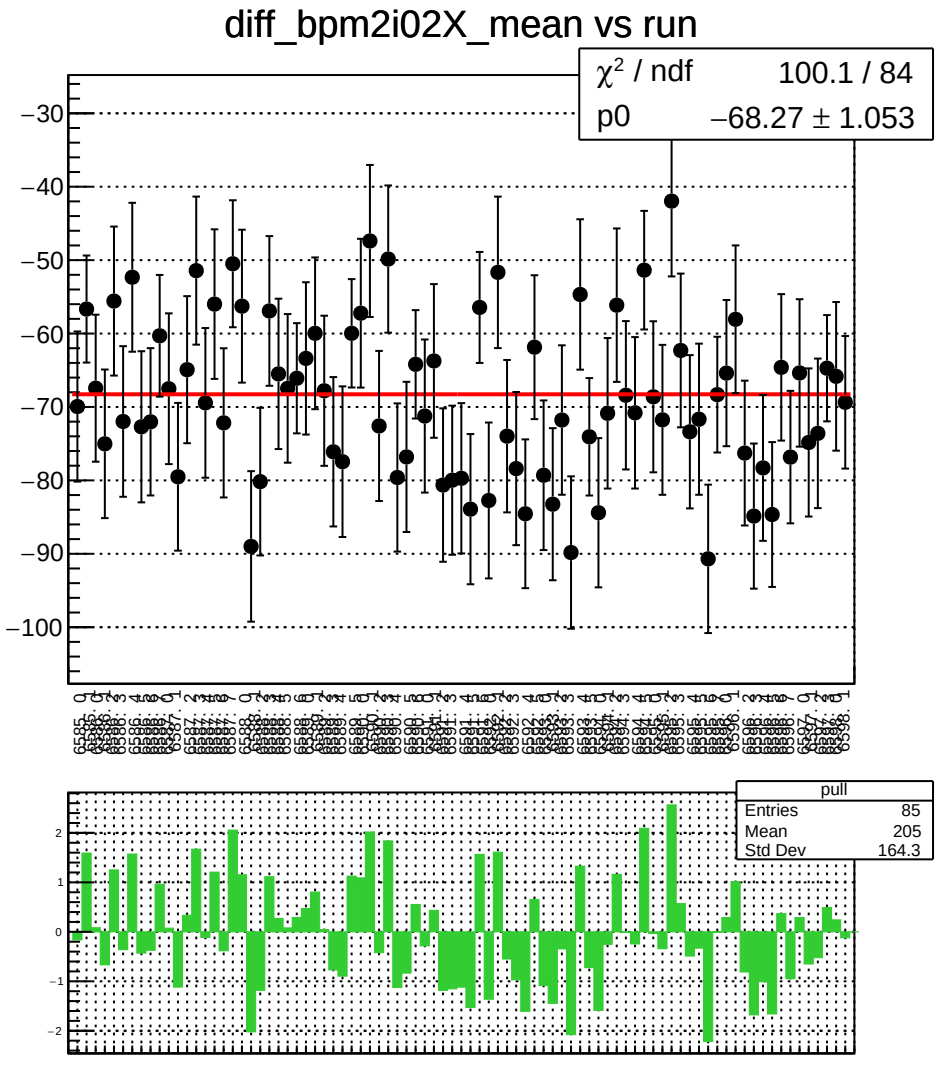

pull1D
Entries 85
Mean −0.01444
Std Dev 0.9861

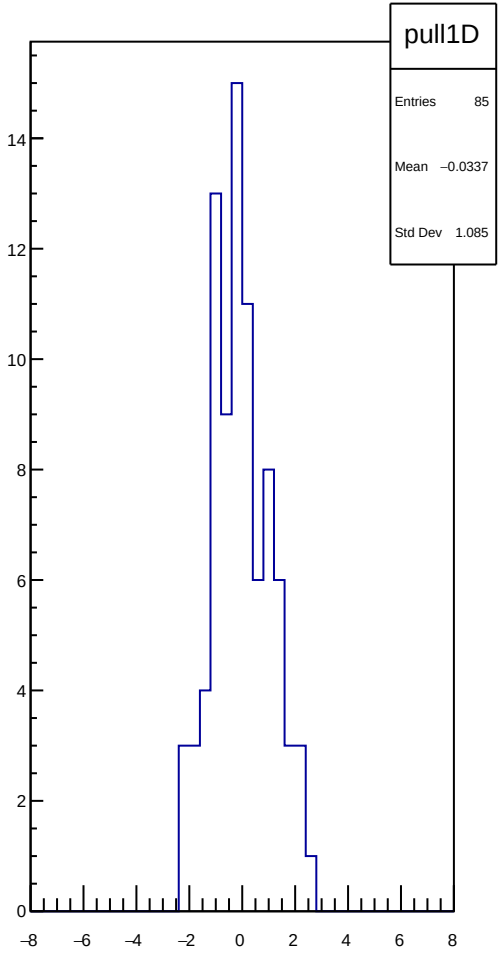

diff_bpm2i01X_rms vs run
χ² / ndf 121.4 / 84
p0 821.8 ± 0.6323
850
840
830
820
810
800

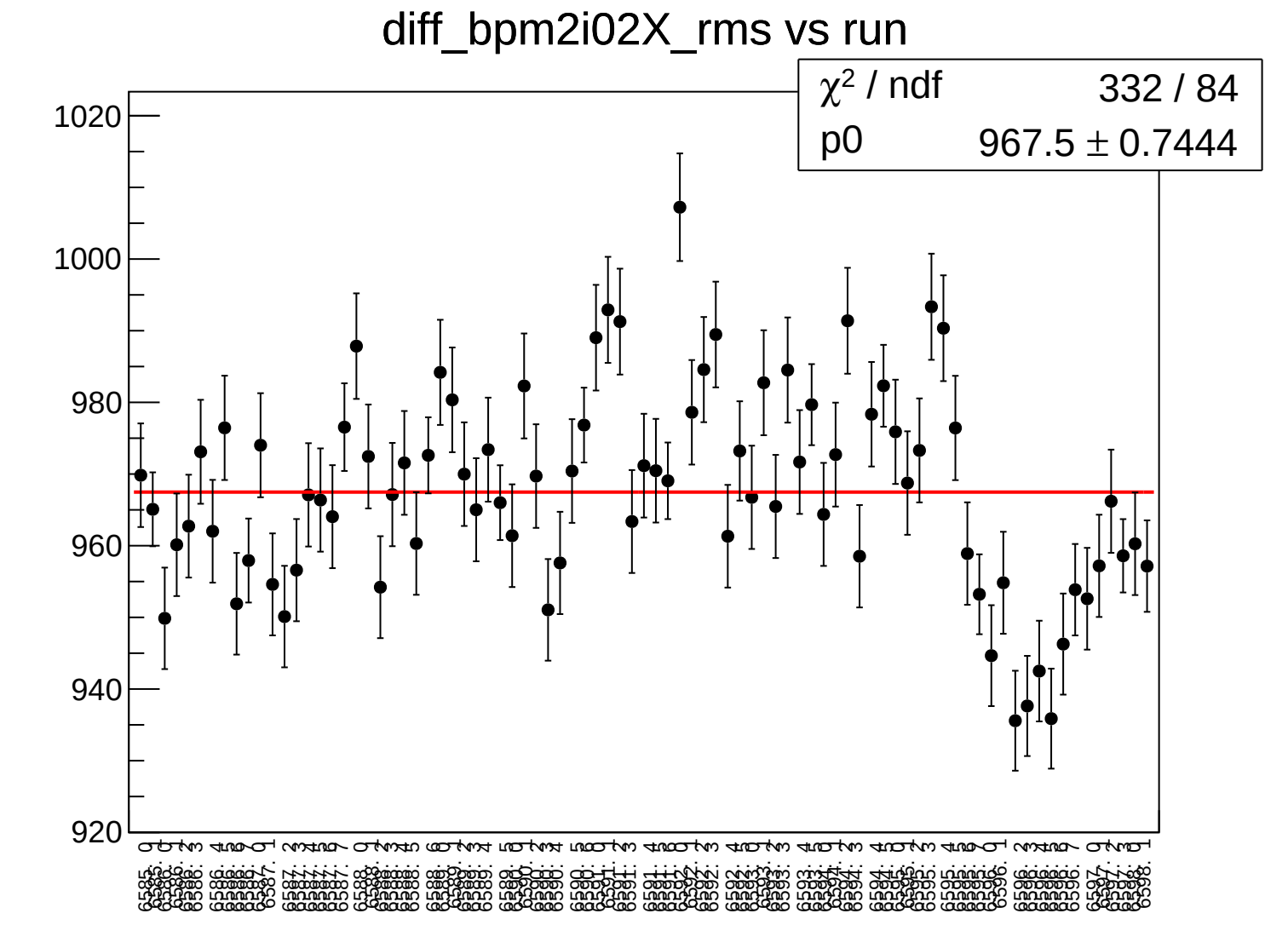

diff_bpm2i01Y_mean vs run
χ² / ndf 73.38 / 84
p0 6.888 ± 1.005
pull
Entries 85
Mean −22.3
Std Dev 30.49

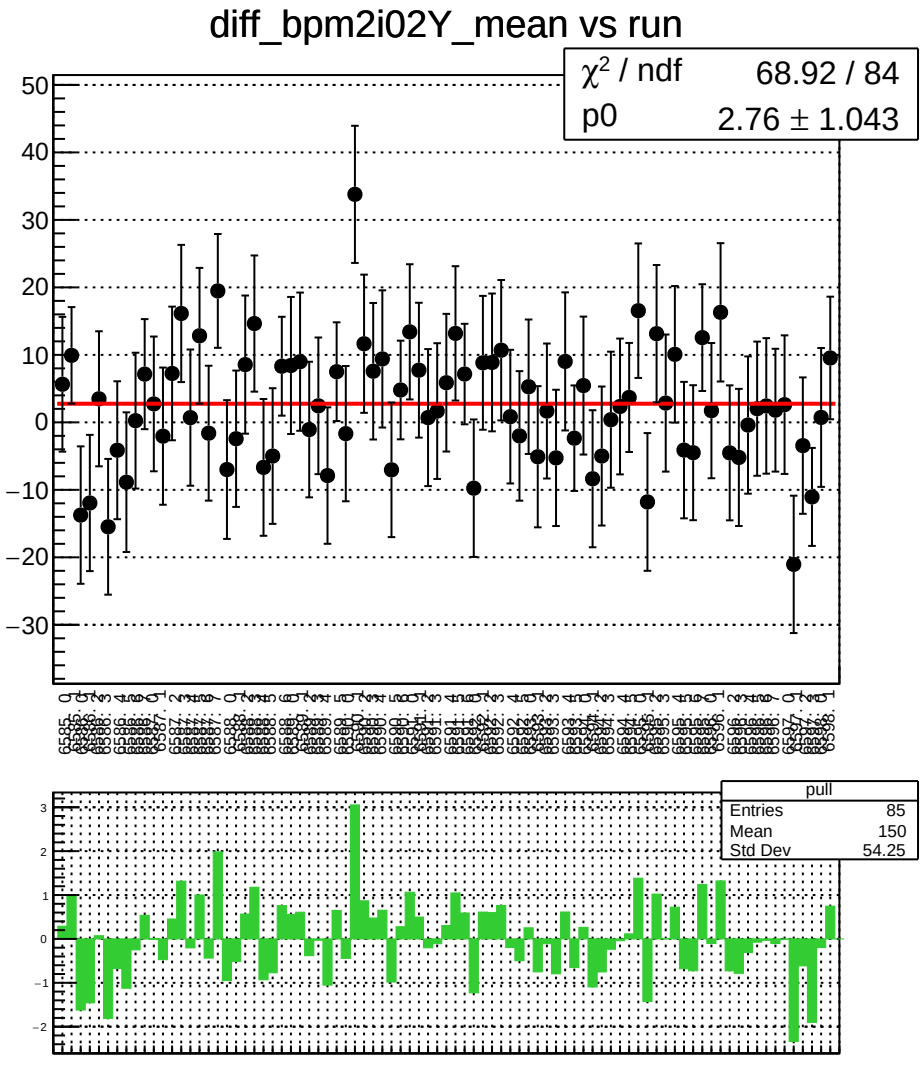

pull1D
Entries 85
Mean −0.002142
Std Dev 0.9291

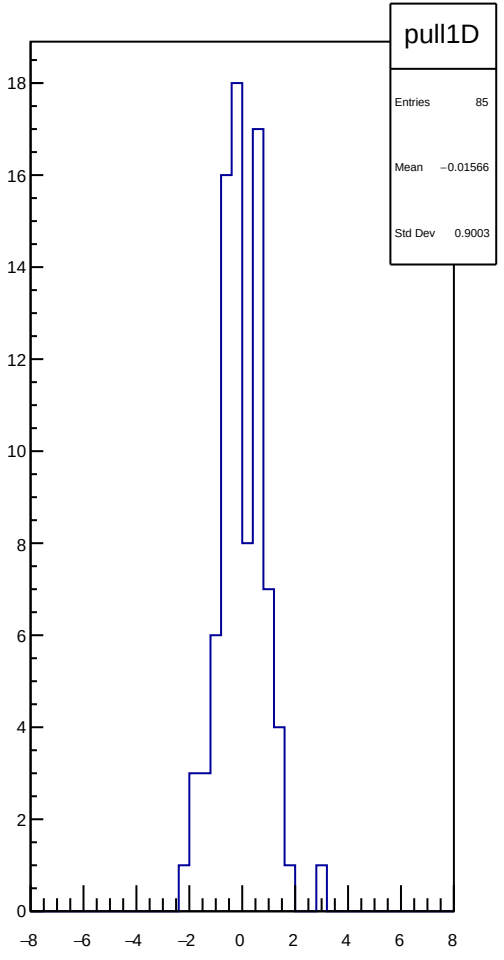

diff_bpm2i01Y_rms vs run
χ² / ndf 470.9 / 84
p0 923.4 ± 0.7105
980
960
940
920
900

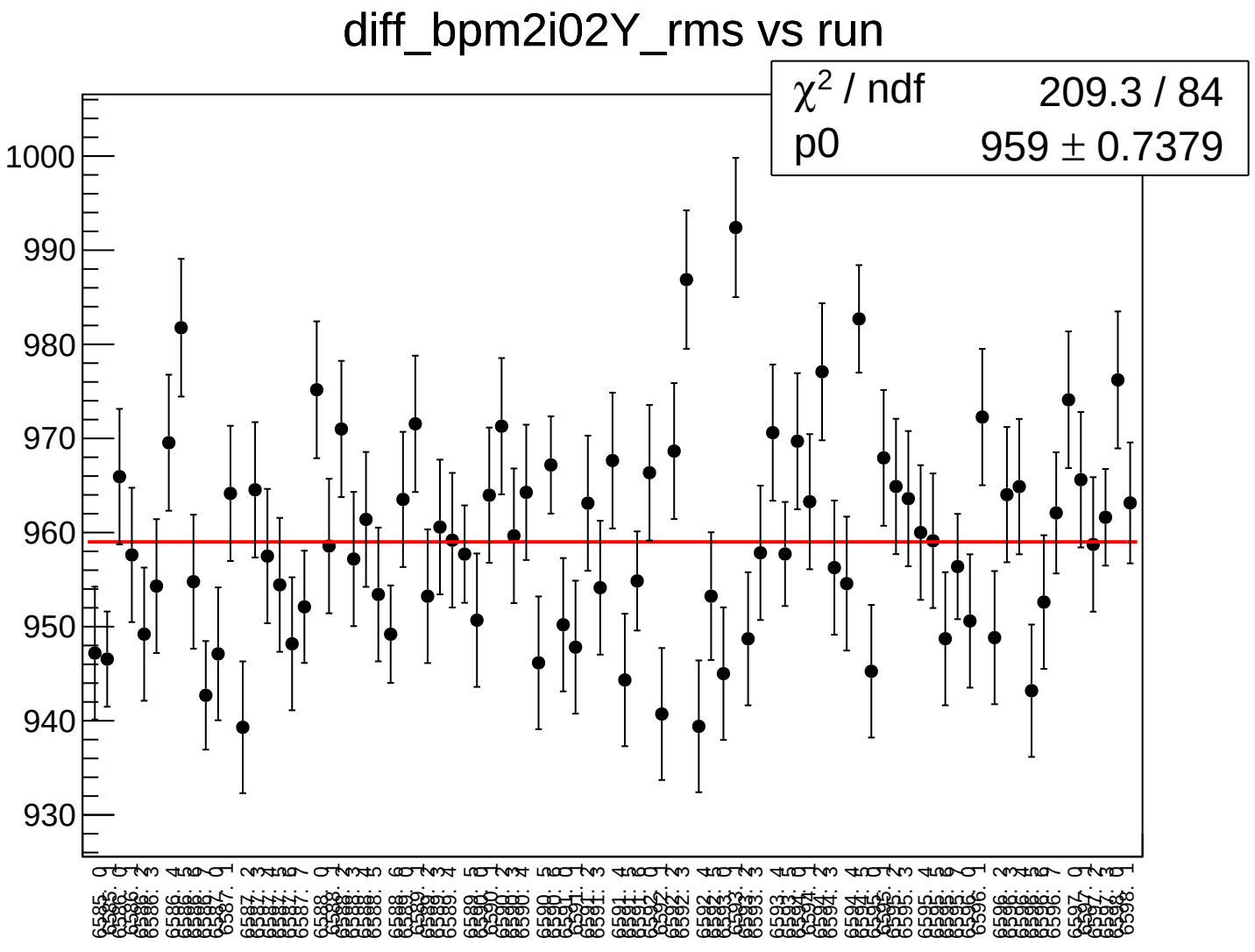

diff_bpm2i02X_mean vs run
χ² / ndf 100.1 / 84
p0 −68.27 ± 1.053
pull
Entries 85
Mean 205
Std Dev 164.3

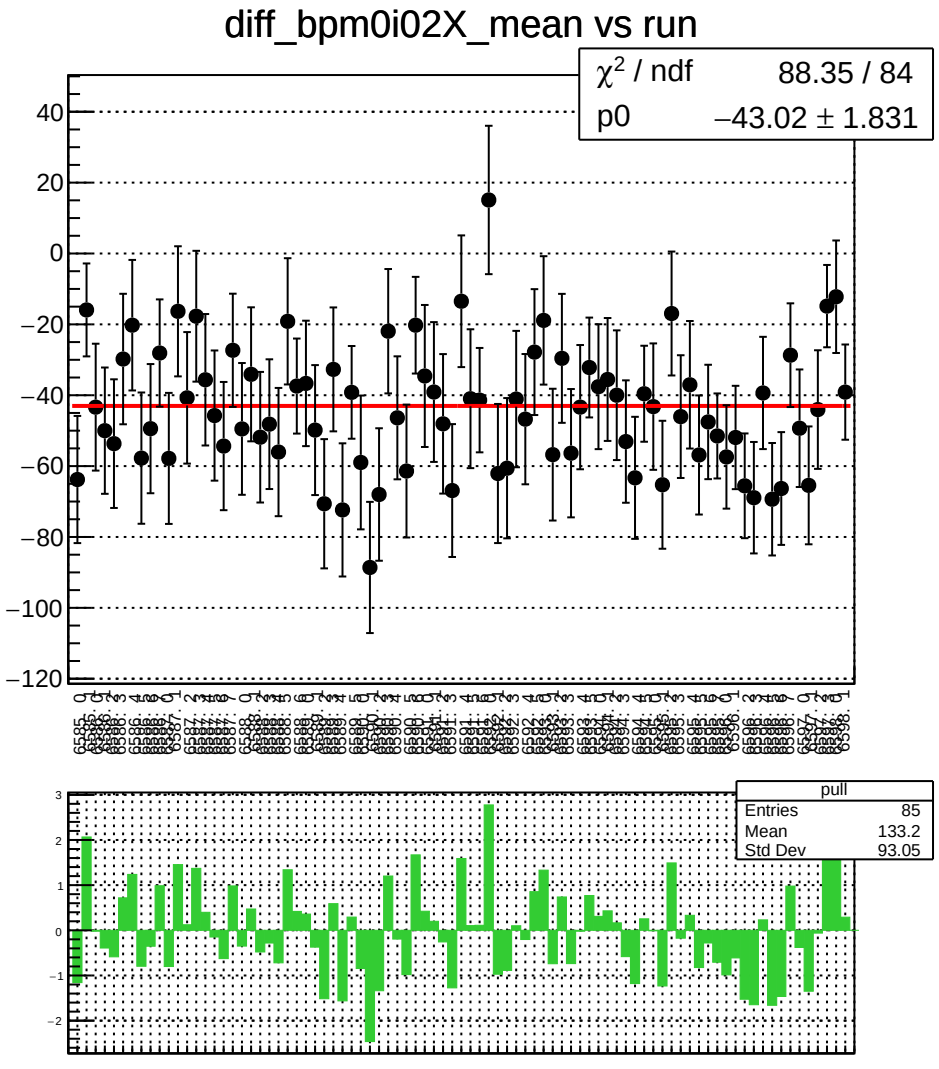

pull1D
Entries 85
Mean −0.0337
Std Dev 1.085

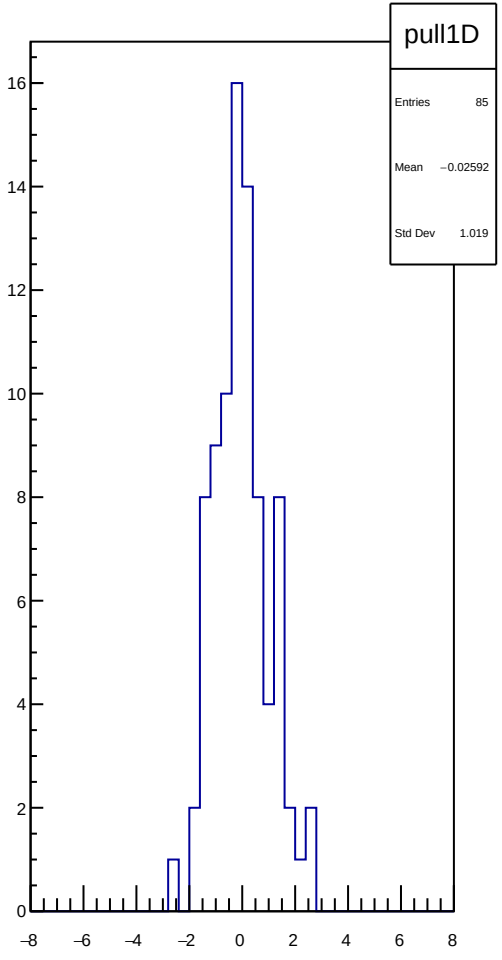

diff_bpm2i02X_rms vs run
χ² / ndf 332 / 84
p0 967.5 ± 0.7444
1020
1000
980
960
940
920

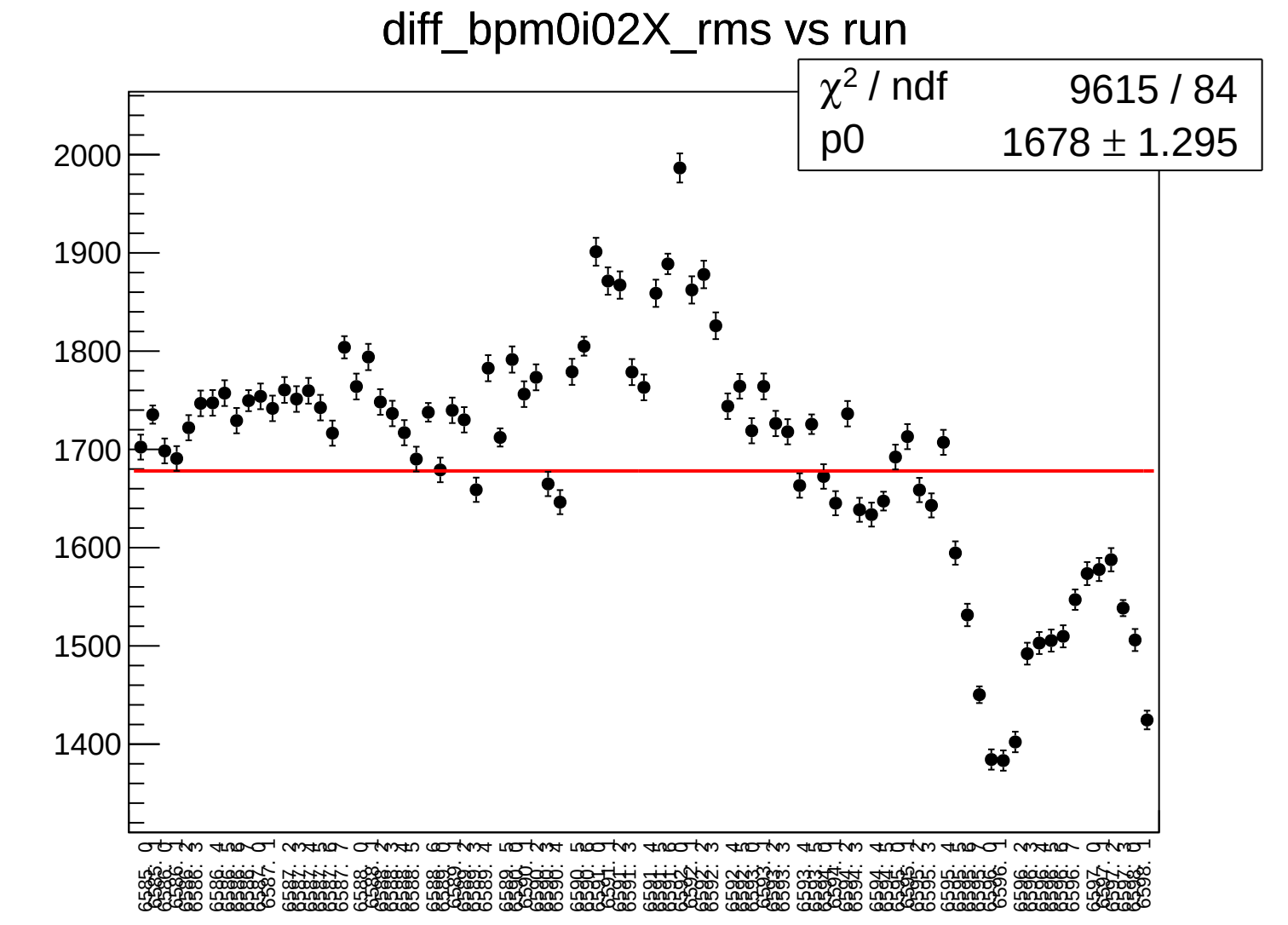

diff_bpm2i02Y_mean vs run
χ² / ndf 68.92 / 84
p0 2.76 ± 1.043
pull
Entries 85
Mean 150
Std Dev 54.25

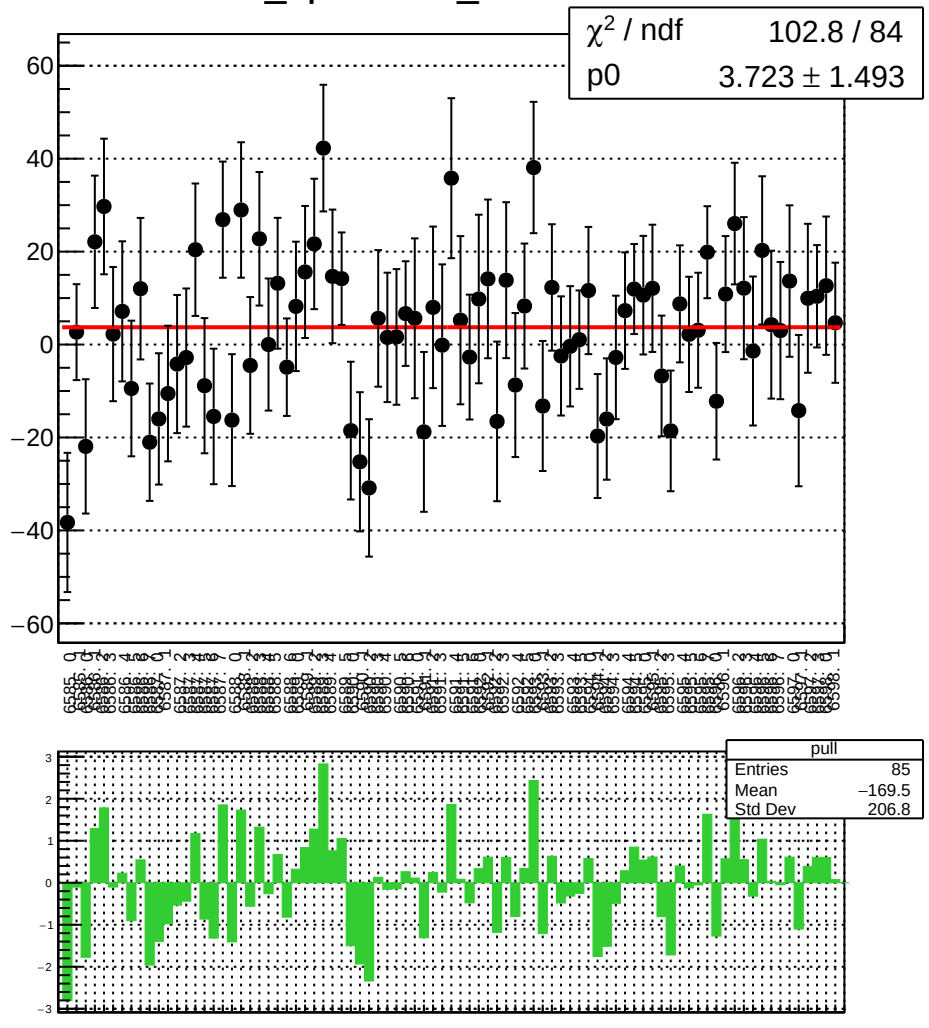

pull1D
Entries 85
Mean −0.01566
Std Dev 0.9003

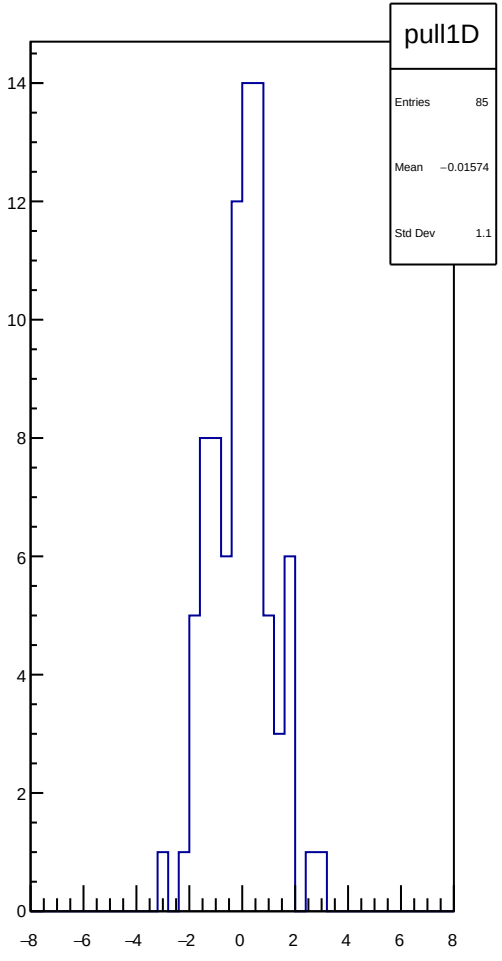

diff_bpm2i02Y_rms vs run
χ² / ndf 209.3 / 84
p0 959 ± 0.7379
1000
990
980
970
960
950
940
930

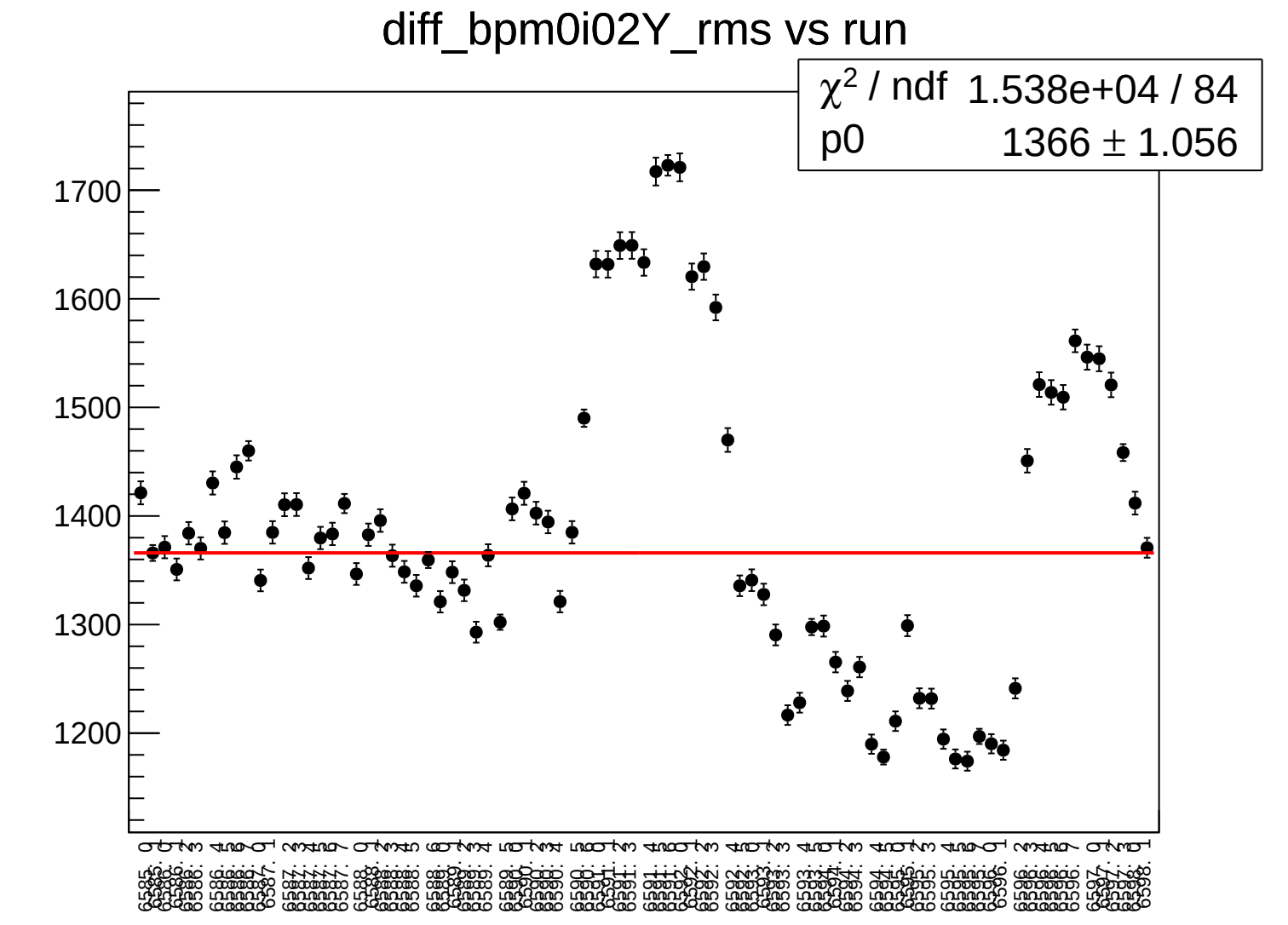

diff_bpm0i02X_mean vs run
χ² / ndf 88.35 / 84
p0 −43.02 ± 1.831
pull
Entries 85
Mean 133.2
Std Dev 93.05

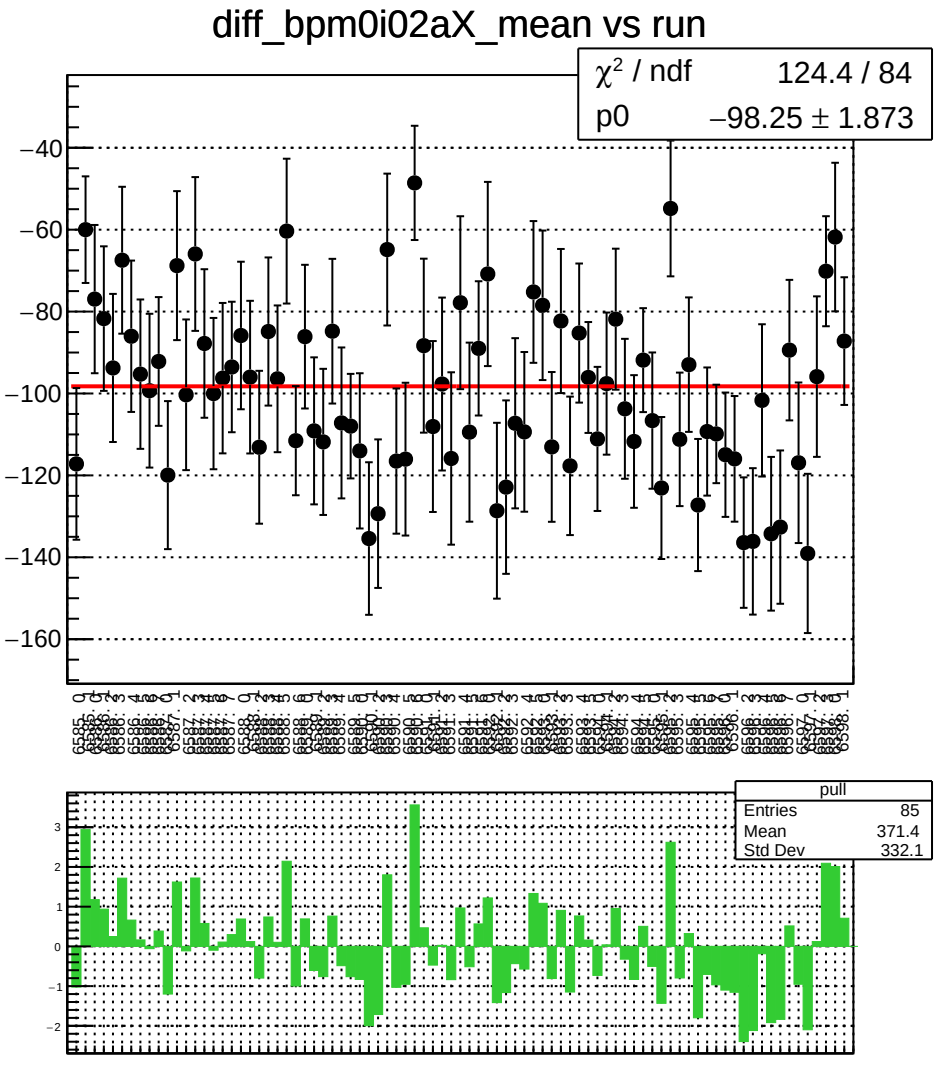

pull1D
Entries 85
Mean −0.02592
Std Dev 1.019

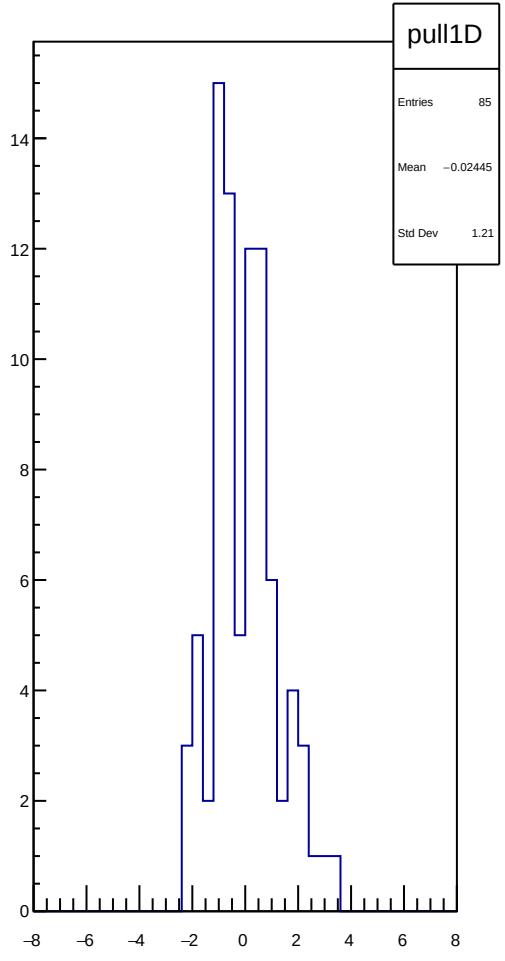

diff_bpm0i02X_rms vs run
χ² / ndf 9615 / 84
p0 1678 ± 1.295
2000
1900
1800
1700
1600
1500
1400

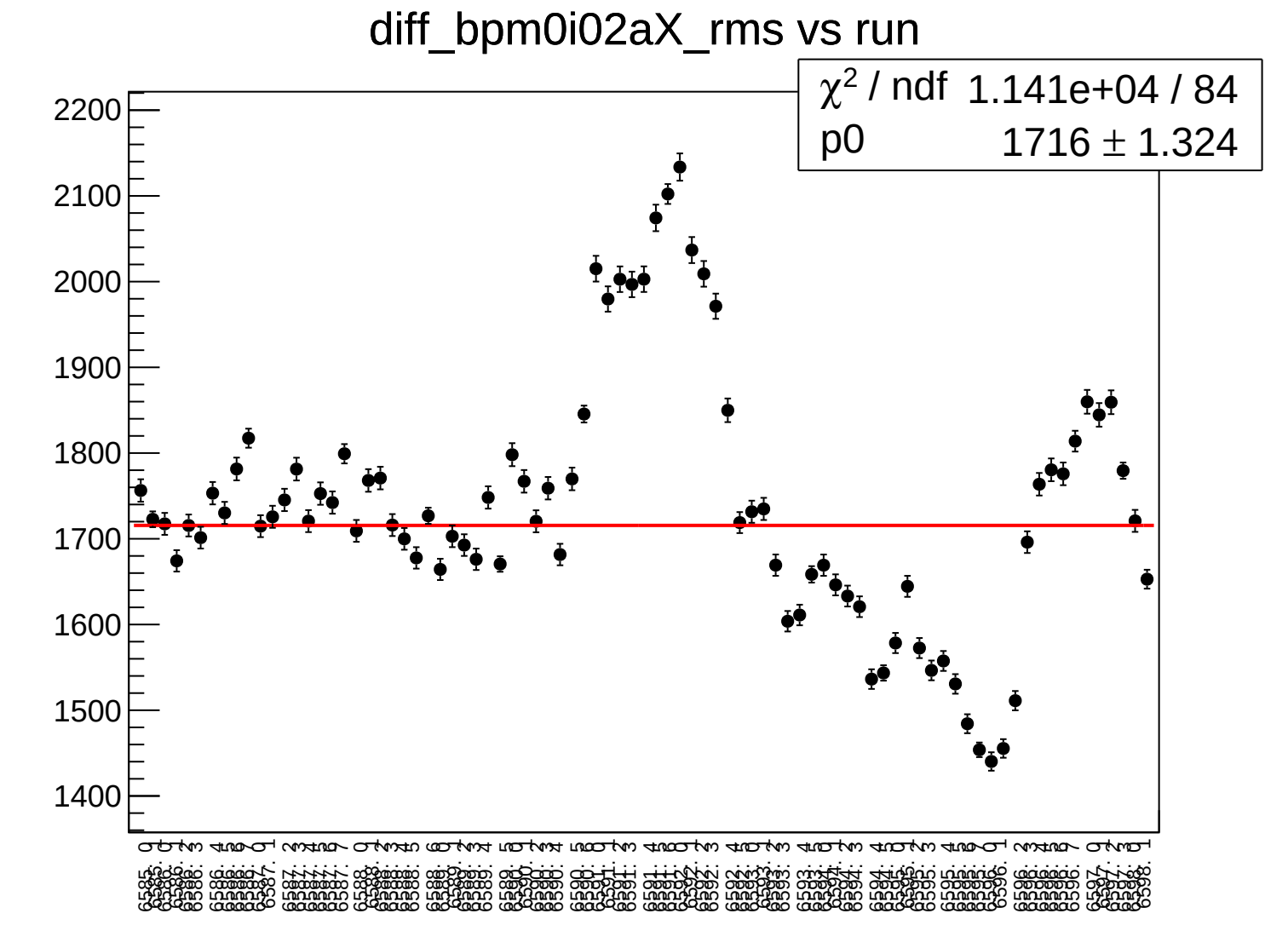

diff_bpm0i02Y_mean vs run
χ² / ndf 102.8 / 84
p0 3.723 ± 1.493
pull
Entries 85
Mean −169.5
Std Dev 206.8

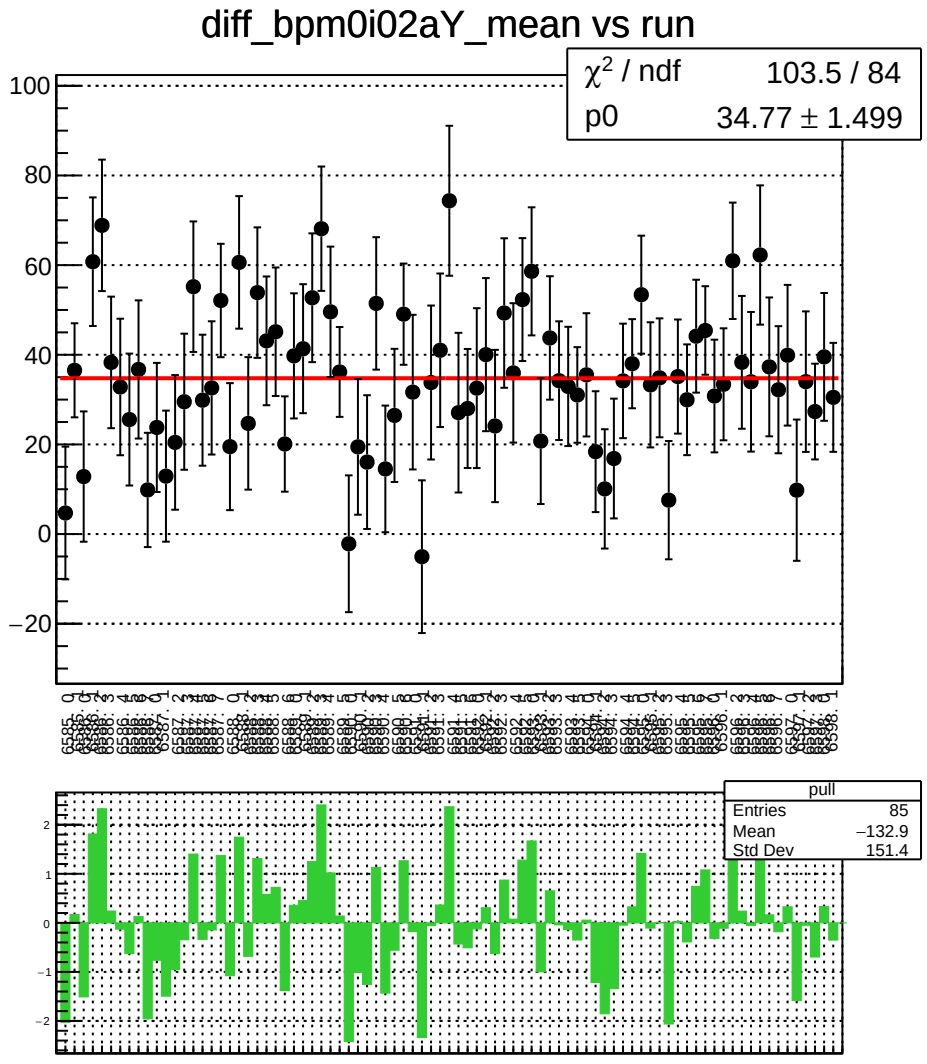

pull1D
Entries 85
Mean −0.01574
Std Dev 1.1

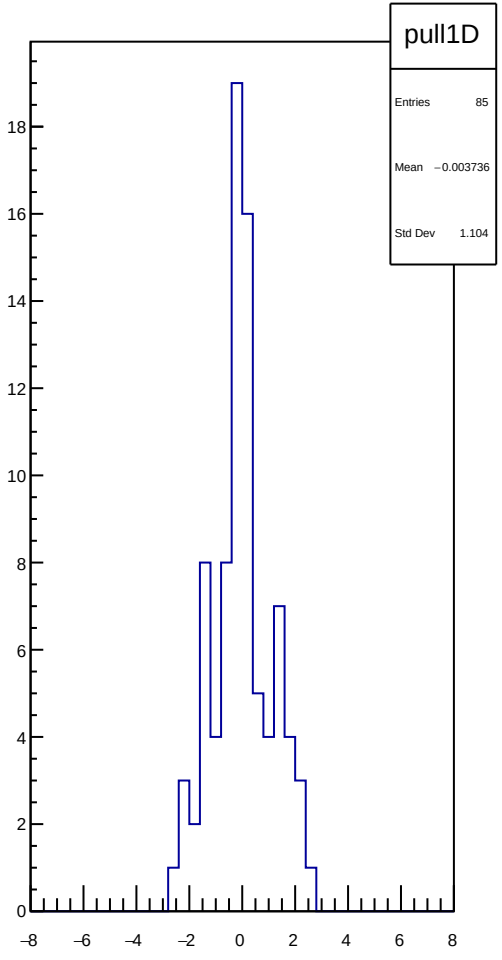

diff_bpm0i02Y_rms vs run
χ² / ndf 1.538e+04 / 84
p0 1366 ± 1.056
1700
1600
1500
1400
1300
1200

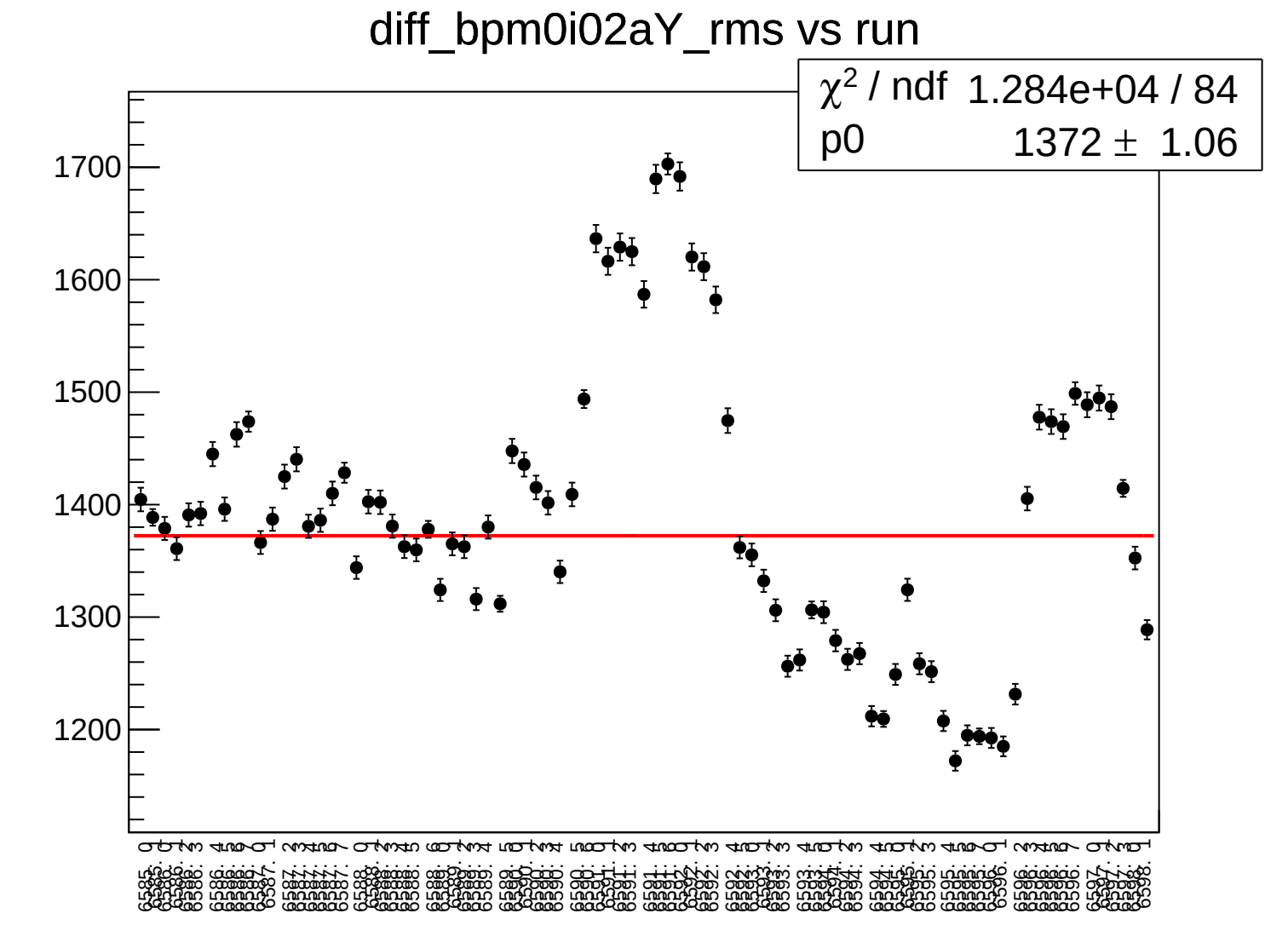

diff_bpm0i02aX_mean vs run
χ² / ndf 124.4 / 84
p0 −98.25 ± 1.873
−40
−60
−80
−100
−120
−140
−160
pull
Entries 85
Mean 371.4
Std Dev 332.1
3
2
1
0
−1
−2

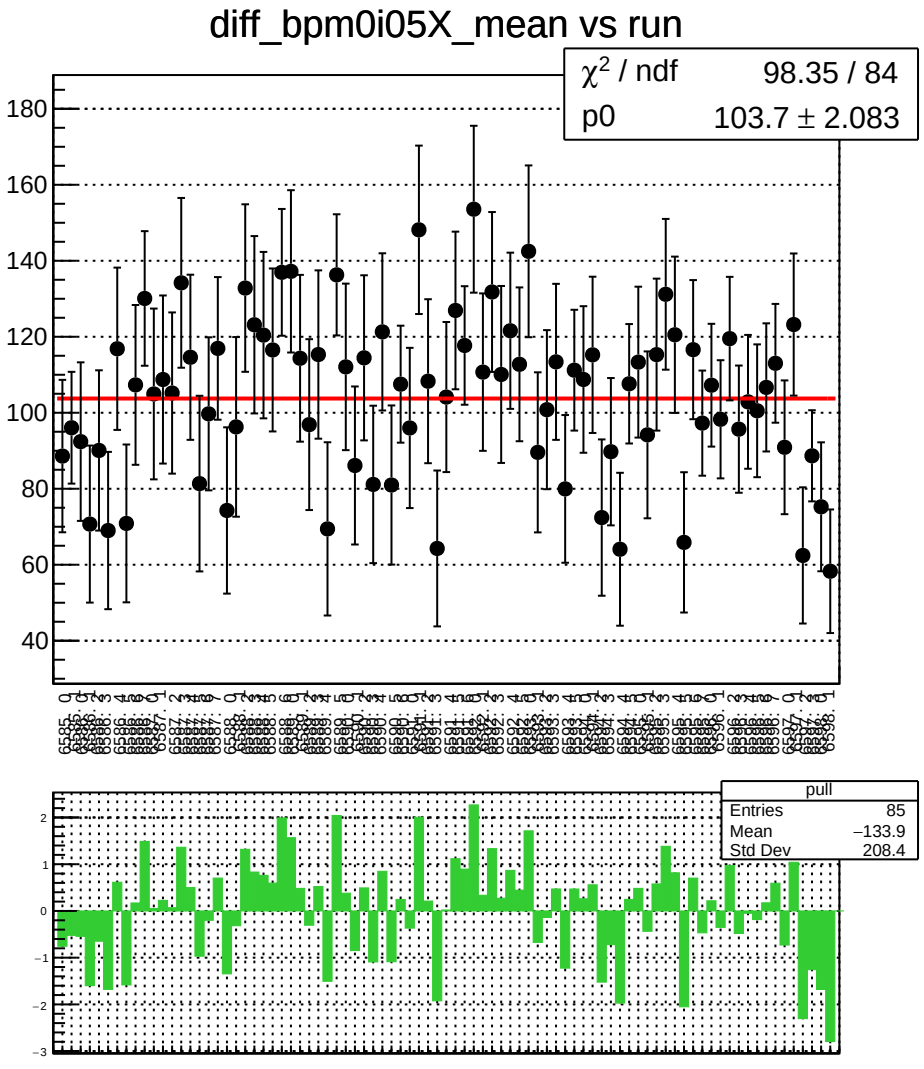

pull1D
Entries 85
Mean −0.02445
Std Dev 1.21
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

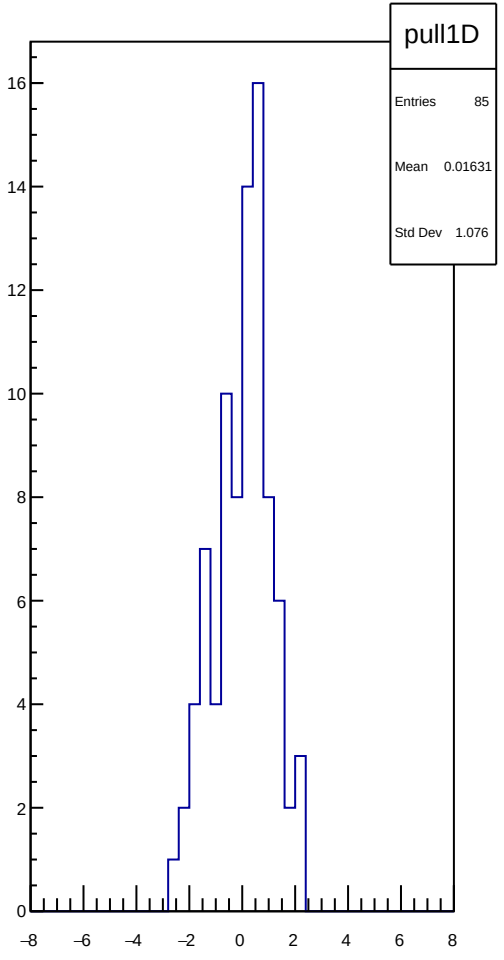

diff_bpm0i02aX_rms vs run
χ² / ndf 1.141e+04 / 84
p0 1716 ± 1.324
2200
2100
2000
1900
1800
1700
1600
1500
1400

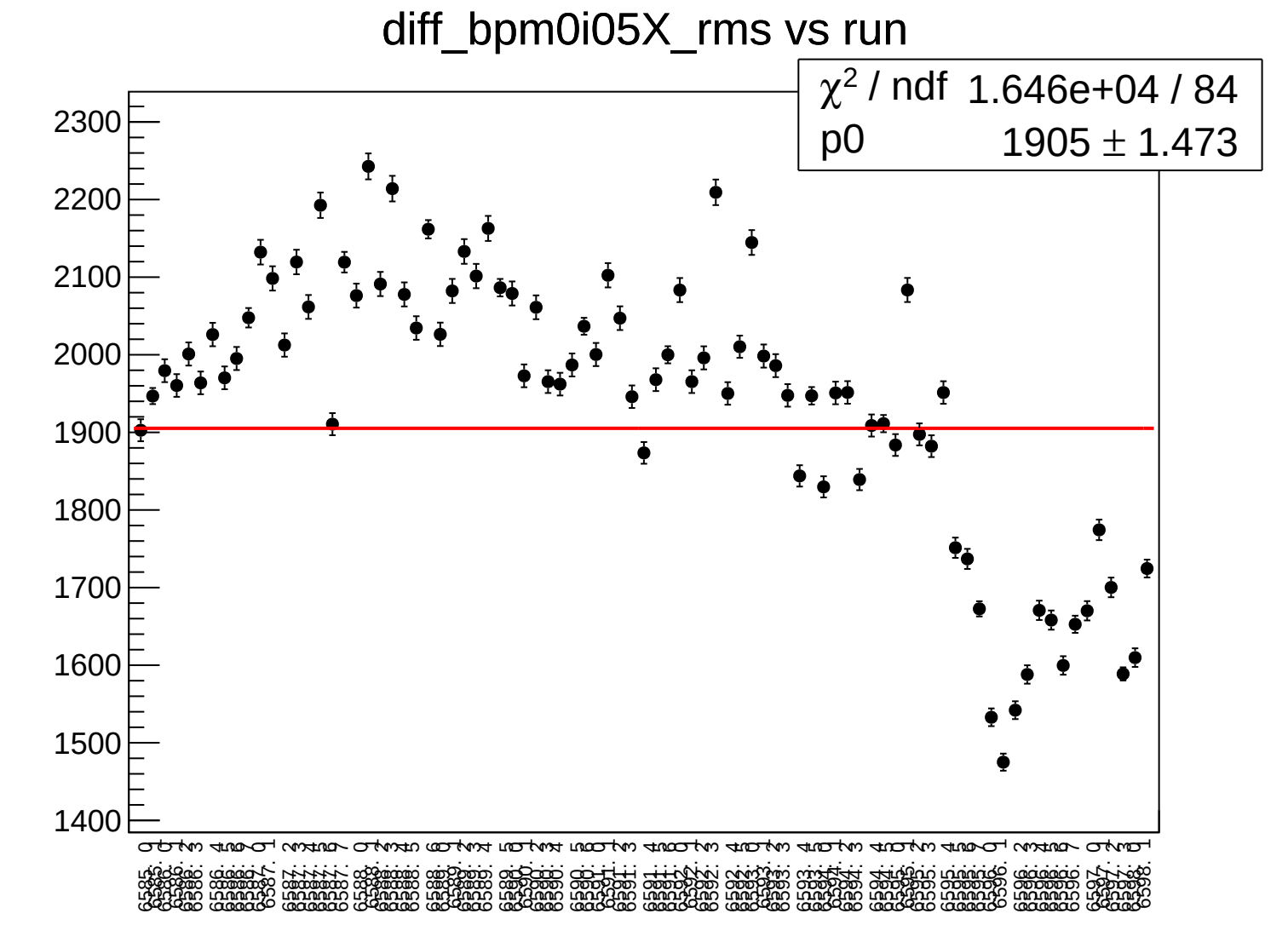

diff_bpm0i02aY_mean vs run
χ² / ndf 103.5 / 84
p0 34.77 ± 1.499
pull
Entries 85
Mean −132.9
Std Dev 151.4

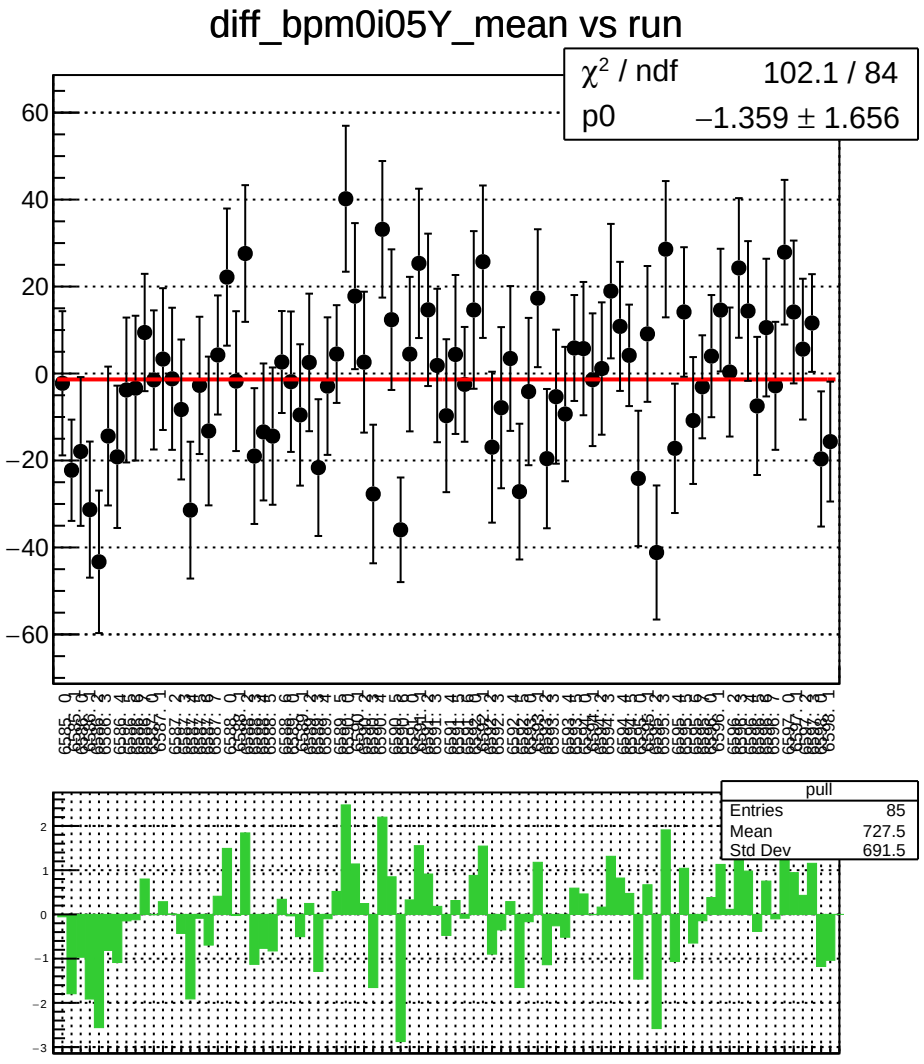

pull1D
Entries 85
Mean −0.003736
Std Dev 1.104

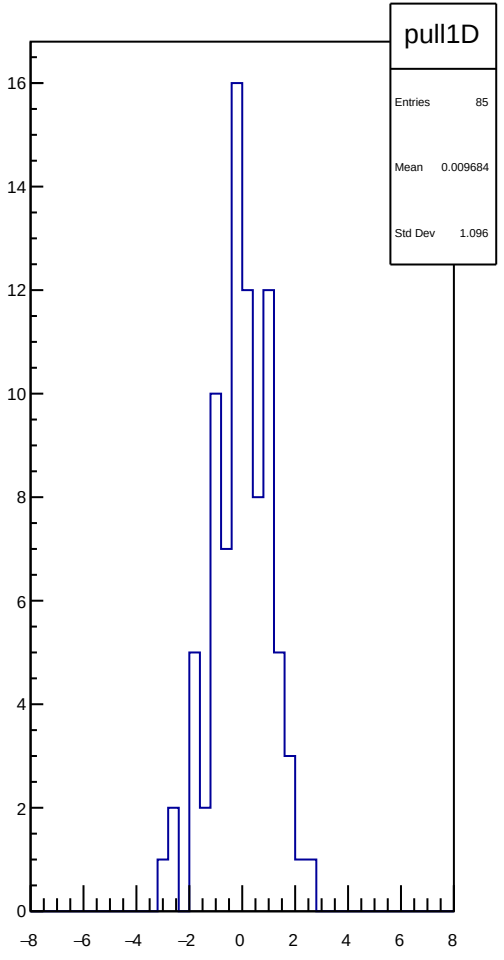

diff_bpm0i02aY_rms vs run
χ² / ndf 1.284e+04 / 84
p0 1372 ± 1.06
1700
1600
1500
1400
1300
1200

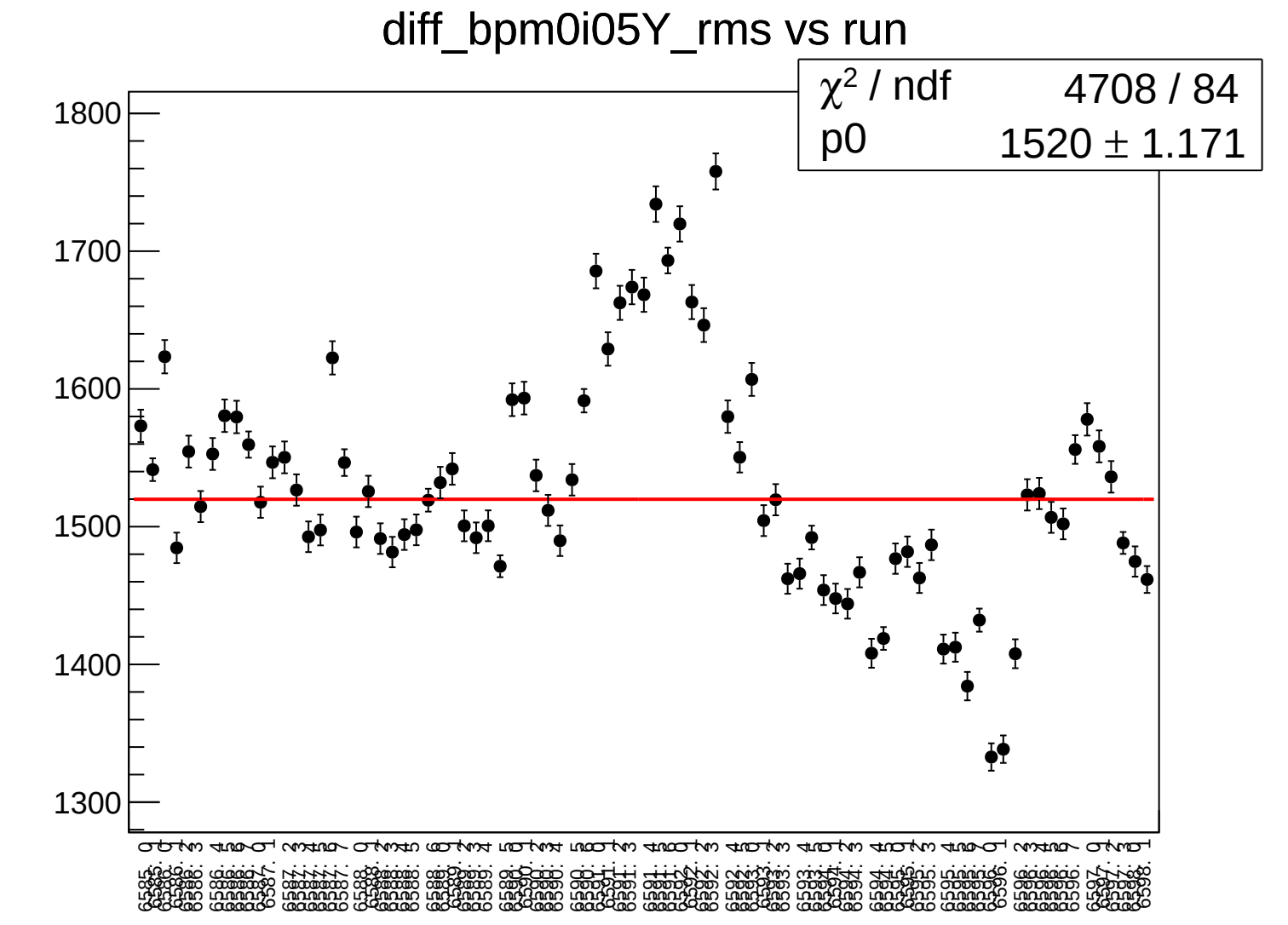

diff_bpm0i05X_mean vs run
χ² / ndf 98.35 / 84
p0 103.7 ± 2.083
pull
Entries 85
Mean −133.9
Std Dev 208.4

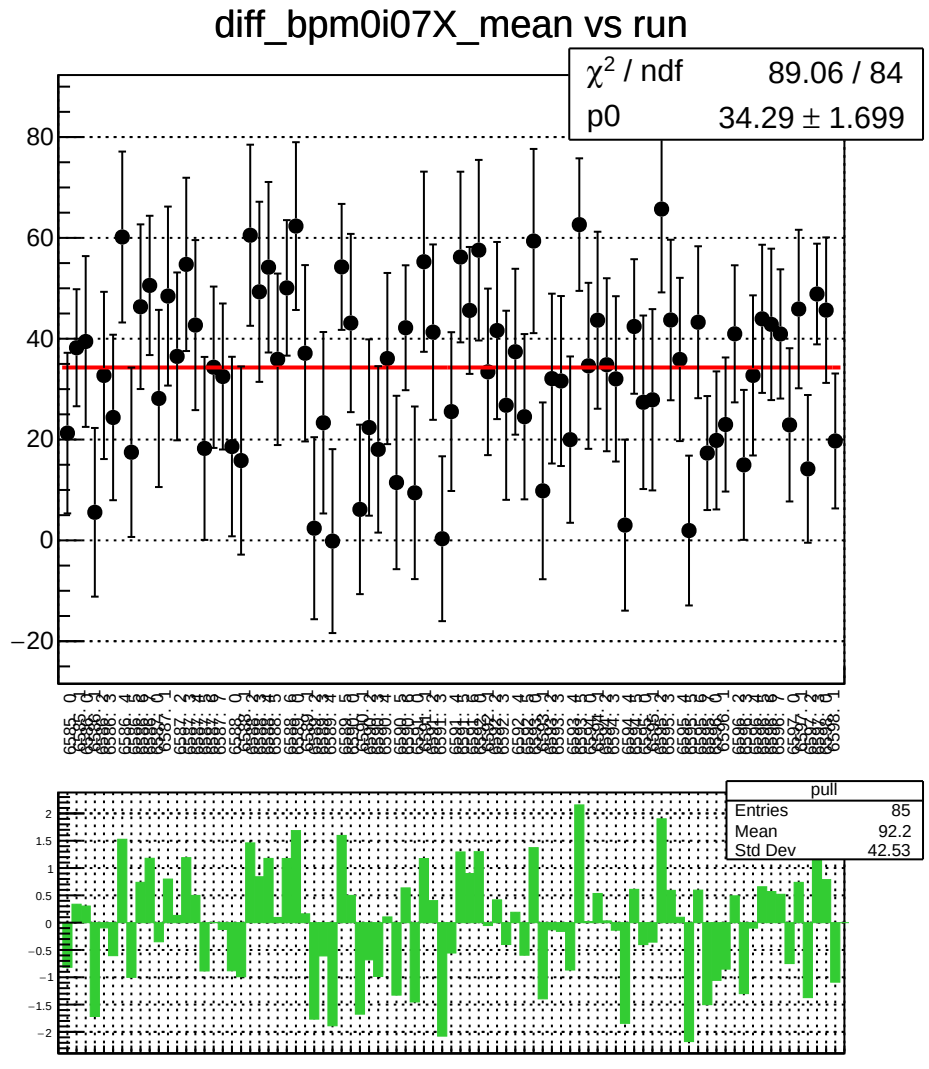

pull1D
Entries 85
Mean 0.01631
Std Dev 1.076

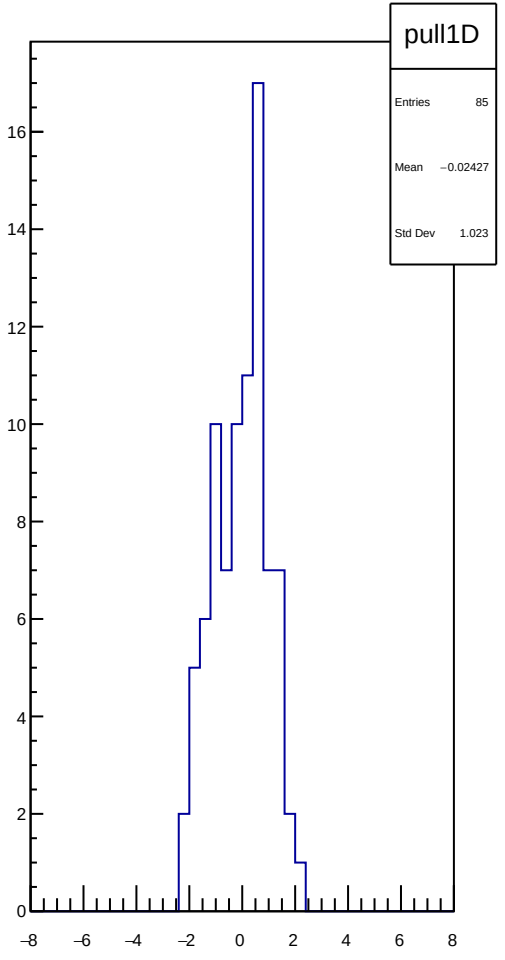

diff_bpm0i05X_rms vs run
χ² / ndf 1.646e+04 / 84
p0 1905 ± 1.473
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400

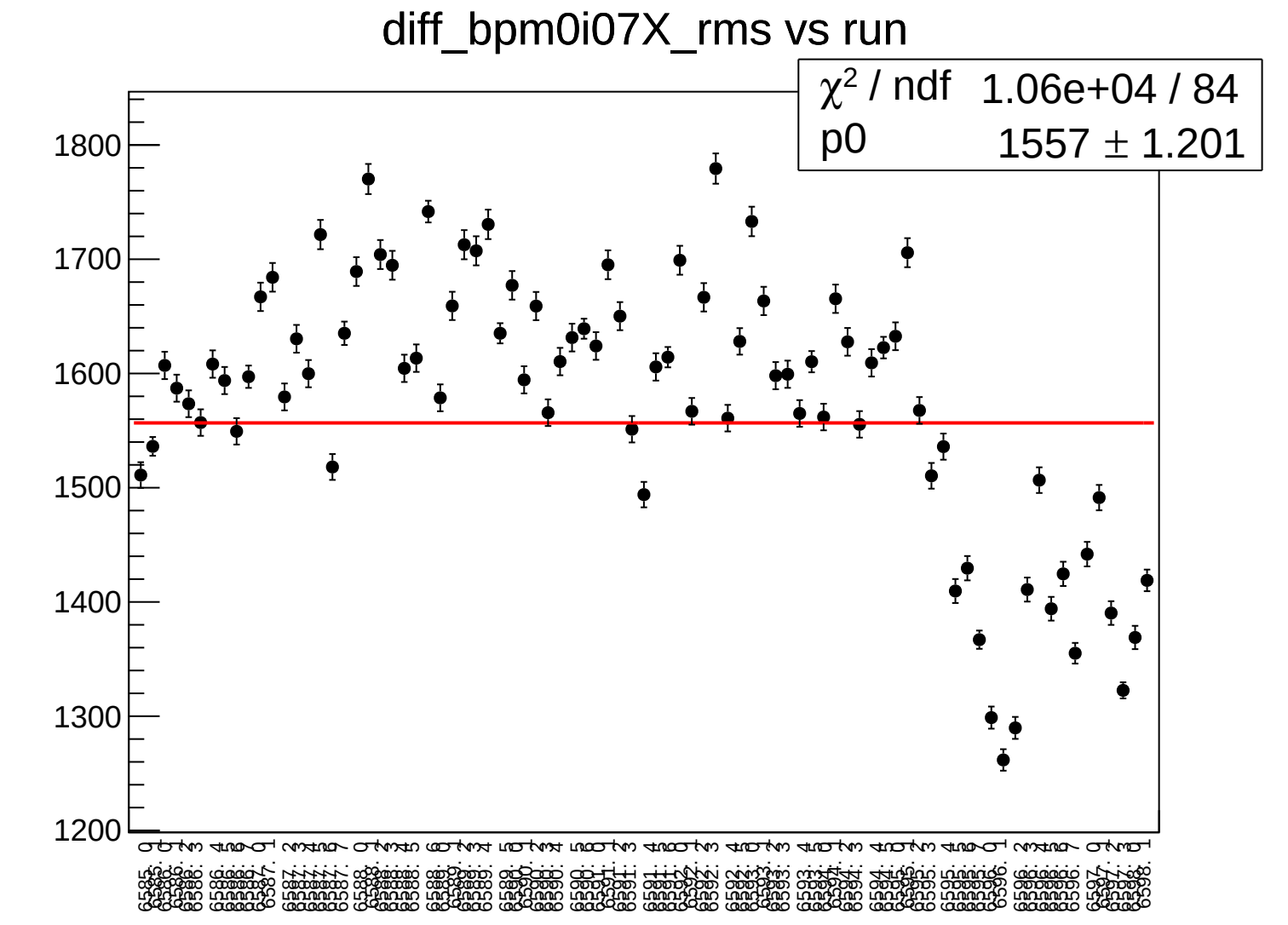

diff_bpm0i05Y_mean vs run
χ² / ndf 102.1 / 84
p0 −1.359 ± 1.656
pull
Entries 85
Mean 727.5
Std Dev 691.5

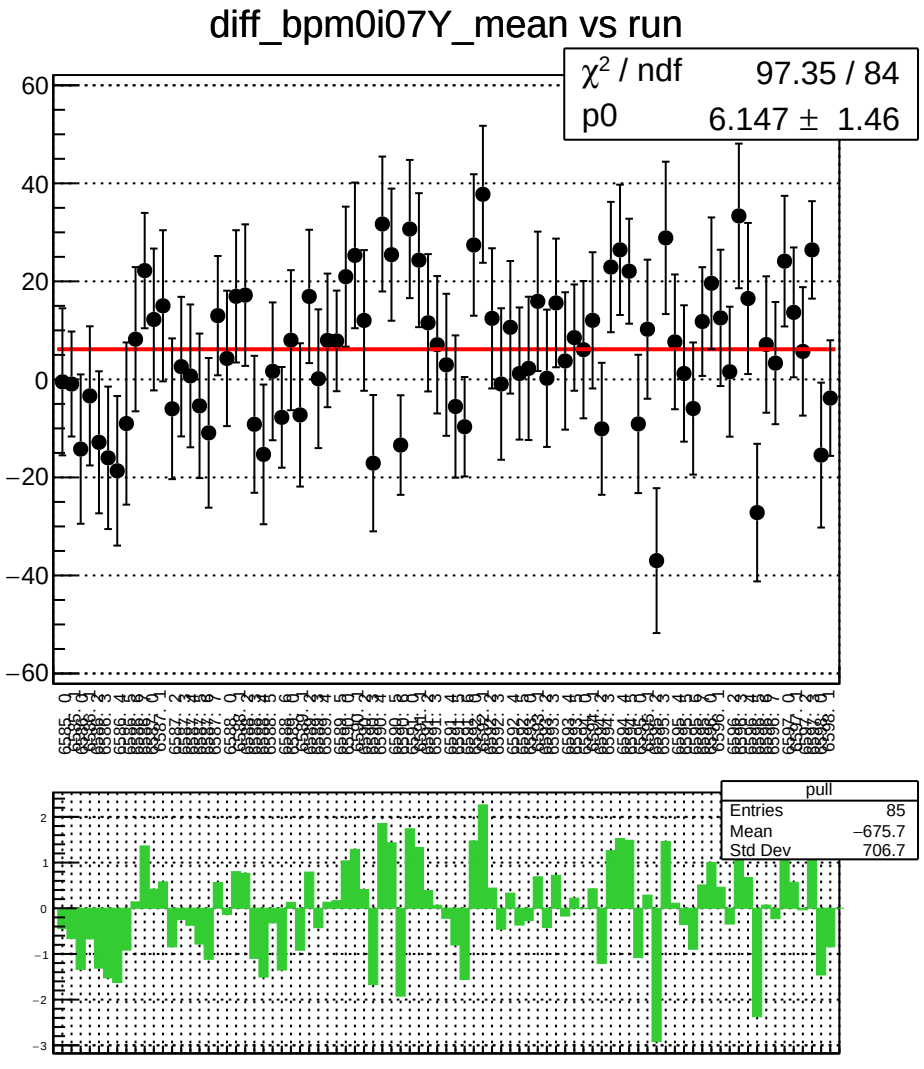

pull1D
Entries 85
Mean 0.009684
Std Dev 1.096

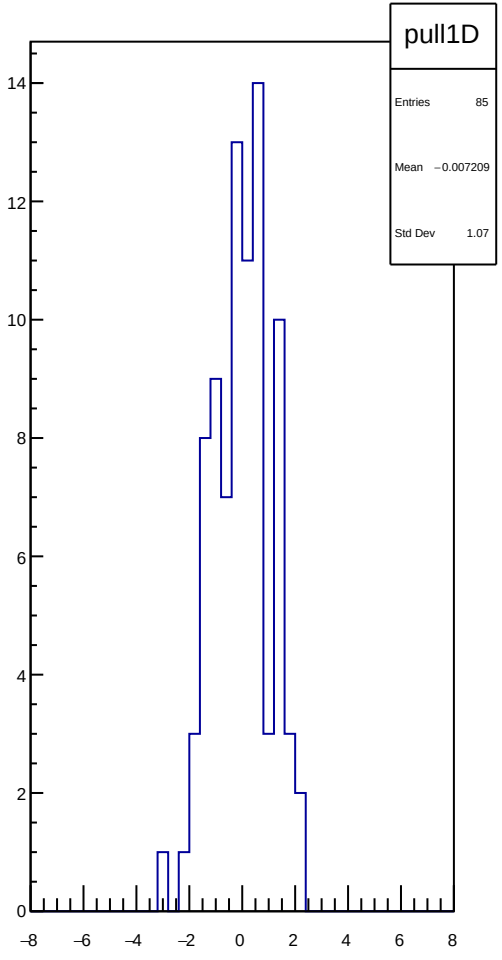

diff_bpm0i05Y_rms vs run
χ² / ndf 4708 / 84
p0 1520 ± 1.171
1800
1700
1600
1500
1400
1300

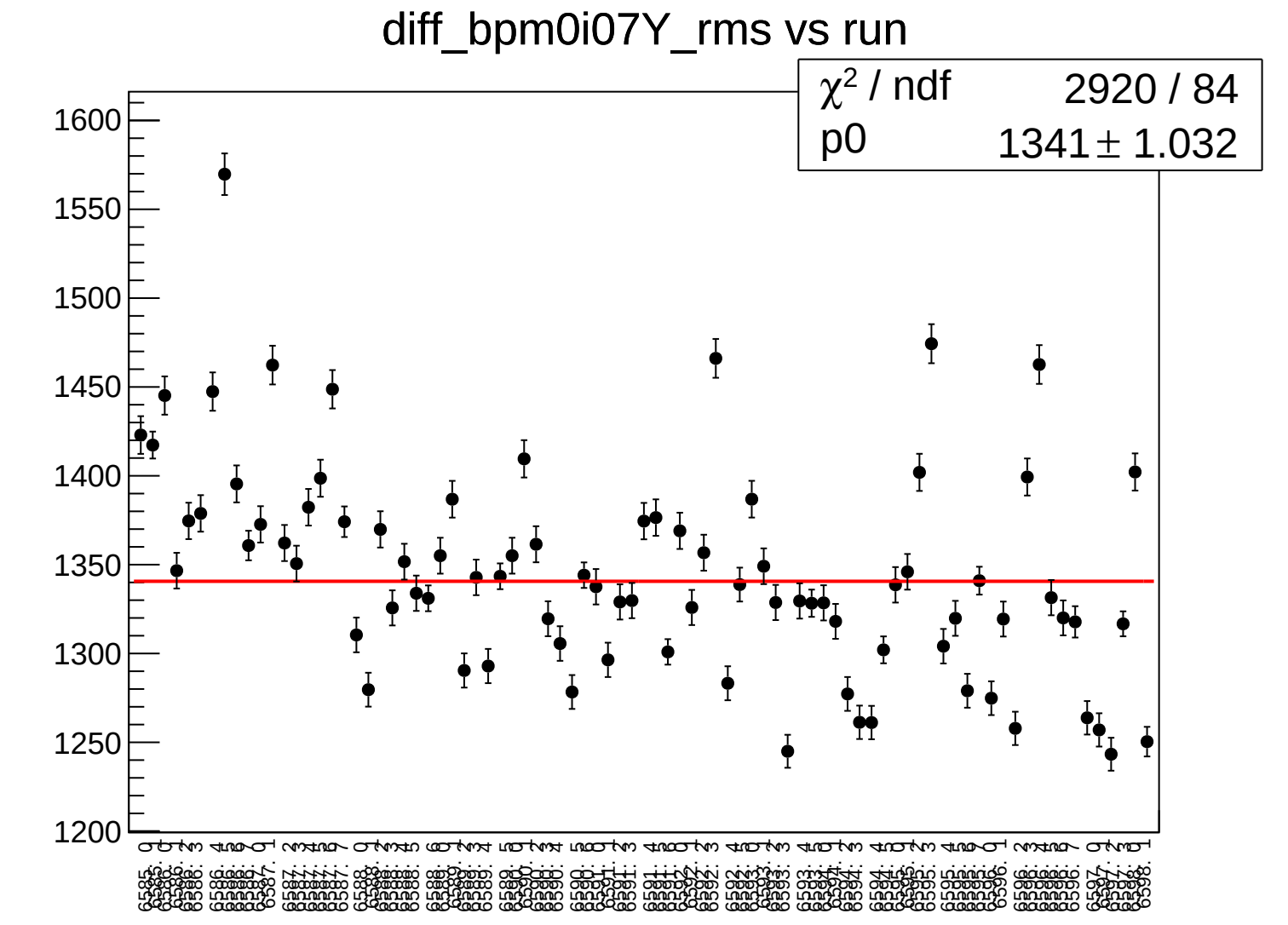

diff_bpm0i07X_mean vs run
χ^2 / ndf 89.06 / 84
p0 34.29 ± 1.699
pull
Entries 85
Mean 92.2
Std Dev 42.53

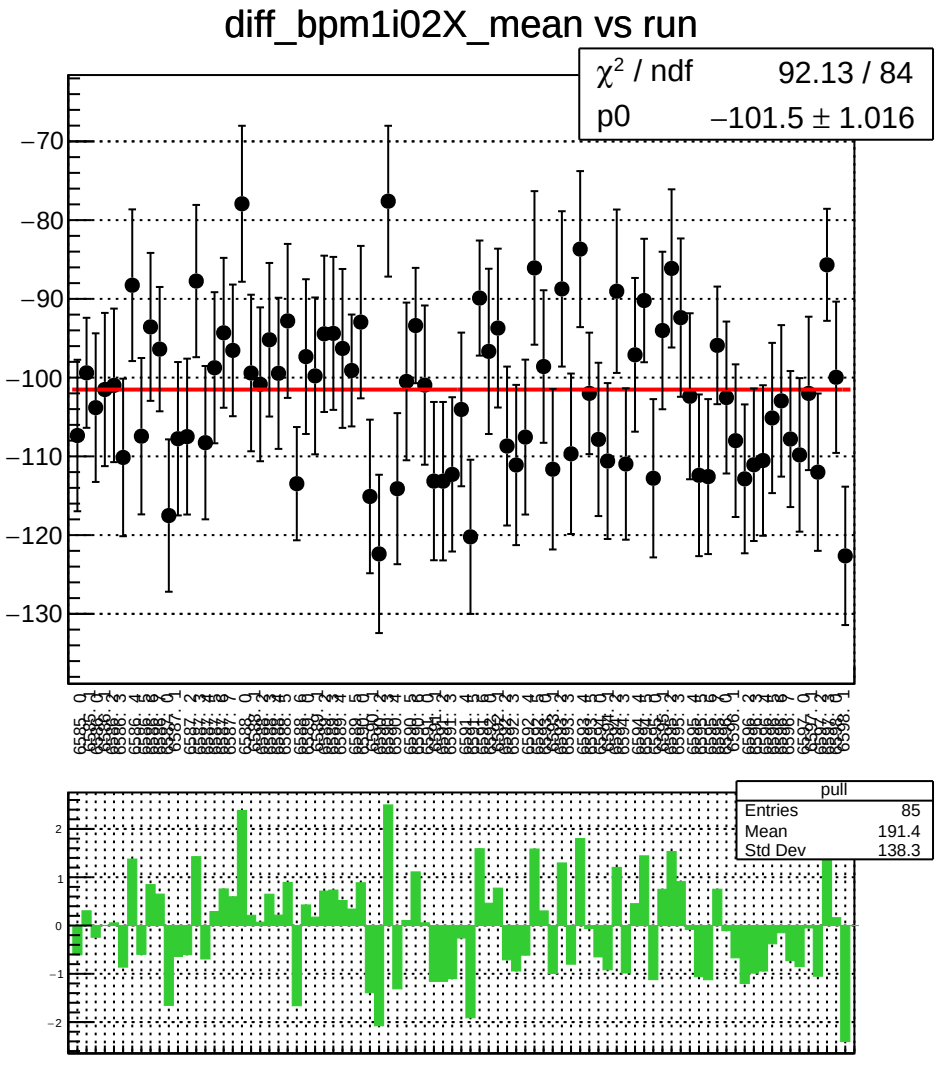

pull1D
Entries 85
Mean −0.02427
Std Dev 1.023

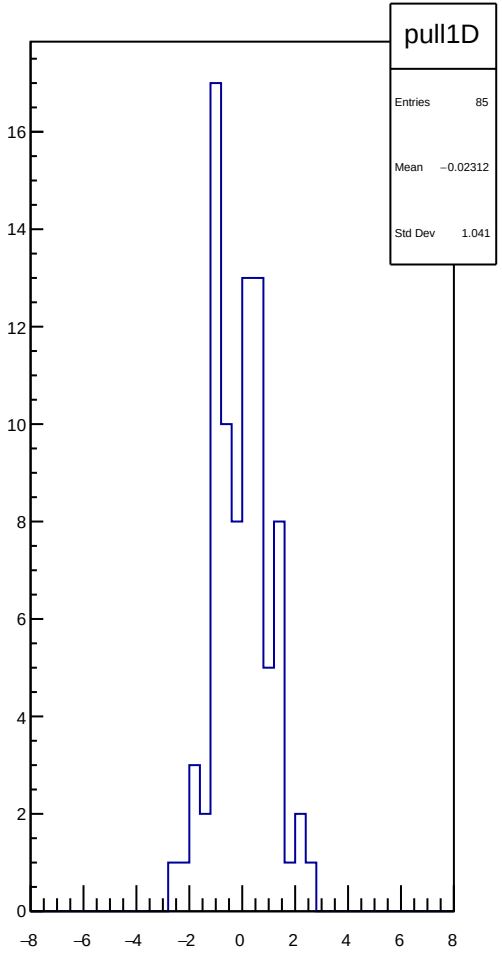

diff_bpm0i07X_rms vs run
χ² / ndf 1.06e+04 / 84
p0 1557 ± 1.201
1800
1700
1600
1500
1400
1300
1200

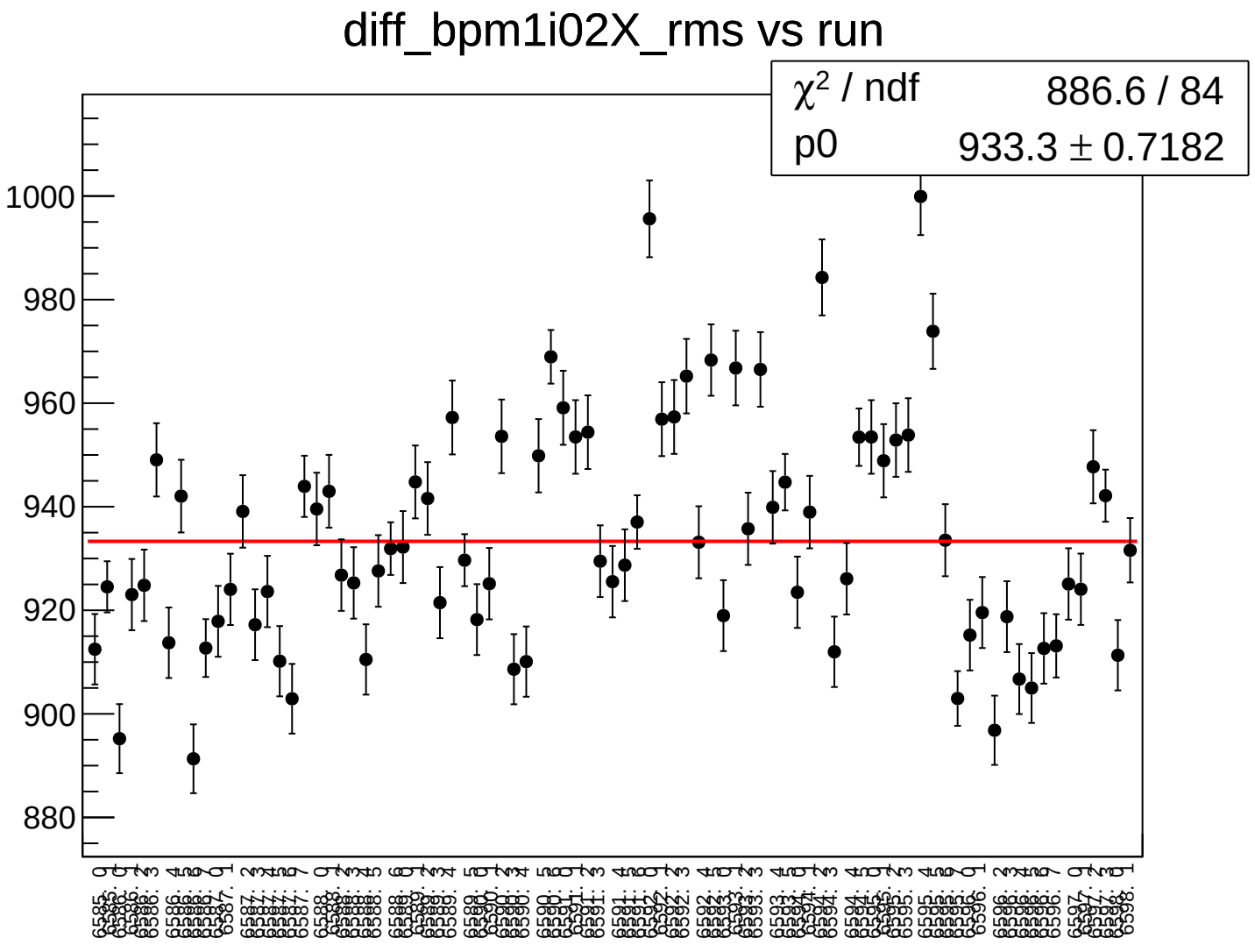

diff_bpm0i07Y_mean vs run
χ² / ndf 97.35 / 84
p0 6.147 ± 1.46
pull
Entries 85
Mean −675.7
Std Dev 706.7

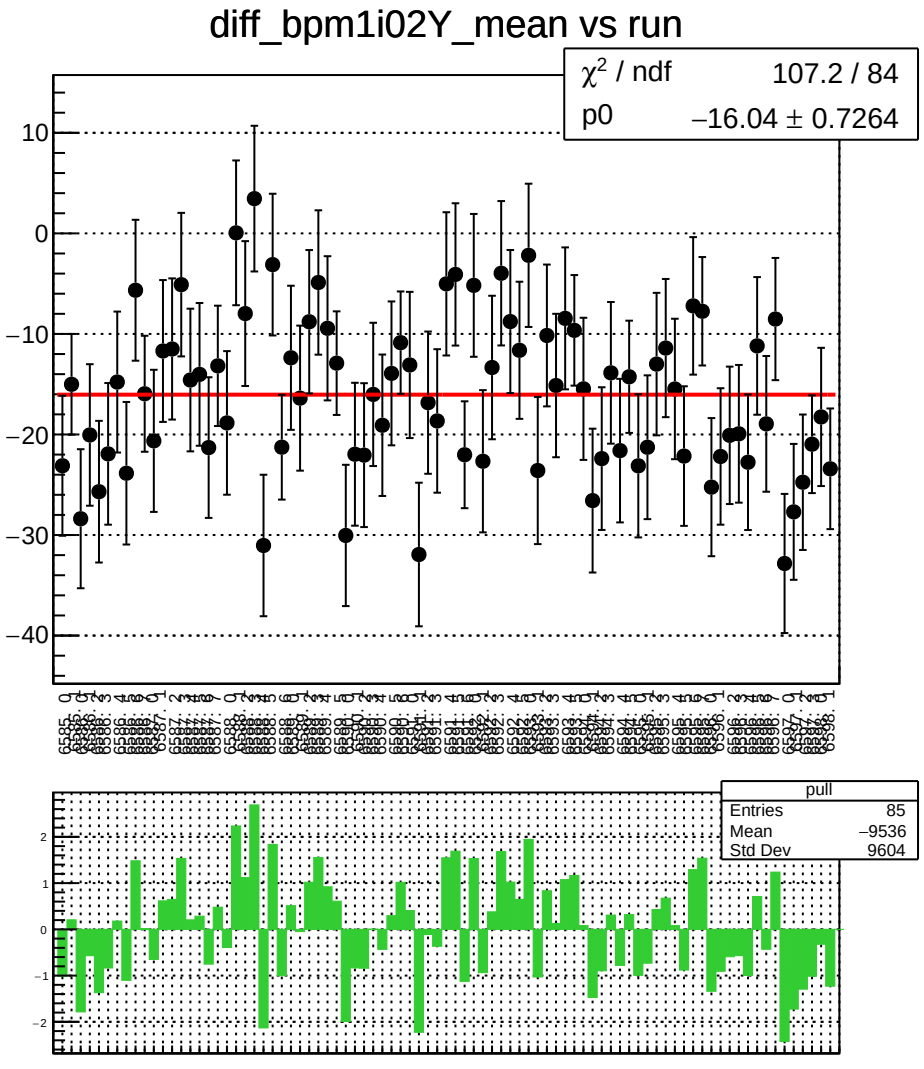

pull1D
Entries 85
Mean −0.007209
Std Dev 1.07

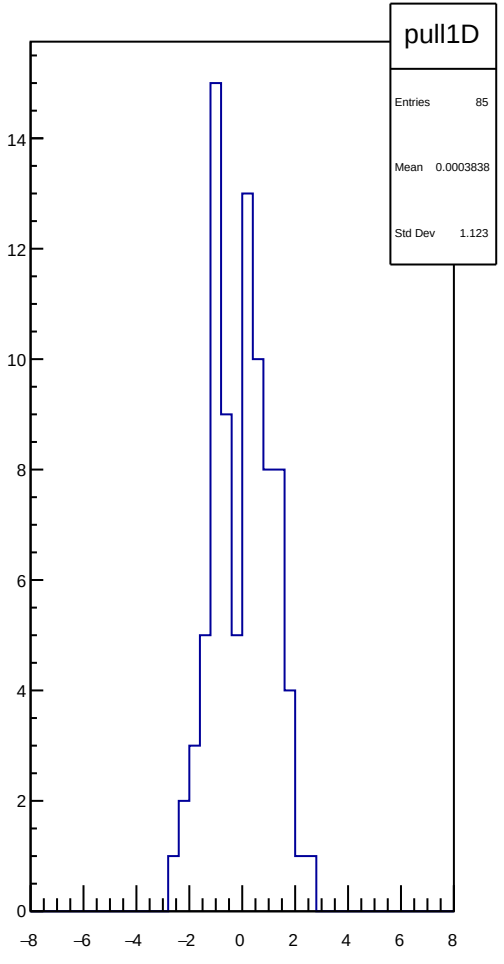

diff_bpm0i07Y_rms vs run
χ² / ndf 2920 / 84
p0 1341 ± 1.032
1600
1550
1500
1450
1400
1350
1300
1250
1200

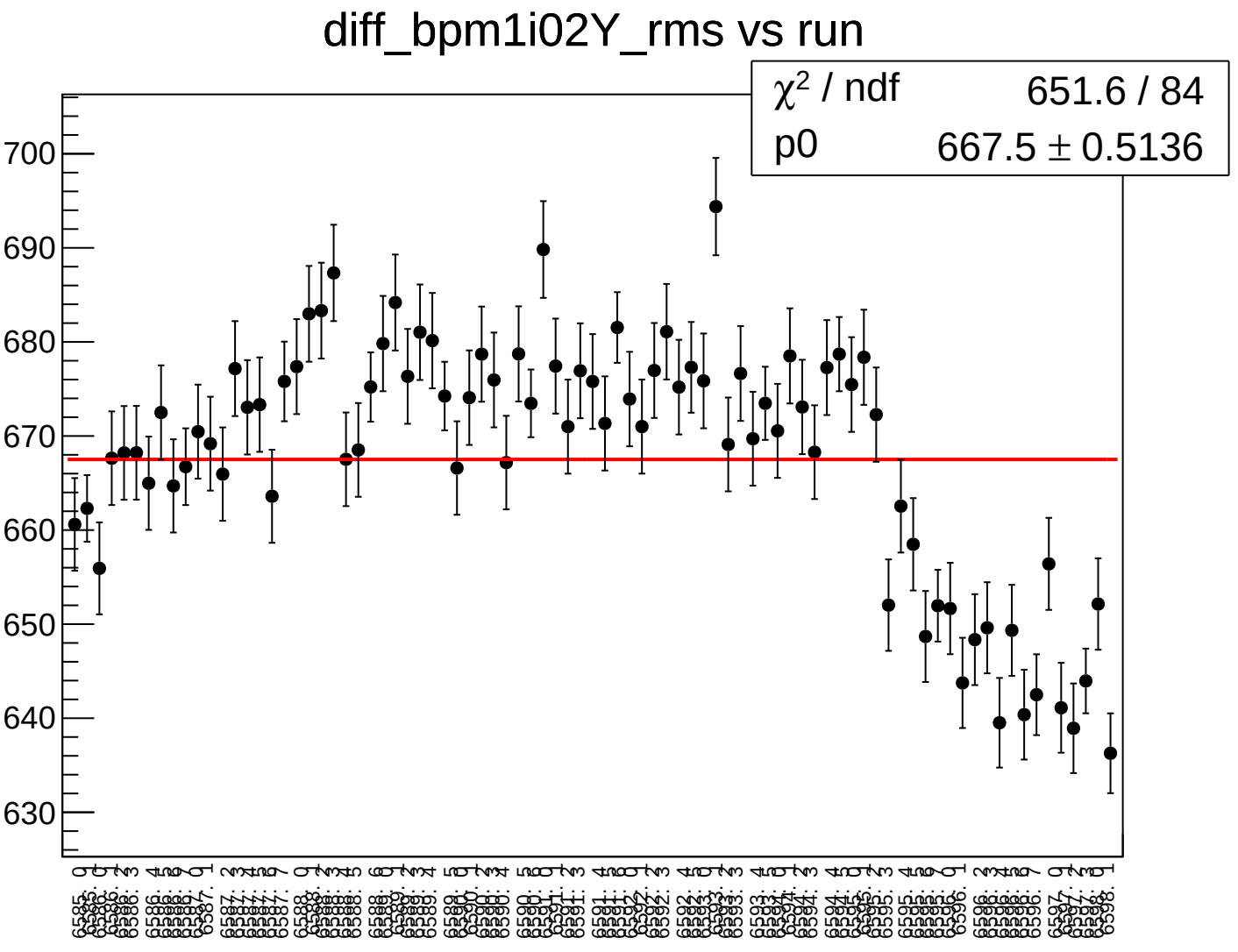

diff_bpm1i02X_mean vs run
χ² / ndf 92.13 / 84
p0 −101.5 ± 1.016
pull
Entries 85
Mean 191.4
Std Dev 138.3

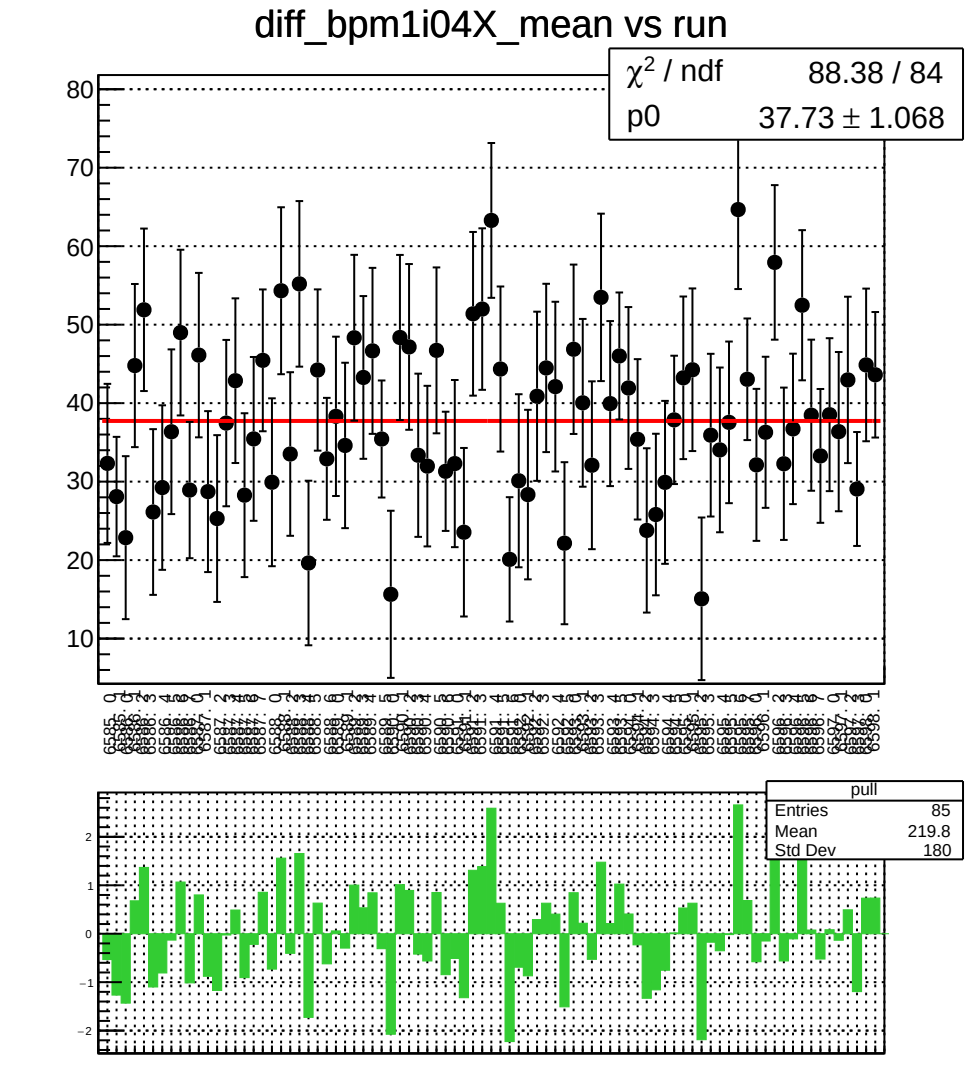

pull1D
Entries 85
Mean −0.02312
Std Dev 1.041

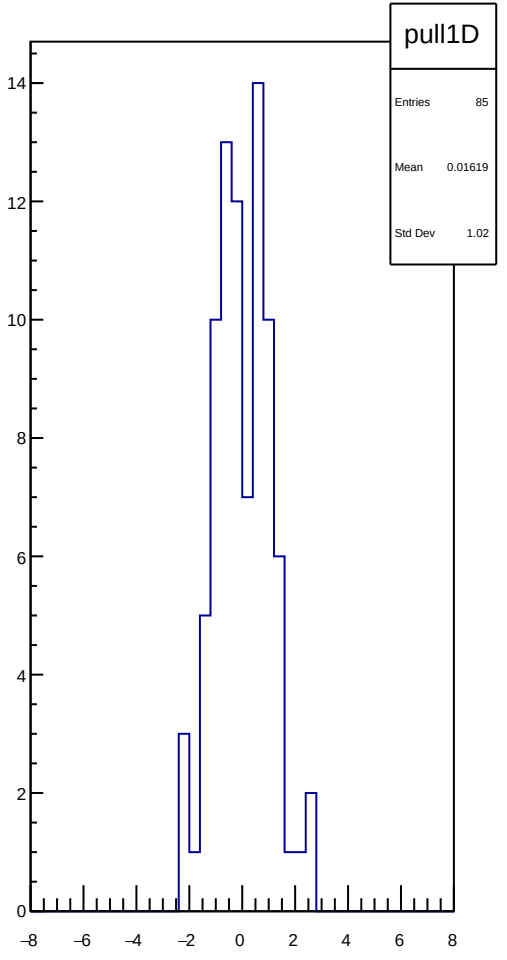

diff_bpm1i02X_rms vs run
χ² / ndf 886.6 / 84
p0 933.3 ± 0.7182
1000
980
960
940
920
900
880

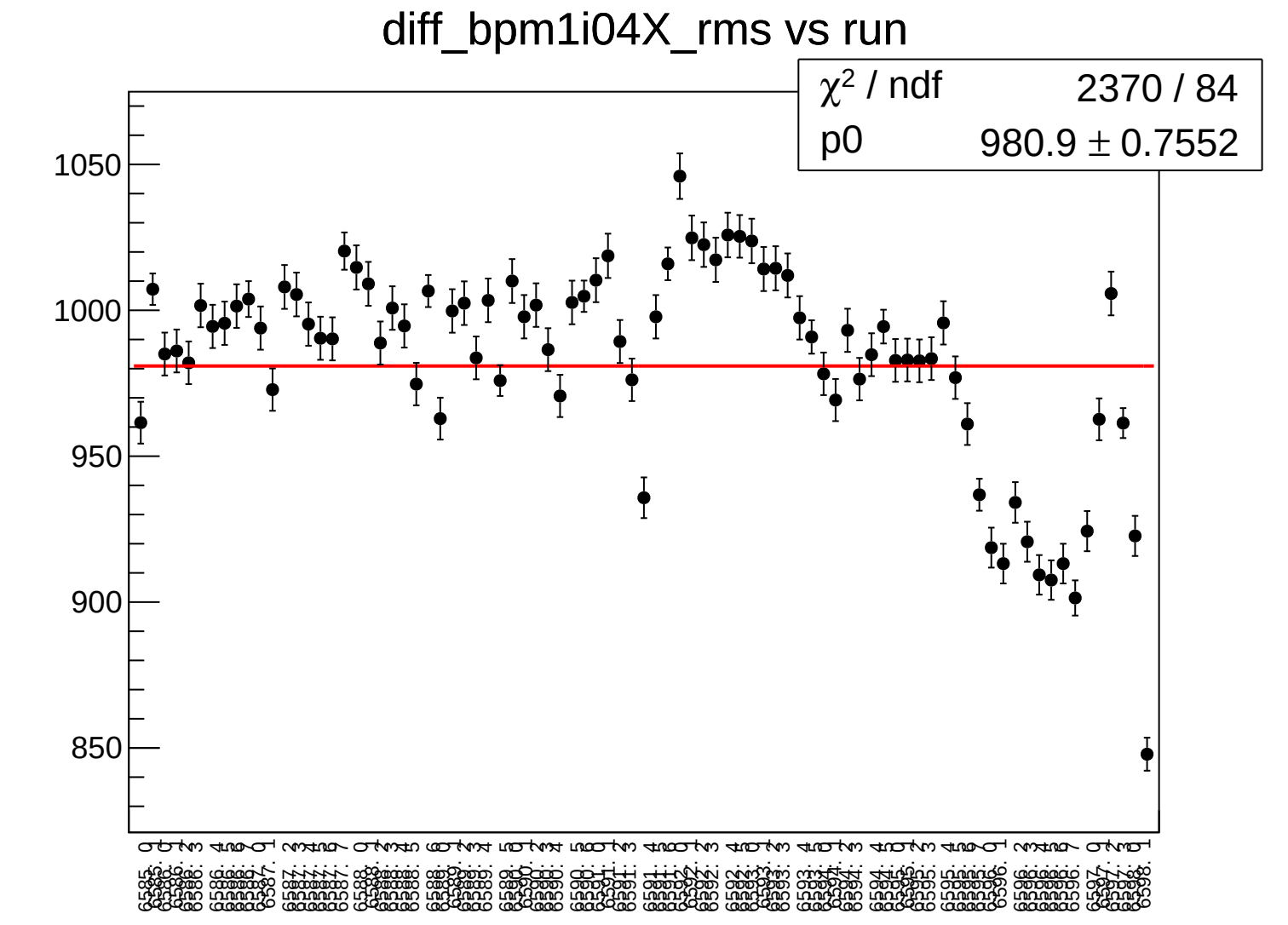

diff_bpm1i02Y_mean vs run
χ² / ndf 107.2 / 84
p0 −16.04 ± 0.7264
pull
Entries 85
Mean −9536
Std Dev 9604

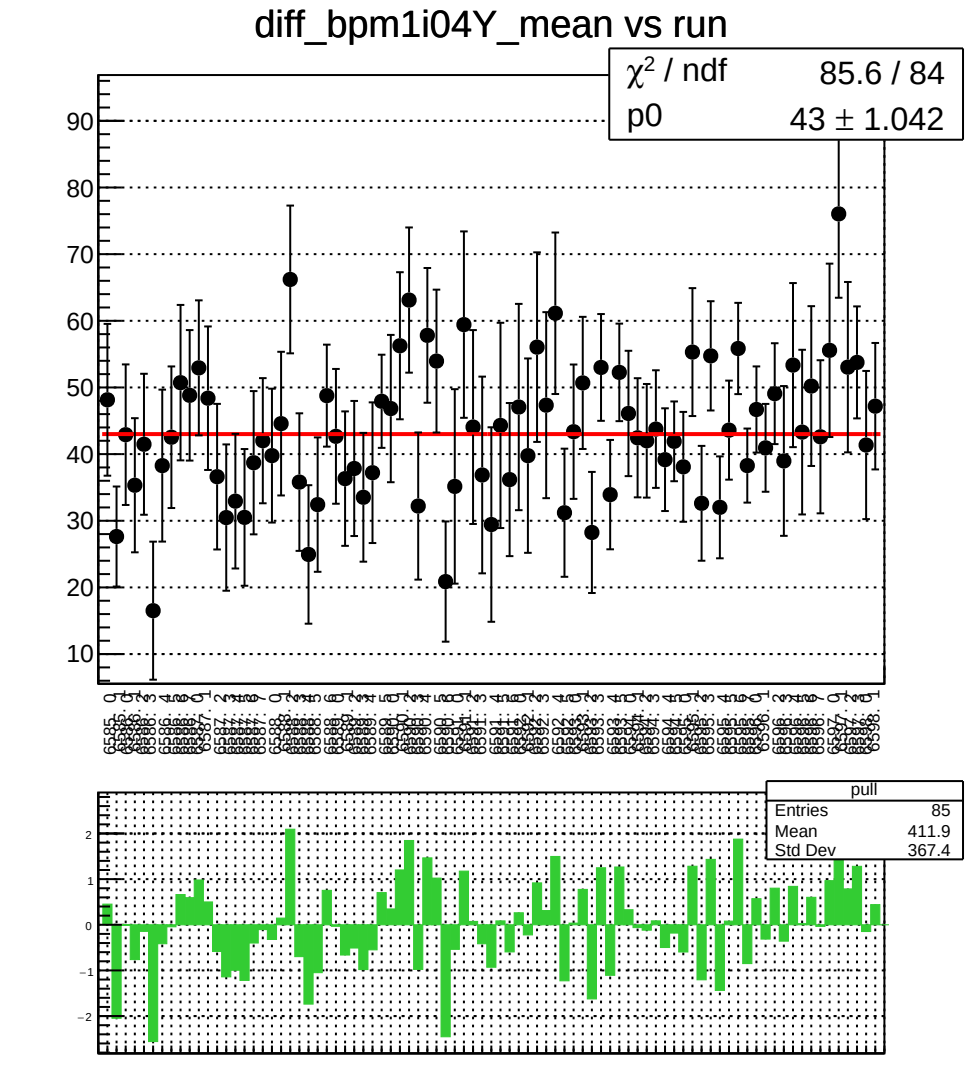

pull1D
Entries 85
Mean 0.0003838
Std Dev 1.123

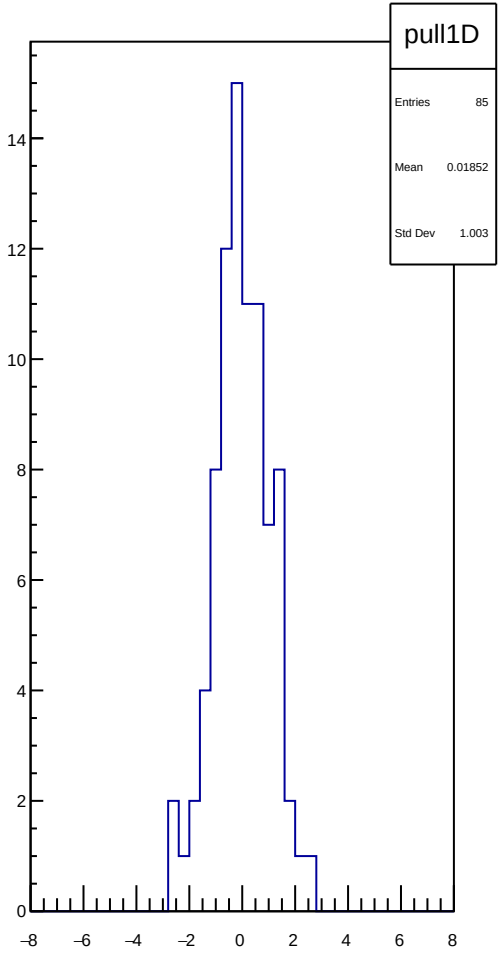

diff_bpm1i02Y_rms vs run
χ² / ndf 651.6 / 84
p0 667.5 ± 0.5136
700
690
680
670
660
650
640
630

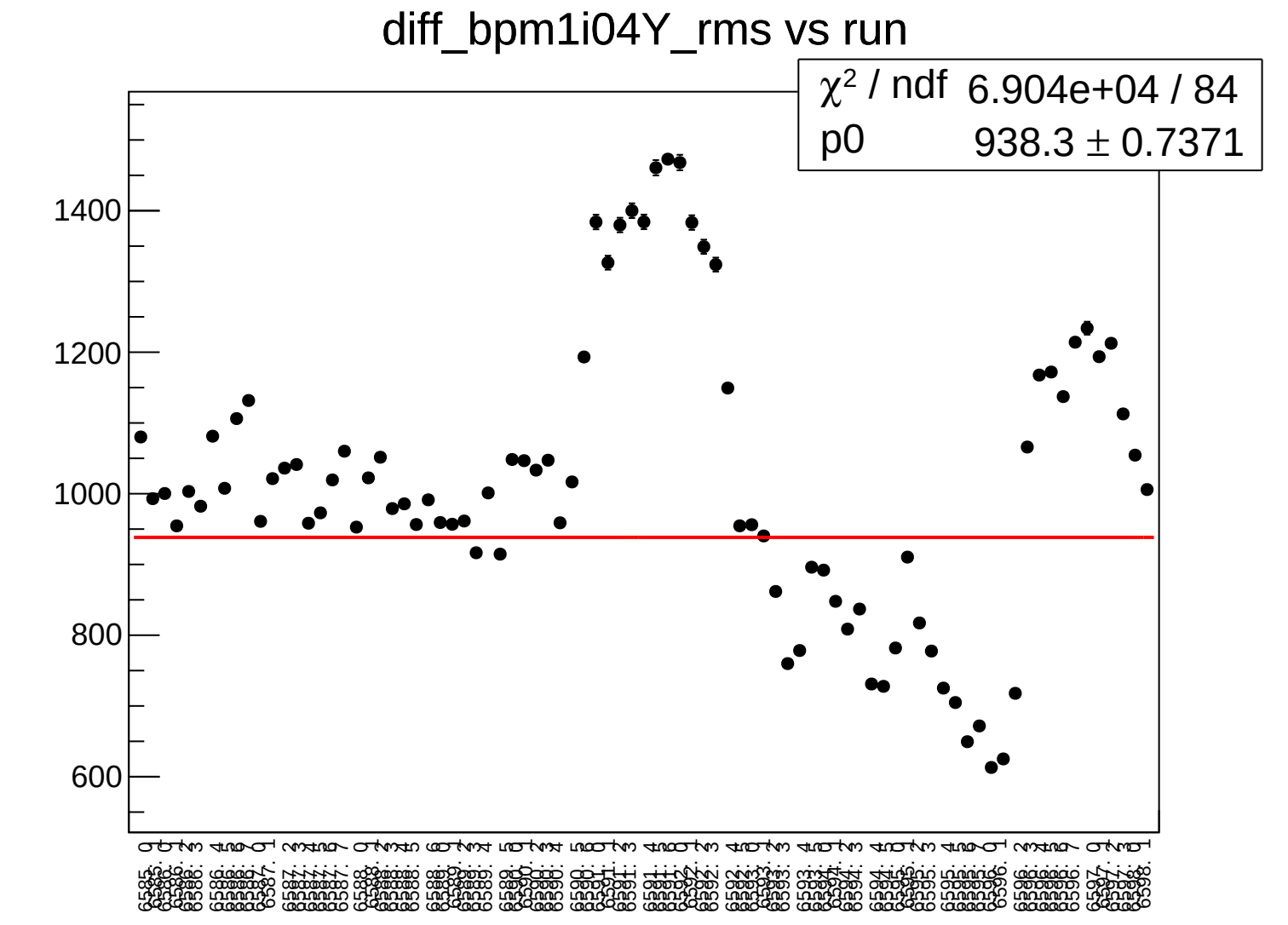

diff_bpm1i04X_mean vs run
χ² / ndf 88.38 / 84
p0 37.73 ± 1.068
pull
Entries 85
Mean 219.8
Std Dev 180

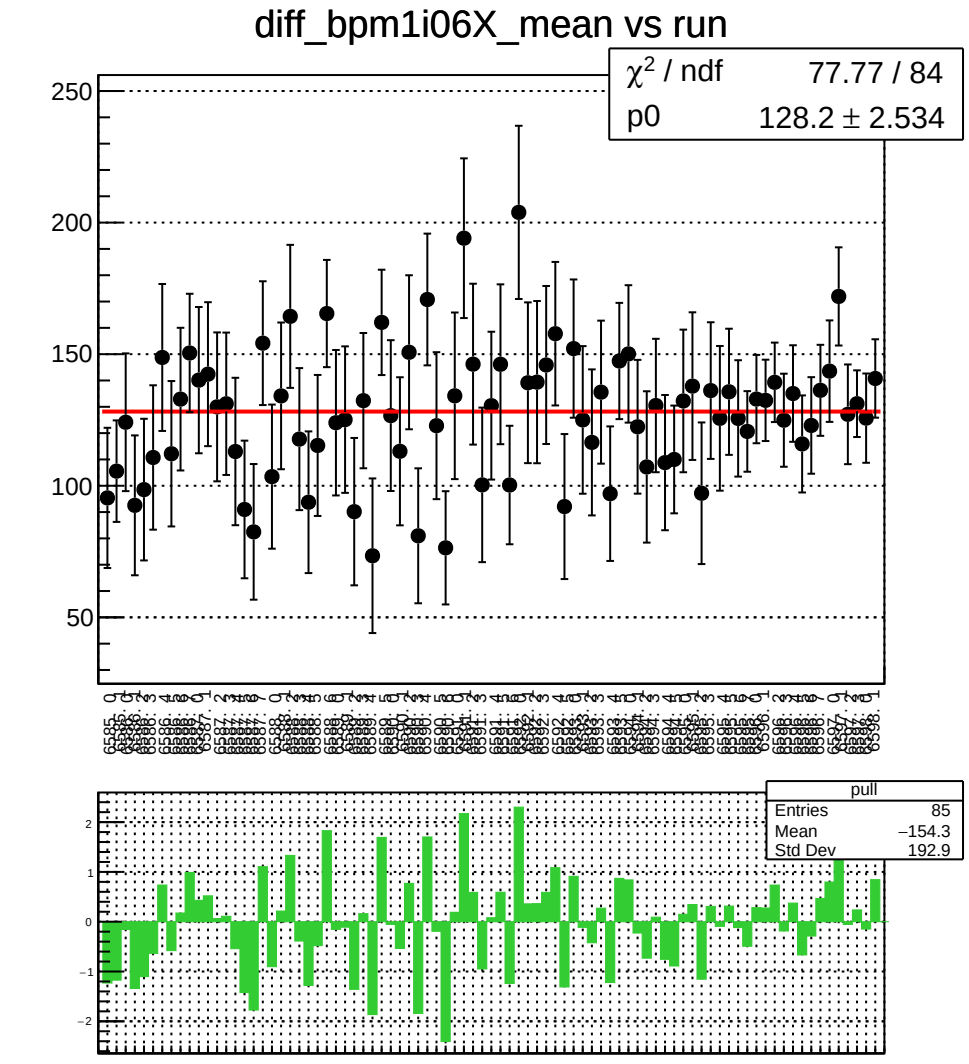

pull1D
Entries 85
Mean 0.01619
Std Dev 1.02

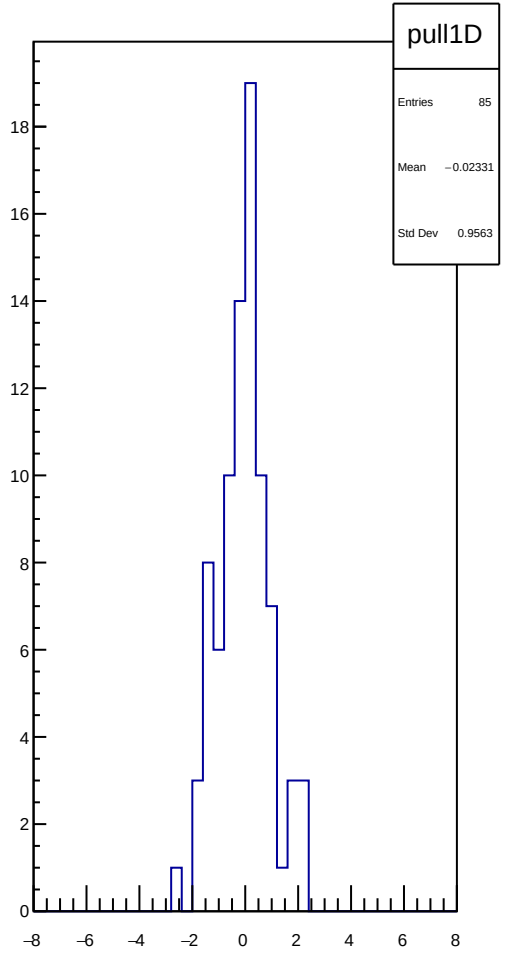

diff_bpm1i04X_rms vs run
χ² / ndf 2370 / 84
p0 980.9 ± 0.7552
1050
1000
950
900
850

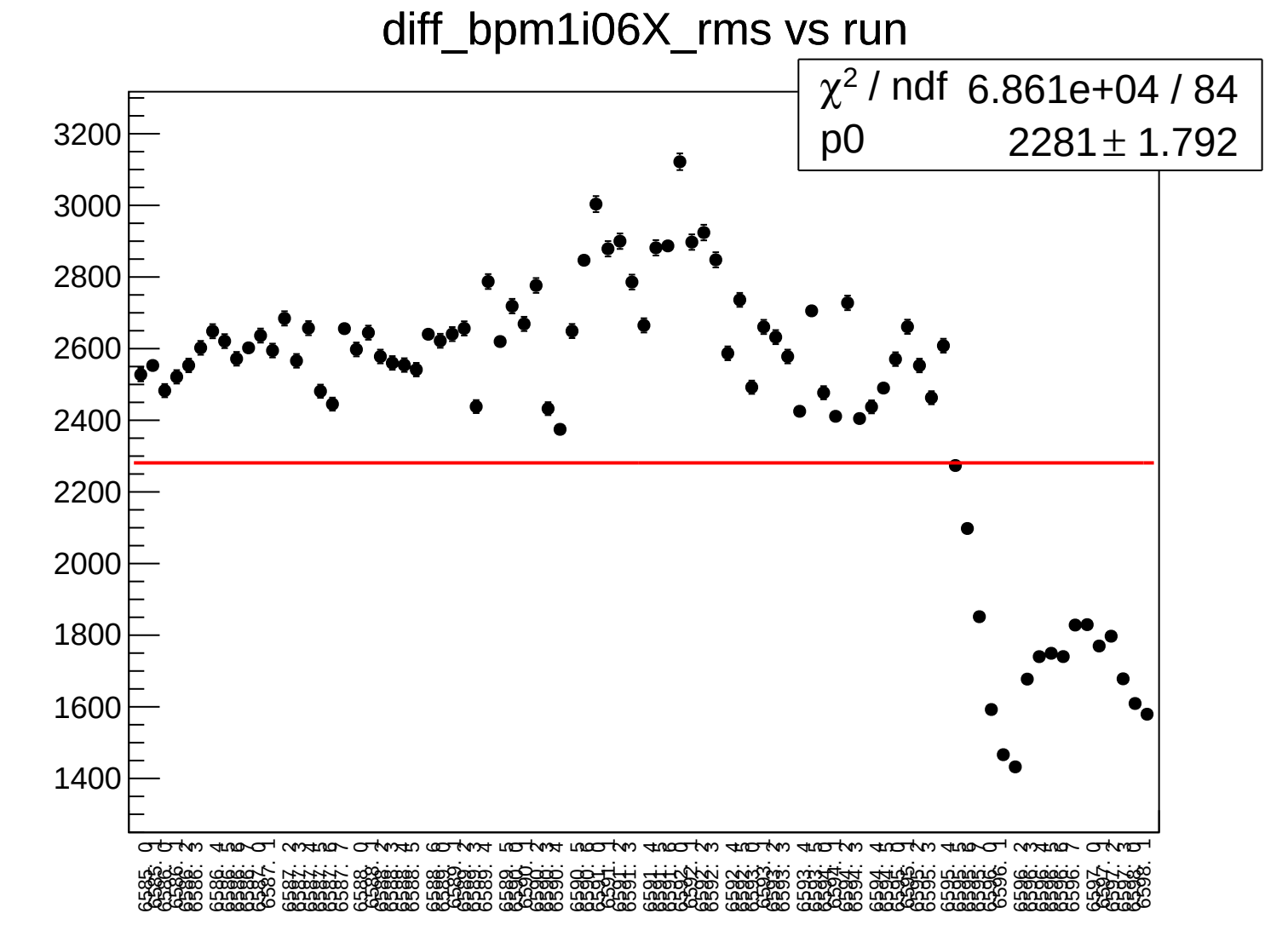

diff_bpm1i04Y_mean vs run
χ^2 / ndf 85.6 / 84
p0 43 ± 1.042
pull
Entries 85
Mean 411.9
Std Dev 367.4

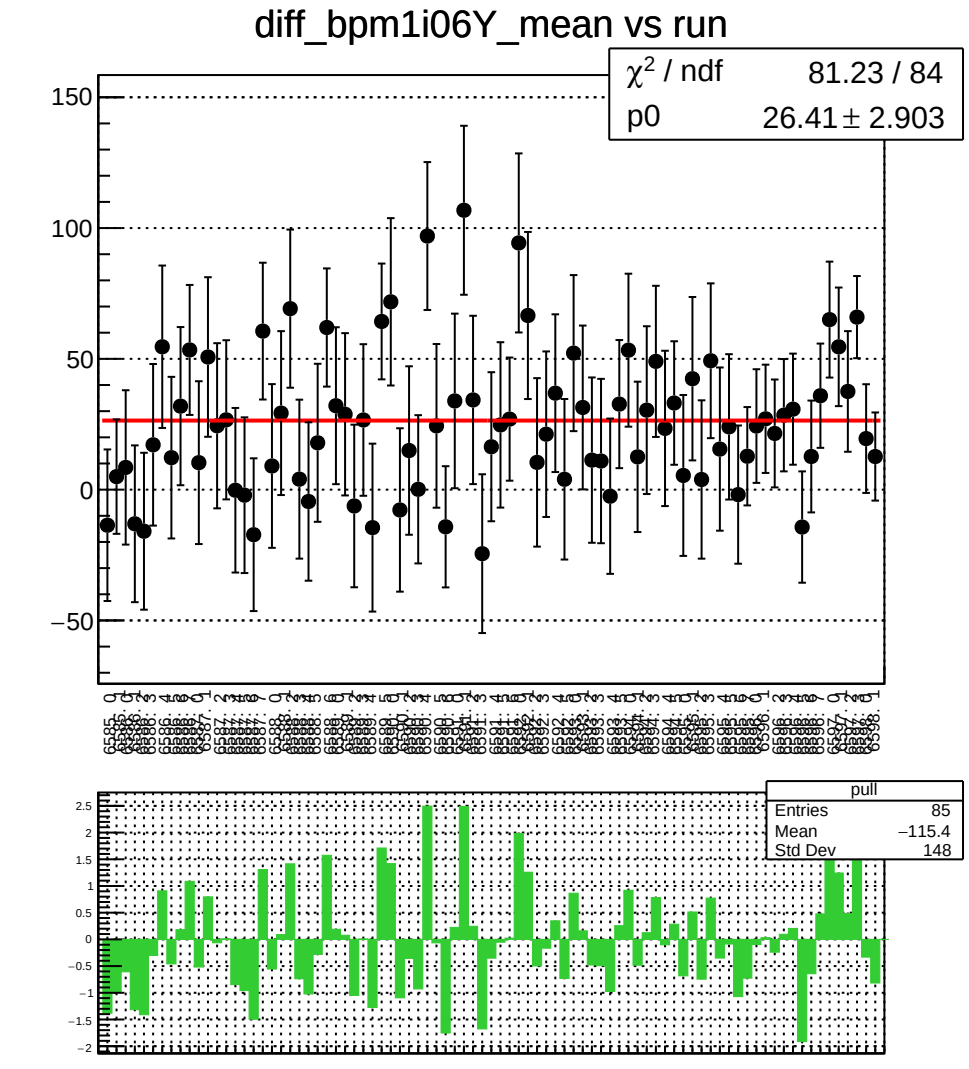

pull1D
Entries 85
Mean 0.01852
Std Dev 1.003

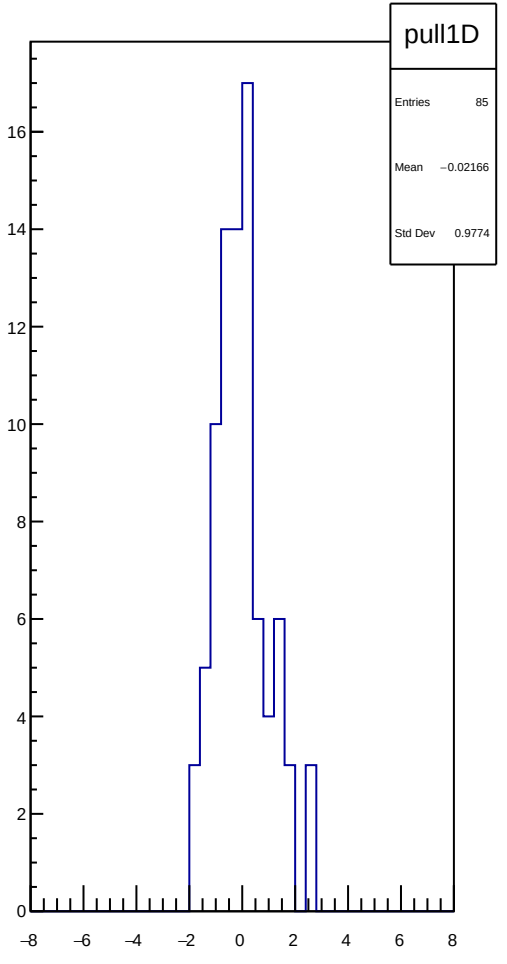

diff_bpm1i04Y_rms vs run
χ² / ndf 6.904e+04 / 84
p0 938.3 ± 0.7371
1400
1200
1000
800
600

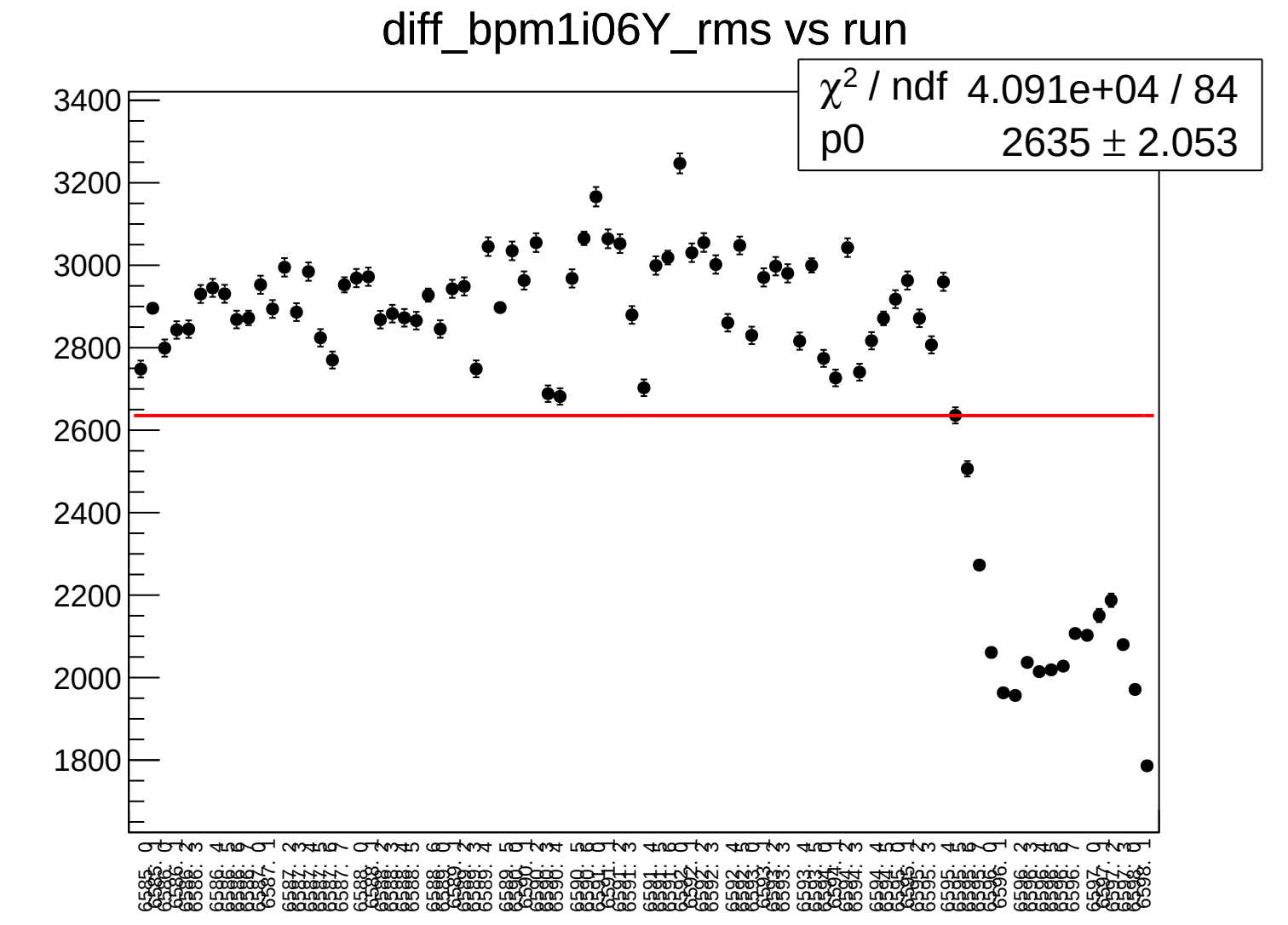

diff_bpm1i06X_mean vs run
χ² / ndf 77.77 / 84
p0 128.2 ± 2.534
250
200
150
100
50
pull
Entries 85
Mean −154.3
Std Dev 192.9
2
1
0
−1
−2

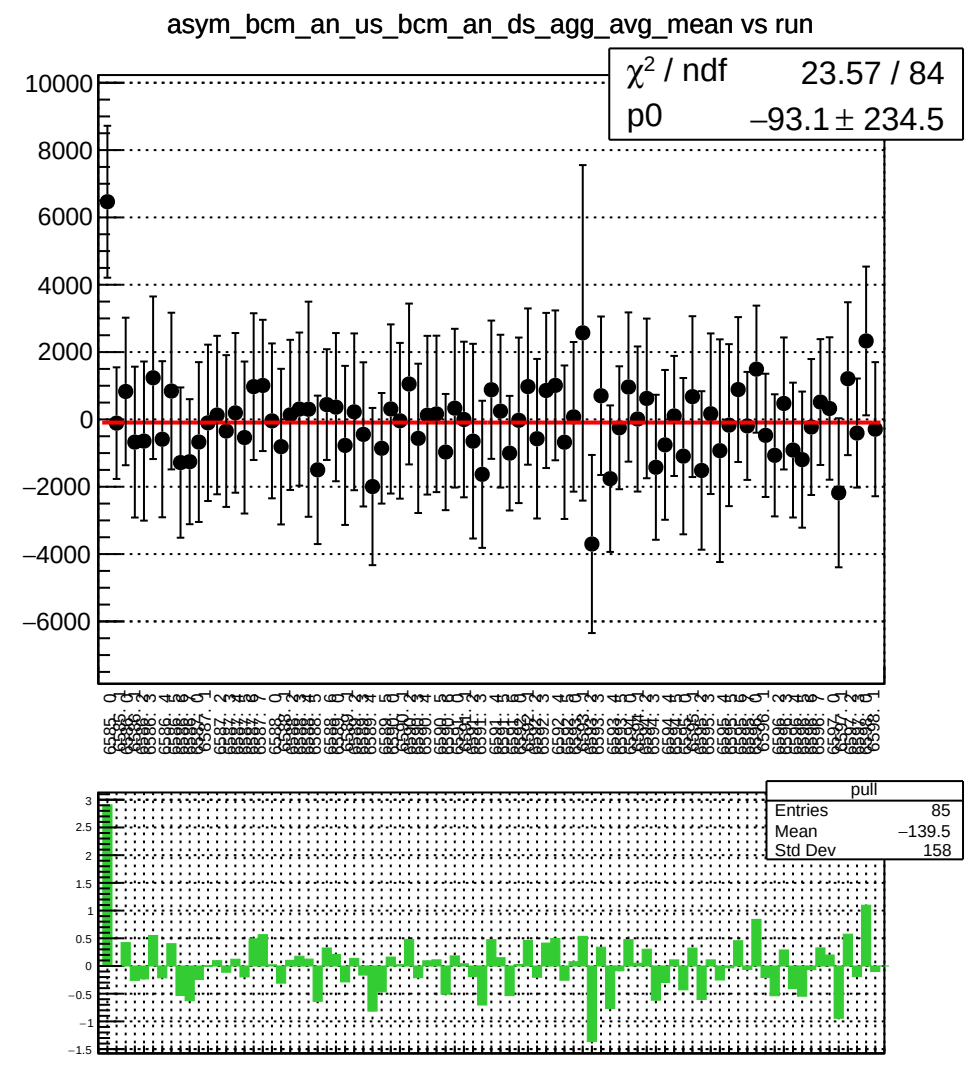

pull1D
Entries 85
Mean −0.02331
Std Dev 0.9563
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

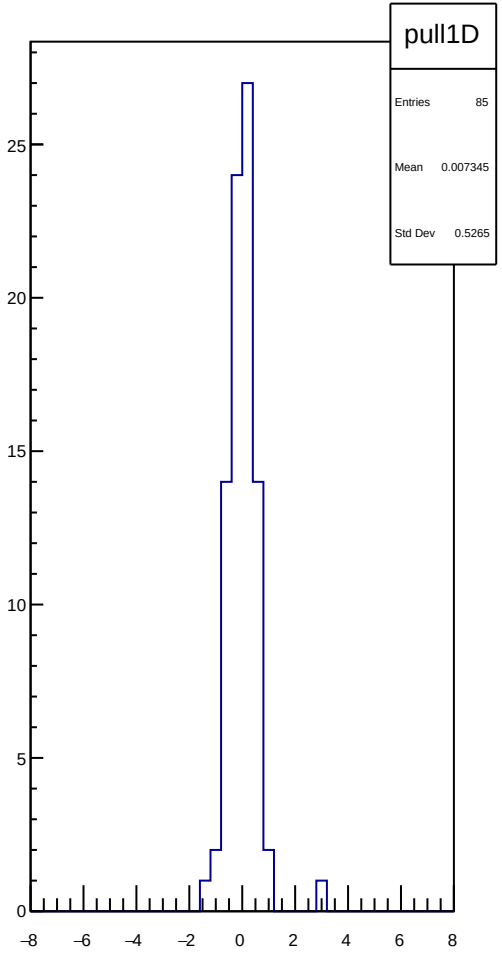

diff_bpm1i06X_rms vs run
χ² / ndf 6.861e+04 / 84
p0 2281 ± 1.792
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

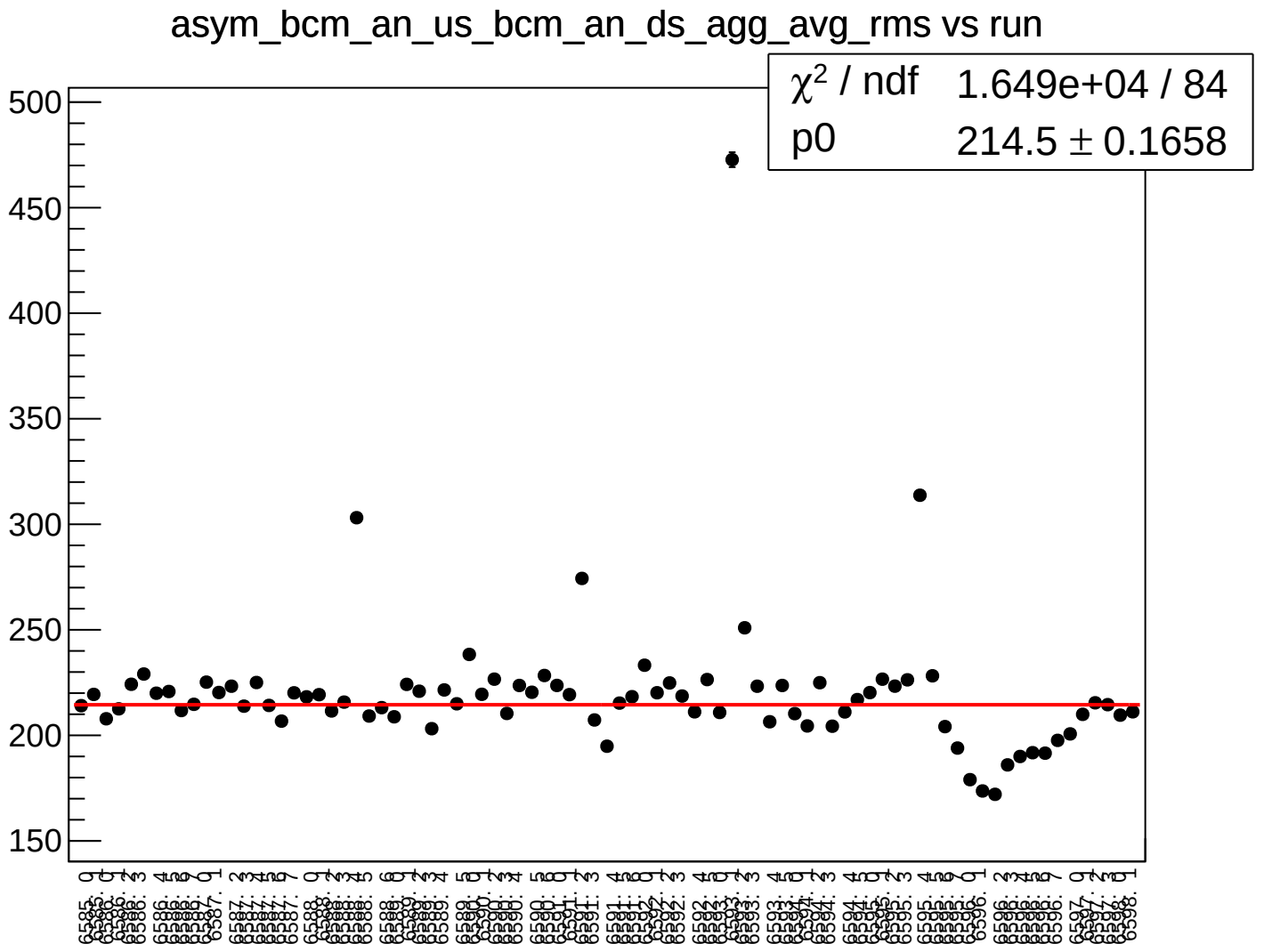

diff_bpm1i06Y_mean vs run
χ² / ndf 81.23 / 84
p0 26.41 ± 2.903
150
100
50
0
−50
pull
Entries 85
Mean −115.4
Std Dev 148
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

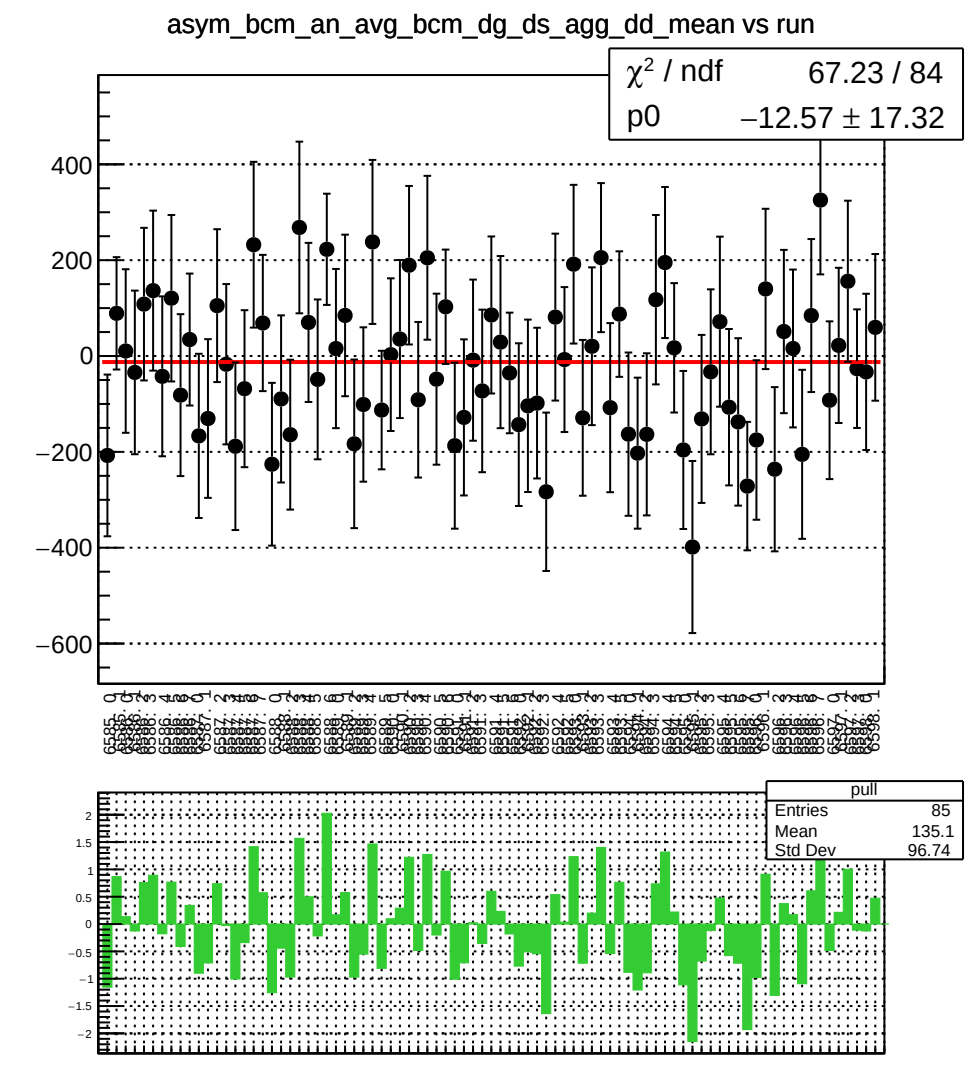

pull1D
Entries 85
Mean −0.02166
Std Dev 0.9774
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

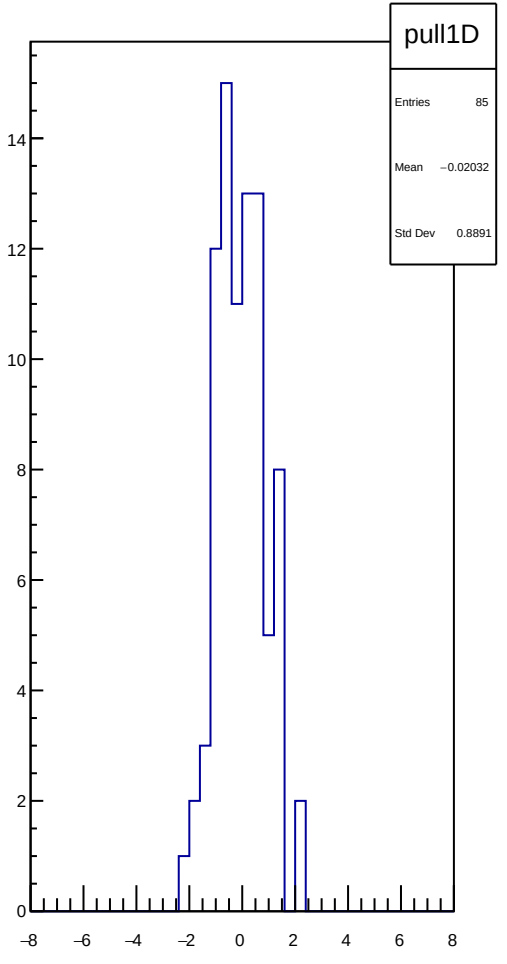

diff_bpm1i06Y_rms vs run
χ² / ndf 4.091e+04 / 84
p0 2635 ± 2.053
3400
3200
3000
2800
2600
2400
2200
2000
1800

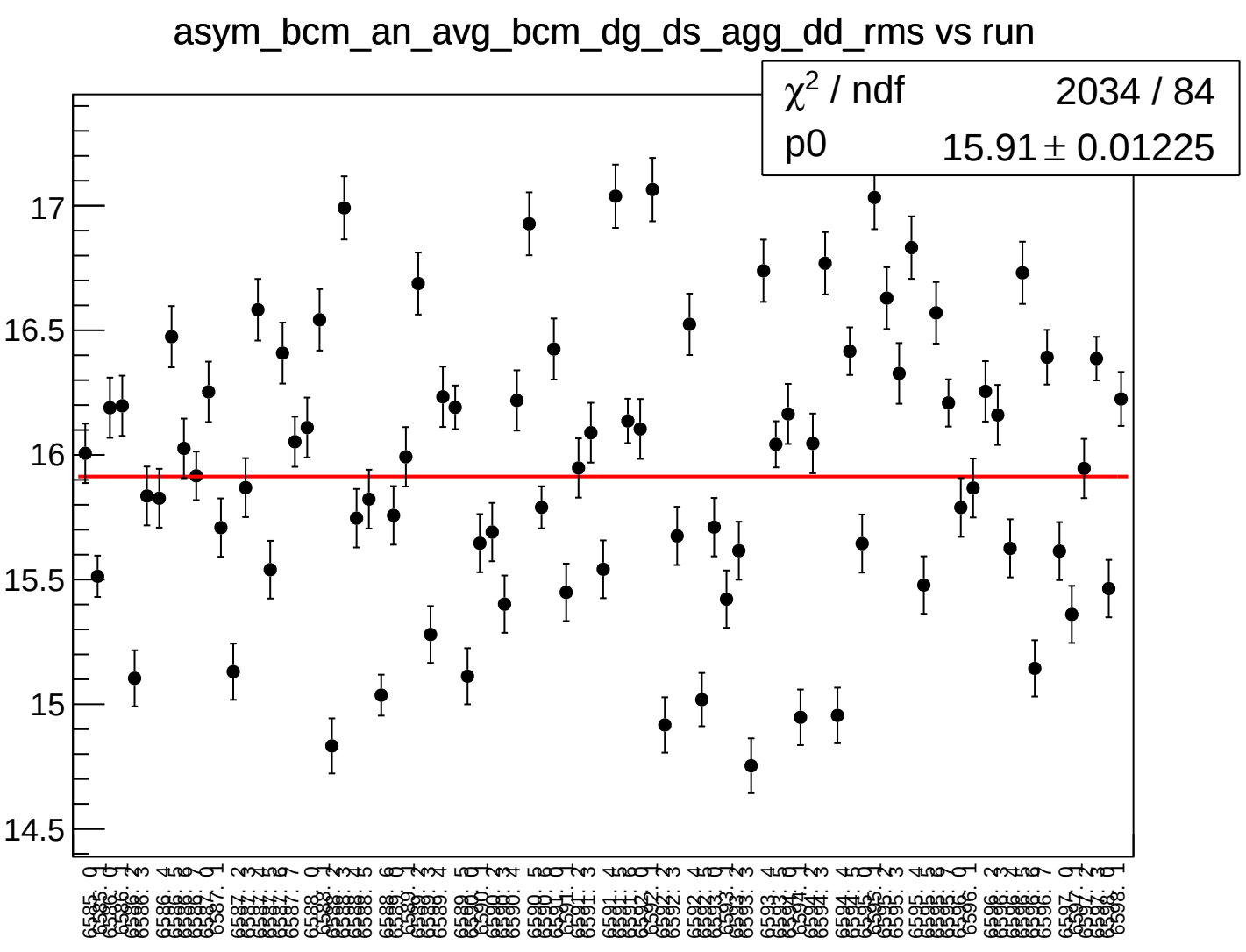

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 23.57 / 84
p0 −93.1 ± 234.5
pull
Entries 85
Mean −139.5
Std Dev 158

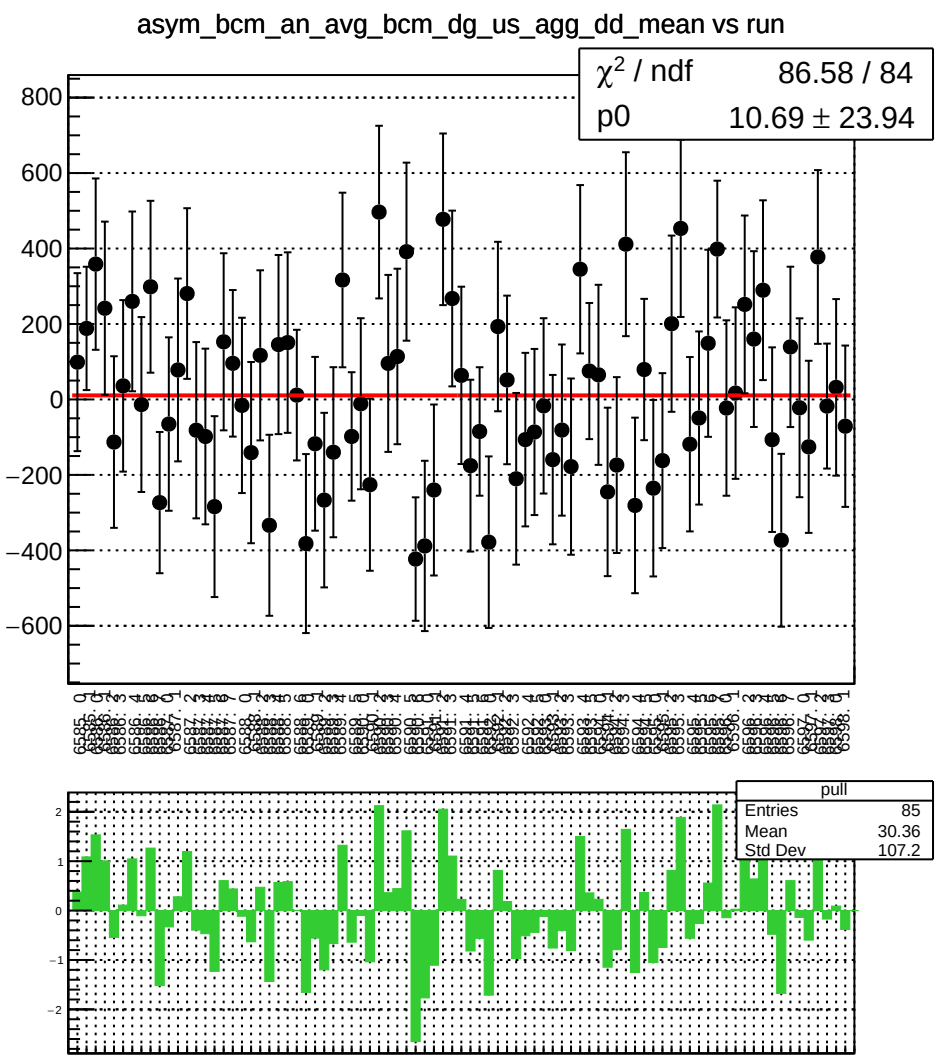

pull1D
Entries 85
Mean 0.007345
Std Dev 0.5265

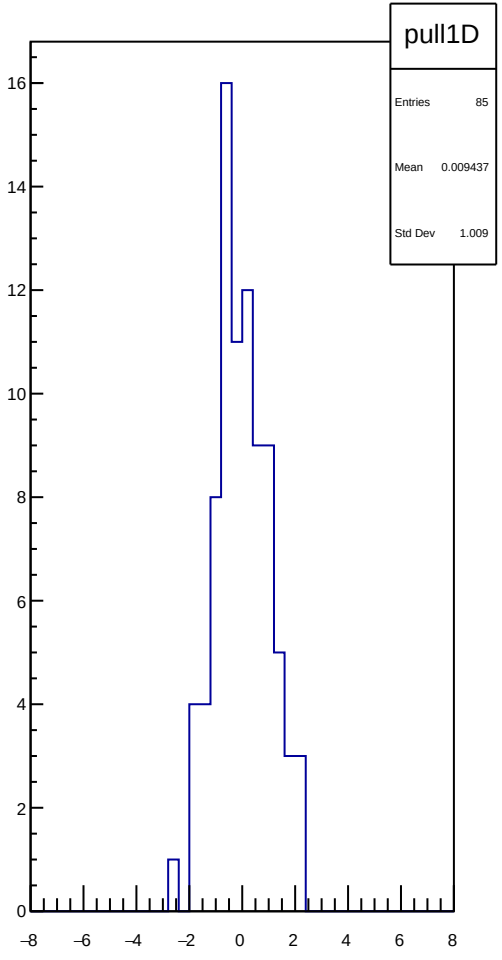

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.649e+04 / 84
p0 214.5 ± 0.1658
500
450
400
350
300
250
200
150

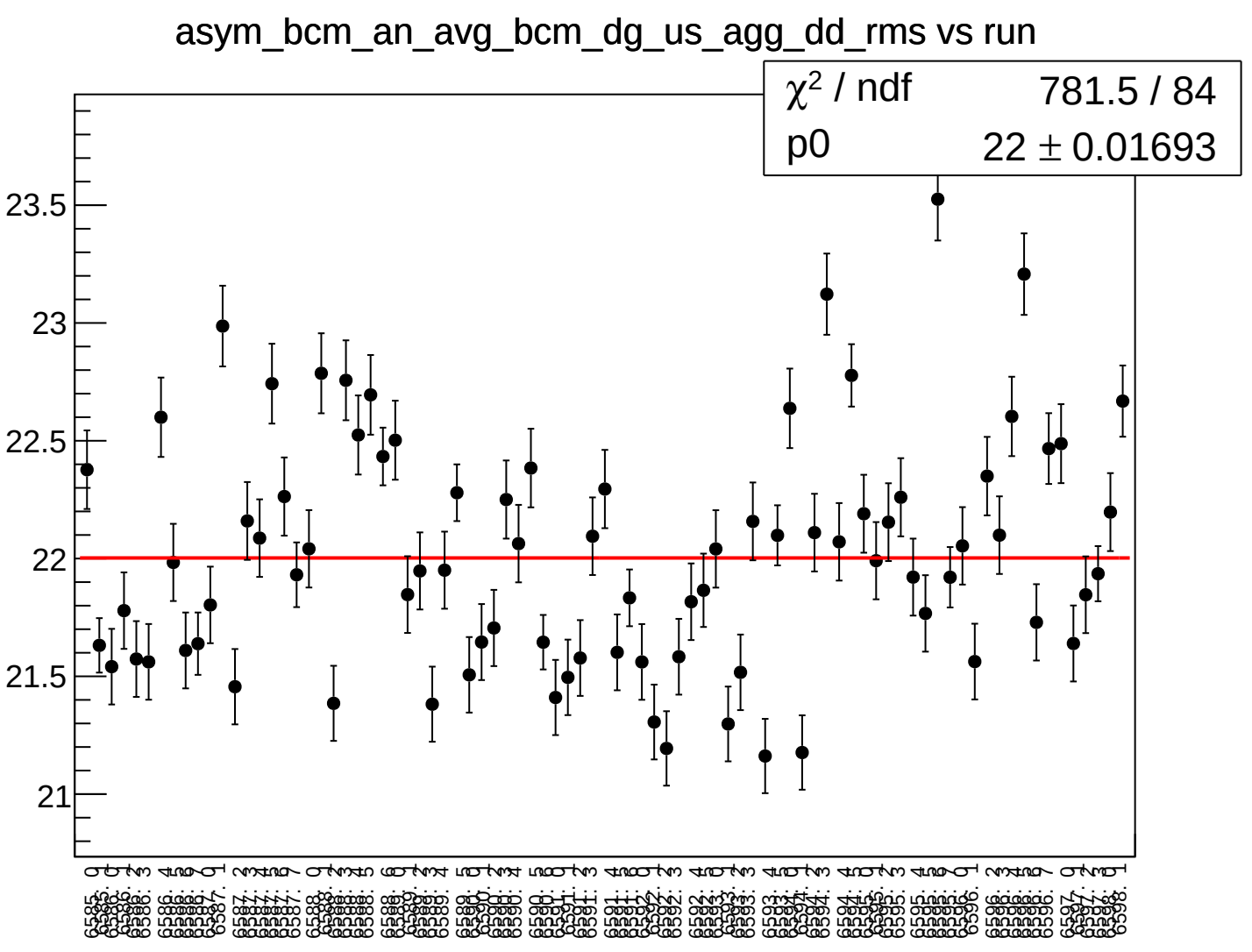

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 67.23 / 84
p0 −12.57 ± 17.32
400
200
0
−200
−400
−600
pull
Entries 85
Mean 135.1
Std Dev 96.74
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

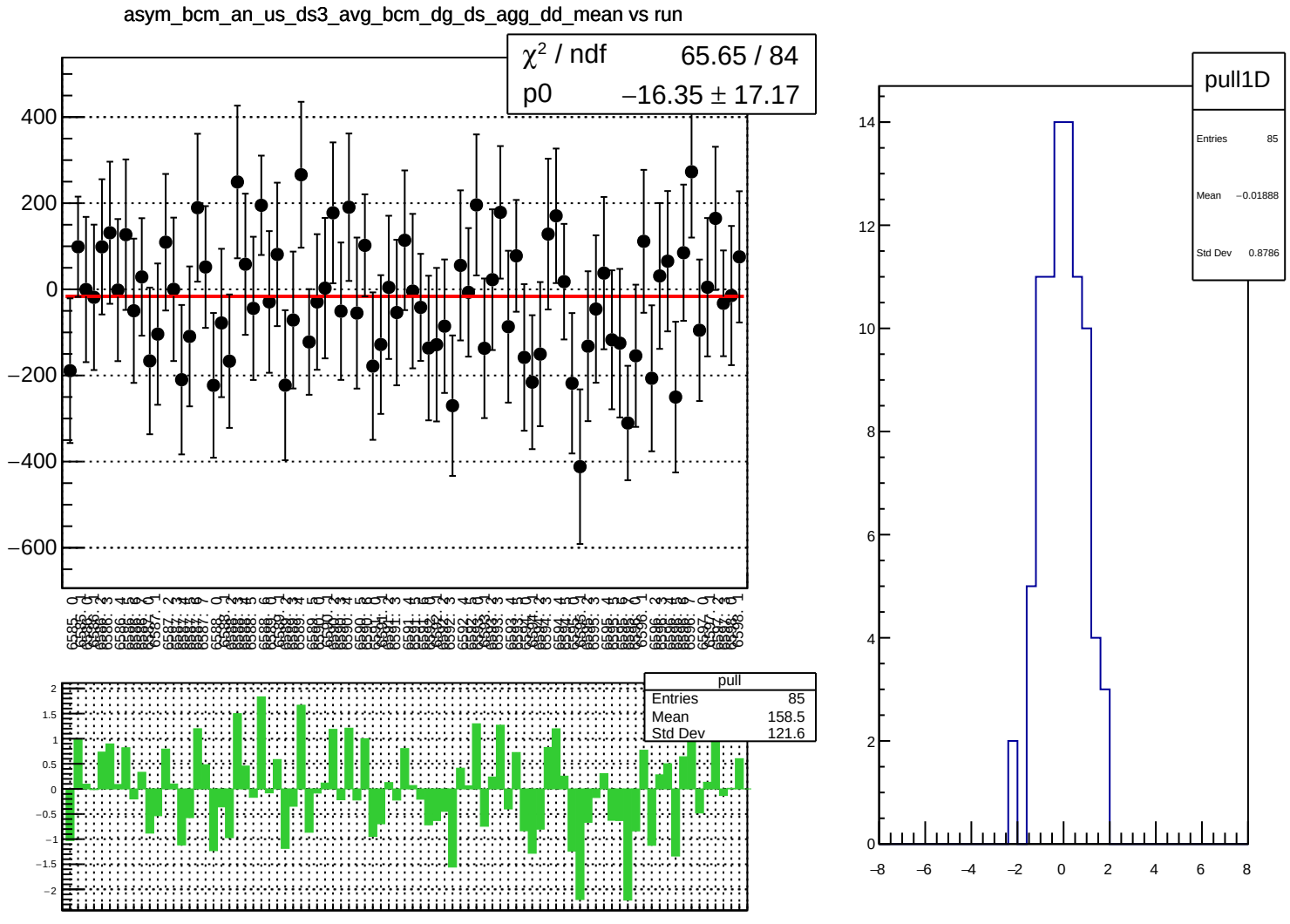

pull1D
Entries 85
Mean −0.02032
Std Dev 0.8891
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

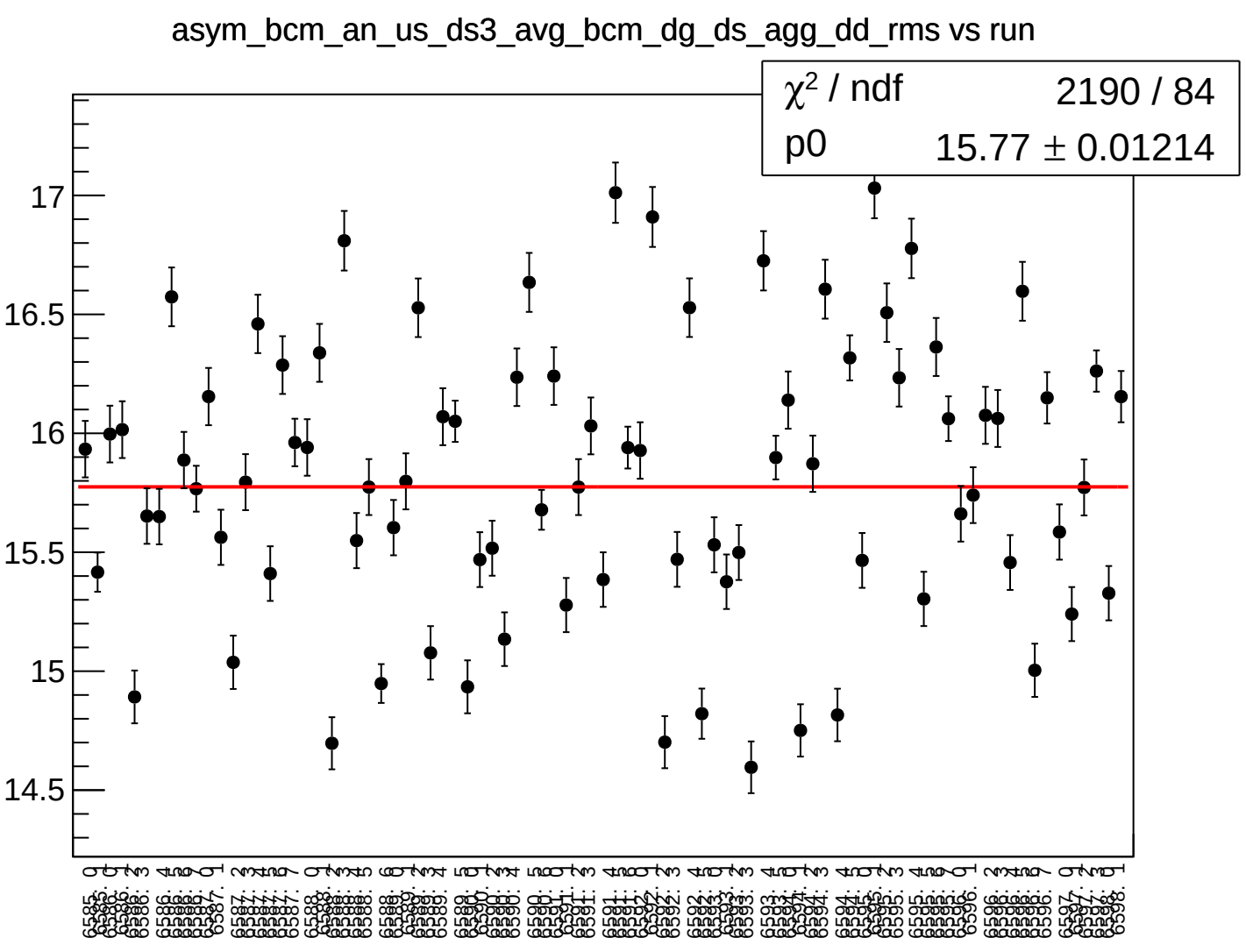

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2034 / 84
p0 15.91 ± 0.01225
17
16.5
16
15.5
15
14.5

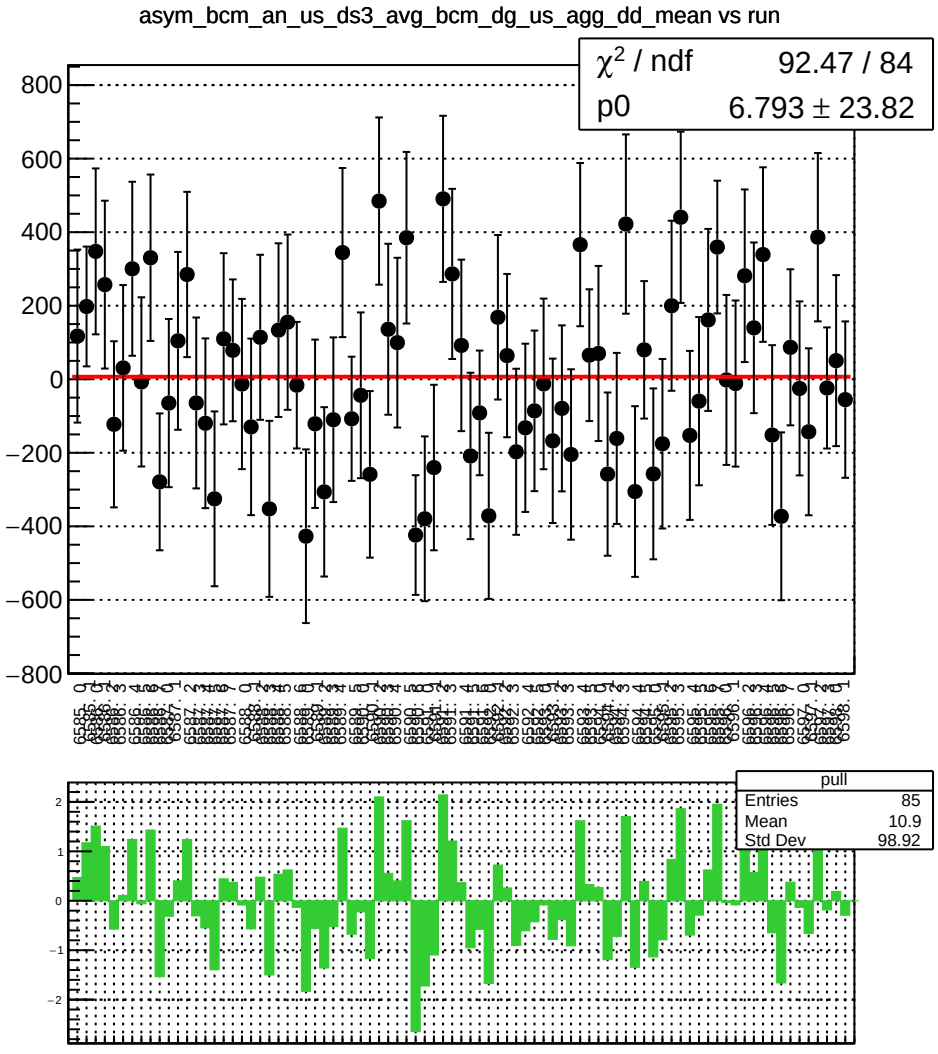

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ^2 / ndf 86.58 / 84
p0 10.69 ± 23.94
pull
Entries 85
Mean 30.36
Std Dev 107.2

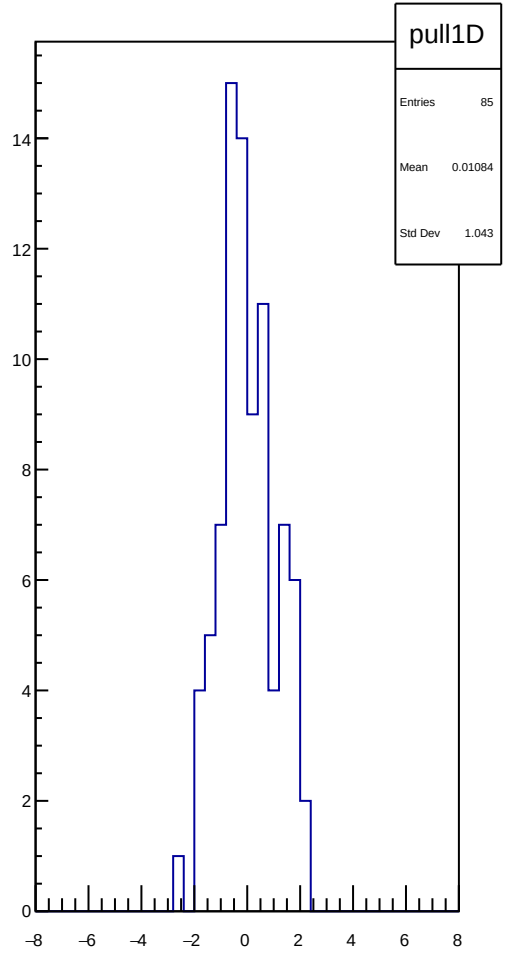

pull1D
Entries 85
Mean 0.009437
Std Dev 1.009

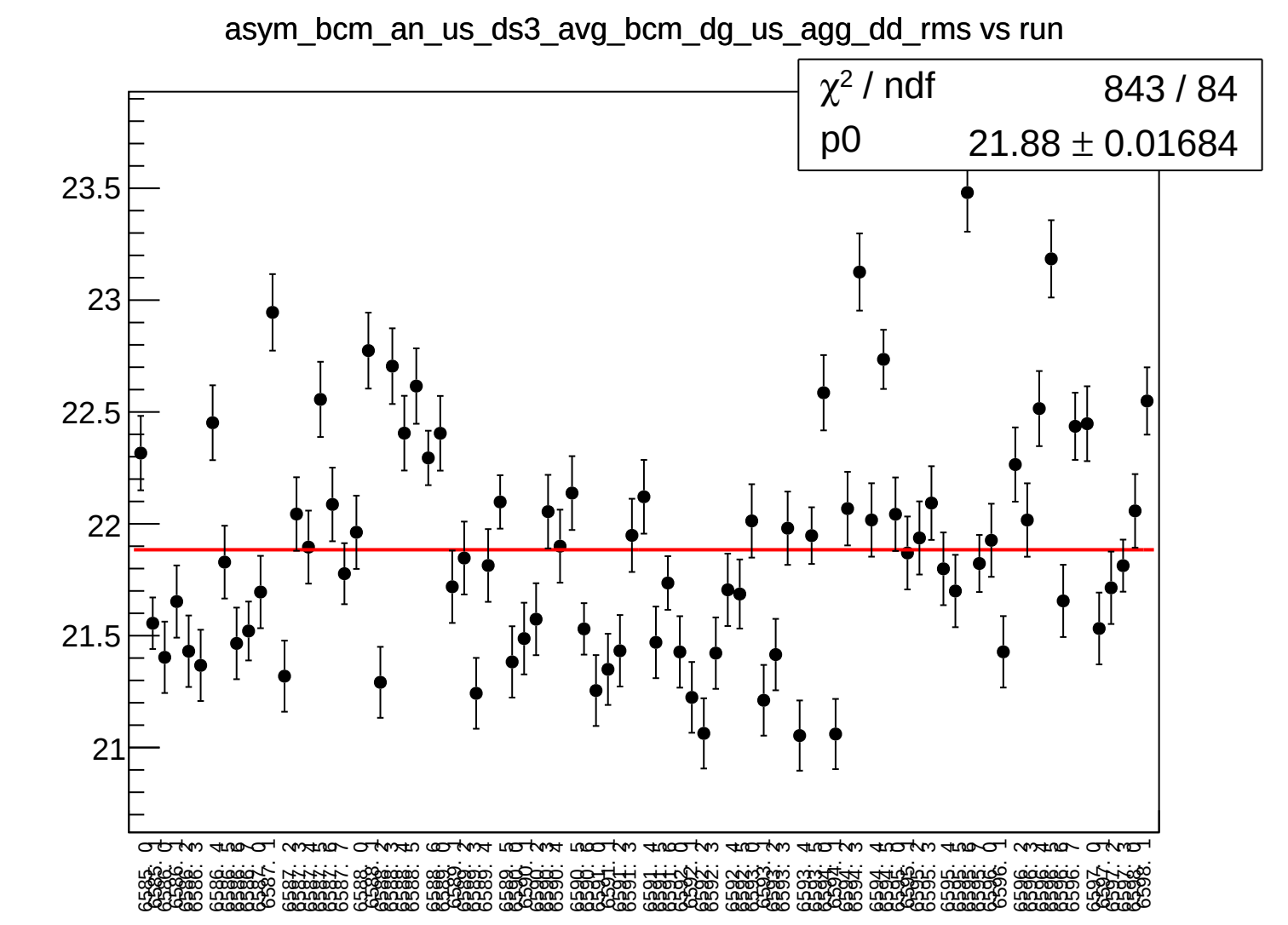

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 781.5 / 84
p0 22 ± 0.01693
23.5
23
22.5
22
21.5
21

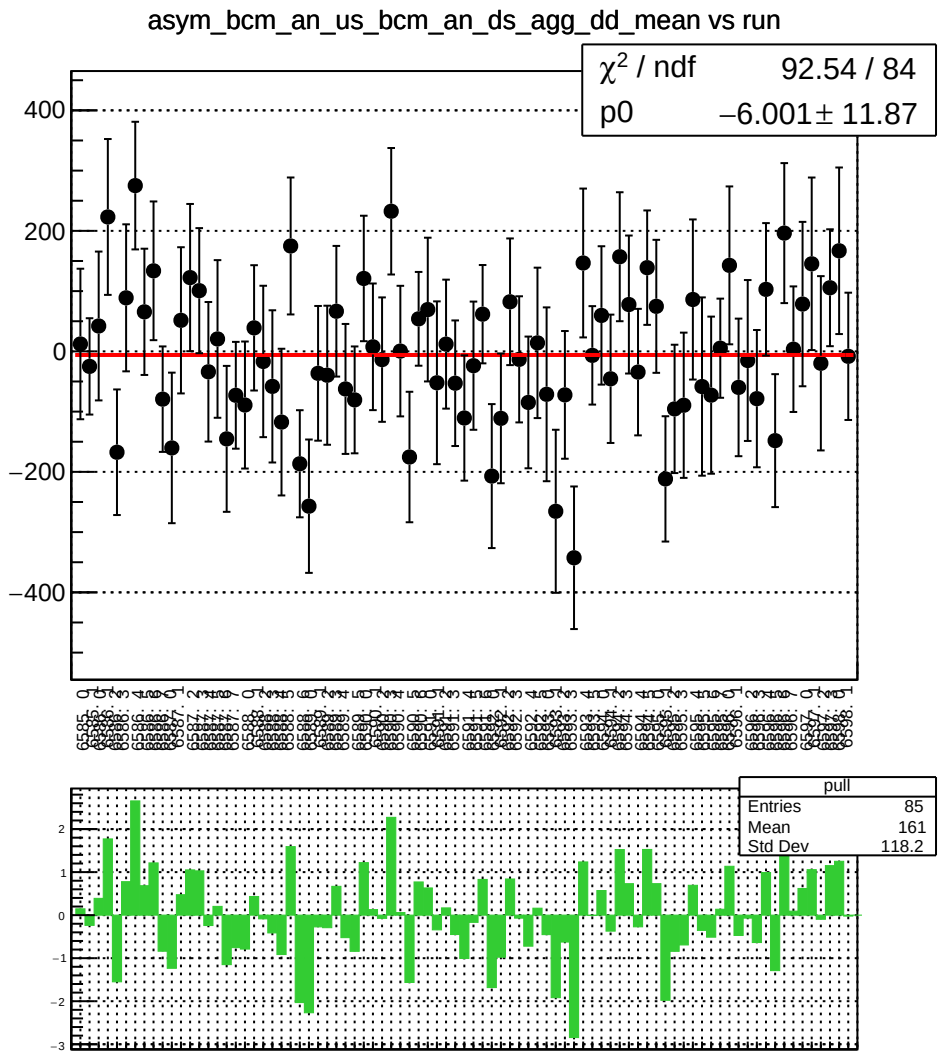

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 65.65 / 84
p0 −16.35 ± 17.17
pull
Entries 85
Mean 158.5
Std Dev 121.6
pull1D
Entries 85
Mean −0.01888
Std Dev 0.8786

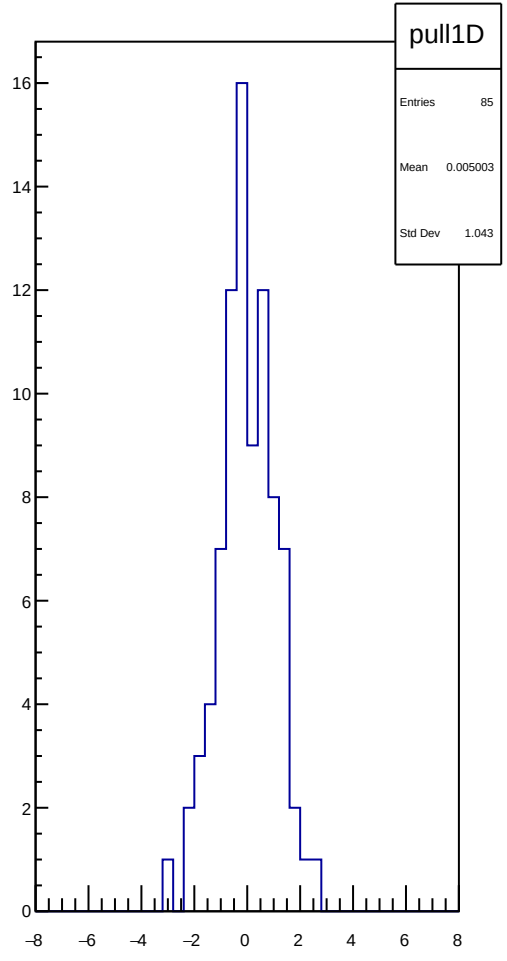

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2190 / 84
p0 15.77 ± 0.01214
17
16.5
16
15.5
15
14.5

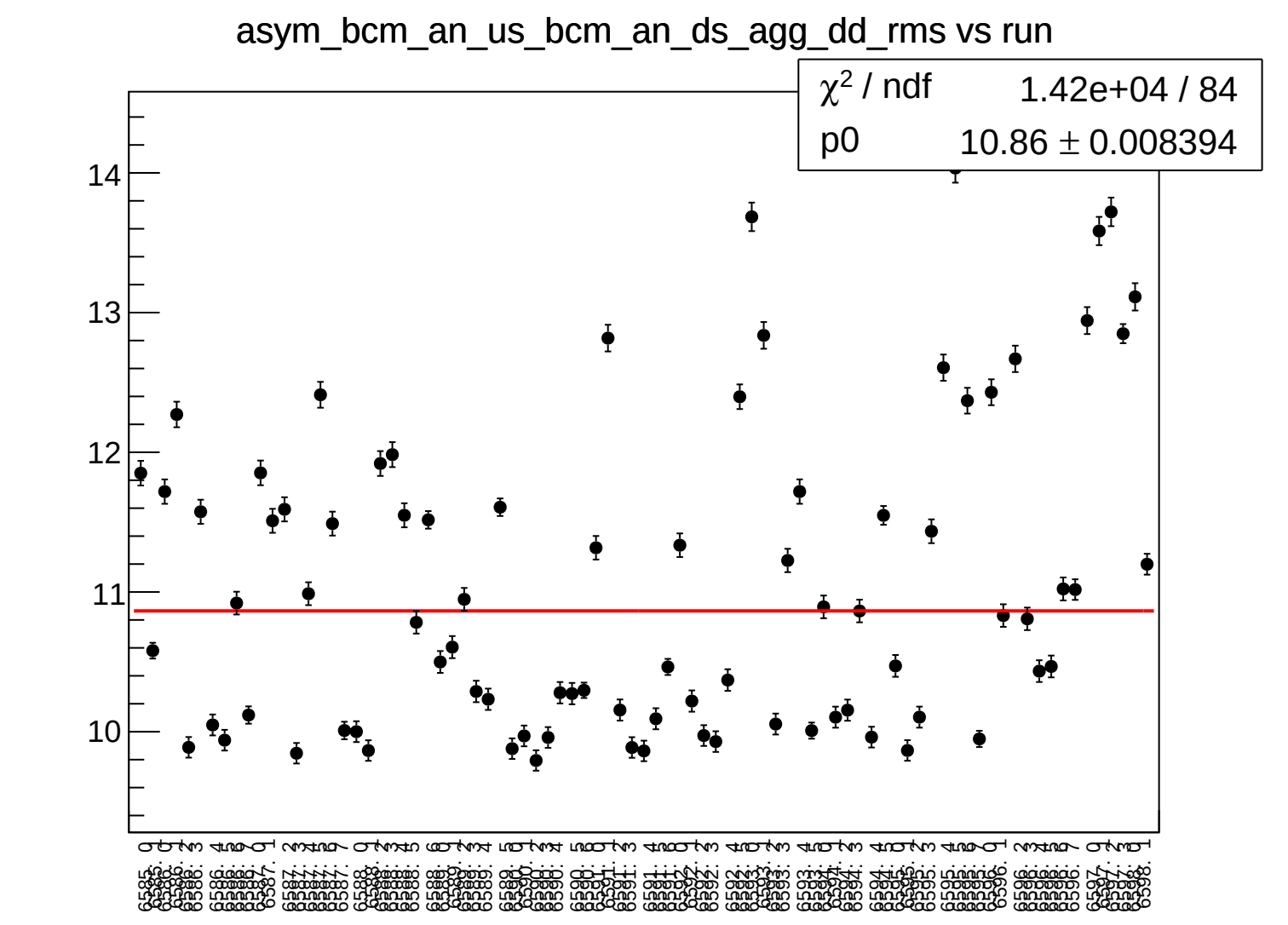

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 92.47 / 84
p0 6.793 ± 23.82
800
600
400
200
0
−200
−400
−600
−800
pull
Entries 85
Mean 10.9
Std Dev 98.92
2
1
0
−1
−2

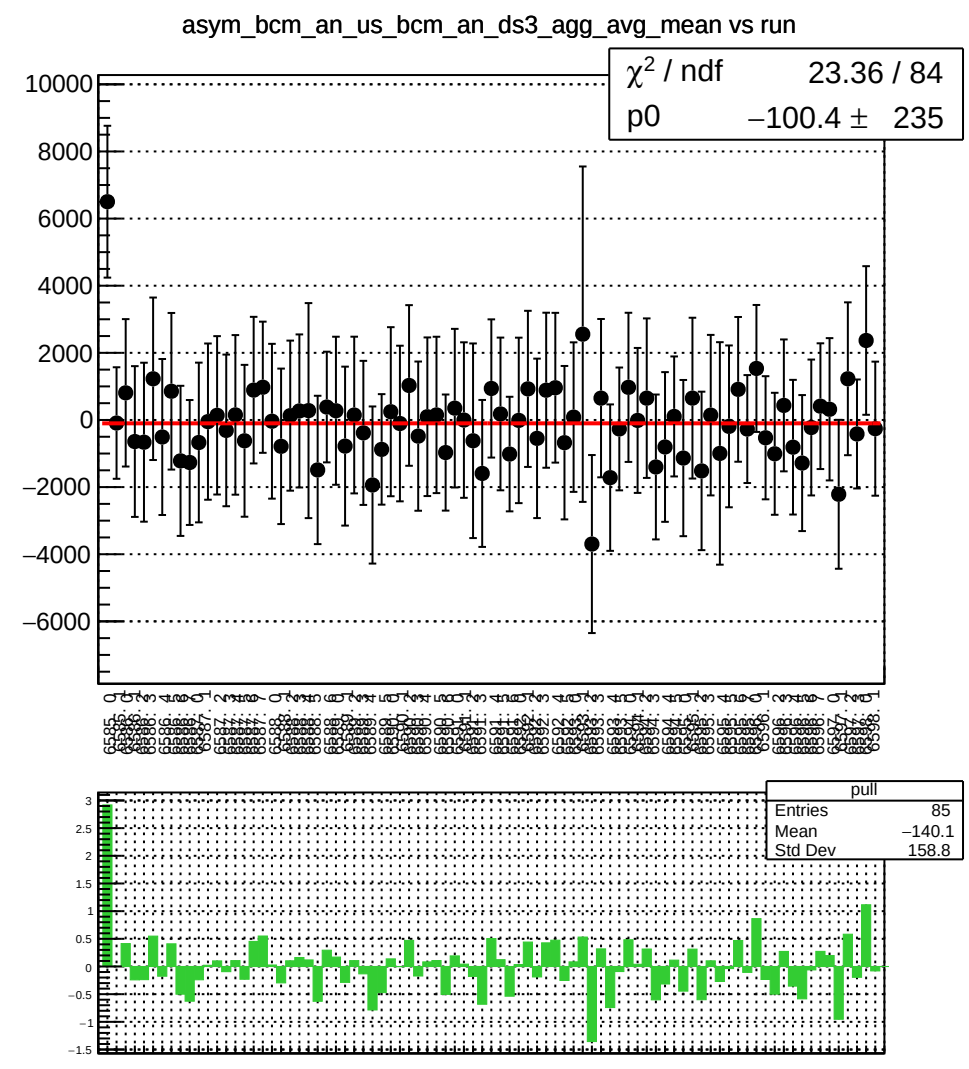

pull1D
Entries 85
Mean 0.01084
Std Dev 1.043
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

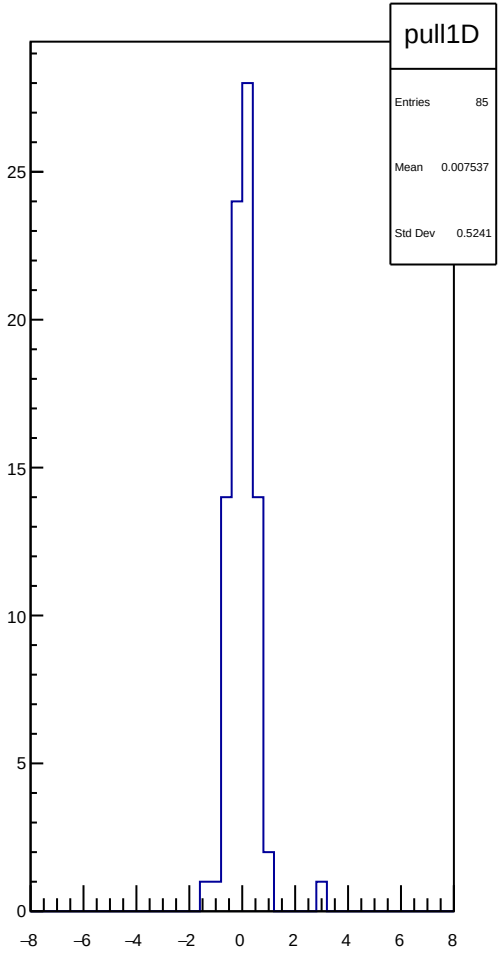

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 843 / 84
p0 21.88 ± 0.01684
23.5
23
22.5
22
21.5
21

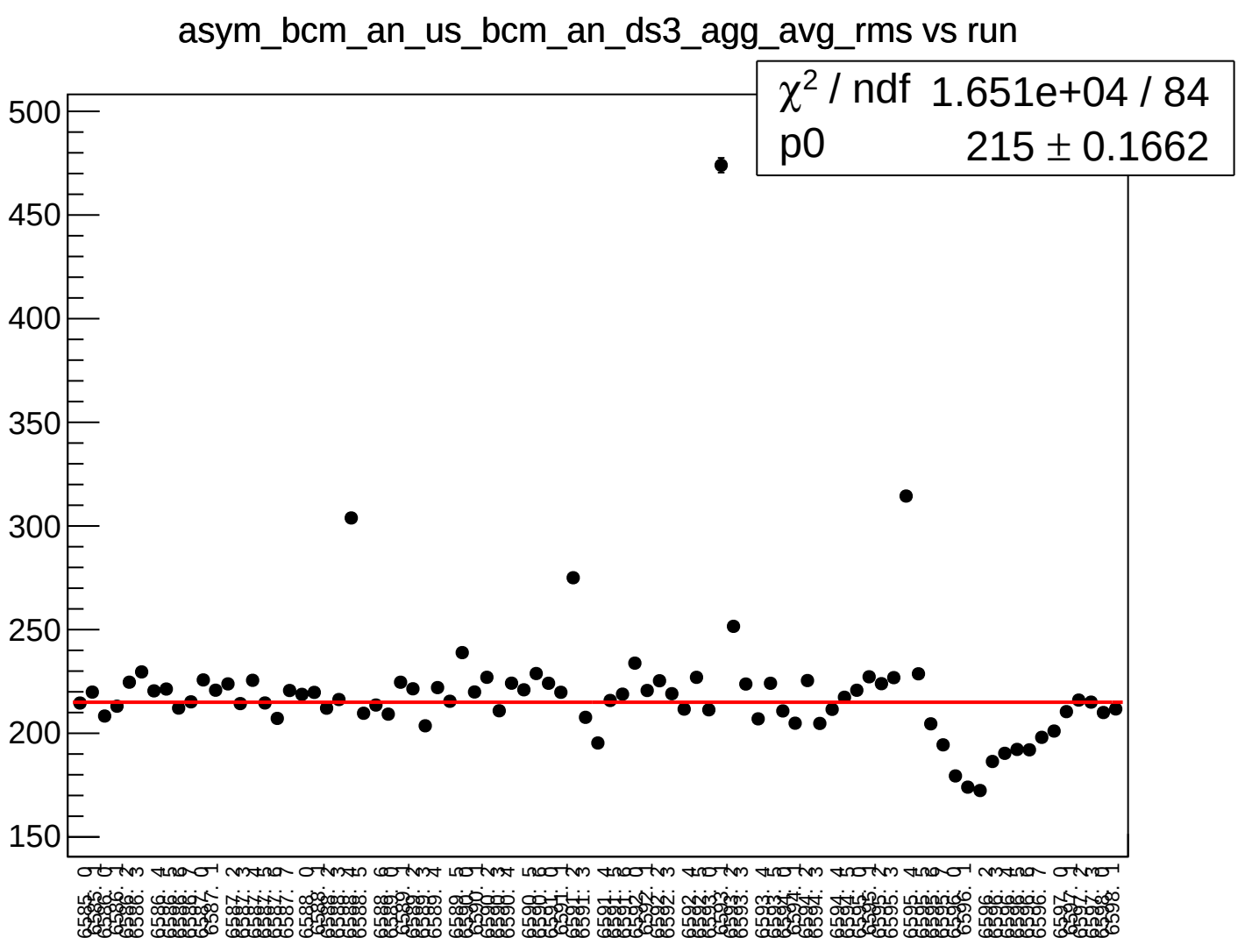

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 92.54 / 84
p0 −6.001 ± 11.87
400
200
0
−200
−400
pull
Entries 85
Mean 161
Std Dev 118.2
2
1
0
−1
−2
−3

