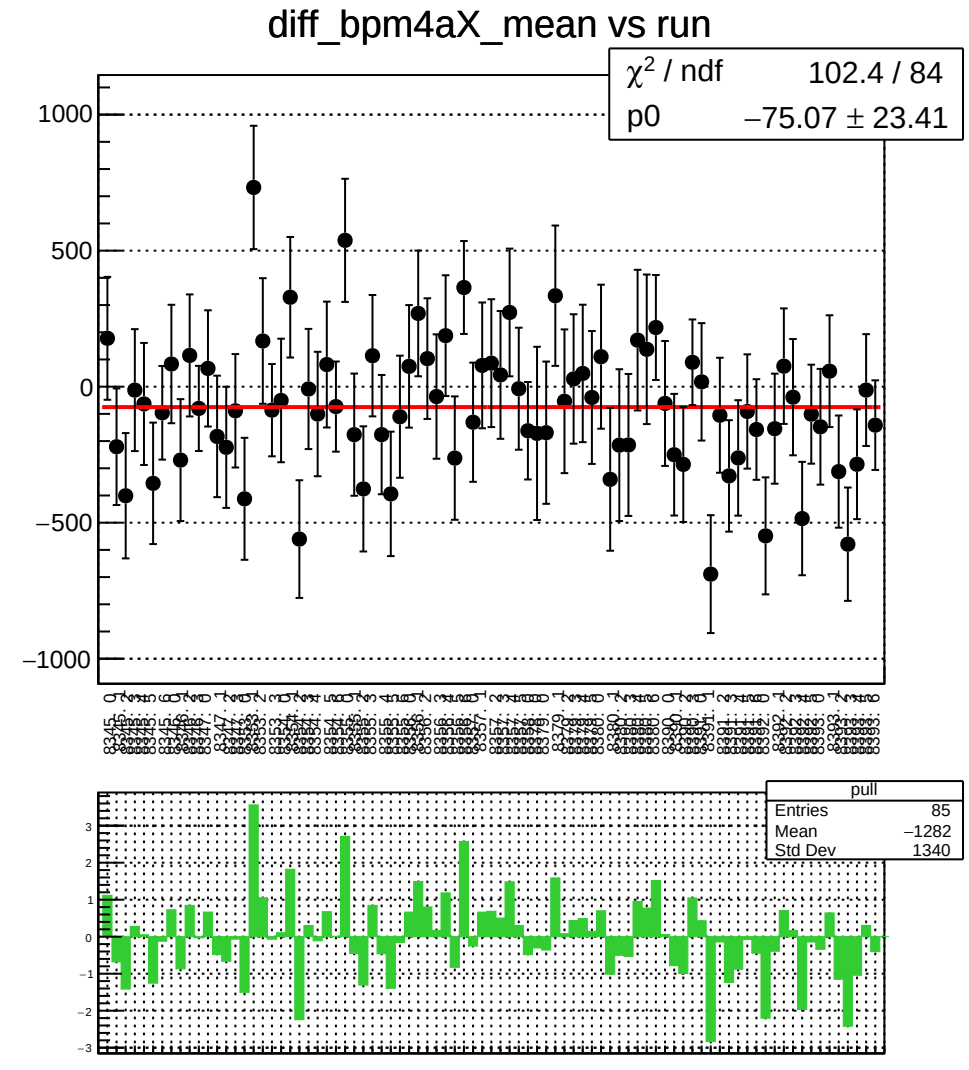
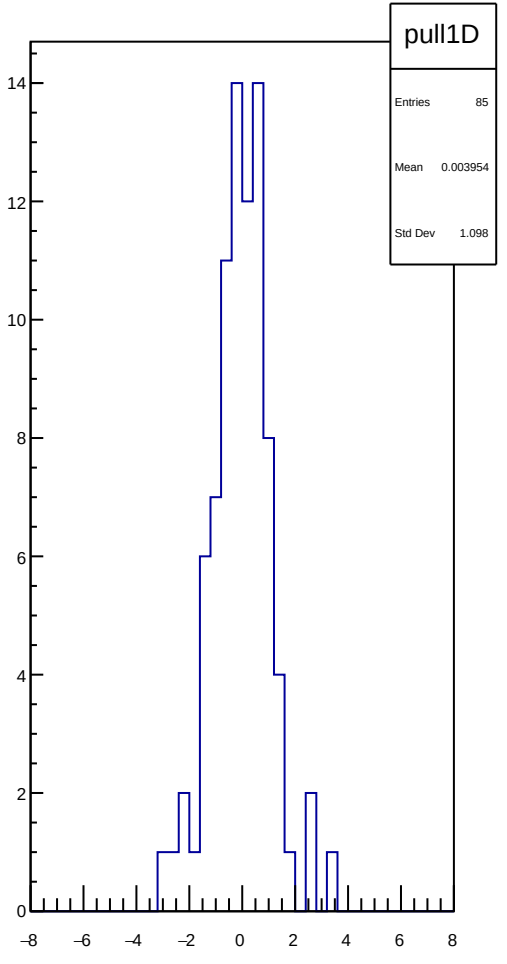
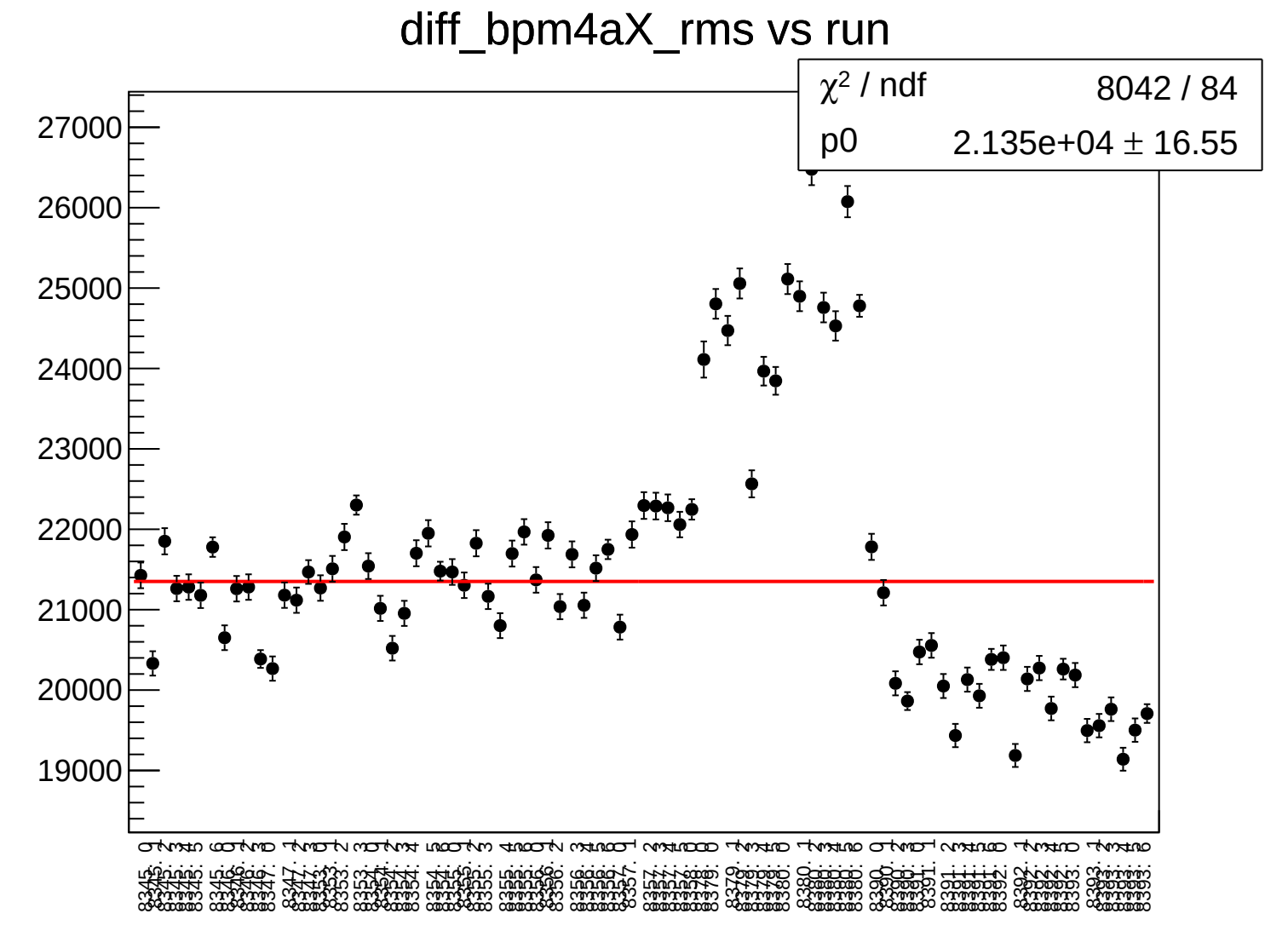
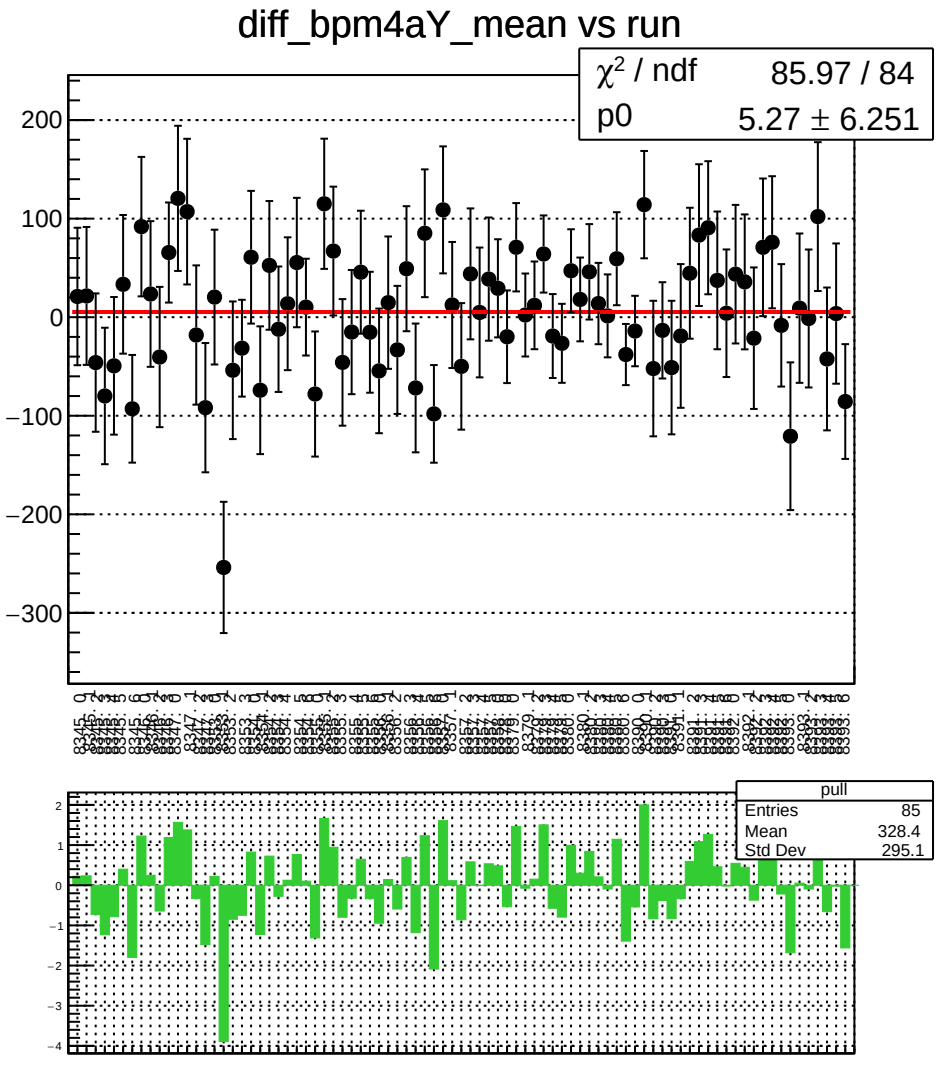
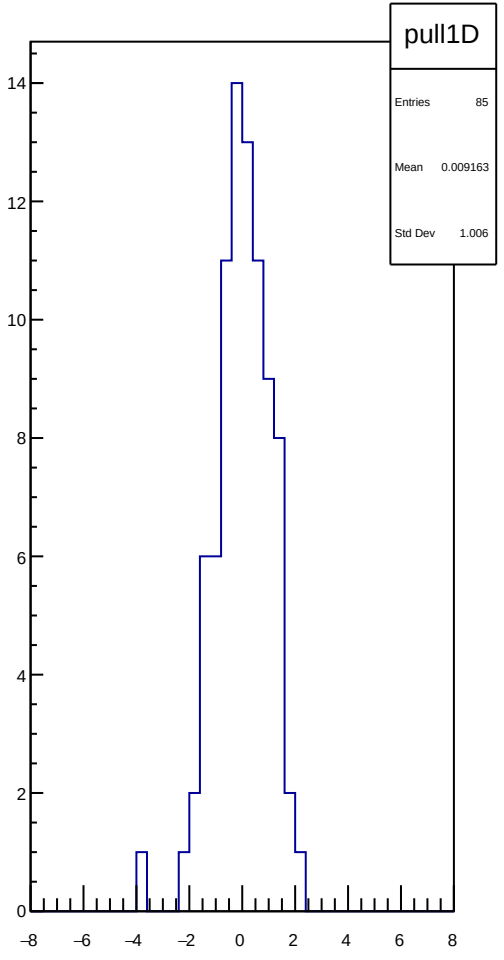
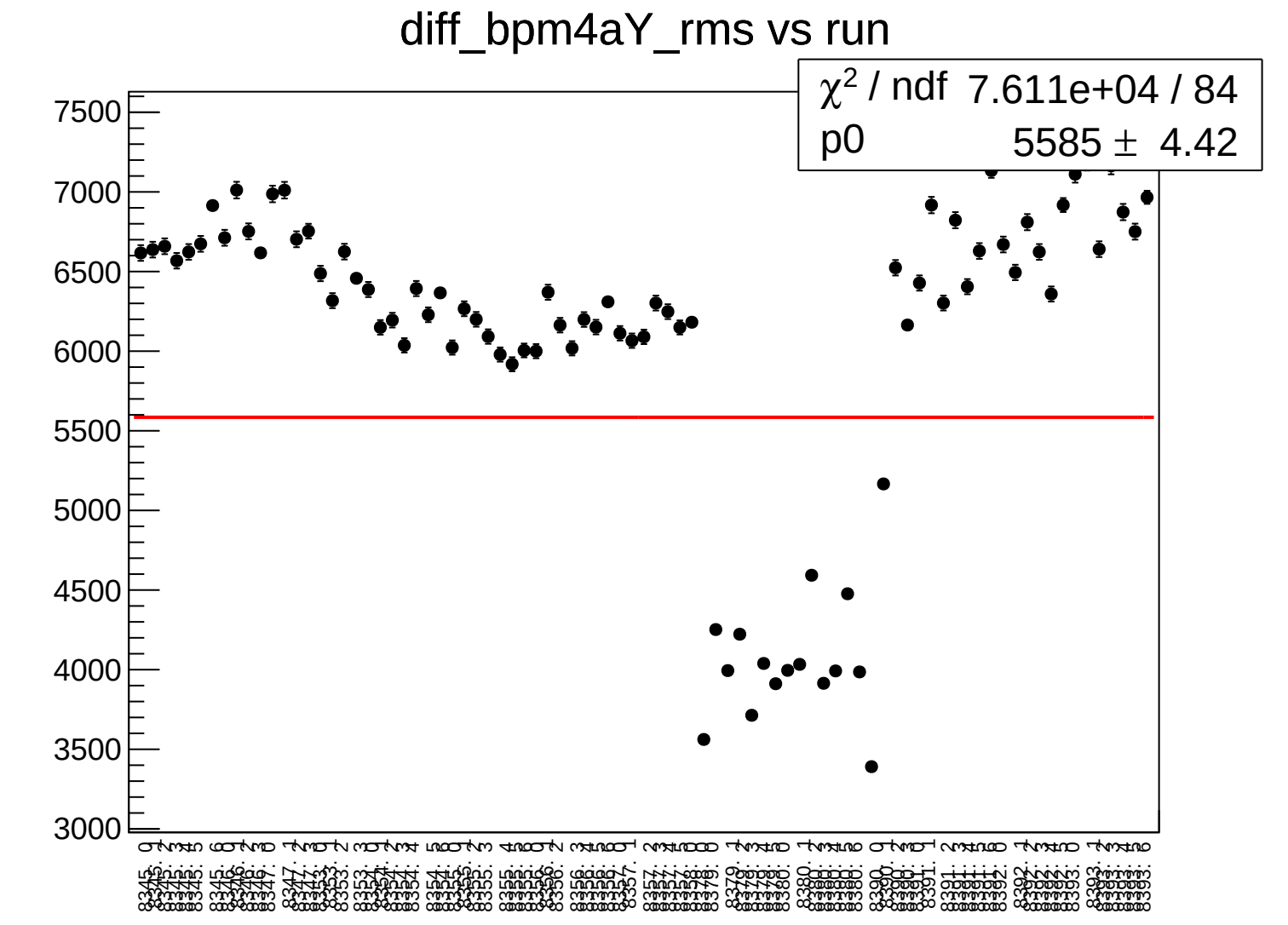

diff_bpm4aX_mean vs run
χ² / ndf 102.4 / 84
p0 −75.07 ± 23.41
1000
500
0
−500
−1000
pull
Entries 85
Mean −1282
Std Dev 1340
3
2
1
0
−1
−2
−3

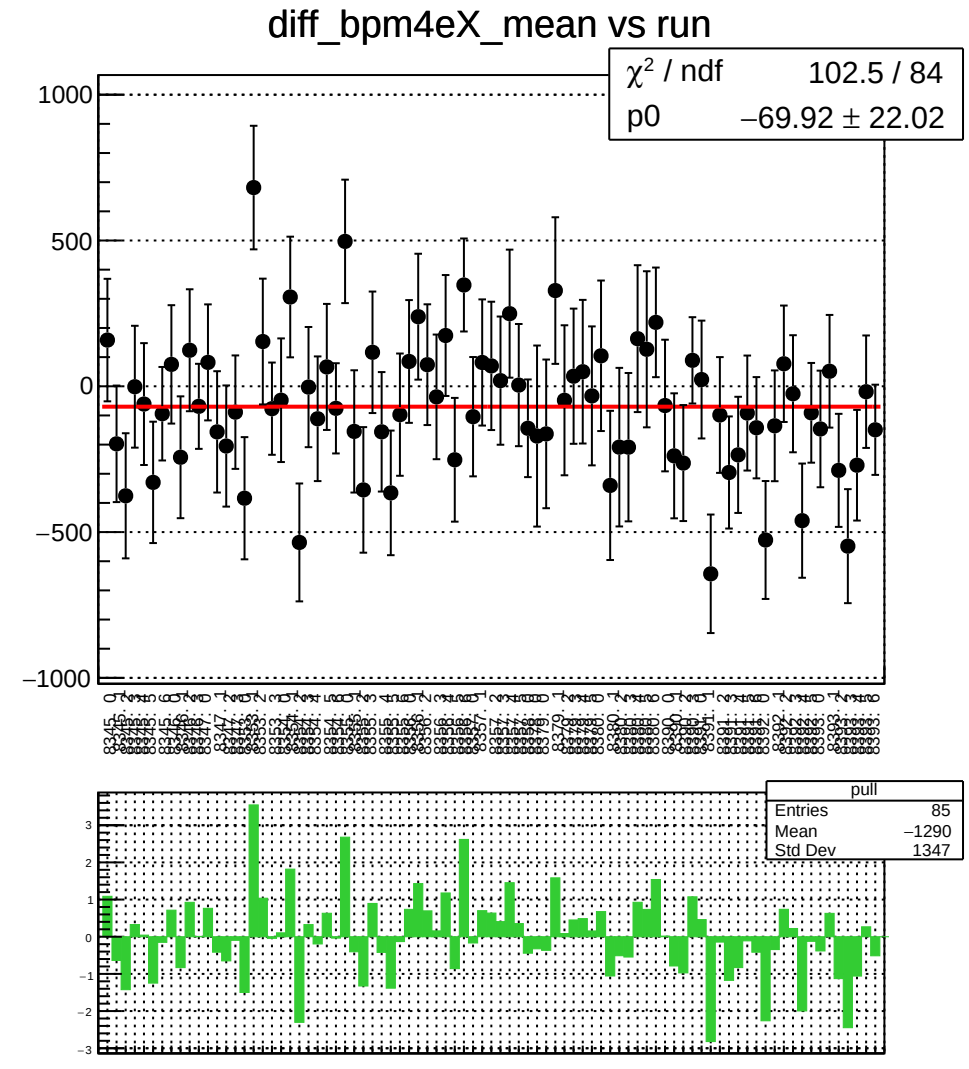

pull1D
Entries 85
Mean 0.003954
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

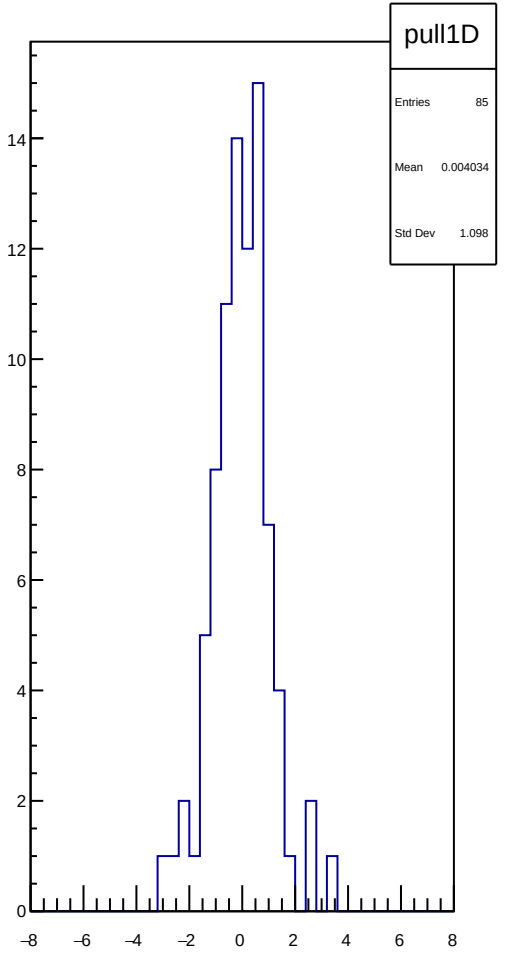

diff_bpm4aX_rms vs run
χ² / ndf 8042 / 84
p0 2.135e+04 ± 16.55
27000
26000
25000
24000
23000
22000
21000
20000
19000

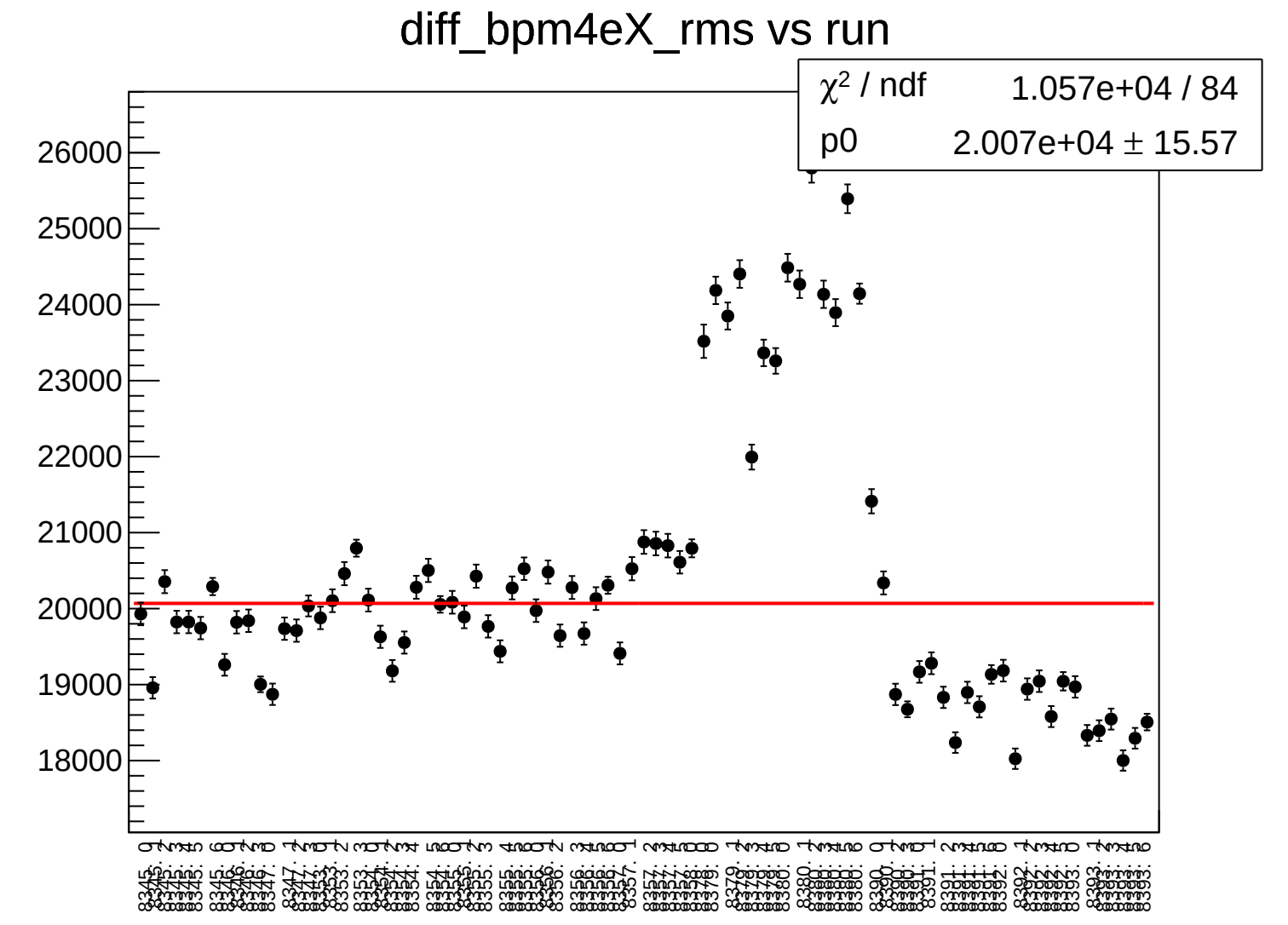

diff_bpm4aY_mean vs run
χ² / ndf 85.97 / 84
p0 5.27 ± 6.251
pull
Entries 85
Mean 328.4
Std Dev 295.1

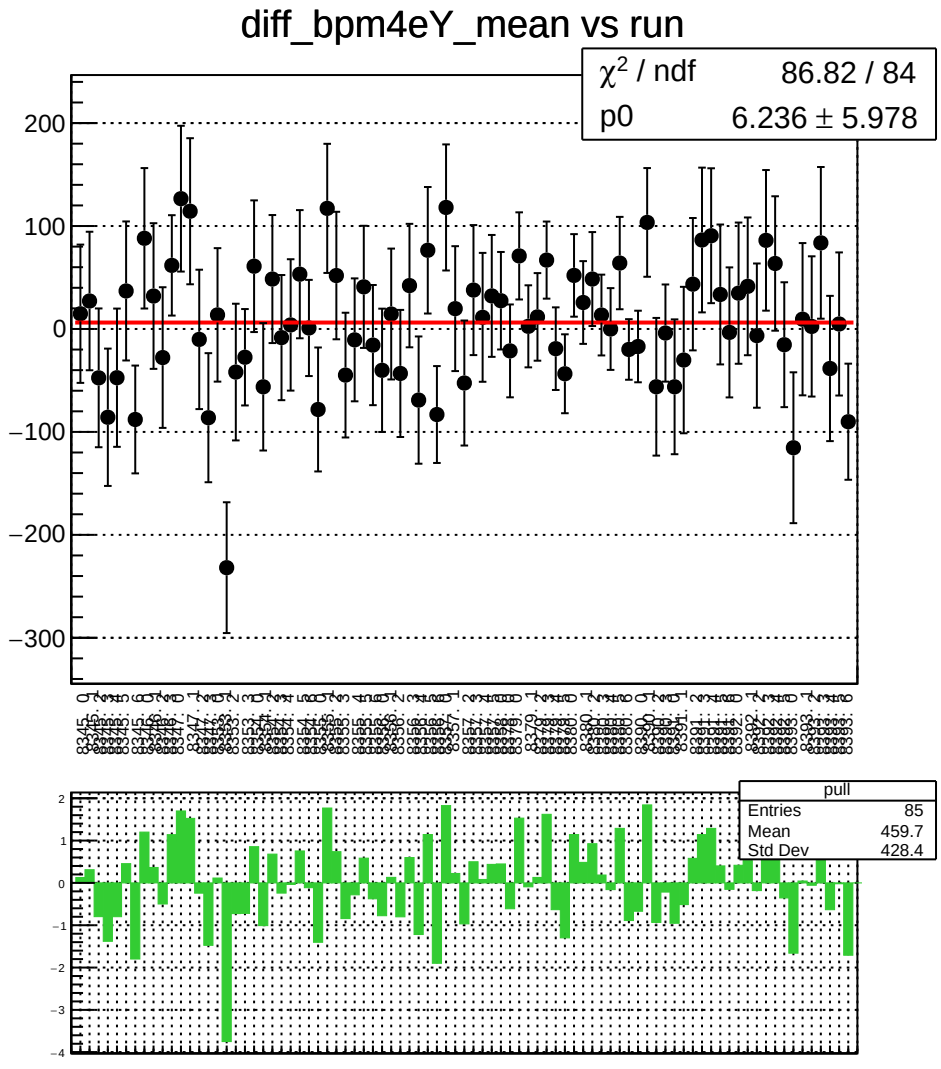

pull1D
Entries 85
Mean 0.009163
Std Dev 1.006

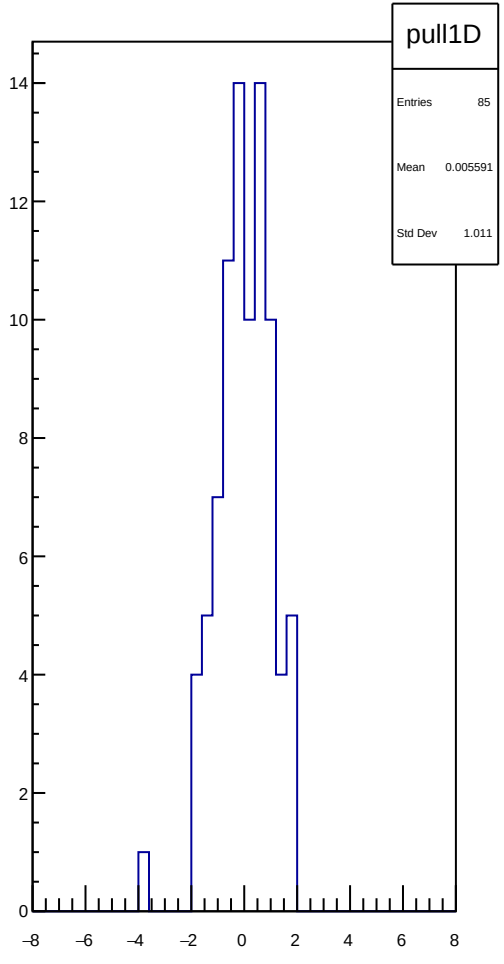

diff_bpm4aY_rms vs run
χ² / ndf 7.611e+04 / 84
p0 5585 ± 4.42
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000

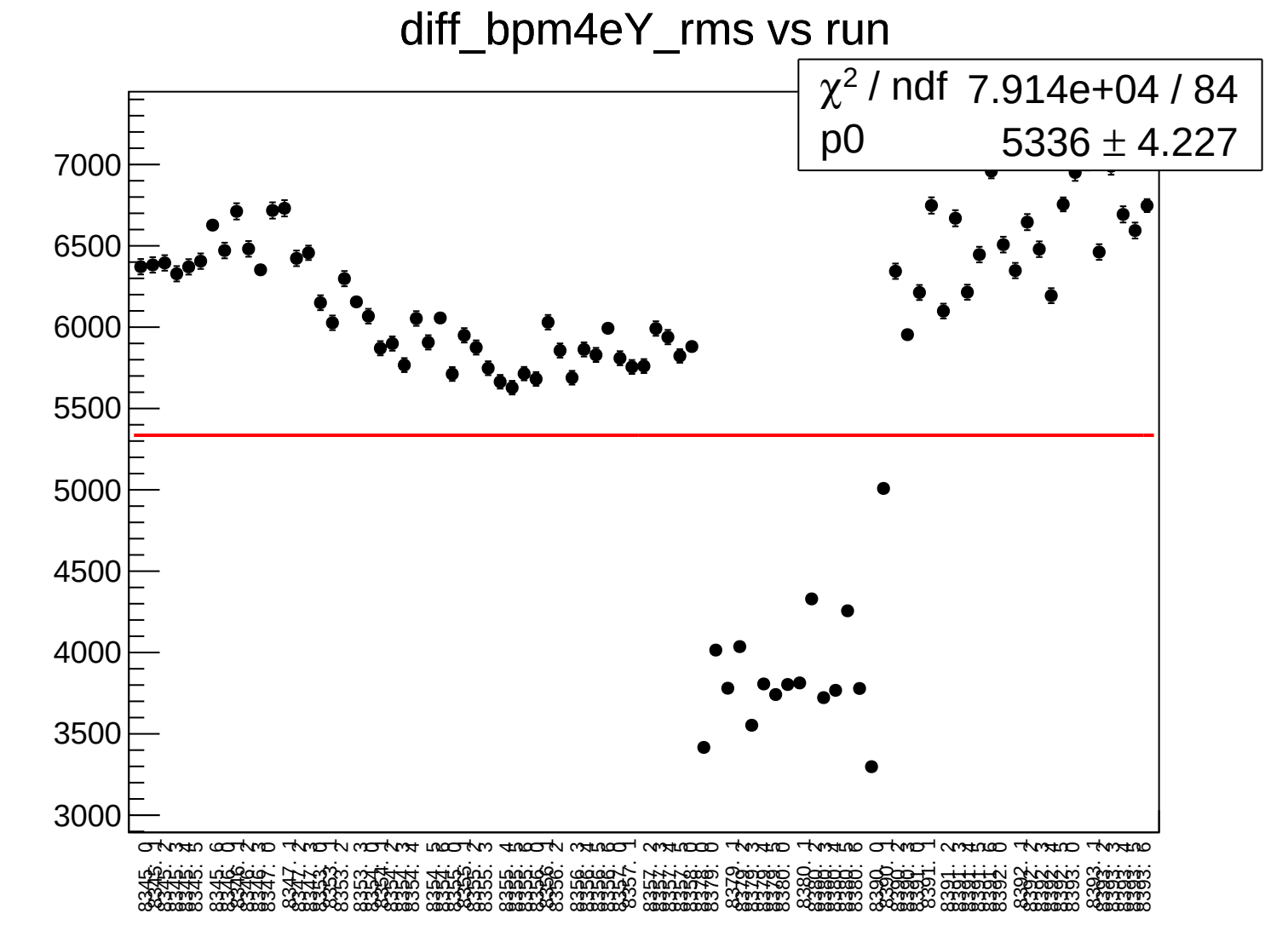

diff_bpm4eX_mean vs run
χ² / ndf 102.5 / 84
p0 −69.92 ± 22.02
1000
500
0
−500
−1000
pull
Entries 85
Mean −1290
Std Dev 1347
3
2
1
0
−1
−2
−3

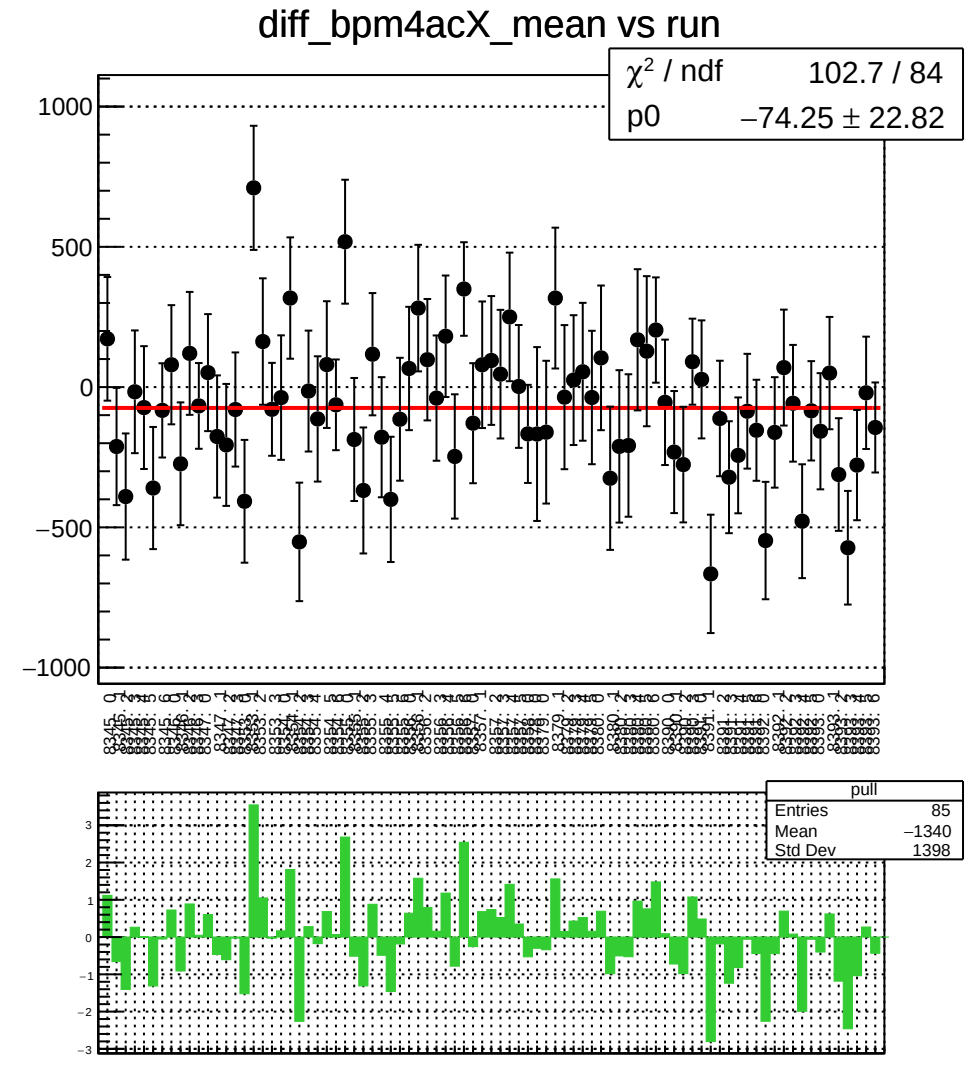

pull1D
Entries 85
Mean 0.004034
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

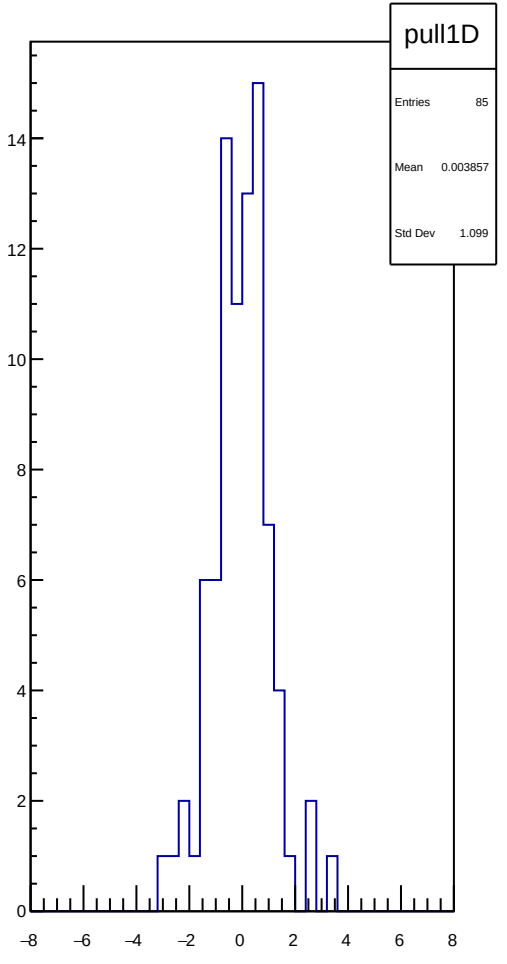

diff_bpm4eX_rms vs run
χ² / ndf 1.057e+04 / 84
p0 2.007e+04 ± 15.57
26000
25000
24000
23000
22000
21000
20000
19000
18000

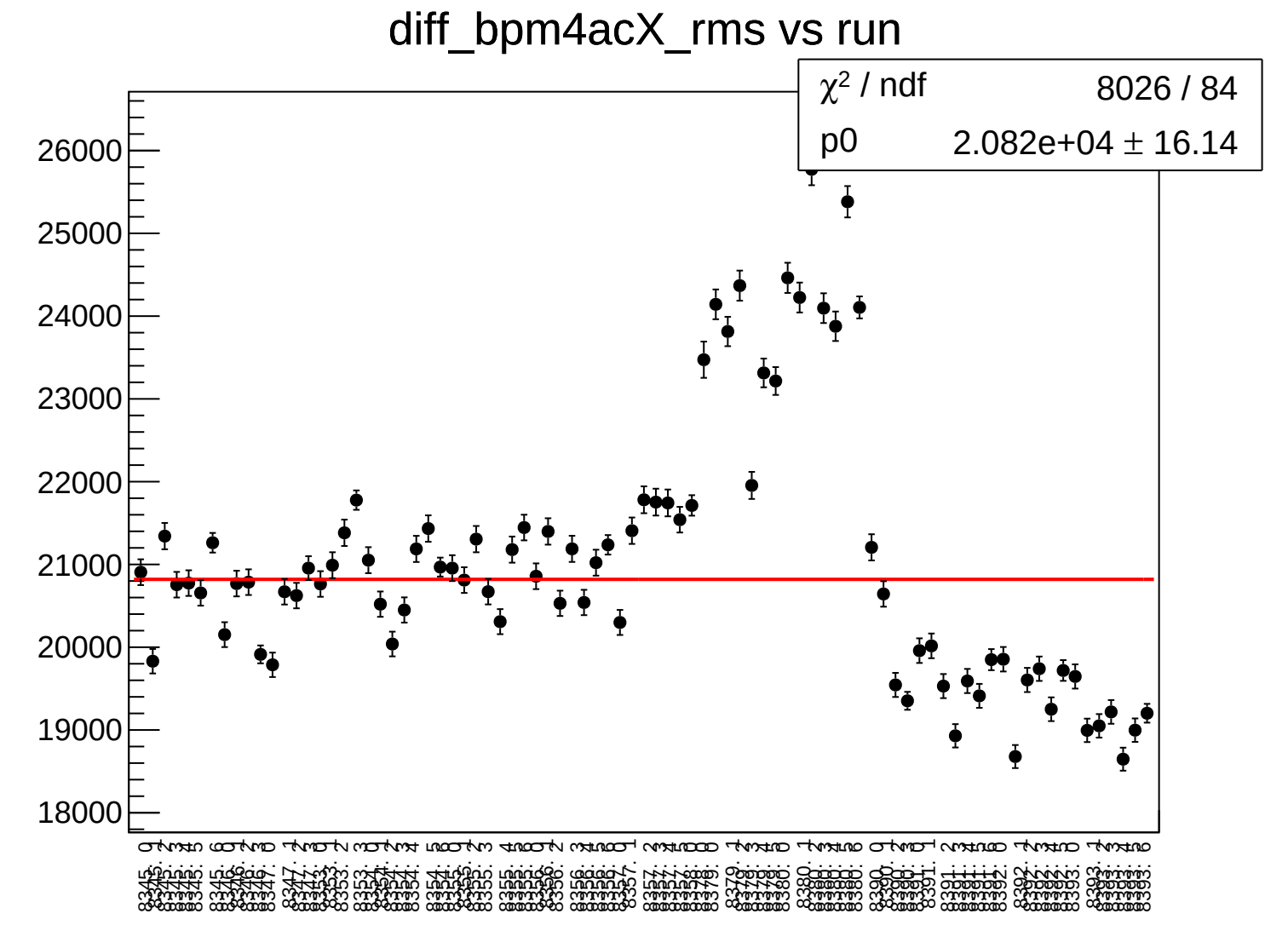

diff_bpm4eY_mean vs run
χ² / ndf 86.82 / 84
p0 6.236 ± 5.978
200
100
0
−100
−200
−300
pull
Entries 85
Mean 459.7
Std Dev 428.4
2
1
0
−1
−2
−3
−4

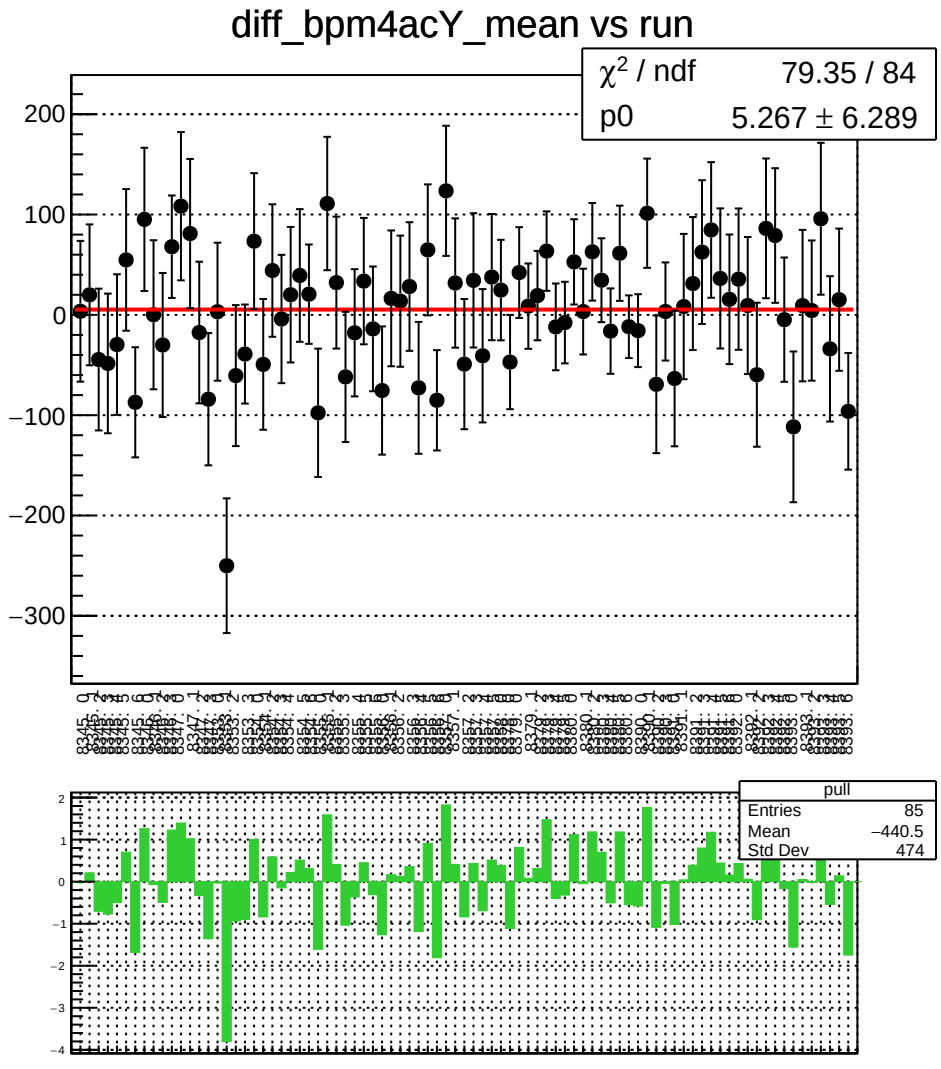

pull1D
Entries 85
Mean 0.005591
Std Dev 1.011
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

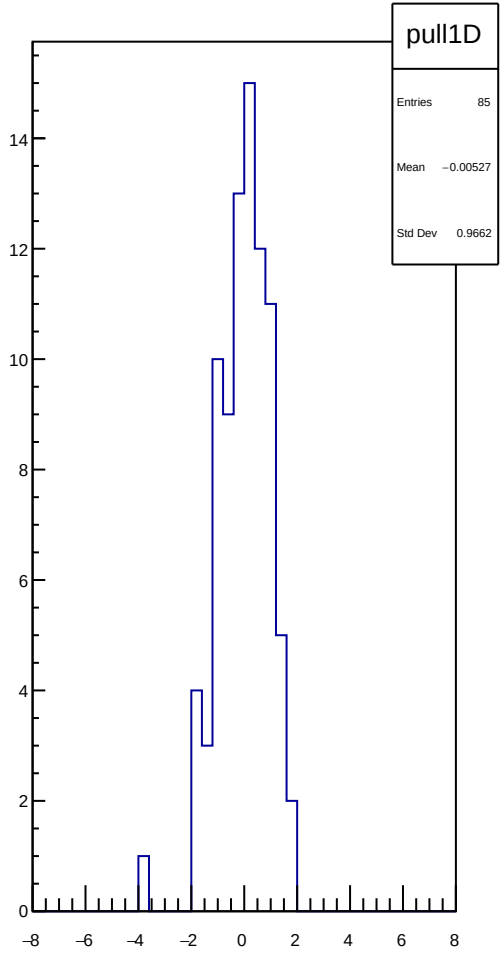

diff_bpm4eY_rms vs run
χ^2 / ndf 7.914e+04 / 84
p0 5336 ± 4.227
7000
6500
6000
5500
5000
4500
4000
3500
3000

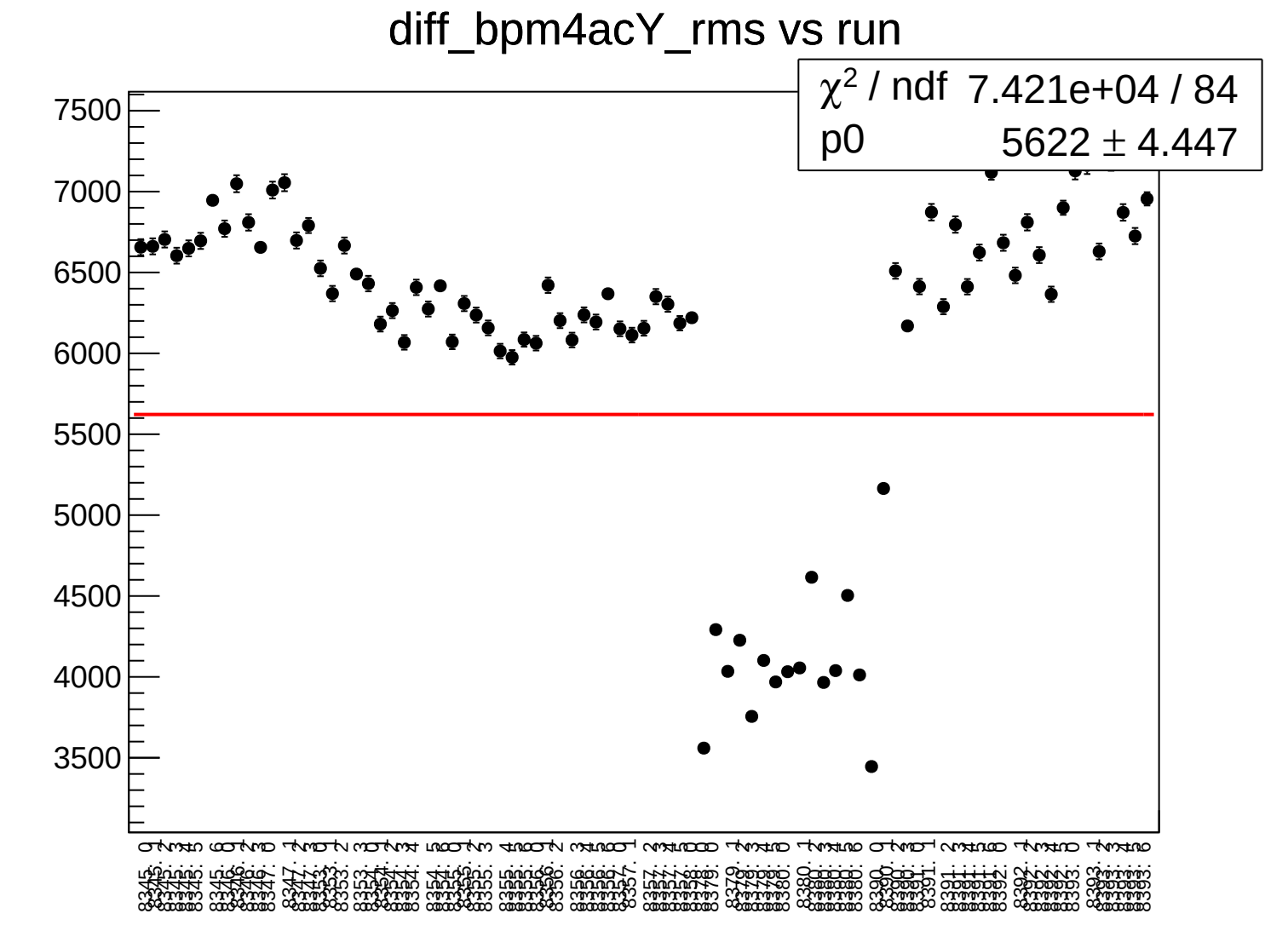

diff_bpm4acX_mean vs run
χ² / ndf 102.7 / 84
p0 −74.25 ± 22.82
1000
500
0
−500
−1000
pull
Entries 85
Mean −1340
Std Dev 1398
3
2
1
0
−1
−2
−3

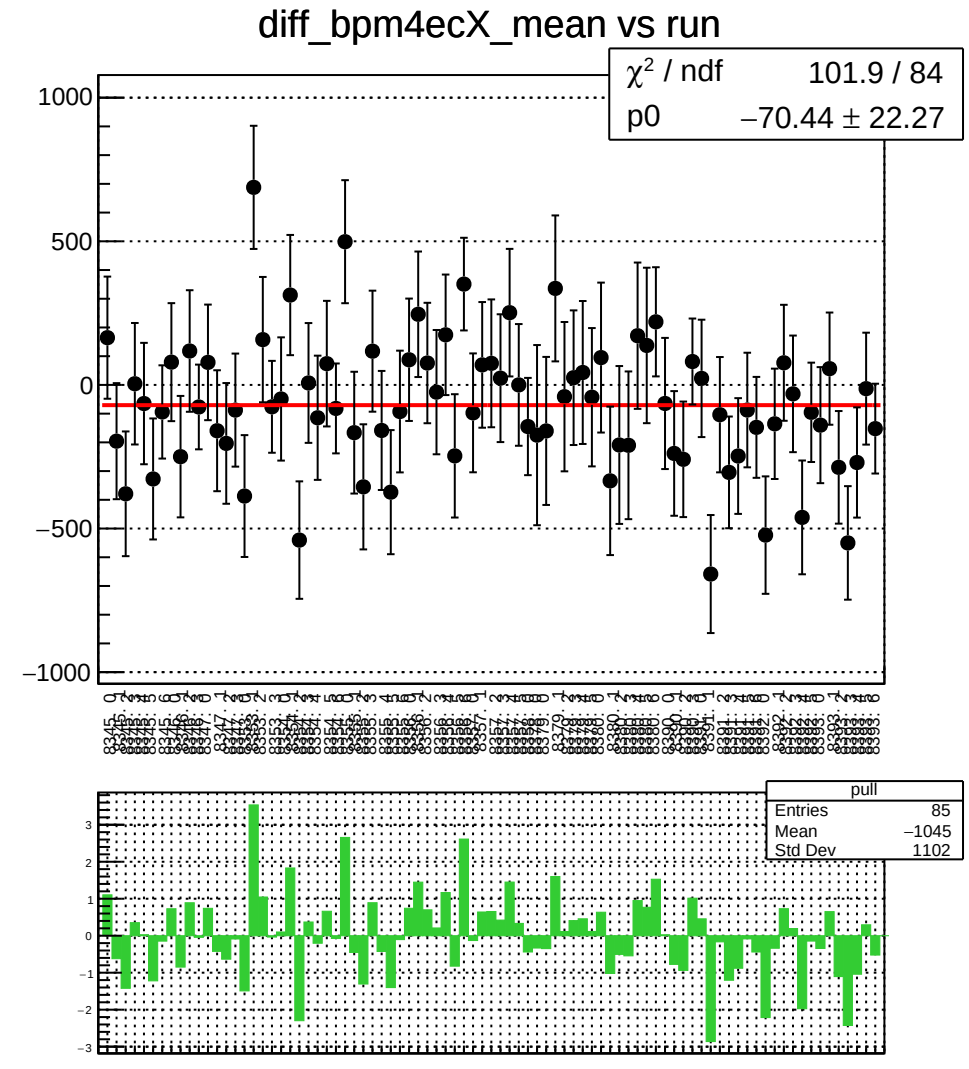

pull1D
Entries 85
Mean 0.003857
Std Dev 1.099
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

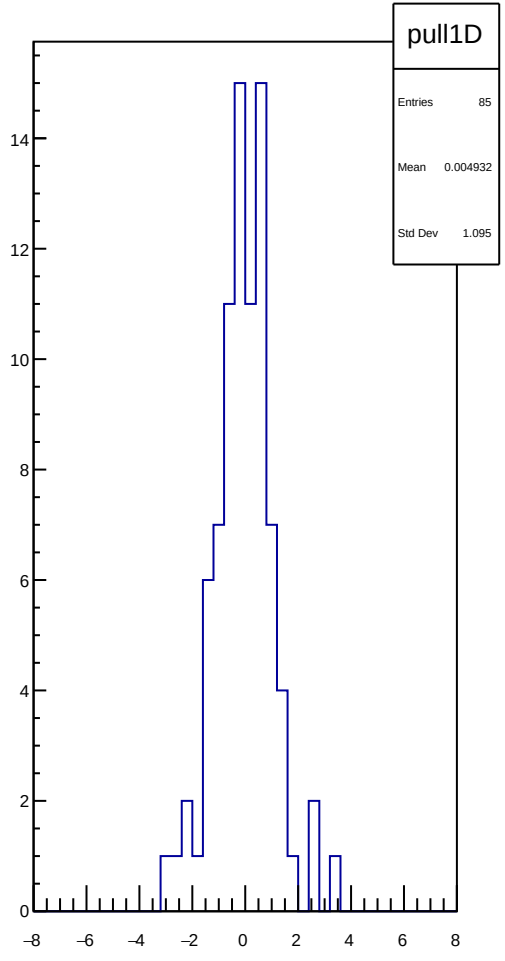

diff_bpm4acX_rms vs run
χ² / ndf 8026 / 84
p0 2.082e+04 ± 16.14
26000
25000
24000
23000
22000
21000
20000
19000
18000

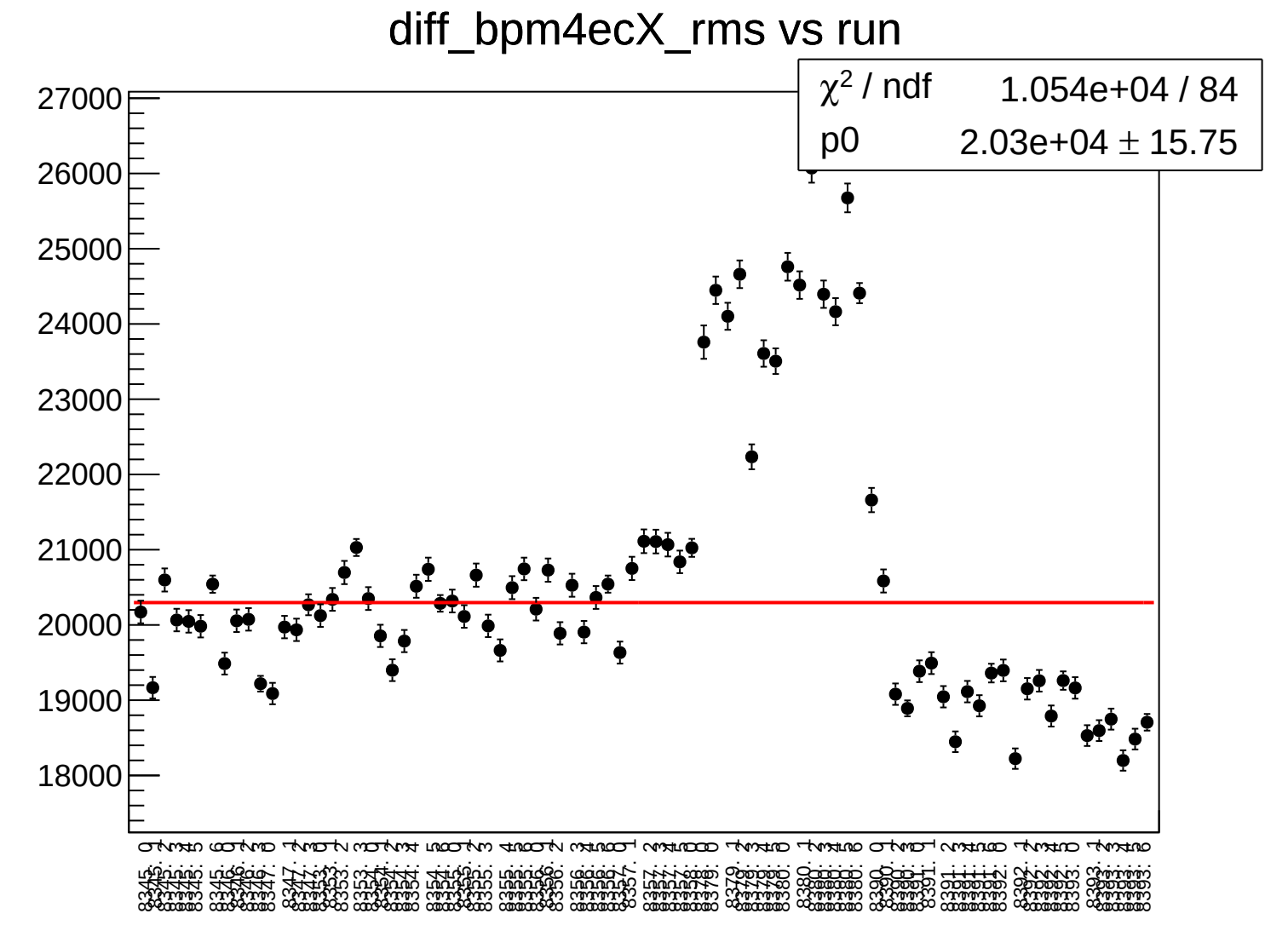

diff_bpm4acY_mean vs run
χ² / ndf 79.35 / 84
p0 5.267 ± 6.289
pull
Entries 85
Mean −440.5
Std Dev 474

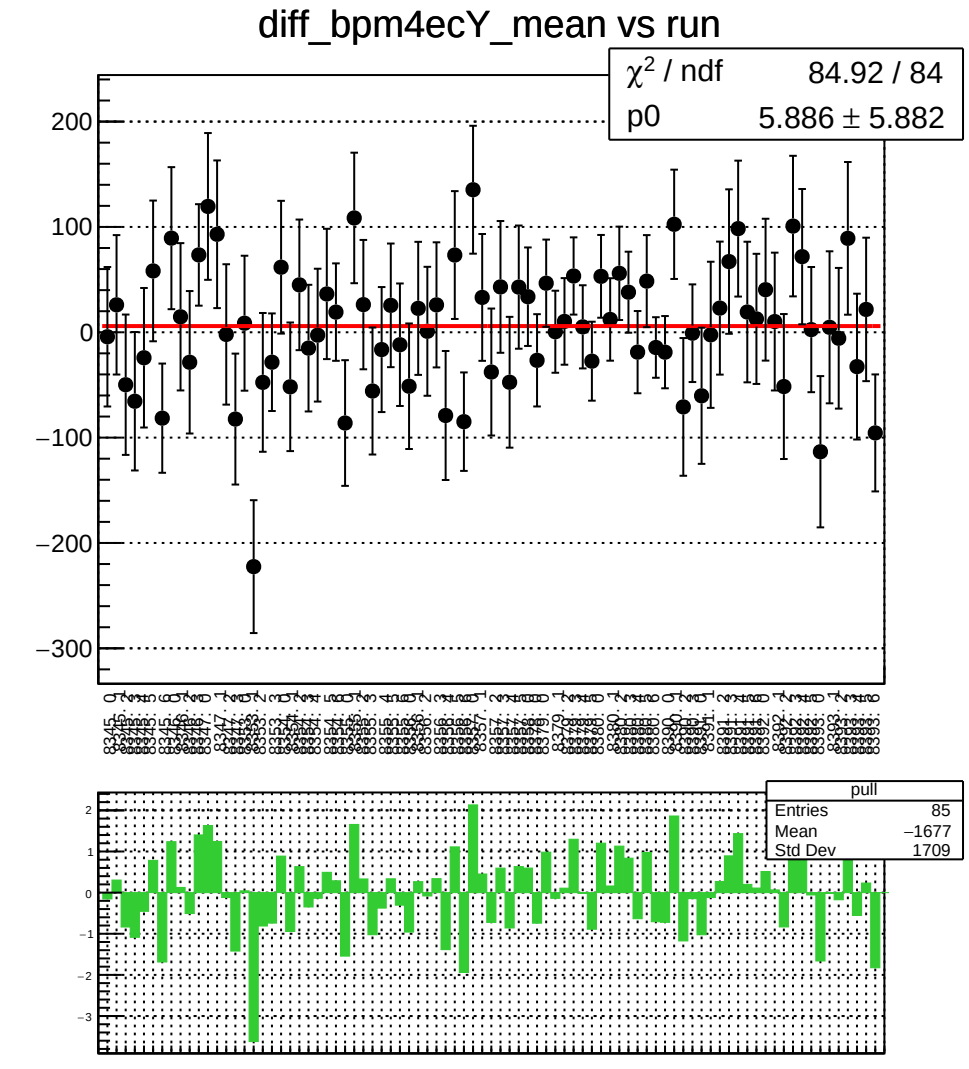

pull1D
Entries 85
Mean −0.00527
Std Dev 0.9662

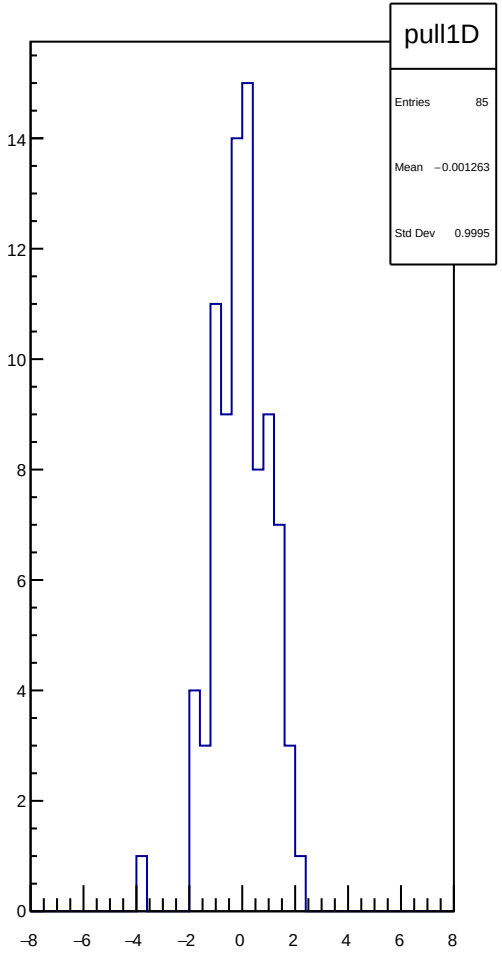

diff_bpm4acY_rms vs run
χ² / ndf 7.421e+04 / 84
p0 5622 ± 4.447
7500
7000
6500
6000
5500
5000
4500
4000
3500

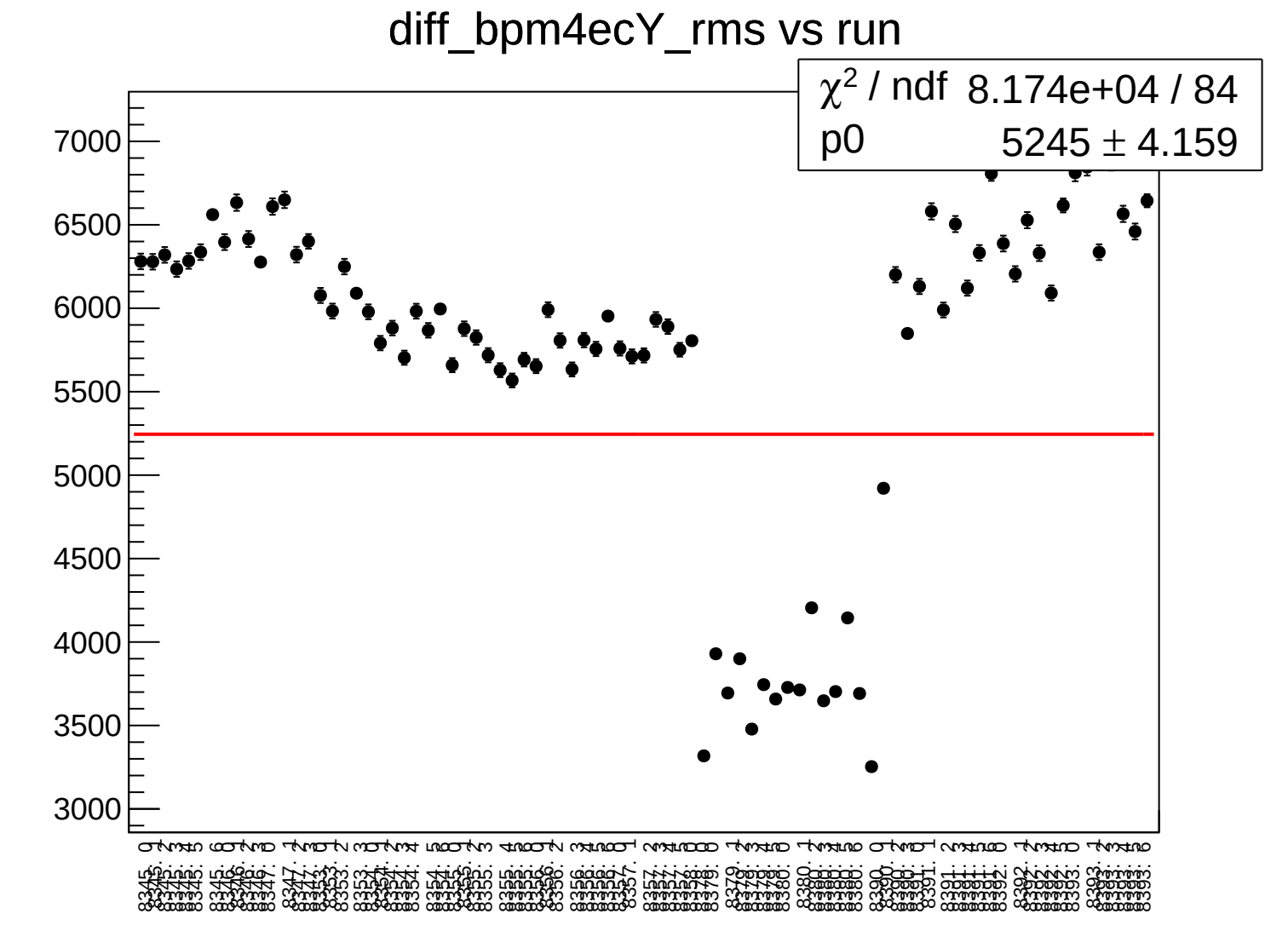

diff_bpm4ecX_mean vs run
χ² / ndf 101.9 / 84
p0 −70.44 ± 22.27
1000
500
0
−500
−1000
pull
Entries 85
Mean −1045
Std Dev 1102
3
2
1
0
−1
−2
−3

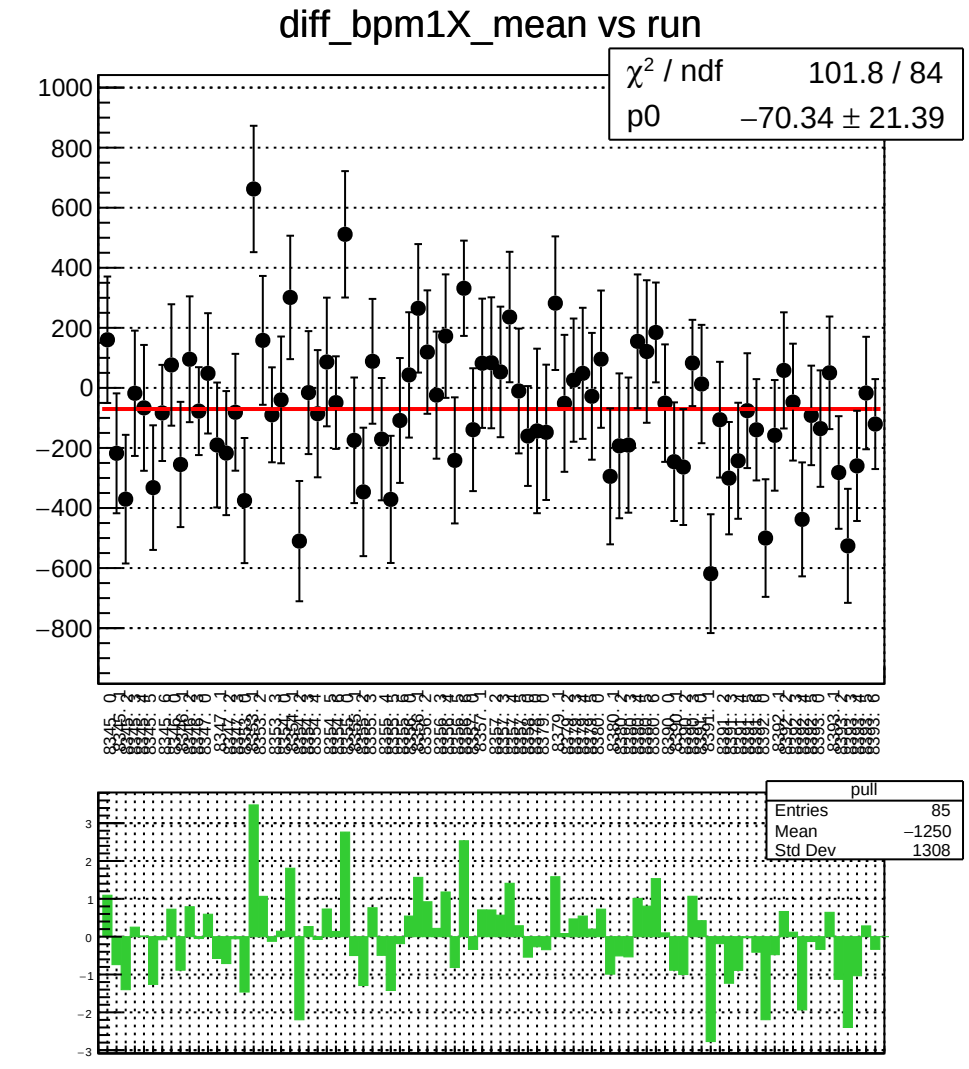

pull1D
Entries 85
Mean 0.004932
Std Dev 1.095
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

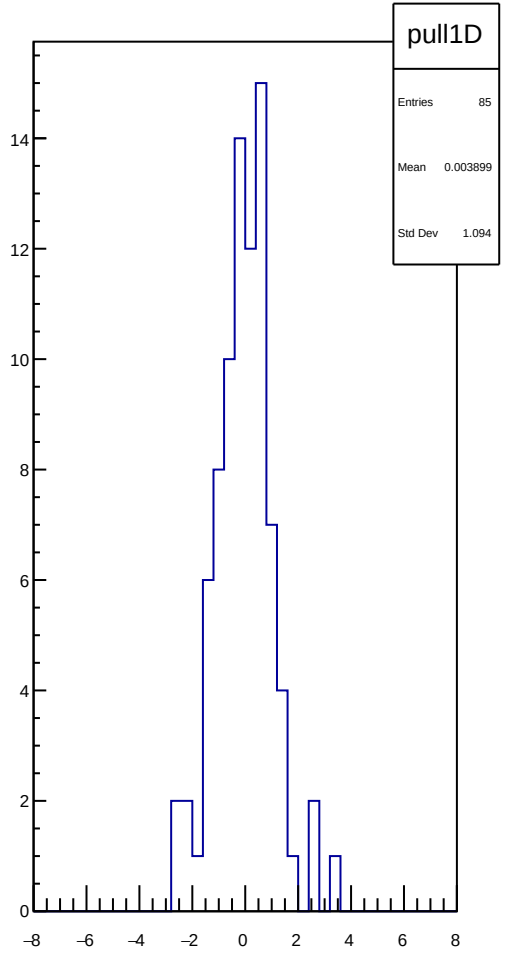

diff_bpm4ecX_rms vs run
χ² / ndf 1.054e+04 / 84
p0 2.03e+04 ± 15.75
27000
26000
25000
24000
23000
22000
21000
20000
19000
18000

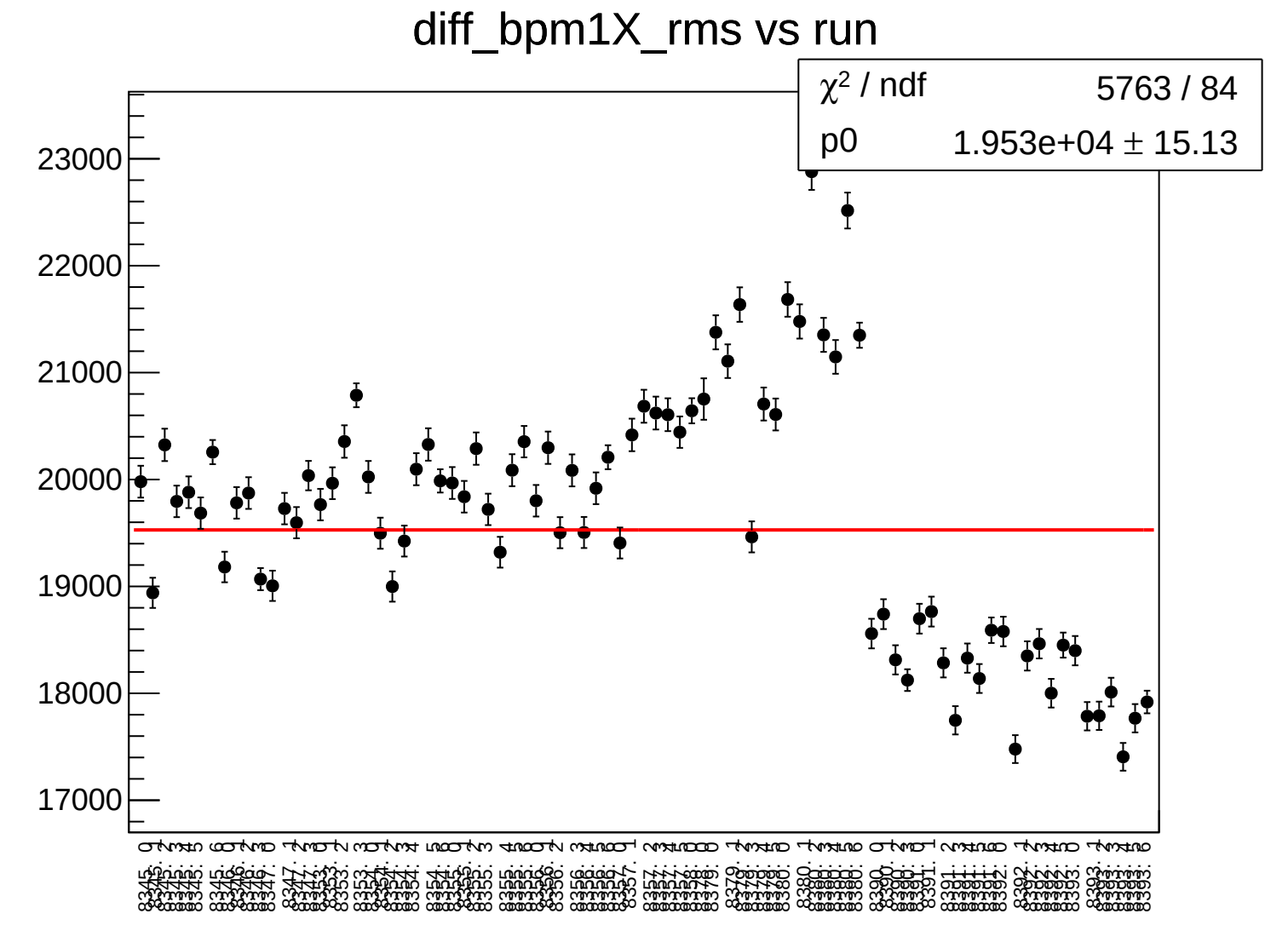

diff_bpm4ecY_mean vs run
χ² / ndf 84.92 / 84
p0 5.886 ± 5.882
pull
Entries 85
Mean −1677
Std Dev 1709

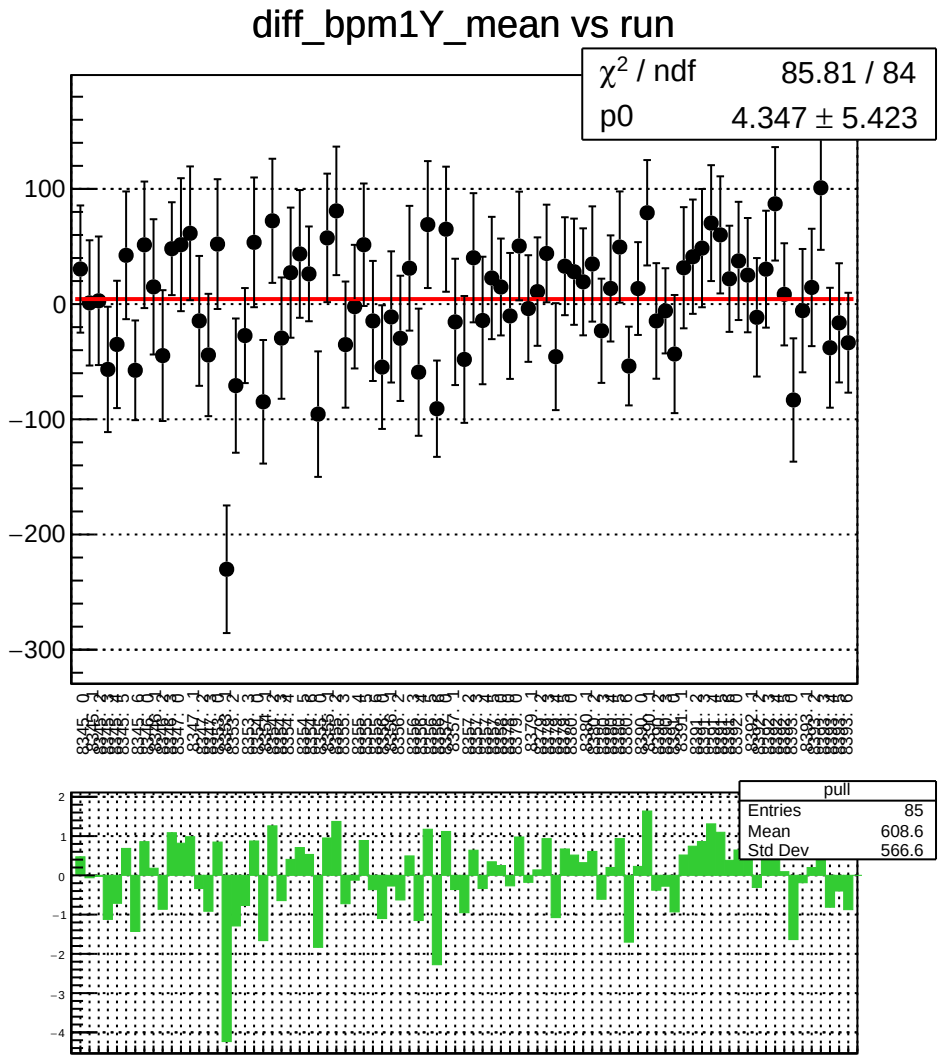

pull1D
Entries 85
Mean −0.001263
Std Dev 0.9995

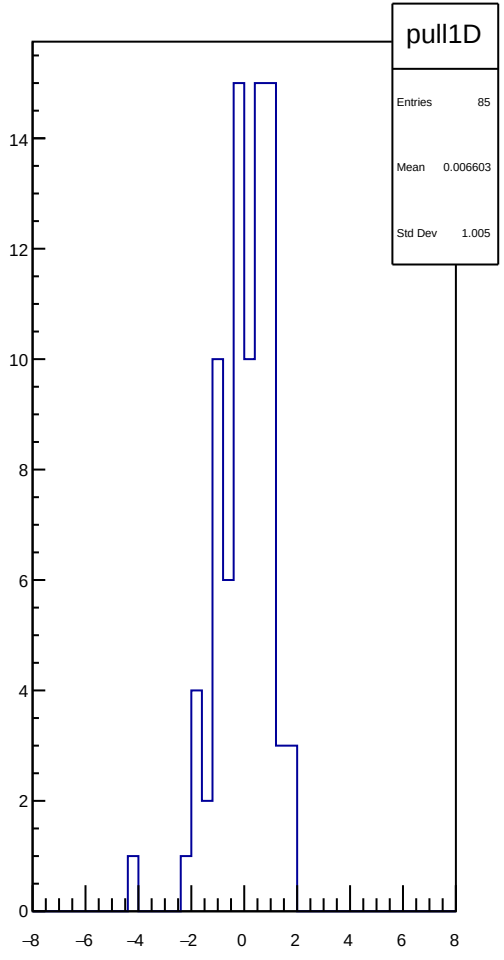

diff_bpm4ecY_rms vs run
χ² / ndf 8.174e+04 / 84
p0 5245 ± 4.159
7000
6500
6000
5500
5000
4500
4000
3500
3000

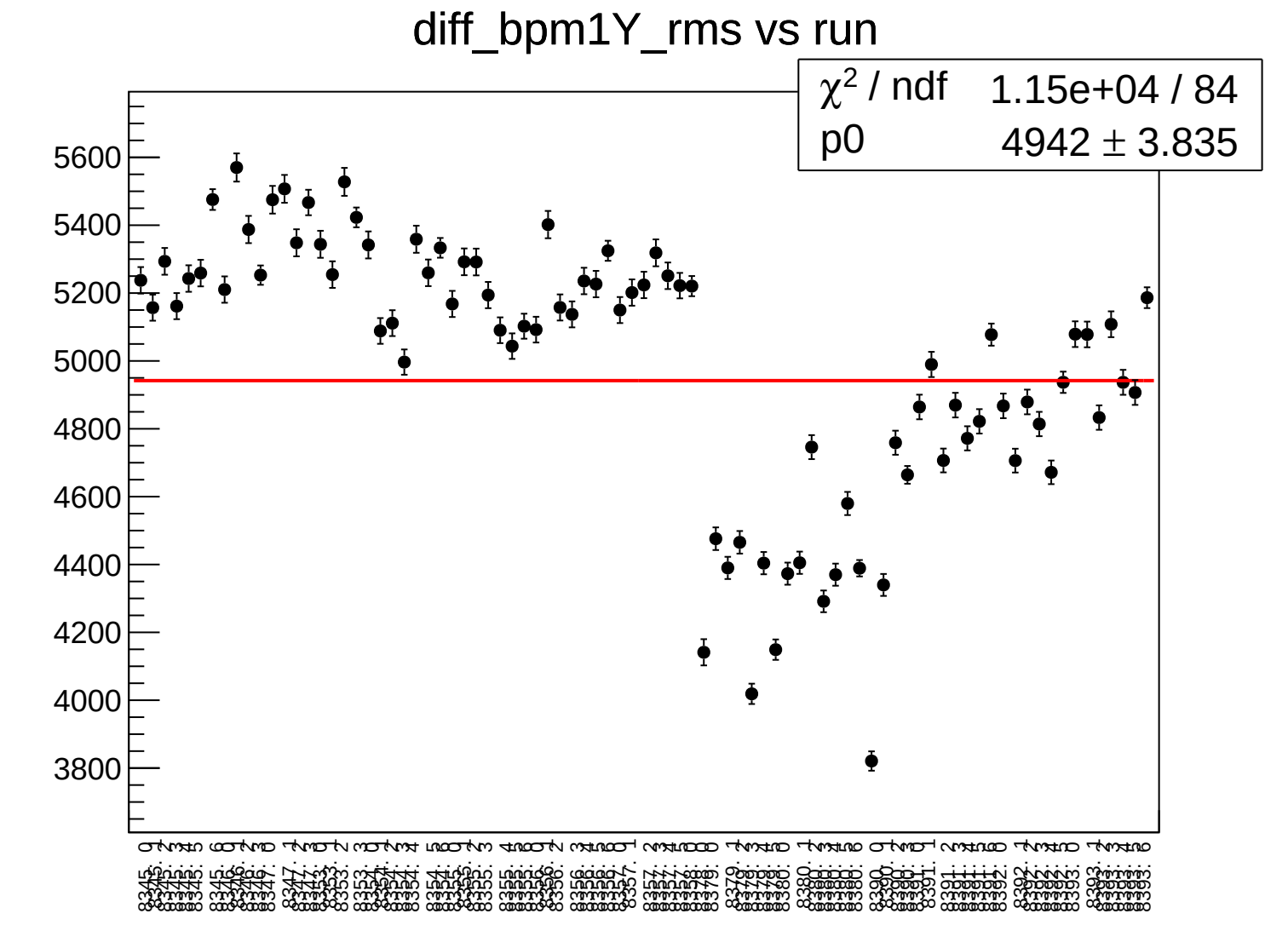

diff_bpm1X_mean vs run
χ² / ndf 101.8 / 84
p0 −70.34 ± 21.39
pull
Entries 85
Mean −1250
Std Dev 1308

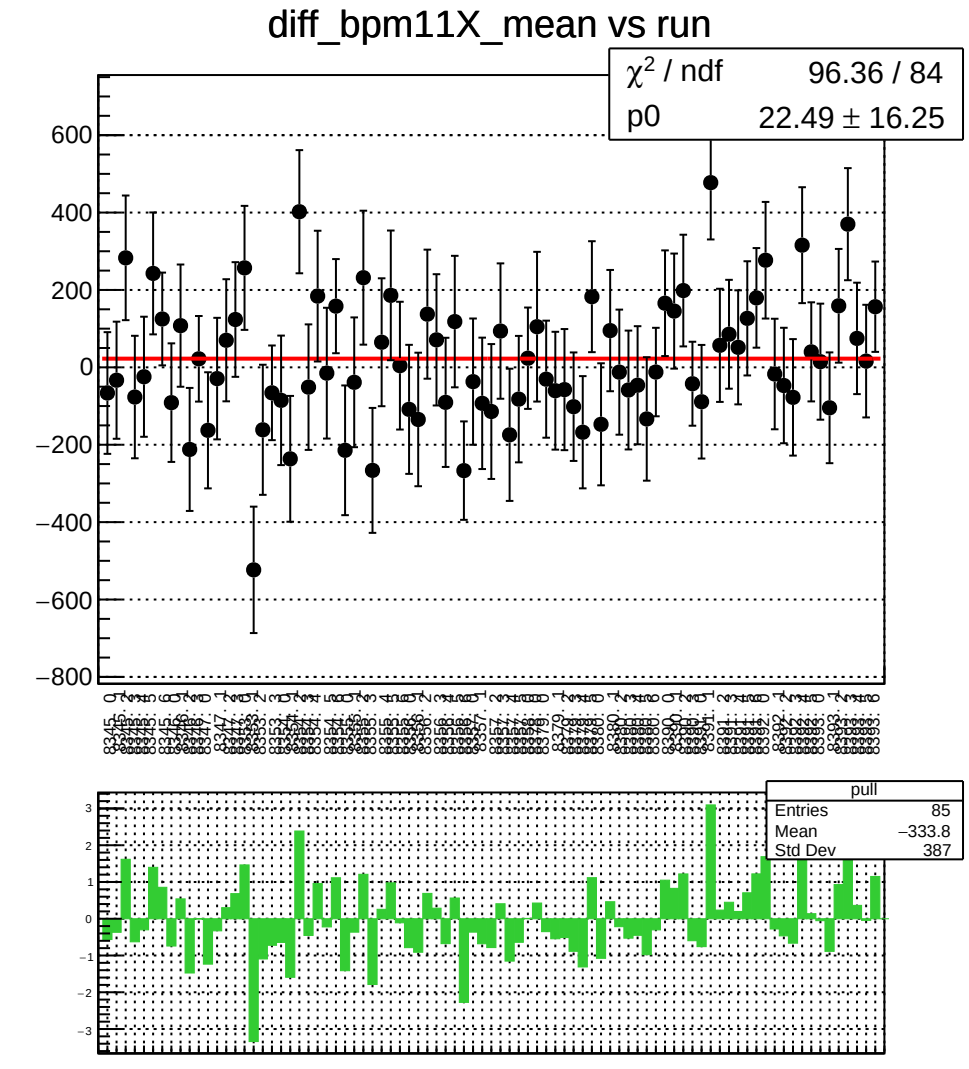

pull1D
Entries 85
Mean 0.003899
Std Dev 1.094

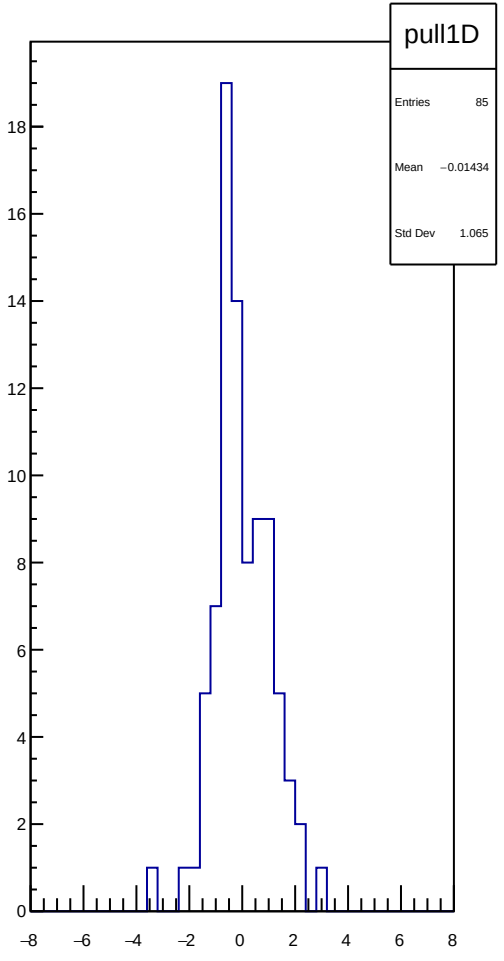

diff_bpm1X_rms vs run
χ² / ndf 5763 / 84
p0 1.953e+04 ± 15.13
23000
22000
21000
20000
19000
18000
17000

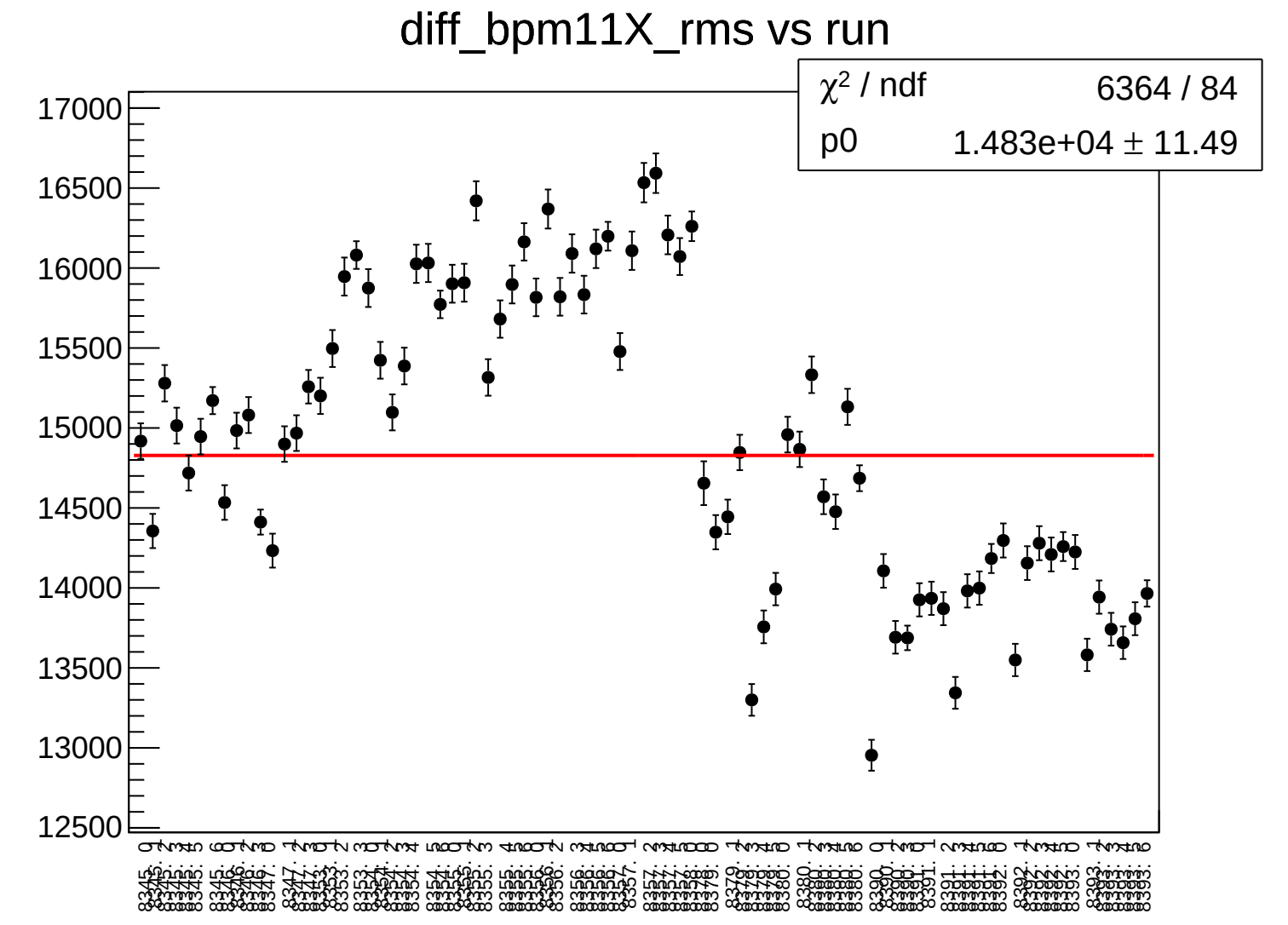

diff_bpm1Y_mean vs run
χ² / ndf 85.81 / 84
p0 4.347 ± 5.423
100
0
−100
−200
−300
pull
Entries 85
Mean 608.6
Std Dev 566.6
2
1
0
−1
−2
−3
−4

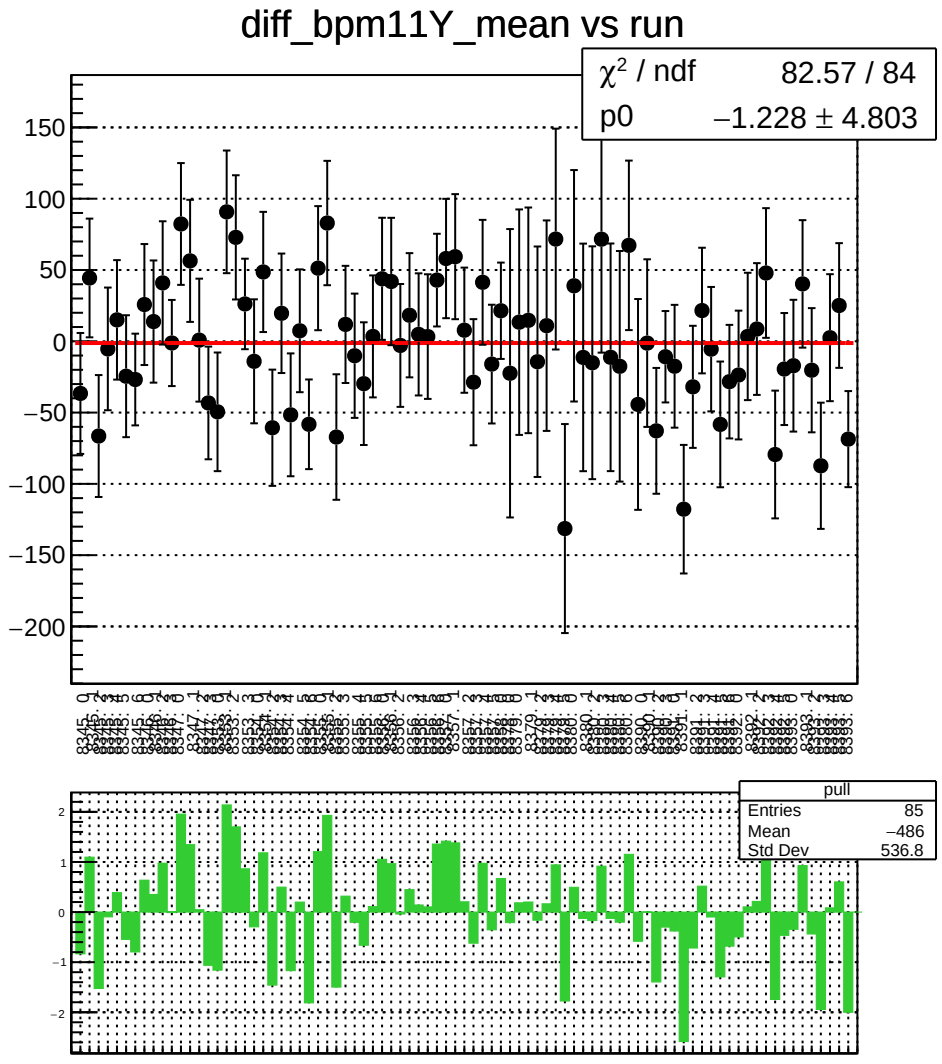

pull1D
Entries 85
Mean 0.006603
Std Dev 1.005
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

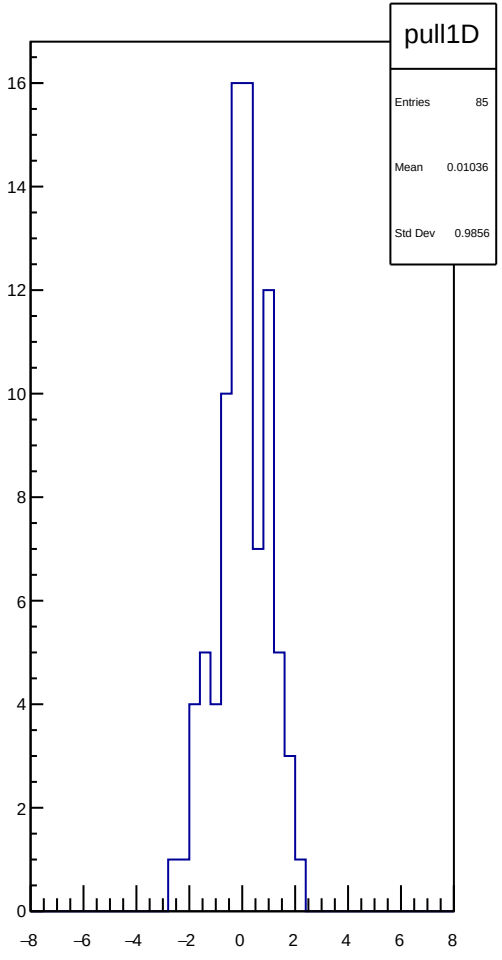

diff_bpm1Y_rms vs run
χ² / ndf 1.15e+04 / 84
p0 4942 ± 3.835
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800

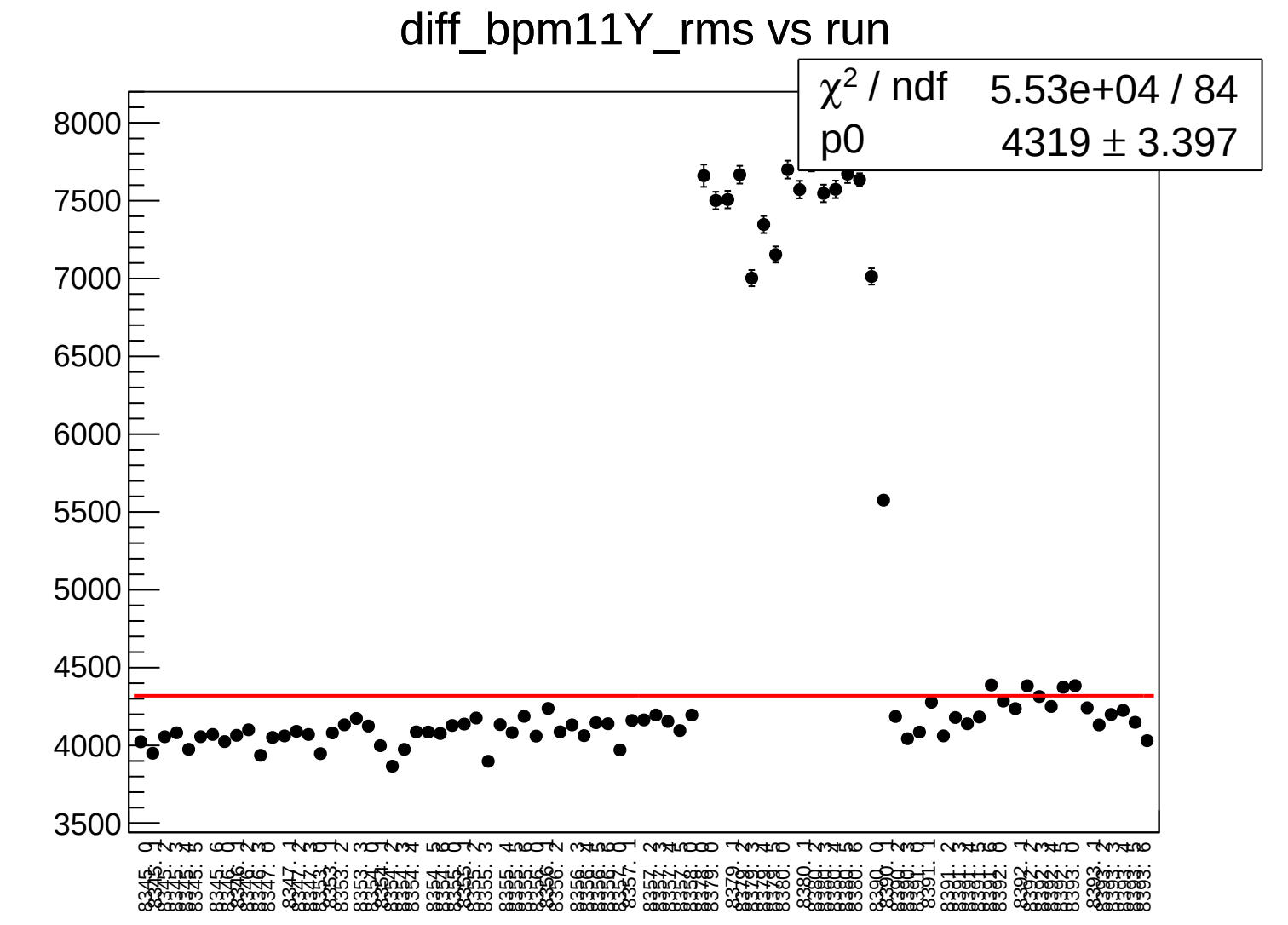

diff_bpm11X_mean vs run
χ^2 / ndf 96.36 / 84
p0 22.49 ± 16.25
pull
Entries 85
Mean −333.8
Std Dev 387

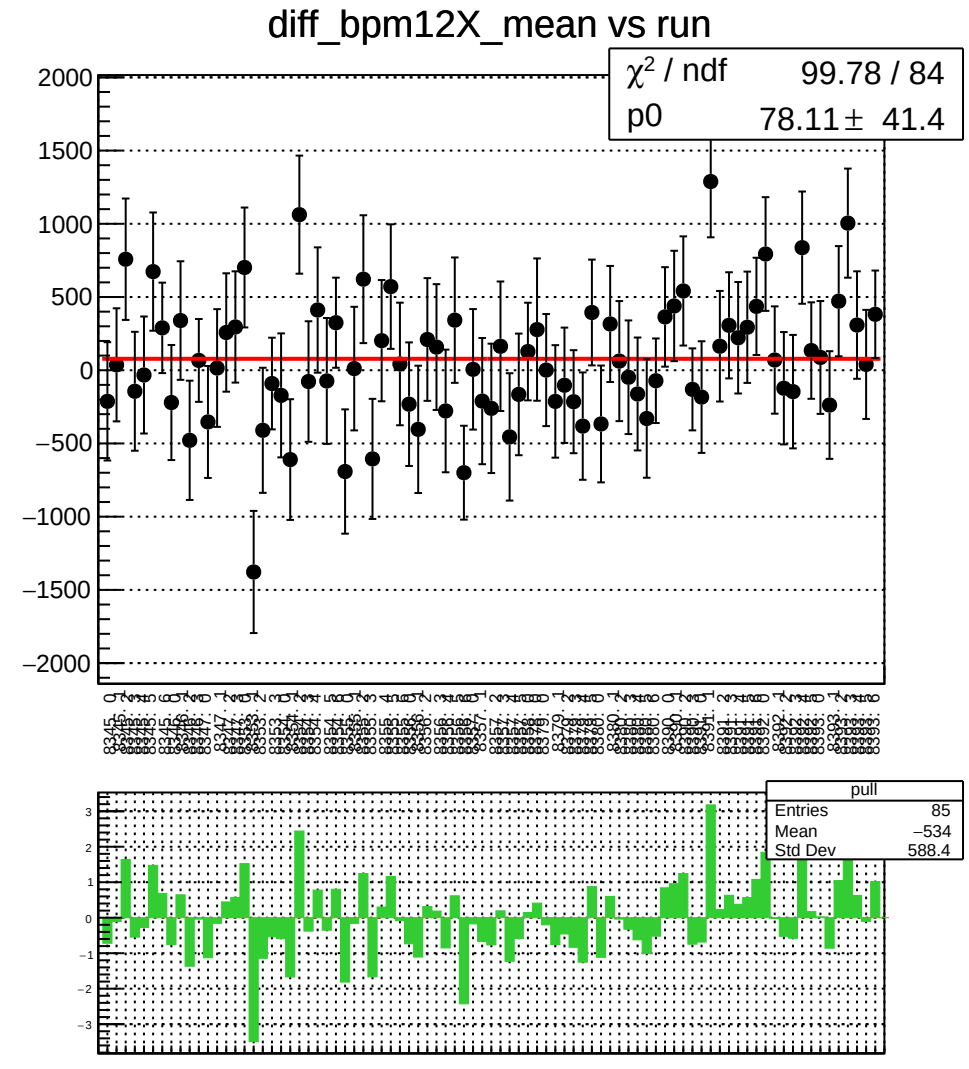

pull1D
Entries 85
Mean −0.01434
Std Dev 1.065

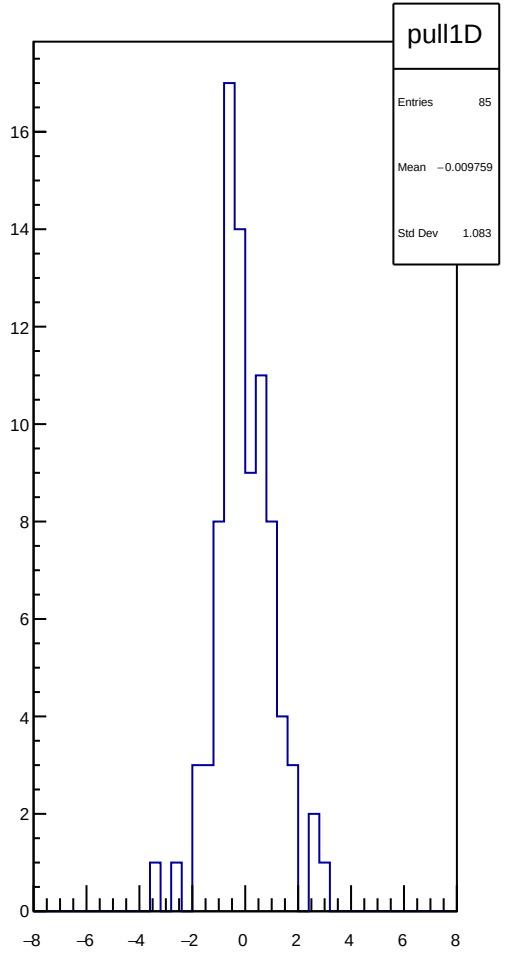

diff_bpm11X_rms vs run
χ² / ndf 6364 / 84
p0 1.483e+04 ± 11.49
17000
16500
16000
15500
15000
14500
14000
13500
13000
12500

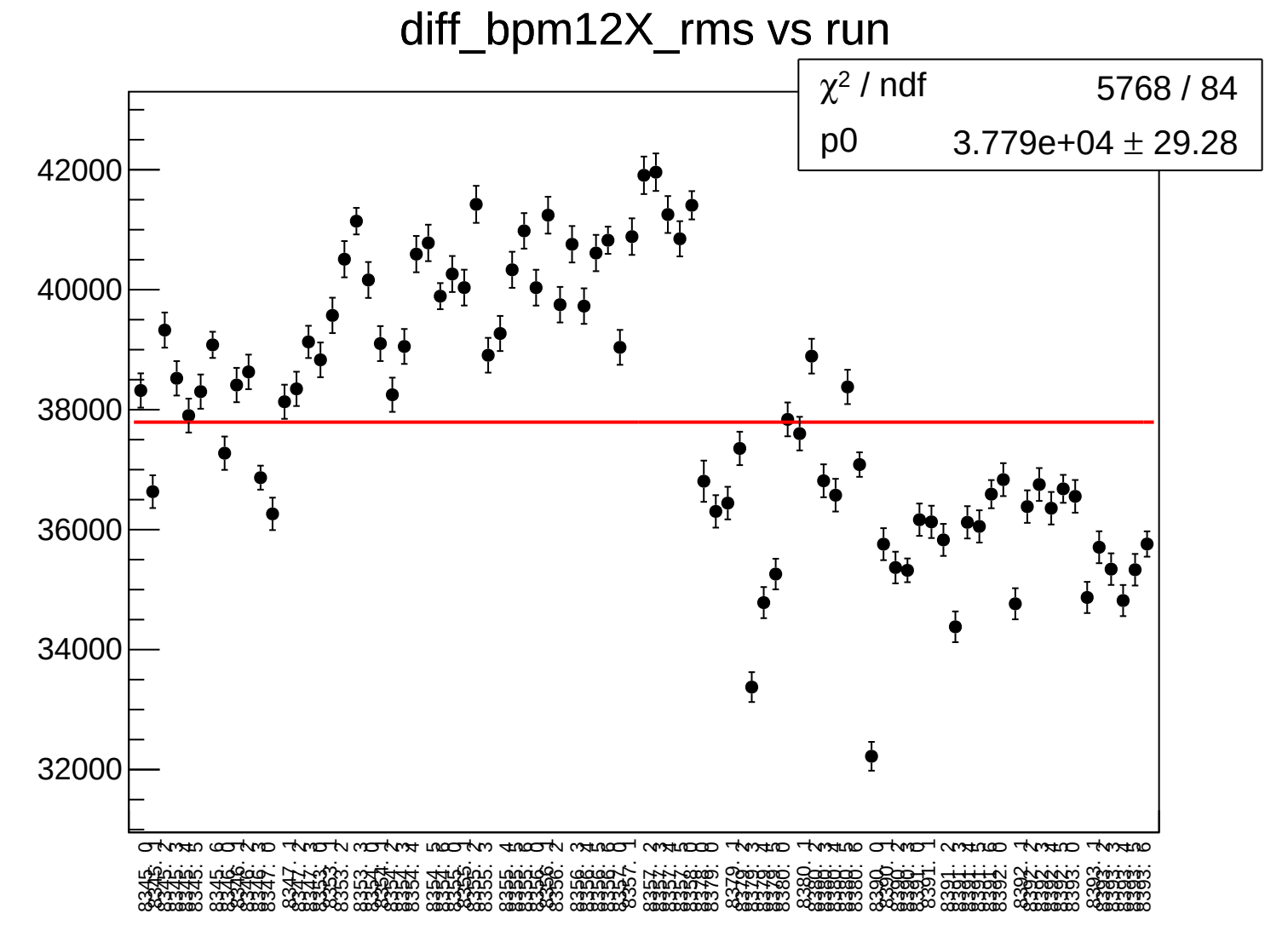

diff_bpm11Y_mean vs run
χ^2 / ndf 82.57 / 84
p0 −1.228 ± 4.803
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −486
Std Dev 536.8
2
1
0
−1
−2

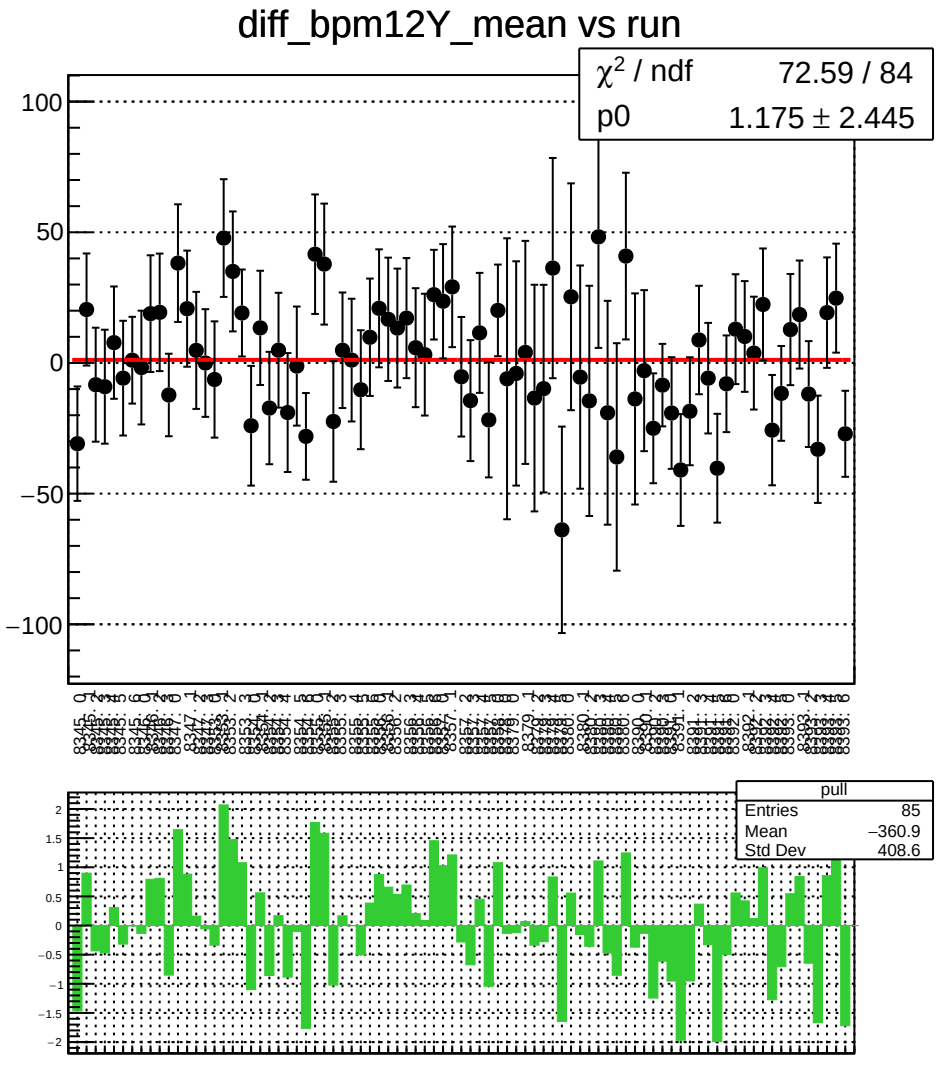

pull1D
Entries 85
Mean 0.01036
Std Dev 0.9856
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

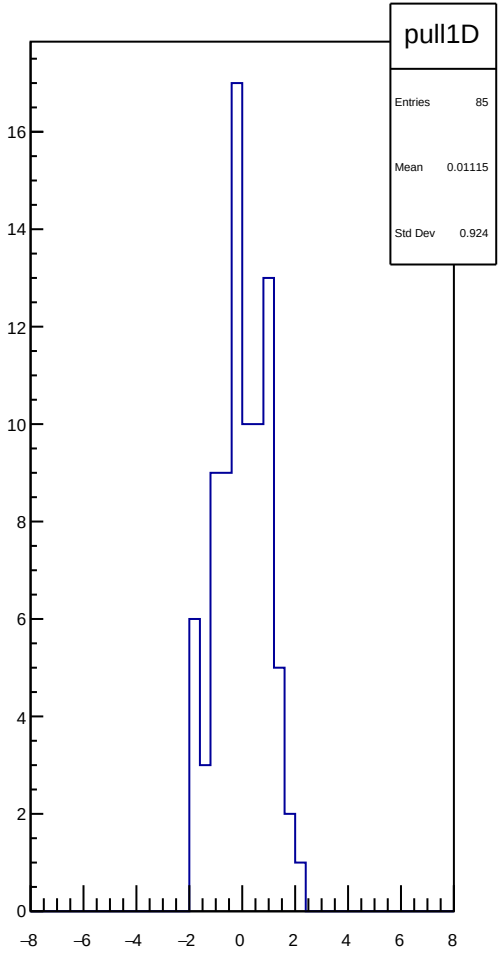

diff_bpm11Y_rms vs run
χ² / ndf 5.53e+04 / 84
p0 4319 ± 3.397
8000
7500
7000
6500
6000
5500
5000
4500
4000
3500

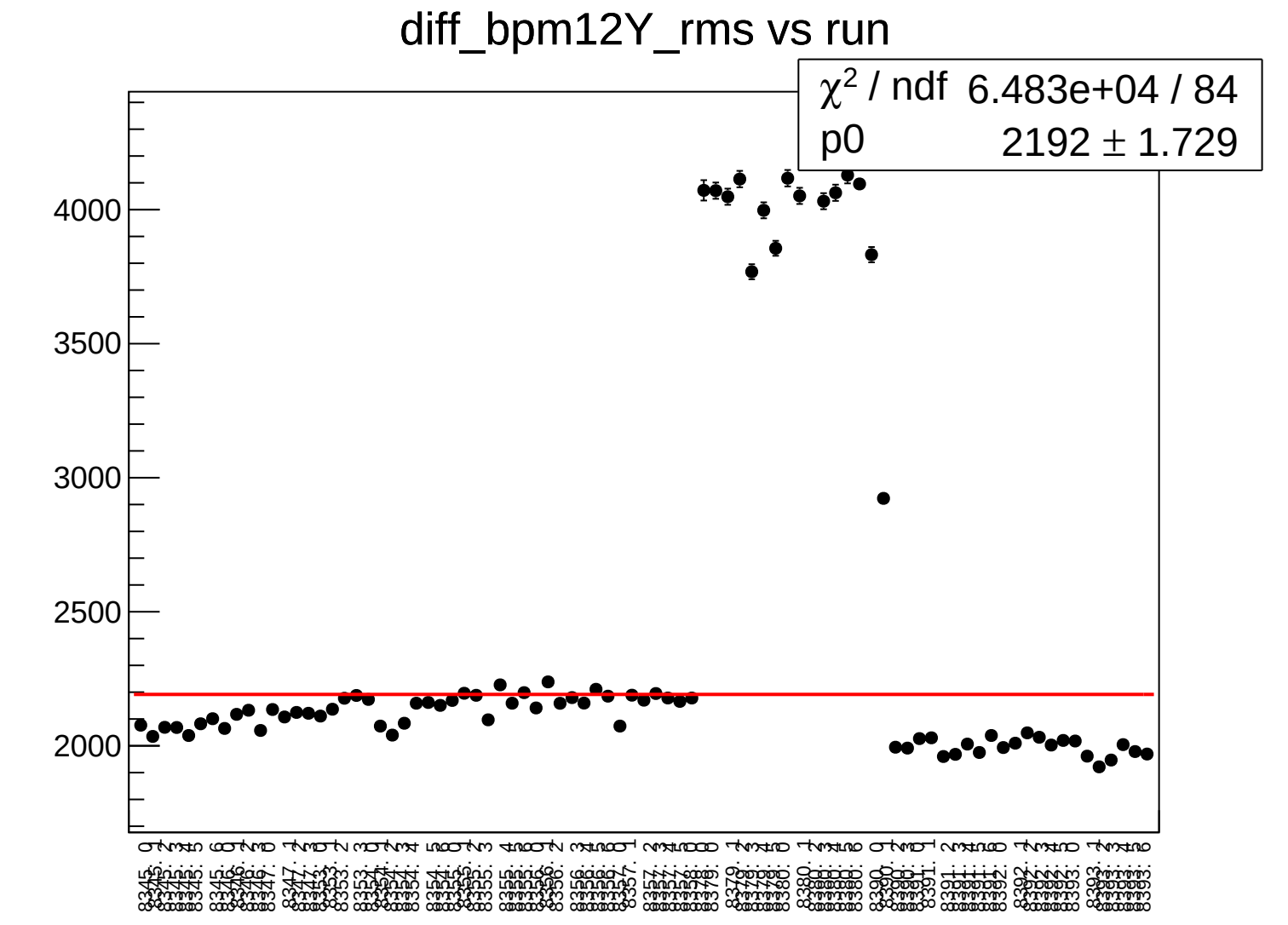

diff_bpm12X_mean vs run
χ² / ndf 99.78 / 84
p0 78.11 ± 41.4
pull
Entries 85
Mean −534
Std Dev 588.4

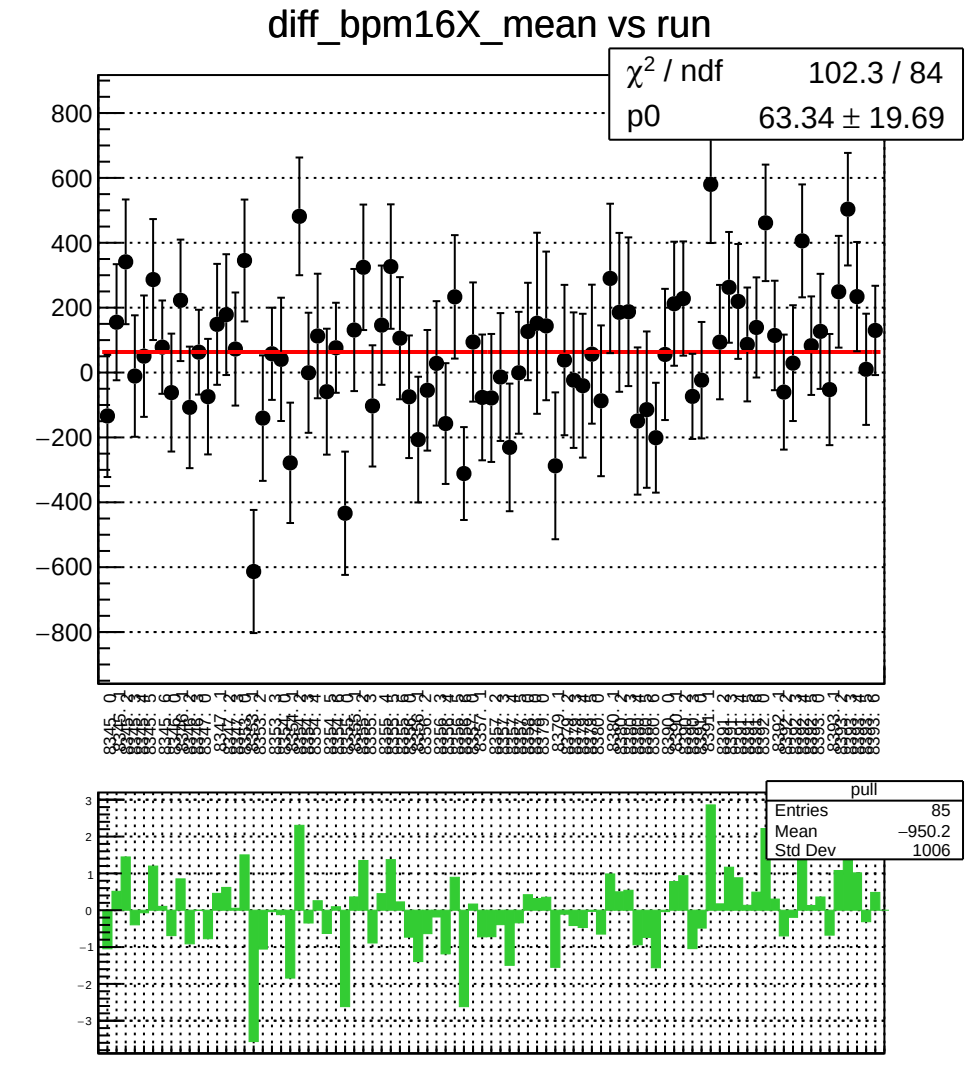

pull1D
Entries 85
Mean −0.009759
Std Dev 1.083

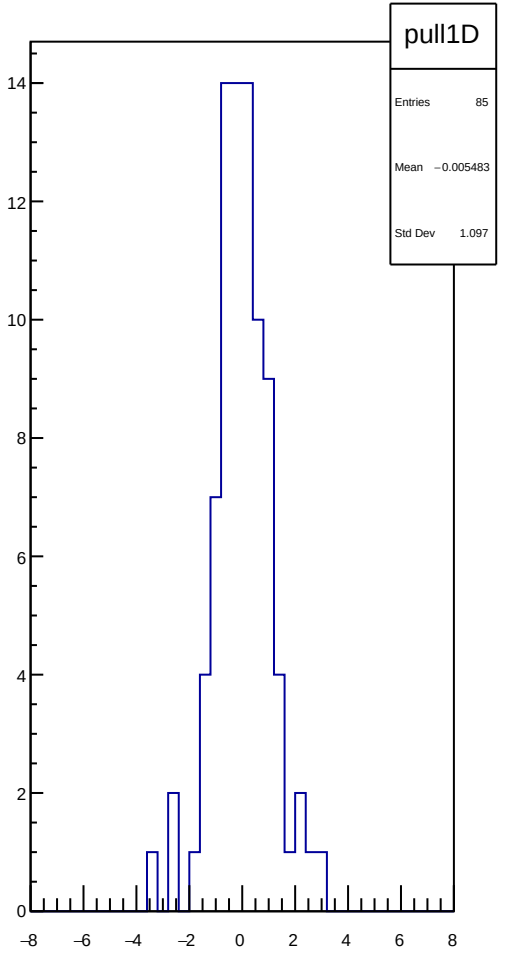

diff_bpm12X_rms vs run
χ² / ndf 5768 / 84
p0 3.779e+04 ± 29.28
42000
40000
38000
36000
34000
32000

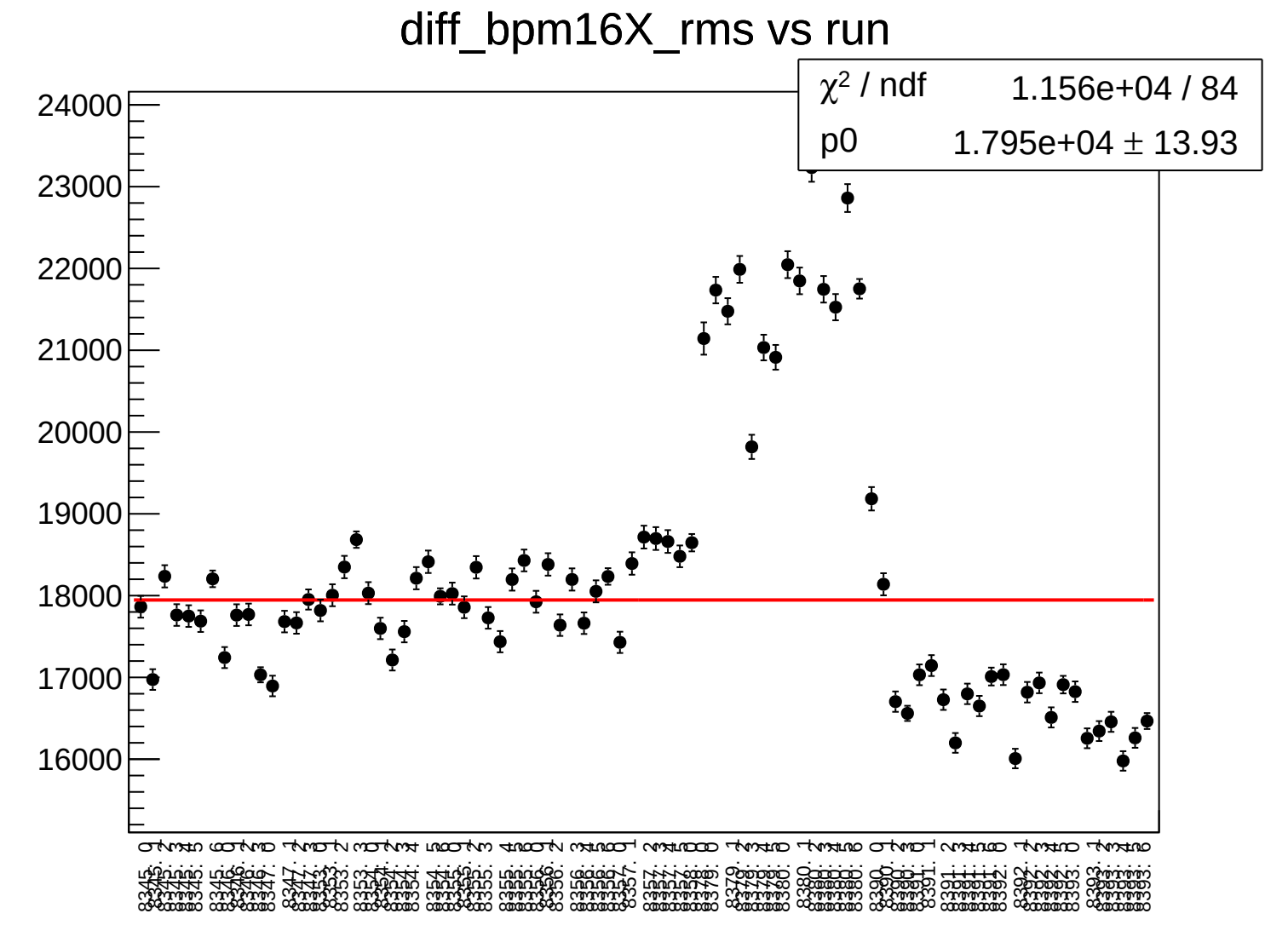

diff_bpm12Y_mean vs run
χ^2 / ndf 72.59 / 84
p0 1.175 ± 2.445
100
50
0
−50
−100
pull
Entries 85
Mean −360.9
Std Dev 408.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

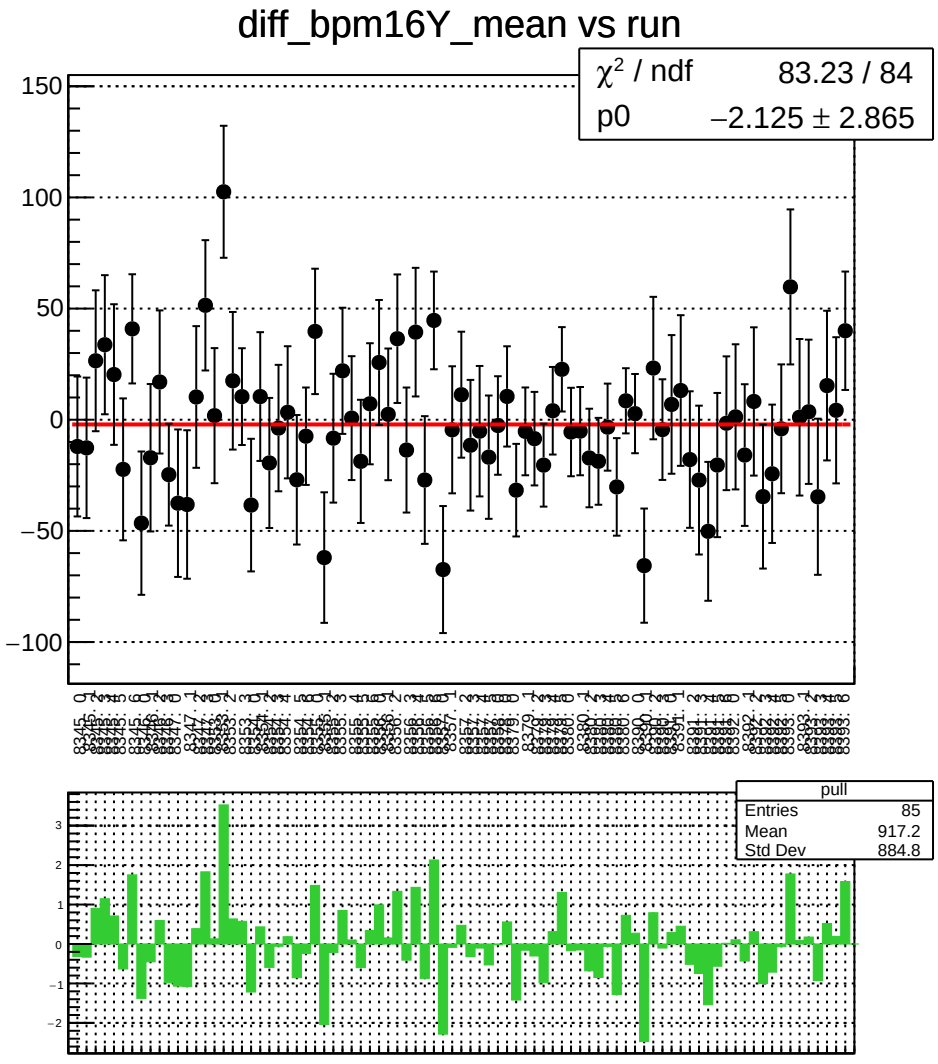

pull1D
Entries 85
Mean 0.01115
Std Dev 0.924
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

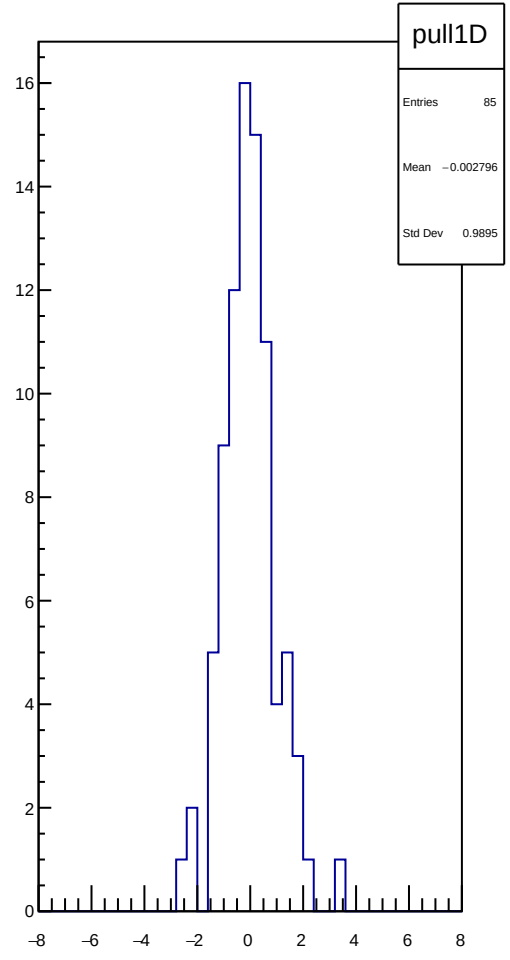

diff_bpm12Y_rms vs run
χ² / ndf 6.483e+04 / 84
p0 2192 ± 1.729
4000
3500
3000
2500
2000

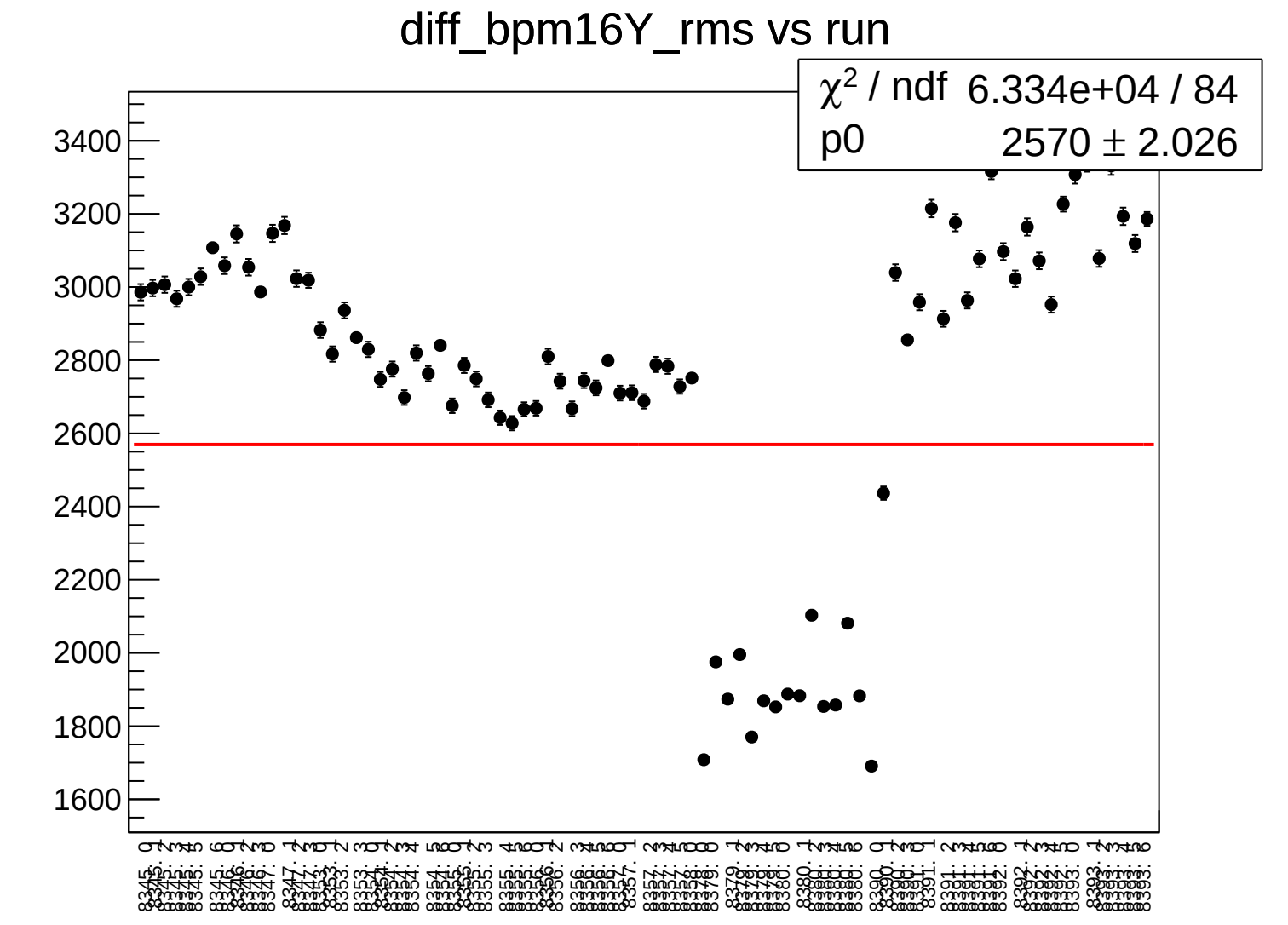

diff_bpm16X_mean vs run
χ² / ndf 102.3 / 84
p0 63.34 ± 19.69
pull
Entries 85
Mean −950.2
Std Dev 1006

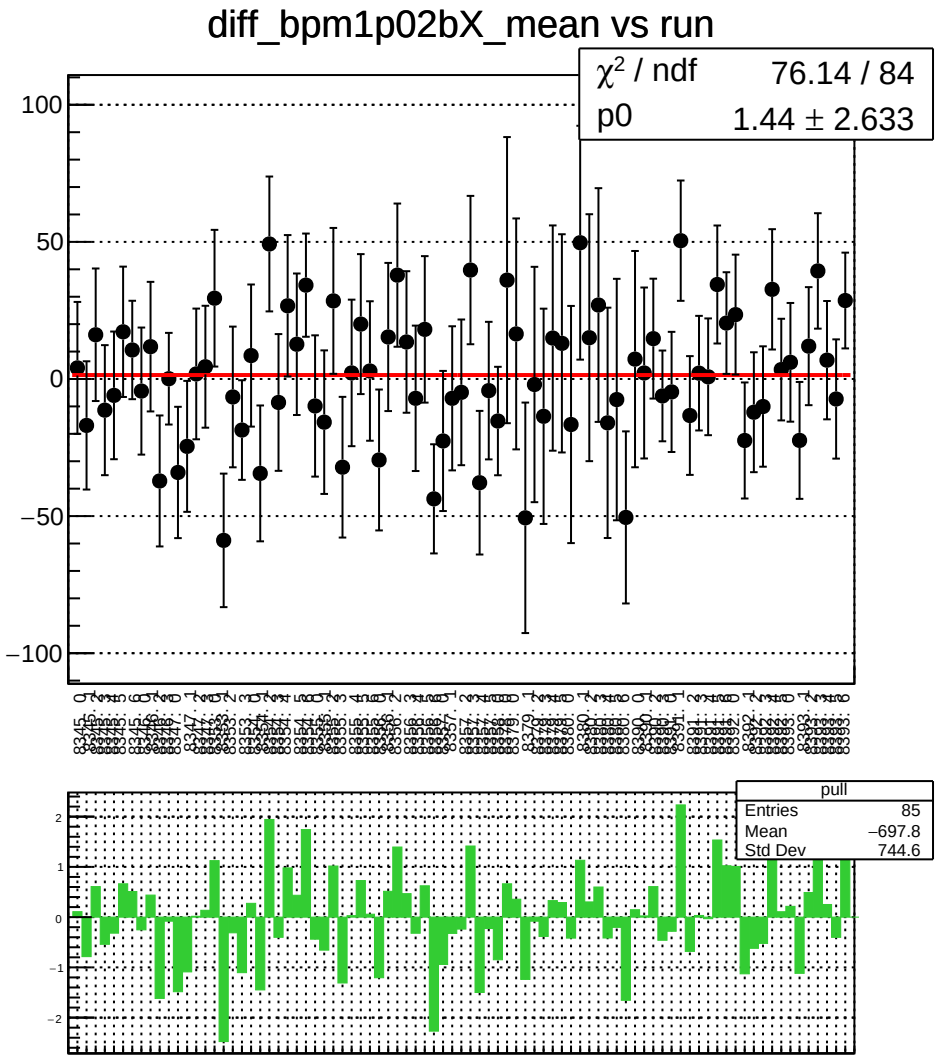

pull1D
Entries 85
Mean −0.005483
Std Dev 1.097

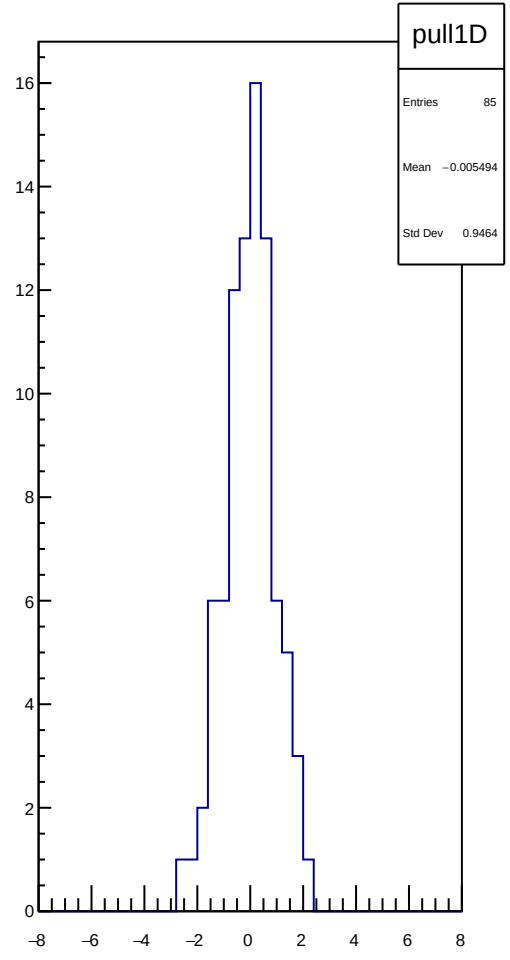

diff_bpm16X_rms vs run
χ² / ndf 1.156e+04 / 84
p0 1.795e+04 ± 13.93
24000
23000
22000
21000
20000
19000
18000
17000
16000

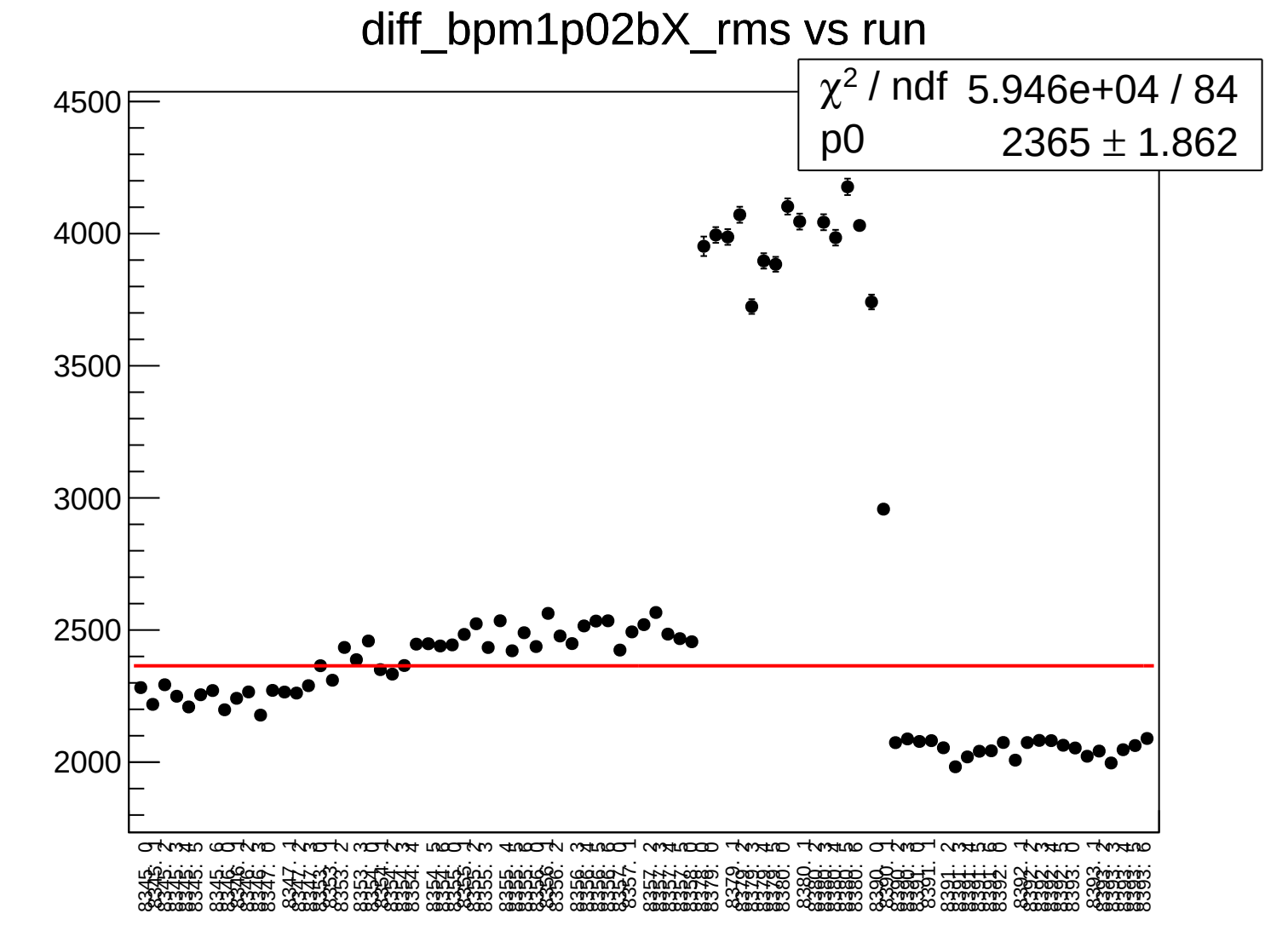

diff_bpm16Y_mean vs run
χ² / ndf 83.23 / 84
p0 −2.125 ± 2.865
150
100
50
0
−50
−100
pull
Entries 85
Mean 917.2
Std Dev 884.8
3
2
1
0
−1
−2

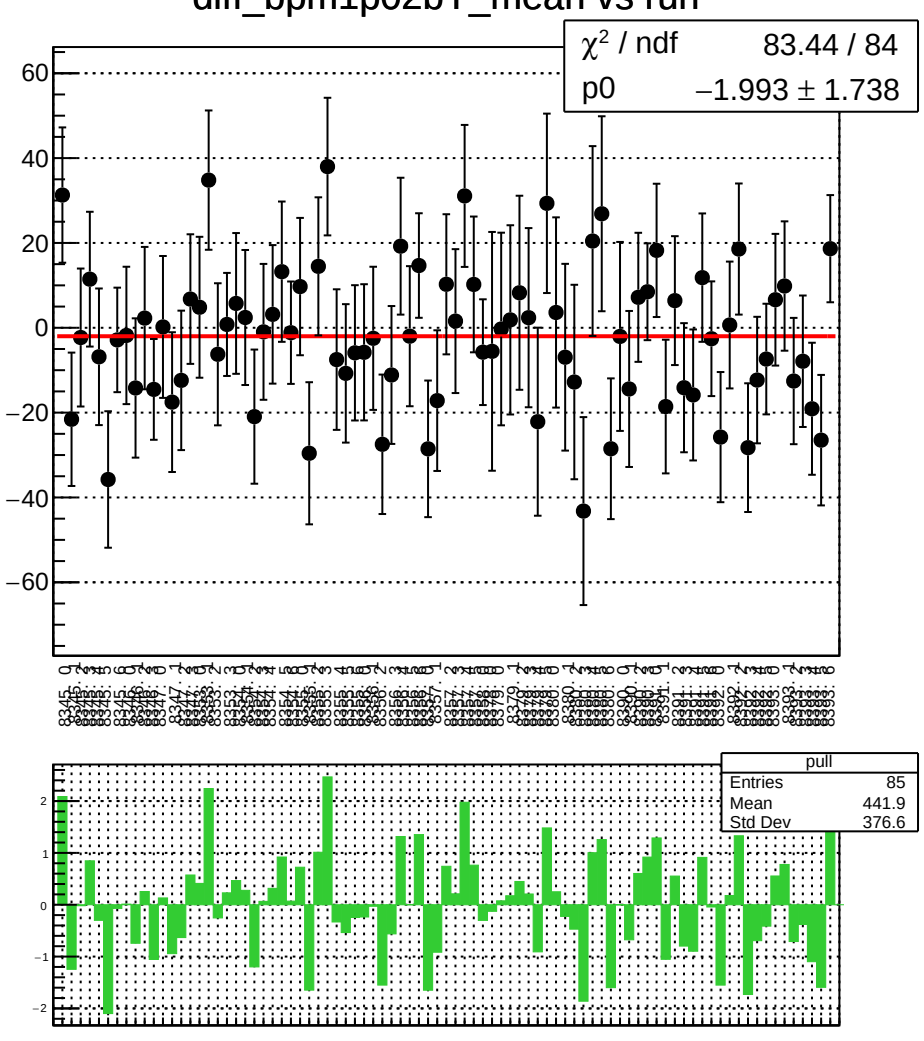

pull1D
Entries 85
Mean −0.002796
Std Dev 0.9895
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

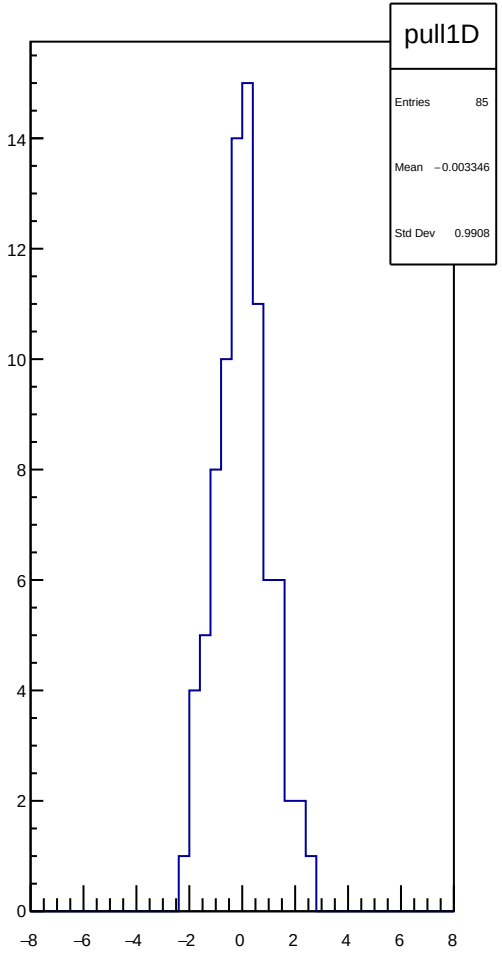

diff_bpm16Y_rms vs run
χ² / ndf 6.334e+04 / 84
p0 2570 ± 2.026
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600

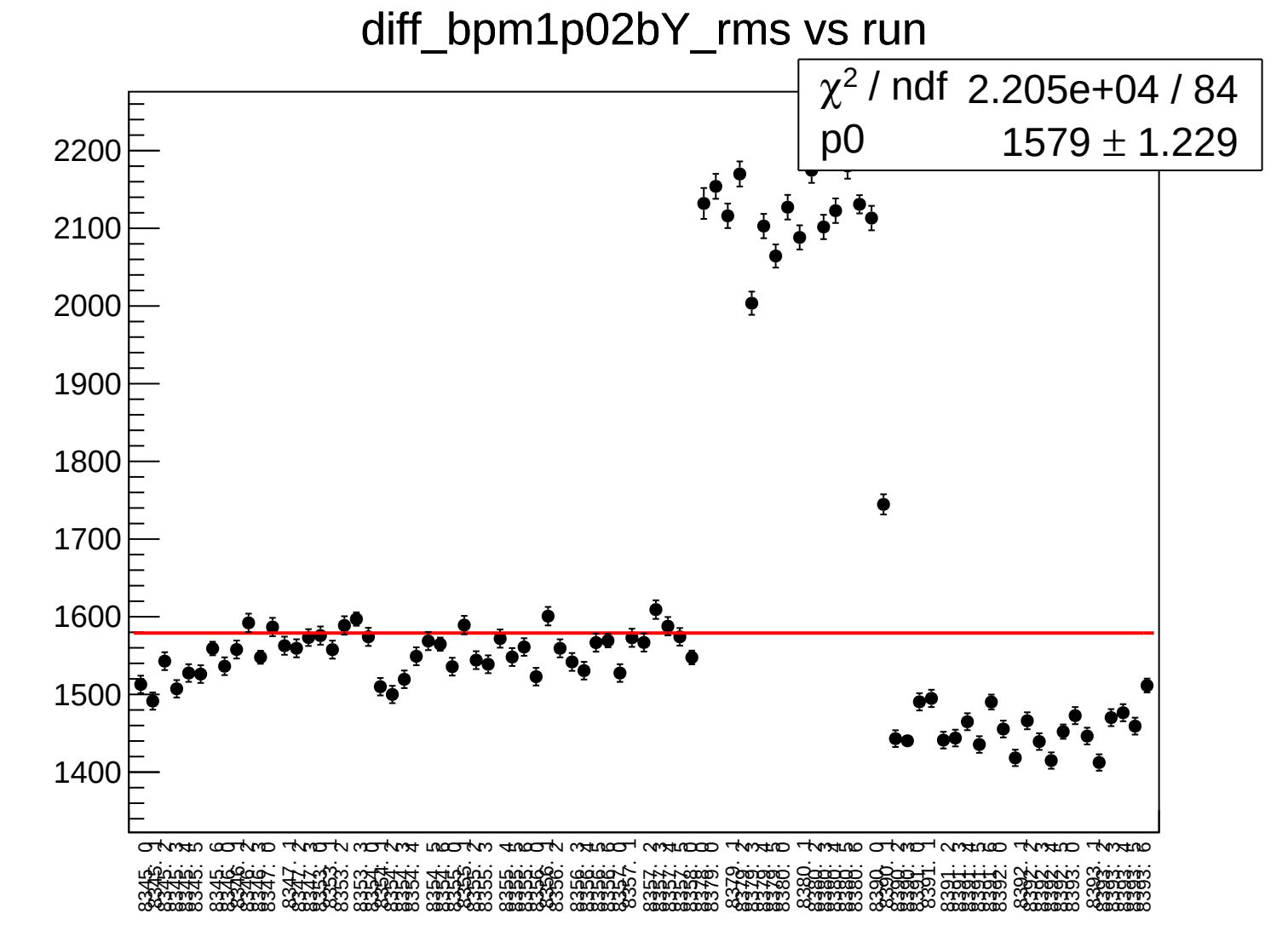

diff_bpm1p02bX_mean vs run
χ² / ndf 76.14 / 84
p0 1.44 ± 2.633
100
50
0
−50
−100
pull
Entries 85
Mean −697.8
Std Dev 744.6
2
1
0
−1
−2

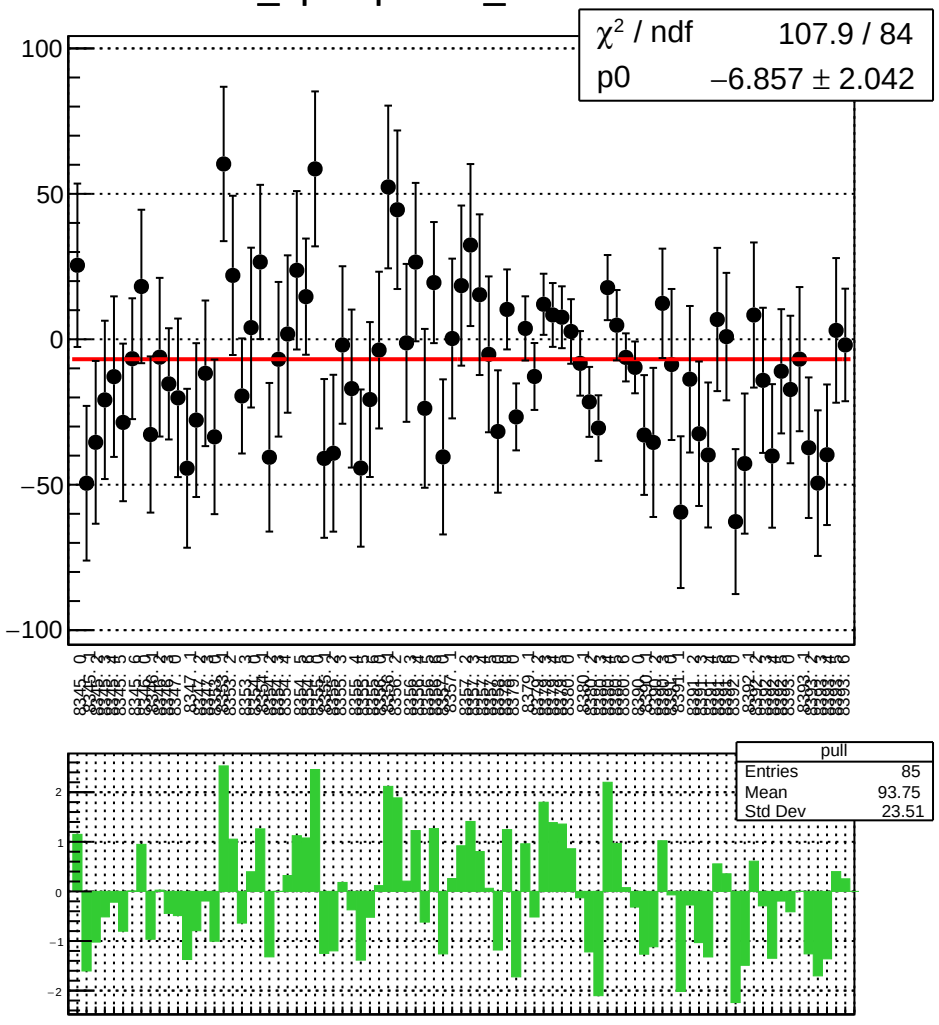

pull1D
Entries 85
Mean −0.005494
Std Dev 0.9464
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

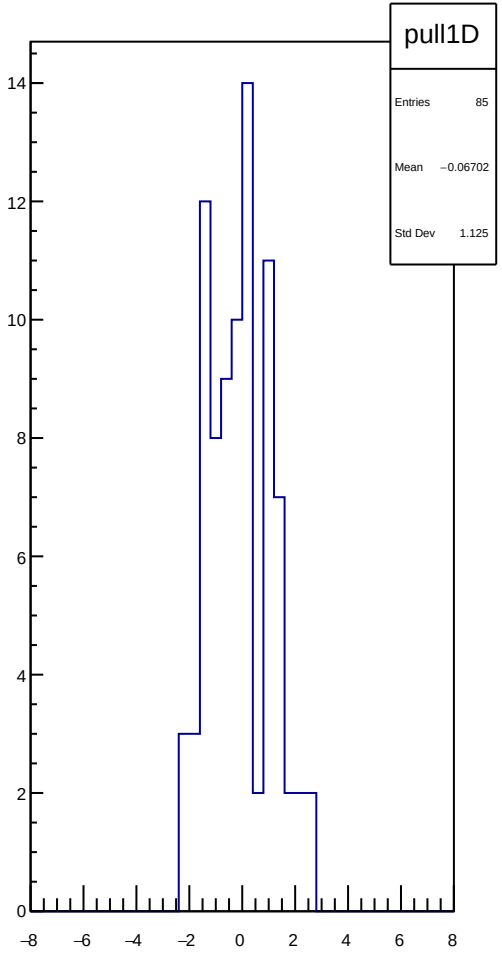

diff_bpm1p02bX_rms vs run
χ² / ndf 5.946e+04 / 84
p0 2365 ± 1.862
4500
4000
3500
3000
2500
2000

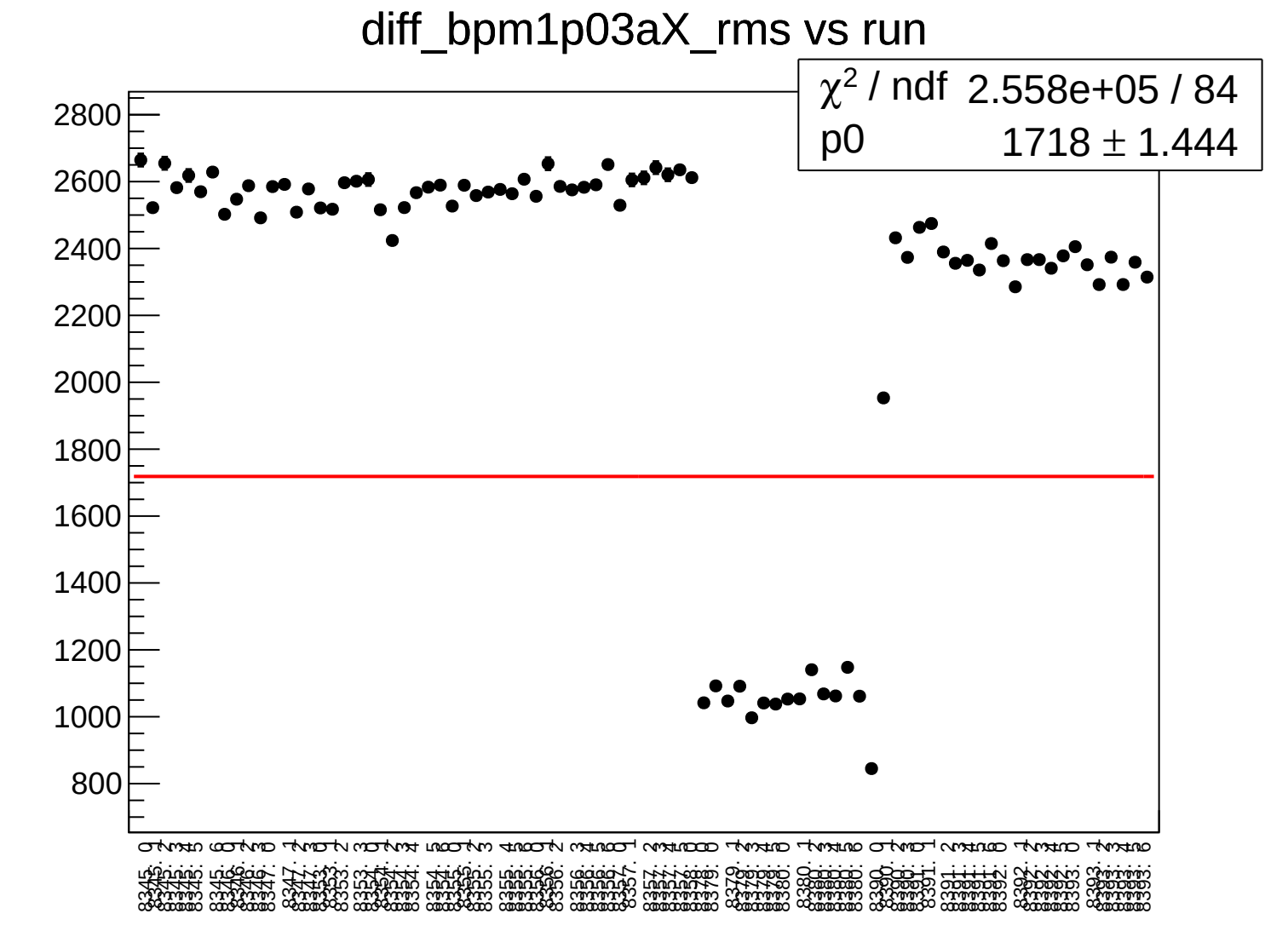

diff_bpm1p02bY_mean vs run
χ² / ndf 83.44 / 84
p0 −1.993 ± 1.738
pull
Entries 85
Mean 441.9
Std Dev 376.6

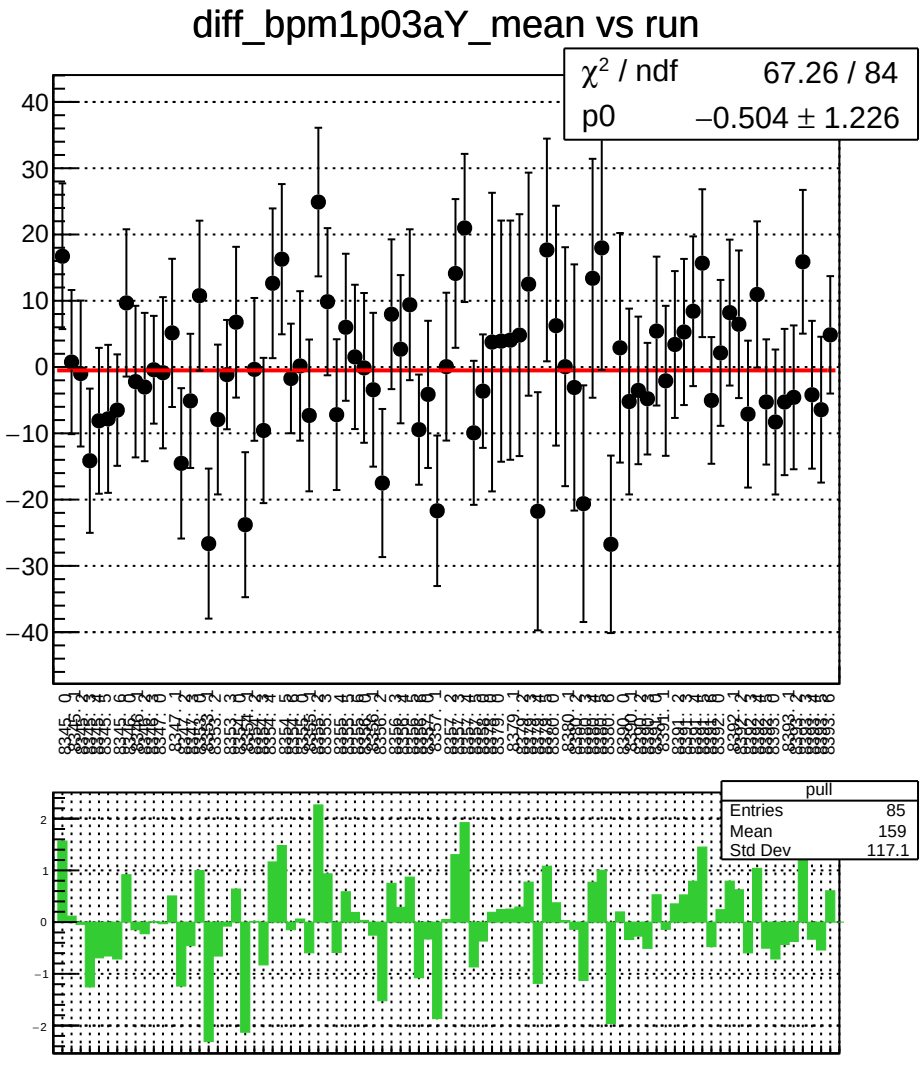

pull1D
Entries 85
Mean −0.003346
Std Dev 0.9908

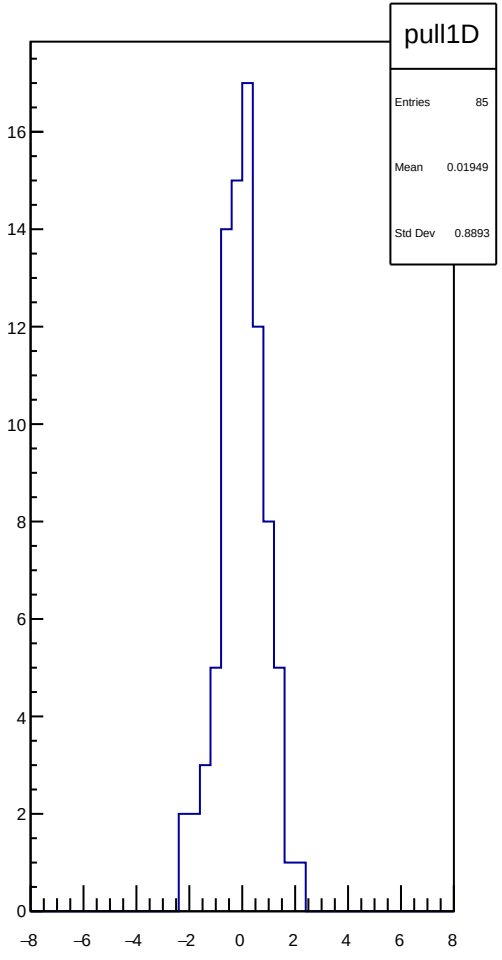

diff_bpm1p02bY_rms vs run
χ² / ndf 2.205e+04 / 84
p0 1579 ± 1.229
2200
2100
2000
1900
1800
1700
1600
1500
1400

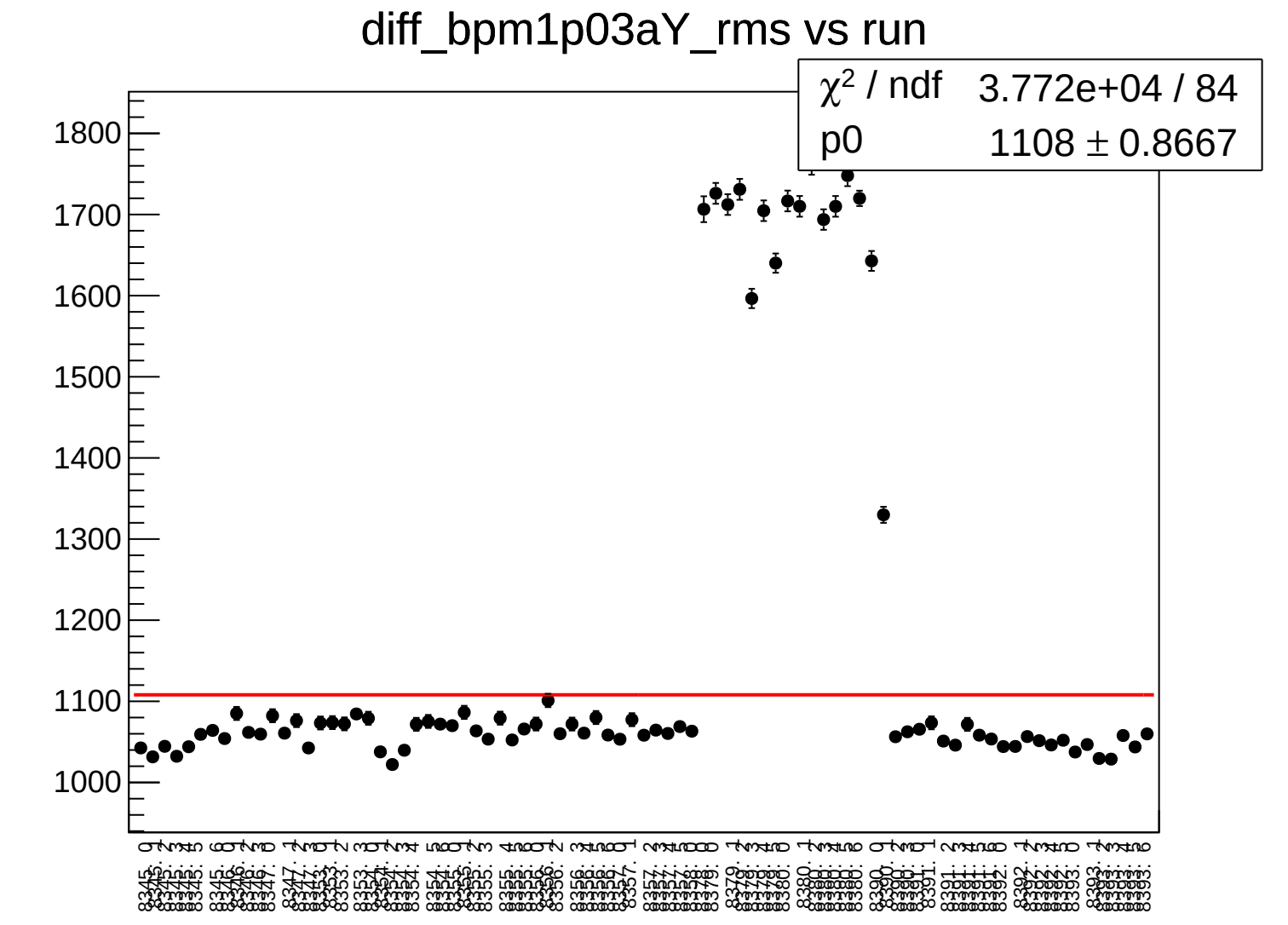

diff_bpm1p03aX_mean vs run
χ² / ndf 107.9 / 84
p0 −6.857 ± 2.042
pull
Entries 85
Mean 93.75
Std Dev 23.51

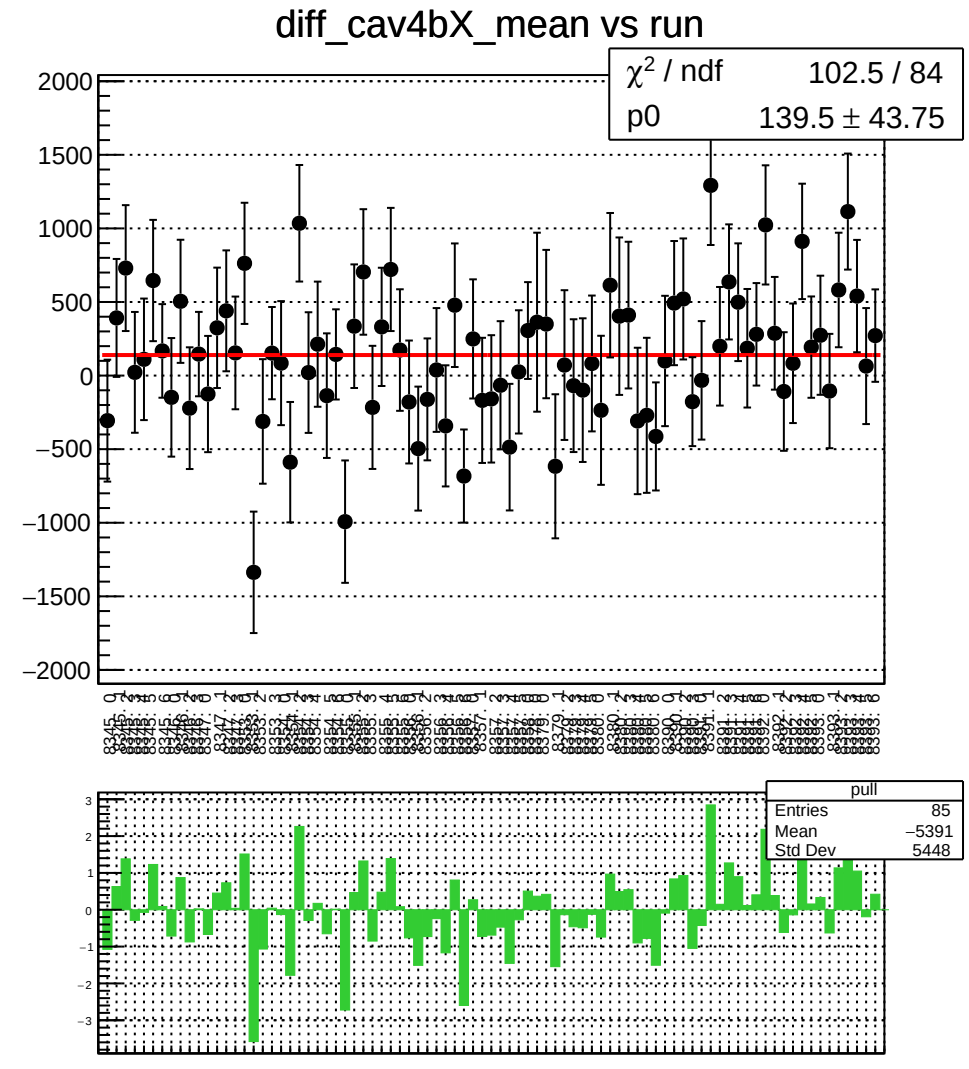

pull1D
Entries 85
Mean −0.06702
Std Dev 1.125

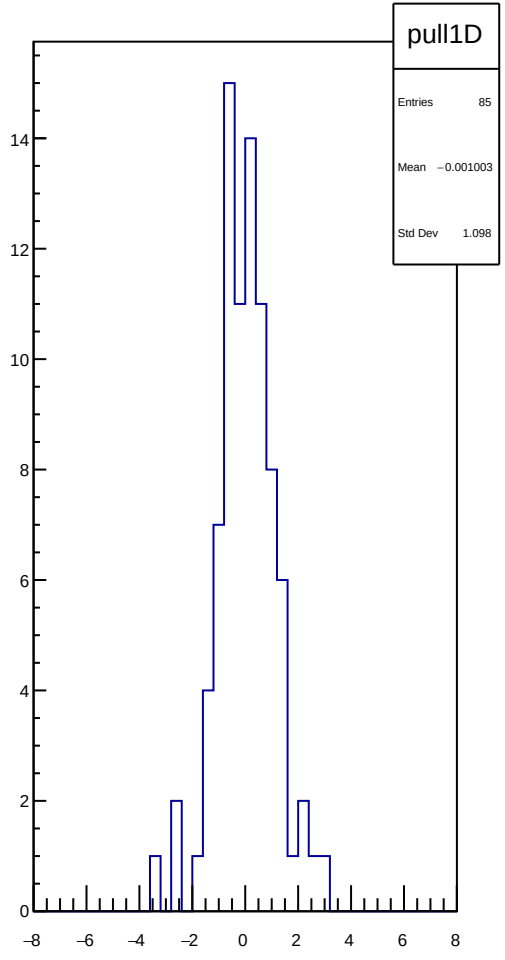

diff_bpm1p03aX_rms vs run
χ² / ndf 2.558e+05 / 84
p0 1718 ± 1.444
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800

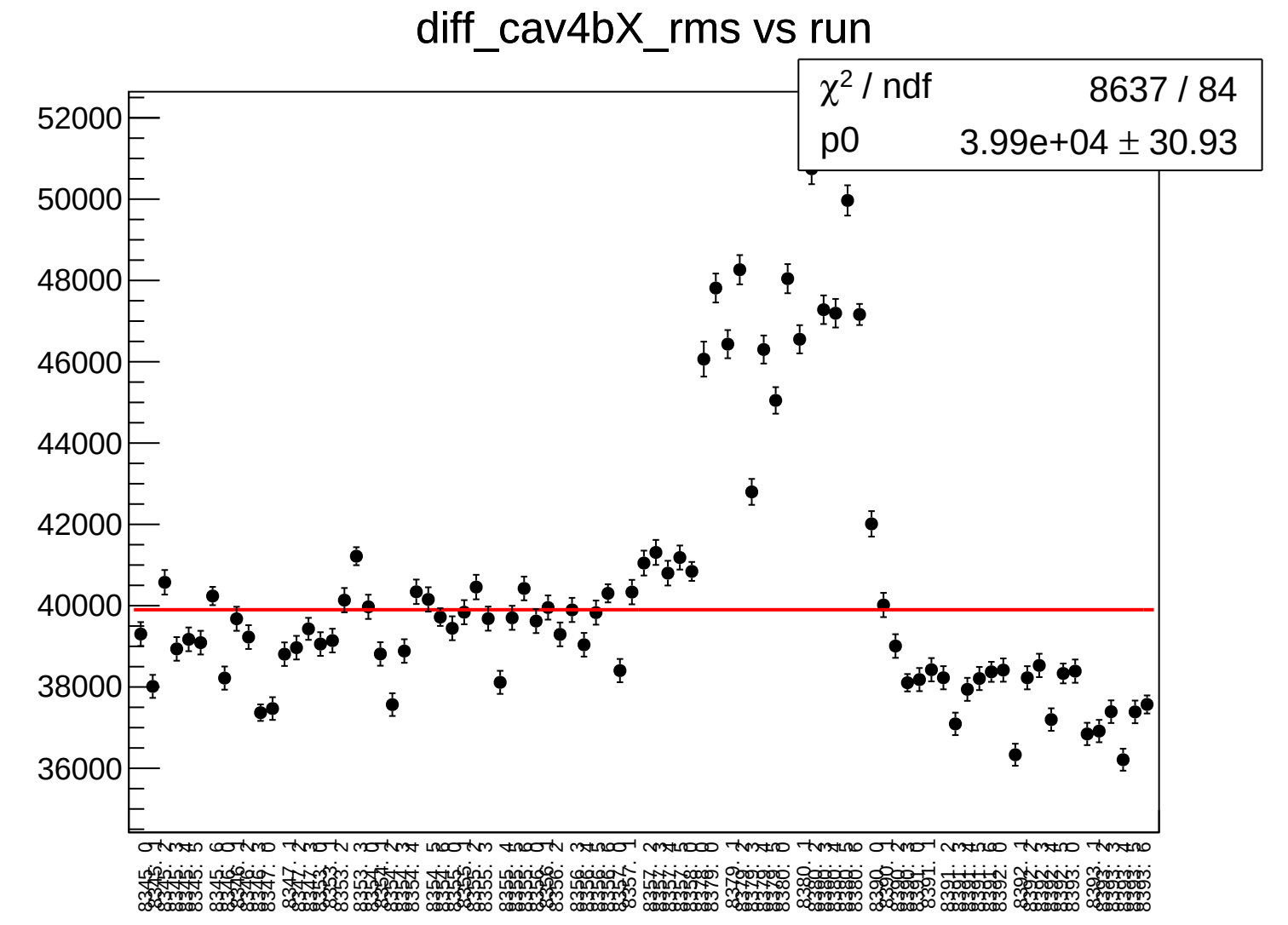

diff_bpm1p03aY_mean vs run
χ² / ndf 67.26 / 84
p0 −0.504 ± 1.226
pull
Entries 85
Mean 159
Std Dev 117.1

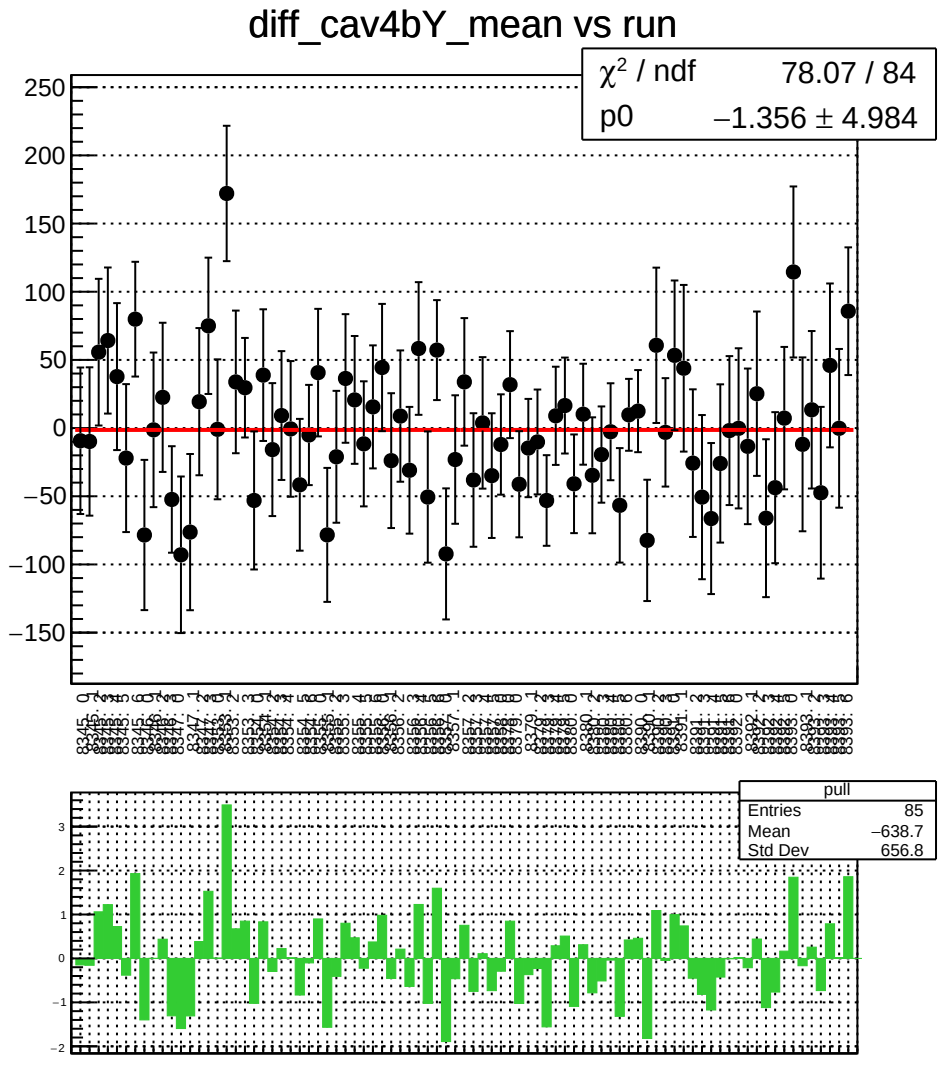

pull1D
Entries 85
Mean 0.01949
Std Dev 0.8893

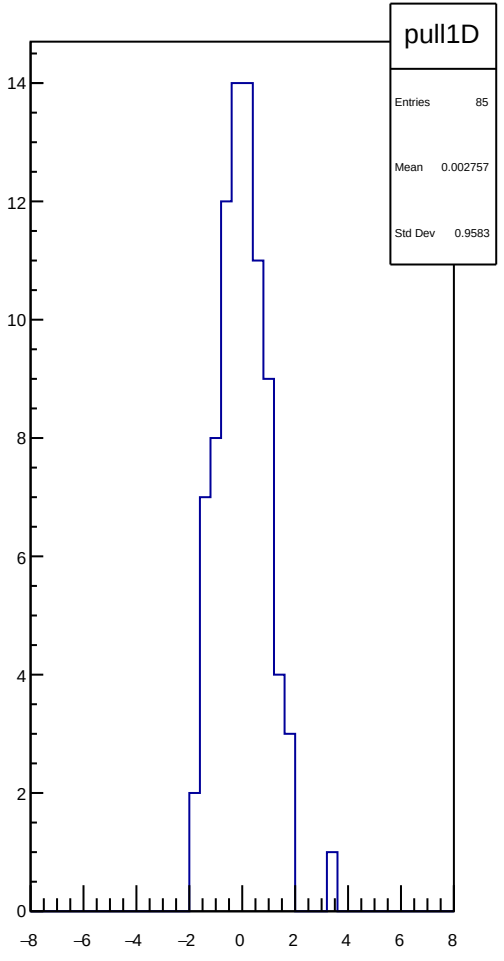

diff_bpm1p03aY_rms vs run
χ² / ndf 3.772e+04 / 84
p0 1108 ± 0.8667
1800
1700
1600
1500
1400
1300
1200
1100
1000

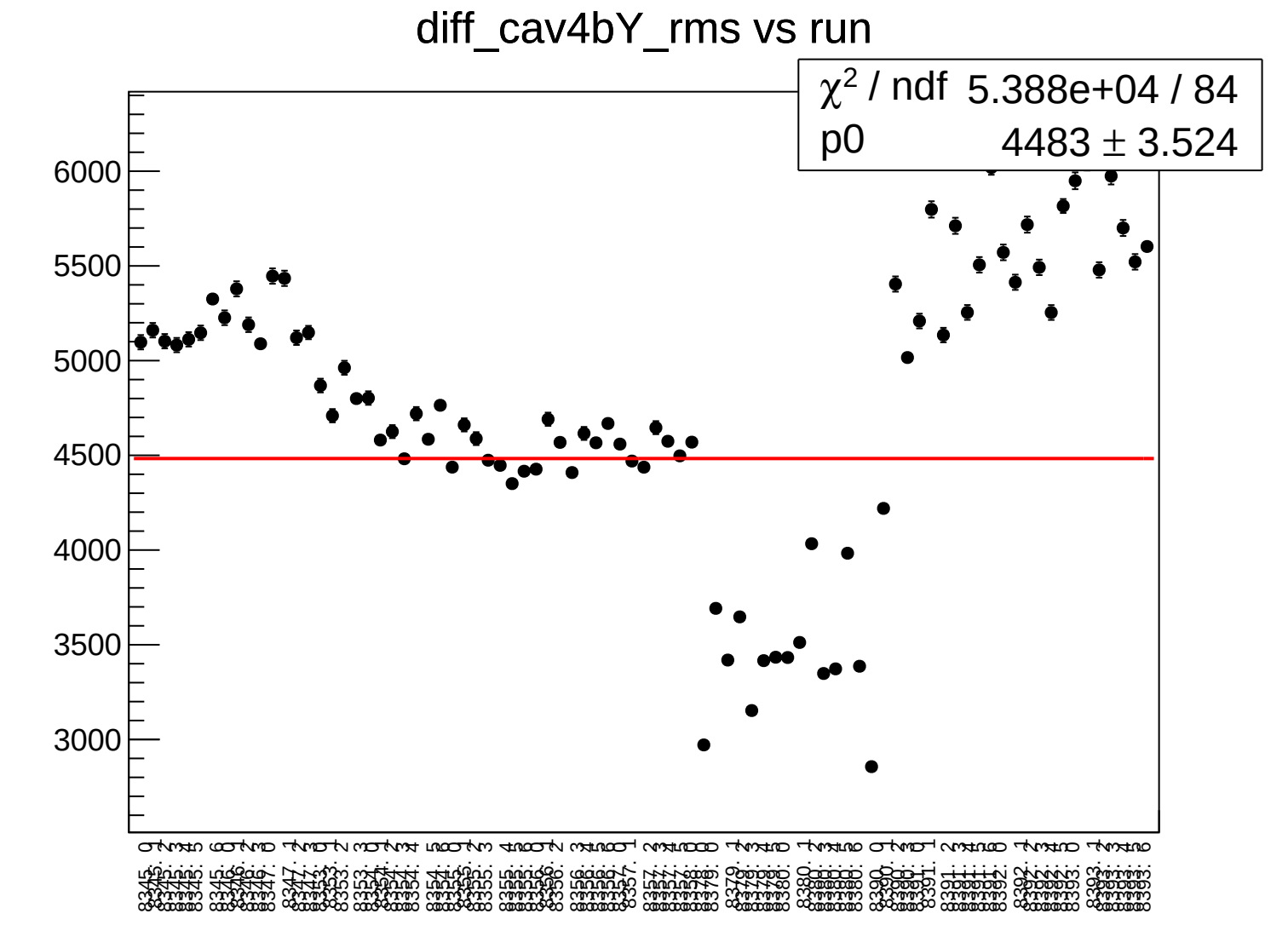

diff_cav4bX_mean vs run
χ² / ndf 102.5 / 84
p0 139.5 ± 43.75
pull
Entries 85
Mean −5391
Std Dev 5448

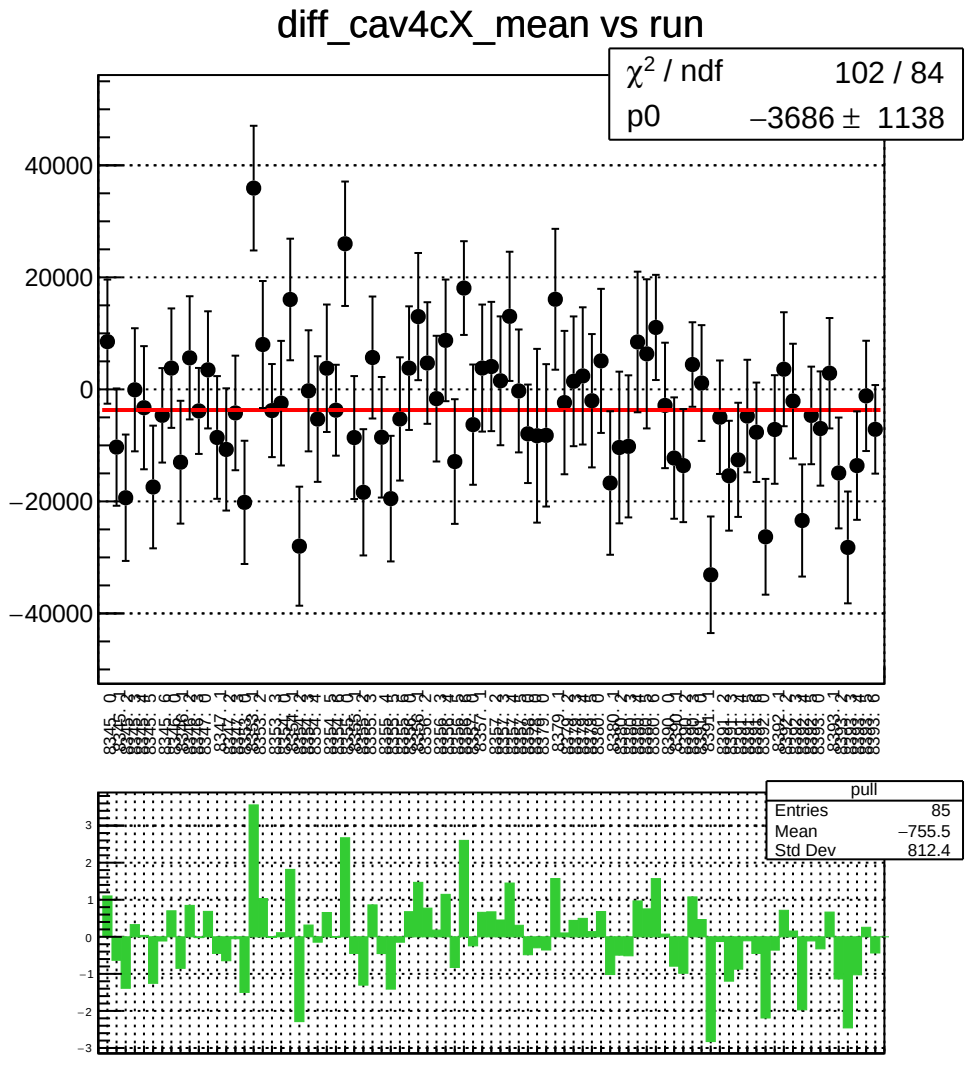

pull1D
Entries 85
Mean −0.001003
Std Dev 1.098

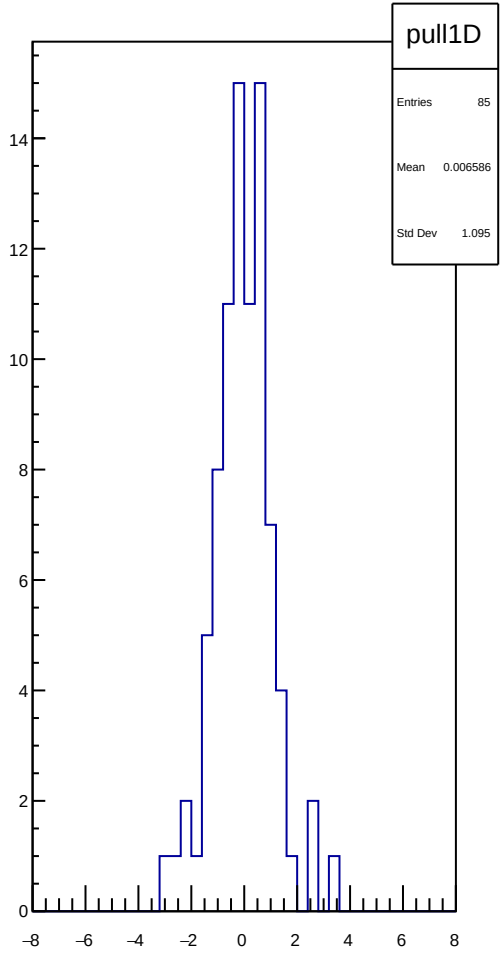

diff_cav4bX_rms vs run
χ^2 / ndf 8637 / 84
p0 3.99e+04 ± 30.93
52000
50000
48000
46000
44000
42000
40000
38000
36000

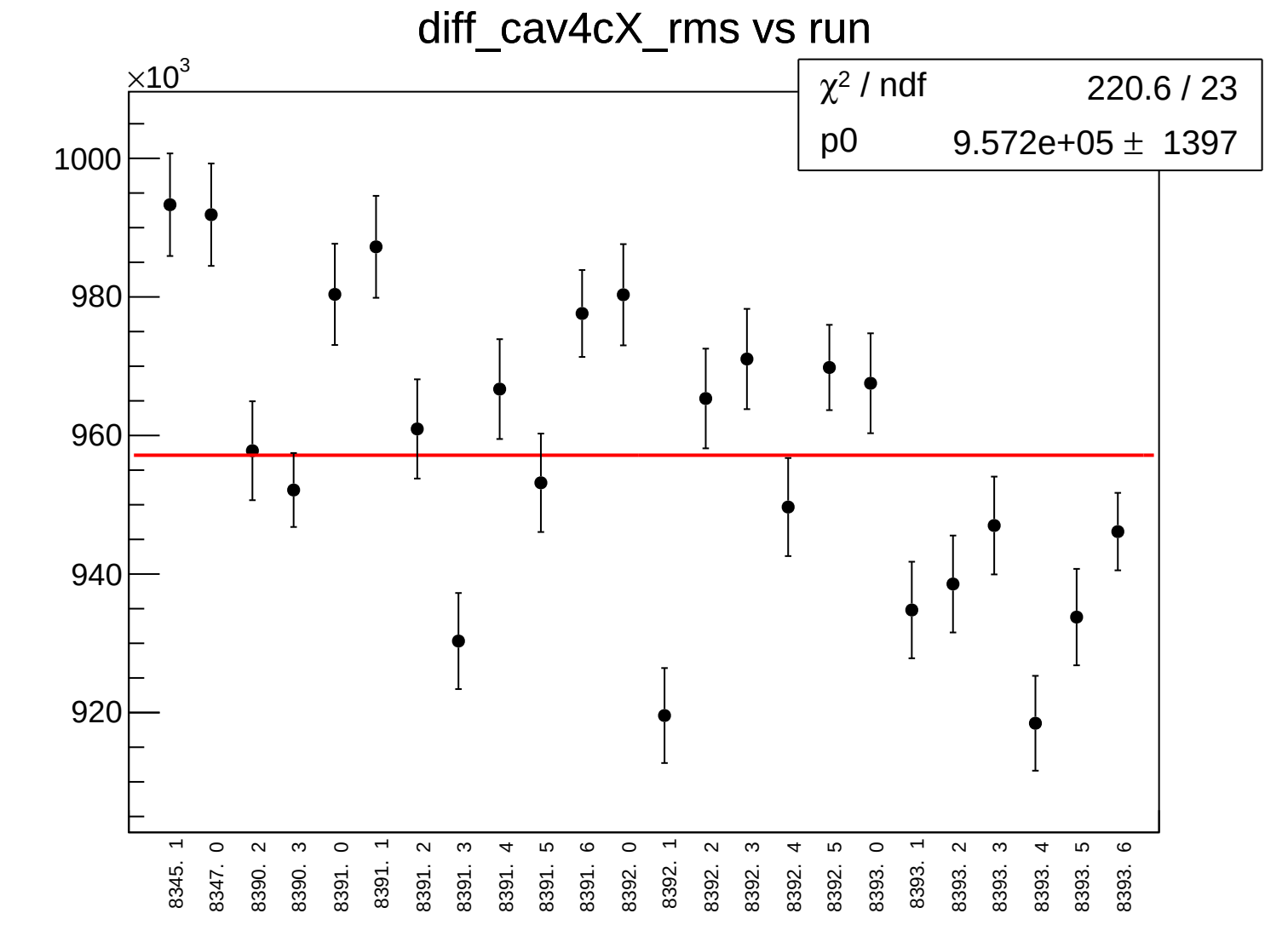

diff_cav4bY_mean vs run
χ² / ndf 78.07 / 84
p0 −1.356 ± 4.984
pull
Entries 85
Mean −638.7
Std Dev 656.8

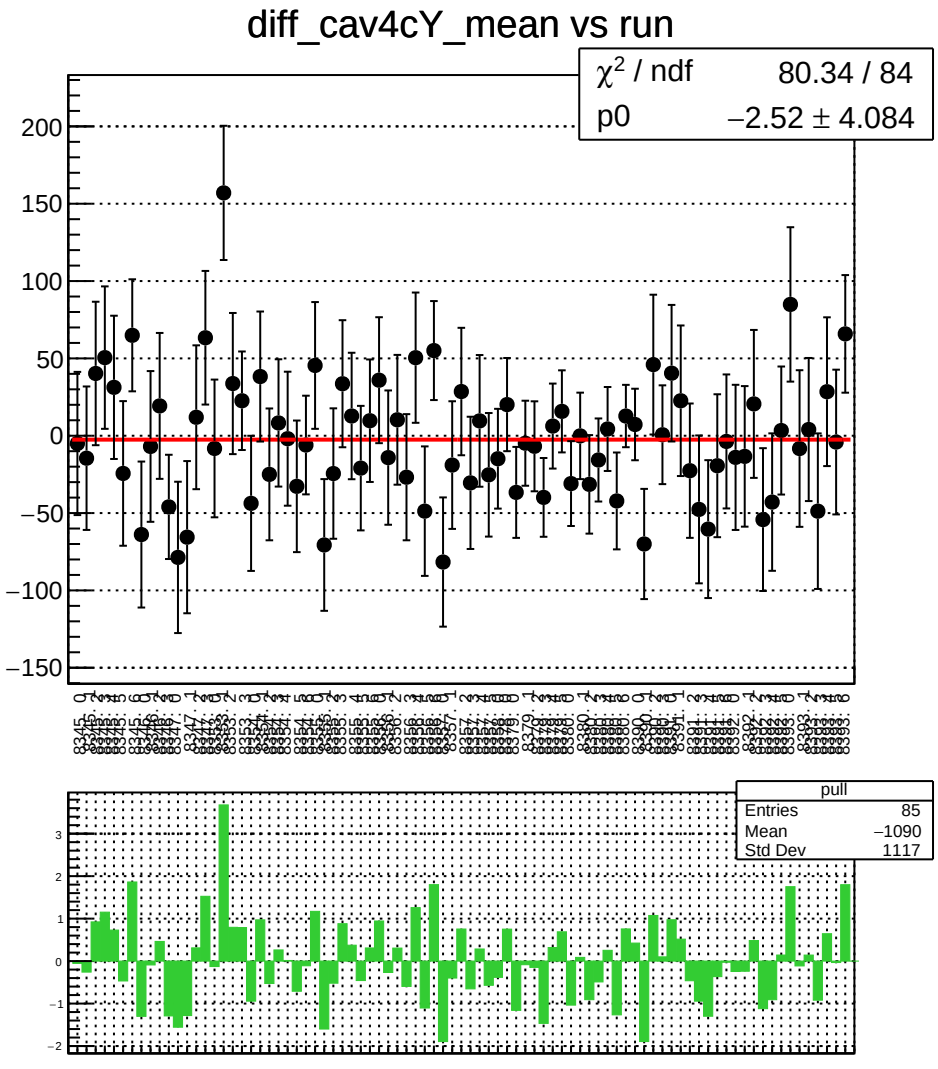

pull1D
Entries 85
Mean 0.002757
Std Dev 0.9583

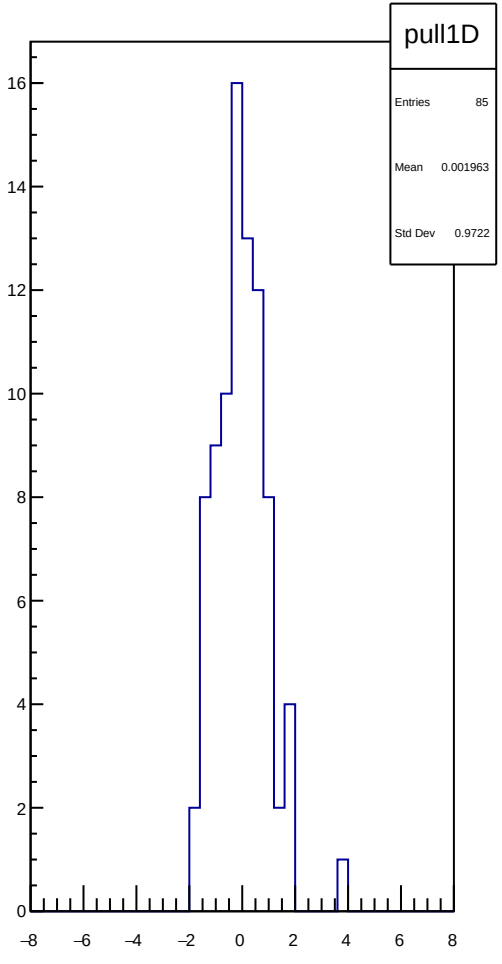

diff_cav4bY_rms vs run
χ² / ndf 5.388e+04 / 84
p0 4483 ± 3.524
6000
5500
5000
4500
4000
3500
3000

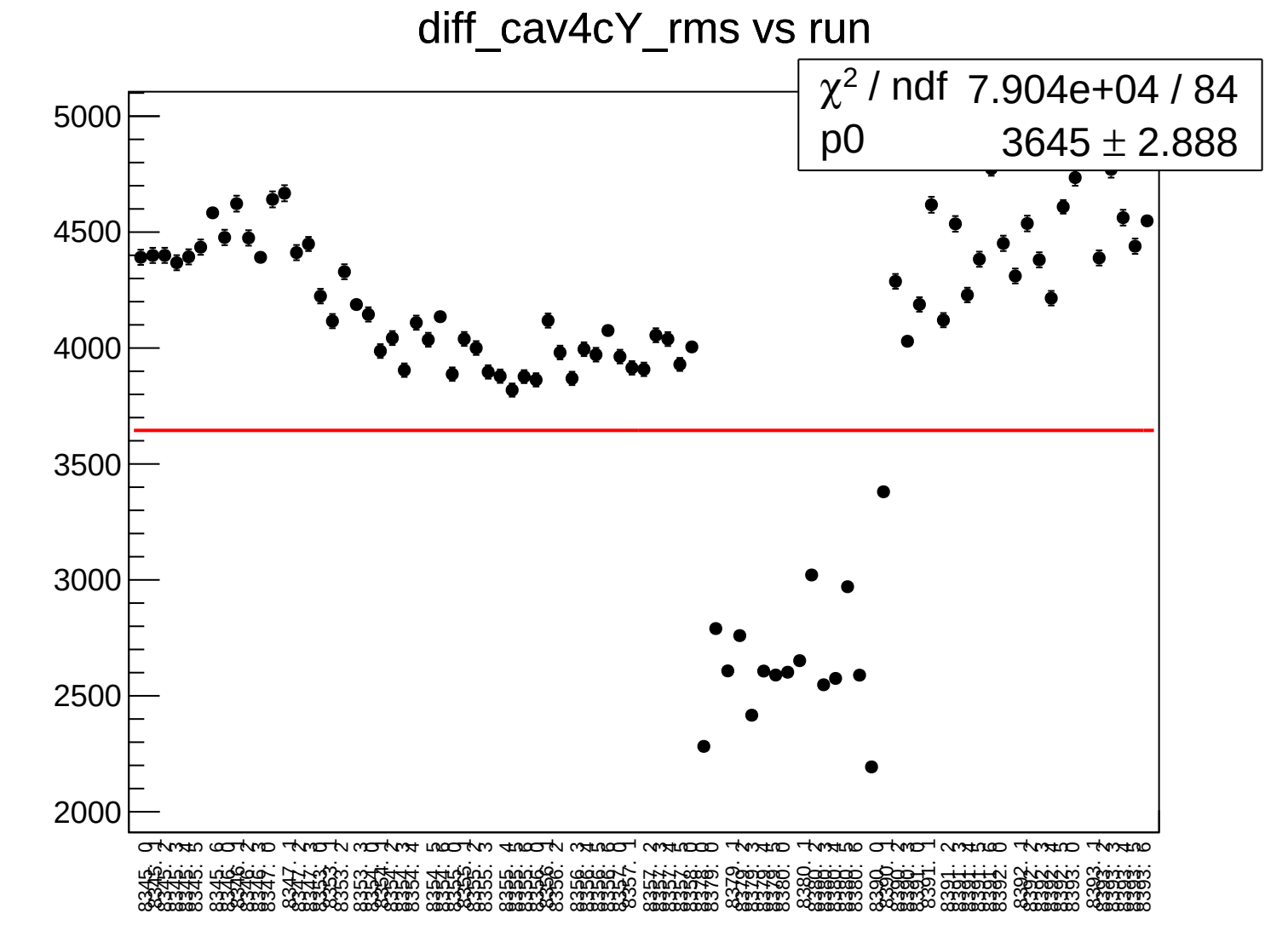

diff_cav4cX_mean vs run
χ² / ndf 102 / 84
p0 −3686 ± 1138
40000
20000
0
−20000
−40000
pull
Entries 85
Mean −755.5
Std Dev 812.4
3
2
1
0
−1
−2
−3

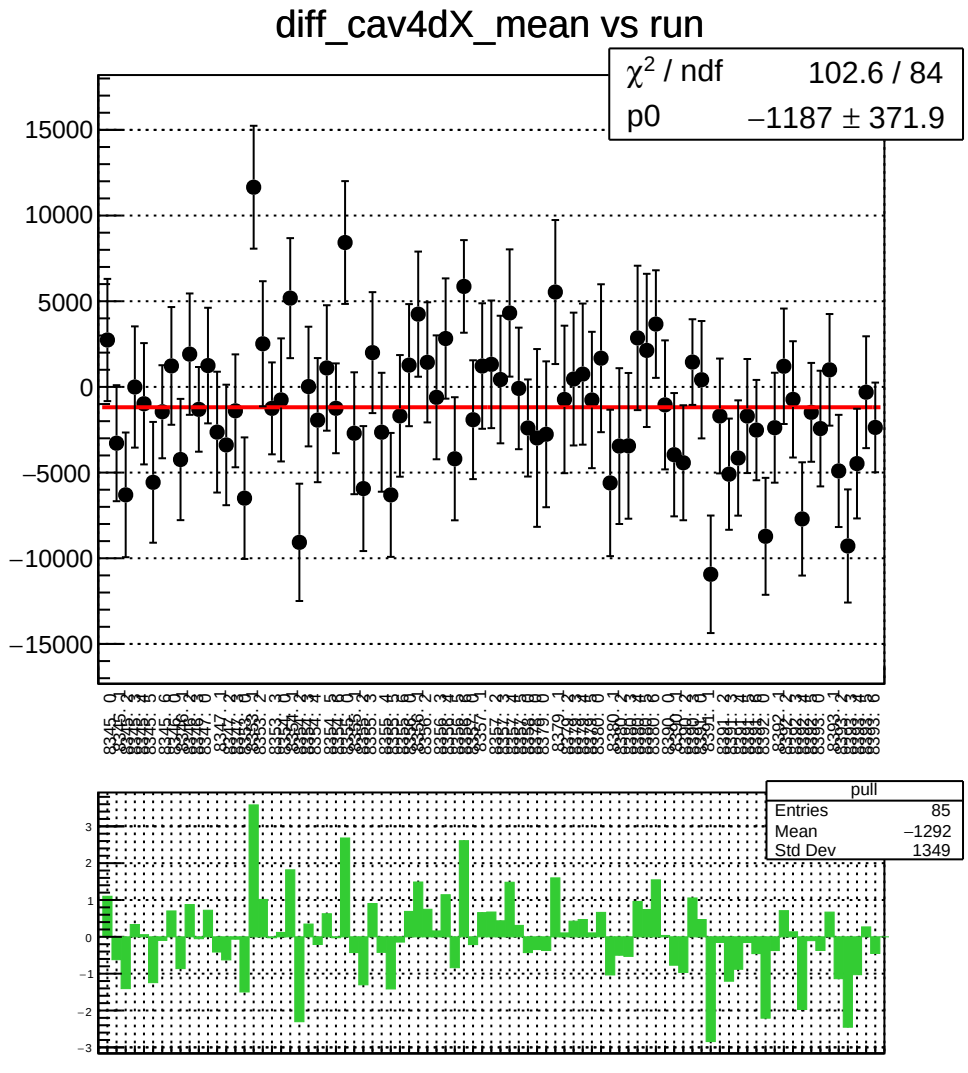

pull1D
Entries 85
Mean 0.006586
Std Dev 1.095
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

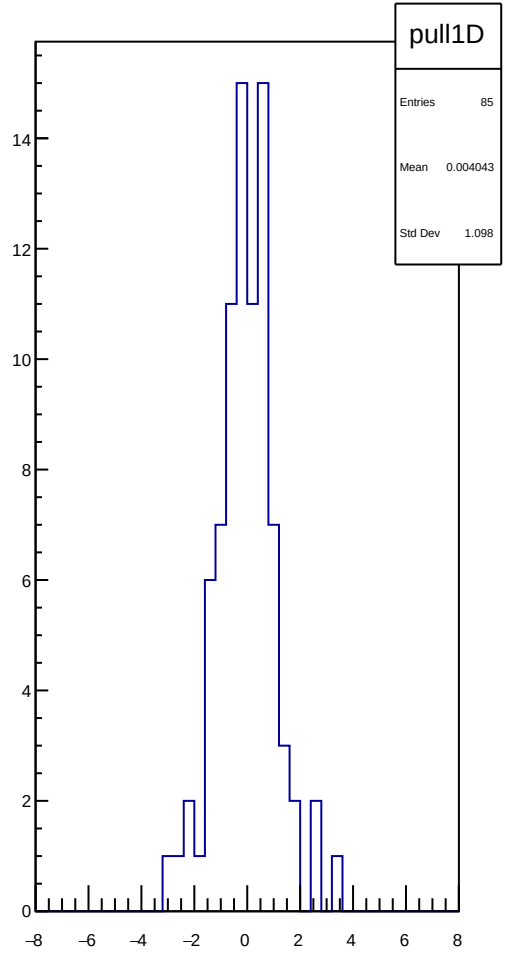

diff_cav4cX_rms vs run
×10^3
χ² / ndf 220.6 / 23
p0 9.572e+05 ± 1397
1000
980
960
940
920
8345. 1
8347. 0
8390. 2
8390. 3
8391. 0
8391. 1
8391. 2
8391. 3
8391. 4
8391. 5
8391. 6
8392. 0
8392. 1
8392. 2
8392. 3
8392. 4
8392. 5
8393. 0
8393. 1
8393. 2
8393. 3
8393. 4
8393. 5
8393. 6

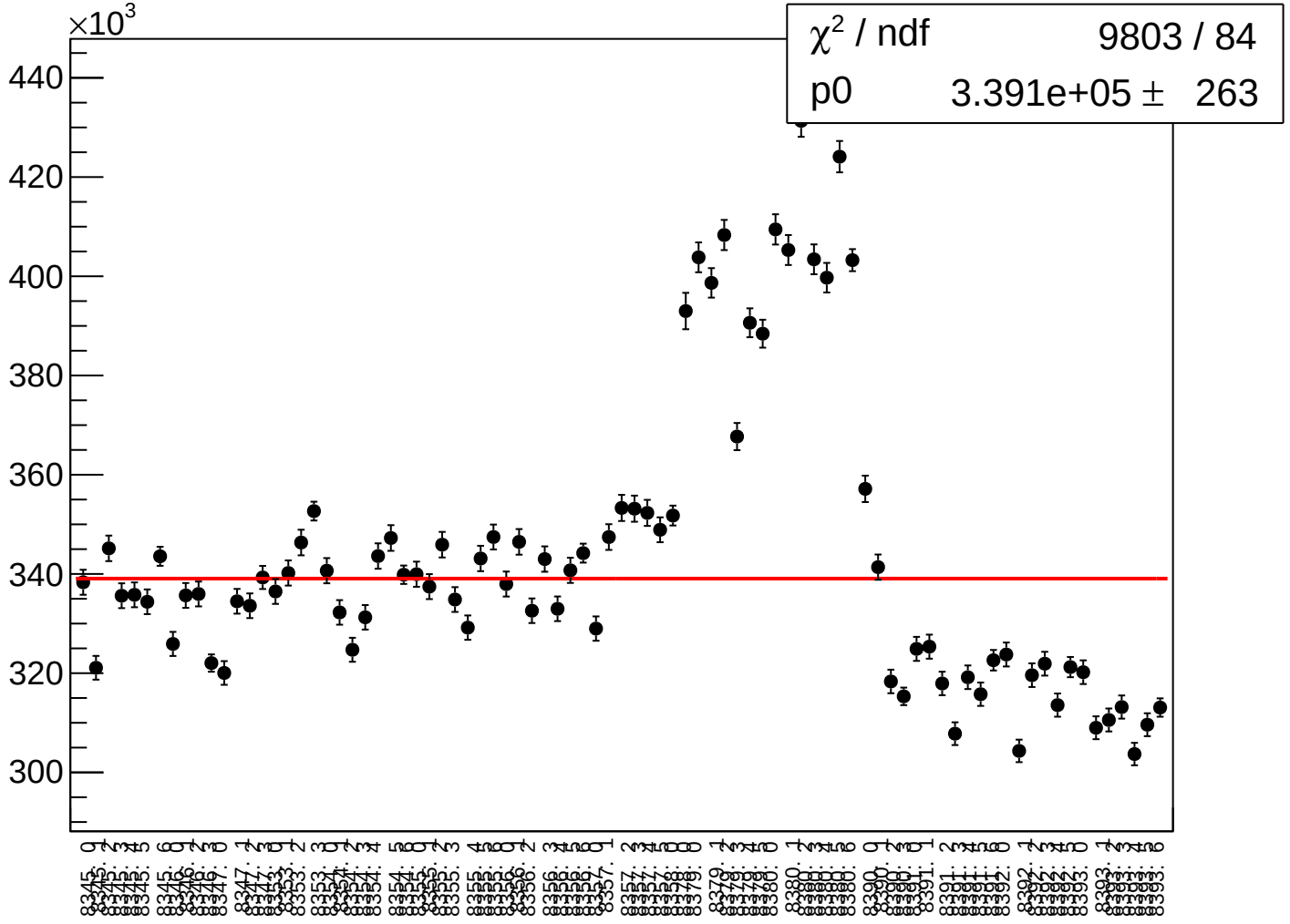

diff_cav4cY_mean vs run
χ^2 / ndf 80.34 / 84
p0 −2.52 ± 4.084
pull
Entries 85
Mean −1090
Std Dev 1117

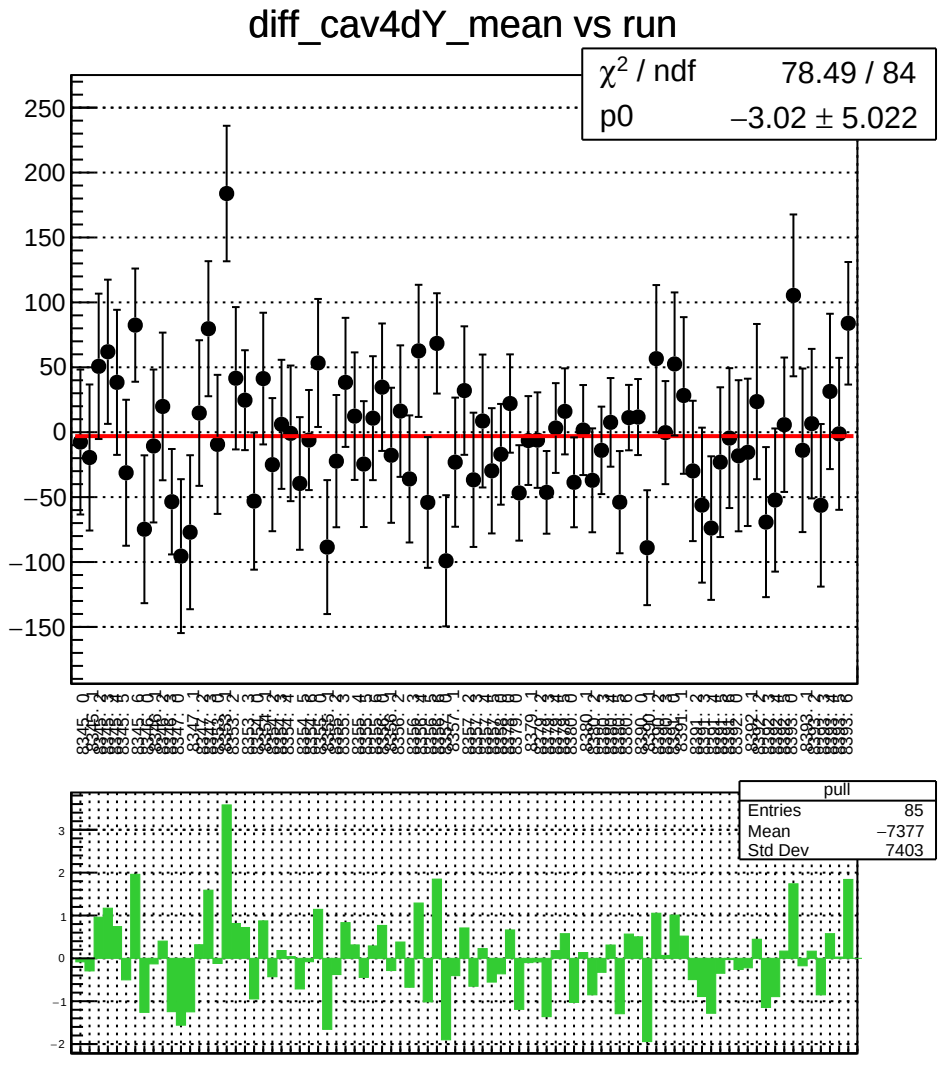

pull1D
Entries 85
Mean 0.001963
Std Dev 0.9722

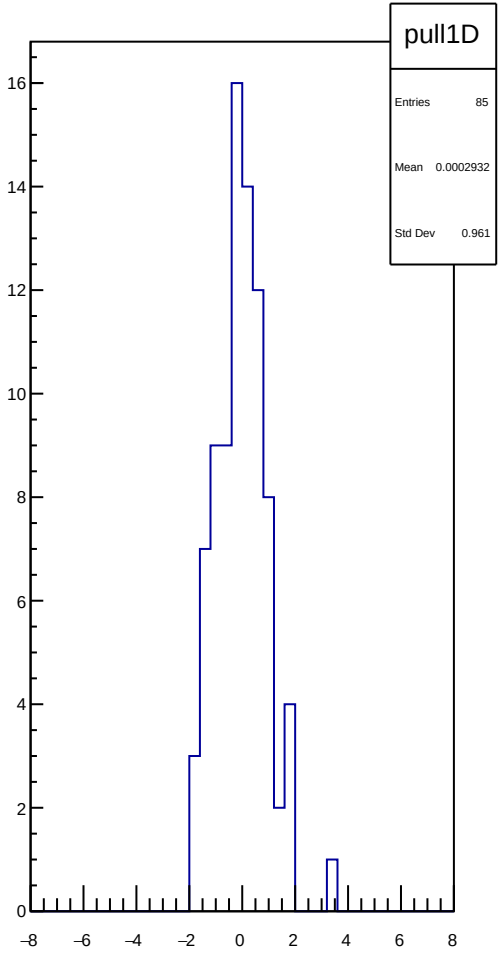

diff_cav4cY_rms vs run
χ² / ndf 7.904e+04 / 84
p0 3645 ± 2.888
5000
4500
4000
3500
3000
2500
2000

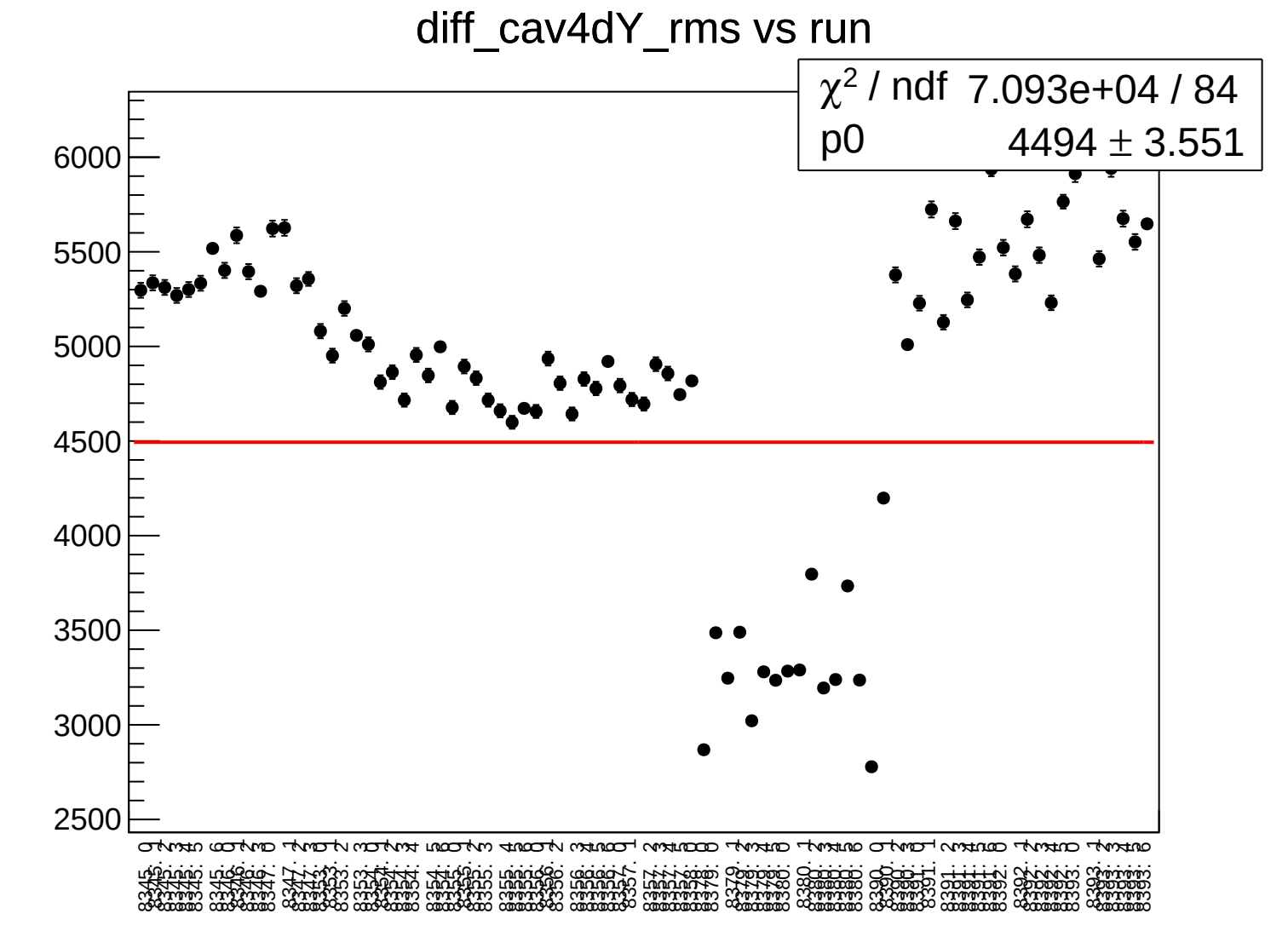

diff_cav4dX_mean vs run
χ² / ndf 102.6 / 84
p0 −1187 ± 371.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −1292
Std Dev 1349
3
2
1
0
−1
−2
−3

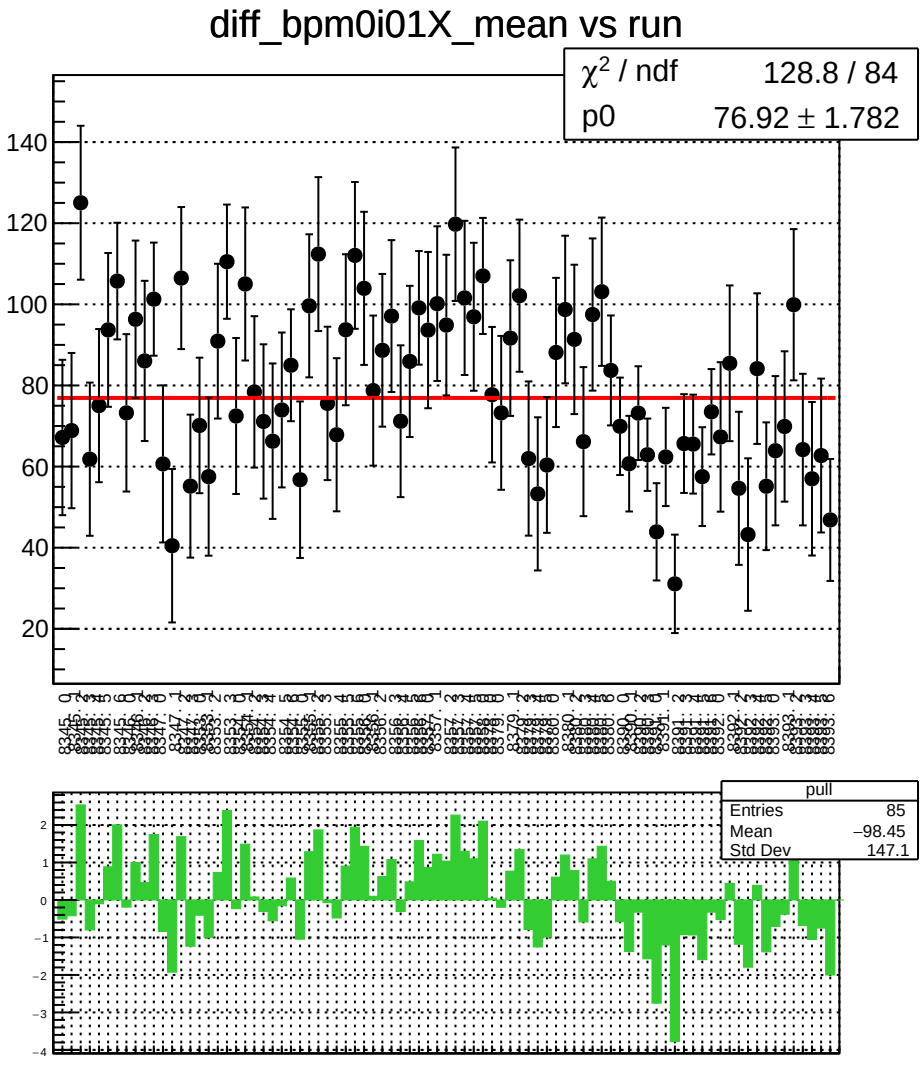

pull1D
Entries 85
Mean 0.004043
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

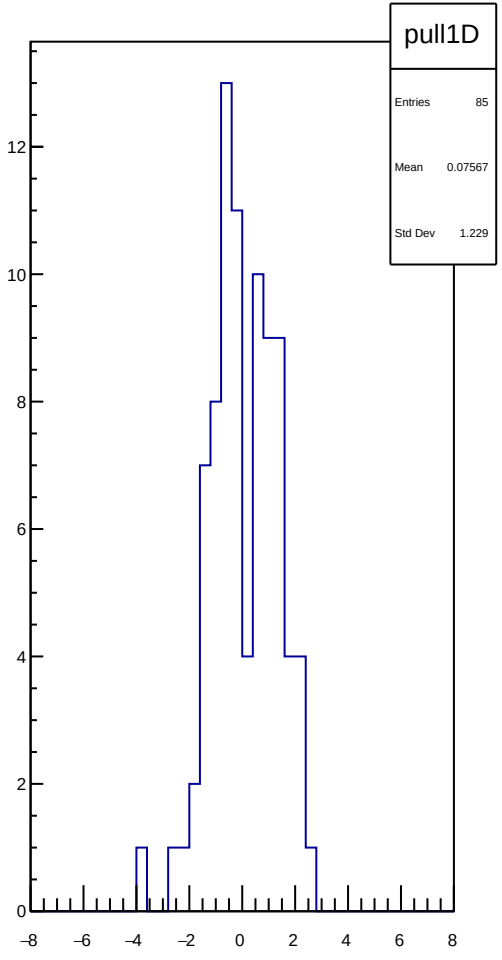

diff_cav4dX_rms vs run
×10^3
440
420
400
380
360
340
320
300
χ² / ndf 9803 / 84
p0 3.391e+05 ± 263

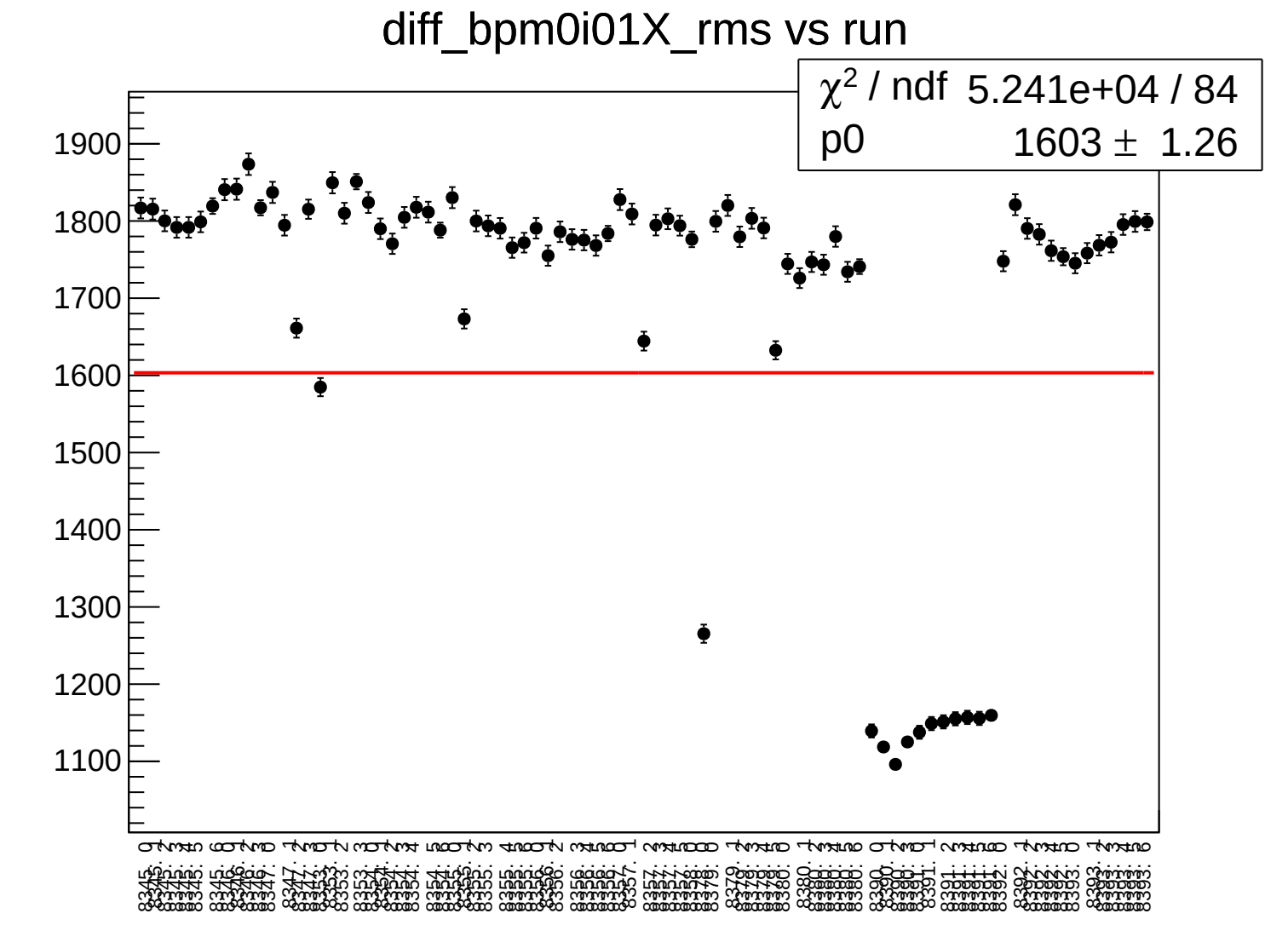

diff_cav4dY_mean vs run
χ² / ndf 78.49 / 84
p0 −3.02 ± 5.022
pull
Entries 85
Mean −7377
Std Dev 7403

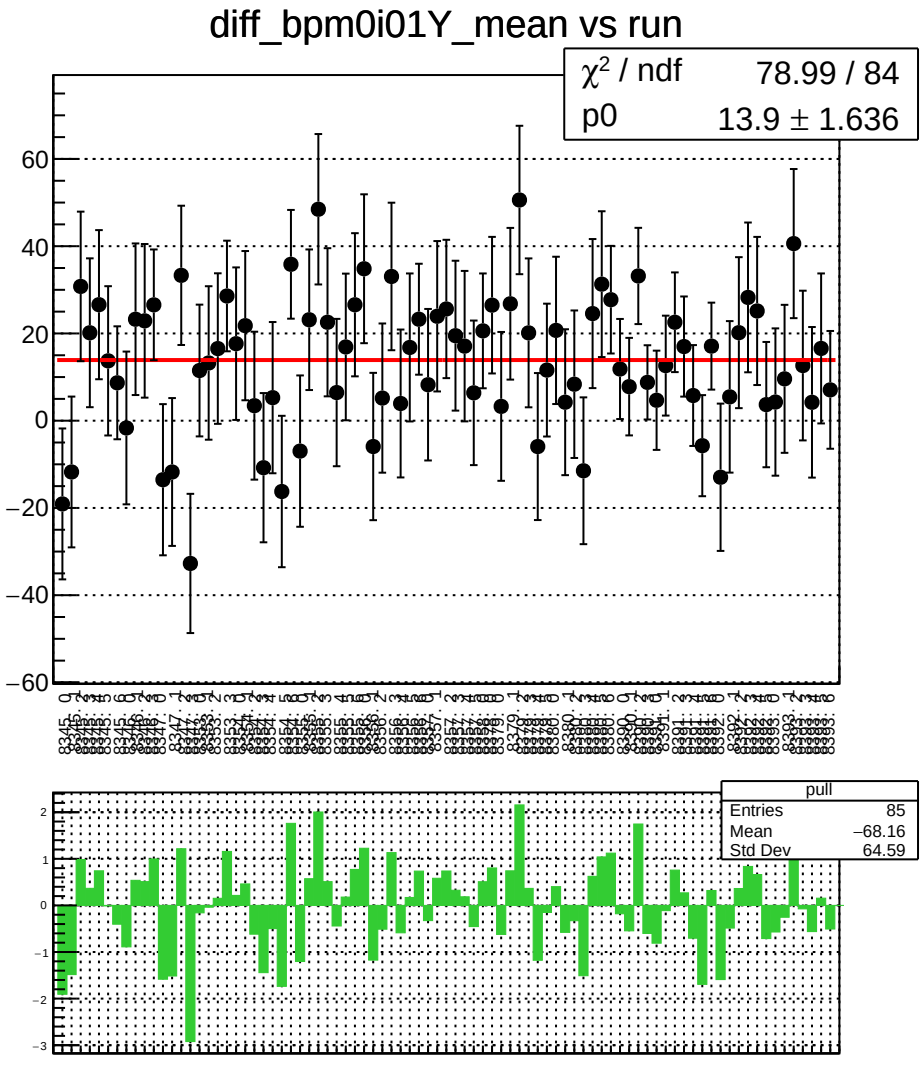

pull1D
Entries 85
Mean 0.0002932
Std Dev 0.961

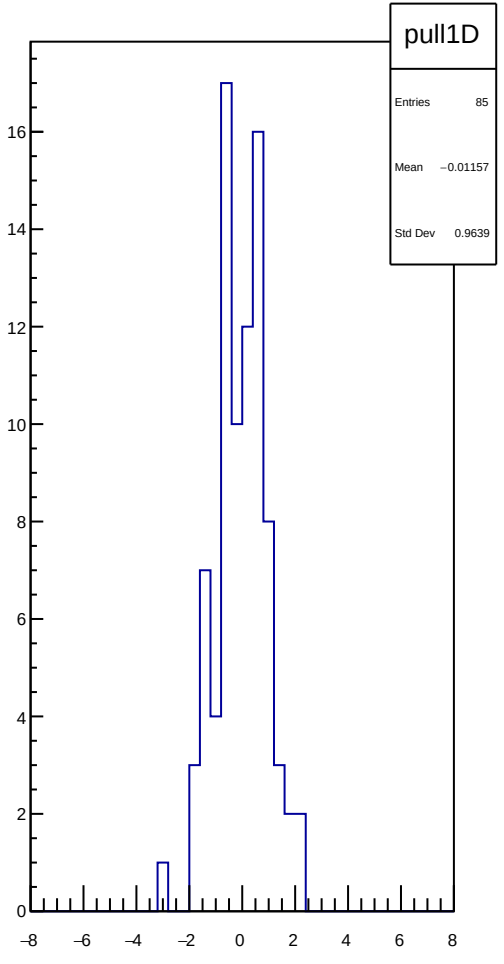

diff_cav4dY_rms vs run
χ² / ndf 7.093e+04 / 84
p0 4494 ± 3.551
6000
5500
5000
4500
4000
3500
3000
2500