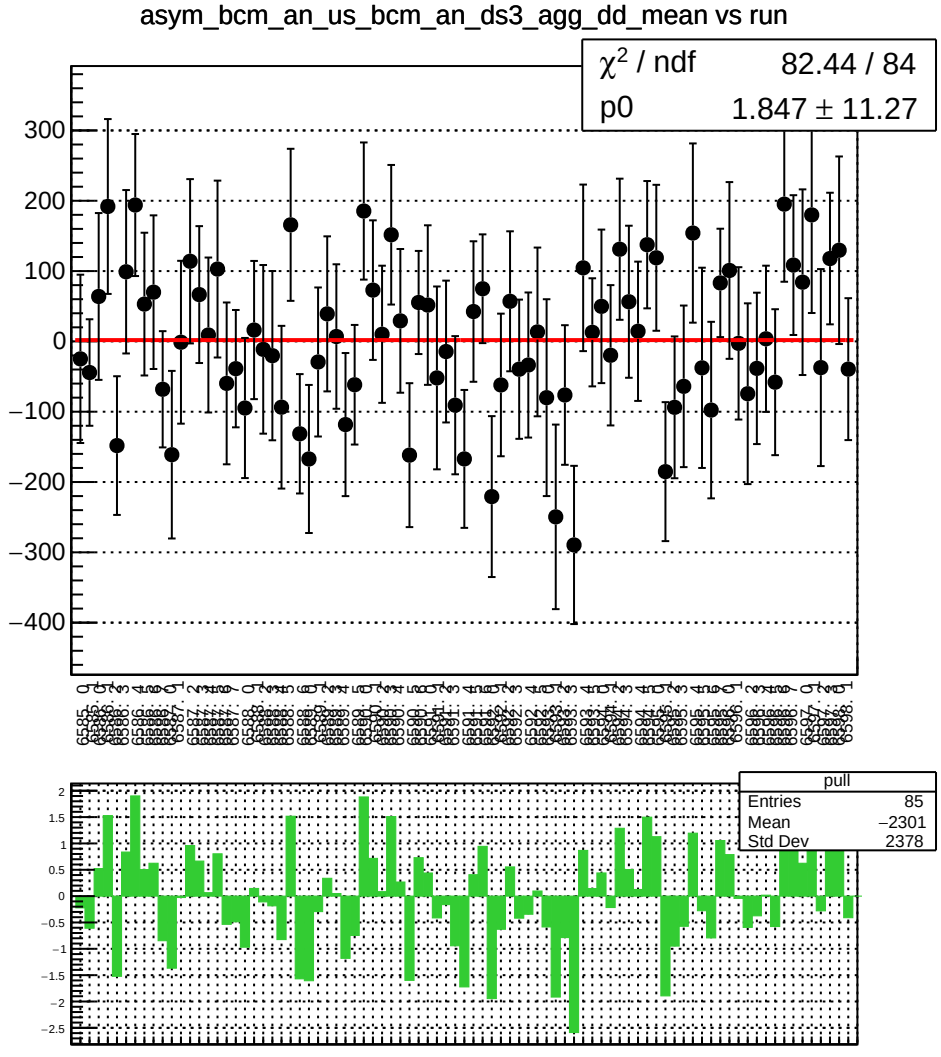

pull1D
Entries 85
Mean 0.005003
Std Dev 1.043
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

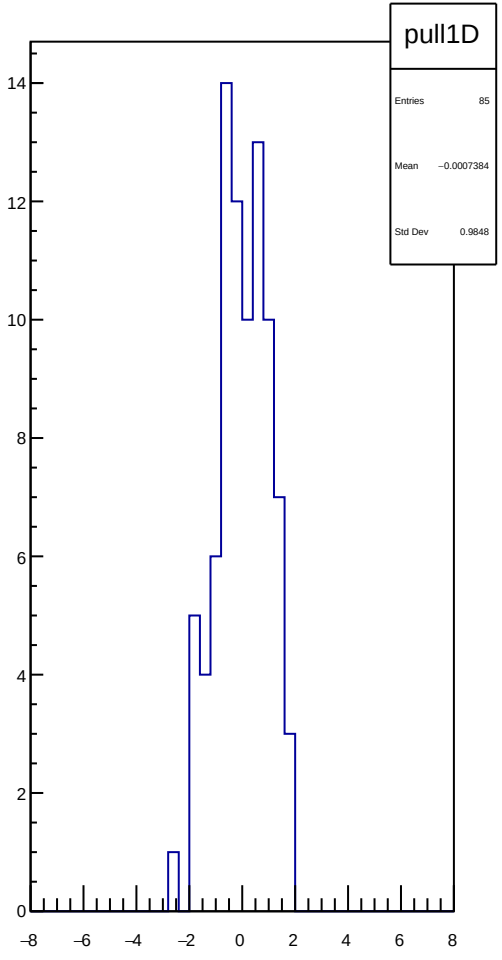

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.42e+04 / 84
p0 10.86 ± 0.008394
14
13
12
11
10

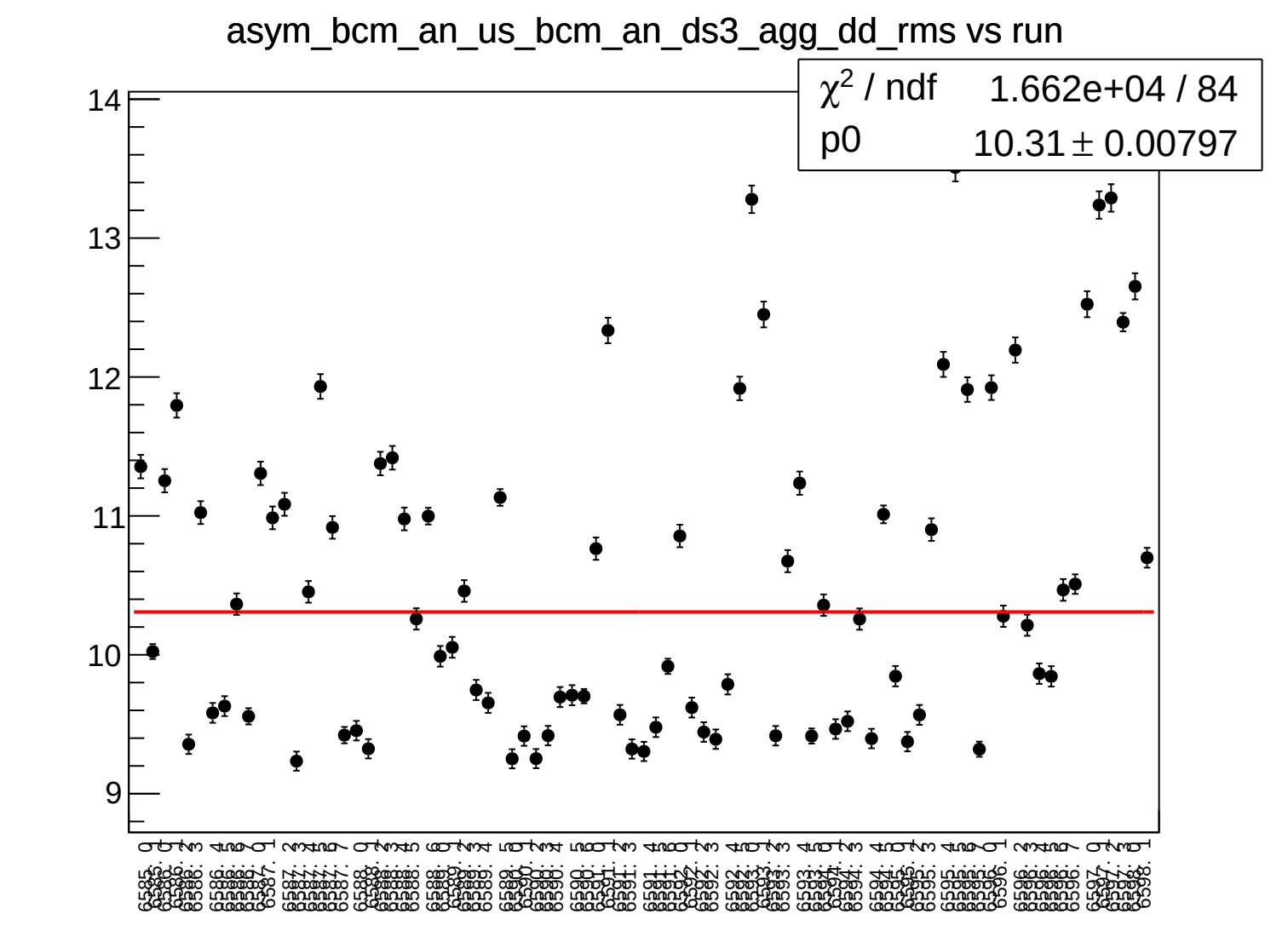

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 23.36 / 84
p0 −100.4 ± 235
pull
Entries 85
Mean −140.1
Std Dev 158.8

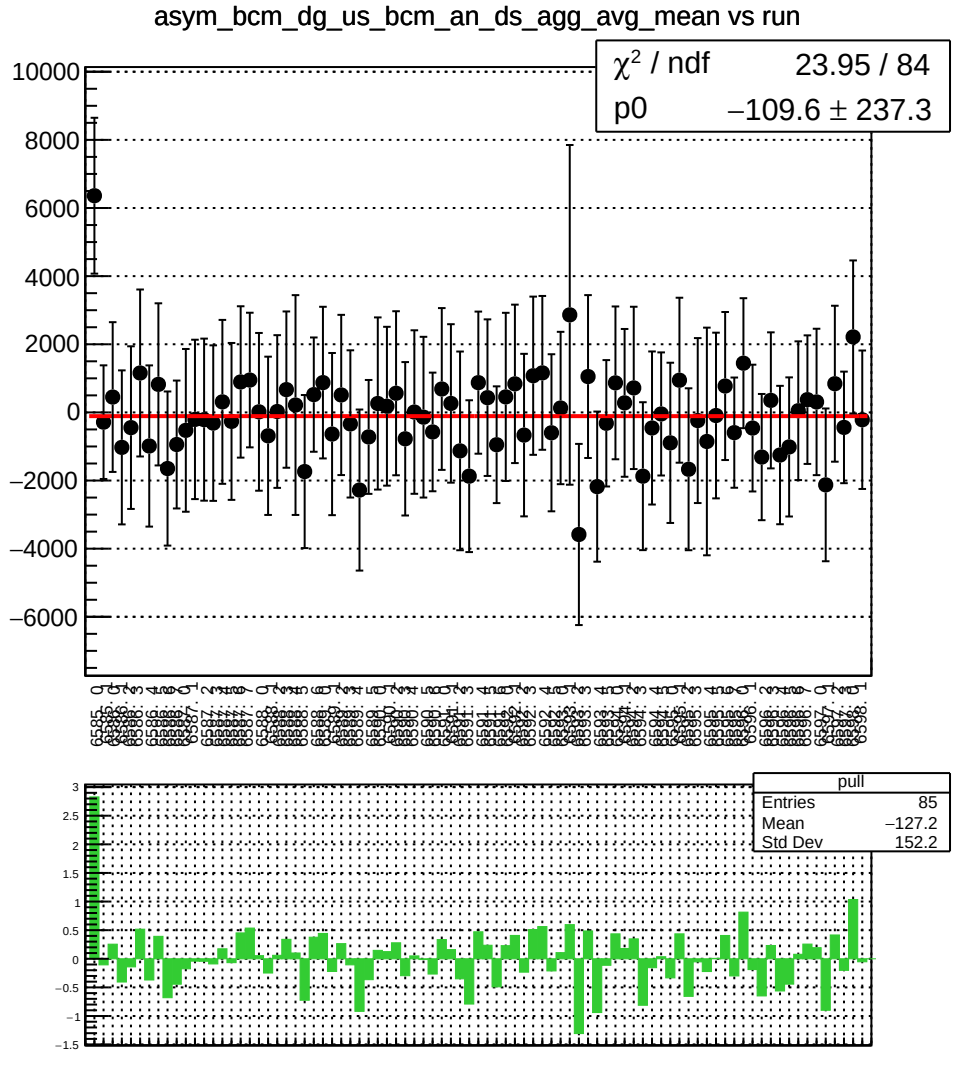

pull1D
Entries 85
Mean 0.007537
Std Dev 0.5241

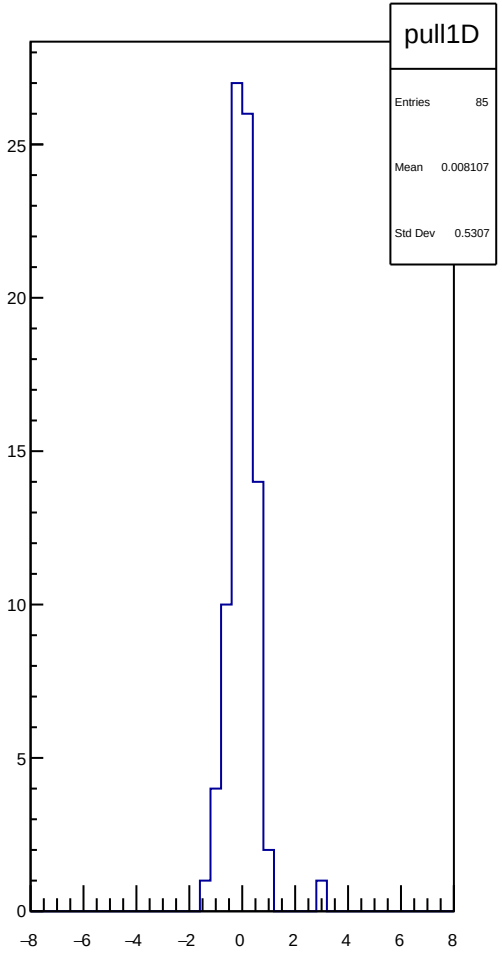

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.651e+04 / 84
p0 215 ± 0.1662
500
450
400
350
300
250
200
150

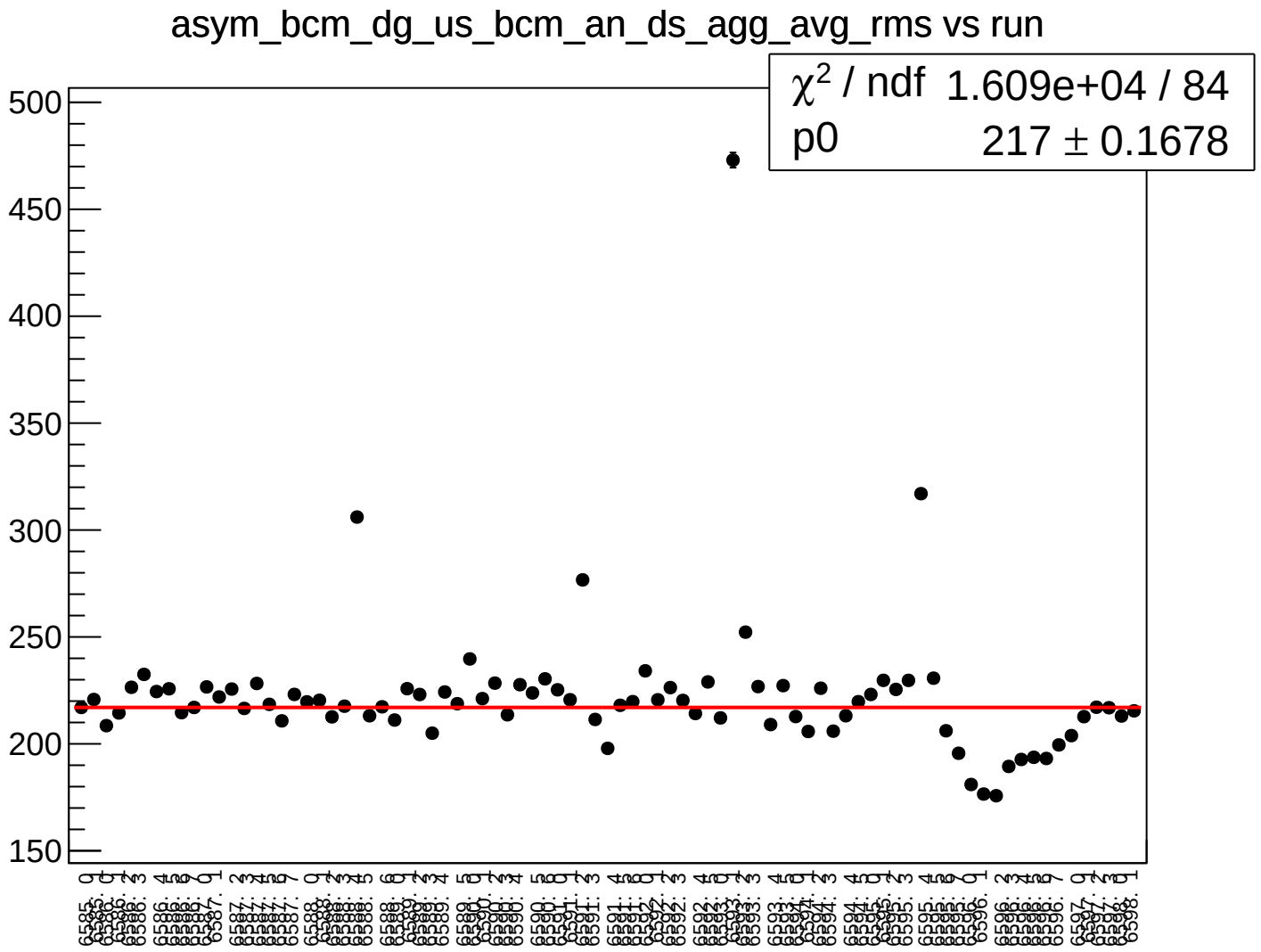

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 82.44 / 84
p0 1.847 ± 11.27
pull
Entries 85
Mean −2301
Std Dev 2378

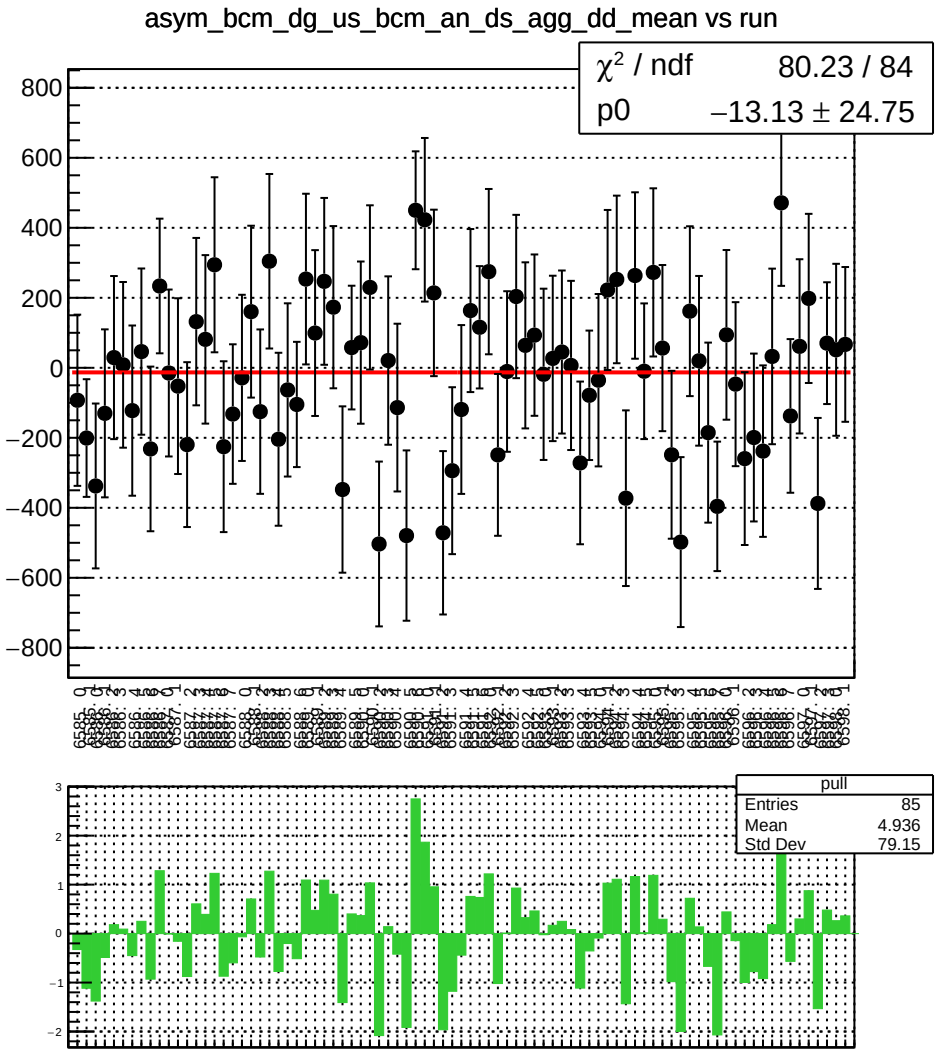

pull1D
Entries 85
Mean −0.0007384
Std Dev 0.9848

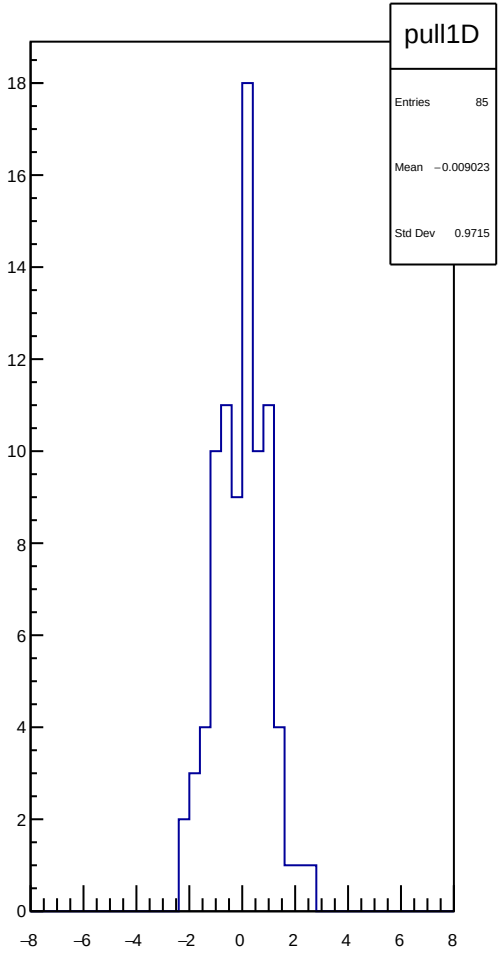

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.662e+04 / 84
p0 10.31 ± 0.00797
14
13
12
11
10
9

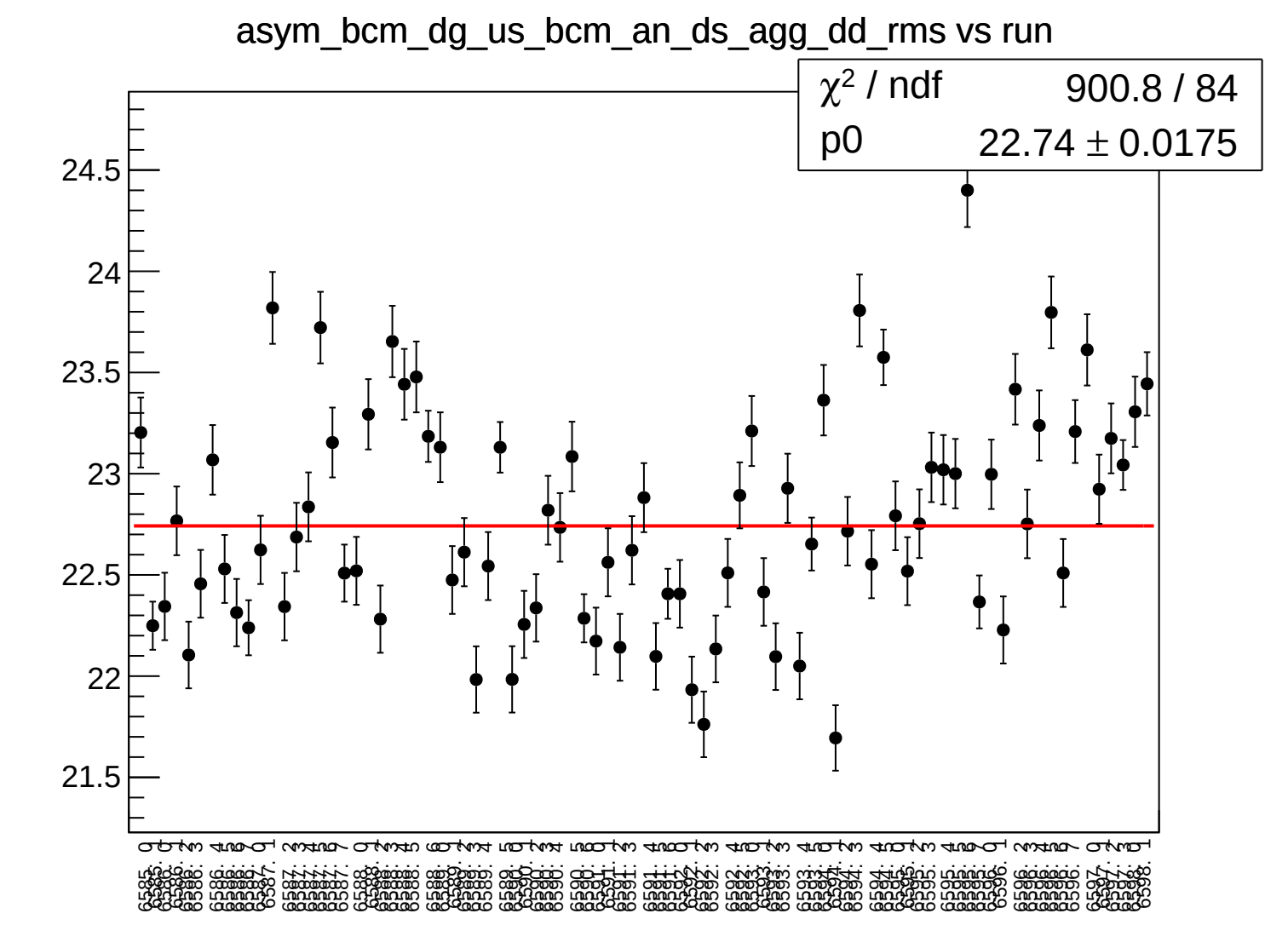

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 23.95 / 84
p0 −109.6 ± 237.3
pull
Entries 85
Mean −127.2
Std Dev 152.2

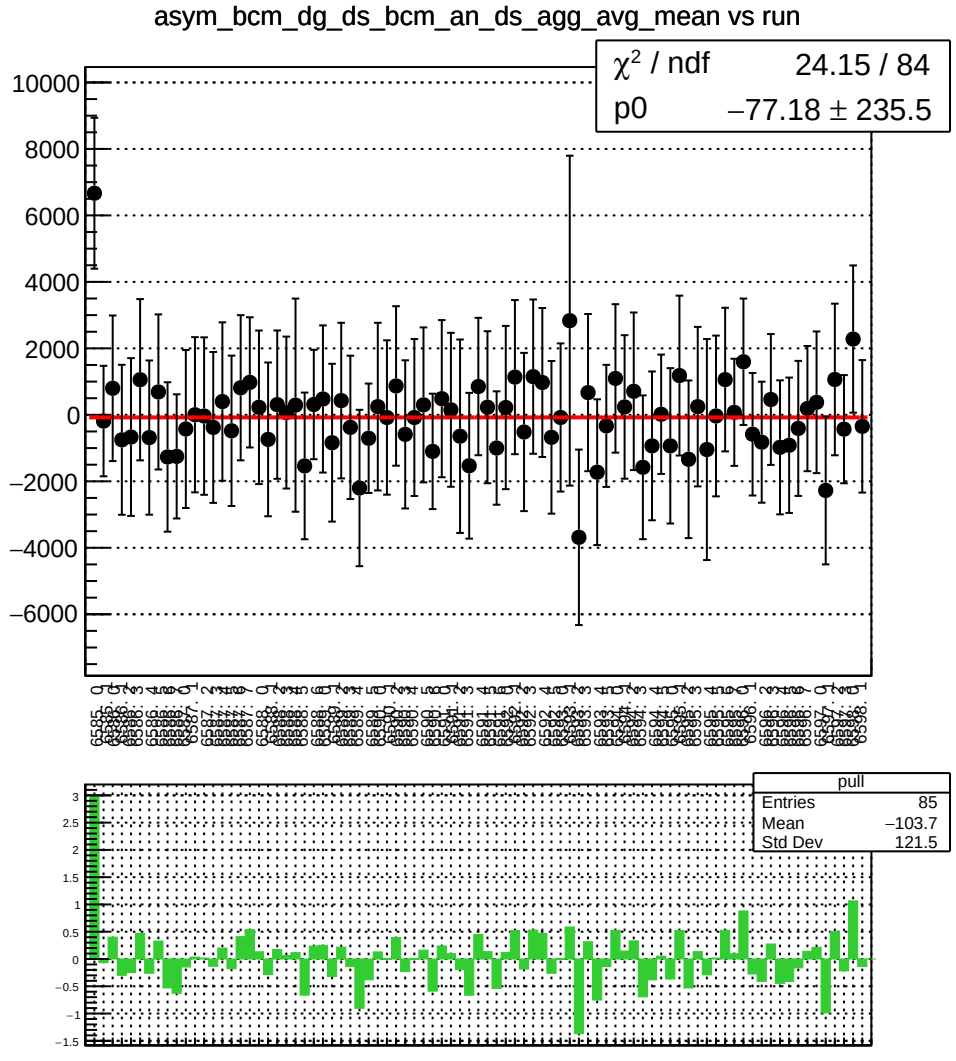

pull1D
Entries 85
Mean 0.008107
Std Dev 0.5307

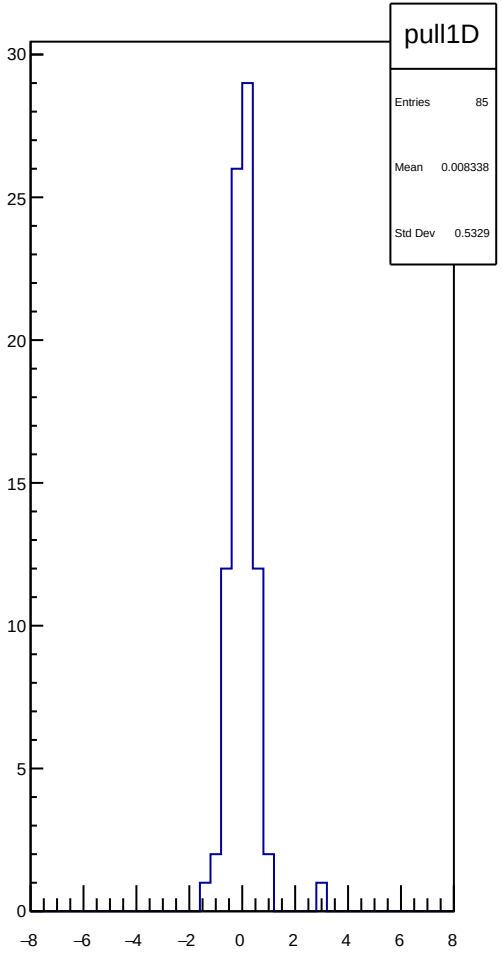

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.609e+04 / 84
p0 217 ± 0.1678
500
450
400
350
300
250
200
150

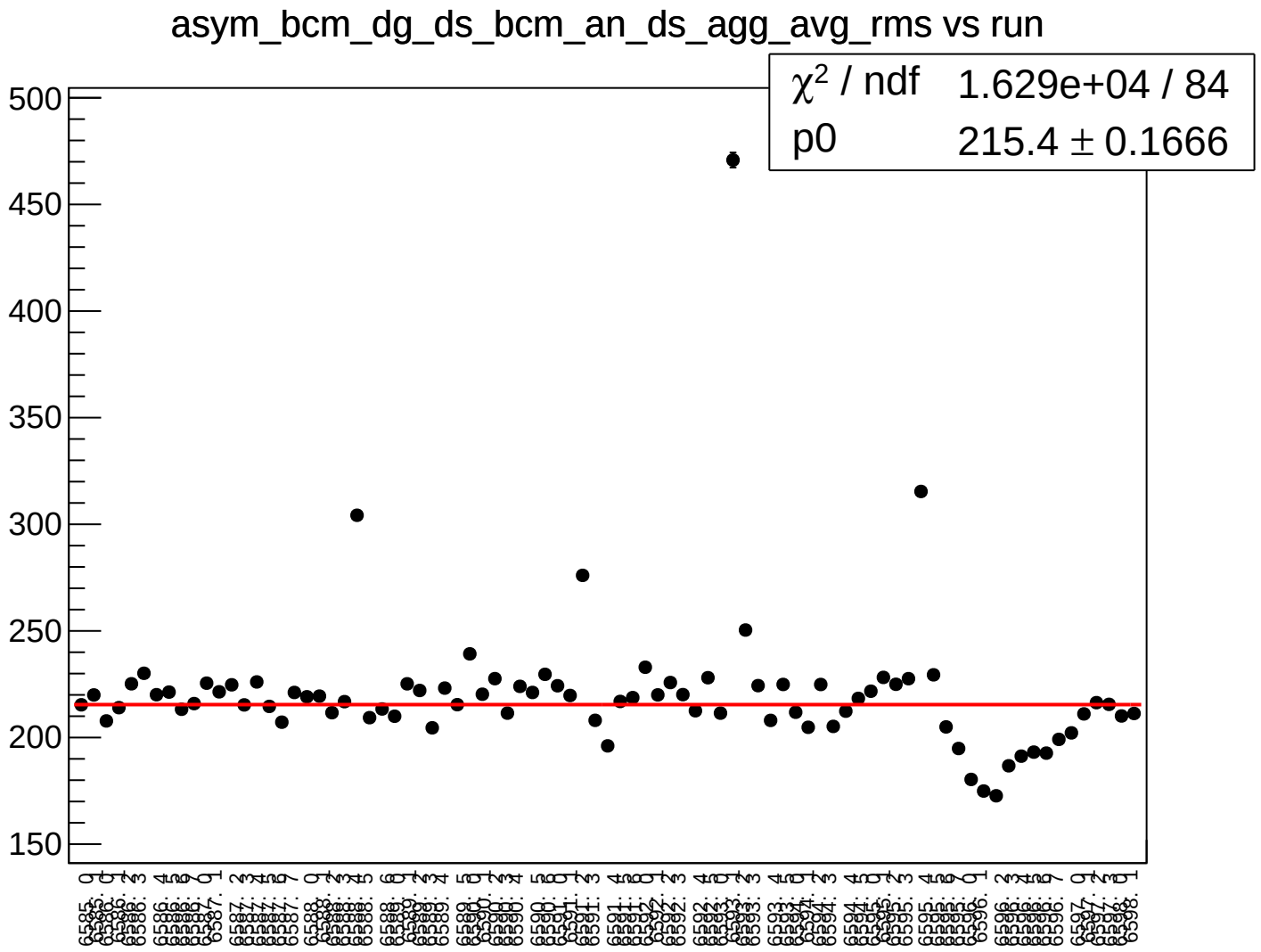

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 80.23 / 84
p0 −13.13 ± 24.75
pull
Entries 85
Mean 4.936
Std Dev 79.15

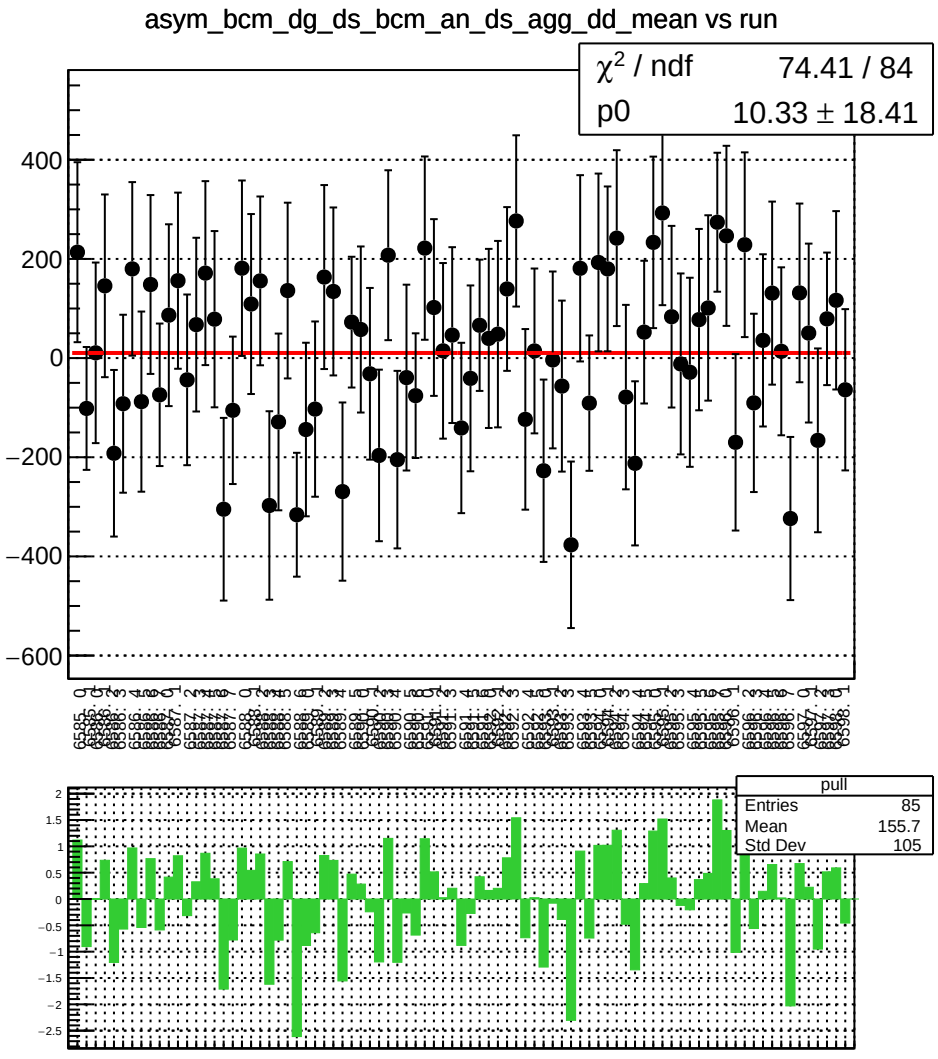

pull1D
Entries 85
Mean −0.009023
Std Dev 0.9715

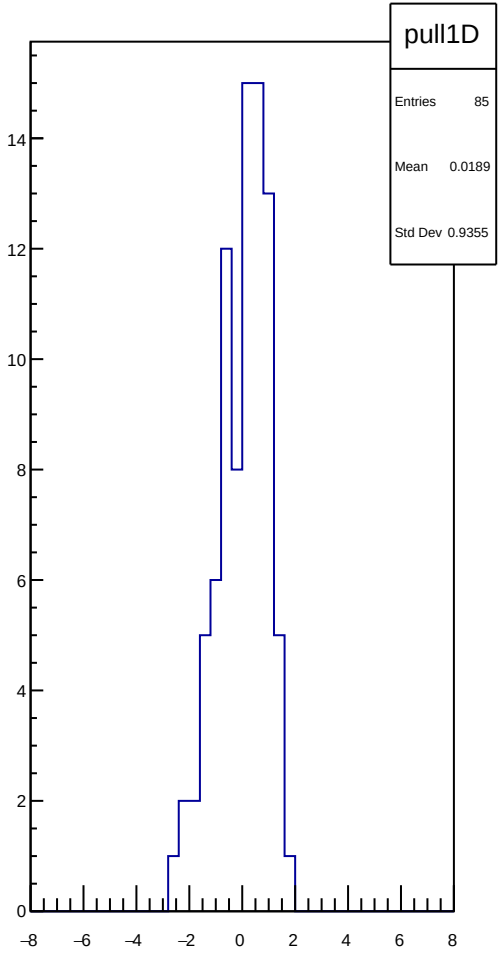

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 900.8 / 84
p0 22.74 ± 0.0175
24.5
24
23.5
23
22.5
22
21.5

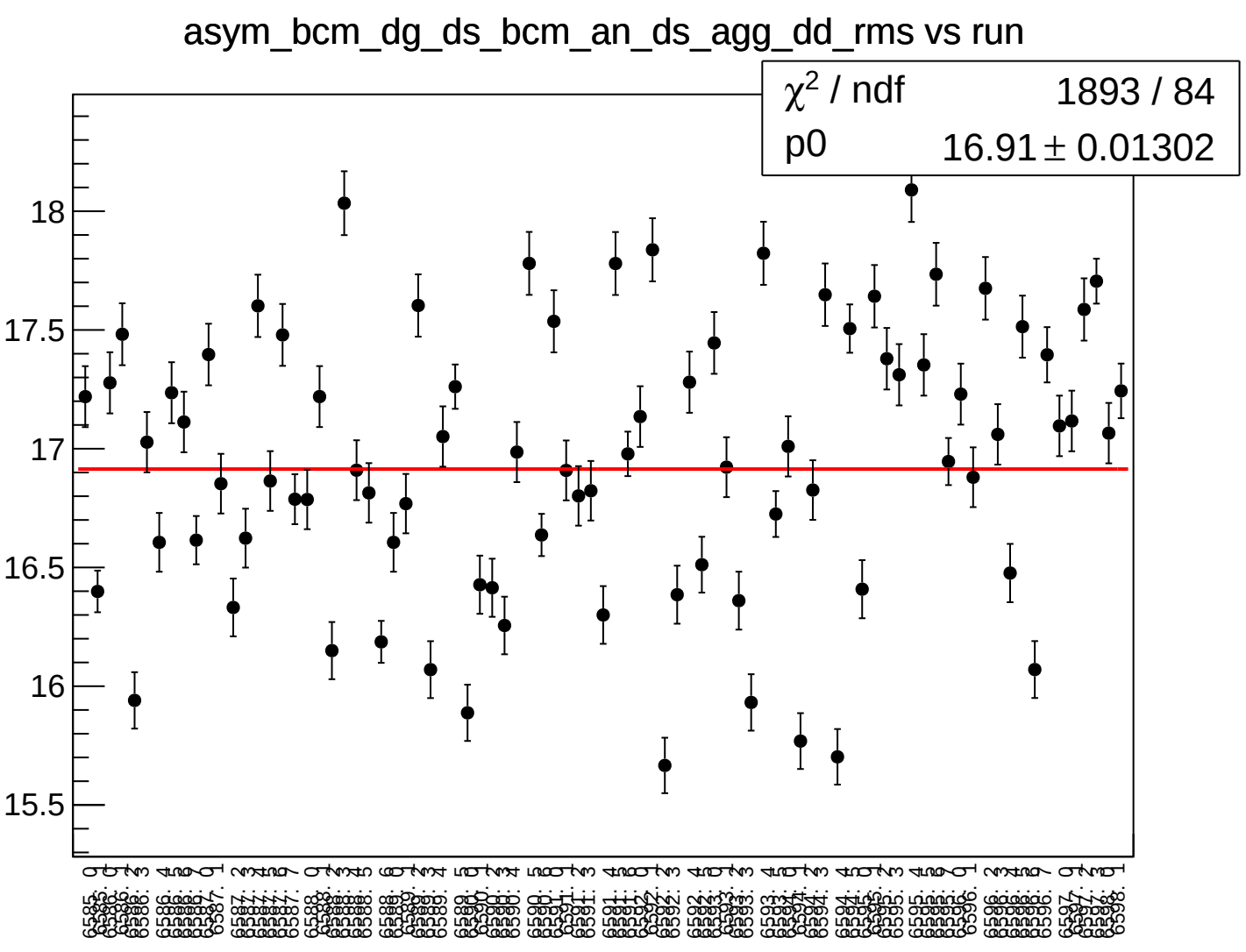

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.15 / 84
p0 −77.18 ± 235.5
pull
Entries 85
Mean −103.7
Std Dev 121.5

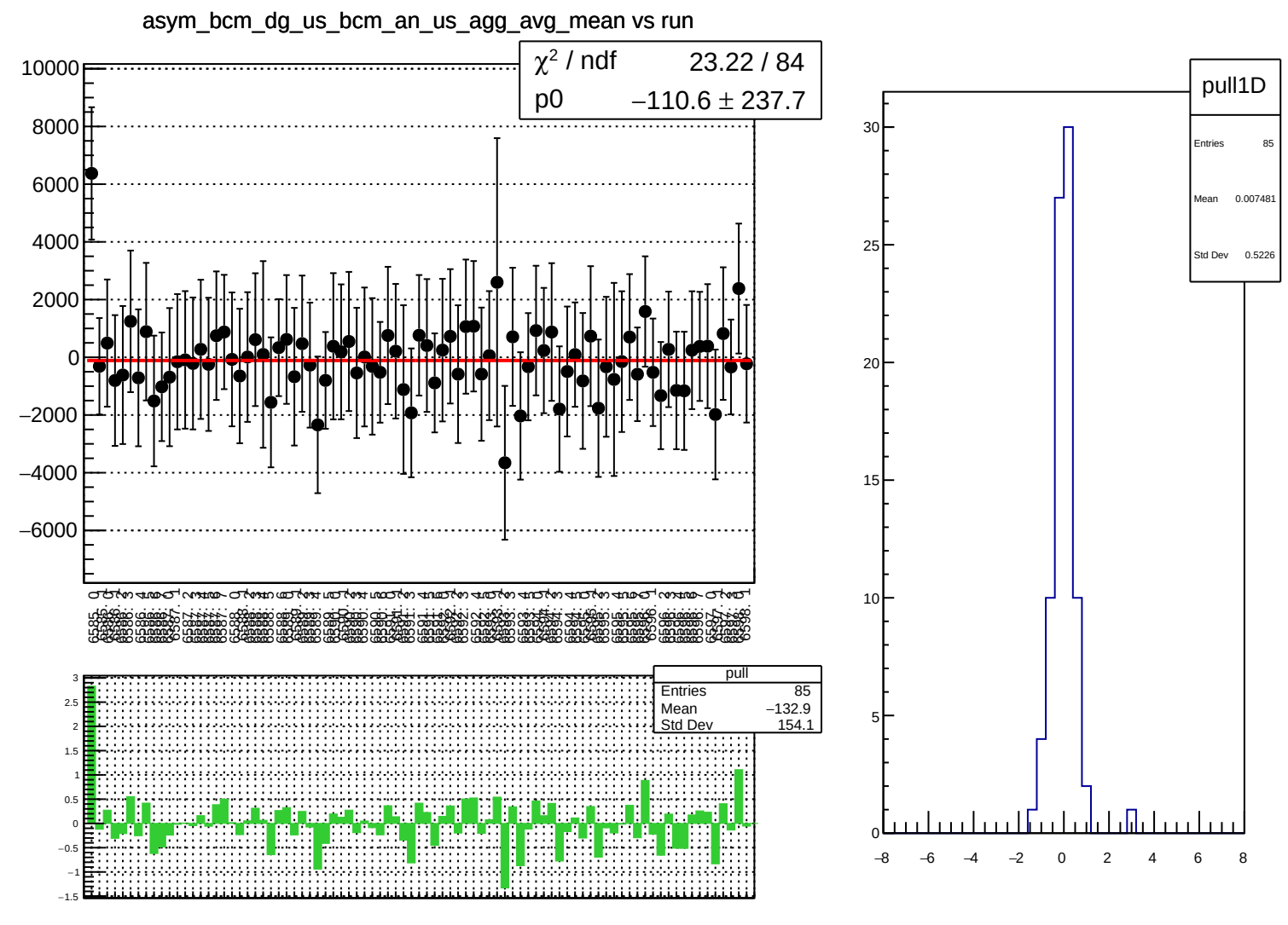

pull1D
Entries 85
Mean 0.008338
Std Dev 0.5329

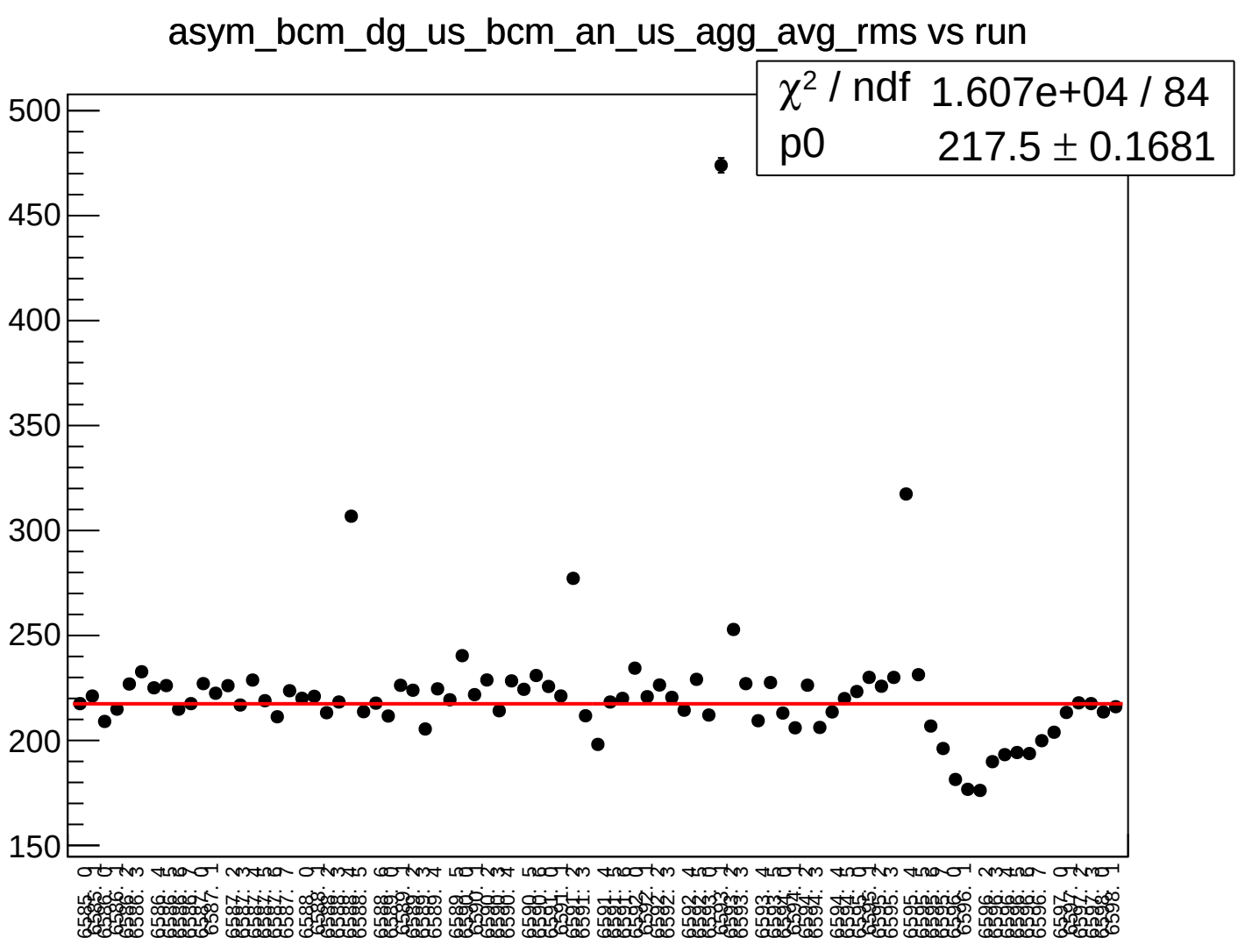

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.629e+04 / 84
p0 215.4 ± 0.1666
500
450
400
350
300
250
200
150

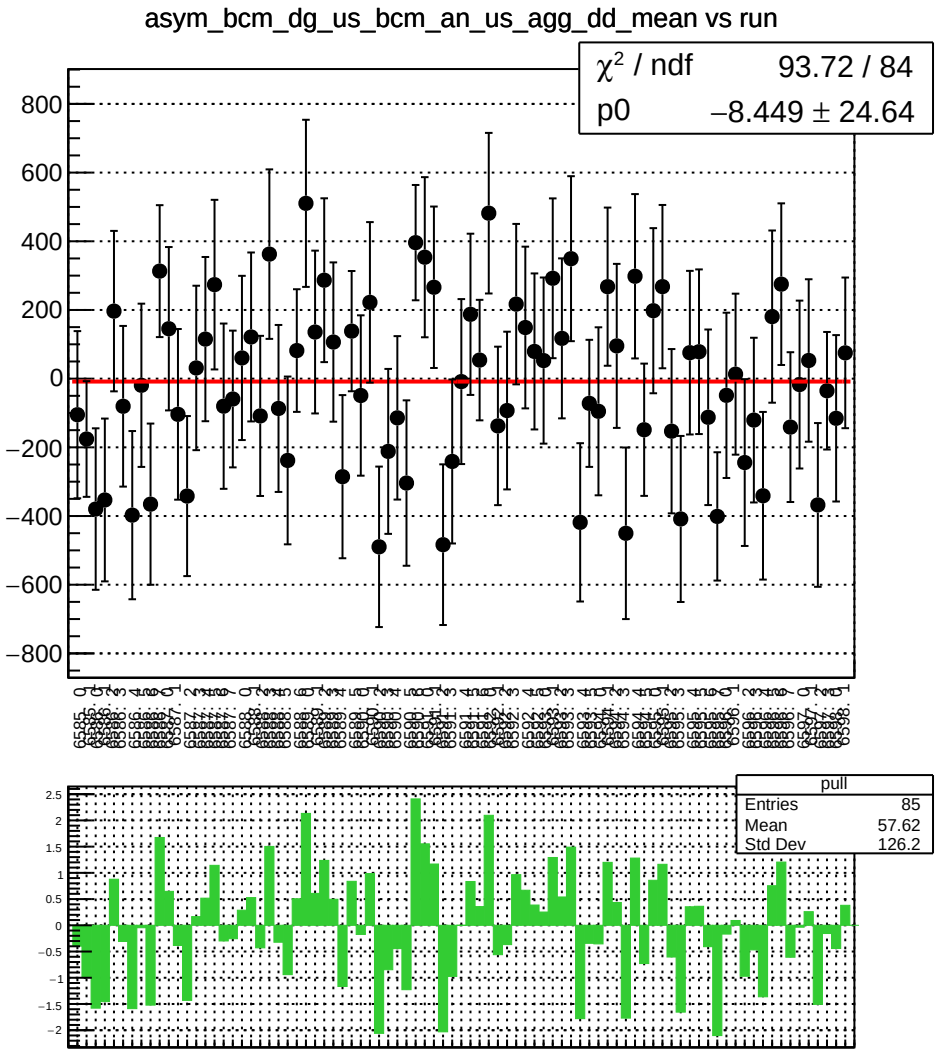

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 74.41 / 84
p0 10.33 ± 18.41
pull
Entries 85
Mean 155.7
Std Dev 105

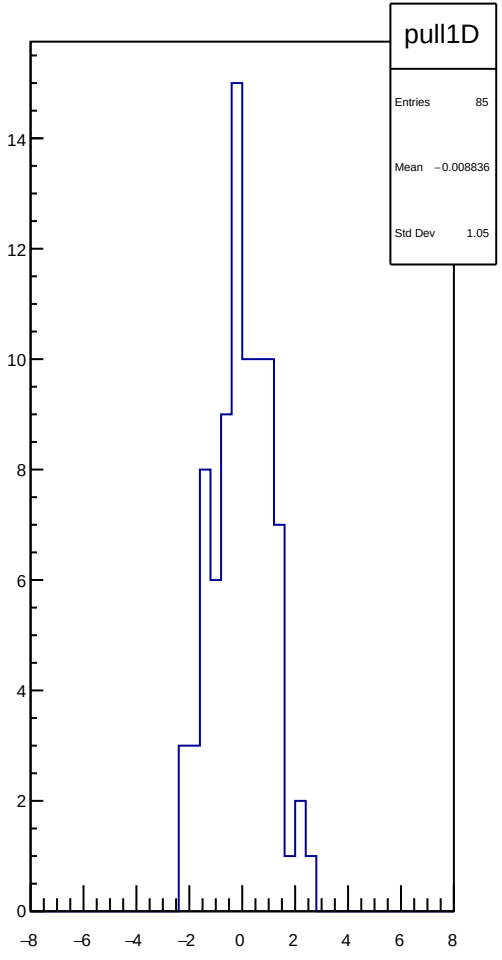

pull1D
Entries 85
Mean 0.0189
Std Dev 0.9355

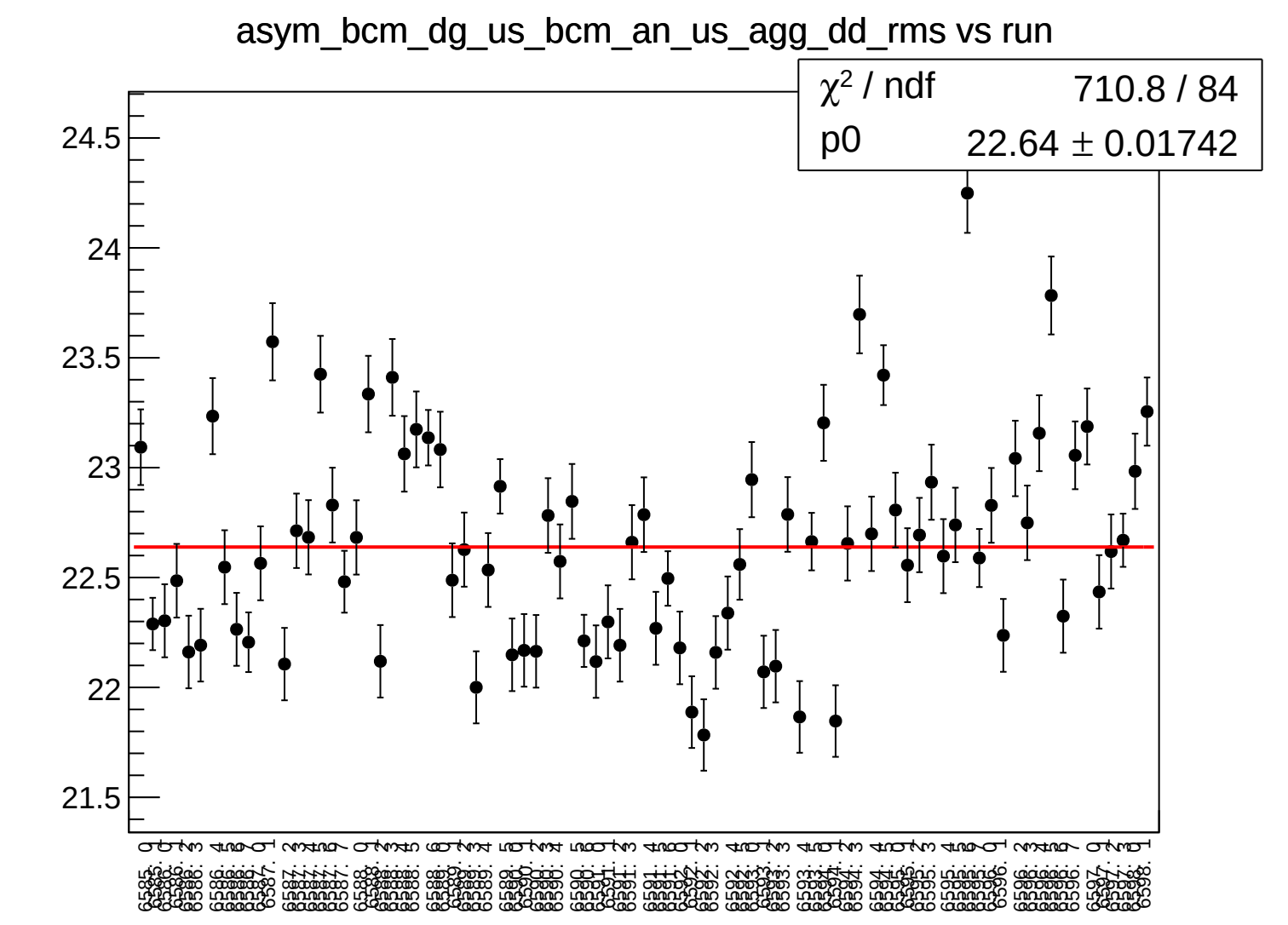

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1893 / 84
p0 16.91 ± 0.01302
18
17.5
17
16.5
16
15.5

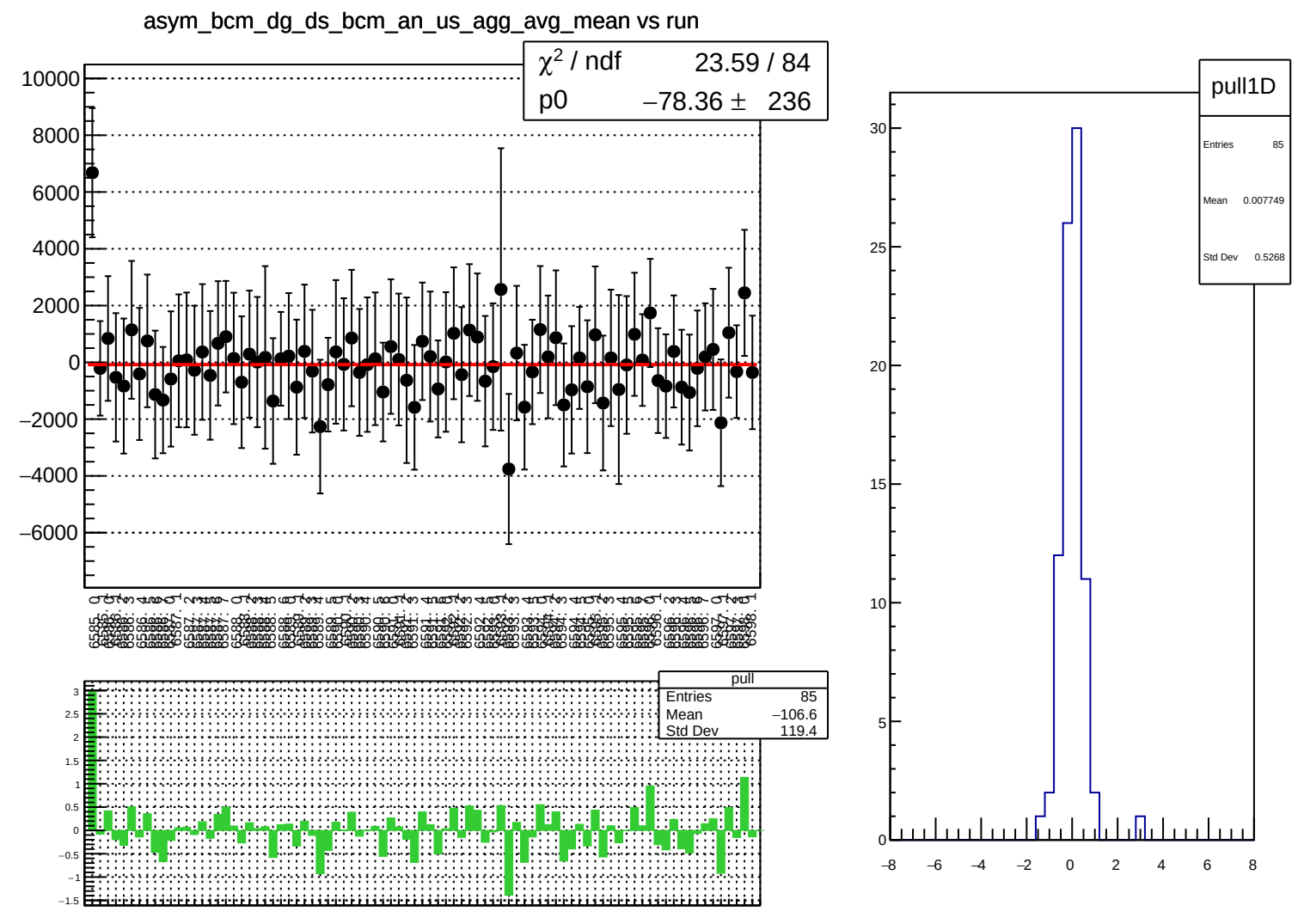

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 23.22 / 84
p0 −110.6 ± 237.7
pull
Entries 85
Mean −132.9
Std Dev 154.1
pull1D
Entries 85
Mean 0.007481
Std Dev 0.5226

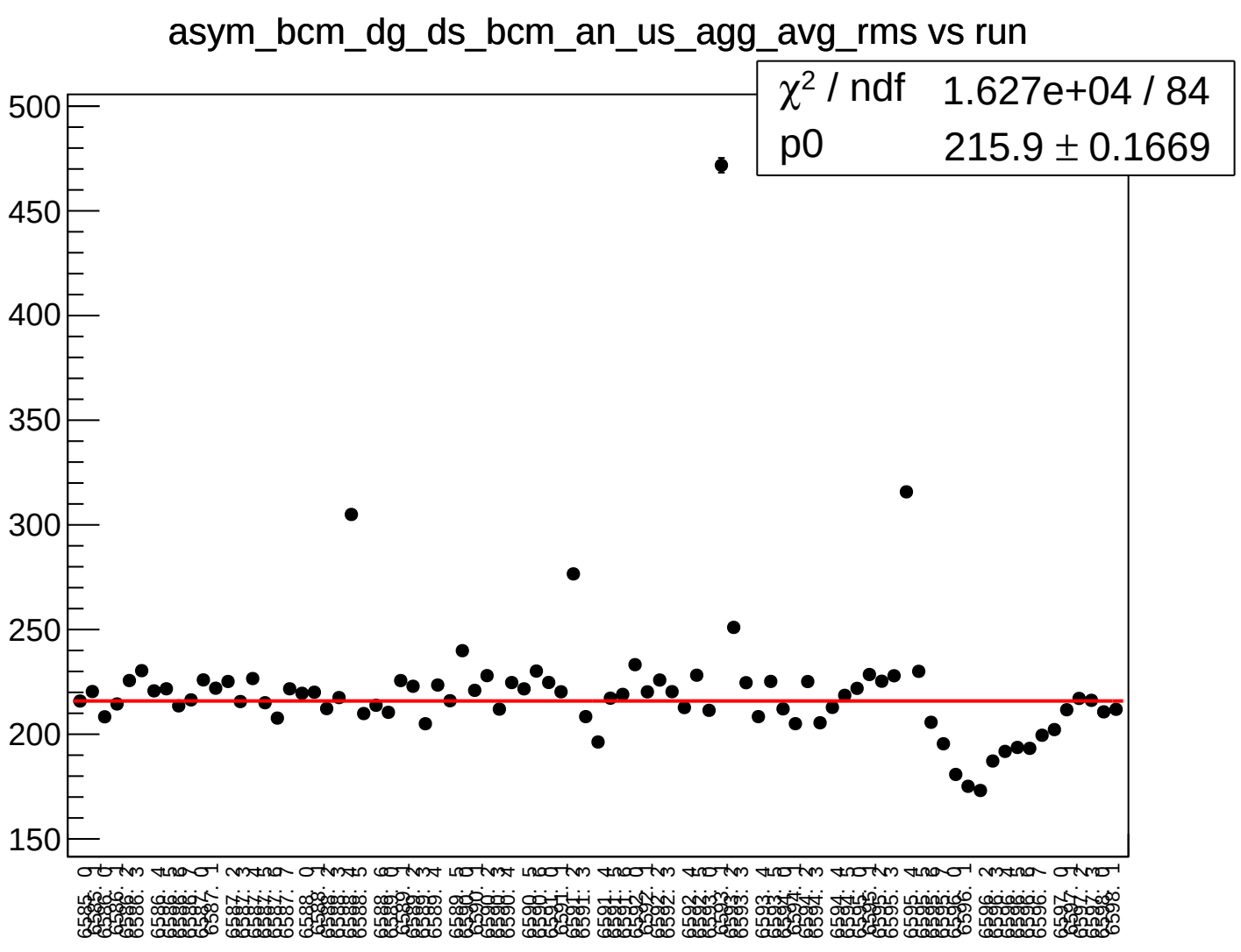

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.607e+04 / 84
p0 217.5 ± 0.1681
500
450
400
350
300
250
200
150

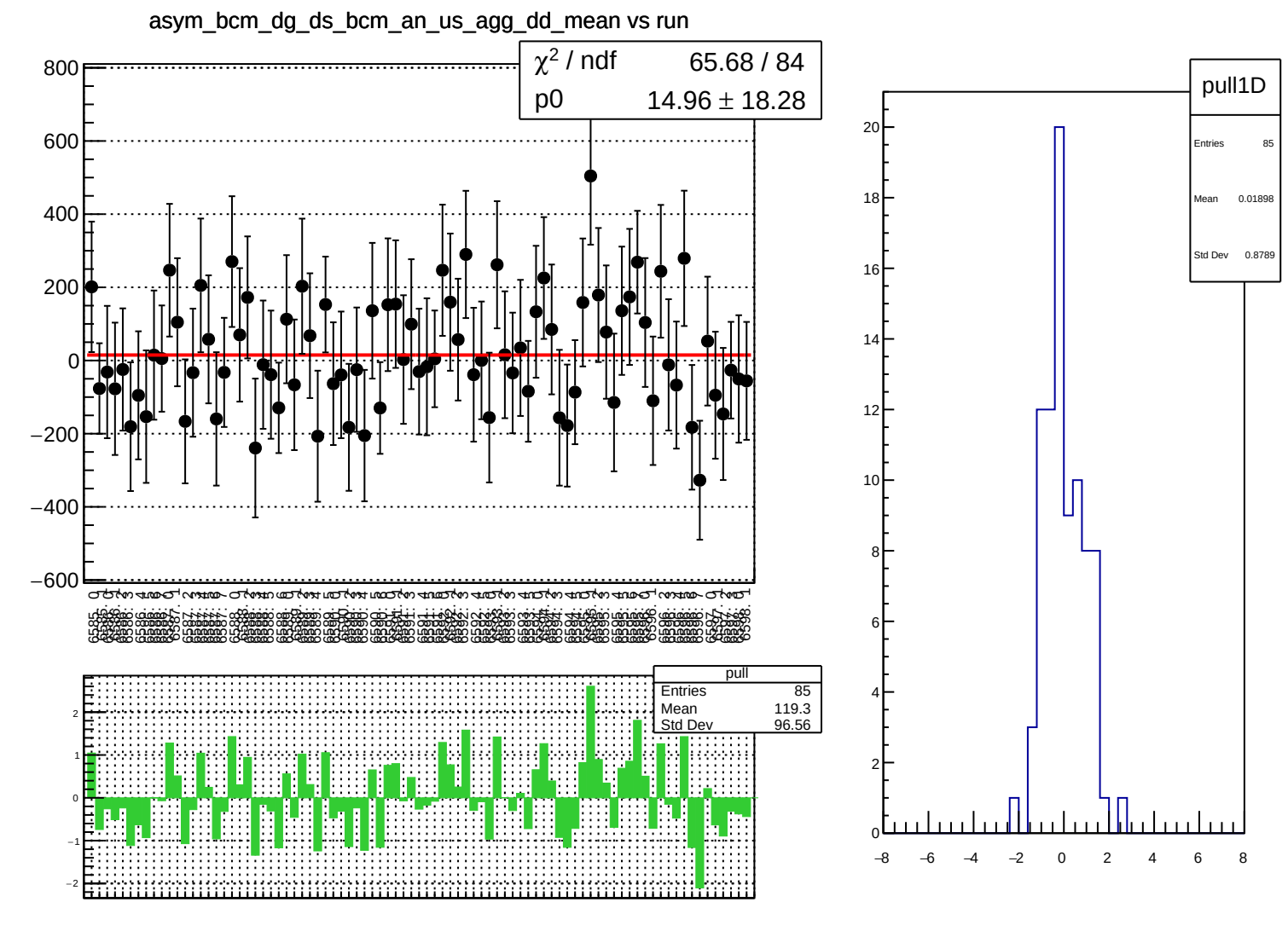

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 93.72 / 84
p0 −8.449 ± 24.64
pull
Entries 85
Mean 57.62
Std Dev 126.2

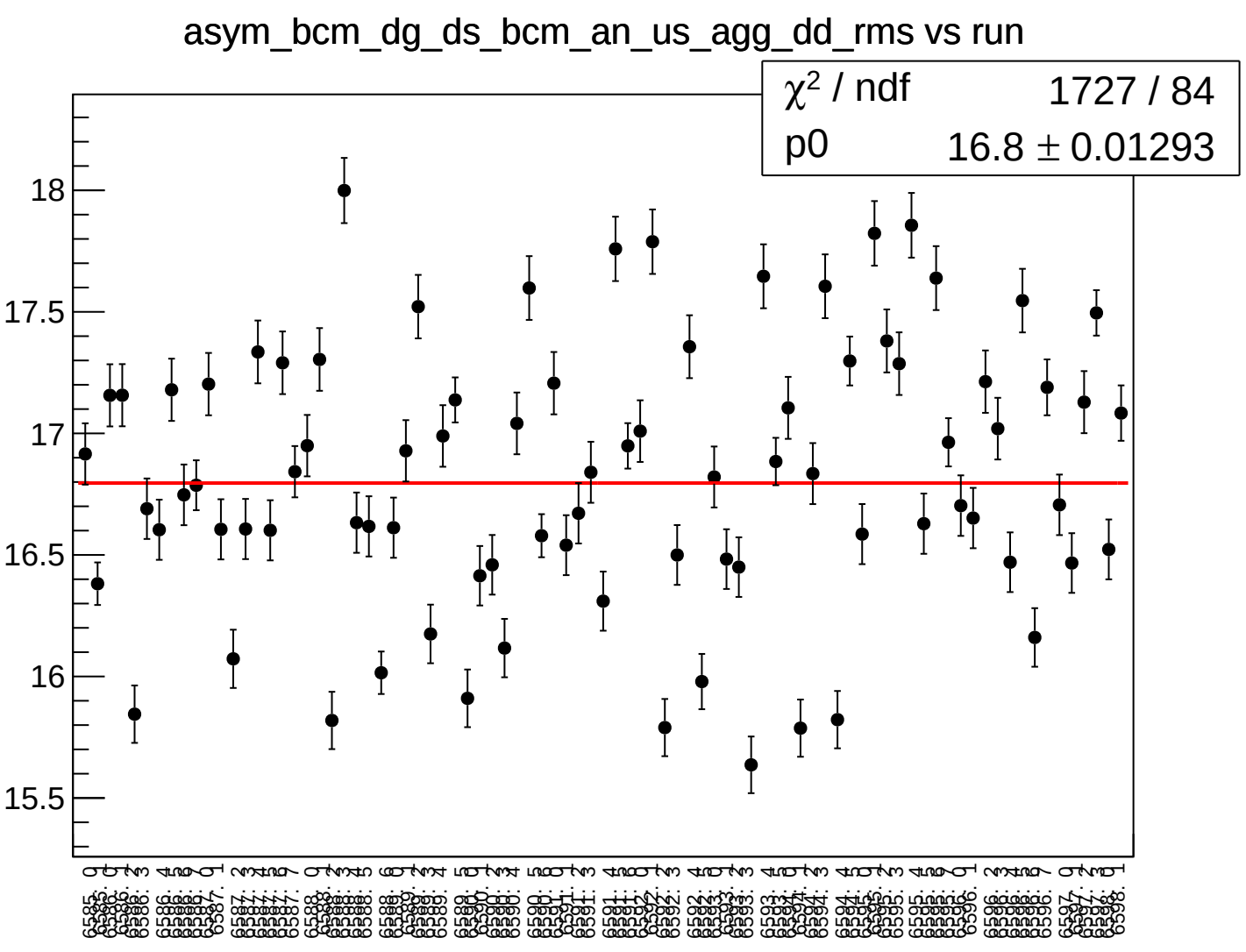

pull1D
Entries 85
Mean −0.008836
Std Dev 1.05

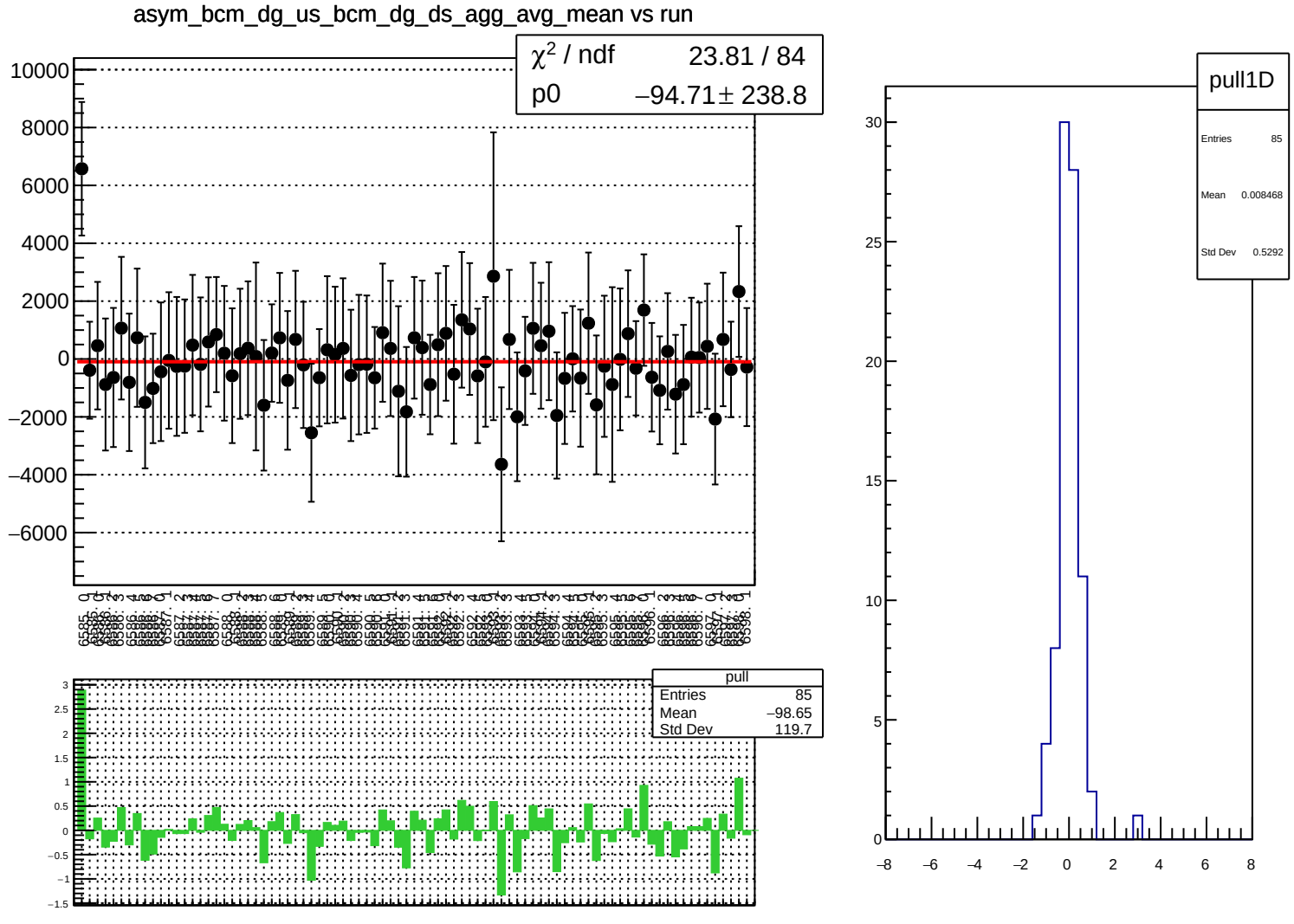

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 710.8 / 84
p0 22.64 ± 0.01742
24.5
24
23.5
23
22.5
22
21.5

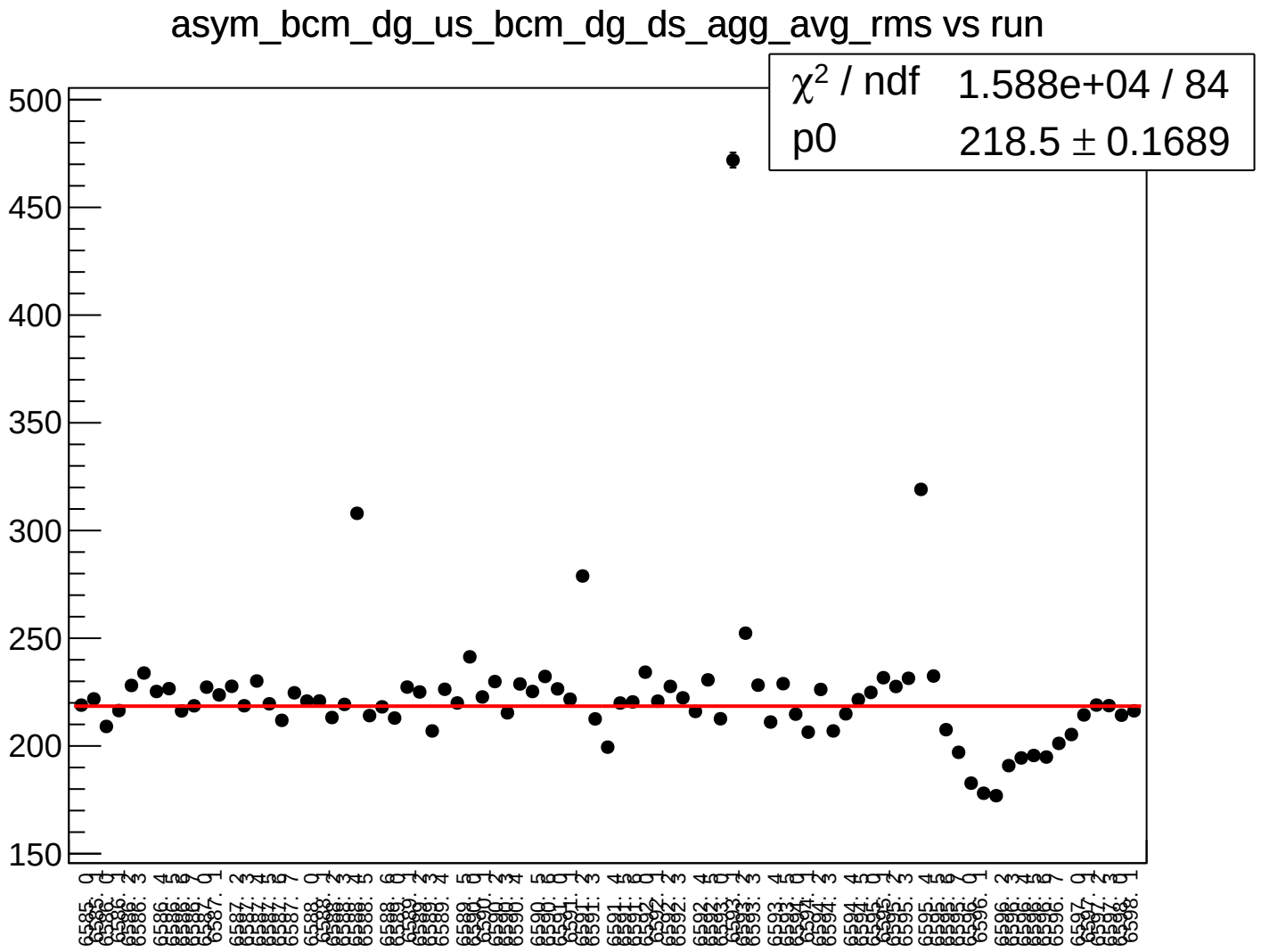

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 23.59 / 84
p0 −78.36 ± 236
pull
Entries 85
Mean −106.6
Std Dev 119.4
pull1D
Entries 85
Mean 0.007749
Std Dev 0.5268

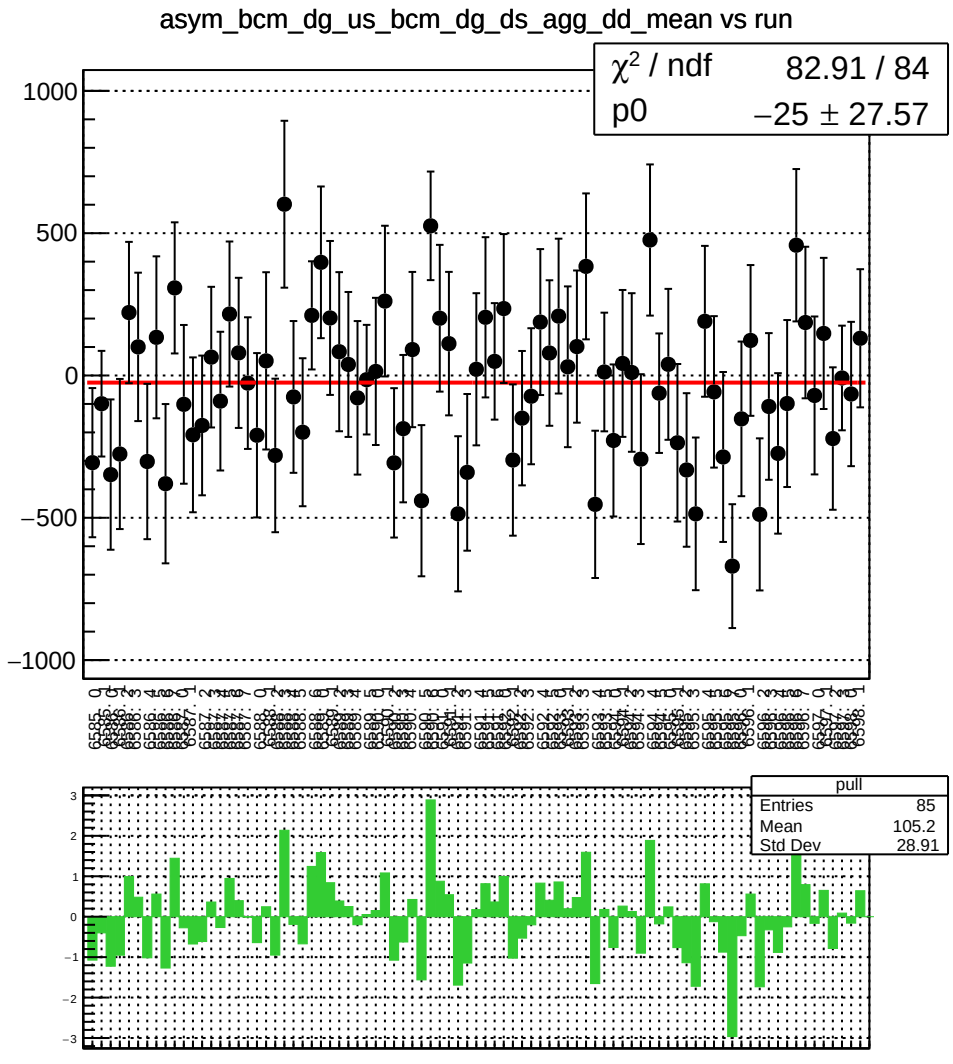

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.627e+04 / 84
p0 215.9 ± 0.1669
500
450
400
350
300
250
200
150

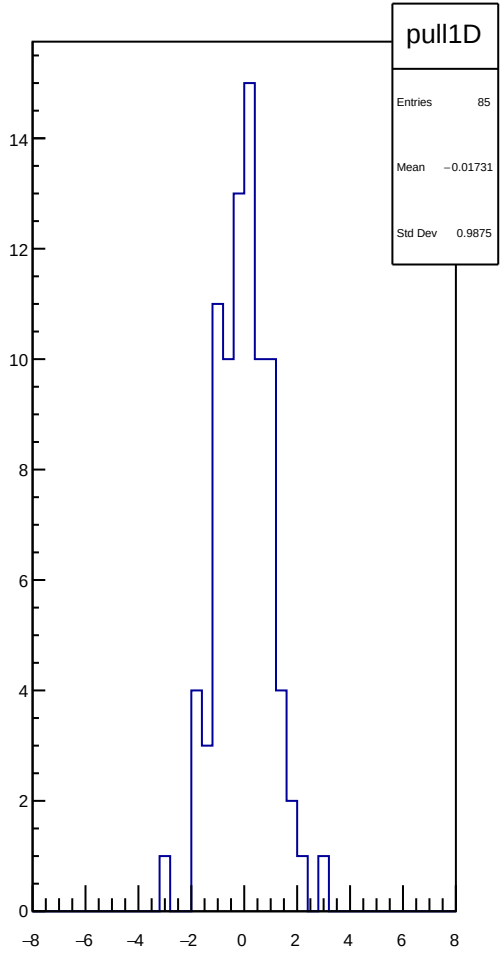

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 65.68 / 84
p0 14.96 ± 18.28
pull
Entries 85
Mean 119.3
Std Dev 96.56
pull1D
Entries 85
Mean 0.01898
Std Dev 0.8789

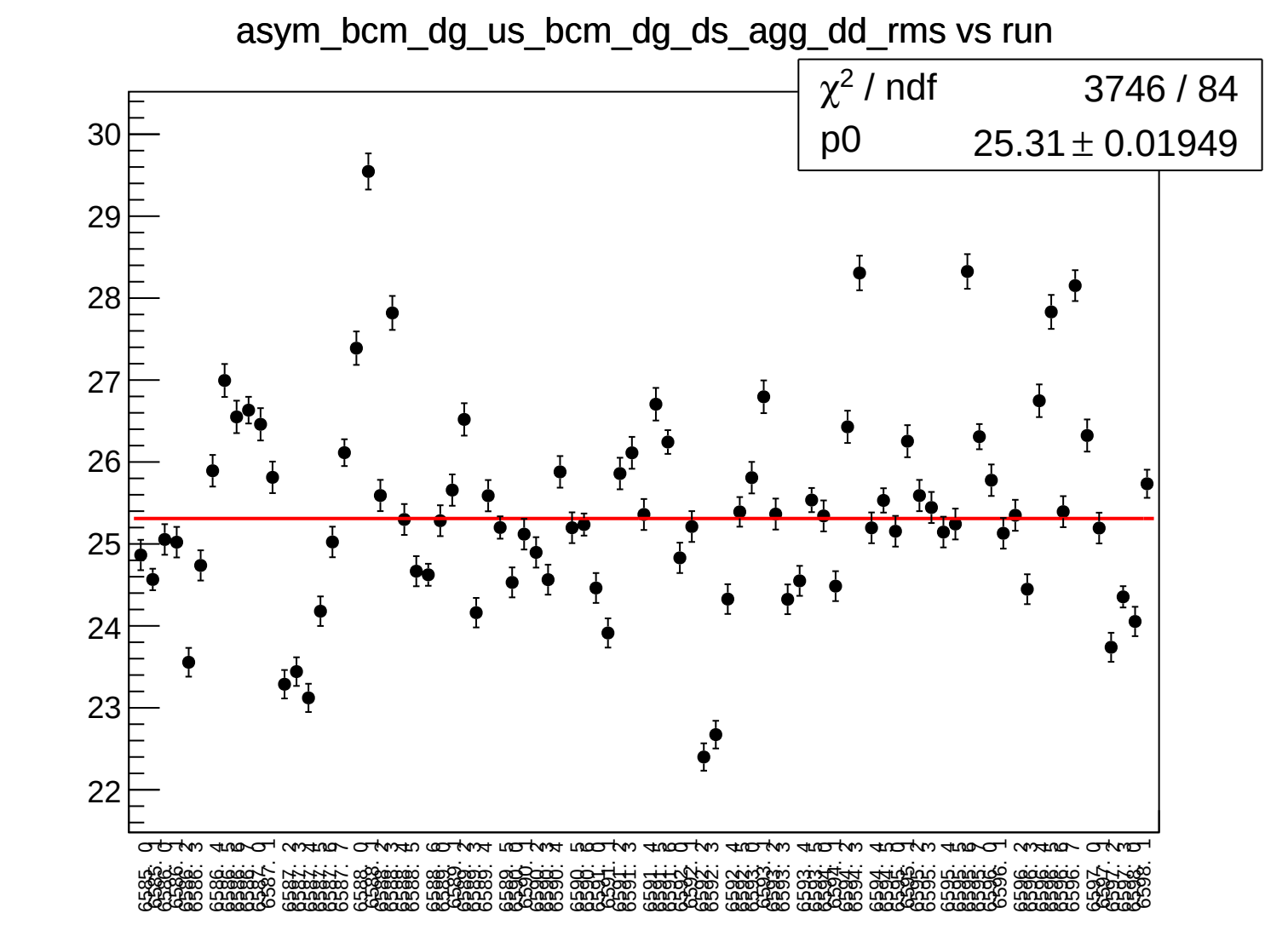

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1727 / 84
p0 16.8 ± 0.01293
18
17.5
17
16.5
16
15.5

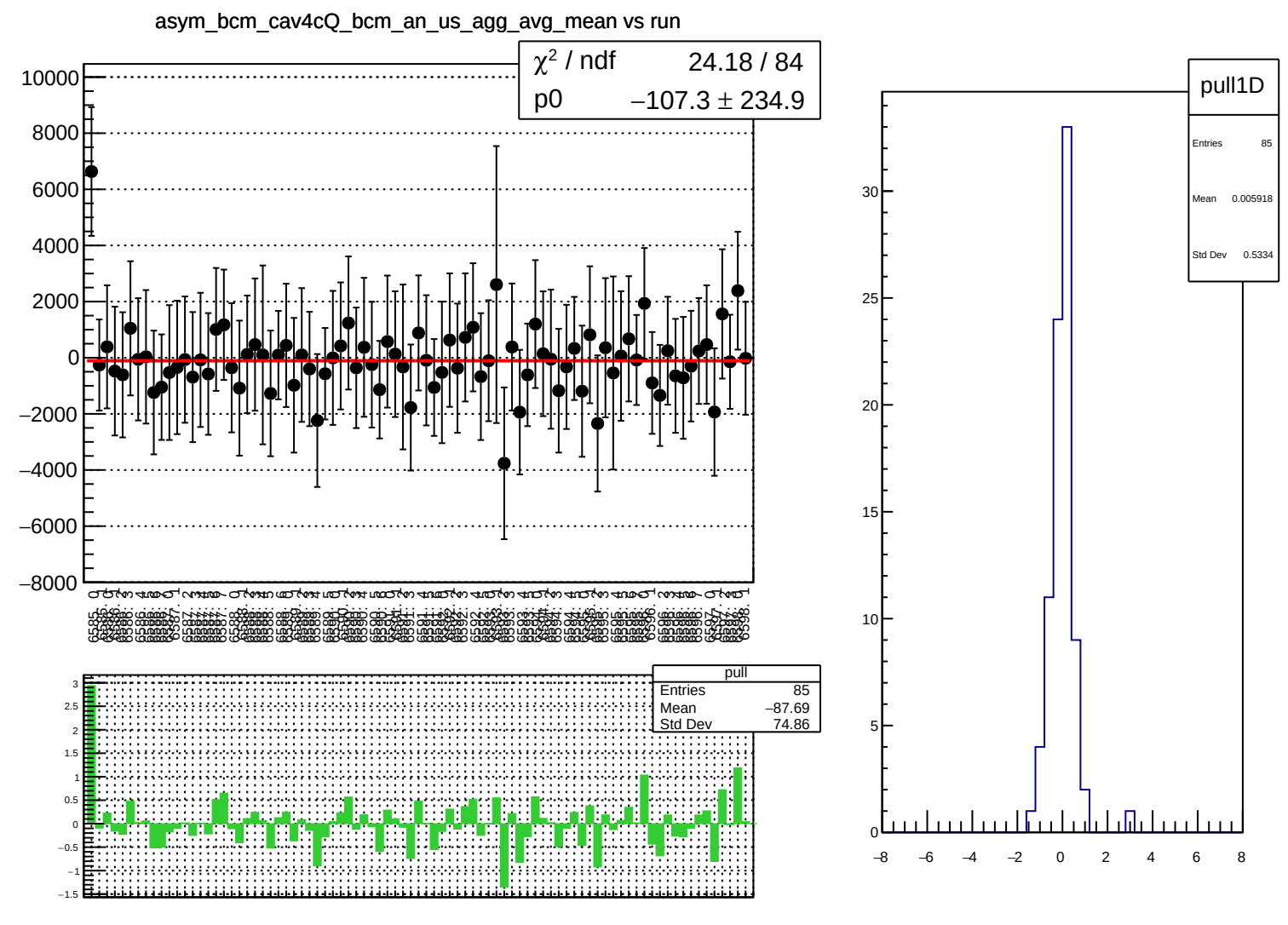

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 23.81 / 84
p0 −94.71 ± 238.8
pull
Entries 85
Mean −98.65
Std Dev 119.7
pull1D
Entries 85
Mean 0.008468
Std Dev 0.5292

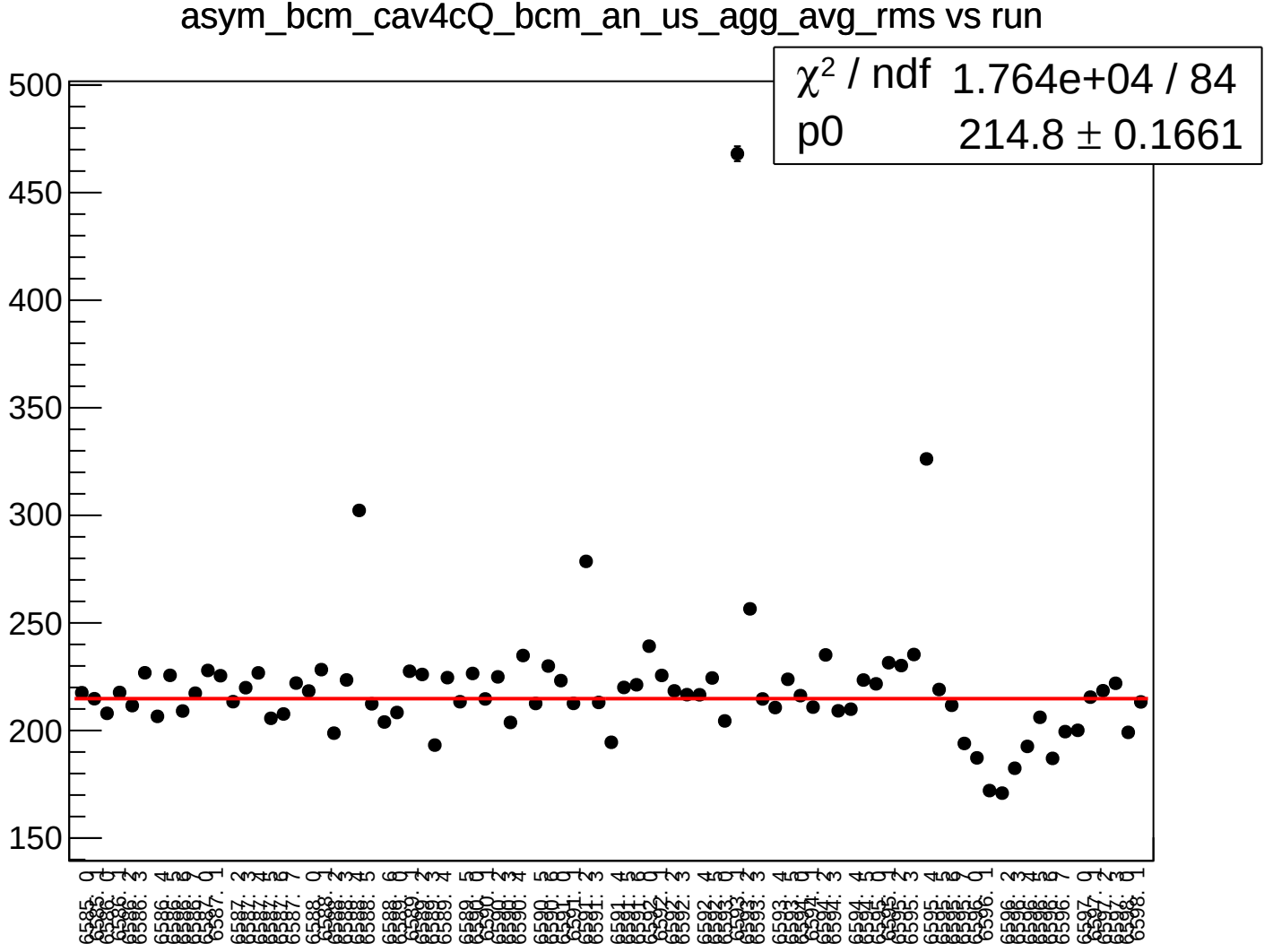

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.588e+04 / 84
p0 218.5 ± 0.1689
500
450
400
350
300
250
200
150

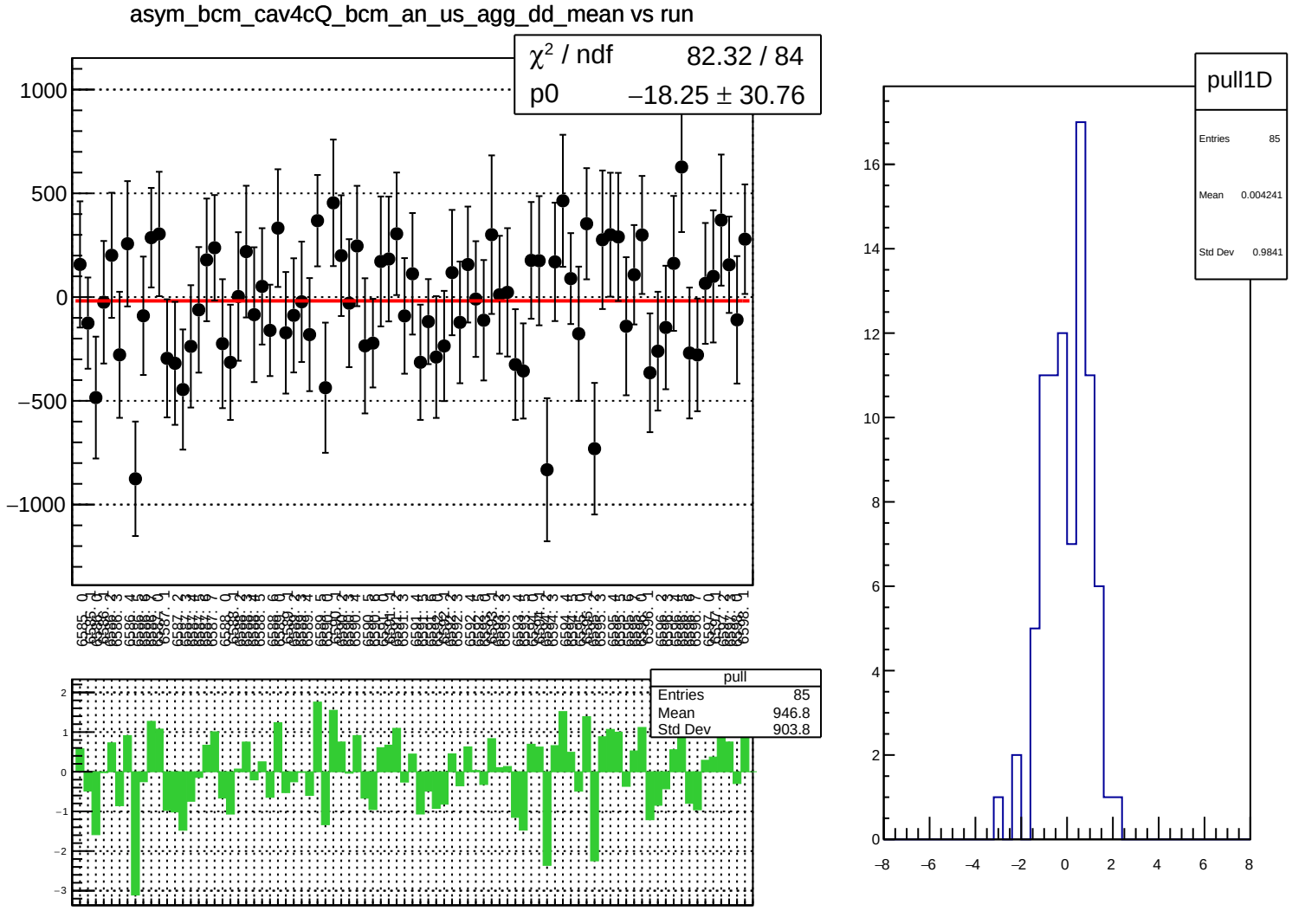

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 82.91 / 84
p0 −25 ± 27.57
1000
500
0
−500
−1000
pull
Entries 85
Mean 105.2
Std Dev 28.91
3
2
1
0
−1
−2
−3

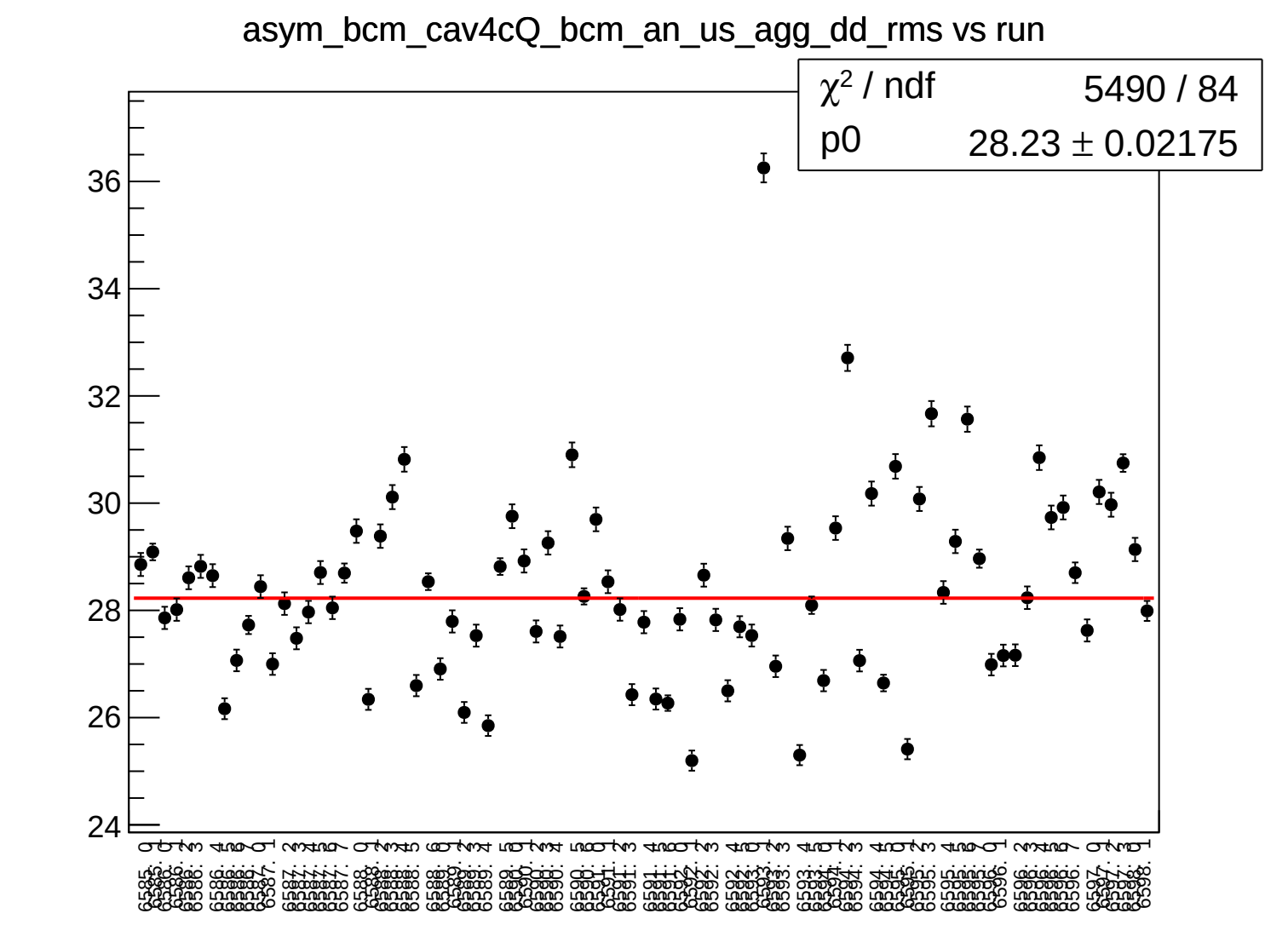

pull1D
Entries 85
Mean −0.01731
Std Dev 0.9875
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

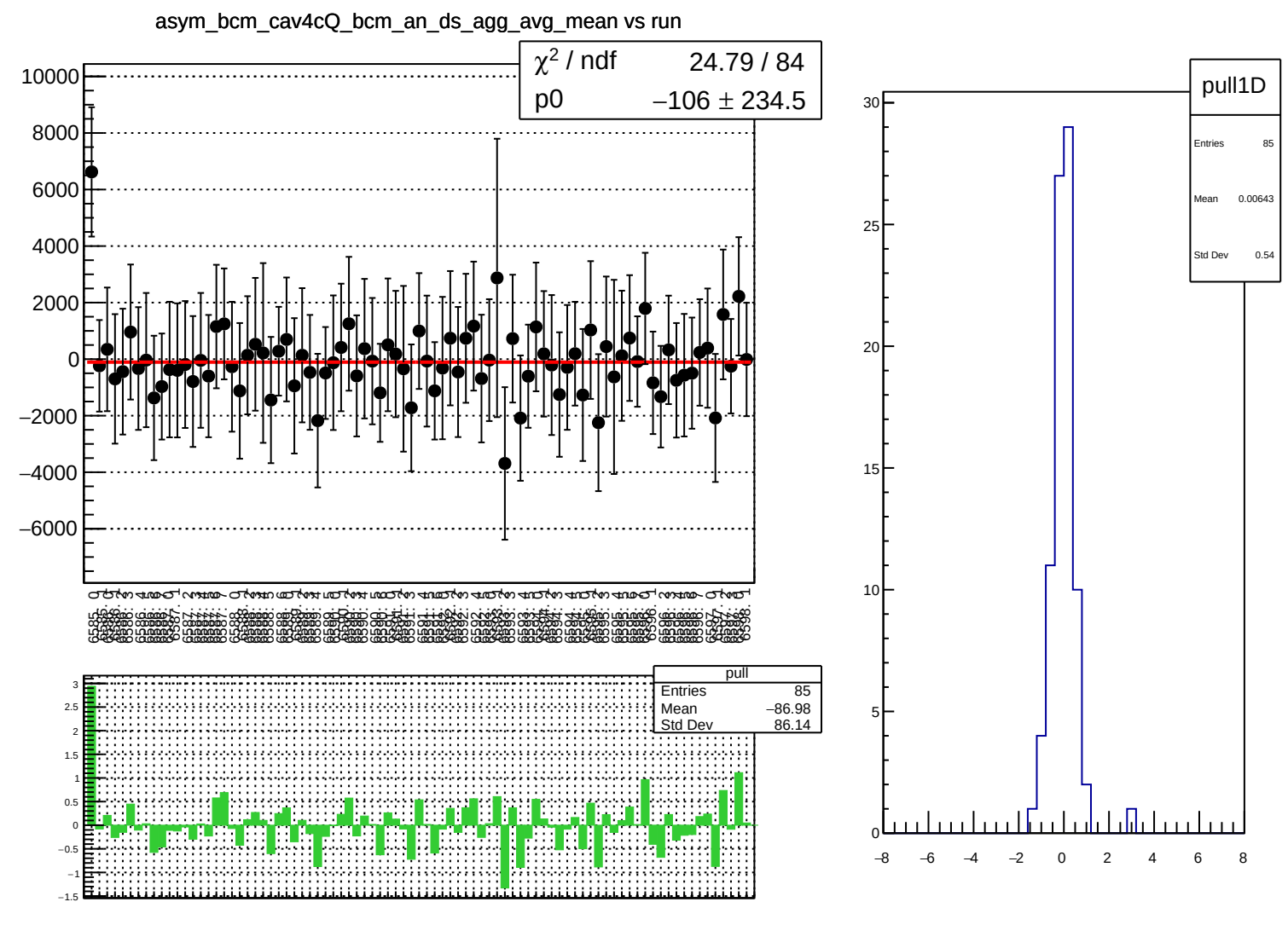

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3746 / 84
p0 25.31 ± 0.01949
30
29
28
27
26
25
24
23
22

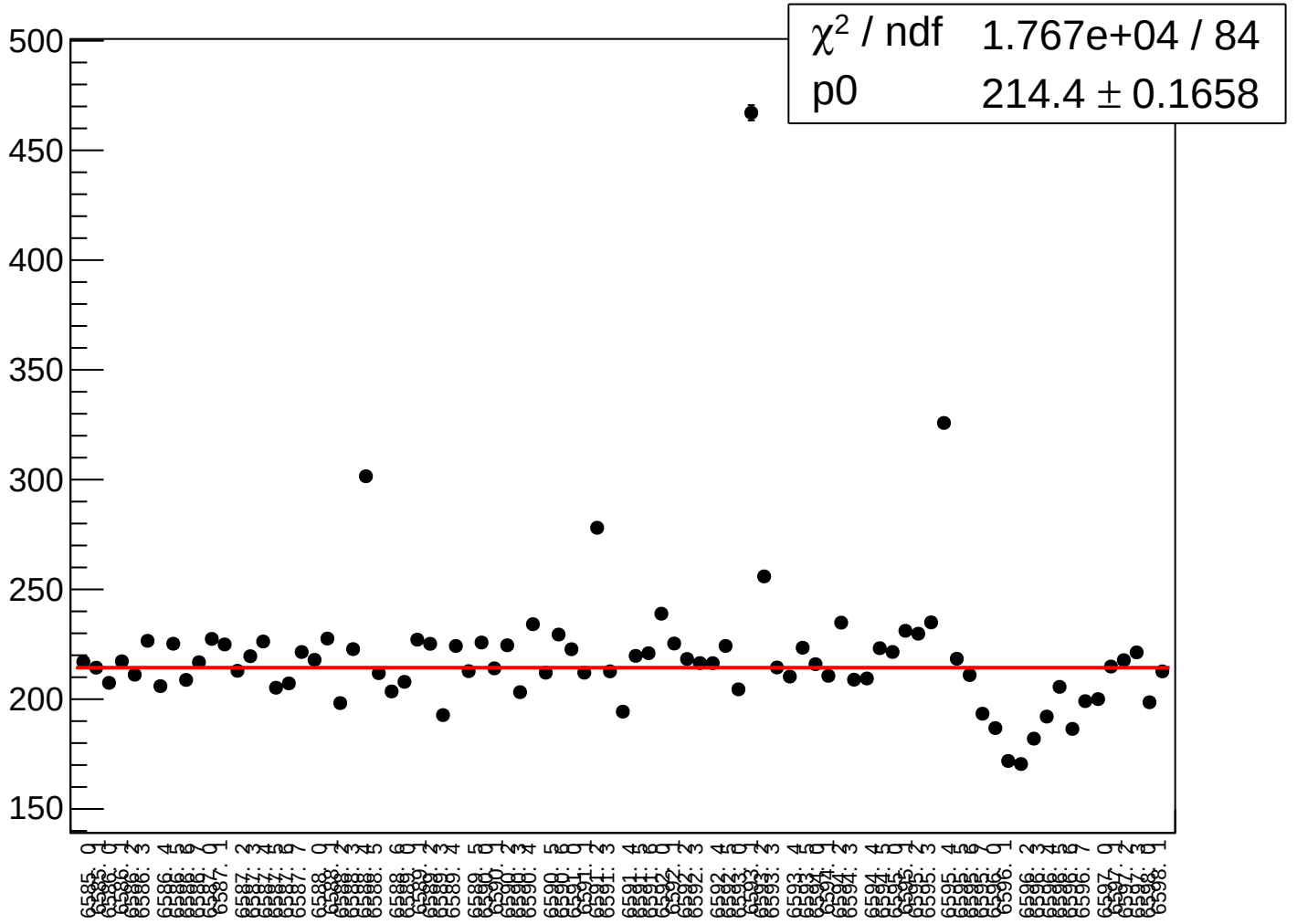

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 24.18 / 84
p0 −107.3 ± 234.9
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean −87.69
Std Dev 74.86
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean 0.005918
Std Dev 0.5334
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

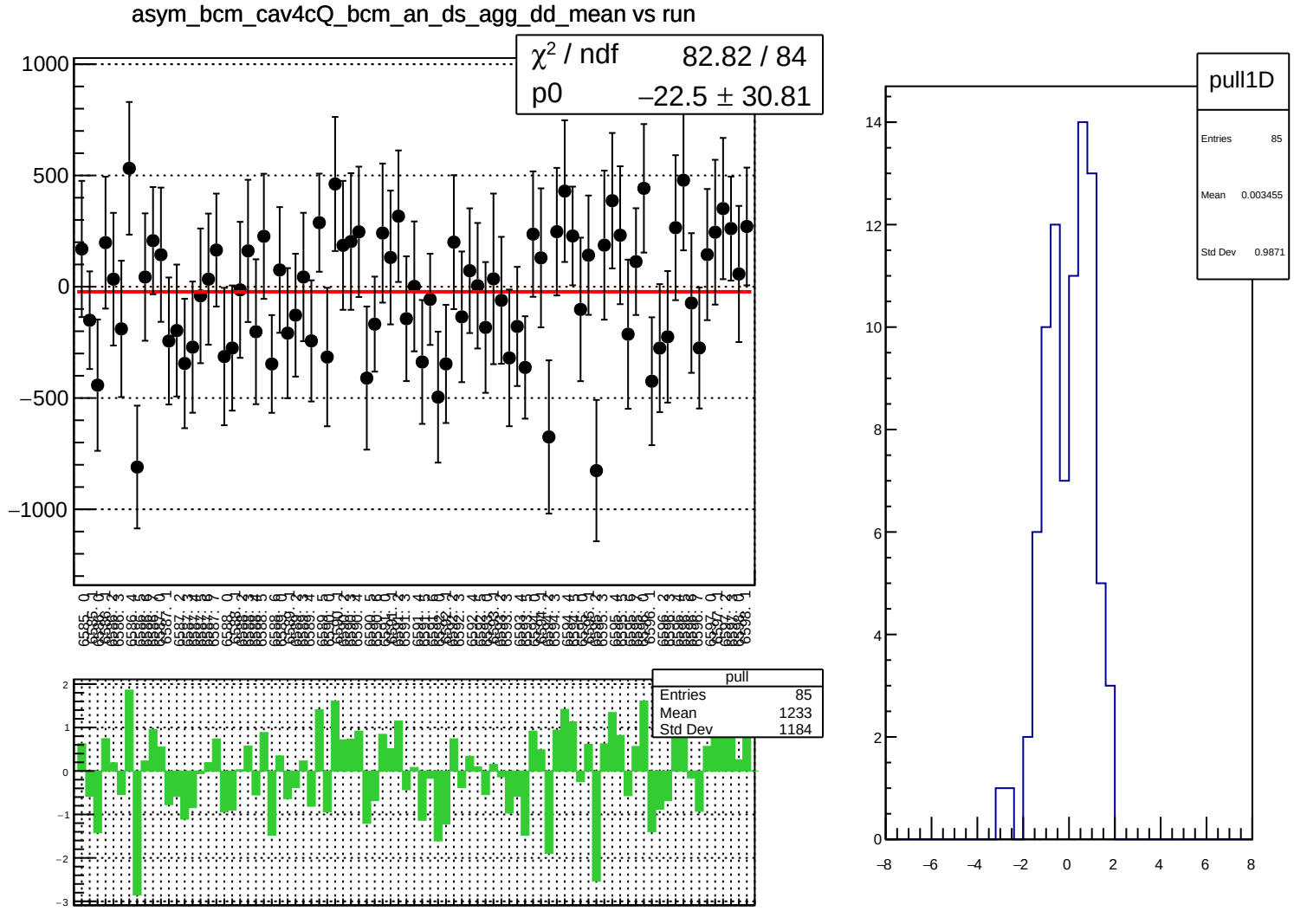

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.764e+04 / 84
p0 214.8 ± 0.1661
500
450
400
350
300
250
200
150

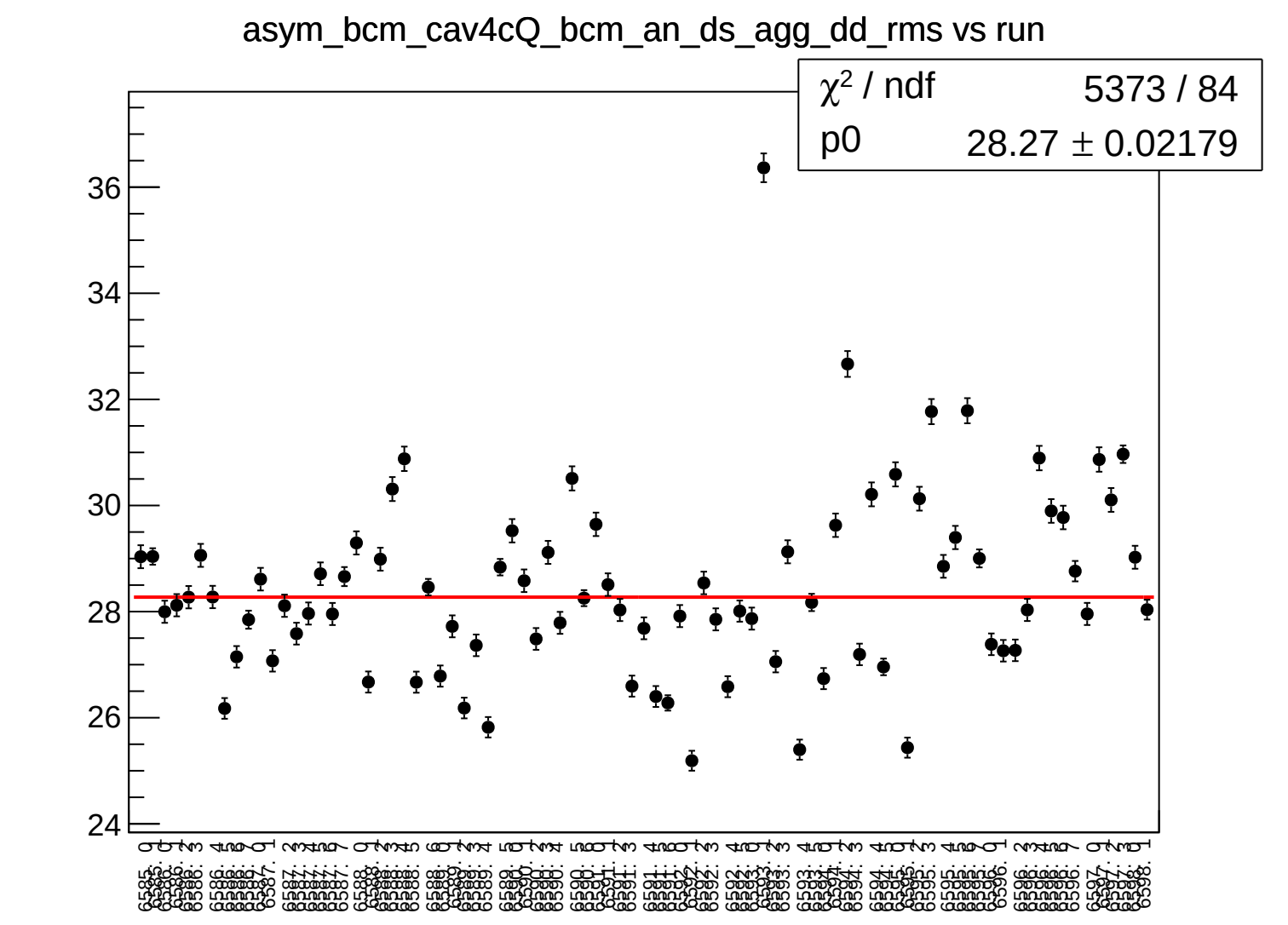

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.32 / 84
p0 −18.25 ± 30.76
1000
500
0
−500
−1000
pull
Entries 85
Mean 946.8
Std Dev 903.8
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean 0.004241
Std Dev 0.9841
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

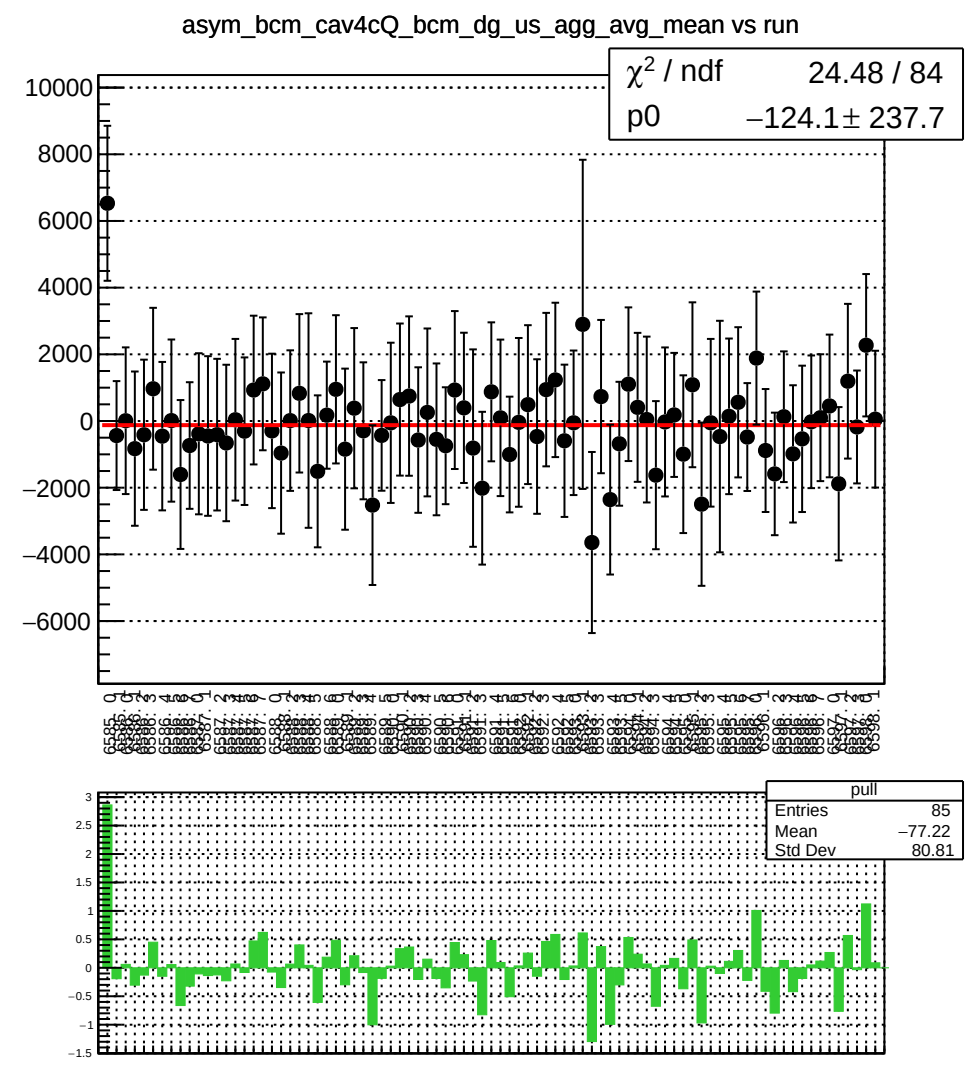

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5490 / 84
p0 28.23 ± 0.02175
36
34
32
30
28
26
24

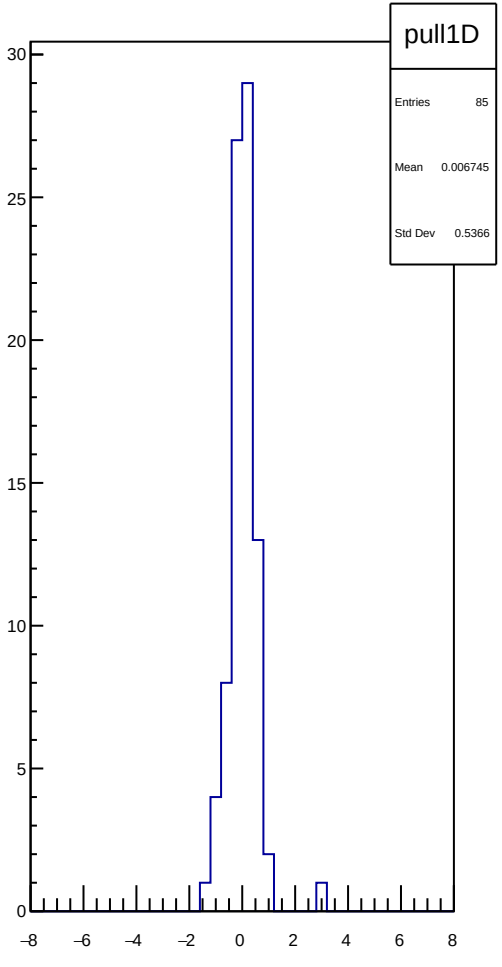

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.79 / 84
p0 −106 ± 234.5
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −86.98
Std Dev 86.14
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 85
Mean 0.00643
Std Dev 0.54
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

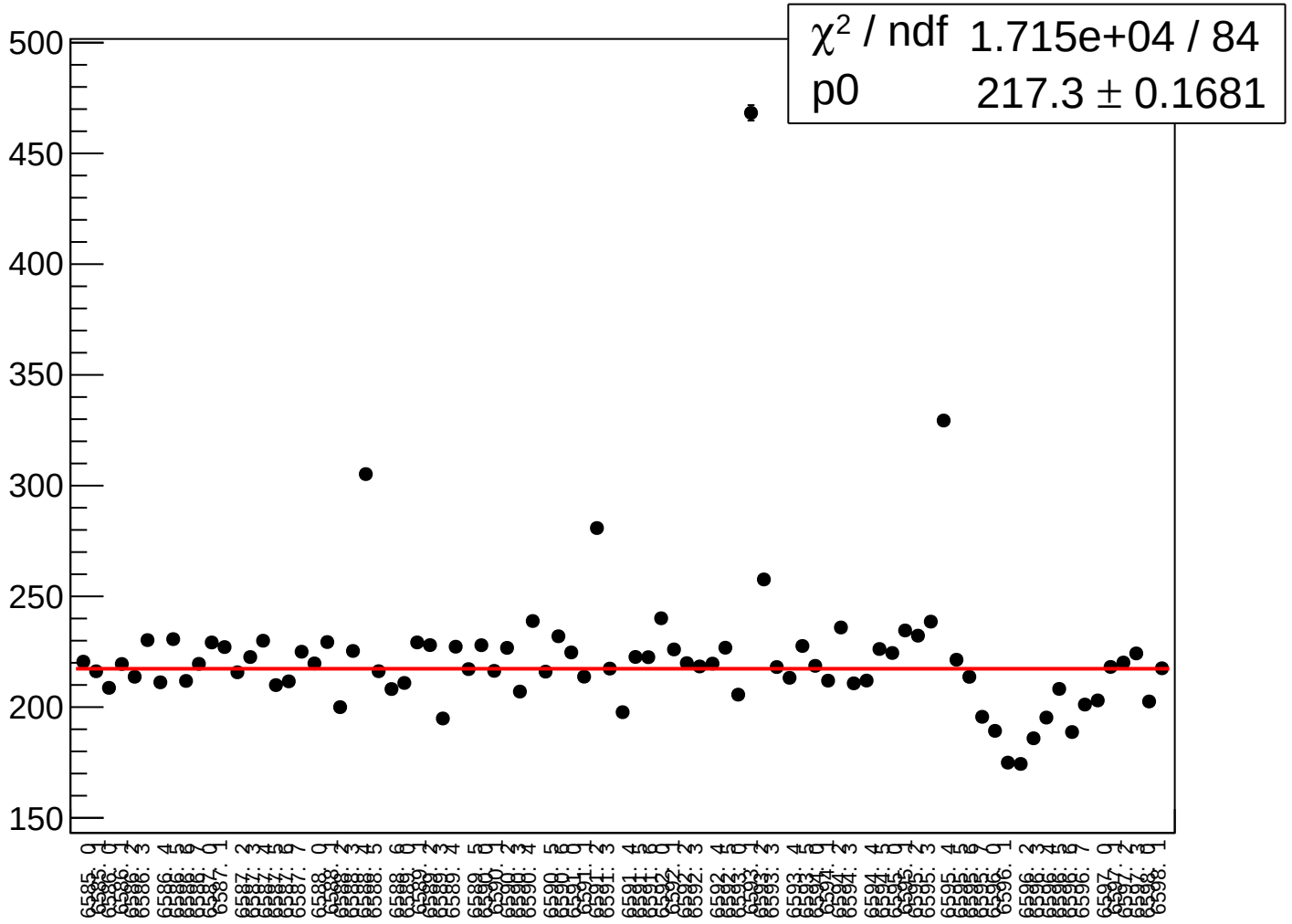

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.767e+04 / 84
p0 214.4 ± 0.1658
500
450
400
350
300
250
200
150

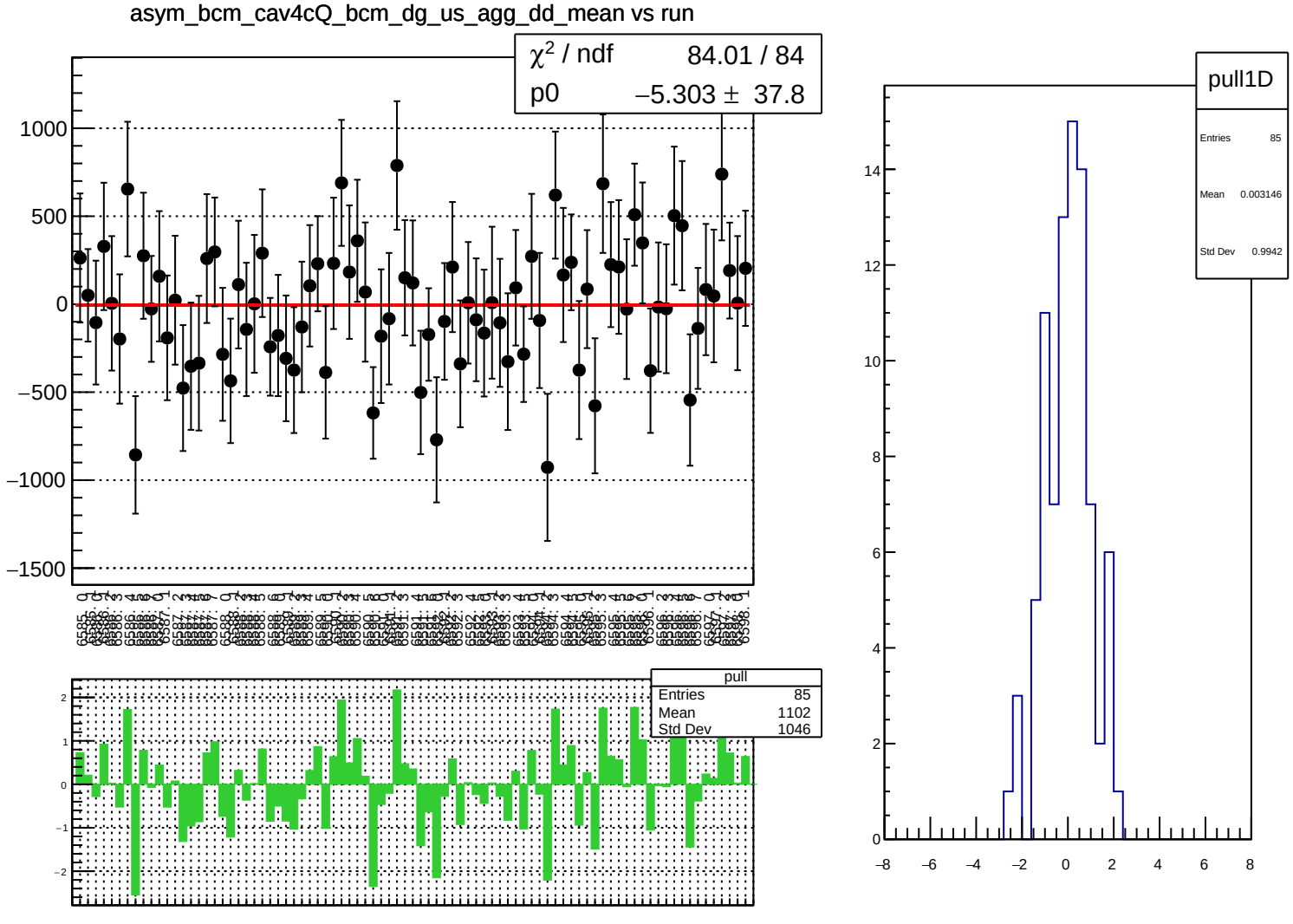

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.82 / 84
p0 −22.5 ± 30.81
1000
500
0
−500
−1000
pull
Entries 85
Mean 1233
Std Dev 1184
pull1D
Entries 85
Mean 0.003455
Std Dev 0.9871
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

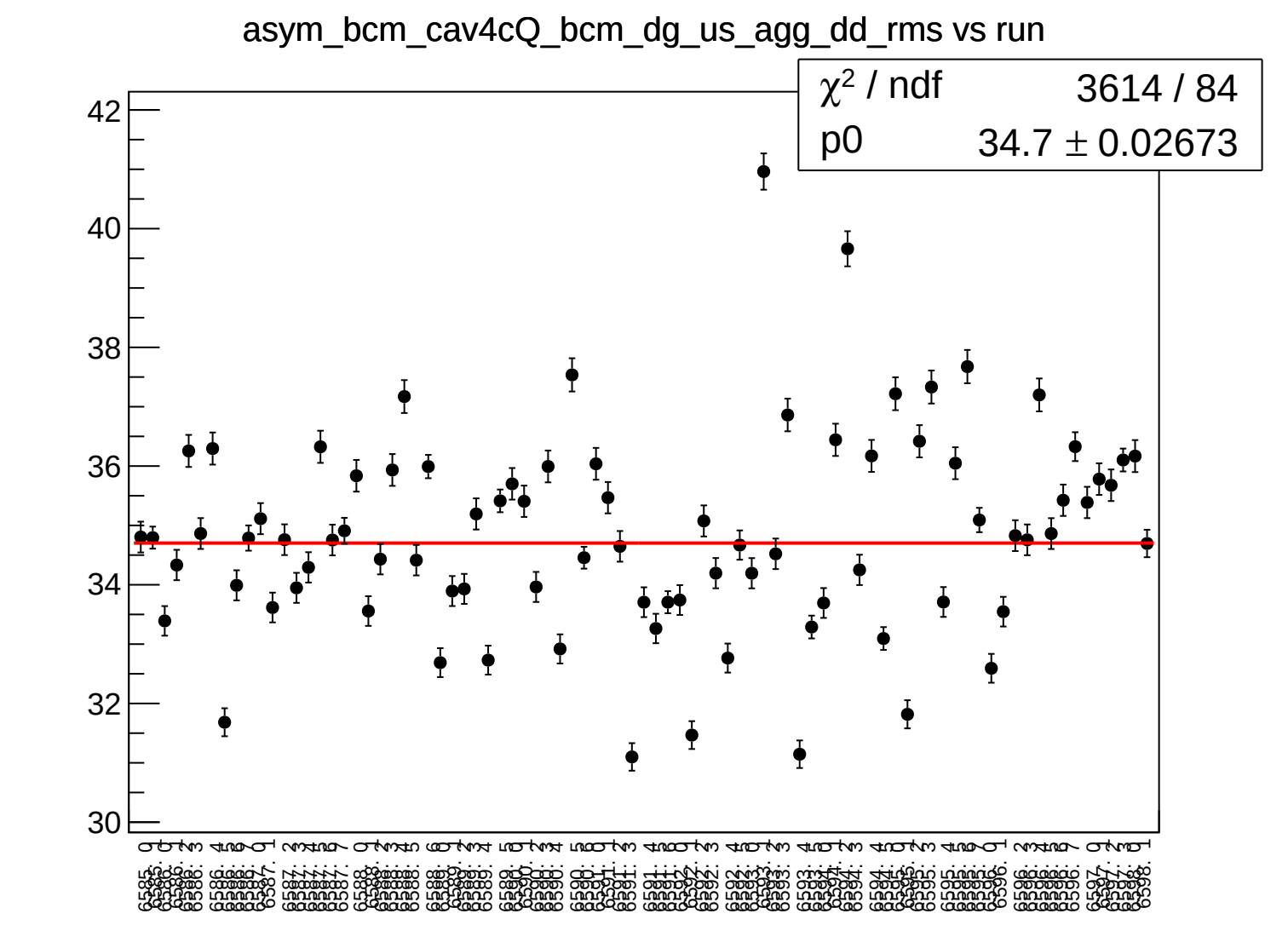

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5373 / 84
p0 28.27 ± 0.02179
36
34
32
30
28
26
24

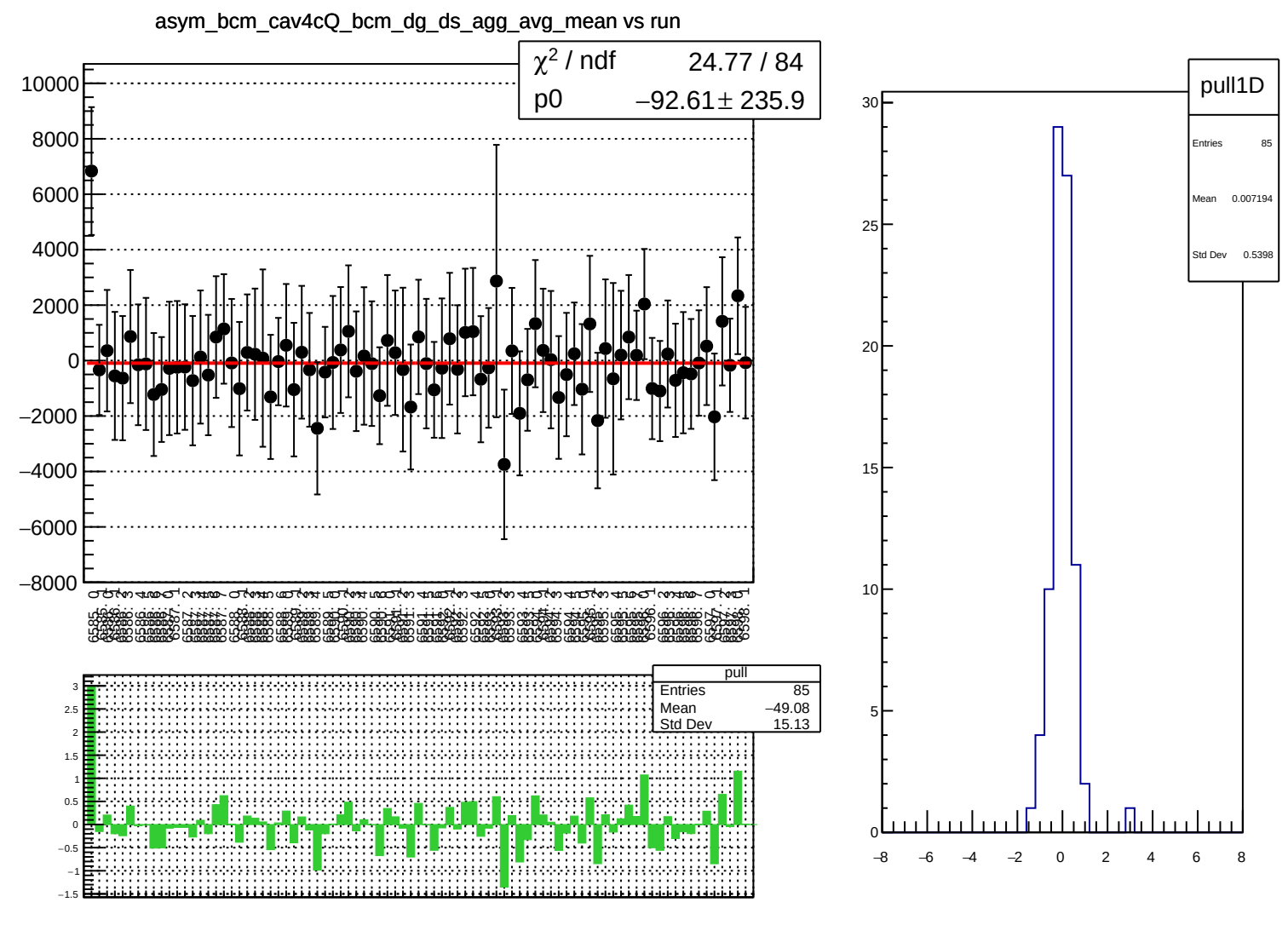

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 24.48 / 84
p0 −124.1± 237.7
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −77.22
Std Dev 80.81
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

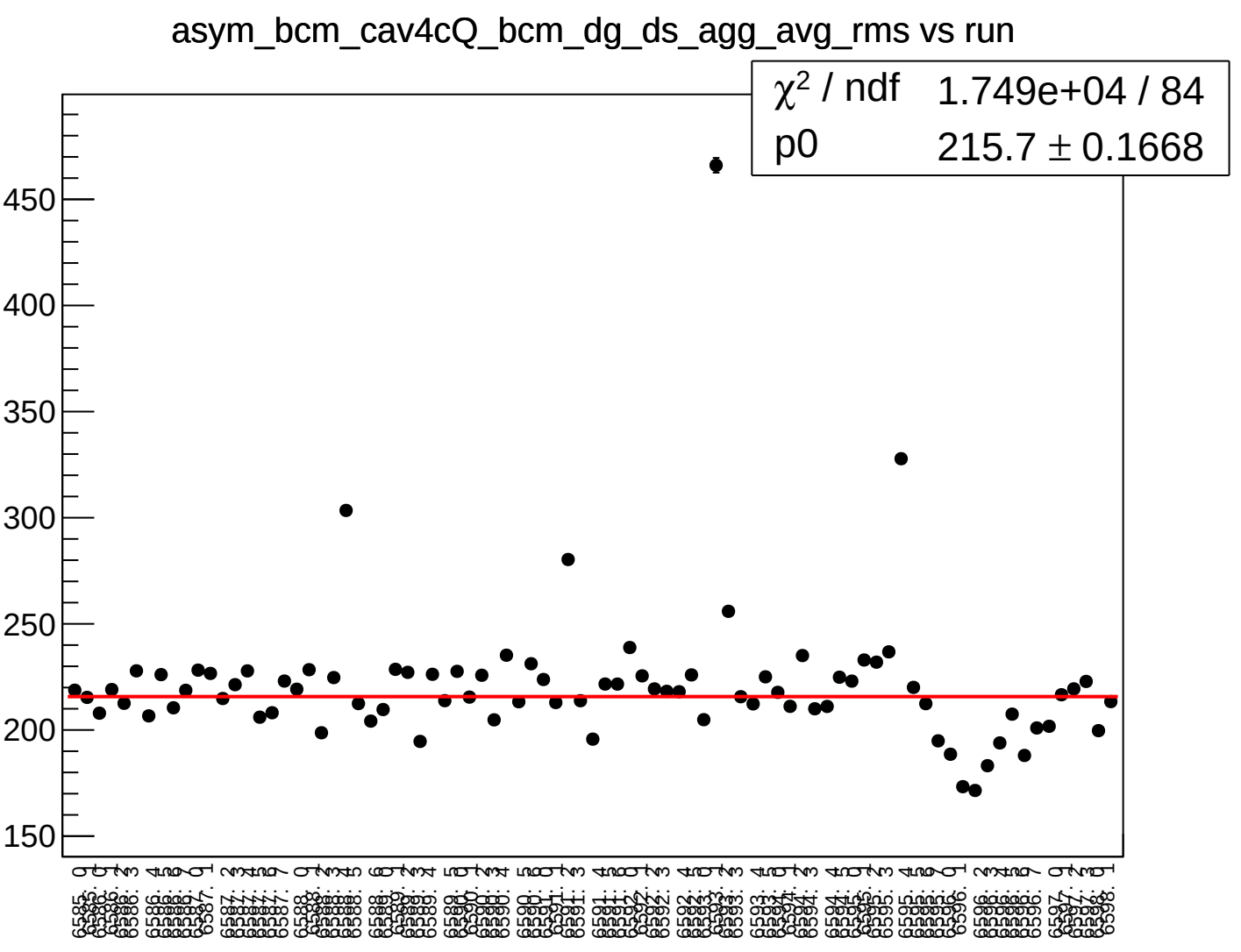

pull1D
Entries 85
Mean 0.006745
Std Dev 0.5366
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

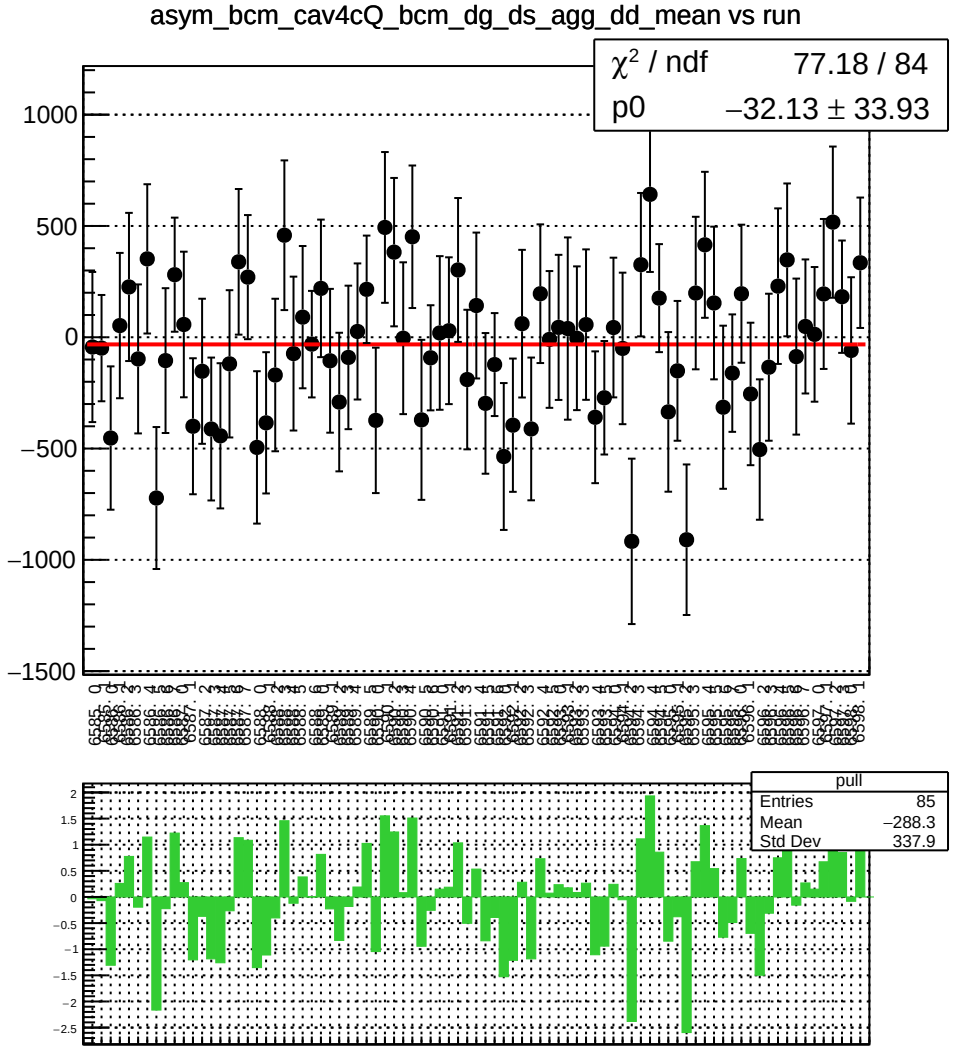

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.715e+04 / 84
p0 217.3 ± 0.1681
500
450
400
350
300
250
200
150

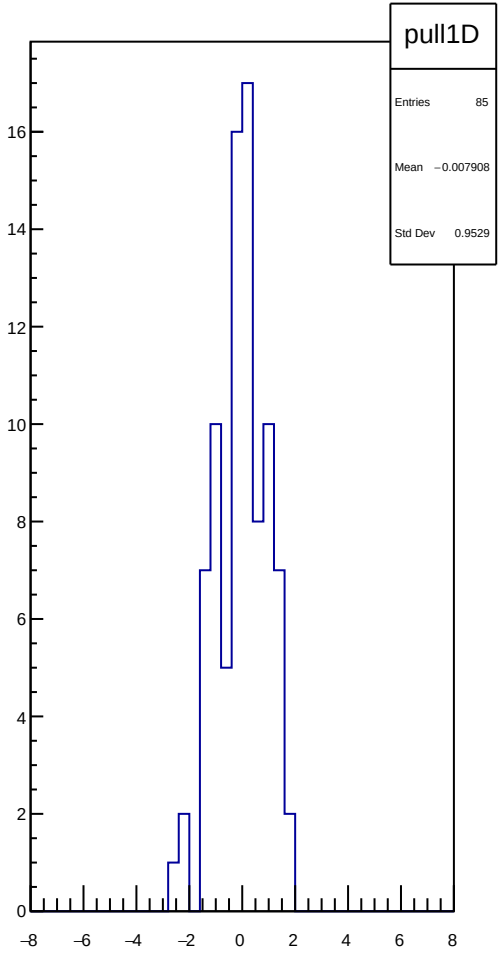

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 84.01 / 84
p0 −5.303 ± 37.8
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 1102
Std Dev 1046
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.003146
Std Dev 0.9942
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

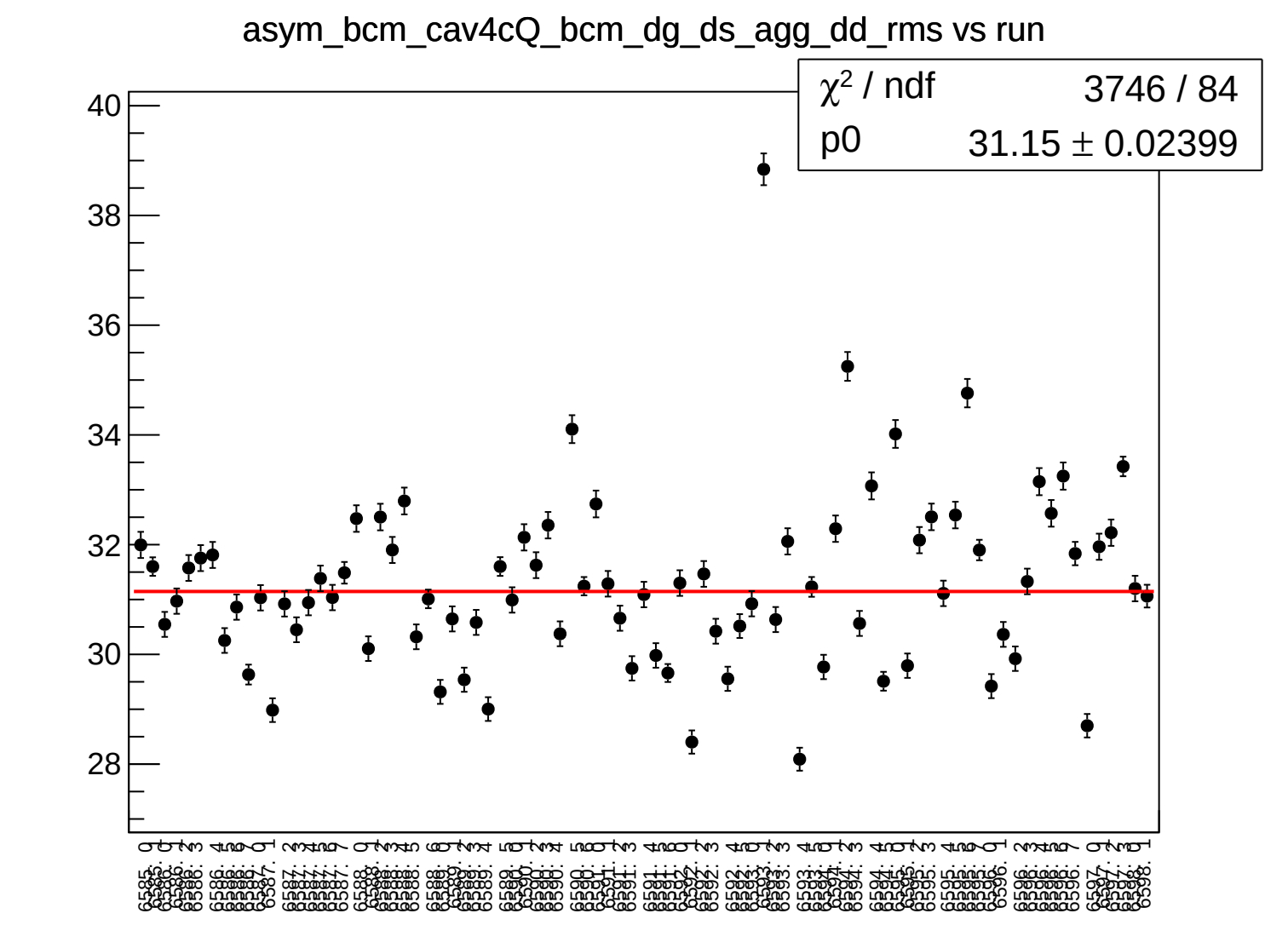

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 3614 / 84
p0 34.7 ± 0.02673
42
40
38
36
34
32
30

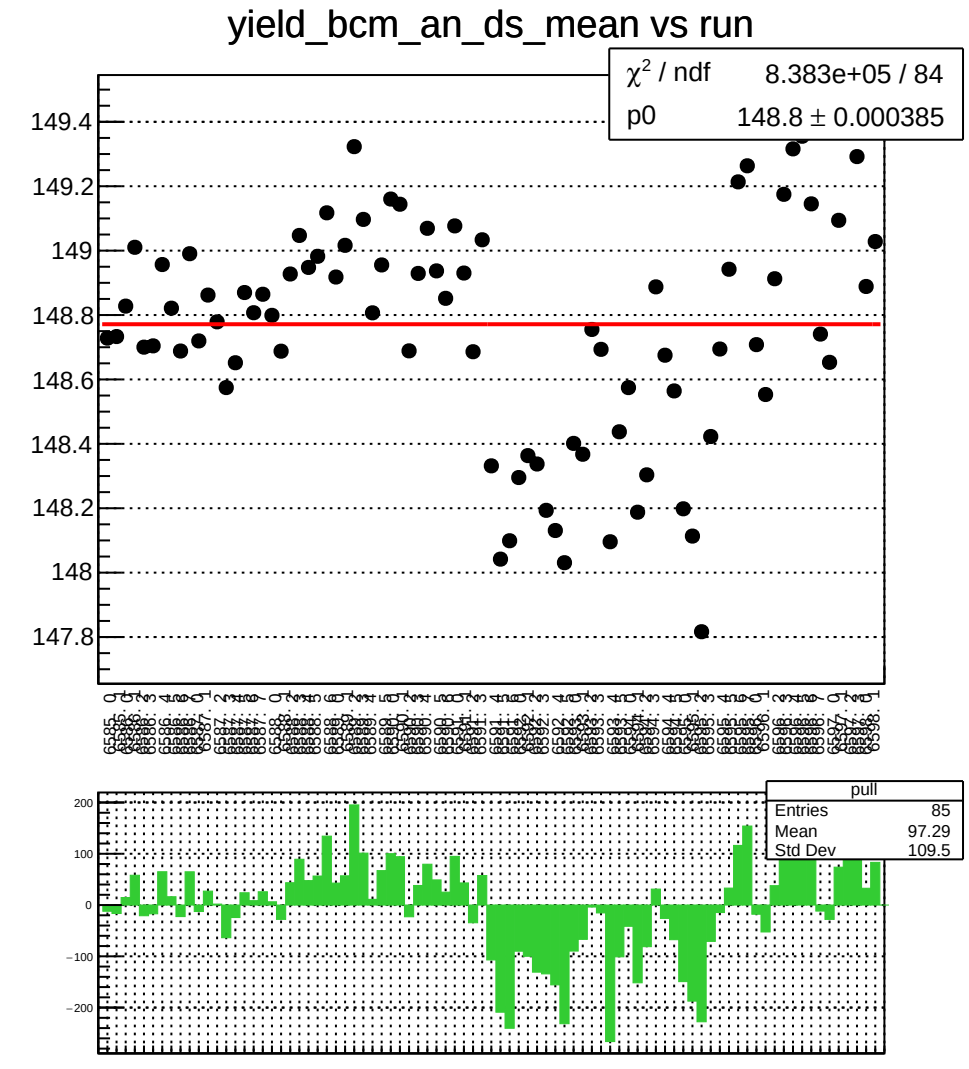

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 24.77 / 84
p0 −92.61 ± 235.9
pull
Entries 85
Mean −49.08
Std Dev 15.13
pull1D
Entries 85
Mean 0.007194
Std Dev 0.5398

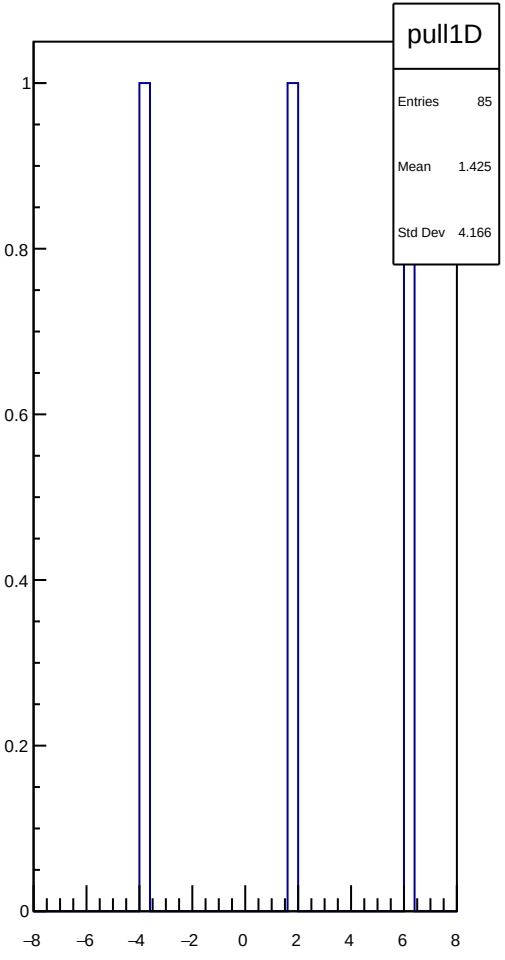

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.749e+04 / 84
p0 215.7 ± 0.1668
450
400
350
300
250
200
150

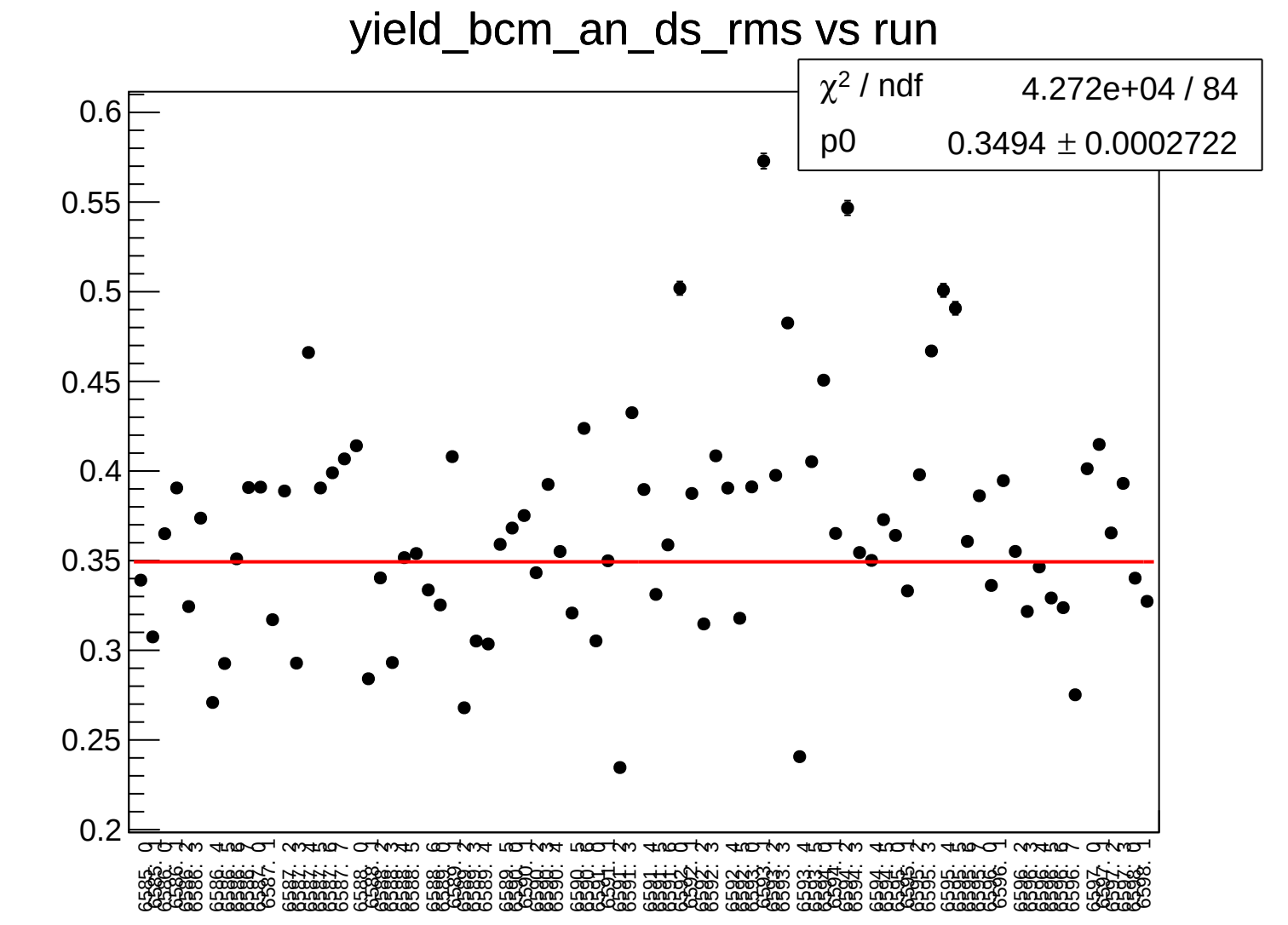

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 77.18 / 84
p0 −32.13 ± 33.93
pull
Entries 85
Mean −288.3
Std Dev 337.9

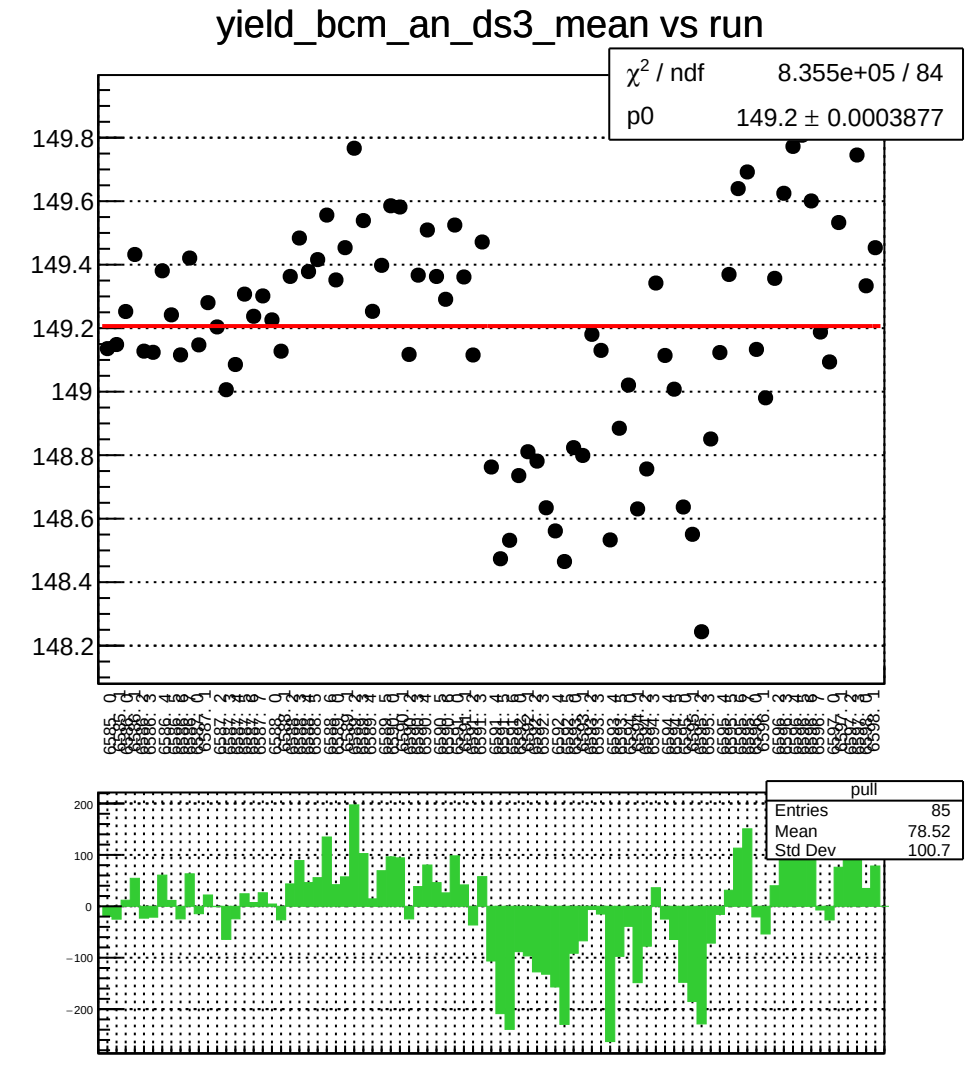

pull1D
Entries 85
Mean −0.007908
Std Dev 0.9529

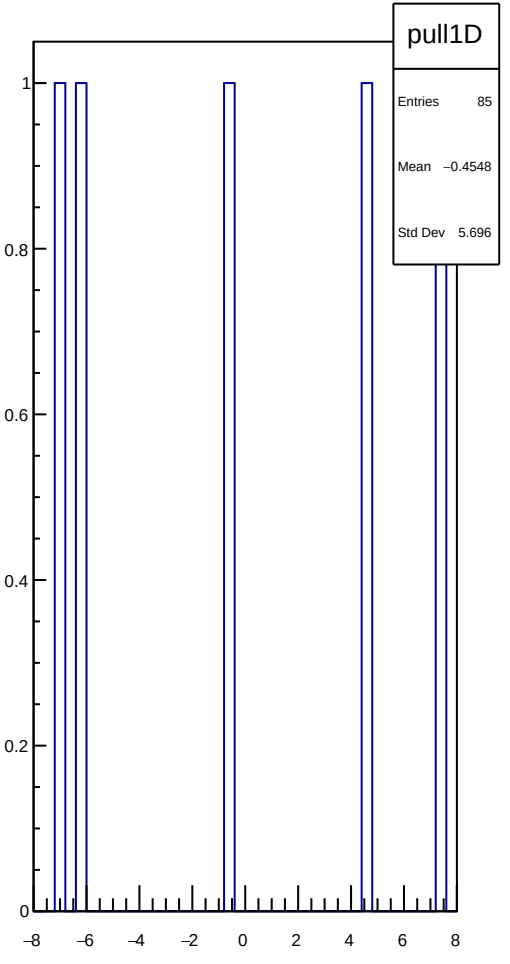

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3746 / 84
p0 31.15 ± 0.02399
40
38
36
34
32
30
28

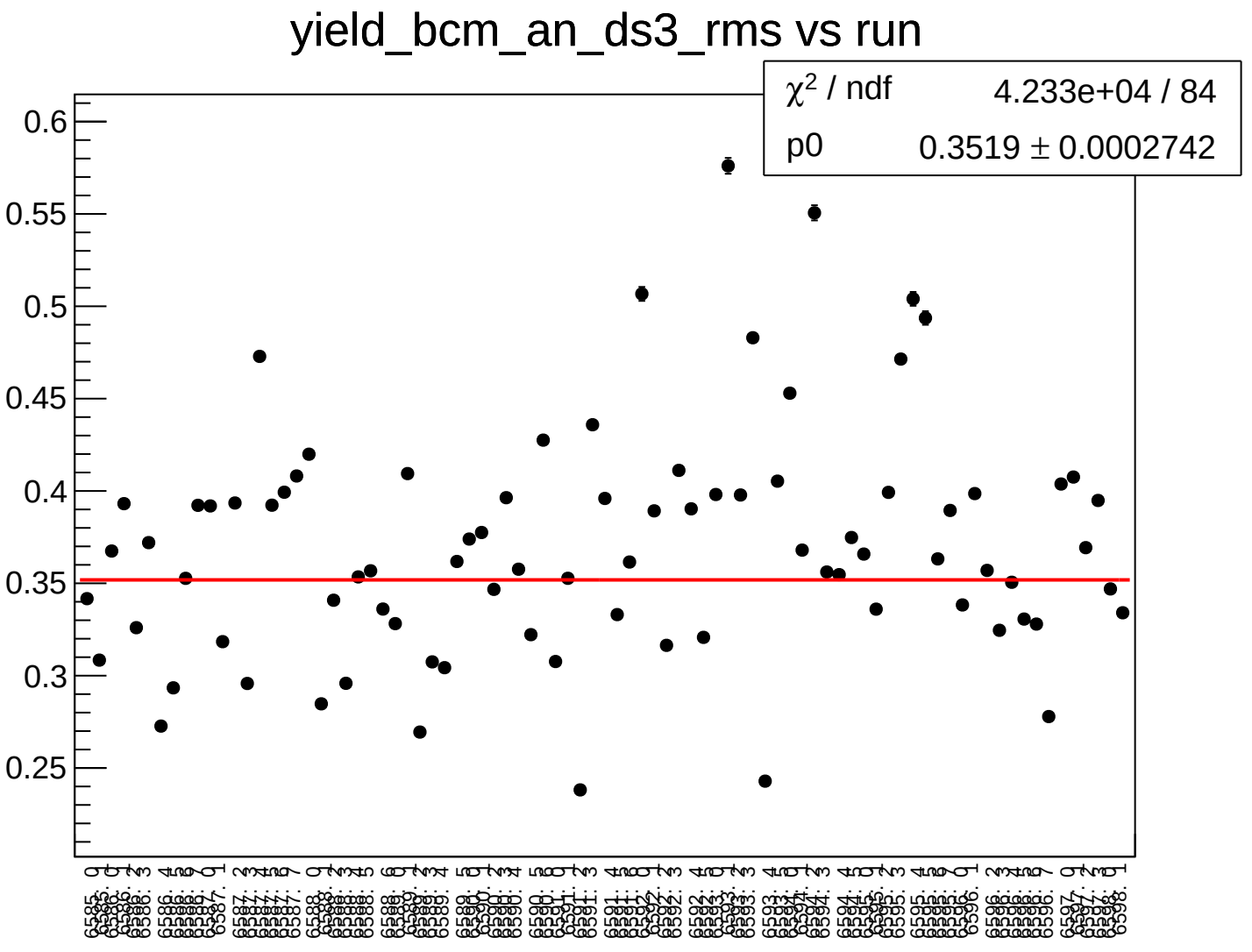

yield_bcm_an_ds_mean vs run
χ² / ndf 8.383e+05 / 84
p0 148.8 ± 0.000385
149.4
149.2
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 85
Mean 97.29
Std Dev 109.5
200
100
0
−100
−200

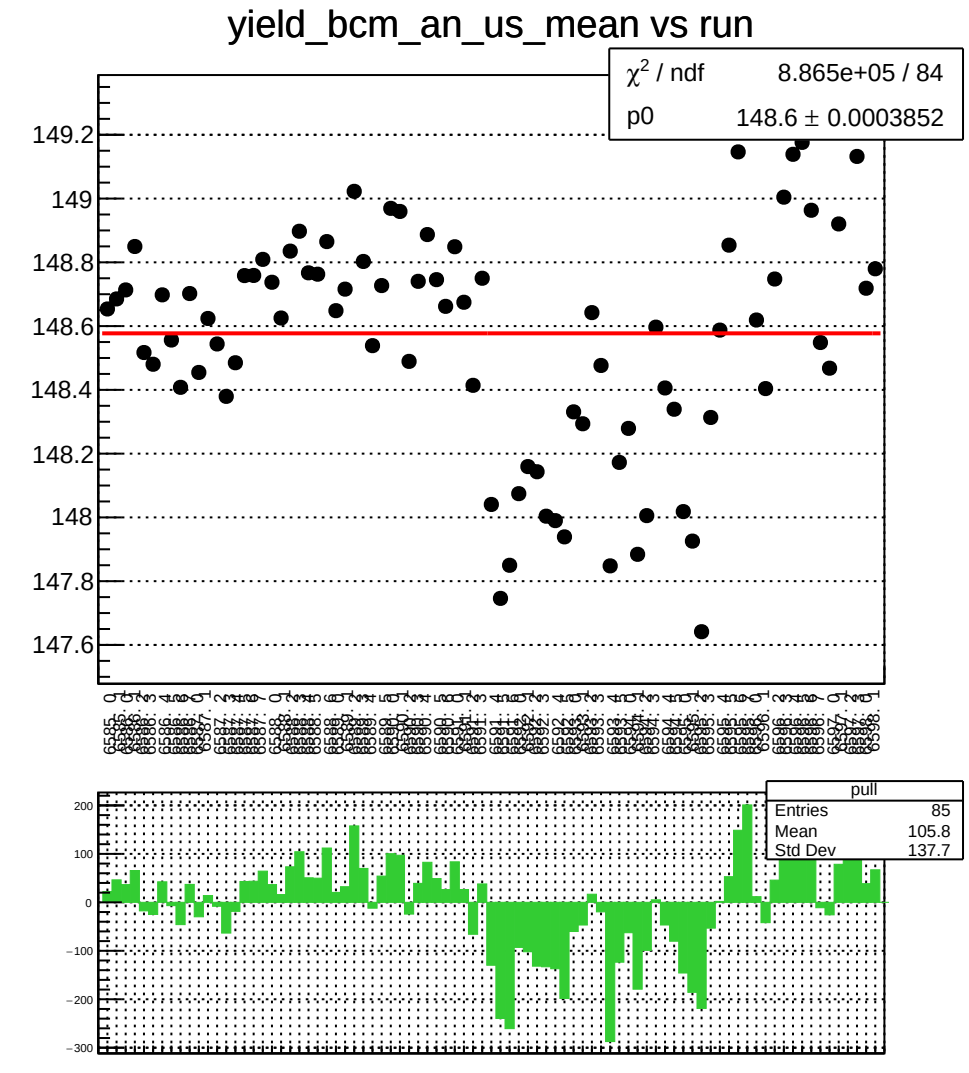

pull1D
Entries 85
Mean 1.425
Std Dev 4.166
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

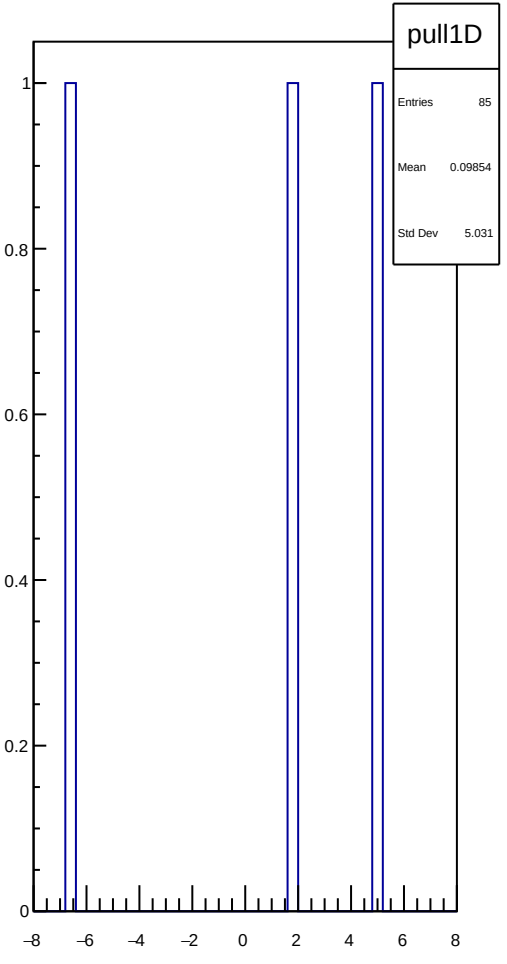

yield_bcm_an_ds_rms vs run
χ² / ndf 4.272e+04 / 84
p0 0.3494 ± 0.0002722
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2

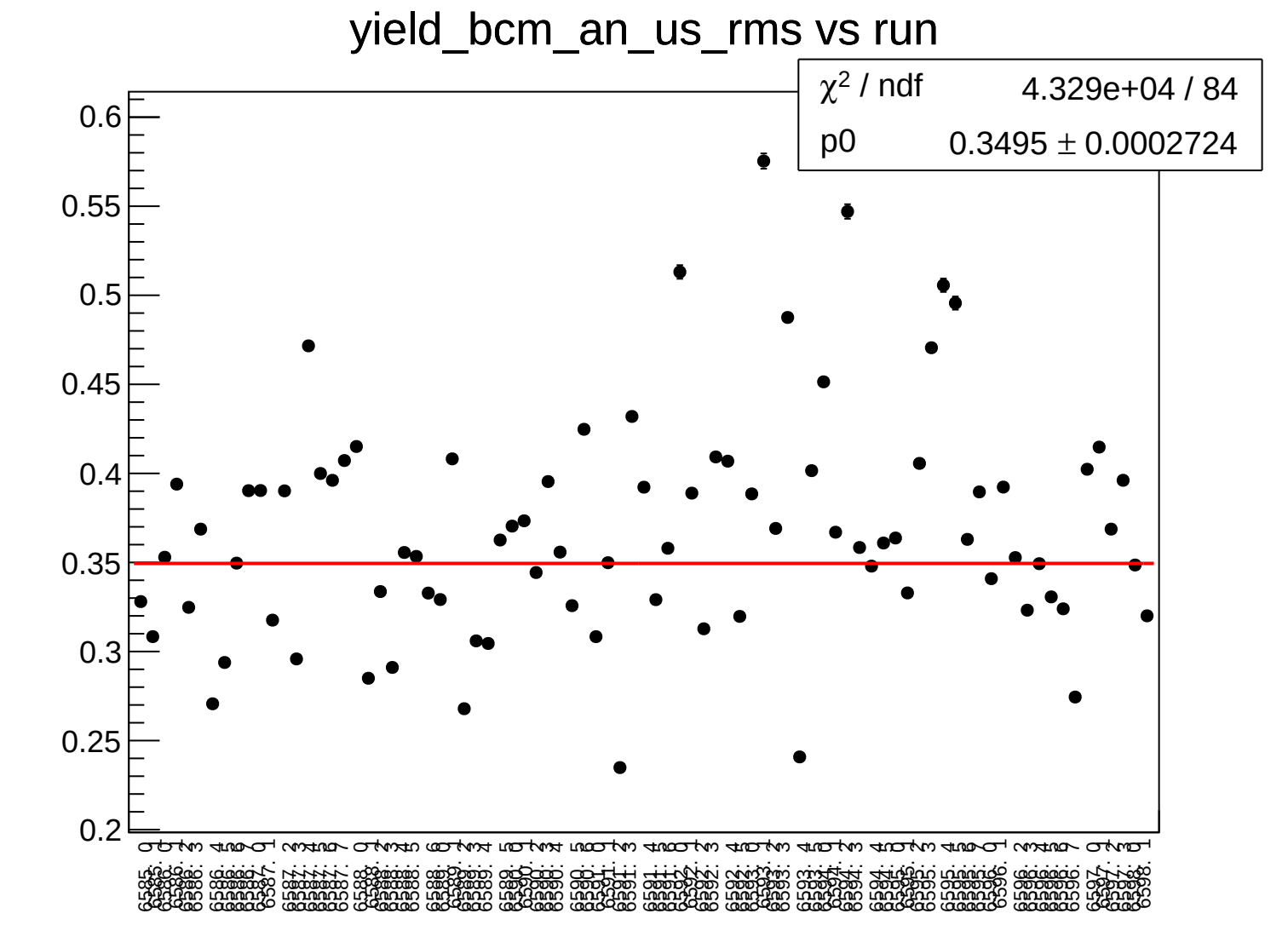

yield_bcm_an_ds3_mean vs run
χ² / ndf 8.355e+05 / 84
p0 149.2 ± 0.0003877
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
148.2
pull
Entries 85
Mean 78.52
Std Dev 100.7
200
100
0
−100
−200

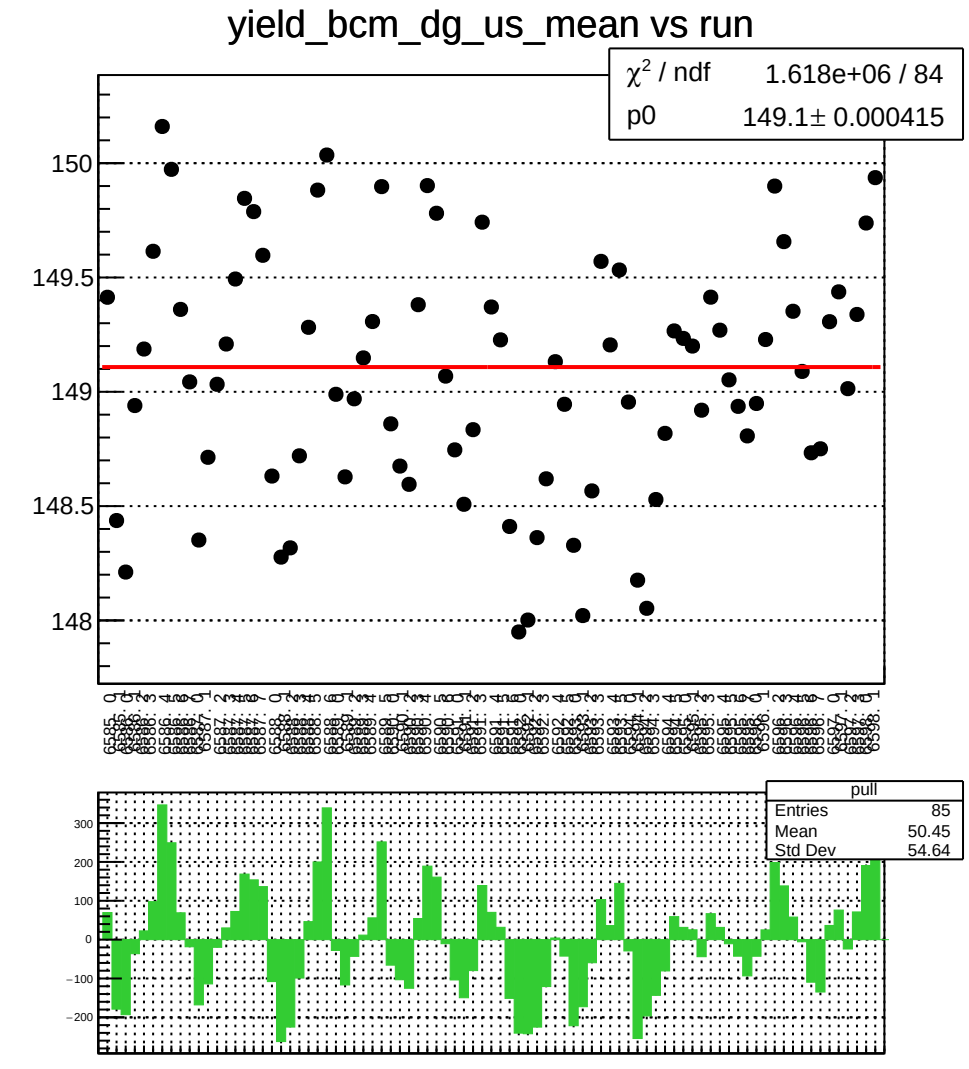

pull1D
Entries 85
Mean −0.4548
Std Dev 5.696
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

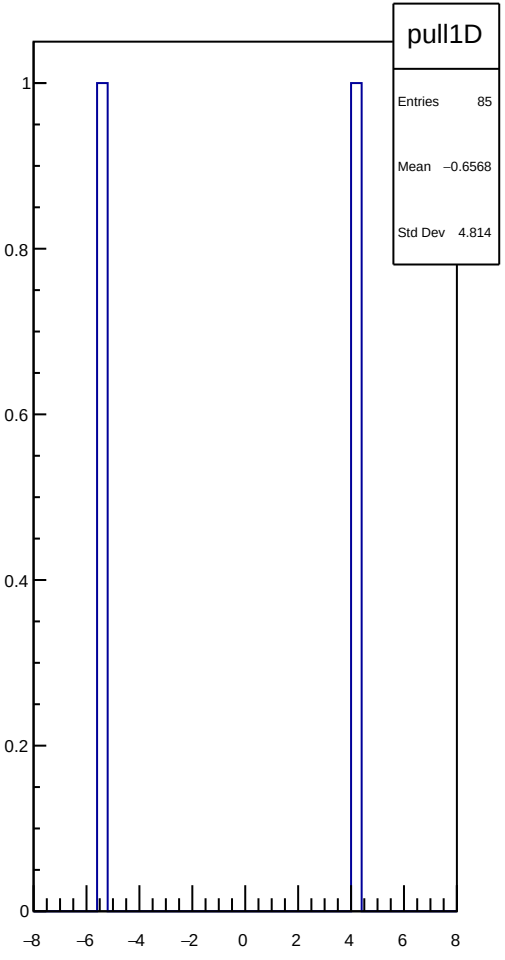

yield_bcm_an_ds3_rms vs run
χ² / ndf 4.233e+04 / 84
p0 0.3519 ± 0.0002742
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25

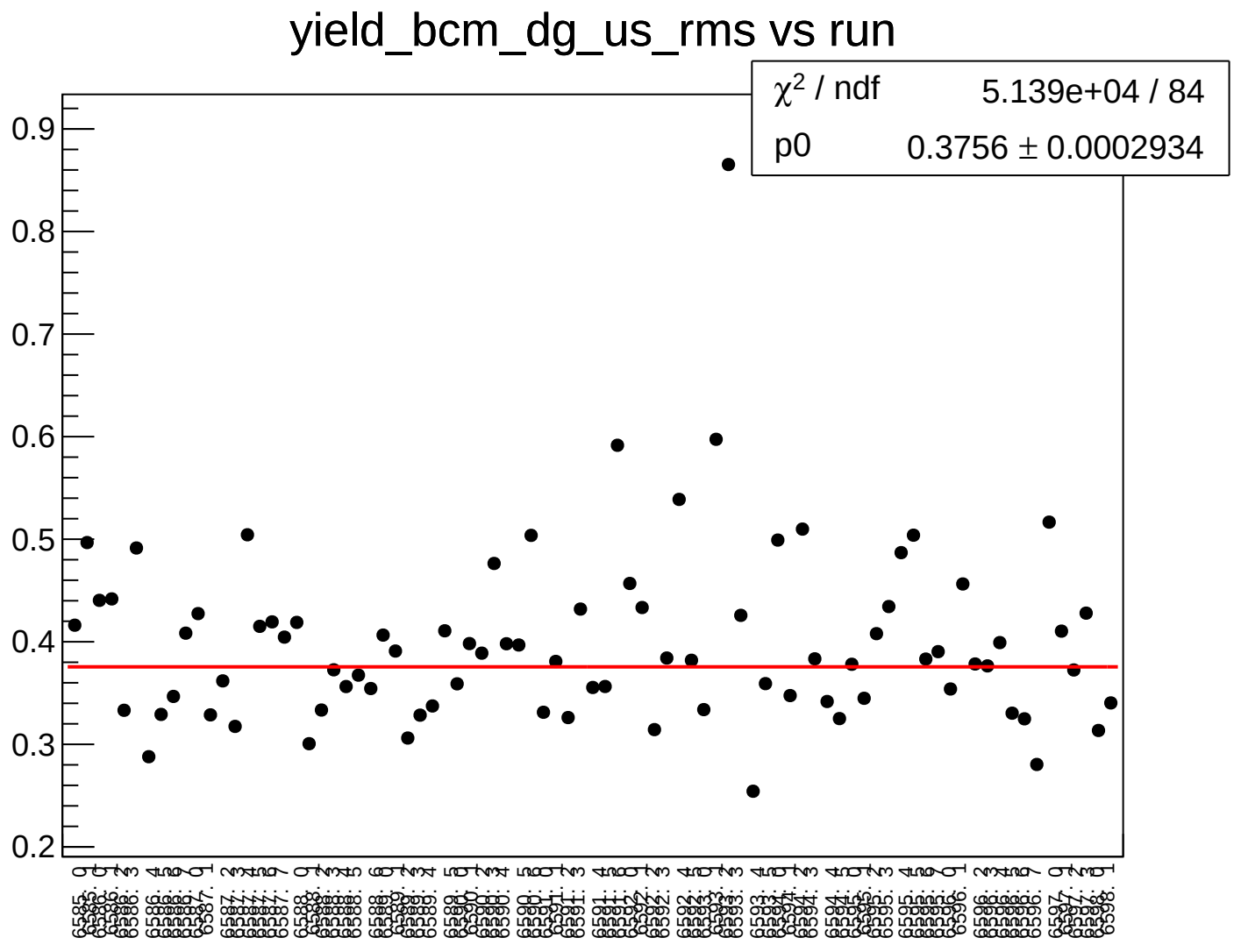

yield_bcm_an_us_mean vs run
χ² / ndf 8.865e+05 / 84
p0 148.6 ± 0.0003852
149.2
149
148.8
148.6
148.4
148.2
148
147.8
147.6
pull
Entries 85
Mean 105.8
Std Dev 137.7
200
100
0
−100
−200
−300

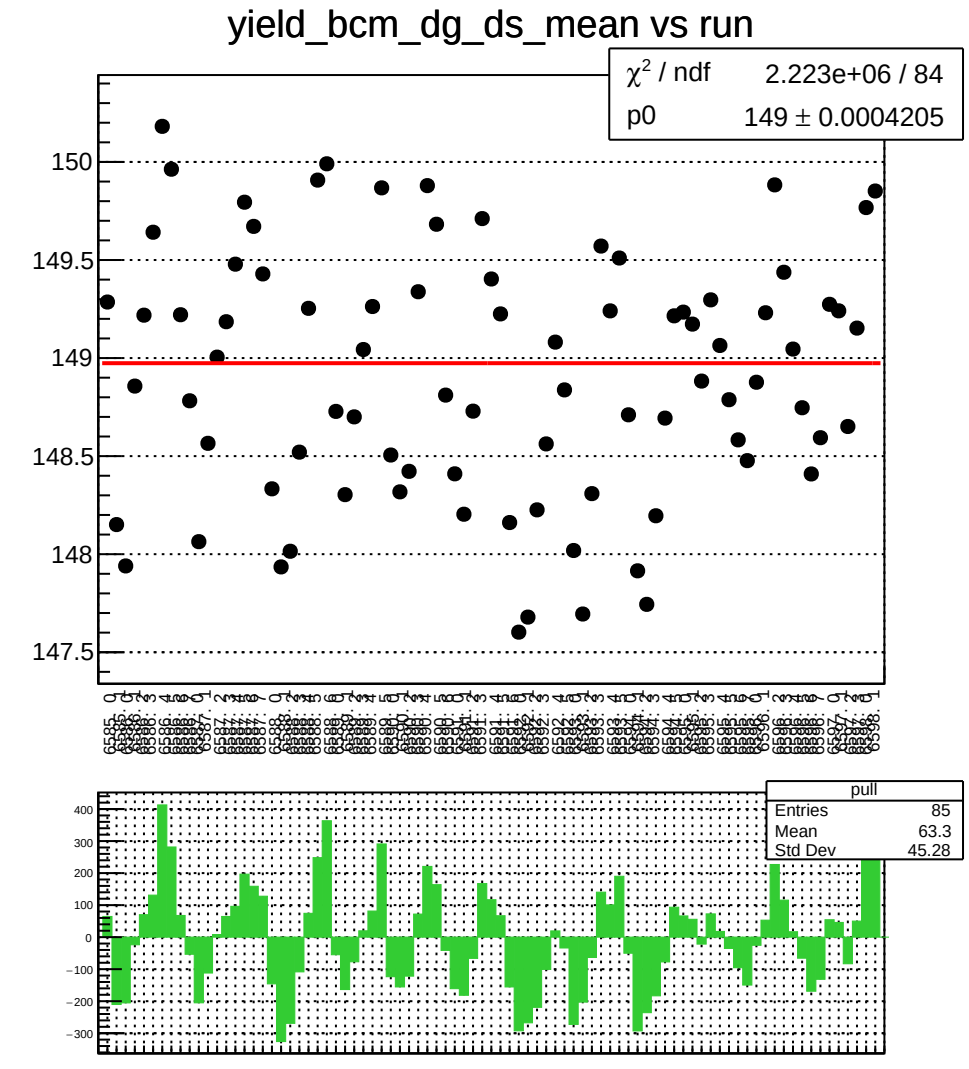

pull1D
Entries 85
Mean 0.09854
Std Dev 5.031
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

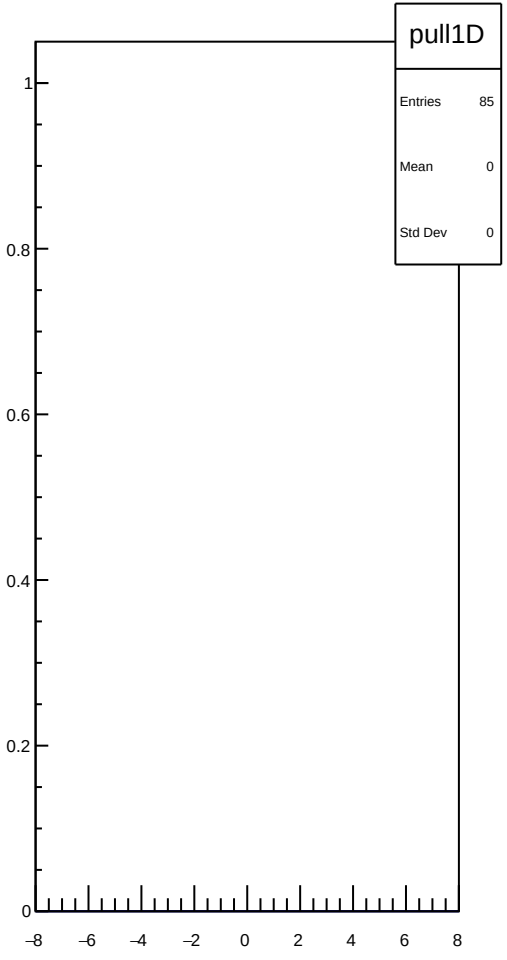

yield_bcm_an_us_rms vs run
χ² / ndf 4.329e+04 / 84
p0 0.3495 ± 0.0002724
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2

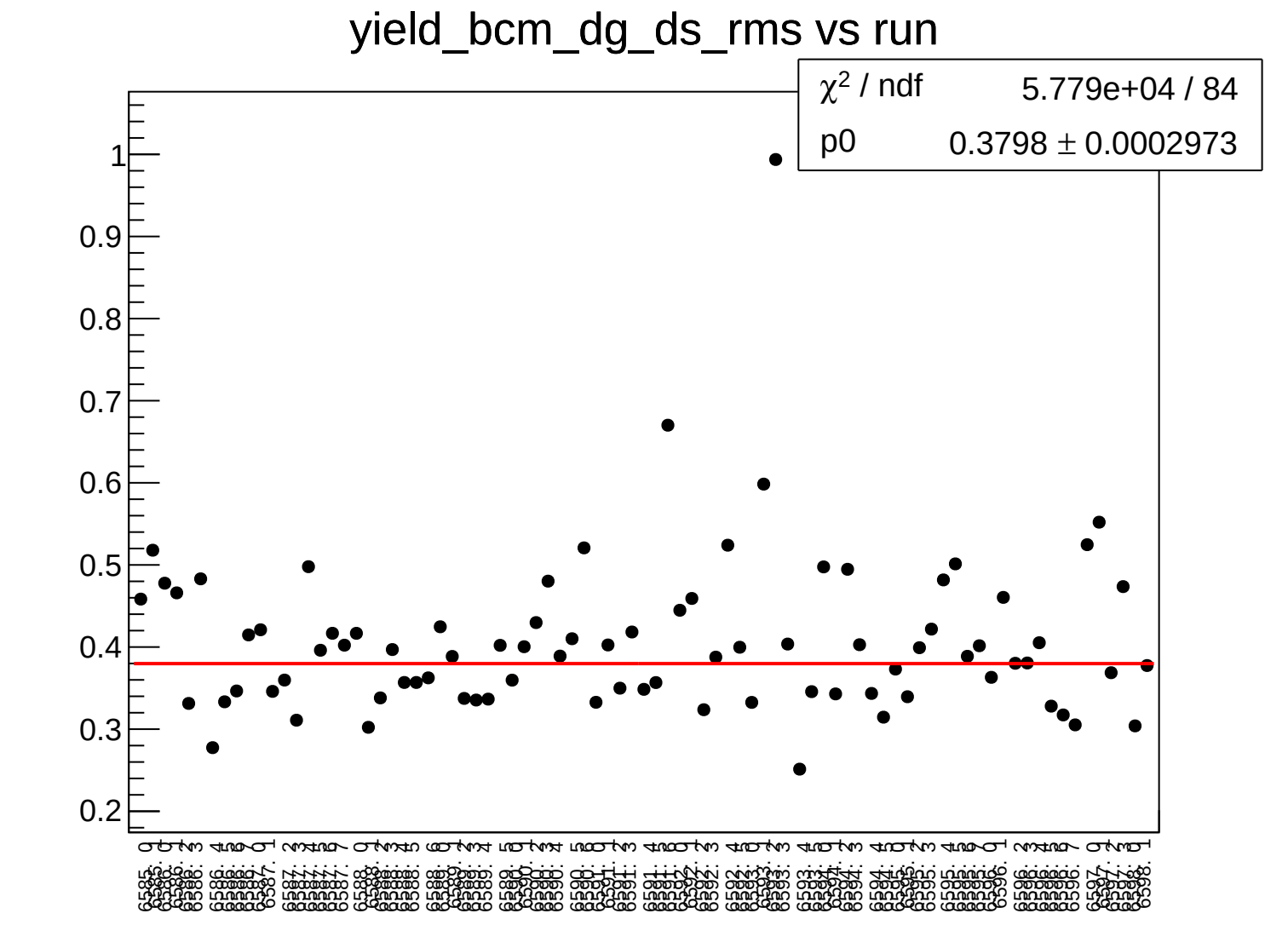

yield_bcm_dg_us_mean vs run
χ² / ndf 1.618e+06 / 84
p0 149.1± 0.000415
150
149.5
149
148.5
148
pull
Entries 85
Mean 50.45
Std Dev 54.64
300
200
100
0
−100
−200

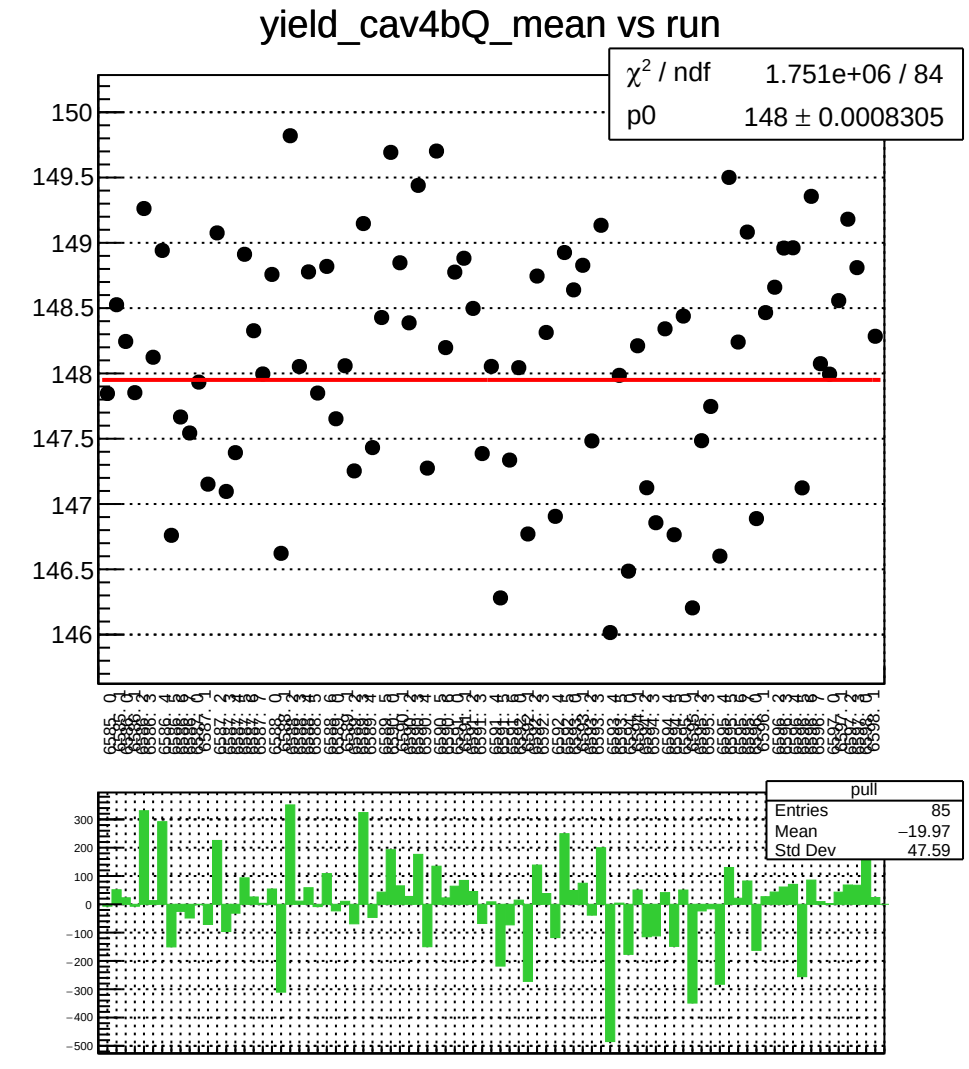

pull1D
Entries 85
Mean −0.6568
Std Dev 4.814
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

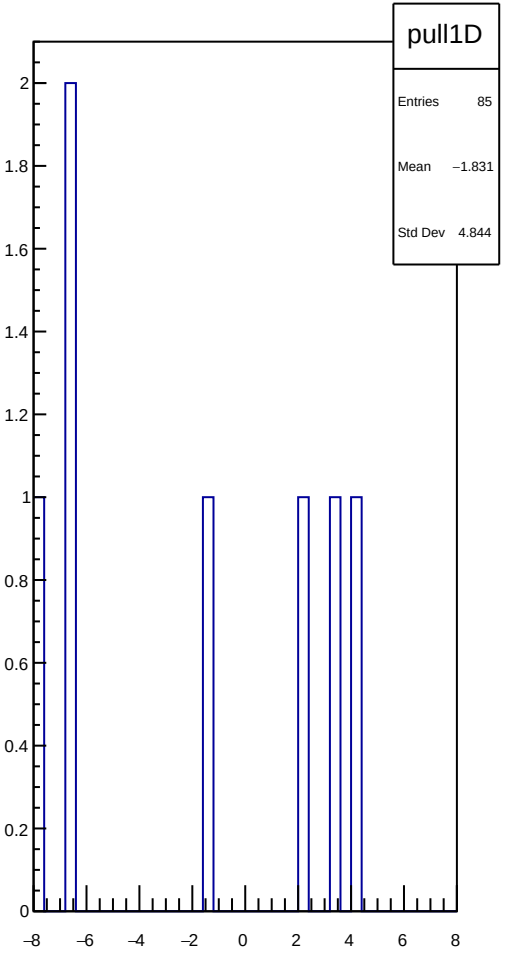

yield_bcm_dg_us_rms vs run
χ² / ndf 5.139e+04 / 84
p0 0.3756 ± 0.0002934
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2

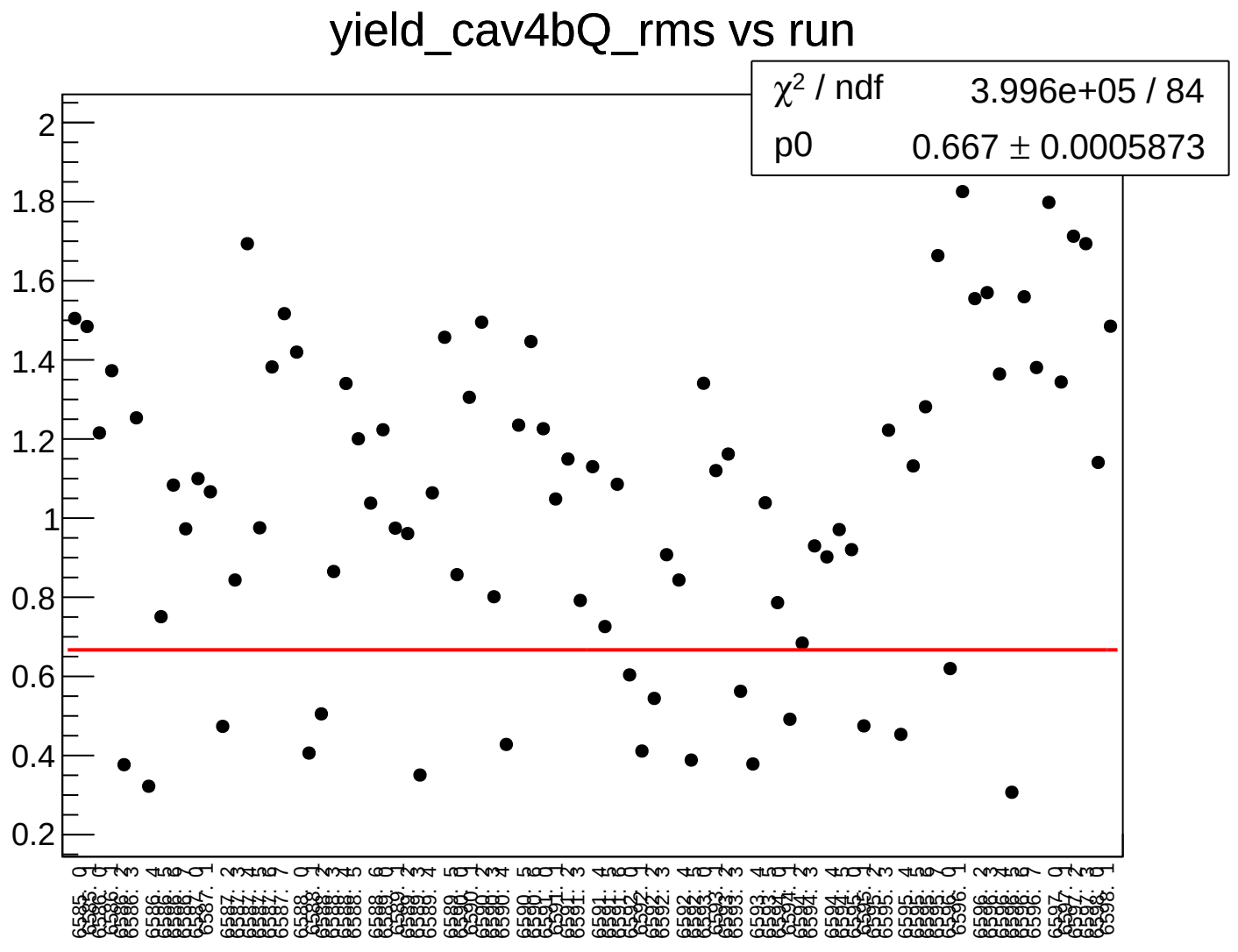

yield_bcm_dg_ds_mean vs run
χ² / ndf 2.223e+06 / 84
p0 149 ± 0.0004205
150
149.5
149
148.5
148
147.5
pull
Entries 85
Mean 63.3
Std Dev 45.28
400
300
200
100
0
−100
−200
−300

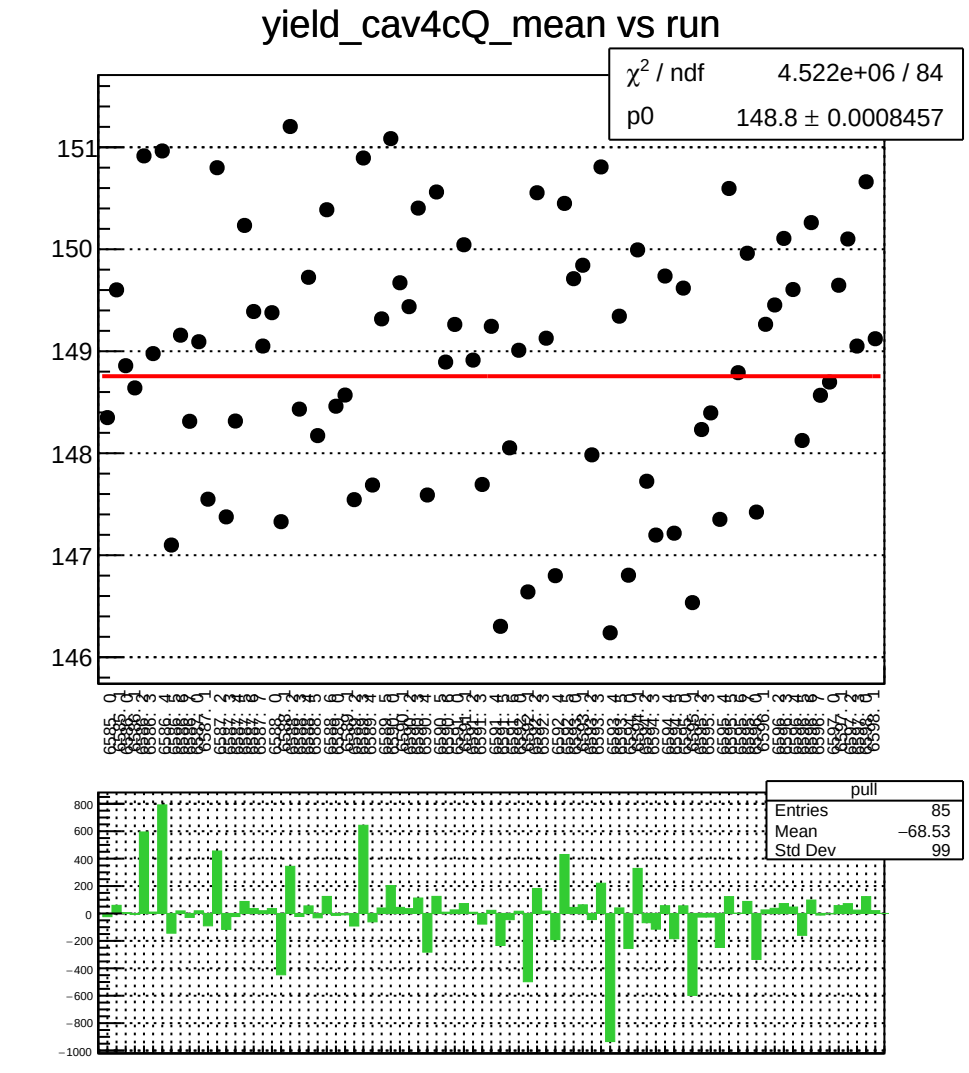

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

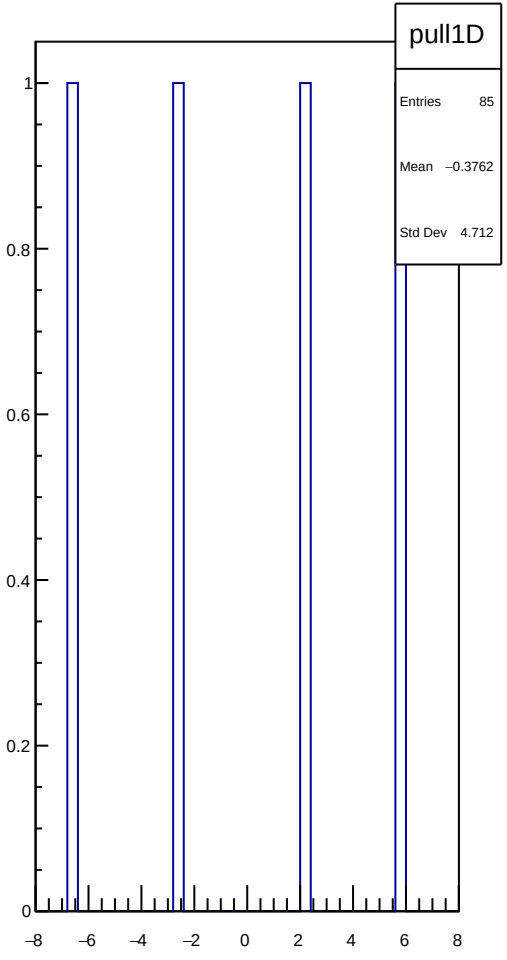

yield_bcm_dg_ds_rms vs run
χ^2 / ndf 5.779e+04 / 84
p0 0.3798 ± 0.0002973
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2

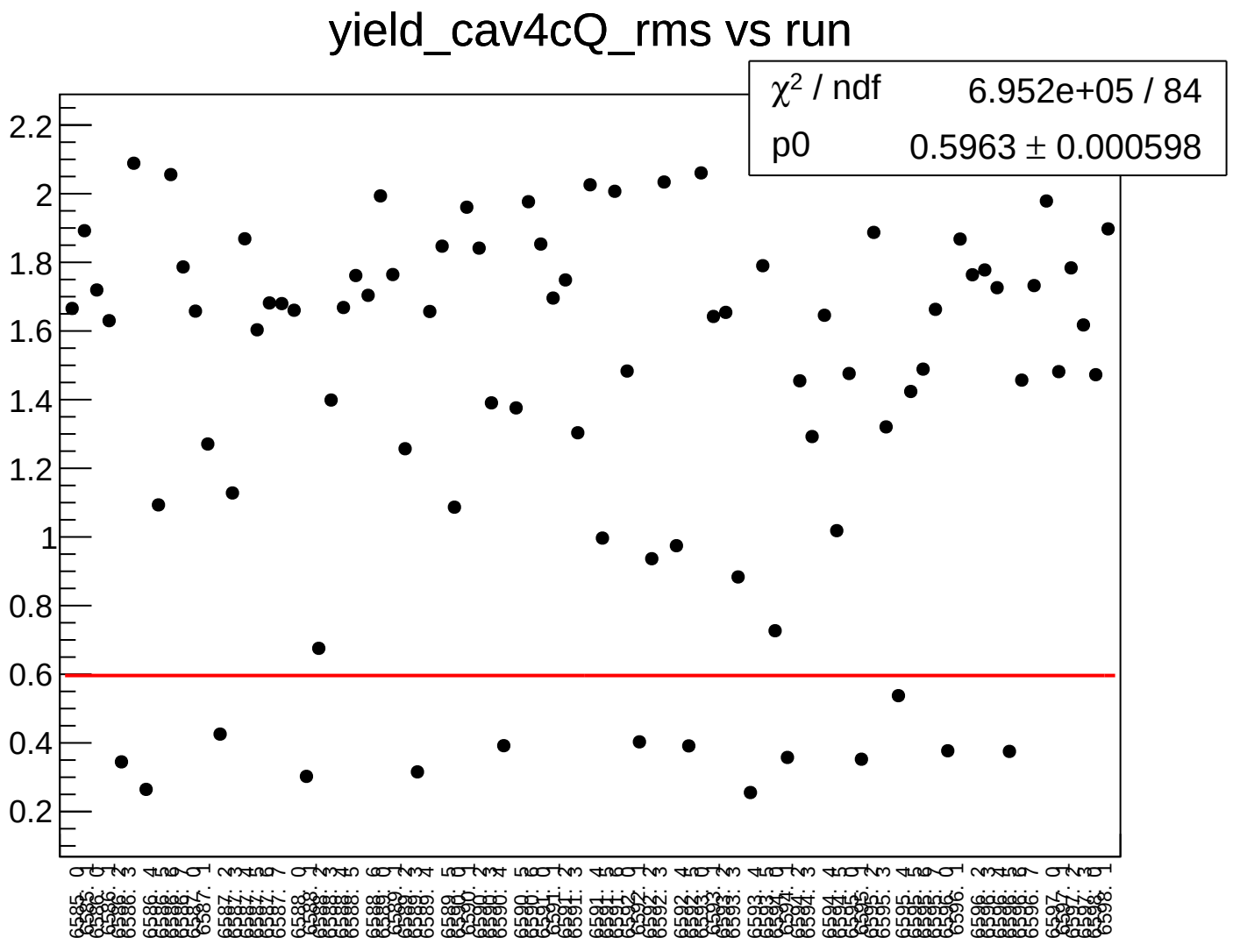

yield_cav4bQ_mean vs run
χ² / ndf 1.751e+06 / 84
p0 148 ± 0.0008305
150
149.5
149
148.5
148
147.5
147
146.5
146
pull
Entries 85
Mean −19.97
Std Dev 47.59
300
200
100
0
−100
−200
−300
−400
−500

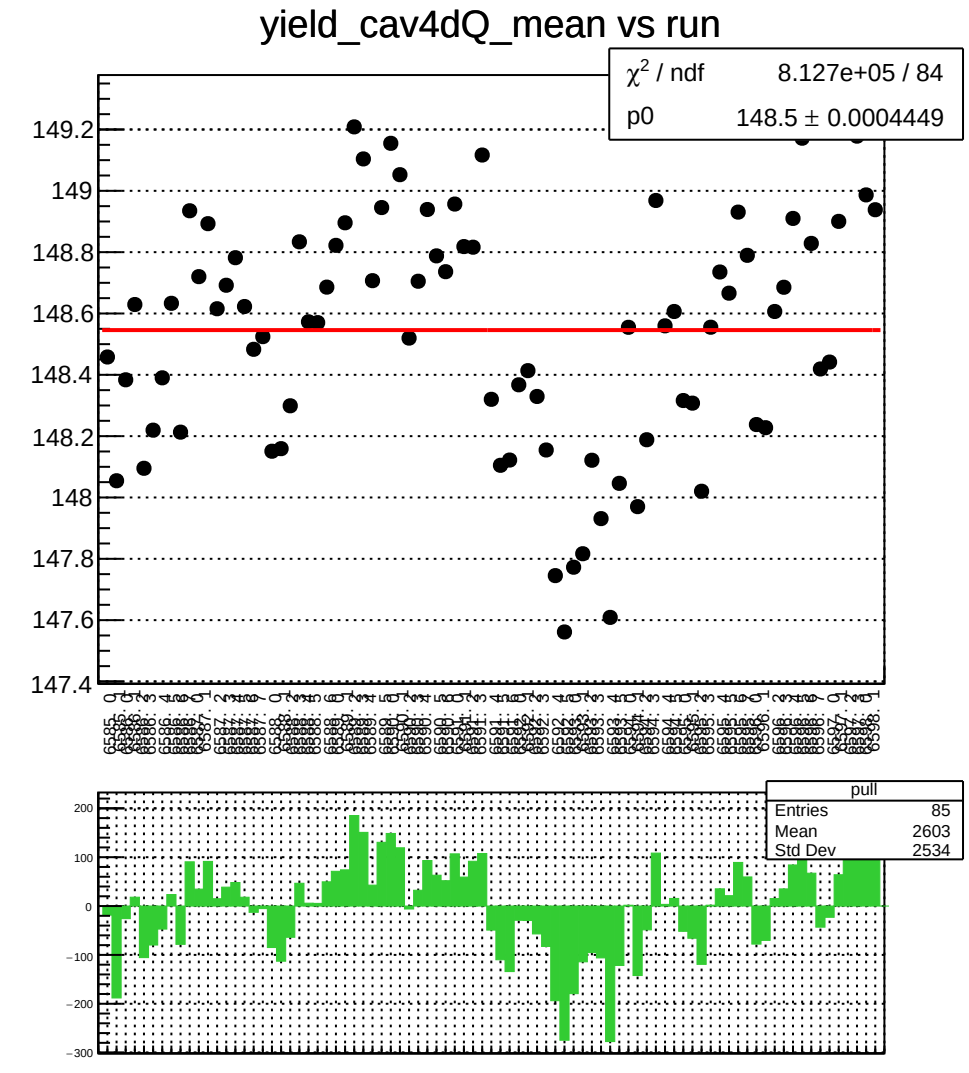

pull1D
Entries 85
Mean −1.831
Std Dev 4.844
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

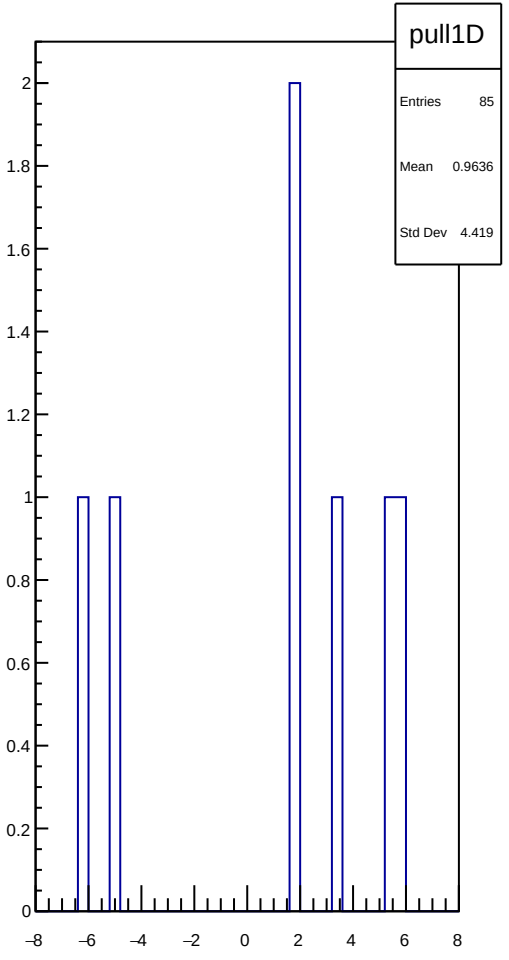

yield_cav4bQ_rms vs run
χ² / ndf 3.996e+05 / 84
p0 0.667 ± 0.0005873
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

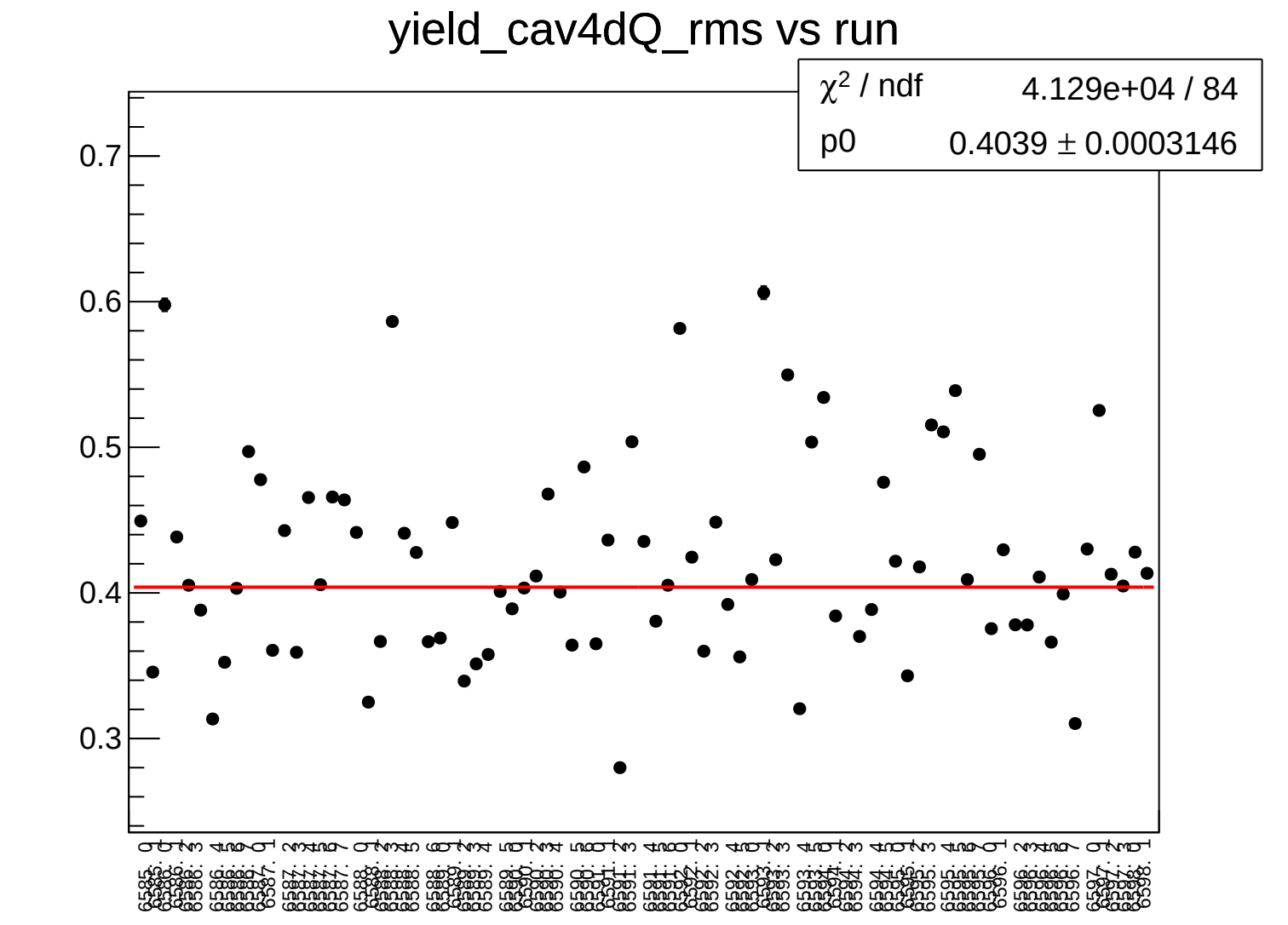

yield_cav4cQ_mean vs run
χ² / ndf 4.522e+06 / 84
p0 148.8 ± 0.0008457
151
150
149
148
147
146
pull
Entries 85
Mean −68.53
Std Dev 99
800
600
400
200
0
−200
−400
−600
−800
−1000

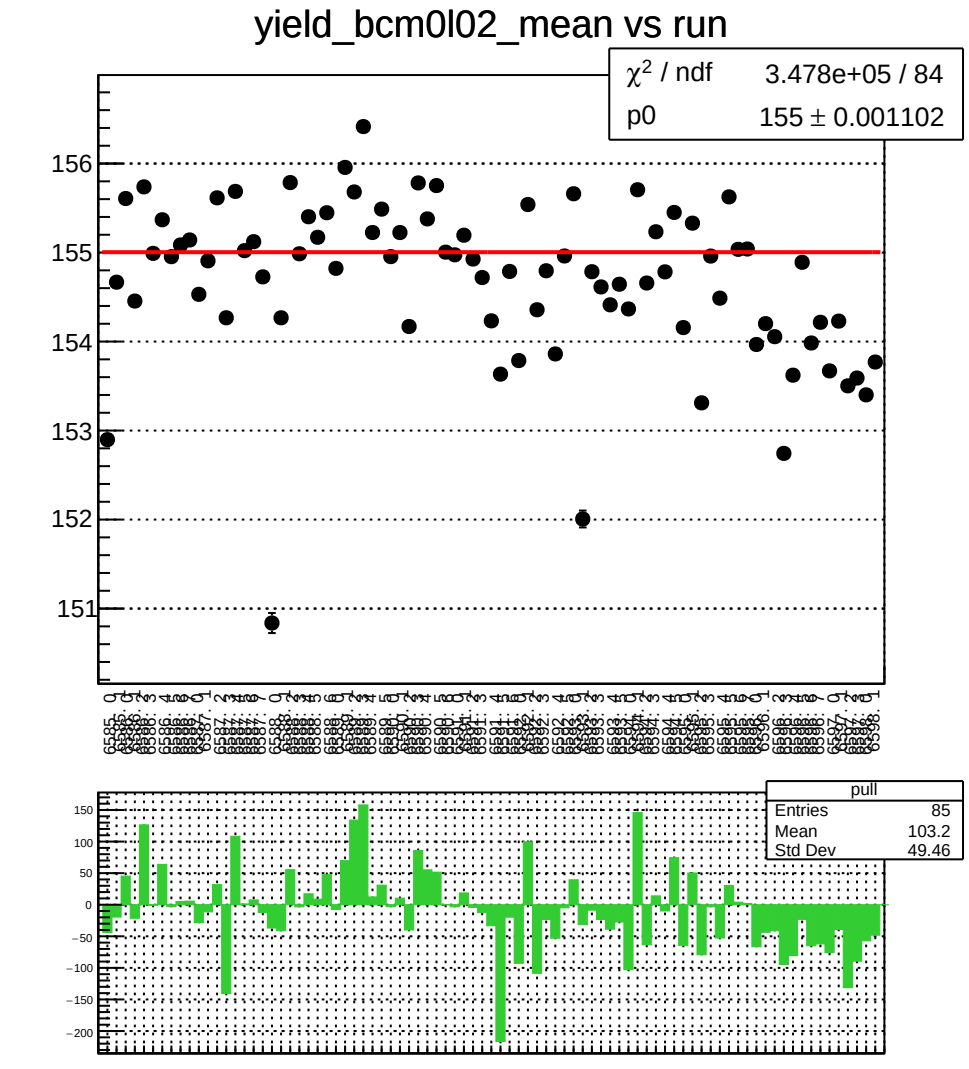

pull1D
Entries 85
Mean −0.3762
Std Dev 4.712
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

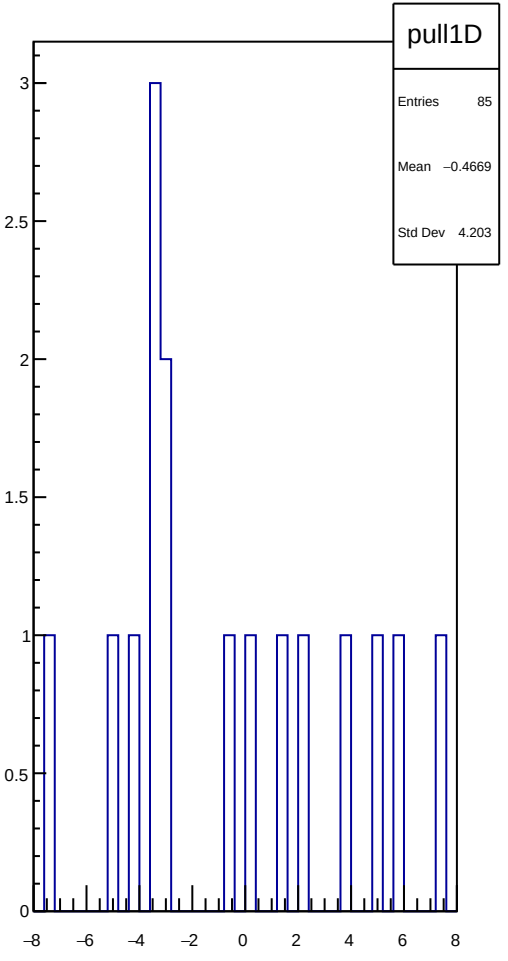

yield_cav4cQ_rms vs run
χ² / ndf 6.952e+05 / 84
p0 0.5963 ± 0.000598
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

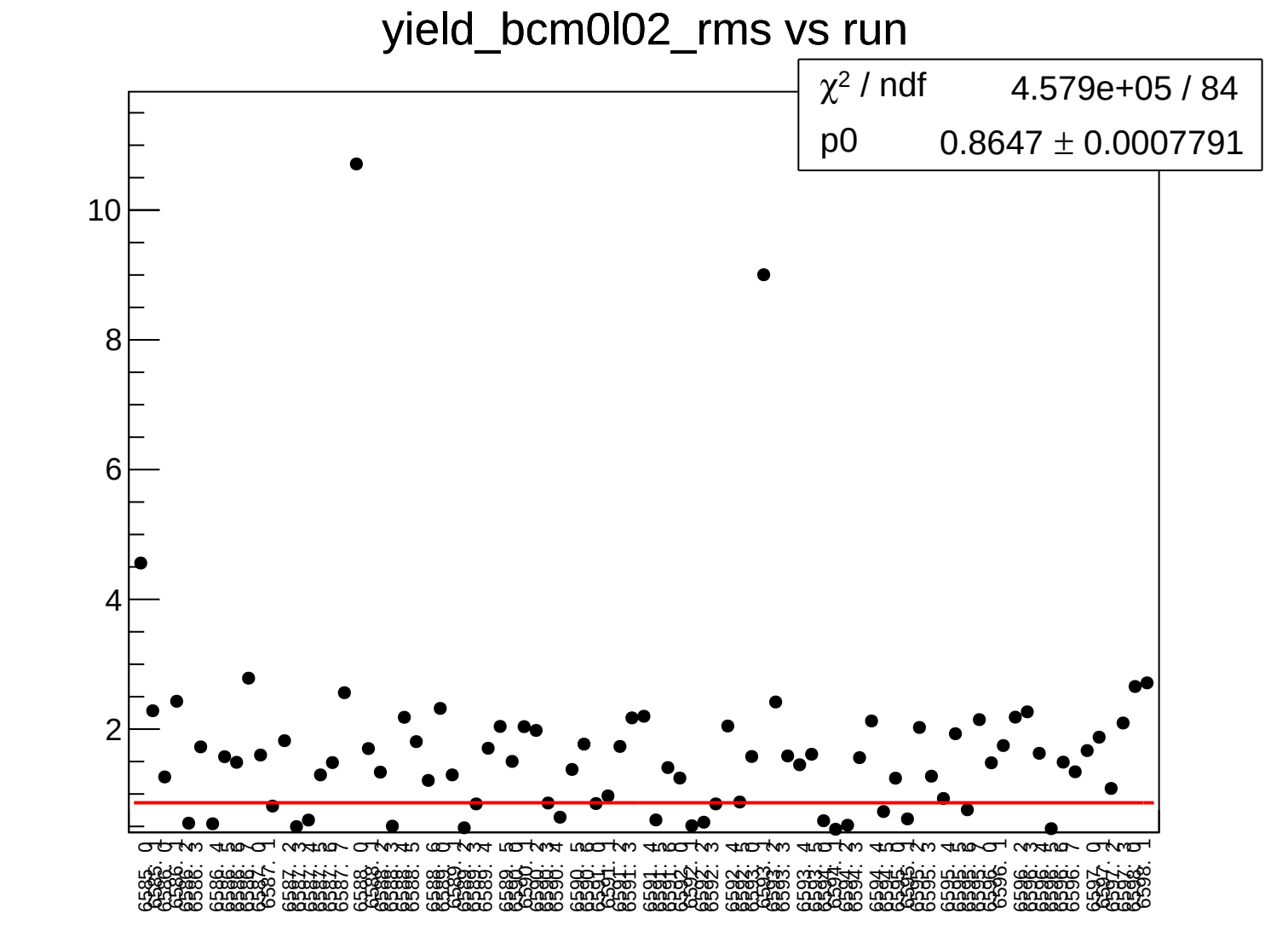

yield_cav4dQ_mean vs run
χ² / ndf 8.127e+05 / 84
p0 148.5 ± 0.0004449
149.2
149
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
pull
Entries 85
Mean 2603
Std Dev 2534
200
100
0
−100
−200
−300

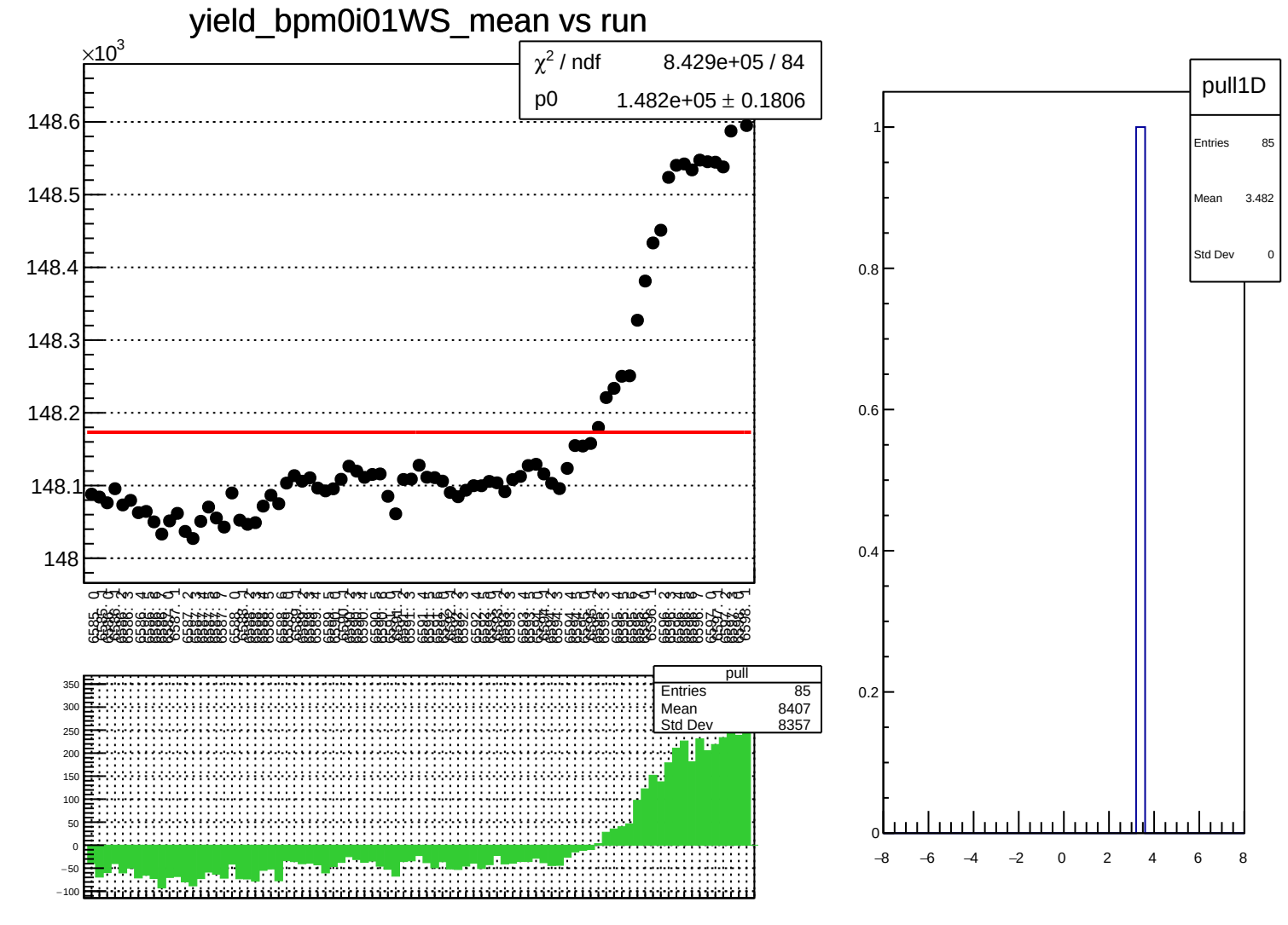

pull1D
Entries 85
Mean 0.9636
Std Dev 4.419
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

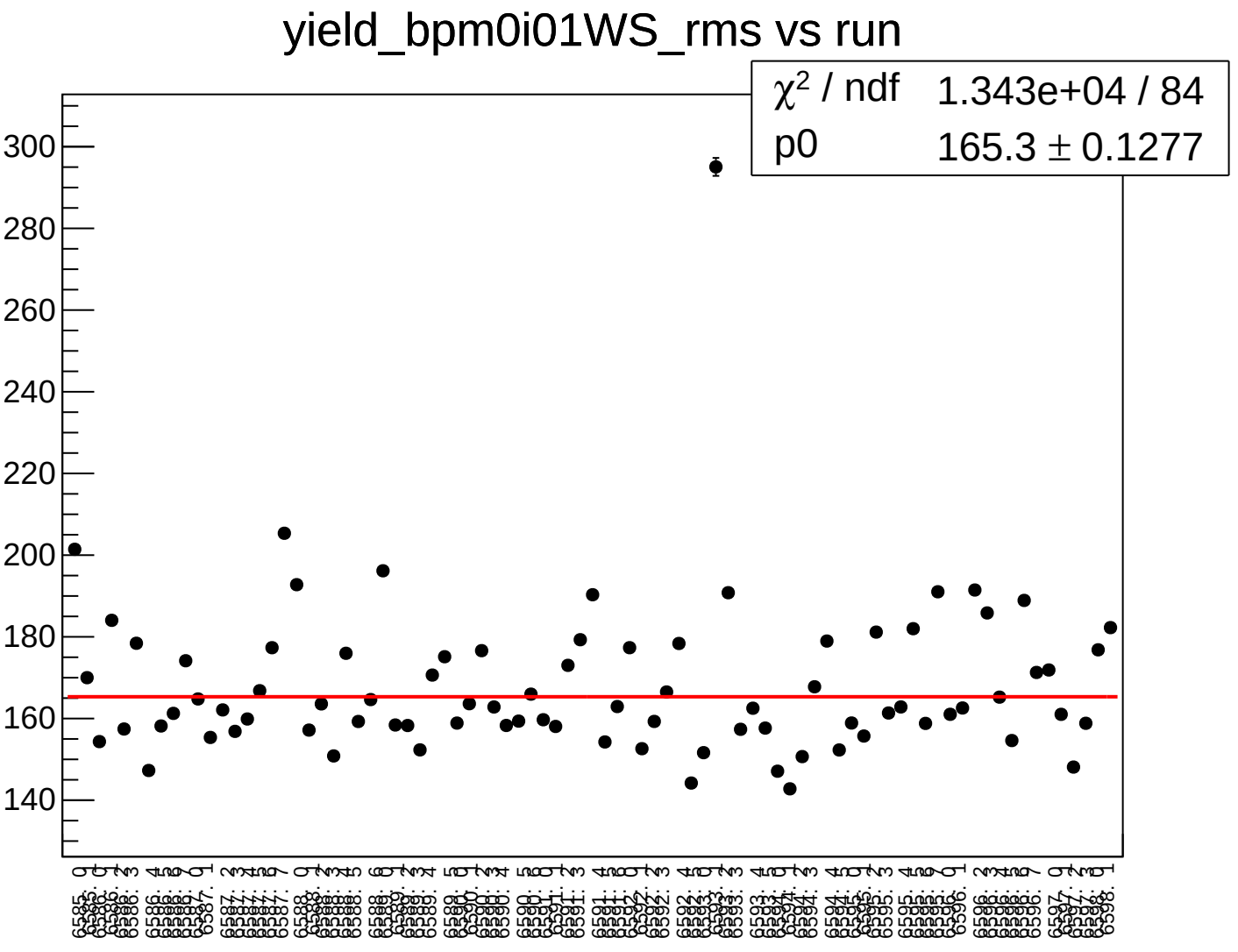

yield_cav4dQ_rms vs run
χ² / ndf 4.129e+04 / 84
p0 0.4039 ± 0.0003146
0.7
0.6
0.5
0.4
0.3

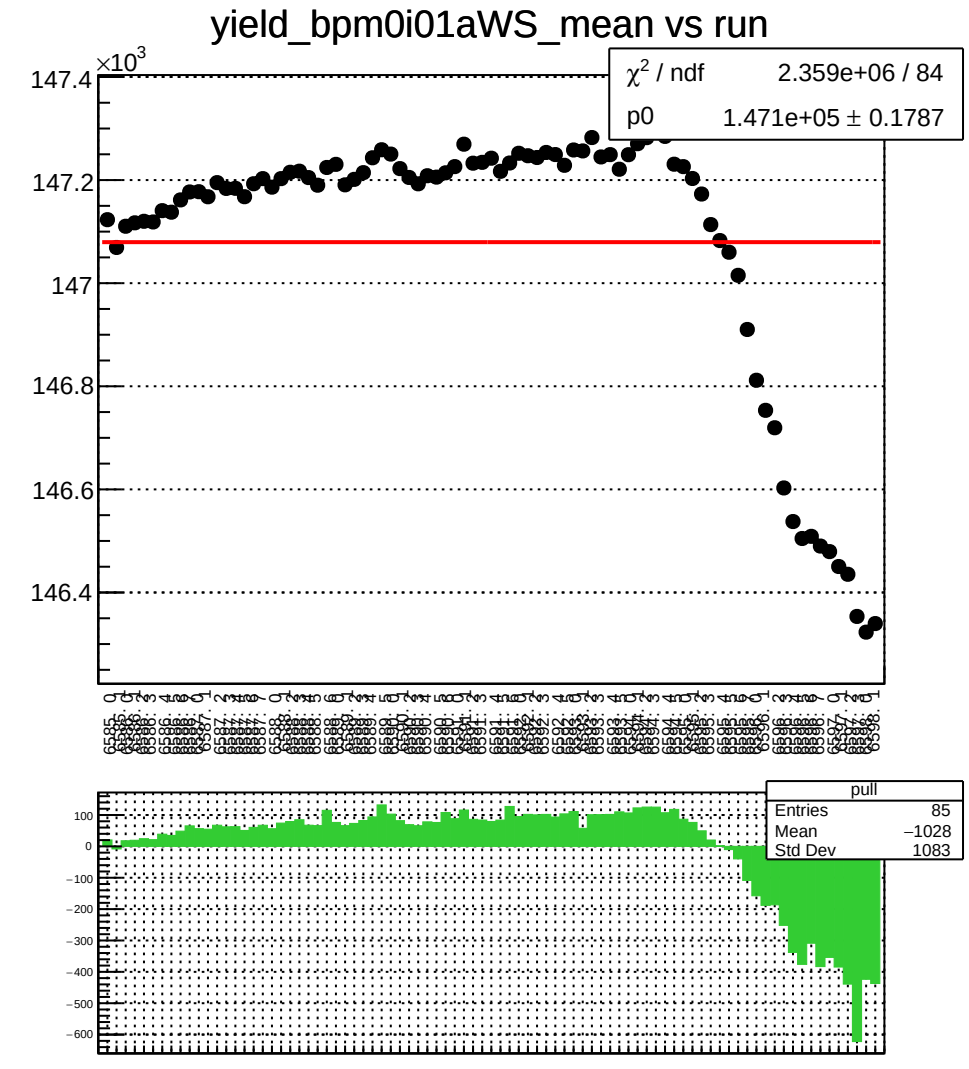

yield_bcm0l02_mean vs run
χ² / ndf 3.478e+05 / 84
p0 155 ± 0.001102
156
155
154
153
152
151
pull
Entries 85
Mean 103.2
Std Dev 49.46
150
100
50
0
−50
−100
−150
−200

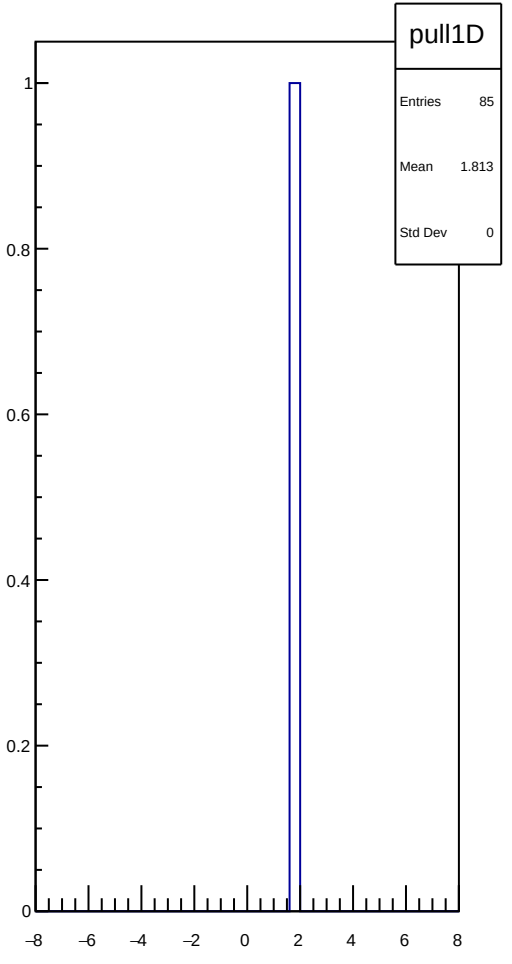

pull1D
Entries 85
Mean −0.4669
Std Dev 4.203
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

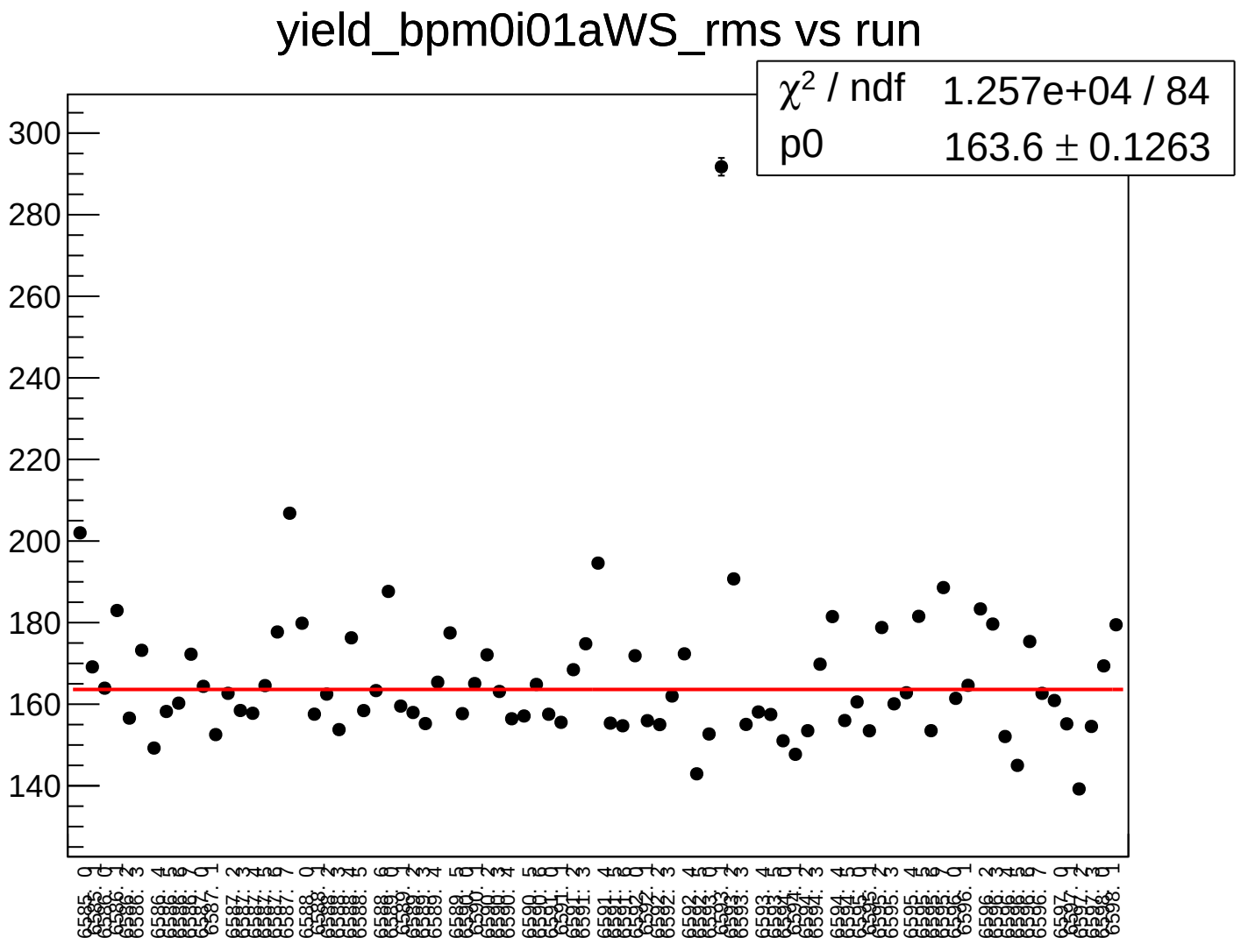

yield_bcm0l02_rms vs run
χ² / ndf 4.579e+05 / 84
p0 0.8647 ± 0.0007791
10
8
6
4
2

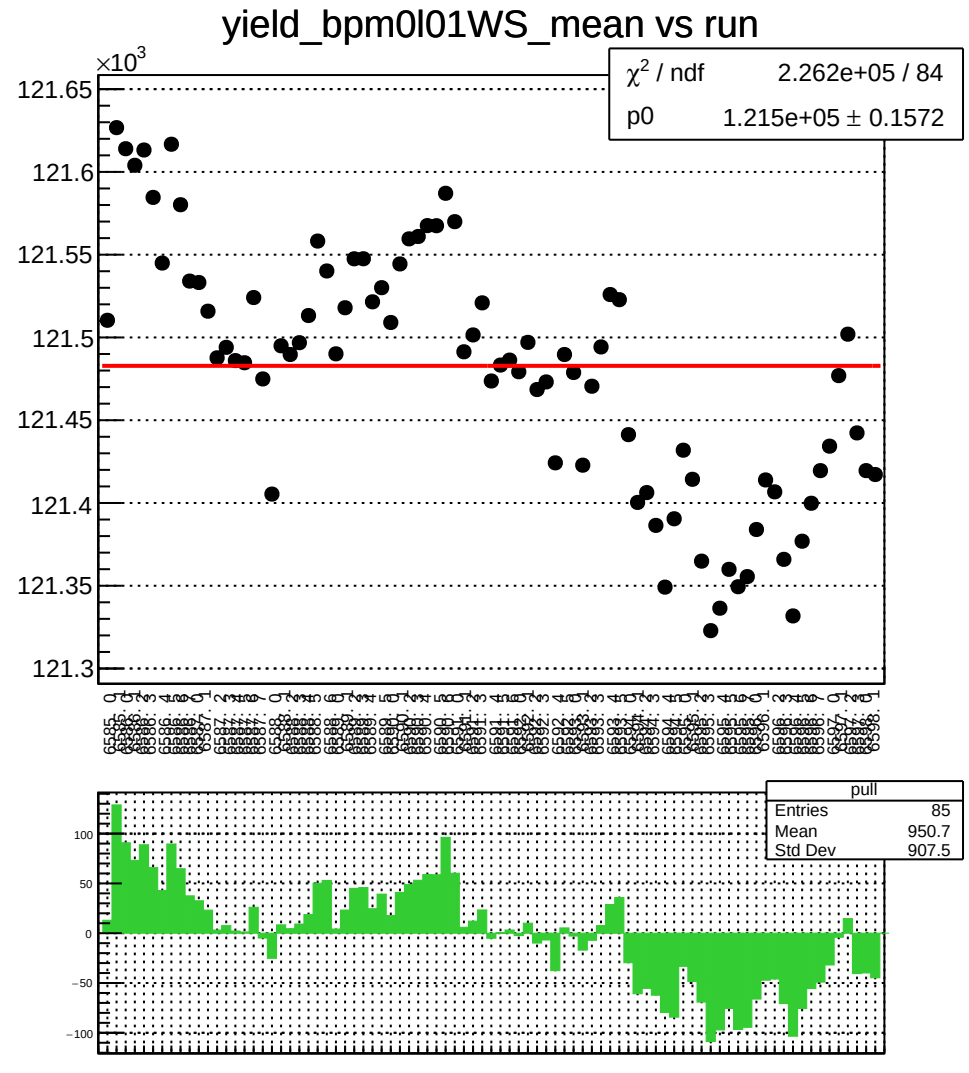

yield_bpm0i01WS_mean vs run
×10^3
χ^2 / ndf 8.429e+05 / 84
p0 1.482e+05 ± 0.1806
148.6
148.5
148.4
148.3
148.2
148.1
148
pull
Entries 85
Mean 8407
Std Dev 8357
350
300
250
200
150
100
50
0
−50
−100
pull1D
Entries 85
Mean 3.482
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

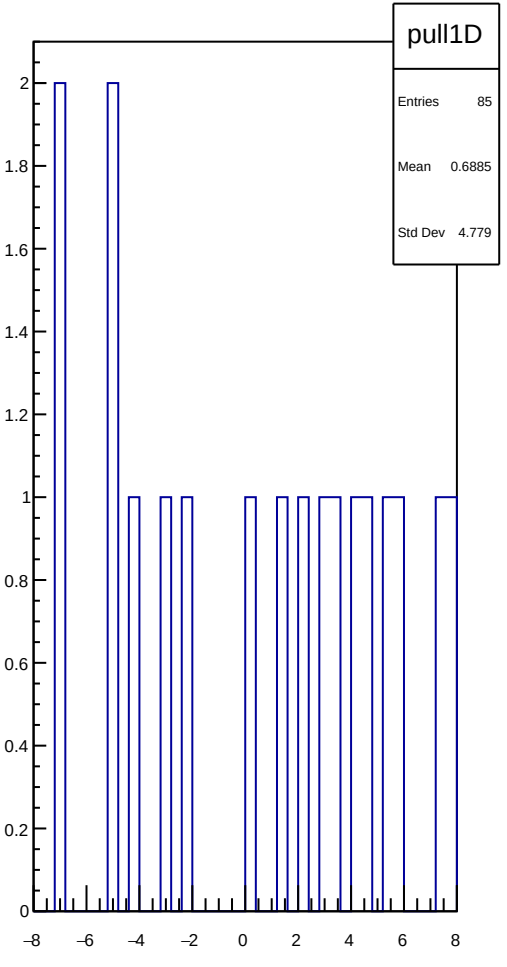

yield_bpm0i01WS_rms vs run
χ² / ndf 1.343e+04 / 84
p0 165.3 ± 0.1277
300
280
260
240
220
200
180
160
140

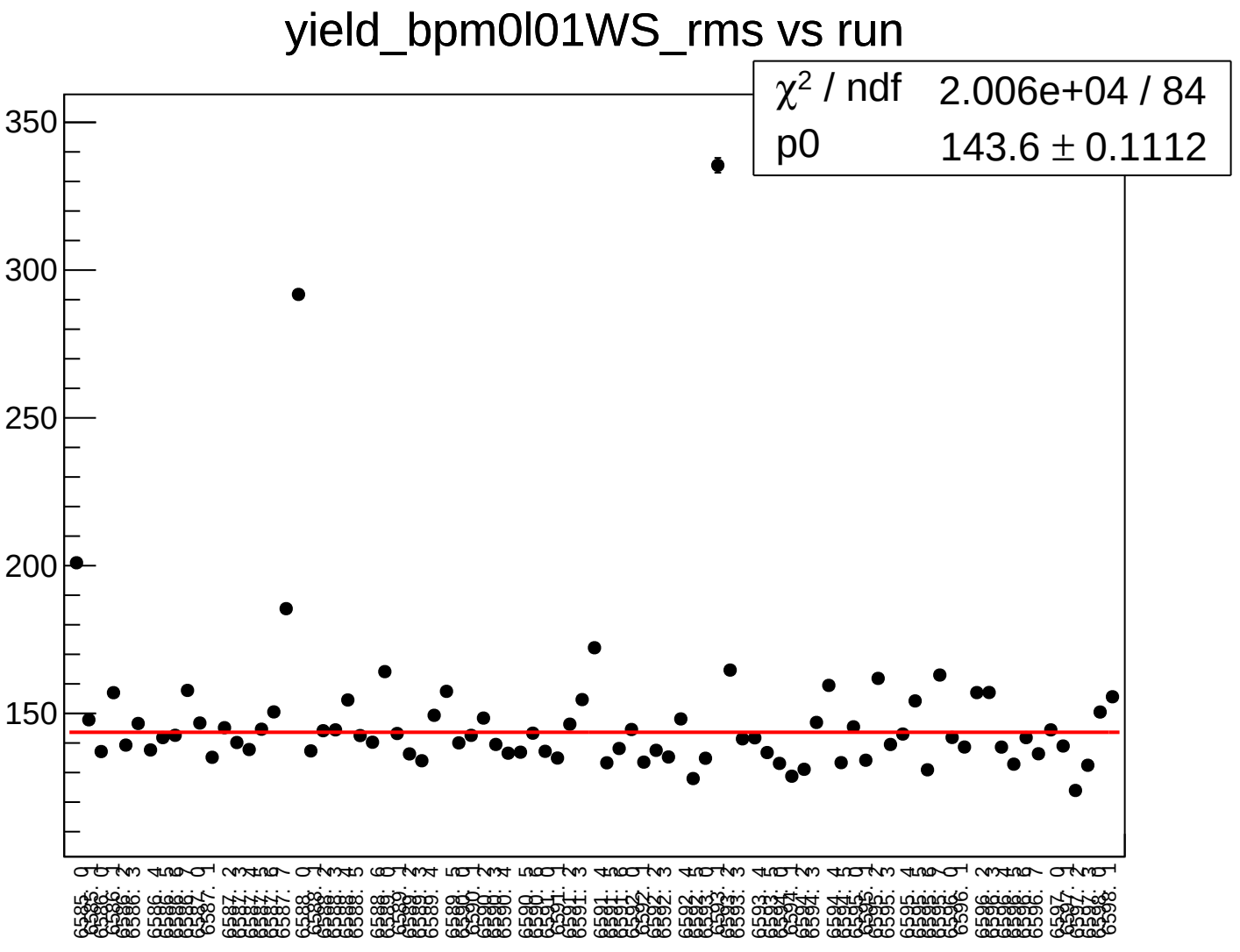

yield_bpm0i01aWS_mean vs run
×10^3
147.4
147.2
147
146.8
146.6
146.4
χ² / ndf 2.359e+06 / 84
p0 1.471e+05 ± 0.1787
pull
Entries 85
Mean −1028
Std Dev 1083
100
0
−100
−200
−300
−400
−500
−600

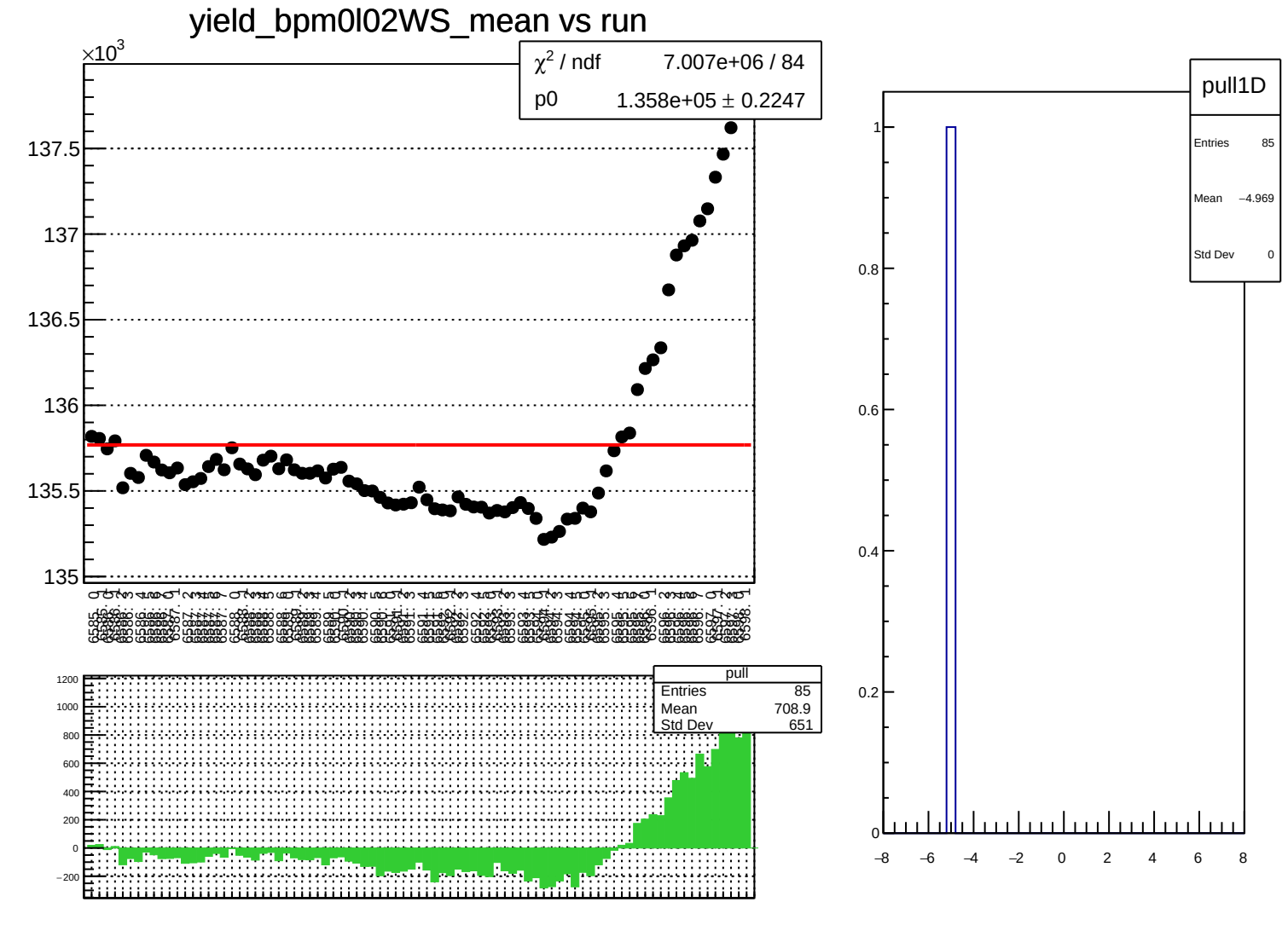

pull1D
Entries 85
Mean 1.813
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

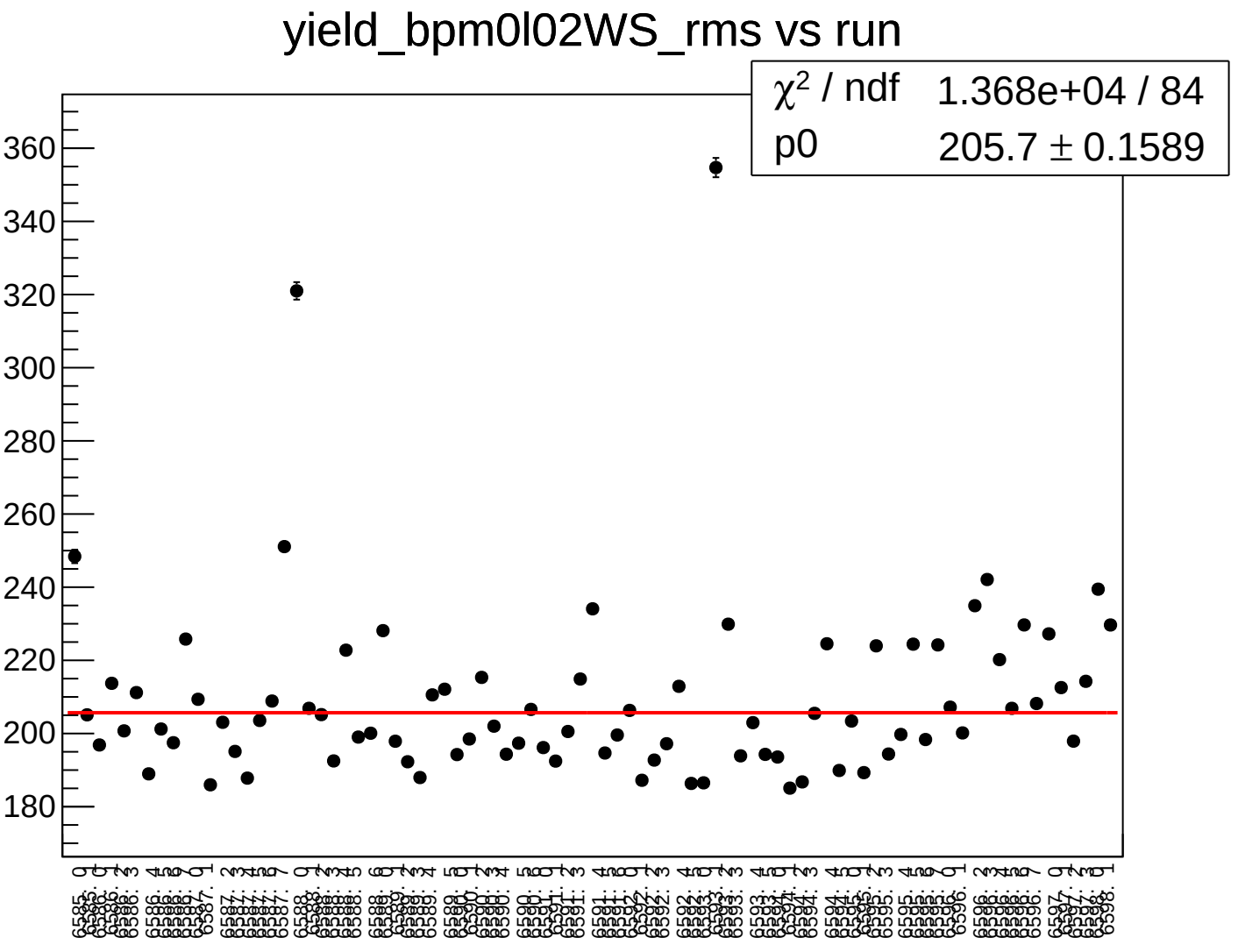

yield_bpm0i01aWS_rms vs run
χ² / ndf 1.257e+04 / 84
p0 163.6 ± 0.1263
300
280
260
240
220
200
180
160
140

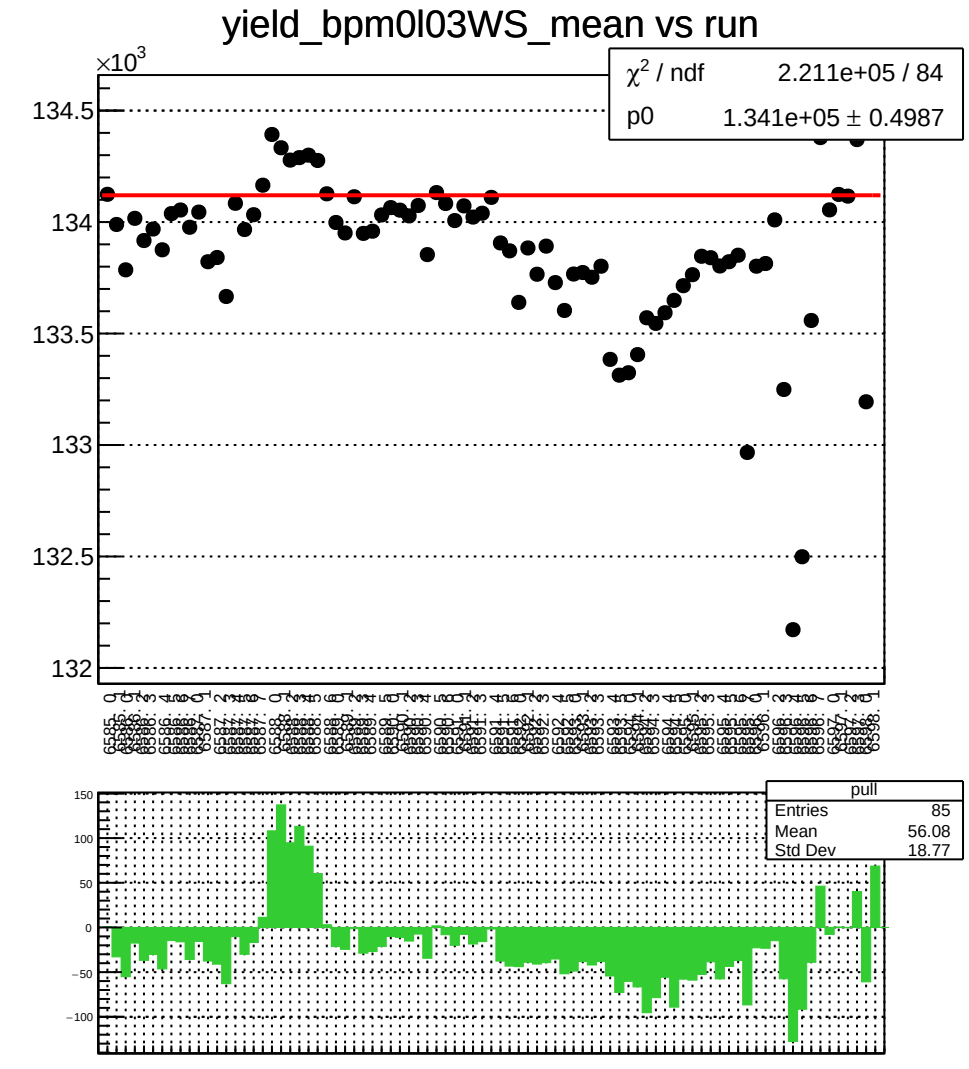

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.262e+05 / 84
p0 1.215e+05 ± 0.1572
121.65
121.6
121.55
121.5
121.45
121.4
121.35
121.3
pull
Entries 85
Mean 950.7
Std Dev 907.5
100
50
0
−50
−100

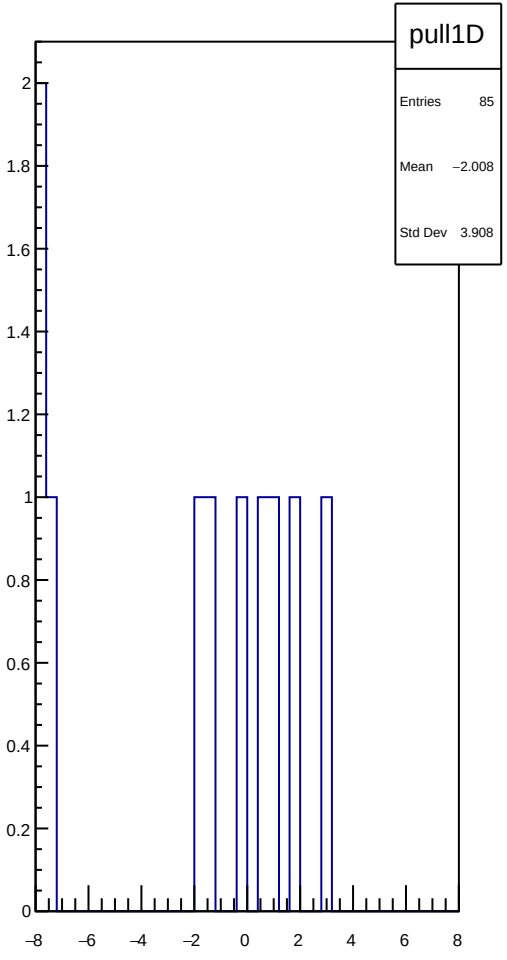

pull1D
Entries 85
Mean 0.6885
Std Dev 4.779
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

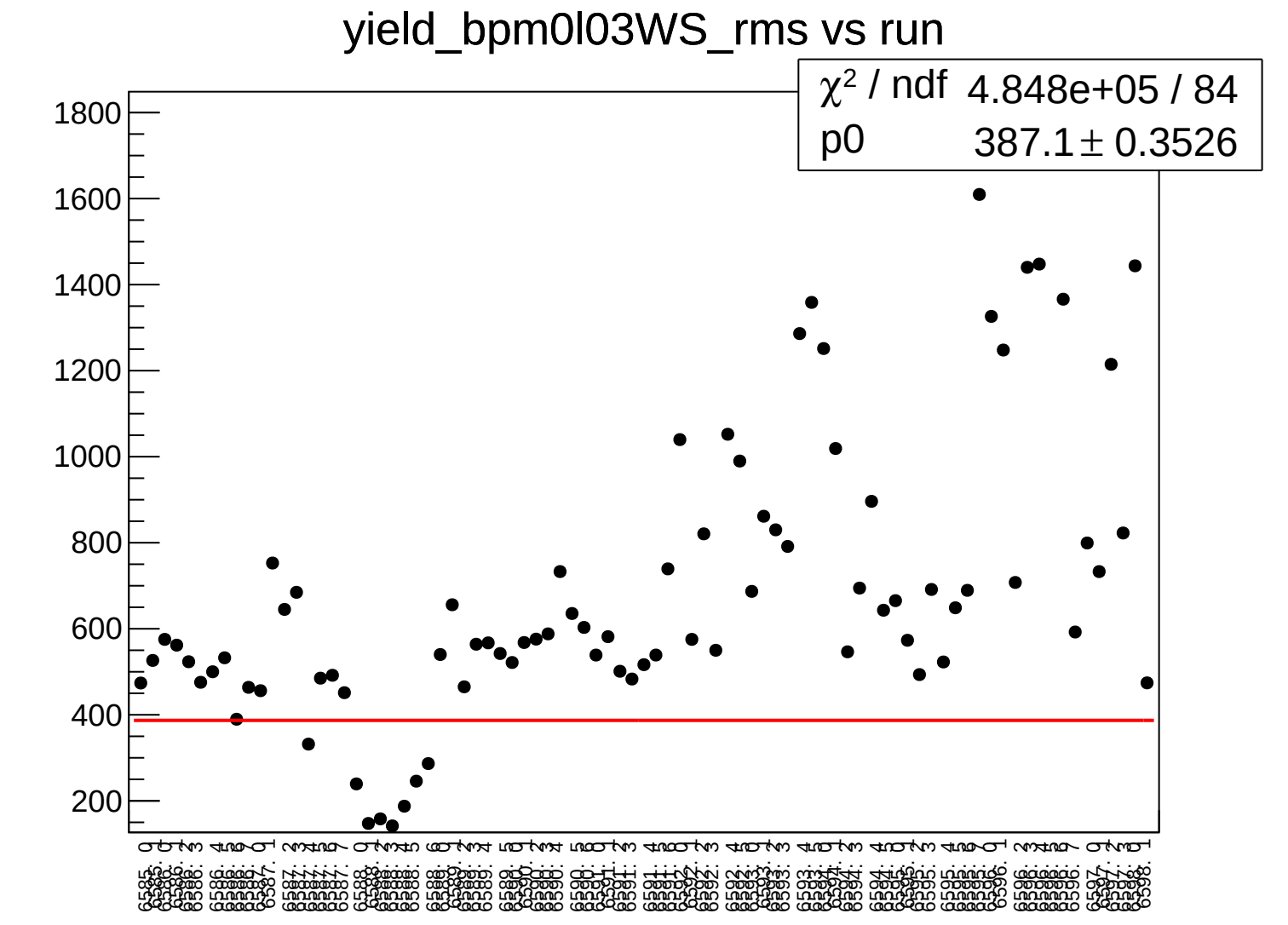

yield_bpm0l01WS_rms vs run
χ² / ndf 2.006e+04 / 84
p0 143.6 ± 0.1112
350
300
250
200
150

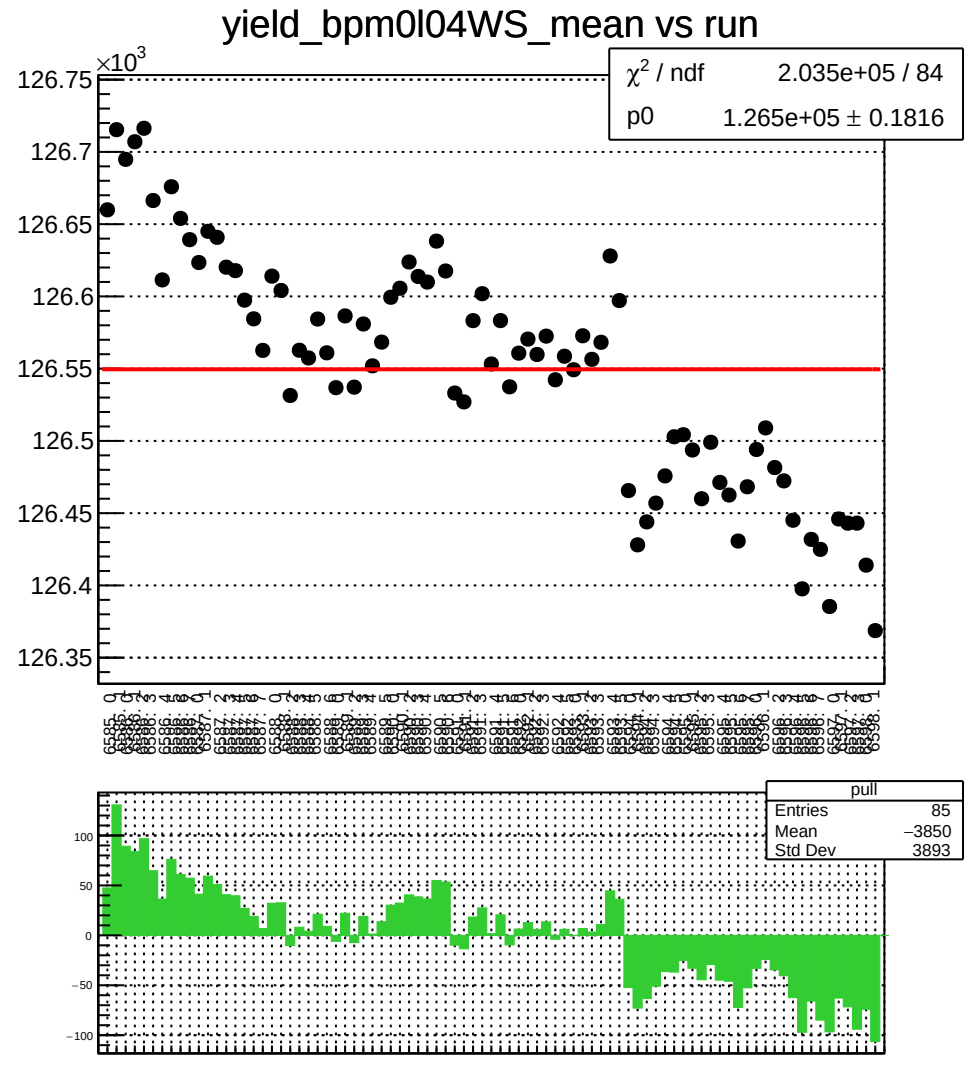

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 7.007e+06 / 84
p0 1.358e+05 ± 0.2247
137.5
137
136.5
136
135.5
135
pull
Entries 85
Mean 708.9
Std Dev 651
1200
1000
800
600
400
200
0
−200
pull1D
Entries 85
Mean −4.969
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

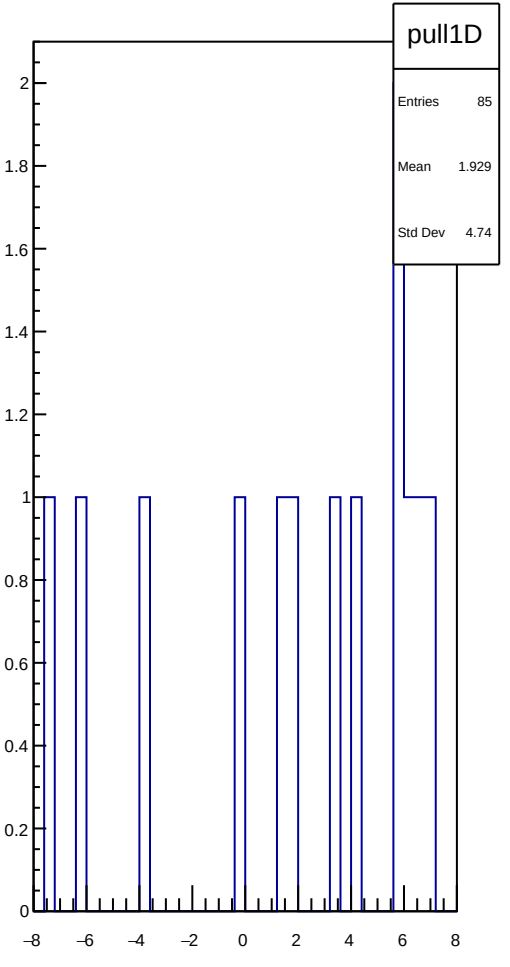

yield_bpm0l02WS_rms vs run
χ² / ndf 1.368e+04 / 84
p0 205.7 ± 0.1589
360
340
320
300
280
260
240
220
200
180

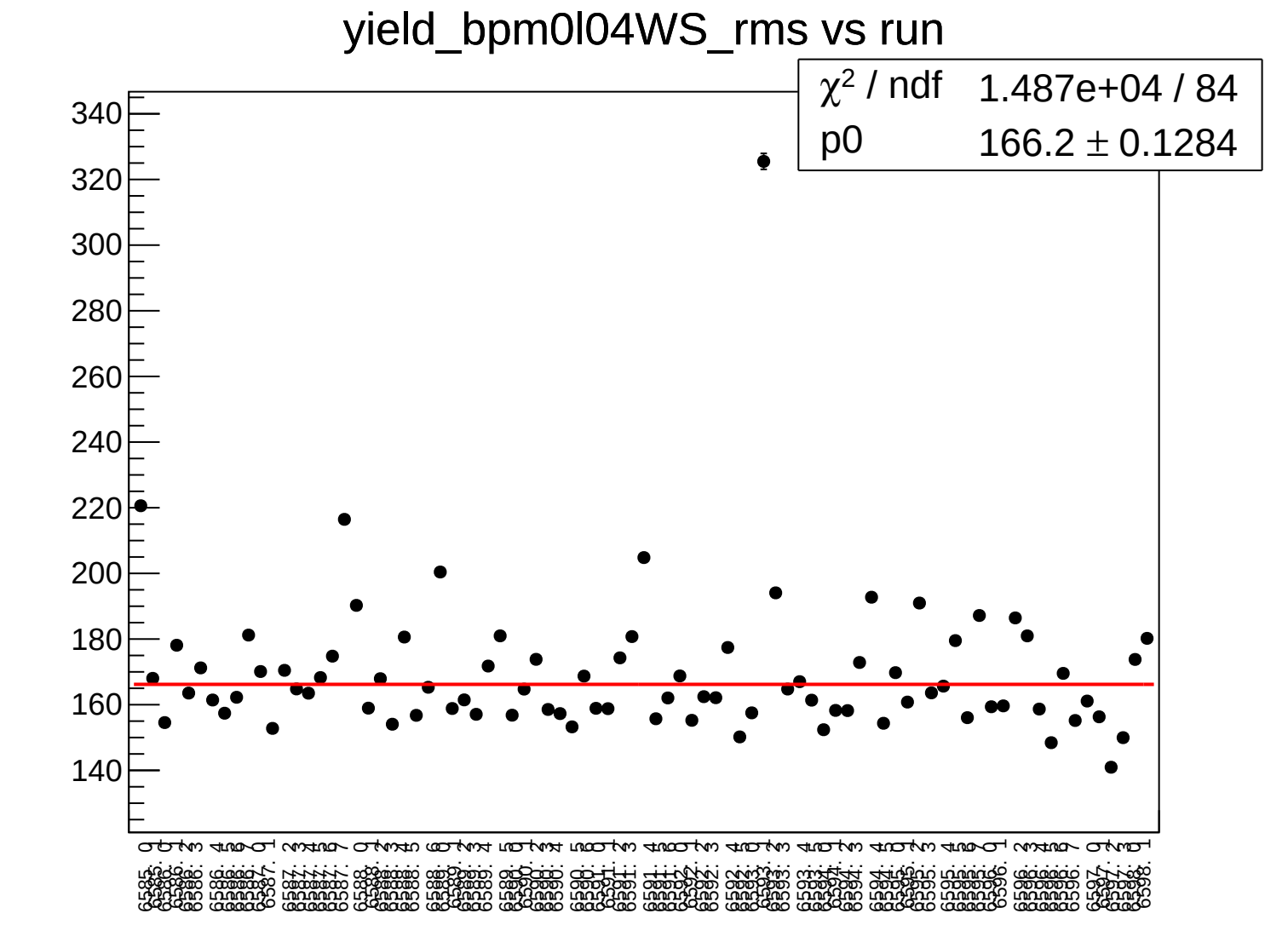

yield_bpm0l03WS_mean vs run
×10^3
χ^2 / ndf 2.211e+05 / 84
p0 1.341e+05 ± 0.4987
134.5
134
133.5
133
132.5
132
pull
Entries 85
Mean 56.08
Std Dev 18.77
150
100
50
0
−50
−100

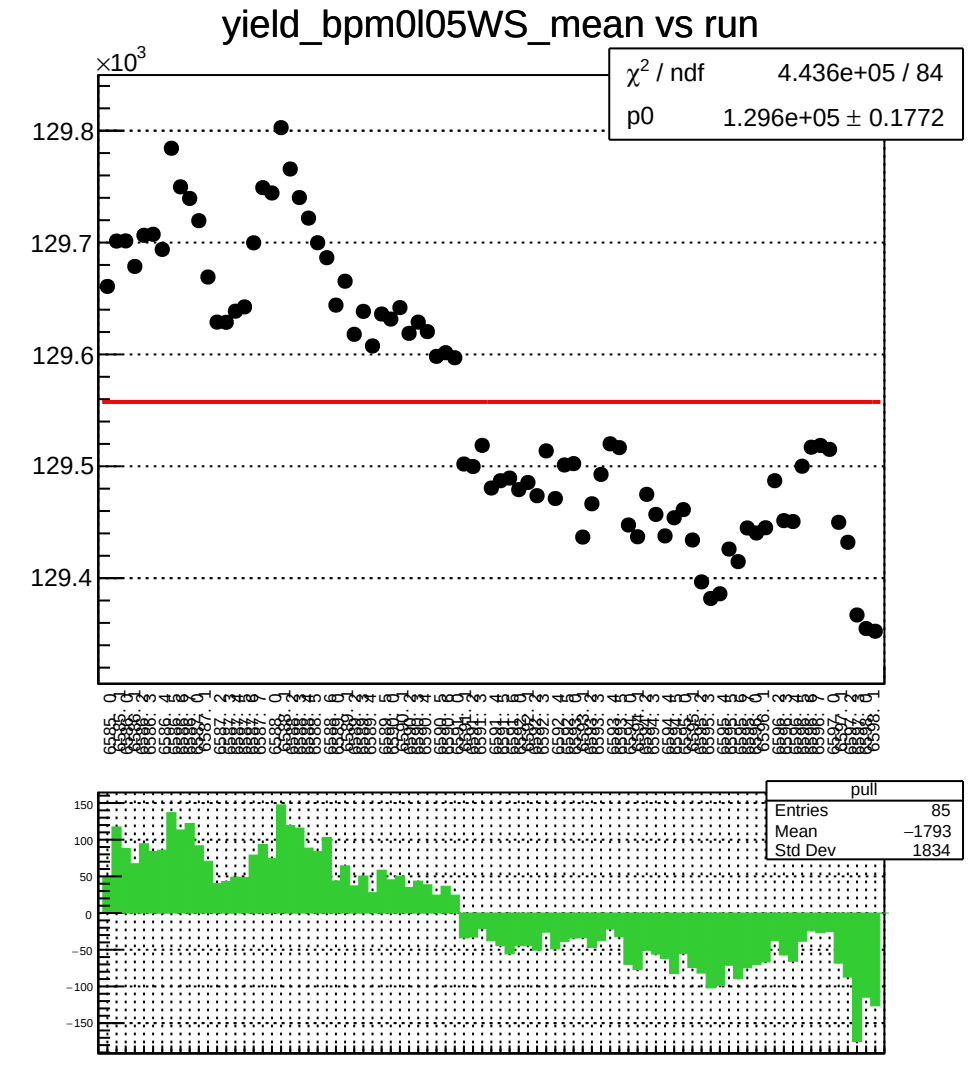

pull1D
Entries 85
Mean −2.008
Std Dev 3.908
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

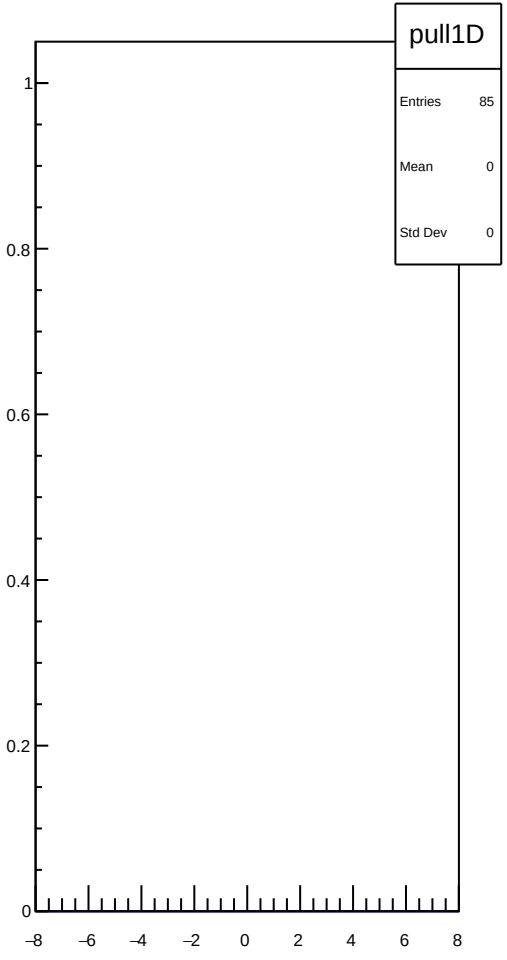

yield_bpm0l03WS_rms vs run
χ² / ndf 4.848e+05 / 84
p0 387.1 ± 0.3526
1800
1600
1400
1200
1000
800
600
400
200

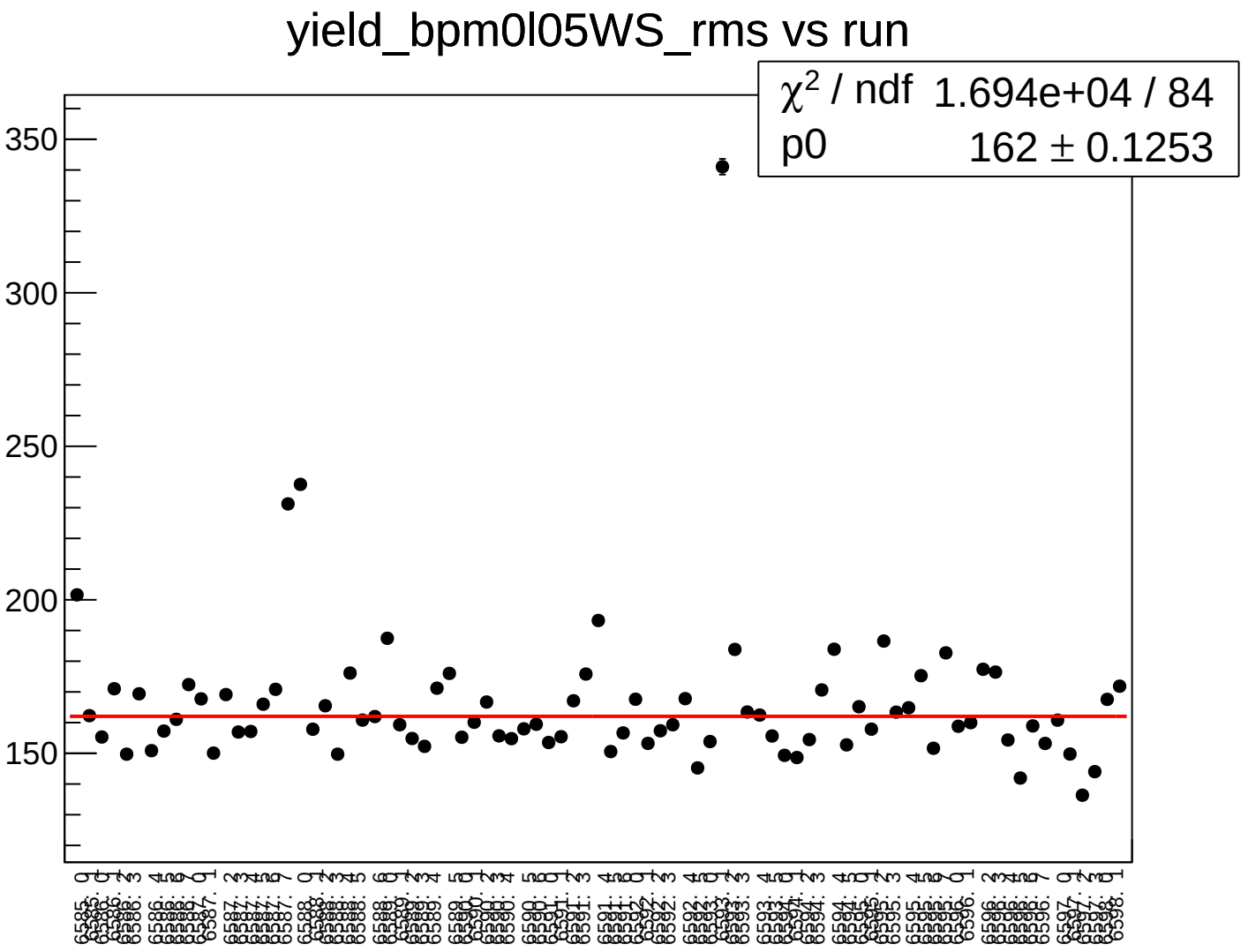

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 2.035e+05 / 84
p0 1.265e+05 ± 0.1816
126.75
126.7
126.65
126.6
126.55
126.5
126.45
126.4
126.35
pull
Entries 85
Mean −3850
Std Dev 3893
100
50
0
−50
−100

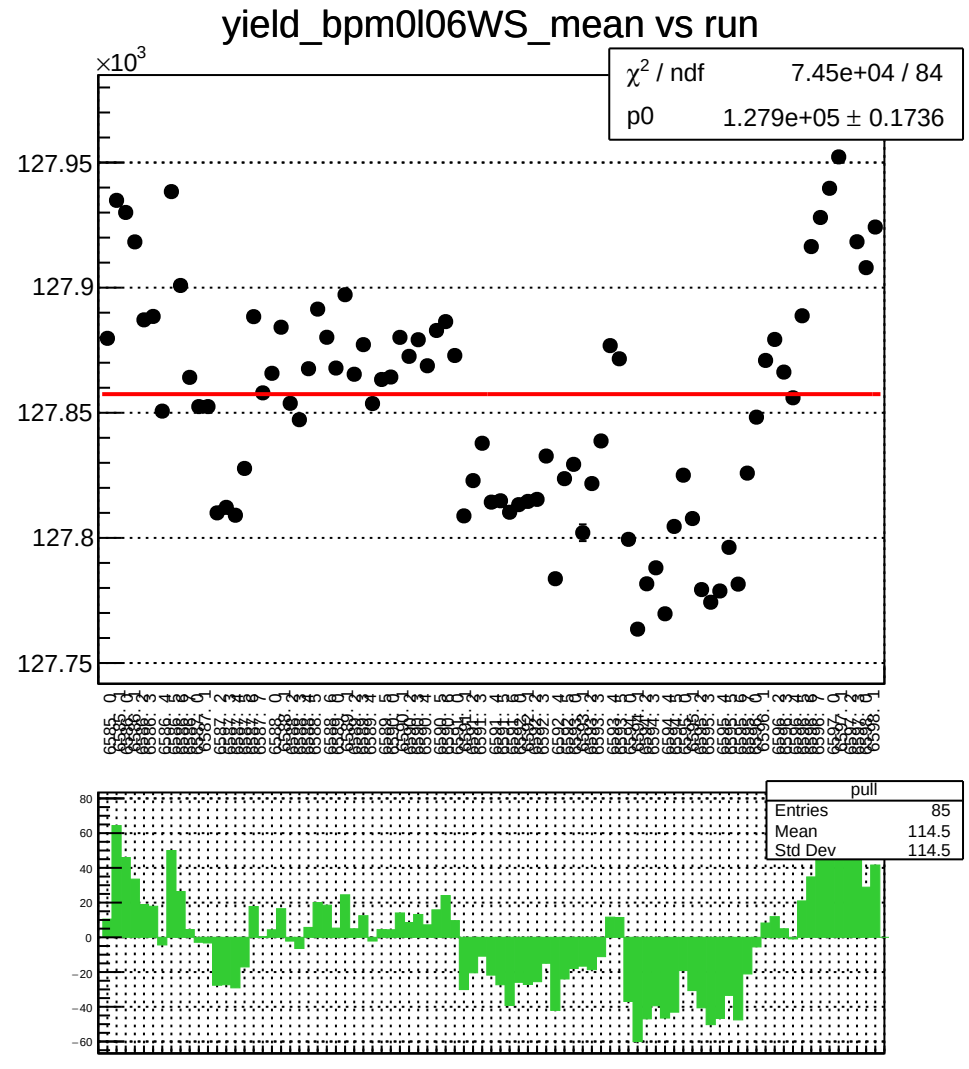

pull1D
Entries 85
Mean 1.929
Std Dev 4.74
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

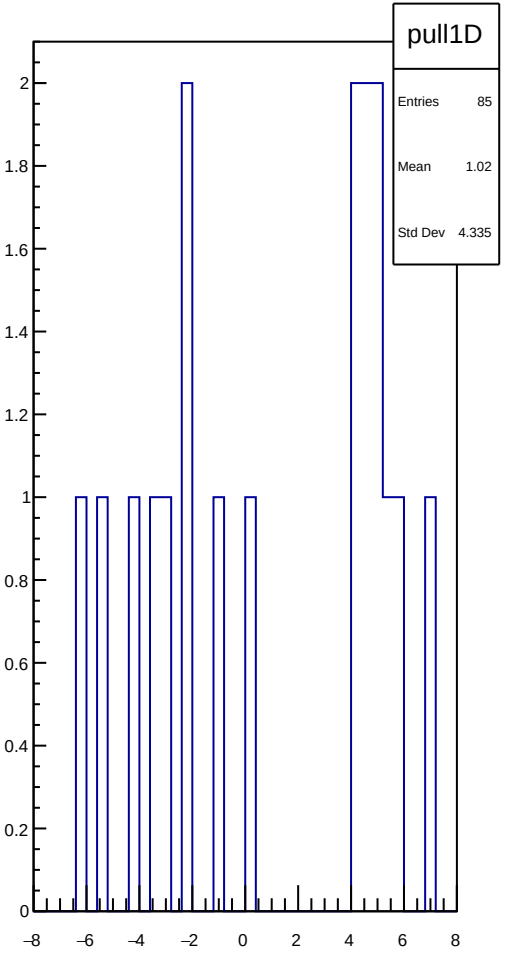

yield_bpm0l04WS_rms vs run
χ² / ndf 1.487e+04 / 84
p0 166.2 ± 0.1284
340
320
300
280
260
240
220
200
180
160
140

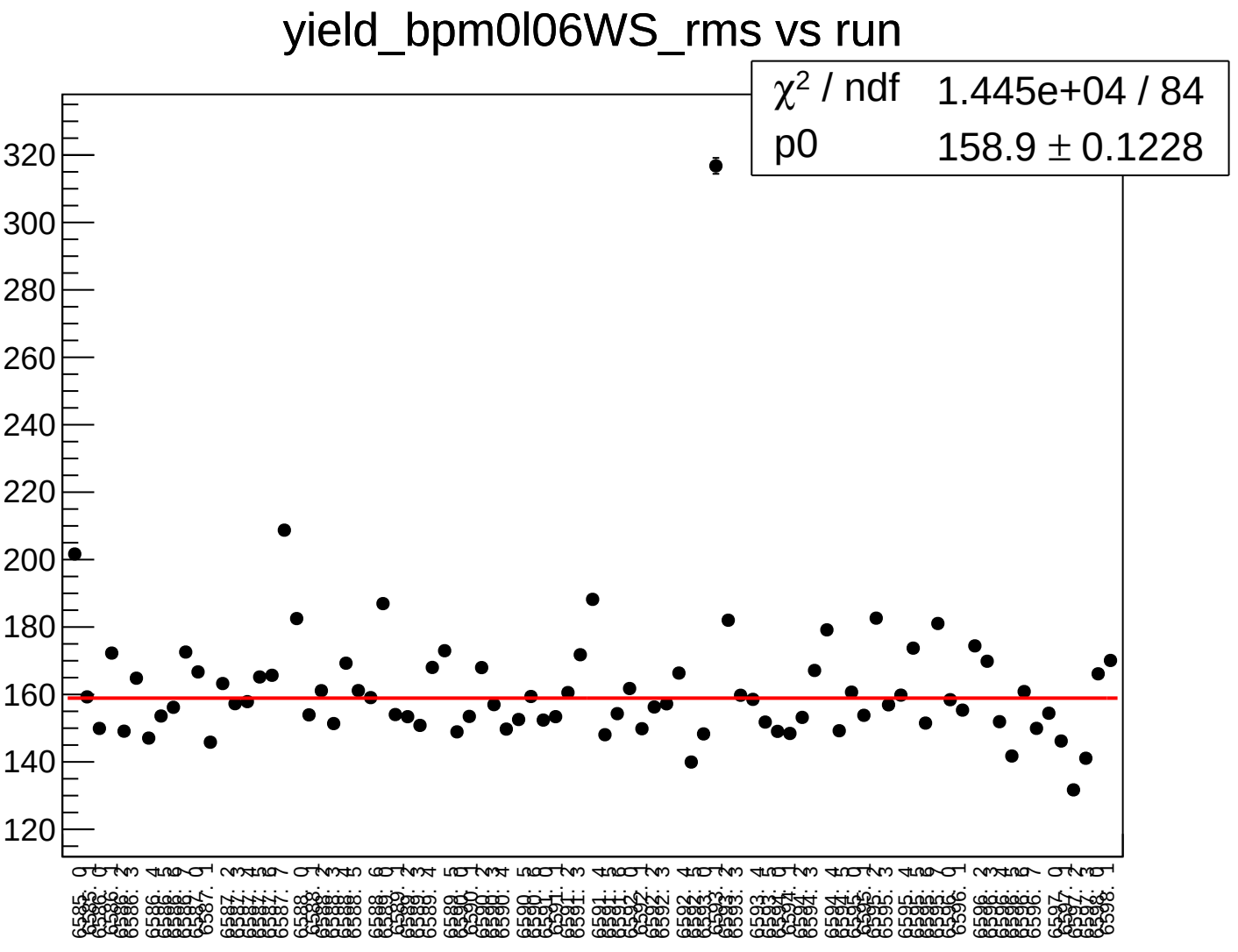

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 4.436e+05 / 84
p0 1.296e+05 ± 0.1772
129.8
129.7
129.6
129.5
129.4
pull
Entries 85
Mean −1793
Std Dev 1834
150
100
50
0
−50
−100
−150

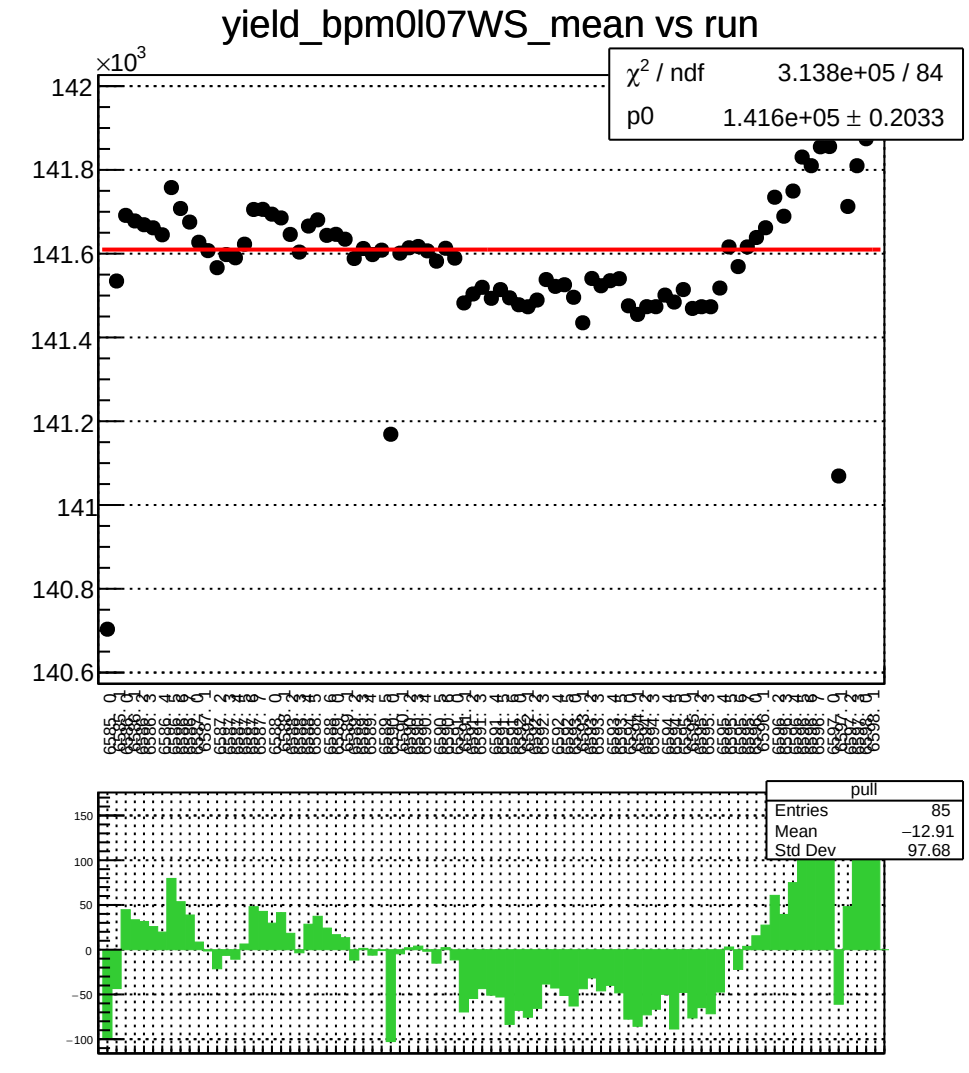

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

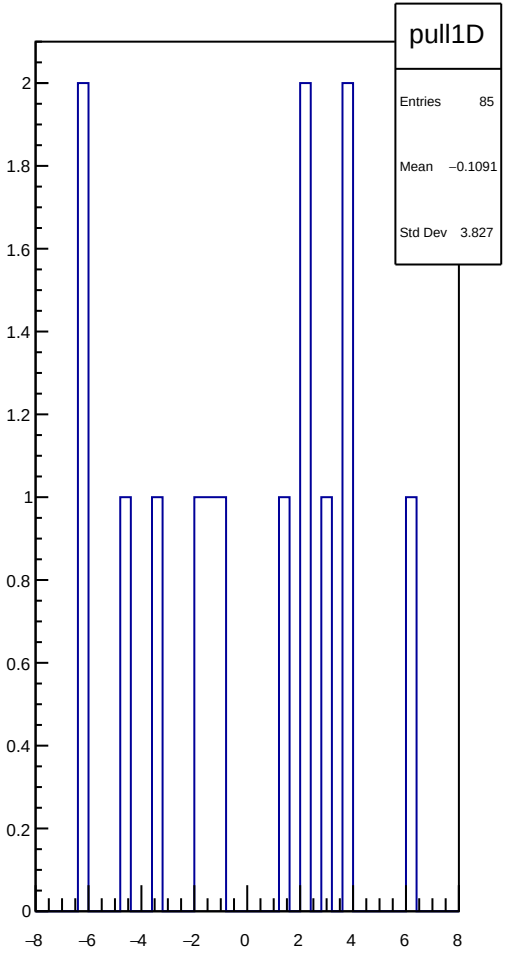

yield_bpm0l05WS_rms vs run
χ² / ndf 1.694e+04 / 84
p0 162 ± 0.1253
350
300
250
200
150

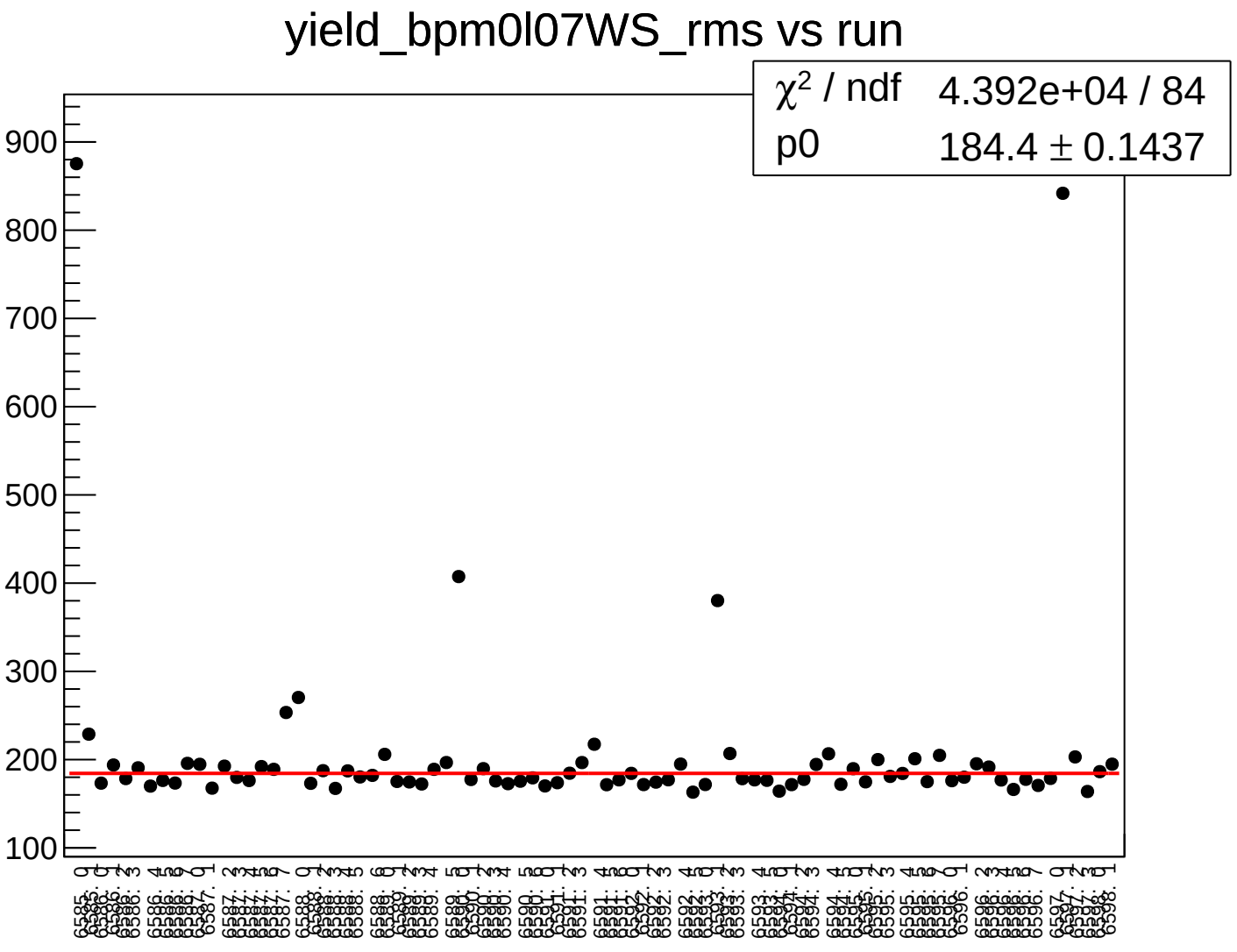

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 7.45e+04 / 84
p0 1.279e+05 ± 0.1736
127.95
127.9
127.85
127.8
127.75
pull
Entries 85
Mean 114.5
Std Dev 114.5
80
60
40
20
0
−20
−40
−60

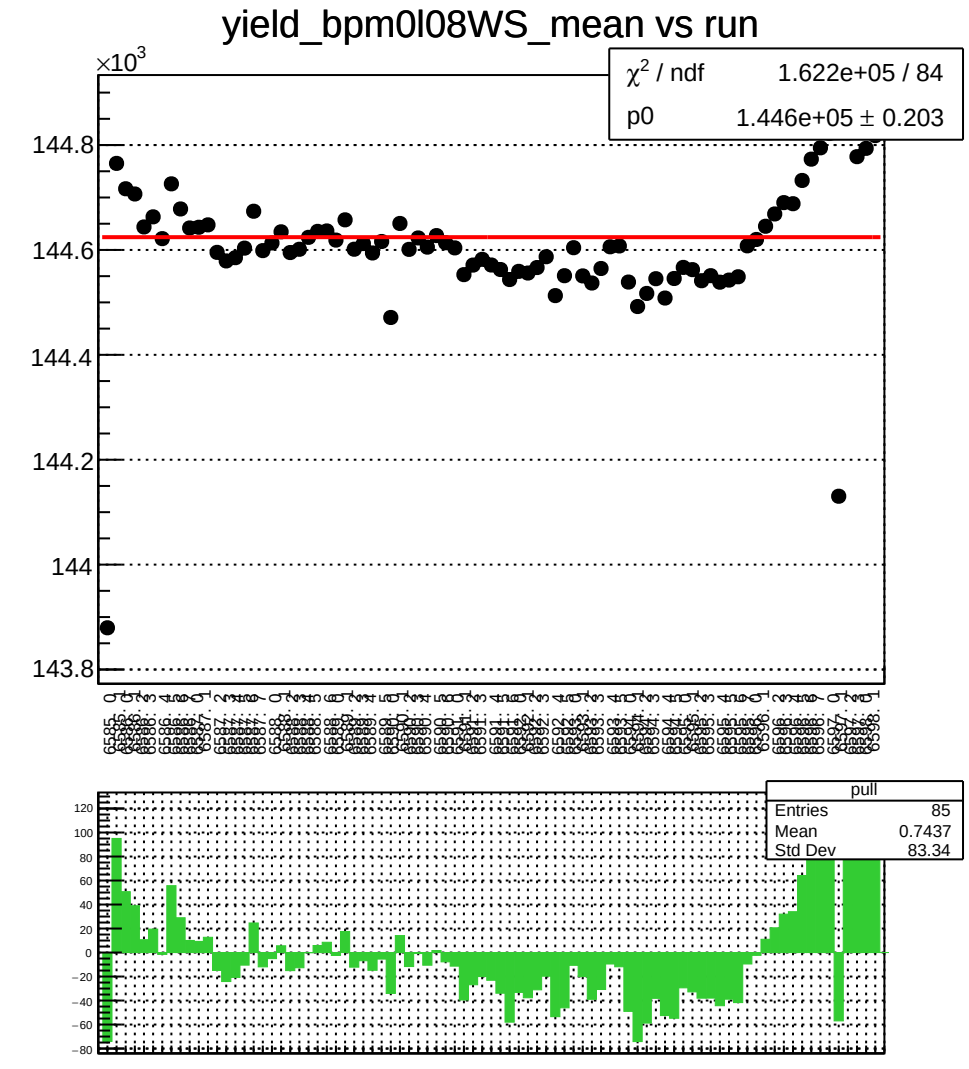

pull1D
Entries 85
Mean 1.02
Std Dev 4.335
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

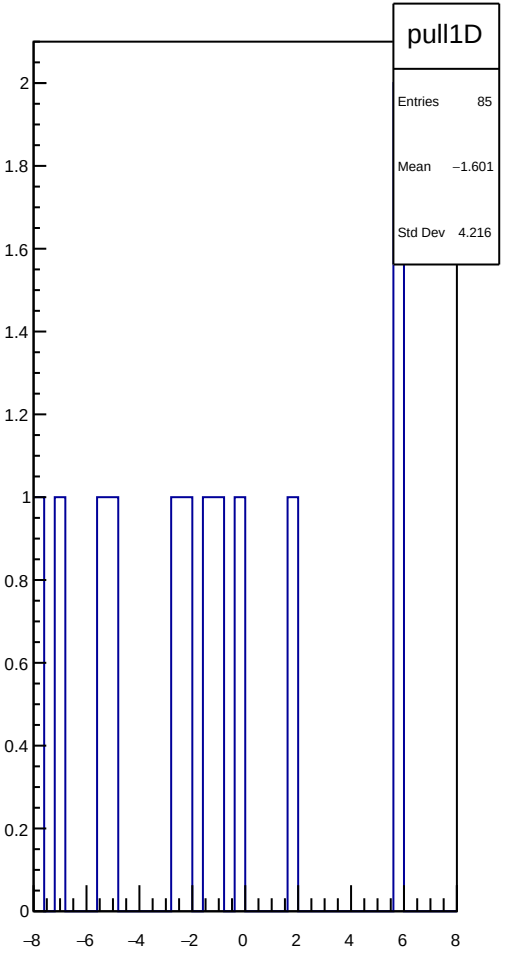

yield_bpm0l06WS_rms vs run
χ² / ndf 1.445e+04 / 84
p0 158.9 ± 0.1228
320
300
280
260
240
220
200
180
160
140
120

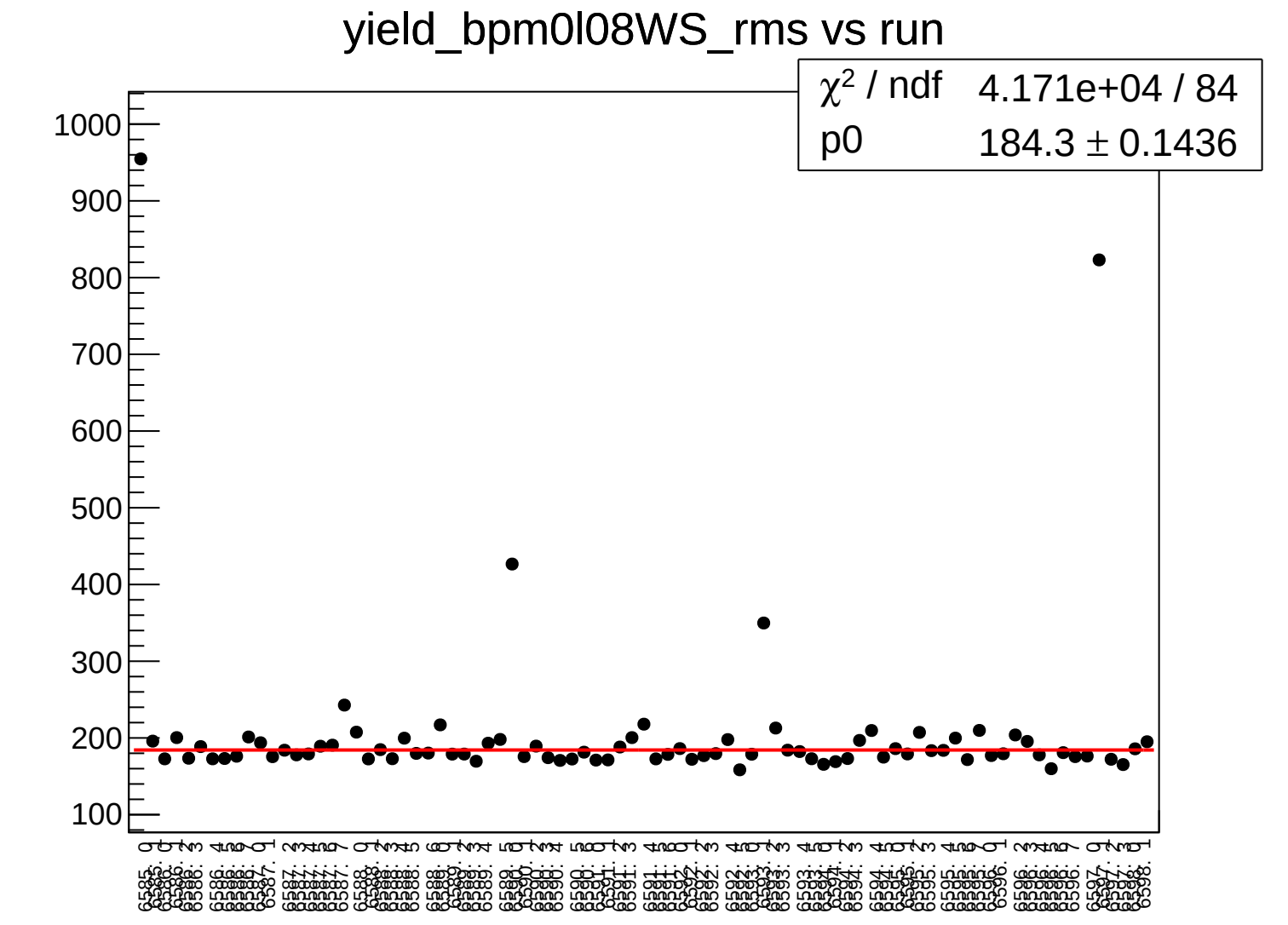

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 3.138e+05 / 84
p0 1.416e+05 ± 0.2033
142
141.8
141.6
141.4
141.2
141
140.8
140.6
pull
Entries 85
Mean −12.91
Std Dev 97.68
150
100
50
0
−50
−100

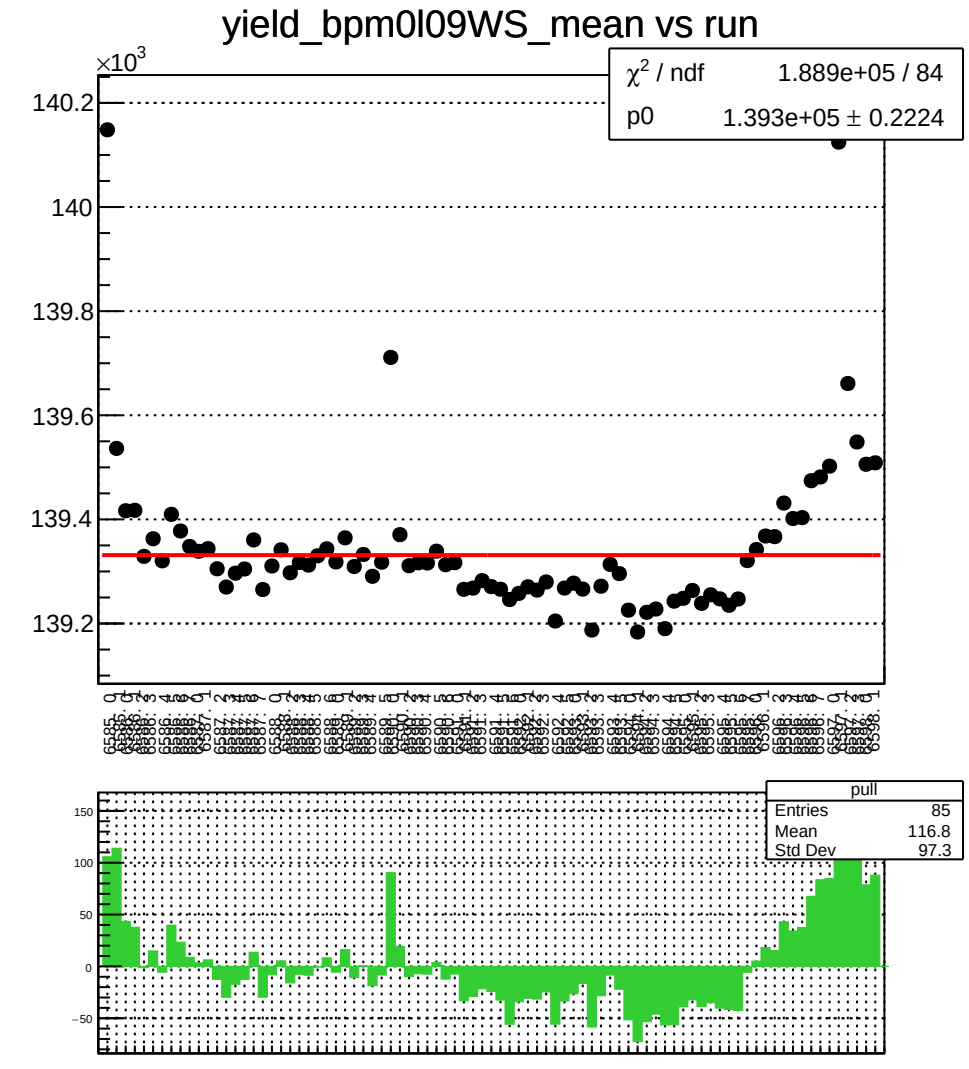

pull1D
Entries 85
Mean −0.1091
Std Dev 3.827
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

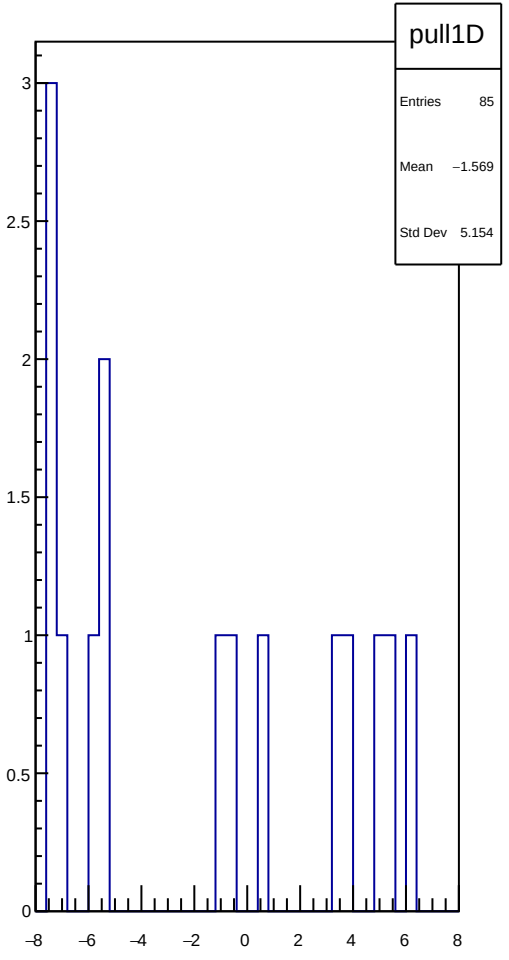

yield_bpm0l07WS_rms vs run
χ² / ndf 4.392e+04 / 84
p0 184.4 ± 0.1437
900
800
700
600
500
400
300
200
100

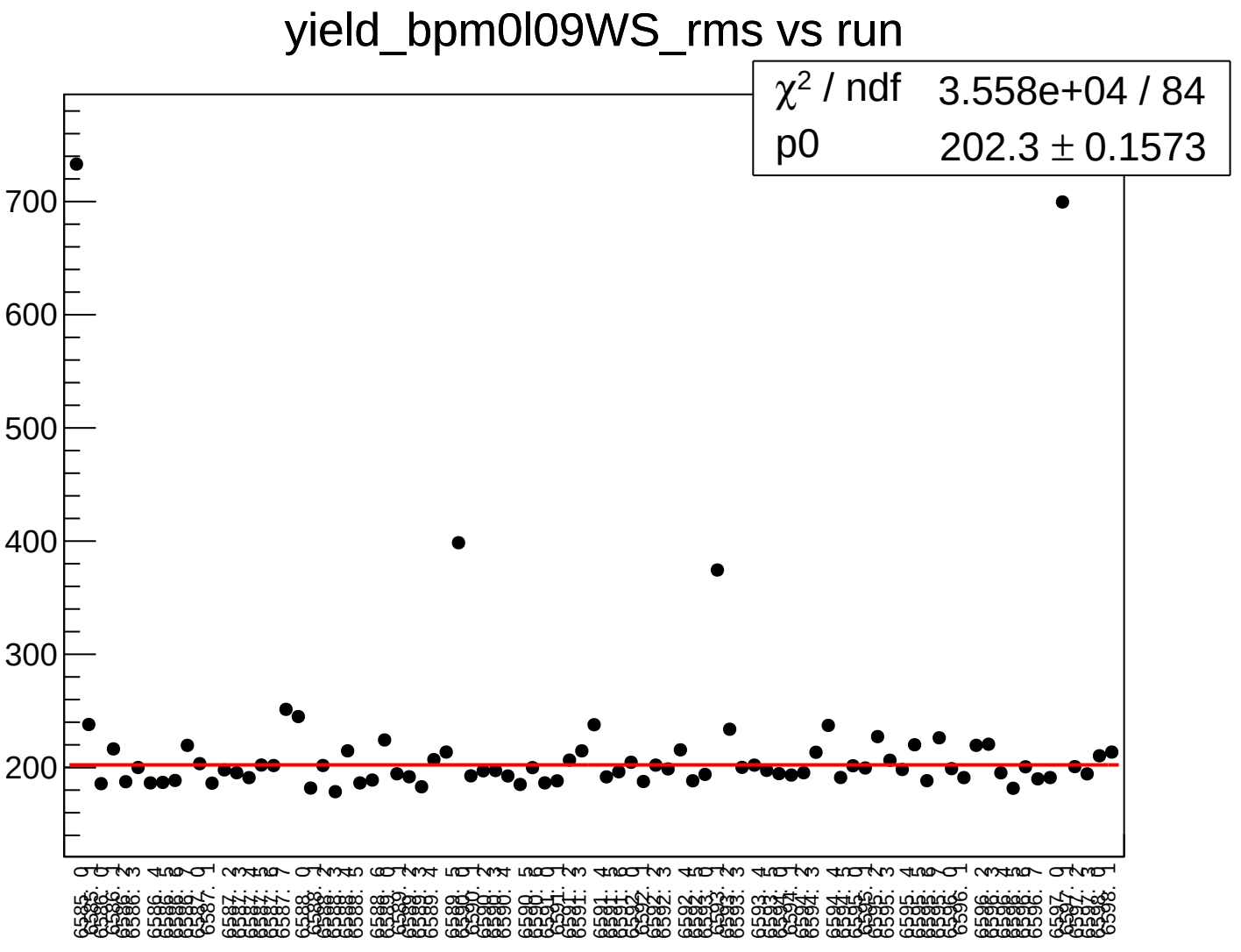

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 1.622e+05 / 84
p0 1.446e+05 ± 0.203
144.8
144.6
144.4
144.2
144
143.8
pull
Entries 85
Mean 0.7437
Std Dev 83.34
120
100
80
60
40
20
0
−20
−40
−60
−80

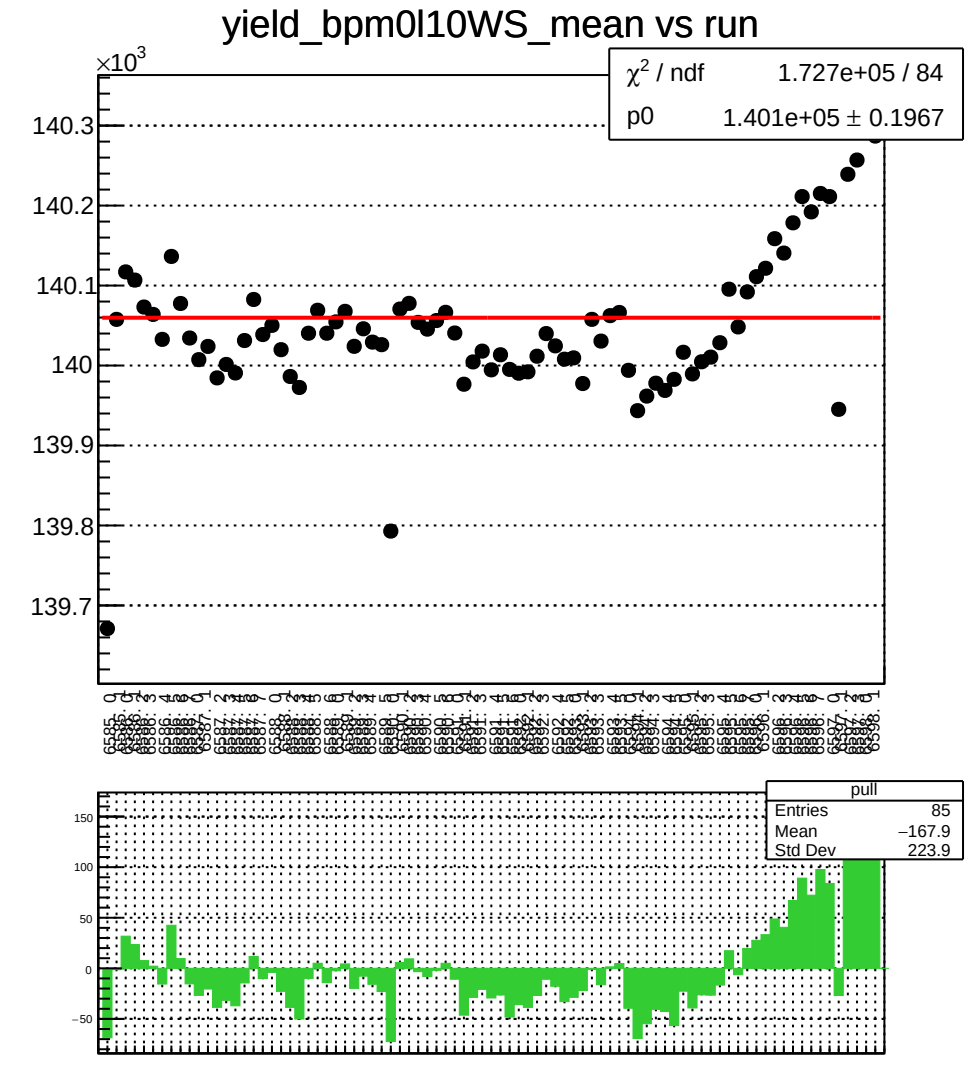

pull1D
Entries 85
Mean −1.601
Std Dev 4.216
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

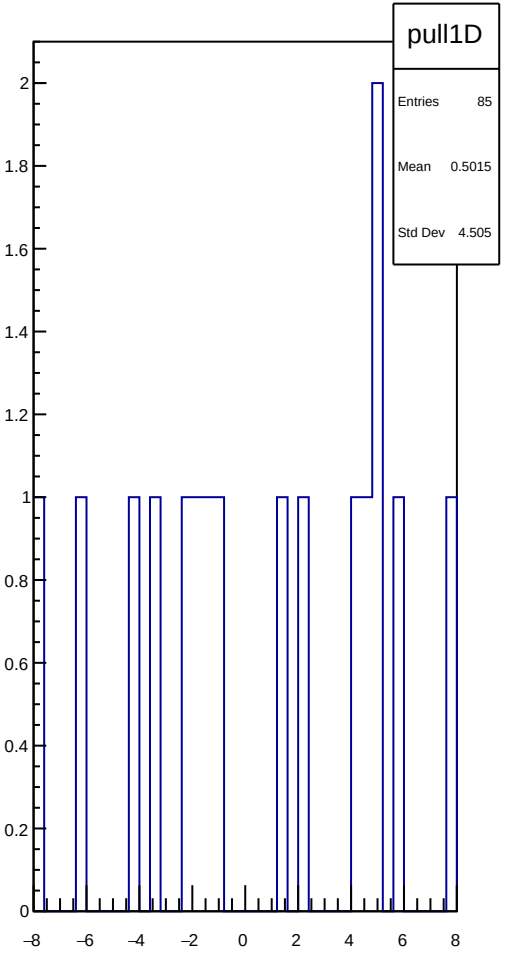

yield_bpm0l08WS_rms vs run
χ² / ndf 4.171e+04 / 84
p0 184.3 ± 0.1436
1000
900
800
700
600
500
400
300
200
100

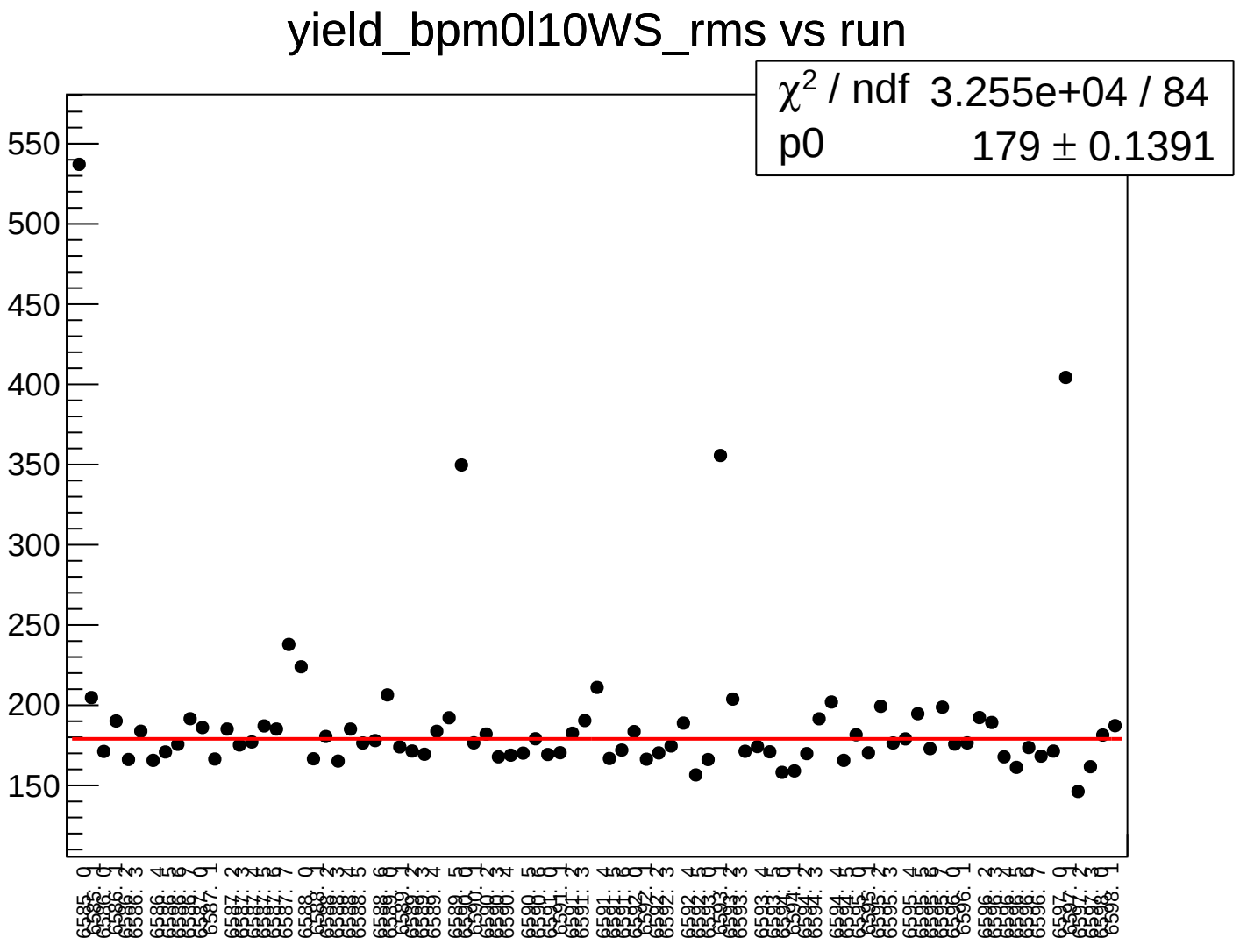

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 1.889e+05 / 84
p0 1.393e+05 ± 0.2224
140.2
140
139.8
139.6
139.4
139.2
pull
Entries 85
Mean 116.8
Std Dev 97.3
150
100
50
0
−50

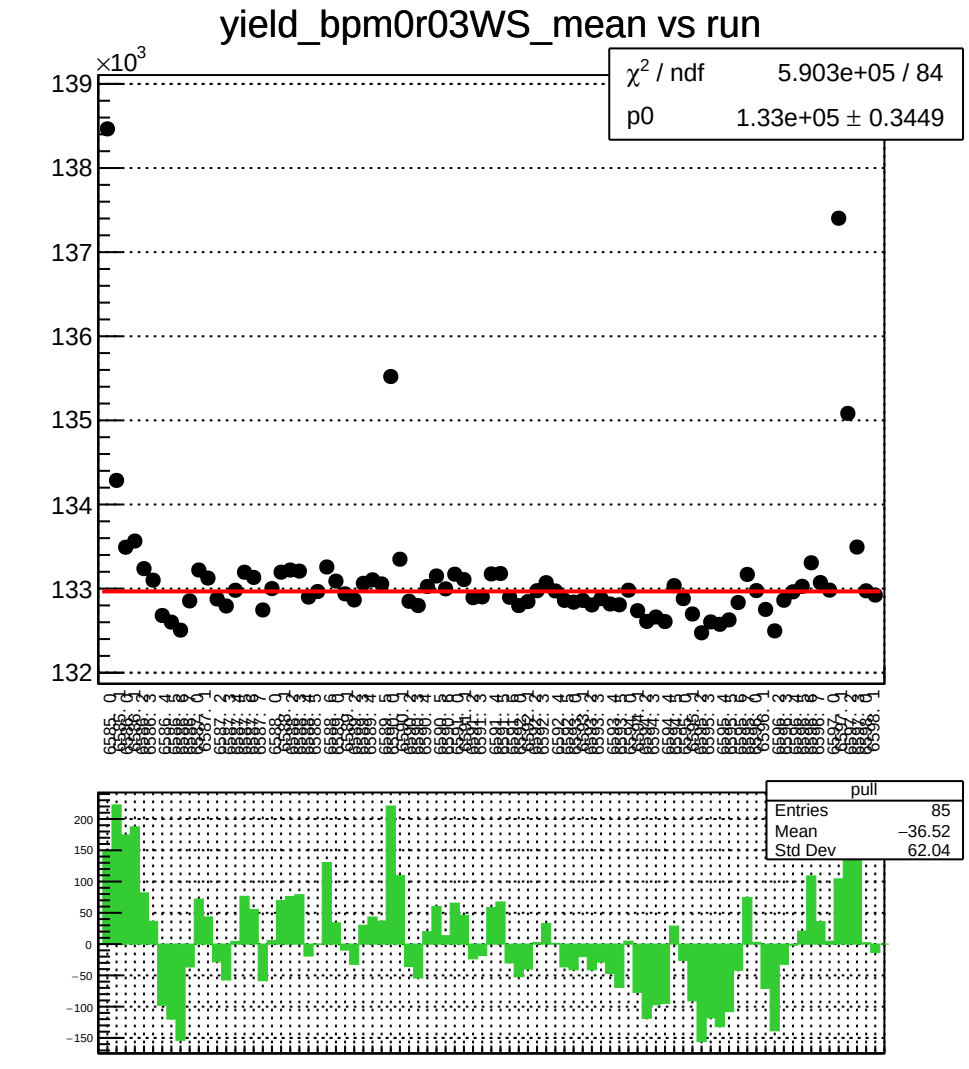

pull1D
Entries 85
Mean −1.569
Std Dev 5.154
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

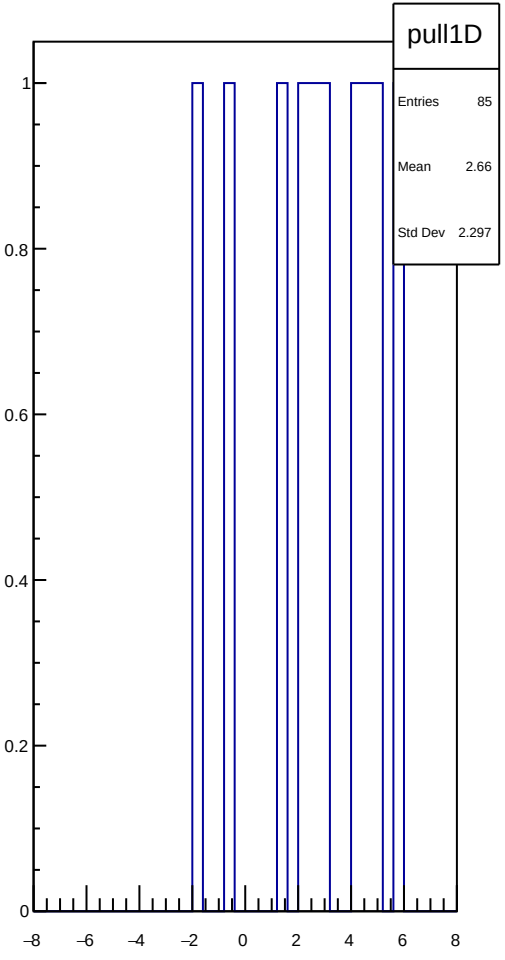

yield_bpm0l09WS_rms vs run
χ² / ndf 3.558e+04 / 84
p0 202.3 ± 0.1573
700
600
500
400
300
200

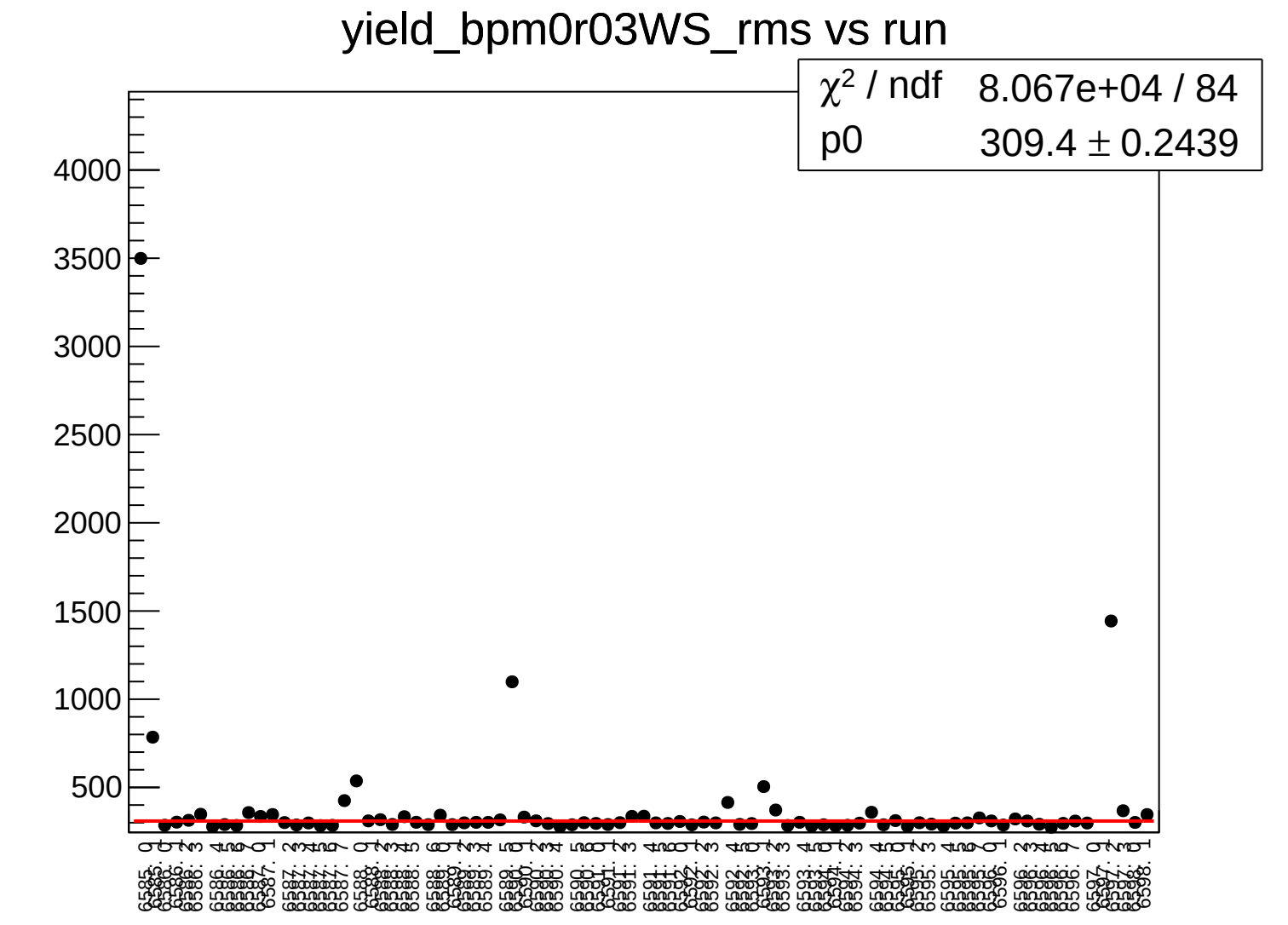

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 1.727e+05 / 84
p0 1.401e+05 ± 0.1967
140.3
140.2
140.1
140
139.9
139.8
139.7
pull
Entries 85
Mean −167.9
Std Dev 223.9
150
100
50
0
−50

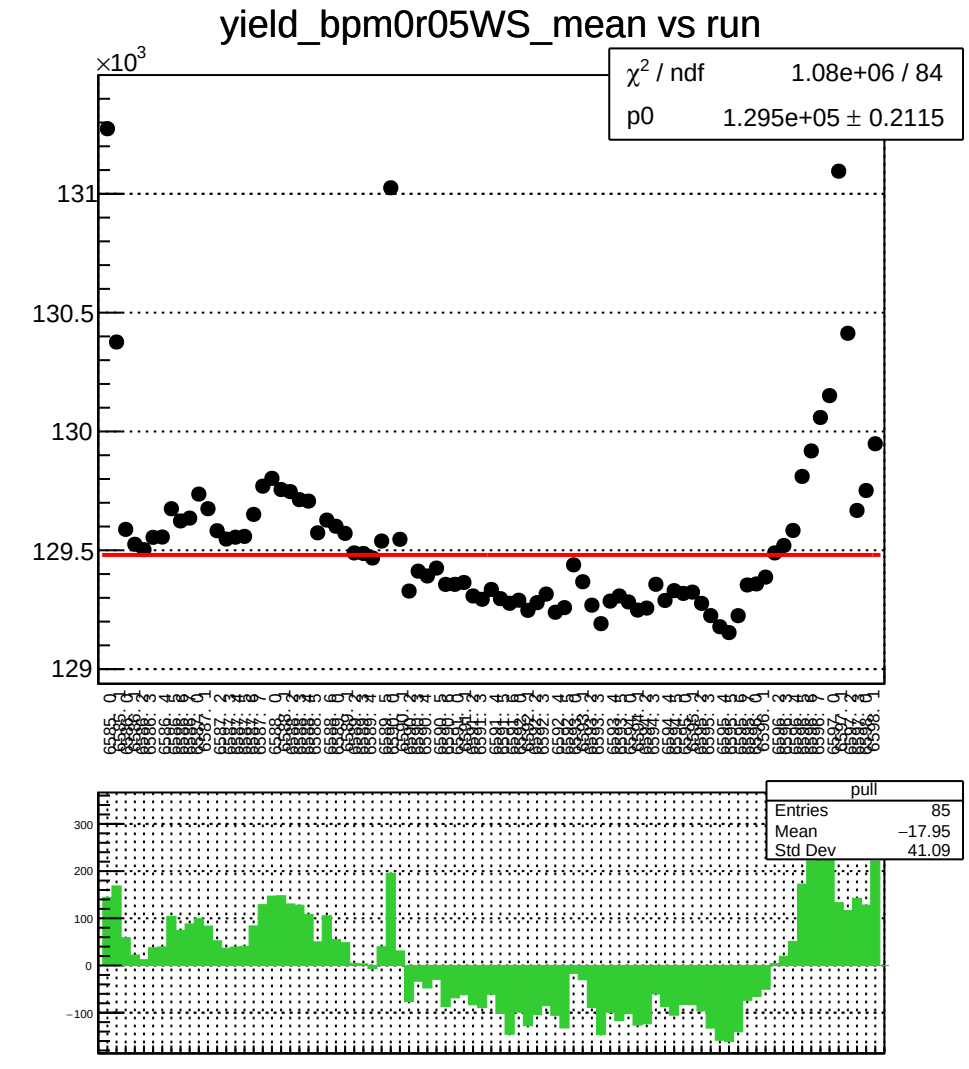

pull1D
Entries 85
Mean 0.5015
Std Dev 4.505
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

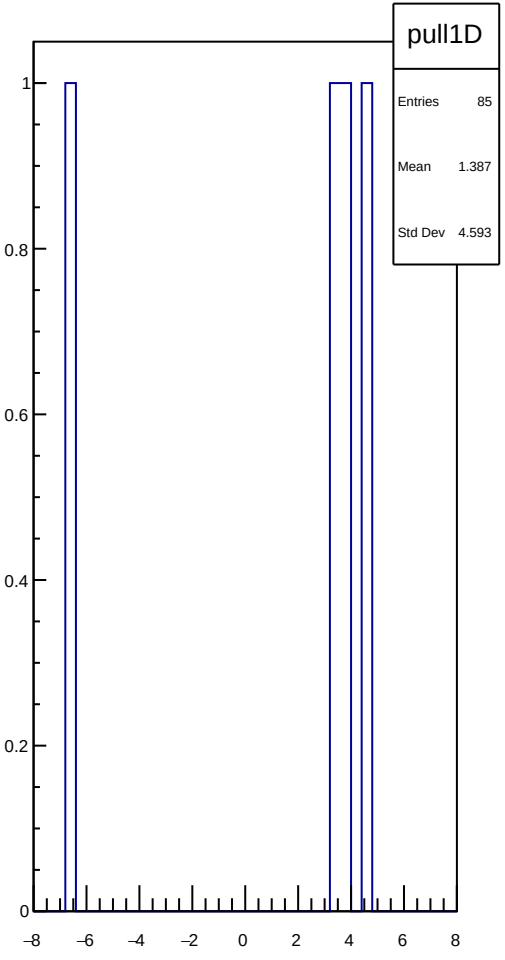

yield_bpm0l10WS_rms vs run
χ² / ndf 3.255e+04 / 84
p0 179 ± 0.1391
550
500
450
400
350
300
250
200
150

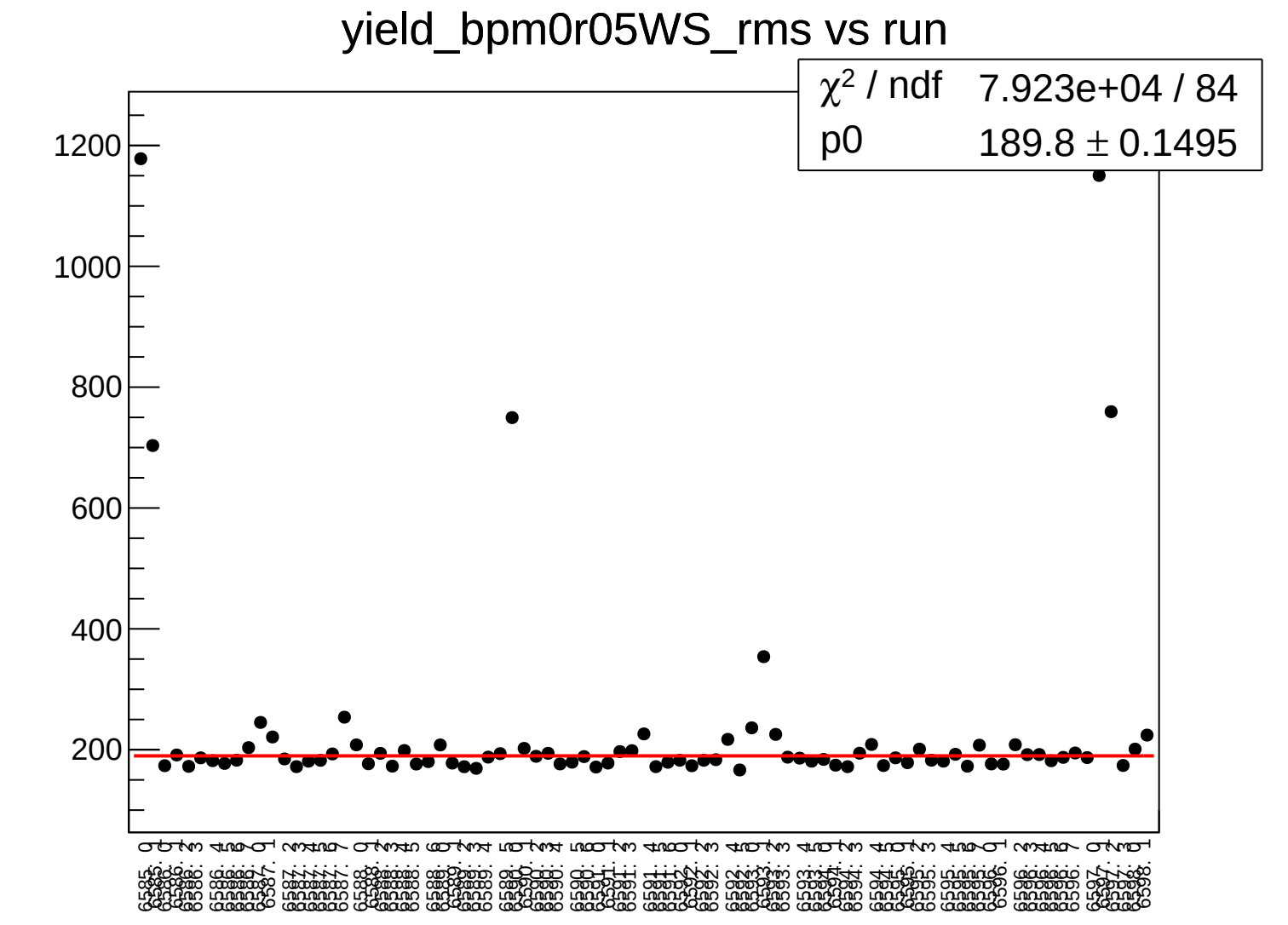

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 5.903e+05 / 84
p0 1.33e+05 ± 0.3449
pull
Entries 85
Mean −36.52
Std Dev 62.04

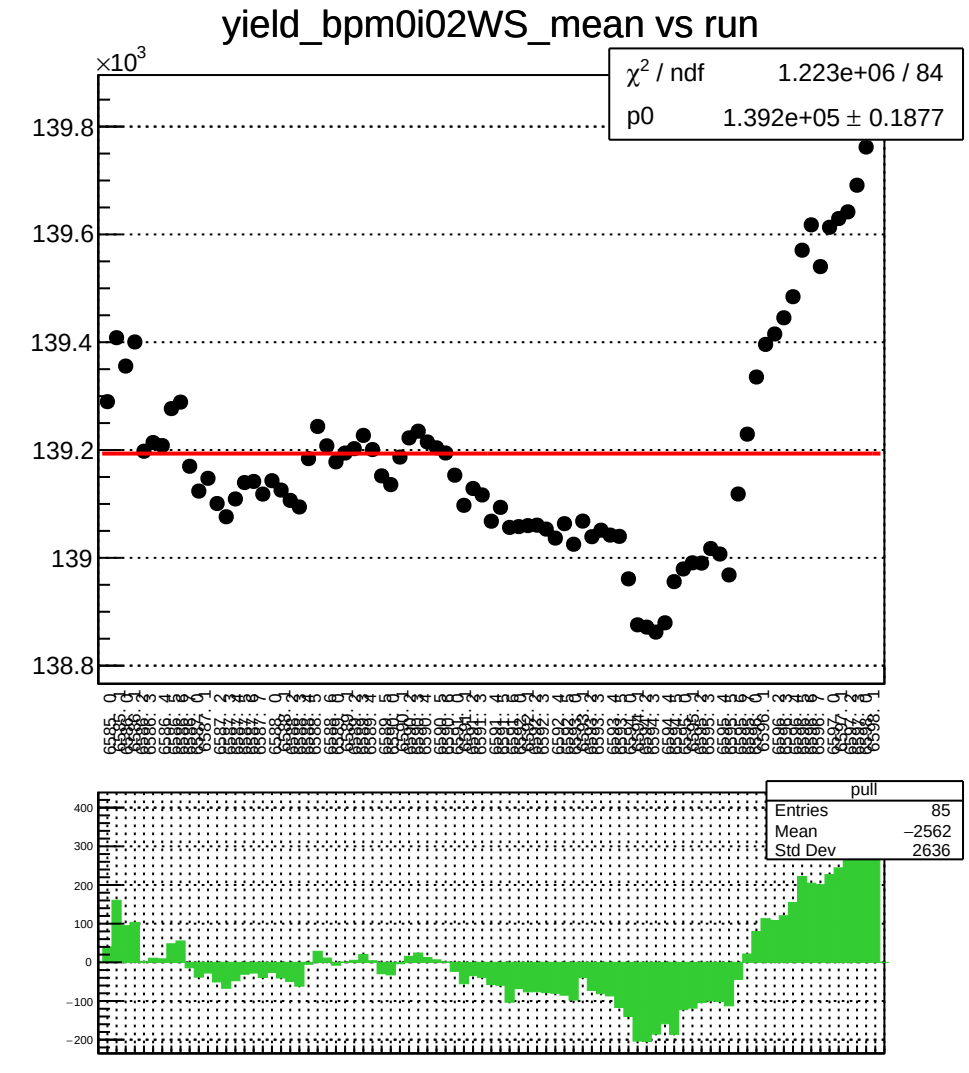

pull1D
Entries 85
Mean 2.66
Std Dev 2.297

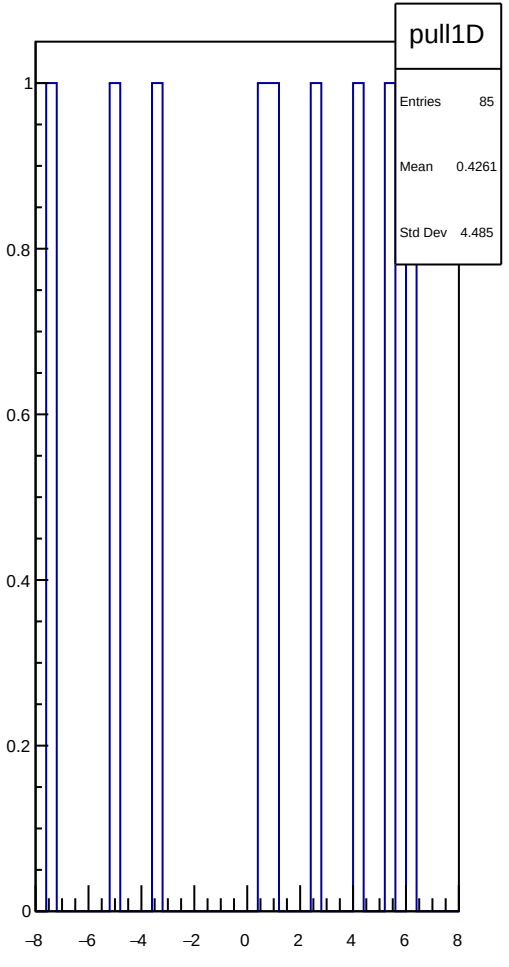

yield_bpm0r03WS_rms vs run
χ^2 / ndf 8.067e+04 / 84
p0 309.4 ± 0.2439
4000
3500
3000
2500
2000
1500
1000
500

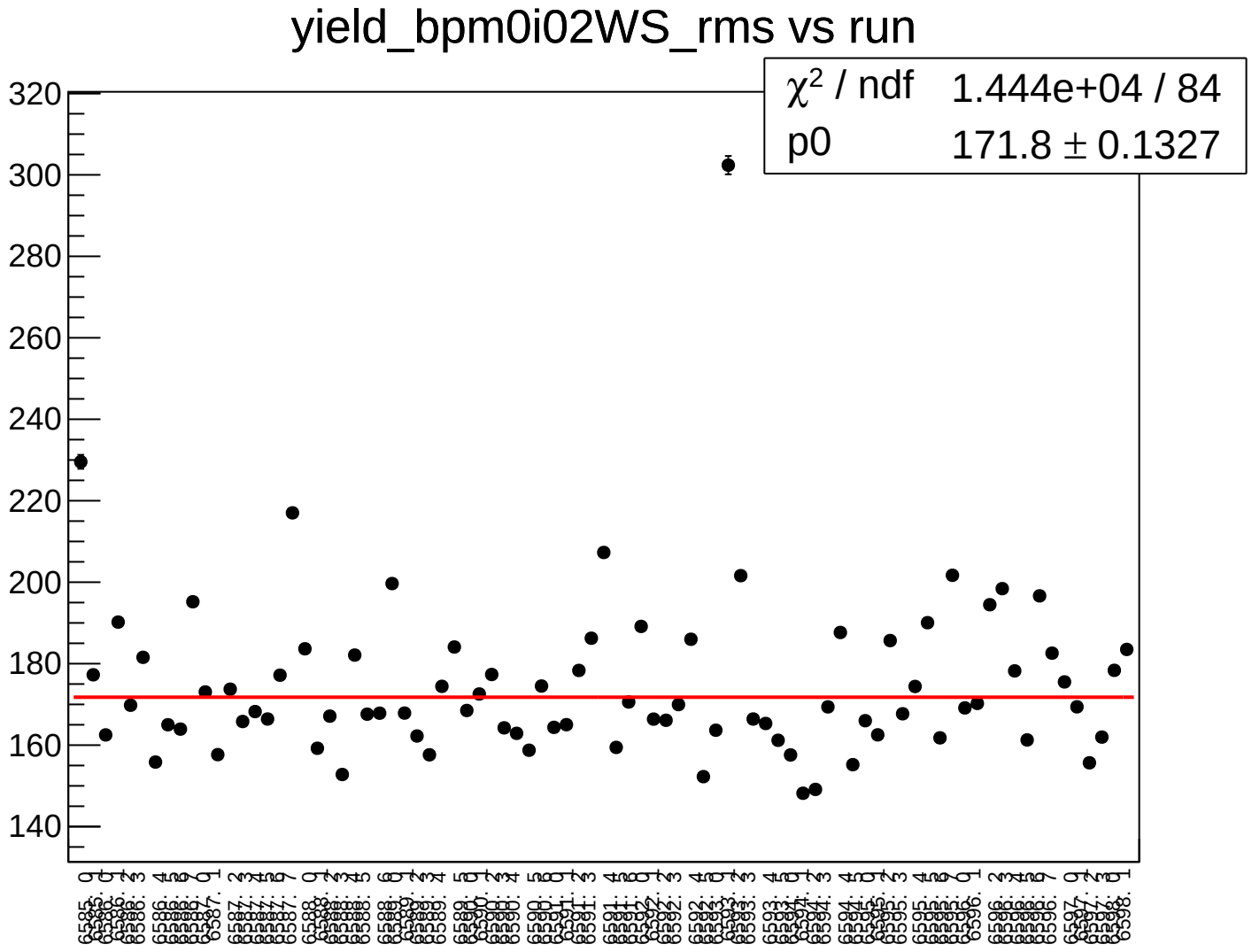

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 1.08e+06 / 84
p0 1.295e+05 ± 0.2115
131
130.5
130
129.5
129
pull
Entries 85
Mean −17.95
Std Dev 41.09
300
200
100
0
−100

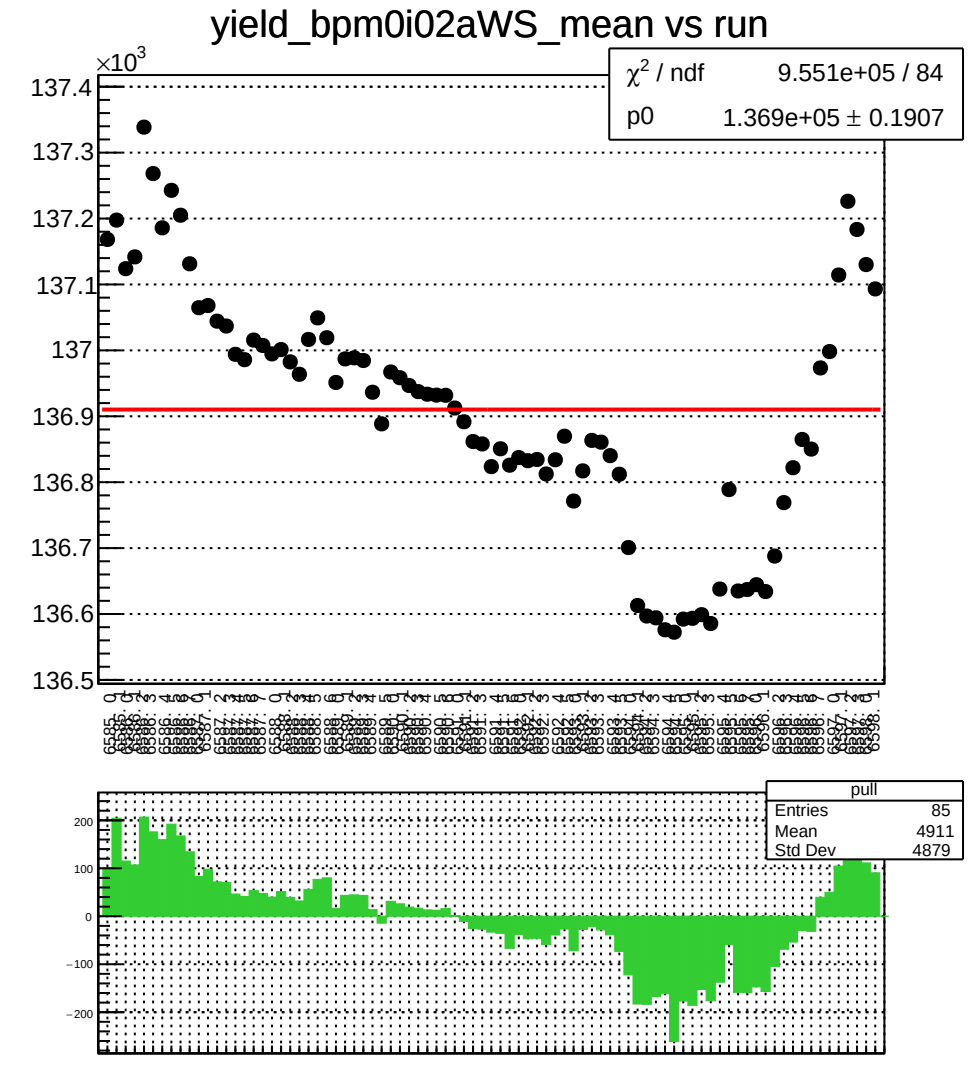

pull1D
Entries 85
Mean 1.387
Std Dev 4.593
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

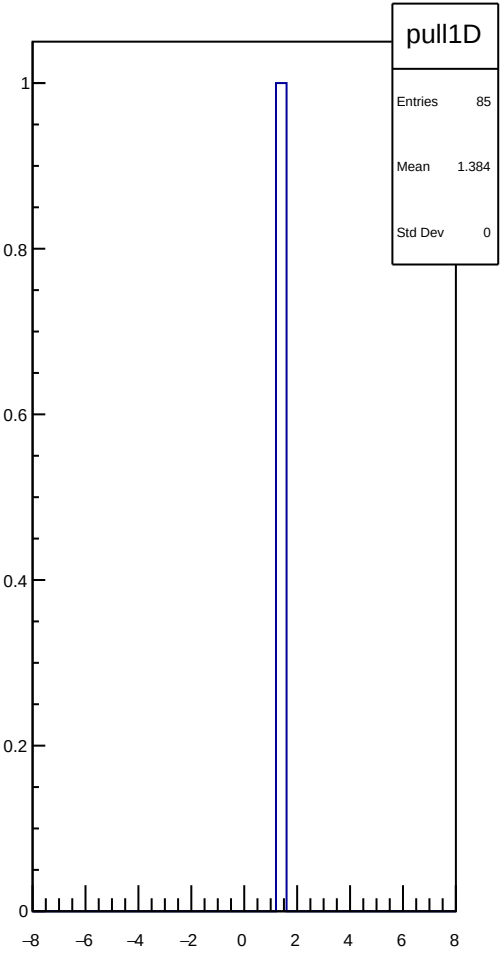

yield_bpm0r05WS_rms vs run
χ² / ndf 7.923e+04 / 84
p0 189.8 ± 0.1495
1200
1000
800
600
400
200

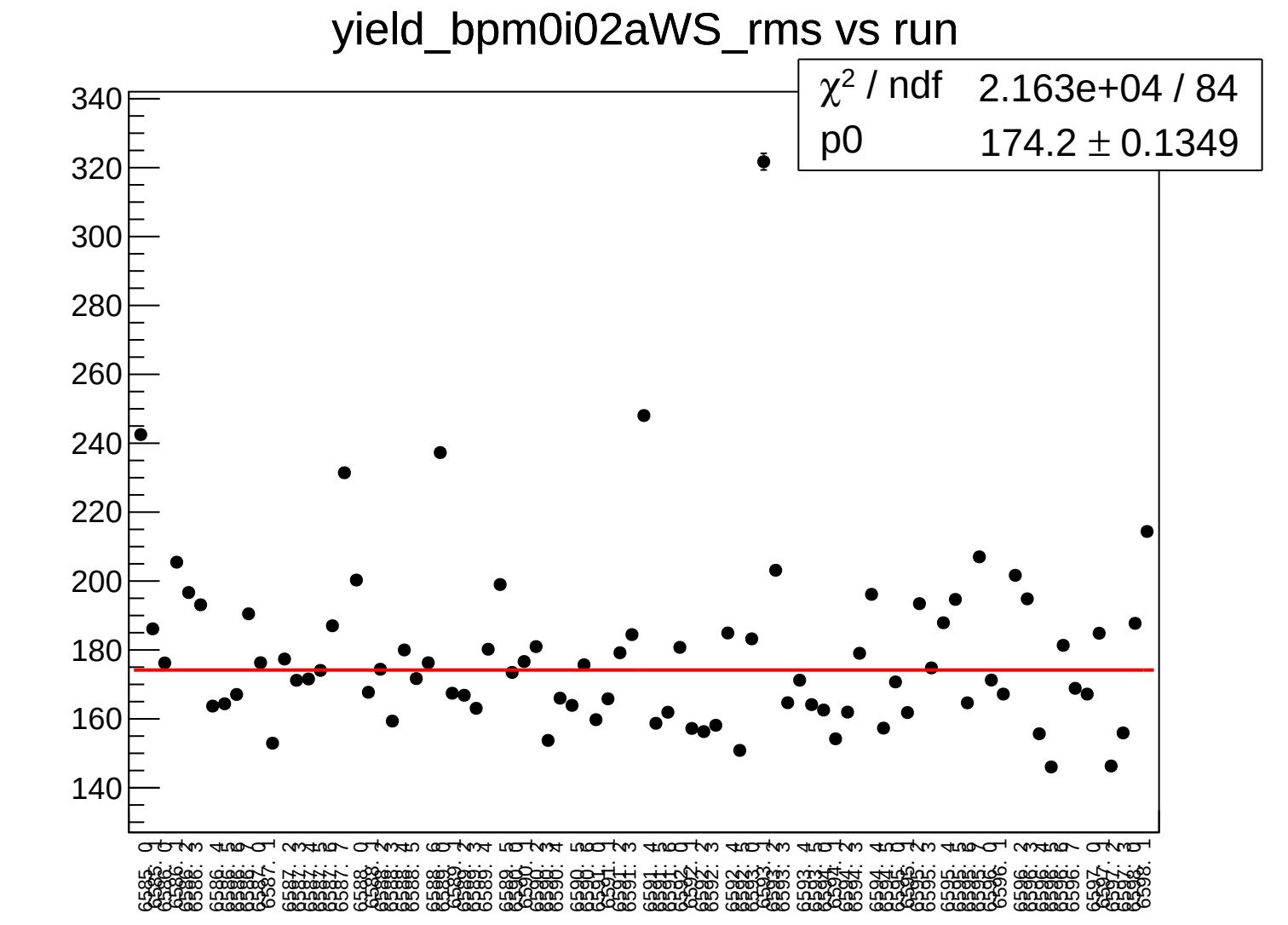

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 1.223e+06 / 84
p0 1.392e+05 ± 0.1877
139.8
139.6
139.4
139.2
139
138.8
pull
Entries 85
Mean −2562
Std Dev 2636
400
300
200
100
0
−100
−200

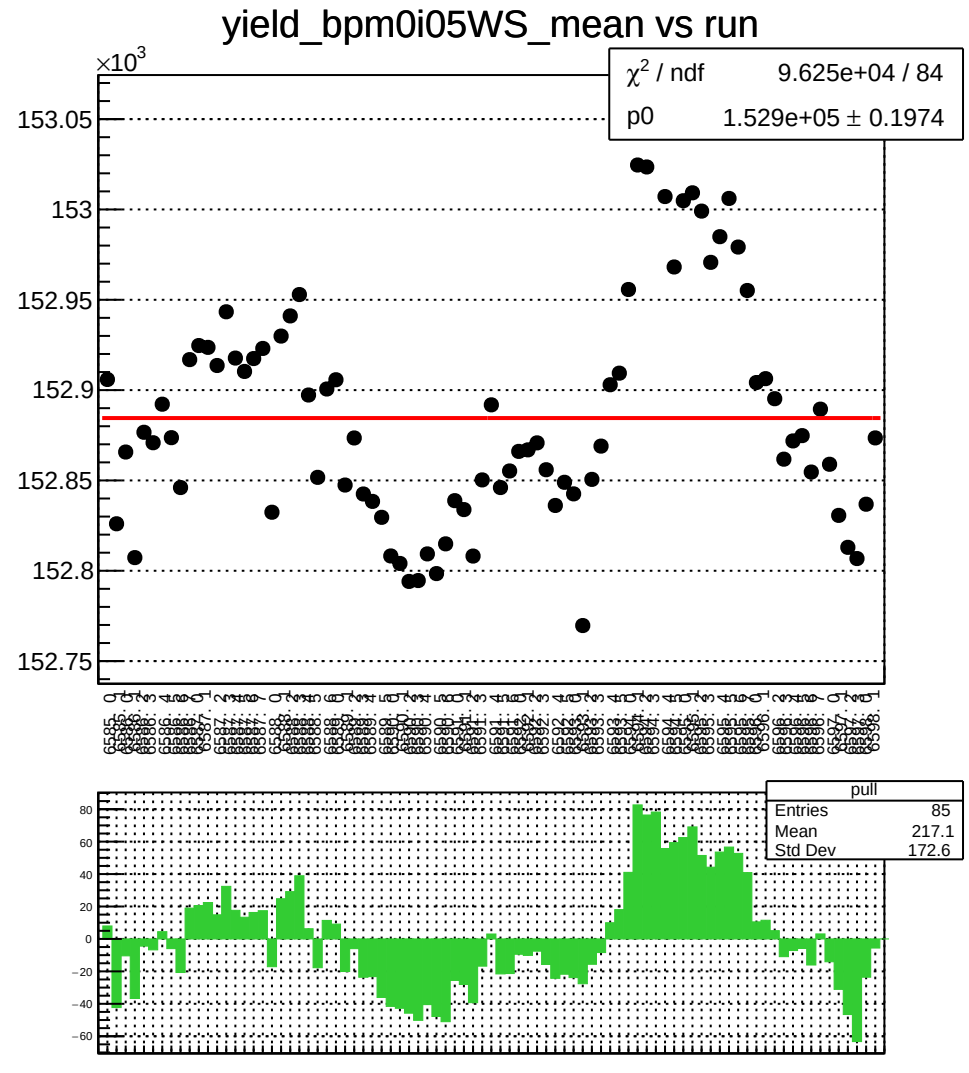

pull1D
Entries 85
Mean 0.4261
Std Dev 4.485
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

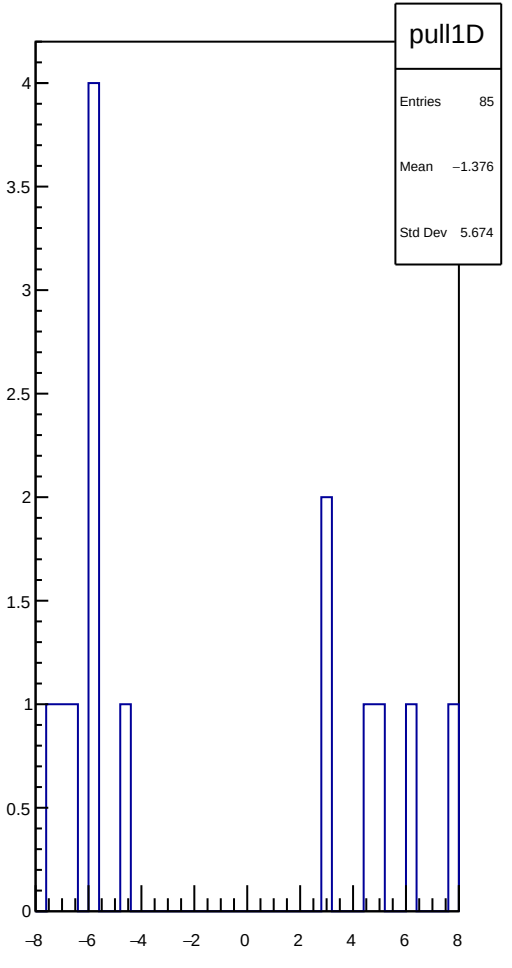

yield_bpm0i02WS_rms vs run
χ² / ndf 1.444e+04 / 84
p0 171.8 ± 0.1327
320
300
280
260
240
220
200
180
160
140

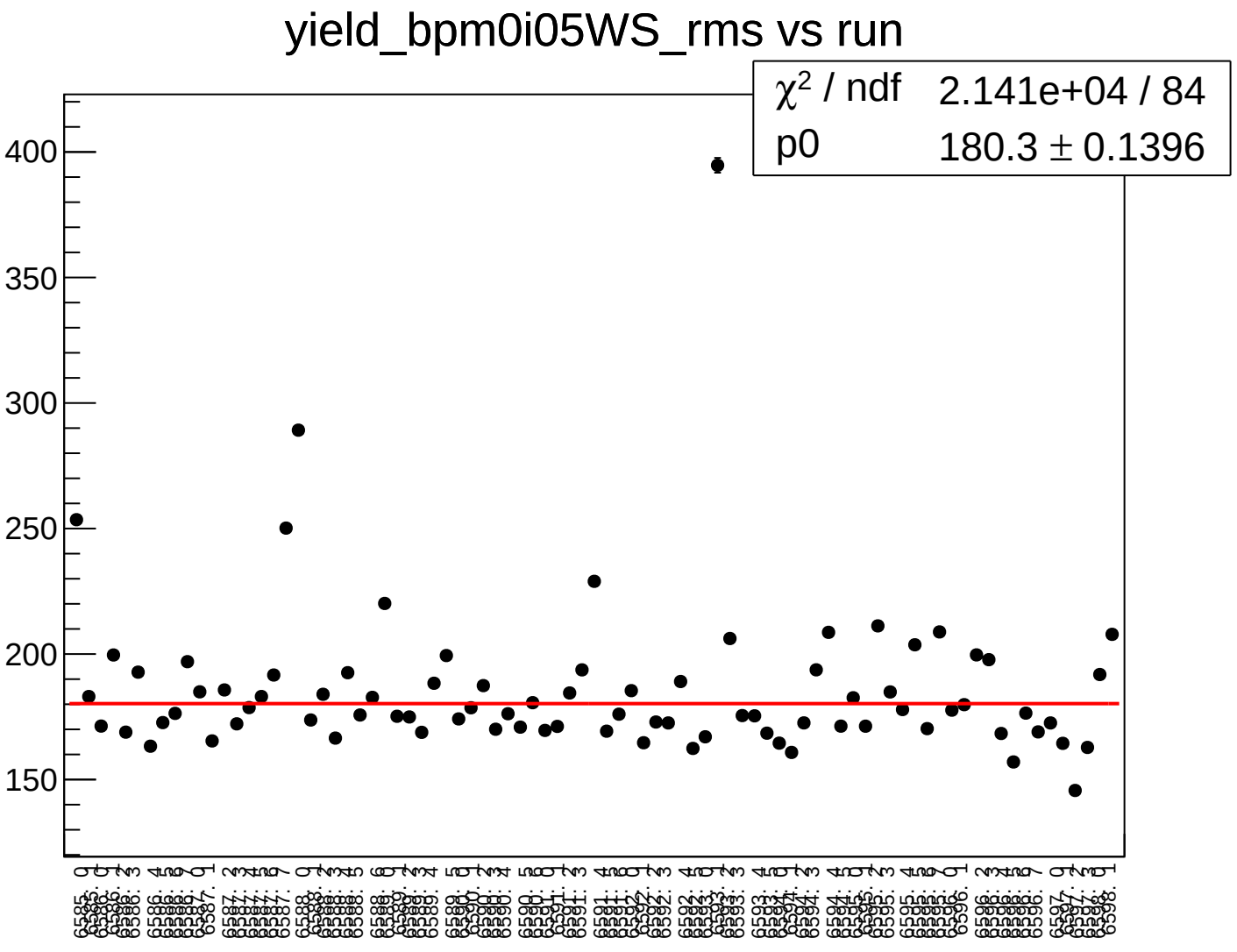

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 9.551e+05 / 84
p0 1.369e+05 ± 0.1907
137.4
137.3
137.2
137.1
137
136.9
136.8
136.7
136.6
136.5
pull
Entries 85
Mean 4911
Std Dev 4879
200
100
0
−100
−200

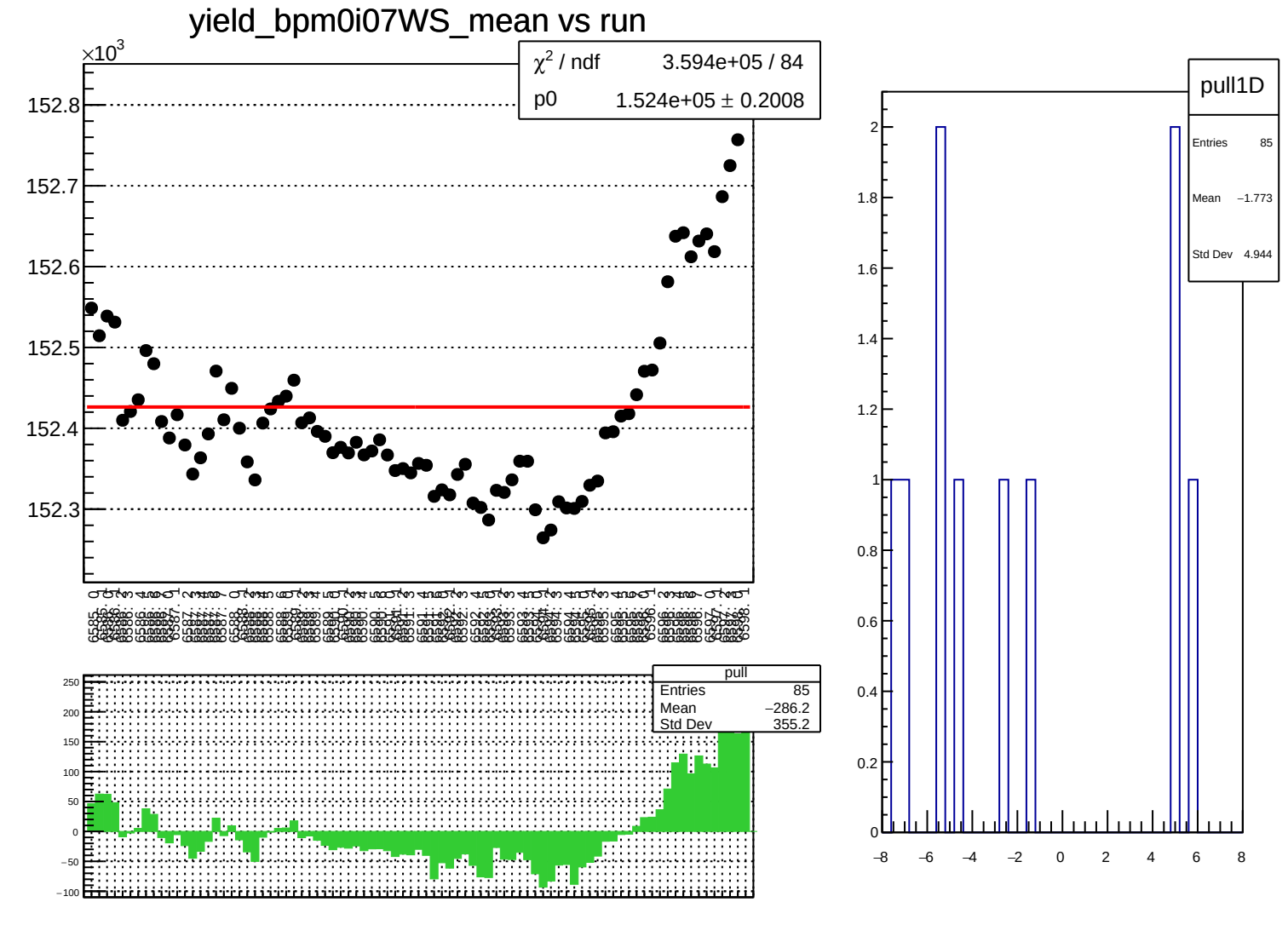

pull1D
Entries 85
Mean 1.384
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

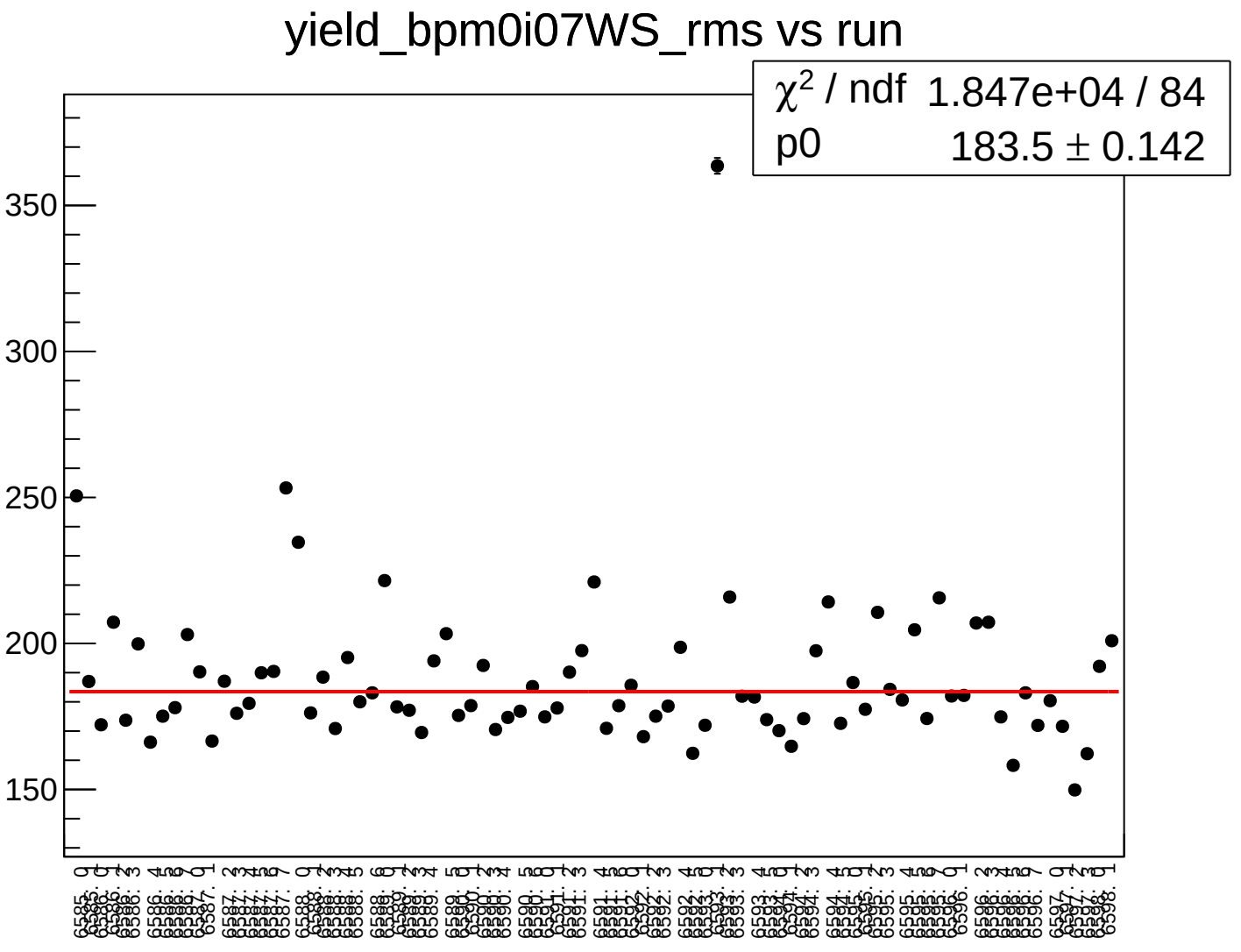

yield_bpm0i02aWS_rms vs run
χ² / ndf 2.163e+04 / 84
p0 174.2 ± 0.1349
340
320
300
280
260
240
220
200
180
160
140

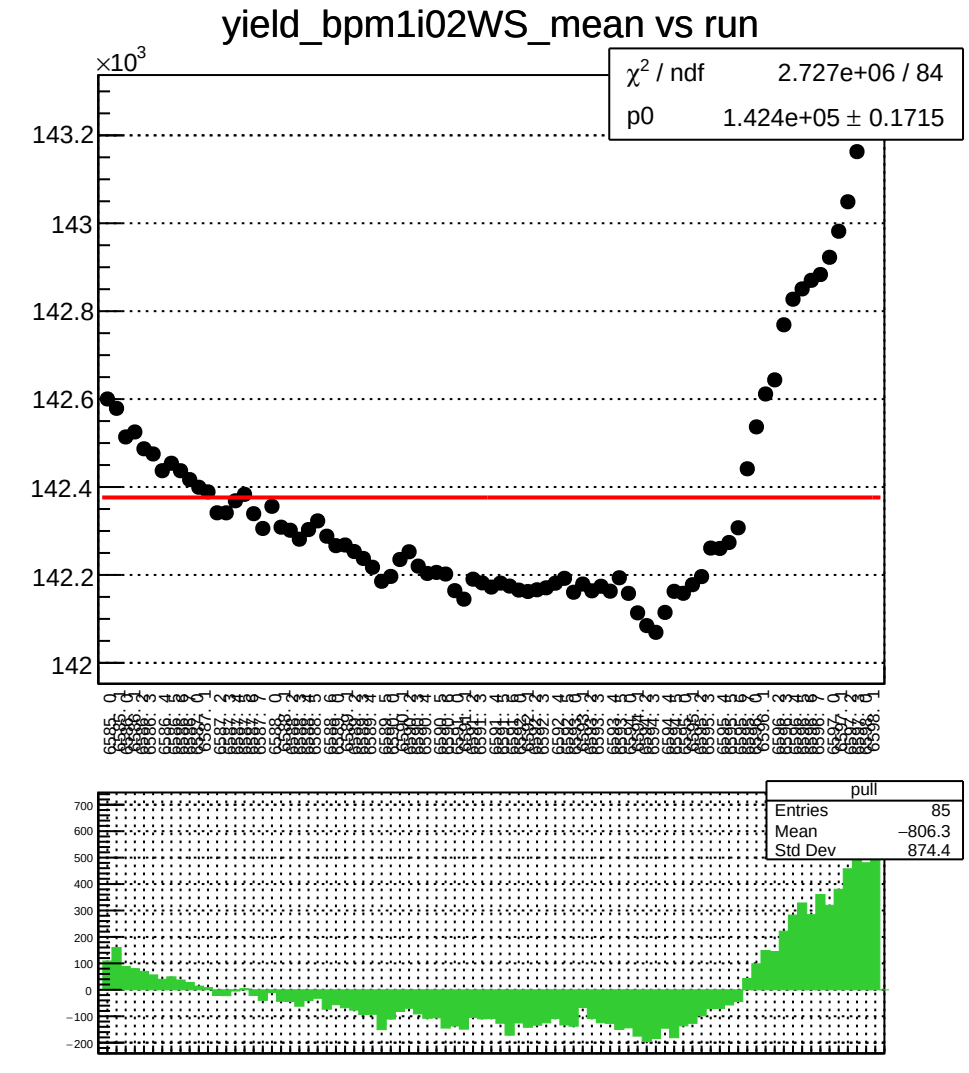

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 9.625e+04 / 84
p0 1.529e+05 ± 0.1974
153.05
153
152.95
152.9
152.85
152.8
152.75
pull
Entries 85
Mean 217.1
Std Dev 172.6
80
60
40
20
0
−20
−40
−60

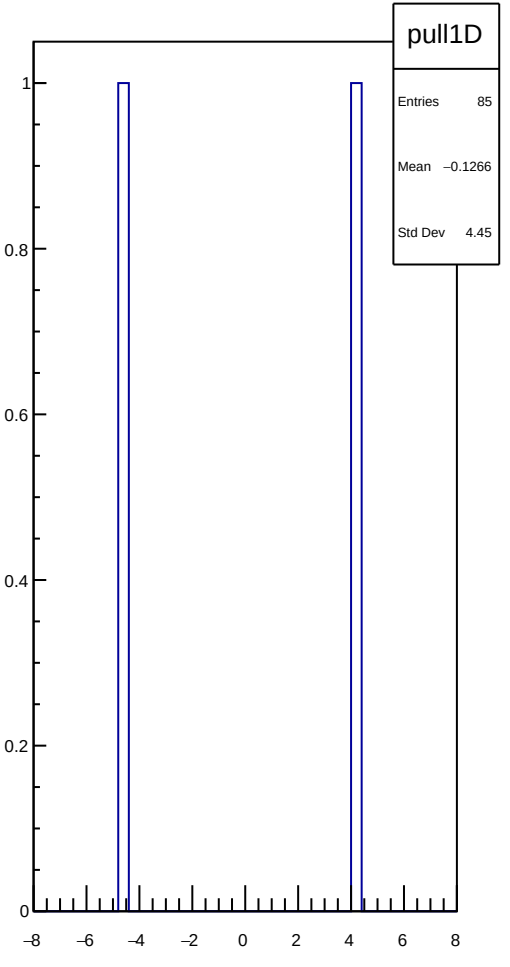

pull1D
Entries 85
Mean −1.376
Std Dev 5.674
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

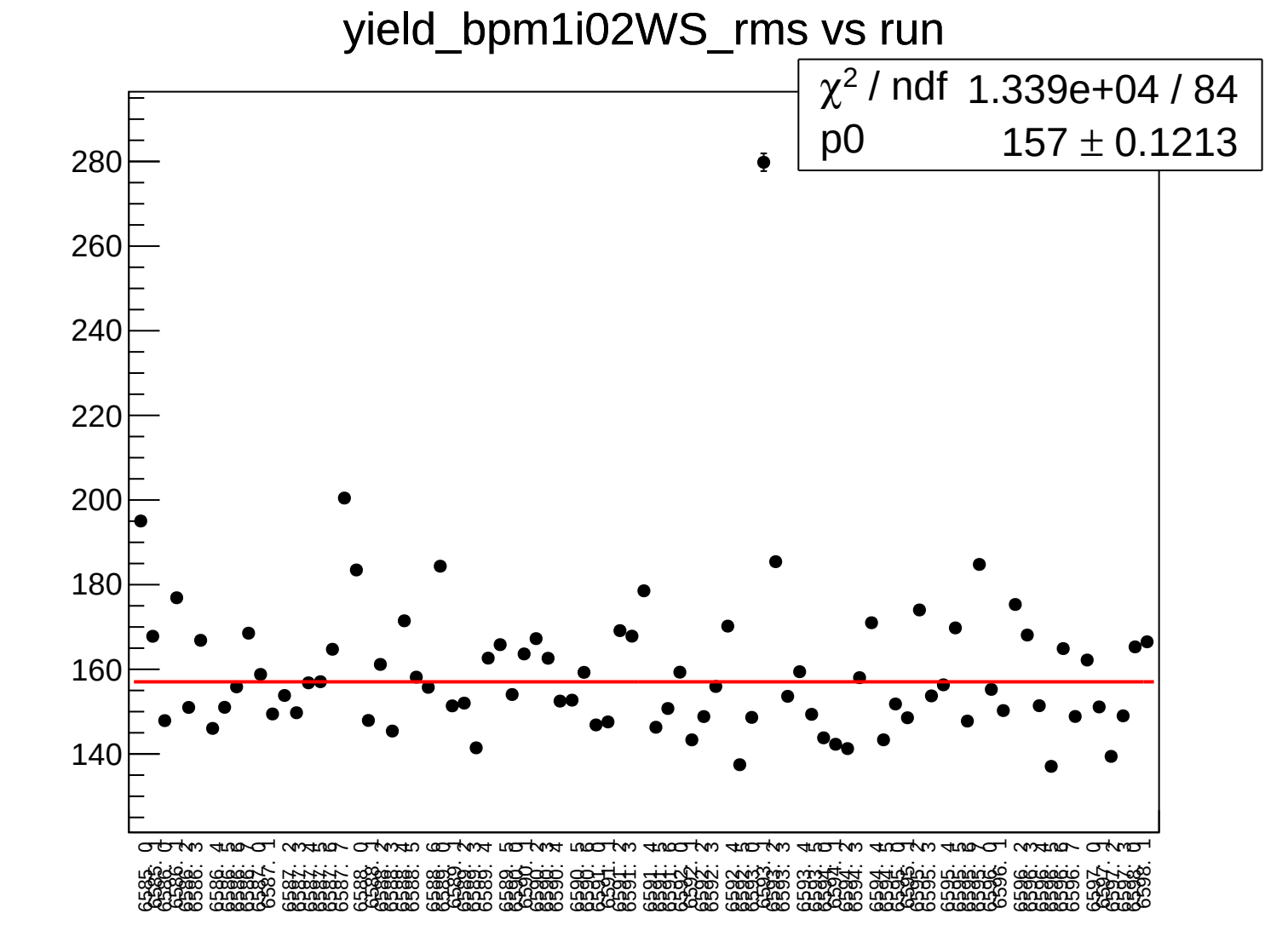

yield_bpm0i05WS_rms vs run
χ² / ndf 2.141e+04 / 84
p0 180.3 ± 0.1396
400
350
300
250
200
150