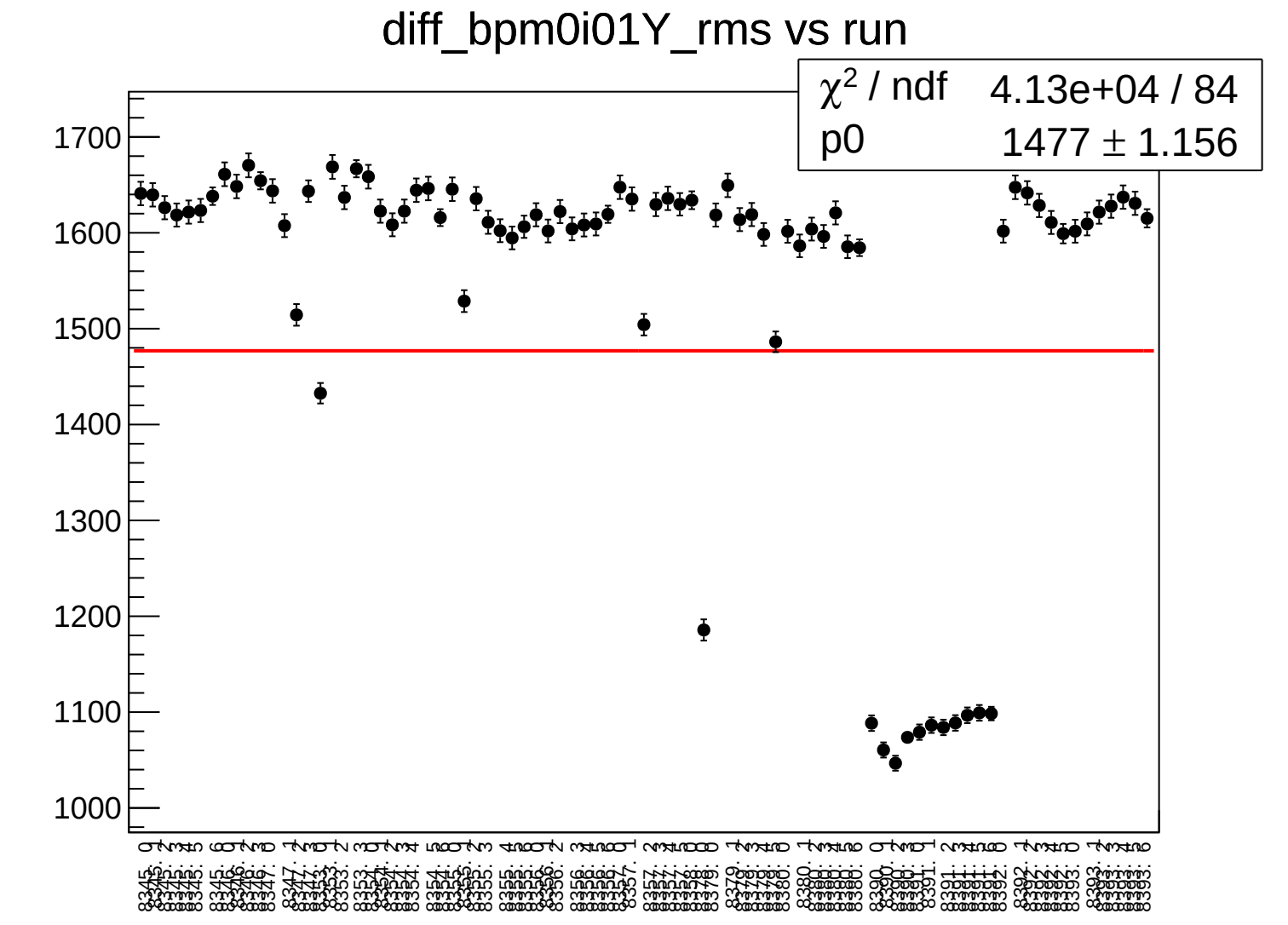

diff_bpm0i01X_mean vs run
χ² / ndf 128.8 / 84
p0 76.92 ± 1.782
pull
Entries 85
Mean −98.45
Std Dev 147.1

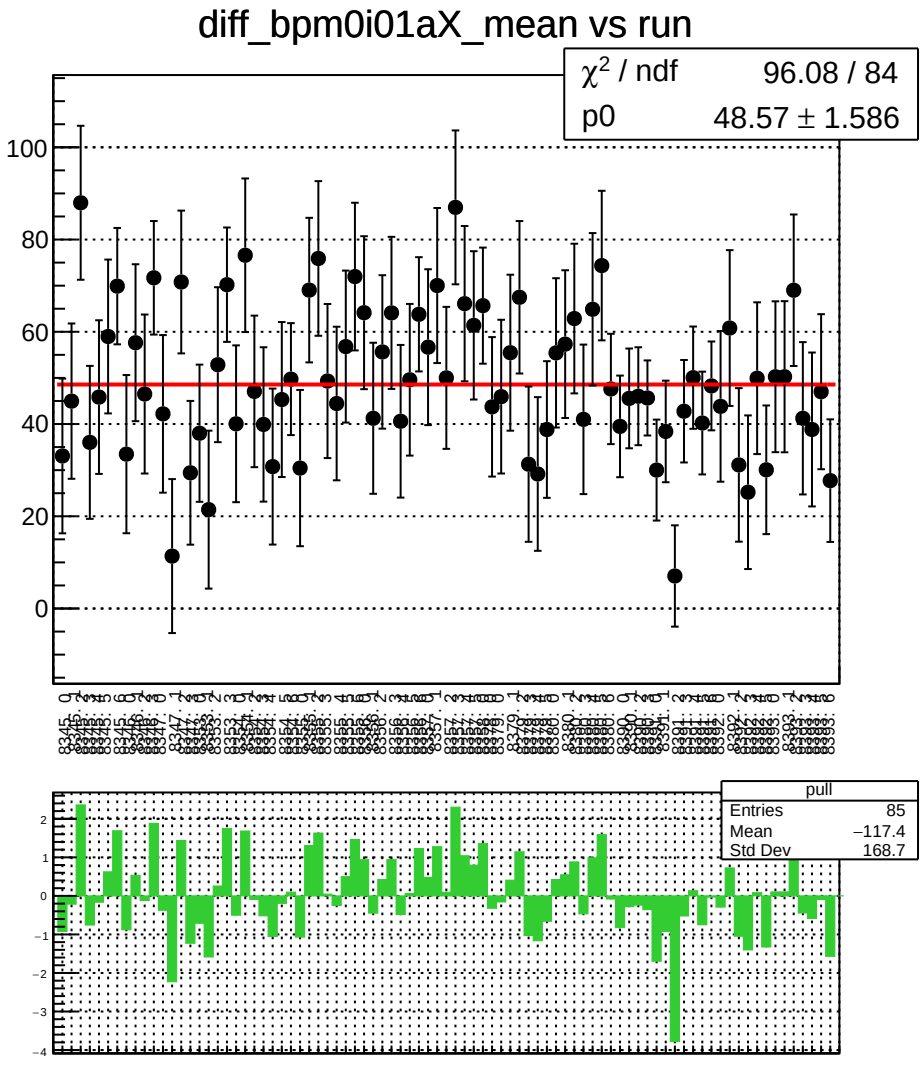

pull1D
Entries 85
Mean 0.07567
Std Dev 1.229

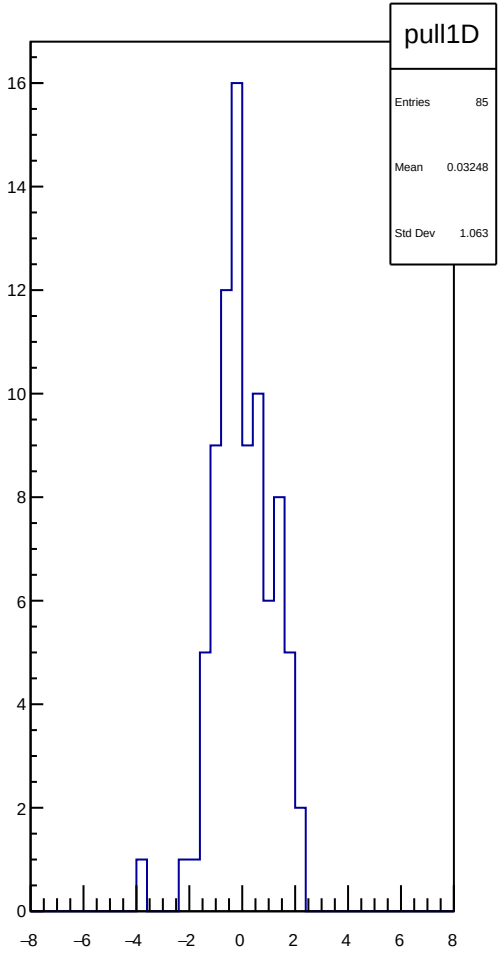

diff_bpm0i01X_rms vs run
χ² / ndf 5.241e+04 / 84
p0 1603 ± 1.26
1900
1800
1700
1600
1500
1400
1300
1200
1100

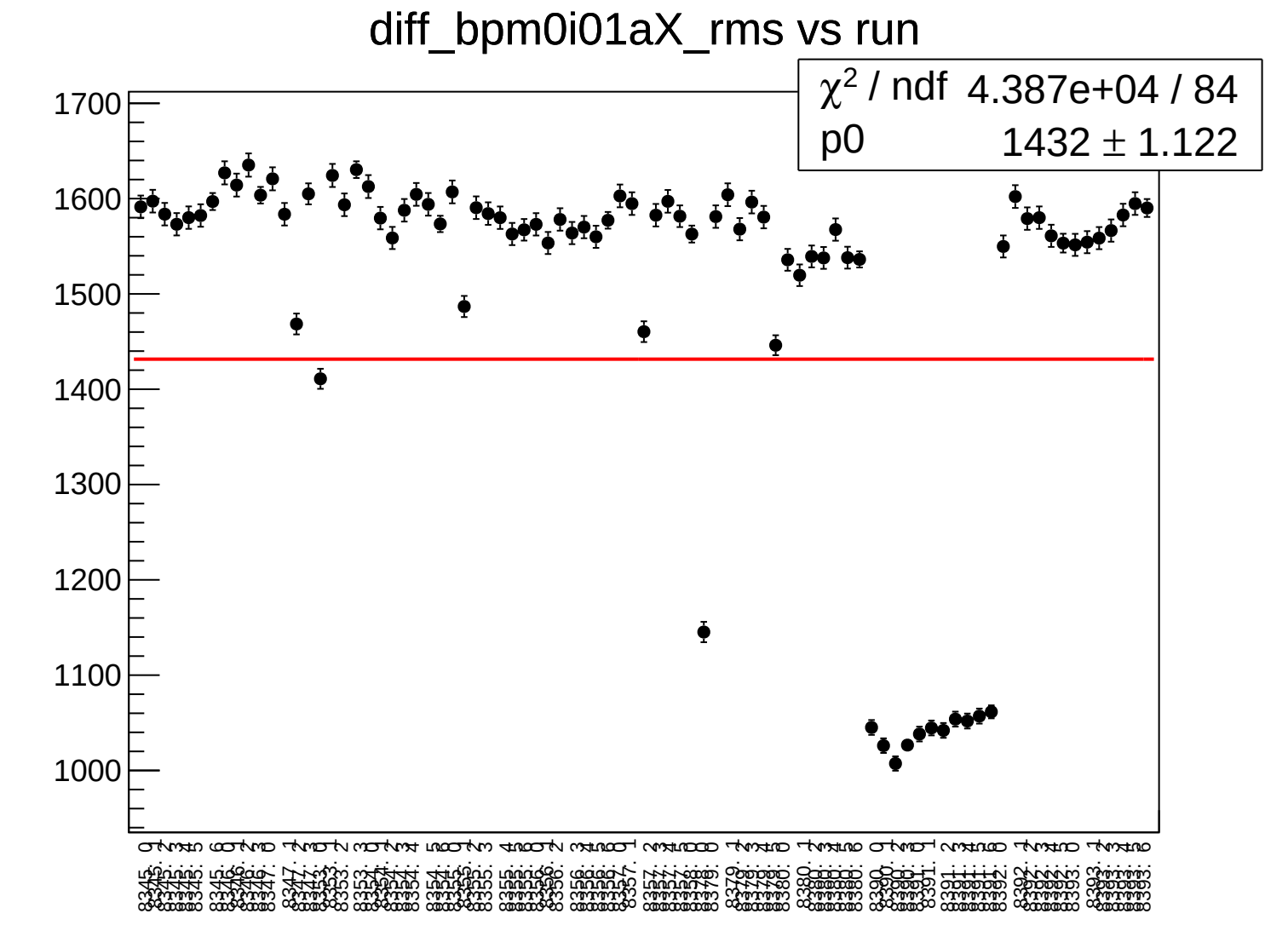

diff_bpm0i01Y_mean vs run
χ² / ndf 78.99 / 84
p0 13.9 ± 1.636
pull
Entries 85
Mean −68.16
Std Dev 64.59

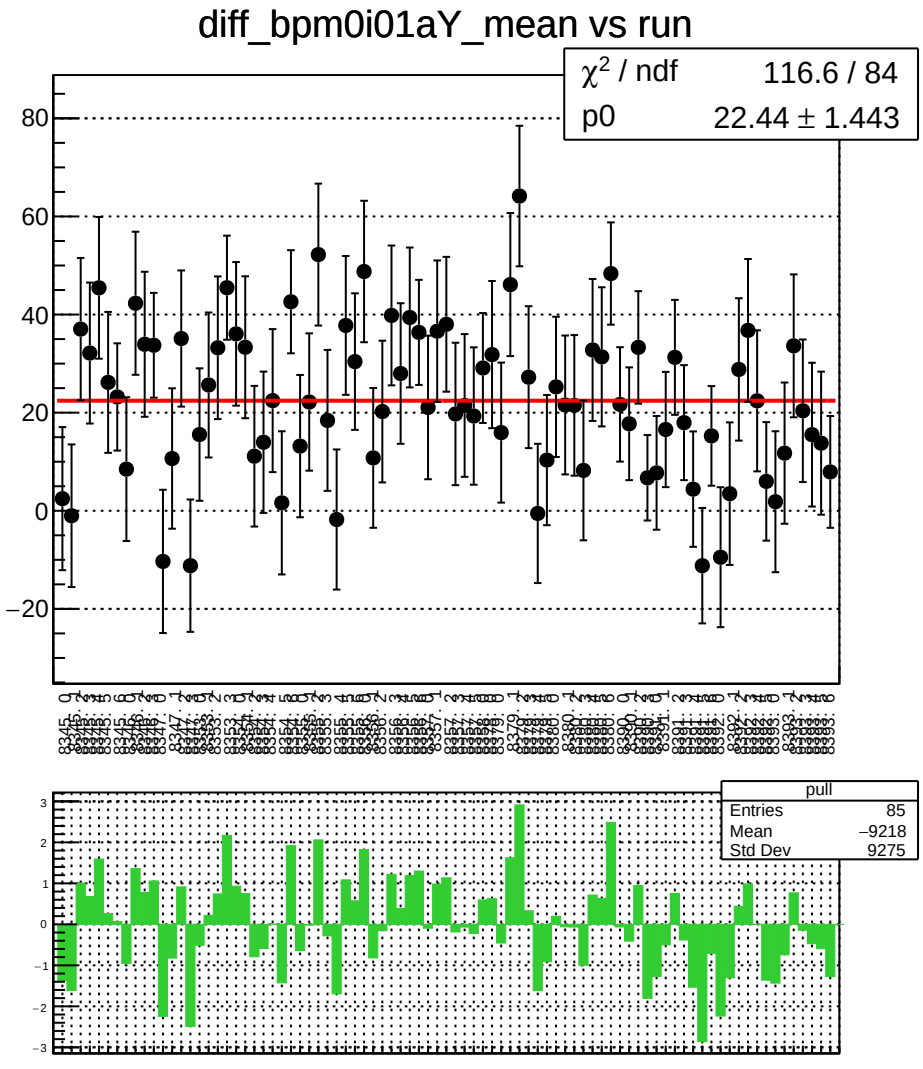

pull1D
Entries 85
Mean −0.01157
Std Dev 0.9639

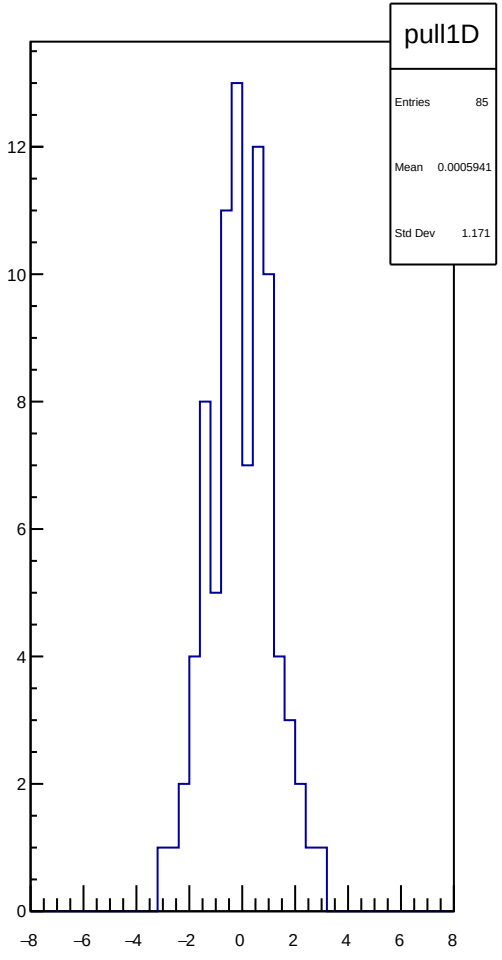

diff_bpm0i01Y_rms vs run
χ² / ndf 4.13e+04 / 84
p0 1477 ± 1.156
1700
1600
1500
1400
1300
1200
1100
1000

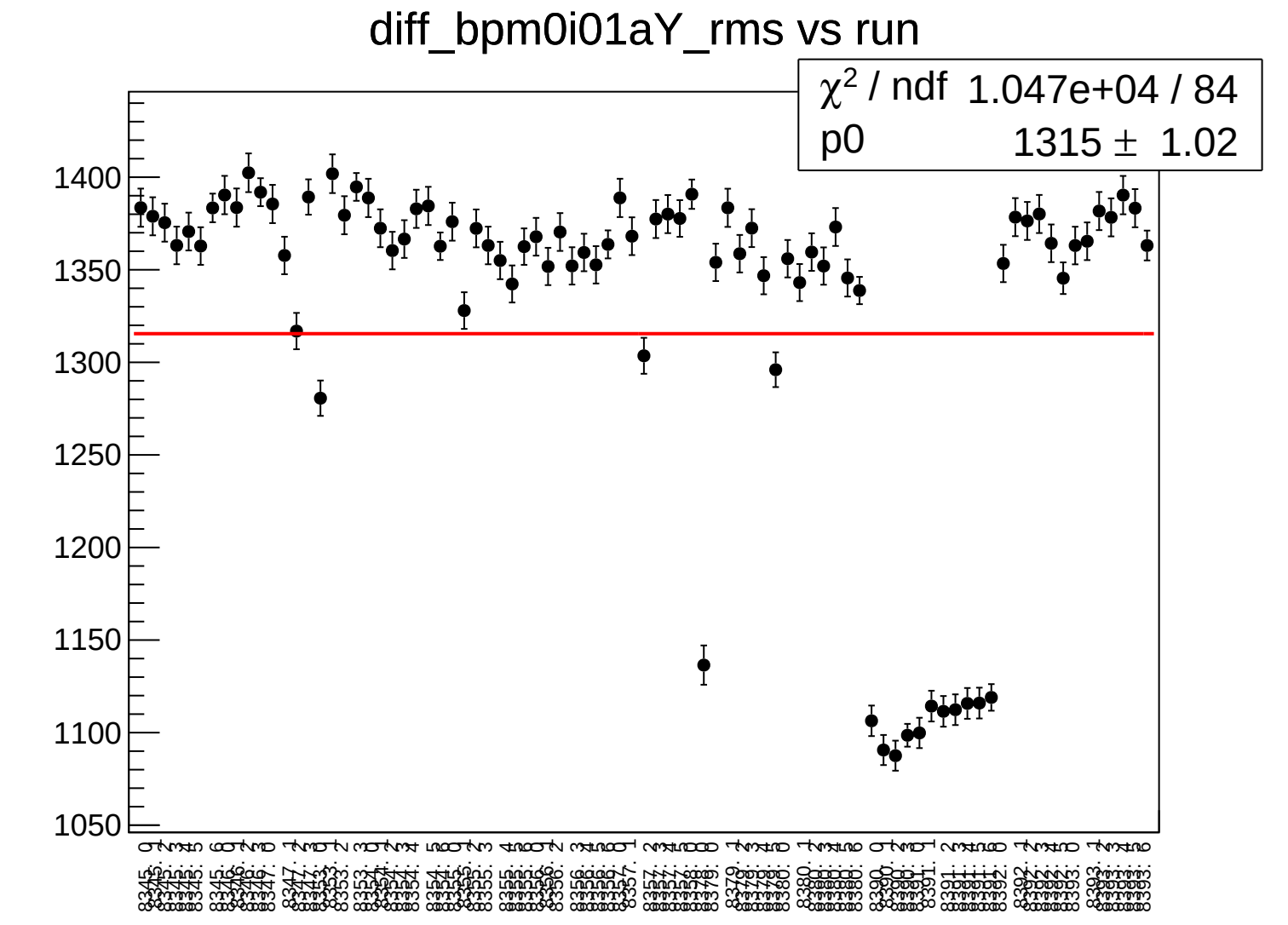

diff_bpm0i01aX_mean vs run
χ² / ndf 96.08 / 84
p0 48.57 ± 1.586
pull
Entries 85
Mean −117.4
Std Dev 168.7

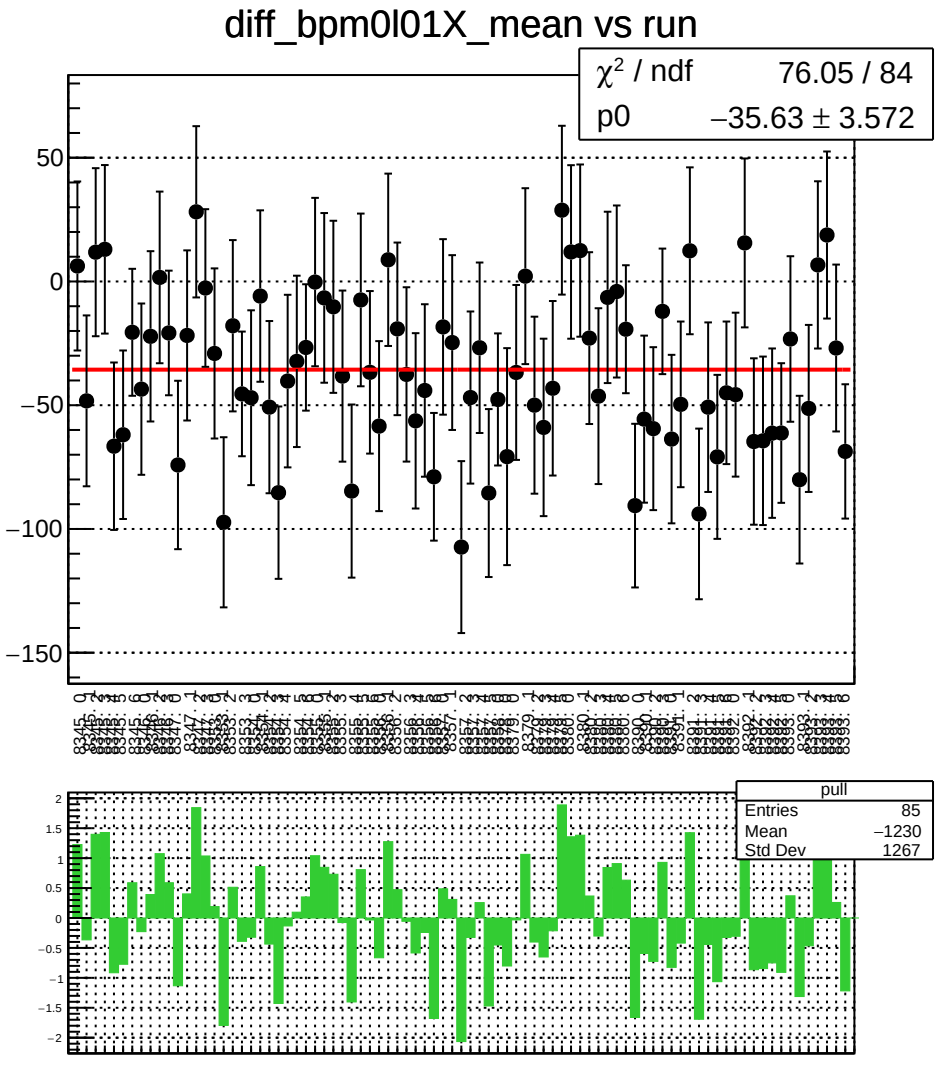

pull1D
Entries 85
Mean 0.03248
Std Dev 1.063

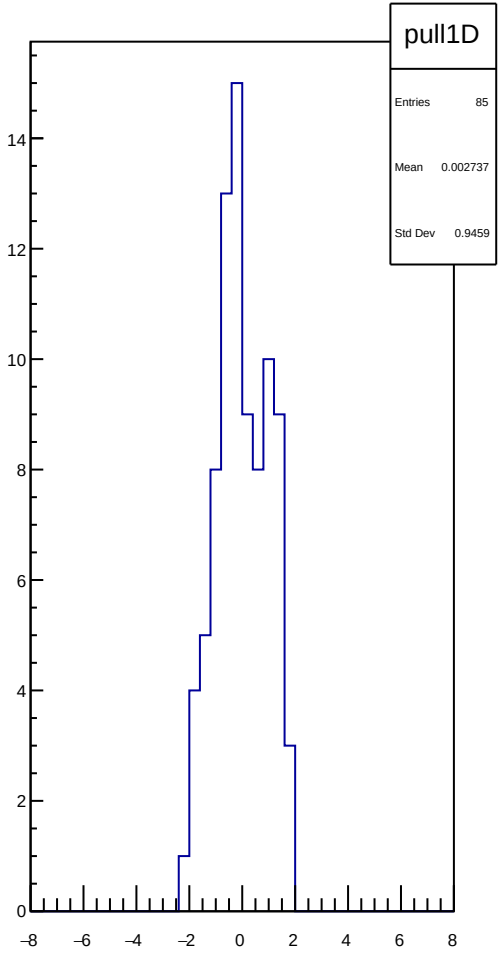

diff_bpm0i01aX_rms vs run
χ² / ndf 4.387e+04 / 84
p0 1432 ± 1.122
1700
1600
1500
1400
1300
1200
1100
1000

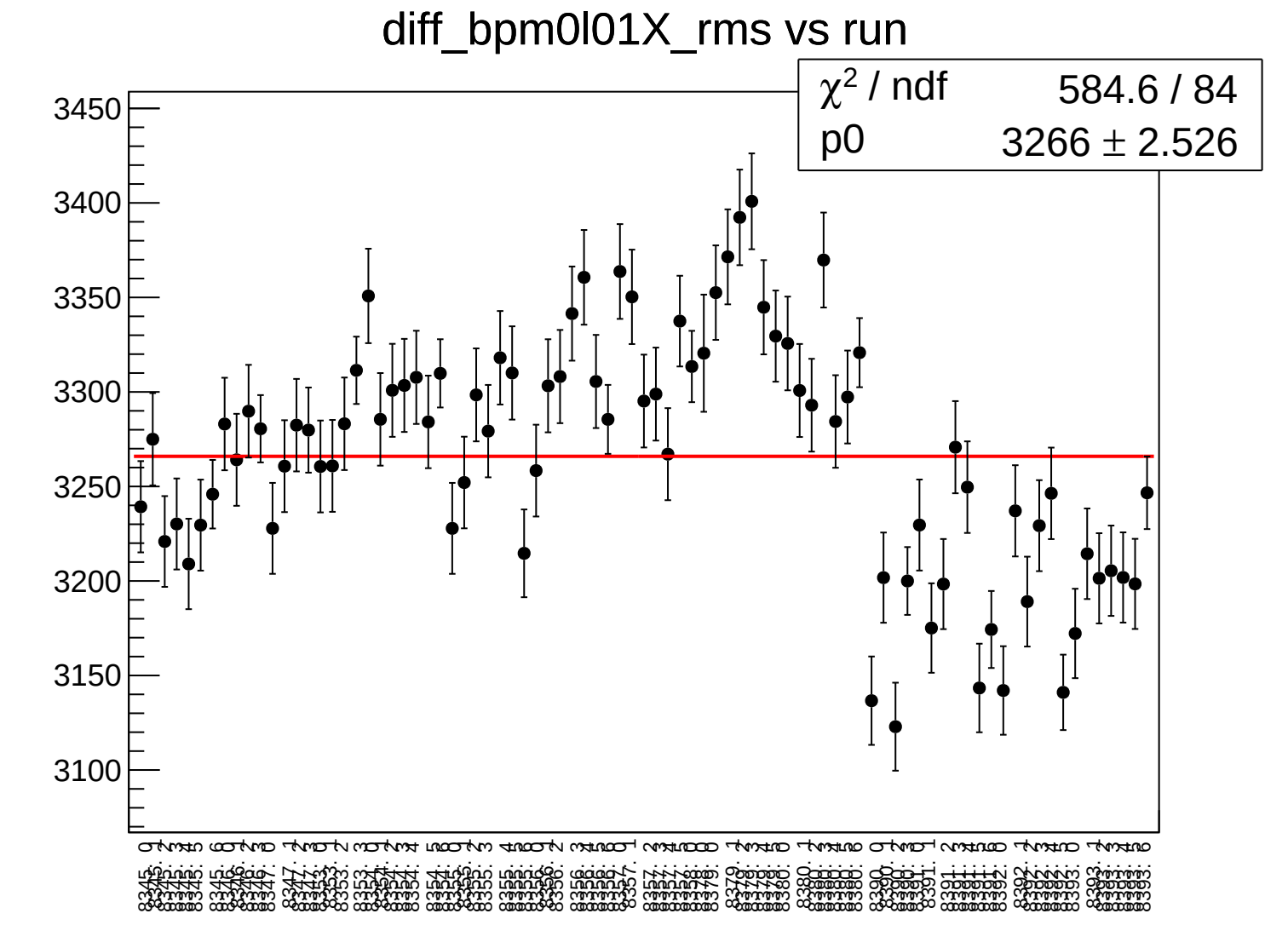

diff_bpm0i01aY_mean vs run
χ² / ndf 116.6 / 84
p0 22.44 ± 1.443
pull
Entries 85
Mean −9218
Std Dev 9275

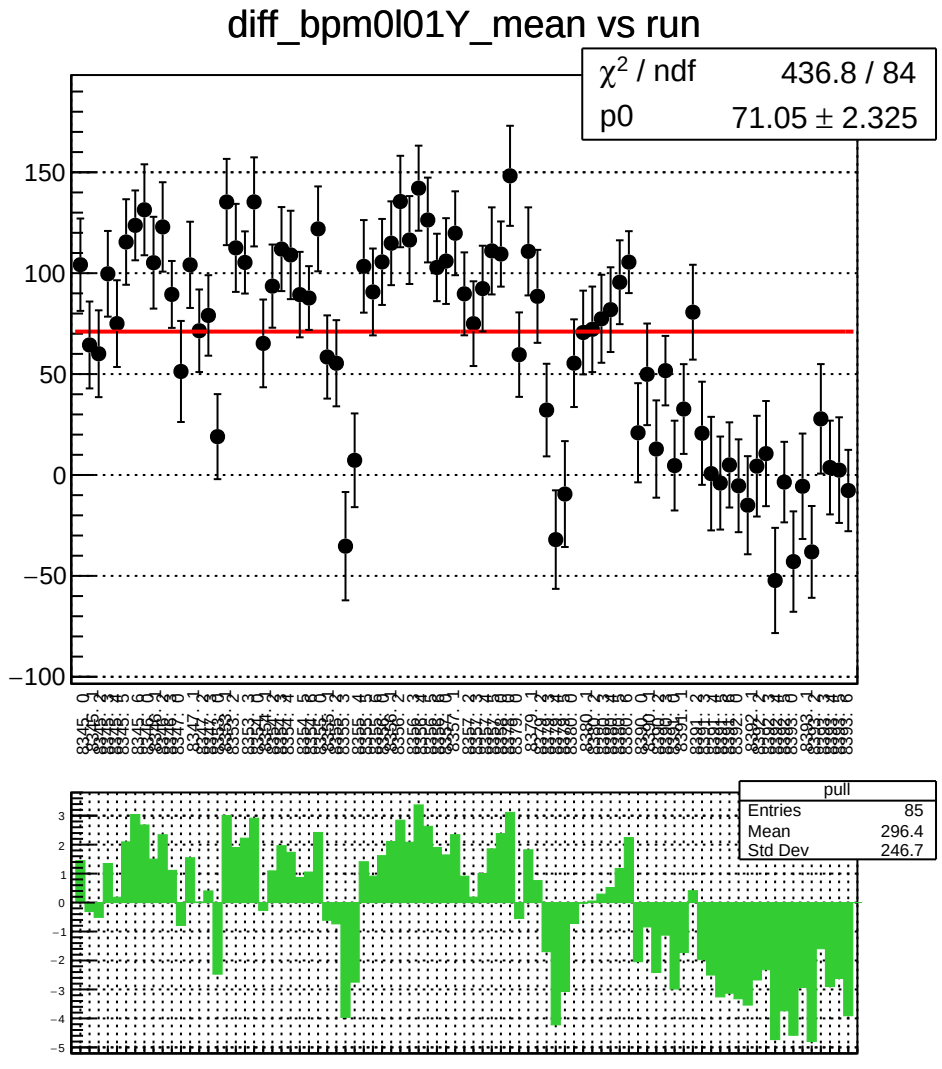

pull1D
Entries 85
Mean 0.0005941
Std Dev 1.171

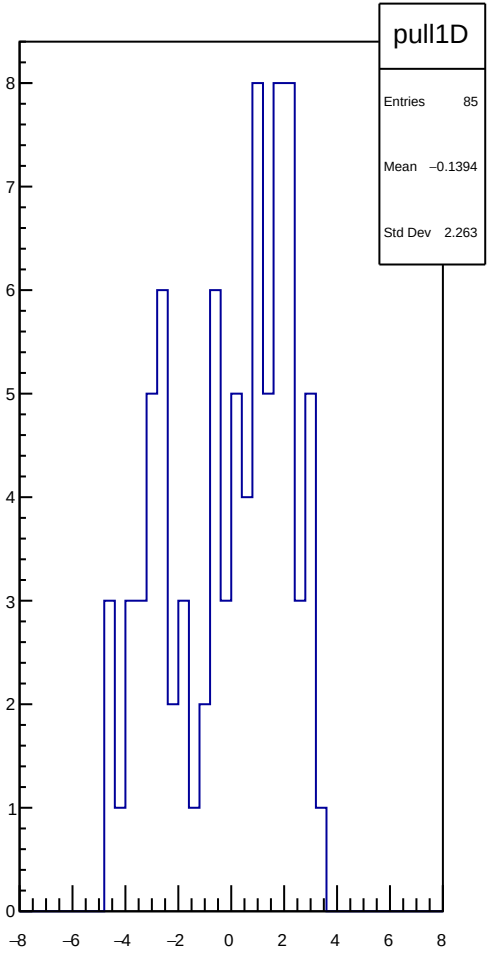

diff_bpm0i01aY_rms vs run
χ² / ndf 1.047e+04 / 84
p0 1315 ± 1.02
1400
1350
1300
1250
1200
1150
1100
1050

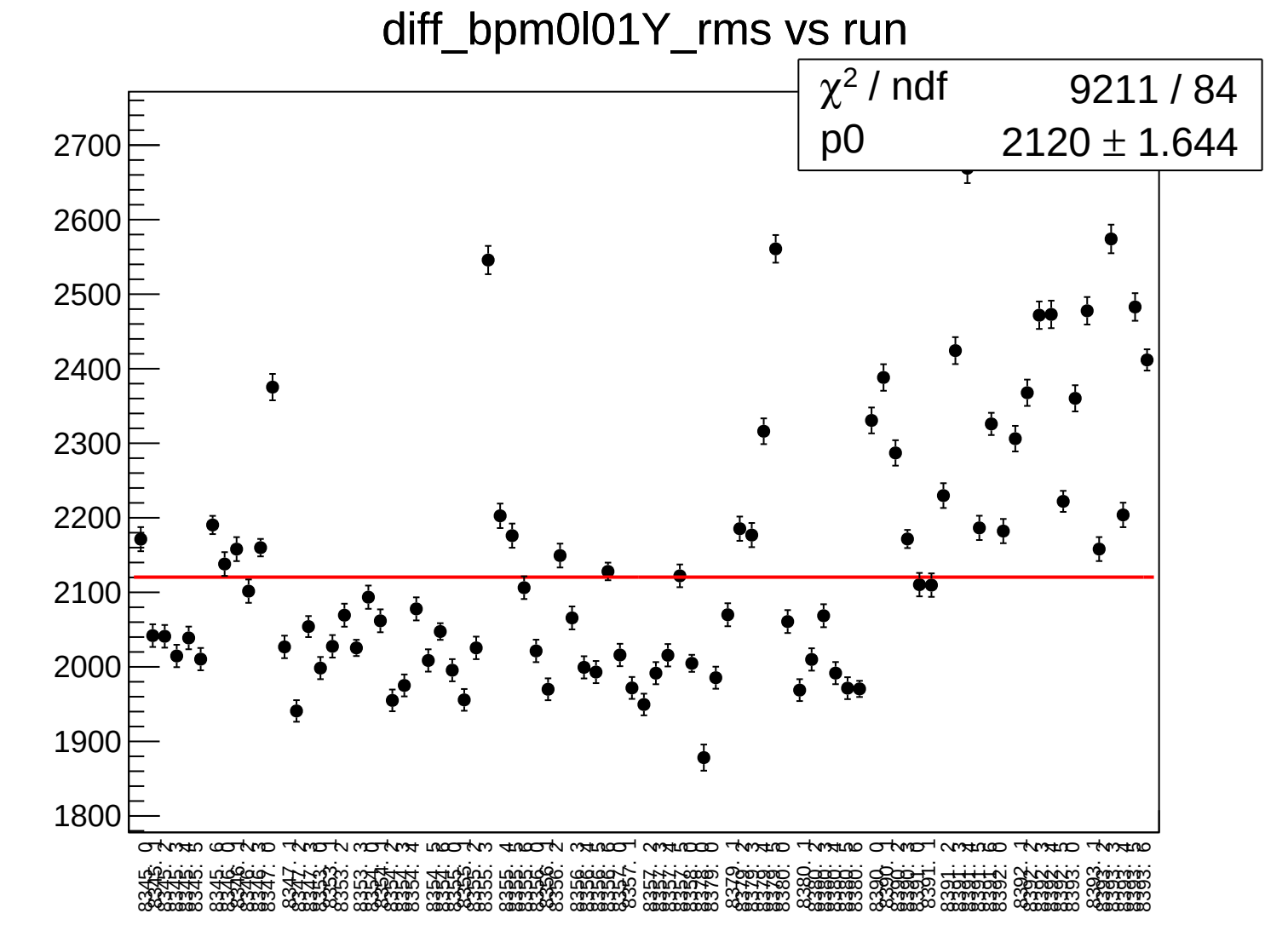

diff_bpm0l01X_mean vs run
χ² / ndf 76.05 / 84
p0 −35.63 ± 3.572
pull
Entries 85
Mean −1230
Std Dev 1267

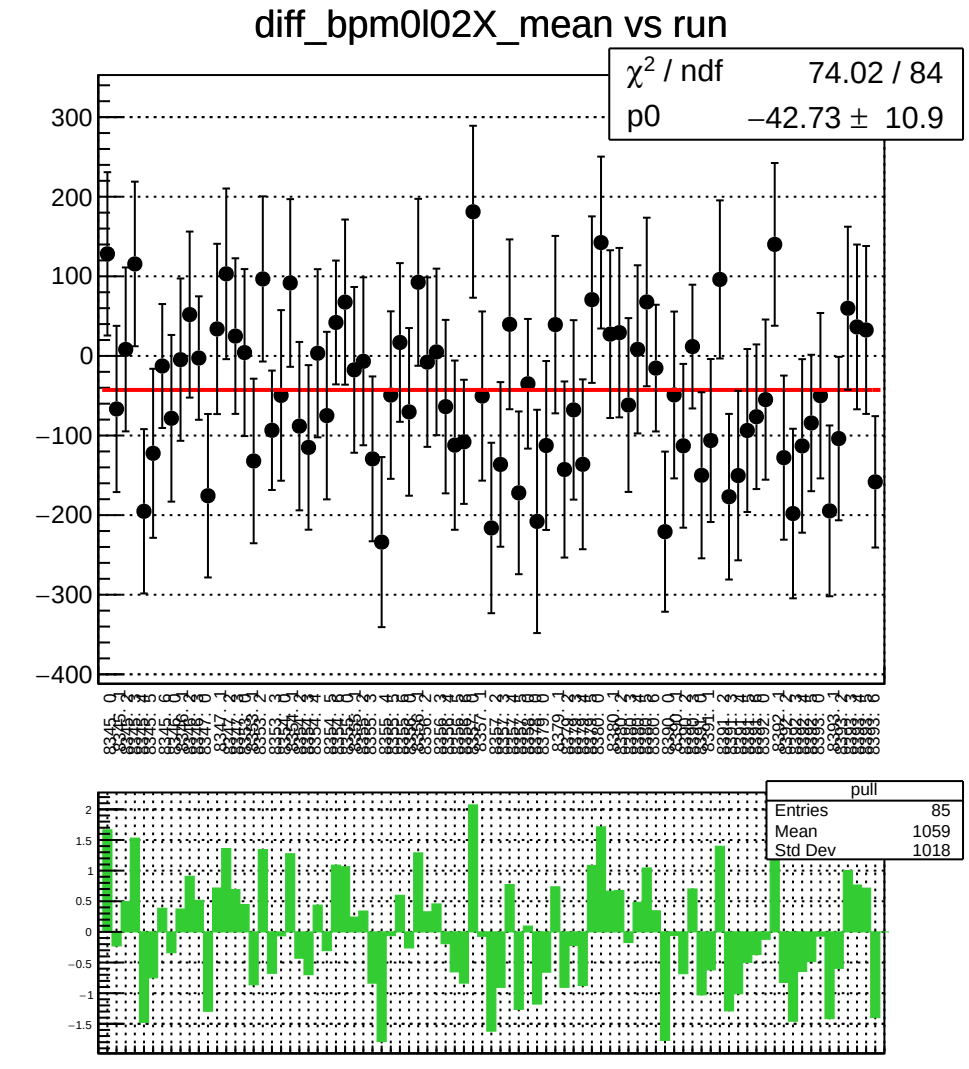

pull1D
Entries 85
Mean 0.002737
Std Dev 0.9459

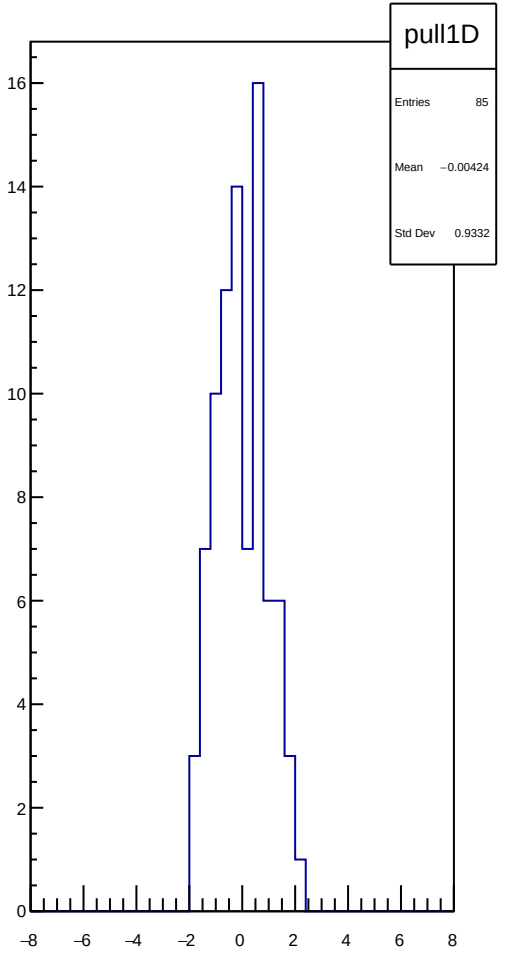

diff_bpm0l01X_rms vs run
χ² / ndf 584.6 / 84
p0 3266 ± 2.526
3450
3400
3350
3300
3250
3200
3150
3100

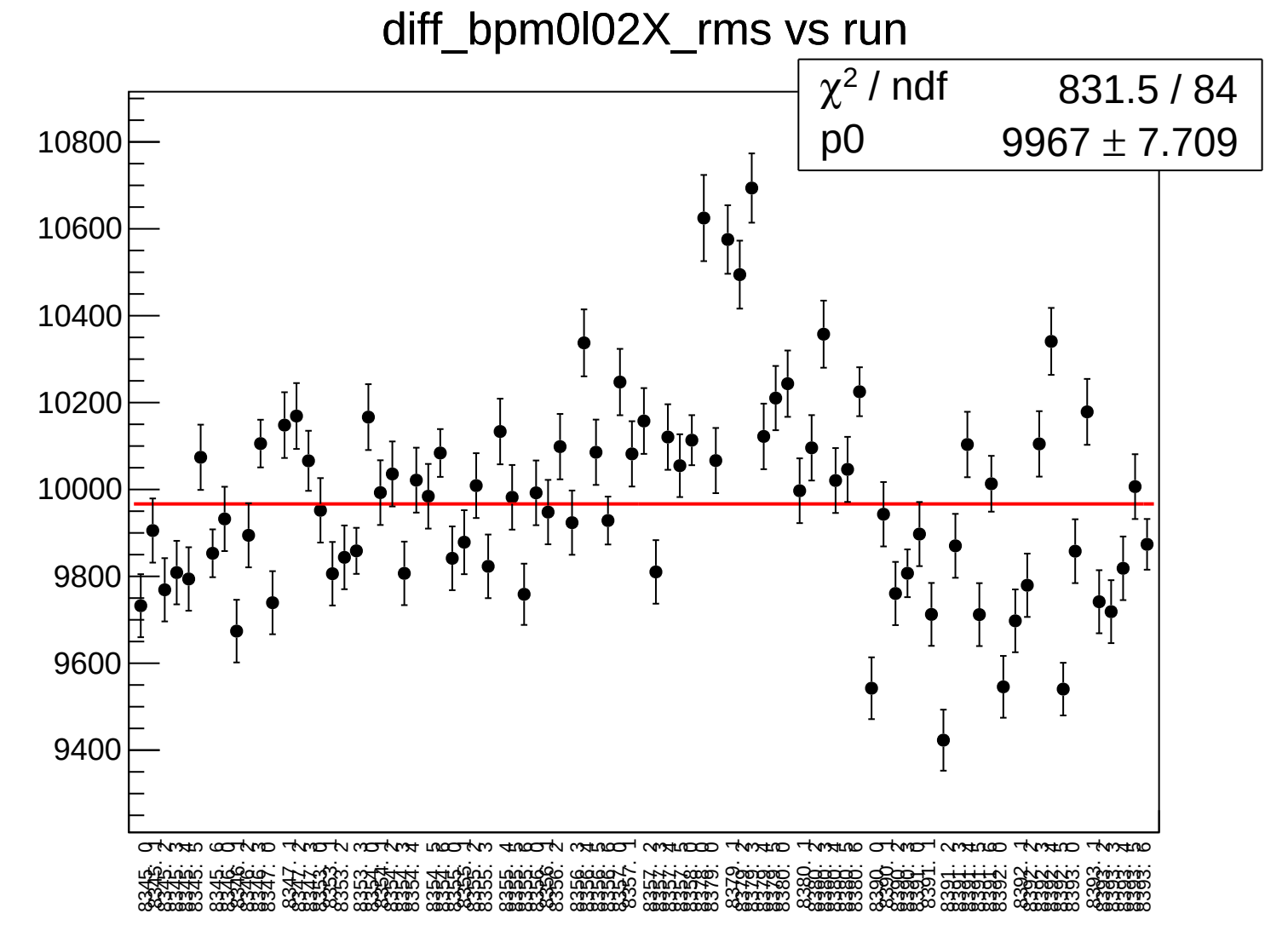

diff_bpm0l01Y_mean vs run
χ^2 / ndf 436.8 / 84
p0 71.05 ± 2.325
150
100
50
0
−50
−100
pull
Entries 85
Mean 296.4
Std Dev 246.7
3
2
1
0
−1
−2
−3
−4
−5

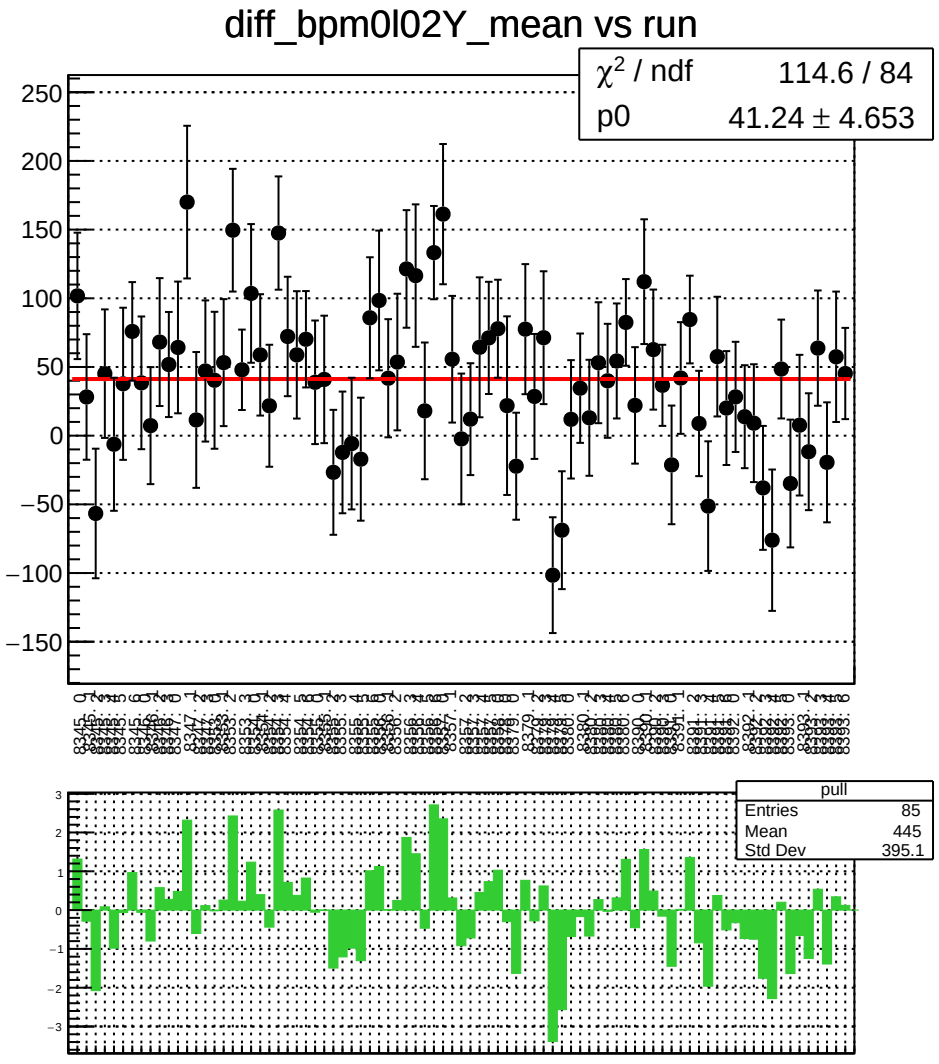

pull1D
Entries 85
Mean −0.1394
Std Dev 2.263
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

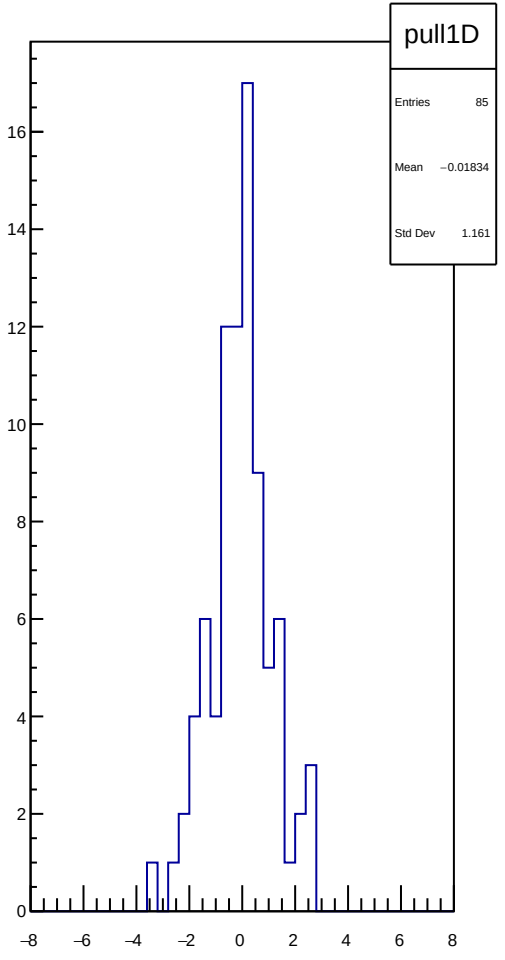

diff_bpm0l01Y_rms vs run
χ² / ndf 9211 / 84
p0 2120 ± 1.644
2700
2600
2500
2400
2300
2200
2100
2000
1900
1800

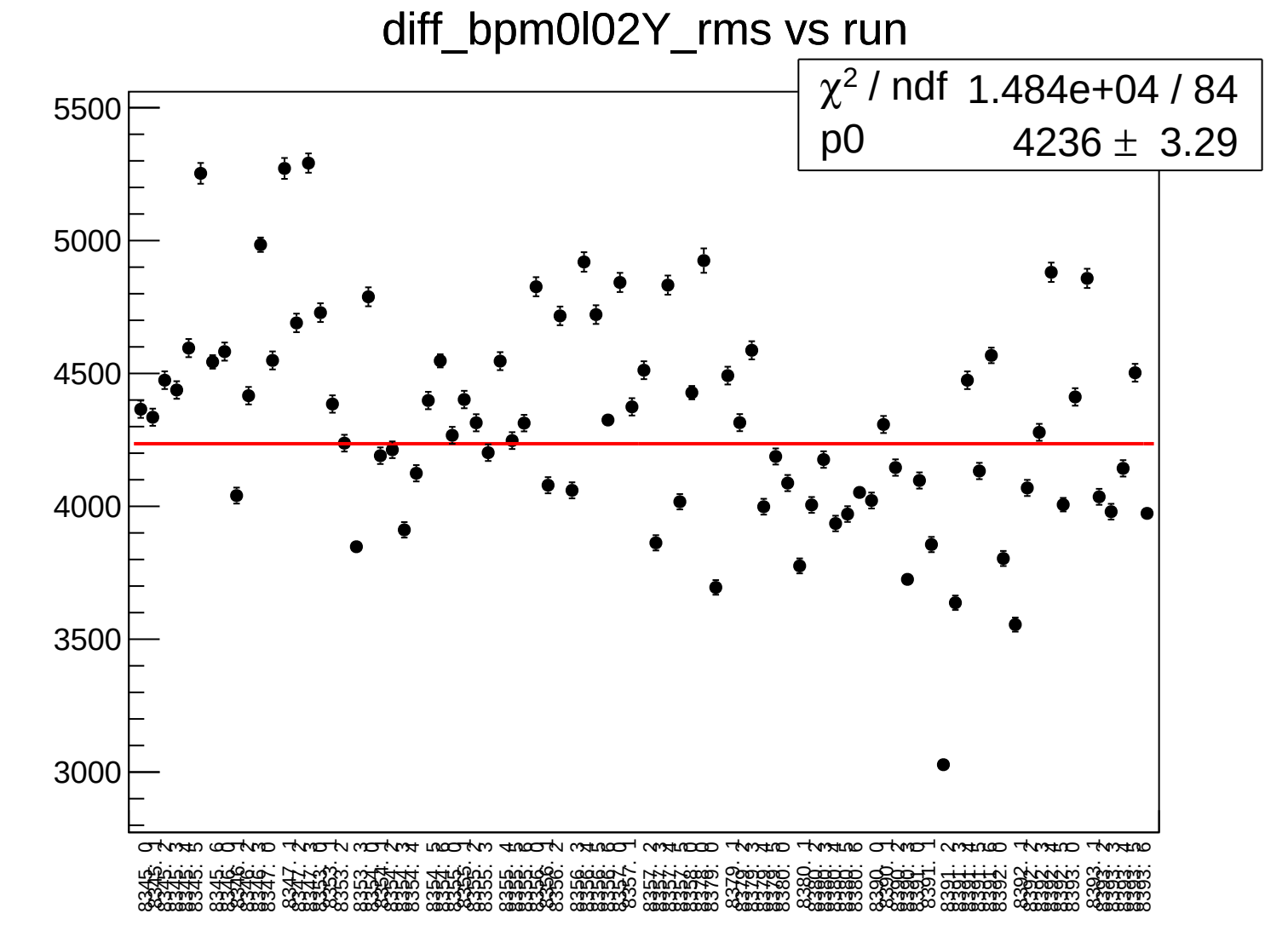

diff_bpm0l02X_mean vs run
χ² / ndf 74.02 / 84
p0 −42.73 ± 10.9
pull
Entries 85
Mean 1059
Std Dev 1018

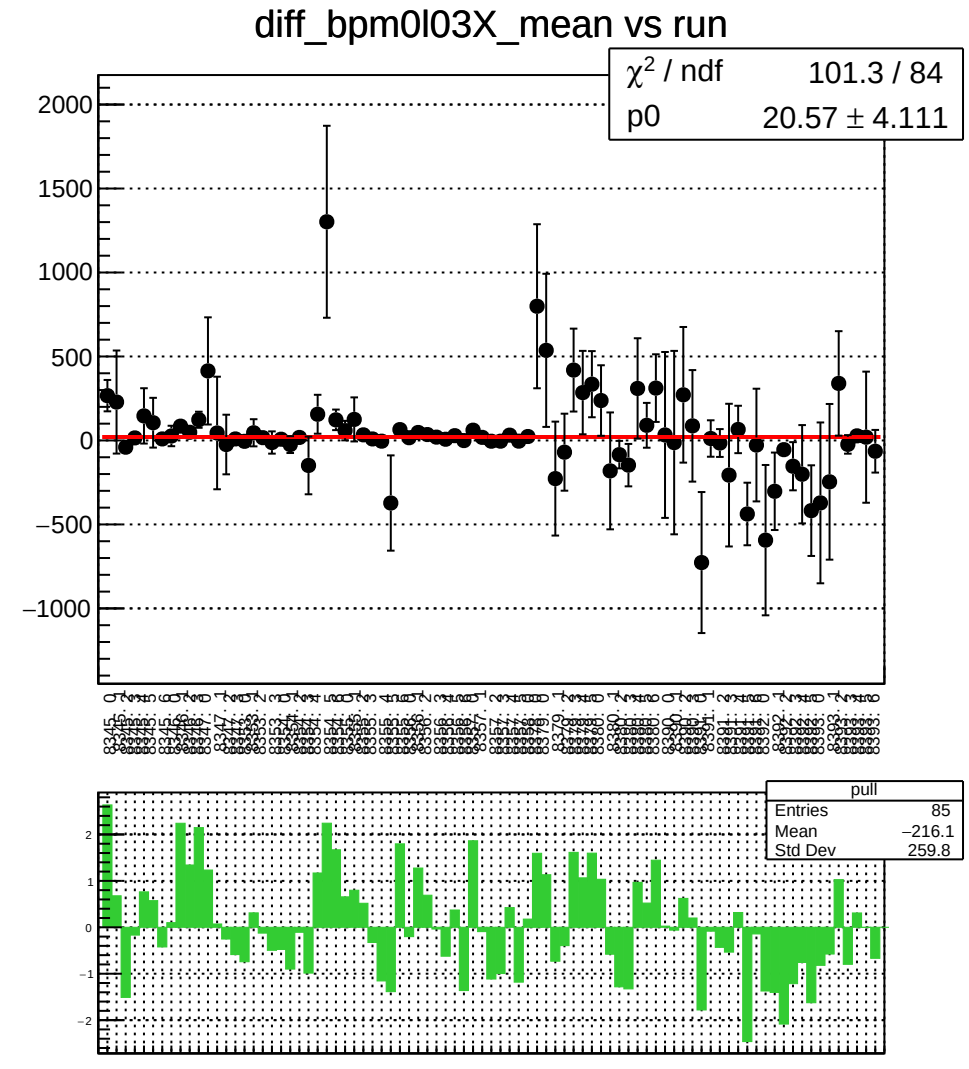

pull1D
Entries 85
Mean −0.00424
Std Dev 0.9332

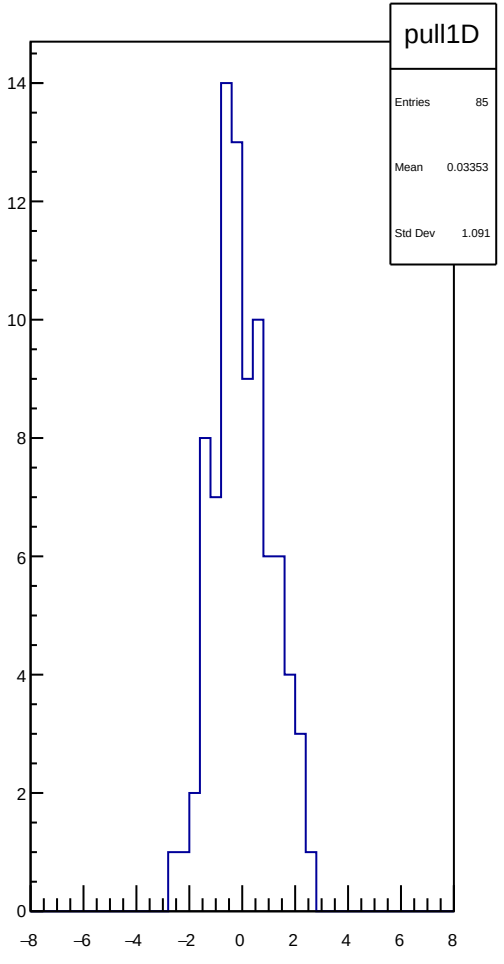

diff_bpm0l02X_rms vs run
χ² / ndf 831.5 / 84
p0 9967 ± 7.709
10800
10600
10400
10200
10000
9800
9600
9400

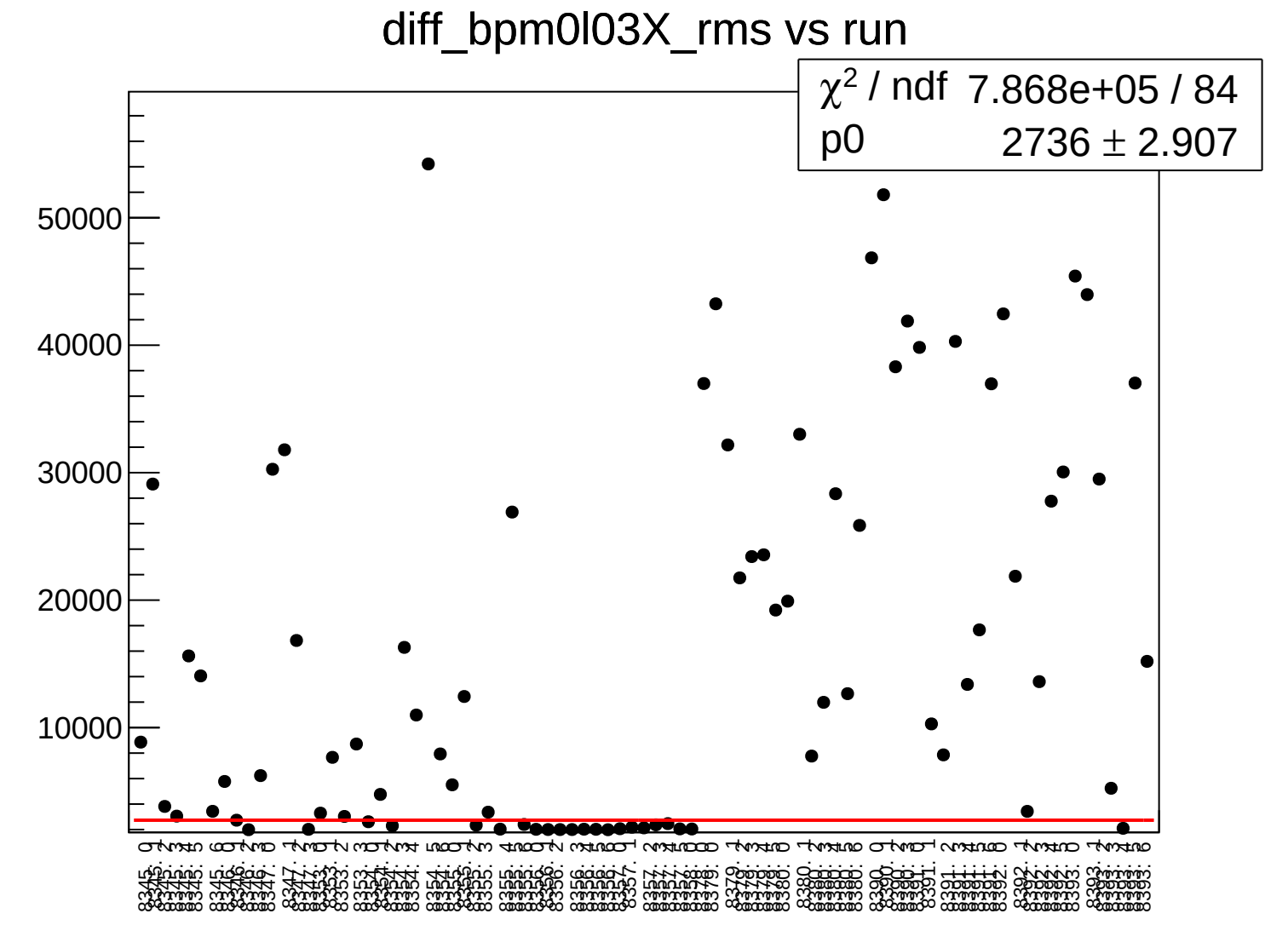

diff_bpm0l02Y_mean vs run
χ² / ndf 114.6 / 84
p0 41.24 ± 4.653
pull
Entries 85
Mean 445
Std Dev 395.1

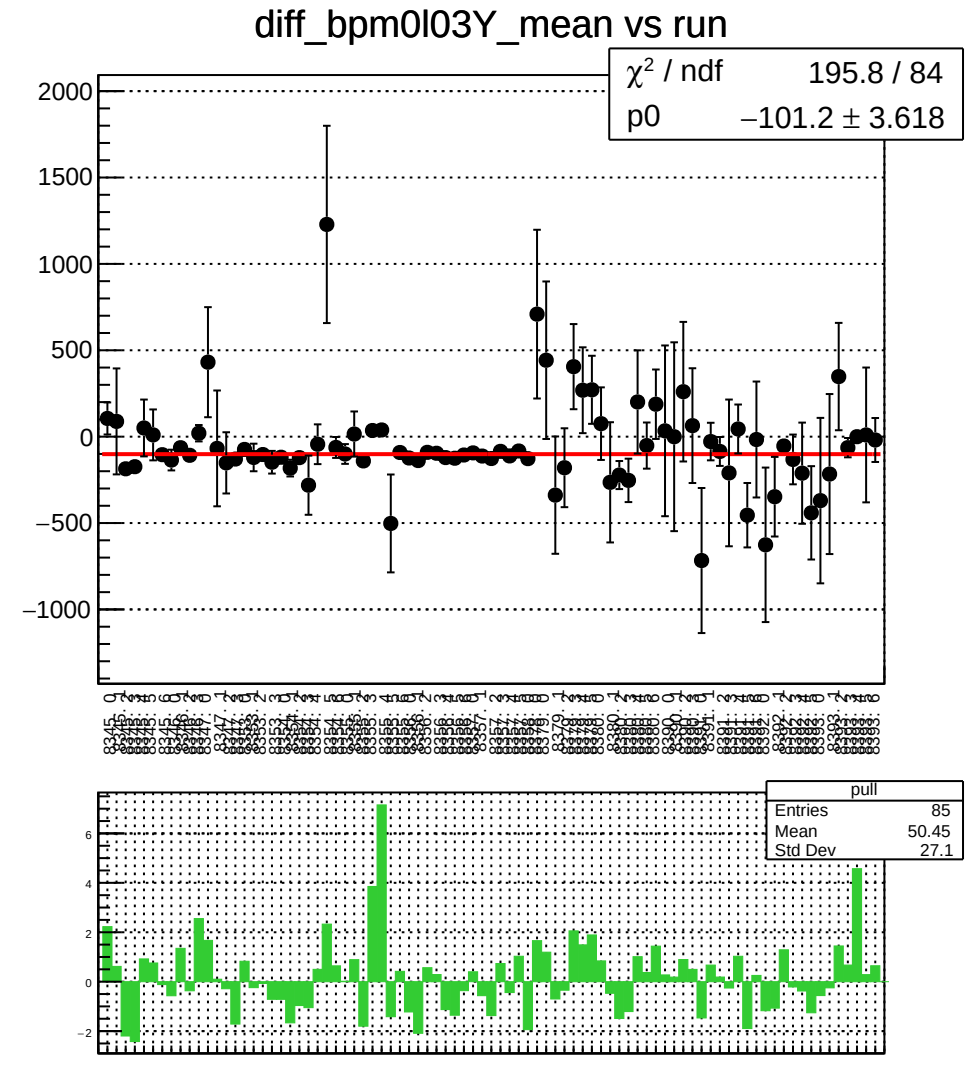

pull1D
Entries 85
Mean −0.01834
Std Dev 1.161

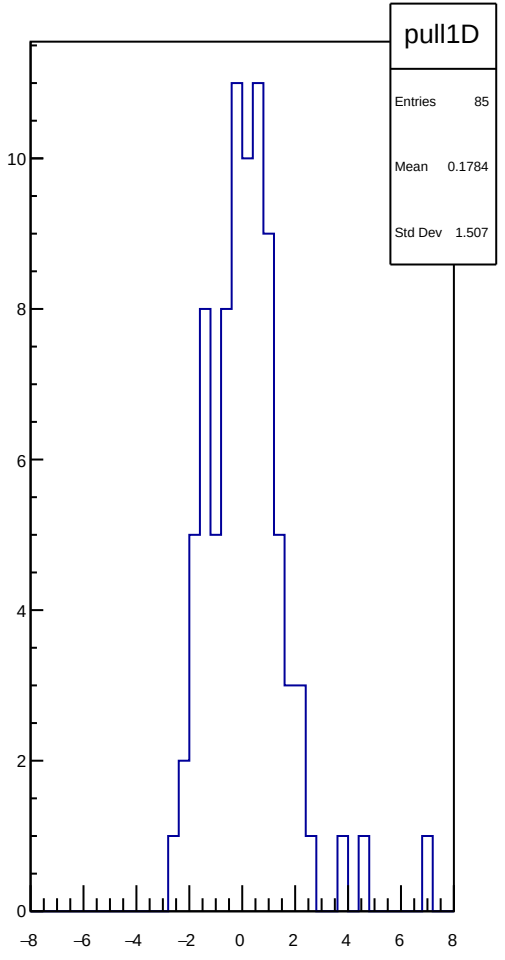

diff_bpm0l02Y_rms vs run
χ² / ndf 1.484e+04 / 84
p0 4236 ± 3.29
5500
5000
4500
4000
3500
3000

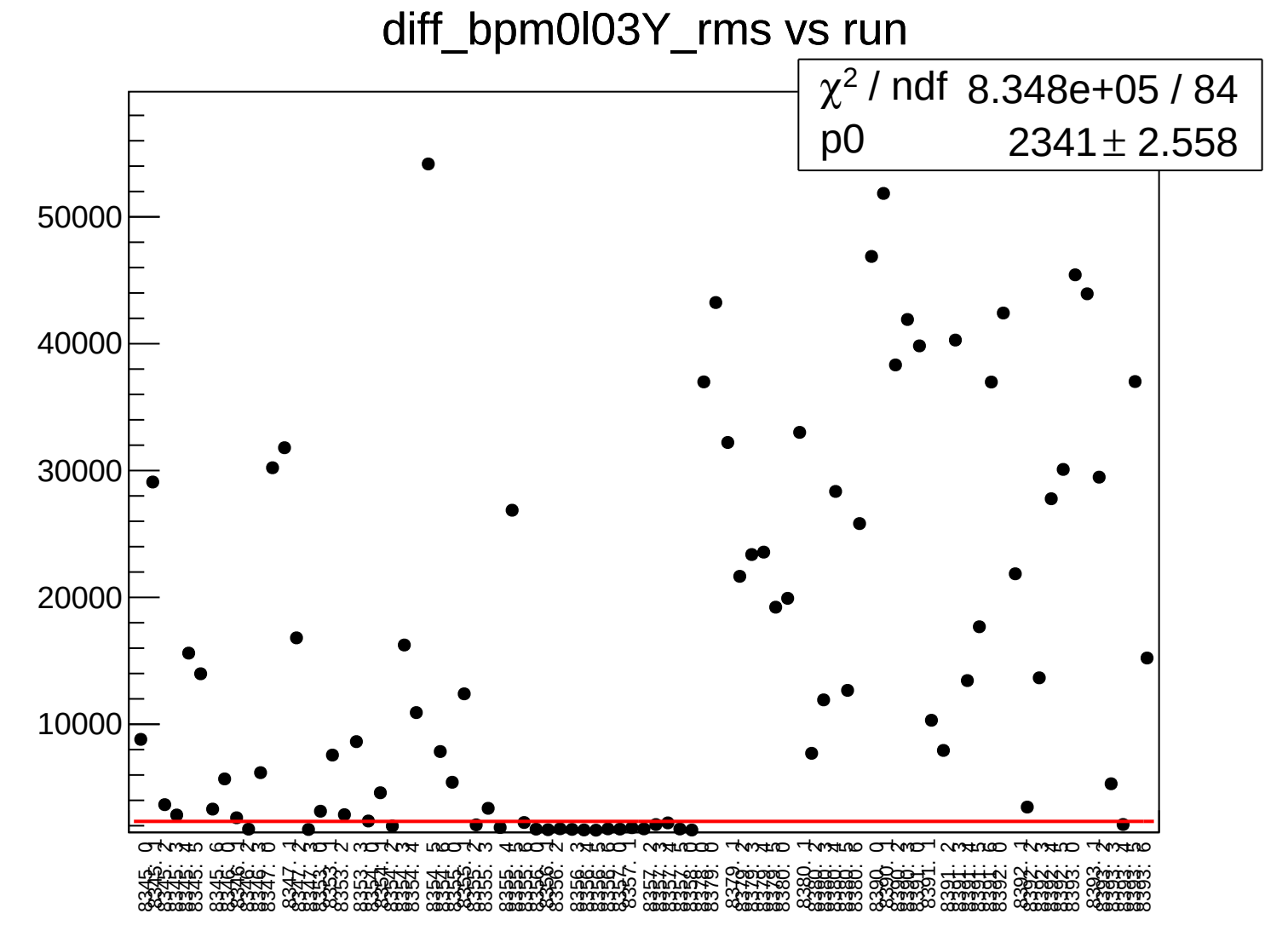

diff_bpm0l03X_mean vs run
χ² / ndf 101.3 / 84
p0 20.57 ± 4.111
pull
Entries 85
Mean −216.1
Std Dev 259.8

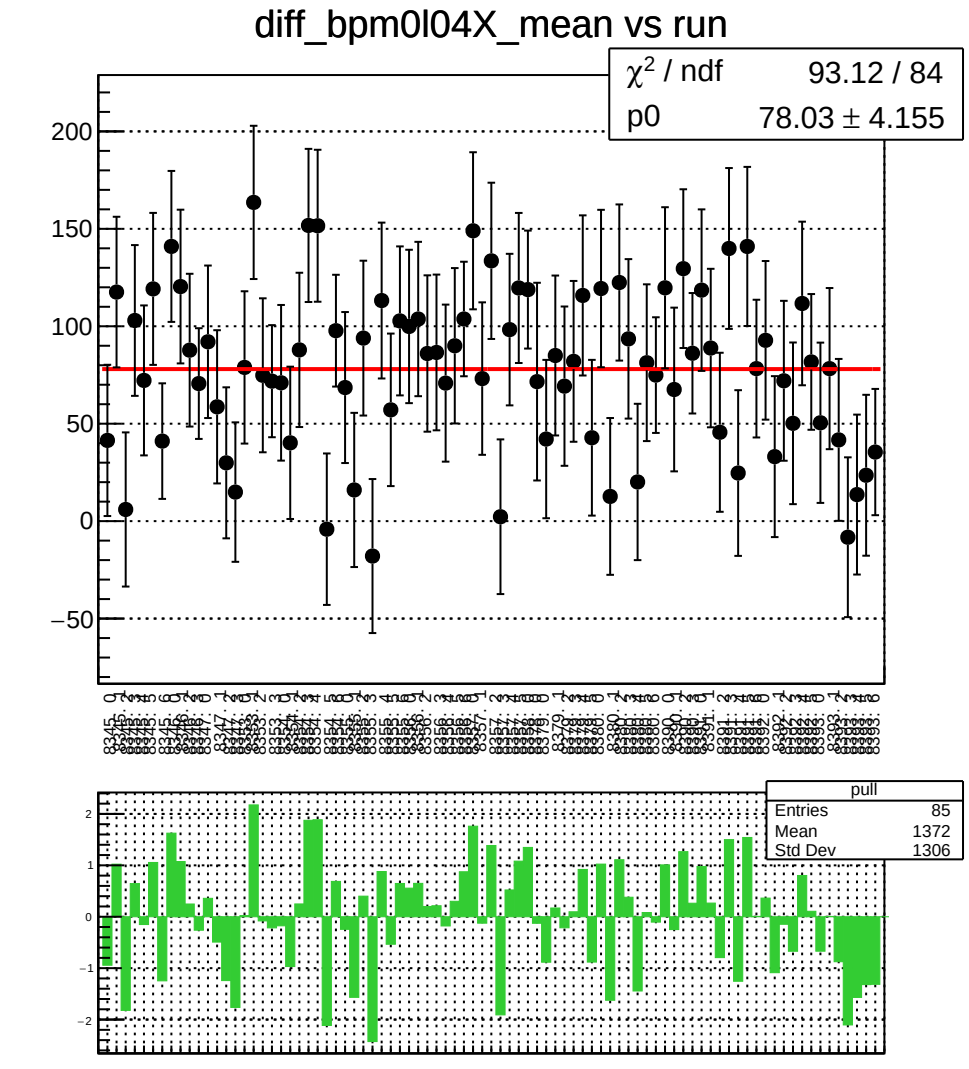

pull1D
Entries 85
Mean 0.03353
Std Dev 1.091

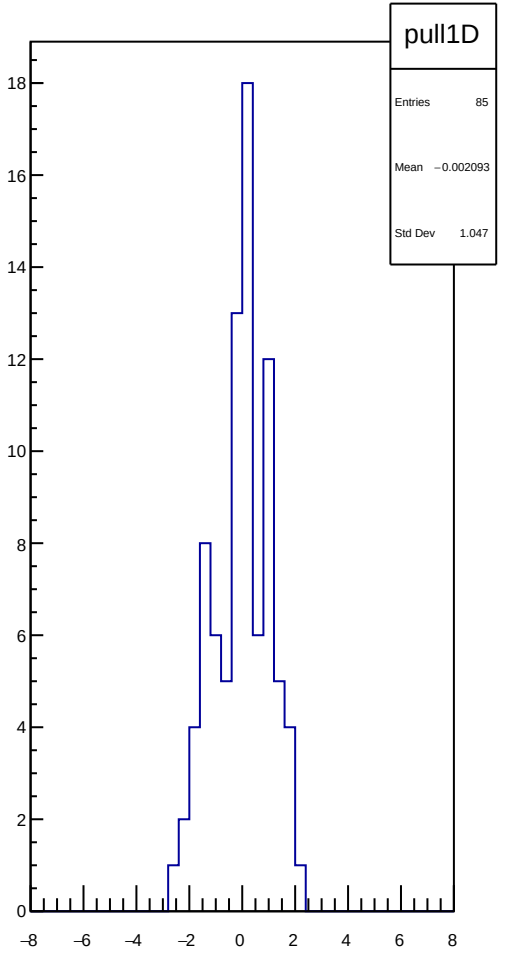

diff_bpm0l03X_rms vs run
χ² / ndf 7.868e+05 / 84
p0 2736 ± 2.907
50000
40000
30000
20000
10000

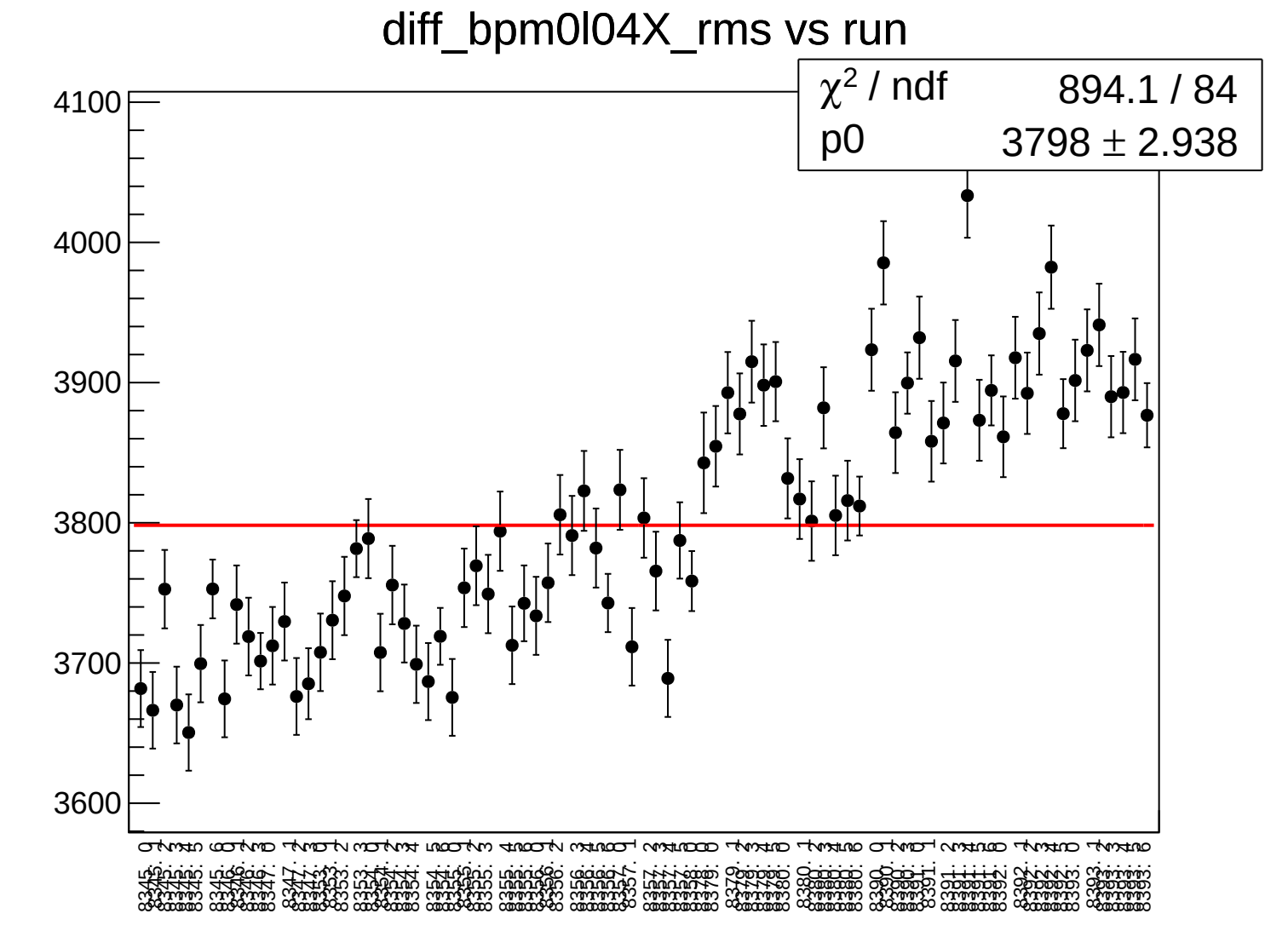

diff_bpm0l03Y_mean vs run
χ² / ndf 195.8 / 84
p0 −101.2 ± 3.618
2000
1500
1000
500
0
−500
−1000
pull
Entries 85
Mean 50.45
Std Dev 27.1
6
4
2
0
−2

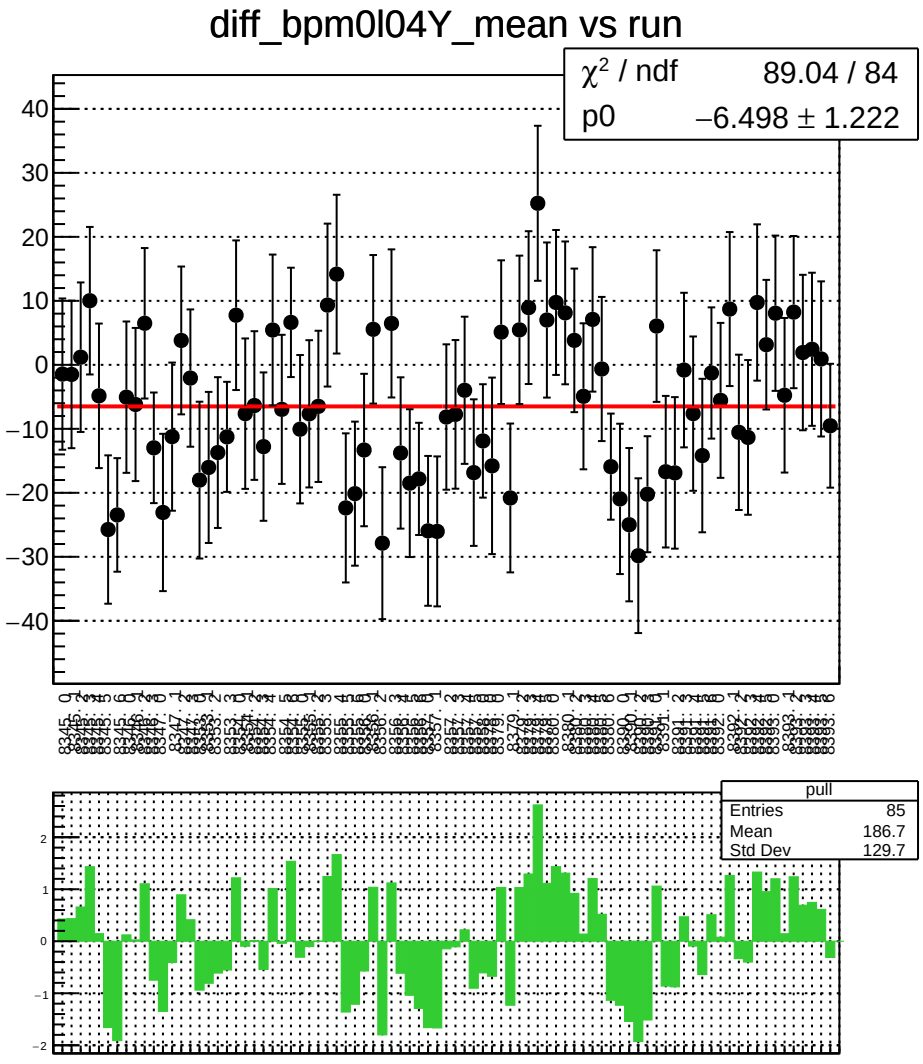

pull1D
Entries 85
Mean 0.1784
Std Dev 1.507
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

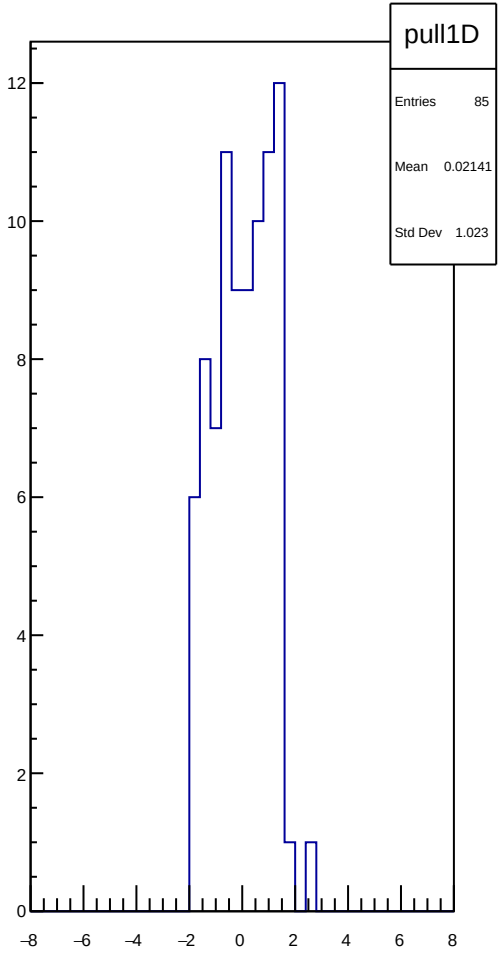

diff_bpm0l03Y_rms vs run
χ² / ndf 8.348e+05 / 84
p0 2341 ± 2.558
50000
40000
30000
20000
10000

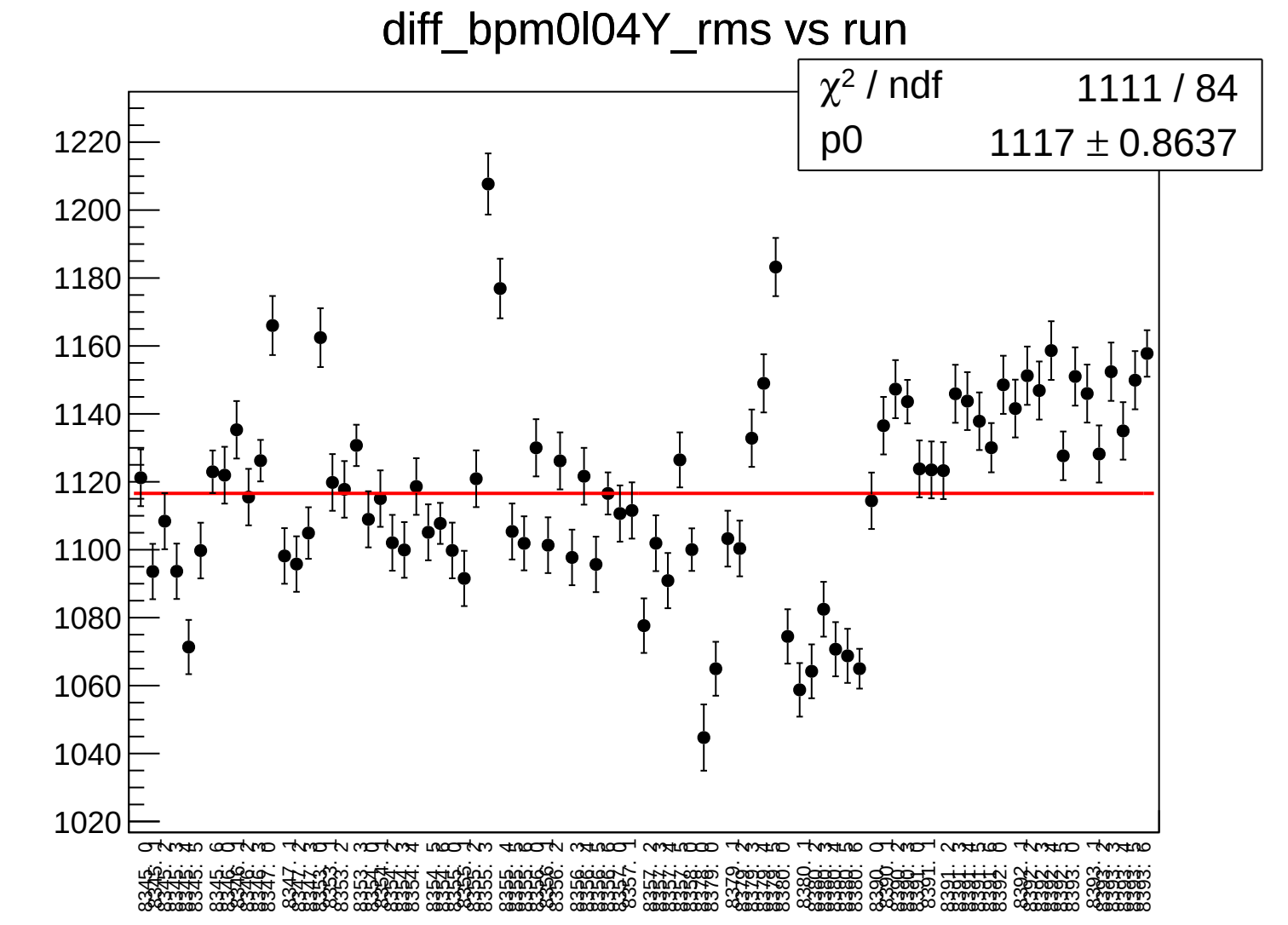

diff_bpm0l04X_mean vs run
χ² / ndf 93.12 / 84
p0 78.03 ± 4.155
200
150
100
50
0
−50
pull
Entries 85
Mean 1372
Std Dev 1306
2
1
0
−1
−2

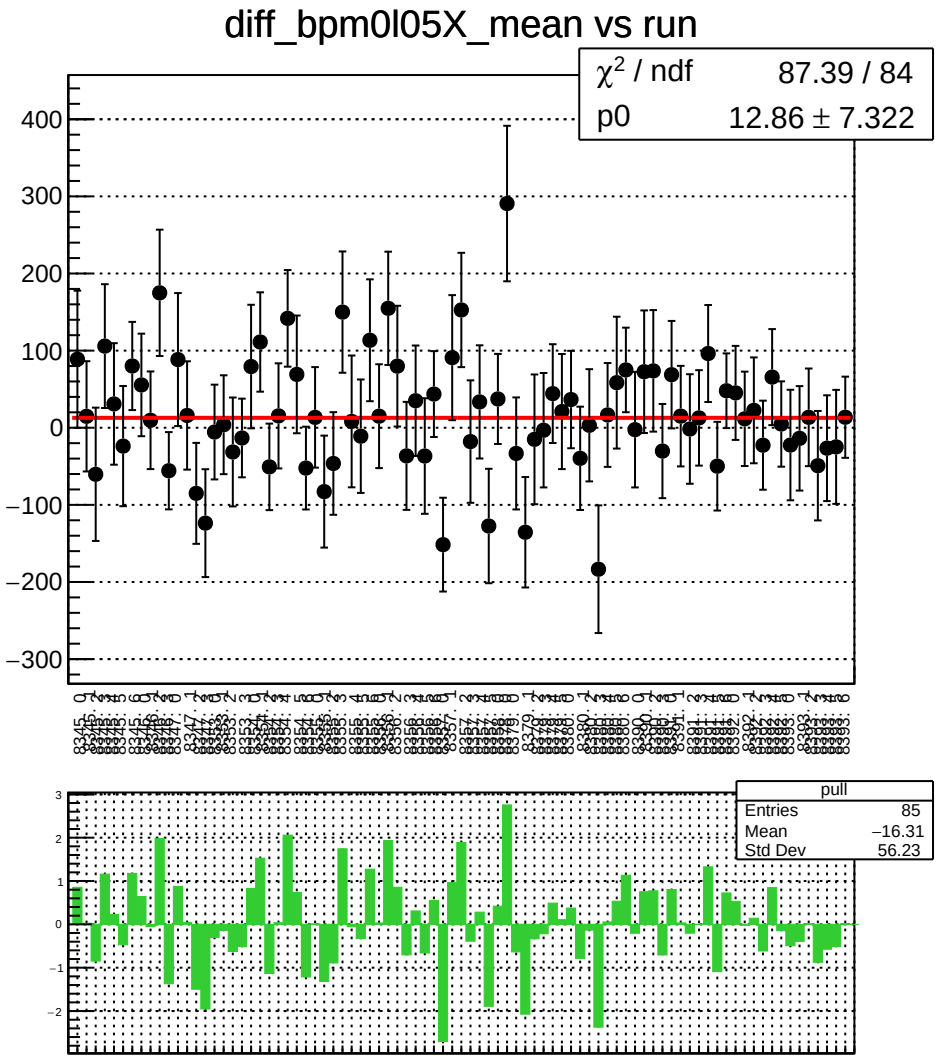

pull1D
Entries 85
Mean −0.002093
Std Dev 1.047
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

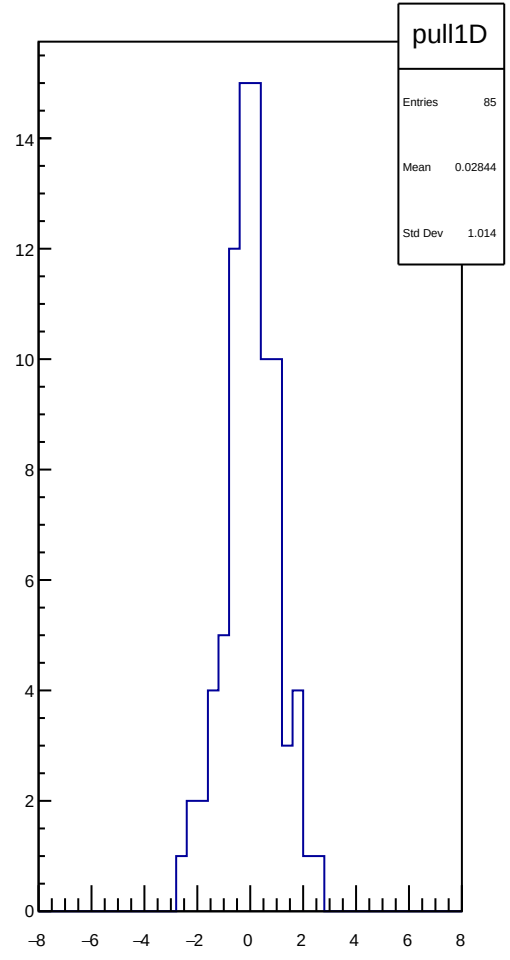

diff_bpm0l04X_rms vs run
χ² / ndf 894.1 / 84
p0 3798 ± 2.938
4100
4000
3900
3800
3700
3600

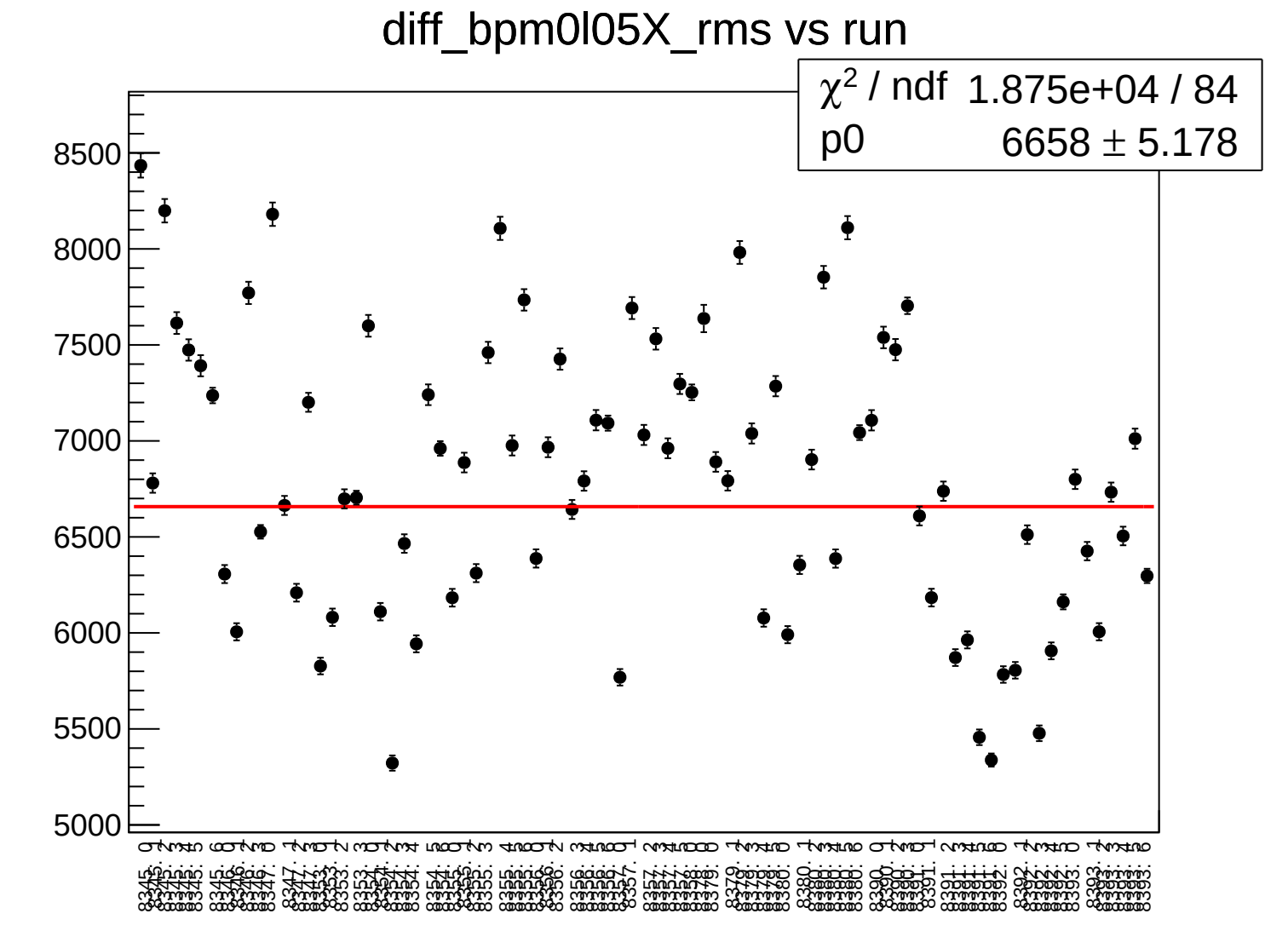

diff_bpm0l04Y_mean vs run
χ² / ndf 89.04 / 84
p0 −6.498 ± 1.222
pull
Entries 85
Mean 186.7
Std Dev 129.7

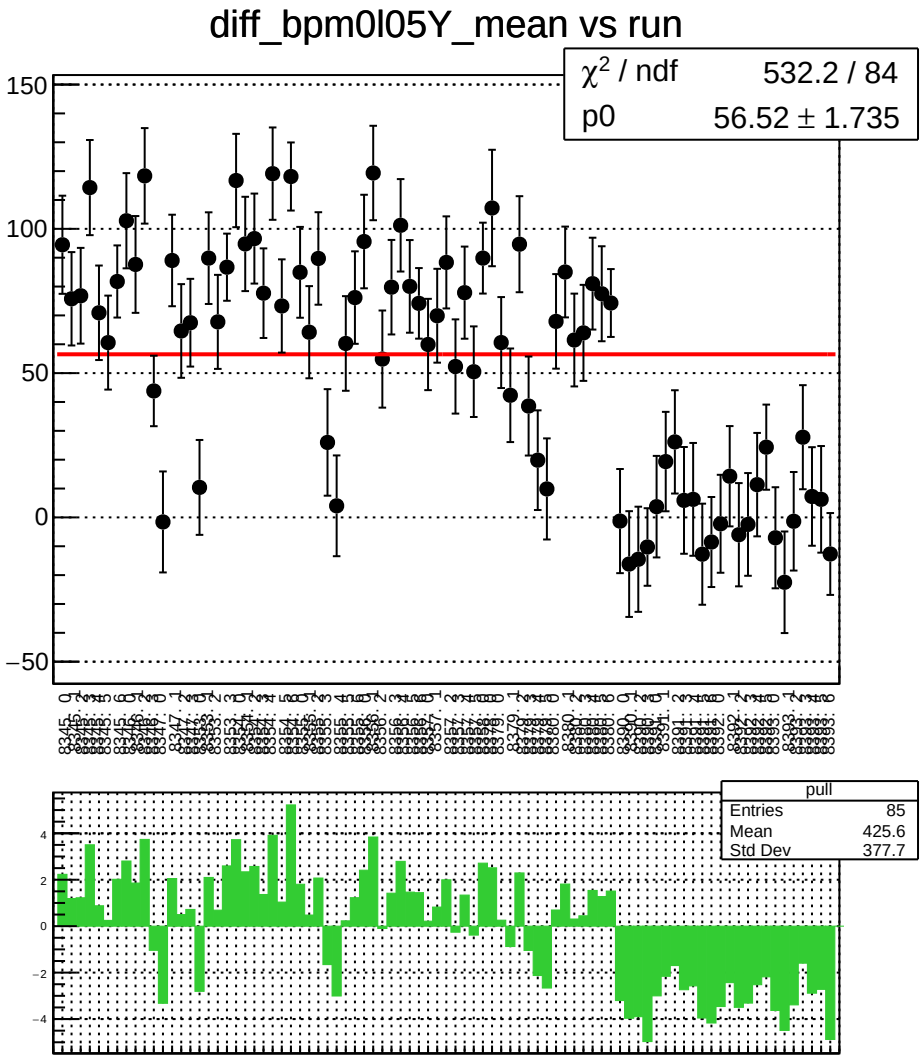

pull1D
Entries 85
Mean 0.02141
Std Dev 1.023

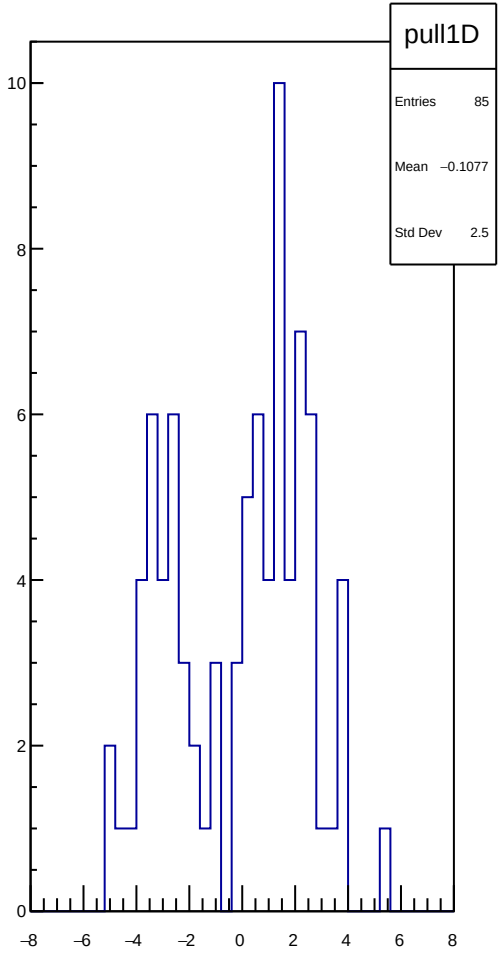

diff_bpm0l04Y_rms vs run
χ² / ndf 1111 / 84
p0 1117 ± 0.8637
1220
1200
1180
1160
1140
1120
1100
1080
1060
1040
1020

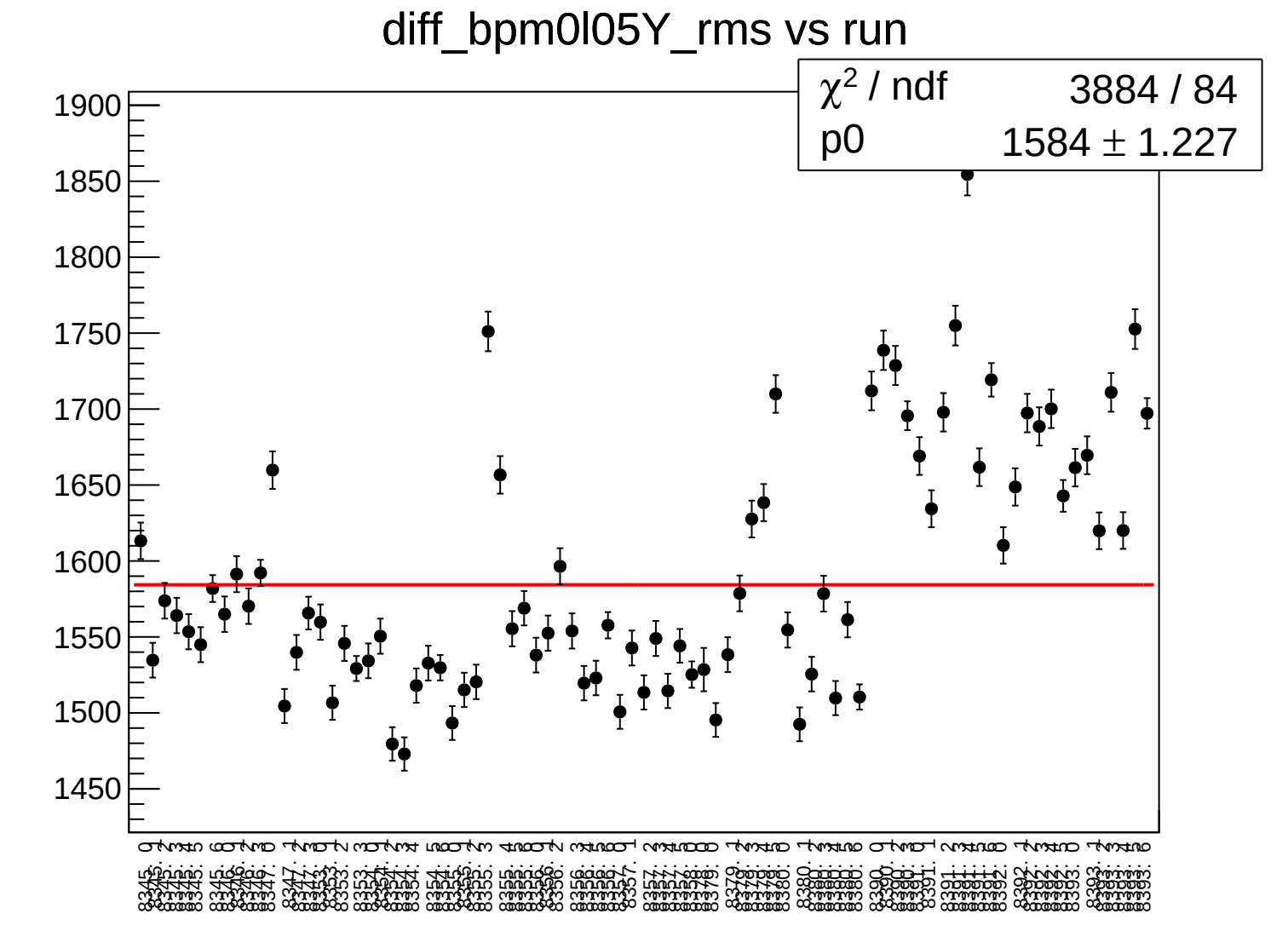

diff_bpm0l05X_mean vs run
χ² / ndf 87.39 / 84
p0 12.86 ± 7.322
pull
Entries 85
Mean −16.31
Std Dev 56.23

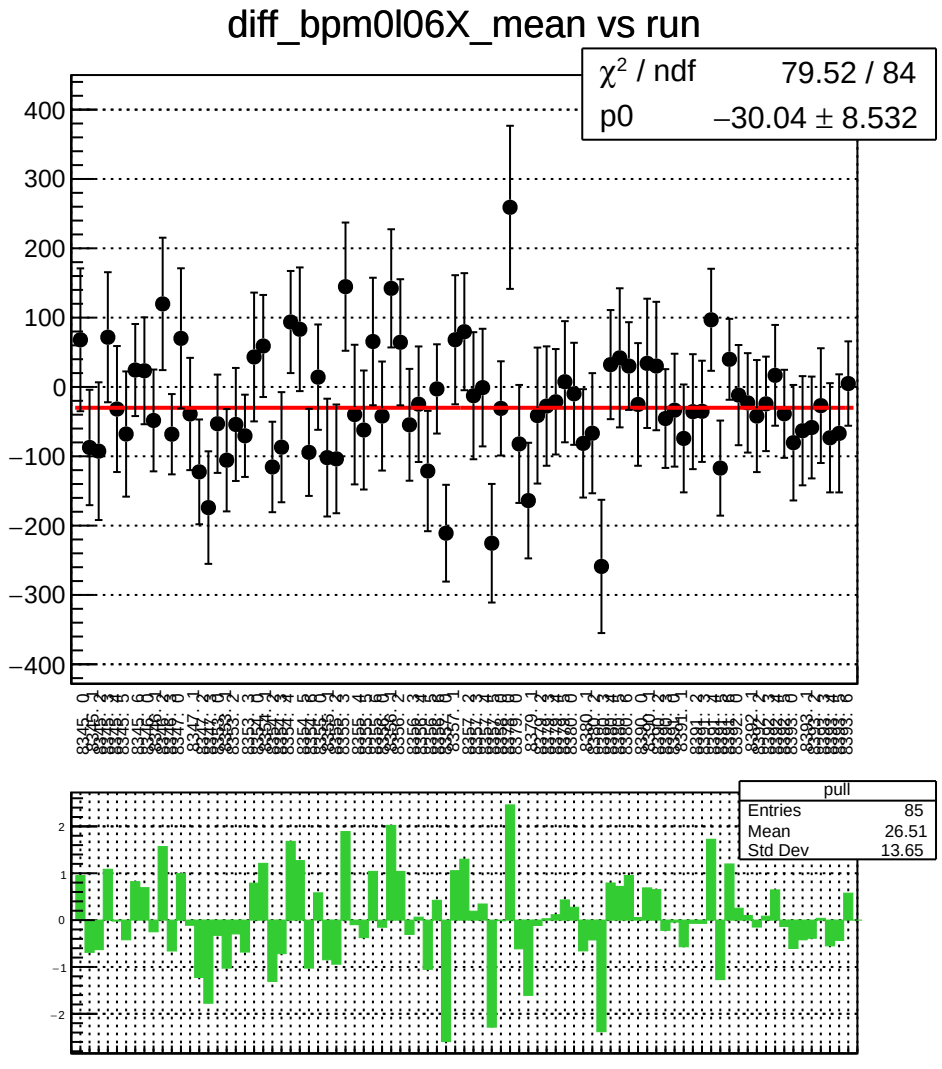

pull1D
Entries 85
Mean 0.02844
Std Dev 1.014

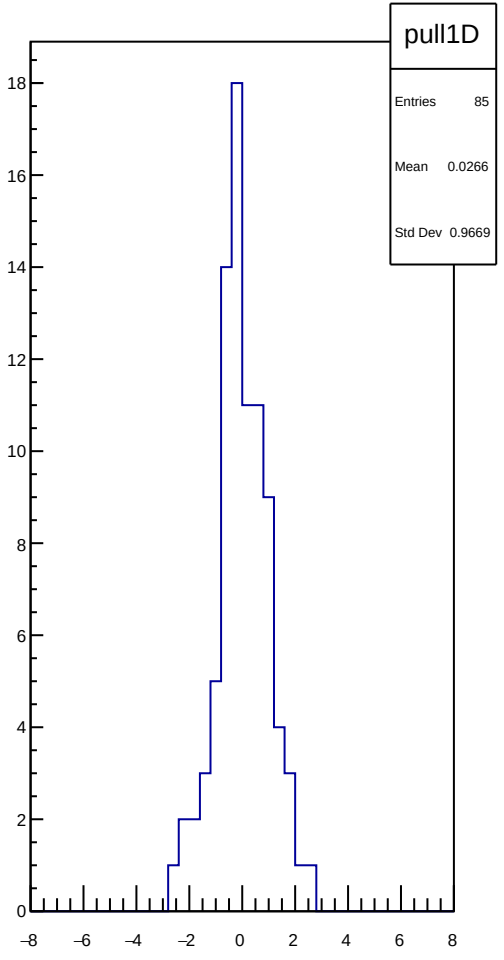

diff_bpm0l05X_rms vs run
χ² / ndf 1.875e+04 / 84
p0 6658 ± 5.178
8500
8000
7500
7000
6500
6000
5500
5000

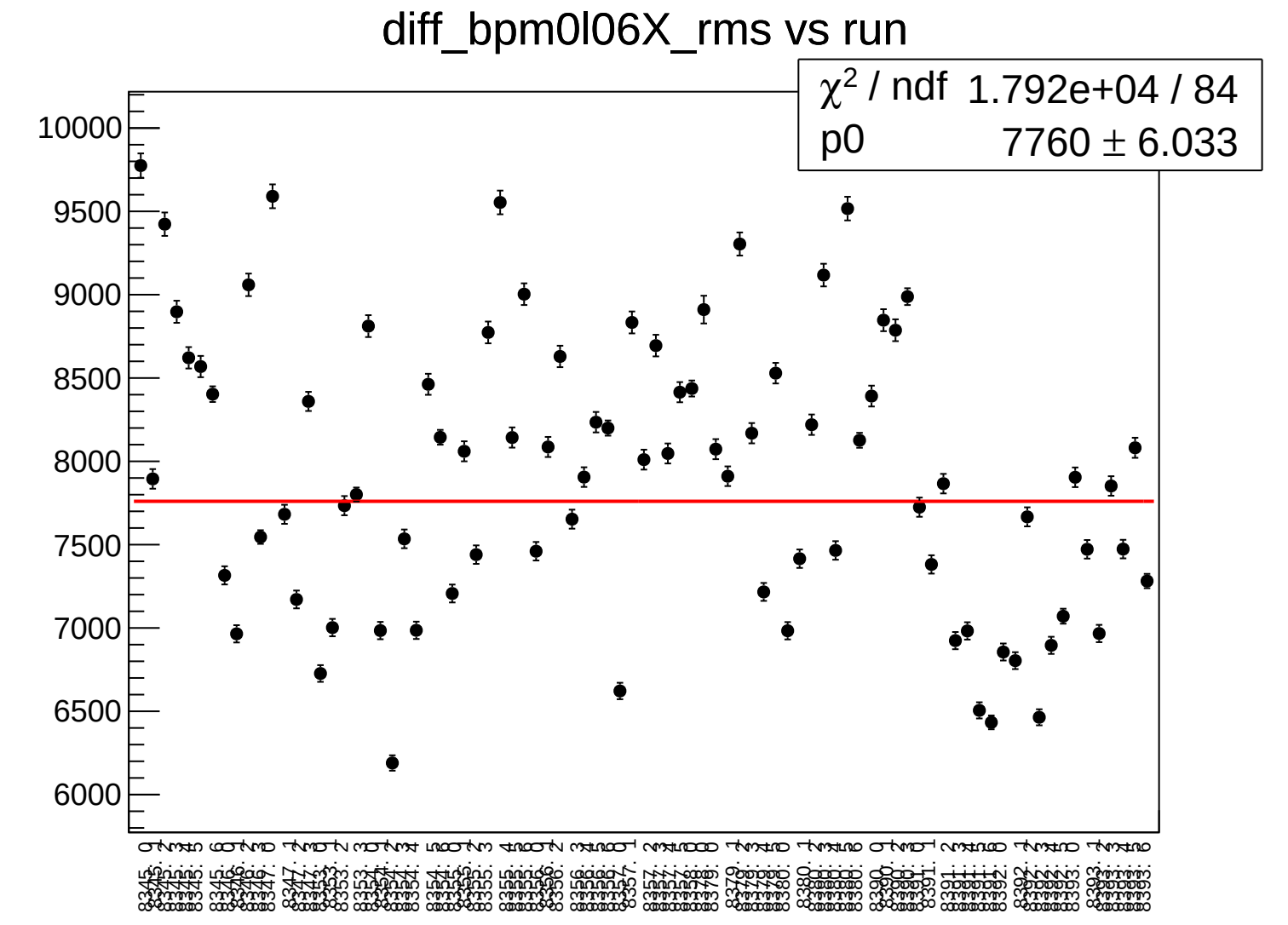

diff_bpm0l05Y_mean vs run
χ^2 / ndf 532.2 / 84
p0 56.52 ± 1.735
150
100
50
0
−50
pull
Entries 85
Mean 425.6
Std Dev 377.7
4
2
0
−2
−4

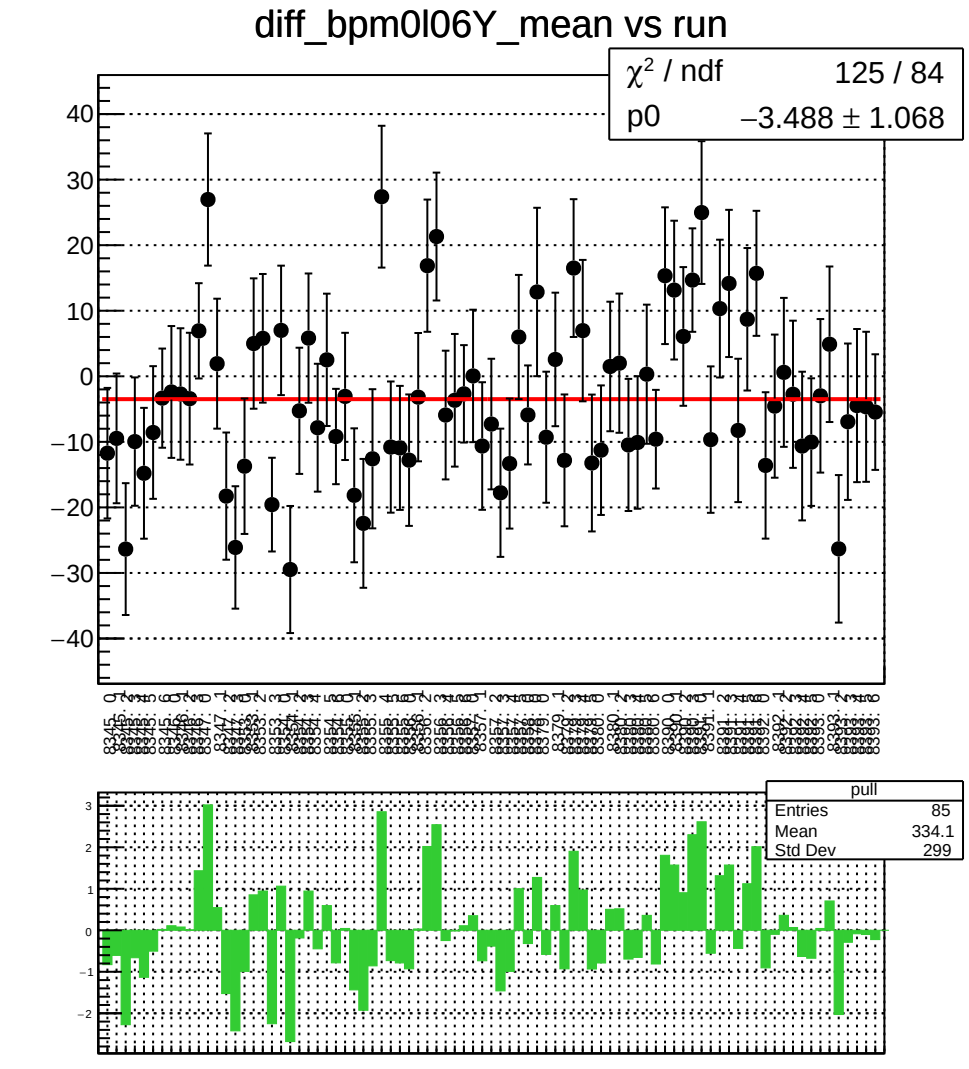

pull1D
Entries 85
Mean −0.1077
Std Dev 2.5
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

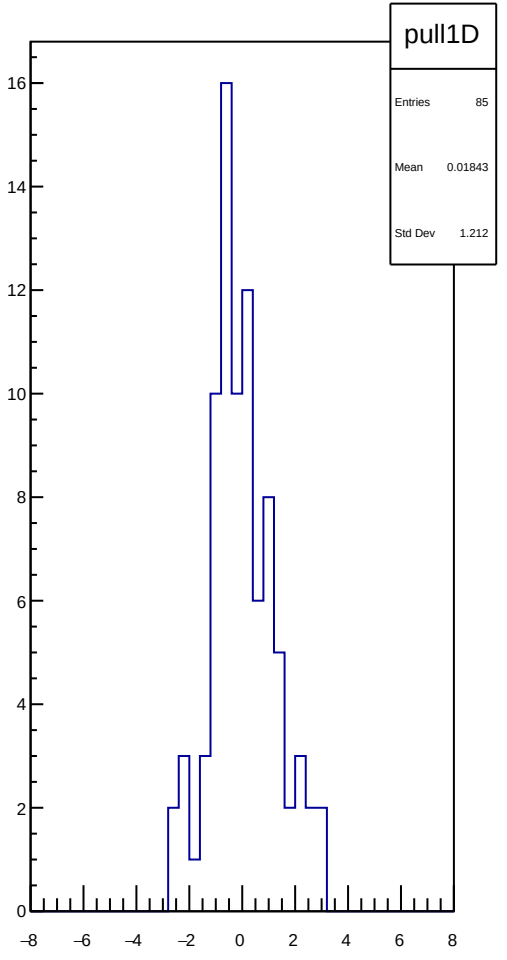

diff_bpm0l05Y_rms vs run
χ² / ndf 3884 / 84
p0 1584 ± 1.227
1900
1850
1800
1750
1700
1650
1600
1550
1500
1450

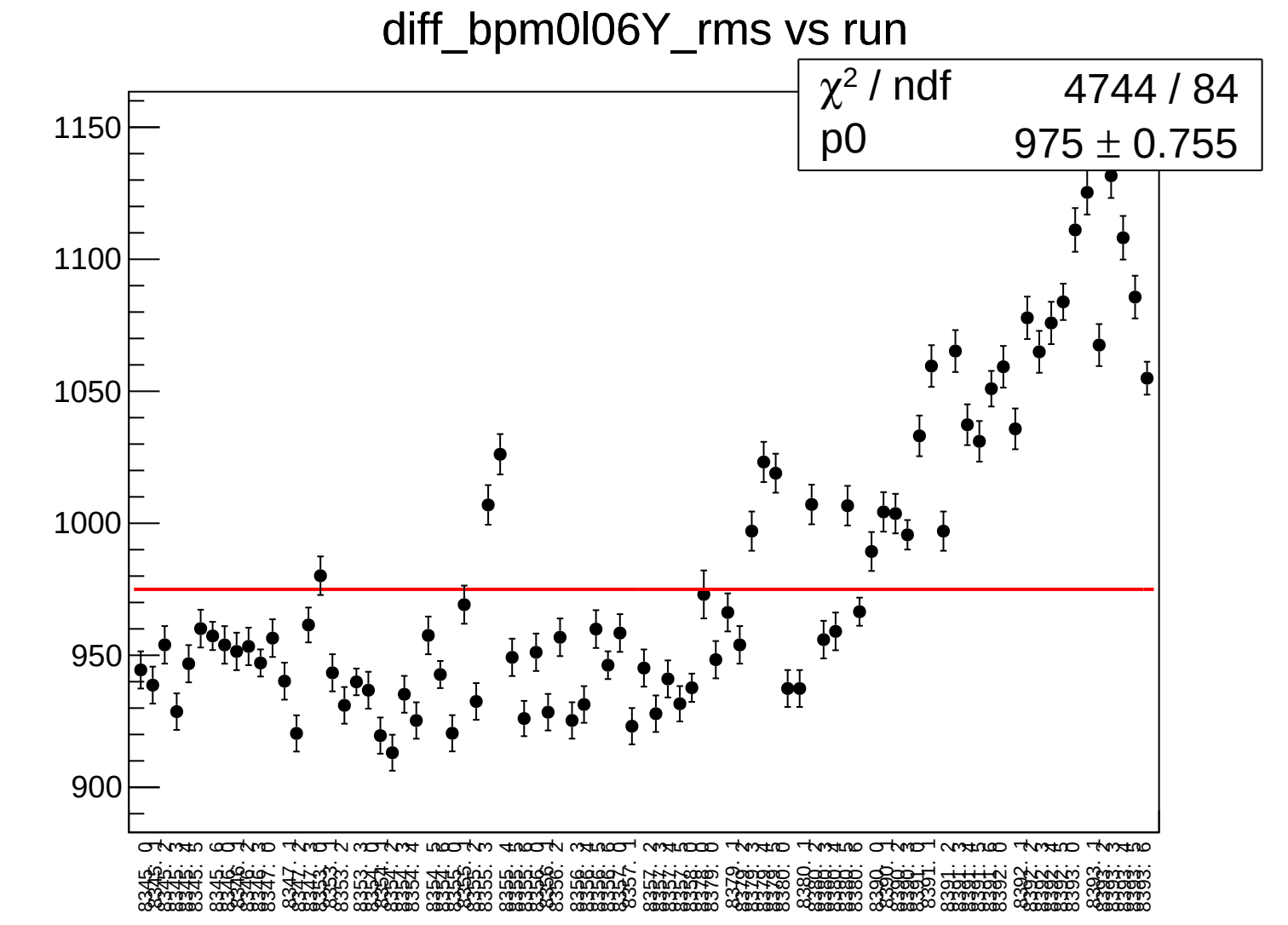

diff_bpm0l06X_mean vs run
χ² / ndf 79.52 / 84
p0 −30.04 ± 8.532
pull
Entries 85
Mean 26.51
Std Dev 13.65

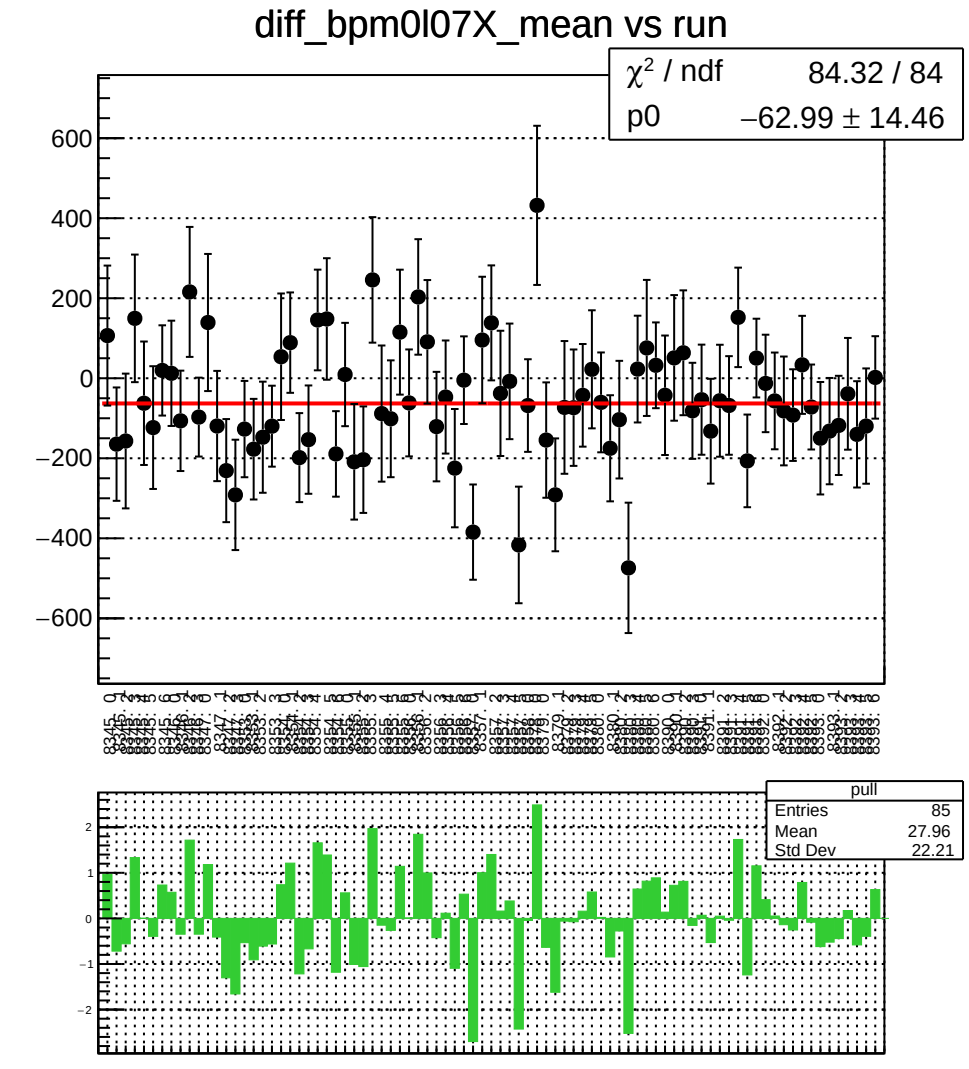

pull1D
Entries 85
Mean 0.0266
Std Dev 0.9669

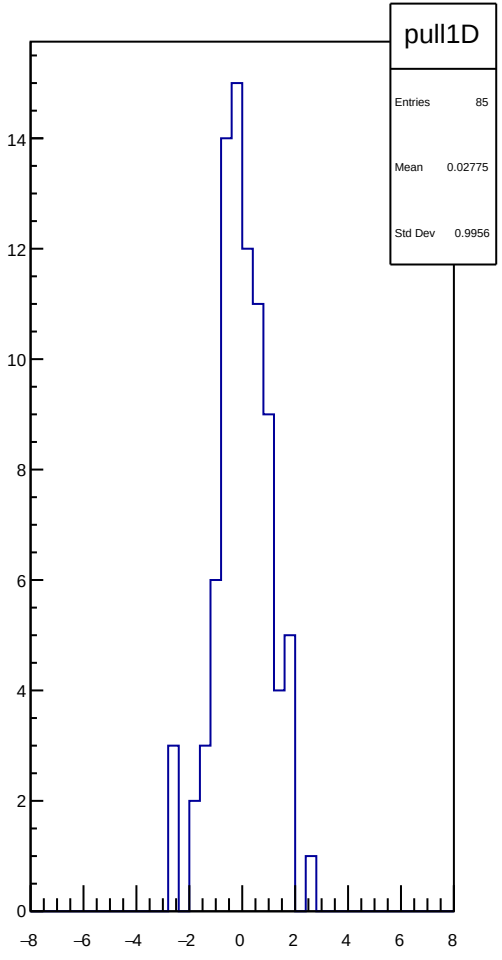

diff_bpm0l06X_rms vs run
χ² / ndf 1.792e+04 / 84
p0 7760 ± 6.033
10000
9500
9000
8500
8000
7500
7000
6500
6000

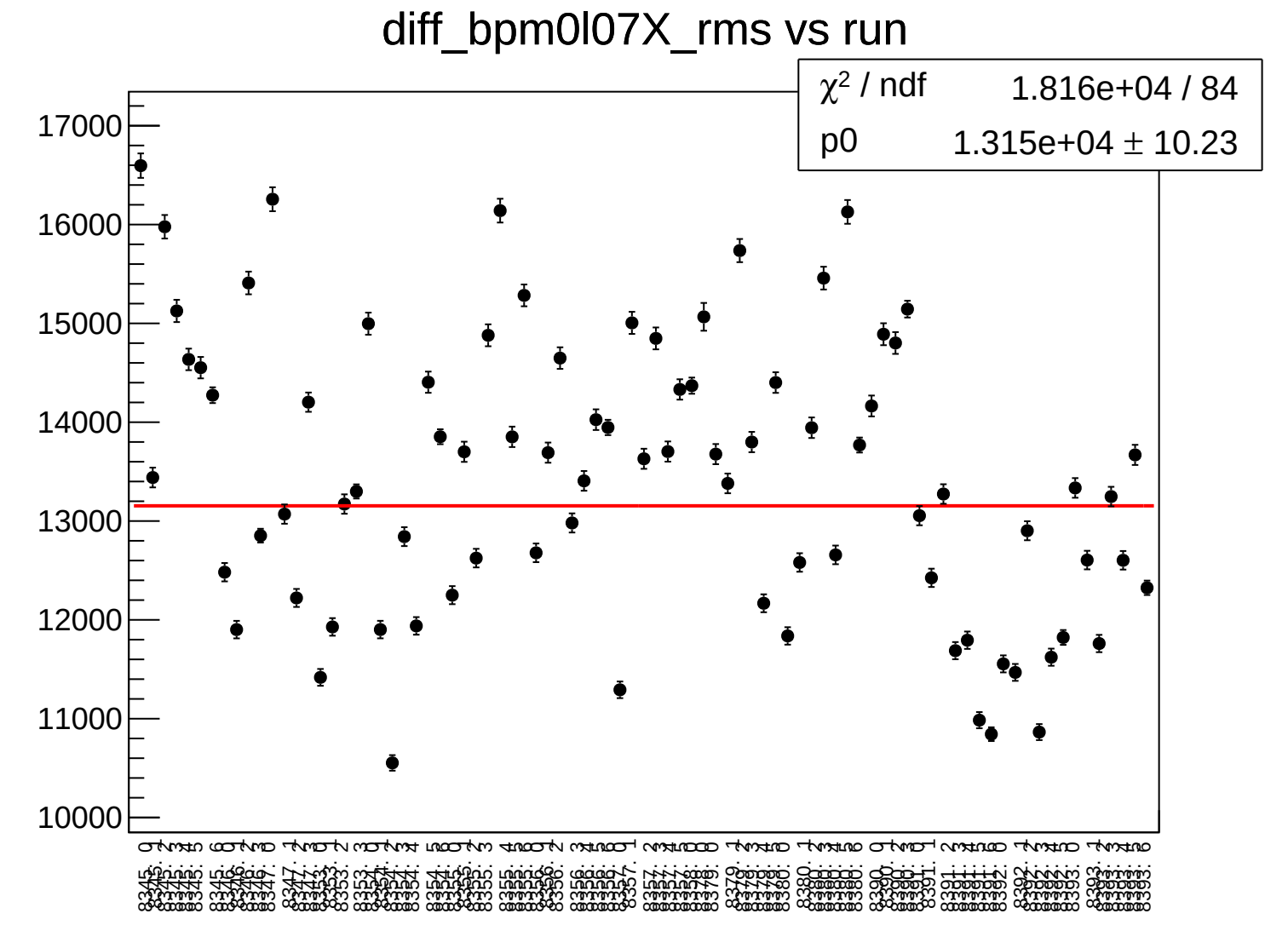

diff_bpm0l06Y_mean vs run
χ² / ndf 125 / 84
p0 −3.488 ± 1.068
pull
Entries 85
Mean 334.1
Std Dev 299

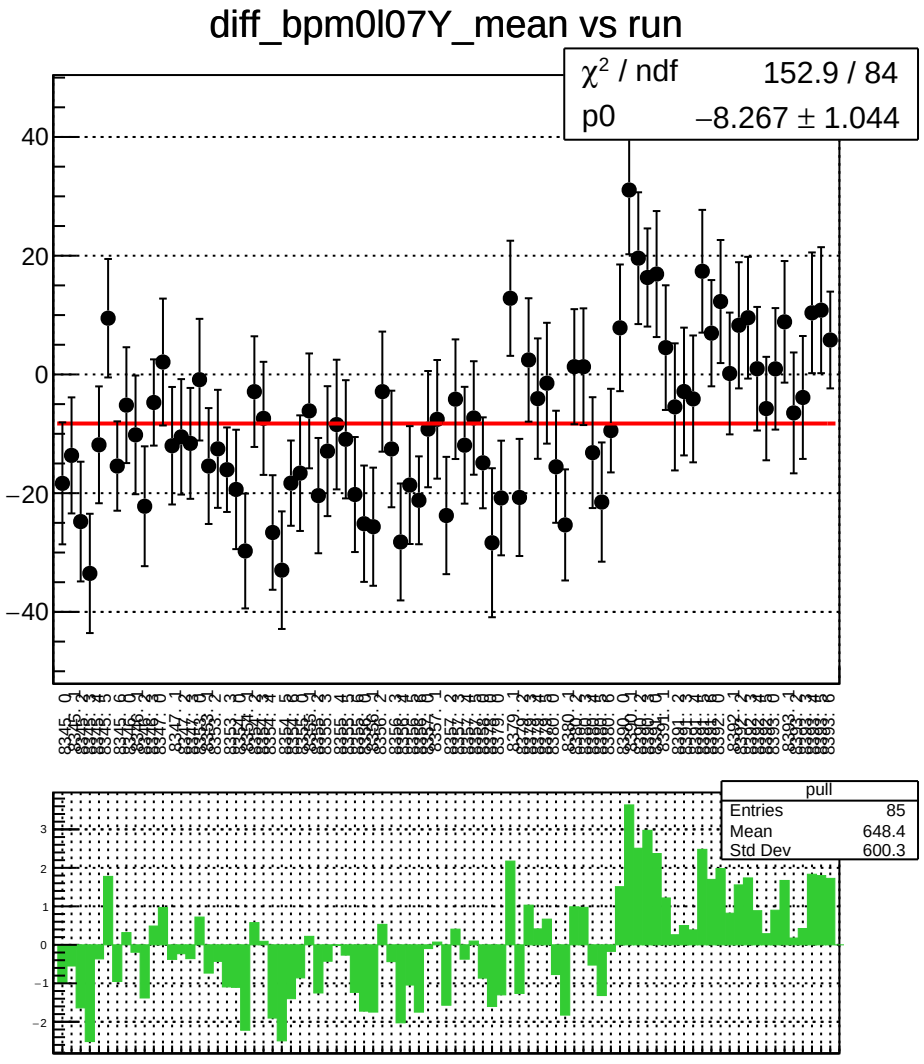

pull1D
Entries 85
Mean 0.01843
Std Dev 1.212

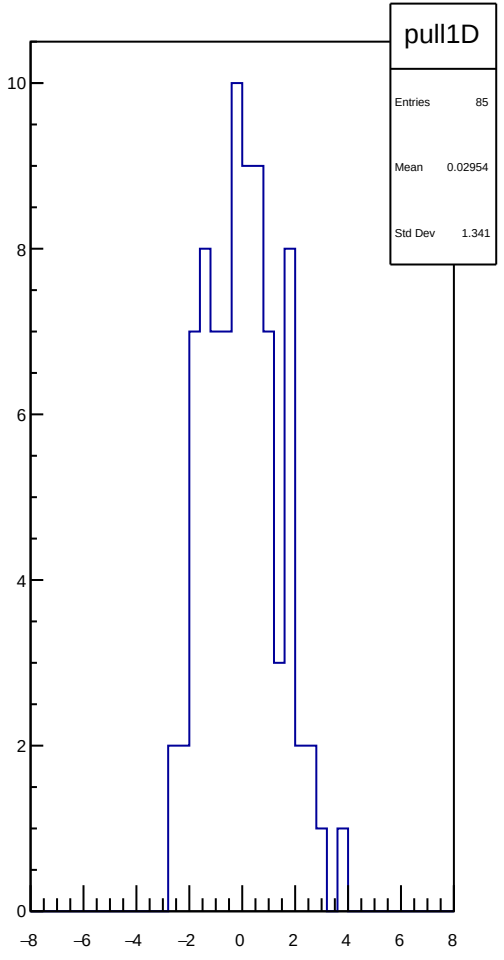

diff_bpm0l06Y_rms vs run
χ² / ndf 4744 / 84
p0 975 ± 0.755
1150
1100
1050
1000
950
900

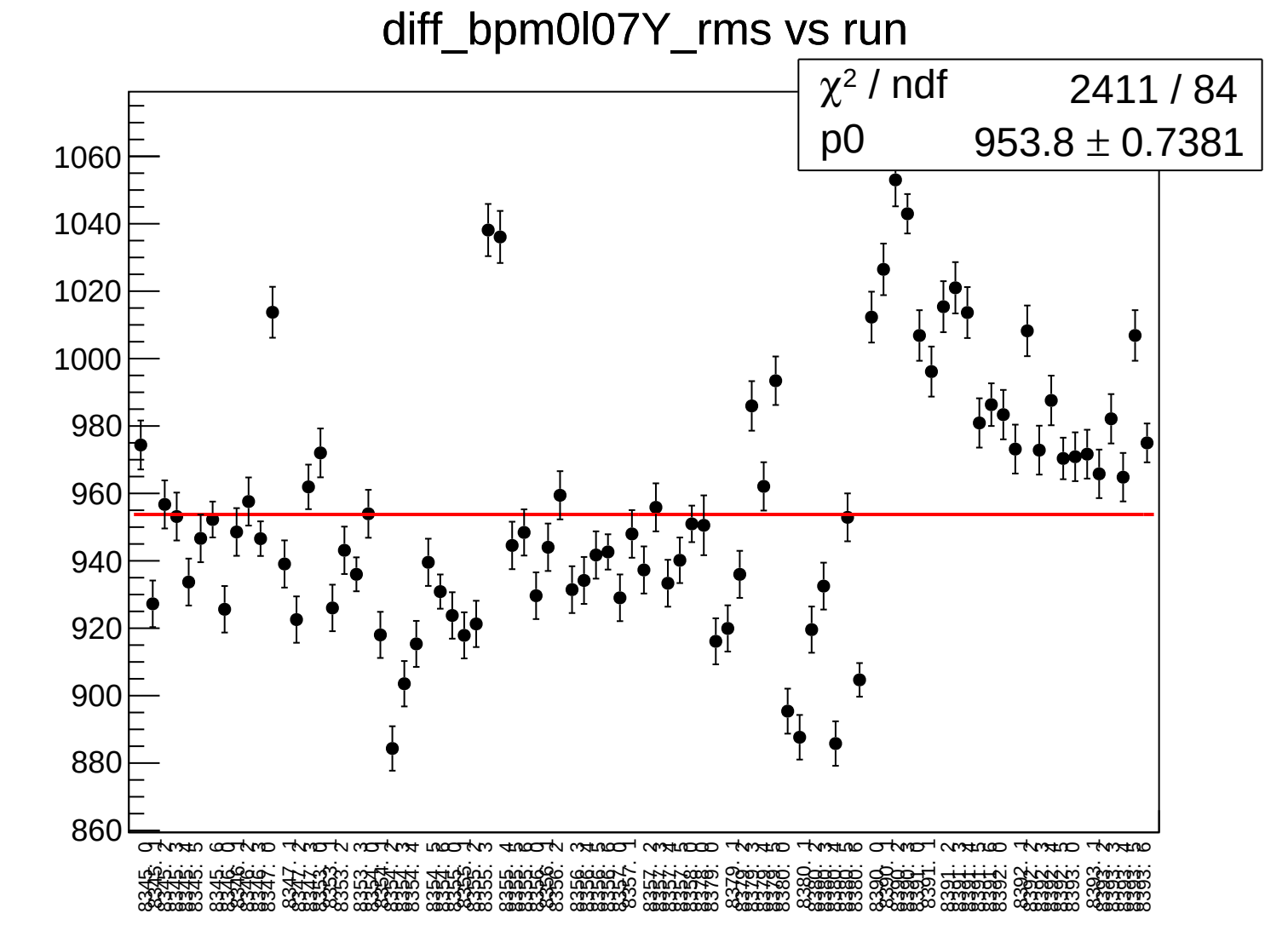

diff_bpm0l07X_mean vs run
χ^2 / ndf 84.32 / 84
p0 −62.99 ± 14.46
pull
Entries 85
Mean 27.96
Std Dev 22.21

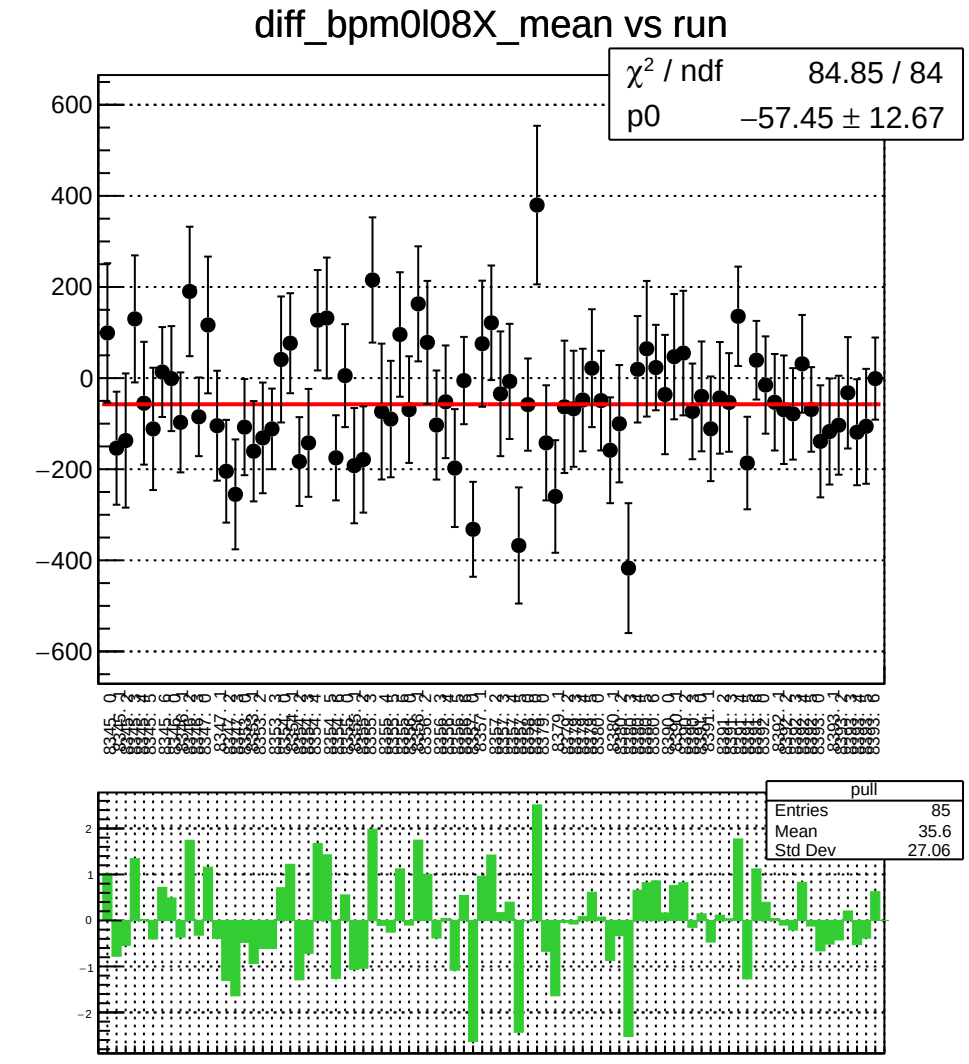

pull1D
Entries 85
Mean 0.02775
Std Dev 0.9956

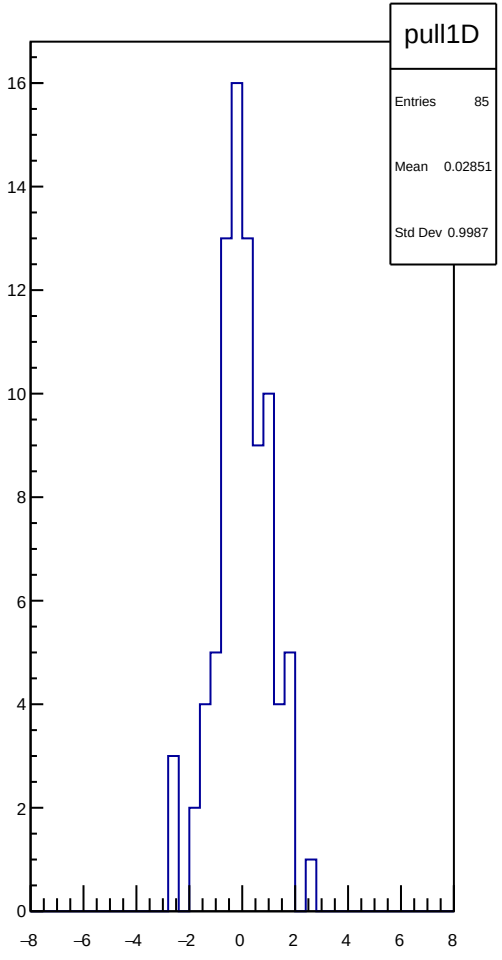

diff_bpm0l07X_rms vs run
χ² / ndf 1.816e+04 / 84
p0 1.315e+04 ± 10.23
17000
16000
15000
14000
13000
12000
11000
10000

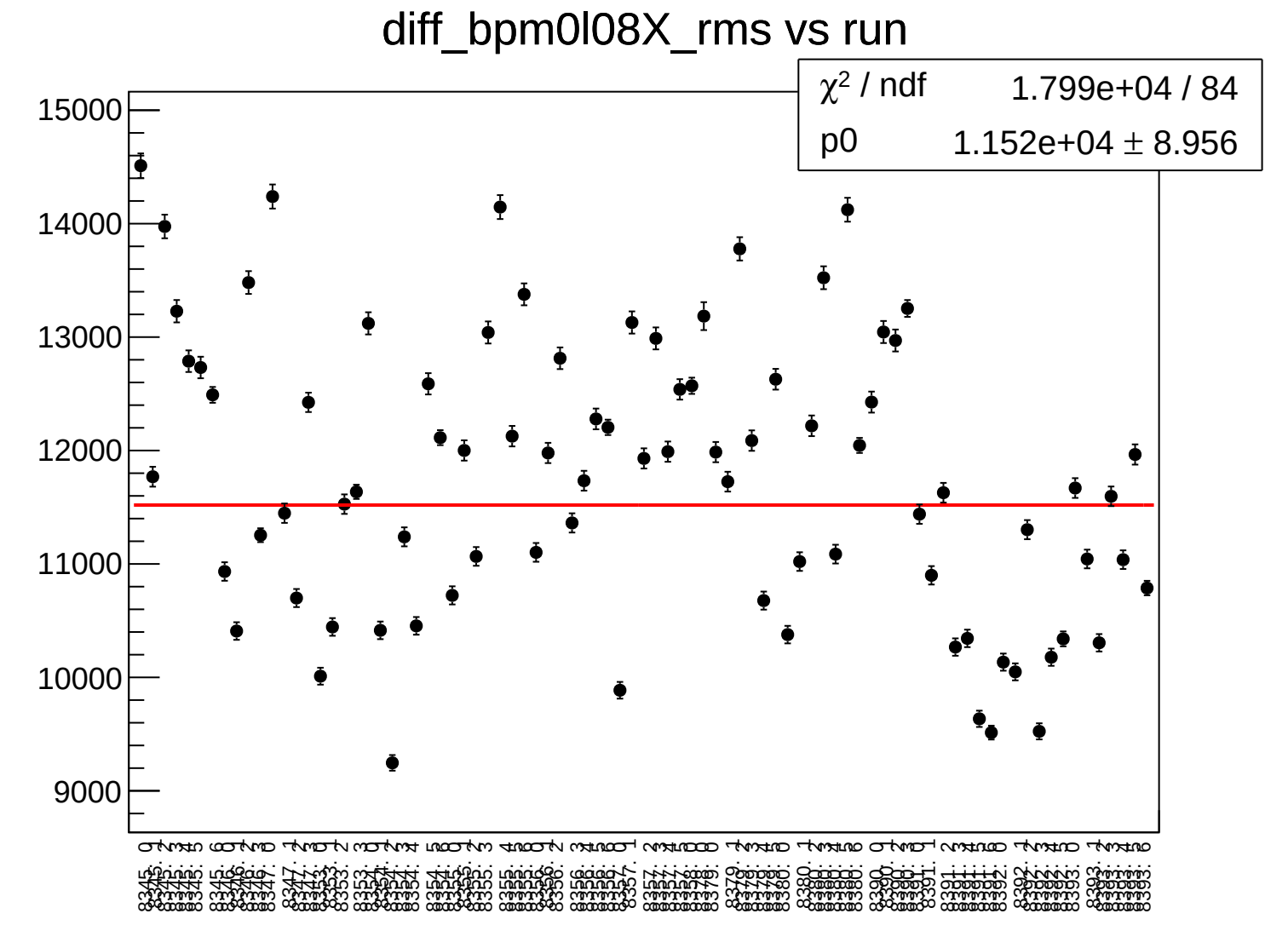

diff_bpm0l07Y_mean vs run
χ² / ndf 152.9 / 84
p0 −8.267 ± 1.044
pull
Entries 85
Mean 648.4
Std Dev 600.3

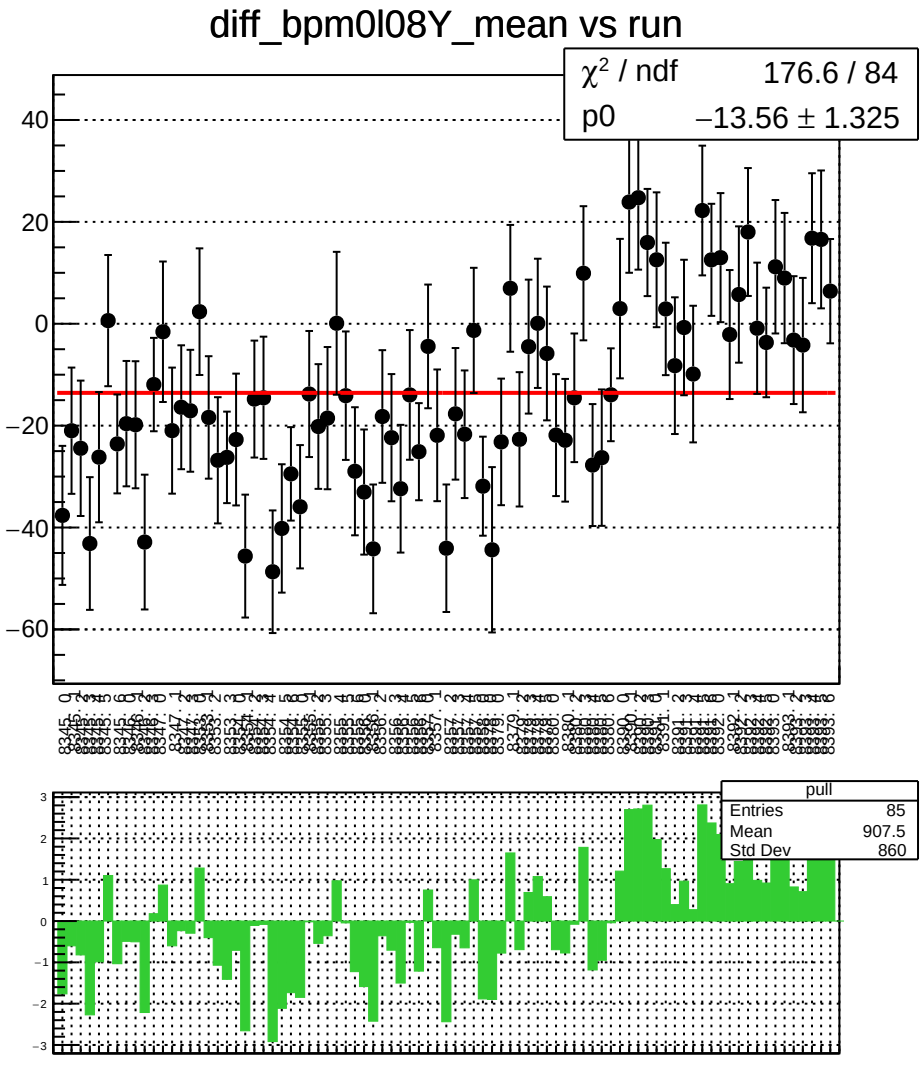

pull1D
Entries 85
Mean 0.02954
Std Dev 1.341

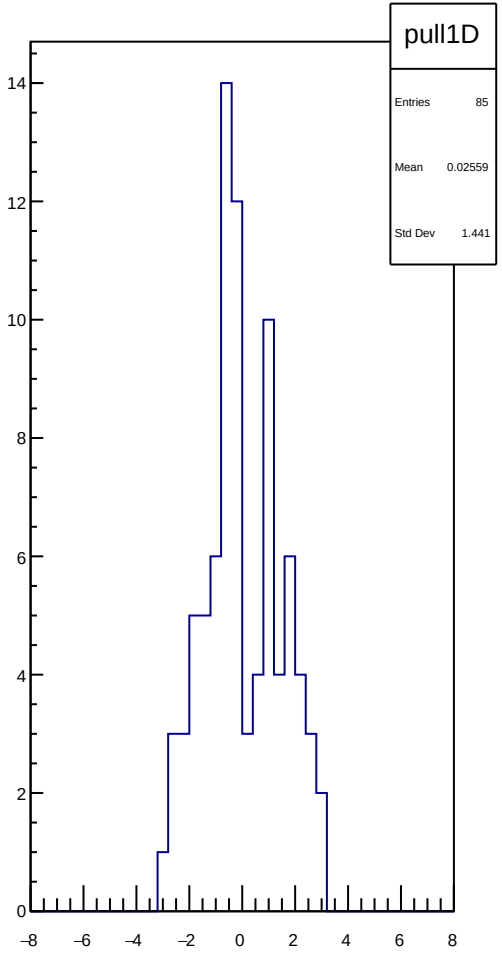

diff_bpm0l07Y_rms vs run
χ² / ndf 2411 / 84
p0 953.8 ± 0.7381
1060
1040
1020
1000
980
960
940
920
900
880
860

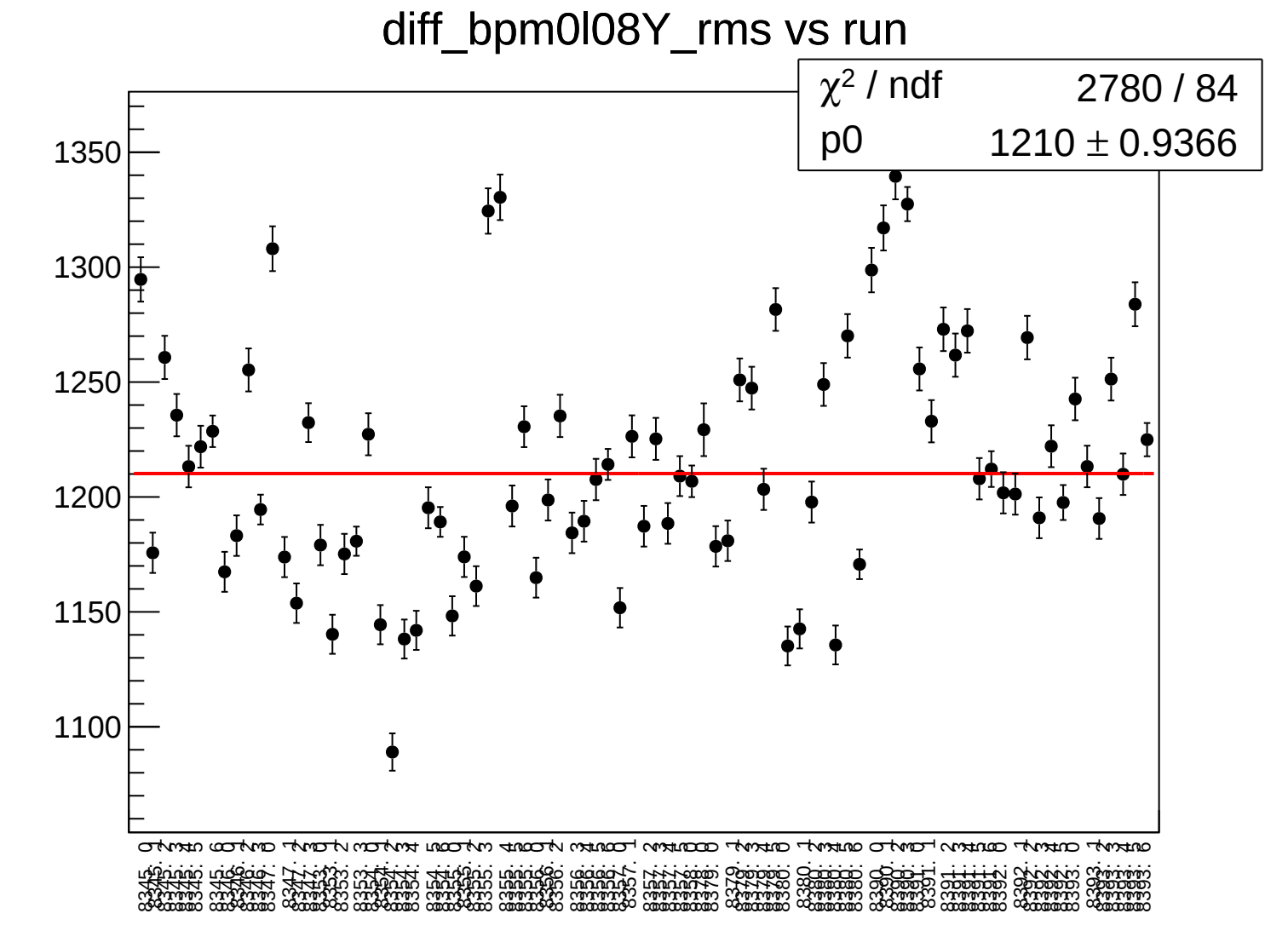

diff_bpm0l08X_mean vs run
χ² / ndf 84.85 / 84
p0 −57.45 ± 12.67
pull
Entries 85
Mean 35.6
Std Dev 27.06

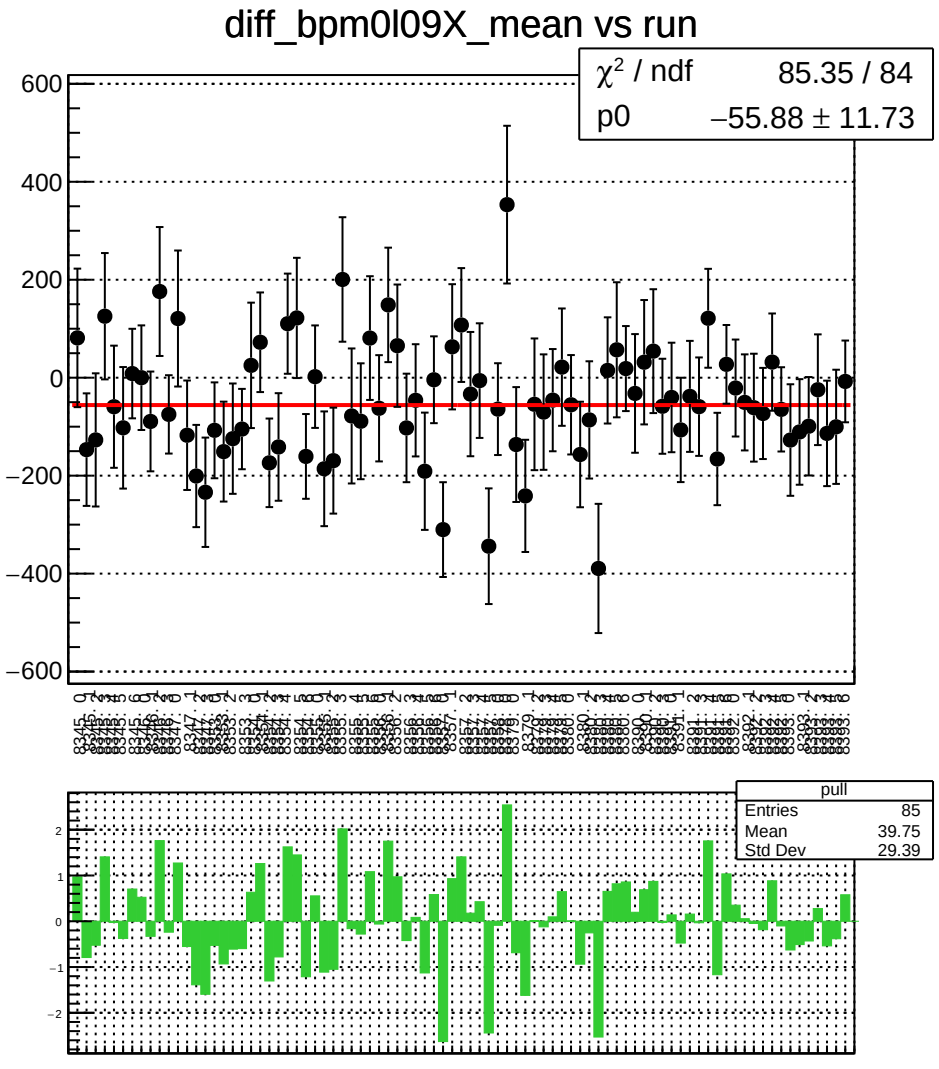

pull1D
Entries 85
Mean 0.02851
Std Dev 0.9987

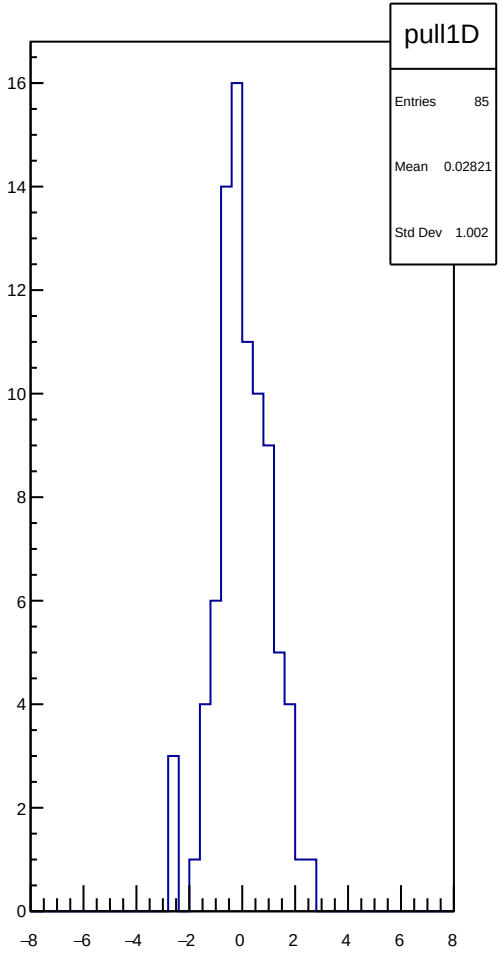

diff_bpm0l08X_rms vs run
χ² / ndf 1.799e+04 / 84
p0 1.152e+04 ± 8.956
15000
14000
13000
12000
11000
10000
9000

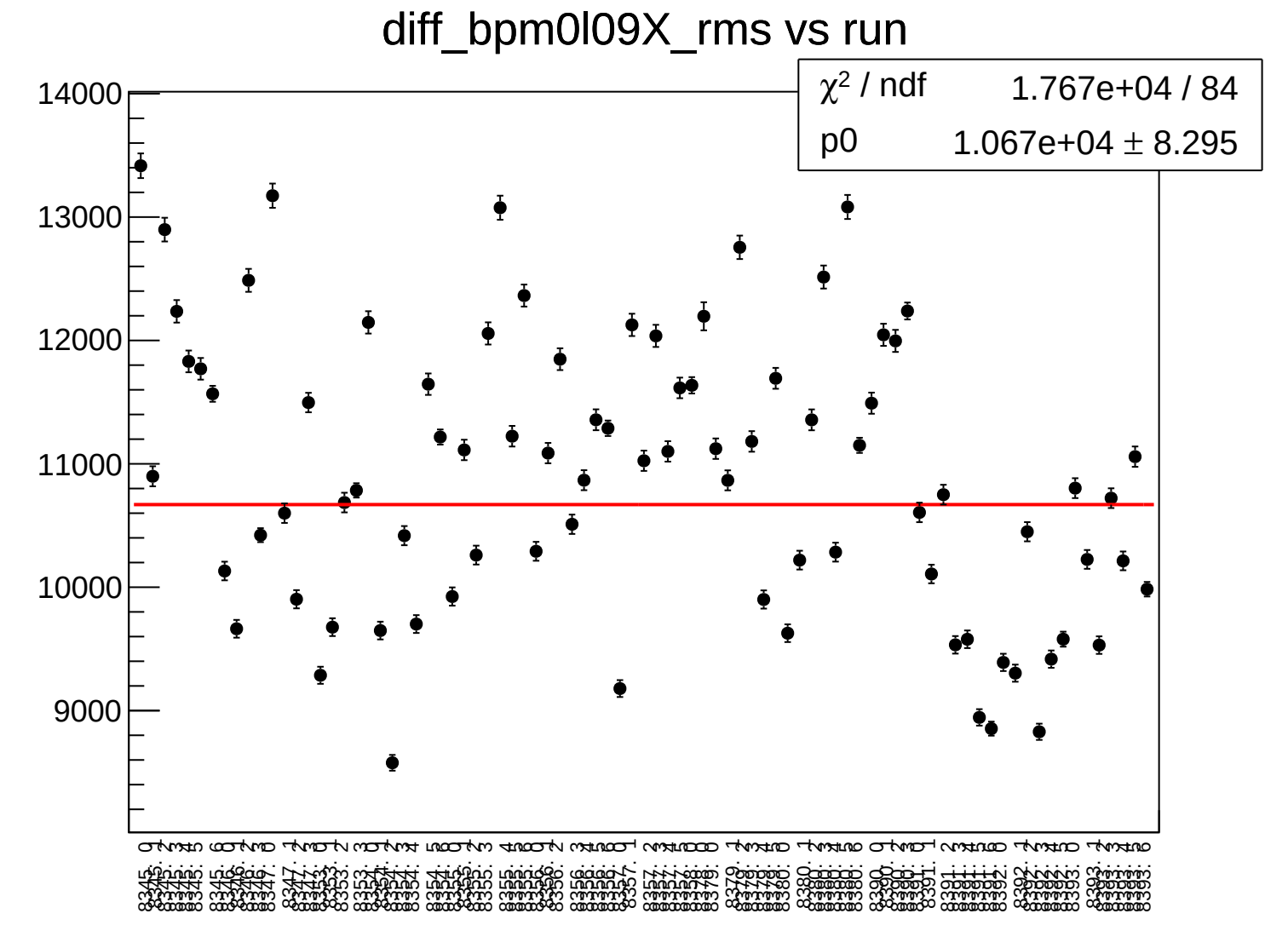

diff_bpm0l08Y_mean vs run
χ² / ndf 176.6 / 84
p0 −13.56 ± 1.325
pull
Entries 85
Mean 907.5
Std Dev 860

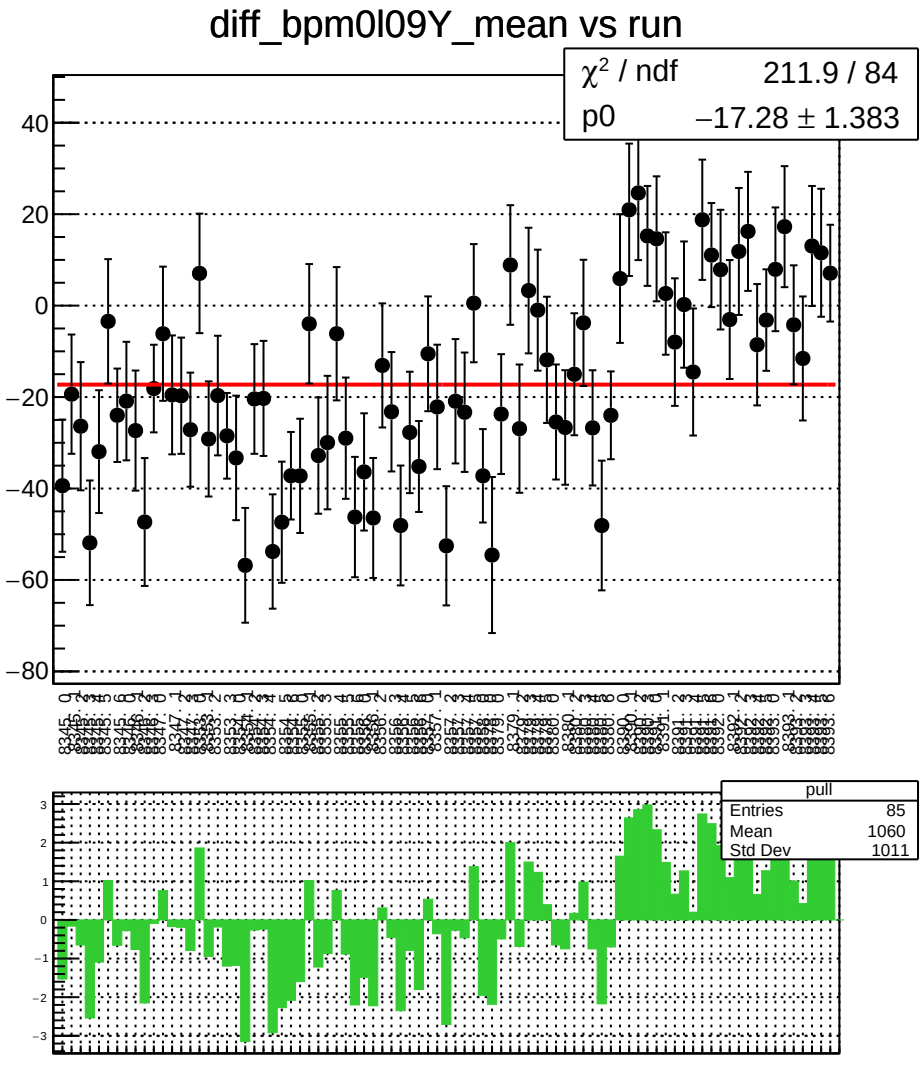

pull1D
Entries 85
Mean 0.02559
Std Dev 1.441

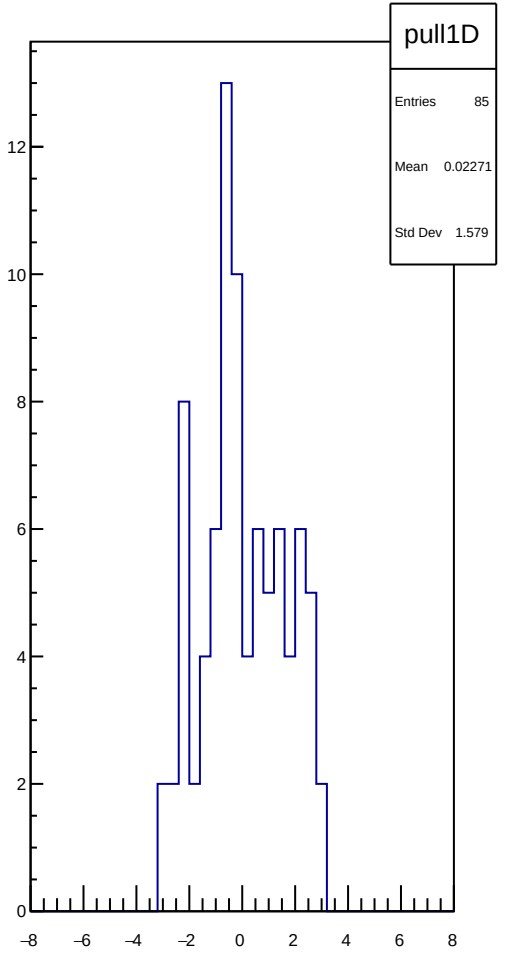

diff_bpm0l08Y_rms vs run
χ² / ndf 2780 / 84
p0 1210 ± 0.9366
1350
1300
1250
1200
1150
1100

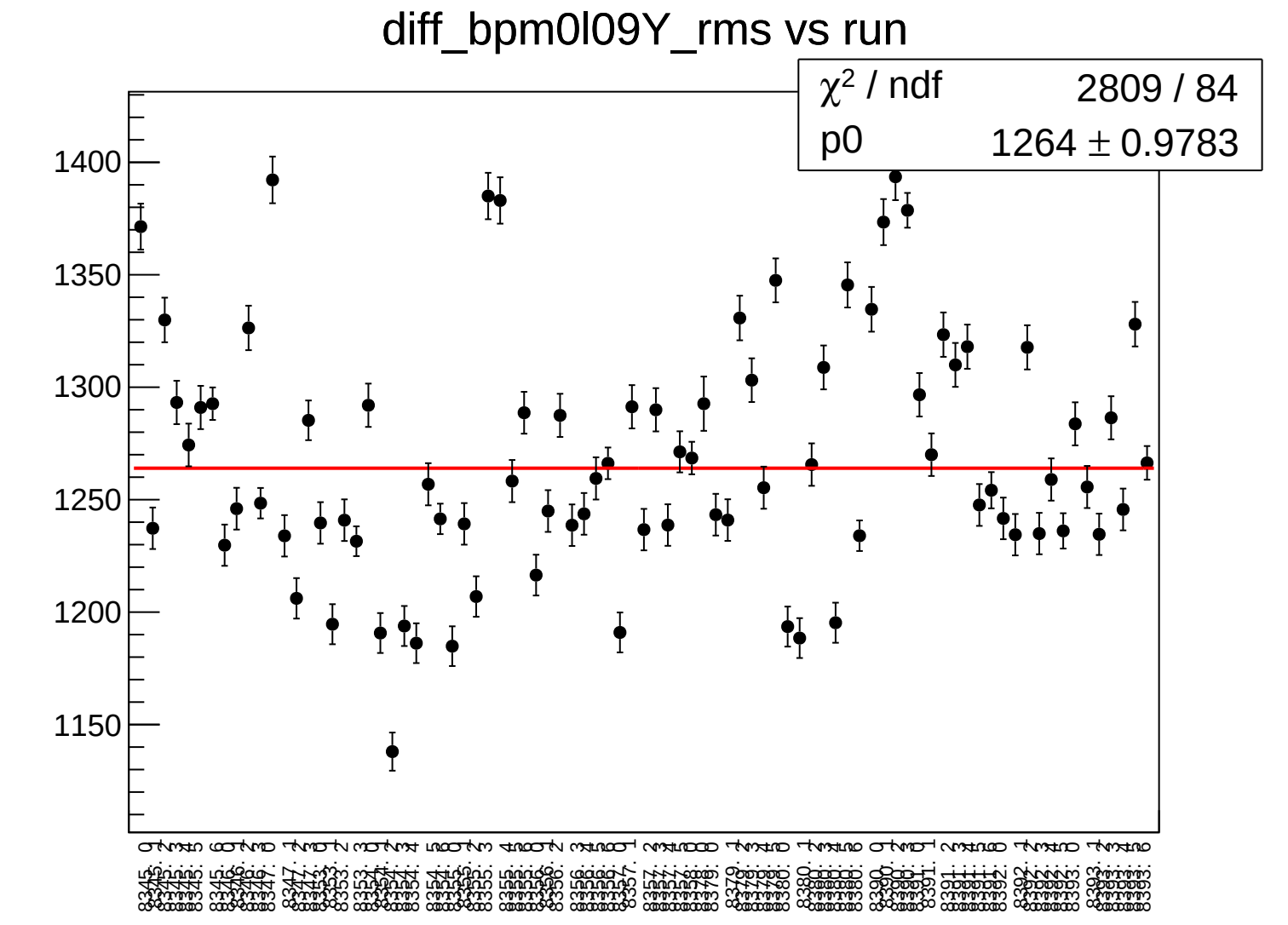

diff_bpm0l09X_mean vs run
χ² / ndf 85.35 / 84
p0 −55.88 ± 11.73
pull
Entries 85
Mean 39.75
Std Dev 29.39

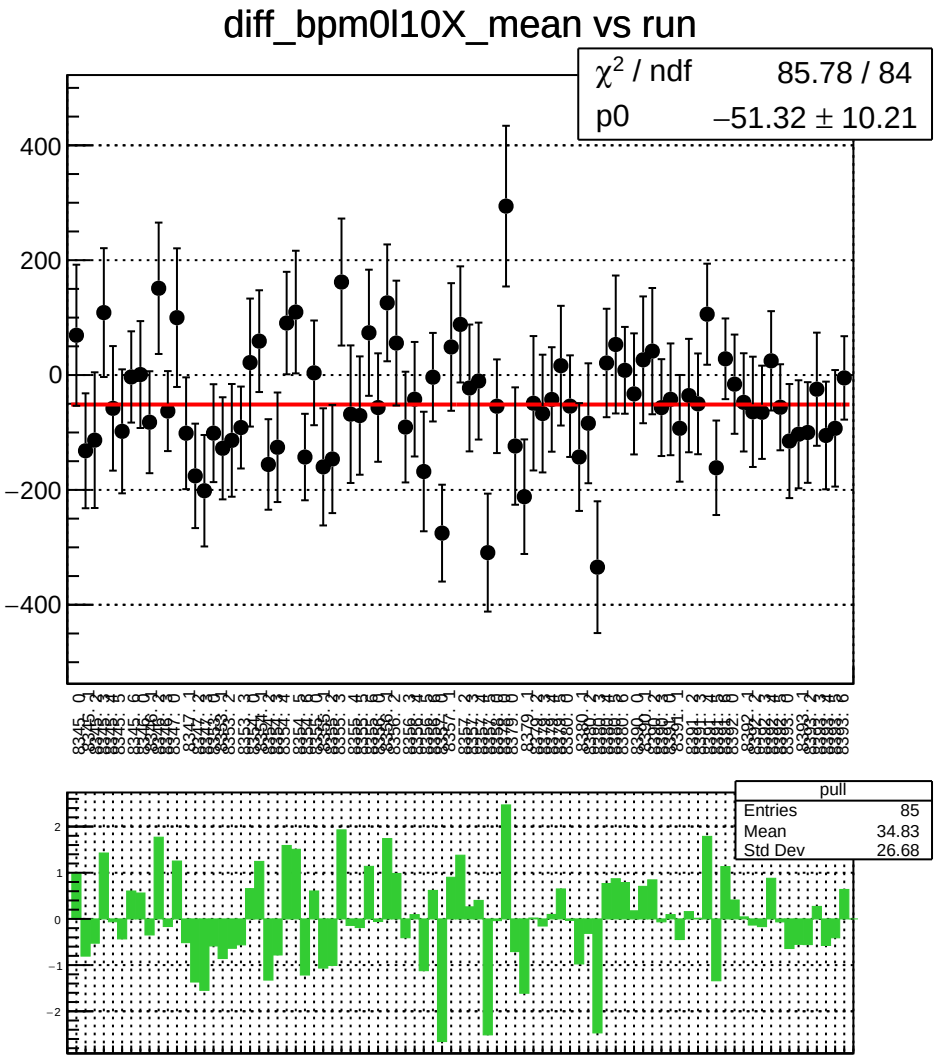

pull1D
Entries 85
Mean 0.02821
Std Dev 1.002

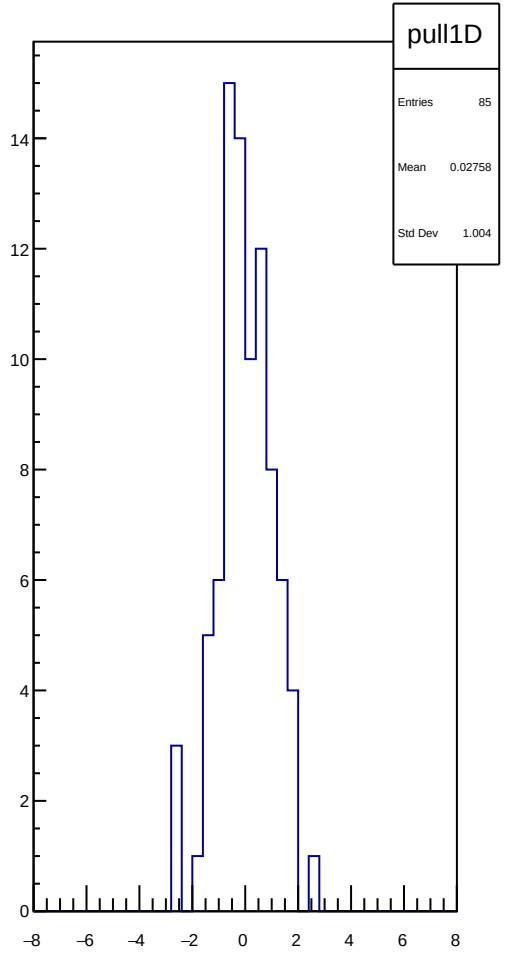

diff_bpm0l09X_rms vs run
χ² / ndf 1.767e+04 / 84
p0 1.067e+04 ± 8.295
14000
13000
12000
11000
10000
9000

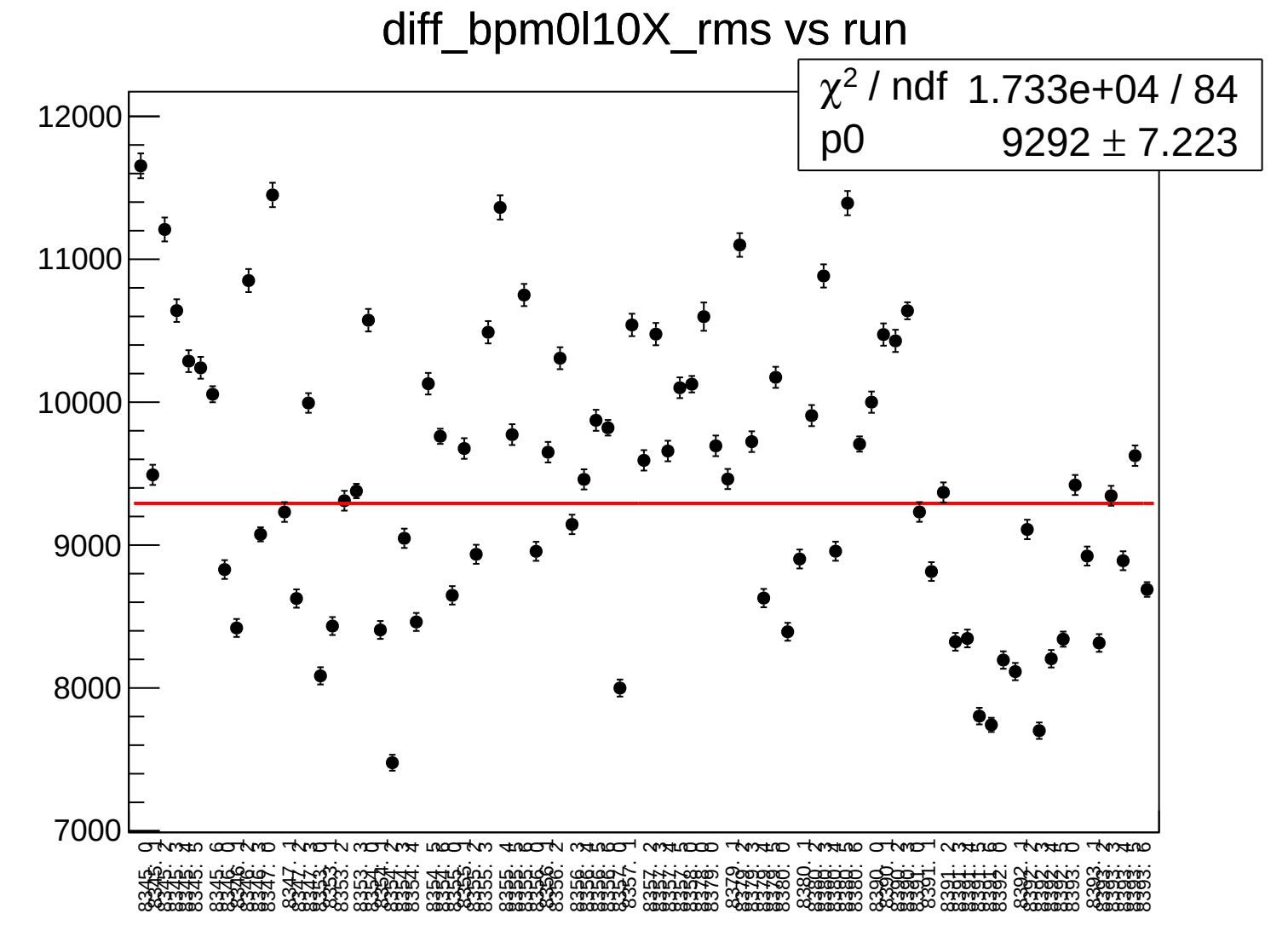

diff_bpm0l09Y_mean vs run
χ² / ndf 211.9 / 84
p0 −17.28 ± 1.383
pull
Entries 85
Mean 1060
Std Dev 1011

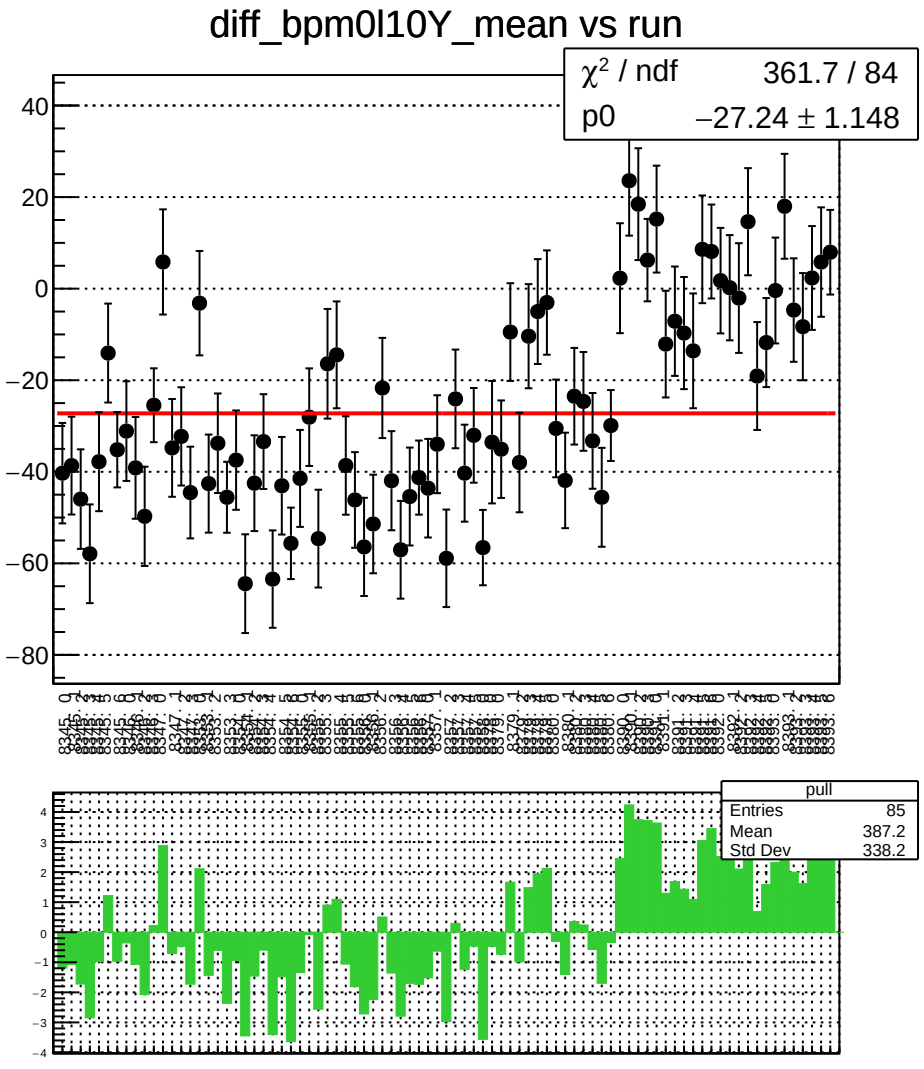

pull1D
Entries 85
Mean 0.02271
Std Dev 1.579

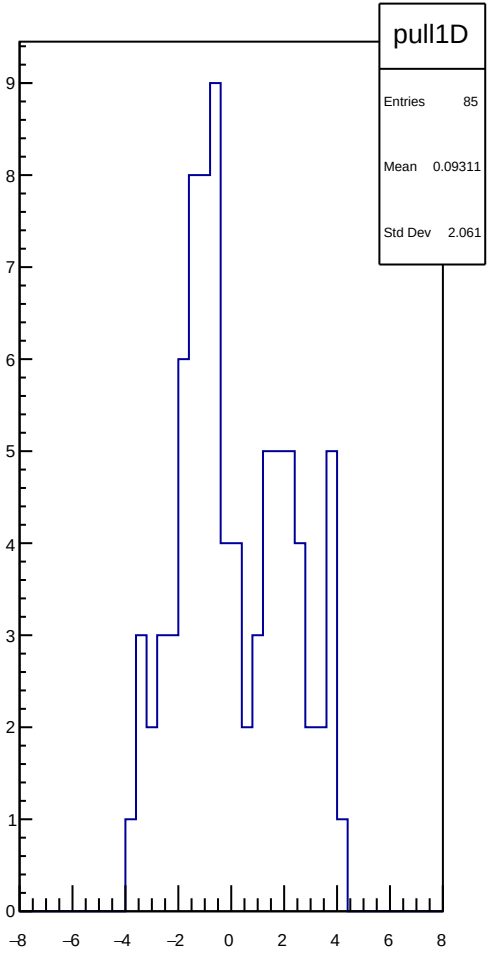

diff_bpm0l09Y_rms vs run
χ² / ndf 2809 / 84
p0 1264 ± 0.9783
1400
1350
1300
1250
1200
1150

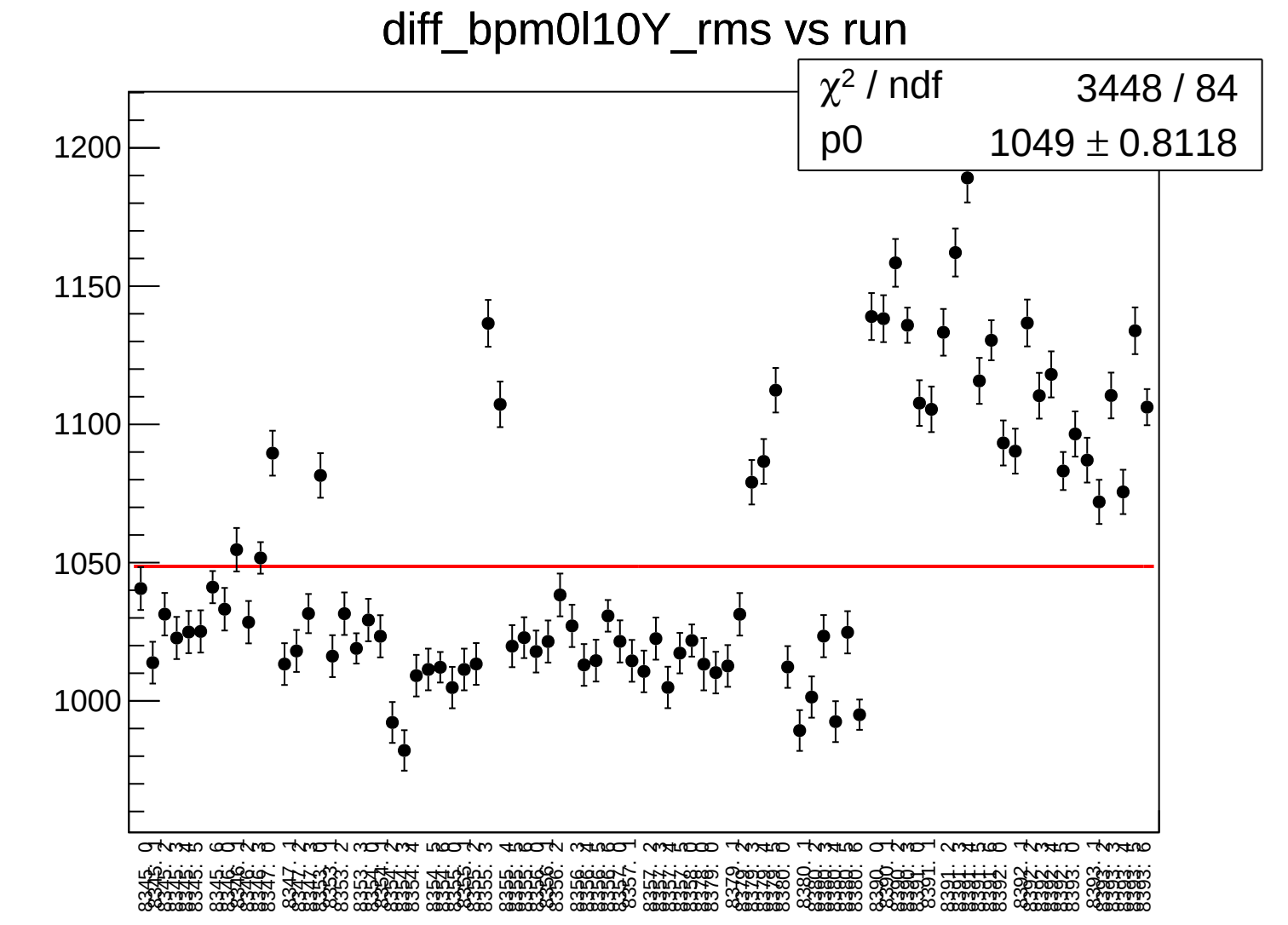

diff_bpm0l10X_mean vs run
χ² / ndf 85.78 / 84
p0 −51.32 ± 10.21
400
200
0
−200
−400
pull
Entries 85
Mean 34.83
Std Dev 26.68
2
1
0
−1
−2

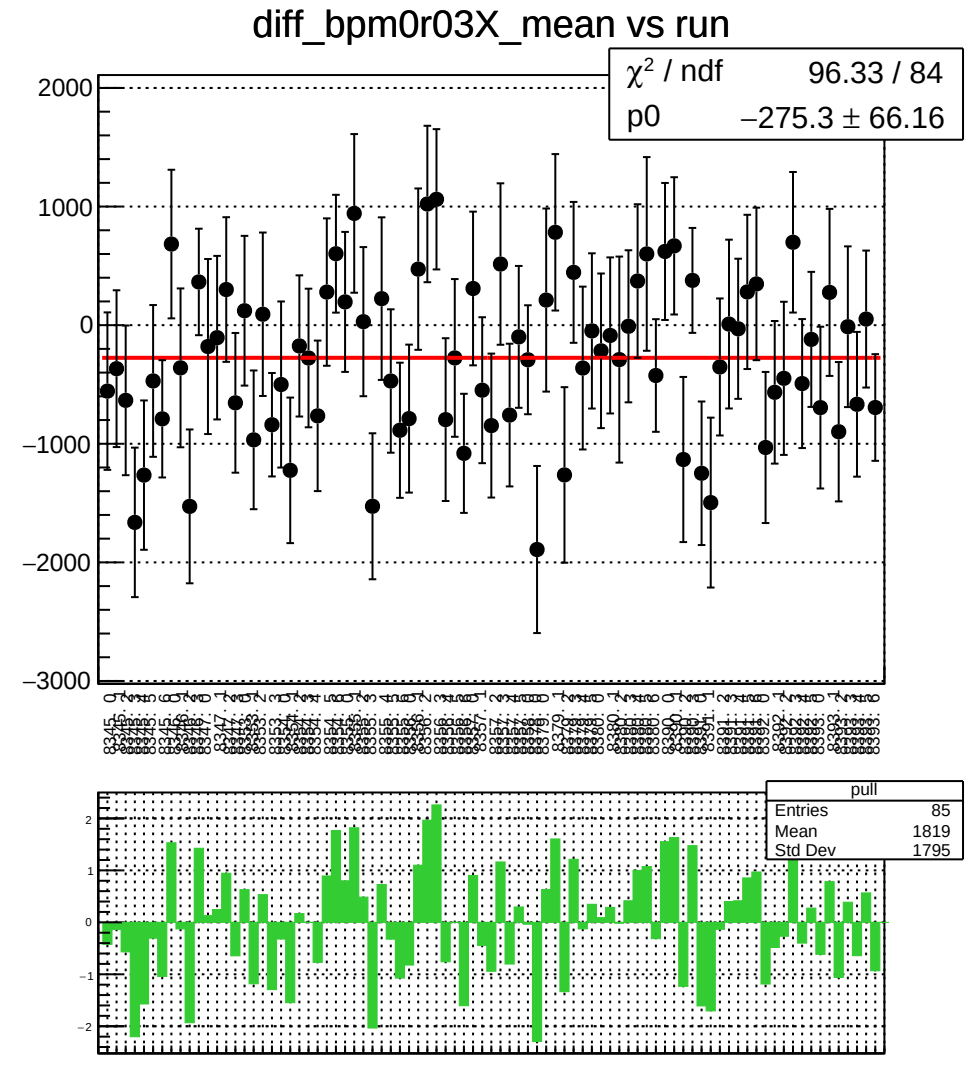

pull1D
Entries 85
Mean 0.02758
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

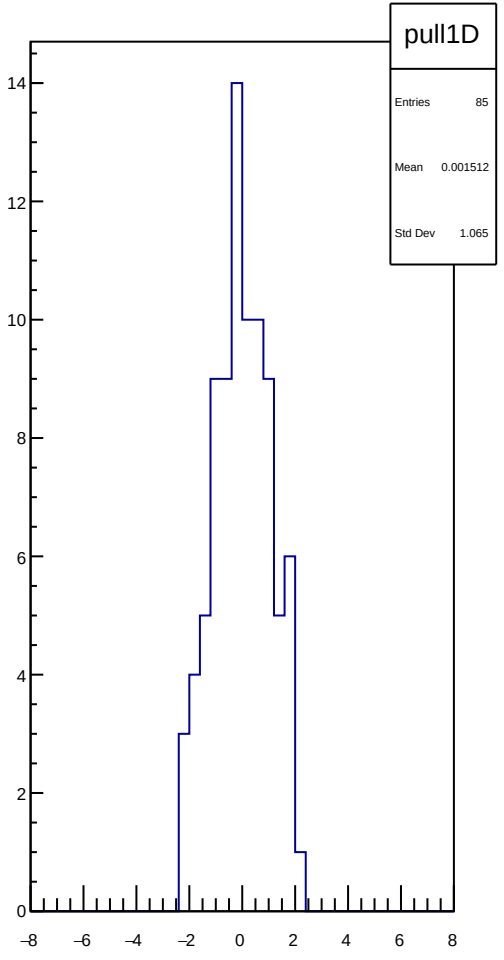

diff_bpm0l10X_rms vs run
χ² / ndf 1.733e+04 / 84
p0 9292 ± 7.223
12000
11000
10000
9000
8000
7000

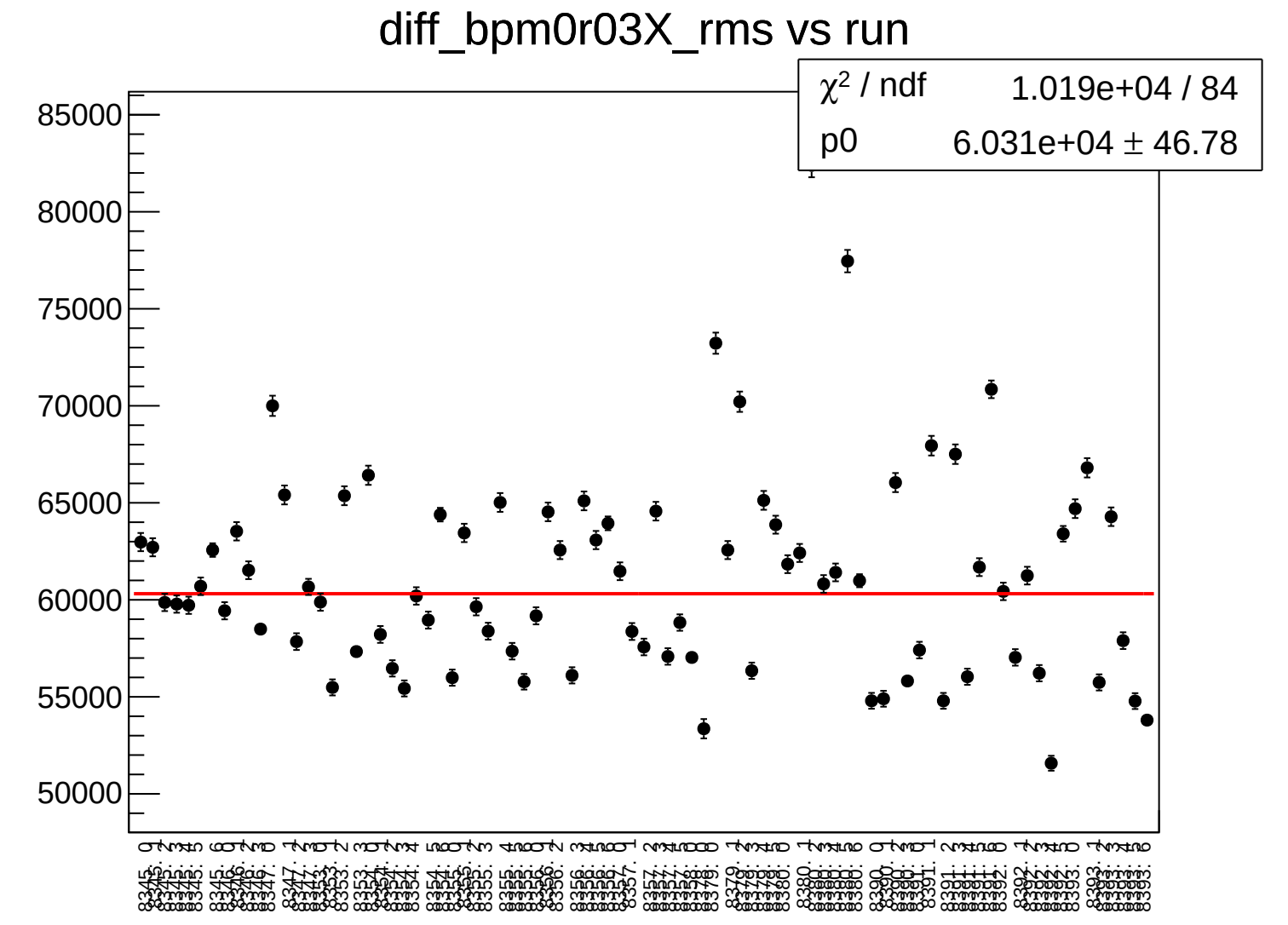

diff_bpm0l10Y_mean vs run
χ² / ndf 361.7 / 84
p0 −27.24 ± 1.148
pull
Entries 85
Mean 387.2
Std Dev 338.2

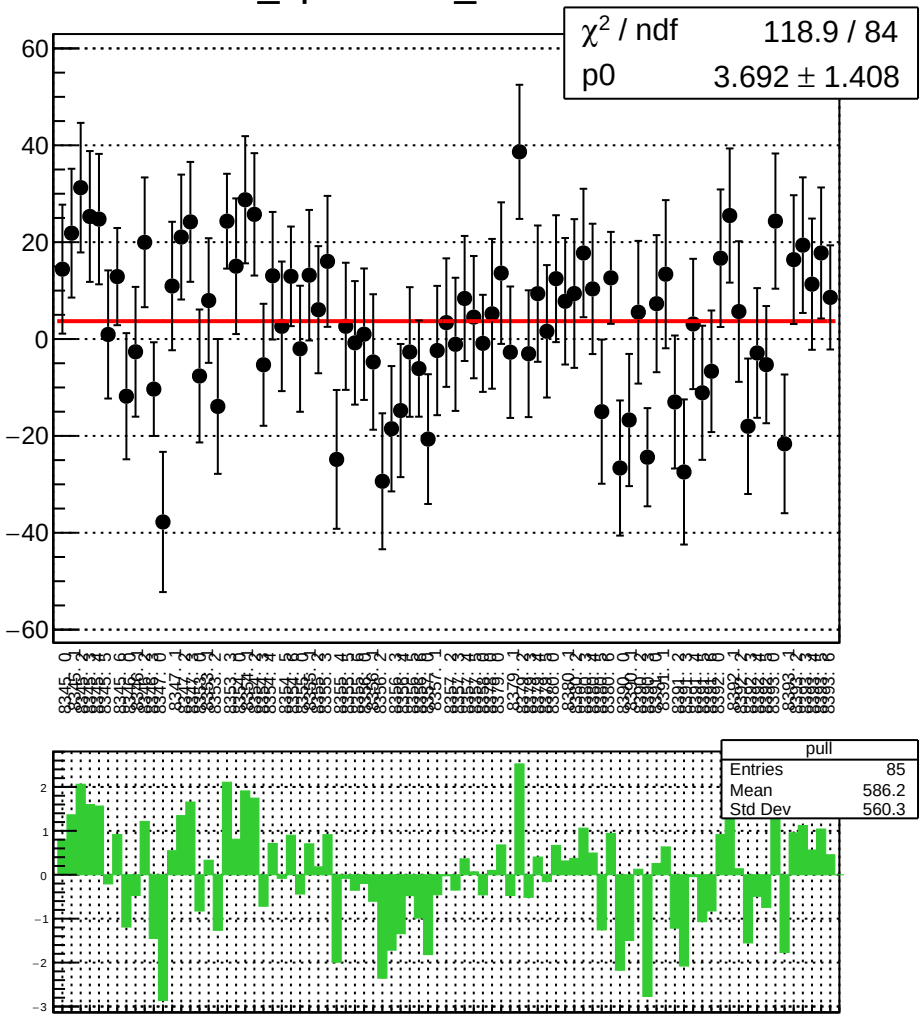

pull1D
Entries 85
Mean 0.09311
Std Dev 2.061

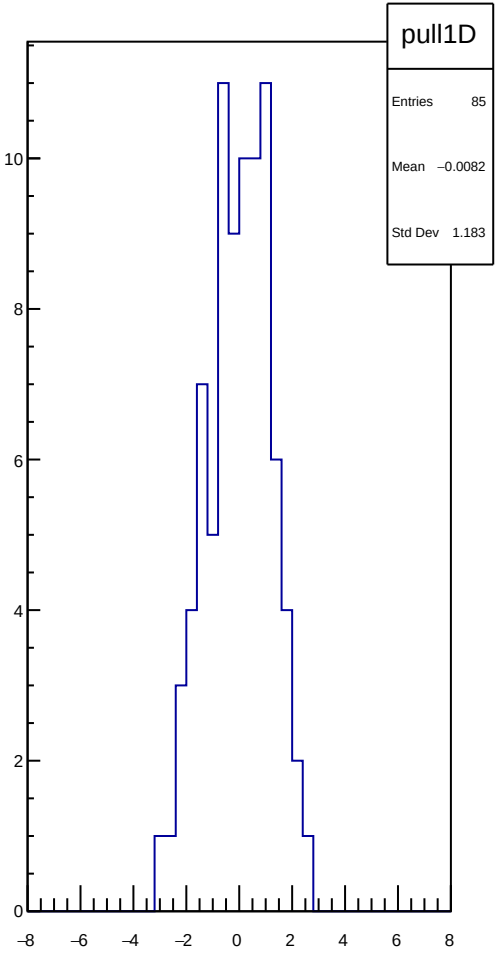

diff_bpm0l10Y_rms vs run
χ² / ndf 3448 / 84
p0 1049 ± 0.8118
1200
1150
1100
1050
1000

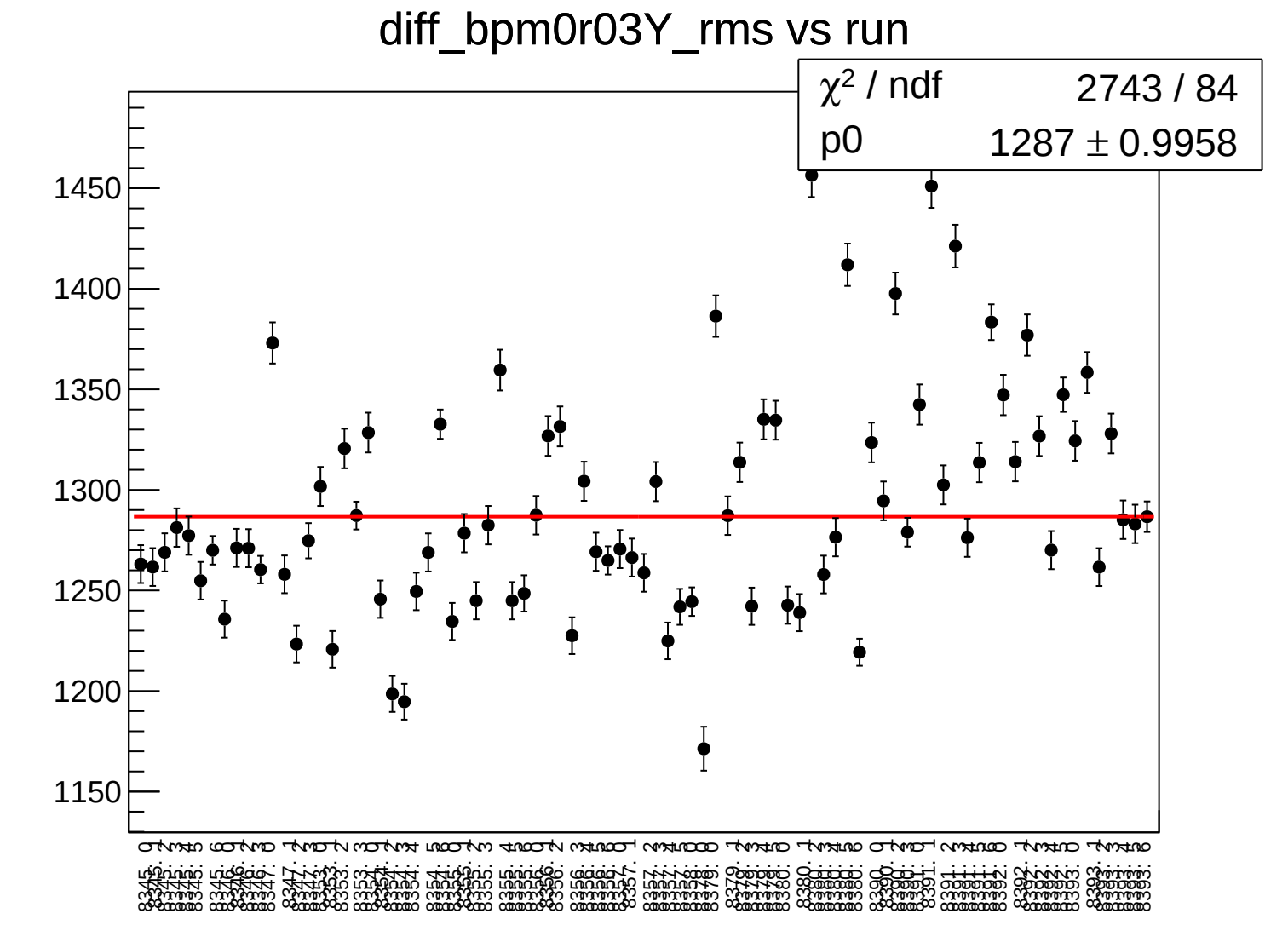

diff_bpm0r03X_mean vs run
χ² / ndf 96.33 / 84
p0 −275.3 ± 66.16
pull
Entries 85
Mean 1819
Std Dev 1795

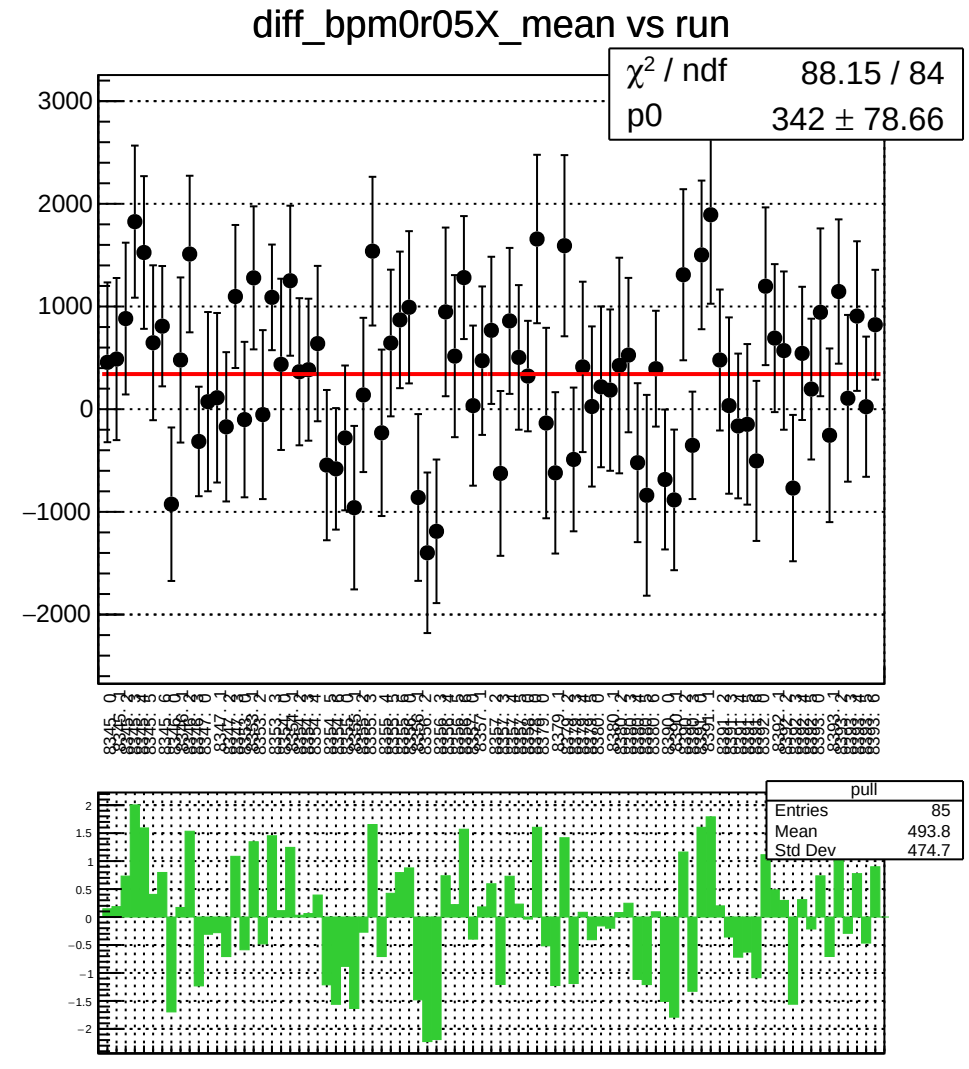

pull1D
Entries 85
Mean 0.001512
Std Dev 1.065

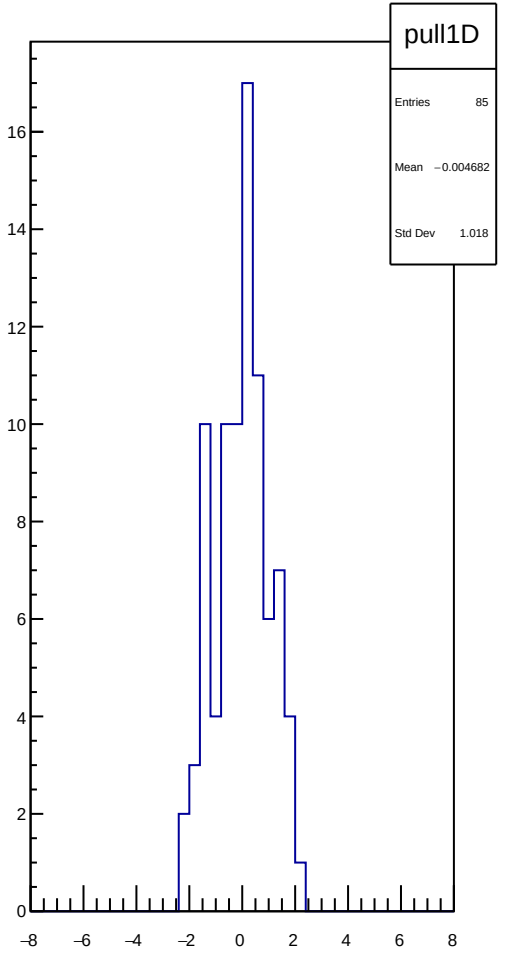

diff_bpm0r03X_rms vs run
χ² / ndf 1.019e+04 / 84
p0 6.031e+04 ± 46.78
85000
80000
75000
70000
65000
60000
55000
50000

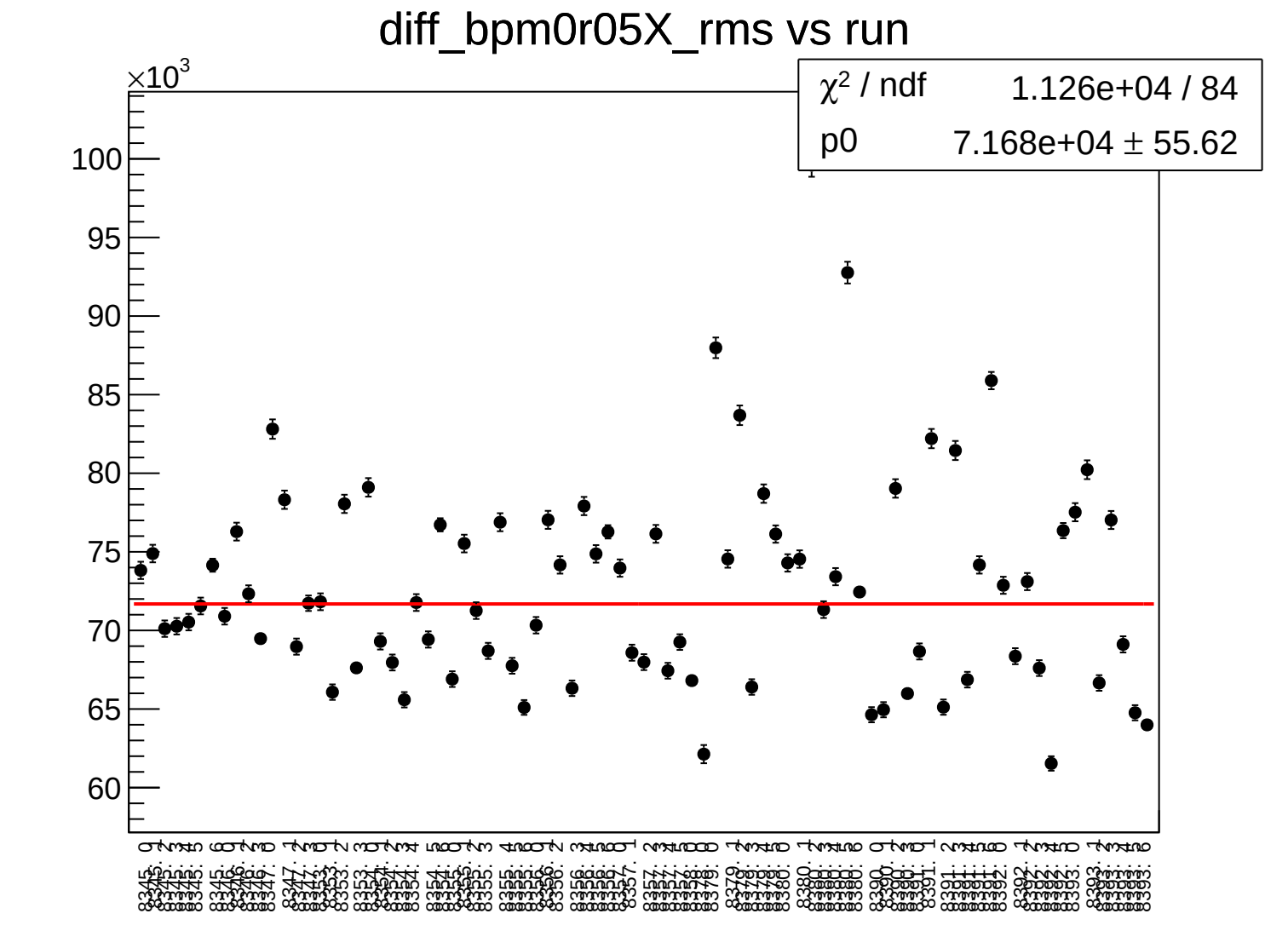

diff_bpm0r03Y_mean vs run
χ² / ndf 118.9 / 84
p0 3.692 ± 1.408
pull
Entries 85
Mean 586.2
Std Dev 560.3

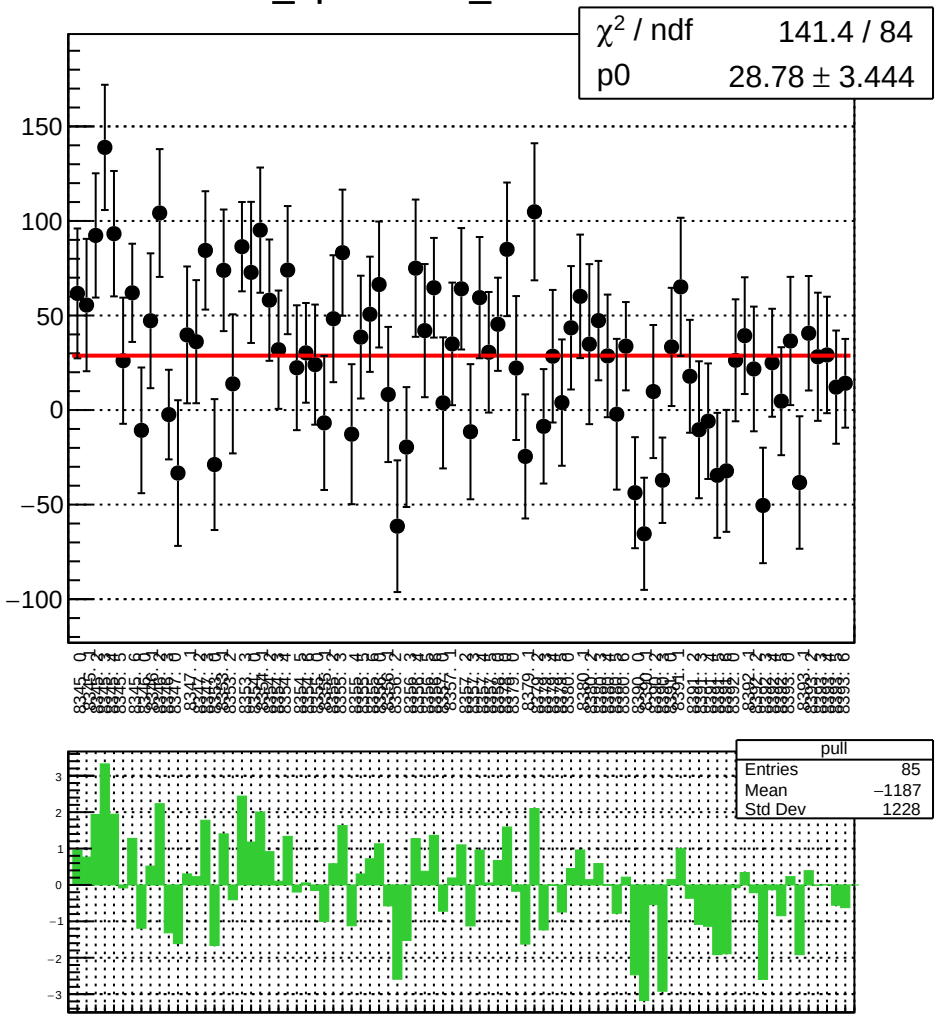

pull1D
Entries 85
Mean −0.0082
Std Dev 1.183

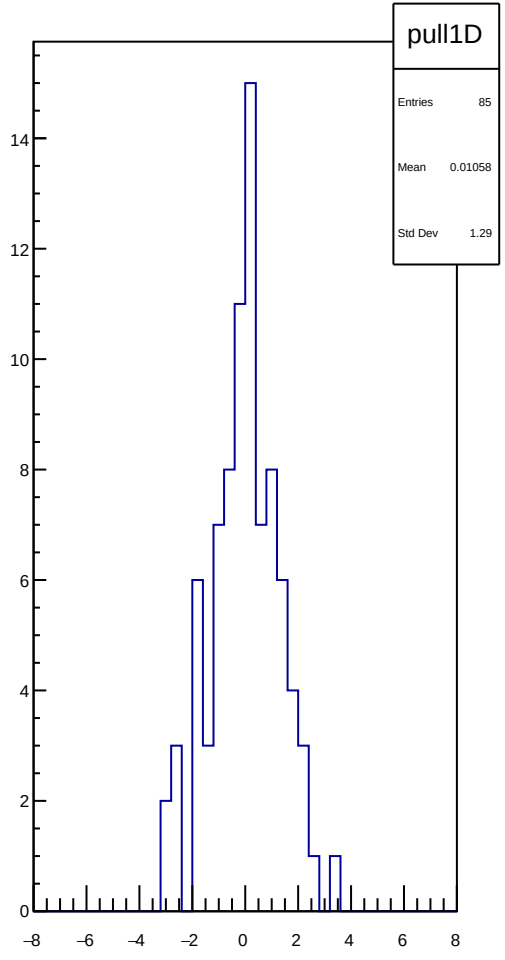

diff_bpm0r03Y_rms vs run
χ² / ndf 2743 / 84
p0 1287 ± 0.9958
1450
1400
1350
1300
1250
1200
1150

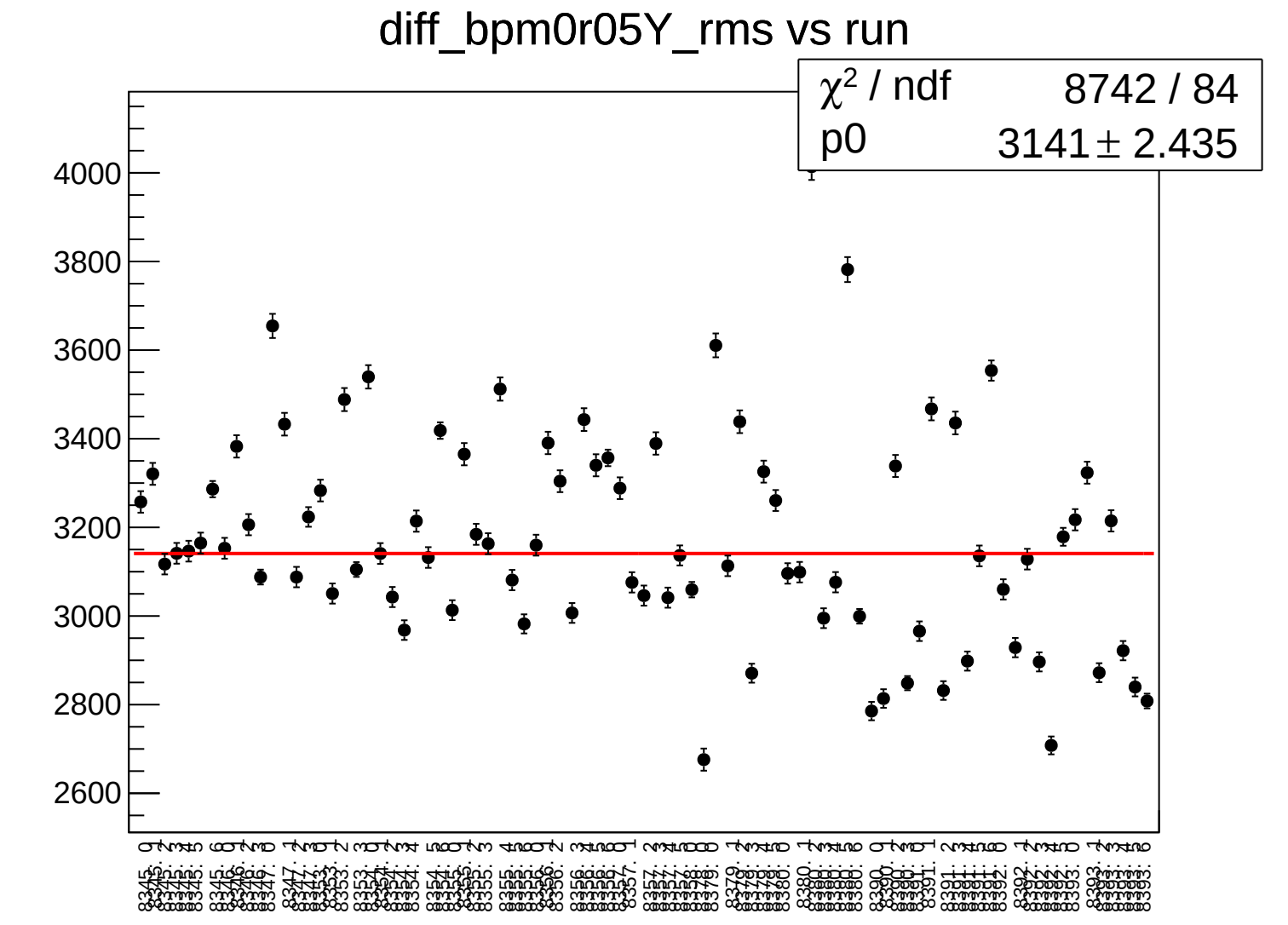

diff_bpm0r05X_mean vs run
χ² / ndf 88.15 / 84
p0 342 ± 78.66
3000
2000
1000
0
−1000
−2000
pull
Entries 85
Mean 493.8
Std Dev 474.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

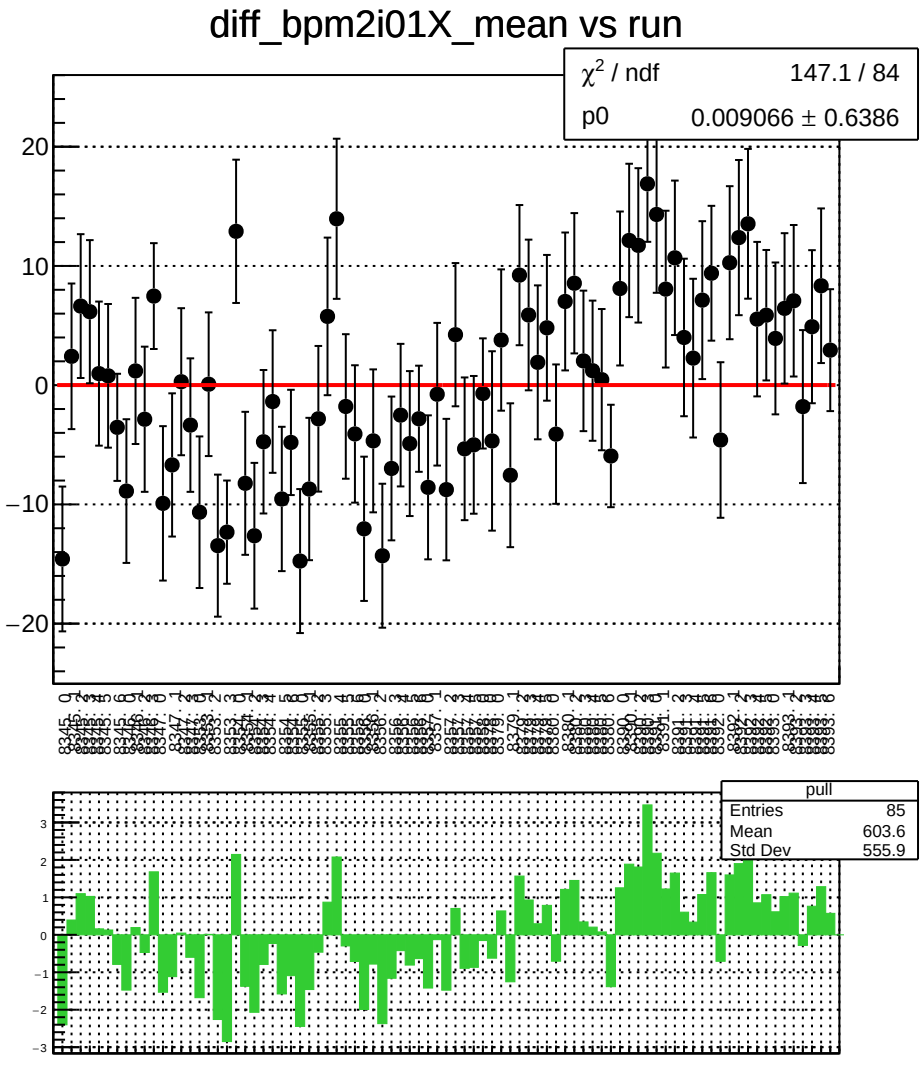

pull1D
Entries 85
Mean −0.004682
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

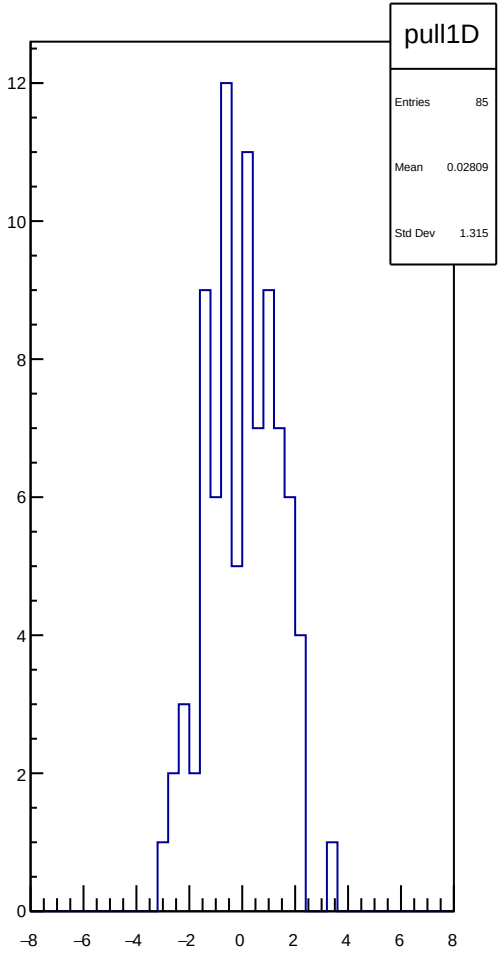

diff_bpm0r05X_rms vs run
×10^3
χ² / ndf 1.126e+04 / 84
p0 7.168e+04 ± 55.62
100
95
90
85
80
75
70
65
60

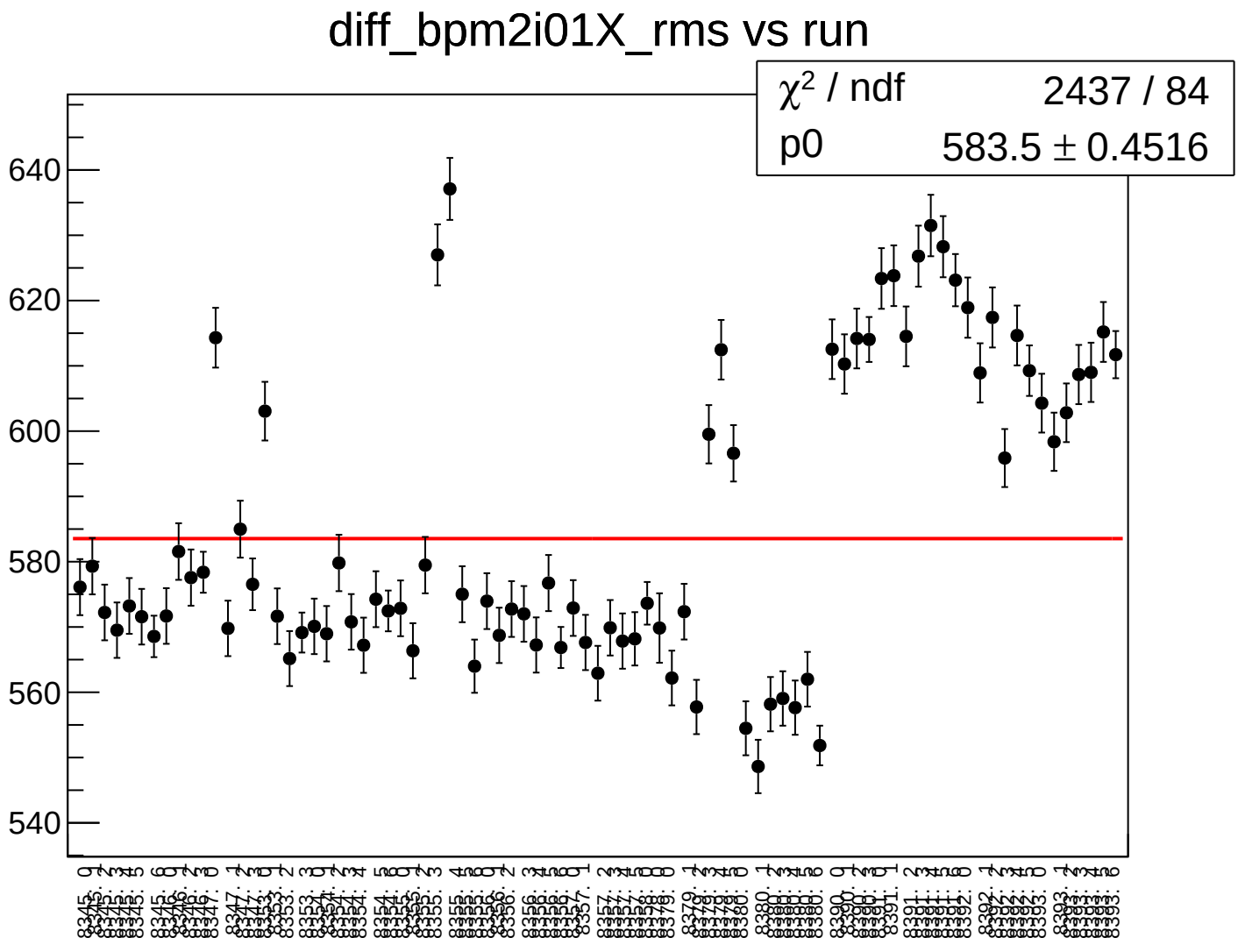

diff_bpm0r05Y_mean vs run
χ² / ndf 141.4 / 84
p0 28.78 ± 3.444
150
100
50
0
−50
−100
pull
Entries 85
Mean −1187
Std Dev 1228
3
2
1
0
−1
−2
−3

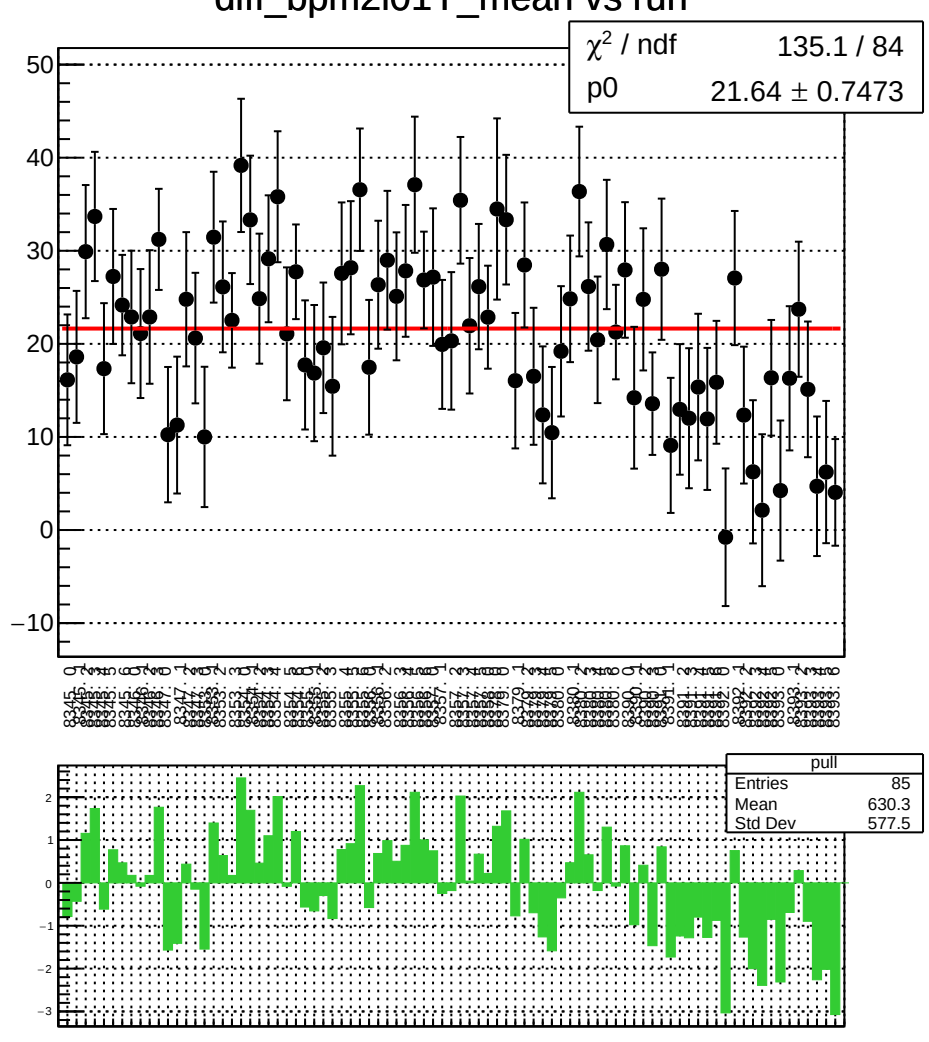

pull1D
Entries 85
Mean 0.01058
Std Dev 1.29
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