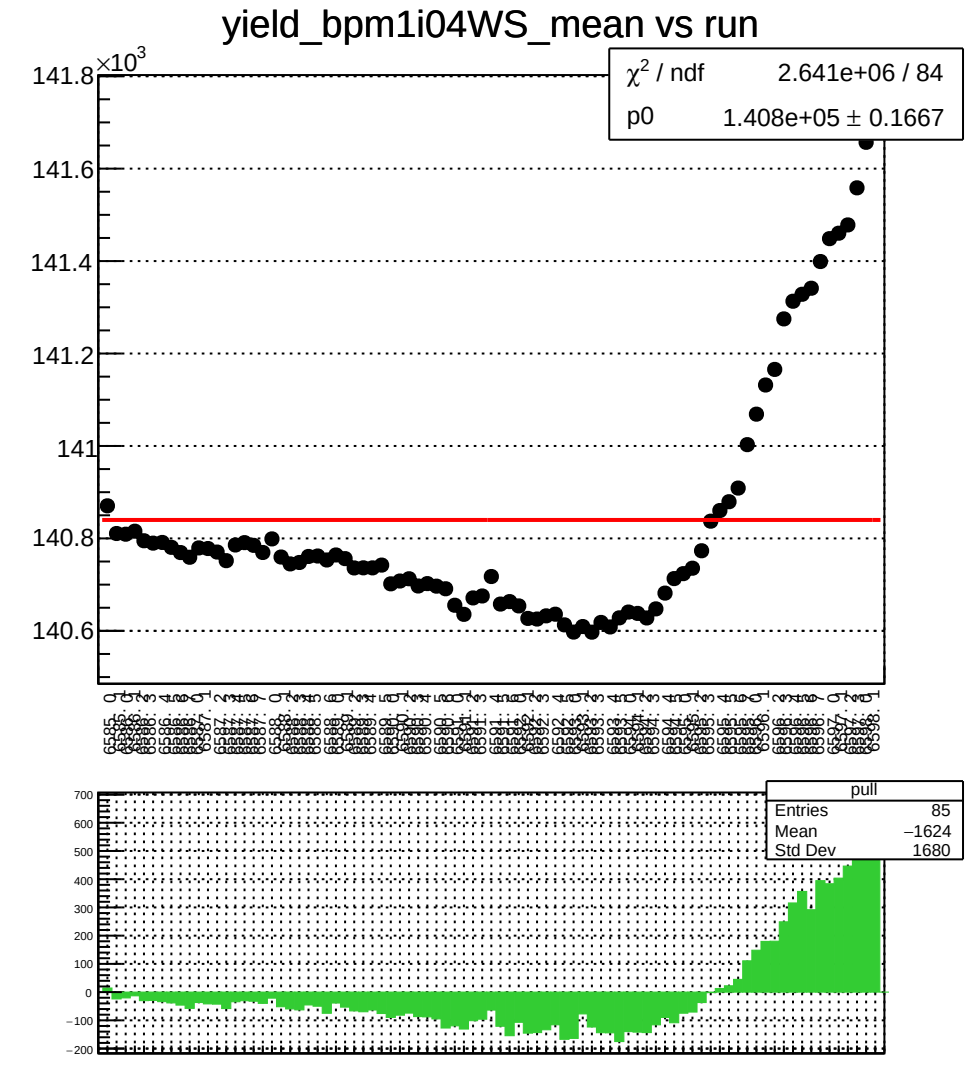

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 3.594e+05 / 84
p0 1.524e+05 ± 0.2008
152.8
152.7
152.6
152.5
152.4
152.3
pull
Entries 85
Mean −286.2
Std Dev 355.2
250
200
150
100
50
0
−50
−100
pull1D
Entries 85
Mean −1.773
Std Dev 4.944
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

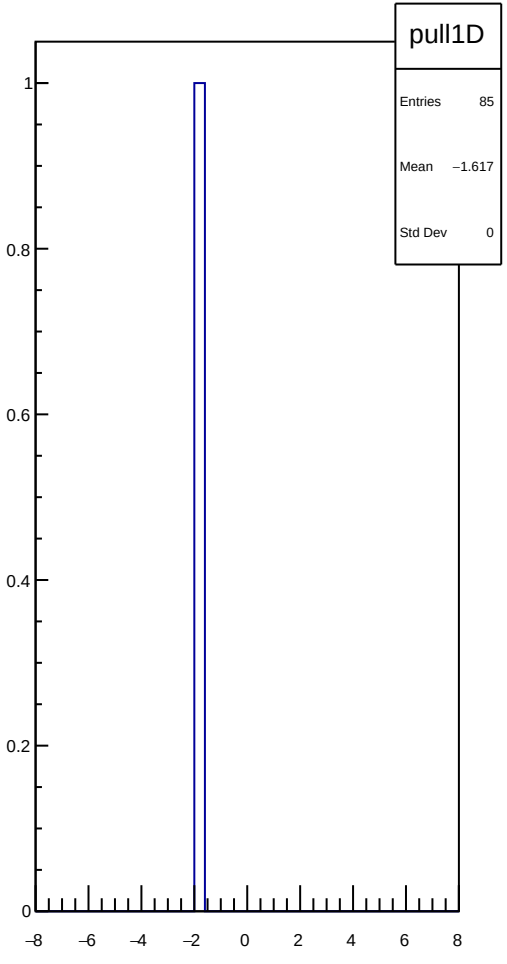

yield_bpm0i07WS_rms vs run
χ² / ndf 1.847e+04 / 84
p0 183.5 ± 0.142
350
300
250
200
150

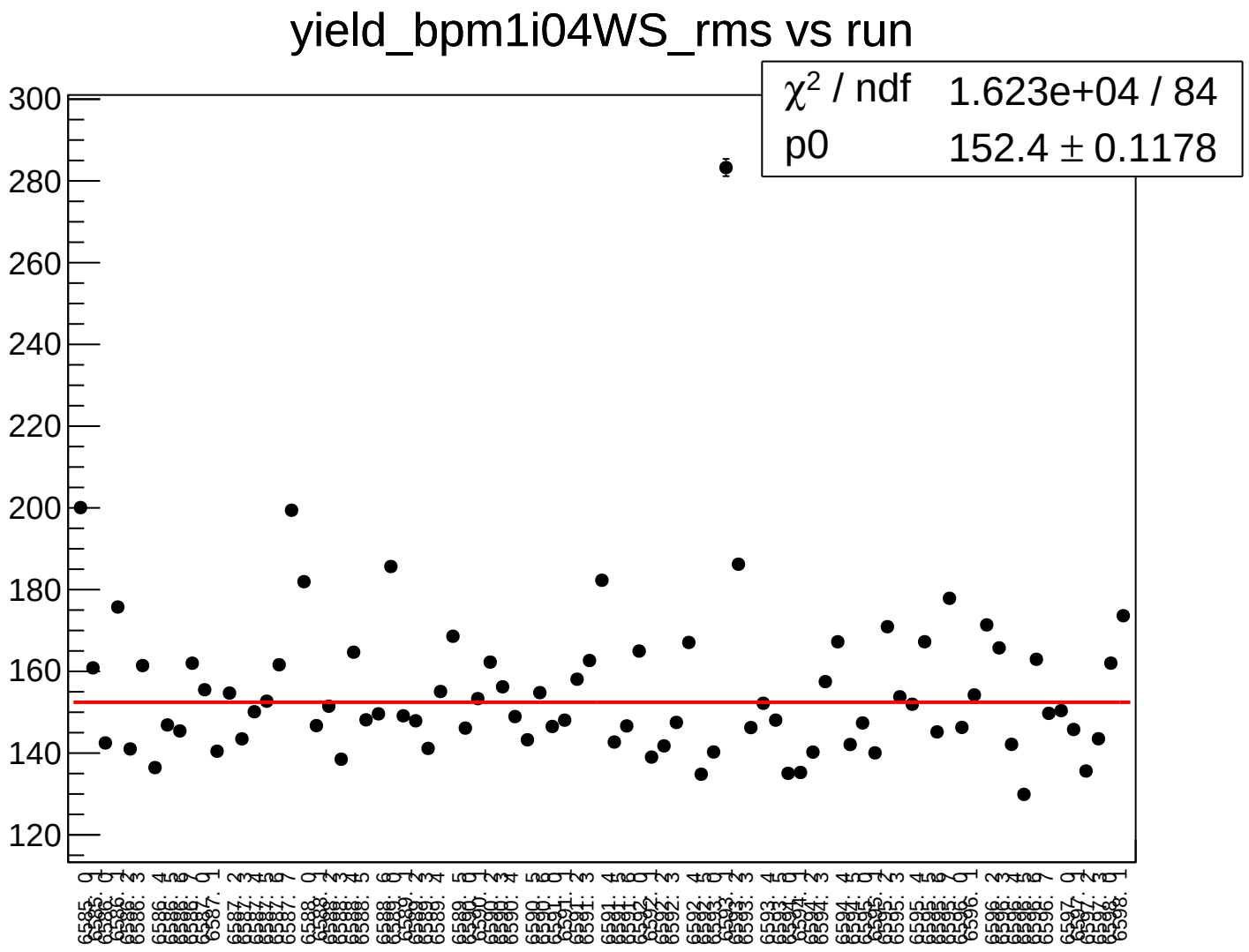

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 2.727e+06 / 84
p0 1.424e+05 ± 0.1715
143.2
143
142.8
142.6
142.4
142.2
142
pull
Entries 85
Mean −806.3
Std Dev 874.4
700
600
500
400
300
200
100
0
−100
−200

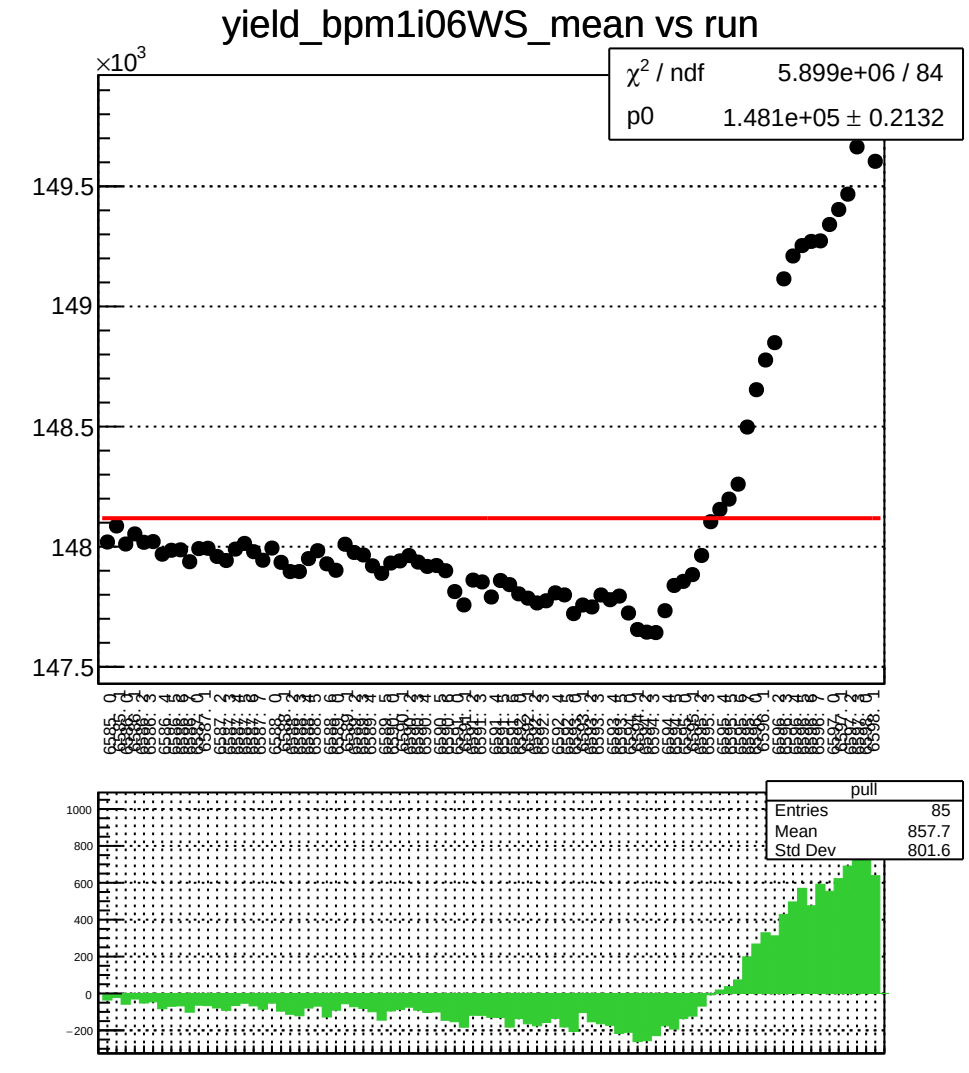

pull1D
Entries 85
Mean −0.1266
Std Dev 4.45
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

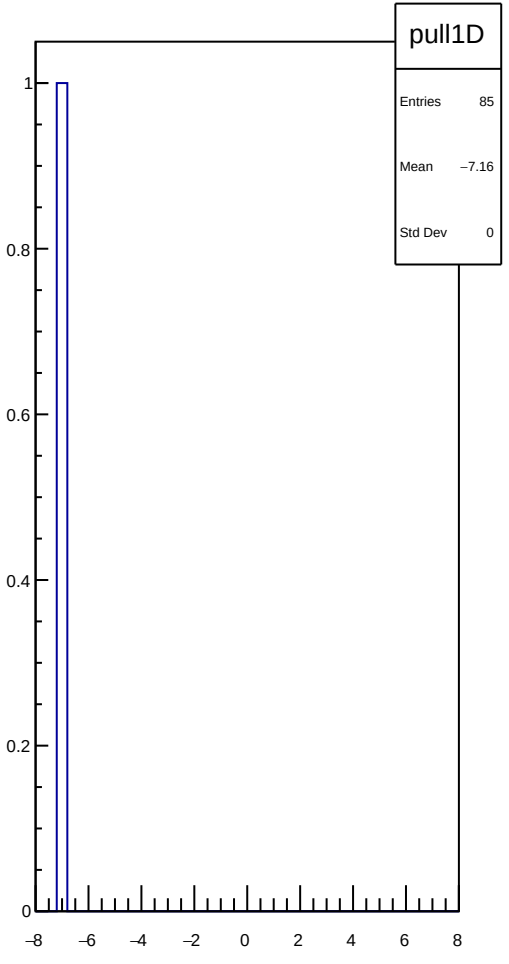

yield_bpm1i02WS_rms vs run
χ^2 / ndf 1.339e+04 / 84
p0 157 ± 0.1213
280
260
240
220
200
180
160
140

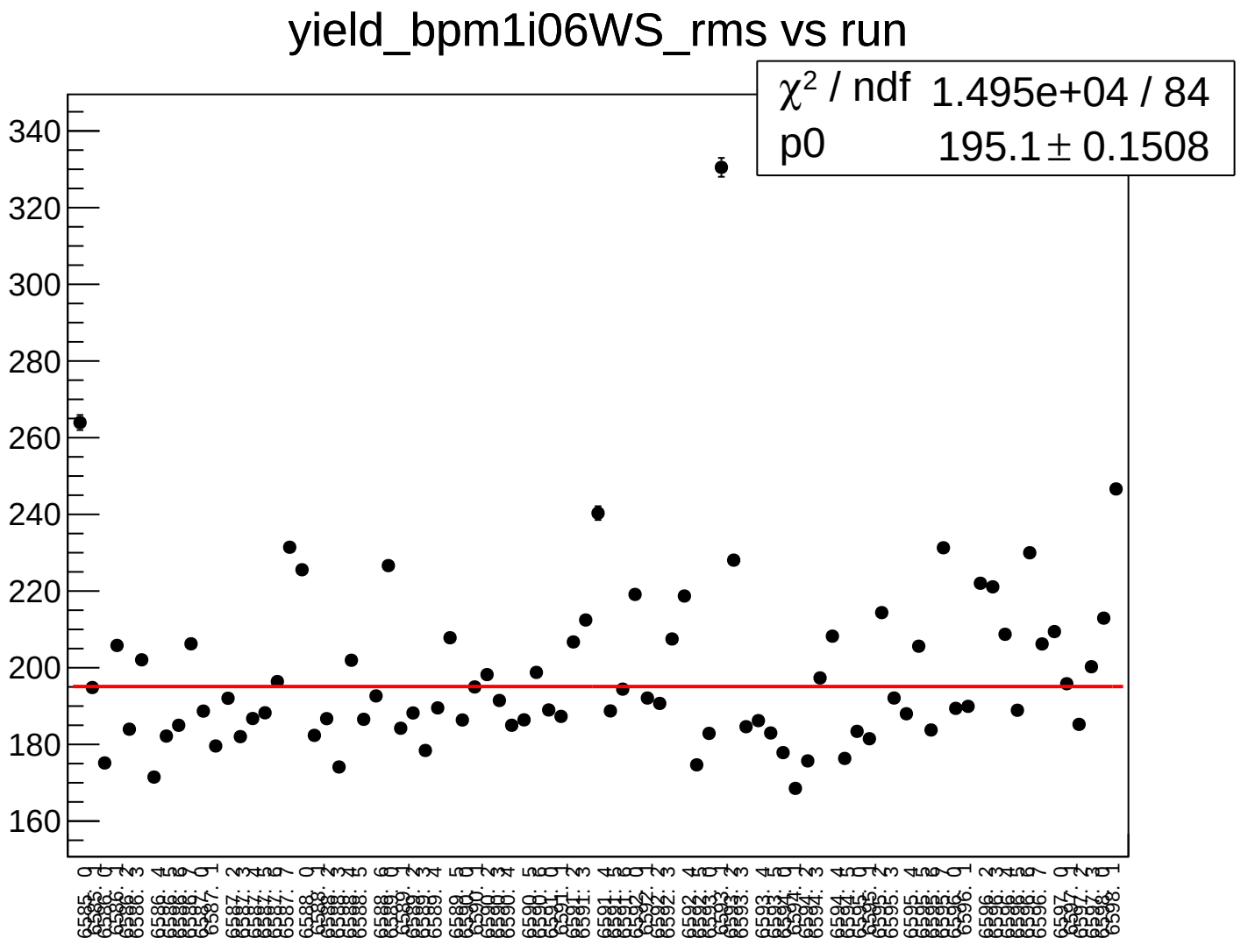

yield_bpm1i04WS_mean vs run
χ² / ndf 2.641e+06 / 84
p0 1.408e+05 ± 0.1667
×10³
141.8
141.6
141.4
141.2
141
140.8
140.6
pull
Entries 85
Mean −1624
Std Dev 1680
700
600
500
400
300
200
100
0
−100
−200

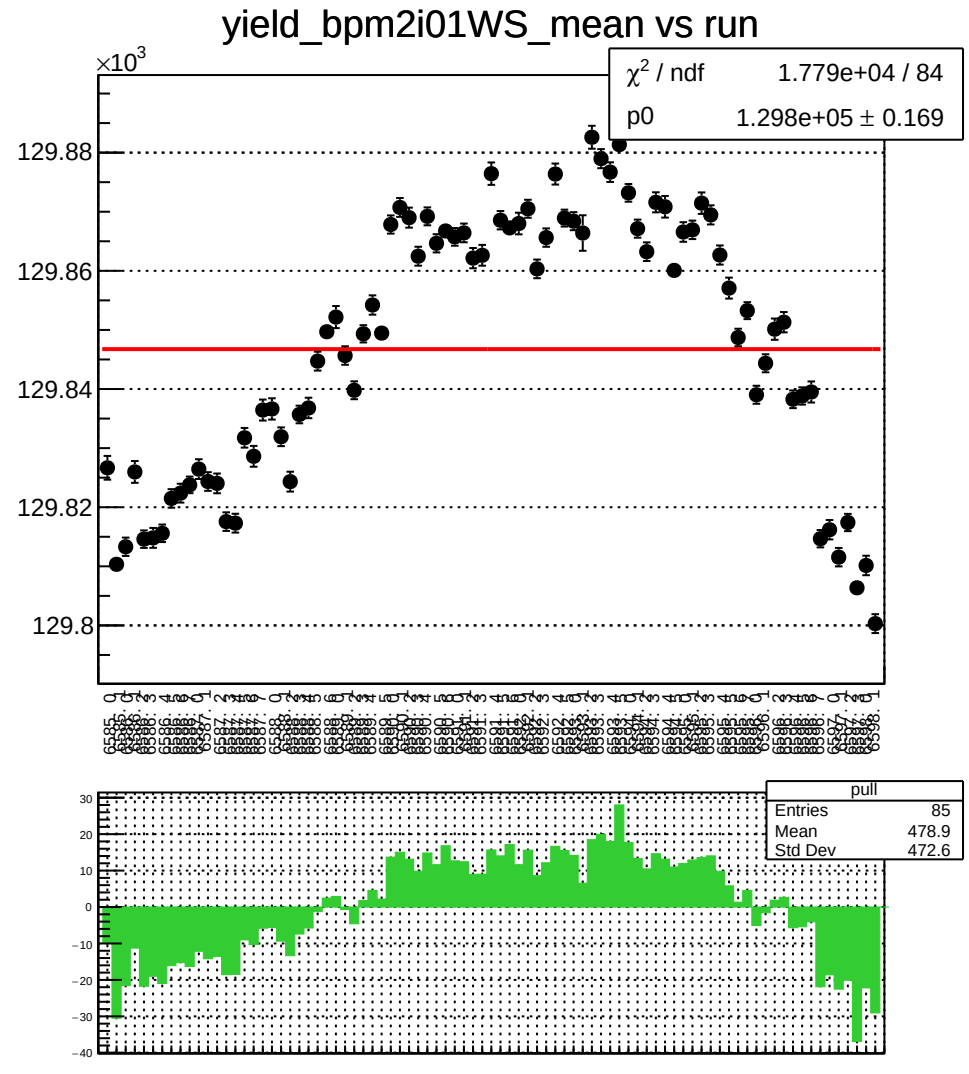

pull1D
Entries 85
Mean −1.617
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

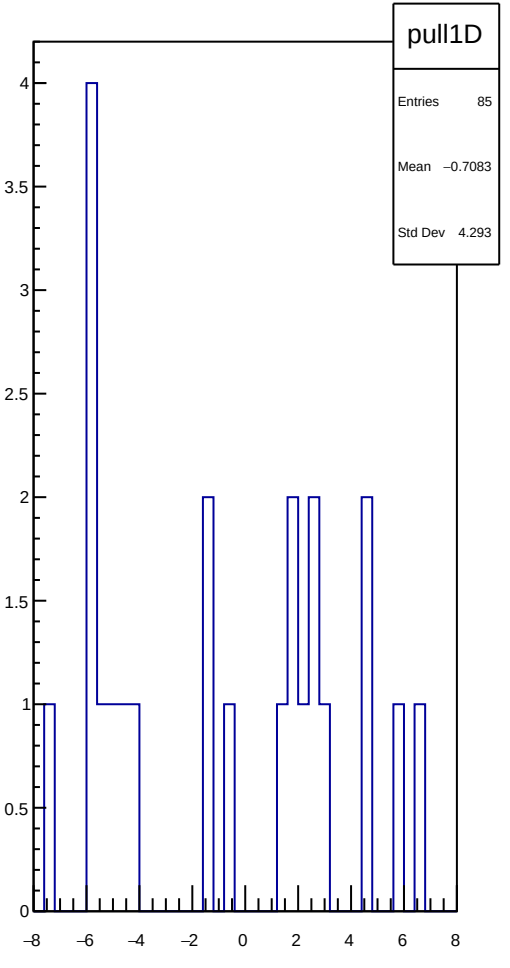

yield_bpm1i04WS_rms vs run
χ² / ndf 1.623e+04 / 84
p0 152.4 ± 0.1178
300
280
260
240
220
200
180
160
140
120

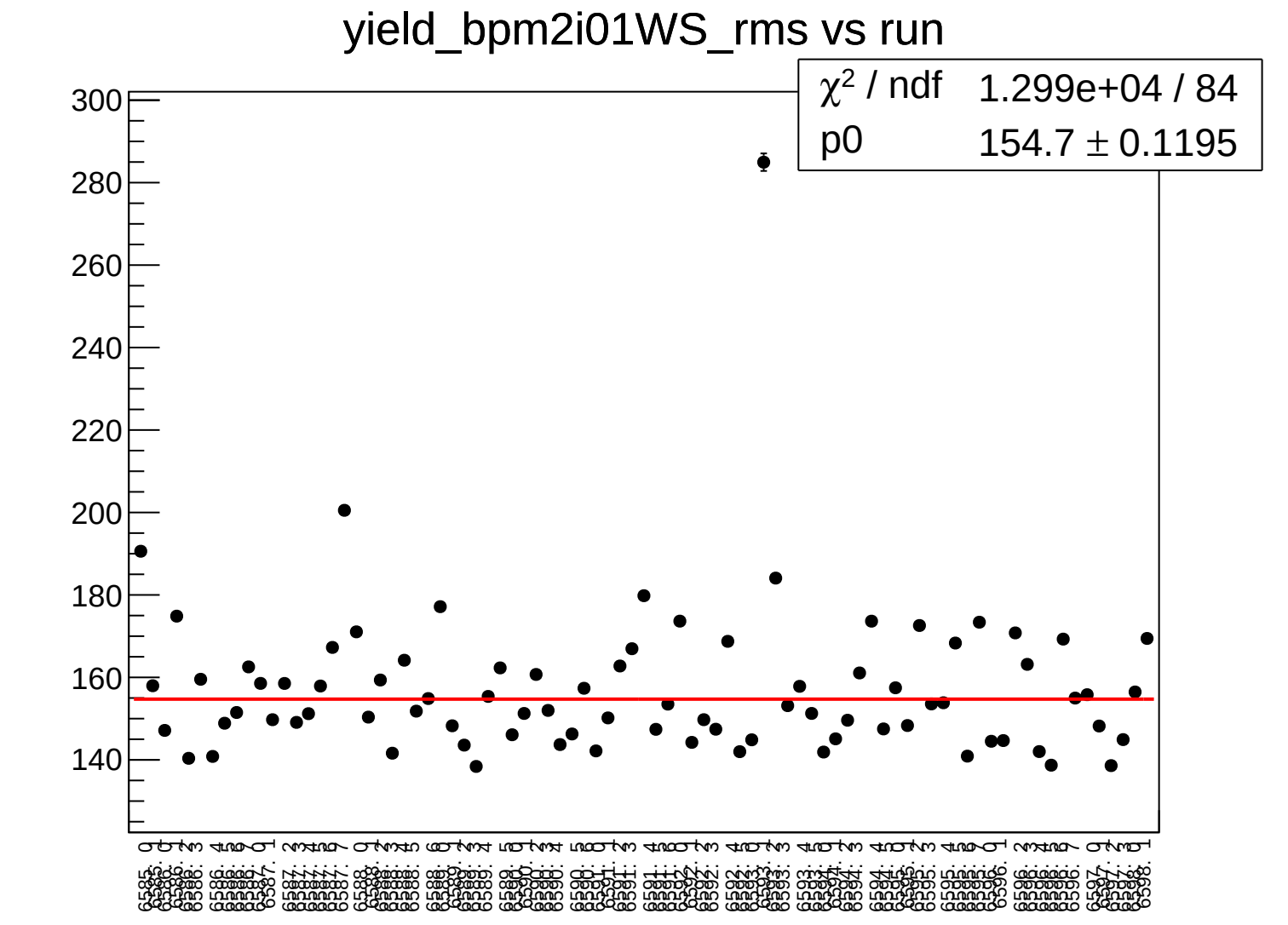

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 5.899e+06 / 84
p0 1.481e+05 ± 0.2132
149.5
149
148.5
148
147.5
pull
Entries 85
Mean 857.7
Std Dev 801.6
1000
800
600
400
200
0
−200

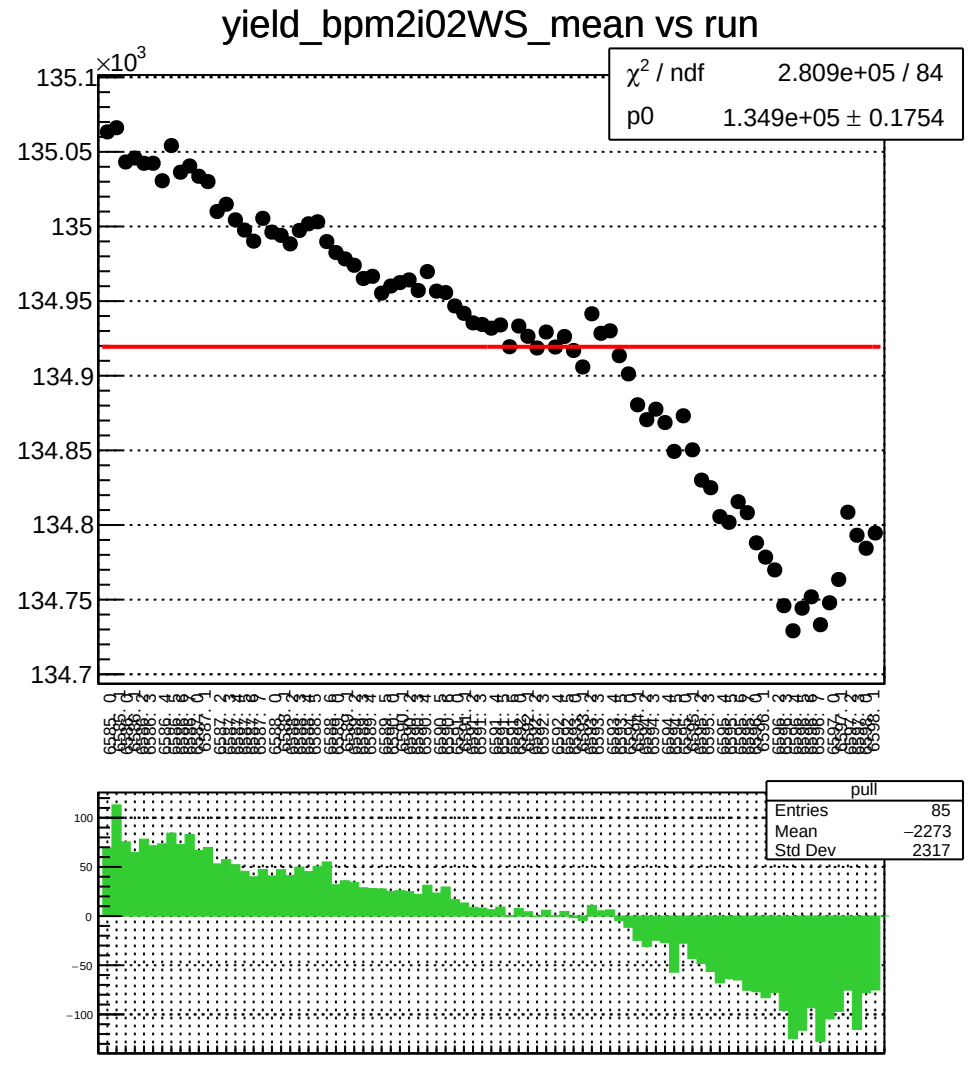

pull1D
Entries 85
Mean −7.16
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

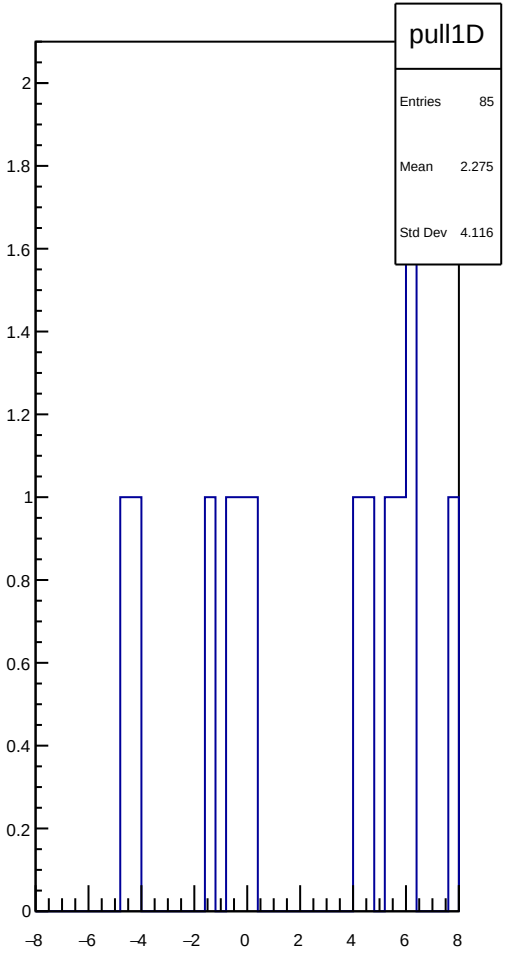

yield_bpm1i06WS_rms vs run
χ² / ndf 1.495e+04 / 84
p0 195.1 ± 0.1508
340
320
300
280
260
240
220
200
180
160

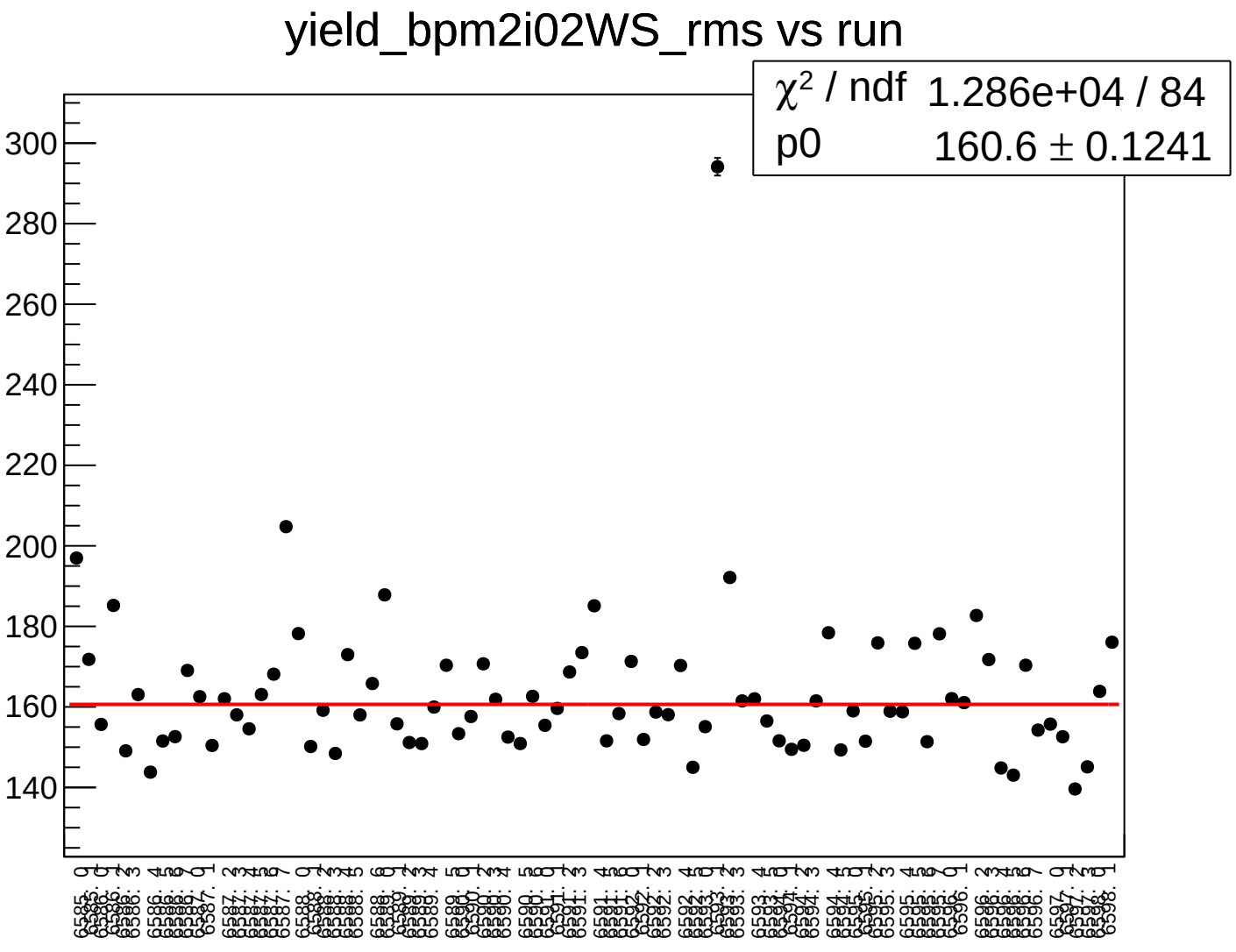

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 1.779e+04 / 84
p0 1.298e+05 ± 0.169
129.88
129.86
129.84
129.82
129.8
pull
Entries 85
Mean 478.9
Std Dev 472.6
30
20
10
0
−10
−20
−30
−40

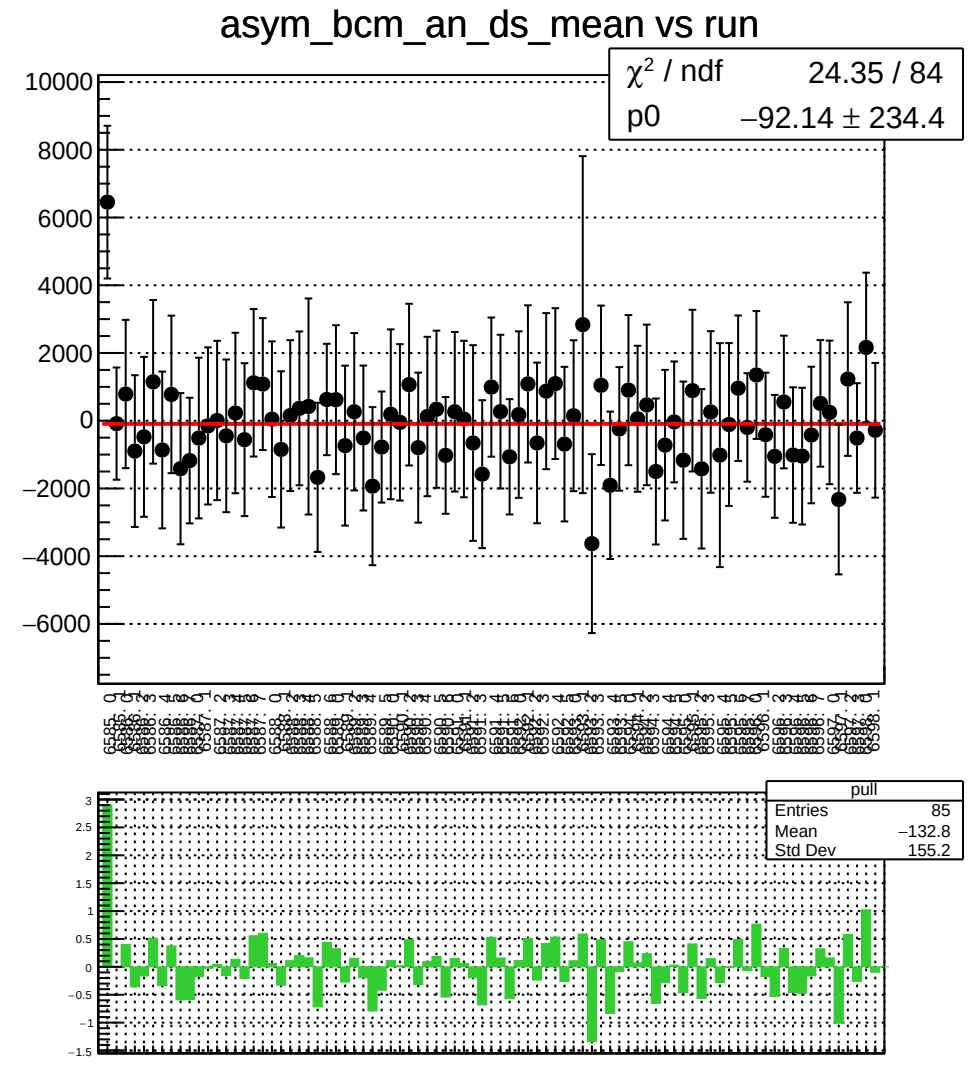

pull1D
Entries 85
Mean −0.7083
Std Dev 4.293
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

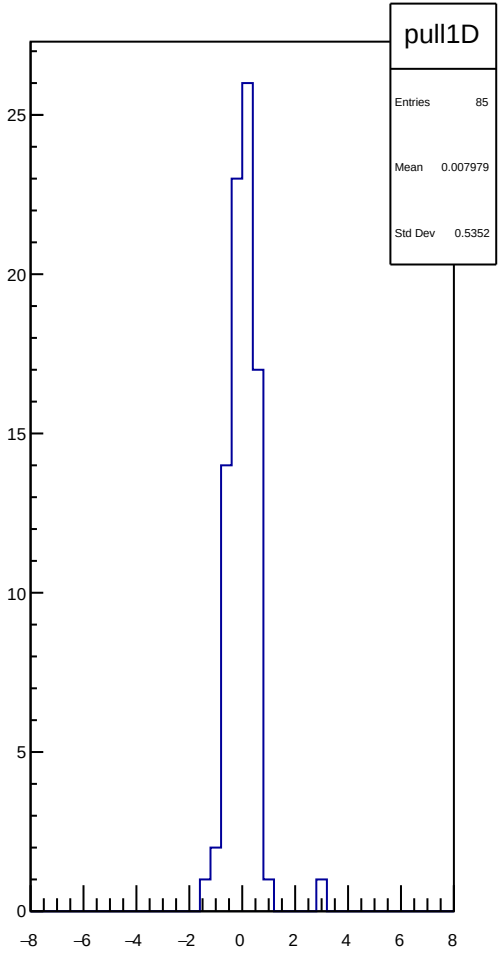

yield_bpm2i01WS_rms vs run
χ² / ndf 1.299e+04 / 84
p0 154.7 ± 0.1195
300
280
260
240
220
200
180
160
140

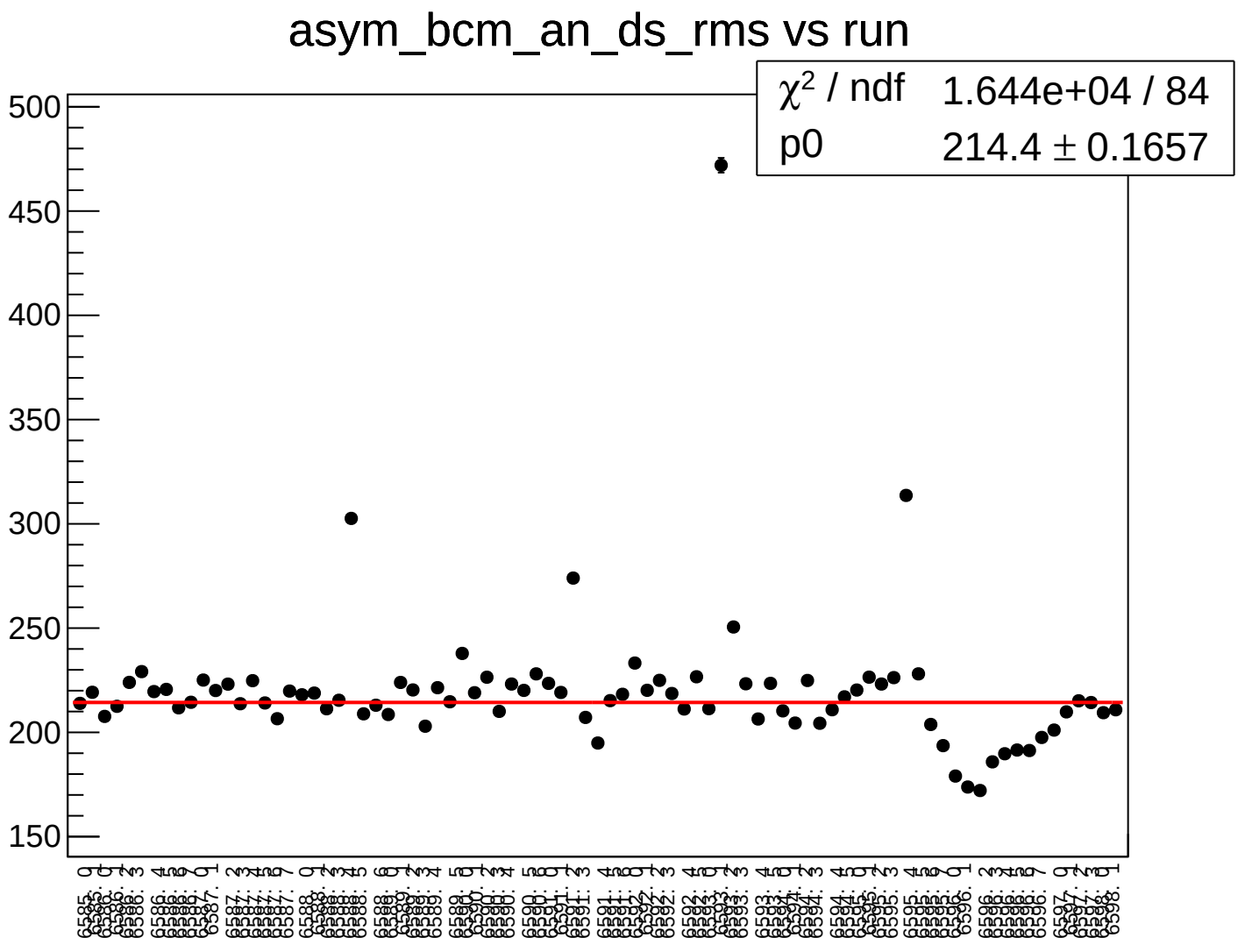

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 2.809e+05 / 84
p0 1.349e+05 ± 0.1754
135.1
135.05
135
134.95
134.9
134.85
134.8
134.75
134.7
pull
Entries 85
Mean −2273
Std Dev 2317
100
50
0
−50
−100

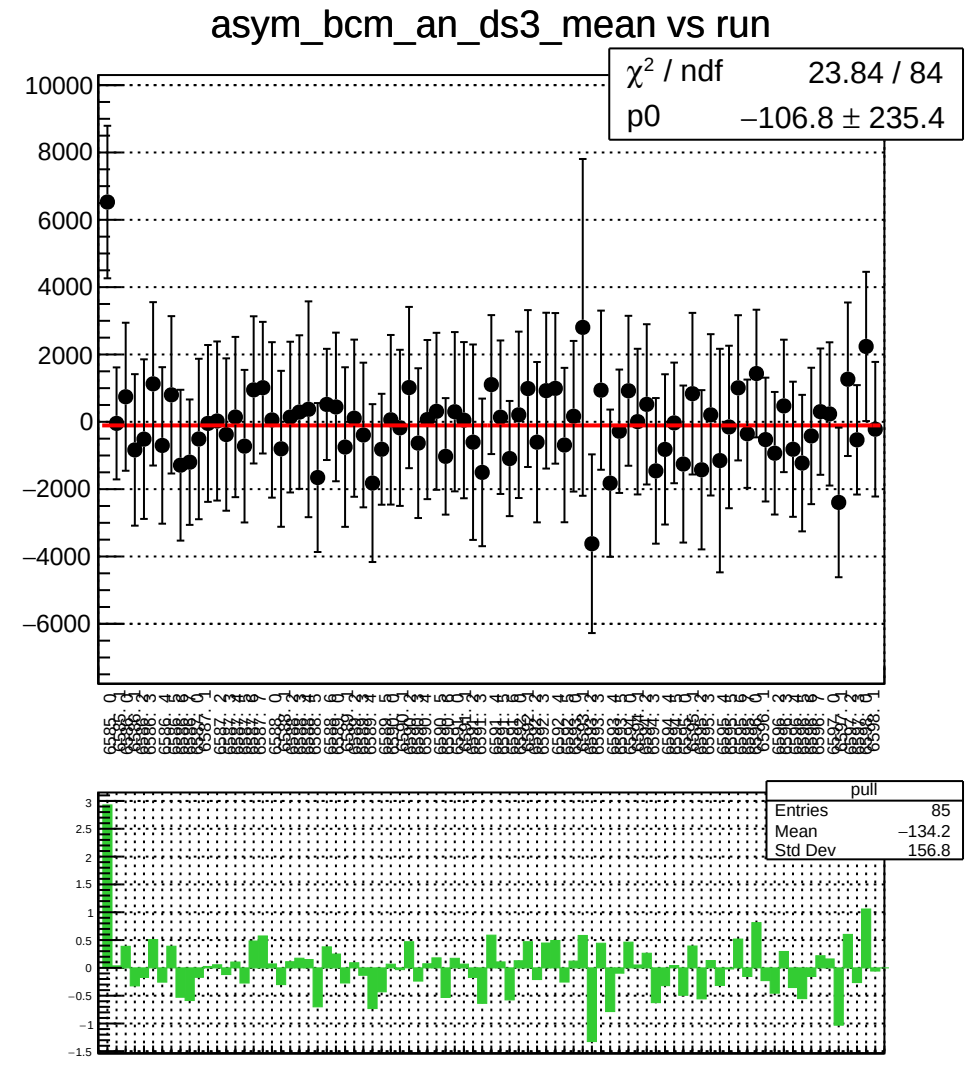

pull1D
Entries 85
Mean 2.275
Std Dev 4.116
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

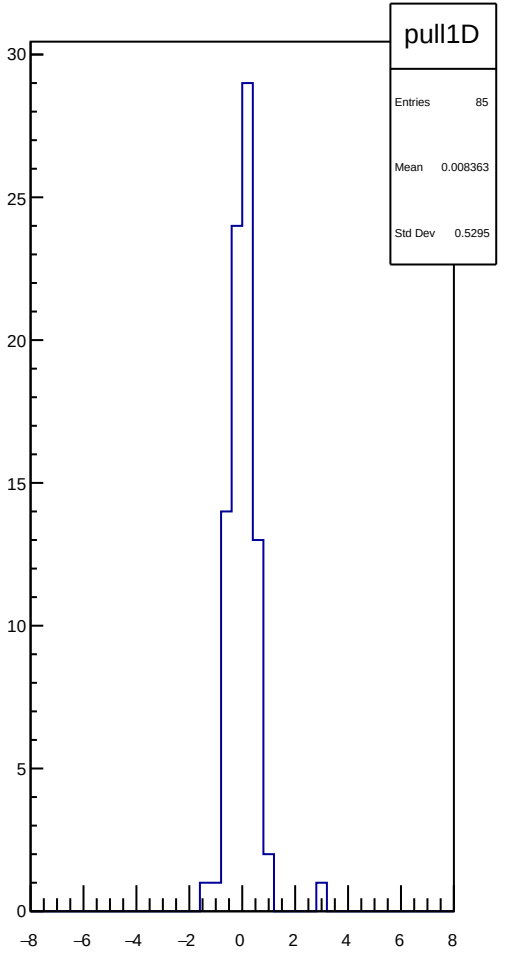

yield_bpm2i02WS_rms vs run
χ² / ndf 1.286e+04 / 84
p0 160.6 ± 0.1241
300
280
260
240
220
200
180
160
140

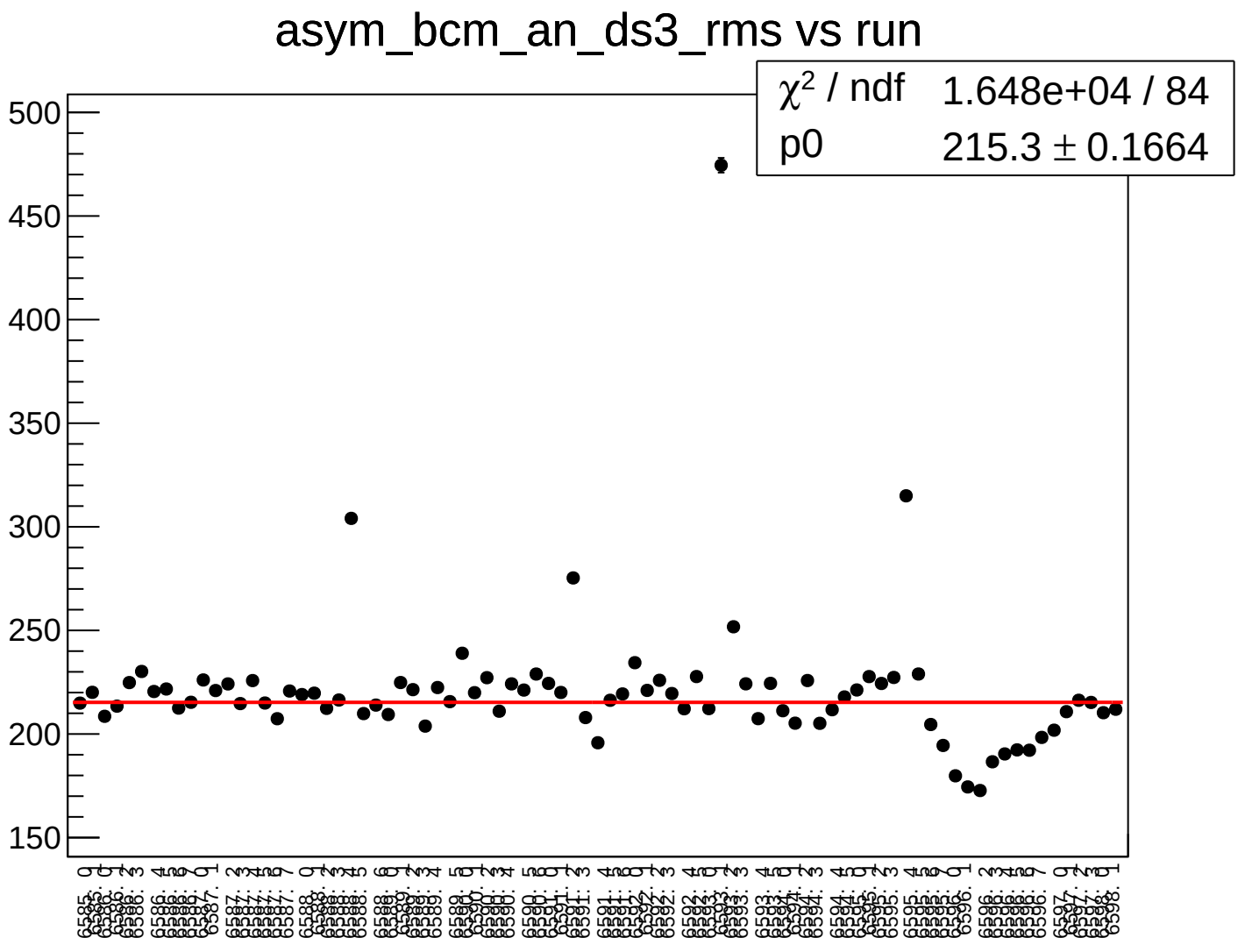

asym_bcm_an_ds_mean vs run
χ² / ndf 24.35 / 84
p0 −92.14 ± 234.4
pull
Entries 85
Mean −132.8
Std Dev 155.2

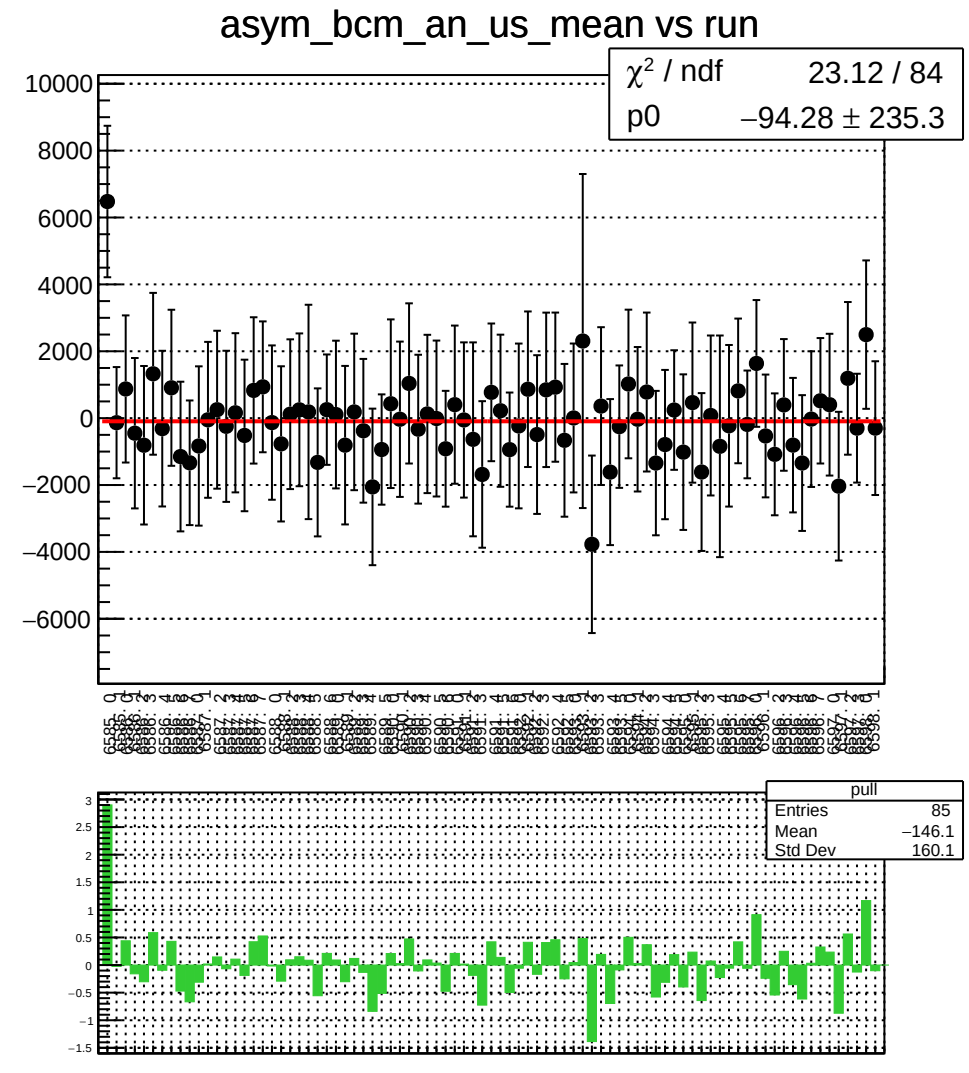

pull1D
Entries 85
Mean 0.007979
Std Dev 0.5352

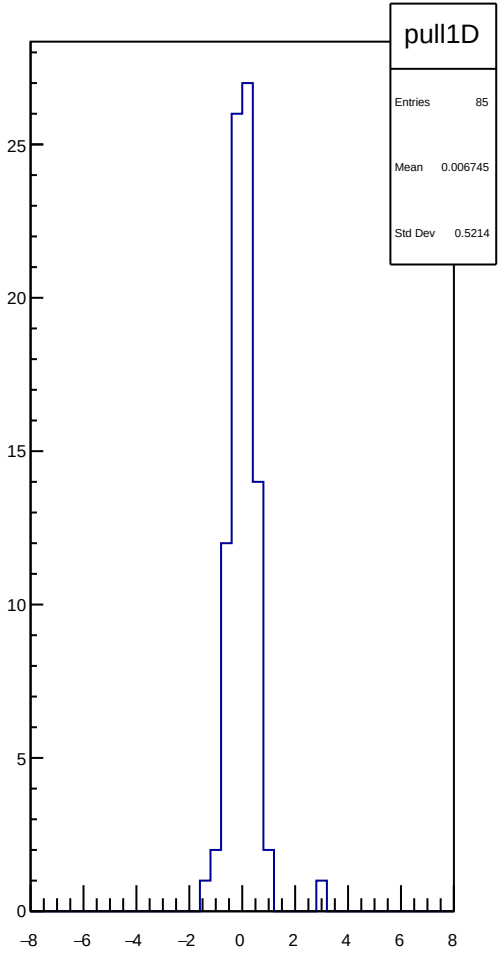

asym_bcm_an_ds_rms vs run
χ² / ndf 1.644e+04 / 84
p0 214.4 ± 0.1657
500
450
400
350
300
250
200
150

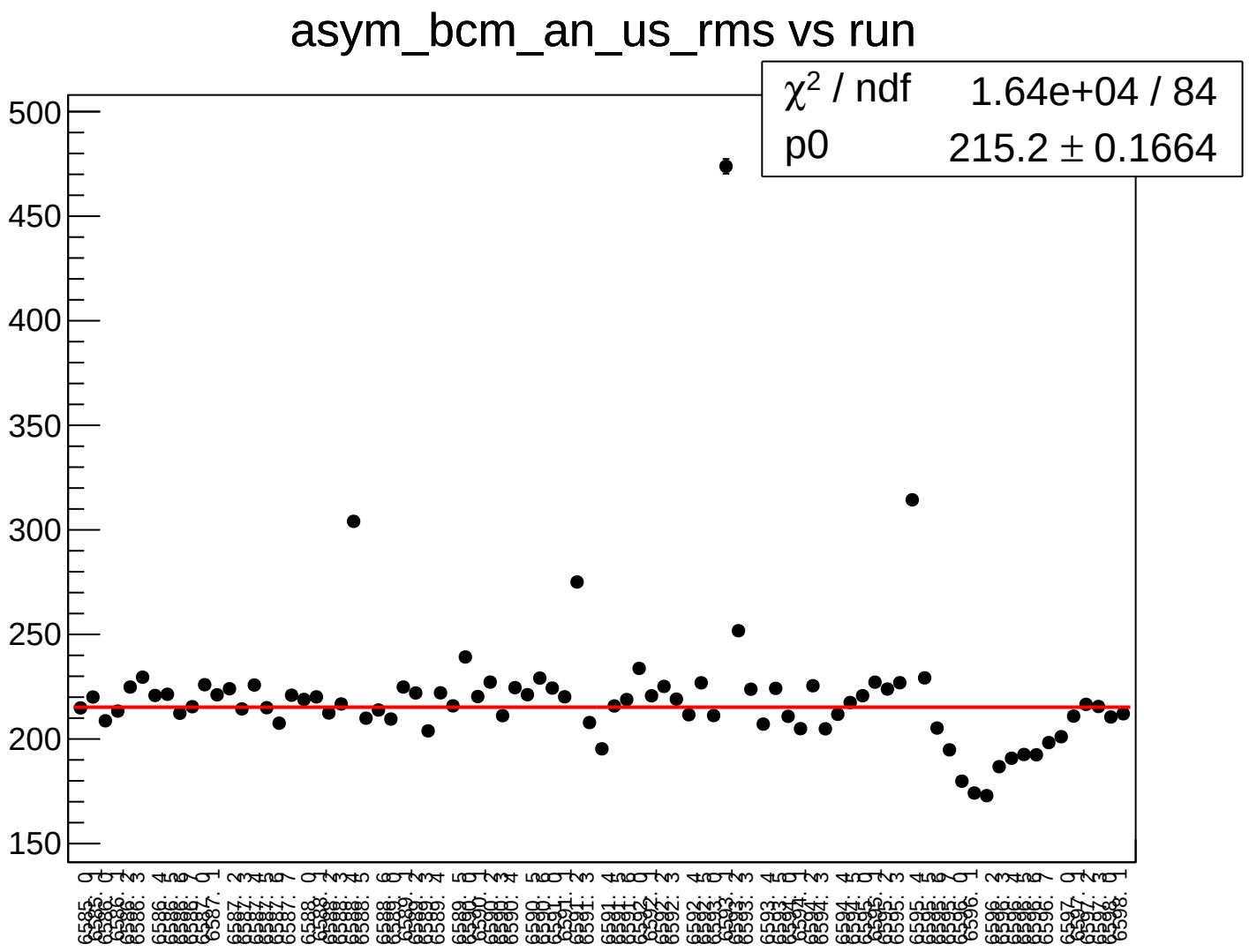

asym_bcm_an_ds3_mean vs run
χ² / ndf 23.84 / 84
p0 −106.8 ± 235.4
pull
Entries 85
Mean −134.2
Std Dev 156.8

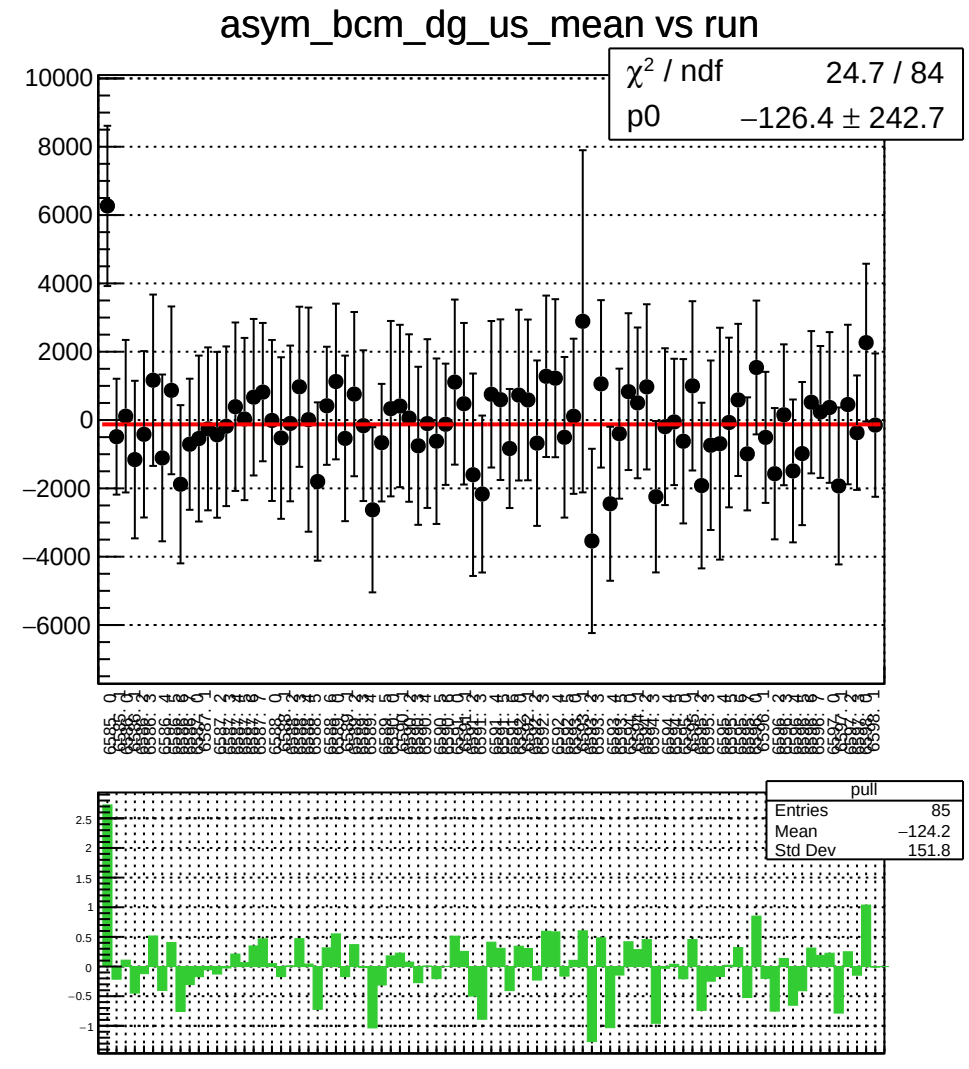

pull1D
Entries 85
Mean 0.008363
Std Dev 0.5295

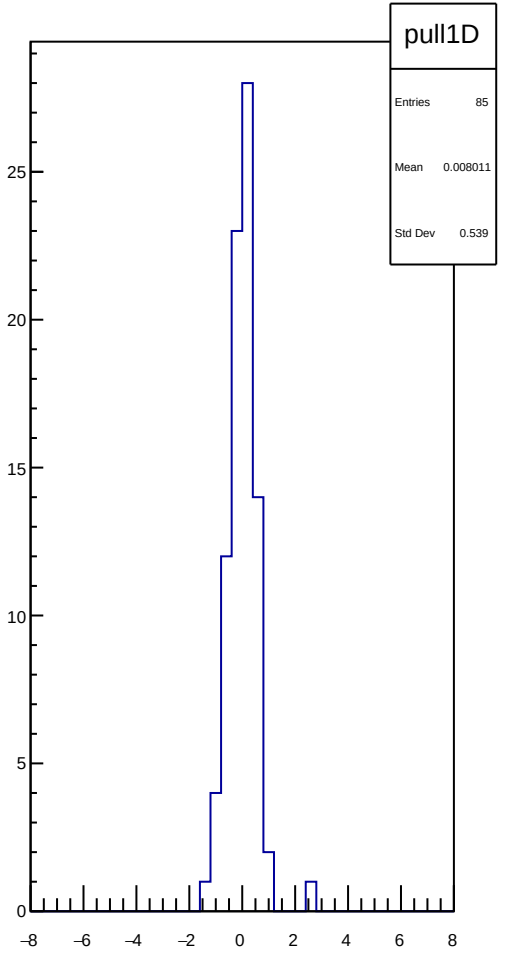

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.648e+04 / 84
p0 215.3 ± 0.1664
500
450
400
350
300
250
200
150

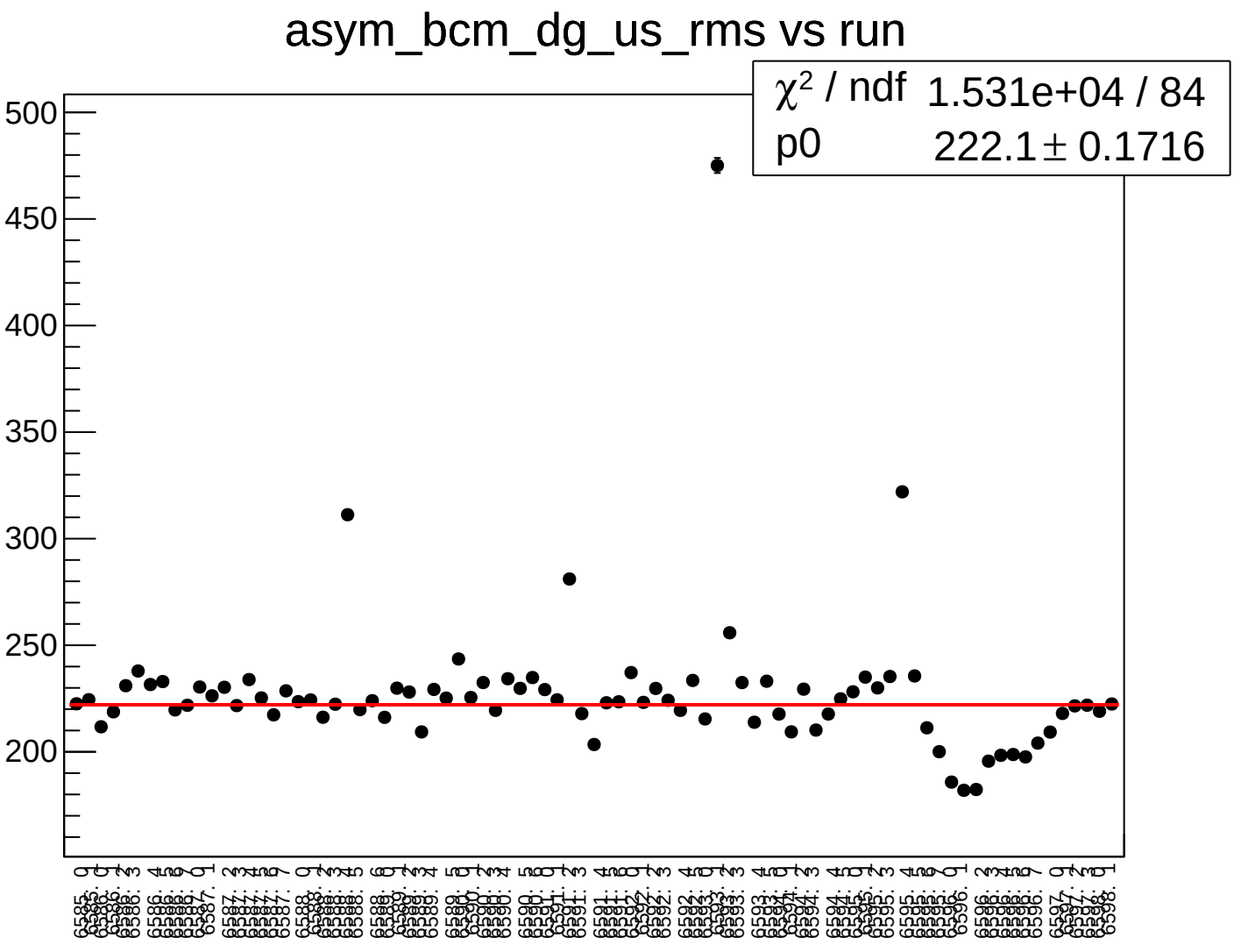

asym_bcm_an_us_mean vs run
χ² / ndf 23.12 / 84
p0 −94.28 ± 235.3
pull
Entries 85
Mean −146.1
Std Dev 160.1

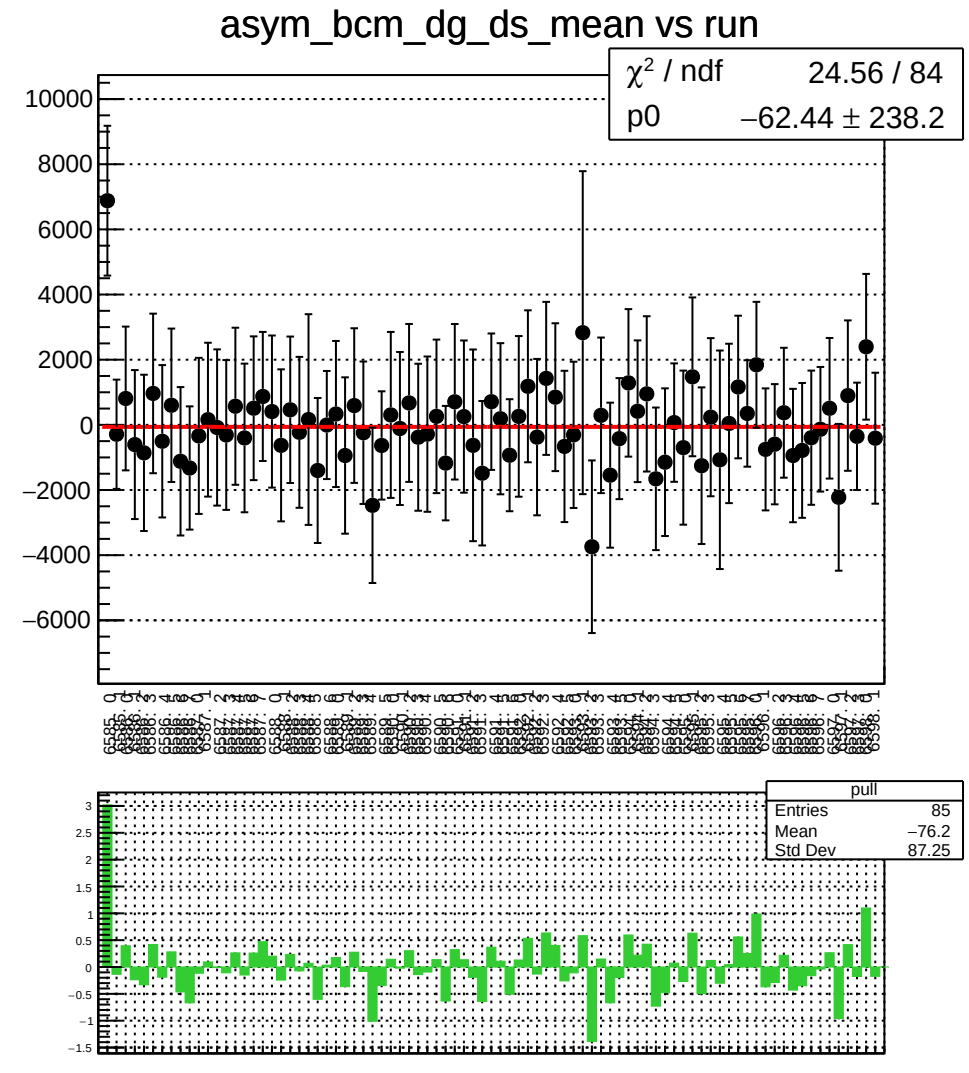

pull1D
Entries 85
Mean 0.006745
Std Dev 0.5214

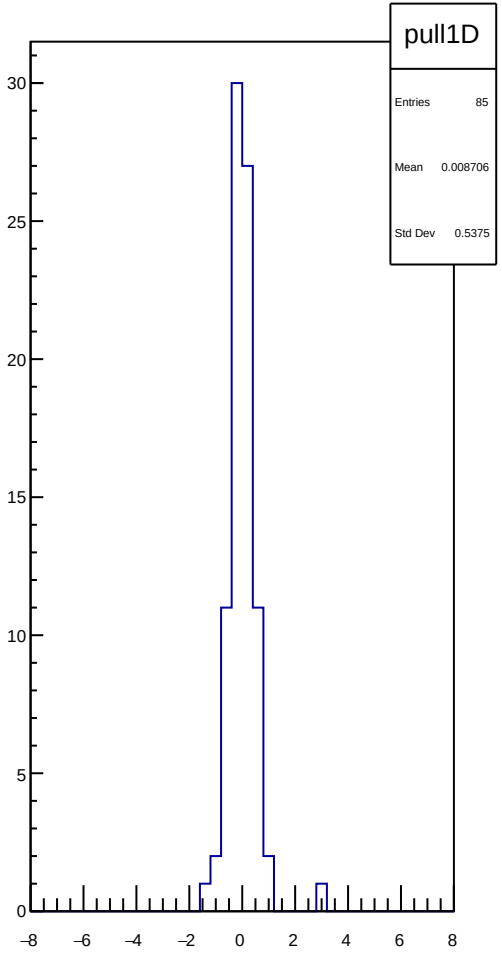

asym_bcm_an_us_rms vs run
χ² / ndf 1.64e+04 / 84
p0 215.2 ± 0.1664
500
450
400
350
300
250
200
150

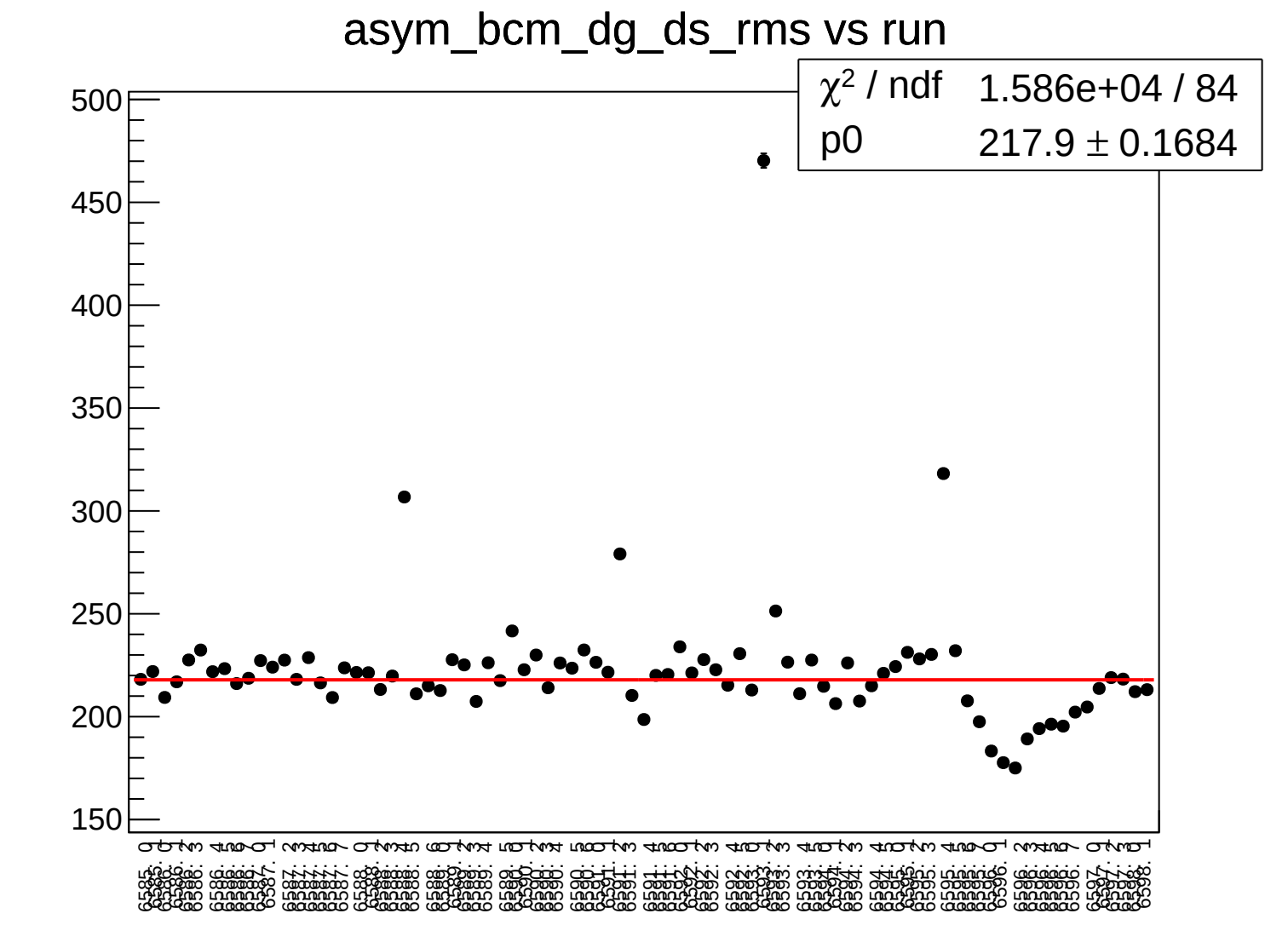

asym_bcm_dg_us_mean vs run
χ² / ndf 24.7 / 84
p0 −126.4 ± 242.7
pull
Entries 85
Mean −124.2
Std Dev 151.8

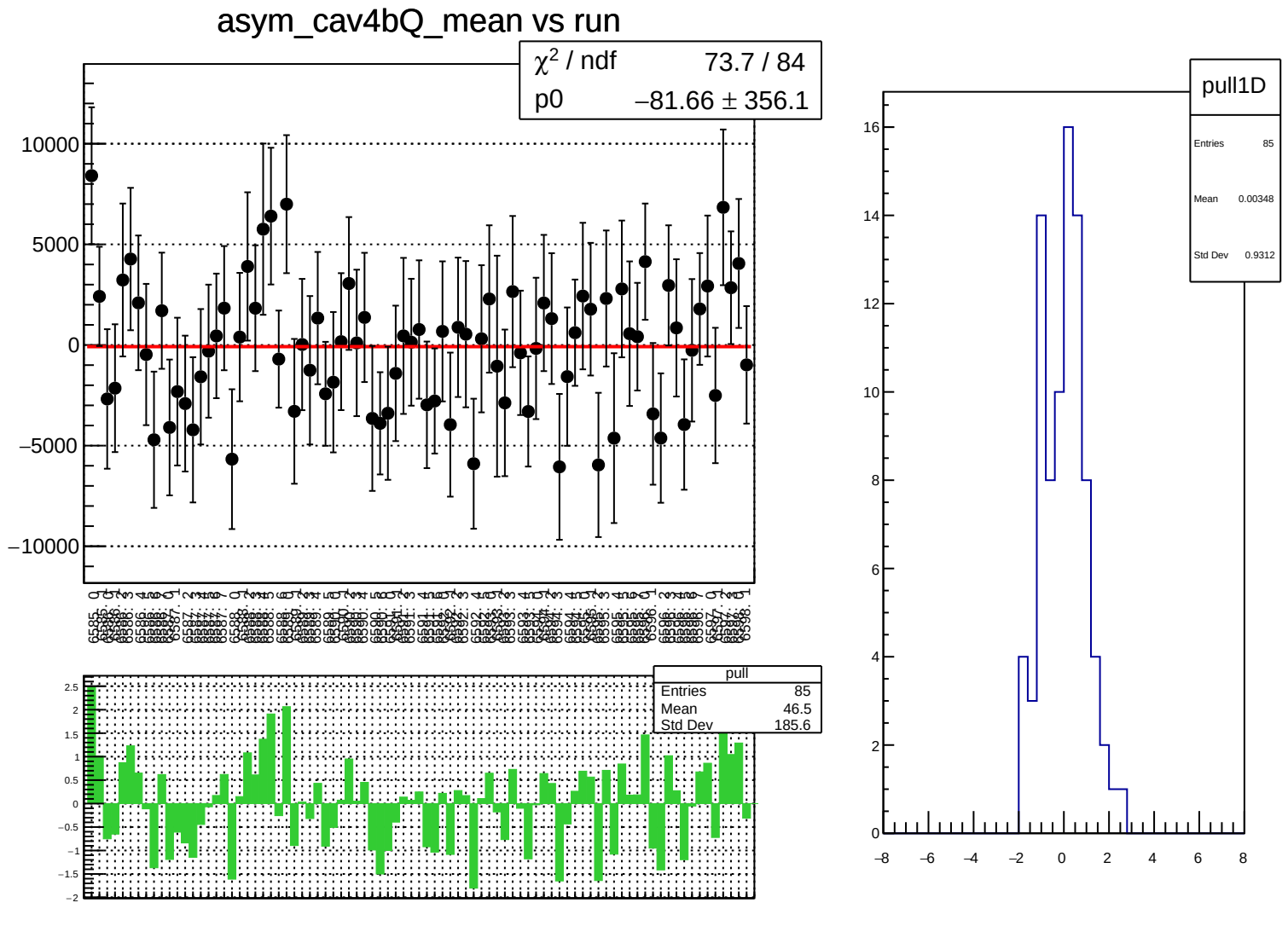

pull1D
Entries 85
Mean 0.008011
Std Dev 0.539

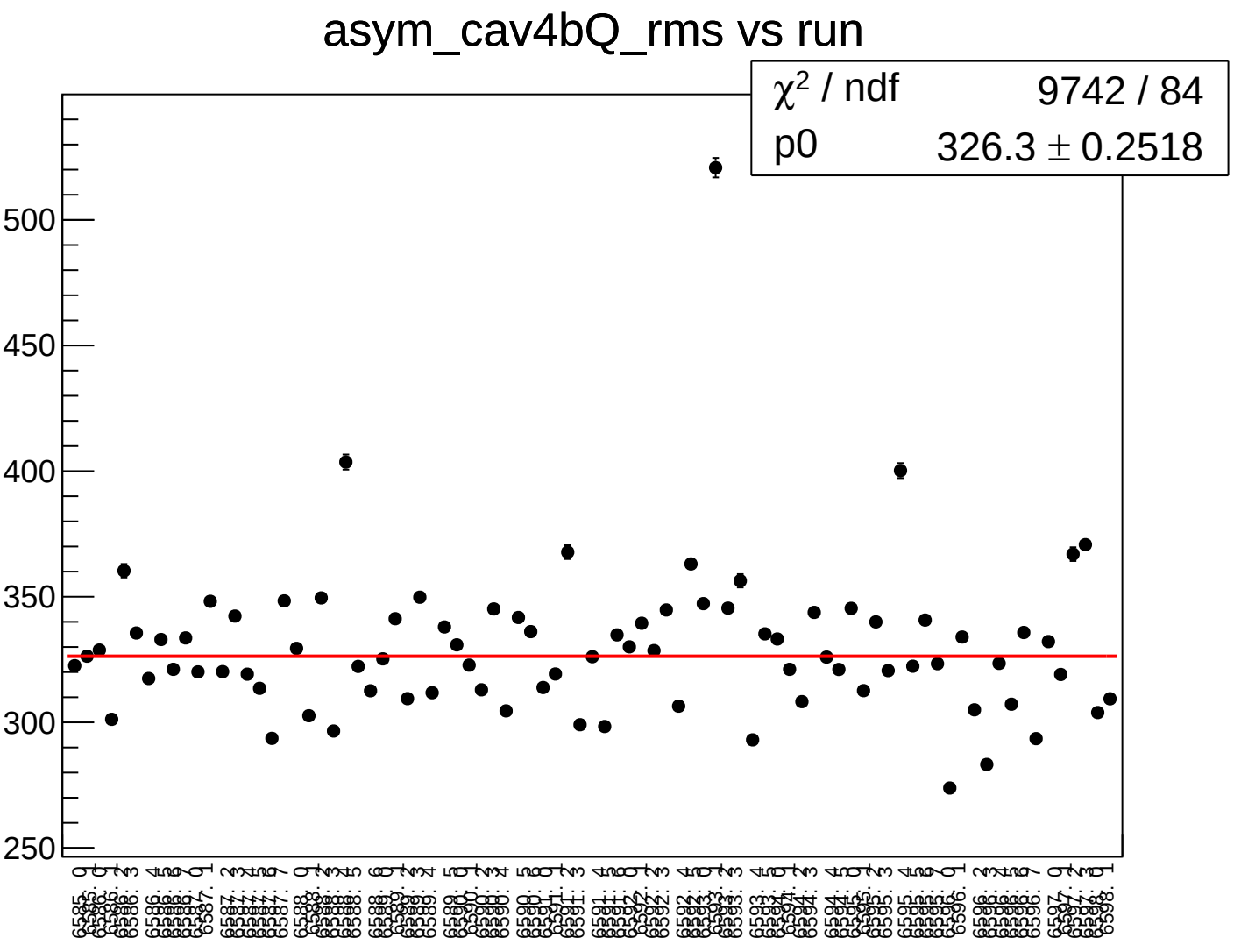

asym_bcm_dg_us_rms vs run
χ² / ndf 1.531e+04 / 84
p0 222.1 ± 0.1716
500
450
400
350
300
250
200

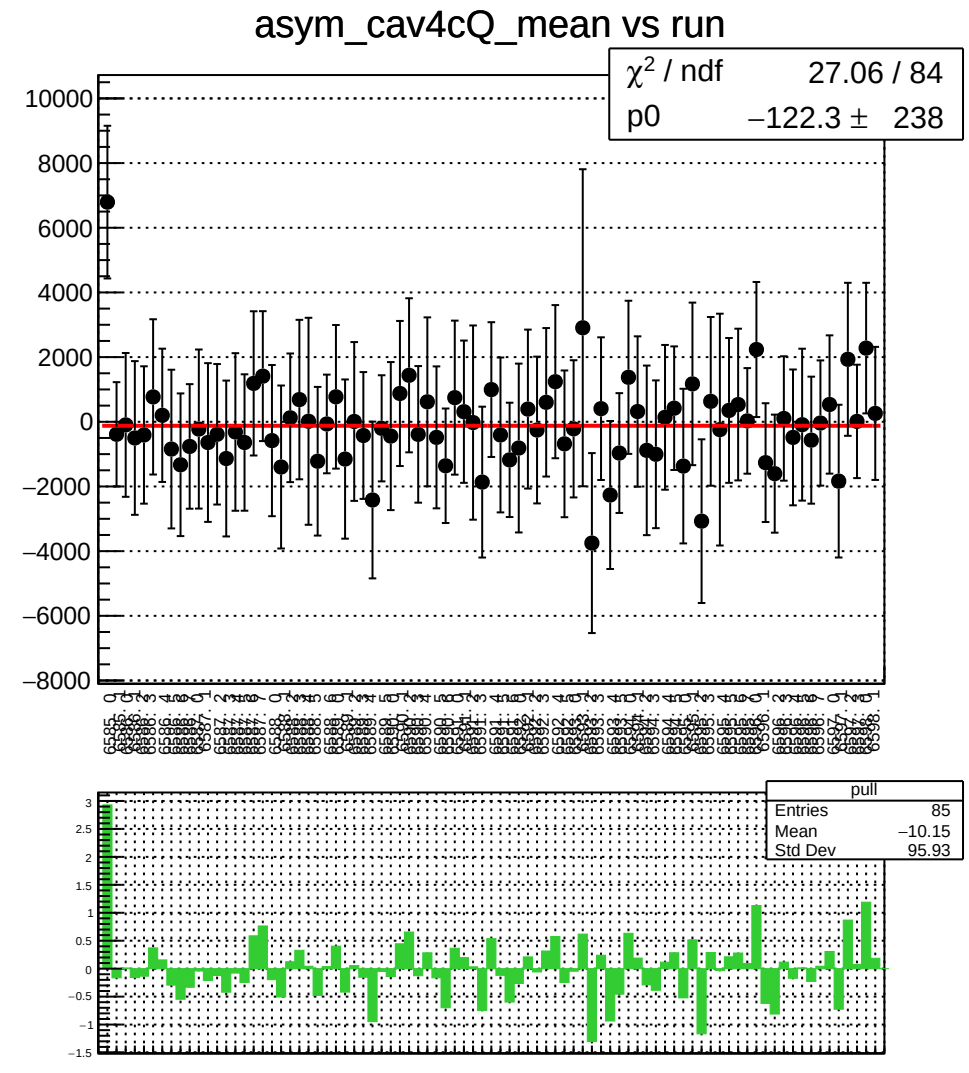

asym_bcm_dg_ds_mean vs run
χ² / ndf 24.56 / 84
p0 −62.44 ± 238.2
pull
Entries 85
Mean −76.2
Std Dev 87.25

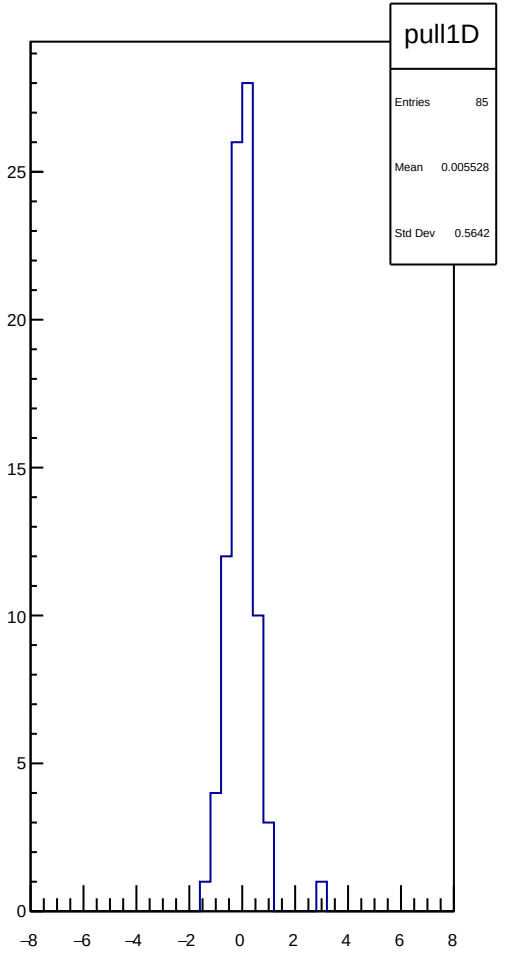

pull1D
Entries 85
Mean 0.008706
Std Dev 0.5375

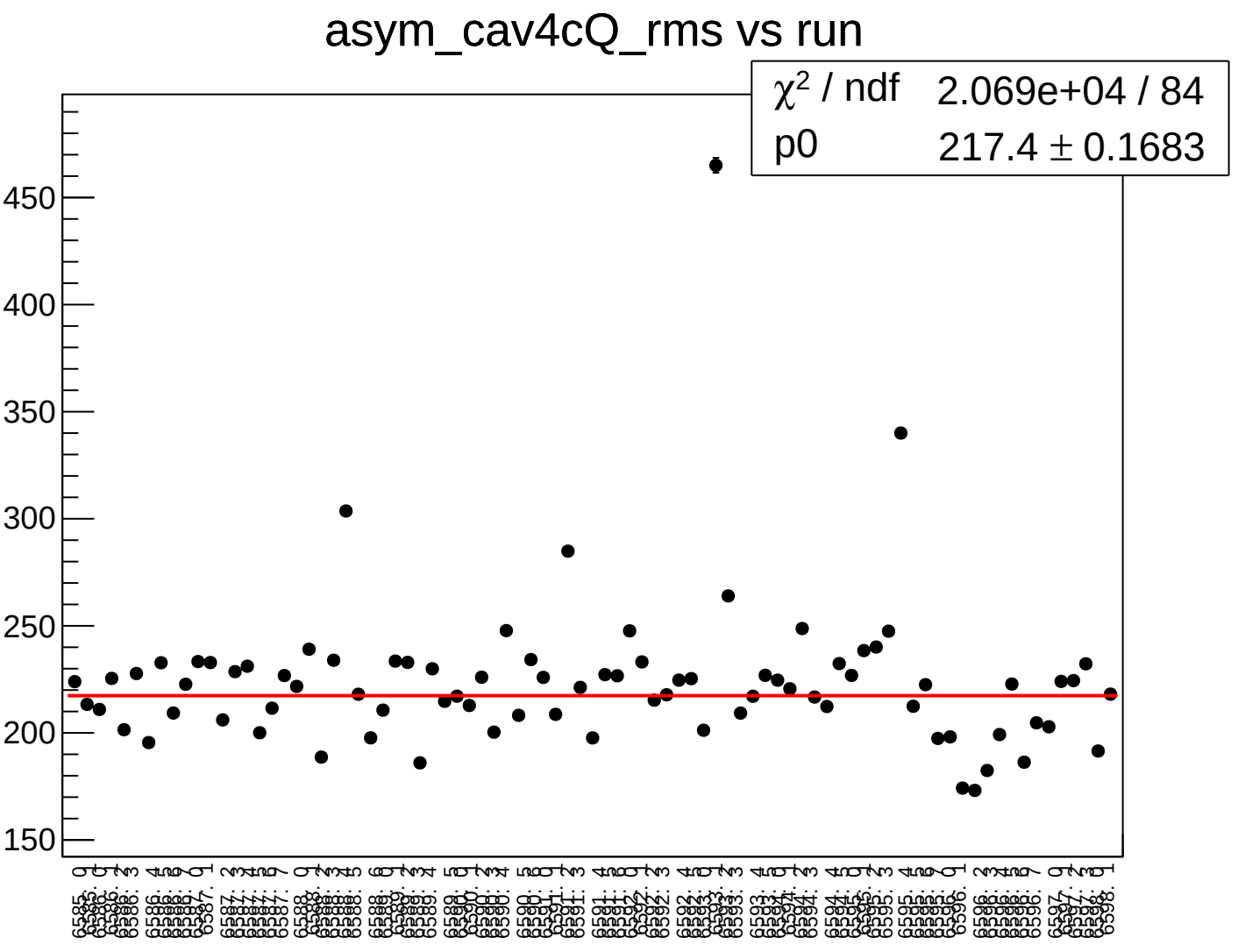

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.586e+04 / 84
p0 217.9 ± 0.1684
500
450
400
350
300
250
200
150

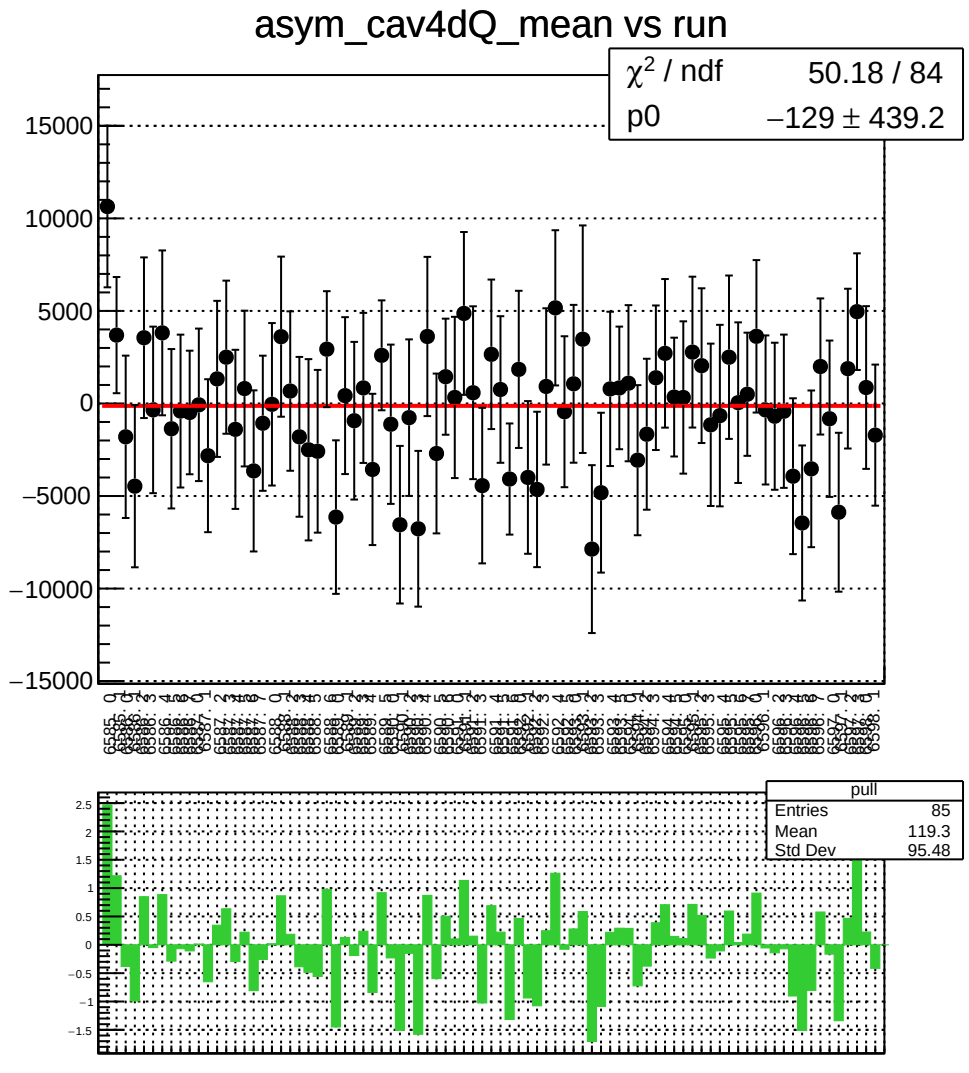

asym_cav4bQ_mean vs run
χ² / ndf 73.7 / 84
p0 −81.66 ± 356.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 46.5
Std Dev 185.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.00348
Std Dev 0.9312
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

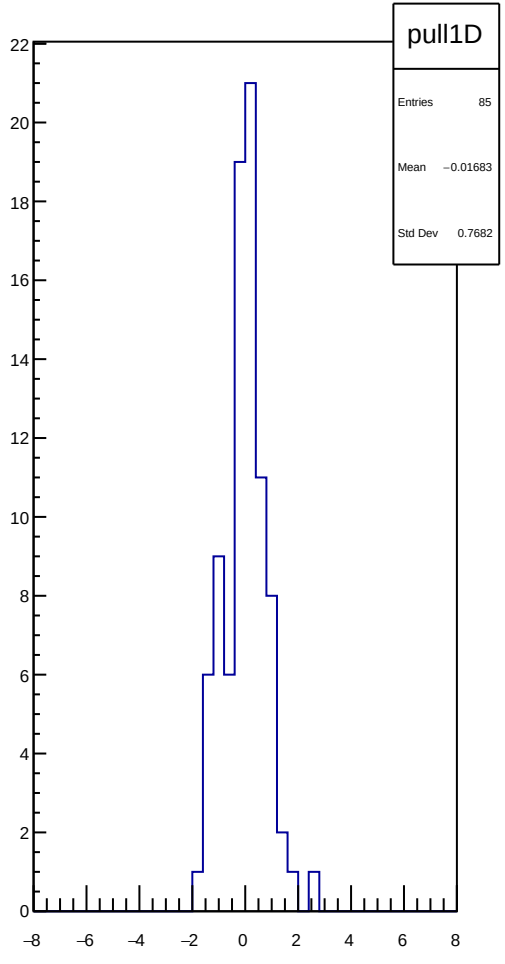

asym_cav4bQ_rms vs run
χ^2 / ndf 9742 / 84
p0 326.3 ± 0.2518
500
450
400
350
300
250

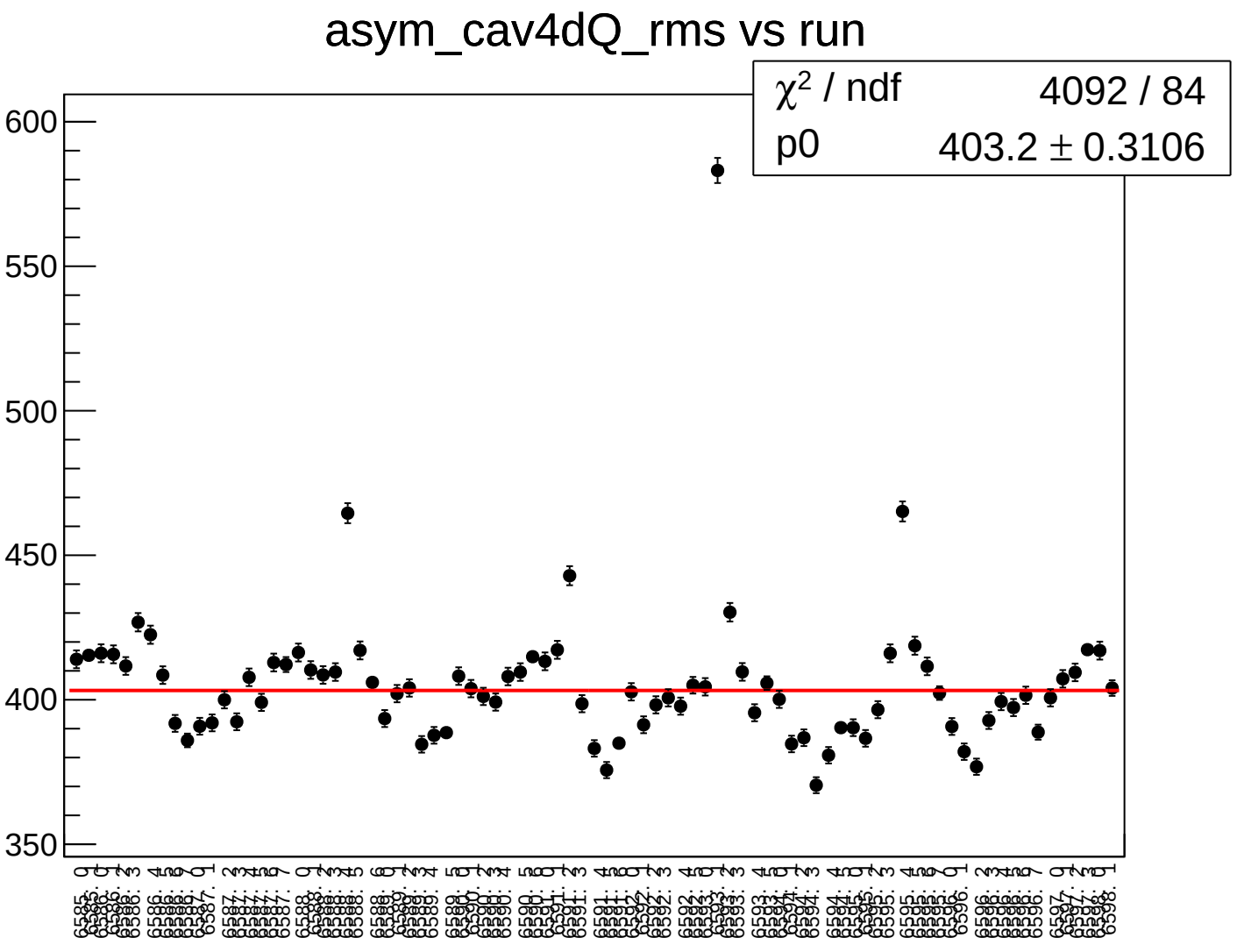

asym_cav4cQ_mean vs run
χ² / ndf 27.06 / 84
p0 −122.3 ± 238
pull
Entries 85
Mean −10.15
Std Dev 95.93

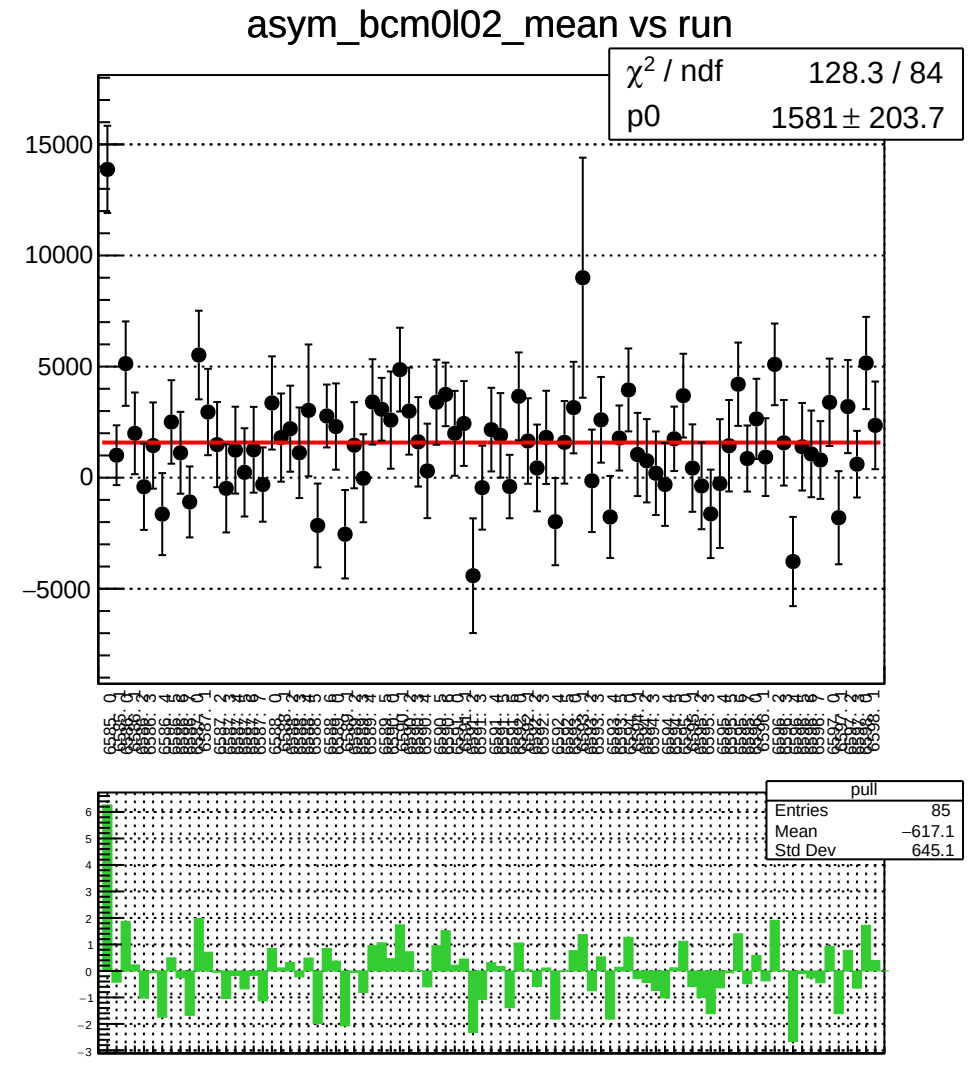

pull1D
Entries 85
Mean 0.005528
Std Dev 0.5642

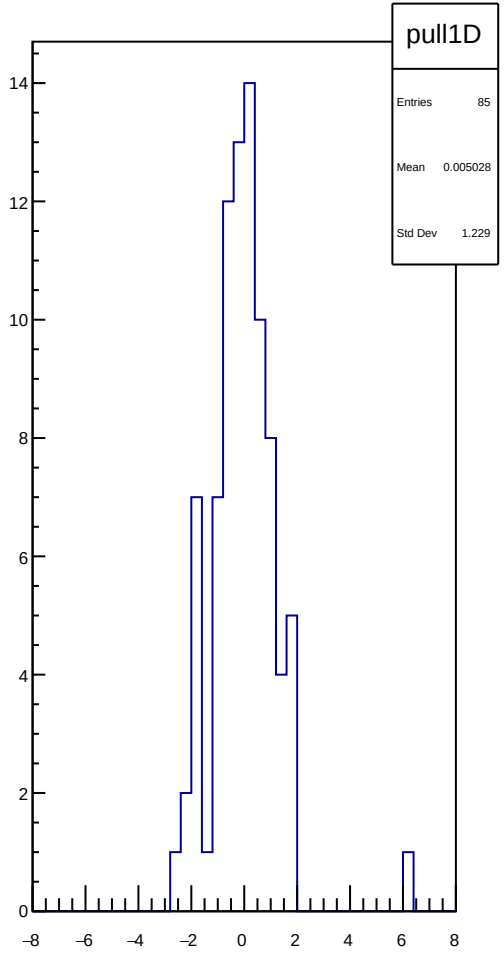

asym_cav4cQ_rms vs run
χ² / ndf 2.069e+04 / 84
p0 217.4 ± 0.1683
450
400
350
300
250
200
150

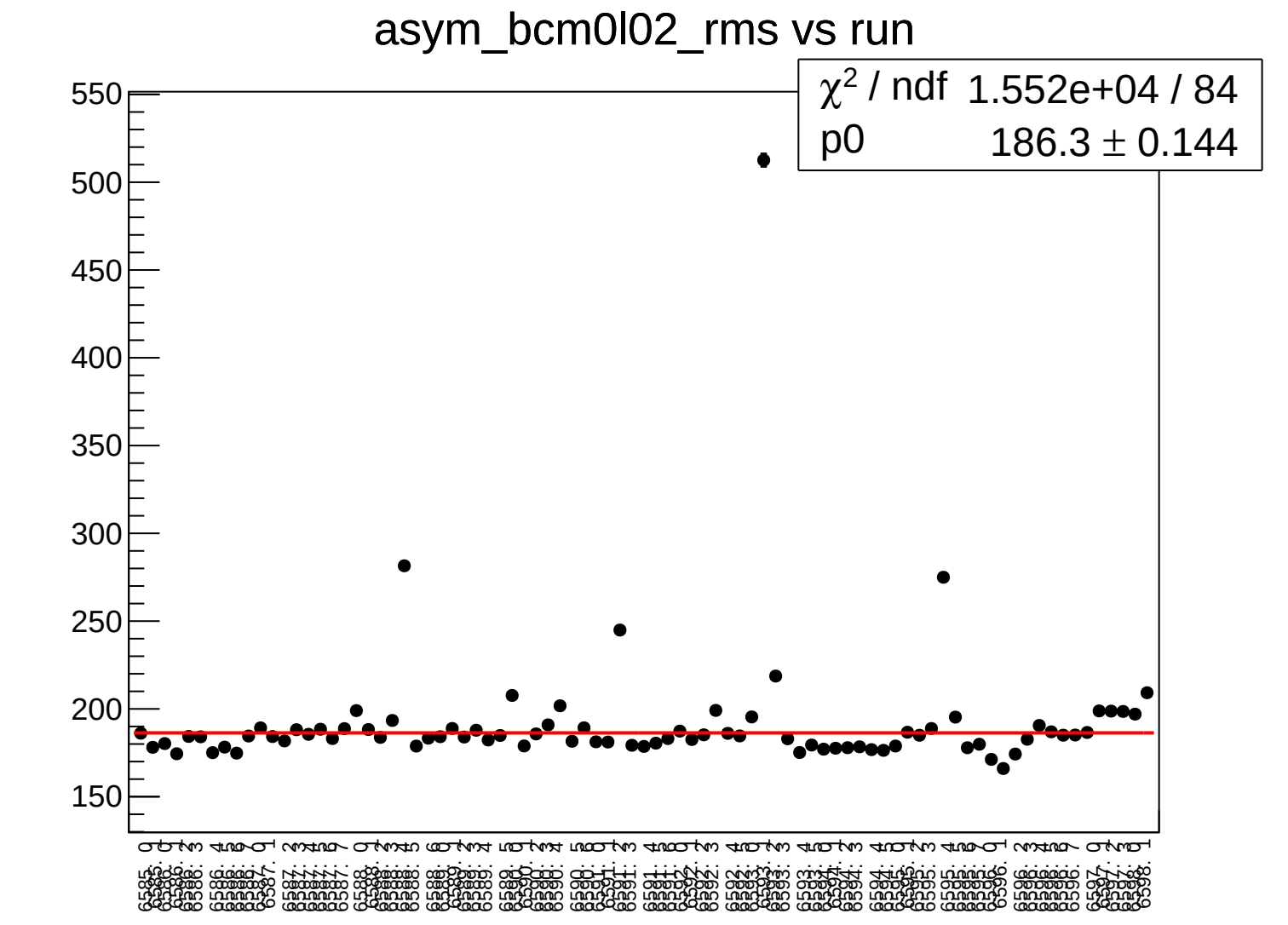

asym_cav4dQ_mean vs run
χ² / ndf 50.18 / 84
p0 −129 ± 439.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 119.3
Std Dev 95.48
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

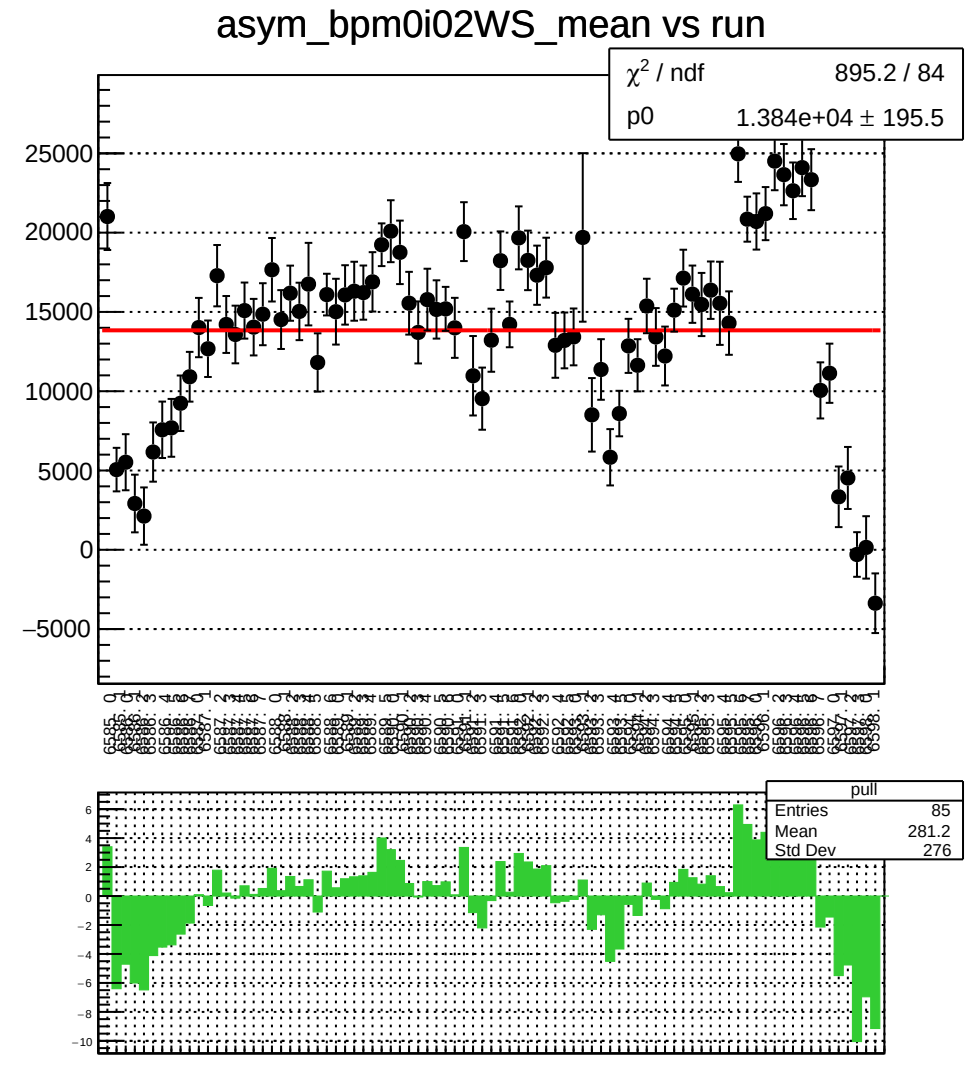

pull1D
Entries 85
Mean −0.01683
Std Dev 0.7682
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

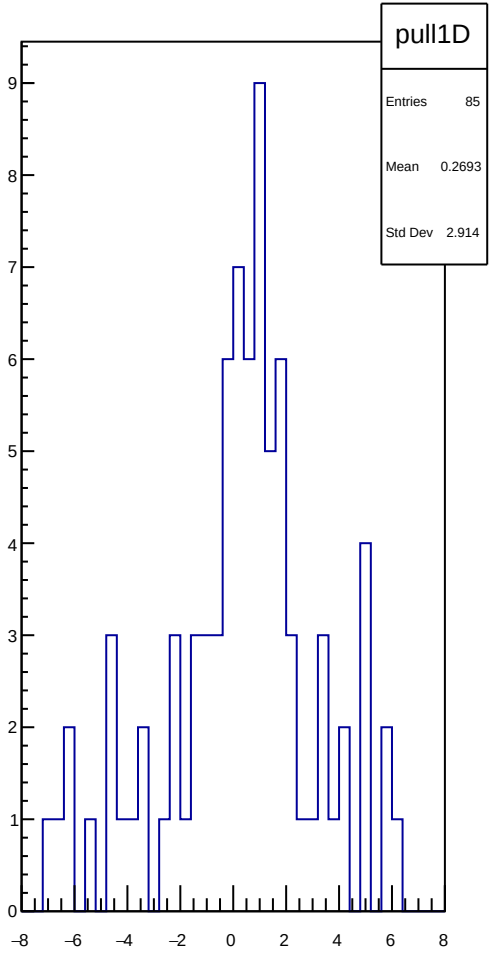

asym_cav4dQ_rms vs run
χ² / ndf 4092 / 84
p0 403.2 ± 0.3106
600
550
500
450
400
350

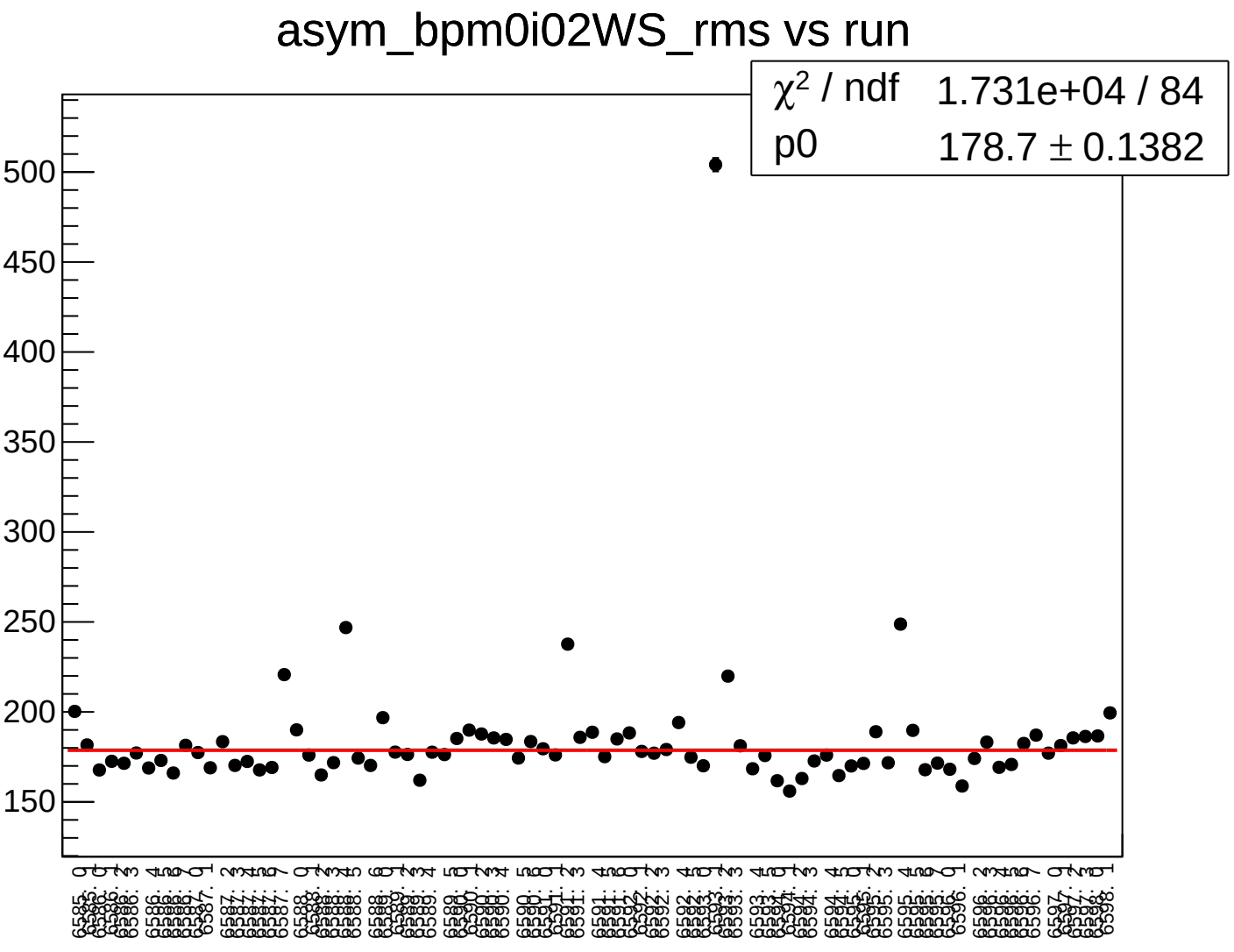

asym_bcm0l02_mean vs run
χ² / ndf 128.3 / 84
p0 1581 ± 203.7
15000
10000
5000
0
−5000
pull
Entries 85
Mean −617.1
Std Dev 645.1
6
5
4
3
2
1
0
−1
−2
−3

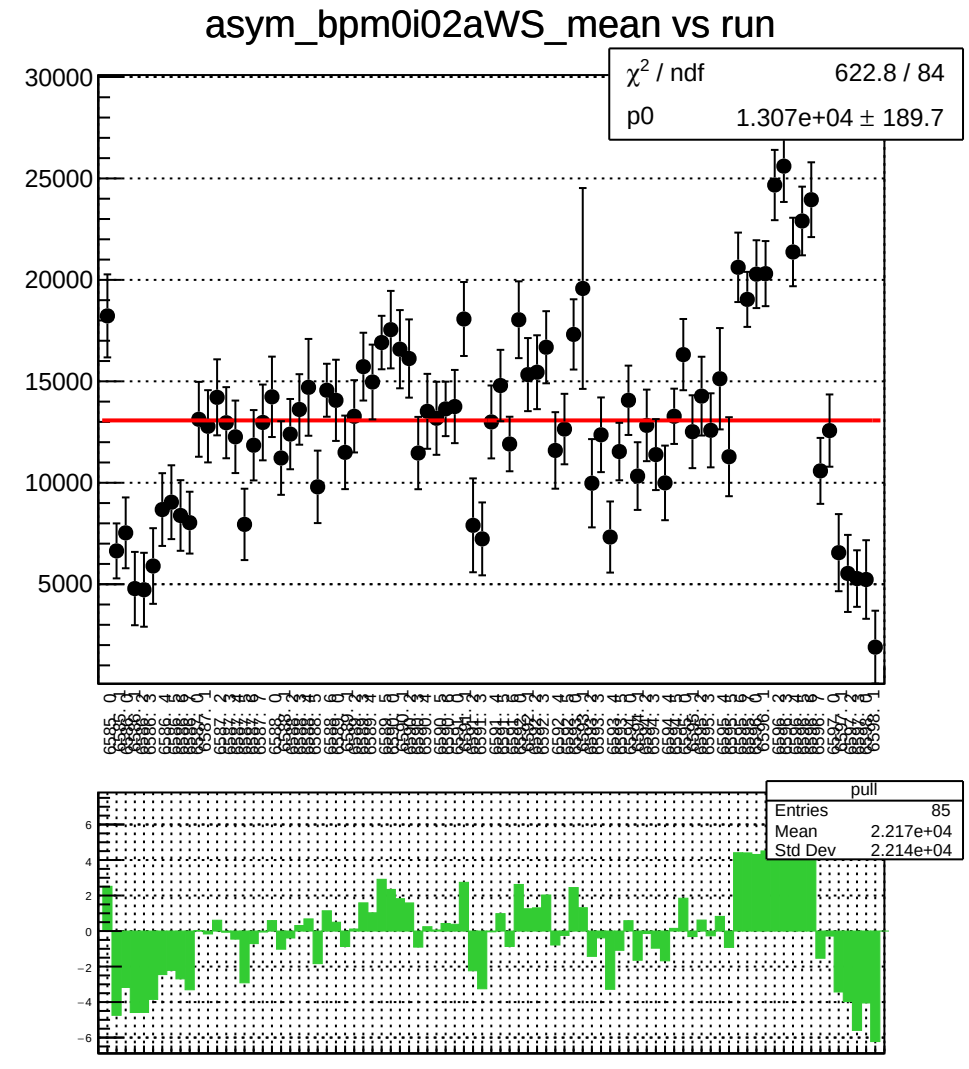

pull1D
Entries 85
Mean 0.005028
Std Dev 1.229
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

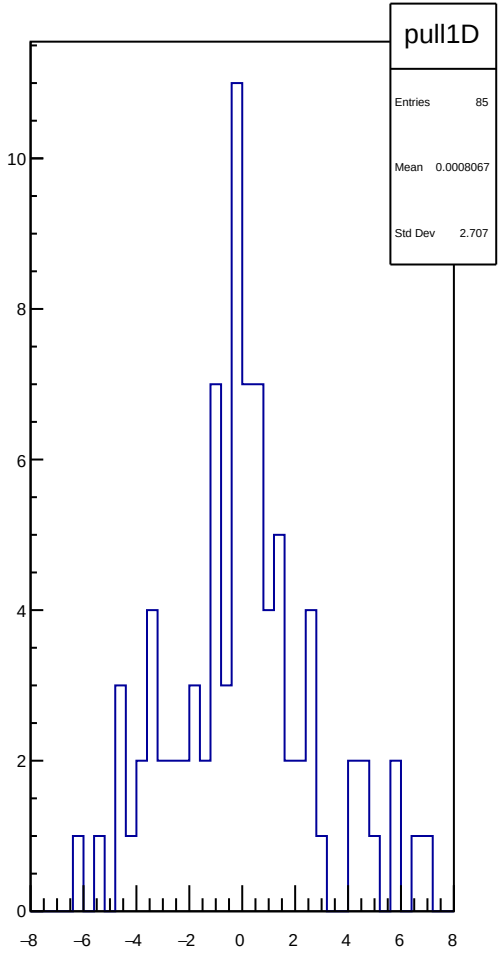

asym_bcm0l02_rms vs run
χ^2 / ndf 1.552e+04 / 84
p0 186.3 ± 0.144
550
500
450
400
350
300
250
200
150

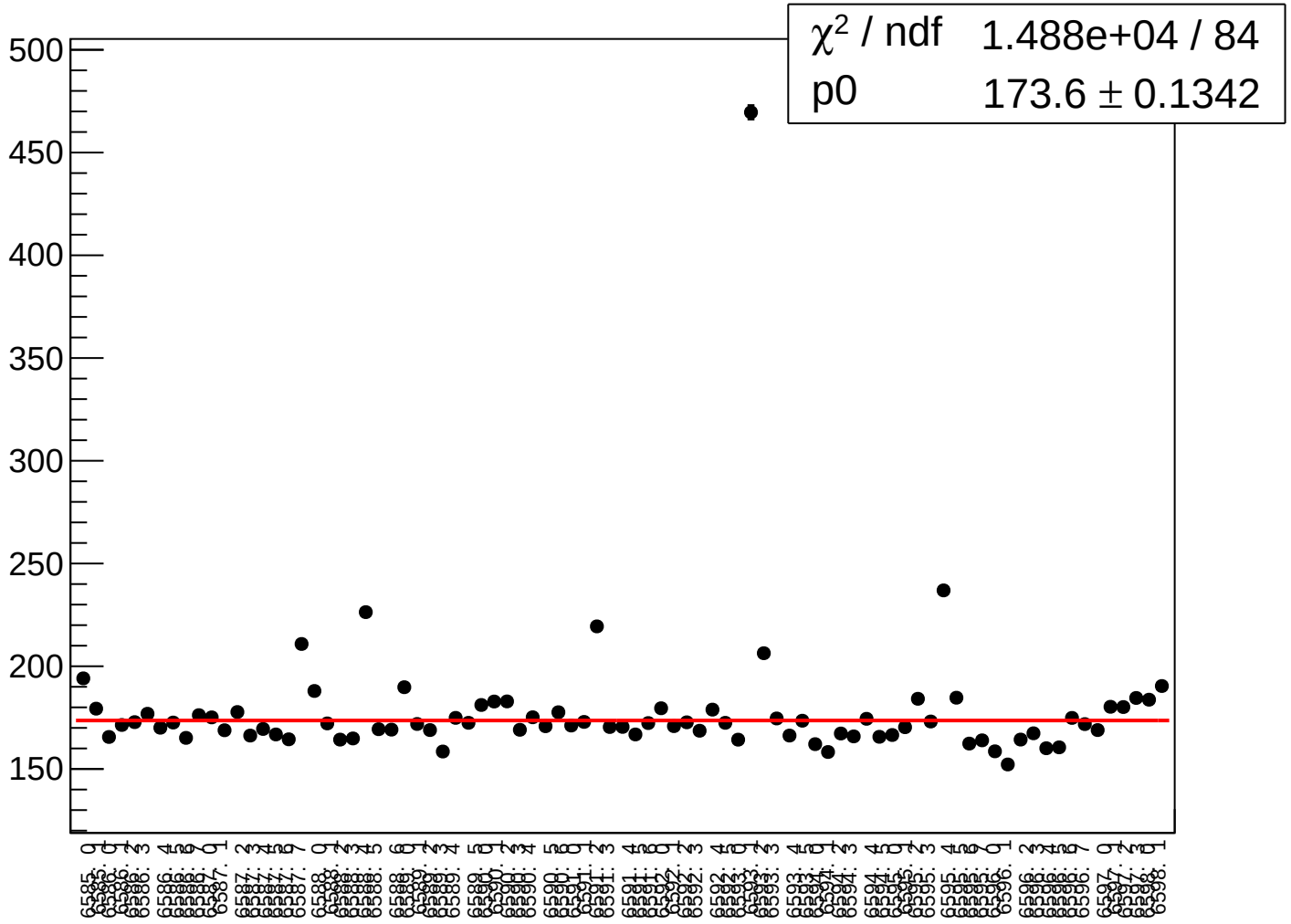

asym_bpm0i02WS_mean vs run
χ² / ndf 895.2 / 84
p0 1.384e+04 ± 195.5
pull
Entries 85
Mean 281.2
Std Dev 276

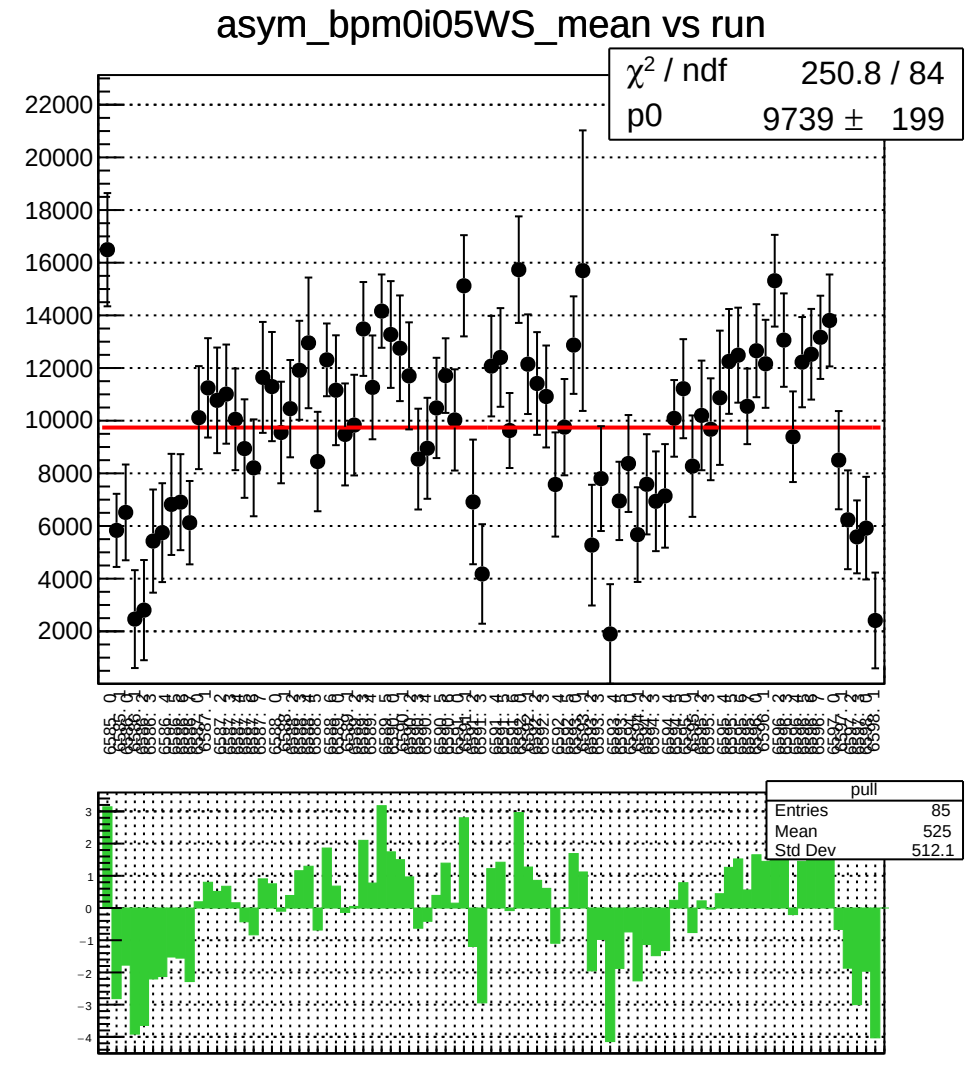

pull1D
Entries 85
Mean 0.2693
Std Dev 2.914

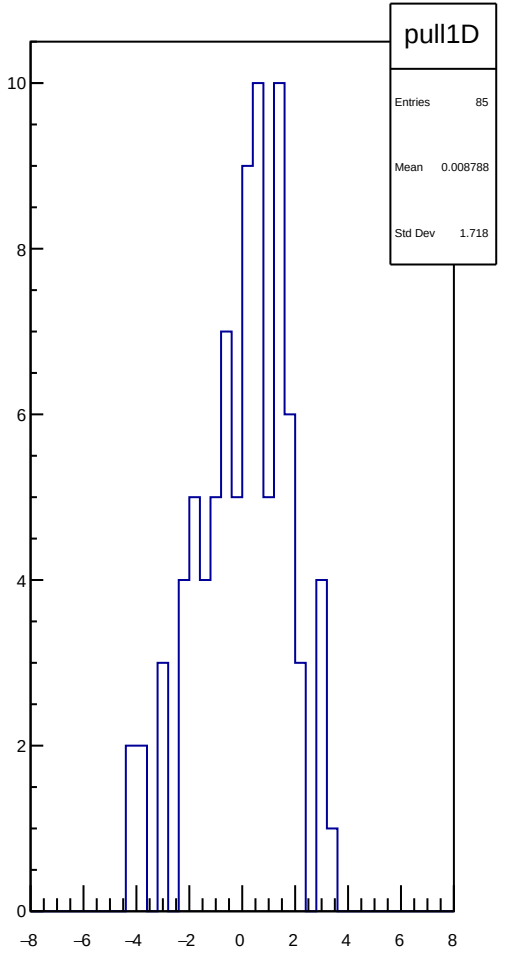

asym_bpm0i02WS_rms vs run
χ² / ndf 1.731e+04 / 84
p0 178.7 ± 0.1382
500
450
400
350
300
250
200
150

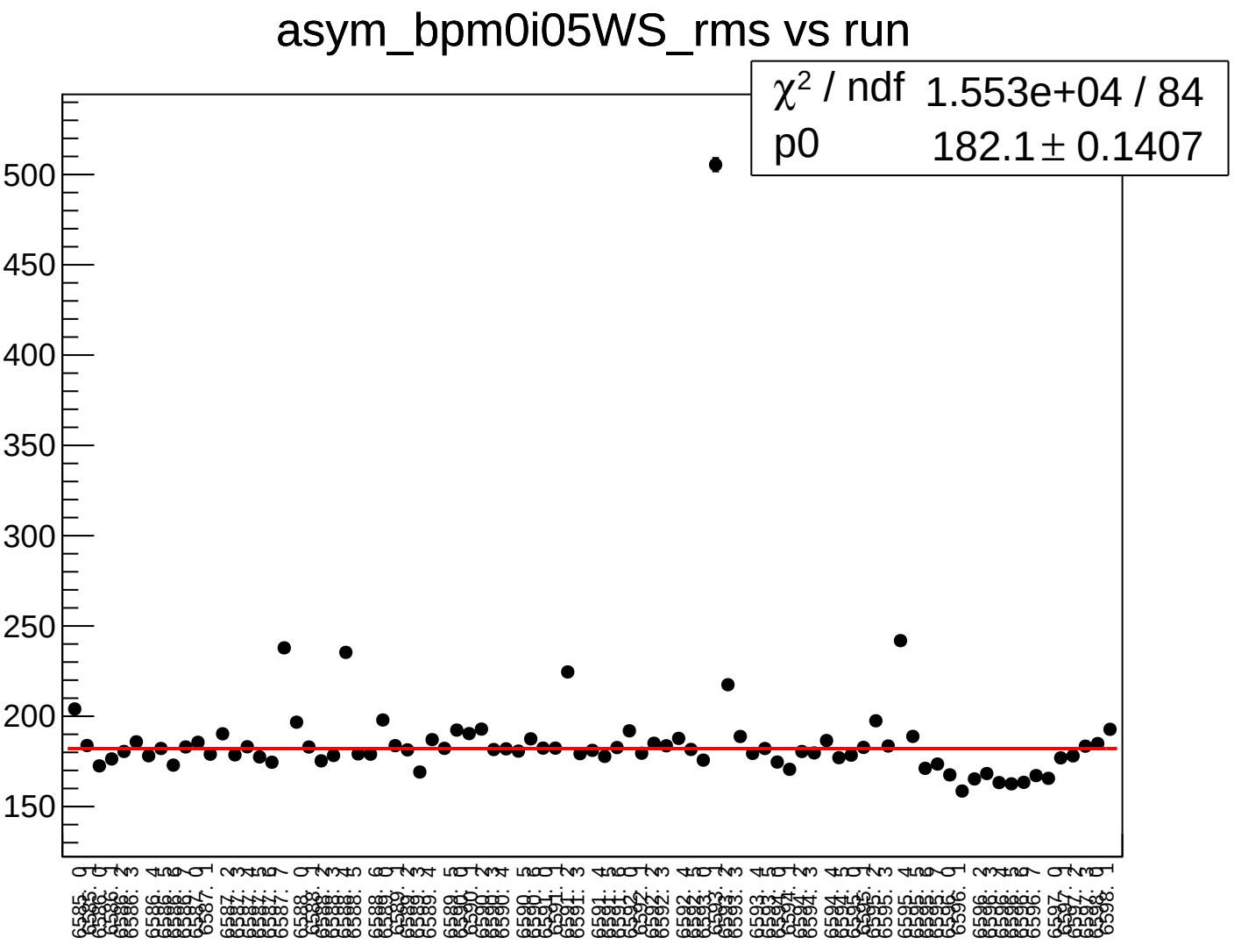

asym_bpm0i02aWS_mean vs run
χ² / ndf 622.8 / 84
p0 1.307e+04 ± 189.7
30000
25000
20000
15000
10000
5000
pull
Entries 85
Mean 2.217e+04
Std Dev 2.214e+04
6
4
2
0
−2
−4
−6

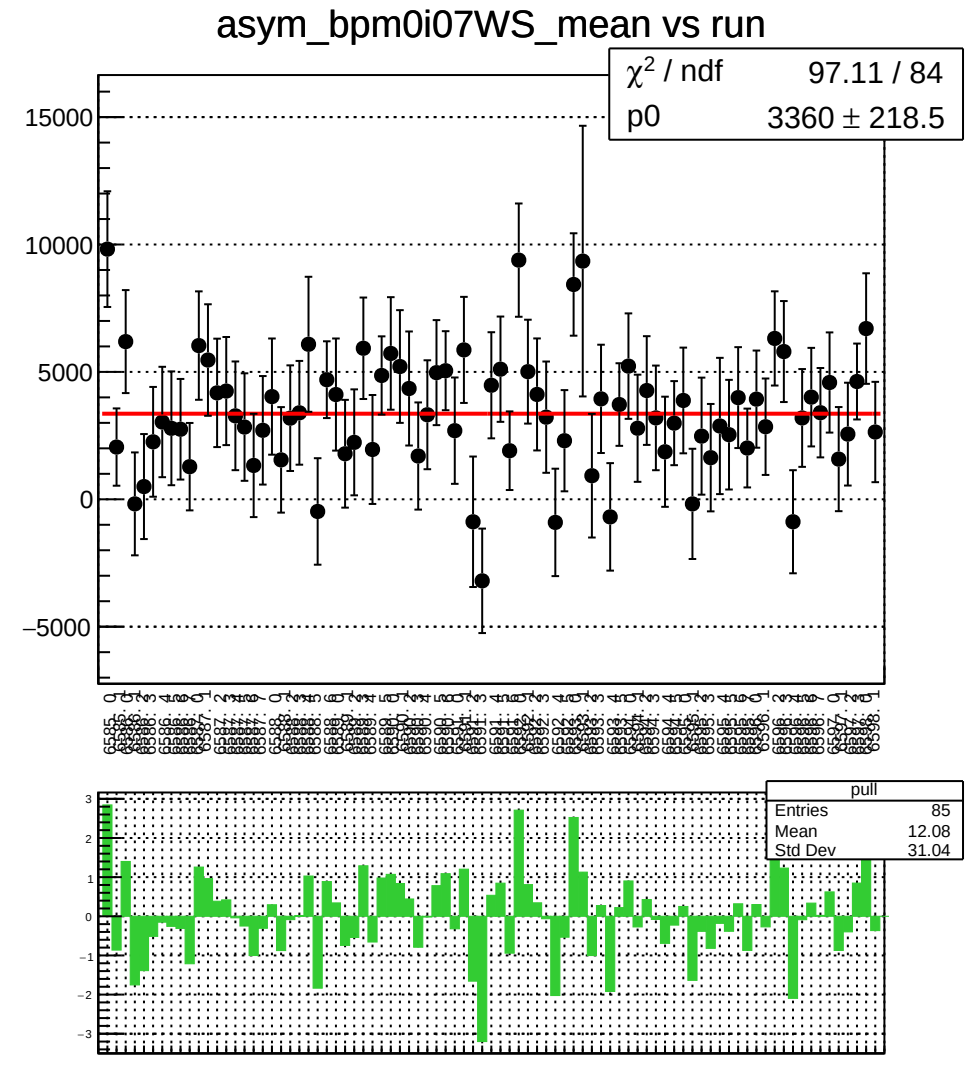

pull1D
Entries 85
Mean 0.0008067
Std Dev 2.707
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

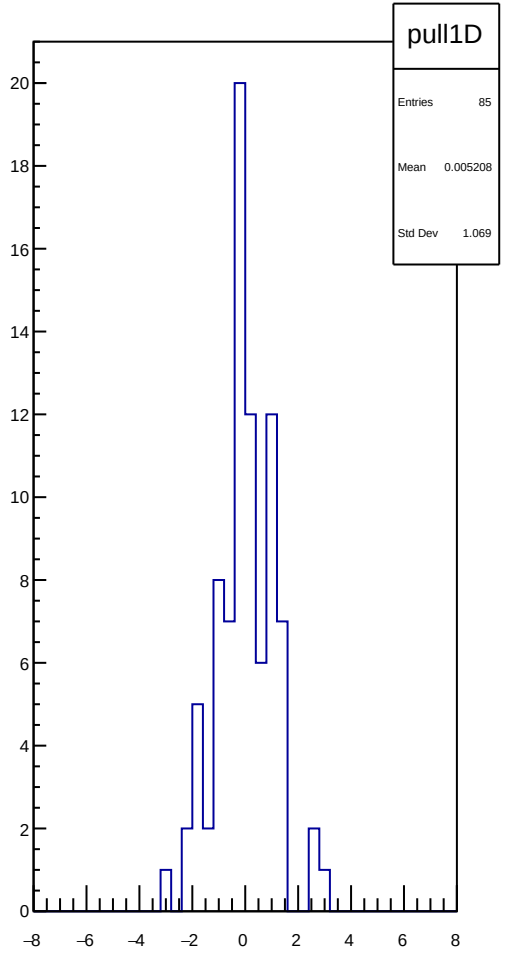

asym_bpm0i02aWS_rms vs run
χ² / ndf 1.488e+04 / 84
p0 173.6 ± 0.1342
500
450
400
350
300
250
200
150

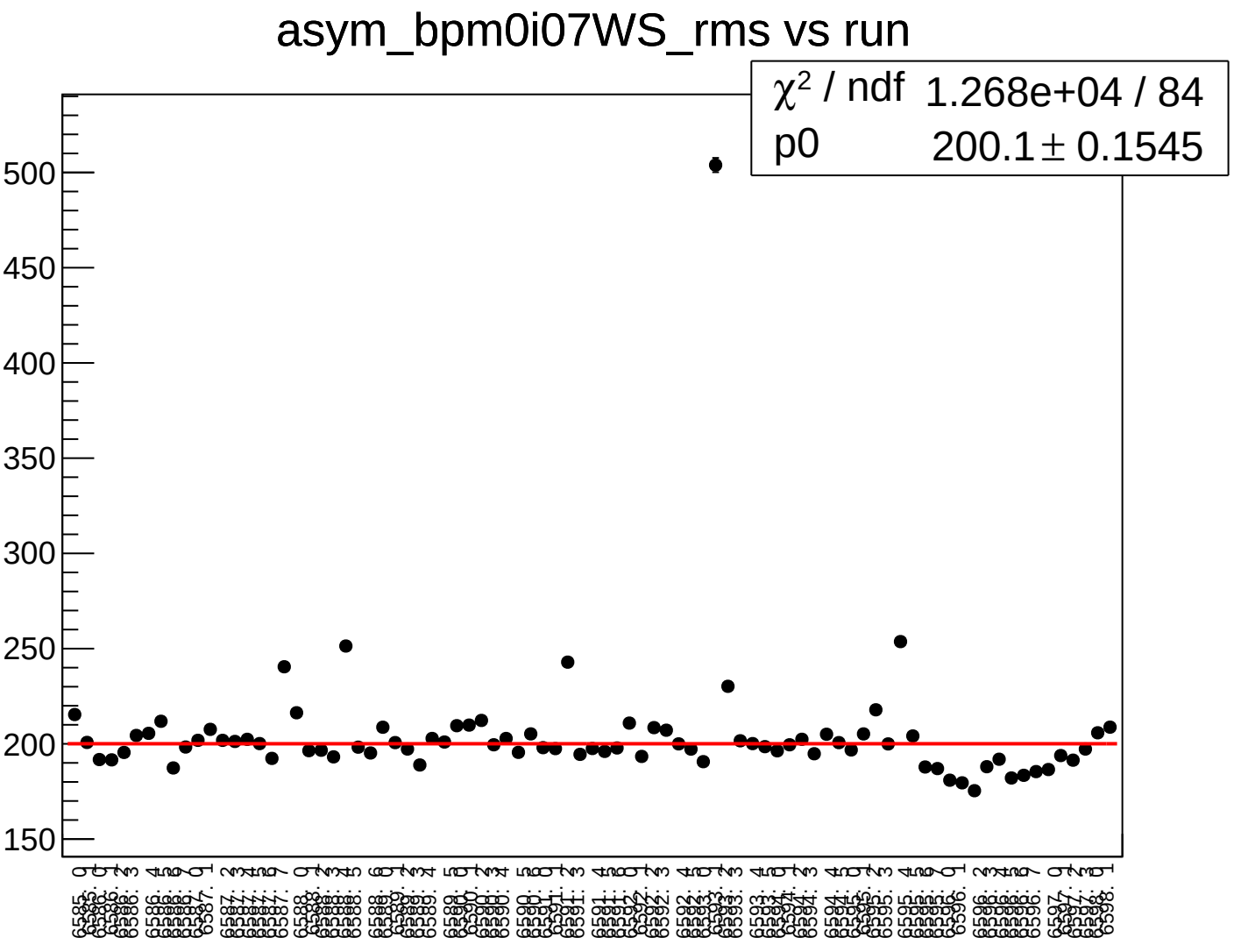

asym_bpm0i05WS_mean vs run
χ² / ndf 250.8 / 84
p0 9739 ± 199
pull
Entries 85
Mean 525
Std Dev 512.1

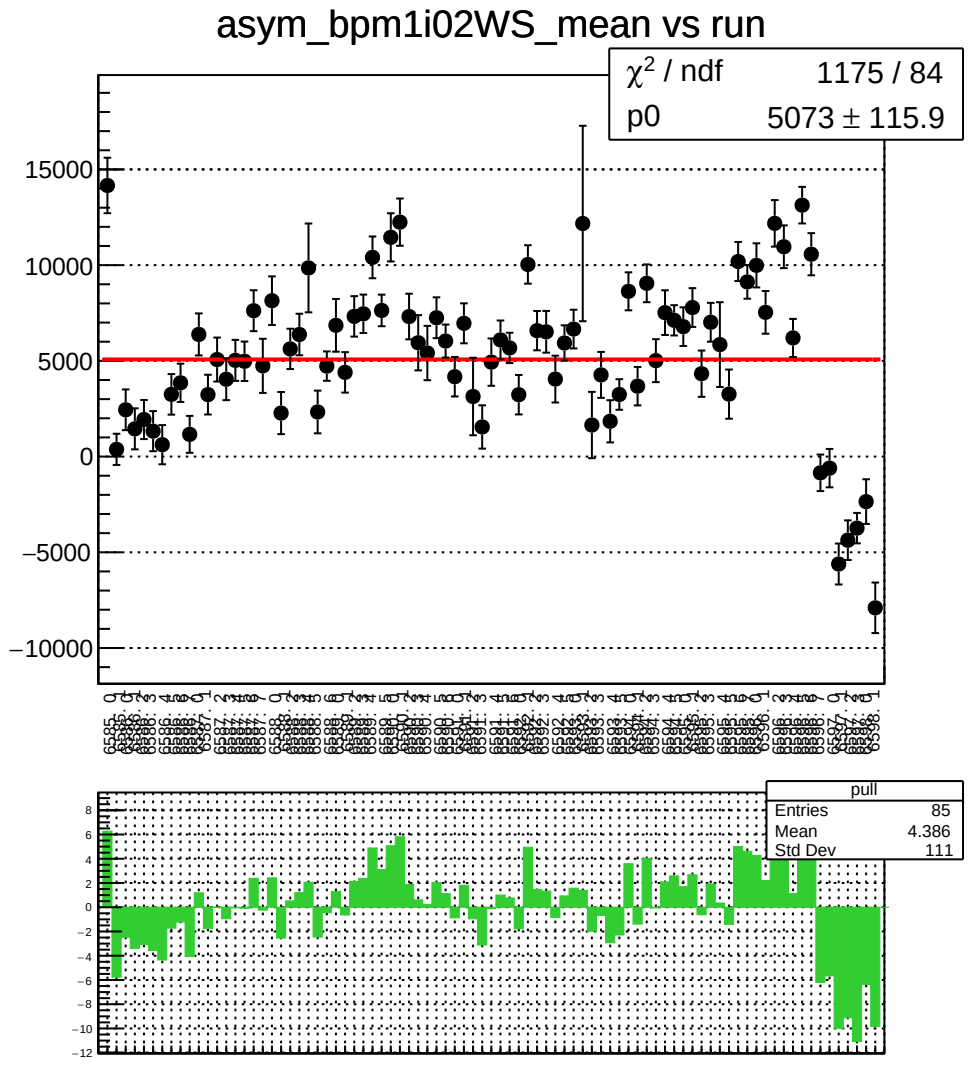

pull1D
Entries 85
Mean 0.008788
Std Dev 1.718

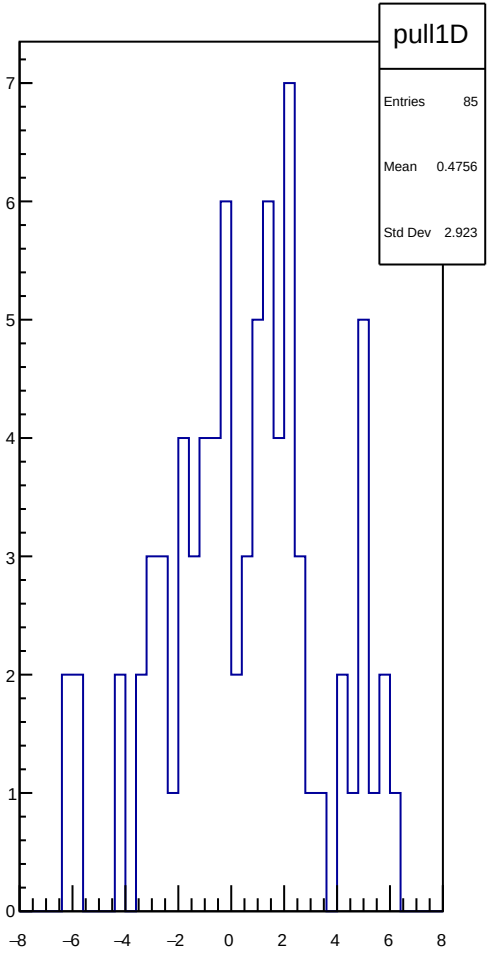

asym_bpm0i05WS_rms vs run
χ² / ndf 1.553e+04 / 84
p0 182.1 ± 0.1407
500
450
400
350
300
250
200
150

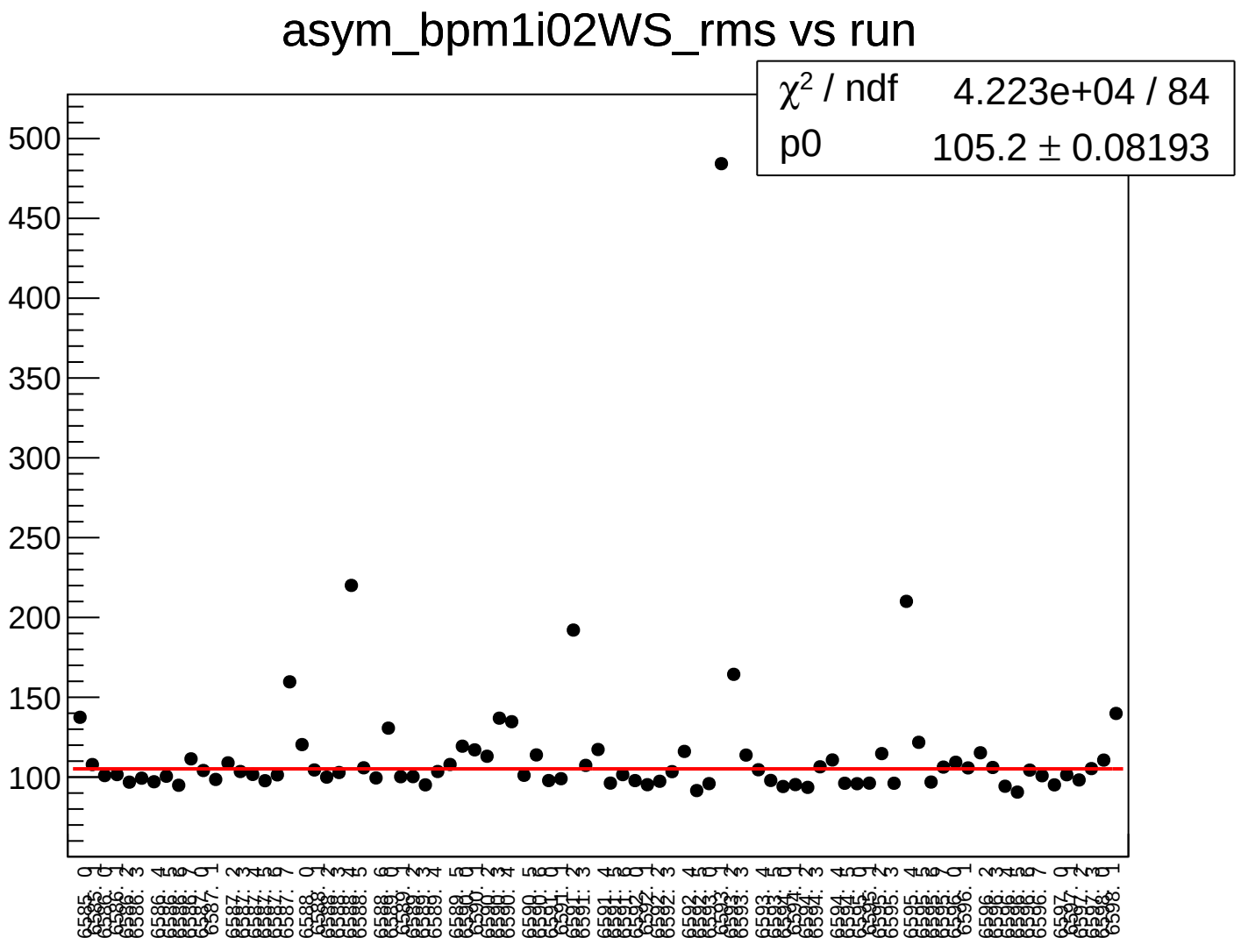

asym_bpm0i07WS_mean vs run
χ² / ndf 97.11 / 84
p0 3360 ± 218.5
15000
10000
5000
0
−5000
pull
Entries 85
Mean 12.08
Std Dev 31.04
3
2
1
0
−1
−2
−3

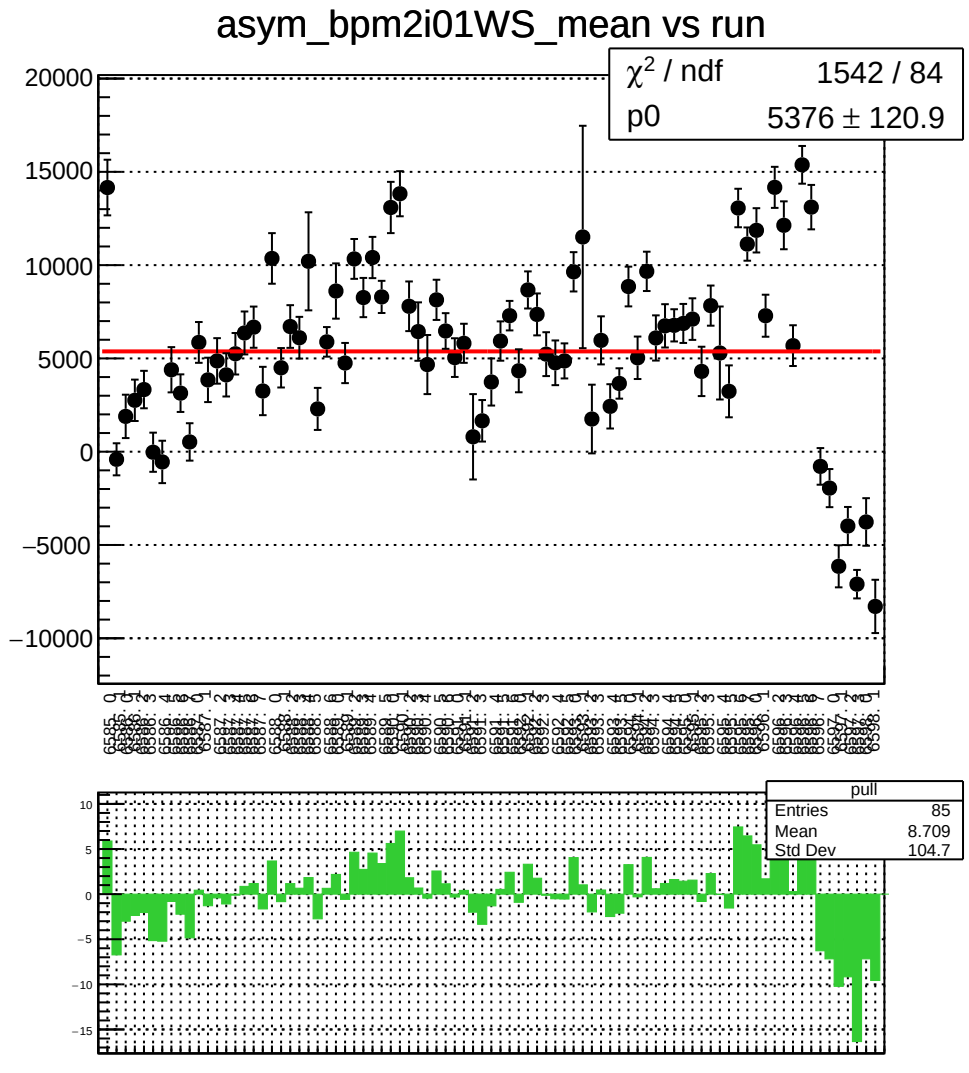

pull1D
Entries 85
Mean 0.005208
Std Dev 1.069
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

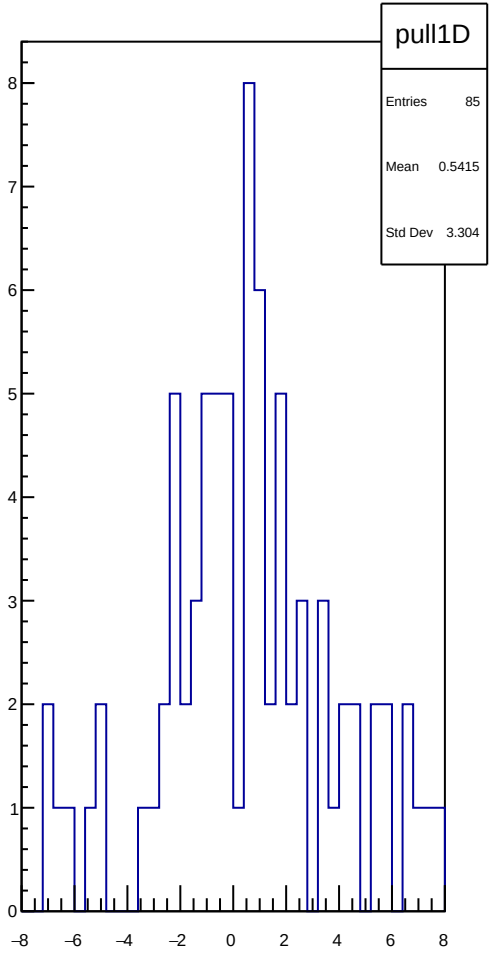

asym_bpm0i07WS_rms vs run
χ² / ndf 1.268e+04 / 84
p0 200.1 ± 0.1545
500
450
400
350
300
250
200
150

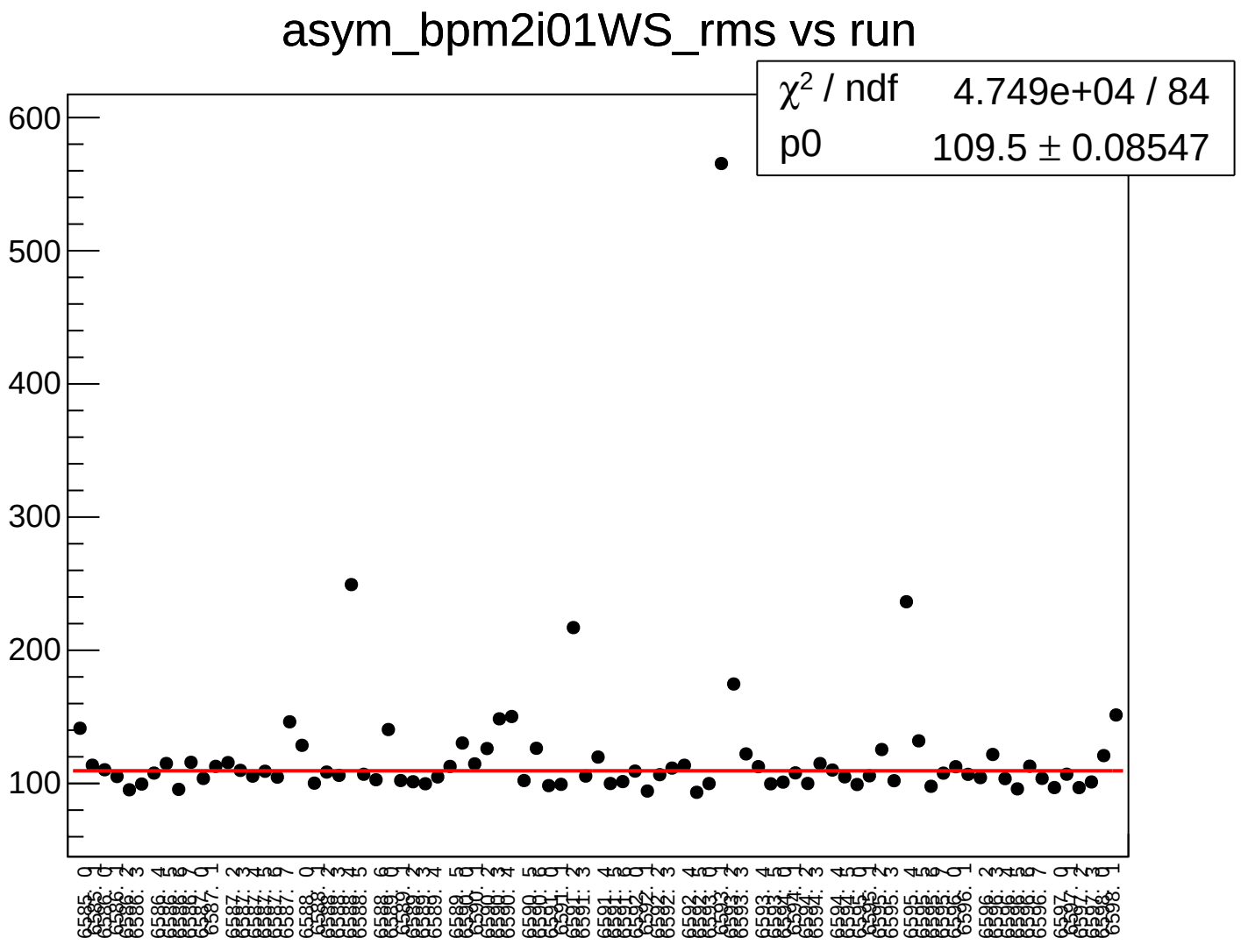

asym_bpm1i02WS_mean vs run
χ² / ndf 1175 / 84
p0 5073 ± 115.9
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 4.386
Std Dev 111
8
6
4
2
0
−2
−4
−6
−8
−10
−12

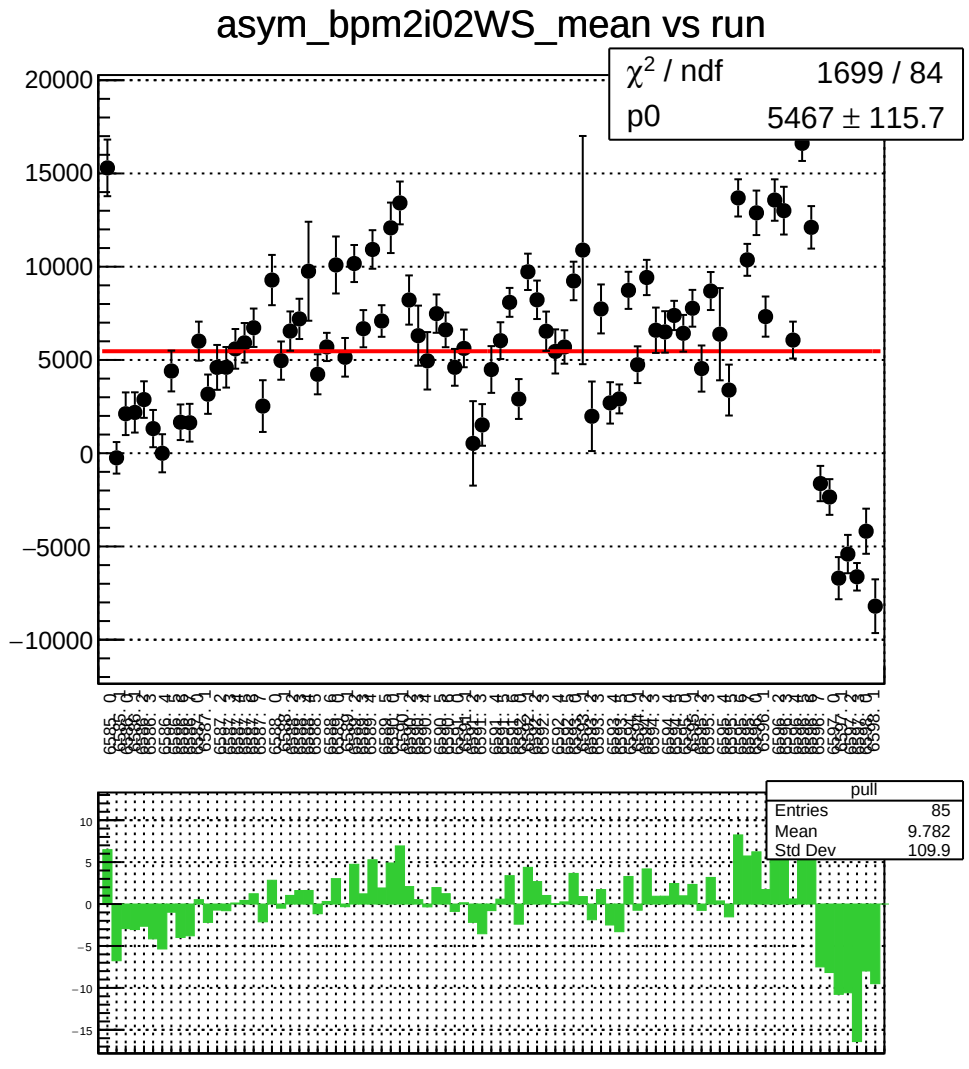

pull1D
Entries 85
Mean 0.4756
Std Dev 2.923
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

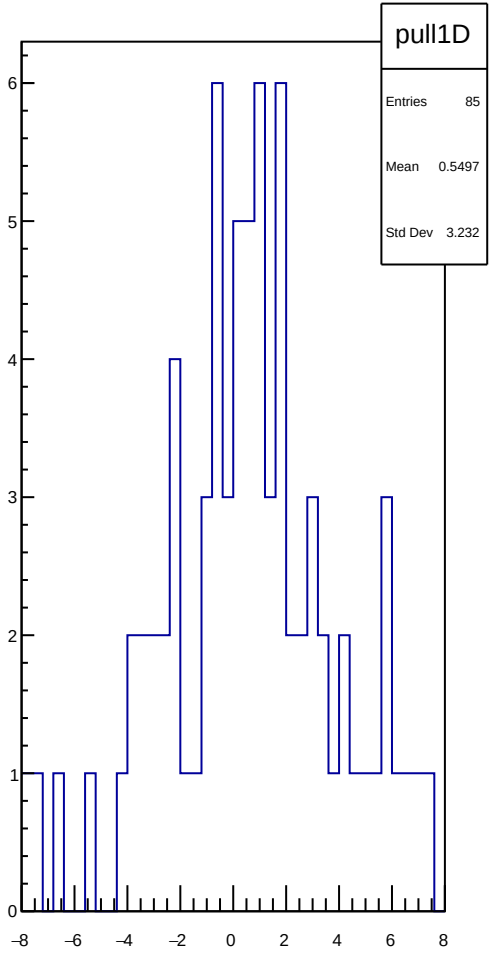

asym_bpm1i02WS_rms vs run
χ^2 / ndf 4.223e+04 / 84
p0 105.2 ± 0.08193
500
450
400
350
300
250
200
150
100

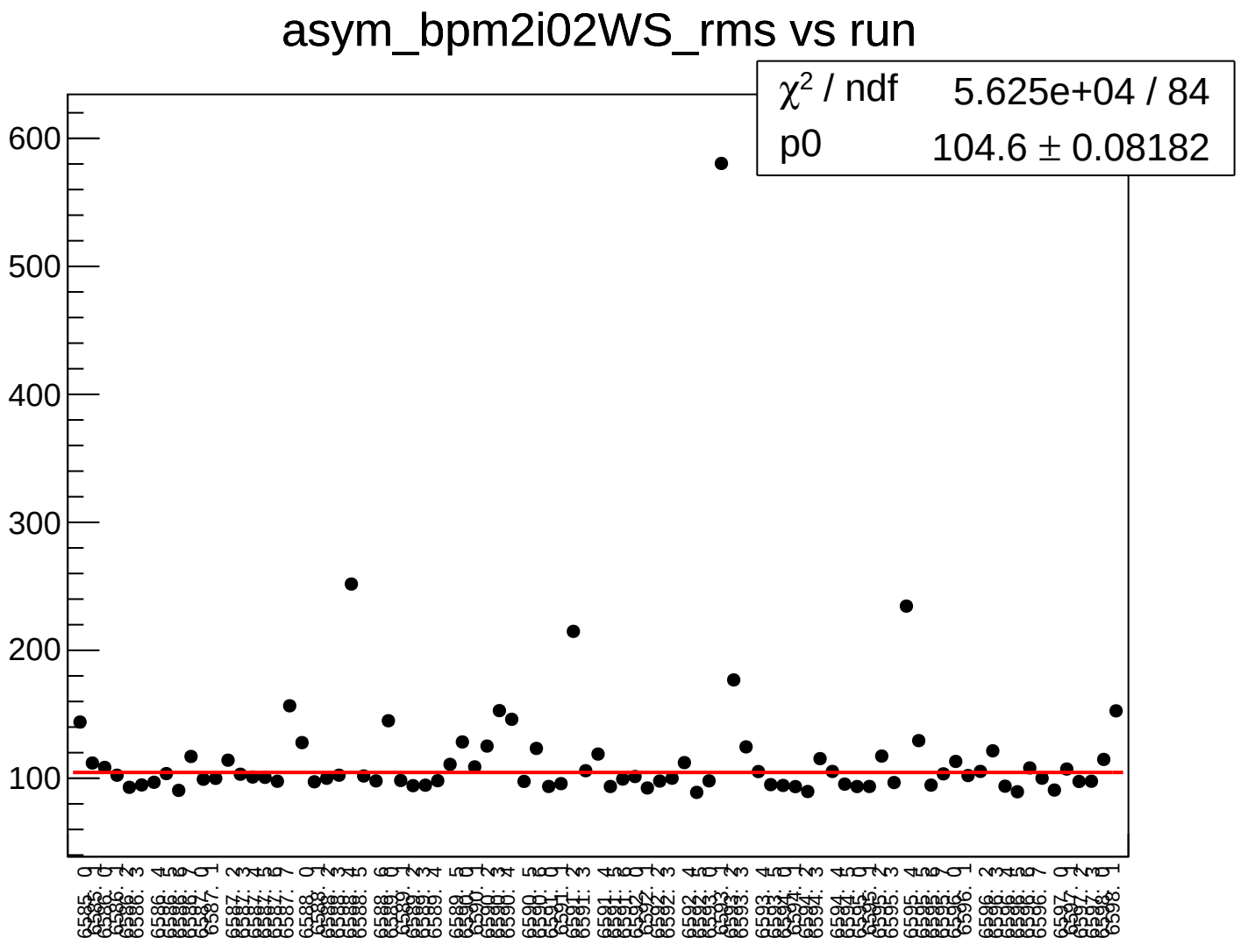

asym_bpm2i01WS_mean vs run
χ² / ndf 1542 / 84
p0 5376 ± 120.9
pull
Entries 85
Mean 8.709
Std Dev 104.7

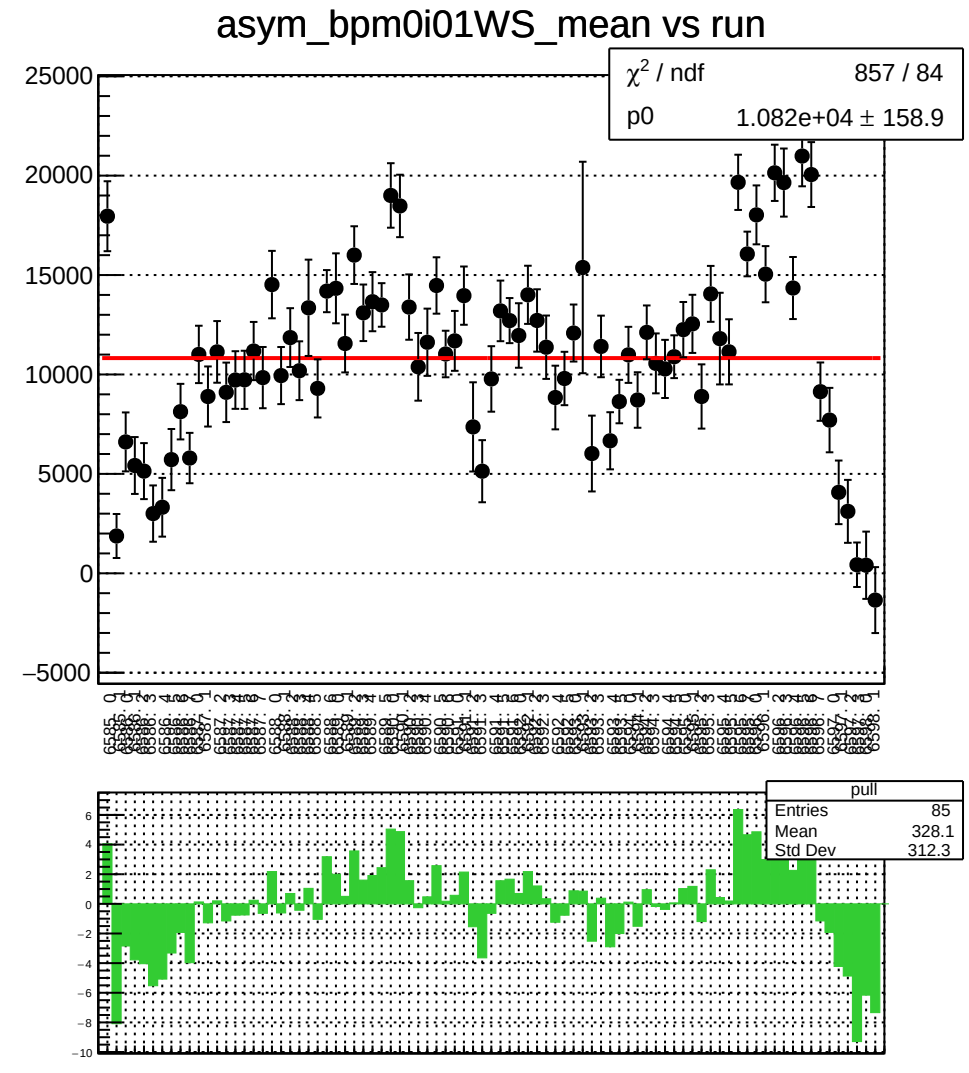

pull1D
Entries 85
Mean 0.5415
Std Dev 3.304

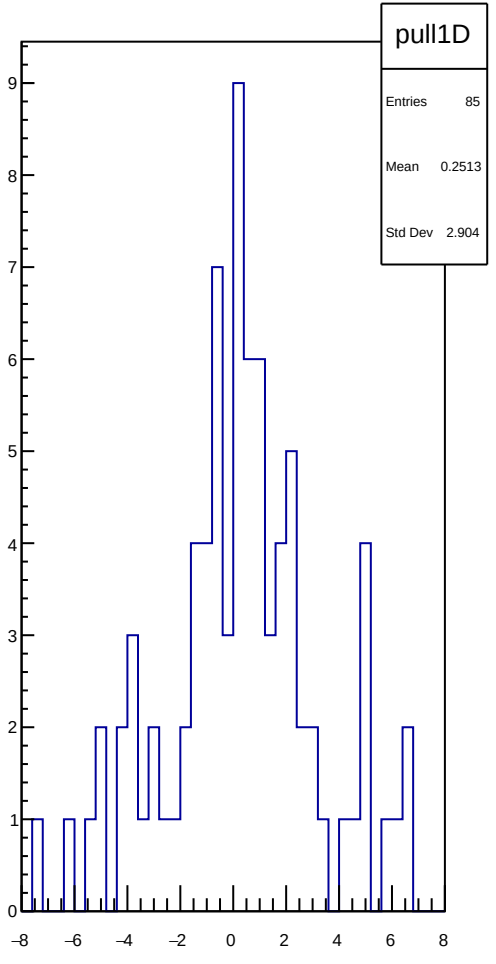

asym_bpm2i01WS_rms vs run
χ² / ndf 4.749e+04 / 84
p0 109.5 ± 0.08547
600
500
400
300
200
100

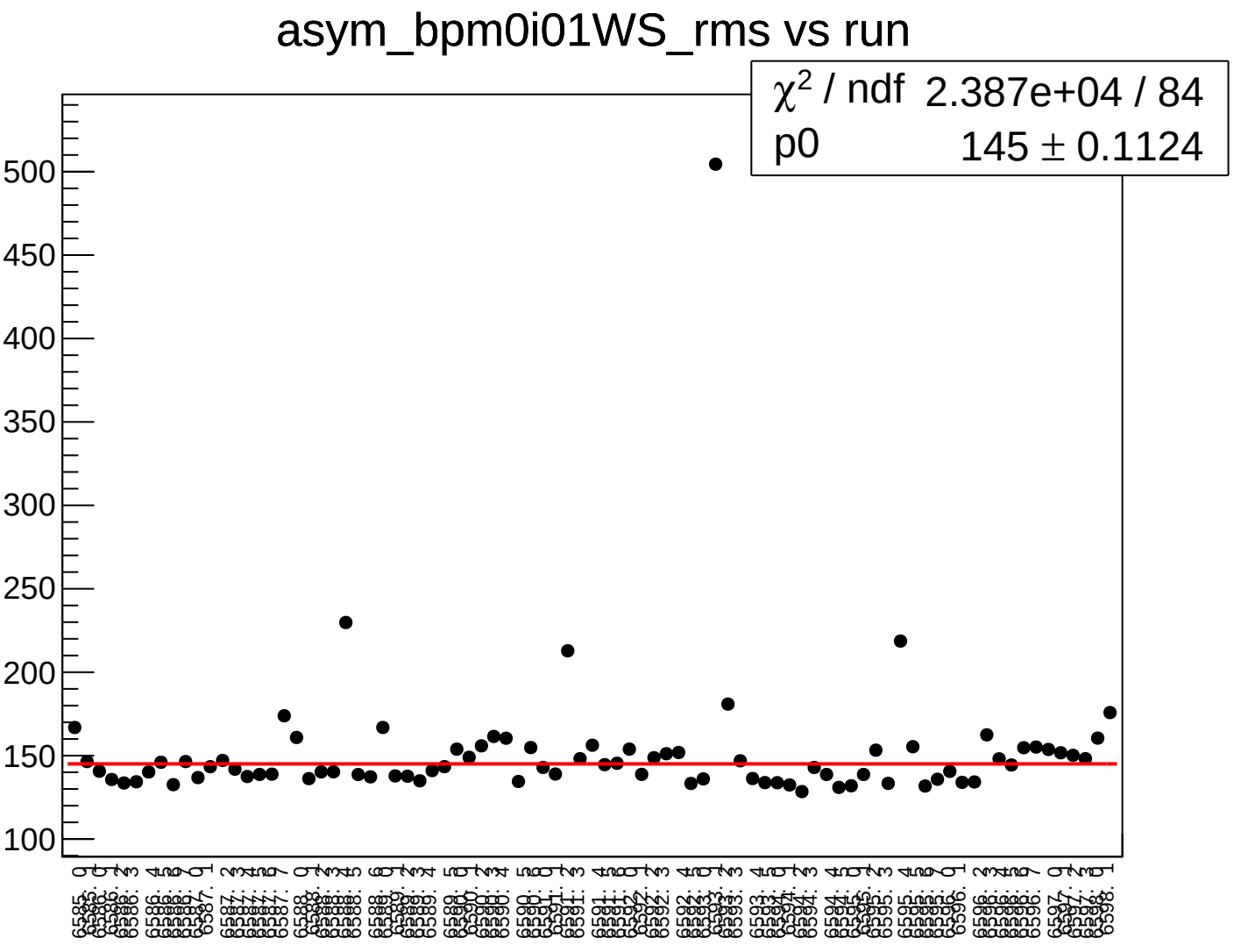

asym_bpm2i02WS_mean vs run
χ² / ndf 1699 / 84
p0 5467 ± 115.7
pull
Entries 85
Mean 9.782
Std Dev 109.9

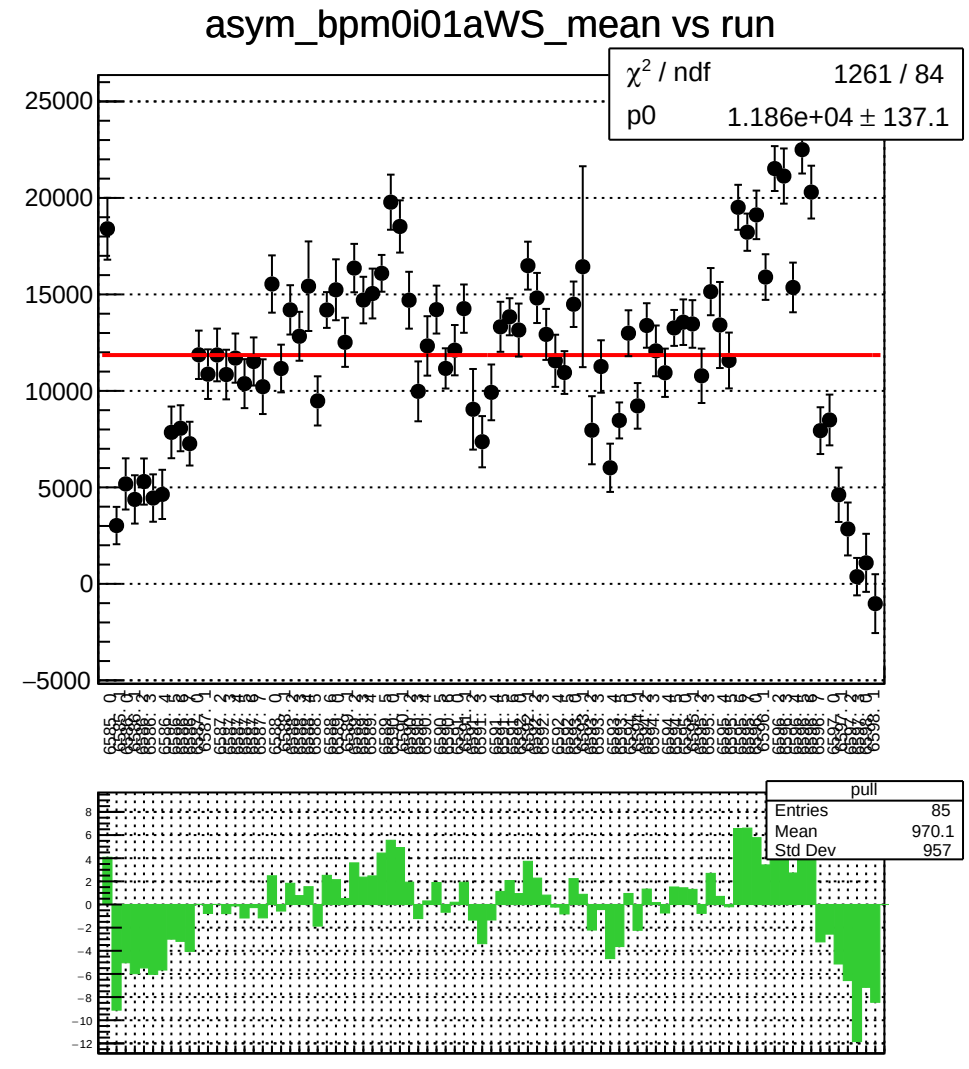

pull1D
Entries 85
Mean 0.5497
Std Dev 3.232

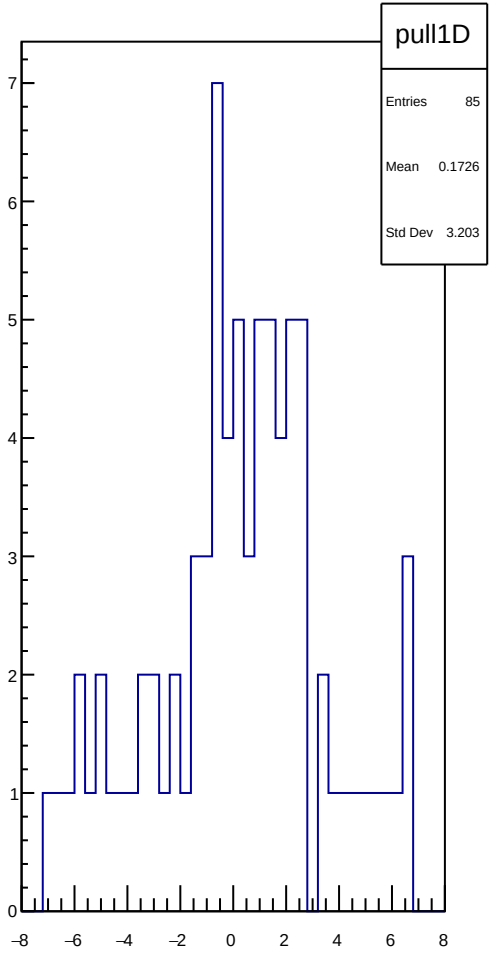

asym_bpm2i02WS_rms vs run
χ^2 / ndf 5.625e+04 / 84
p0 104.6 ± 0.08182
600
500
400
300
200
100

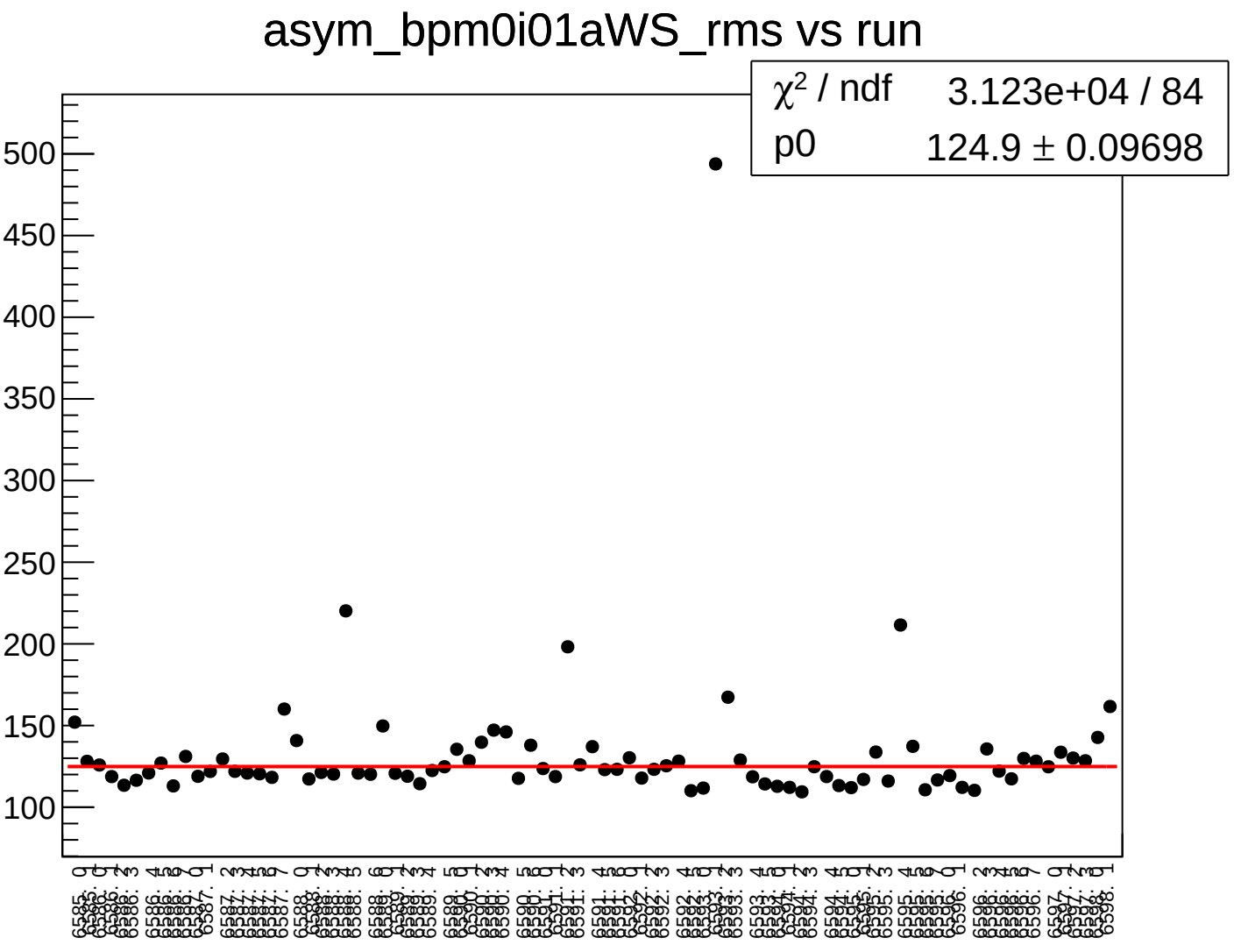

asym_bpm0i01WS_mean vs run
χ² / ndf 857 / 84
p0 1.082e+04 ± 158.9
pull
Entries 85
Mean 328.1
Std Dev 312.3

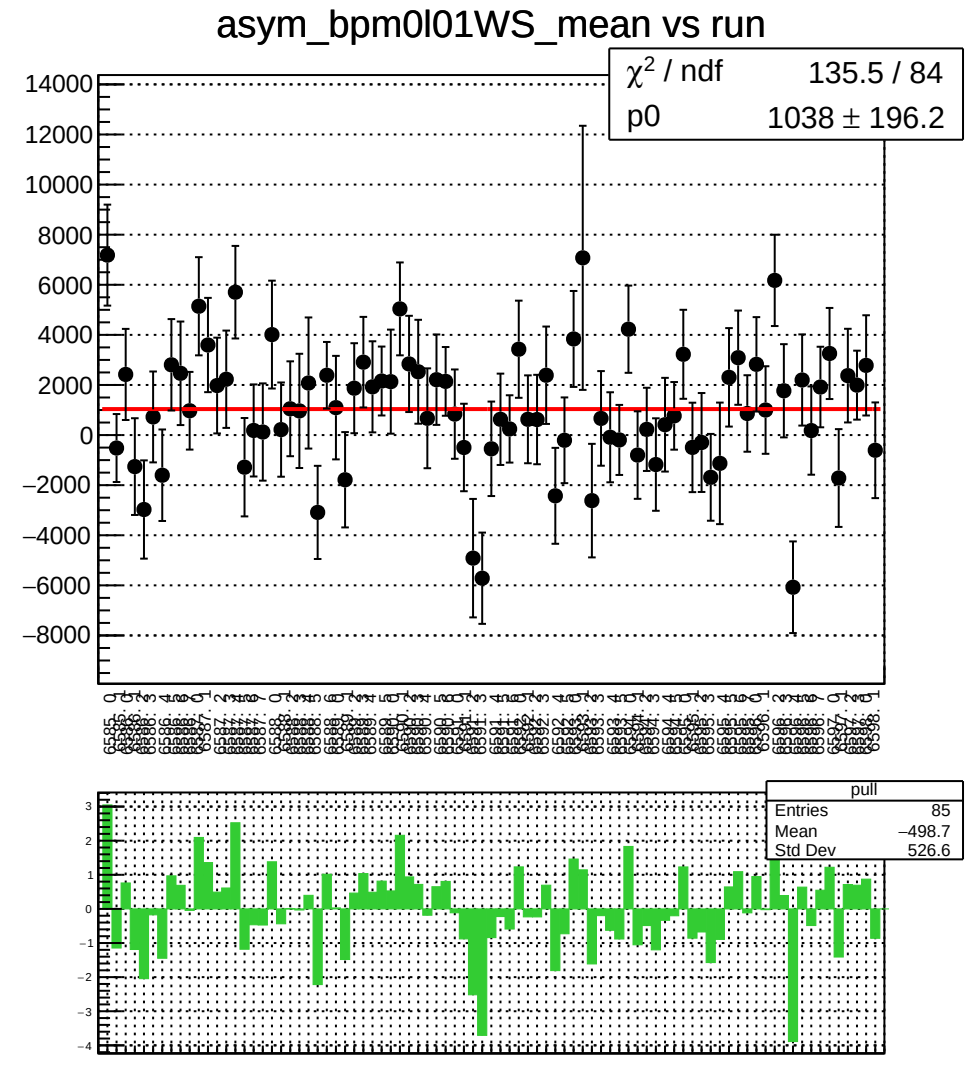

pull1D
Entries 85
Mean 0.2513
Std Dev 2.904

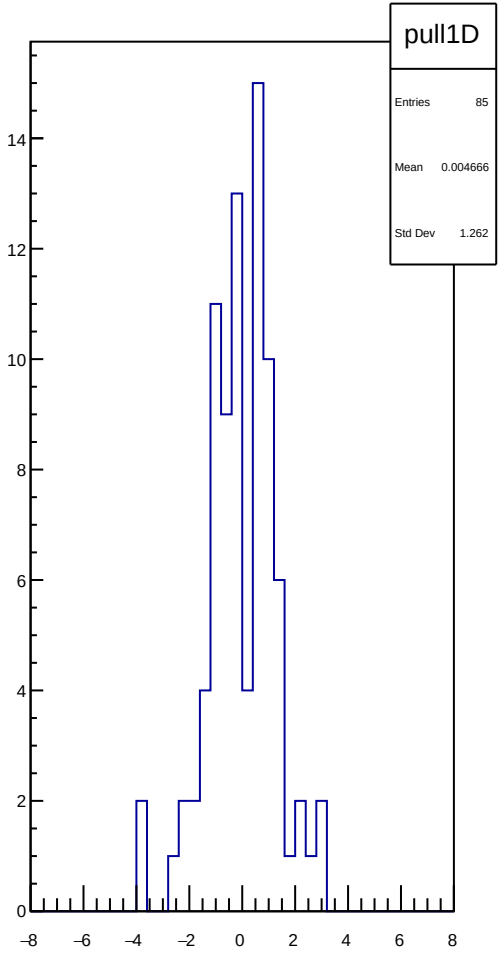

asym_bpm0i01WS_rms vs run
χ^2 / ndf 2.387e+04 / 84
p0 145 ± 0.1124
500
450
400
350
300
250
200
150
100