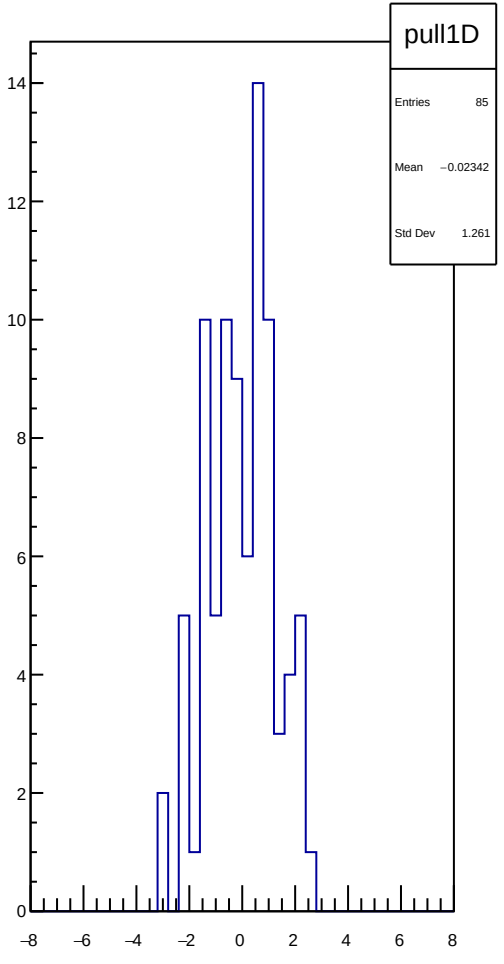

diff_bpm0r05Y_rms vs run
χ^2 / ndf 8742 / 84
p0 3141 ± 2.435
4000
3800
3600
3400
3200
3000
2800
2600

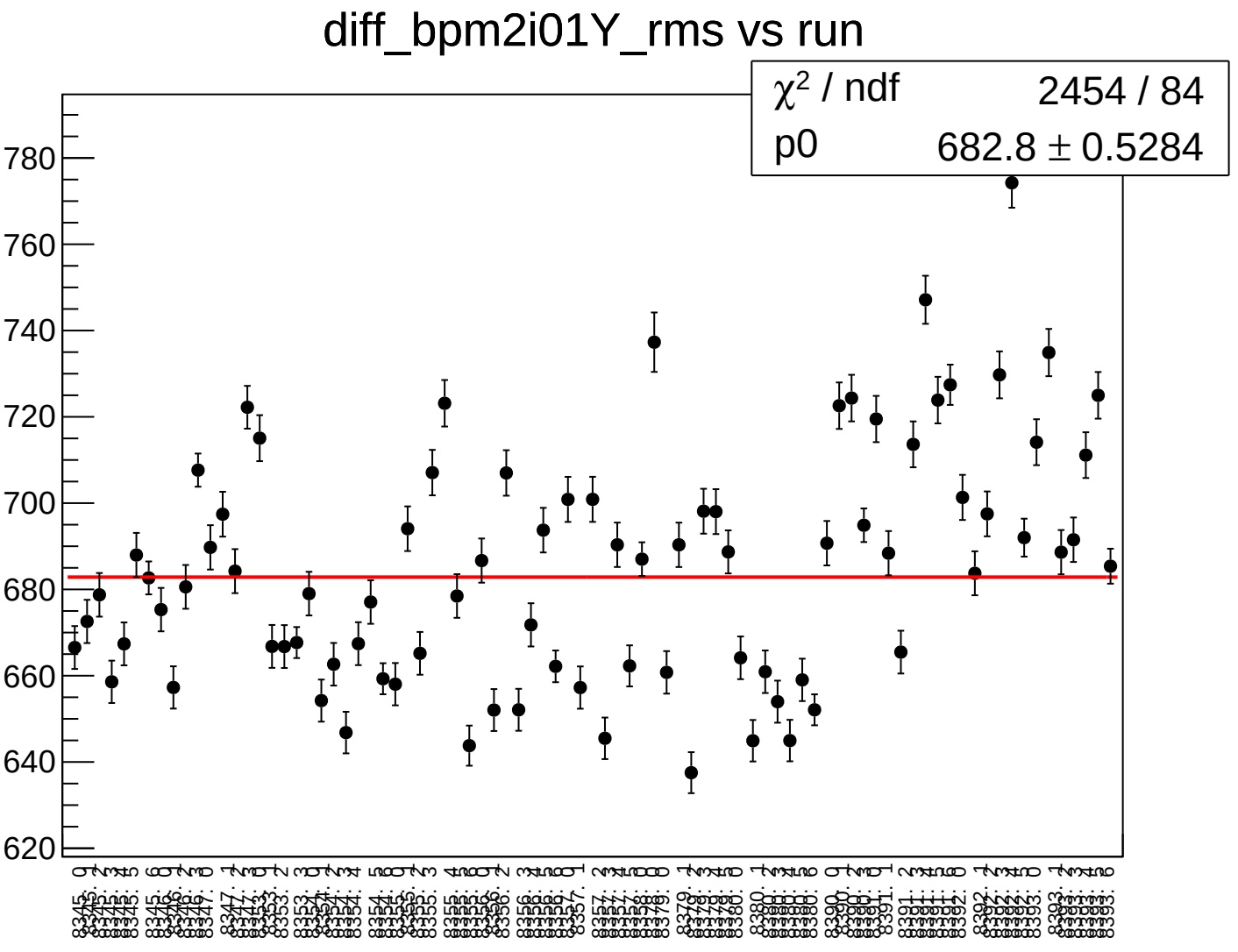

diff_bpm2i01X_mean vs run
χ² / ndf 147.1 / 84
p0 0.009066 ± 0.6386
pull
Entries 85
Mean 603.6
Std Dev 555.9

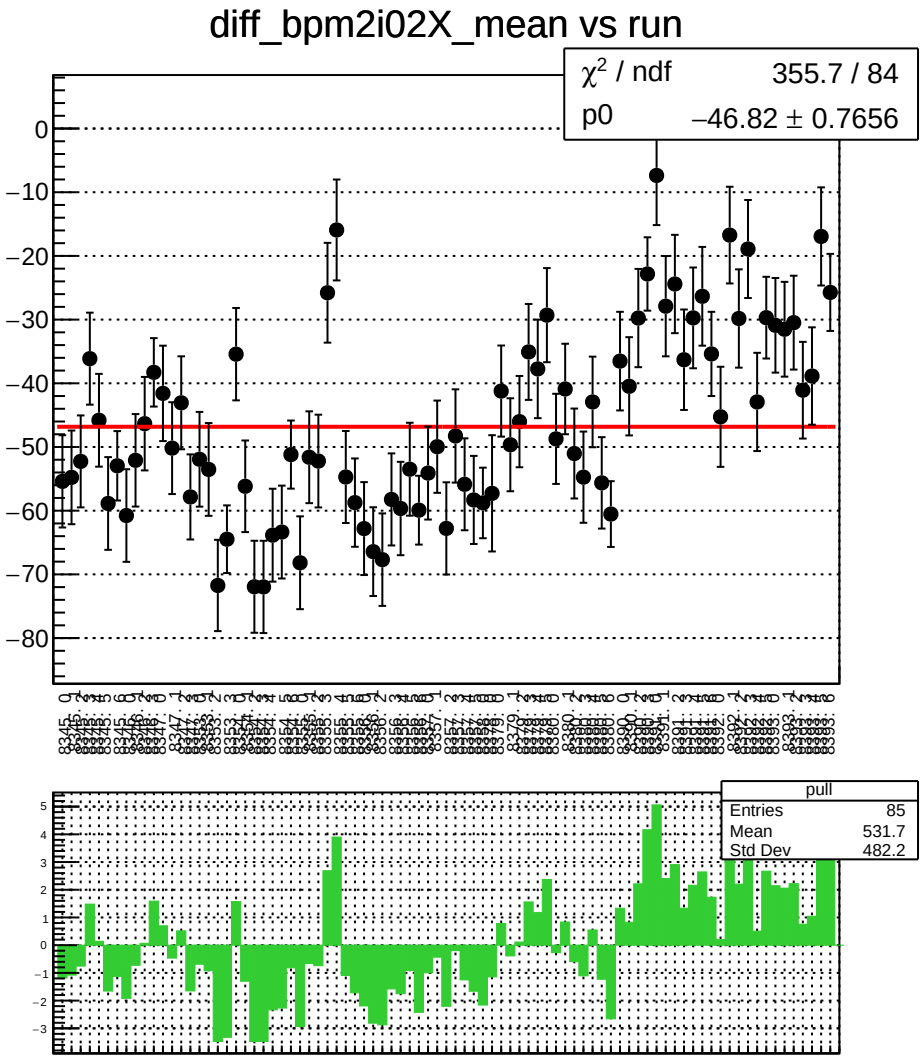

pull1D
Entries 85
Mean 0.02809
Std Dev 1.315

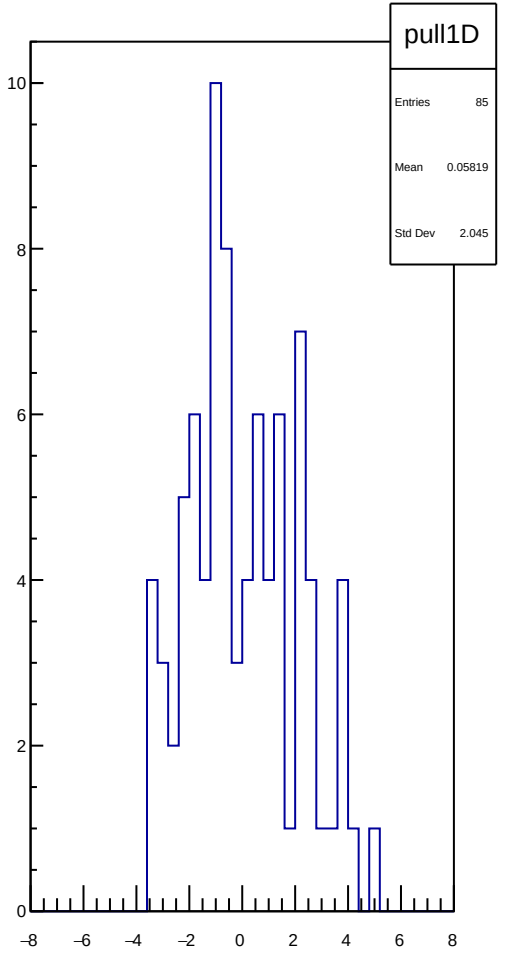

diff_bpm2i01X_rms vs run
χ² / ndf 2437 / 84
p0 583.5 ± 0.4516
640
620
600
580
560
540

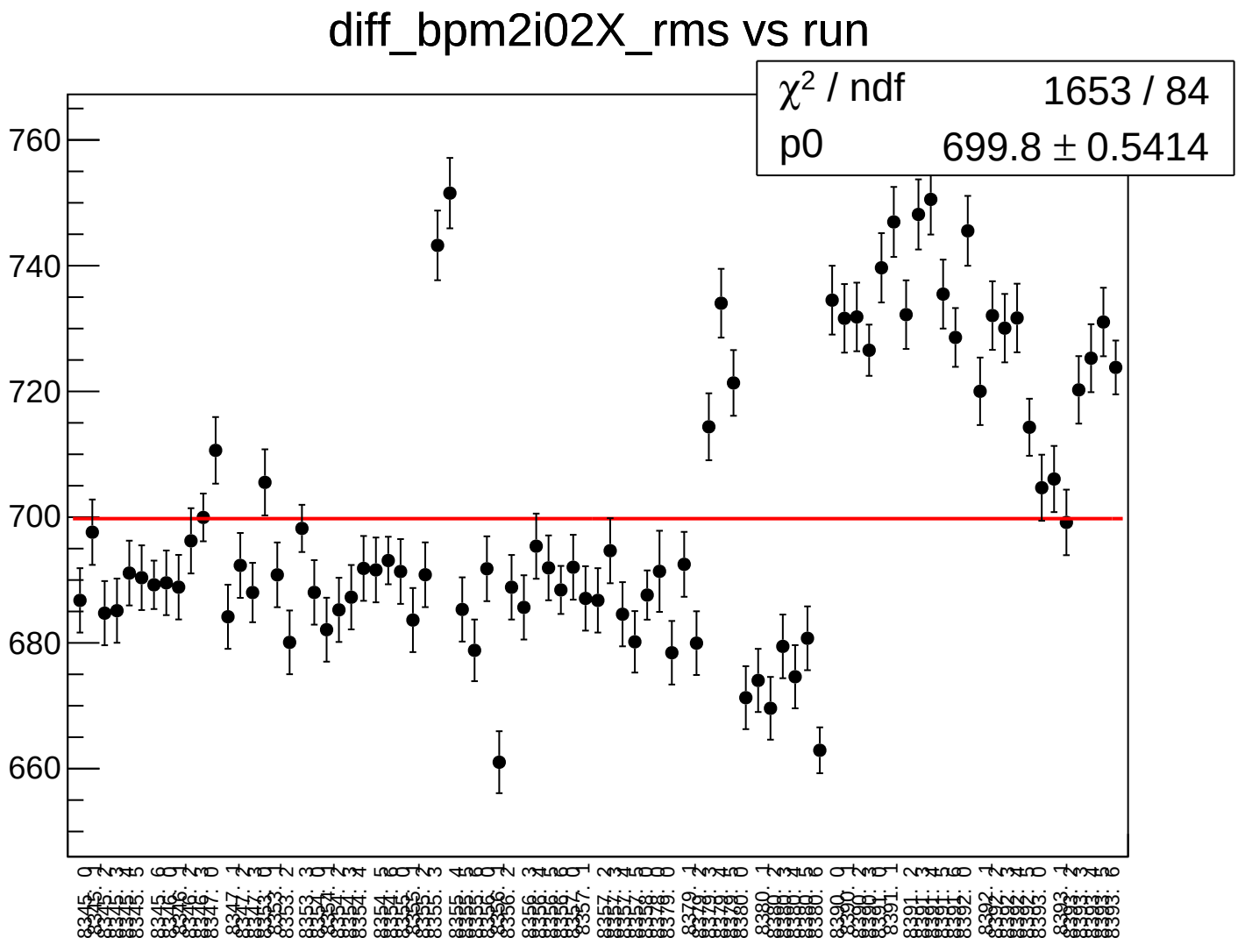

diff_bpm2i01Y_mean vs run
χ² / ndf 135.1 / 84
p0 21.64 ± 0.7473
pull
Entries 85
Mean 630.3
Std Dev 577.5

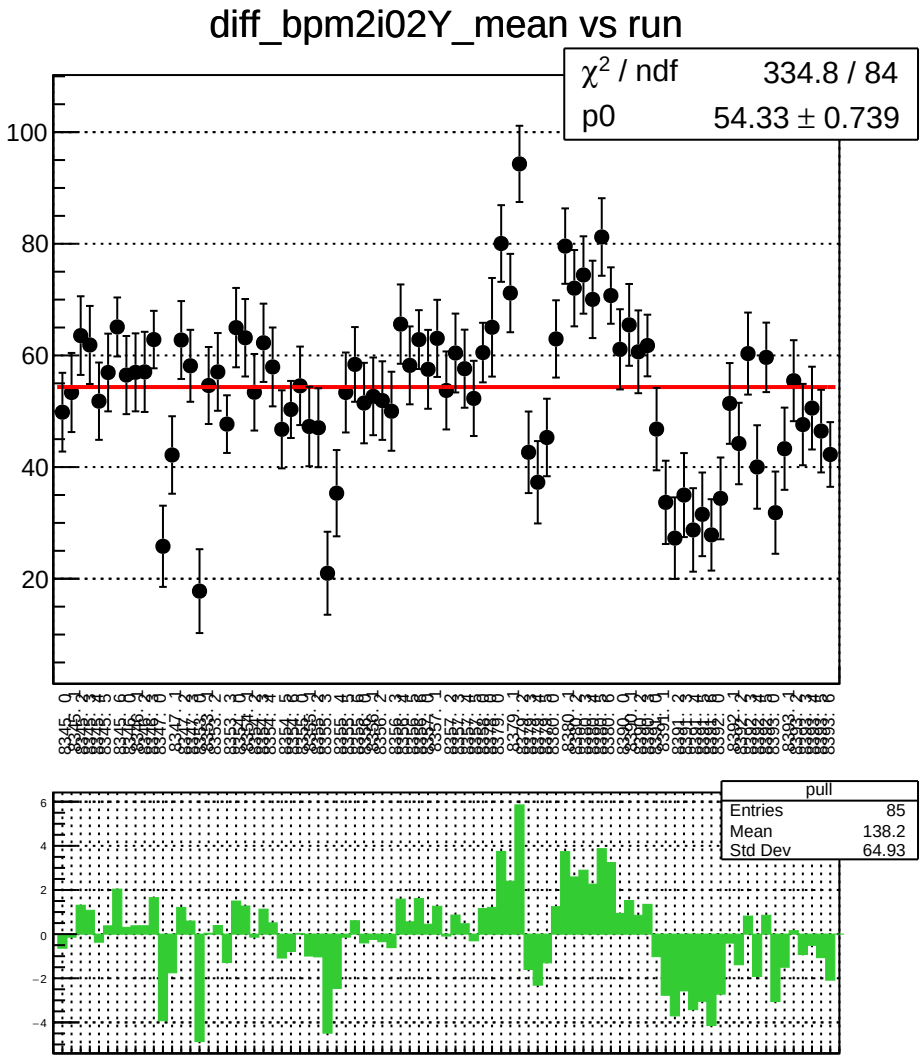

pull1D
Entries 85
Mean −0.02342
Std Dev 1.261

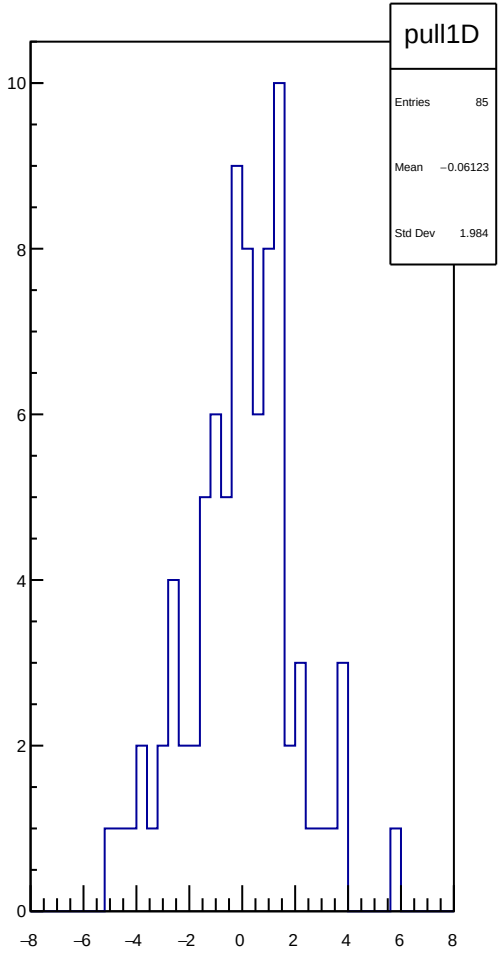

diff_bpm2i01Y_rms vs run
χ² / ndf 2454 / 84
p0 682.8 ± 0.5284
780
760
740
720
700
680
660
640
620

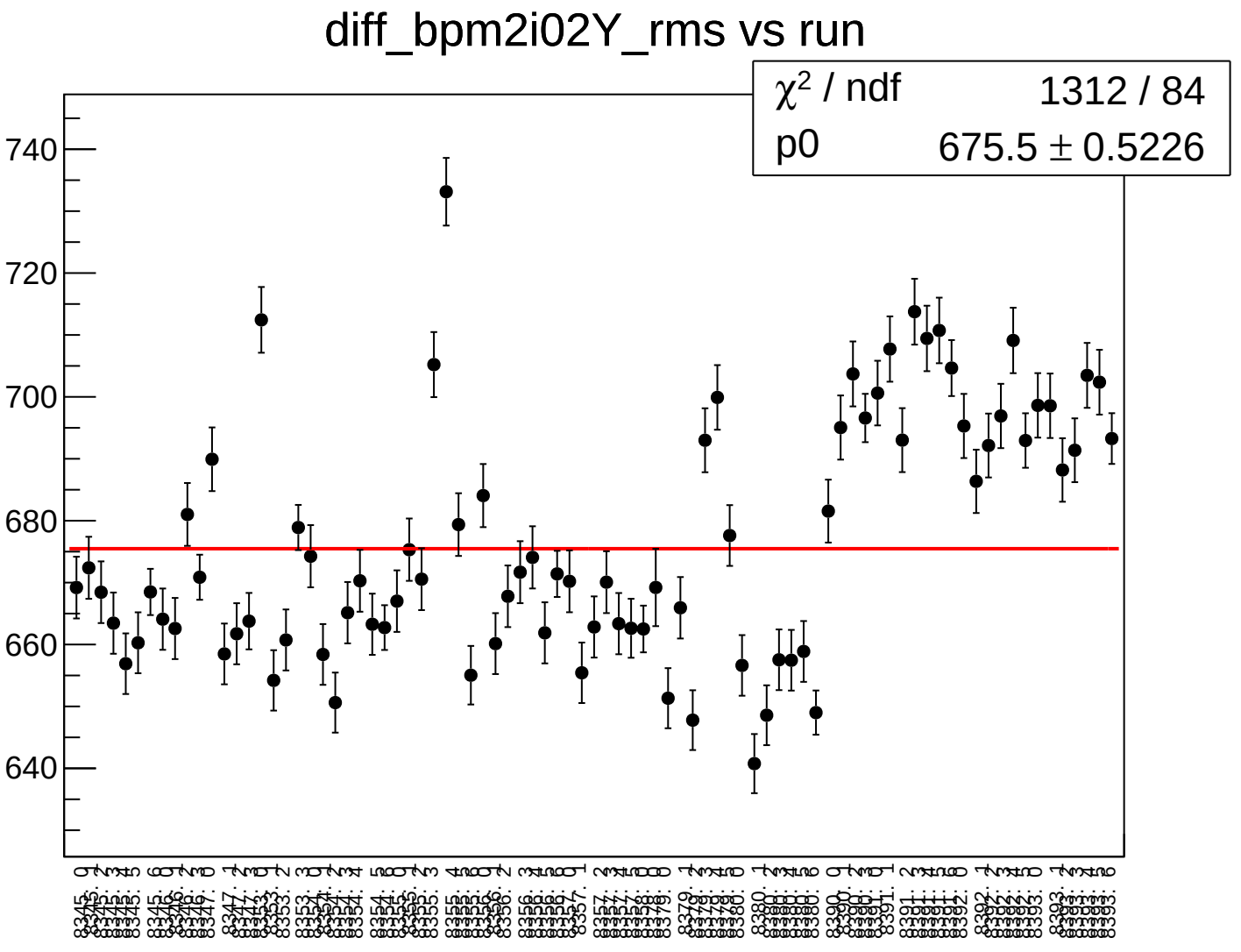

diff_bpm2i02X_mean vs run
χ² / ndf 355.7 / 84
p0 −46.82 ± 0.7656
pull
Entries 85
Mean 531.7
Std Dev 482.2

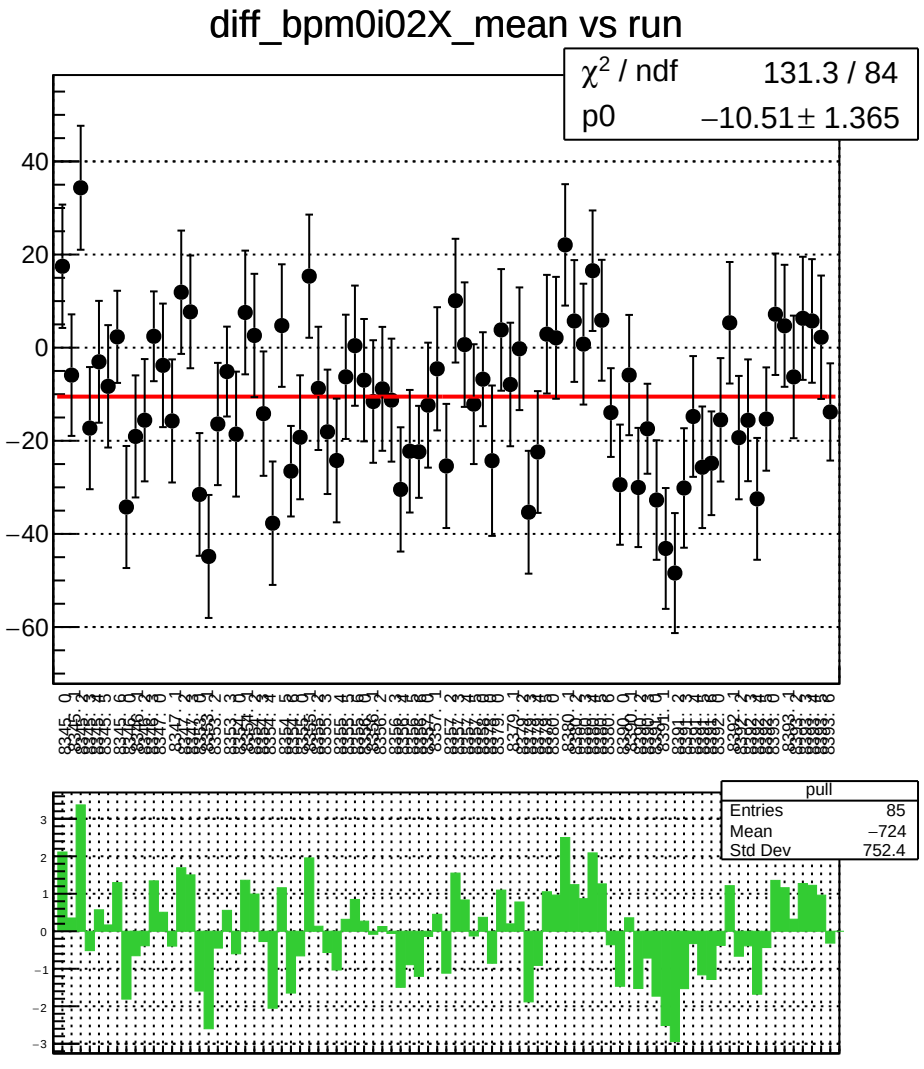

pull1D
Entries 85
Mean 0.05819
Std Dev 2.045

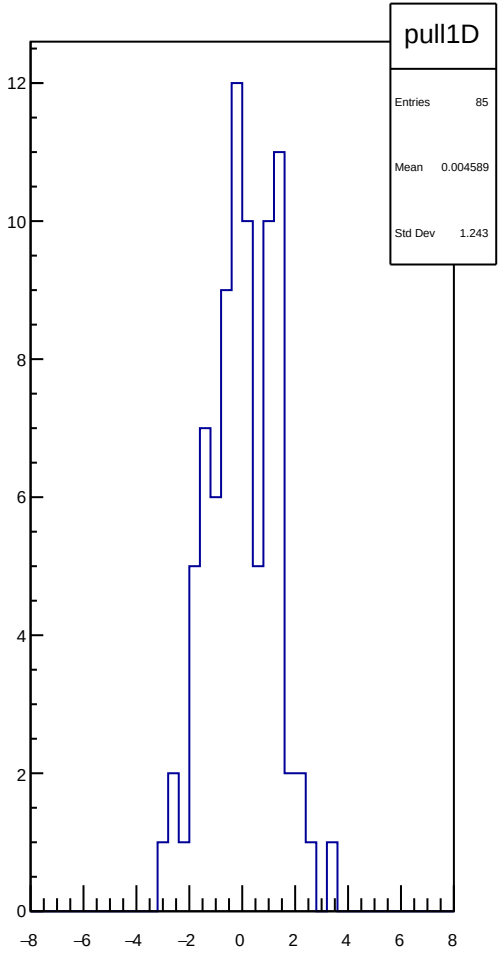

diff_bpm2i02X_rms vs run
χ² / ndf 1653 / 84
p0 699.8 ± 0.5414
760
740
720
700
680
660

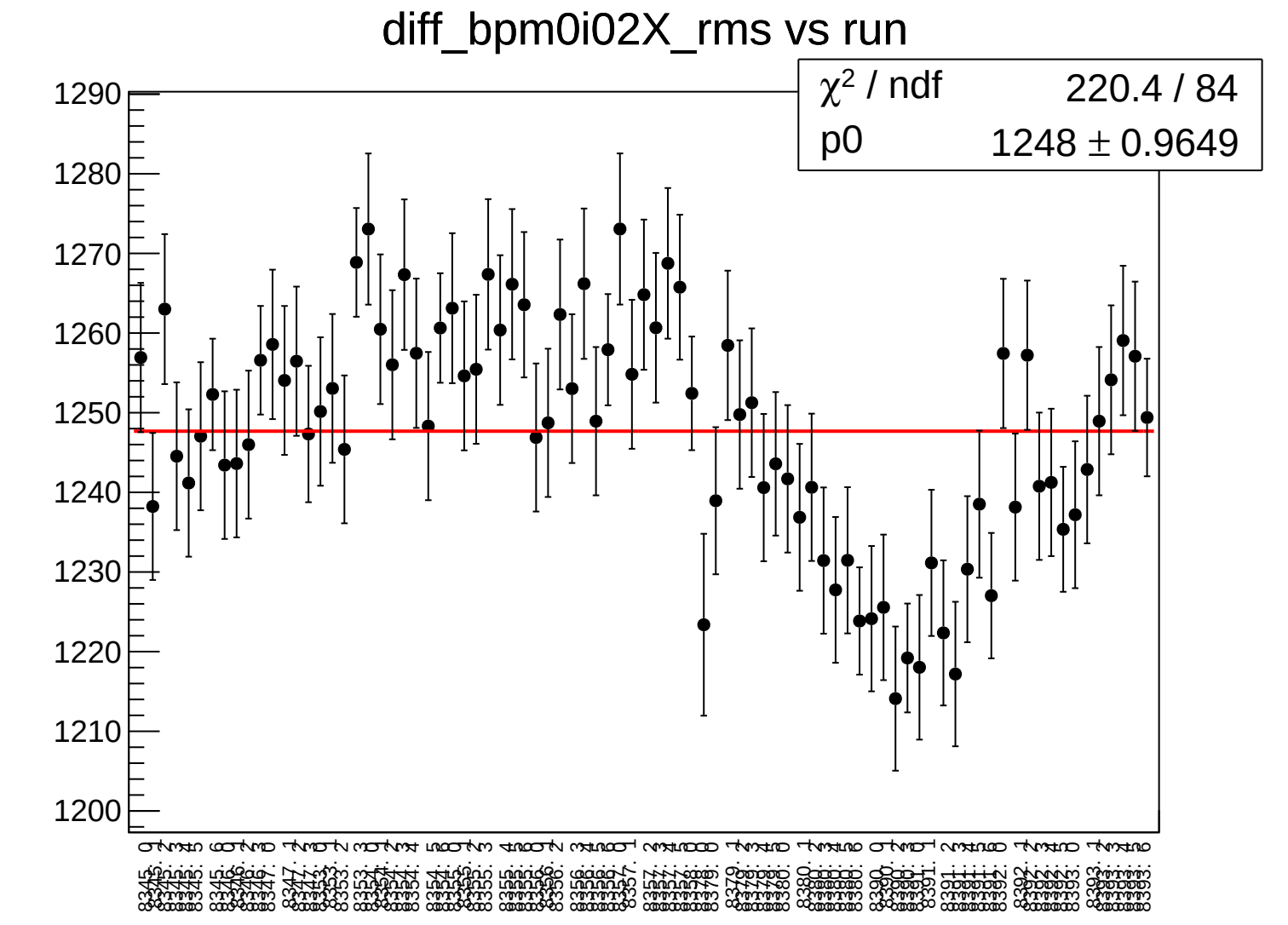

diff_bpm2i02Y_mean vs run
χ² / ndf 334.8 / 84
p0 54.33 ± 0.739
pull
Entries 85
Mean 138.2
Std Dev 64.93

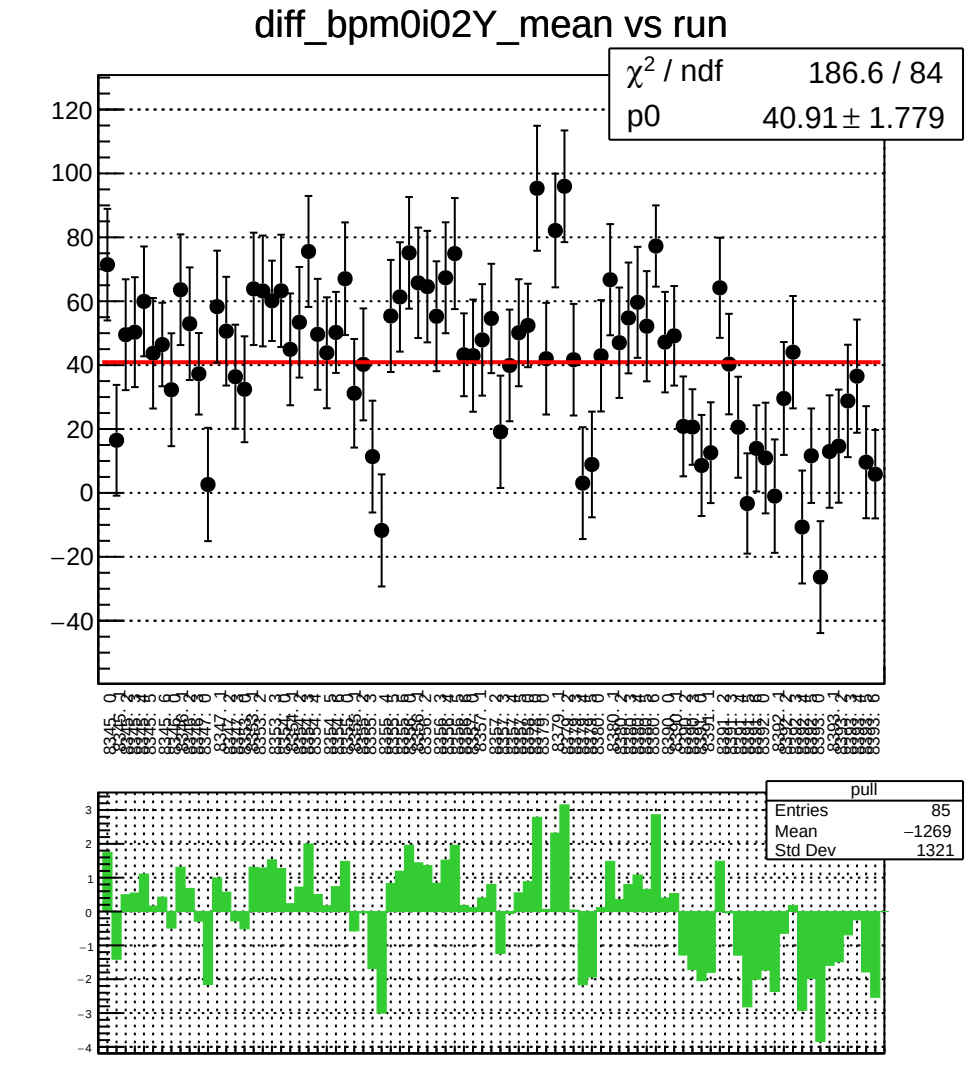

pull1D
Entries 85
Mean −0.06123
Std Dev 1.984

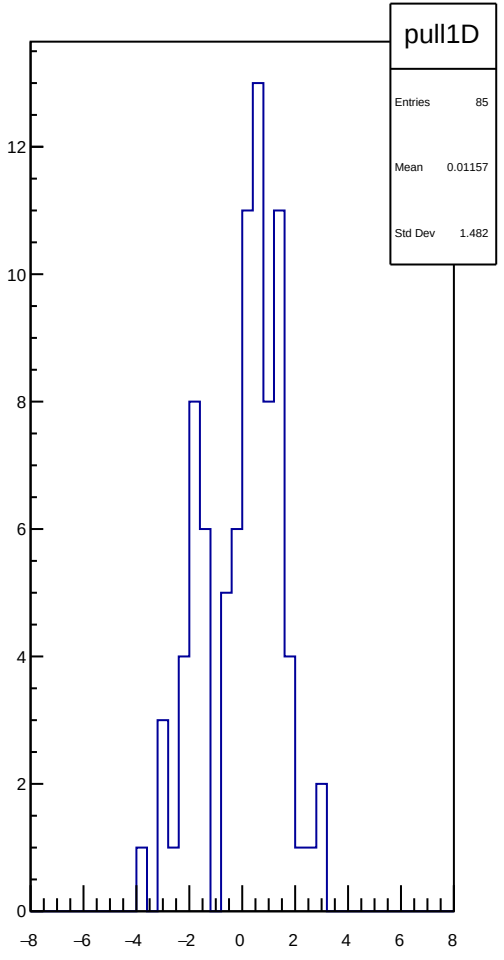

diff_bpm2i02Y_rms vs run
χ² / ndf 1312 / 84
p0 675.5 ± 0.5226
740
720
700
680
660
640

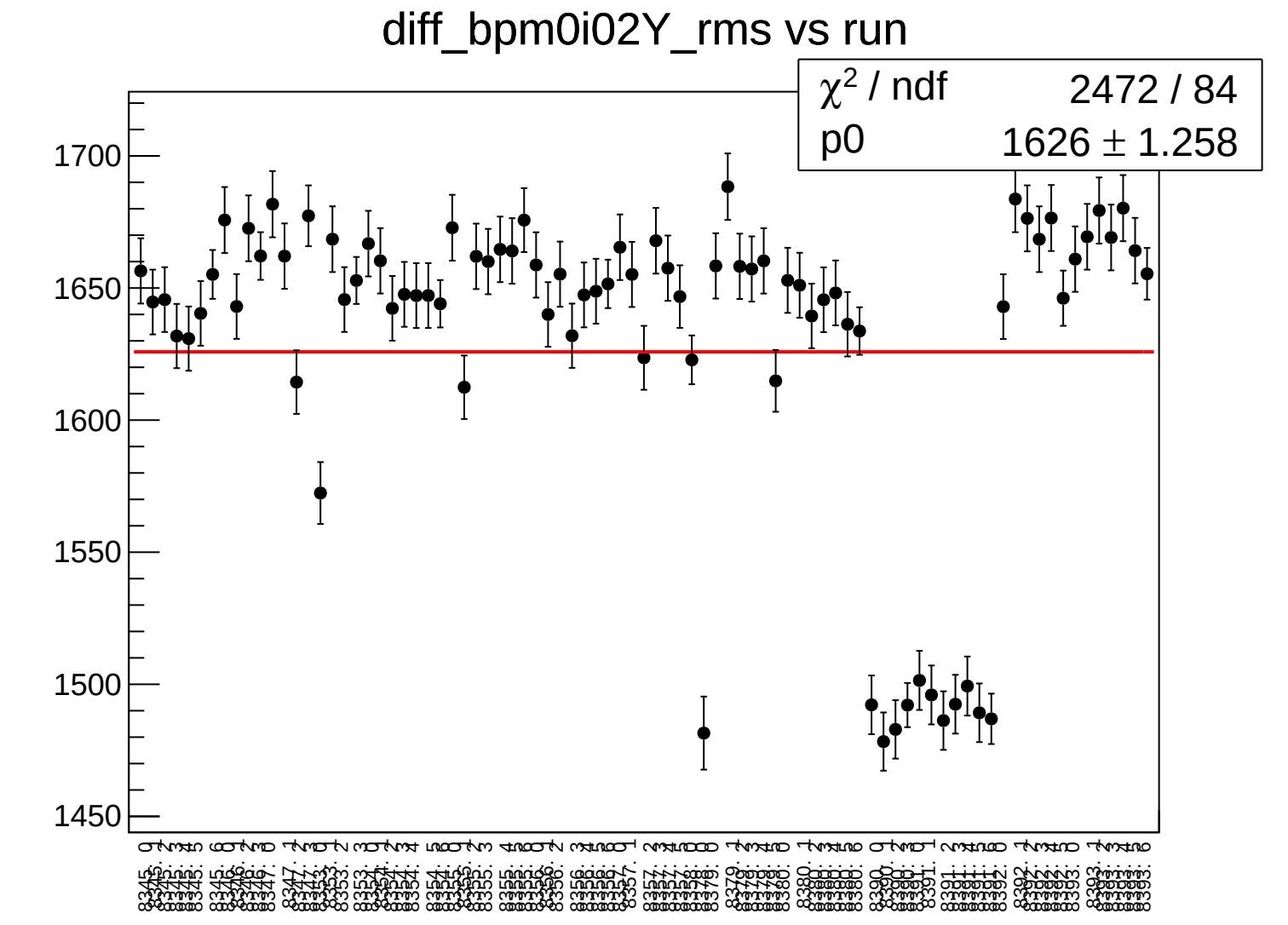

diff_bpm0i02X_mean vs run
χ^2 / ndf 131.3 / 84
p0 −10.51± 1.365
pull
Entries 85
Mean −724
Std Dev 752.4

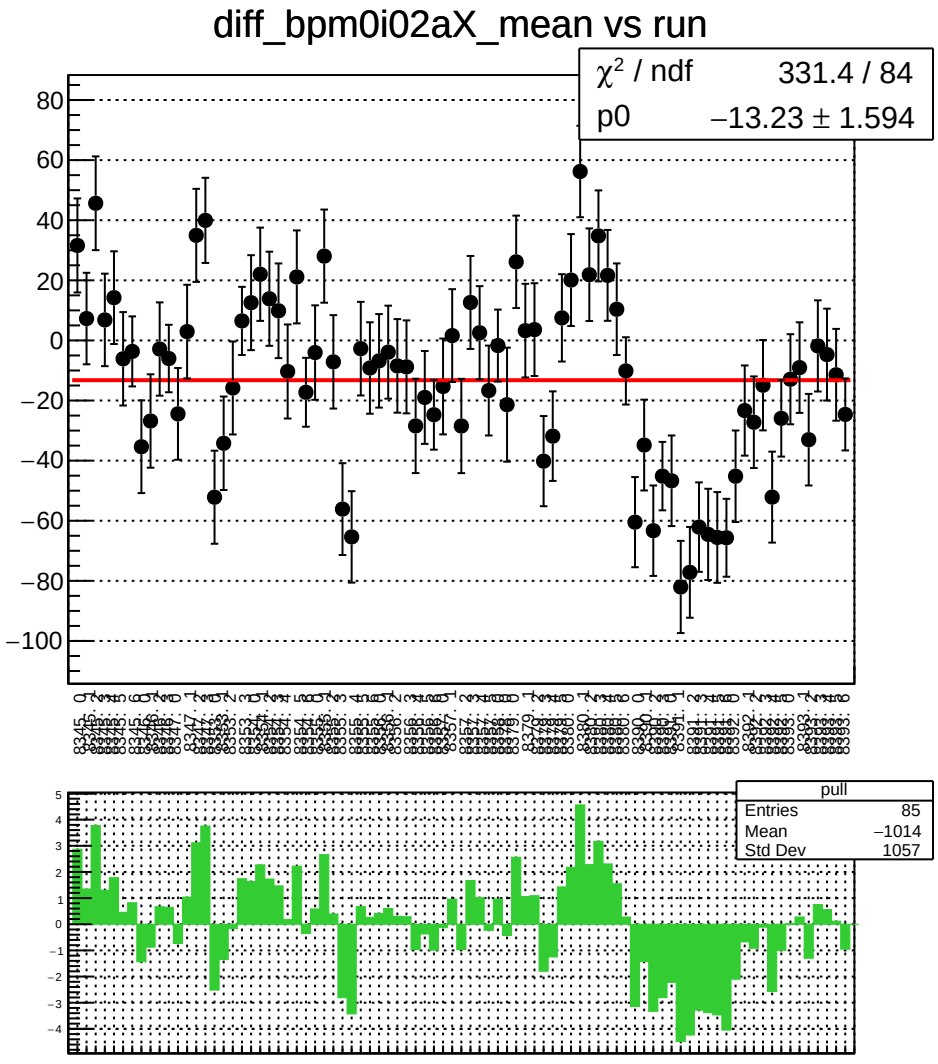

pull1D
Entries 85
Mean 0.004589
Std Dev 1.243

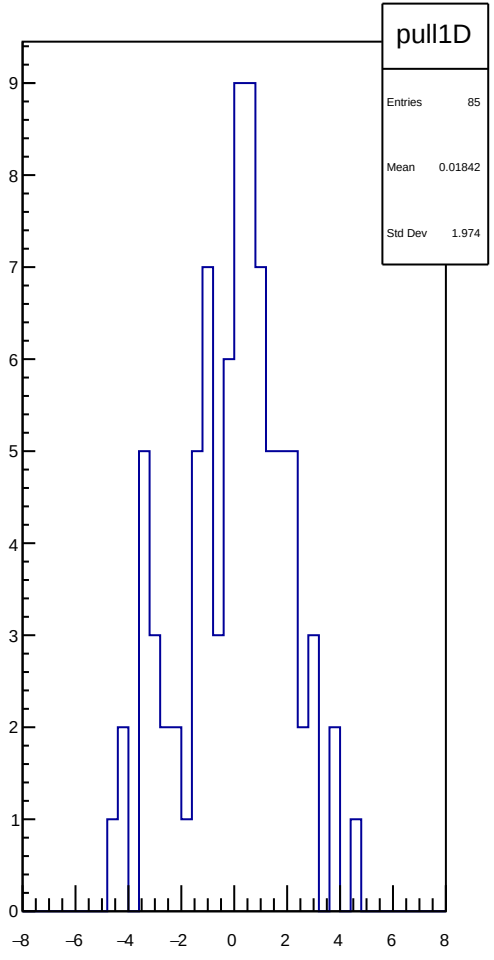

diff_bpm0i02X_rms vs run
χ² / ndf 220.4 / 84
p0 1248 ± 0.9649
1290
1280
1270
1260
1250
1240
1230
1220
1210
1200

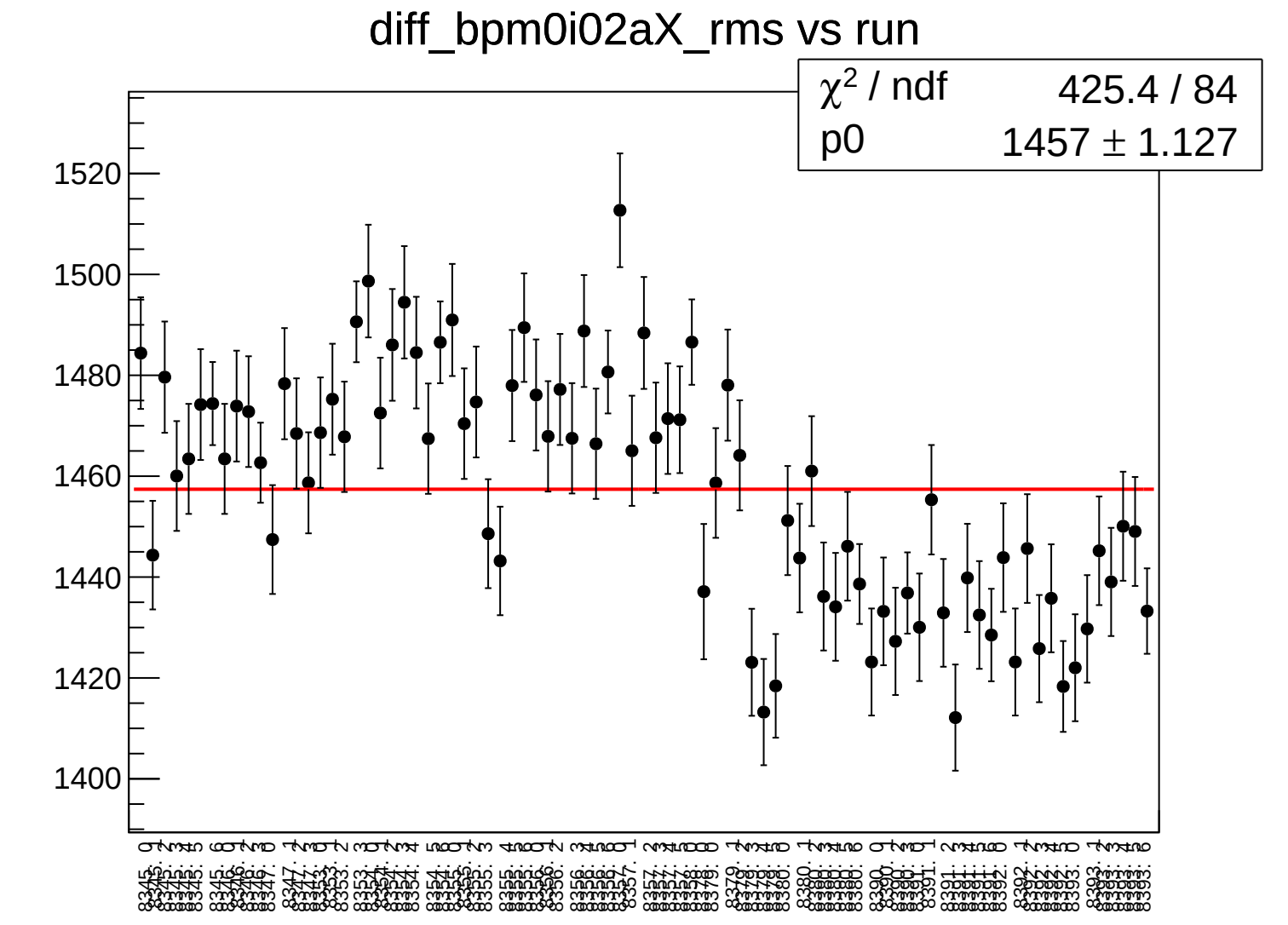

diff_bpm0i02Y_mean vs run
χ² / ndf 186.6 / 84
p0 40.91 ± 1.779
pull
Entries 85
Mean −1269
Std Dev 1321

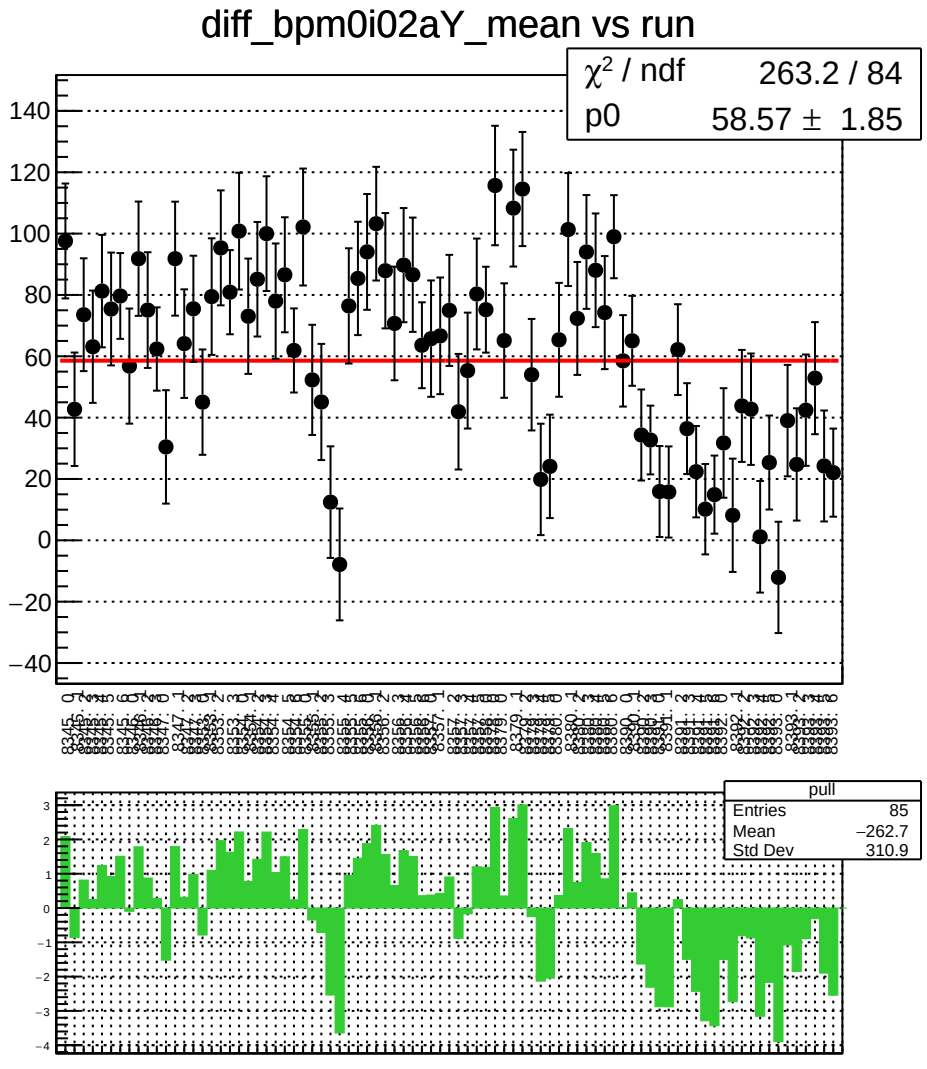

pull1D
Entries 85
Mean 0.01157
Std Dev 1.482

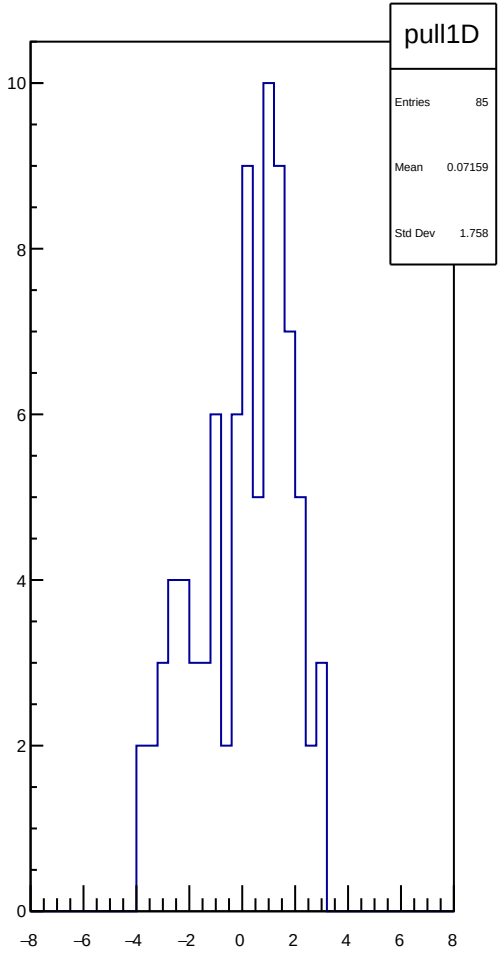

diff_bpm0i02Y_rms vs run
χ² / ndf 2472 / 84
p0 1626 ± 1.258
1700
1650
1600
1550
1500
1450

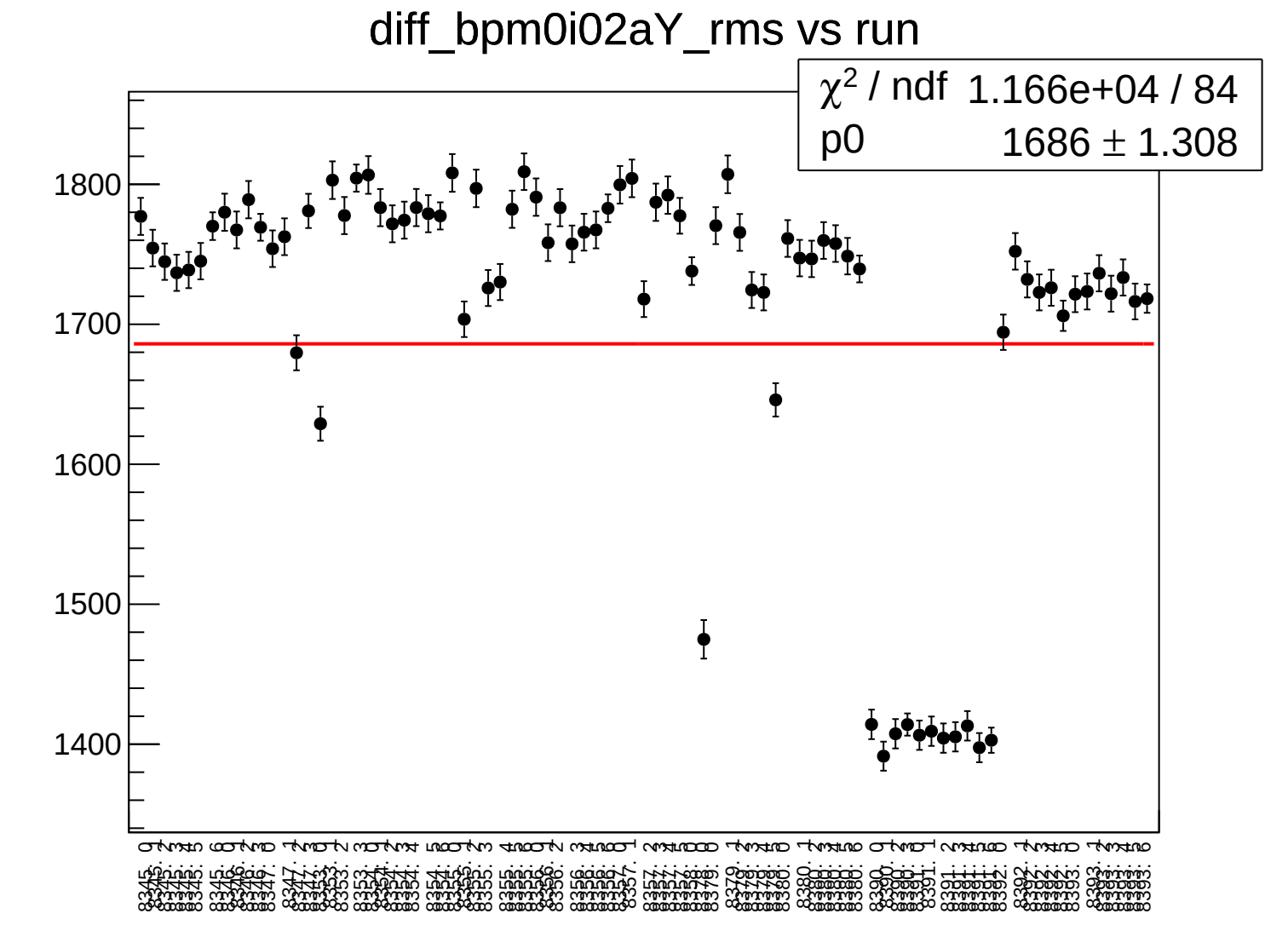

diff_bpm0i02aX_mean vs run
χ² / ndf 331.4 / 84
p0 −13.23 ± 1.594
pull
Entries 85
Mean −1014
Std Dev 1057

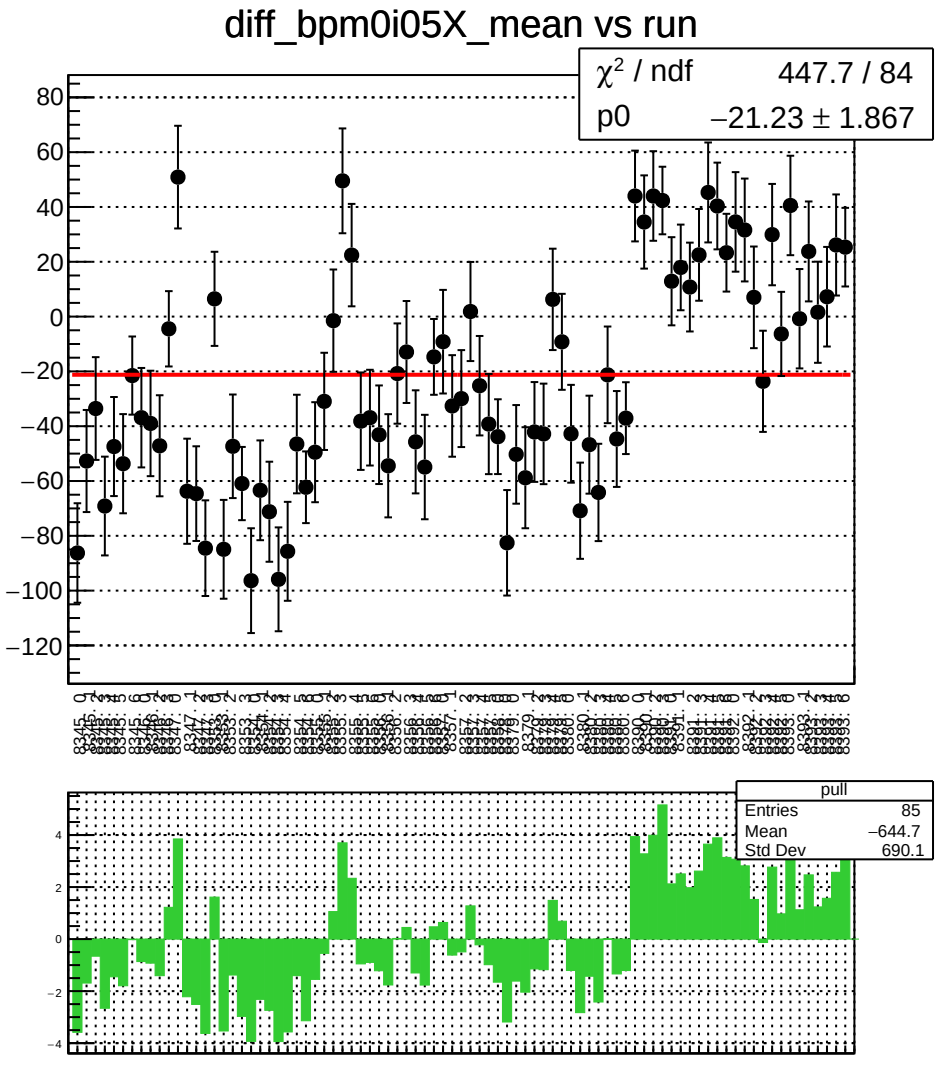

pull1D
Entries 85
Mean 0.01842
Std Dev 1.974

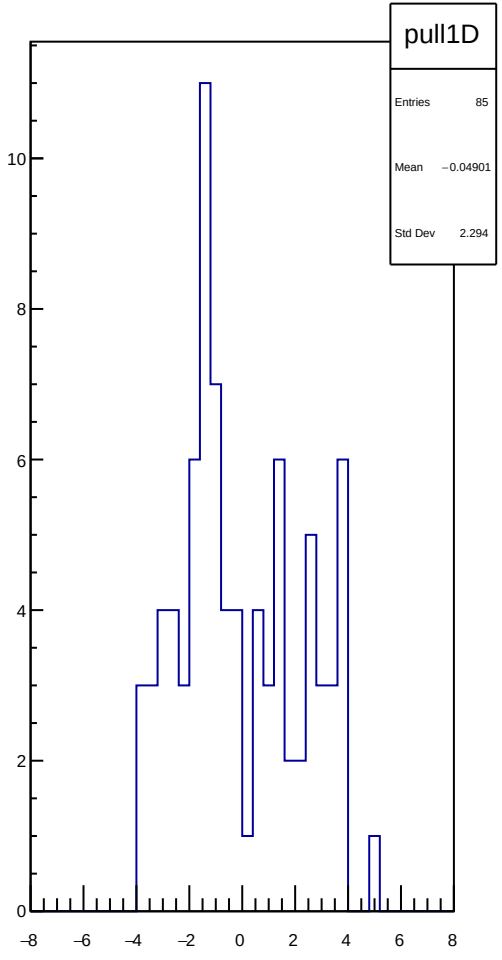

diff_bpm0i02aX_rms vs run
χ² / ndf 425.4 / 84
p0 1457 ± 1.127
1520
1500
1480
1460
1440
1420
1400

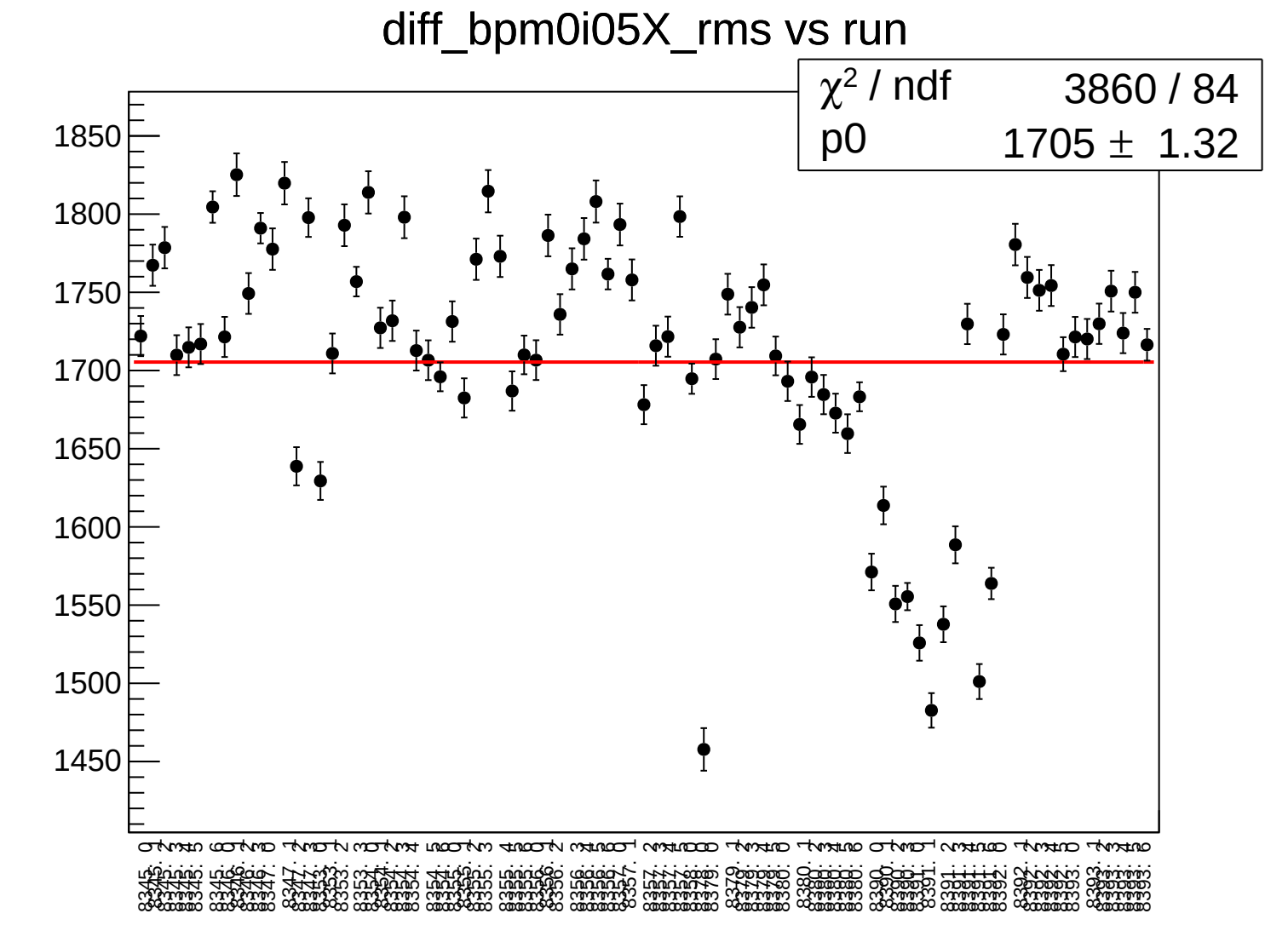

diff_bpm0i02aY_mean vs run
χ² / ndf 263.2 / 84
p0 58.57 ± 1.85
pull
Entries 85
Mean −262.7
Std Dev 310.9

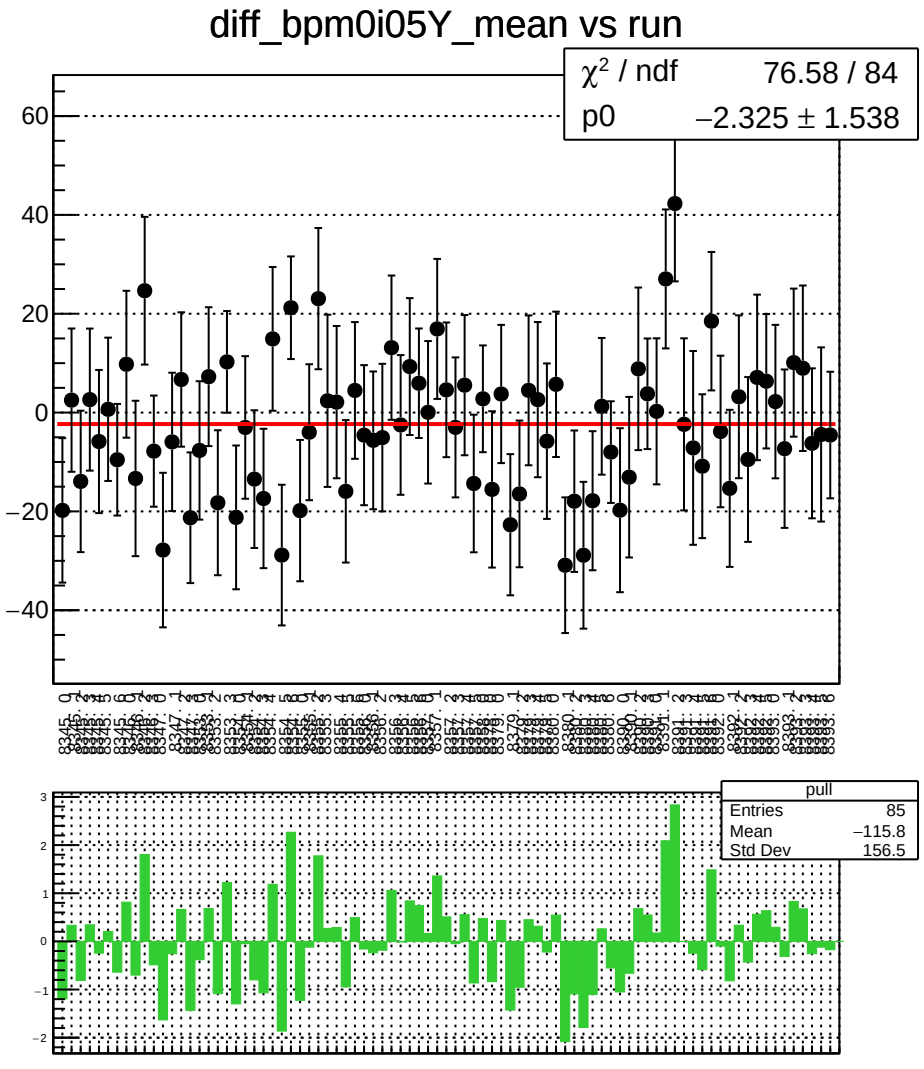

pull1D
Entries 85
Mean 0.07159
Std Dev 1.758

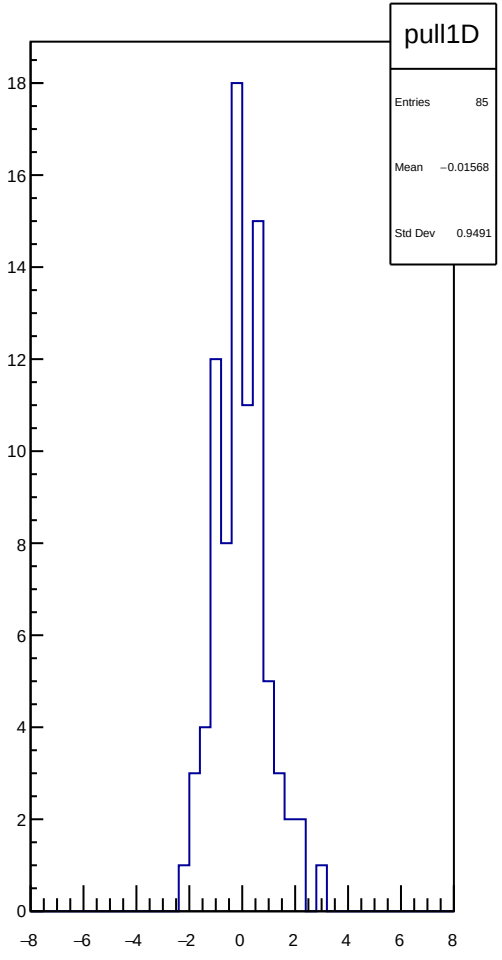

diff_bpm0i02aY_rms vs run
χ² / ndf 1.166e+04 / 84
p0 1686 ± 1.308
1800
1700
1600
1500
1400

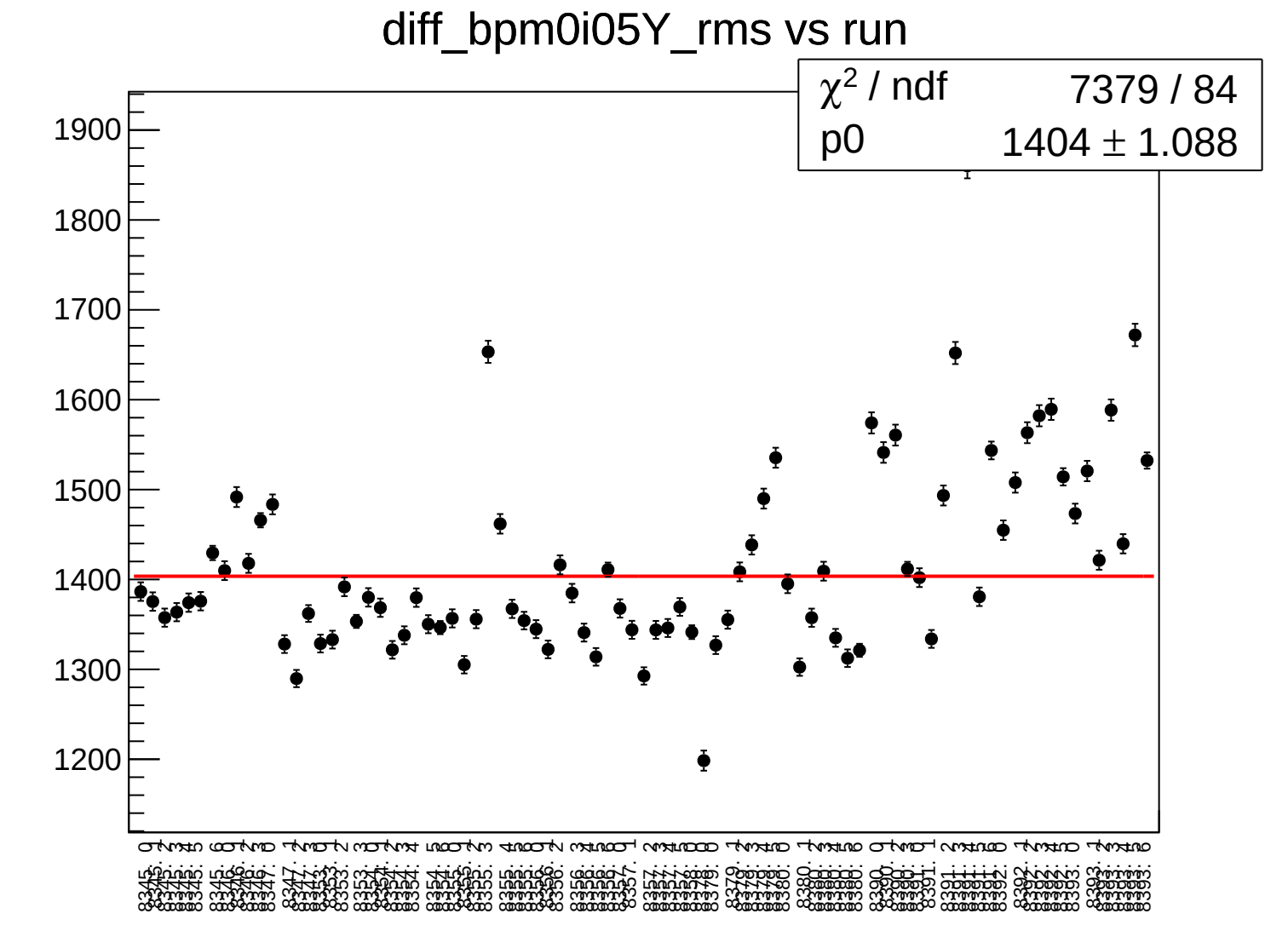

diff_bpm0i05X_mean vs run
χ² / ndf 447.7 / 84
p0 −21.23 ± 1.867
pull
Entries 85
Mean −644.7
Std Dev 690.1

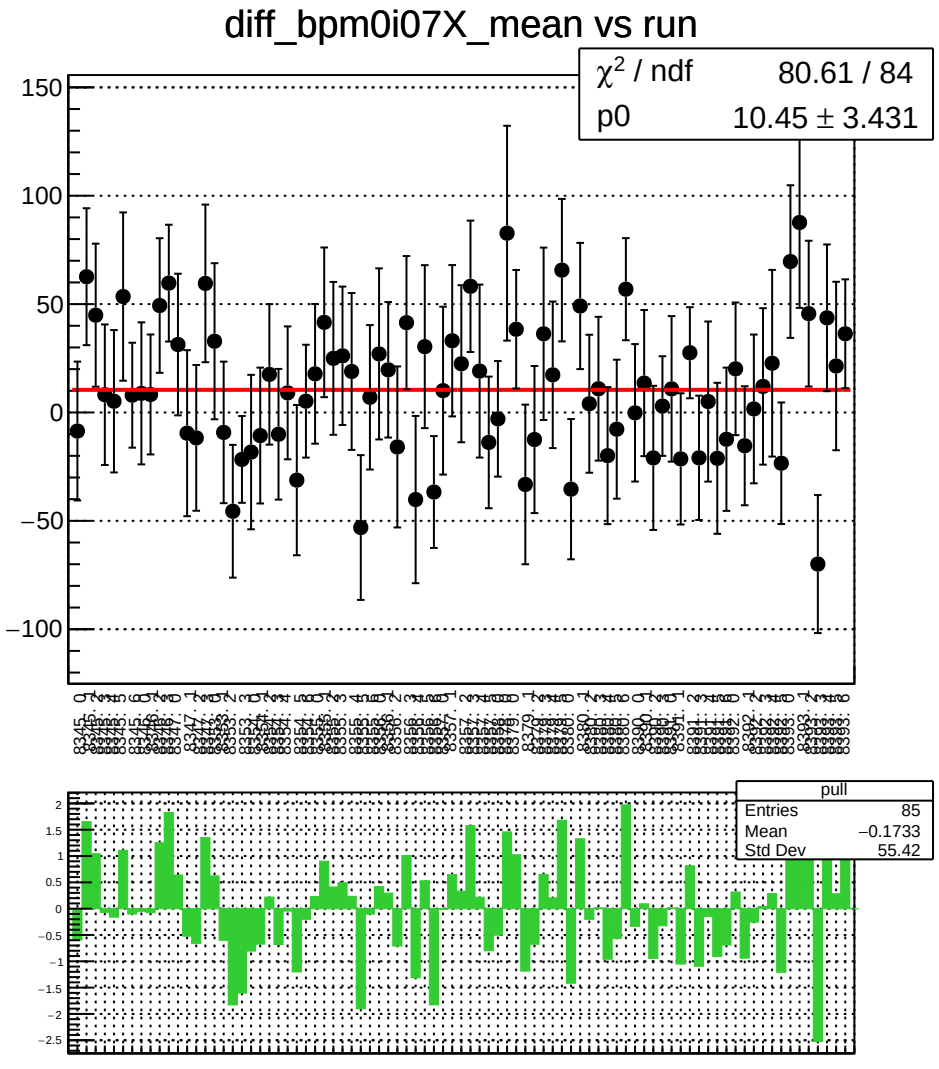

pull1D
Entries 85
Mean −0.04901
Std Dev 2.294

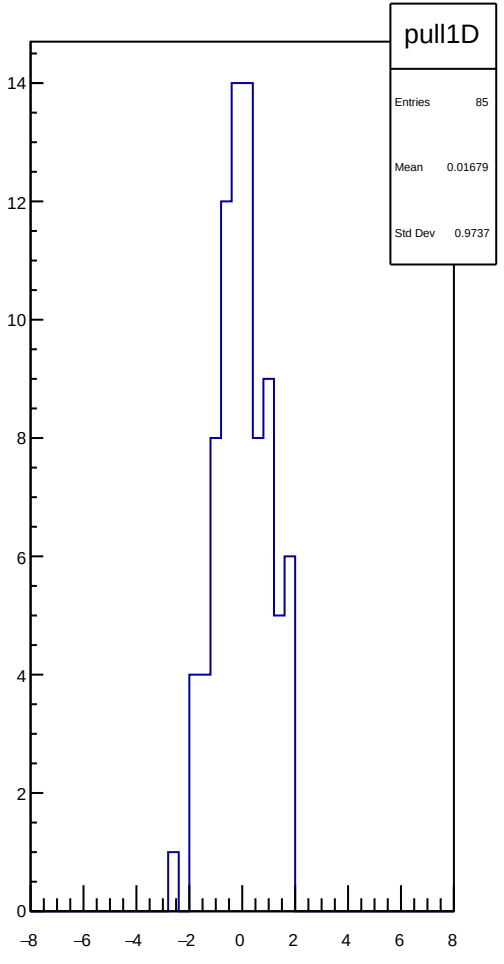

diff_bpm0i05X_rms vs run
χ² / ndf 3860 / 84
p0 1705 ± 1.32
1850
1800
1750
1700
1650
1600
1550
1500
1450

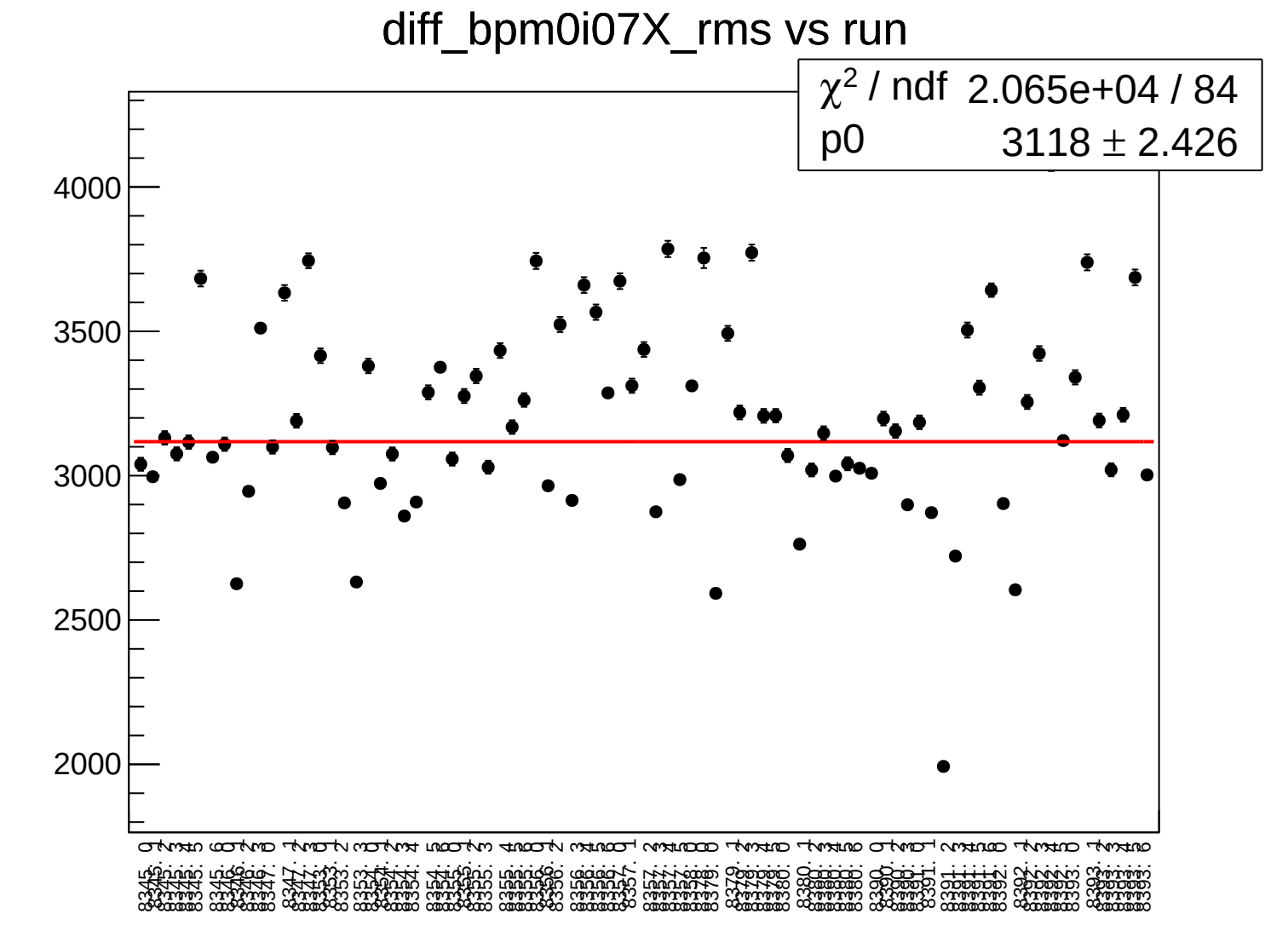

diff_bpm0i05Y_mean vs run
χ² / ndf 76.58 / 84
p0 −2.325 ± 1.538
pull
Entries 85
Mean −115.8
Std Dev 156.5

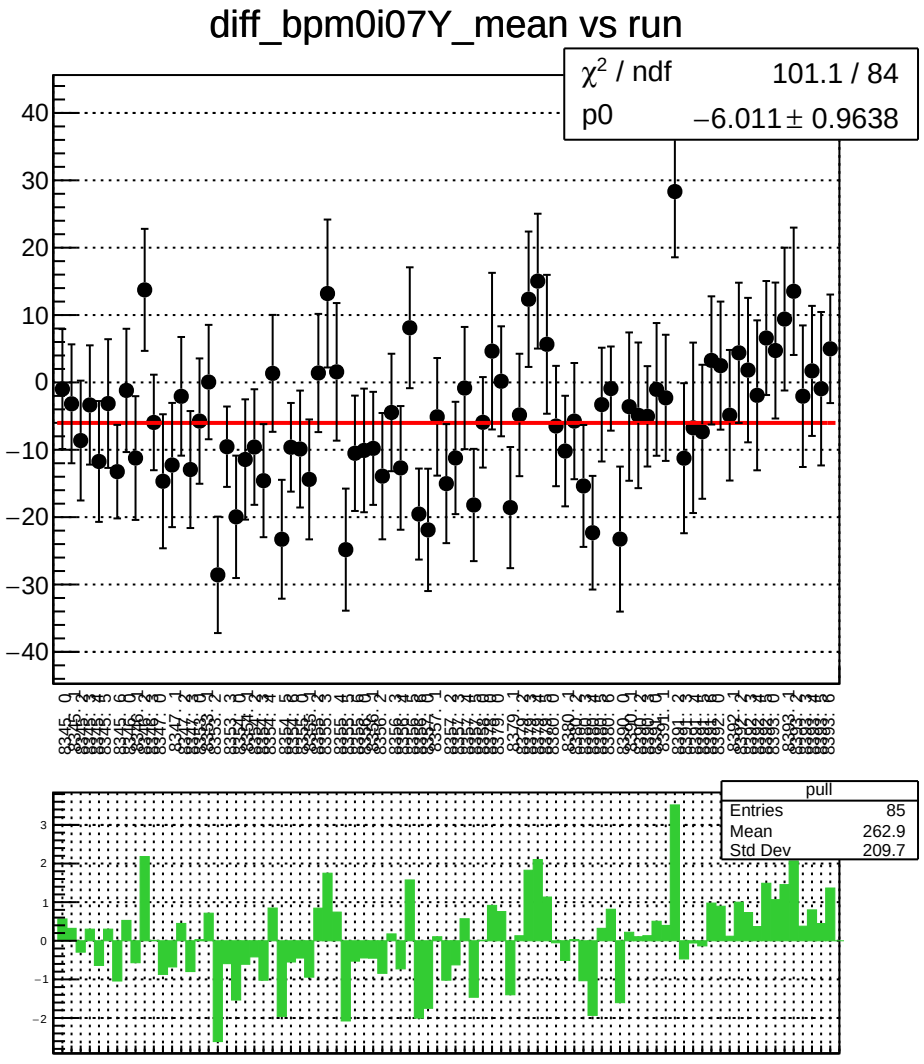

pull1D
Entries 85
Mean −0.01568
Std Dev 0.9491

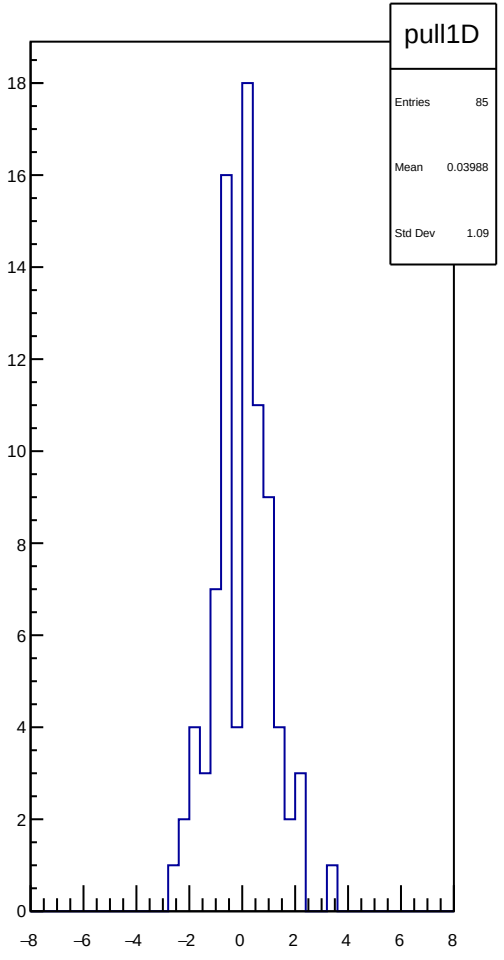

diff_bpm0i05Y_rms vs run
χ² / ndf 7379 / 84
p0 1404 ± 1.088
1900
1800
1700
1600
1500
1400
1300
1200

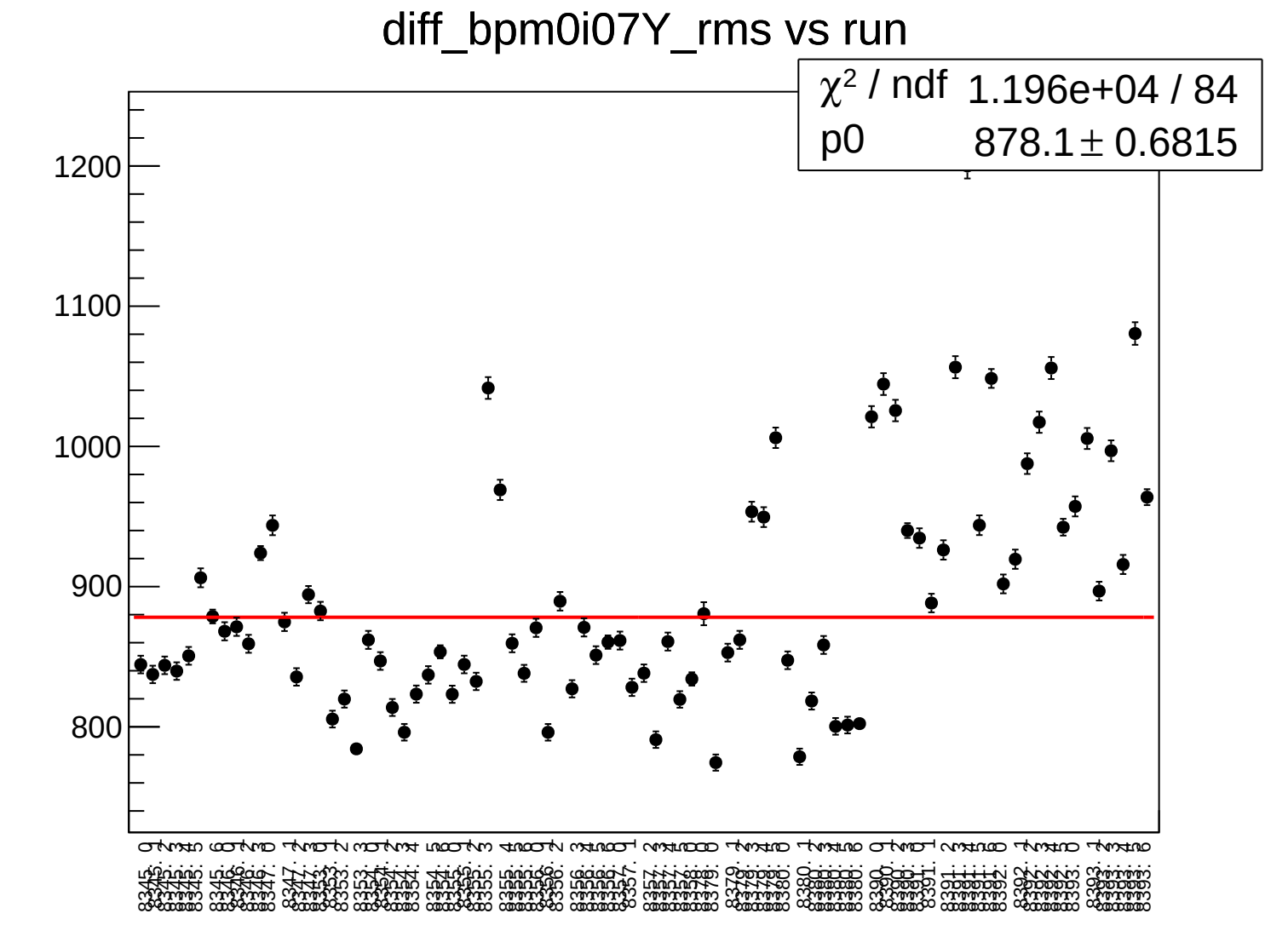

diff_bpm0i07X_mean vs run
χ² / ndf 80.61 / 84
p0 10.45 ± 3.431
150
100
50
0
−50
−100
pull
Entries 85
Mean −0.1733
Std Dev 55.42
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

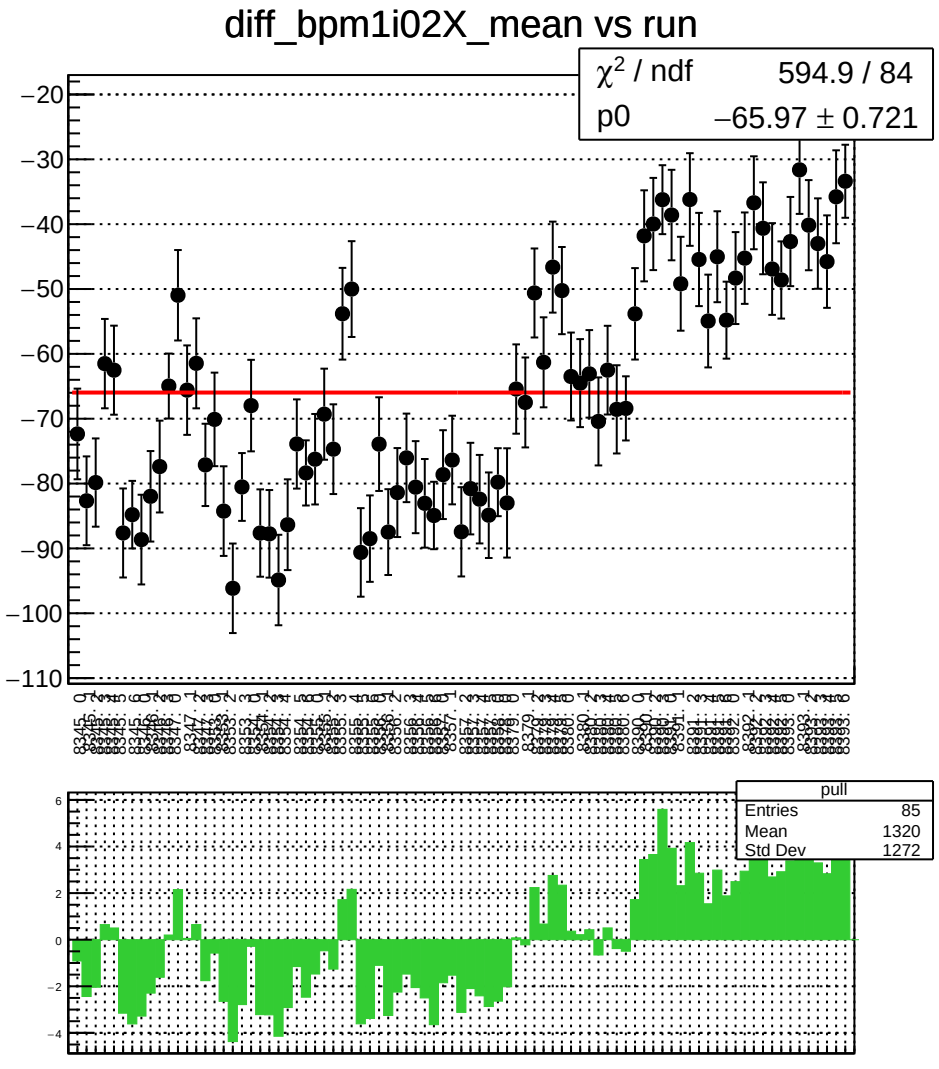

pull1D
Entries 85
Mean 0.01679
Std Dev 0.9737
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

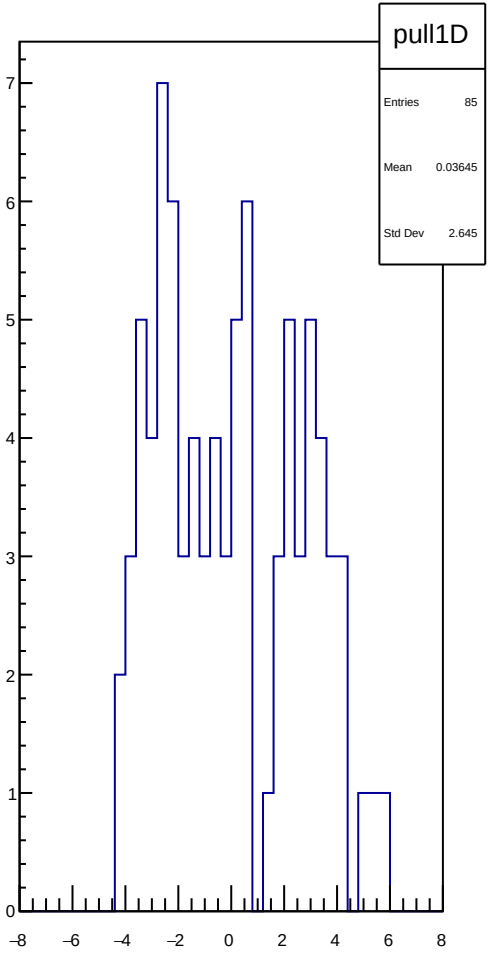

diff_bpm0i07X_rms vs run
χ² / ndf 2.065e+04 / 84
p0 3118 ± 2.426
4000
3500
3000
2500
2000

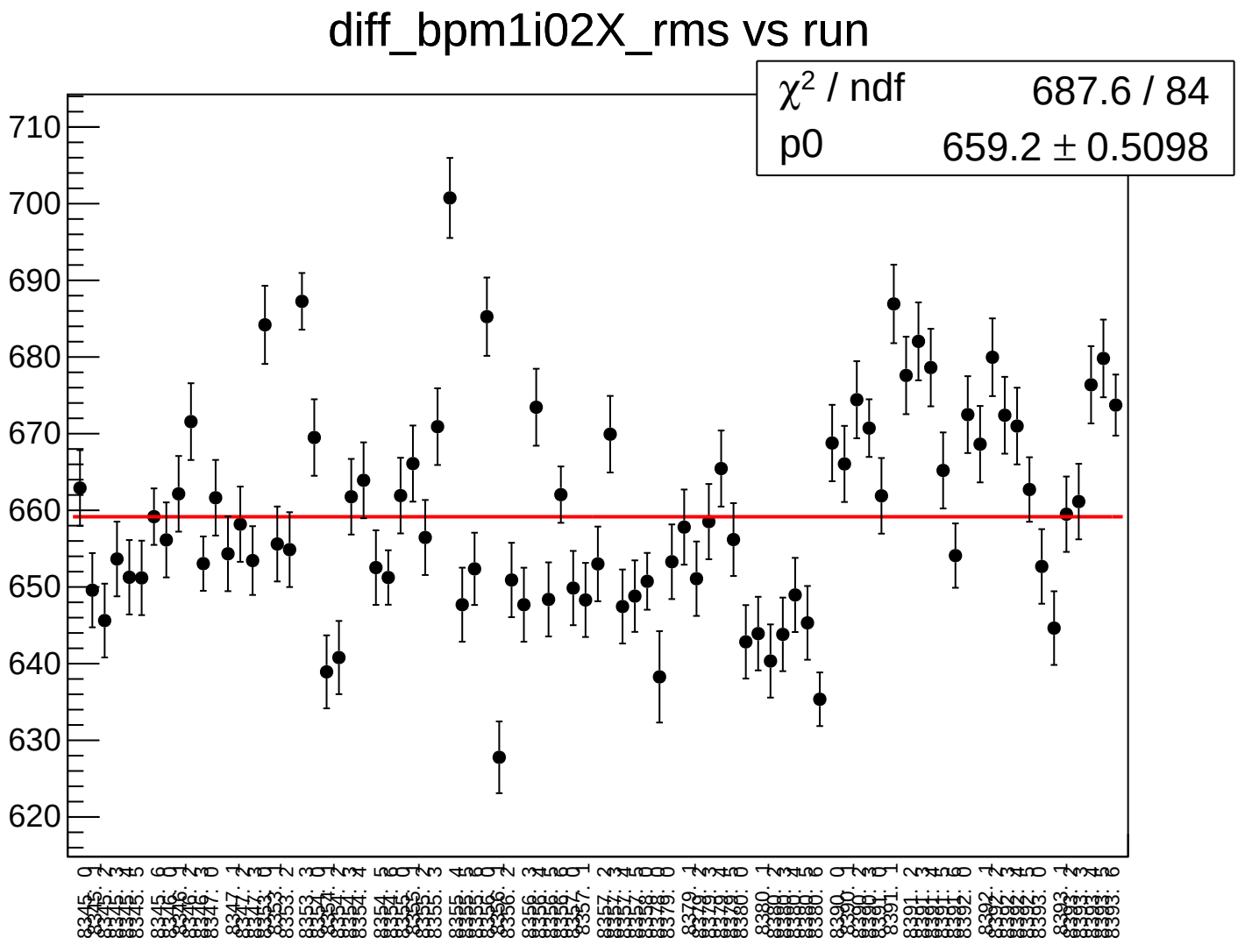

diff_bpm0i07Y_mean vs run
χ² / ndf 101.1 / 84
p0 −6.011 ± 0.9638
pull
Entries 85
Mean 262.9
Std Dev 209.7

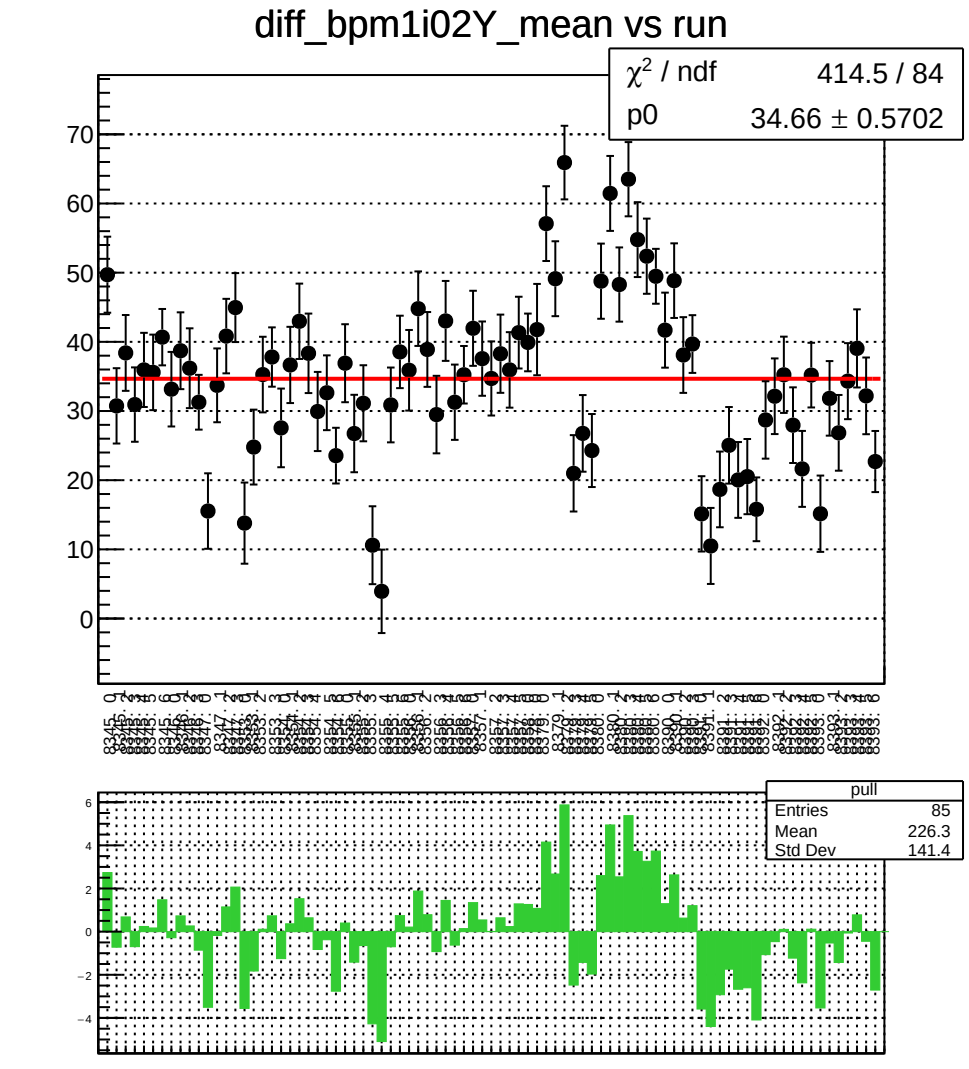

pull1D
Entries 85
Mean 0.03988
Std Dev 1.09

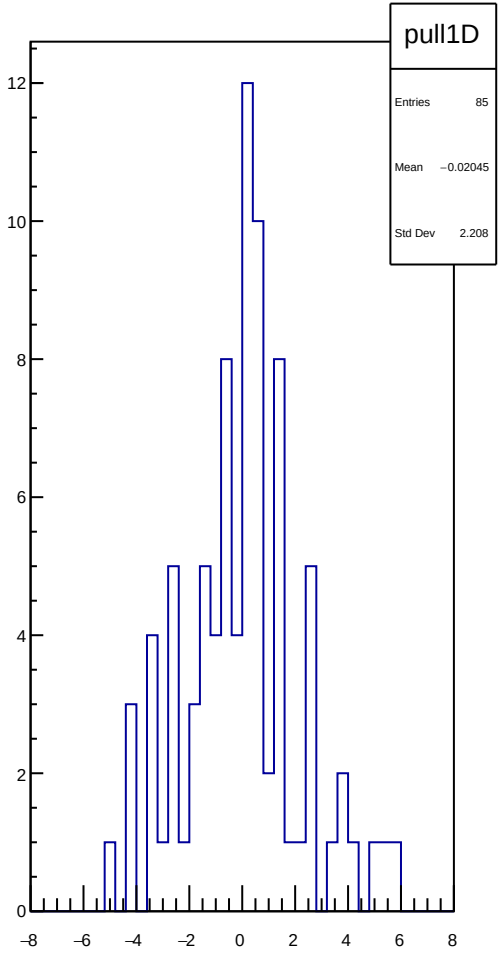

diff_bpm0i07Y_rms vs run
χ² / ndf 1.196e+04 / 84
p0 878.1 ± 0.6815
1200
1100
1000
900
800

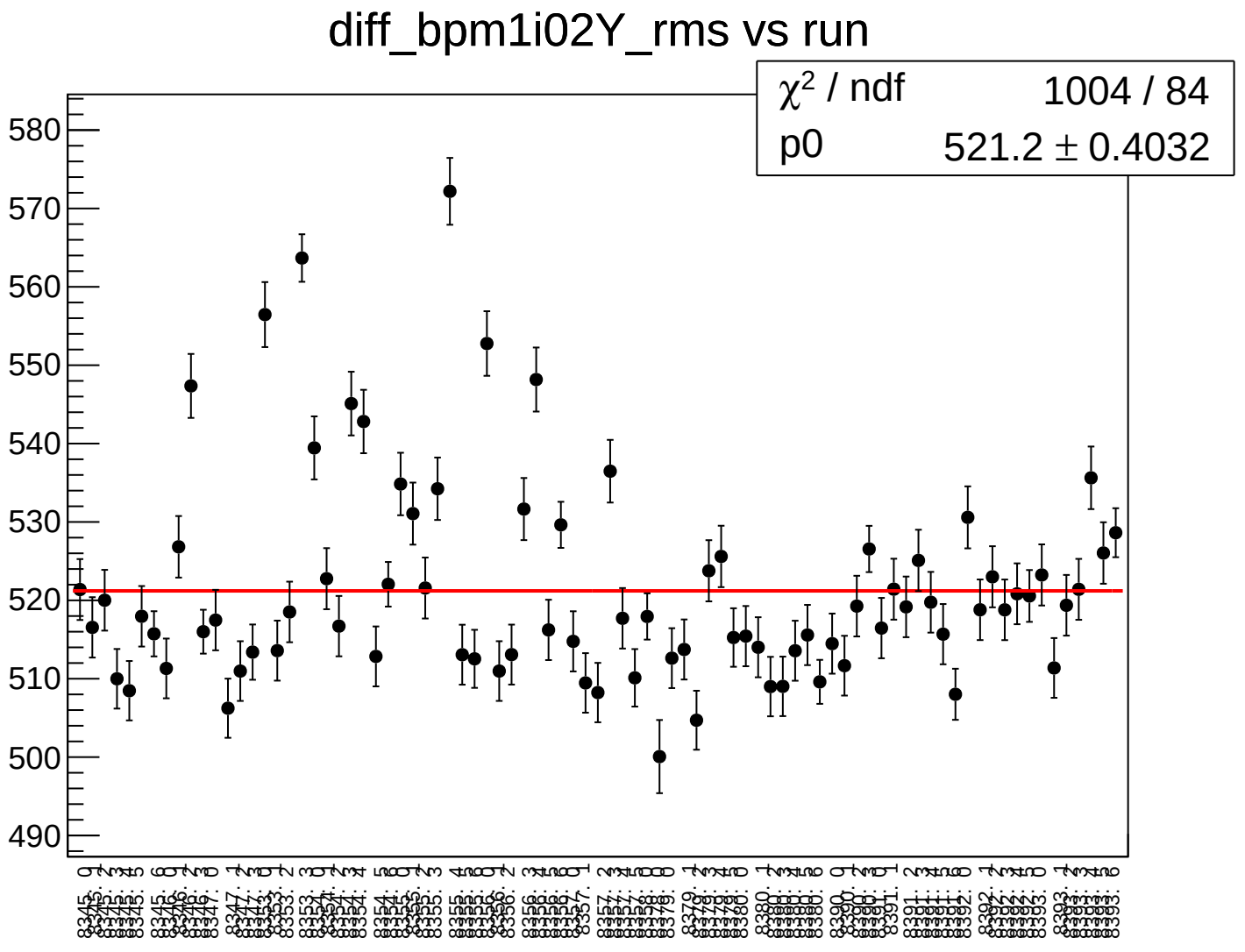

diff_bpm1i02X_mean vs run
χ² / ndf 594.9 / 84
p0 −65.97 ± 0.721
pull
Entries 85
Mean 1320
Std Dev 1272

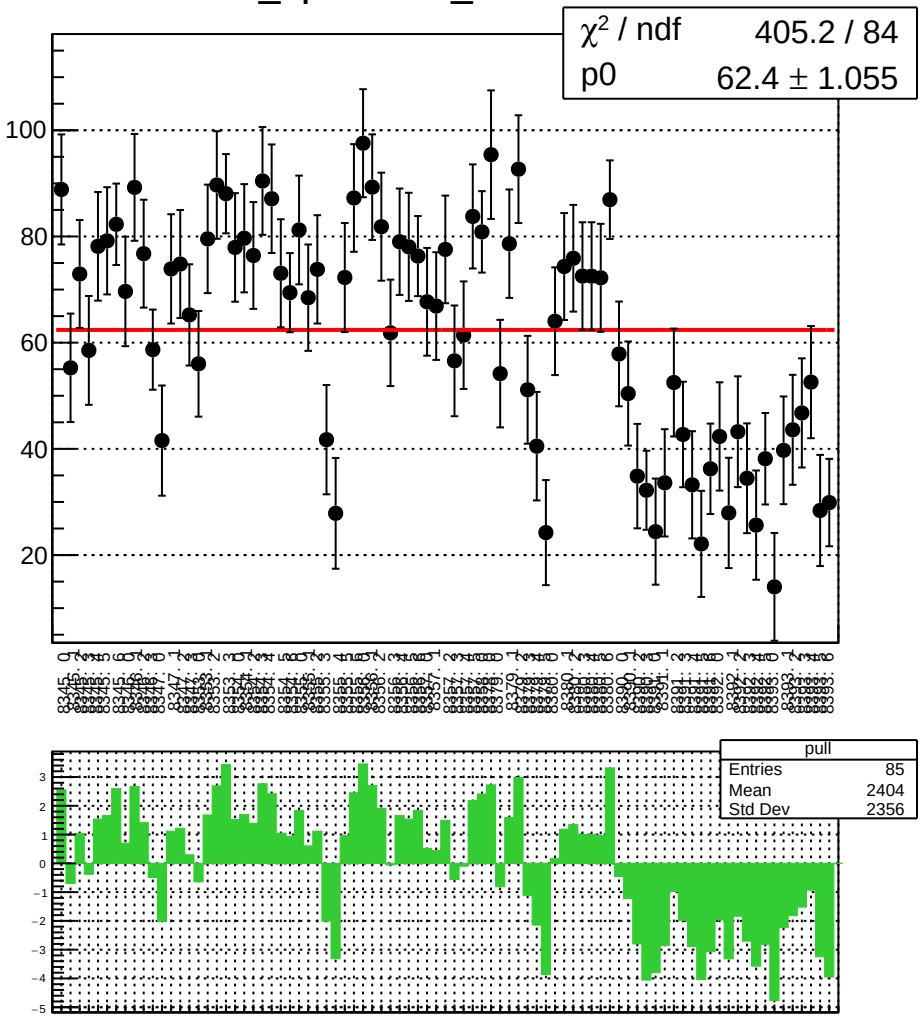

pull1D
Entries 85
Mean 0.03645
Std Dev 2.645

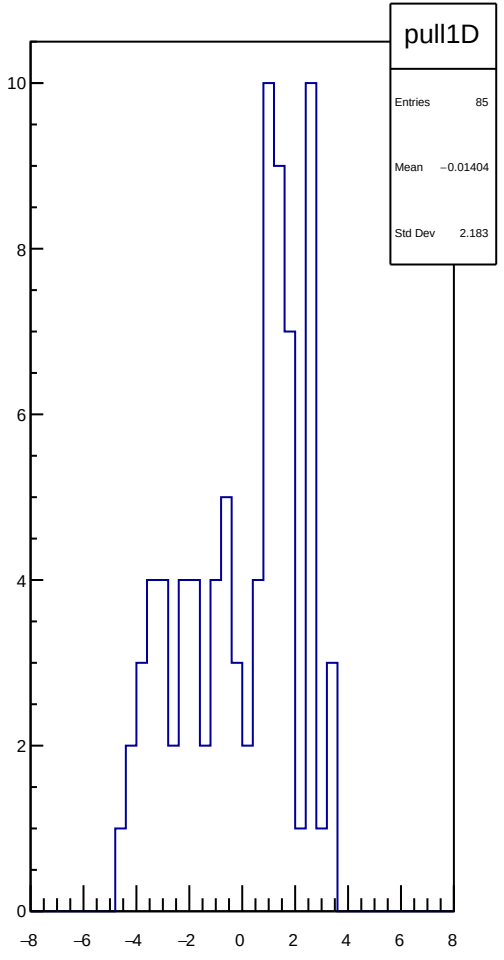

diff_bpm1i02X_rms vs run
χ² / ndf 687.6 / 84
p0 659.2 ± 0.5098
710
700
690
680
670
660
650
640
630
620

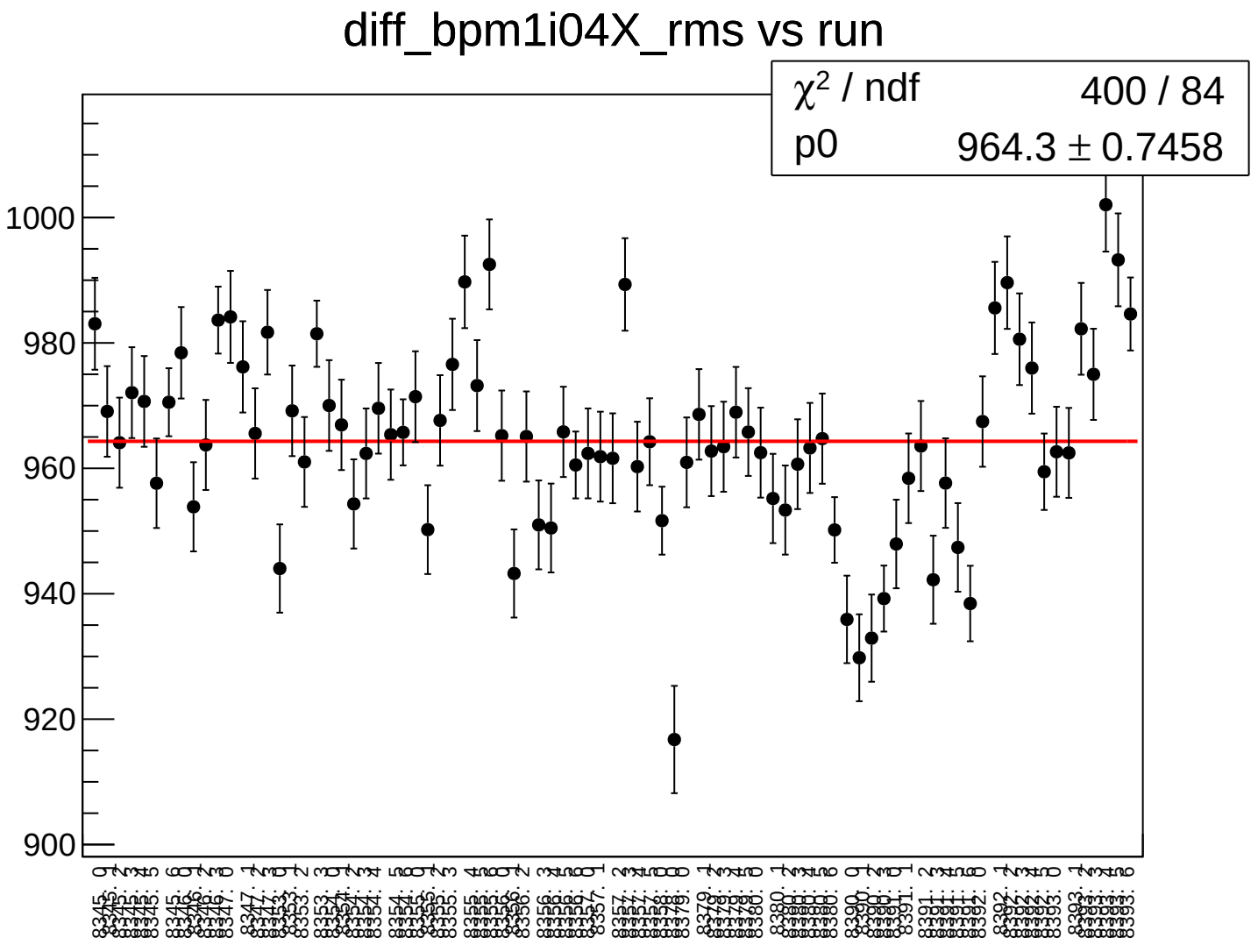

diff_bpm1i02Y_mean vs run
χ² / ndf 414.5 / 84
p0 34.66 ± 0.5702
pull
Entries 85
Mean 226.3
Std Dev 141.4

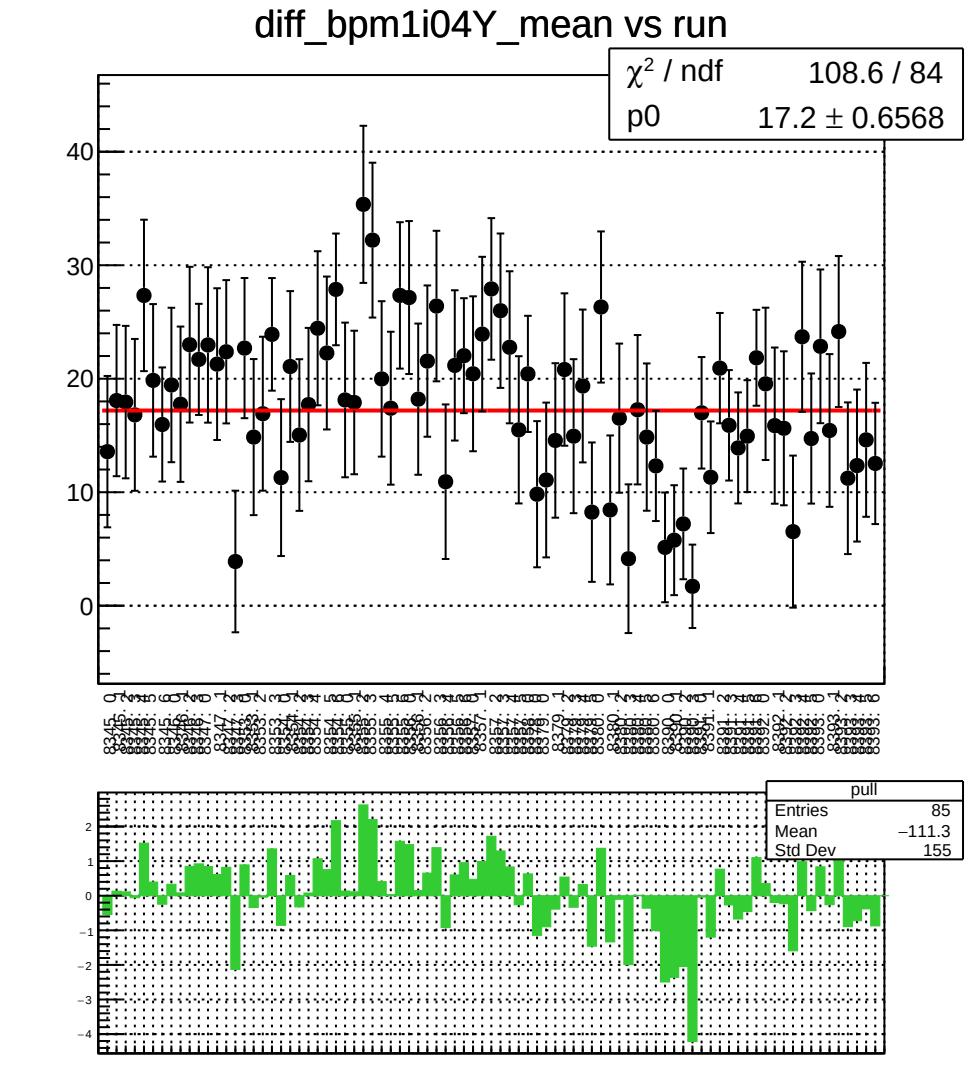

pull1D
Entries 85
Mean −0.02045
Std Dev 2.208

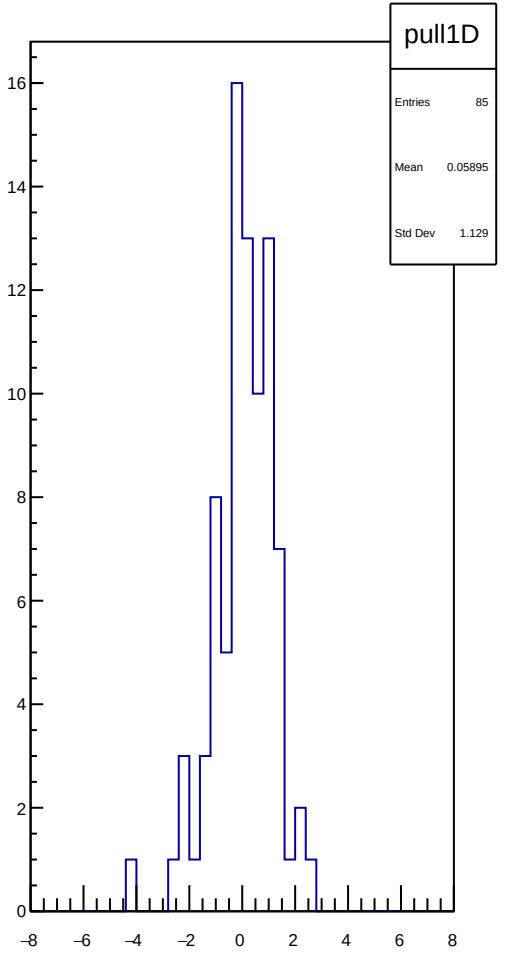

diff_bpm1i02Y_rms vs run
χ² / ndf 1004 / 84
p0 521.2 ± 0.4032
580
570
560
550
540
530
520
510
500
490

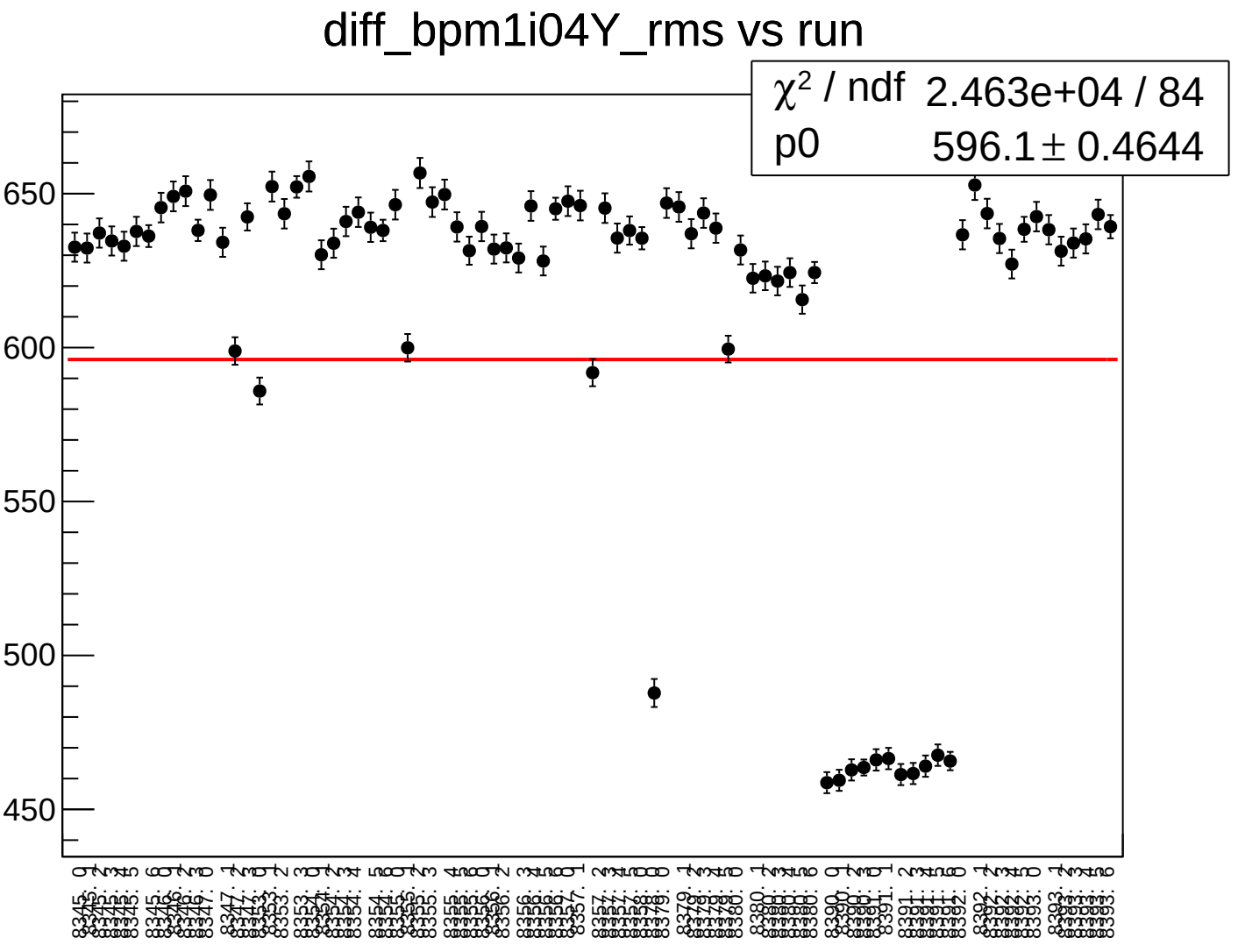

diff_bpm1i04X_mean vs run
χ^2 / ndf 405.2 / 84
p0 62.4 ± 1.055
pull
Entries 85
Mean 2404
Std Dev 2356

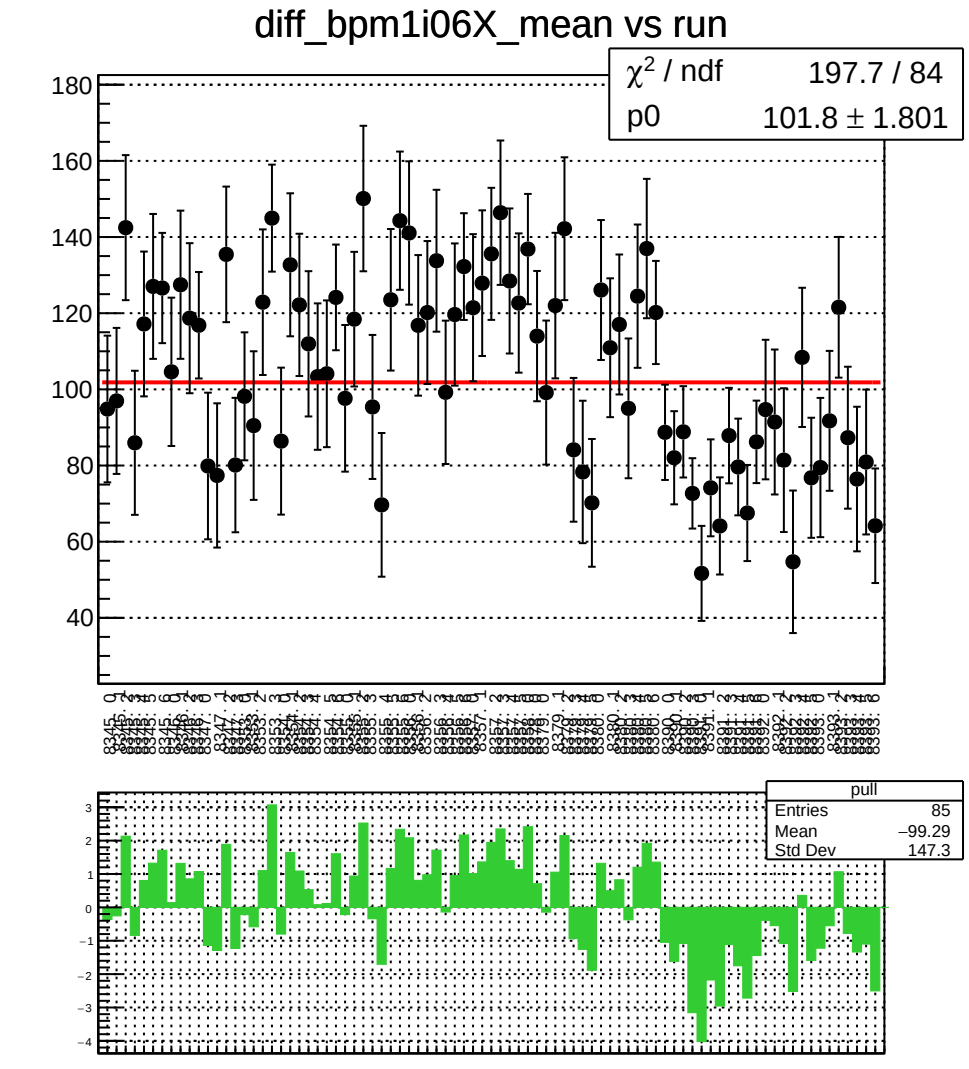

pull1D
Entries 85
Mean −0.01404
Std Dev 2.183

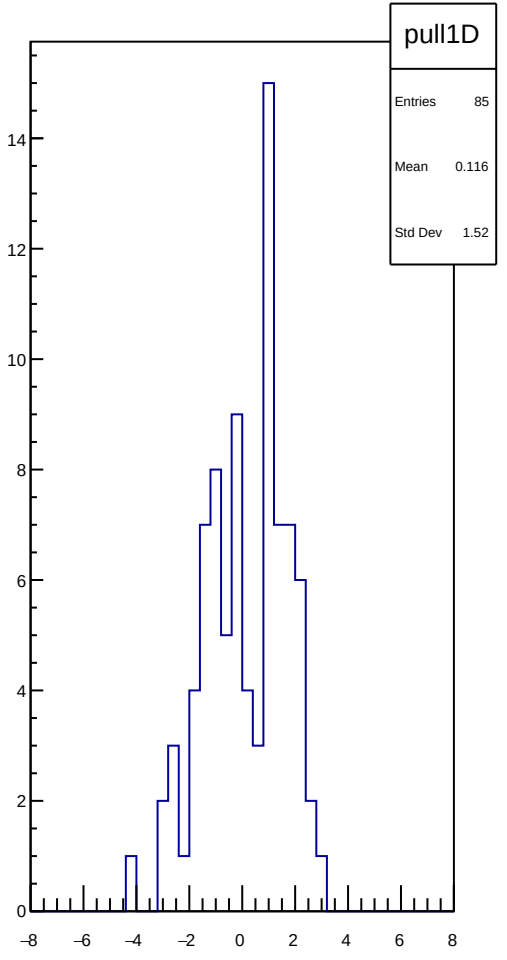

diff_bpm1i04X_rms vs run
χ² / ndf 400 / 84
p0 964.3 ± 0.7458
1000
980
960
940
920
900

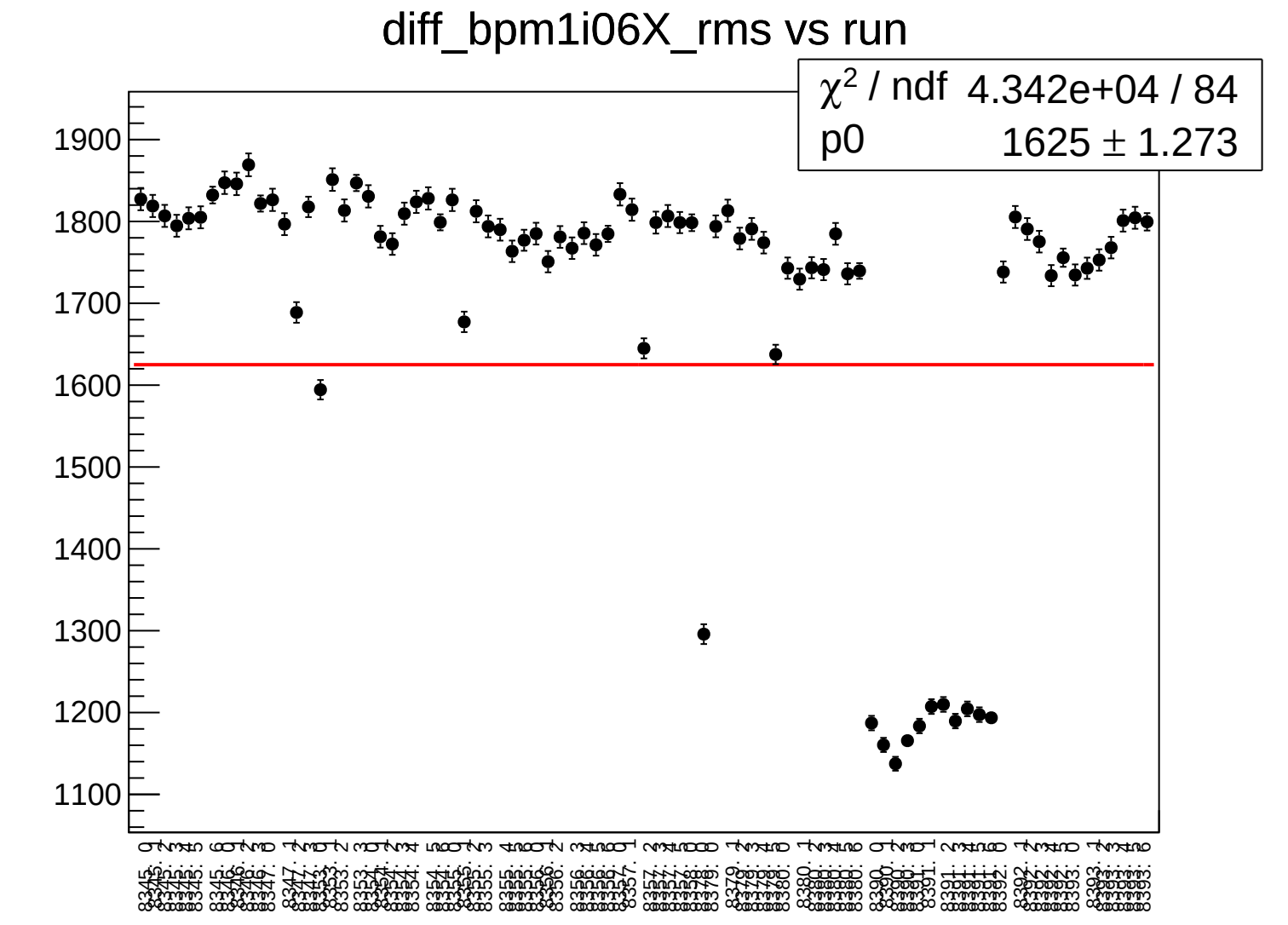

diff_bpm1i04Y_mean vs run
χ² / ndf 108.6 / 84
p0 17.2 ± 0.6568
pull
Entries 85
Mean −111.3
Std Dev 155

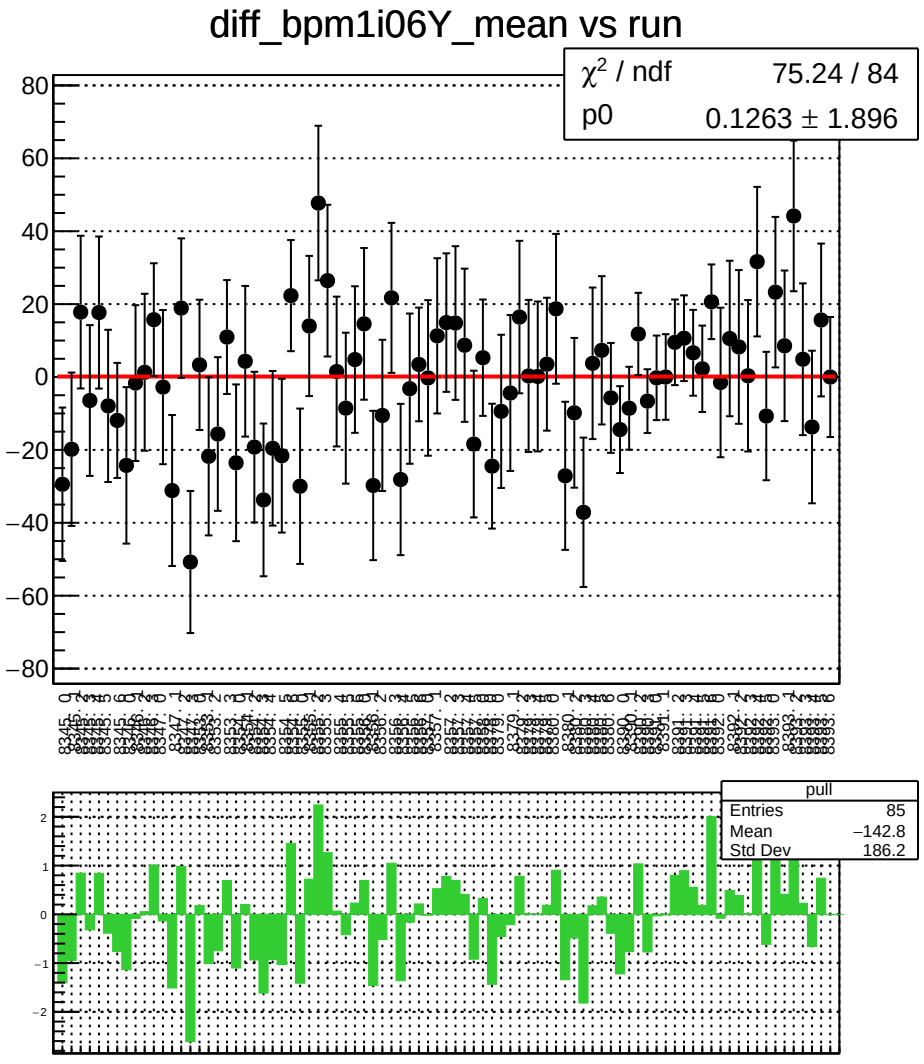

pull1D
Entries 85
Mean 0.05895
Std Dev 1.129

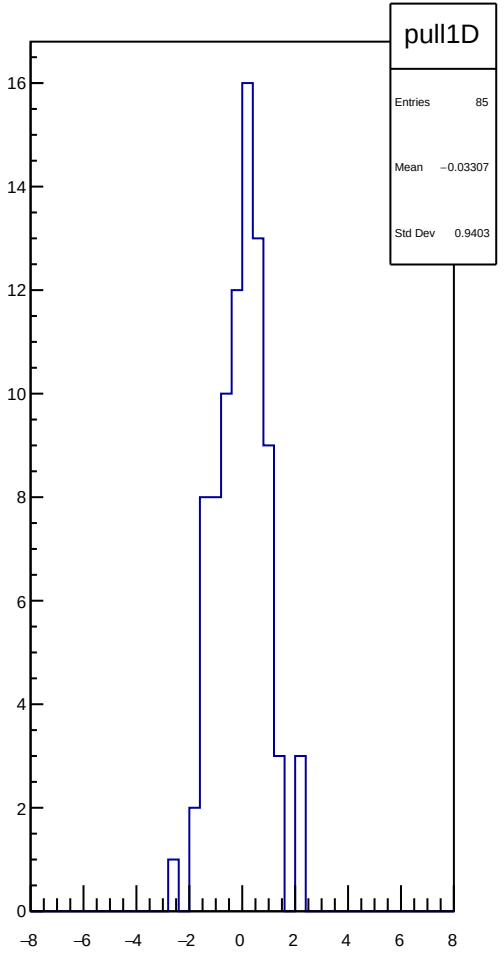

diff_bpm1i04Y_rms vs run
χ² / ndf 2.463e+04 / 84
p0 596.1 ± 0.4644
650
600
550
500
450

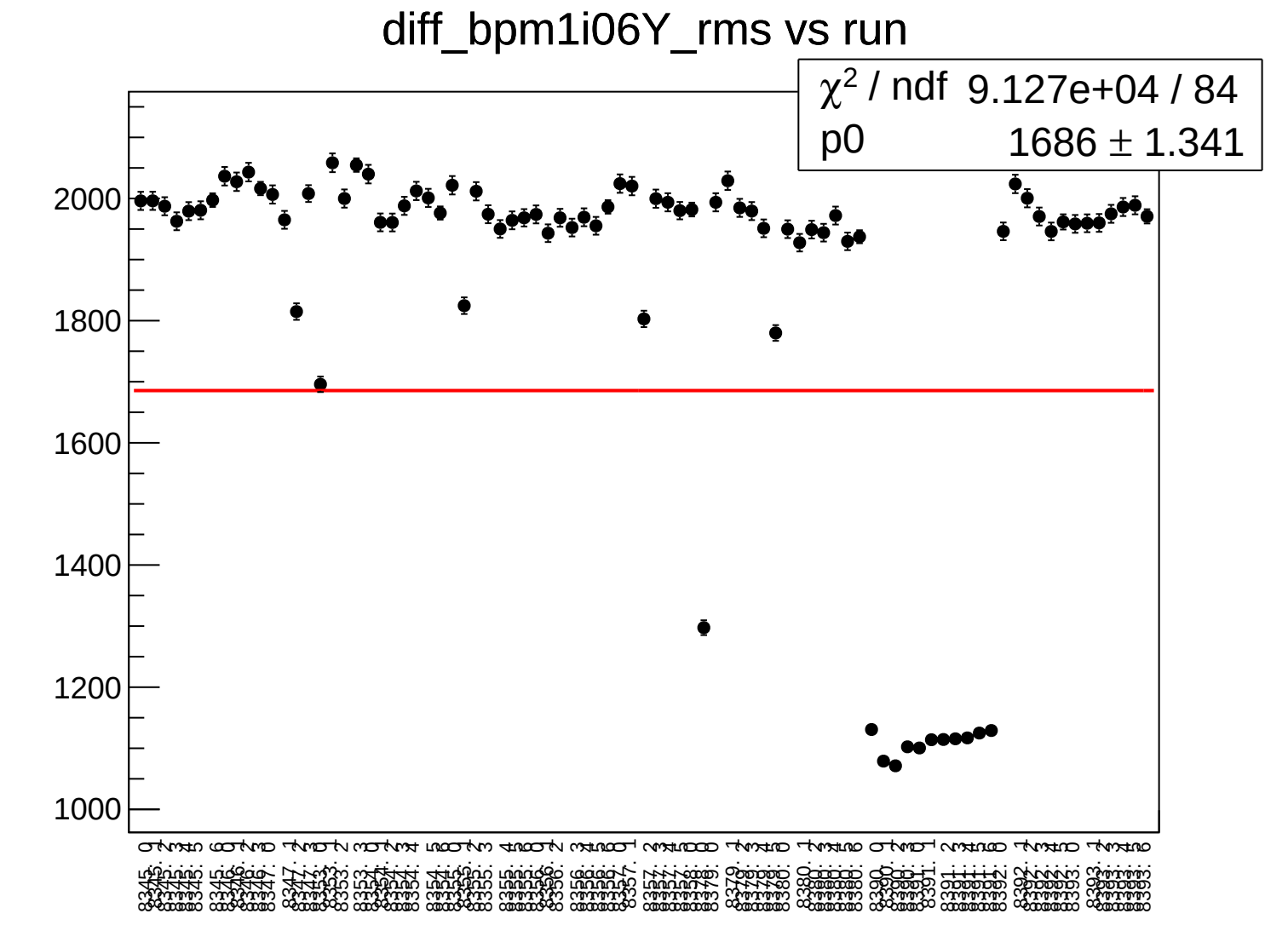

diff_bpm1i06X_mean vs run
χ^2 / ndf 197.7 / 84
p0 101.8 ± 1.801
pull
Entries 85
Mean −99.29
Std Dev 147.3

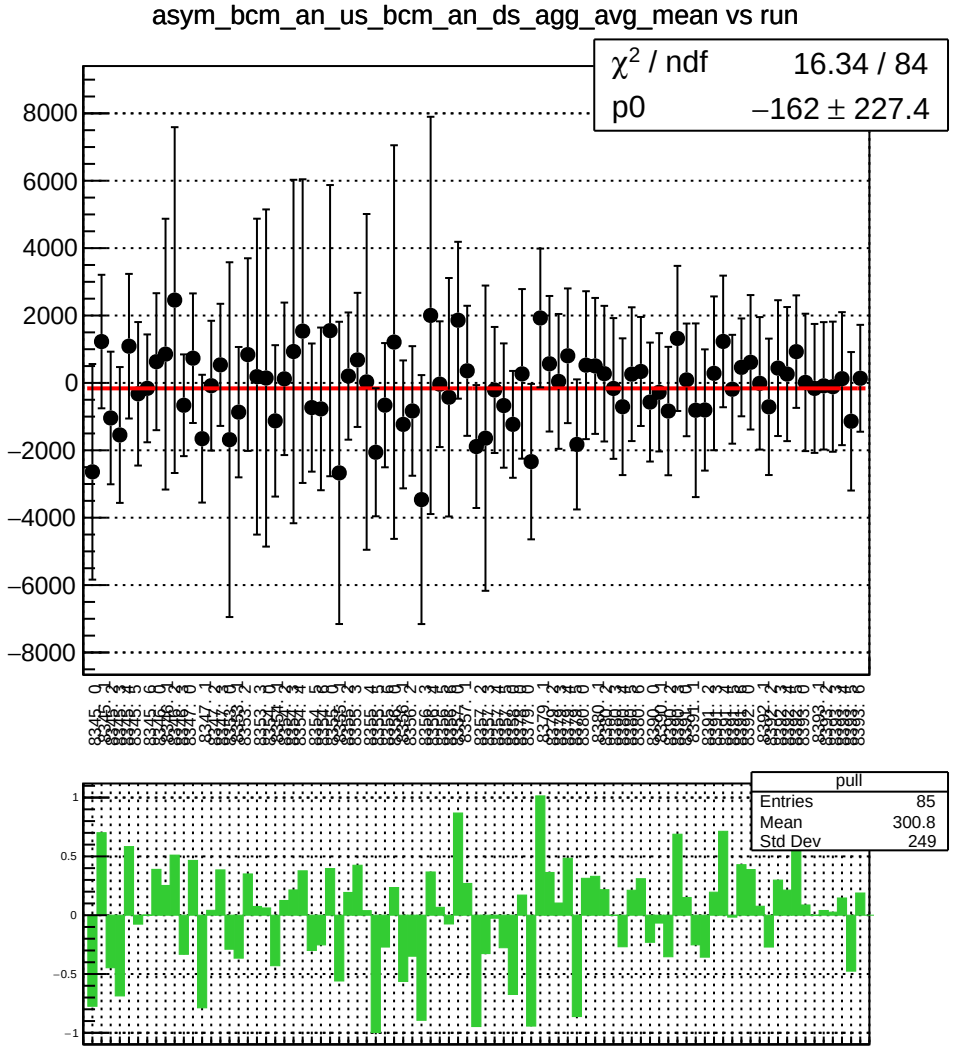

pull1D
Entries 85
Mean 0.116
Std Dev 1.52

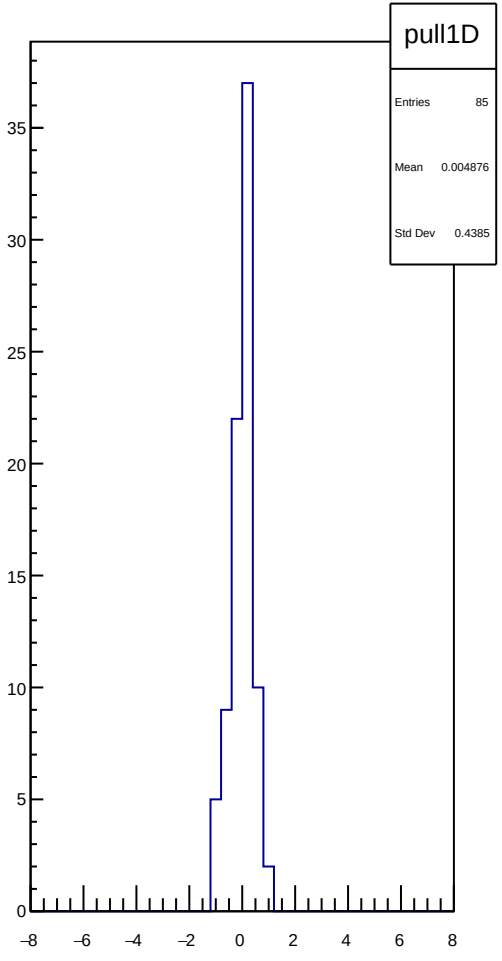

diff_bpm1i06X_rms vs run
χ² / ndf 4.342e+04 / 84
p0 1625 ± 1.273
1900
1800
1700
1600
1500
1400
1300
1200
1100

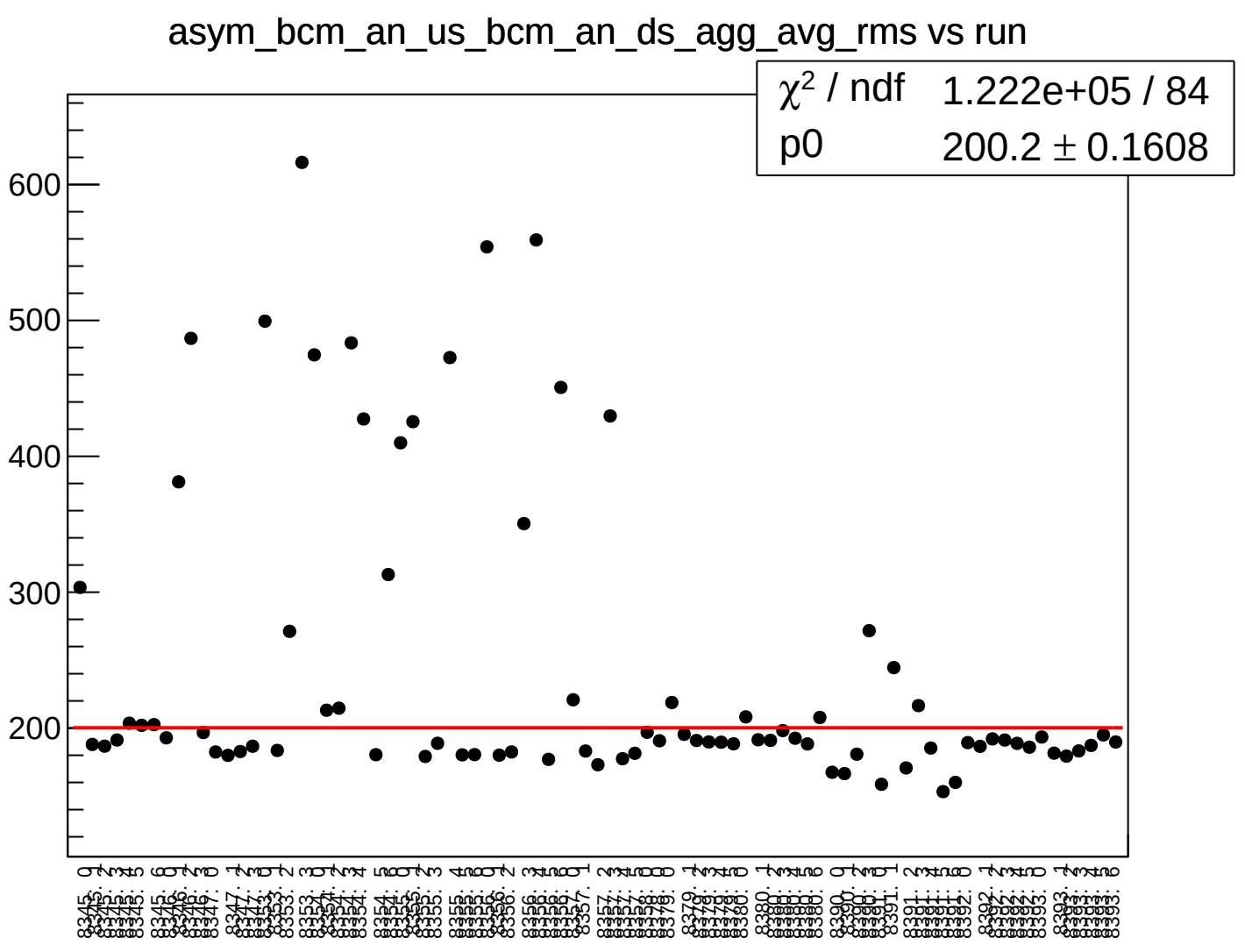

diff_bpm1i06Y_mean vs run
χ² / ndf 75.24 / 84
p0 0.1263 ± 1.896
pull
Entries 85
Mean −142.8
Std Dev 186.2

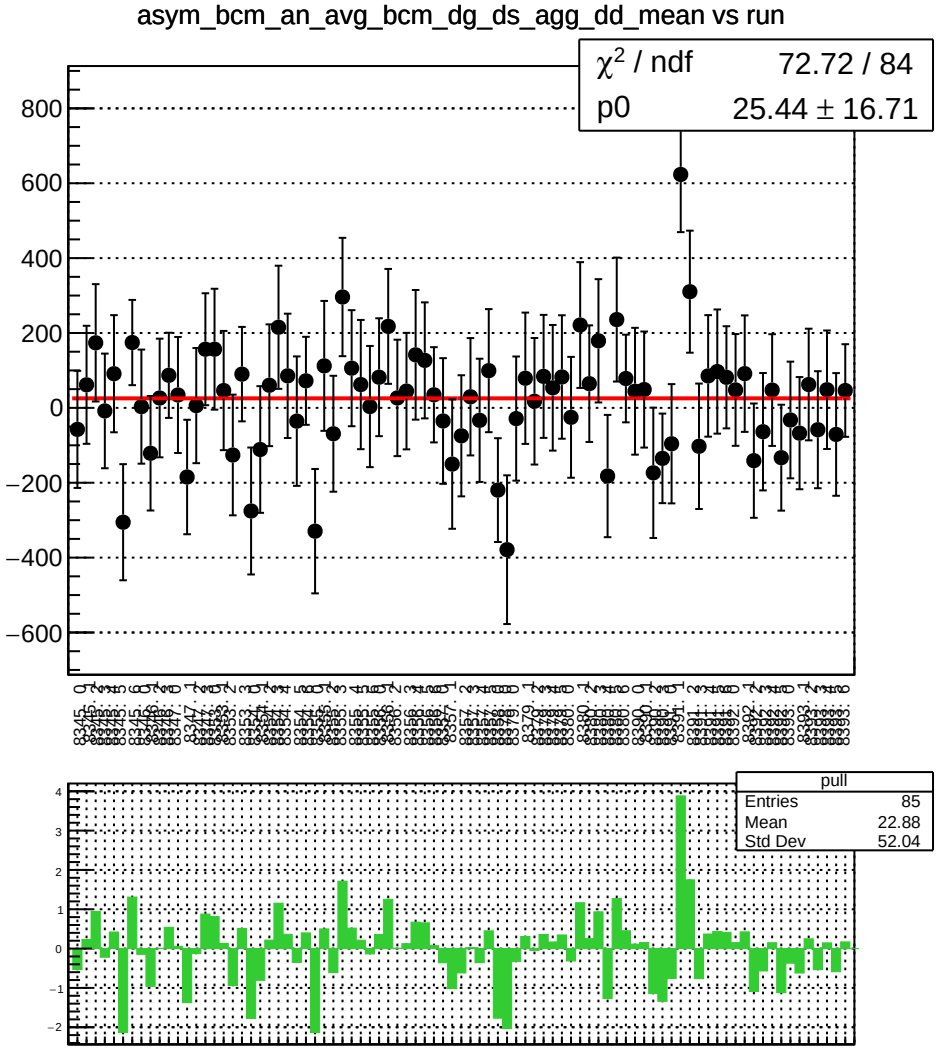

pull1D
Entries 85
Mean −0.03307
Std Dev 0.9403

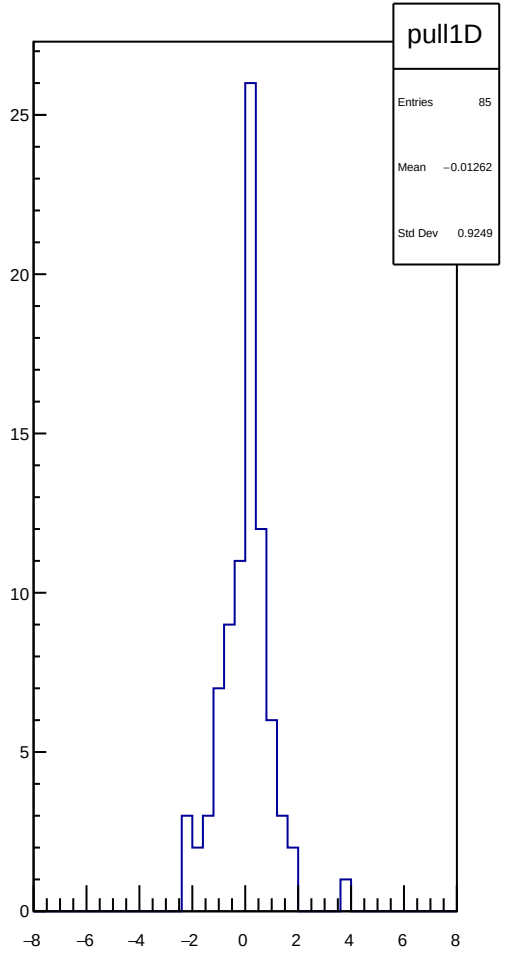

diff_bpm1i06Y_rms vs run
χ² / ndf 9.127e+04 / 84
p0 1686 ± 1.341
2000
1800
1600
1400
1200
1000

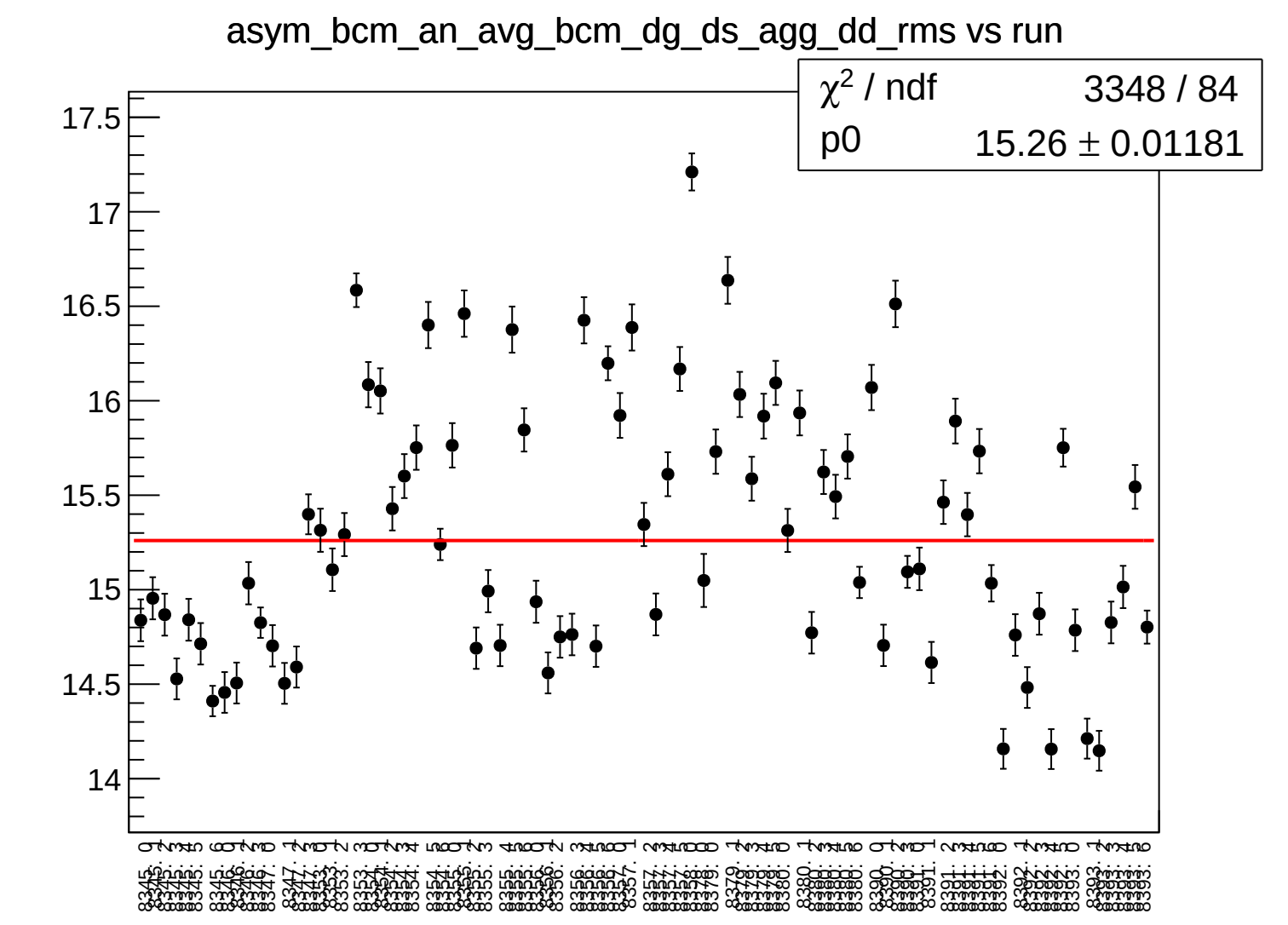

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.34 / 84
p0 −162 ± 227.4
pull
Entries 85
Mean 300.8
Std Dev 249

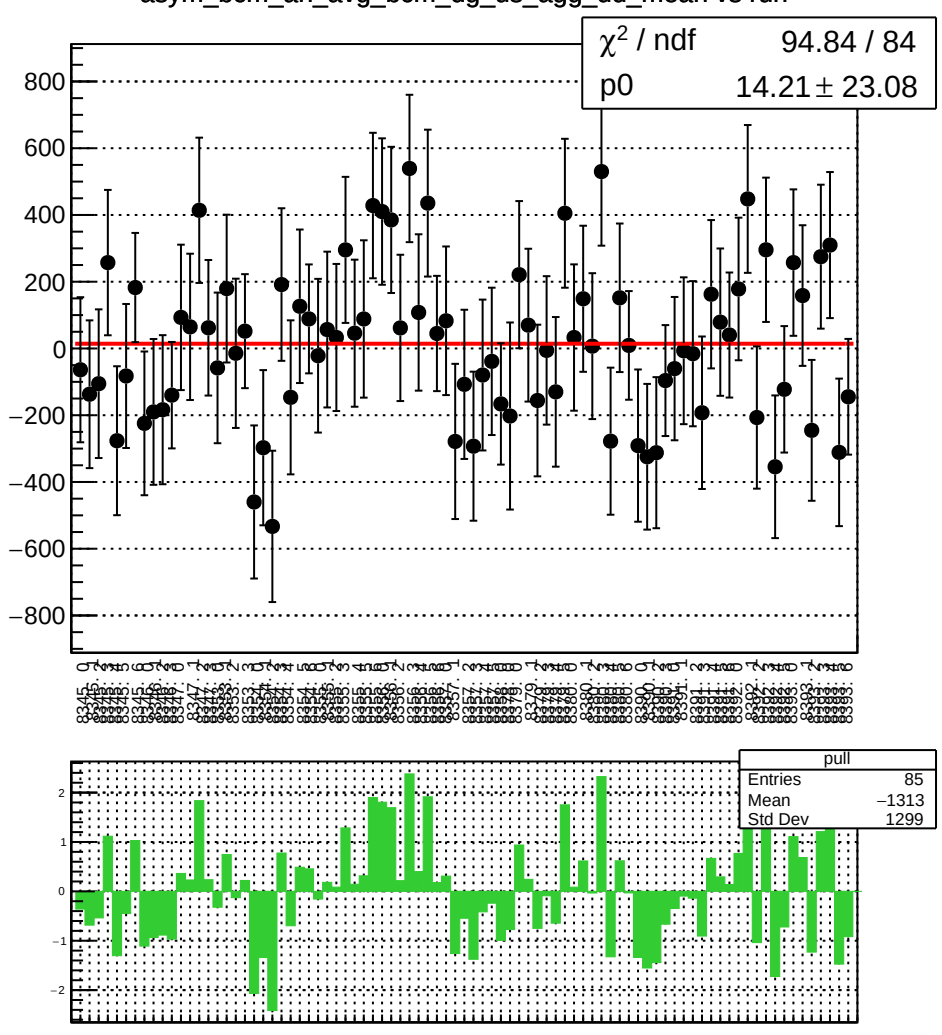

pull1D
Entries 85
Mean 0.004876
Std Dev 0.4385

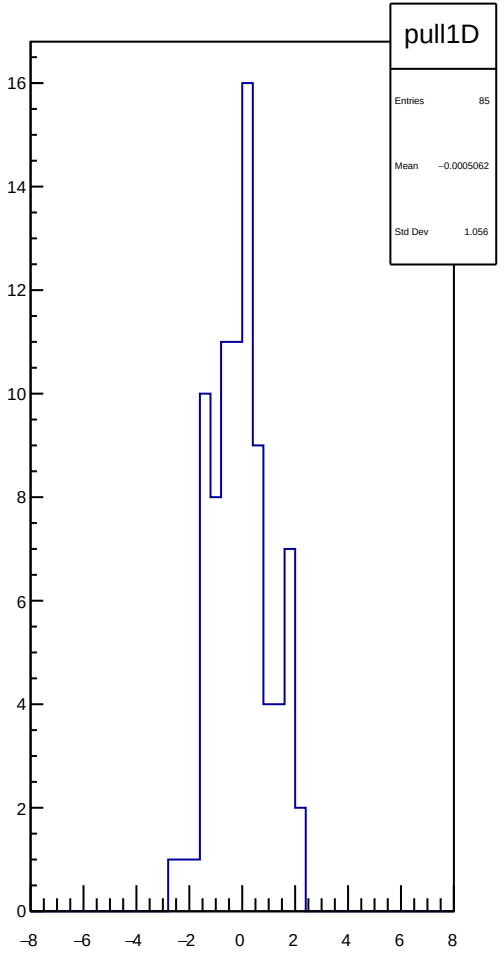

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.222e+05 / 84
p0 200.2 ± 0.1608
600
500
400
300
200

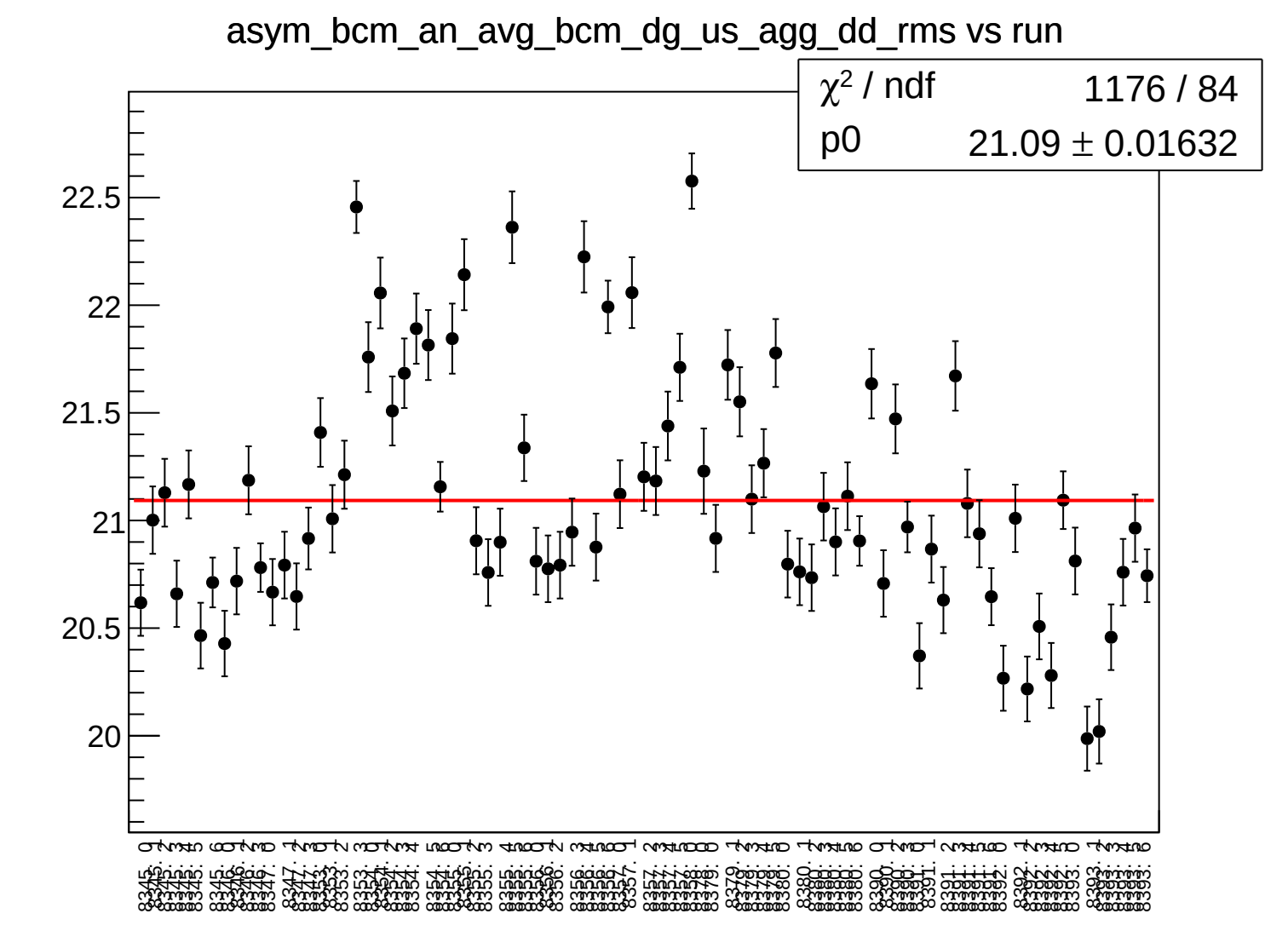

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 72.72 / 84
p0 25.44 ± 16.71
800
600
400
200
0
−200
−400
−600
pull
Entries 85
Mean 22.88
Std Dev 52.04
4
3
2
1
0
−1
−2

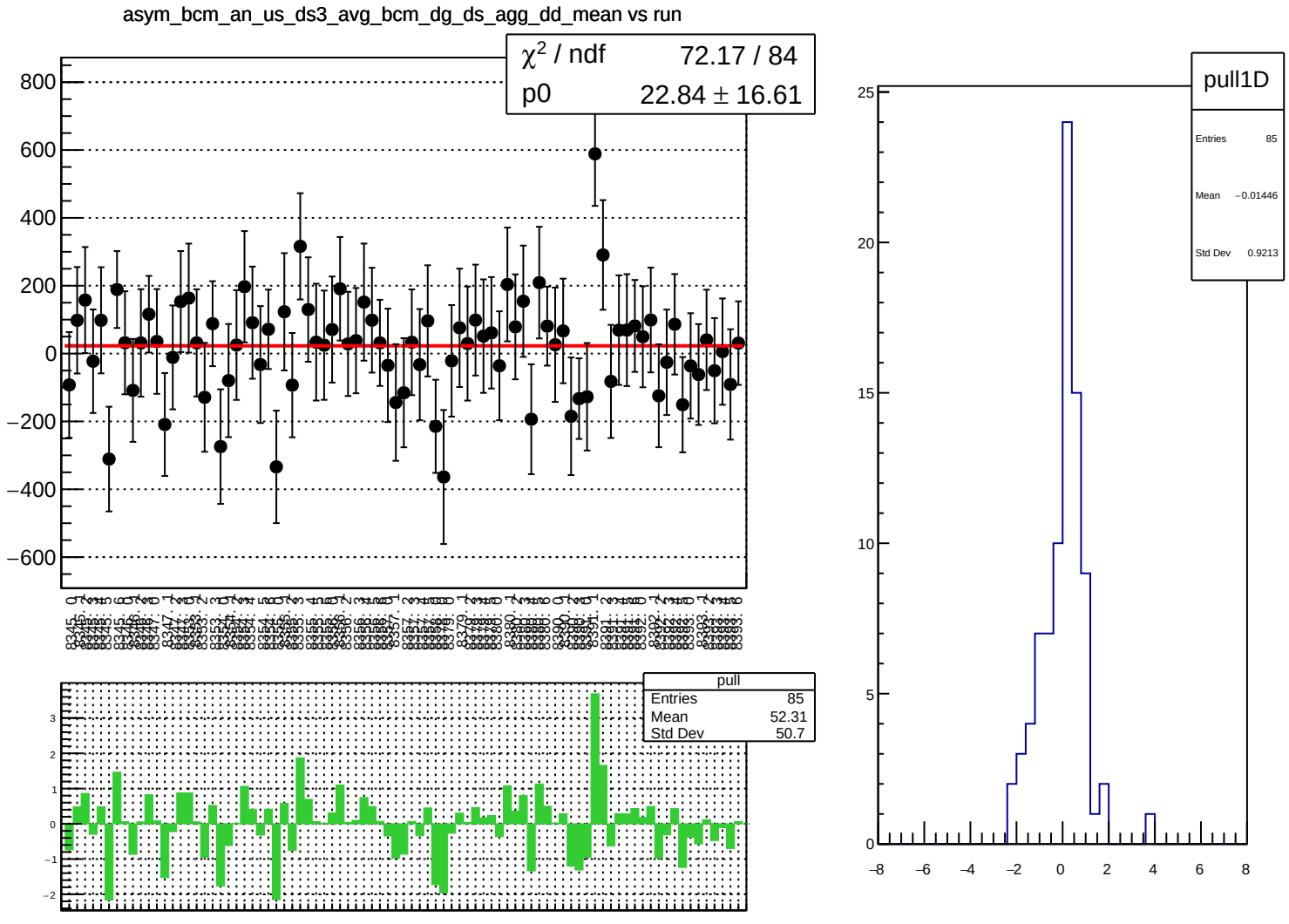

pull1D
Entries 85
Mean −0.01262
Std Dev 0.9249
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

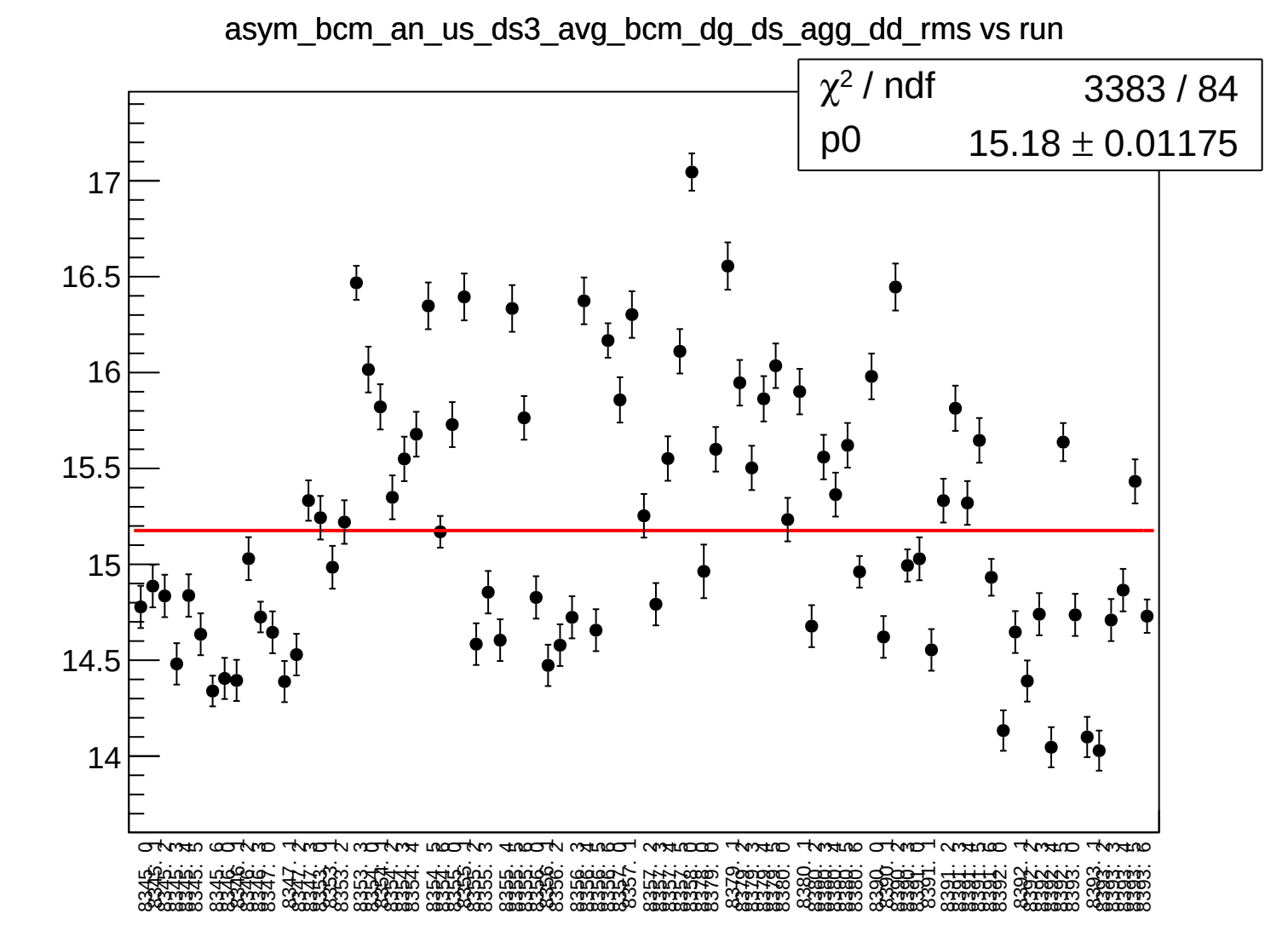

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3348 / 84
p0 15.26 ± 0.01181
17.5
17
16.5
16
15.5
15
14.5
14

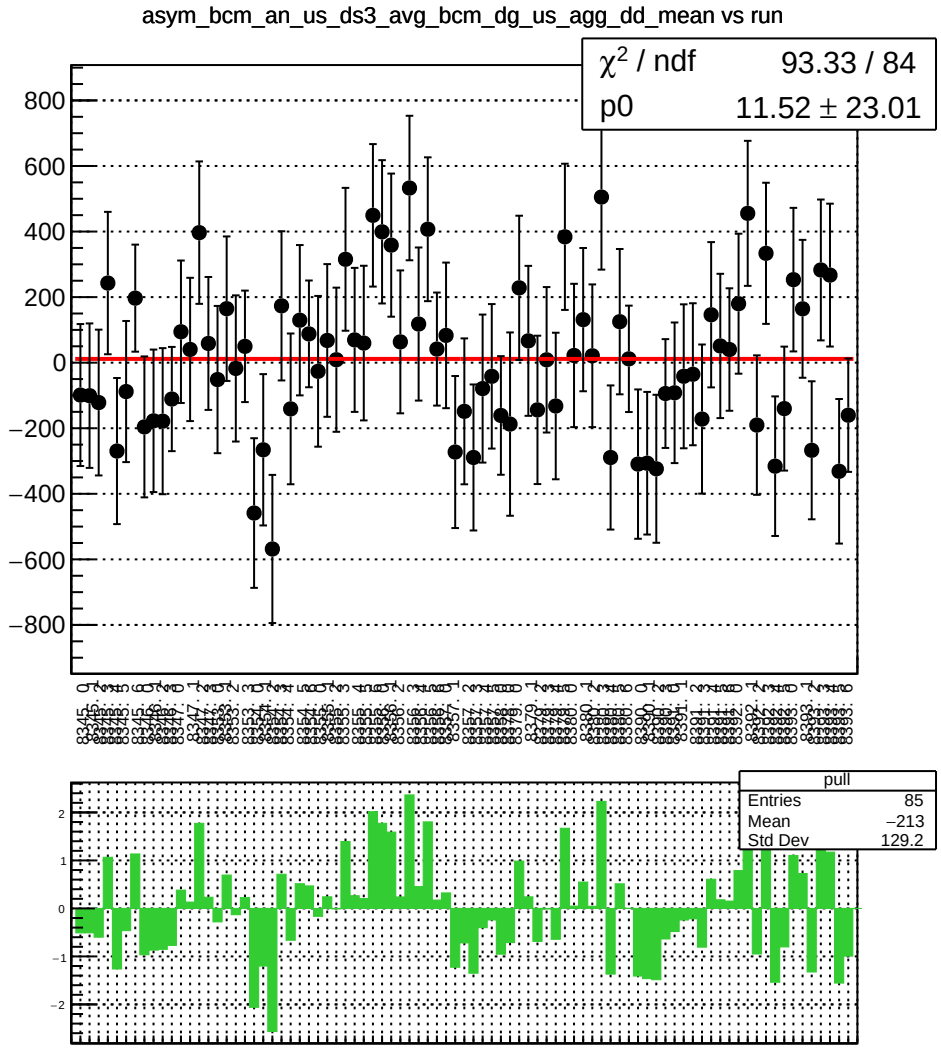

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 94.84 / 84
p0 14.21 ± 23.08
pull
Entries 85
Mean −1313
Std Dev 1299

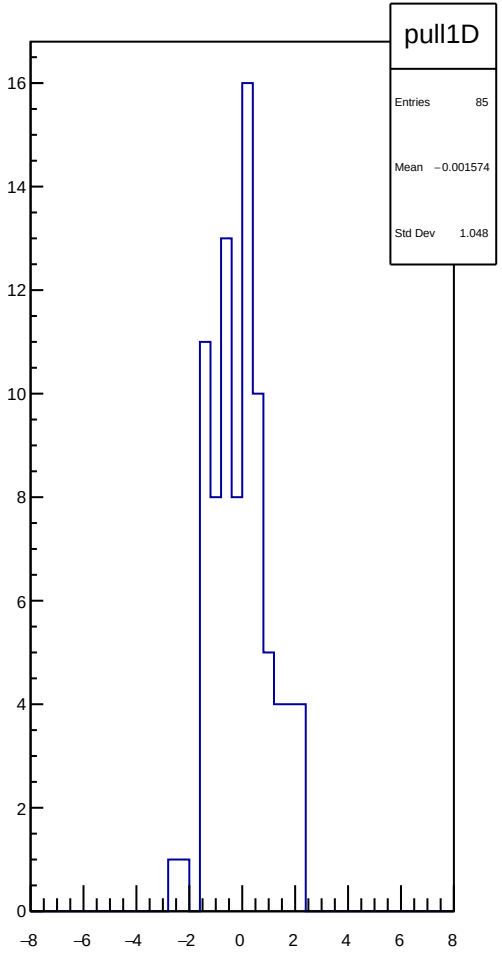

pull1D
Entries 85
Mean −0.0005062
Std Dev 1.056

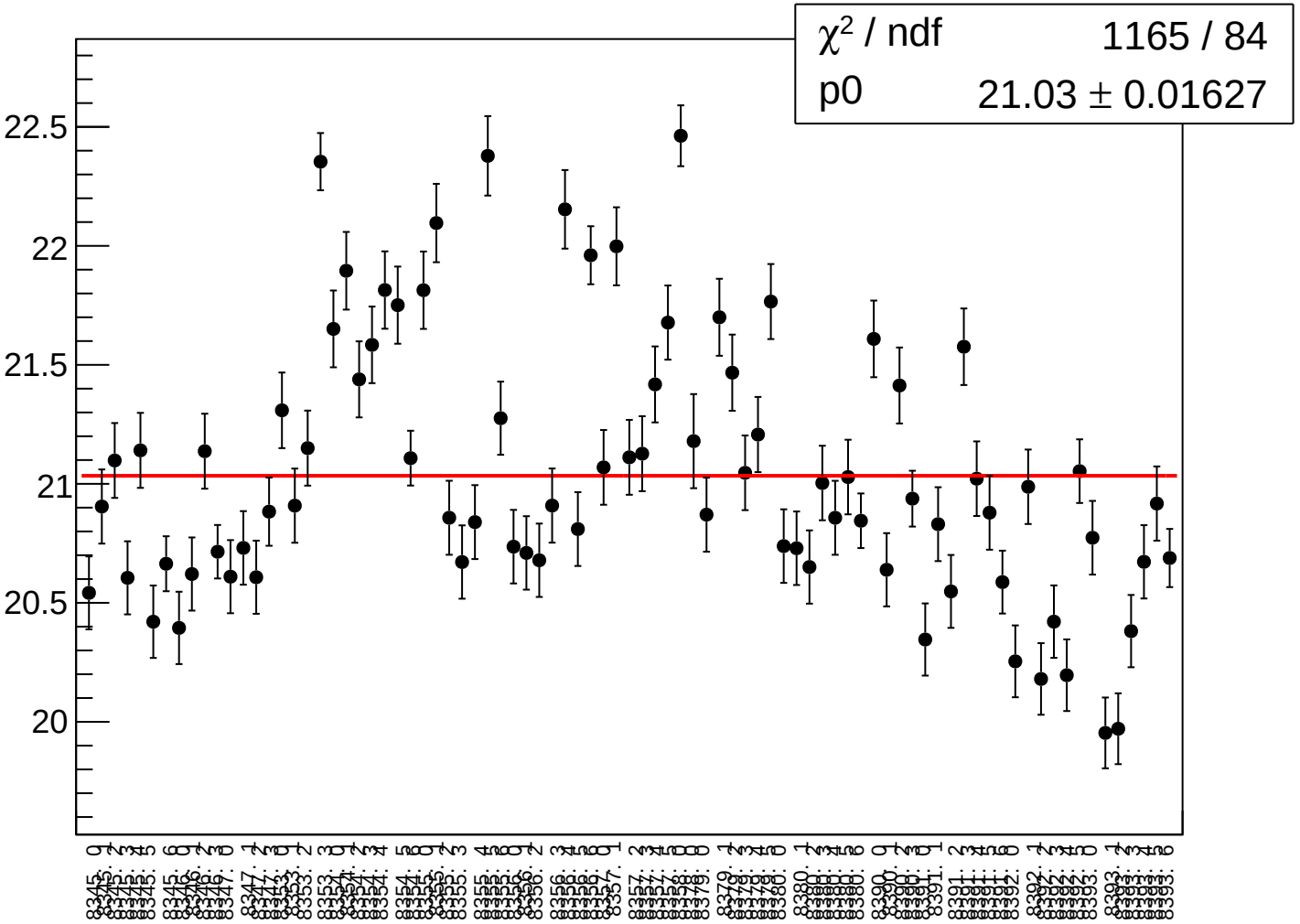

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1176 / 84
p0 21.09 ± 0.01632
22.5
22
21.5
21
20.5
20

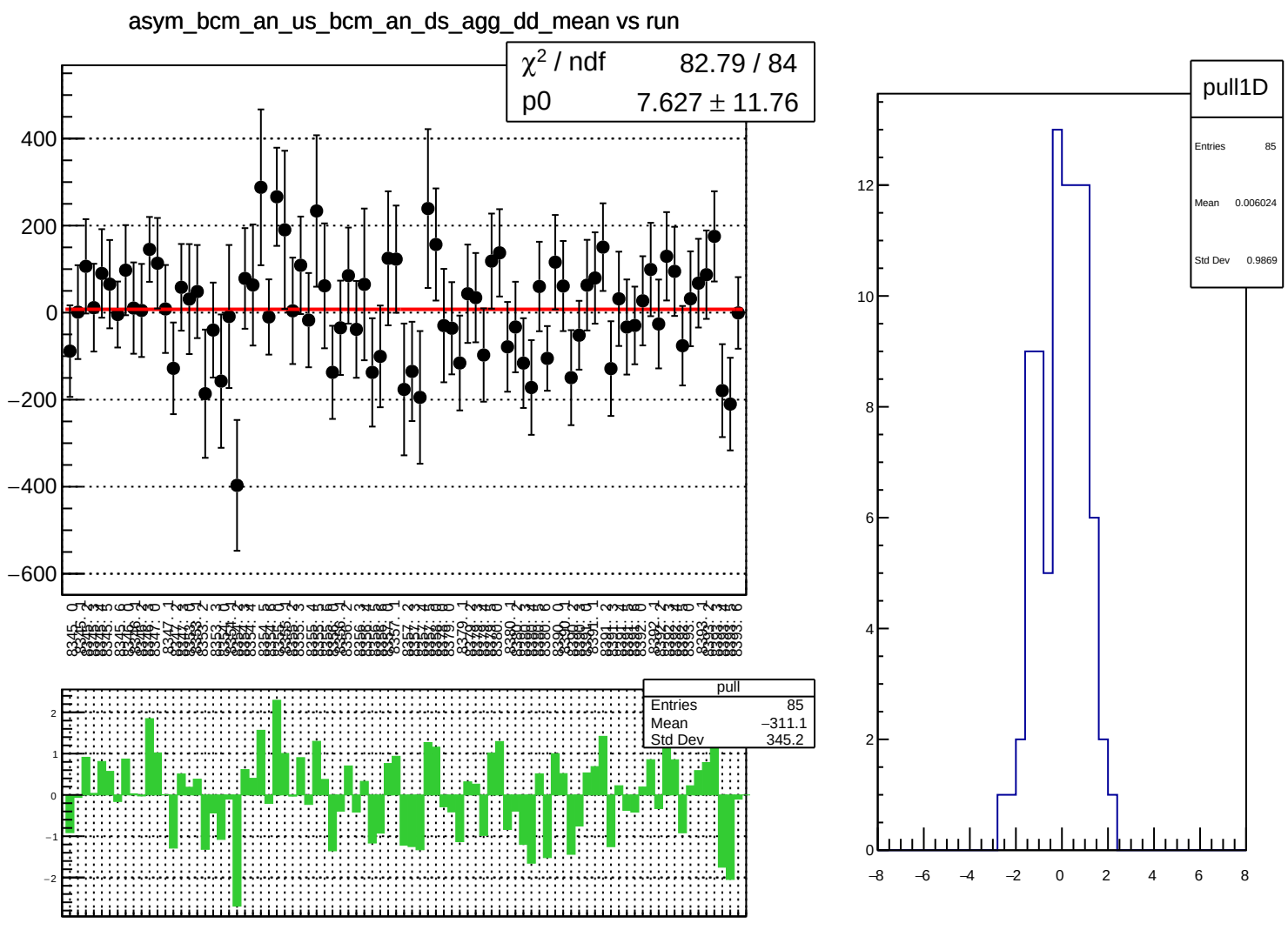

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 72.17 / 84
p0 22.84 ± 16.61
800
600
400
200
0
−200
−400
−600
pull
Entries 85
Mean 52.31
Std Dev 50.7
3
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.01446
Std Dev 0.9213
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

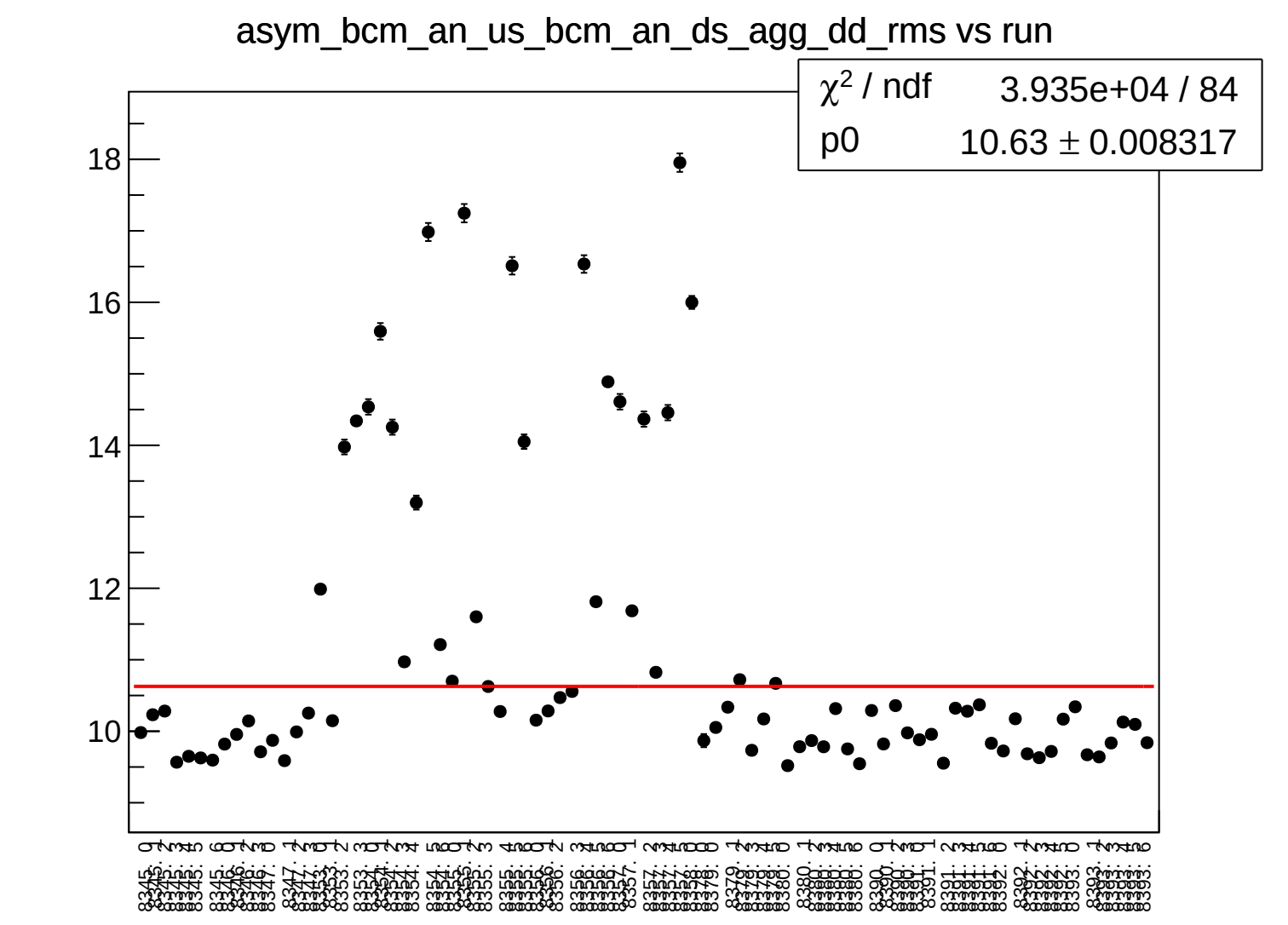

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3383 / 84
p0 15.18 ± 0.01175
17
16.5
16
15.5
15
14.5
14

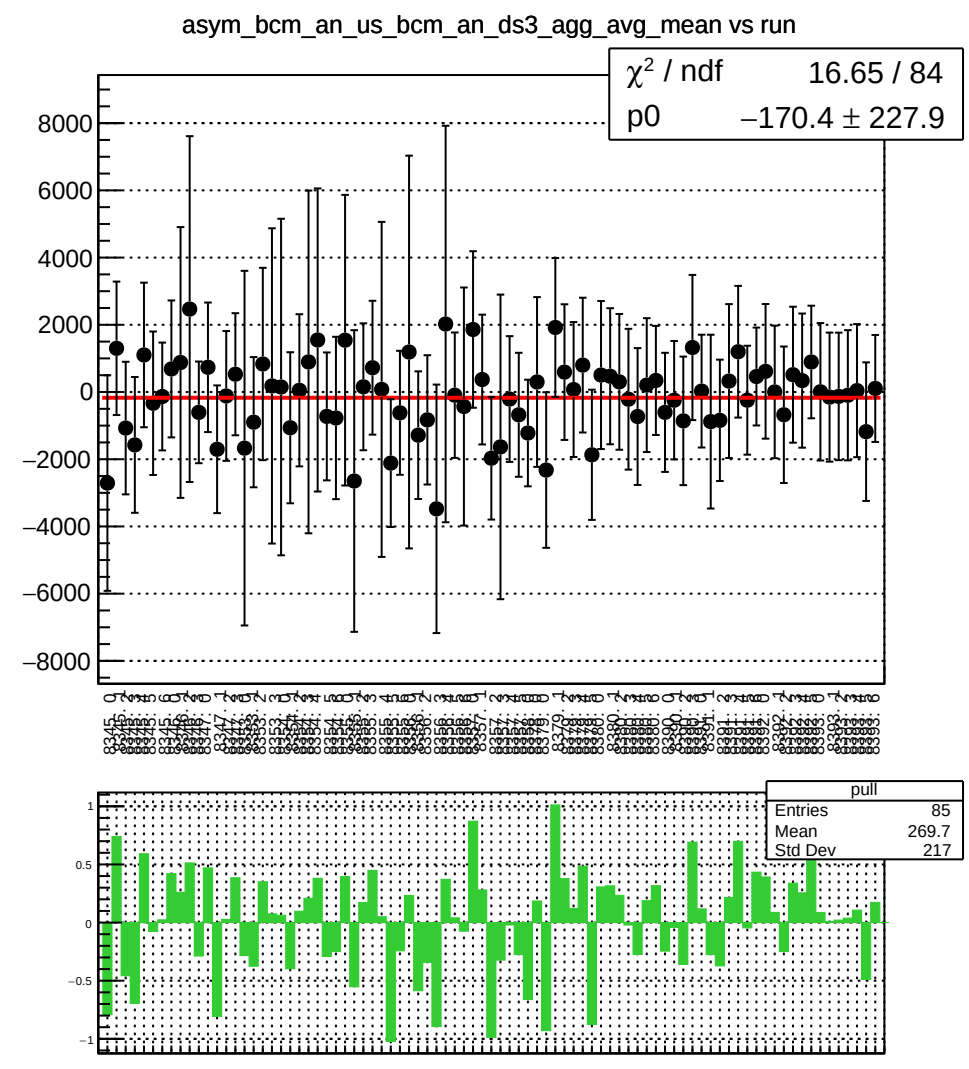

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 93.33 / 84
p0 11.52 ± 23.01
pull
Entries 85
Mean −213
Std Dev 129.2

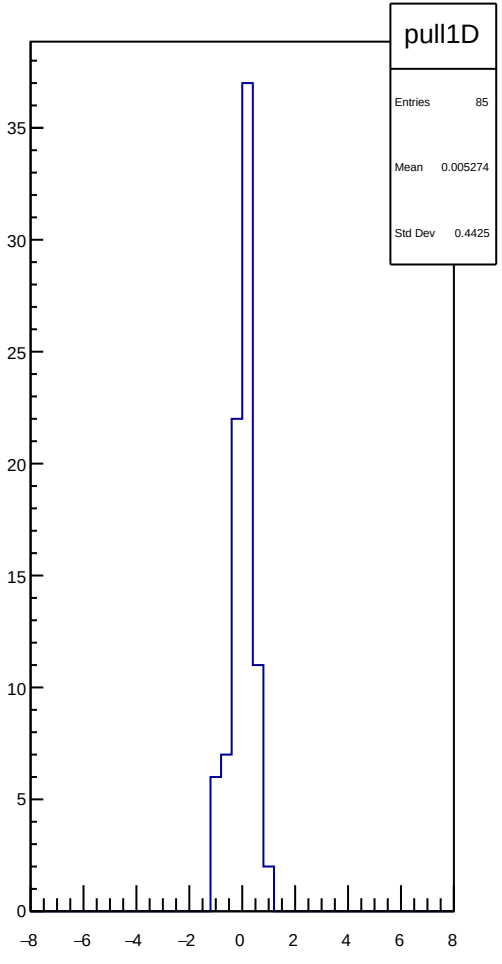

pull1D
Entries 85
Mean −0.001574
Std Dev 1.048

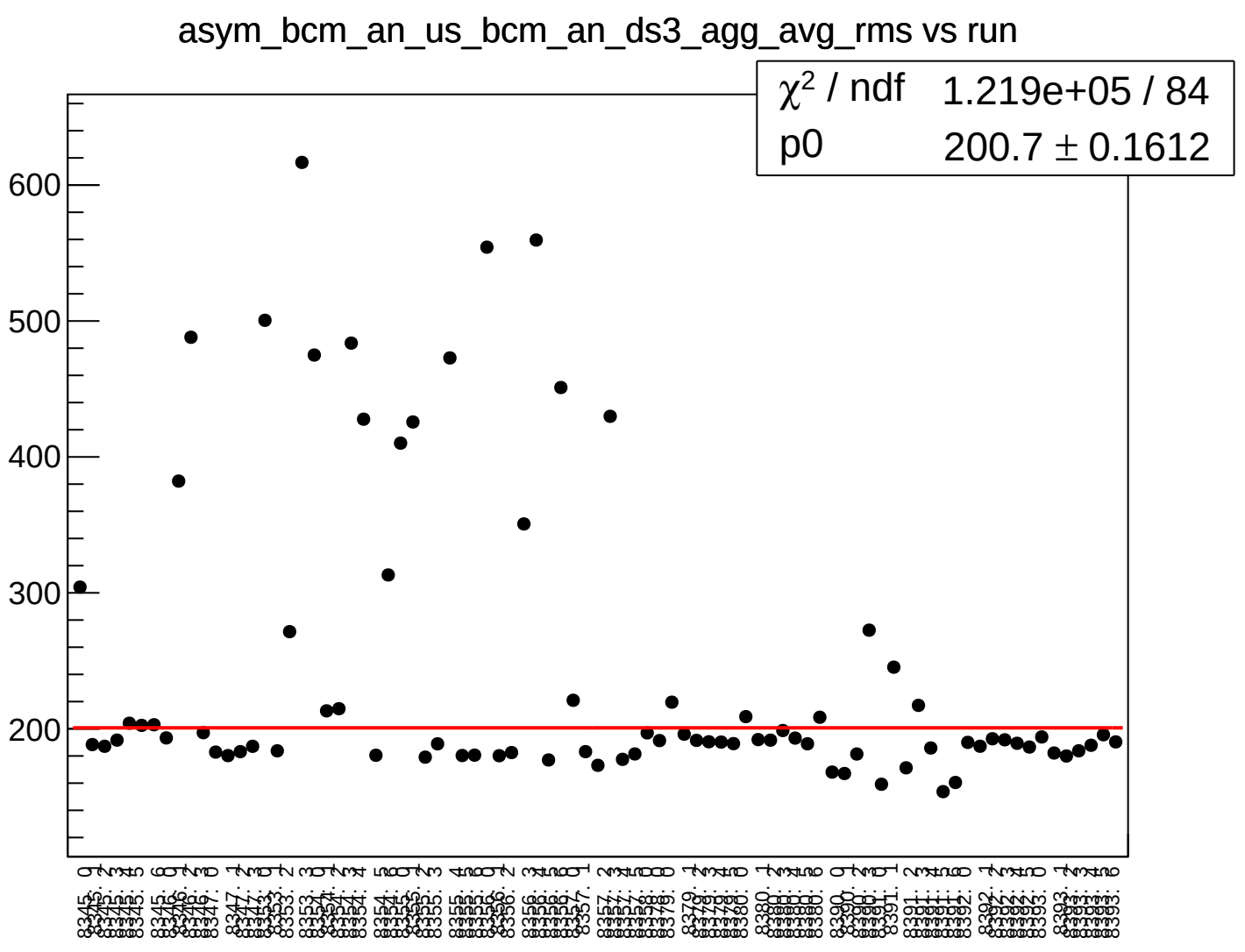

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1165 / 84
p0 21.03 ± 0.01627
22.5
22
21.5
21
20.5
20

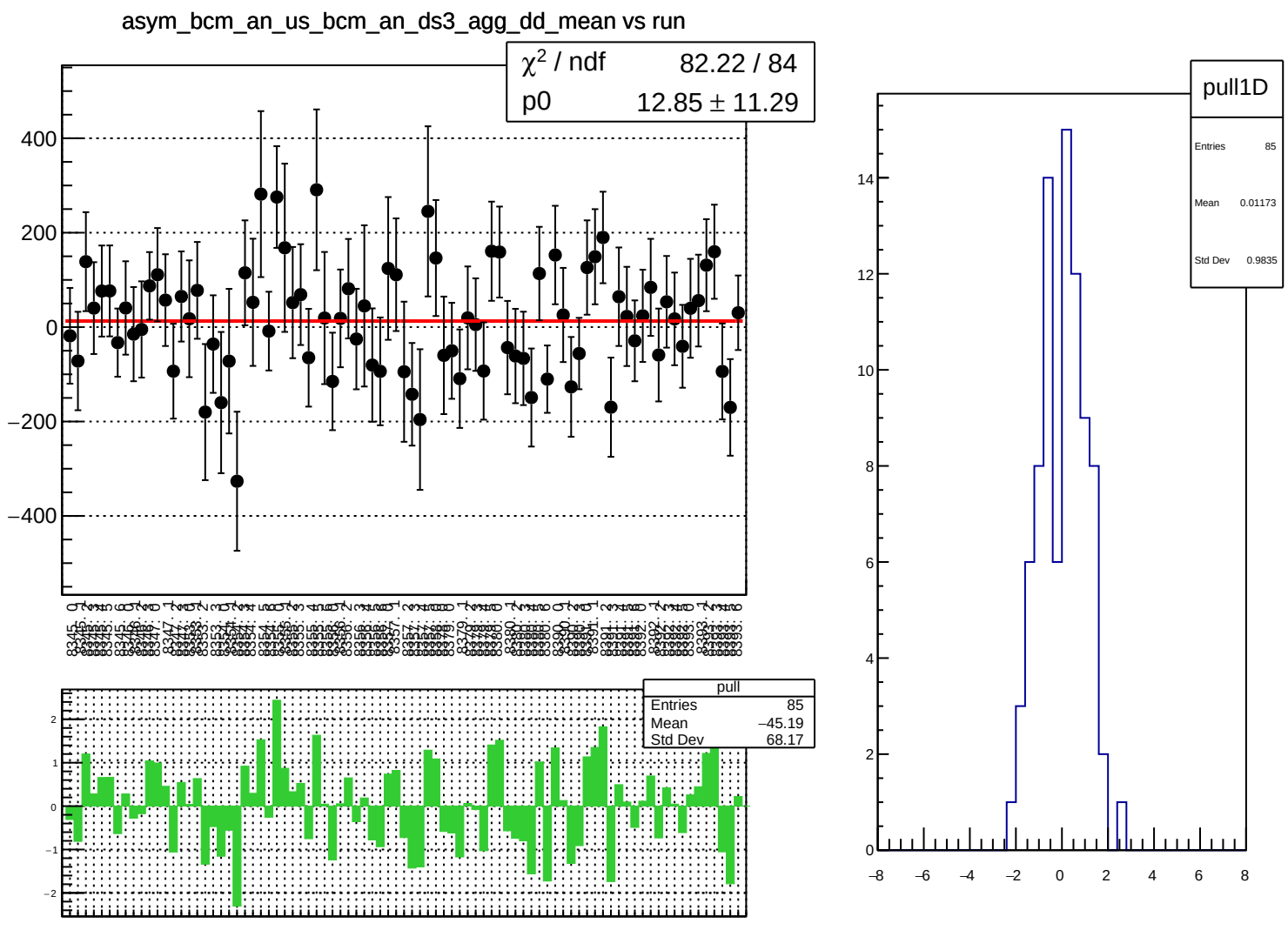

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.79 / 84
p0 7.627 ± 11.76
400
200
0
−200
−400
−600
pull
Entries 85
Mean −311.1
Std Dev 345.2
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.006024
Std Dev 0.9869
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

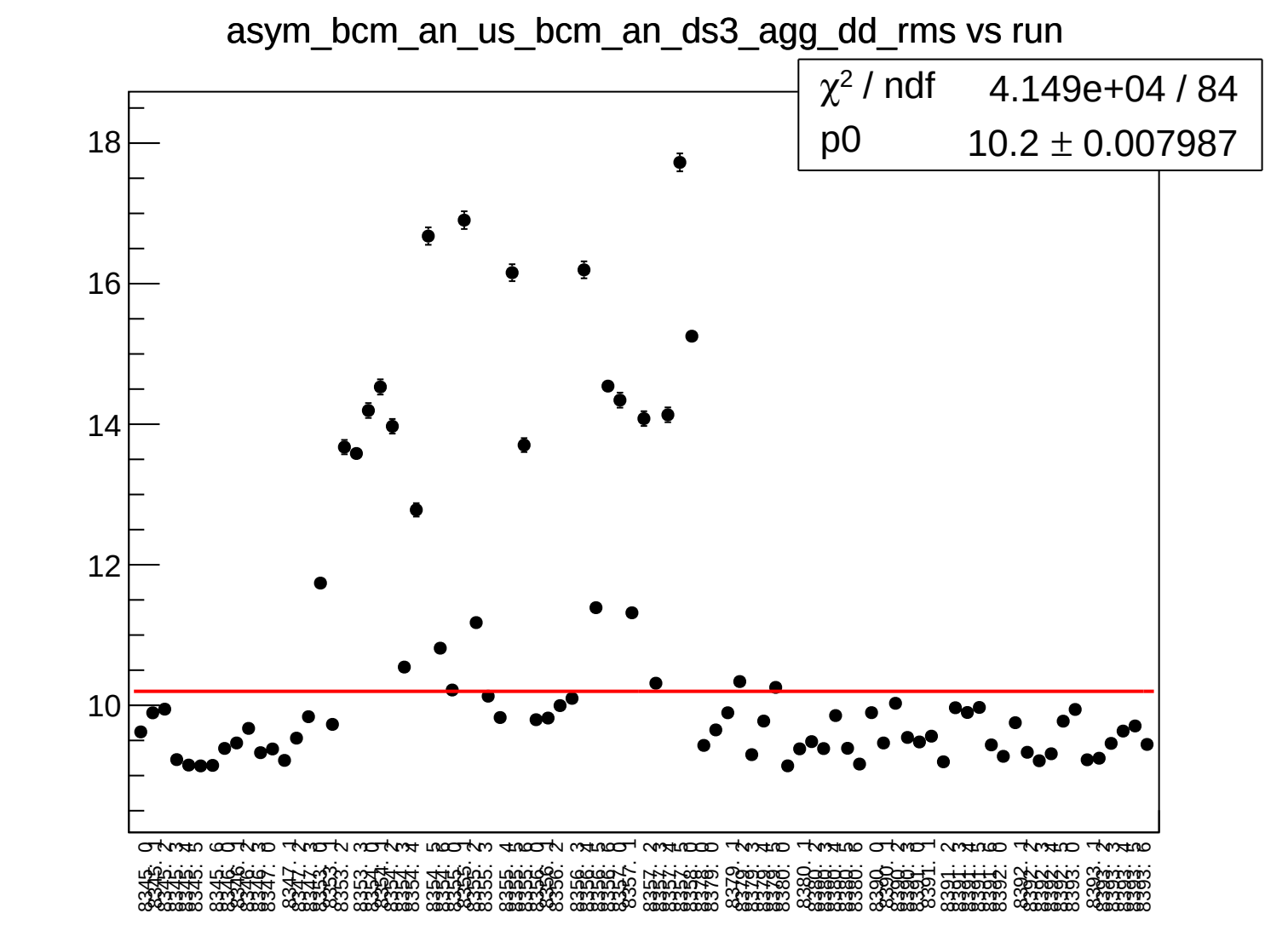

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3.935e+04 / 84
p0 10.63 ± 0.008317
18
16
14
12
10

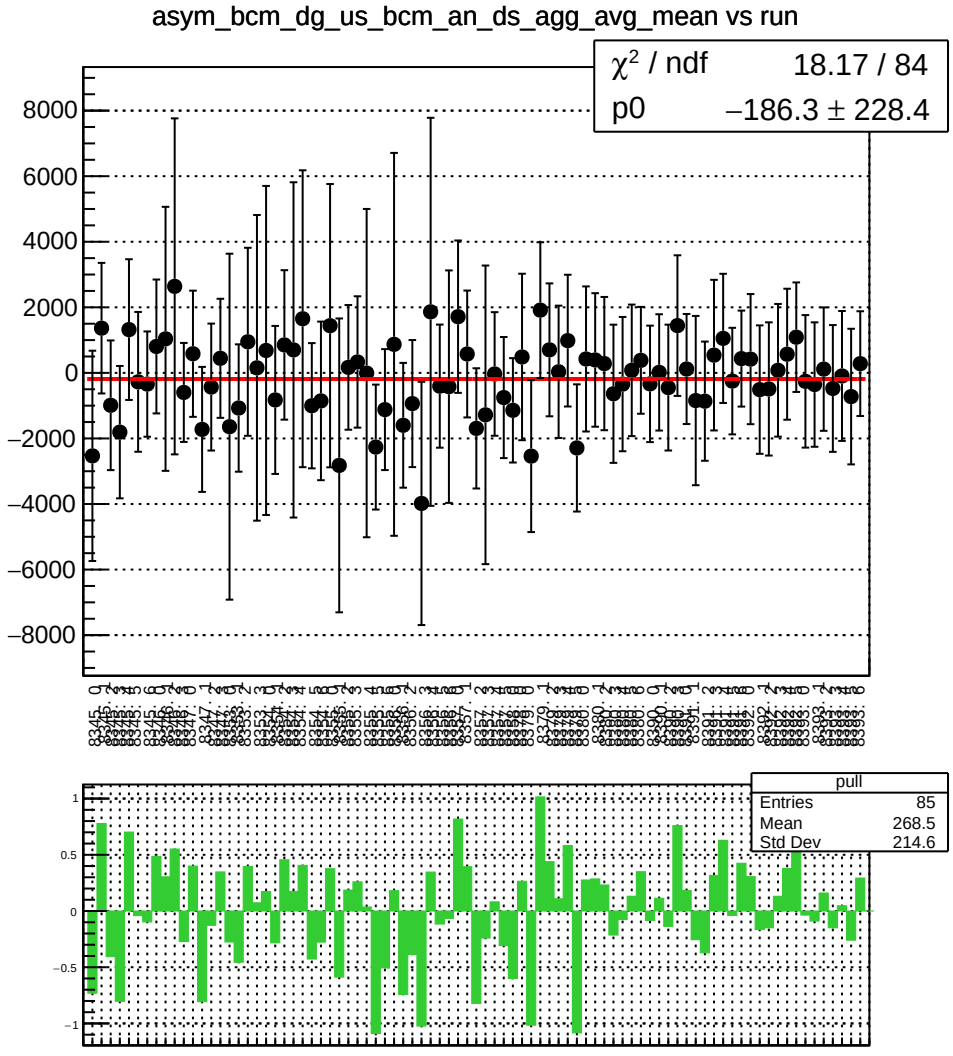

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 16.65 / 84
p0 −170.4 ± 227.9
pull
Entries 85
Mean 269.7
Std Dev 217

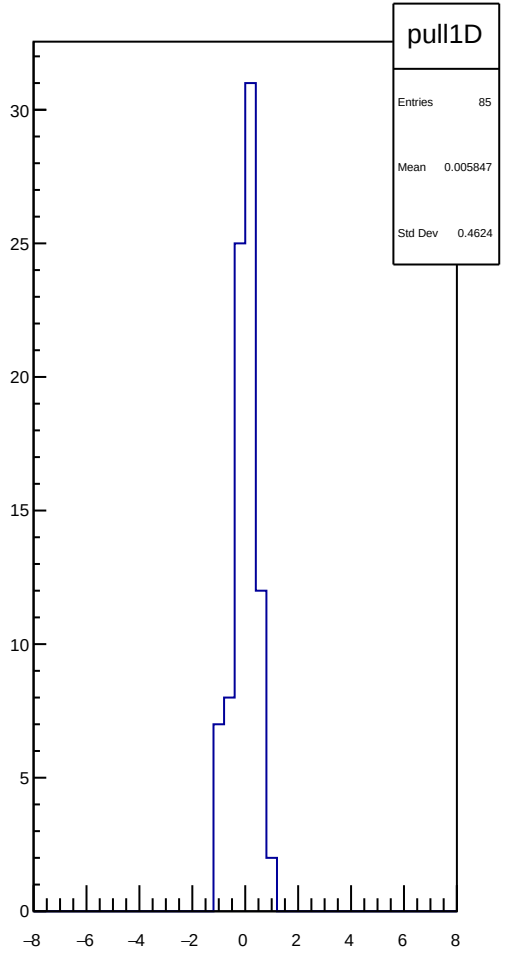

pull1D
Entries 85
Mean 0.005274
Std Dev 0.4425

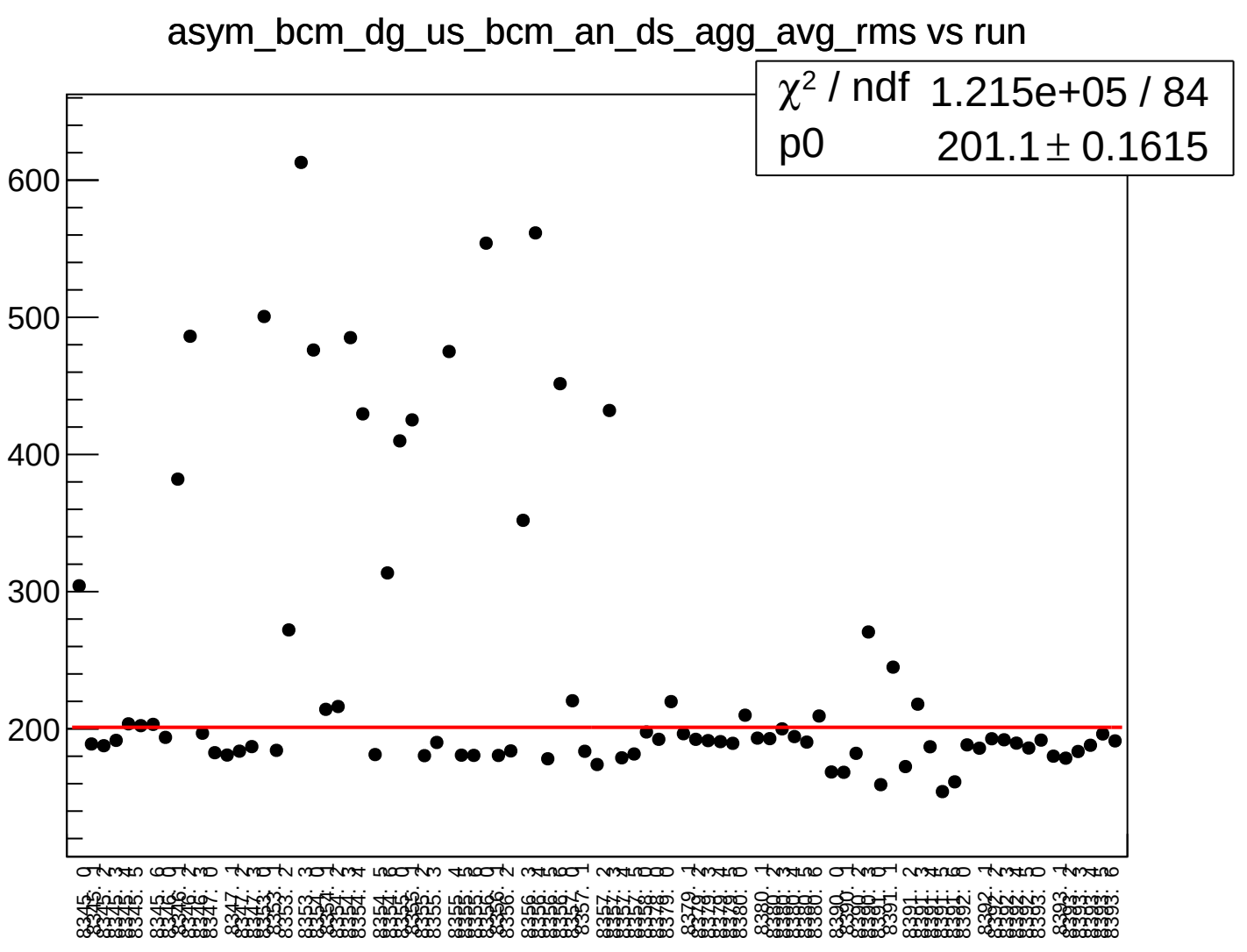

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.219e+05 / 84
p0 200.7 ± 0.1612
600
500
400
300
200

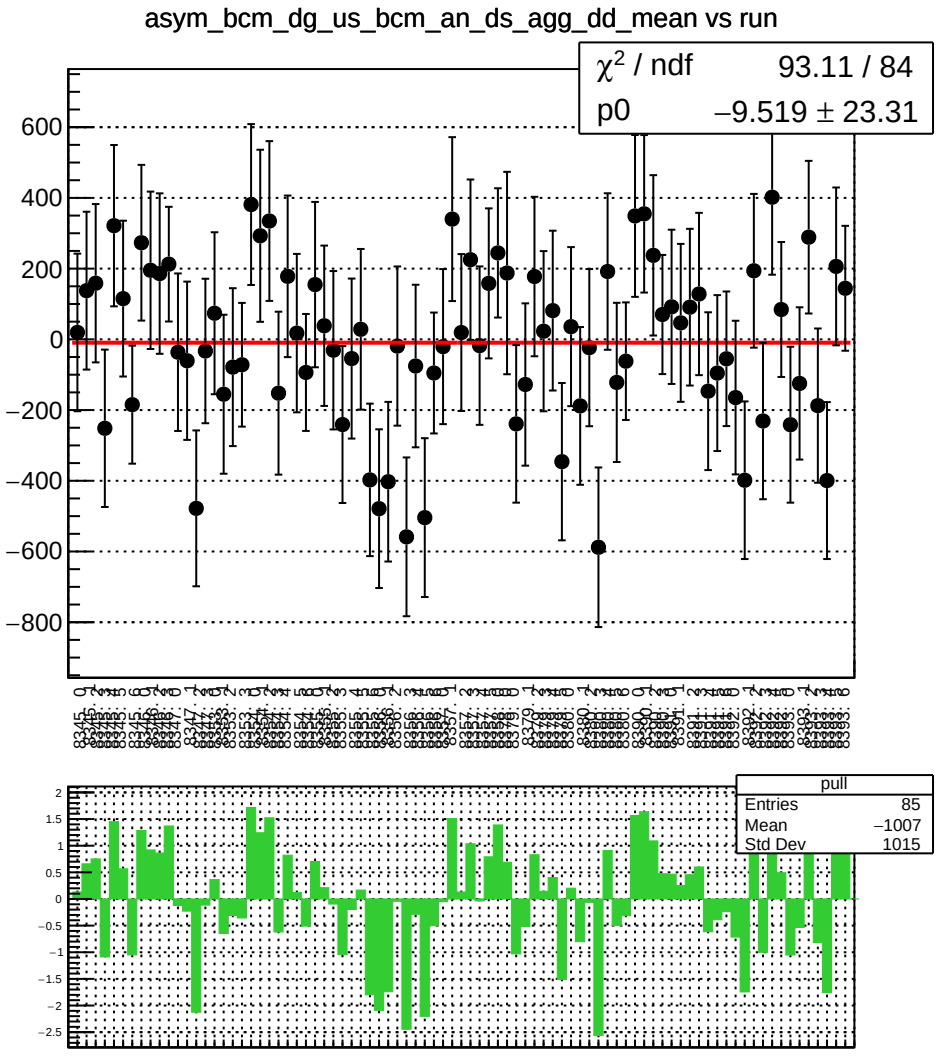

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 82.22 / 84
p0 12.85 ± 11.29
400
200
0
−200
−400
pull
Entries 85
Mean −45.19
Std Dev 68.17
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.01173
Std Dev 0.9835
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

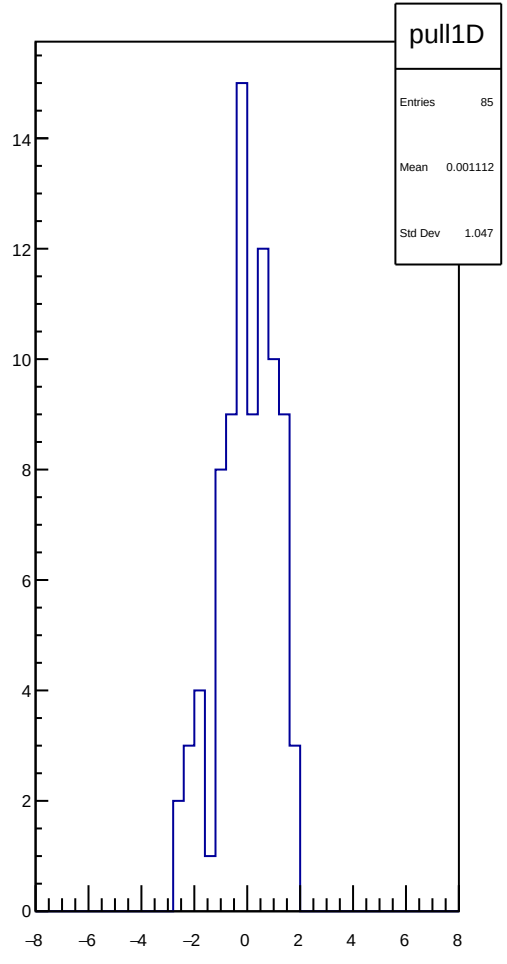

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 4.149e+04 / 84
p0 10.2 ± 0.007987
18
16
14
12
10

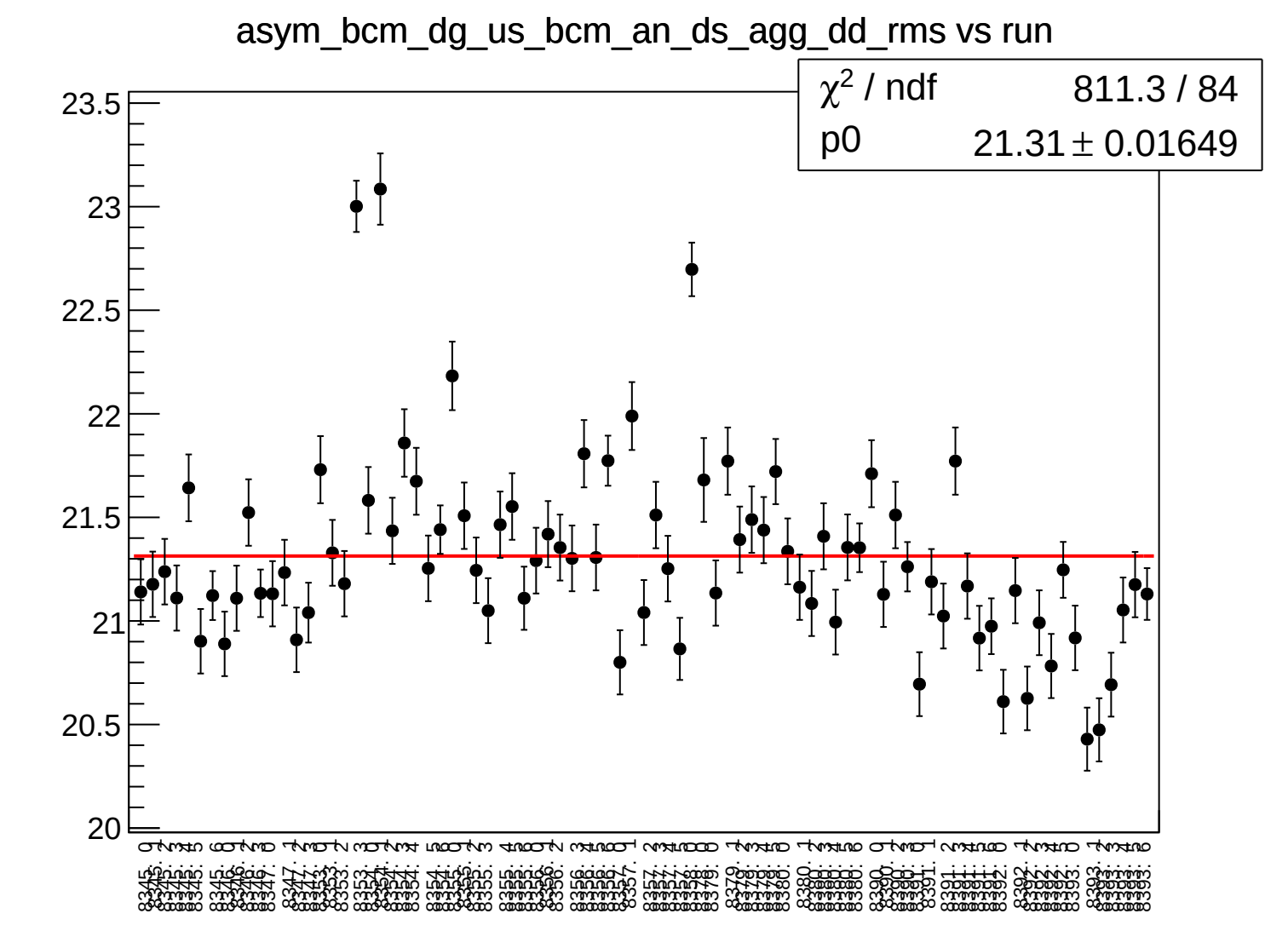

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.17 / 84
p0 −186.3 ± 228.4
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 268.5
Std Dev 214.6
1
0.5
0
−0.5
−1

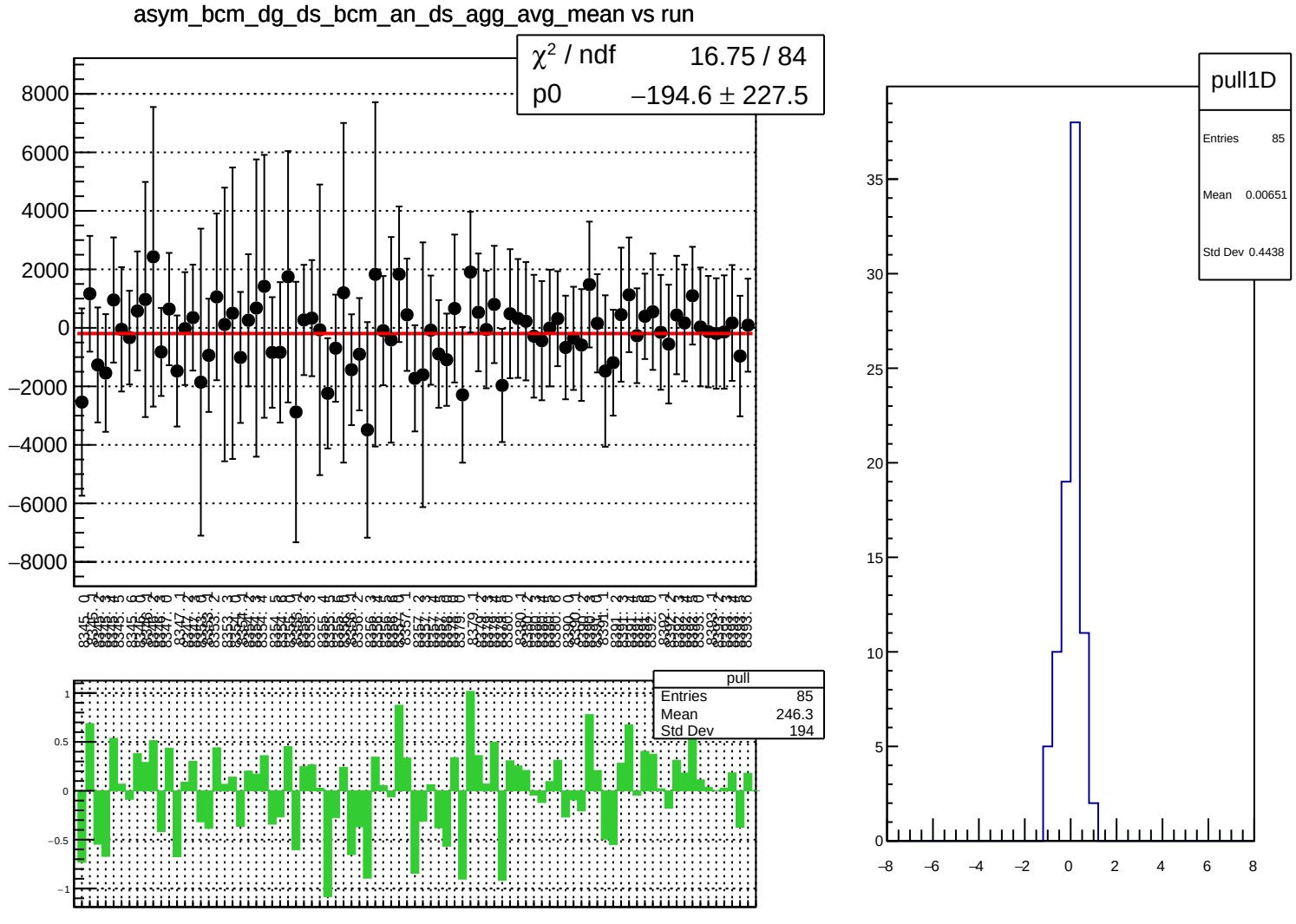

pull1D
Entries 85
Mean 0.005847
Std Dev 0.4624
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

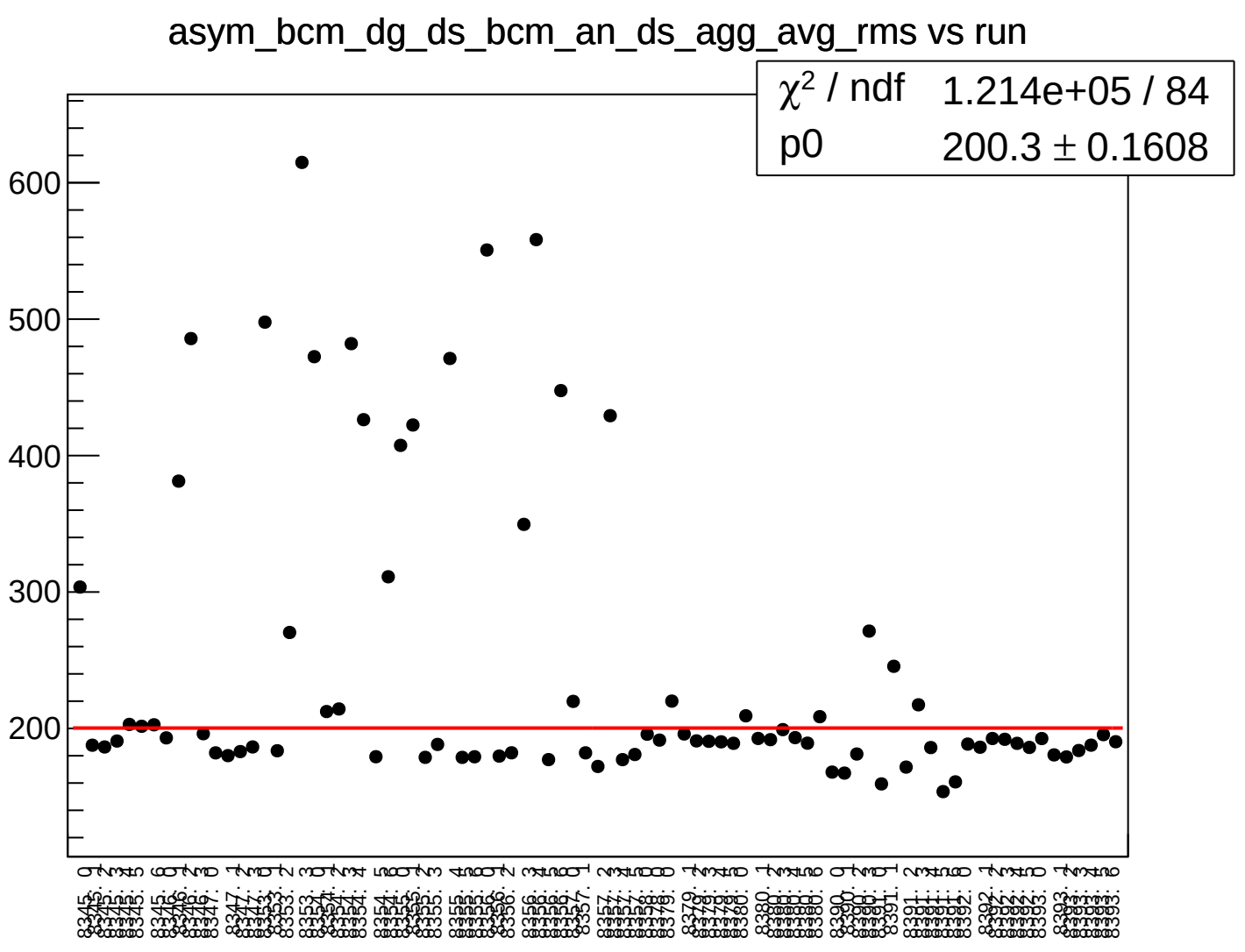

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.215e+05 / 84
p0 201.1 ± 0.1615
600
500
400
300
200

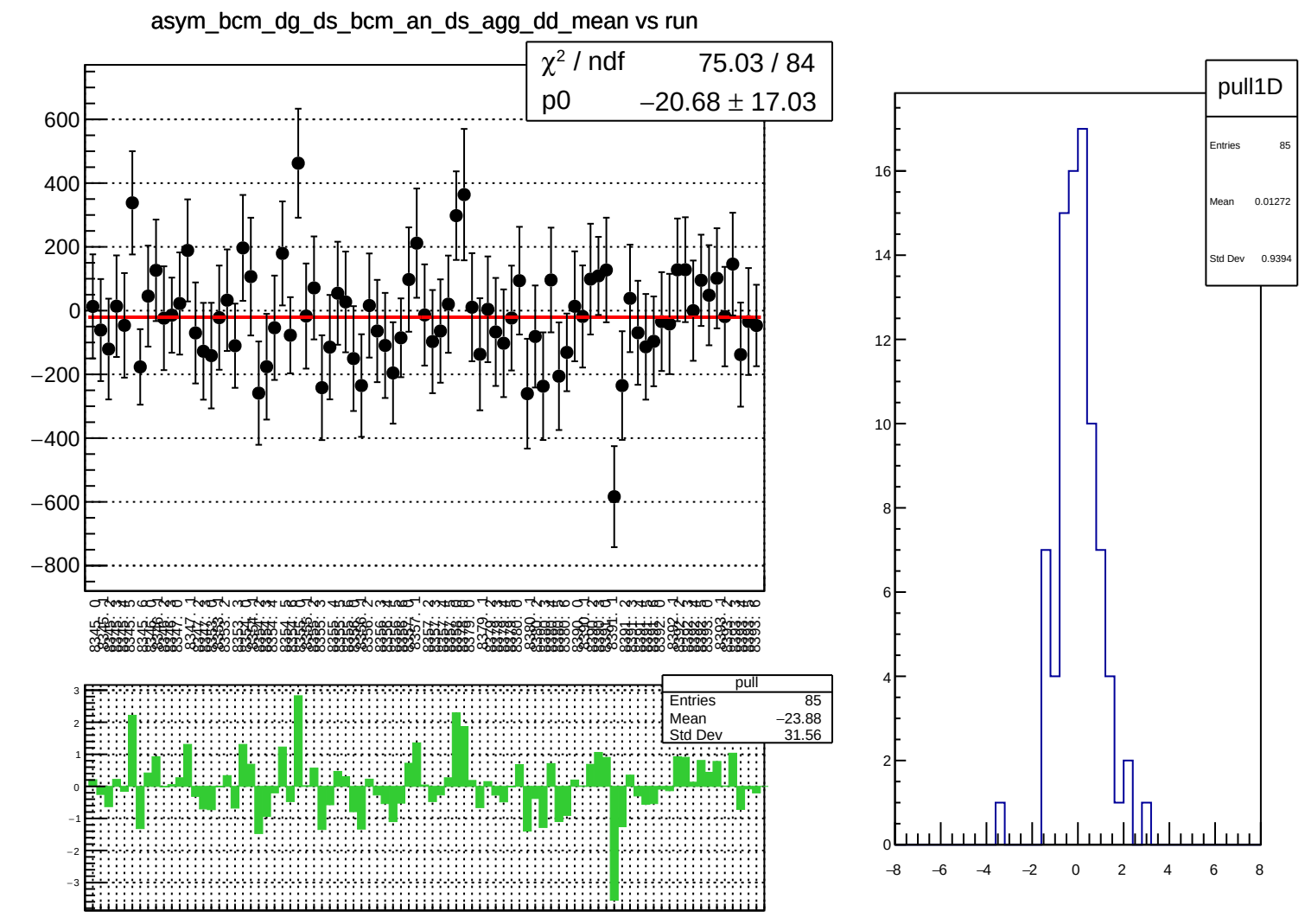

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 93.11 / 84
p0 −9.519 ± 23.31
pull
Entries 85
Mean −1007
Std Dev 1015

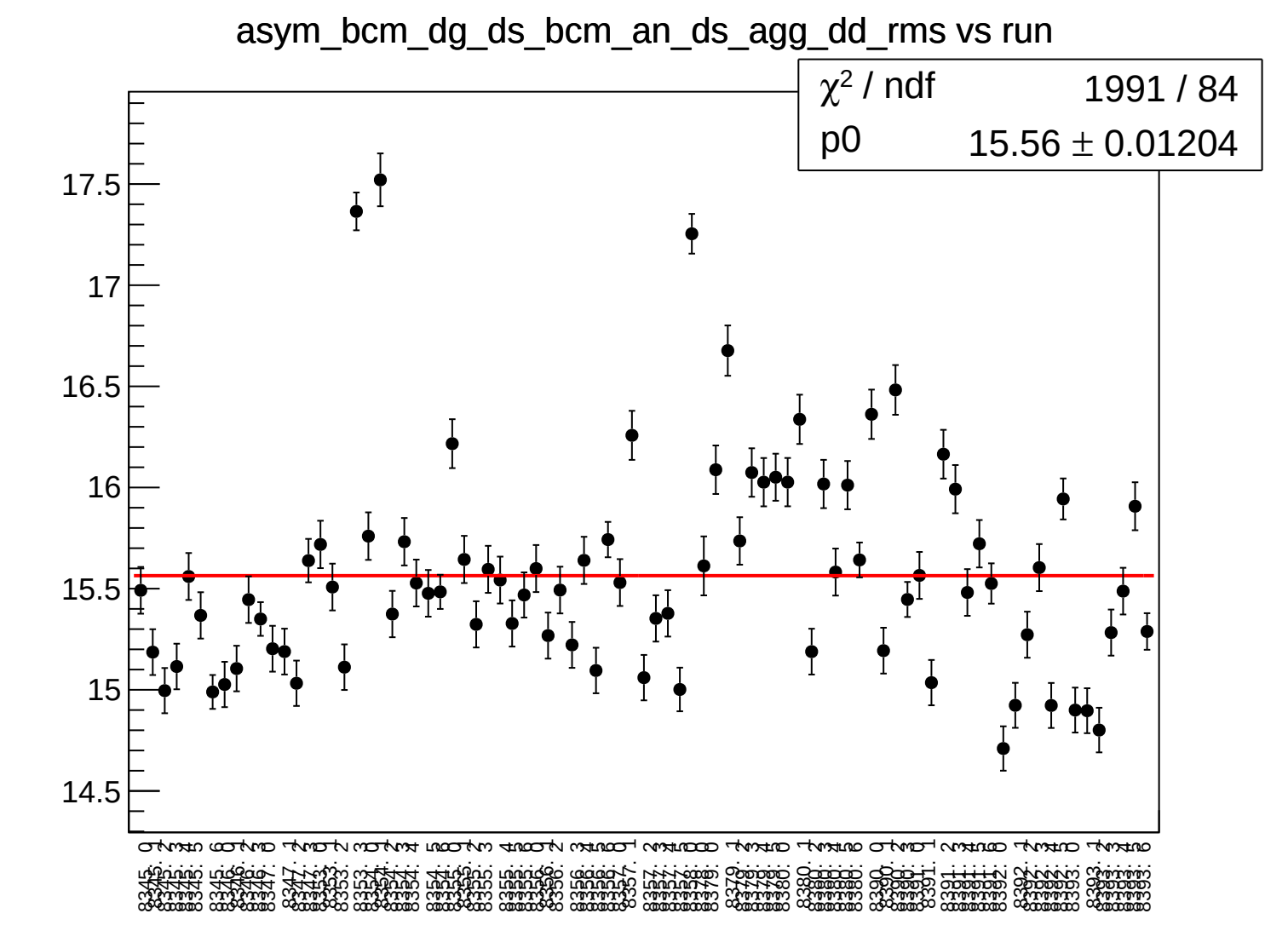

pull1D
Entries 85
Mean 0.001112
Std Dev 1.047

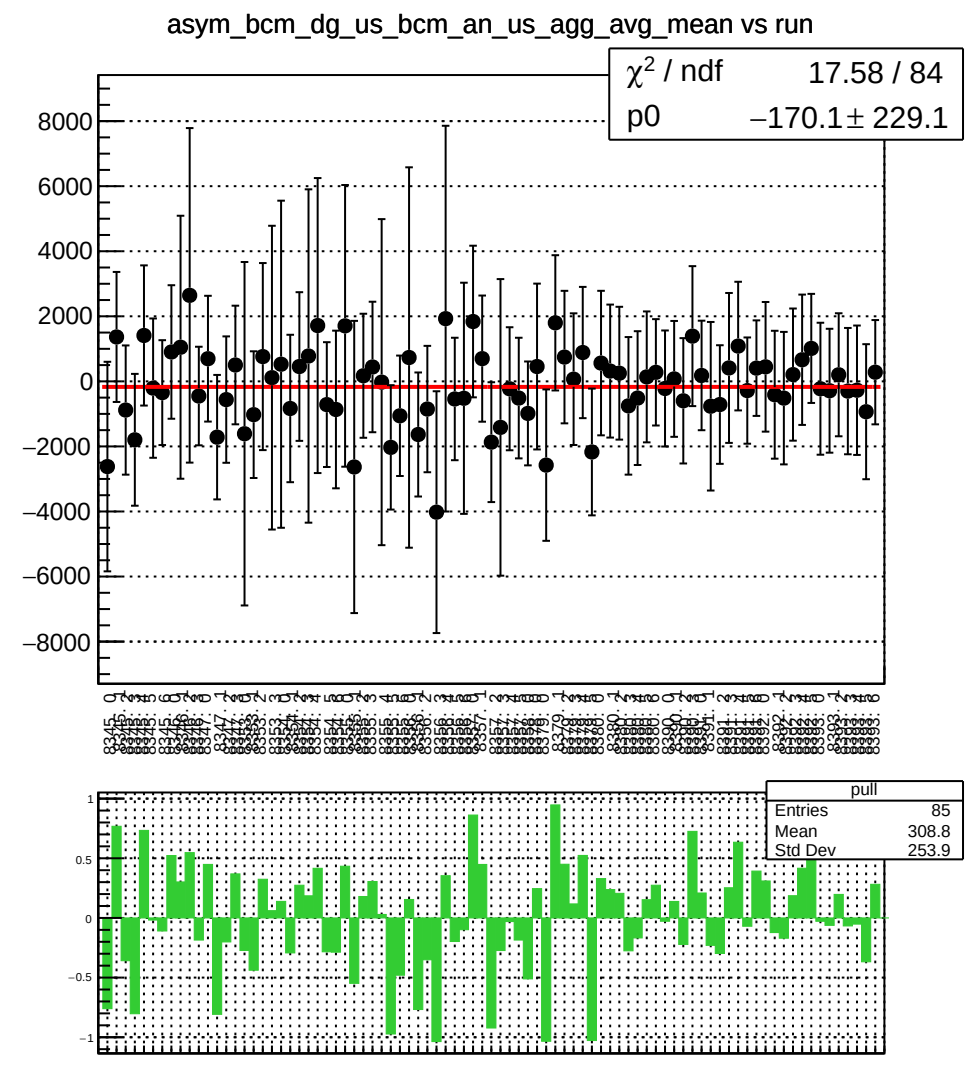

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 811.3 / 84
p0 21.31 ± 0.01649
23.5
23
22.5
22
21.5
21
20.5
20