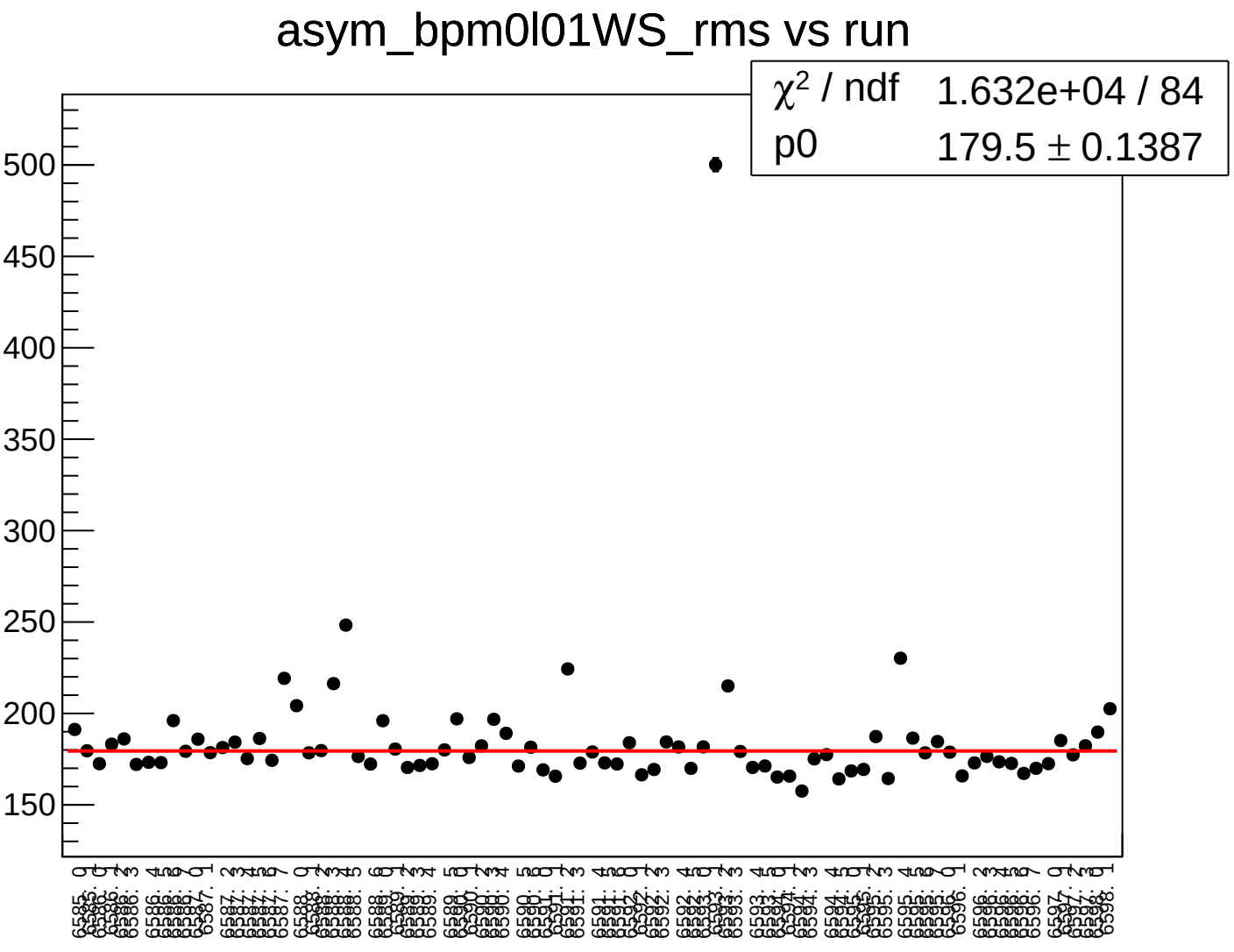

asym_bpm0i01aWS_mean vs run
χ² / ndf 1261 / 84
p0 1.186e+04 ± 137.1
pull
Entries 85
Mean 970.1
Std Dev 957

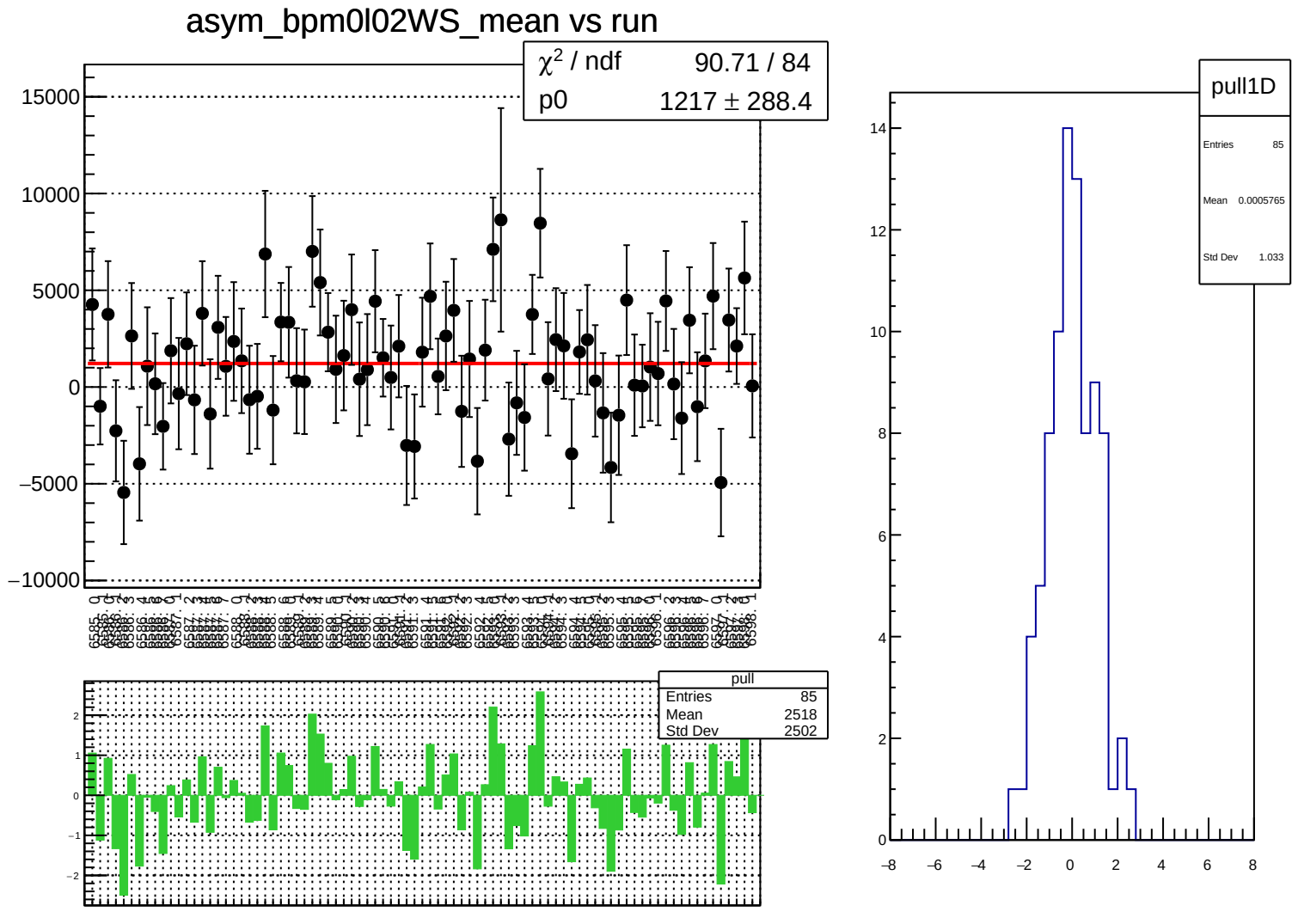

pull1D
Entries 85
Mean 0.1726
Std Dev 3.203

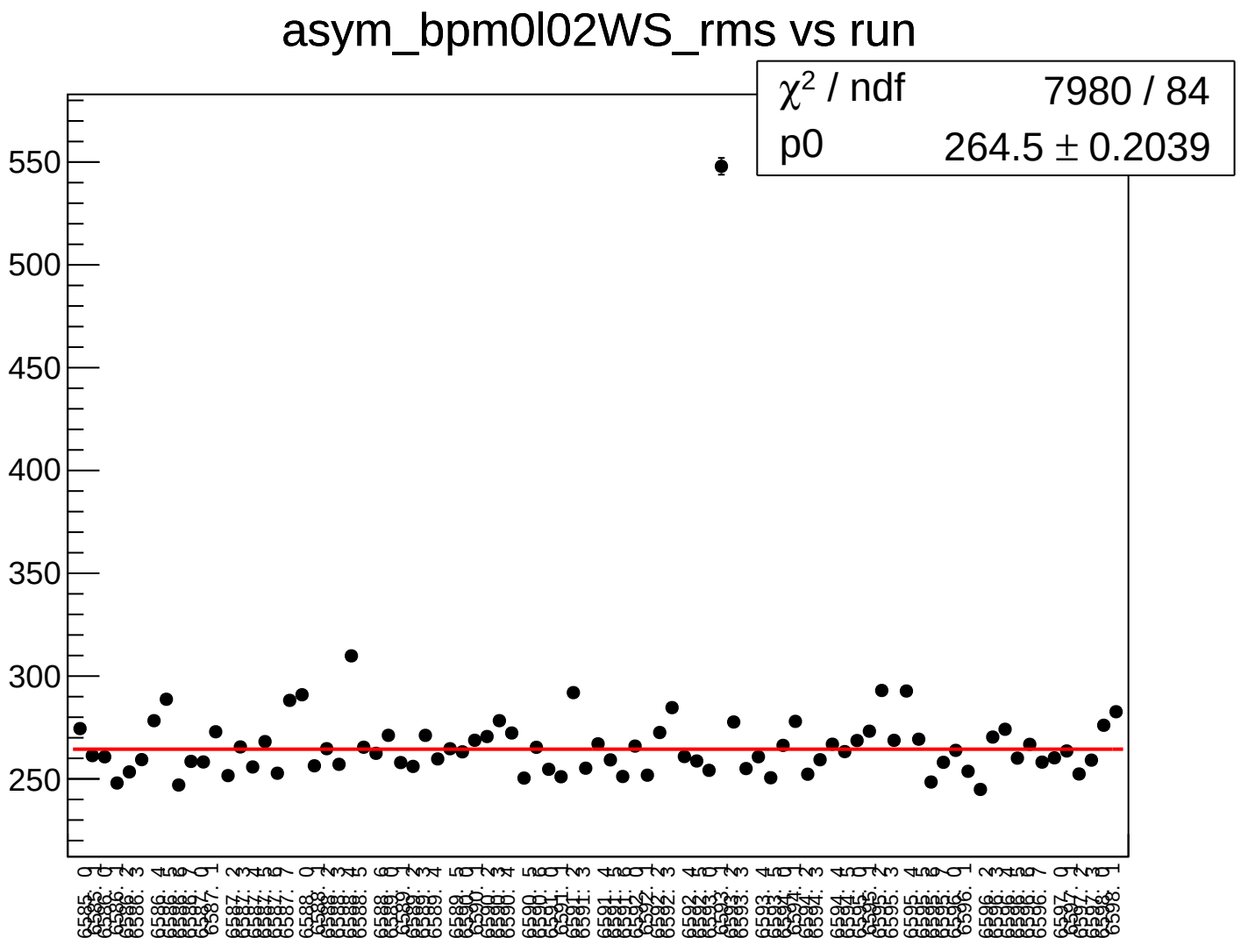

asym_bpm0i01aWS_rms vs run
χ² / ndf 3.123e+04 / 84
p0 124.9 ± 0.09698
500
450
400
350
300
250
200
150
100

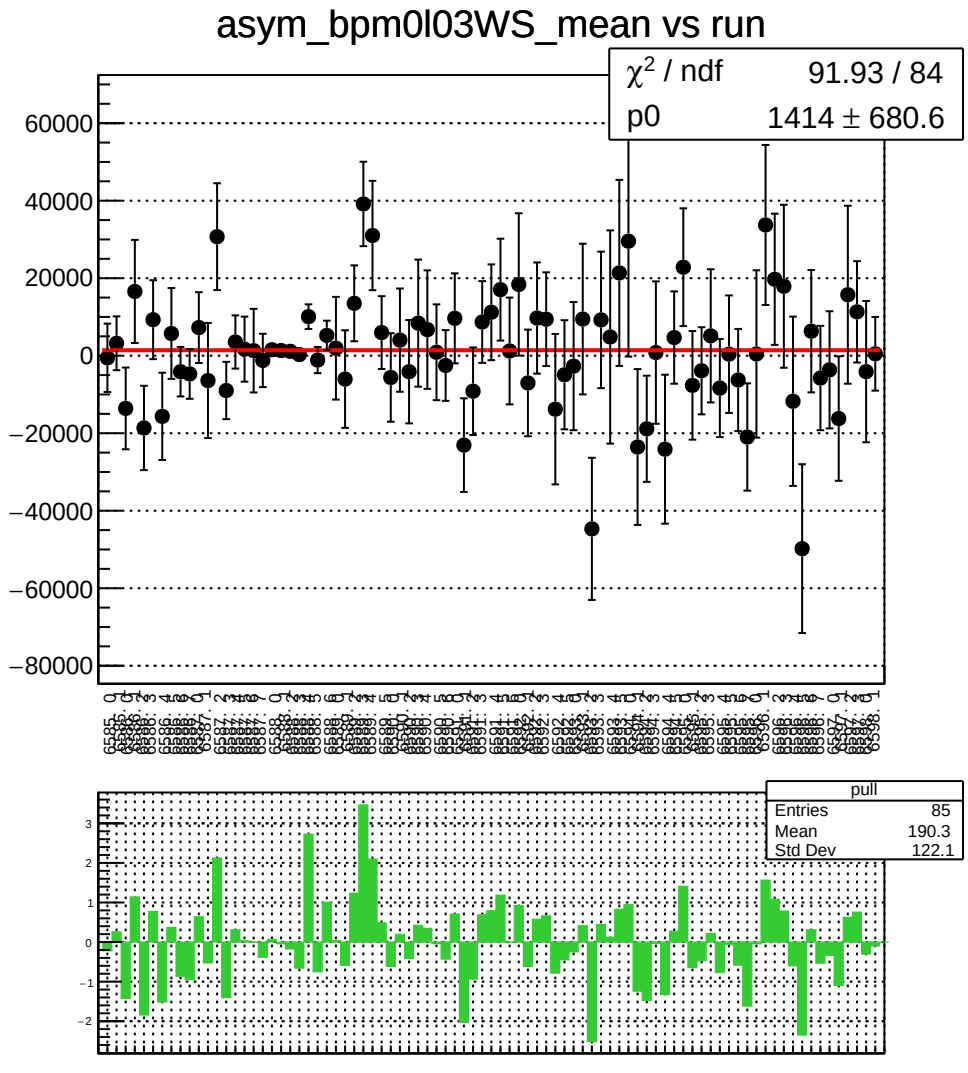

asym_bpm0l01WS_mean vs run
χ² / ndf 135.5 / 84
p0 1038 ± 196.2
pull
Entries 85
Mean −498.7
Std Dev 526.6

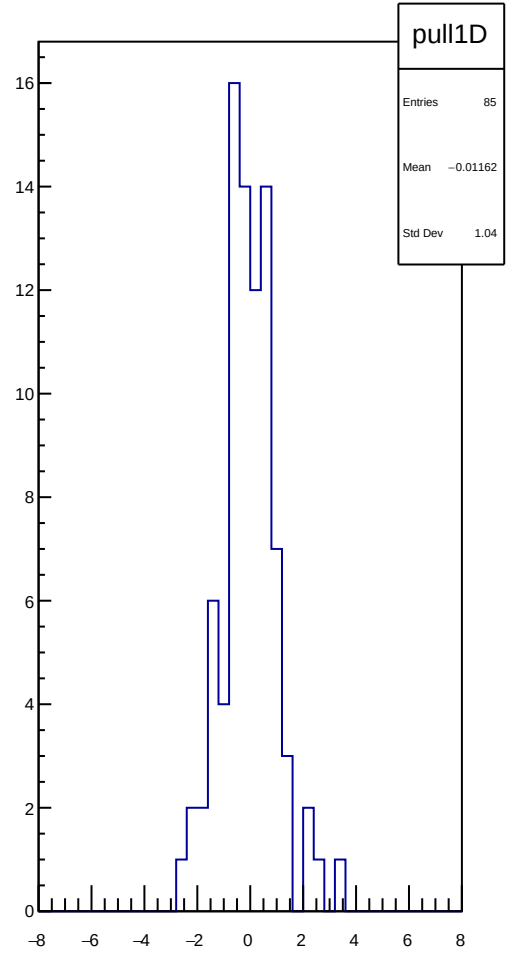

pull1D
Entries 85
Mean 0.004666
Std Dev 1.262

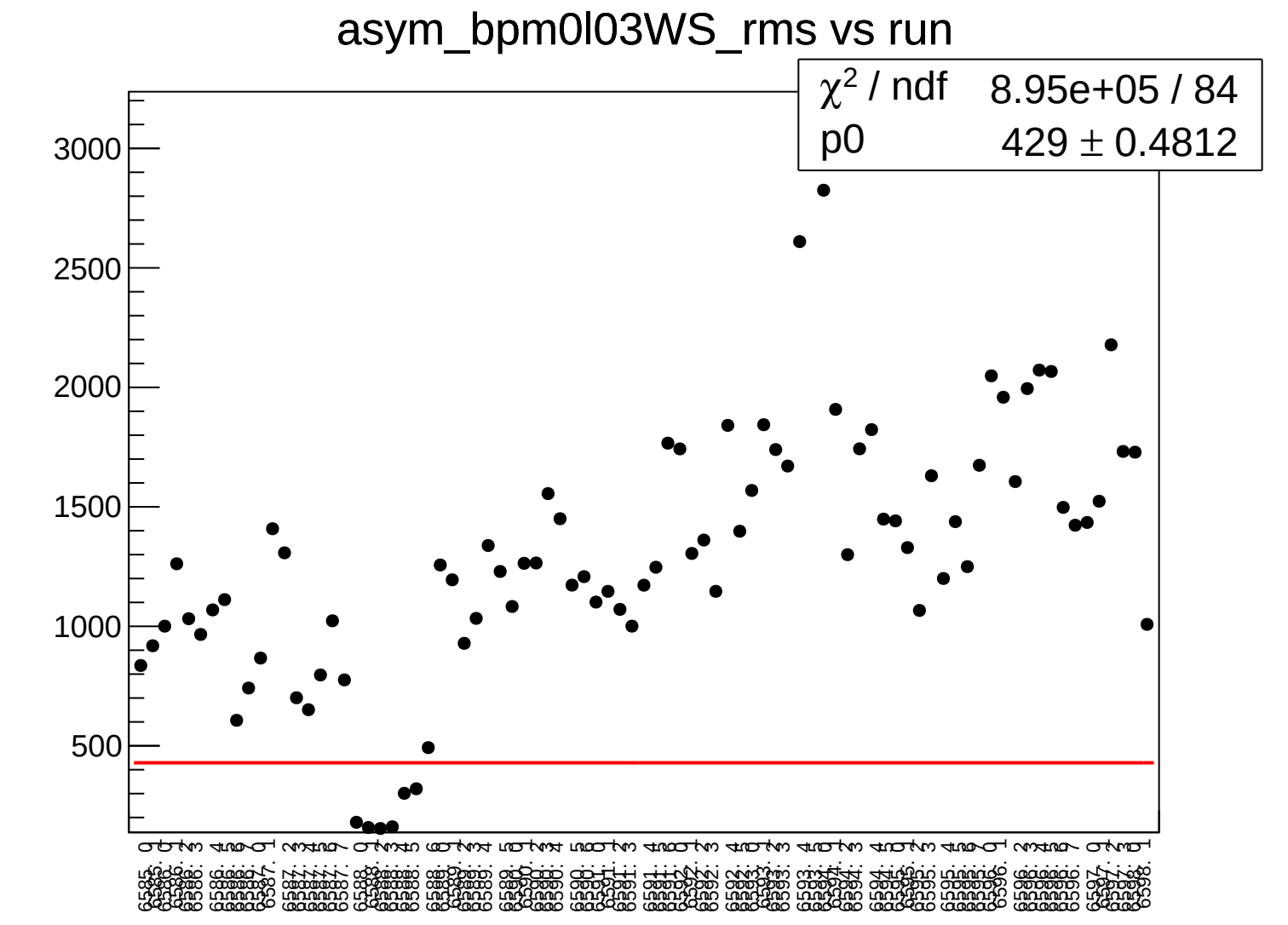

asym_bpm0l01WS_rms vs run
χ² / ndf 1.632e+04 / 84
p0 179.5 ± 0.1387
500
450
400
350
300
250
200
150

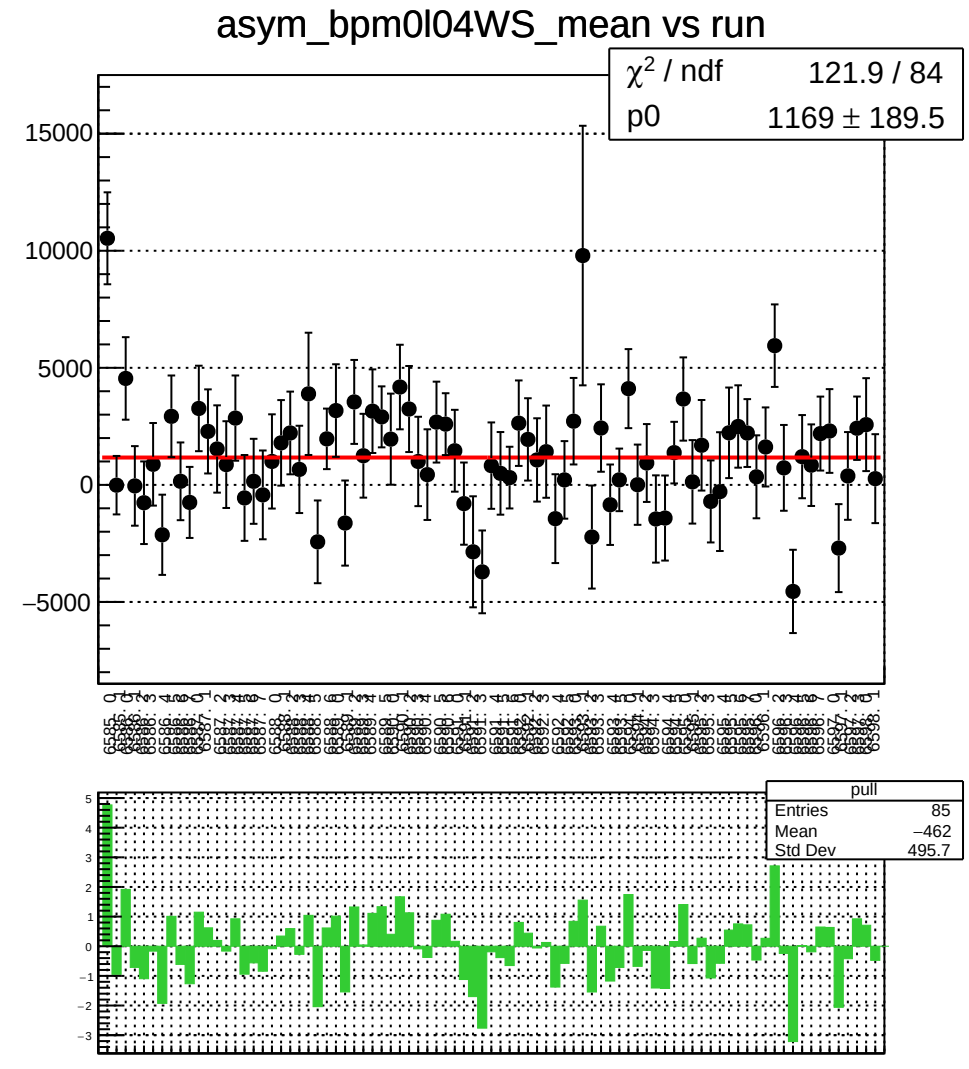

asym_bpm0l02WS_mean vs run
χ² / ndf 90.71 / 84
p0 1217 ± 288.4
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 2518
Std Dev 2502
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.0005765
Std Dev 1.033
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

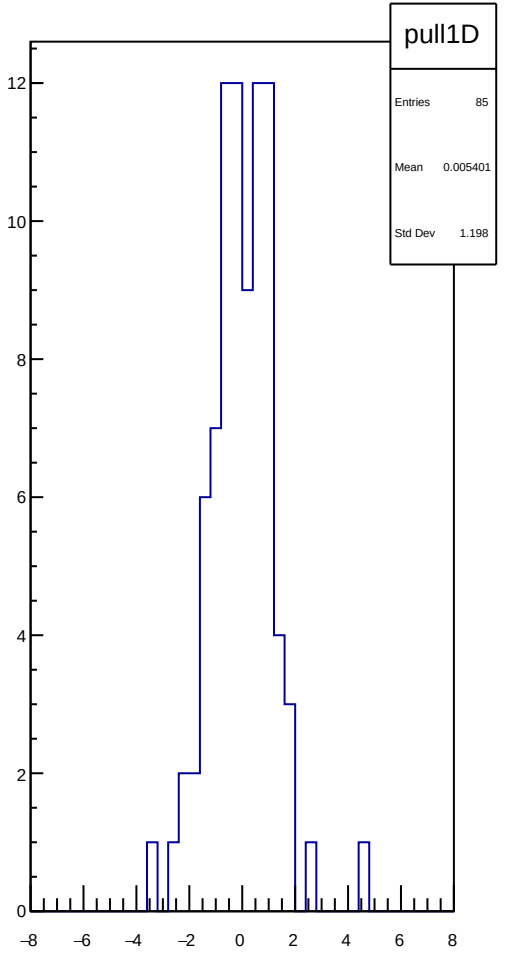

asym_bpm0l02WS_rms vs run
χ² / ndf 7980 / 84
p0 264.5 ± 0.2039
550
500
450
400
350
300
250

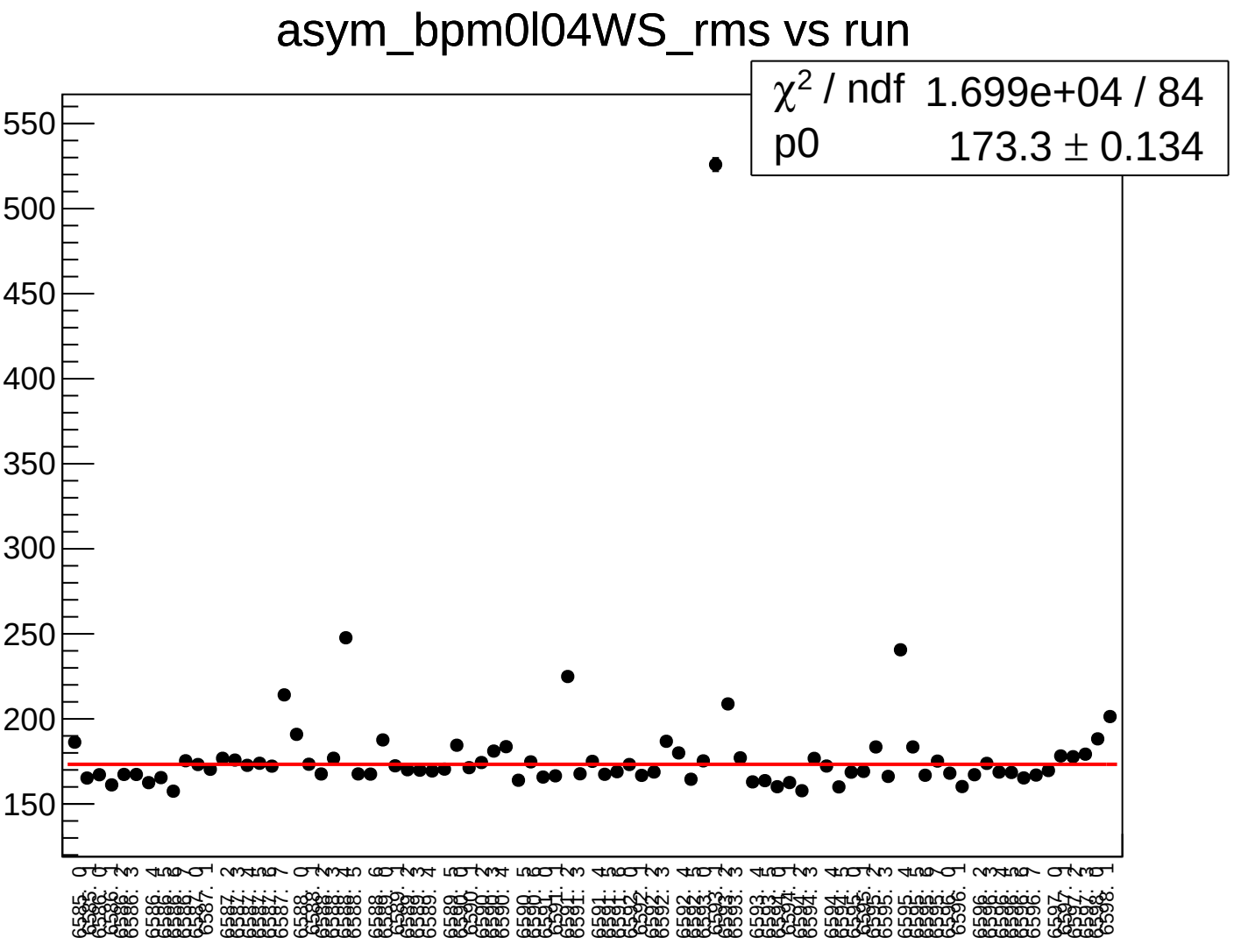

asym_bpm0l03WS_mean vs run
χ² / ndf 91.93 / 84
p0 1414 ± 680.6
pull
Entries 85
Mean 190.3
Std Dev 122.1

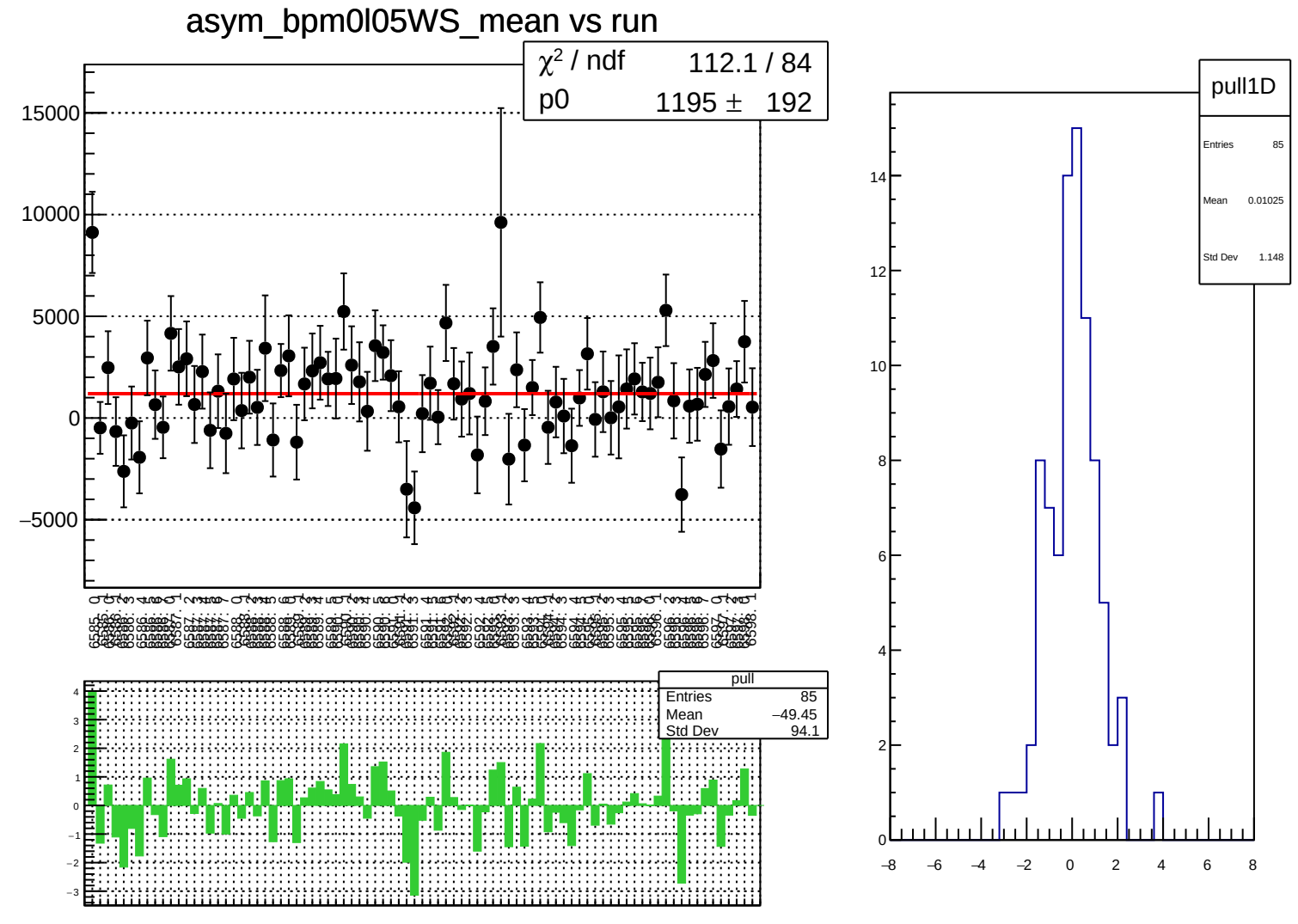

pull1D
Entries 85
Mean −0.01162
Std Dev 1.04

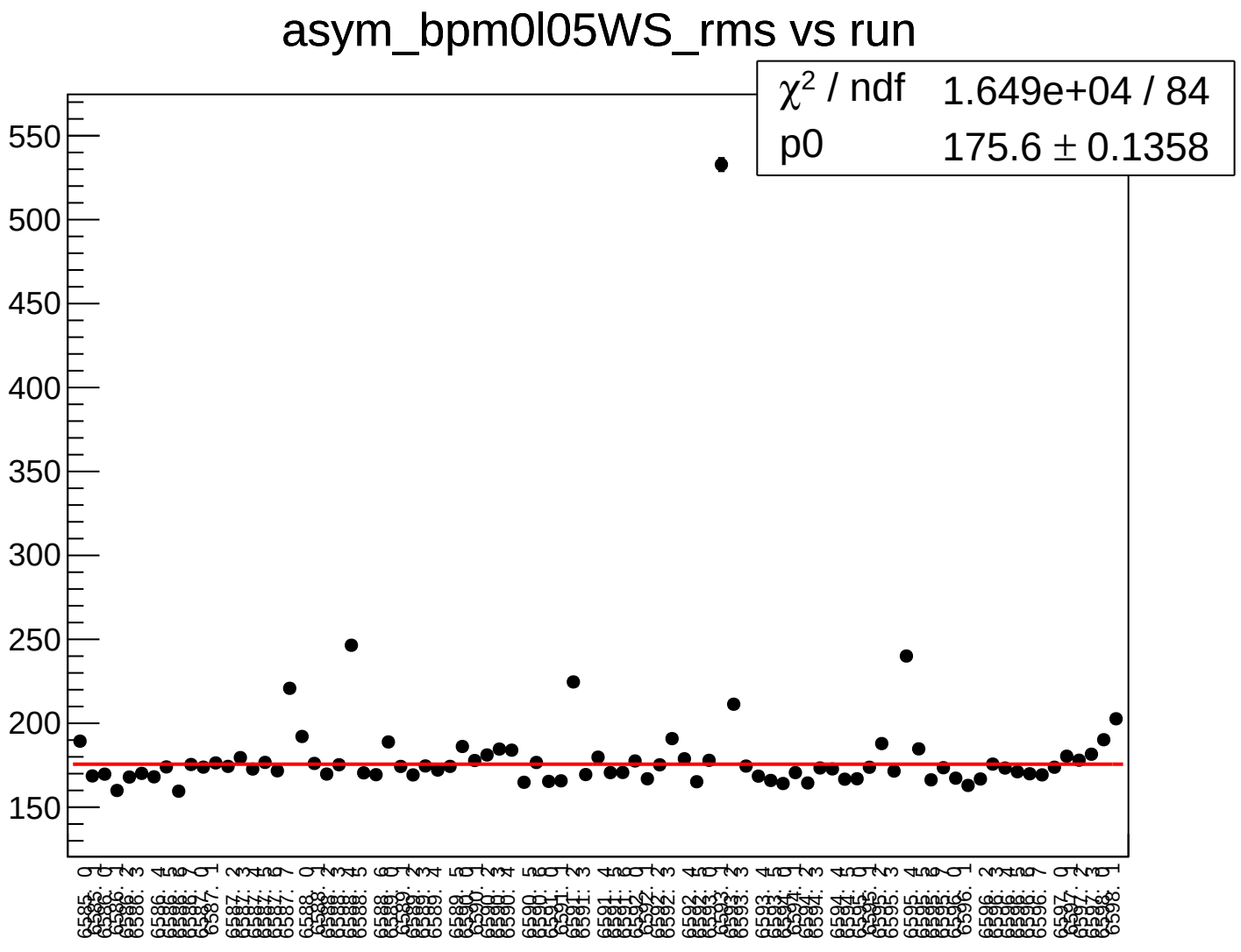

asym_bpm0l03WS_rms vs run
χ² / ndf 8.95e+05 / 84
p0 429 ± 0.4812
3000
2500
2000
1500
1000
500

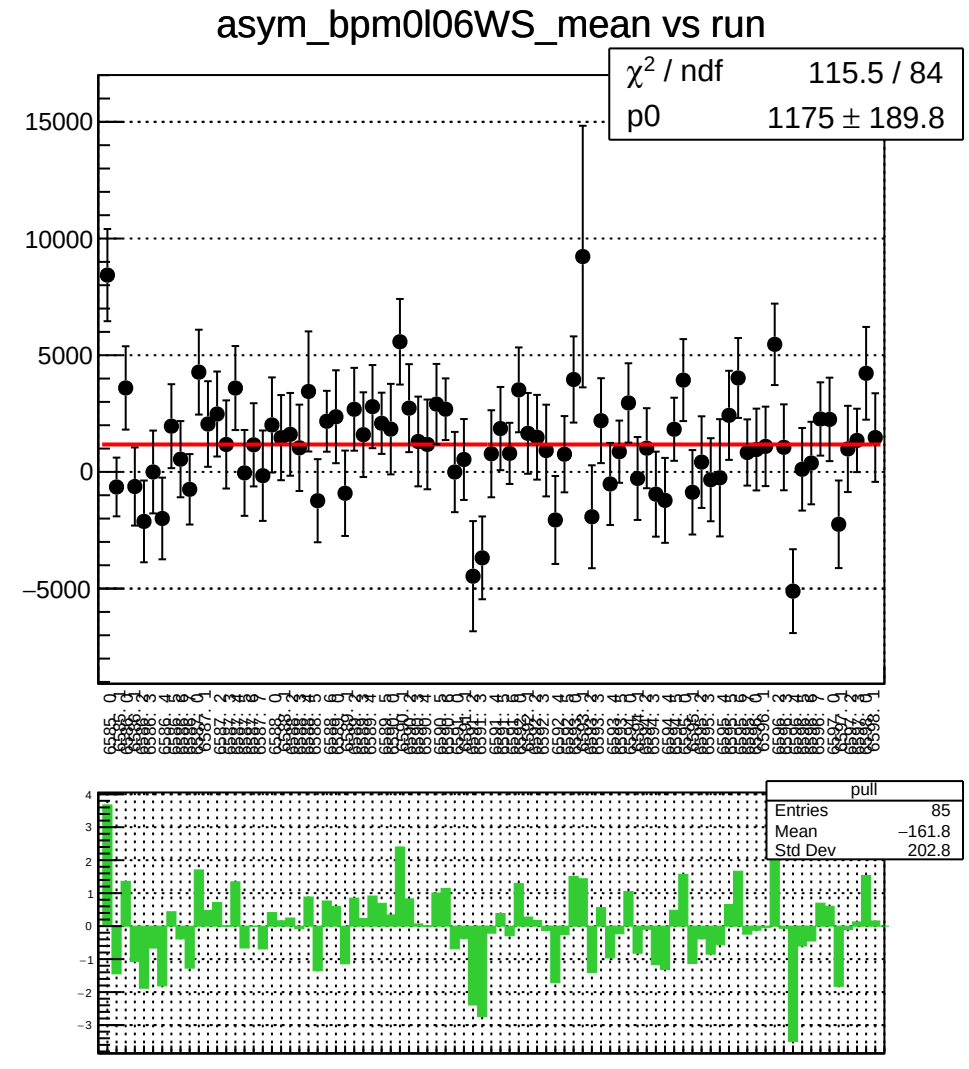

asym_bpm0l04WS_mean vs run
χ² / ndf 121.9 / 84
p0 1169 ± 189.5
15000
10000
5000
0
−5000
pull
Entries 85
Mean −462
Std Dev 495.7
5
4
3
2
1
0
−1
−2
−3

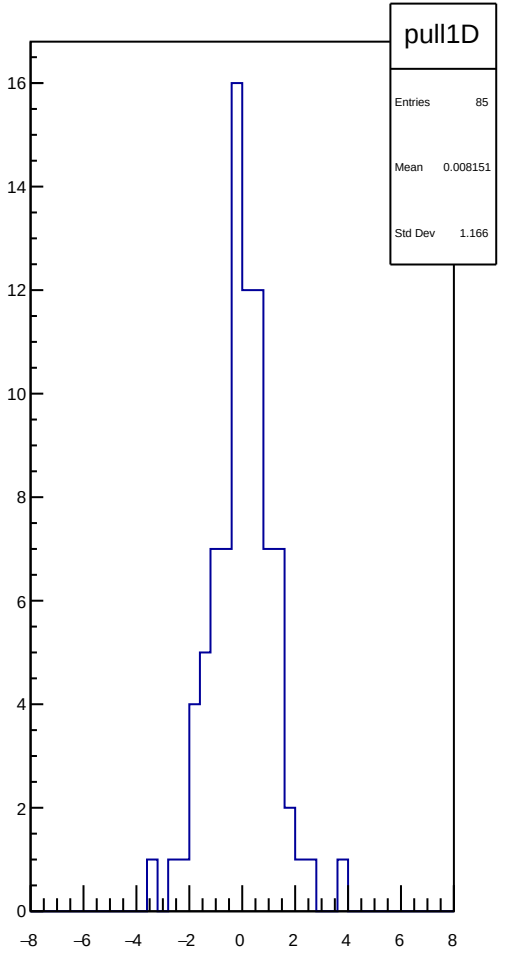

pull1D
Entries 85
Mean 0.005401
Std Dev 1.198
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

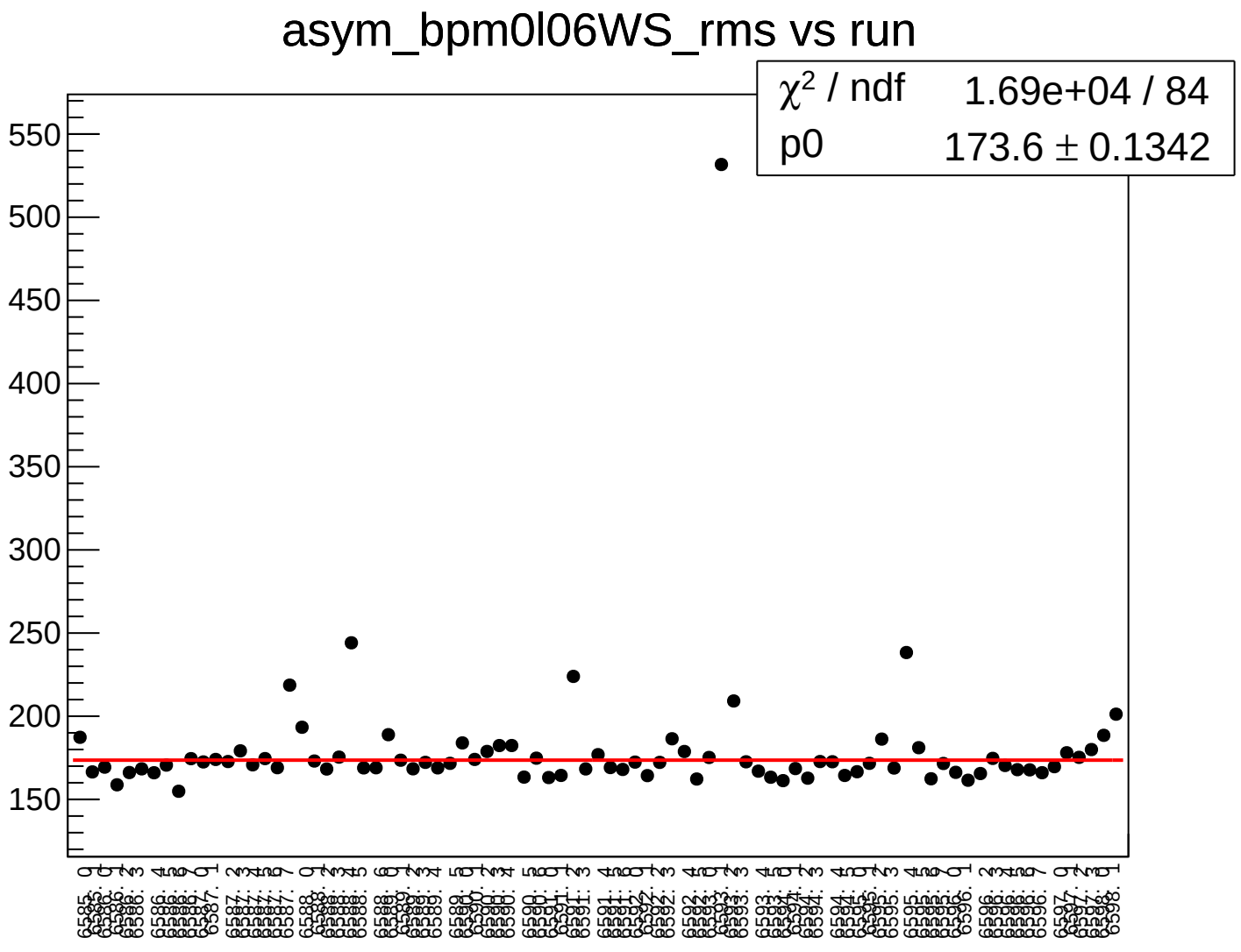

asym_bpm0l04WS_rms vs run
χ^2 / ndf 1.699e+04 / 84
p0 173.3 ± 0.134
550
500
450
400
350
300
250
200
150

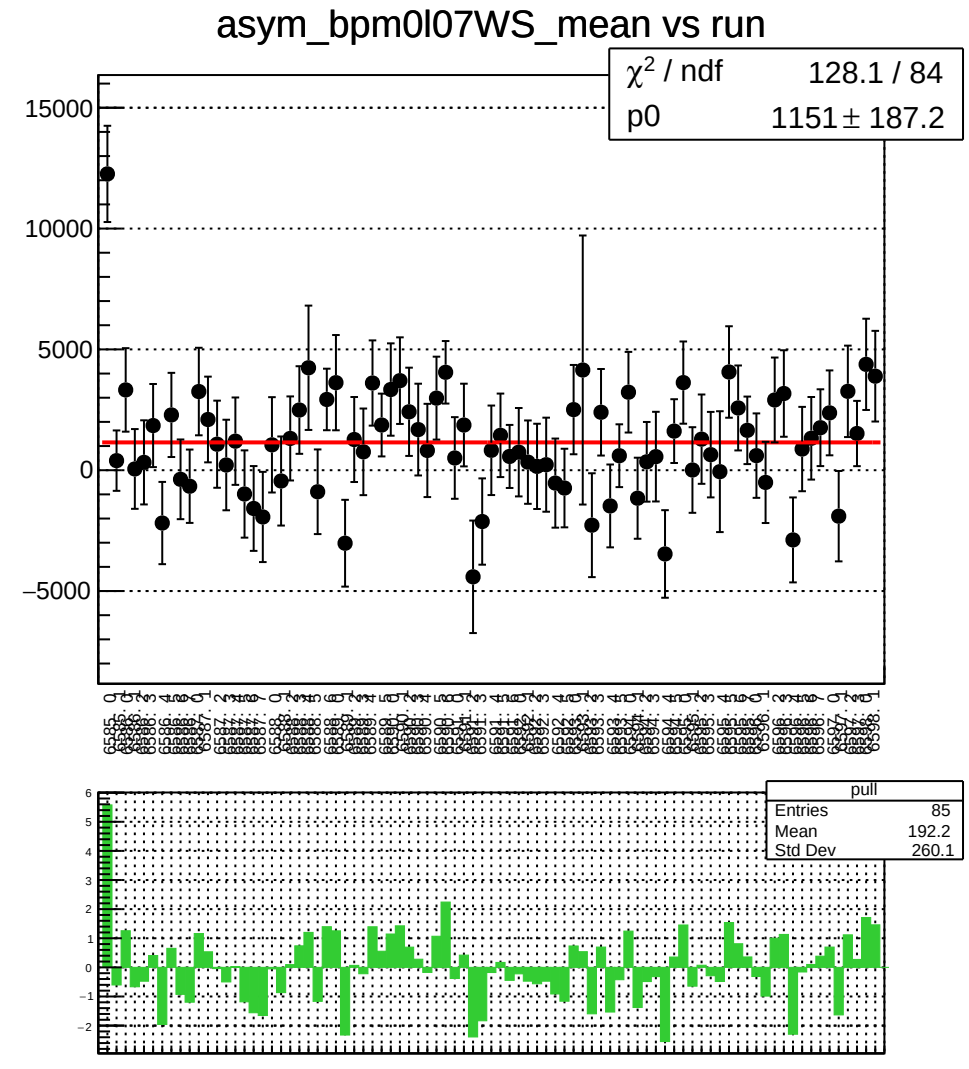

asym_bpm0l05WS_mean vs run
χ² / ndf 112.1 / 84
p0 1195 ± 192
15000
10000
5000
0
−5000
pull
Entries 85
Mean −49.45
Std Dev 94.1
pull1D
Entries 85
Mean 0.01025
Std Dev 1.148

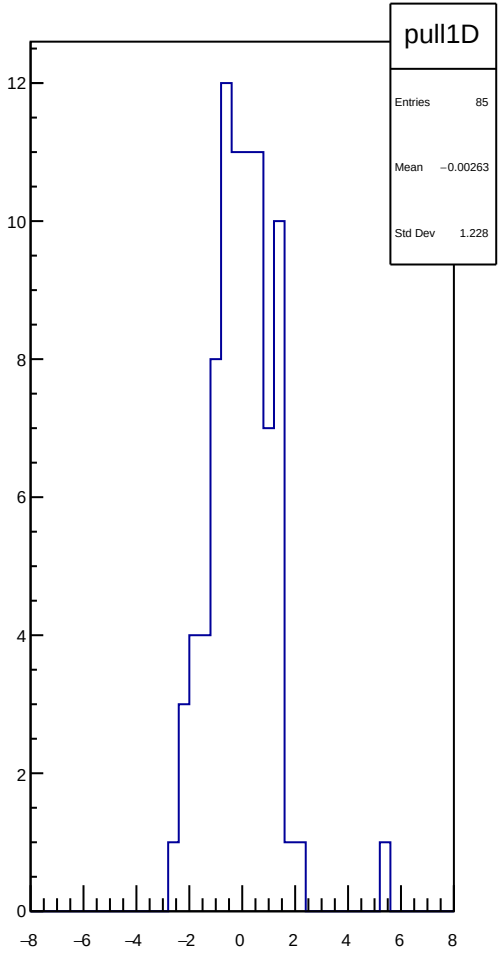

asym_bpm0l05WS_rms vs run
χ^2 / ndf 1.649e+04 / 84
p0 175.6 ± 0.1358
550
500
450
400
350
300
250
200
150

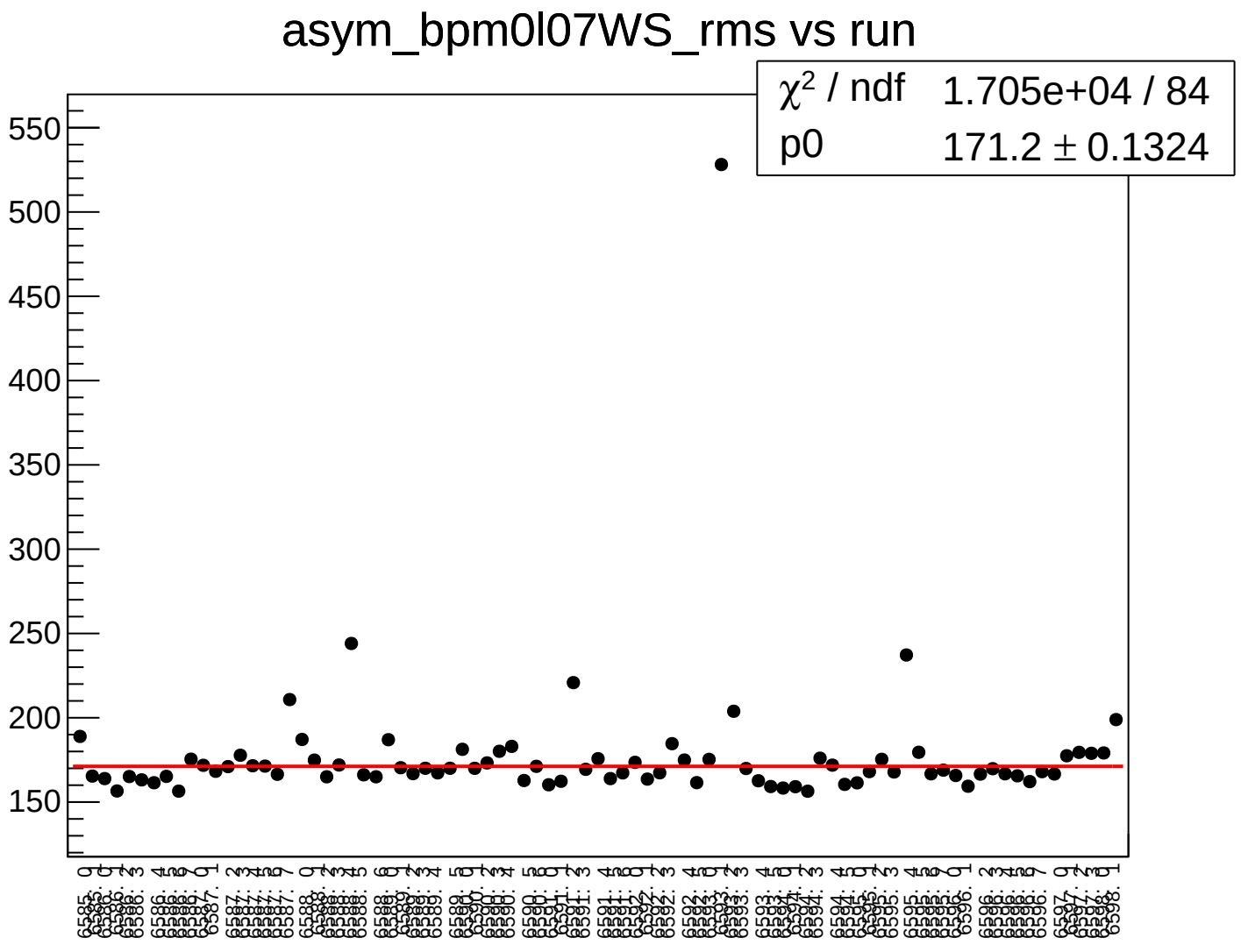

asym_bpm0l06WS_mean vs run
χ² / ndf 115.5 / 84
p0 1175 ± 189.8
15000
10000
5000
0
−5000
pull
Entries 85
Mean −161.8
Std Dev 202.8
4
3
2
1
0
−1
−2
−3

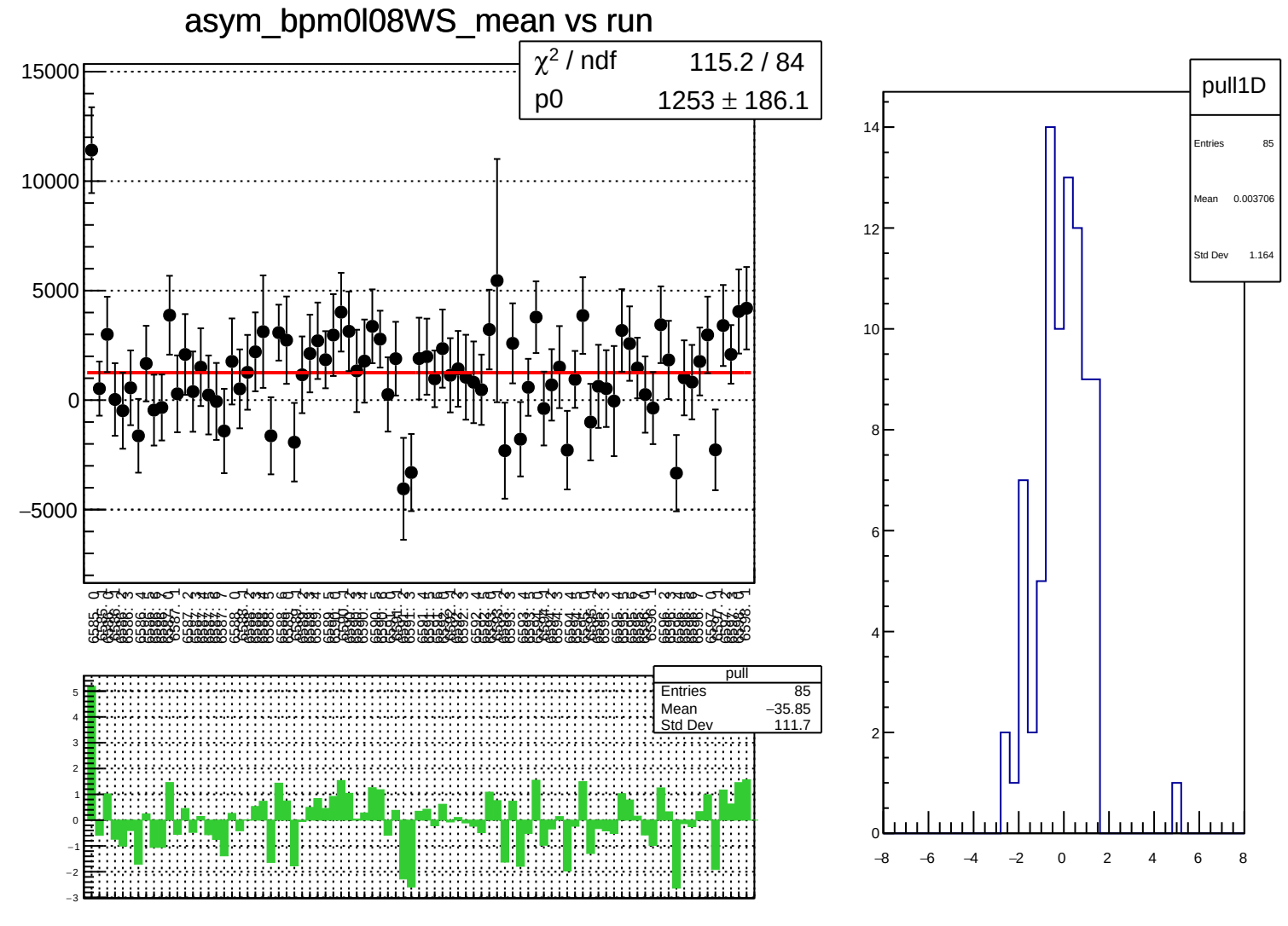

pull1D
Entries 85
Mean 0.008151
Std Dev 1.166
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

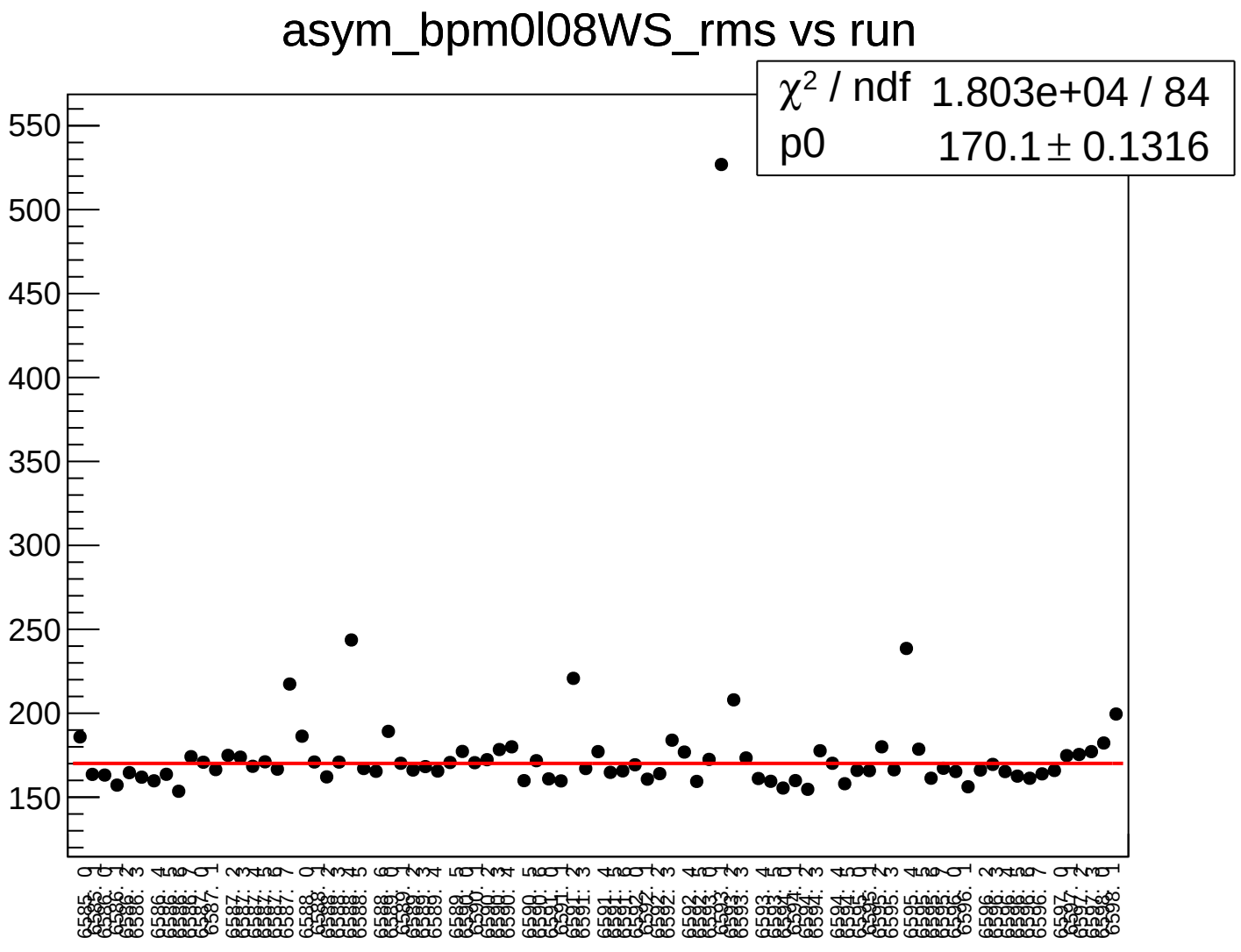

asym_bpm0l06WS_rms vs run
χ^2 / ndf 1.69e+04 / 84
p0 173.6 ± 0.1342
550
500
450
400
350
300
250
200
150

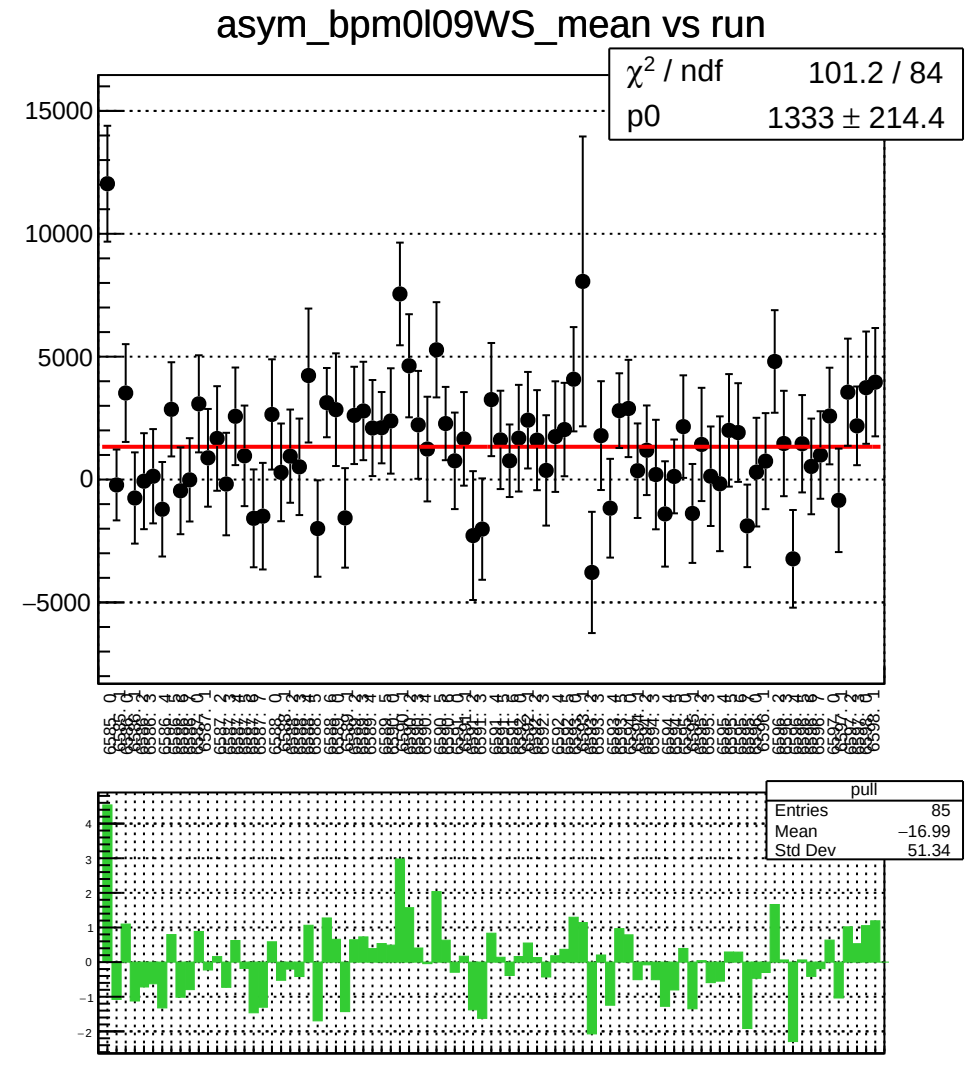

asym_bpm0l07WS_mean vs run
χ² / ndf 128.1 / 84
p0 1151 ± 187.2
15000
10000
5000
0
−5000
pull
Entries 85
Mean 192.2
Std Dev 260.1
6
5
4
3
2
1
0
−1
−2

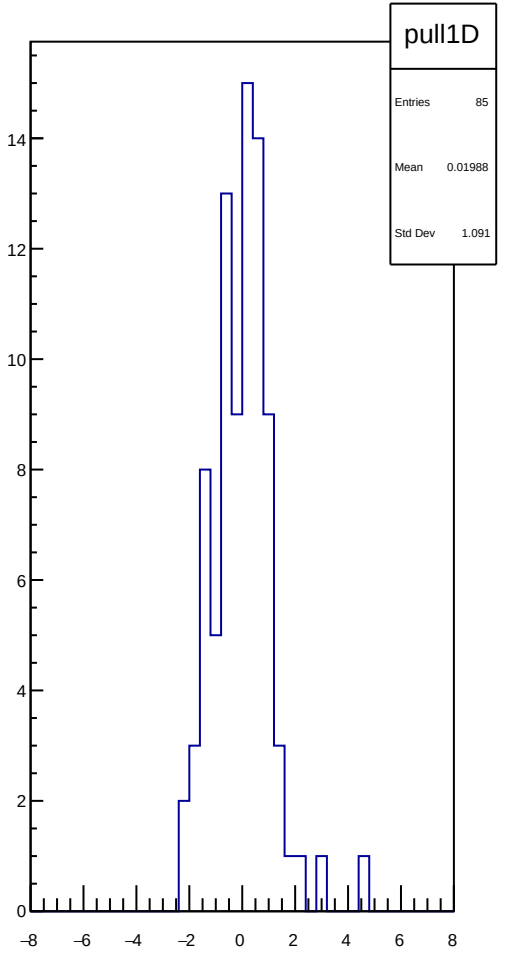

pull1D
Entries 85
Mean −0.00263
Std Dev 1.228
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

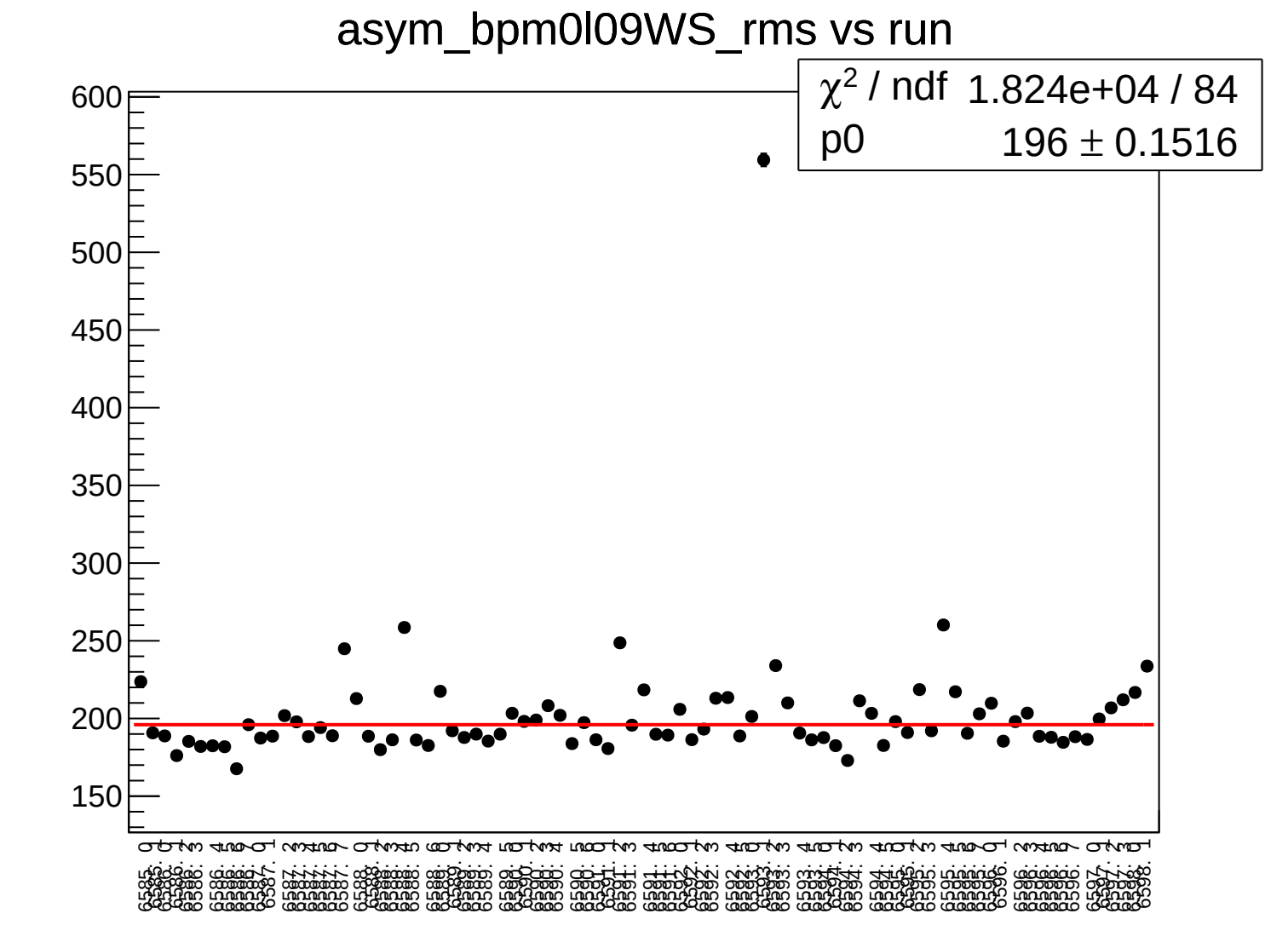

asym_bpm0l07WS_rms vs run
χ² / ndf 1.705e+04 / 84
p0 171.2 ± 0.1324
550
500
450
400
350
300
250
200
150

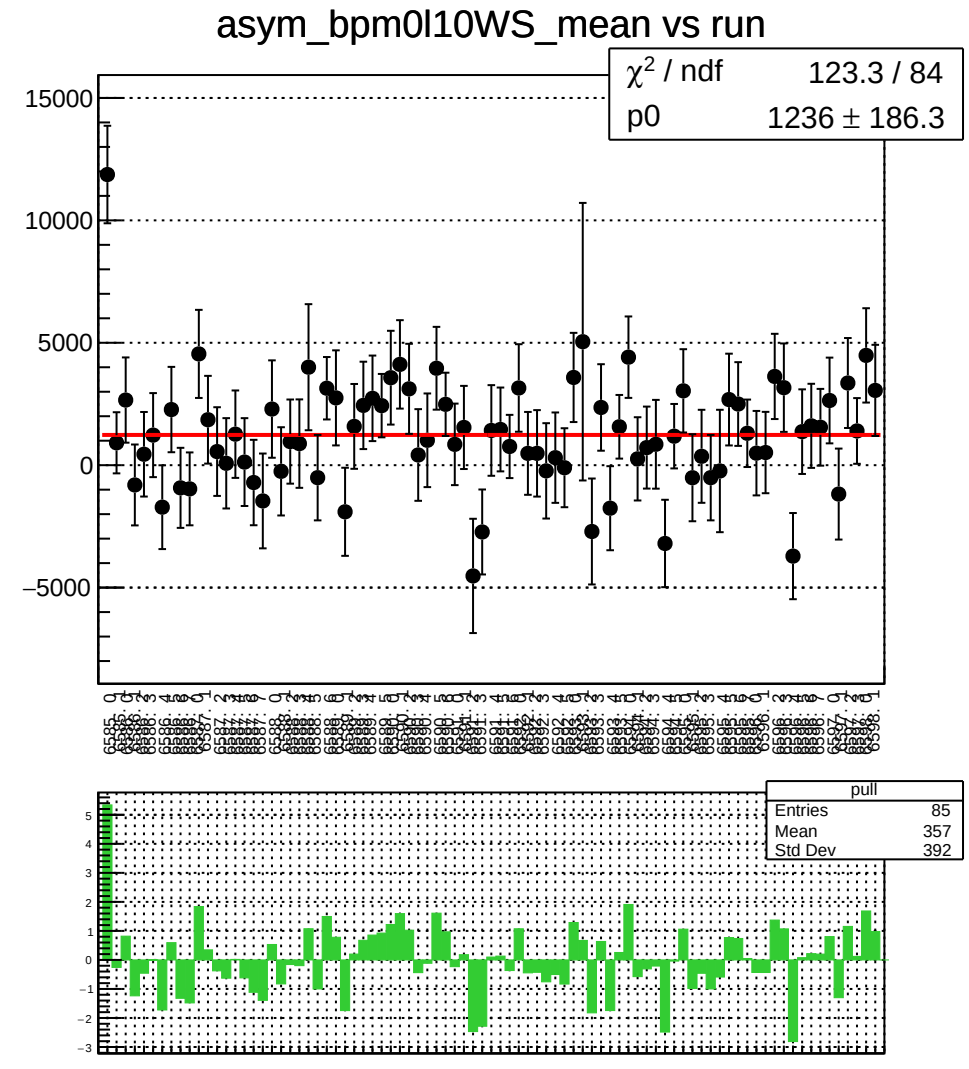

asym_bpm0l08WS_mean vs run
χ² / ndf 115.2 / 84
p0 1253 ± 186.1
15000
10000
5000
0
−5000
pull
Entries 85
Mean −35.85
Std Dev 111.7
pull1D
Entries 85
Mean 0.003706
Std Dev 1.164

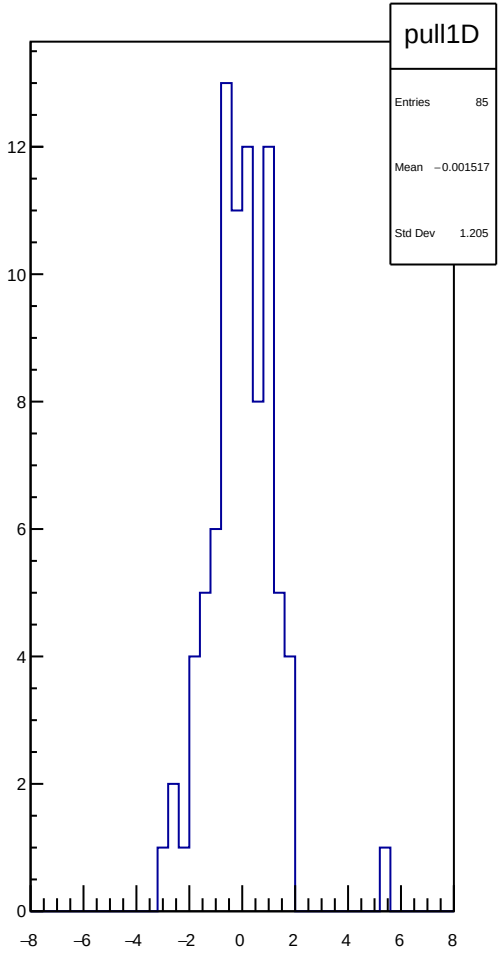

asym_bpm0l08WS_rms vs run
χ² / ndf 1.803e+04 / 84
p0 170.1 ± 0.1316
550
500
450
400
350
300
250
200
150

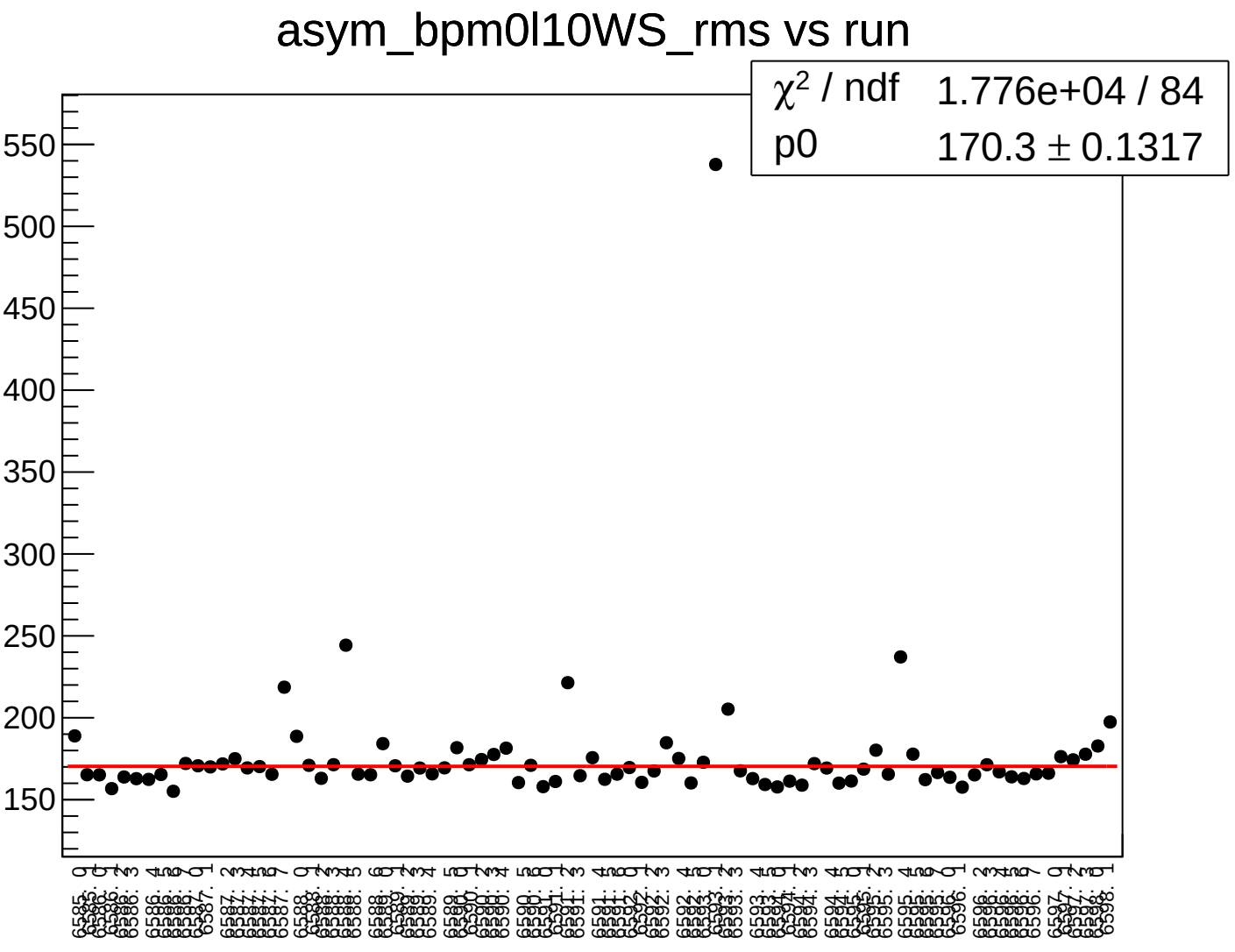

asym_bpm0l09WS_mean vs run
χ² / ndf 101.2 / 84
p0 1333 ± 214.4
15000
10000
5000
0
−5000
pull
Entries 85
Mean −16.99
Std Dev 51.34
4
3
2
1
0
−1
−2

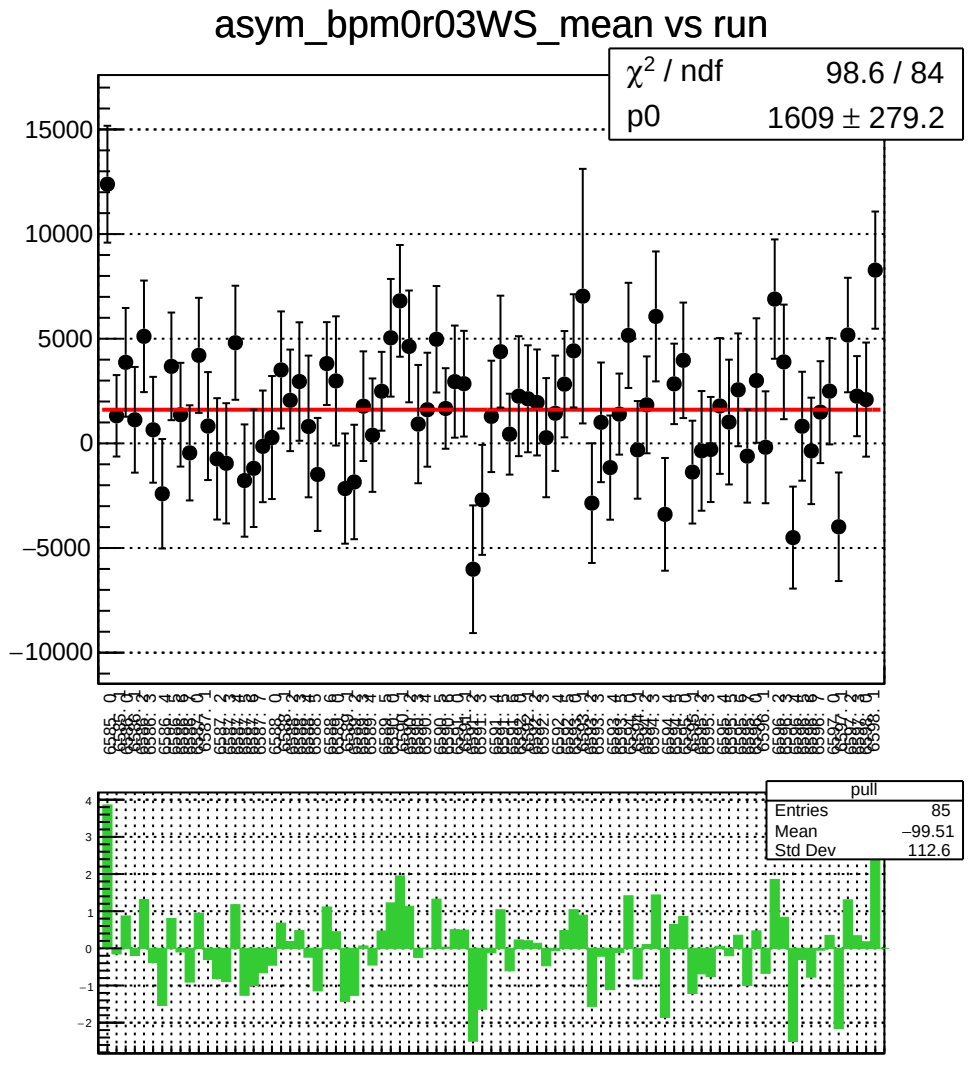

pull1D
Entries 85
Mean 0.01988
Std Dev 1.091
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

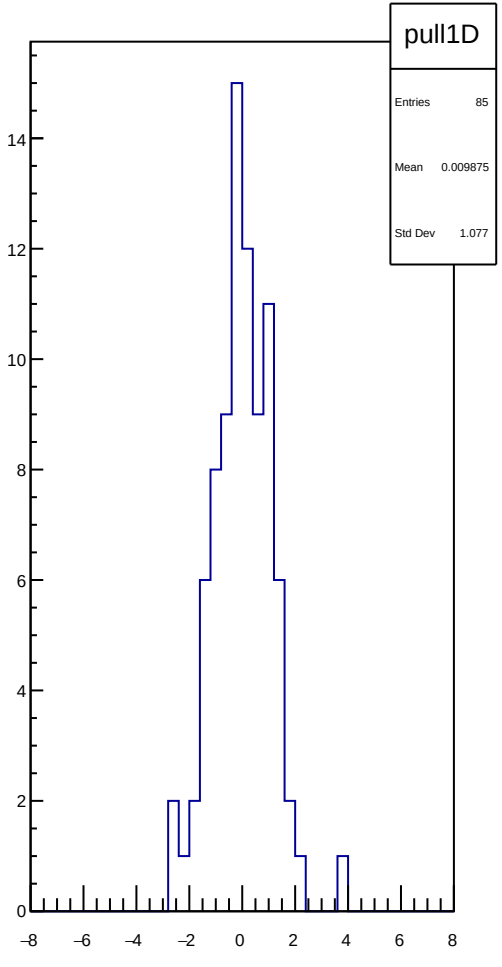

asym_bpm0l09WS_rms vs run
χ^2 / ndf 1.824e+04 / 84
p0 196 ± 0.1516
600
550
500
450
400
350
300
250
200
150

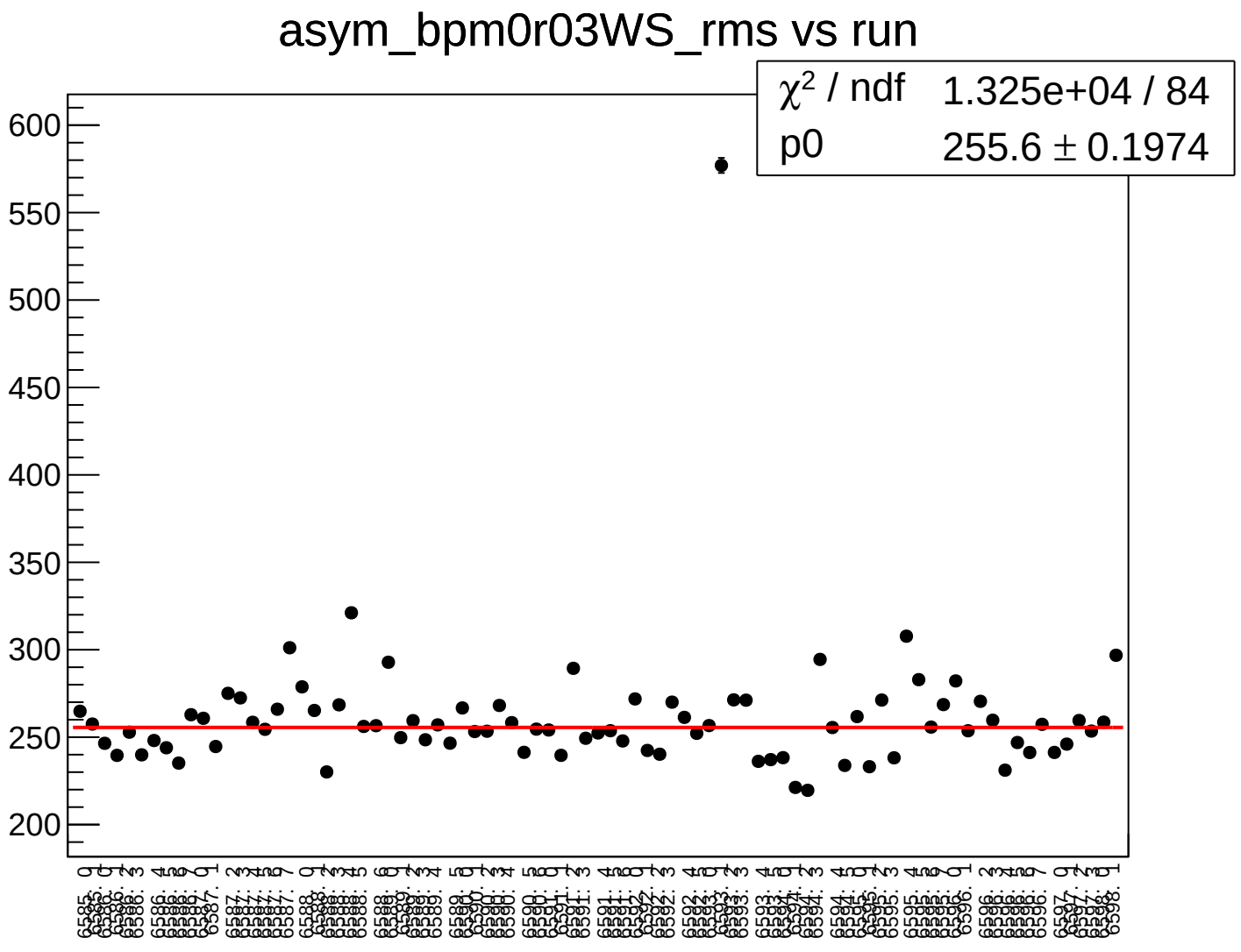

asym_bpm0l10WS_mean vs run
χ² / ndf 123.3 / 84
p0 1236 ± 186.3
15000
10000
5000
0
−5000
pull
Entries 85
Mean 357
Std Dev 392
5
4
3
2
1
0
−1
−2
−3

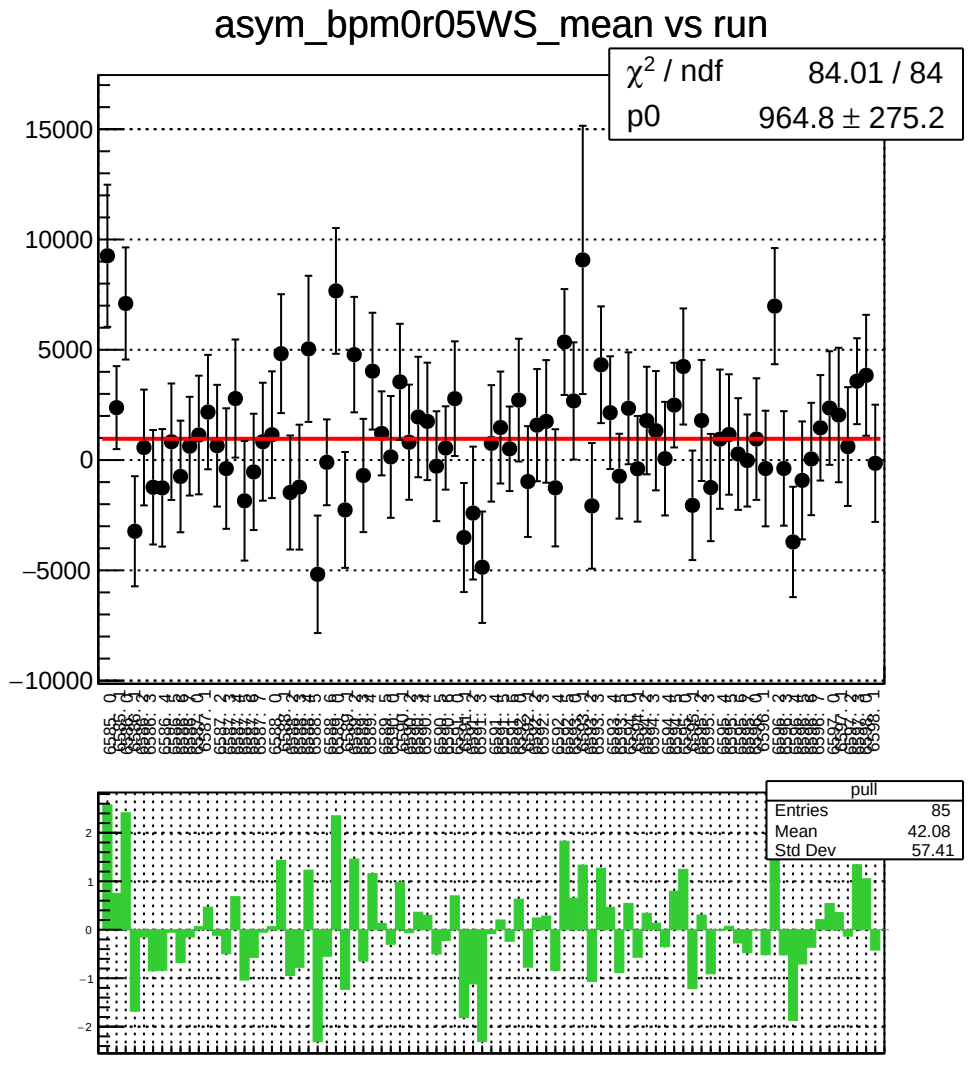

pull1D
Entries 85
Mean −0.001517
Std Dev 1.205
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

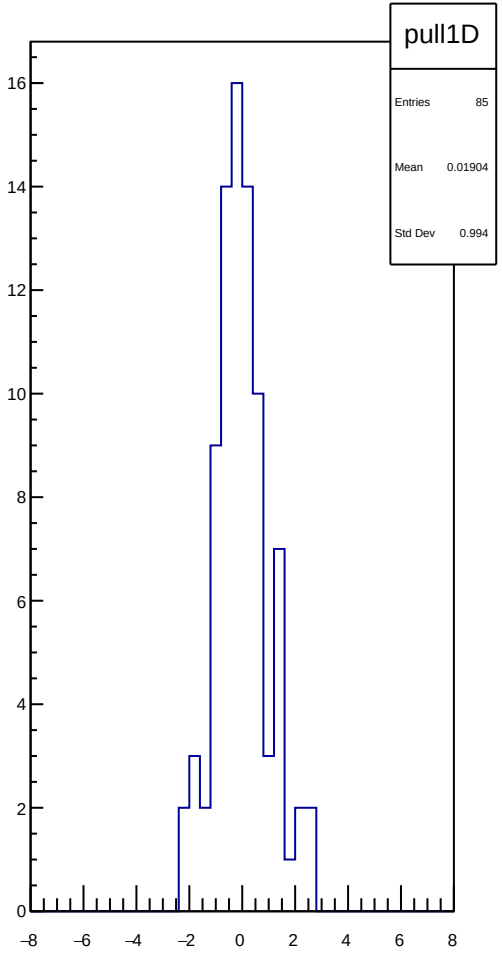

asym_bpm0l10WS_rms vs run
χ² / ndf 1.776e+04 / 84
p0 170.3 ± 0.1317
550
500
450
400
350
300
250
200
150

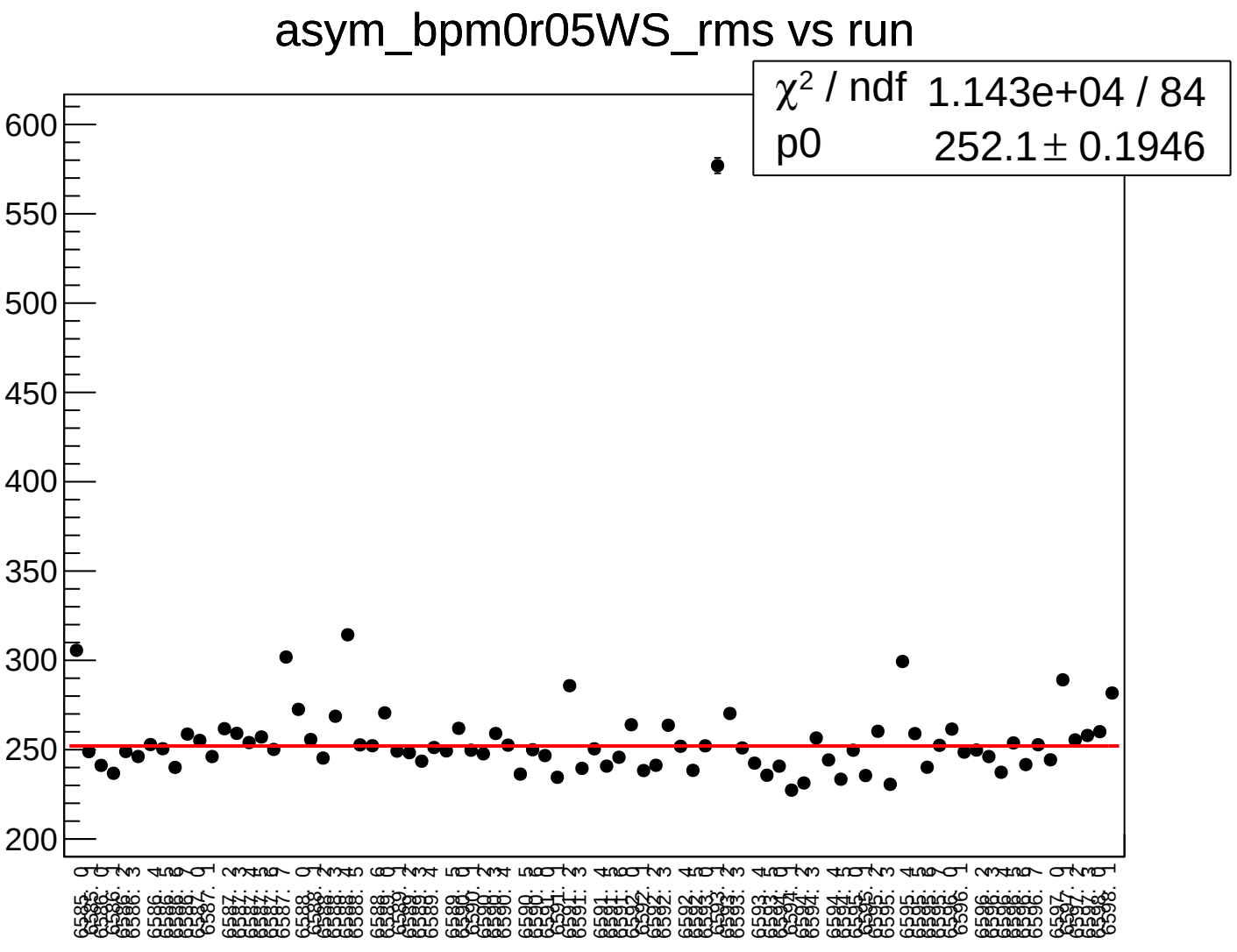

asym_bpm0r03WS_mean vs run
χ² / ndf 98.6 / 84
p0 1609 ± 279.2
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −99.51
Std Dev 112.6
4
3
2
1
0
−1
−2

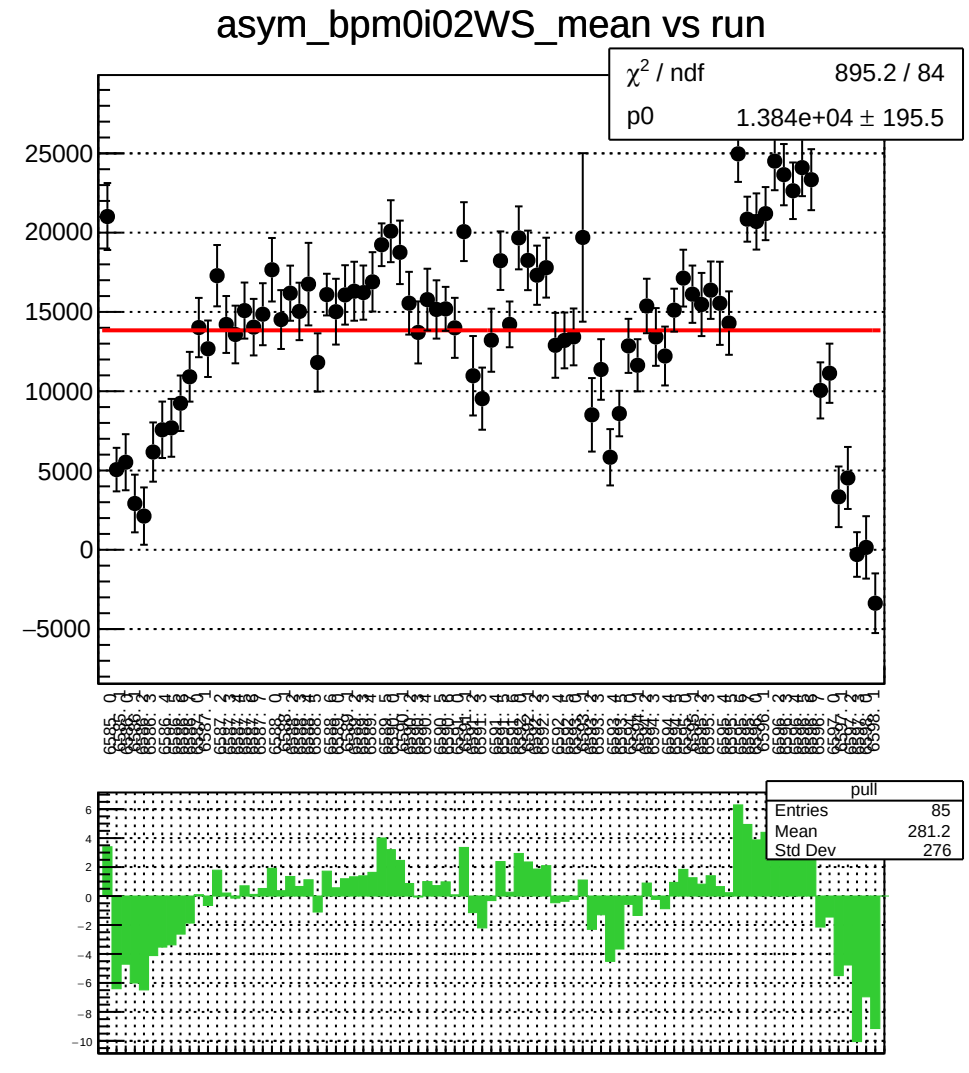

pull1D
Entries 85
Mean 0.009875
Std Dev 1.077
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

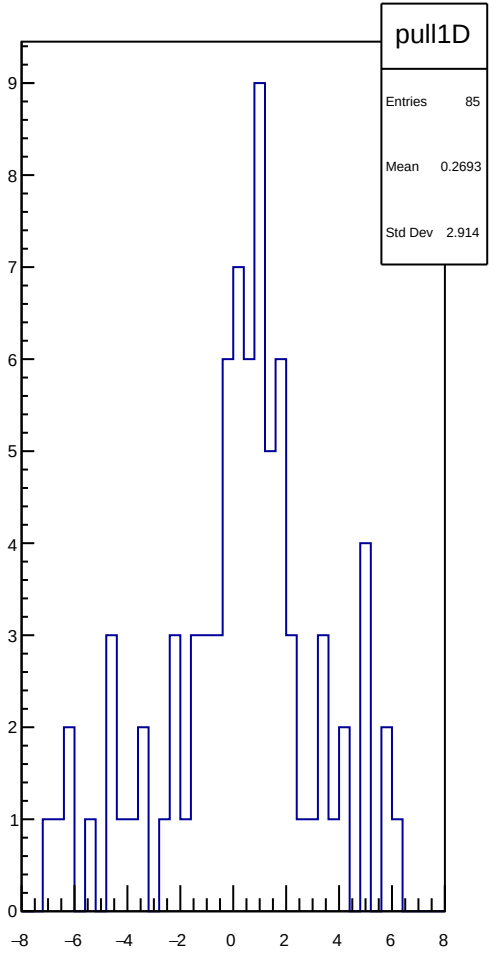

asym_bpm0r03WS_rms vs run
χ^2 / ndf 1.325e+04 / 84
p0 255.6 ± 0.1974
600
550
500
450
400
350
300
250
200

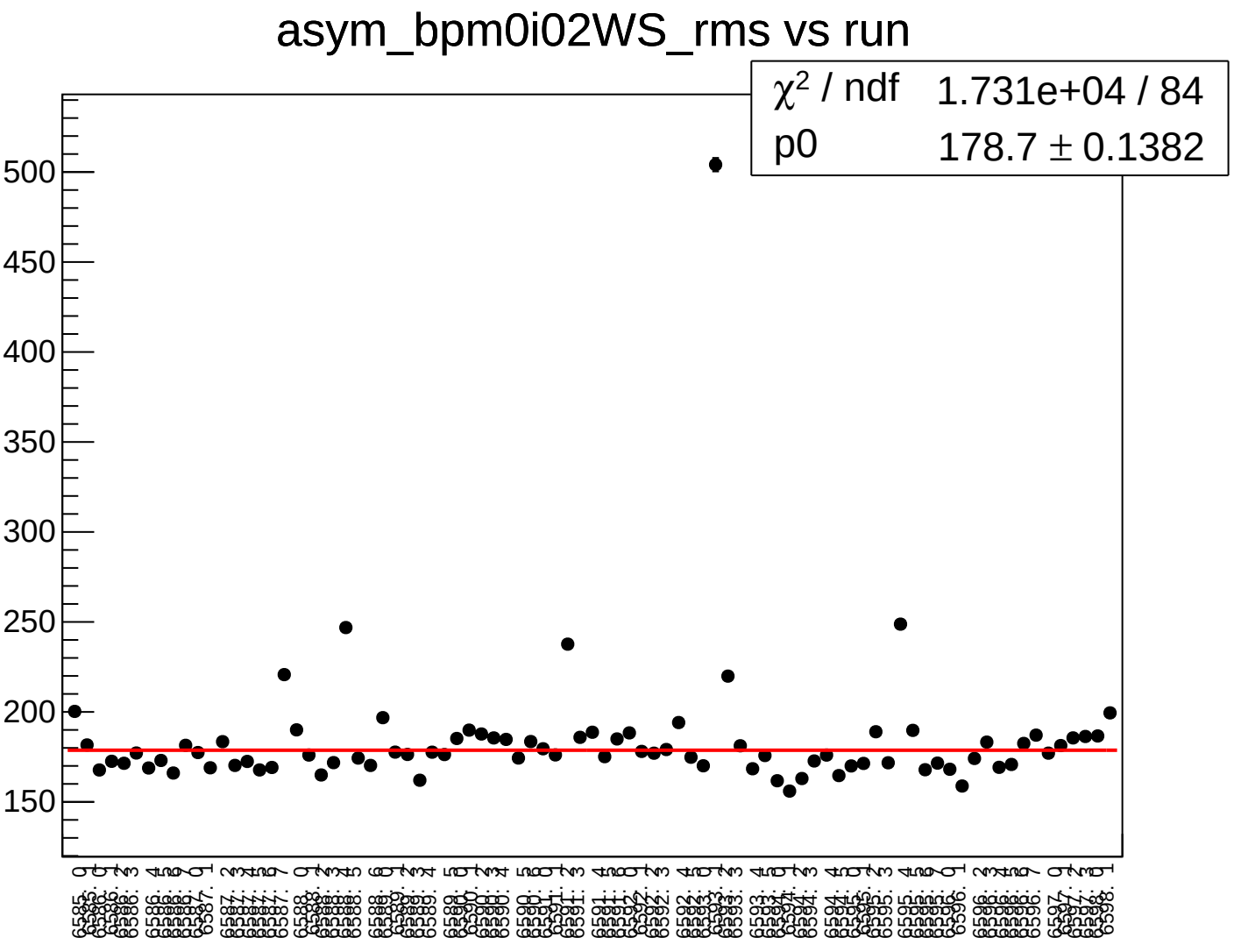

asym_bpm0r05WS_mean vs run
χ² / ndf 84.01 / 84
p0 964.8 ± 275.2
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 42.08
Std Dev 57.41
2
1
0
−1
−2

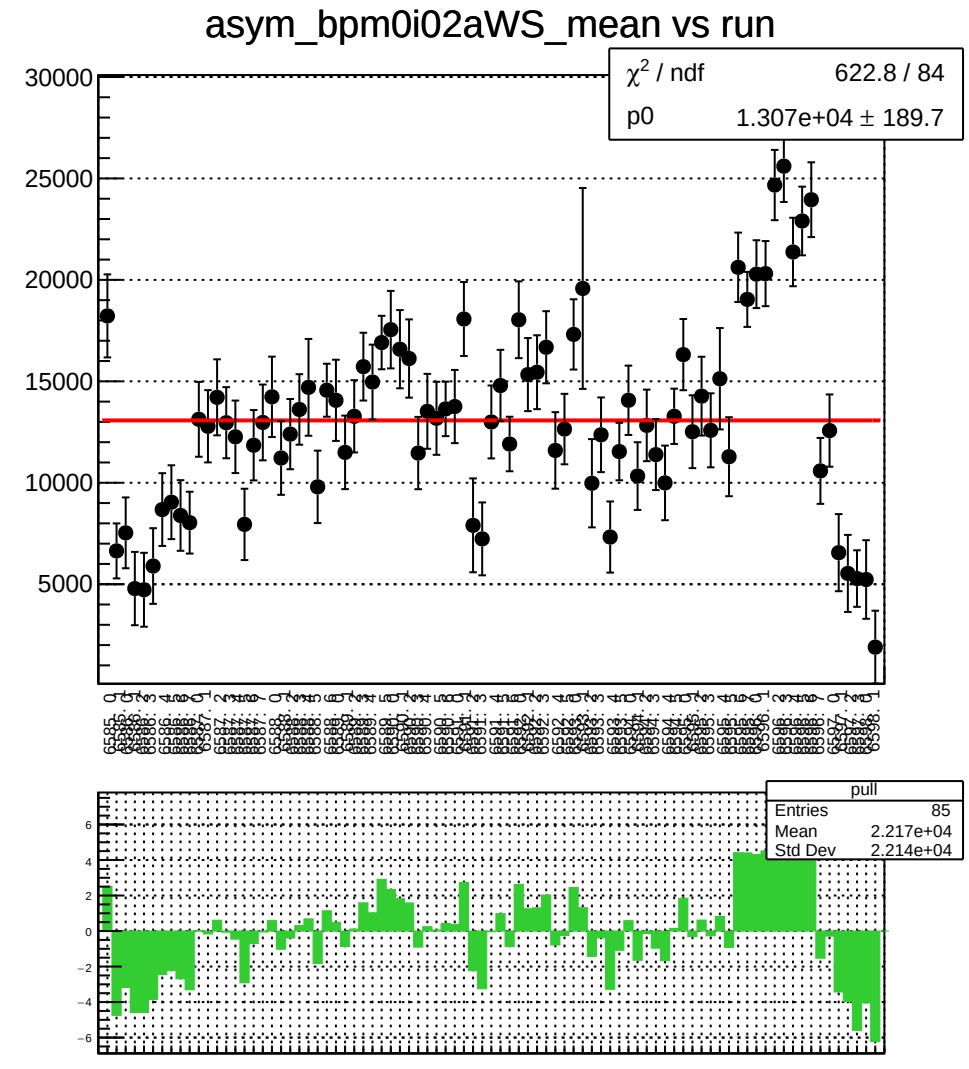

pull1D
Entries 85
Mean 0.01904
Std Dev 0.994
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

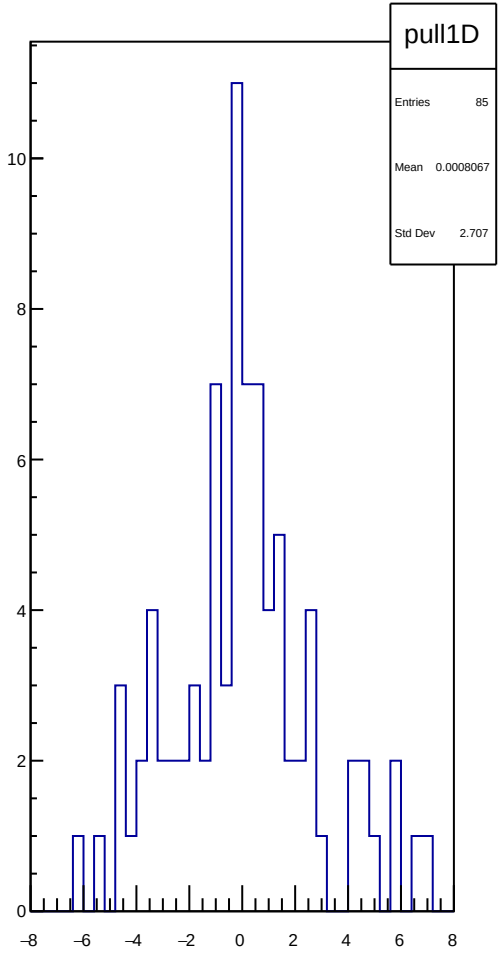

asym_bpm0r05WS_rms vs run
χ² / ndf 1.143e+04 / 84
p0 252.1 ± 0.1946
600
550
500
450
400
350
300
250
200

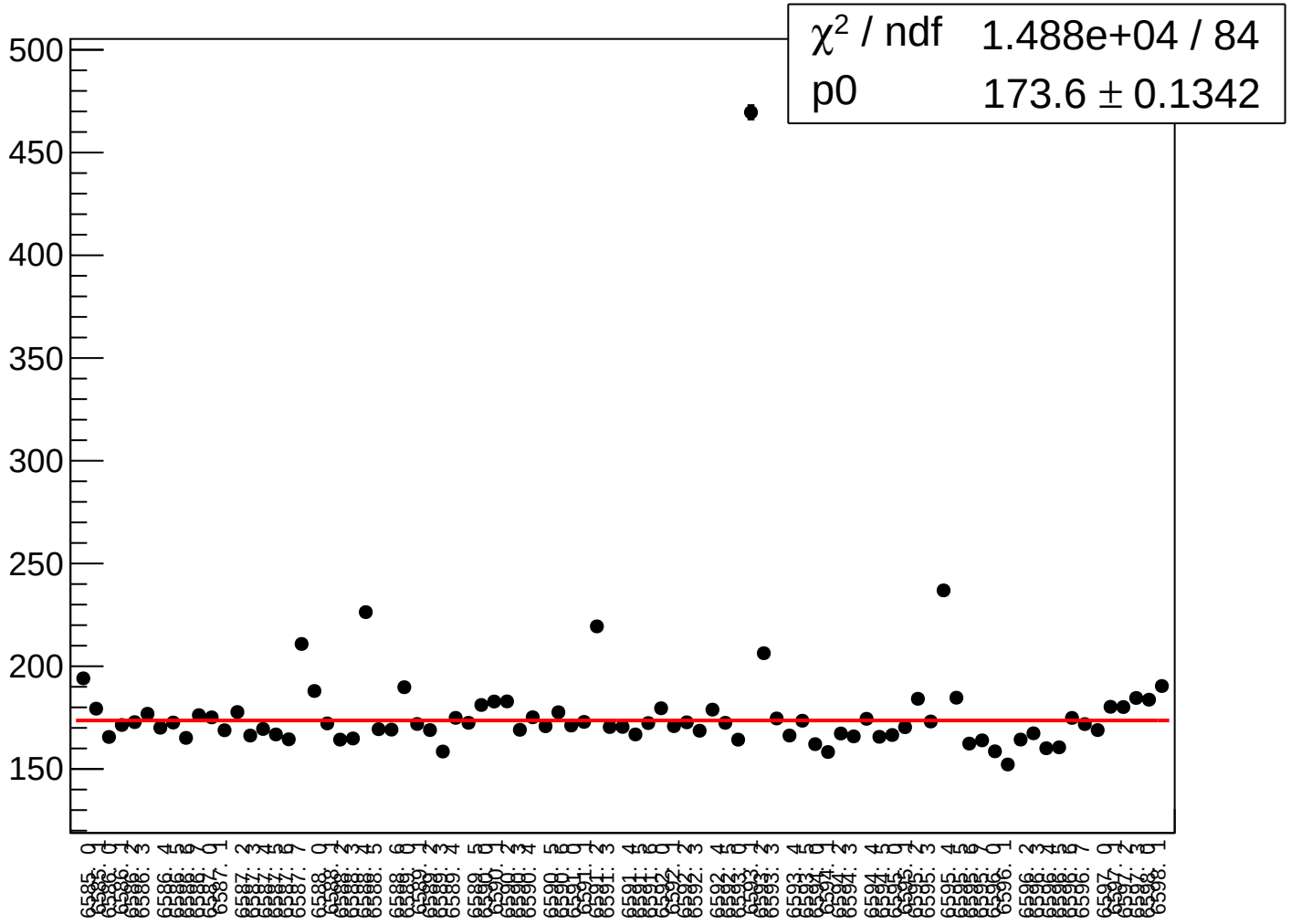

asym_bpm0i02WS_mean vs run
χ² / ndf 895.2 / 84
p0 1.384e+04 ± 195.5
pull
Entries 85
Mean 281.2
Std Dev 276

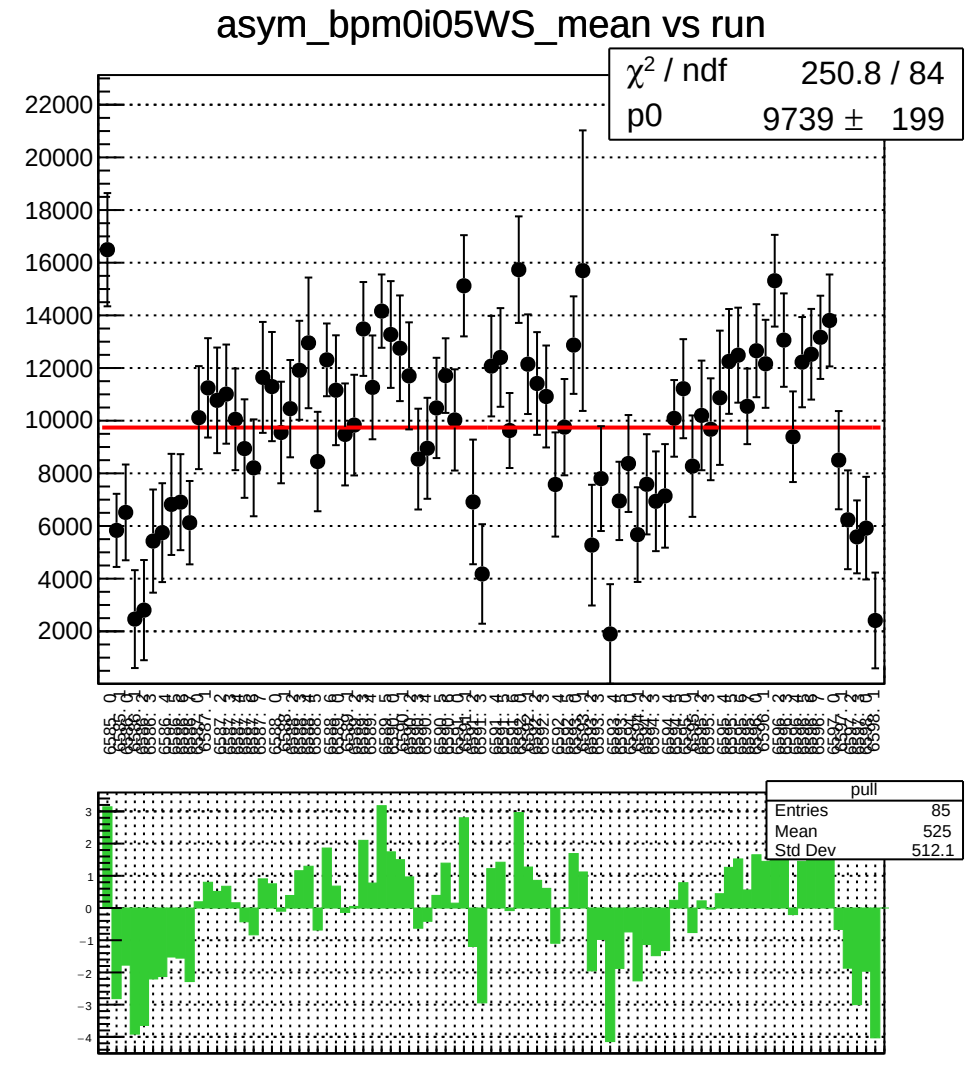

pull1D
Entries 85
Mean 0.2693
Std Dev 2.914

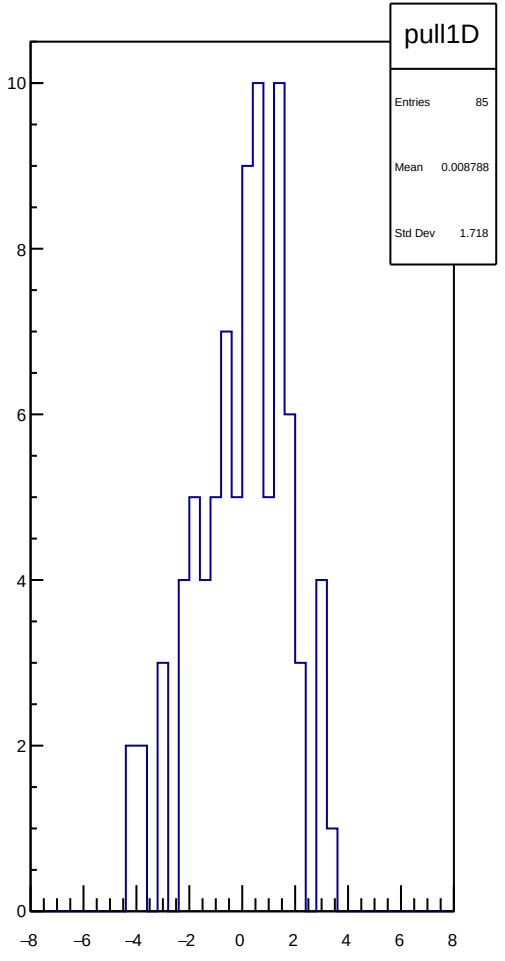

asym_bpm0i02WS_rms vs run
χ² / ndf 1.731e+04 / 84
p0 178.7 ± 0.1382
500
450
400
350
300
250
200
150

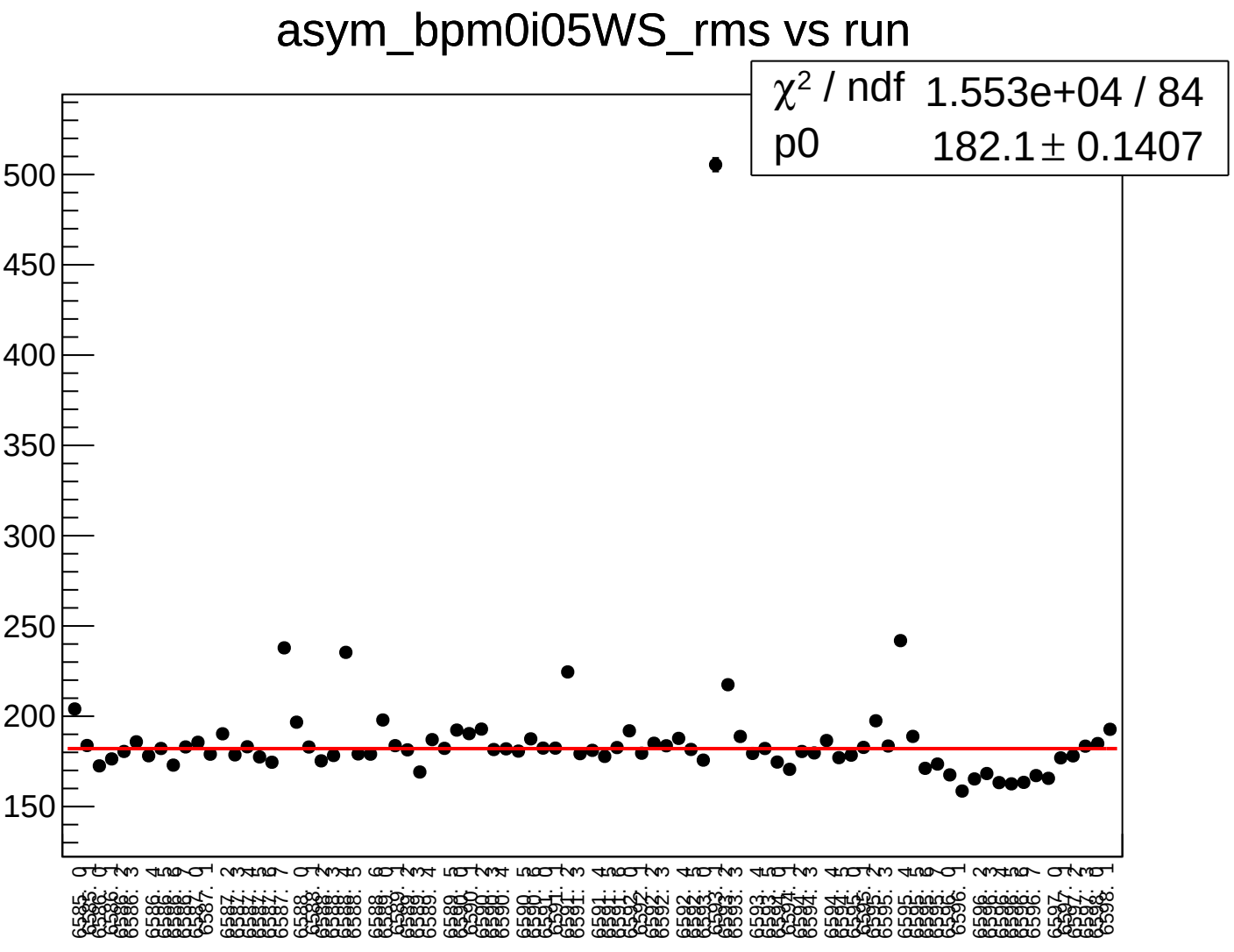

asym_bpm0i02aWS_mean vs run
χ² / ndf 622.8 / 84
p0 1.307e+04 ± 189.7
30000
25000
20000
15000
10000
5000
pull
Entries 85
Mean 2.217e+04
Std Dev 2.214e+04
6
4
2
0
−2
−4
−6

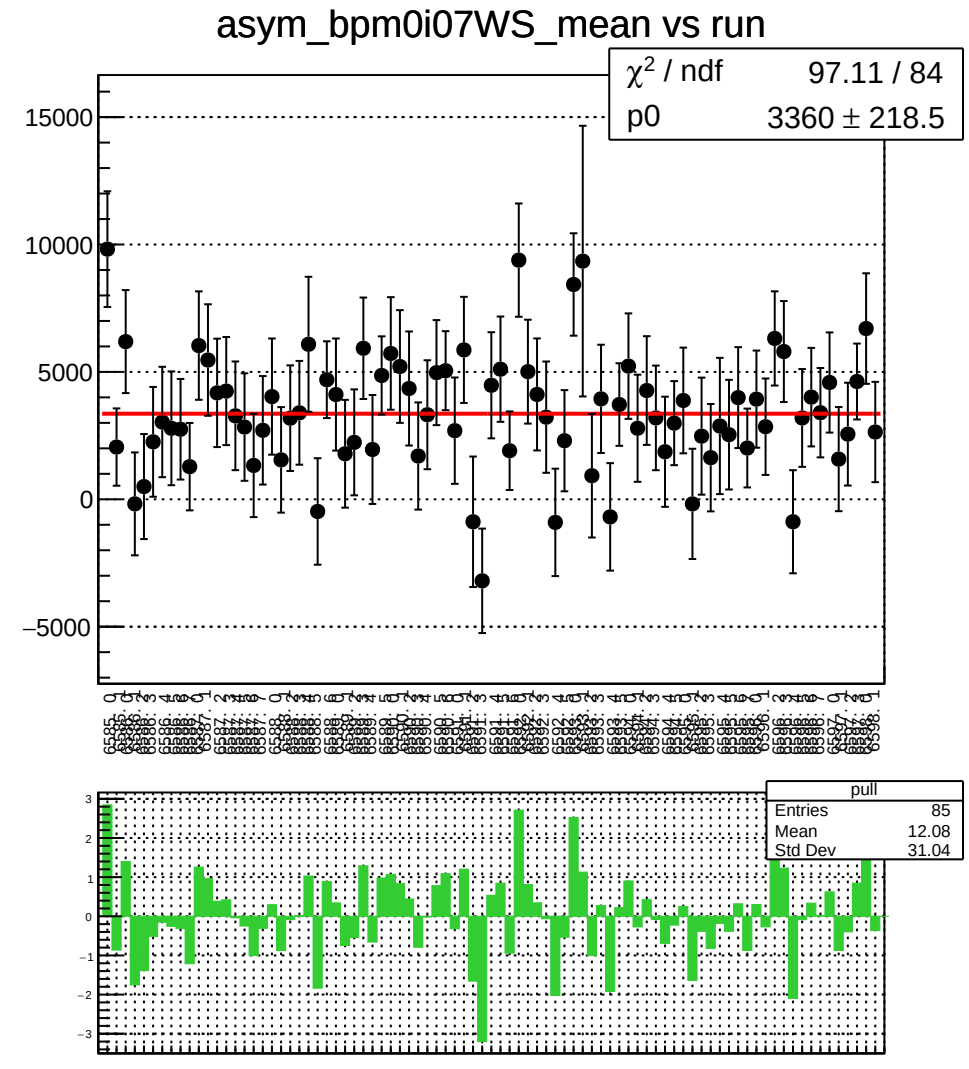

pull1D
Entries 85
Mean 0.0008067
Std Dev 2.707
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

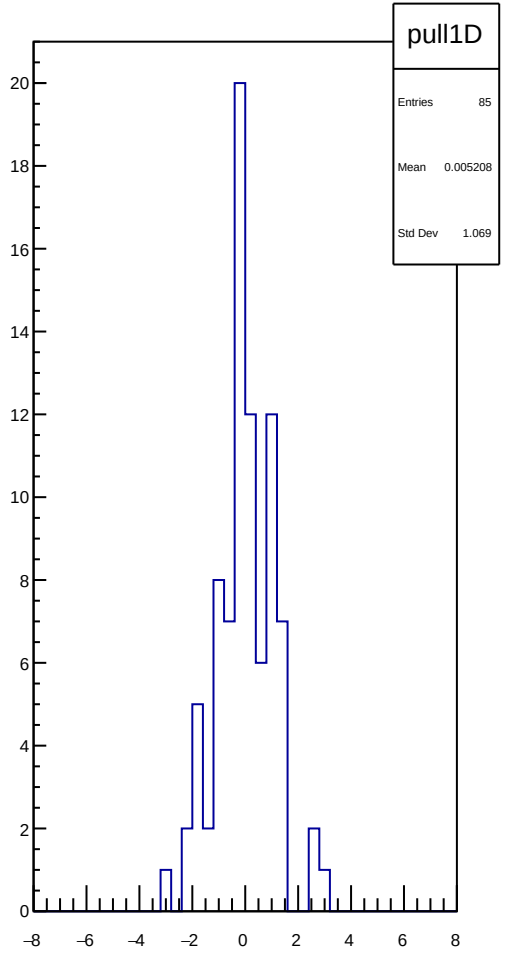

asym_bpm0i02aWS_rms vs run
χ² / ndf 1.488e+04 / 84
p0 173.6 ± 0.1342
500
450
400
350
300
250
200
150

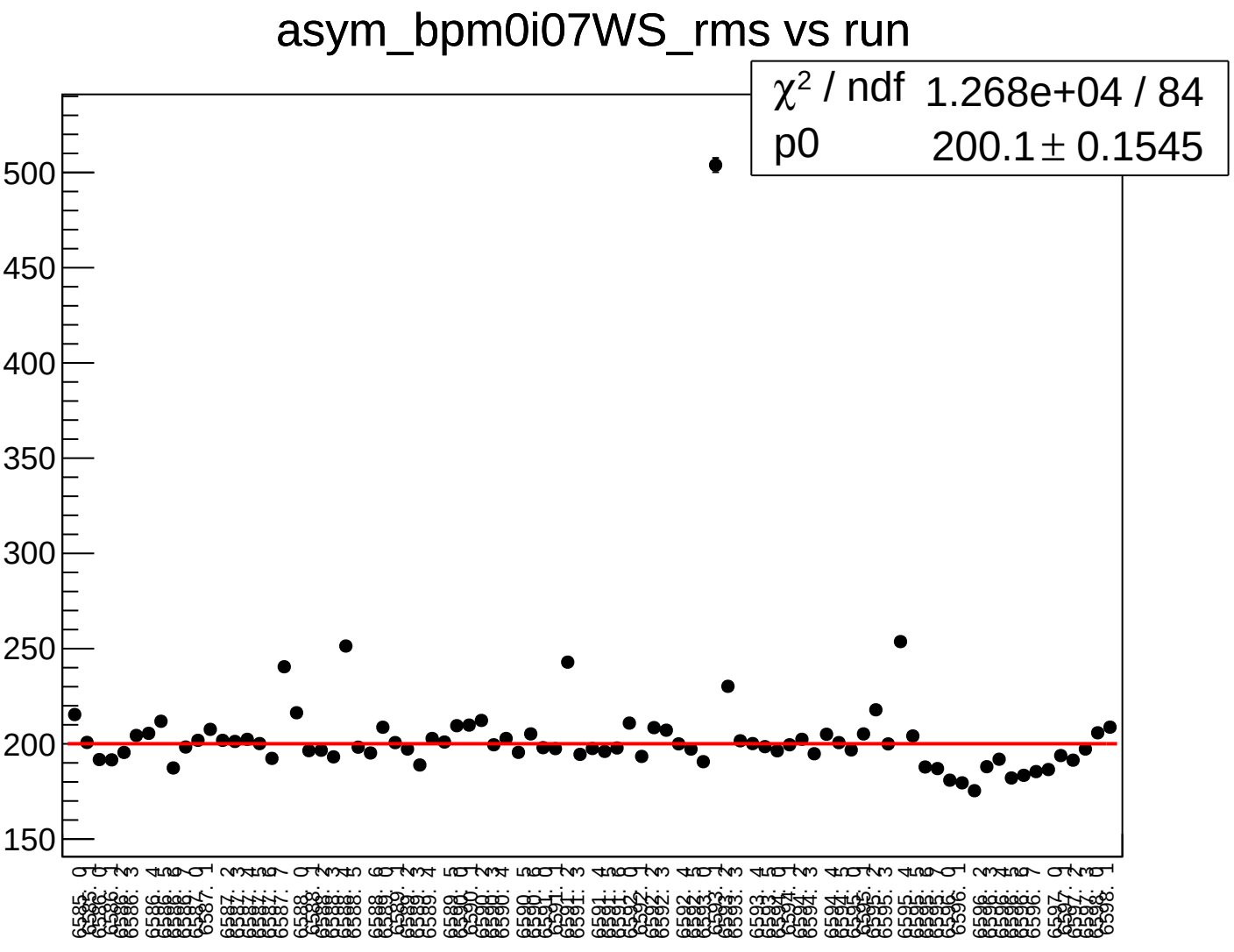

asym_bpm0i05WS_mean vs run
χ² / ndf 250.8 / 84
p0 9739 ± 199
pull
Entries 85
Mean 525
Std Dev 512.1

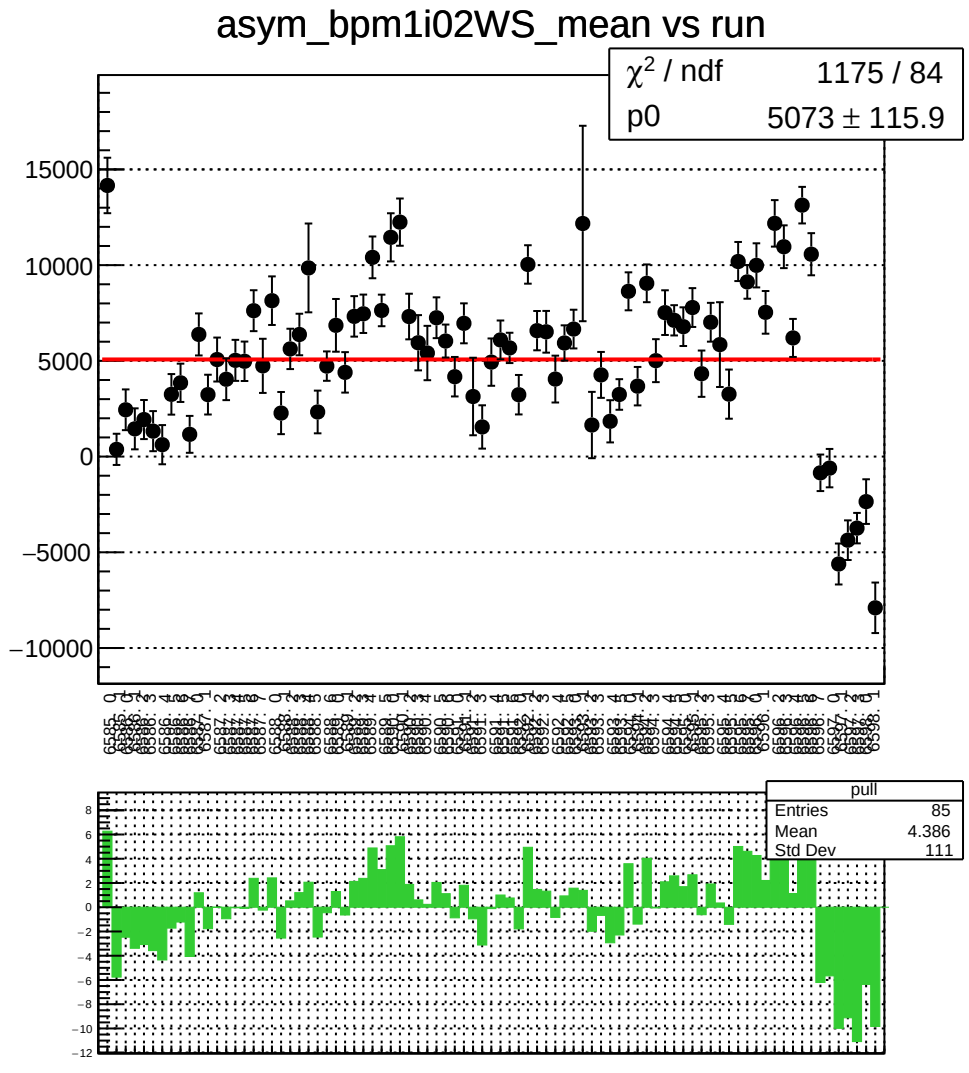

pull1D
Entries 85
Mean 0.008788
Std Dev 1.718

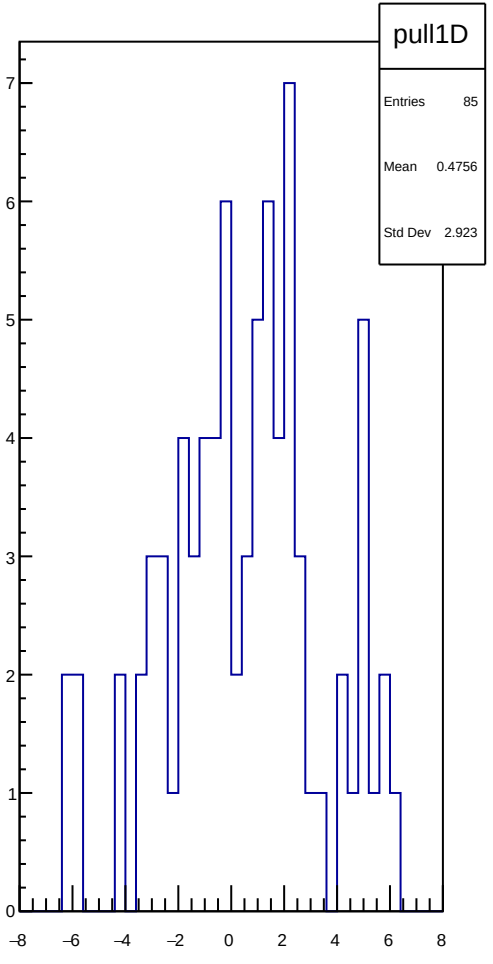

asym_bpm0i05WS_rms vs run
χ² / ndf 1.553e+04 / 84
p0 182.1 ± 0.1407
500
450
400
350
300
250
200
150

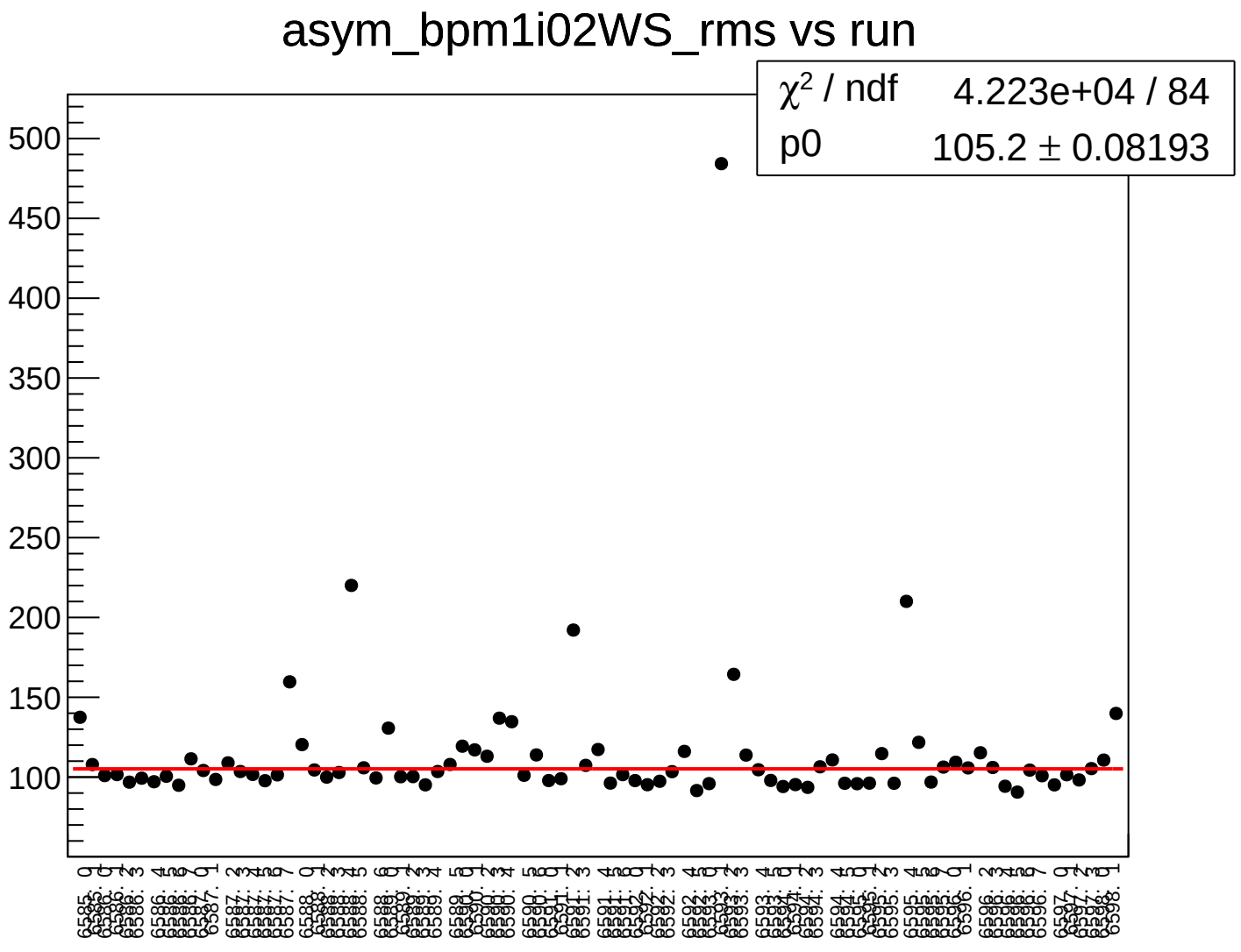

asym_bpm0i07WS_mean vs run
χ² / ndf 97.11 / 84
p0 3360 ± 218.5
15000
10000
5000
0
−5000
pull
Entries 85
Mean 12.08
Std Dev 31.04
3
2
1
0
−1
−2
−3

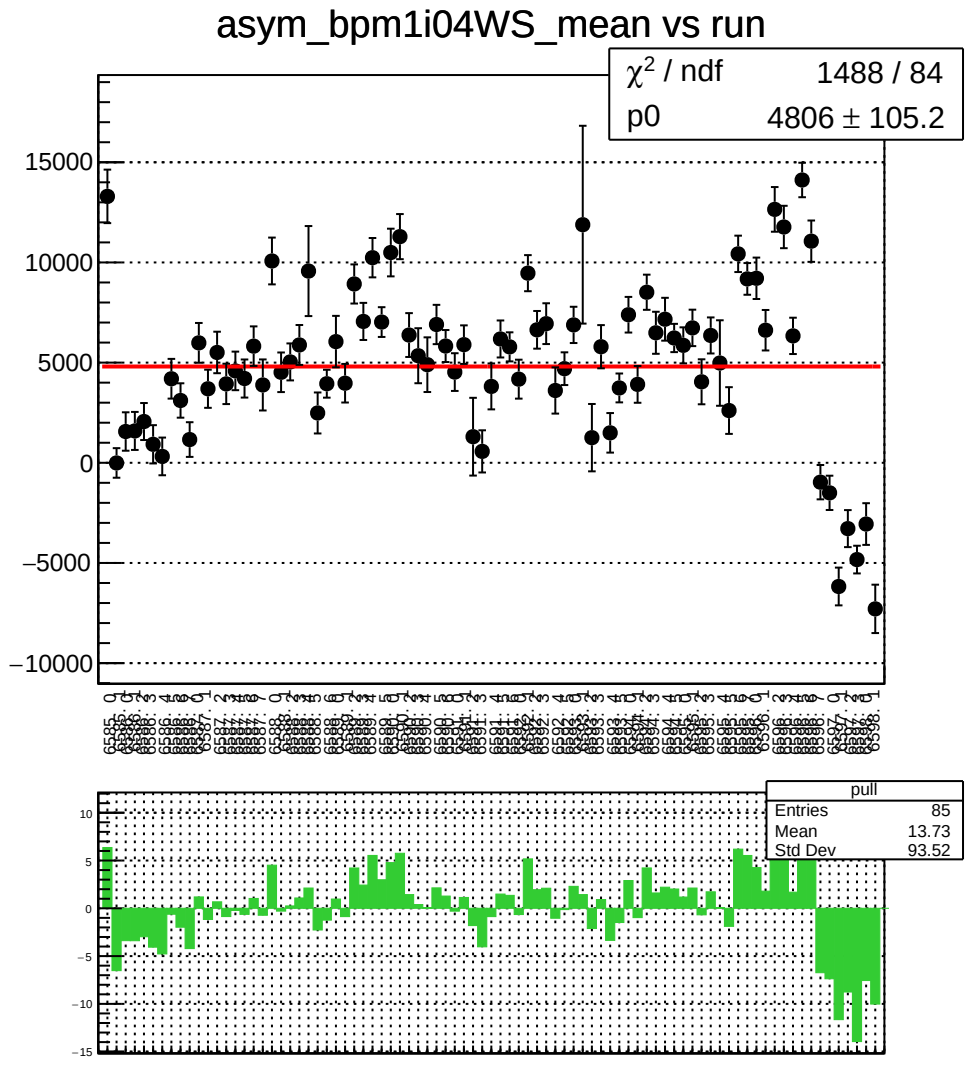

pull1D
Entries 85
Mean 0.005208
Std Dev 1.069
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

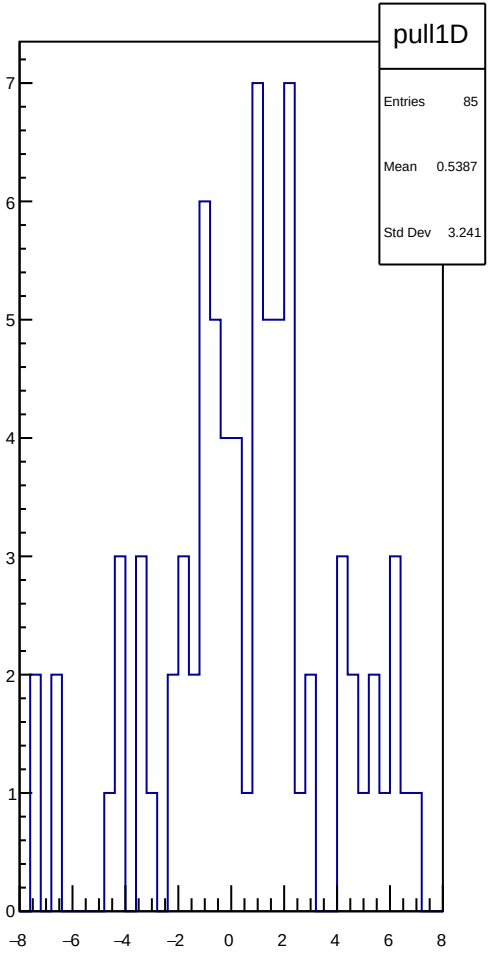

asym_bpm0i07WS_rms vs run
χ² / ndf 1.268e+04 / 84
p0 200.1 ± 0.1545
500
450
400
350
300
250
200
150

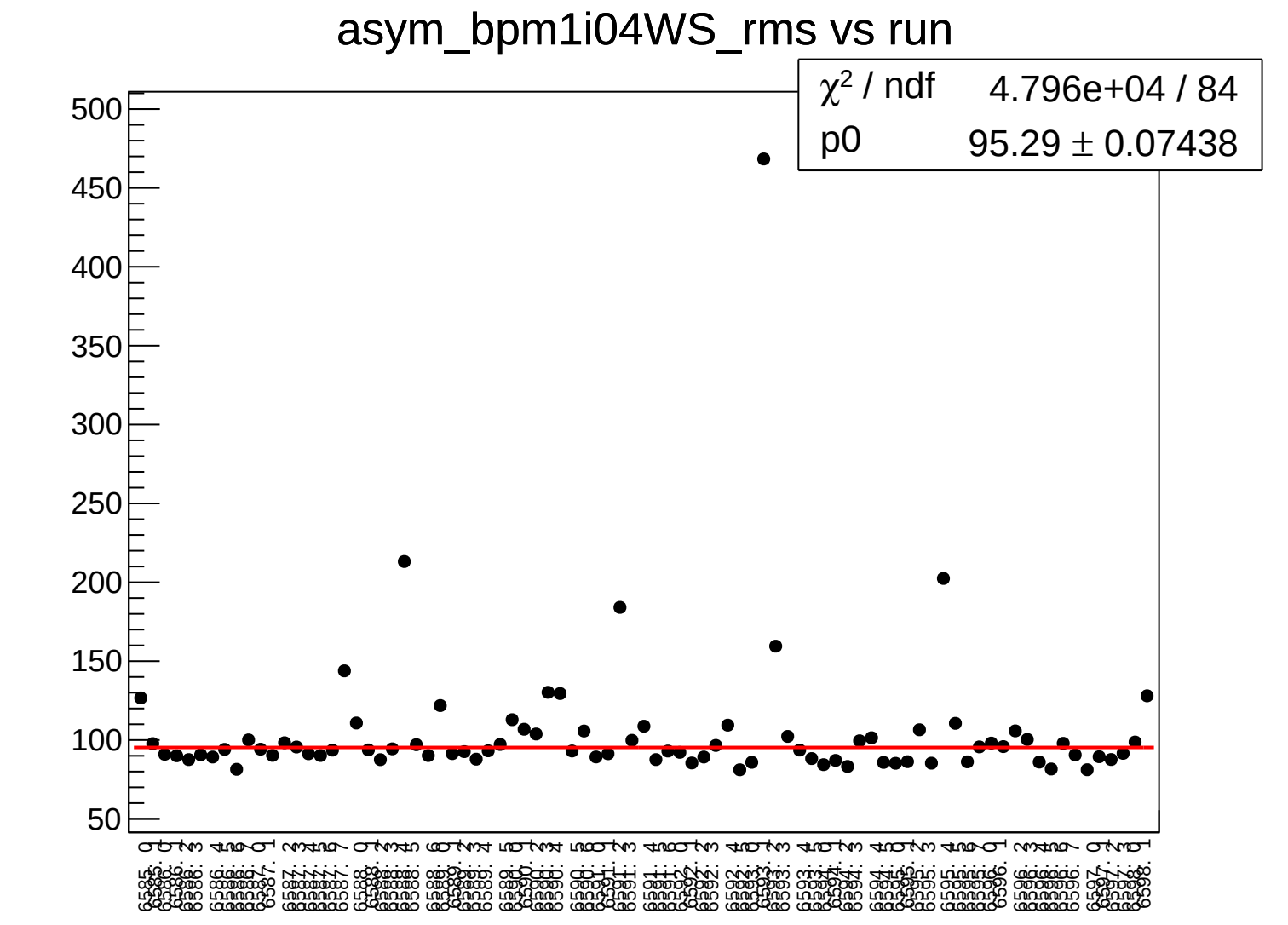

asym_bpm1i02WS_mean vs run
χ² / ndf 1175 / 84
p0 5073 ± 115.9
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 4.386
Std Dev 111
8
6
4
2
0
−2
−4
−6
−8
−10
−12

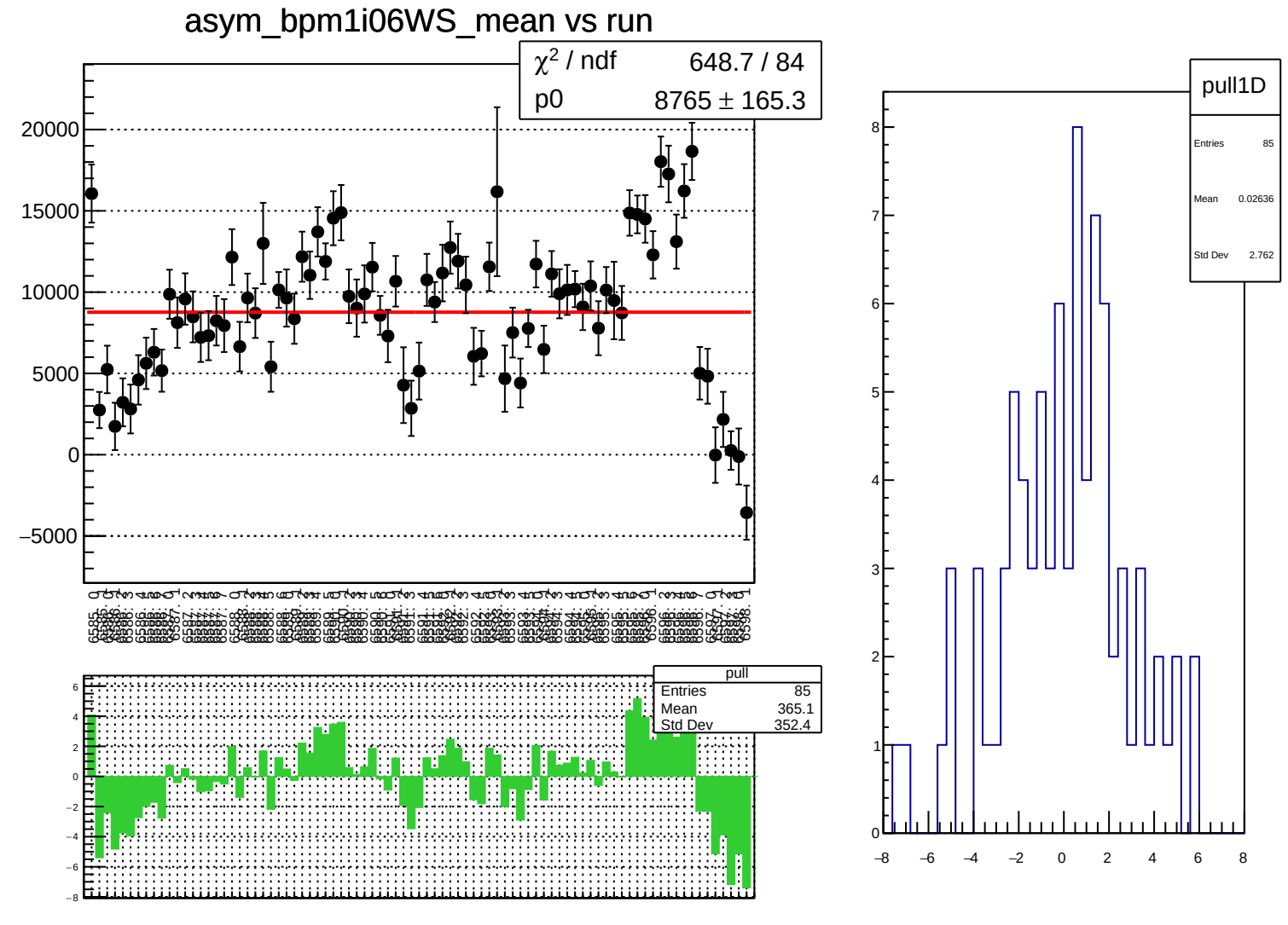

pull1D
Entries 85
Mean 0.4756
Std Dev 2.923
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

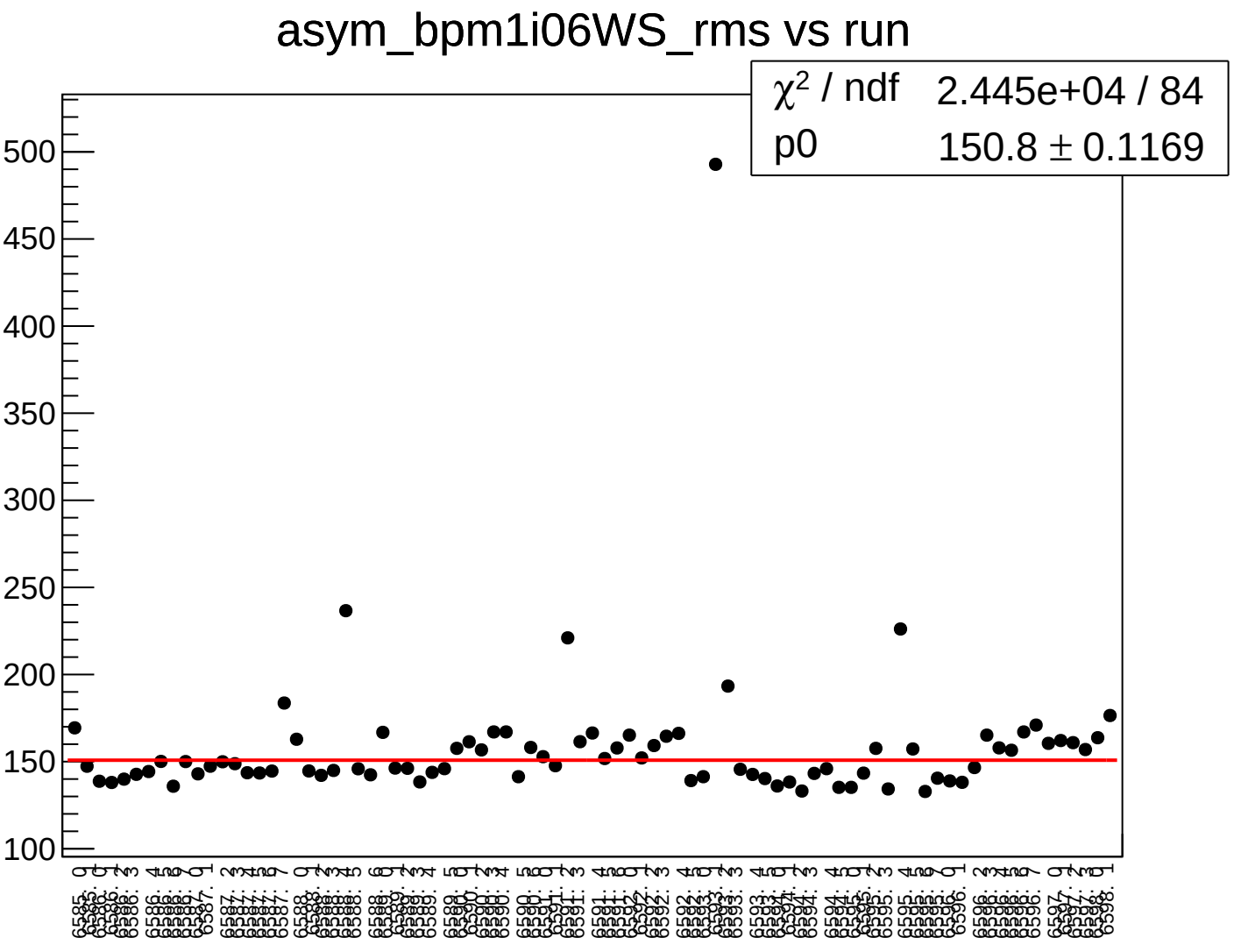

asym_bpm1i02WS_rms vs run
χ^2 / ndf 4.223e+04 / 84
p0 105.2 ± 0.08193
500
450
400
350
300
250
200
150
100

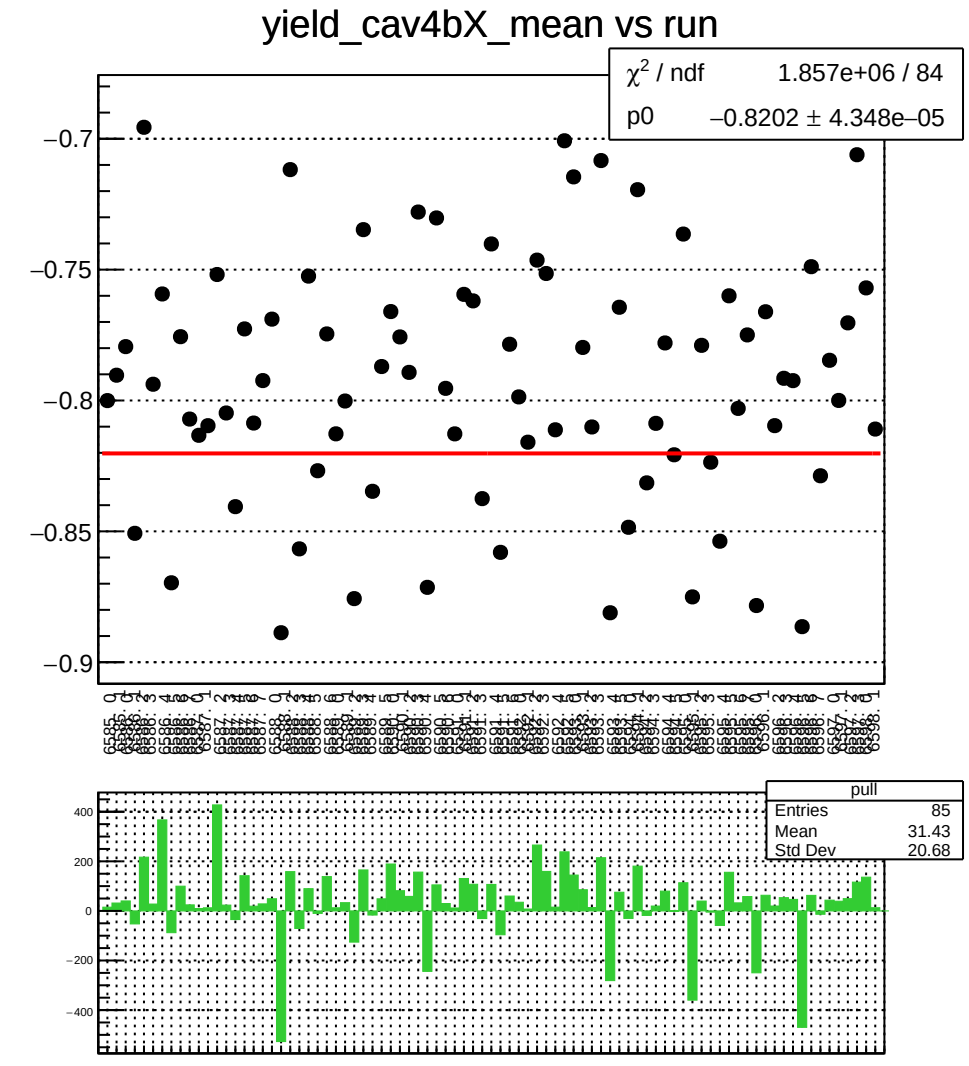

asym_bpm1i04WS_mean vs run
χ² / ndf 1488 / 84
p0 4806 ± 105.2
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 13.73
Std Dev 93.52
10
5
0
−5
−10
−15

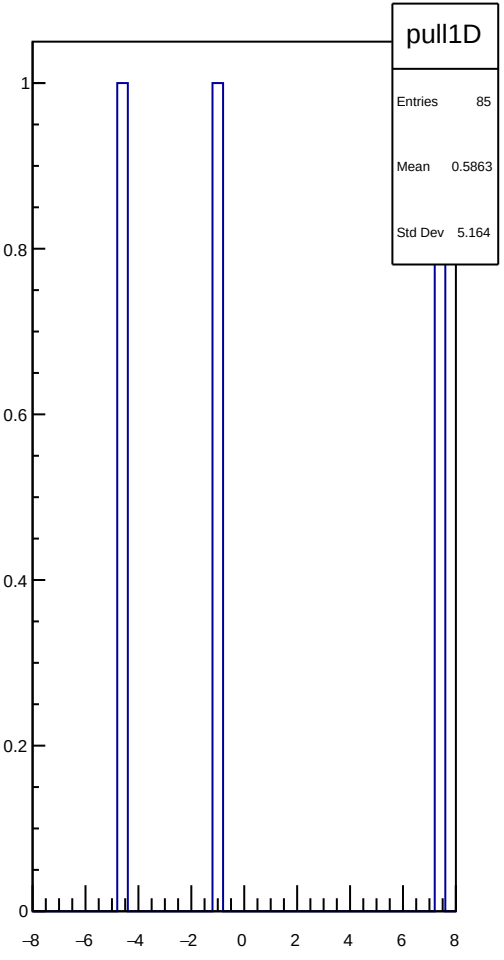

pull1D
Entries 85
Mean 0.5387
Std Dev 3.241
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

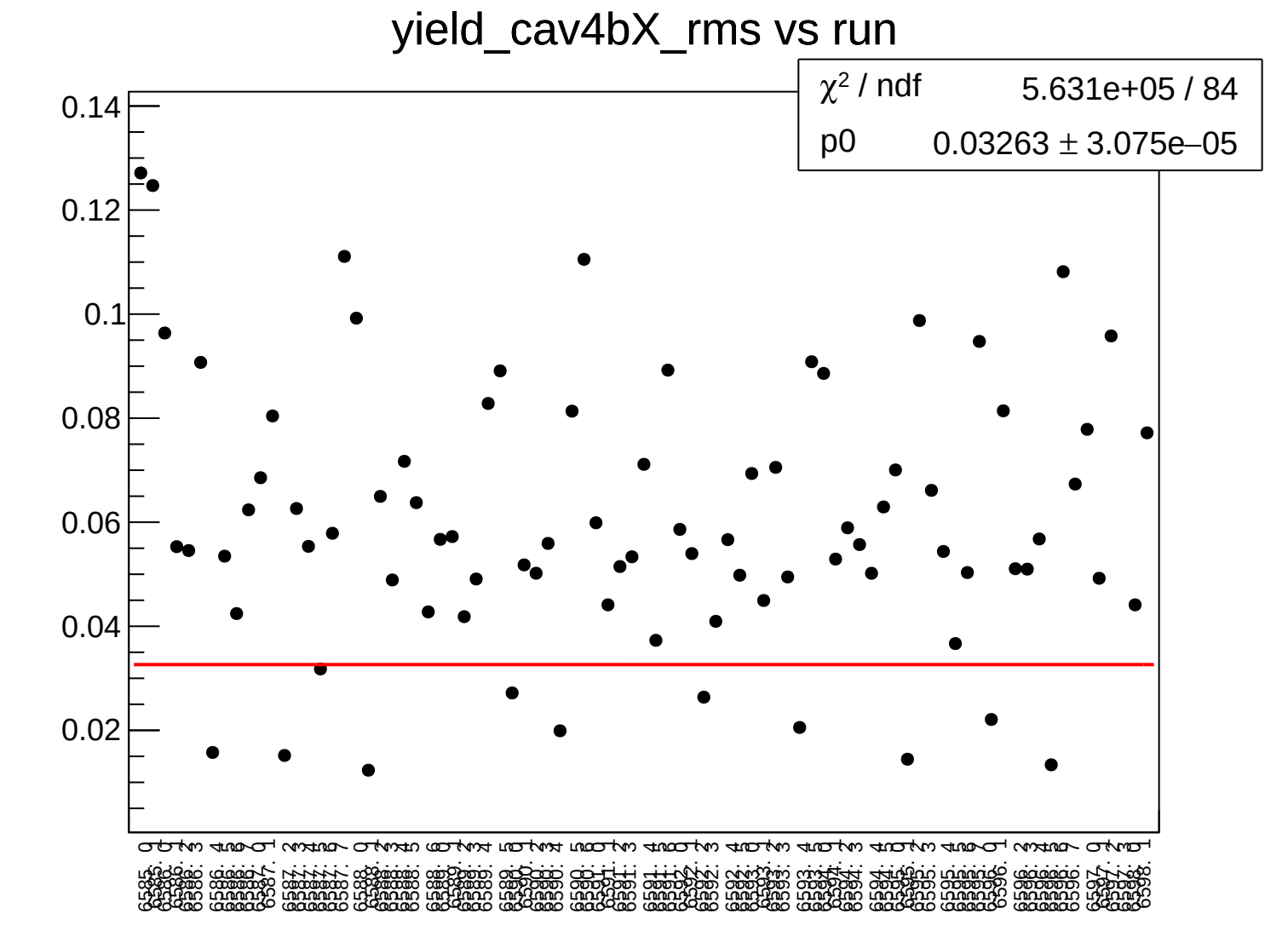

asym_bpm1i04WS_rms vs run
χ² / ndf 4.796e+04 / 84
p0 95.29 ± 0.07438
500
450
400
350
300
250
200
150
100
50

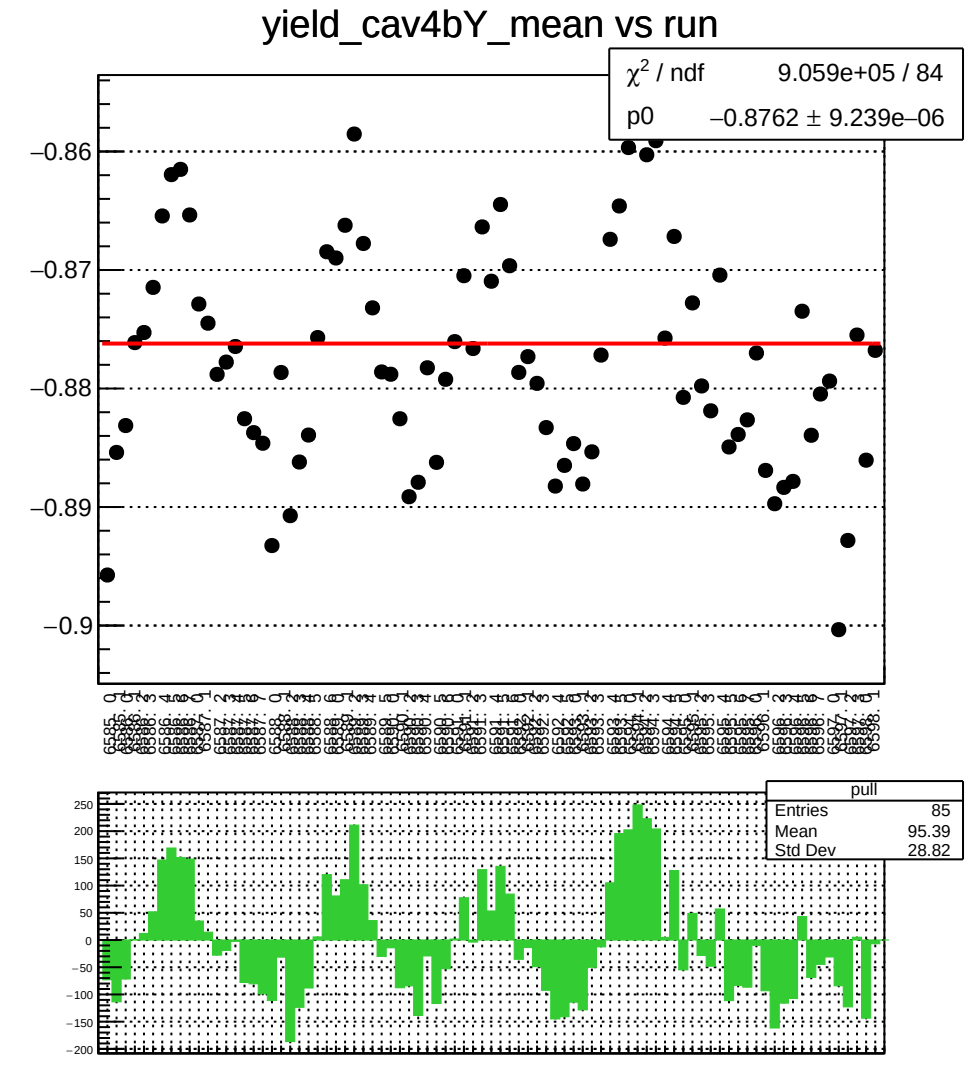

asym_bpm1i06WS_mean vs run
χ² / ndf 648.7 / 84
p0 8765 ± 165.3
pull
Entries 85
Mean 365.1
Std Dev 352.4
pull1D
Entries 85
Mean 0.02636
Std Dev 2.762

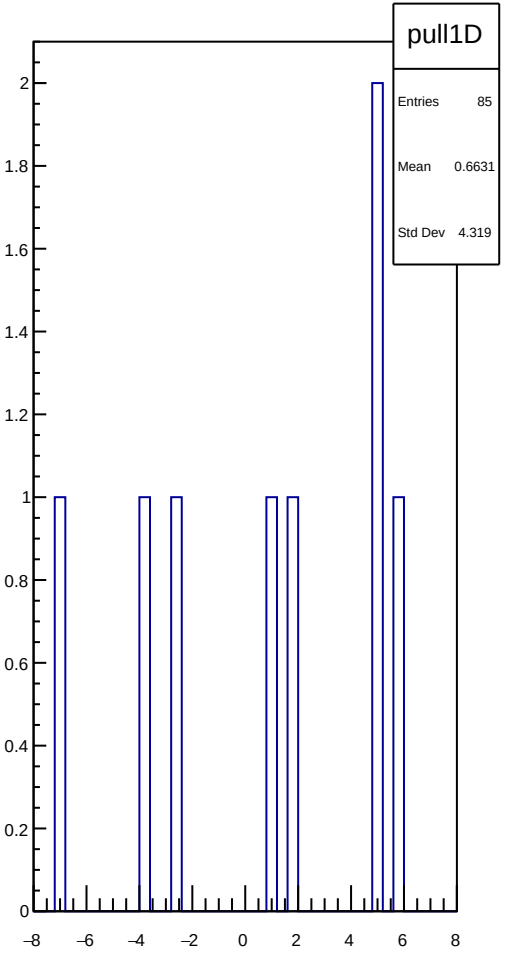

asym_bpm1i06WS_rms vs run
χ² / ndf 2.445e+04 / 84
p0 150.8 ± 0.1169
500
450
400
350
300
250
200
150
100

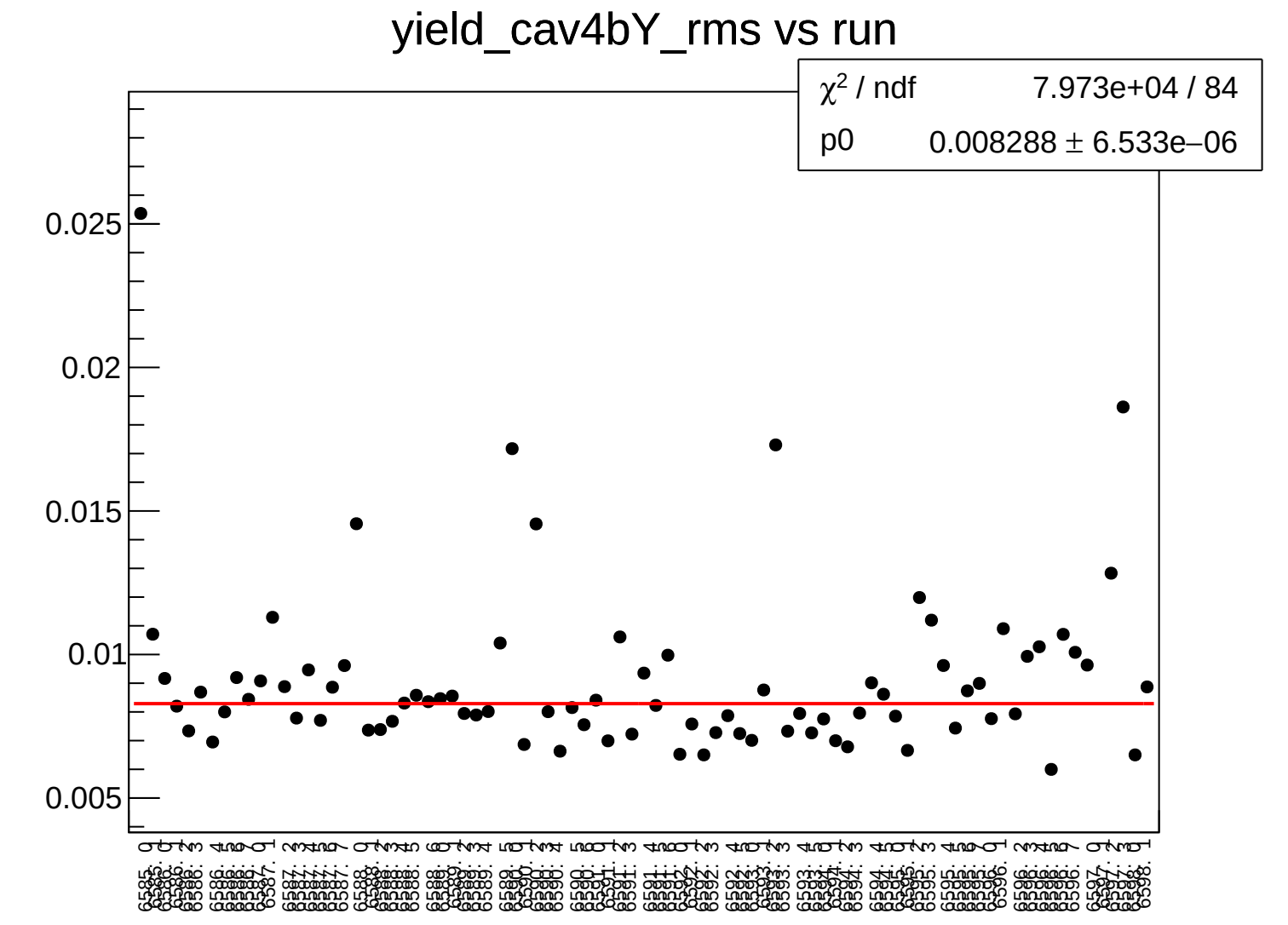

yield_cav4bX_mean vs run
χ² / ndf 1.857e+06 / 84
p0 −0.8202 ± 4.348e−05
−0.7
−0.75
−0.8
−0.85
−0.9
pull
Entries 85
Mean 31.43
Std Dev 20.68
400
200
0
−200
−400

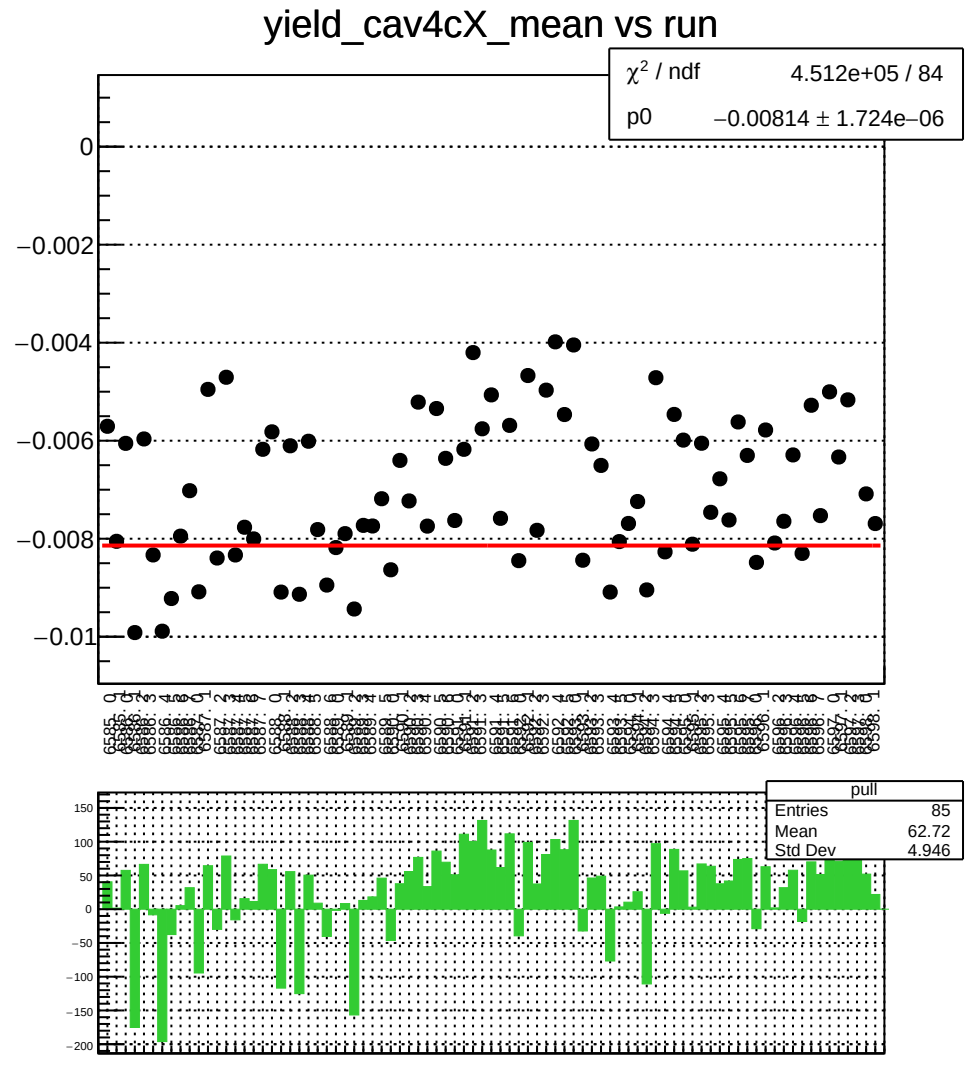

pull1D
Entries 85
Mean 0.5863
Std Dev 5.164
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

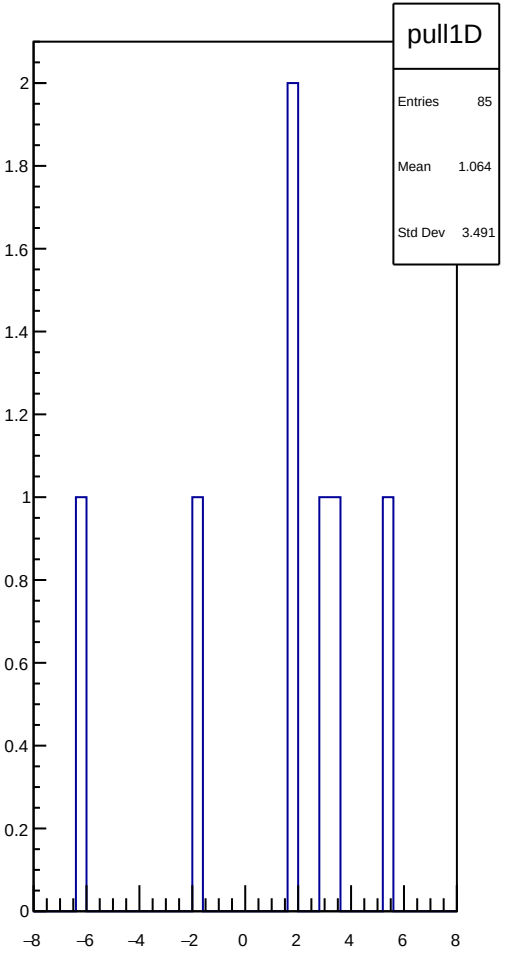

yield_cav4bX_rms vs run
χ² / ndf 5.631e+05 / 84
p0 0.03263 ± 3.075e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

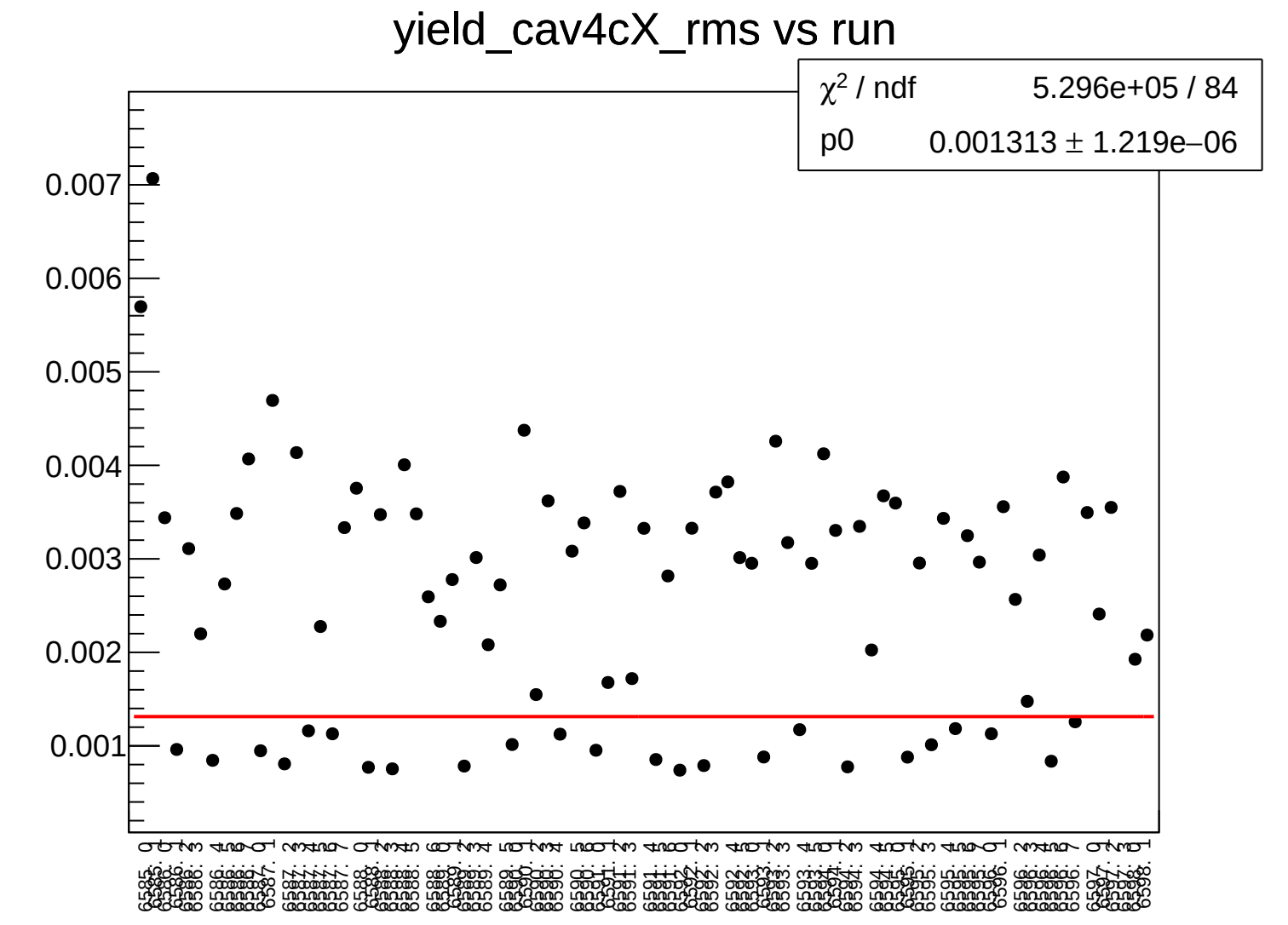

yield_cav4bY_mean vs run
χ² / ndf 9.059e+05 / 84
p0 −0.8762 ± 9.239e−06
−0.86
−0.87
−0.88
−0.89
−0.9
pull
Entries 85
Mean 95.39
Std Dev 28.82
250
200
150
100
50
0
−50
−100
−150
−200

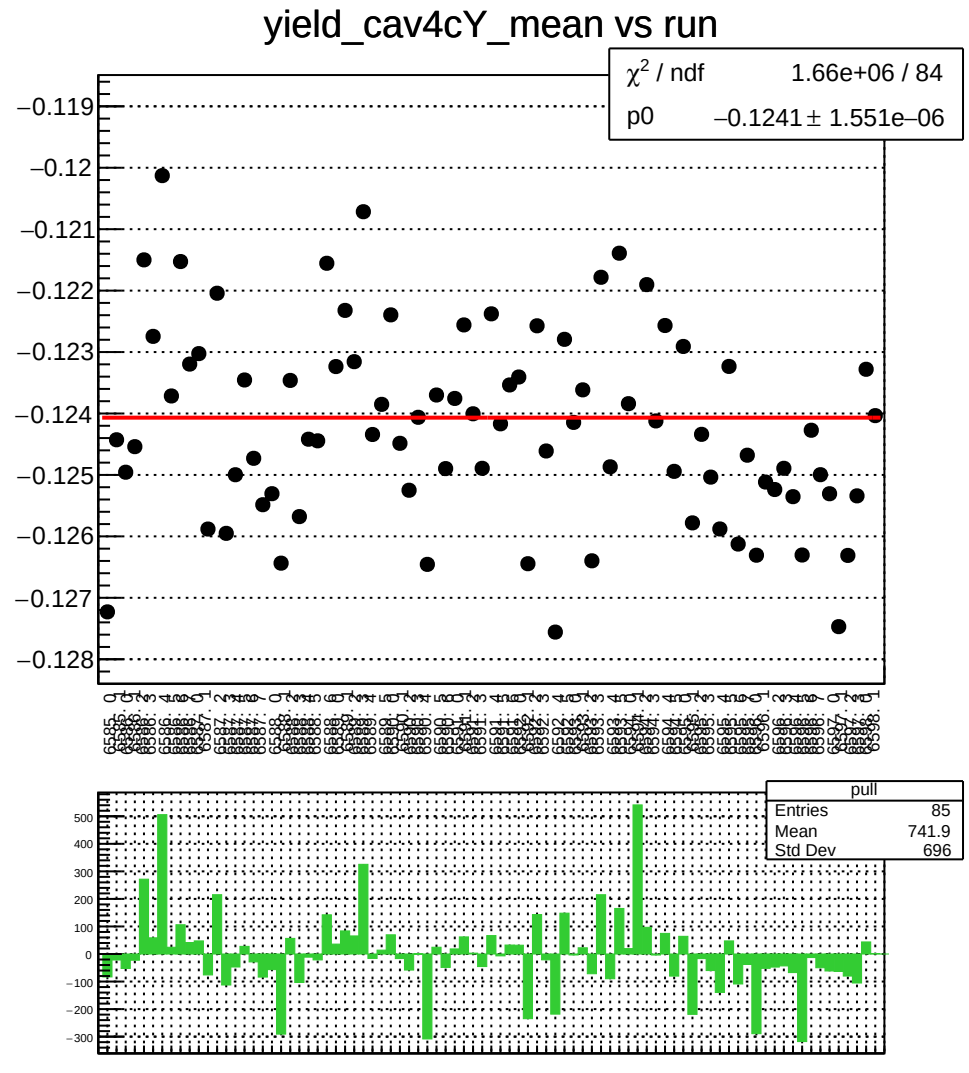

pull1D
Entries 85
Mean 0.6631
Std Dev 4.319
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

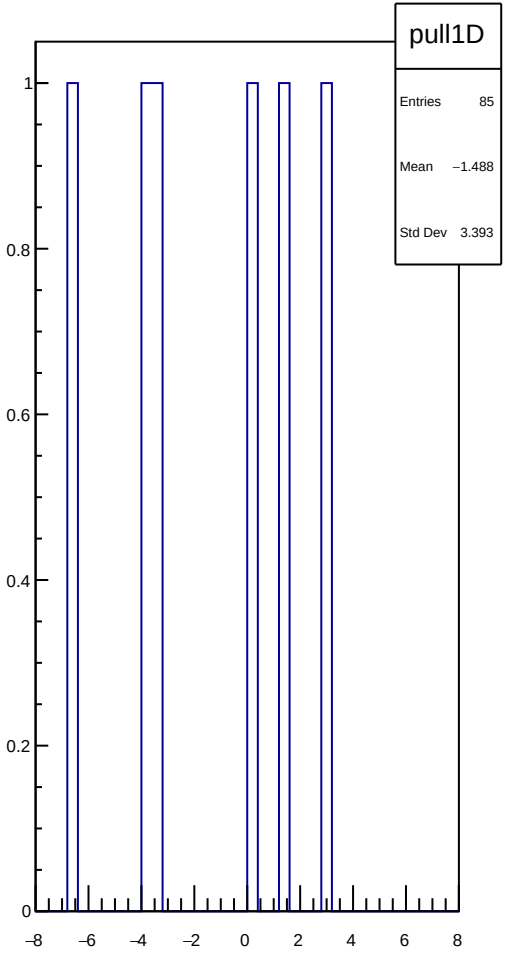

yield_cav4bY_rms vs run
χ² / ndf 7.973e+04 / 84
p0 0.008288 ± 6.533e−06
0.025
0.02
0.015
0.01
0.005

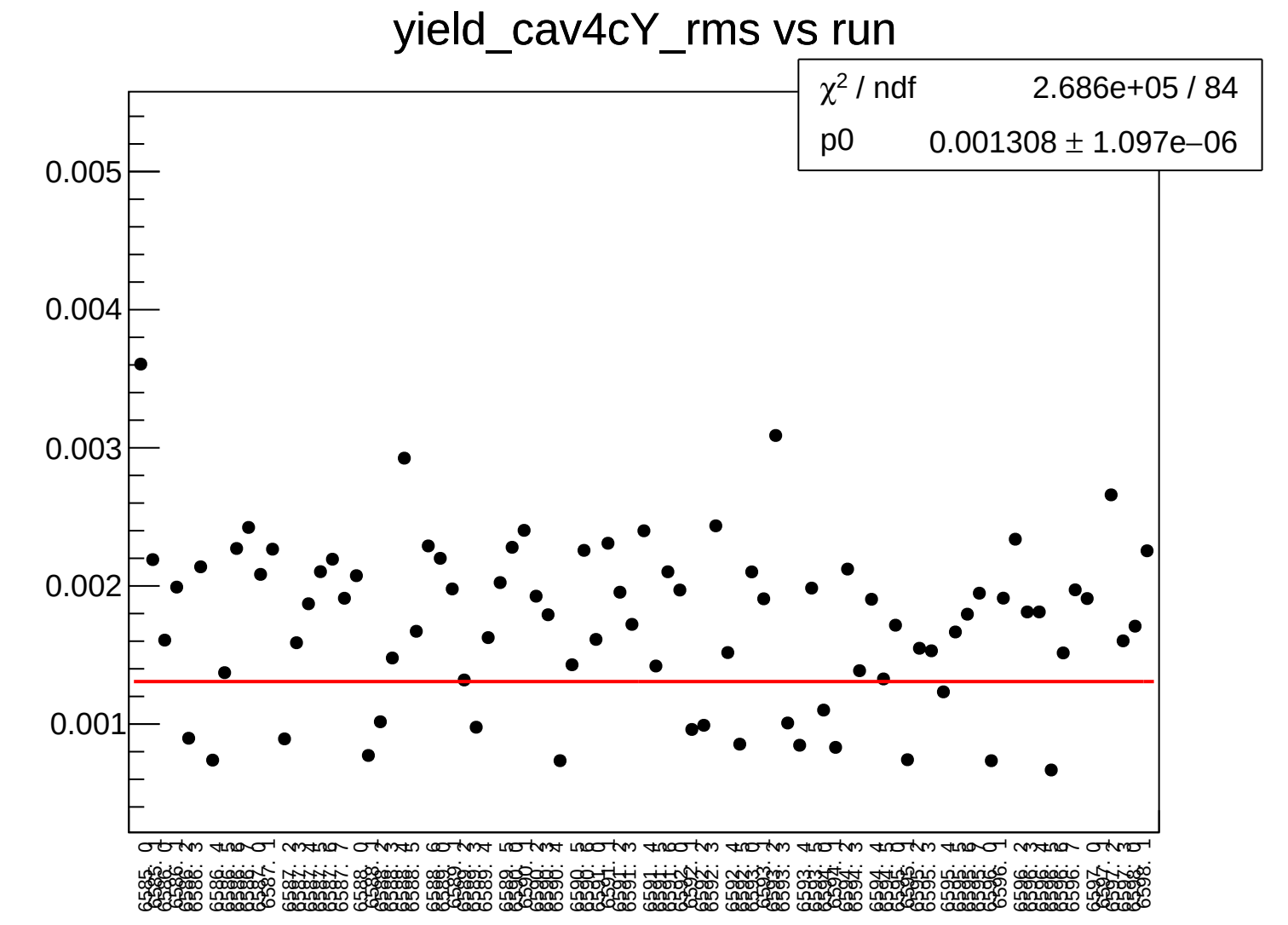

yield_cav4cX_mean vs run
χ² / ndf 4.512e+05 / 84
p0 −0.00814 ± 1.724e−06
0
−0.002
−0.004
−0.006
−0.008
−0.01
pull
Entries 85
Mean 62.72
Std Dev 4.946
150
100
50
0
−50
−100
−150
−200

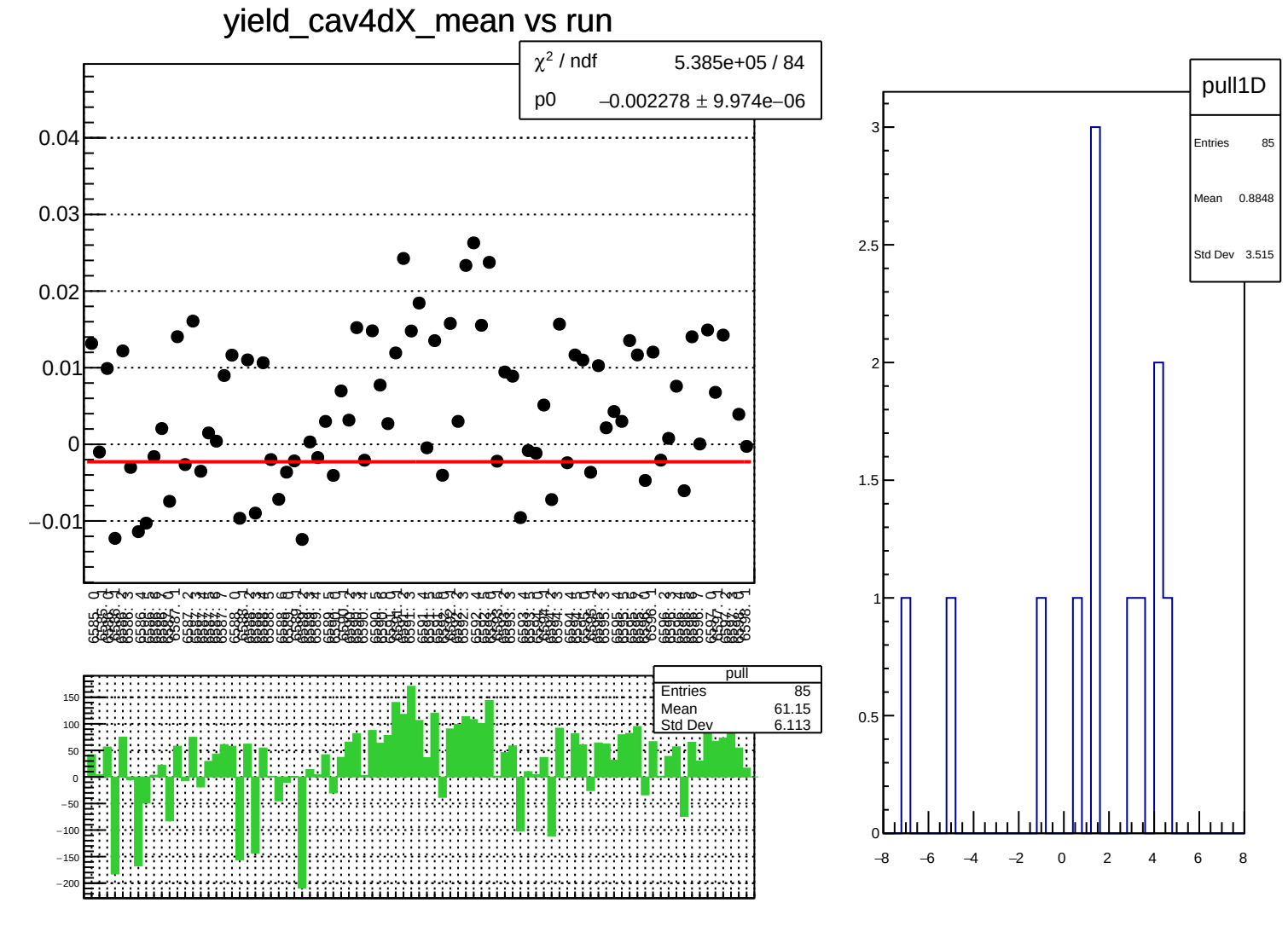

pull1D
Entries 85
Mean 1.064
Std Dev 3.491
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

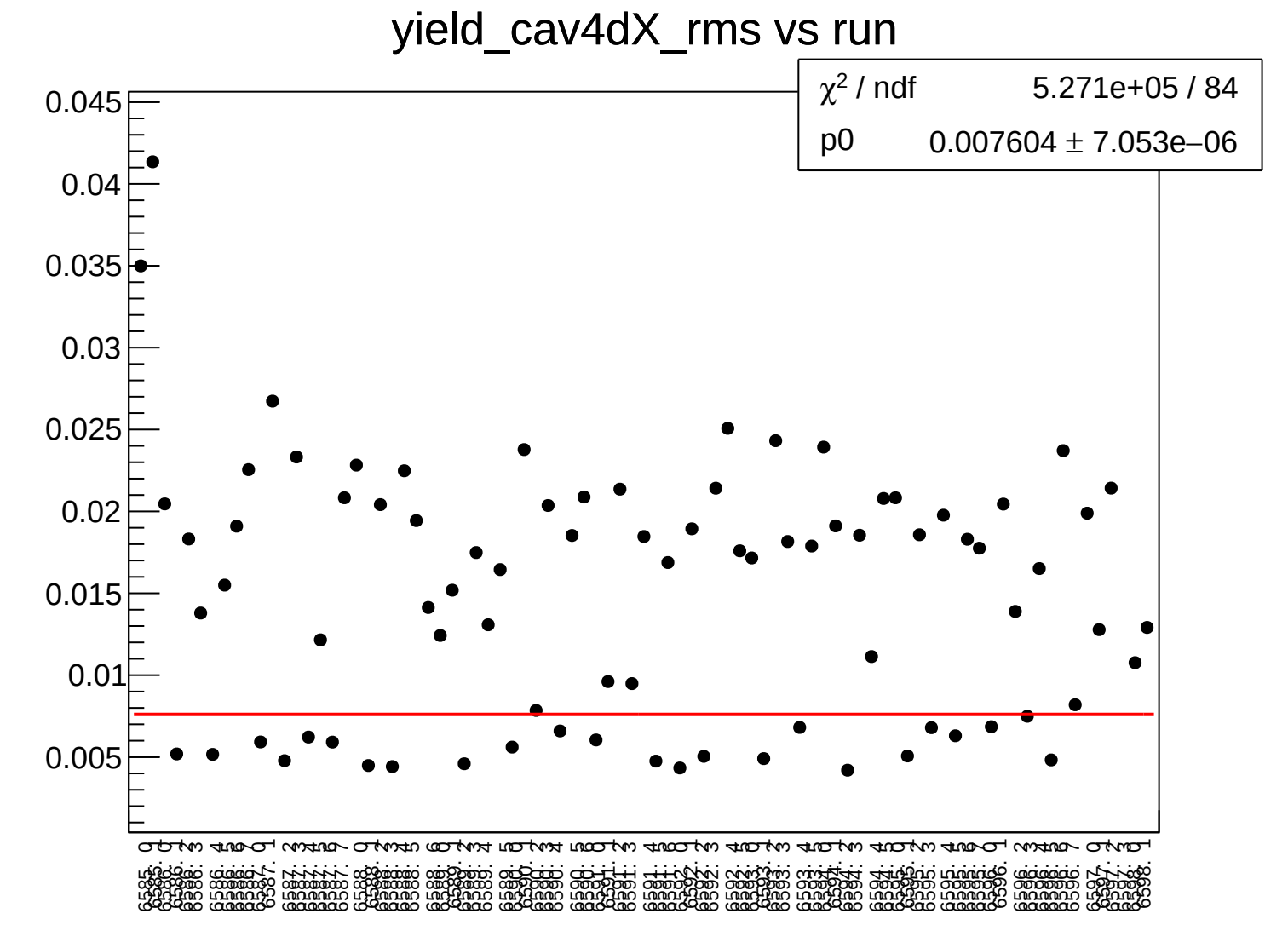

yield_cav4cX_rms vs run
χ² / ndf 5.296e+05 / 84
p0 0.001313 ± 1.219e−06
0.007
0.006
0.005
0.004
0.003
0.002
0.001

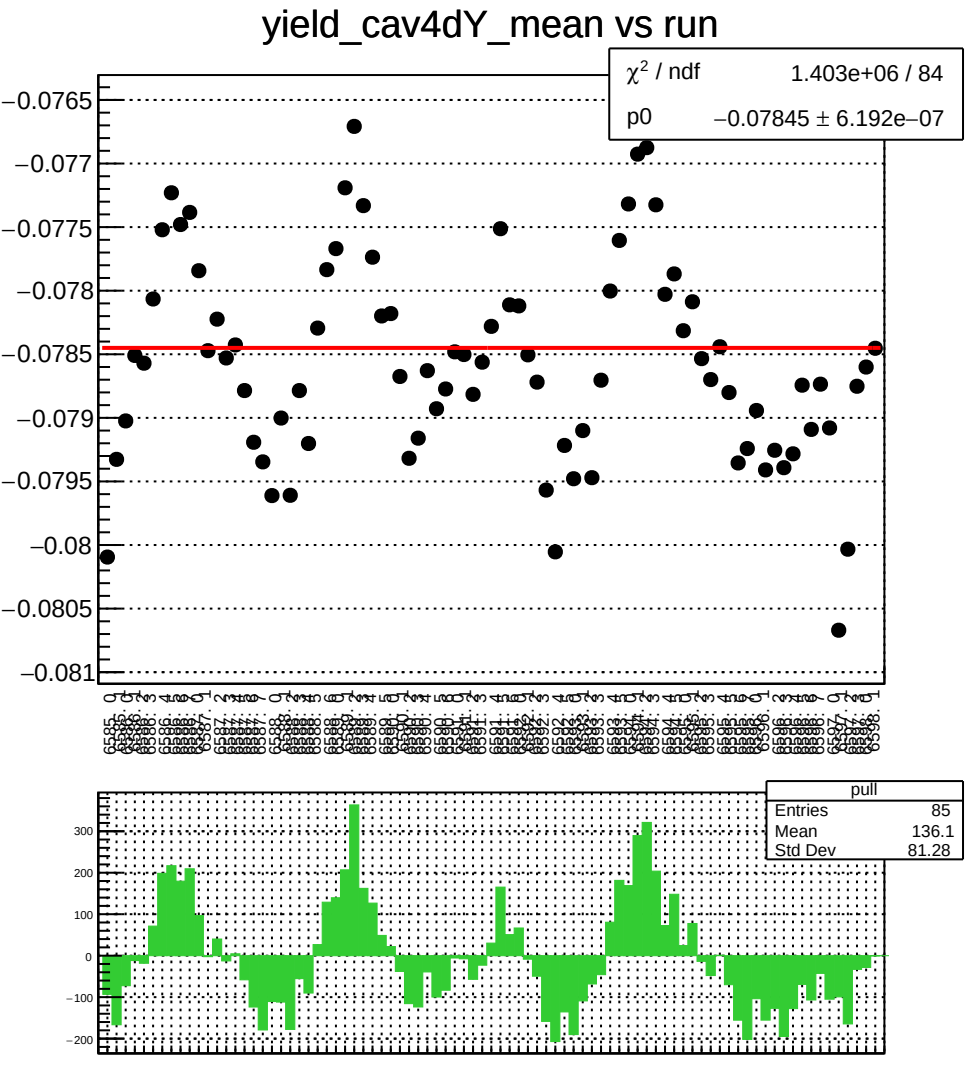

yield_cav4cY_mean vs run
χ² / ndf 1.66e+06 / 84
p0 −0.1241 ± 1.551e−06
−0.119
−0.12
−0.121
−0.122
−0.123
−0.124
−0.125
−0.126
−0.127
−0.128
pull
Entries 85
Mean 741.9
Std Dev 696
500
400
300
200
100
0
−100
−200
−300

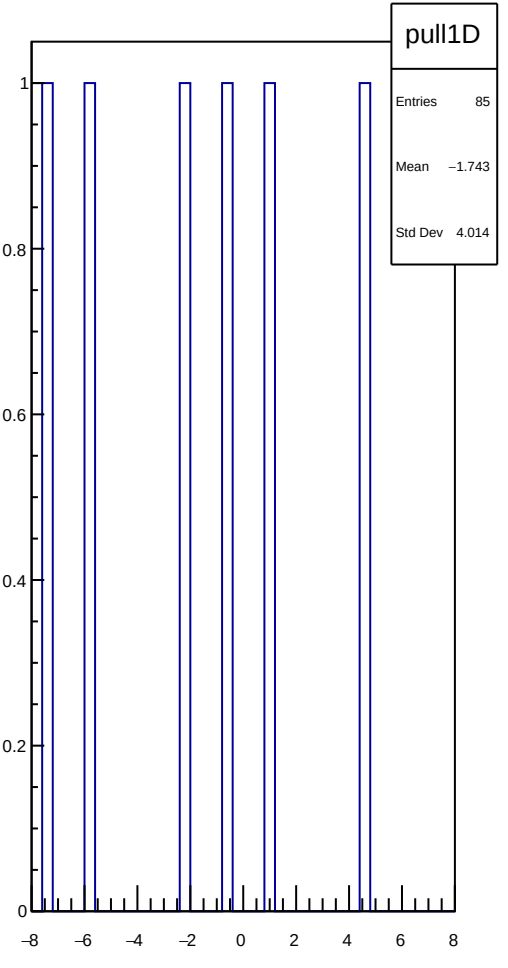

pull1D
Entries 85
Mean −1.488
Std Dev 3.393
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

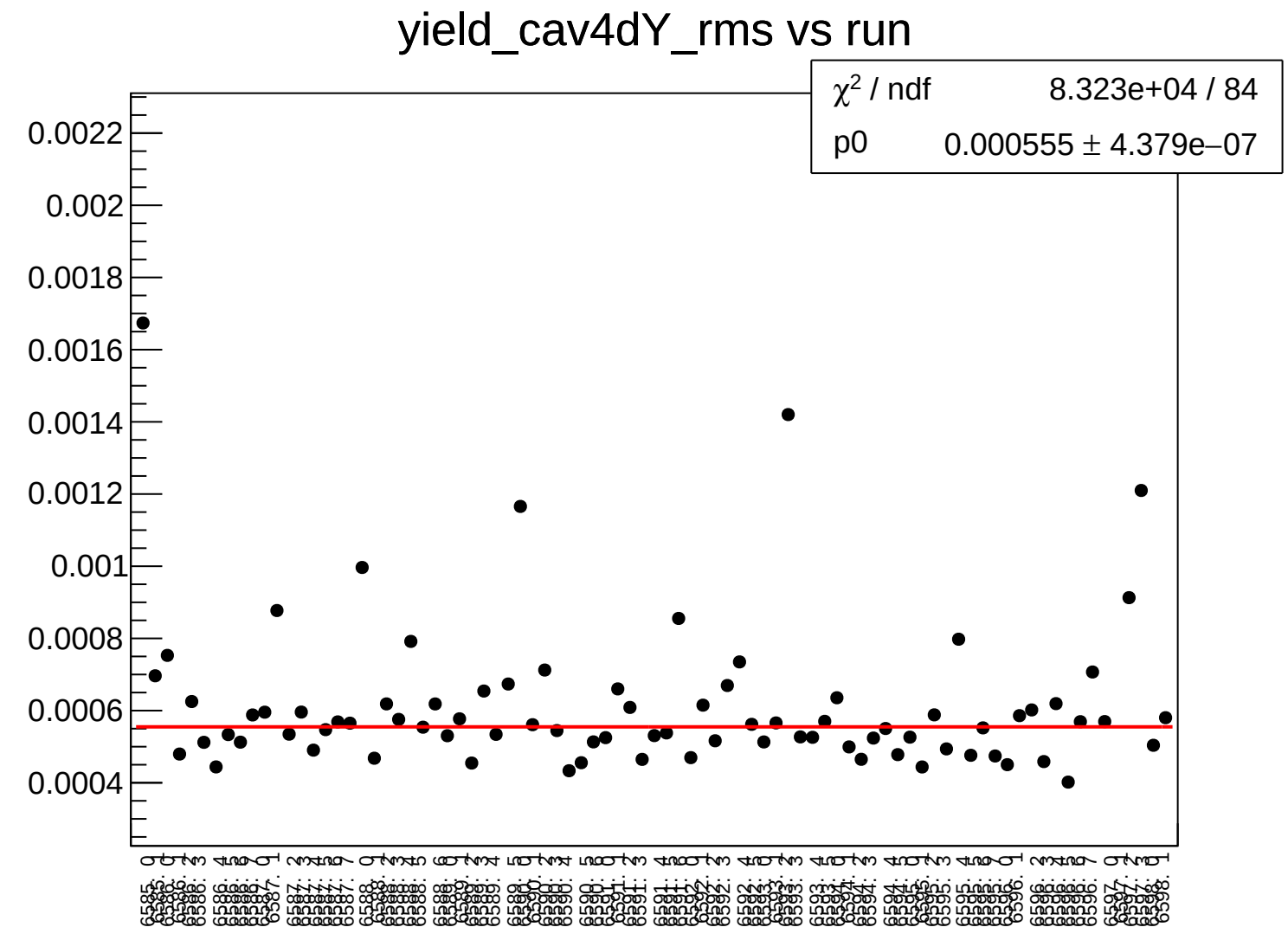

yield_cav4cY_rms vs run
χ² / ndf 2.686e+05 / 84
p0 0.001308 ± 1.097e−06
0.005
0.004
0.003
0.002
0.001

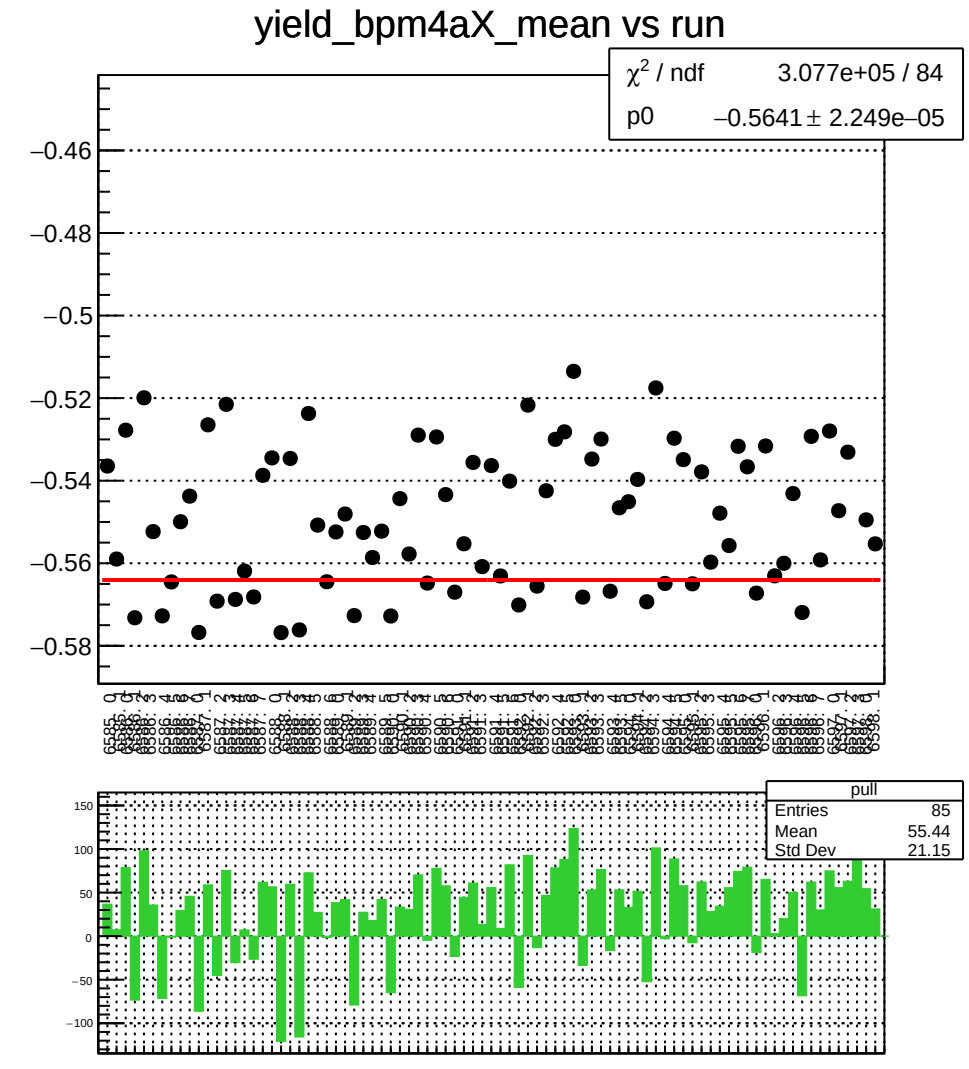

yield_cav4dX_mean vs run
χ² / ndf 5.385e+05 / 84
p0 −0.002278 ± 9.974e−06
0.04
0.03
0.02
0.01
0
−0.01
pull
Entries 85
Mean 61.15
Std Dev 6.113
150
100
50
0
−50
−100
−150
−200
pull1D
Entries 85
Mean 0.8848
Std Dev 3.515
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

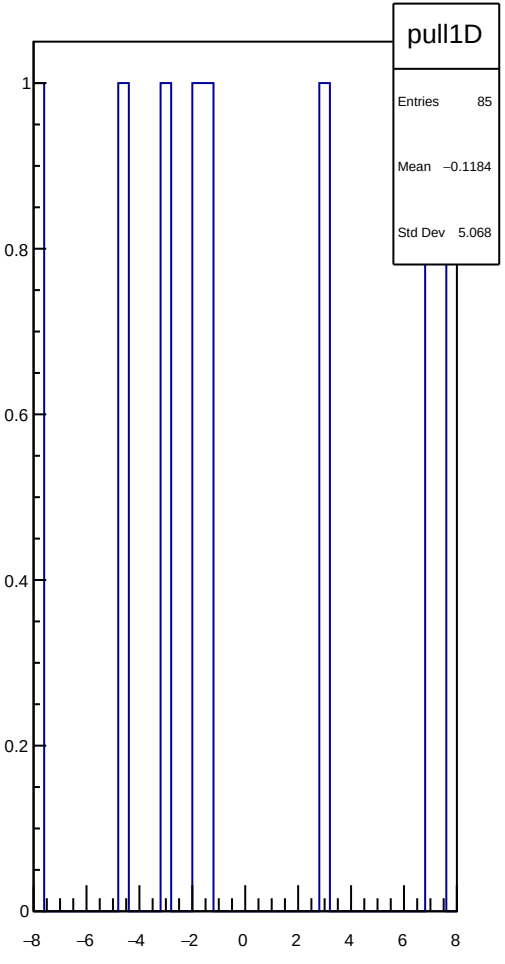

yield_cav4dX_rms vs run
χ² / ndf 5.271e+05 / 84
p0 0.007604 ± 7.053e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

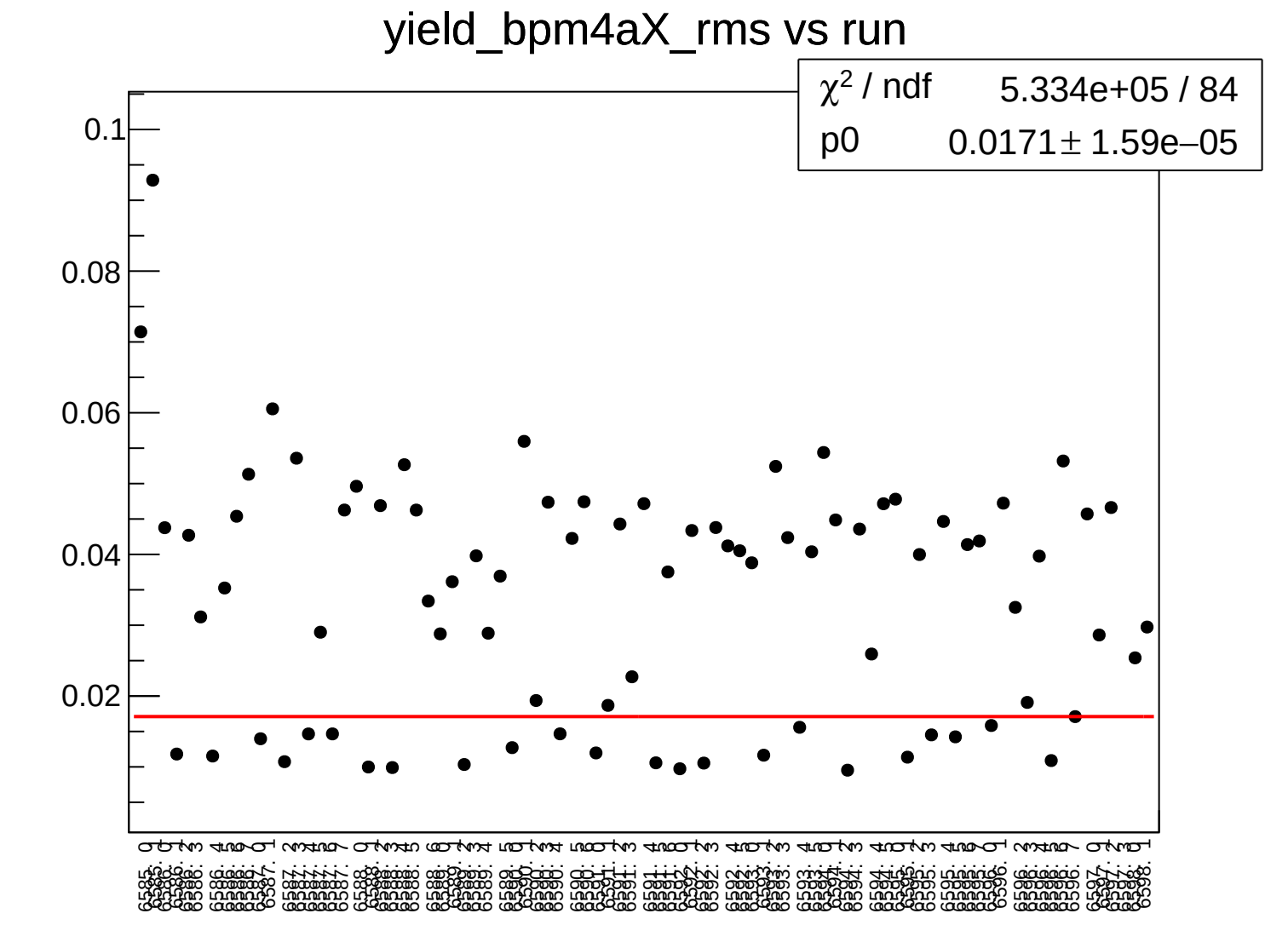

yield_cav4dY_mean vs run
χ² / ndf 1.403e+06 / 84
p0 −0.07845 ± 6.192e−07
−0.0765
−0.077
−0.0775
−0.078
−0.0785
−0.079
−0.0795
−0.08
−0.0805
−0.081
pull
Entries 85
Mean 136.1
Std Dev 81.28
300
200
100
0
−100
−200

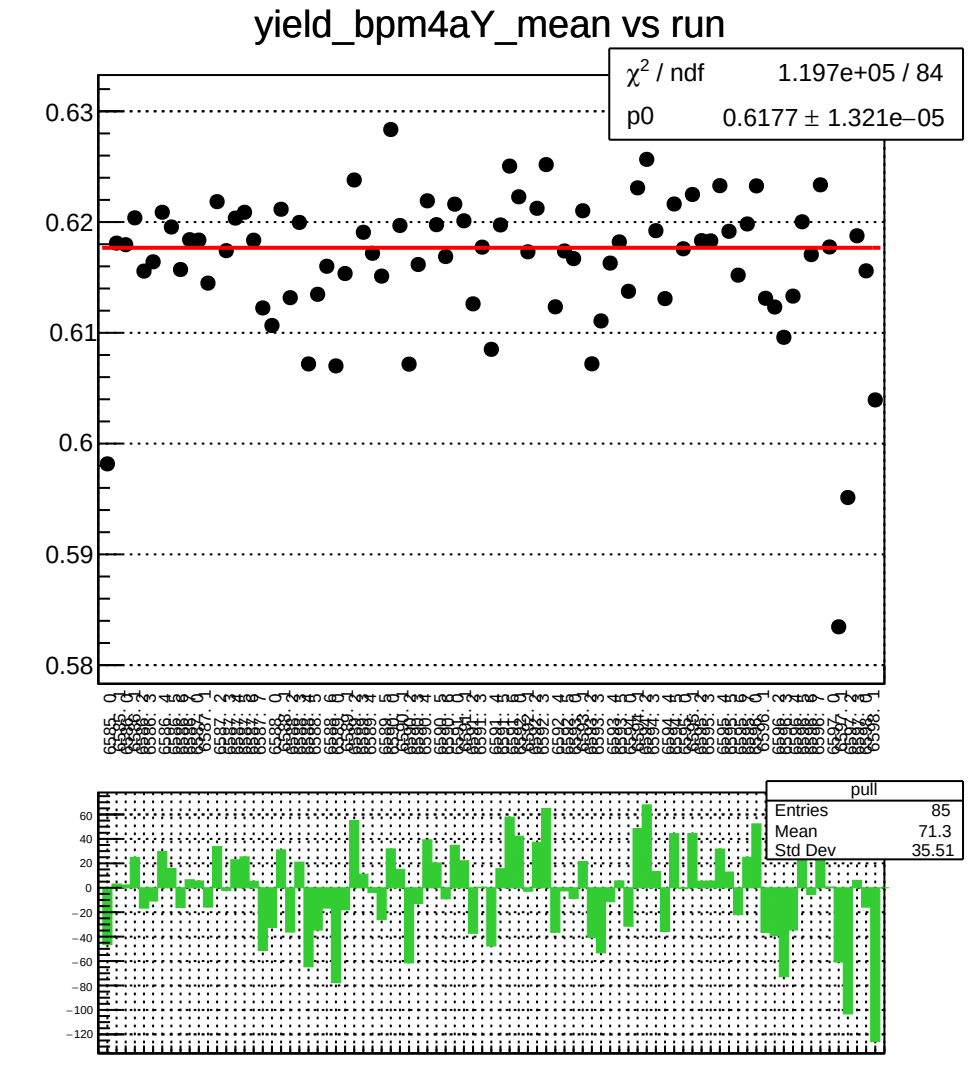

pull1D
Entries 85
Mean −1.743
Std Dev 4.014
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

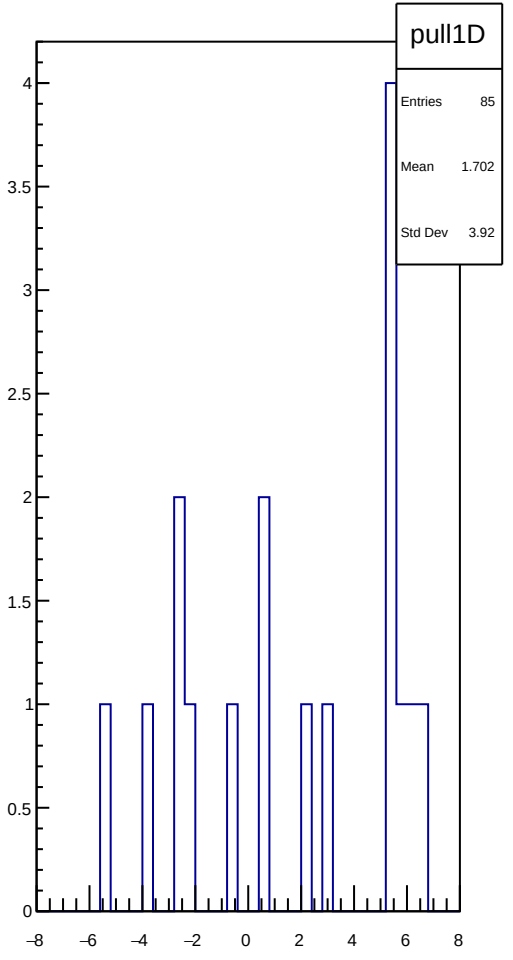

yield_cav4dY_rms vs run
χ^2 / ndf 8.323e+04 / 84
p0 0.000555 ± 4.379e−07
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

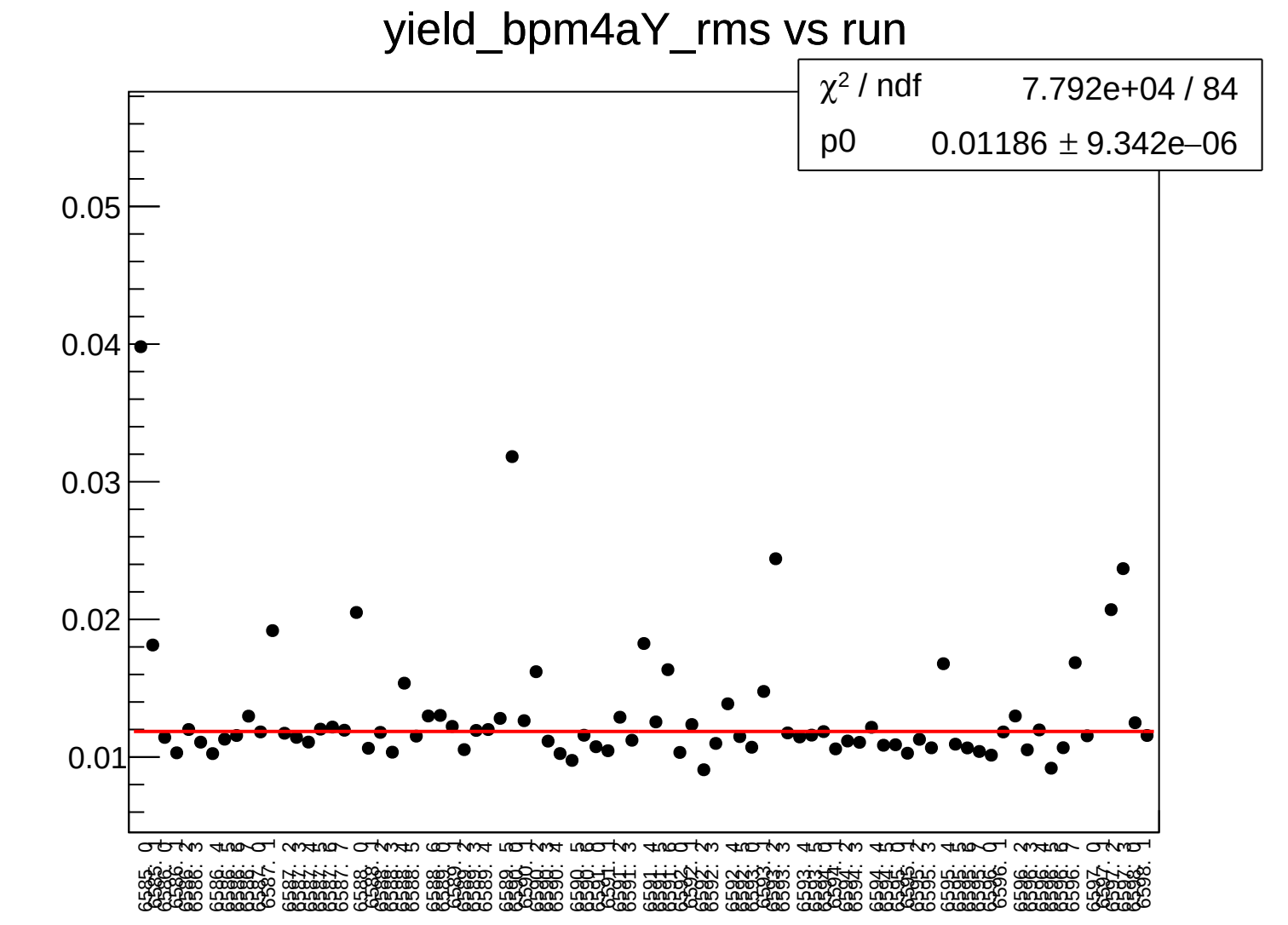

yield_bpm4aX_mean vs run
χ² / ndf 3.077e+05 / 84
p0 −0.5641 ± 2.249e−05
−0.46
−0.48
−0.5
−0.52
−0.54
−0.56
−0.58
pull
Entries 85
Mean 55.44
Std Dev 21.15
150
100
50
0
−50
−100

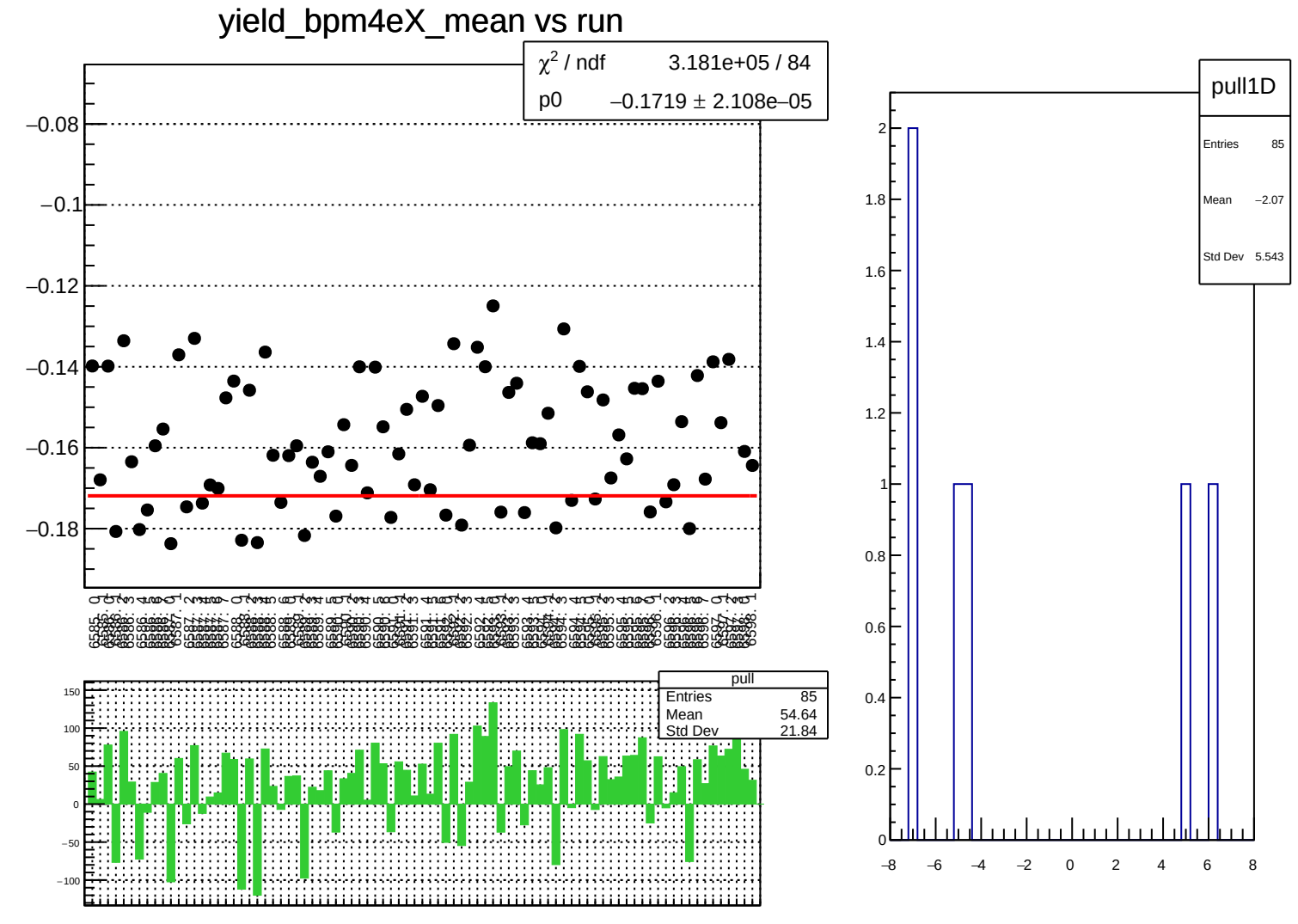

pull1D
Entries 85
Mean −0.1184
Std Dev 5.068
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

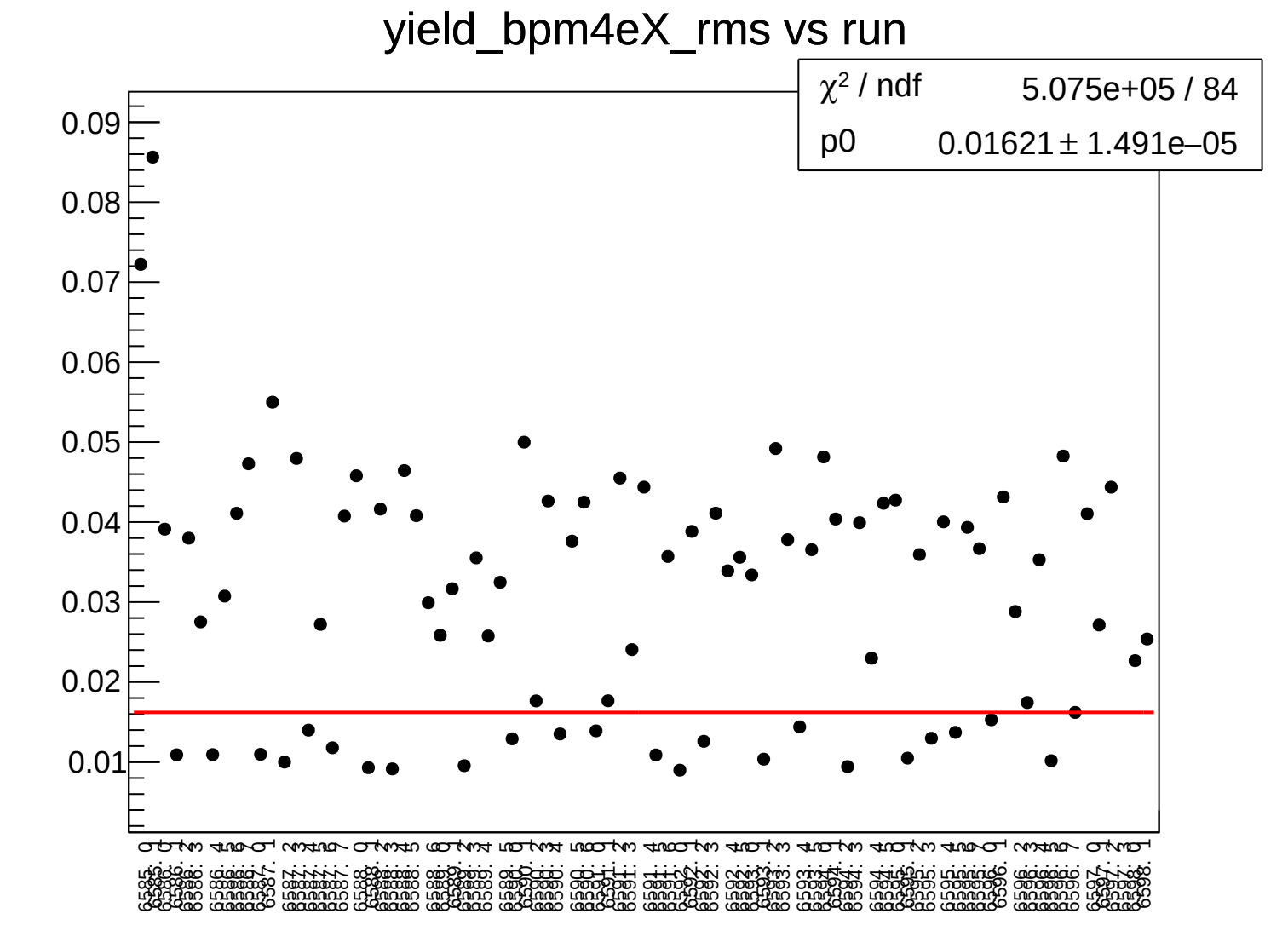

yield_bpm4aX_rms vs run
χ^2 / ndf 5.334e+05 / 84
p0 0.0171 ± 1.59e−05
0.1
0.08
0.06
0.04
0.02

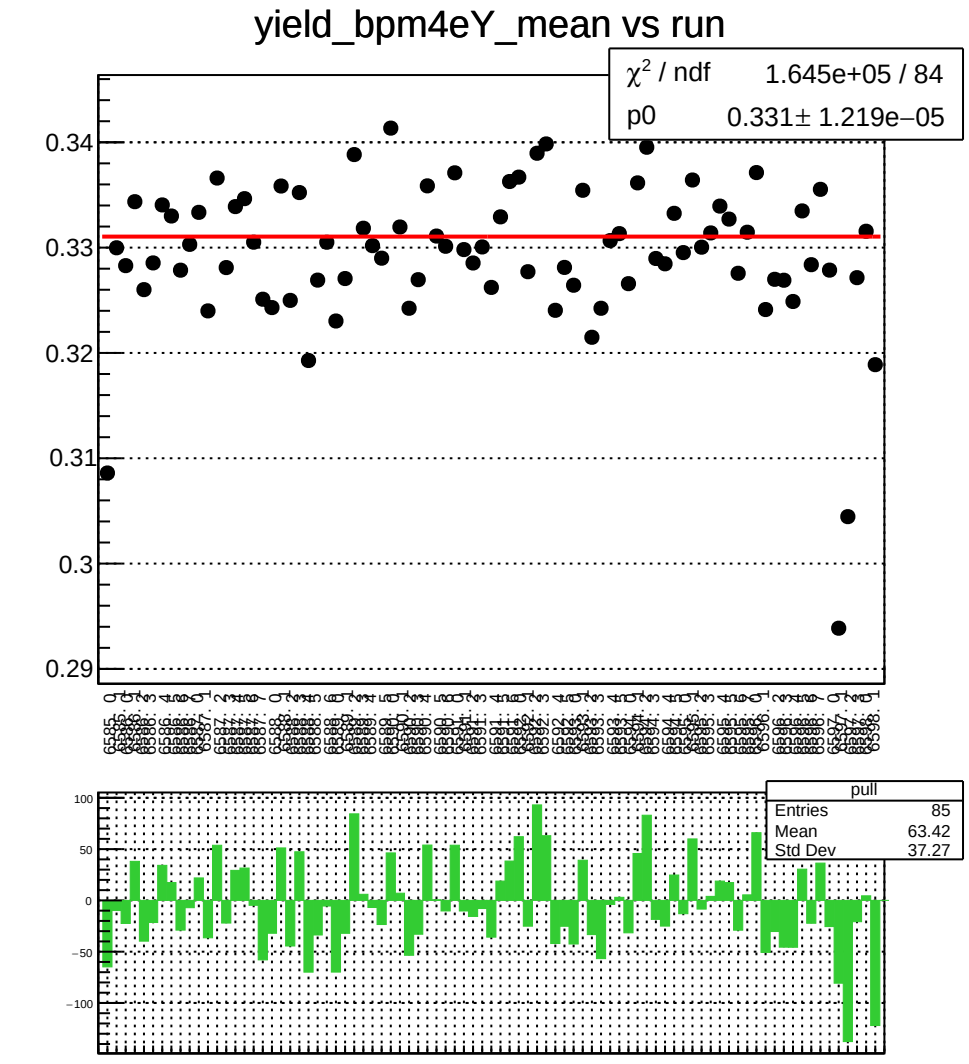

yield_bpm4aY_mean vs run
χ² / ndf 1.197e+05 / 84
p0 0.6177 ± 1.321e−05
0.63
0.62
0.61
0.6
0.59
0.58
pull
Entries 85
Mean 71.3
Std Dev 35.51
60
40
20
0
−20
−40
−60
−80
−100
−120

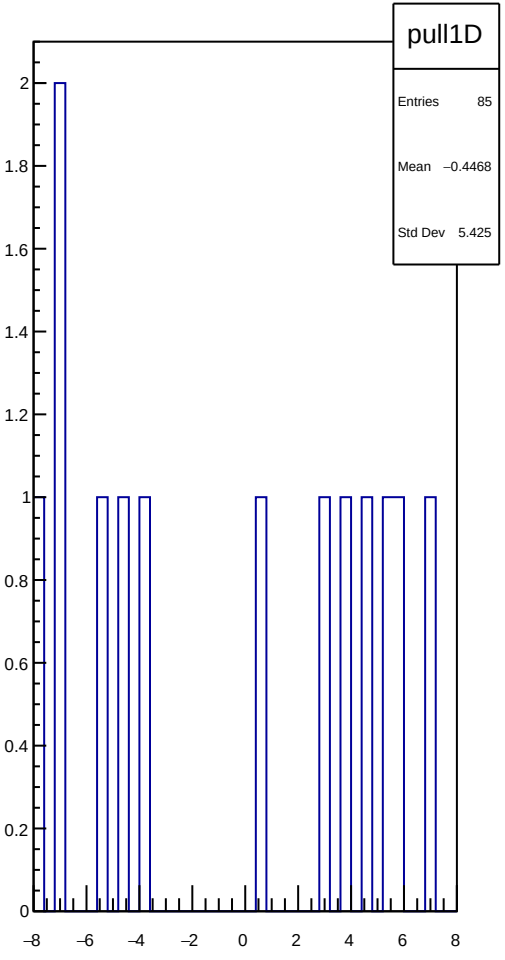

pull1D
Entries 85
Mean 1.702
Std Dev 3.92
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

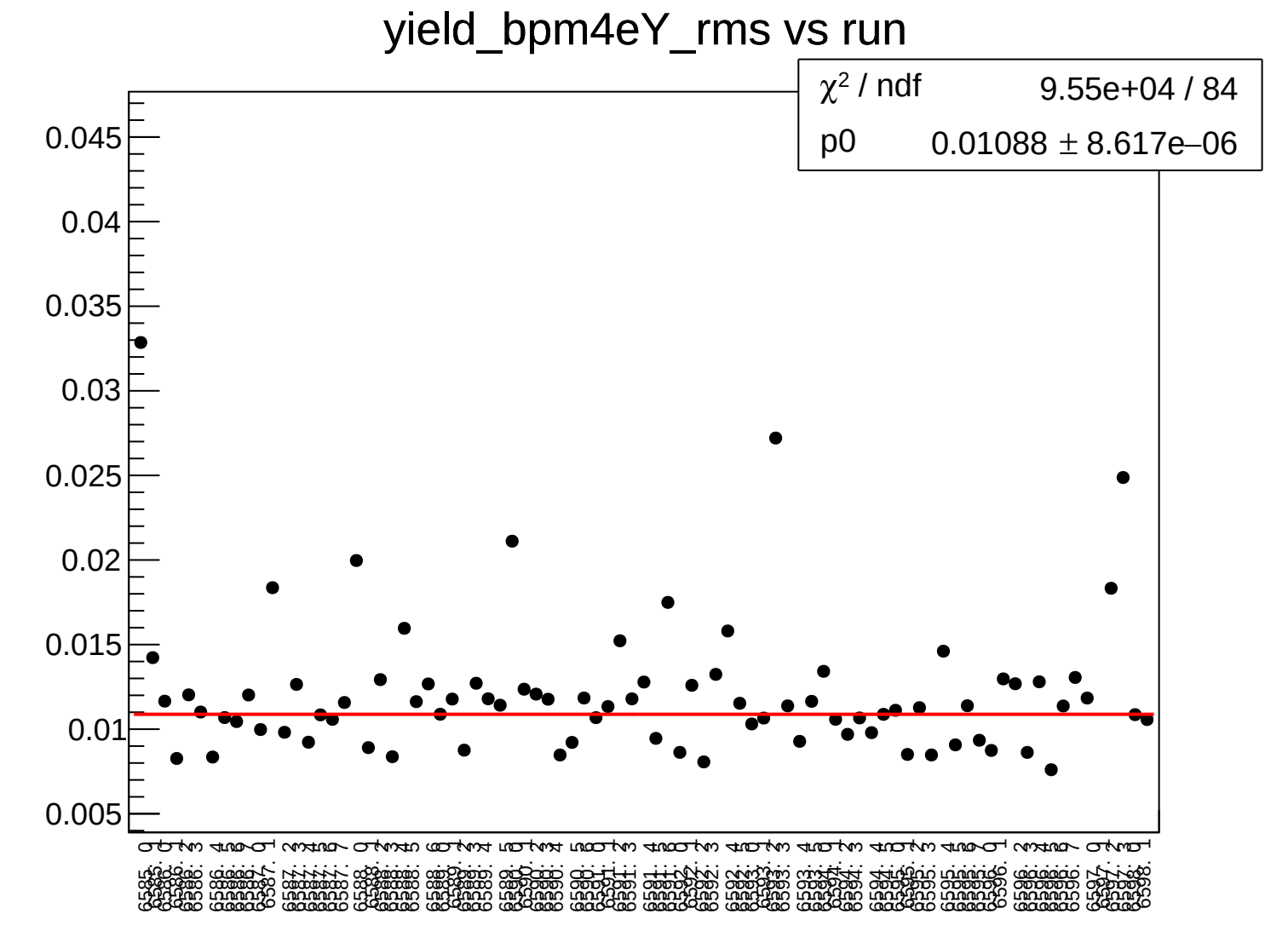

yield_bpm4aY_rms vs run
χ² / ndf 7.792e+04 / 84
p0 0.01186 ± 9.342e–06
0.05
0.04
0.03
0.02
0.01

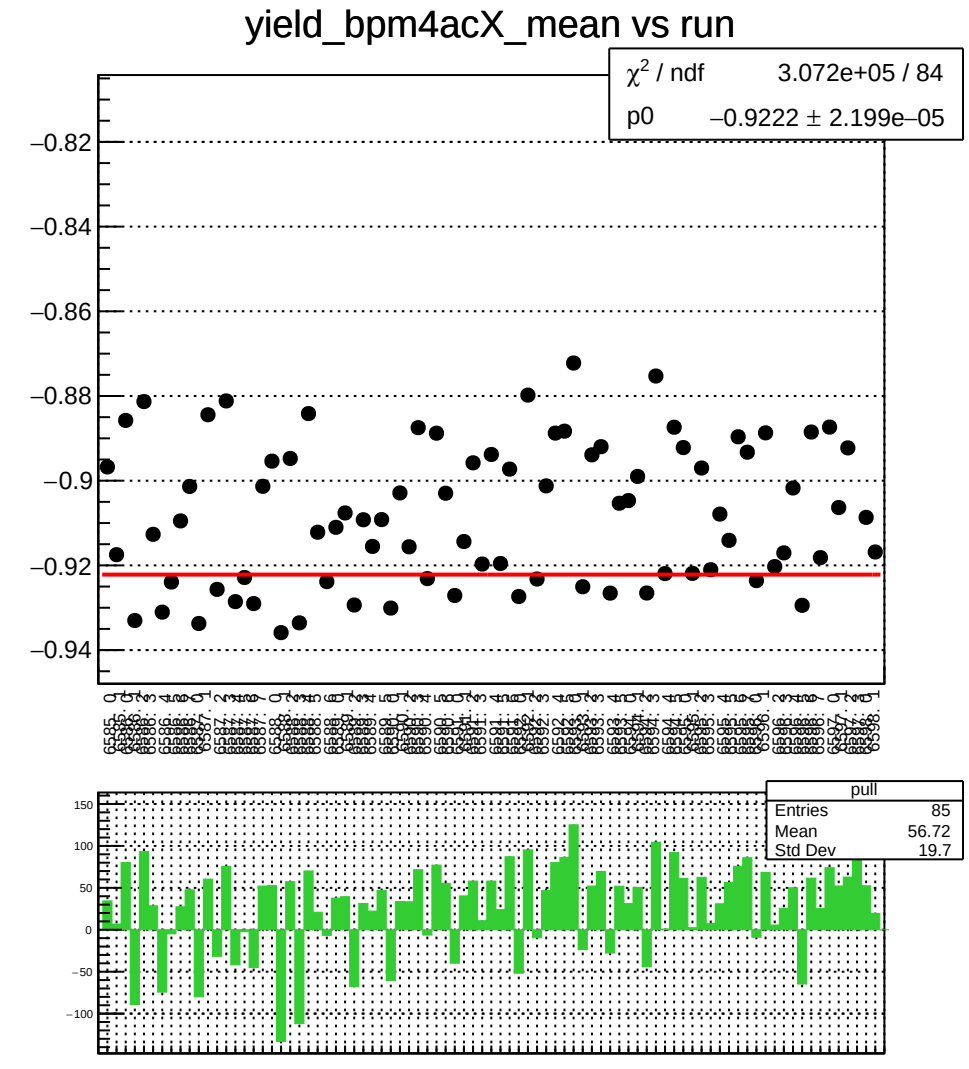

yield_bpm4eX_mean vs run
χ² / ndf 3.181e+05 / 84
p0 −0.1719 ± 2.108e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 85
Mean 54.64
Std Dev 21.84
150
100
50
0
−50
−100
pull1D
Entries 85
Mean −2.07
Std Dev 5.543
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

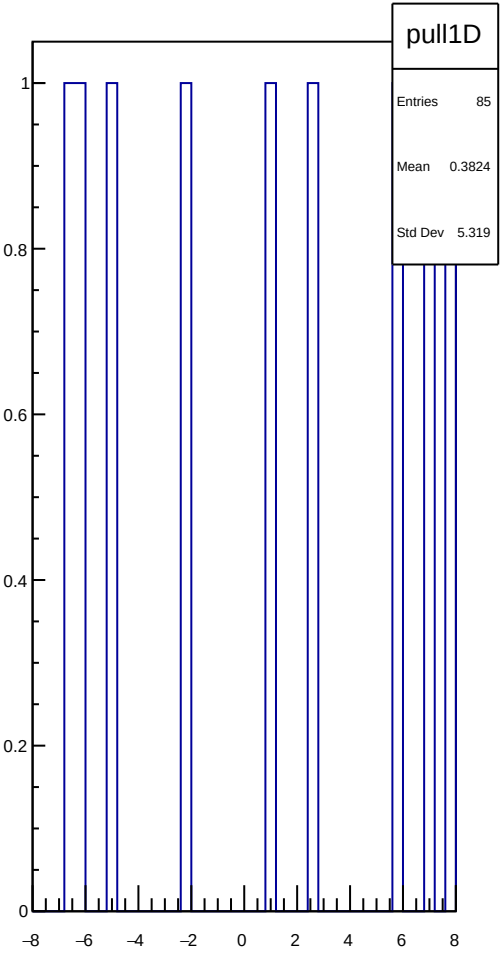

yield_bpm4eX_rms vs run
χ² / ndf 5.075e+05 / 84
p0 0.01621 ± 1.491e–05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

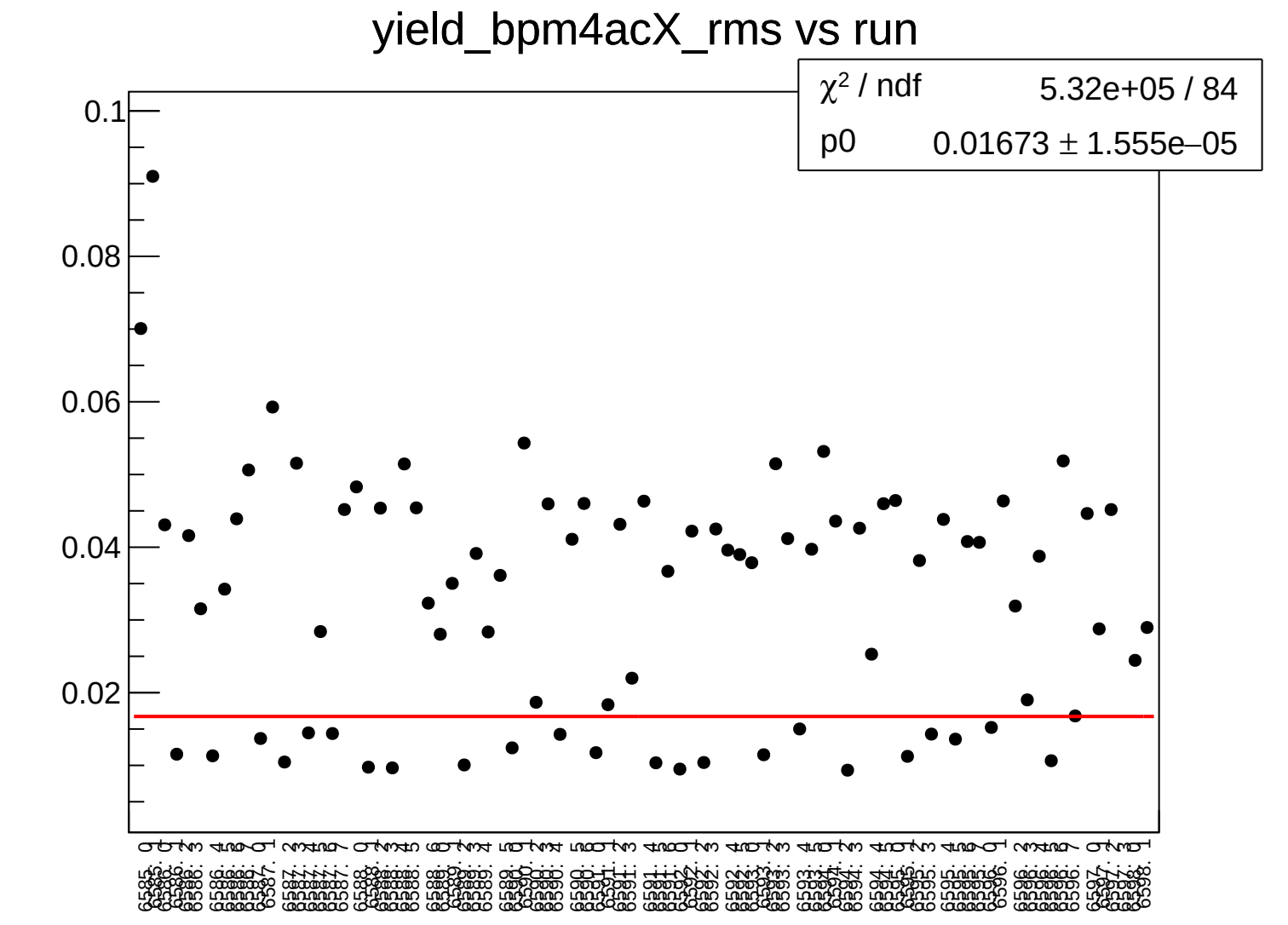

yield_bpm4eY_mean vs run
χ² / ndf 1.645e+05 / 84
p0 0.331± 1.219e−05
0.34
0.33
0.32
0.31
0.3
0.29
pull
Entries 85
Mean 63.42
Std Dev 37.27
100
50
0
−50
−100

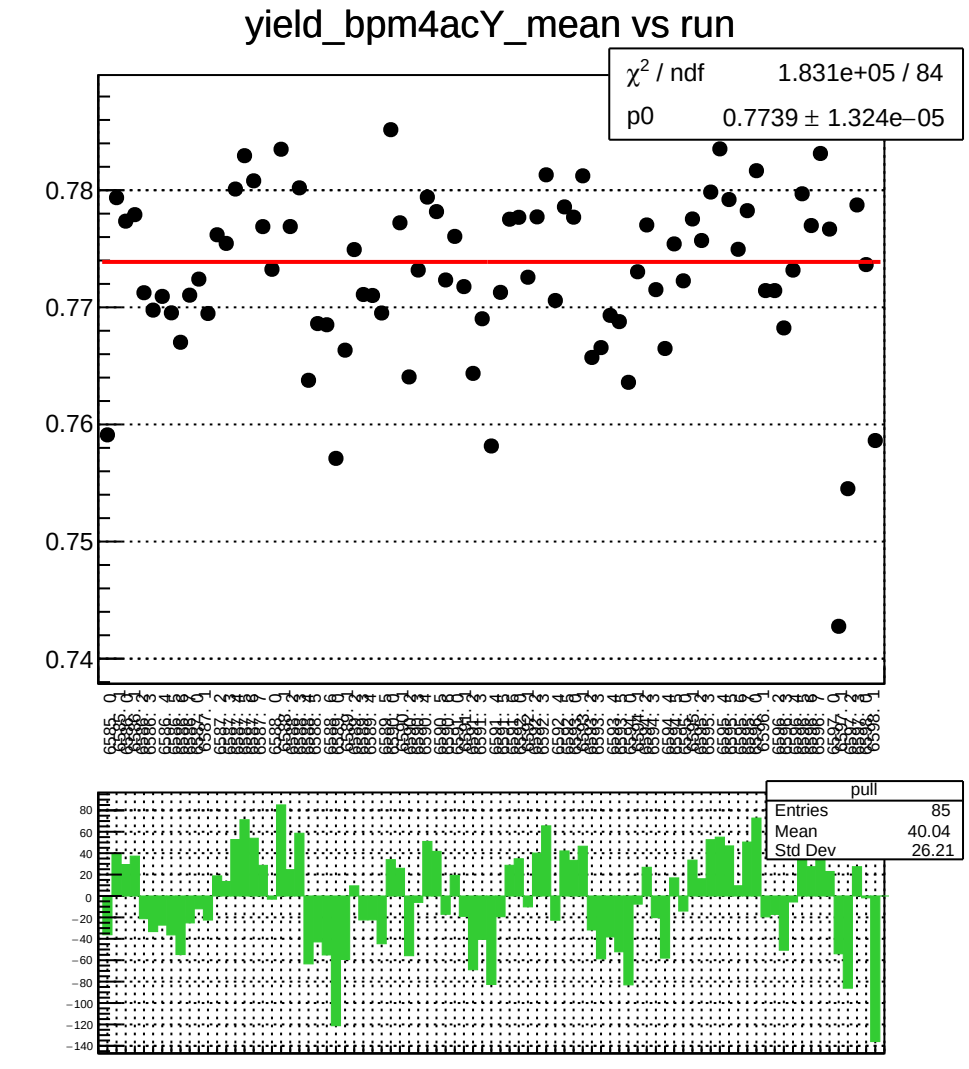

pull1D
Entries 85
Mean −0.4468
Std Dev 5.425
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

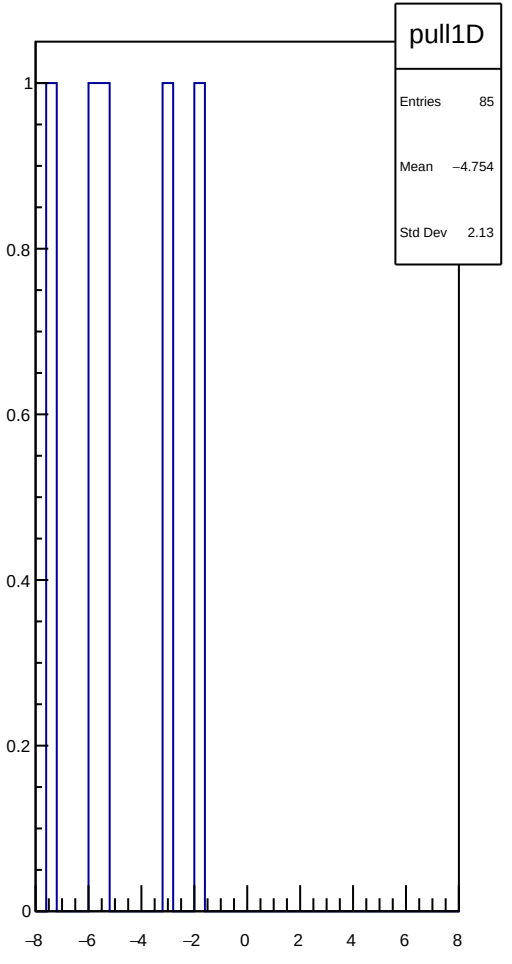

yield_bpm4eY_rms vs run
χ² / ndf 9.55e+04 / 84
p0 0.01088 ± 8.617e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

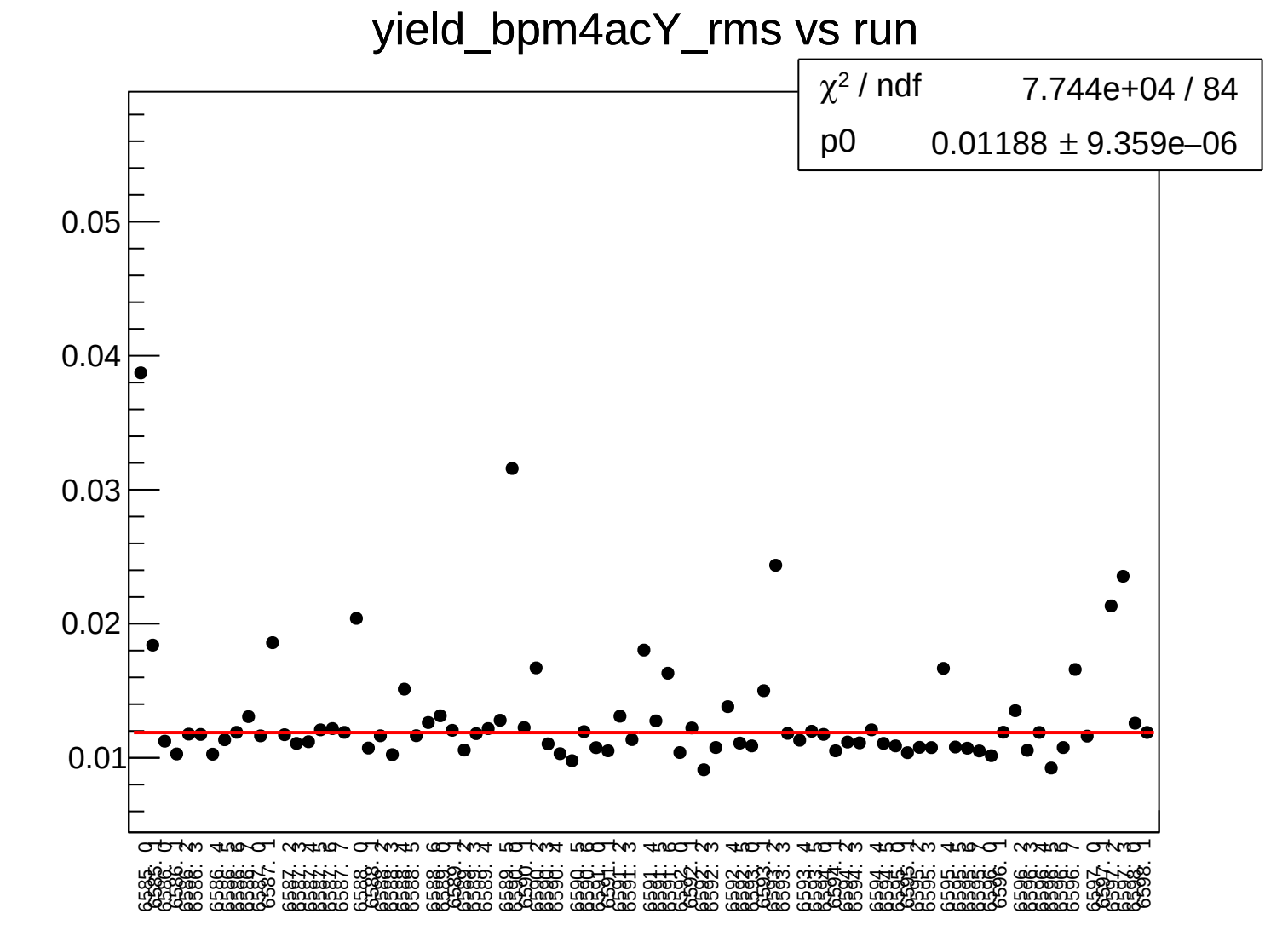

yield_bpm4acX_mean vs run
χ² / ndf 3.072e+05 / 84
p0 −0.9222 ± 2.199e−05
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 85
Mean 56.72
Std Dev 19.7
150
100
50
0
−50
−100

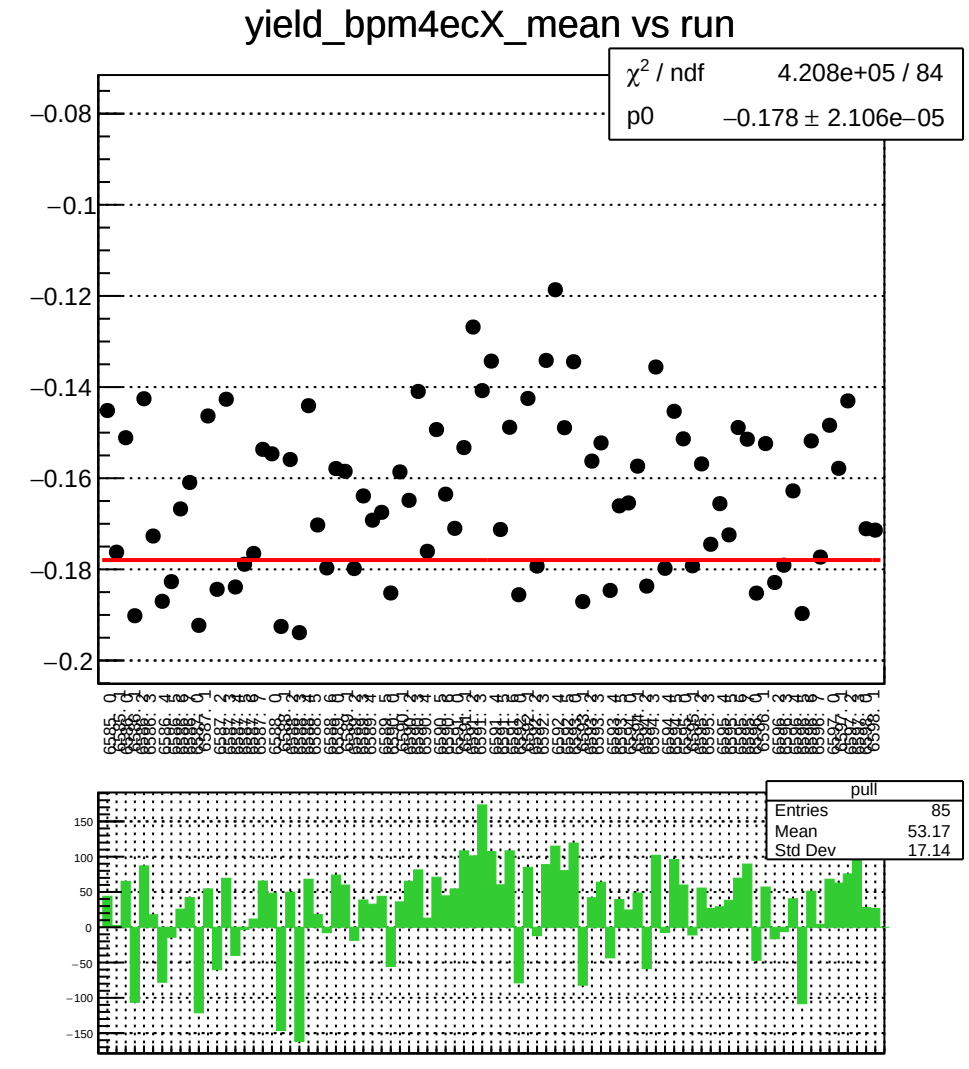

pull1D
Entries 85
Mean 0.3824
Std Dev 5.319
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

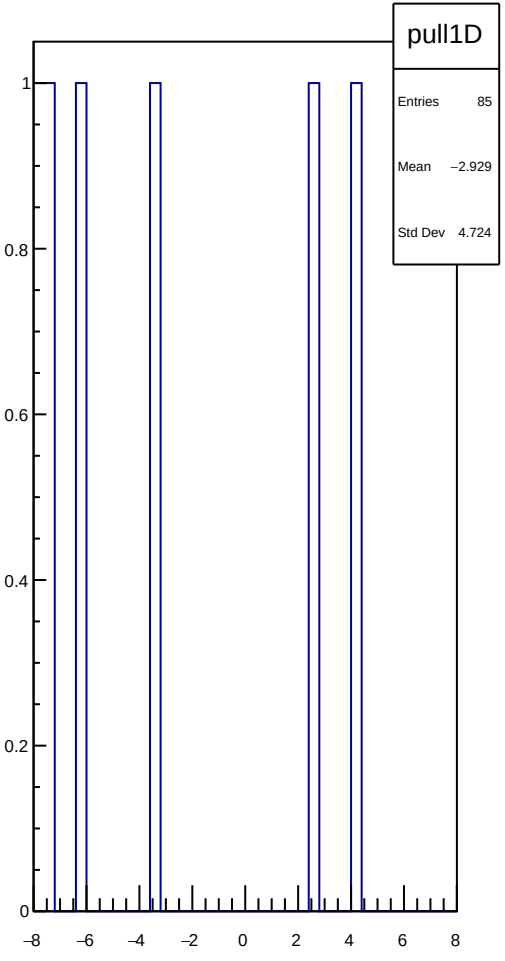

yield_bpm4acX_rms vs run
χ² / ndf 5.32e+05 / 84
p0 0.01673 ± 1.555e−05
0.1
0.08
0.06
0.04
0.02

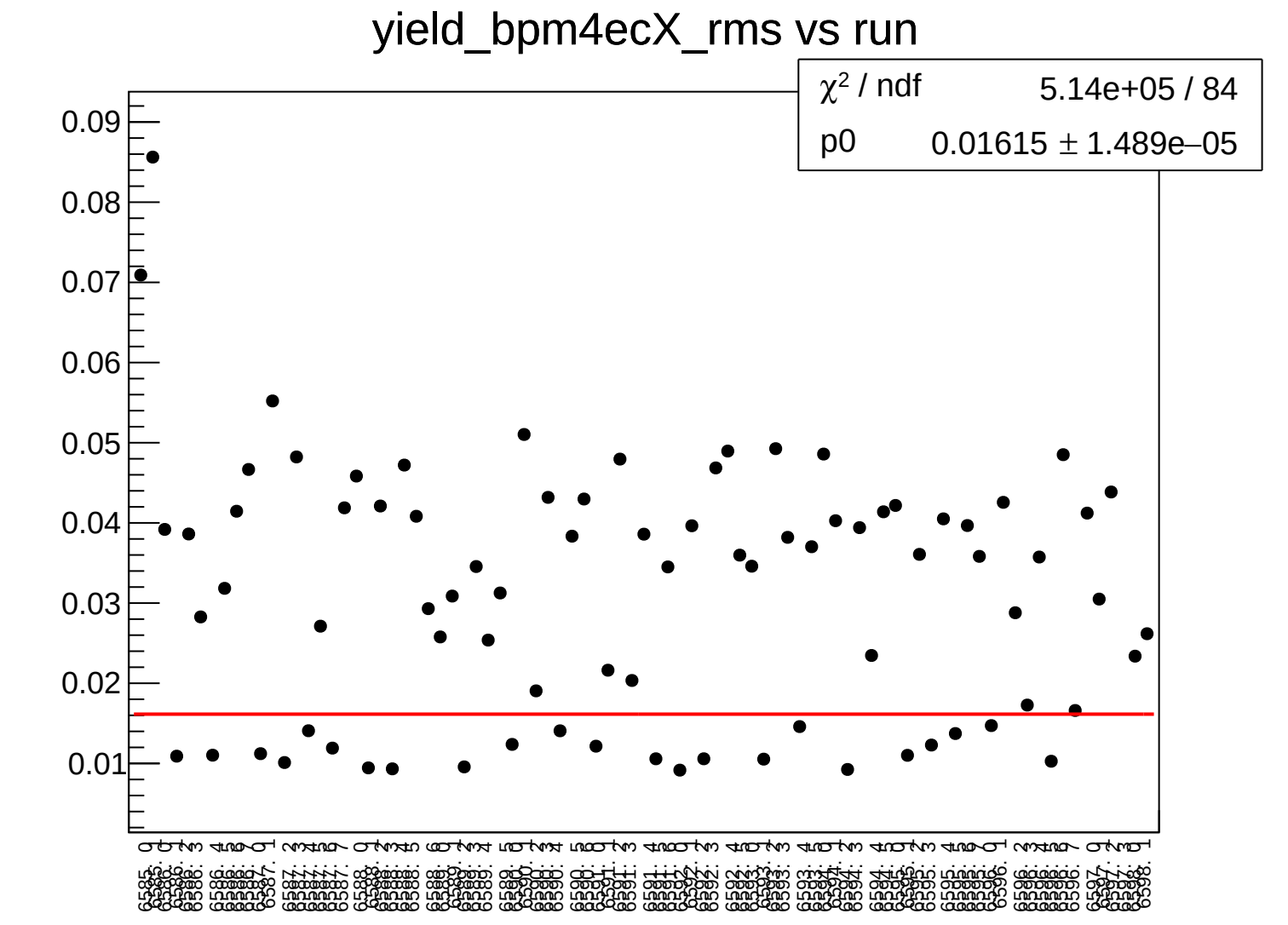

yield_bpm4acY_mean vs run
χ² / ndf 1.831e+05 / 84
p0 0.7739 ± 1.324e−05
0.78
0.77
0.76
0.75
0.74
pull
Entries 85
Mean 40.04
Std Dev 26.21
80
60
40
20
0
−20
−40
−60
−80
−100
−120
−140

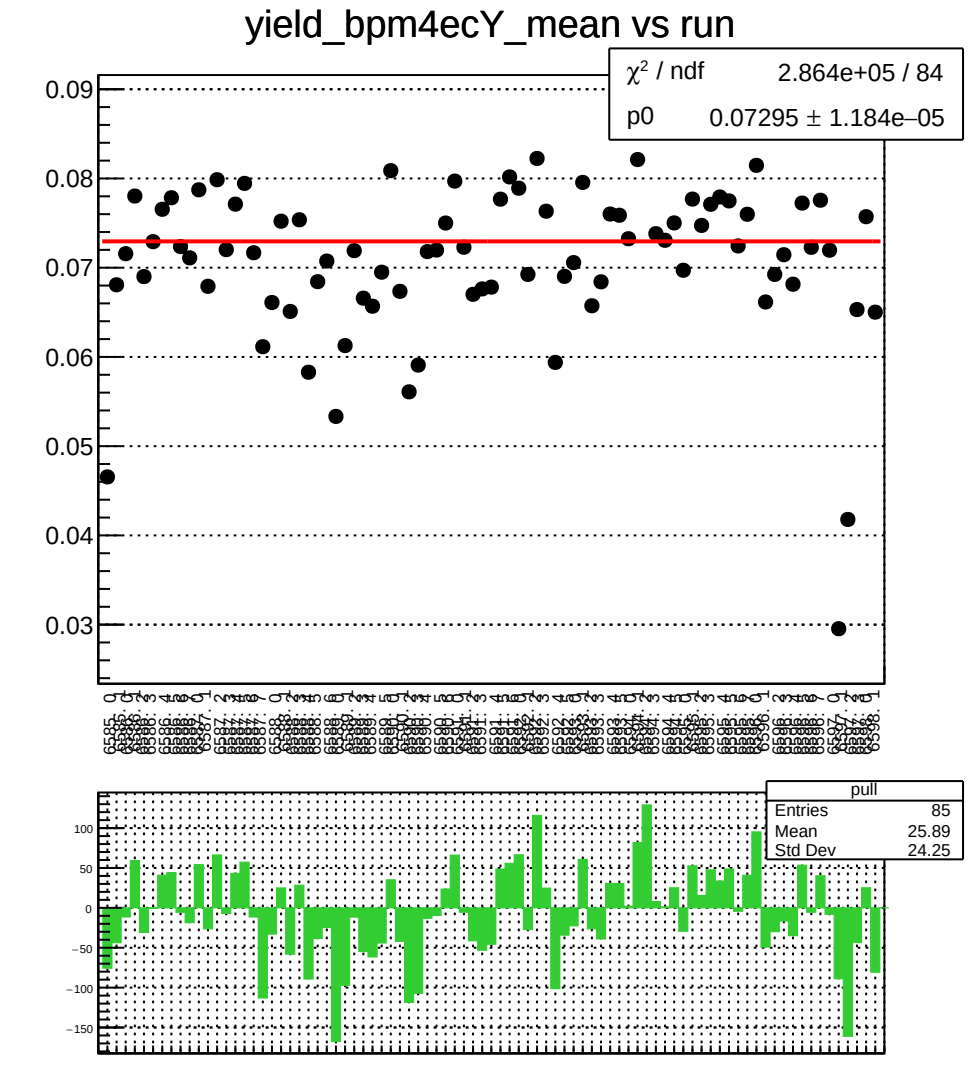

pull1D
Entries 85
Mean −4.754
Std Dev 2.13
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

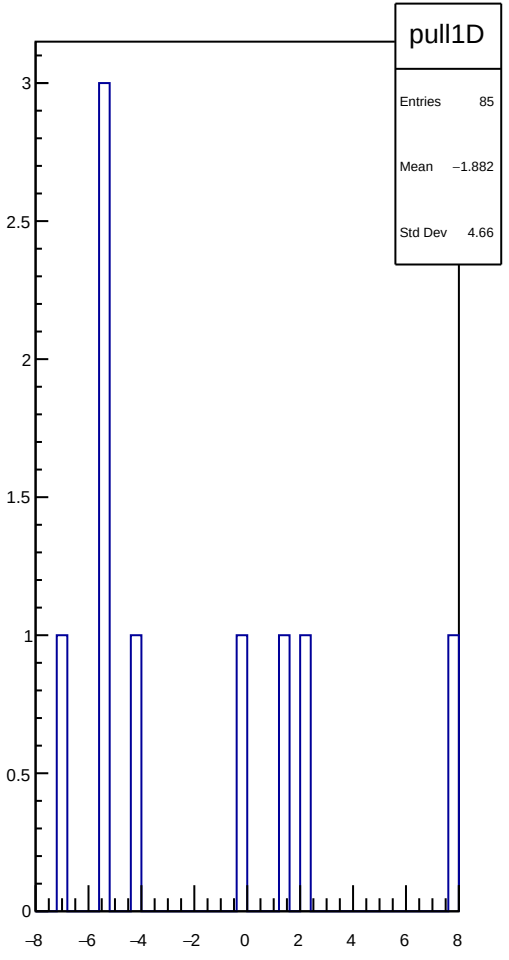

yield_bpm4acY_rms vs run
χ² / ndf 7.744e+04 / 84
p0 0.01188 ± 9.359e–06
0.05
0.04
0.03
0.02
0.01

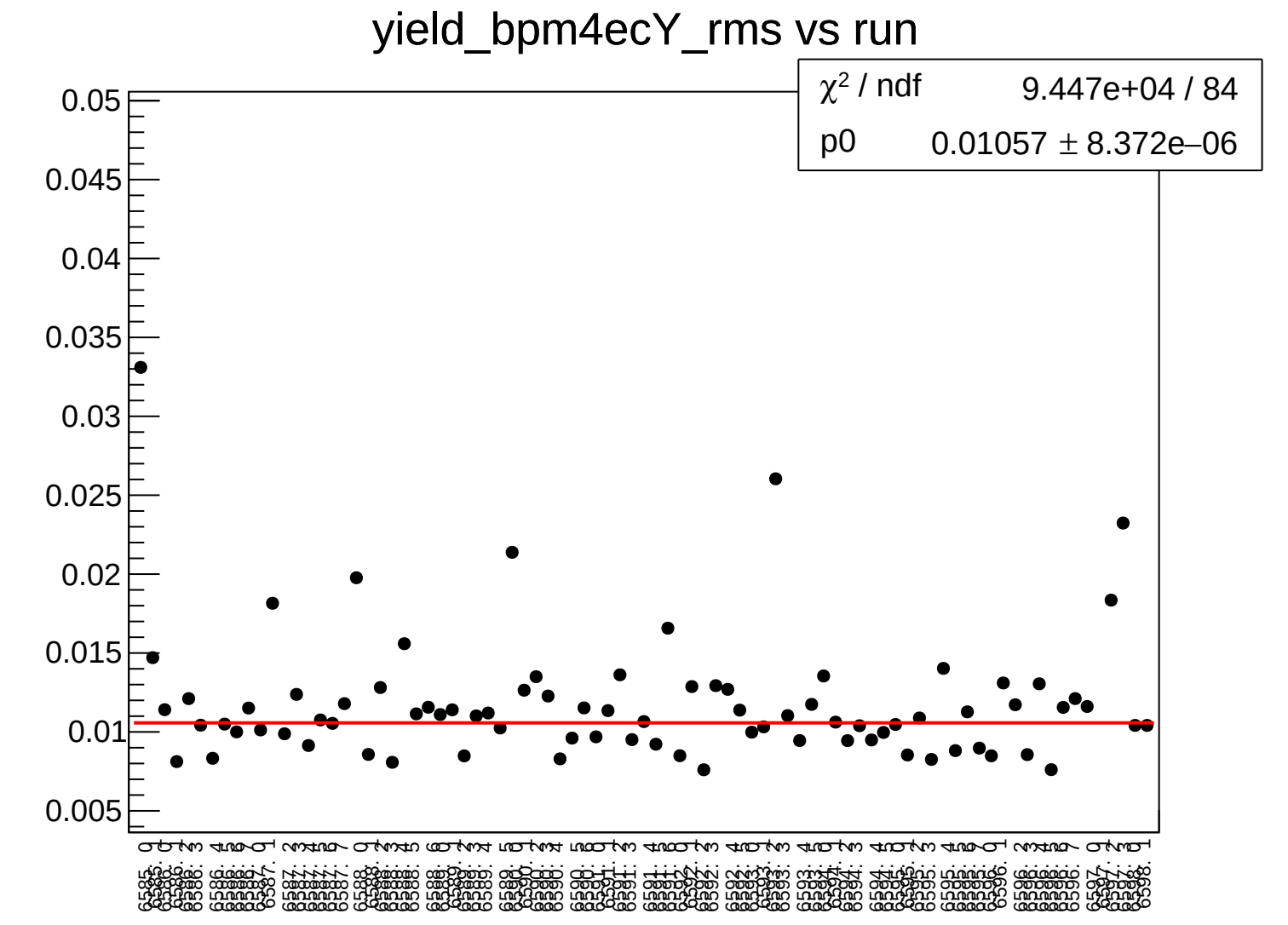

yield_bpm4ecX_mean vs run
χ² / ndf 4.208e+05 / 84
p0 −0.178 ± 2.106e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
pull
Entries 85
Mean 53.17
Std Dev 17.14
150
100
50
0
−50
−100
−150

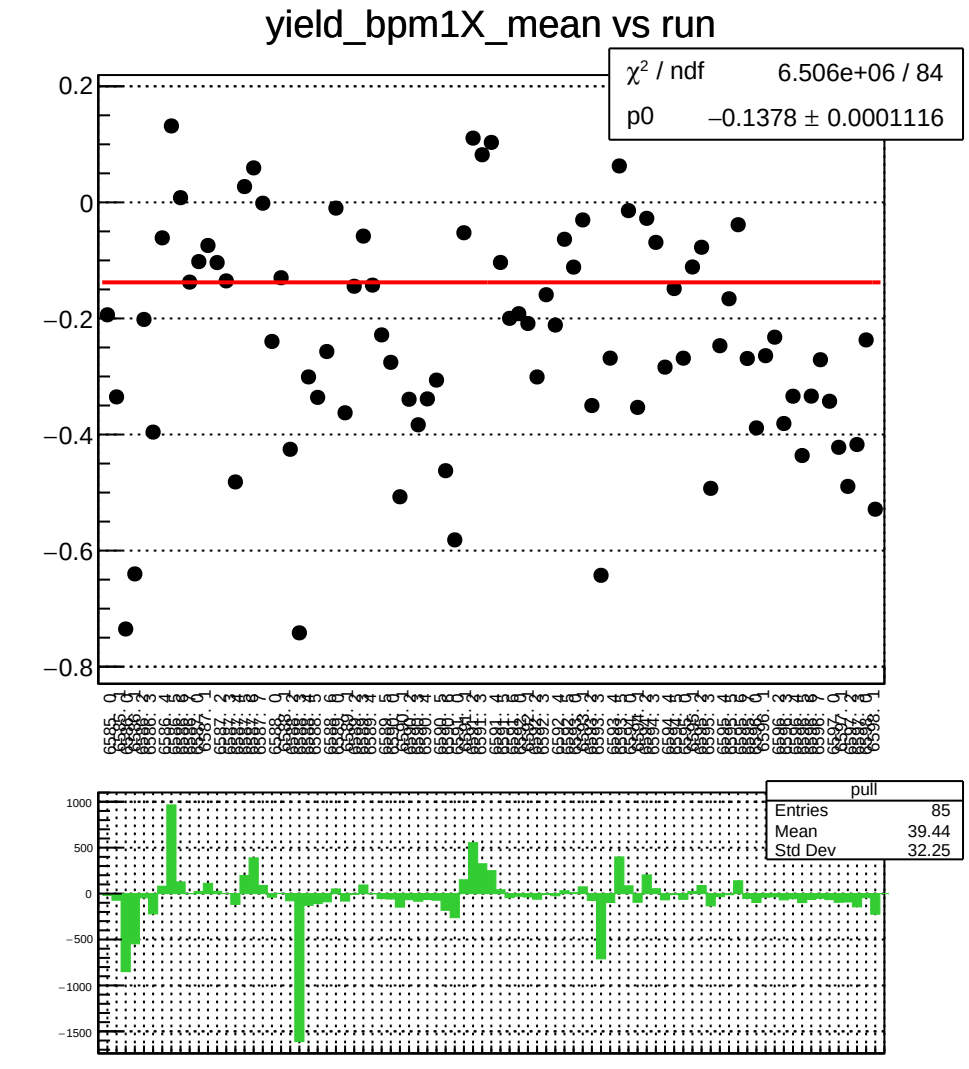

pull1D
Entries 85
Mean −2.929
Std Dev 4.724
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

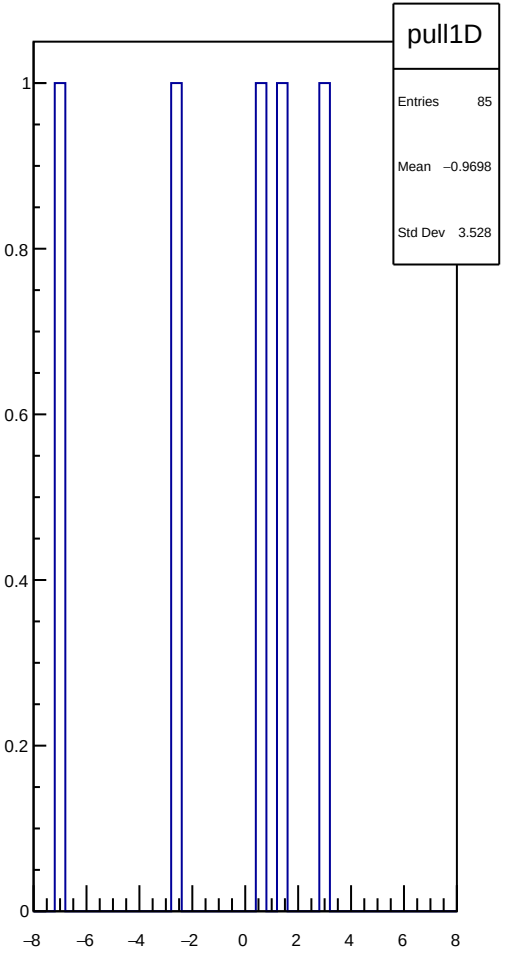

yield_bpm4ecX_rms vs run
χ² / ndf 5.14e+05 / 84
p0 0.01615 ± 1.489e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

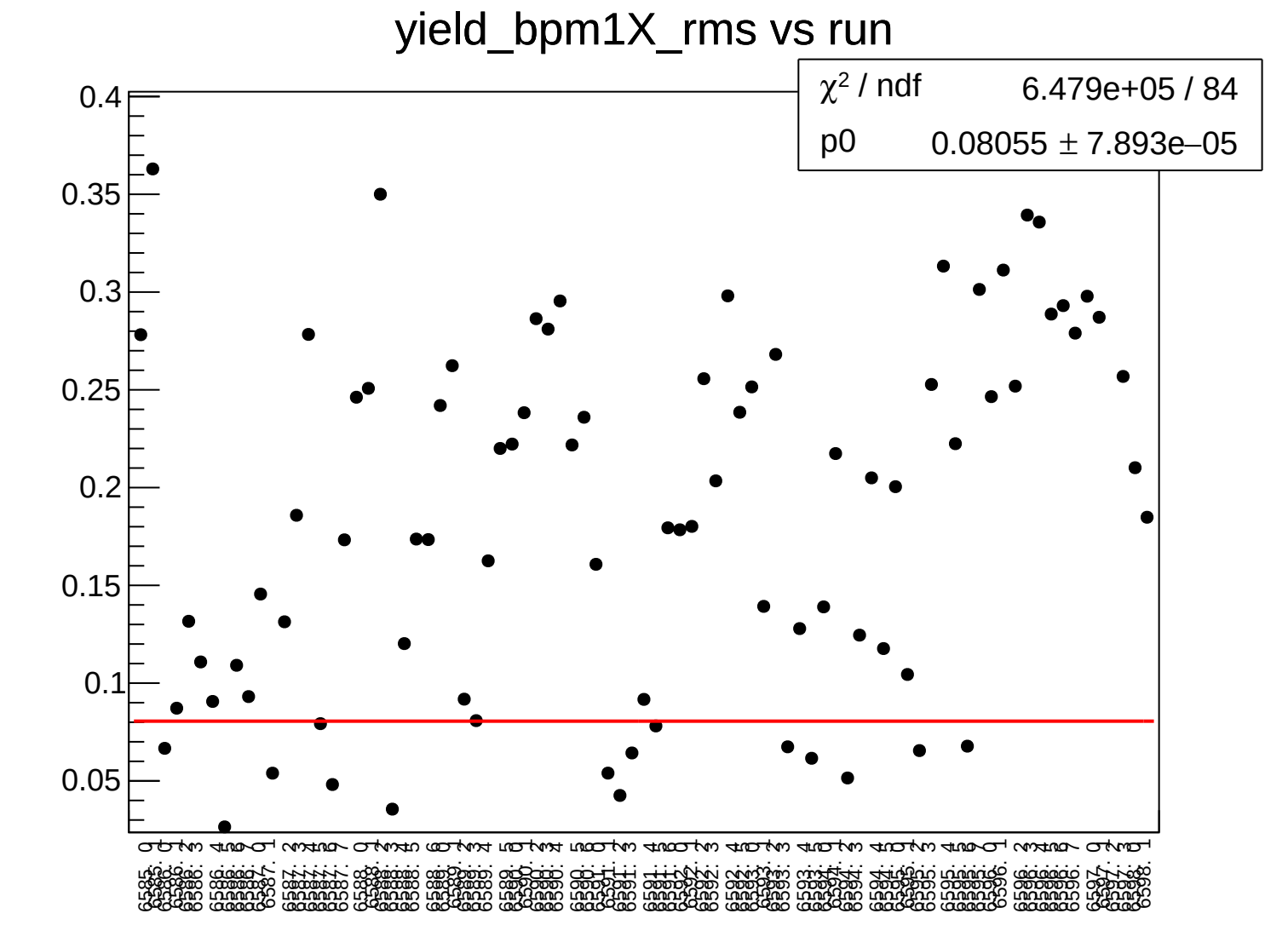

yield_bpm4ecY_mean vs run
χ² / ndf 2.864e+05 / 84
p0 0.07295 ± 1.184e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
pull
Entries 85
Mean 25.89
Std Dev 24.25
100
50
0
−50
−100
−150

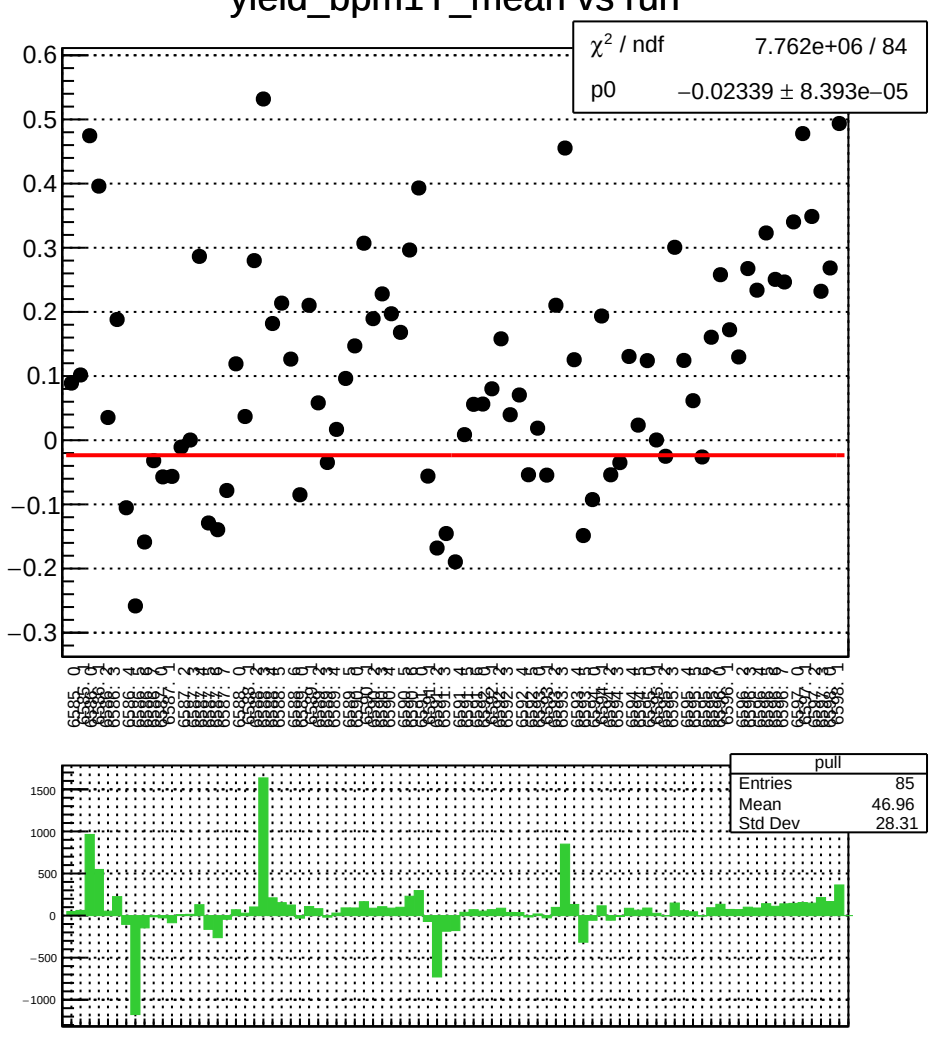

pull1D
Entries 85
Mean −1.882
Std Dev 4.66
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

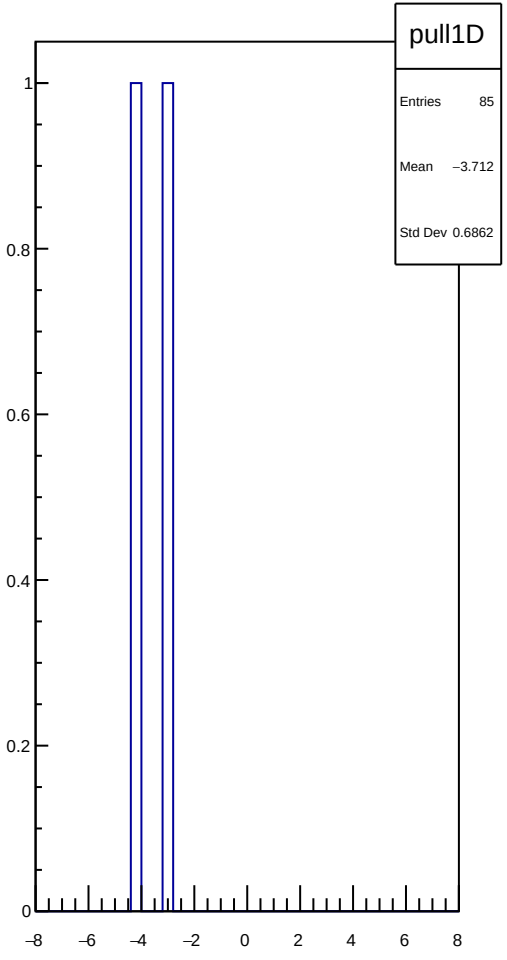

yield_bpm4ecY_rms vs run
χ² / ndf 9.447e+04 / 84
p0 0.01057 ± 8.372e–06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

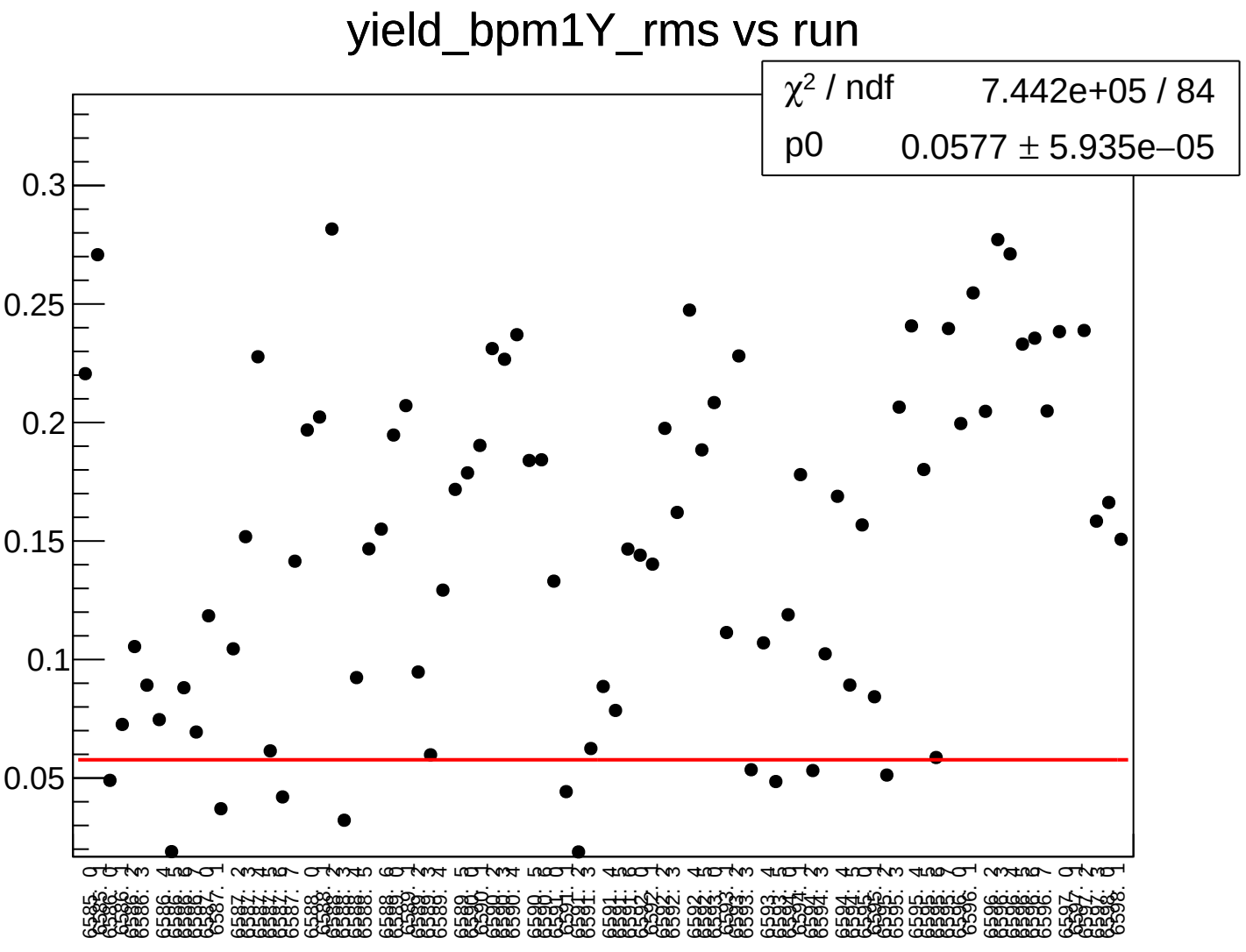

yield_bpm1X_mean vs run
χ² / ndf 6.506e+06 / 84
p0 −0.1378 ± 0.0001116
pull
Entries 85
Mean 39.44
Std Dev 32.25

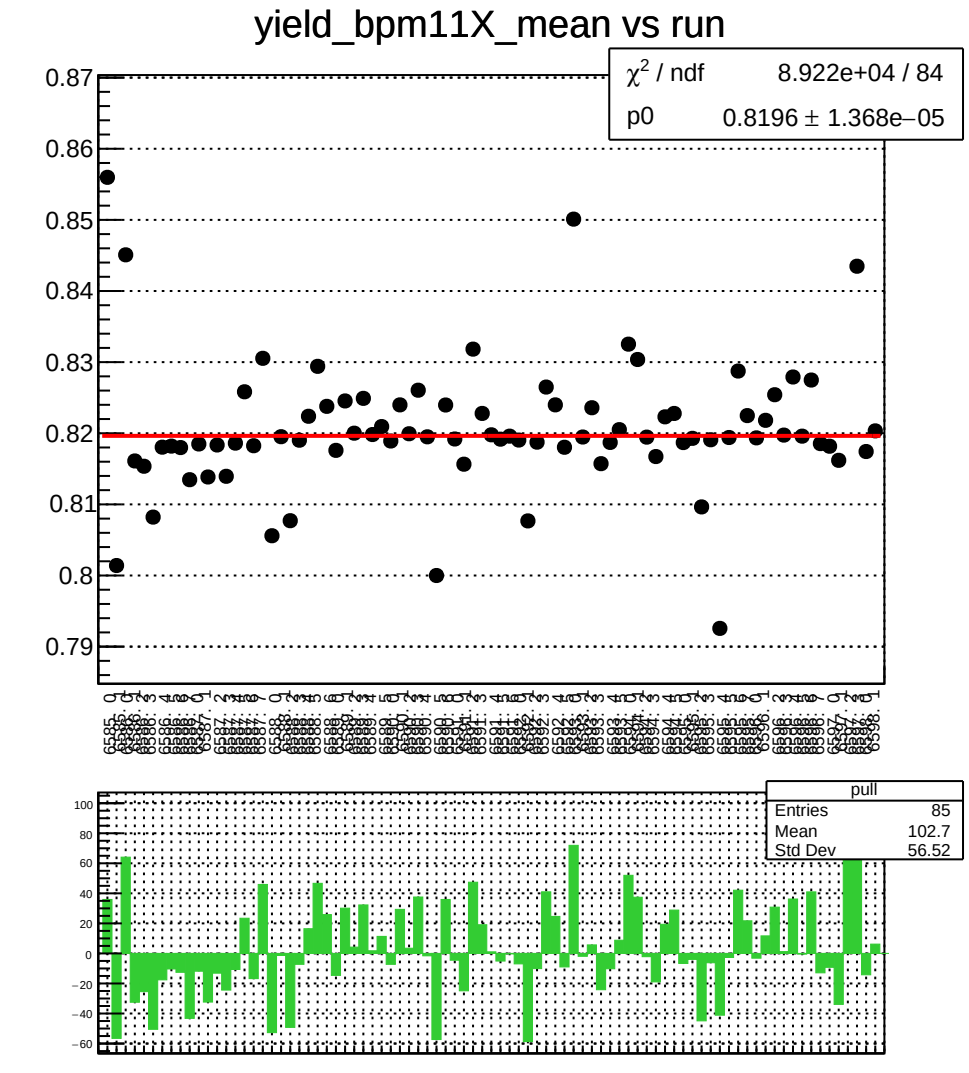

pull1D
Entries 85
Mean −0.9698
Std Dev 3.528

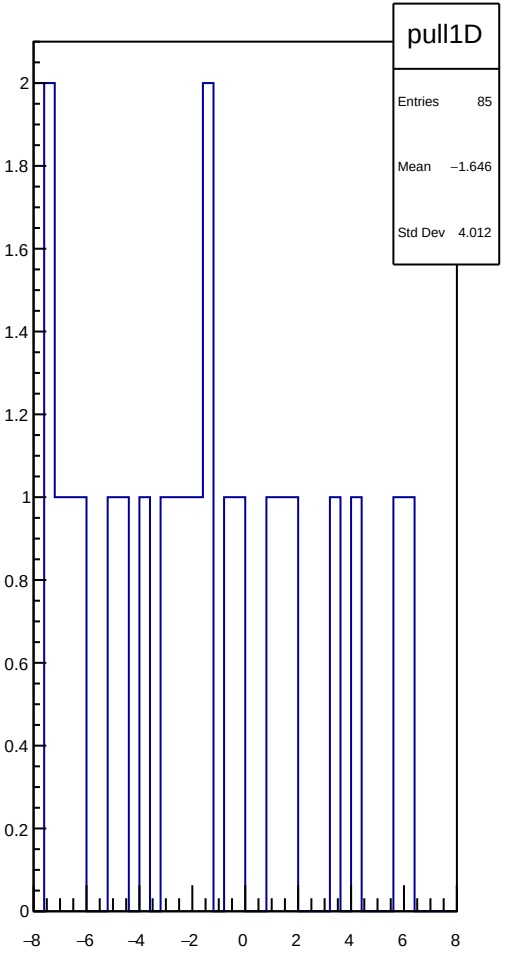

yield_bpm1X_rms vs run
χ² / ndf 6.479e+05 / 84
p0 0.08055 ± 7.893e–05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

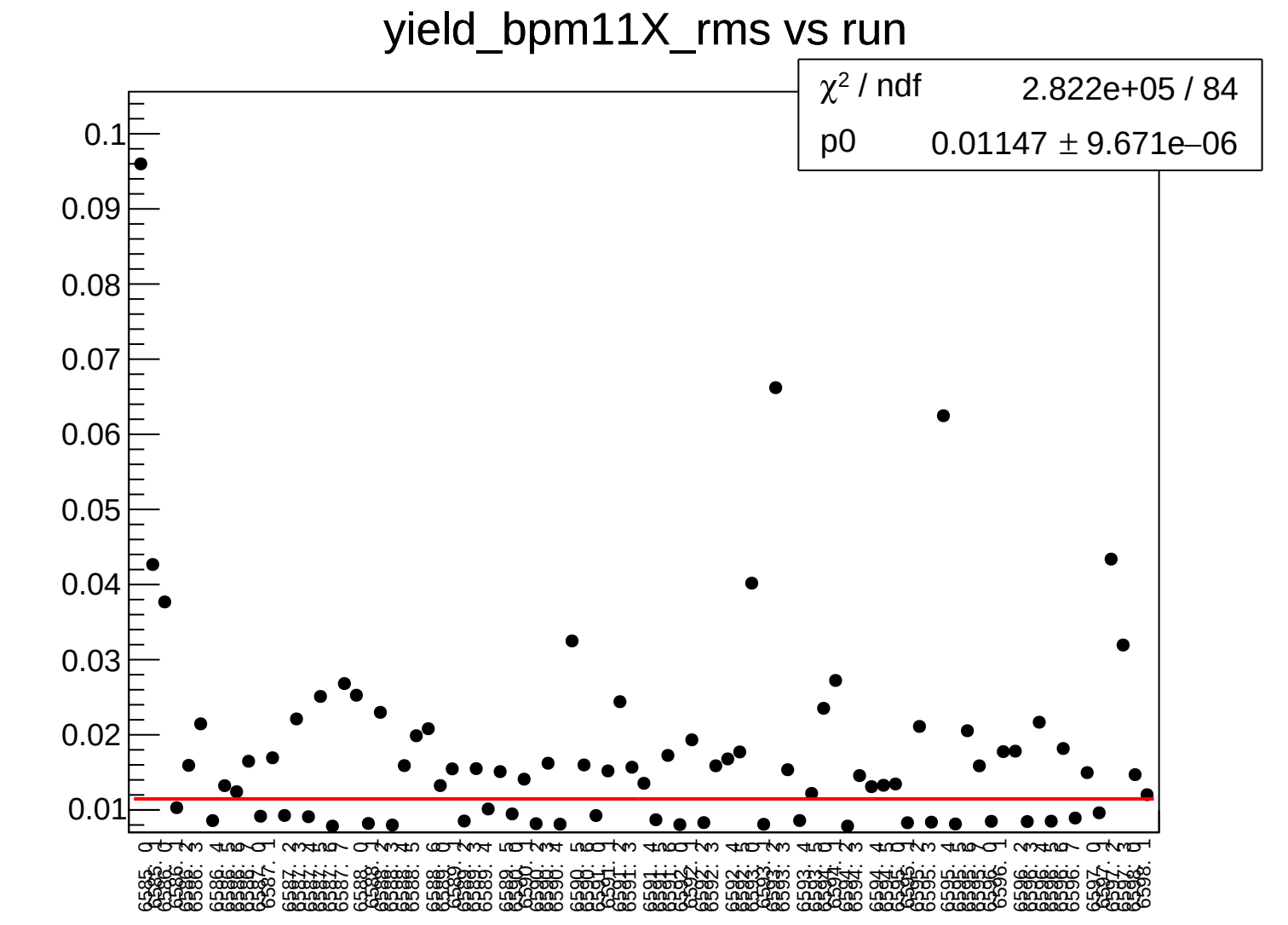

yield_bpm1Y_mean vs run
χ² / ndf 7.762e+06 / 84
p0 −0.02339 ± 8.393e−05
pull
Entries 85
Mean 46.96
Std Dev 28.31

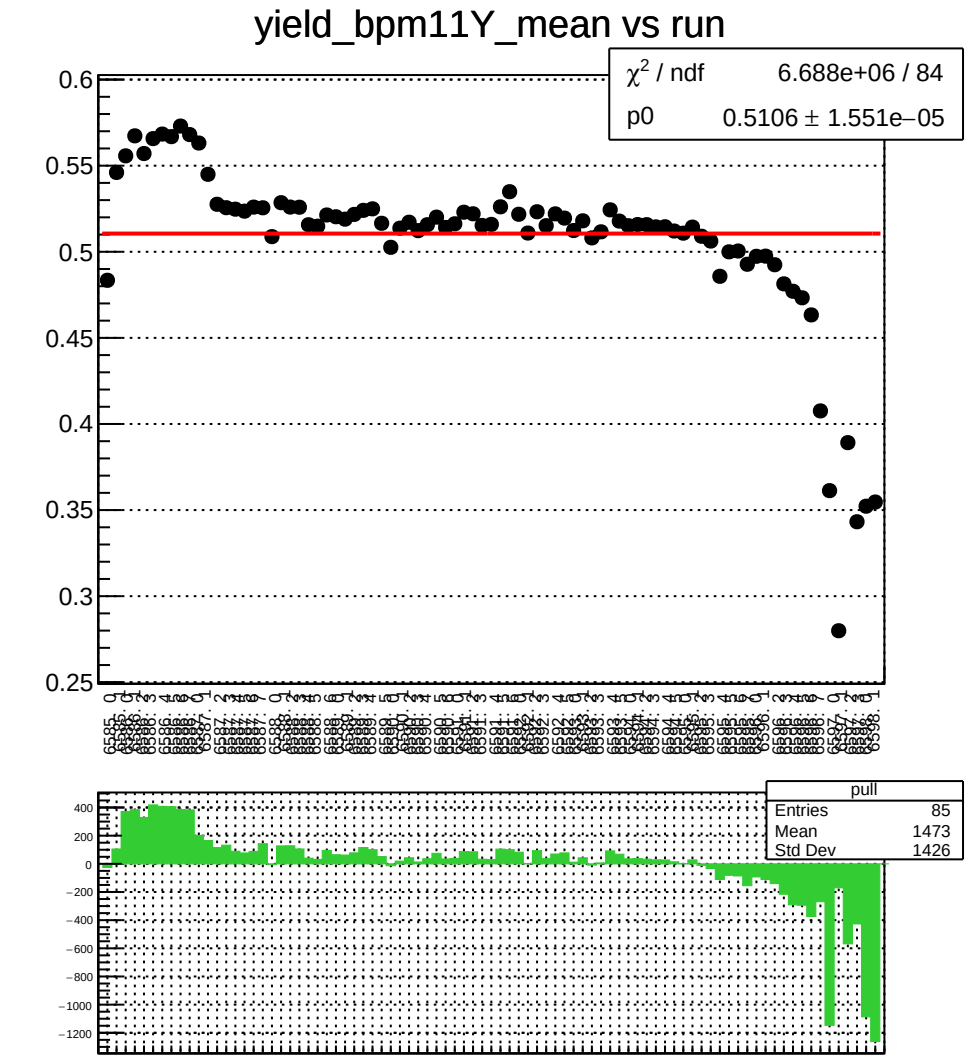

pull1D
Entries 85
Mean −3.712
Std Dev 0.6862

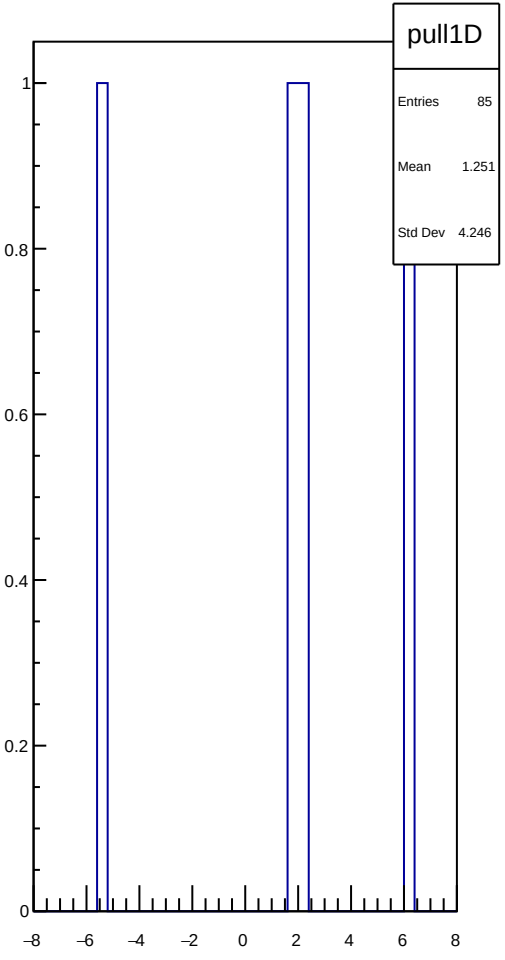

yield_bpm1Y_rms vs run
χ² / ndf 7.442e+05 / 84
p0 0.0577 ± 5.935e−05
0.3
0.25
0.2
0.15
0.1
0.05

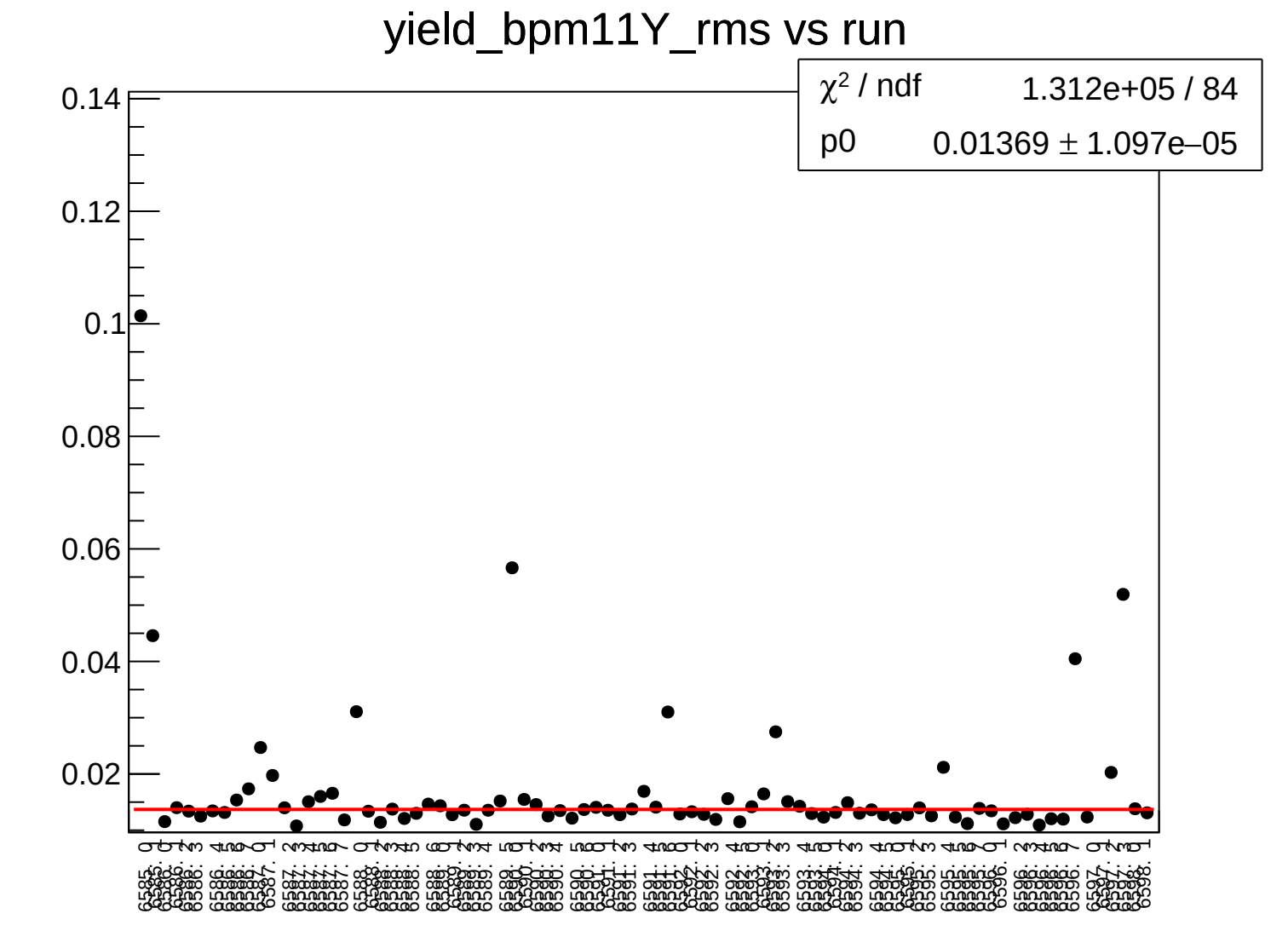

yield_bpm11X_mean vs run
χ² / ndf 8.922e+04 / 84
p0 0.8196 ± 1.368e−05
pull
Entries 85
Mean 102.7
Std Dev 56.52

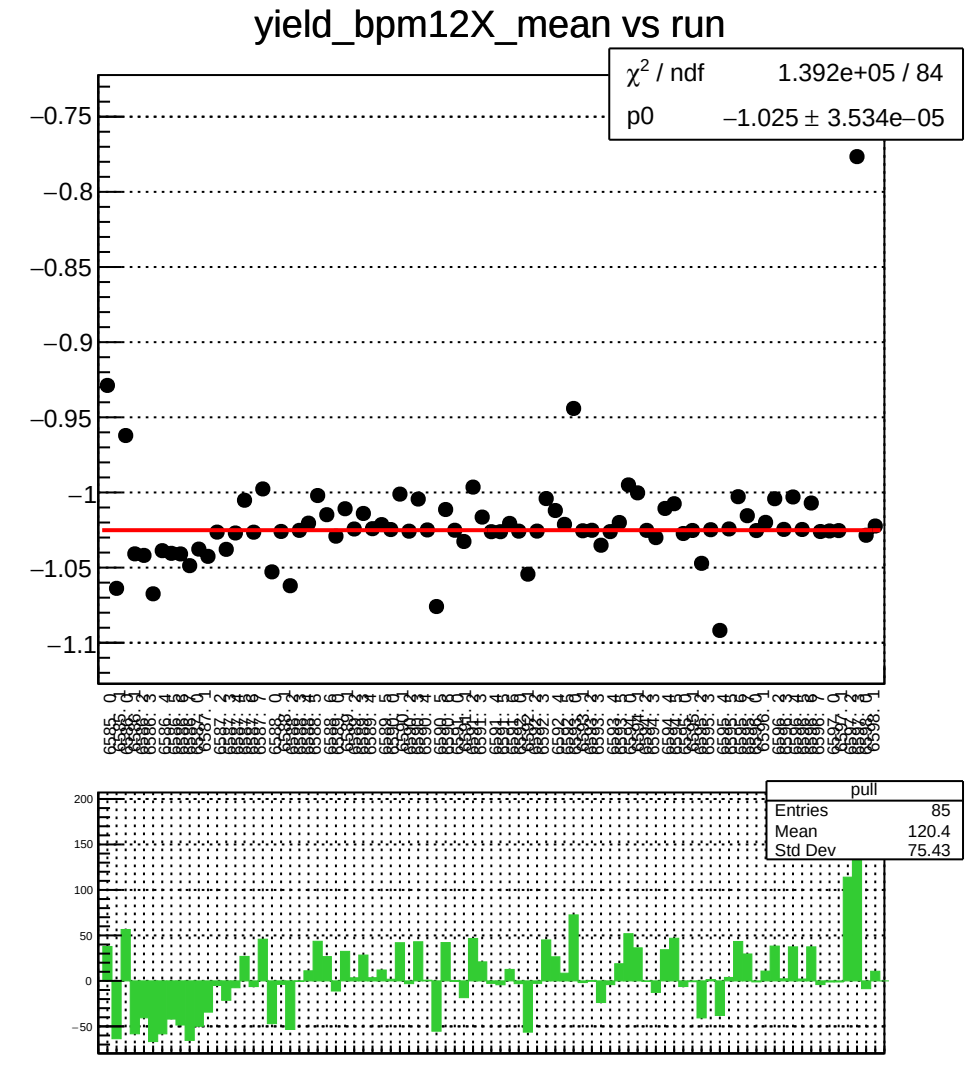

pull1D
Entries 85
Mean −1.646
Std Dev 4.012

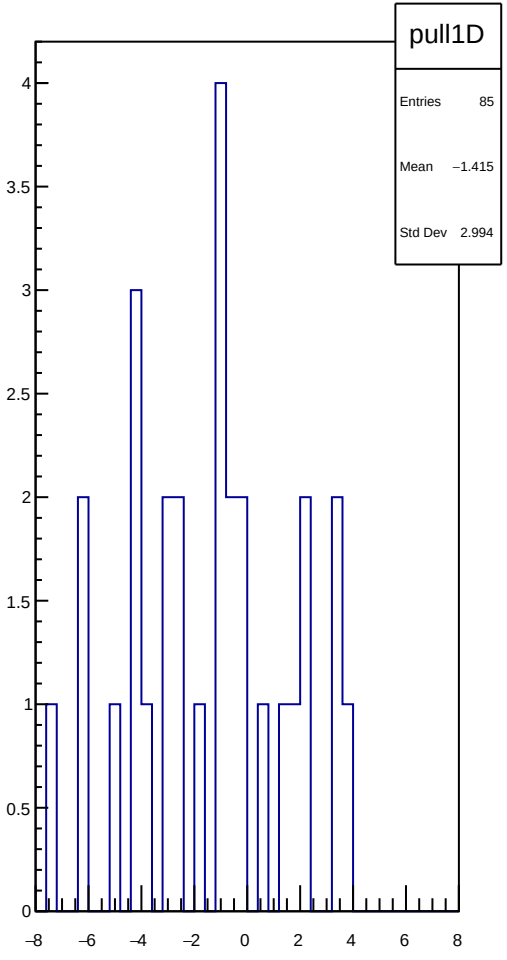

yield_bpm11X_rms vs run
χ² / ndf 2.822e+05 / 84
p0 0.01147 ± 9.671e–06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

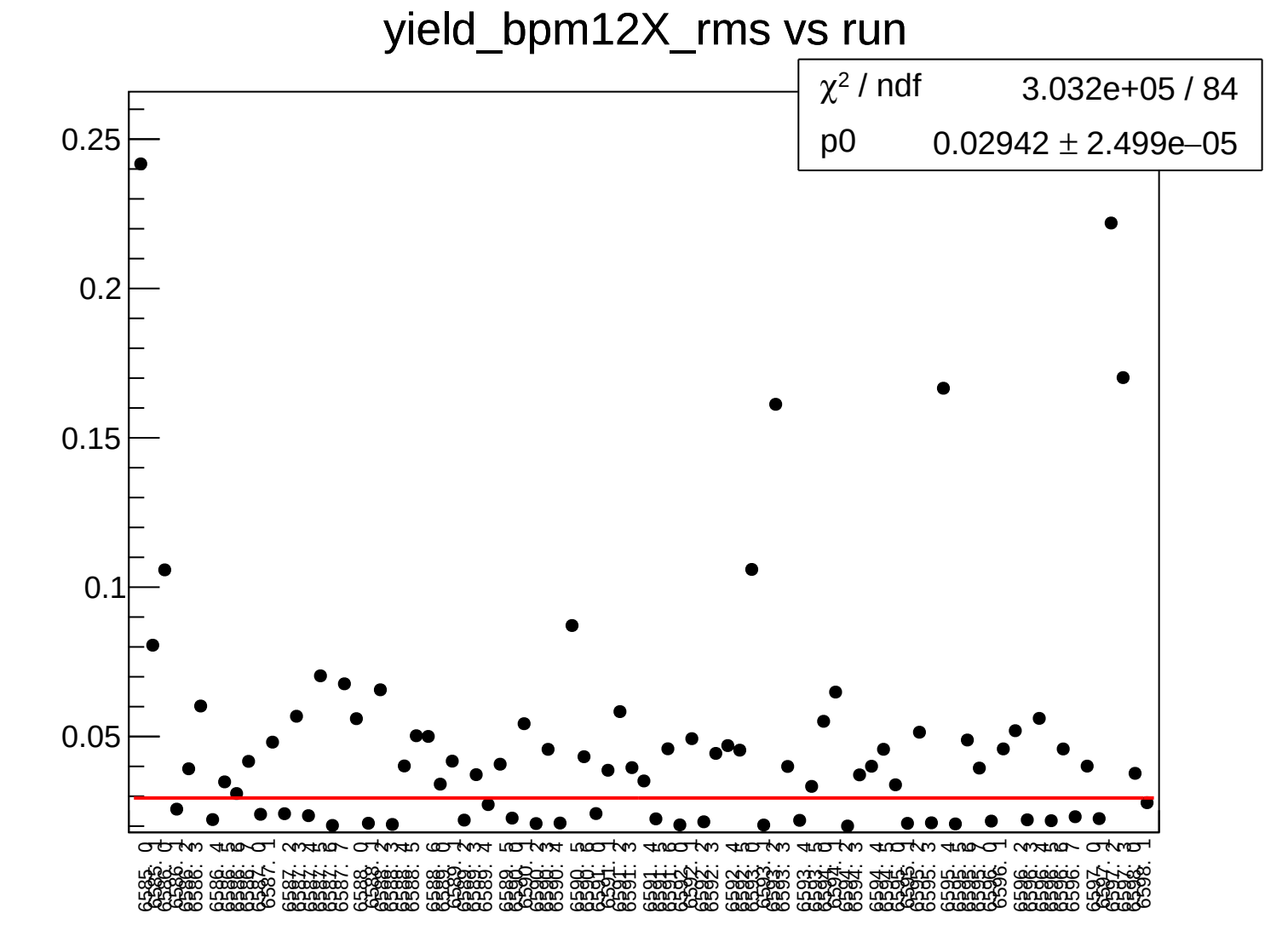

yield_bpm11Y_mean vs run
χ² / ndf 6.688e+06 / 84
p0 0.5106 ± 1.551e−05
pull
Entries 85
Mean 1473
Std Dev 1426

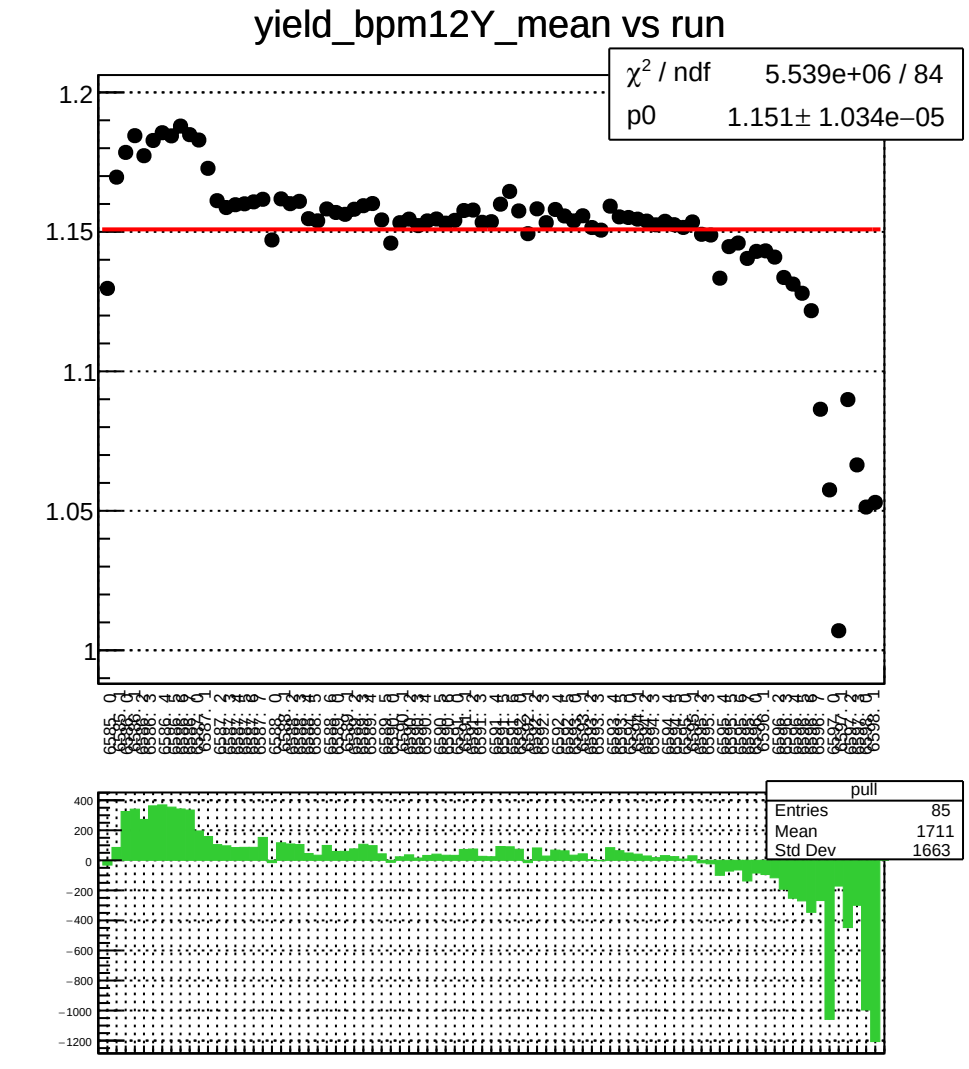

pull1D
Entries 85
Mean 1.251
Std Dev 4.246

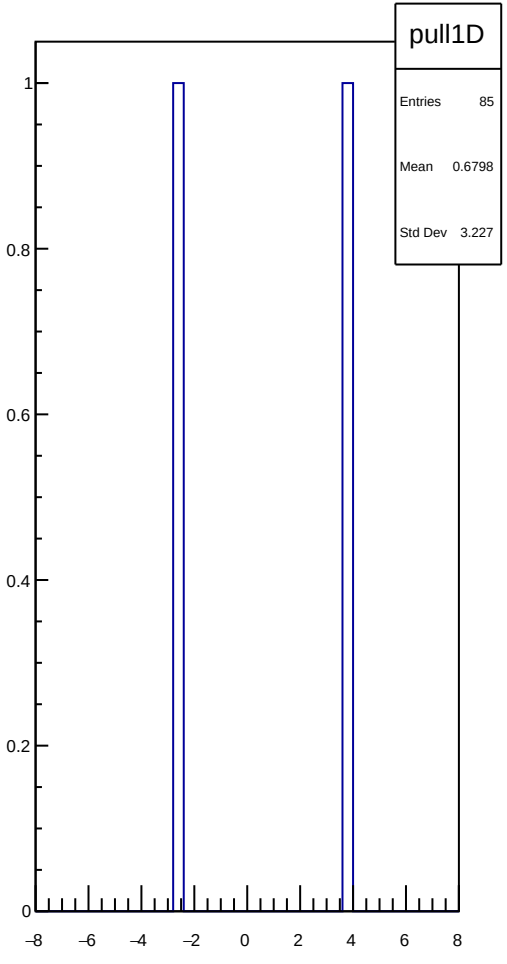

yield_bpm11Y_rms vs run
χ² / ndf 1.312e+05 / 84
p0 0.01369 ± 1.097e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

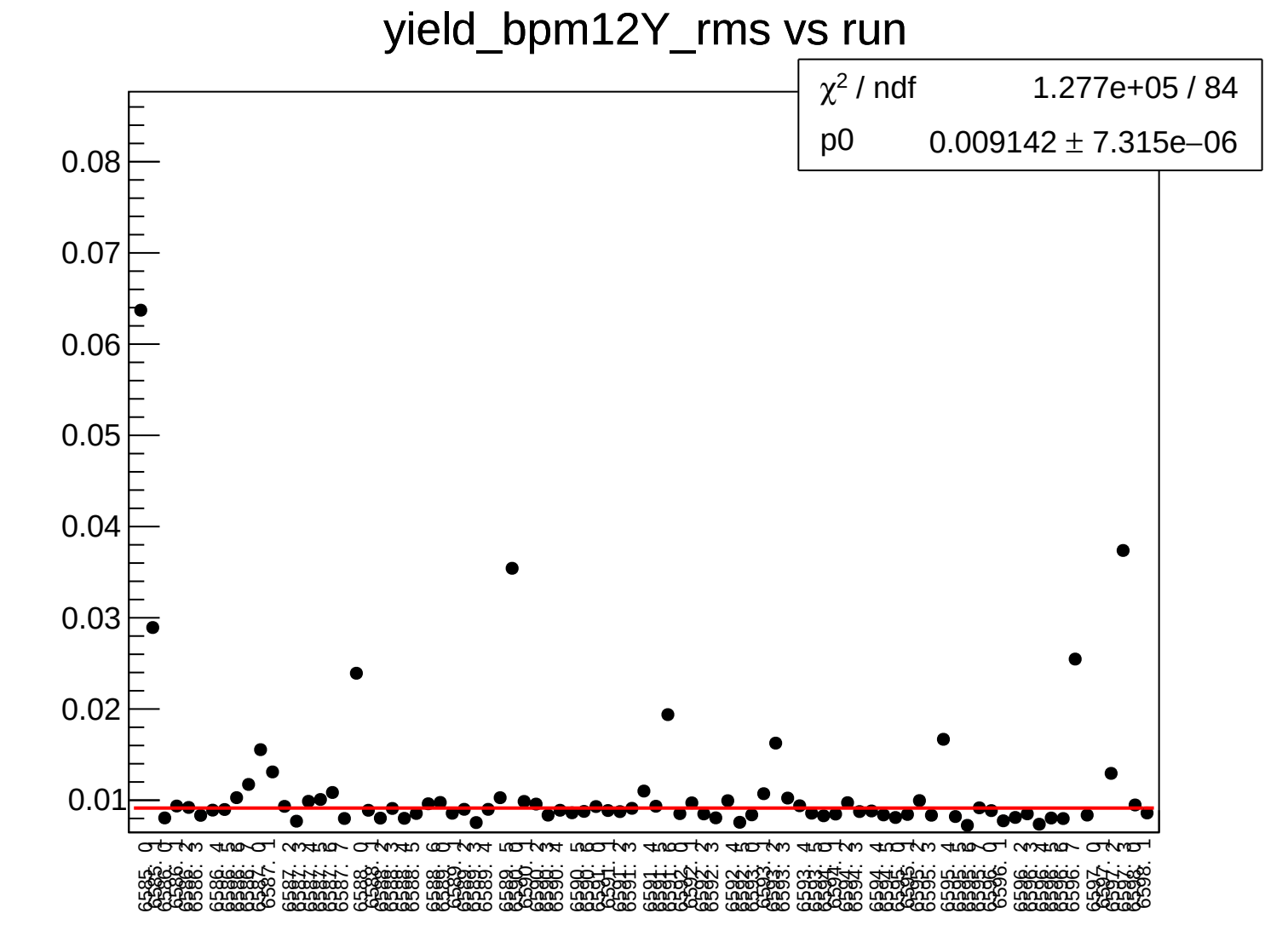

yield_bpm12X_mean vs run
χ² / ndf 1.392e+05 / 84
p0 −1.025 ± 3.534e−05
pull
Entries 85
Mean 120.4
Std Dev 75.43

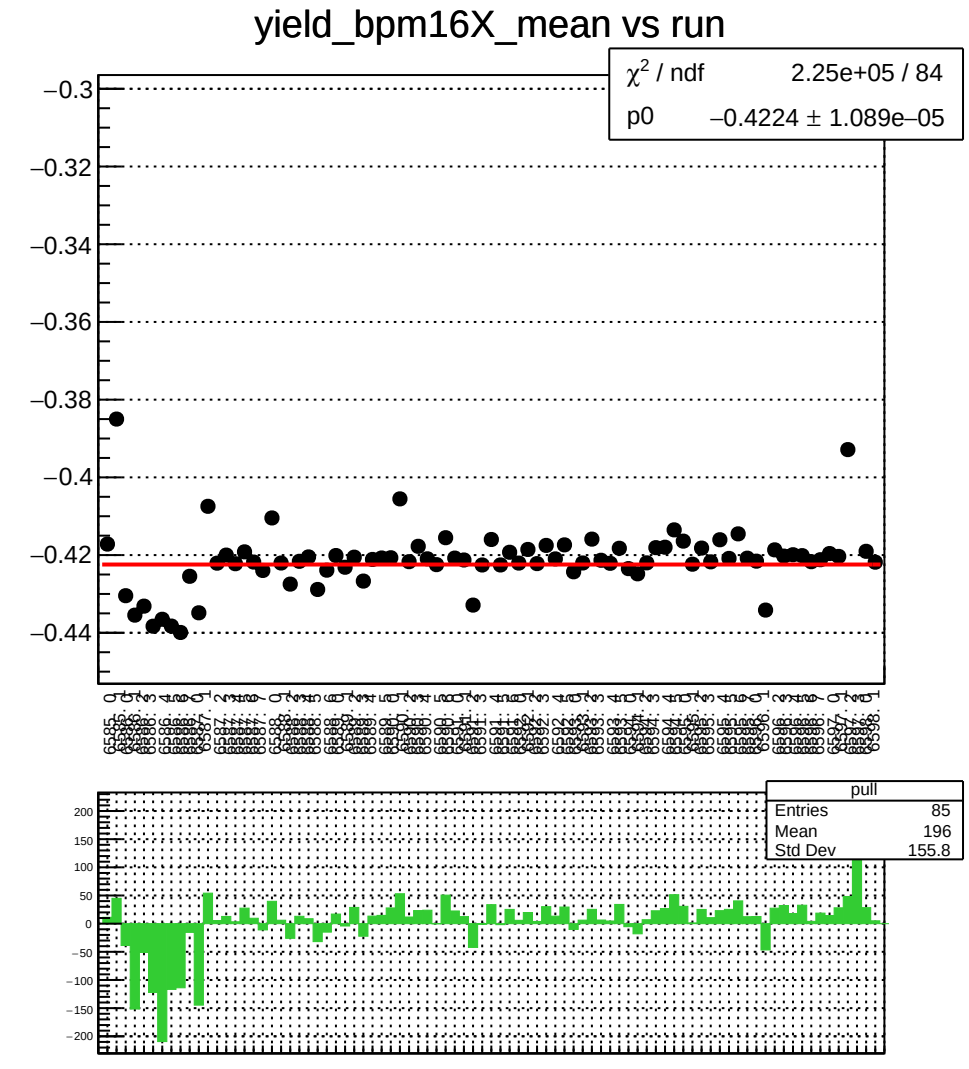

pull1D
Entries 85
Mean −1.415
Std Dev 2.994

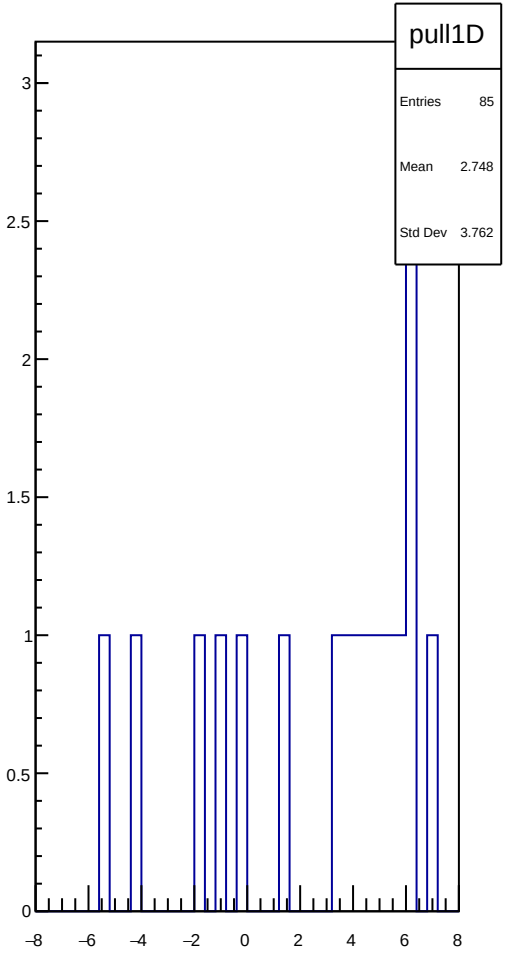

yield_bpm12X_rms vs run
χ² / ndf 3.032e+05 / 84
p0 0.02942 ± 2.499e−05
0.25
0.2
0.15
0.1
0.05

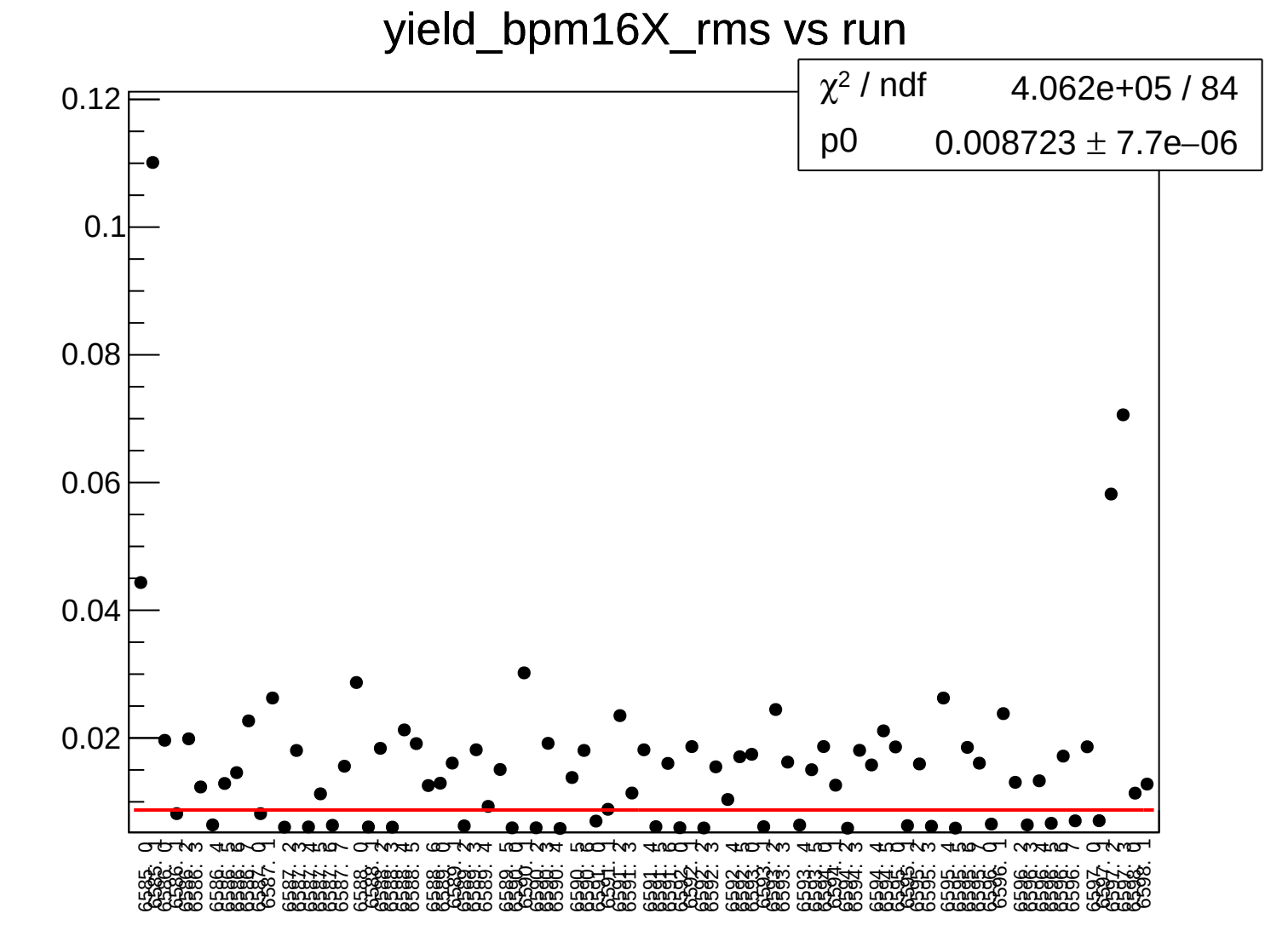

yield_bpm12Y_mean vs run
χ² / ndf 5.539e+06 / 84
p0 1.151± 1.034e−05
1.2
1.15
1.1
1.05
1
pull
Entries 85
Mean 1711
Std Dev 1663
400
200
0
−200
−400
−600
−800
−1000
−1200

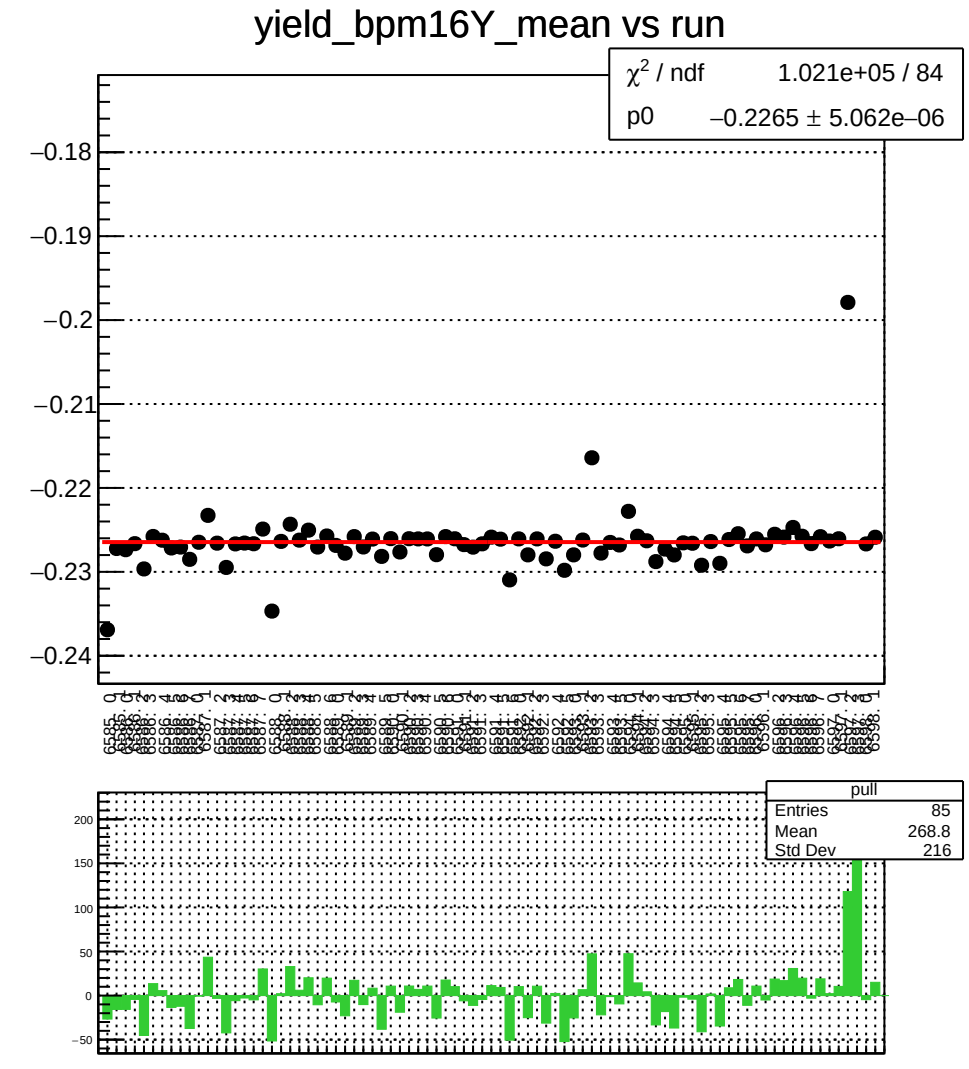

pull1D
Entries 85
Mean 0.6798
Std Dev 3.227
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

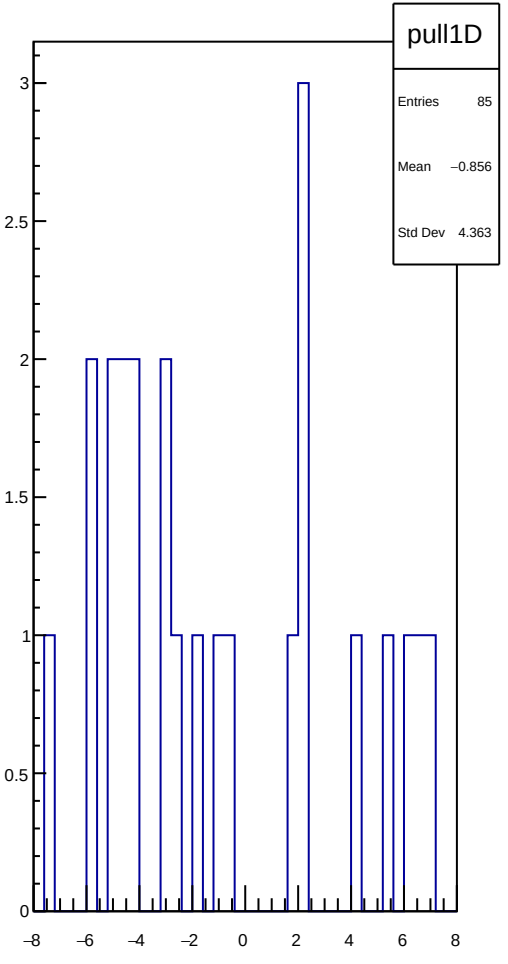

yield_bpm12Y_rms vs run
χ² / ndf 1.277e+05 / 84
p0 0.009142 ± 7.315e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

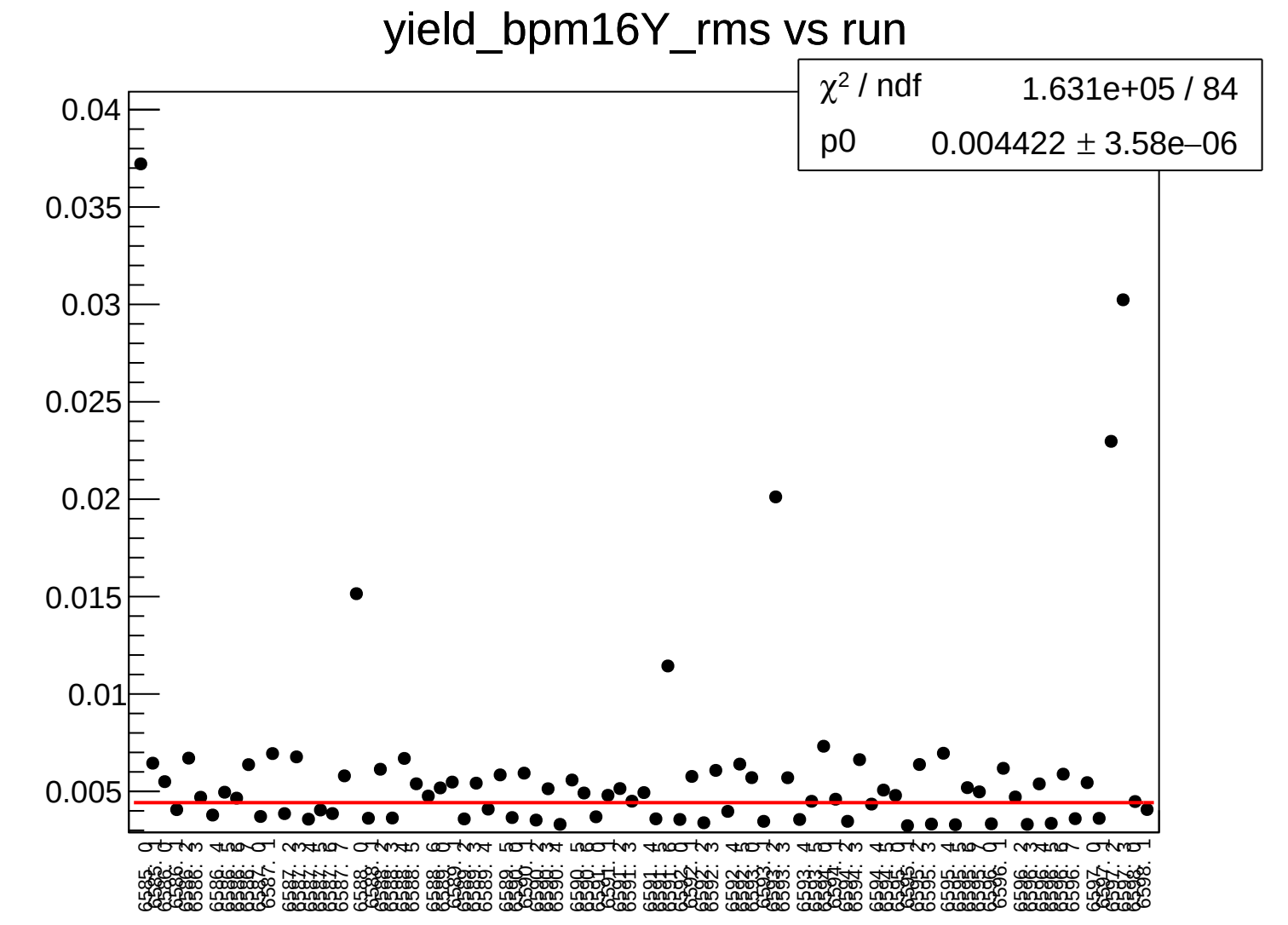

yield_bpm16X_mean vs run
χ² / ndf 2.25e+05 / 84
p0 −0.4224 ± 1.089e−05
−0.3
−0.32
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
pull
Entries 85
Mean 196
Std Dev 155.8
200
150
100
50
0
−50
−100
−150
−200

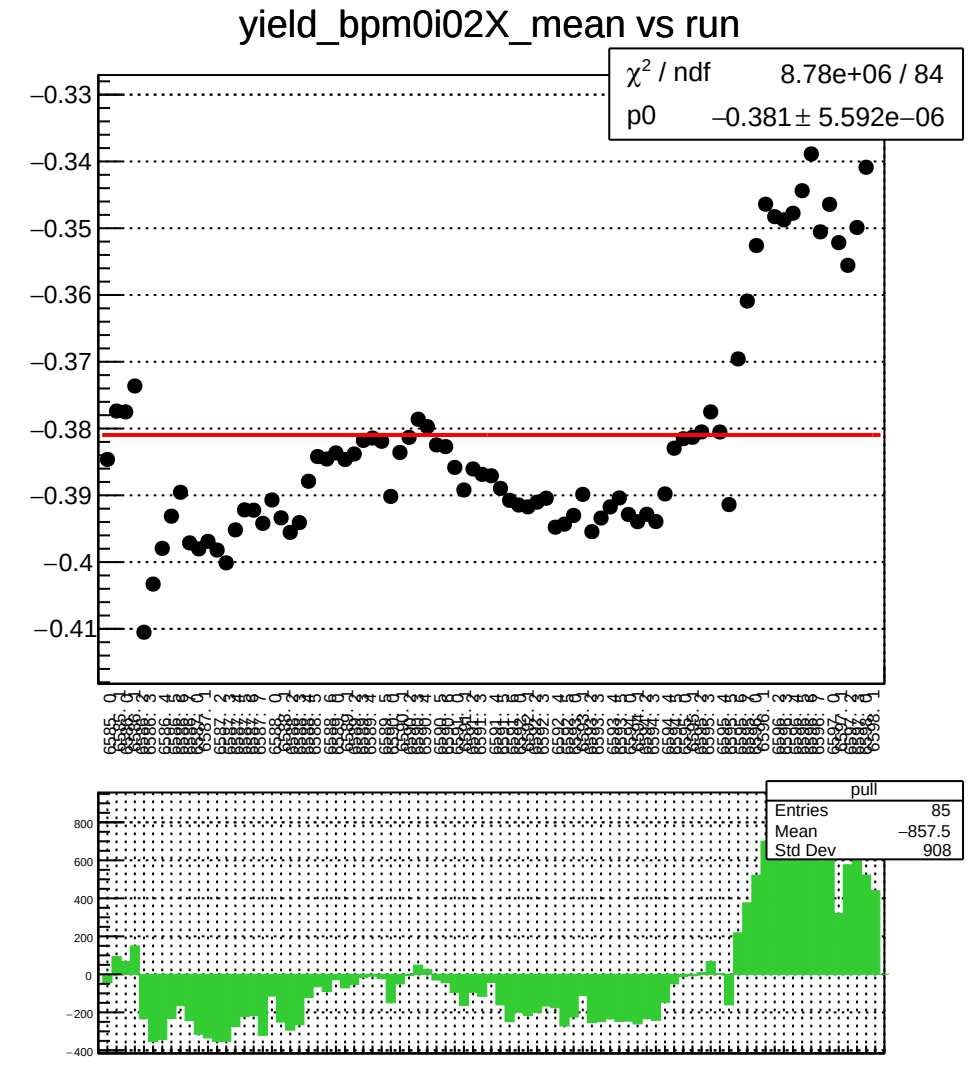

pull1D
Entries 85
Mean 2.748
Std Dev 3.762
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

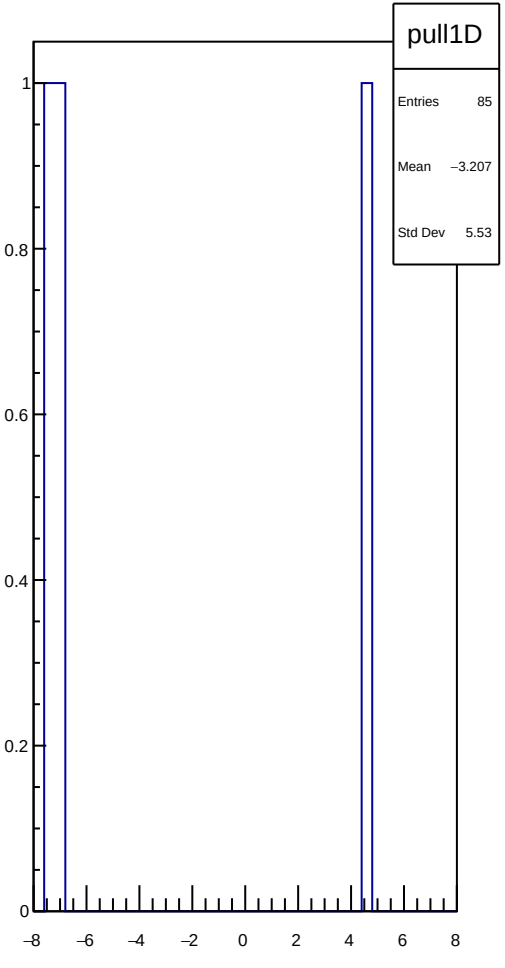

yield_bpm16X_rms vs run
χ² / ndf 4.062e+05 / 84
p0 0.008723 ± 7.7e–06
0.12
0.1
0.08
0.06
0.04
0.02

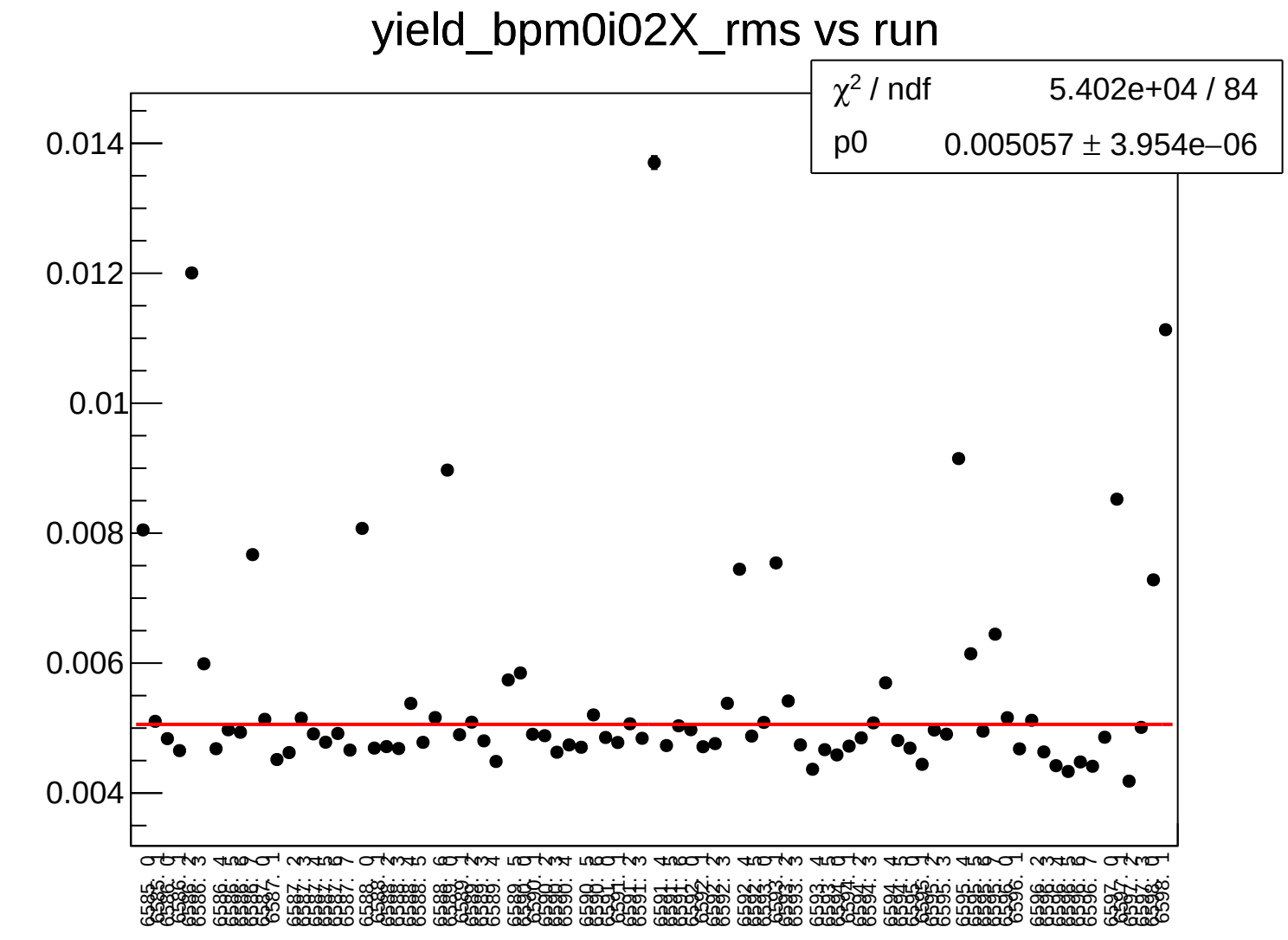

yield_bpm16Y_mean vs run
χ² / ndf 1.021e+05 / 84
p0 −0.2265 ± 5.062e−06
−0.18
−0.19
−0.2
−0.21
−0.22
−0.23
−0.24
pull
Entries 85
Mean 268.8
Std Dev 216
200
150
100
50
0
−50

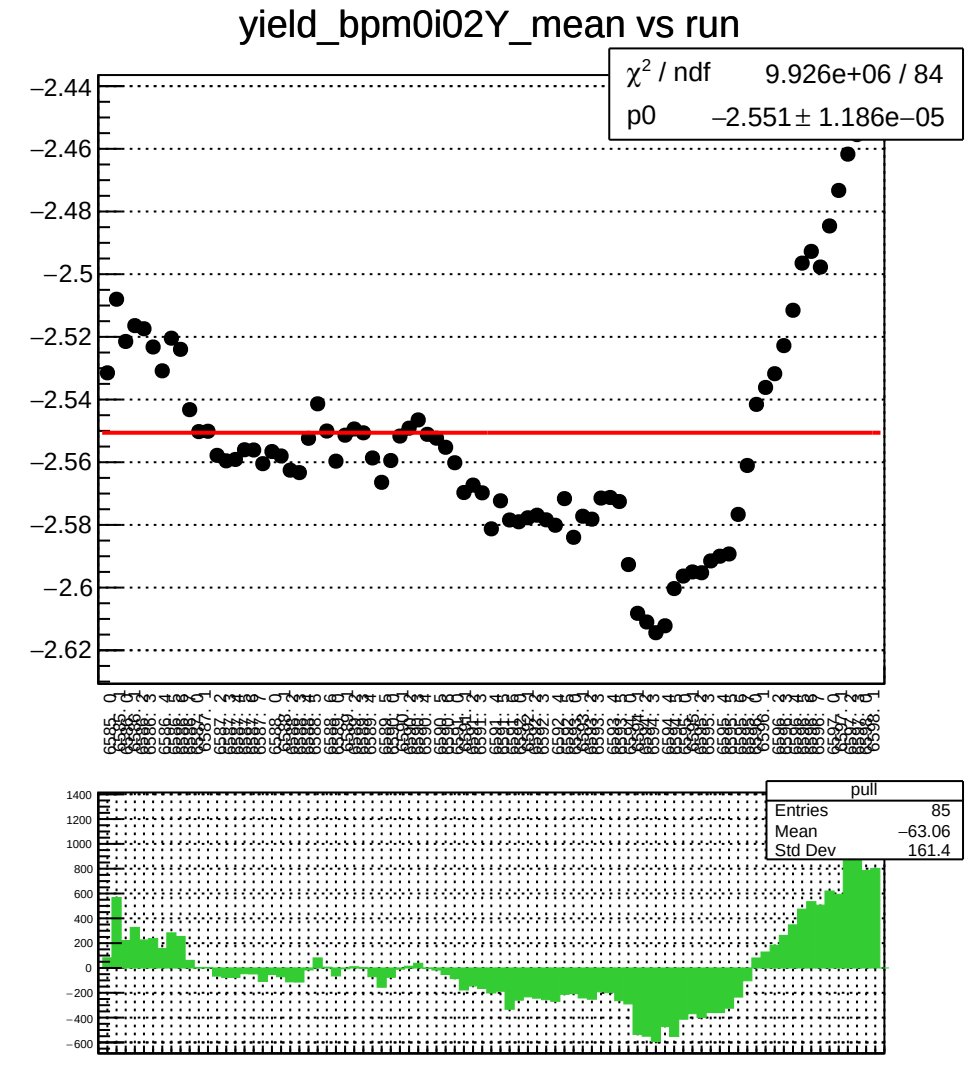

pull1D
Entries 85
Mean −0.856
Std Dev 4.363
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

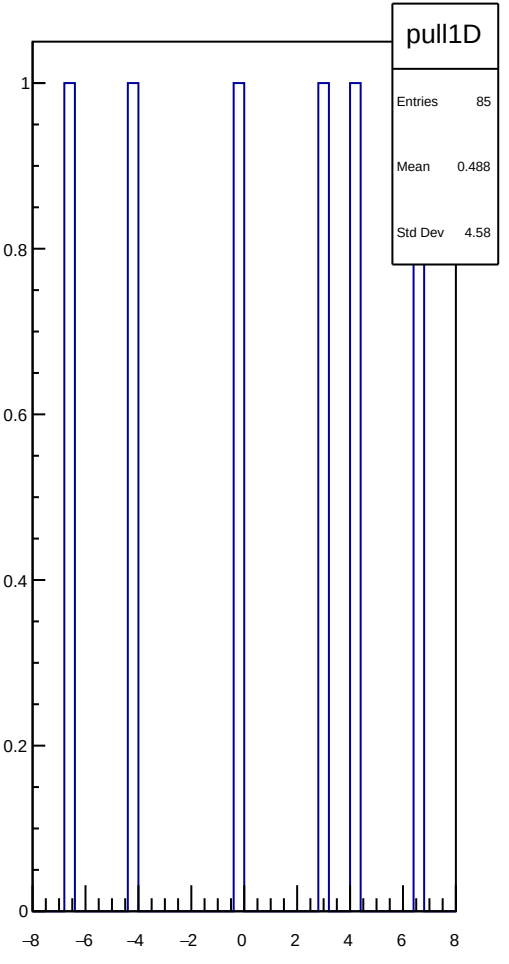

yield_bpm16Y_rms vs run
χ² / ndf 1.631e+05 / 84
p0 0.004422 ± 3.58e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

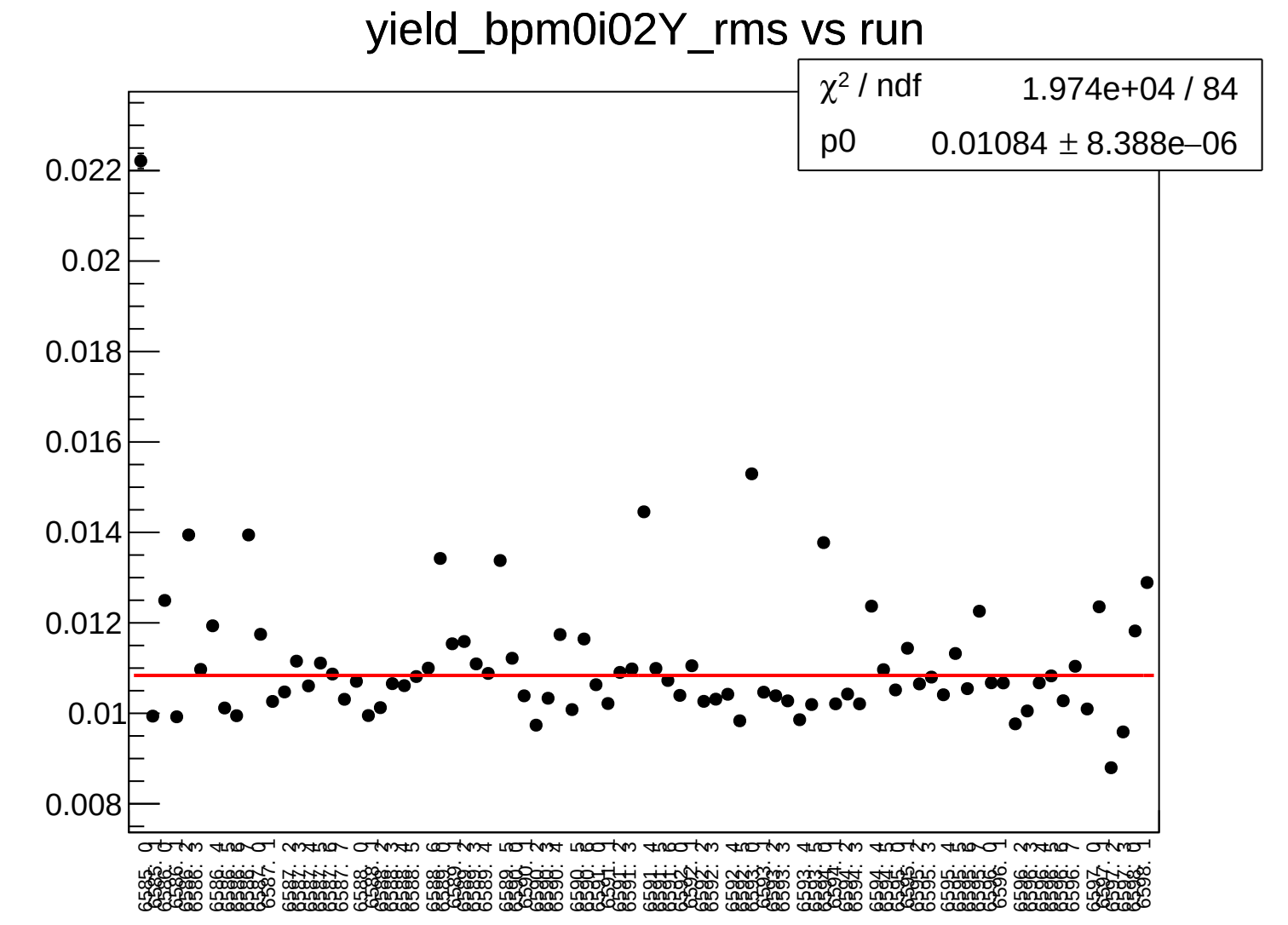

yield_bpm0i02X_mean vs run
χ² / ndf 8.78e+06 / 84
p0 −0.381 ± 5.592e−06
pull
Entries 85
Mean −857.5
Std Dev 908

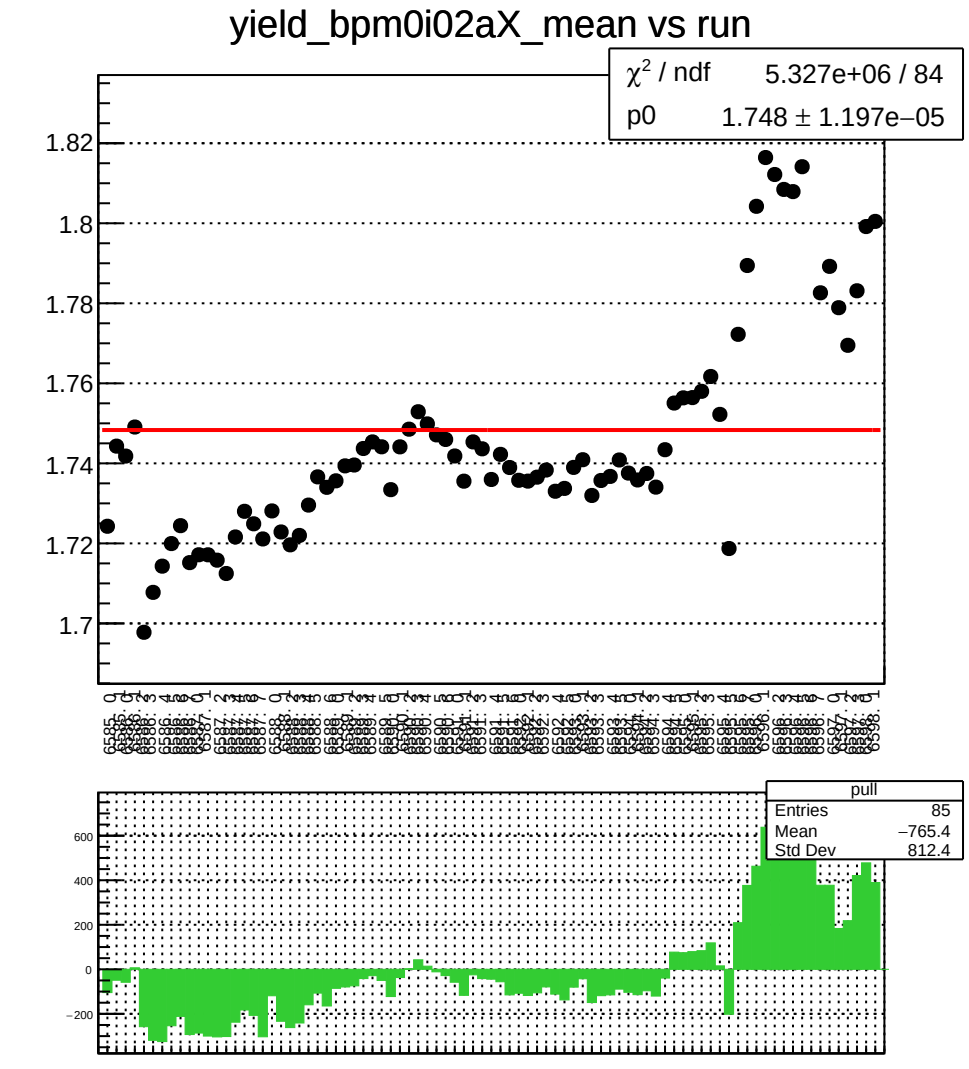

pull1D
Entries 85
Mean −3.207
Std Dev 5.53

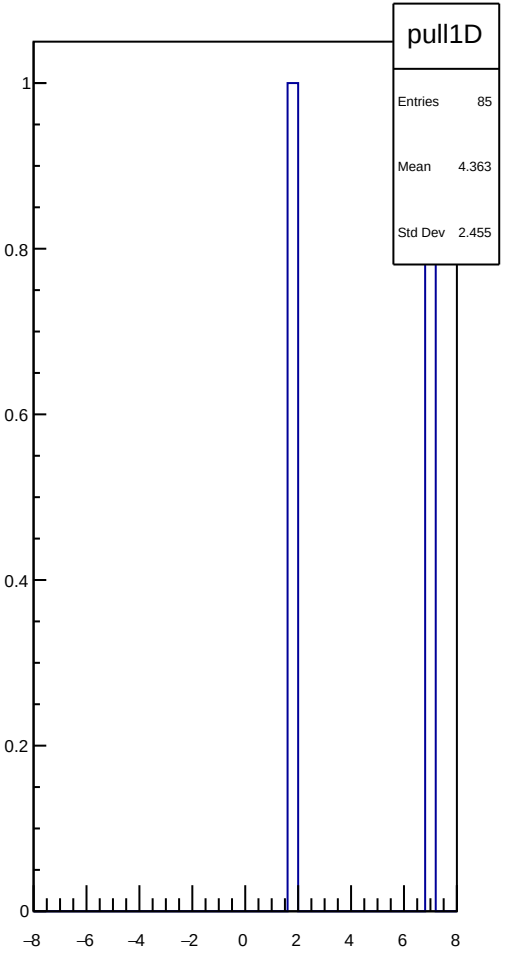

yield_bpm0i02X_rms vs run
χ² / ndf 5.402e+04 / 84
p0 0.005057 ± 3.954e−06
0.014
0.012
0.01
0.008
0.006
0.004

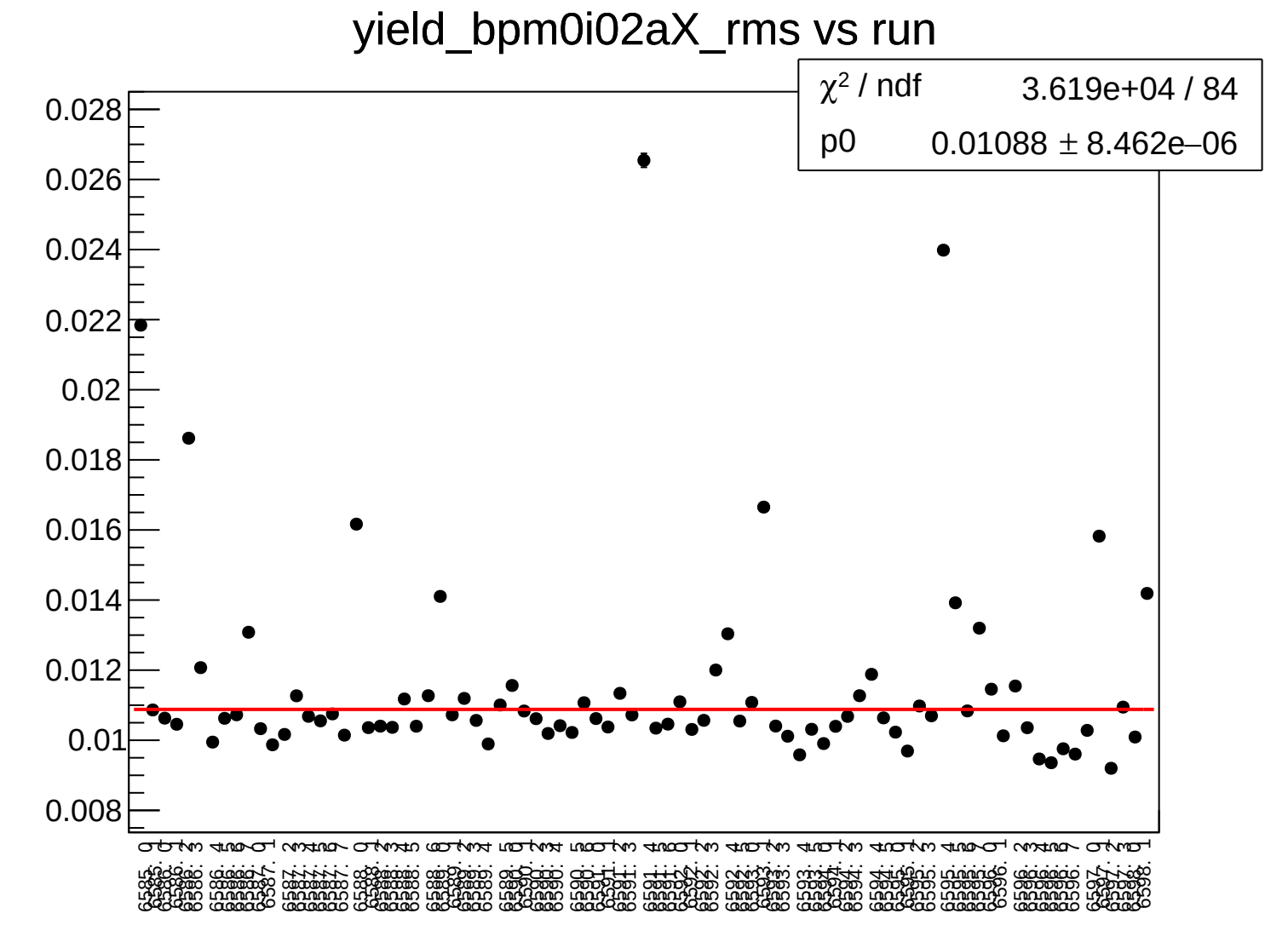

yield_bpm0i02Y_mean vs run
χ² / ndf 9.926e+06 / 84
p0 −2.551 ± 1.186e−05
−2.44
−2.46
−2.48
−2.5
−2.52
−2.54
−2.56
−2.58
−2.6
−2.62
pull
Entries 85
Mean −63.06
Std Dev 161.4
1400
1200
1000
800
600
400
200
0
−200
−400
−600

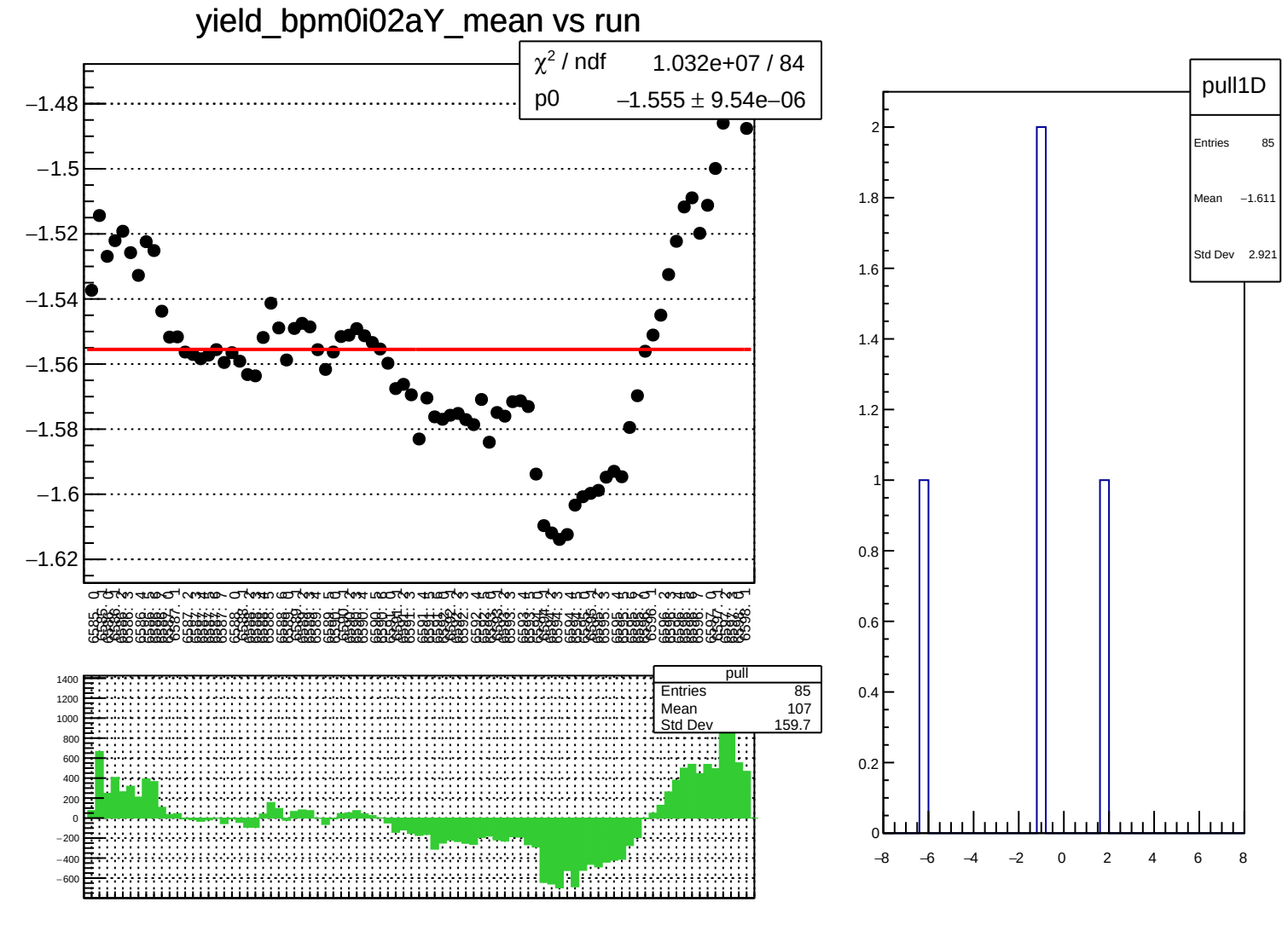

pull1D
Entries 85
Mean 0.488
Std Dev 4.58
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

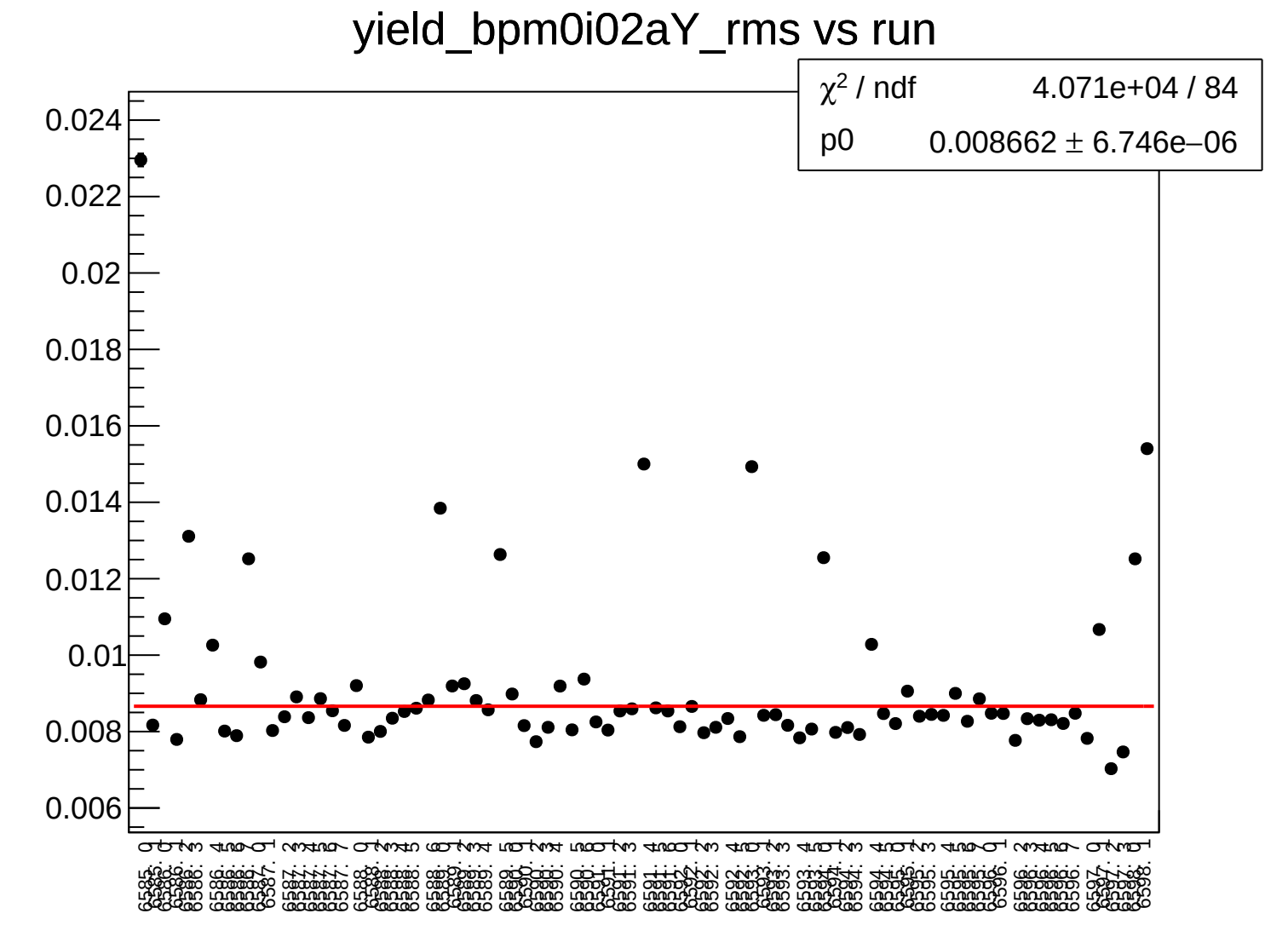

yield_bpm0i02Y_rms vs run
χ² / ndf 1.974e+04 / 84
p0 0.01084 ± 8.388e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

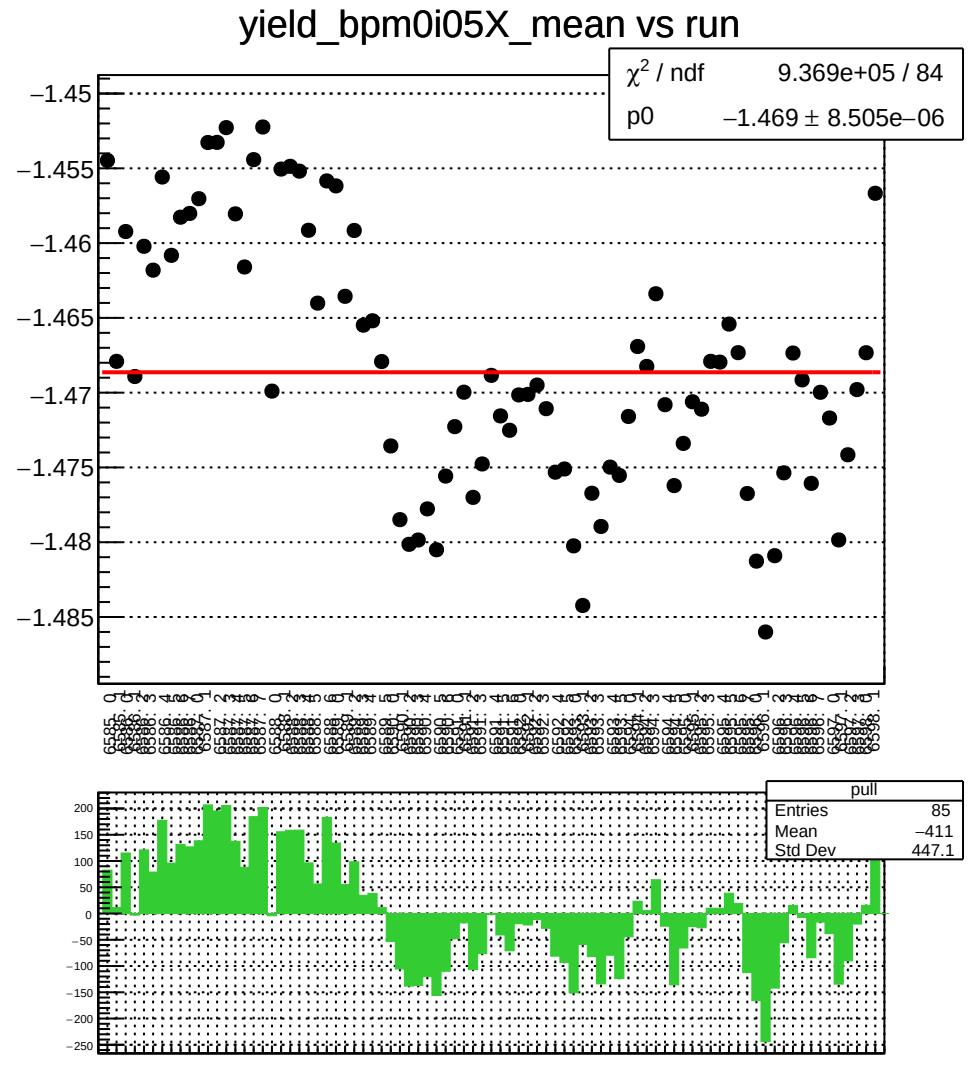

yield_bpm0i02aX_mean vs run
χ² / ndf 5.327e+06 / 84
p0 1.748 ± 1.197e−05
1.82
1.8
1.78
1.76
1.74
1.72
1.7
pull
Entries 85
Mean −765.4
Std Dev 812.4
600
400
200
0
−200

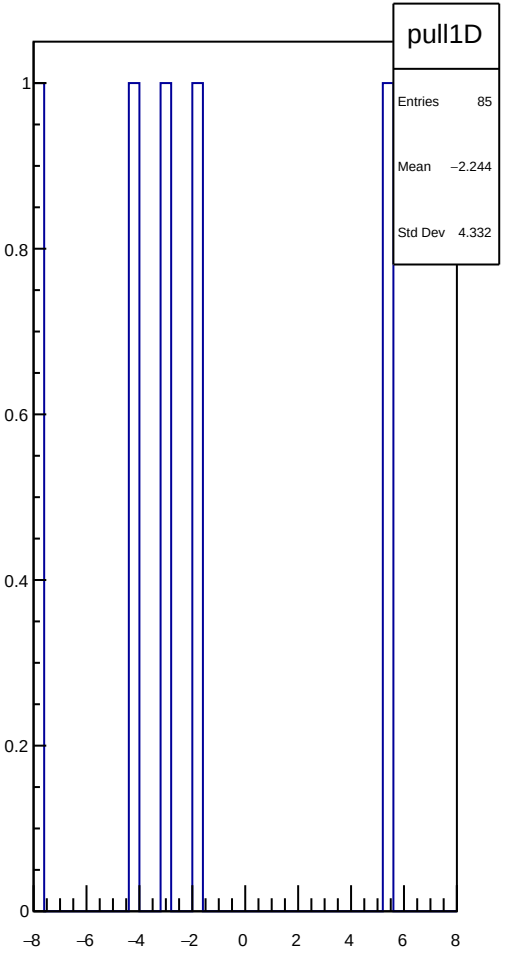

pull1D
Entries 85
Mean 4.363
Std Dev 2.455
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

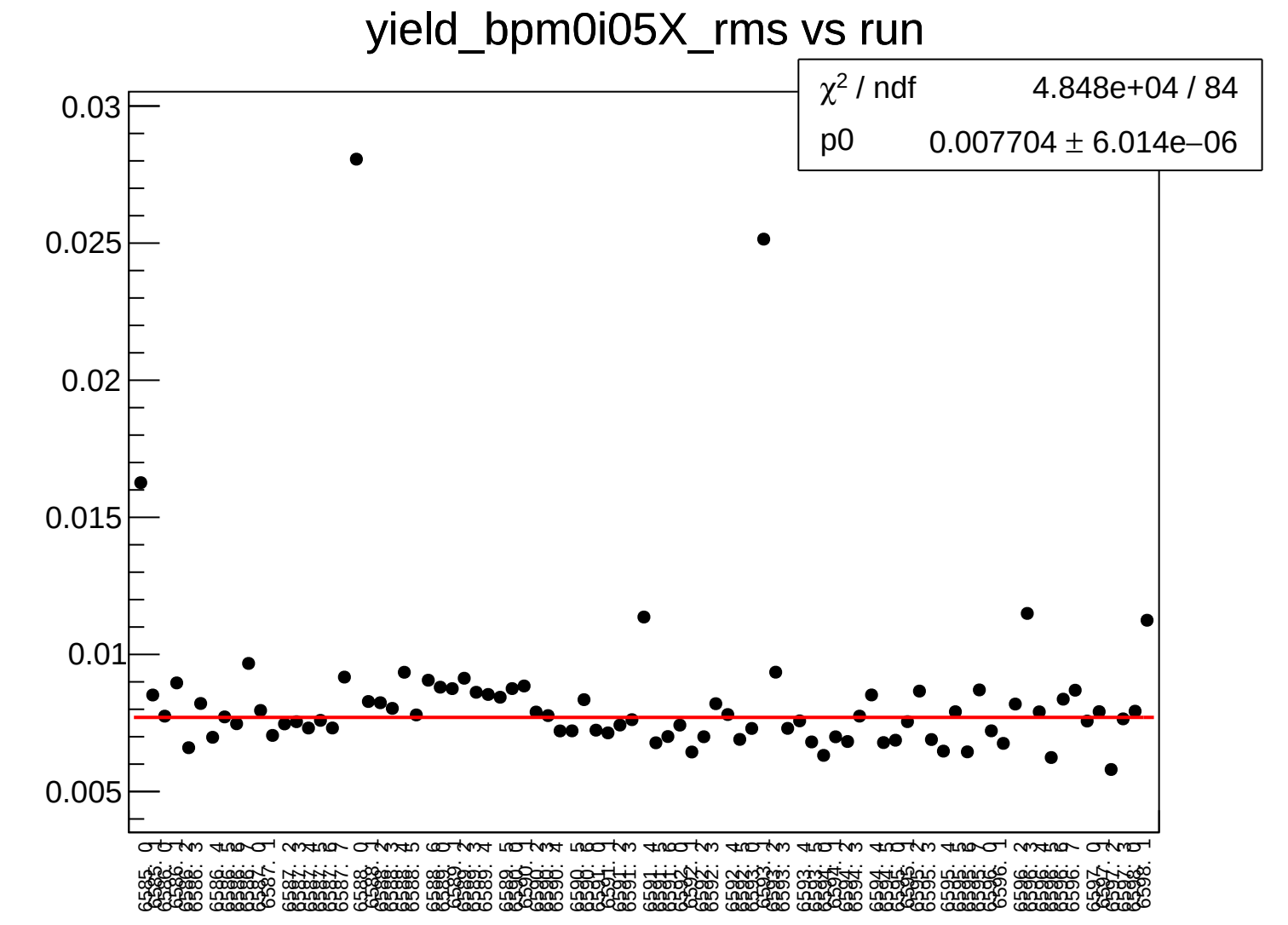

yield_bpm0i02aX_rms vs run
χ² / ndf 3.619e+04 / 84
p0 0.01088 ± 8.462e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