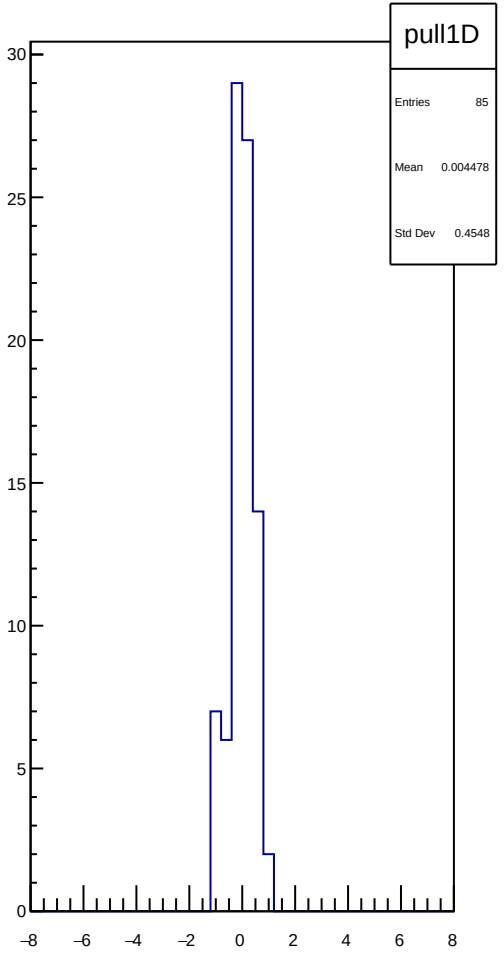

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.75 / 84
p0 −194.6 ± 227.5
pull
Entries 85
Mean 246.3
Std Dev 194
pull1D
Entries 85
Mean 0.00651
Std Dev 0.4438

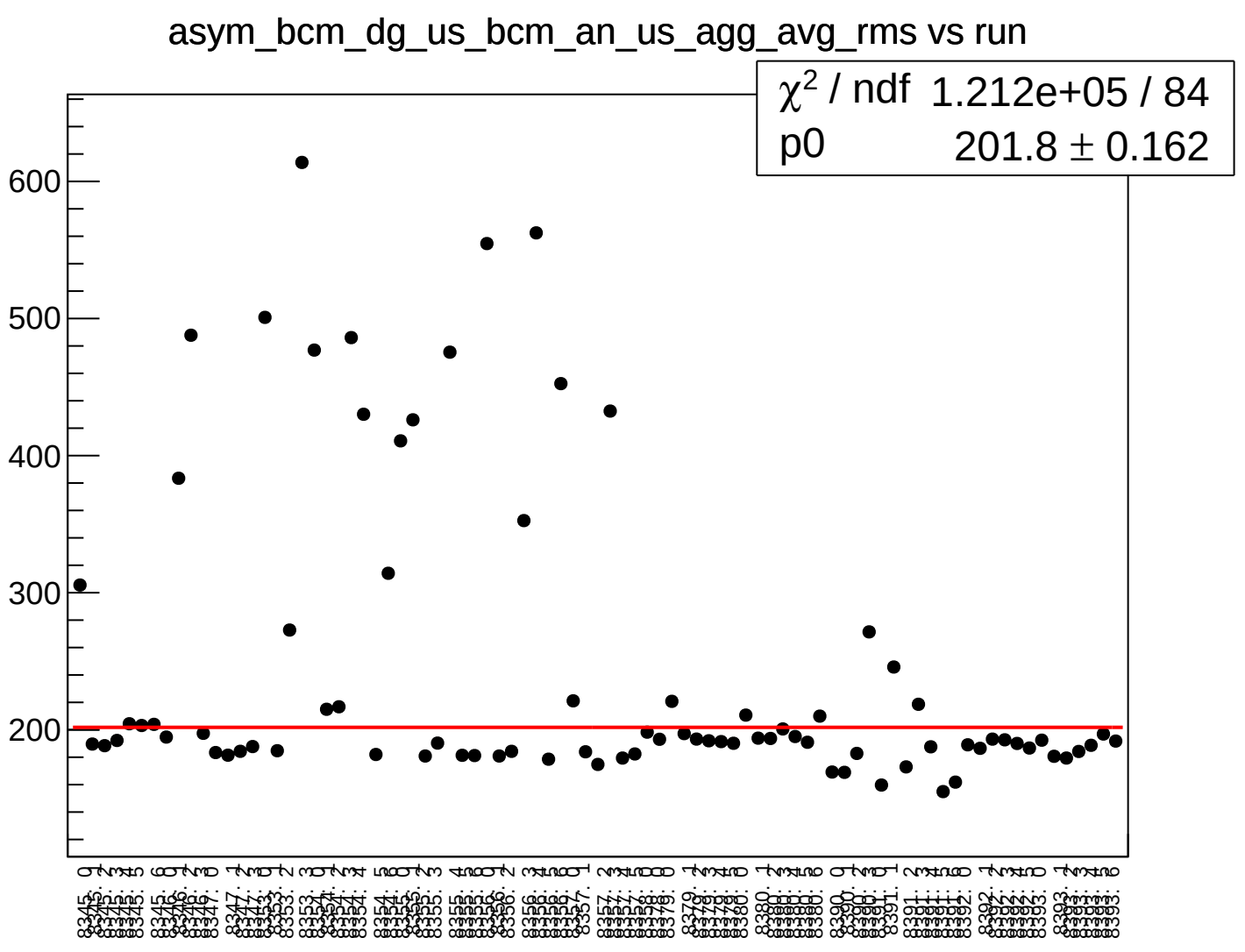

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.214e+05 / 84
p0 200.3 ± 0.1608
600
500
400
300
200

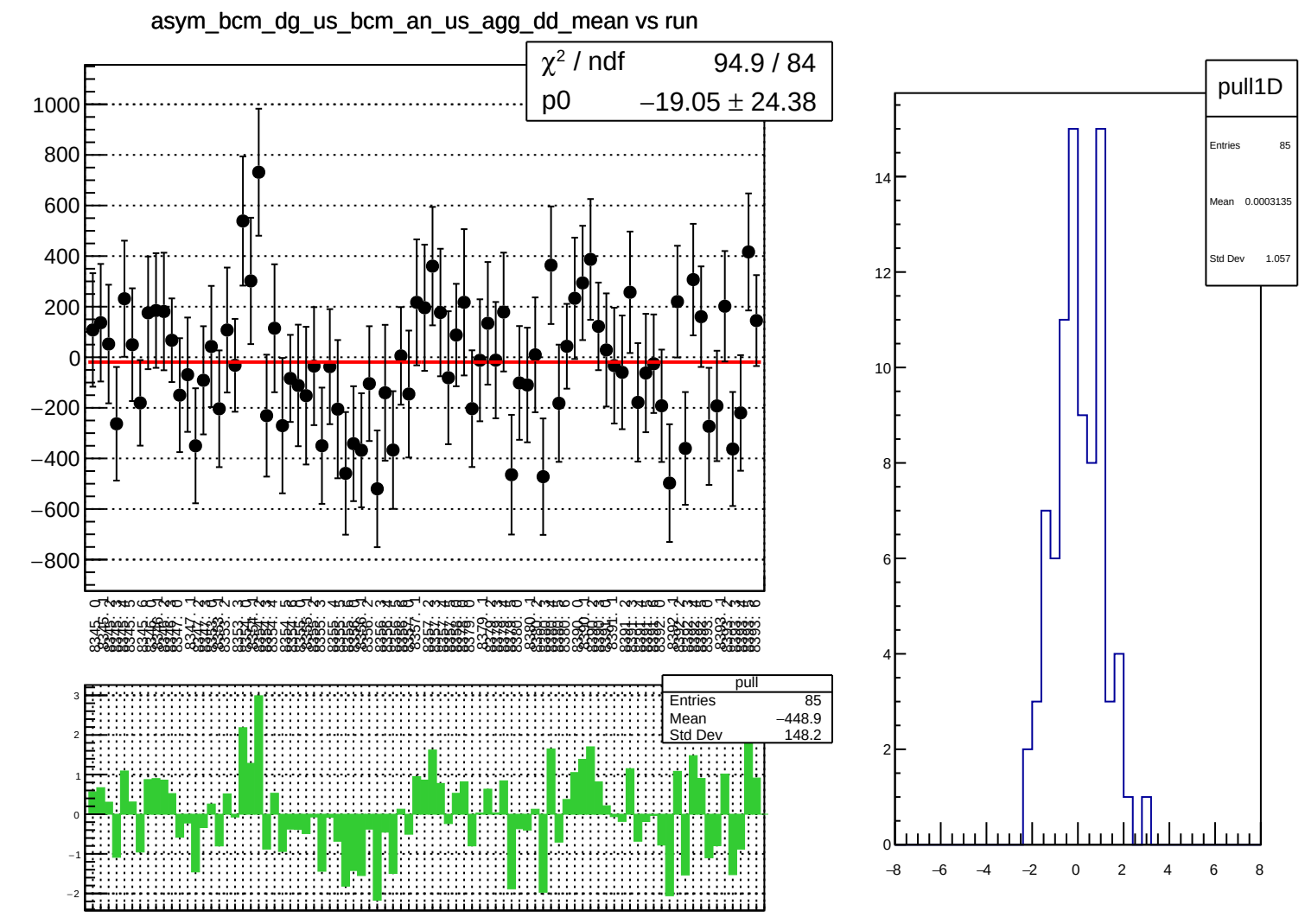

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.03 / 84
p0 −20.68 ± 17.03
pull
Entries 85
Mean −23.88
Std Dev 31.56
pull1D
Entries 85
Mean 0.01272
Std Dev 0.9394

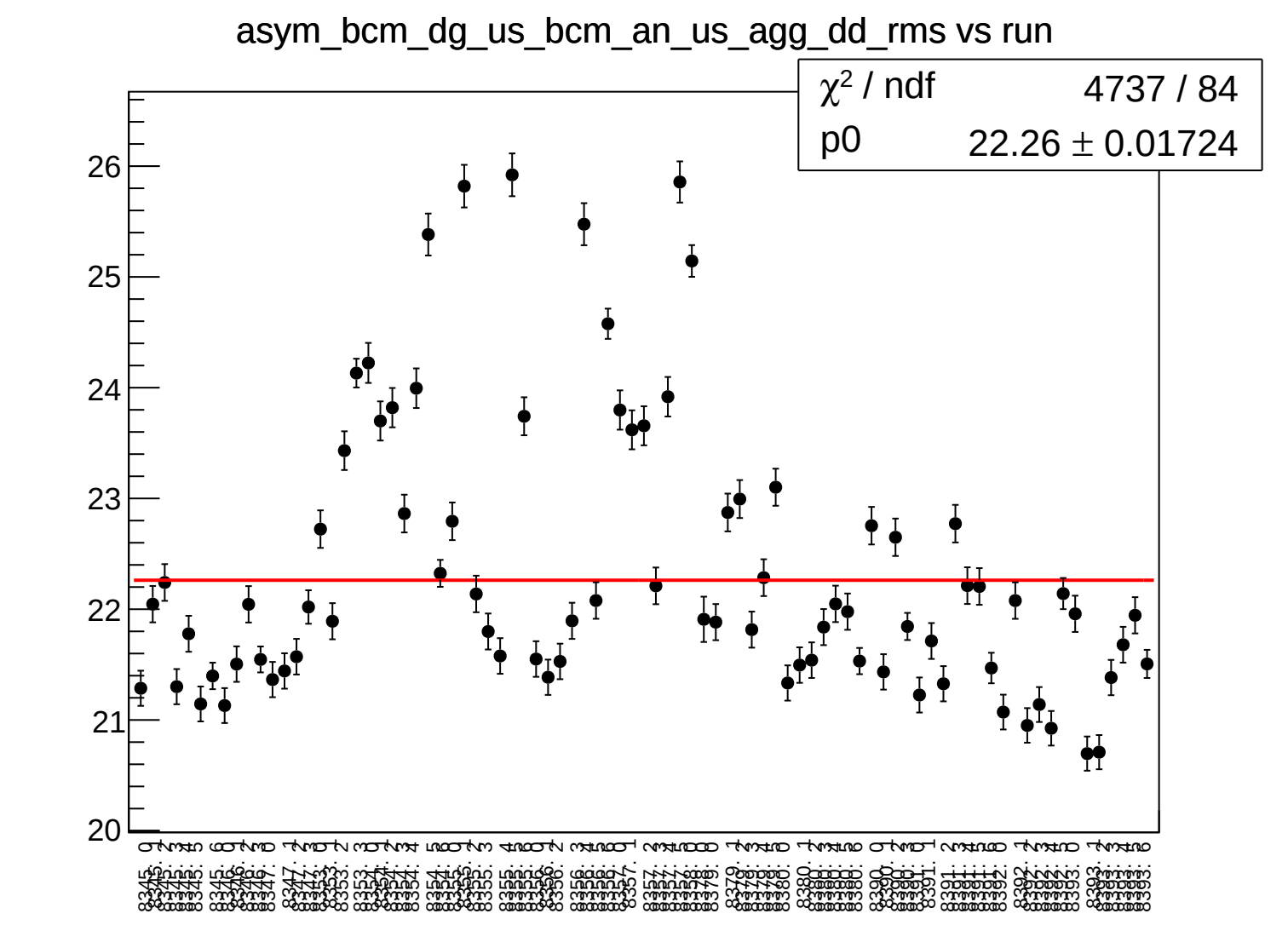

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1991 / 84
p0 15.56 ± 0.01204
17.5
17
16.5
16
15.5
15
14.5

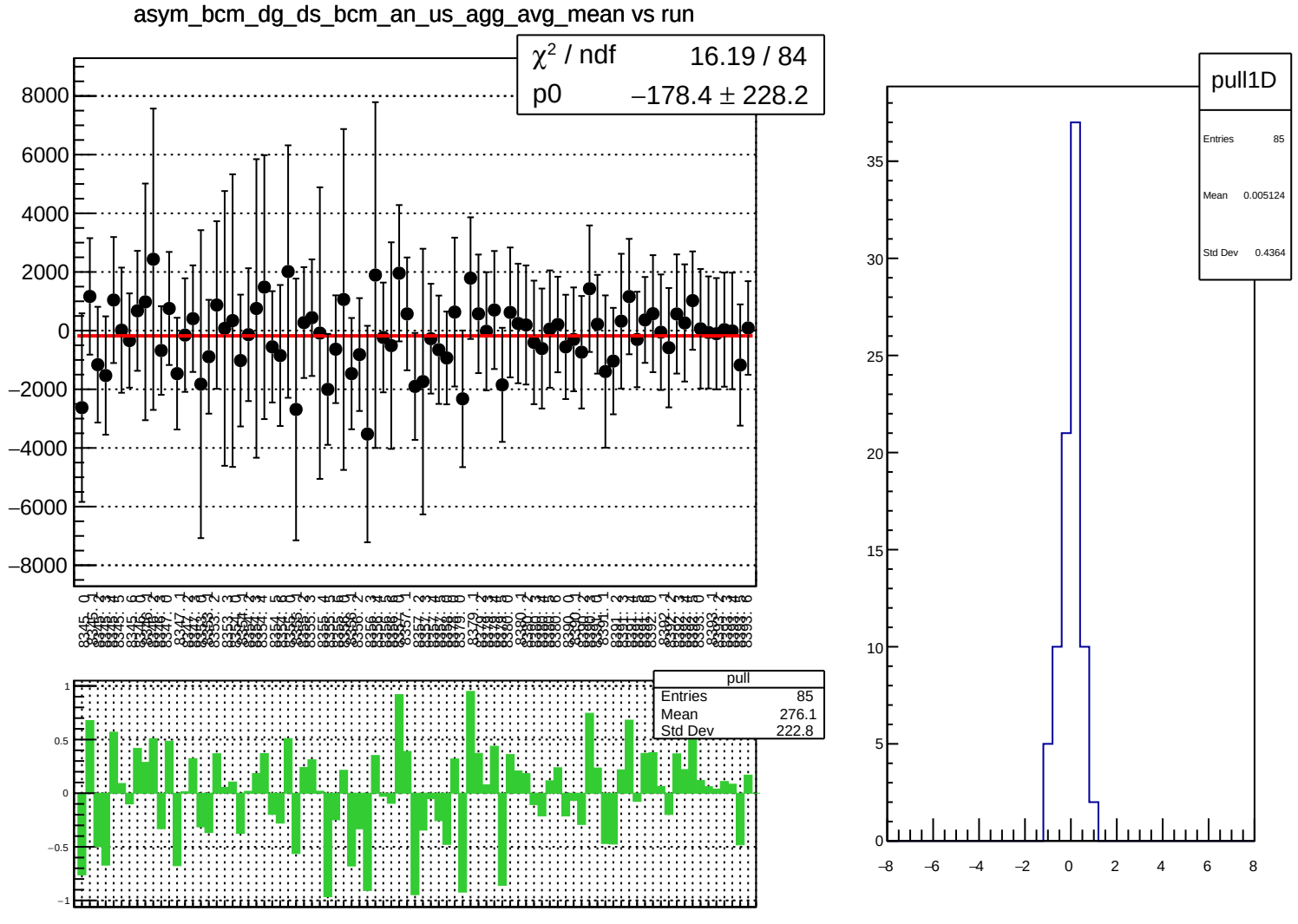

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.58 / 84
p0 −170.1 ± 229.1
pull
Entries 85
Mean 308.8
Std Dev 253.9

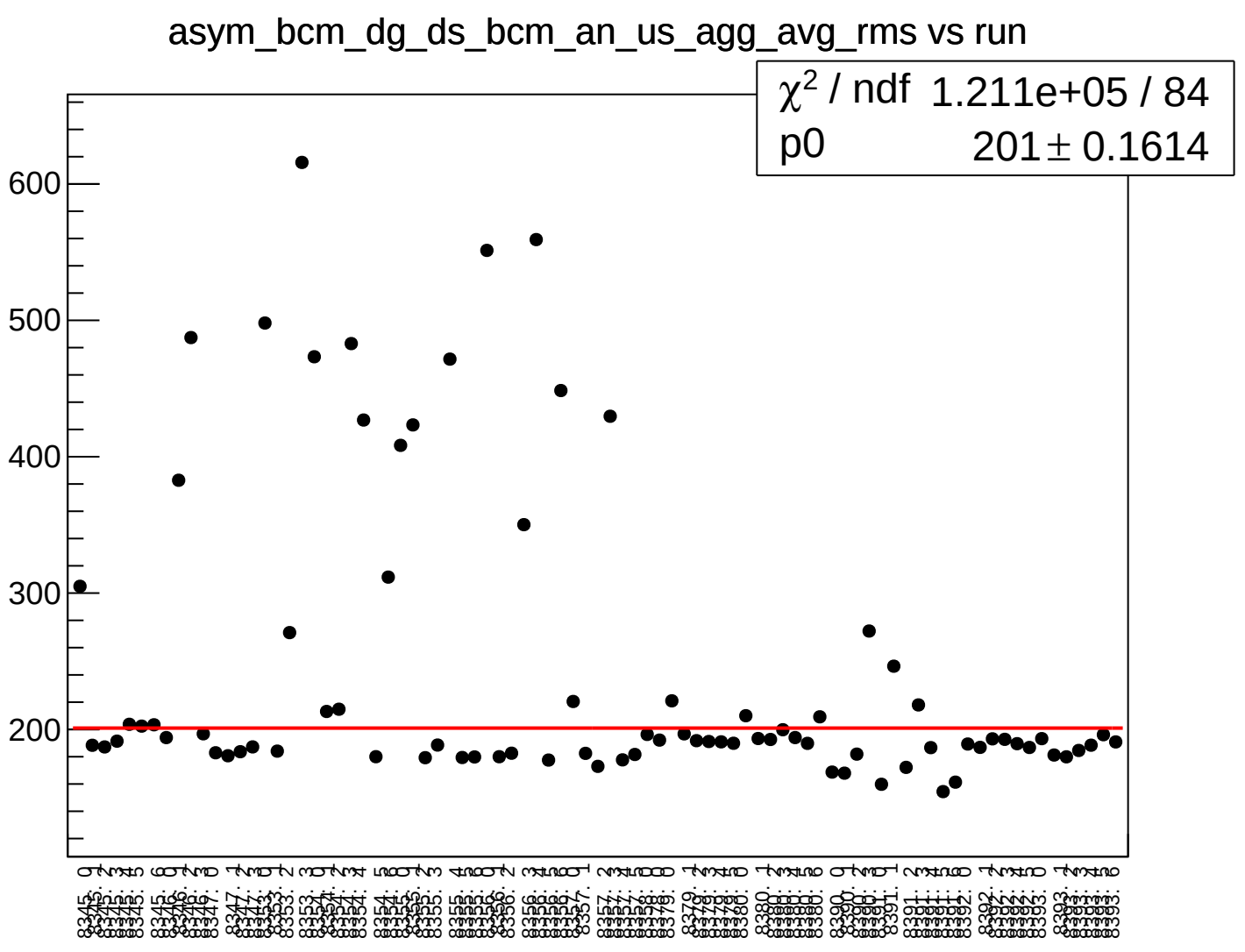

pull1D
Entries 85
Mean 0.004478
Std Dev 0.4548

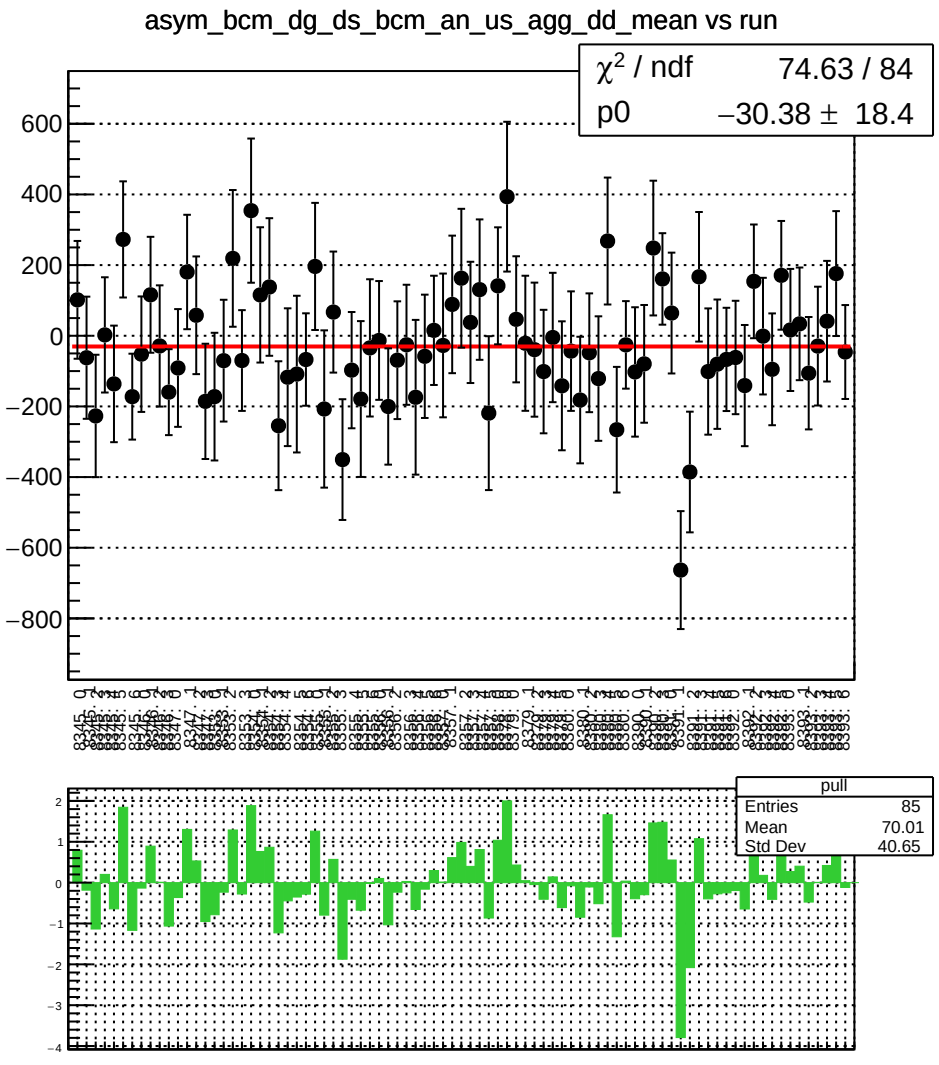

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.212e+05 / 84
p0 201.8 ± 0.162
600
500
400
300
200

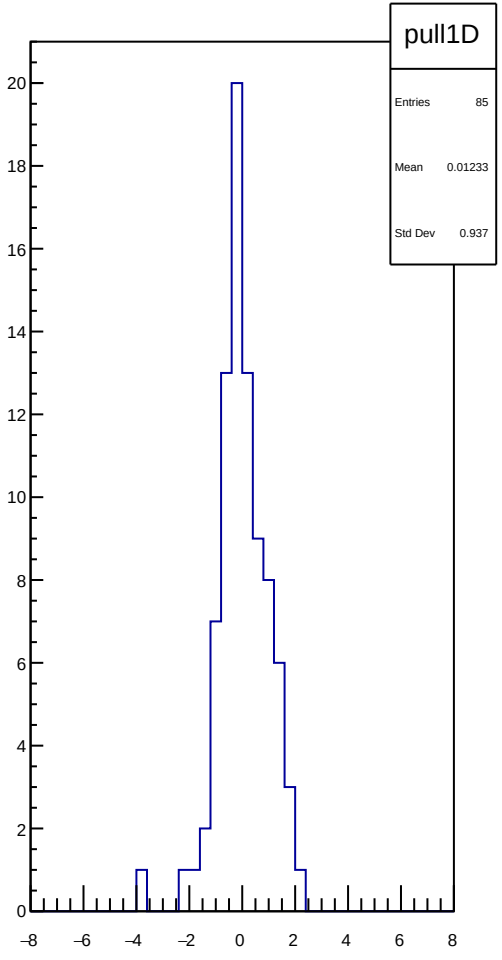

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 94.9 / 84
p0 −19.05 ± 24.38
pull
Entries 85
Mean −448.9
Std Dev 148.2
pull1D
Entries 85
Mean 0.0003135
Std Dev 1.057

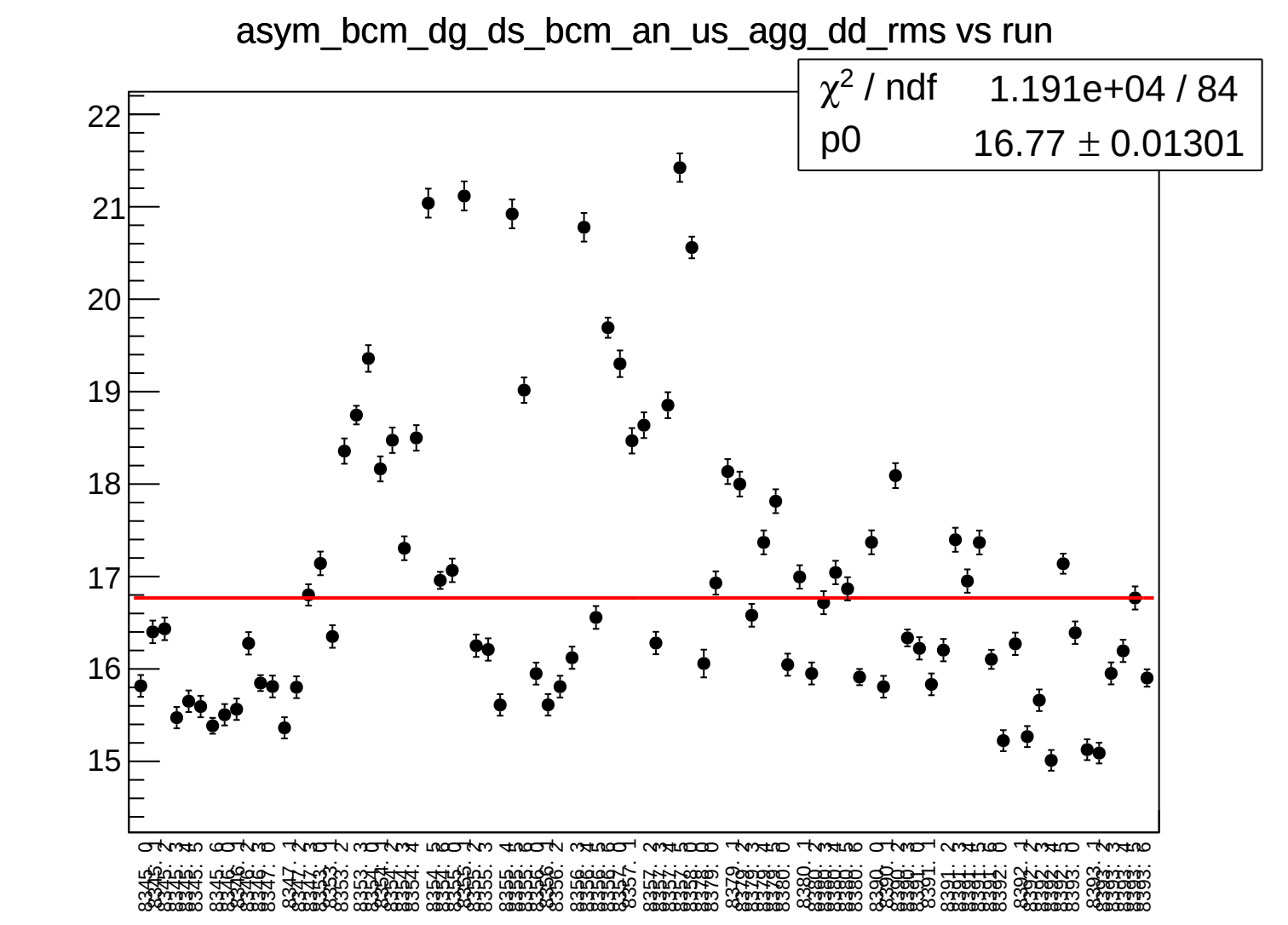

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4737 / 84
p0 22.26 ± 0.01724
26
25
24
23
22
21
20

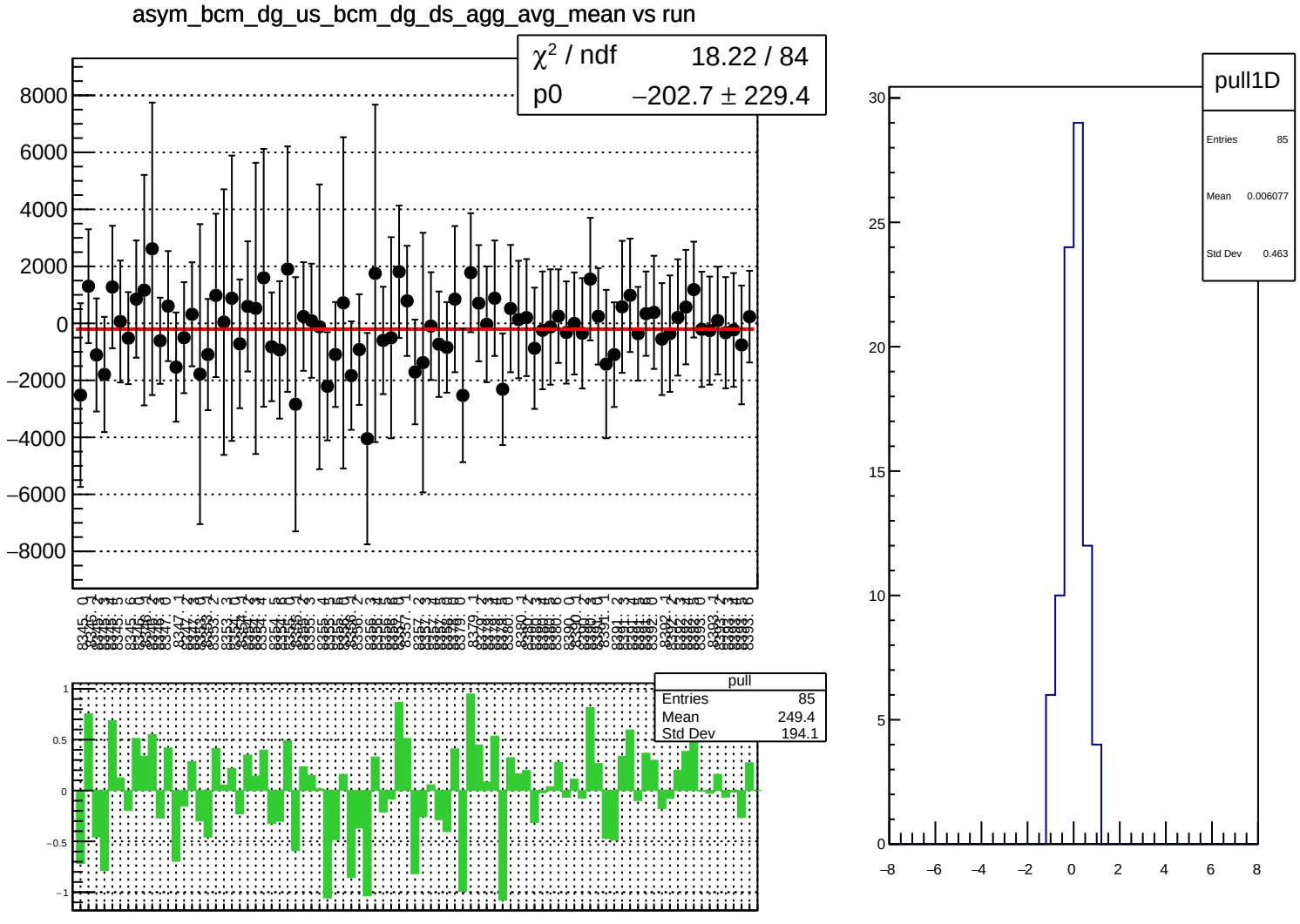

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.19 / 84
p0 −178.4 ± 228.2
pull
Entries 85
Mean 276.1
Std Dev 222.8
pull1D
Entries 85
Mean 0.005124
Std Dev 0.4364

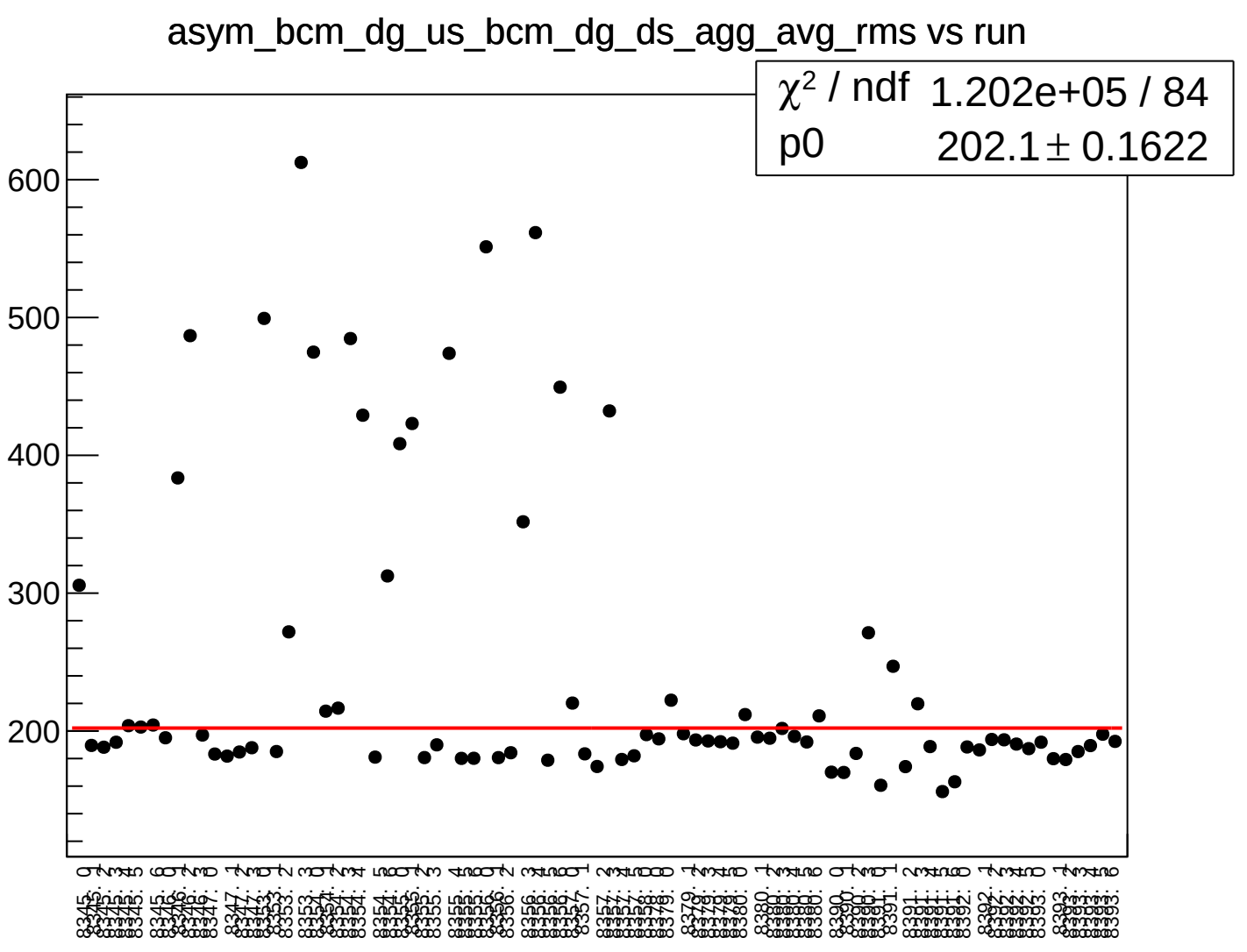

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ^2 / ndf 1.211e+05 / 84
p0 201 ± 0.1614
600
500
400
300
200

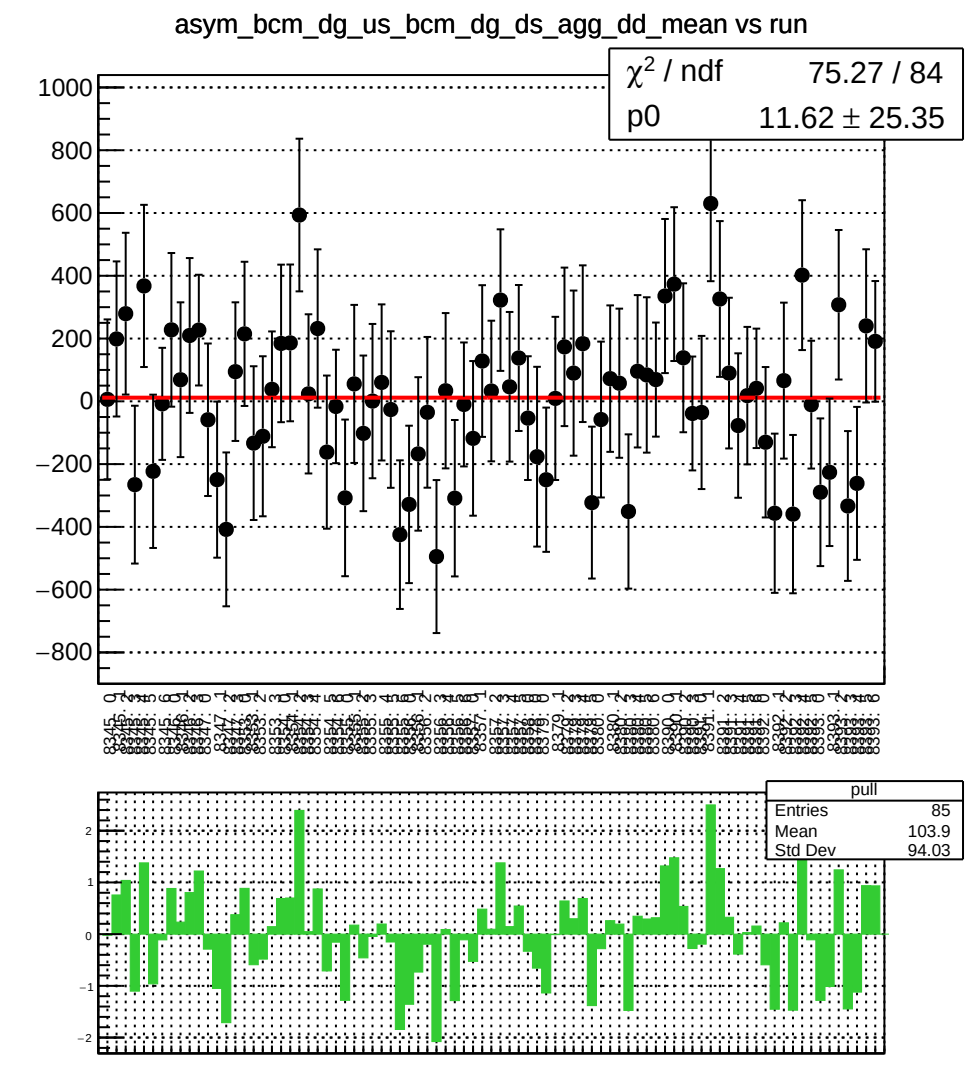

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 74.63 / 84
p0 −30.38 ± 18.4
pull
Entries 85
Mean 70.01
Std Dev 40.65

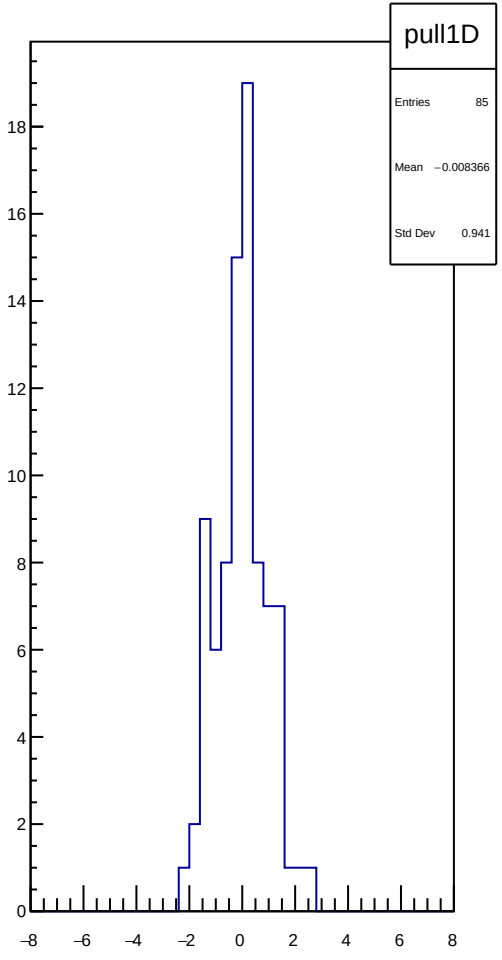

pull1D
Entries 85
Mean 0.01233
Std Dev 0.937

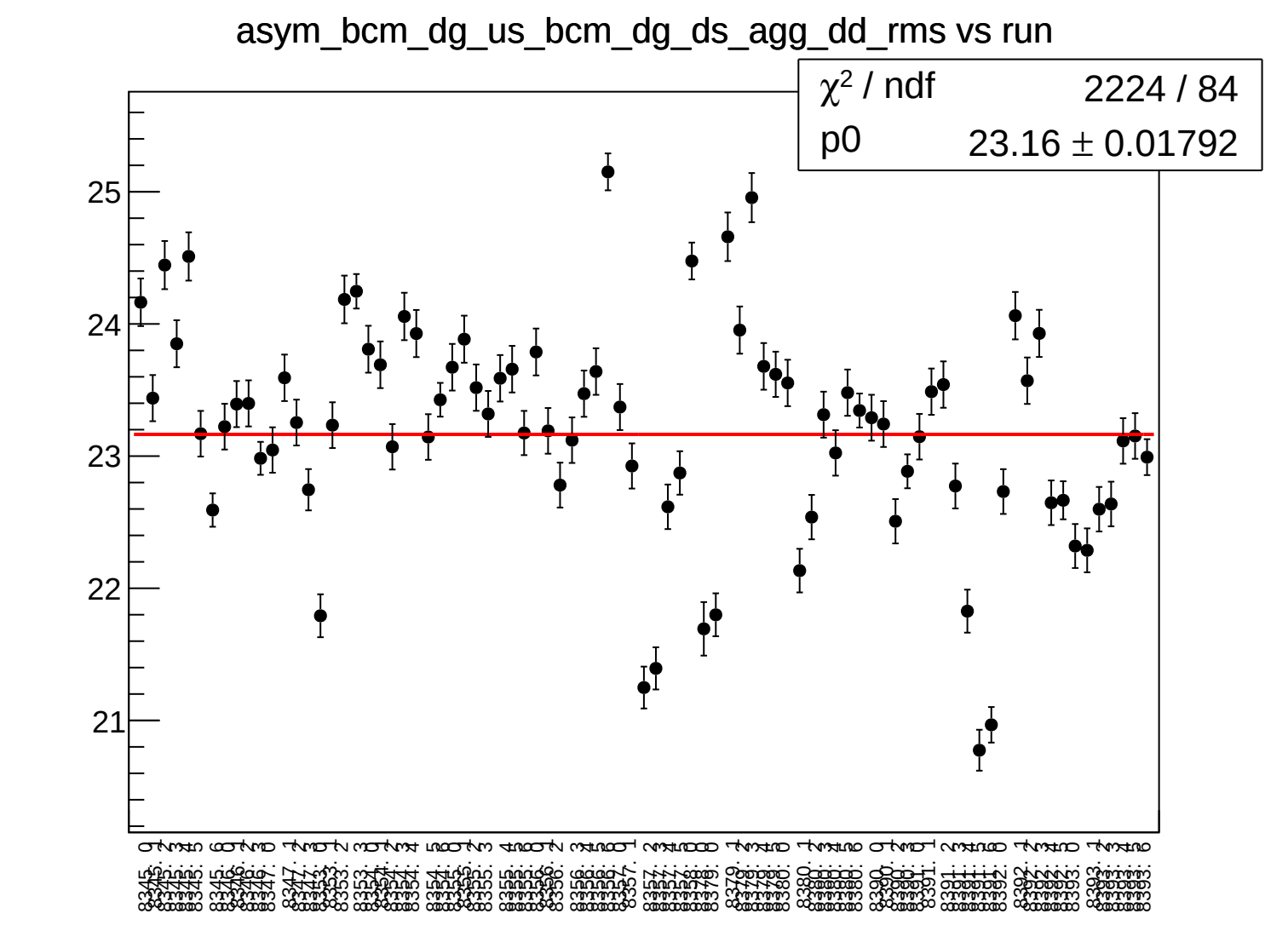

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1.191e+04 / 84
p0 16.77 ± 0.01301
22
21
20
19
18
17
16
15

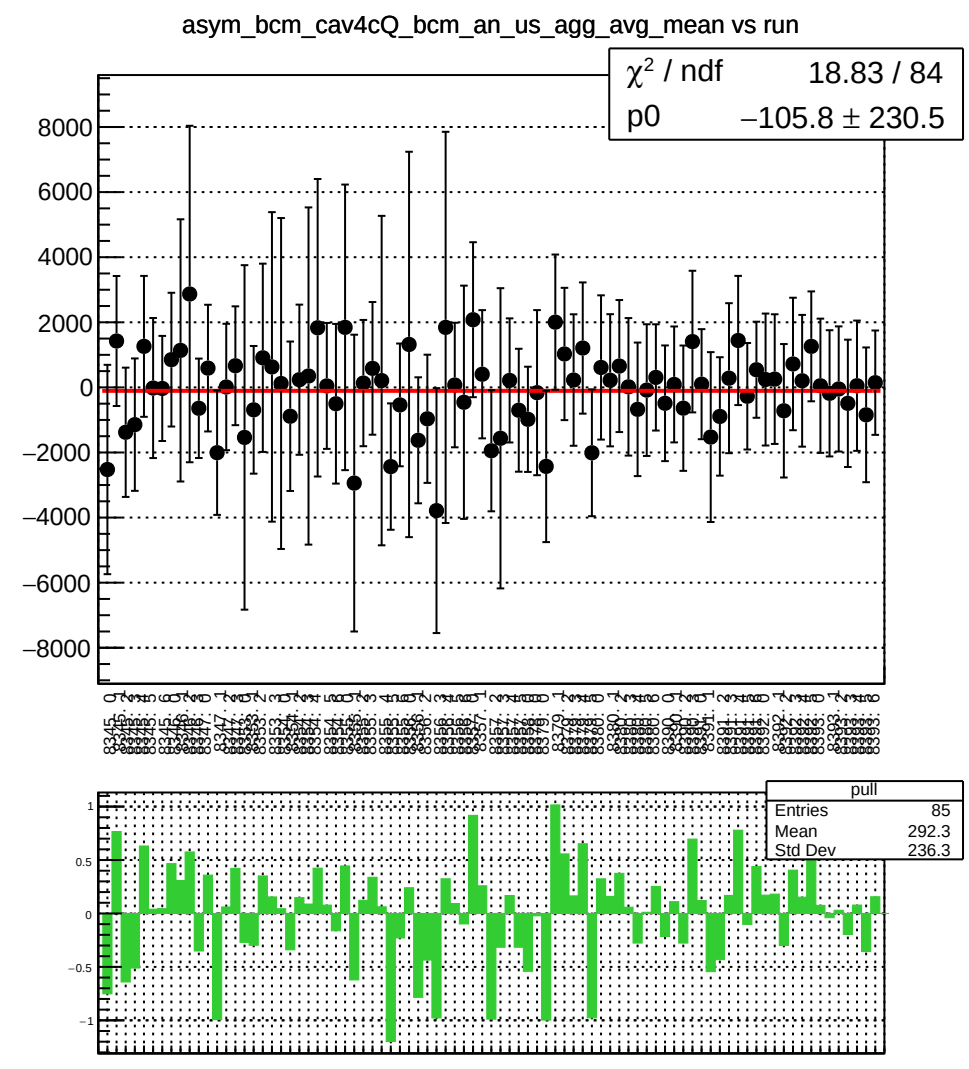

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.22 / 84
p0 −202.7 ± 229.4
pull
Entries 85
Mean 249.4
Std Dev 194.1
pull1D
Entries 85
Mean 0.006077
Std Dev 0.463

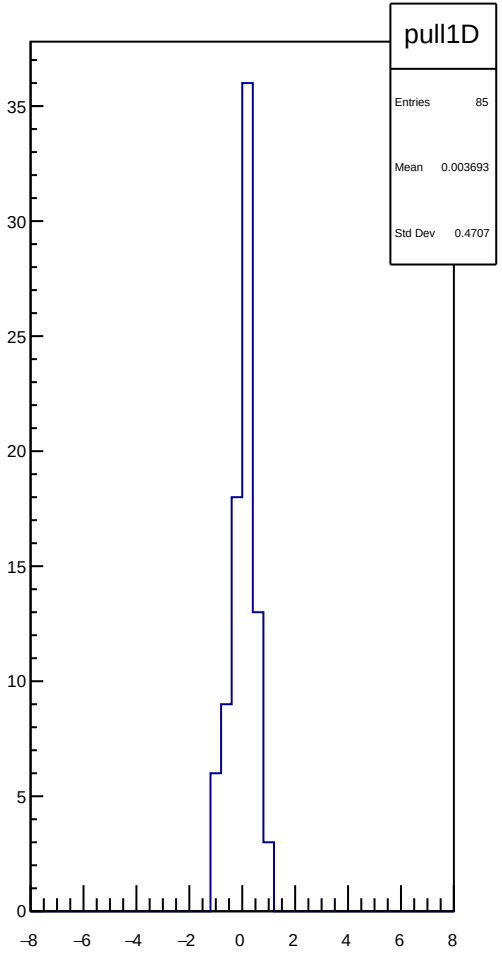

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.202e+05 / 84
p0 202.1 ± 0.1622
600
500
400
300
200

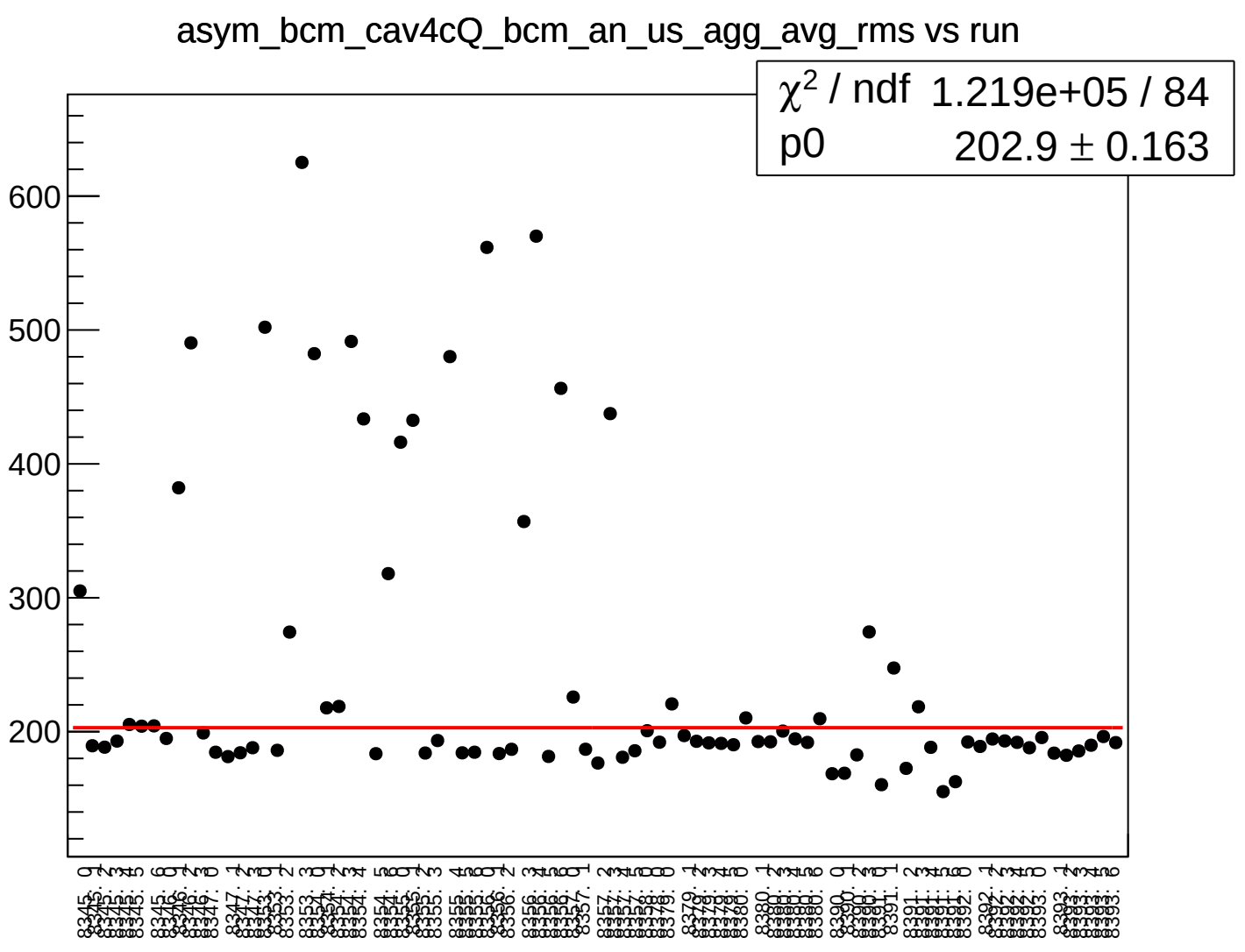

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 75.27 / 84
p0 11.62 ± 25.35
pull
Entries 85
Mean 103.9
Std Dev 94.03

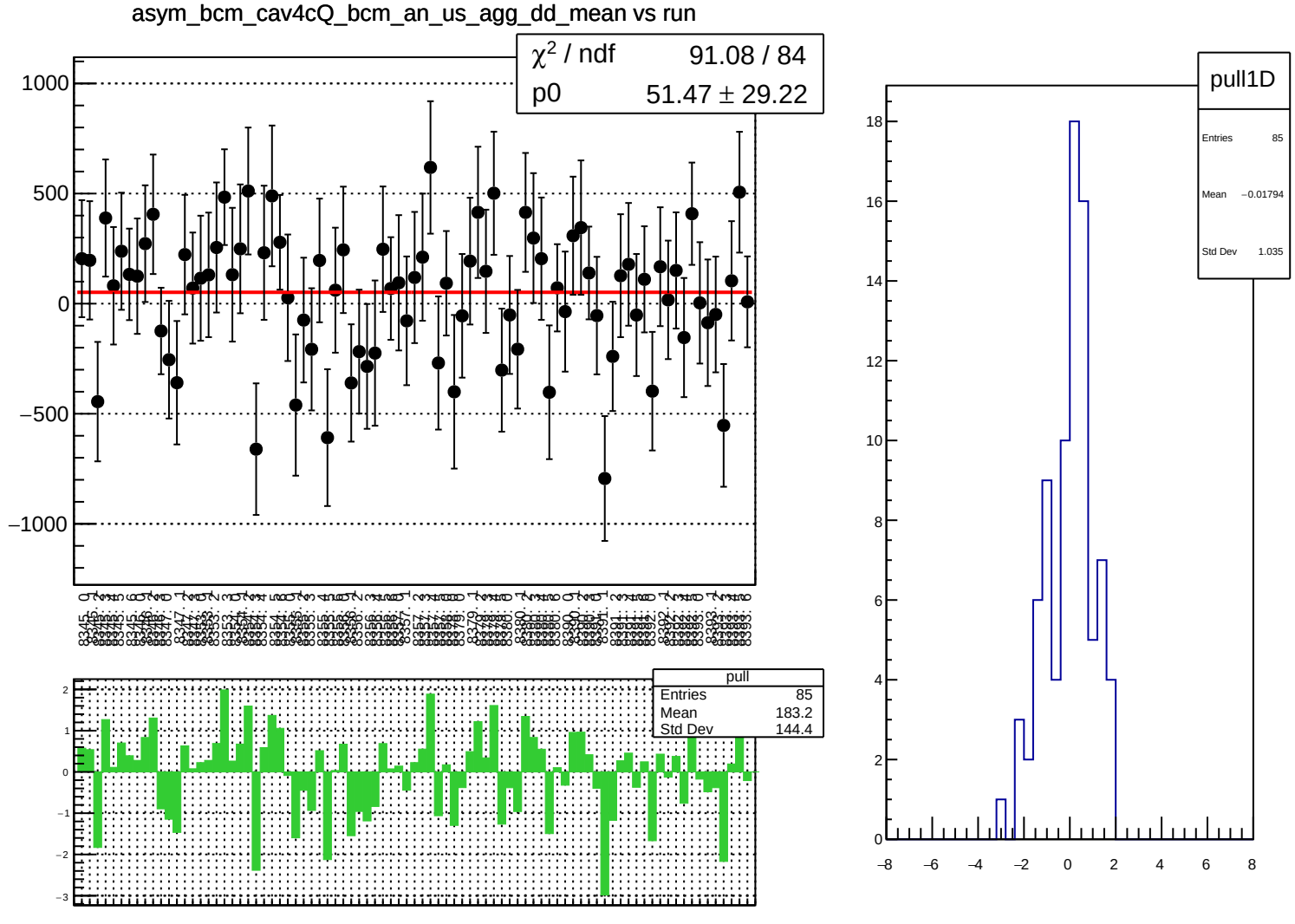

pull1D
Entries 85
Mean −0.008366
Std Dev 0.941

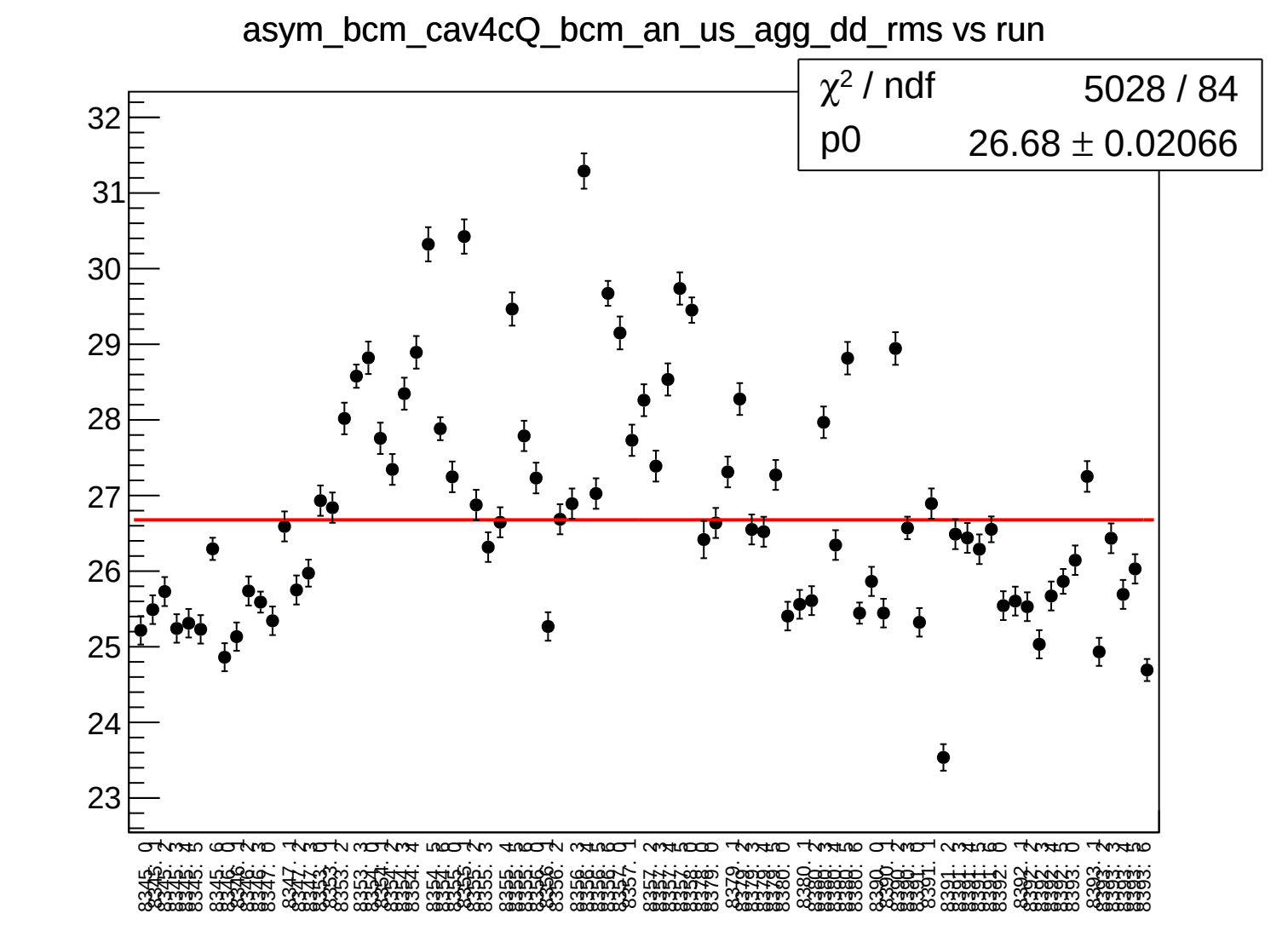

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2224 / 84
p0 23.16 ± 0.01792
25
24
23
22
21

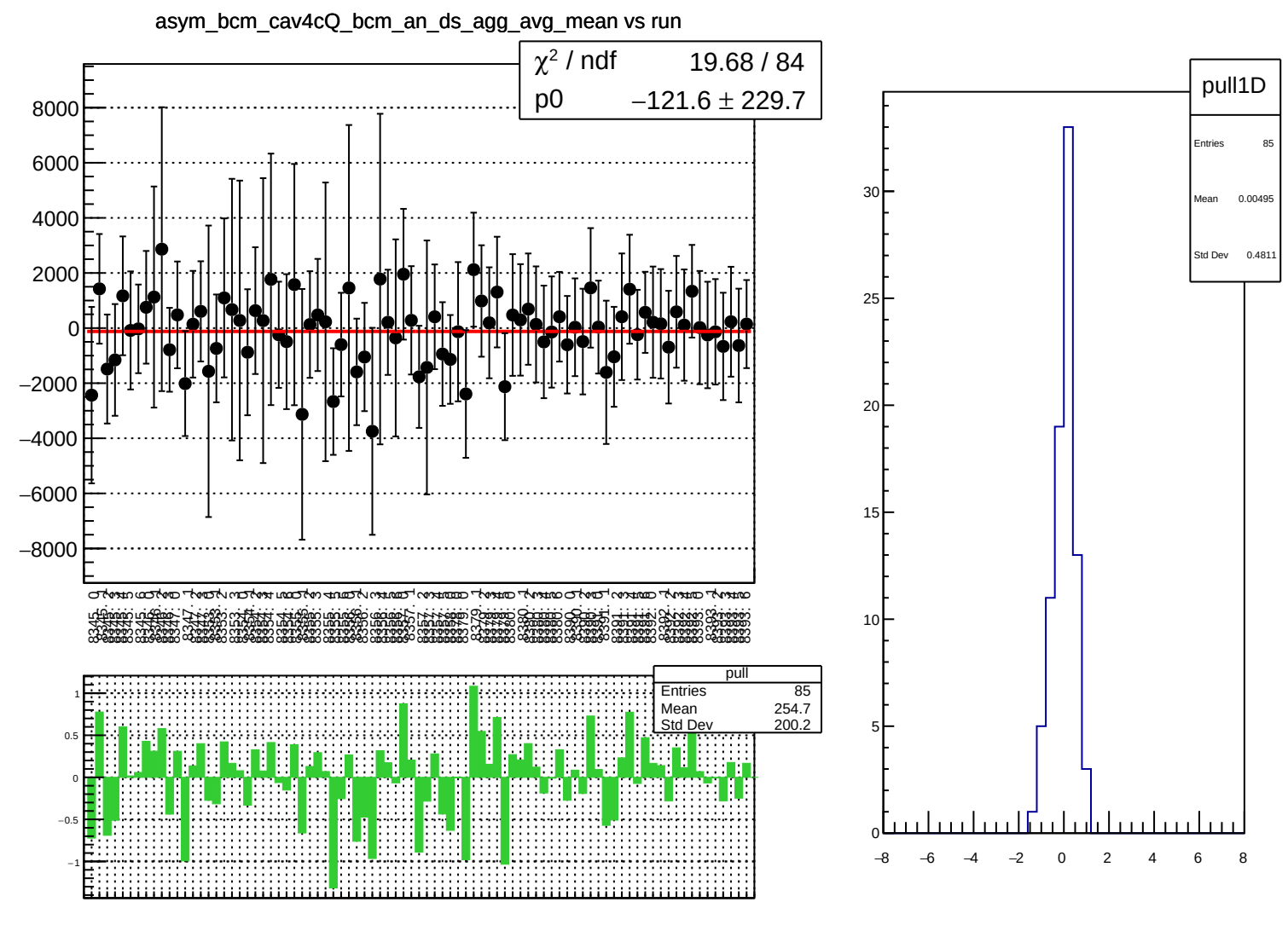

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.83 / 84
p0 −105.8 ± 230.5
pull
Entries 85
Mean 292.3
Std Dev 236.3

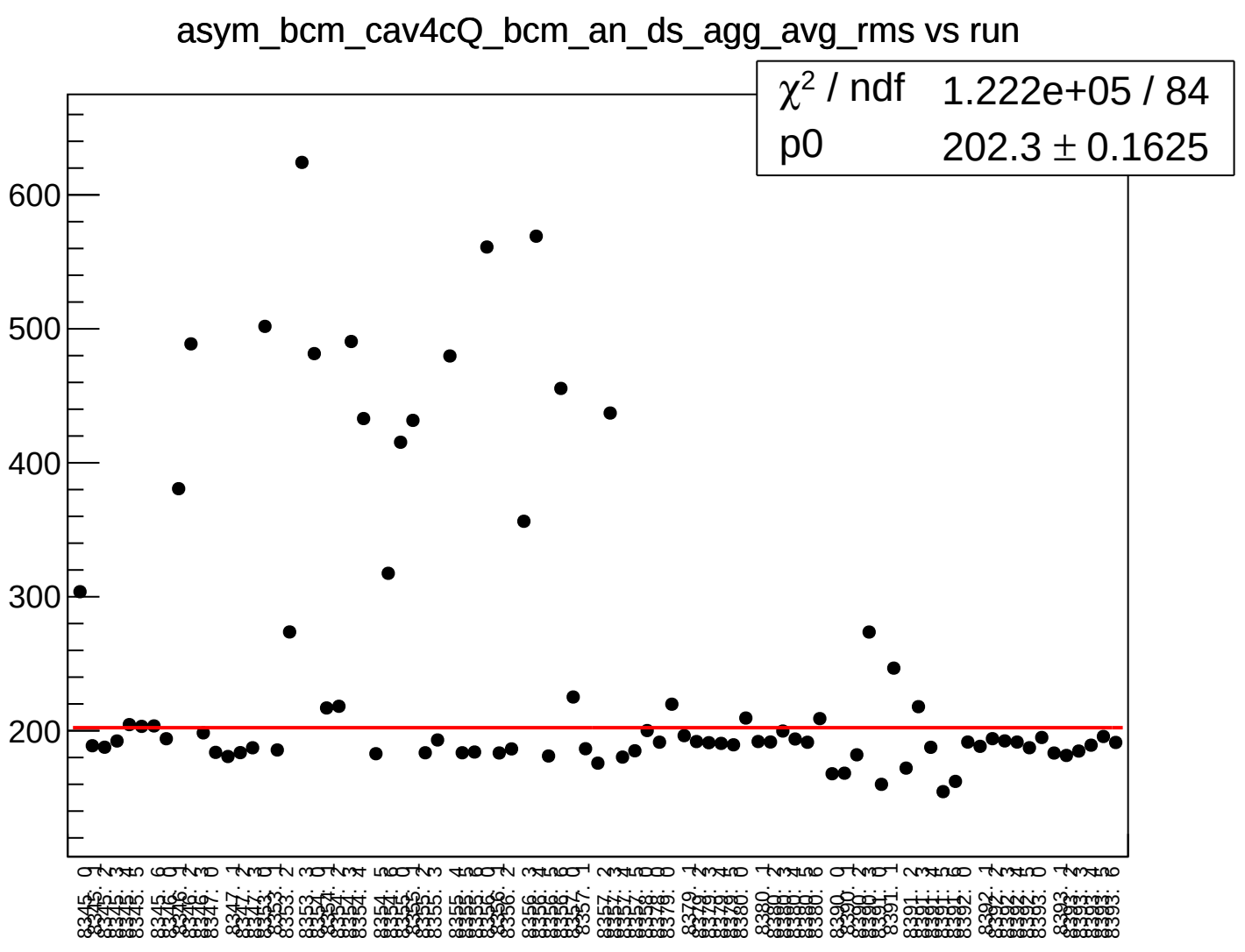

pull1D
Entries 85
Mean 0.003693
Std Dev 0.4707

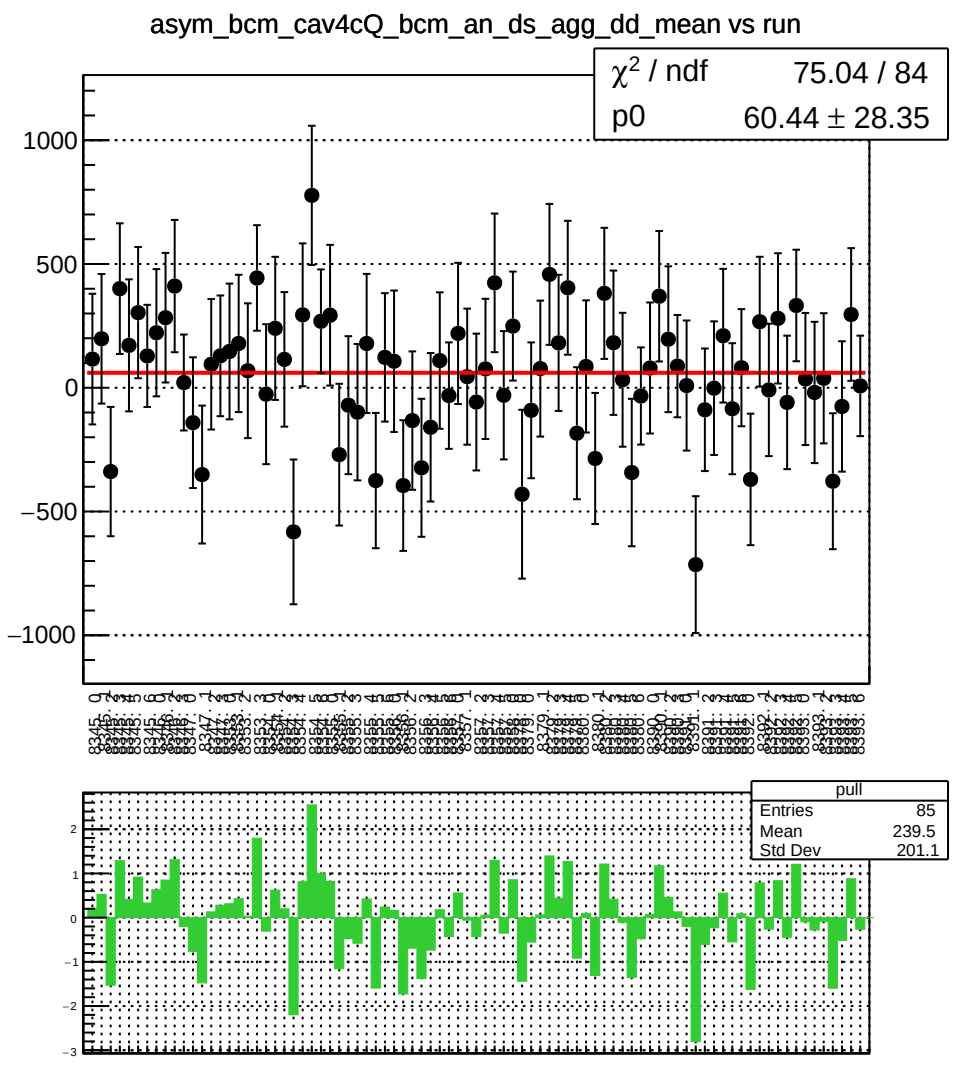

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.219e+05 / 84
p0 202.9 ± 0.163
600
500
400
300
200

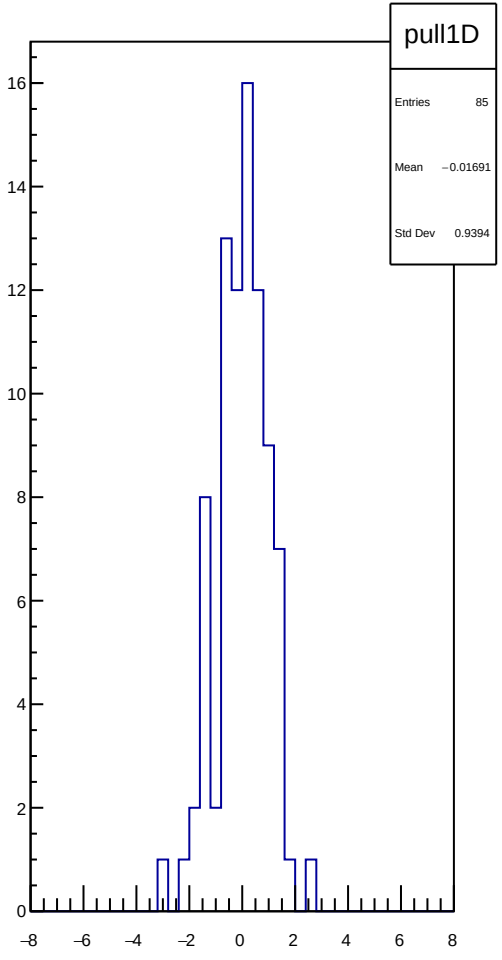

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 91.08 / 84
p0 51.47 ± 29.22
1000
500
0
−500
−1000
pull
Entries 85
Mean 183.2
Std Dev 144.4
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.01794
Std Dev 1.035
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

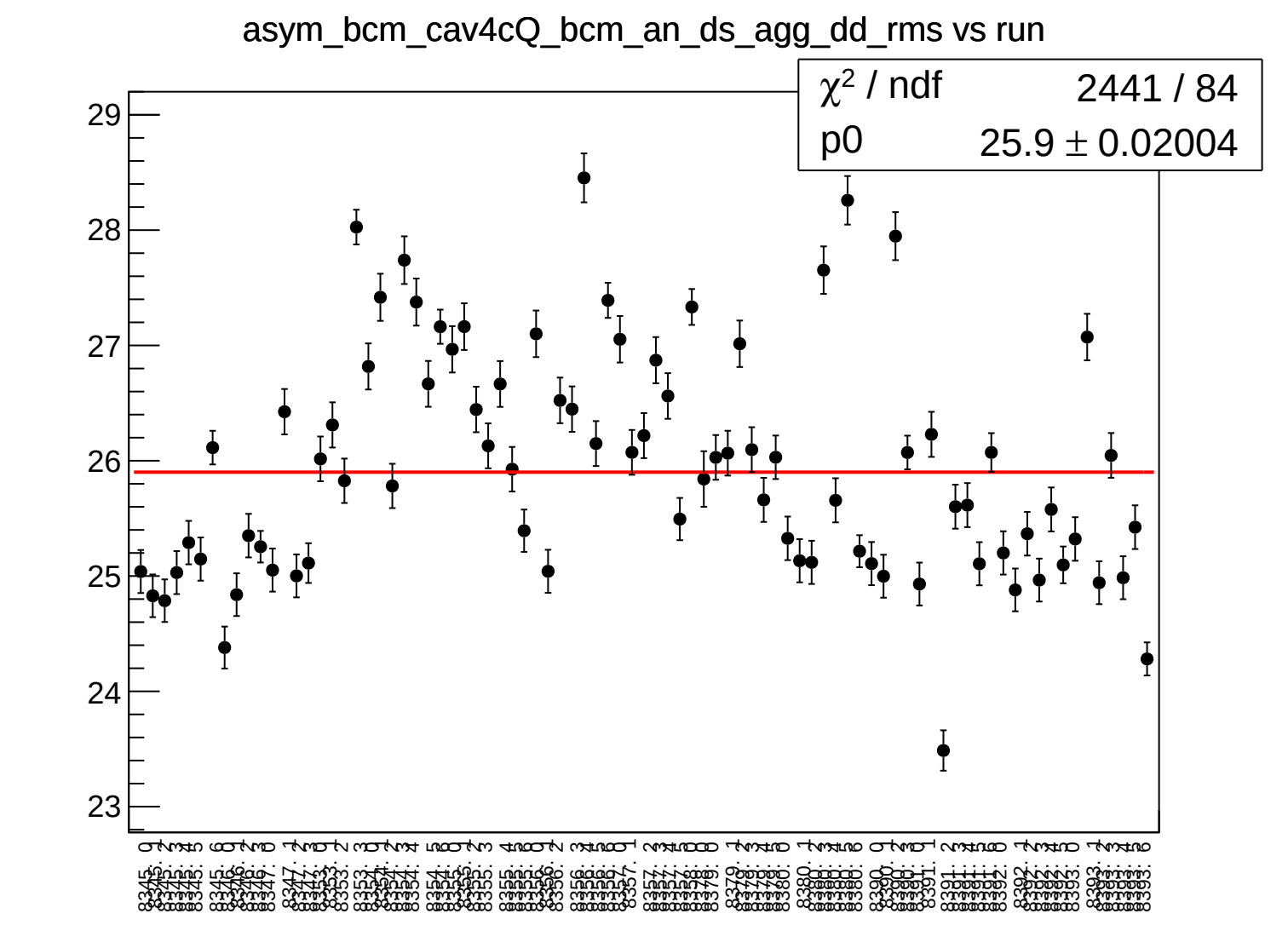

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5028 / 84
p0 26.68 ± 0.02066
32
31
30
29
28
27
26
25
24
23

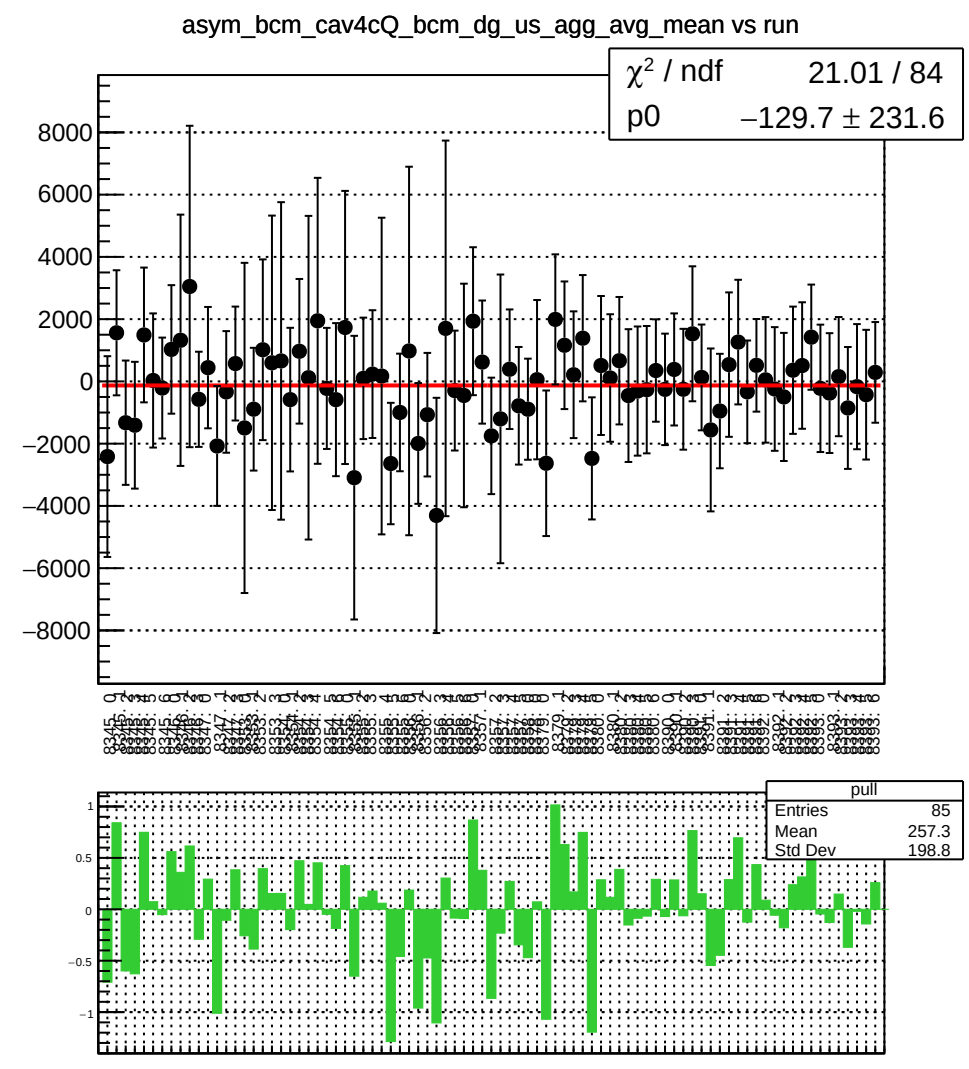

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.68 / 84
p0 −121.6 ± 229.7
pull
Entries 85
Mean 254.7
Std Dev 200.2
pull1D
Entries 85
Mean 0.00495
Std Dev 0.4811

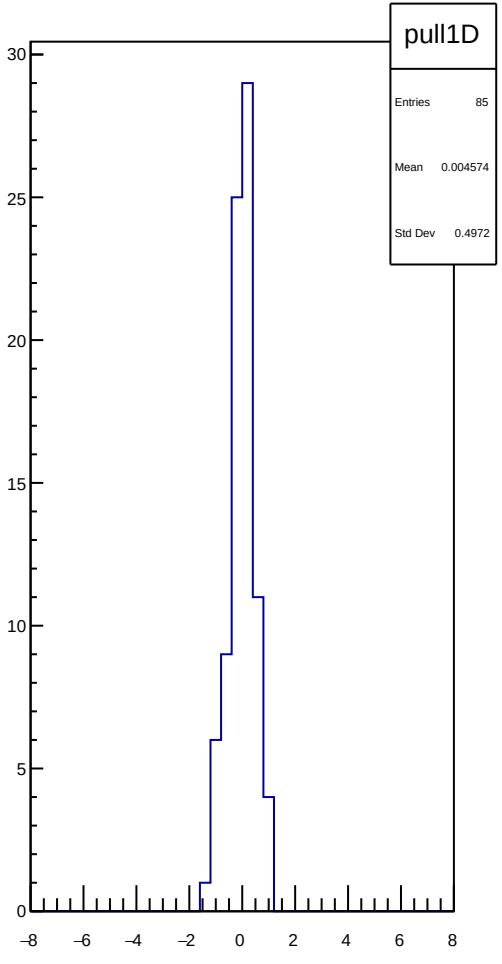

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.222e+05 / 84
p0 202.3 ± 0.1625
600
500
400
300
200

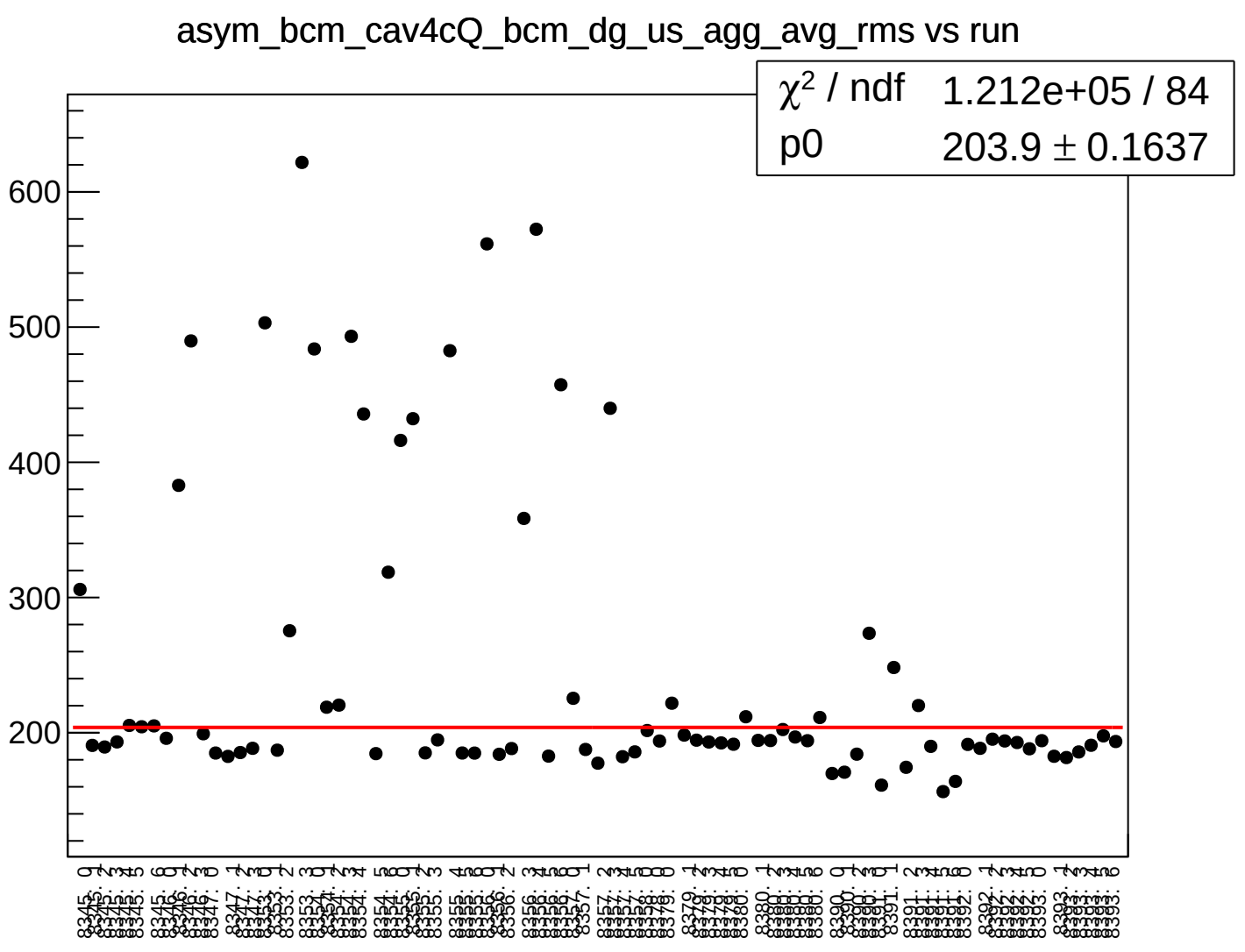

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.04 / 84
p0 60.44 ± 28.35
1000
500
0
−500
−1000
pull
Entries 85
Mean 239.5
Std Dev 201.1
2
1
0
−1
−2
−3

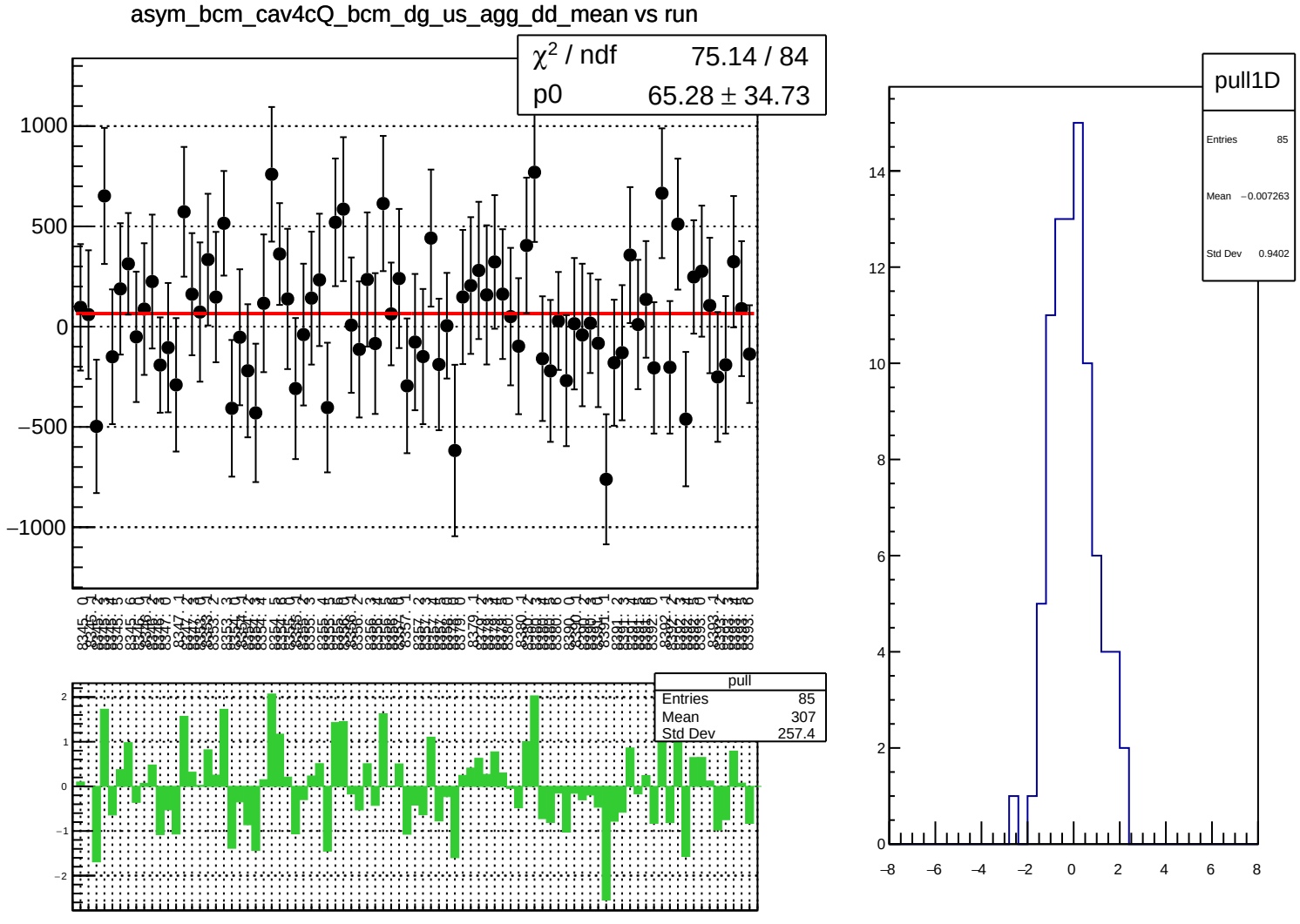

pull1D
Entries 85
Mean −0.01691
Std Dev 0.9394
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

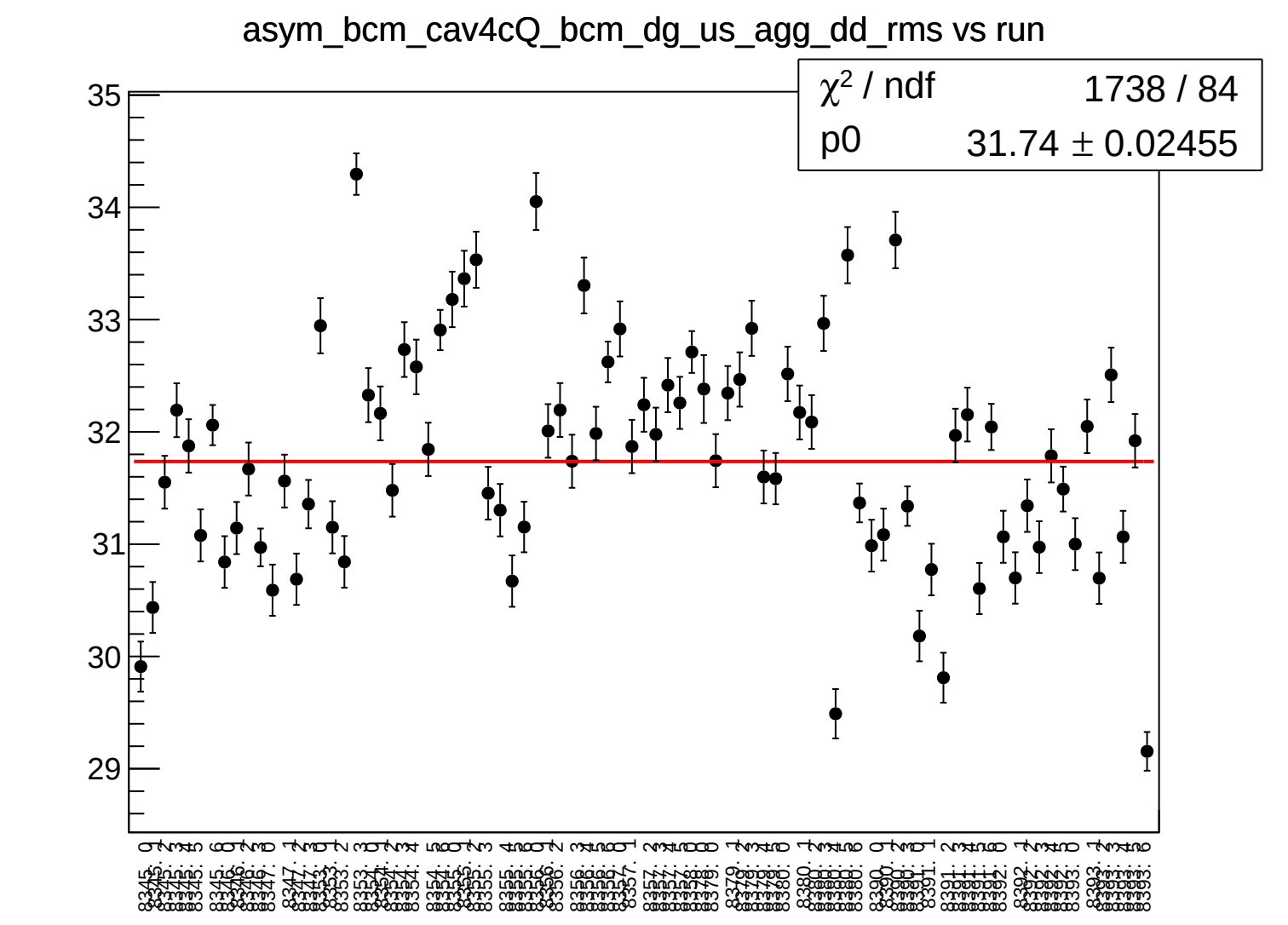

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2441 / 84
p0 25.9 ± 0.02004
29
28
27
26
25
24
23

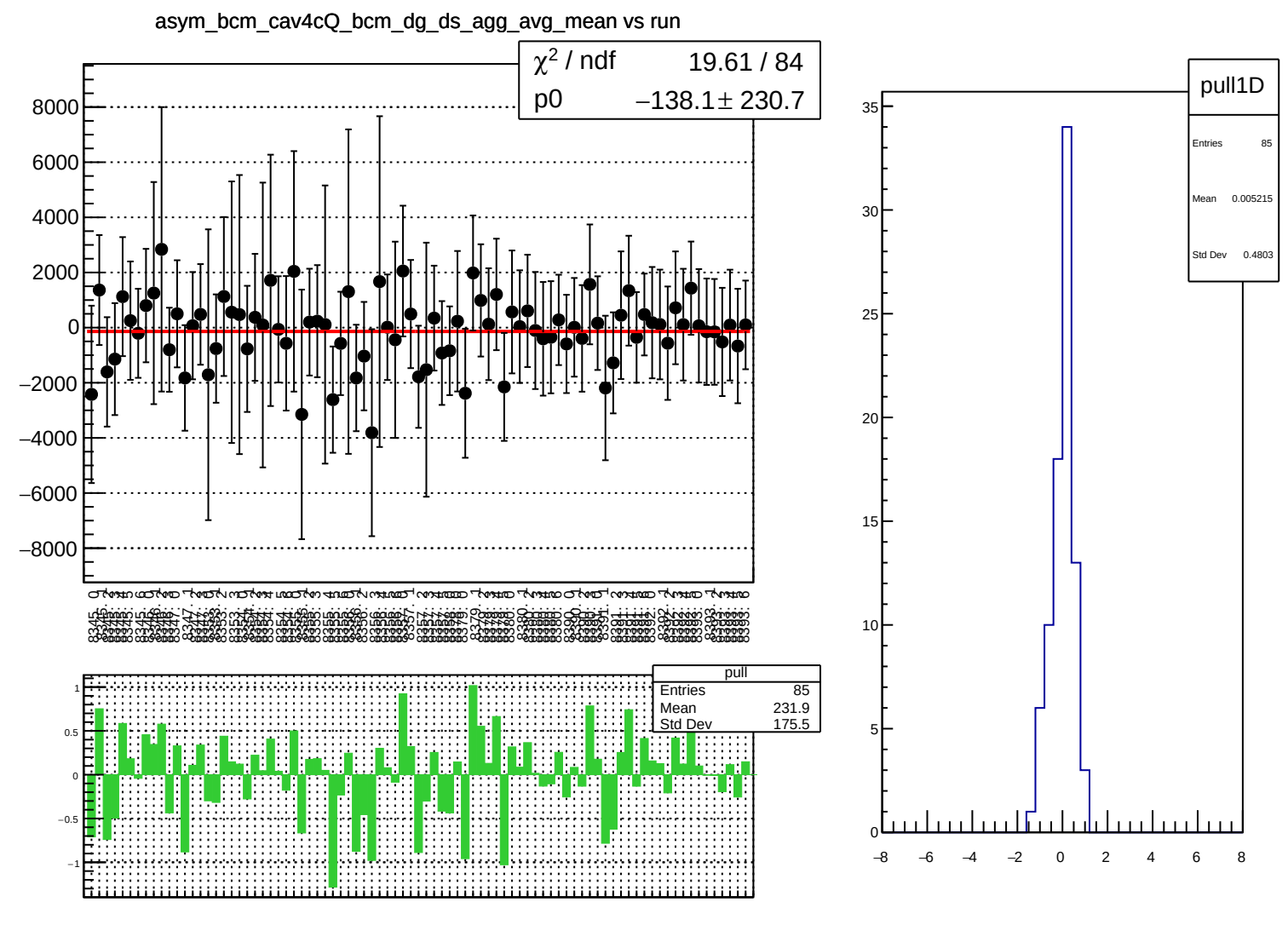

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 21.01 / 84
p0 −129.7 ± 231.6
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 85
Mean 257.3
Std Dev 198.8
1
0.5
0
−0.5
−1

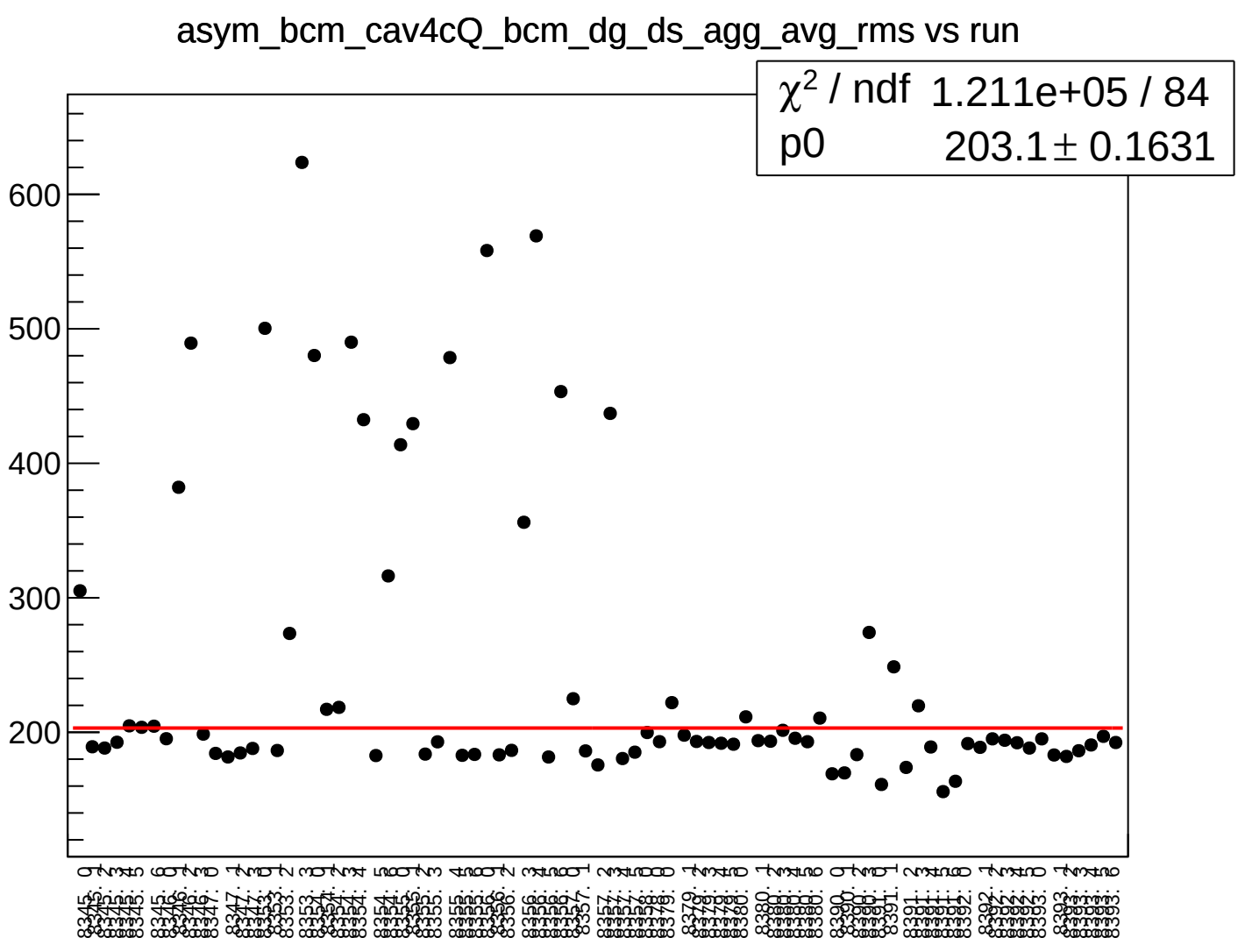

pull1D
Entries 85
Mean 0.004574
Std Dev 0.4972
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

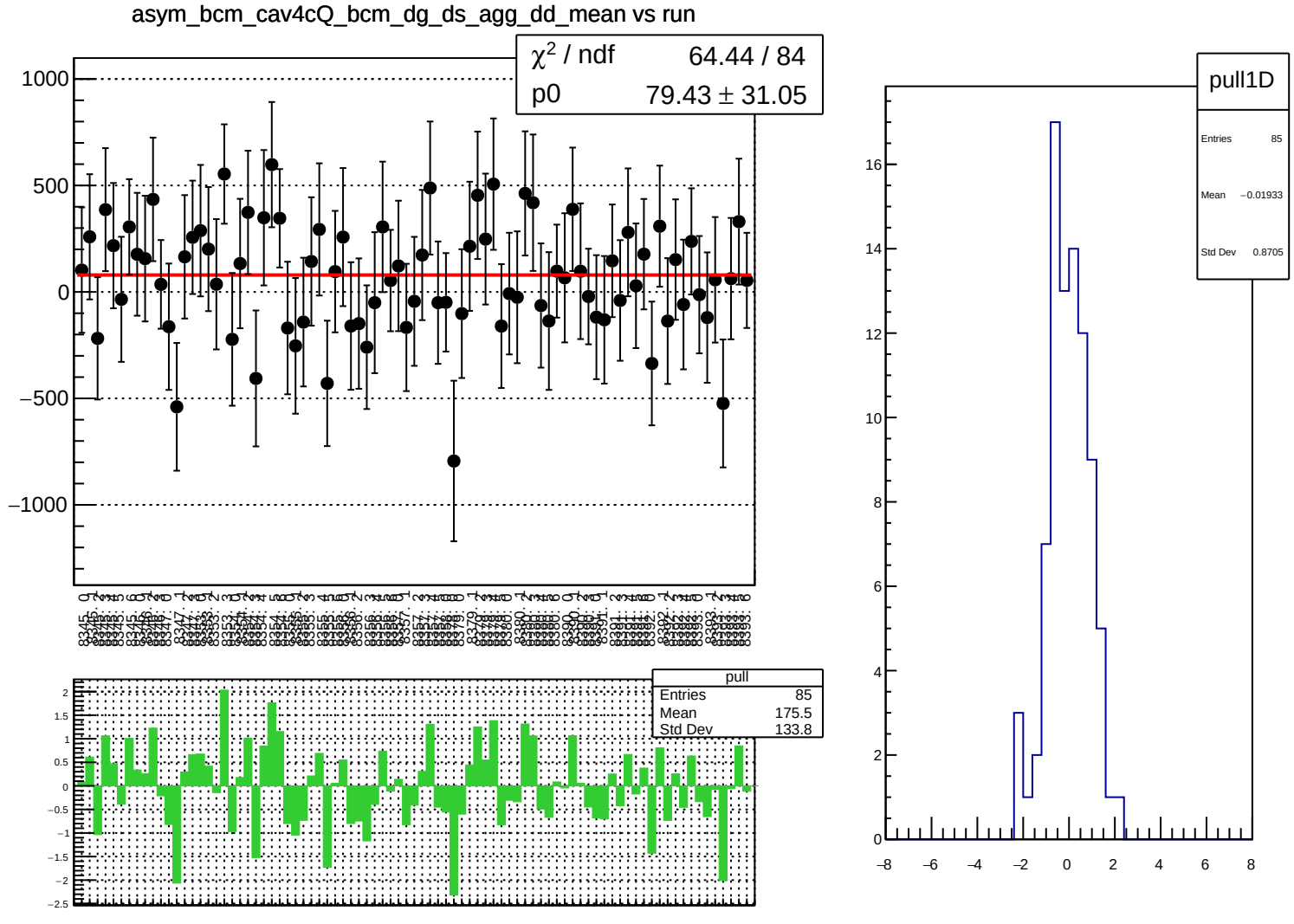

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.212e+05 / 84
p0 203.9 ± 0.1637
600
500
400
300
200

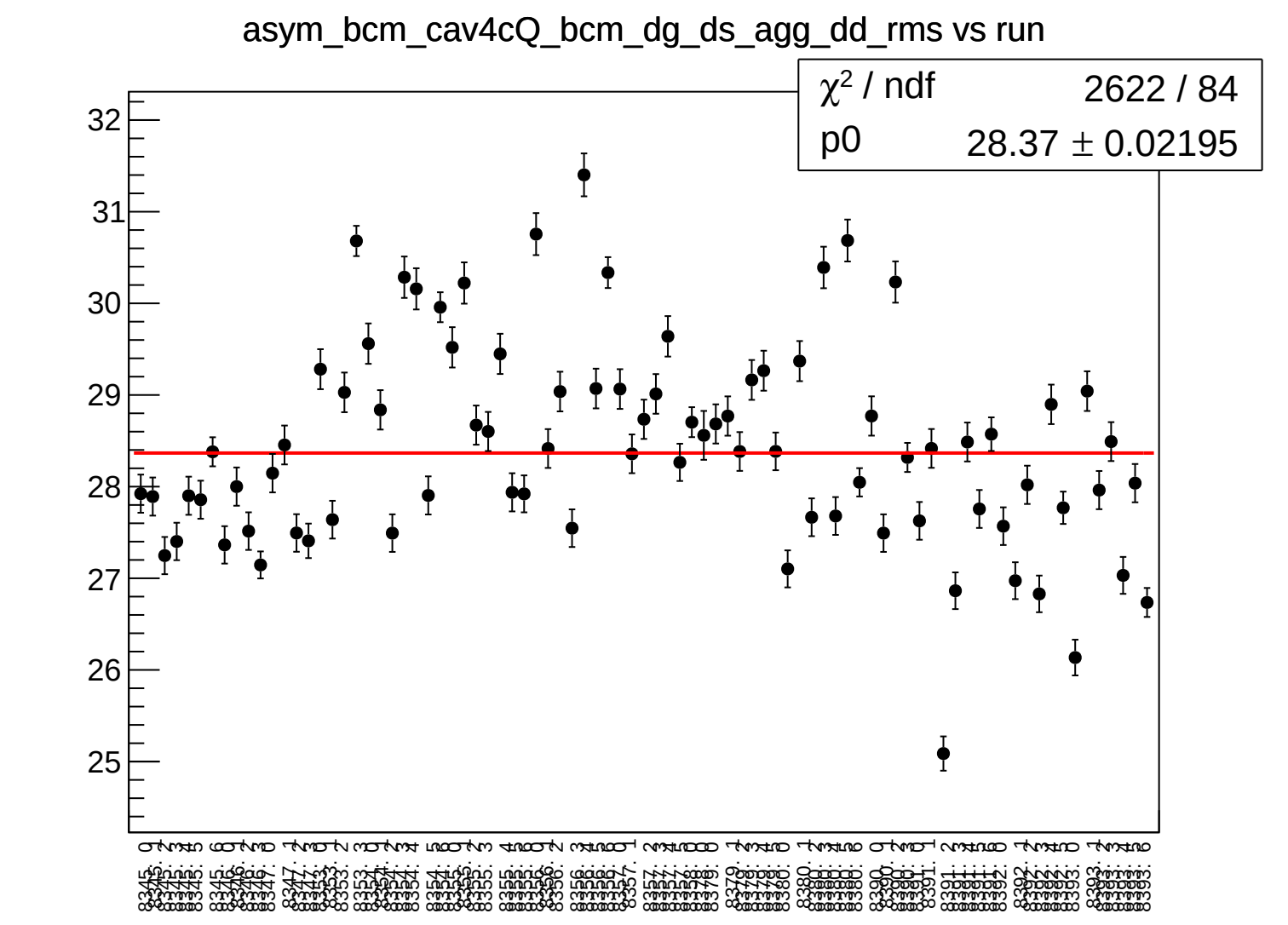

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 75.14 / 84
p0 65.28 ± 34.73
1000
500
0
−500
−1000
pull
Entries 85
Mean 307
Std Dev 257.4
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.007263
Std Dev 0.9402
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

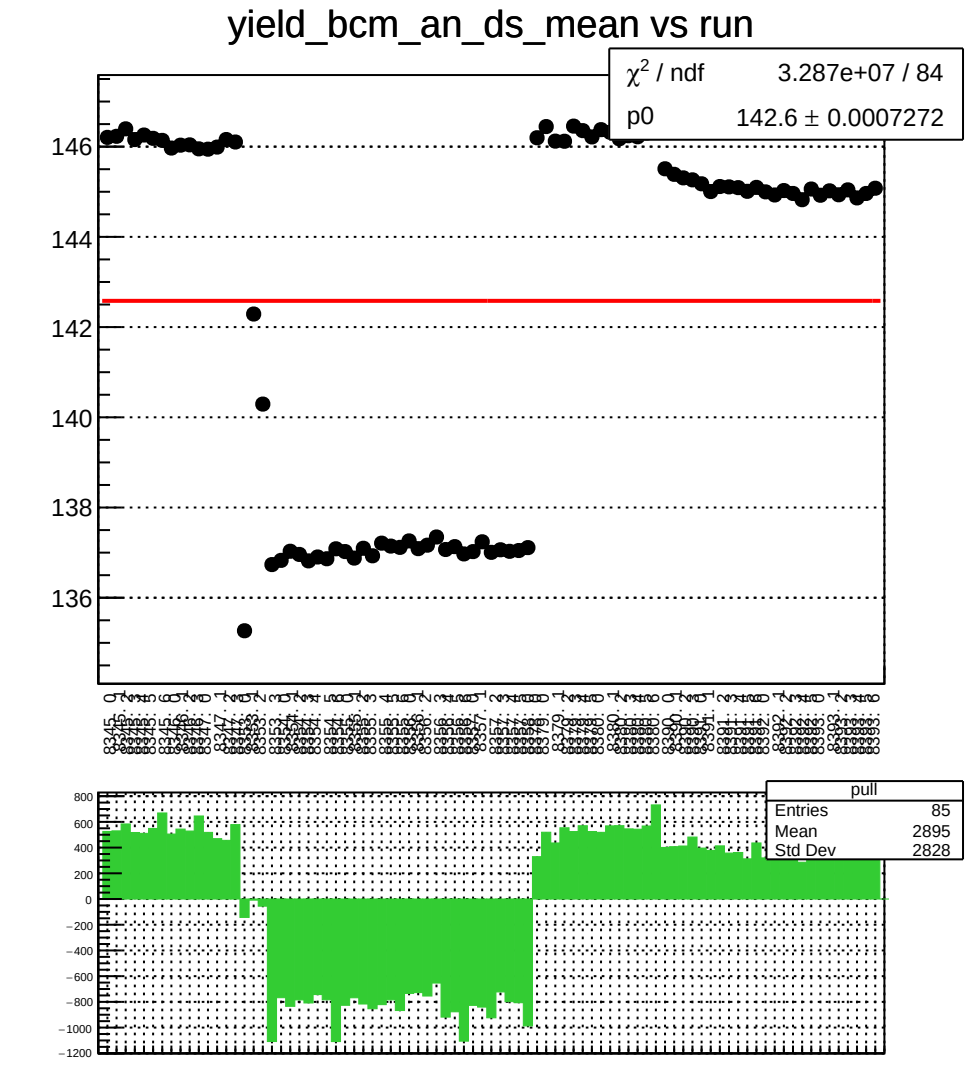

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1738 / 84
p0 31.74 ± 0.02455
35
34
33
32
31
30
29

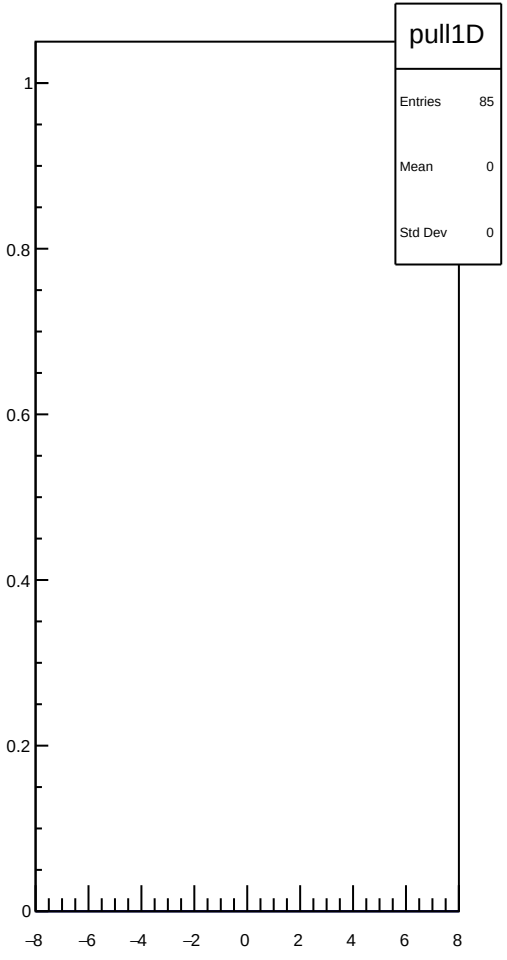

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 19.61 / 84
p0 −138.1± 230.7
pull
Entries 85
Mean 231.9
Std Dev 175.5
pull1D
Entries 85
Mean 0.005215
Std Dev 0.4803

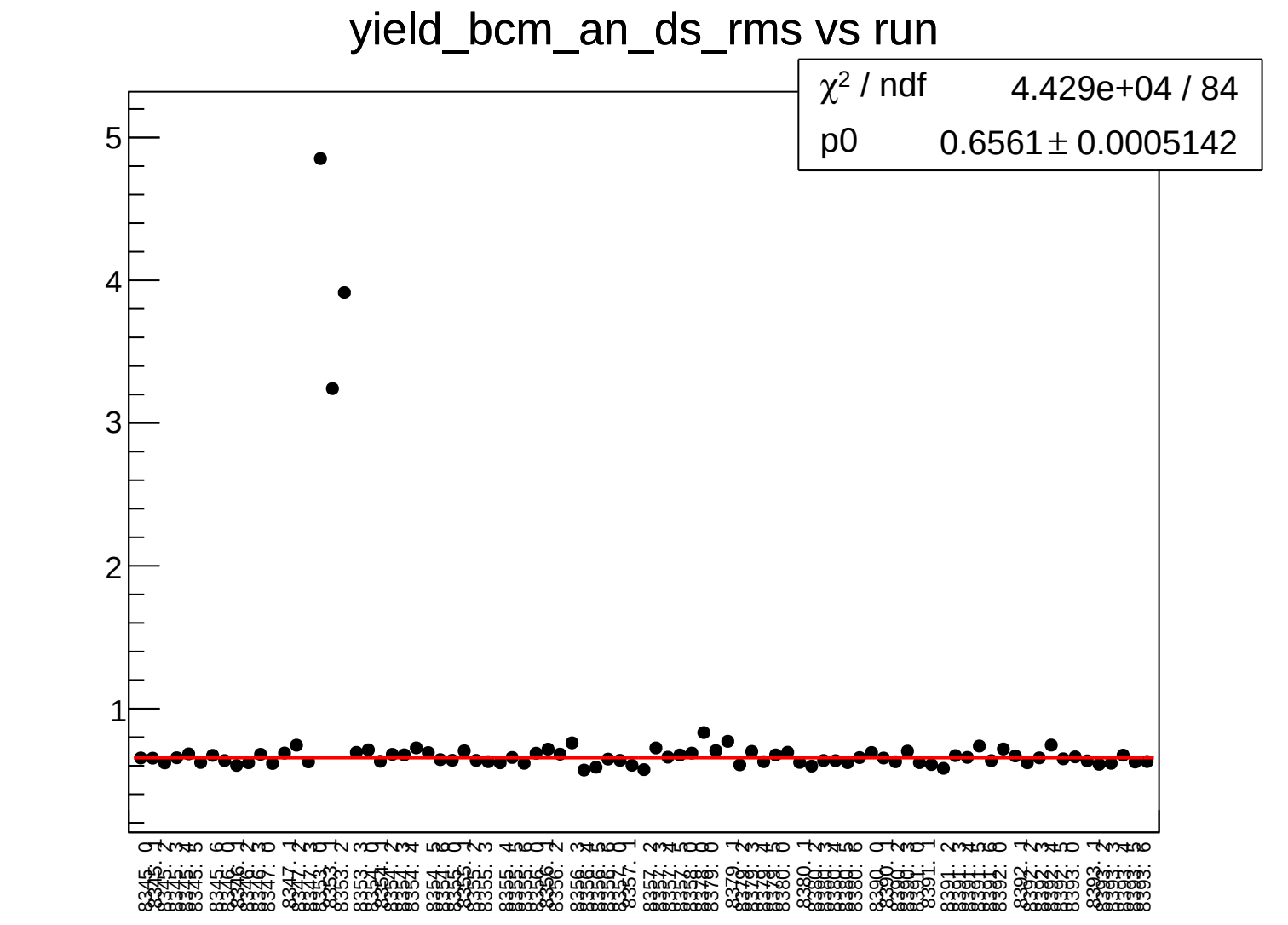

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.211e+05 / 84
p0 203.1 ± 0.1631
600
500
400
300
200

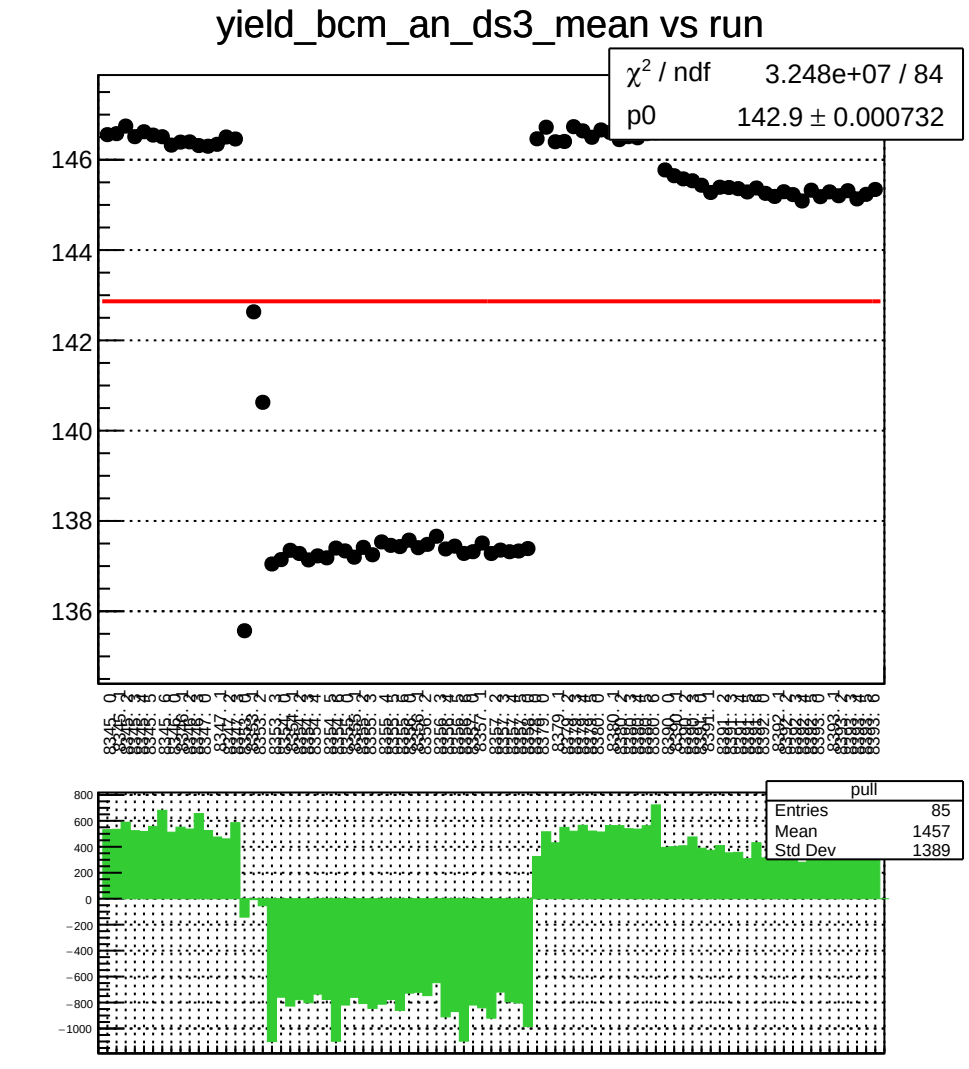

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 64.44 / 84
p0 79.43 ± 31.05
pull
Entries 85
Mean 175.5
Std Dev 133.8
pull1D
Entries 85
Mean −0.01933
Std Dev 0.8705

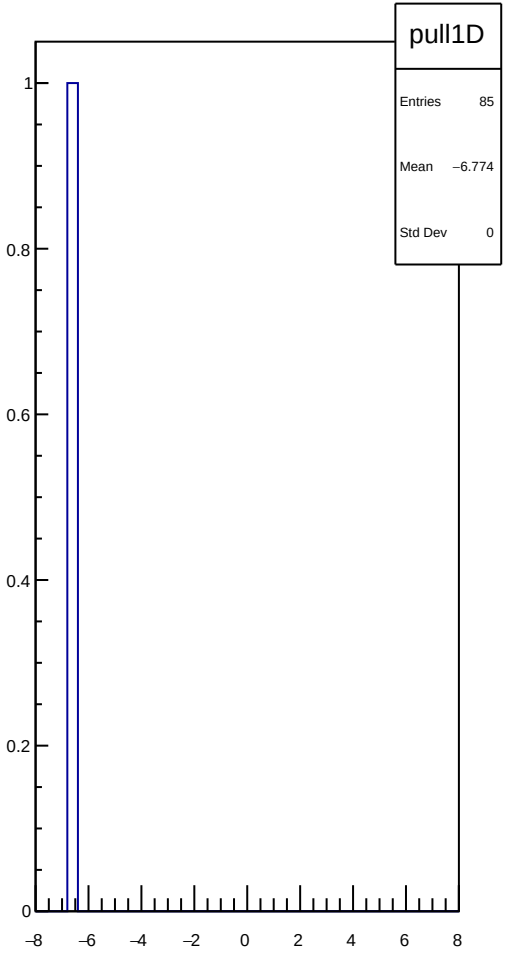

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2622 / 84
p0 28.37 ± 0.02195
32
31
30
29
28
27
26
25

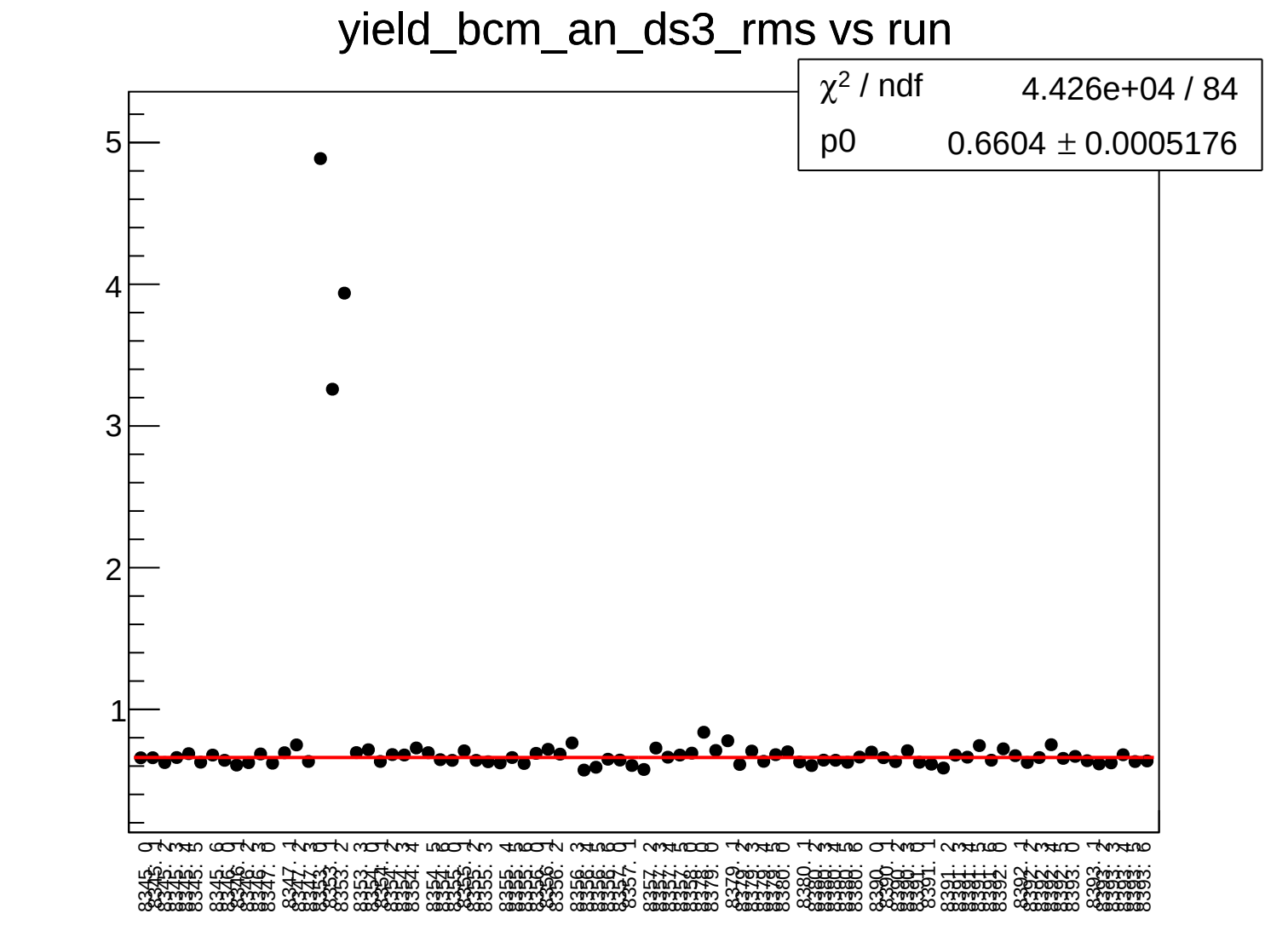

yield_bcm_an_ds_mean vs run
χ² / ndf 3.287e+07 / 84
p0 142.6 ± 0.0007272
146
144
142
140
138
136
pull
Entries 85
Mean 2895
Std Dev 2828
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

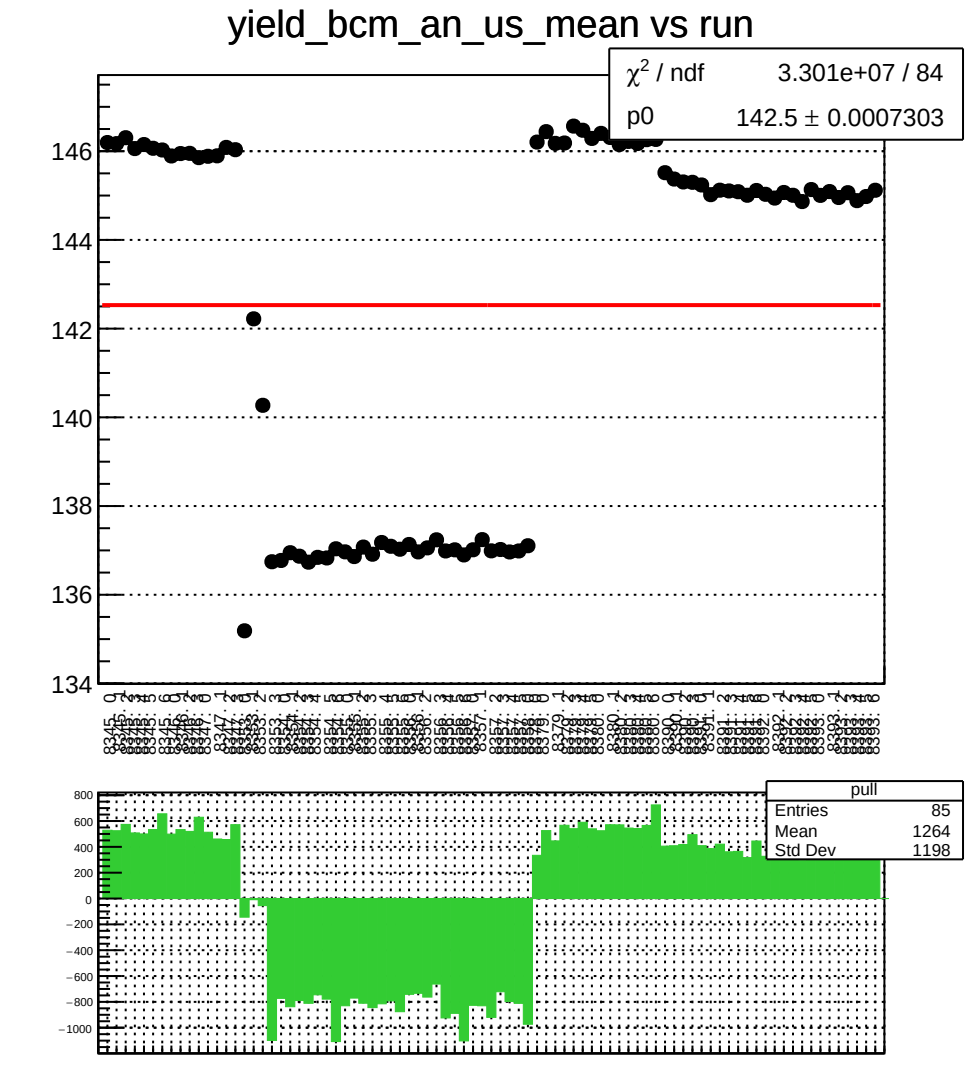

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

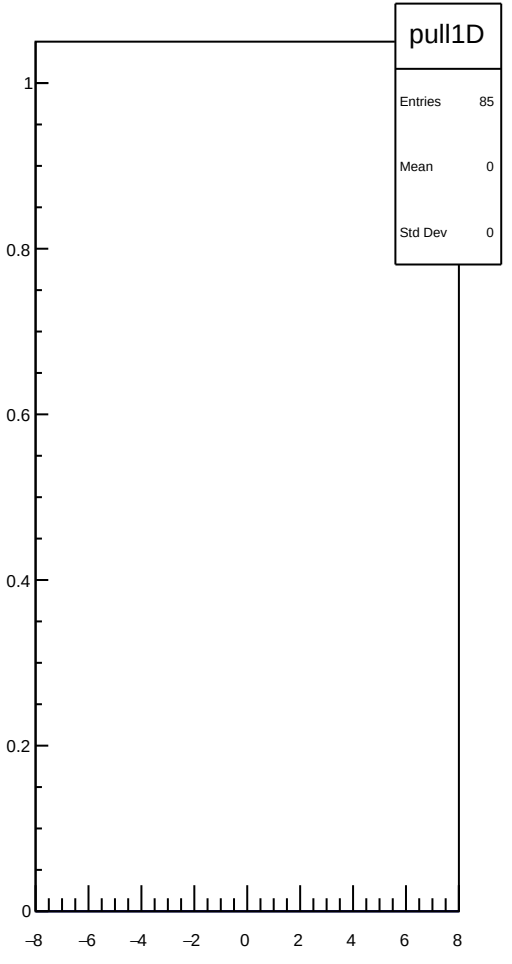

yield_bcm_an_ds_rms vs run
χ² / ndf 4.429e+04 / 84
p0 0.6561 ± 0.0005142
5
4
3
2
1

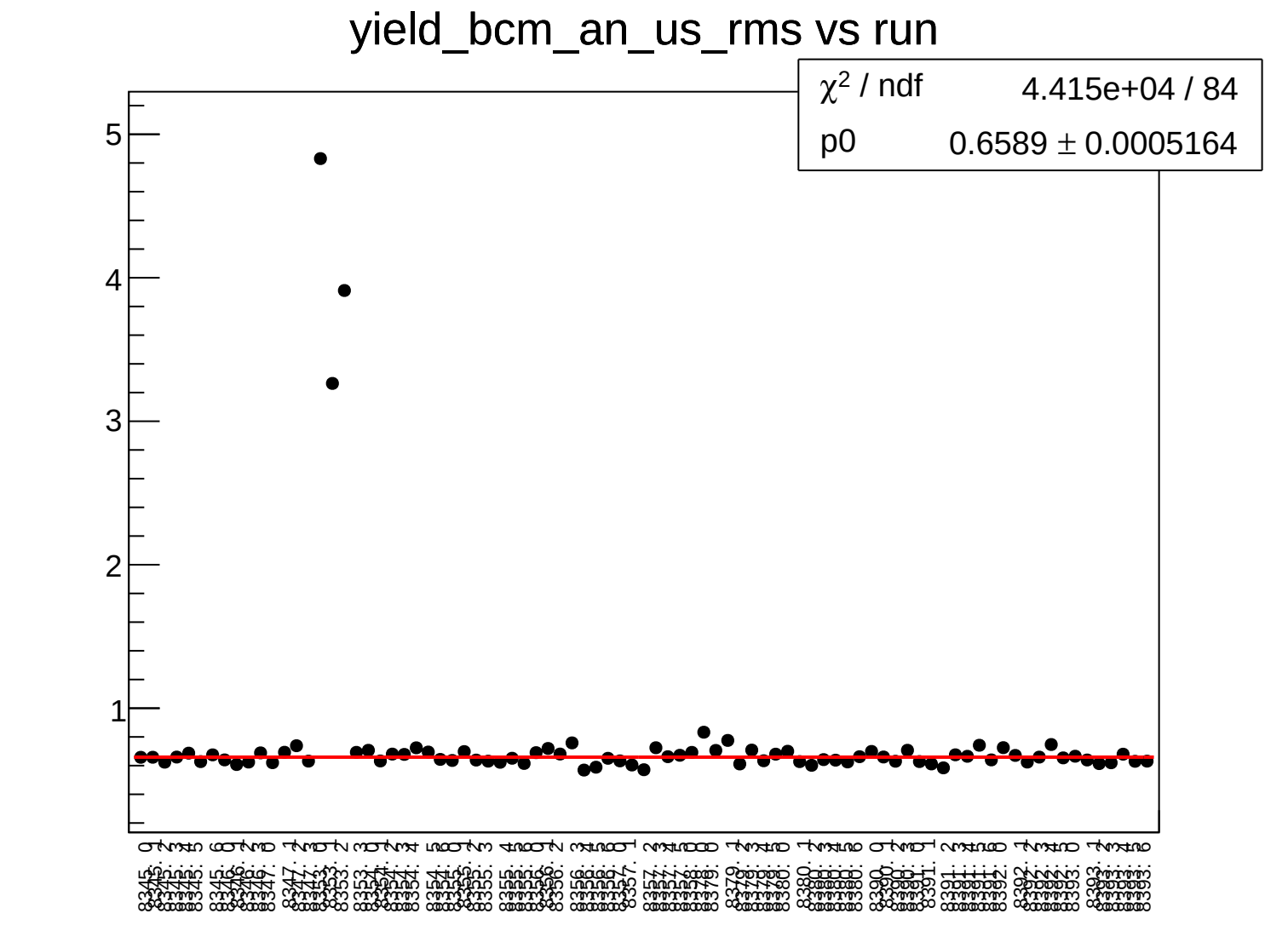

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.248e+07 / 84
p0 142.9 ± 0.000732
146
144
142
140
138
136
pull
Entries 85
Mean 1457
Std Dev 1389
800
600
400
200
0
−200
−400
−600
−800
−1000

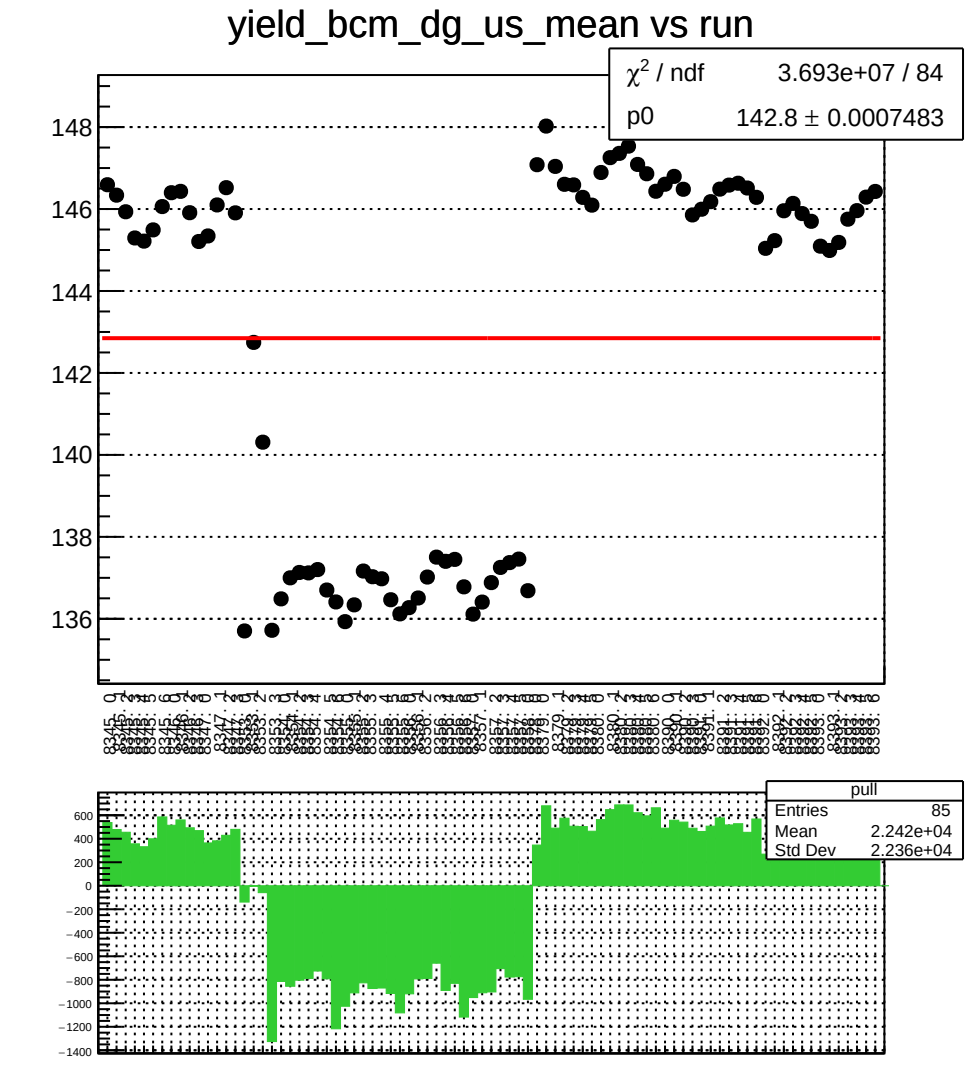

pull1D
Entries 85
Mean −6.774
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

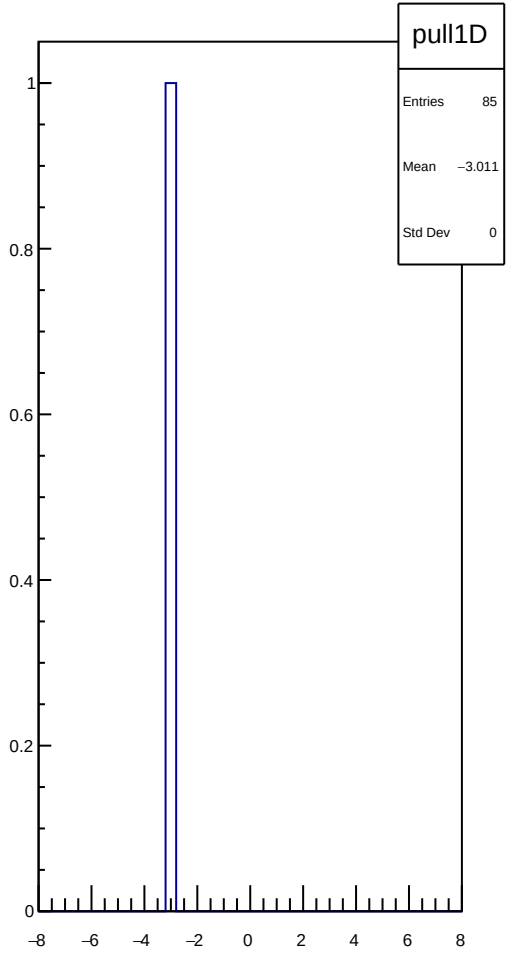

yield_bcm_an_ds3_rms vs run
χ² / ndf 4.426e+04 / 84
p0 0.6604 ± 0.0005176
5
4
3
2
1

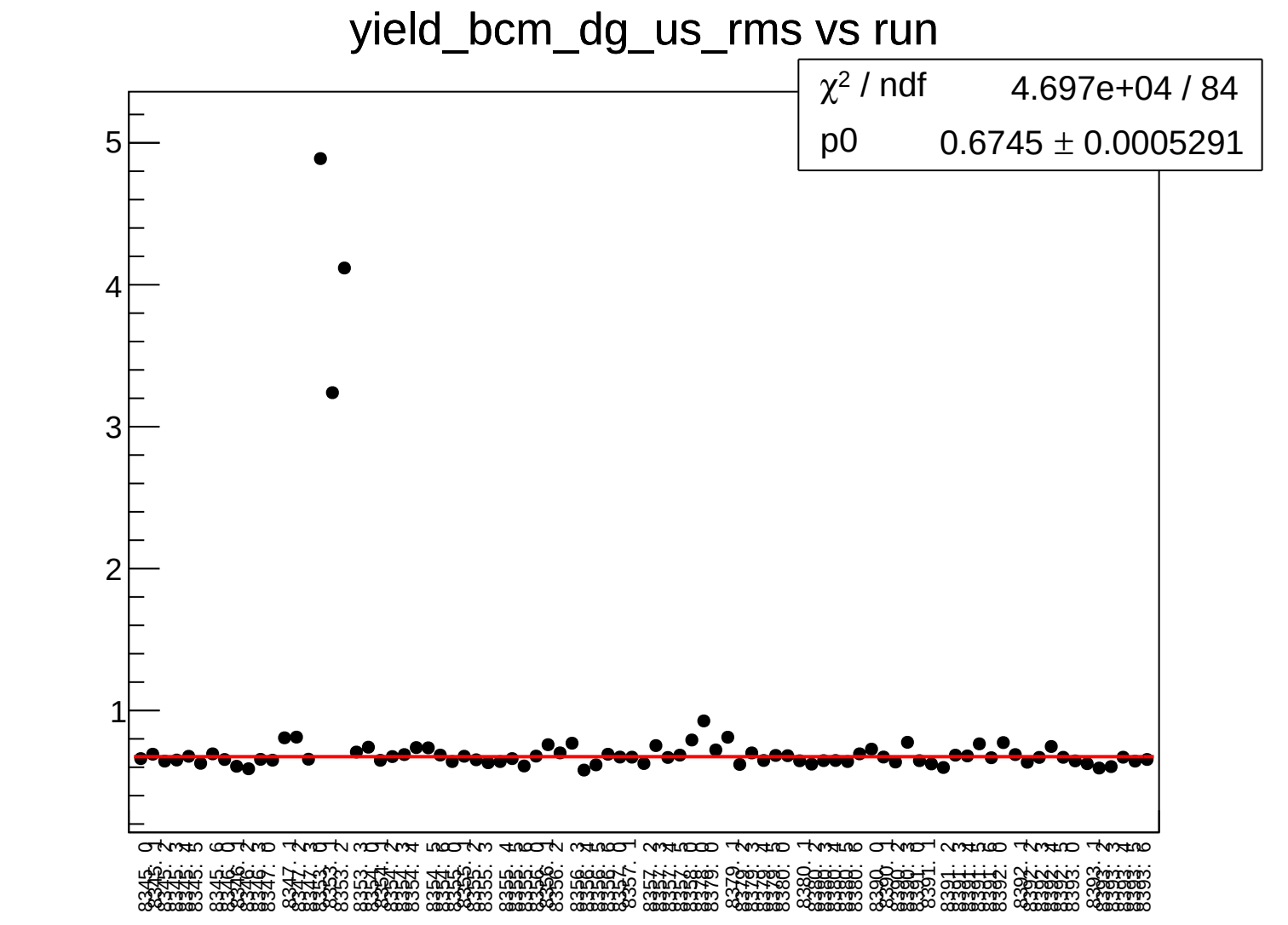

yield_bcm_an_us_mean vs run
χ² / ndf 3.301e+07 / 84
p0 142.5 ± 0.0007303
146
144
142
140
138
136
134
pull
Entries 85
Mean 1264
Std Dev 1198
800
600
400
200
0
−200
−400
−600
−800
−1000

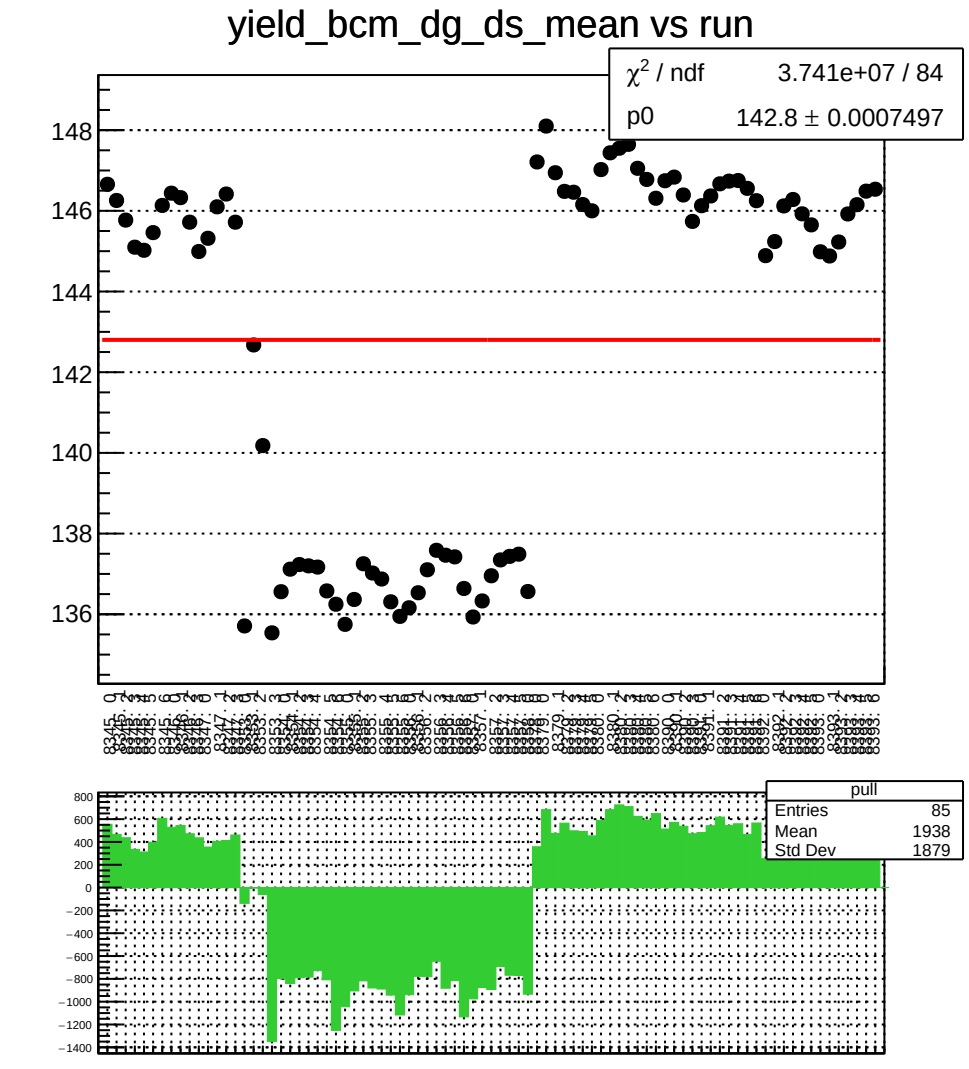

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

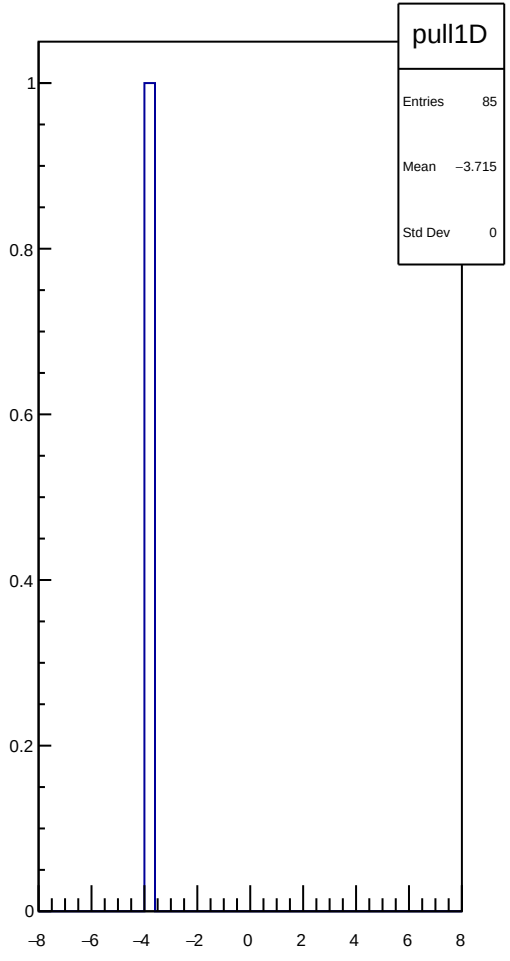

yield_bcm_an_us_rms vs run
χ² / ndf 4.415e+04 / 84
p0 0.6589 ± 0.0005164
5
4
3
2
1

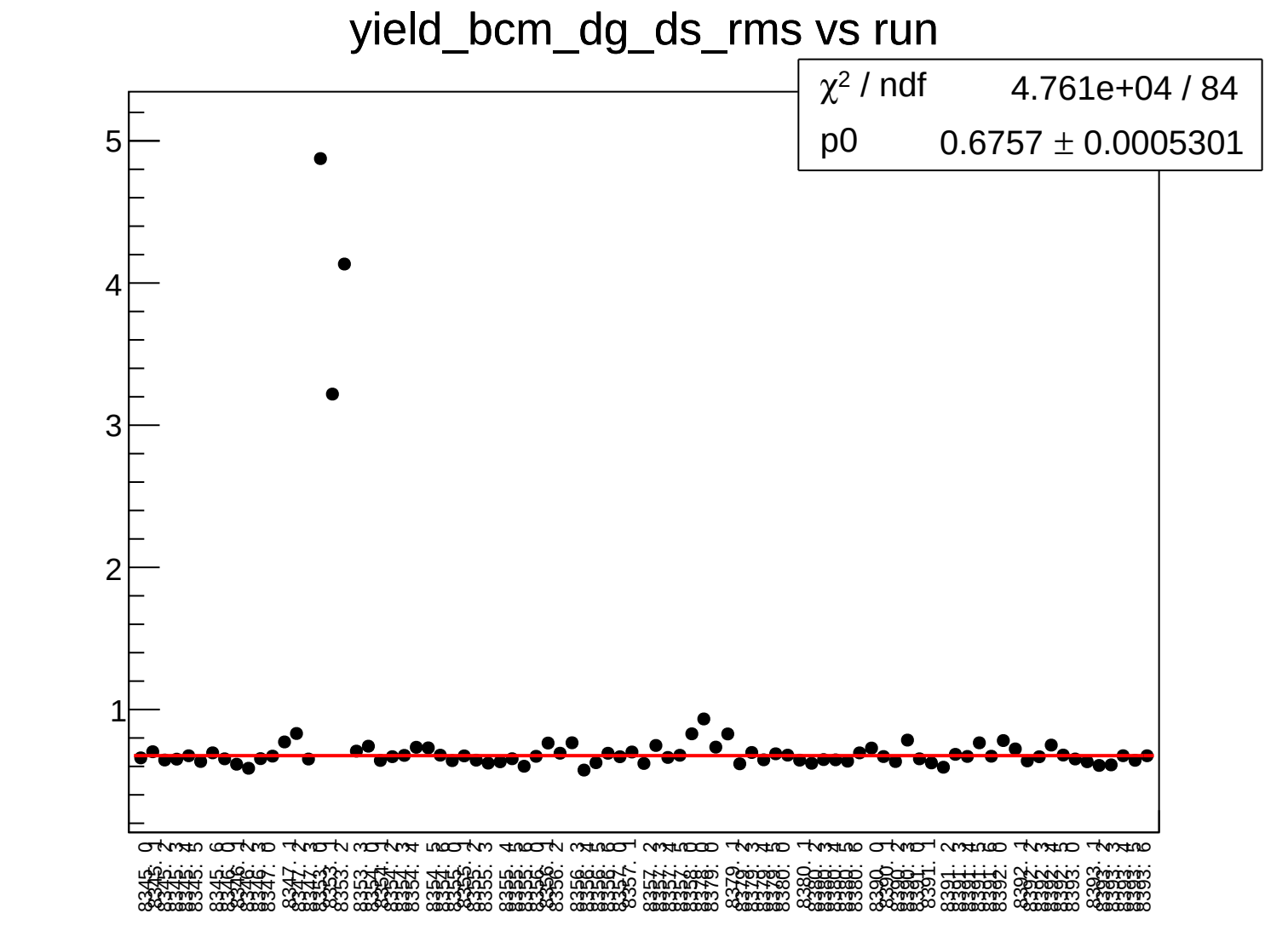

yield_bcm_dg_us_mean vs run
χ² / ndf 3.693e+07 / 84
p0 142.8 ± 0.0007483
148
146
144
142
140
138
136
pull
Entries 85
Mean 2.242e+04
Std Dev 2.236e+04
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

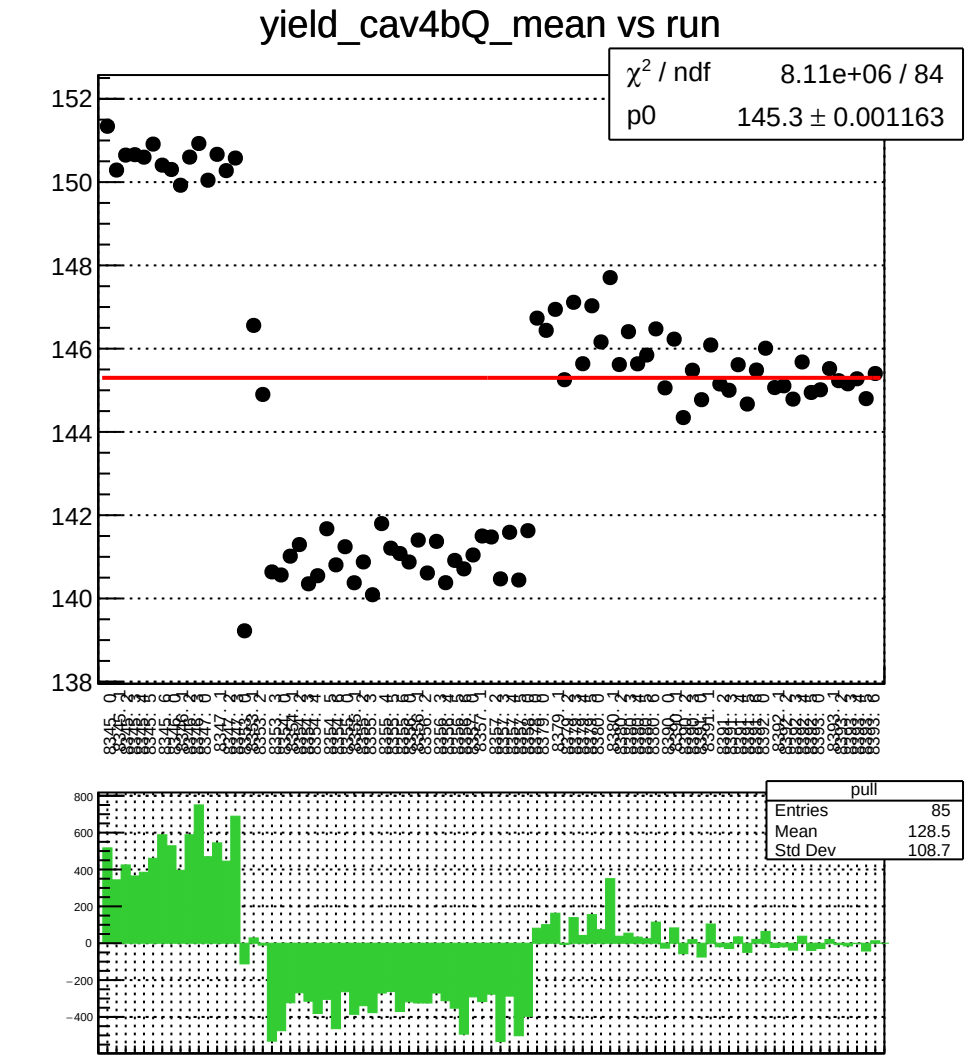

pull1D
Entries 85
Mean −3.011
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

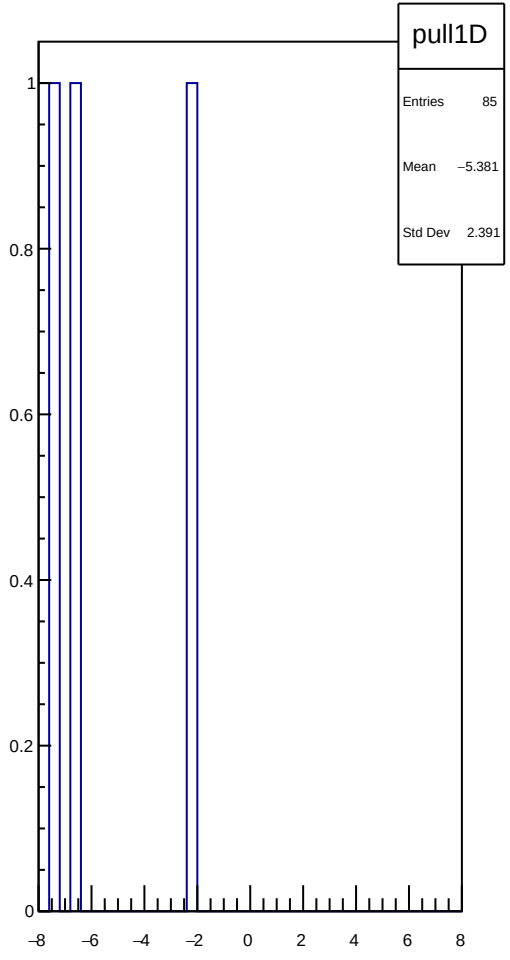

yield_bcm_dg_us_rms vs run
χ² / ndf 4.697e+04 / 84
p0 0.6745 ± 0.0005291
5
4
3
2
1

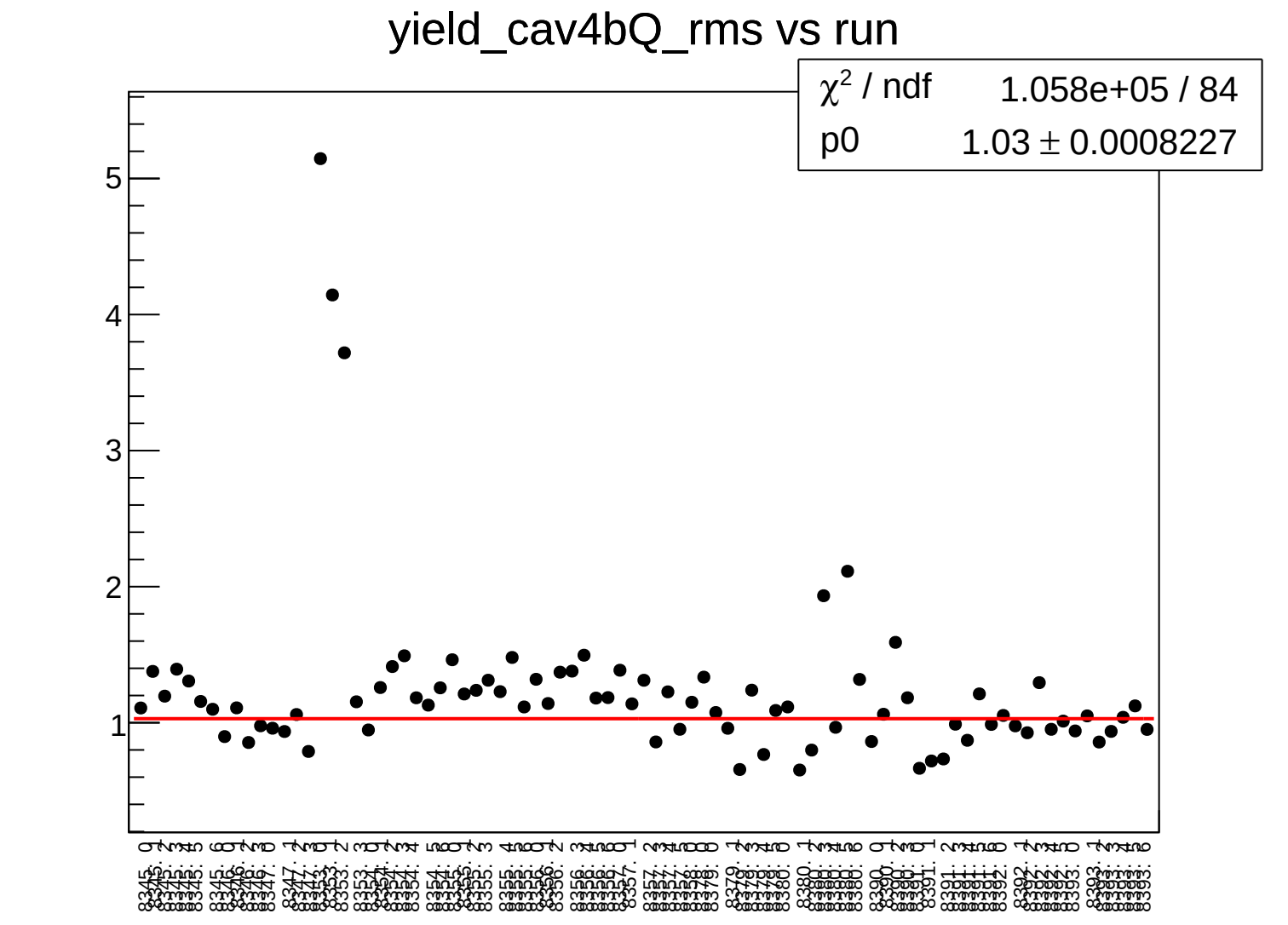

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.741e+07 / 84
p0 142.8 ± 0.0007497
148
146
144
142
140
138
136
pull
Entries 85
Mean 1938
Std Dev 1879
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

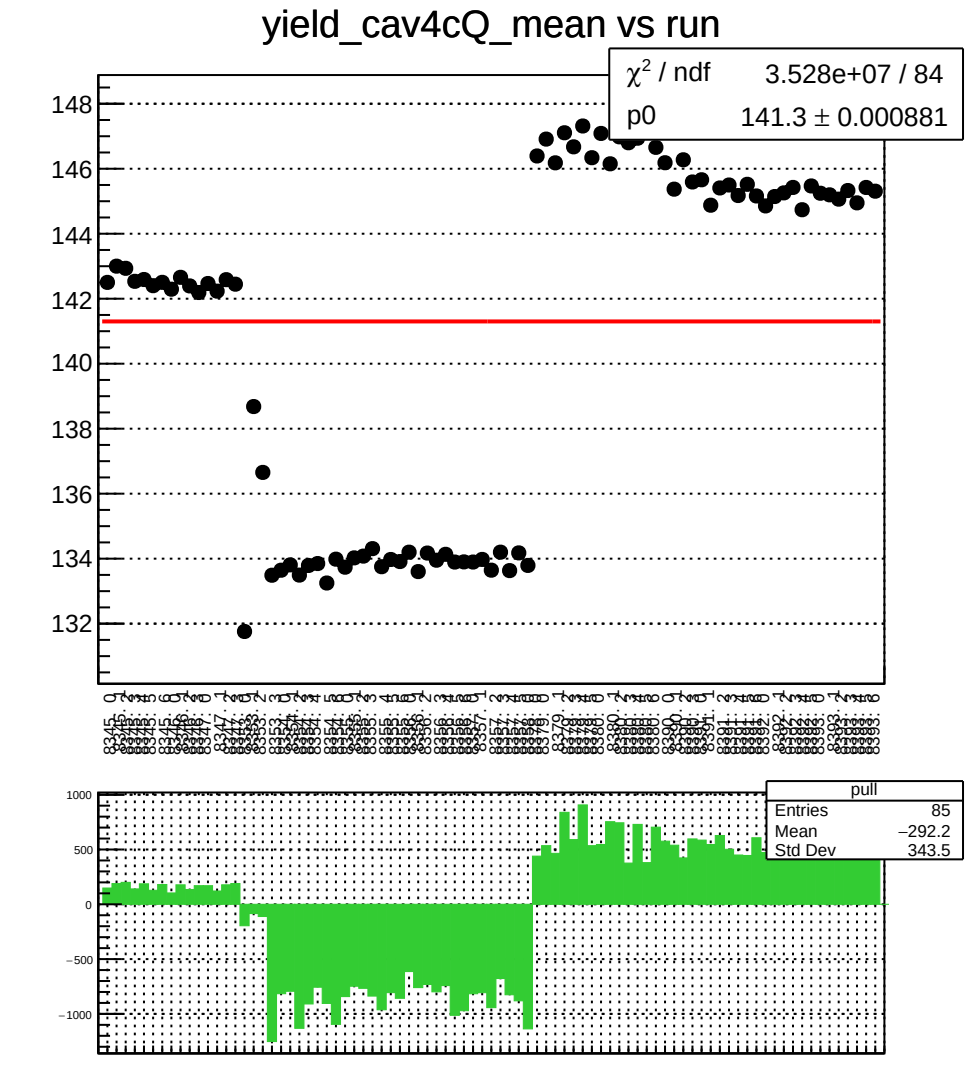

pull1D
Entries 85
Mean −3.715
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

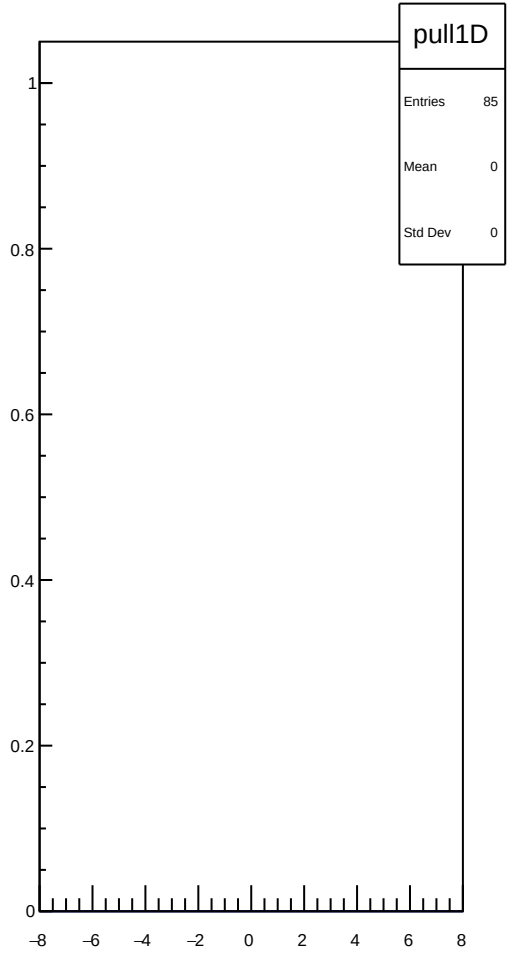

yield_bcm_dg_ds_rms vs run
χ² / ndf 4.761e+04 / 84
p0 0.6757 ± 0.0005301
5
4
3
2
1

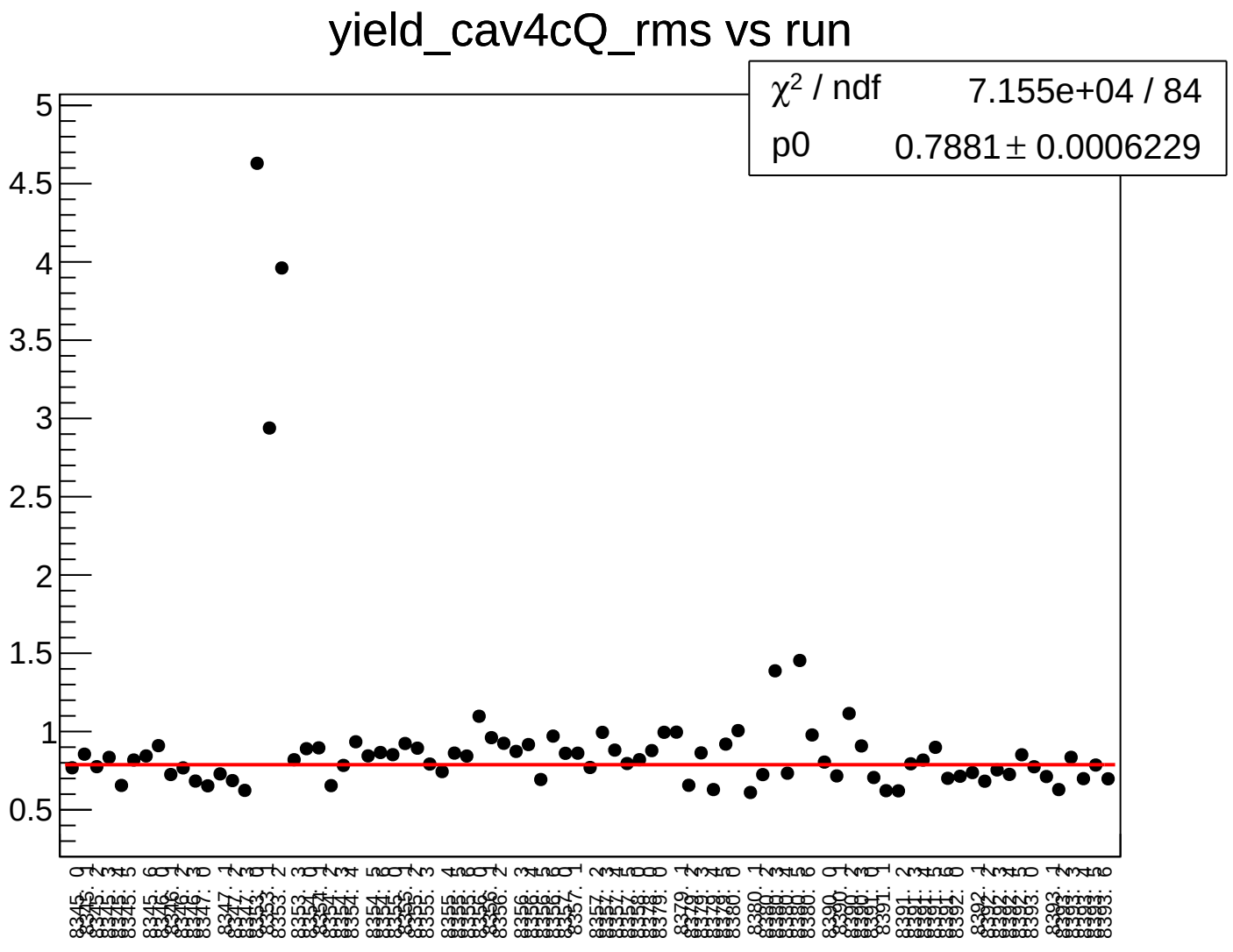

yield_cav4bQ_mean vs run
χ² / ndf 8.11e+06 / 84
p0 145.3 ± 0.001163
152
150
148
146
144
142
140
138
pull
Entries 85
Mean 128.5
Std Dev 108.7
800
600
400
200
0
−200
−400

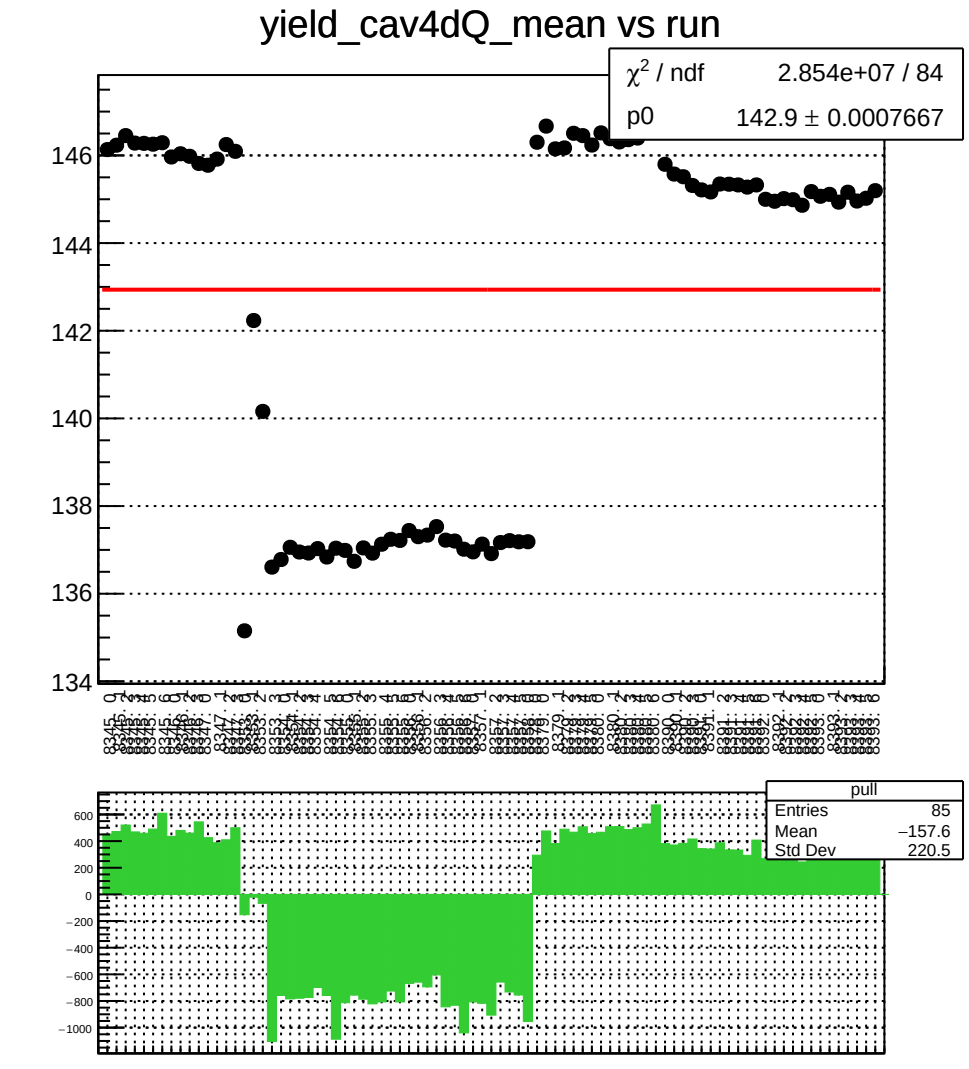

pull1D
Entries 85
Mean −5.381
Std Dev 2.391
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

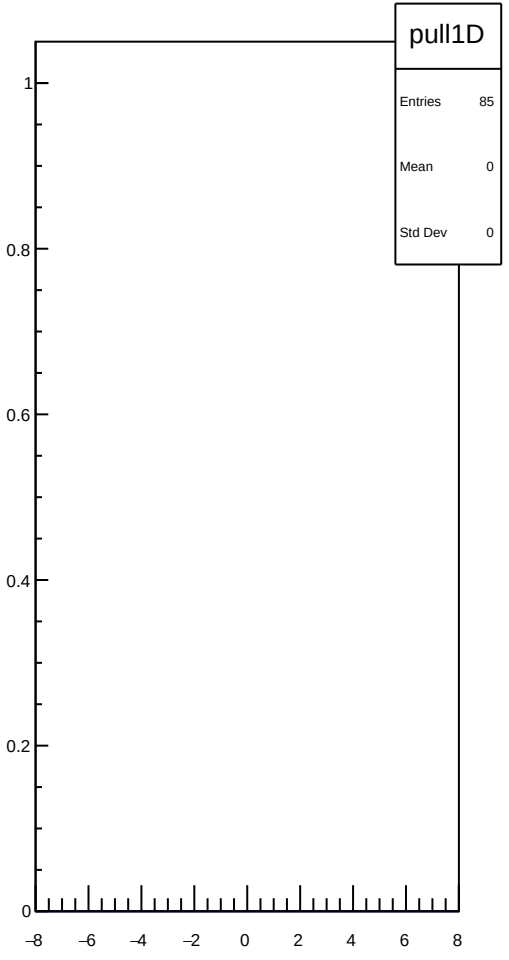

yield_cav4bQ_rms vs run
χ^2 / ndf 1.058e+05 / 84
p0 1.03 ± 0.0008227
5
4
3
2
1

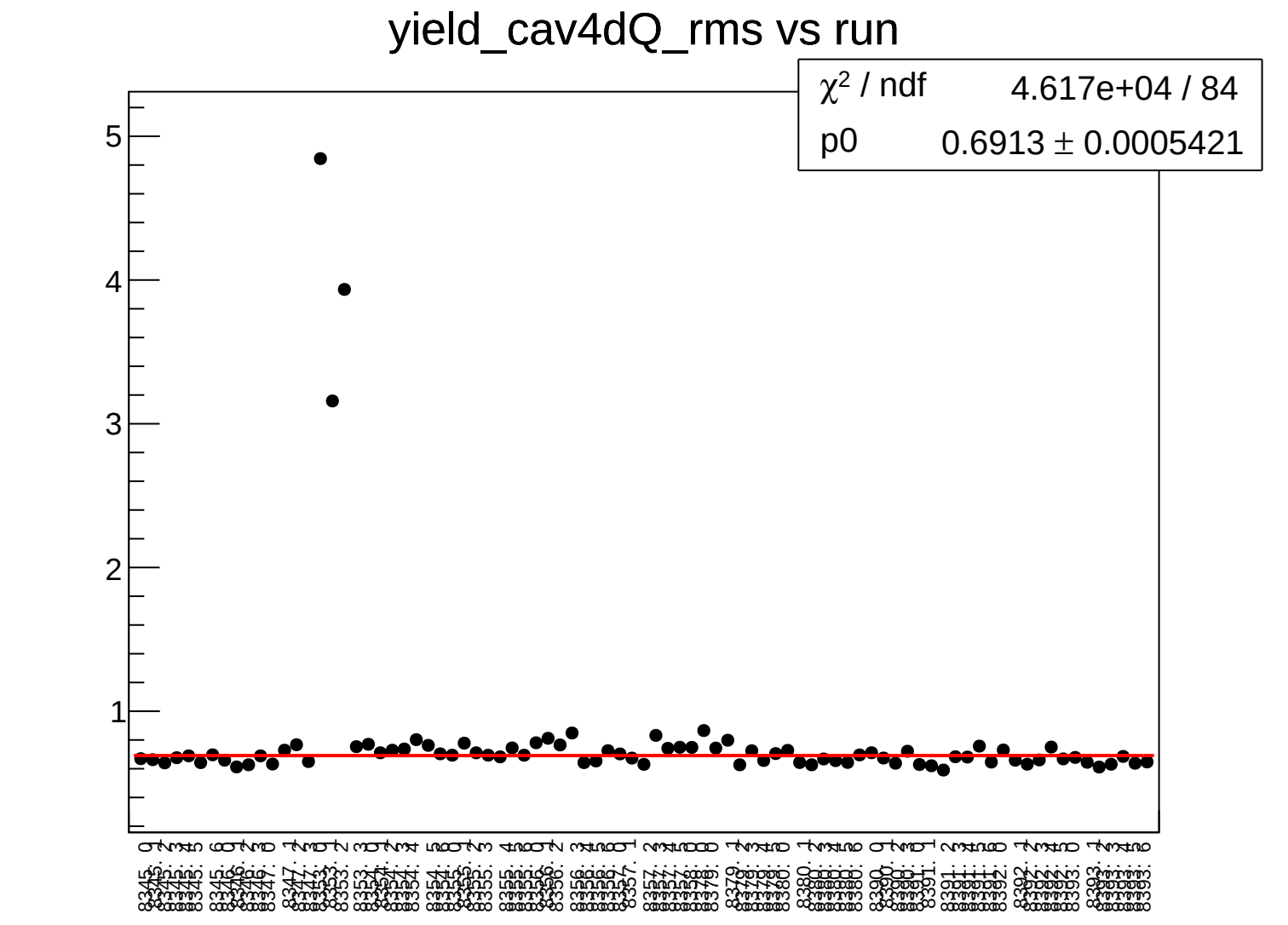

yield_cav4cQ_mean vs run
χ² / ndf 3.528e+07 / 84
p0 141.3 ± 0.000881
148
146
144
142
140
138
136
134
132
pull
Entries 85
Mean −292.2
Std Dev 343.5
1000
500
0
−500
−1000

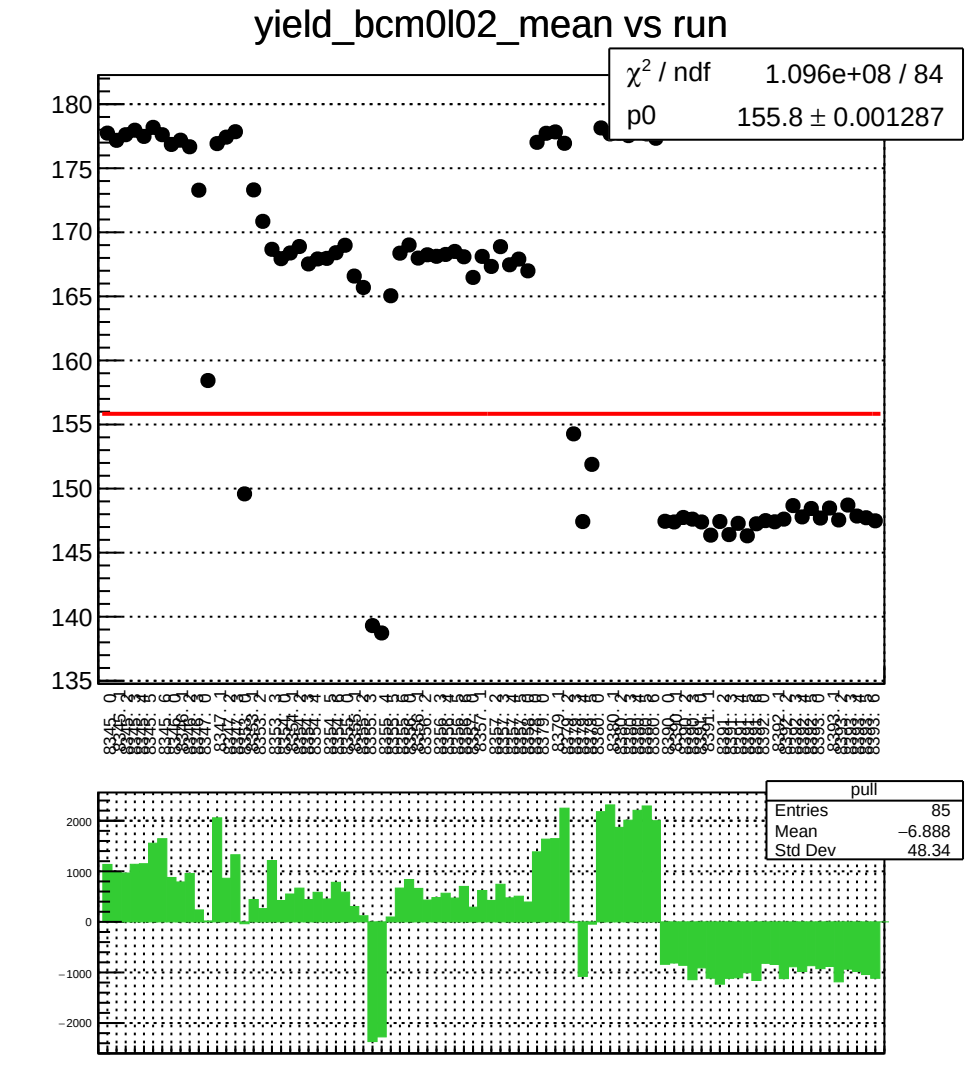

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

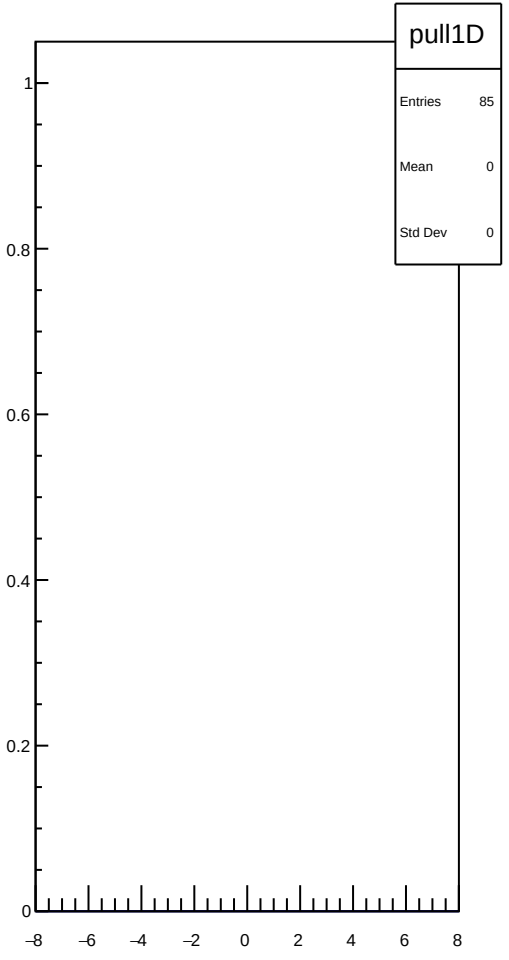

yield_cav4cQ_rms vs run
χ² / ndf 7.155e+04 / 84
p0 0.7881 ± 0.0006229
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

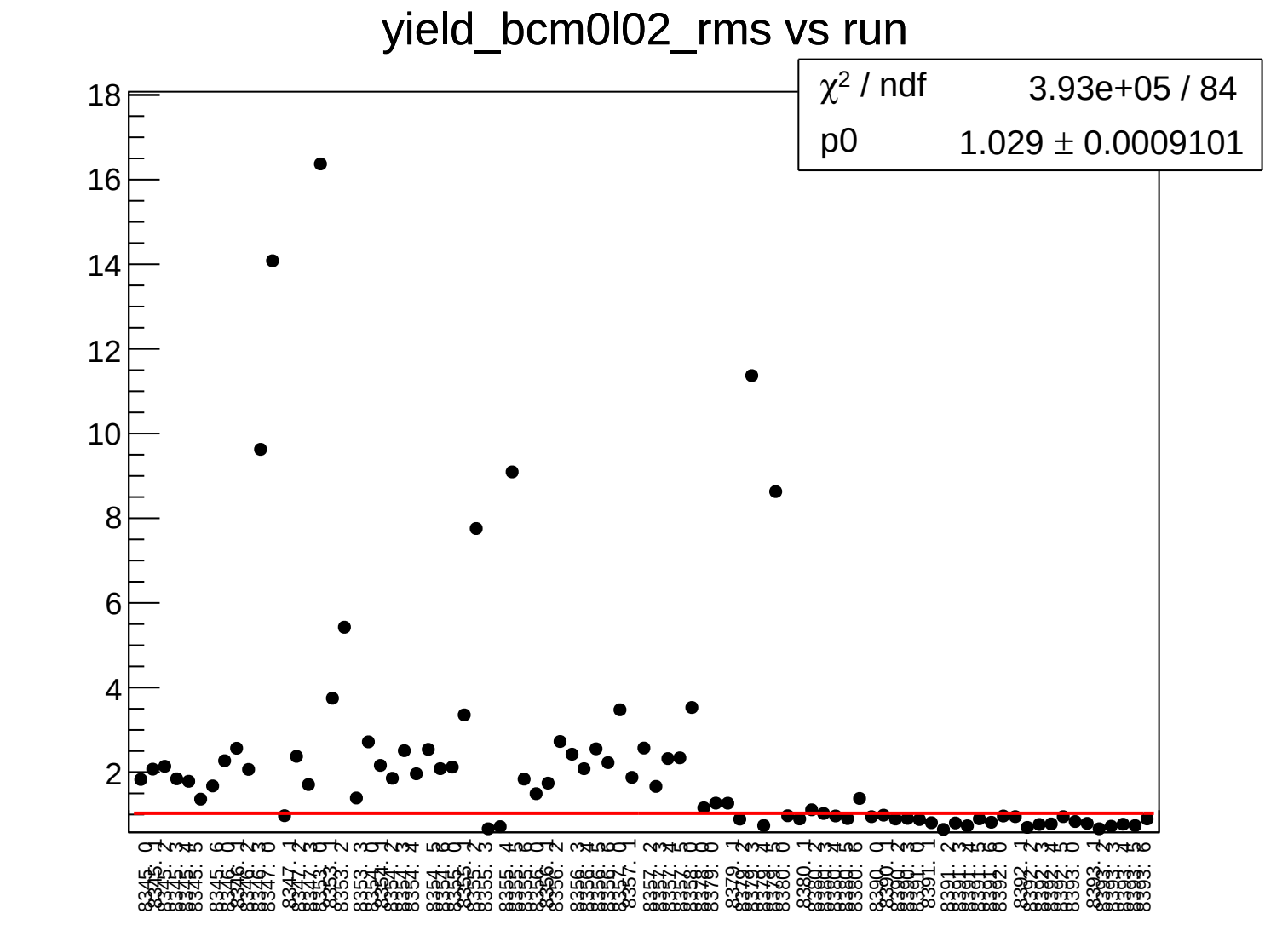

yield_cav4dQ_mean vs run
χ² / ndf 2.854e+07 / 84
p0 142.9 ± 0.0007667
146
144
142
140
138
136
134
pull
Entries 85
Mean −157.6
Std Dev 220.5
600
400
200
0
−200
−400
−600
−800
−1000

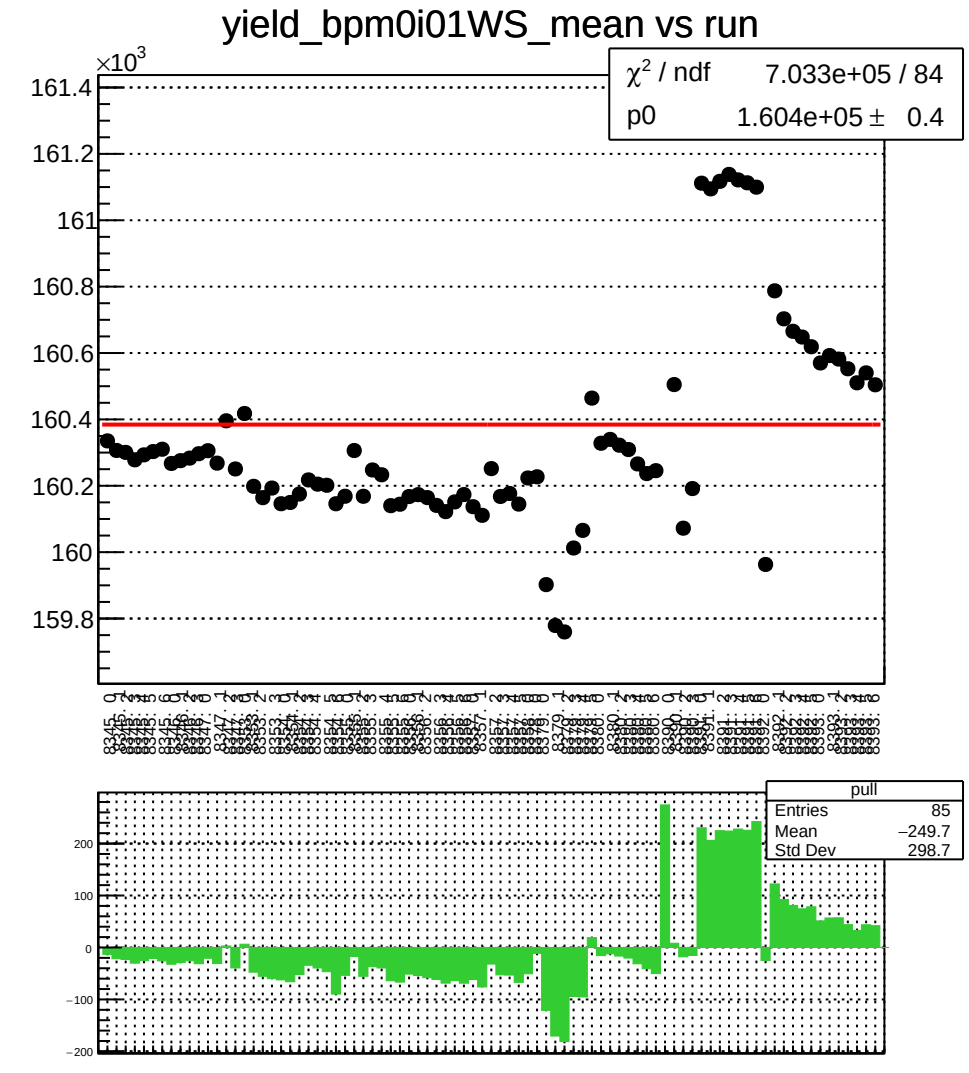

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

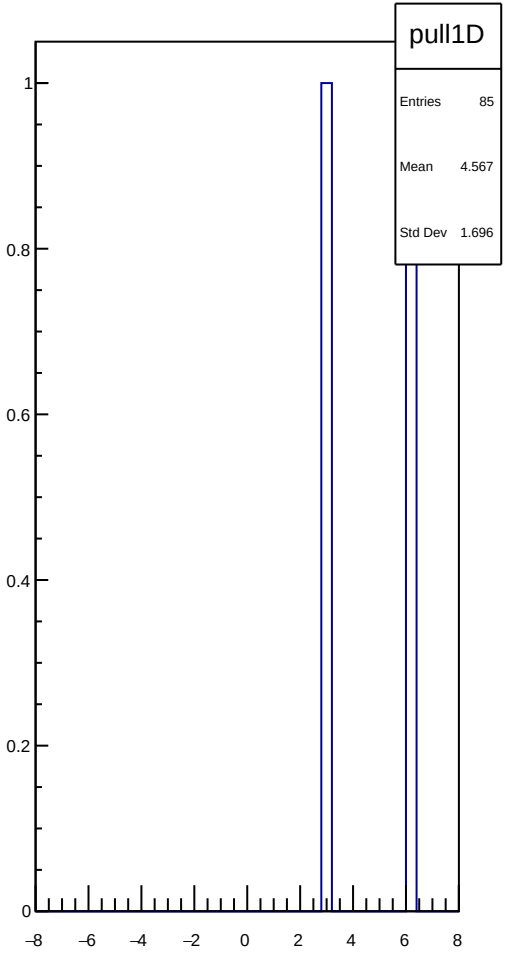

yield_cav4dQ_rms vs run
χ² / ndf 4.617e+04 / 84
p0 0.6913 ± 0.0005421
5
4
3
2
1

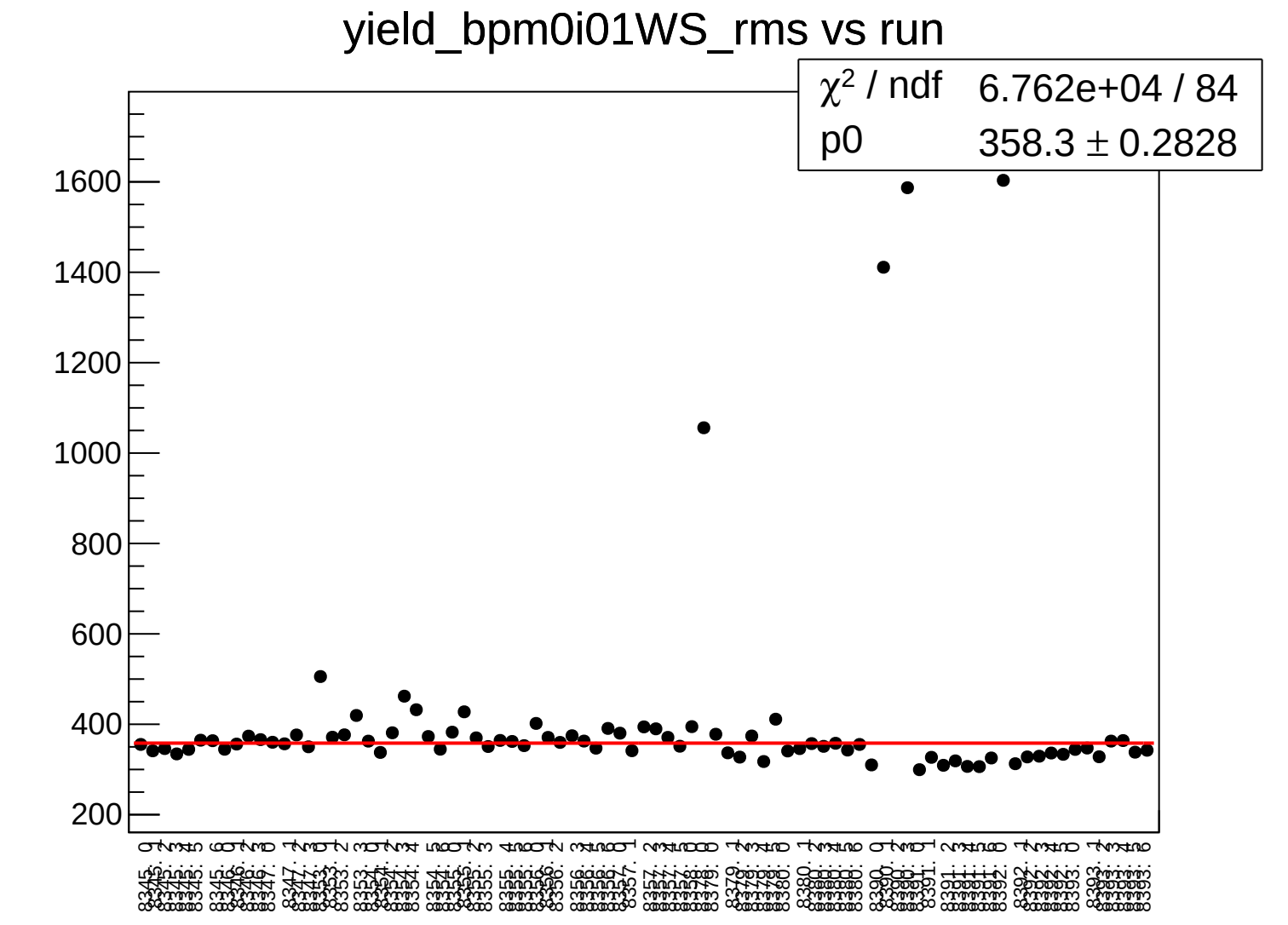

yield_bcm0l02_mean vs run
χ² / ndf 1.096e+08 / 84
p0 155.8 ± 0.001287
pull
Entries 85
Mean −6.888
Std Dev 48.34

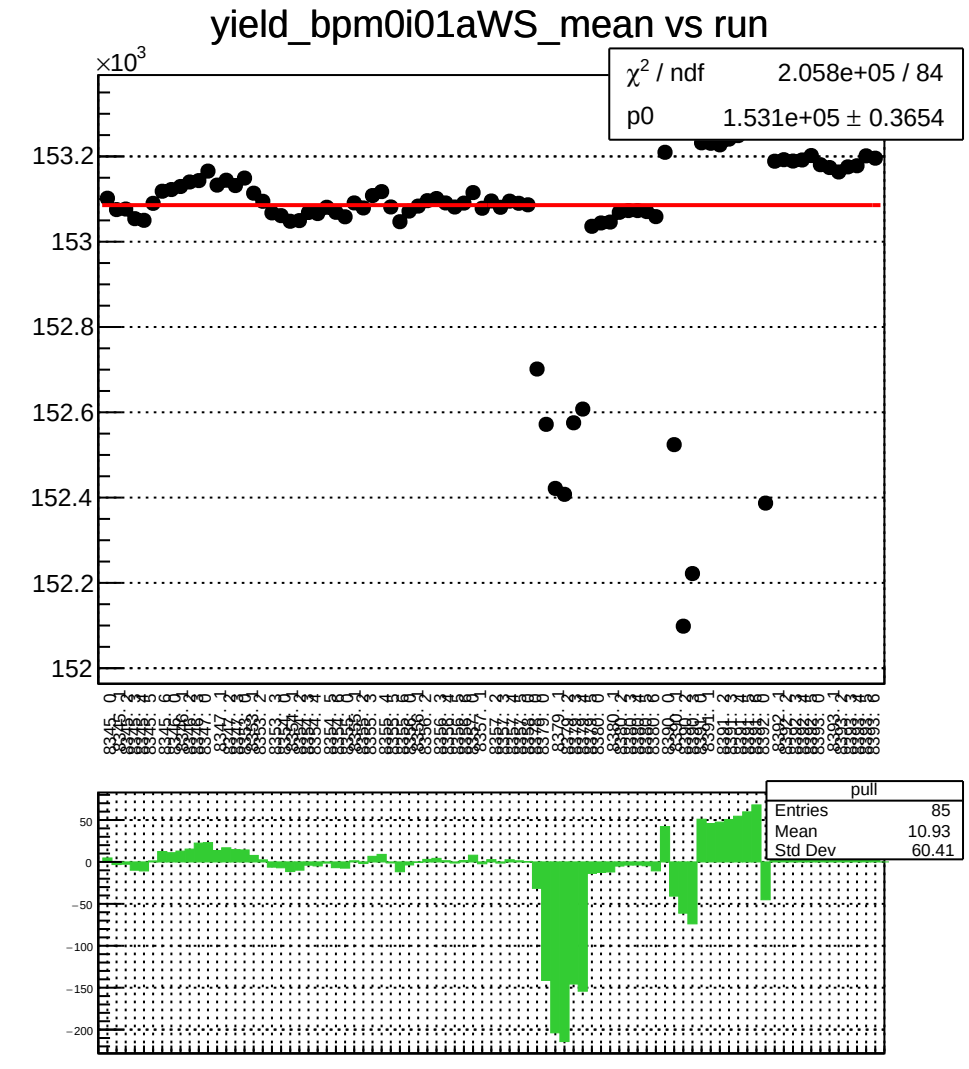

pull1D
Entries 85
Mean 0
Std Dev 0

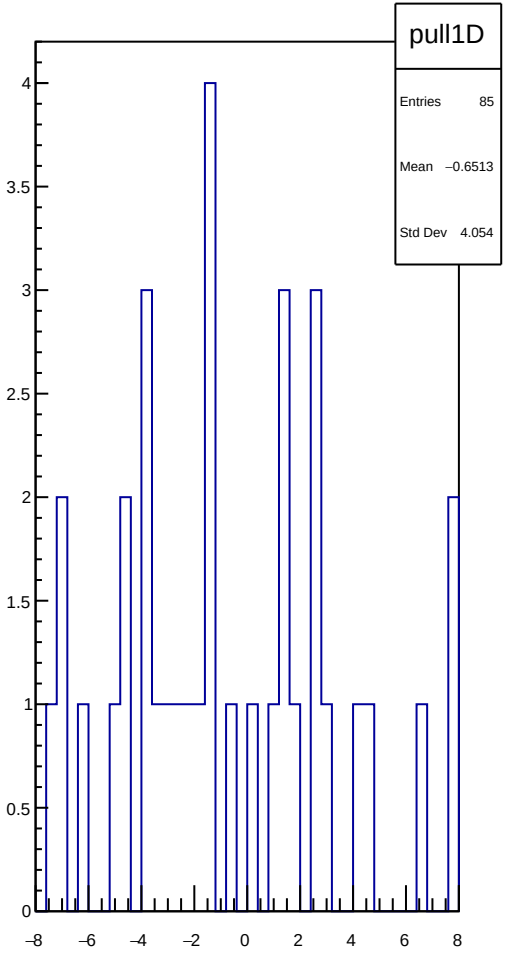

yield_bcm0l02_rms vs run
χ² / ndf 3.93e+05 / 84
p0 1.029 ± 0.0009101
18
16
14
12
10
8
6
4
2

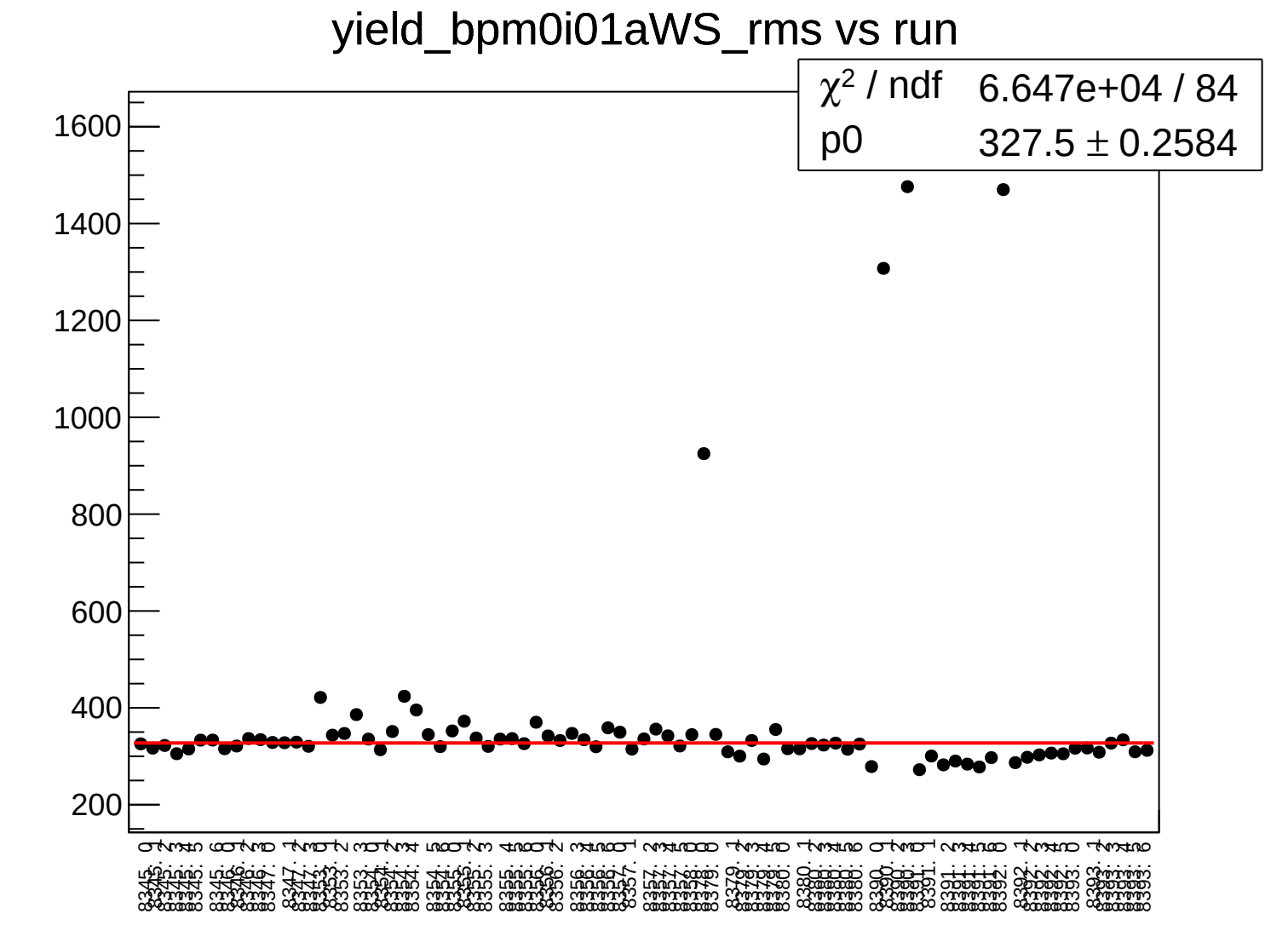

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 7.033e+05 / 84
p0 1.604e+05 ± 0.4
161.4
161.2
161
160.8
160.6
160.4
160.2
160
159.8
pull
Entries 85
Mean −249.7
Std Dev 298.7
200
100
0
−100
−200

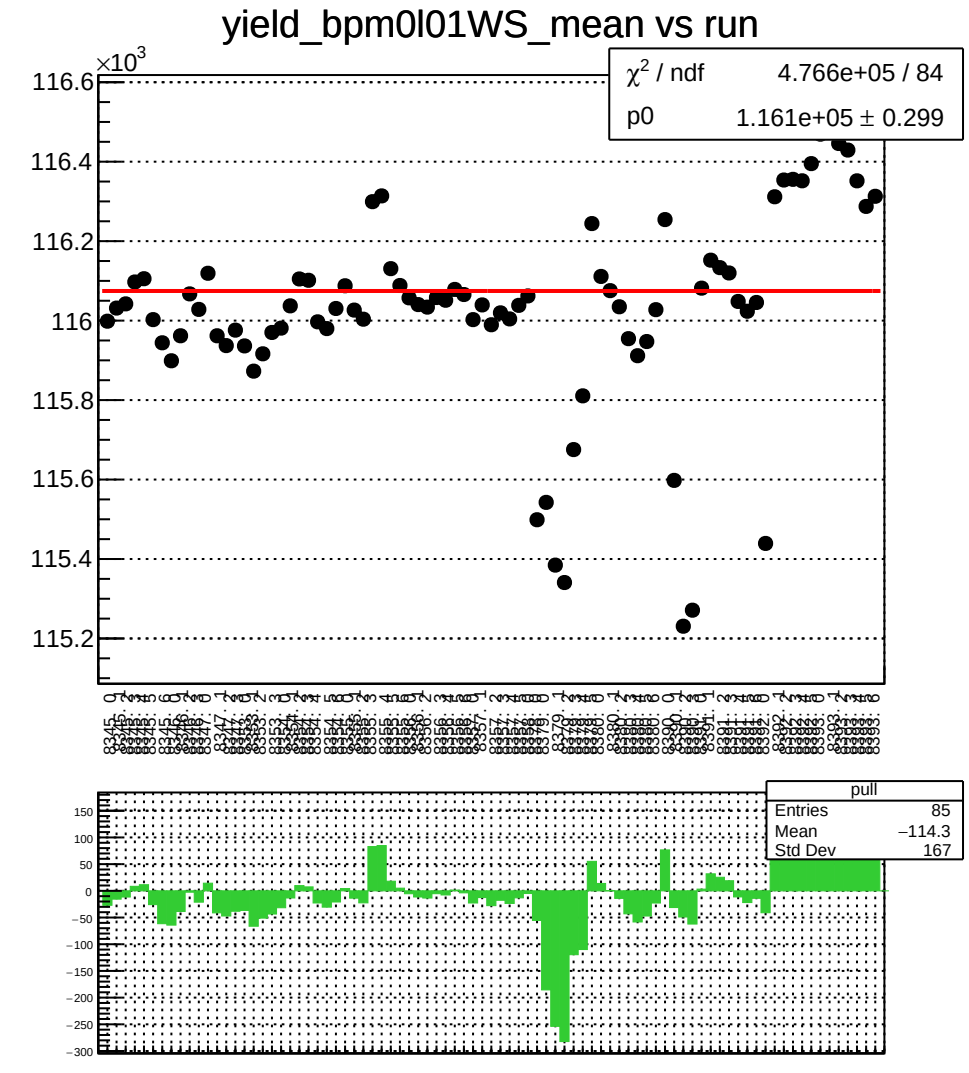

pull1D
Entries 85
Mean 4.567
Std Dev 1.696
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

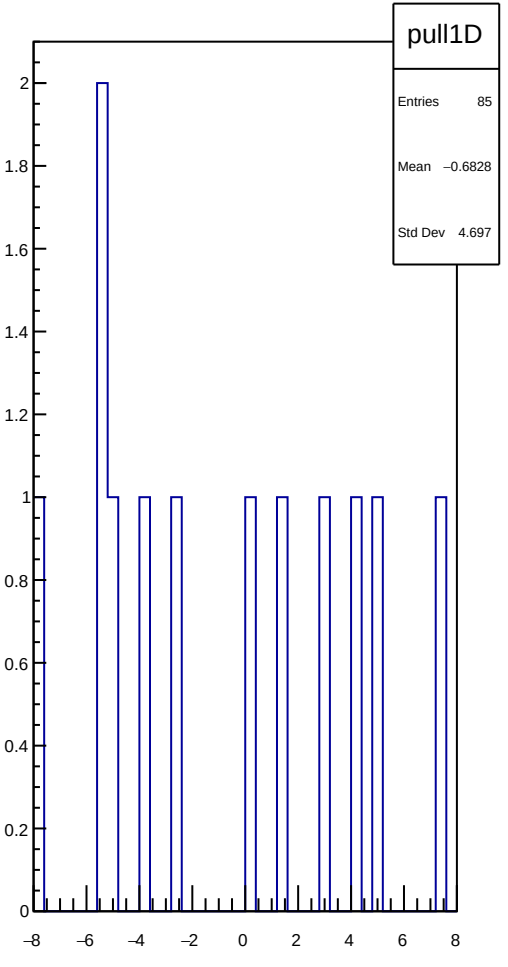

yield_bpm0i01WS_rms vs run
χ² / ndf 6.762e+04 / 84
p0 358.3 ± 0.2828
1600
1400
1200
1000
800
600
400
200

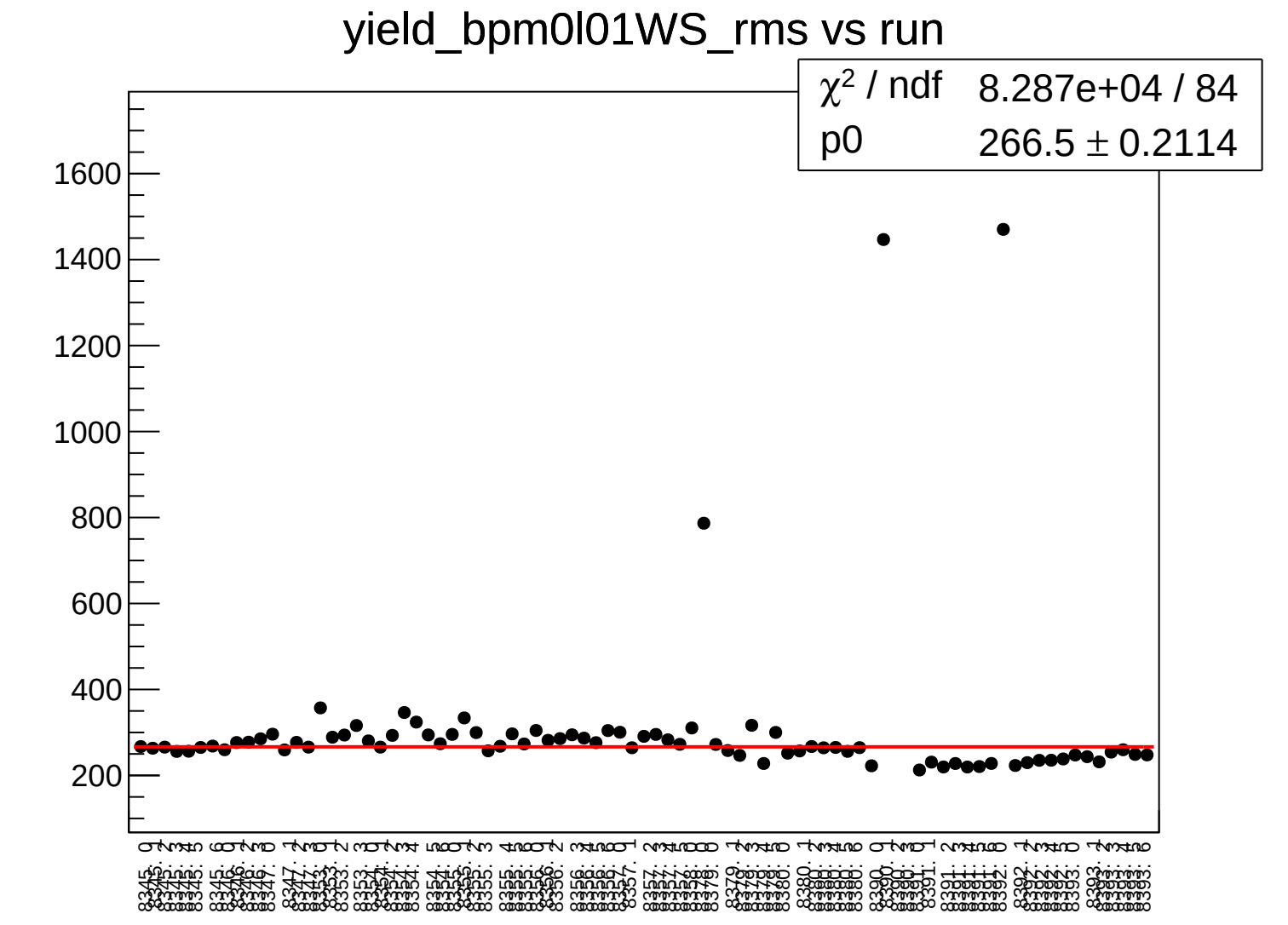

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 2.058e+05 / 84
p0 1.531e+05 ± 0.3654
153.2
153
152.8
152.6
152.4
152.2
152
pull
Entries 85
Mean 10.93
Std Dev 60.41
50
0
−50
−100
−150
−200

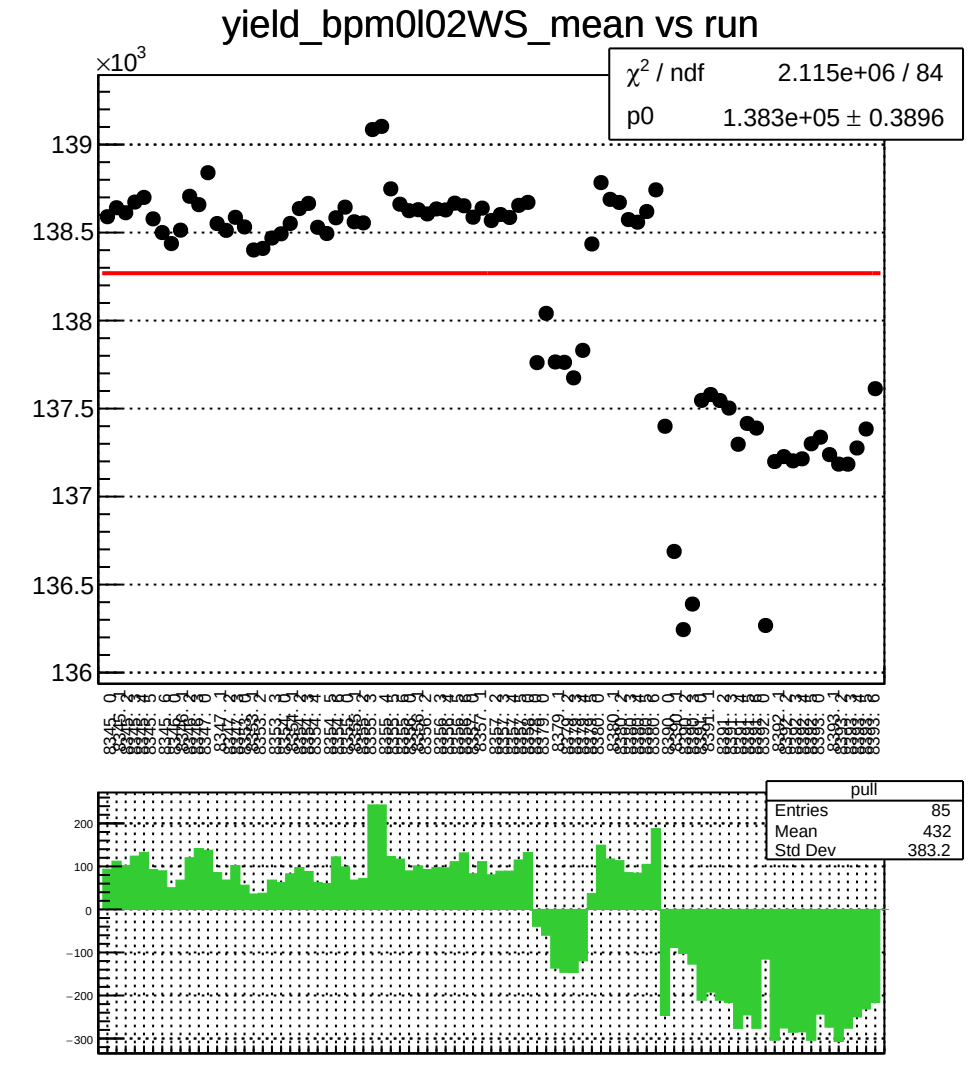

pull1D
Entries 85
Mean −0.6513
Std Dev 4.054
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

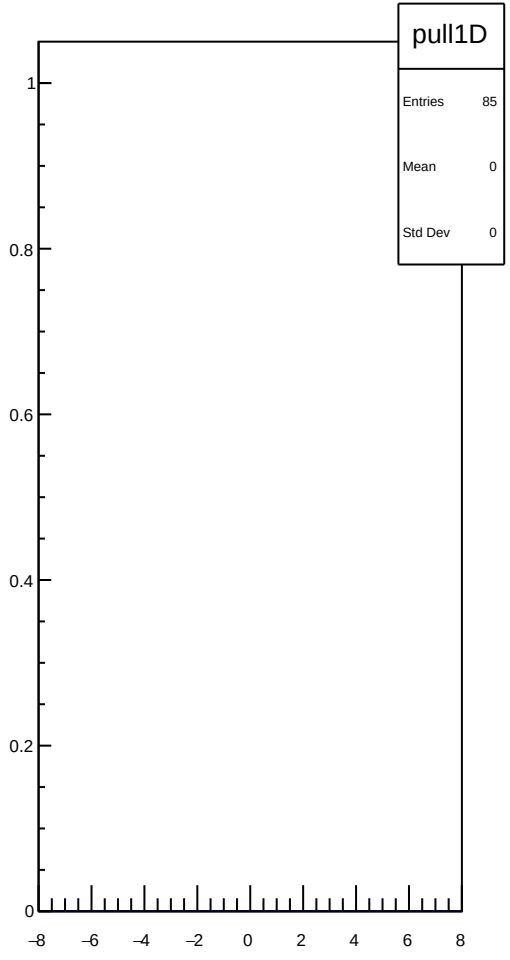

yield_bpm0i01aWS_rms vs run
χ² / ndf 6.647e+04 / 84
p0 327.5 ± 0.2584
1600
1400
1200
1000
800
600
400
200

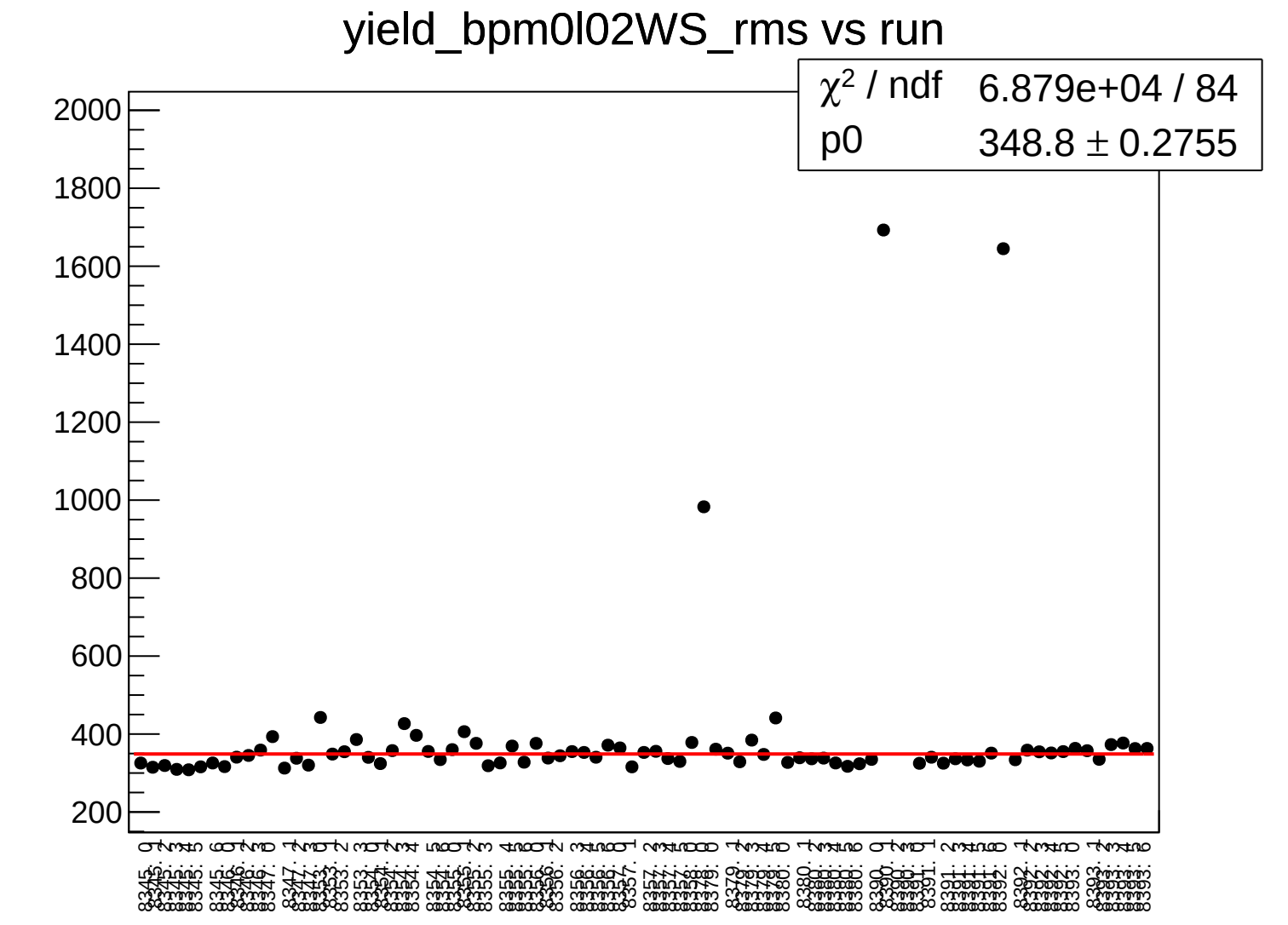

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 4.766e+05 / 84
p0 1.161e+05 ± 0.299
116.6
116.4
116.2
116
115.8
115.6
115.4
115.2
pull
Entries 85
Mean −114.3
Std Dev 167
150
100
50
0
−50
−100
−150
−200
−250
−300

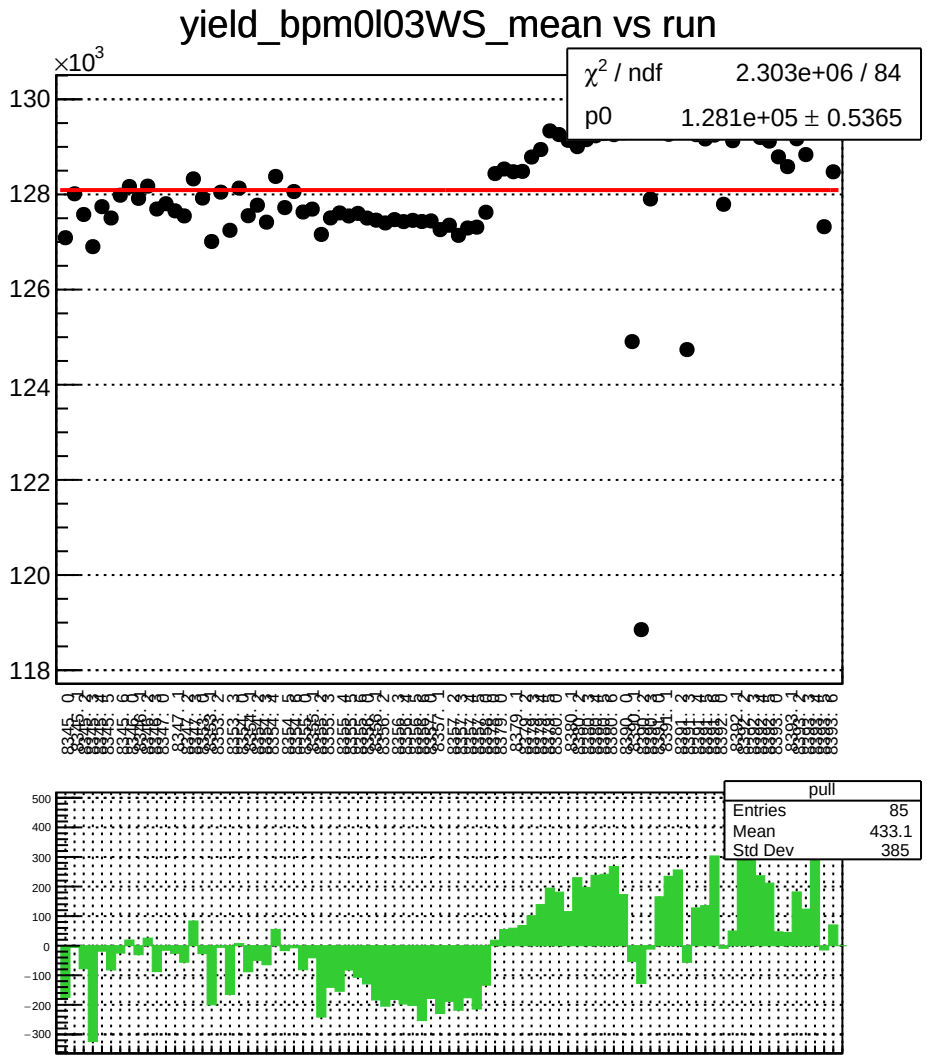

pull1D
Entries 85
Mean −0.6828
Std Dev 4.697
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

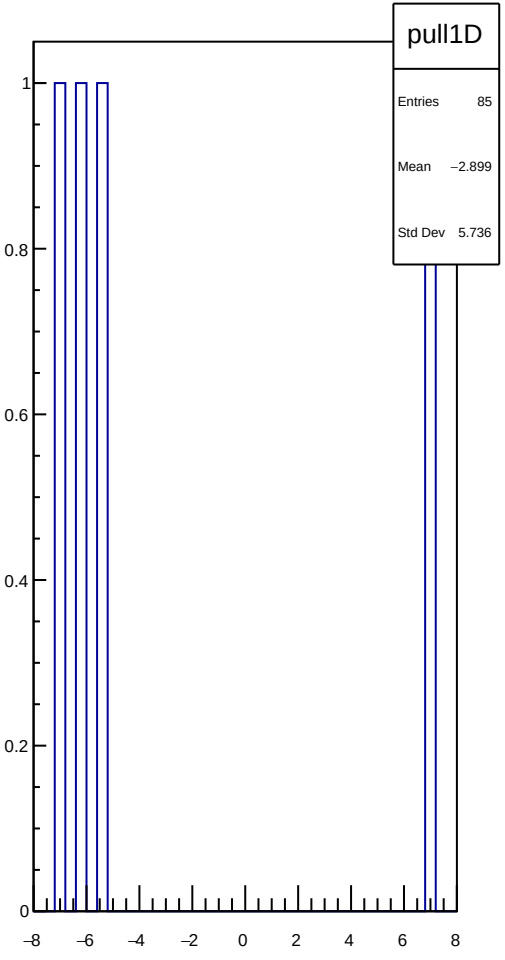

yield_bpm0l01WS_rms vs run
χ² / ndf 8.287e+04 / 84
p0 266.5 ± 0.2114
1600
1400
1200
1000
800
600
400
200

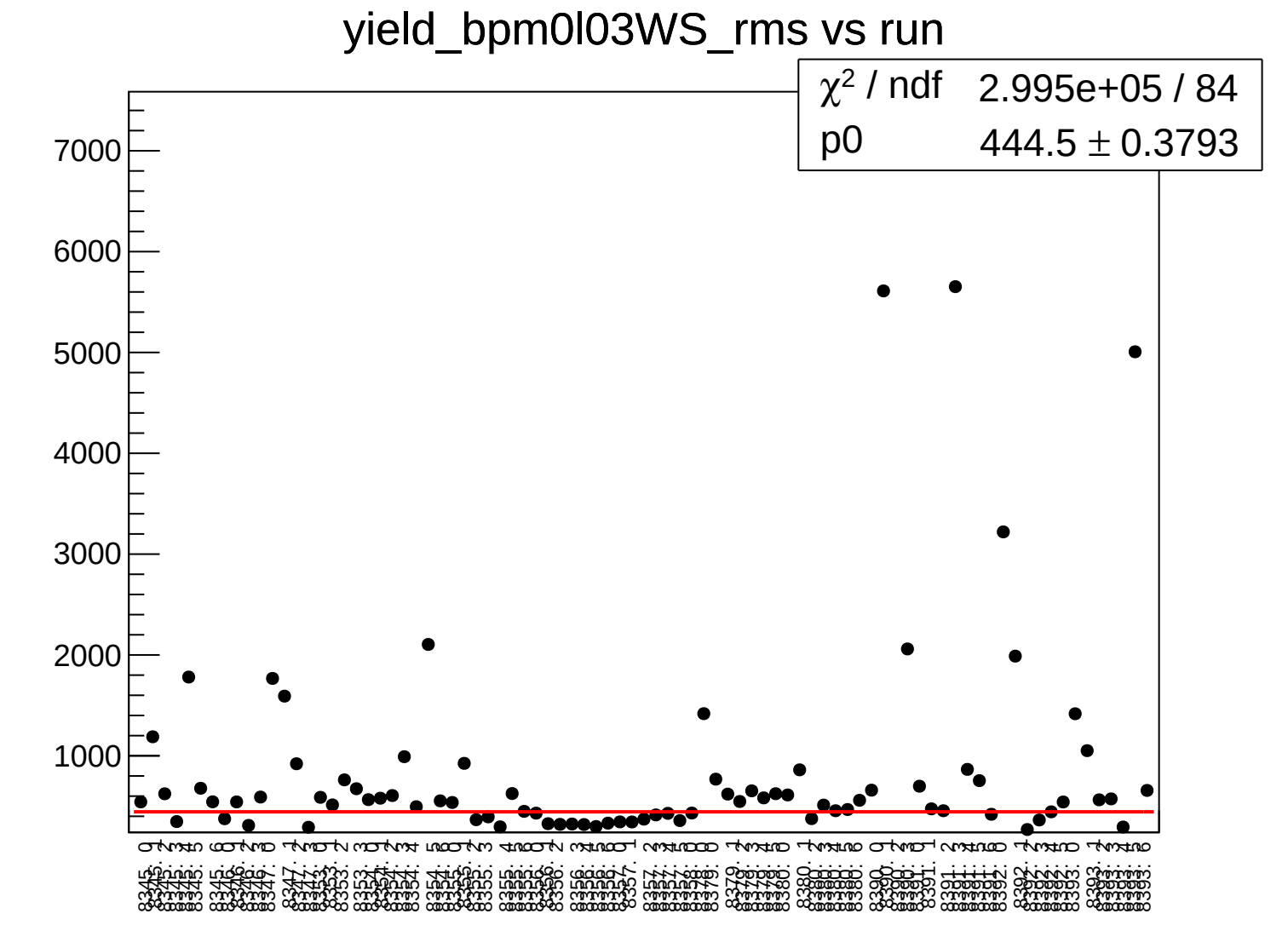

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 2.115e+06 / 84
p0 1.383e+05 ± 0.3896
139
138.5
138
137.5
137
136.5
136
pull
Entries 85
Mean 432
Std Dev 383.2
200
100
0
−100
−200
−300

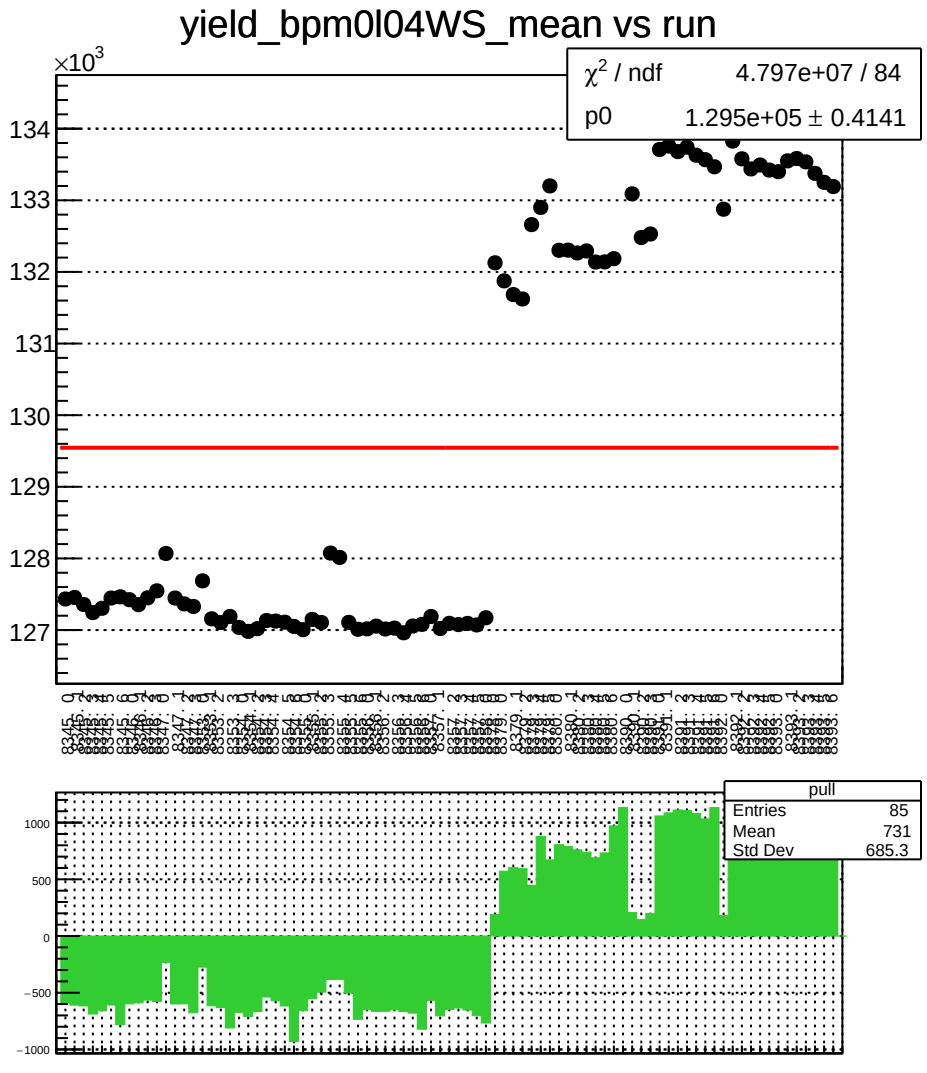

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

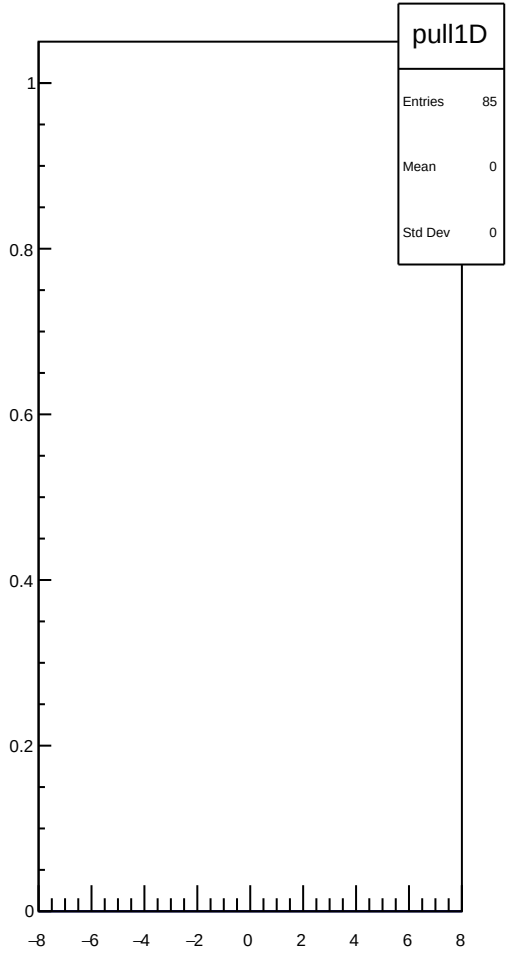

yield_bpm0l02WS_rms vs run
χ² / ndf 6.879e+04 / 84
p0 348.8 ± 0.2755
2000
1800
1600
1400
1200
1000
800
600
400
200

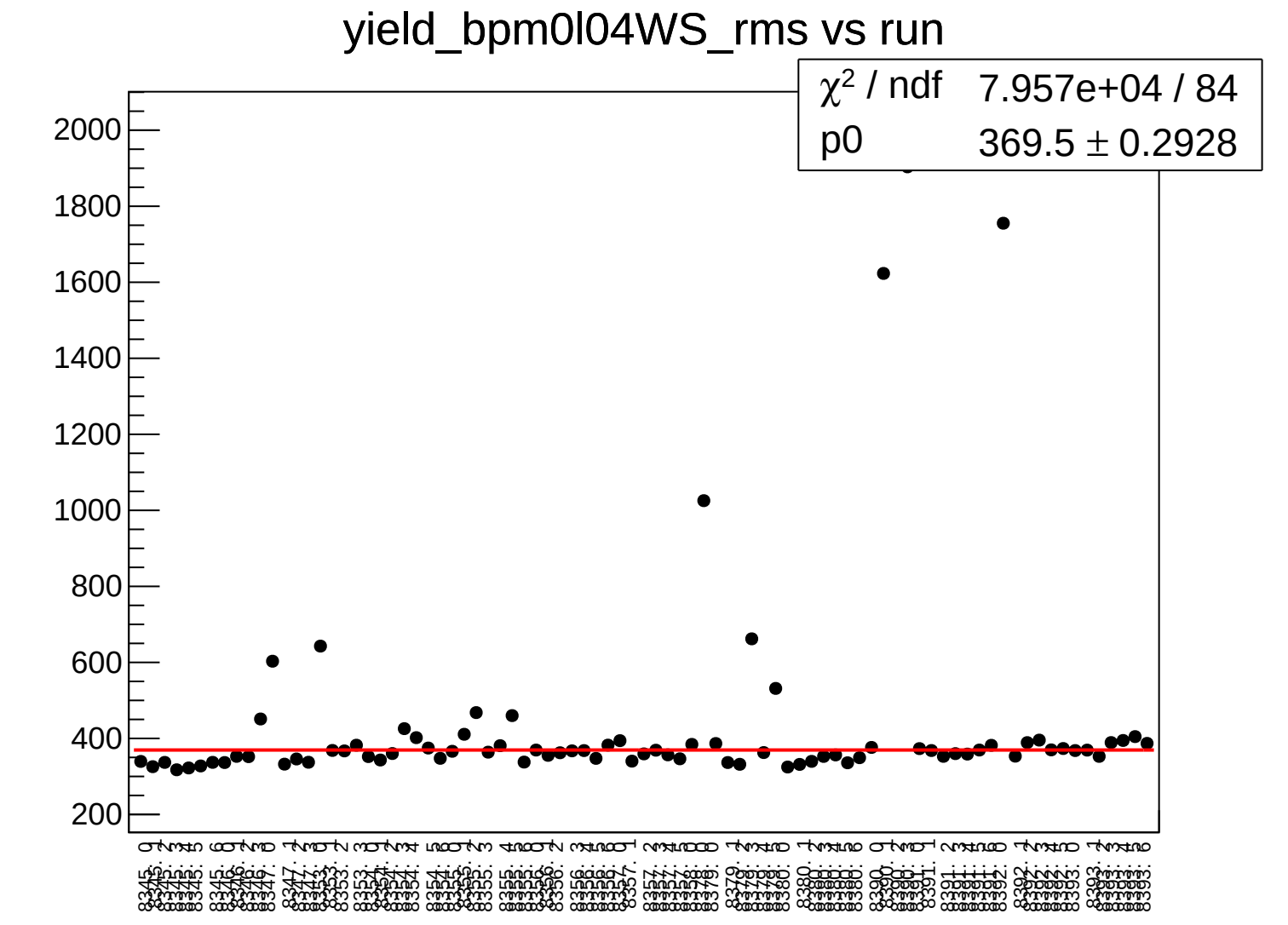

yield_bpm0l03WS_mean vs run
×10^3
130
128
126
124
122
120
118
χ² / ndf 2.303e+06 / 84
p0 1.281e+05 ± 0.5365
pull
Entries 85
Mean 433.1
Std Dev 385
500
400
300
200
100
0
−100
−200
−300

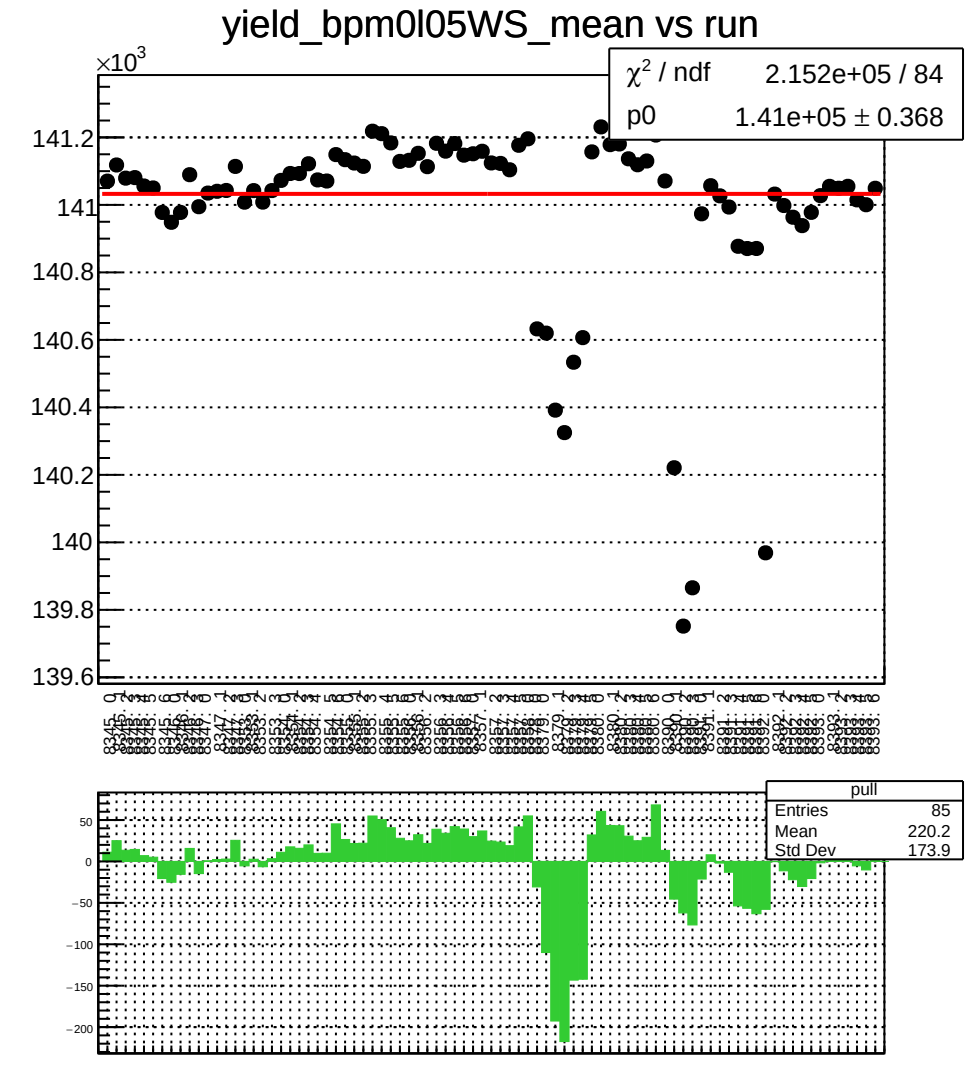

pull1D
Entries 85
Mean −2.899
Std Dev 5.736
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

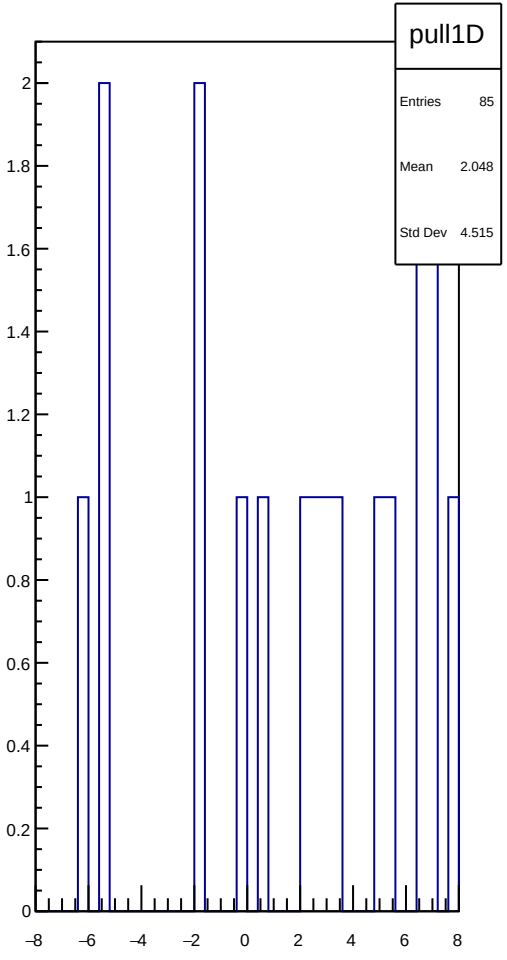

yield_bpm0l03WS_rms vs run
χ² / ndf 2.995e+05 / 84
p0 444.5 ± 0.3793
7000
6000
5000
4000
3000
2000
1000

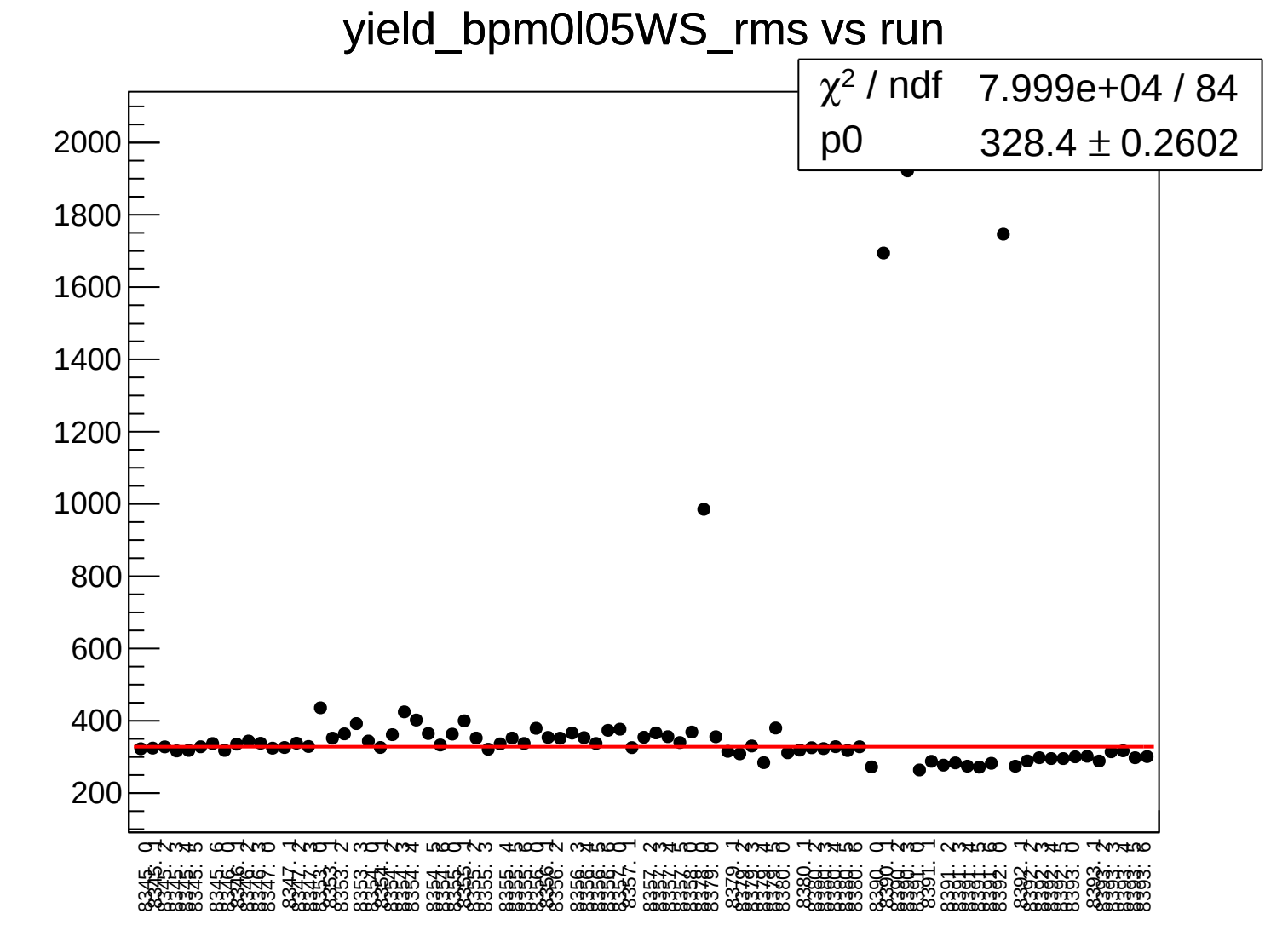

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 4.797e+07 / 84
p0 1.295e+05 ± 0.4141
134
133
132
131
130
129
128
127
pull
Entries 85
Mean 731
Std Dev 685.3
1000
500
0
−500
−1000

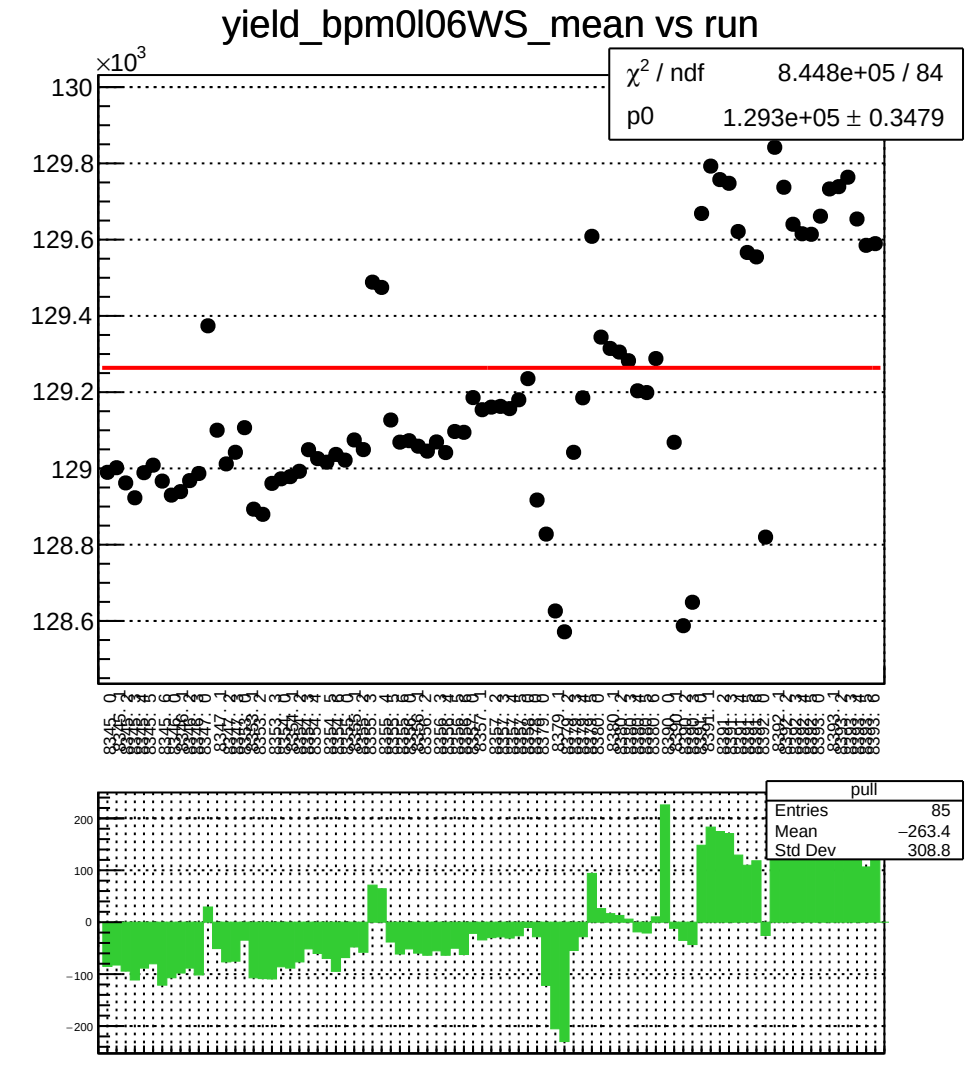

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

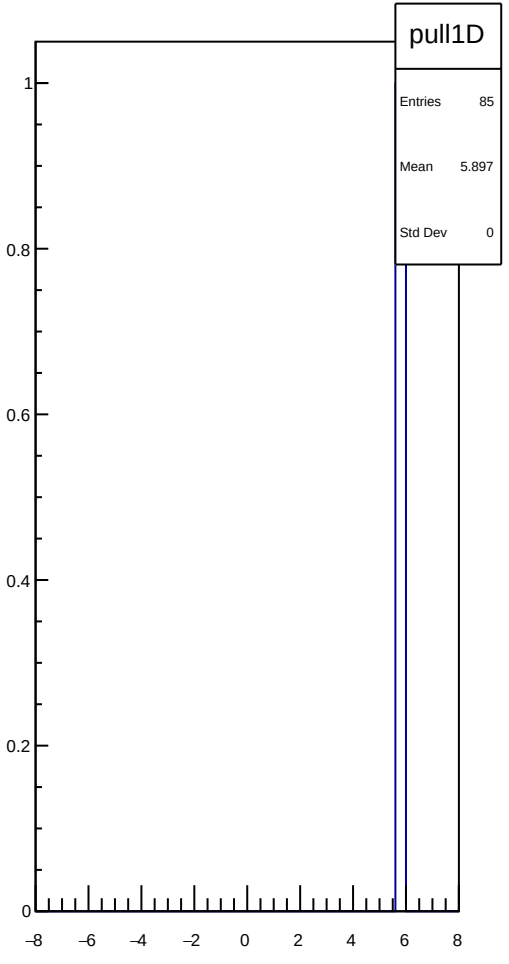

yield_bpm0l04WS_rms vs run
χ² / ndf 7.957e+04 / 84
p0 369.5 ± 0.2928
2000
1800
1600
1400
1200
1000
800
600
400
200

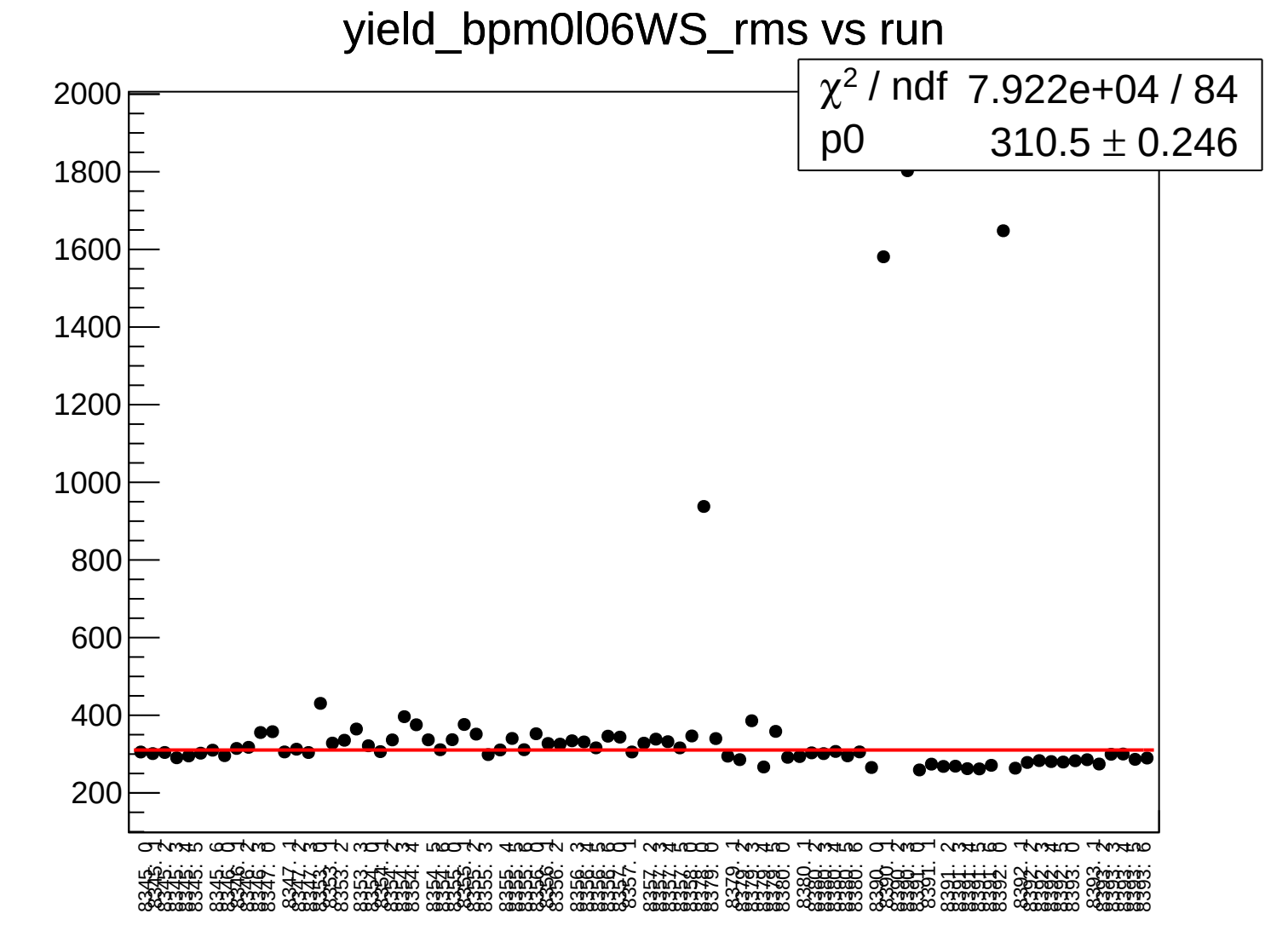

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 2.152e+05 / 84
p0 1.41e+05 ± 0.368
141.2
141
140.8
140.6
140.4
140.2
140
139.8
139.6
pull
Entries 85
Mean 220.2
Std Dev 173.9
50
0
−50
−100
−150
−200

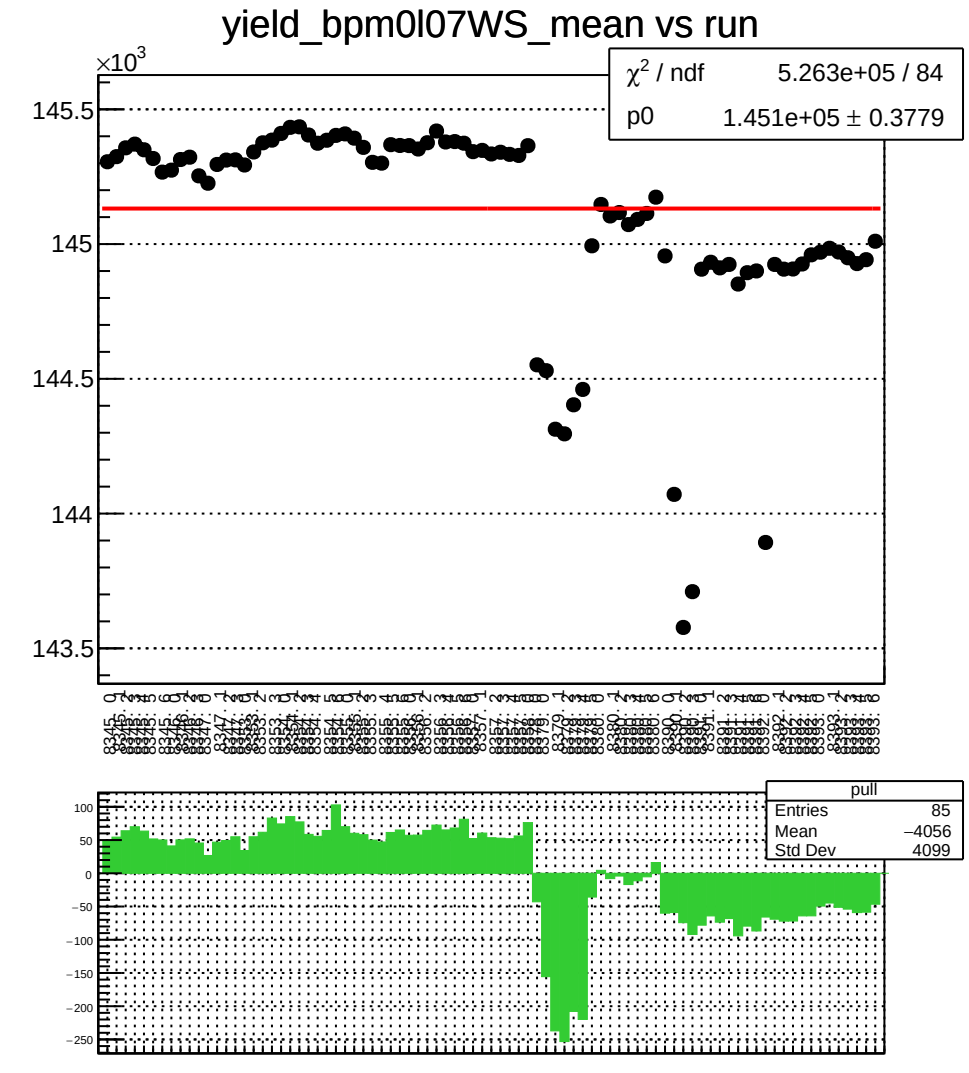

pull1D
Entries 85
Mean 2.048
Std Dev 4.515
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

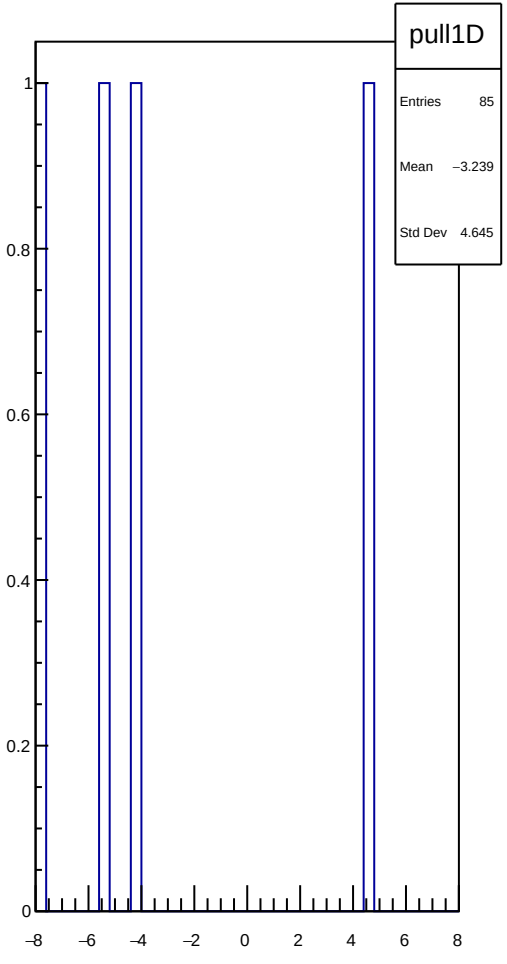

yield_bpm0l05WS_rms vs run
χ² / ndf 7.999e+04 / 84
p0 328.4 ± 0.2602
2000
1800
1600
1400
1200
1000
800
600
400
200

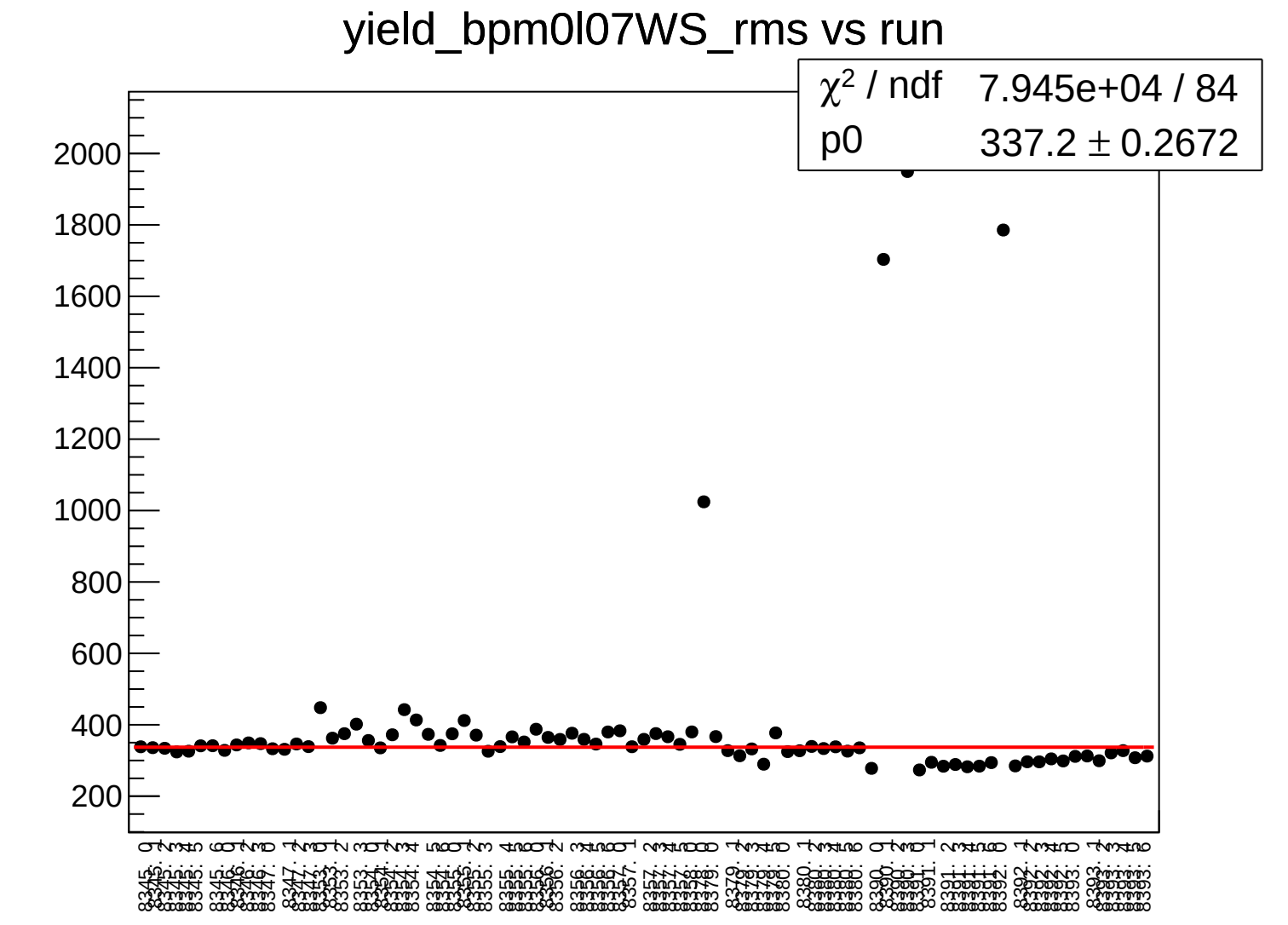

yield_bpm0l06WS_mean vs run
×10^3
130
129.8
129.6
129.4
129.2
129
128.8
128.6
χ² / ndf 8.448e+05 / 84
p0 1.293e+05 ± 0.3479
pull
Entries 85
Mean −263.4
Std Dev 308.8
200
100
0
−100
−200

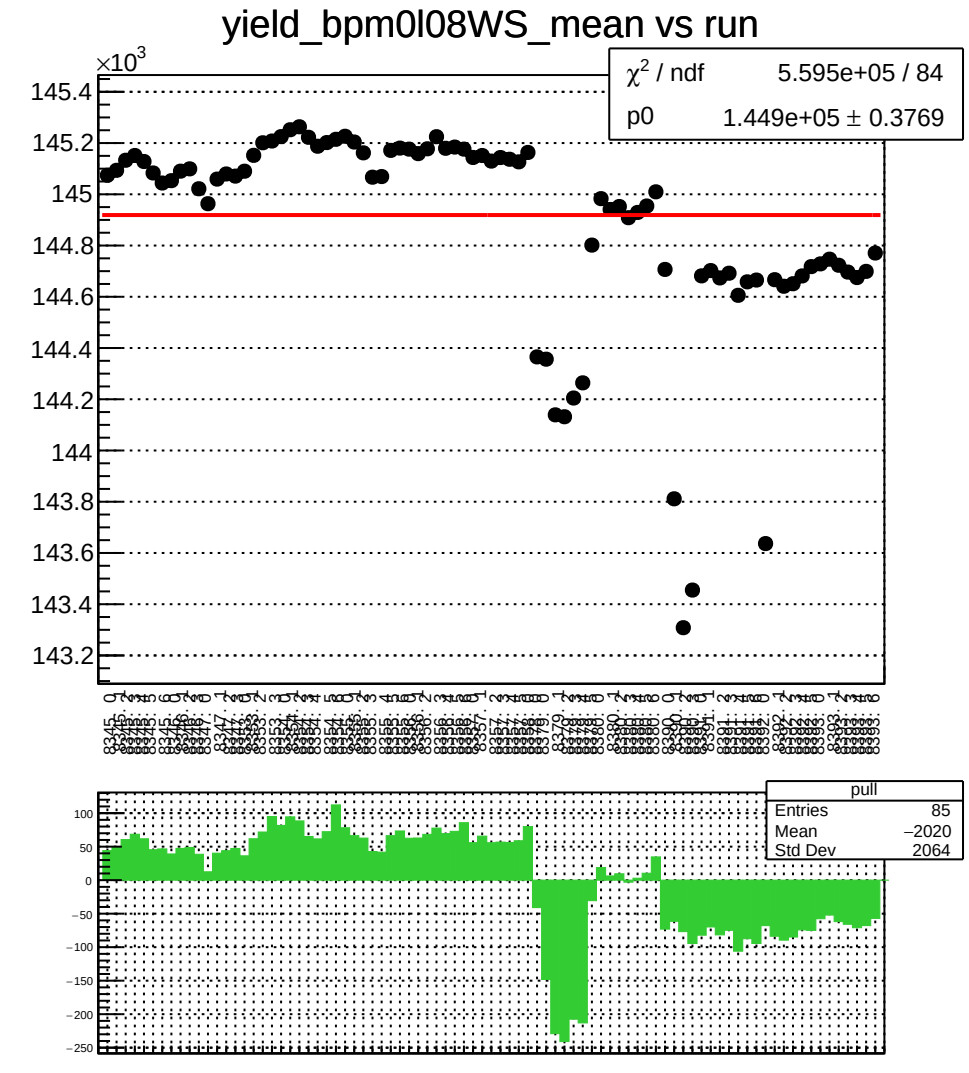

pull1D
Entries 85
Mean 5.897
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

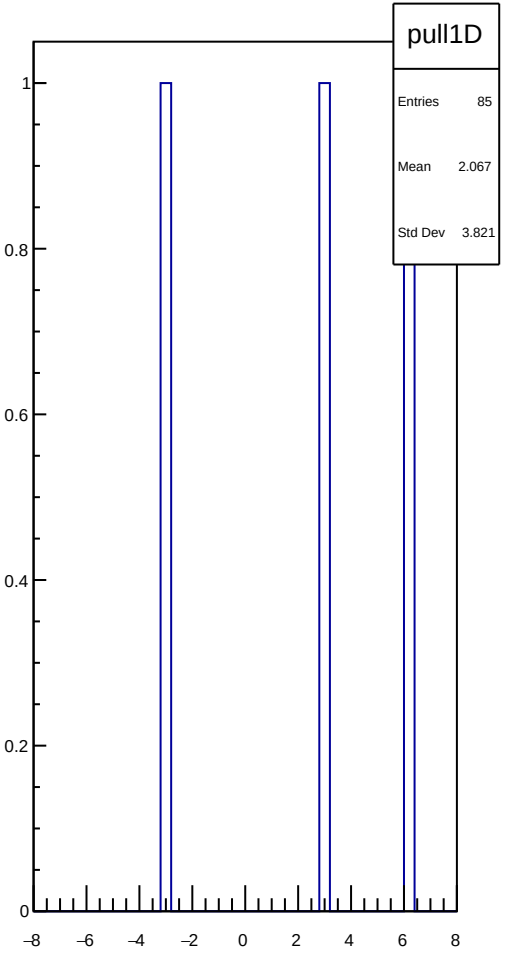

yield_bpm0l06WS_rms vs run
χ^2 / ndf 7.922e+04 / 84
p0 310.5 ± 0.246
2000
1800
1600
1400
1200
1000
800
600
400
200

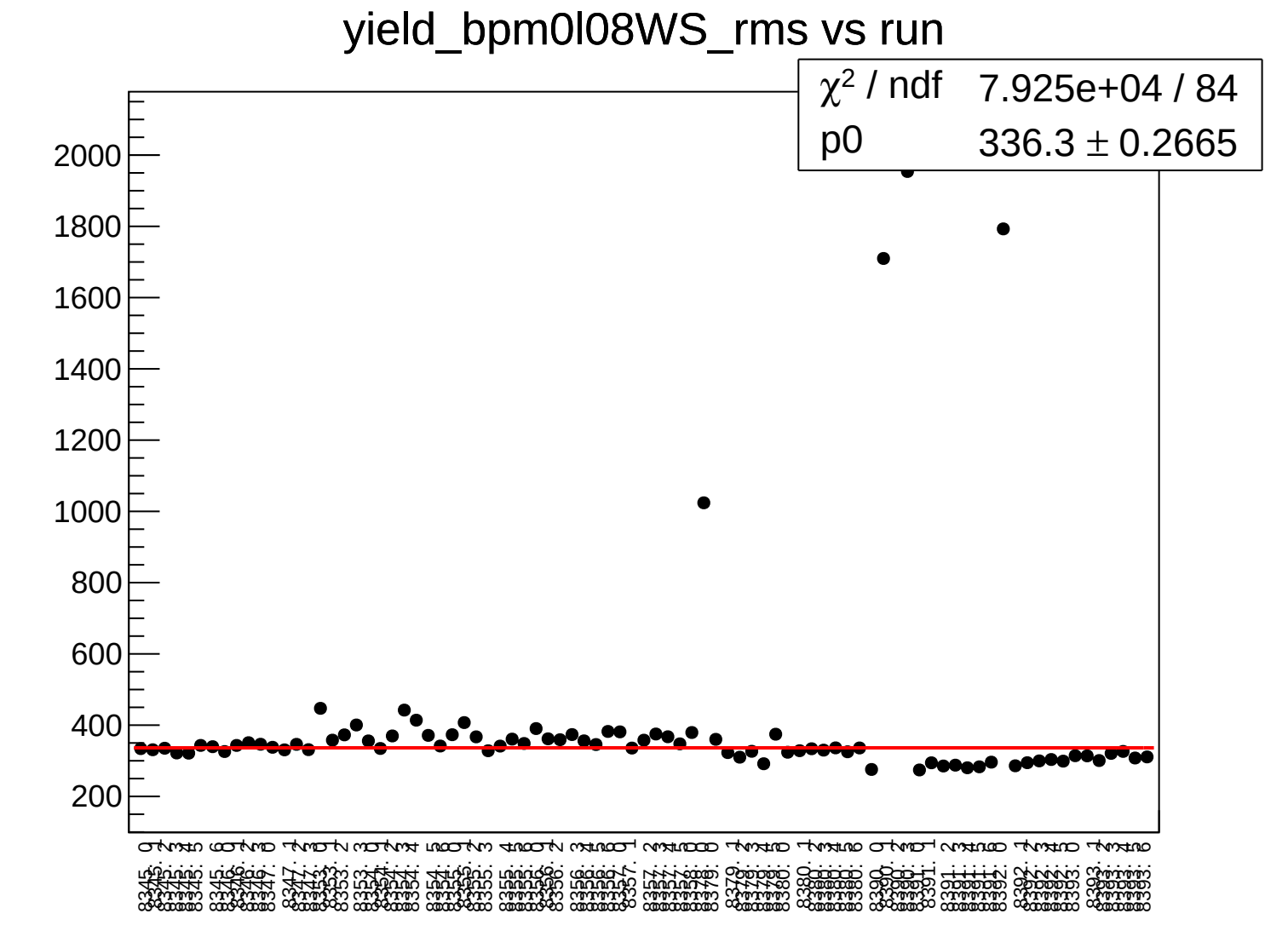

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 5.263e+05 / 84
p0 1.451e+05 ± 0.3779
145.5
145
144.5
144
143.5
pull
Entries 85
Mean −4056
Std Dev 4099
100
50
0
−50
−100
−150
−200
−250

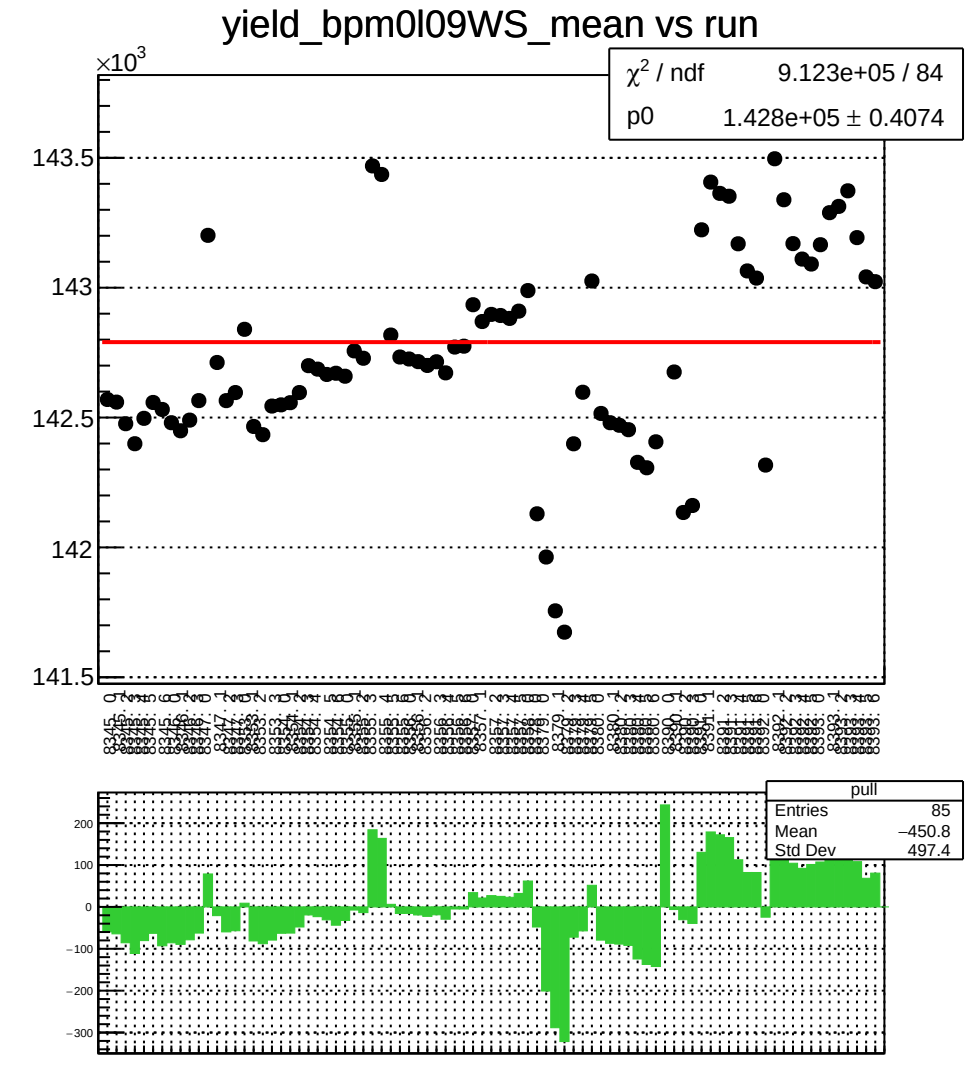

pull1D
Entries 85
Mean −3.239
Std Dev 4.645
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

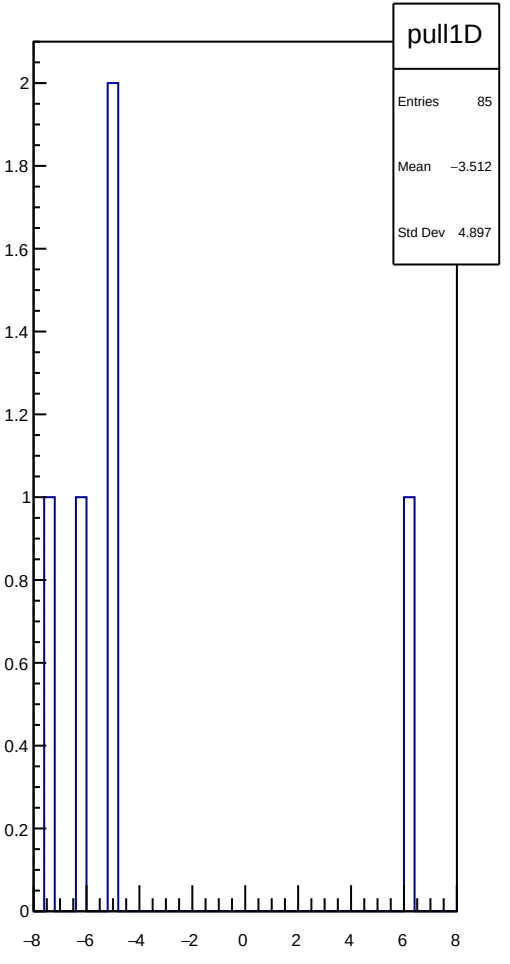

yield_bpm0l07WS_rms vs run
χ² / ndf 7.945e+04 / 84
p0 337.2 ± 0.2672
2000
1800
1600
1400
1200
1000
800
600
400
200

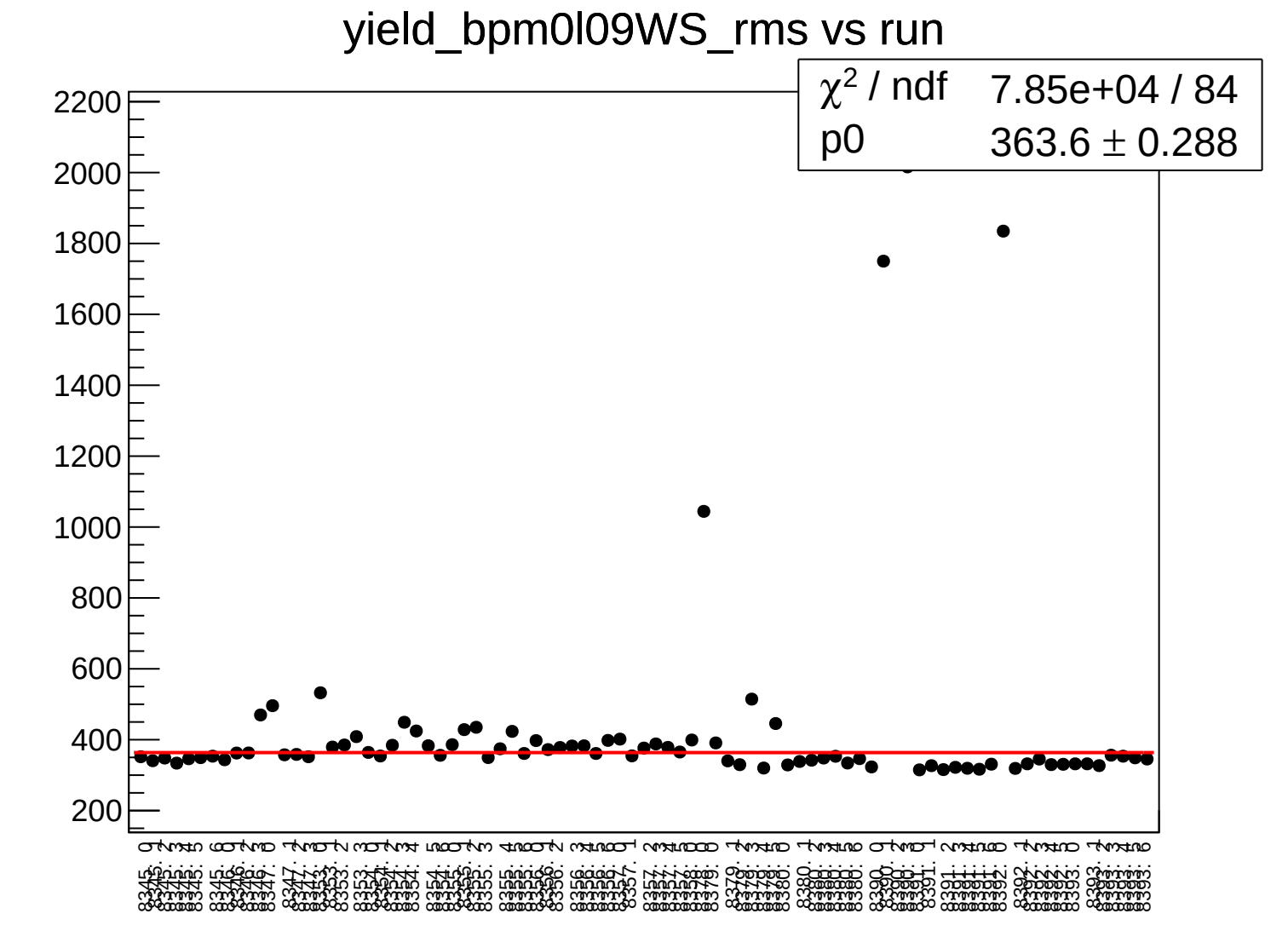

yield_bpm0l08WS_mean vs run
×10^3
χ^2 / ndf 5.595e+05 / 84
p0 1.449e+05 ± 0.3769
145.4
145.2
145
144.8
144.6
144.4
144.2
144
143.8
143.6
143.4
143.2
pull
Entries 85
Mean −2020
Std Dev 2064
100
50
0
−50
−100
−150
−200
−250

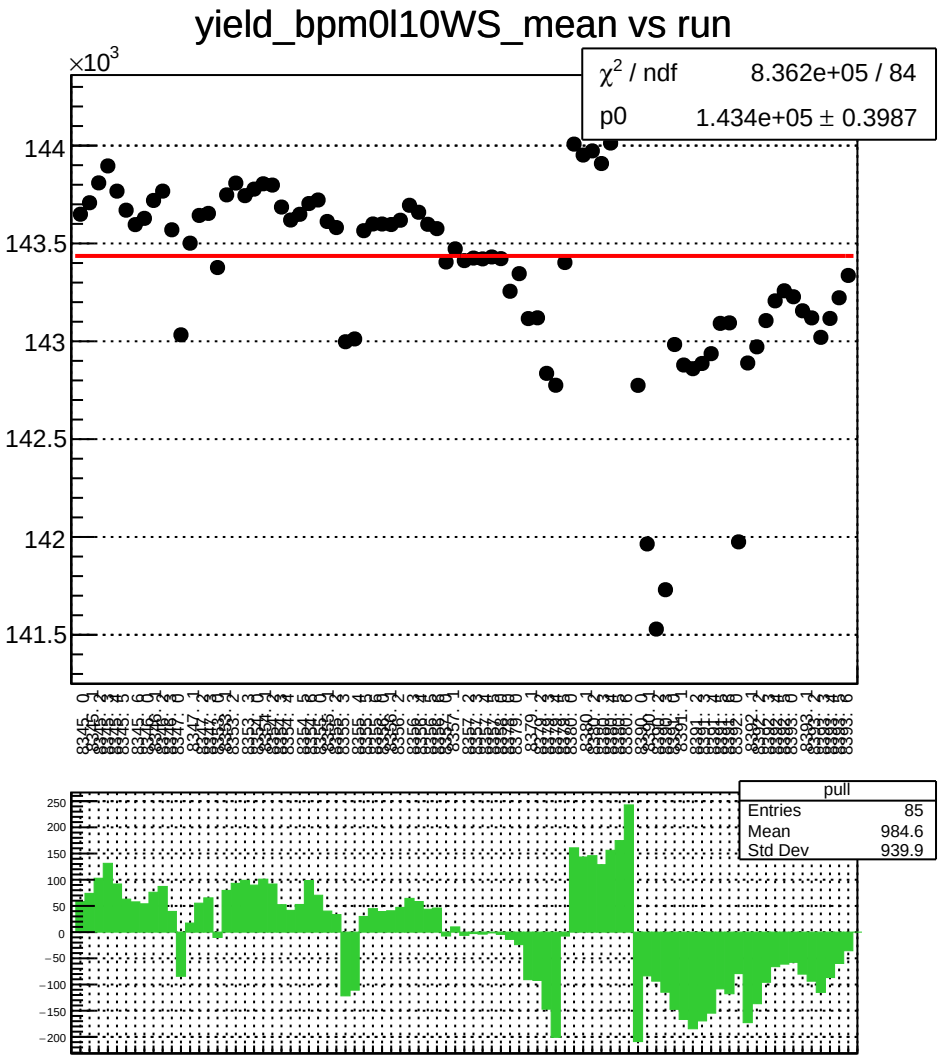

pull1D
Entries 85
Mean 2.067
Std Dev 3.821
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

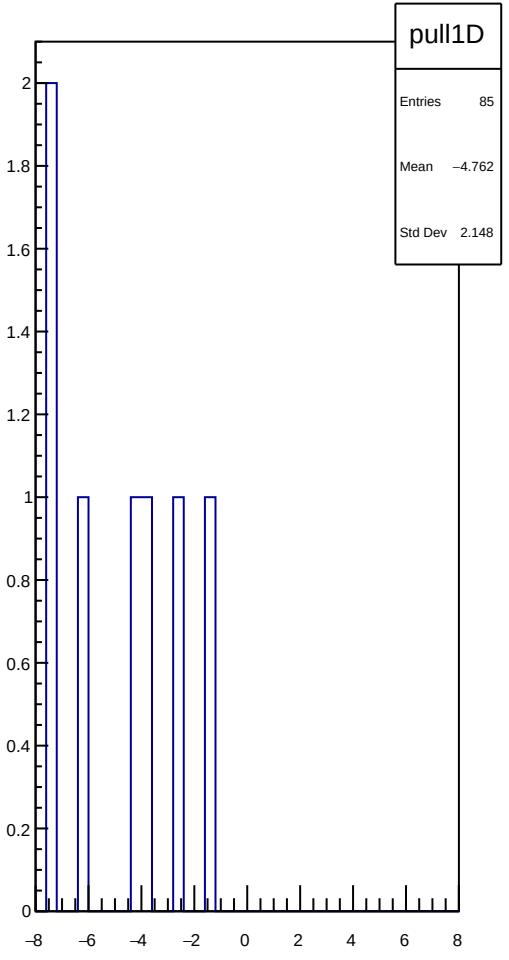

yield_bpm0l08WS_rms vs run
χ^2 / ndf 7.925e+04 / 84
p0 336.3 ± 0.2665
2000
1800
1600
1400
1200
1000
800
600
400
200

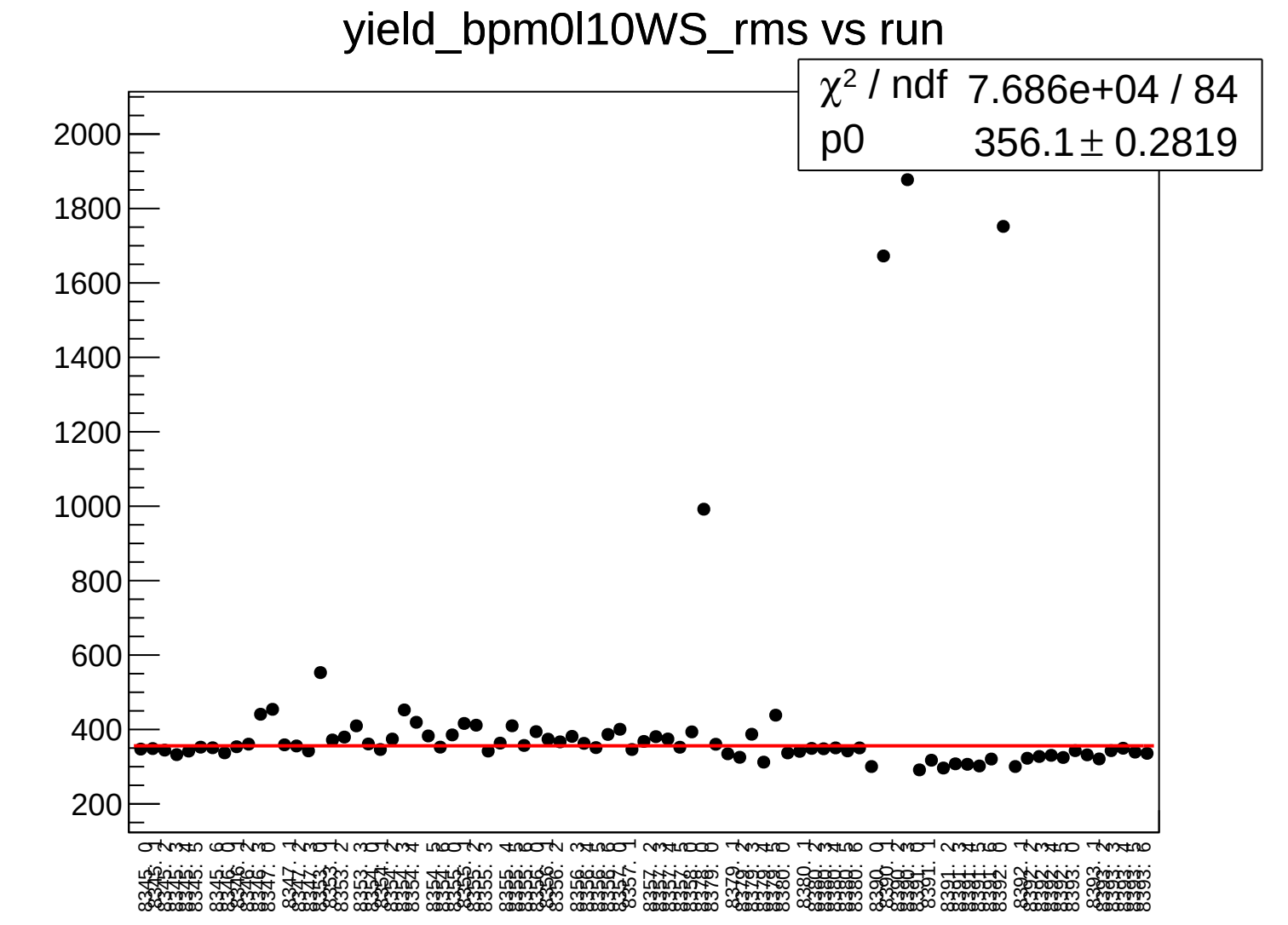

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 9.123e+05 / 84
p0 1.428e+05 ± 0.4074
143.5
143
142.5
142
141.5
pull
Entries 85
Mean −450.8
Std Dev 497.4
200
100
0
−100
−200
−300

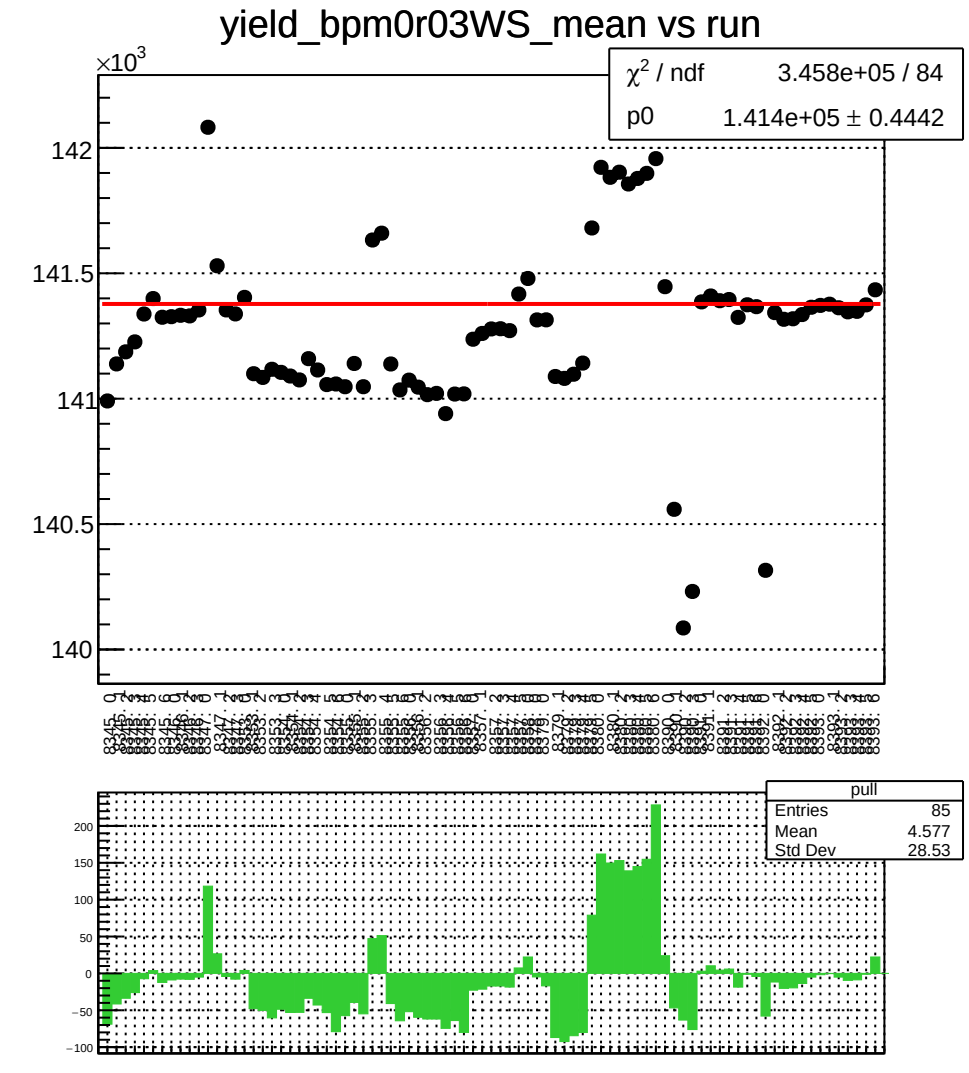

pull1D
Entries 85
Mean −3.512
Std Dev 4.897
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

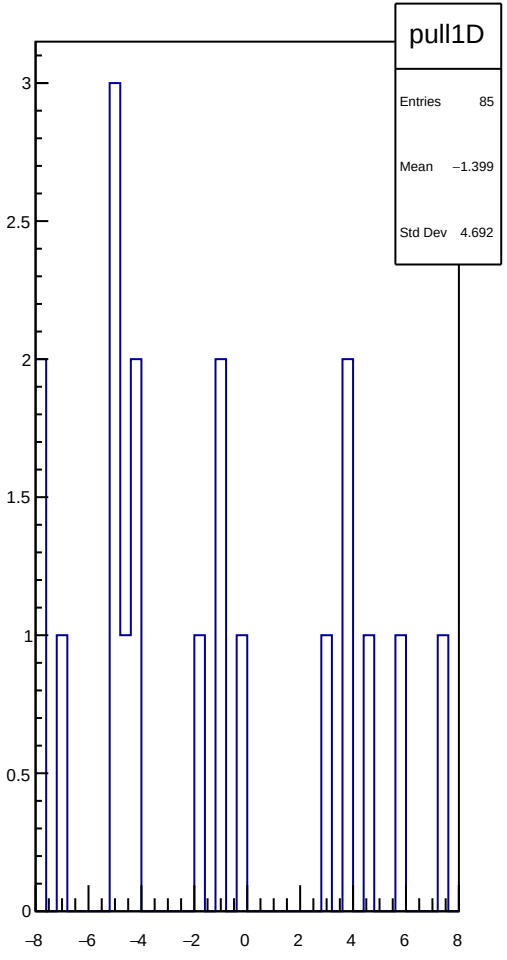

yield_bpm0l09WS_rms vs run
χ^2 / ndf 7.85e+04 / 84
p0 363.6 ± 0.288
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

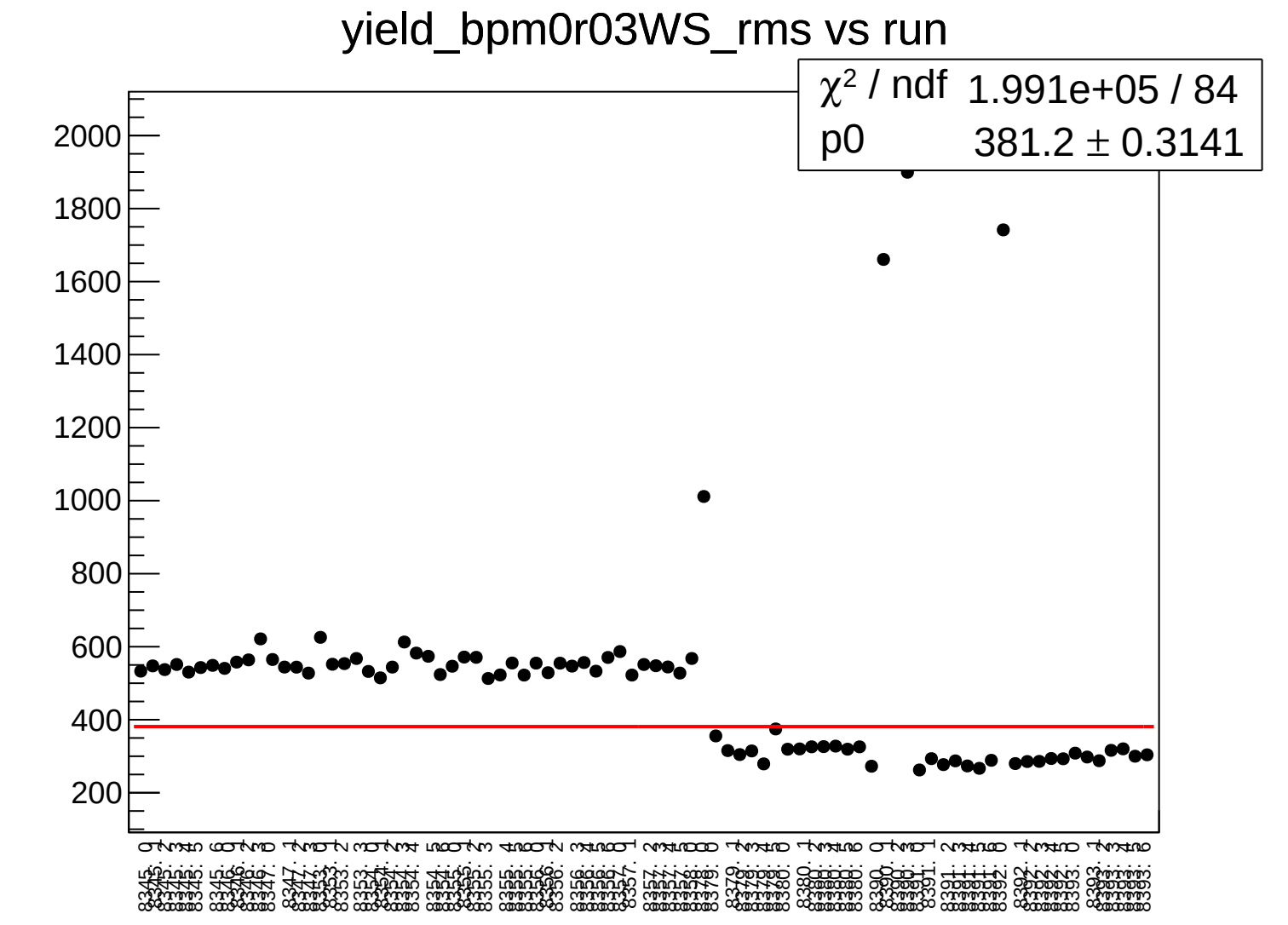

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 8.362e+05 / 84
p0 1.434e+05 ± 0.3987
144
143.5
143
142.5
142
141.5
pull
Entries 85
Mean 984.6
Std Dev 939.9
250
200
150
100
50
0
−50
−100
−150
−200

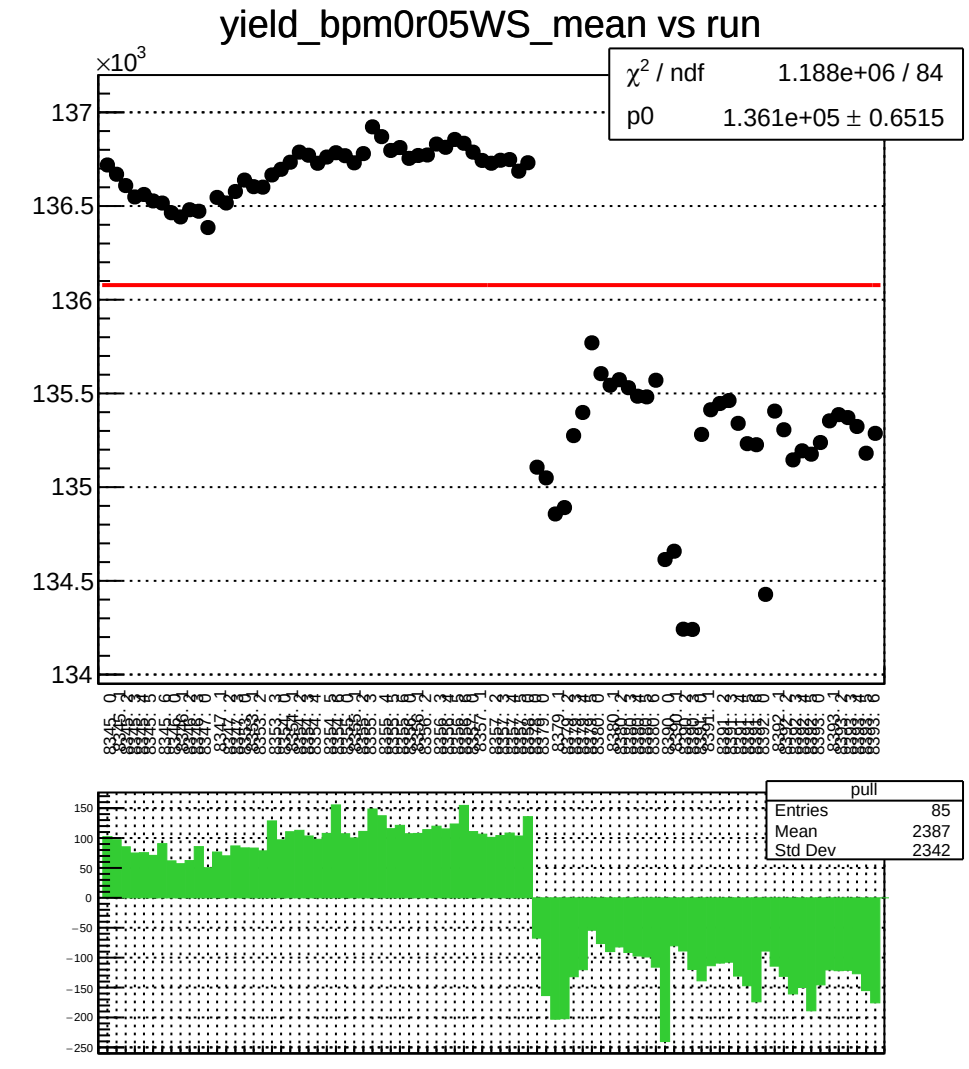

pull1D
Entries 85
Mean −4.762
Std Dev 2.148
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

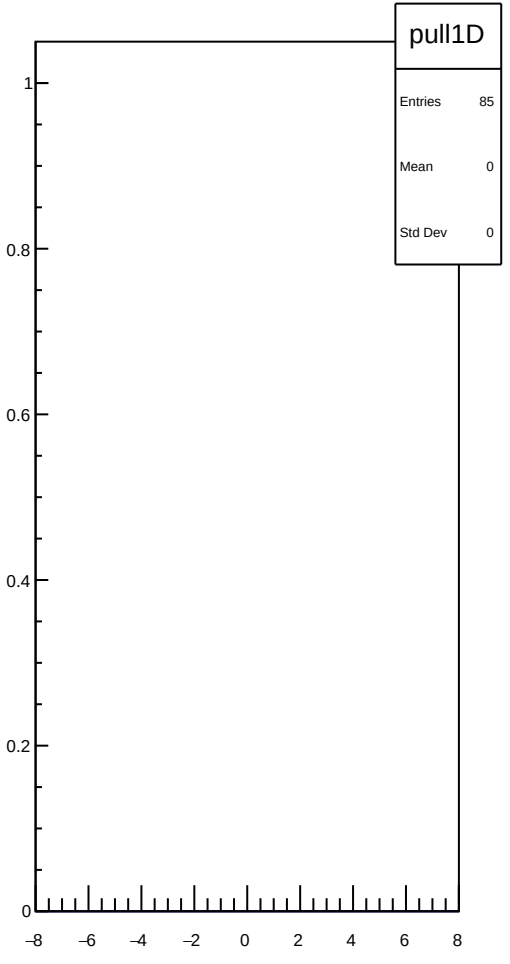

yield_bpm0l10WS_rms vs run
χ² / ndf 7.686e+04 / 84
p0 356.1 ± 0.2819
2000
1800
1600
1400
1200
1000
800
600
400
200

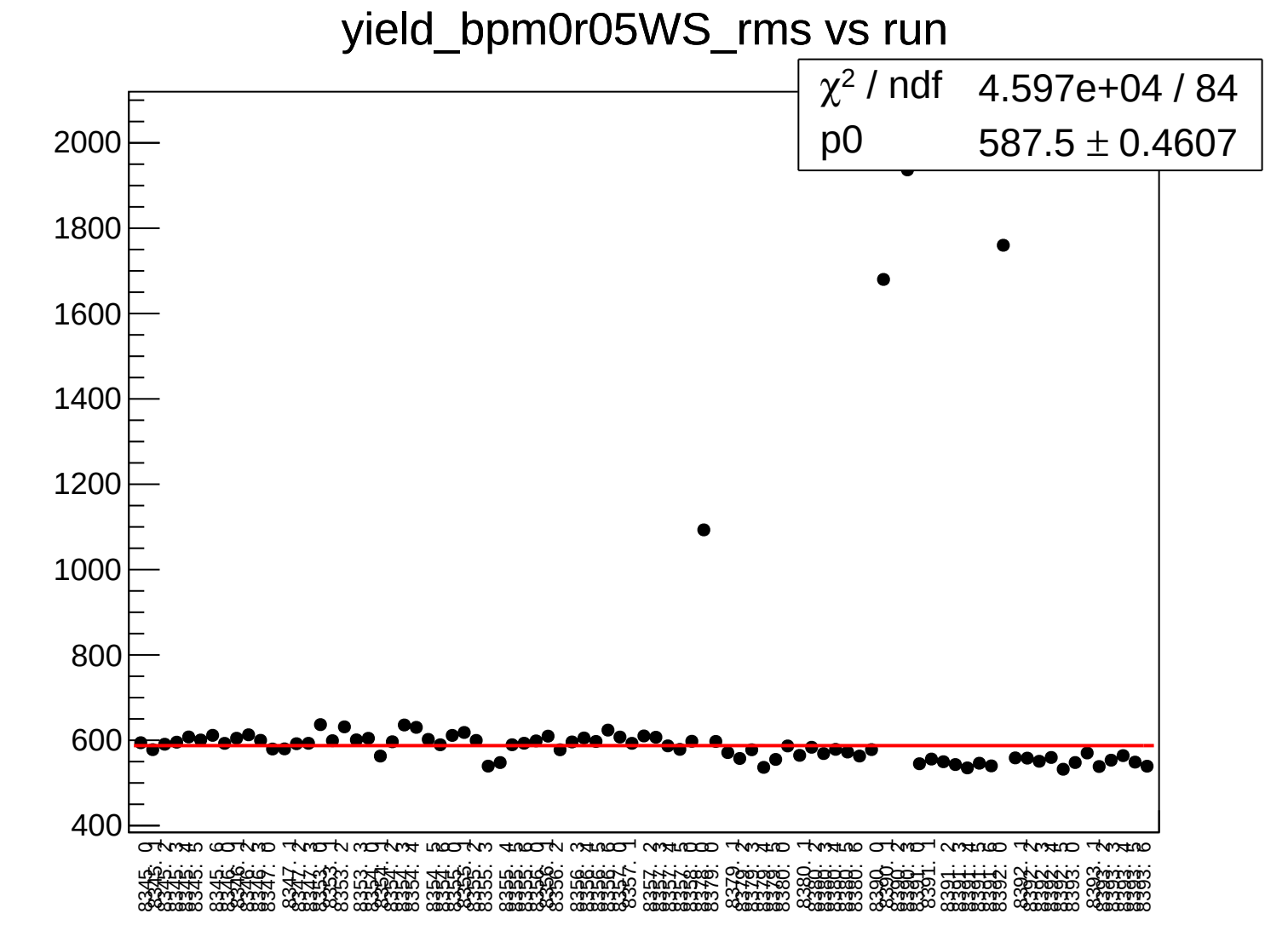

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 3.458e+05 / 84
p0 1.414e+05 ± 0.4442
142
141.5
141
140.5
140
pull
Entries 85
Mean 4.577
Std Dev 28.53
200
150
100
50
0
−50
−100

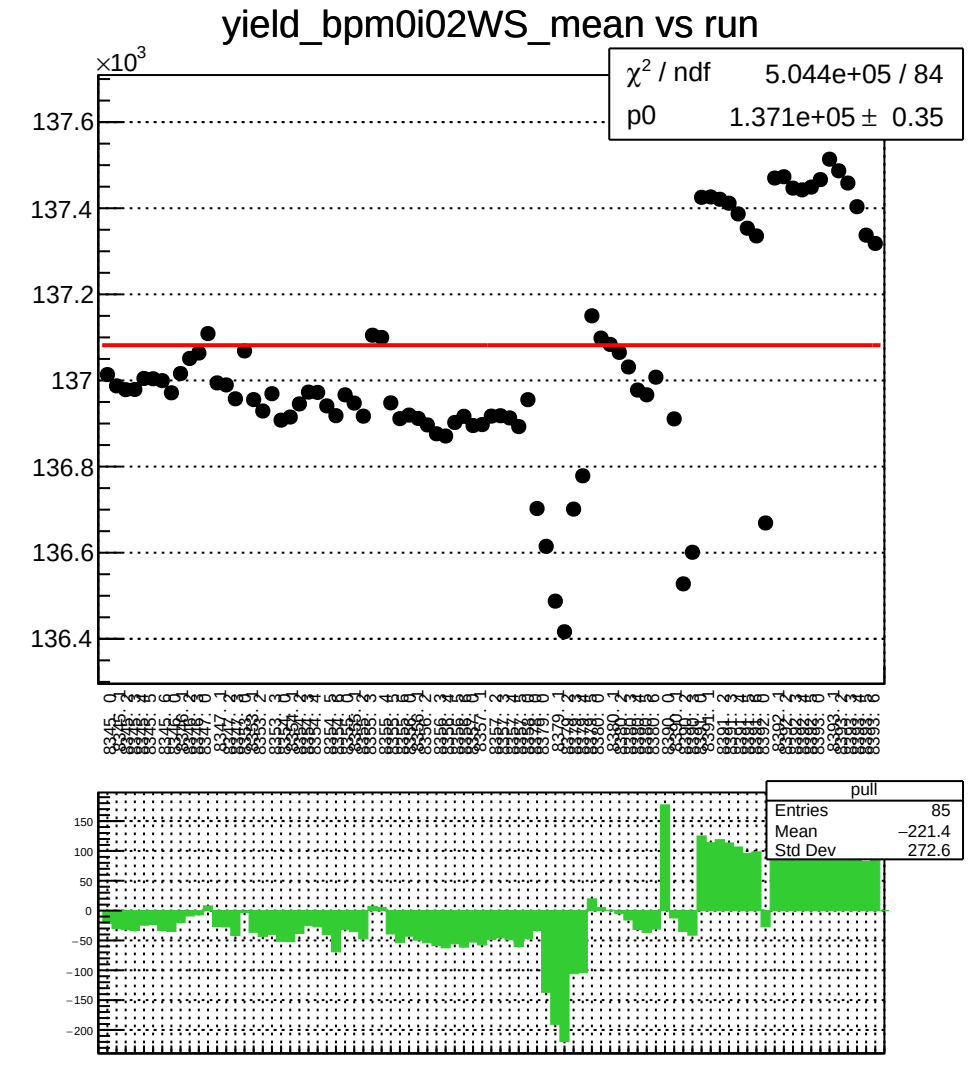

pull1D
Entries 85
Mean −1.399
Std Dev 4.692
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

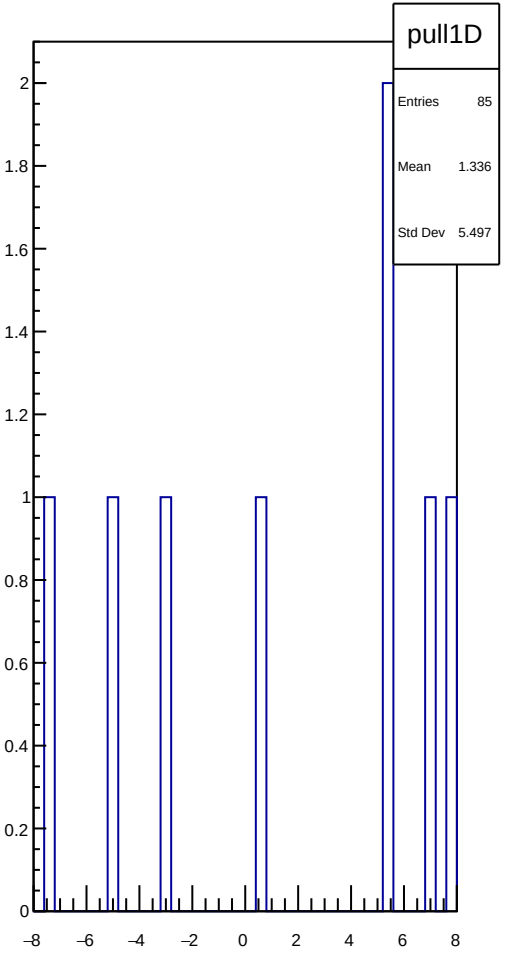

yield_bpm0r03WS_rms vs run
χ² / ndf 1.991e+05 / 84
p0 381.2 ± 0.3141
2000
1800
1600
1400
1200
1000
800
600
400
200

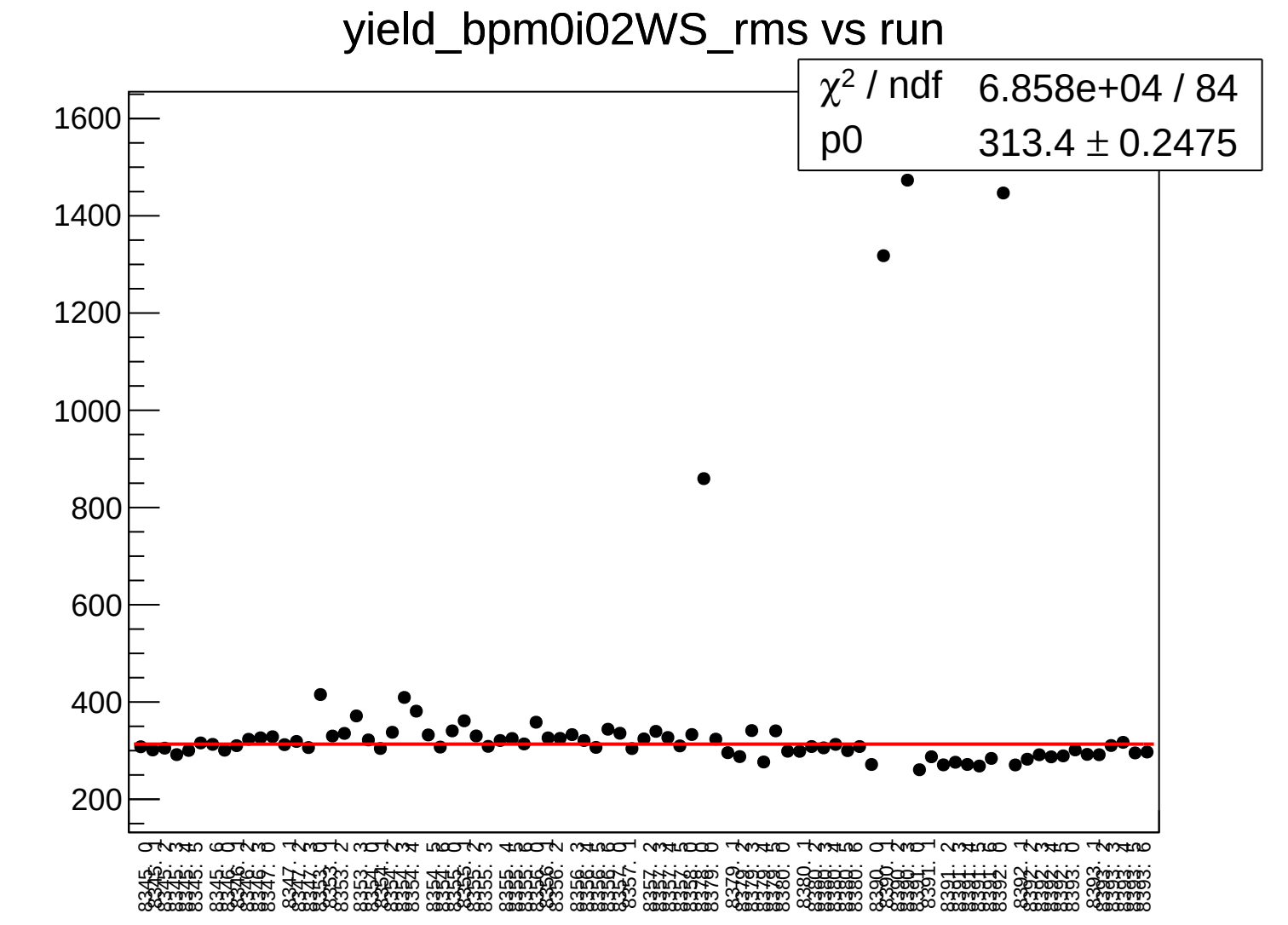

yield_bpm0r05WS_mean vs run
×10^3
χ^2 / ndf 1.188e+06 / 84
p0 1.361e+05 ± 0.6515
137
136.5
136
135.5
135
134.5
134
pull
Entries 85
Mean 2387
Std Dev 2342
150
100
50
0
−50
−100
−150
−200
−250

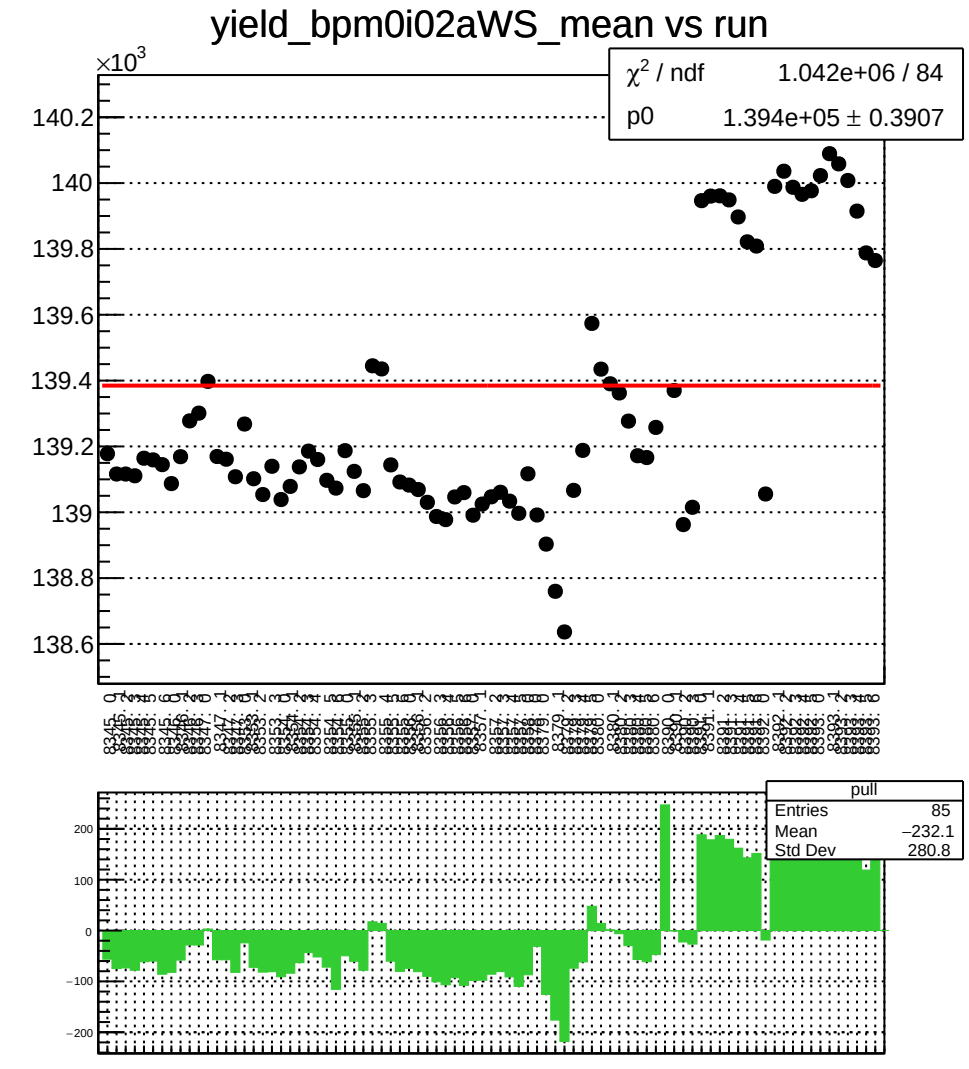

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

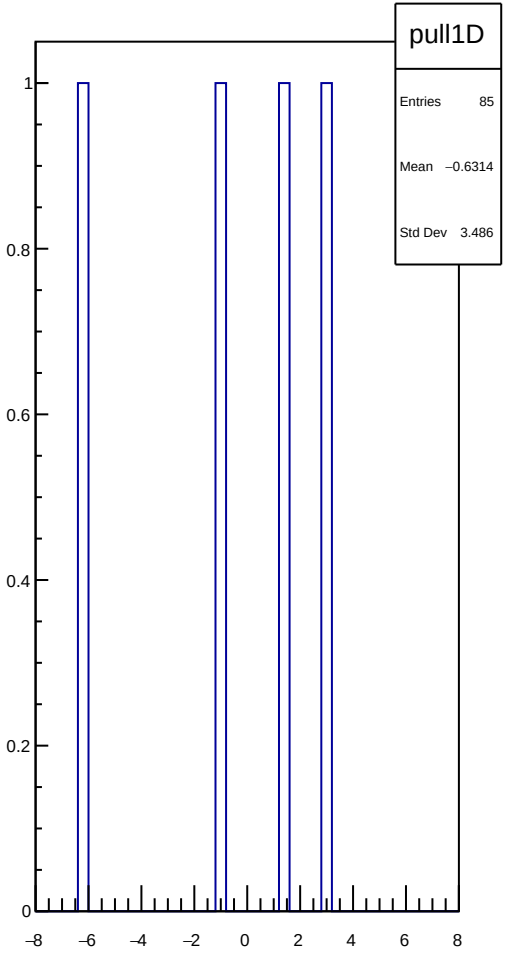

yield_bpm0r05WS_rms vs run
χ² / ndf 4.597e+04 / 84
p0 587.5 ± 0.4607
2000
1800
1600
1400
1200
1000
800
600
400

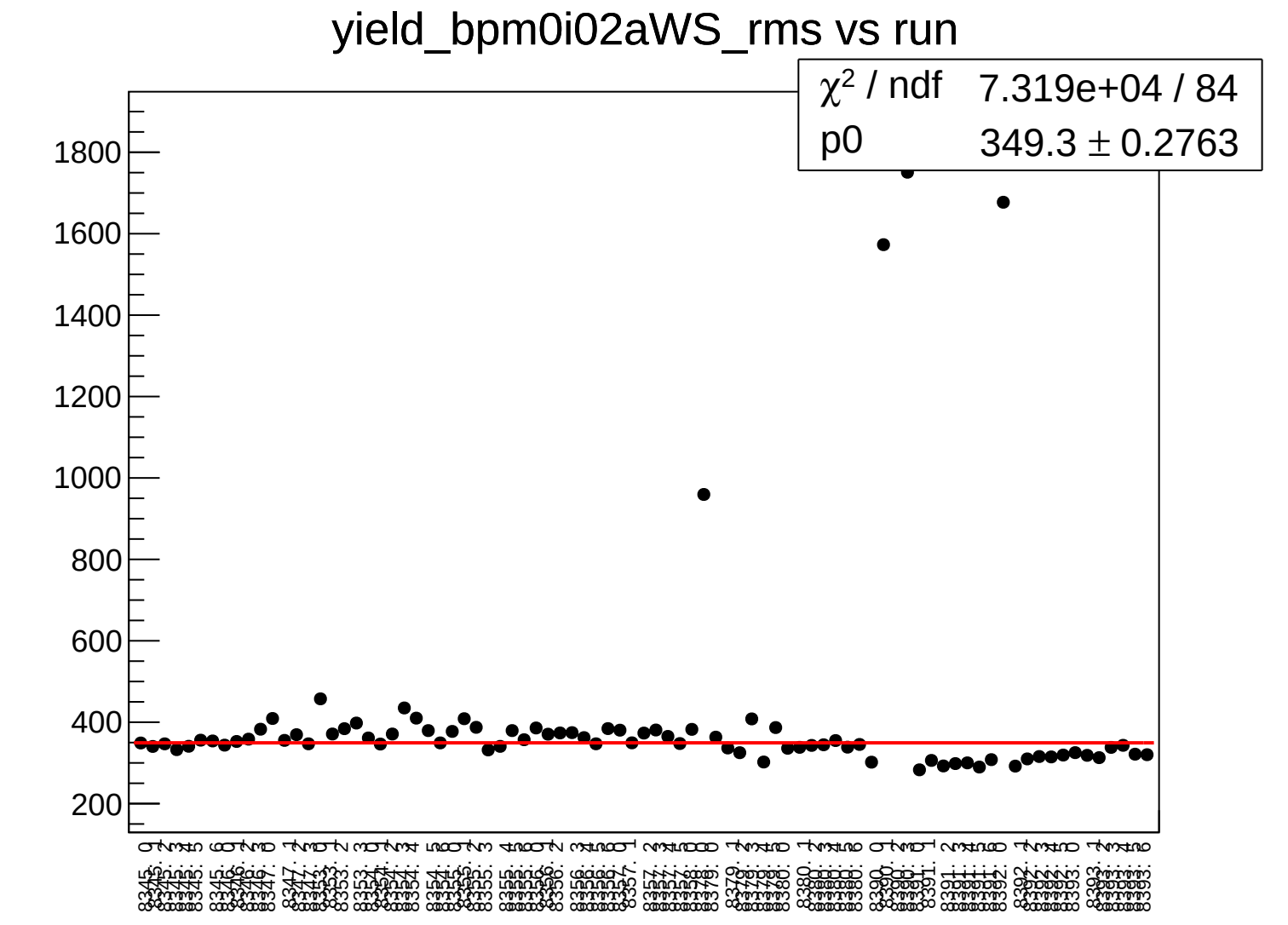

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 5.044e+05 / 84
p0 1.371e+05 ± 0.35
137.6
137.4
137.2
137
136.8
136.6
136.4
pull
Entries 85
Mean −221.4
Std Dev 272.6
150
100
50
0
−50
−100
−150
−200

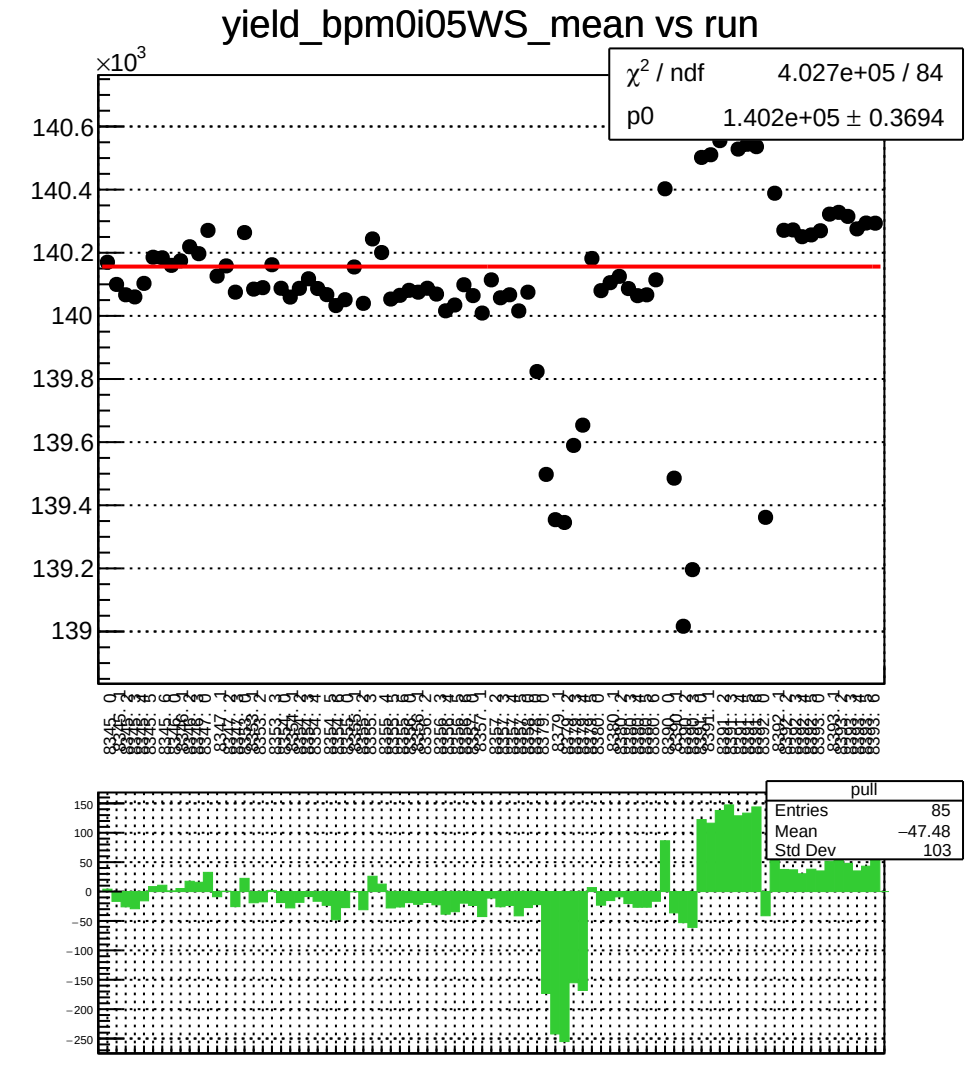

pull1D
Entries 85
Mean 1.336
Std Dev 5.497
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

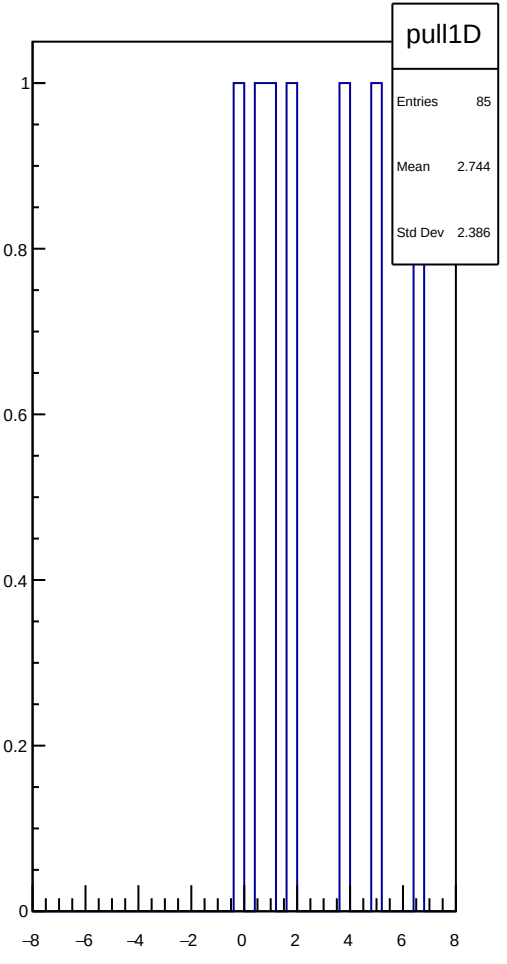

yield_bpm0i02WS_rms vs run
χ² / ndf 6.858e+04 / 84
p0 313.4 ± 0.2475
1600
1400
1200
1000
800
600
400
200

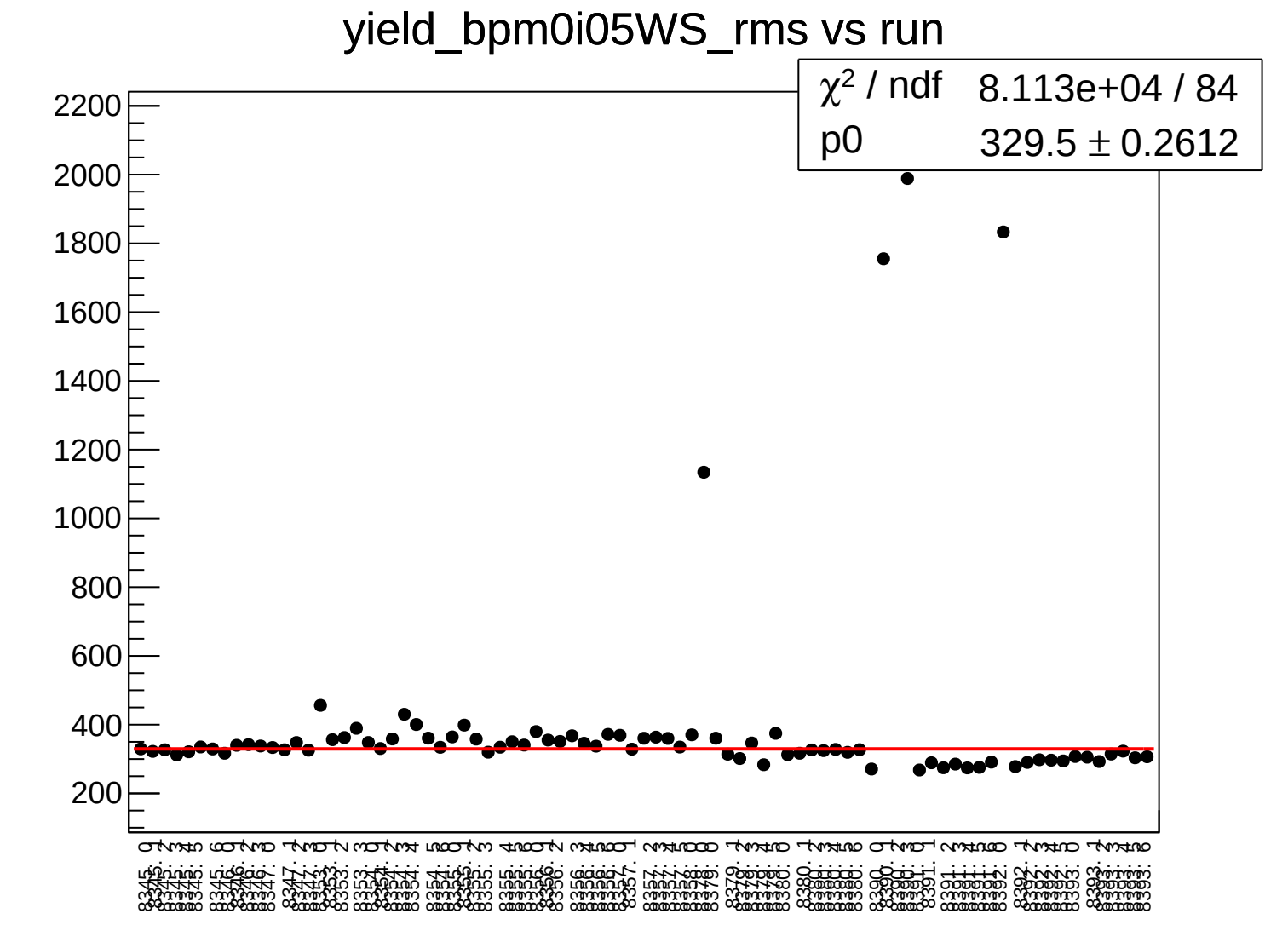

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 1.042e+06 / 84
p0 1.394e+05 ± 0.3907
140.2
140
139.8
139.6
139.4
139.2
139
138.8
138.6
pull
Entries 85
Mean −232.1
Std Dev 280.8
200
100
0
−100
−200

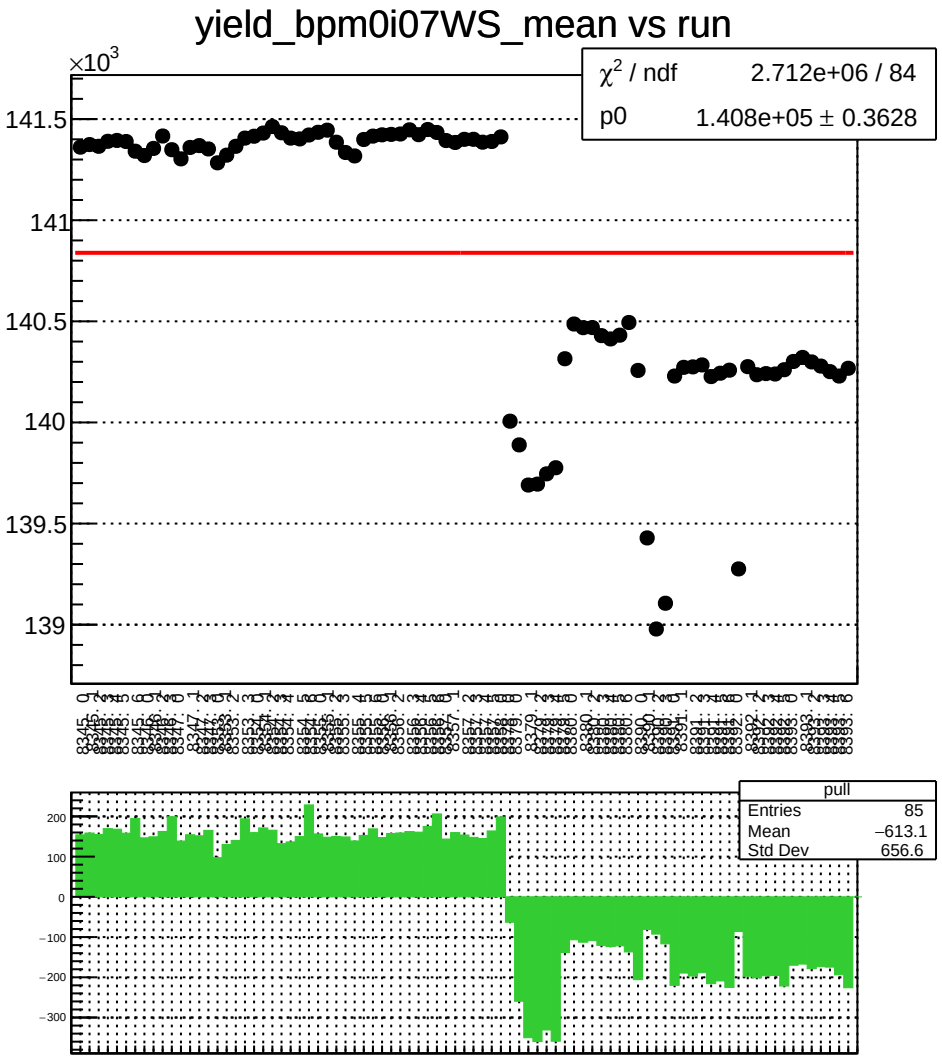

pull1D
Entries 85
Mean −0.6314
Std Dev 3.486
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

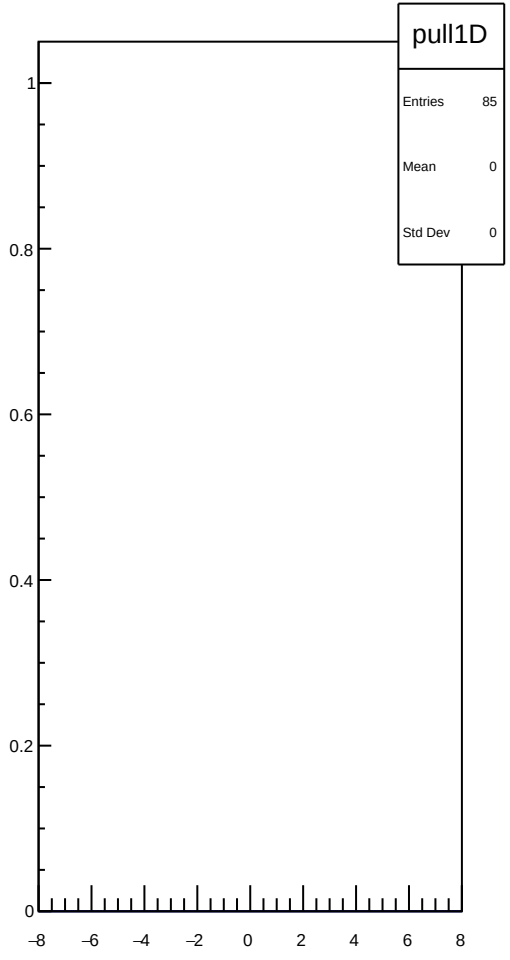

yield_bpm0i02aWS_rms vs run
χ² / ndf 7.319e+04 / 84
p0 349.3 ± 0.2763
1800
1600
1400
1200
1000
800
600
400
200

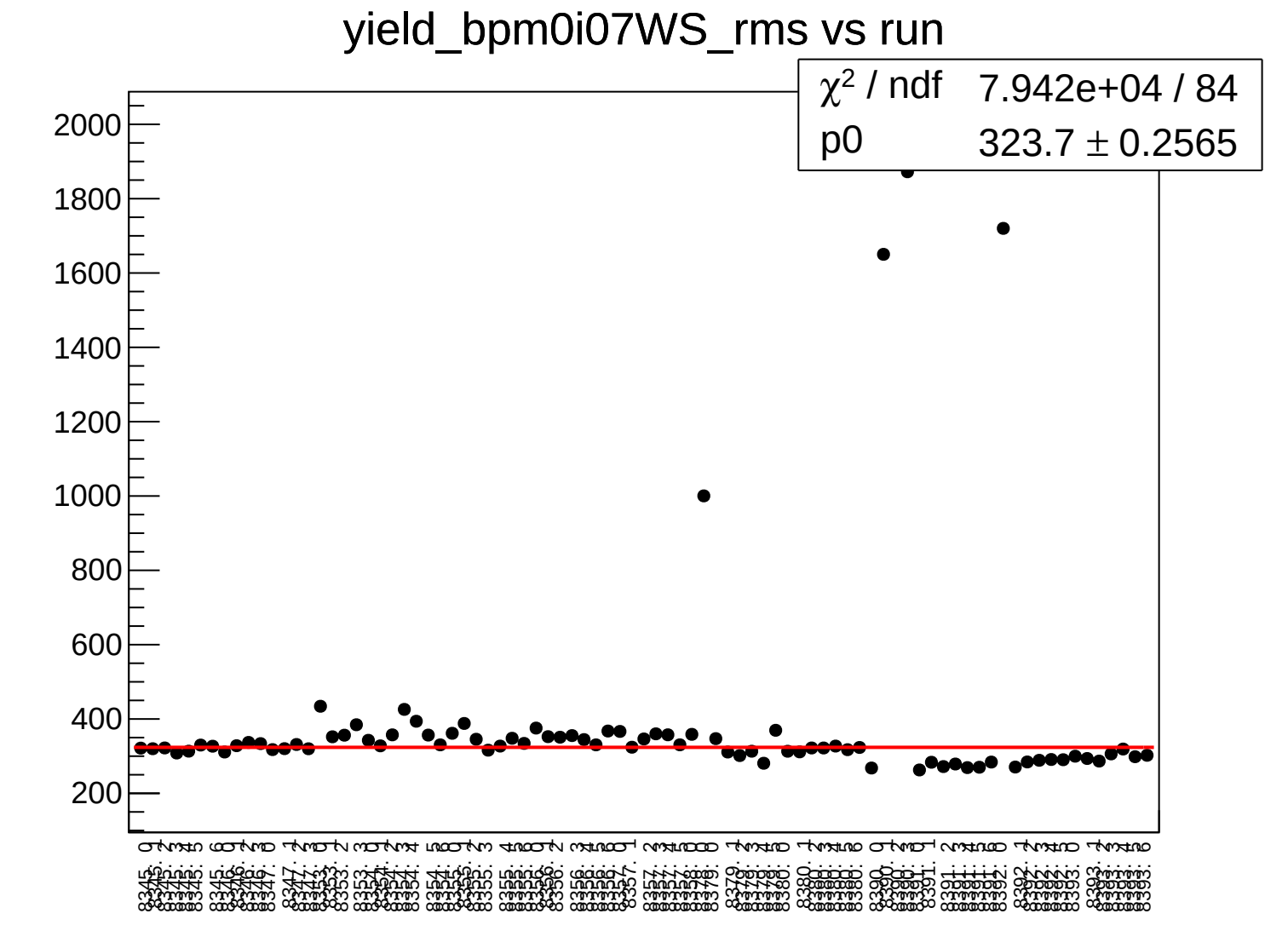

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 4.027e+05 / 84
p0 1.402e+05 ± 0.3694
140.6
140.4
140.2
140
139.8
139.6
139.4
139.2
139
pull
Entries 85
Mean −47.48
Std Dev 103
150
100
50
0
−50
−100
−150
−200
−250

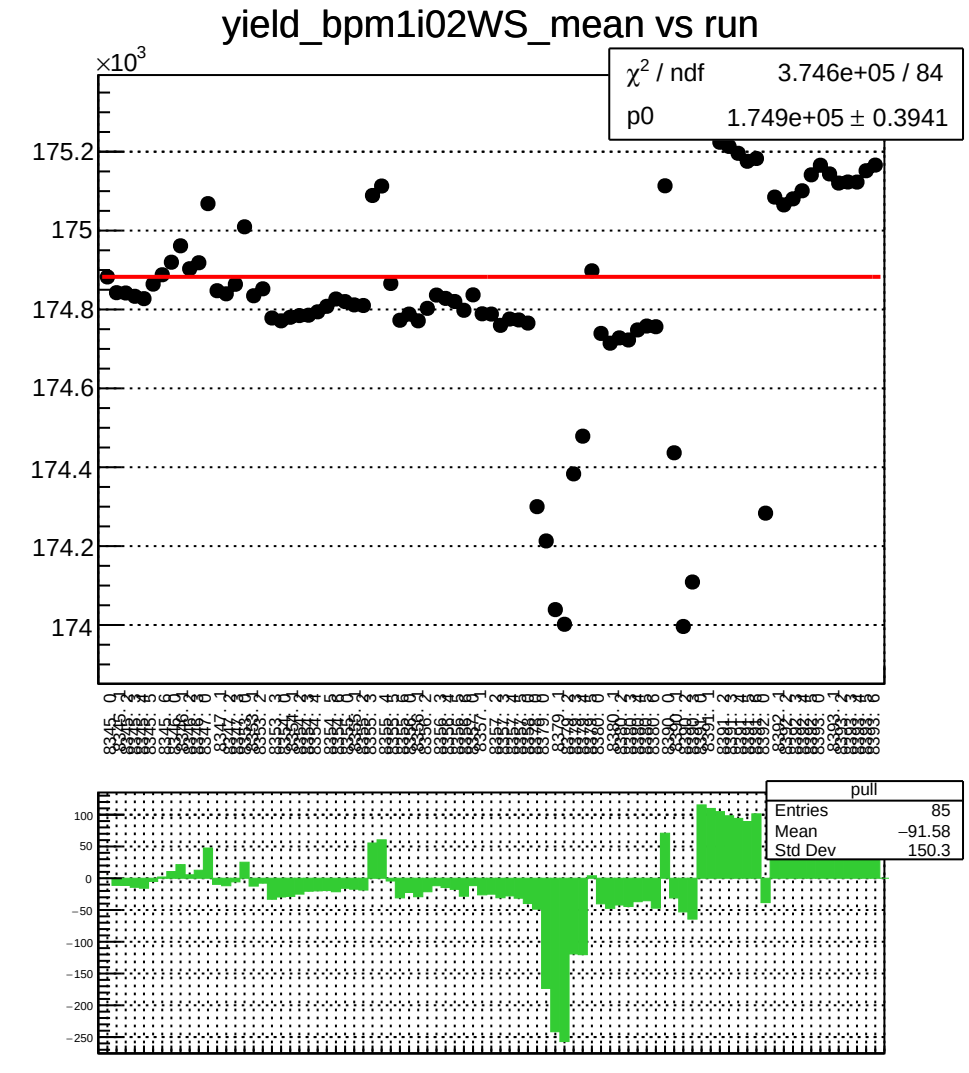

pull1D
Entries 85
Mean 2.744
Std Dev 2.386
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

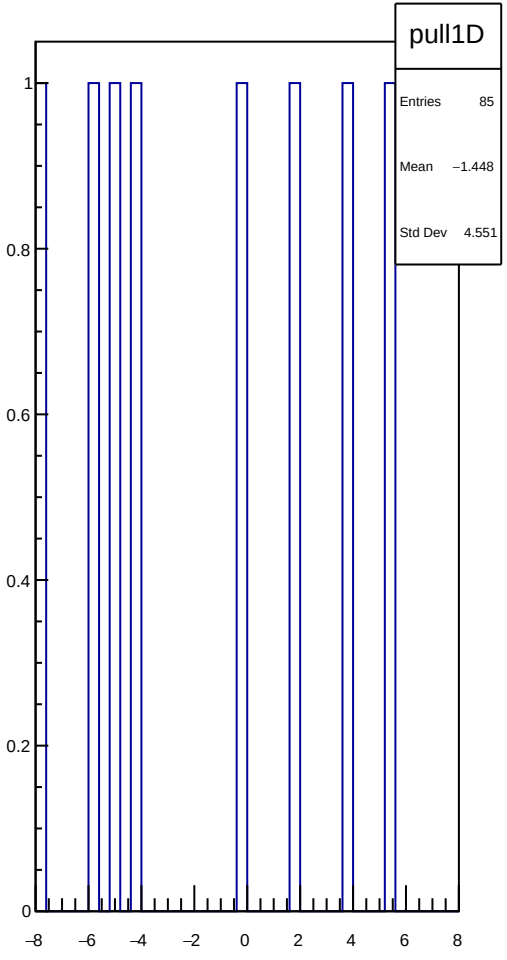

yield_bpm0i05WS_rms vs run
χ² / ndf 8.113e+04 / 84
p0 329.5 ± 0.2612
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

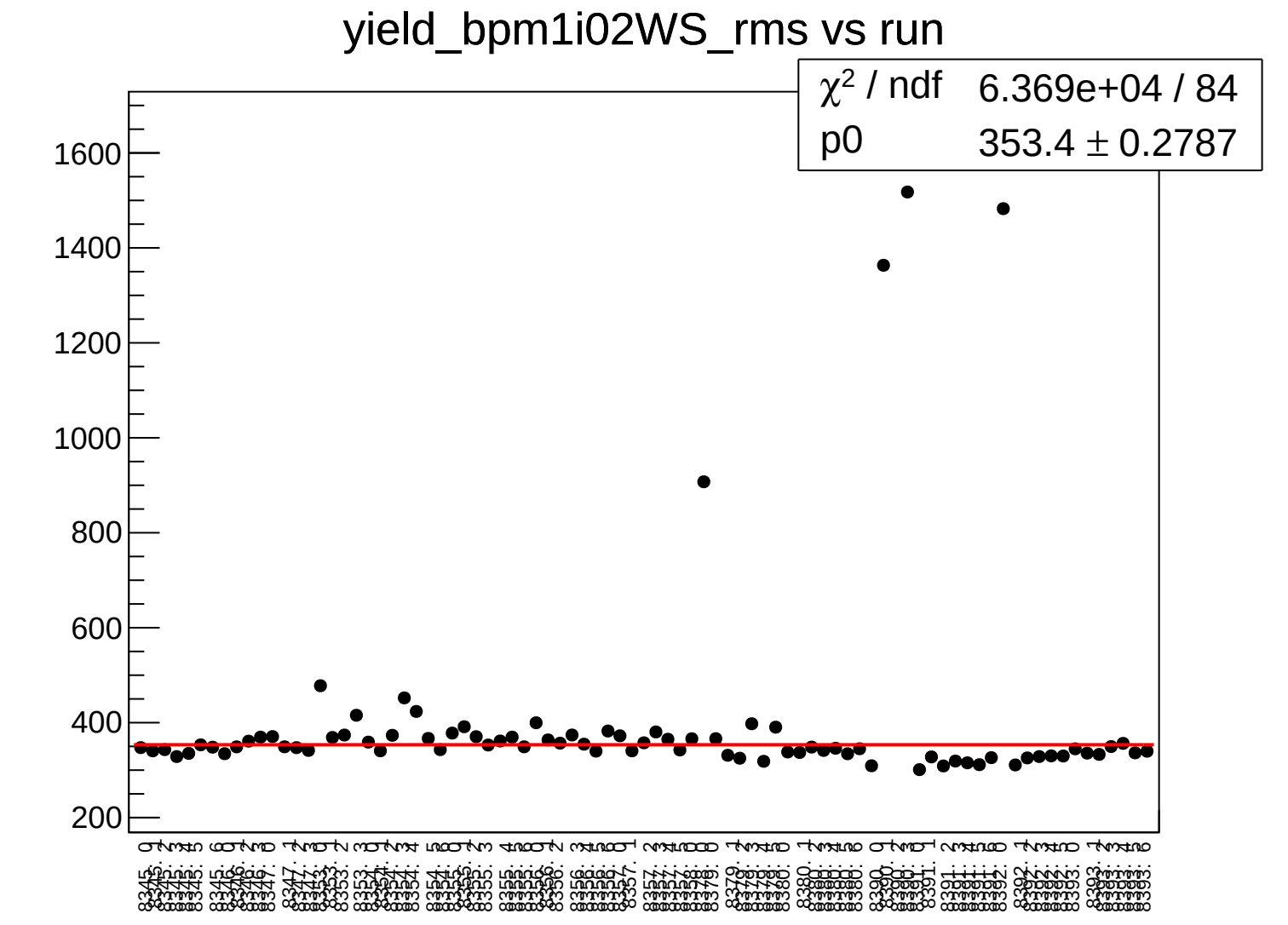

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 2.712e+06 / 84
p0 1.408e+05 ± 0.3628
141.5
141
140.5
140
139.5
139
pull
Entries 85
Mean −613.1
Std Dev 656.6
200
100
0
−100
−200
−300

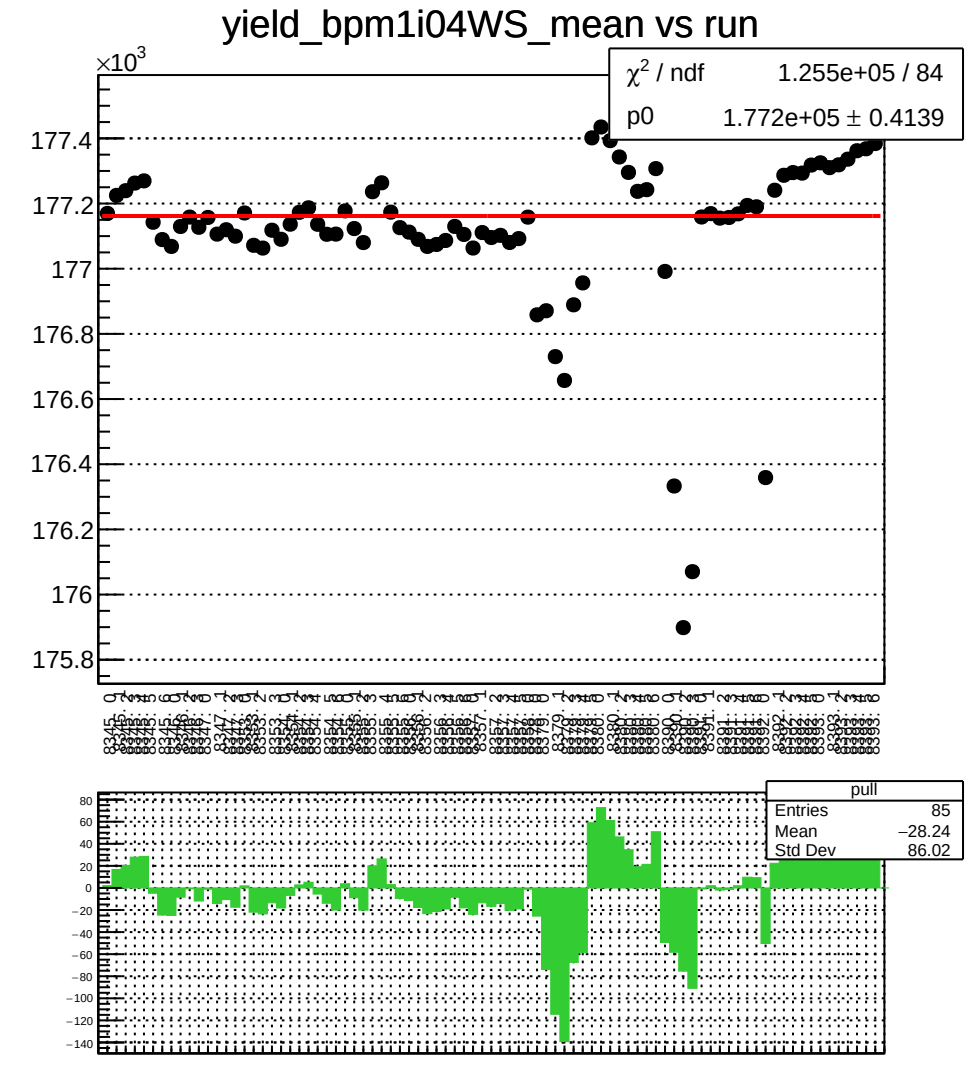

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

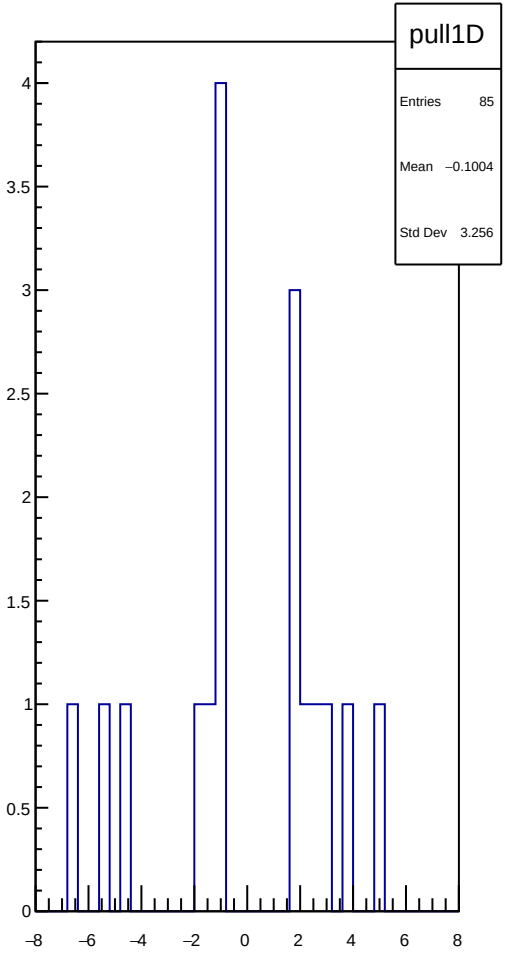

yield_bpm0i07WS_rms vs run
χ² / ndf 7.942e+04 / 84
p0 323.7 ± 0.2565
2000
1800
1600
1400
1200
1000
800
600
400
200

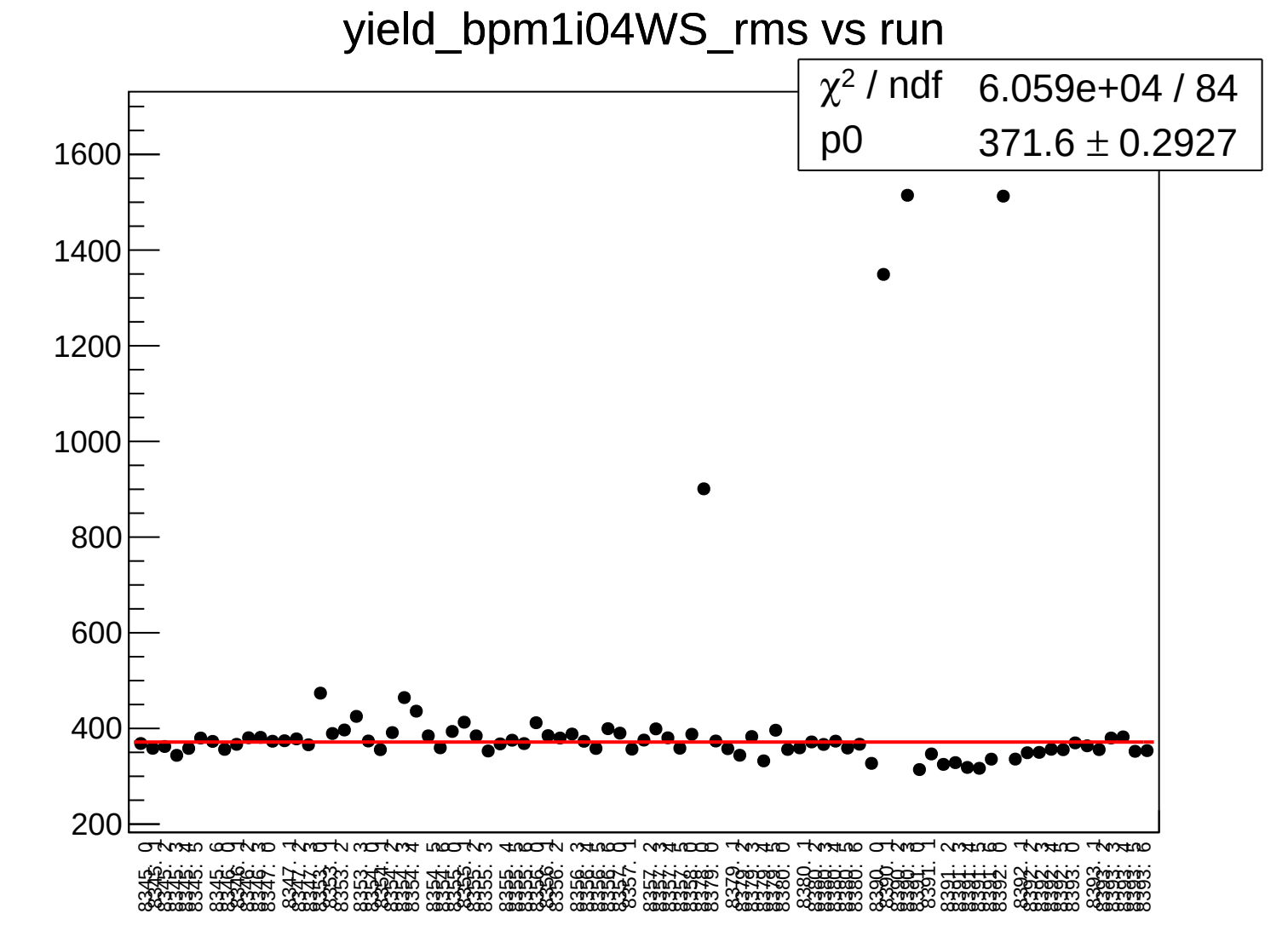

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 3.746e+05 / 84
p0 1.749e+05 ± 0.3941
175.2
175
174.8
174.6
174.4
174.2
174
pull
Entries 85
Mean −91.58
Std Dev 150.3
100
50
0
−50
−100
−150
−200
−250

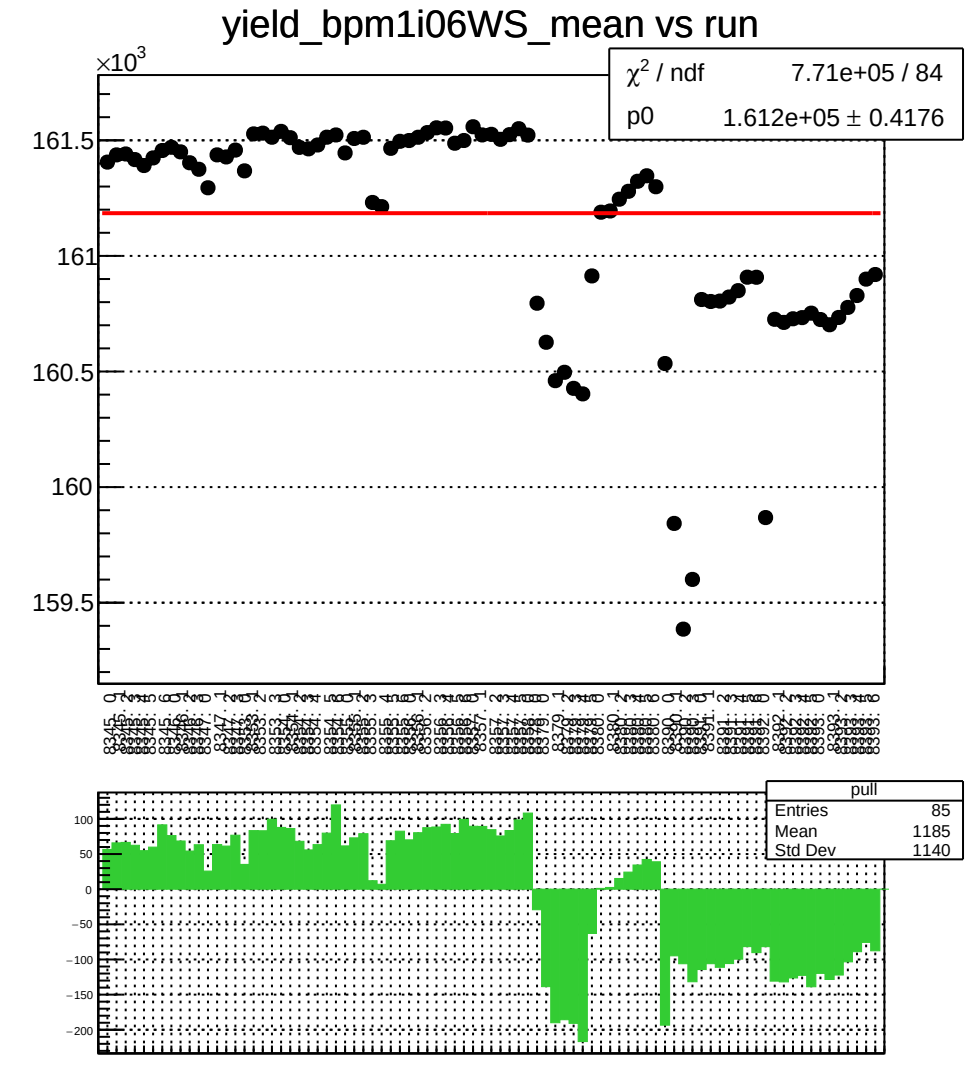

pull1D
Entries 85
Mean −1.448
Std Dev 4.551
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

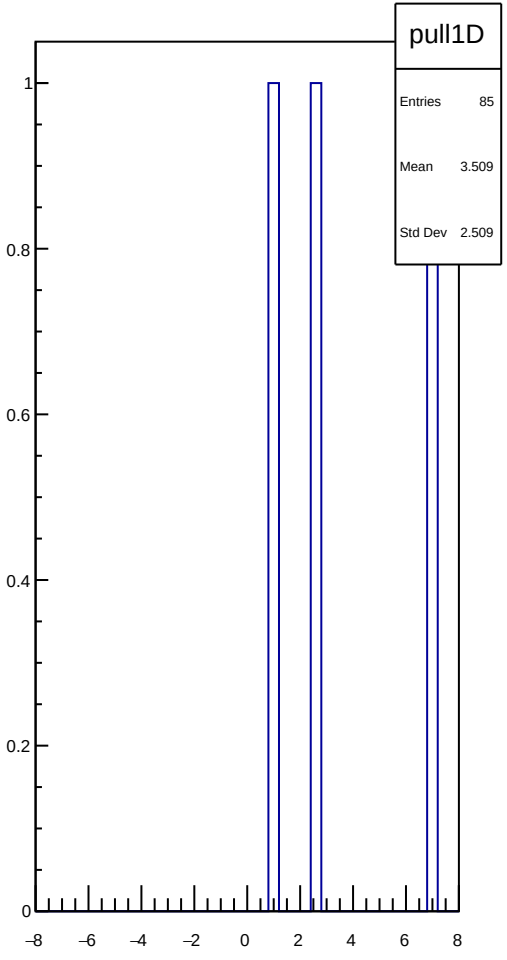

yield_bpm1i02WS_rms vs run
χ² / ndf 6.369e+04 / 84
p0 353.4 ± 0.2787
1600
1400
1200
1000
800
600
400
200

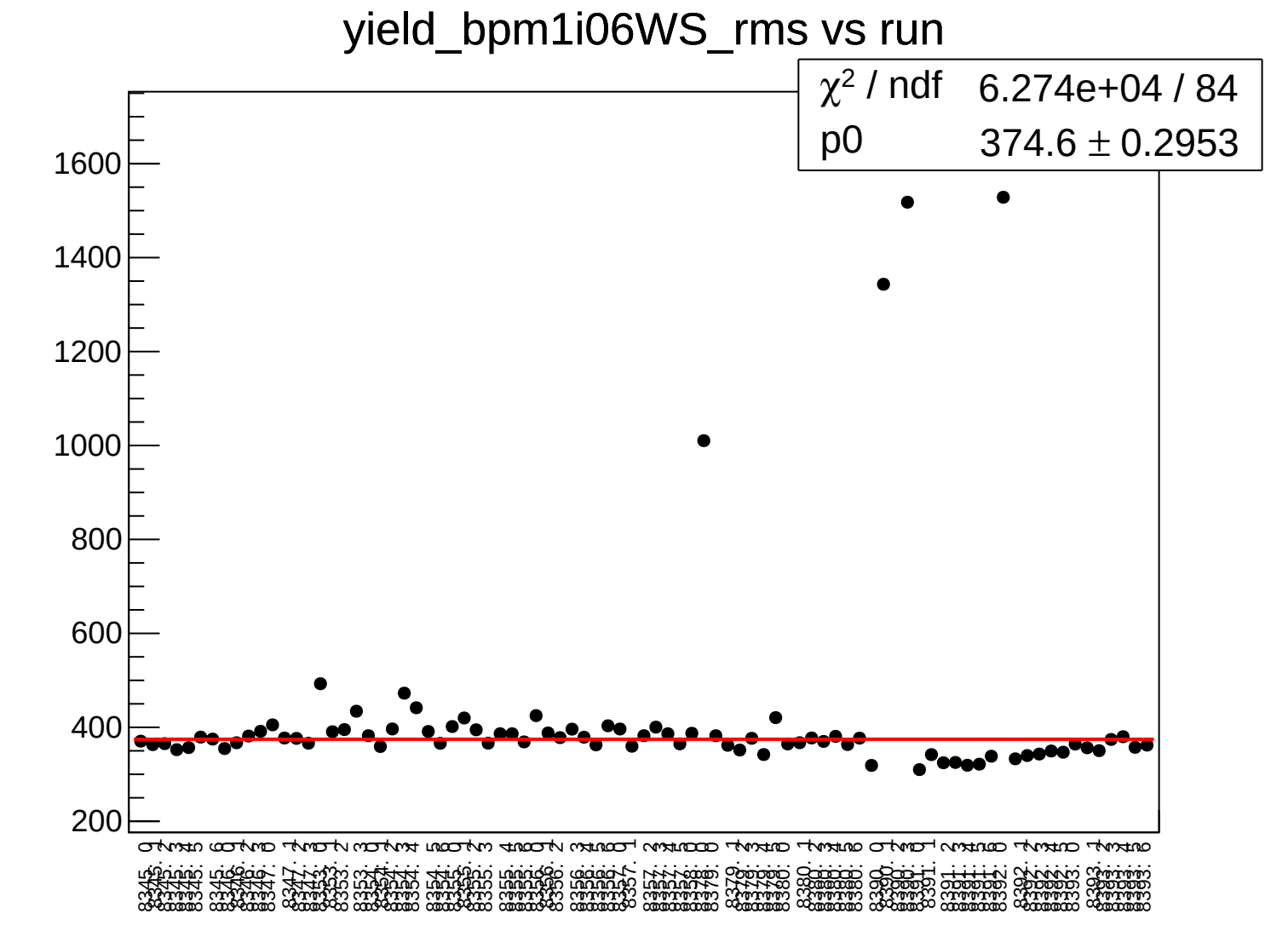

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 1.255e+05 / 84
p0 1.772e+05 ± 0.4139
177.4
177.2
177
176.8
176.6
176.4
176.2
176
175.8
pull
Entries 85
Mean −28.24
Std Dev 86.02
80
60
40
20
0
−20
−40
−60
−80
−100
−120
−140

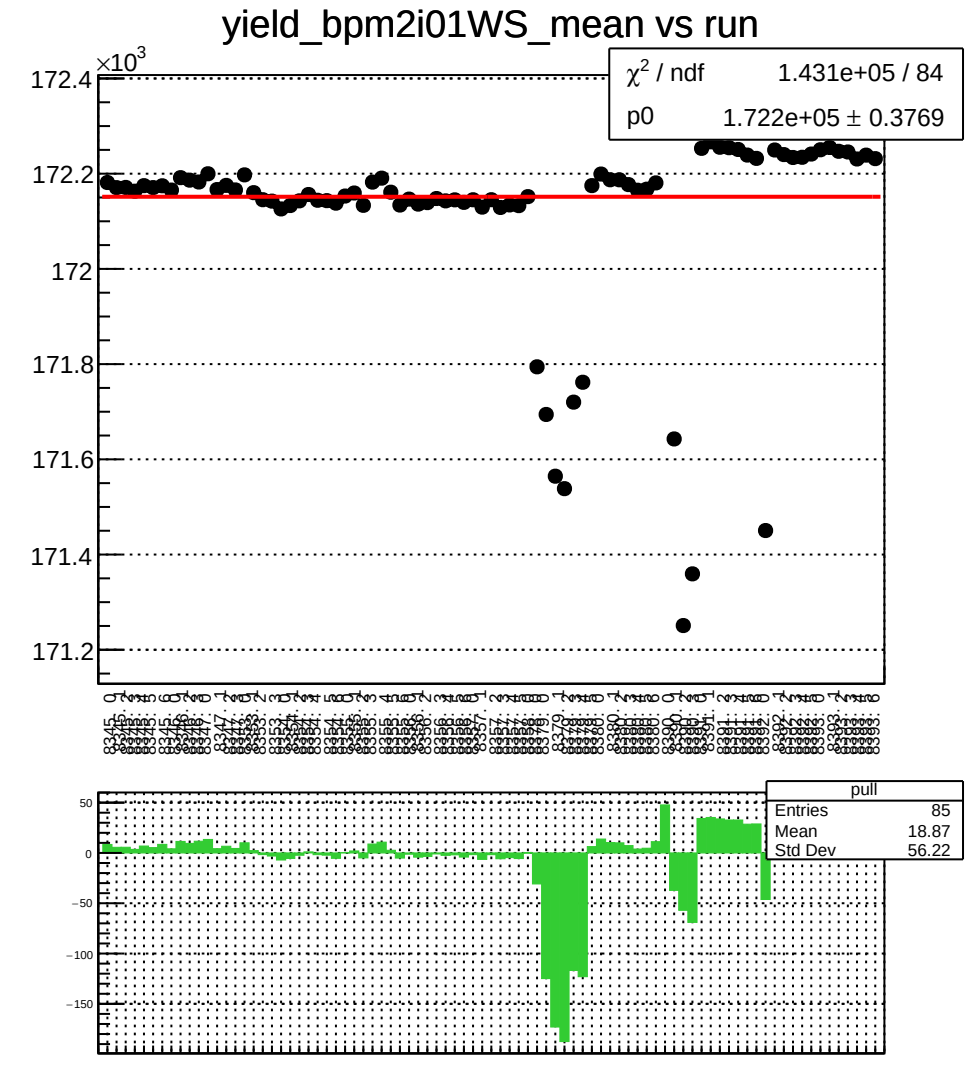

pull1D
Entries 85
Mean −0.1004
Std Dev 3.256
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

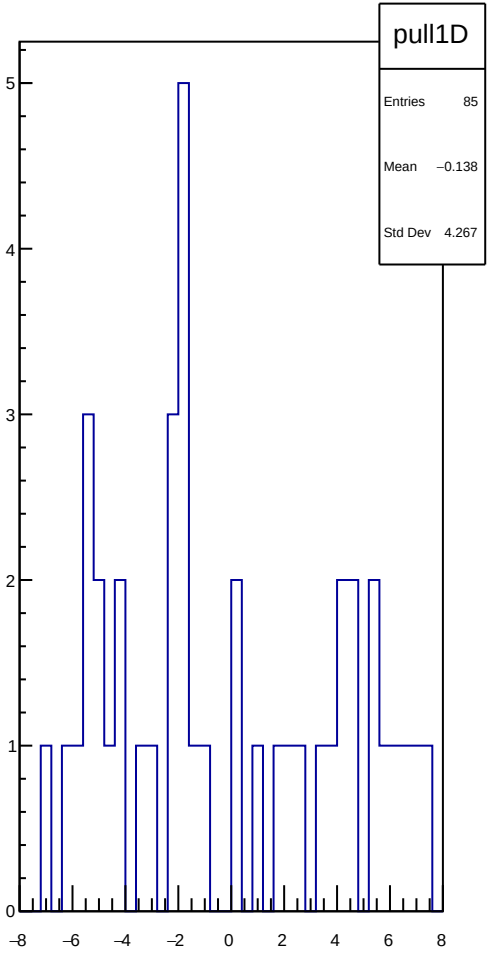

yield_bpm1i04WS_rms vs run
χ² / ndf 6.059e+04 / 84
p0 371.6 ± 0.2927
1600
1400
1200
1000
800
600
400
200

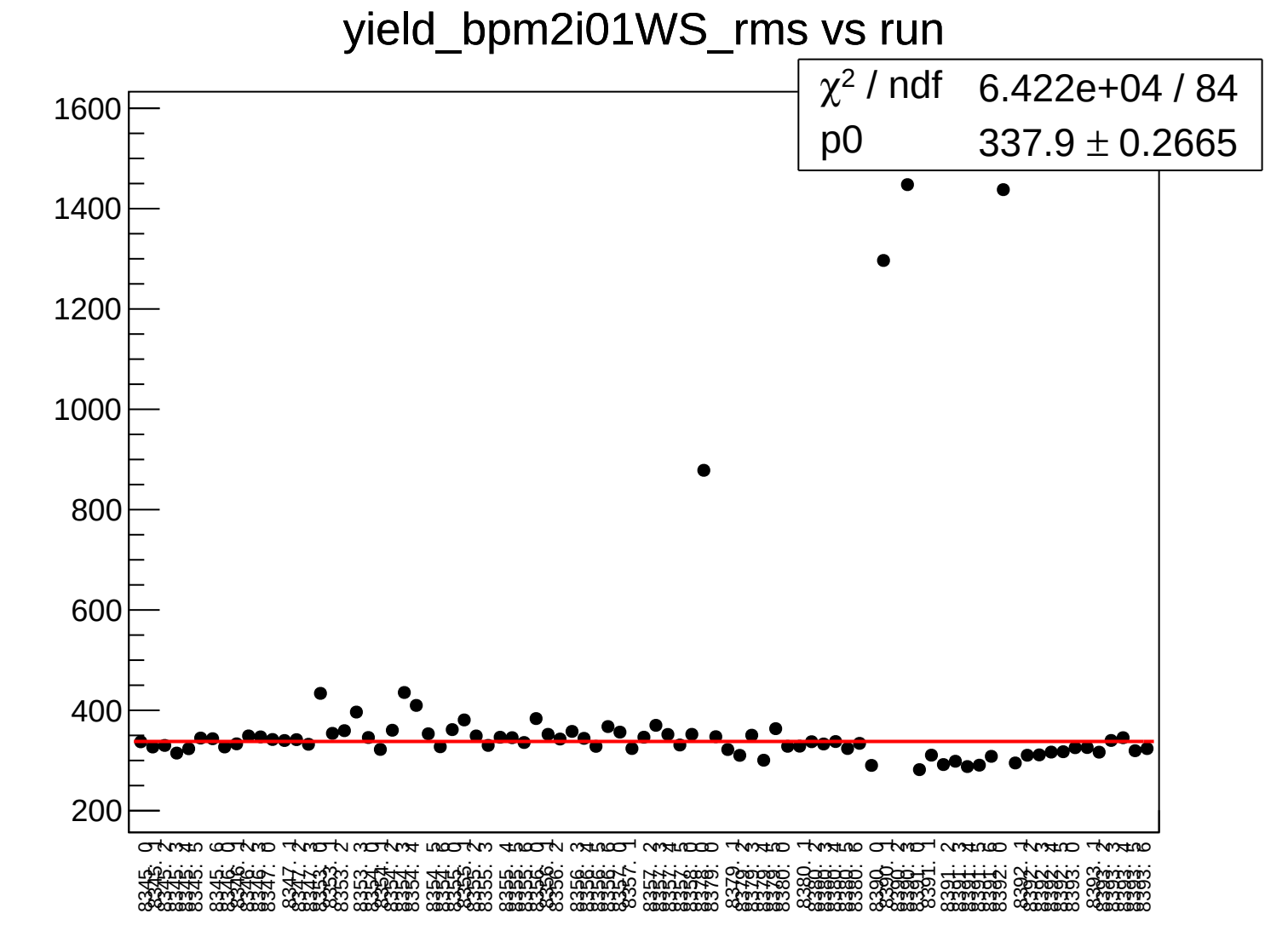

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 7.71e+05 / 84
p0 1.612e+05 ± 0.4176
161.5
161
160.5
160
159.5
pull
Entries 85
Mean 1185
Std Dev 1140
100
50
0
−50
−100
−150
−200

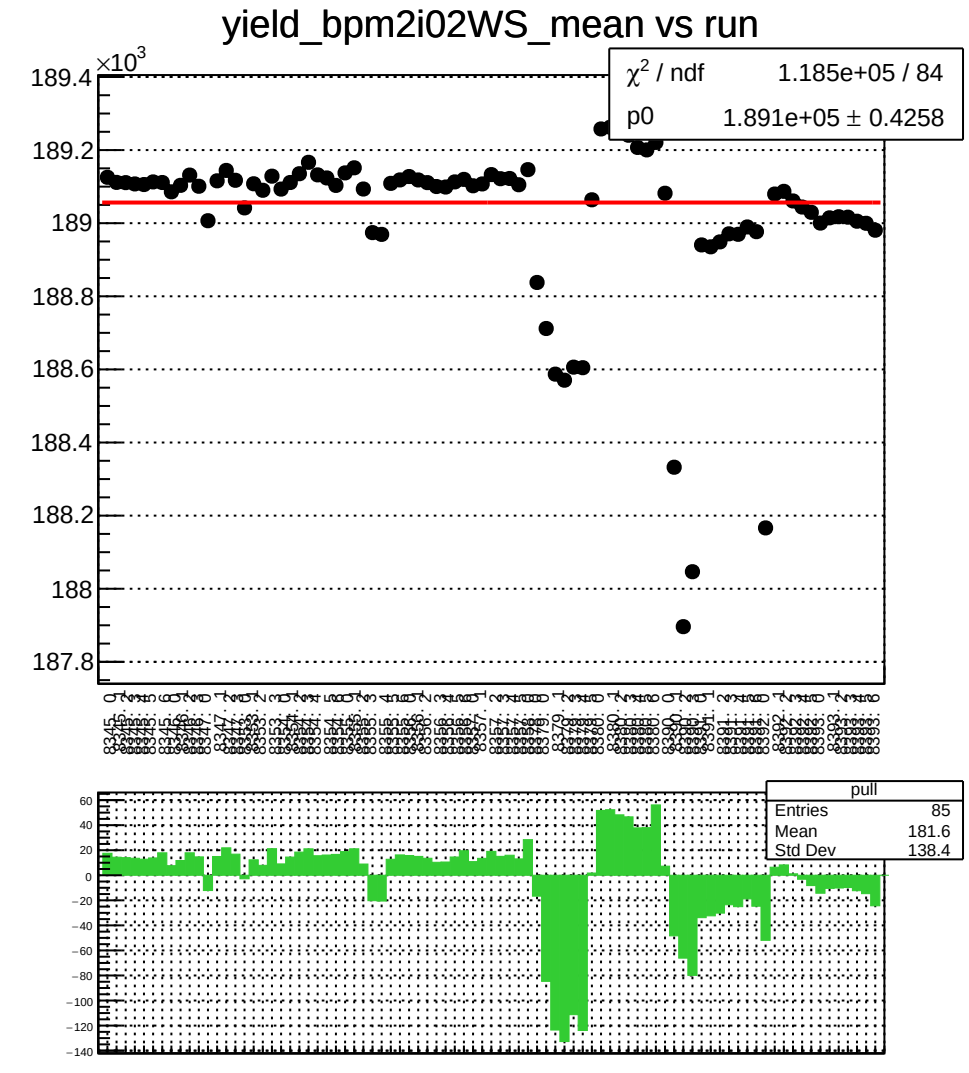

pull1D
Entries 85
Mean 3.509
Std Dev 2.509
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

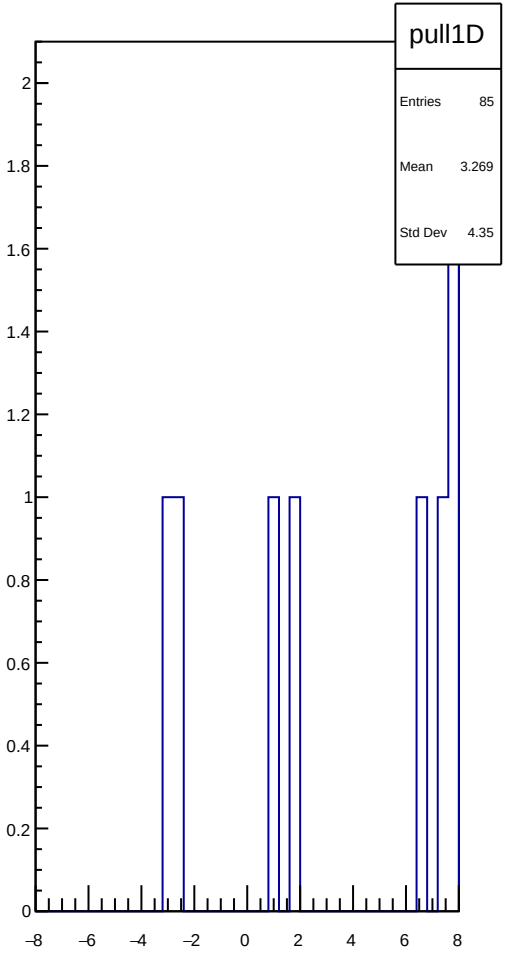

yield_bpm1i06WS_rms vs run
χ² / ndf 6.274e+04 / 84
p0 374.6 ± 0.2953
1600
1400
1200
1000
800
600
400
200

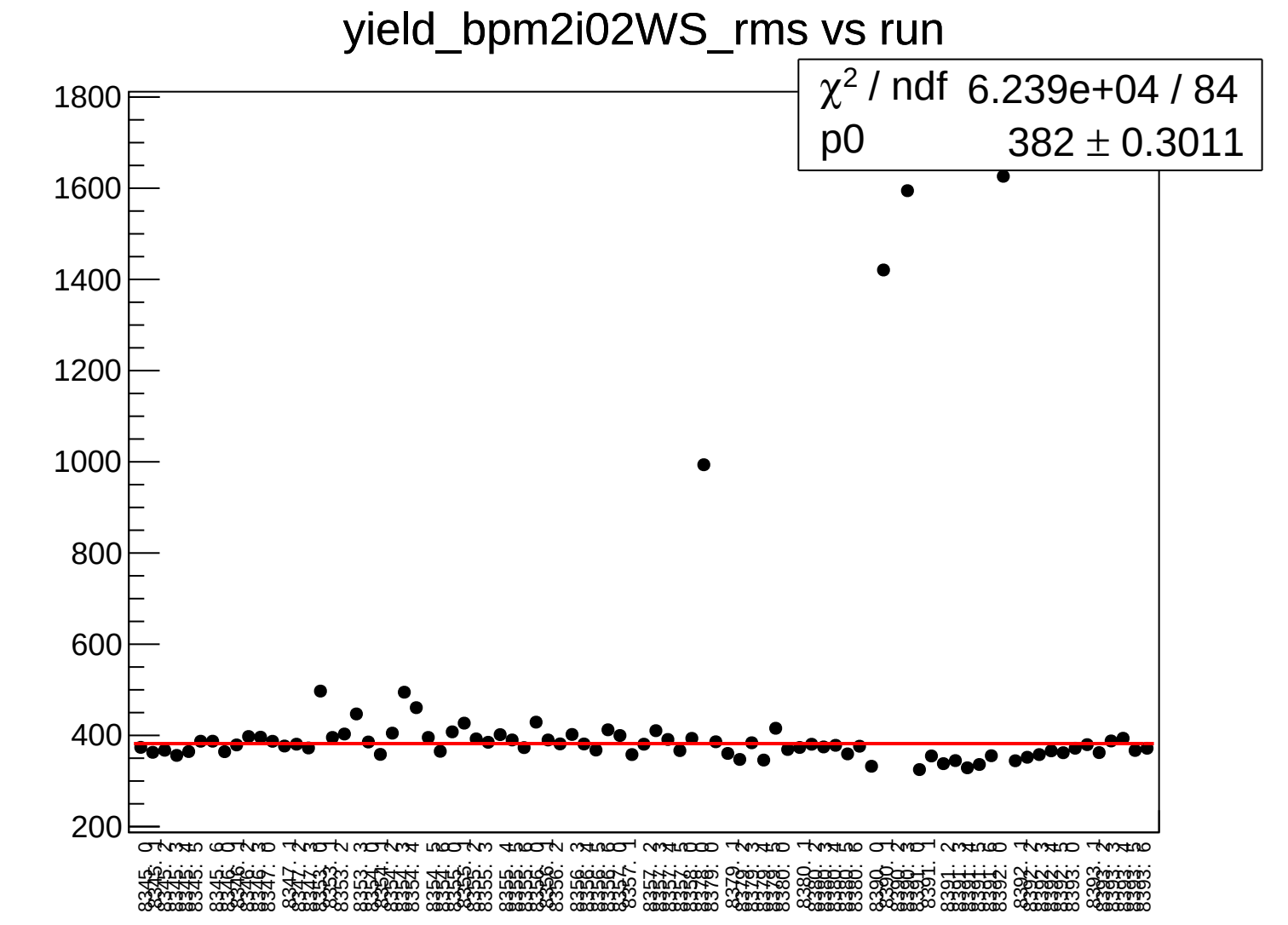

yield_bpm2i01WS_mean vs run
χ² / ndf 1.431e+05 / 84
p0 1.722e+05 ± 0.3769
×10³
172.4
172.2
172
171.8
171.6
171.4
171.2
pull
Entries 85
Mean 18.87
Std Dev 56.22
50
0
−50
−100
−150

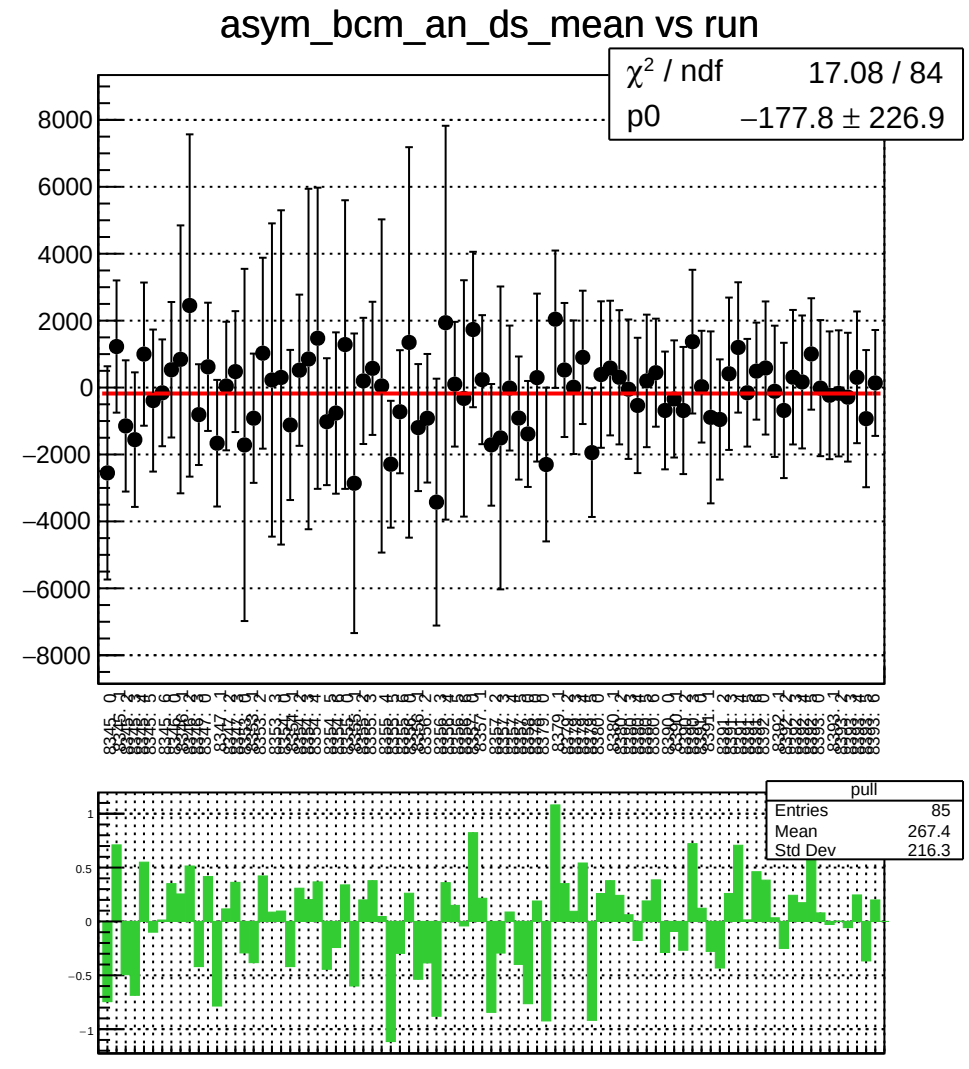

pull1D
Entries 85
Mean −0.138
Std Dev 4.267
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

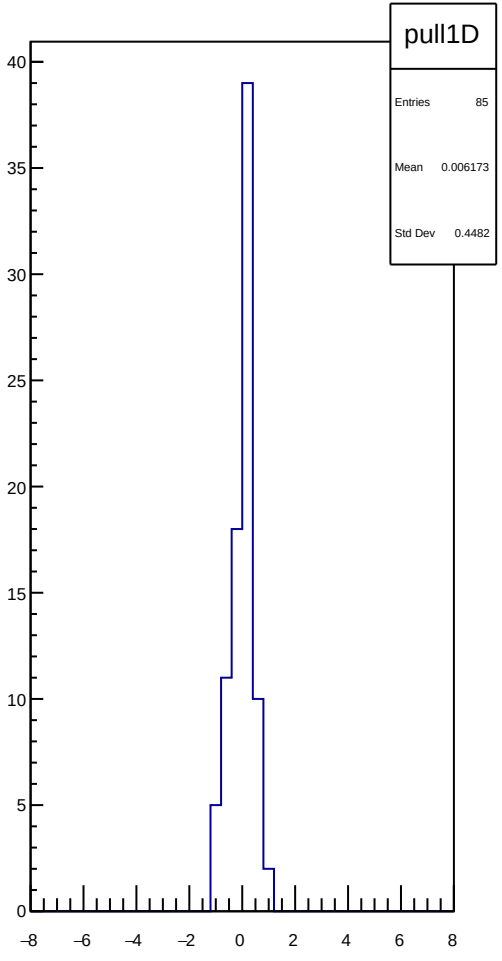

yield_bpm2i01WS_rms vs run
χ² / ndf 6.422e+04 / 84
p0 337.9 ± 0.2665
1600
1400
1200
1000
800
600
400
200

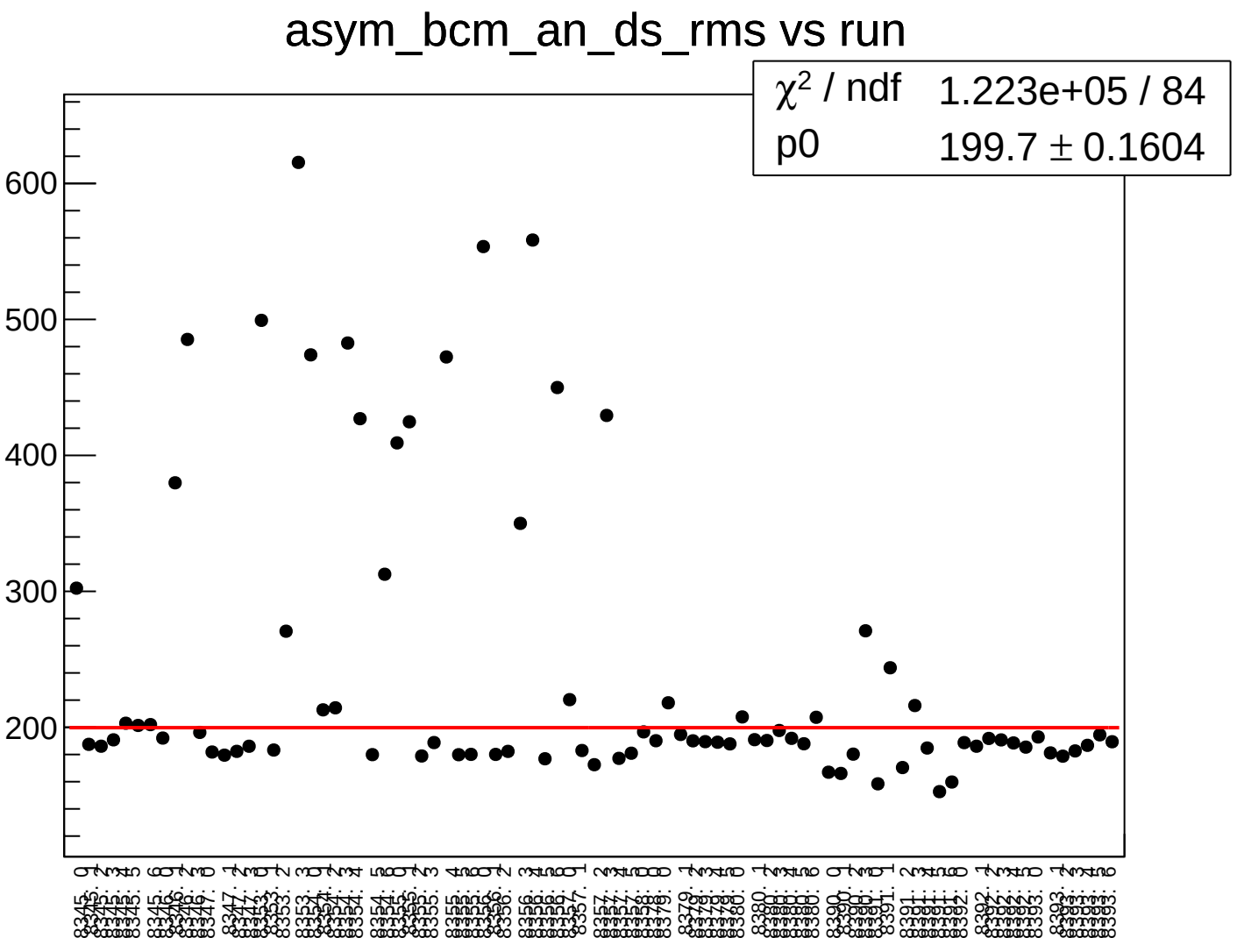

yield_bpm2i02WS_mean vs run
×10^3
189.4
189.2
189
188.8
188.6
188.4
188.2
188
187.8
χ² / ndf 1.185e+05 / 84
p0 1.891e+05 ± 0.4258
pull
Entries 85
Mean 181.6
Std Dev 138.4
60
40
20
0
−20
−40
−60
−80
−100
−120
−140

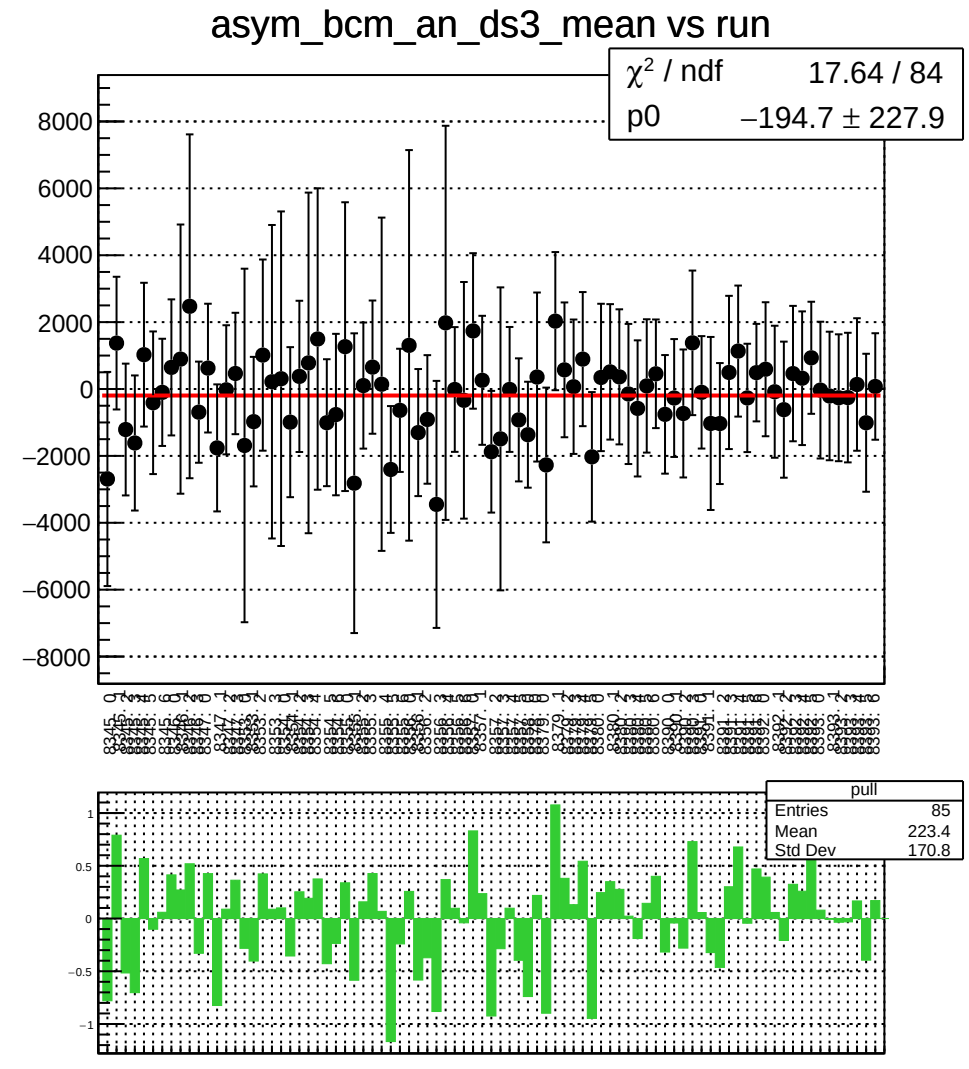

pull1D
Entries 85
Mean 3.269
Std Dev 4.35
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

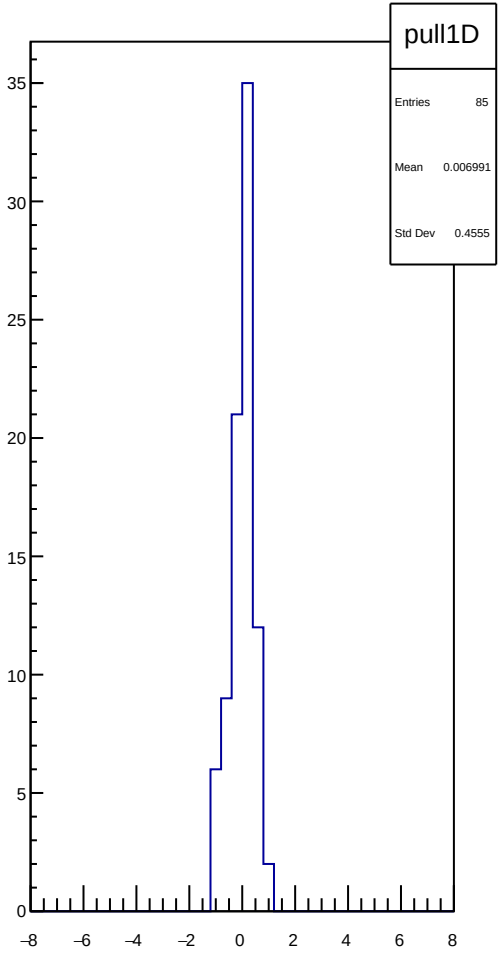

yield_bpm2i02WS_rms vs run
χ² / ndf 6.239e+04 / 84
p0 382 ± 0.3011
1800
1600
1400
1200
1000
800
600
400
200

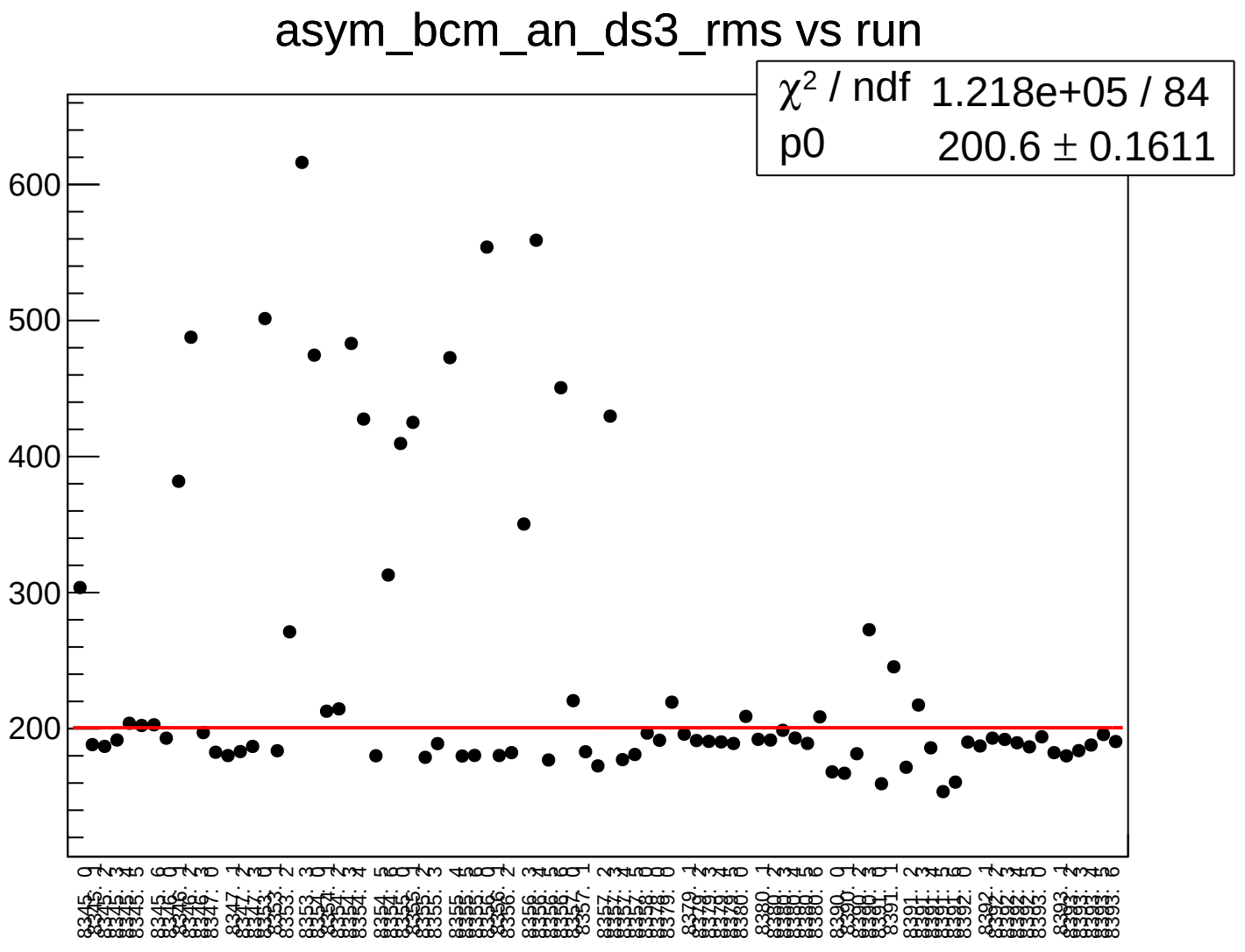

asym_bcm_an_ds_mean vs run
χ² / ndf 17.08 / 84
p0 −177.8 ± 226.9
pull
Entries 85
Mean 267.4
Std Dev 216.3

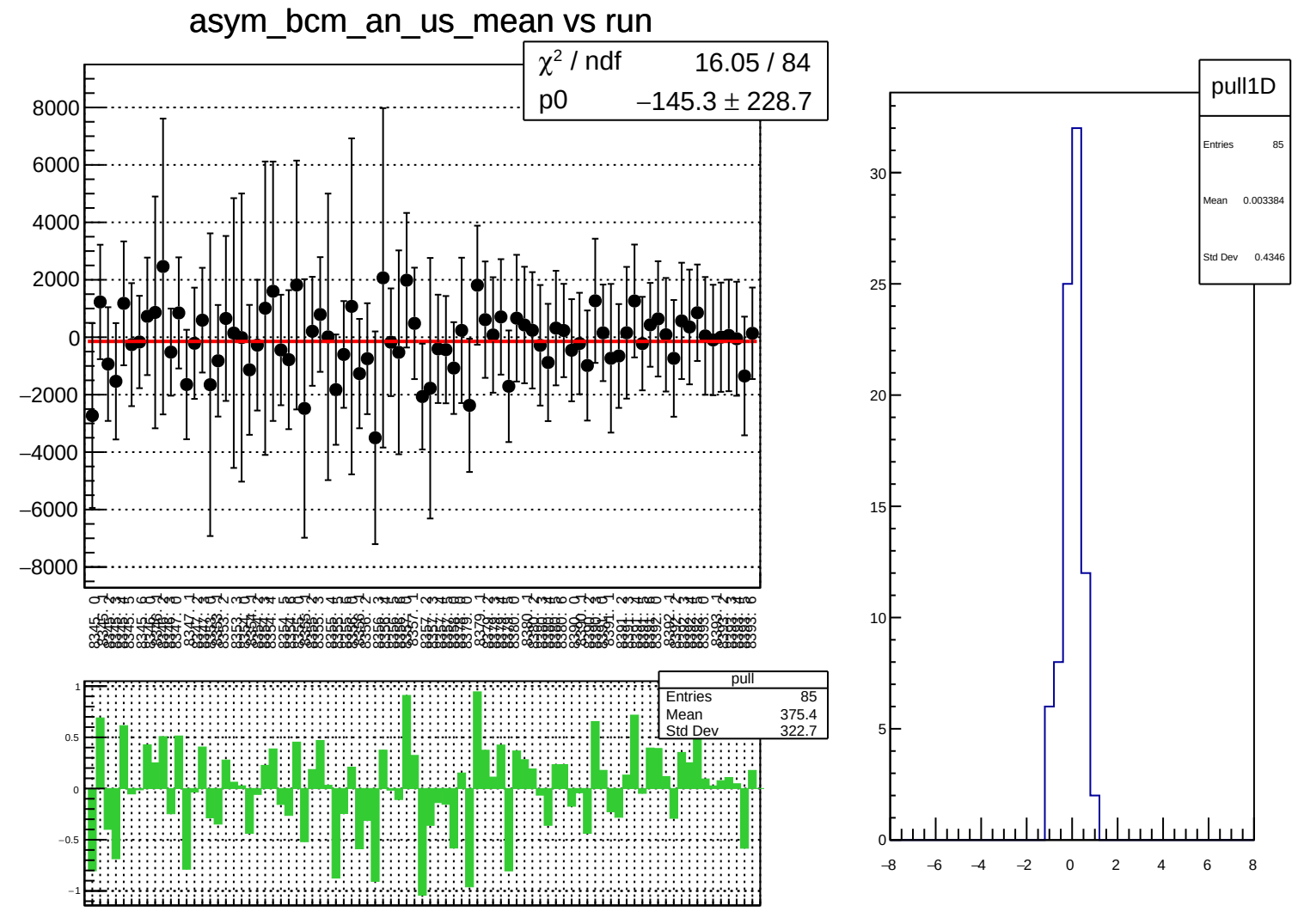

pull1D
Entries 85
Mean 0.006173
Std Dev 0.4482

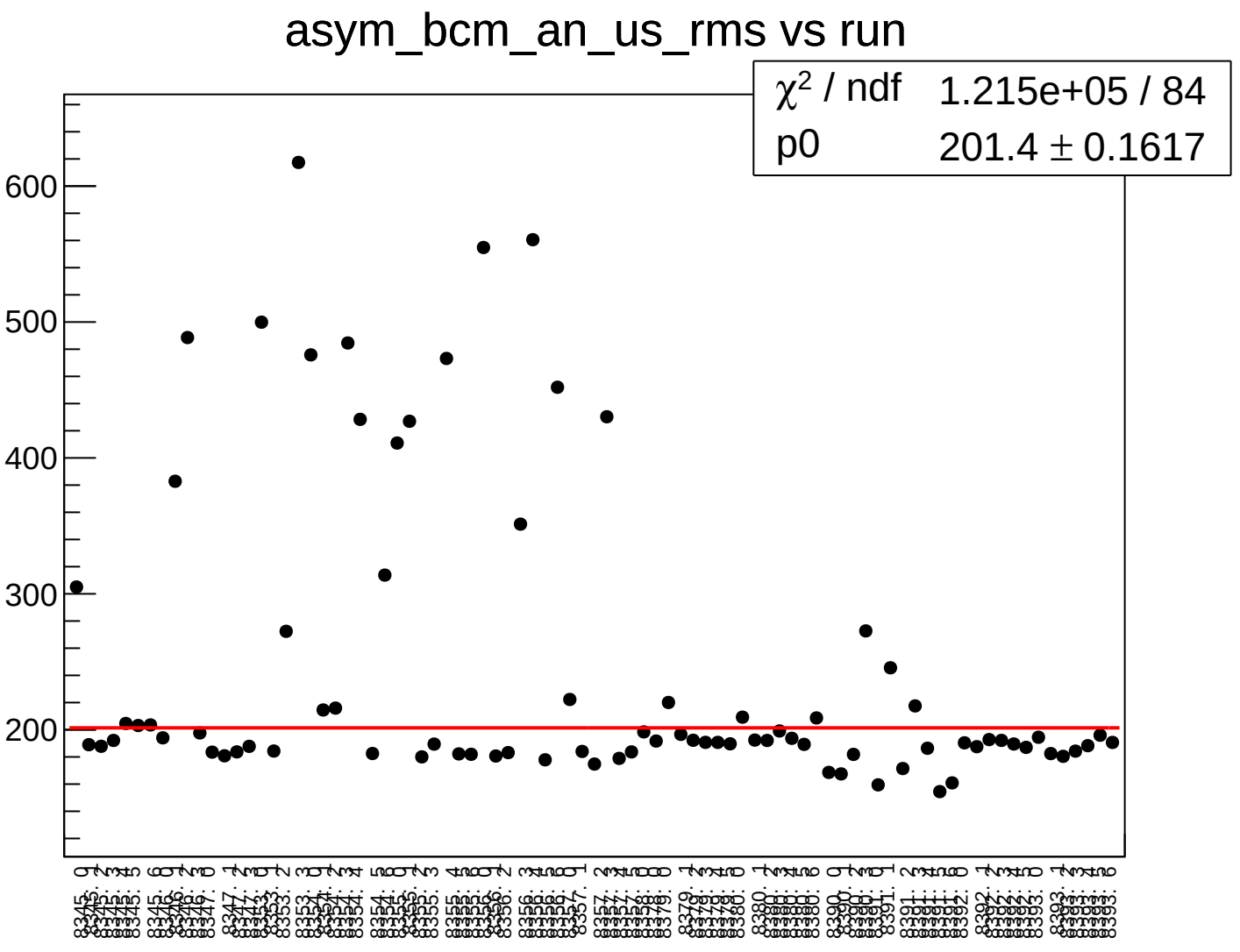

asym_bcm_an_ds_rms vs run
χ² / ndf 1.223e+05 / 84
p0 199.7 ± 0.1604
600
500
400
300
200

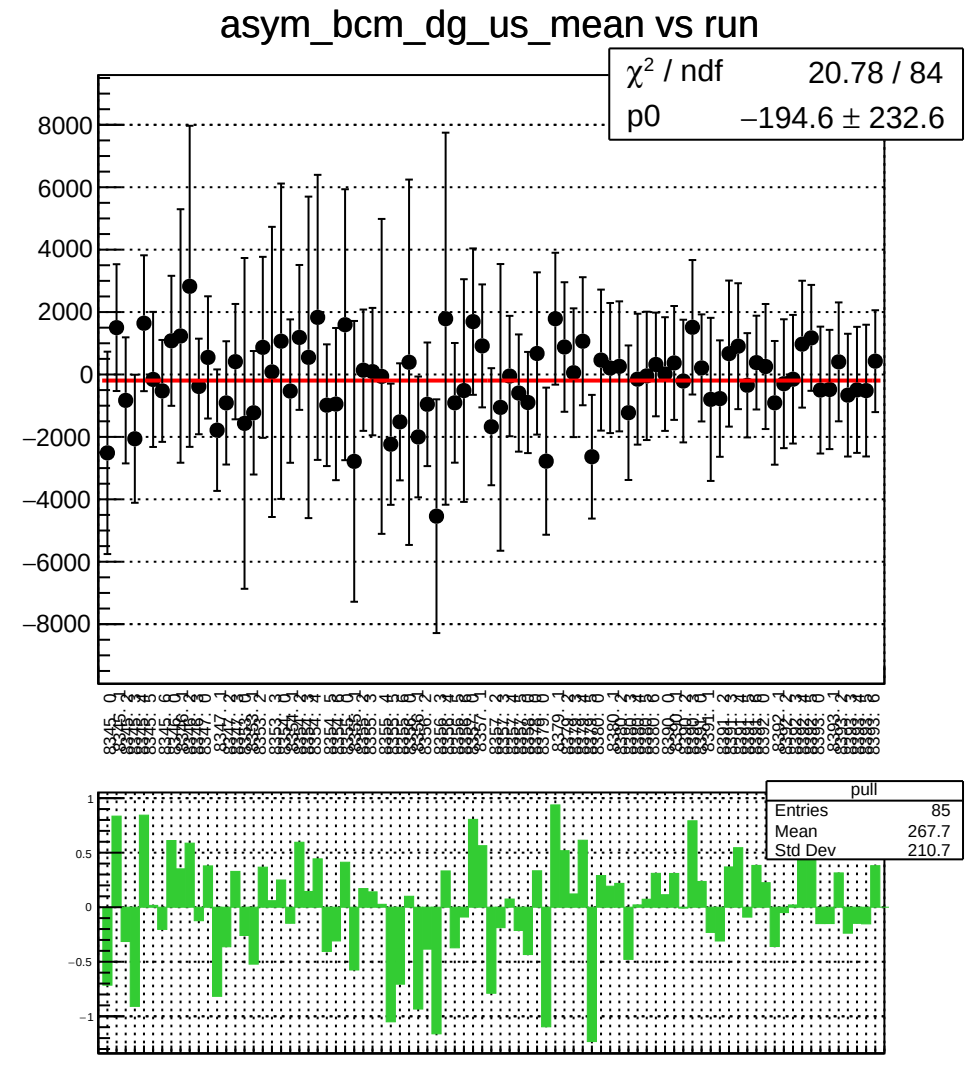

asym_bcm_an_ds3_mean vs run
χ² / ndf 17.64 / 84
p0 −194.7 ± 227.9
pull
Entries 85
Mean 223.4
Std Dev 170.8

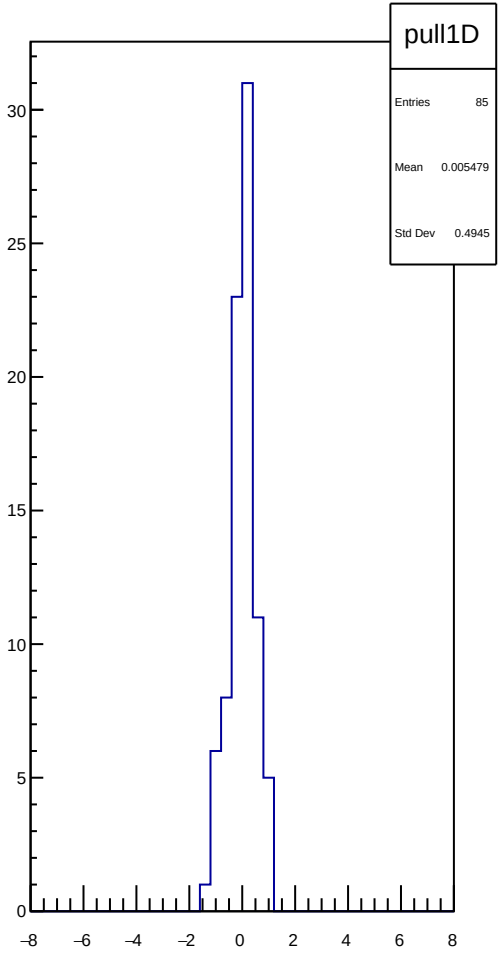

pull1D
Entries 85
Mean 0.006991
Std Dev 0.4555

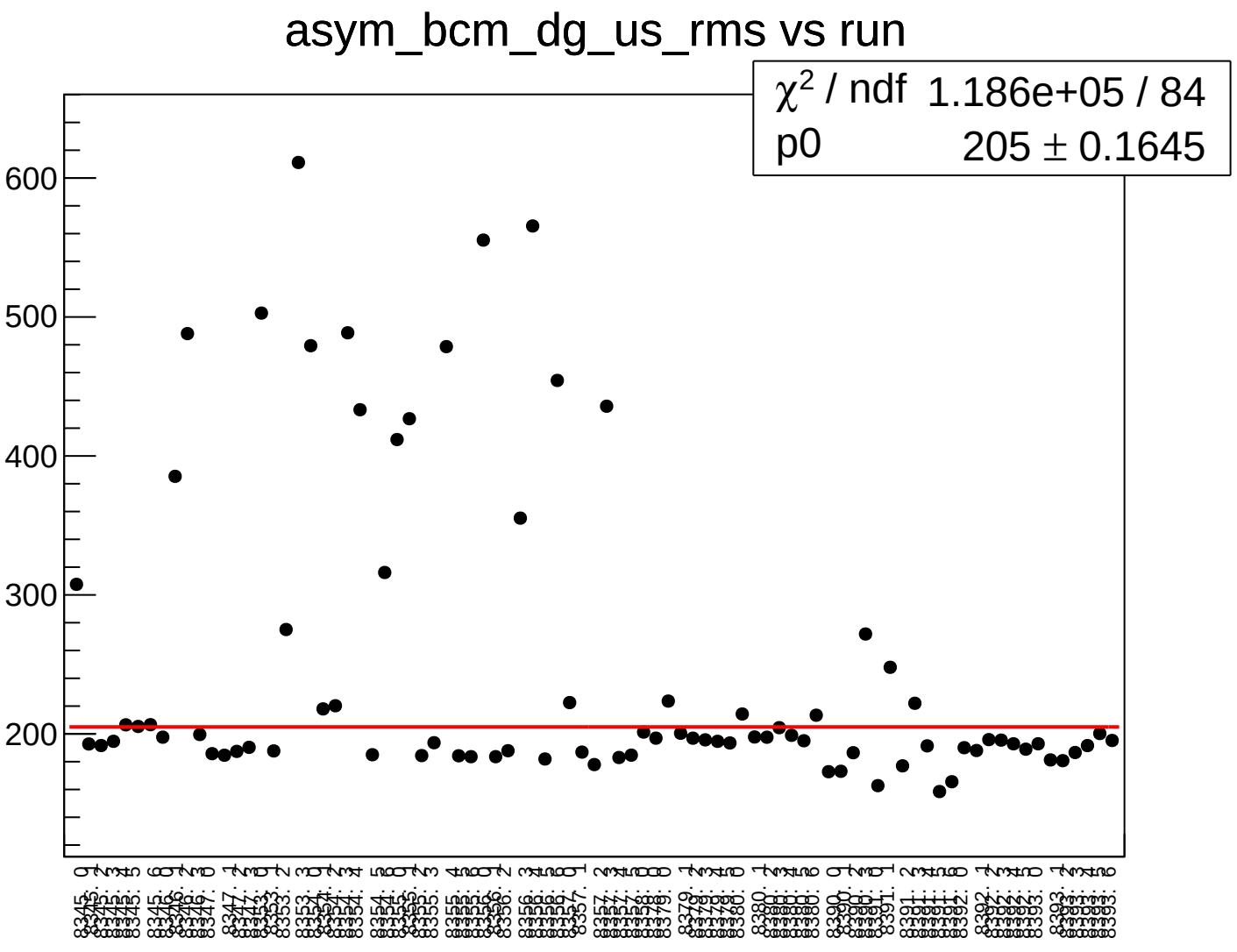

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.218e+05 / 84
p0 200.6 ± 0.1611
600
500
400
300
200

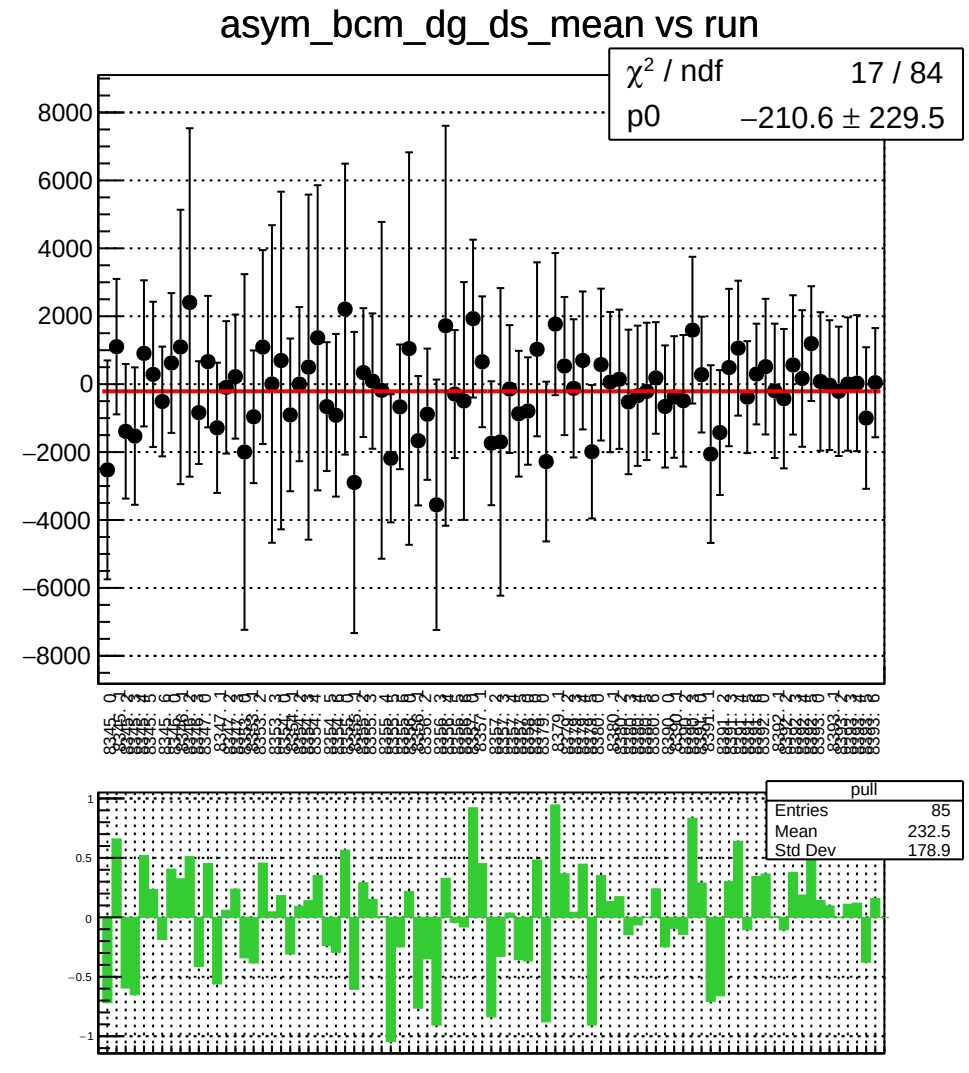

asym_bcm_an_us_mean vs run
χ² / ndf 16.05 / 84
p0 −145.3 ± 228.7
pull
Entries 85
Mean 375.4
Std Dev 322.7
pull1D
Entries 85
Mean 0.003384
Std Dev 0.4346

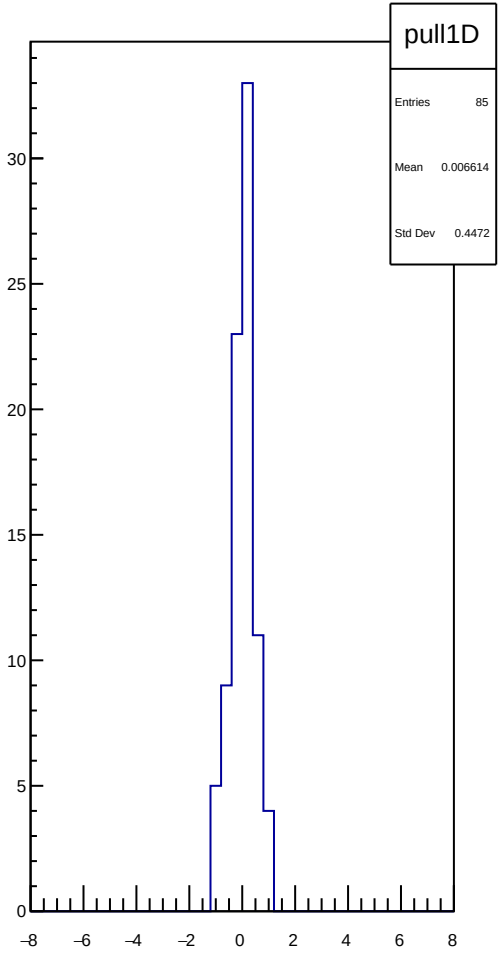

asym_bcm_an_us_rms vs run
χ² / ndf 1.215e+05 / 84
p0 201.4 ± 0.1617
600
500
400
300
200

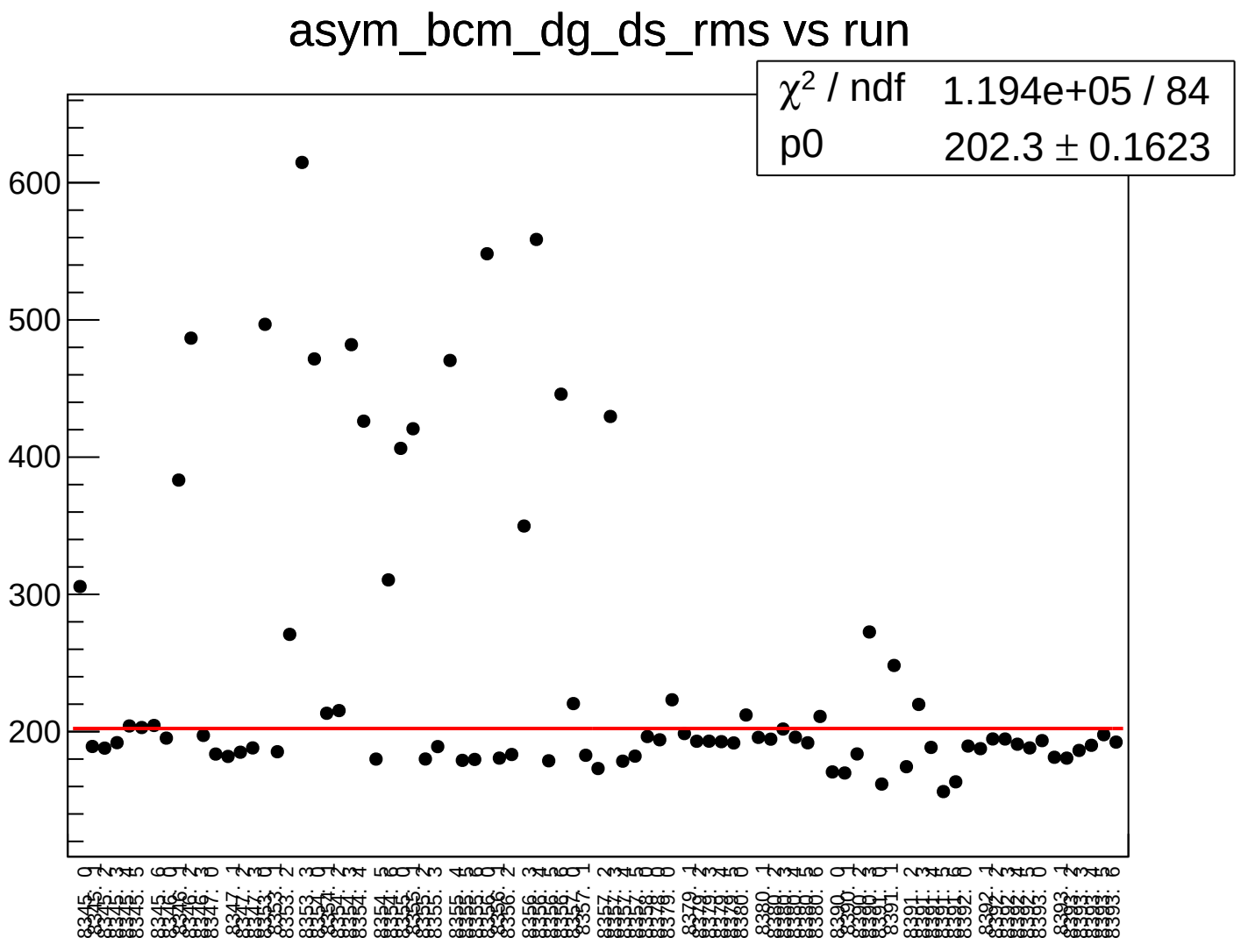

asym_bcm_dg_us_mean vs run
χ² / ndf 20.78 / 84
p0 −194.6 ± 232.6
pull
Entries 85
Mean 267.7
Std Dev 210.7

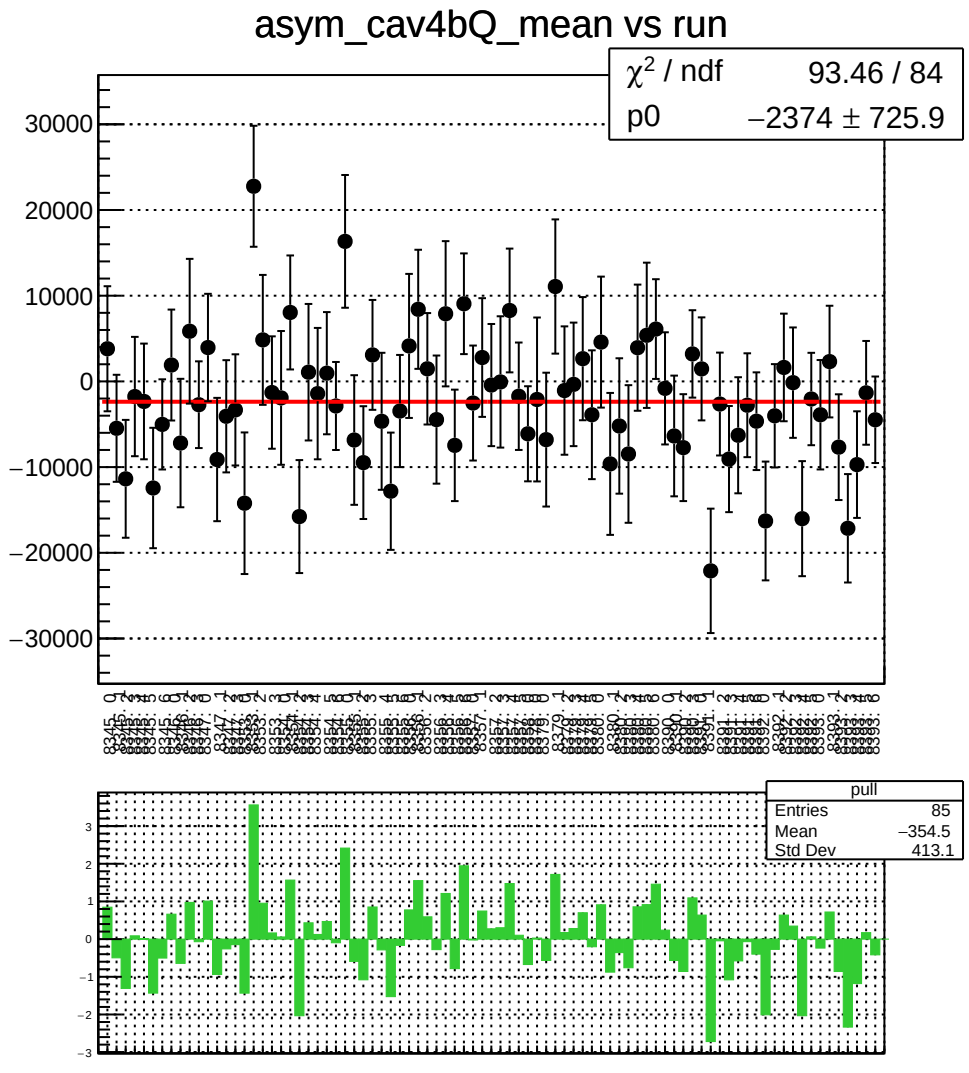

pull1D
Entries 85
Mean 0.005479
Std Dev 0.4945

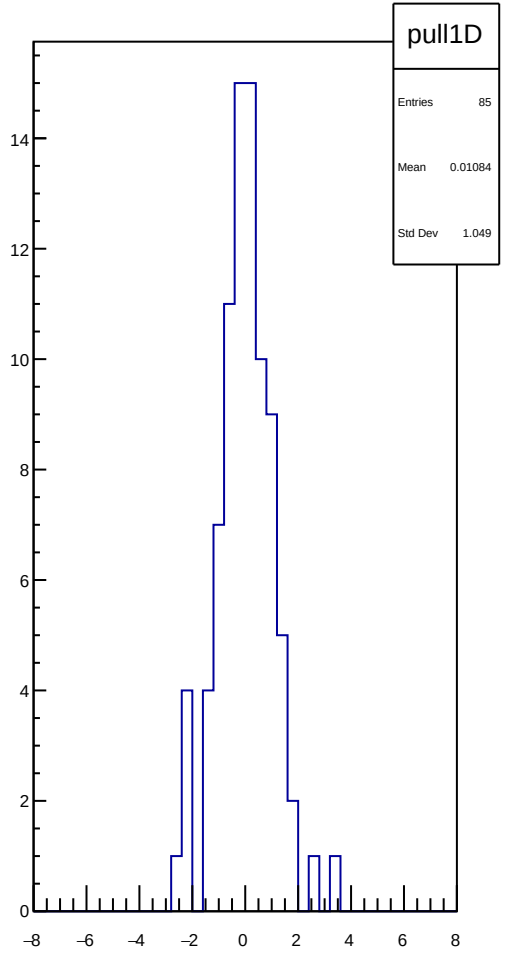

asym_bcm_dg_us_rms vs run
χ^2 / ndf 1.186e+05 / 84
p0 205 ± 0.1645
600
500
400
300
200

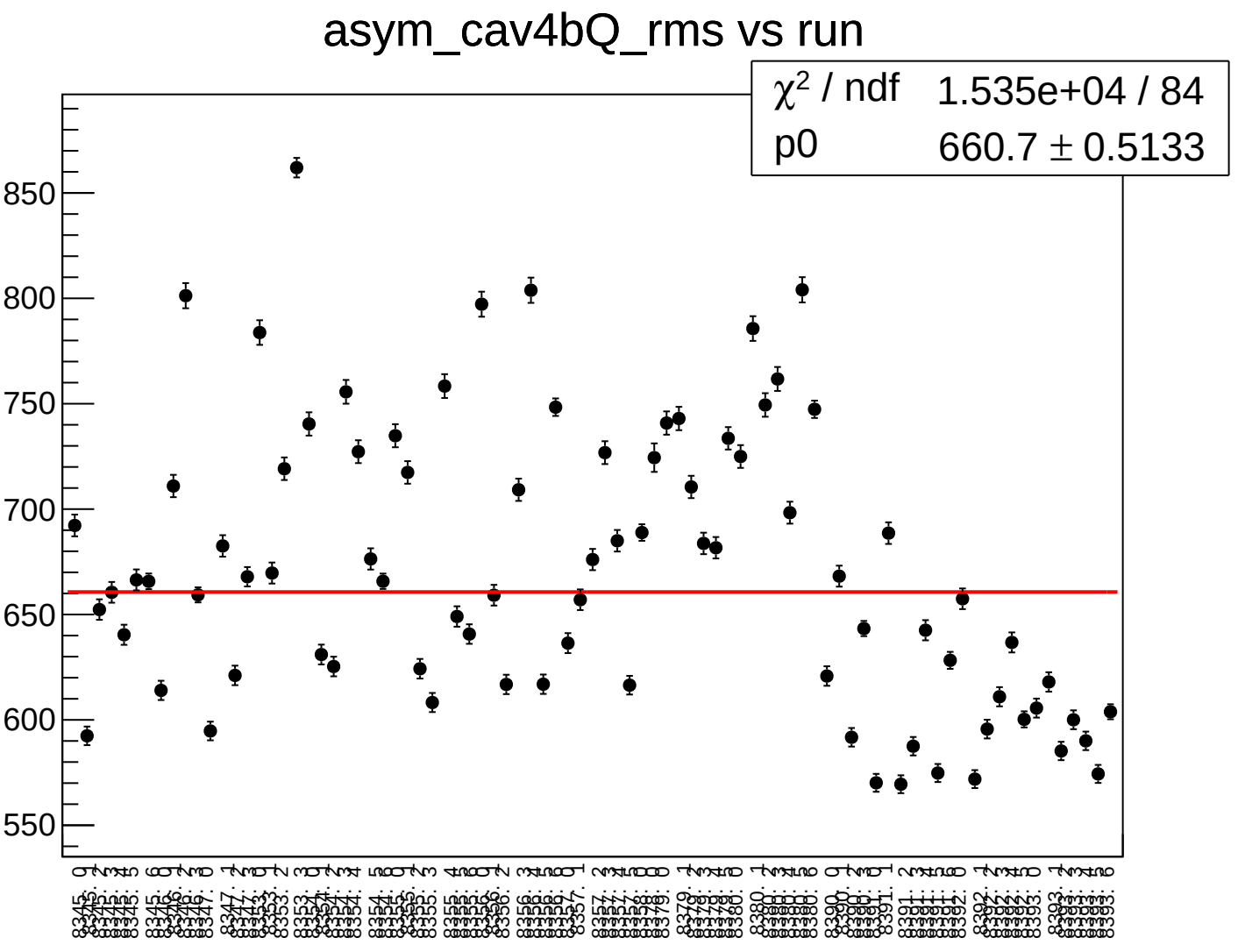

asym_bcm_dg_ds_mean vs run
χ² / ndf 17 / 84
p0 −210.6 ± 229.5
pull
Entries 85
Mean 232.5
Std Dev 178.9

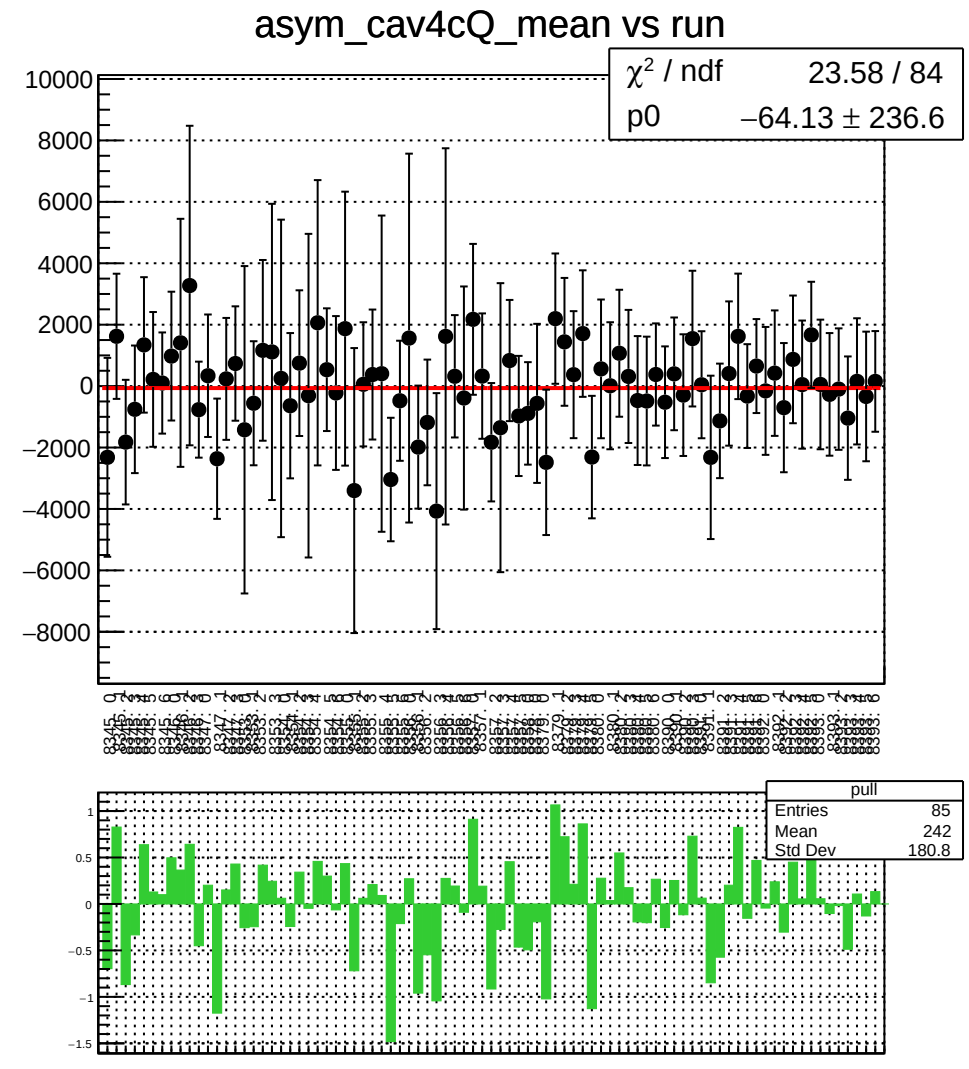

pull1D
Entries 85
Mean 0.006614
Std Dev 0.4472

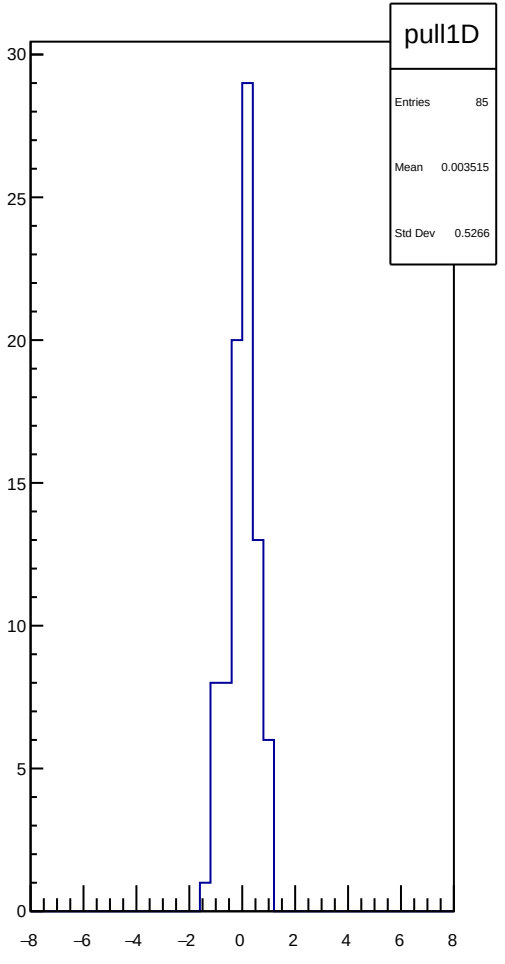

asym_bcm_dg_ds_rms vs run
χ^2 / ndf 1.194e+05 / 84
p0 202.3 ± 0.1623
600
500
400
300
200

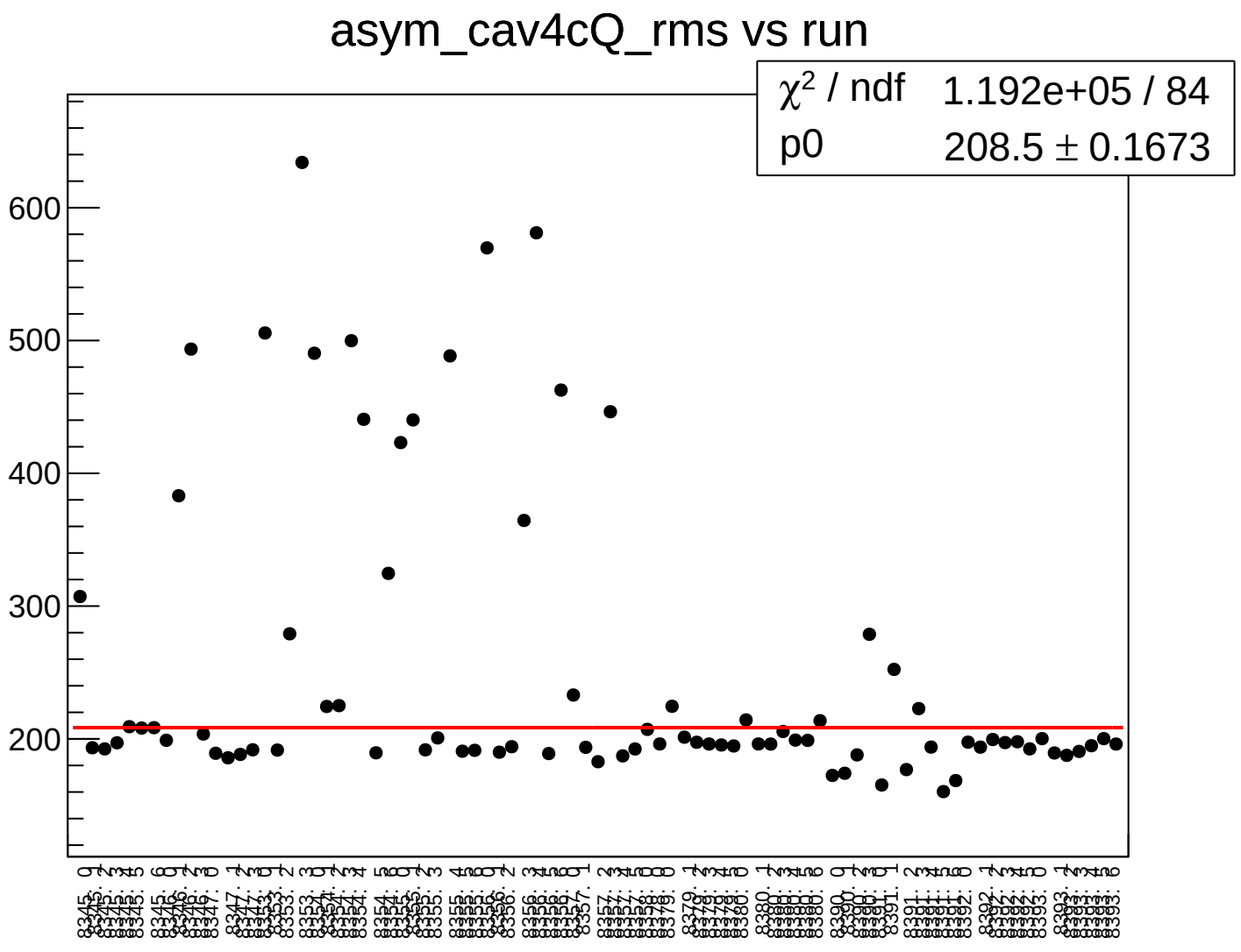

asym_cav4bQ_mean vs run
χ² / ndf 93.46 / 84
p0 −2374 ± 725.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −354.5
Std Dev 413.1
3
2
1
0
−1
−2
−3

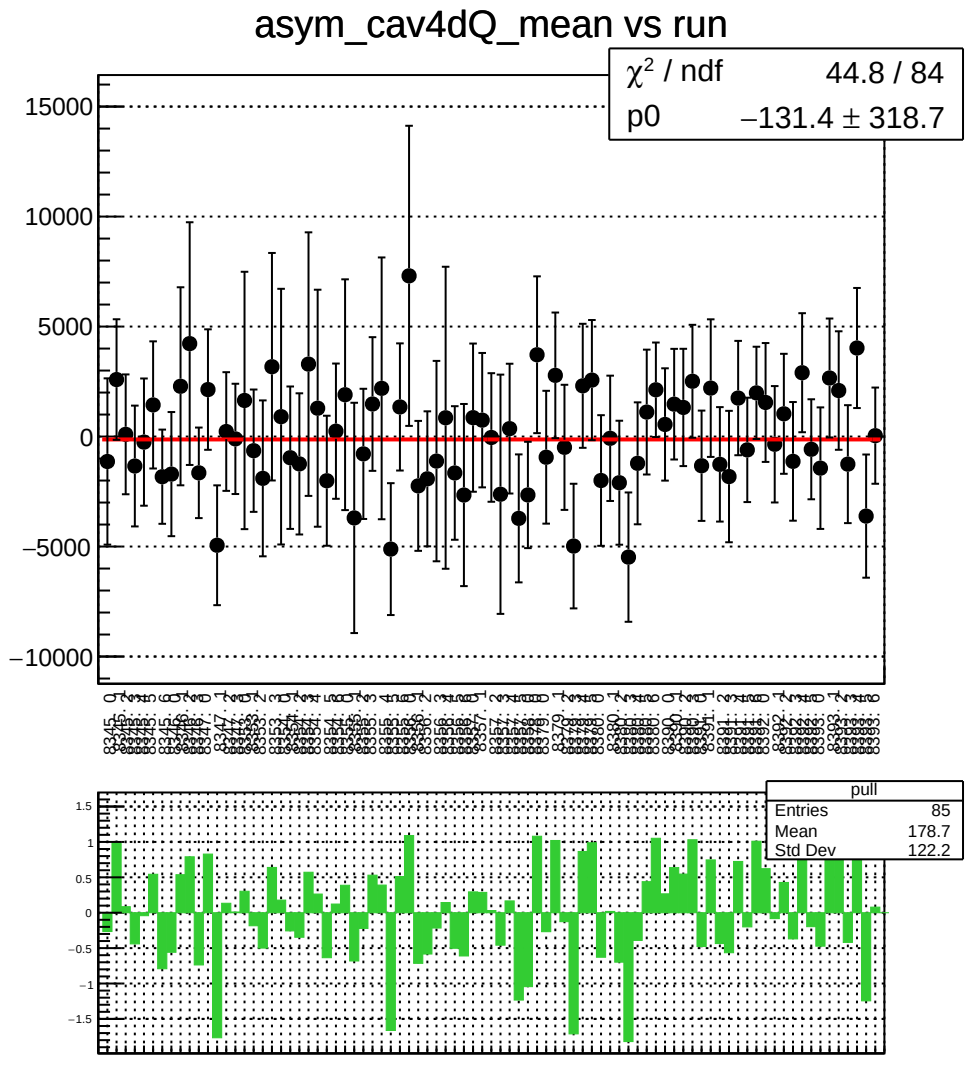

pull1D
Entries 85
Mean 0.01084
Std Dev 1.049
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

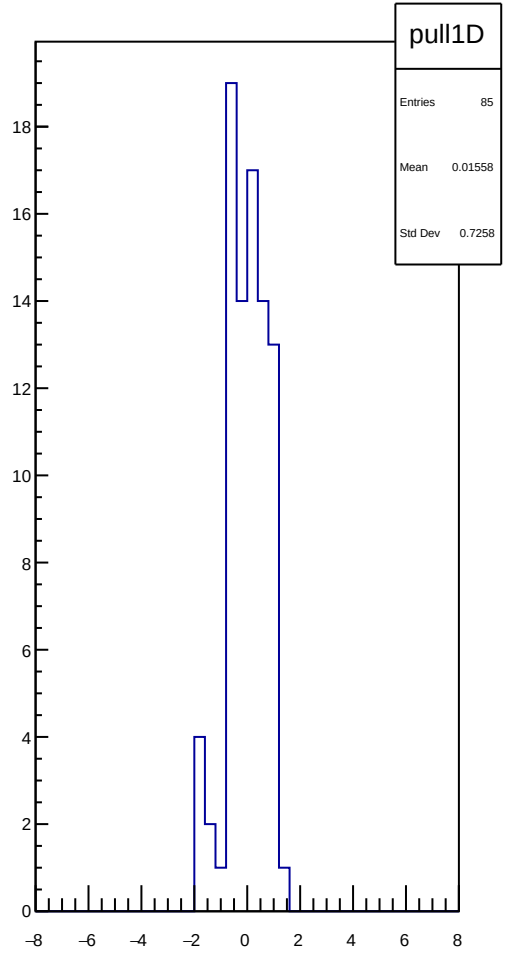

asym_cav4bQ_rms vs run
χ^2 / ndf 1.535e+04 / 84
p0 660.7 ± 0.5133
850
800
750
700
650
600
550

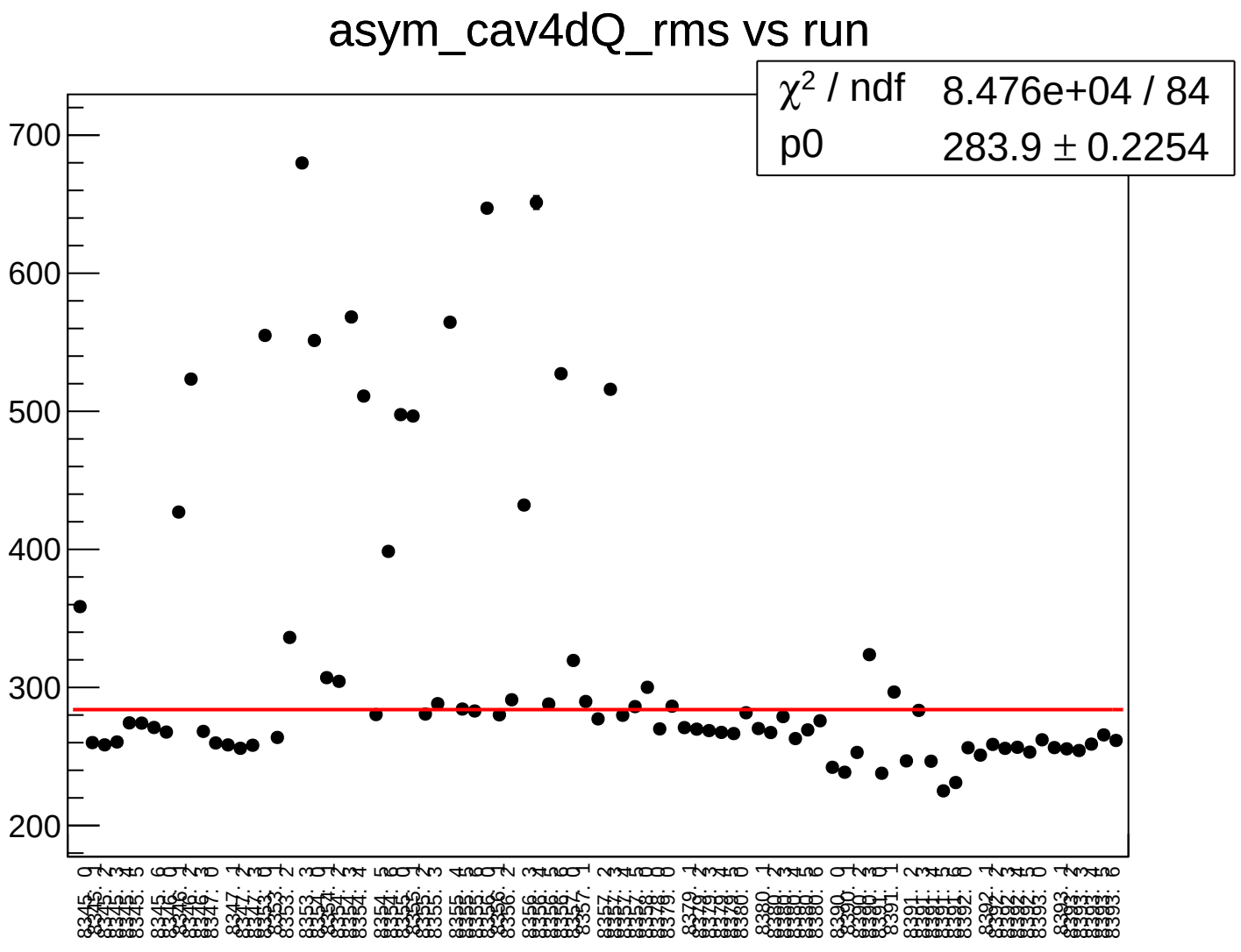

asym_cav4cQ_mean vs run
χ² / ndf 23.58 / 84
p0 −64.13 ± 236.6
pull
Entries 85
Mean 242
Std Dev 180.8

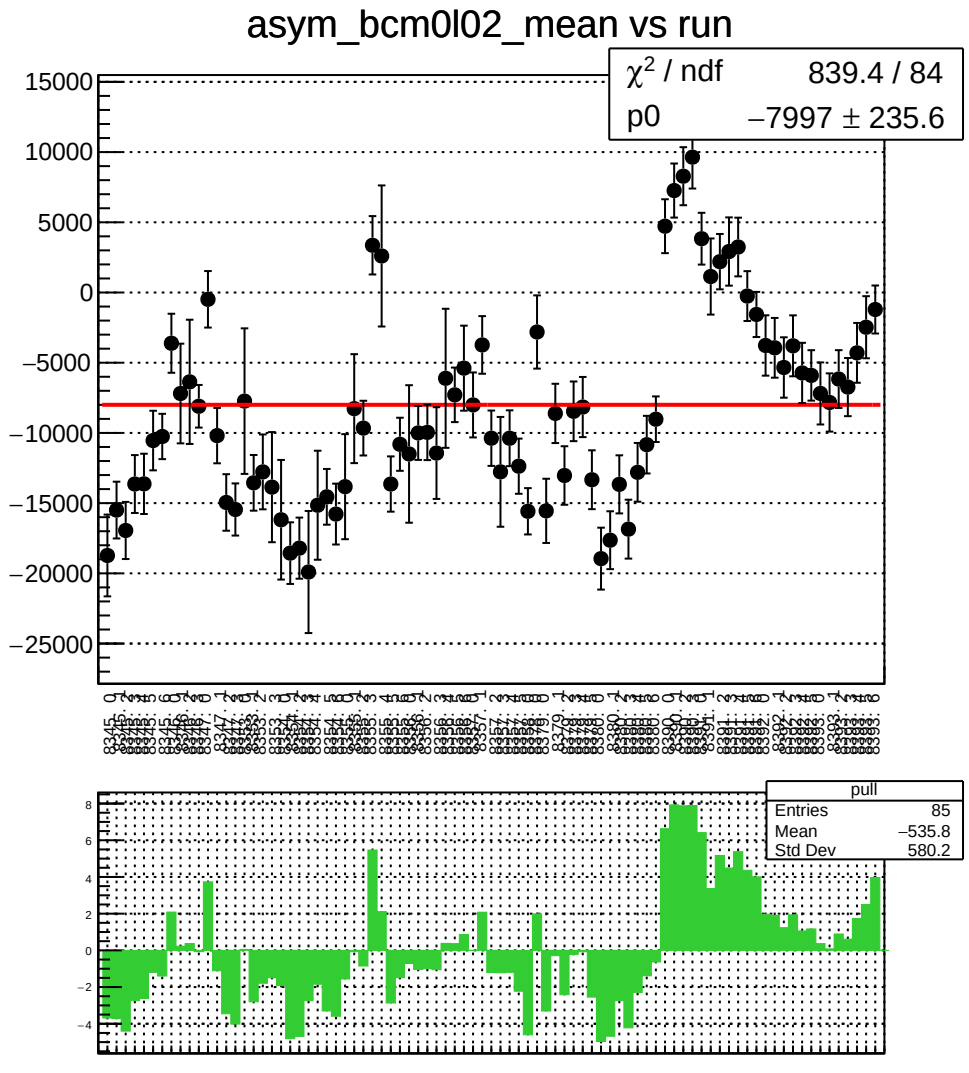

pull1D
Entries 85
Mean 0.003515
Std Dev 0.5266

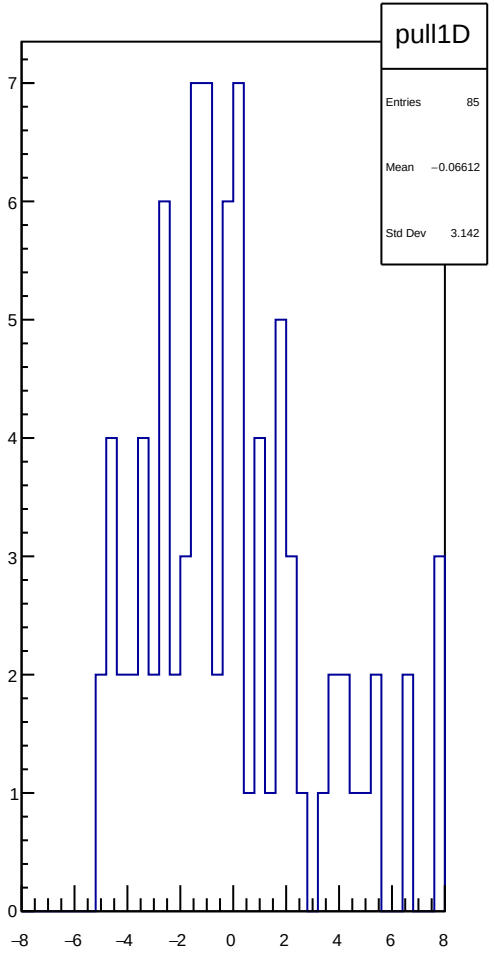

asym_cav4cQ_rms vs run
χ^2 / ndf 1.192e+05 / 84
p0 208.5 ± 0.1673
600
500
400
300
200

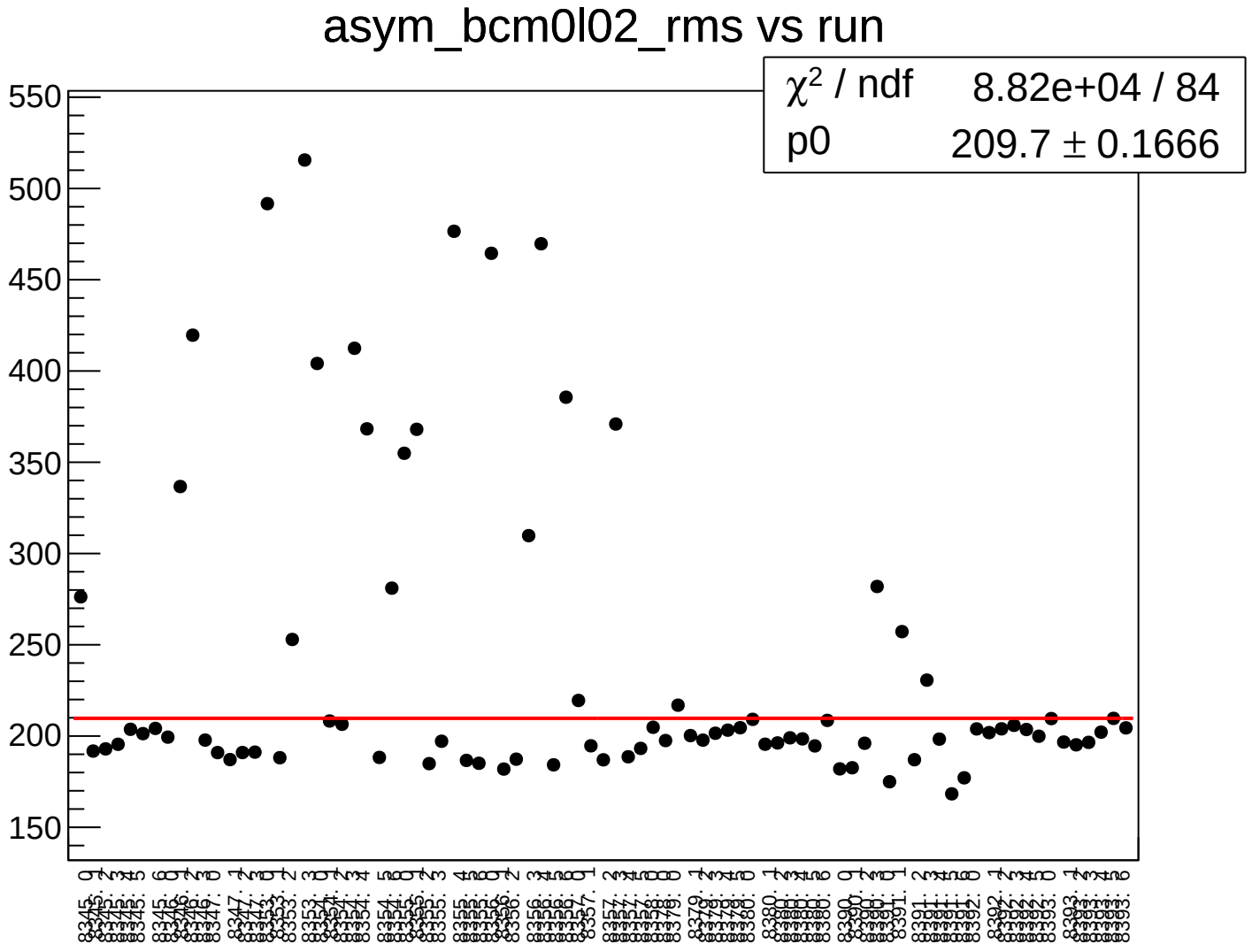

asym_cav4dQ_mean vs run
χ² / ndf 44.8 / 84
p0 −131.4 ± 318.7
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 178.7
Std Dev 122.2
1.5
1
0.5
0
−0.5
−1
−1.5

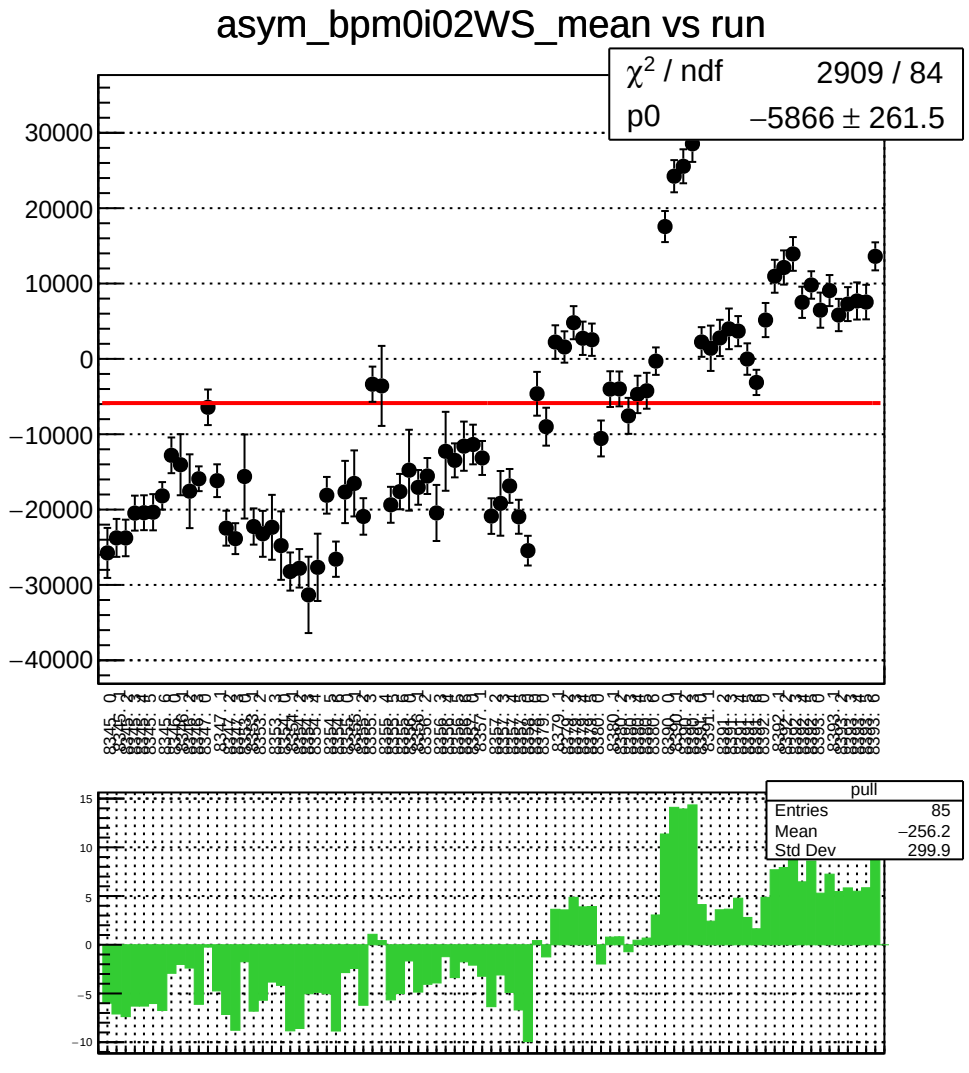

pull1D
Entries 85
Mean 0.01558
Std Dev 0.7258
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

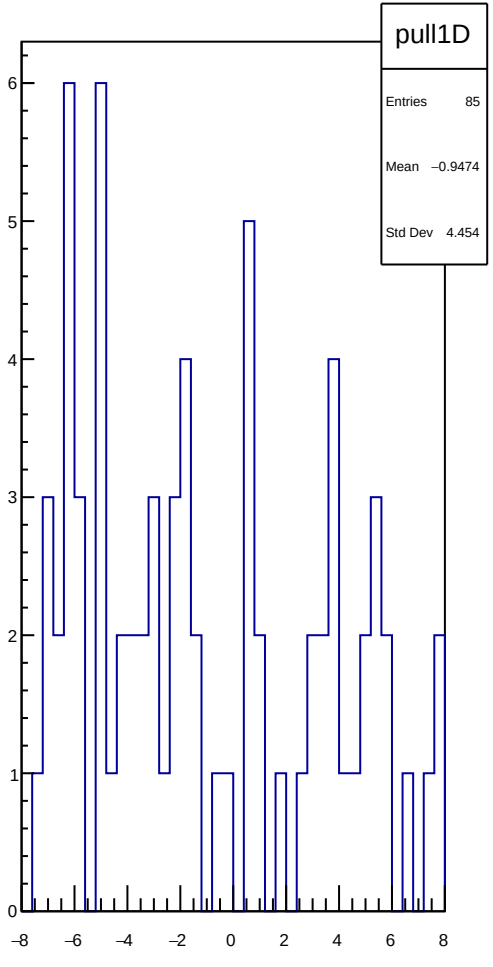

asym_cav4dQ_rms vs run
χ² / ndf 8.476e+04 / 84
p0 283.9 ± 0.2254
700
600
500
400
300
200

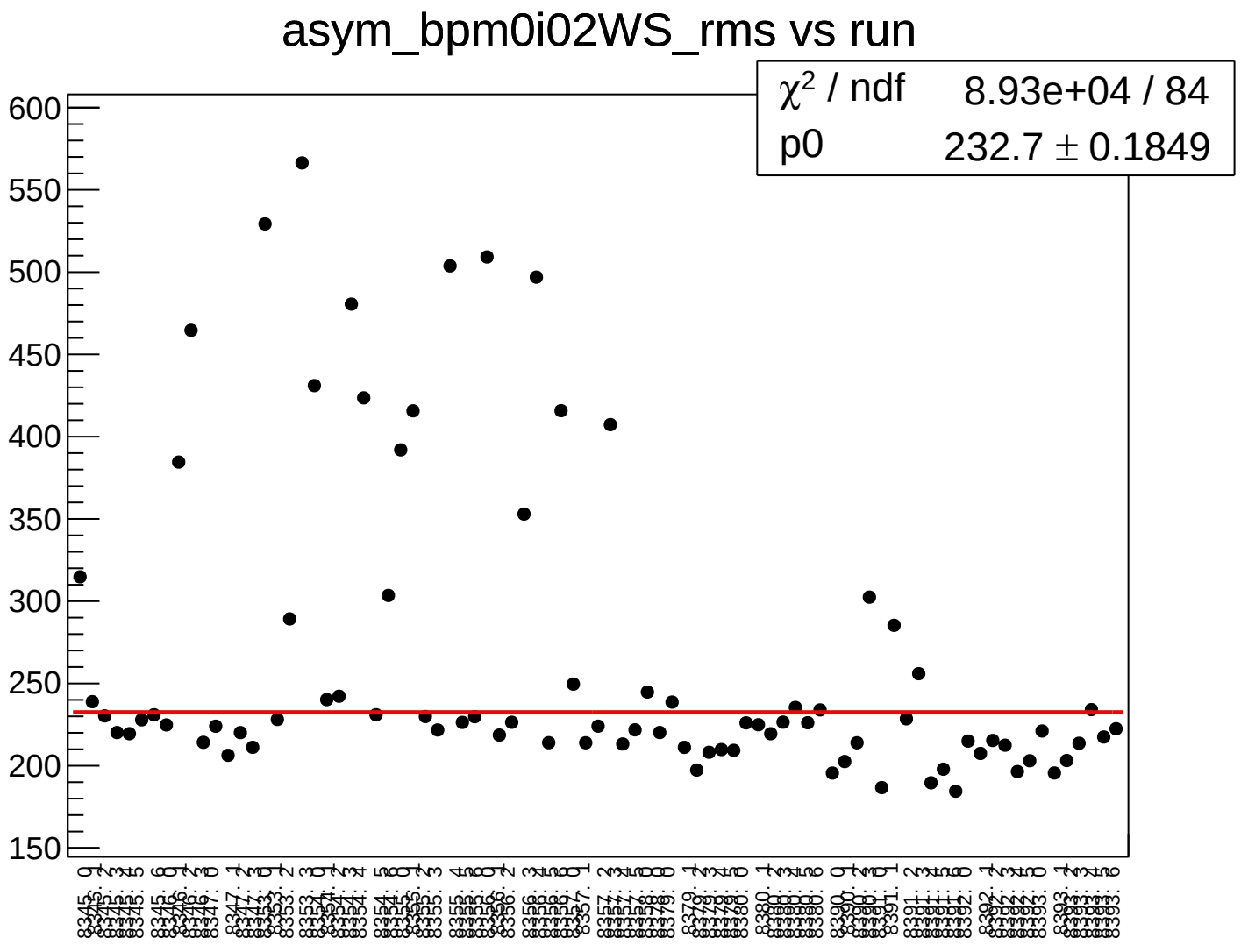

asym_bcm0l02_mean vs run
χ² / ndf 839.4 / 84
p0 −7997 ± 235.6
pull
Entries 85
Mean −535.8
Std Dev 580.2