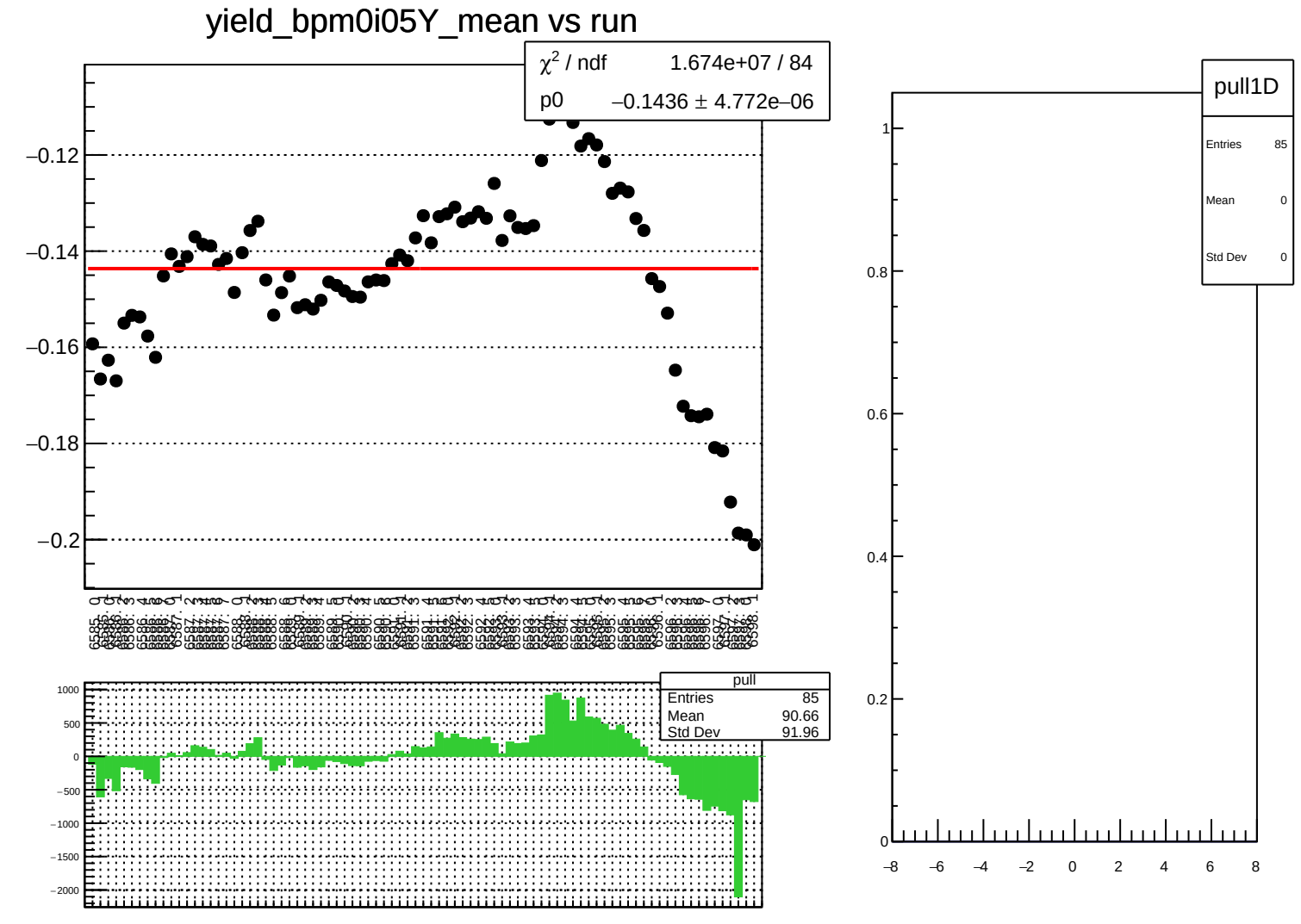

yield_bpm0i02aY_mean vs run
χ² / ndf 1.032e+07 / 84
p0 –1.555 ± 9.54e–06
–1.48
–1.5
–1.52
–1.54
–1.56
–1.58
–1.6
–1.62
pull
Entries 85
Mean 107
Std Dev 159.7
1400
1200
1000
800
600
400
200
0
–200
–400
–600
pull1D
Entries 85
Mean –1.611
Std Dev 2.921
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

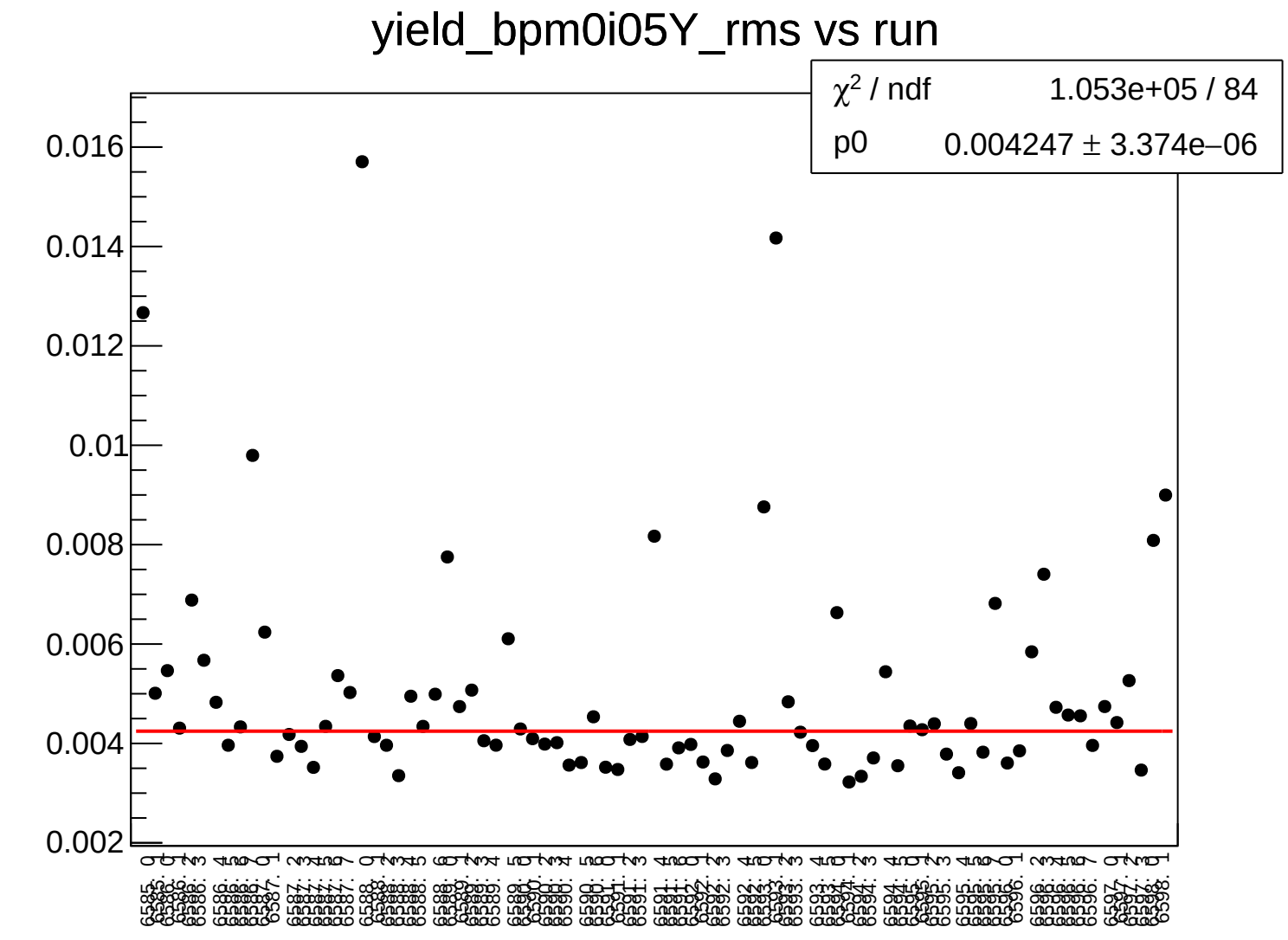

yield_bpm0i02aY_rms vs run
χ² / ndf 4.071e+04 / 84
p0 0.008662 ± 6.746e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

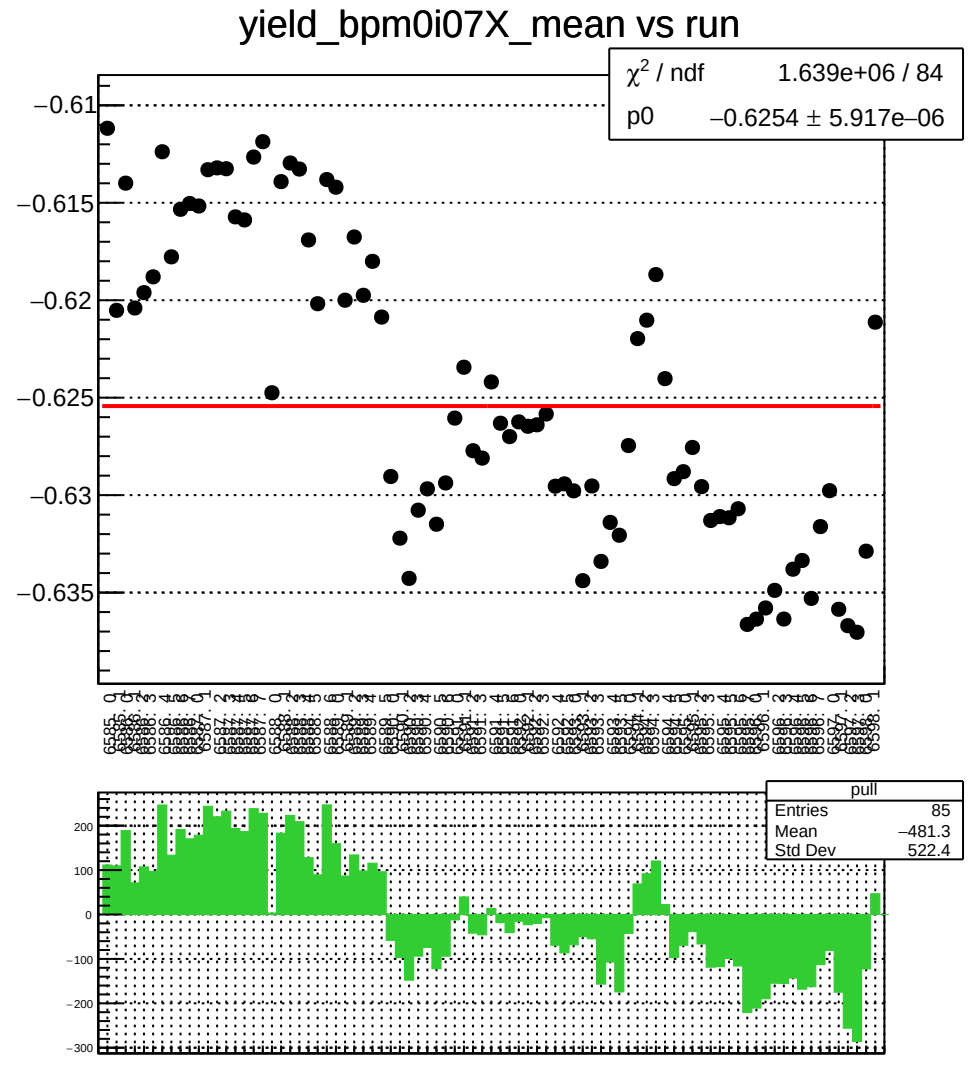

yield_bpm0i05X_mean vs run
χ² / ndf 9.369e+05 / 84
p0 −1.469 ± 8.505e−06
−1.45
−1.455
−1.46
−1.465
−1.47
−1.475
−1.48
−1.485
pull
Entries 85
Mean −411
Std Dev 447.1
200
150
100
50
0
−50
−100
−150
−200
−250

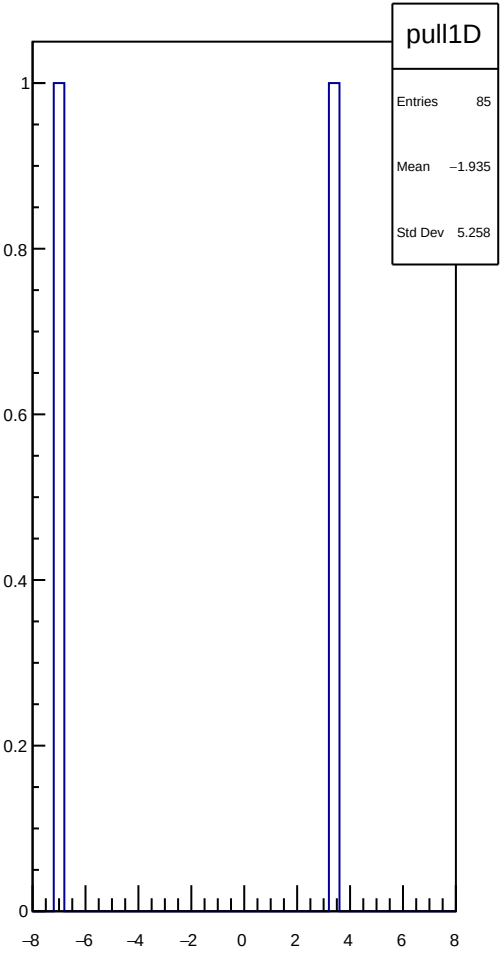

pull1D
Entries 85
Mean −2.244
Std Dev 4.332
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

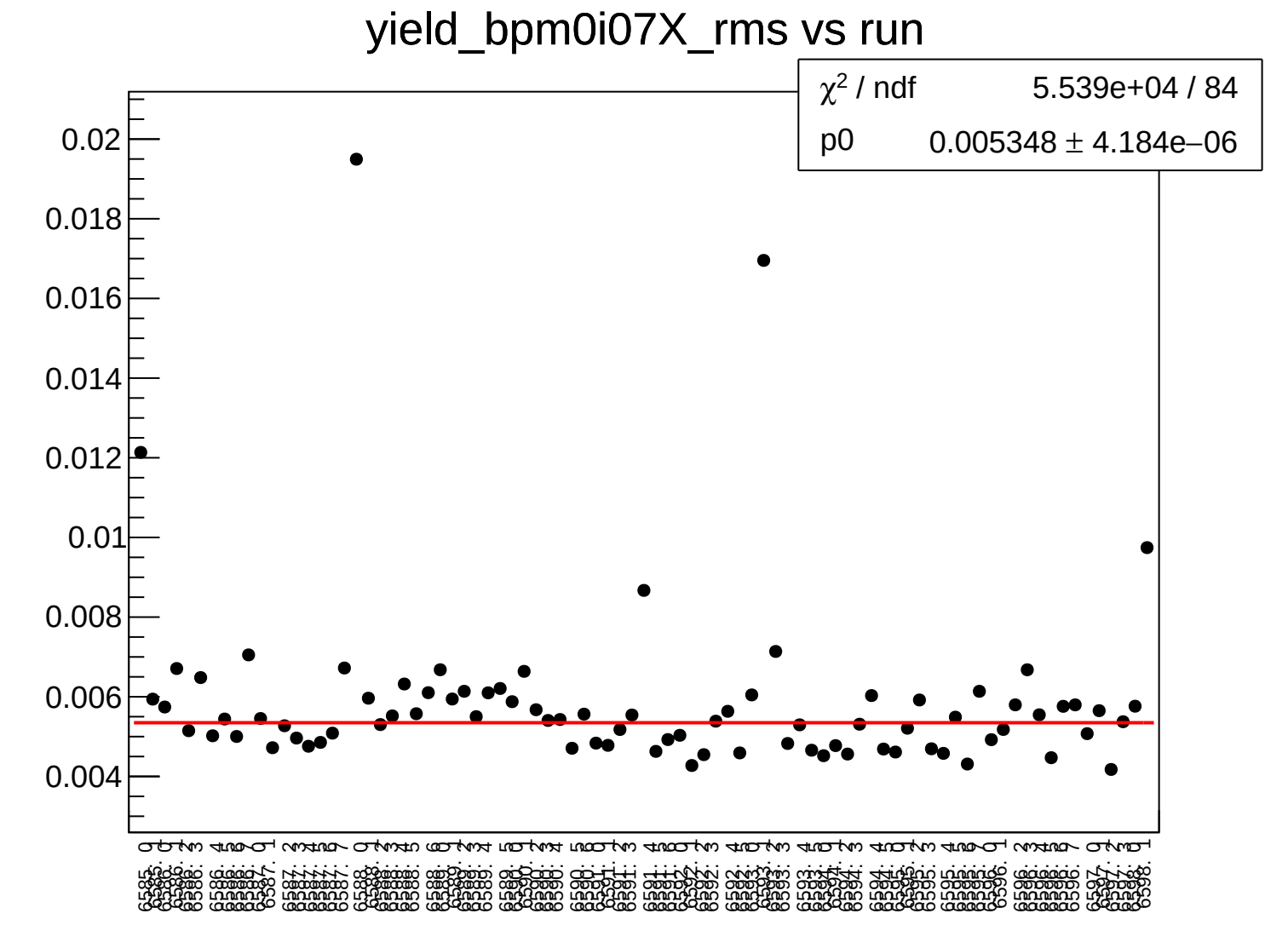

yield_bpm0i05X_rms vs run
χ² / ndf 4.848e+04 / 84
p0 0.007704 ± 6.014e−06
0.03
0.025
0.02
0.015
0.01
0.005

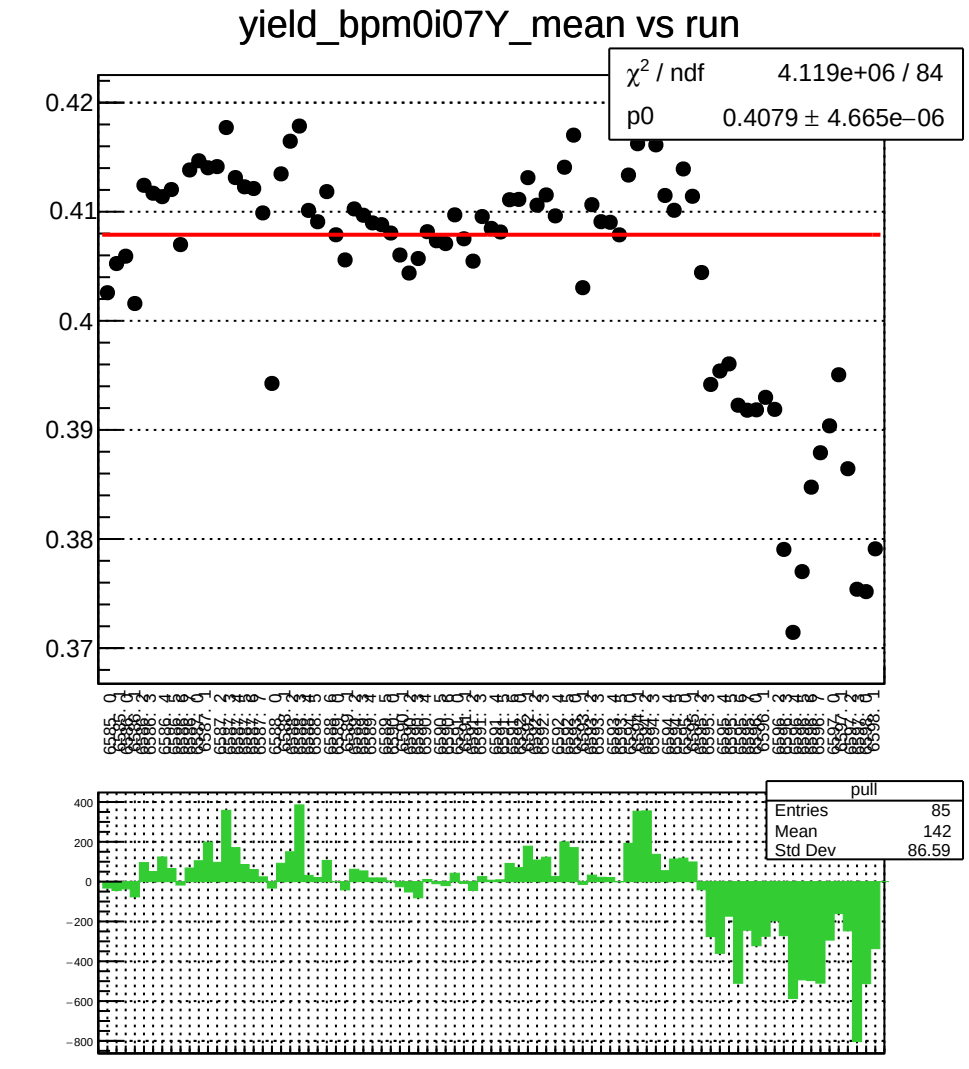

yield_bpm0i05Y_mean vs run
χ² / ndf 1.674e+07 / 84
p0 −0.1436 ± 4.772e−06
−0.12
−0.14
−0.16
−0.18
−0.2
pull
Entries 85
Mean 90.66
Std Dev 91.96
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

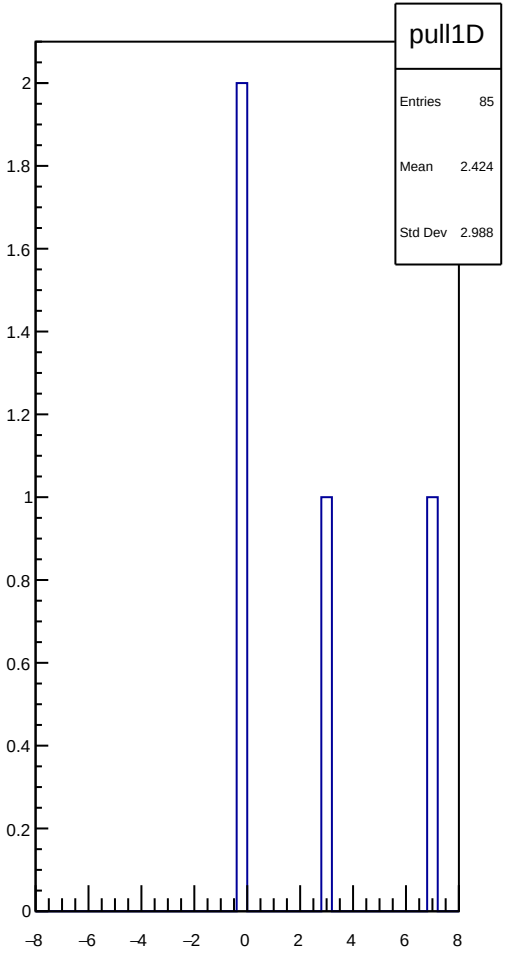

yield_bpm0i05Y_rms vs run
χ² / ndf 1.053e+05 / 84
p0 0.004247 ± 3.374e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

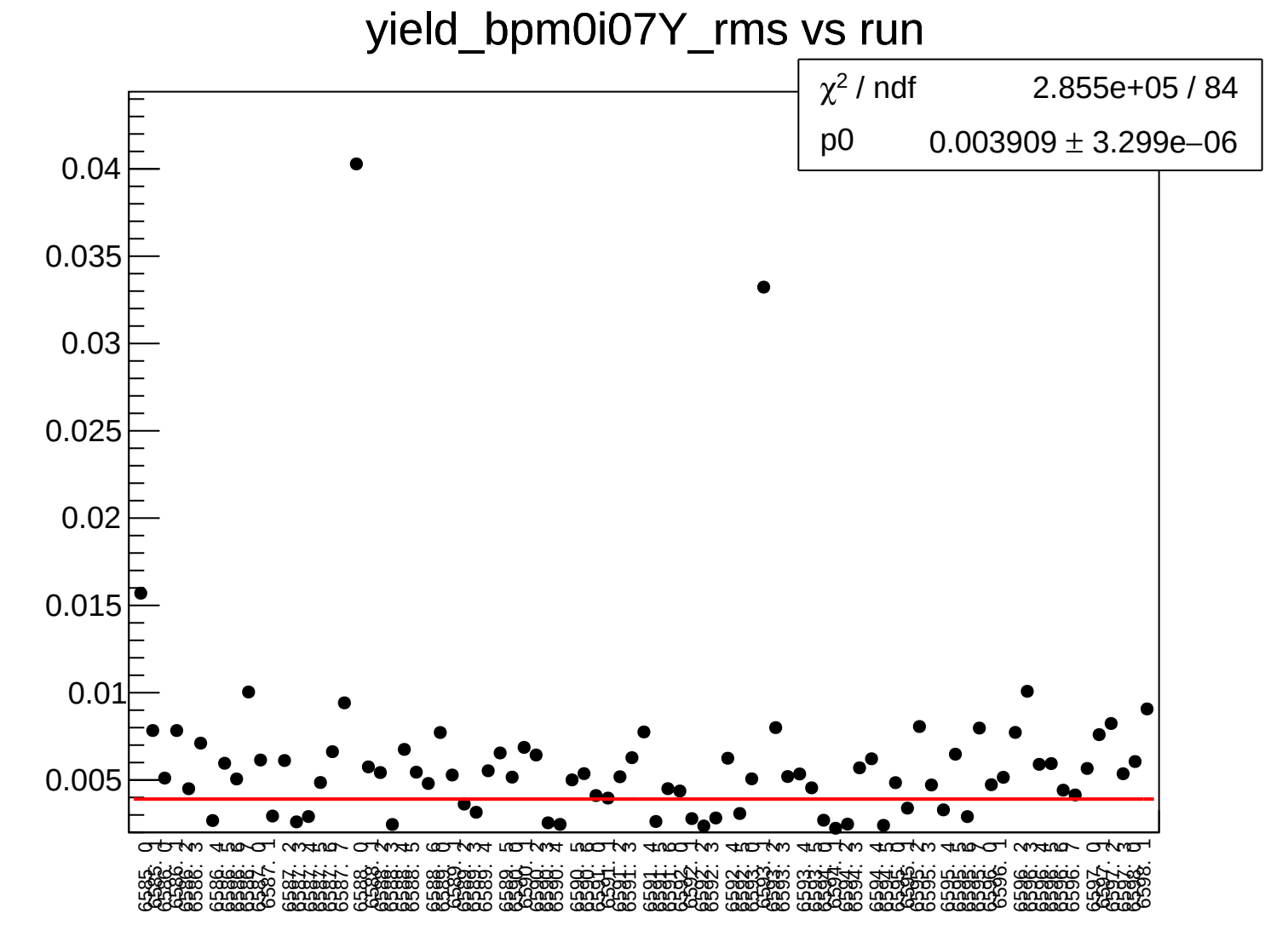

yield_bpm0i07X_mean vs run
χ² / ndf 1.639e+06 / 84
p0 −0.6254 ± 5.917e−06
−0.61
−0.615
−0.62
−0.625
−0.63
−0.635
pull
Entries 85
Mean −481.3
Std Dev 522.4
200
100
0
−100
−200
−300

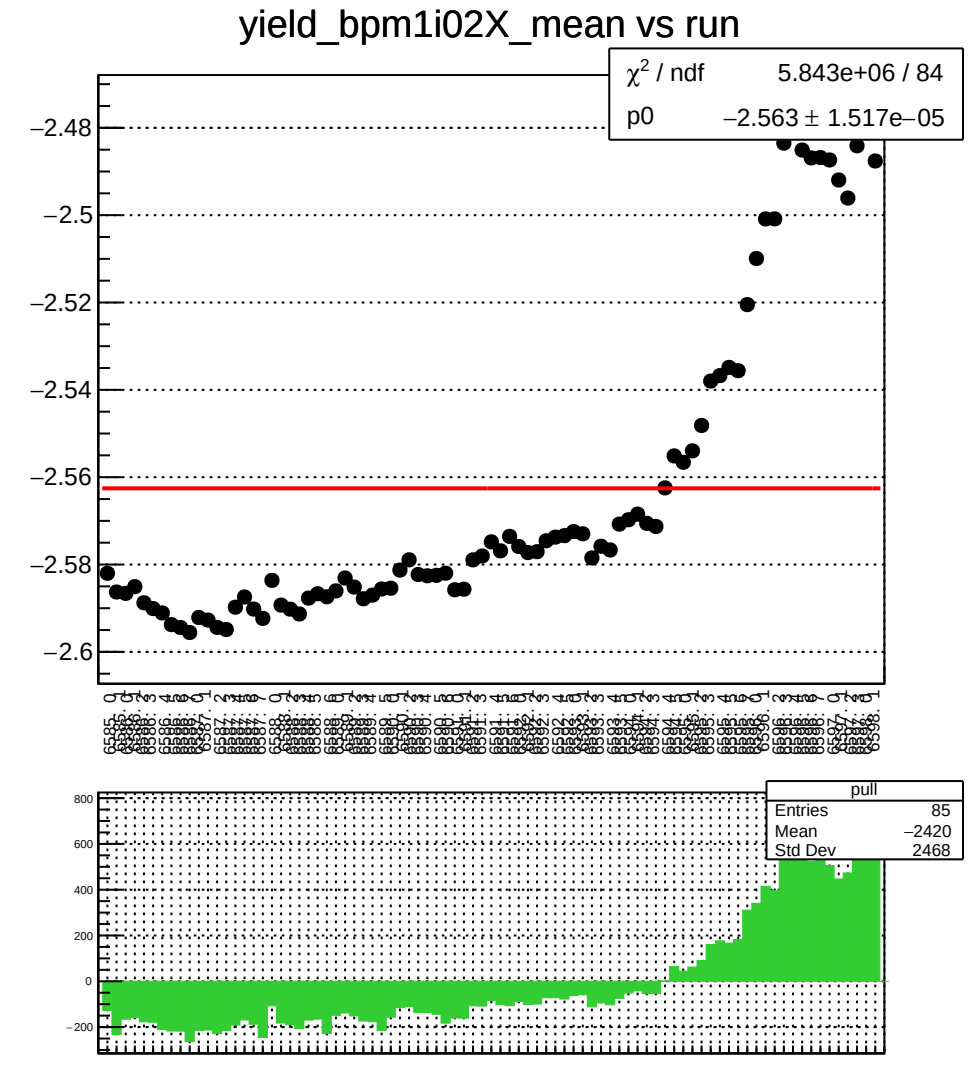

pull1D
Entries 85
Mean −1.935
Std Dev 5.258
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

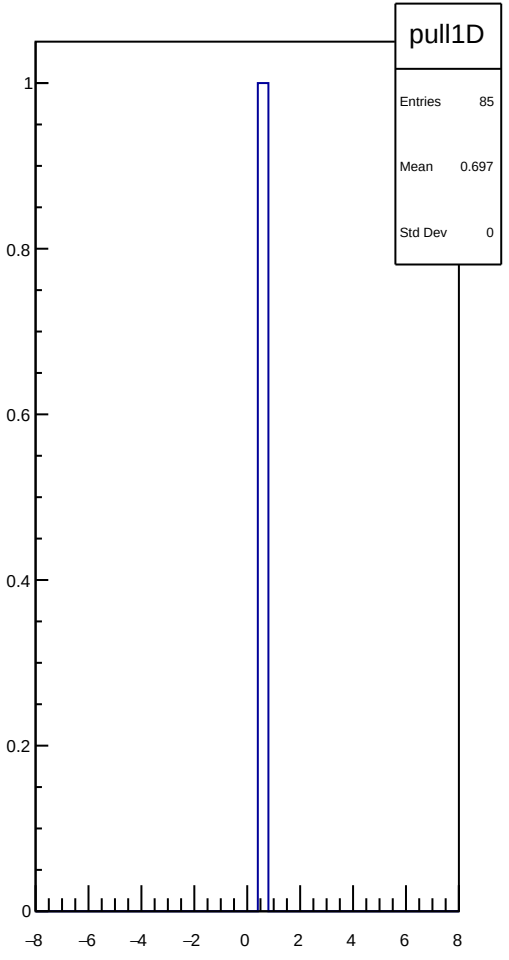

yield_bpm0i07X_rms vs run
χ² / ndf 5.539e+04 / 84
p0 0.005348 ± 4.184e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

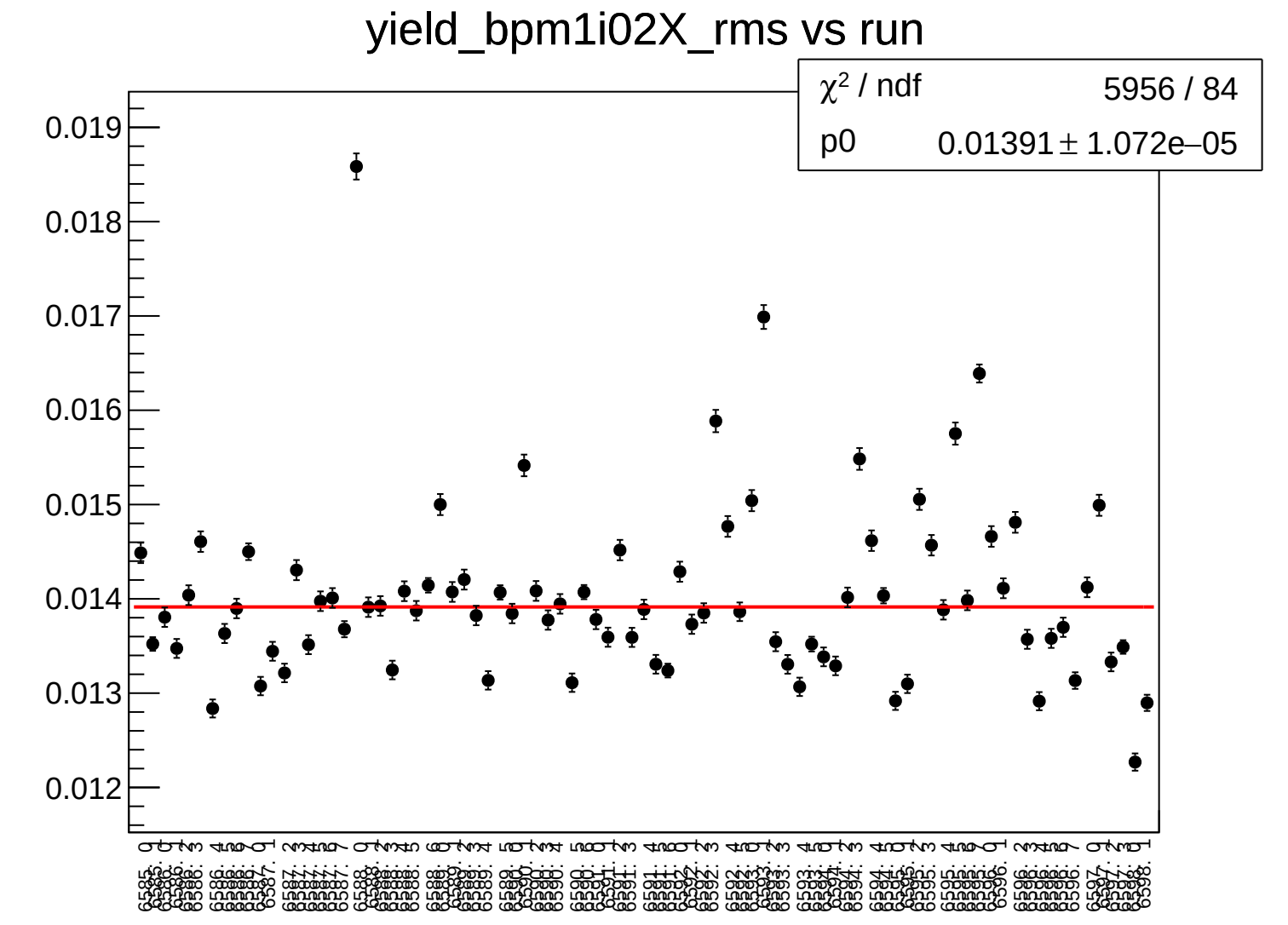

yield_bpm0i07Y_mean vs run
χ² / ndf 4.119e+06 / 84
p0 0.4079 ± 4.665e−06
0.42
0.41
0.4
0.39
0.38
0.37
pull
Entries 85
Mean 142
Std Dev 86.59
400
200
0
−200
−400
−600
−800

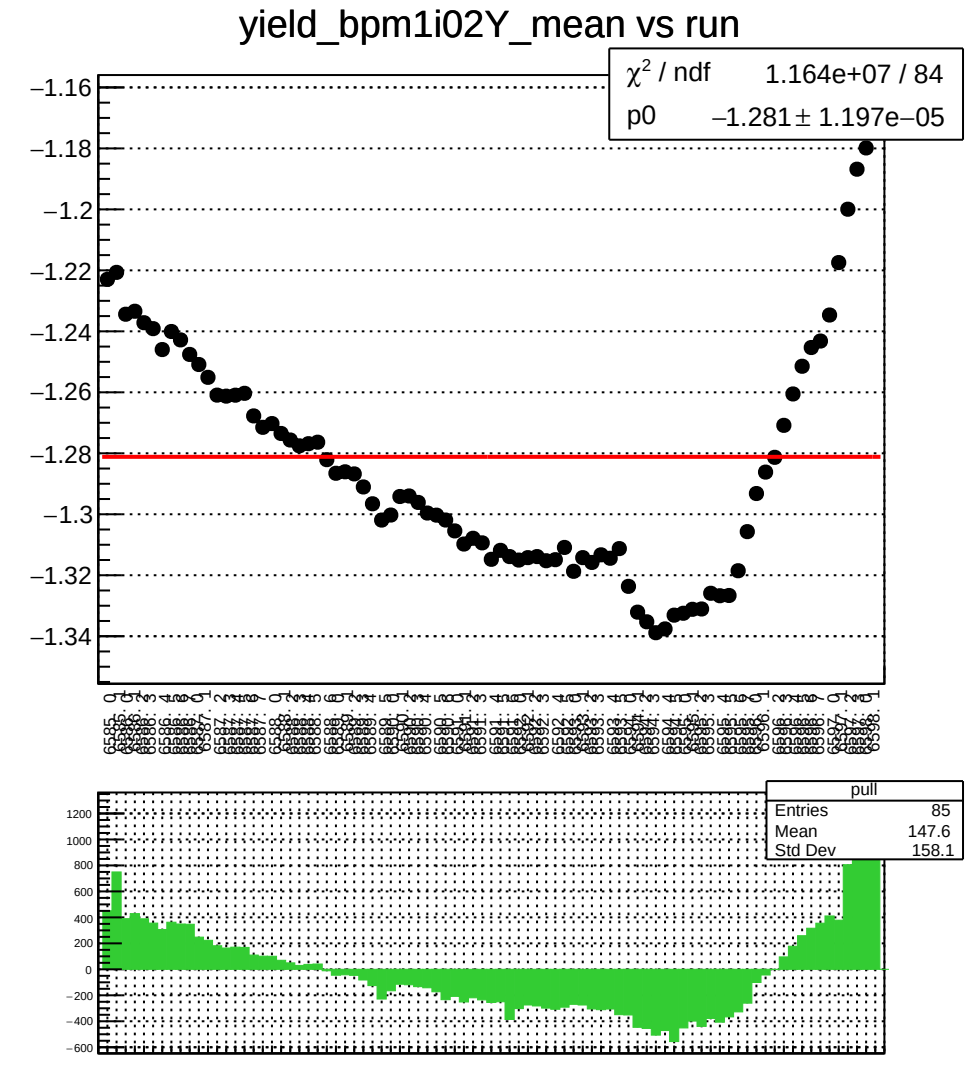

pull1D
Entries 85
Mean 2.424
Std Dev 2.988
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

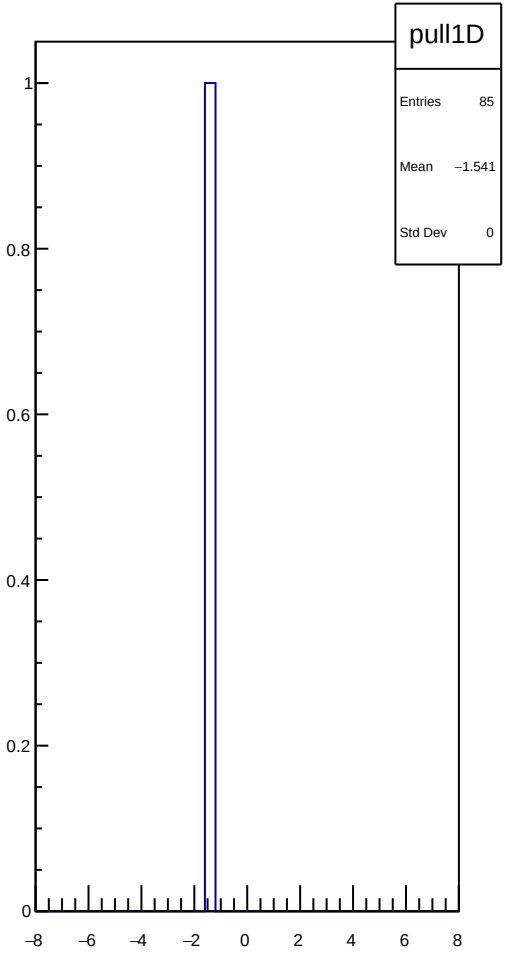

yield_bpm0i07Y_rms vs run
χ² / ndf 2.855e+05 / 84
p0 0.003909 ± 3.299e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

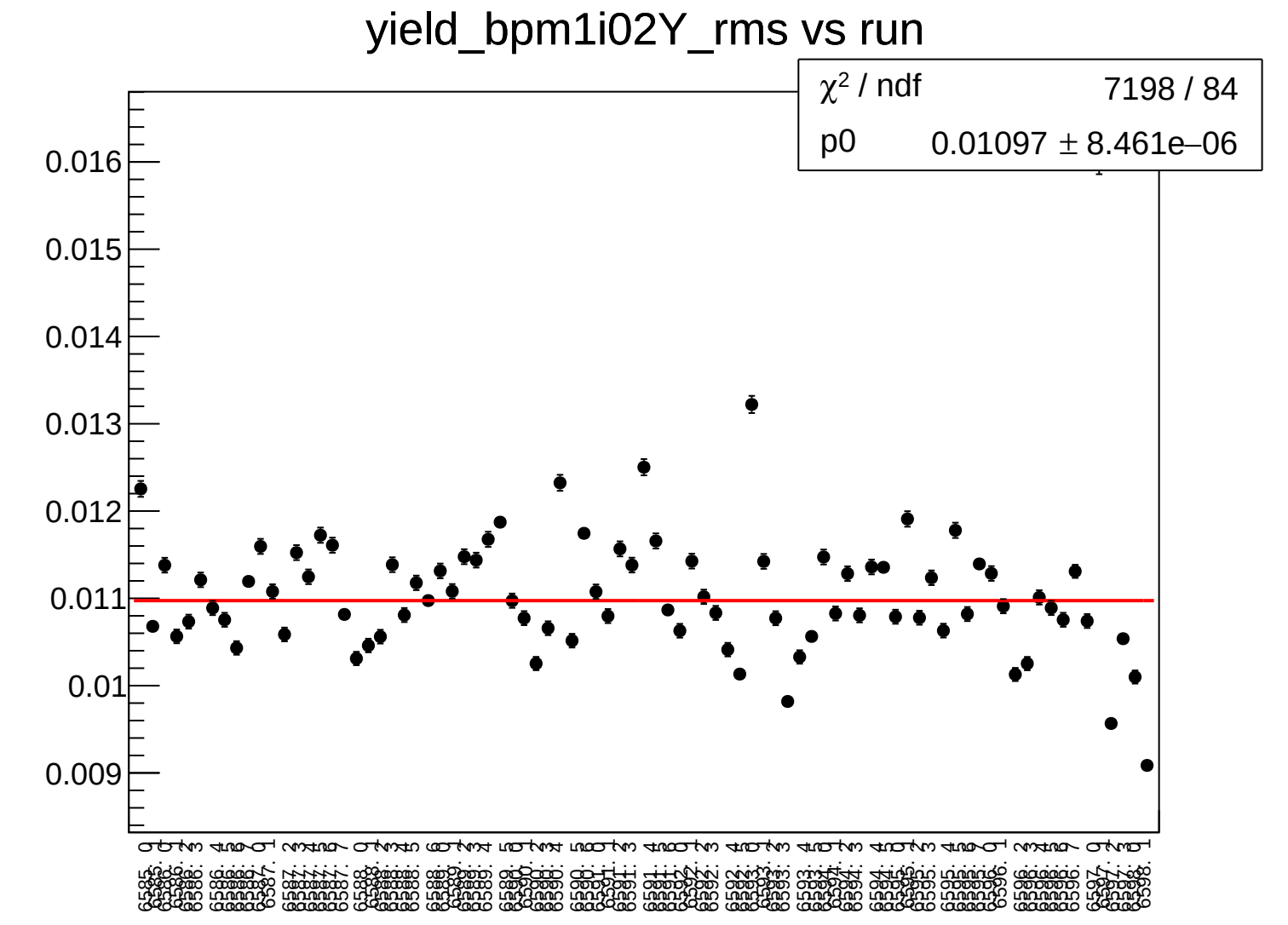

yield_bpm1i02X_mean vs run
χ² / ndf 5.843e+06 / 84
p0 −2.563 ± 1.517e−05
−2.48
−2.5
−2.52
−2.54
−2.56
−2.58
−2.6
pull
Entries 85
Mean −2420
Std Dev 2468
800
600
400
200
0
−200

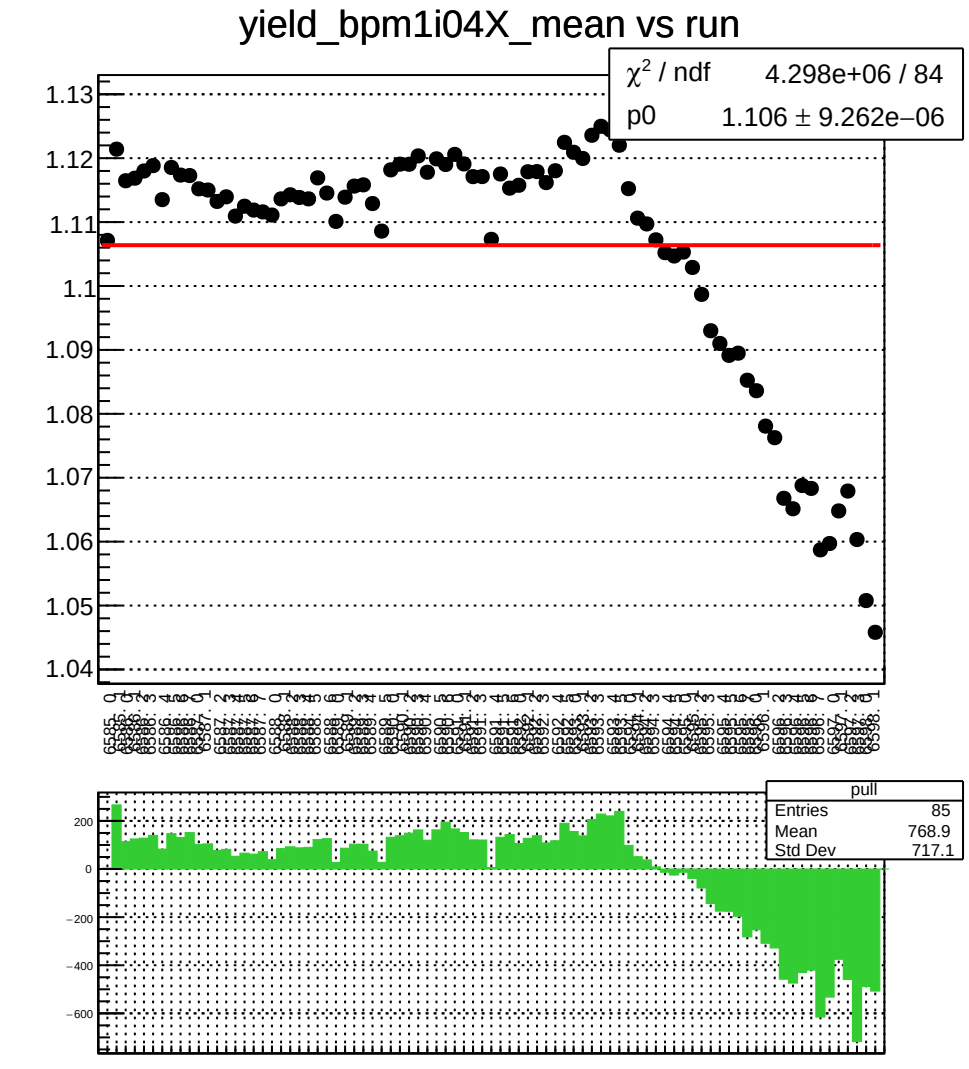

pull1D
Entries 85
Mean 0.697
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

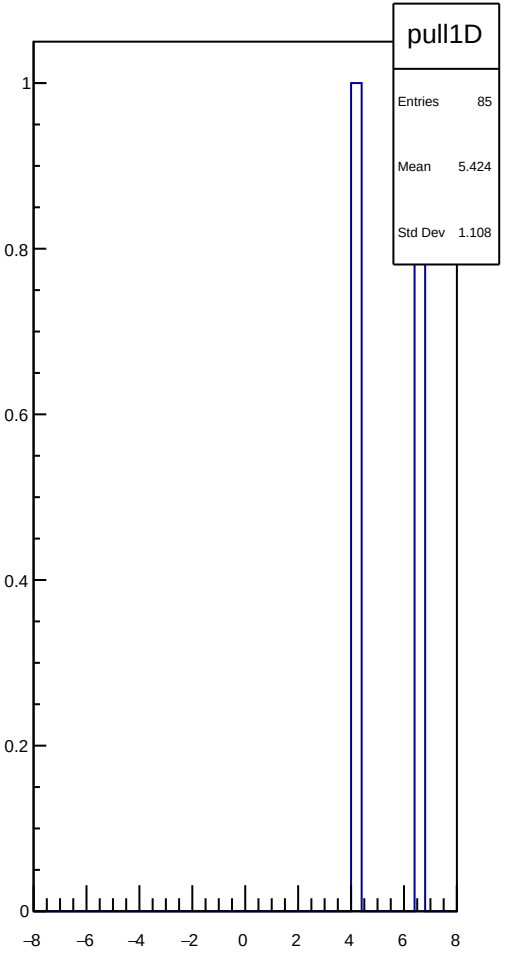

yield_bpm1i02X_rms vs run
χ² / ndf 5956 / 84
p0 0.01391 ± 1.072e–05
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012

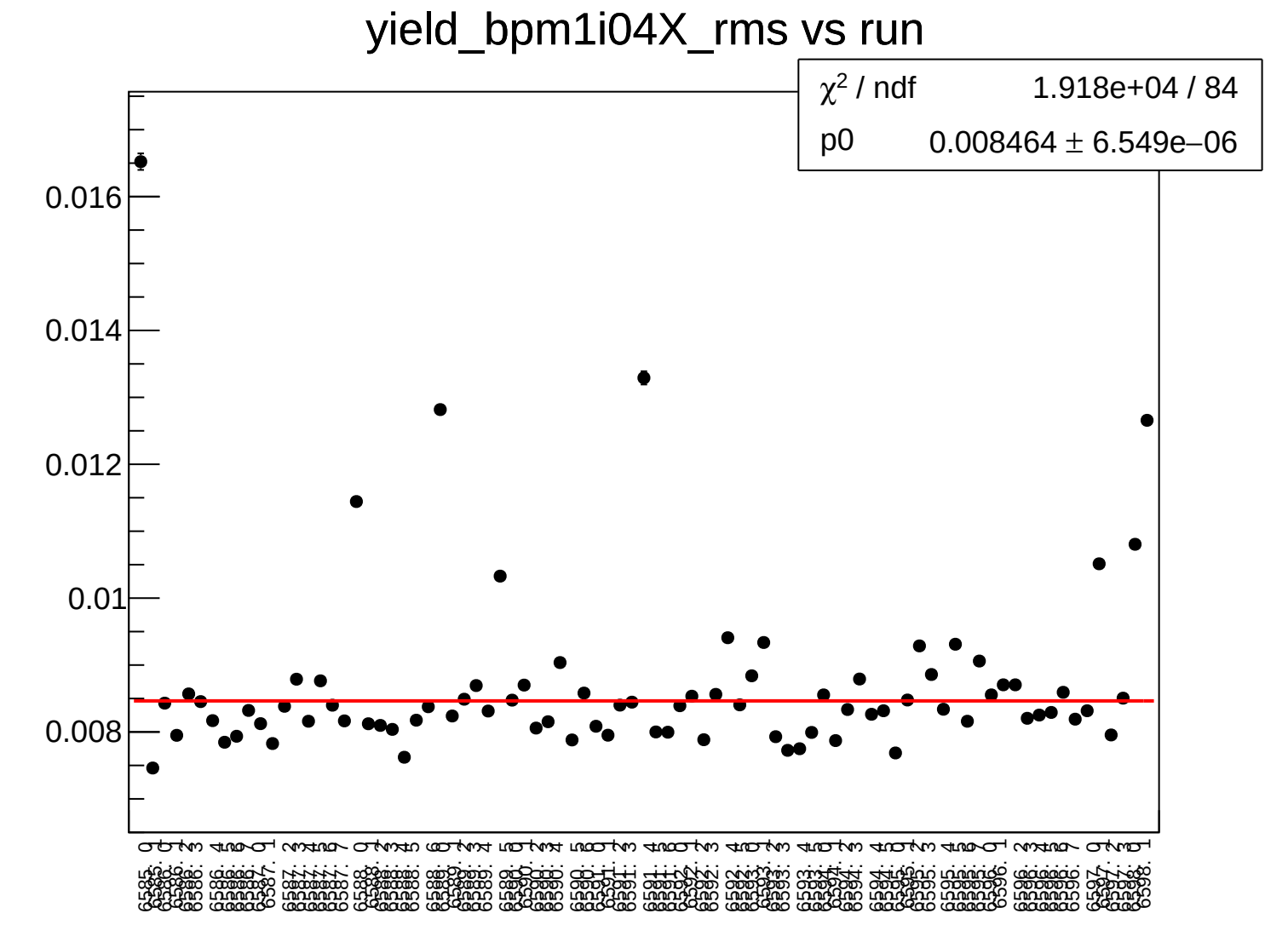

yield_bpm1i02Y_mean vs run
χ² / ndf 1.164e+07 / 84
p0 −1.281 ± 1.197e−05
−1.16
−1.18
−1.2
−1.22
−1.24
−1.26
−1.28
−1.3
−1.32
−1.34
pull
Entries 85
Mean 147.6
Std Dev 158.1
1200
1000
800
600
400
200
0
−200
−400
−600

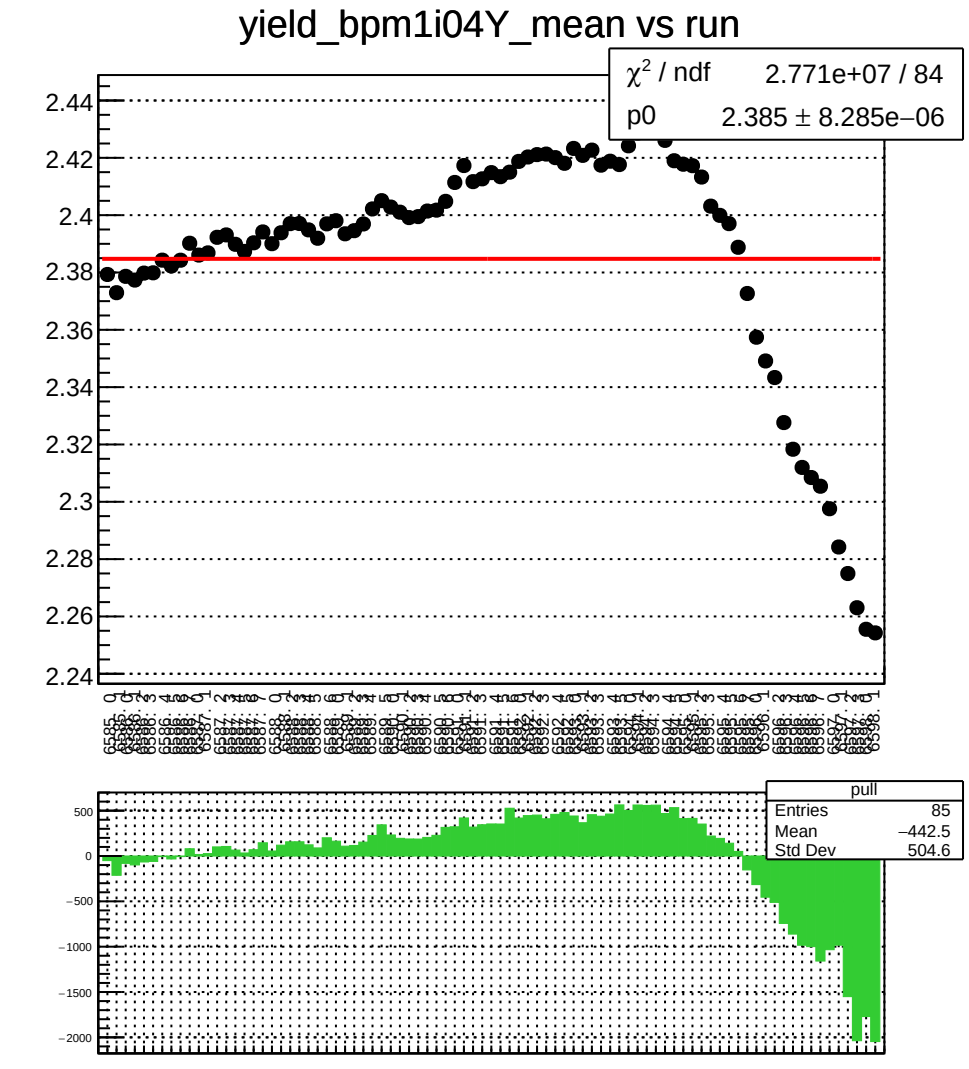

pull1D
Entries 85
Mean −1.541
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

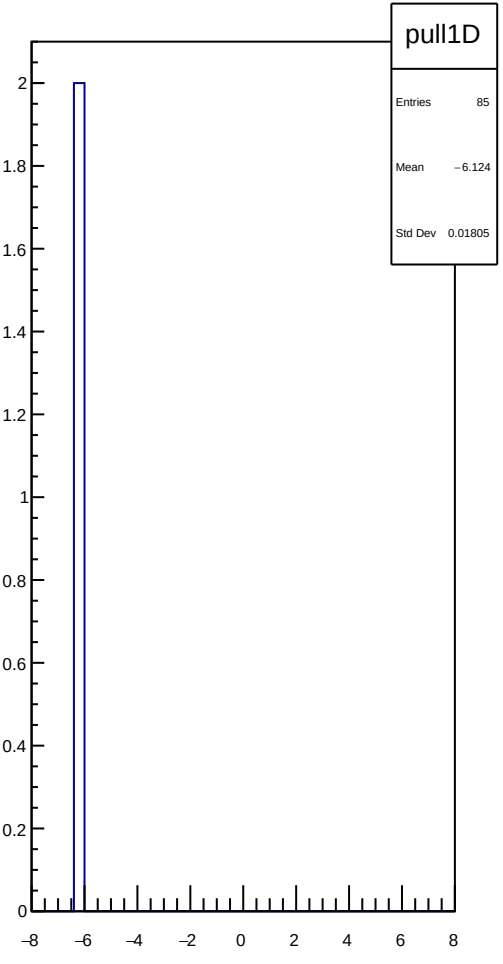

yield_bpm1i02Y_rms vs run
χ² / ndf 7198 / 84
p0 0.01097 ± 8.461e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

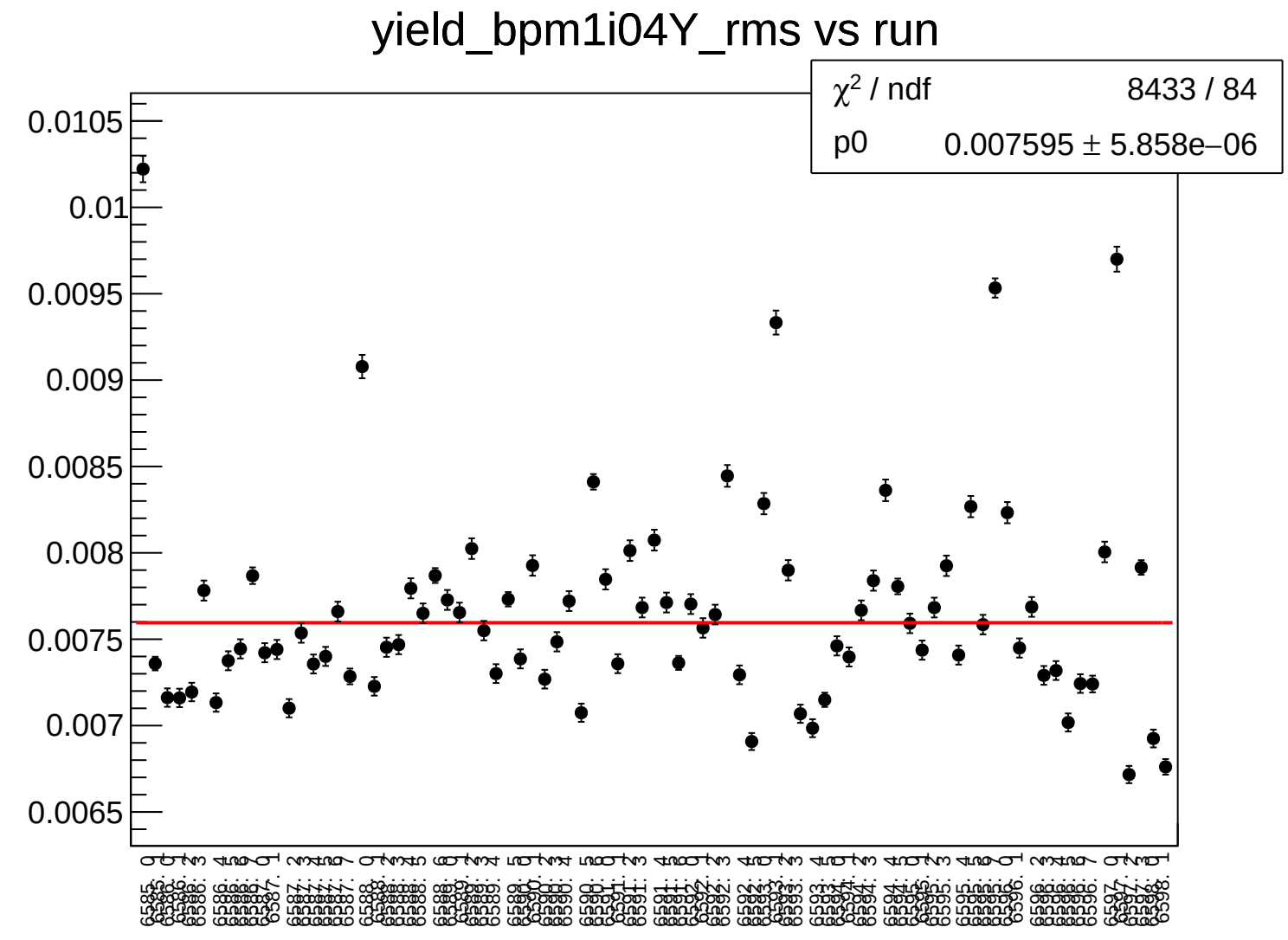

yield_bpm1i04X_mean vs run
χ² / ndf 4.298e+06 / 84
p0 1.106 ± 9.262e−06
1.13
1.12
1.11
1.1
1.09
1.08
1.07
1.06
1.05
1.04
pull
Entries 85
Mean 768.9
Std Dev 717.1
200
0
−200
−400
−600

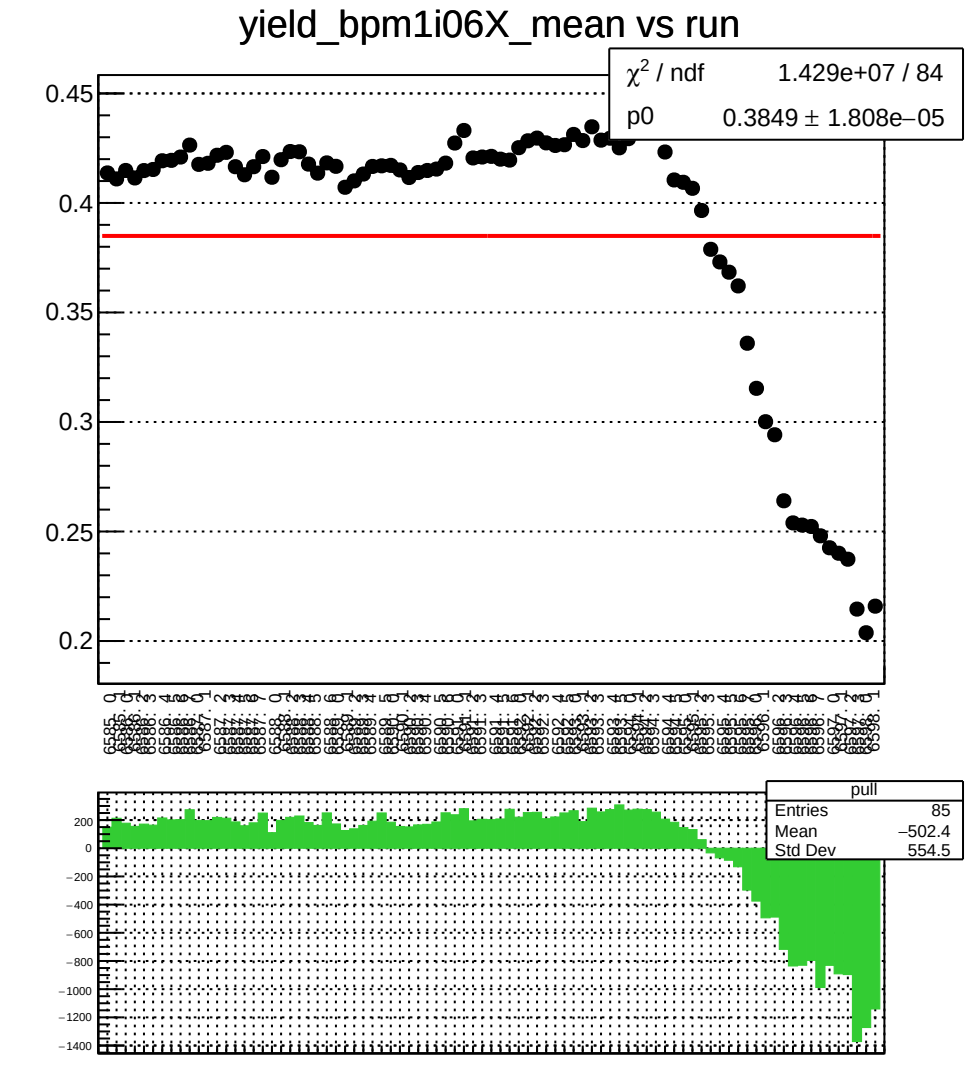

pull1D
Entries 85
Mean 5.424
Std Dev 1.108
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

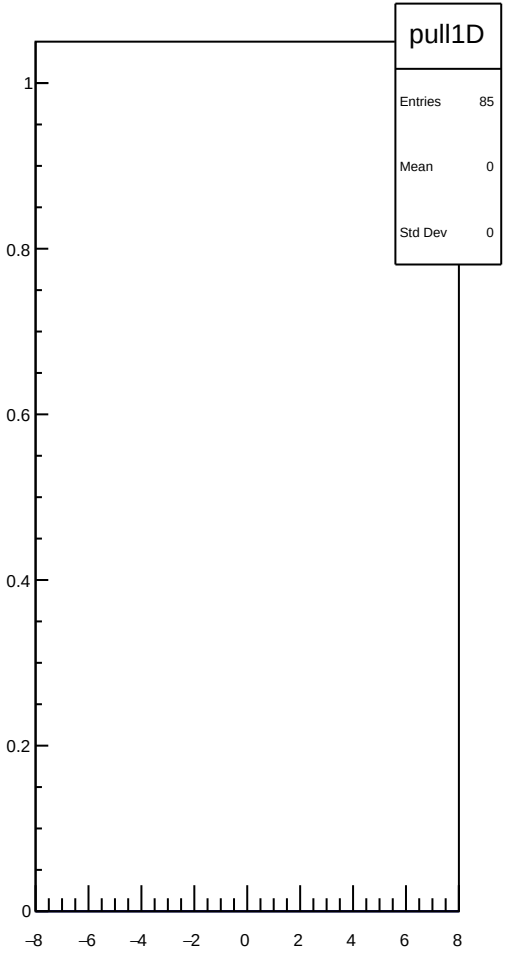

yield_bpm1i04X_rms vs run
χ^2 / ndf 1.918e+04 / 84
p0 0.008464 ± 6.549e−06
0.016
0.014
0.012
0.01
0.008

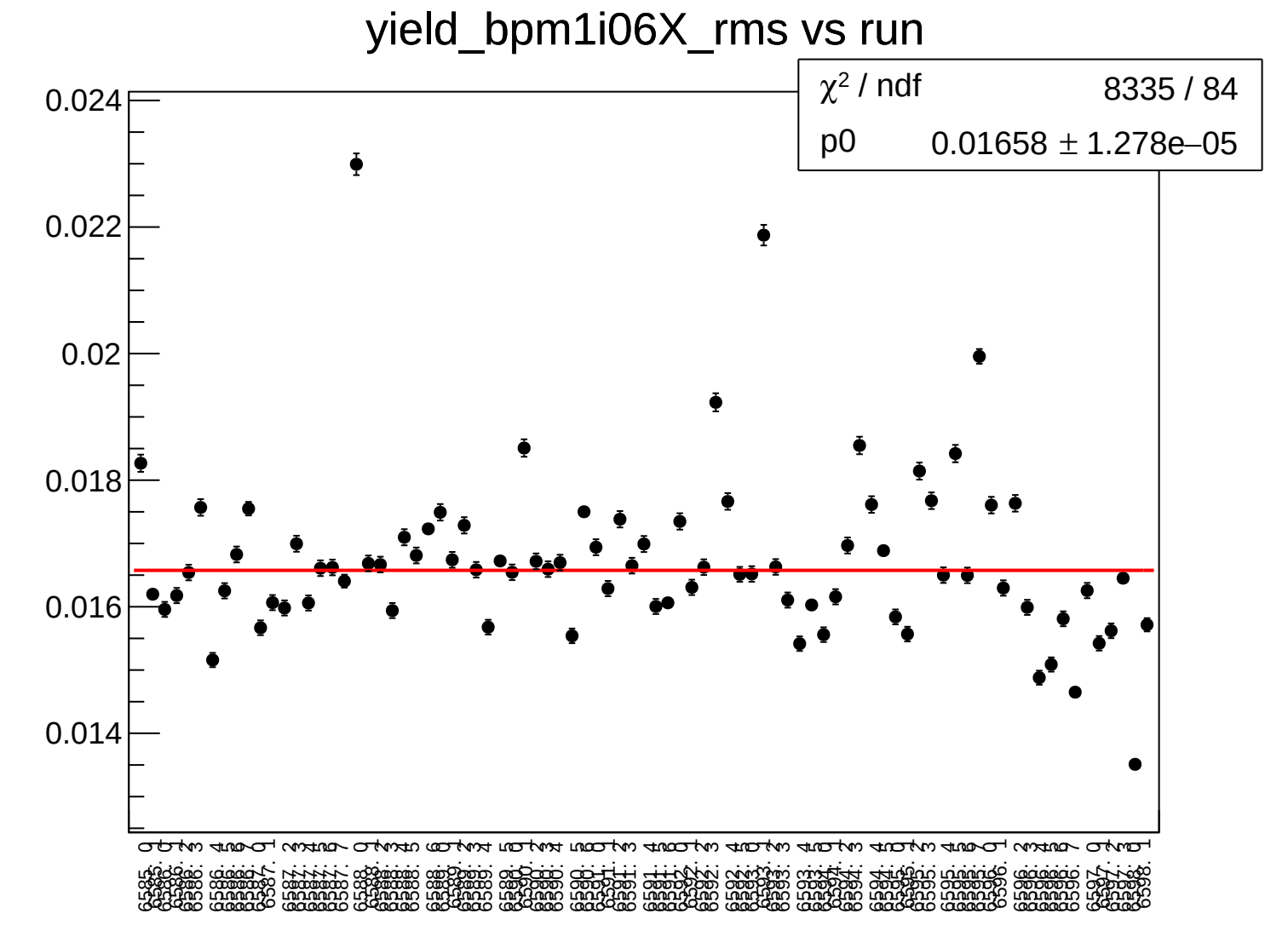

yield_bpm1i04Y_mean vs run
χ² / ndf 2.771e+07 / 84
p0 2.385 ± 8.285e−06
pull
Entries 85
Mean −442.5
Std Dev 504.6

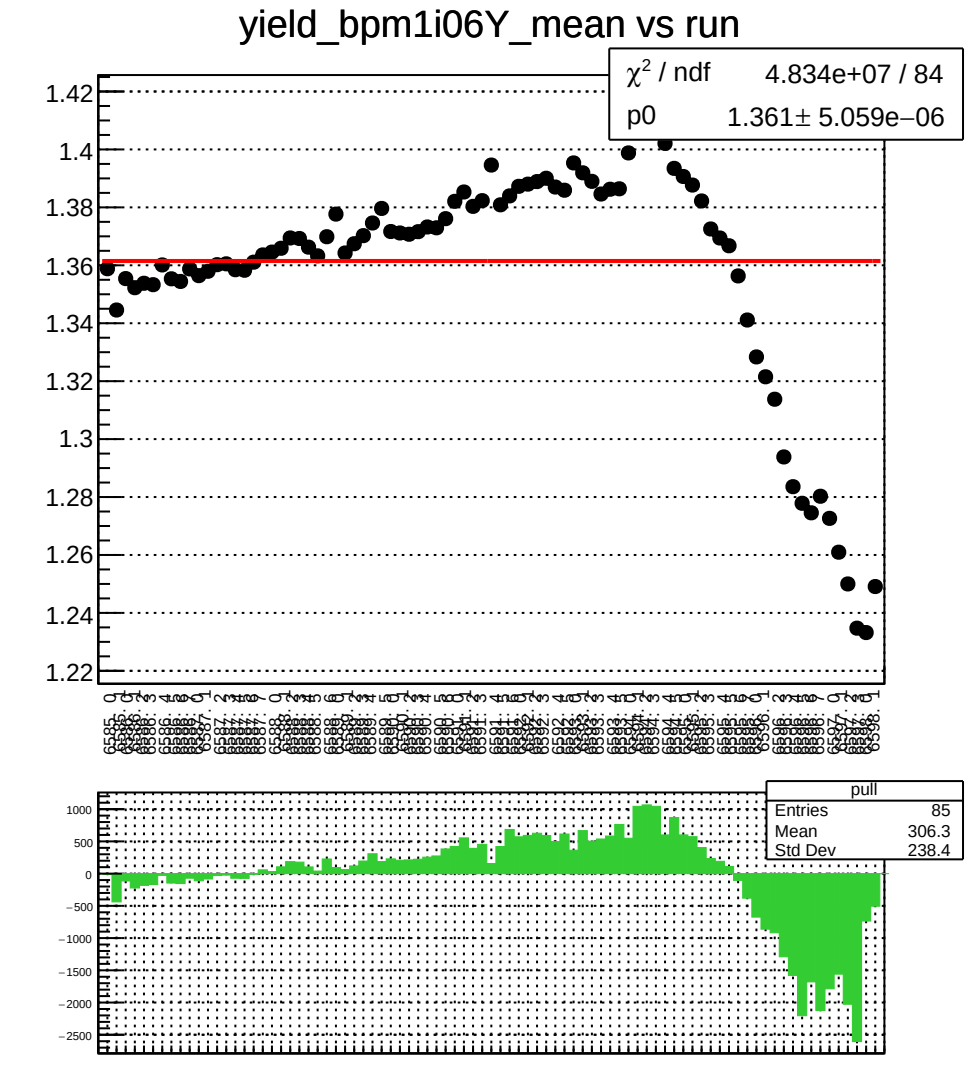

pull1D
Entries 85
Mean −6.124
Std Dev 0.01805

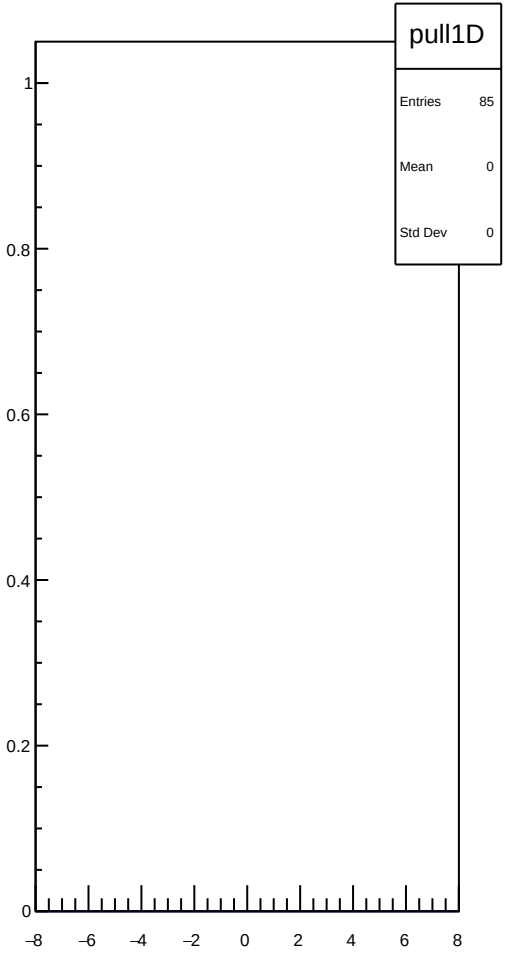

yield_bpm1i04Y_rms vs run
χ^2 / ndf 8433 / 84
p0 0.007595 ± 5.858e−06
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065

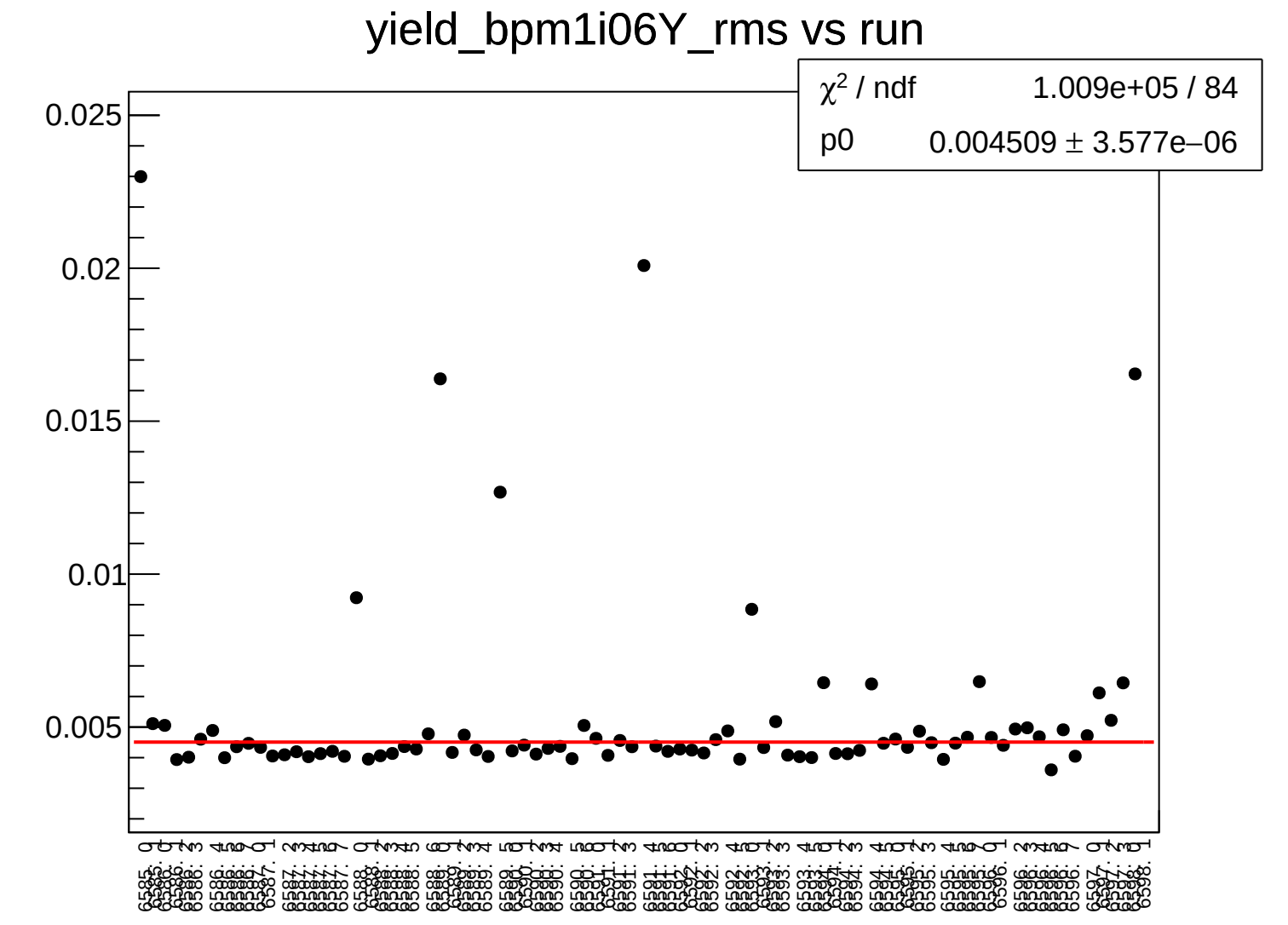

yield_bpm1i06X_mean vs run
χ² / ndf 1.429e+07 / 84
p0 0.3849 ± 1.808e−05
0.45
0.4
0.35
0.3
0.25
0.2
pull
Entries 85
Mean −502.4
Std Dev 554.5
200
0
−200
−400
−600
−800
−1000
−1200
−1400

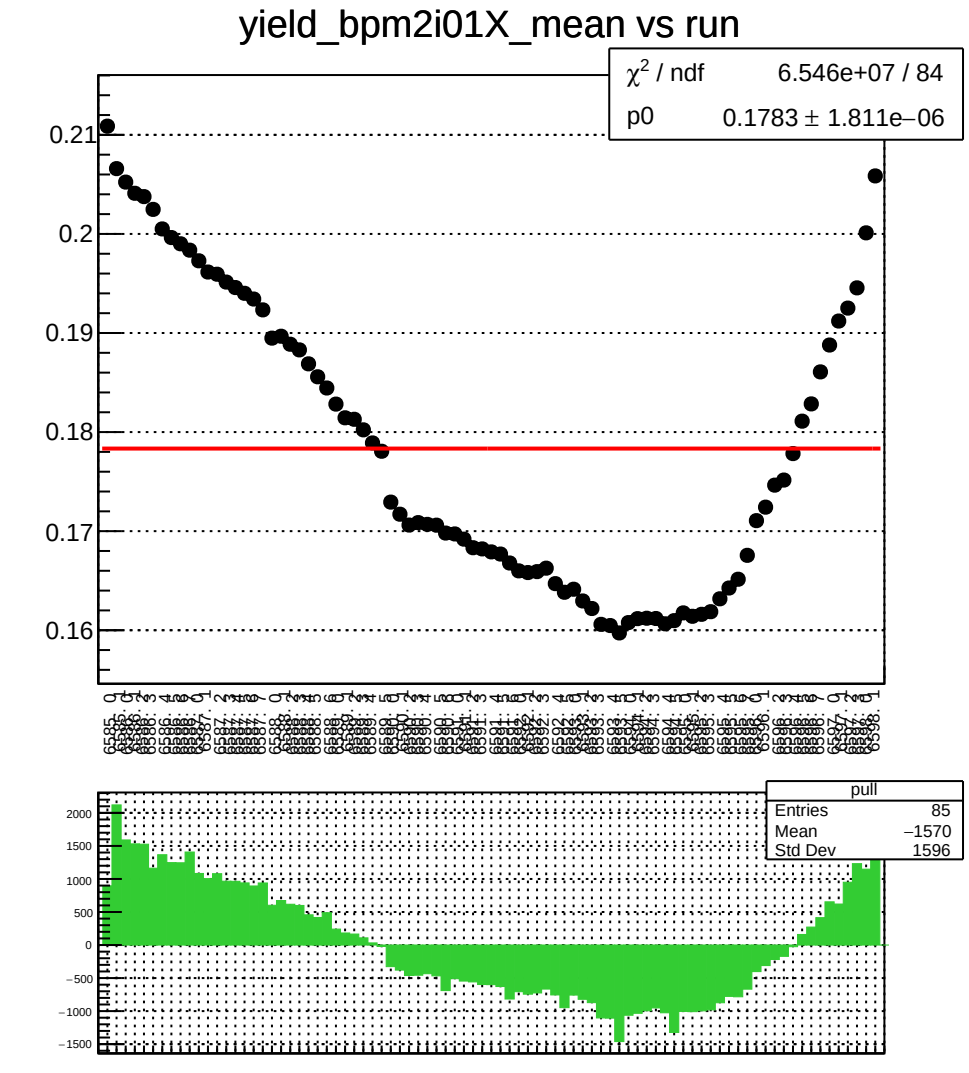

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

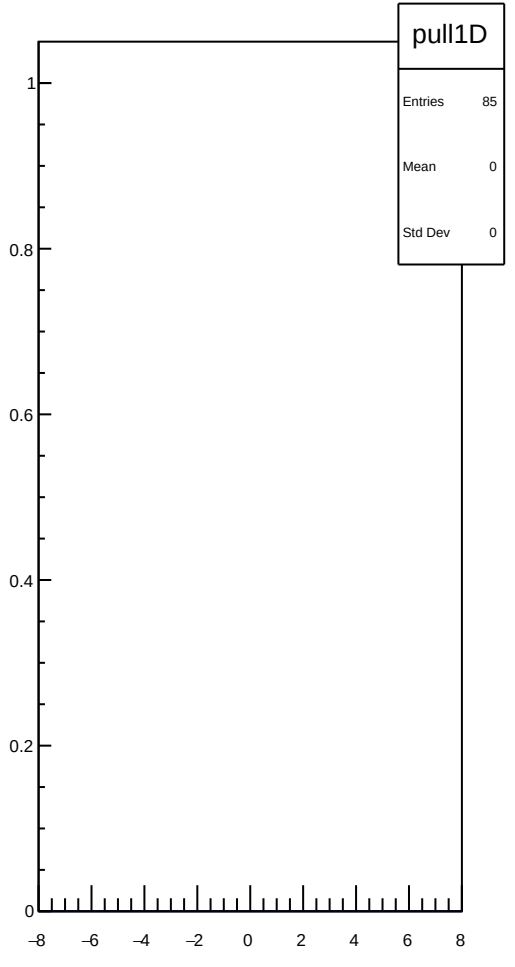

yield_bpm1i06X_rms vs run
χ² / ndf 8335 / 84
p0 0.01658 ± 1.278e–05
0.024
0.022
0.02
0.018
0.016
0.014

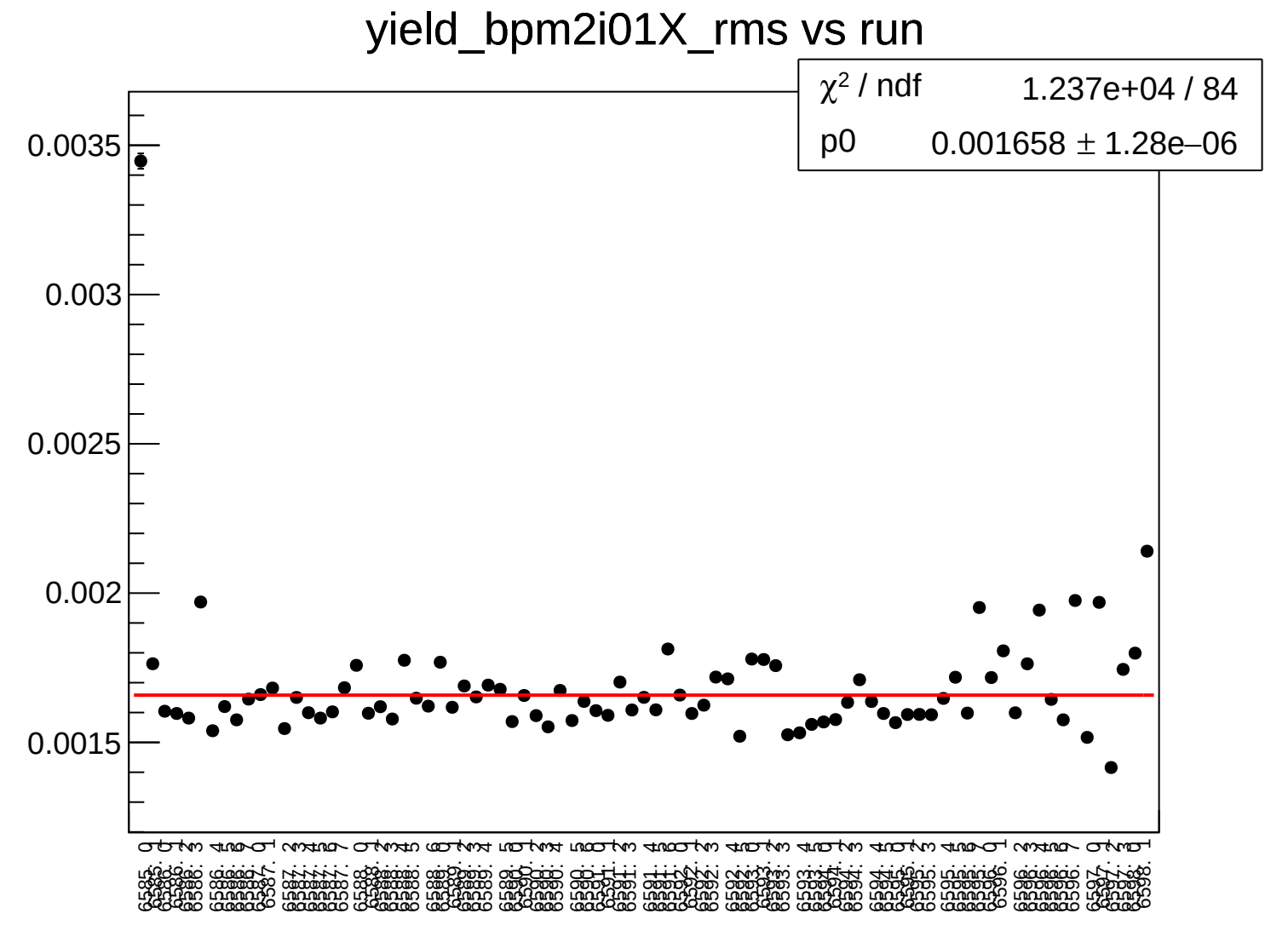

yield_bpm1i06Y_mean vs run
χ² / ndf 4.834e+07 / 84
p0 1.361± 5.059e−06
1.42
1.4
1.38
1.36
1.34
1.32
1.3
1.28
1.26
1.24
1.22
pull
Entries 85
Mean 306.3
Std Dev 238.4
1000
500
0
−500
−1000
−1500
−2000
−2500

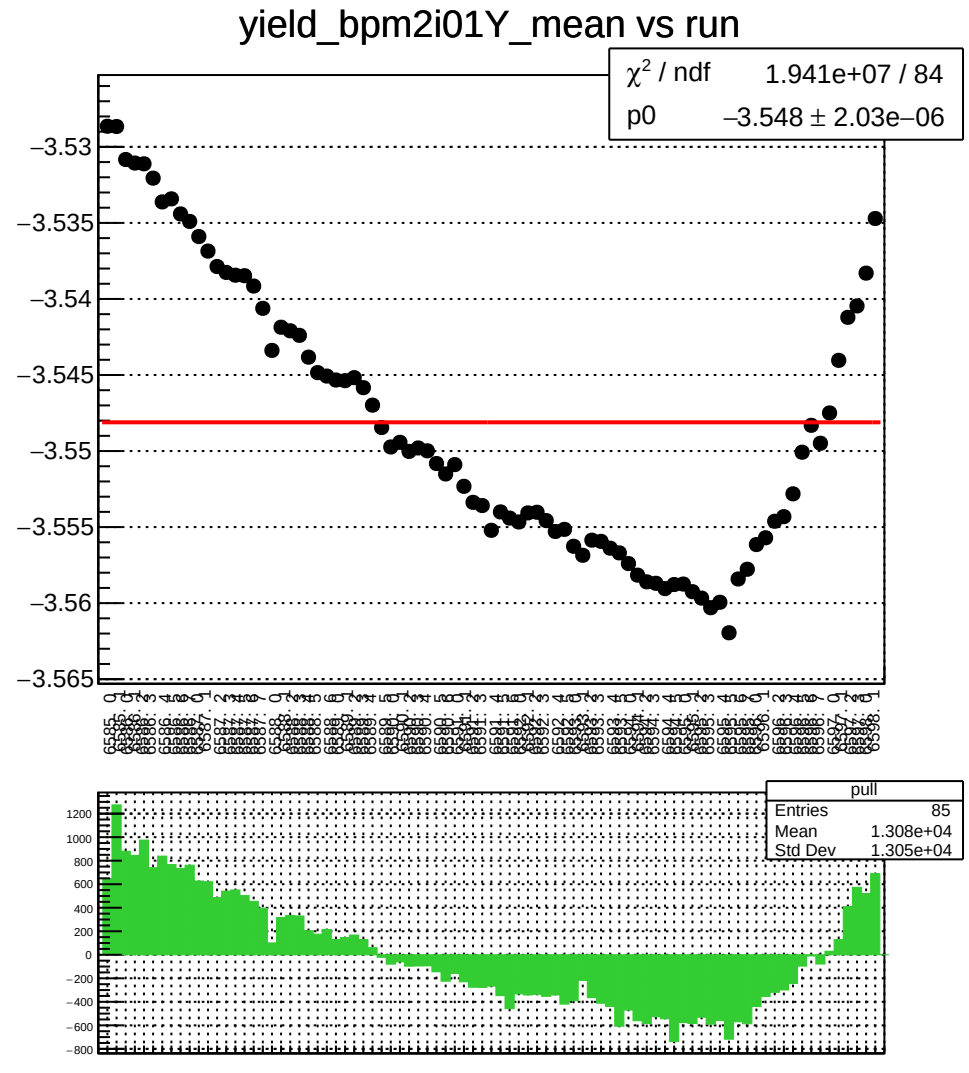

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

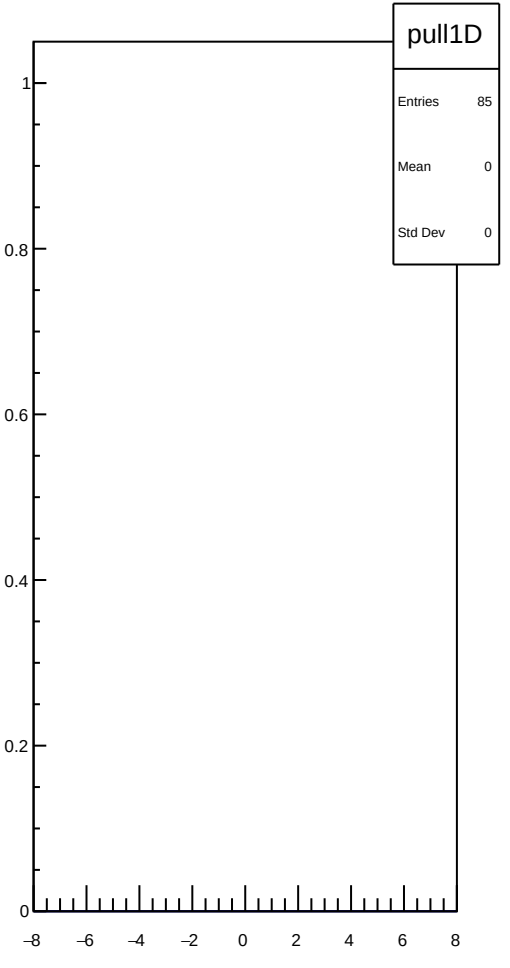

yield_bpm1i06Y_rms vs run
χ^2 / ndf 1.009e+05 / 84
p0 0.004509 ± 3.577e−06
0.025
0.02
0.015
0.01
0.005

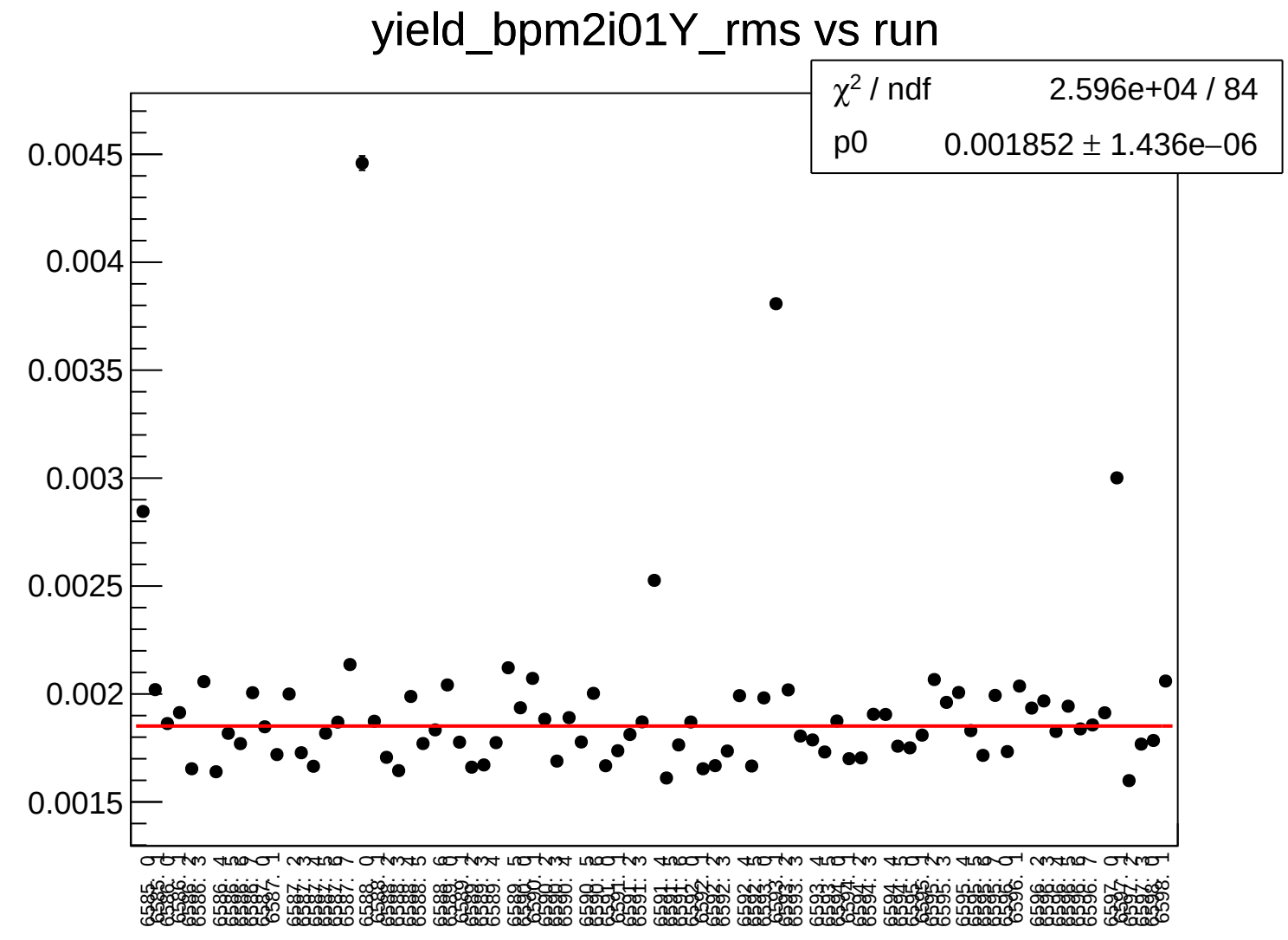

yield_bpm2i01X_mean vs run
χ² / ndf 6.546e+07 / 84
p0 0.1783 ± 1.811e−06
0.21
0.2
0.19
0.18
0.17
0.16
pull
Entries 85
Mean −1570
Std Dev 1596
2000
1500
1000
500
0
−500
−1000
−1500

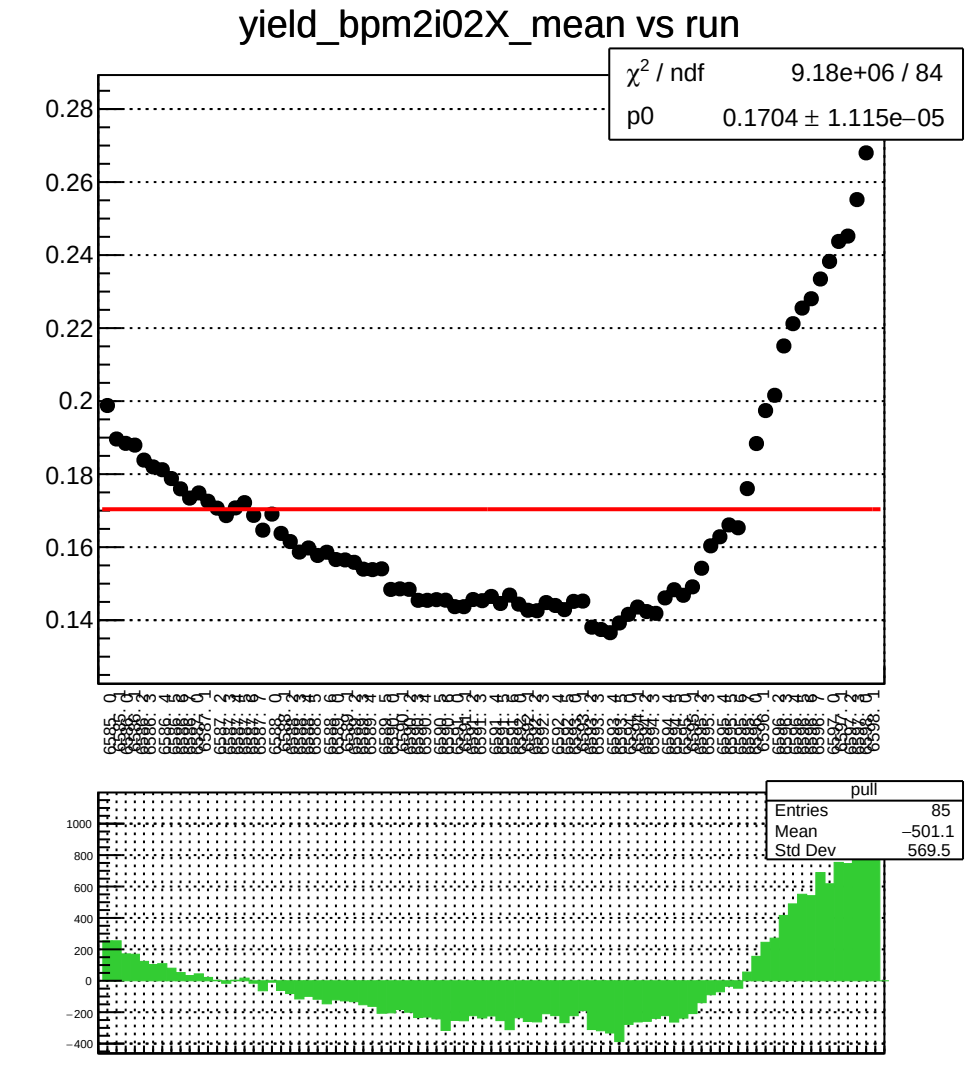

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

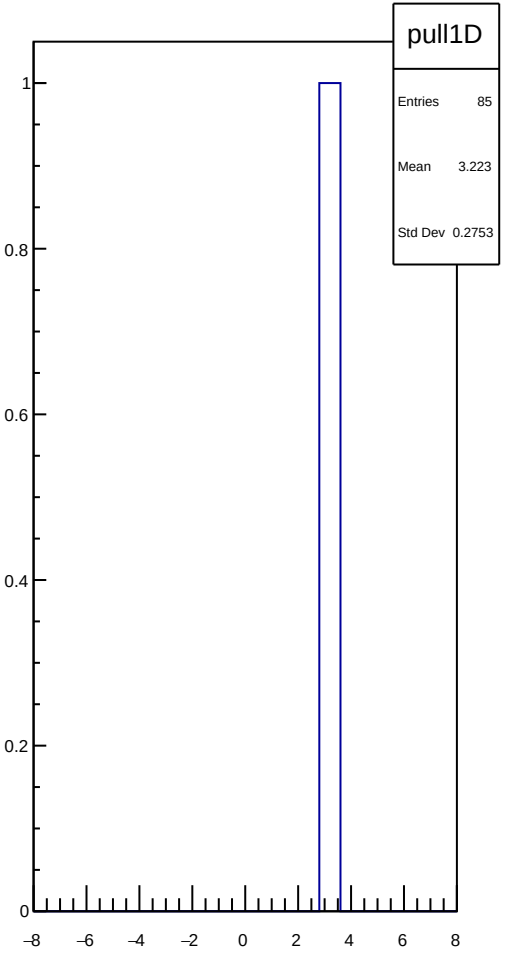

yield_bpm2i01X_rms vs run
χ² / ndf 1.237e+04 / 84
p0 0.001658 ± 1.28e−06
0.0035
0.003
0.0025
0.002
0.0015

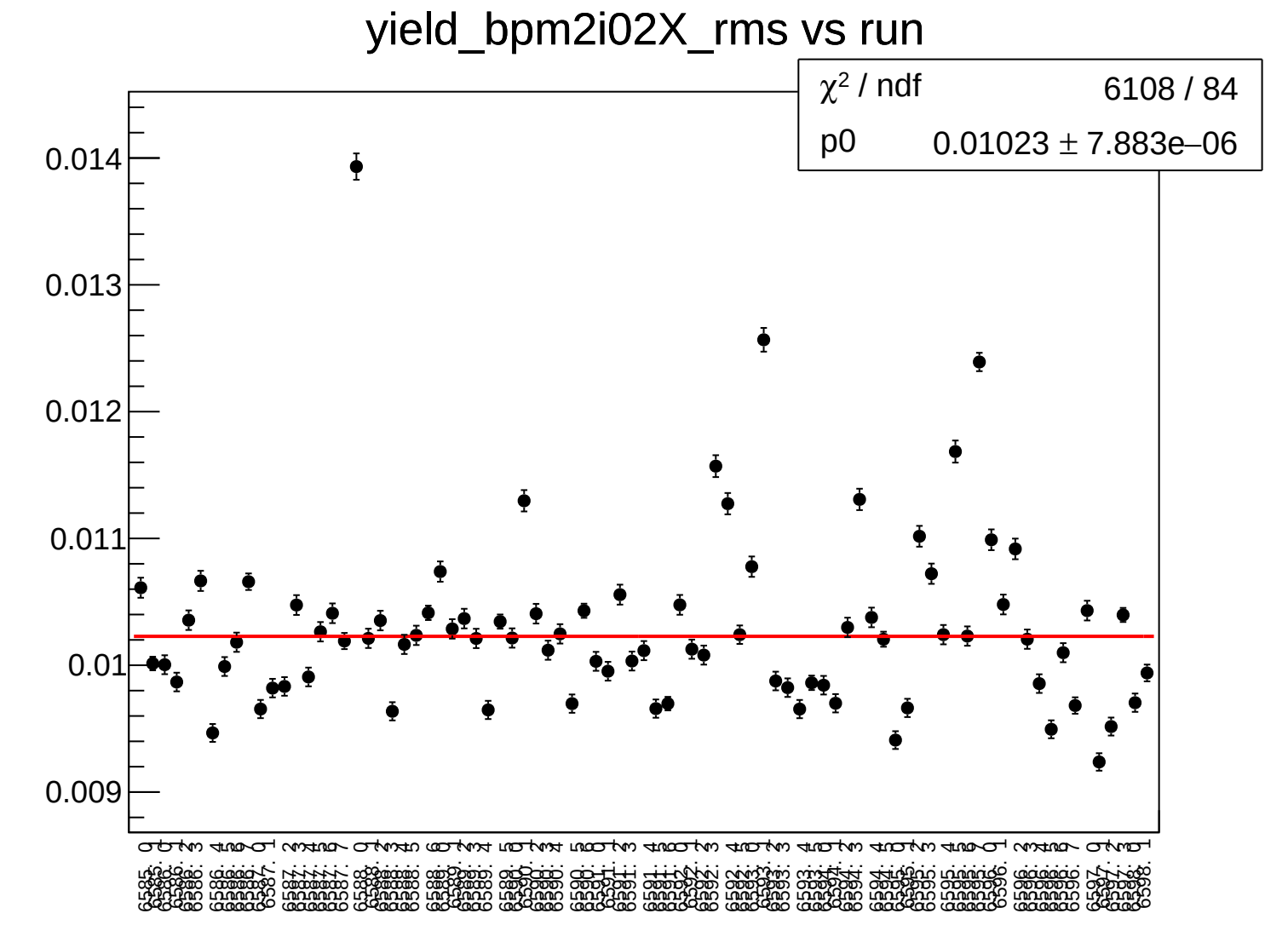

yield_bpm2i01Y_mean vs run
χ² / ndf 1.941e+07 / 84
p0 −3.548 ± 2.03e−06
−3.53
−3.535
−3.54
−3.545
−3.55
−3.555
−3.56
−3.565
pull
Entries 85
Mean 1.308e+04
Std Dev 1.305e+04
1200
1000
800
600
400
200
0
−200
−400
−600
−800

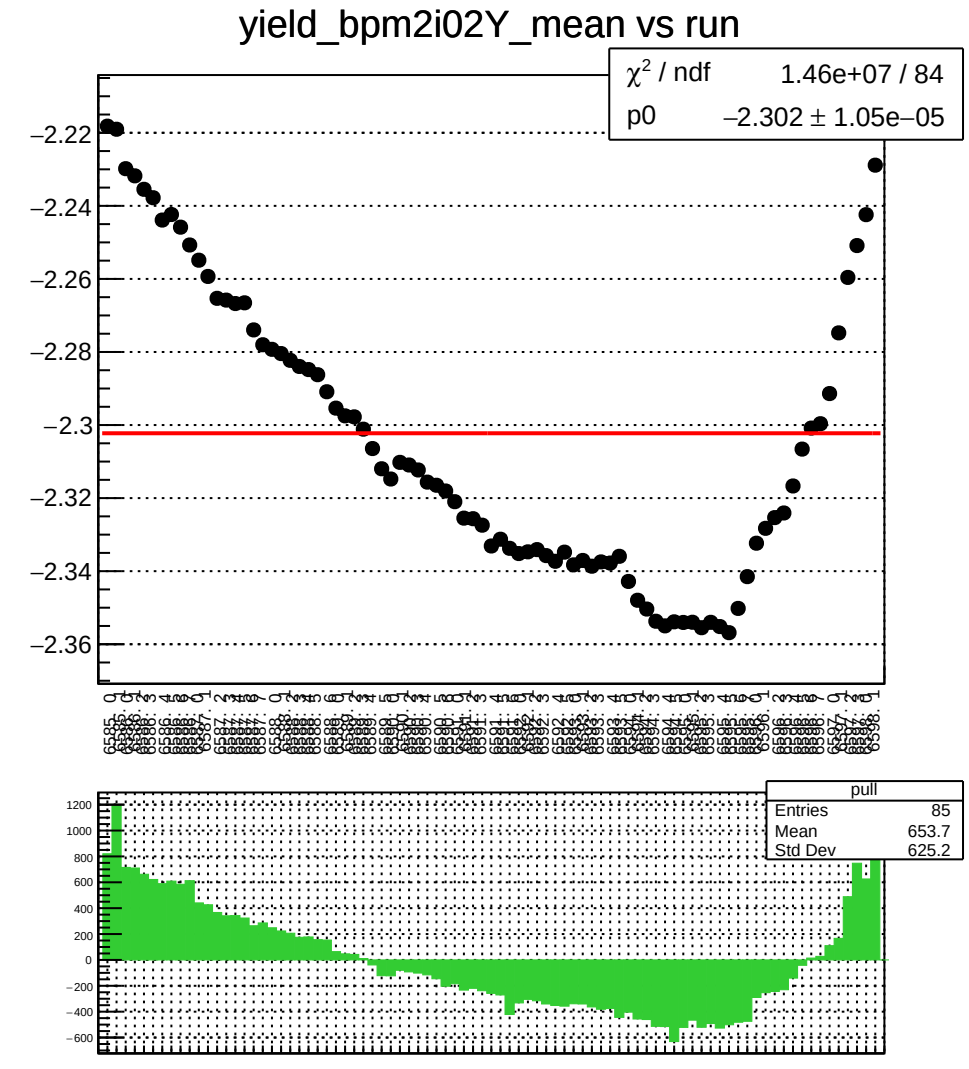

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

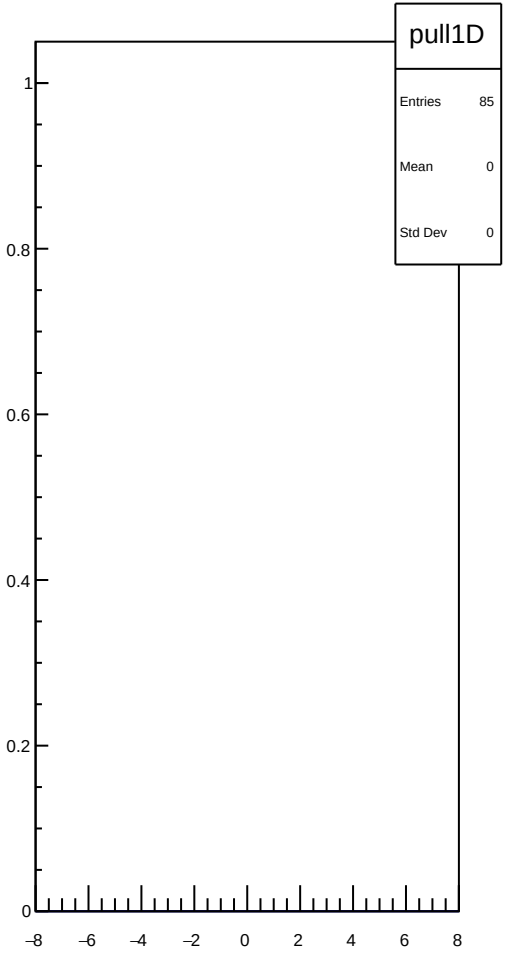

yield_bpm2i01Y_rms vs run
χ² / ndf 2.596e+04 / 84
p0 0.001852 ± 1.436e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015

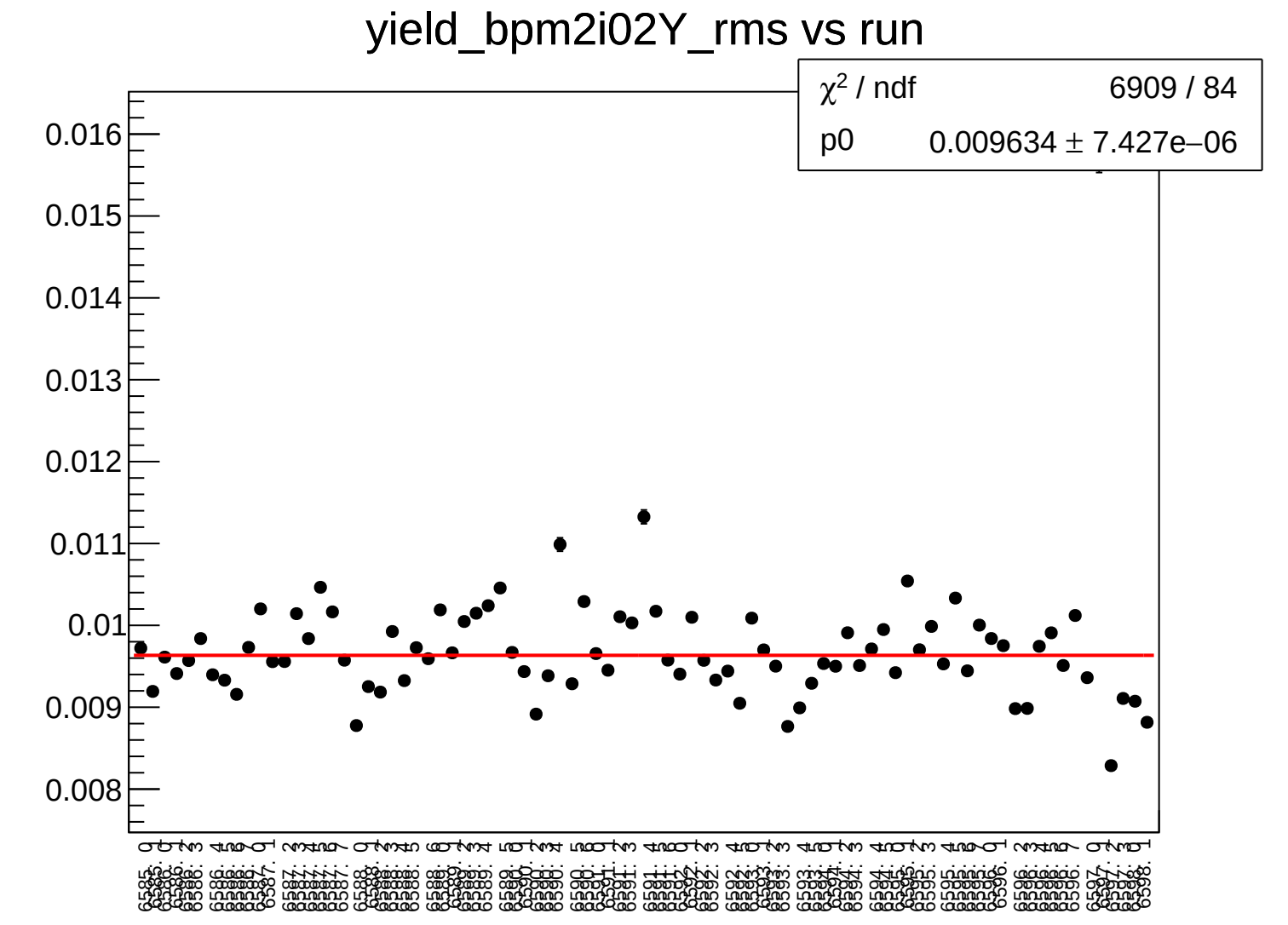

yield_bpm2i02X_mean vs run
χ² / ndf 9.18e+06 / 84
p0 0.1704 ± 1.115e−05
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14
pull
Entries 85
Mean −501.1
Std Dev 569.5
1000
800
600
400
200
0
−200
−400

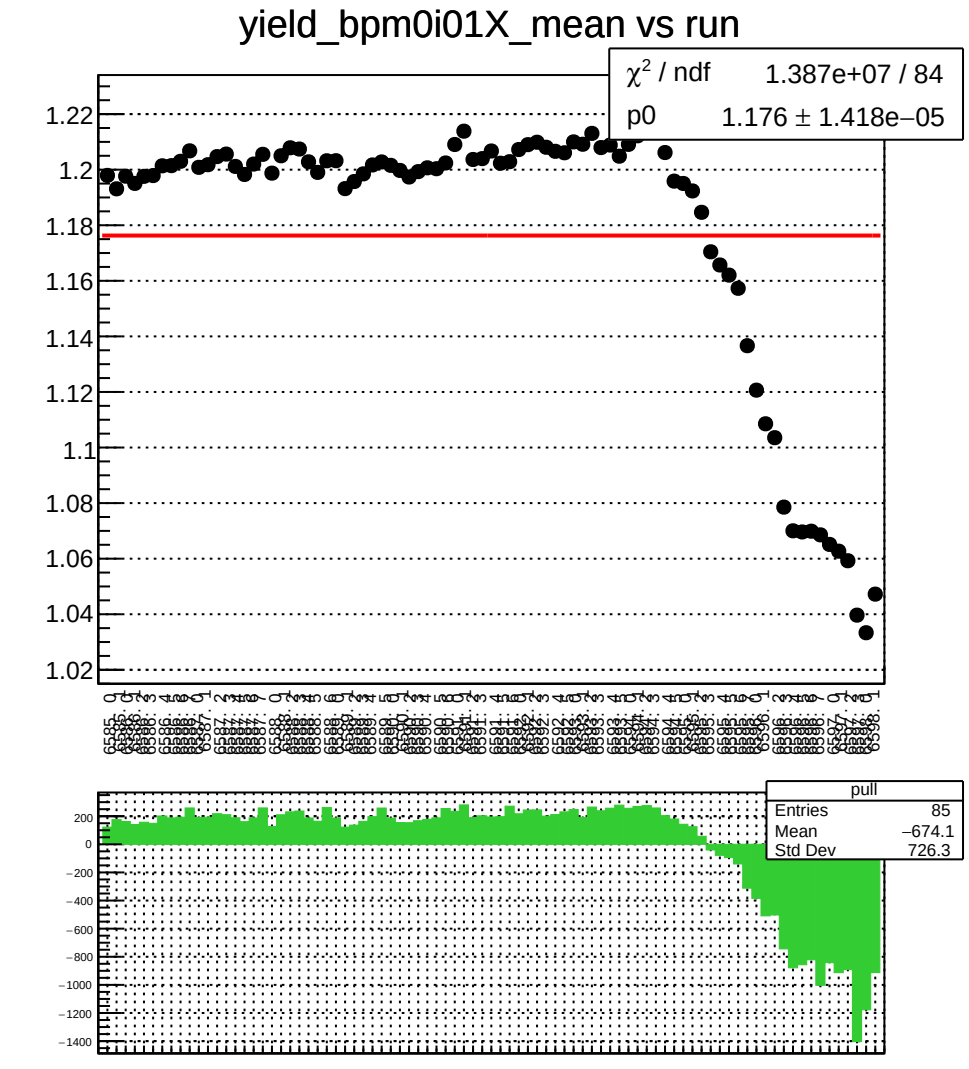

pull1D
Entries 85
Mean 3.223
Std Dev 0.2753
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

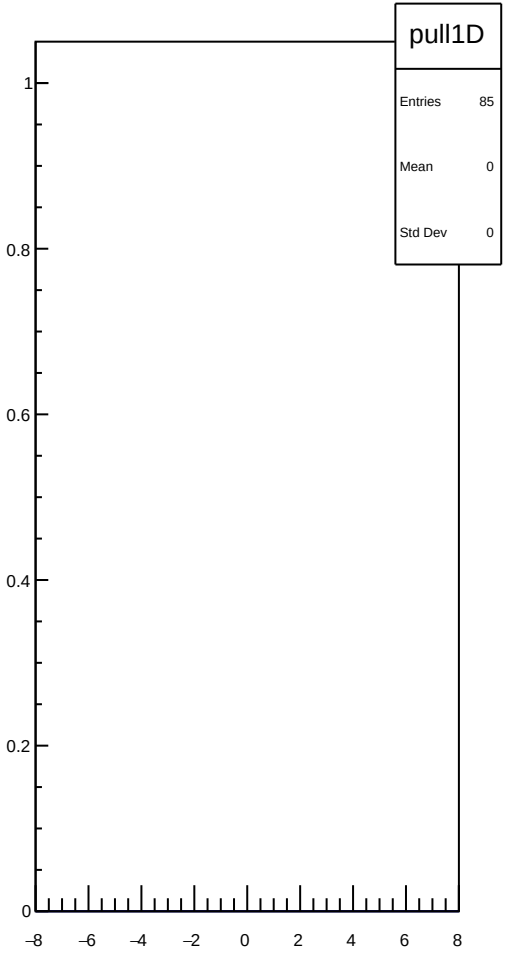

yield_bpm2i02X_rms vs run
χ² / ndf 6108 / 84
p0 0.01023 ± 7.883e–06
0.014
0.013
0.012
0.011
0.01
0.009

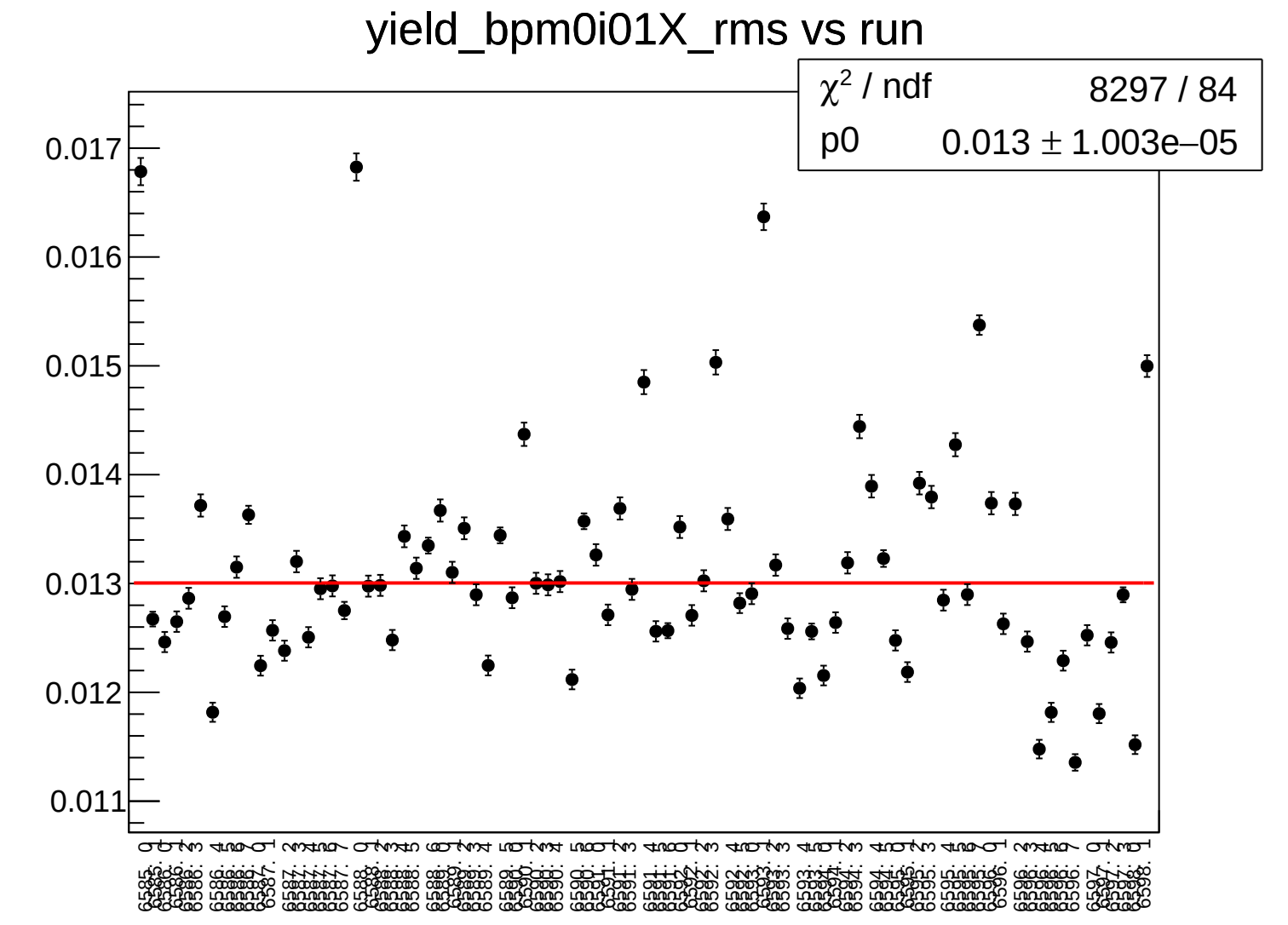

yield_bpm2i02Y_mean vs run
χ² / ndf 1.46e+07 / 84
p0 −2.302 ± 1.05e−05
−2.22
−2.24
−2.26
−2.28
−2.3
−2.32
−2.34
−2.36
pull
Entries 85
Mean 653.7
Std Dev 625.2
1200
1000
800
600
400
200
0
−200
−400
−600

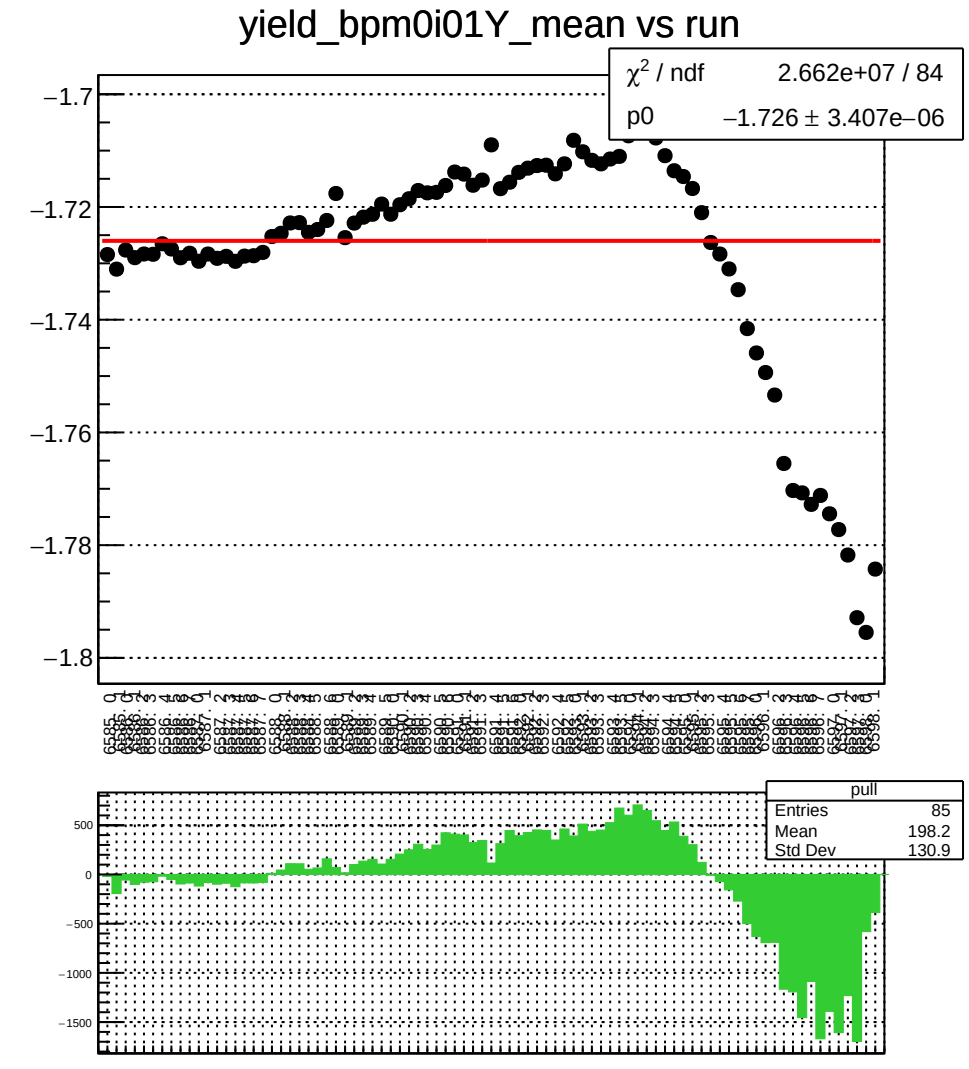

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

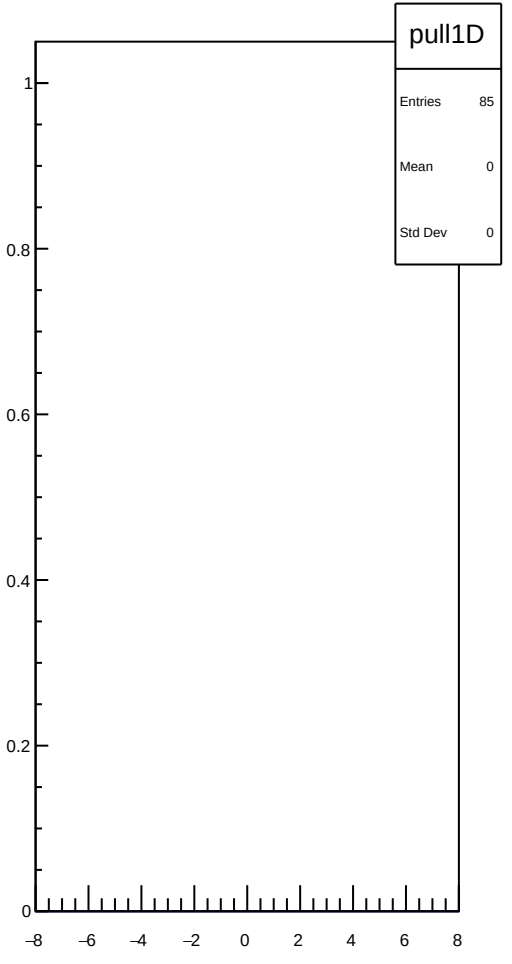

yield_bpm2i02Y_rms vs run
χ^2 / ndf 6909 / 84
p0 0.009634 ± 7.427e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

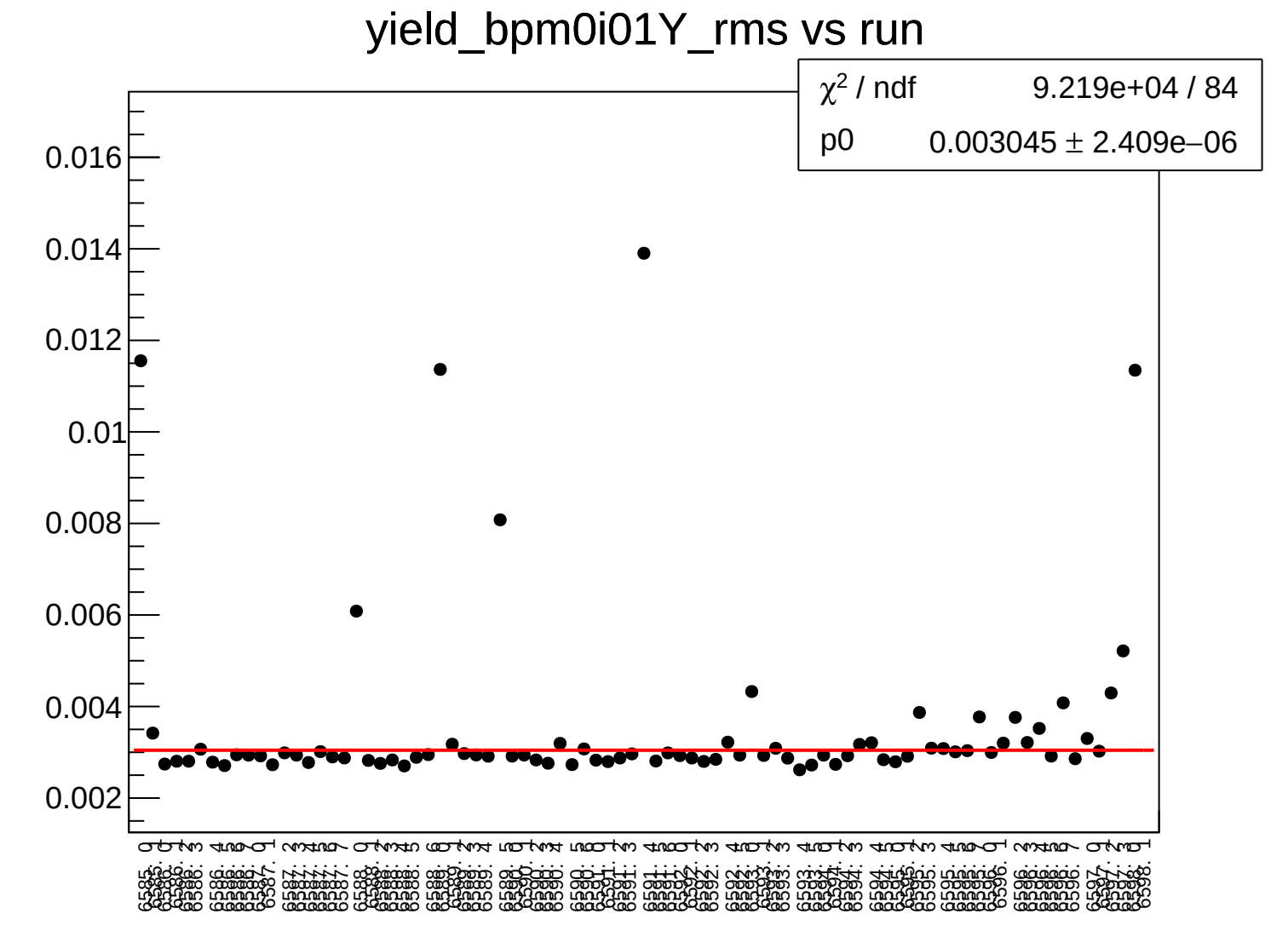

yield_bpm0i01X_mean vs run
χ² / ndf 1.387e+07 / 84
p0 1.176 ± 1.418e−05
pull
Entries 85
Mean −674.1
Std Dev 726.3

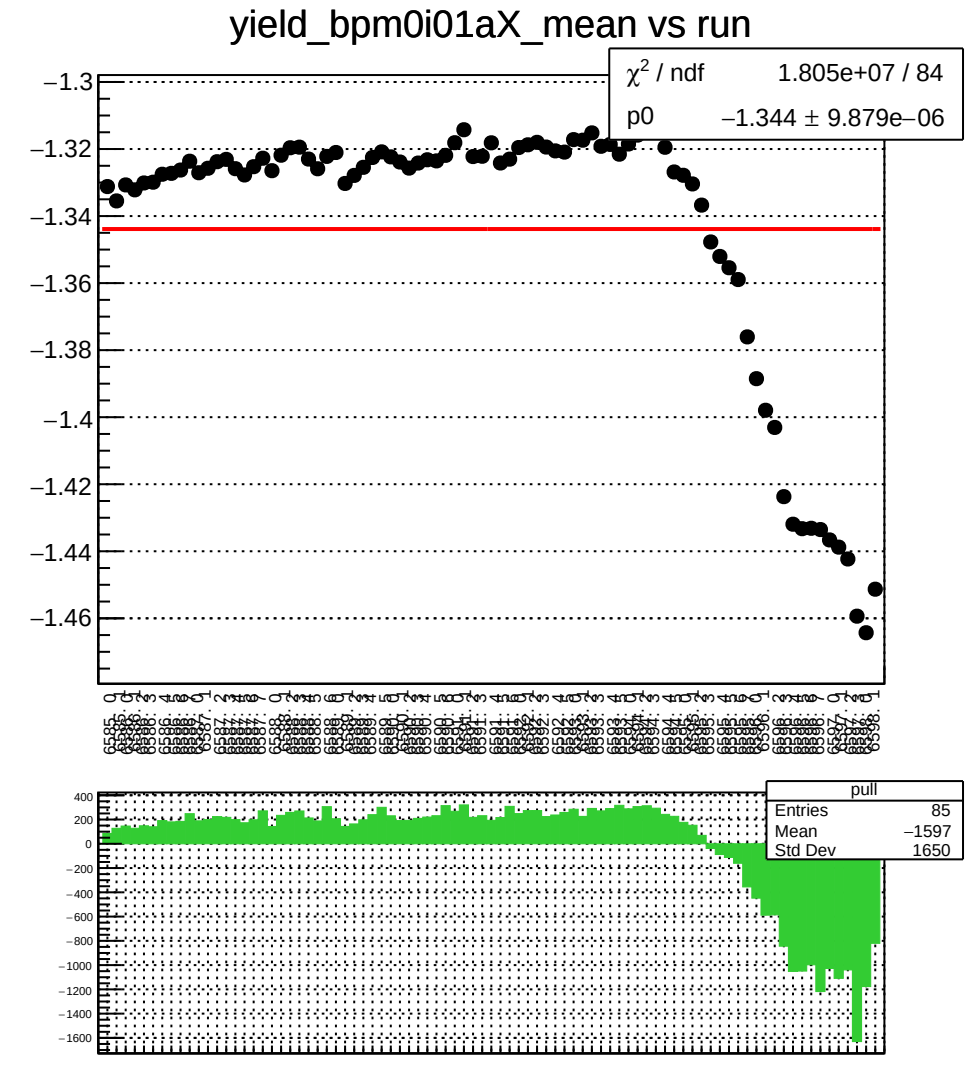

pull1D
Entries 85
Mean 0
Std Dev 0

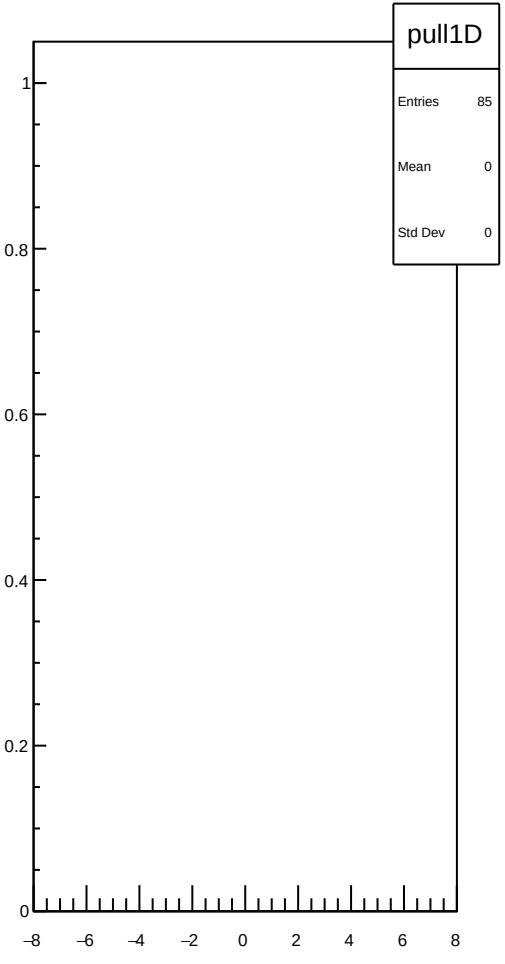

yield_bpm0i01X_rms vs run
χ² / ndf 8297 / 84
p0 0.013 ± 1.003e–05
0.017
0.016
0.015
0.014
0.013
0.012
0.011

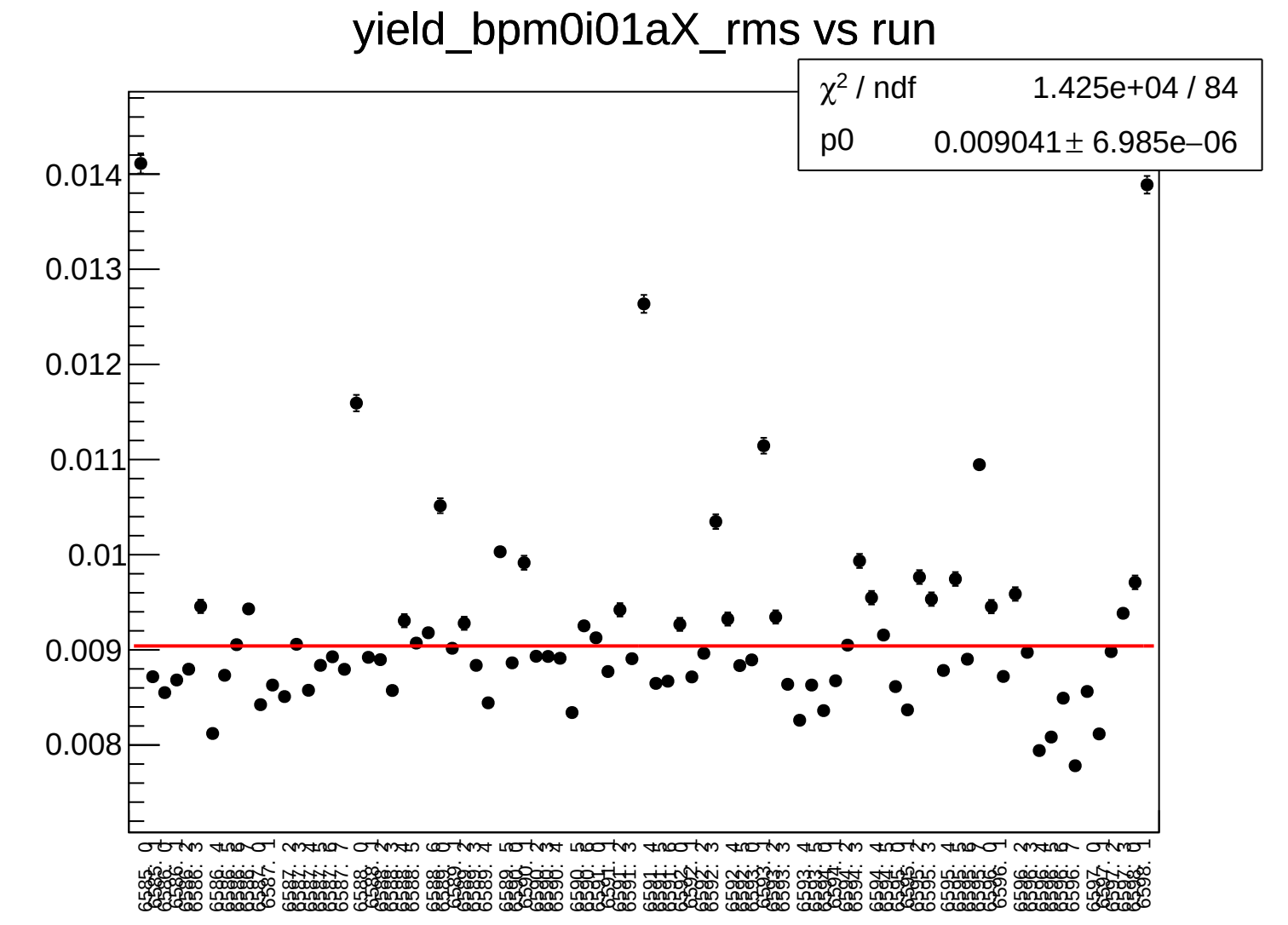

yield_bpm0i01Y_mean vs run
χ² / ndf 2.662e+07 / 84
p0 −1.726 ± 3.407e−06
−1.7
−1.72
−1.74
−1.76
−1.78
−1.8
pull
Entries 85
Mean 198.2
Std Dev 130.9
500
0
−500
−1000
−1500

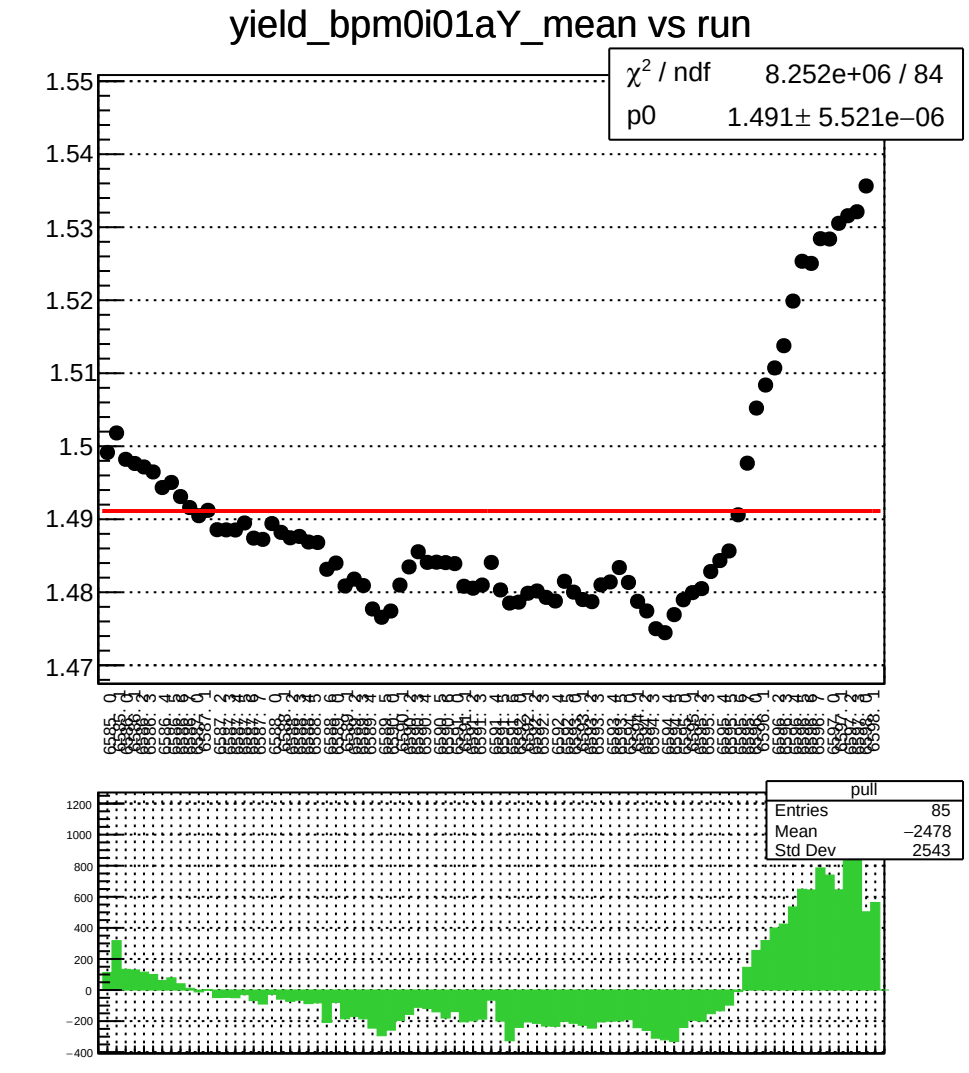

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

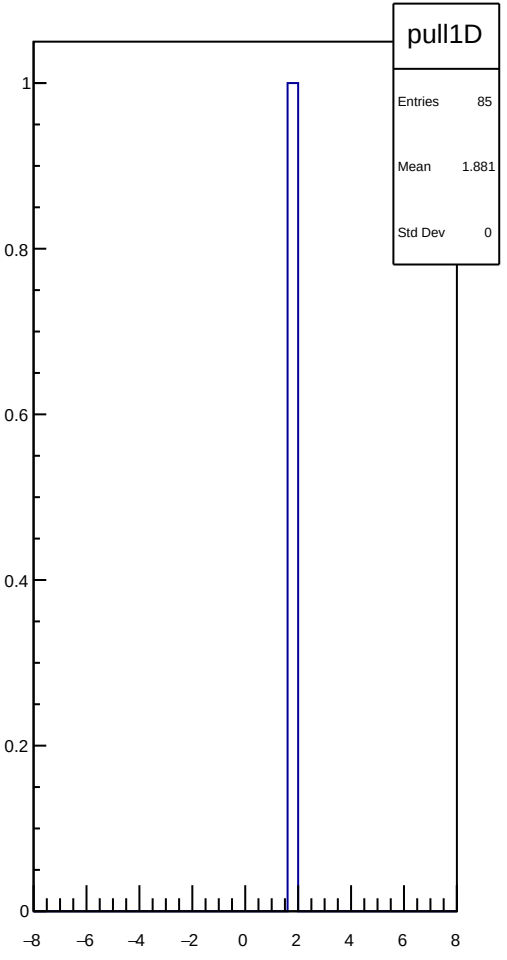

yield_bpm0i01Y_rms vs run
χ^2 / ndf 9.219e+04 / 84
p0 0.003045 ± 2.409e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

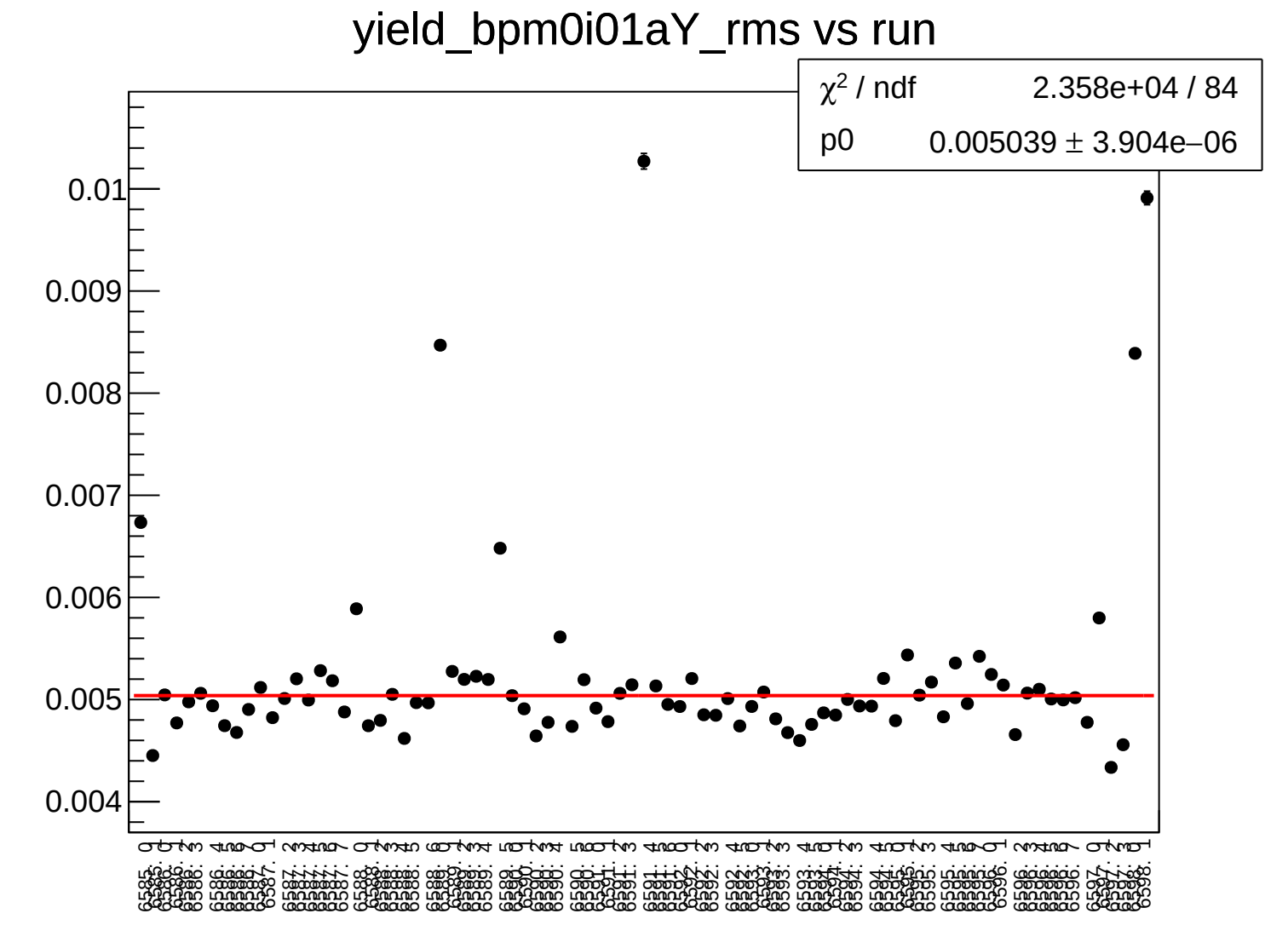

yield_bpm0i01aX_mean vs run
χ² / ndf 1.805e+07 / 84
p0 −1.344 ± 9.879e−06
pull
Entries 85
Mean −1597
Std Dev 1650

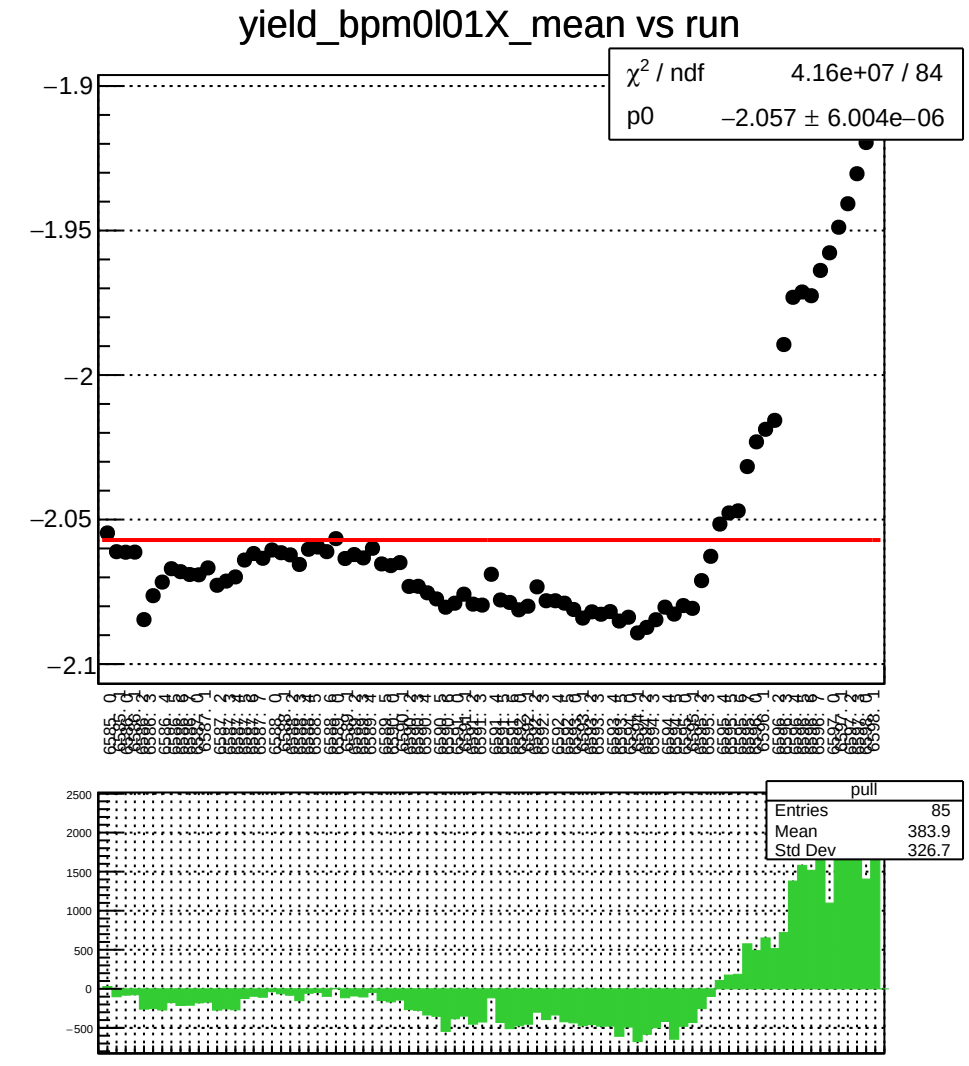

pull1D
Entries 85
Mean 0
Std Dev 0

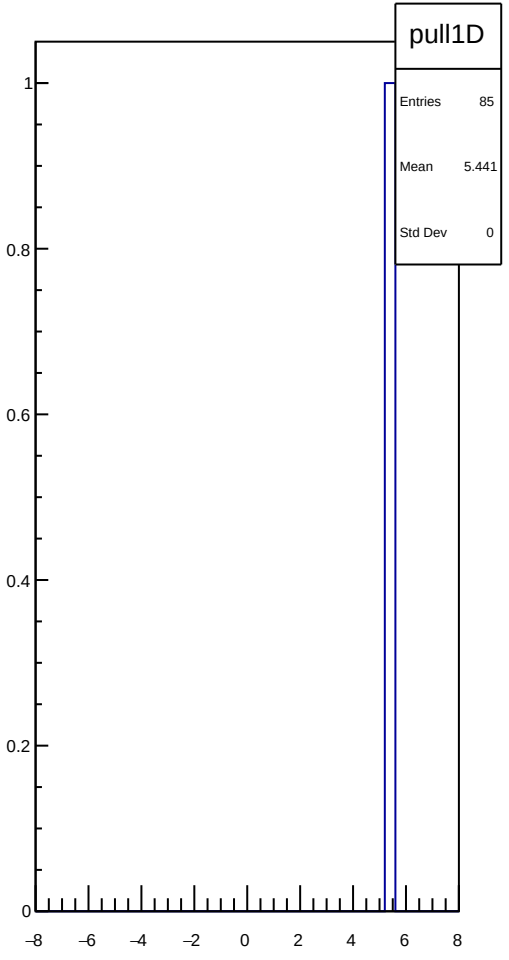

yield_bpm0i01aX_rms vs run
χ² / ndf 1.425e+04 / 84
p0 0.009041 ± 6.985e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008

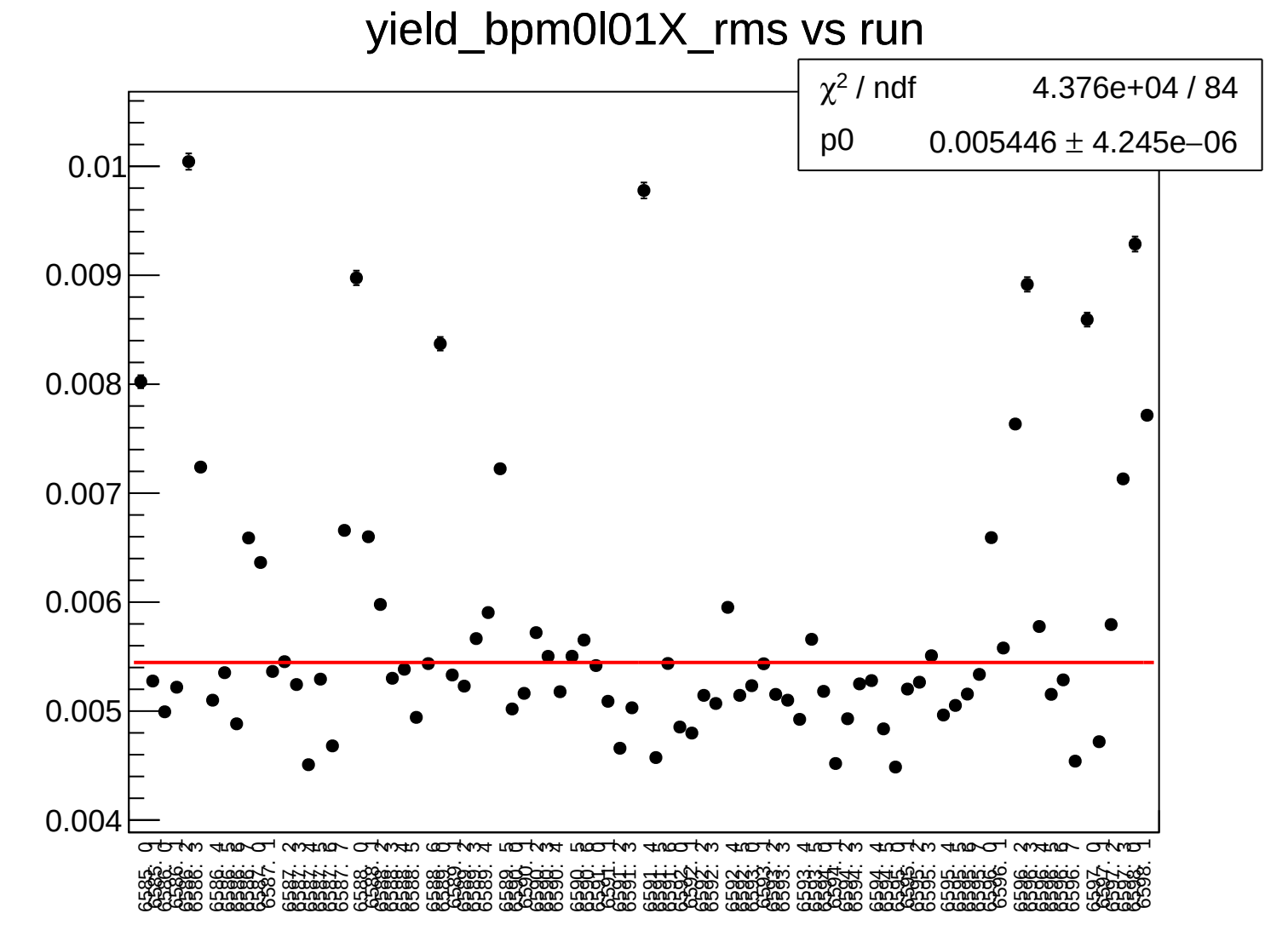

yield_bpm0i01aY_mean vs run
χ² / ndf 8.252e+06 / 84
p0 1.491± 5.521e−06
1.55
1.54
1.53
1.52
1.51
1.5
1.49
1.48
1.47
pull
Entries 85
Mean −2478
Std Dev 2543
1200
1000
800
600
400
200
0
−200
−400

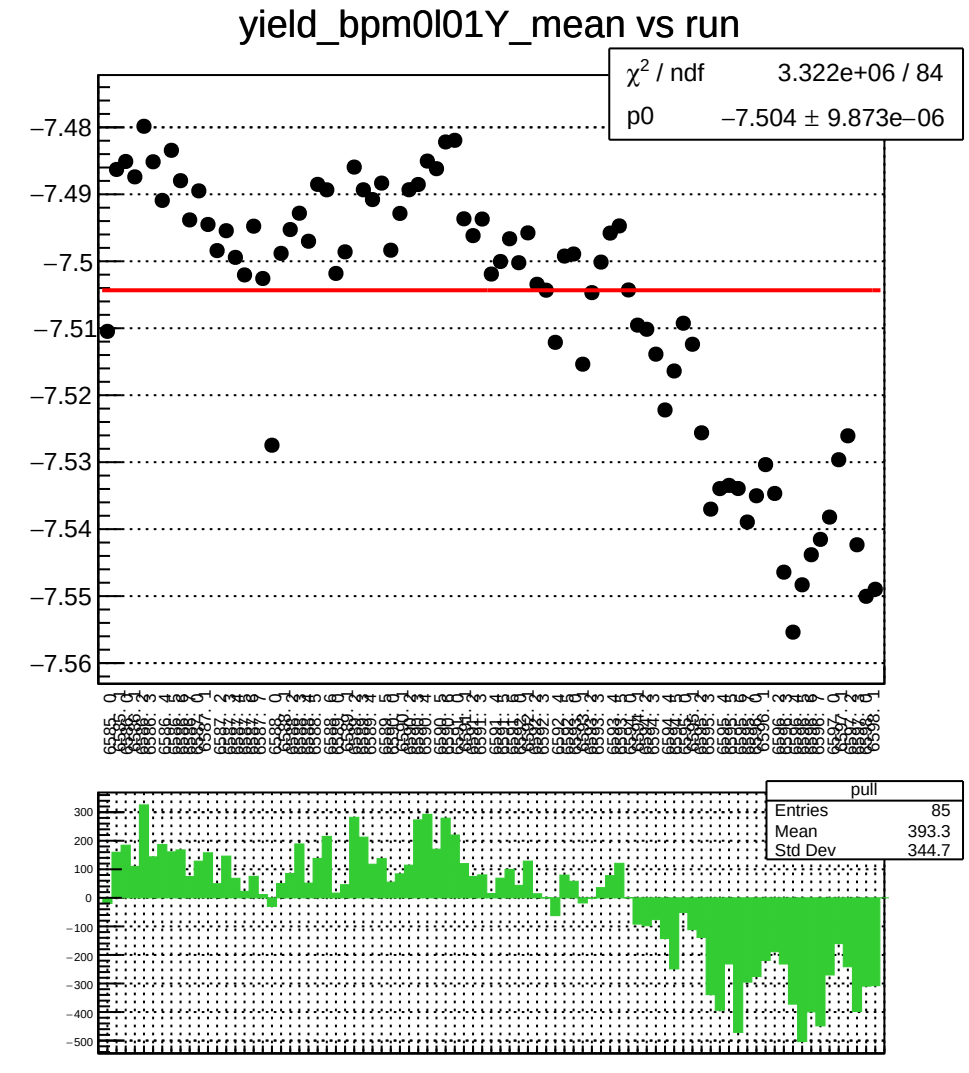

pull1D
Entries 85
Mean 1.881
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

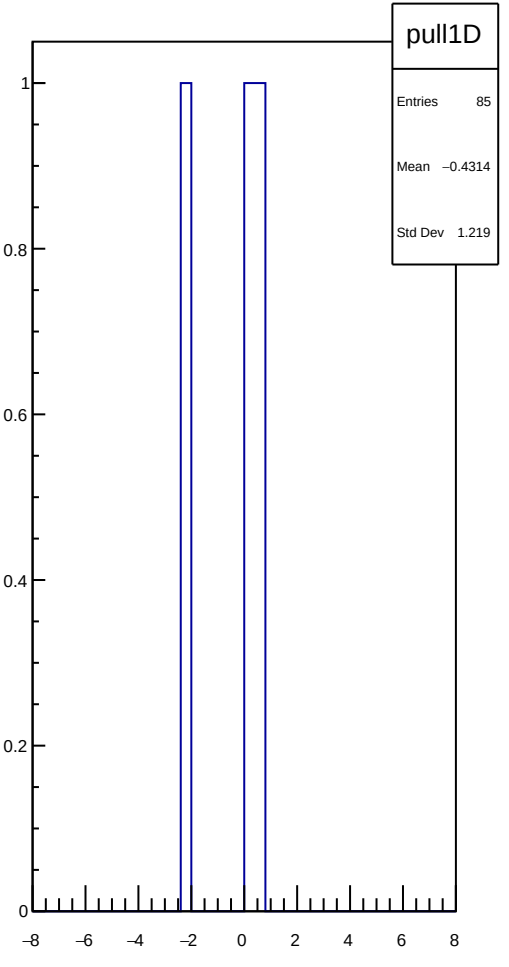

yield_bpm0i01aY_rms vs run
χ² / ndf 2.358e+04 / 84
p0 0.005039 ± 3.904e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004


yield_bpm0l01X_mean vs run
χ² / ndf 4.16e+07 / 84
p0 −2.057 ± 6.004e−06
−1.9
−1.95
−2
−2.05
−2.1
pull
Entries 85
Mean 383.9
Std Dev 326.7
2500
2000
1500
1000
500
0
−500


pull1D
Entries 85
Mean 5.441
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


yield_bpm0l01X_rms vs run
χ^2 / ndf 4.376e+04 / 84
p0 0.005446 ± 4.245e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004


yield_bpm0l01Y_mean vs run
χ² / ndf 3.322e+06 / 84
p0 −7.504 ± 9.873e−06
−7.48
−7.49
−7.5
−7.51
−7.52
−7.53
−7.54
−7.55
−7.56
pull
Entries 85
Mean 393.3
Std Dev 344.7
300
200
100
0
−100
−200
−300
−400
−500


pull1D
Entries 85
Mean −0.4314
Std Dev 1.219
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
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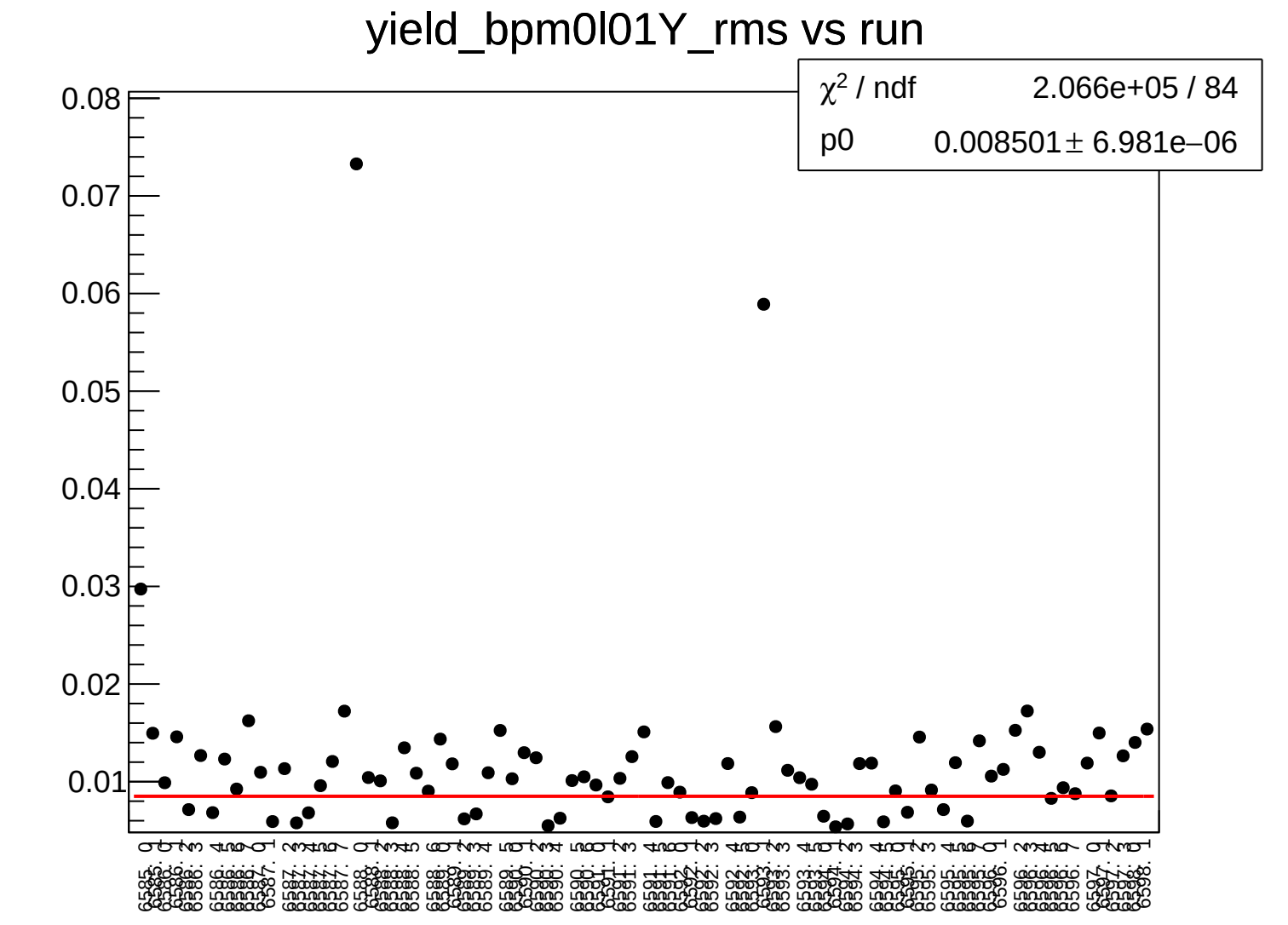
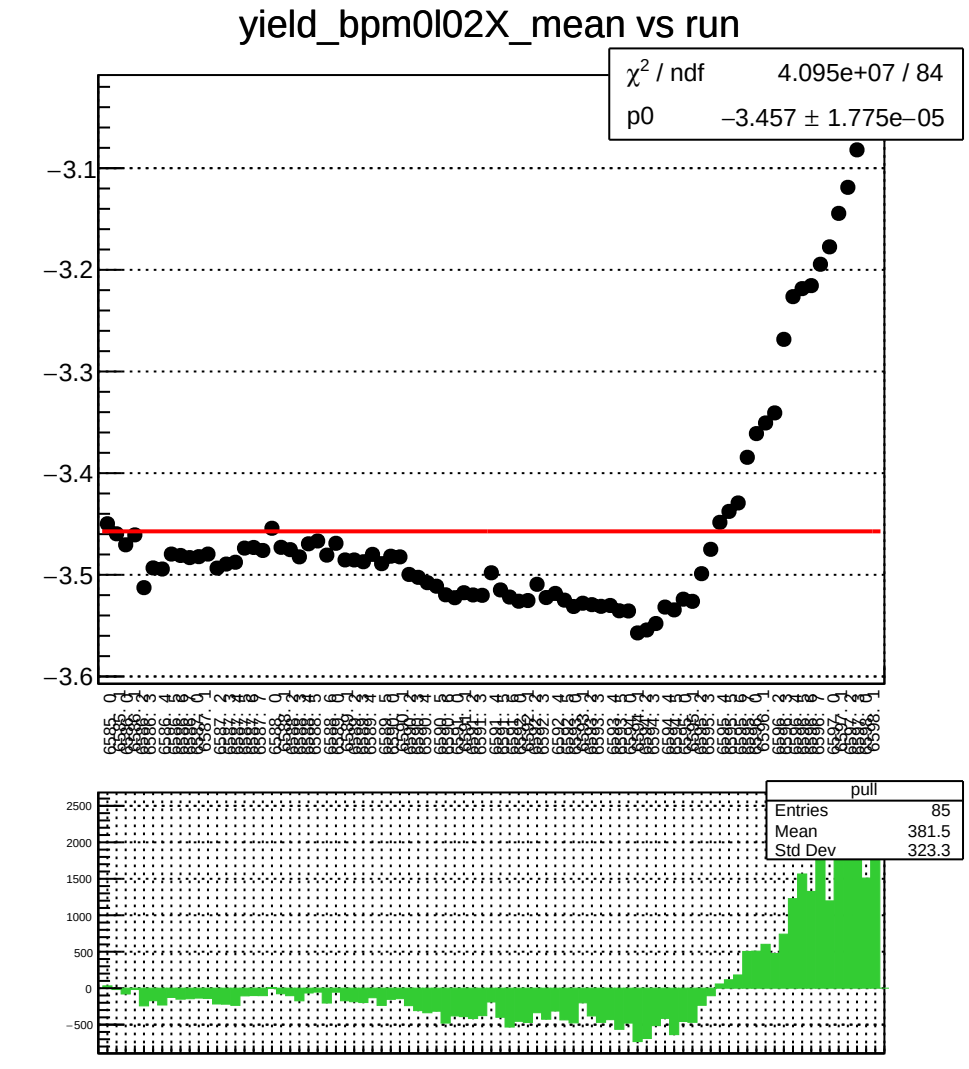
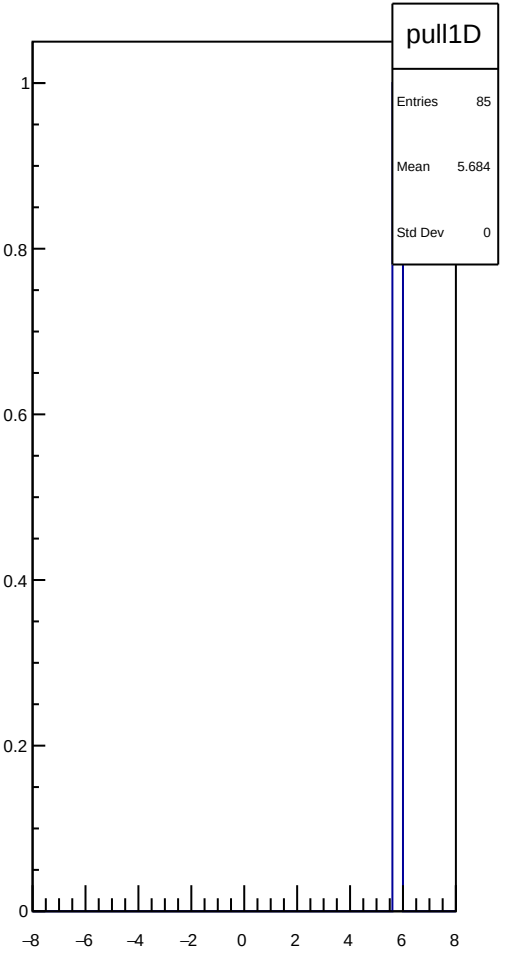
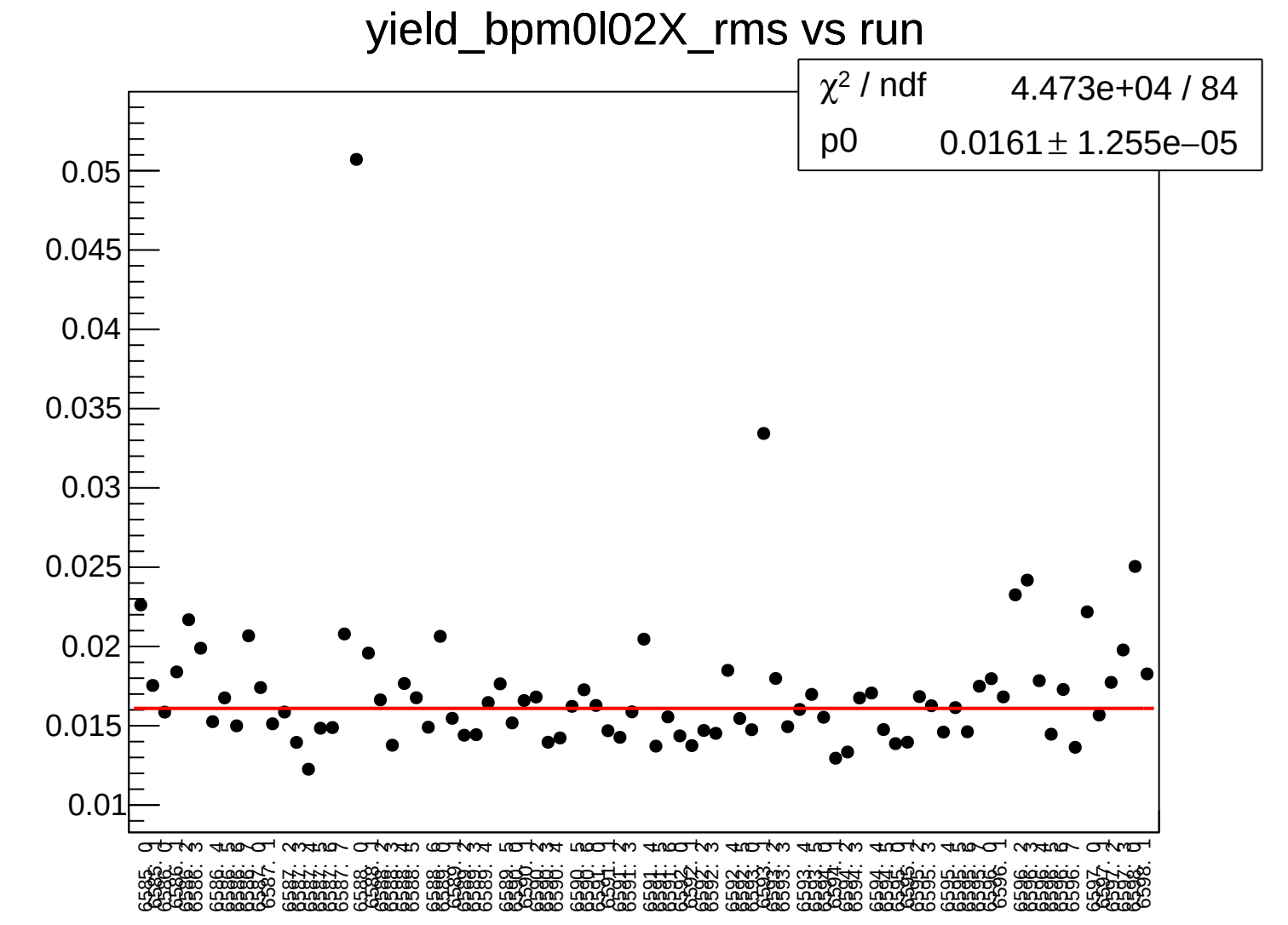
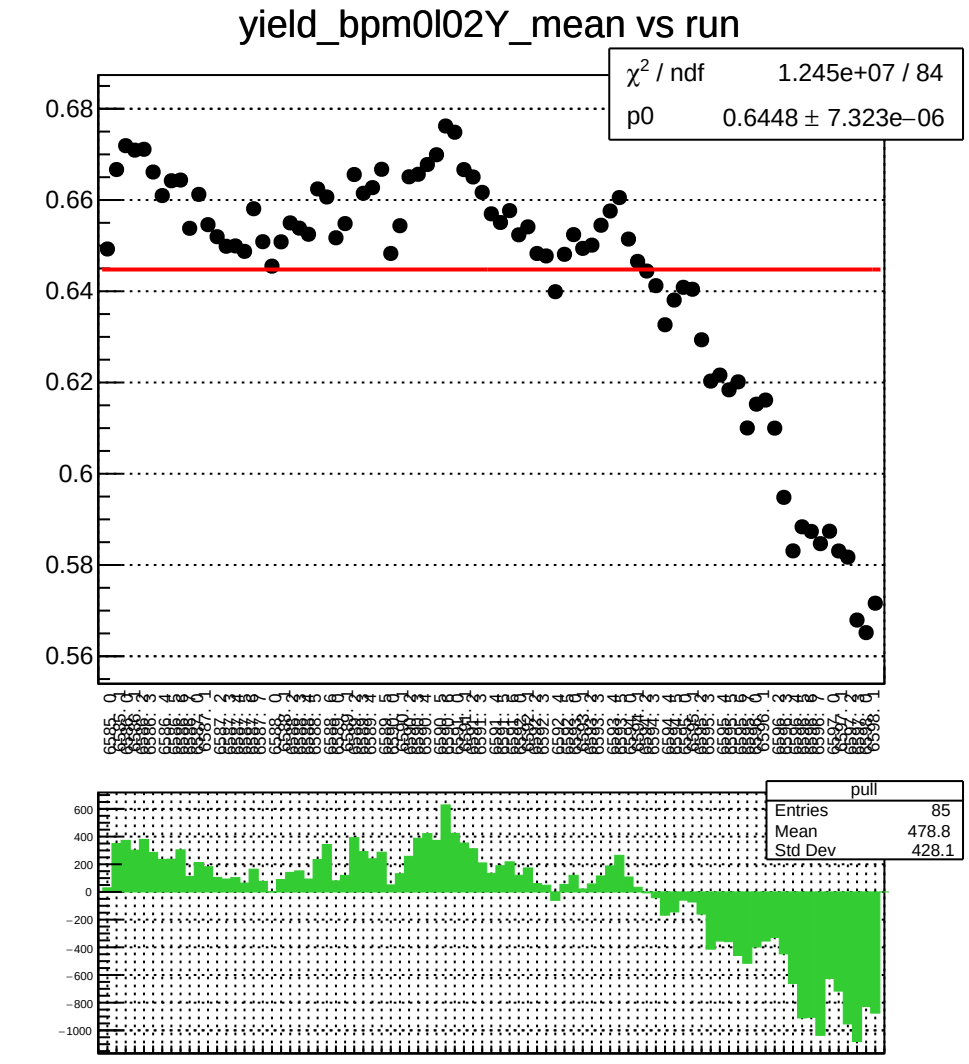
0
2
4
6
8

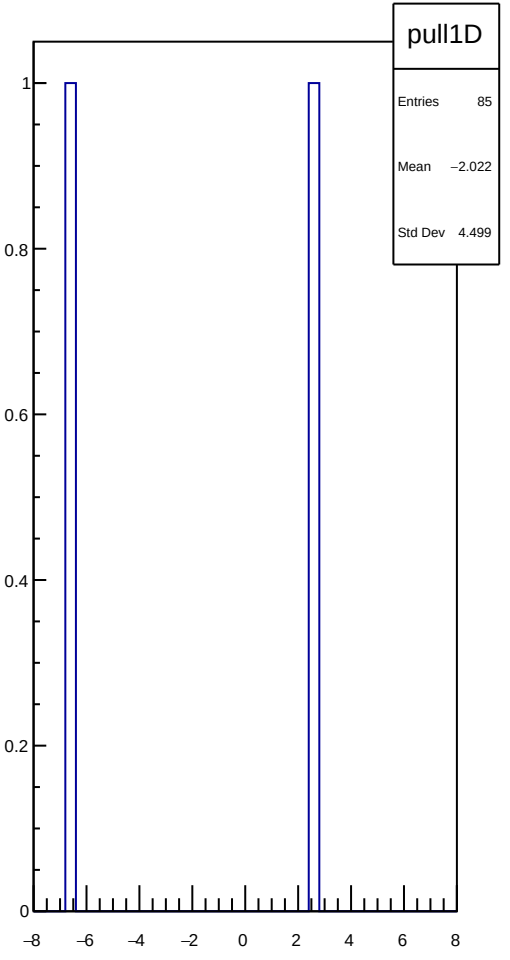

yield_bpm0l01Y_rms vs run
χ² / ndf 2.066e+05 / 84
p0 0.008501 ± 6.981e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

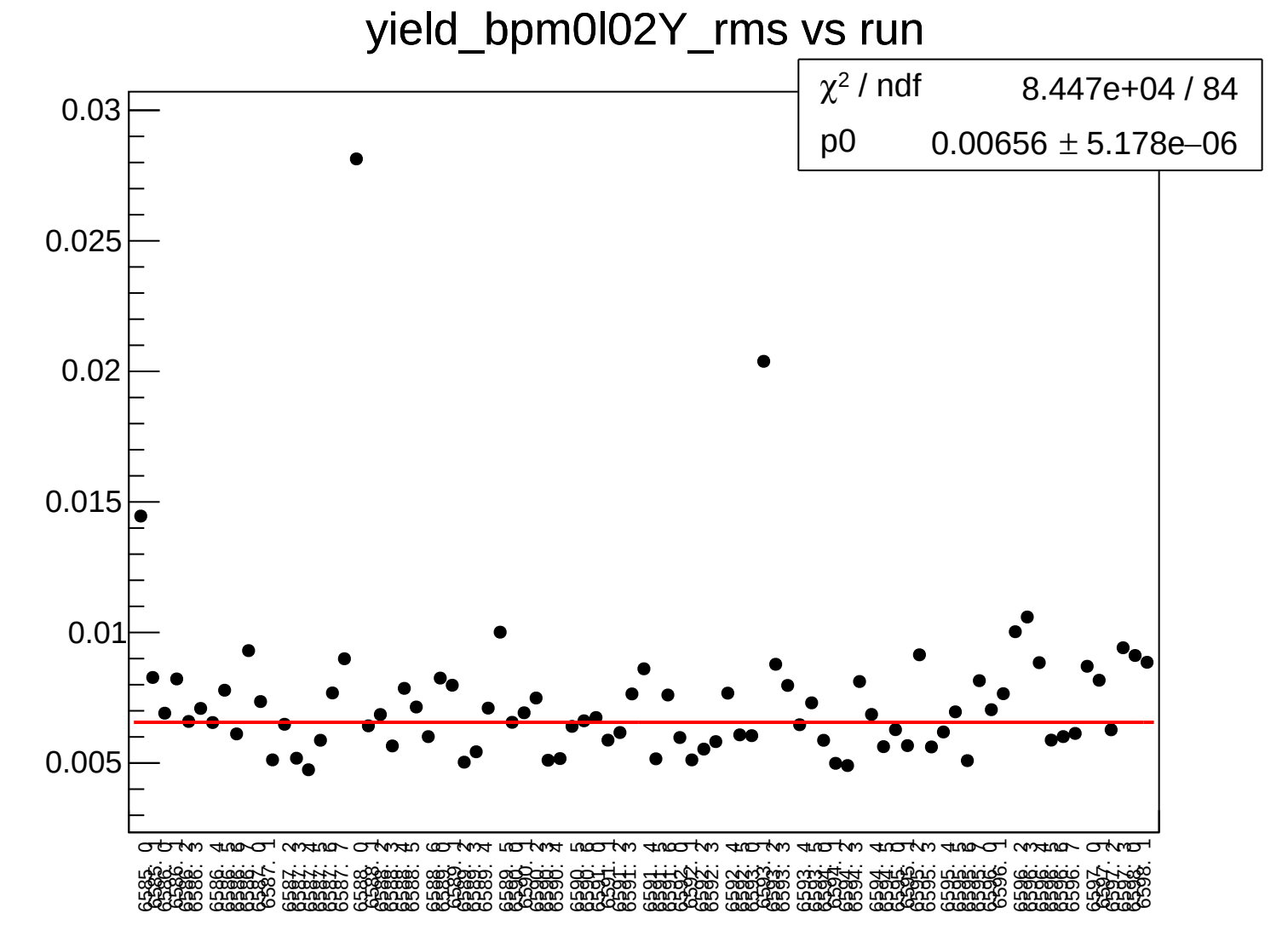

yield_bpm0l02X_mean vs run
χ² / ndf 4.095e+07 / 84
p0 −3.457 ± 1.775e−05
−3.1
−3.2
−3.3
−3.4
−3.5
−3.6
pull
Entries 85
Mean 381.5
Std Dev 323.3
2500
2000
1500
1000
500
0
−500

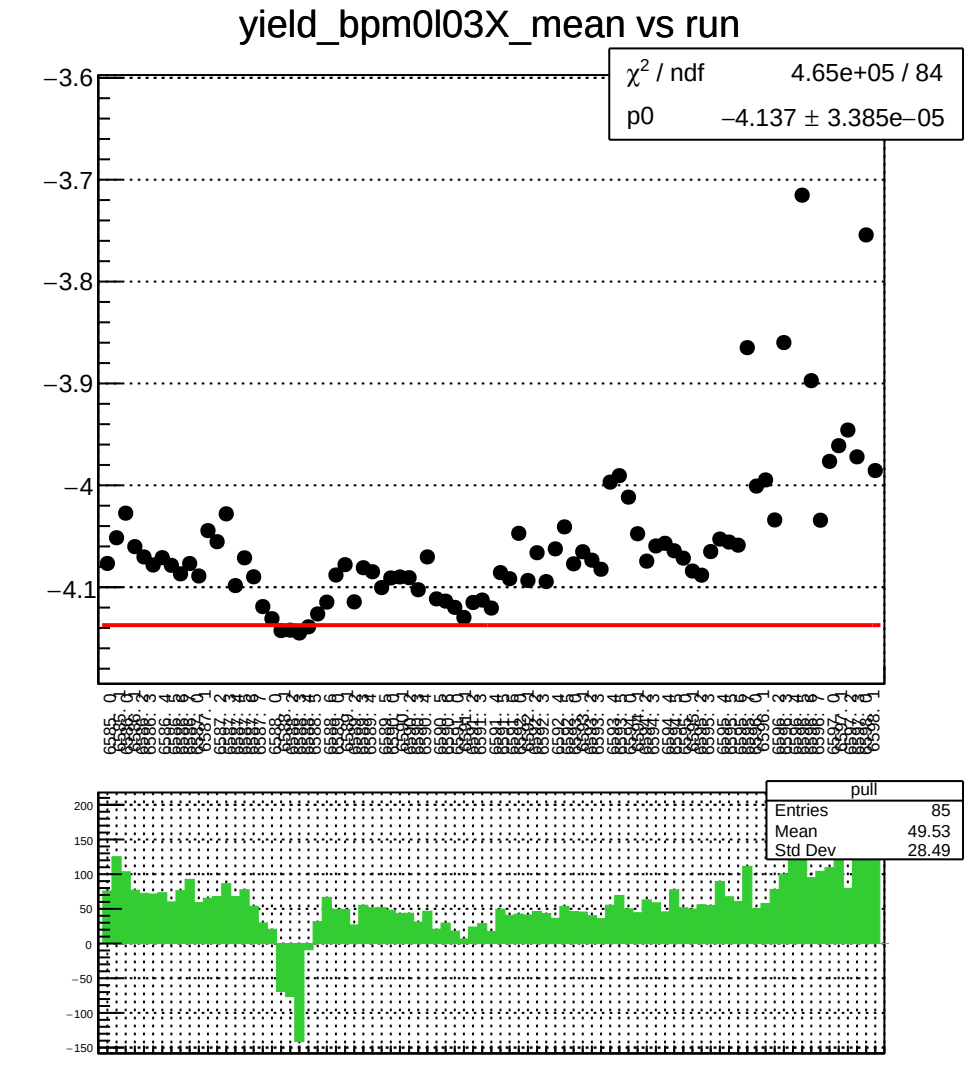

pull1D
Entries 85
Mean 5.684
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

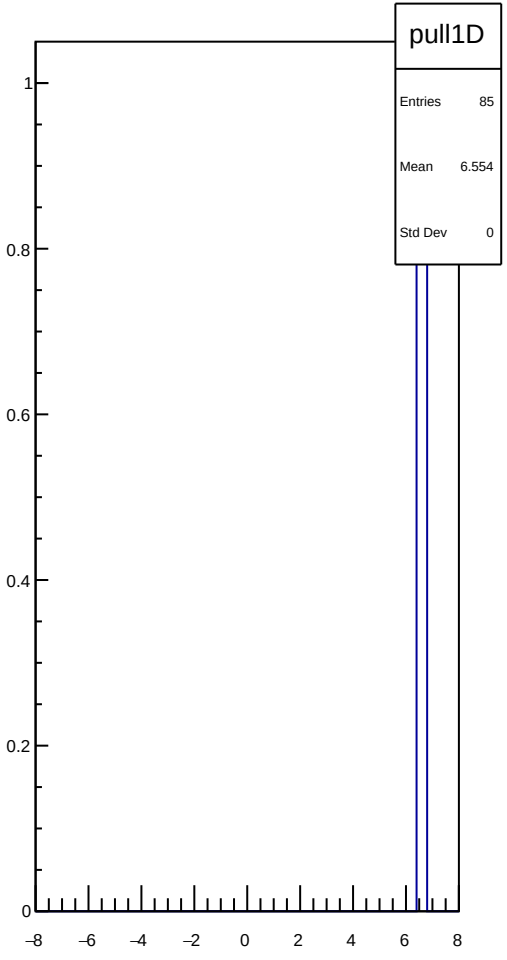

yield_bpm0l02X_rms vs run
χ² / ndf 4.473e+04 / 84
p0 0.0161 ± 1.255e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

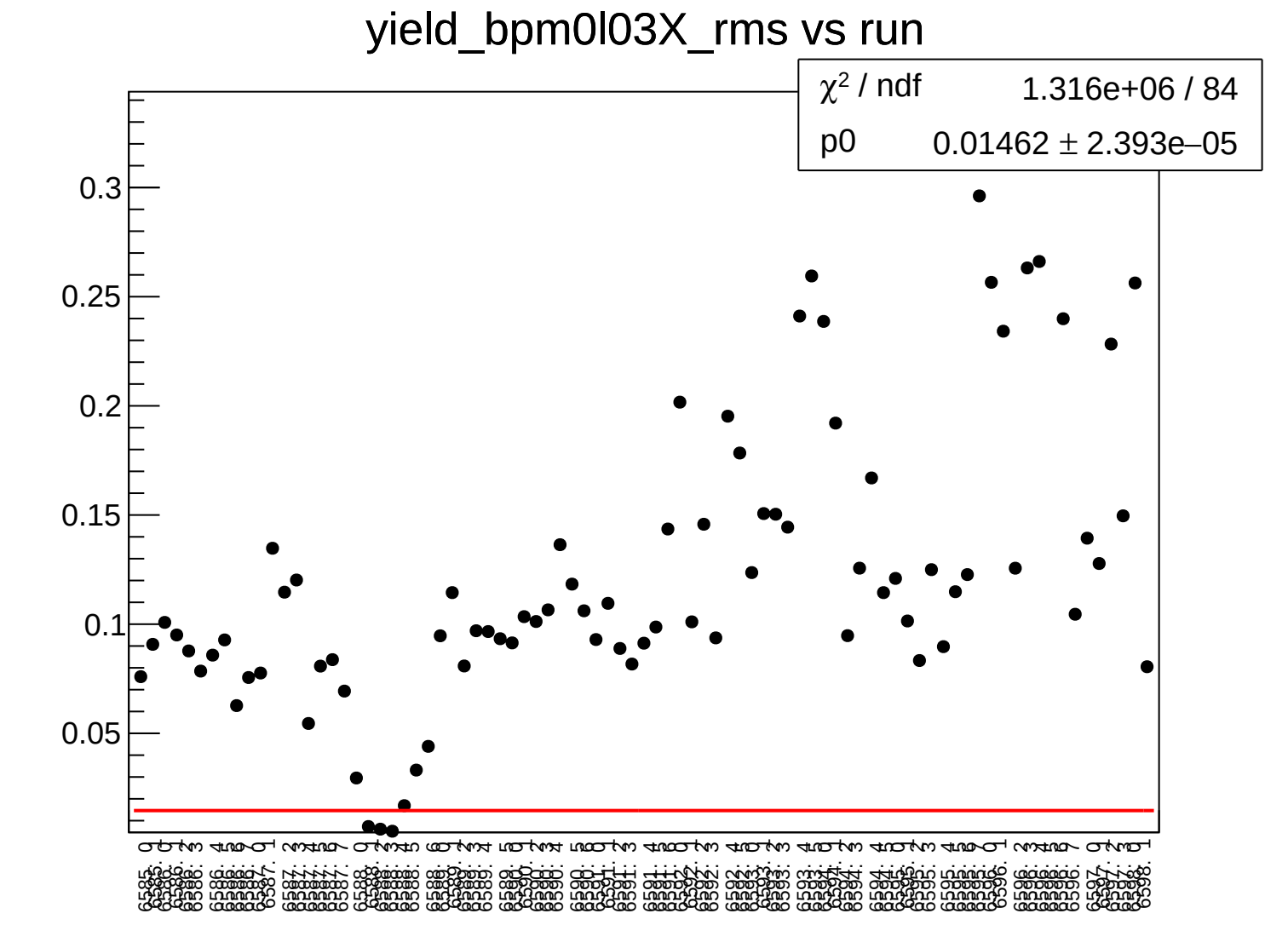

yield_bpm0l02Y_mean vs run
χ² / ndf 1.245e+07 / 84
p0 0.6448 ± 7.323e−06
0.68
0.66
0.64
0.62
0.6
0.58
0.56
pull
Entries 85
Mean 478.8
Std Dev 428.1
600
400
200
0
−200
−400
−600
−800
−1000

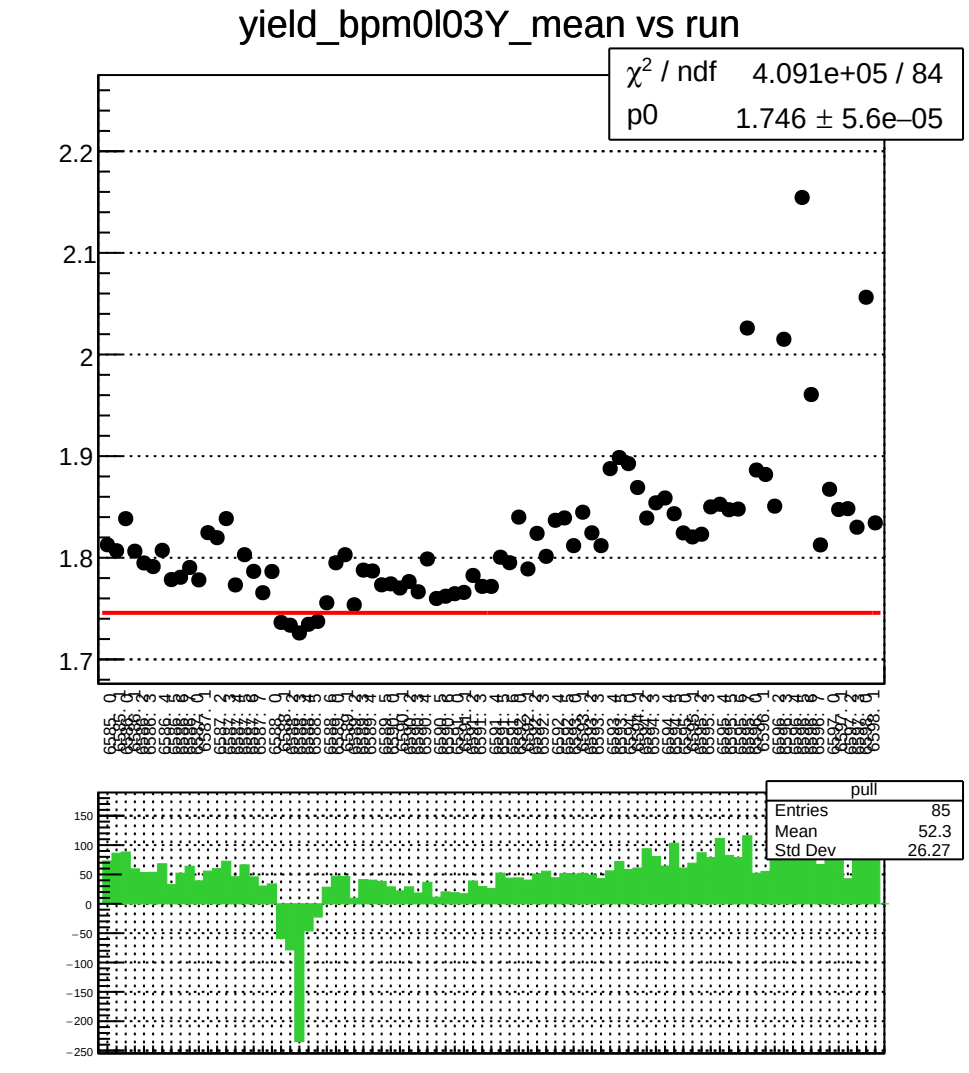

pull1D
Entries 85
Mean −2.022
Std Dev 4.499
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