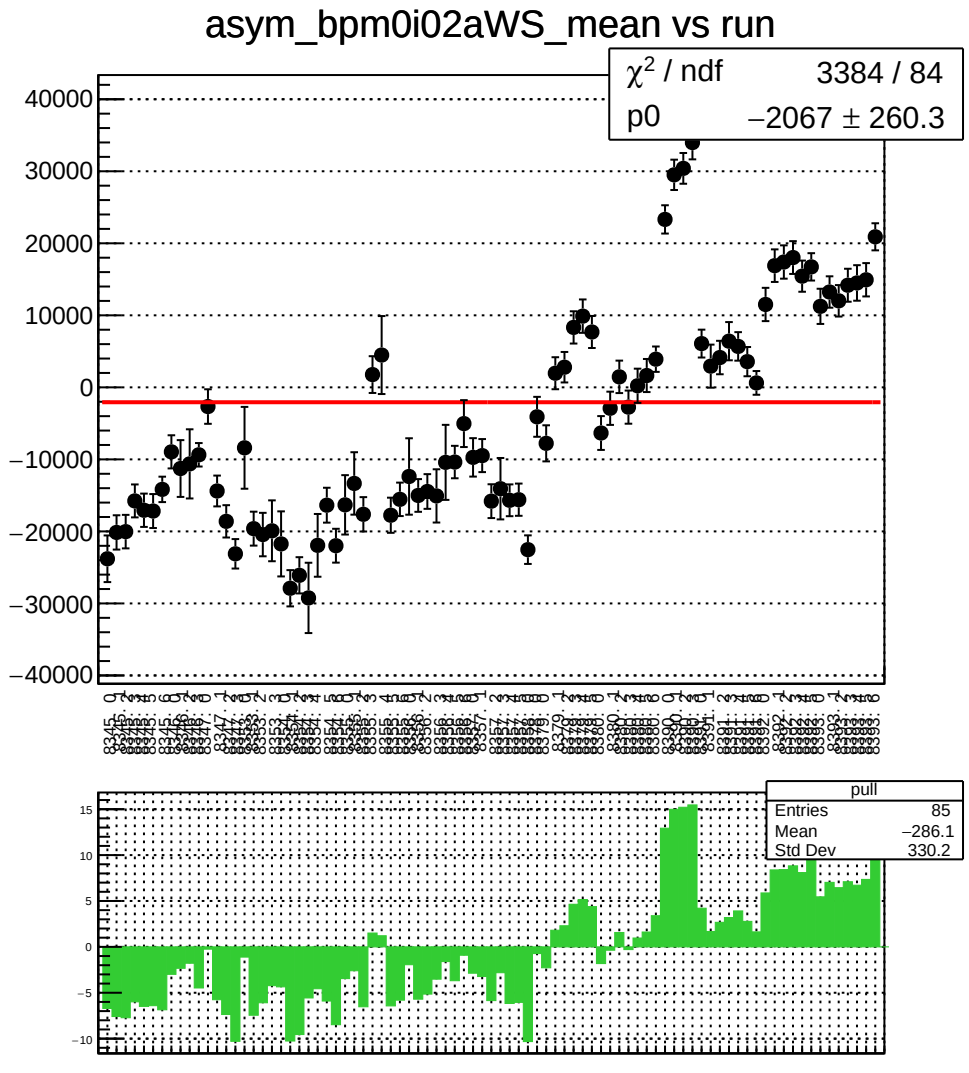

pull1D
Entries 85
Mean −0.06612
Std Dev 3.142

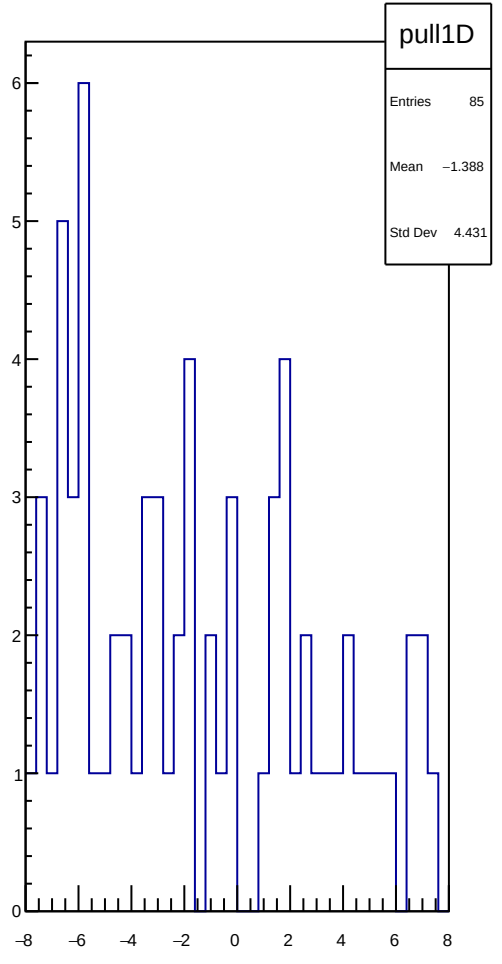

asym_bcm0l02_rms vs run
χ² / ndf 8.82e+04 / 84
p0 209.7 ± 0.1666
550
500
450
400
350
300
250
200
150

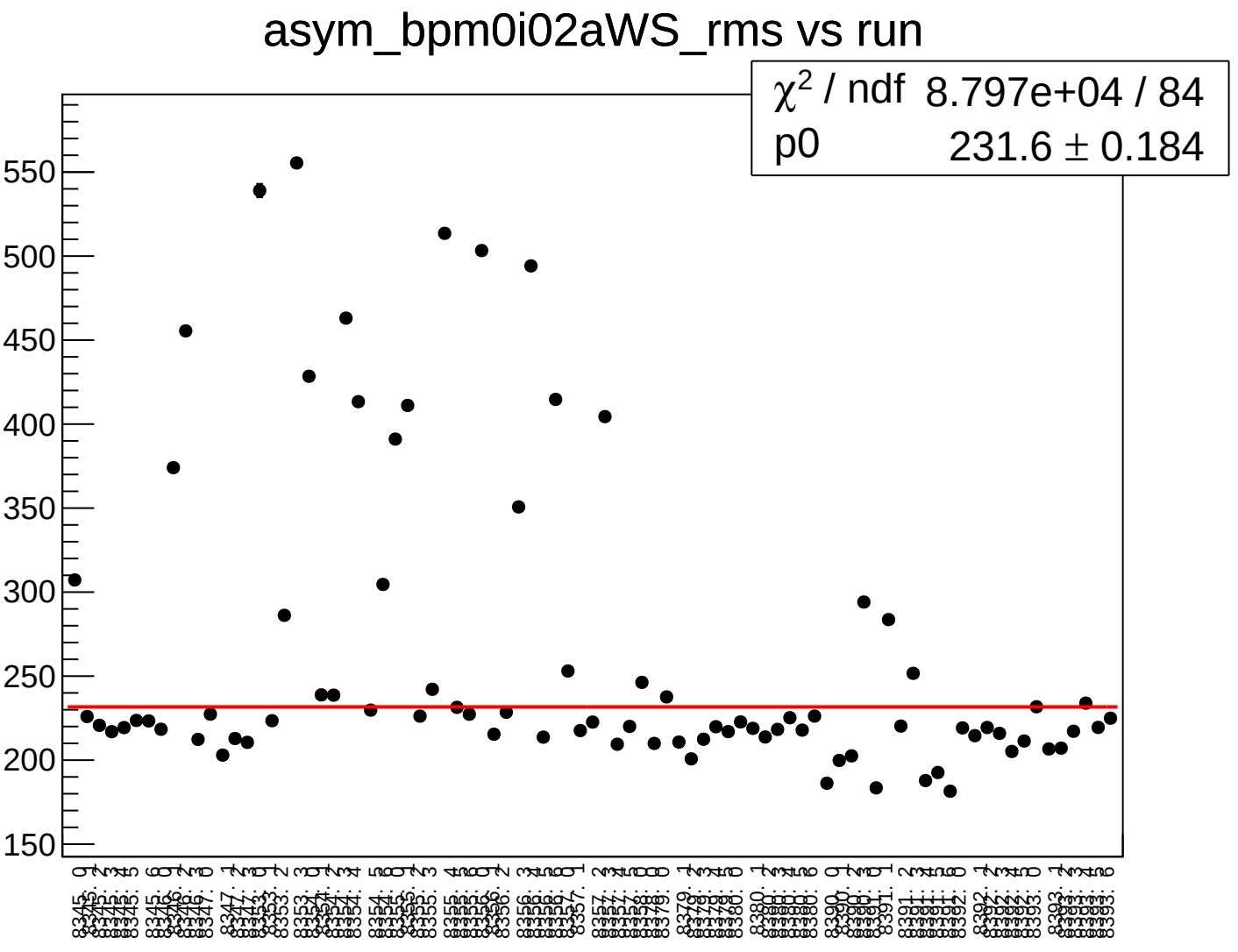

asym_bpm0i02WS_mean vs run
χ² / ndf 2909 / 84
p0 −5866 ± 261.5
pull
Entries 85
Mean −256.2
Std Dev 299.9

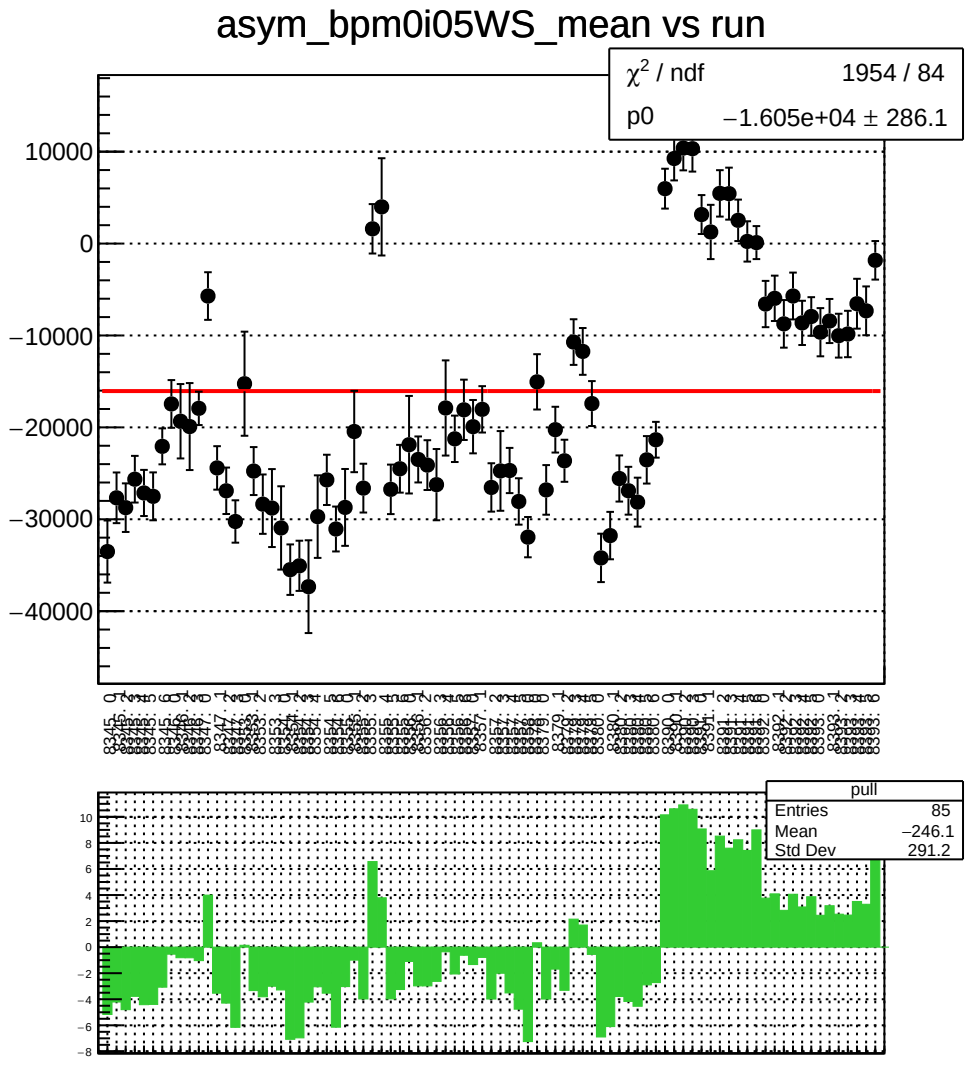

pull1D
Entries 85
Mean −0.9474
Std Dev 4.454

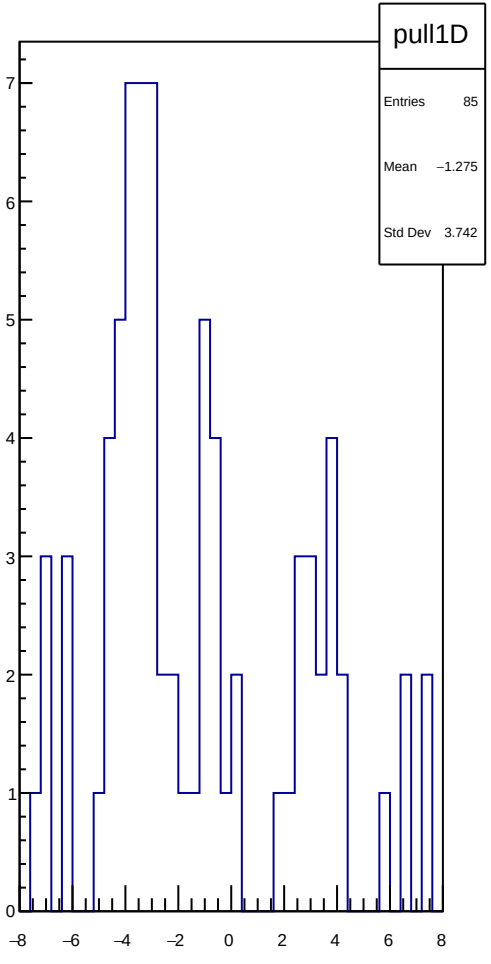

asym_bpm0i02WS_rms vs run
χ^2 / ndf 8.93e+04 / 84
p0 232.7 ± 0.1849
600
550
500
450
400
350
300
250
200
150

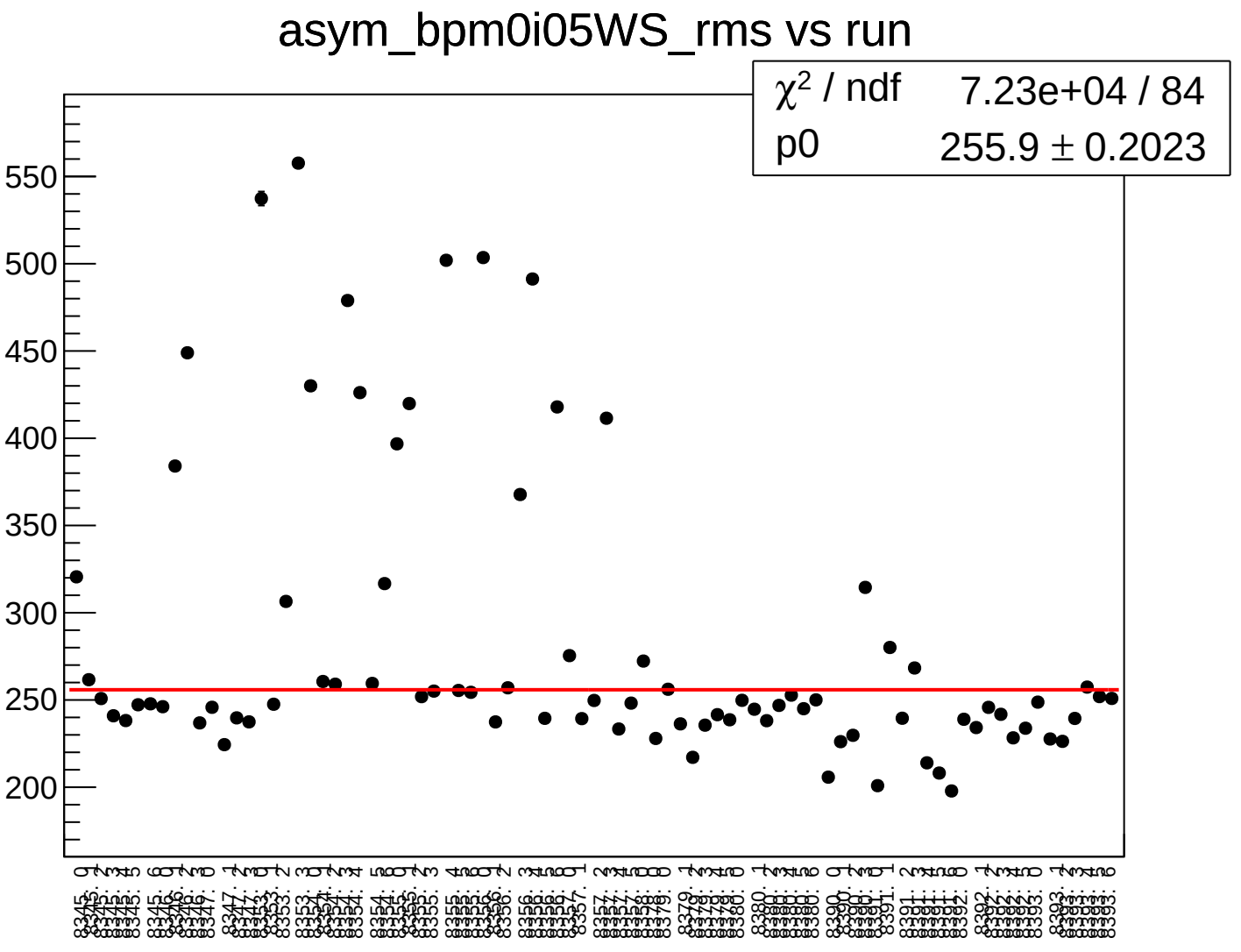

asym_bpm0i02aWS_mean vs run
χ² / ndf 3384 / 84
p0 −2067 ± 260.3
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −286.1
Std Dev 330.2
15
10
5
0
−5
−10

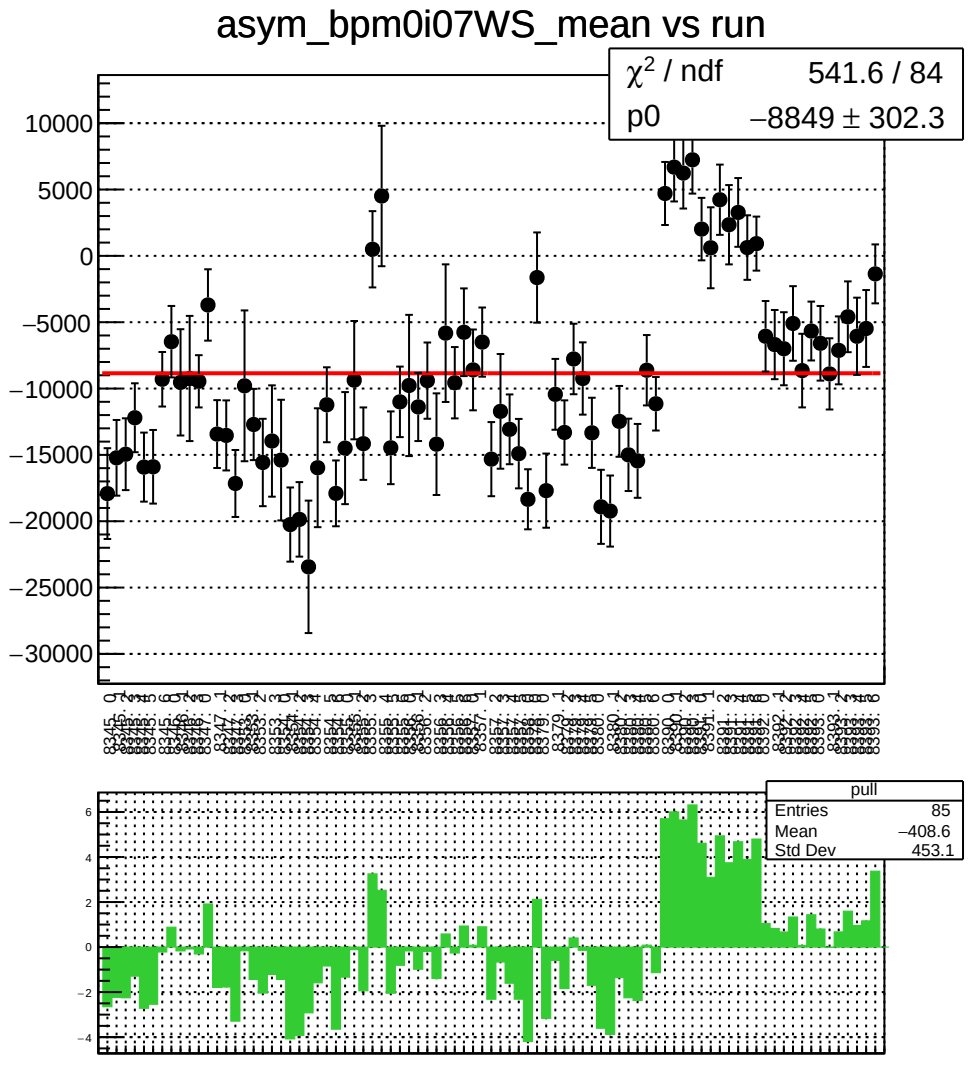

pull1D
Entries 85
Mean −1.388
Std Dev 4.431
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

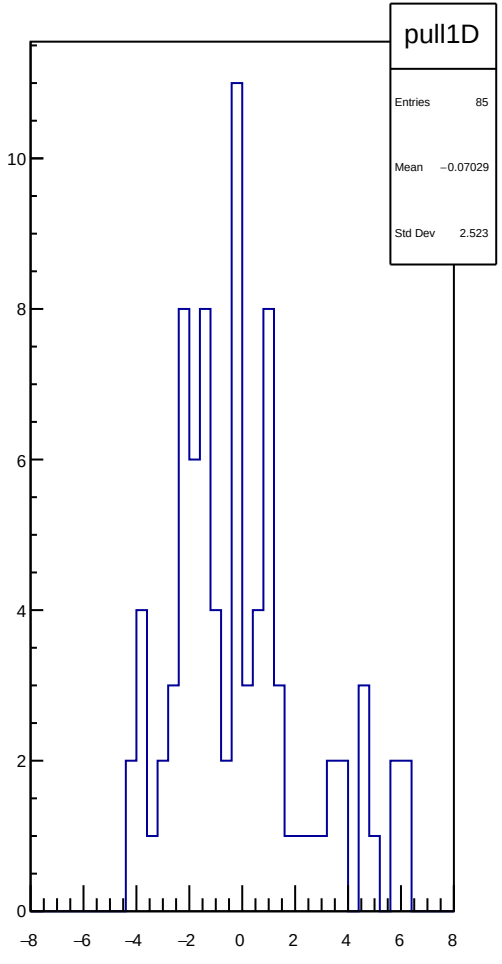

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 8.797e+04 / 84
p0 231.6 ± 0.184
550
500
450
400
350
300
250
200
150

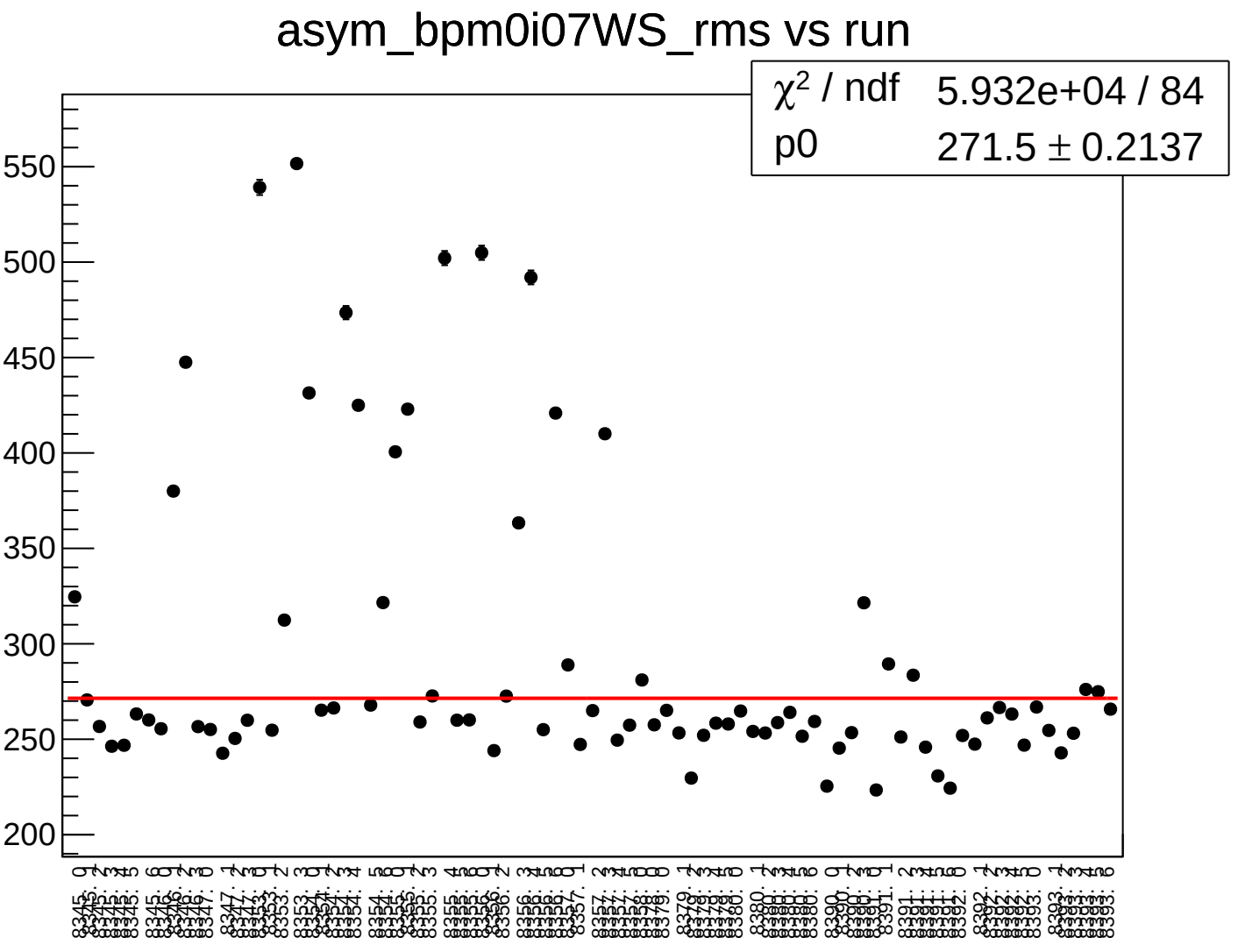

asym_bpm0i05WS_mean vs run
χ² / ndf 1954 / 84
p0 −1.605e+04 ± 286.1
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −246.1
Std Dev 291.2
10
8
6
4
2
0
−2
−4
−6
−8

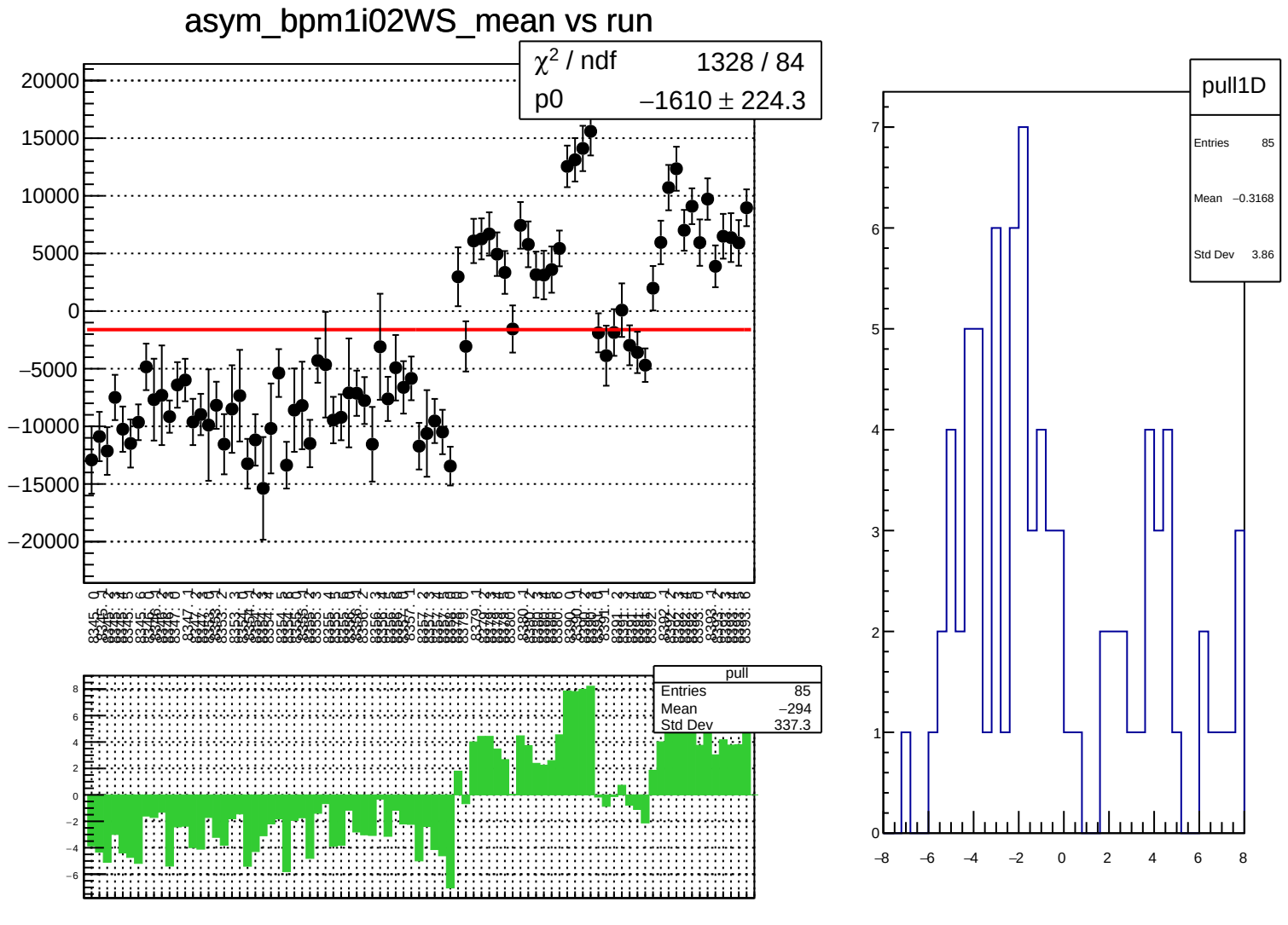

pull1D
Entries 85
Mean −1.275
Std Dev 3.742
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

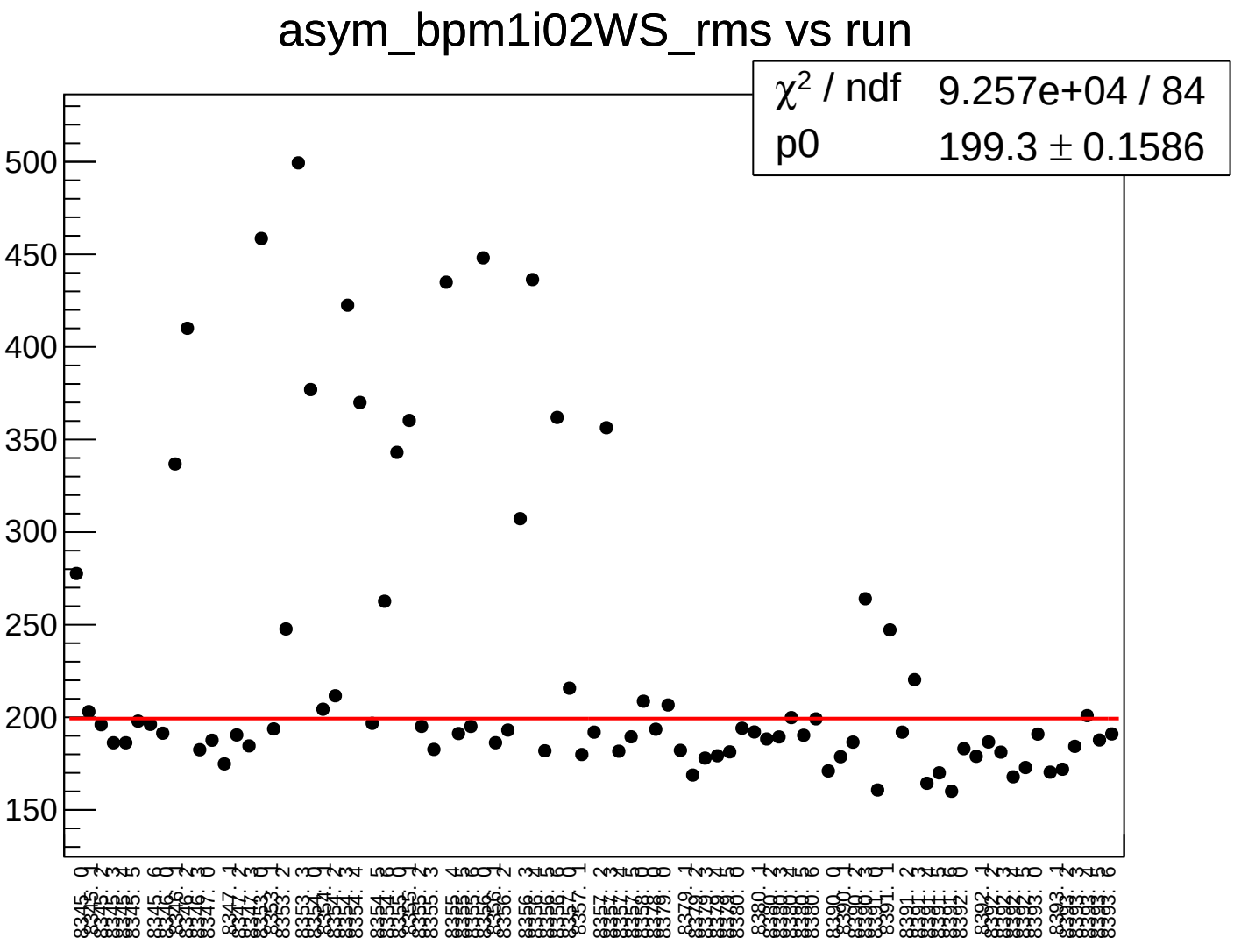

asym_bpm0i05WS_rms vs run
χ^2 / ndf 7.23e+04 / 84
p0 255.9 ± 0.2023
550
500
450
400
350
300
250
200

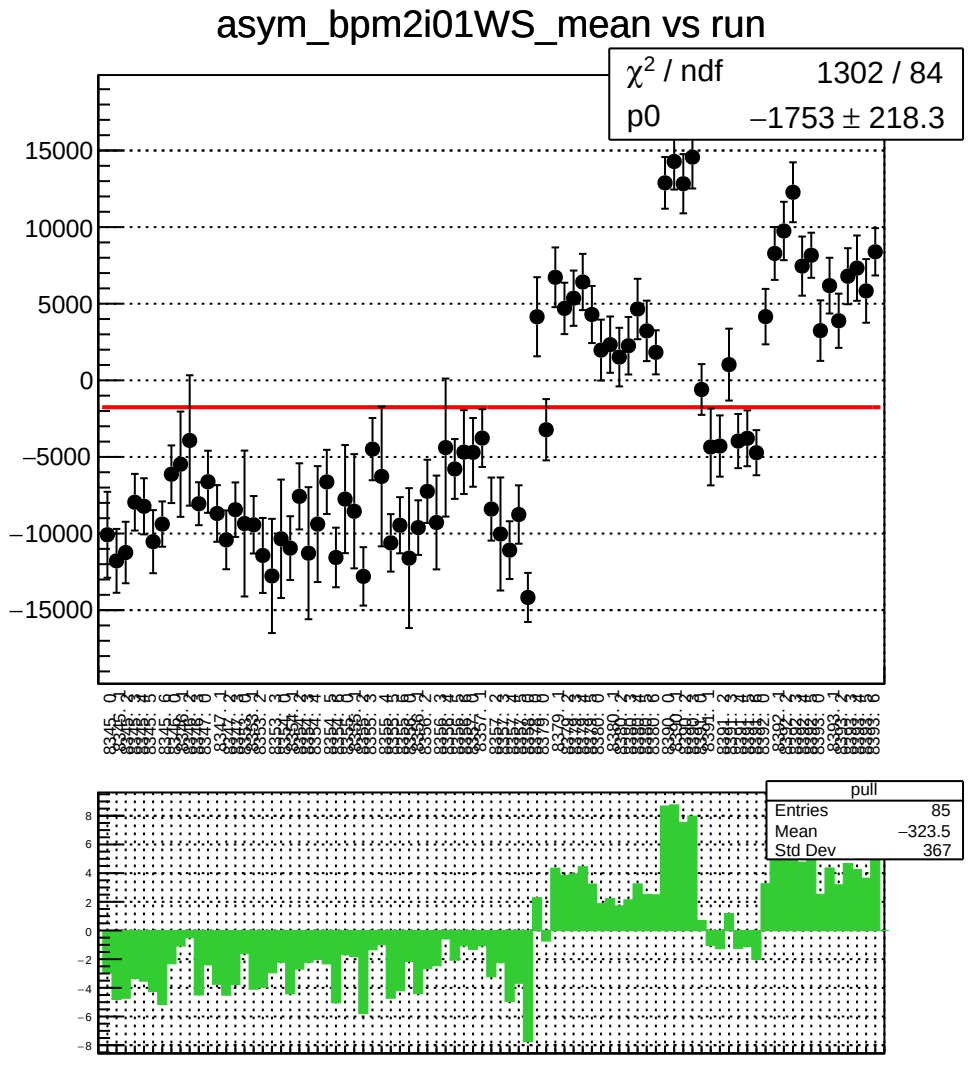

asym_bpm0i07WS_mean vs run
χ² / ndf 541.6 / 84
p0 −8849 ± 302.3
pull
Entries 85
Mean −408.6
Std Dev 453.1

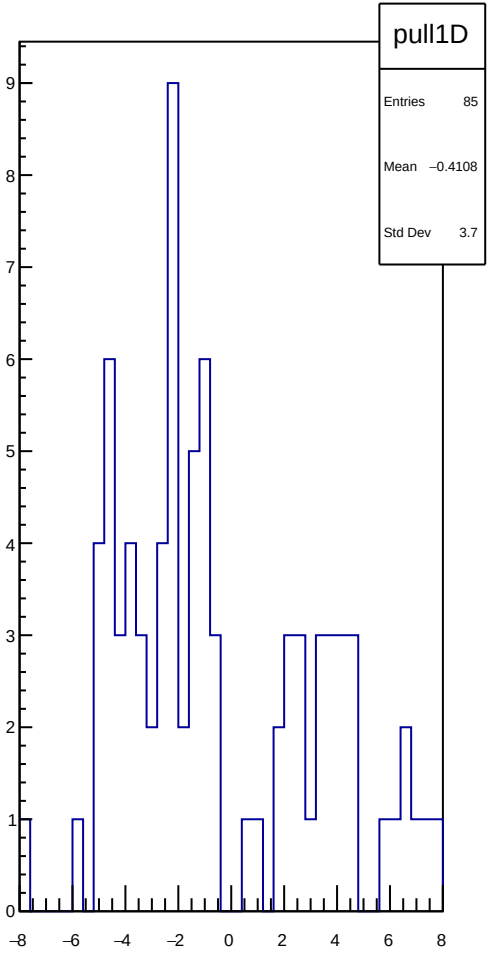

pull1D
Entries 85
Mean −0.07029
Std Dev 2.523

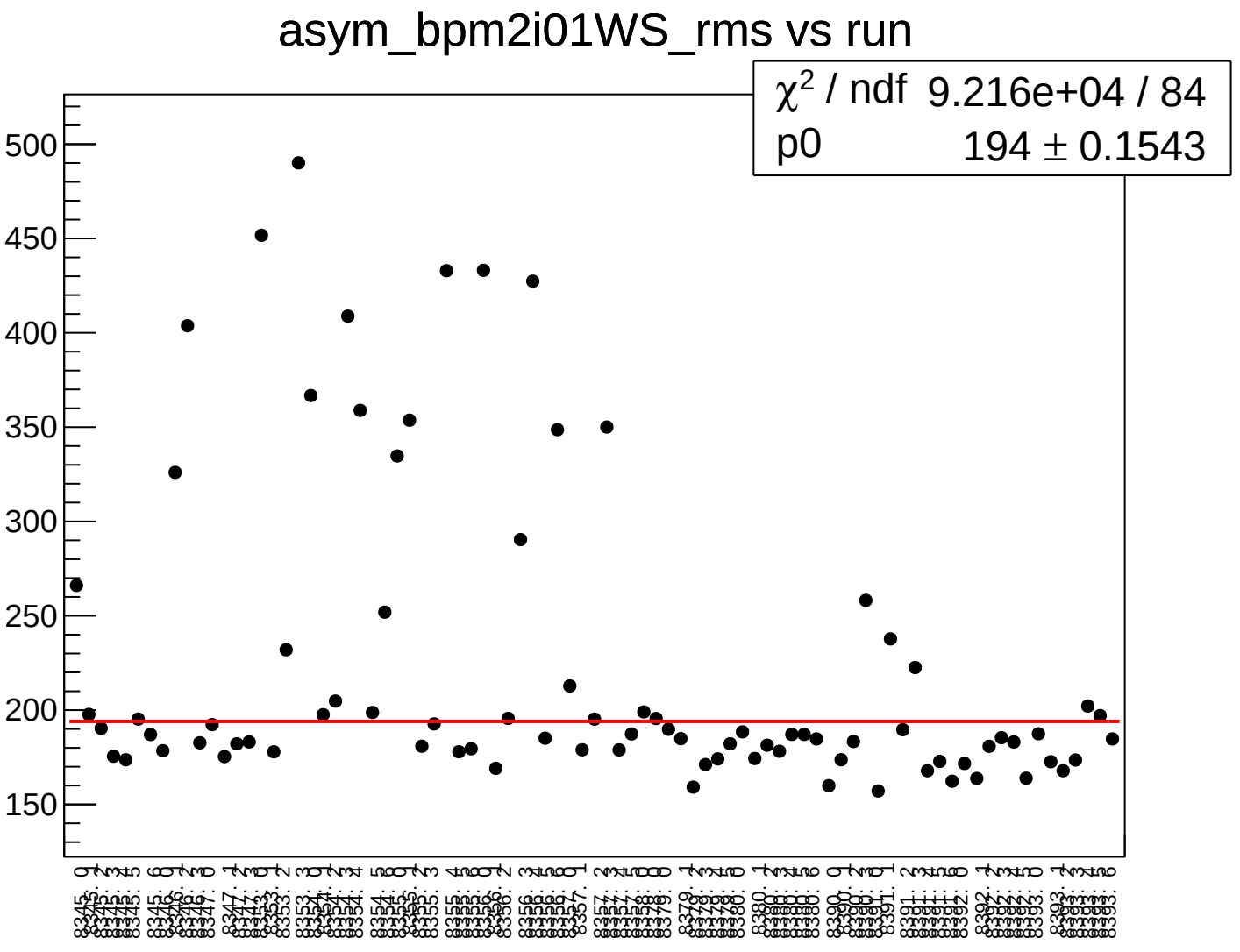

asym_bpm0i07WS_rms vs run
χ² / ndf 5.932e+04 / 84
p0 271.5 ± 0.2137
550
500
450
400
350
300
250
200

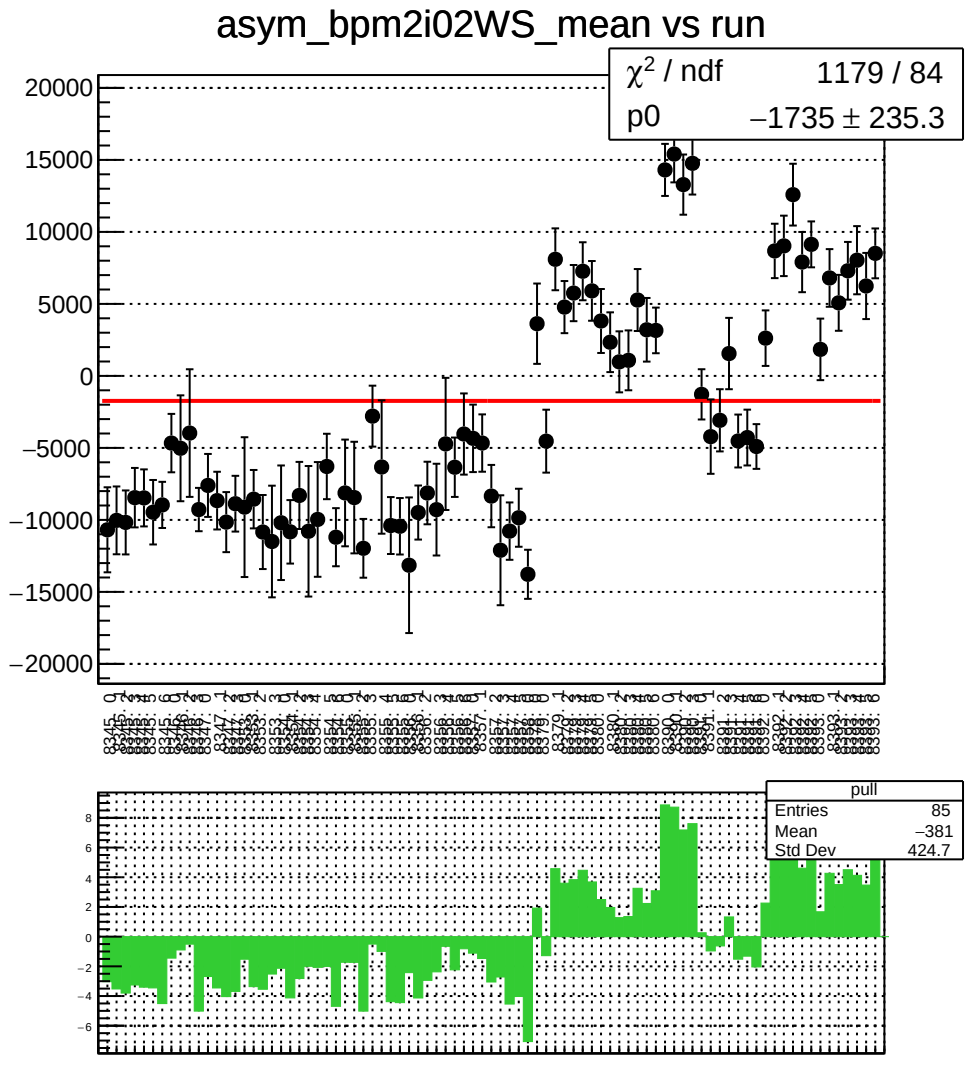

asym_bpm1i02WS_mean vs run
χ² / ndf 1328 / 84
p0 −1610 ± 224.3
pull
Entries 85
Mean −294
Std Dev 337.3
pull1D
Entries 85
Mean −0.3168
Std Dev 3.86

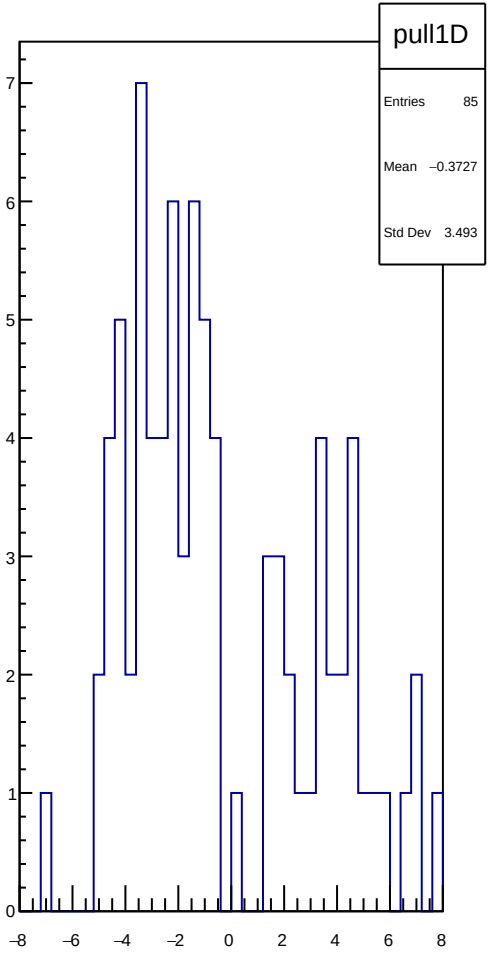

asym_bpm1i02WS_rms vs run
χ² / ndf 9.257e+04 / 84
p0 199.3 ± 0.1586
500
450
400
350
300
250
200
150

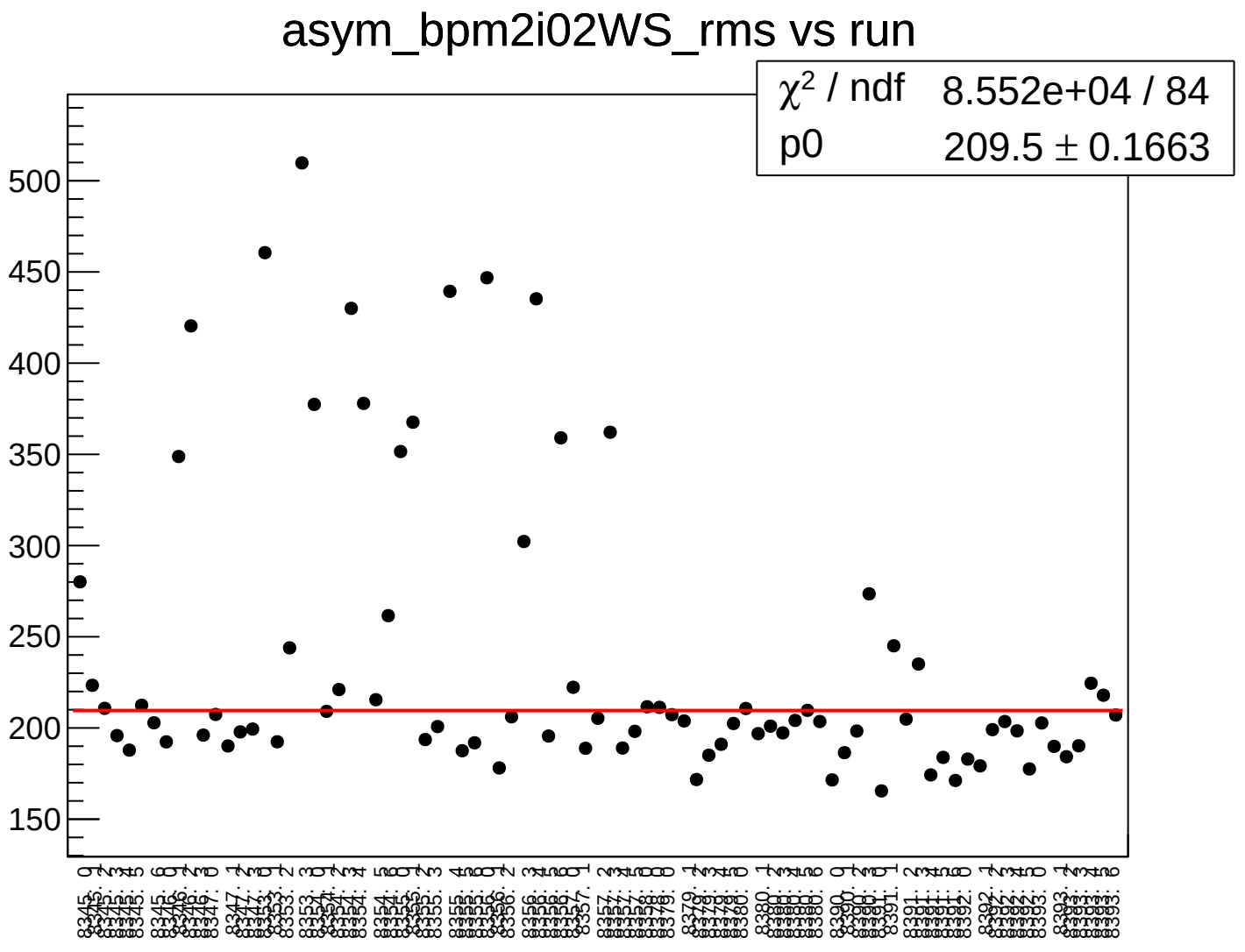

asym_bpm2i01WS_mean vs run
χ² / ndf 1302 / 84
p0 −1753 ± 218.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean −323.5
Std Dev 367
8
6
4
2
0
−2
−4
−6
−8

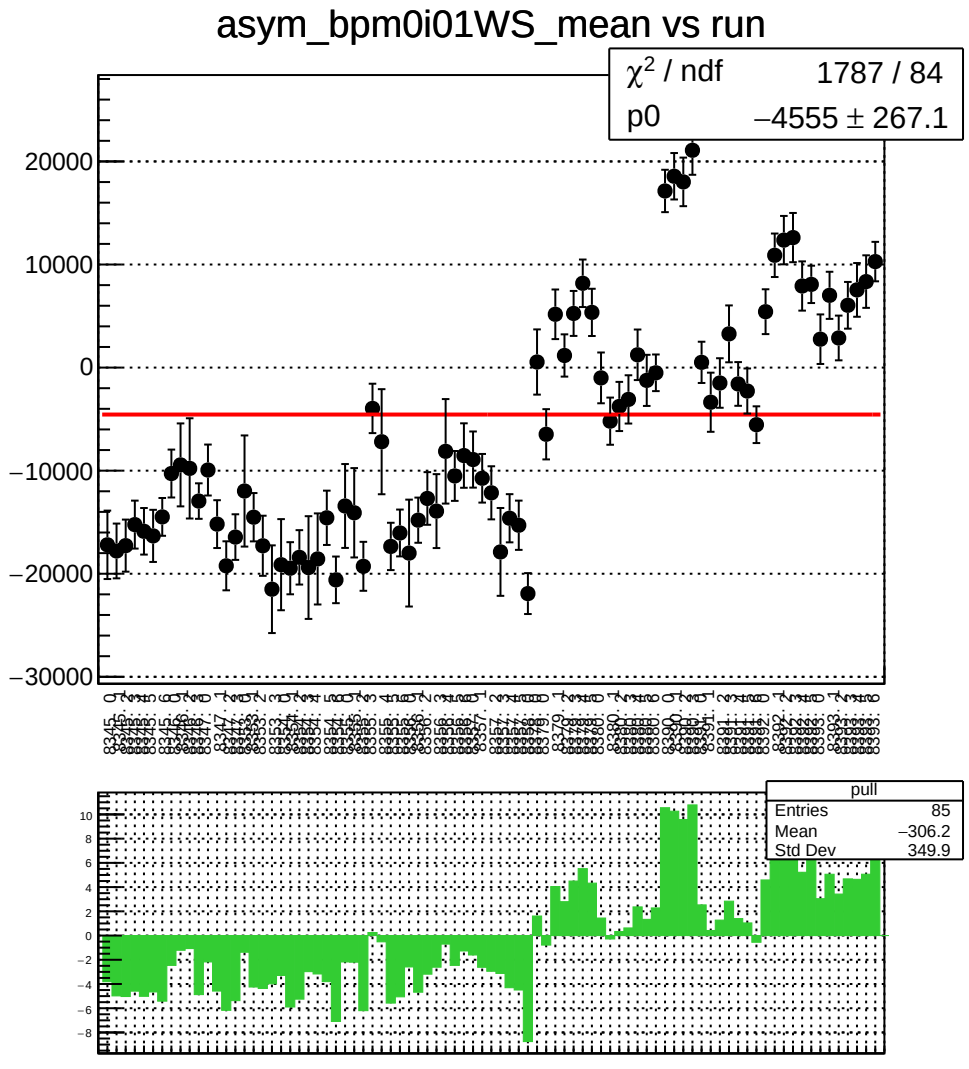

pull1D
Entries 85
Mean −0.4108
Std Dev 3.7
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

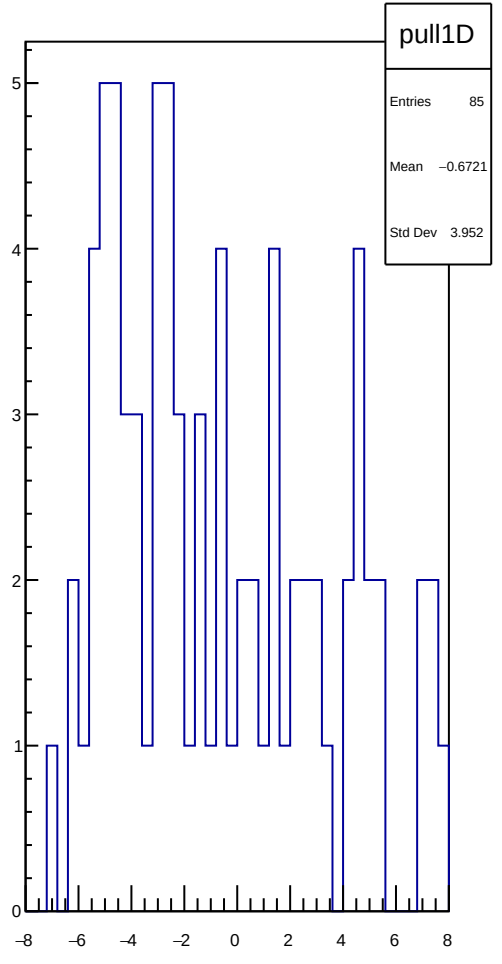

asym_bpm2i01WS_rms vs run
χ^2 / ndf 9.216e+04 / 84
p0 194 ± 0.1543
500
450
400
350
300
250
200
150

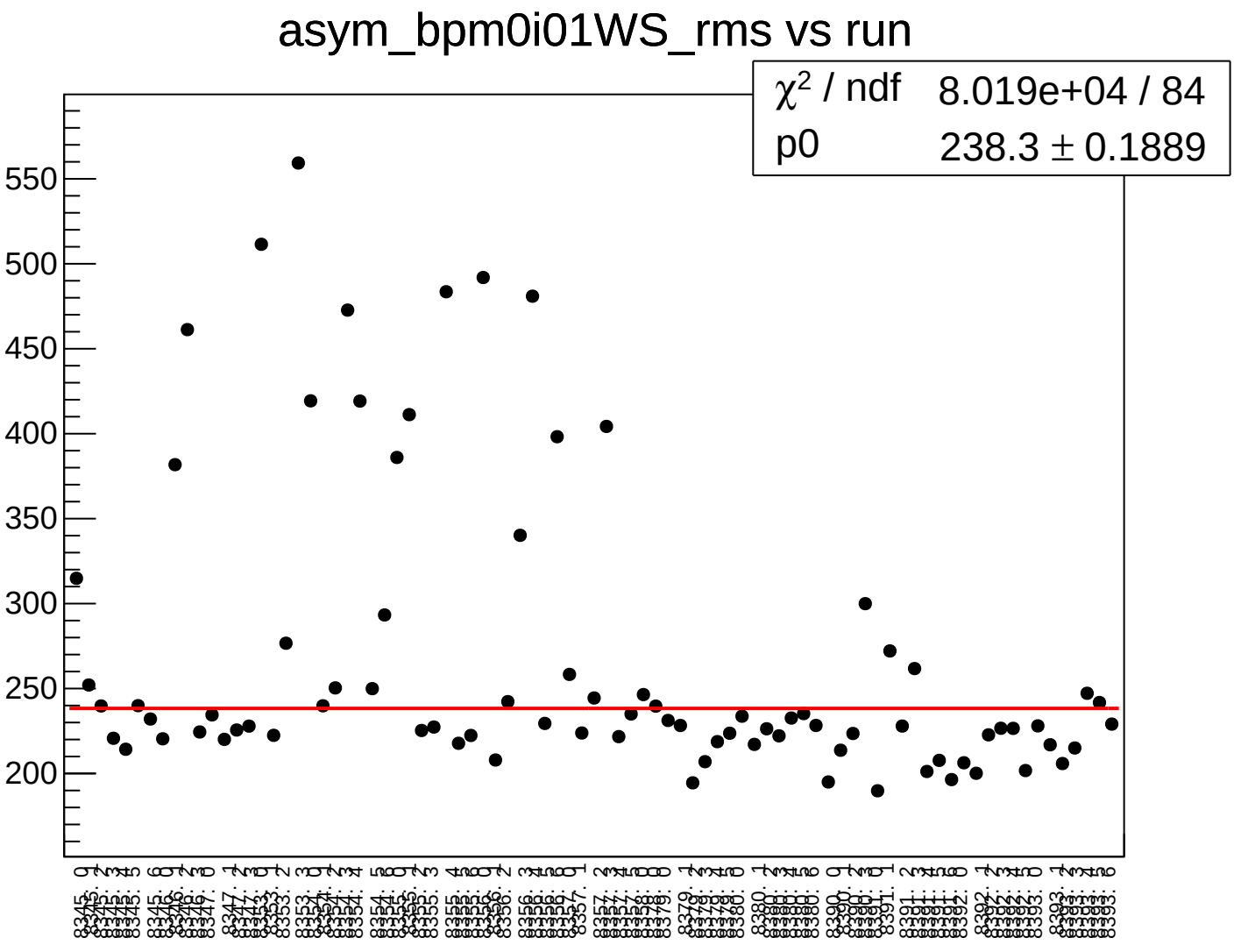

asym_bpm2i02WS_mean vs run
χ² / ndf 1179 / 84
p0 −1735 ± 235.3
pull
Entries 85
Mean −381
Std Dev 424.7

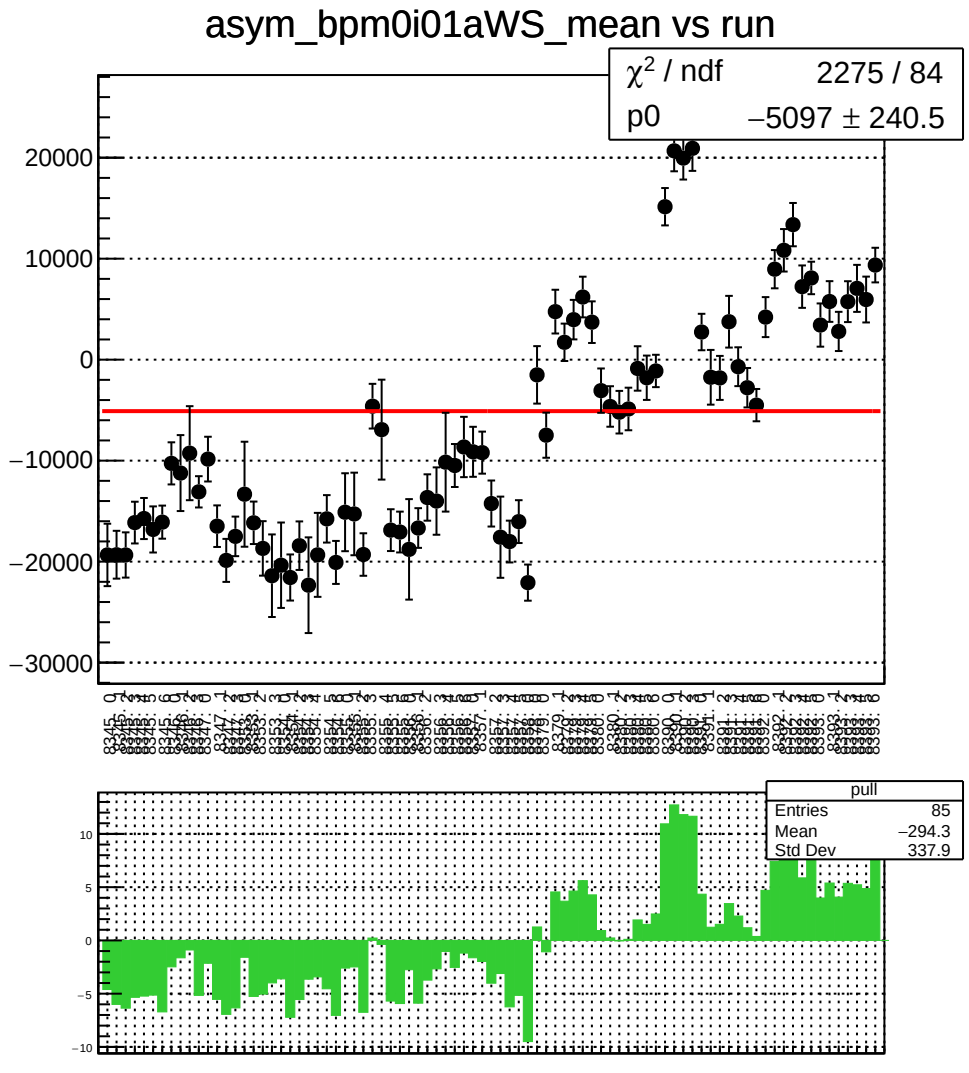

pull1D
Entries 85
Mean −0.3727
Std Dev 3.493

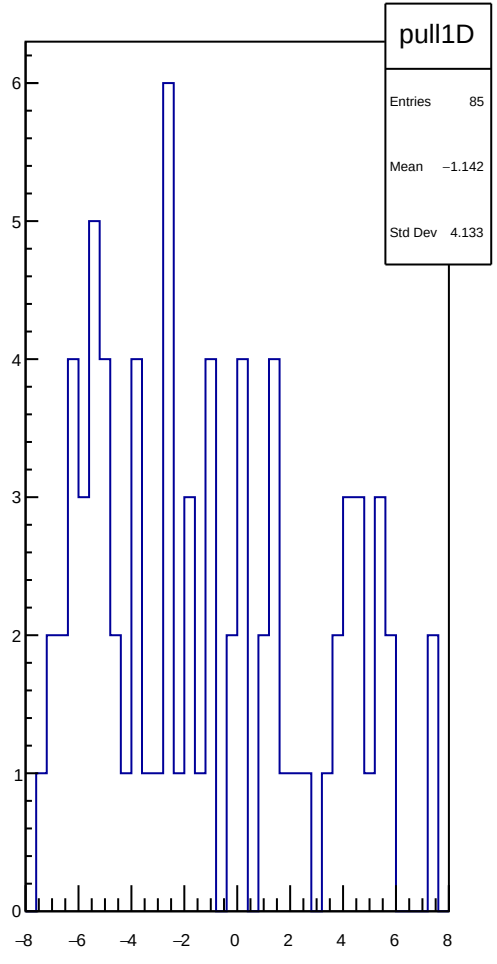

asym_bpm2i02WS_rms vs run
χ² / ndf 8.552e+04 / 84
p0 209.5 ± 0.1663
500
450
400
350
300
250
200
150

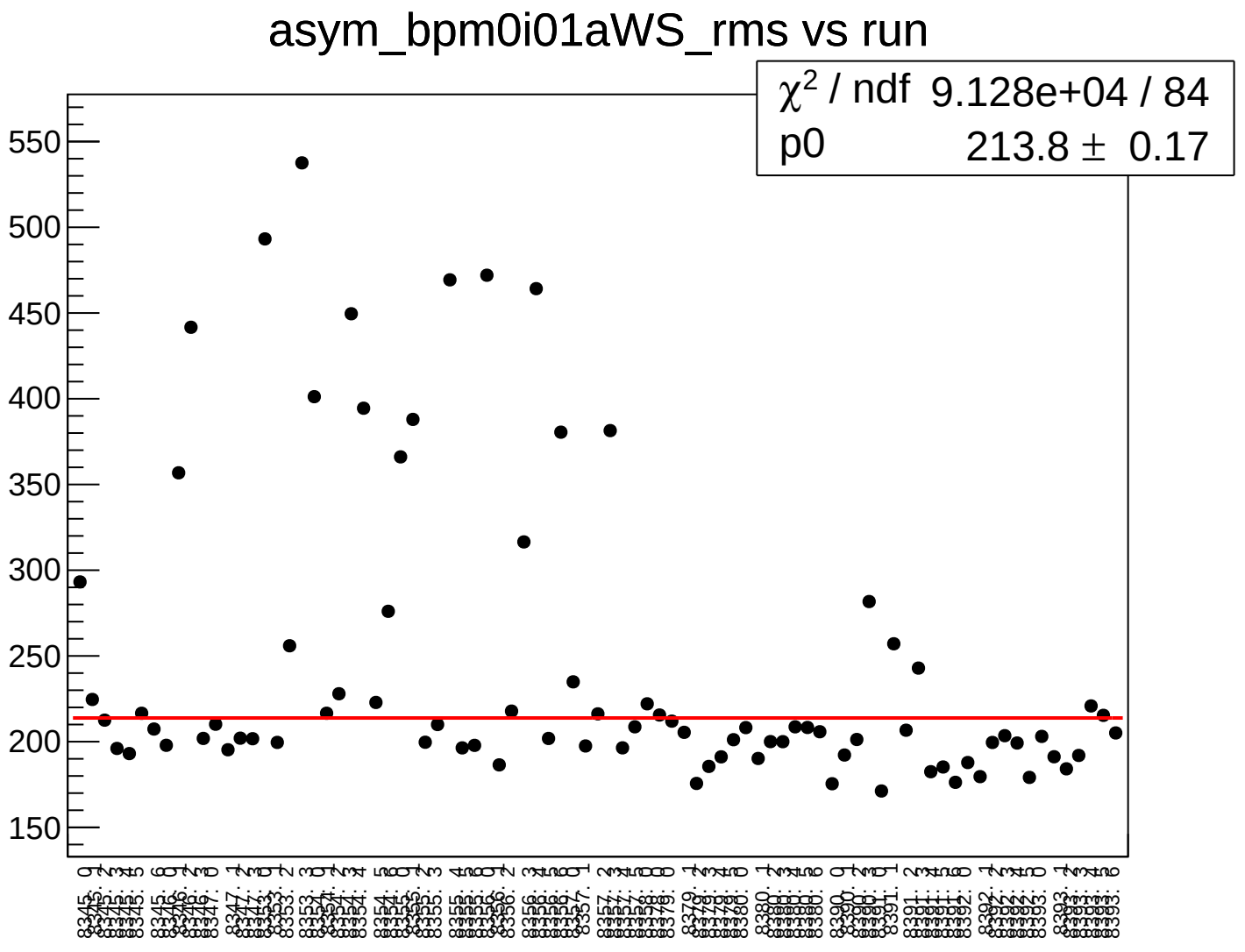

asym_bpm0i01WS_mean vs run
χ² / ndf 1787 / 84
p0 −4555 ± 267.1
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −306.2
Std Dev 349.9
10
8
6
4
2
0
−2
−4
−6
−8

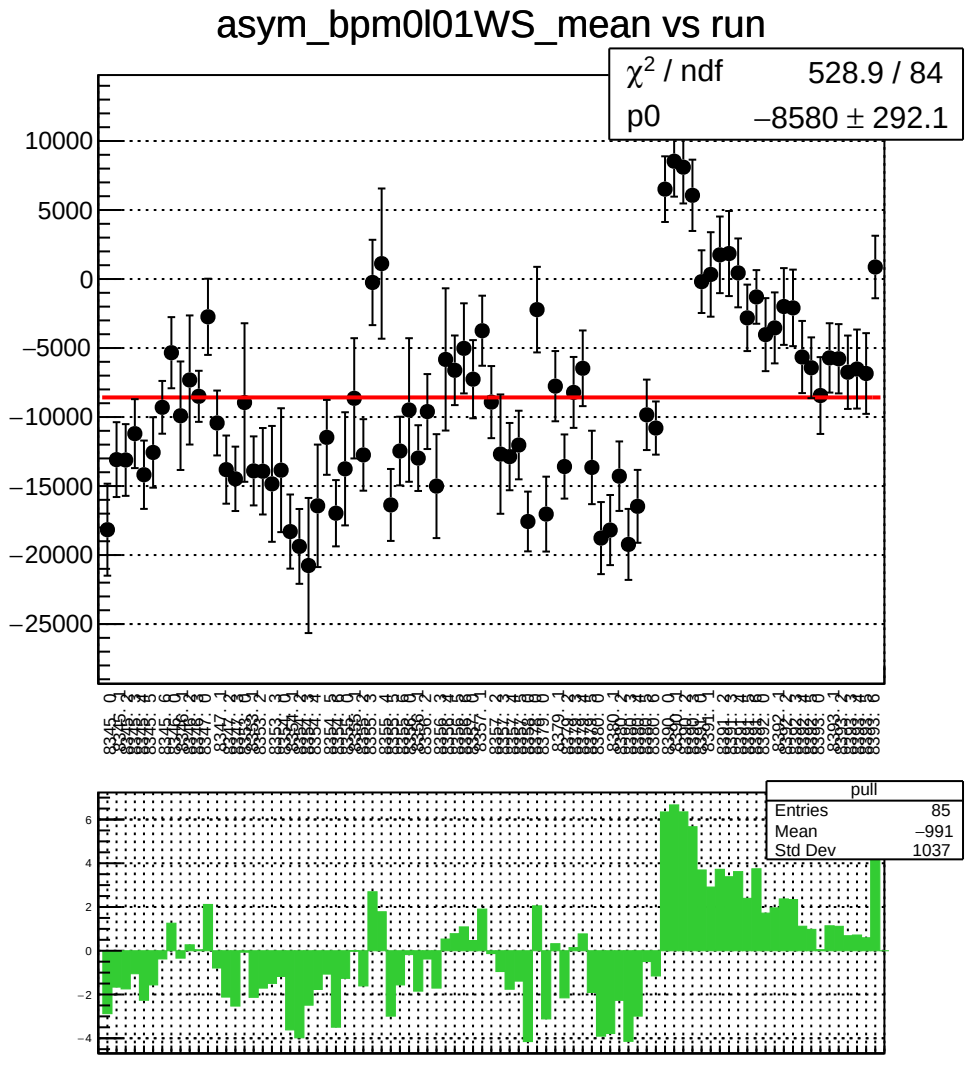

pull1D
Entries 85
Mean −0.6721
Std Dev 3.952
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

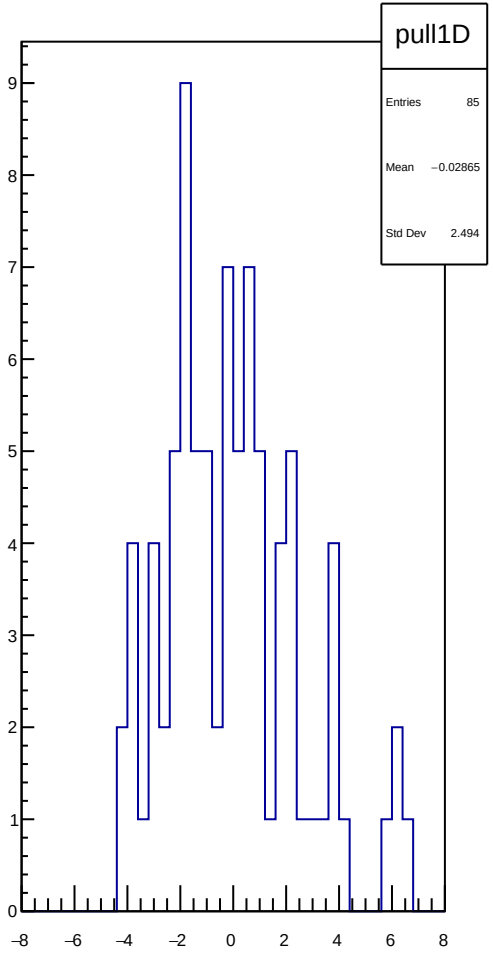

asym_bpm0i01WS_rms vs run
χ² / ndf 8.019e+04 / 84
p0 238.3 ± 0.1889
550
500
450
400
350
300
250
200

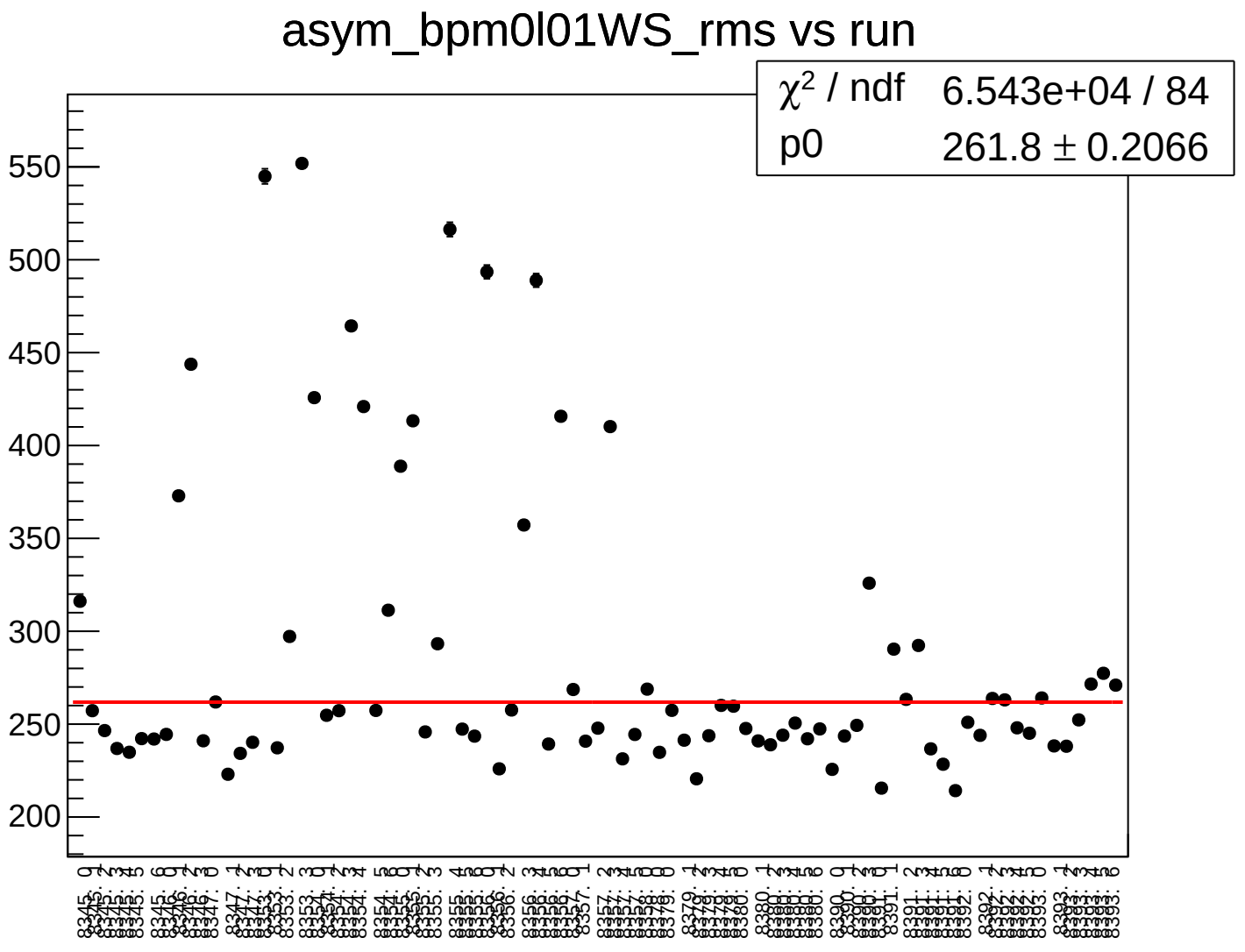

asym_bpm0i01aWS_mean vs run
χ² / ndf 2275 / 84
p0 −5097 ± 240.5
20000
10000
0
−10000
−20000
−30000
pull
Entries 85
Mean −294.3
Std Dev 337.9
10
5
0
−5
−10

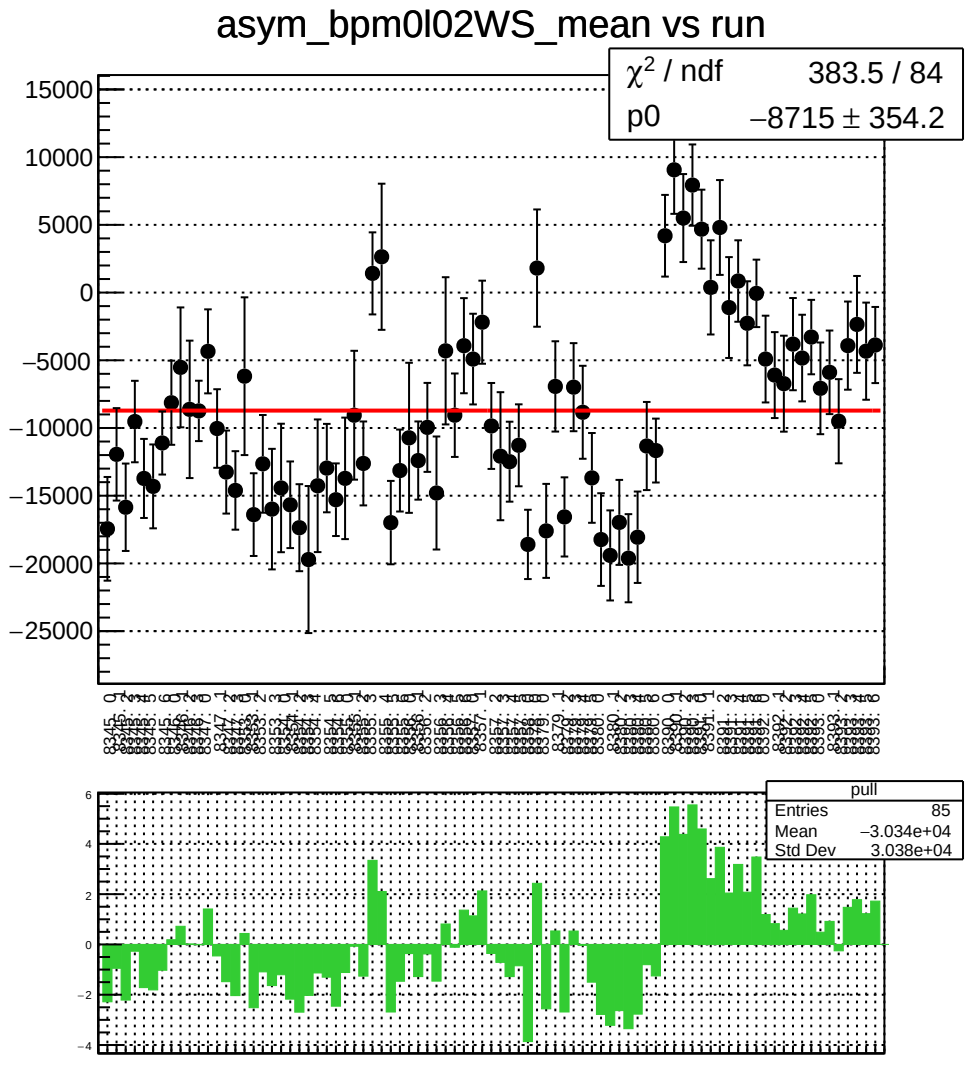

pull1D
Entries 85
Mean −1.142
Std Dev 4.133
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

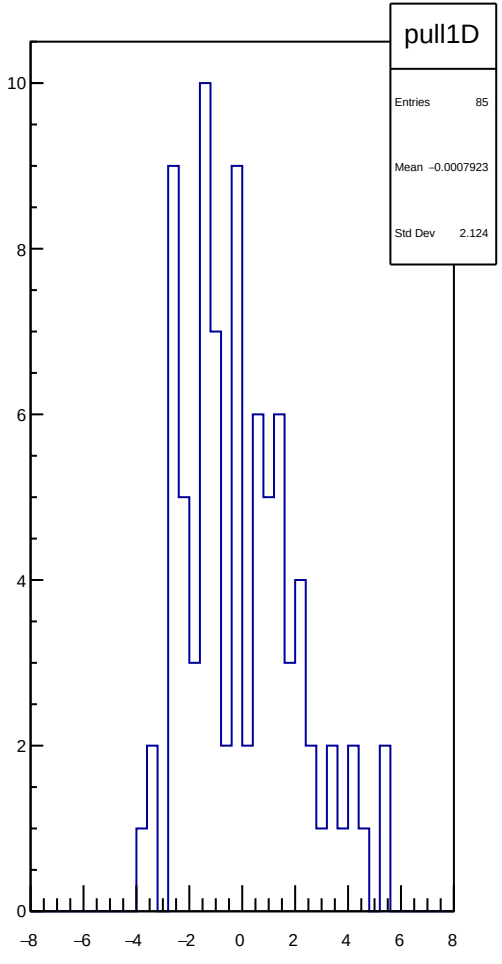

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 9.128e+04 / 84
p0 213.8 ± 0.17
550
500
450
400
350
300
250
200
150

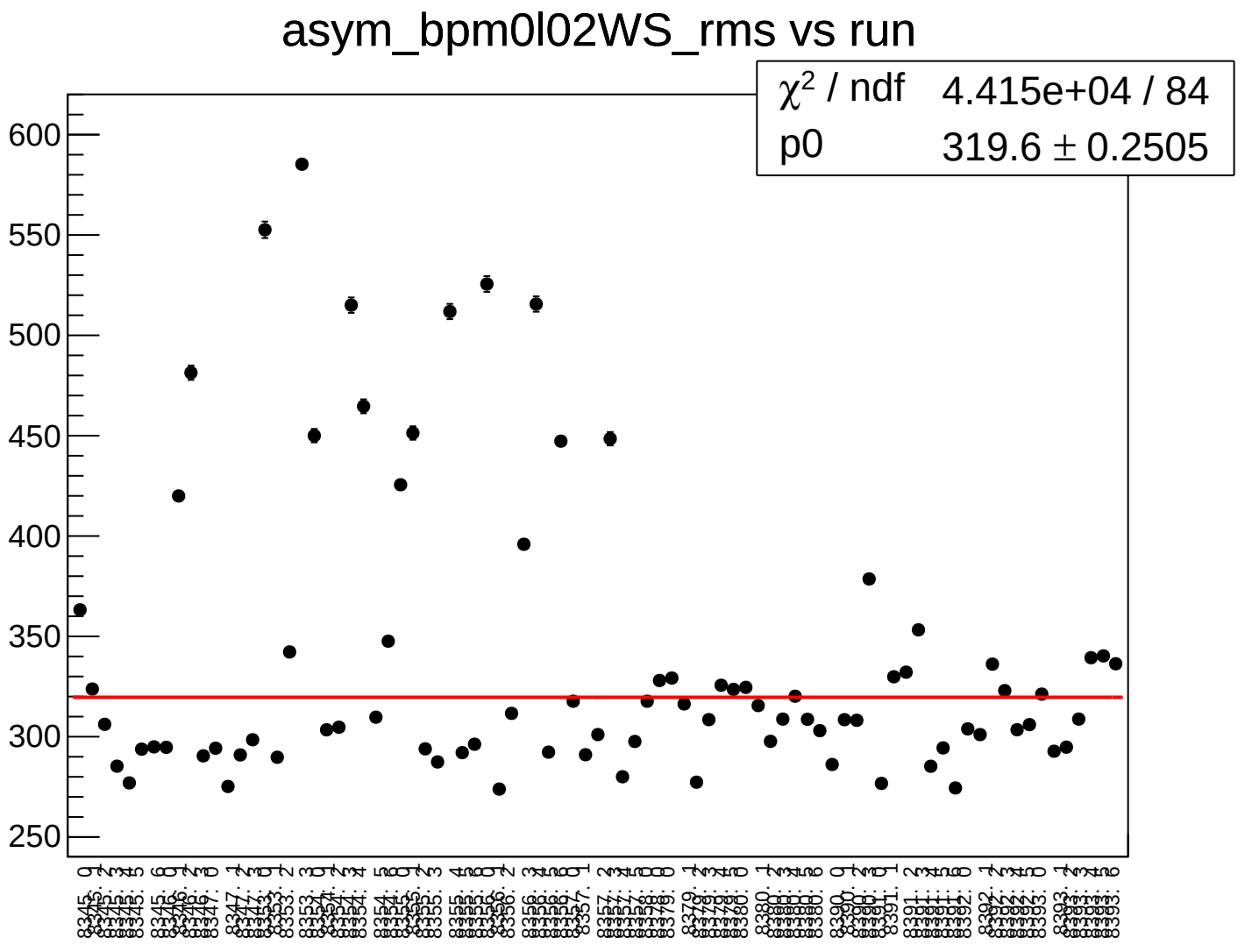

asym_bpm0l01WS_mean vs run
χ² / ndf 528.9 / 84
p0 −8580 ± 292.1
pull
Entries 85
Mean −991
Std Dev 1037

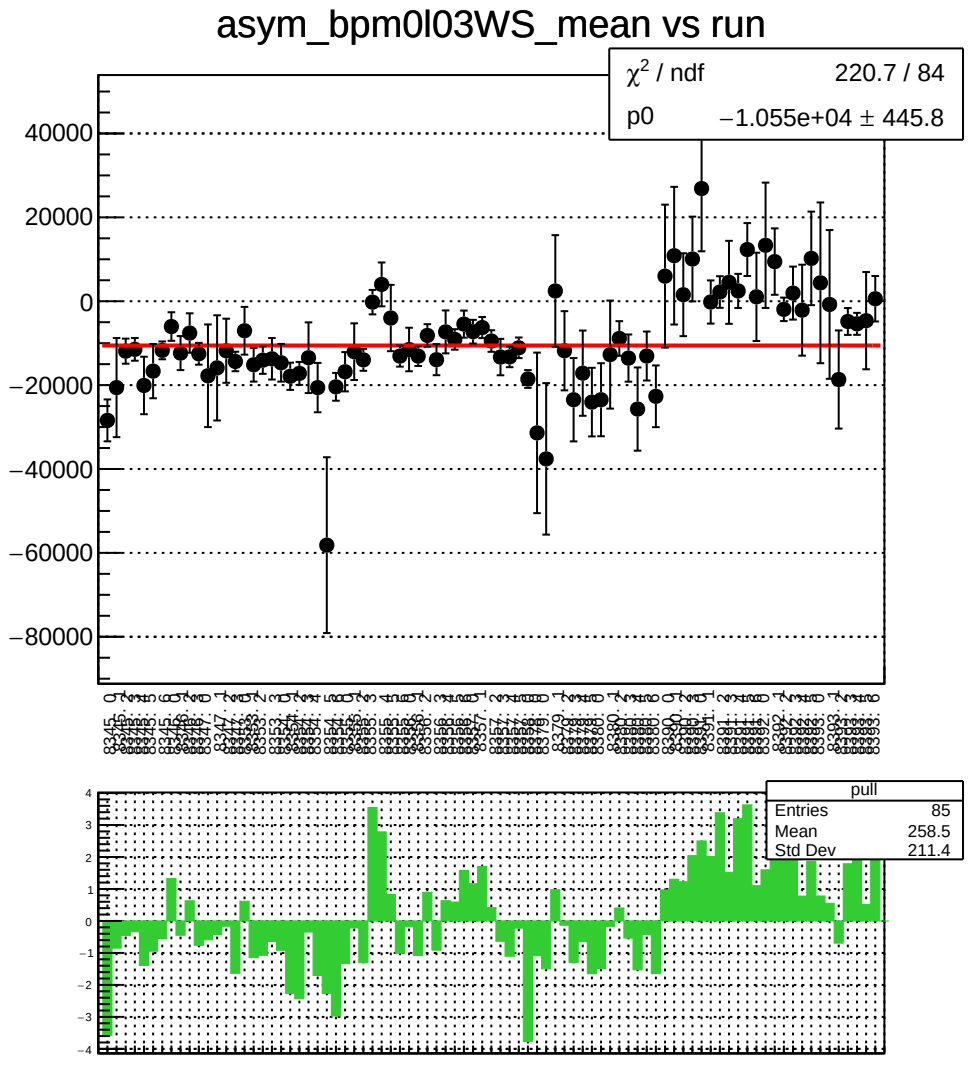

pull1D
Entries 85
Mean −0.02865
Std Dev 2.494

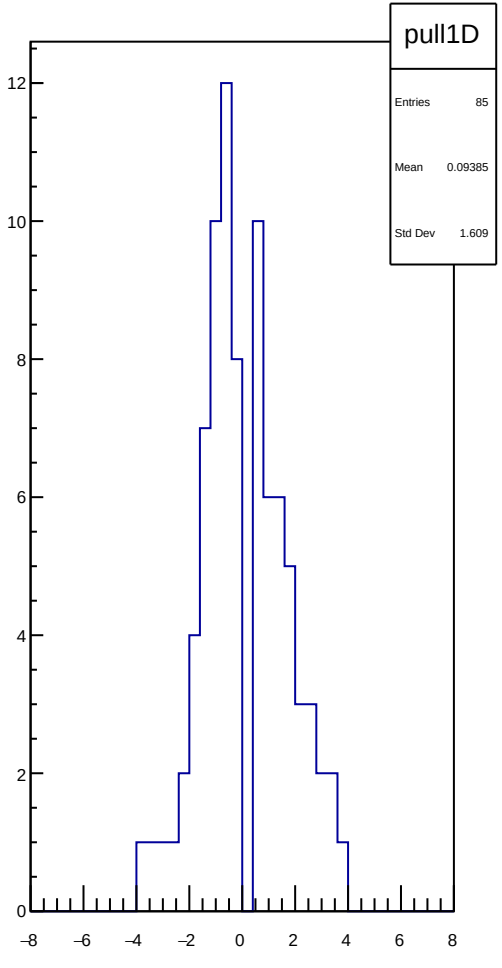

asym_bpm0l01WS_rms vs run
χ² / ndf 6.543e+04 / 84
p0 261.8 ± 0.2066
550
500
450
400
350
300
250
200

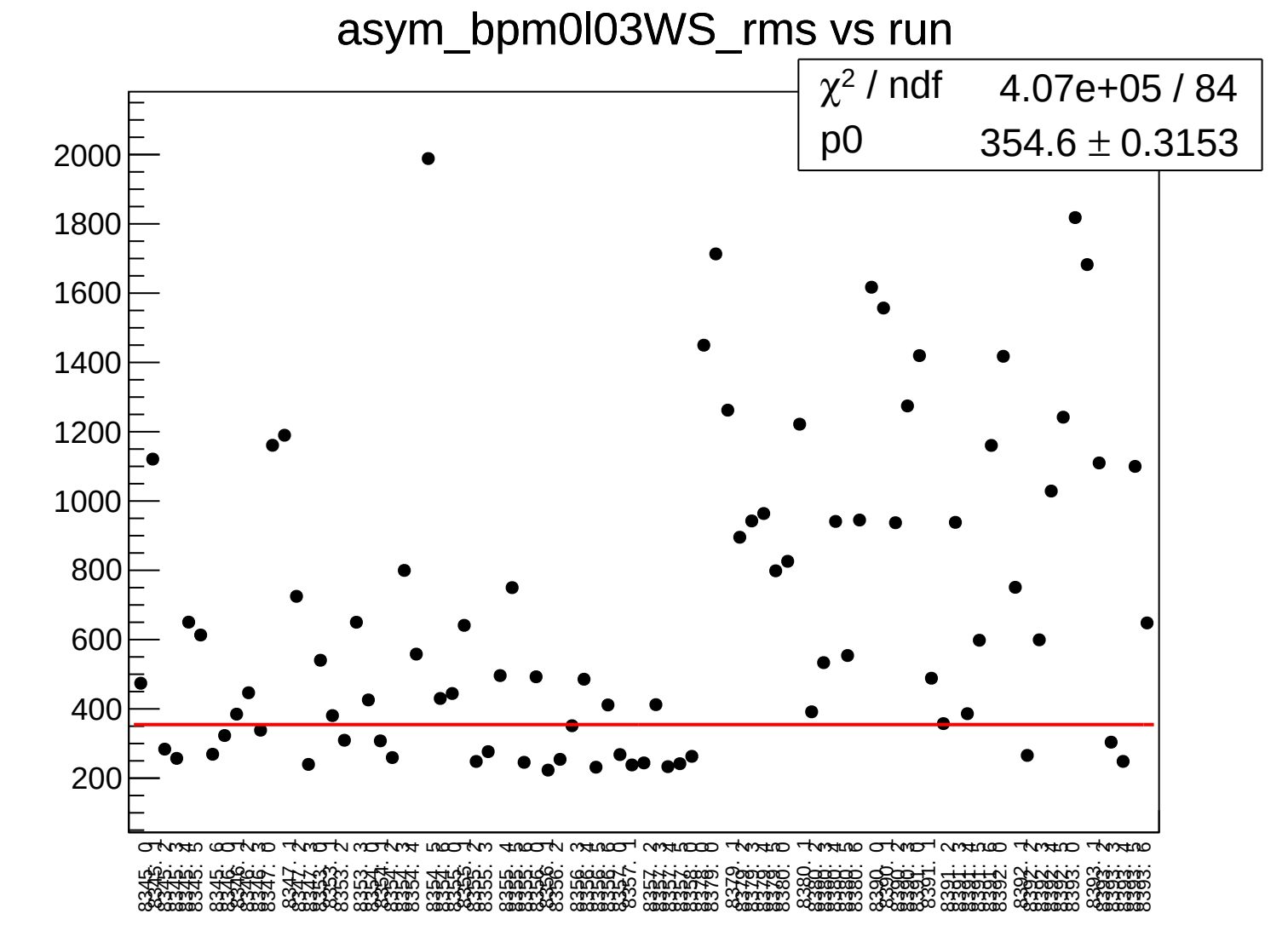

asym_bpm0l02WS_mean vs run
χ² / ndf 383.5 / 84
p0 −8715 ± 354.2
pull
Entries 85
Mean −3.034e+04
Std Dev 3.038e+04

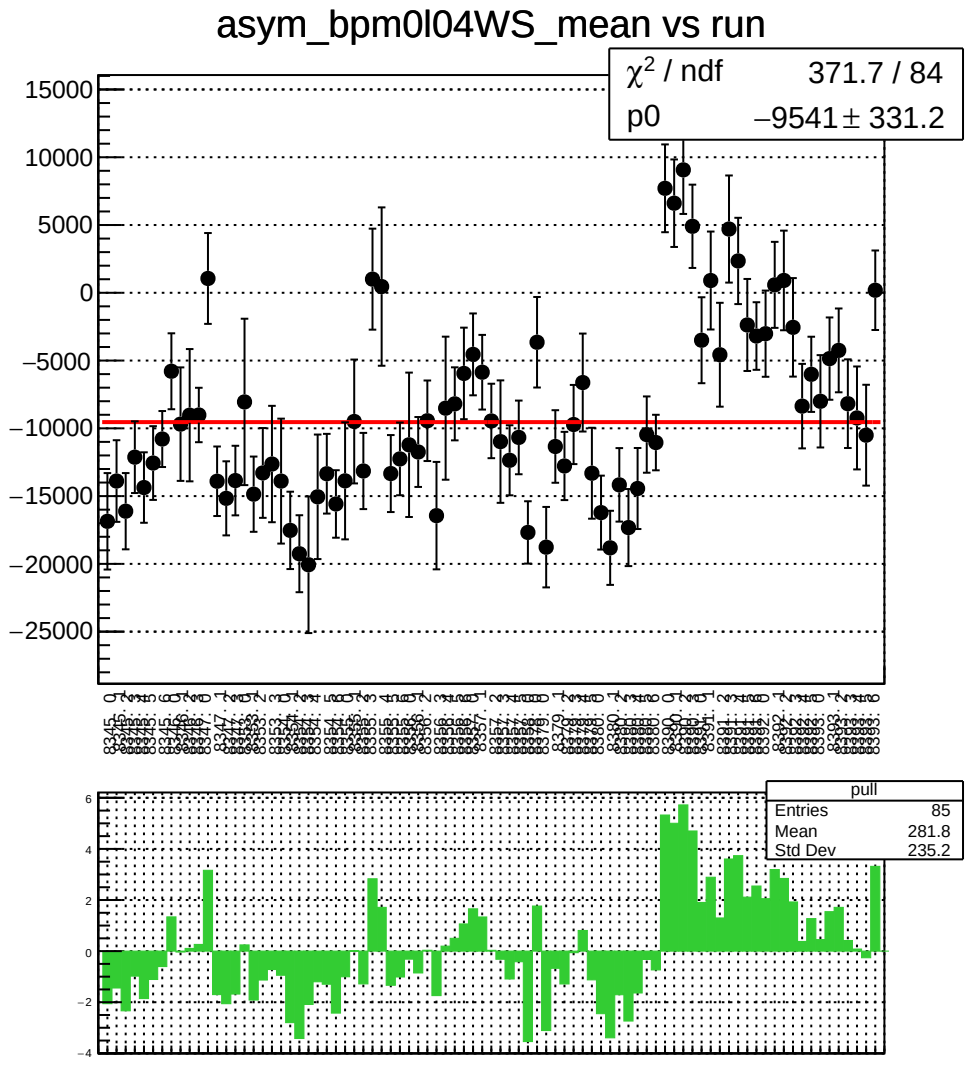

pull1D
Entries 85
Mean −0.0007923
Std Dev 2.124

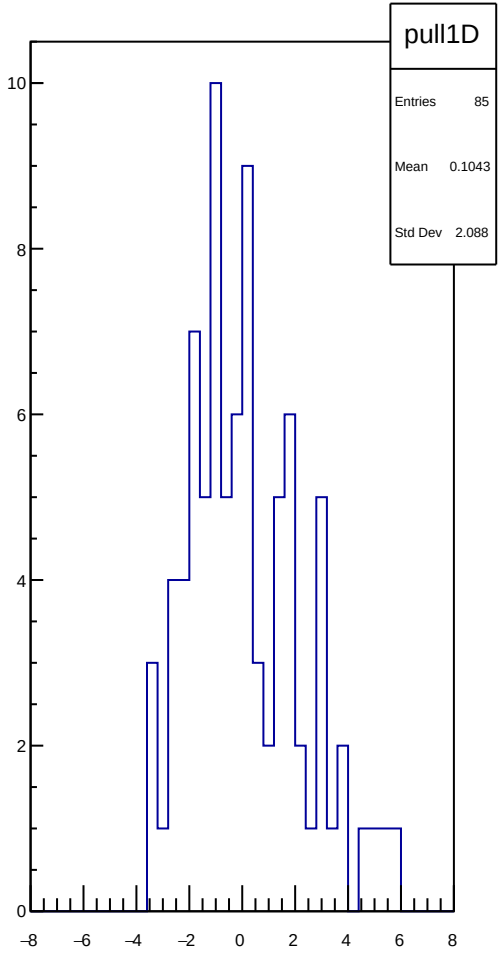

asym_bpm0l02WS_rms vs run
χ² / ndf 4.415e+04 / 84
p0 319.6 ± 0.2505
600
550
500
450
400
350
300
250

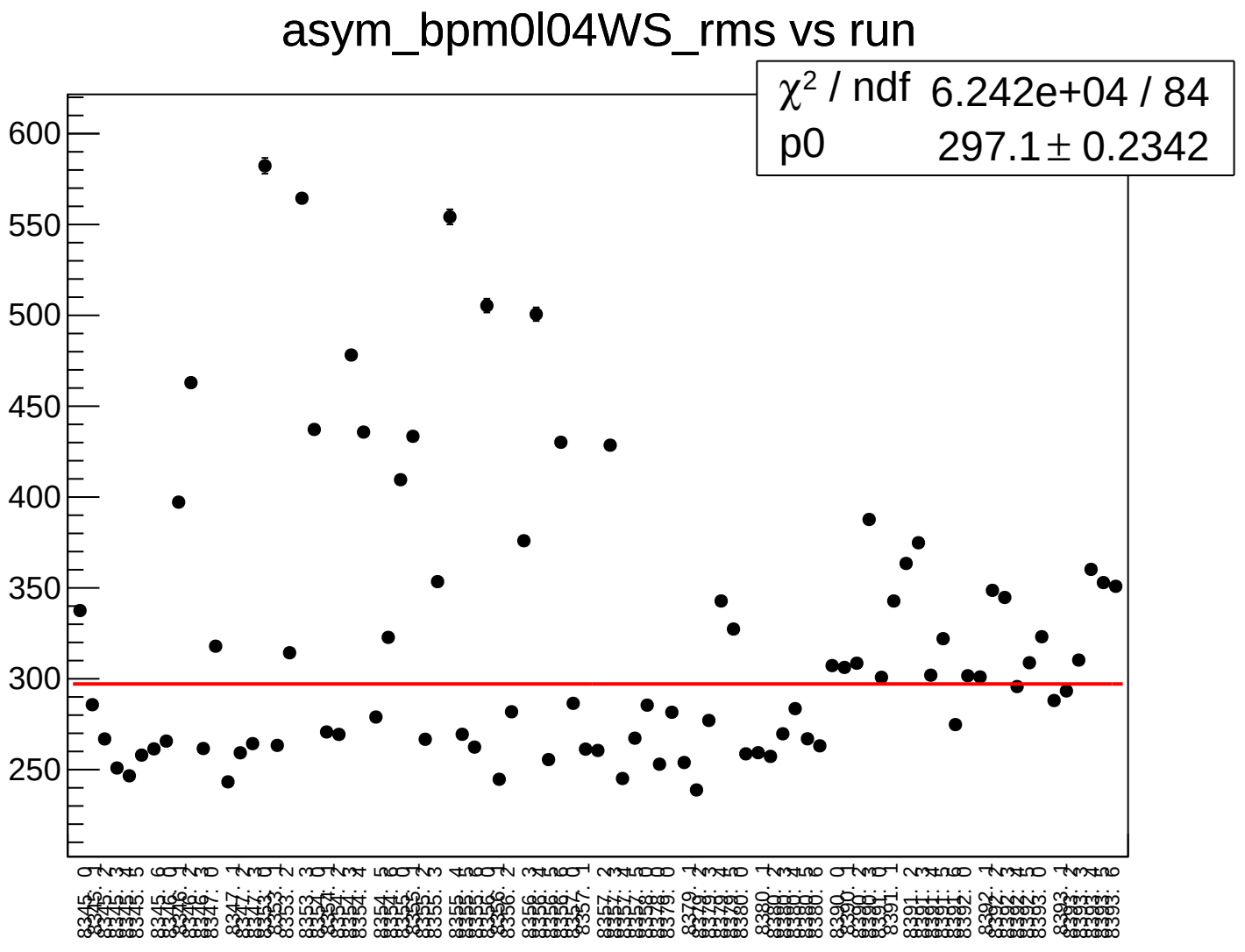

asym_bpm0l03WS_mean vs run
χ² / ndf 220.7 / 84
p0 −1.055e+04 ± 445.8
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 85
Mean 258.5
Std Dev 211.4
4
3
2
1
0
−1
−2
−3
−4

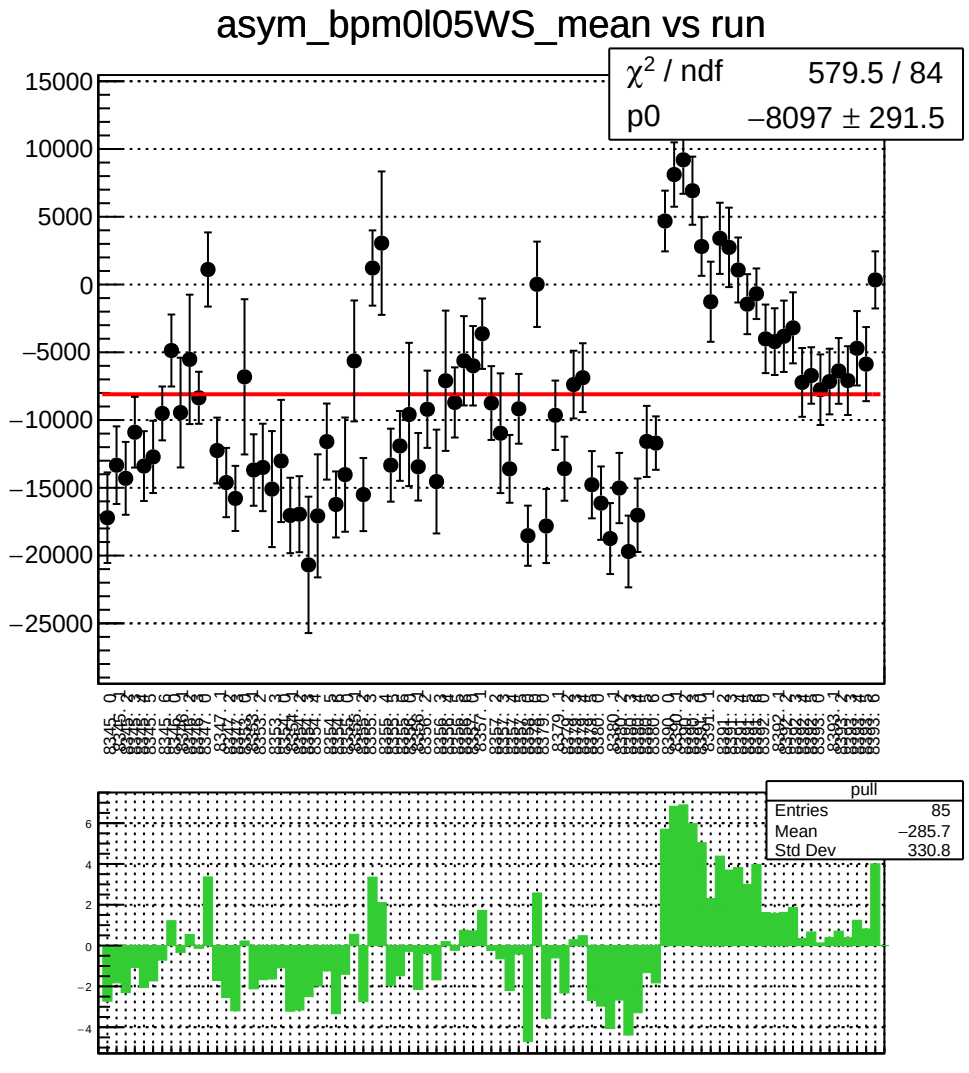

pull1D
Entries 85
Mean 0.09385
Std Dev 1.609
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

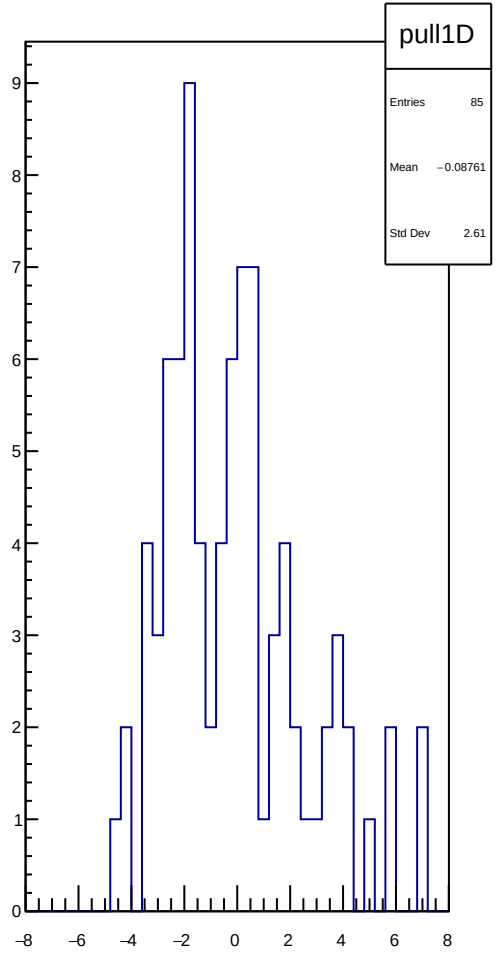

asym_bpm0l03WS_rms vs run
χ² / ndf 4.07e+05 / 84
p0 354.6 ± 0.3153
2000
1800
1600
1400
1200
1000
800
600
400
200

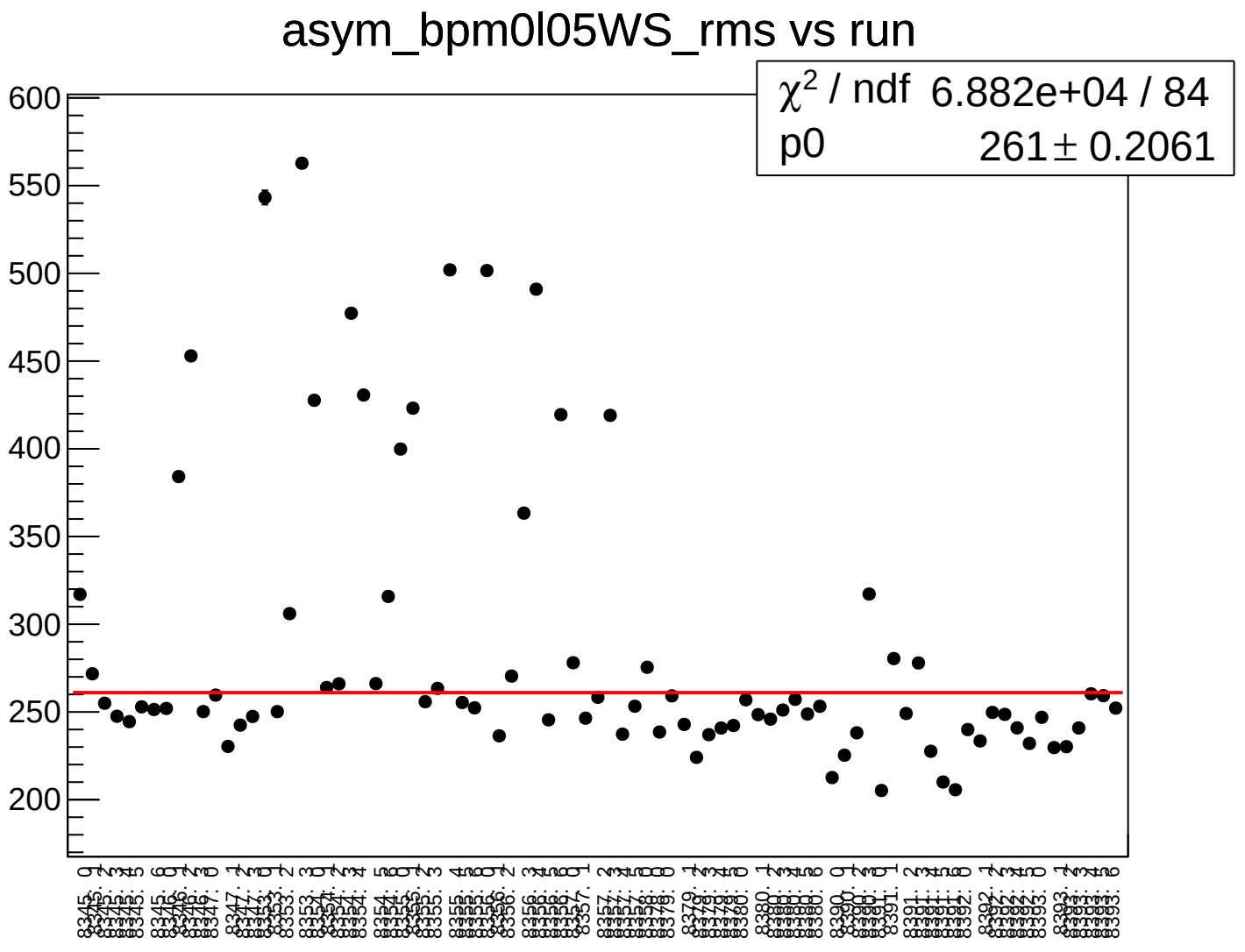

asym_bpm0l04WS_mean vs run
χ² / ndf 371.7 / 84
p0 −9541 ± 331.2
pull
Entries 85
Mean 281.8
Std Dev 235.2

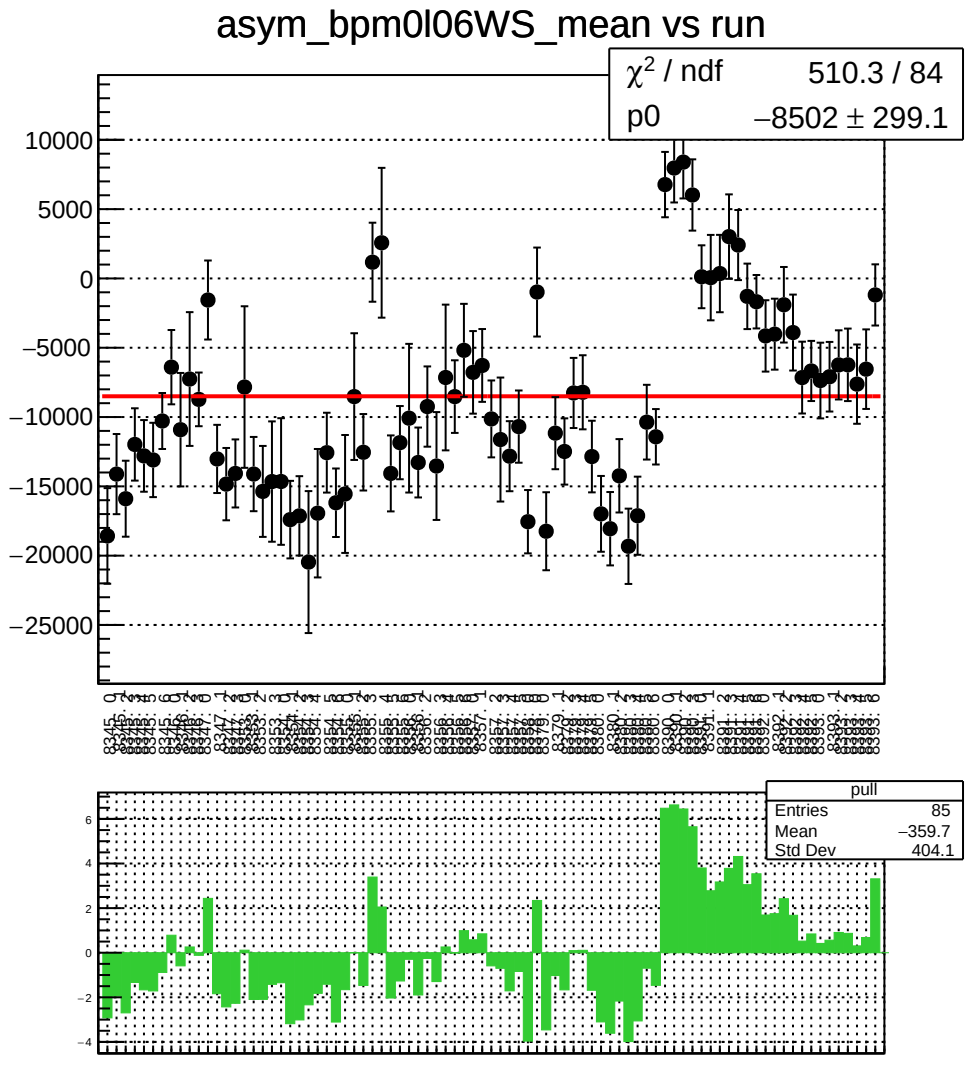

pull1D
Entries 85
Mean 0.1043
Std Dev 2.088

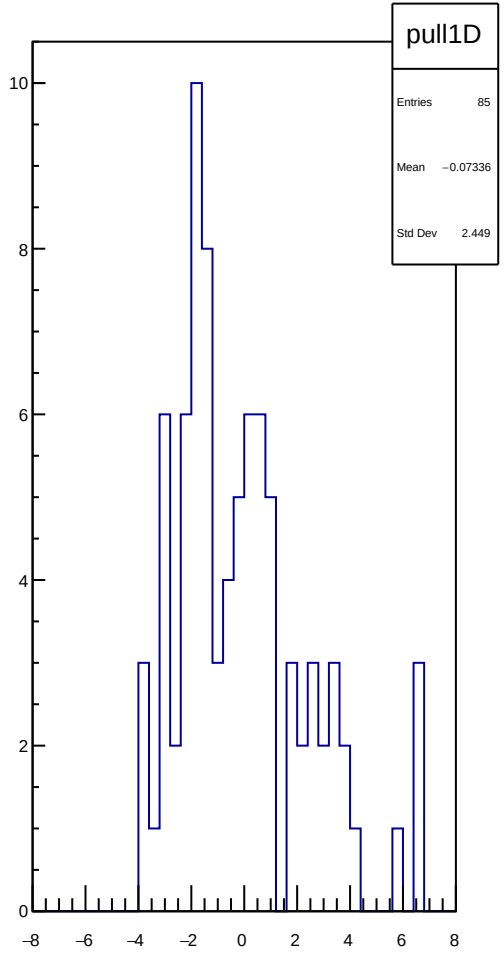

asym_bpm0l04WS_rms vs run
χ² / ndf 6.242e+04 / 84
p0 297.1 ± 0.2342
600
550
500
450
400
350
300
250

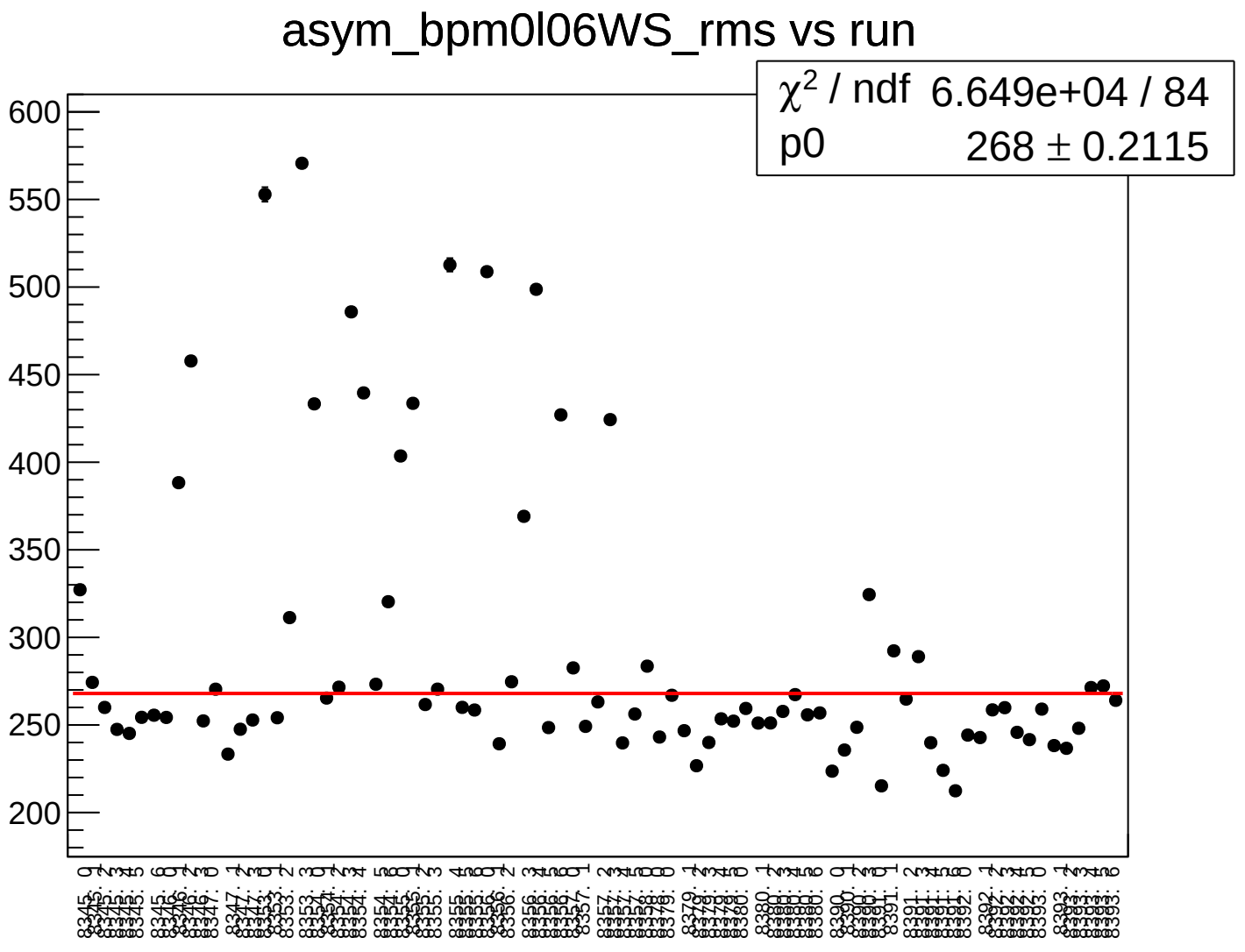

asym_bpm0l05WS_mean vs run
χ² / ndf 579.5 / 84
p0 −8097 ± 291.5
pull
Entries 85
Mean −285.7
Std Dev 330.8

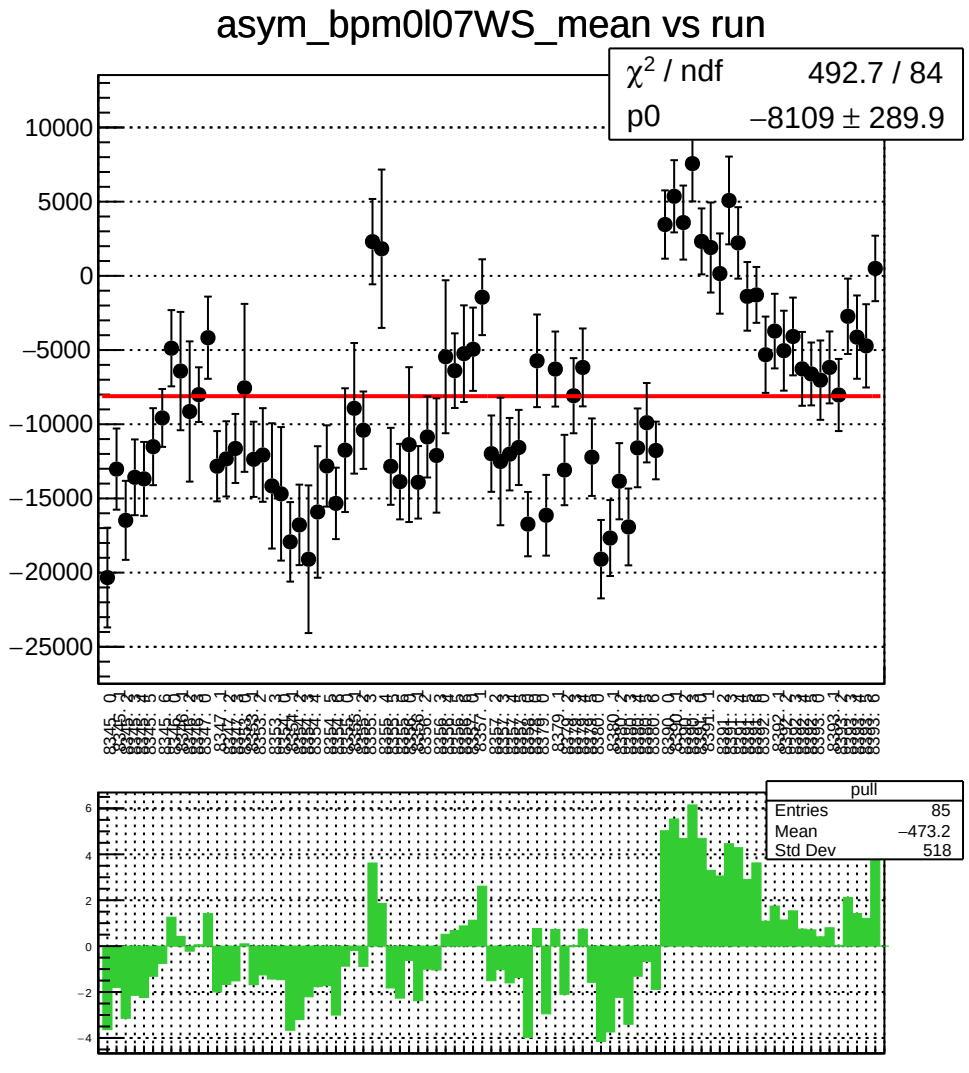

pull1D
Entries 85
Mean −0.08761
Std Dev 2.61

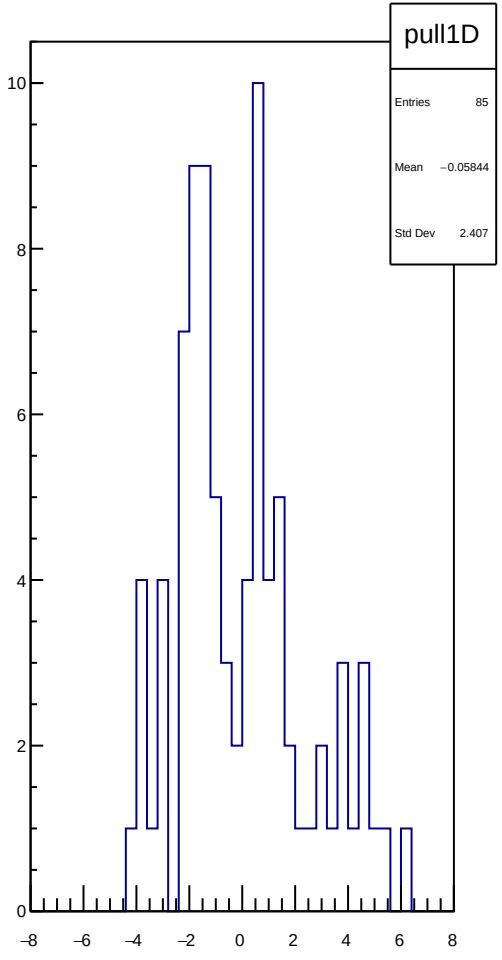

asym_bpm0l05WS_rms vs run
χ^2 / ndf 6.882e+04 / 84
p0 261 ± 0.2061
600
550
500
450
400
350
300
250
200

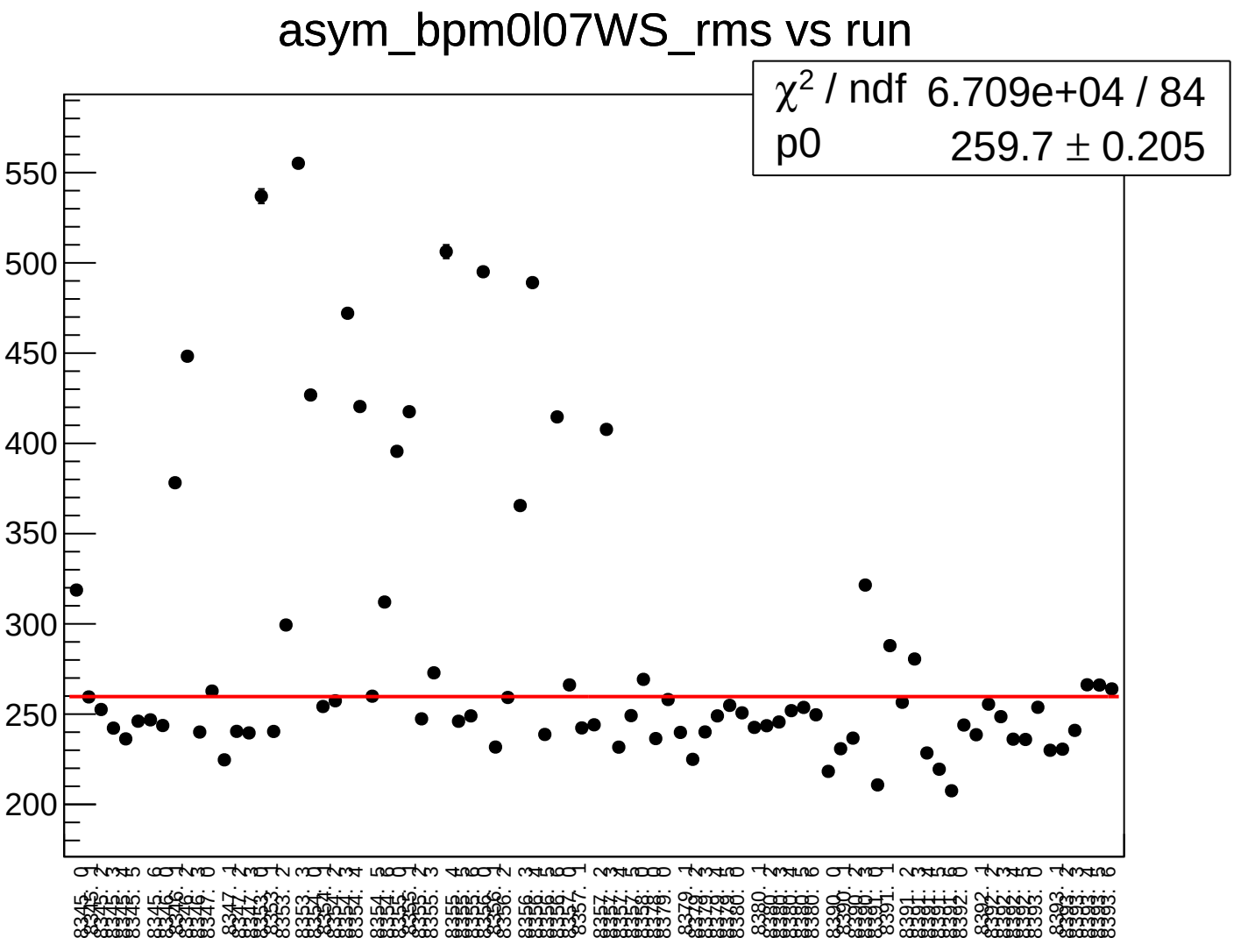

asym_bpm0l06WS_mean vs run
χ² / ndf 510.3 / 84
p0 −8502 ± 299.1
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean −359.7
Std Dev 404.1
6
4
2
0
−2
−4

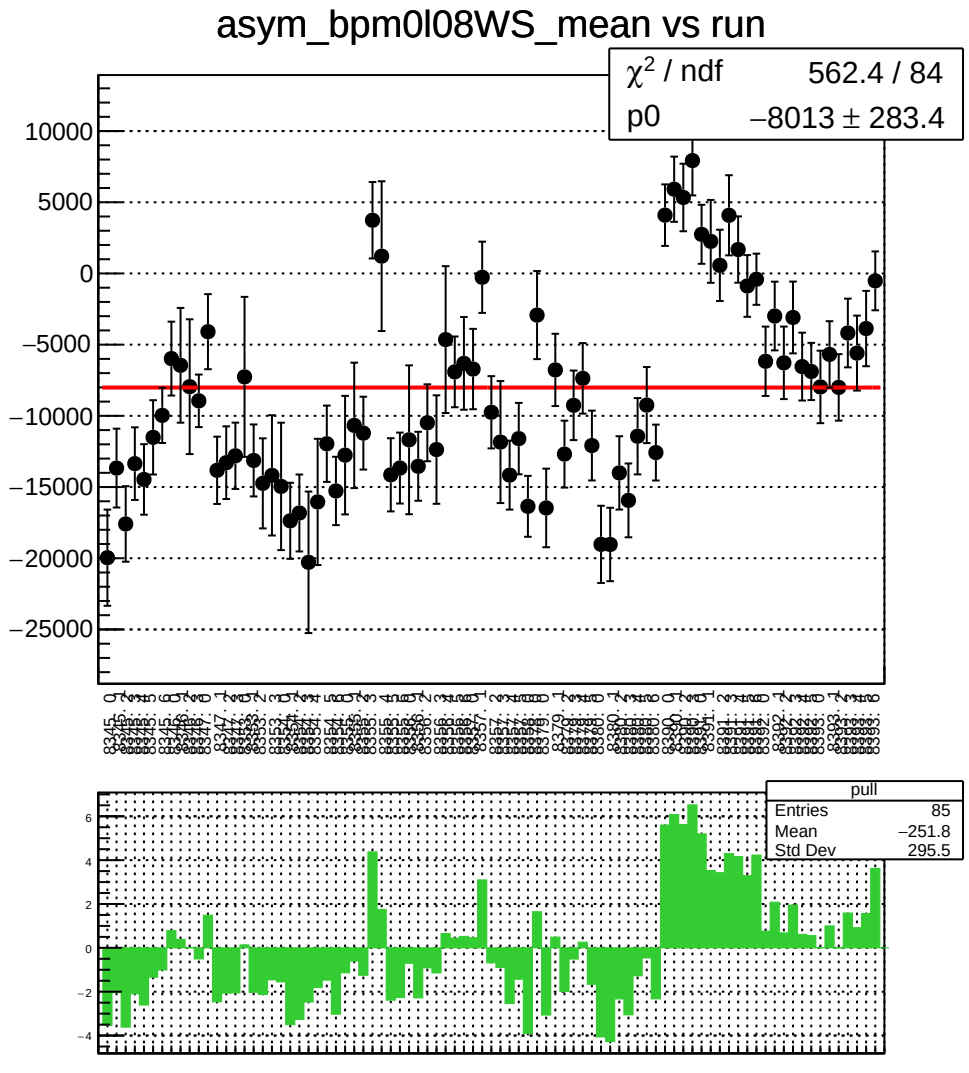

pull1D
Entries 85
Mean −0.07336
Std Dev 2.449
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

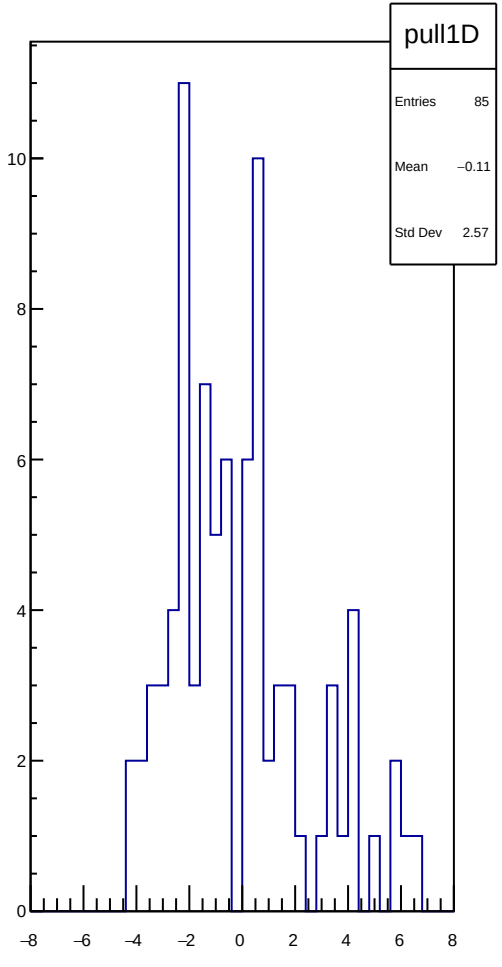

asym_bpm0l06WS_rms vs run
χ² / ndf 6.649e+04 / 84
p0 268 ± 0.2115
600
550
500
450
400
350
300
250
200

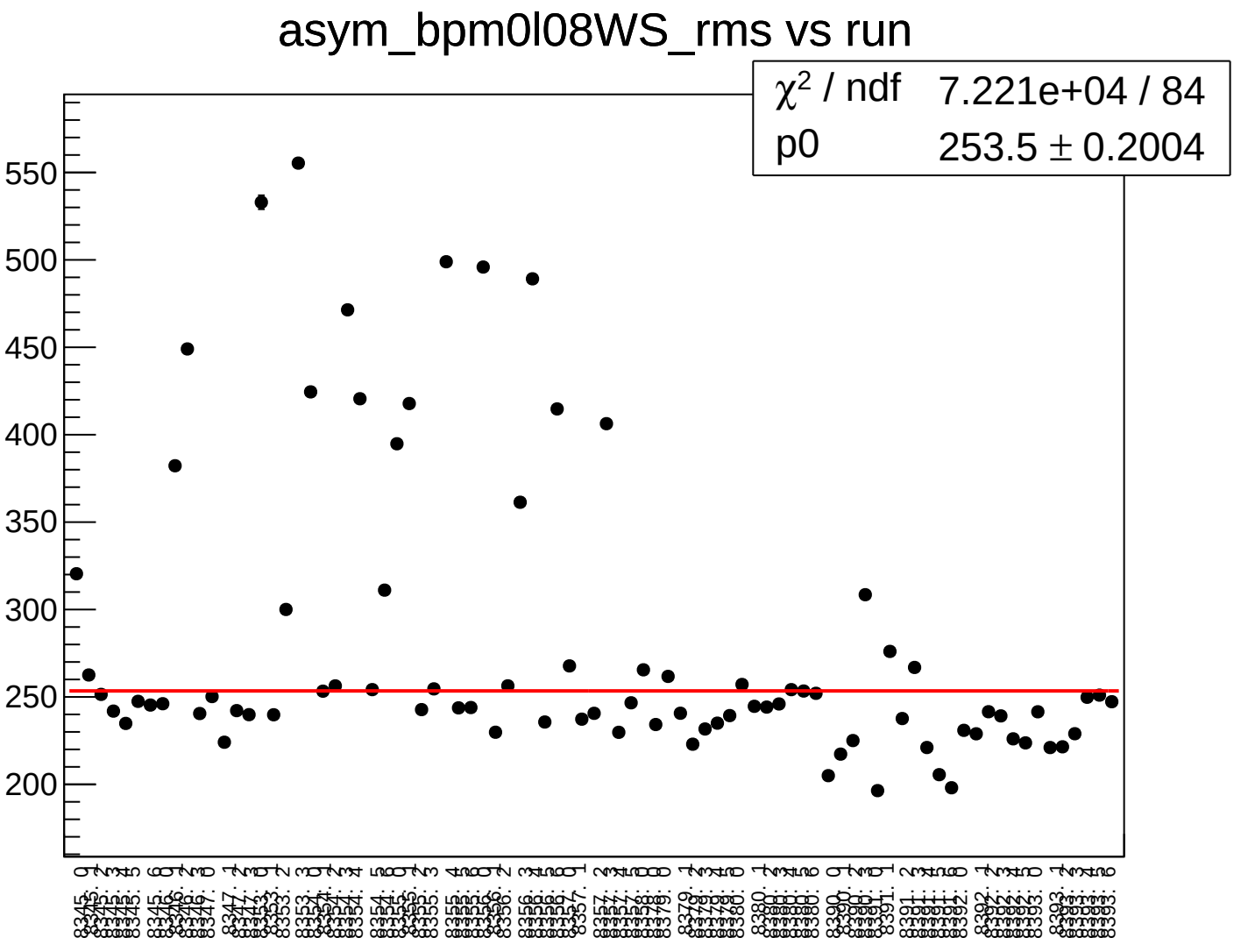

asym_bpm0l07WS_mean vs run
χ² / ndf 492.7 / 84
p0 −8109 ± 289.9
pull
Entries 85
Mean −473.2
Std Dev 518

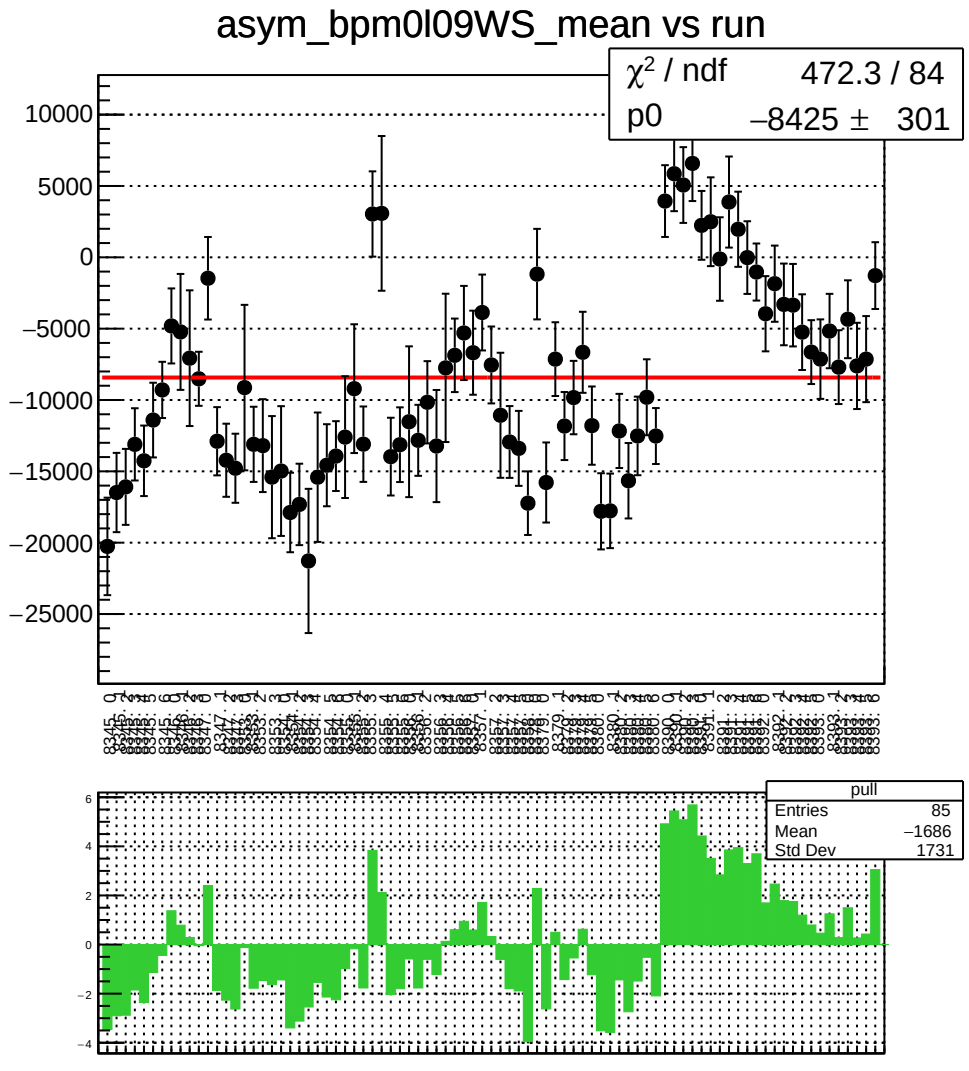

pull1D
Entries 85
Mean −0.05844
Std Dev 2.407

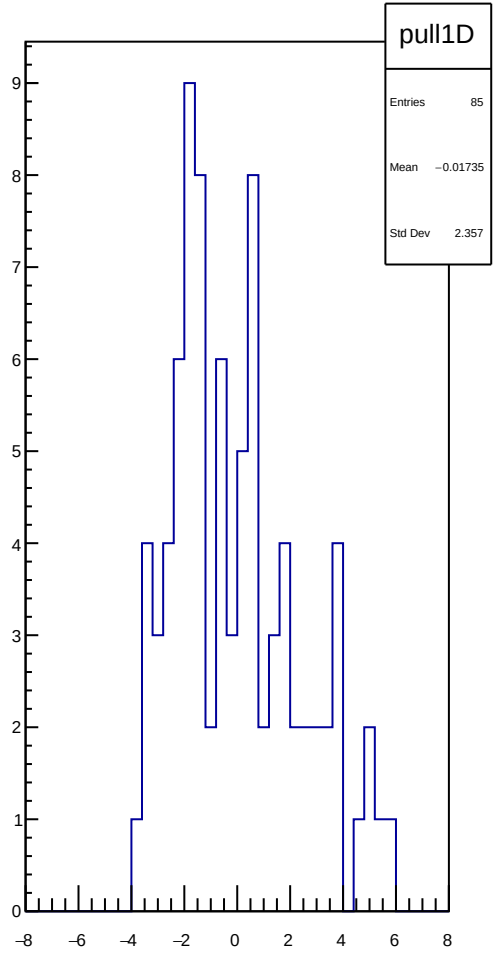

asym_bpm0l07WS_rms vs run
χ^2 / ndf 6.709e+04 / 84
p0 259.7 ± 0.205
550
500
450
400
350
300
250
200

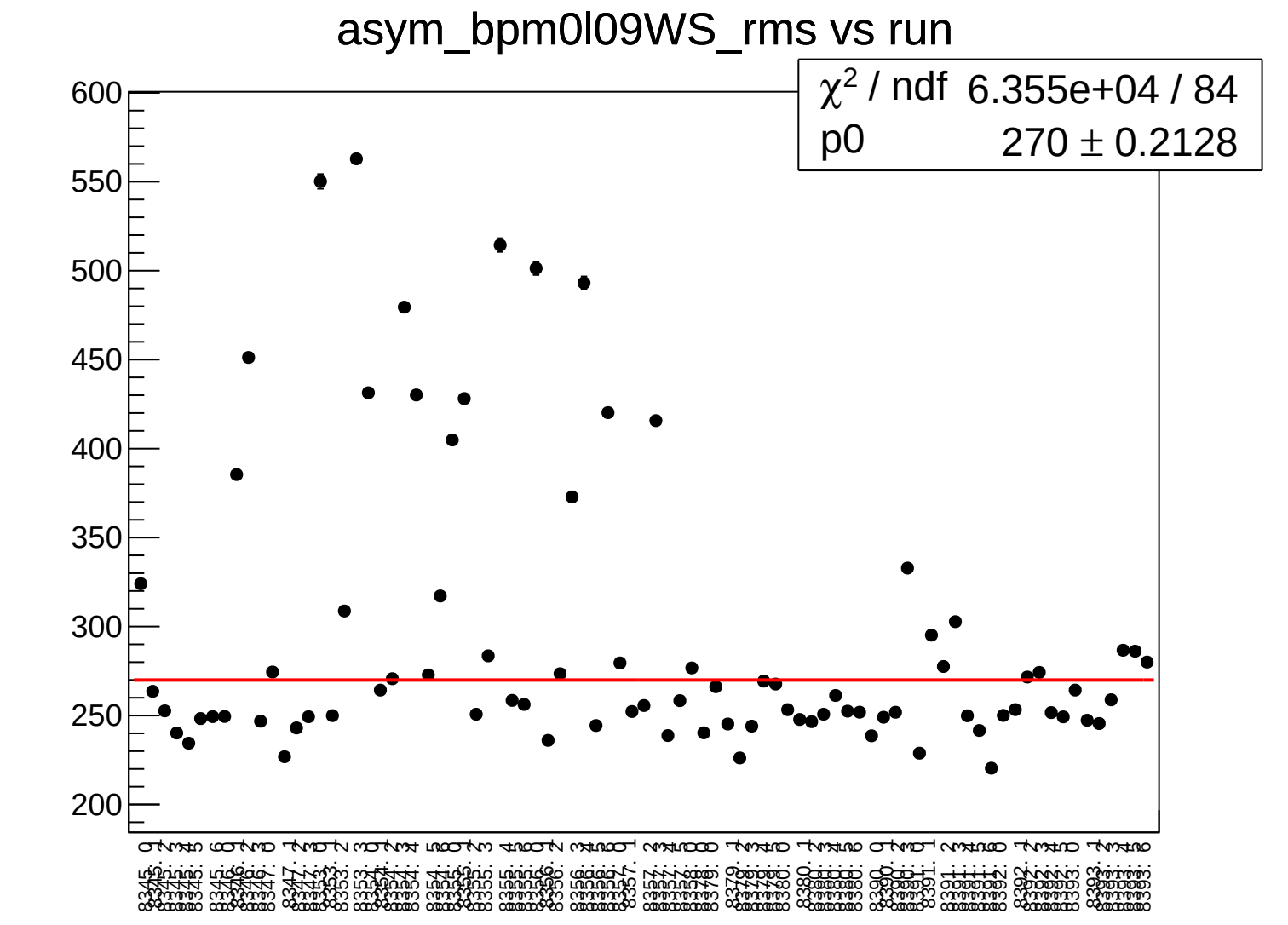

asym_bpm0l08WS_mean vs run
χ² / ndf 562.4 / 84
p0 −8013 ± 283.4
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean −251.8
Std Dev 295.5
6
4
2
0
−2
−4

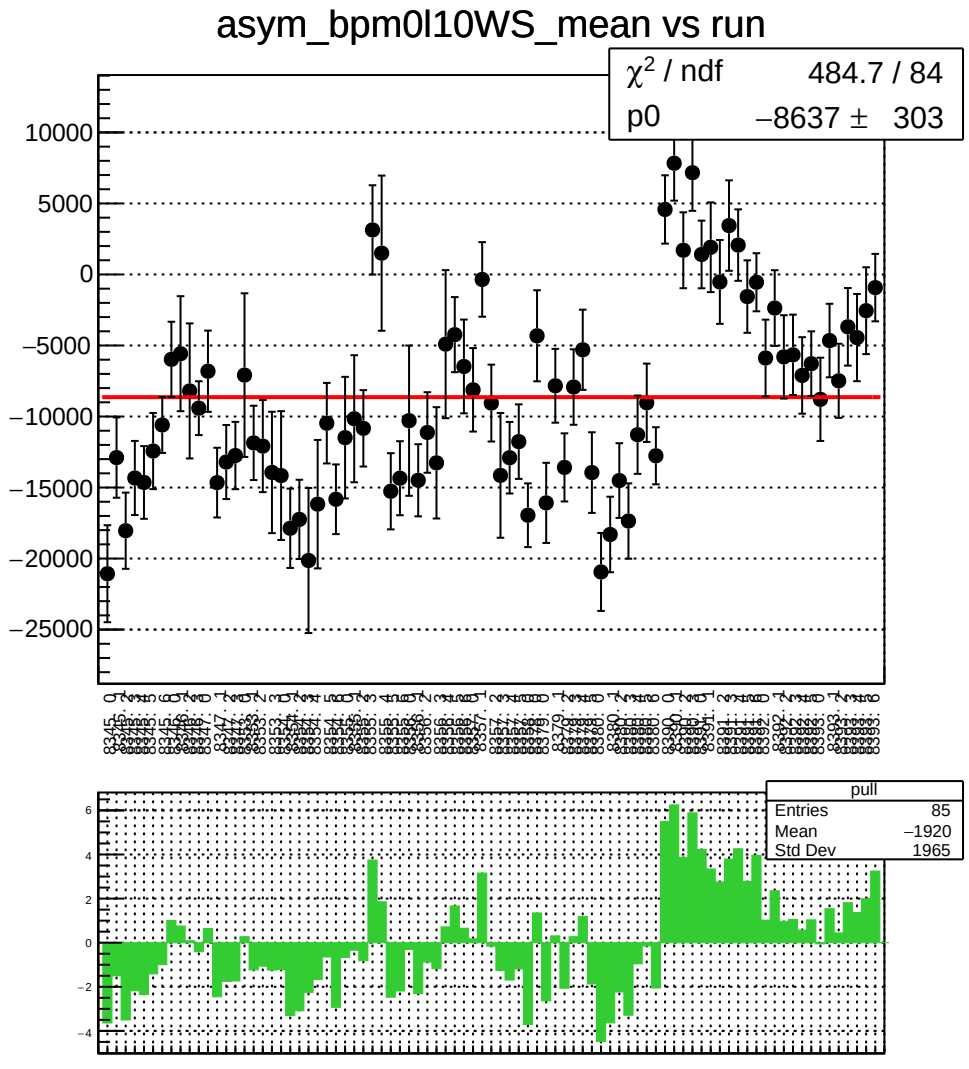

pull1D
Entries 85
Mean −0.11
Std Dev 2.57
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

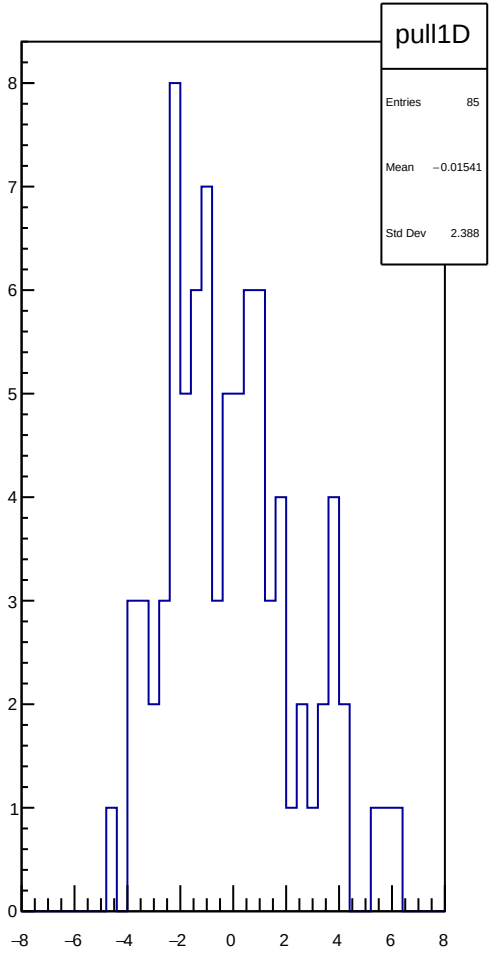

asym_bpm0l08WS_rms vs run
χ² / ndf 7.221e+04 / 84
p0 253.5 ± 0.2004
550
500
450
400
350
300
250
200

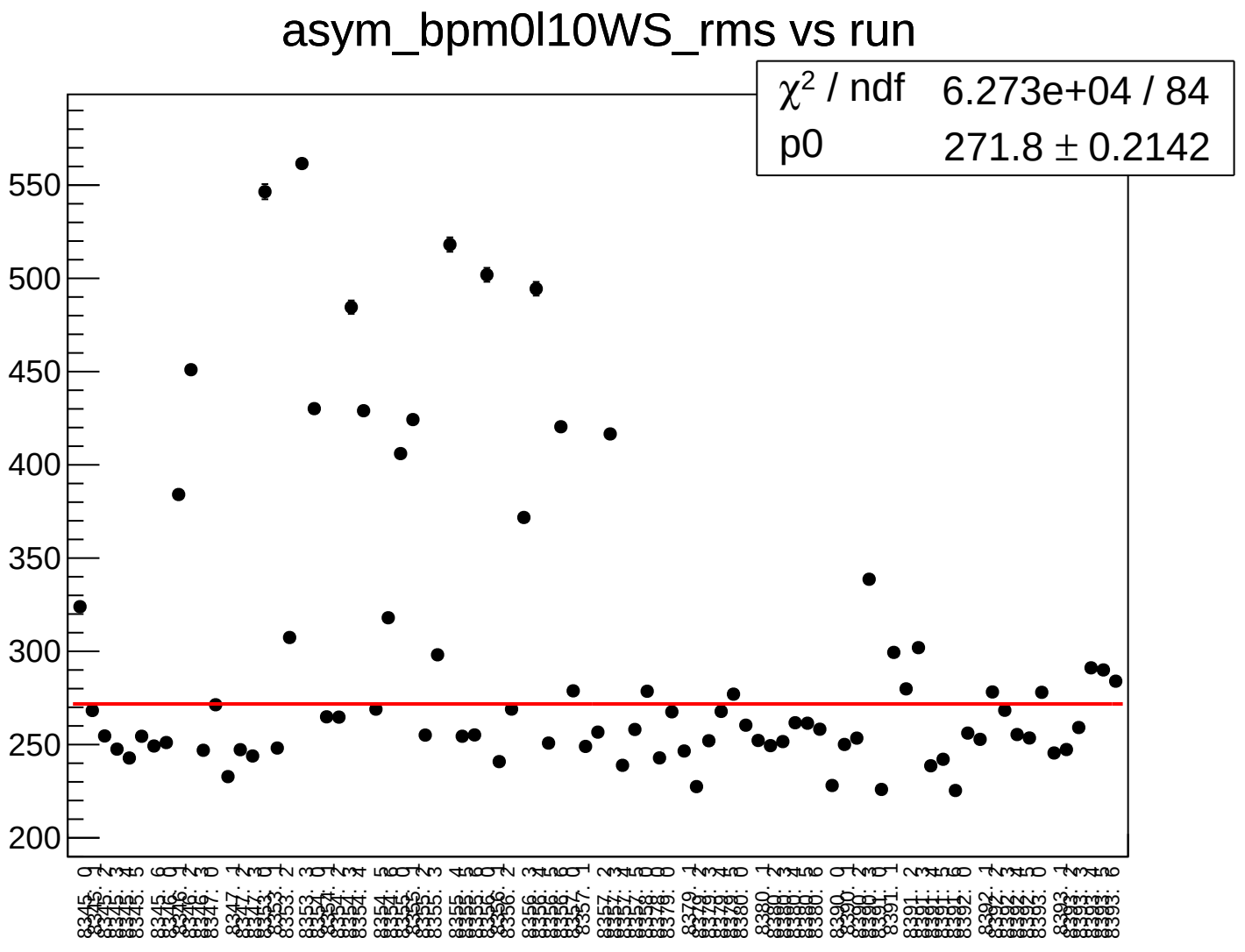

asym_bpm0l09WS_mean vs run
χ² / ndf 472.3 / 84
p0 −8425 ± 301
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean −1686
Std Dev 1731
6
4
2
0
−2
−4

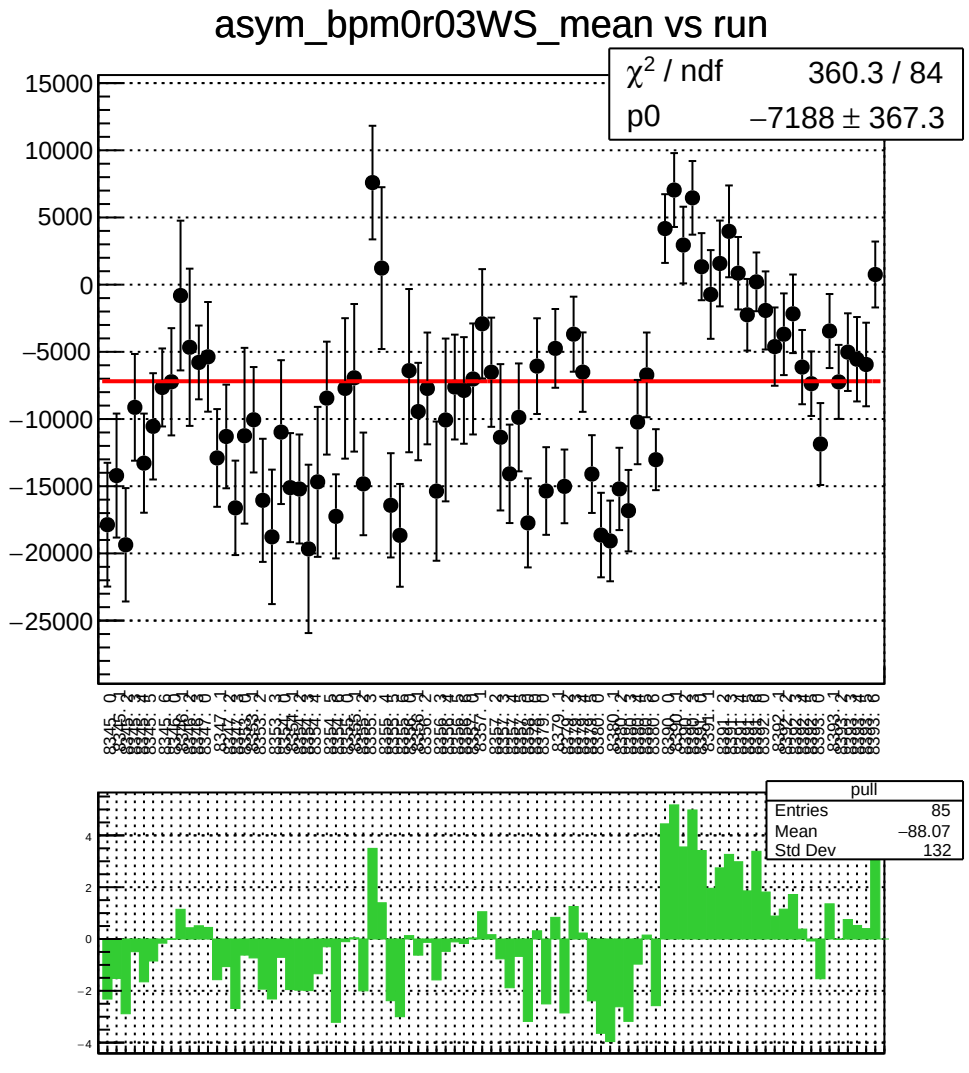

pull1D
Entries 85
Mean −0.01735
Std Dev 2.357
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

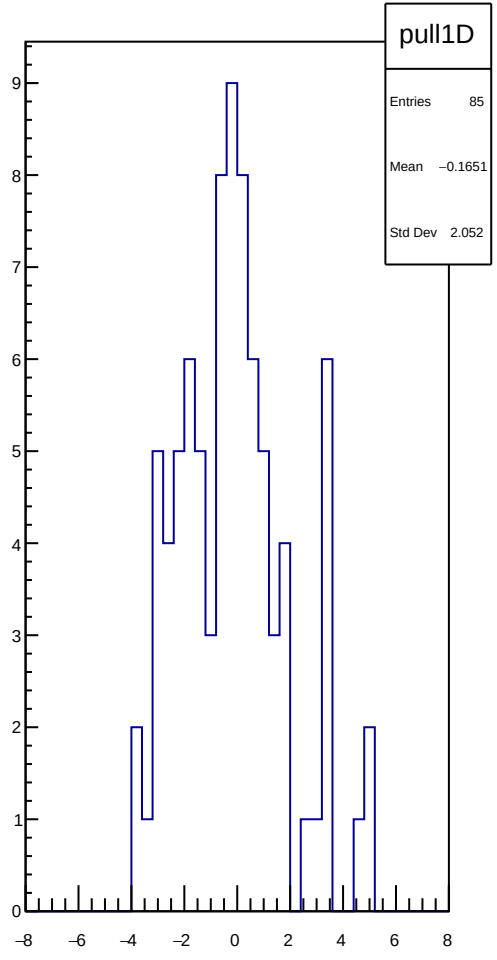

asym_bpm0l09WS_rms vs run
χ^2 / ndf 6.355e+04 / 84
p0 270 ± 0.2128
600
550
500
450
400
350
300
250
200

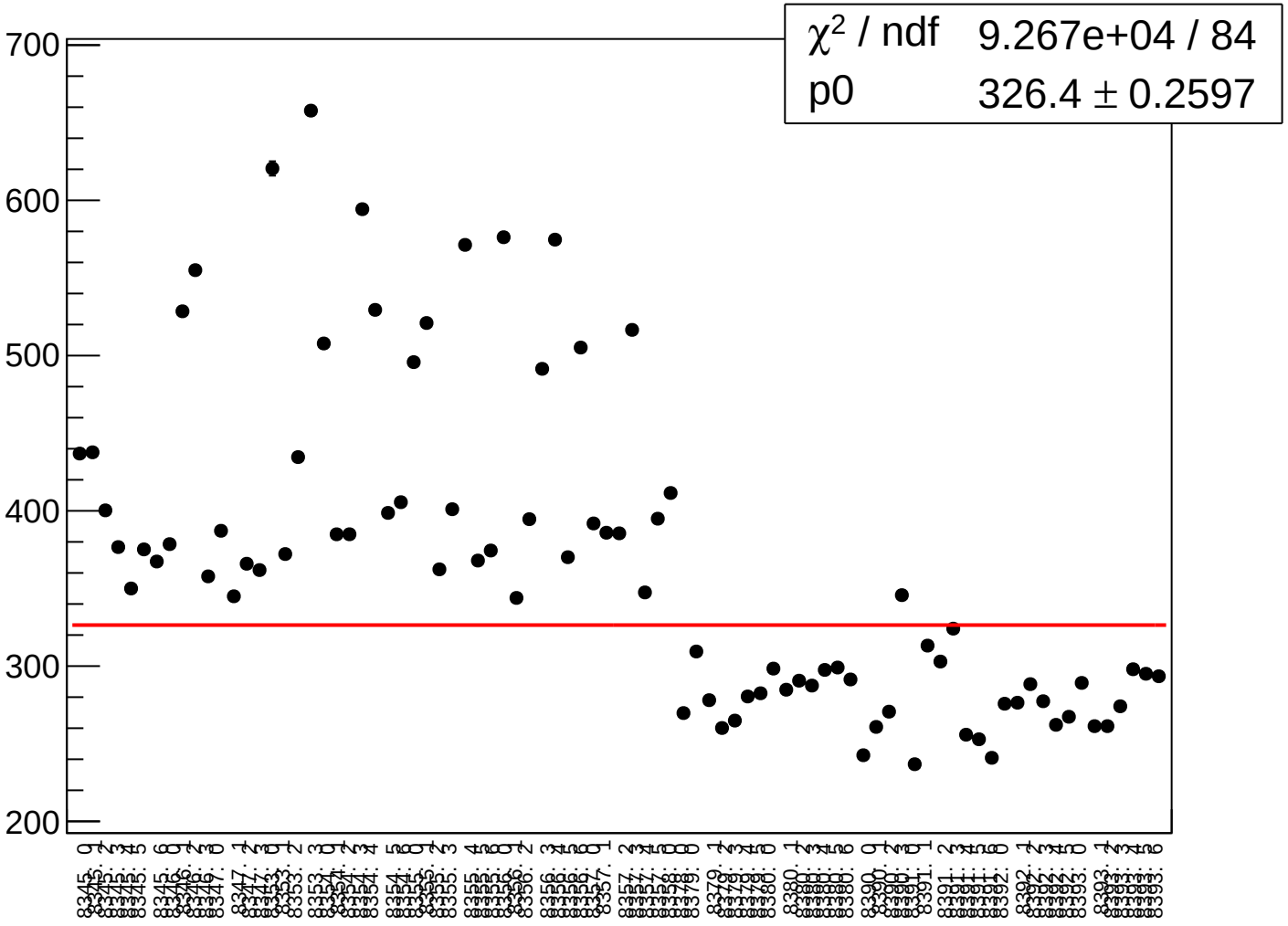

asym_bpm0l10WS_mean vs run
χ² / ndf 484.7 / 84
p0 −8637 ± 303
pull
Entries 85
Mean −1920
Std Dev 1965

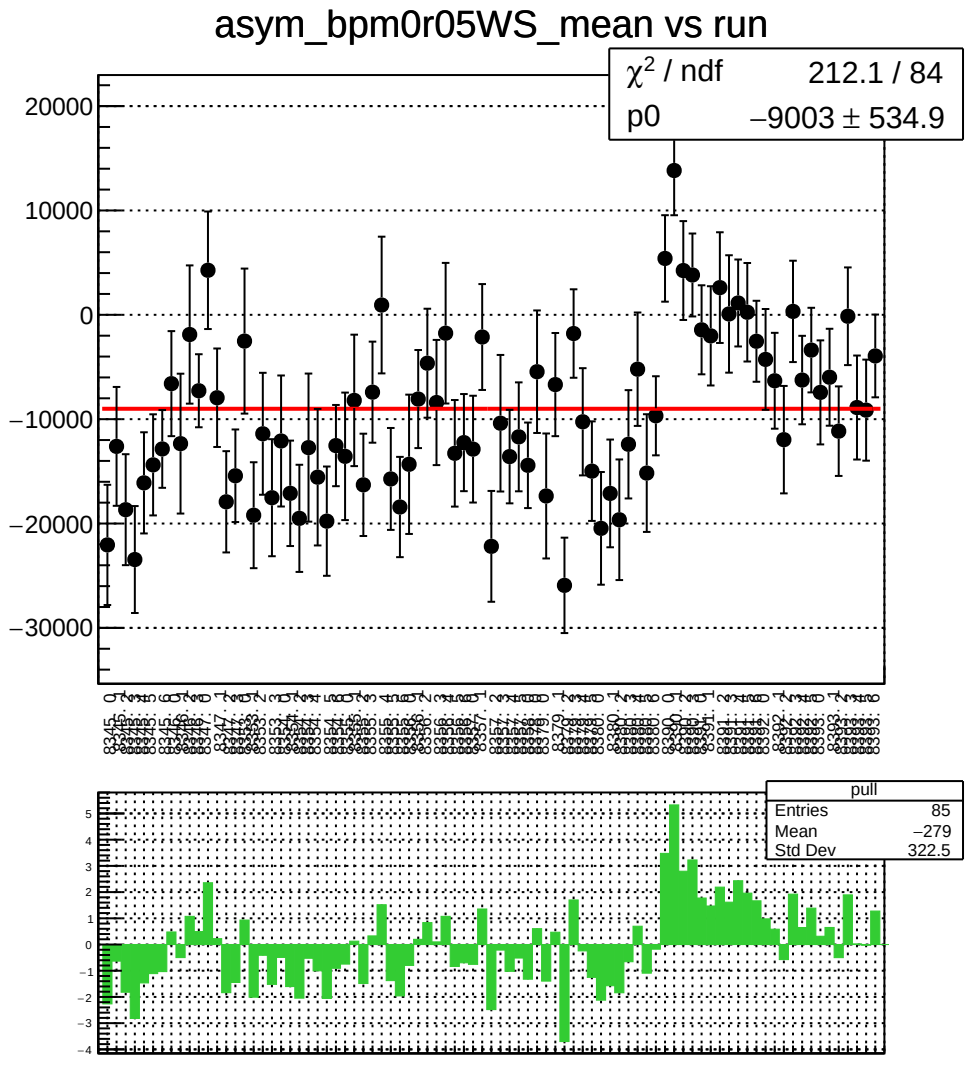

pull1D
Entries 85
Mean −0.01541
Std Dev 2.388

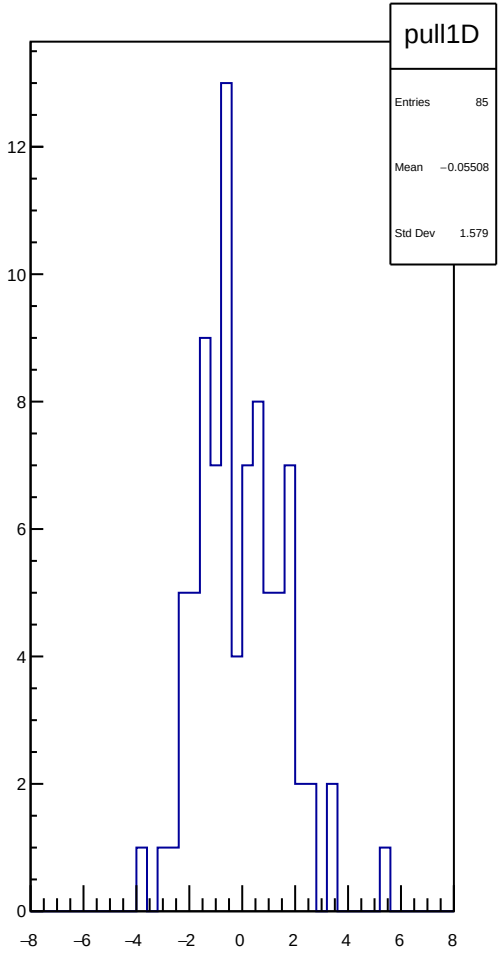

asym_bpm0l10WS_rms vs run
χ² / ndf 6.273e+04 / 84
p0 271.8 ± 0.2142
550
500
450
400
350
300
250
200

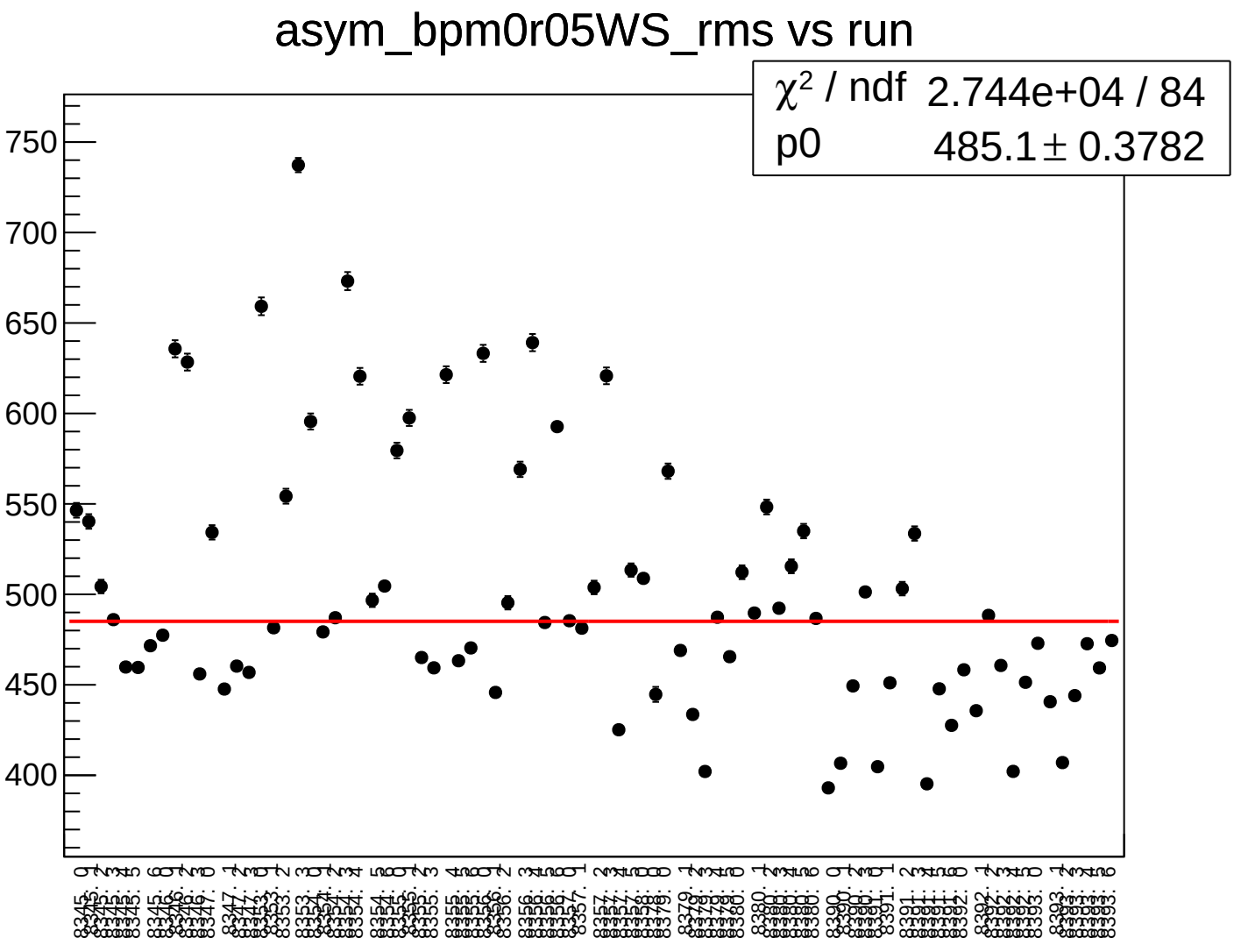

asym_bpm0r03WS_mean vs run
χ² / ndf 360.3 / 84
p0 −7188 ± 367.3
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean −88.07
Std Dev 132
4
2
0
−2
−4

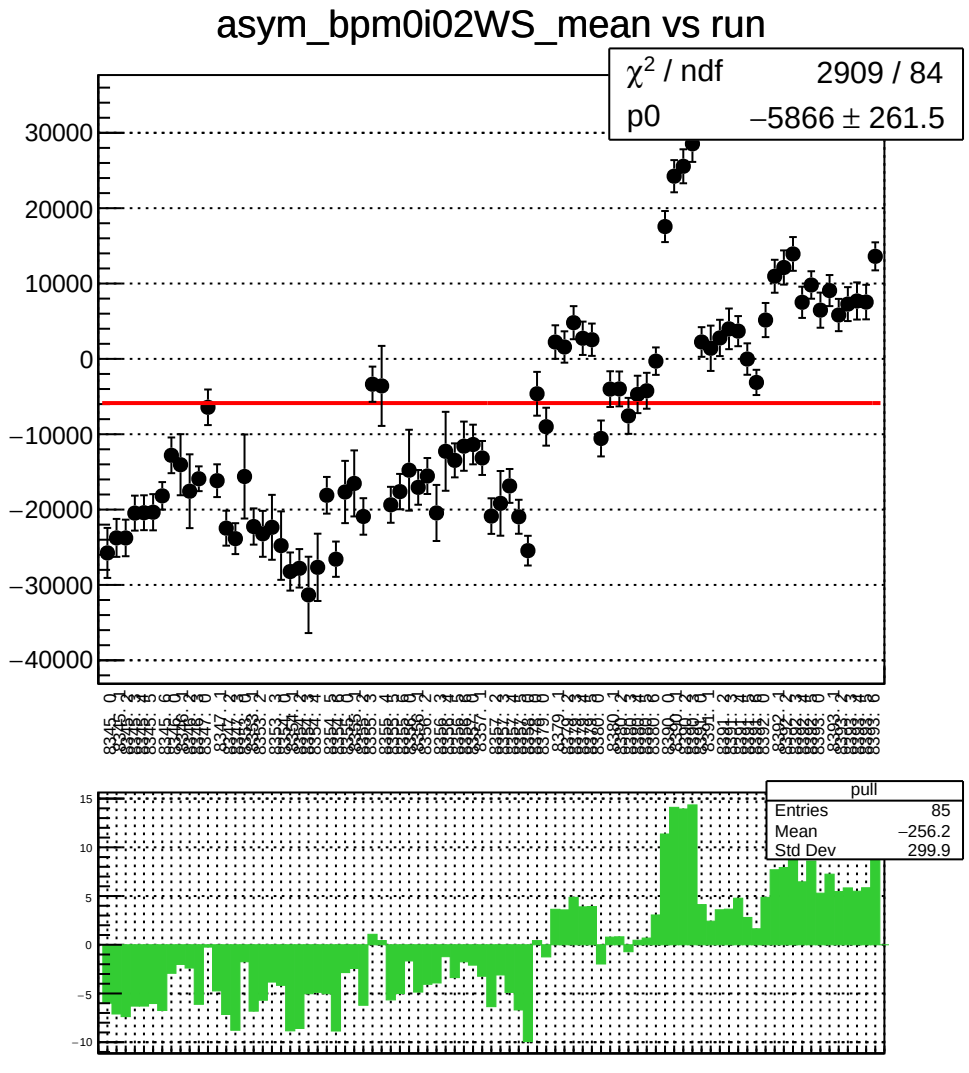

pull1D
Entries 85
Mean −0.1651
Std Dev 2.052
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

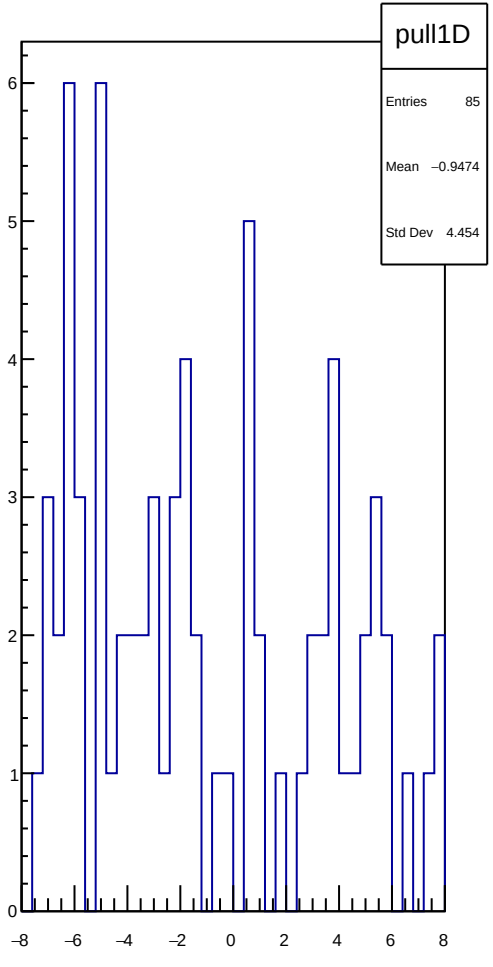

asym_bpm0r03WS_rms vs run
χ² / ndf 9.267e+04 / 84
p0 326.4 ± 0.2597
700
600
500
400
300
200

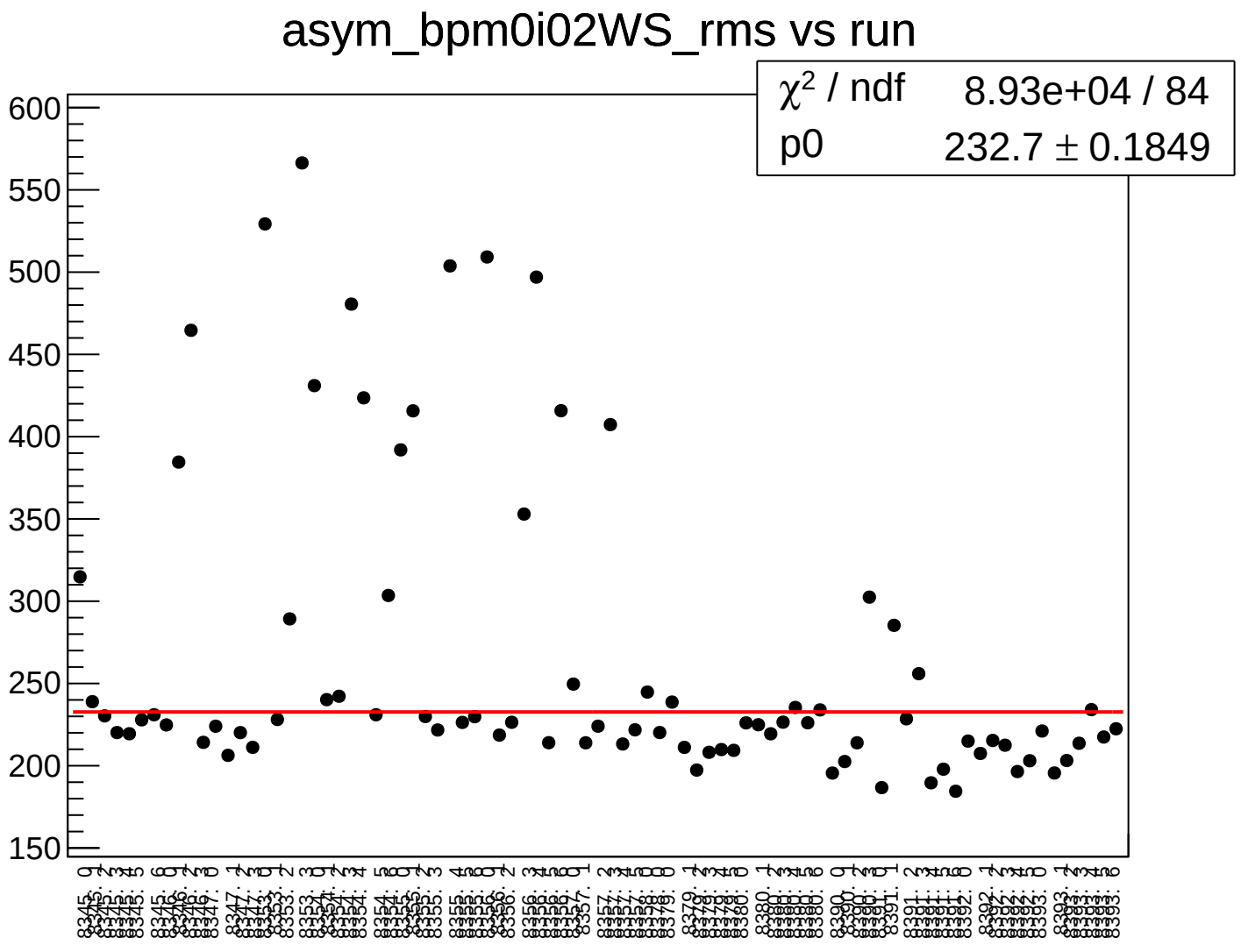

asym_bpm0r05WS_mean vs run
χ² / ndf 212.1 / 84
p0 −9003 ± 534.9
pull
Entries 85
Mean −279
Std Dev 322.5

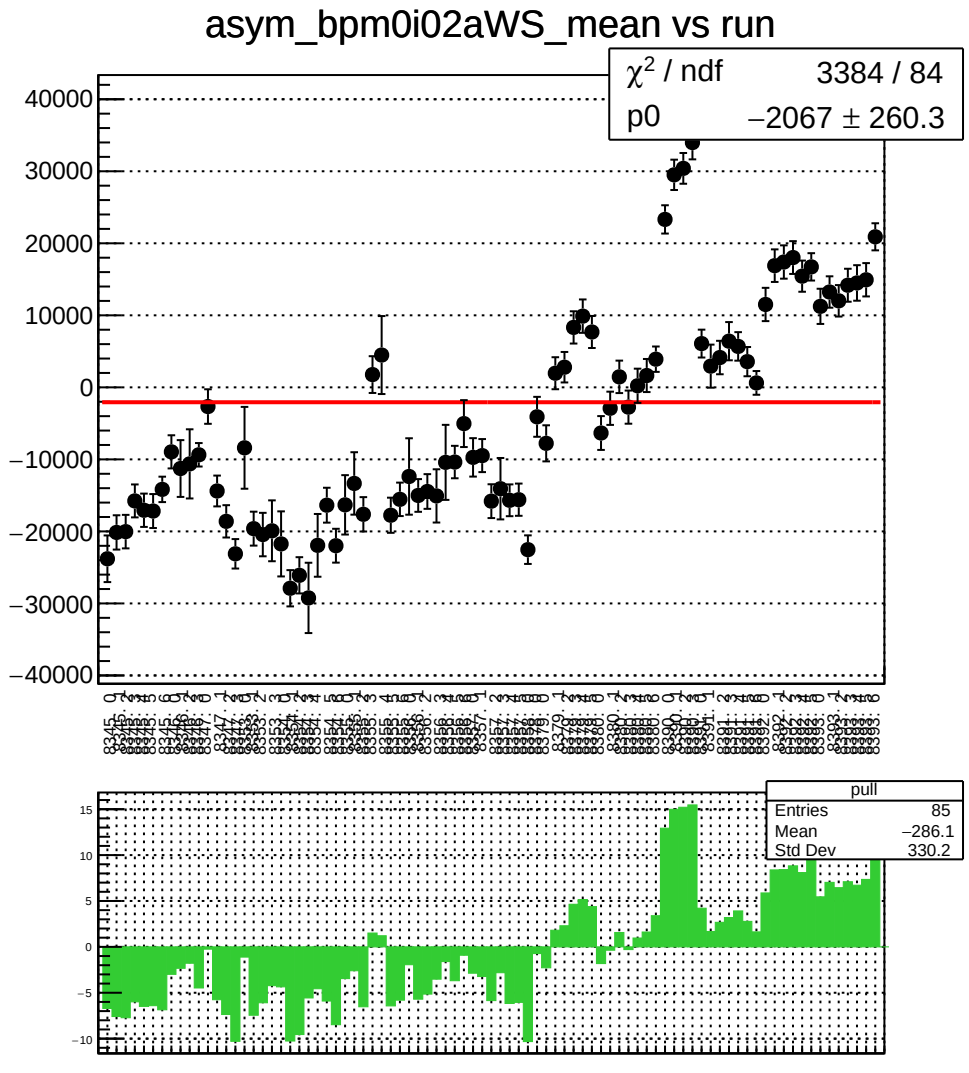

pull1D
Entries 85
Mean −0.05508
Std Dev 1.579

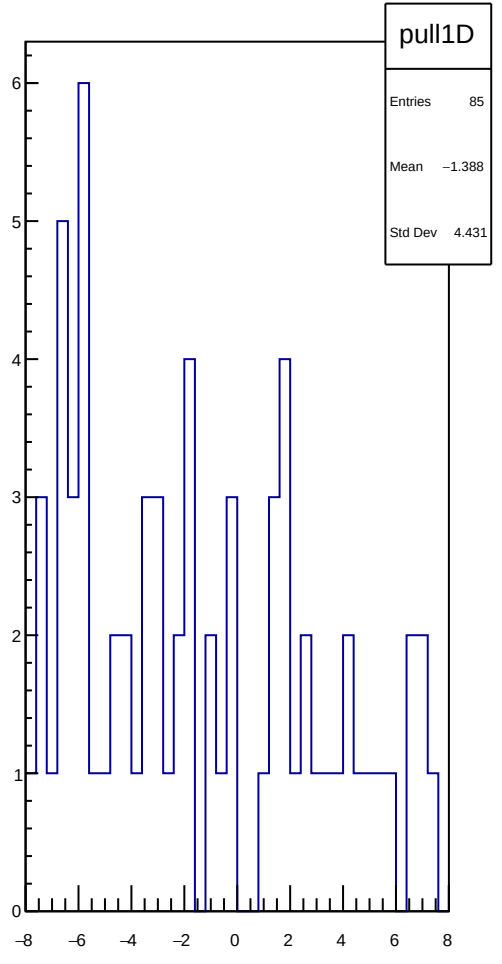

asym_bpm0r05WS_rms vs run
χ² / ndf 2.744e+04 / 84
p0 485.1 ± 0.3782
750
700
650
600
550
500
450
400

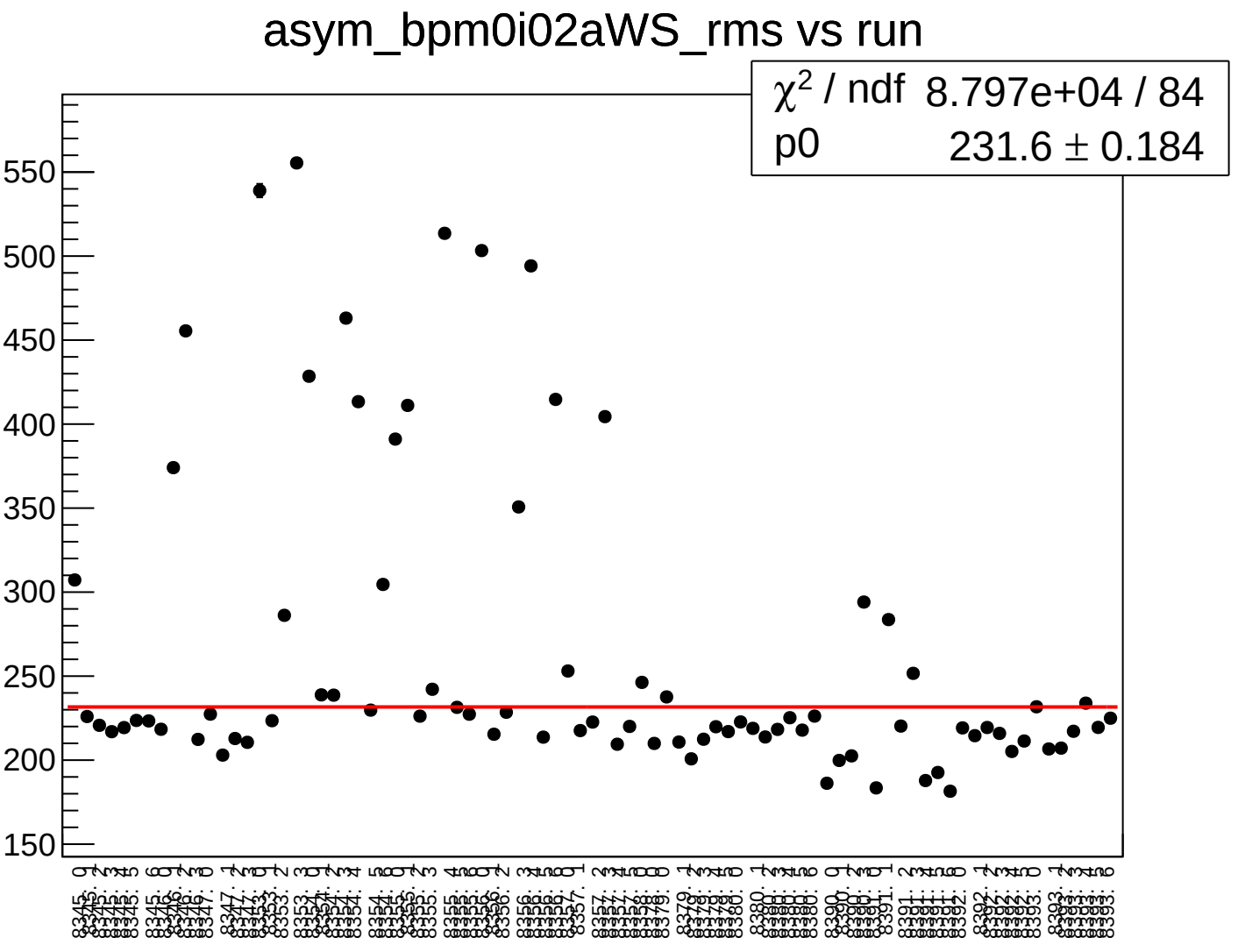

asym_bpm0i02WS_mean vs run
χ² / ndf 2909 / 84
p0 −5866 ± 261.5
pull
Entries 85
Mean −256.2
Std Dev 299.9

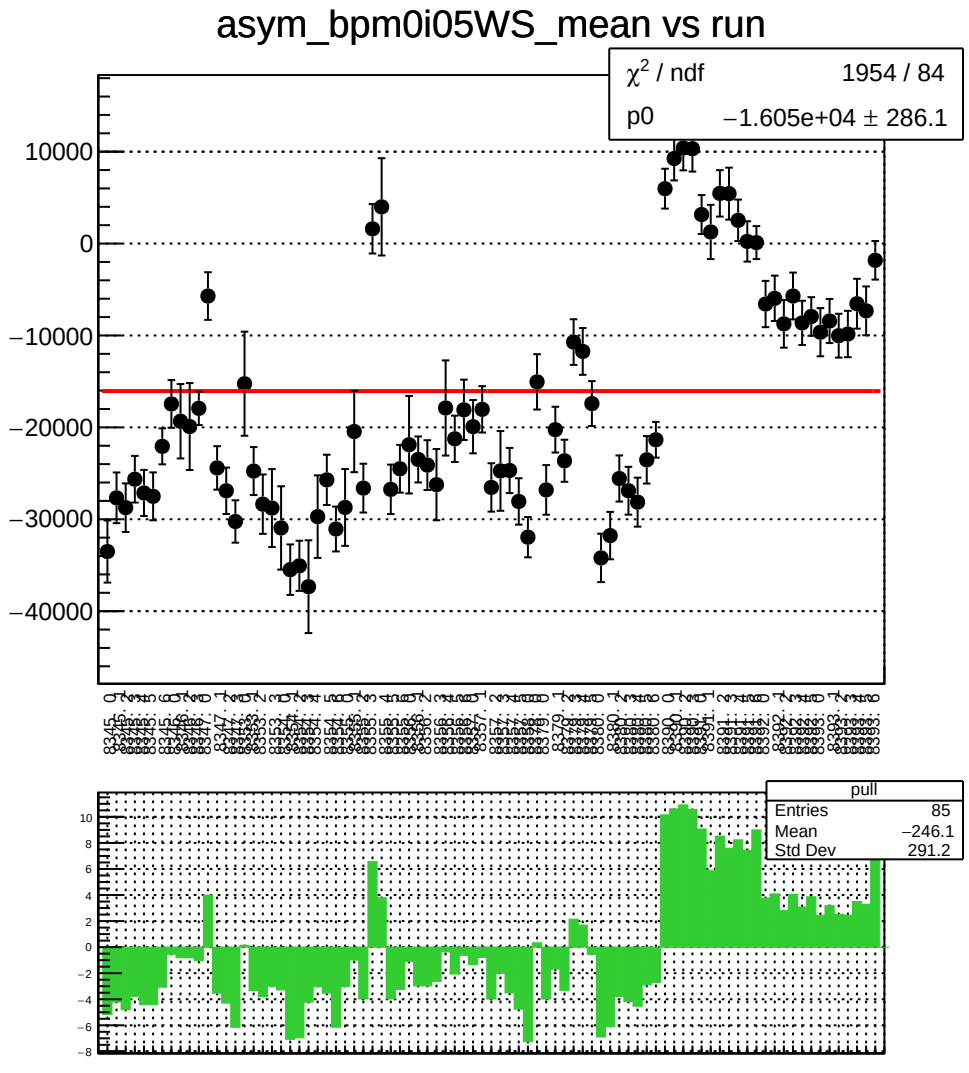

pull1D
Entries 85
Mean −0.9474
Std Dev 4.454

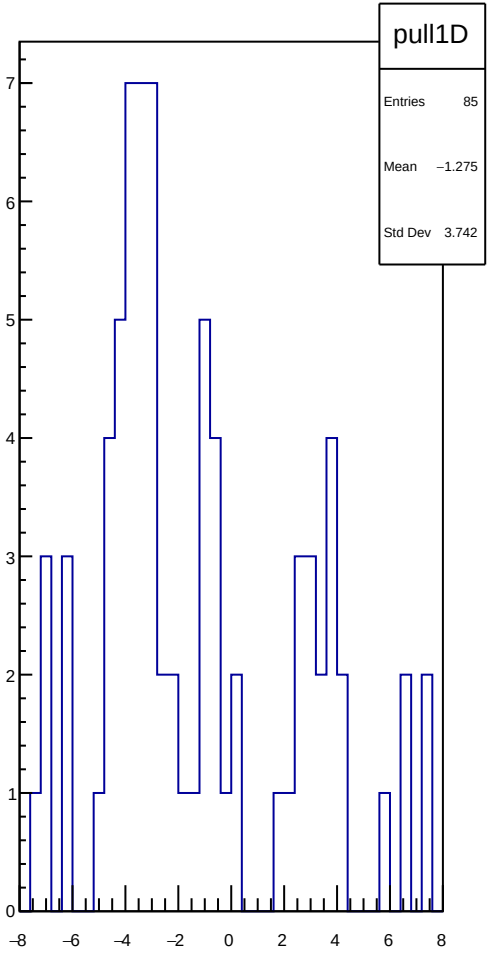

asym_bpm0i02WS_rms vs run
χ^2 / ndf 8.93e+04 / 84
p0 232.7 ± 0.1849
600
550
500
450
400
350
300
250
200
150

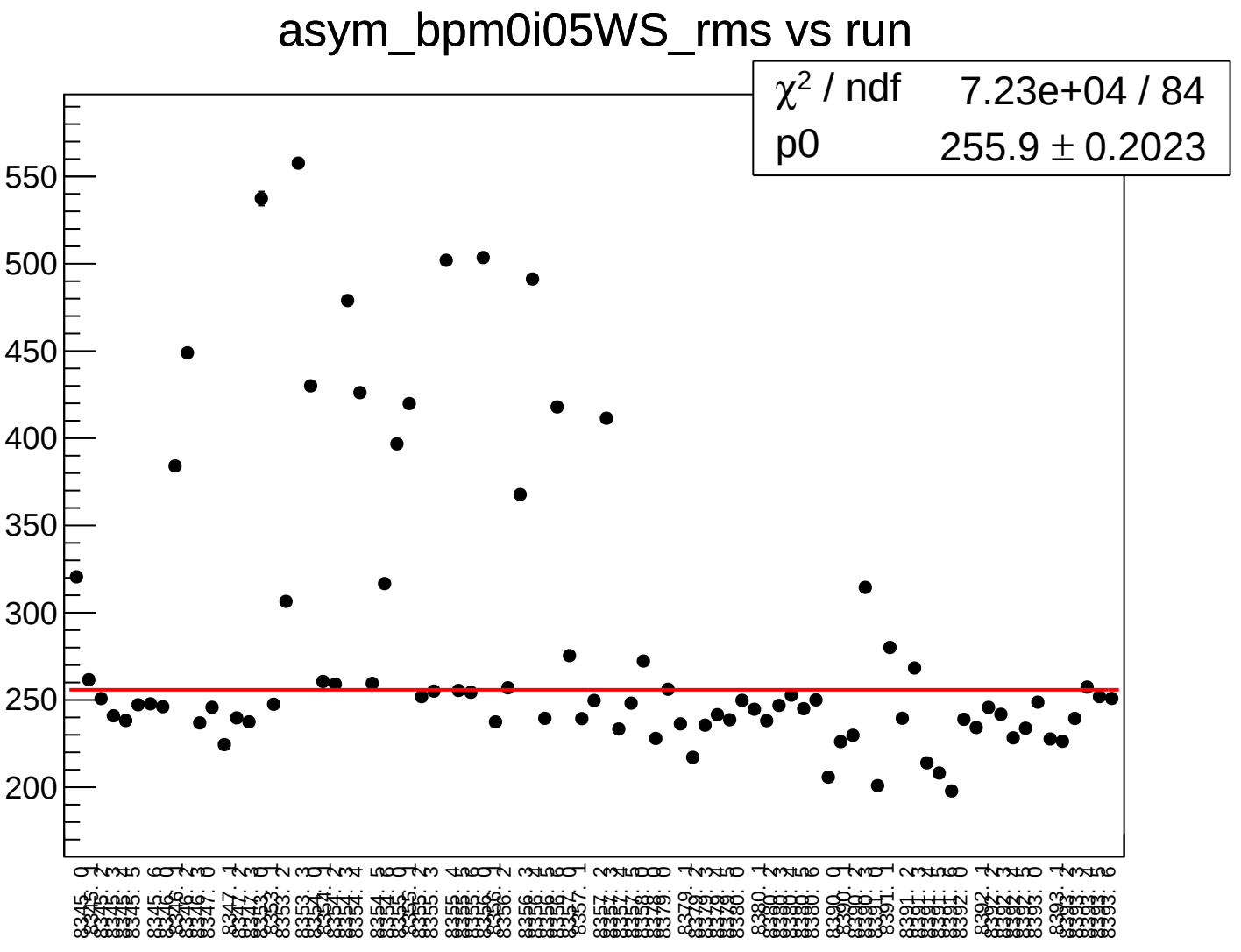

asym_bpm0i02aWS_mean vs run
χ² / ndf 3384 / 84
p0 −2067 ± 260.3
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −286.1
Std Dev 330.2
15
10
5
0
−5
−10

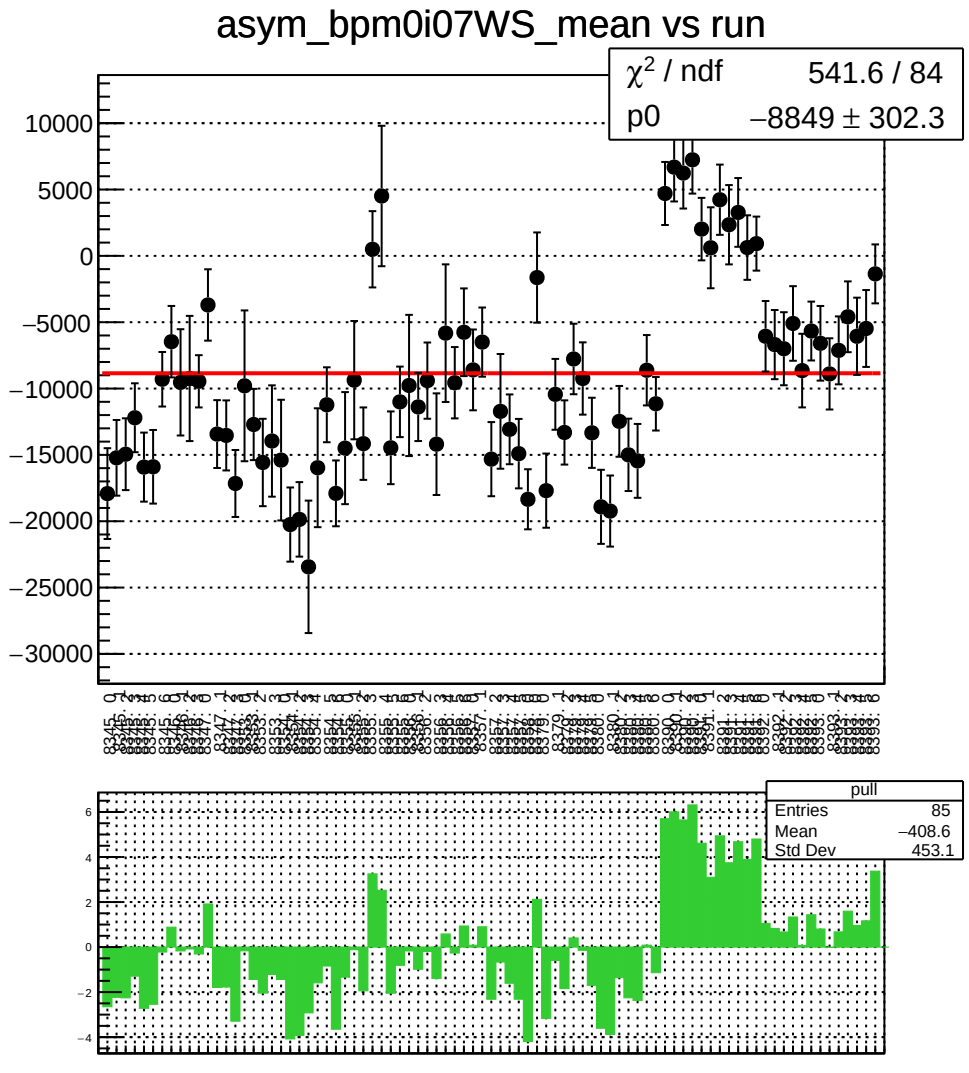

pull1D
Entries 85
Mean −1.388
Std Dev 4.431
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

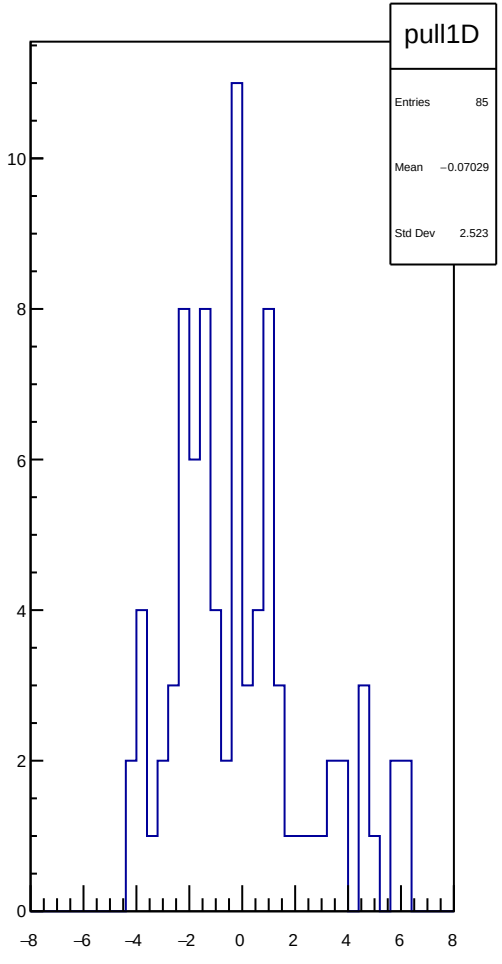

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 8.797e+04 / 84
p0 231.6 ± 0.184
550
500
450
400
350
300
250
200
150

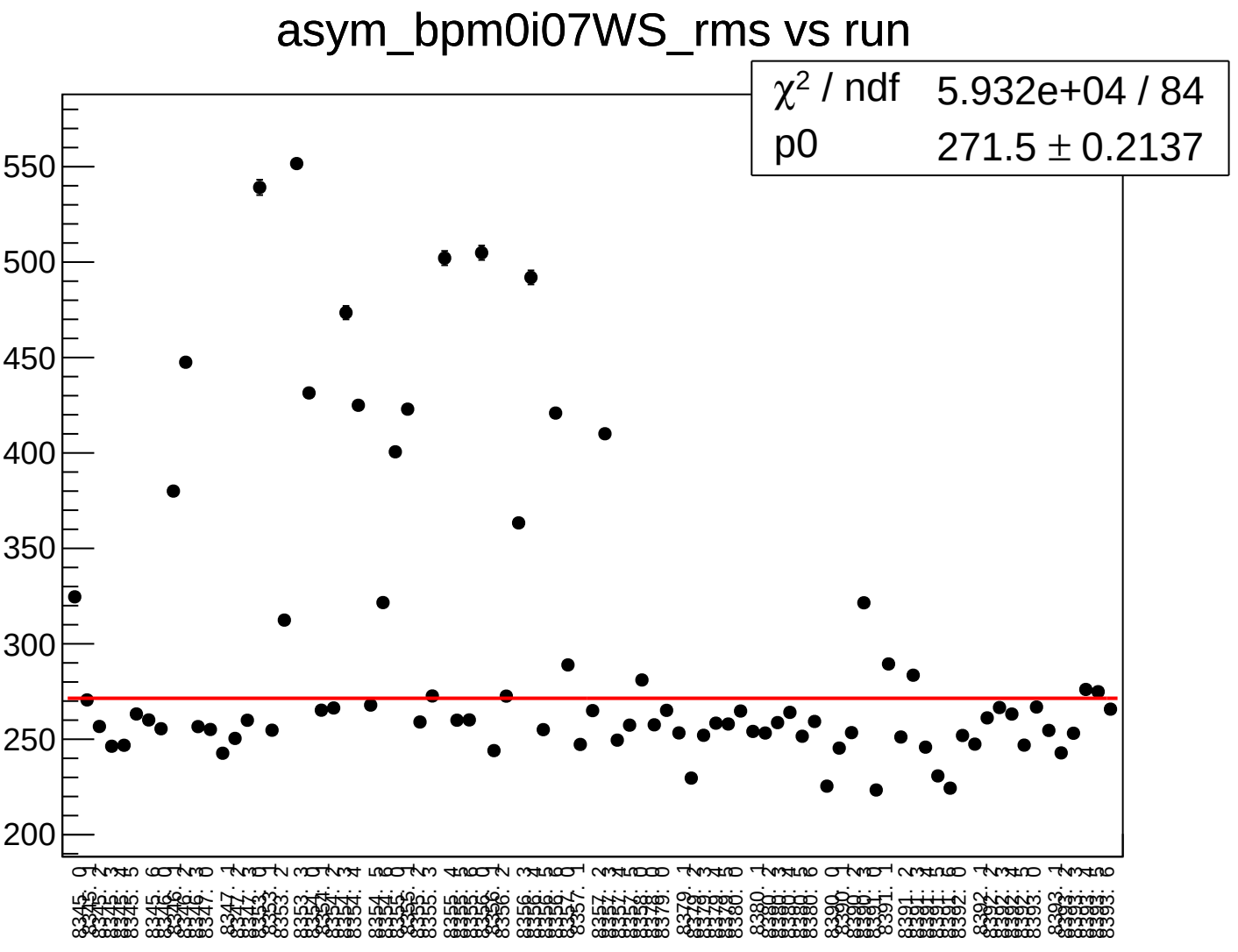

asym_bpm0i05WS_mean vs run
χ² / ndf 1954 / 84
p0 −1.605e+04 ± 286.1
10000
0
−10000
−20000
−30000
−40000
pull
Entries 85
Mean −246.1
Std Dev 291.2
10
8
6
4
2
0
−2
−4
−6
−8

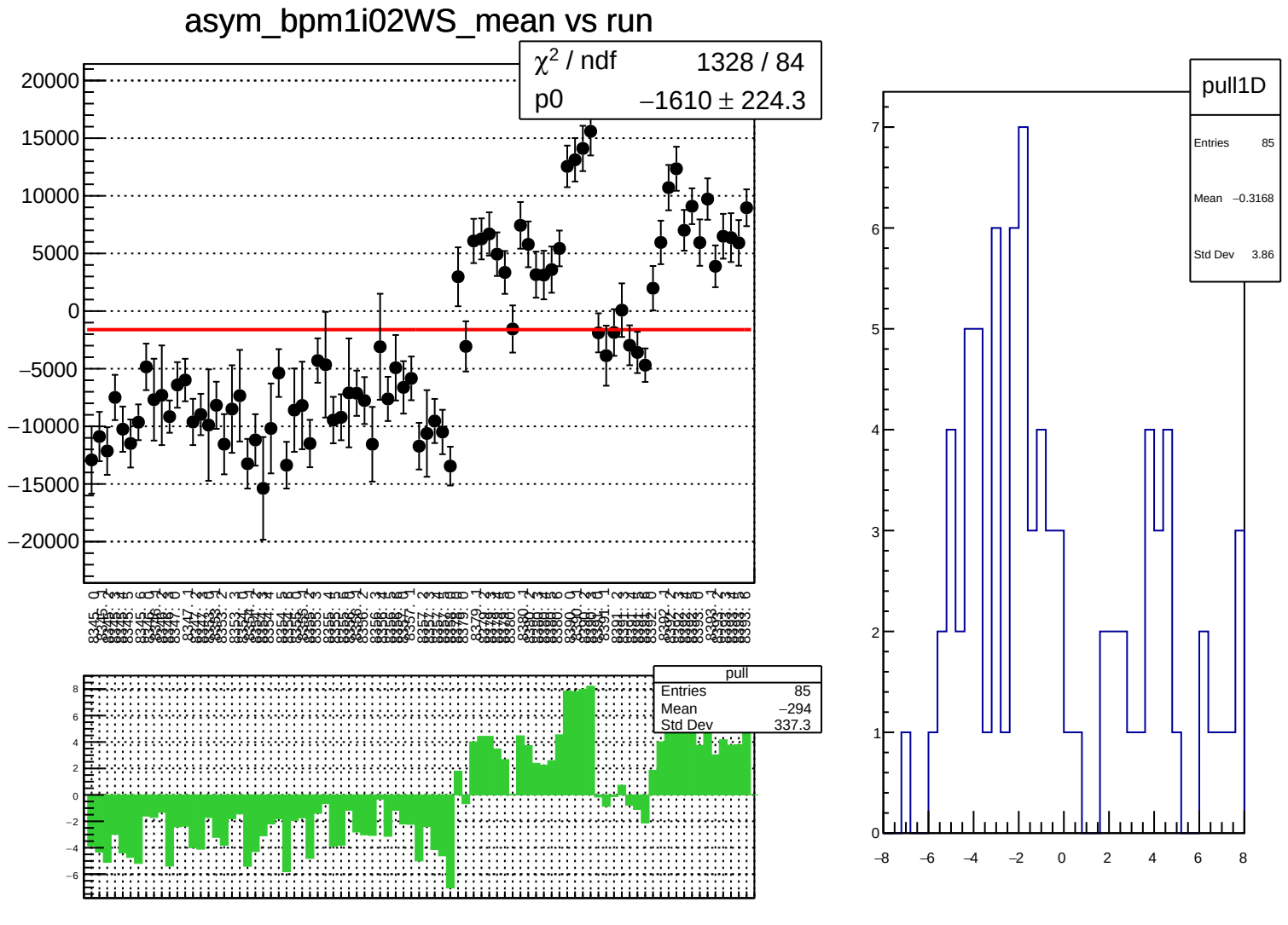

pull1D
Entries 85
Mean −1.275
Std Dev 3.742
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

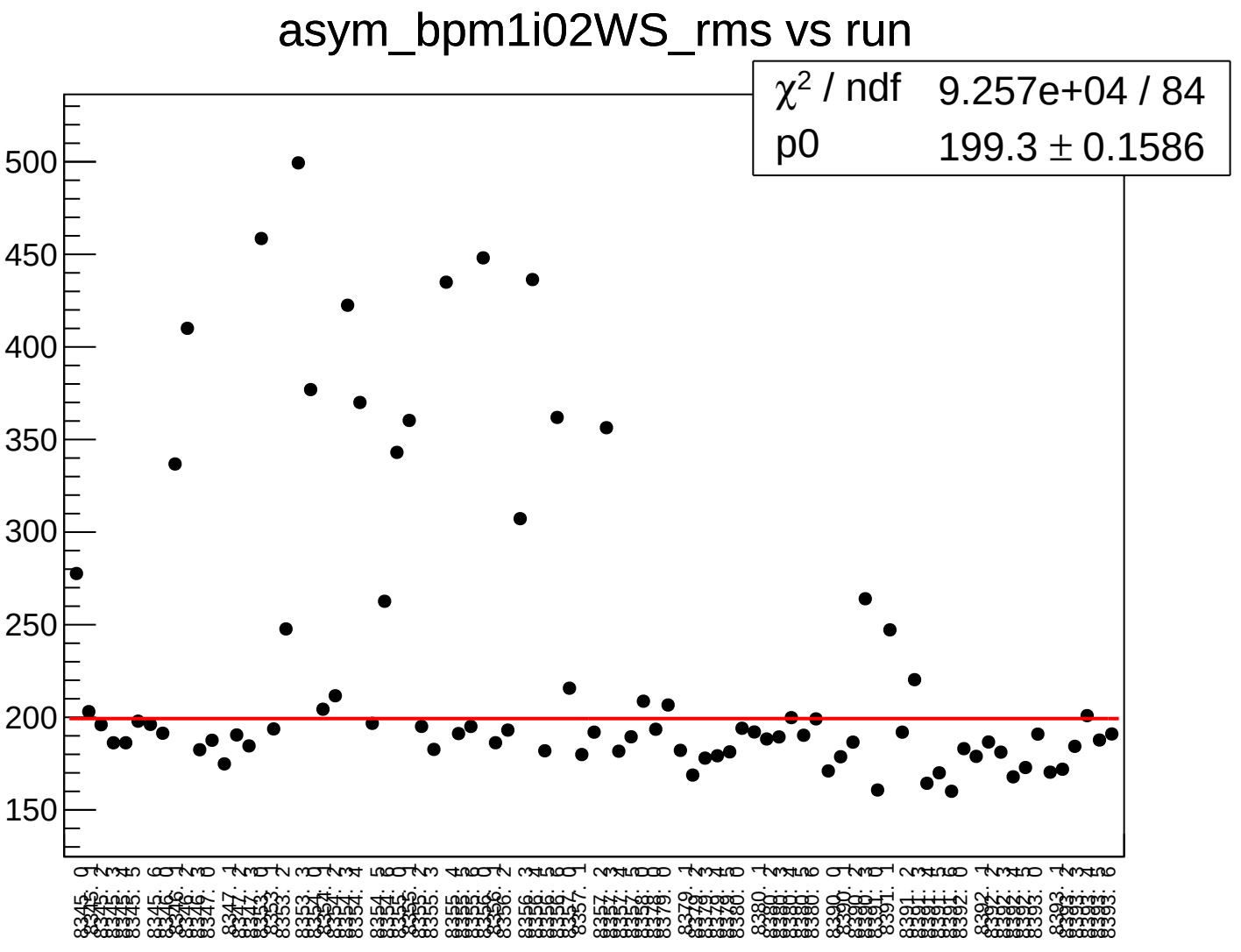

asym_bpm0i05WS_rms vs run
χ^2 / ndf 7.23e+04 / 84
p0 255.9 ± 0.2023
550
500
450
400
350
300
250
200

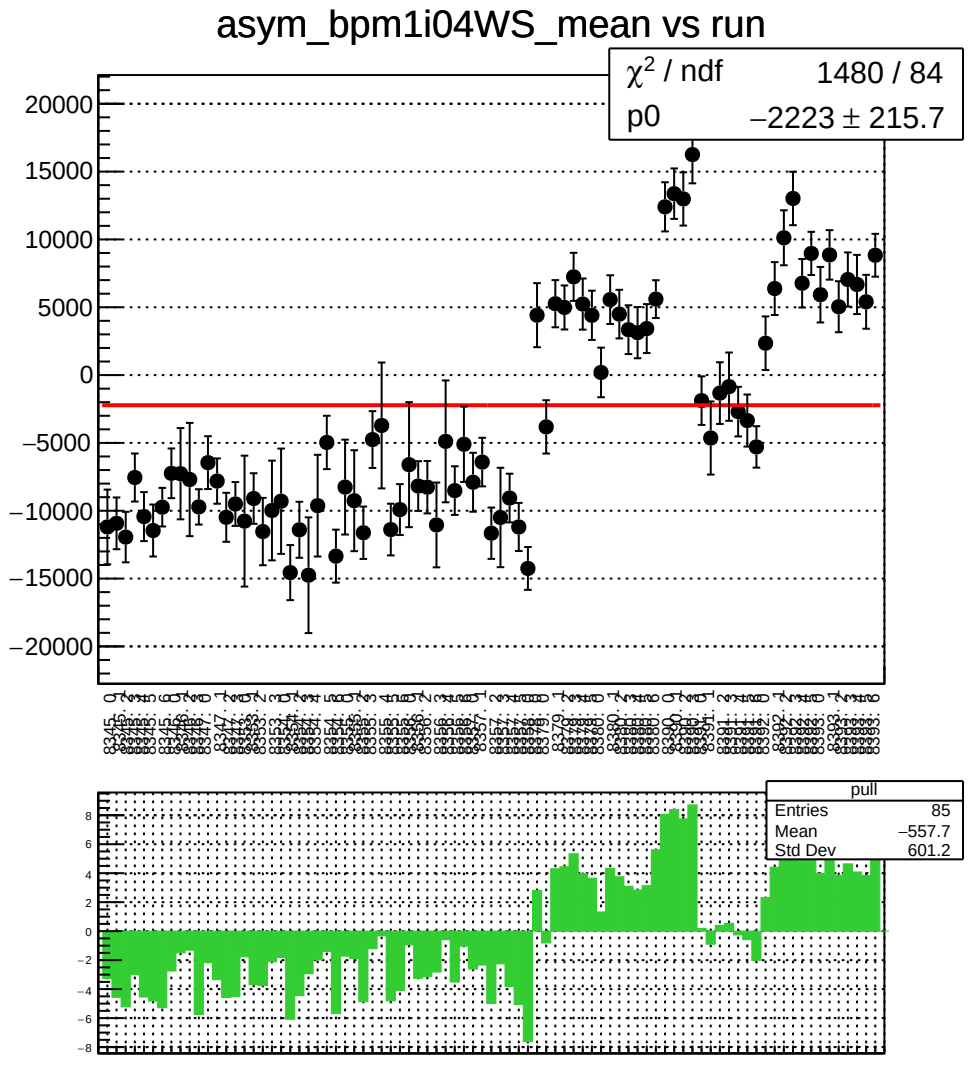

asym_bpm0i07WS_mean vs run
χ² / ndf 541.6 / 84
p0 −8849 ± 302.3
pull
Entries 85
Mean −408.6
Std Dev 453.1

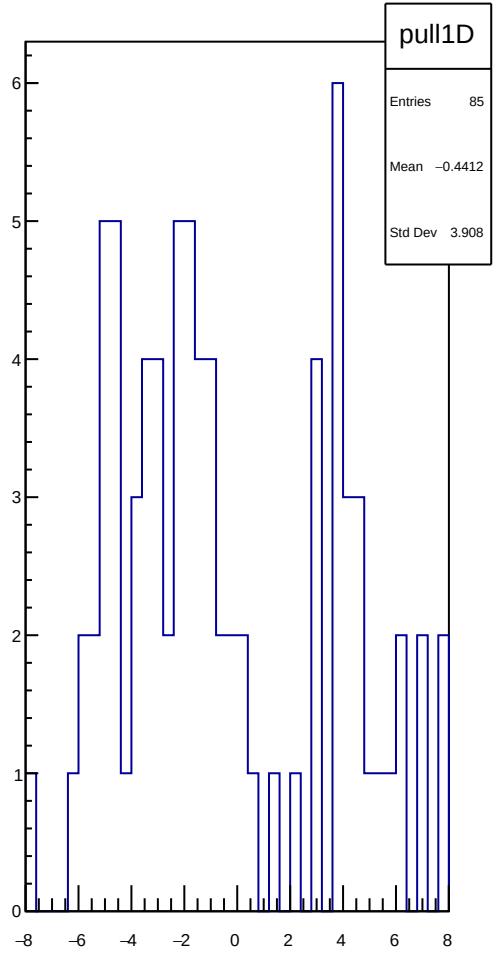

pull1D
Entries 85
Mean −0.07029
Std Dev 2.523

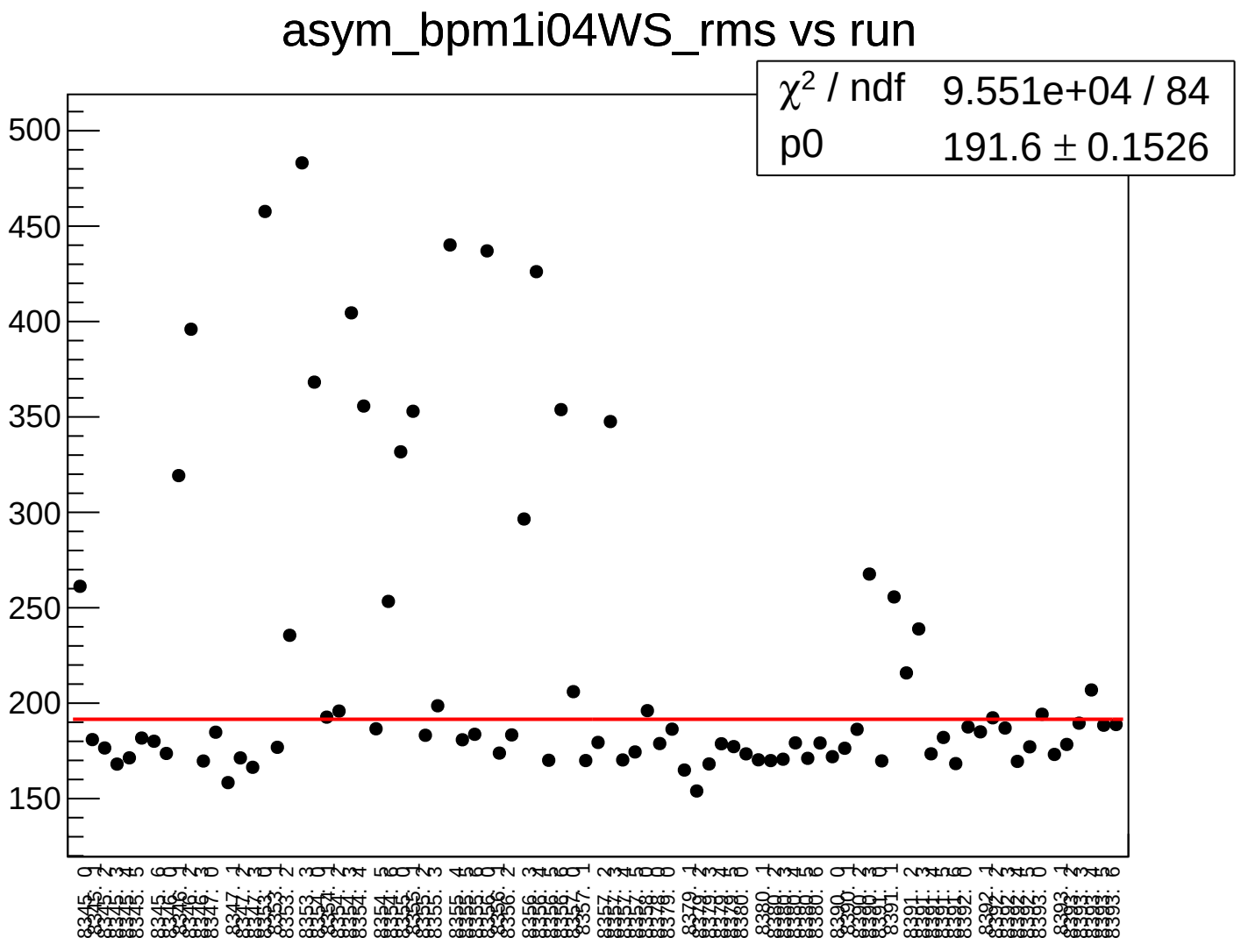

asym_bpm0i07WS_rms vs run
χ² / ndf 5.932e+04 / 84
p0 271.5 ± 0.2137
550
500
450
400
350
300
250
200

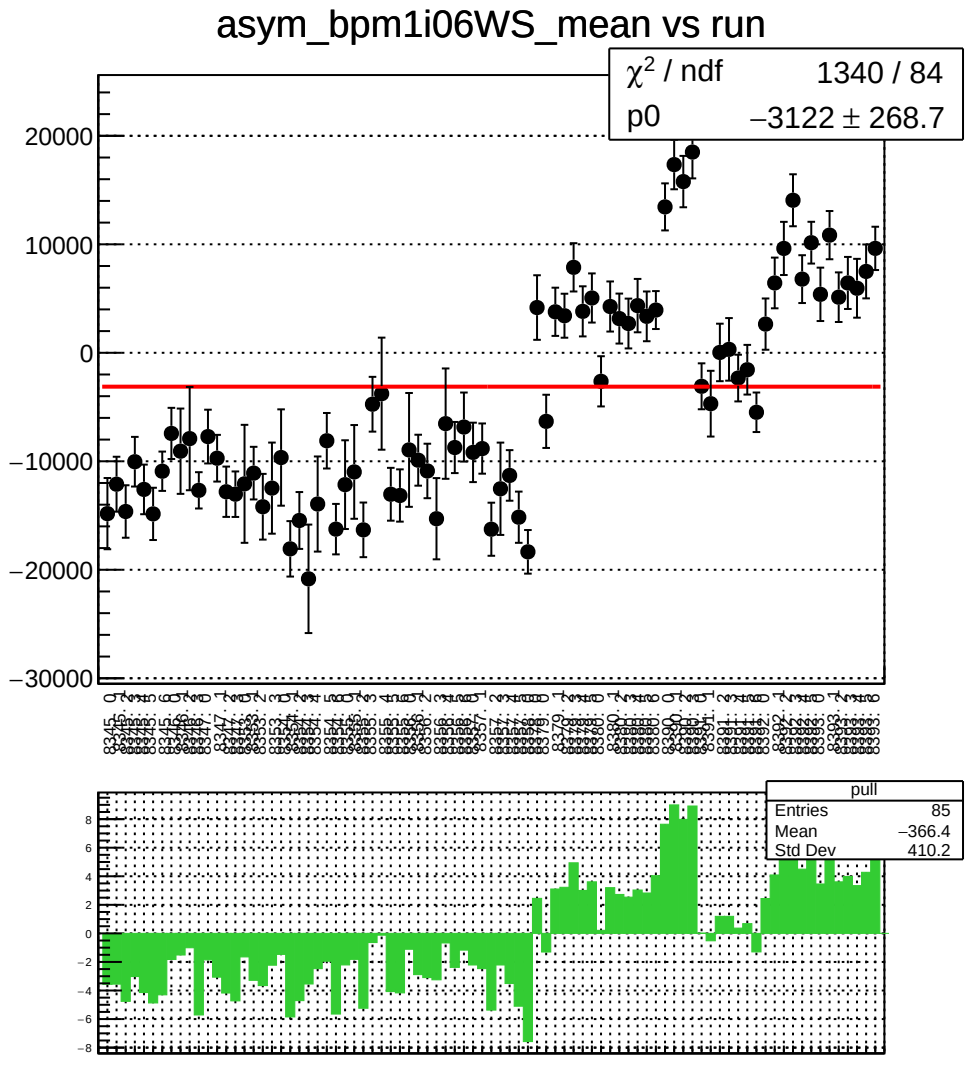

asym_bpm1i02WS_mean vs run
χ² / ndf 1328 / 84
p0 −1610 ± 224.3
pull
Entries 85
Mean −294
Std Dev 337.3
pull1D
Entries 85
Mean −0.3168
Std Dev 3.86

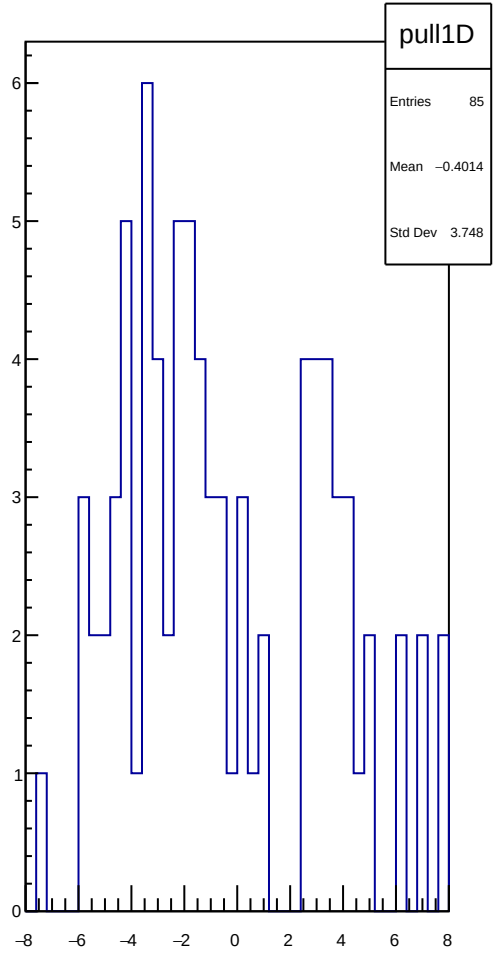

asym_bpm1i02WS_rms vs run
χ² / ndf 9.257e+04 / 84
p0 199.3 ± 0.1586
500
450
400
350
300
250
200
150

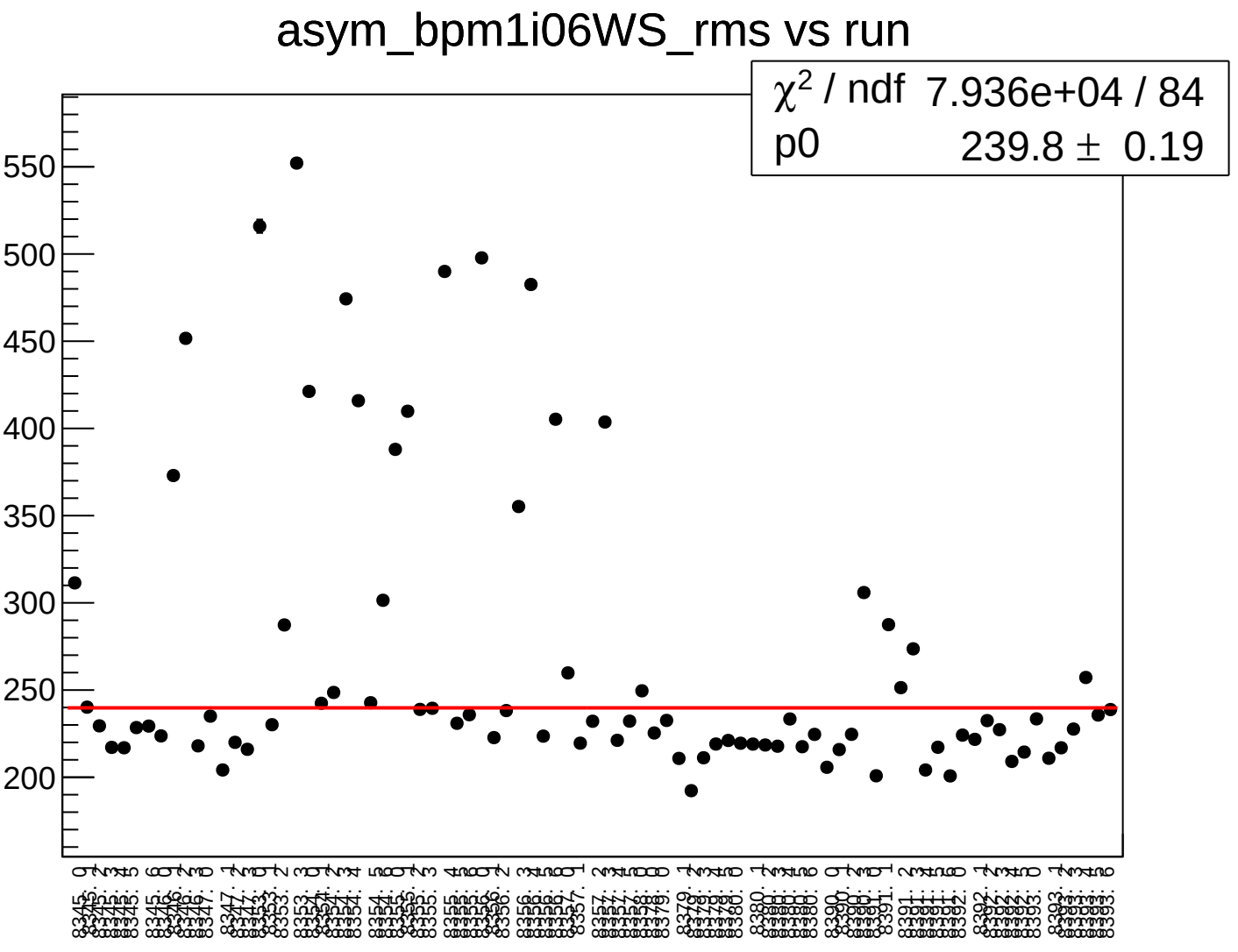

asym_bpm1i04WS_mean vs run
χ² / ndf 1480 / 84
p0 −2223 ± 215.7
pull
Entries 85
Mean −557.7
Std Dev 601.2

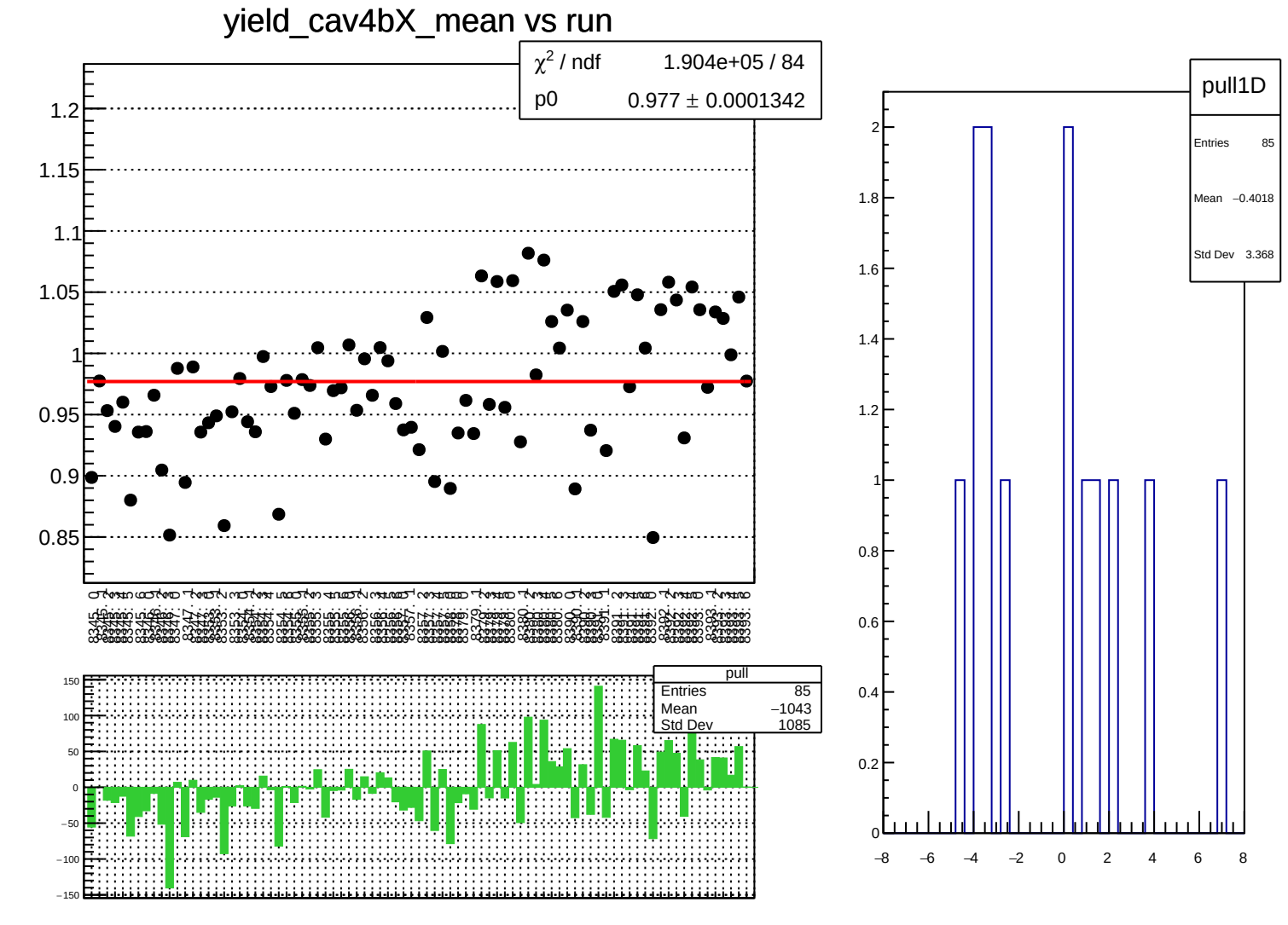

pull1D
Entries 85
Mean −0.4412
Std Dev 3.908

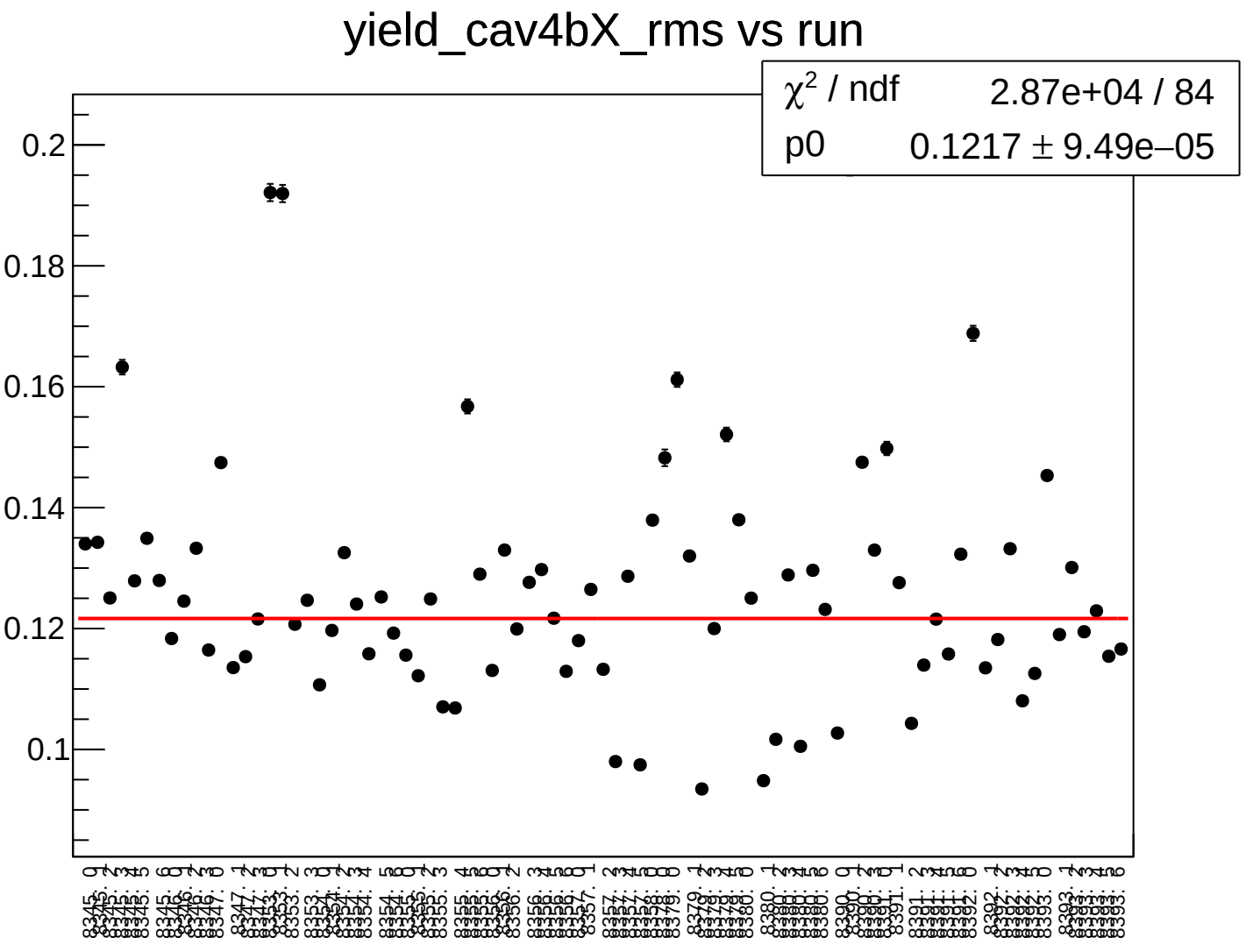

asym_bpm1i04WS_rms vs run
χ² / ndf 9.551e+04 / 84
p0 191.6 ± 0.1526
500
450
400
350
300
250
200
150

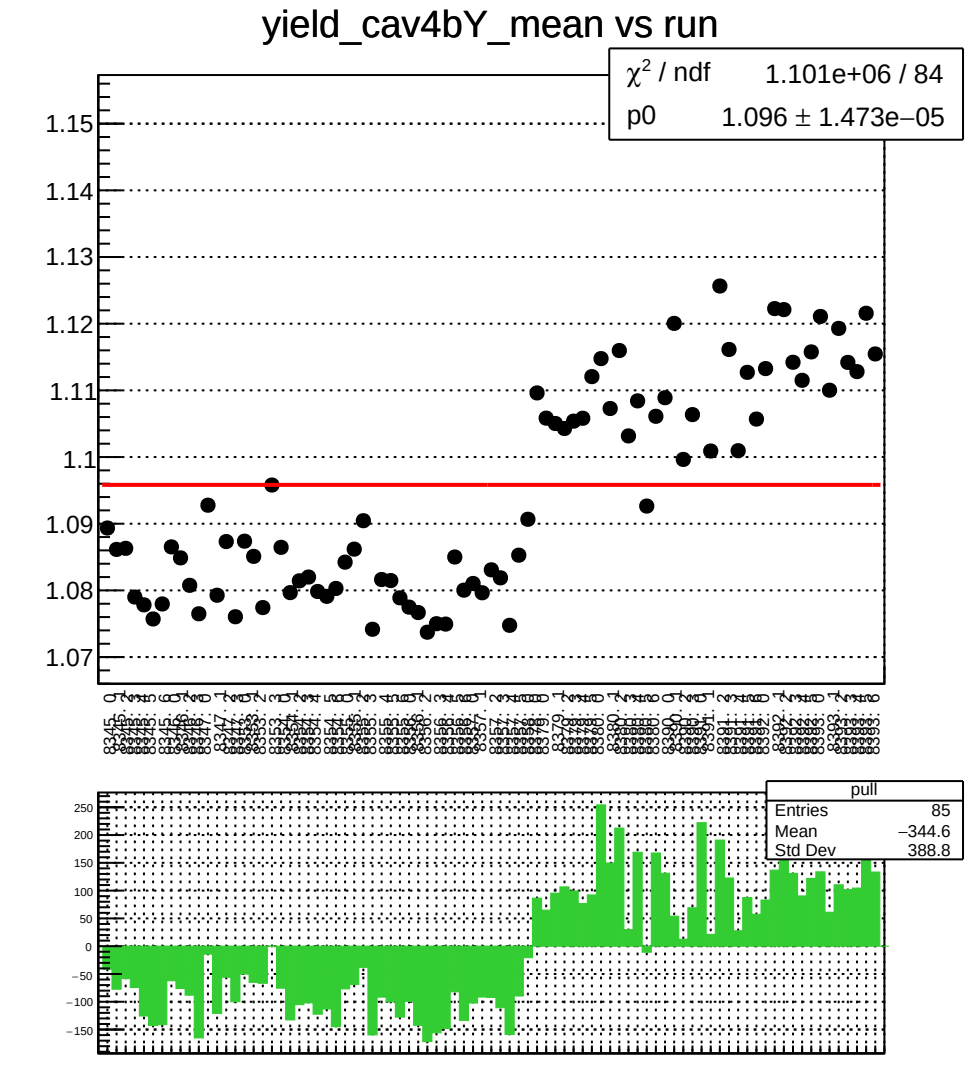

asym_bpm1i06WS_mean vs run
χ² / ndf 1340 / 84
p0 −3122 ± 268.7
pull
Entries 85
Mean −366.4
Std Dev 410.2