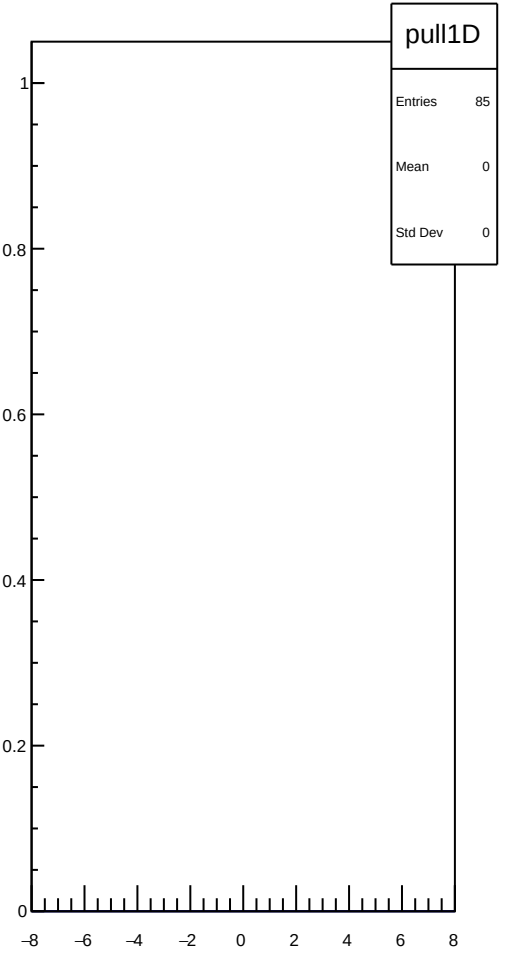

yield_bpm0l02Y_rms vs run
χ² / ndf 8.447e+04 / 84
p0 0.00656 ± 5.178e–06
0.03
0.025
0.02
0.015
0.01
0.005

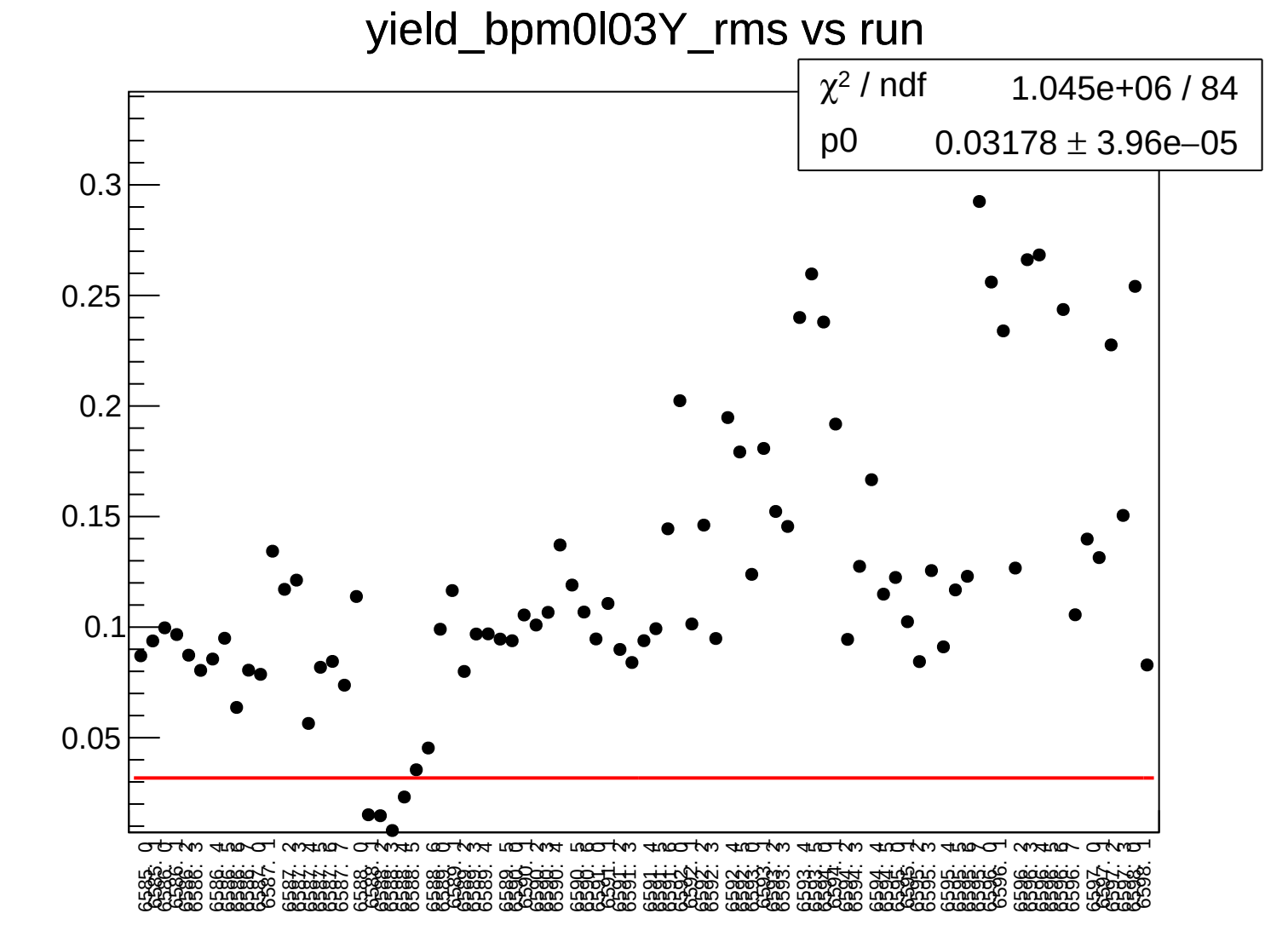

yield_bpm0l03X_mean vs run
χ² / ndf 4.65e+05 / 84
p0 −4.137 ± 3.385e−05
−3.6
−3.7
−3.8
−3.9
−4
−4.1
pull
Entries 85
Mean 49.53
Std Dev 28.49
200
150
100
50
0
−50
−100
−150

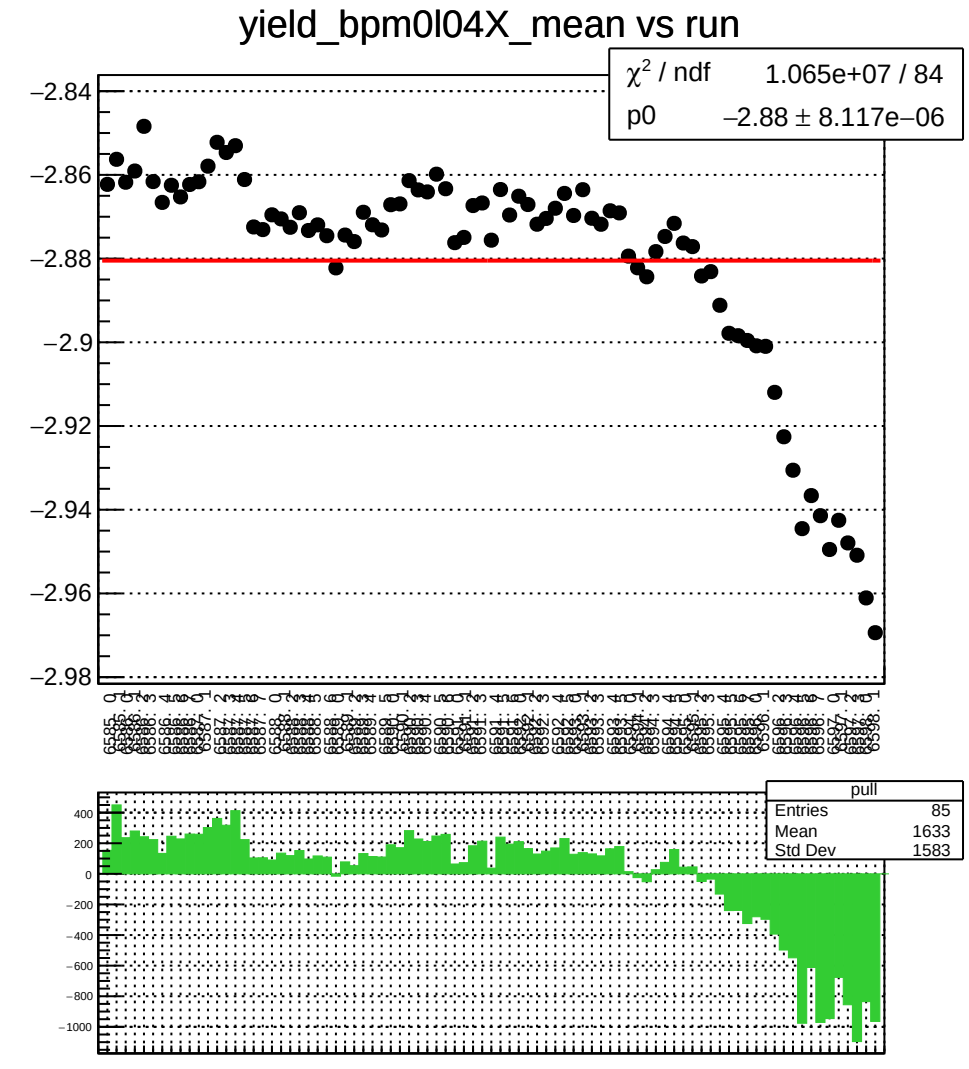

pull1D
Entries 85
Mean 6.554
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

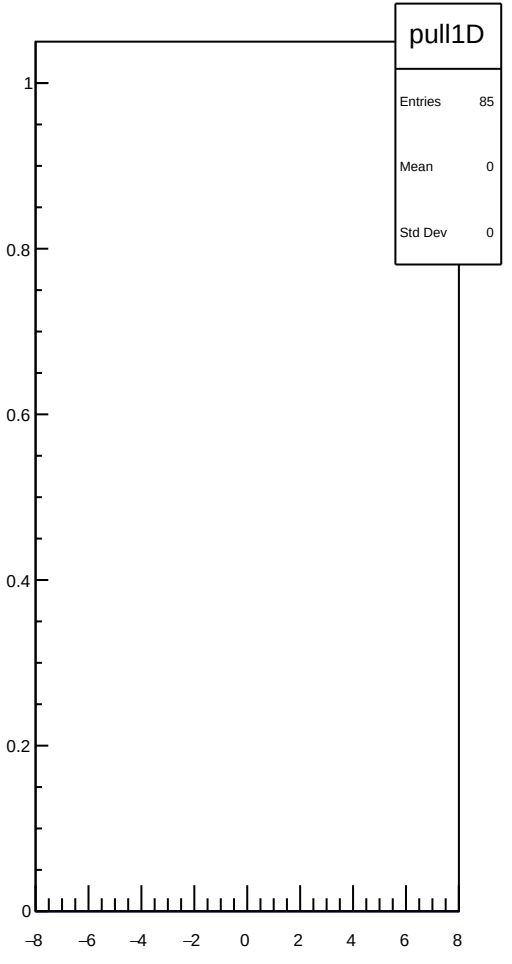

yield_bpm0l03X_rms vs run
χ² / ndf 1.316e+06 / 84
p0 0.01462 ± 2.393e–05
0.3
0.25
0.2
0.15
0.1
0.05

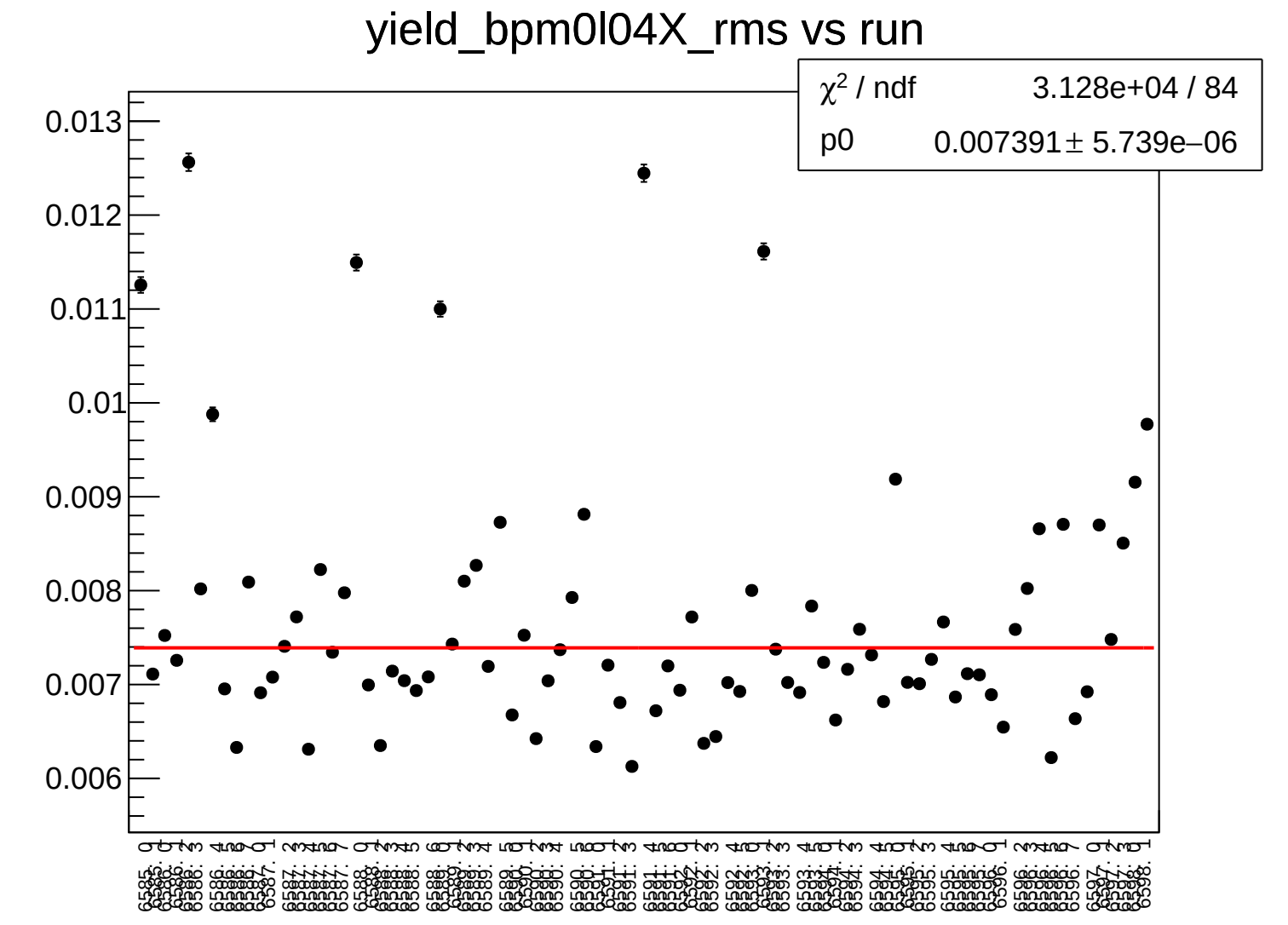

yield_bpm0l03Y_mean vs run
χ² / ndf 4.091e+05 / 84
p0 1.746 ± 5.6e–05
pull
Entries 85
Mean 52.3
Std Dev 26.27

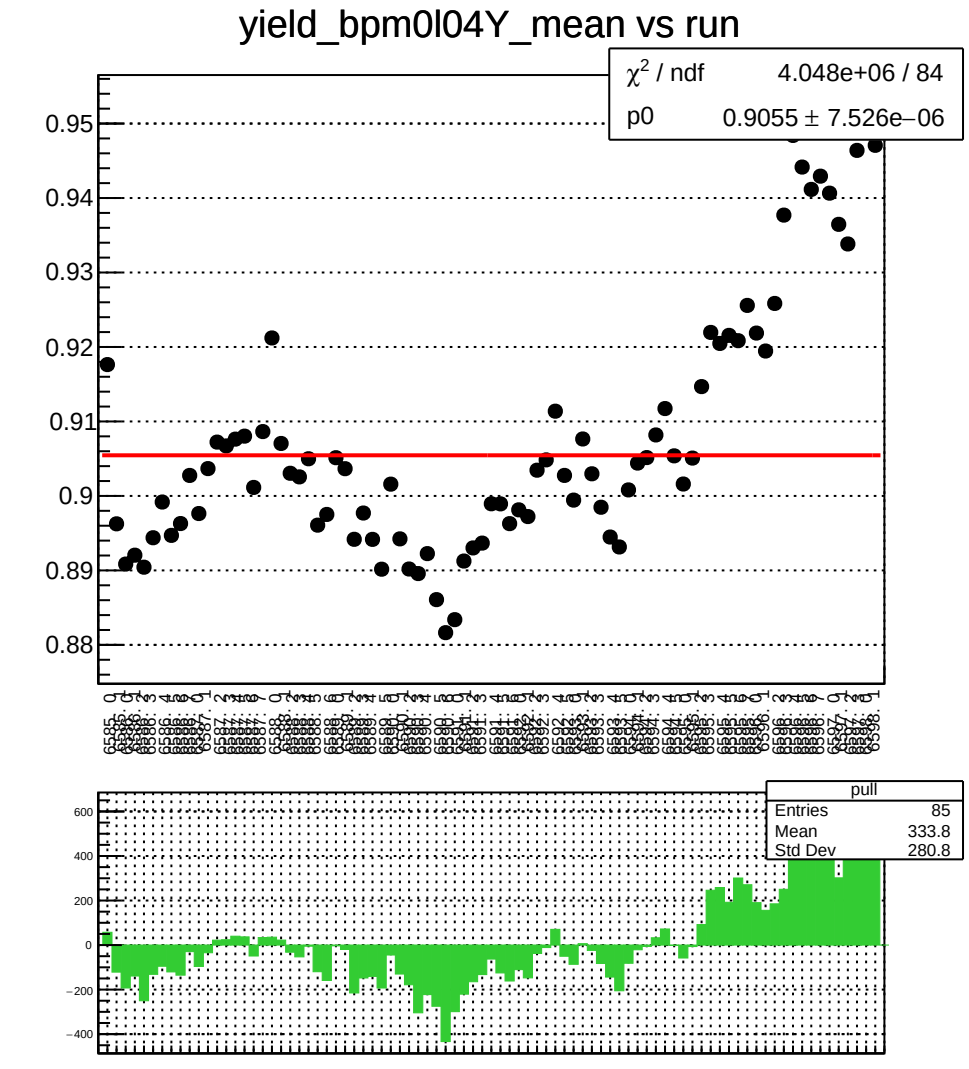

pull1D
Entries 85
Mean 0
Std Dev 0

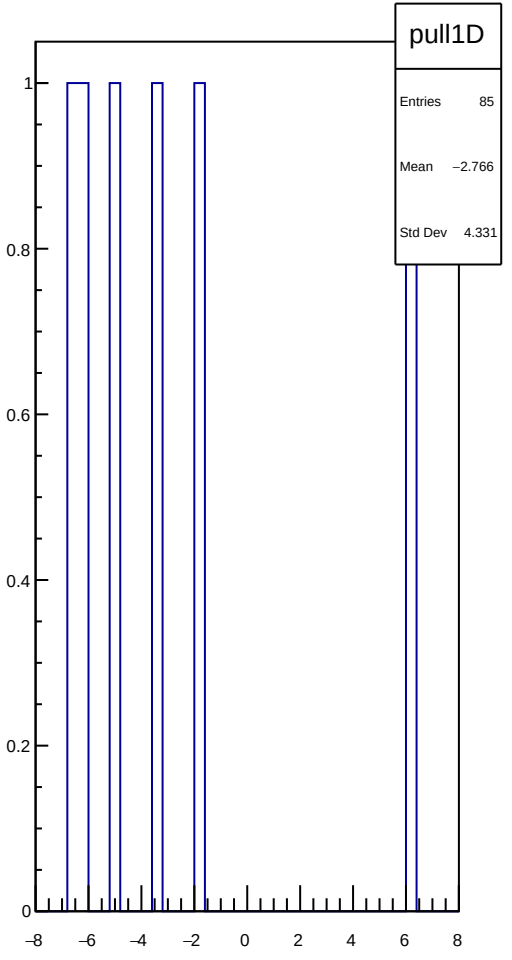

yield_bpm0l03Y_rms vs run
χ² / ndf 1.045e+06 / 84
p0 0.03178 ± 3.96e−05
0.3
0.25
0.2
0.15
0.1
0.05

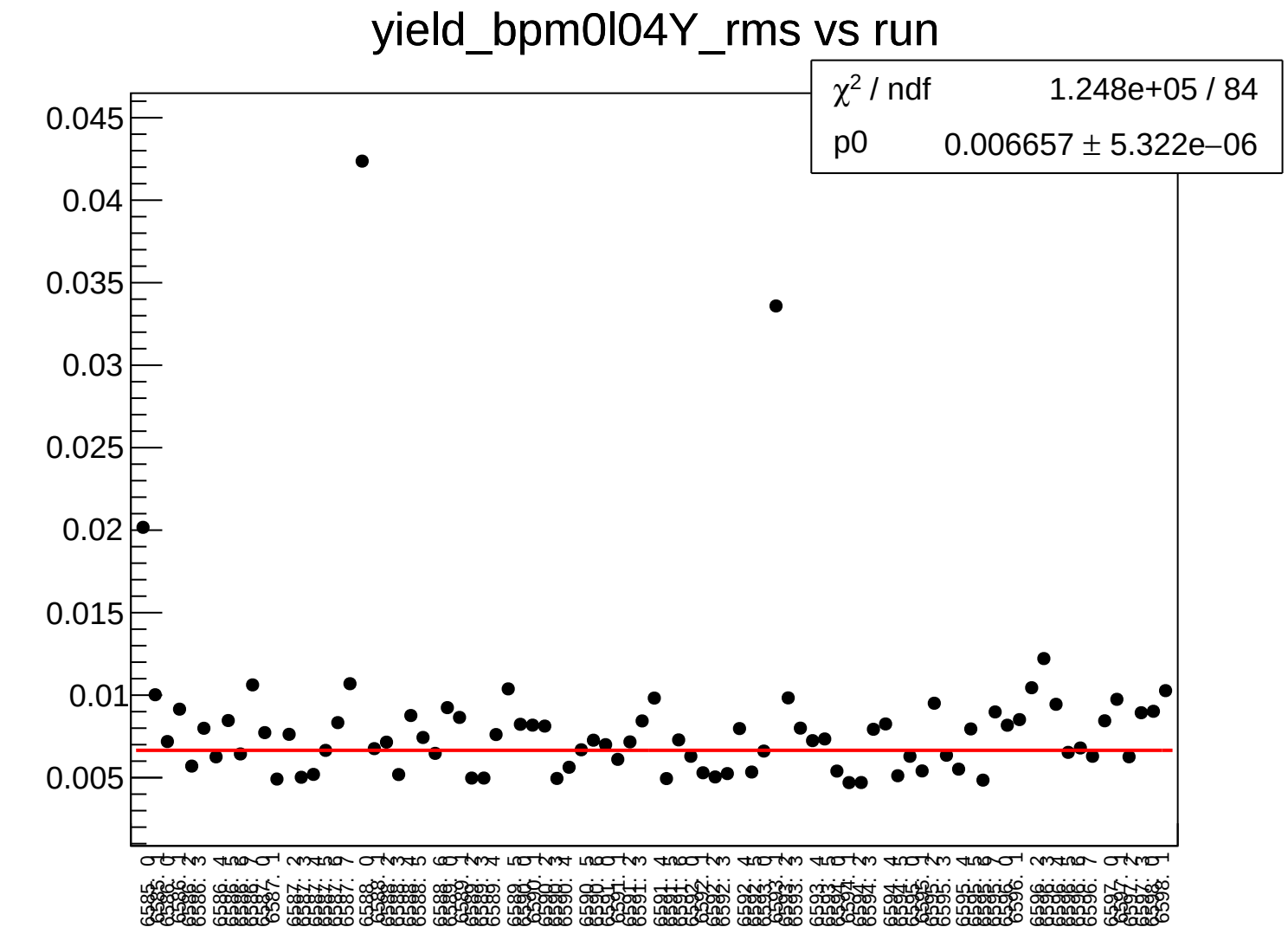

yield_bpm0l04X_mean vs run
χ² / ndf 1.065e+07 / 84
p0 −2.88 ± 8.117e−06
−2.84
−2.86
−2.88
−2.9
−2.92
−2.94
−2.96
−2.98
pull
Entries 85
Mean 1633
Std Dev 1583
400
200
0
−200
−400
−600
−800
−1000

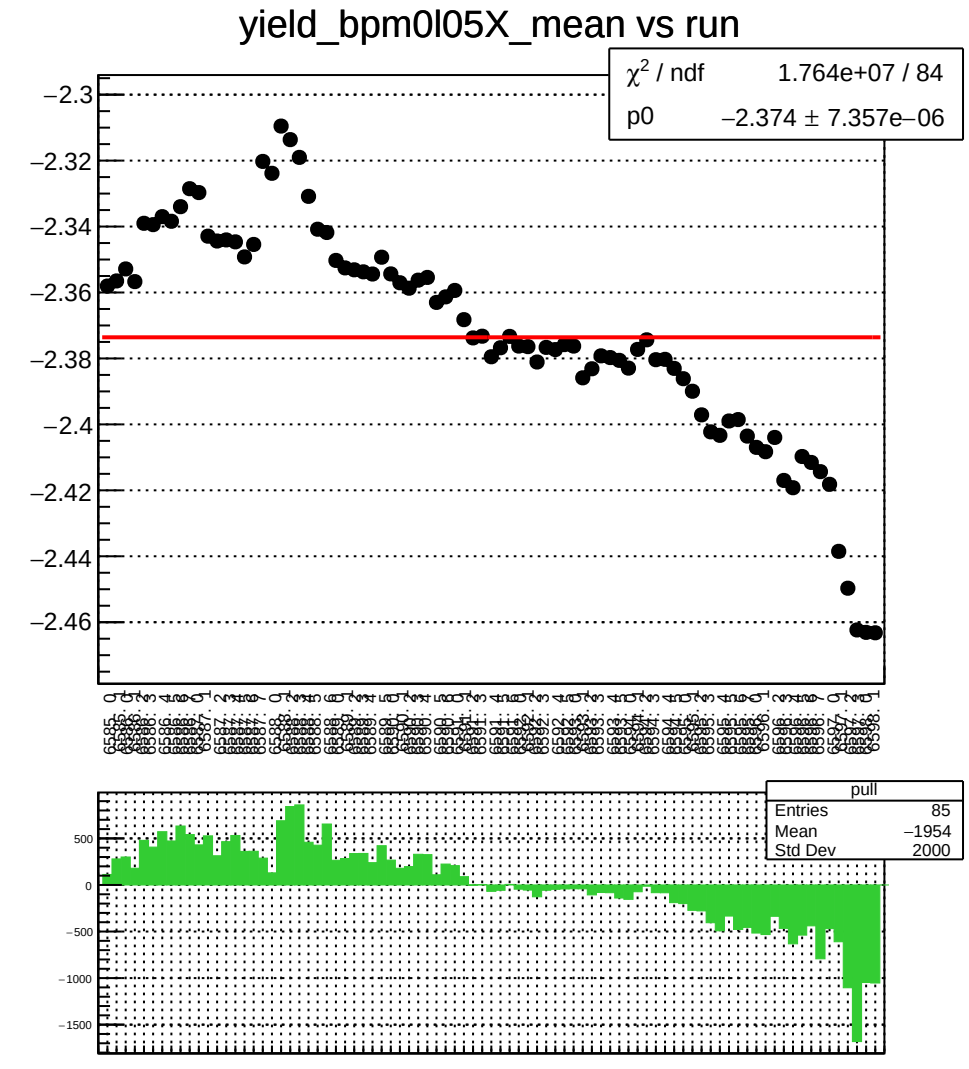

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

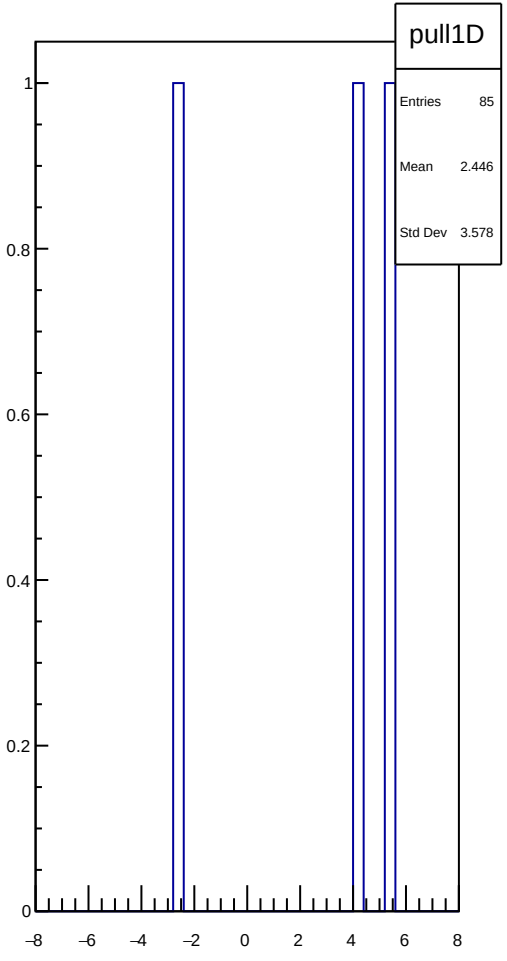

yield_bpm0l04X_rms vs run
χ² / ndf 3.128e+04 / 84
p0 0.007391 ± 5.739e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

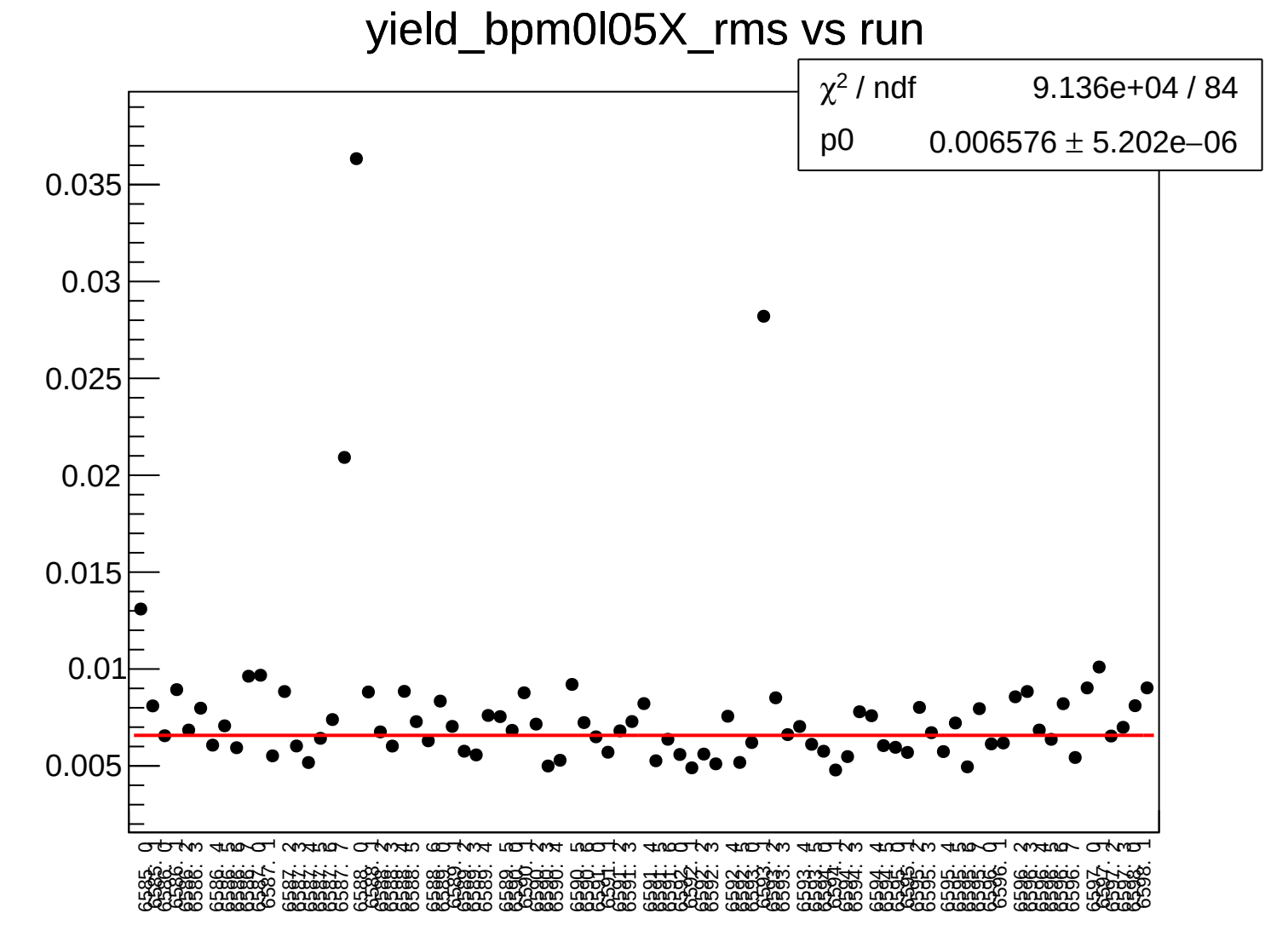

yield_bpm0l04Y_mean vs run
χ² / ndf 4.048e+06 / 84
p0 0.9055 ± 7.526e−06
0.95
0.94
0.93
0.92
0.91
0.9
0.89
0.88
pull
Entries 85
Mean 333.8
Std Dev 280.8
600
400
200
0
−200
−400

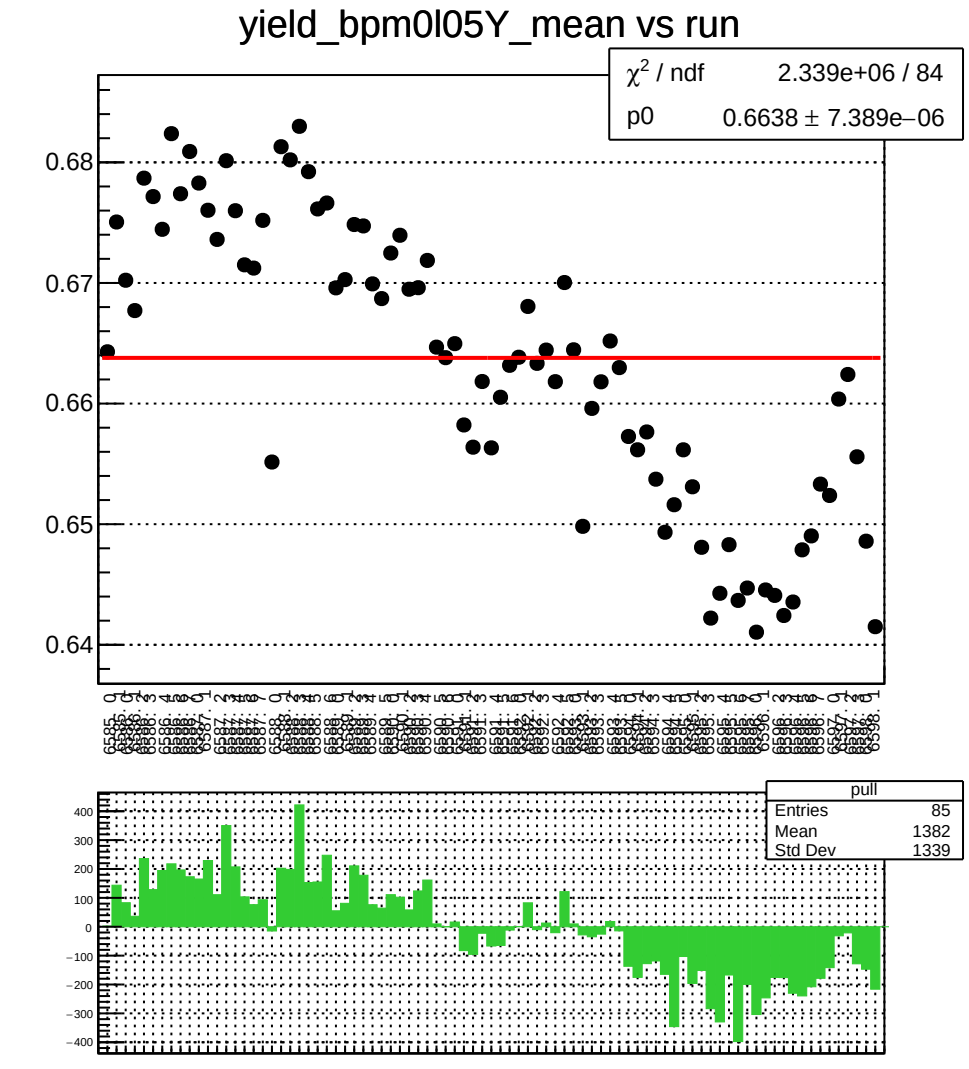

pull1D
Entries 85
Mean −2.766
Std Dev 4.331
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

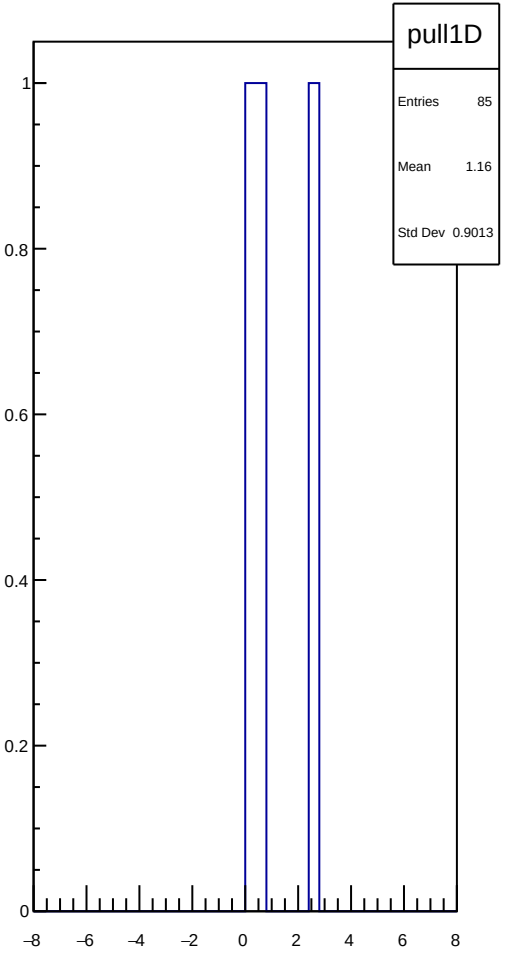

yield_bpm0l04Y_rms vs run
χ² / ndf 1.248e+05 / 84
p0 0.006657 ± 5.322e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

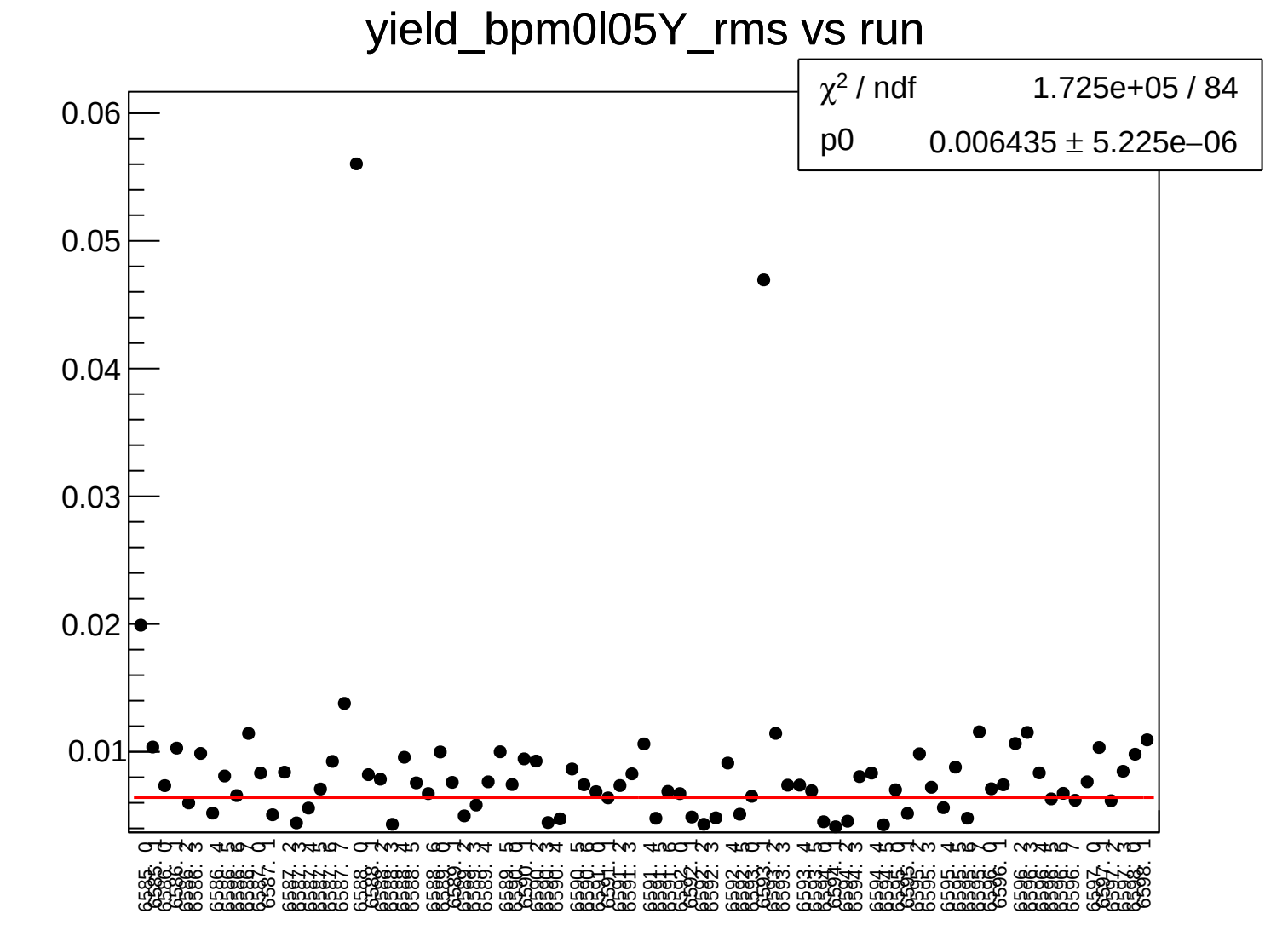

yield_bpm0l05X_mean vs run
χ² / ndf 1.764e+07 / 84
p0 −2.374 ± 7.357e−06
−2.3
−2.32
−2.34
−2.36
−2.38
−2.4
−2.42
−2.44
−2.46
pull
Entries 85
Mean −1954
Std Dev 2000
500
0
−500
−1000
−1500

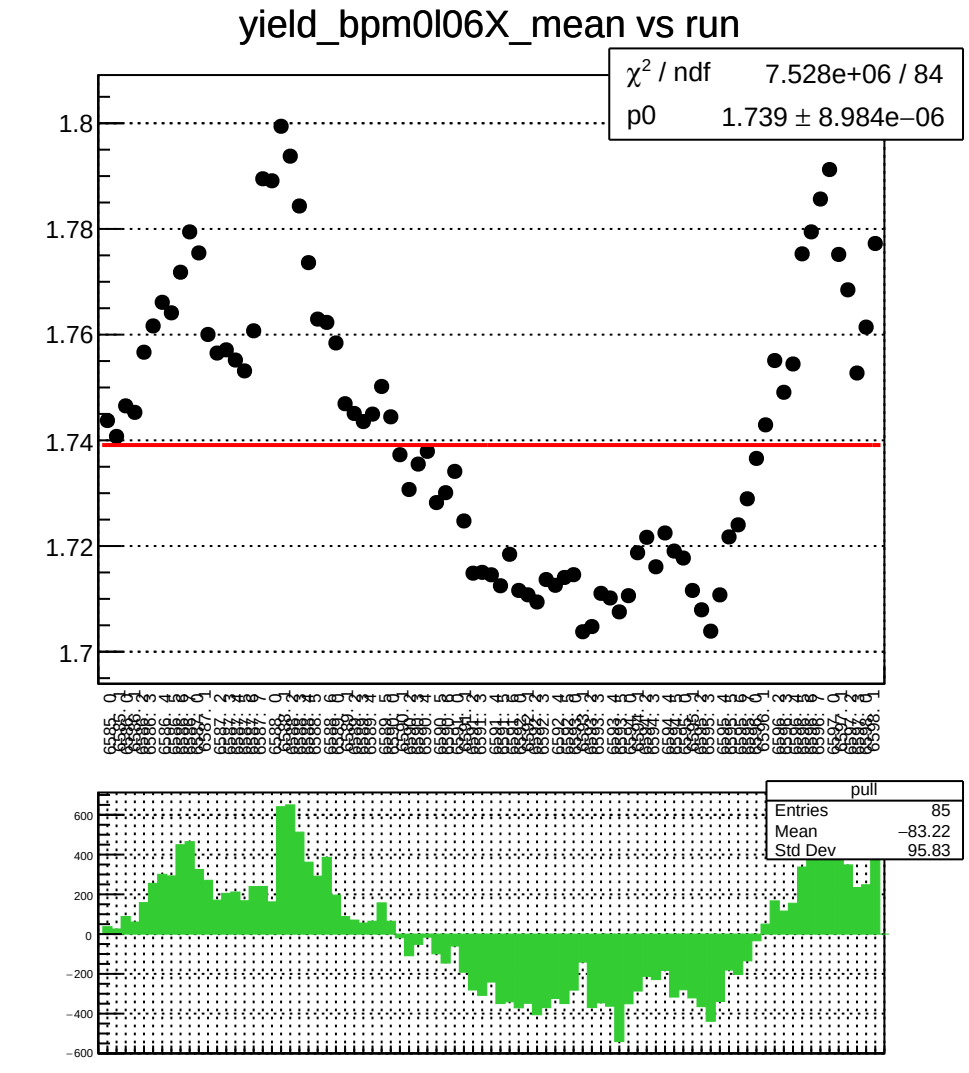

pull1D
Entries 85
Mean 2.446
Std Dev 3.578
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

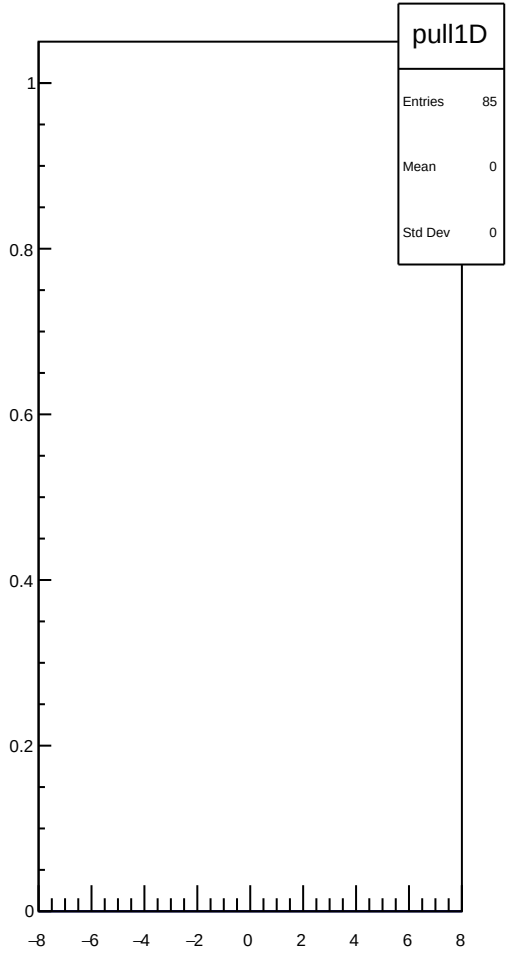

yield_bpm0l05X_rms vs run
χ^2 / ndf 9.136e+04 / 84
p0 0.006576 ± 5.202e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

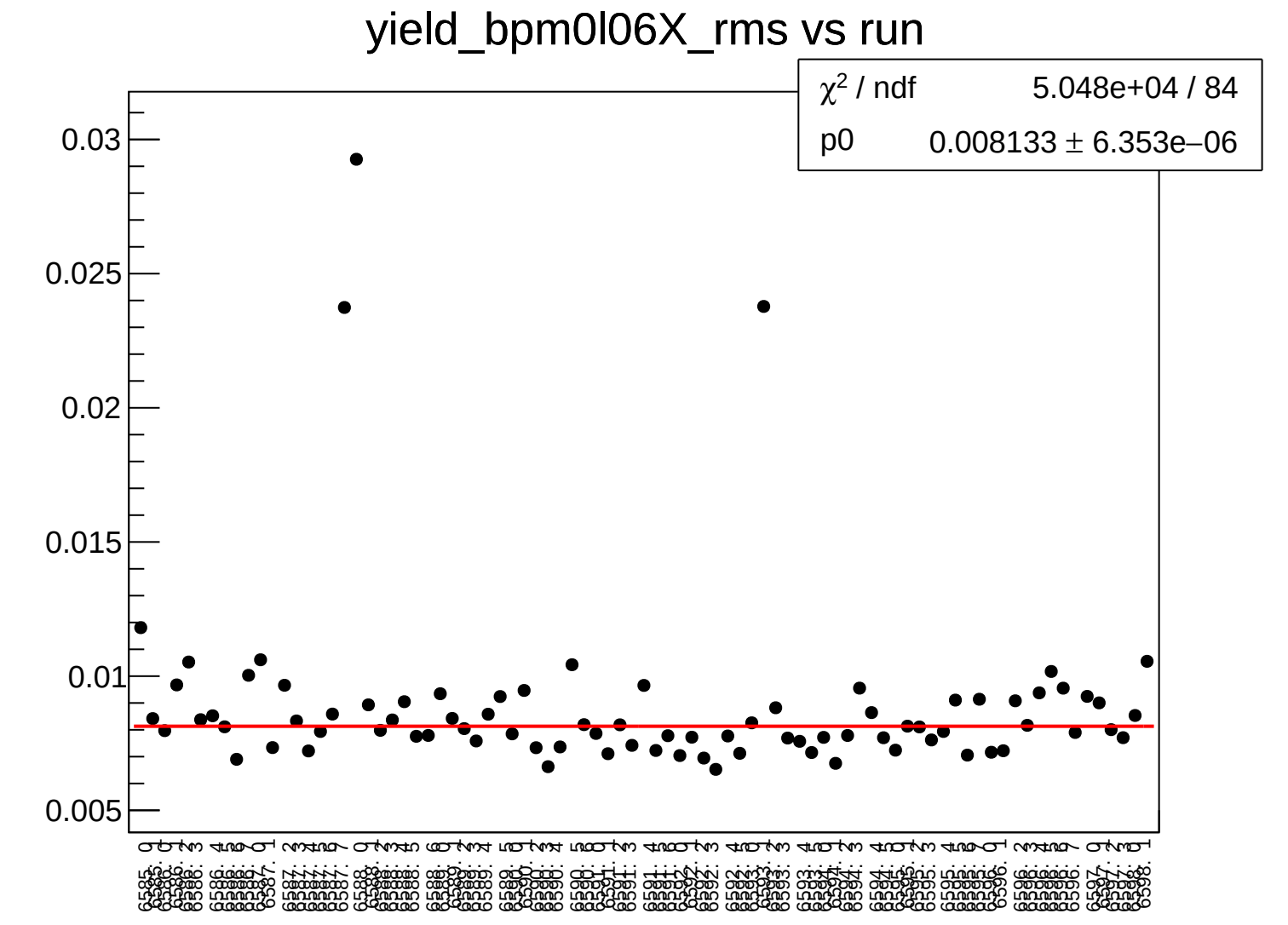

yield_bpm0l05Y_mean vs run
χ² / ndf 2.339e+06 / 84
p0 0.6638 ± 7.389e−06
0.68
0.67
0.66
0.65
0.64
pull
Entries 85
Mean 1382
Std Dev 1339
400
300
200
100
0
−100
−200
−300
−400

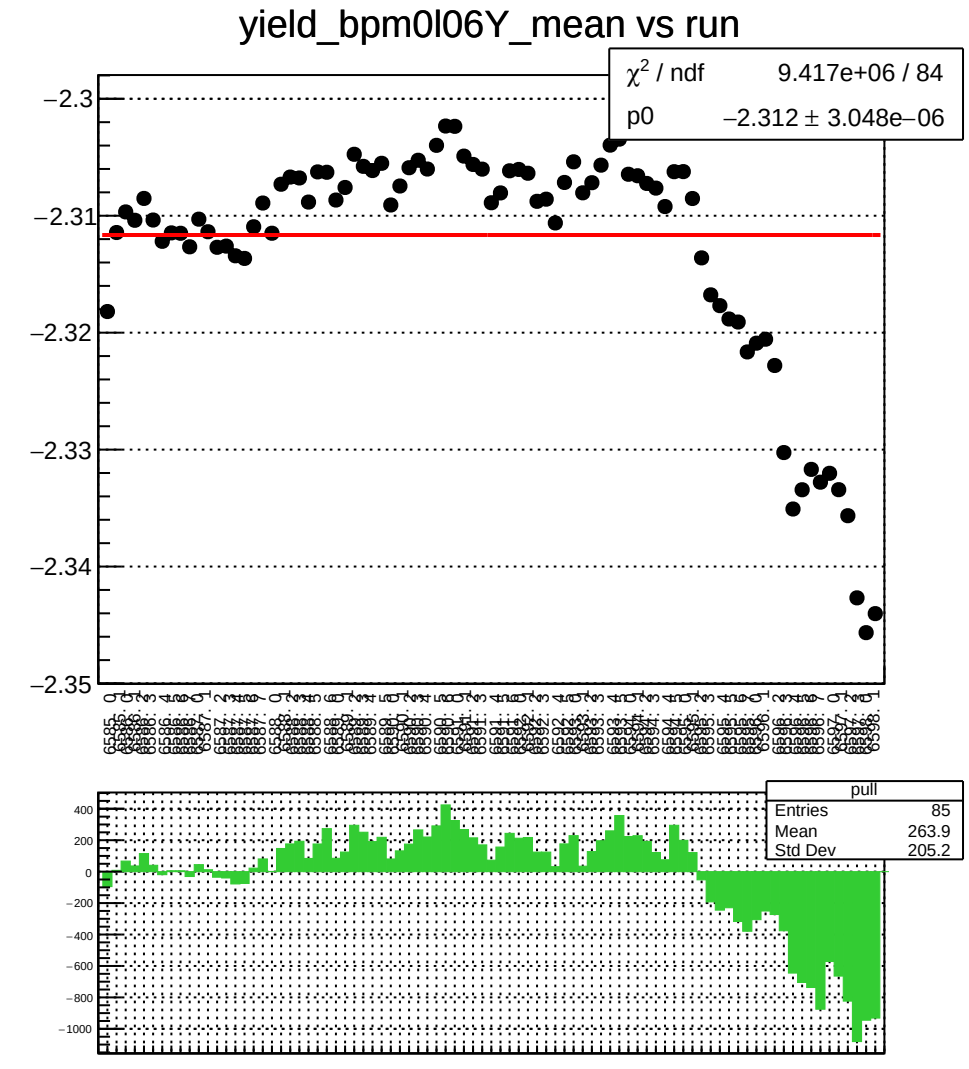

pull1D
Entries 85
Mean 1.16
Std Dev 0.9013
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

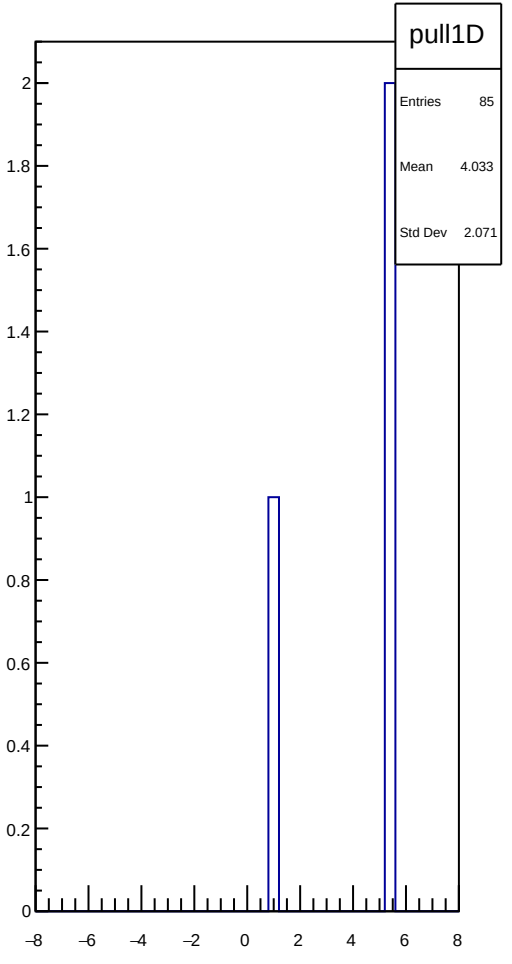

yield_bpm0l05Y_rms vs run
χ² / ndf 1.725e+05 / 84
p0 0.006435 ± 5.225e−06
0.06
0.05
0.04
0.03
0.02
0.01

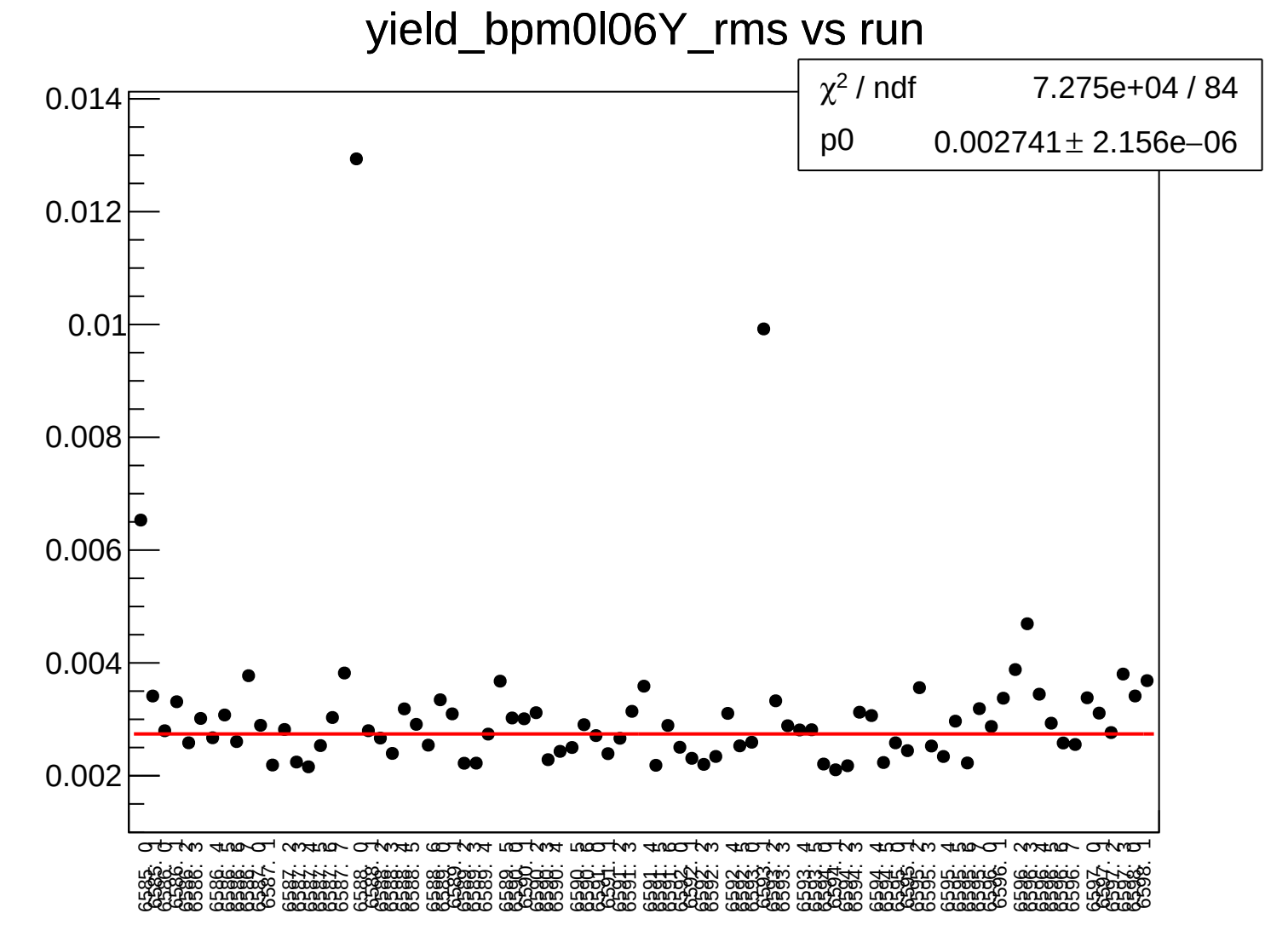

yield_bpm0l06X_mean vs run
χ² / ndf 7.528e+06 / 84
p0 1.739 ± 8.984e−06
1.8
1.78
1.76
1.74
1.72
1.7
pull
Entries 85
Mean −83.22
Std Dev 95.83
600
400
200
0
−200
−400
−600

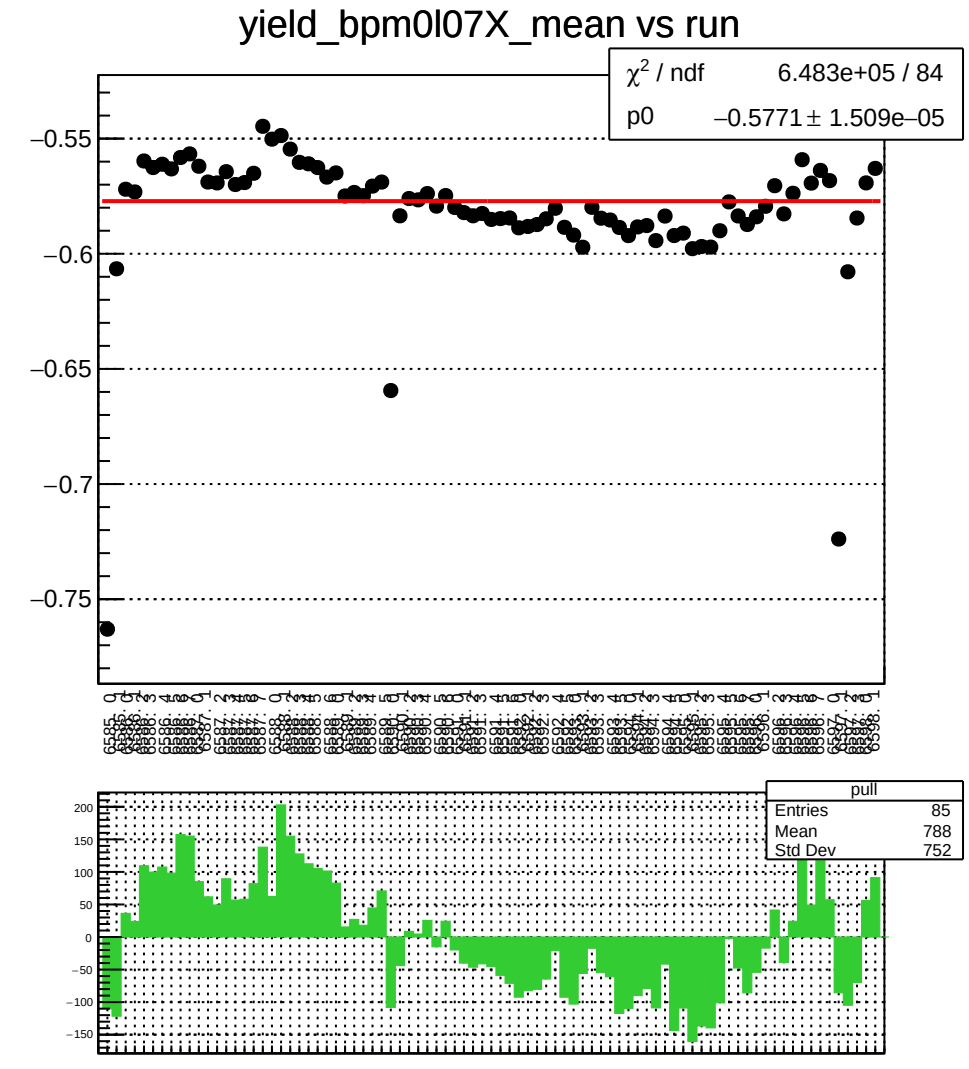

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

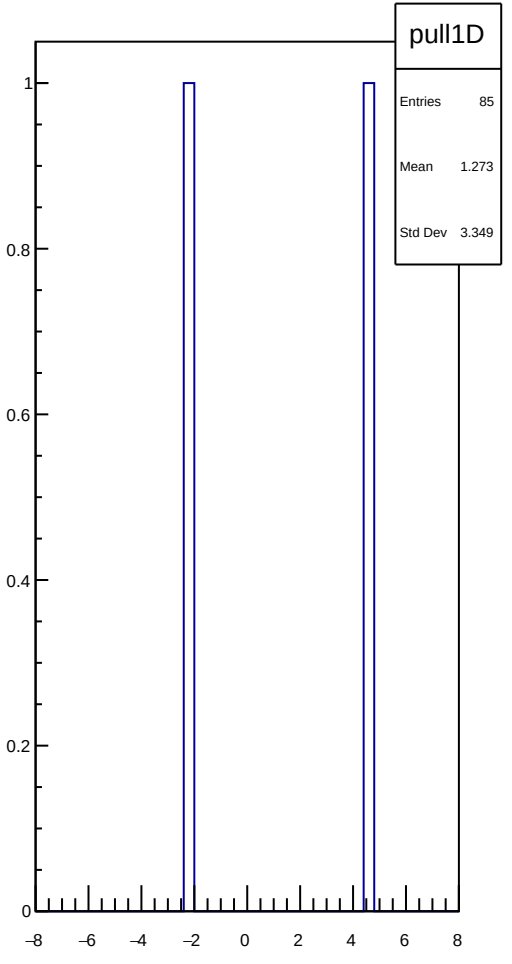

yield_bpm0l06X_rms vs run
χ^2 / ndf 5.048e+04 / 84
p0 0.008133 ± 6.353e−06
0.03
0.025
0.02
0.015
0.01
0.005

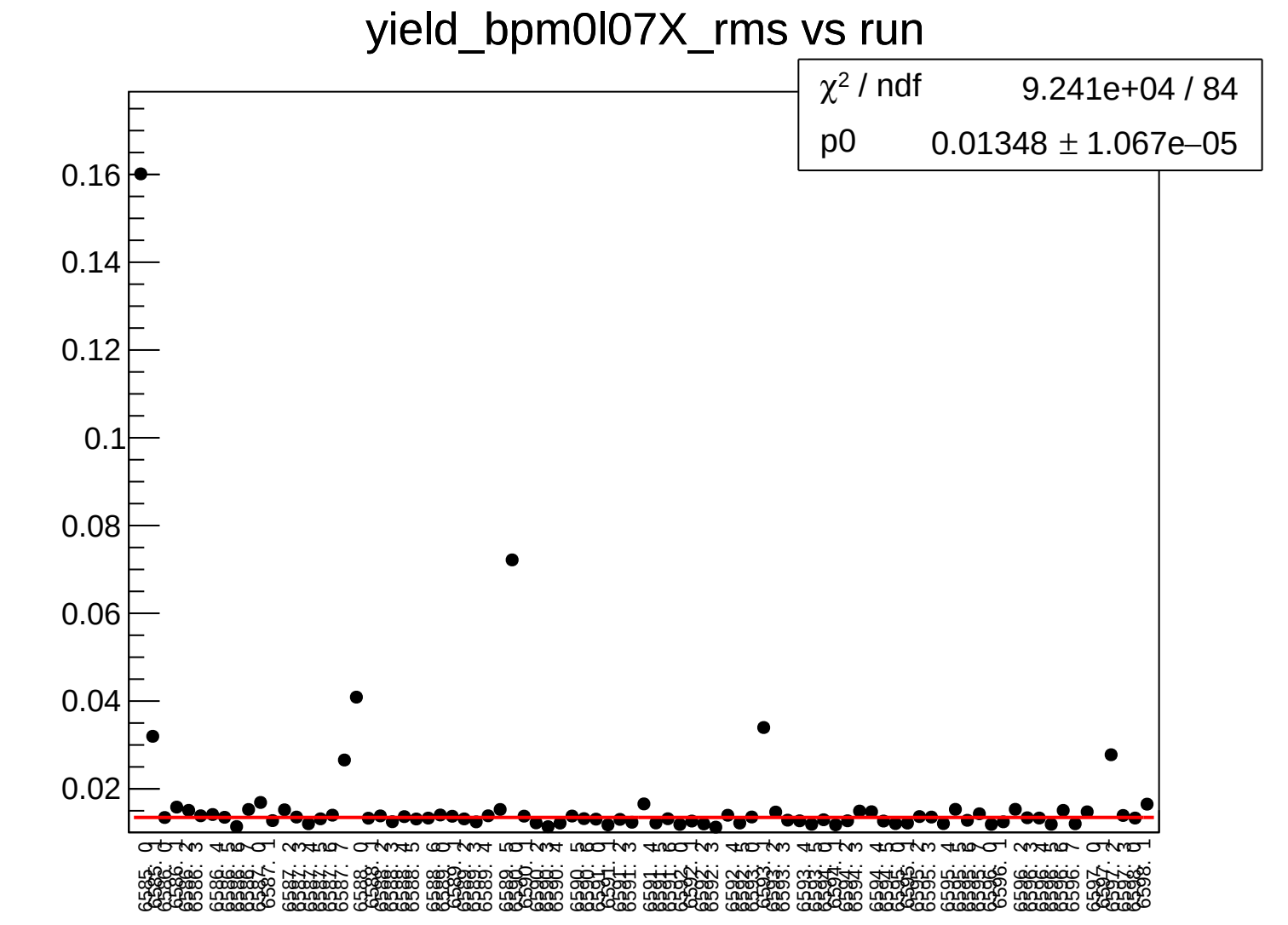

yield_bpm0l06Y_mean vs run
χ² / ndf 9.417e+06 / 84
p0 −2.312 ± 3.048e−06
−2.3
−2.31
−2.32
−2.33
−2.34
−2.35
pull
Entries 85
Mean 263.9
Std Dev 205.2
400
200
0
−200
−400
−600
−800
−1000

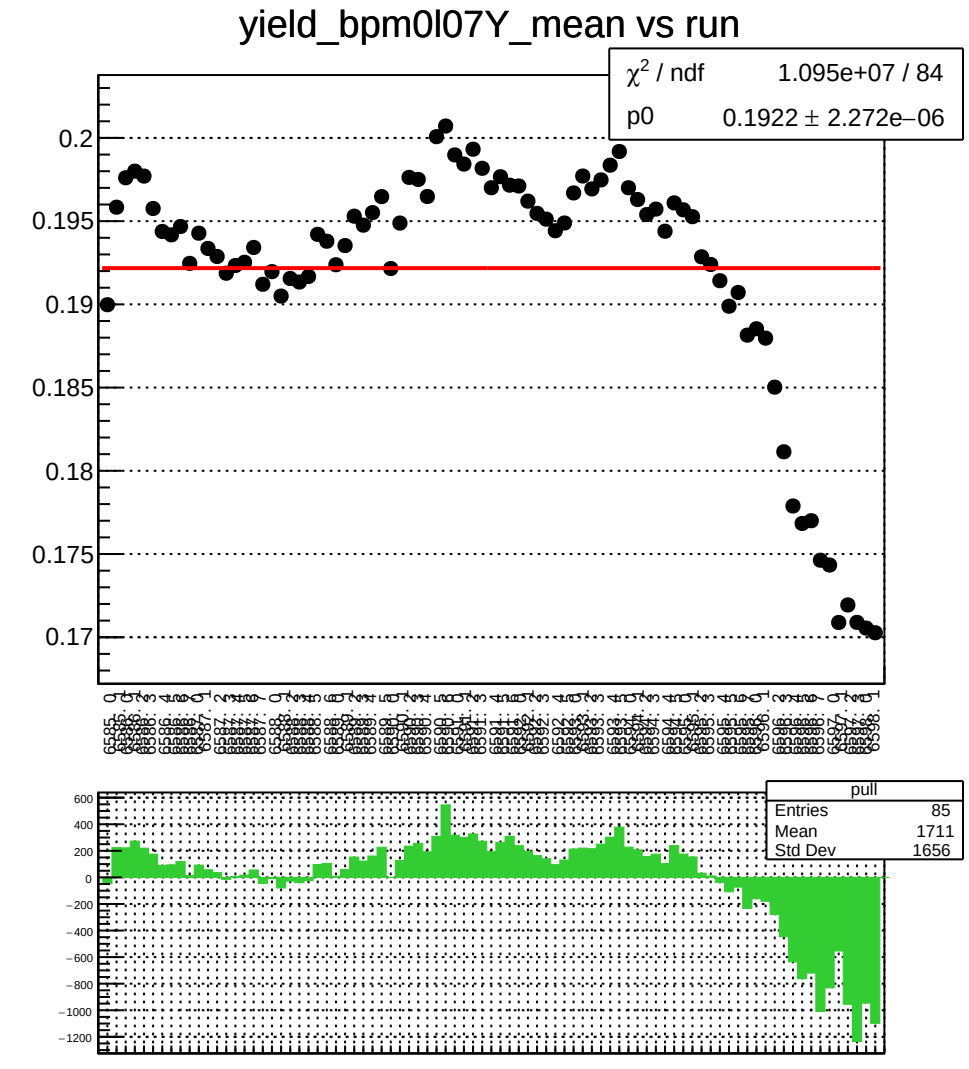

pull1D
Entries 85
Mean 4.033
Std Dev 2.071
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

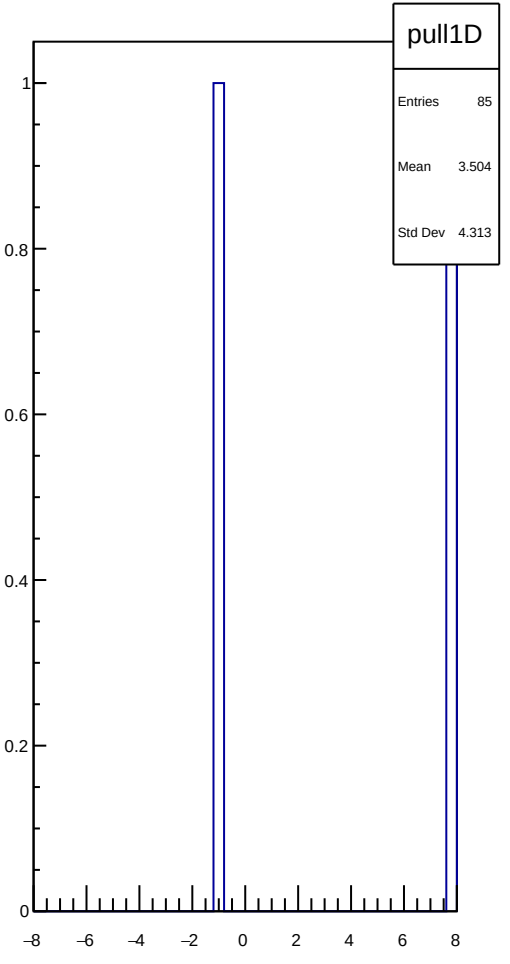

yield_bpm0l06Y_rms vs run
χ^2 / ndf 7.275e+04 / 84
p0 0.002741 ± 2.156e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

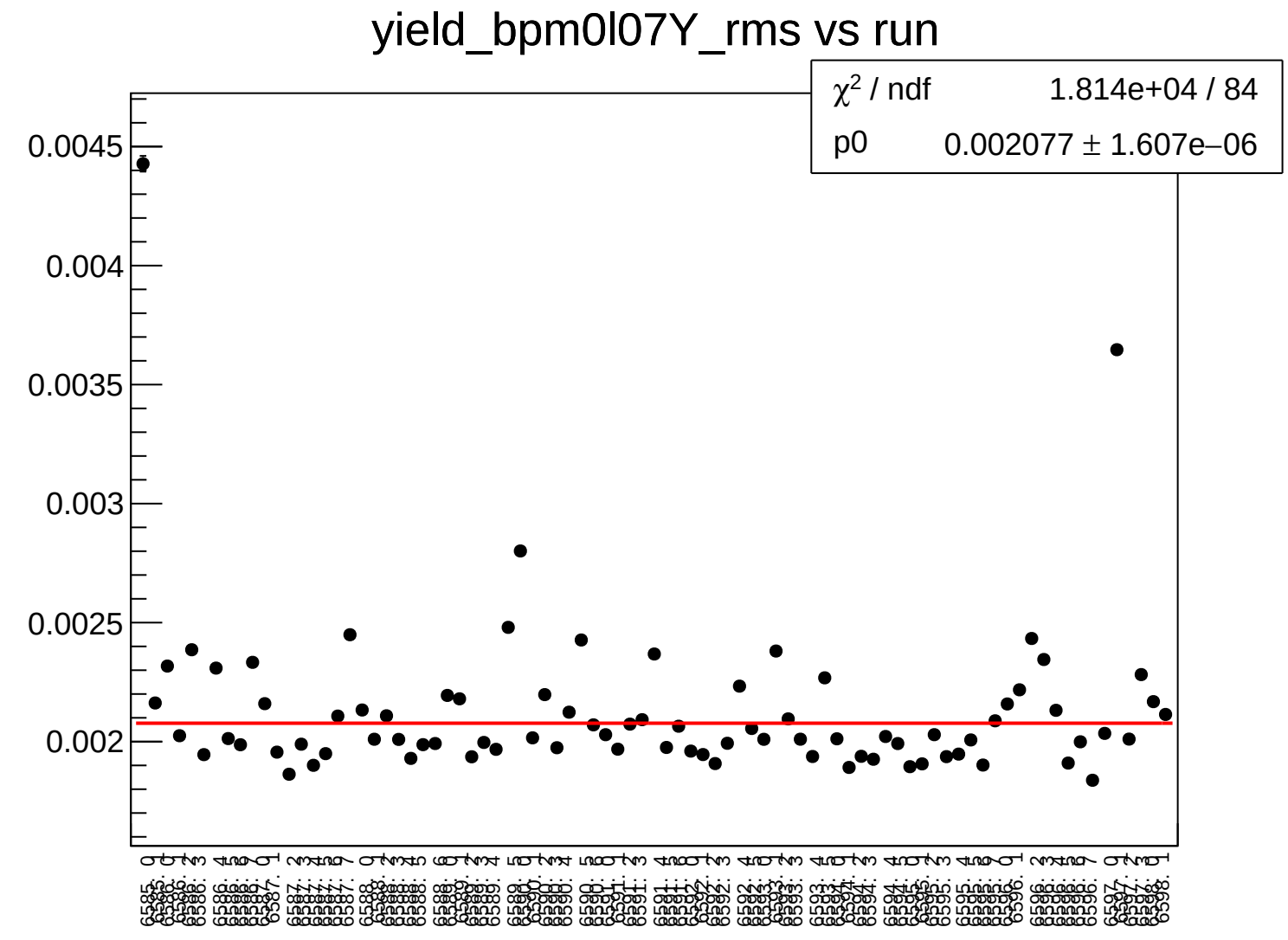

yield_bpm0l07X_mean vs run
χ² / ndf 6.483e+05 / 84
p0 −0.5771 ± 1.509e−05
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 85
Mean 788
Std Dev 752
200
150
100
50
0
−50
−100
−150

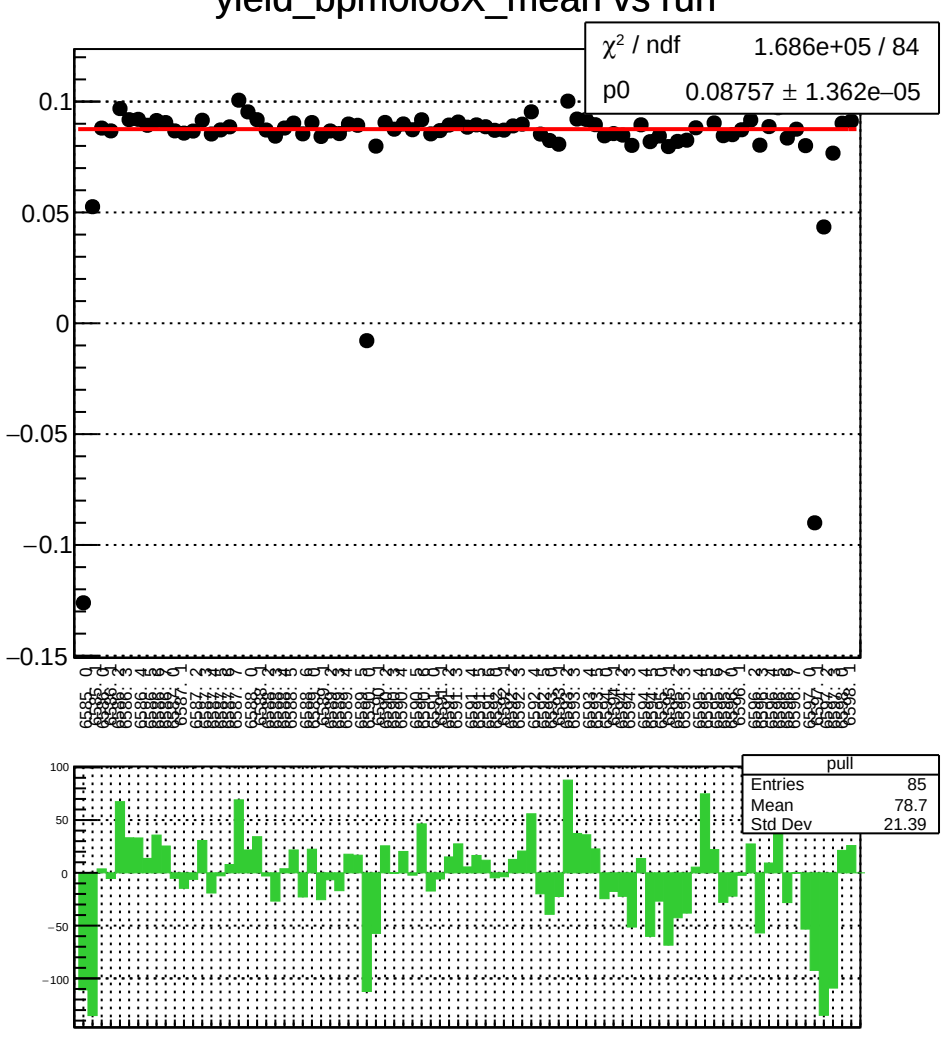

pull1D
Entries 85
Mean 1.273
Std Dev 3.349
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

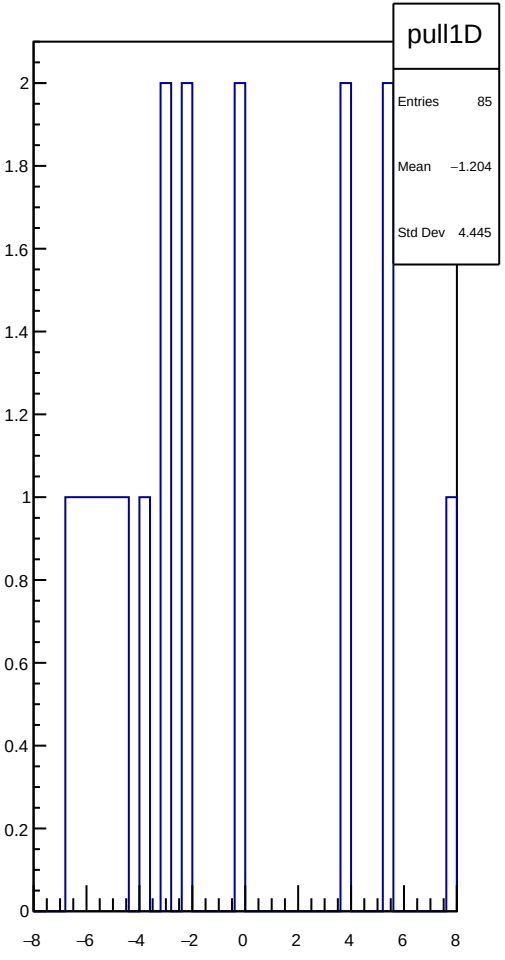

yield_bpm0l07X_rms vs run
χ² / ndf 9.241e+04 / 84
p0 0.01348 ± 1.067e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

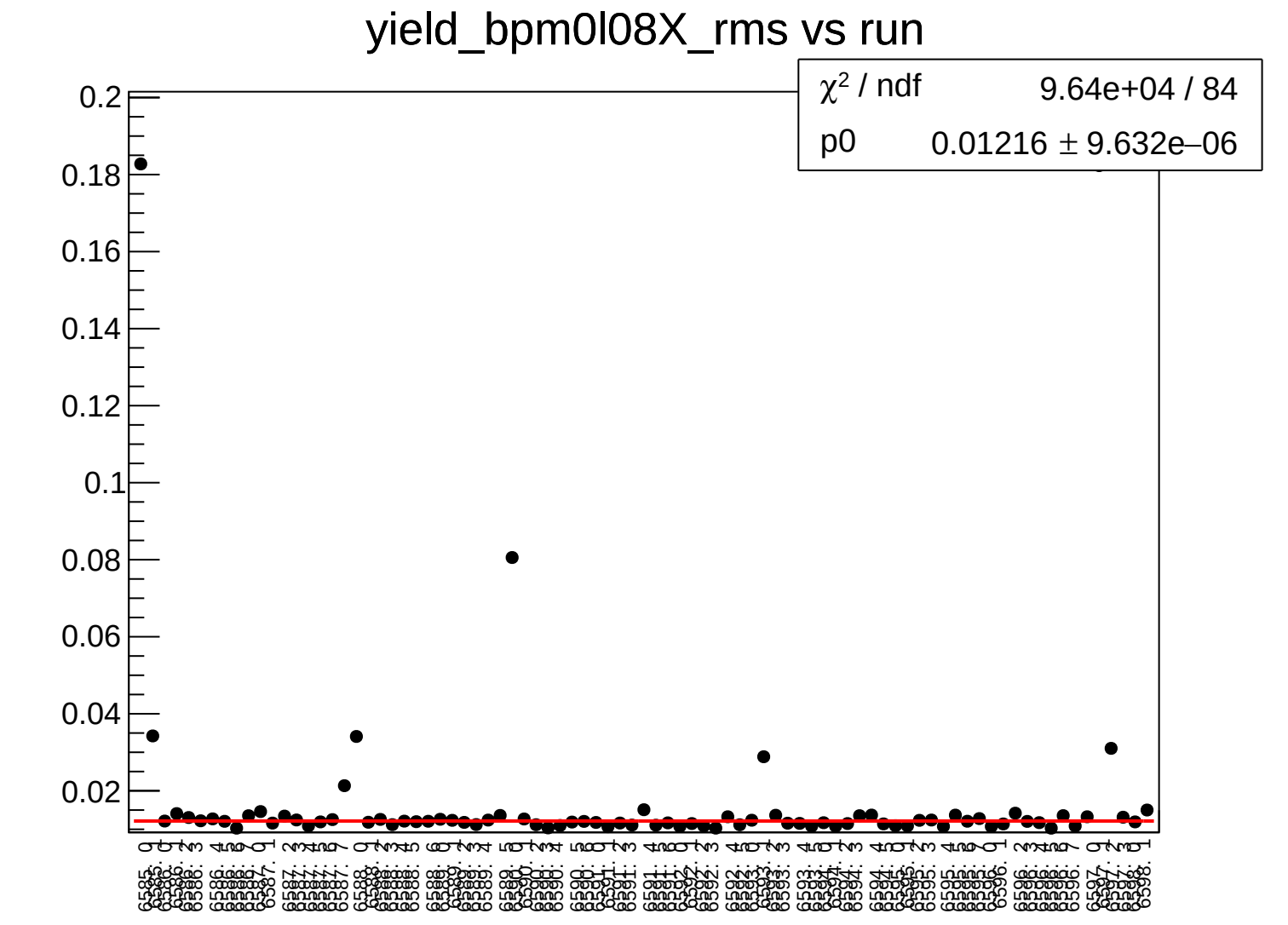

yield_bpm0l07Y_mean vs run
χ² / ndf 1.095e+07 / 84
p0 0.1922 ± 2.272e−06
0.2
0.195
0.19
0.185
0.18
0.175
0.17
pull
Entries 85
Mean 1711
Std Dev 1656
600
400
200
0
−200
−400
−600
−800
−1000
−1200

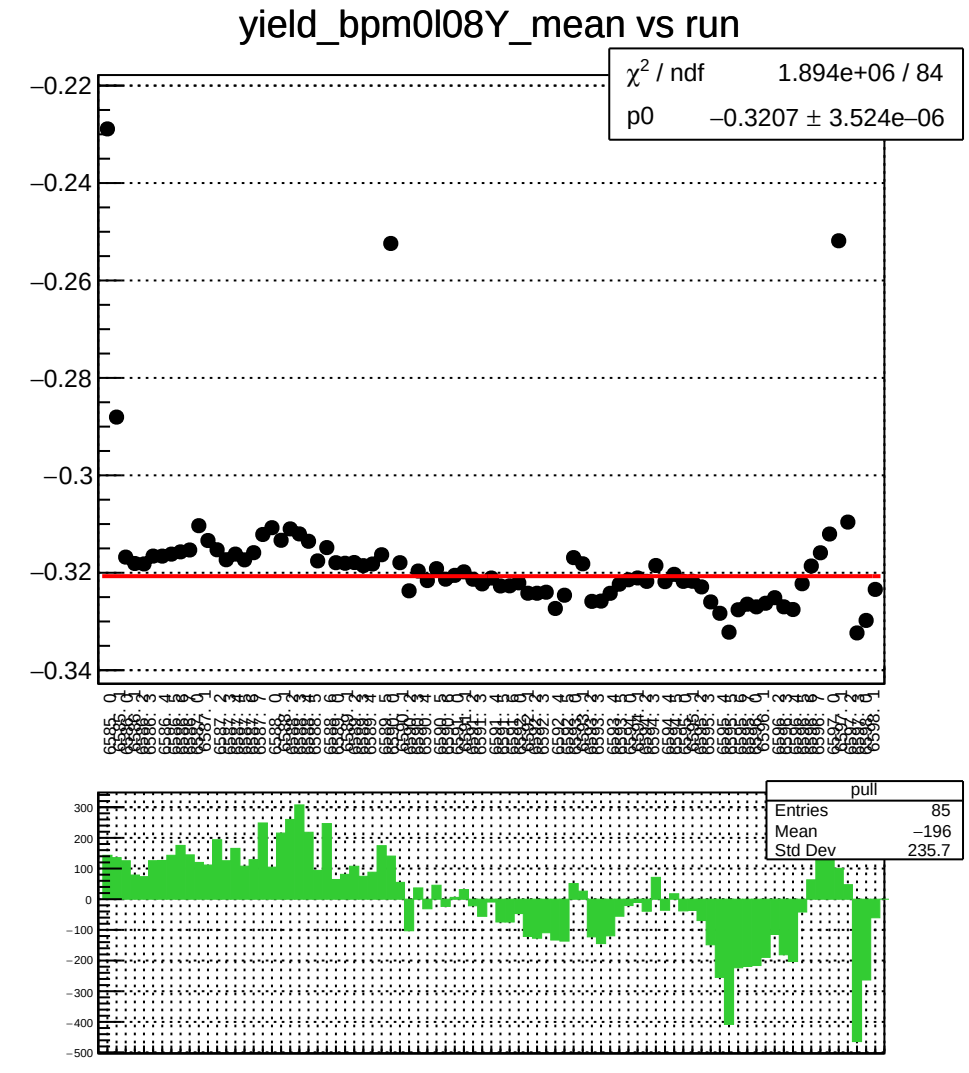

pull1D
Entries 85
Mean 3.504
Std Dev 4.313
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

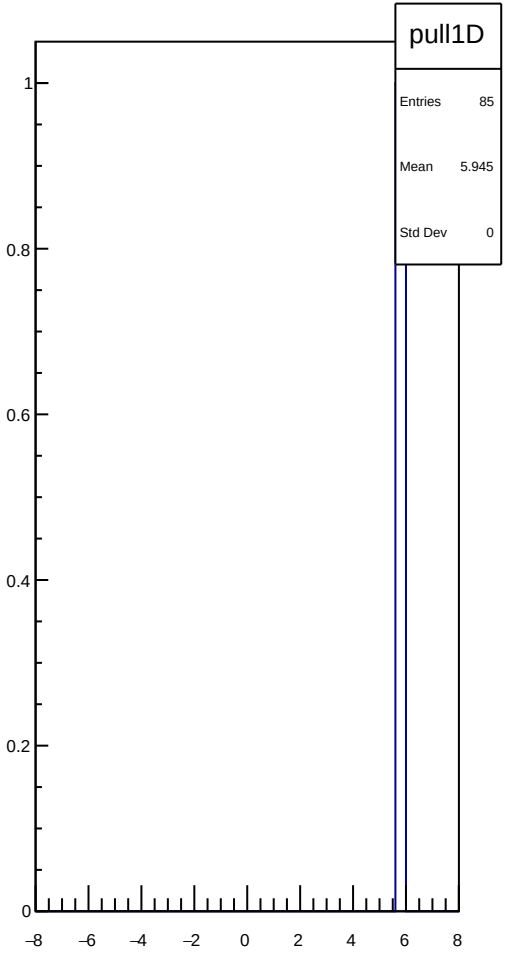

yield_bpm0l07Y_rms vs run
χ² / ndf 1.814e+04 / 84
p0 0.002077 ± 1.607e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002

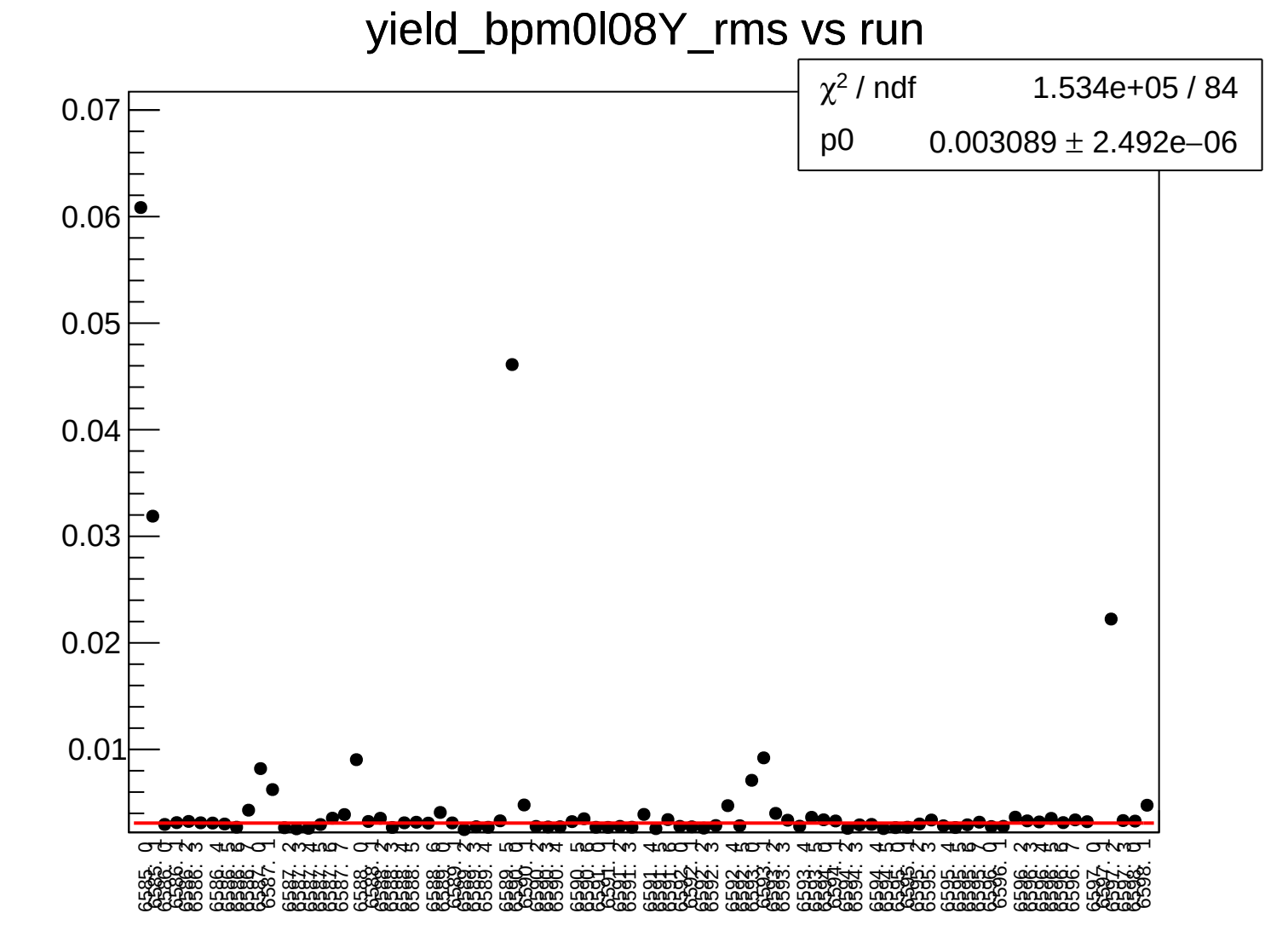

yield_bpm0l08X_mean vs run
χ² / ndf 1.686e+05 / 84
p0 0.08757 ± 1.362e−05
pull
Entries 85
Mean 78.7
Std Dev 21.39

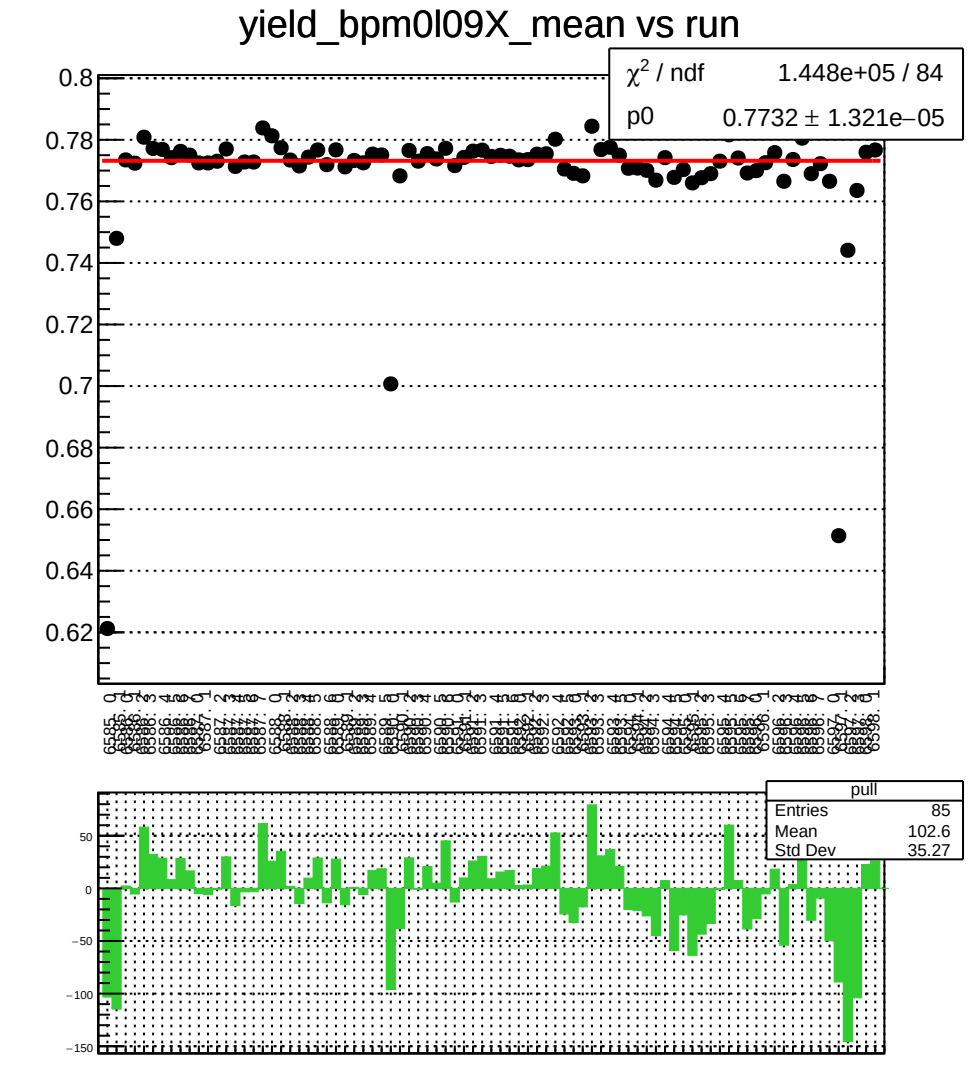

pull1D
Entries 85
Mean −1.204
Std Dev 4.445

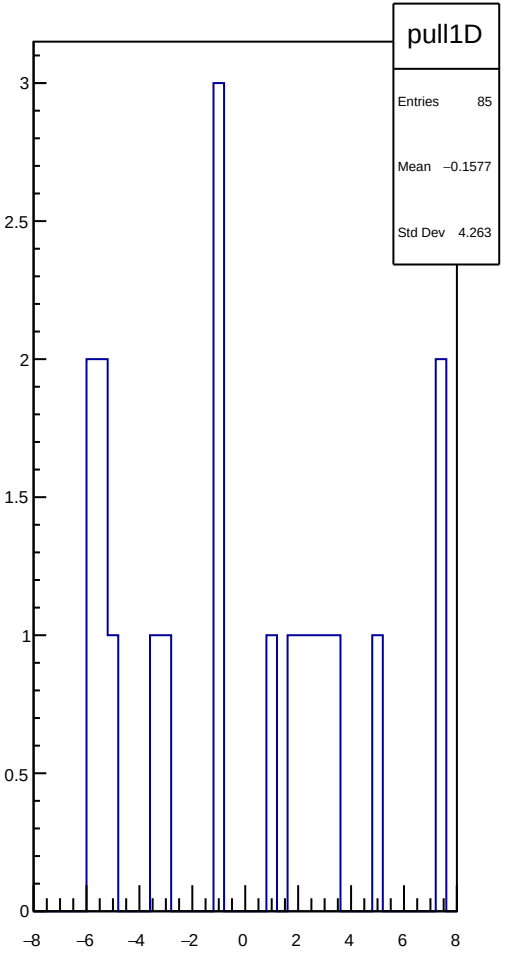

yield_bpm0l08X_rms vs run
χ² / ndf 9.64e+04 / 84
p0 0.01216 ± 9.632e–06
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

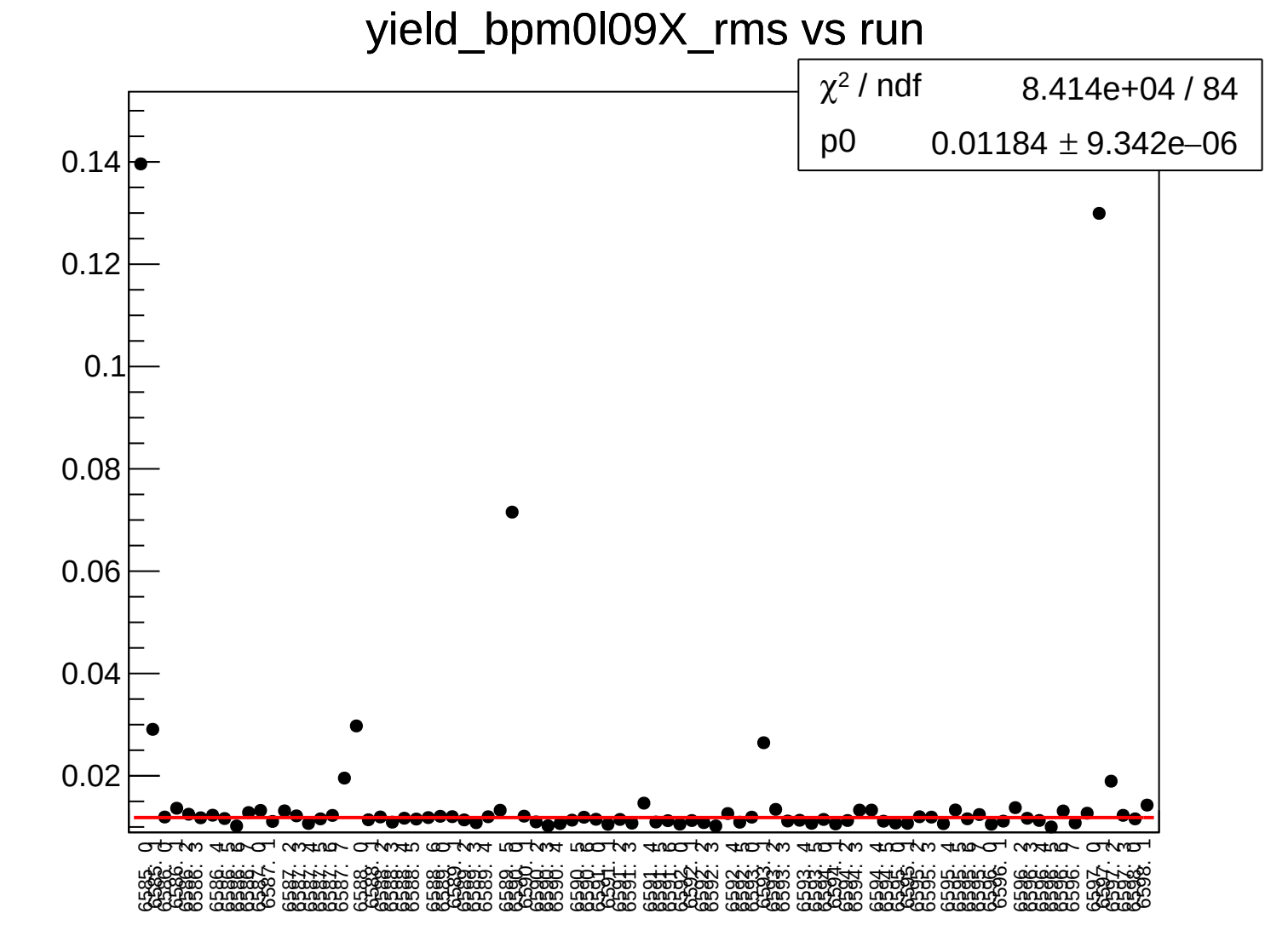

yield_bpm0l08Y_mean vs run
χ² / ndf 1.894e+06 / 84
p0 −0.3207 ± 3.524e−06
−0.22
−0.24
−0.26
−0.28
−0.3
−0.32
−0.34
pull
Entries 85
Mean −196
Std Dev 235.7
300
200
100
0
−100
−200
−300
−400
−500

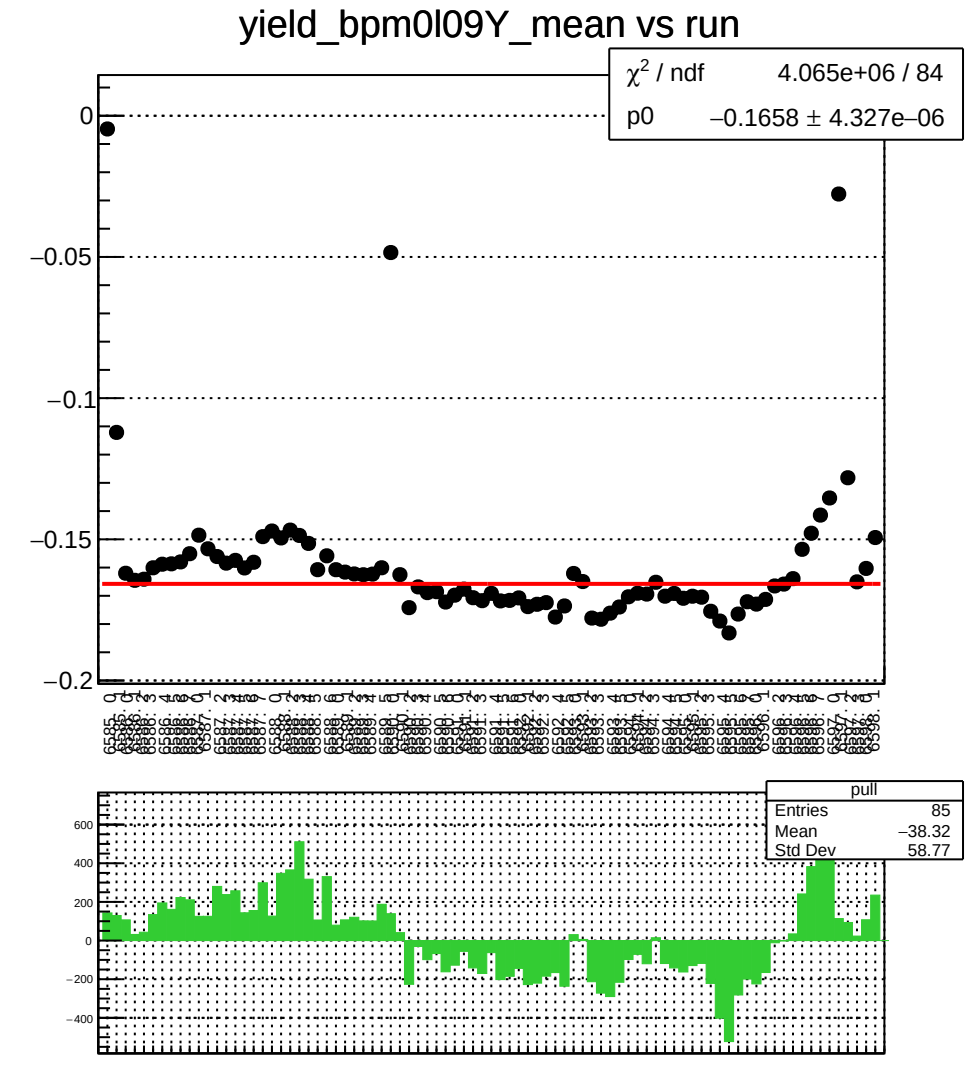

pull1D
Entries 85
Mean 5.945
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

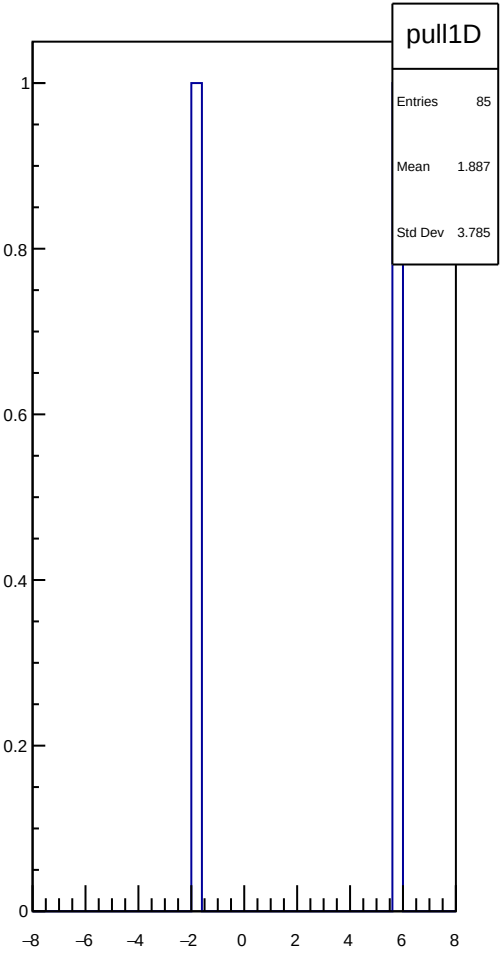

yield_bpm0l08Y_rms vs run
χ² / ndf 1.534e+05 / 84
p0 0.003089 ± 2.492e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

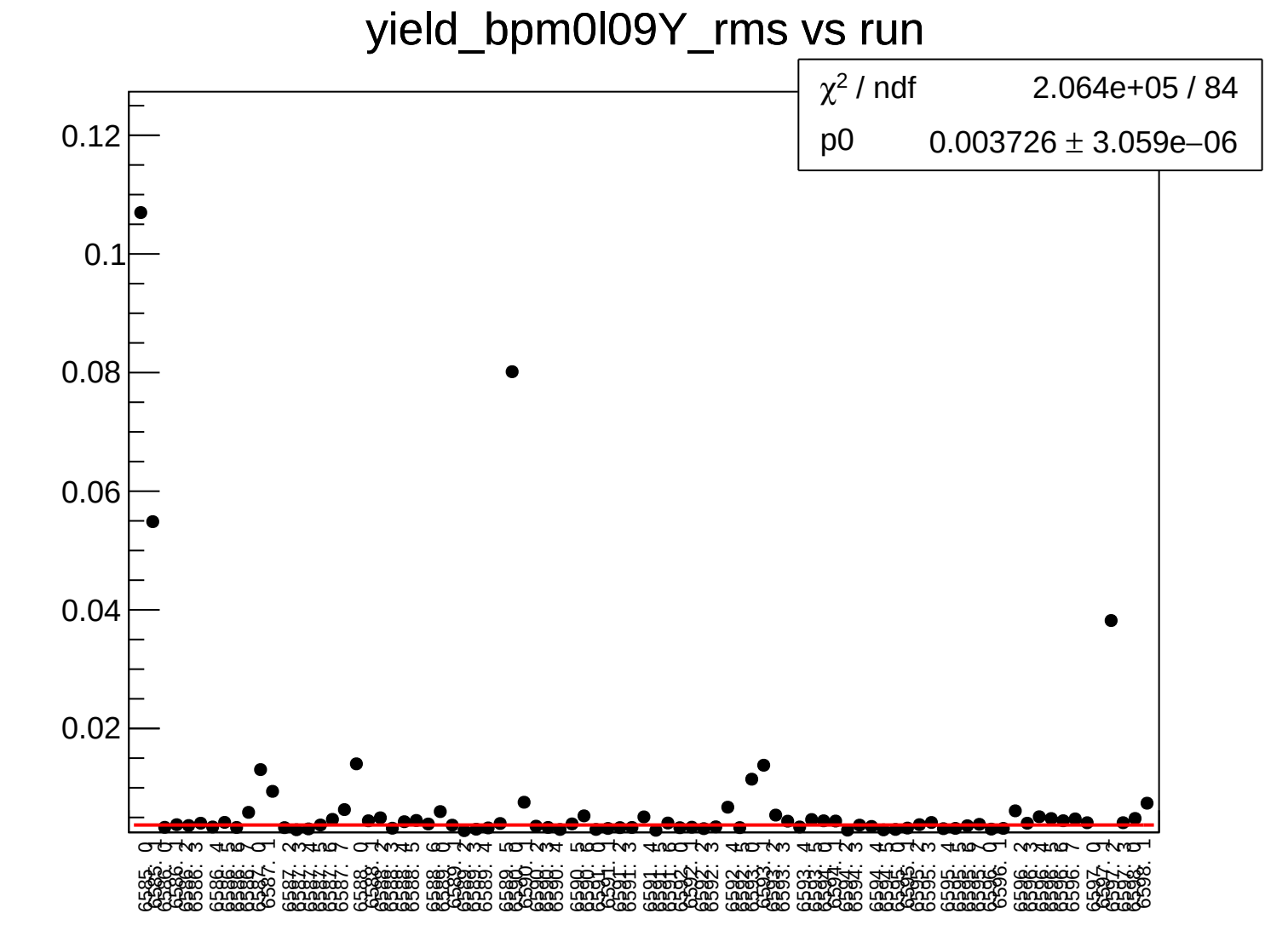

yield_bpm0l09X_mean vs run
χ² / ndf 1.448e+05 / 84
p0 0.7732 ± 1.321e−05
pull
Entries 85
Mean 102.6
Std Dev 35.27

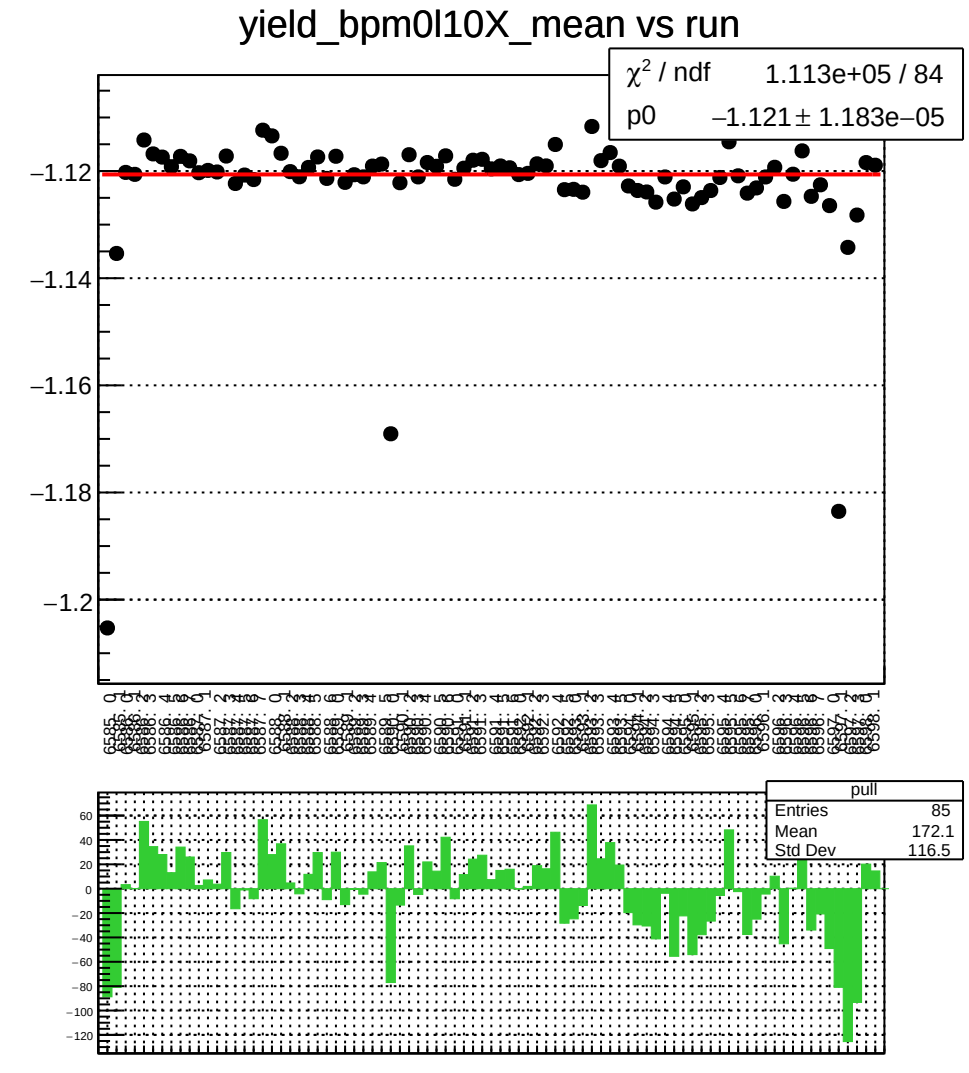

pull1D
Entries 85
Mean −0.1577
Std Dev 4.263

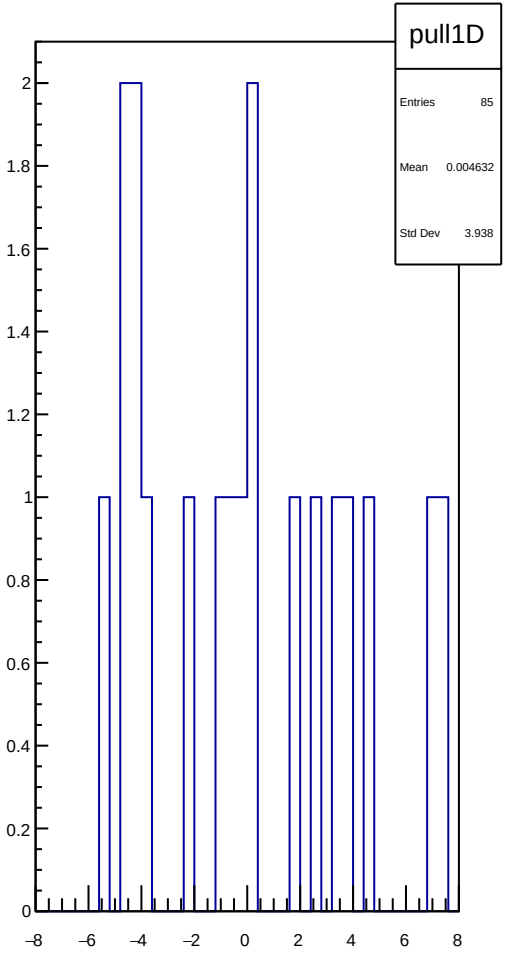

yield_bpm0l09X_rms vs run
χ² / ndf 8.414e+04 / 84
p0 0.01184 ± 9.342e–06
0.14
0.12
0.1
0.08
0.06
0.04
0.02

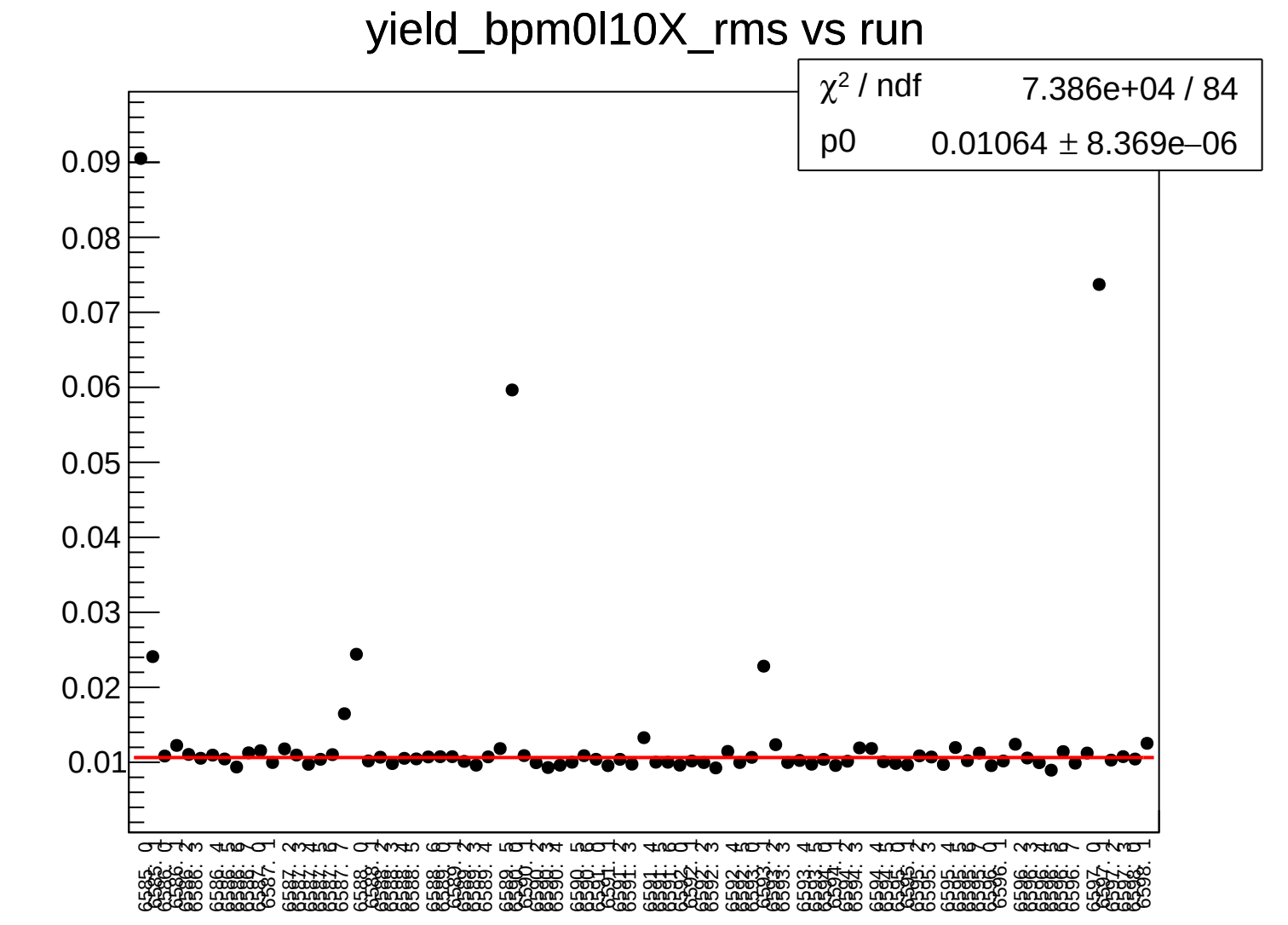

yield_bpm0l09Y_mean vs run
χ² / ndf 4.065e+06 / 84
p0 −0.1658 ± 4.327e−06
0
−0.05
−0.1
−0.15
−0.2
pull
Entries 85
Mean −38.32
Std Dev 58.77
600
400
200
0
−200
−400

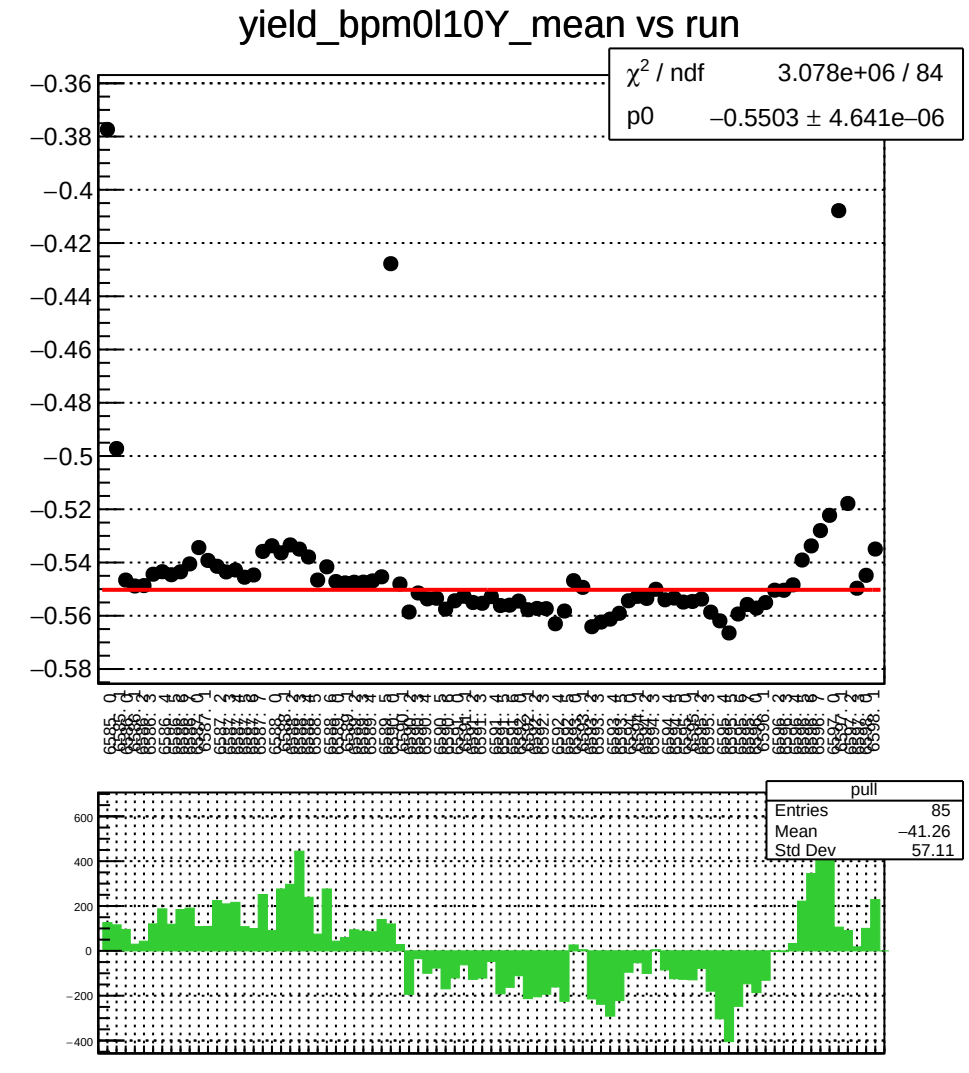

pull1D
Entries 85
Mean 1.887
Std Dev 3.785
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

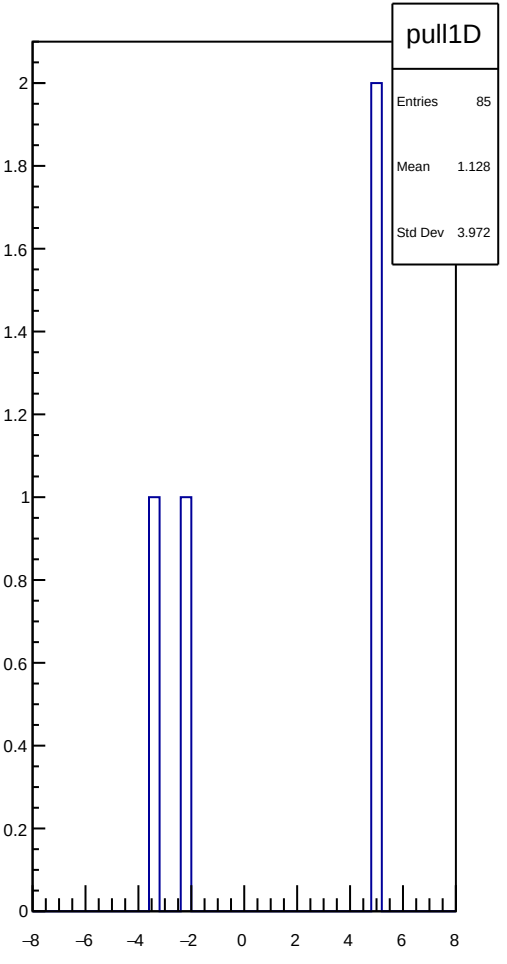

yield_bpm0l09Y_rms vs run
χ² / ndf 2.064e+05 / 84
p0 0.003726 ± 3.059e−06
0.12
0.1
0.08
0.06
0.04
0.02

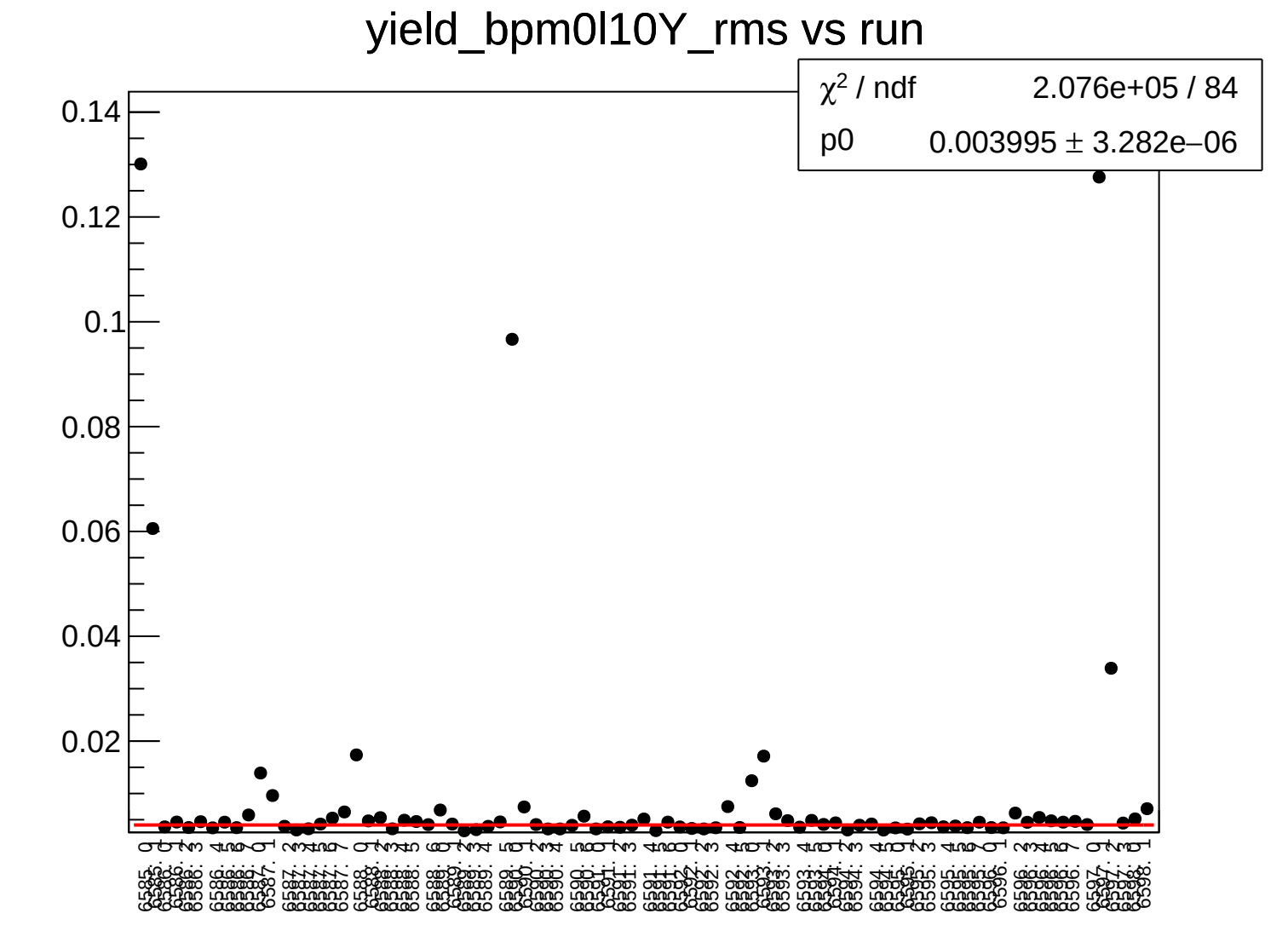

yield_bpm0l10X_mean vs run
χ² / ndf 1.113e+05 / 84
p0 −1.121 ± 1.183e−05
−1.12
−1.14
−1.16
−1.18
−1.2
pull
Entries 85
Mean 172.1
Std Dev 116.5
60
40
20
0
−20
−40
−60
−80
−100
−120

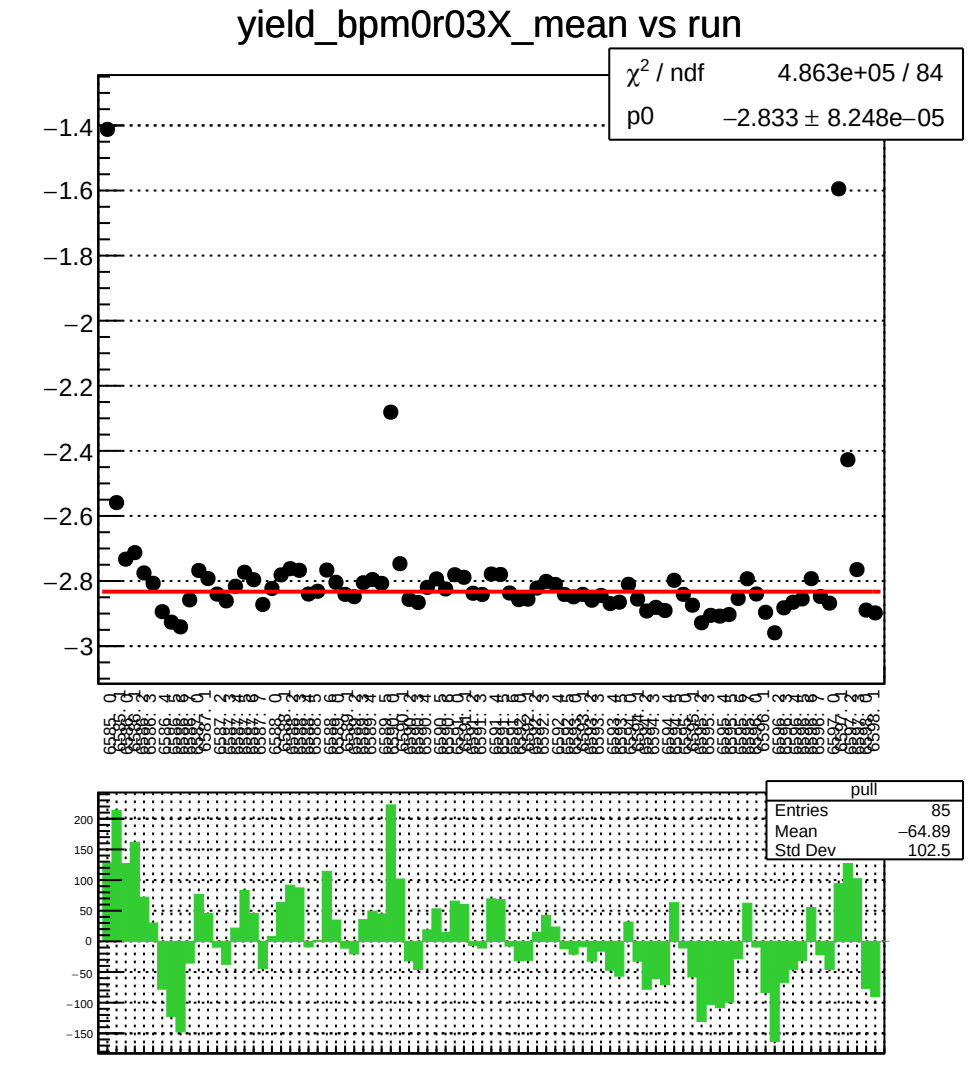

pull1D
Entries 85
Mean 0.004632
Std Dev 3.938
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

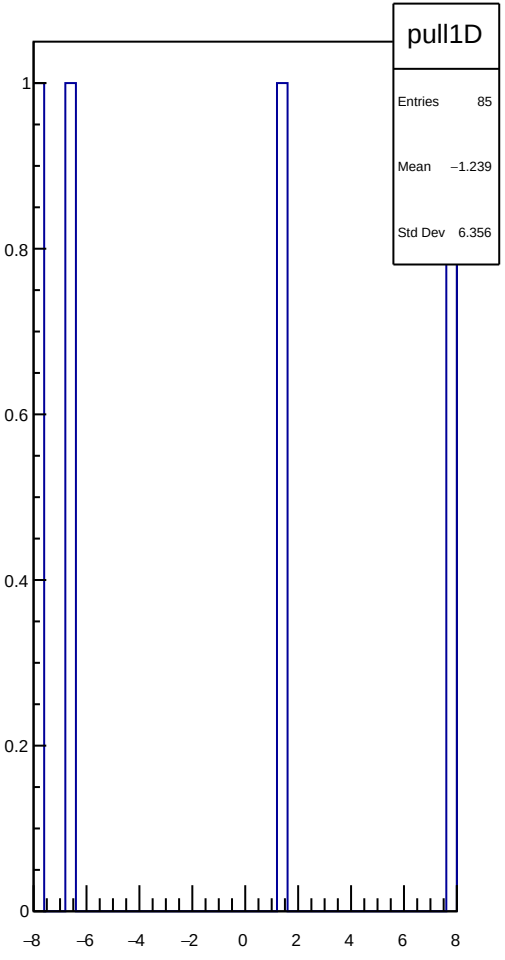

yield_bpm0l10X_rms vs run
χ² / ndf 7.386e+04 / 84
p0 0.01064 ± 8.369e–06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

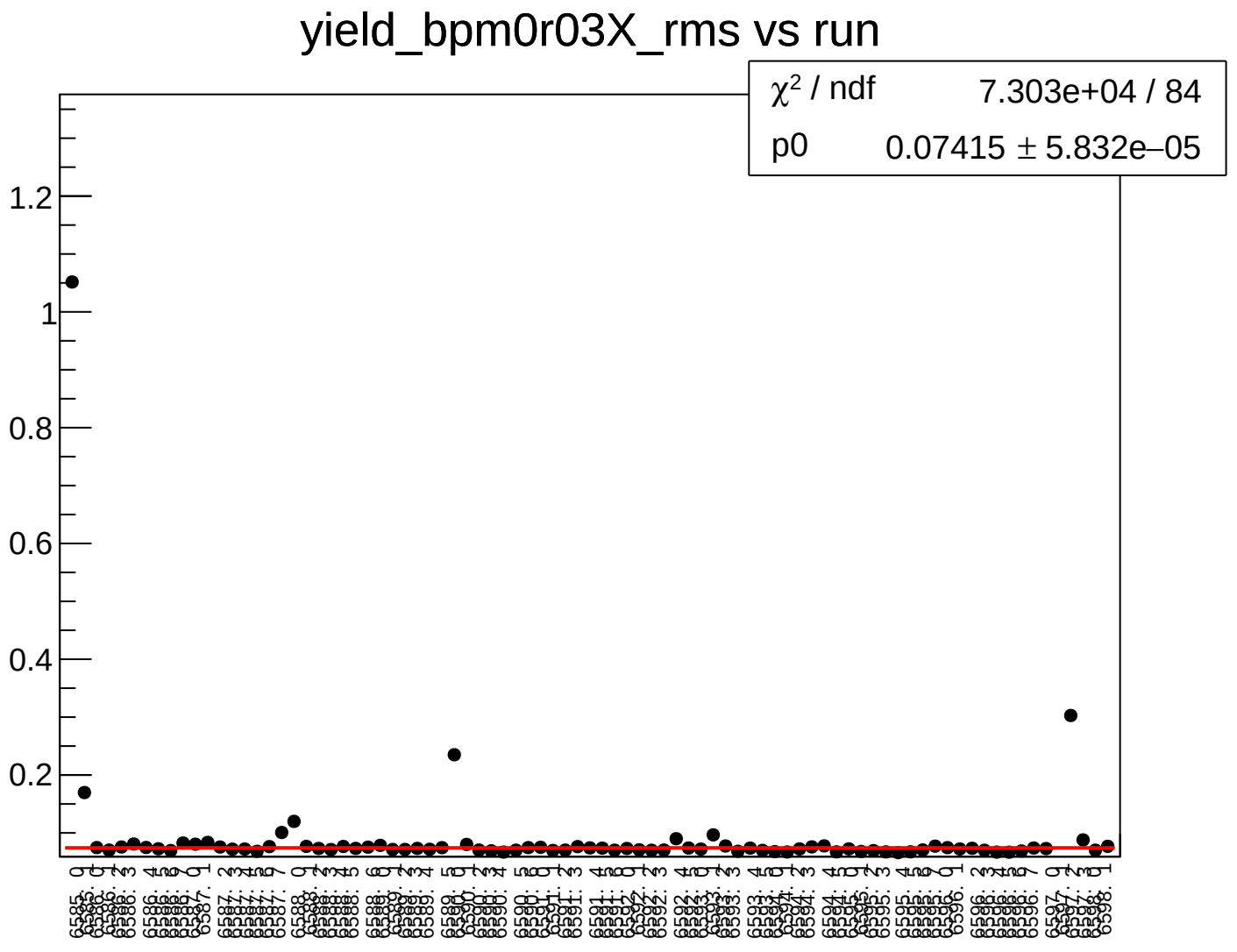

yield_bpm0l10Y_mean vs run
χ² / ndf 3.078e+06 / 84
p0 −0.5503 ± 4.641e−06
pull
Entries 85
Mean −41.26
Std Dev 57.11

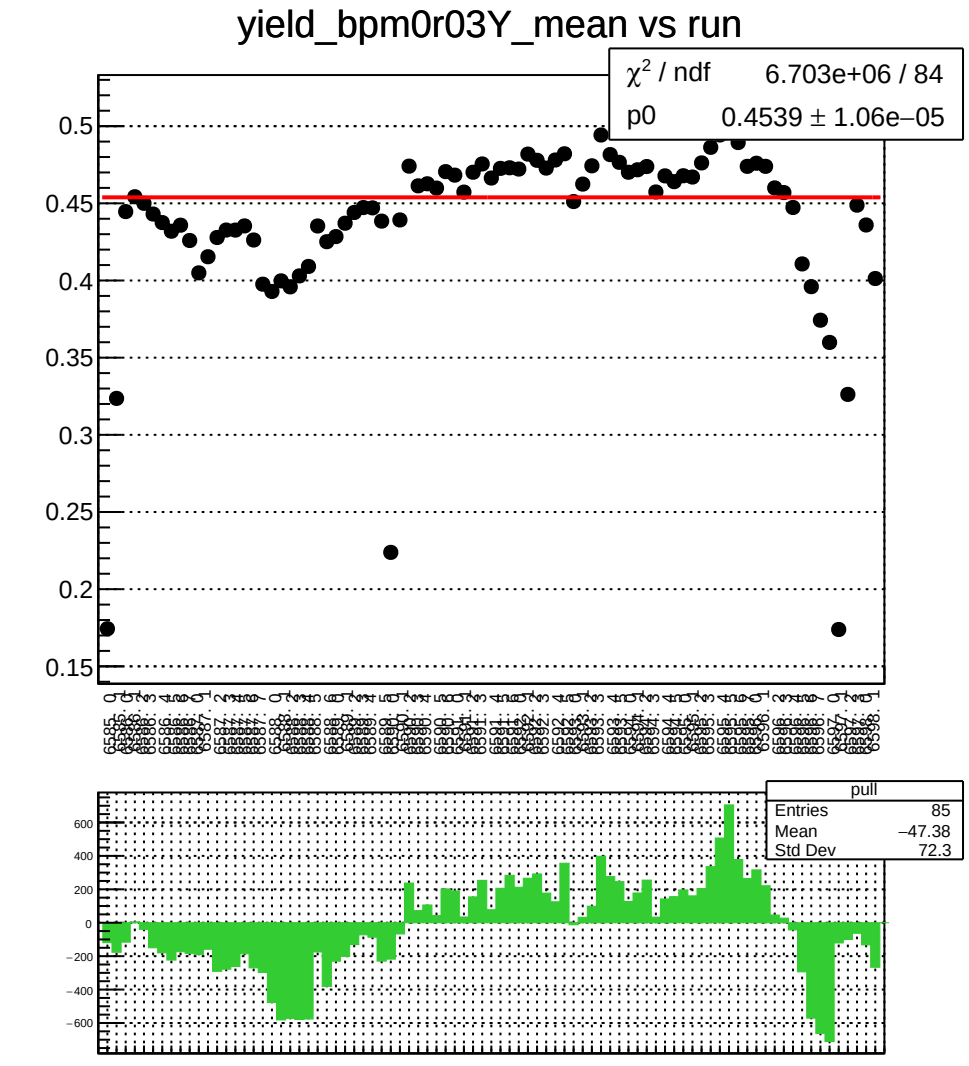

pull1D
Entries 85
Mean 1.128
Std Dev 3.972

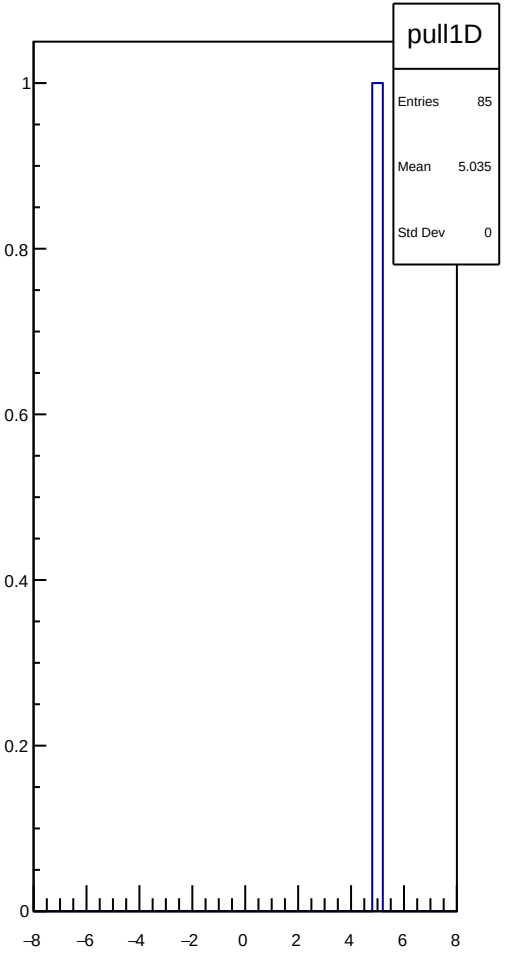

yield_bpm0l10Y_rms vs run
χ² / ndf 2.076e+05 / 84
p0 0.003995 ± 3.282e−06
0.14
0.12
0.1
0.08
0.06
0.04
0.02


yield_bpm0r03X_mean vs run
χ² / ndf 4.863e+05 / 84
p0 −2.833 ± 8.248e−05
pull
Entries 85
Mean −64.89
Std Dev 102.5

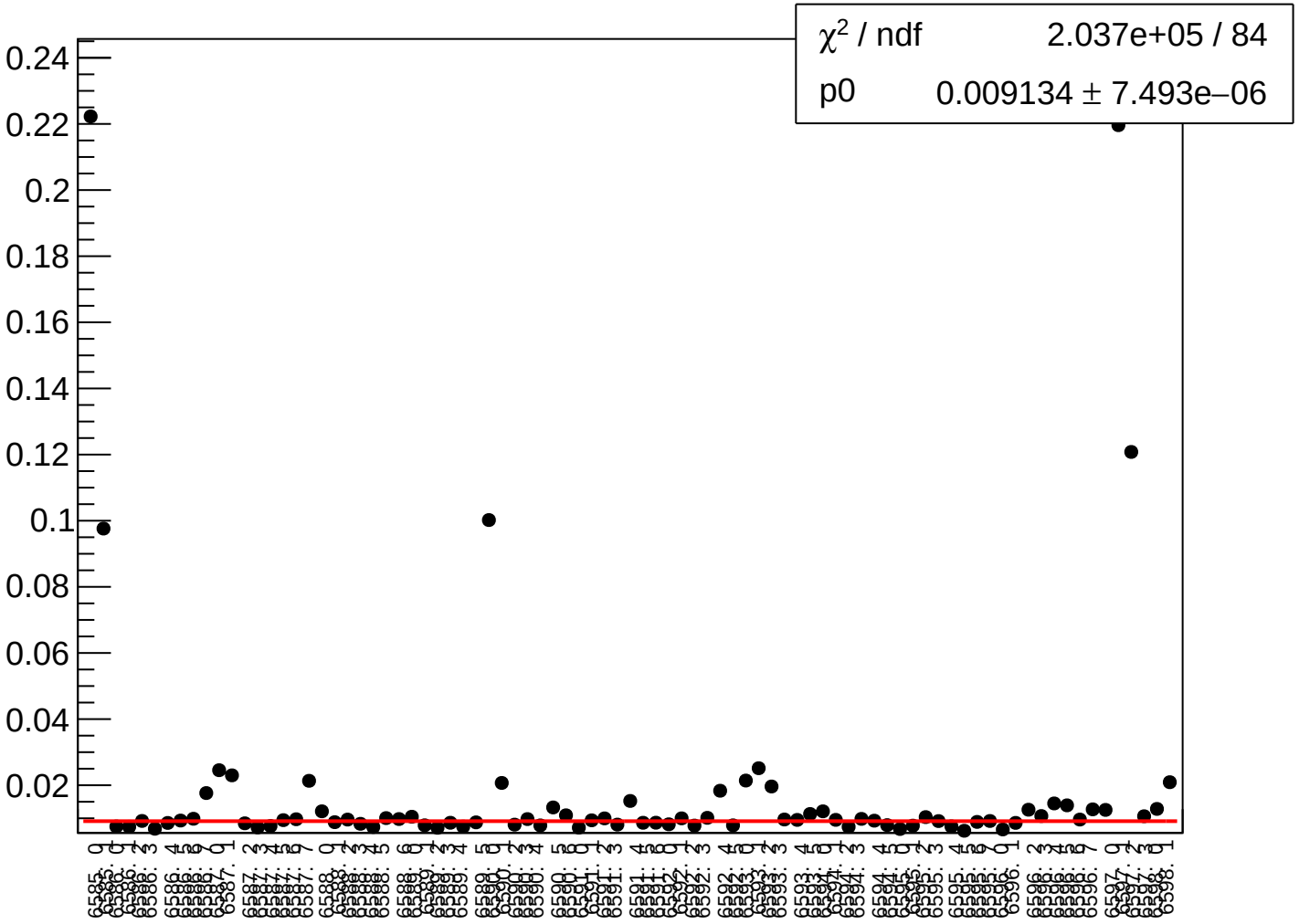

pull1D
Entries 85
Mean −1.239
Std Dev 6.356

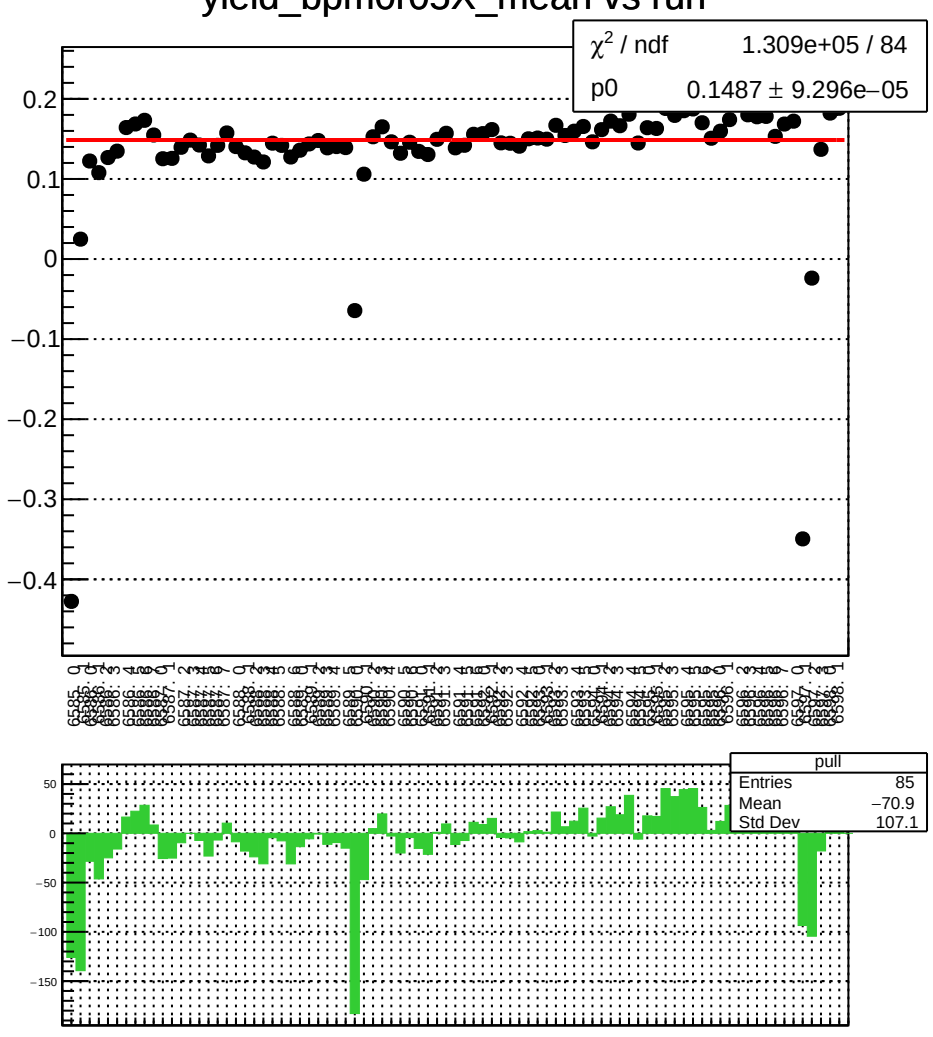

yield_bpm0r03X_rms vs run
χ² / ndf 7.303e+04 / 84
p0 0.07415 ± 5.832e–05
1.2
1
0.8
0.6
0.4
0.2

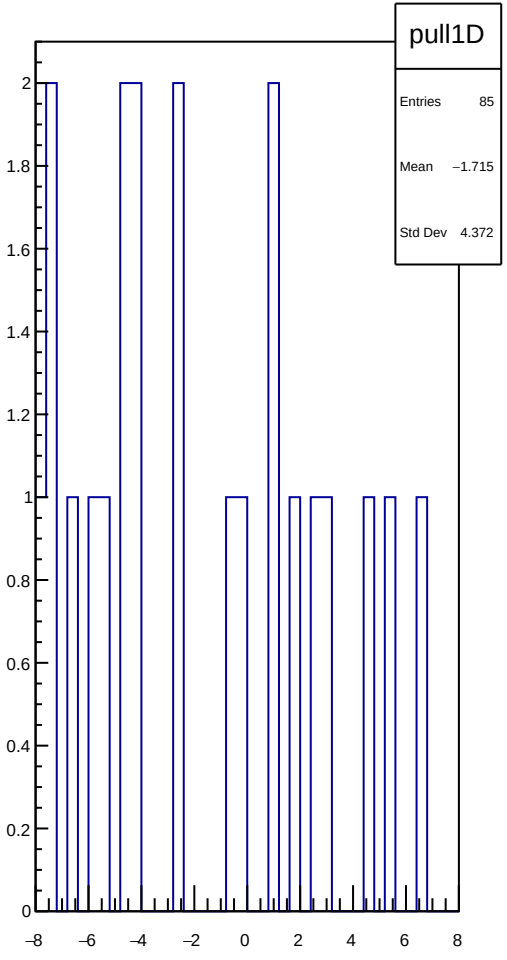

yield_bpm0r03Y_mean vs run
χ² / ndf 6.703e+06 / 84
p0 0.4539 ± 1.06e−05
pull
Entries 85
Mean −47.38
Std Dev 72.3

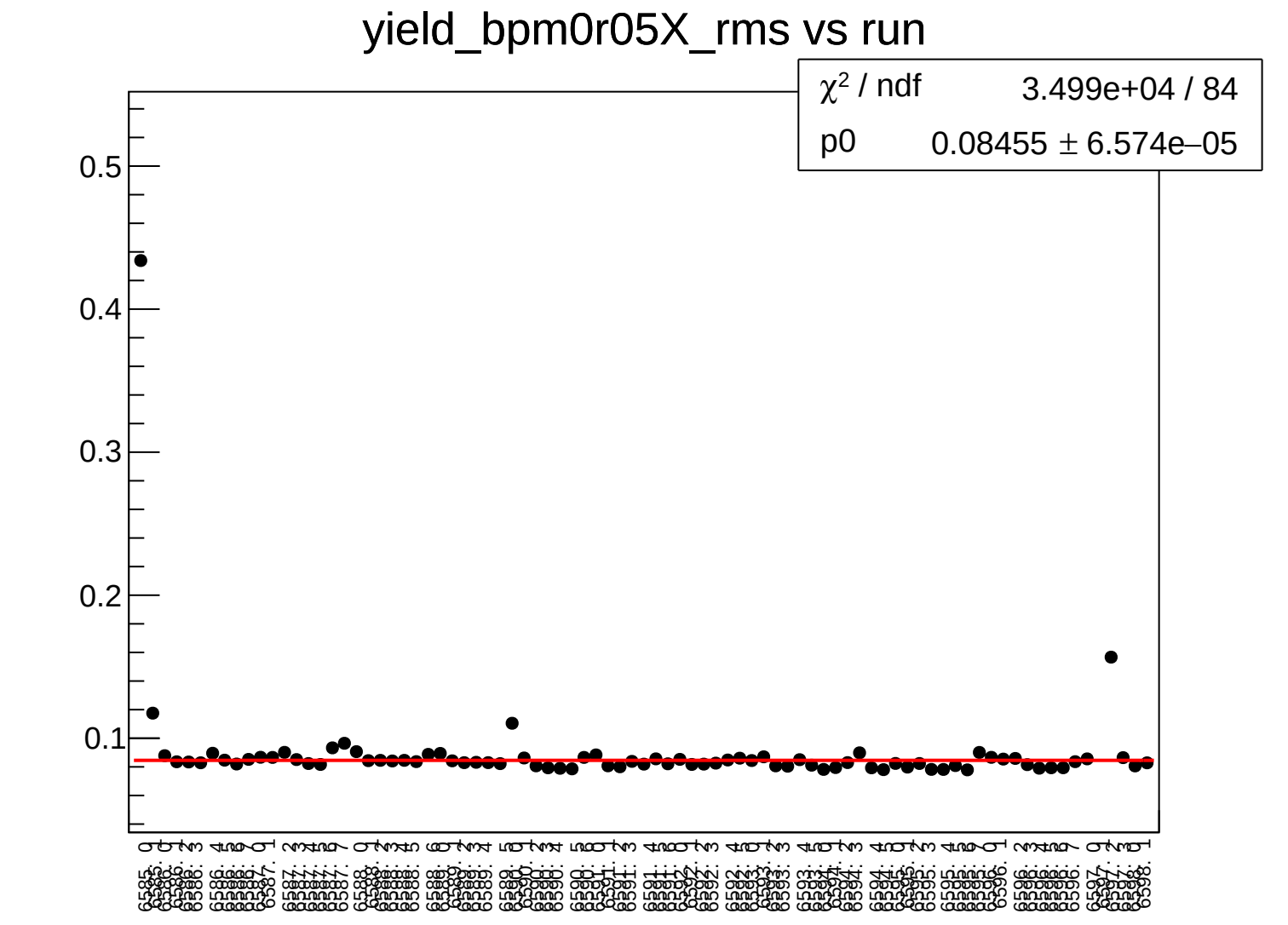

pull1D
Entries 85
Mean 5.035
Std Dev 0

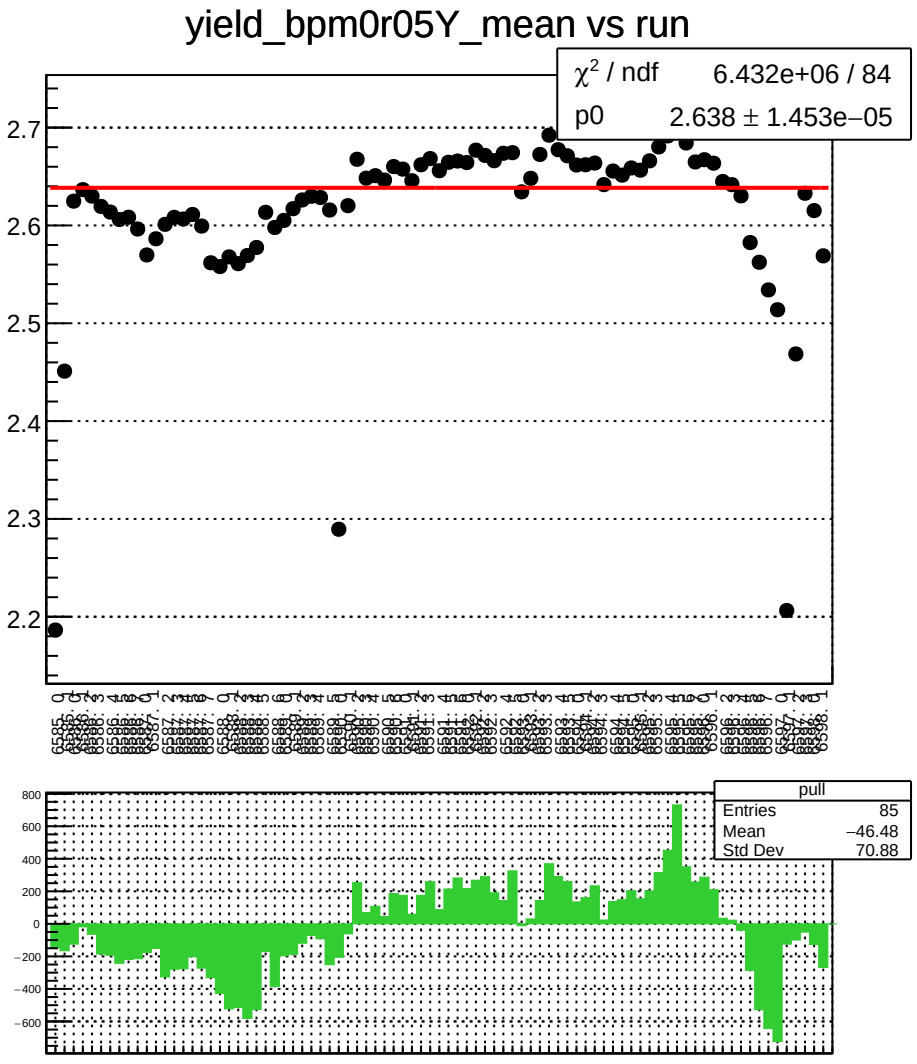
yield_bpm0r03Y_rms vs run

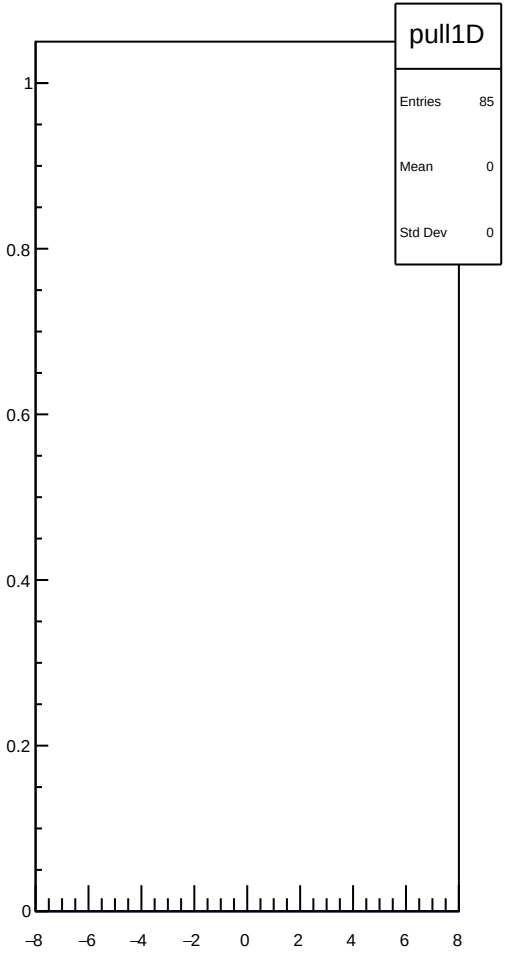


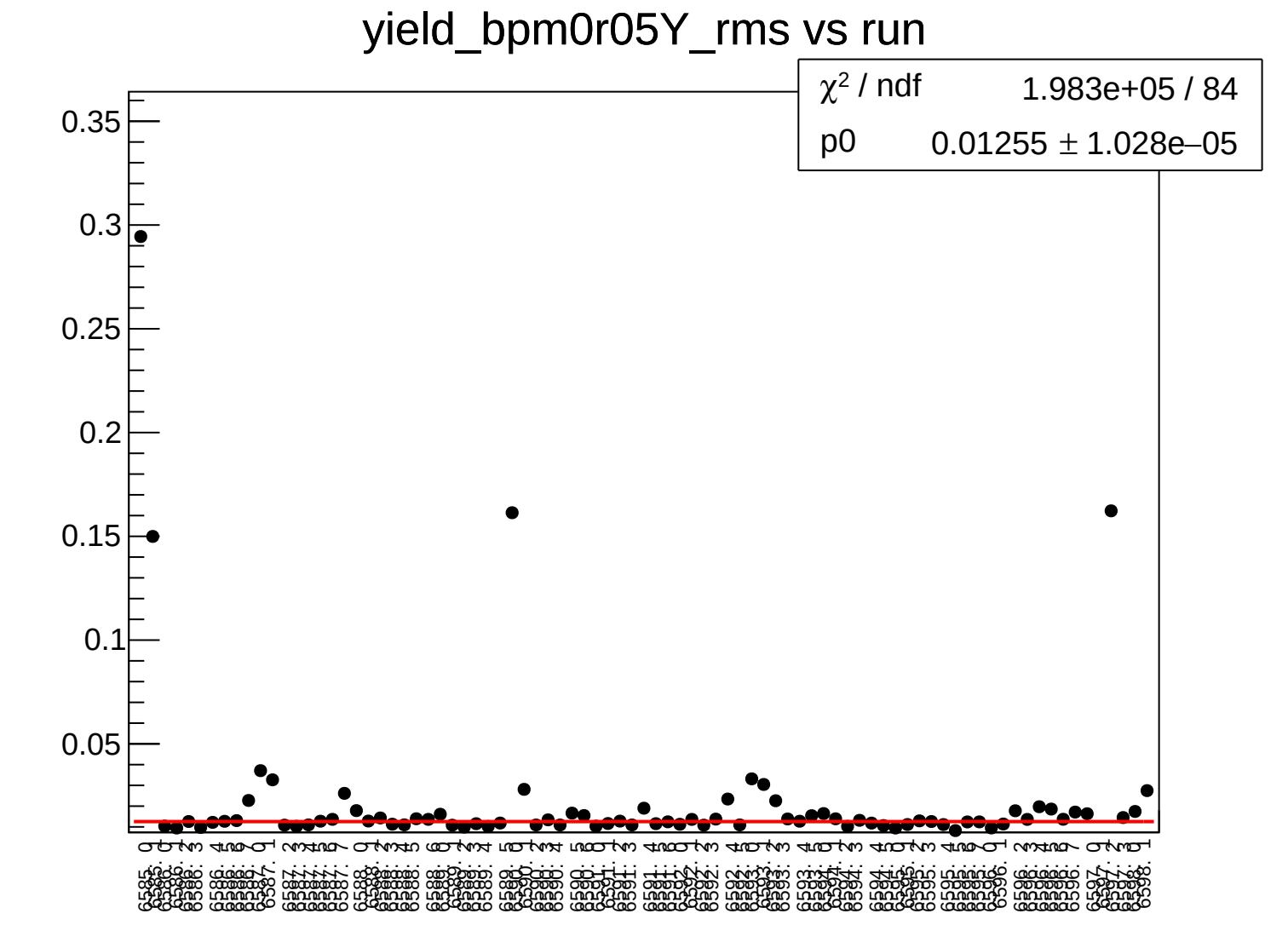

yield_bpm0r05X_mean vs run
χ² / ndf 1.309e+05 / 84
p0 0.1487 ± 9.296e−05
pull
Entries 85
Mean −70.9
Std Dev 107.1

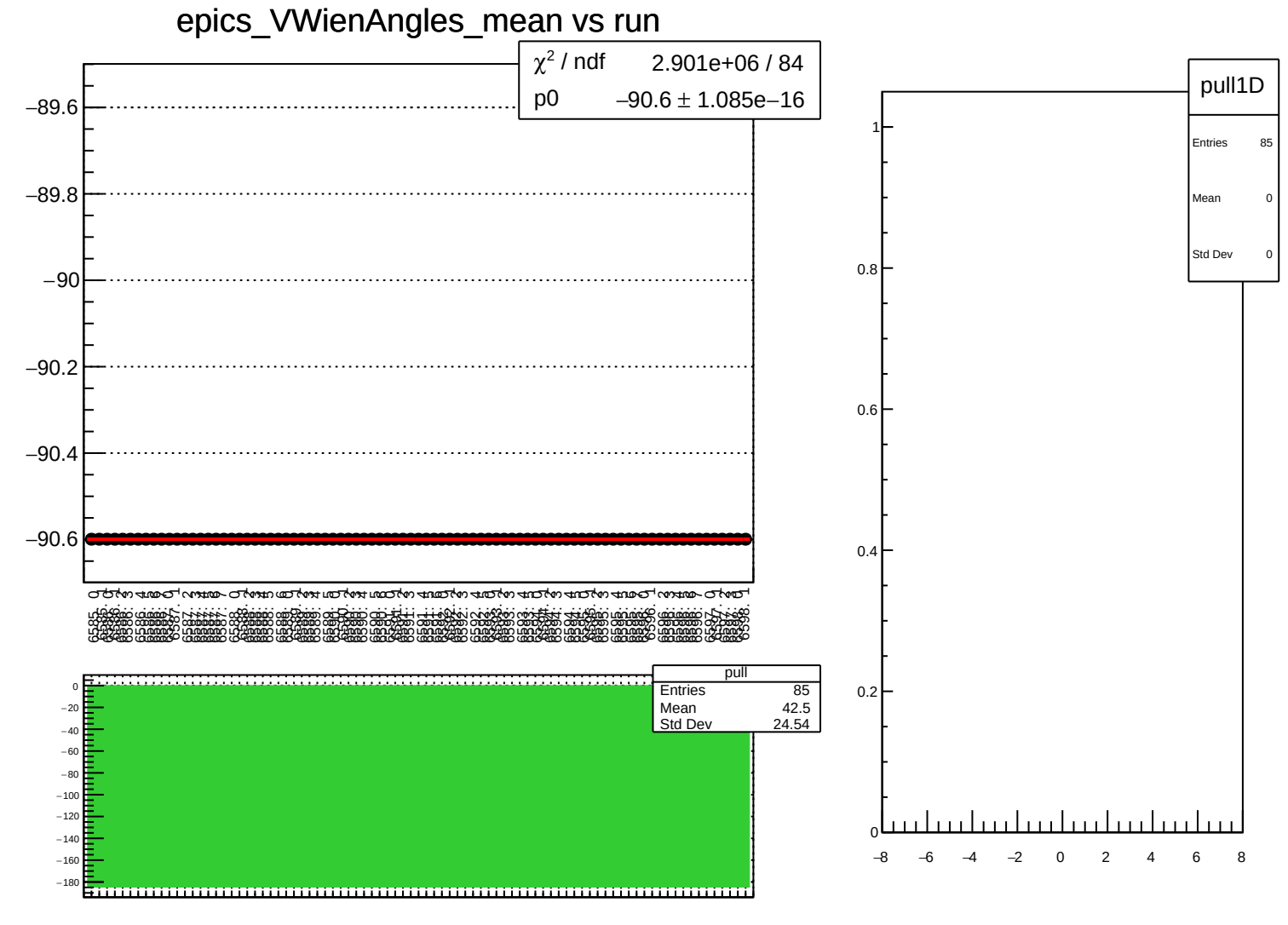

pull1D
Entries 85
Mean −1.715
Std Dev 4.372

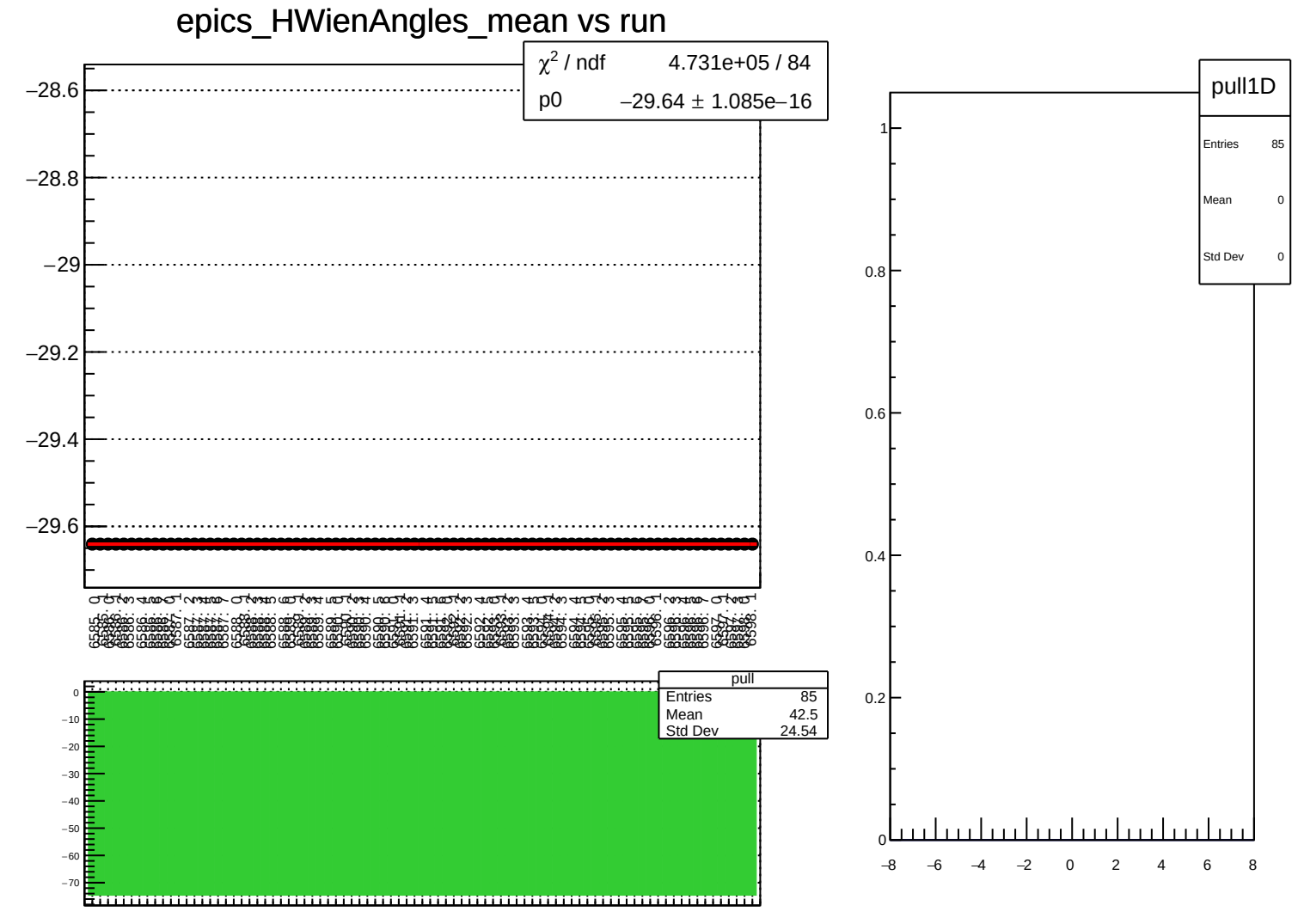

yield_bpm0r05X_rms vs run
χ² / ndf 3.499e+04 / 84
p0 0.08455 ± 6.574e–05
0.5
0.4
0.3
0.2
0.1

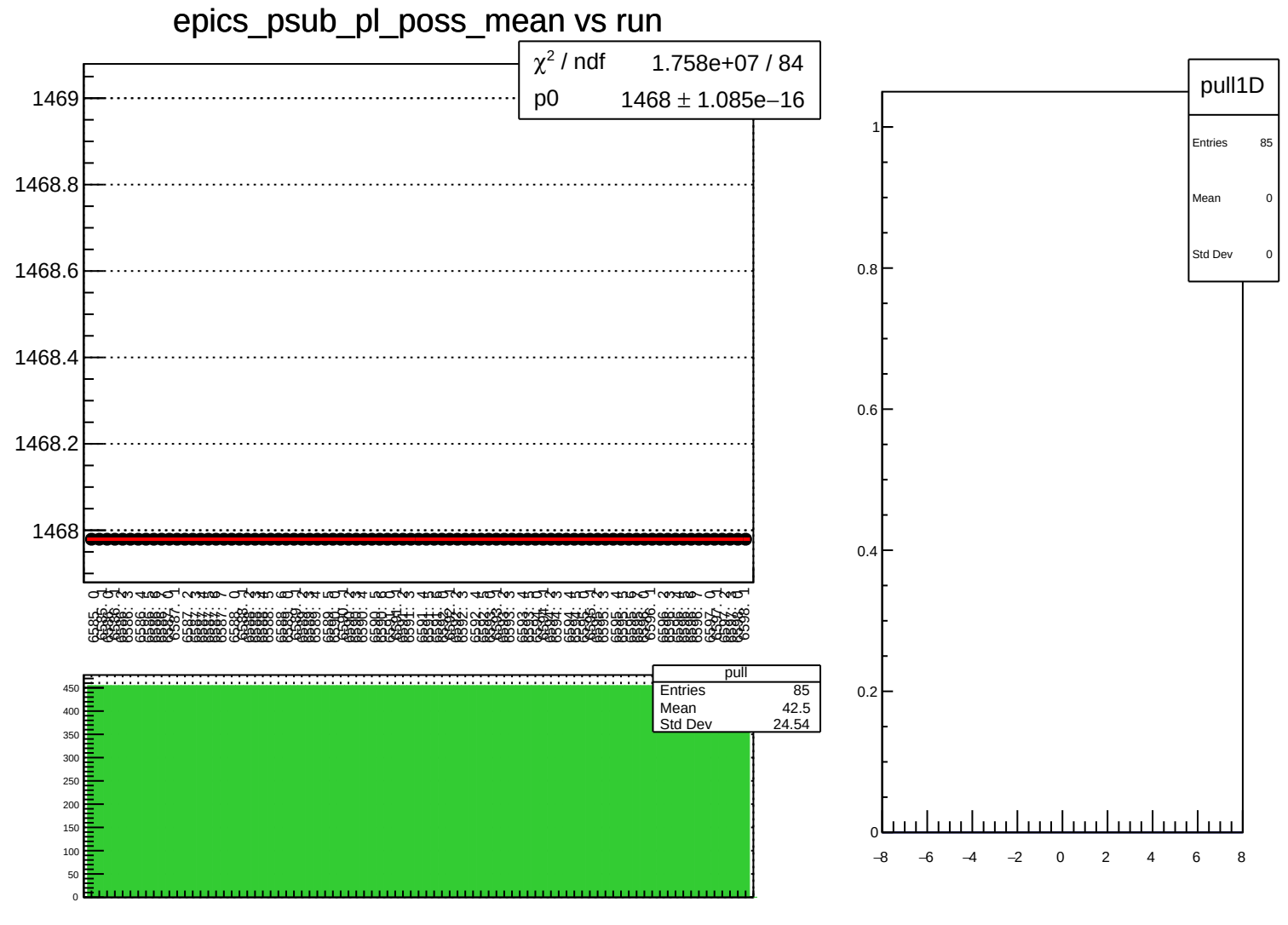

yield_bpm0r05Y_mean vs run
χ² / ndf 6.432e+06 / 84
p0 2.638 ± 1.453e−05
2.7
2.6
2.5
2.4
2.3
2.2
pull
Entries 85
Mean −46.48
Std Dev 70.88
800
600
400
200
0
−200
−400
−600

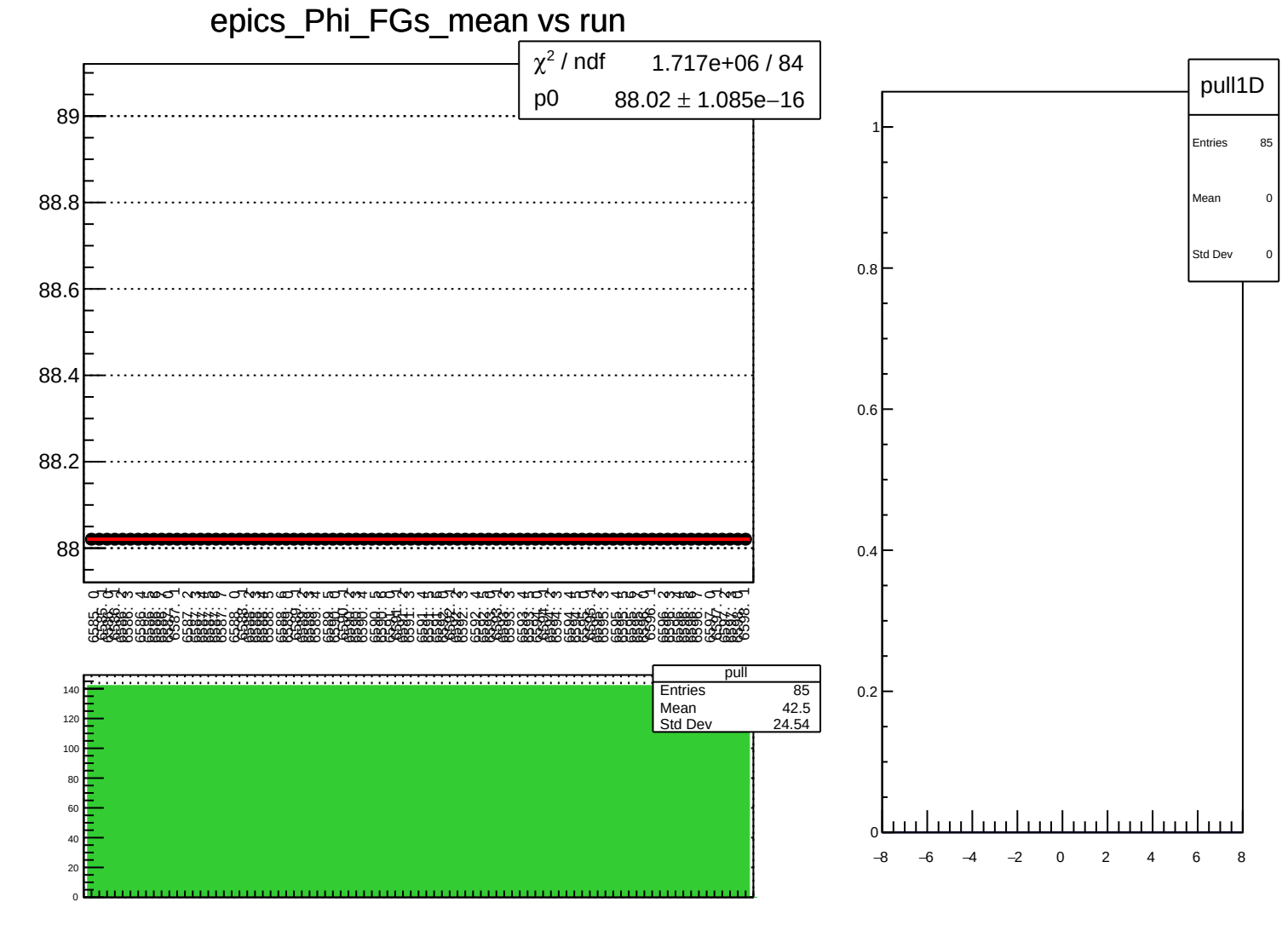

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

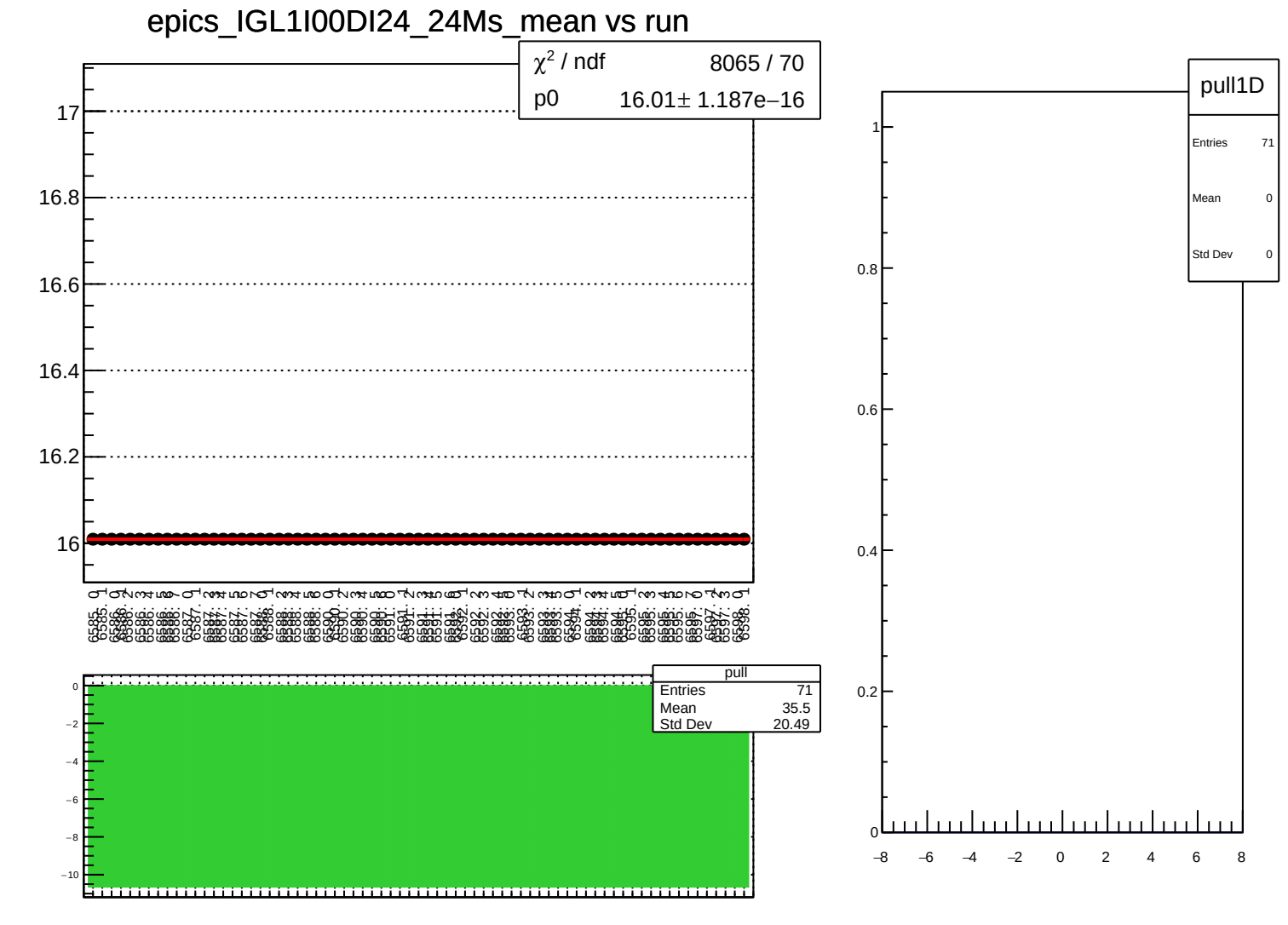

yield_bpm0r05Y_rms vs run
χ² / ndf 1.983e+05 / 84
p0 0.01255 ± 1.028e–05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

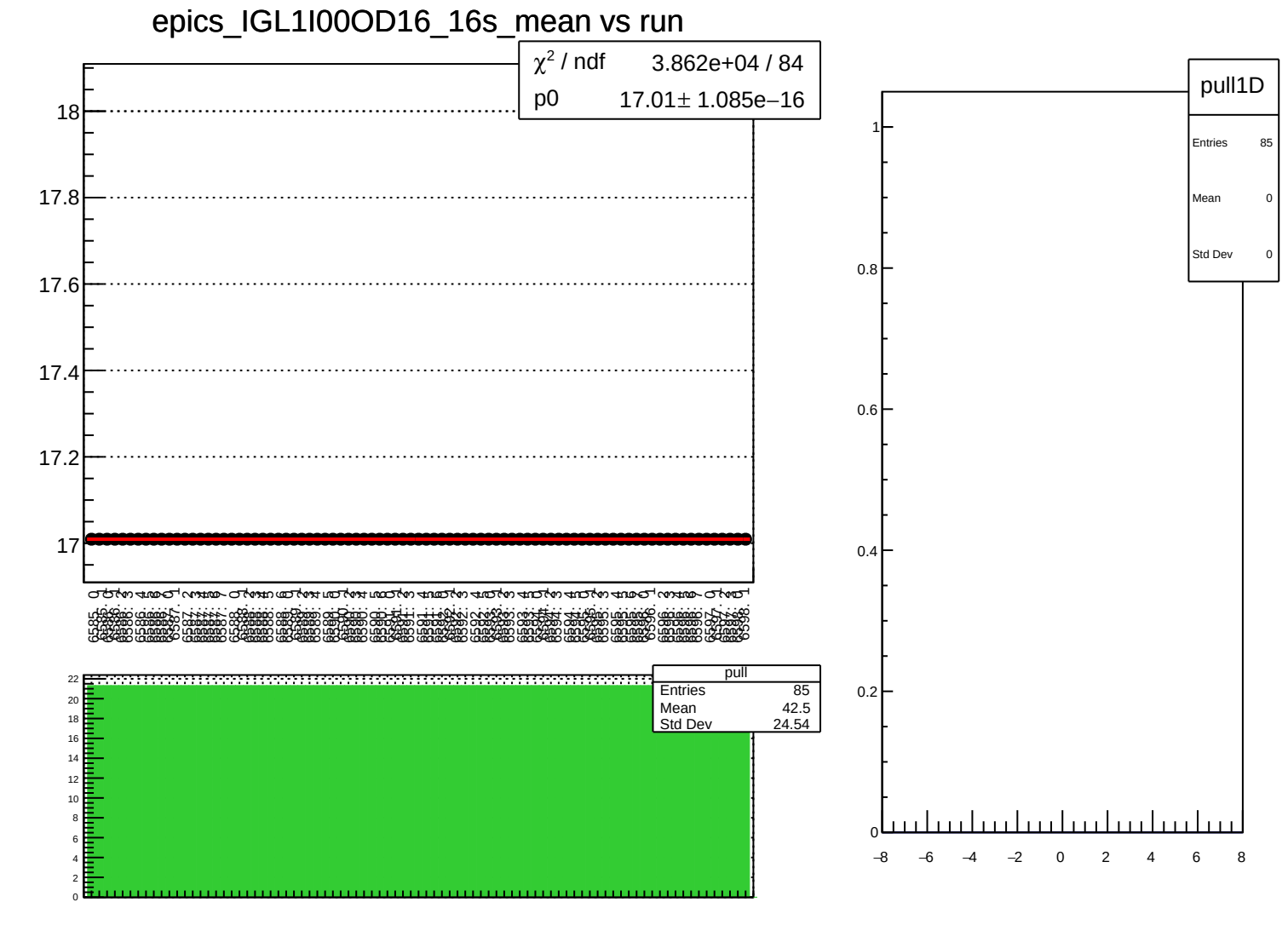

epics_VWienAngles_mean vs run
χ² / ndf 2.901e+06 / 84
p0 −90.6 ± 1.085e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−20
−40
−60
−80
−100
−120
−140
−160
−180
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

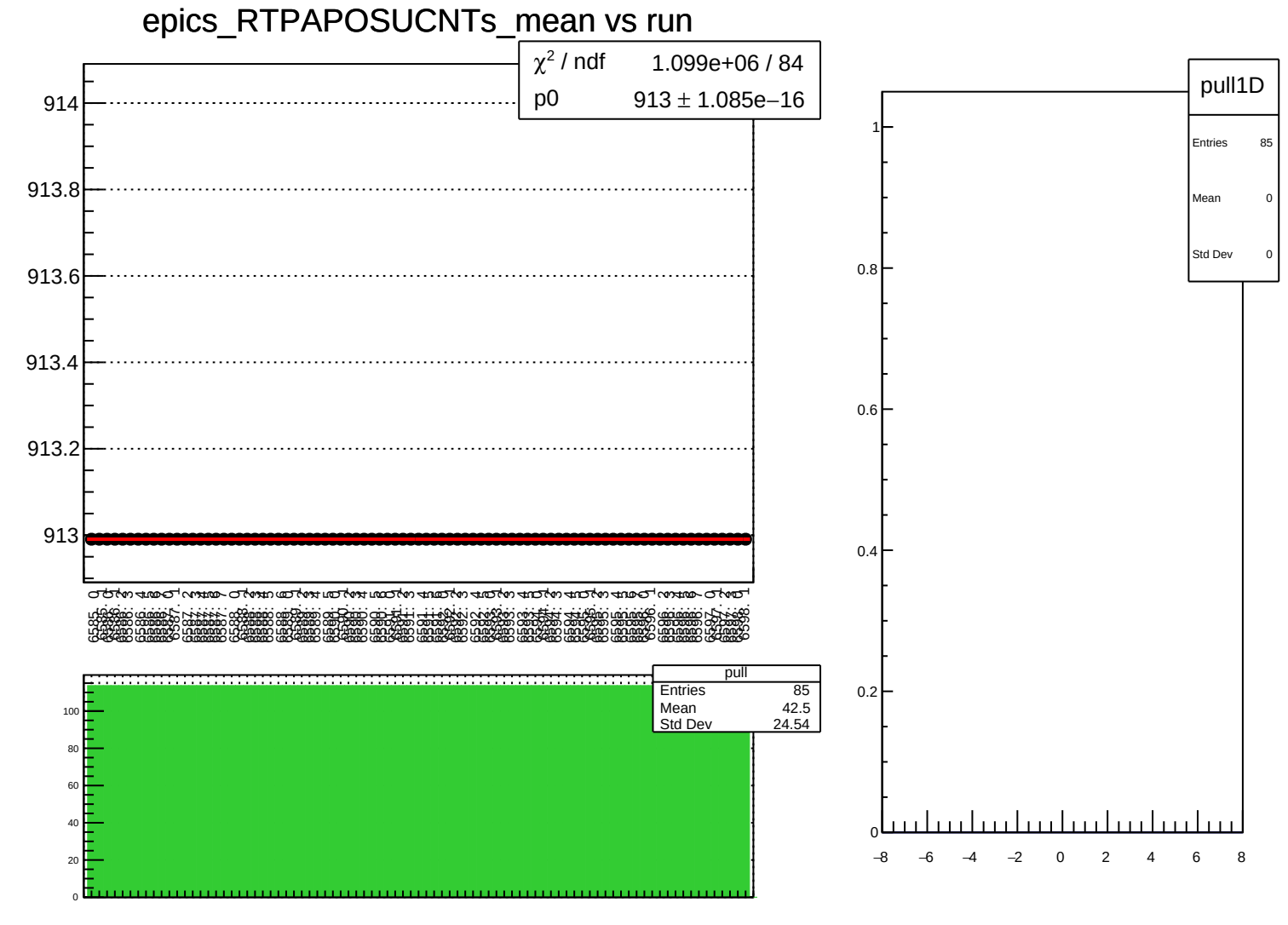

epics_HWienAngles_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

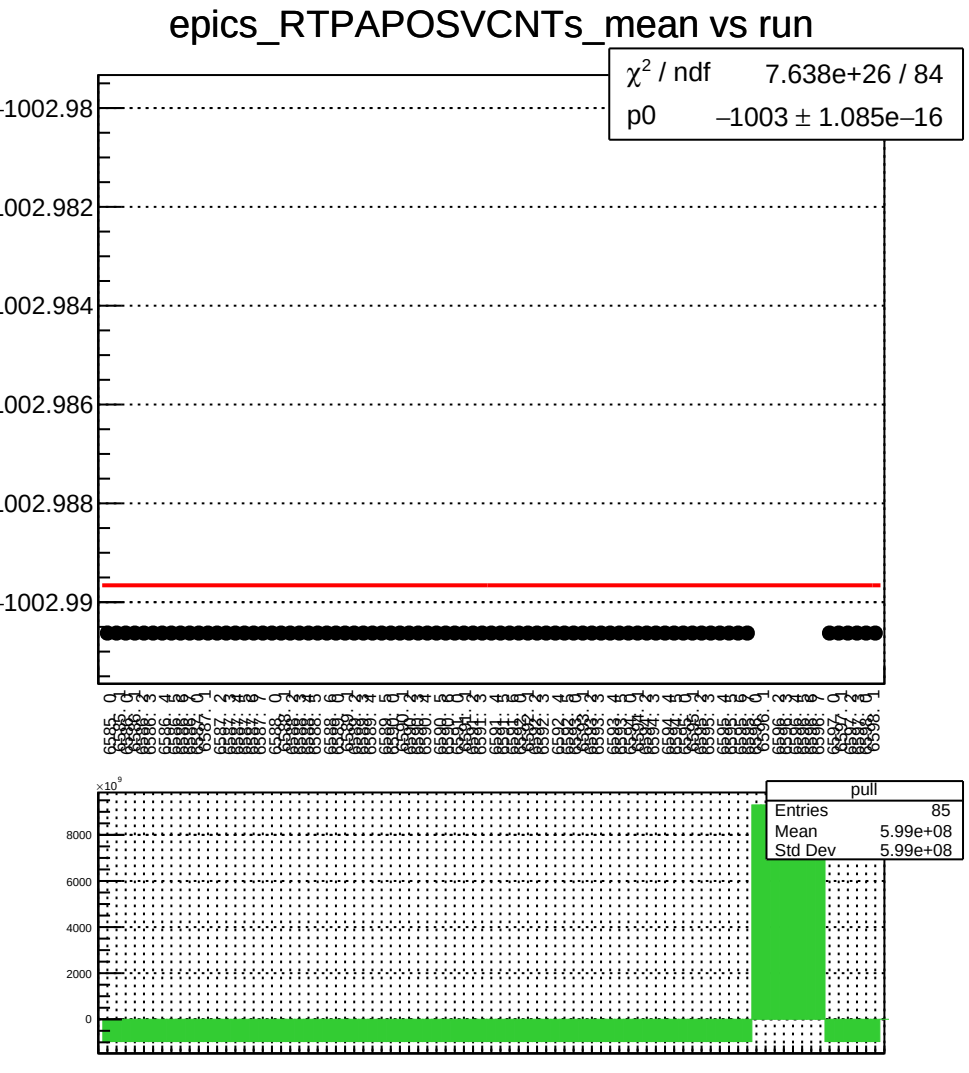

epics_psub_pl_poss_mean vs run
χ² / ndf 1.758e+07 / 84
p0 1468 ± 1.085e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 85
Mean 42.5
Std Dev 24.54
450
400
350
300
250
200
150
100
50
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

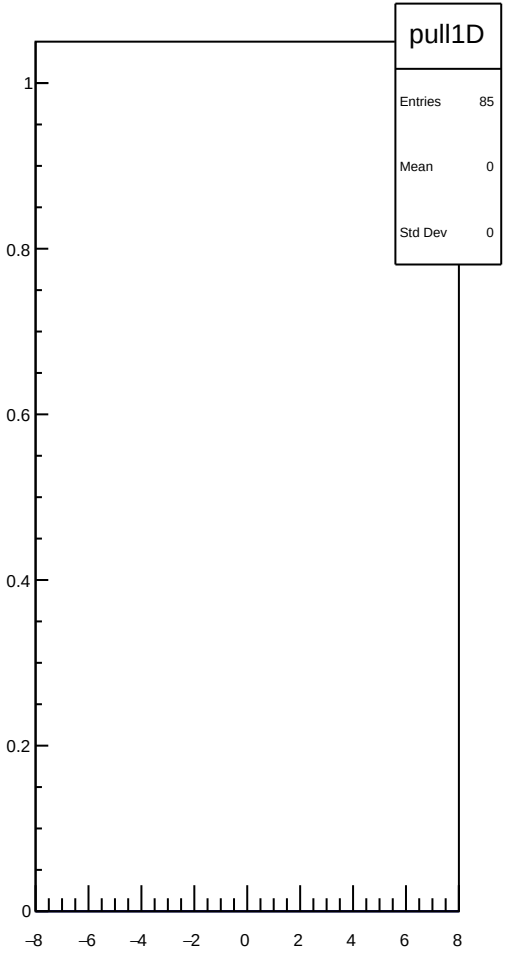

epics_Phi_FGs_mean vs run
χ² / ndf 1.717e+06 / 84
p0 88.02 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
140
120
100
80
60
40
20
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 8065 / 70
p0 16.01± 1.187e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 71
Mean 35.5
Std Dev 20.49
0
−2
−4
−6
−8
−10
pull1D
Entries 71
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 3.862e+04 / 84
p0 17.01± 1.085e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 85
Mean 42.5
Std Dev 24.54
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 85
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_RTPAPOSUCNTs_mean vs run
χ² / ndf 1.099e+06 / 84
p0 913 ± 1.085e−16
914
913.8
913.6
913.4
913.2
913
pull
Entries 85
Mean 42.5
Std Dev 24.54
100
80
60
40
20
0
pull1D
Entries 85
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 7.638e+26 / 84
p0 −1003 ± 1.085e−16
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
×10⁹
8000
6000
4000
2000
0
pull
Entries 85
Mean 5.99e+08
Std Dev 5.99e+08


pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8