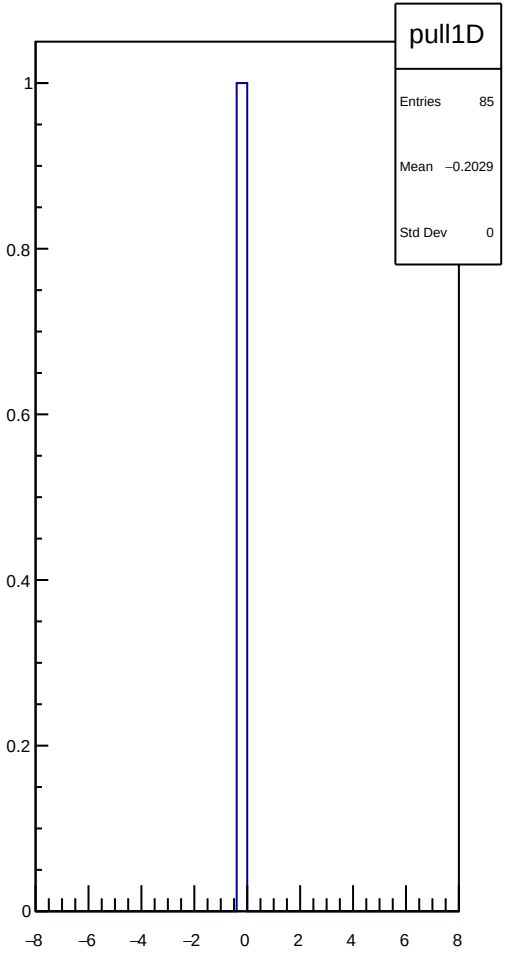

pull1D
Entries 85
Mean −0.4014
Std Dev 3.748

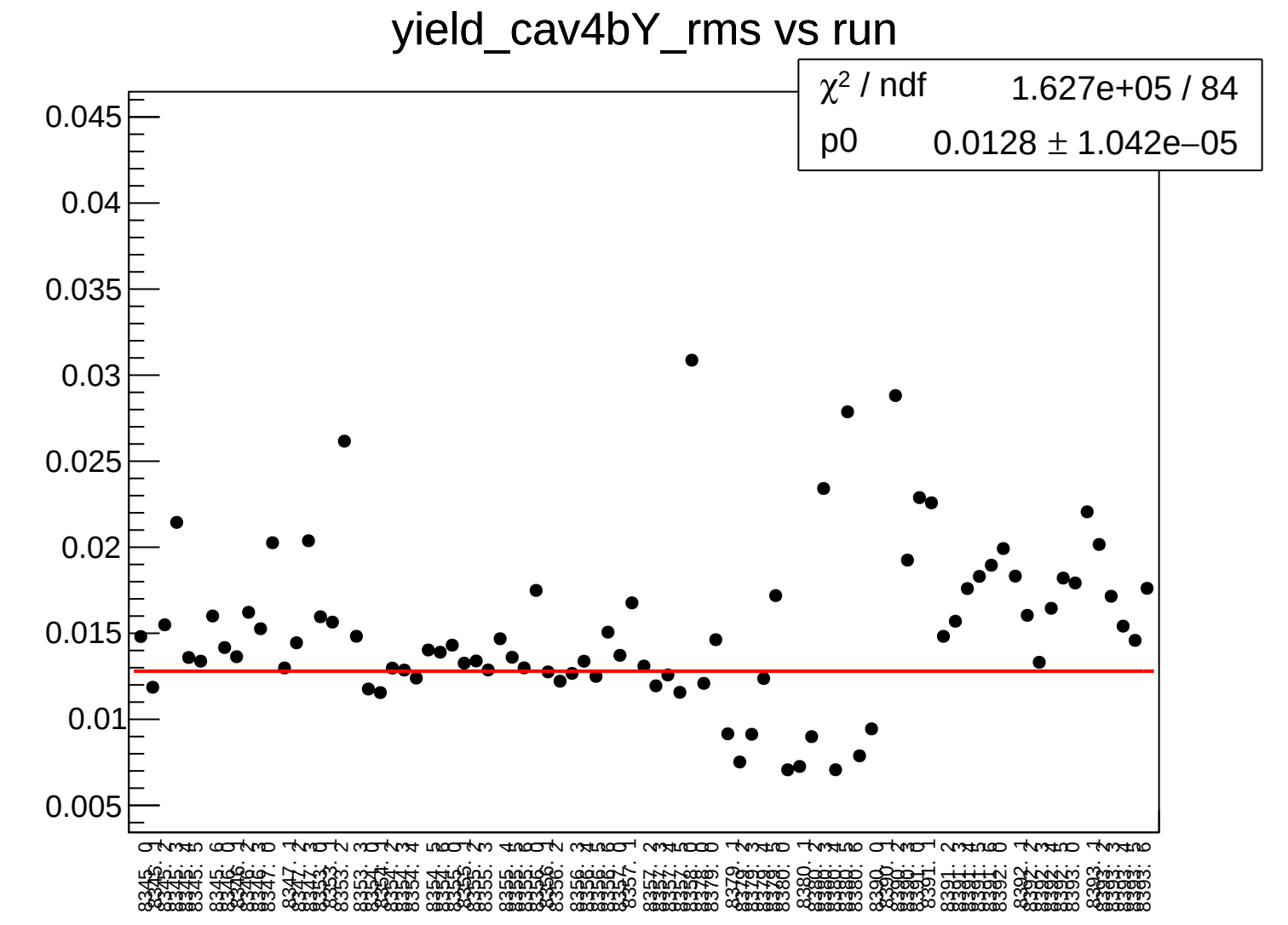

asym_bpm1i06WS_rms vs run
χ² / ndf 7.936e+04 / 84
p0 239.8 ± 0.19
550
500
450
400
350
300
250
200

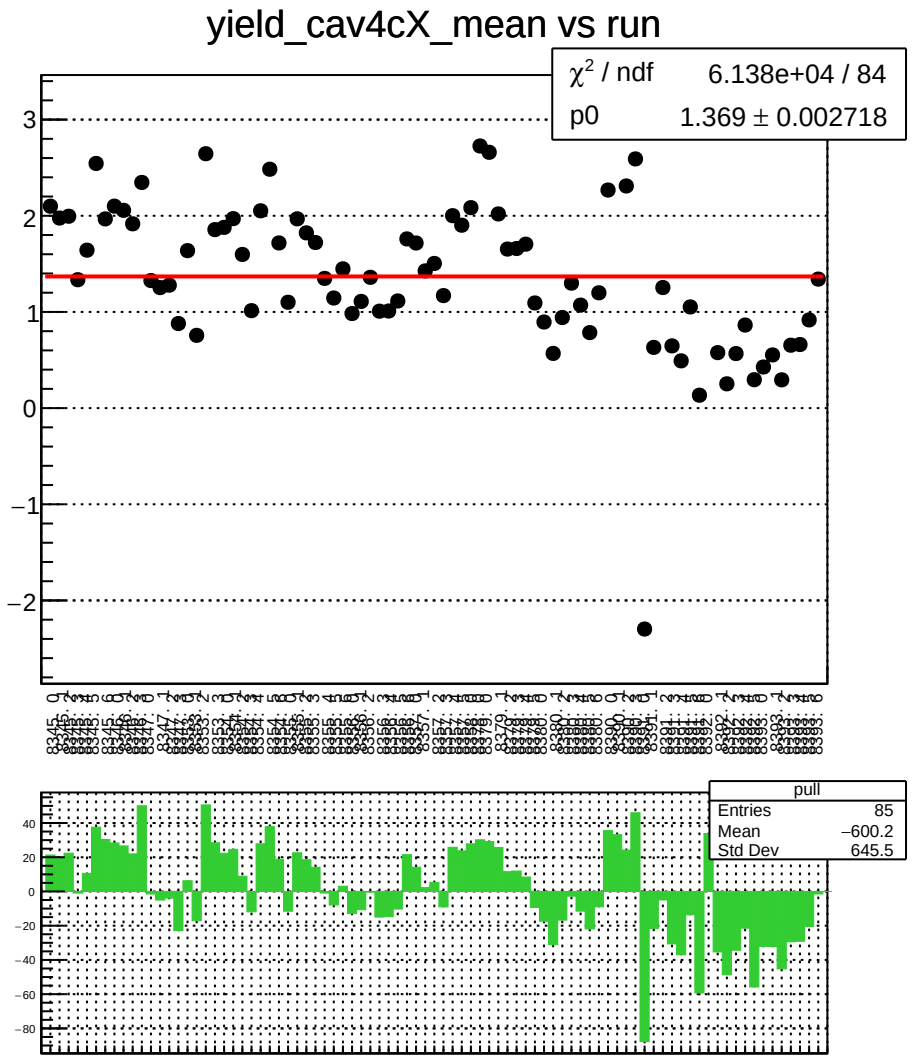

yield_cav4bX_mean vs run
χ² / ndf 1.904e+05 / 84
p0 0.977 ± 0.0001342
pull
Entries 85
Mean −1043
Std Dev 1085
pull1D
Entries 85
Mean −0.4018
Std Dev 3.368

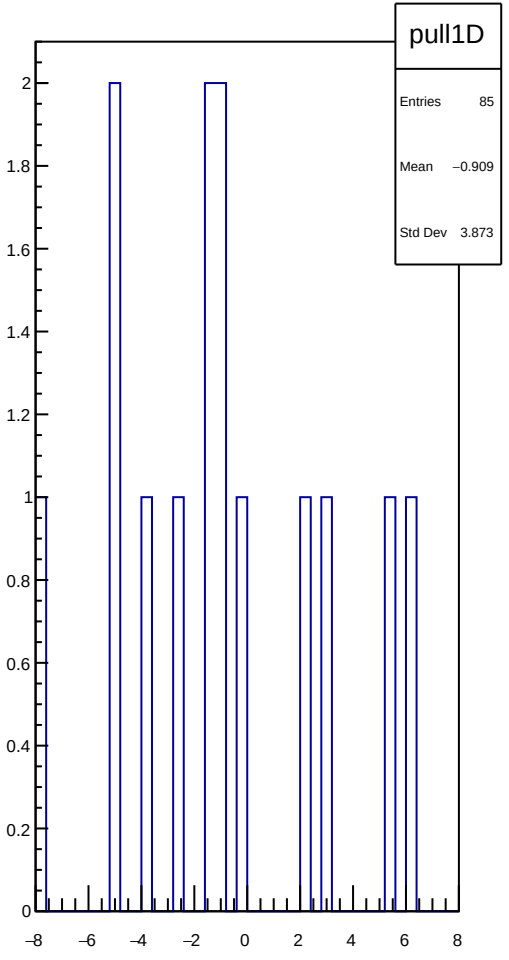

yield_cav4bX_rms vs run
χ² / ndf 2.87e+04 / 84
p0 0.1217 ± 9.49e−05
0.2
0.18
0.16
0.14
0.12
0.1

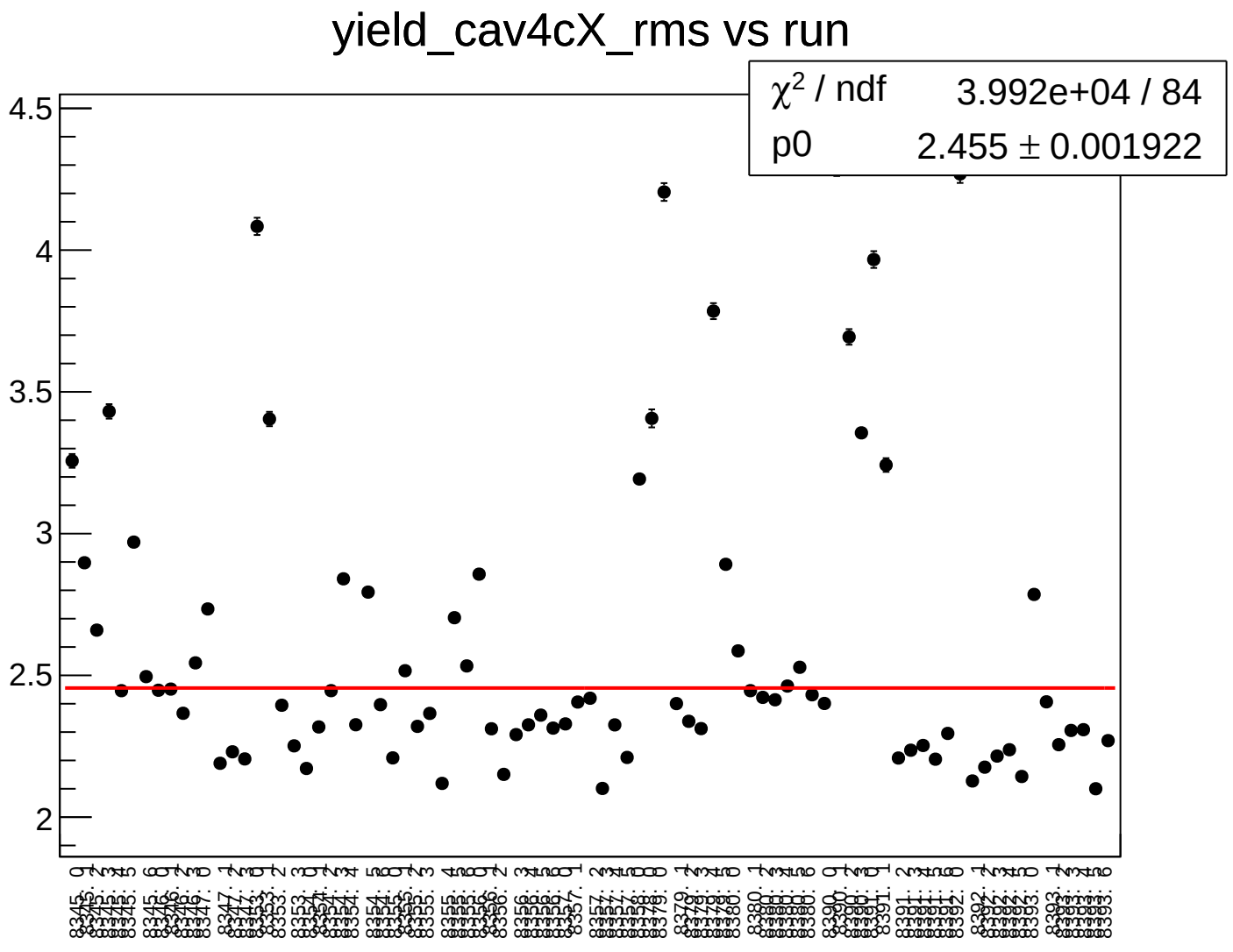

yield_cav4bY_mean vs run
χ² / ndf 1.101e+06 / 84
p0 1.096 ± 1.473e−05
pull
Entries 85
Mean −344.6
Std Dev 388.8

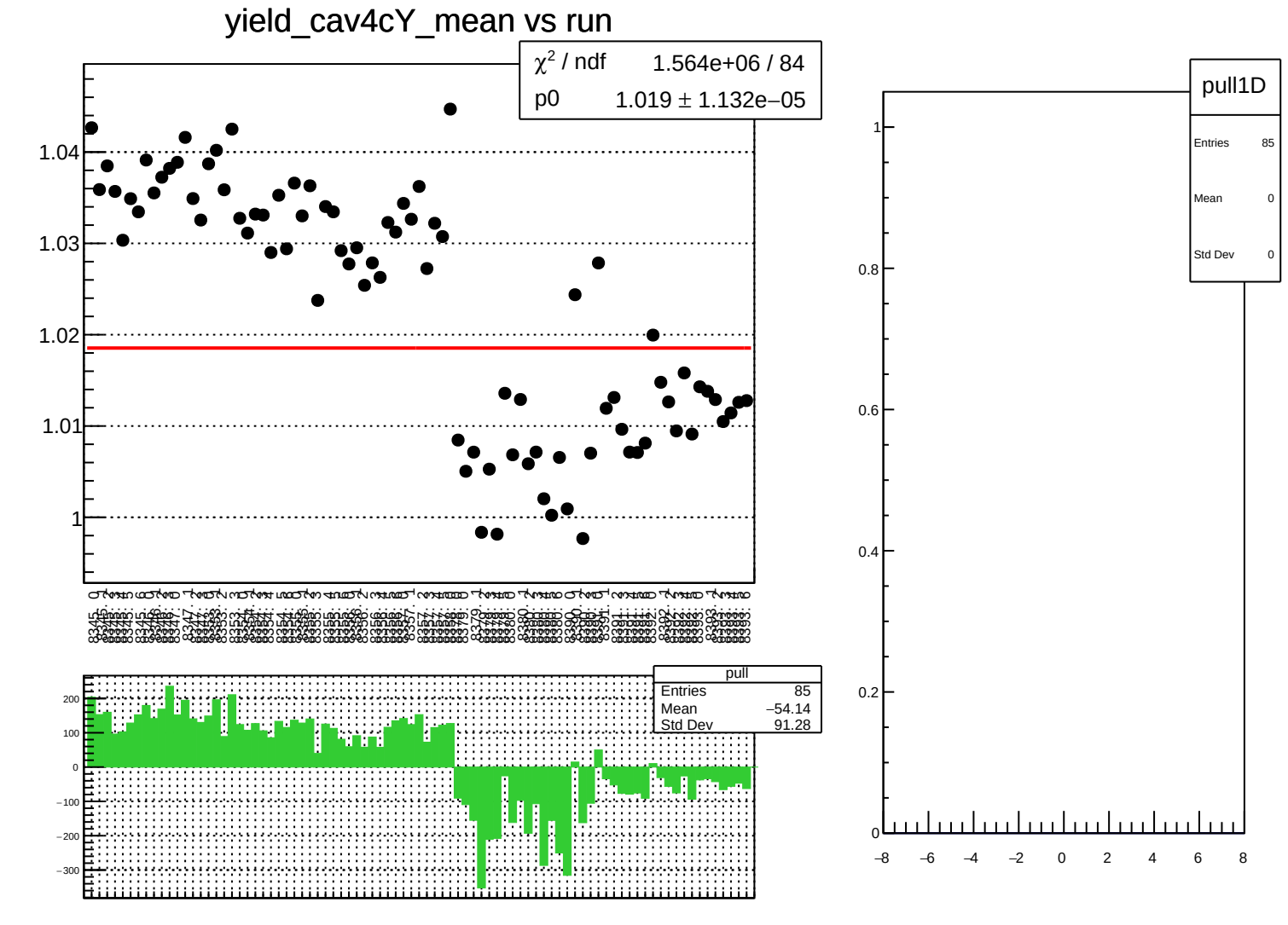

pull1D
Entries 85
Mean −0.2029
Std Dev 0

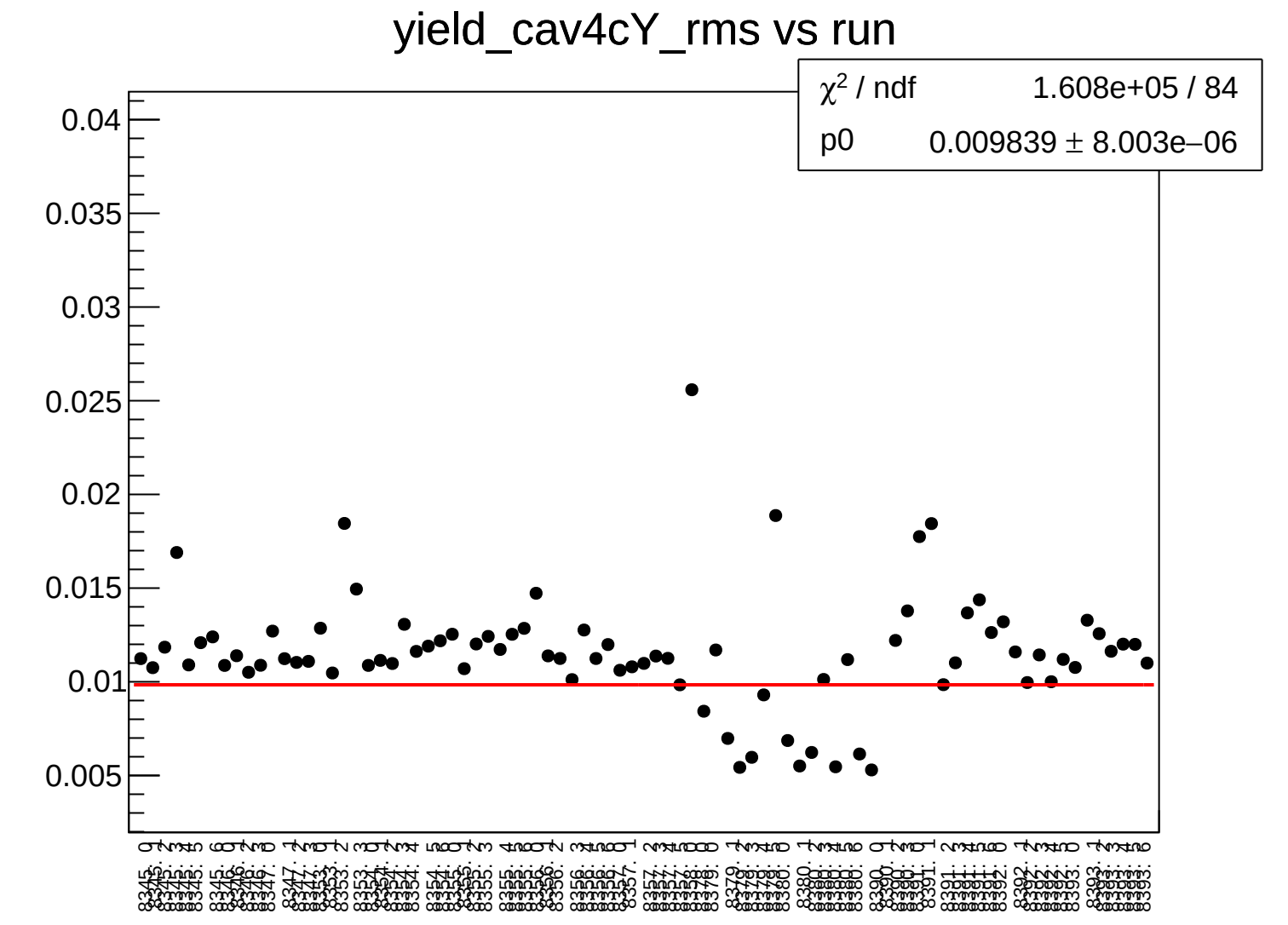

yield_cav4bY_rms vs run
χ² / ndf 1.627e+05 / 84
p0 0.0128 ± 1.042e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

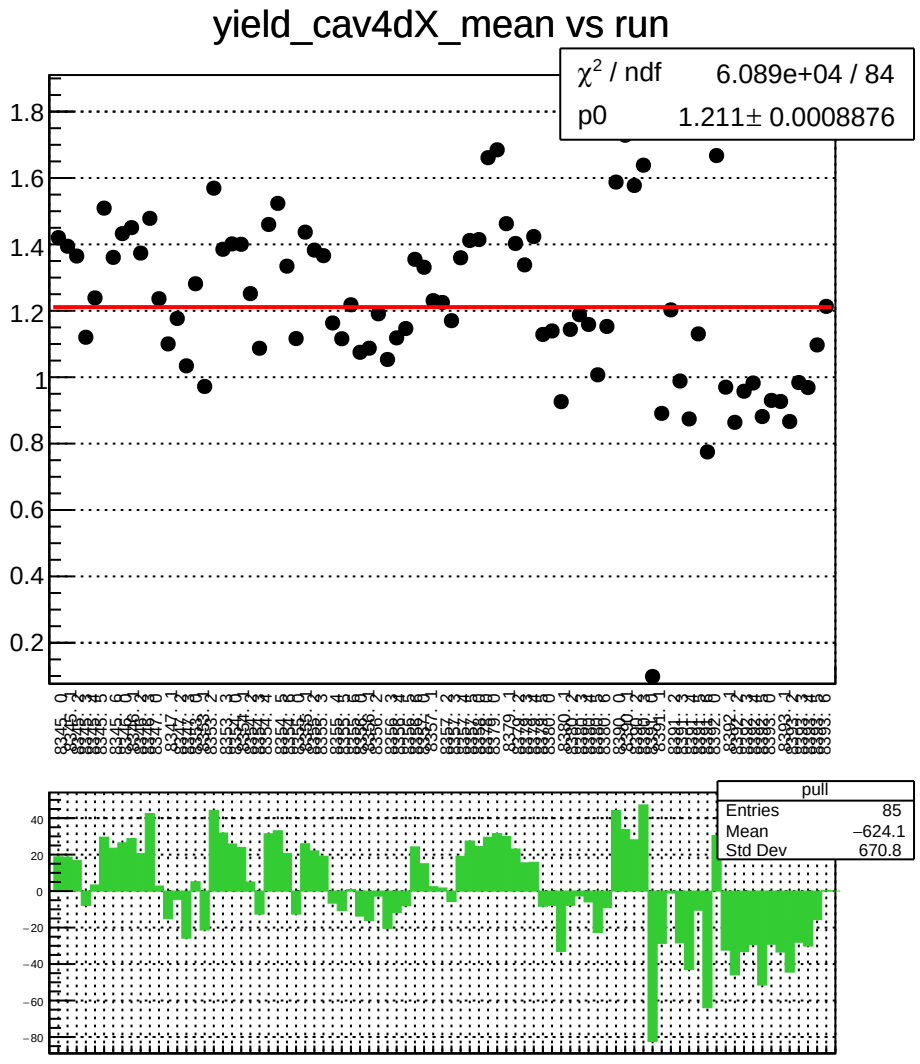

yield_cav4cX_mean vs run
χ² / ndf 6.138e+04 / 84
p0 1.369 ± 0.002718
pull
Entries 85
Mean −600.2
Std Dev 645.5

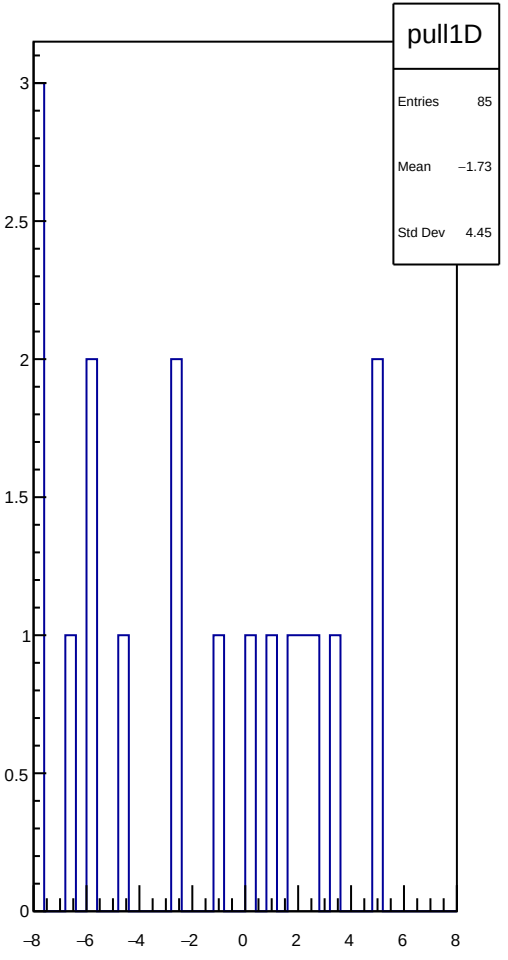

pull1D
Entries 85
Mean −0.909
Std Dev 3.873

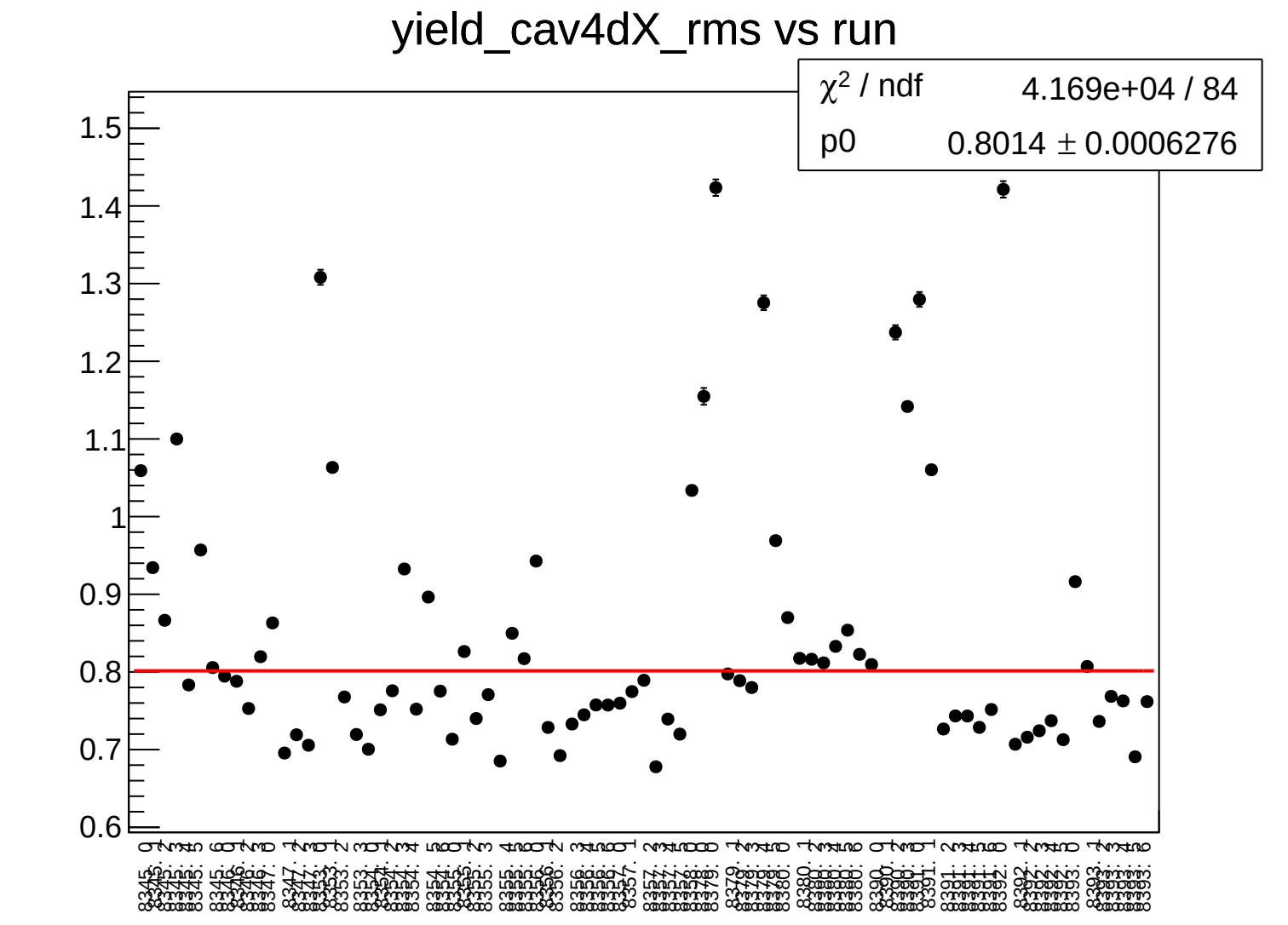

yield_cav4cX_rms vs run
χ^2 / ndf 3.992e+04 / 84
p0 2.455 ± 0.001922
4.5
4
3.5
3
2.5
2

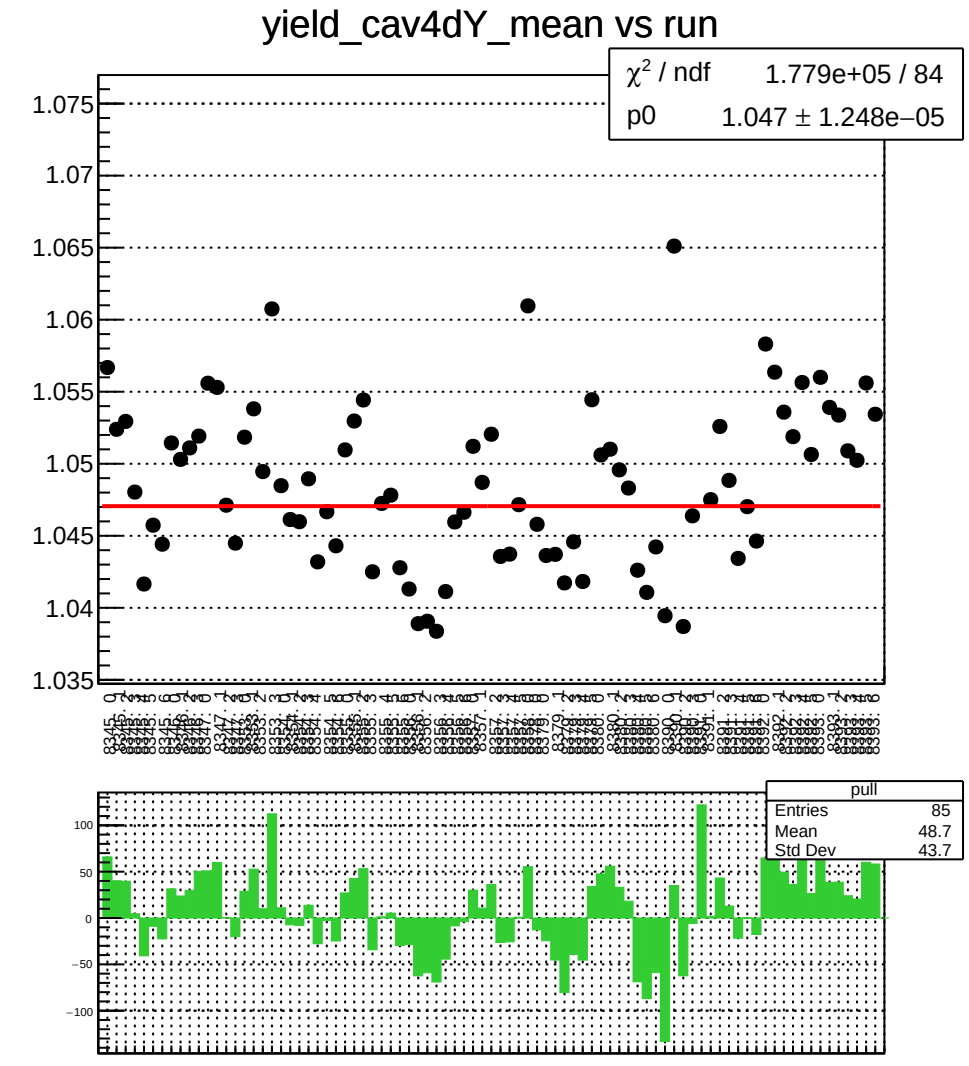

yield_cav4cY_mean vs run
χ² / ndf 1.564e+06 / 84
p0 1.019 ± 1.132e−05
1.04
1.03
1.02
1.01
1
pull
Entries 85
Mean −54.14
Std Dev 91.28
200
100
0
−100
−200
−300
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

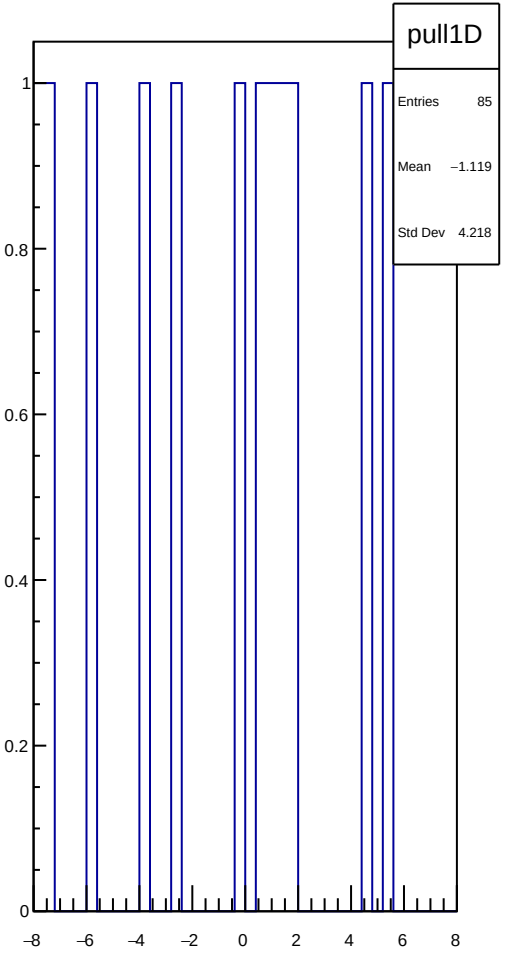

yield_cav4cY_rms vs run
χ² / ndf 1.608e+05 / 84
p0 0.009839 ± 8.003e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

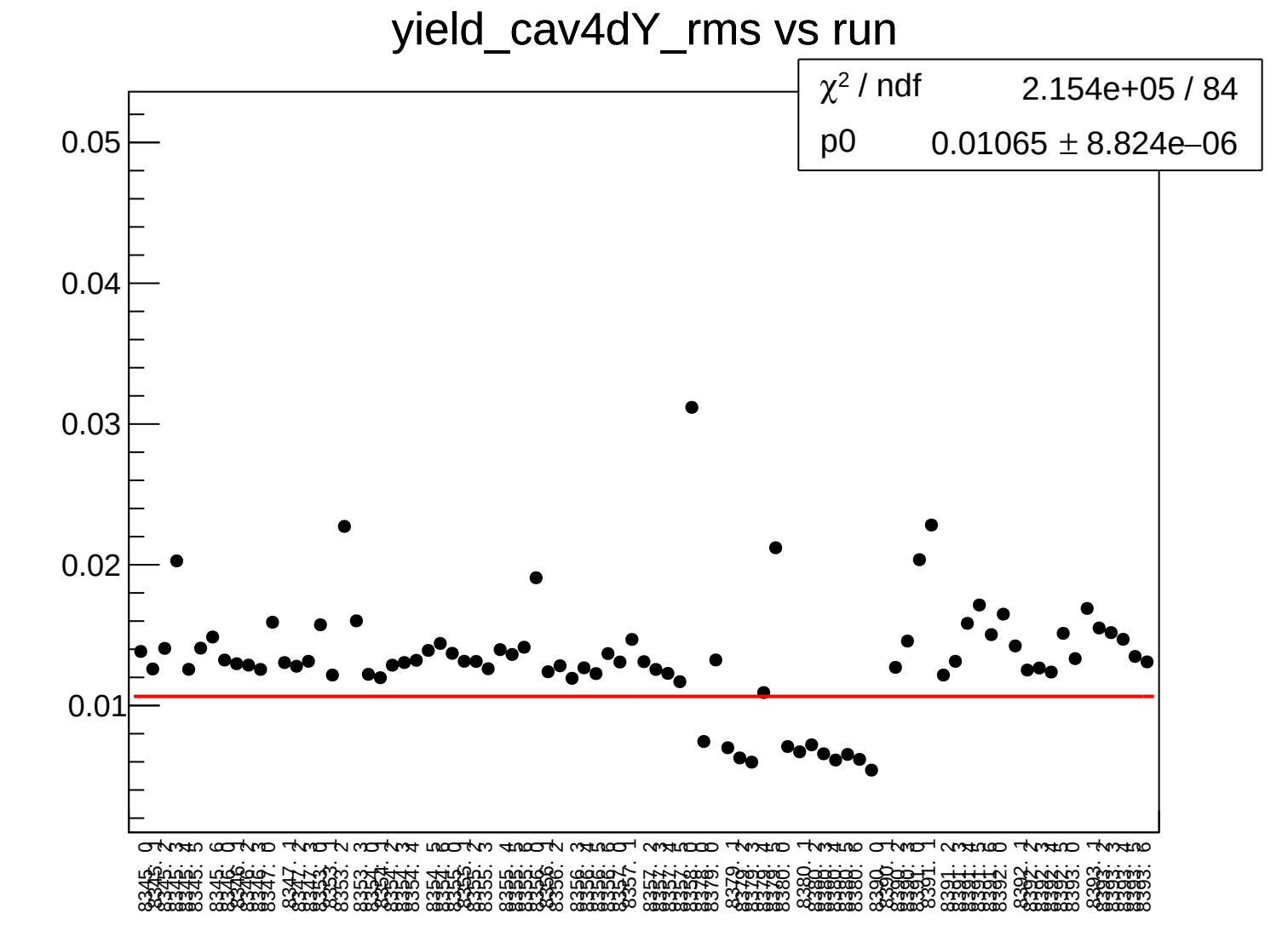

yield_cav4dX_mean vs run
χ² / ndf 6.089e+04 / 84
p0 1.211± 0.0008876
pull
Entries 85
Mean −624.1
Std Dev 670.8

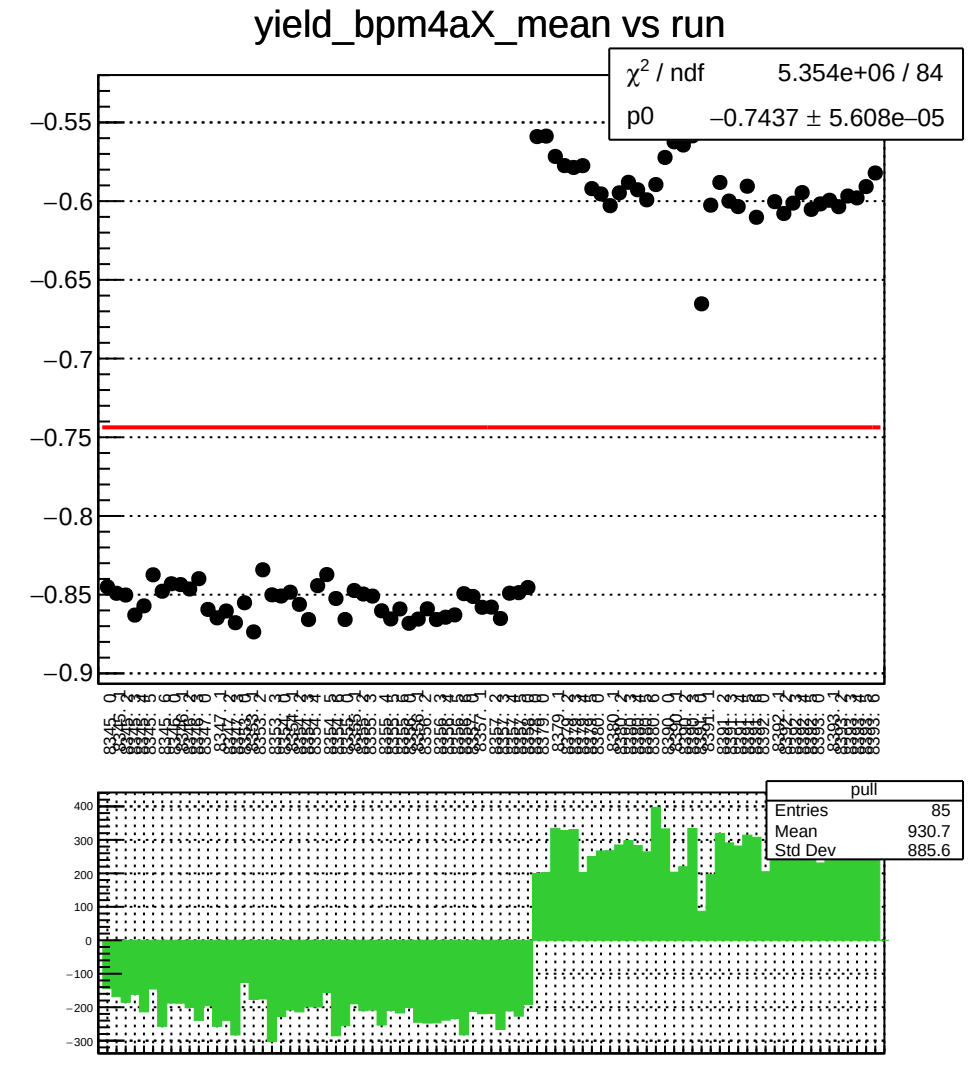

pull1D
Entries 85
Mean −1.73
Std Dev 4.45

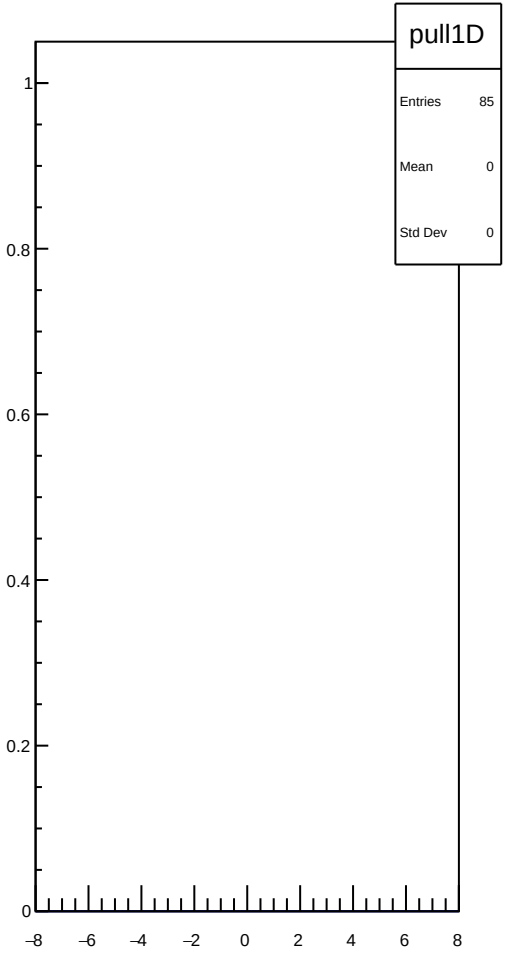

yield_cav4dX_rms vs run
χ² / ndf 4.169e+04 / 84
p0 0.8014 ± 0.0006276
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6

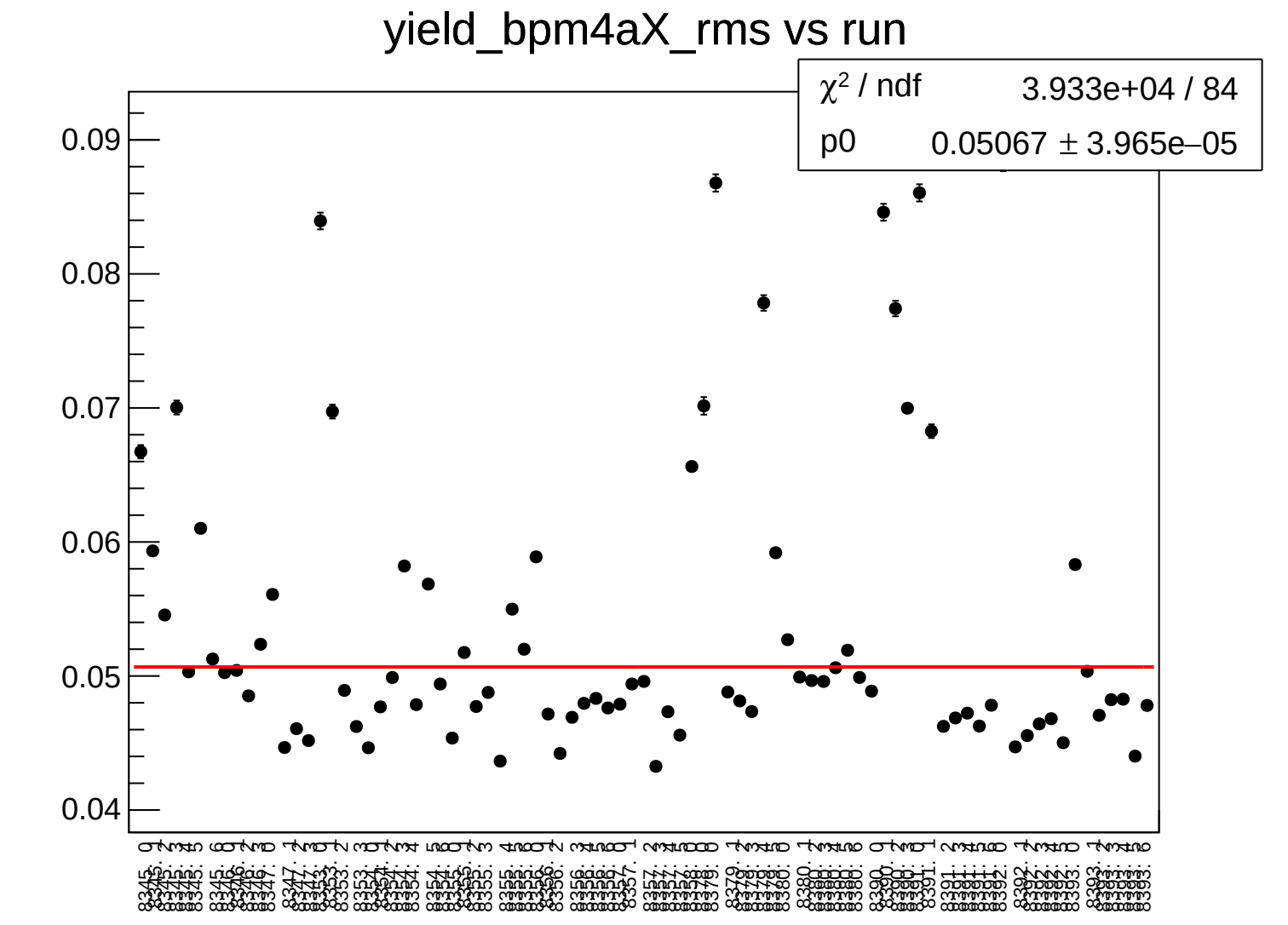

yield_cav4dY_mean vs run
χ² / ndf 1.779e+05 / 84
p0 1.047 ± 1.248e−05
1.075
1.07
1.065
1.06
1.055
1.05
1.045
1.04
1.035
pull
Entries 85
Mean 48.7
Std Dev 43.7
100
50
0
−50
−100

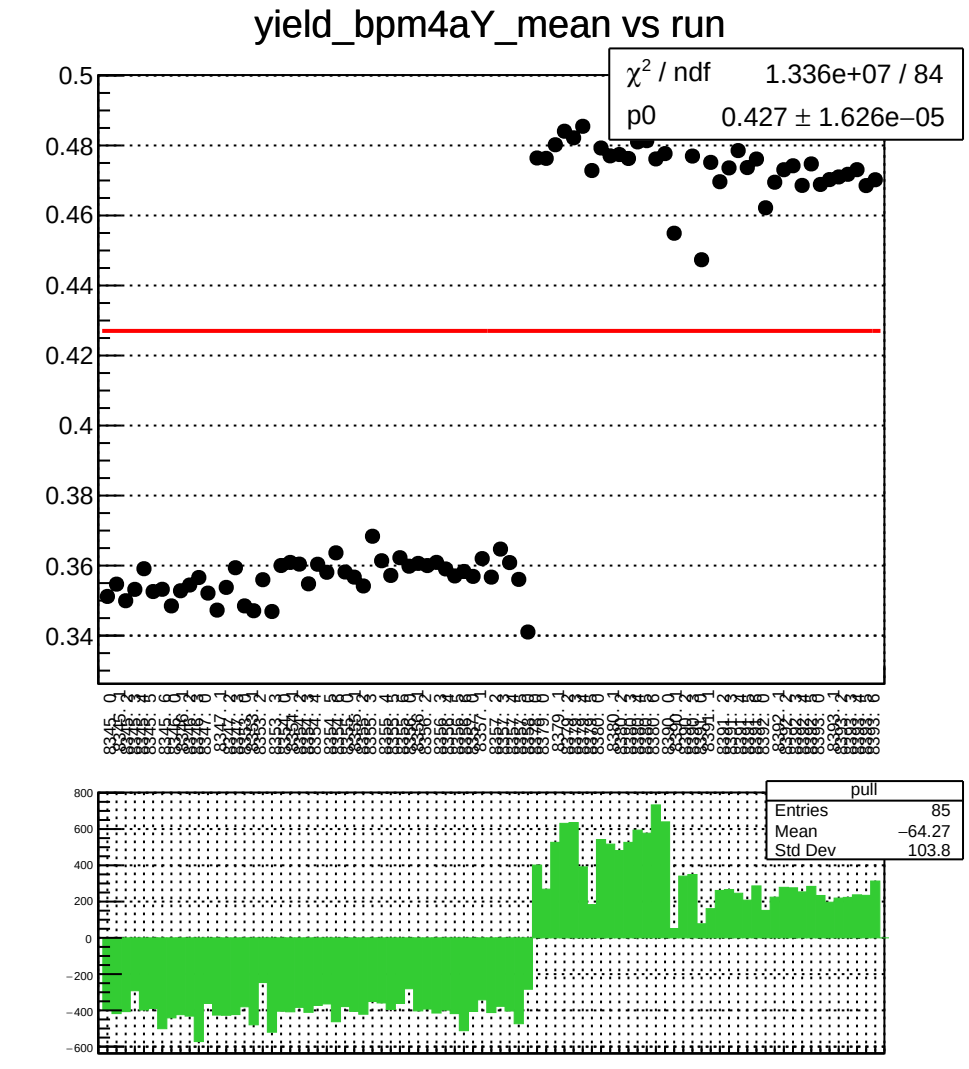

pull1D
Entries 85
Mean −1.119
Std Dev 4.218
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

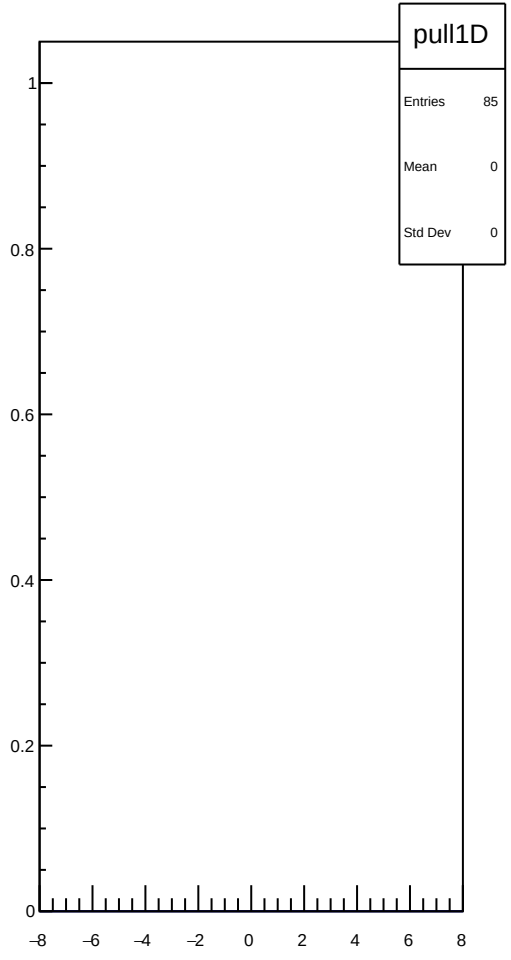

yield_cav4dY_rms vs run
χ² / ndf 2.154e+05 / 84
p0 0.01065 ± 8.824e−06
0.05
0.04
0.03
0.02
0.01

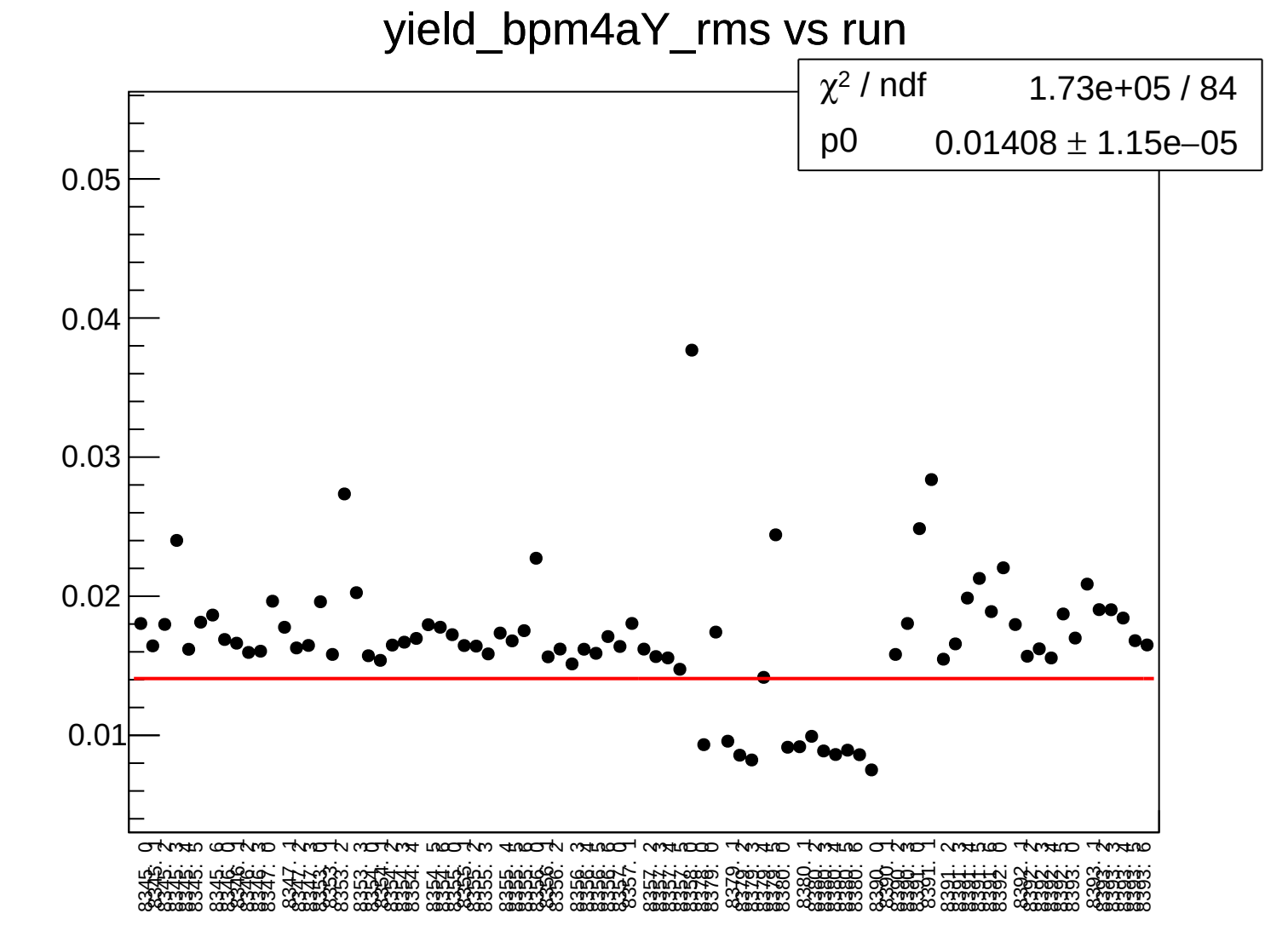

yield_bpm4aX_mean vs run
χ² / ndf 5.354e+06 / 84
p0 −0.7437 ± 5.608e−05
−0.55
−0.6
−0.65
−0.7
−0.75
−0.8
−0.85
−0.9
pull
Entries 85
Mean 930.7
Std Dev 885.6
400
300
200
100
0
−100
−200
−300

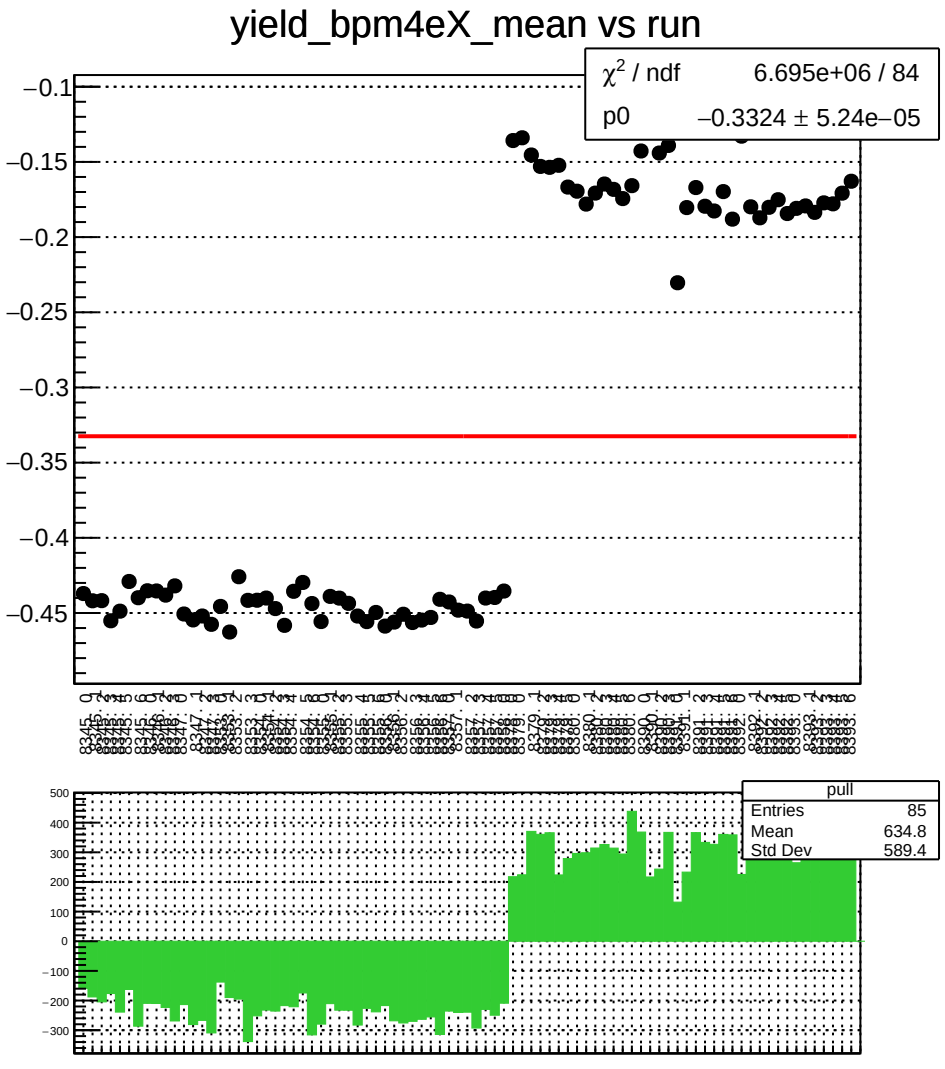

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

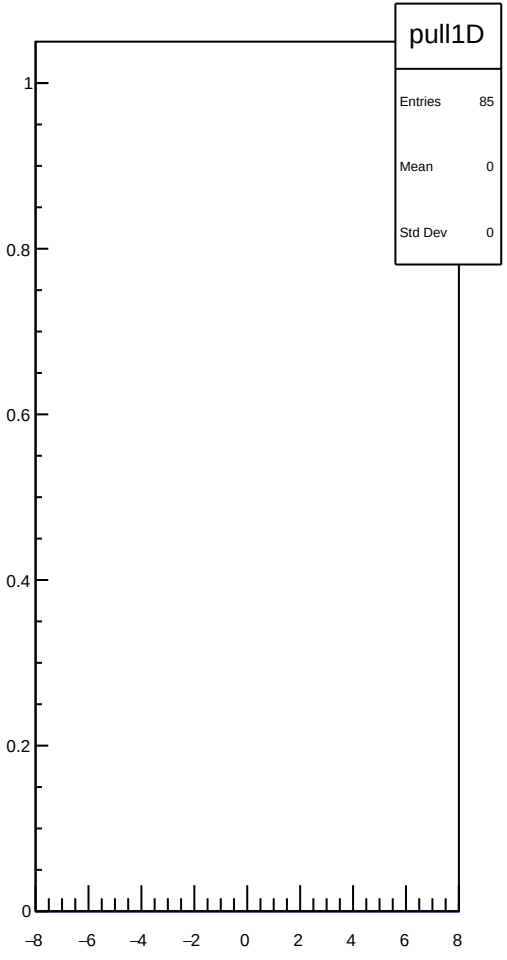

yield_bpm4aX_rms vs run
χ² / ndf 3.933e+04 / 84
p0 0.05067 ± 3.965e–05
0.09
0.08
0.07
0.06
0.05
0.04

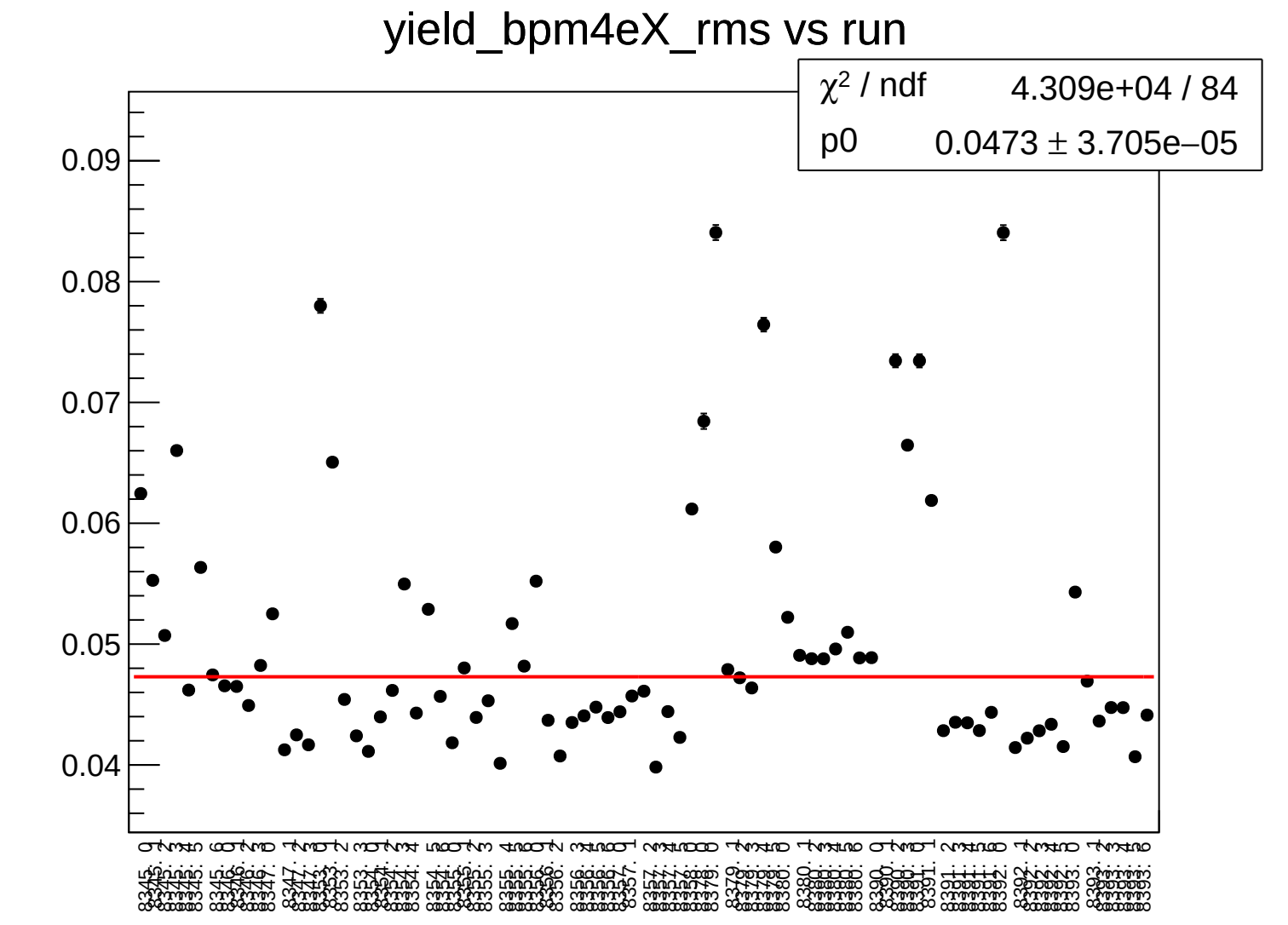

yield_bpm4aY_mean vs run
χ² / ndf 1.336e+07 / 84
p0 0.427 ± 1.626e−05
pull
Entries 85
Mean −64.27
Std Dev 103.8

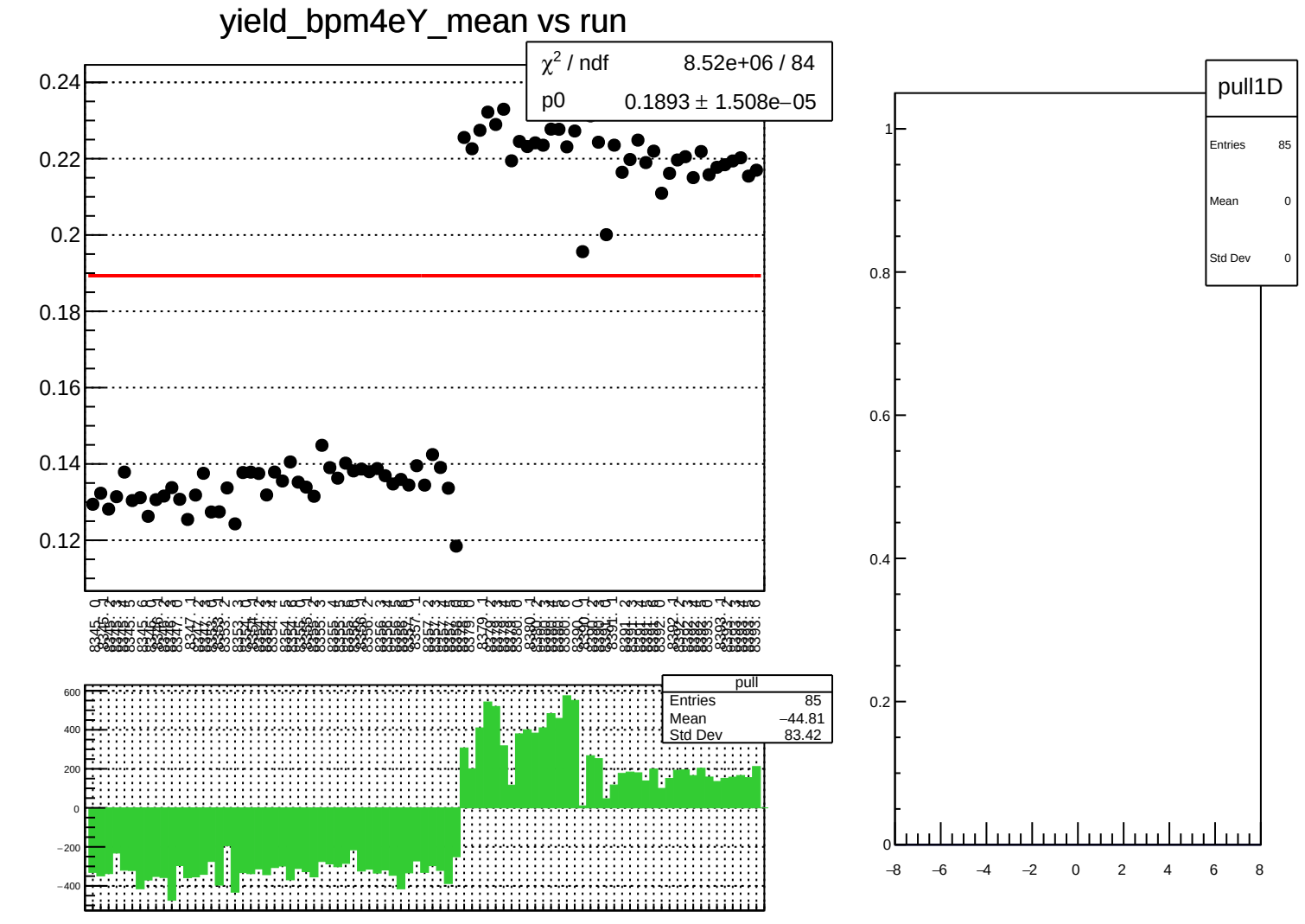

pull1D
Entries 85
Mean 0
Std Dev 0

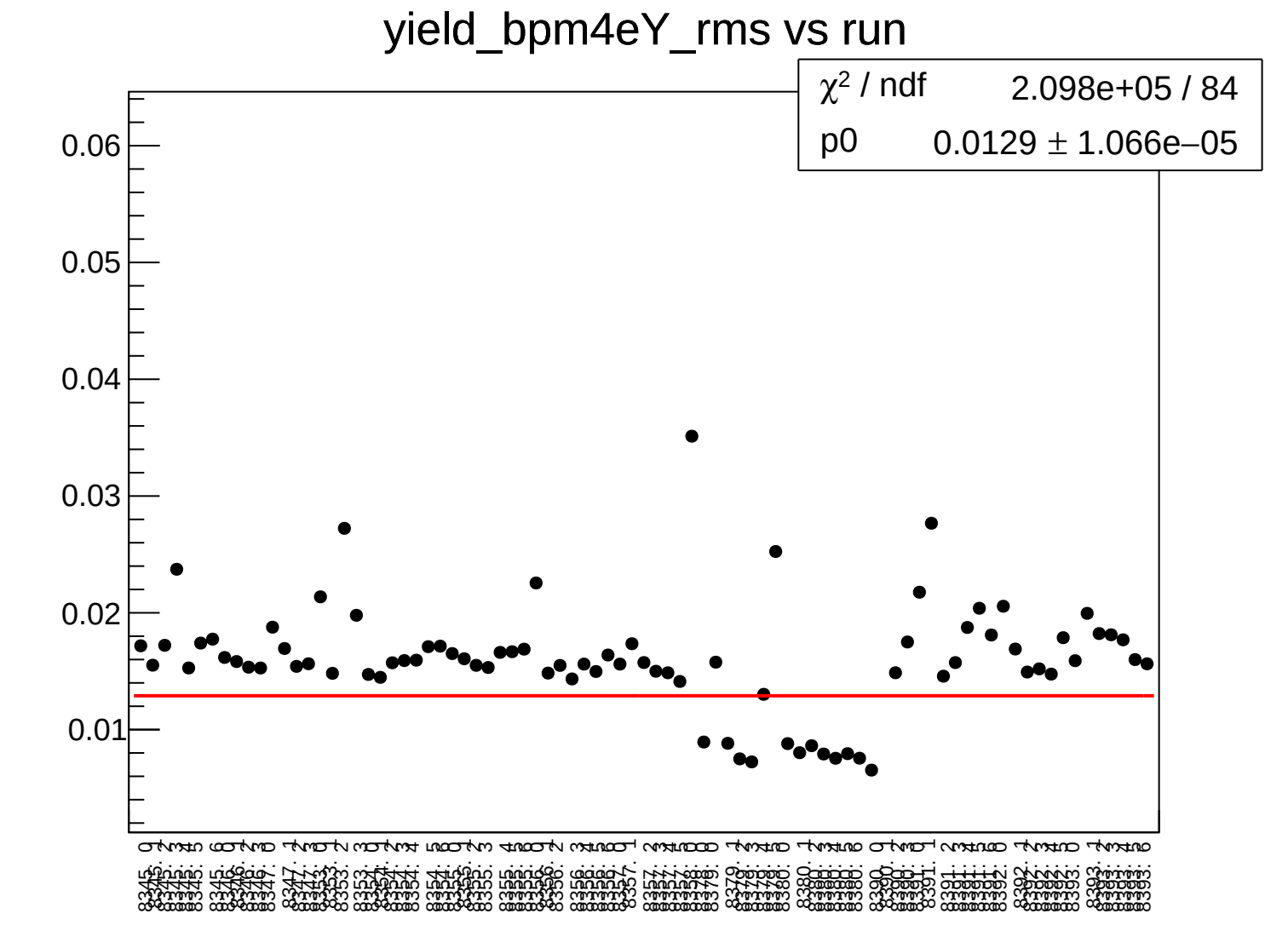

yield_bpm4aY_rms vs run
χ^2 / ndf 1.73e+05 / 84
p0 0.01408 ± 1.15e−05
0.05
0.04
0.03
0.02
0.01

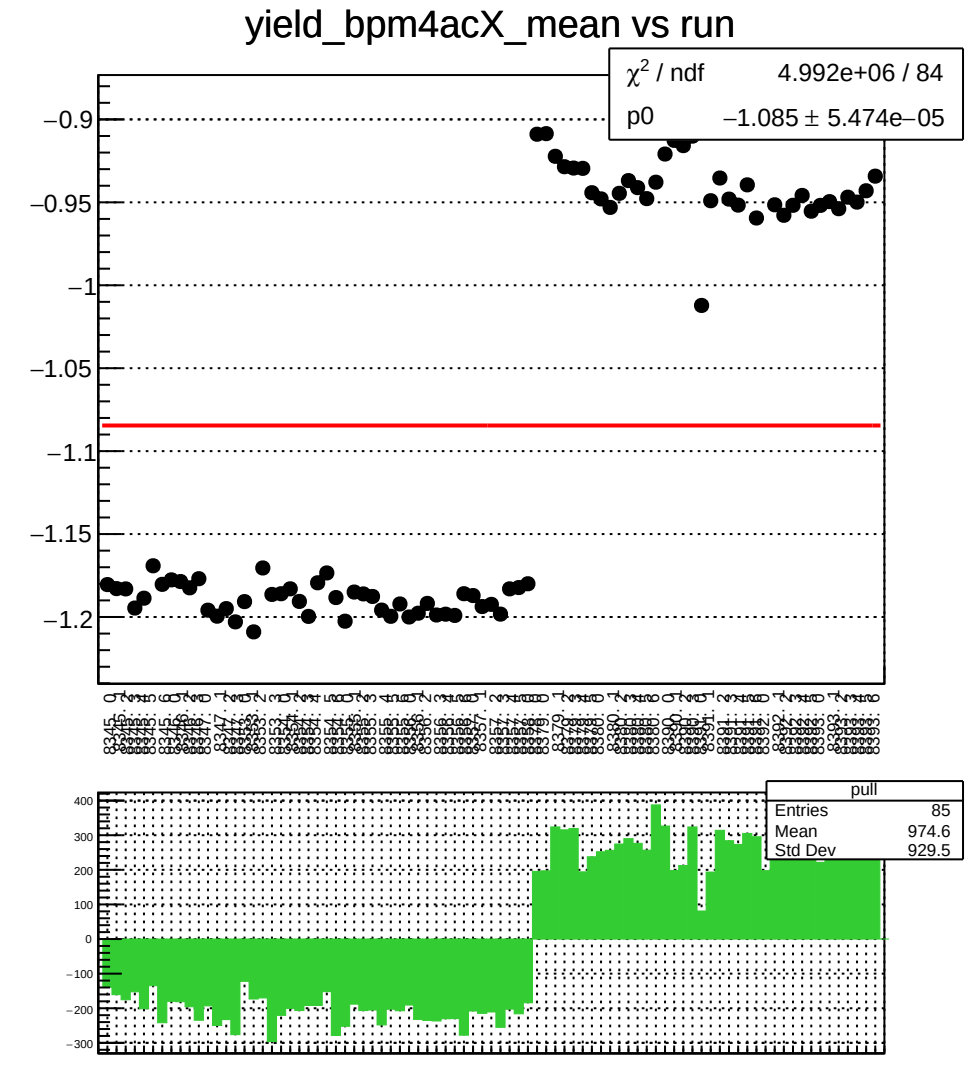

yield_bpm4eX_mean vs run
χ² / ndf 6.695e+06 / 84
p0 −0.3324 ± 5.24e−05
pull
Entries 85
Mean 634.8
Std Dev 589.4

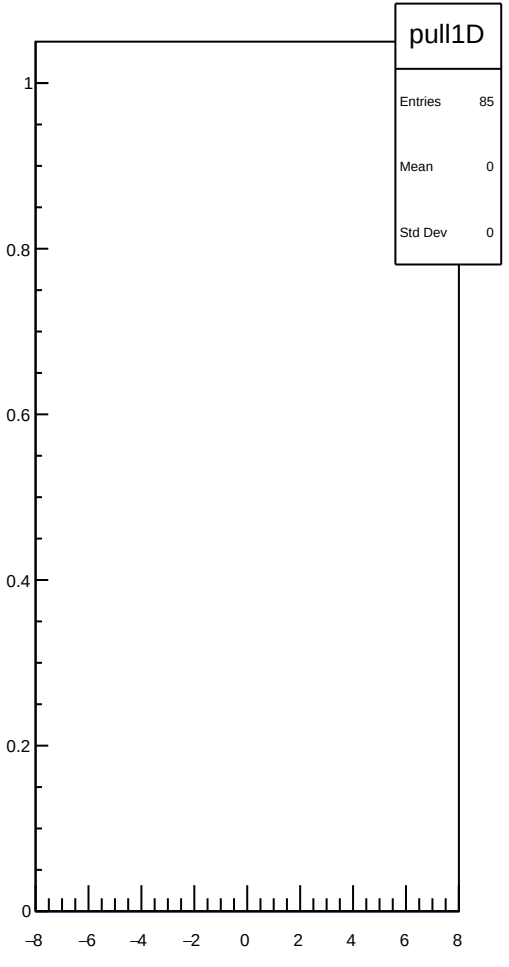

pull1D
Entries 85
Mean 0
Std Dev 0

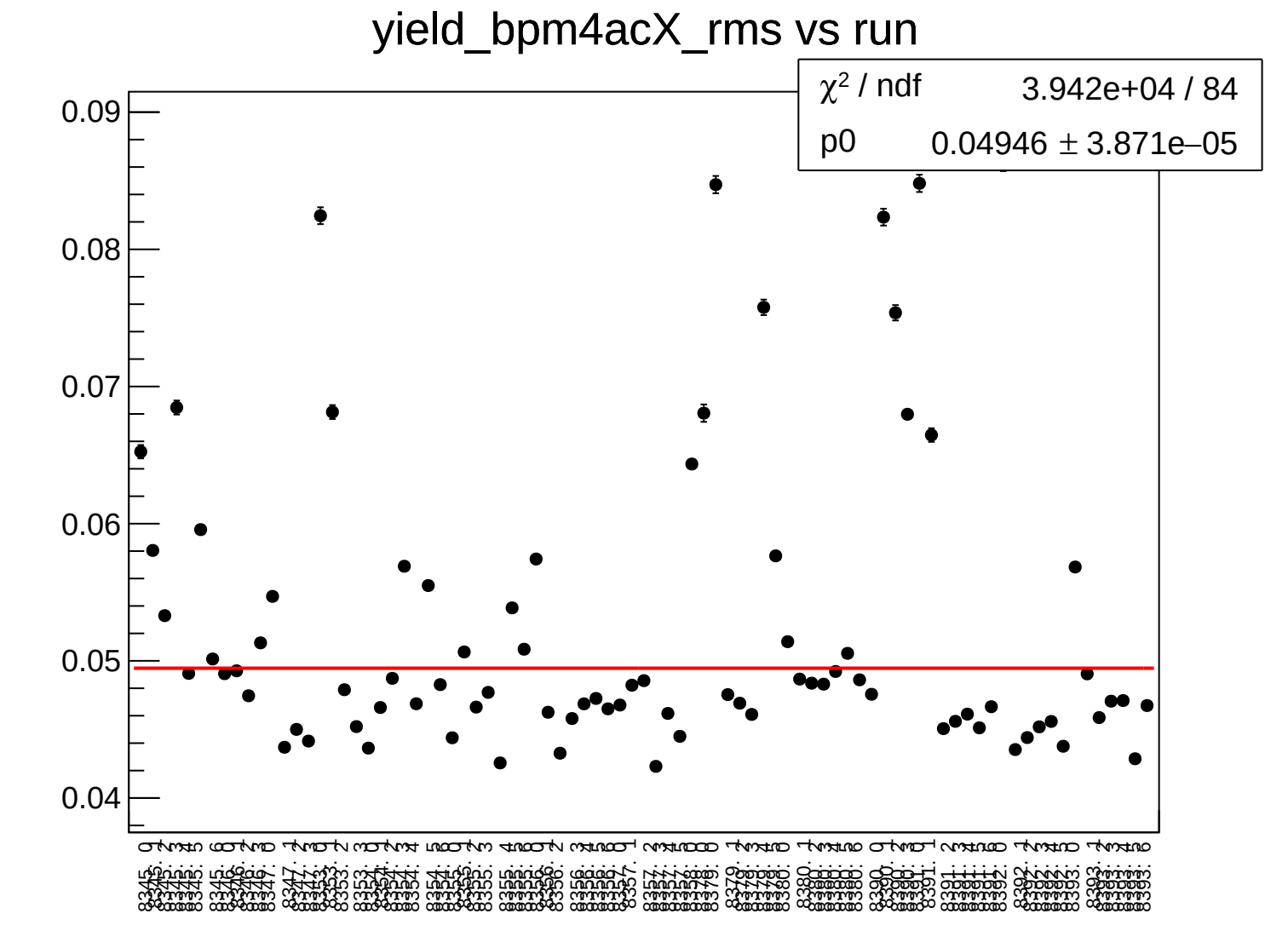

yield_bpm4eX_rms vs run
χ² / ndf 4.309e+04 / 84
p0 0.0473 ± 3.705e−05
0.09
0.08
0.07
0.06
0.05
0.04

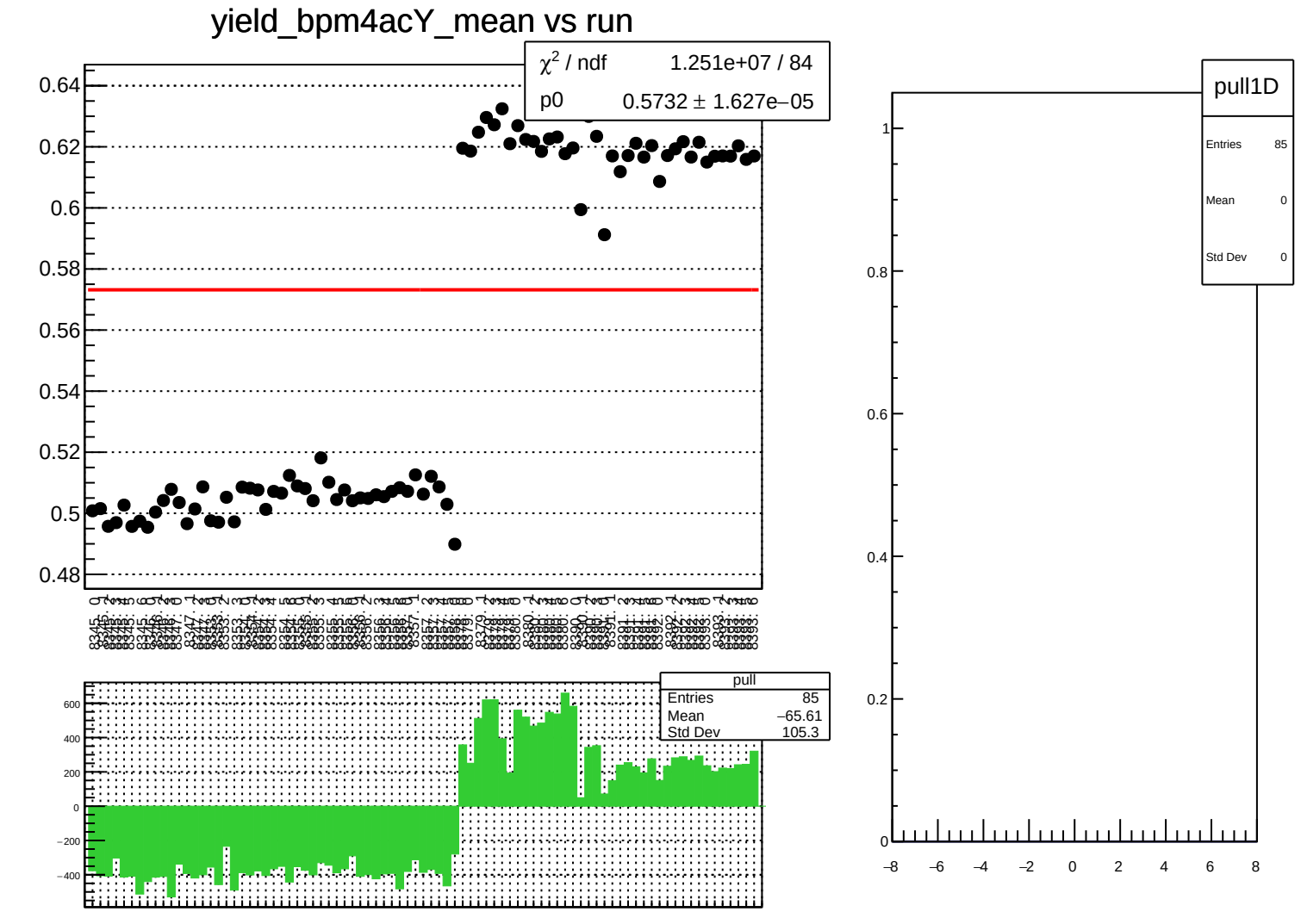

yield_bpm4eY_mean vs run
χ² / ndf 8.52e+06 / 84
p0 0.1893 ± 1.508e−05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
pull
Entries 85
Mean −44.81
Std Dev 83.42
600
400
200
0
−200
−400
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

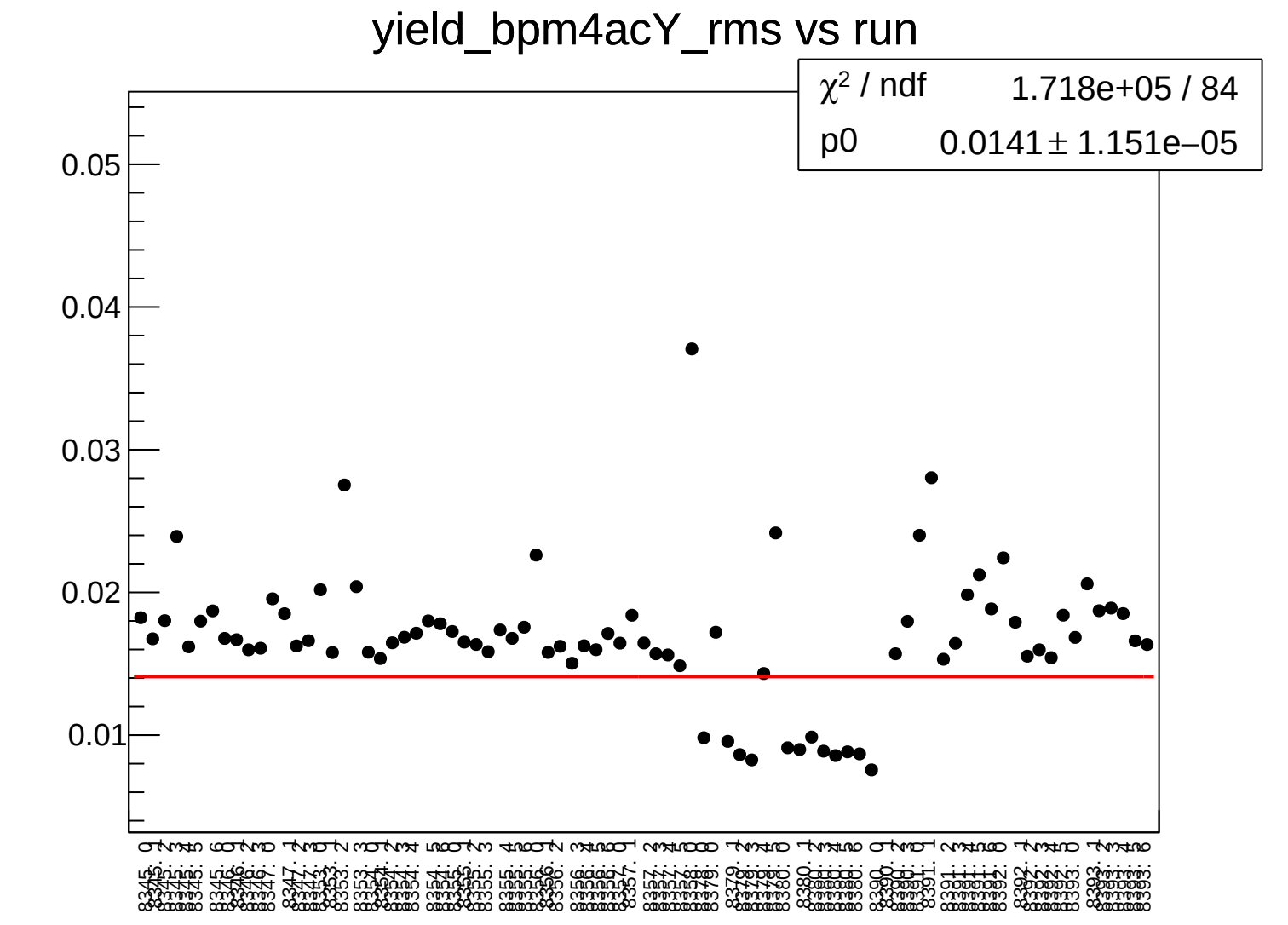

yield_bpm4eY_rms vs run
χ² / ndf 2.098e+05 / 84
p0 0.0129 ± 1.066e−05
0.06
0.05
0.04
0.03
0.02
0.01

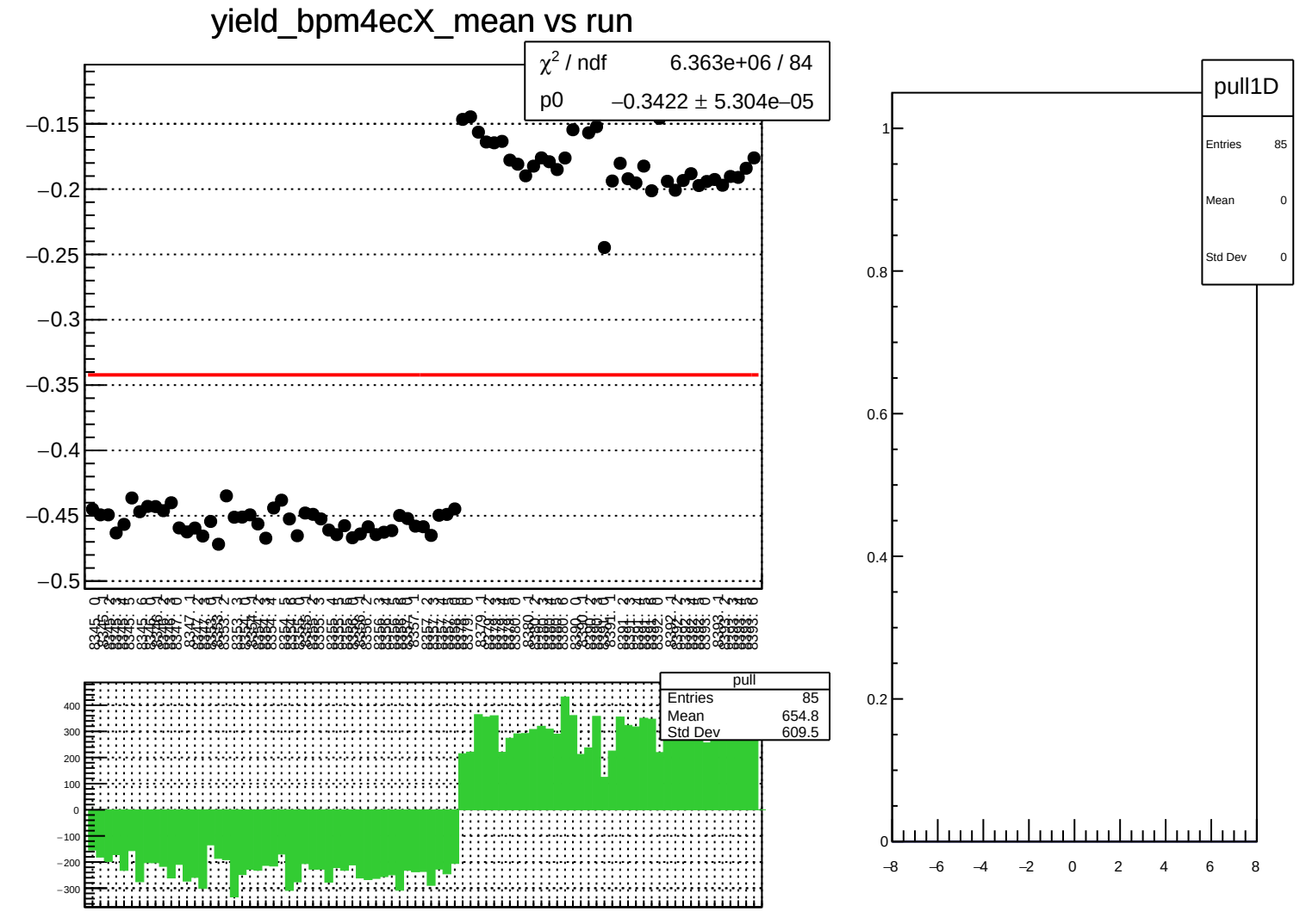

yield_bpm4acX_mean vs run
χ² / ndf 4.992e+06 / 84
p0 −1.085 ± 5.474e−05
−0.9
−0.95
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 85
Mean 974.6
Std Dev 929.5
400
300
200
100
0
−100
−200
−300

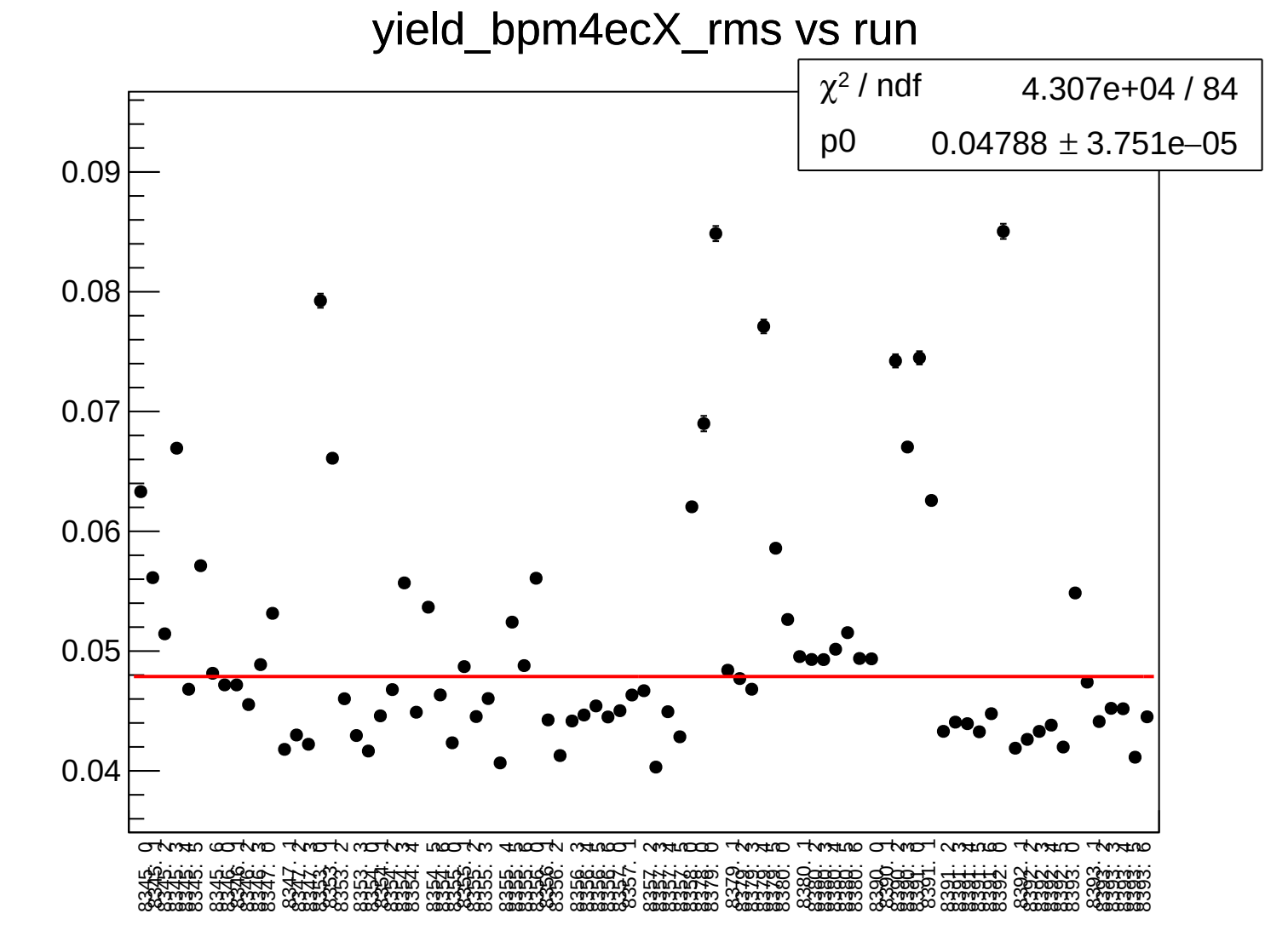

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

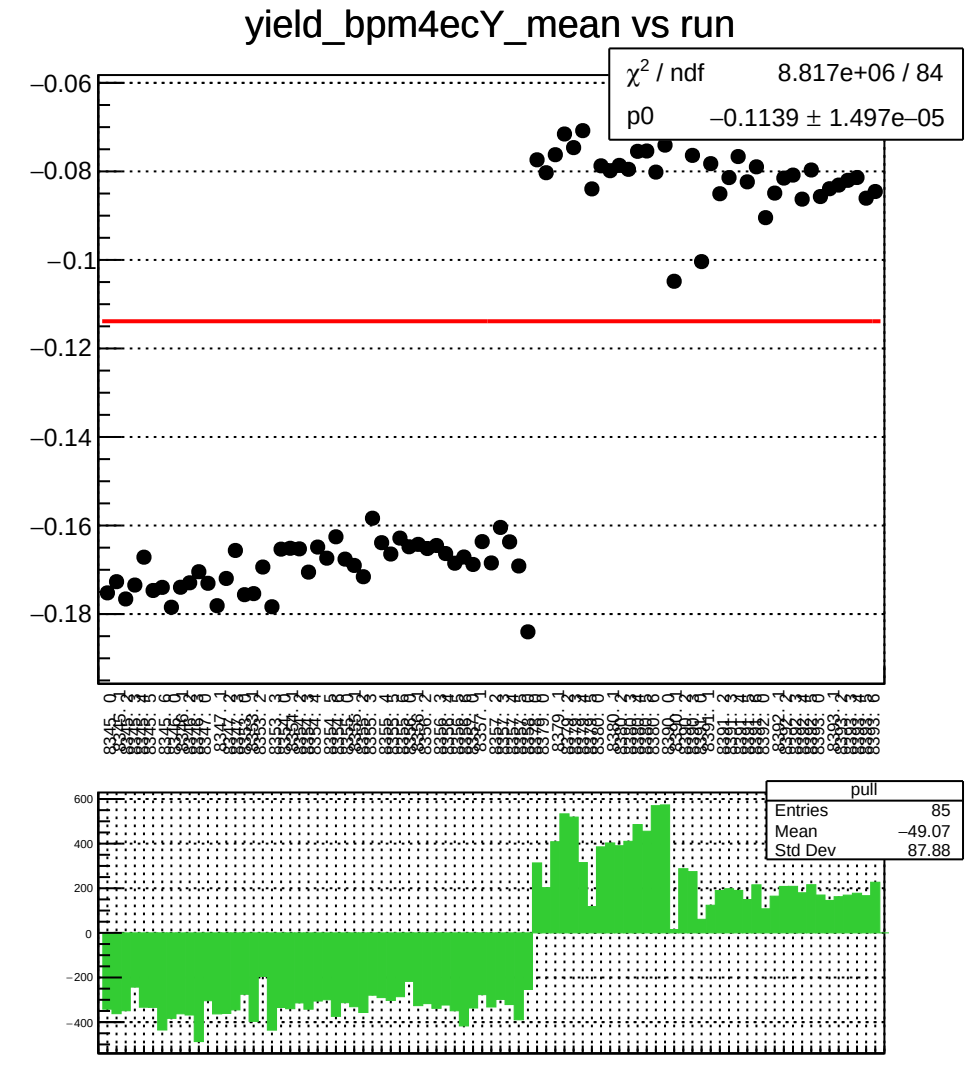

yield_bpm4acX_rms vs run
χ² / ndf 3.942e+04 / 84
p0 0.04946 ± 3.871e–05
0.09
0.08
0.07
0.06
0.05
0.04

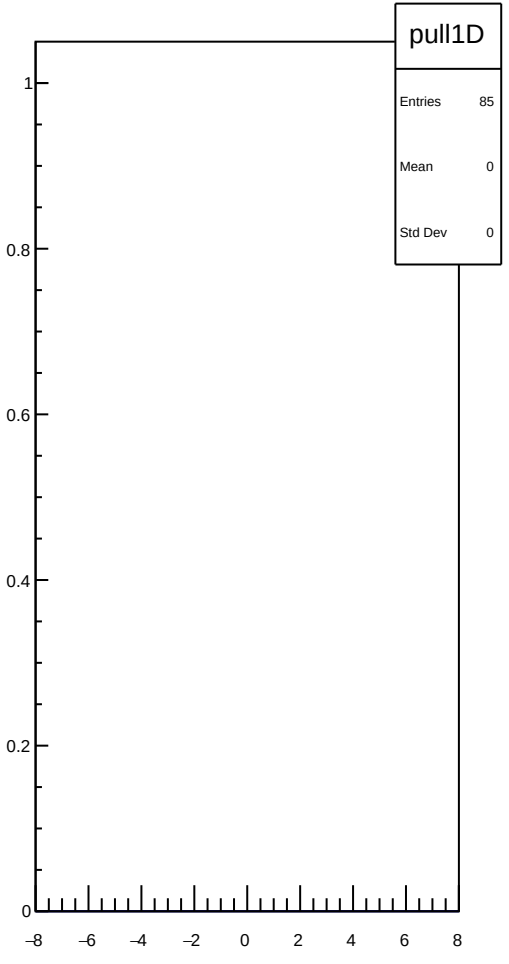

yield_bpm4acY_mean vs run
χ² / ndf 1.251e+07 / 84
p0 0.5732 ± 1.627e−05
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5
0.48
pull
Entries 85
Mean −65.61
Std Dev 105.3
600
400
200
0
−200
−400
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

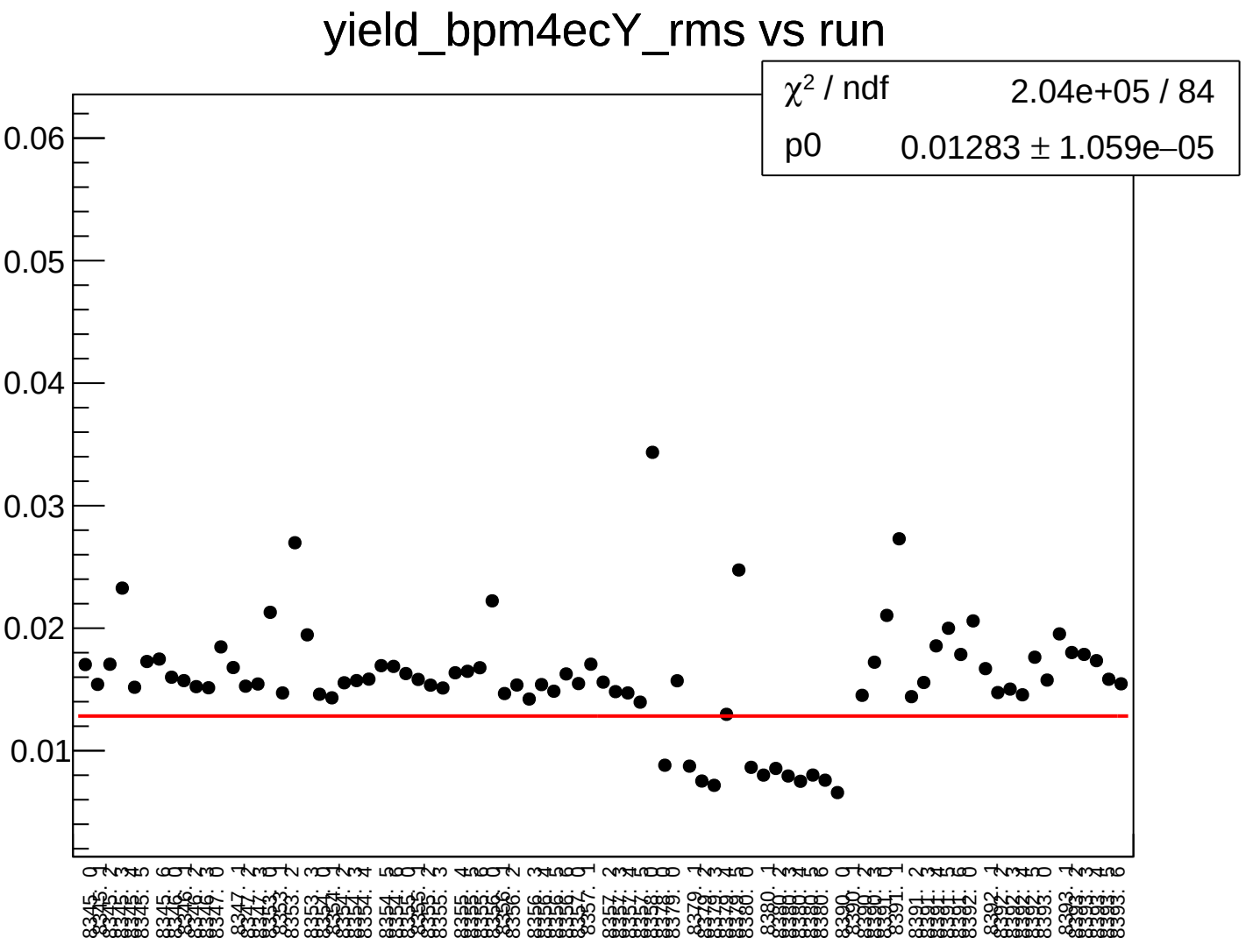

yield_bpm4acY_rms vs run
χ² / ndf 1.718e+05 / 84
p0 0.0141 ± 1.151e−05
0.05
0.04
0.03
0.02
0.01

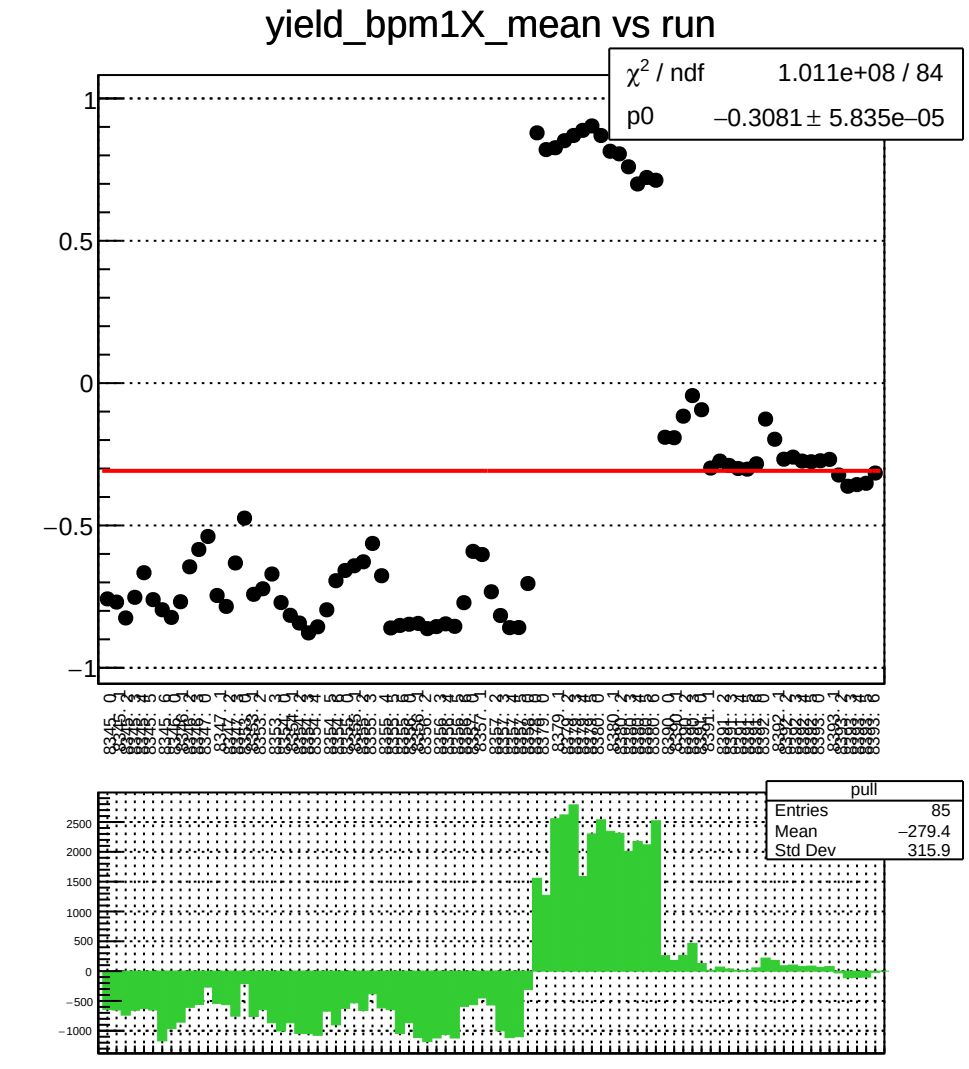

yield_bpm4ecX_mean vs run
χ² / ndf 6.363e+06 / 84
p0 −0.3422 ± 5.304e−05
pull
Entries 85
Mean 654.8
Std Dev 609.5
pull1D
Entries 85
Mean 0
Std Dev 0

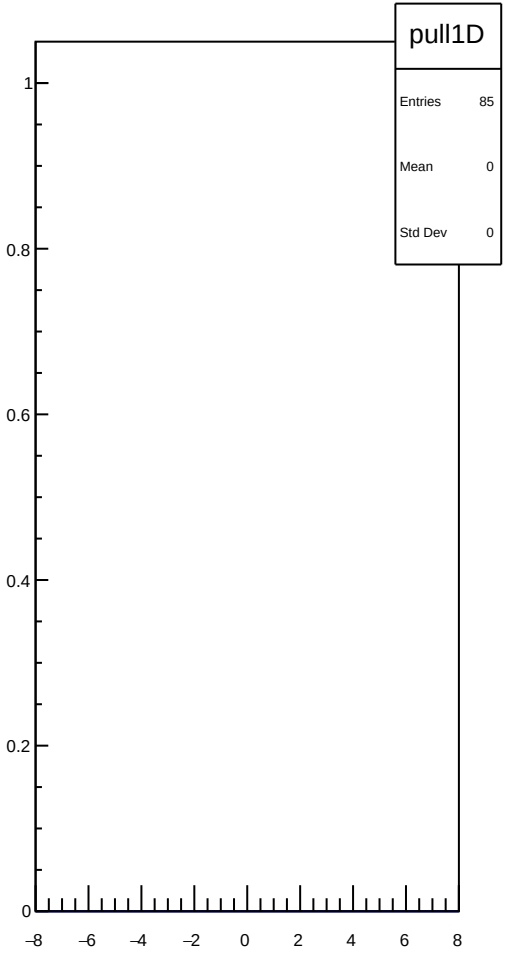

yield_bpm4ecX_rms vs run
χ² / ndf 4.307e+04 / 84
p0 0.04788 ± 3.751e–05
0.09
0.08
0.07
0.06
0.05
0.04

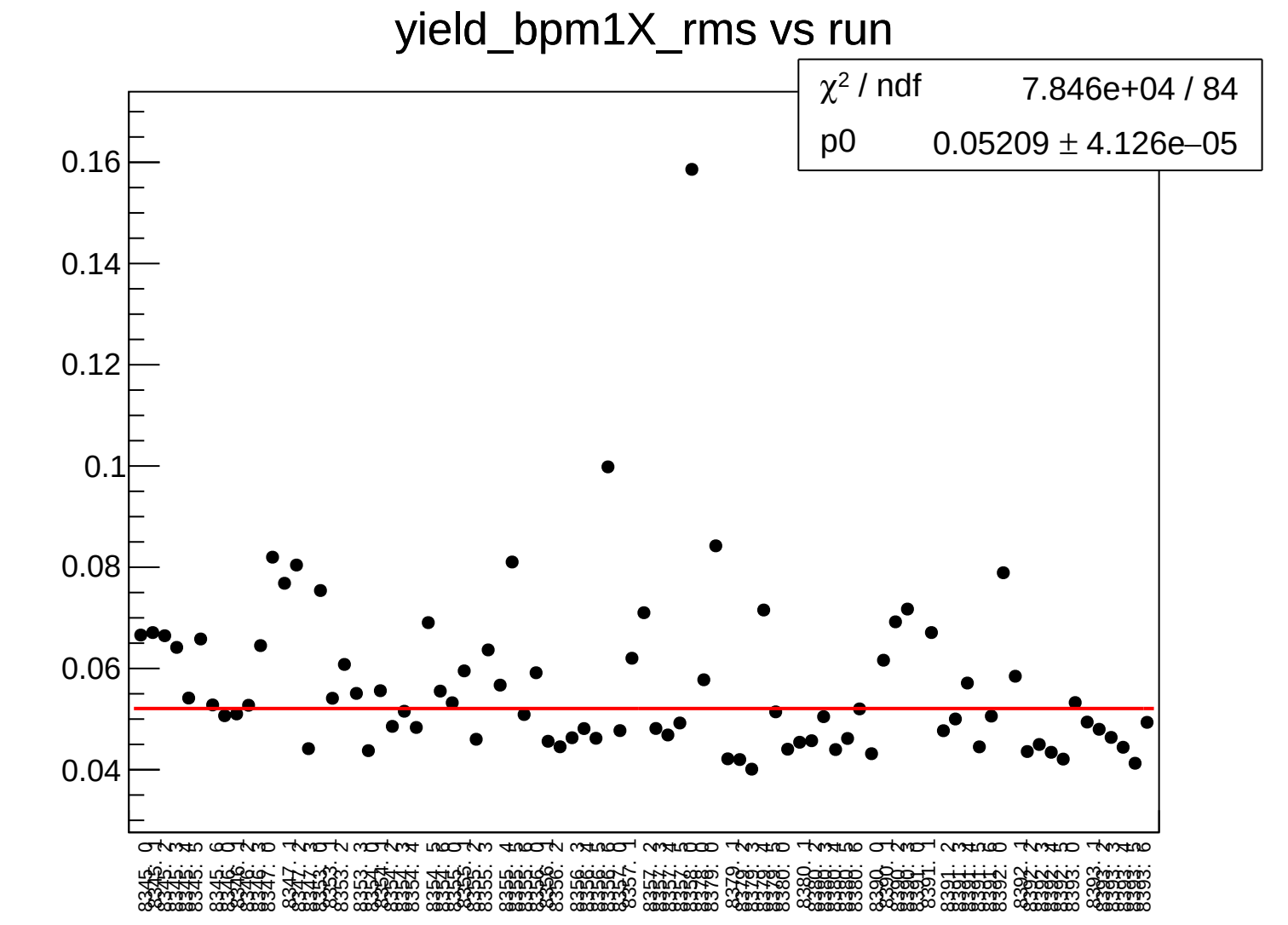

yield_bpm4ecY_mean vs run
χ² / ndf 8.817e+06 / 84
p0 −0.1139 ± 1.497e−05
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 85
Mean −49.07
Std Dev 87.88
600
400
200
0
−200
−400

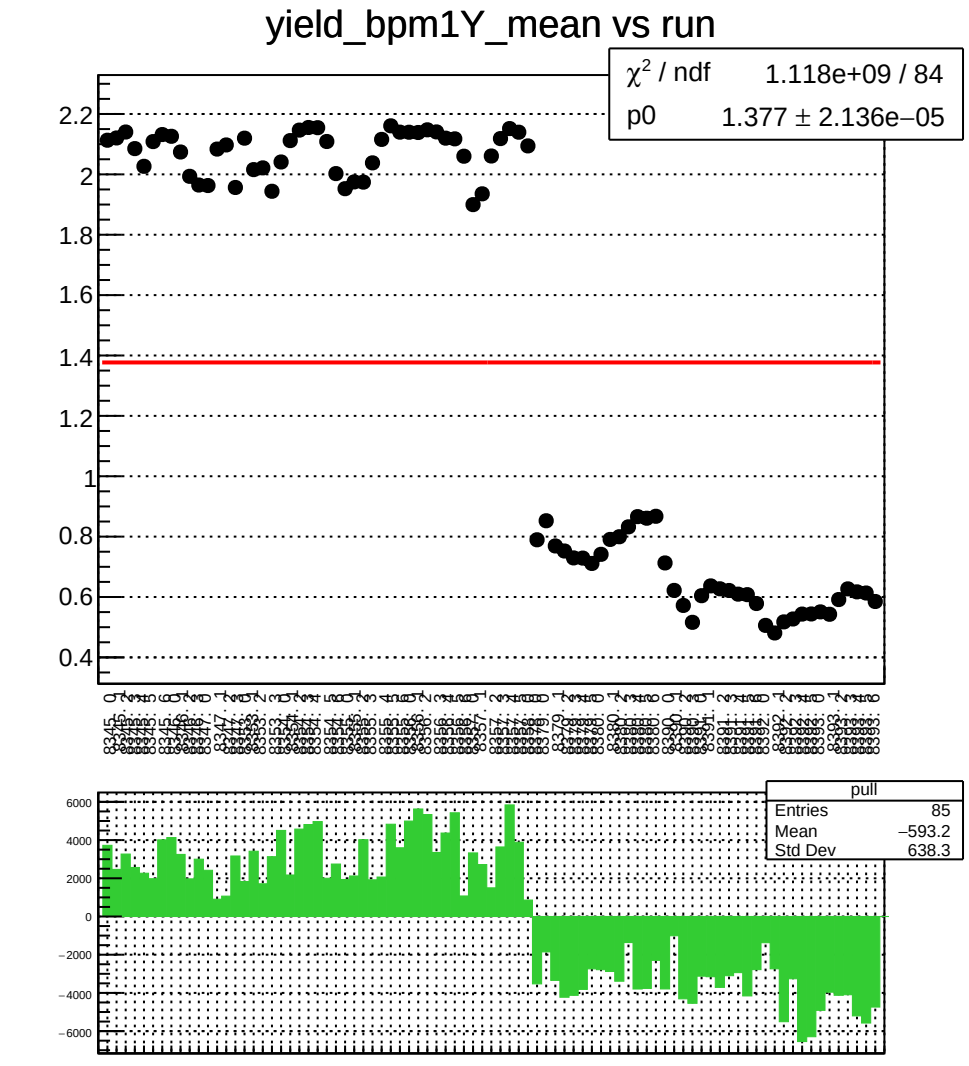

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

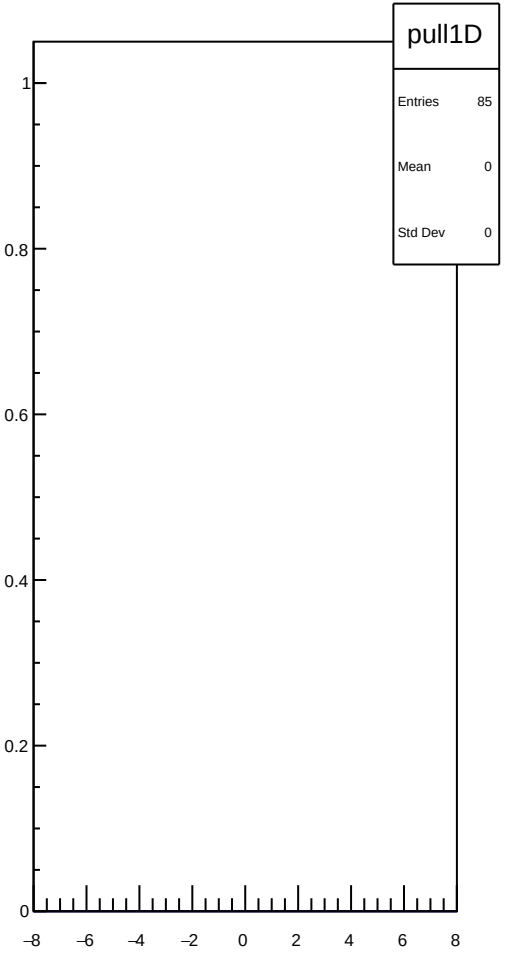

yield_bpm4ecY_rms vs run
χ² / ndf 2.04e+05 / 84
p0 0.01283 ± 1.059e−05
0.06
0.05
0.04
0.03
0.02
0.01

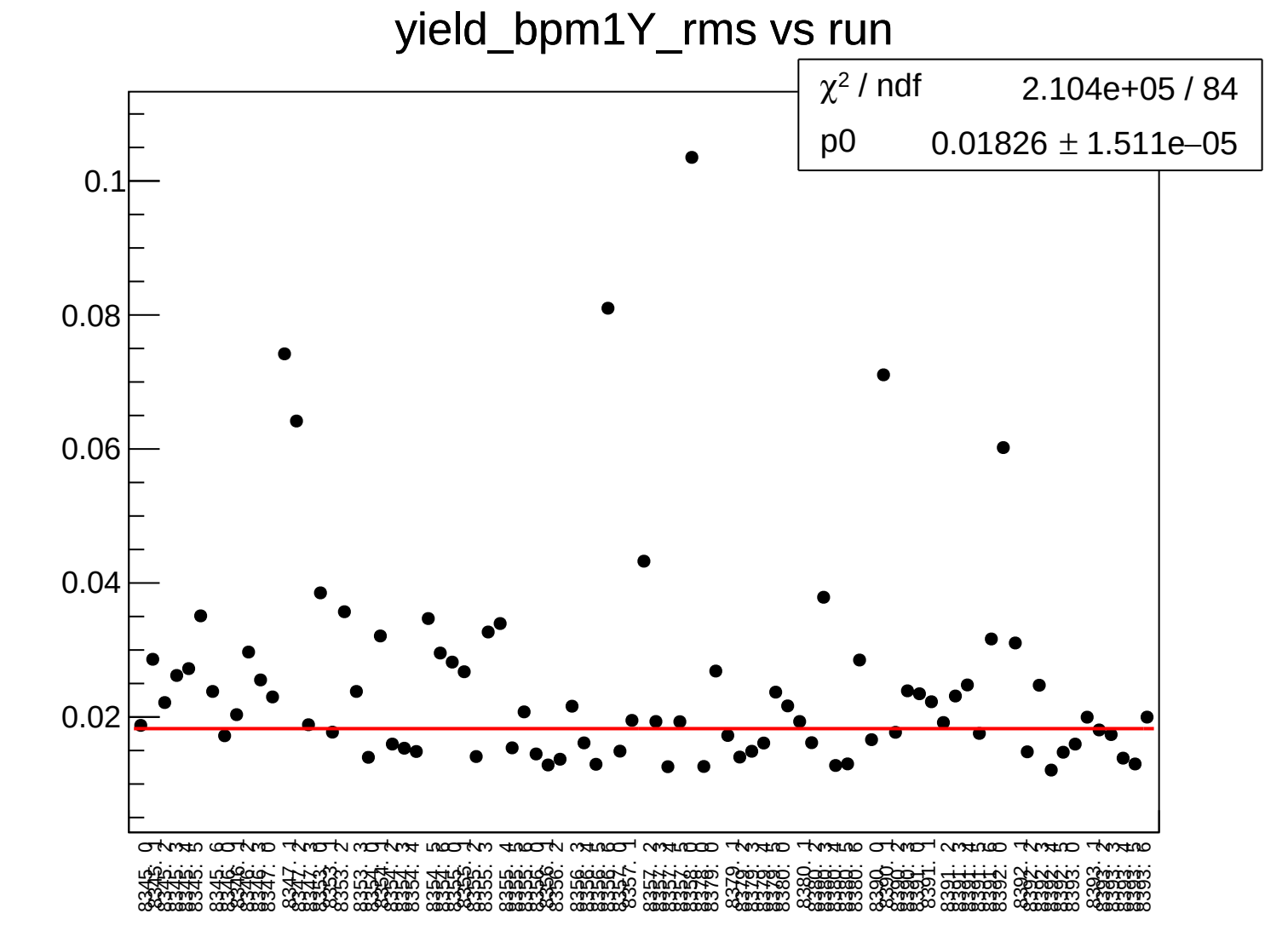

yield_bpm1X_mean vs run
χ² / ndf 1.011e+08 / 84
p0 −0.3081 ± 5.835e−05
pull
Entries 85
Mean −279.4
Std Dev 315.9

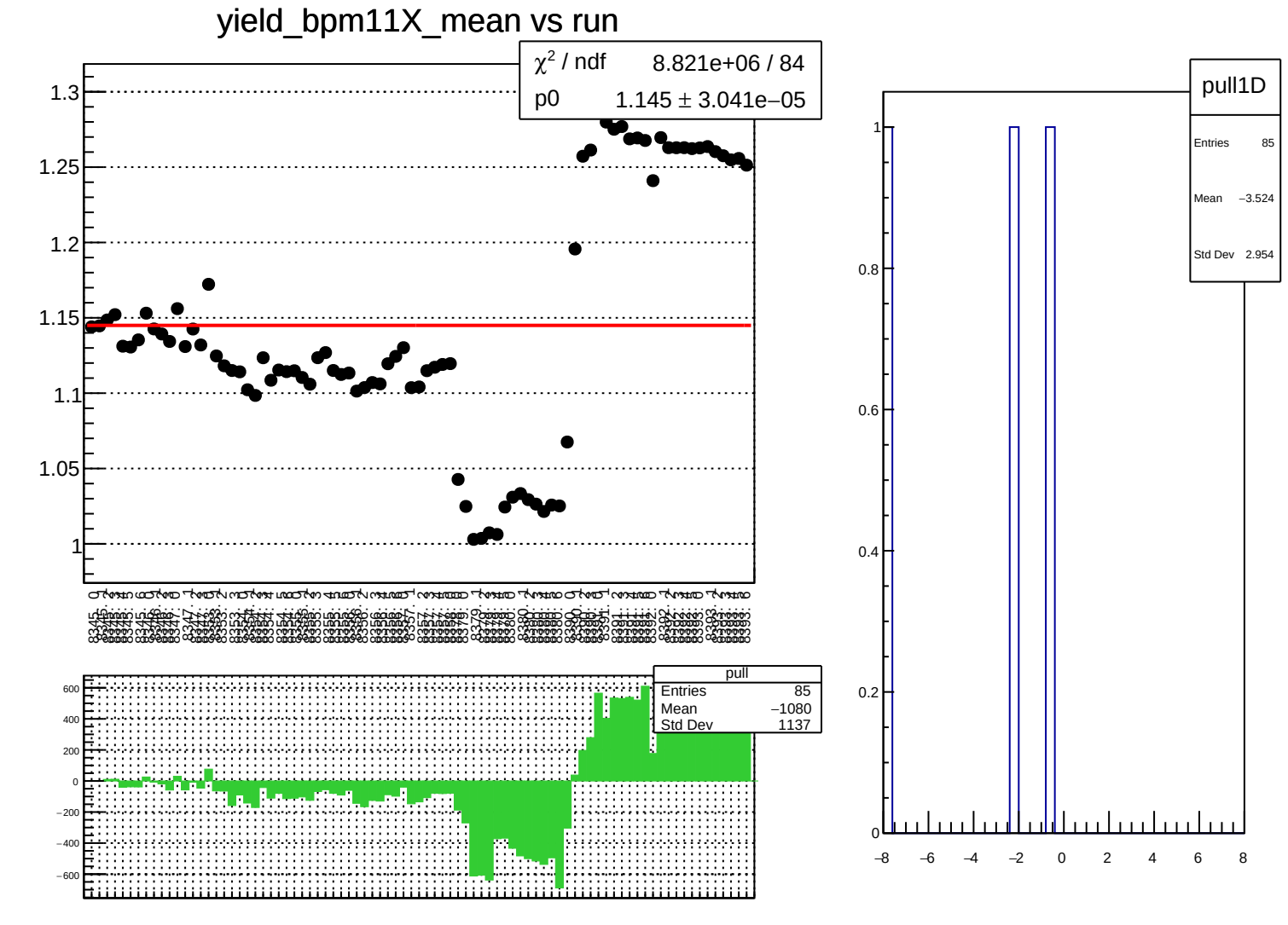

pull1D
Entries 85
Mean 0
Std Dev 0

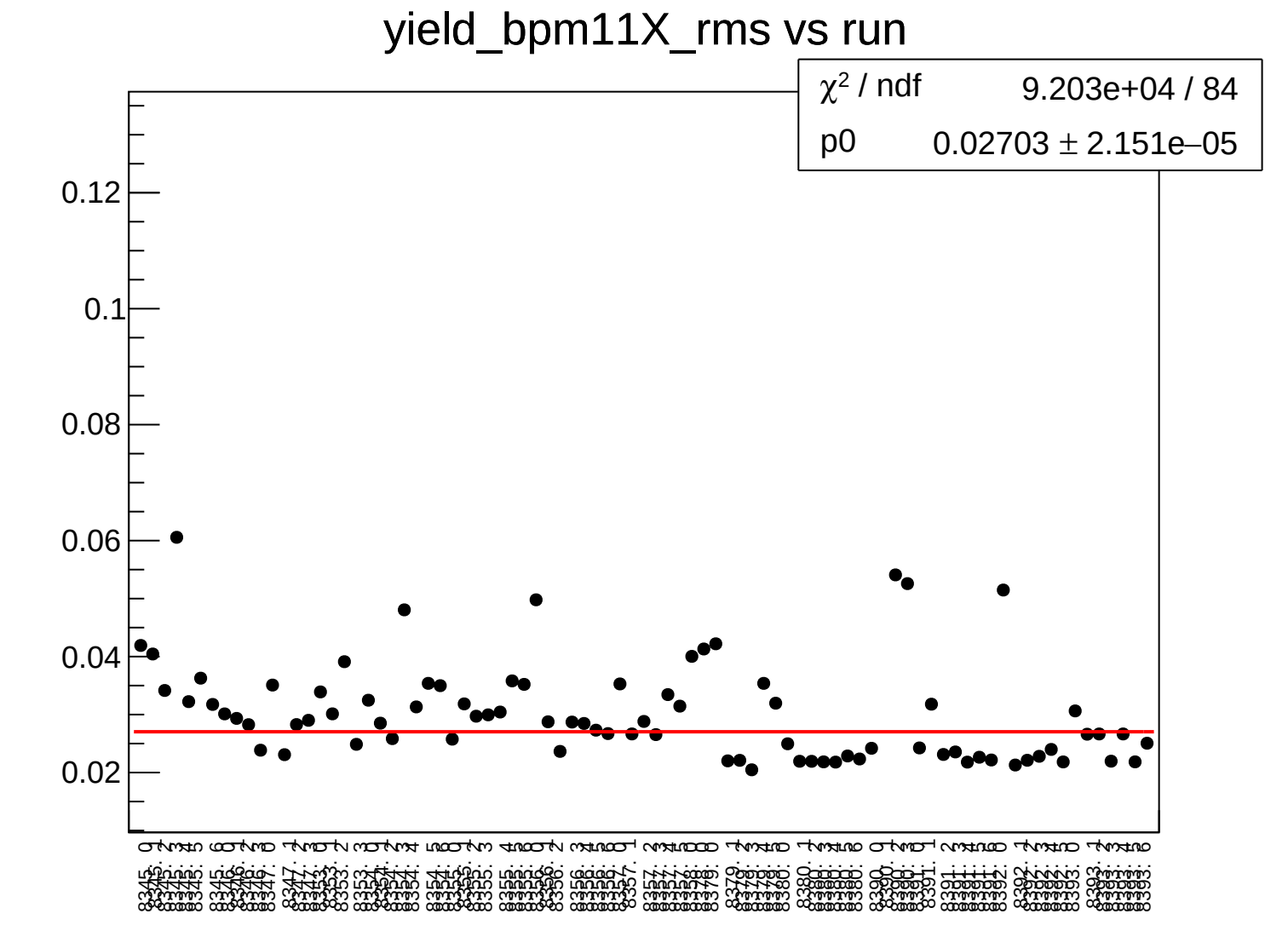

yield_bpm1X_rms vs run
χ² / ndf 7.846e+04 / 84
p0 0.05209 ± 4.126e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

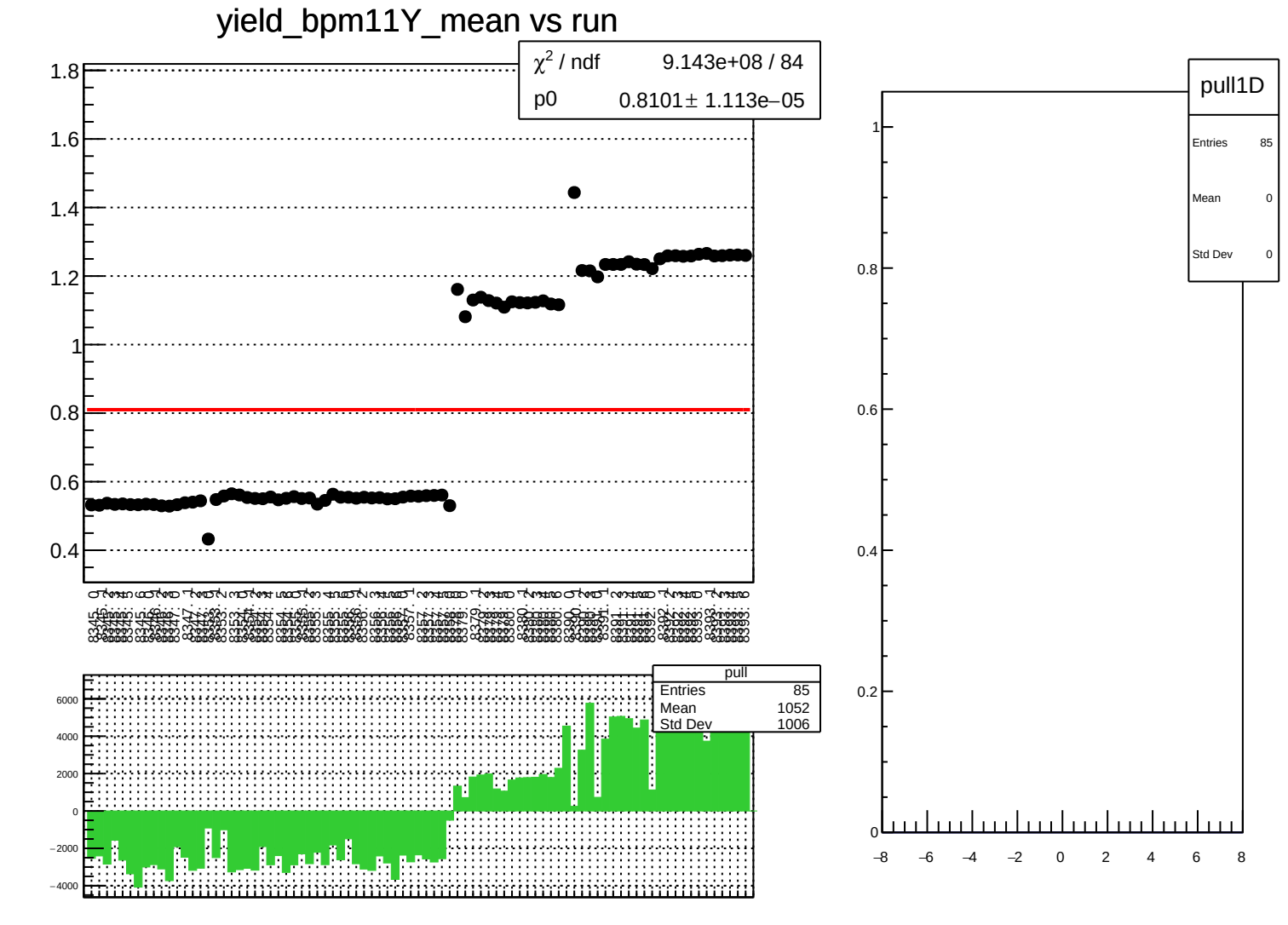

yield_bpm1Y_mean vs run
χ² / ndf 1.118e+09 / 84
p0 1.377 ± 2.136e−05
pull
Entries 85
Mean −593.2
Std Dev 638.3

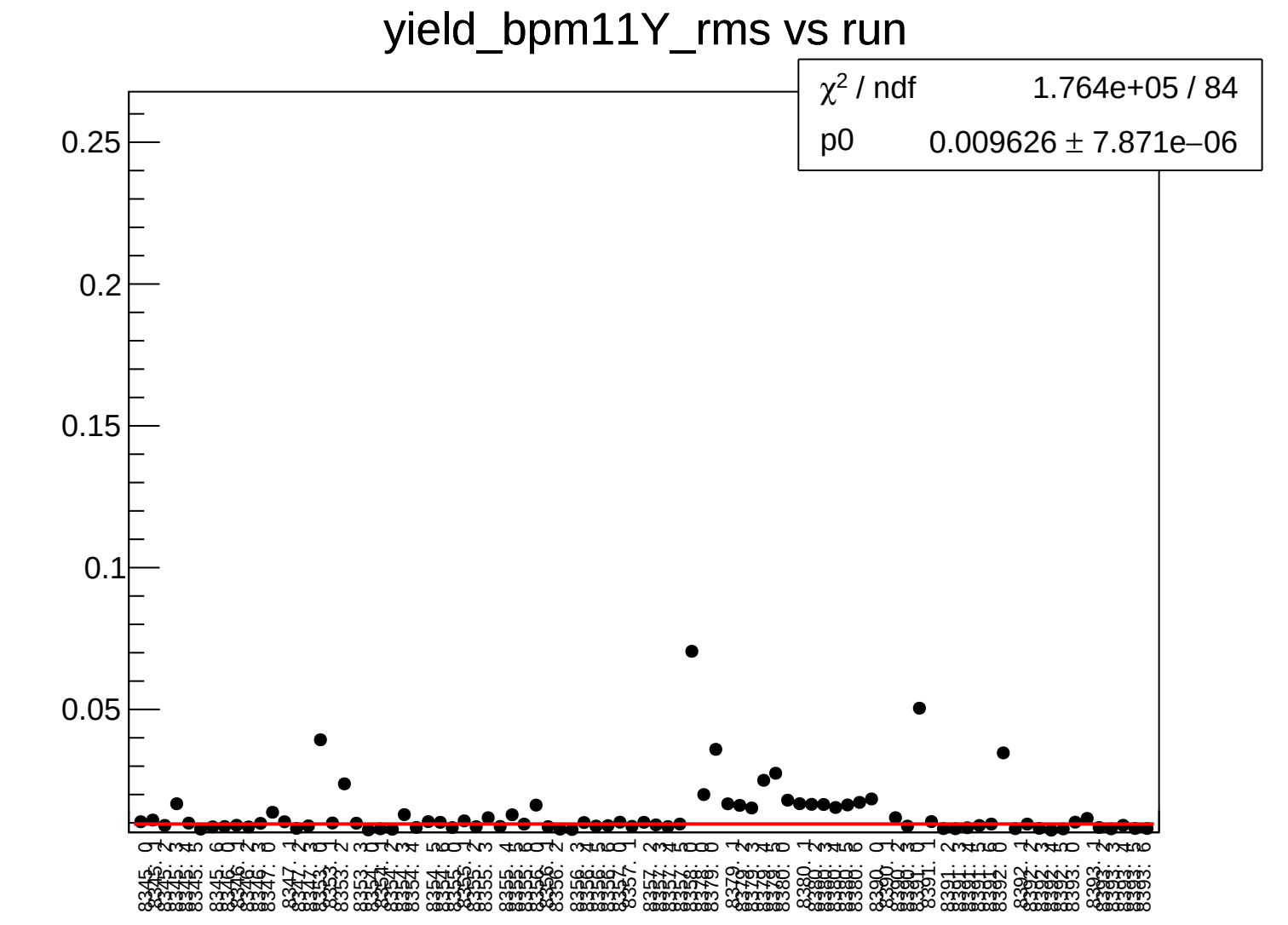

pull1D
Entries 85
Mean 0
Std Dev 0

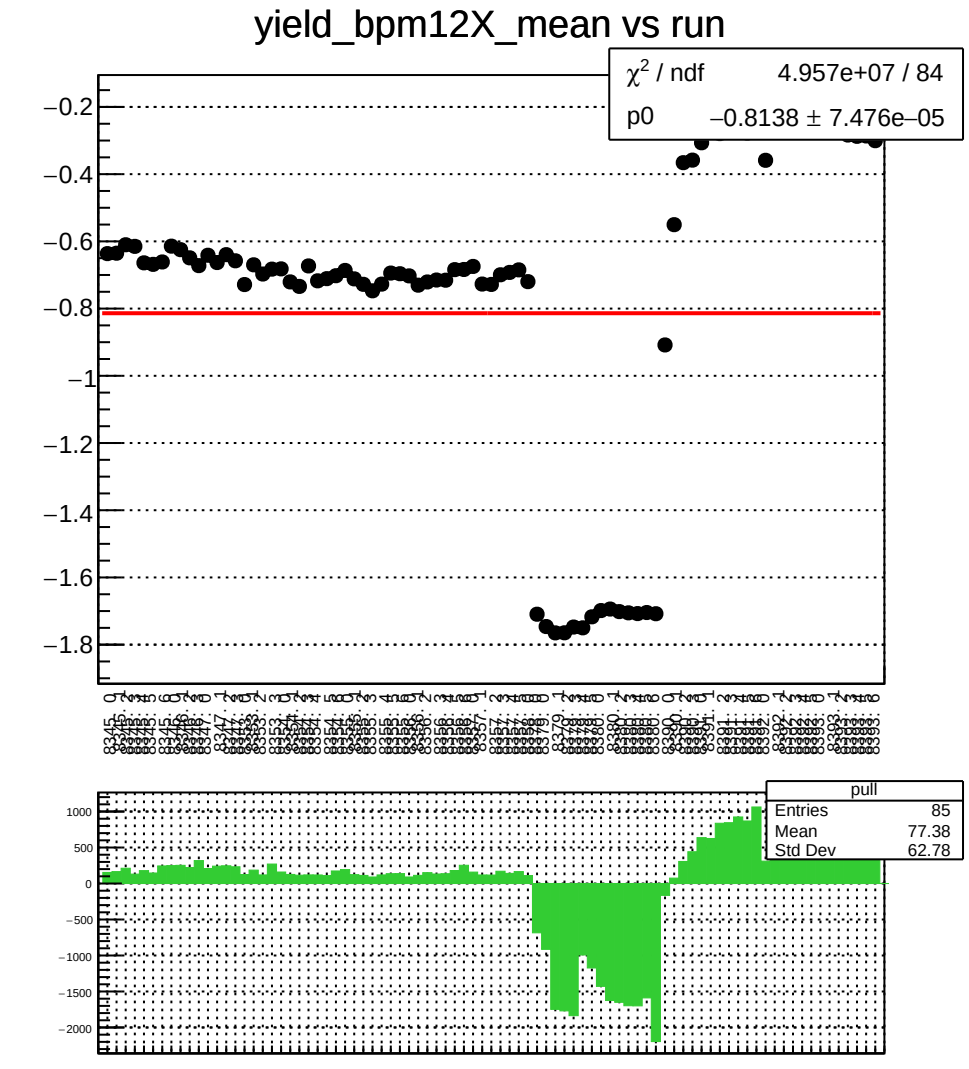

yield_bpm1Y_rms vs run
χ² / ndf 2.104e+05 / 84
p0 0.01826 ± 1.511e−05
0.1
0.08
0.06
0.04
0.02

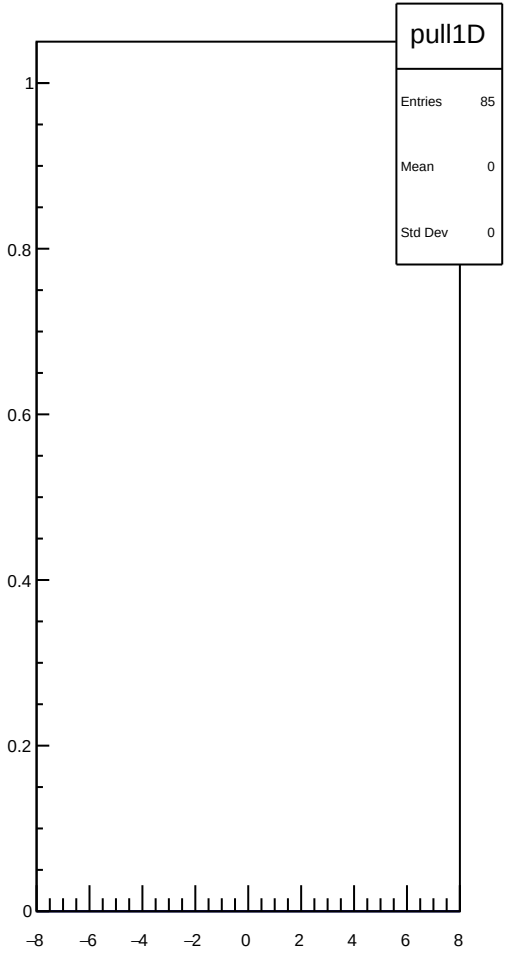

yield_bpm11X_mean vs run
χ² / ndf 8.821e+06 / 84
p0 1.145 ± 3.041e−05
1.3
1.25
1.2
1.15
1.1
1.05
1
pull
Entries 85
Mean −1080
Std Dev 1137
600
400
200
0
−200
−400
−600
pull1D
Entries 85
Mean −3.524
Std Dev 2.954
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

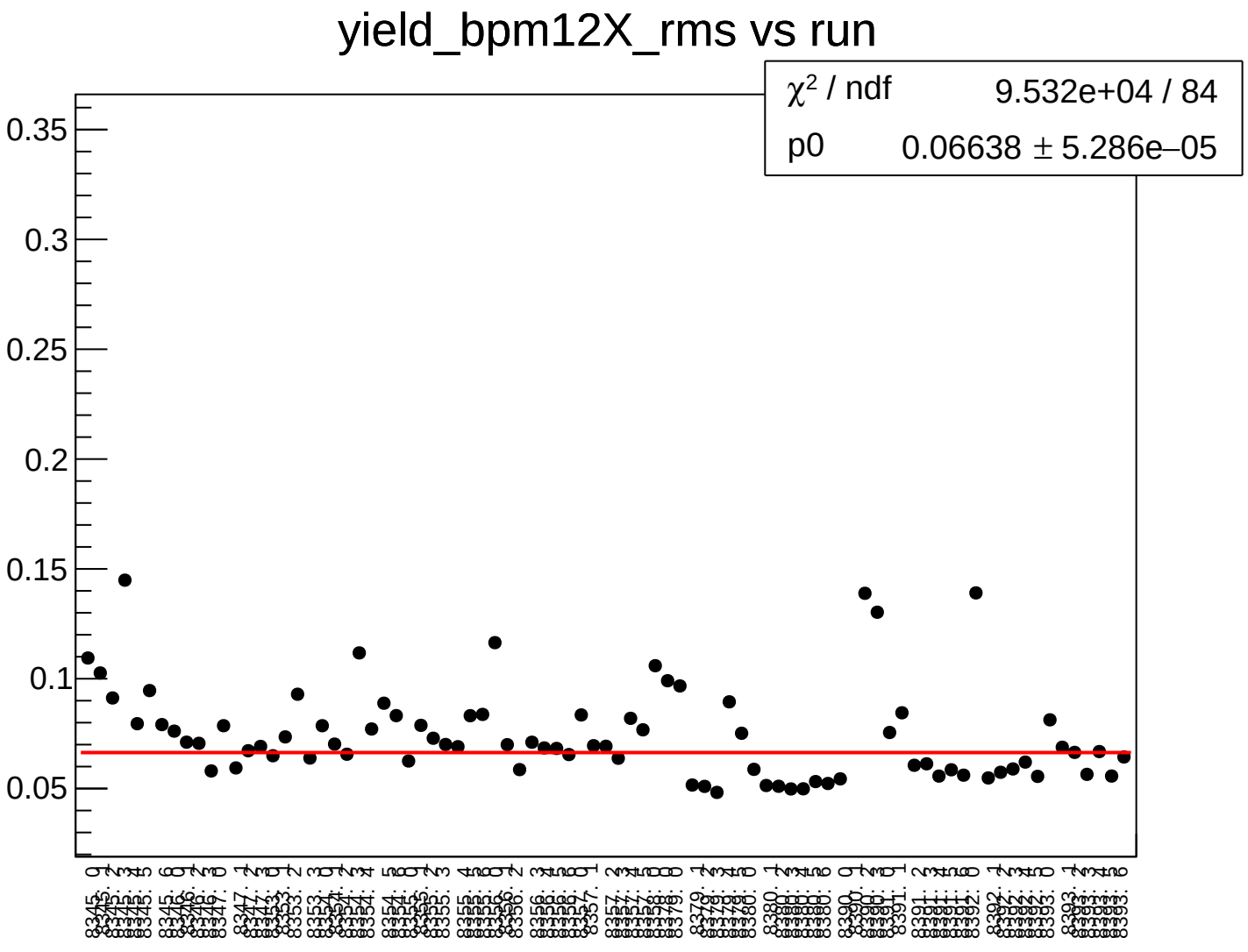

yield_bpm11X_rms vs run
χ² / ndf 9.203e+04 / 84
p0 0.02703 ± 2.151e–05
0.12
0.1
0.08
0.06
0.04
0.02

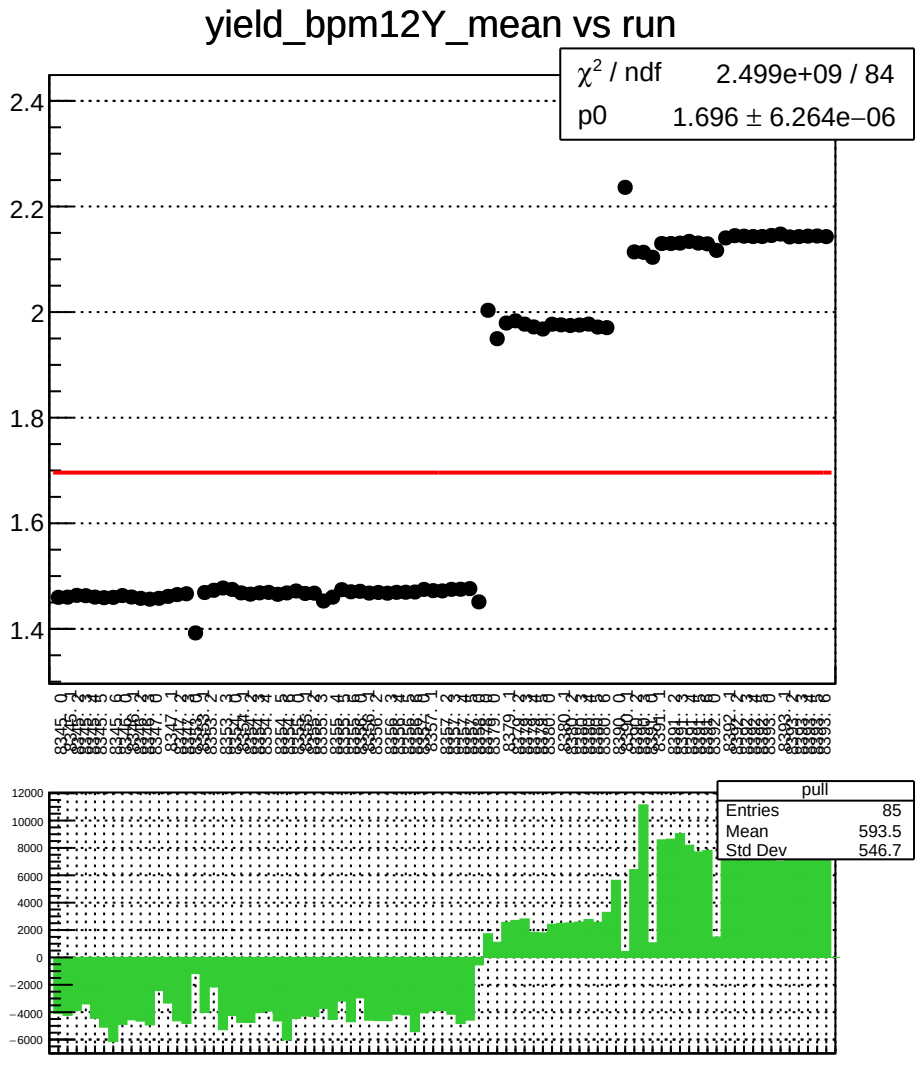

yield_bpm11Y_mean vs run
χ² / ndf 9.143e+08 / 84
p0 0.8101 ± 1.113e−05
pull
Entries 85
Mean 1052
Std Dev 1006
pull1D
Entries 85
Mean 0
Std Dev 0

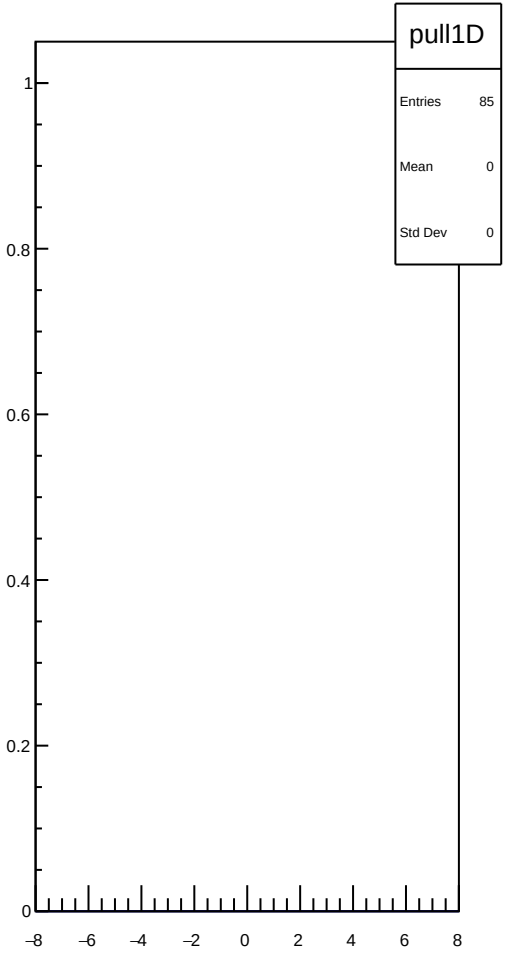

yield_bpm11Y_rms vs run
χ² / ndf 1.764e+05 / 84
p0 0.009626 ± 7.871e−06
0.25
0.2
0.15
0.1
0.05

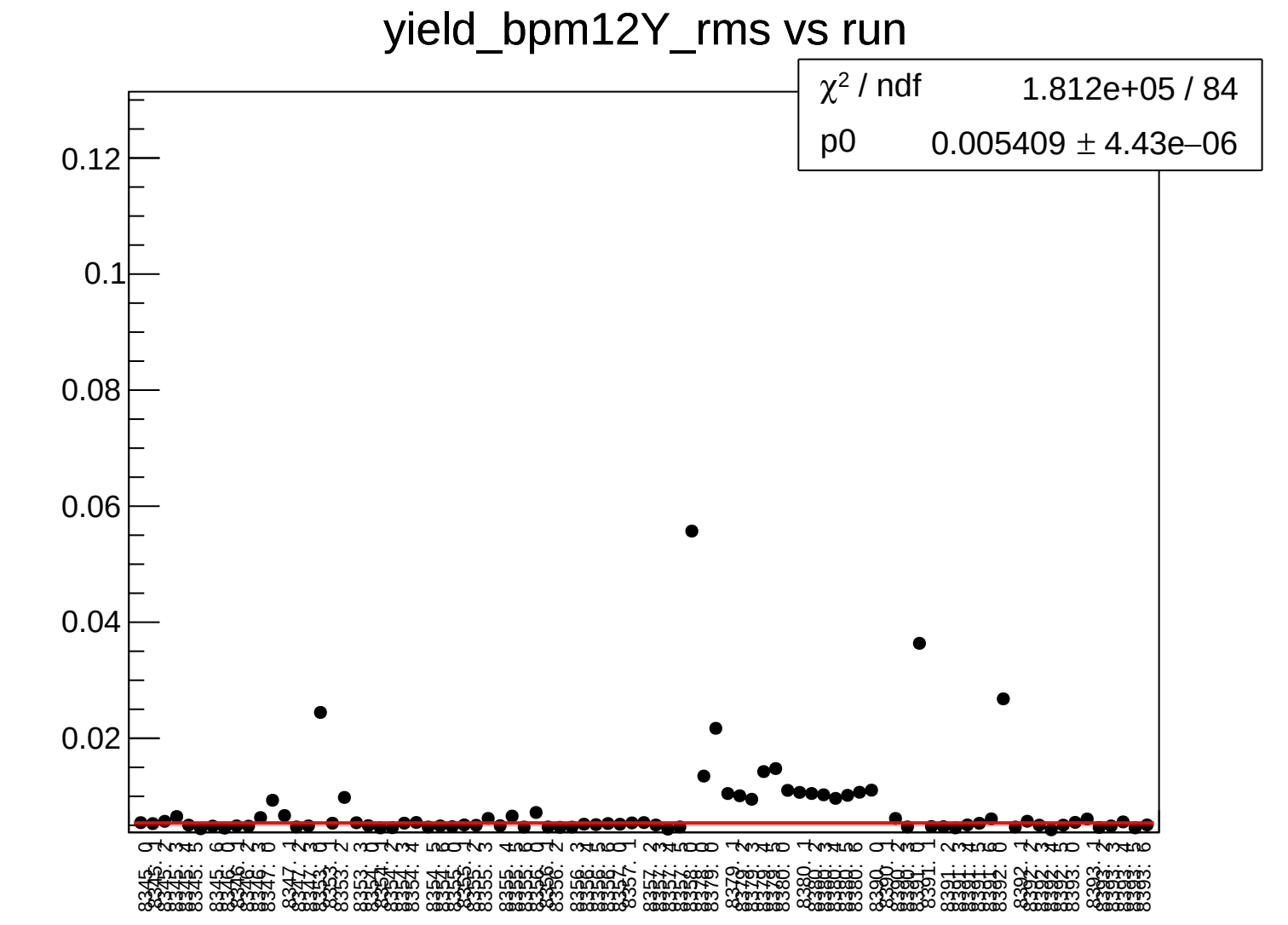

yield_bpm12X_mean vs run
χ² / ndf 4.957e+07 / 84
p0 −0.8138 ± 7.476e−05
pull
Entries 85
Mean 77.38
Std Dev 62.78

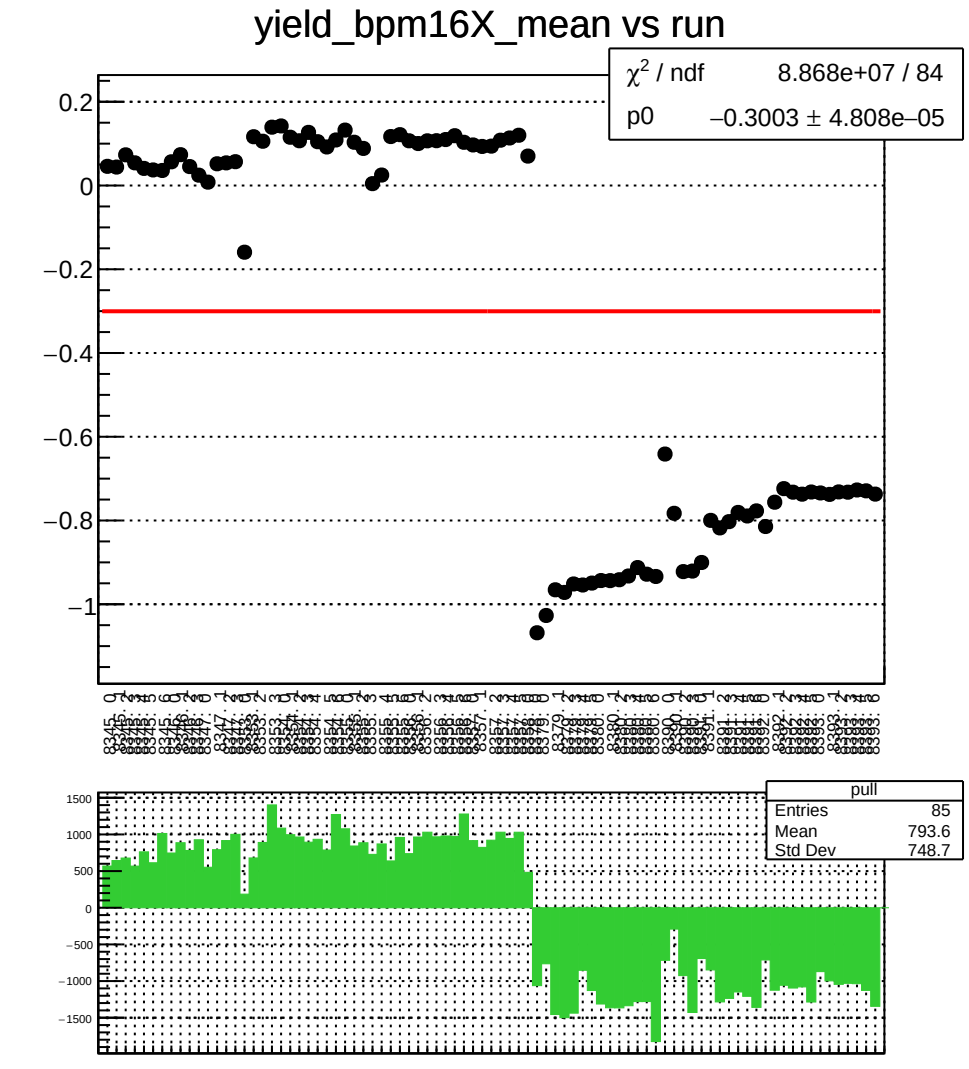

pull1D
Entries 85
Mean 0
Std Dev 0

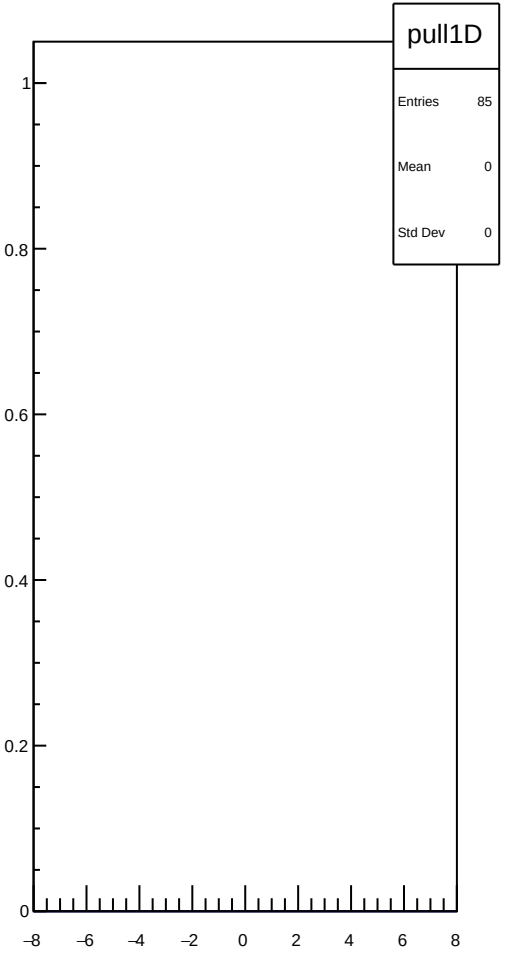

yield_bpm12X_rms vs run
χ² / ndf 9.532e+04 / 84
p0 0.06638 ± 5.286e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

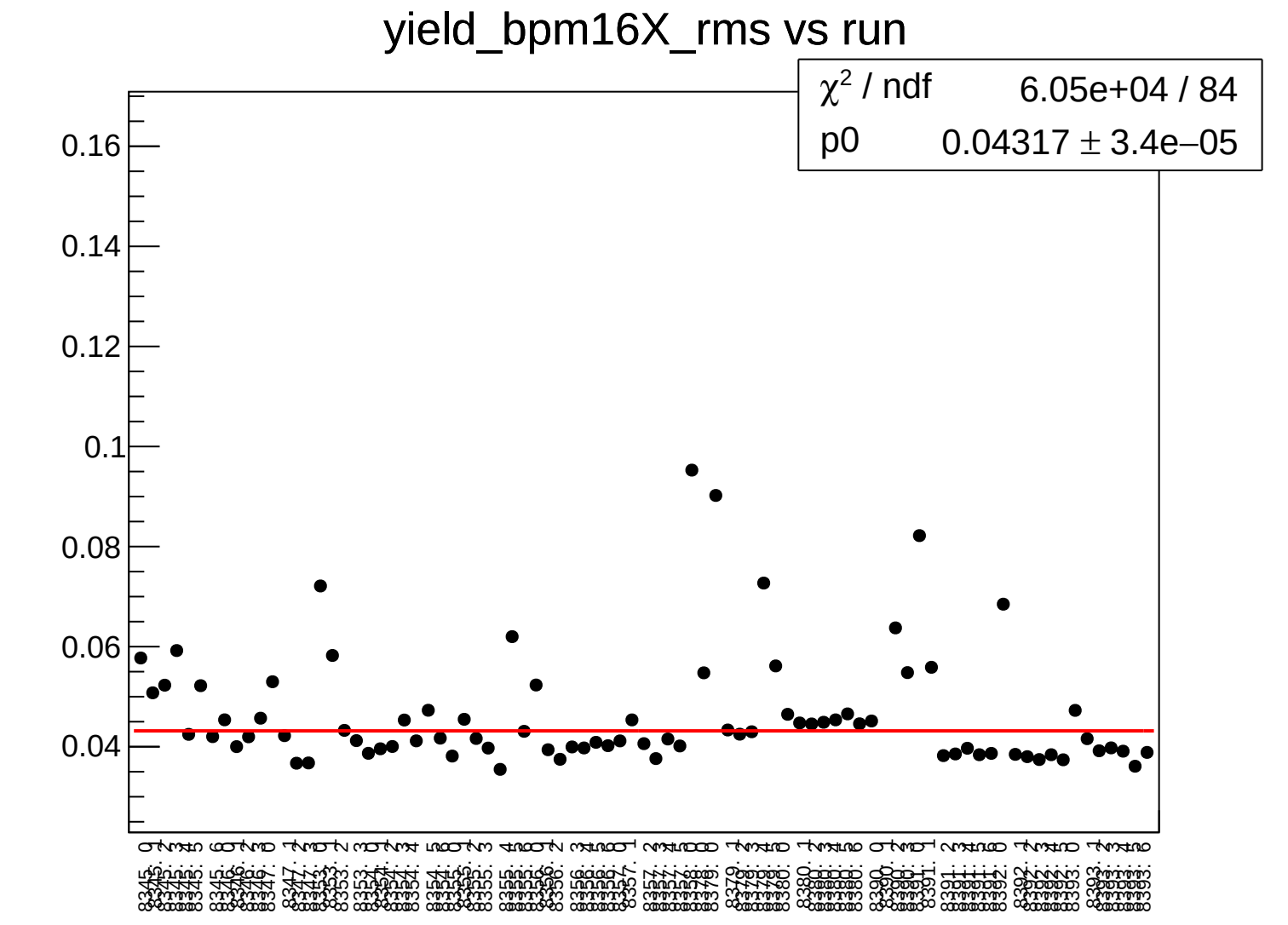

yield_bpm12Y_mean vs run
χ² / ndf 2.499e+09 / 84
p0 1.696 ± 6.264e−06
2.4
2.2
2
1.8
1.6
1.4
pull
Entries 85
Mean 593.5
Std Dev 546.7
12000
10000
8000
6000
4000
2000
0
−2000
−4000
−6000

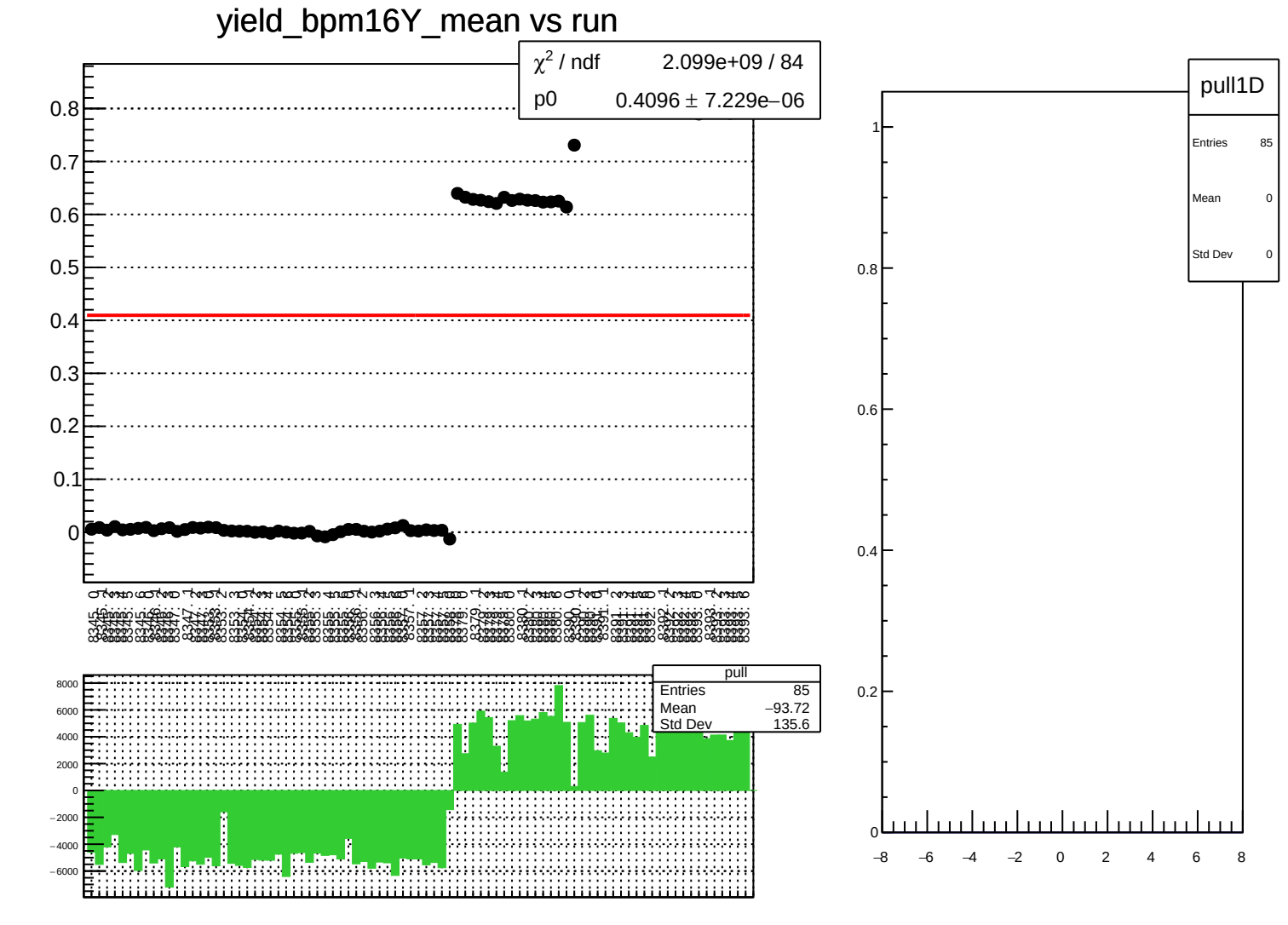

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

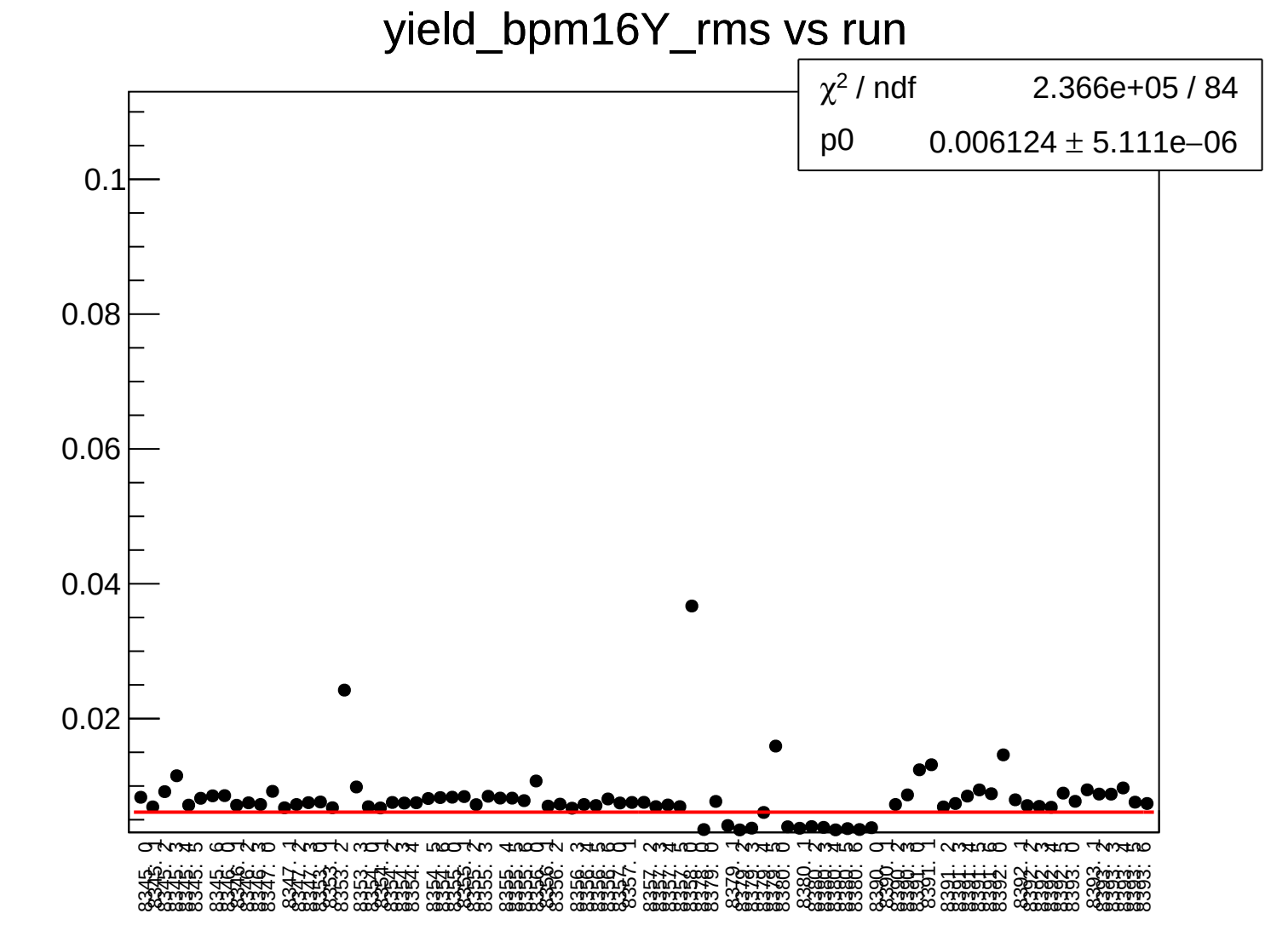

yield_bpm12Y_rms vs run
χ² / ndf 1.812e+05 / 84
p0 0.005409 ± 4.43e−06
0.12
0.1
0.08
0.06
0.04
0.02

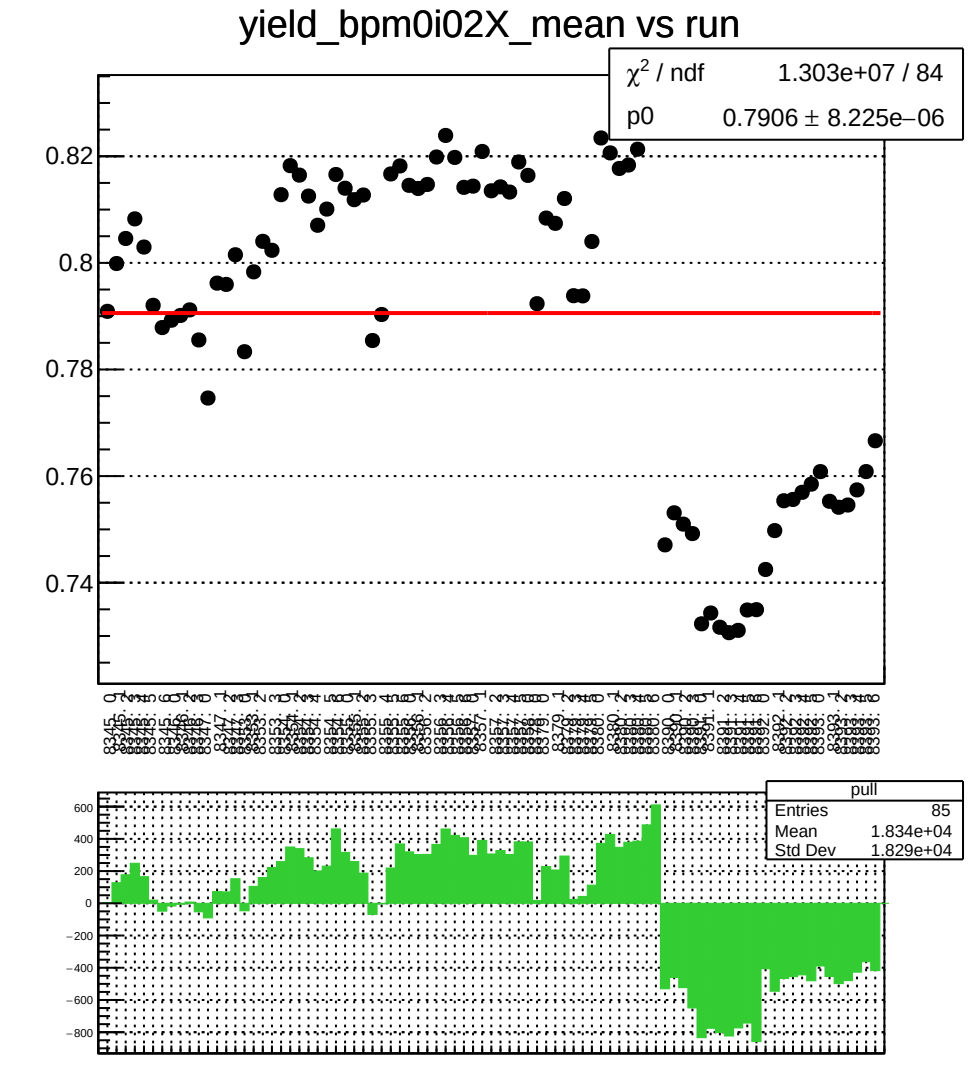

yield_bpm16X_mean vs run
χ² / ndf 8.868e+07 / 84
p0 −0.3003 ± 4.808e−05
pull
Entries 85
Mean 793.6
Std Dev 748.7

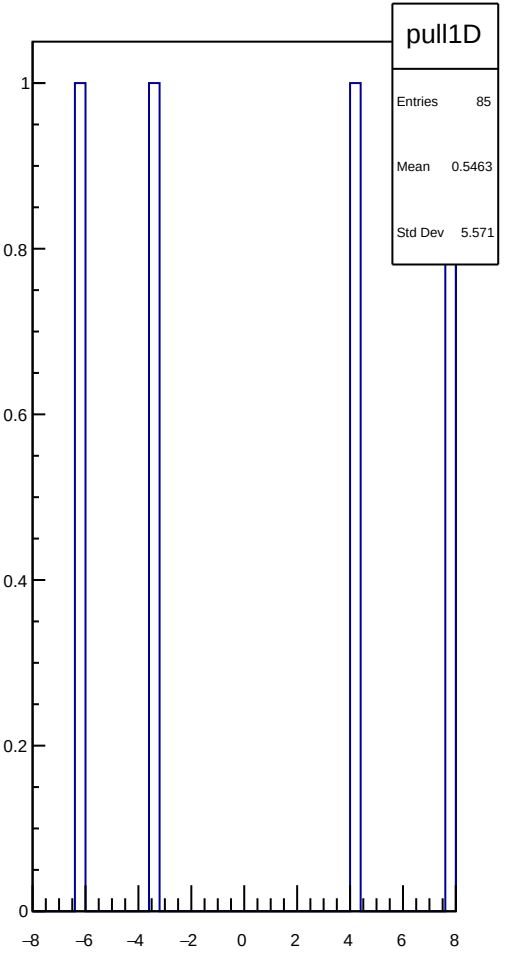

pull1D
Entries 85
Mean 0
Std Dev 0

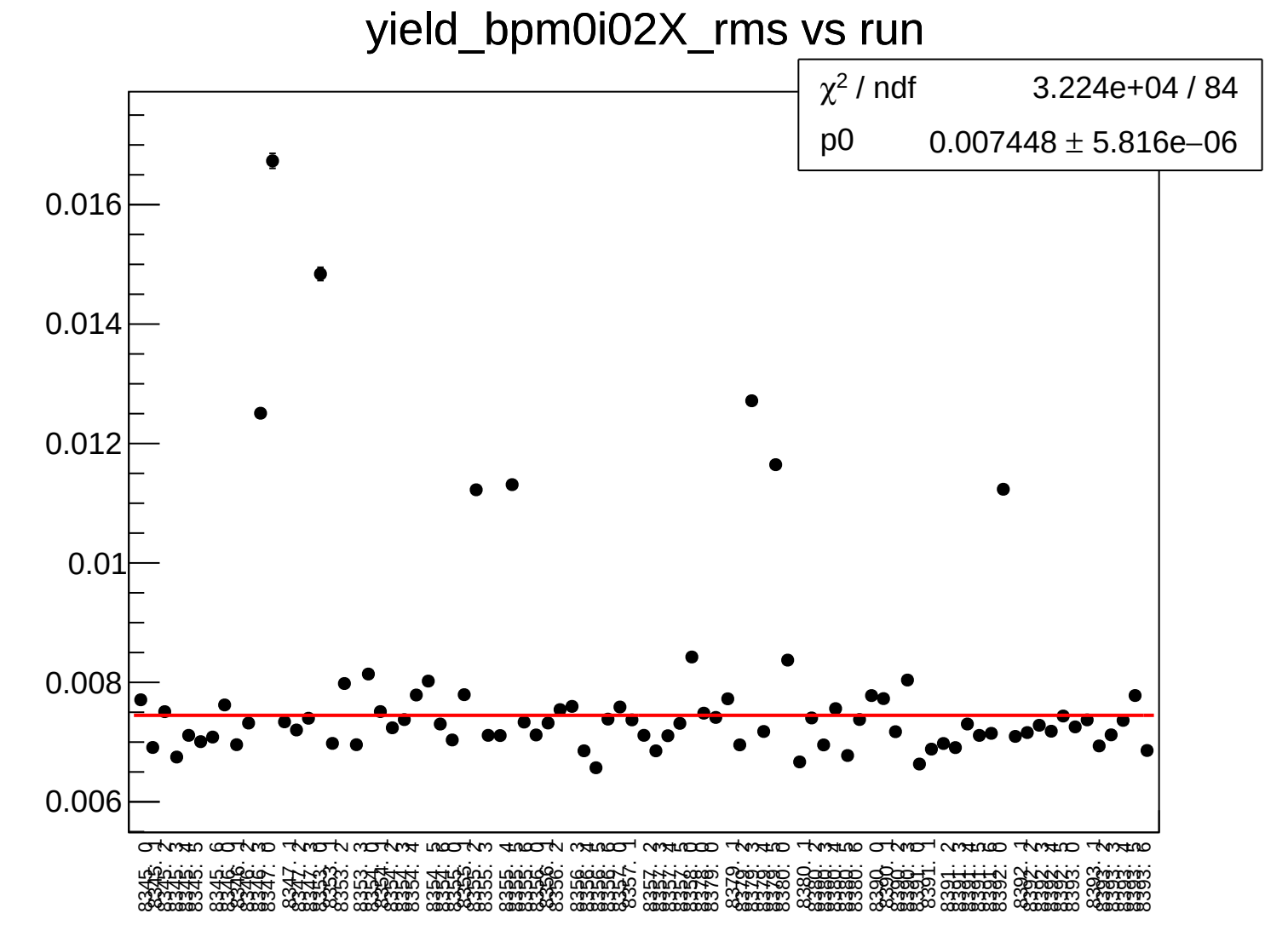

yield_bpm16X_rms vs run
χ^2 / ndf 6.05e+04 / 84
p0 0.04317 ± 3.4e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

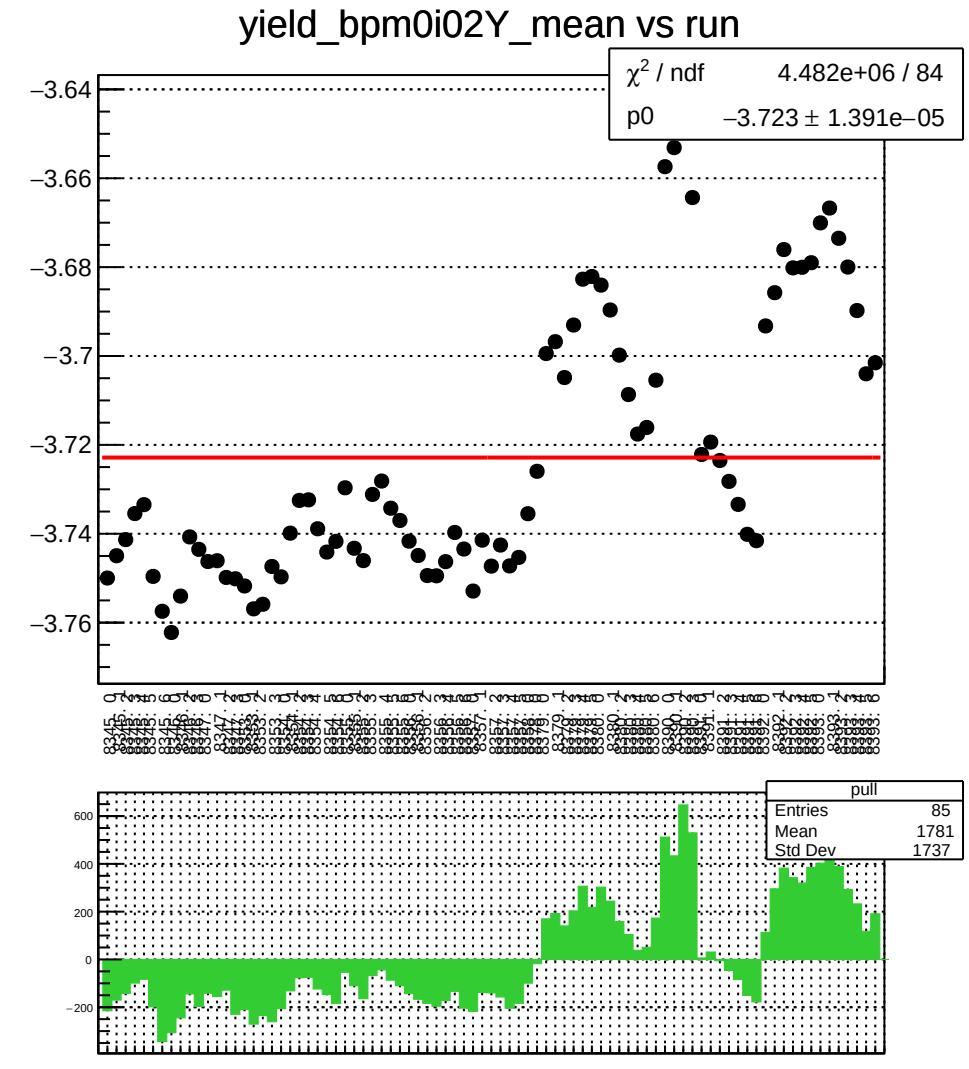

yield_bpm16Y_mean vs run
χ² / ndf 2.099e+09 / 84
p0 0.4096 ± 7.229e−06
pull
Entries 85
Mean −93.72
Std Dev 135.6
pull1D
Entries 85
Mean 0
Std Dev 0

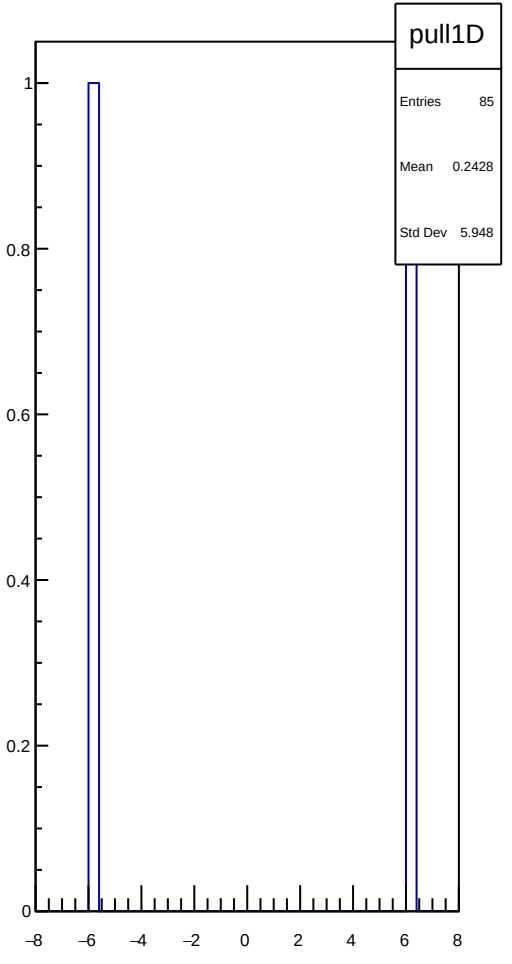

yield_bpm16Y_rms vs run
χ² / ndf 2.366e+05 / 84
p0 0.006124 ± 5.111e−06
0.1
0.08
0.06
0.04
0.02

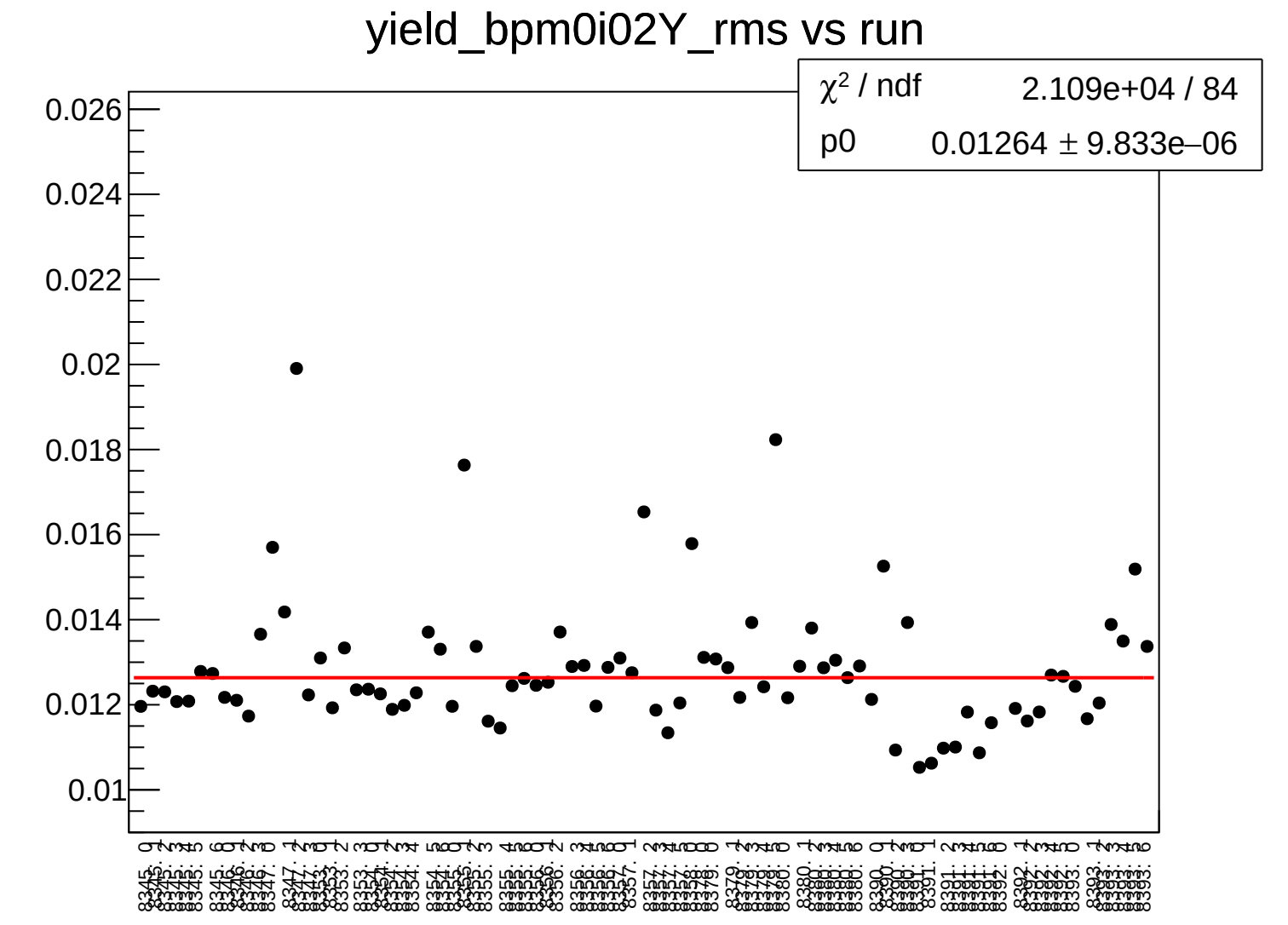

yield_bpm0i02X_mean vs run
χ² / ndf 1.303e+07 / 84
p0 0.7906 ± 8.225e−06
0.82
0.8
0.78
0.76
0.74
pull
Entries 85
Mean 1.834e+04
Std Dev 1.829e+04
600
400
200
0
−200
−400
−600
−800

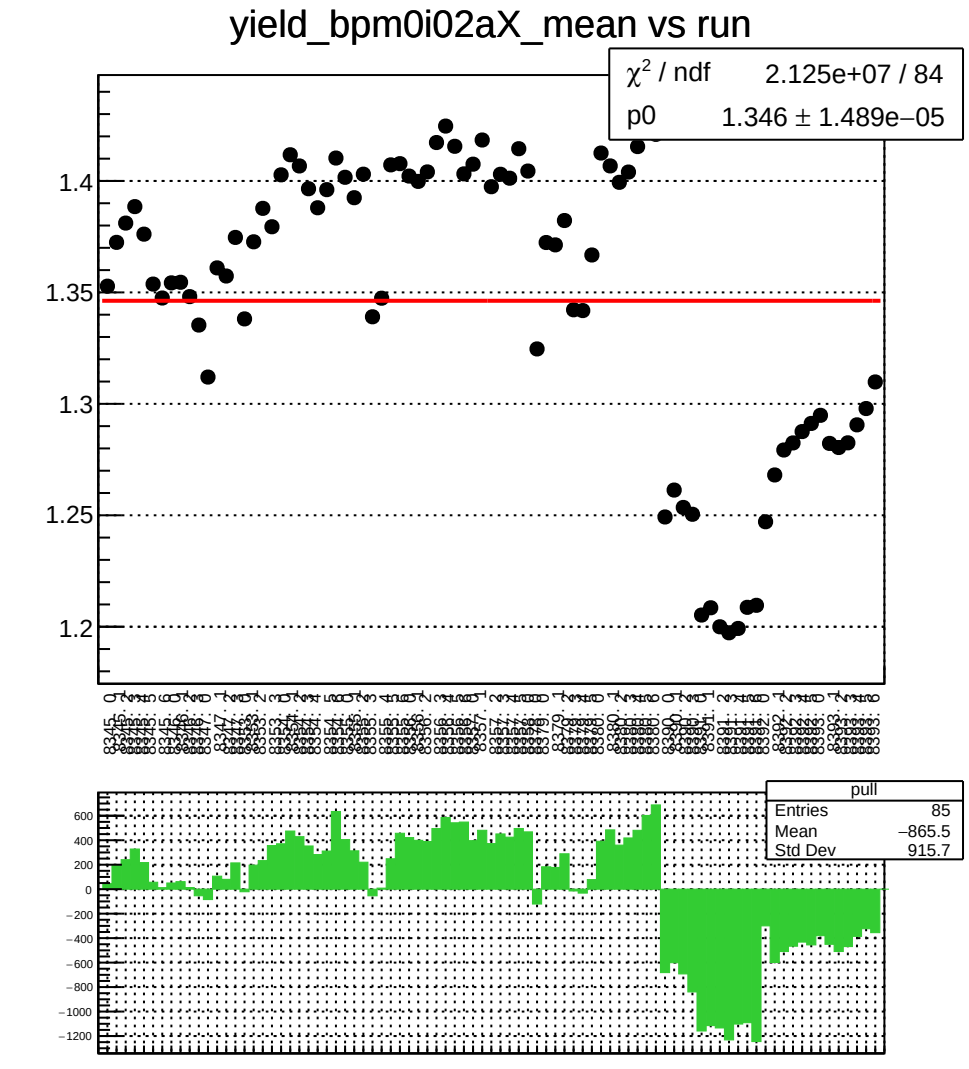

pull1D
Entries 85
Mean 0.5463
Std Dev 5.571
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

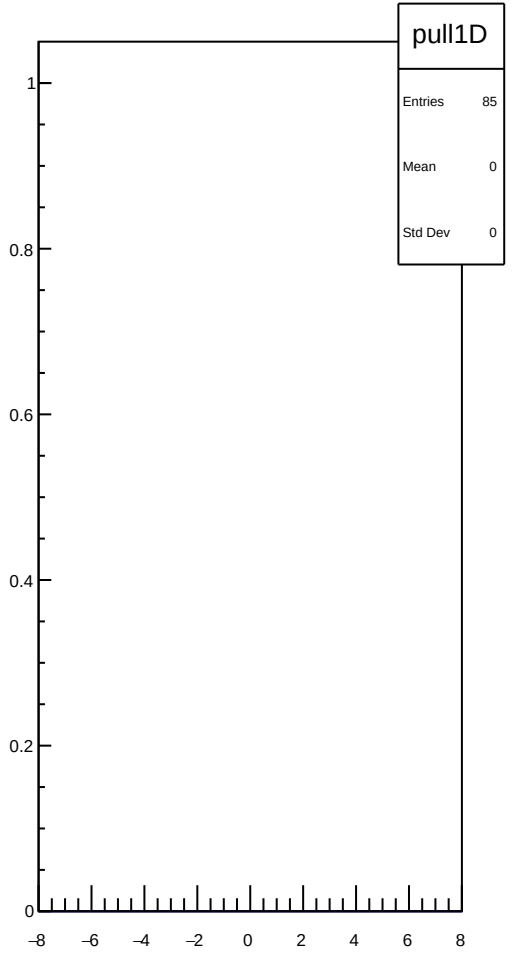

yield_bpm0i02X_rms vs run
χ² / ndf 3.224e+04 / 84
p0 0.007448 ± 5.816e−06
0.016
0.014
0.012
0.01
0.008
0.006

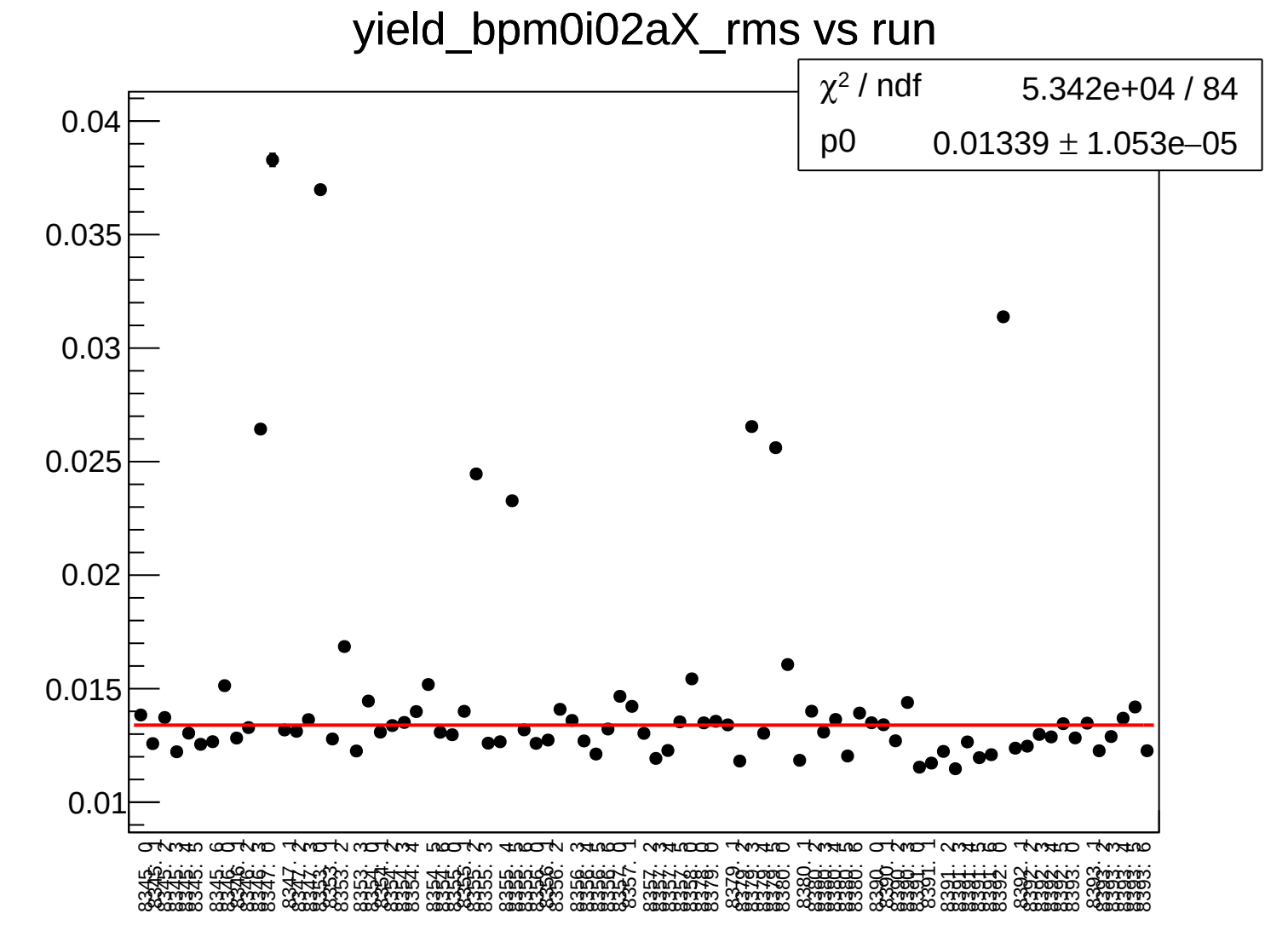

yield_bpm0i02Y_mean vs run
χ² / ndf 4.482e+06 / 84
p0 −3.723 ± 1.391e−05
−3.64
−3.66
−3.68
−3.7
−3.72
−3.74
−3.76
pull
Entries 85
Mean 1781
Std Dev 1737
600
400
200
0
−200

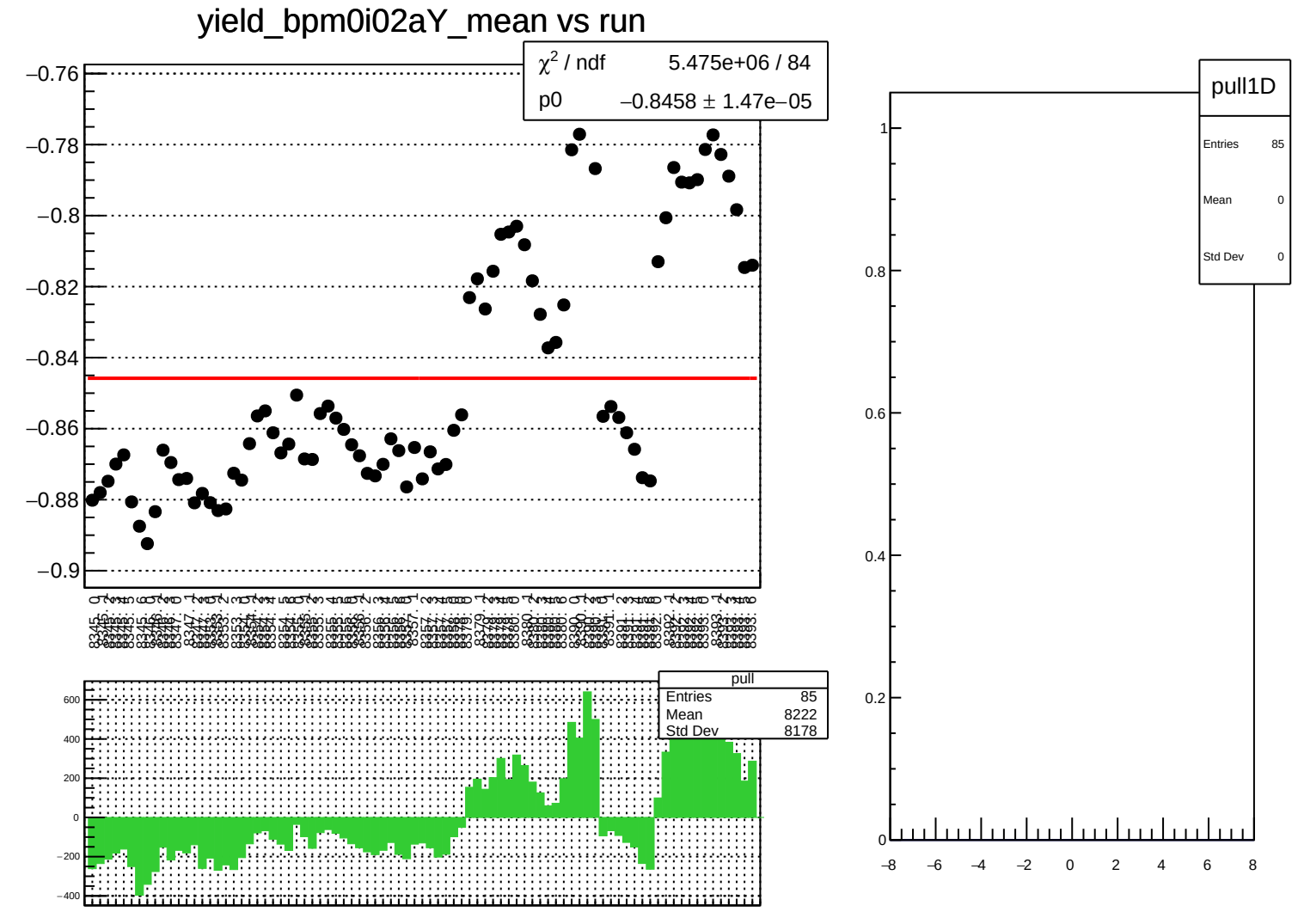

pull1D
Entries 85
Mean 0.2428
Std Dev 5.948
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

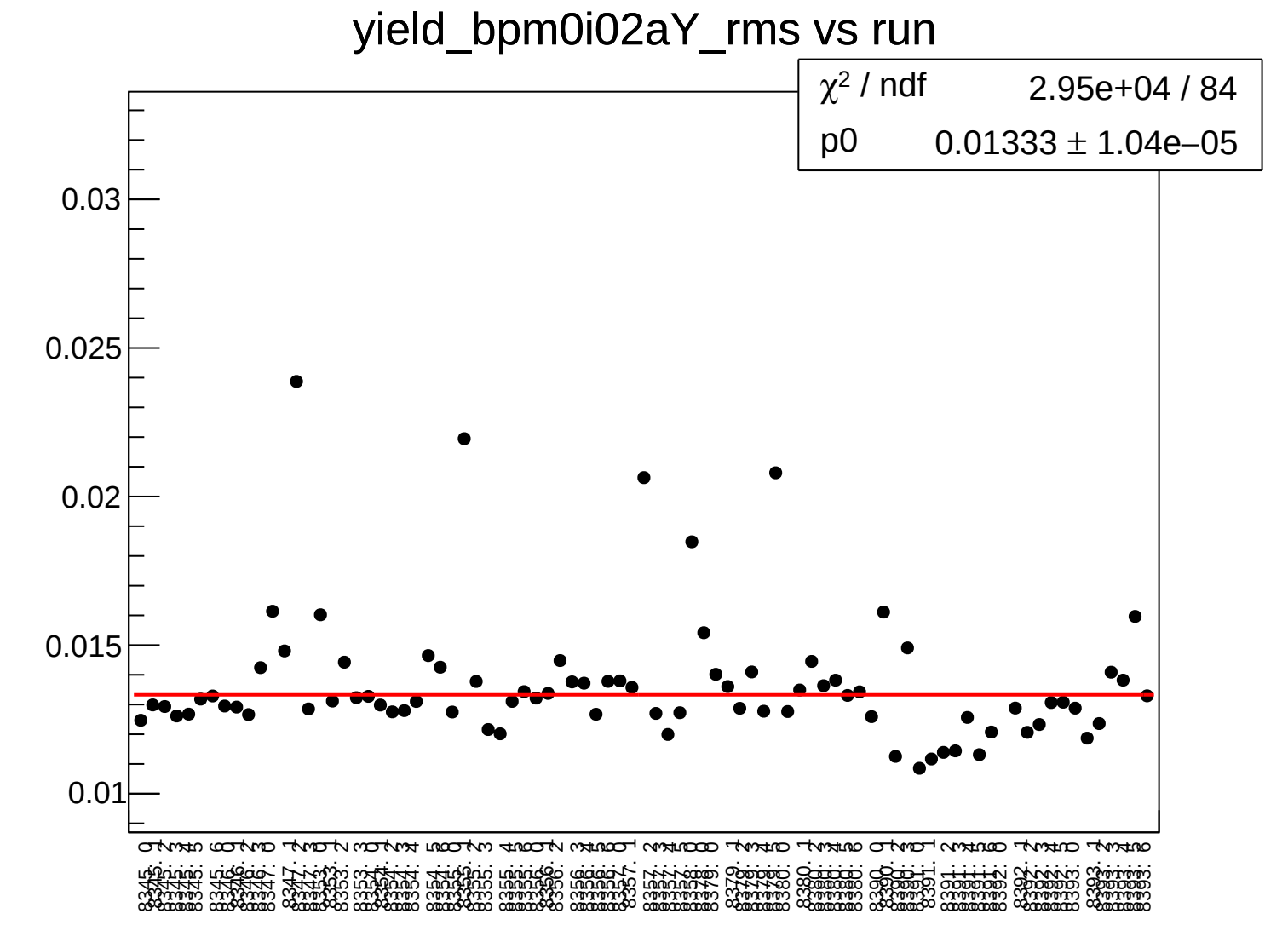

yield_bpm0i02Y_rms vs run
χ² / ndf 2.109e+04 / 84
p0 0.01264 ± 9.833e–06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

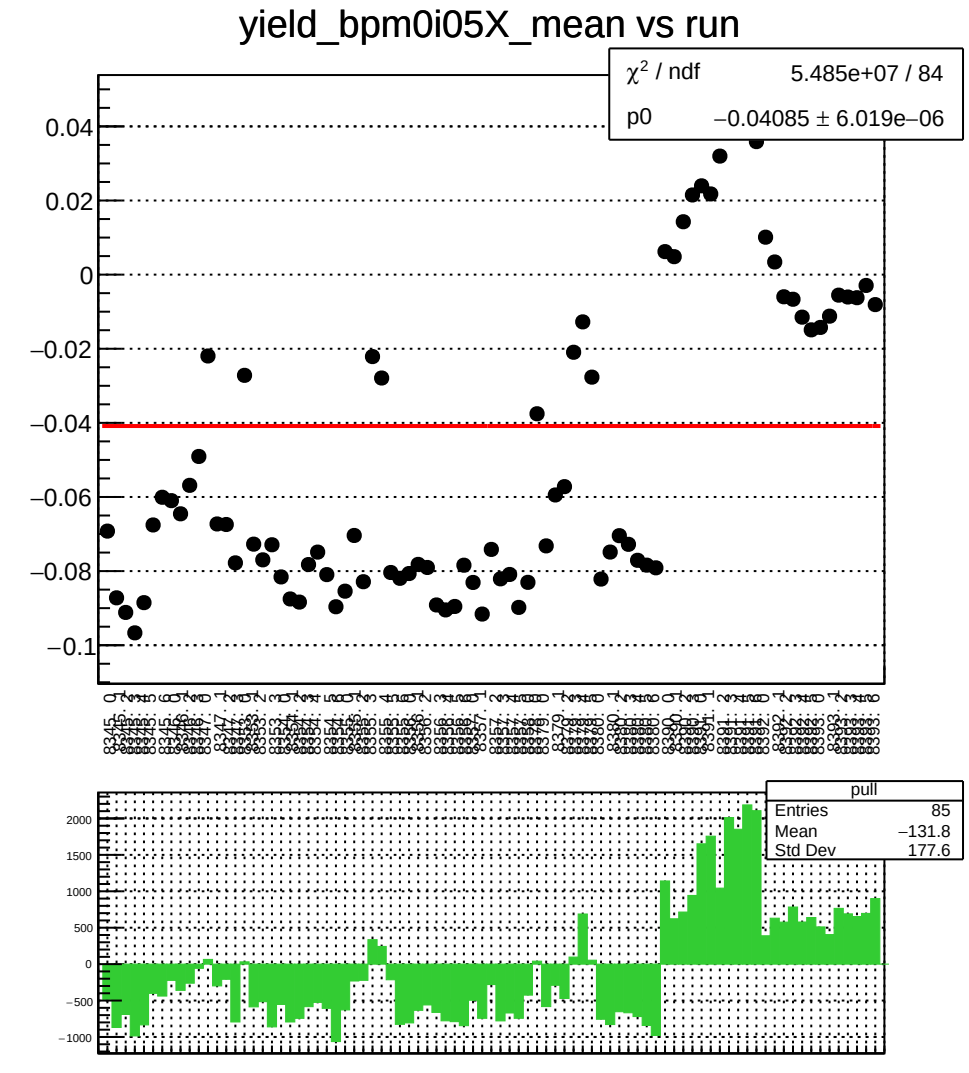

yield_bpm0i02aX_mean vs run
χ² / ndf 2.125e+07 / 84
p0 1.346 ± 1.489e−05
1.4
1.35
1.3
1.25
1.2
pull
Entries 85
Mean −865.5
Std Dev 915.7
600
400
200
0
−200
−400
−600
−800
−1000
−1200

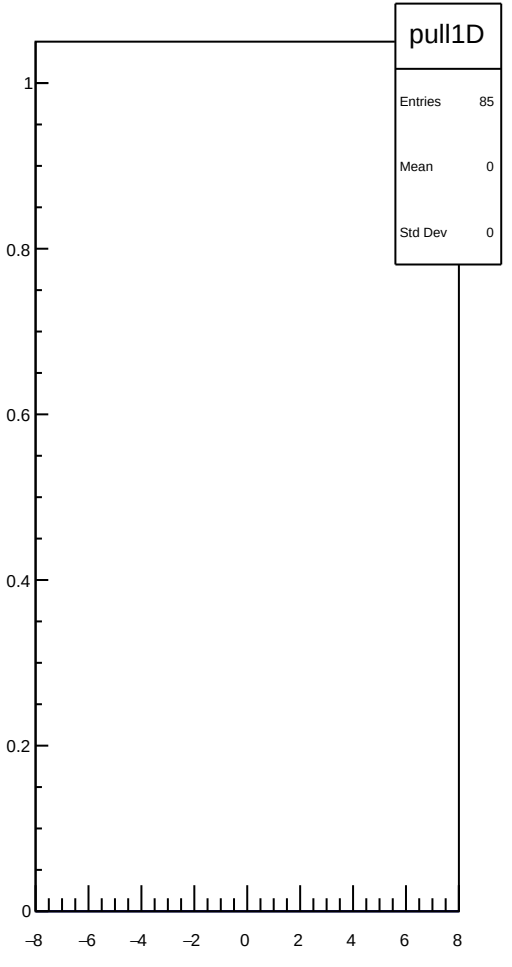

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


yield_bpm0i02aX_rms vs run
χ² / ndf 5.342e+04 / 84
p0 0.01339 ± 1.053e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

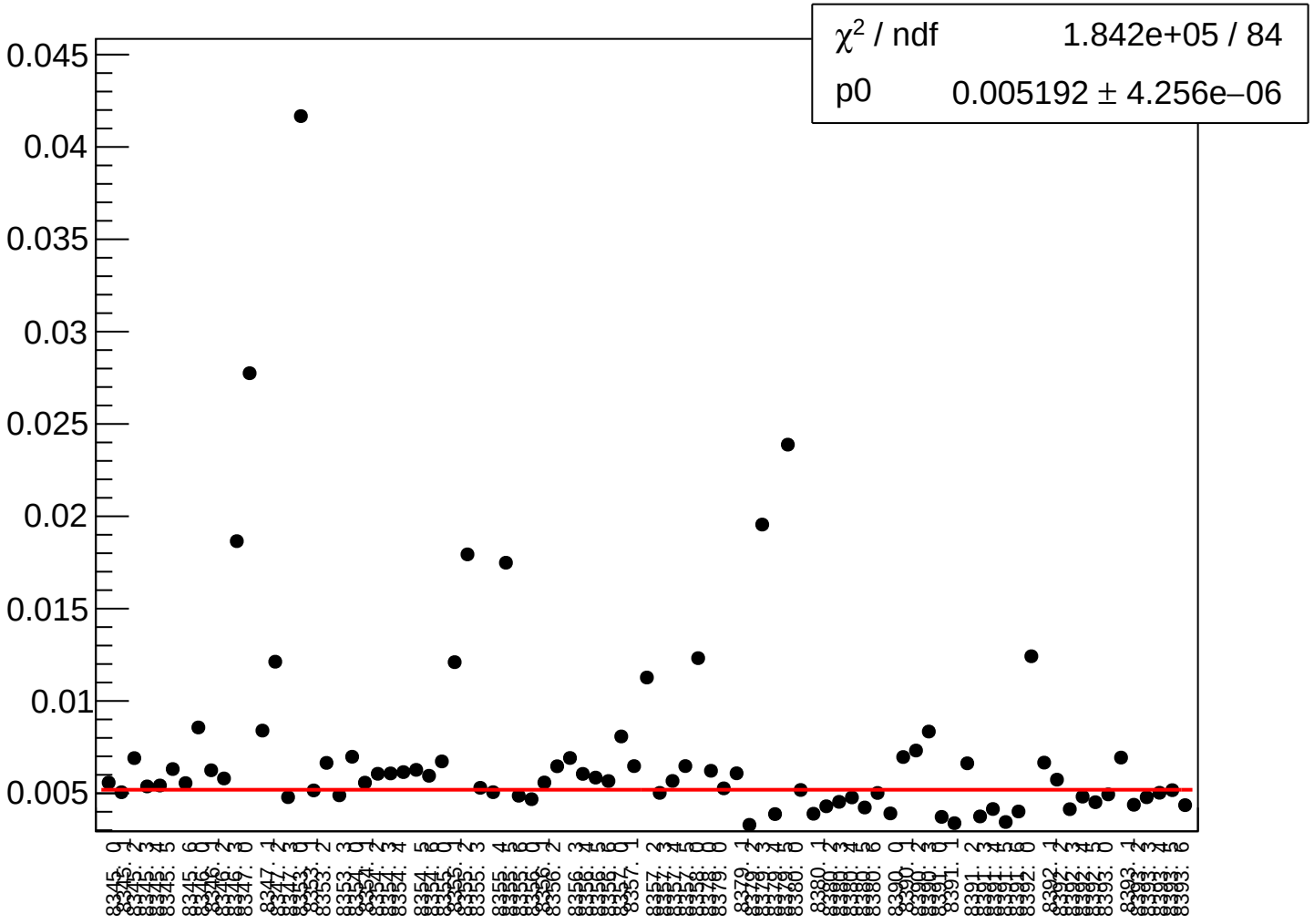

yield_bpm0i02aY_mean vs run
χ² / ndf 5.475e+06 / 84
p0 −0.8458 ± 1.47e−05
−0.76
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
pull
Entries 85
Mean 8222
Std Dev 8178
600
400
200
0
−200
−400
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

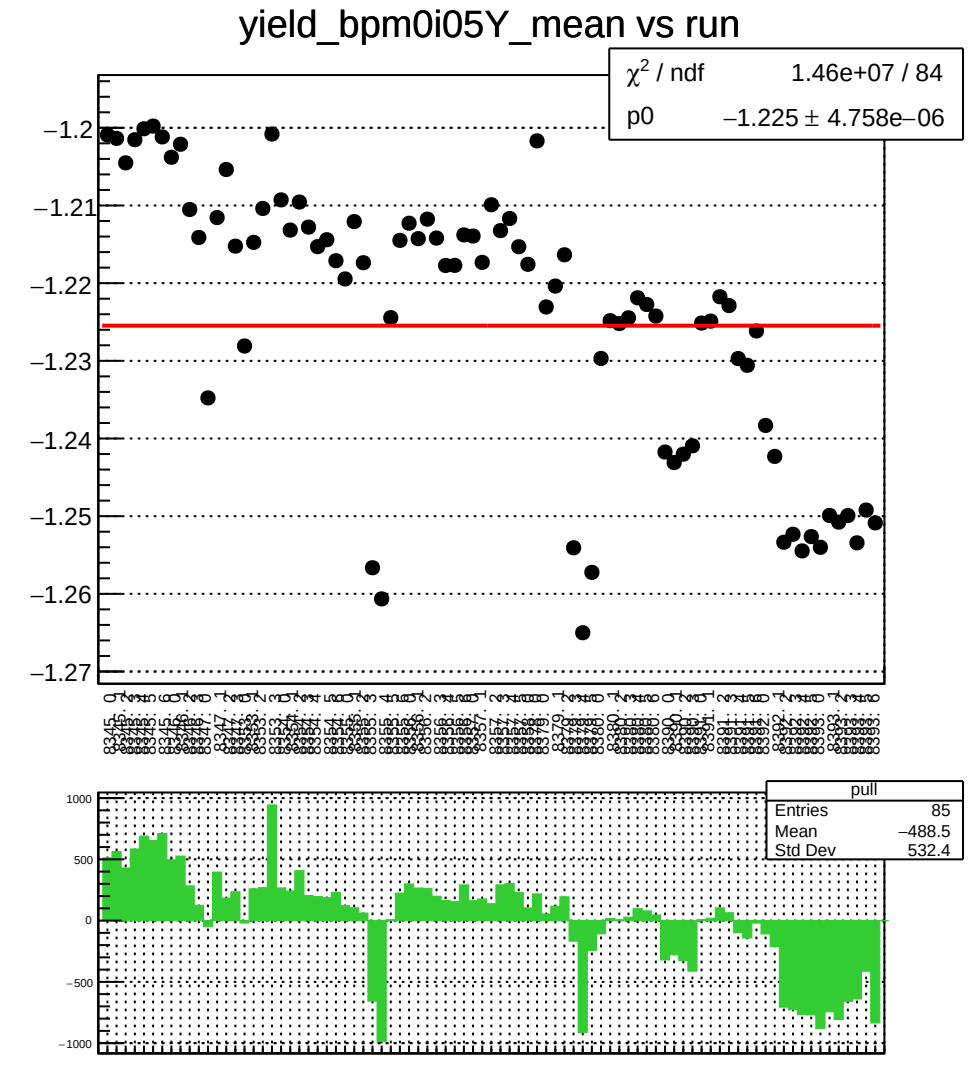

yield_bpm0i02aY_rms vs run
χ² / ndf 2.95e+04 / 84
p0 0.01333 ± 1.04e−05
0.03
0.025
0.02
0.015
0.01

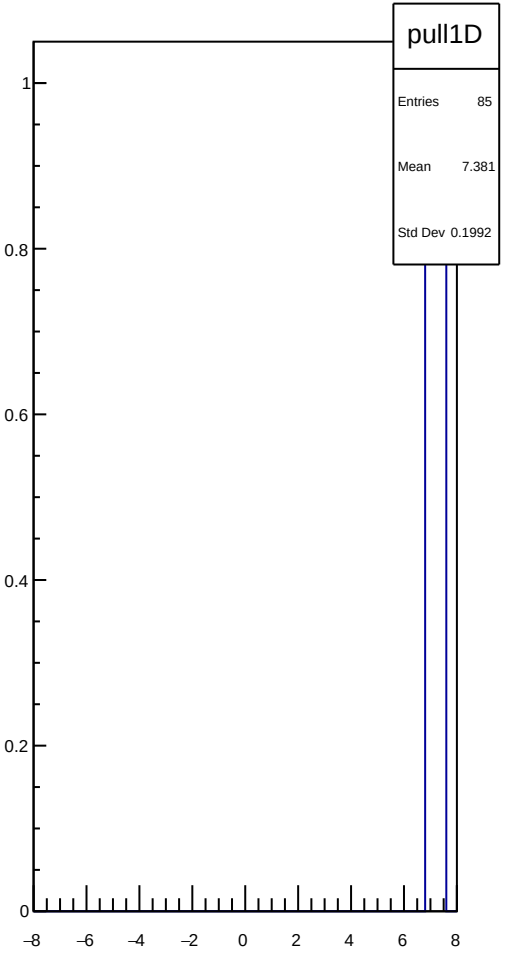

yield_bpm0i05X_mean vs run
χ² / ndf 5.485e+07 / 84
p0 −0.04085 ± 6.019e−06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull
Entries 85
Mean −131.8
Std Dev 177.6
2000
1500
1000
500
0
−500
−1000

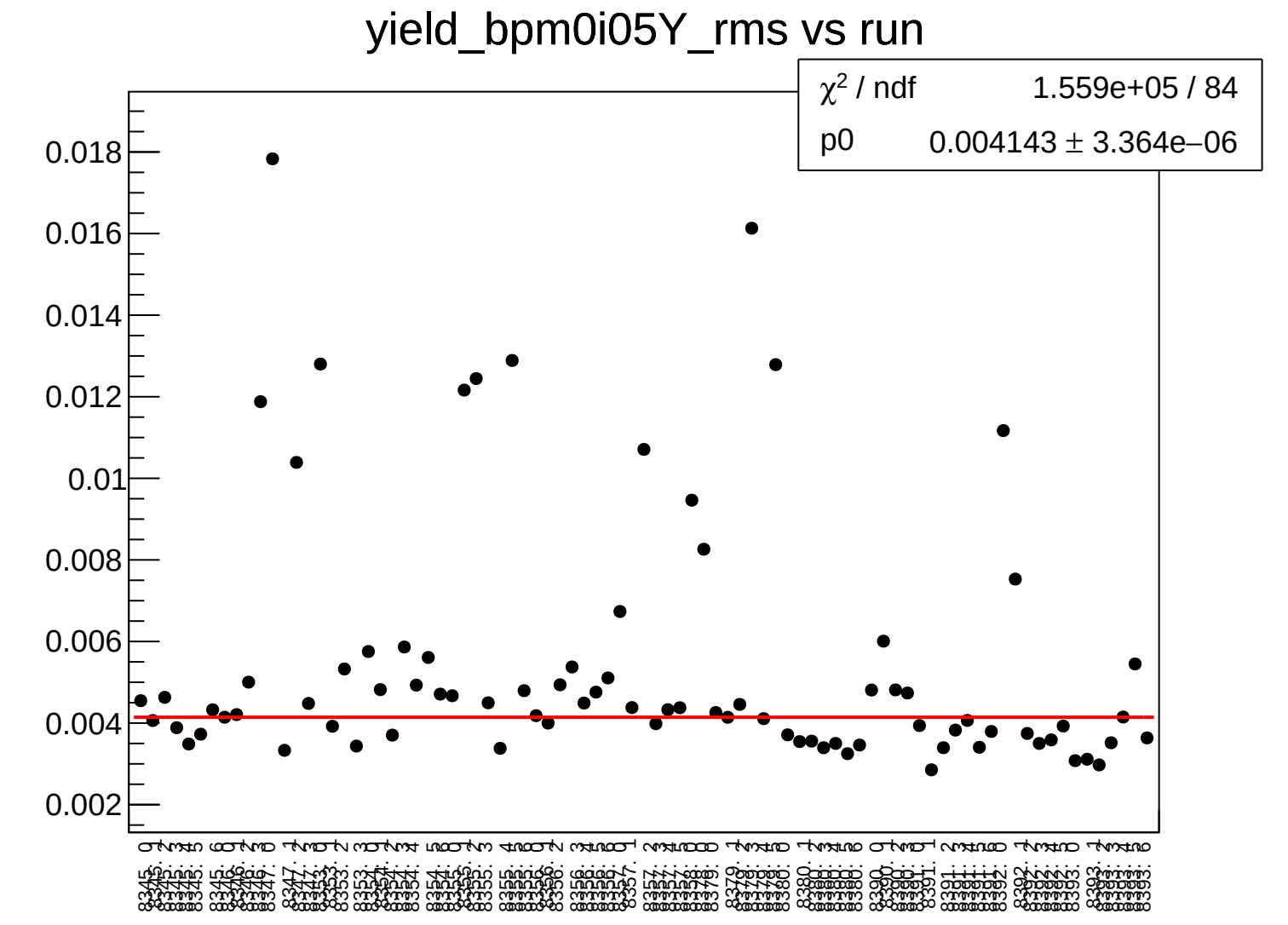

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

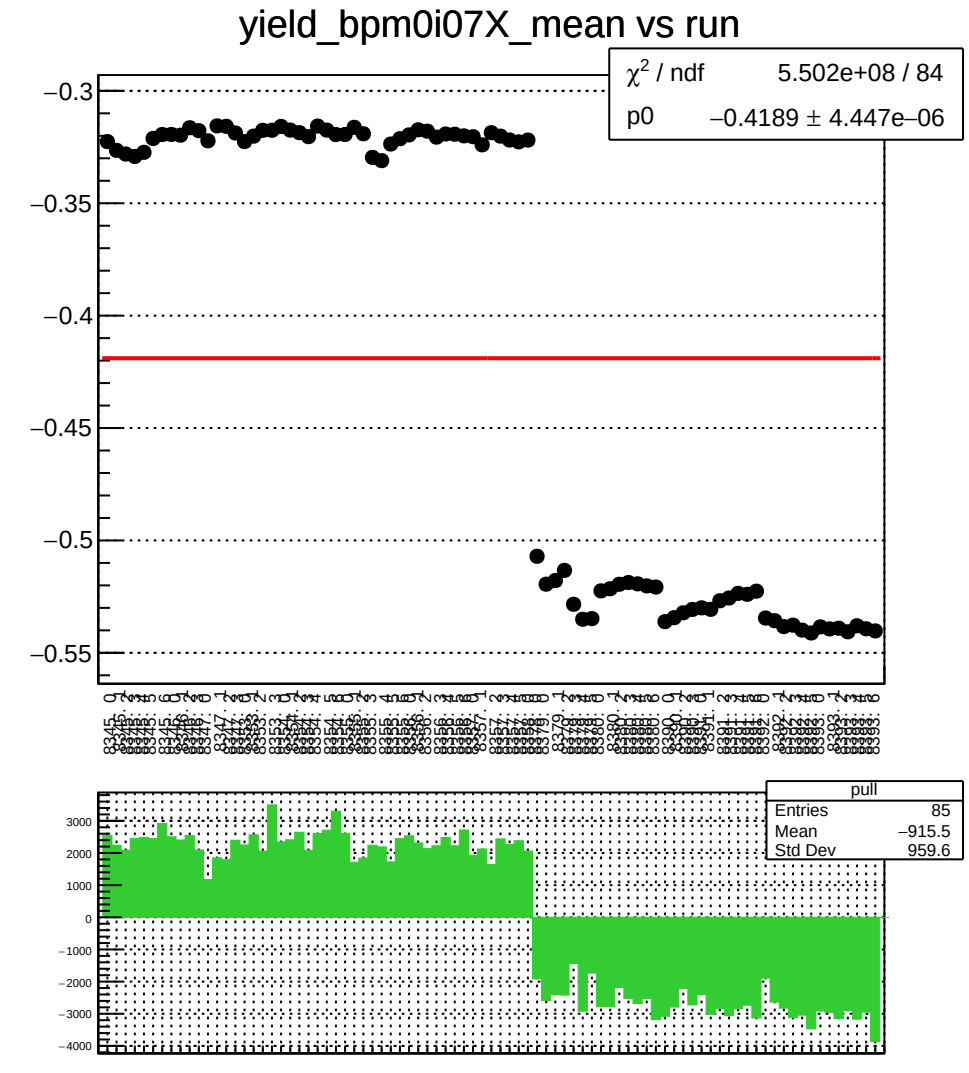
yield_bpm0i05X_rms vs run

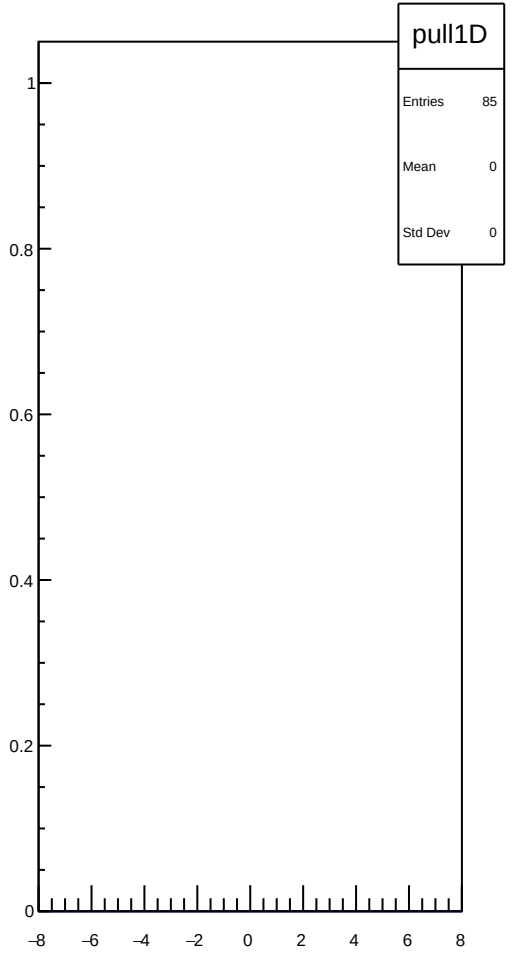


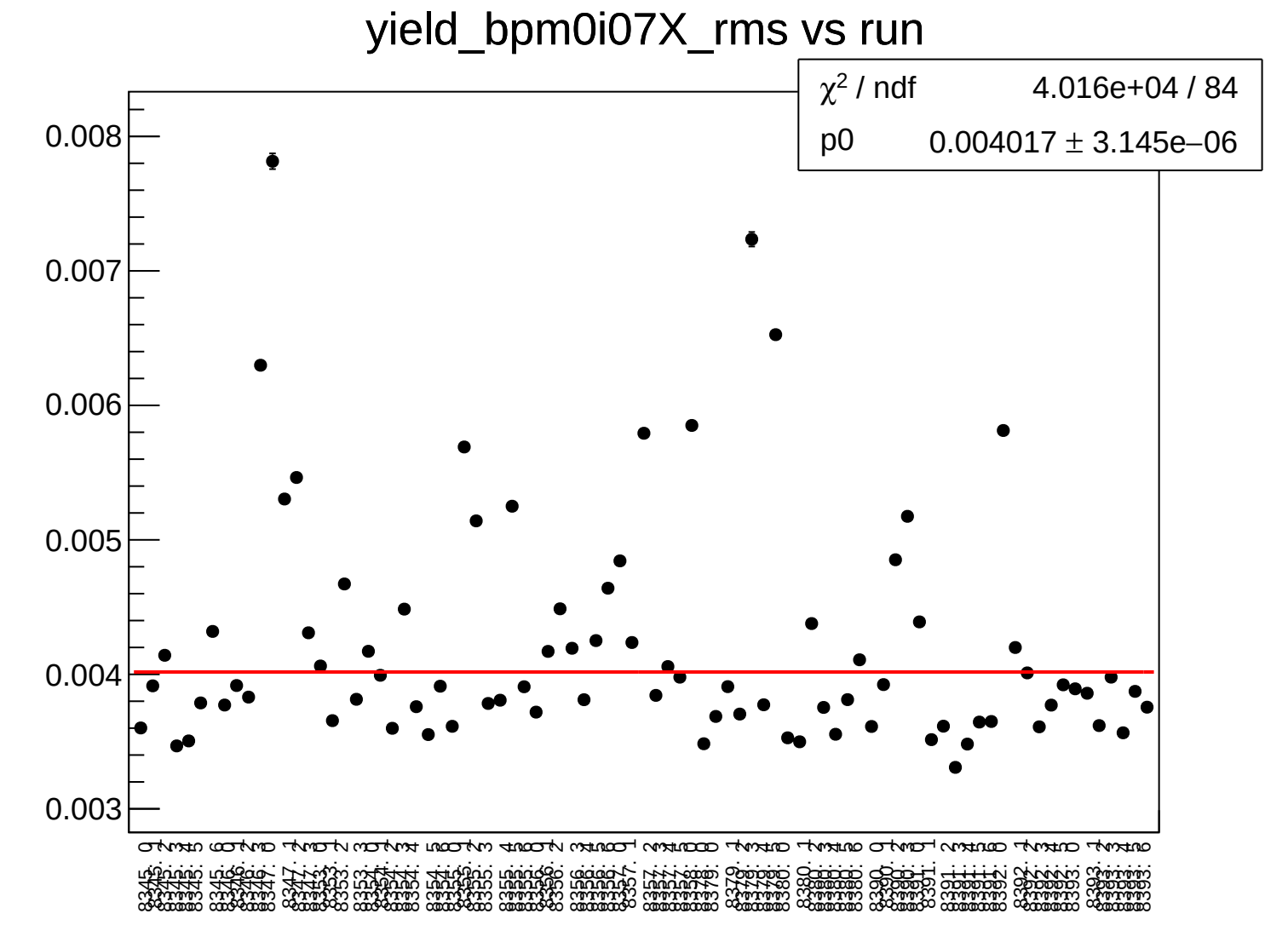

yield_bpm0i05Y_mean vs run
χ² / ndf 1.46e+07 / 84
p0 −1.225 ± 4.758e−06
−1.2
−1.21
−1.22
−1.23
−1.24
−1.25
−1.26
−1.27
pull
Entries 85
Mean −488.5
Std Dev 532.4
1000
500
0
−500
−1000

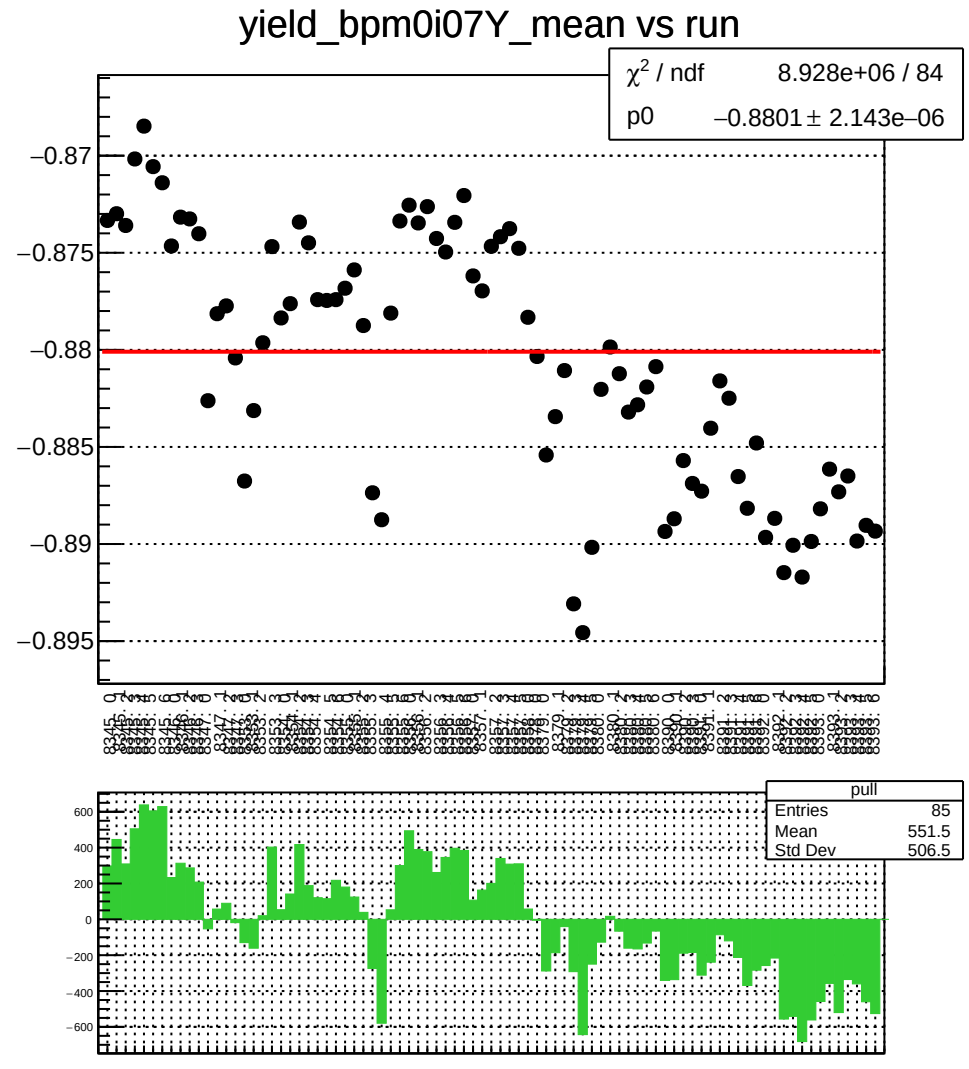

pull1D
Entries 85
Mean 7.381
Std Dev 0.1992
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

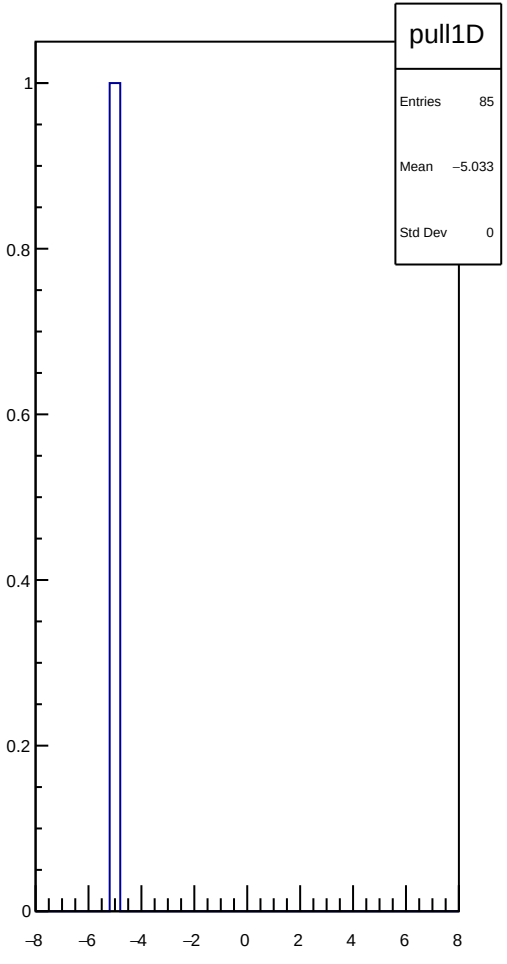

yield_bpm0i05Y_rms vs run
χ² / ndf 1.559e+05 / 84
p0 0.004143 ± 3.364e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

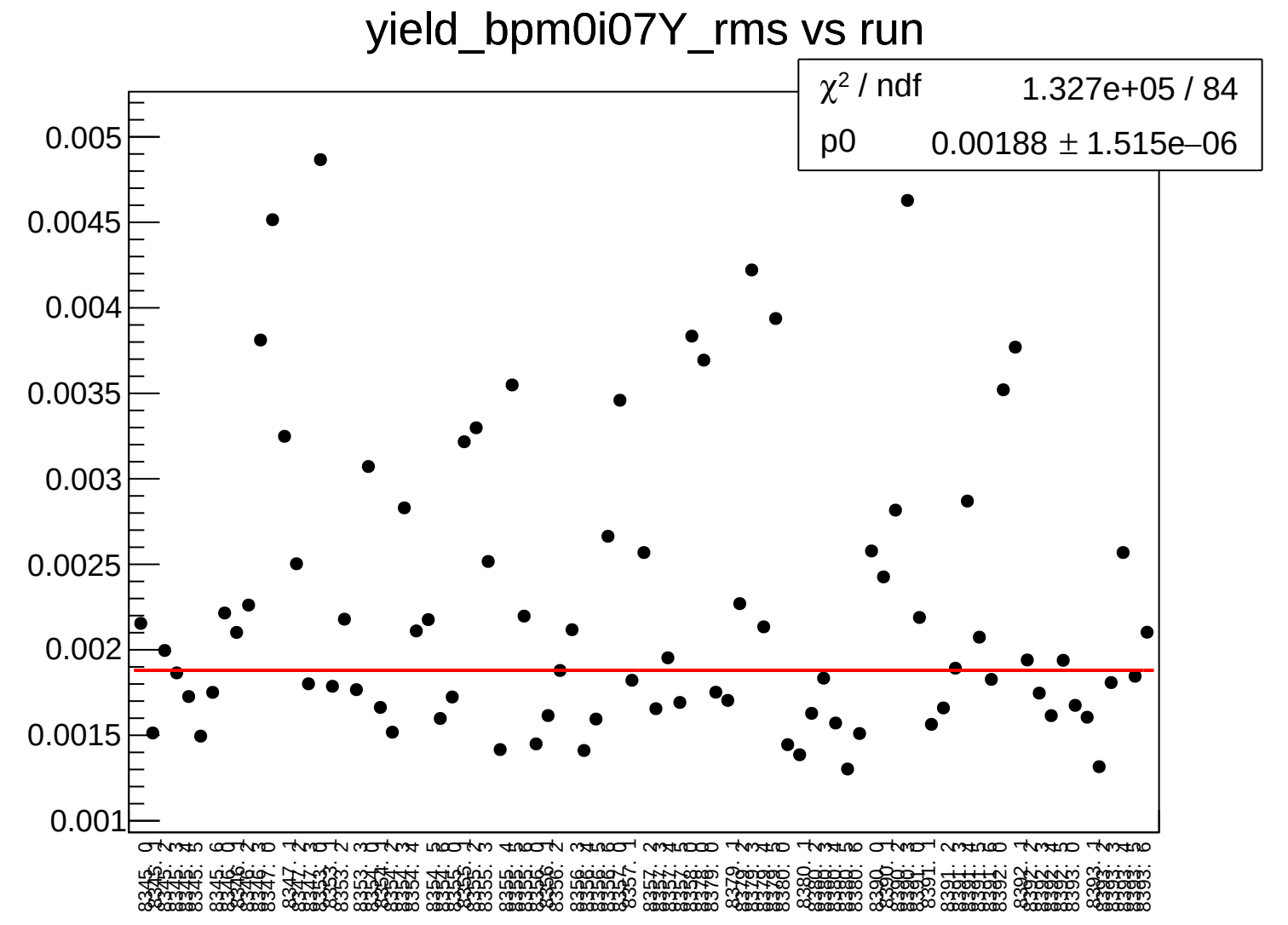

yield_bpm0i07X_mean vs run
χ² / ndf 5.502e+08 / 84
p0 −0.4189 ± 4.447e−06
−0.3
−0.35
−0.4
−0.45
−0.5
−0.55
pull
Entries 85
Mean −915.5
Std Dev 959.6
3000
2000
1000
0
−1000
−2000
−3000
−4000

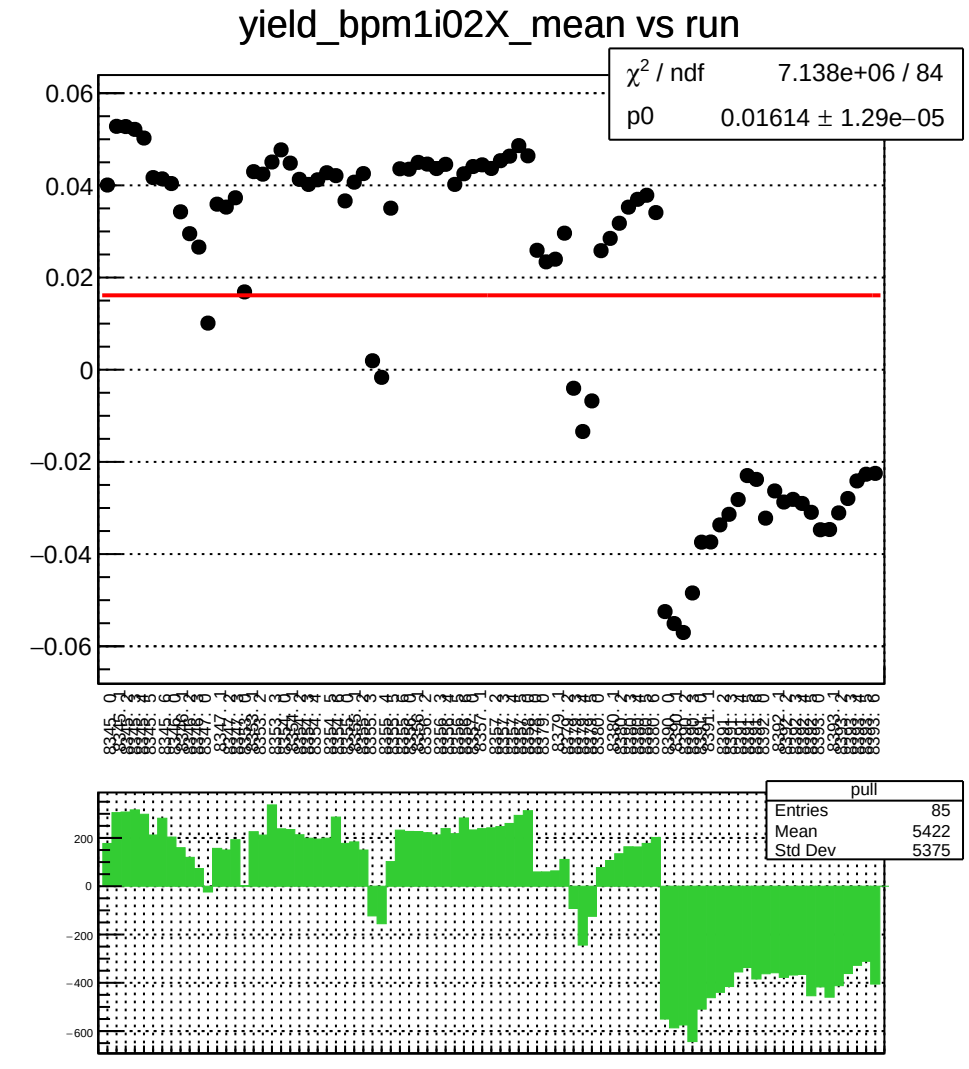

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

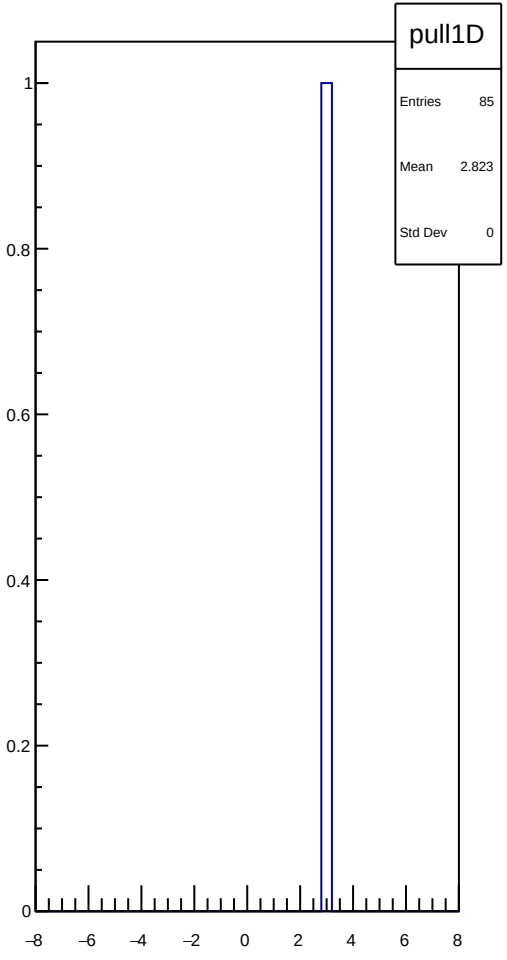

yield_bpm0i07X_rms vs run
χ² / ndf 4.016e+04 / 84
p0 0.004017 ± 3.145e−06
0.008
0.007
0.006
0.005
0.004
0.003

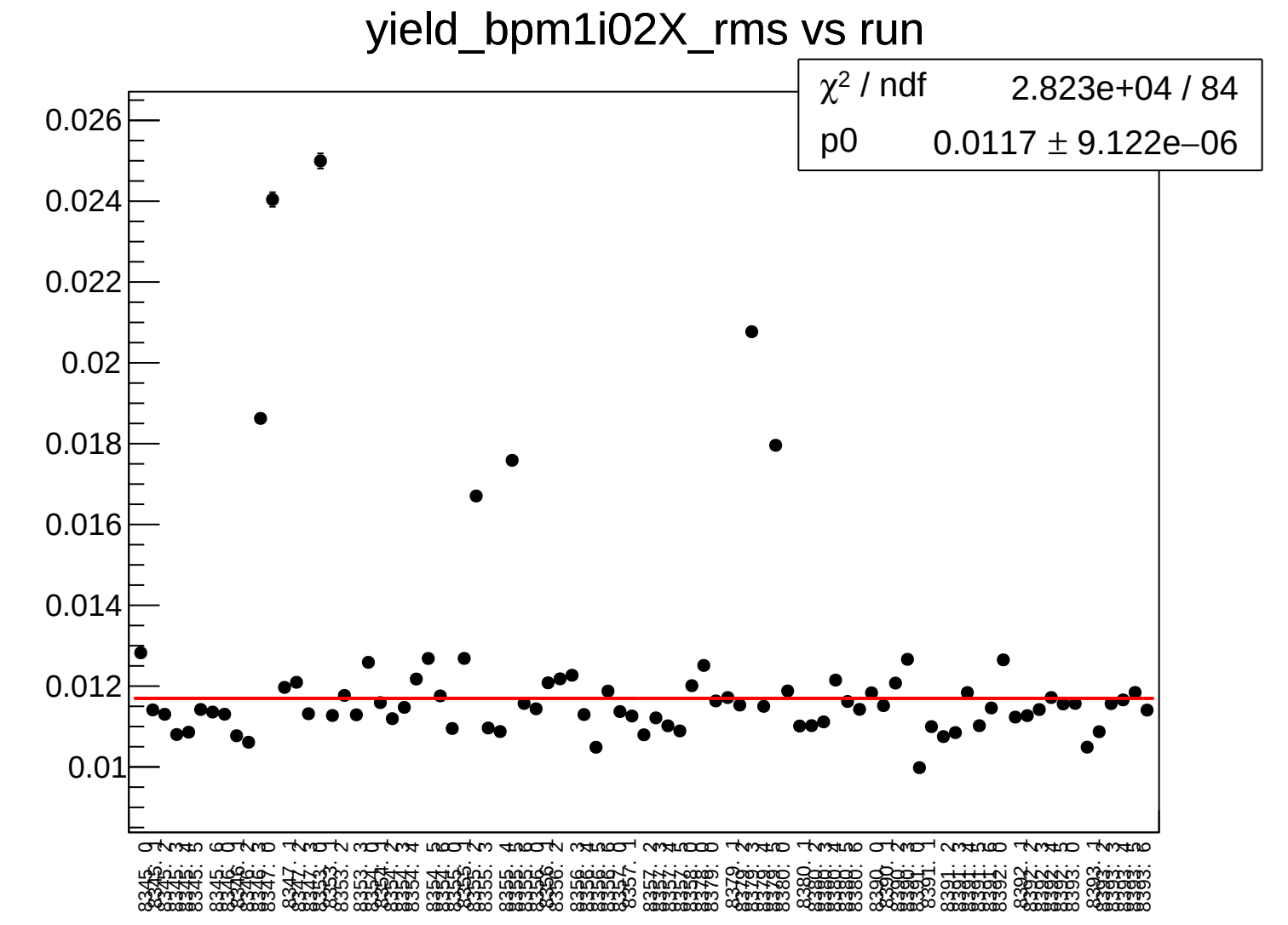

yield_bpm0i07Y_mean vs run
χ² / ndf 8.928e+06 / 84
p0 −0.8801 ± 2.143e−06
−0.87
−0.875
−0.88
−0.885
−0.89
−0.895
pull
Entries 85
Mean 551.5
Std Dev 506.5
600
400
200
0
−200
−400
−600

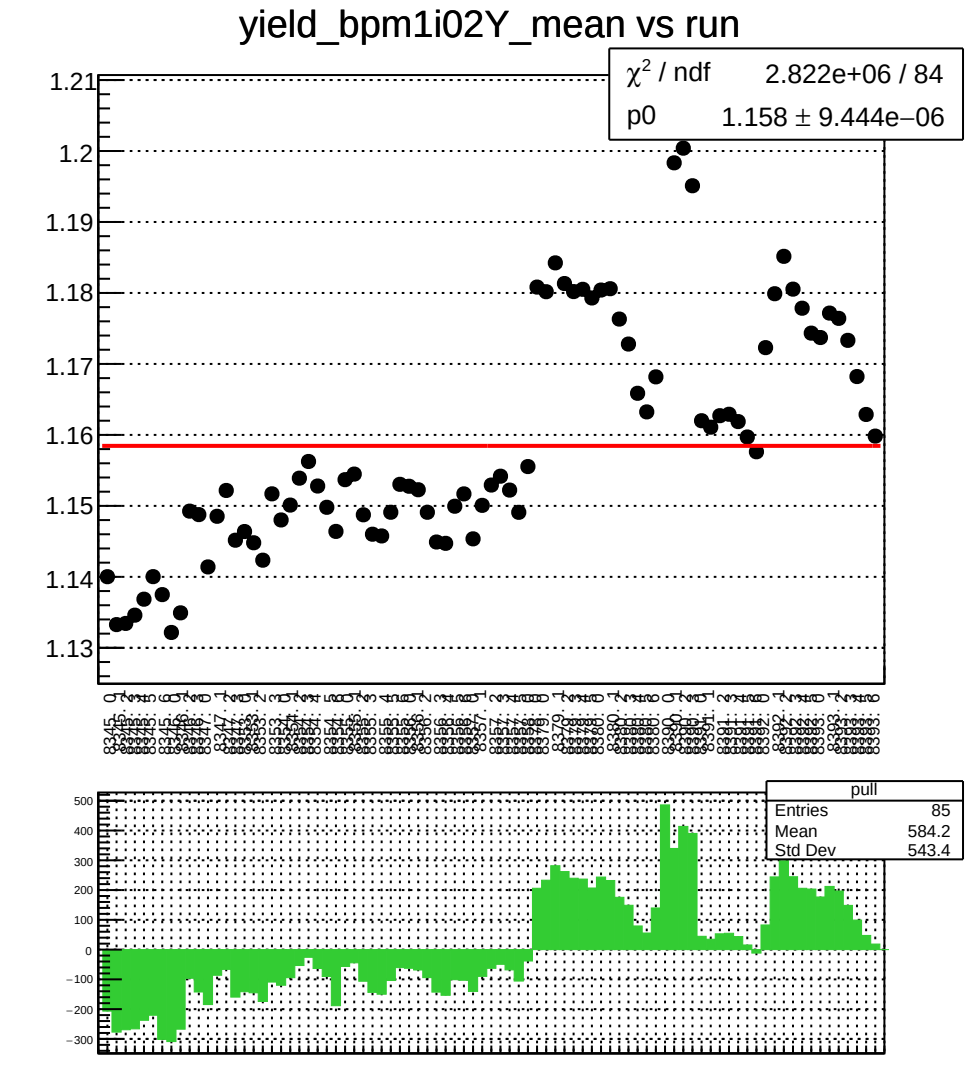

pull1D
Entries 85
Mean −5.033
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

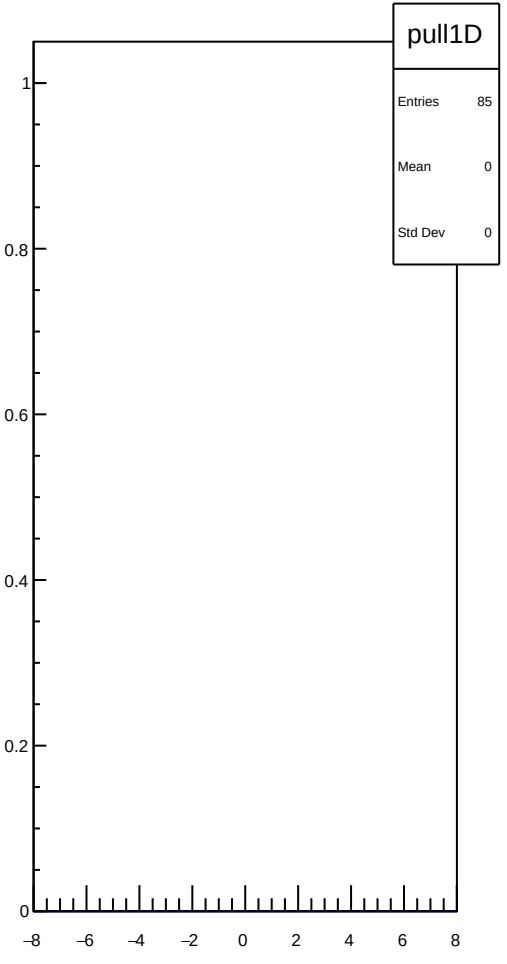

yield_bpm0i07Y_rms vs run
χ² / ndf 1.327e+05 / 84
p0 0.00188 ± 1.515e–06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

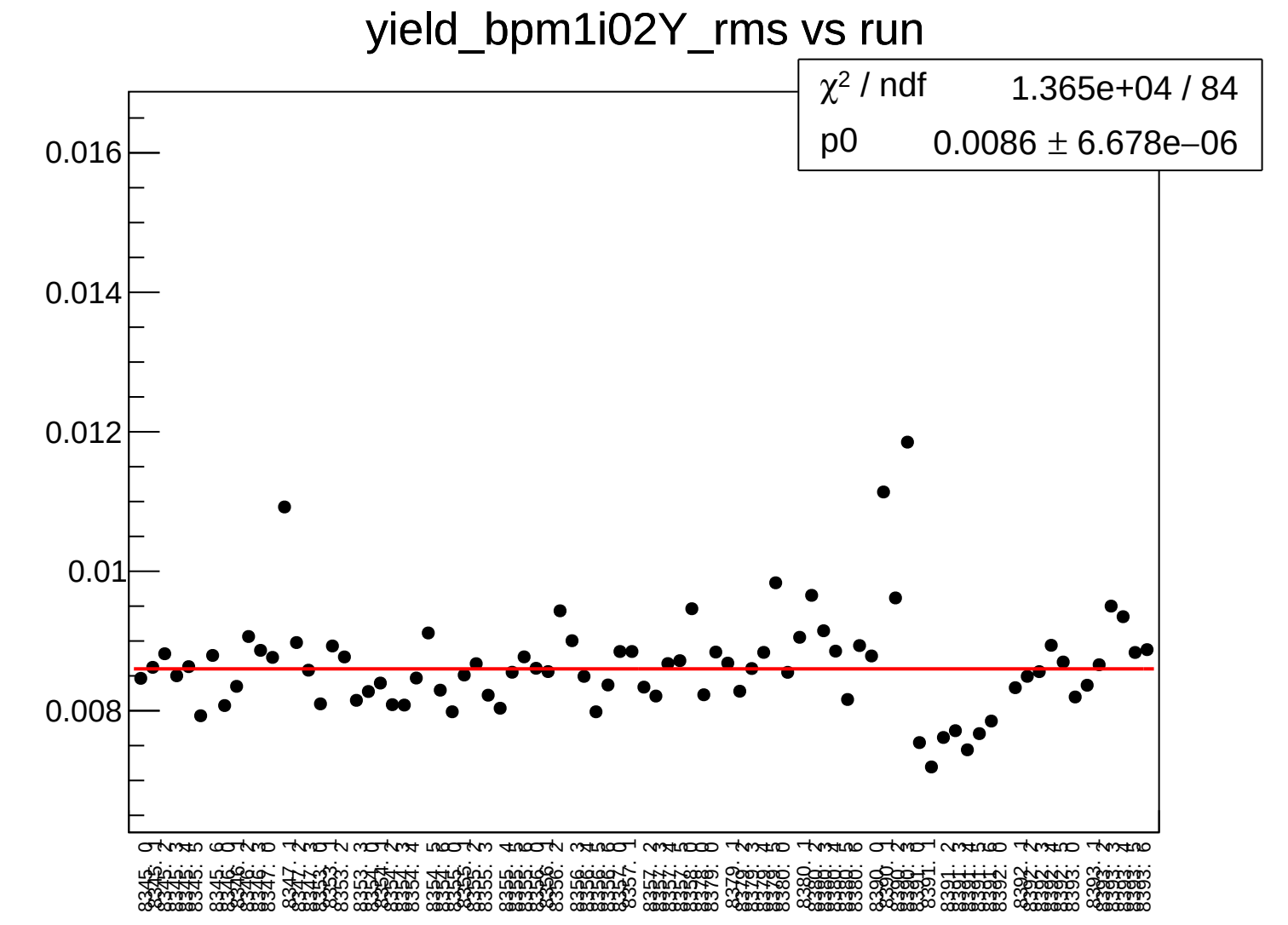

yield_bpm1i02X_mean vs run
χ² / ndf 7.138e+06 / 84
p0 0.01614 ± 1.29e−05
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
pull
Entries 85
Mean 5422
Std Dev 5375
200
0
−200
−400
−600

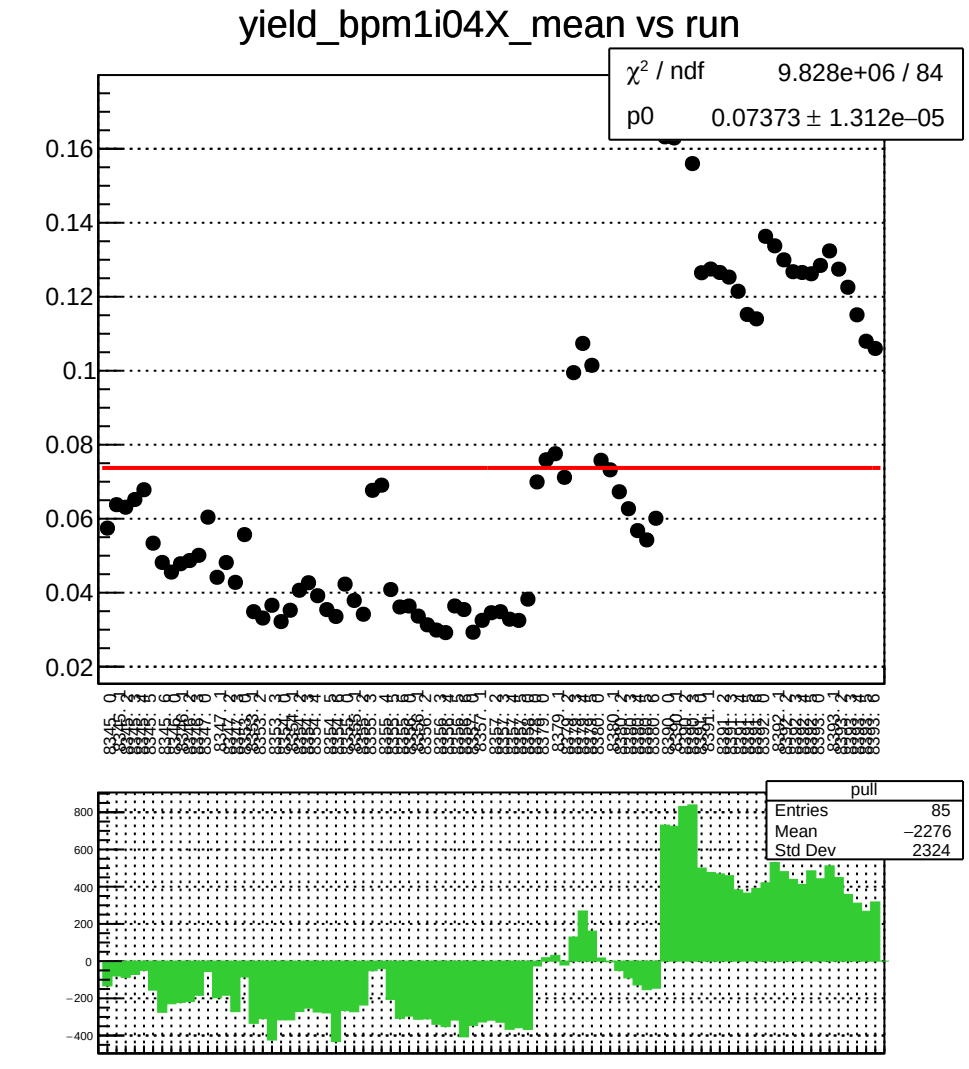

pull1D
Entries 85
Mean 2.823
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

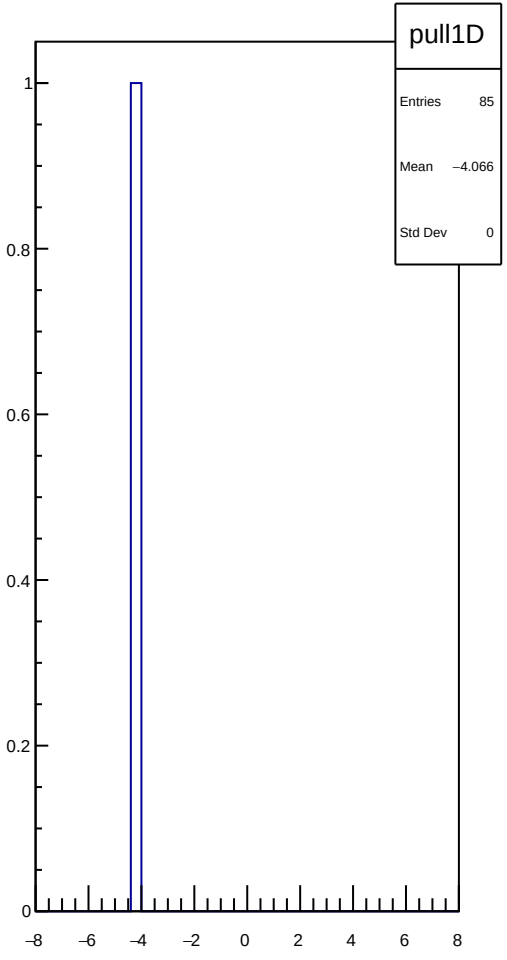

yield_bpm1i02X_rms vs run
χ² / ndf 2.823e+04 / 84
p0 0.0117 ± 9.122e−06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

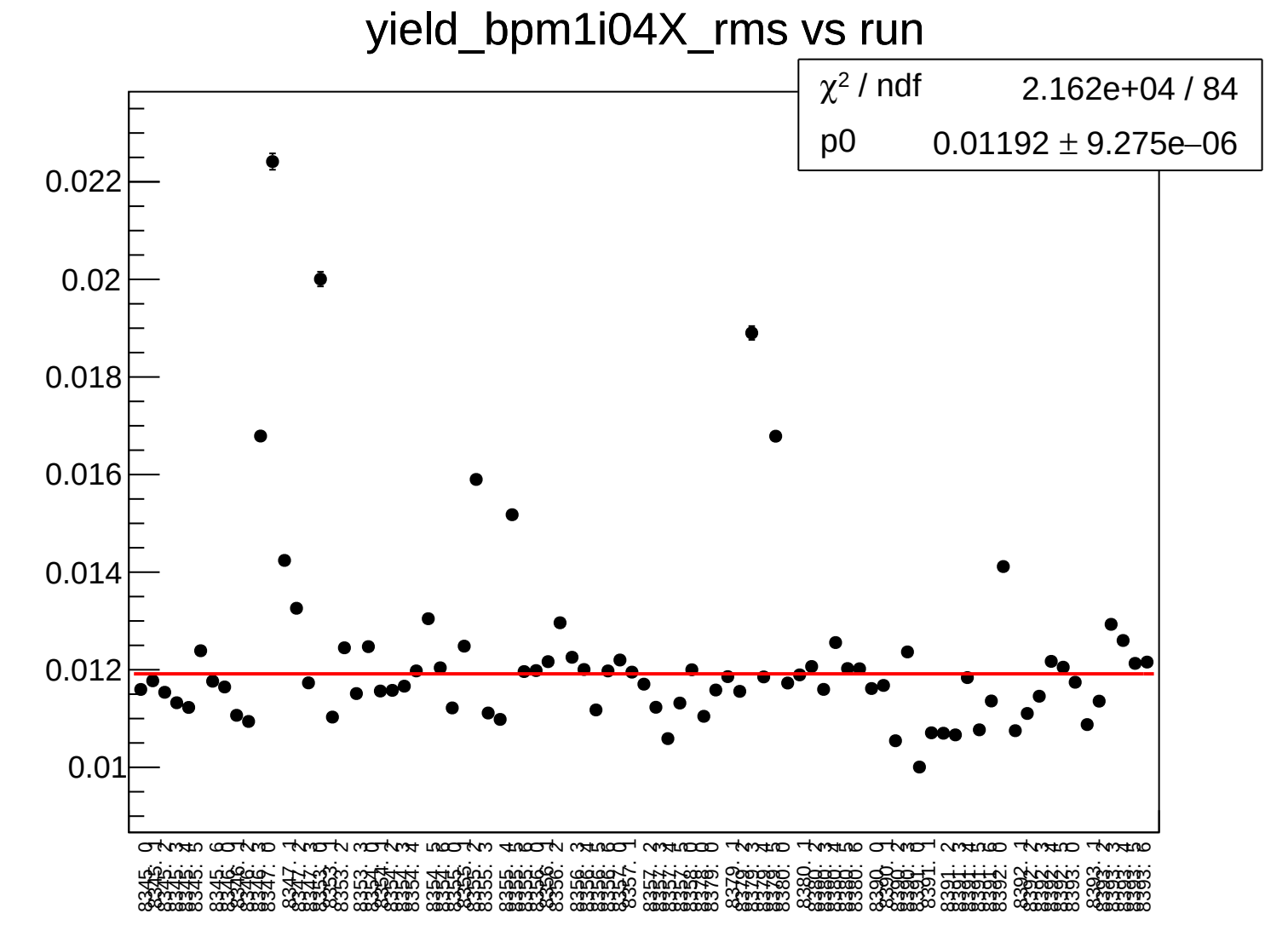

yield_bpm1i02Y_mean vs run
χ² / ndf 2.822e+06 / 84
p0 1.158 ± 9.444e−06
pull
Entries 85
Mean 584.2
Std Dev 543.4

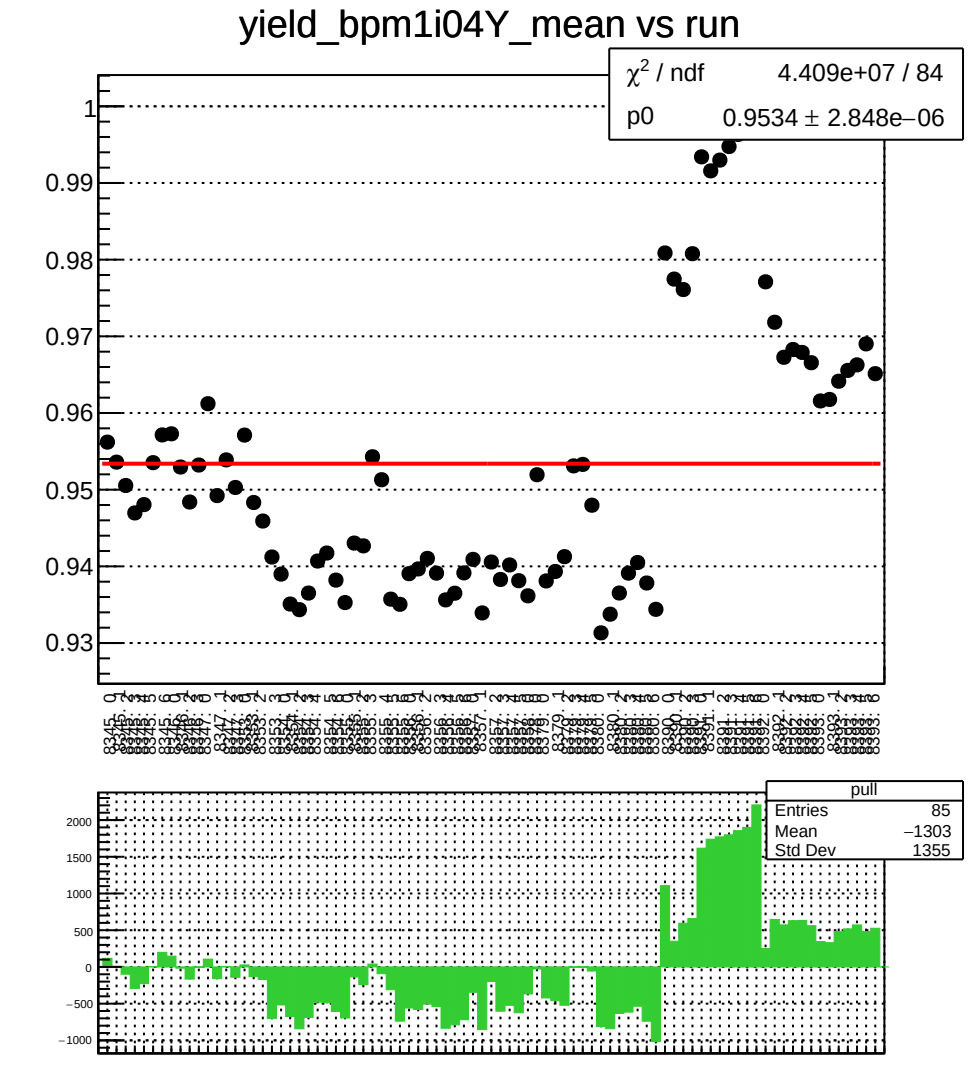

pull1D
Entries 85
Mean 0
Std Dev 0

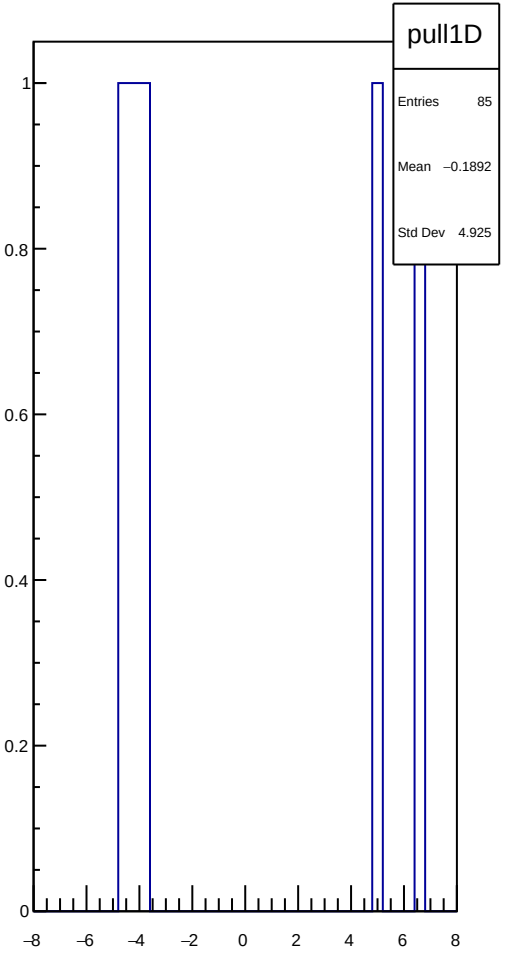

yield_bpm1i02Y_rms vs run
χ² / ndf 1.365e+04 / 84
p0 0.0086 ± 6.678e−06
0.016
0.014
0.012
0.01
0.008

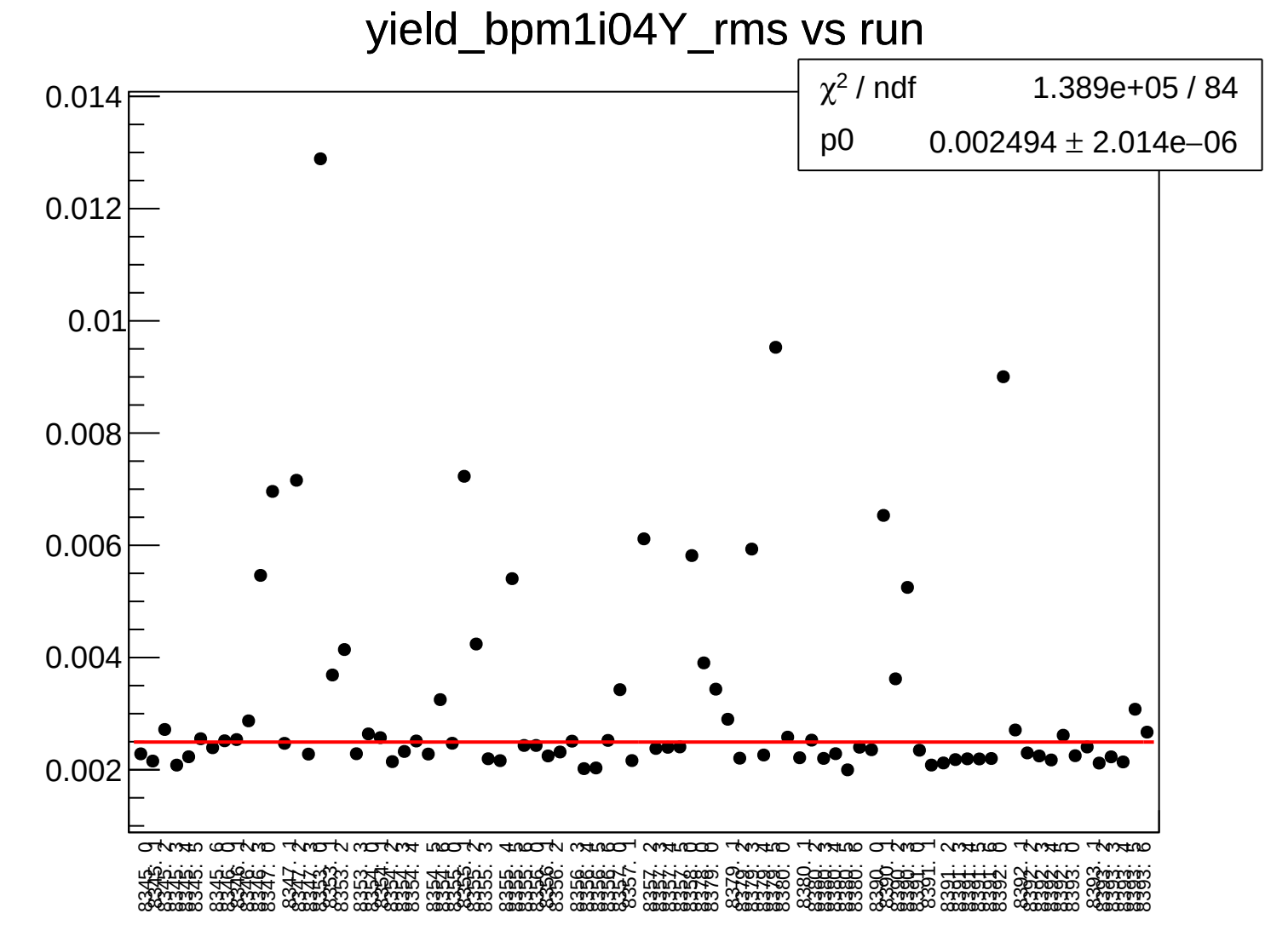

yield_bpm1i04X_mean vs run
χ² / ndf 9.828e+06 / 84
p0 0.07373 ± 1.312e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
pull
Entries 85
Mean −2276
Std Dev 2324
800
600
400
200
0
−200
−400

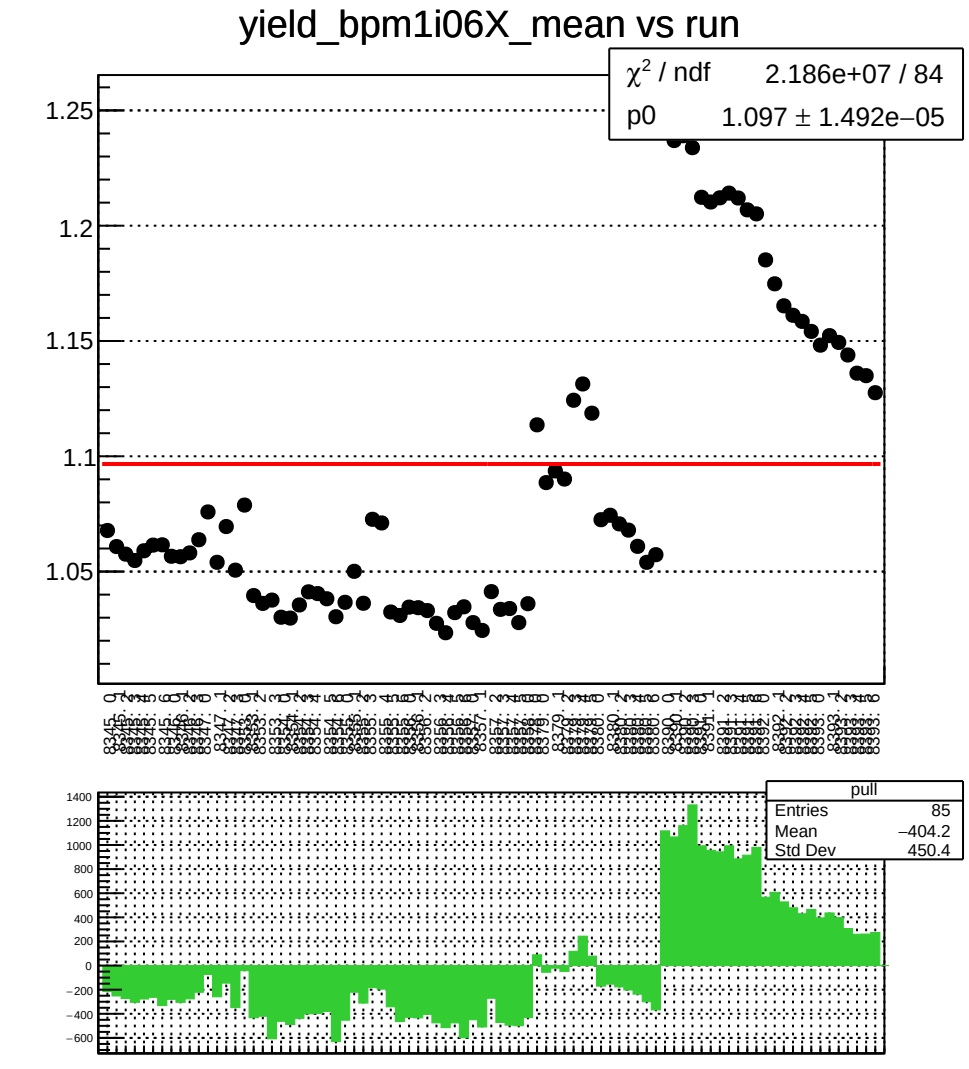

pull1D
Entries 85
Mean −4.066
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

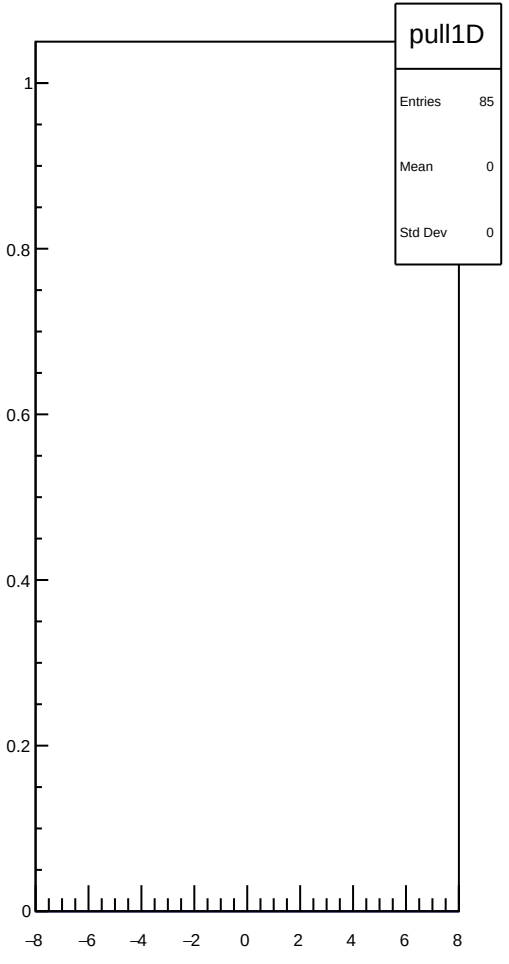

yield_bpm1i04X_rms vs run
χ² / ndf 2.162e+04 / 84
p0 0.01192 ± 9.275e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

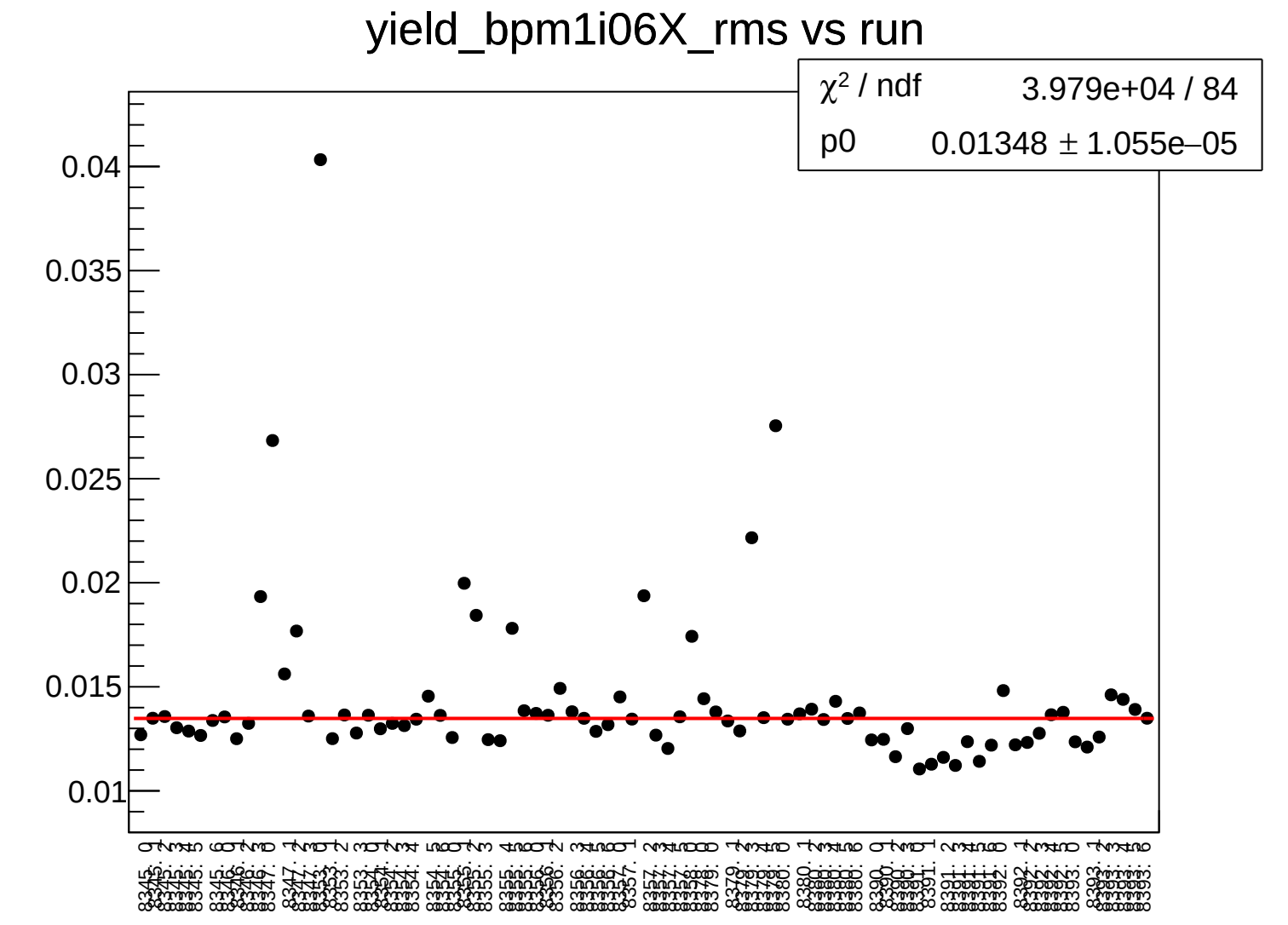

yield_bpm1i04Y_mean vs run
χ² / ndf 4.409e+07 / 84
p0 0.9534 ± 2.848e−06
pull
Entries 85
Mean −1303
Std Dev 1355

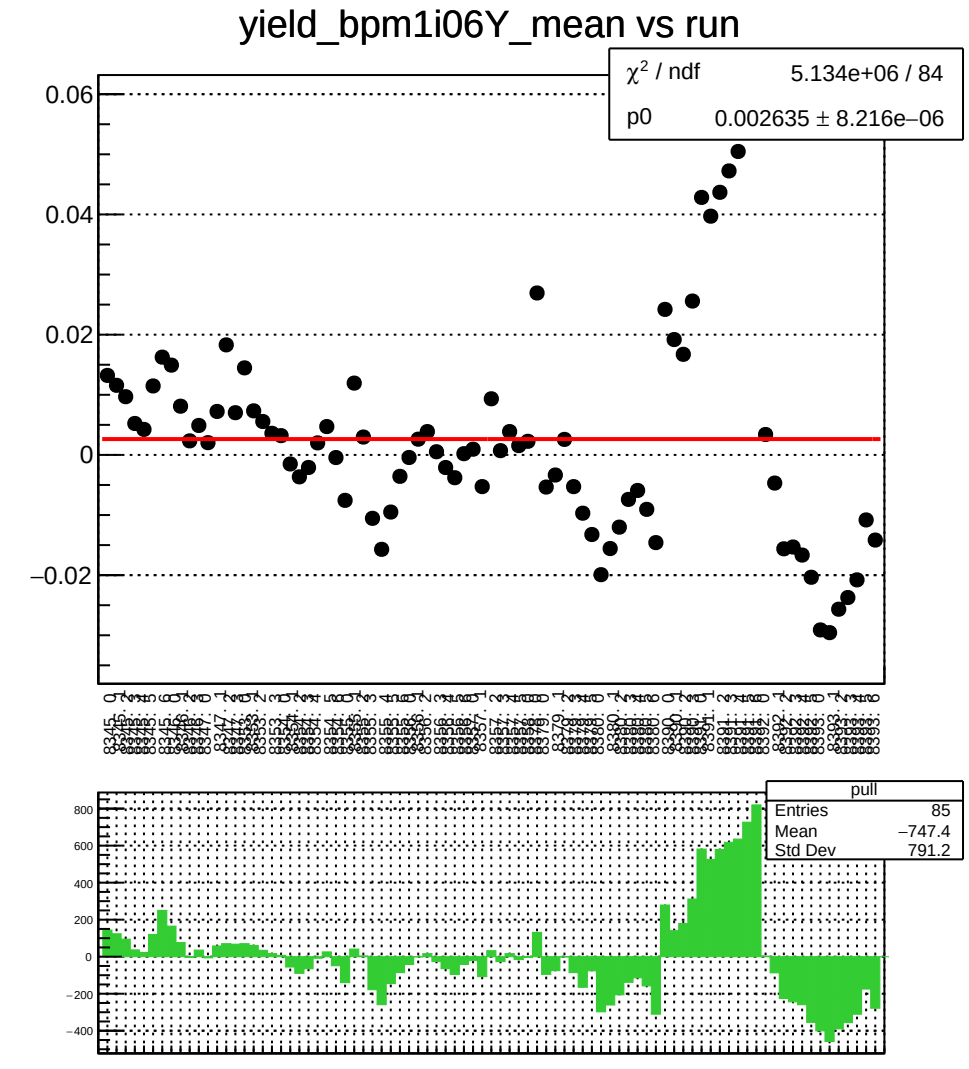

pull1D
Entries 85
Mean −0.1892
Std Dev 4.925

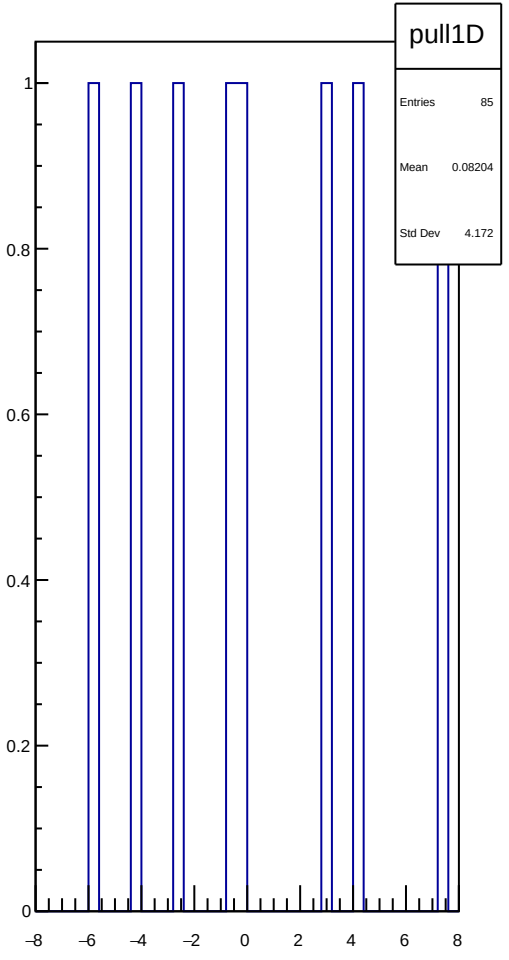

yield_bpm1i04Y_rms vs run
χ^2 / ndf 1.389e+05 / 84
p0 0.002494 ± 2.014e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

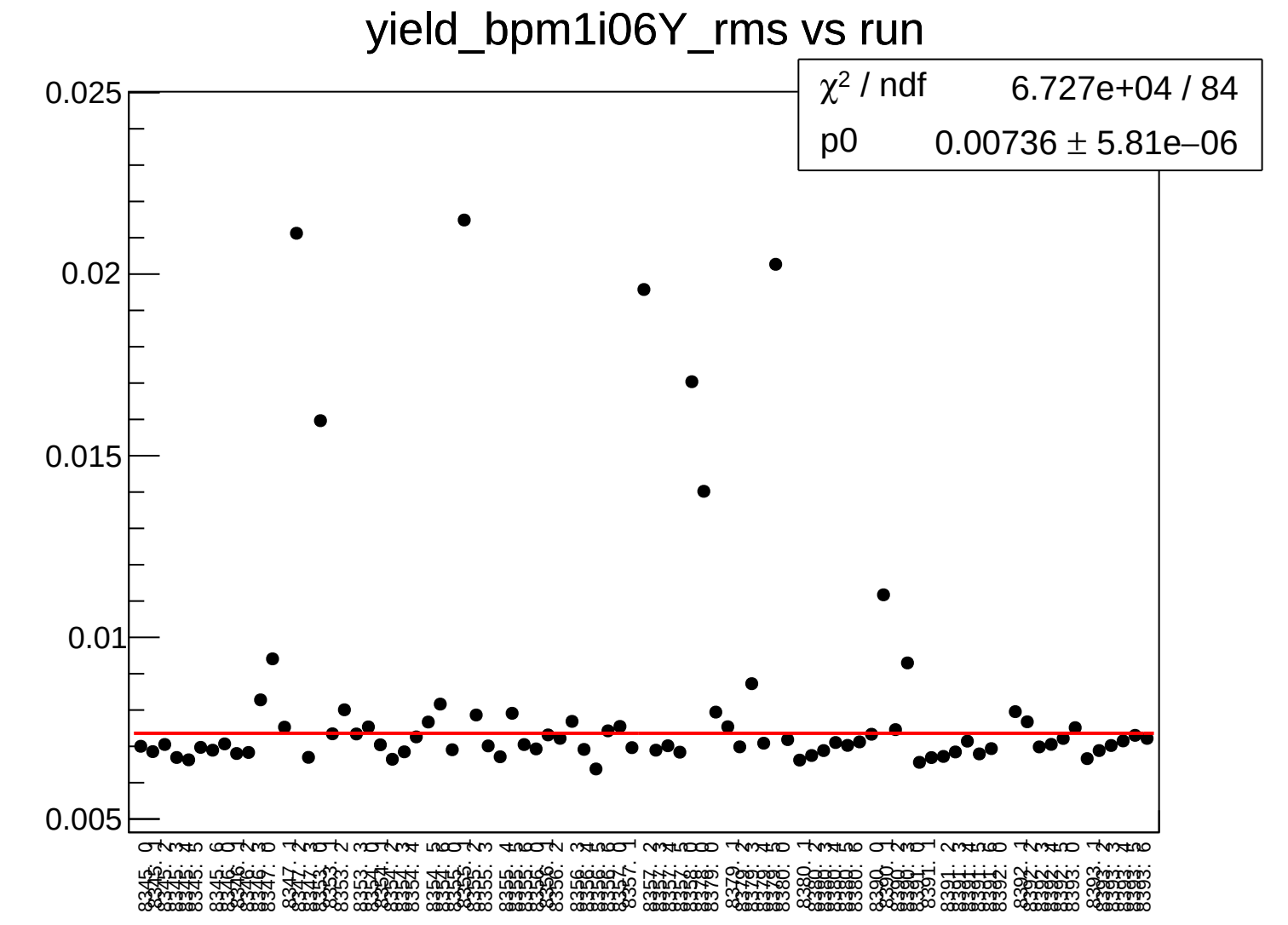

yield_bpm1i06X_mean vs run
χ² / ndf 2.186e+07 / 84
p0 1.097 ± 1.492e−05
1.25
1.2
1.15
1.1
1.05
pull
Entries 85
Mean −404.2
Std Dev 450.4
1400
1200
1000
800
600
400
200
0
−200
−400
−600

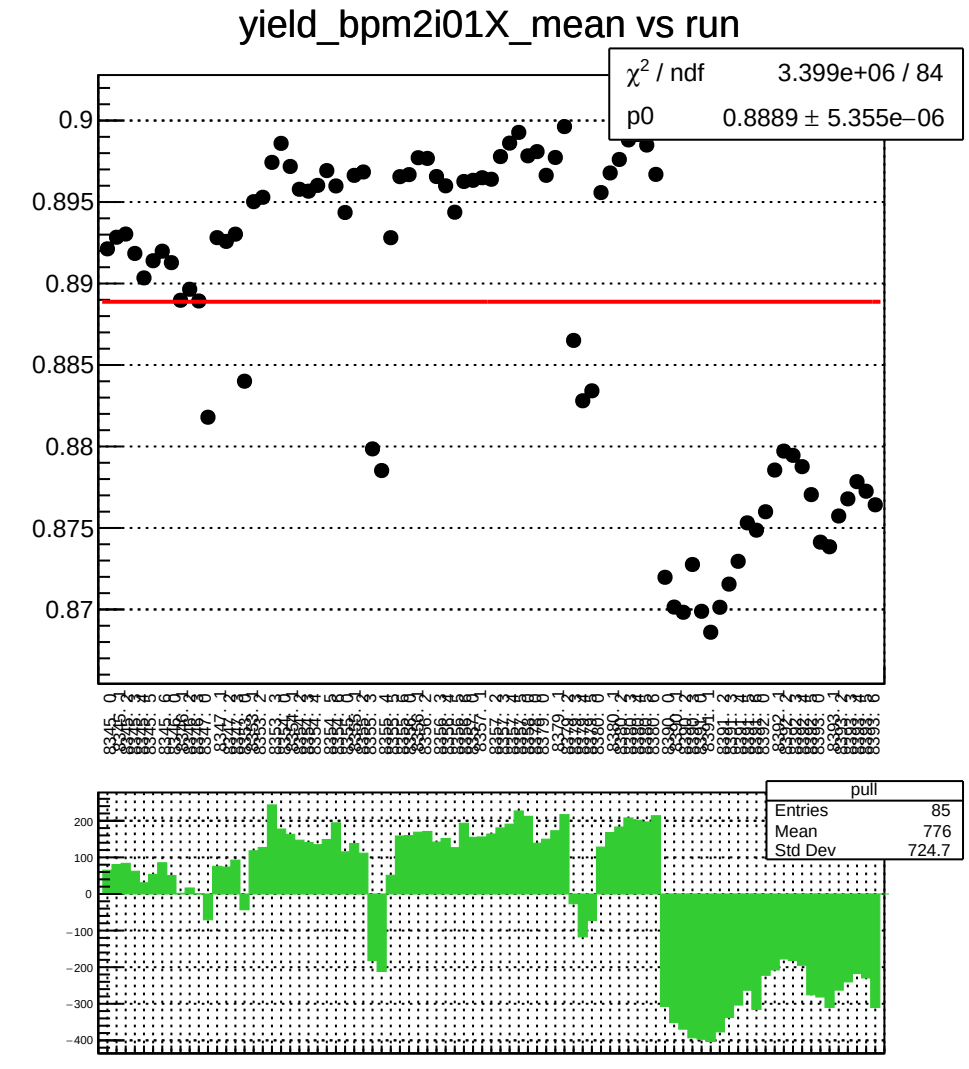

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

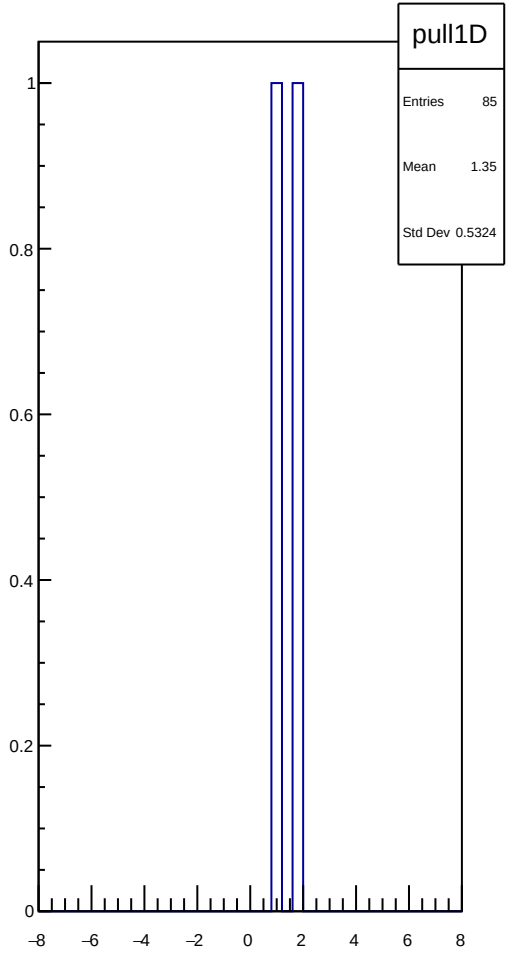

yield_bpm1i06X_rms vs run
χ² / ndf 3.979e+04 / 84
p0 0.01348 ± 1.055e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

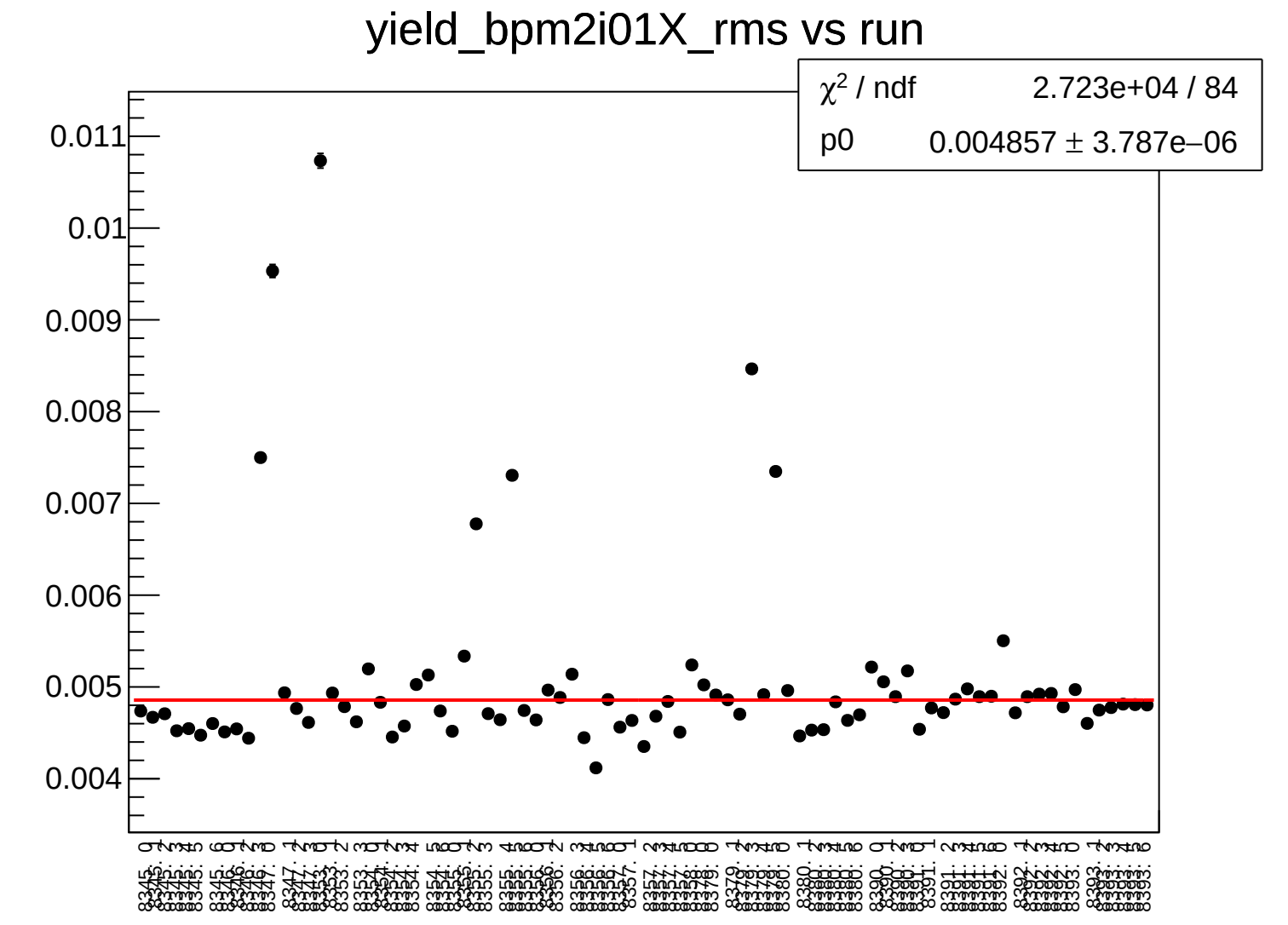

yield_bpm1i06Y_mean vs run
χ² / ndf 5.134e+06 / 84
p0 0.002635 ± 8.216e−06
0.06
0.04
0.02
0
−0.02
pull
Entries 85
Mean −747.4
Std Dev 791.2
800
600
400
200
0
−200
−400

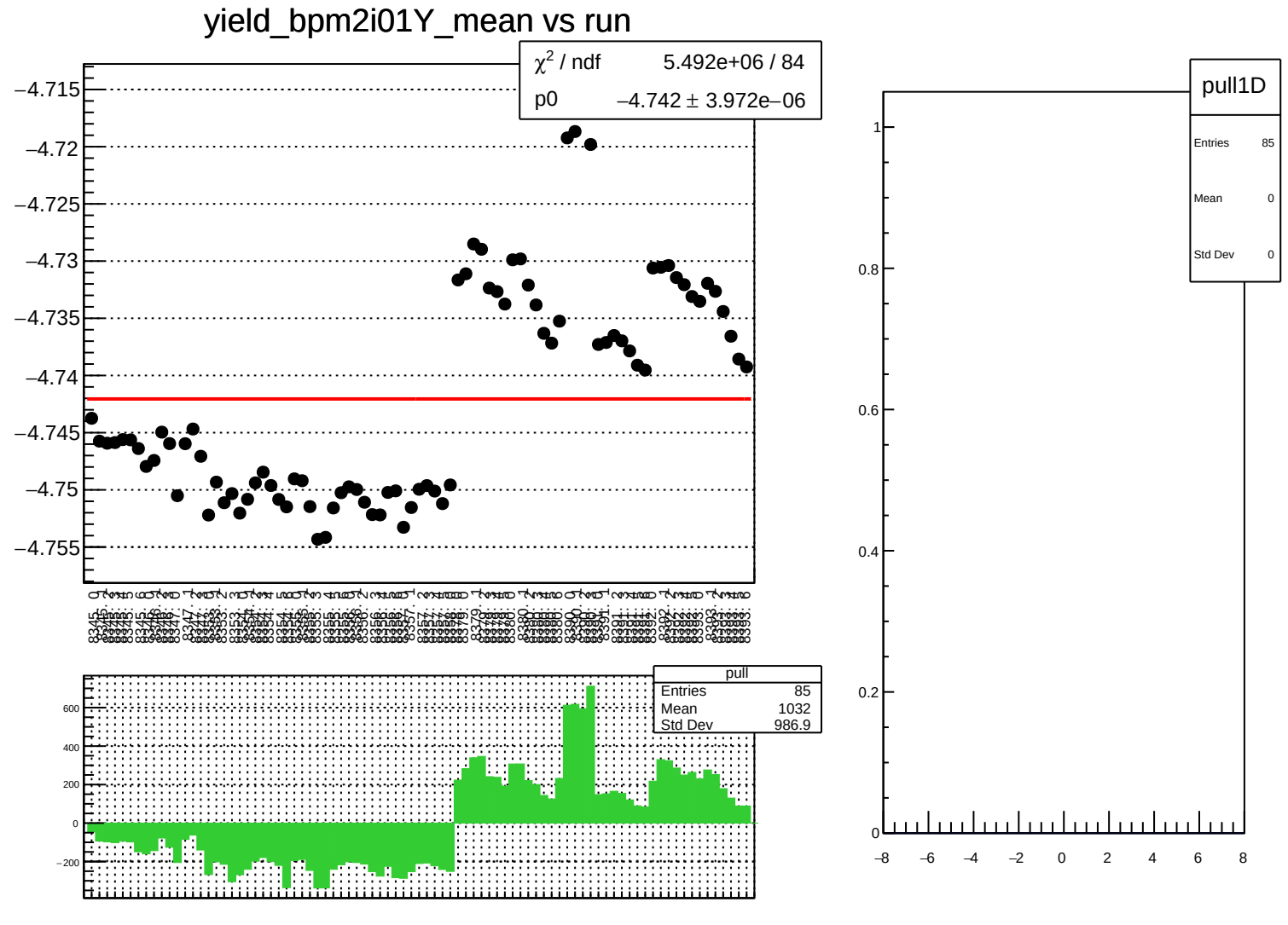

pull1D
Entries 85
Mean 0.08204
Std Dev 4.172
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

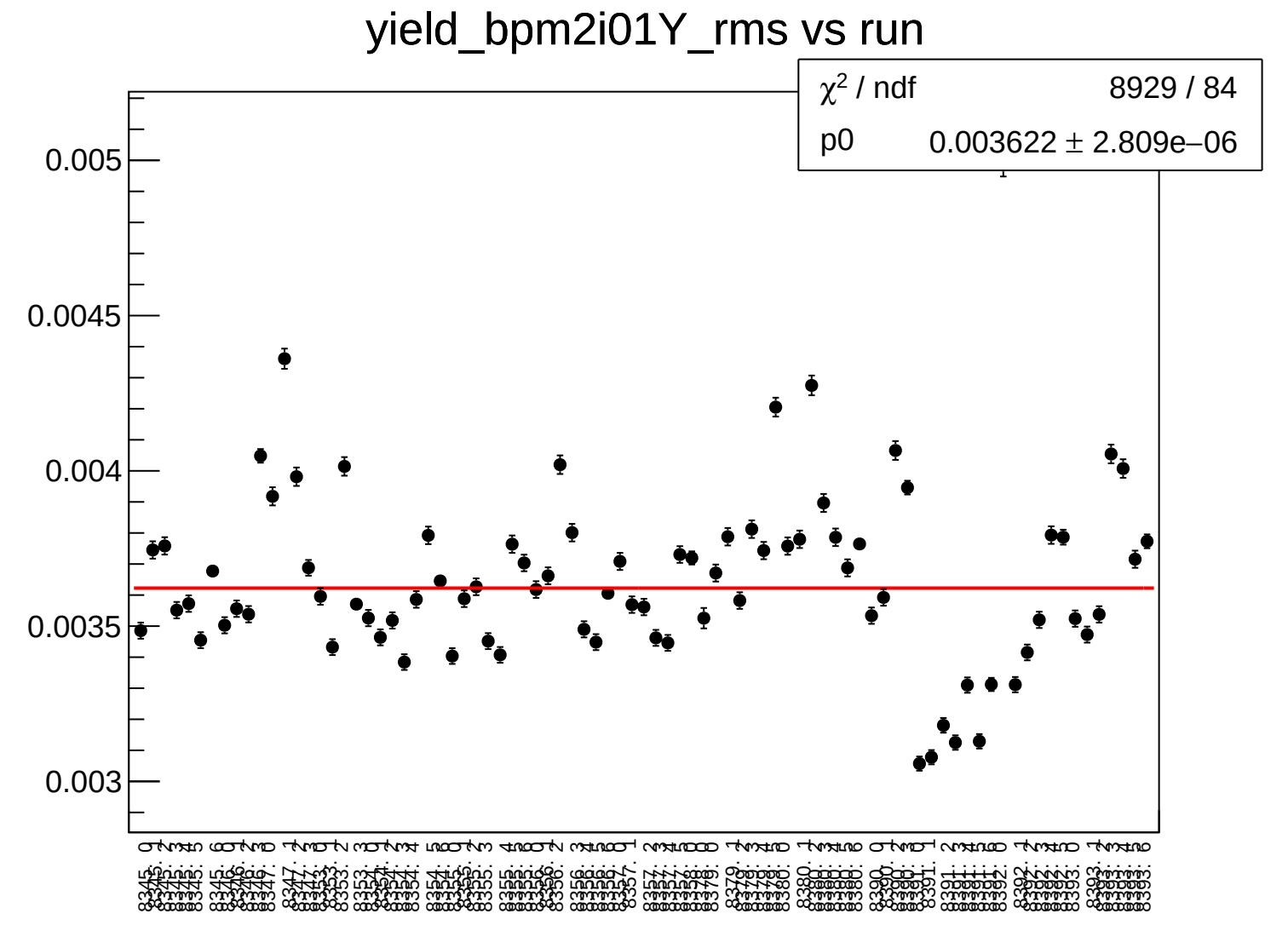

yield_bpm1i06Y_rms vs run
χ² / ndf 6.727e+04 / 84
p0 0.00736 ± 5.81e–06
0.025
0.02
0.015
0.01
0.005

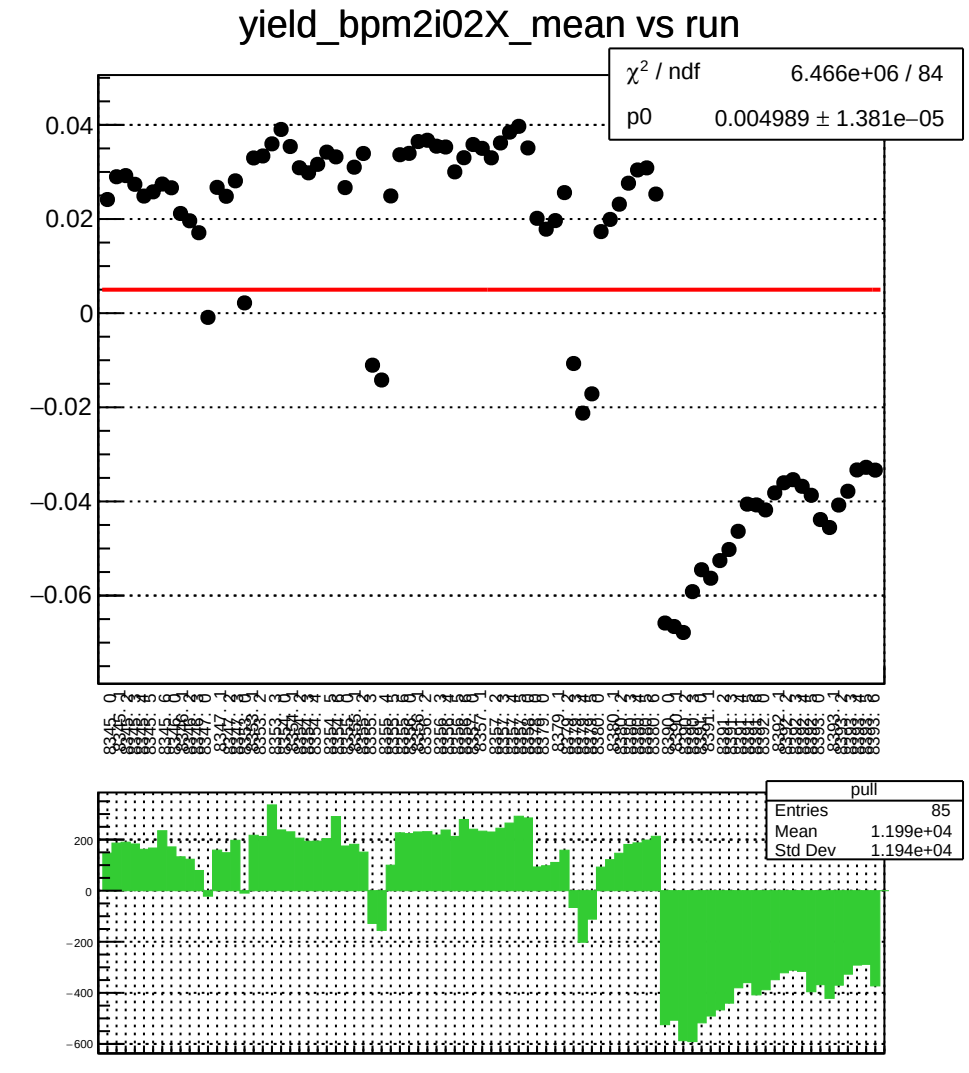

yield_bpm2i01X_mean vs run
χ² / ndf 3.399e+06 / 84
p0 0.8889 ± 5.355e−06
0.9
0.895
0.89
0.885
0.88
0.875
0.87
pull
Entries 85
Mean 776
Std Dev 724.7
200
100
0
−100
−200
−300
−400

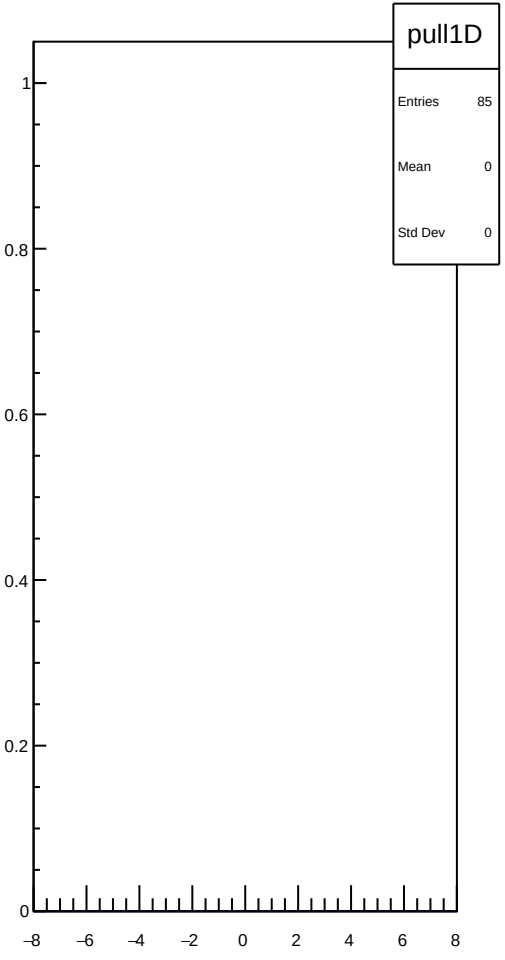

pull1D
Entries 85
Mean 1.35
Std Dev 0.5324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

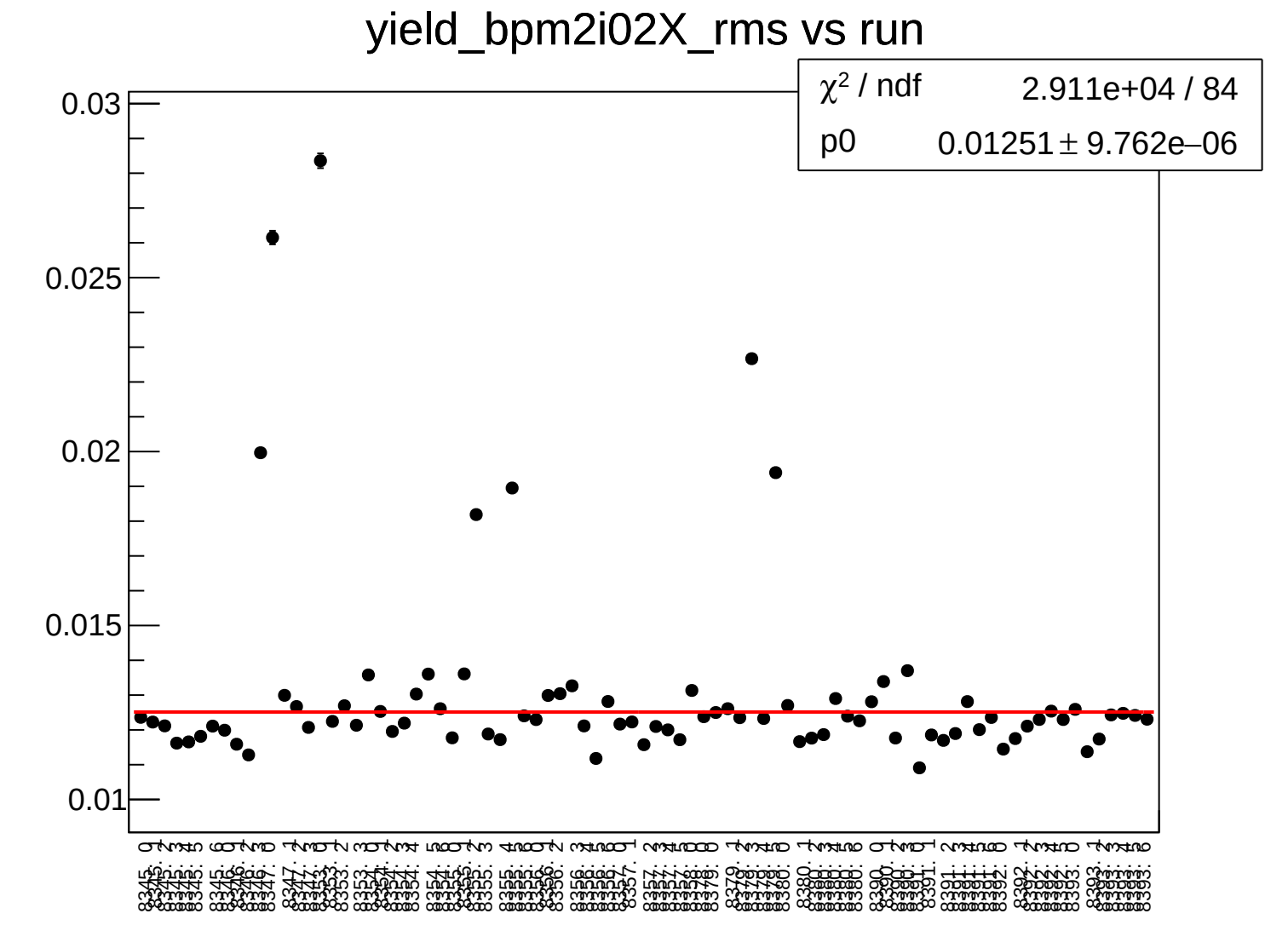

yield_bpm2i01X_rms vs run
χ^2 / ndf 2.723e+04 / 84
p0 0.004857 ± 3.787e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

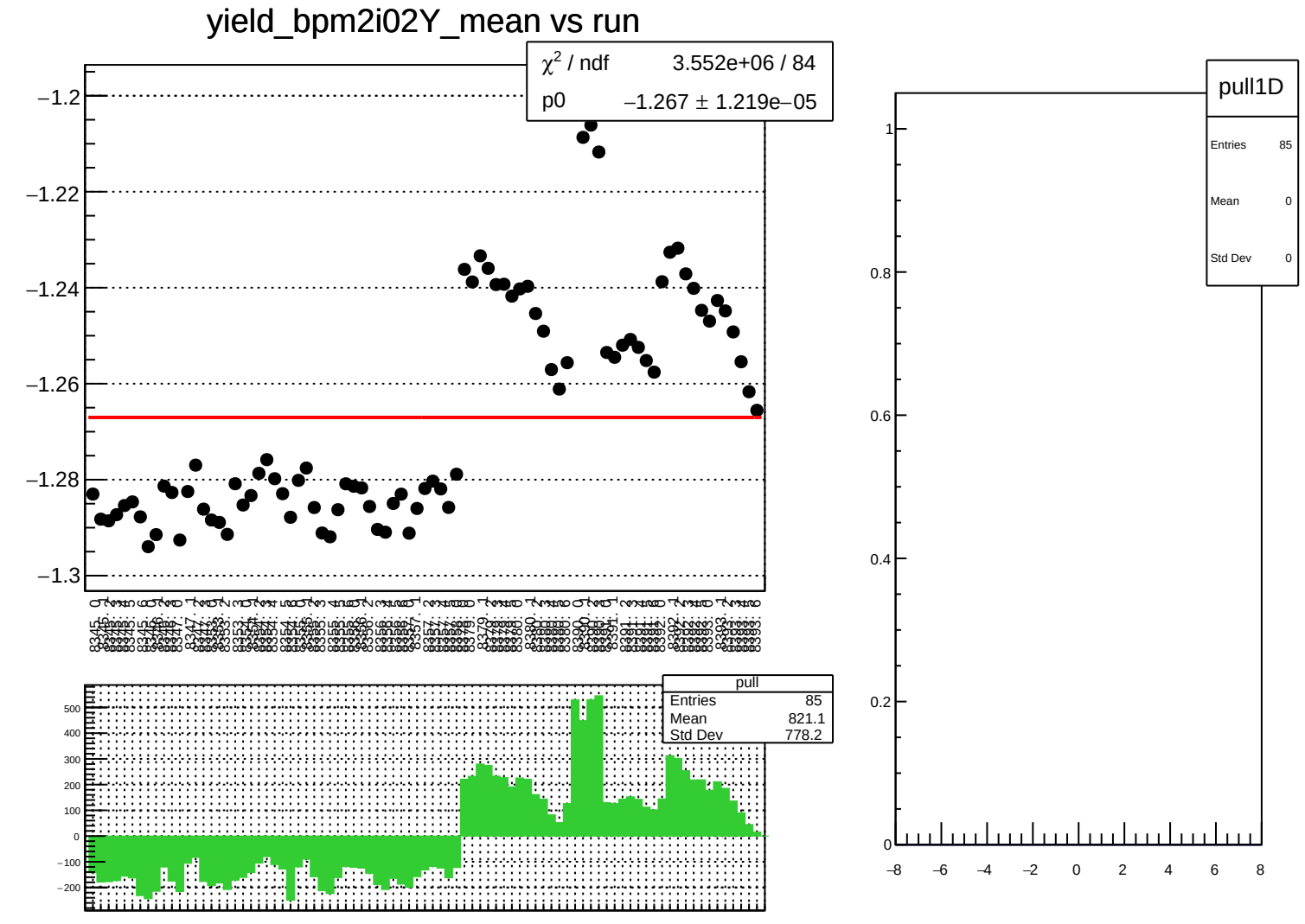

yield_bpm2i01Y_mean vs run
χ² / ndf 5.492e+06 / 84
p0 −4.742 ± 3.972e−06
−4.715
−4.72
−4.725
−4.73
−4.735
−4.74
−4.745
−4.75
−4.755
pull
Entries 85
Mean 1032
Std Dev 986.9
600
400
200
0
−200
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

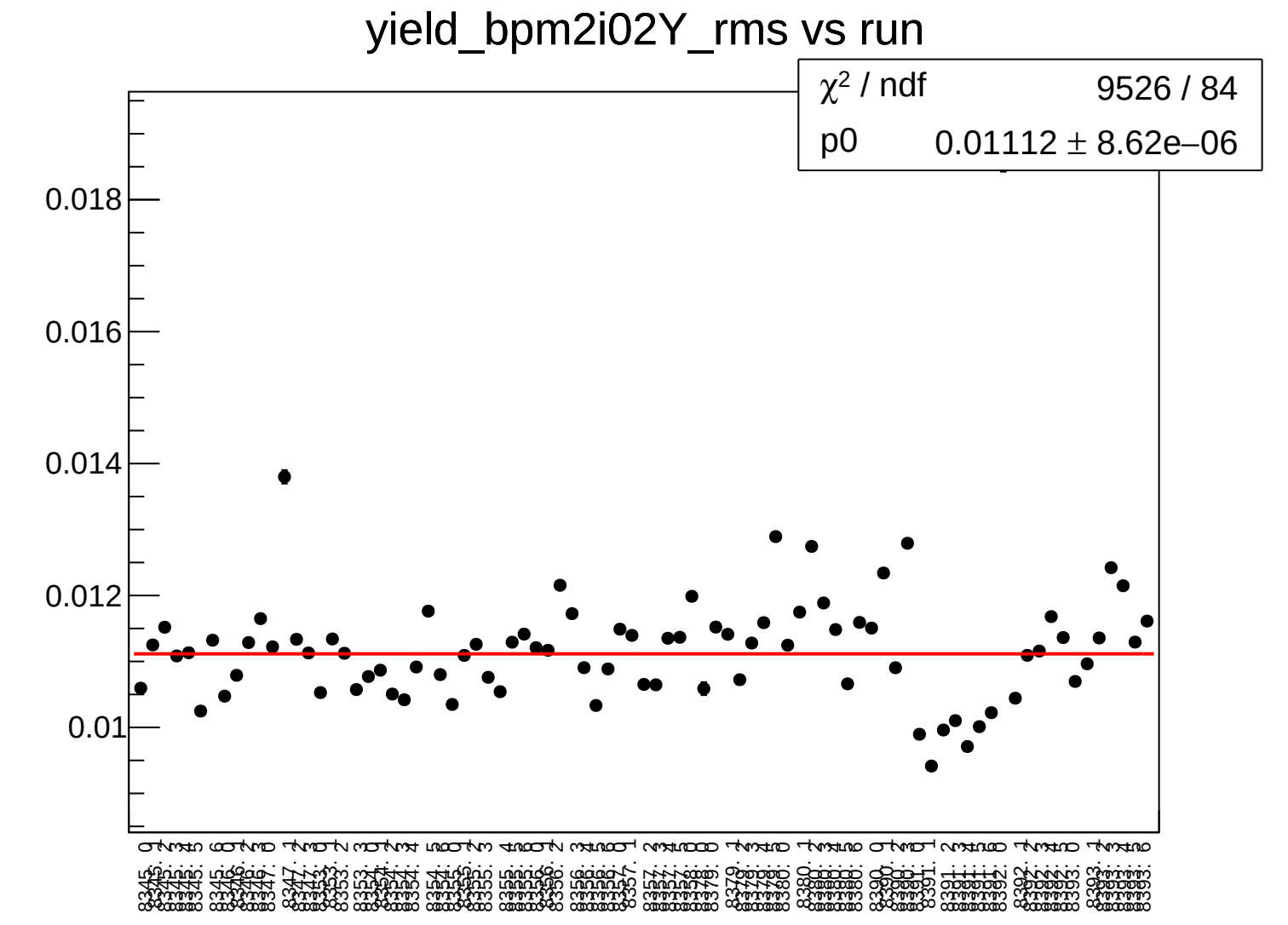

yield_bpm2i01Y_rms vs run
χ² / ndf 8929 / 84
p0 0.003622 ± 2.809e−06
0.005
0.0045
0.004
0.0035
0.003

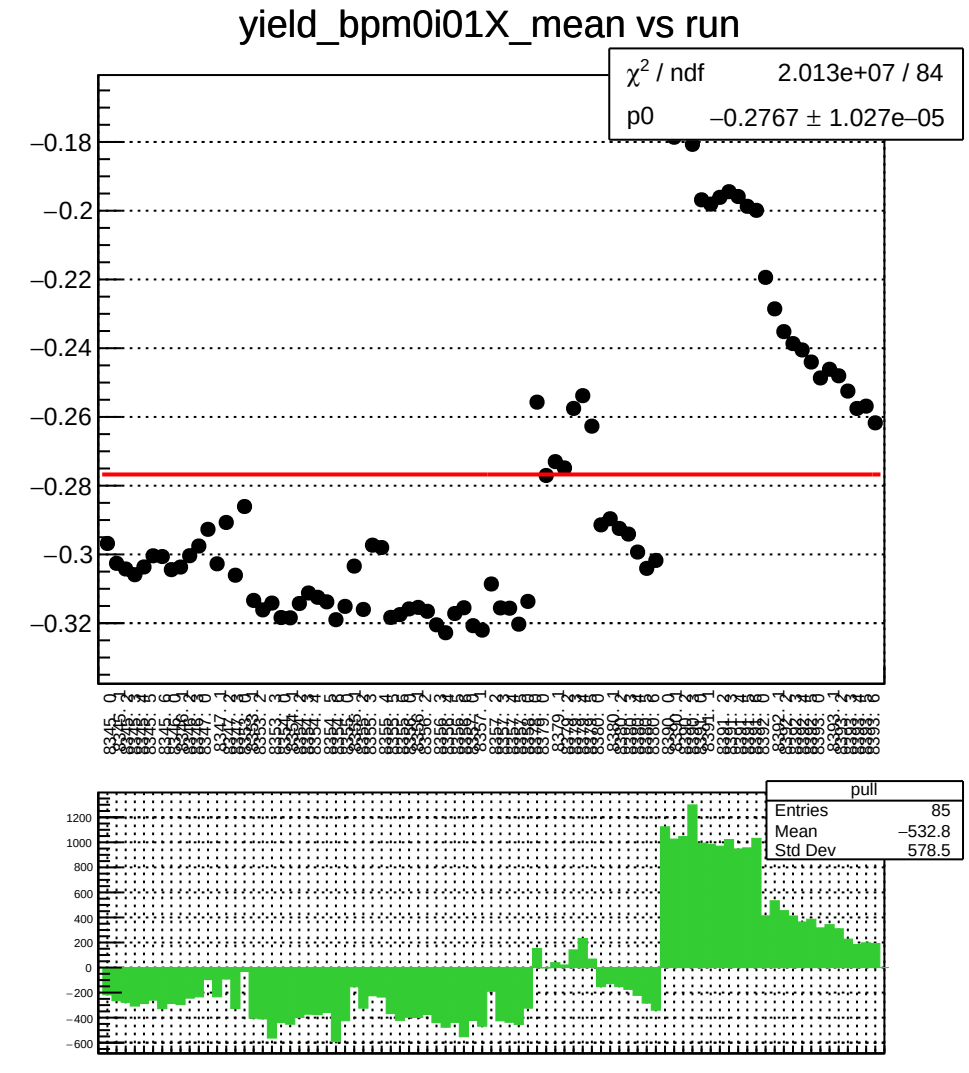

yield_bpm2i02X_mean vs run
χ² / ndf 6.466e+06 / 84
p0 0.004989 ± 1.381e−05
0.04
0.02
0
−0.02
−0.04
−0.06
pull
Entries 85
Mean 1.199e+04
Std Dev 1.194e+04
200
0
−200
−400
−600

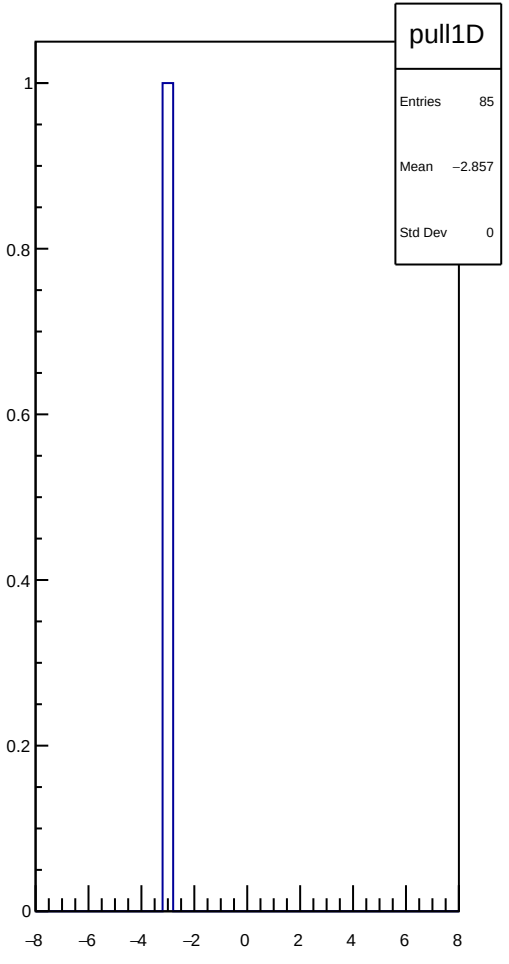

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

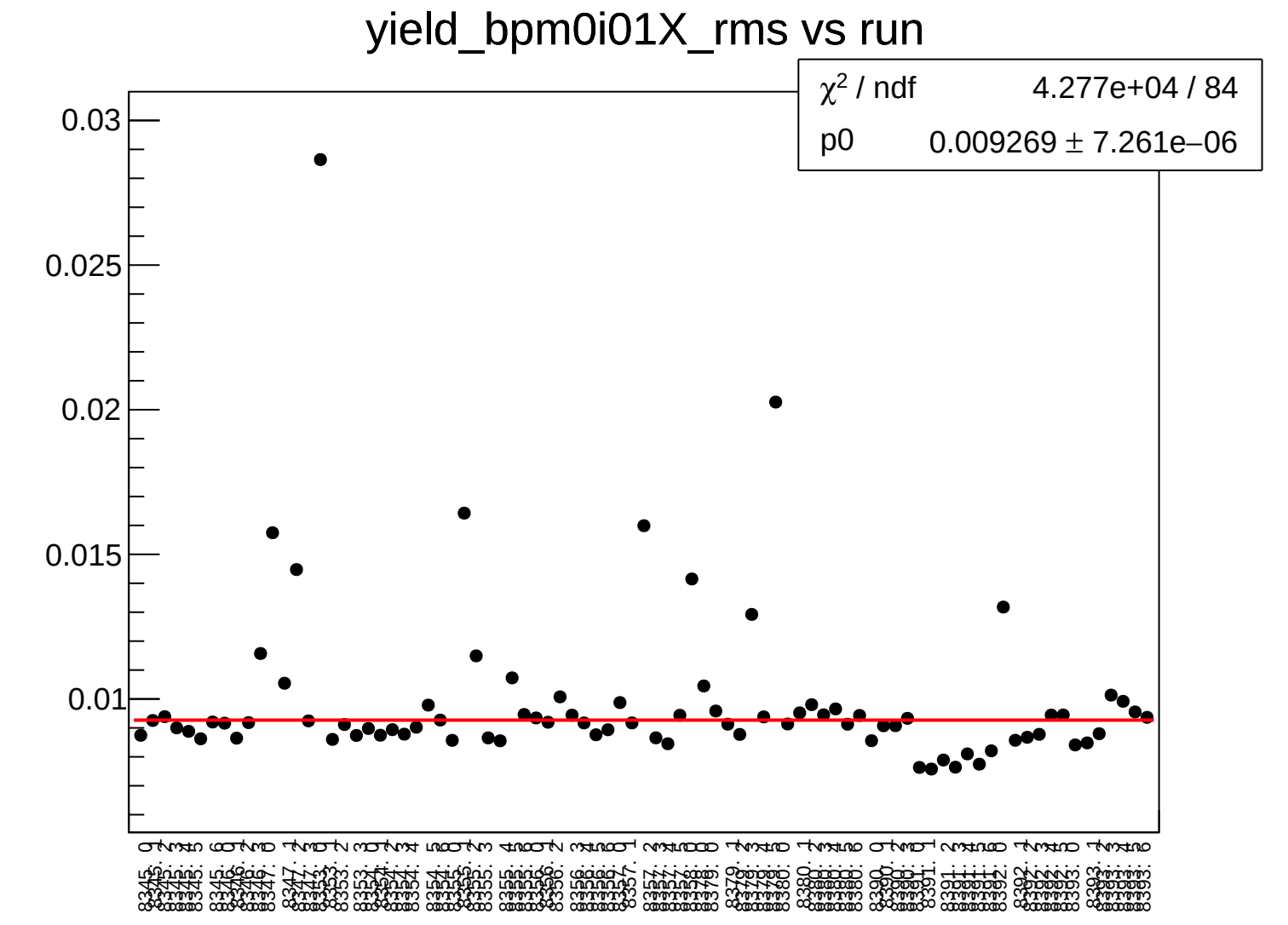

yield_bpm2i02X_rms vs run
χ² / ndf 2.911e+04 / 84
p0 0.01251 ± 9.762e–06
0.03
0.025
0.02
0.015
0.01

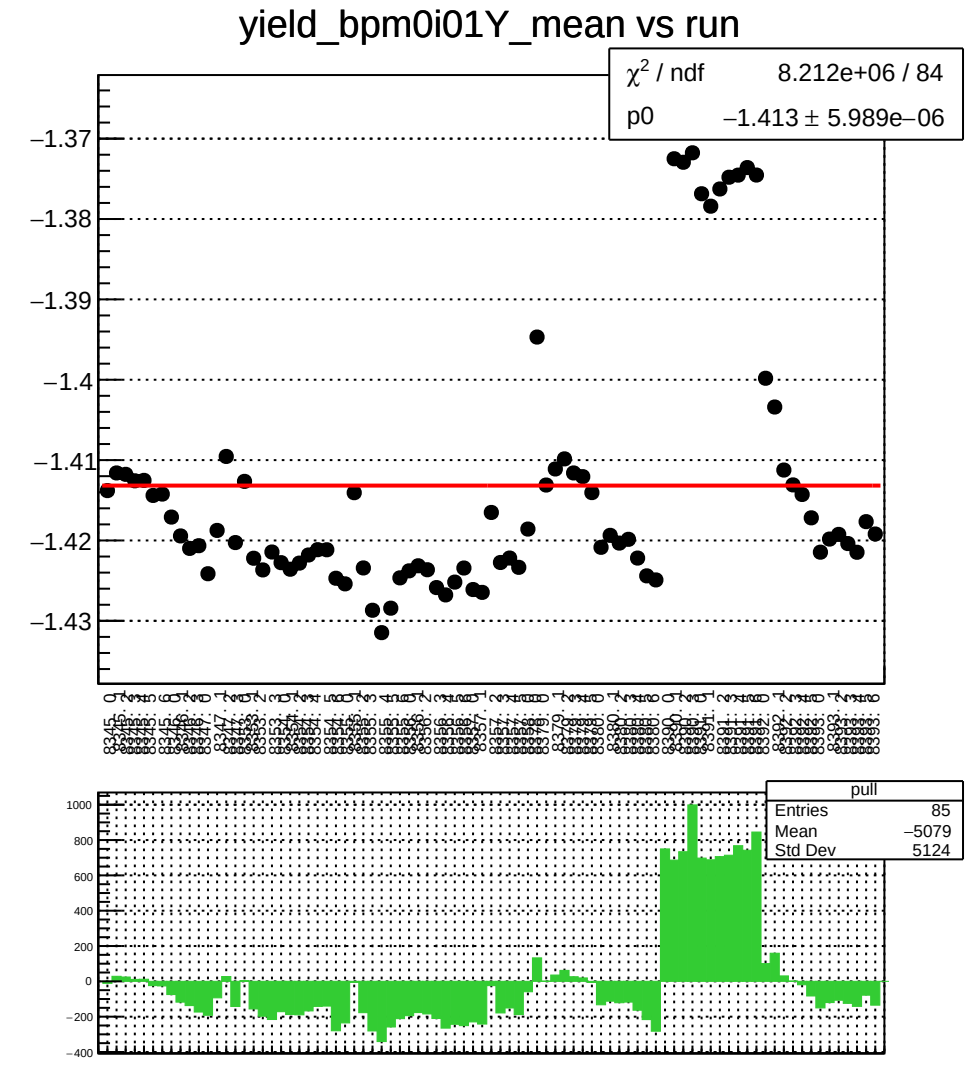

yield_bpm2i02Y_mean vs run
χ² / ndf 3.552e+06 / 84
p0 −1.267 ± 1.219e−05
−1.2
−1.22
−1.24
−1.26
−1.28
−1.3
pull
Entries 85
Mean 821.1
Std Dev 778.2
500
400
300
200
100
0
−100
−200
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

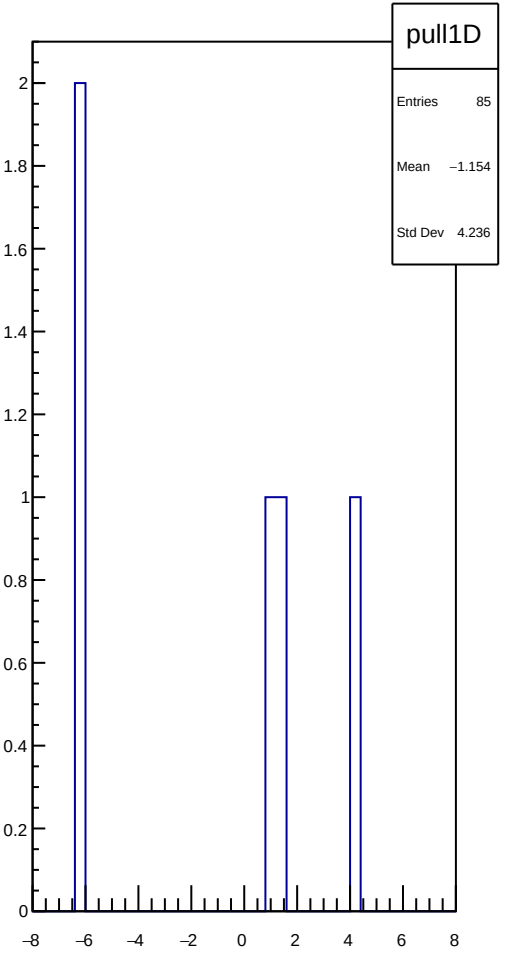

yield_bpm2i02Y_rms vs run
χ² / ndf 9526 / 84
p0 0.01112 ± 8.62e−06
0.018
0.016
0.014
0.012
0.01

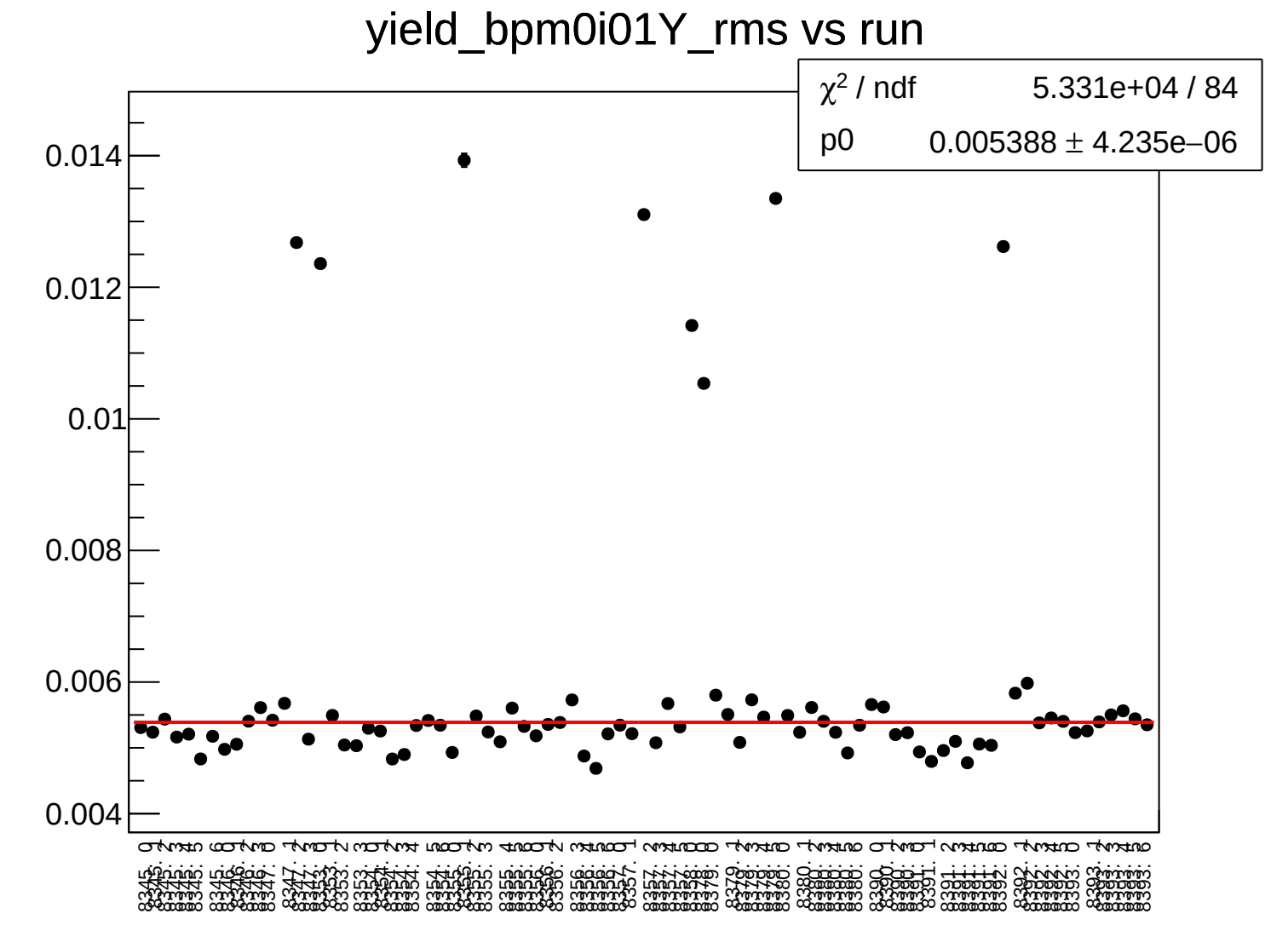

yield_bpm0i01X_mean vs run
χ² / ndf 2.013e+07 / 84
p0 −0.2767 ± 1.027e−05
−0.18
−0.2
−0.22
−0.24
−0.26
−0.28
−0.3
−0.32
pull
Entries 85
Mean −532.8
Std Dev 578.5
1200
1000
800
600
400
200
0
−200
−400
−600

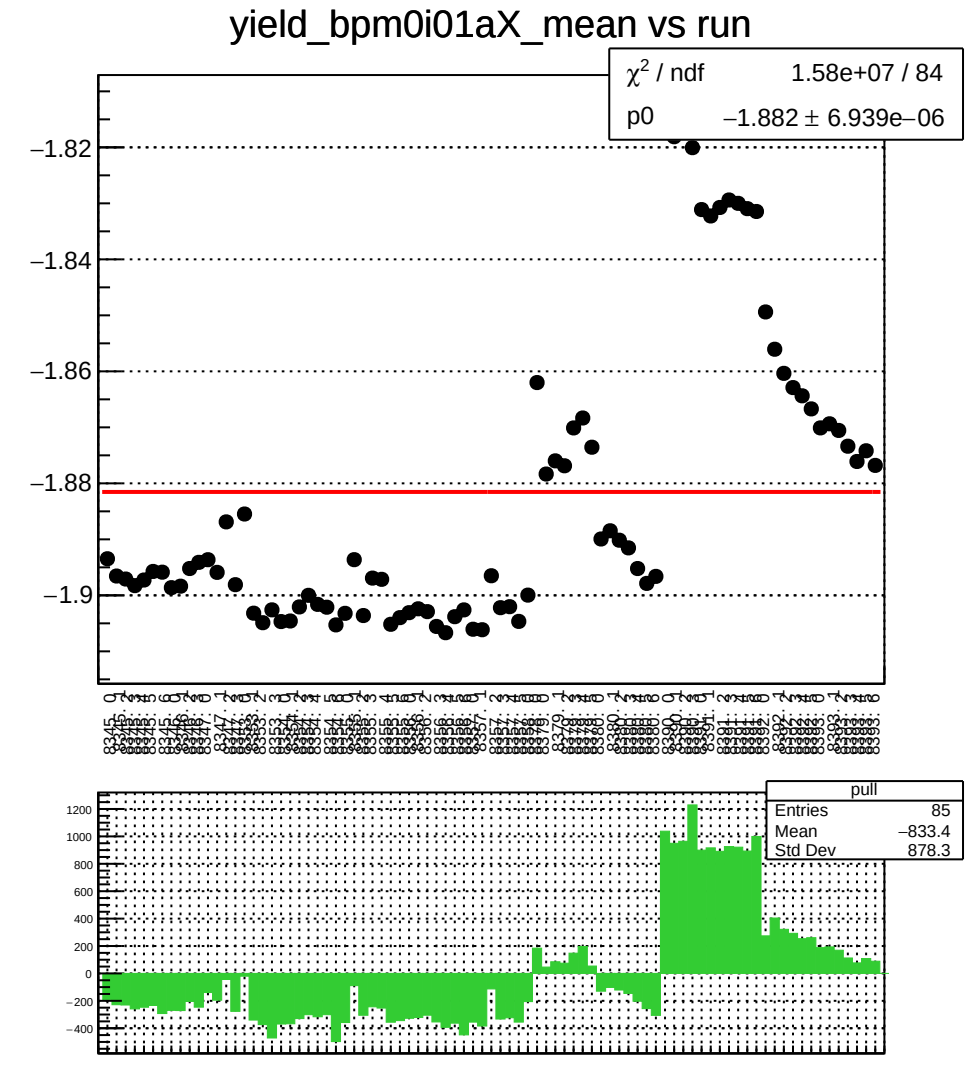

pull1D
Entries 85
Mean −2.857
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

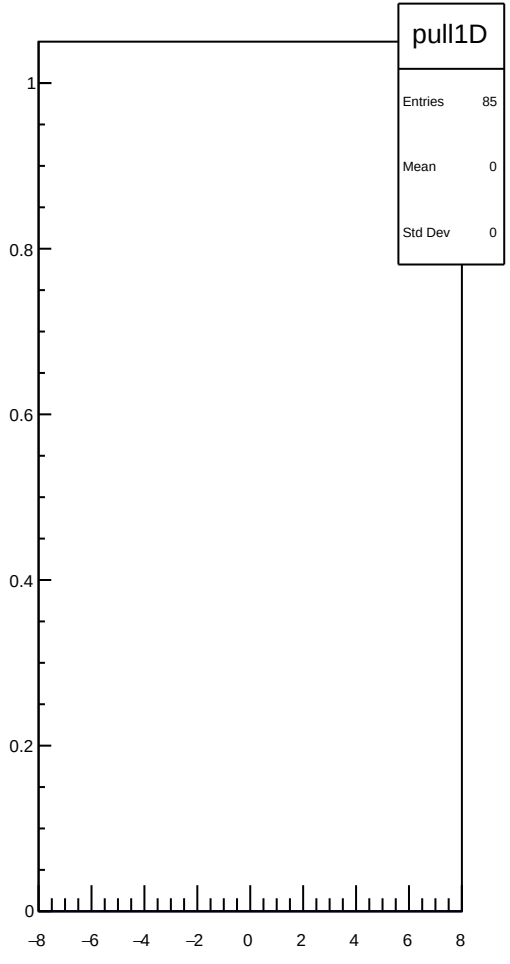

yield_bpm0i01X_rms vs run
χ² / ndf 4.277e+04 / 84
p0 0.009269 ± 7.261e−06
0.03
0.025
0.02
0.015
0.01

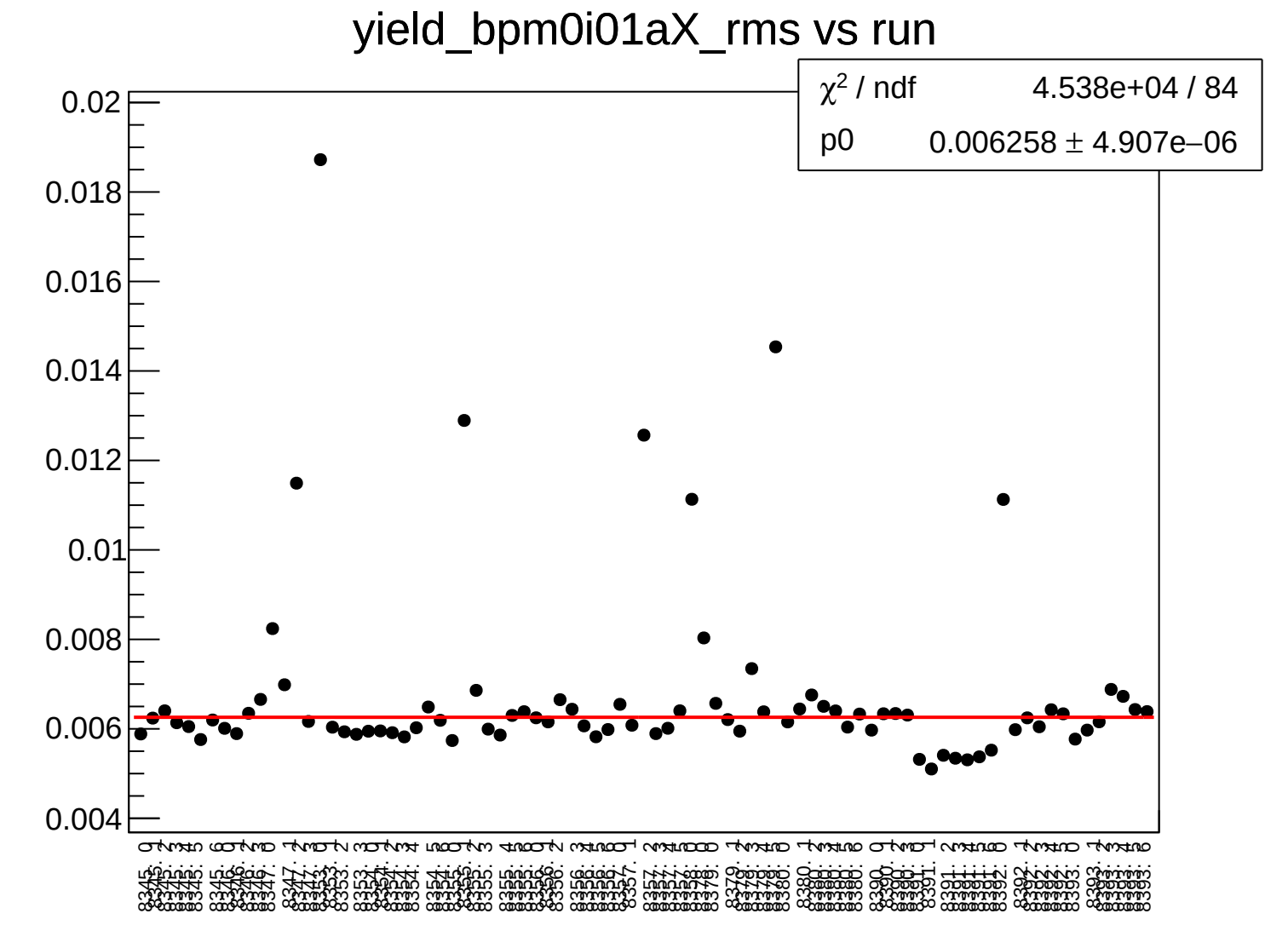

yield_bpm0i01Y_mean vs run
χ² / ndf 8.212e+06 / 84
p0 −1.413 ± 5.989e−06
−1.37
−1.38
−1.39
−1.4
−1.41
−1.42
−1.43
pull
Entries 85
Mean −5079
Std Dev 5124
1000
800
600
400
200
0
−200
−400

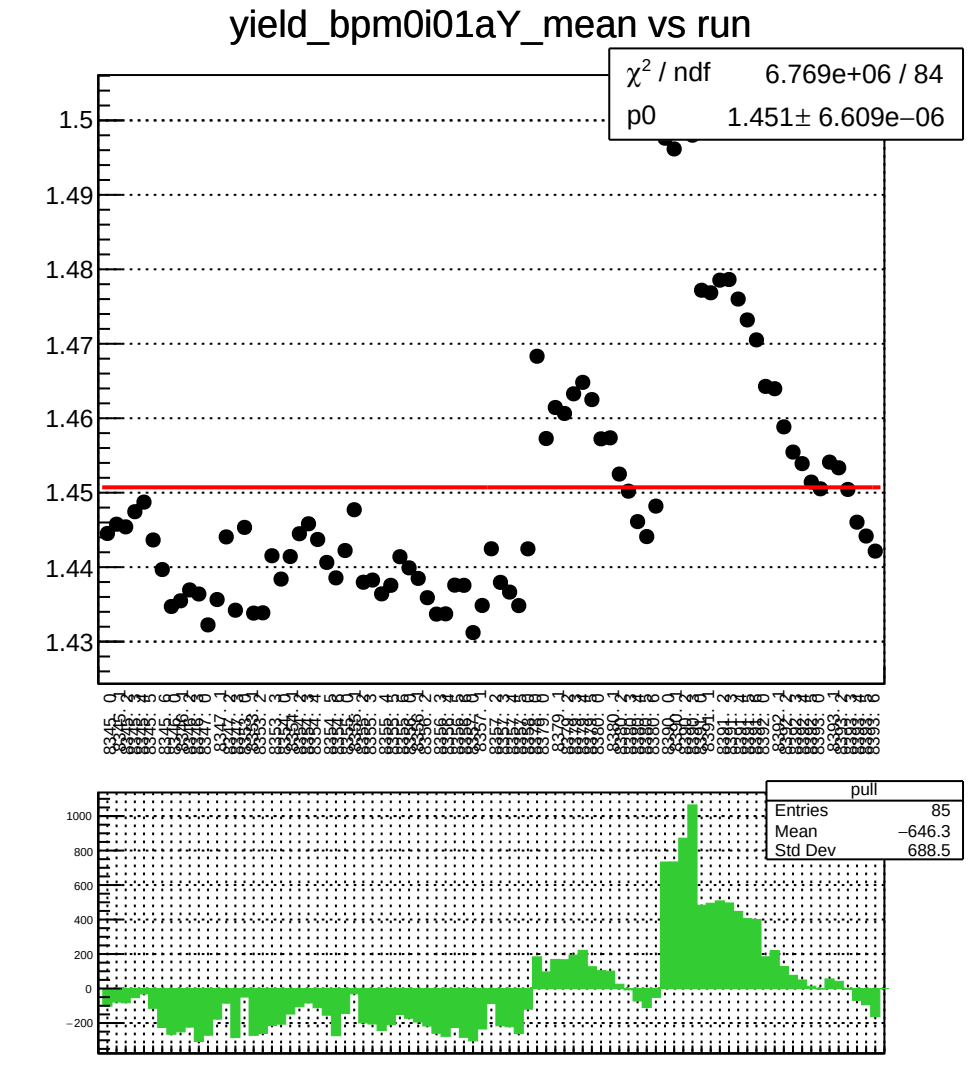

pull1D
Entries 85
Mean −1.154
Std Dev 4.236
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

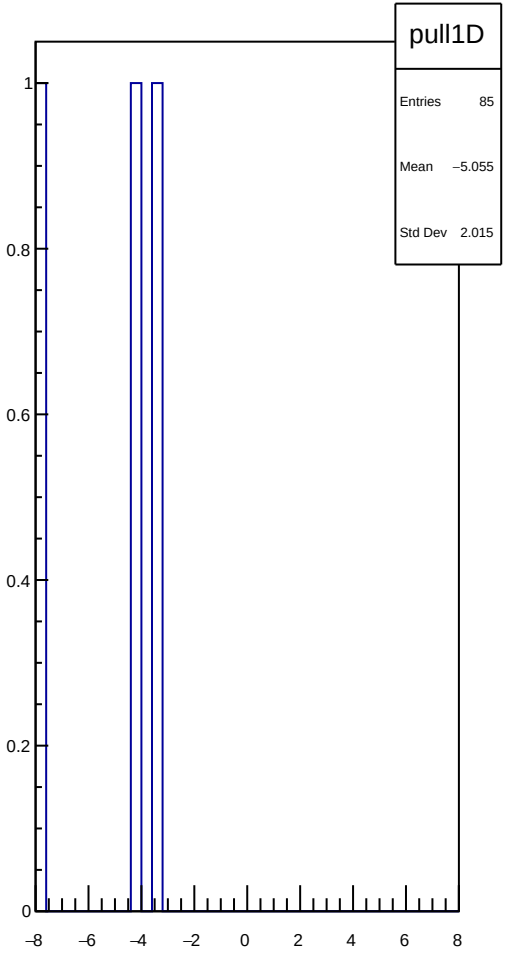

yield_bpm0i01Y_rms vs run
χ² / ndf 5.331e+04 / 84
p0 0.005388 ± 4.235e−06
0.014
0.012
0.01
0.008
0.006
0.004

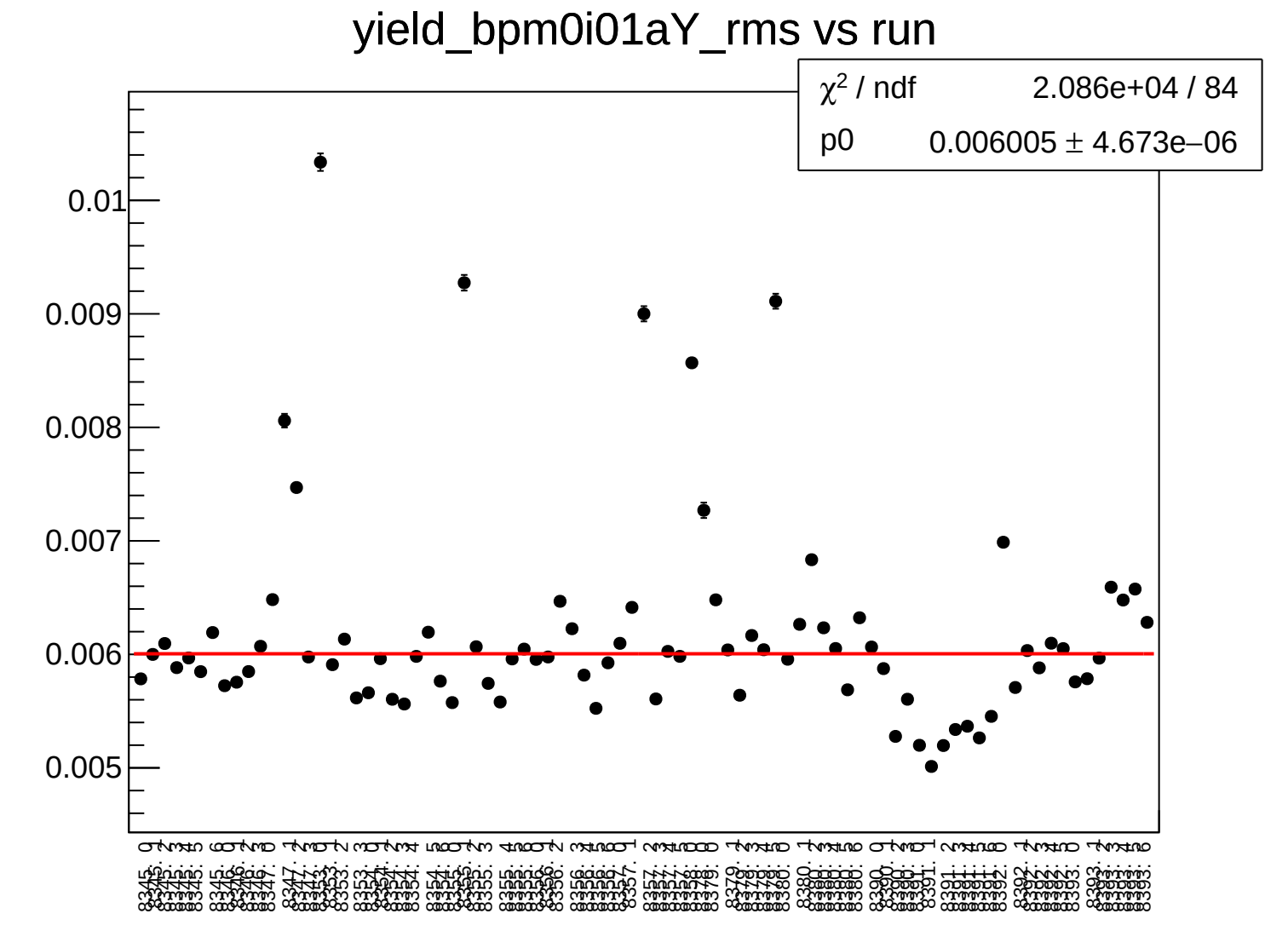

yield_bpm0i01aX_mean vs run
χ² / ndf 1.58e+07 / 84
p0 −1.882 ± 6.939e−06
−1.82
−1.84
−1.86
−1.88
−1.9
pull
Entries 85
Mean −833.4
Std Dev 878.3
1200
1000
800
600
400
200
0
−200
−400

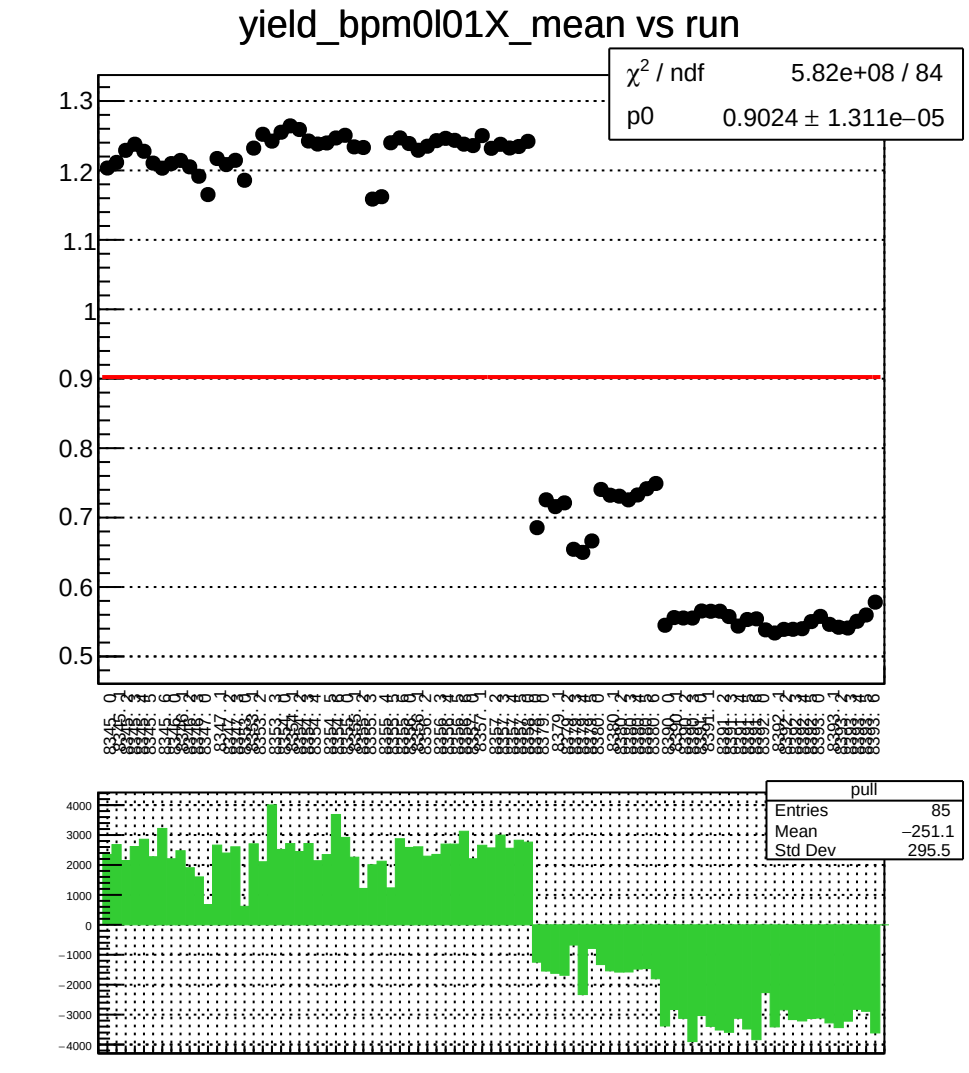

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

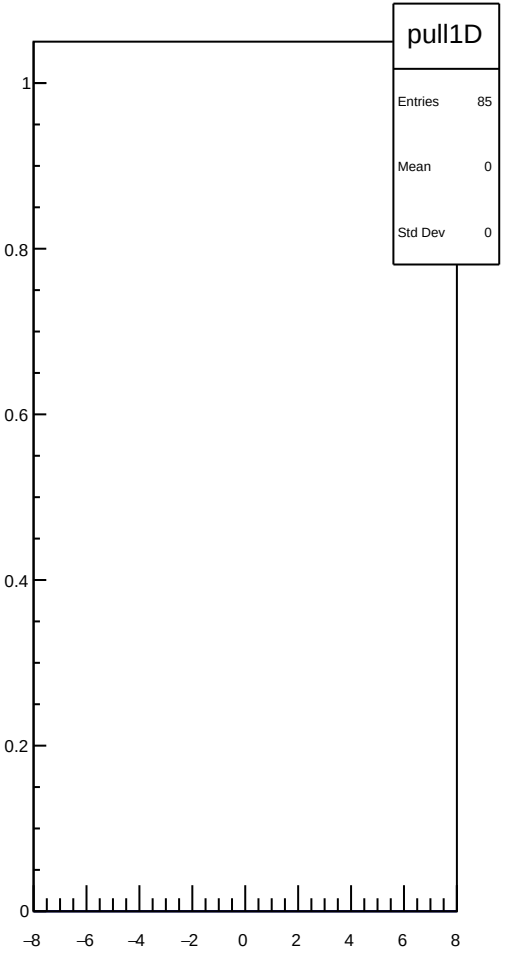

yield_bpm0i01aX_rms vs run
χ² / ndf 4.538e+04 / 84
p0 0.006258 ± 4.907e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

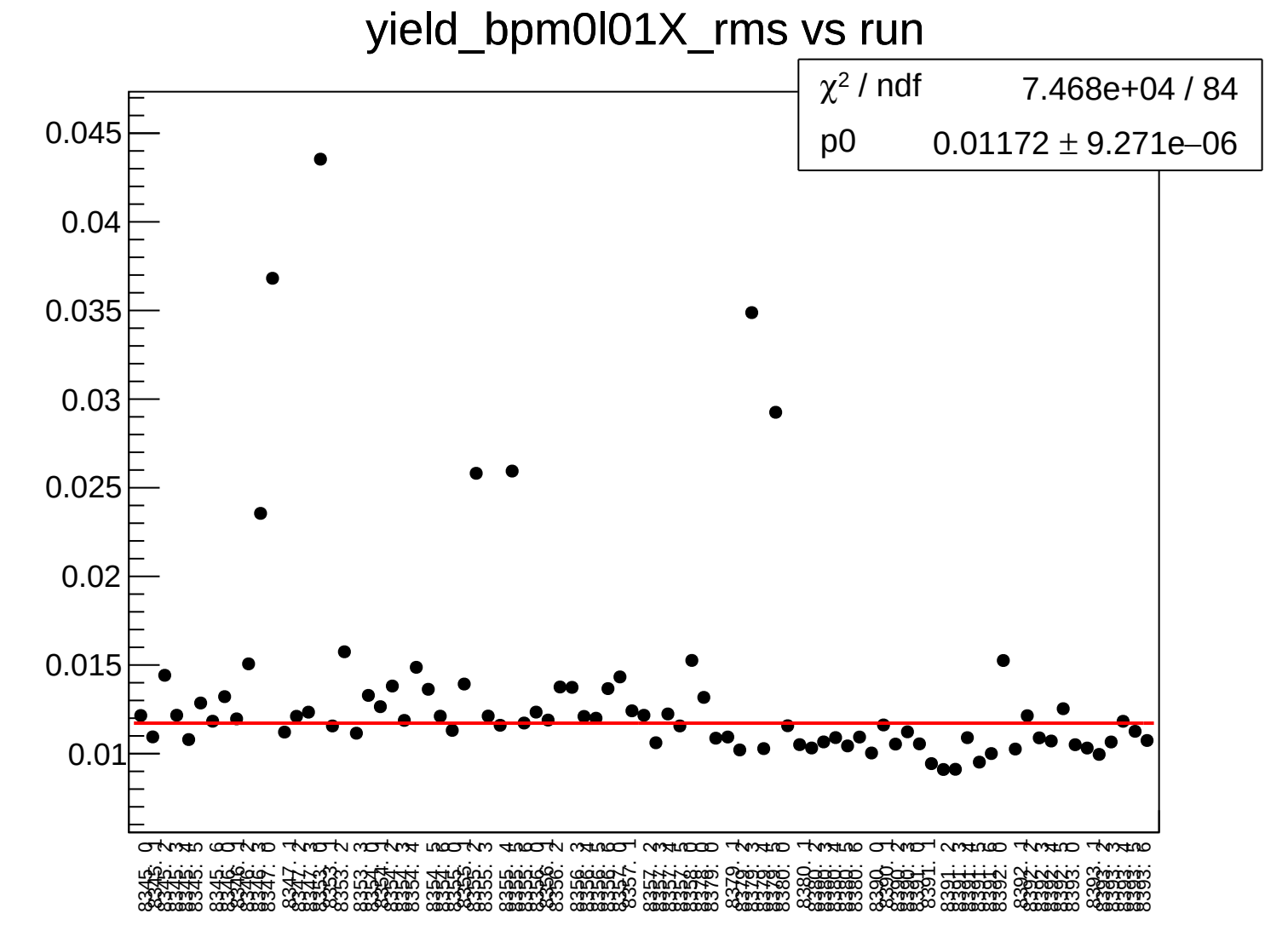

yield_bpm0i01aY_mean vs run
χ² / ndf 6.769e+06 / 84
p0 1.451± 6.609e−06
1.5
1.49
1.48
1.47
1.46
1.45
1.44
1.43
pull
Entries 85
Mean −646.3
Std Dev 688.5
1000
800
600
400
200
0
−200

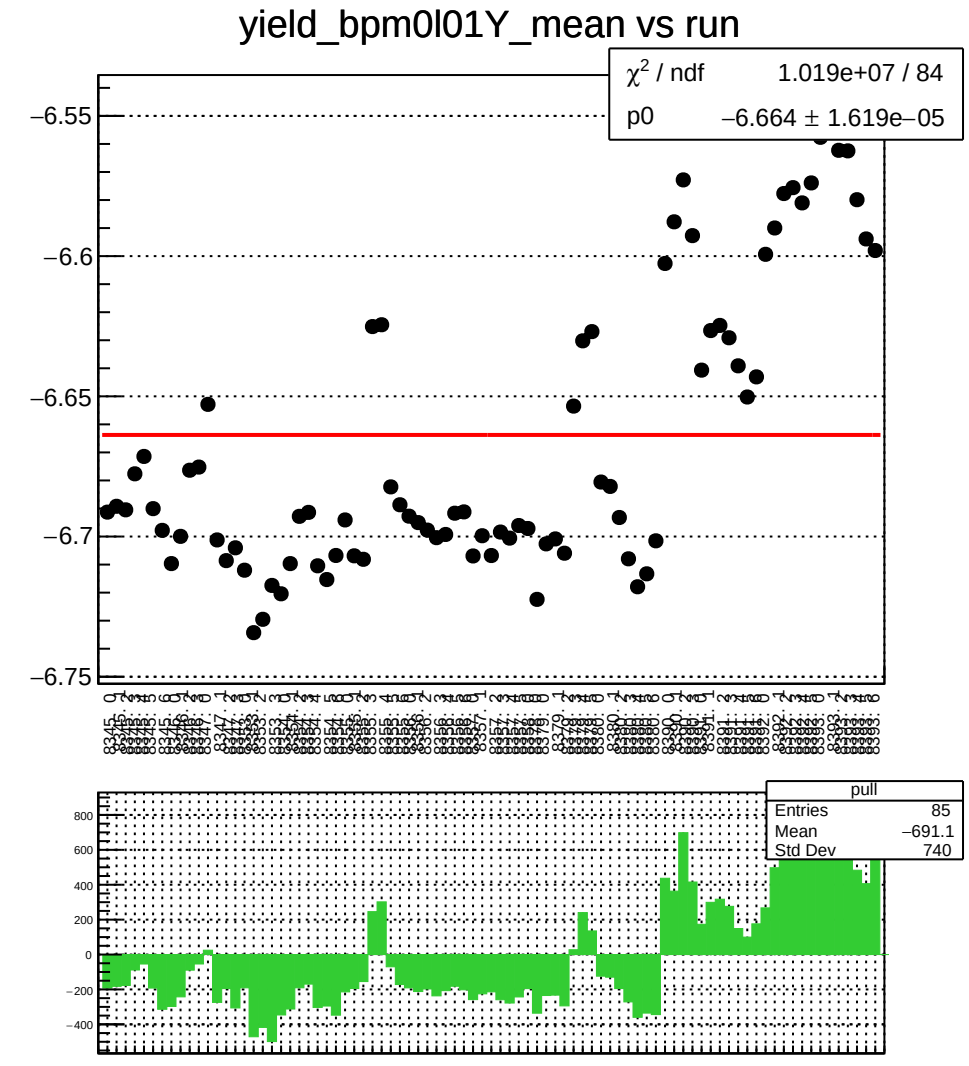

pull1D
Entries 85
Mean −5.055
Std Dev 2.015
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

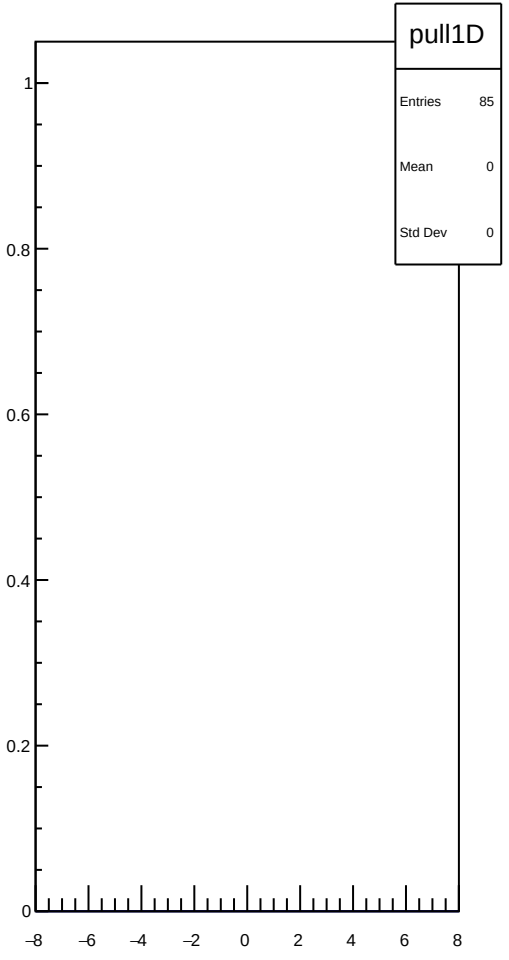

yield_bpm0i01aY_rms vs run
χ² / ndf 2.086e+04 / 84
p0 0.006005 ± 4.673e−06
0.01
0.009
0.008
0.007
0.006
0.005

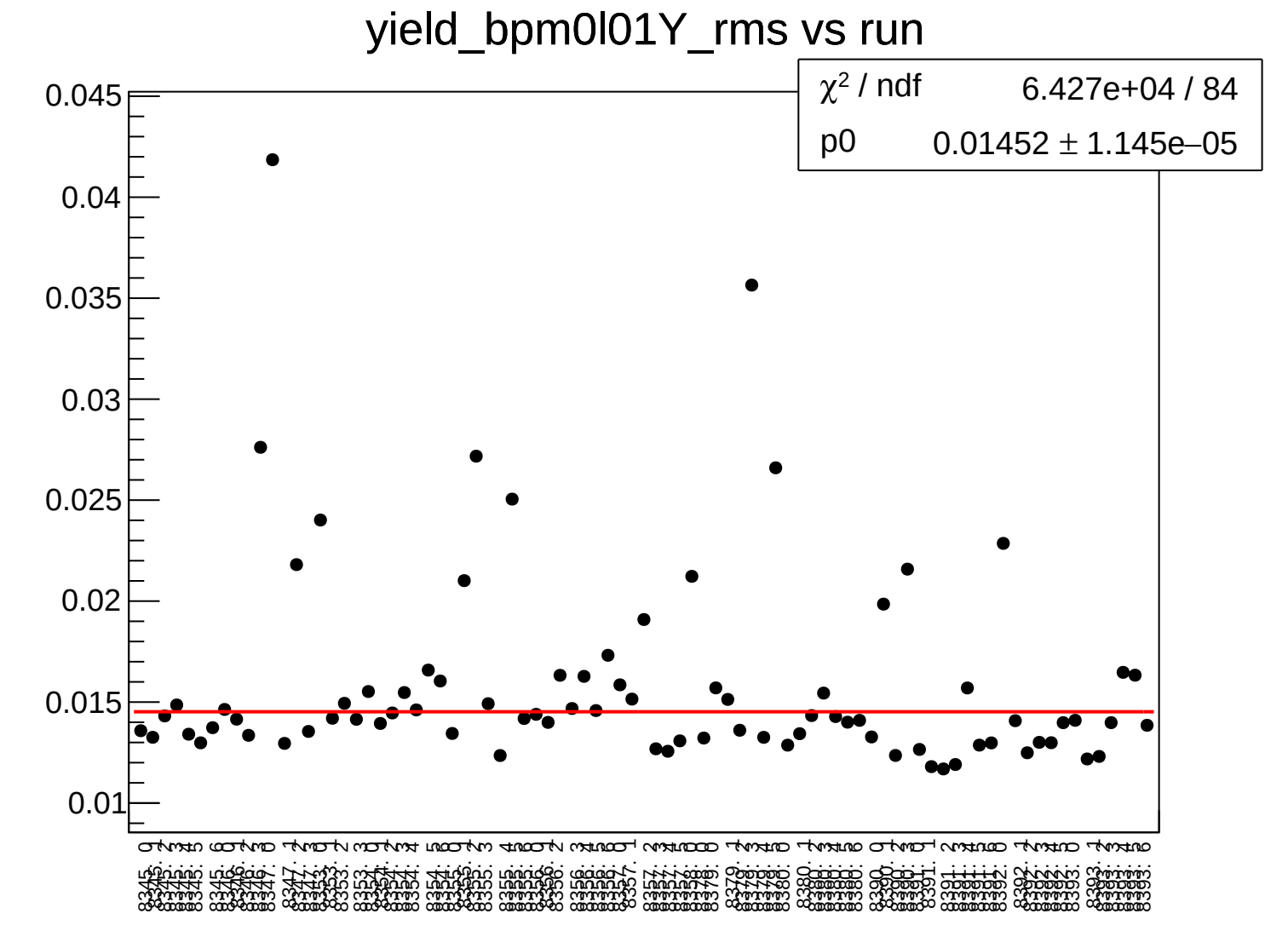

yield_bpm0l01X_mean vs run
χ² / ndf 5.82e+08 / 84
p0 0.9024 ± 1.311e−05
pull
Entries 85
Mean −251.1
Std Dev 295.5

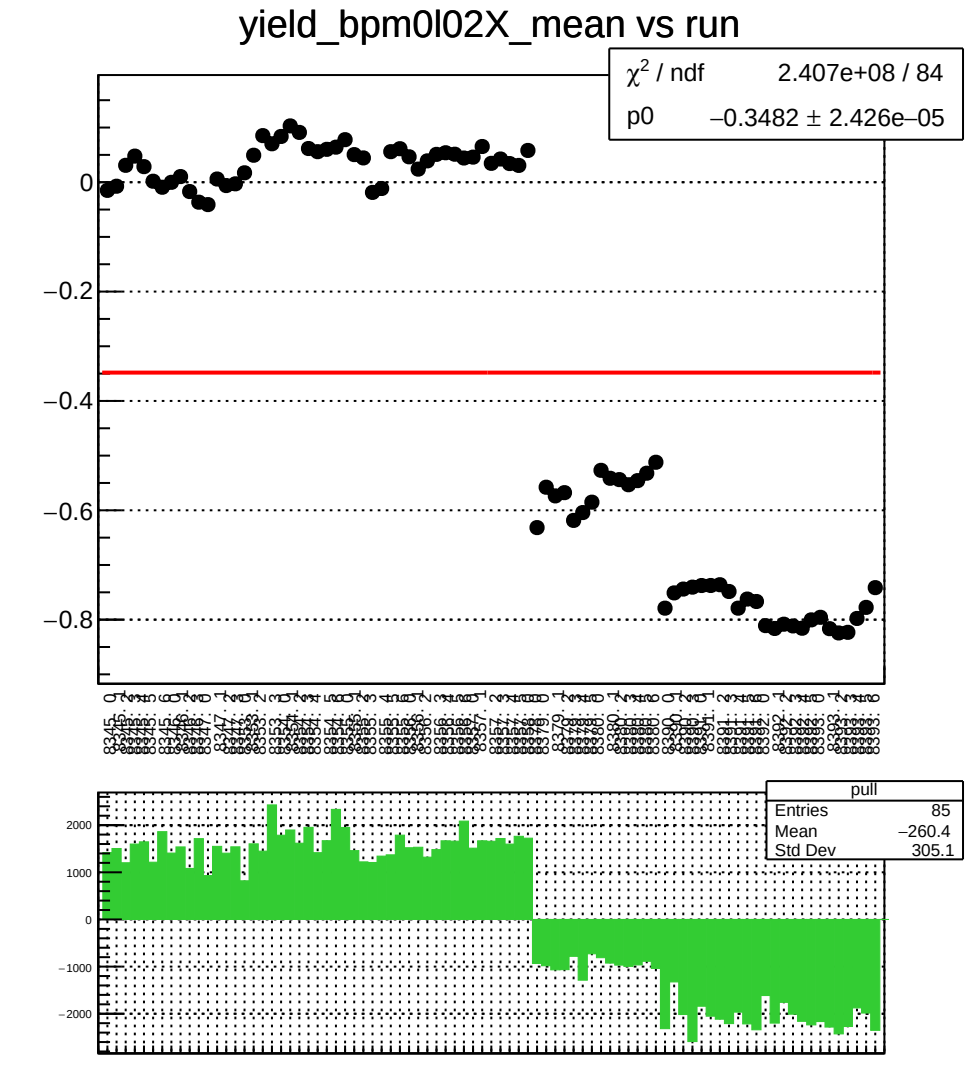

pull1D
Entries 85
Mean 0
Std Dev 0

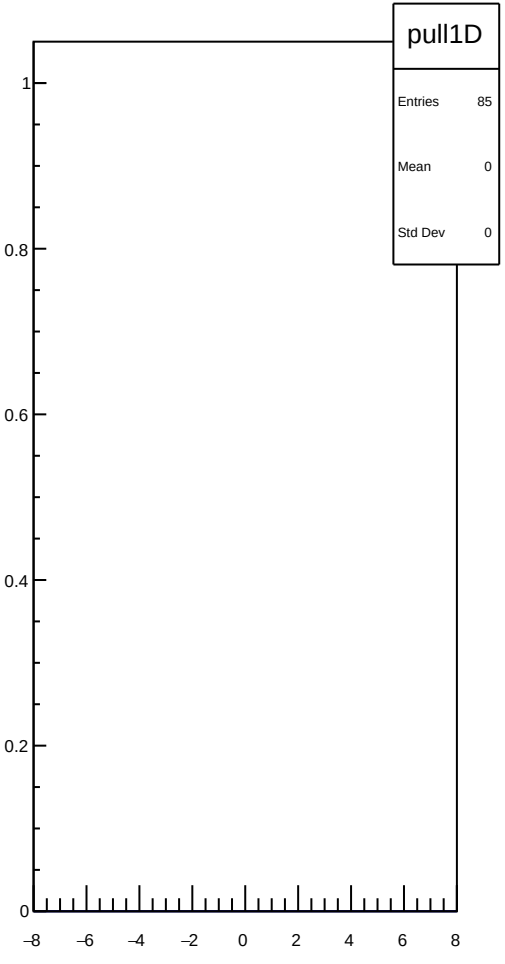

yield_bpm0l01X_rms vs run
χ² / ndf 7.468e+04 / 84
p0 0.01172 ± 9.271e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

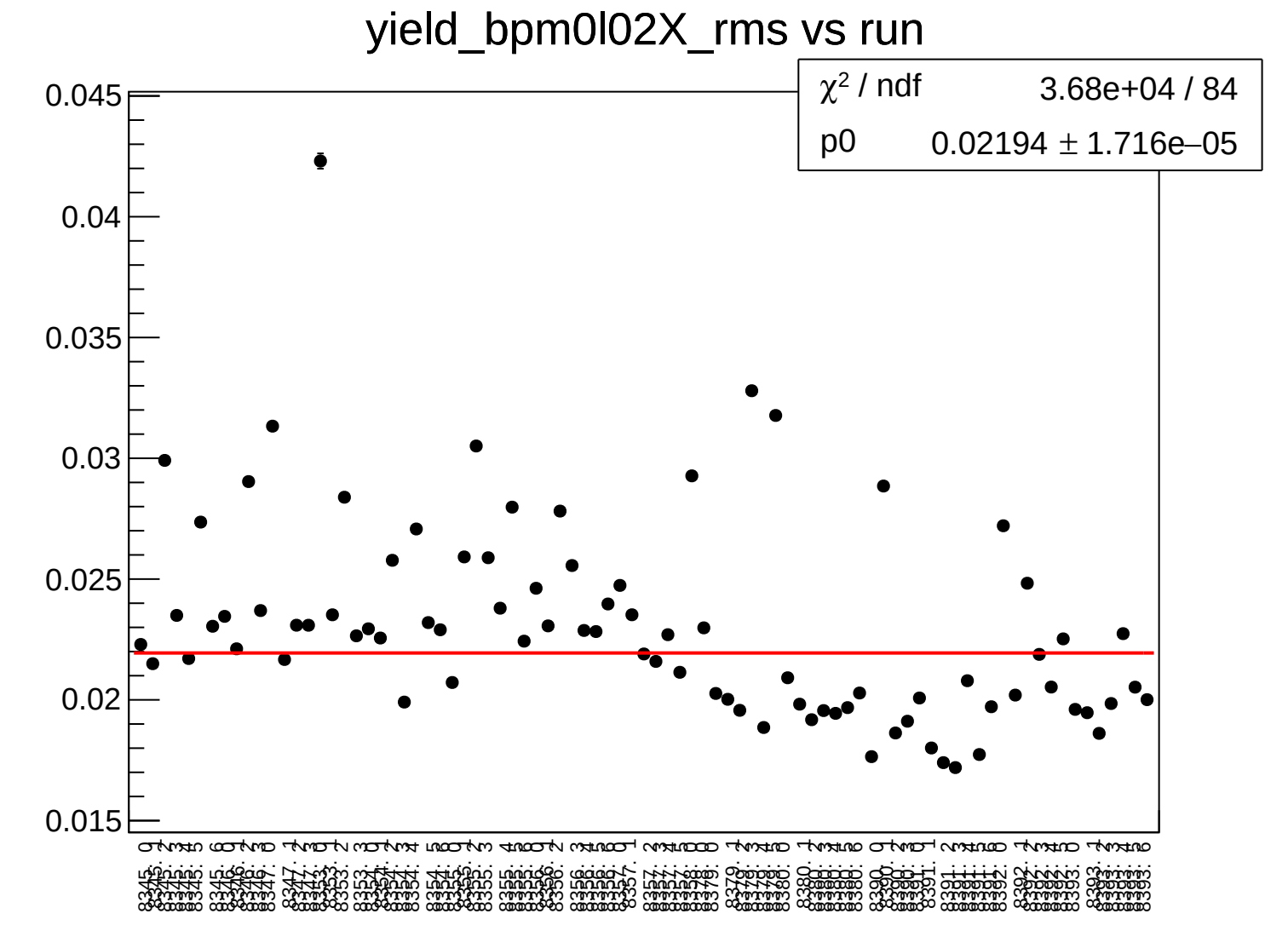

yield_bpm0l01Y_mean vs run
χ² / ndf 1.019e+07 / 84
p0 −6.664 ± 1.619e−05
−6.55
−6.6
−6.65
−6.7
−6.75
pull
Entries 85
Mean −691.1
Std Dev 740
800
600
400
200
0
−200
−400

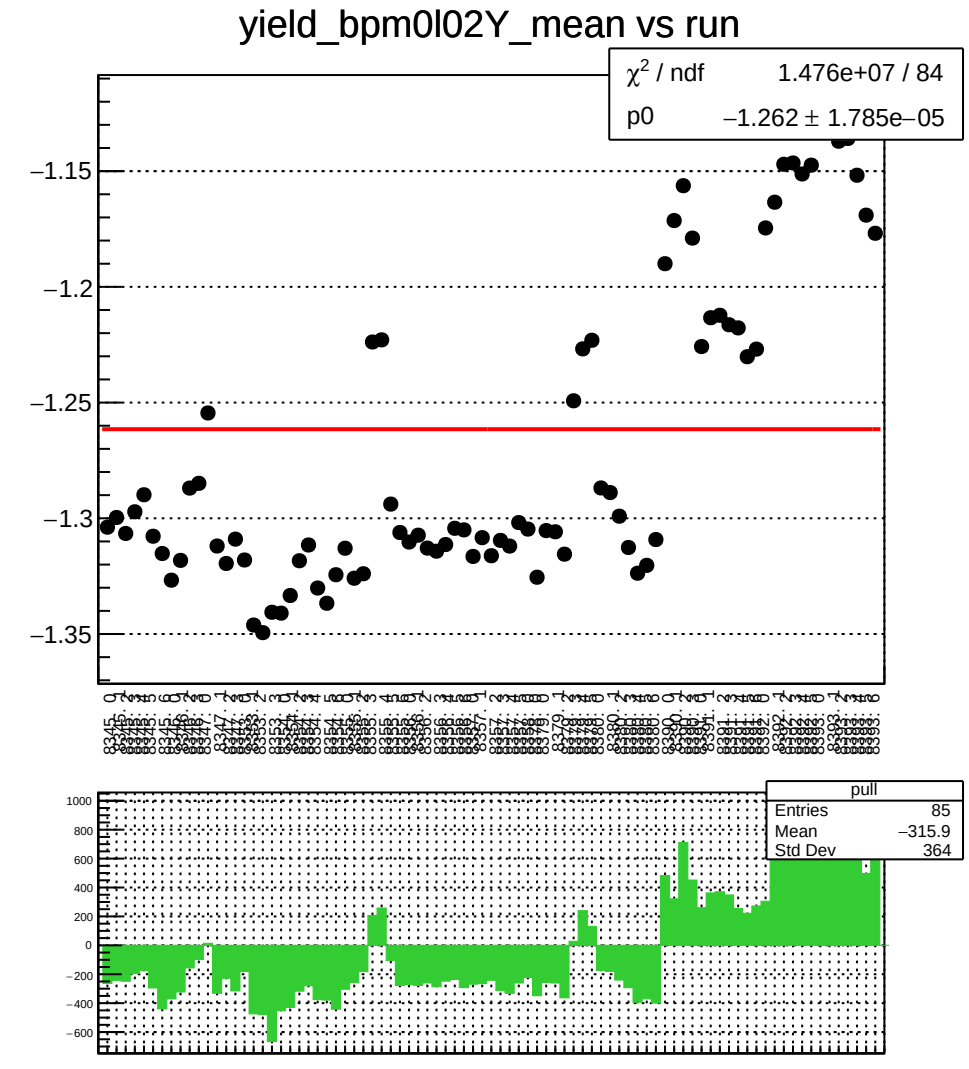

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

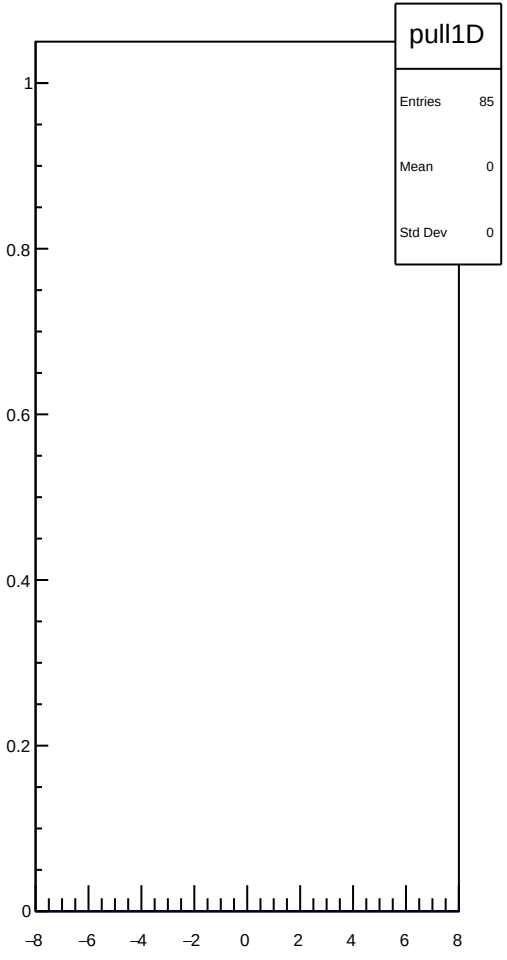

yield_bpm0l01Y_rms vs run
χ² / ndf 6.427e+04 / 84
p0 0.01452 ± 1.145e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

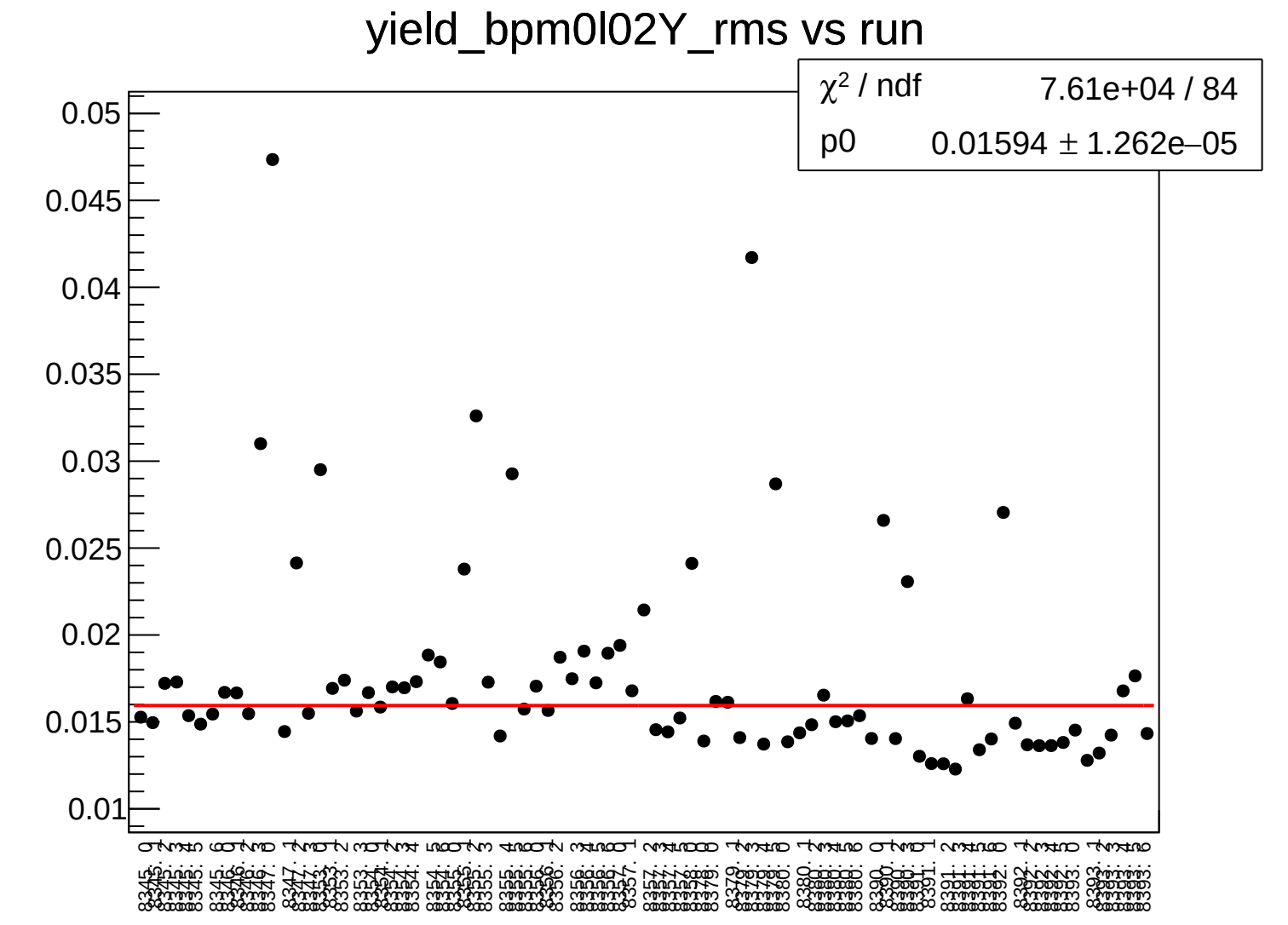

yield_bpm0l02X_mean vs run
χ² / ndf 2.407e+08 / 84
p0 −0.3482 ± 2.426e−05
0
−0.2
−0.4
−0.6
−0.8
pull
Entries 85
Mean −260.4
Std Dev 305.1
2000
1000
0
−1000
−2000

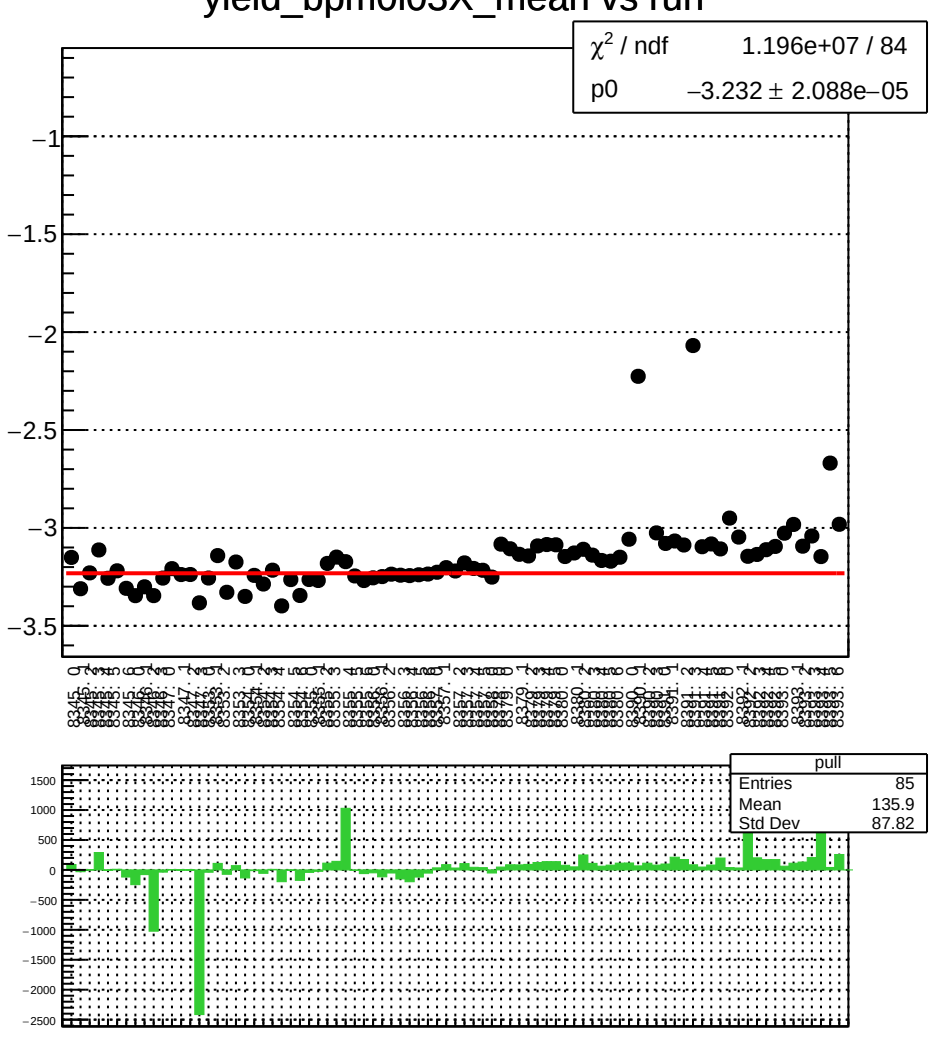

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

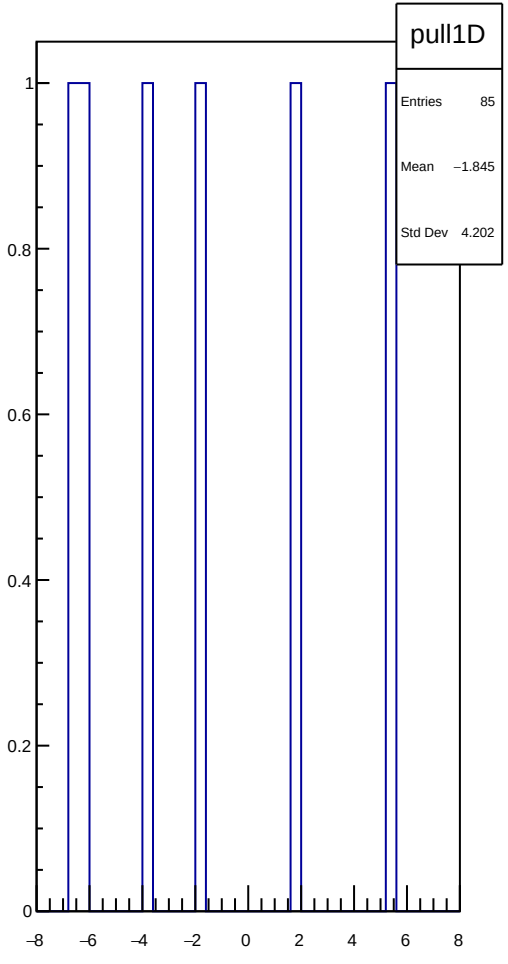

yield_bpm0l02X_rms vs run
χ² / ndf 3.68e+04 / 84
p0 0.02194 ± 1.716e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

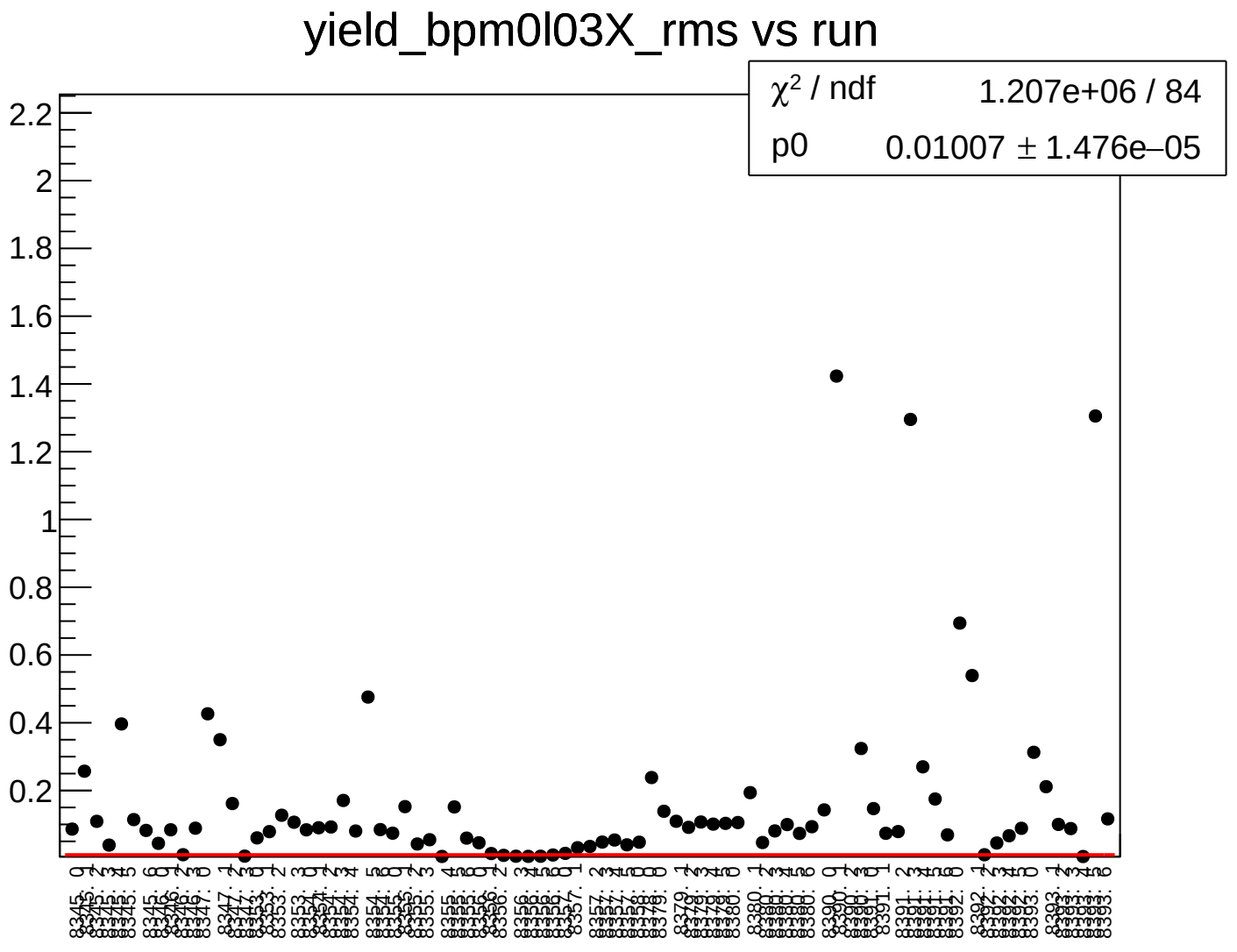

yield_bpm0l02Y_mean vs run
χ² / ndf 1.476e+07 / 84
p0 −1.262 ± 1.785e−05
−1.15
−1.2
−1.25
−1.3
−1.35
pull
Entries 85
Mean −315.9
Std Dev 364
1000
800
600
400
200
0
−200
−400
−600

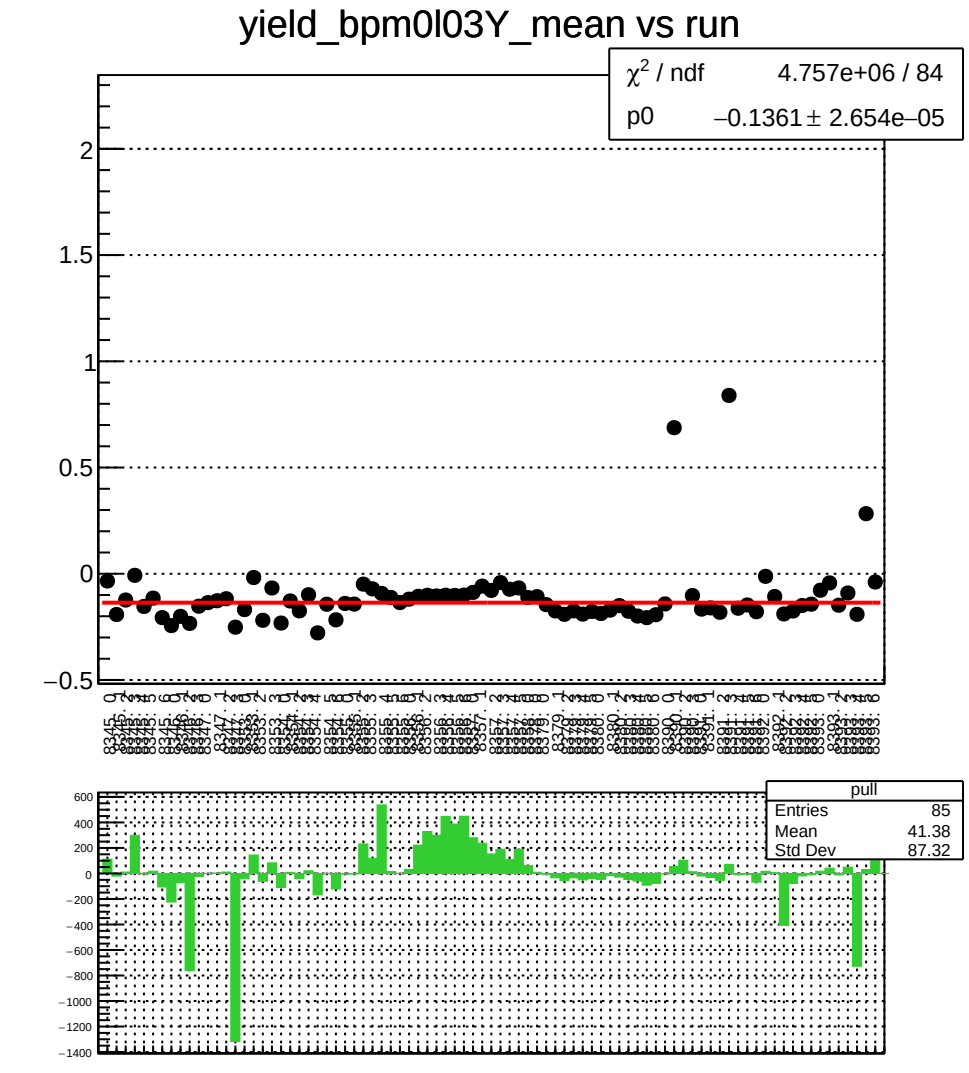

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

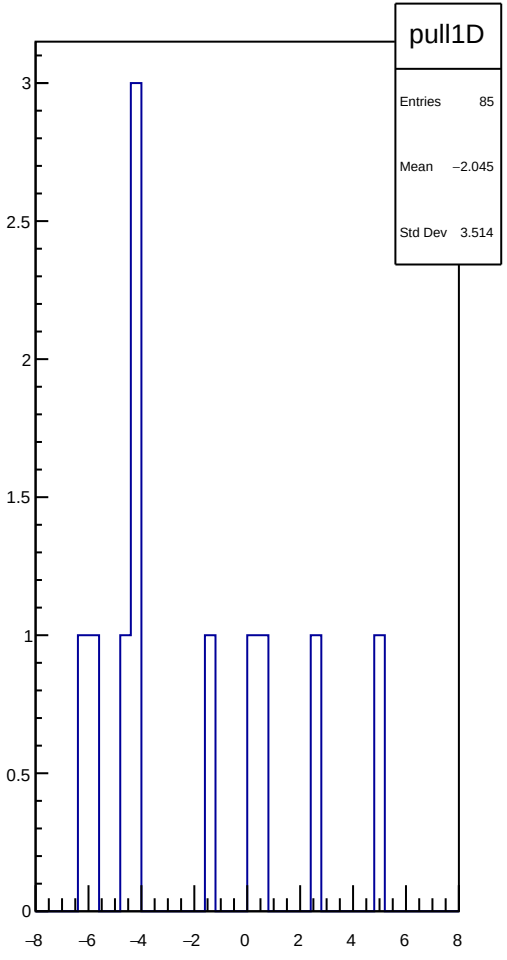

yield_bpm0l02Y_rms vs run
χ² / ndf 7.61e+04 / 84
p0 0.01594 ± 1.262e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

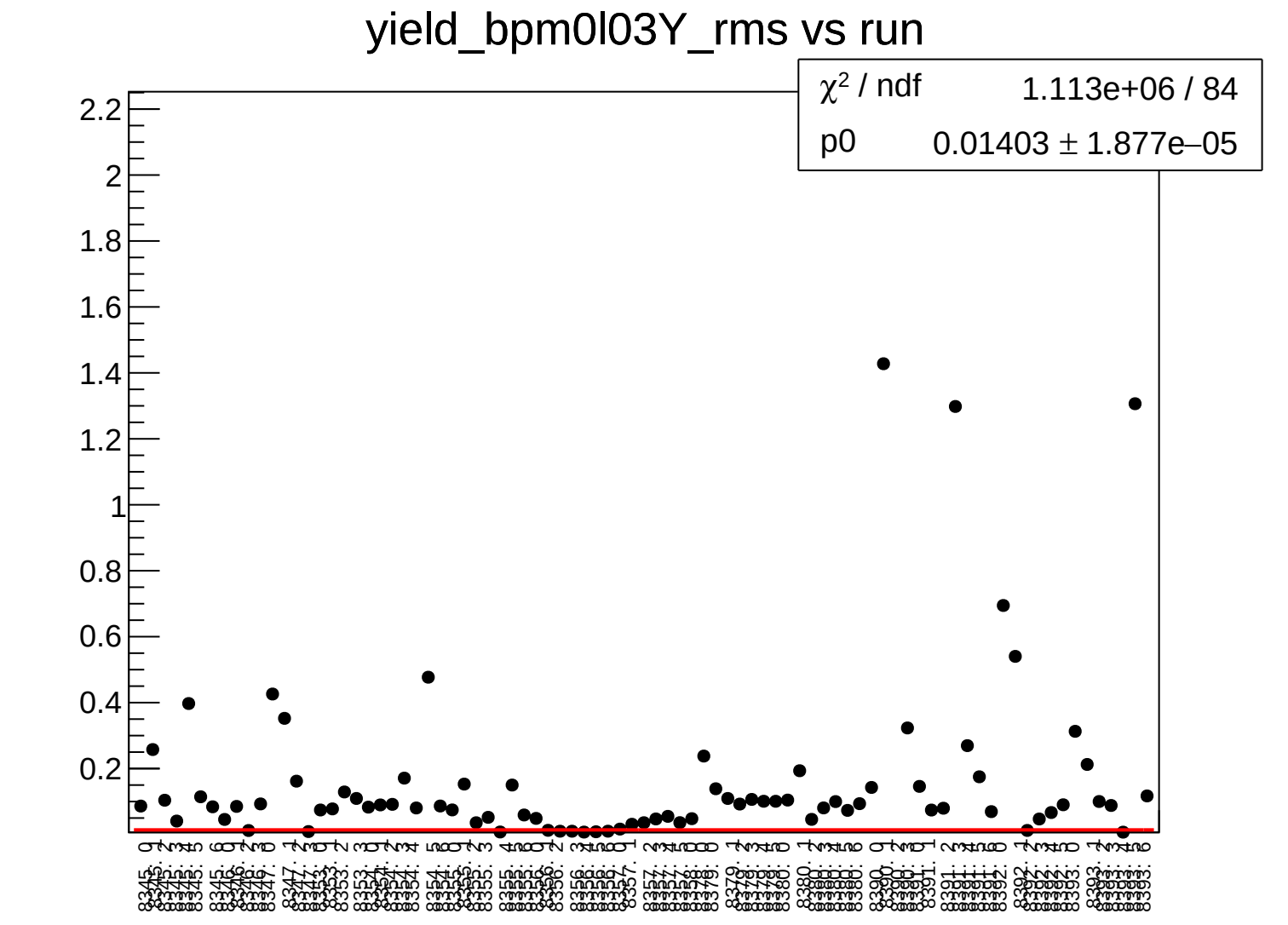

yield_bpm0l03X_mean vs run
χ² / ndf 1.196e+07 / 84
p0 −3.232 ± 2.088e−05
pull
Entries 85
Mean 135.9
Std Dev 87.82

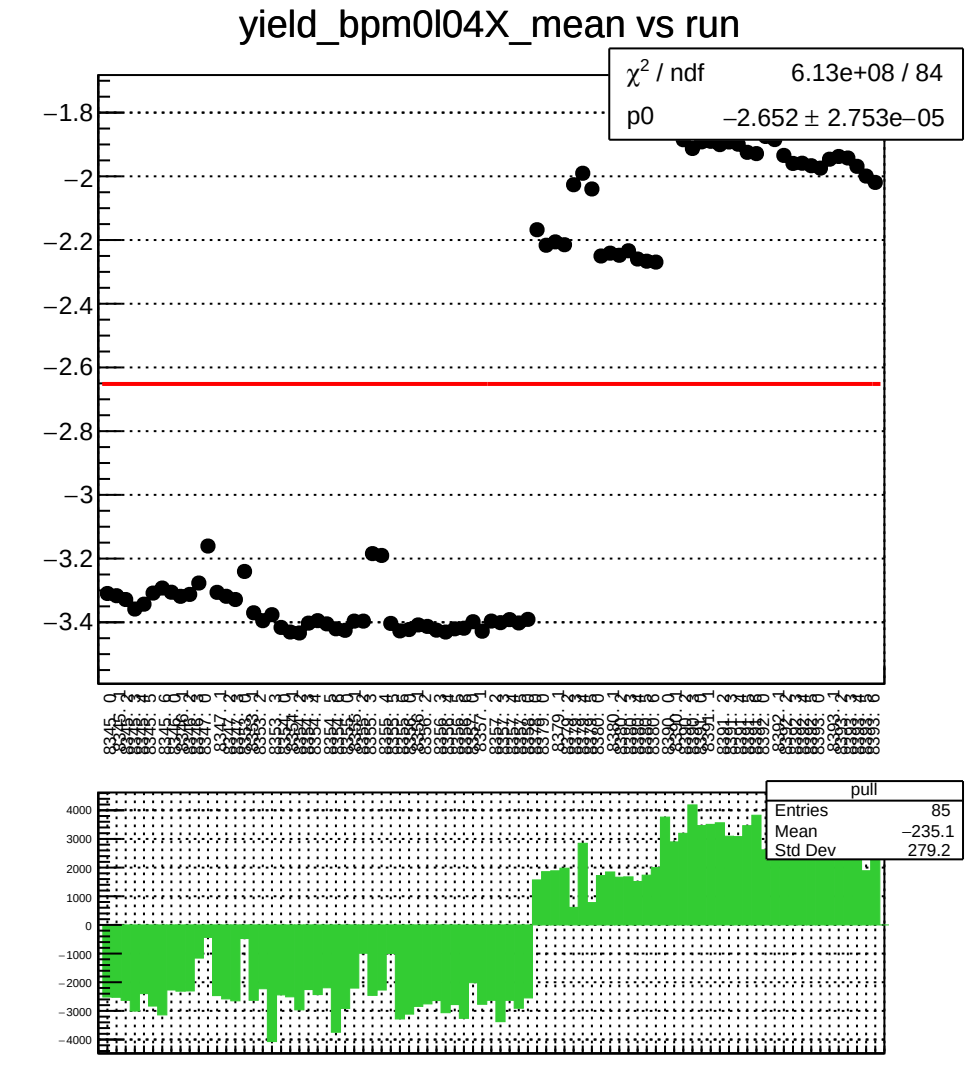

pull1D
Entries 85
Mean −1.845
Std Dev 4.202

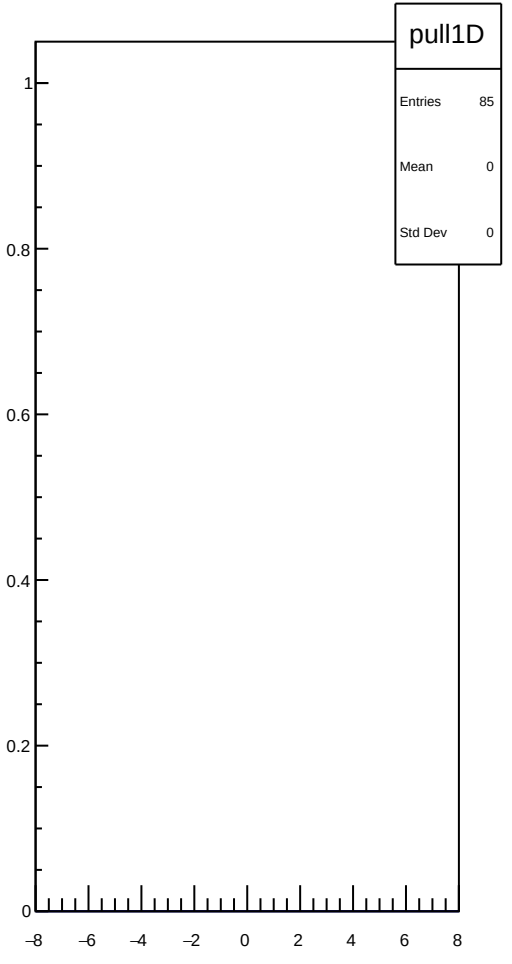

yield_bpm0l03X_rms vs run
χ² / ndf 1.207e+06 / 84
p0 0.01007 ± 1.476e–05
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

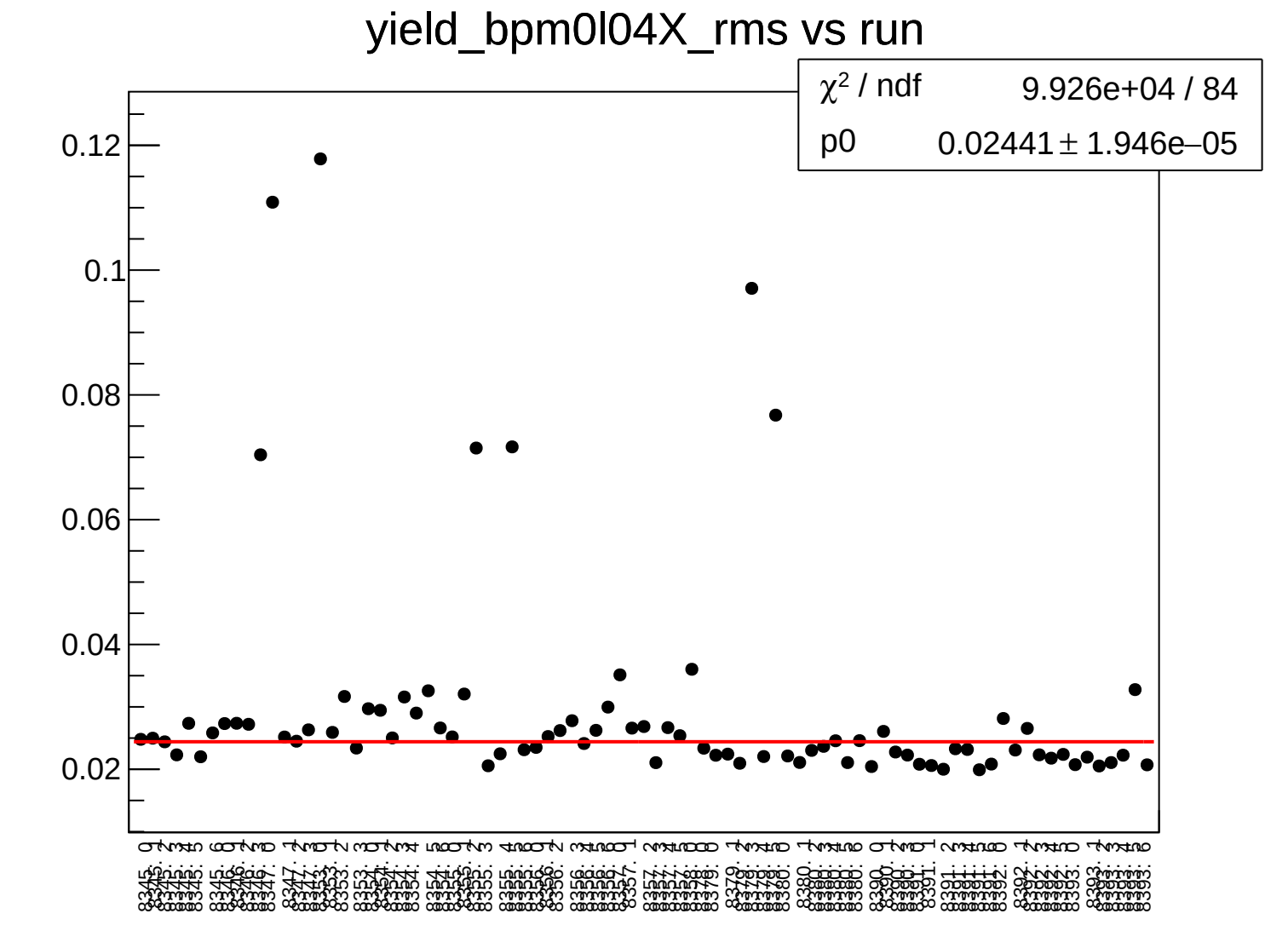

yield_bpm0l03Y_mean vs run
χ² / ndf 4.757e+06 / 84
p0 −0.1361 ± 2.654e−05
pull
Entries 85
Mean 41.38
Std Dev 87.32

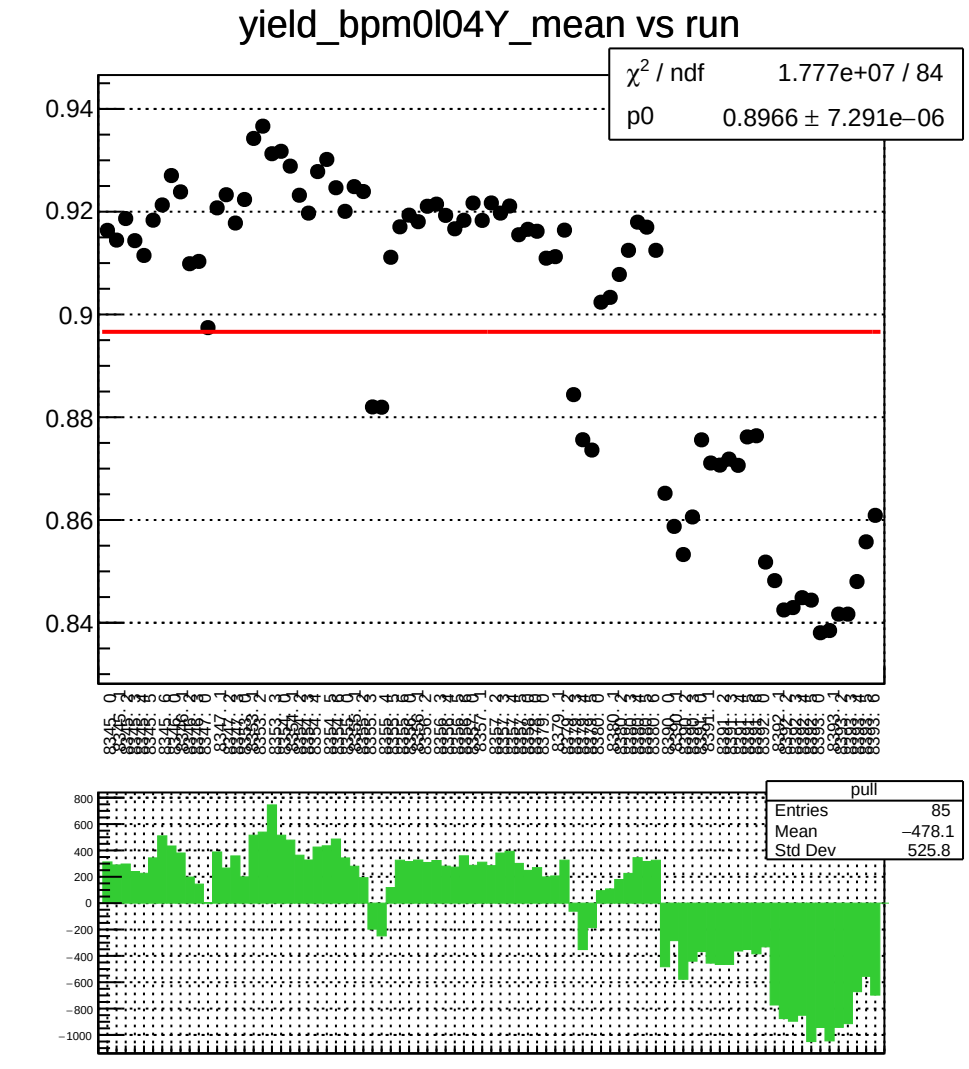

pull1D
Entries 85
Mean −2.045
Std Dev 3.514

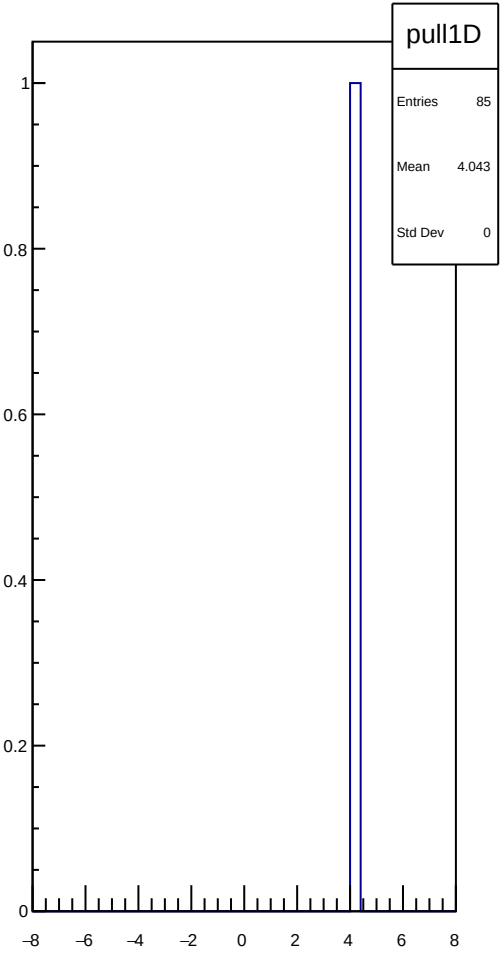

yield_bpm0l03Y_rms vs run
χ² / ndf 1.113e+06 / 84
p0 0.01403 ± 1.877e–05
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

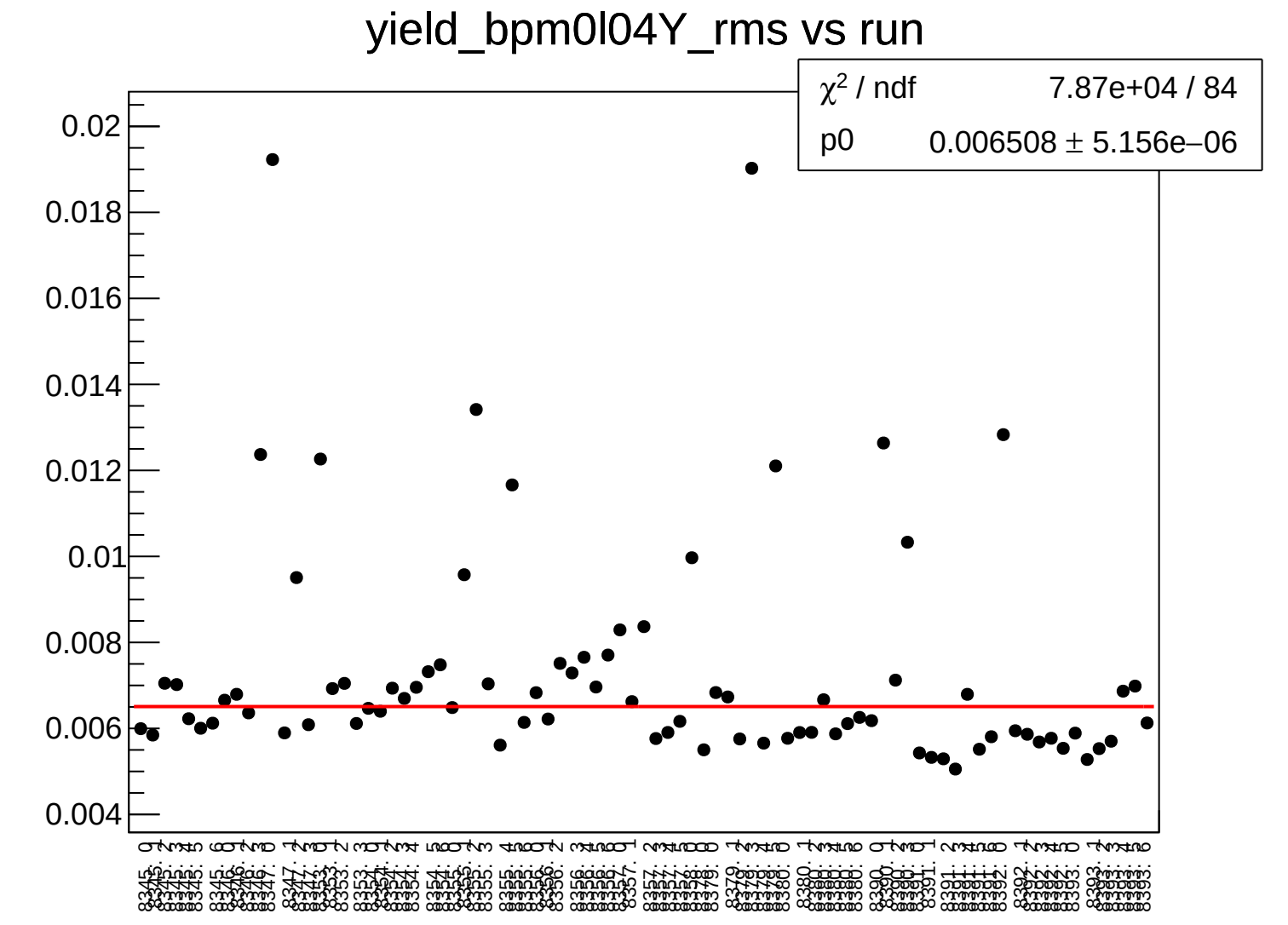

yield_bpm0l04X_mean vs run
χ² / ndf 6.13e+08 / 84
p0 −2.652 ± 2.753e−05
−1.8
−2
−2.2
−2.4
−2.6
−2.8
−3
−3.2
−3.4
pull
Entries 85
Mean −235.1
Std Dev 279.2
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000

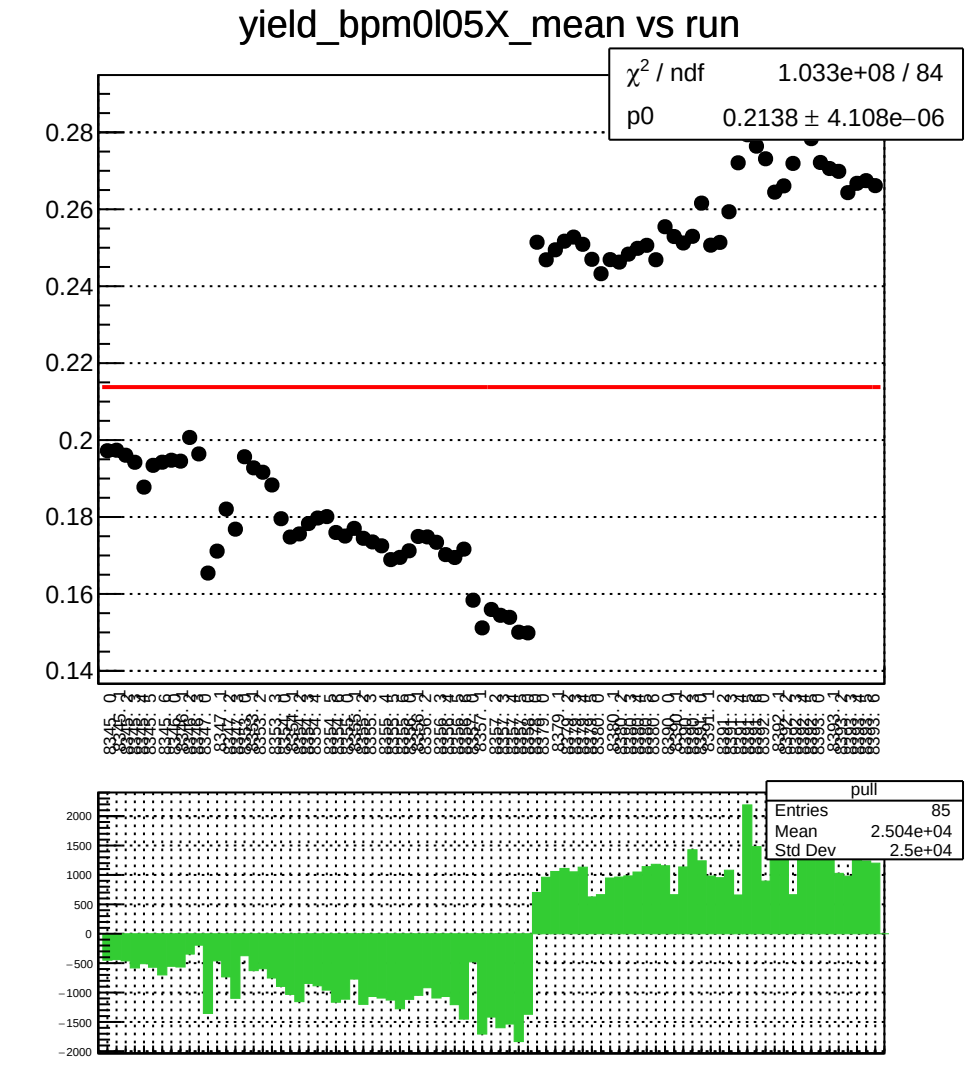

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

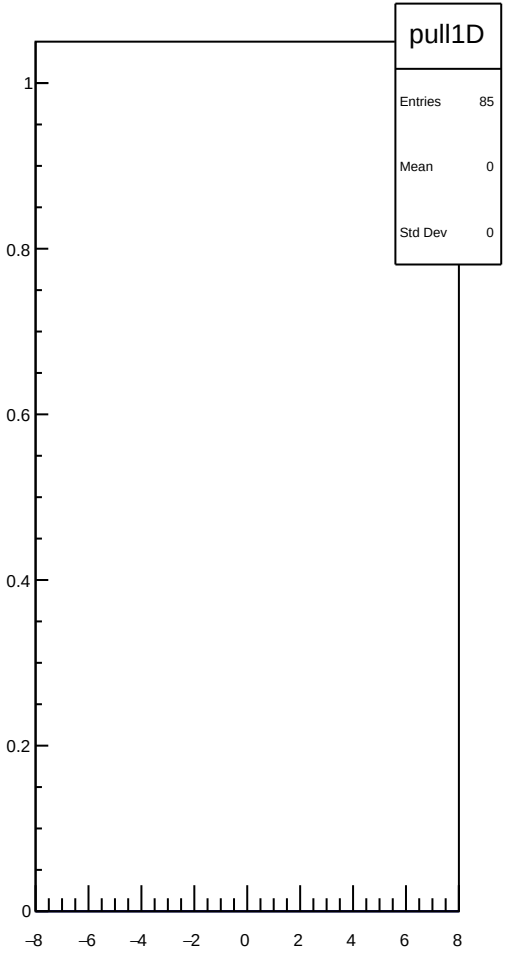

yield_bpm0l04X_rms vs run
χ² / ndf 9.926e+04 / 84
p0 0.02441 ± 1.946e−05
0.12
0.1
0.08
0.06
0.04
0.02

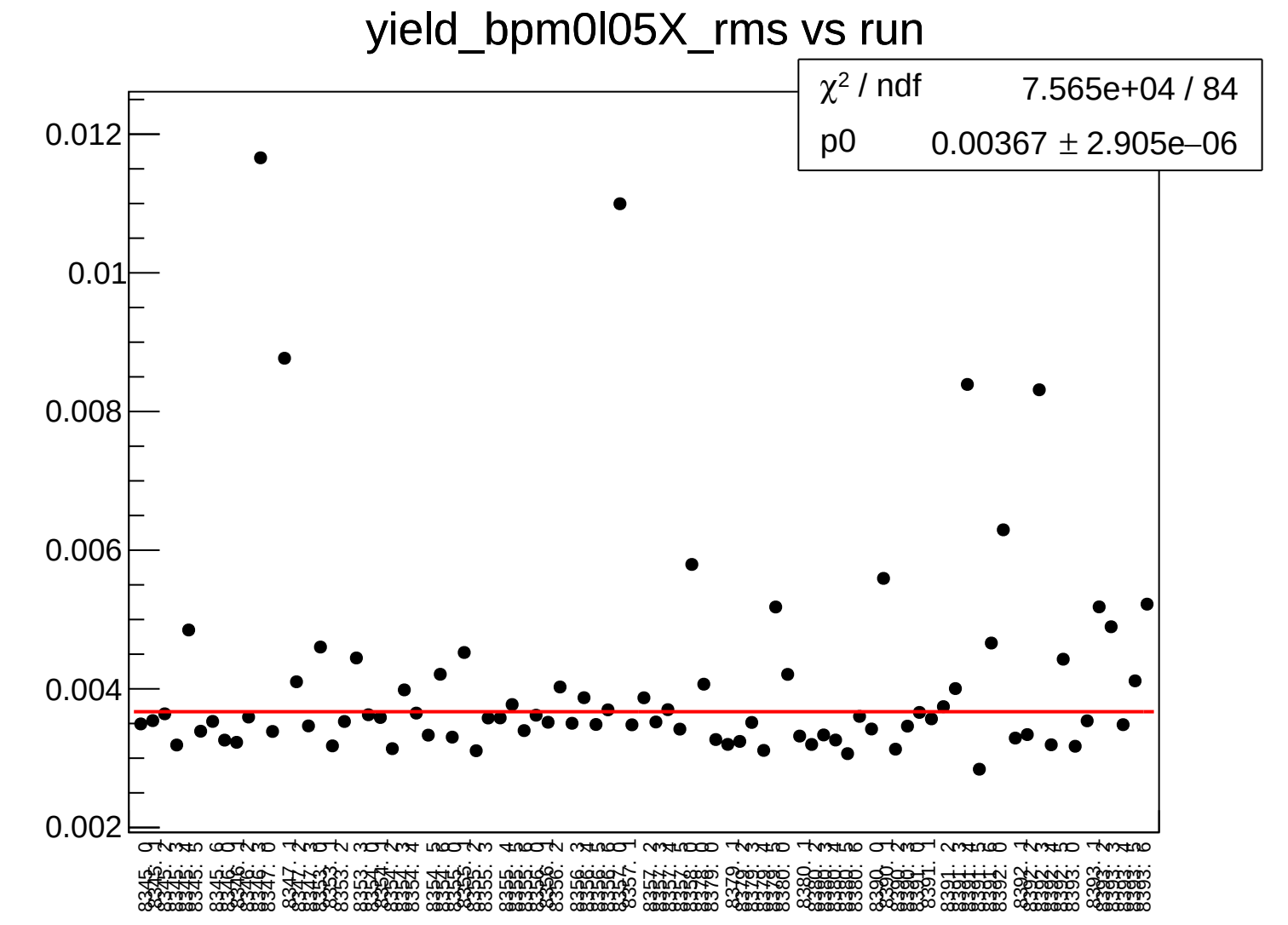

yield_bpm0l04Y_mean vs run
χ² / ndf 1.777e+07 / 84
p0 0.8966 ± 7.291e−06
0.94
0.92
0.9
0.88
0.86
0.84
pull
Entries 85
Mean −478.1
Std Dev 525.8
800
600
400
200
0
−200
−400
−600
−800
−1000

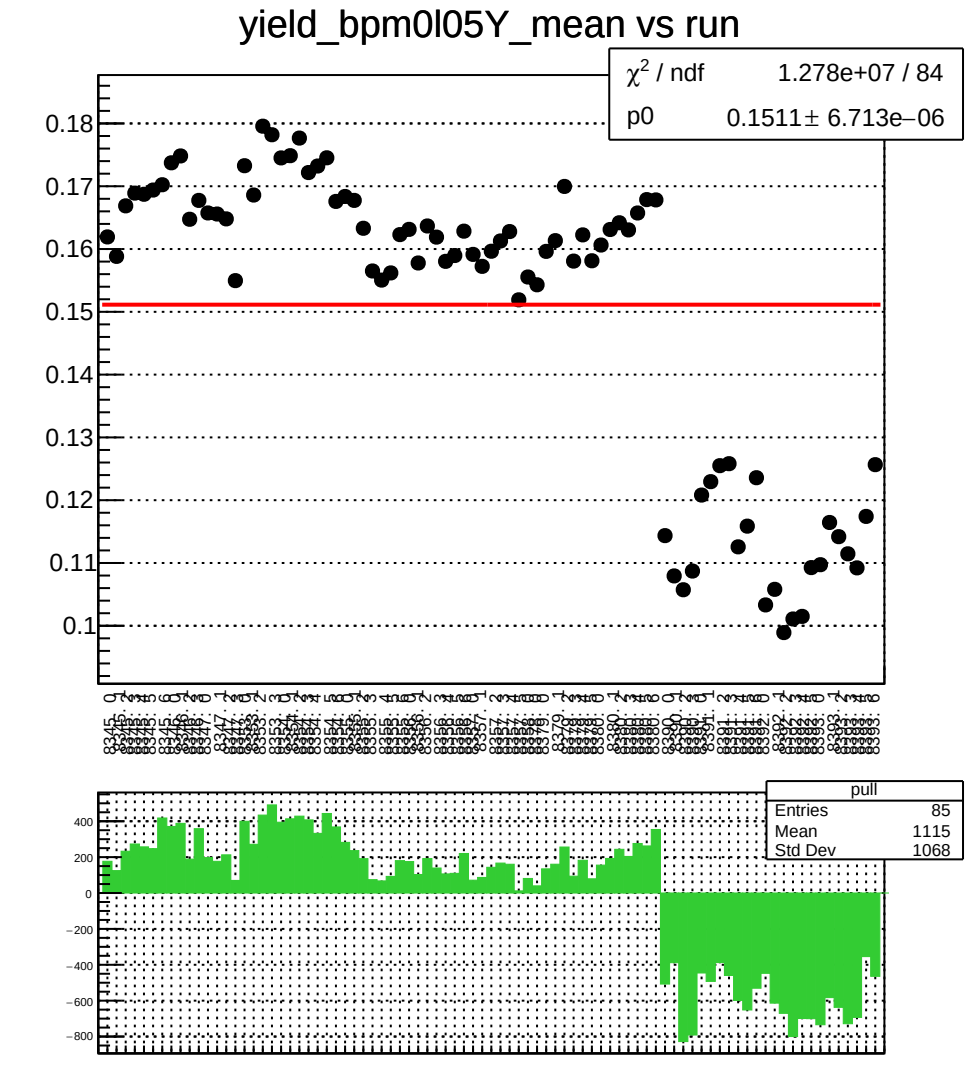

pull1D
Entries 85
Mean 4.043
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

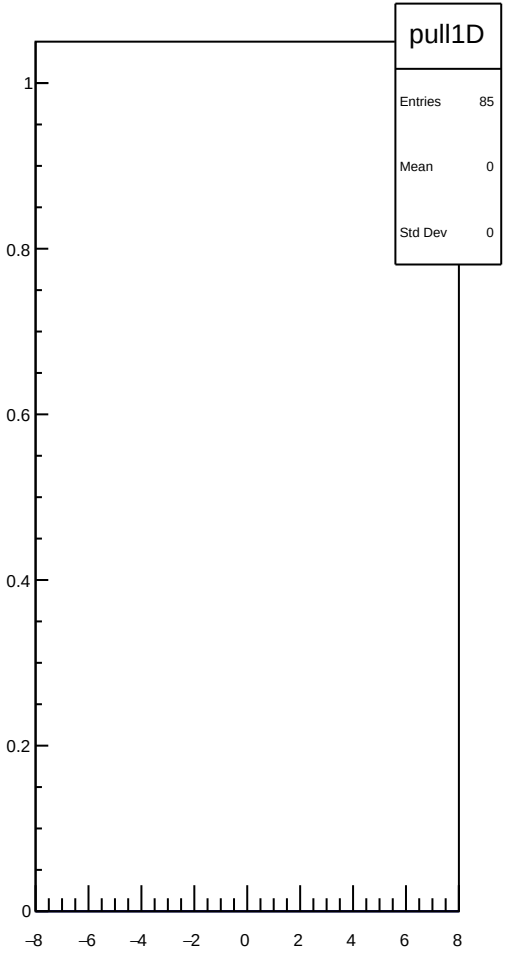

yield_bpm0l04Y_rms vs run
χ² / ndf 7.87e+04 / 84
p0 0.006508 ± 5.156e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

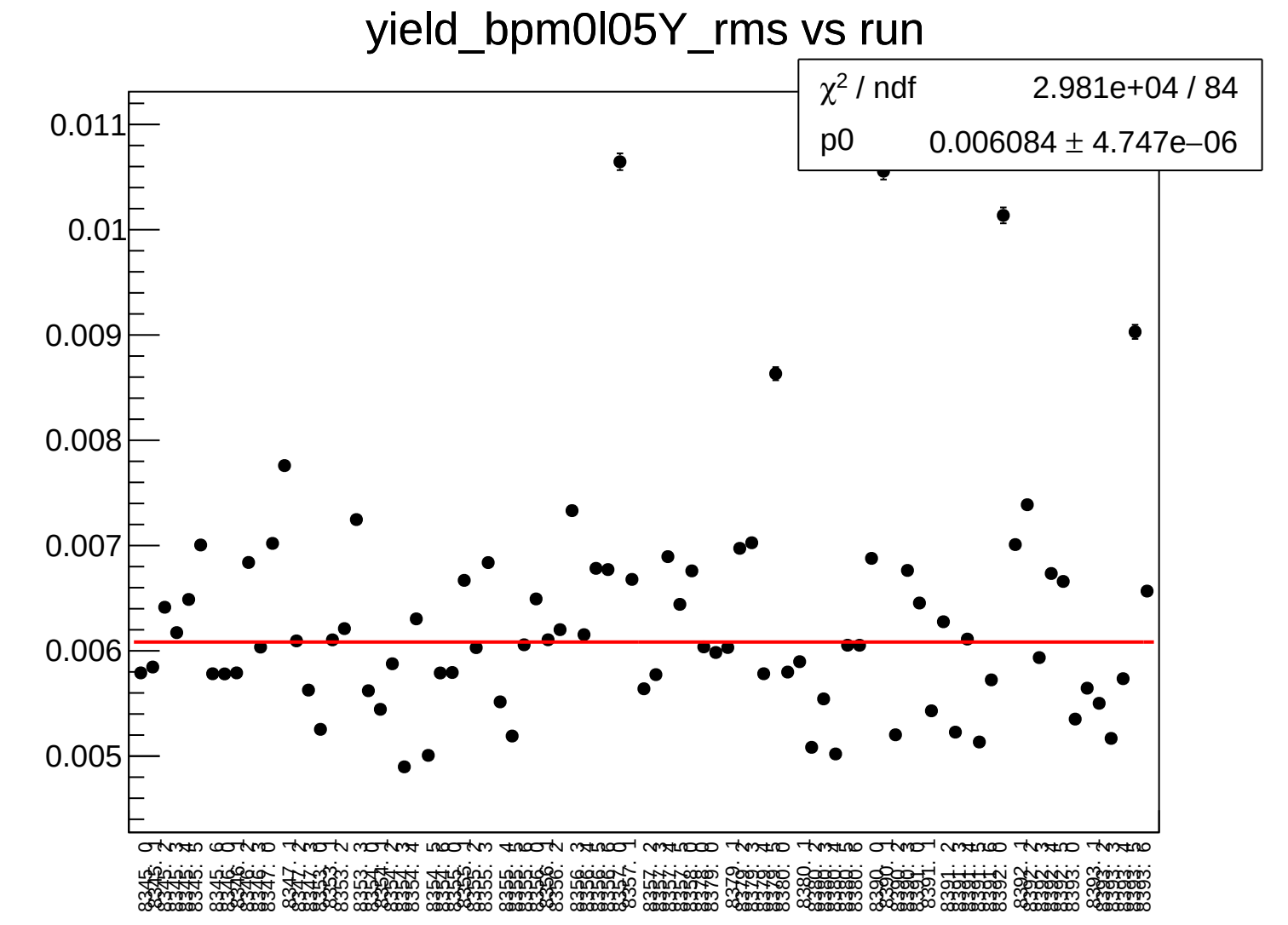

yield_bpm0l05X_mean vs run
χ² / ndf 1.033e+08 / 84
p0 0.2138 ± 4.108e−06
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14
pull
Entries 85
Mean 2.504e+04
Std Dev 2.5e+04
2000
1500
1000
500
0
−500
−1000
−1500
−2000

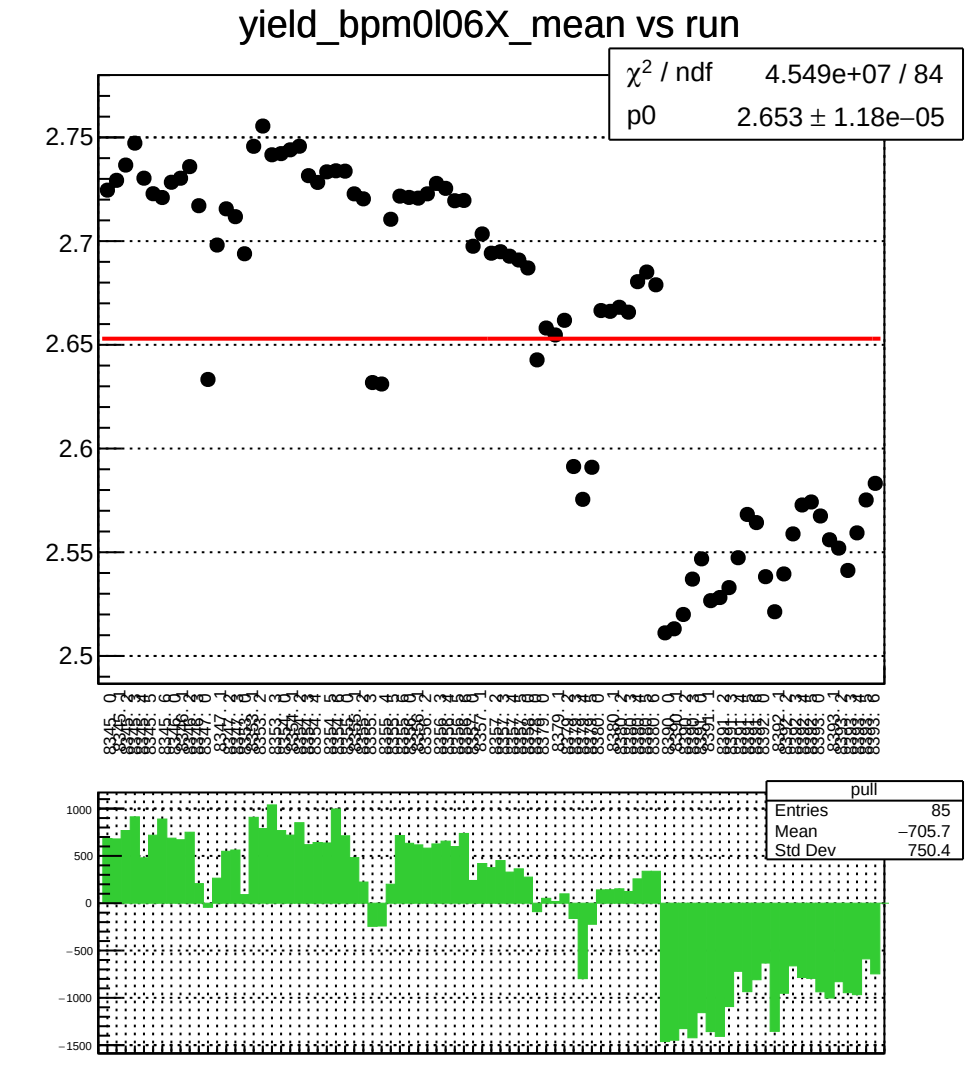

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

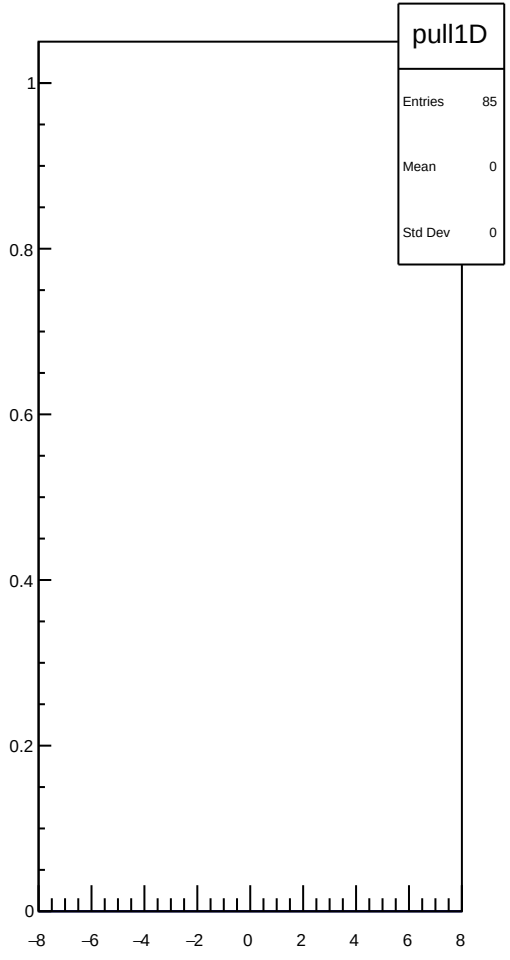

yield_bpm0l05X_rms vs run
χ² / ndf 7.565e+04 / 84
p0 0.00367 ± 2.905e–06
0.012
0.01
0.008
0.006
0.004
0.002

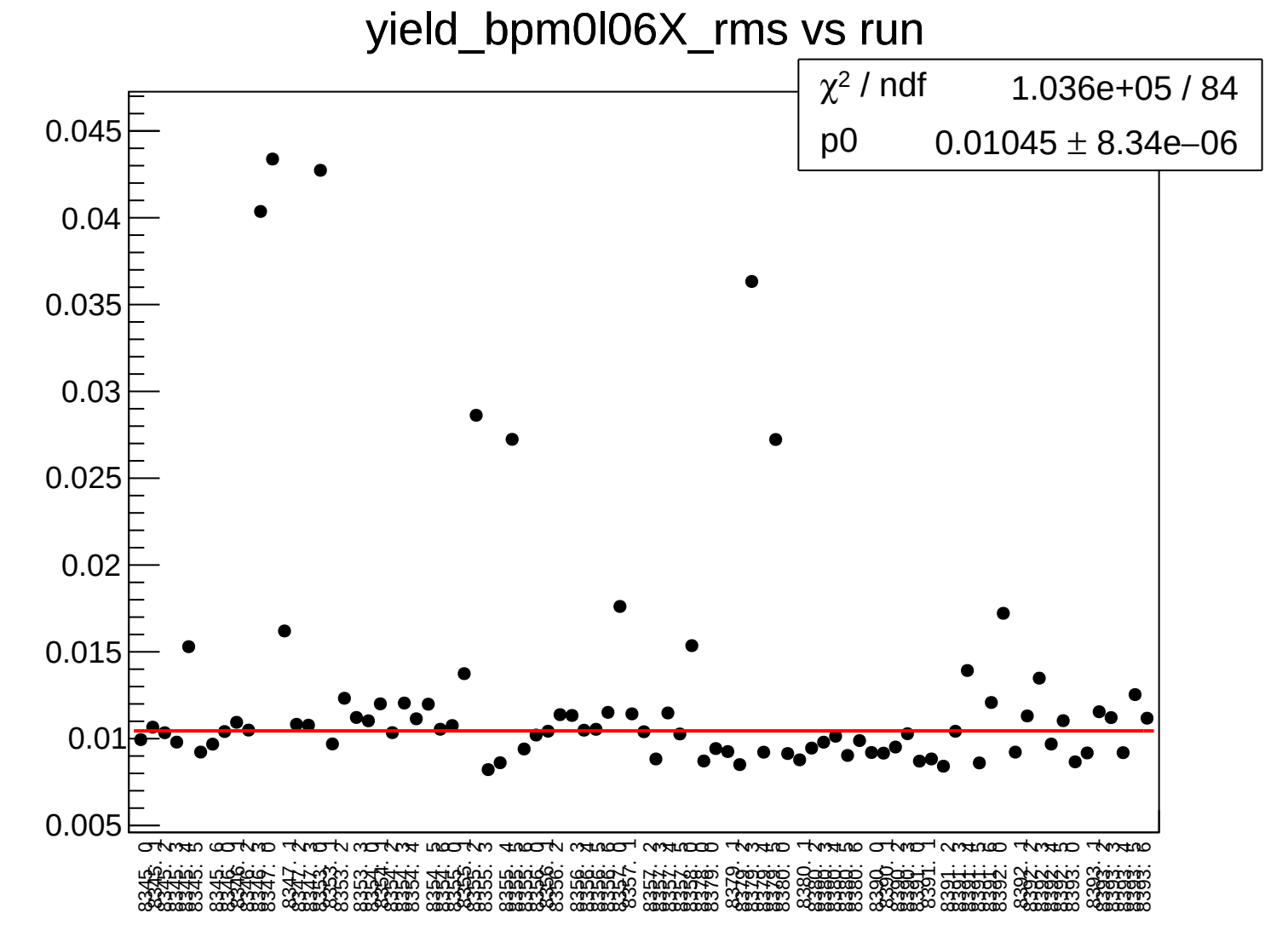

yield_bpm0l05Y_mean vs run
χ² / ndf 1.278e+07 / 84
p0 0.1511 ± 6.713e−06
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
pull
Entries 85
Mean 1115
Std Dev 1068
400
200
0
−200
−400
−600
−800

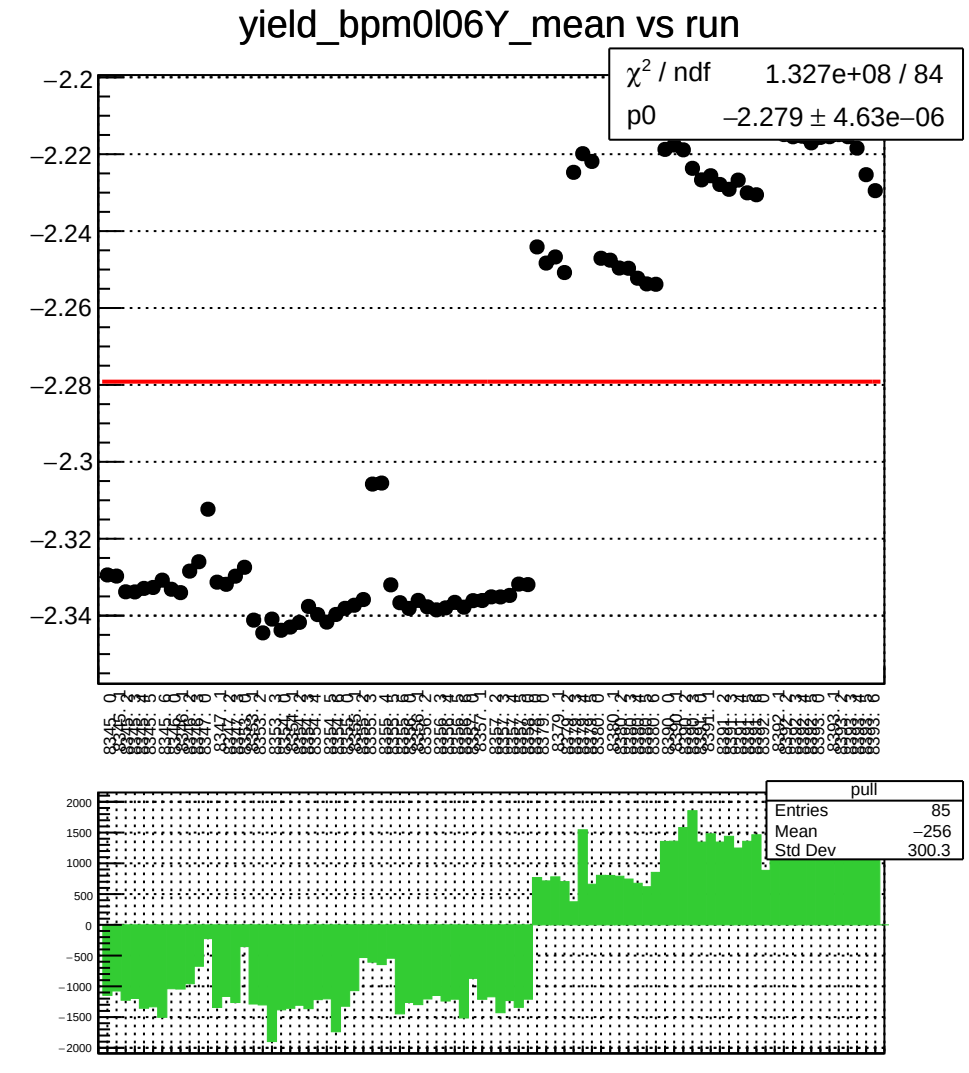

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

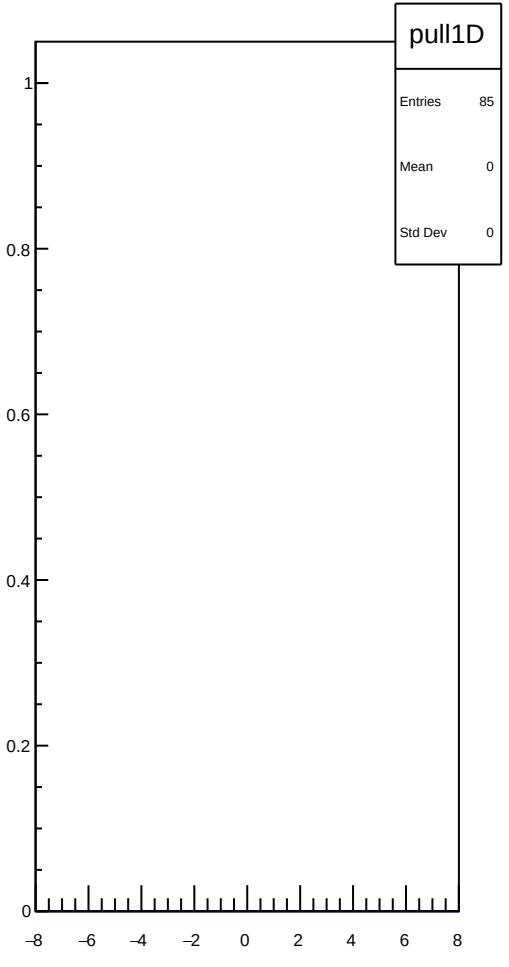

yield_bpm0l05Y_rms vs run
χ² / ndf 2.981e+04 / 84
p0 0.006084 ± 4.747e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005

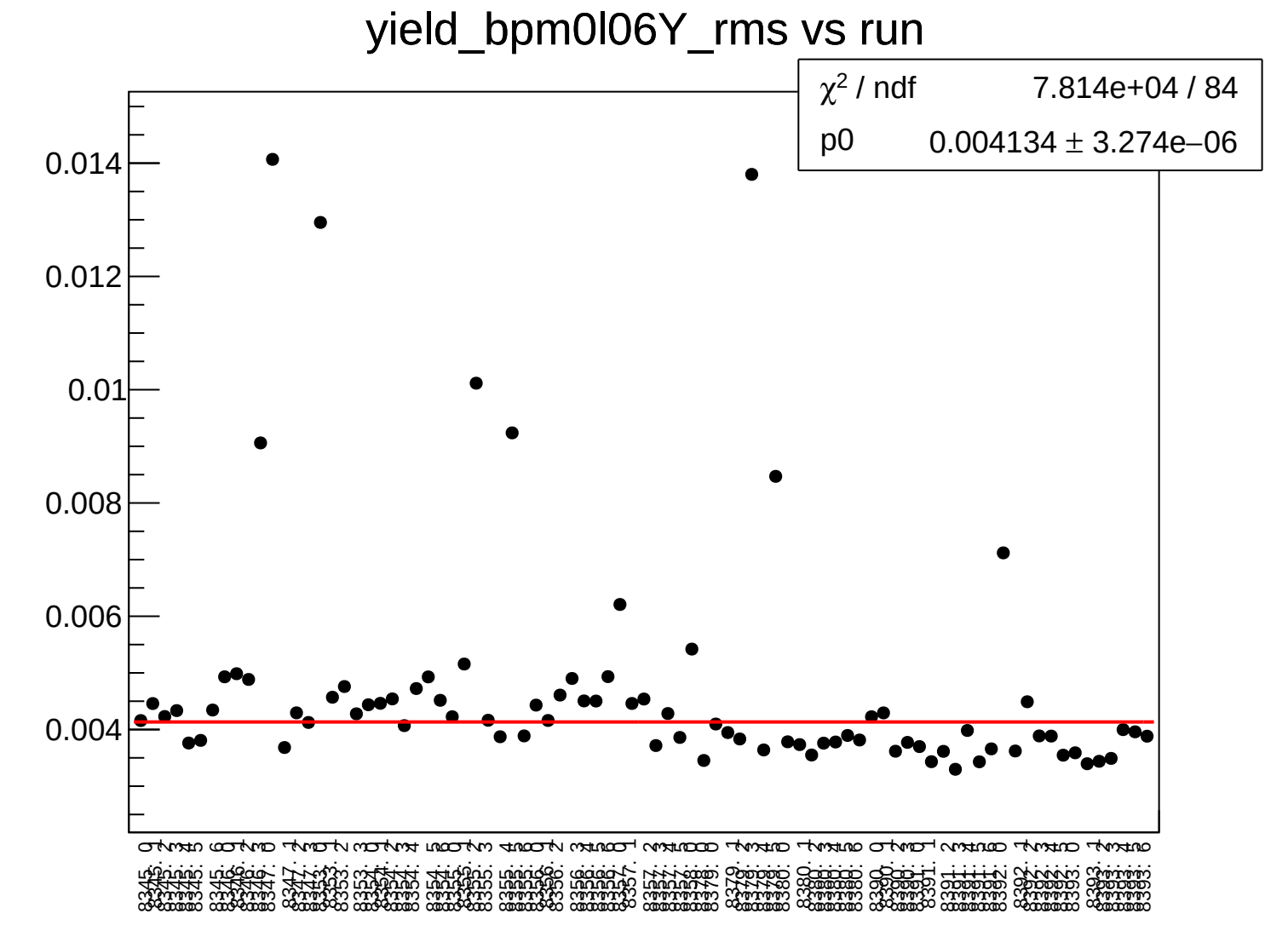

yield_bpm0l06X_mean vs run
χ² / ndf 4.549e+07 / 84
p0 2.653 ± 1.18e−05
2.75
2.7
2.65
2.6
2.55
2.5
pull
Entries 85
Mean −705.7
Std Dev 750.4
1000
500
0
−500
−1000
−1500

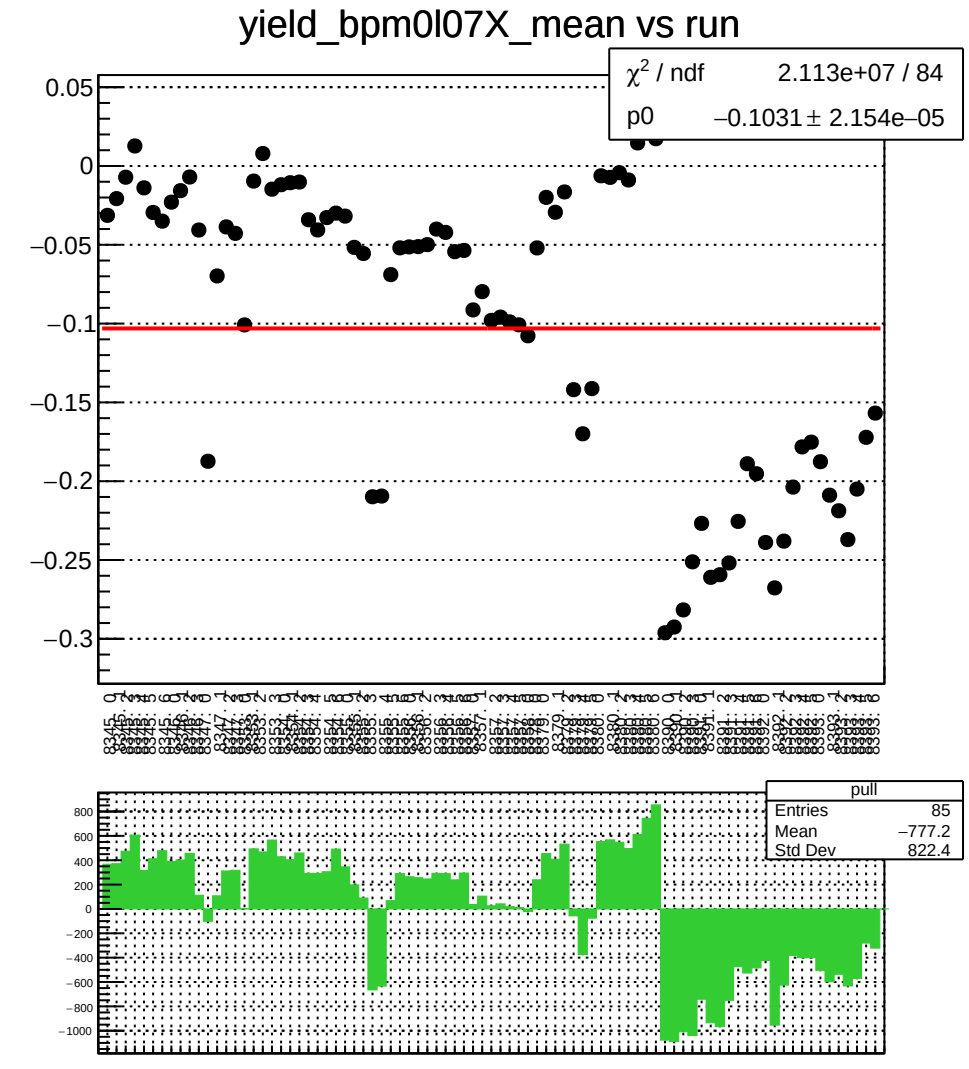

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

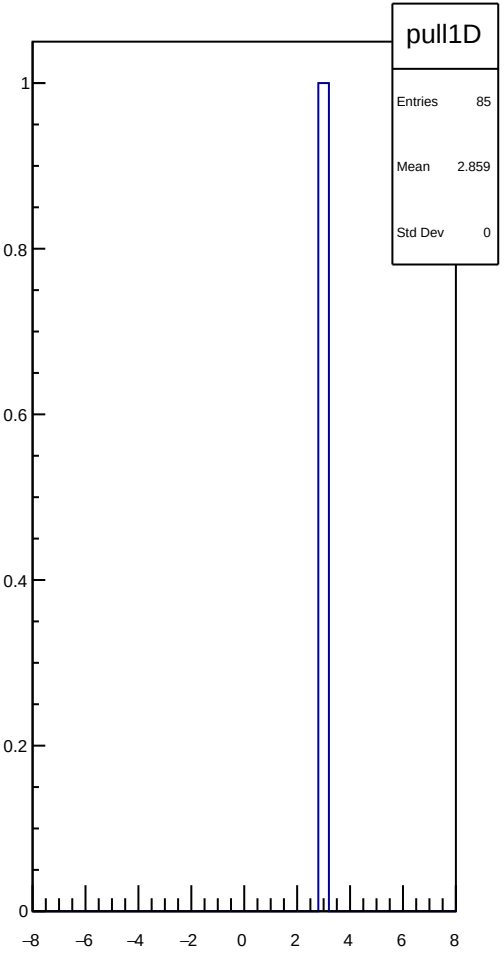

yield_bpm0l06X_rms vs run
χ² / ndf 1.036e+05 / 84
p0 0.01045 ± 8.34e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

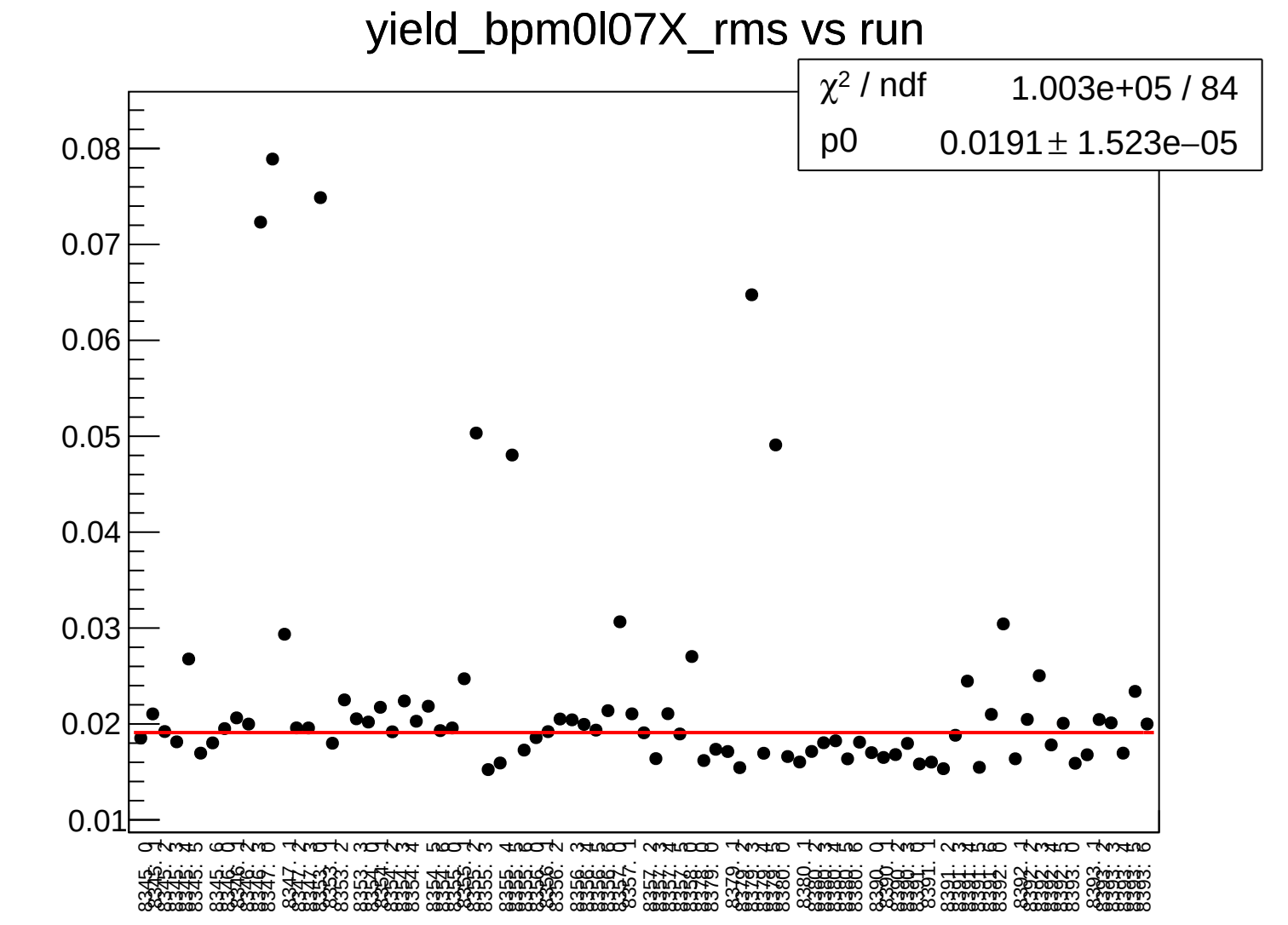

yield_bpm0l06Y_mean vs run
χ² / ndf 1.327e+08 / 84
p0 −2.279 ± 4.63e−06
−2.2
−2.22
−2.24
−2.26
−2.28
−2.3
−2.32
−2.34
pull
Entries 85
Mean −256
Std Dev 300.3
2000
1500
1000
500
0
−500
−1000
−1500
−2000

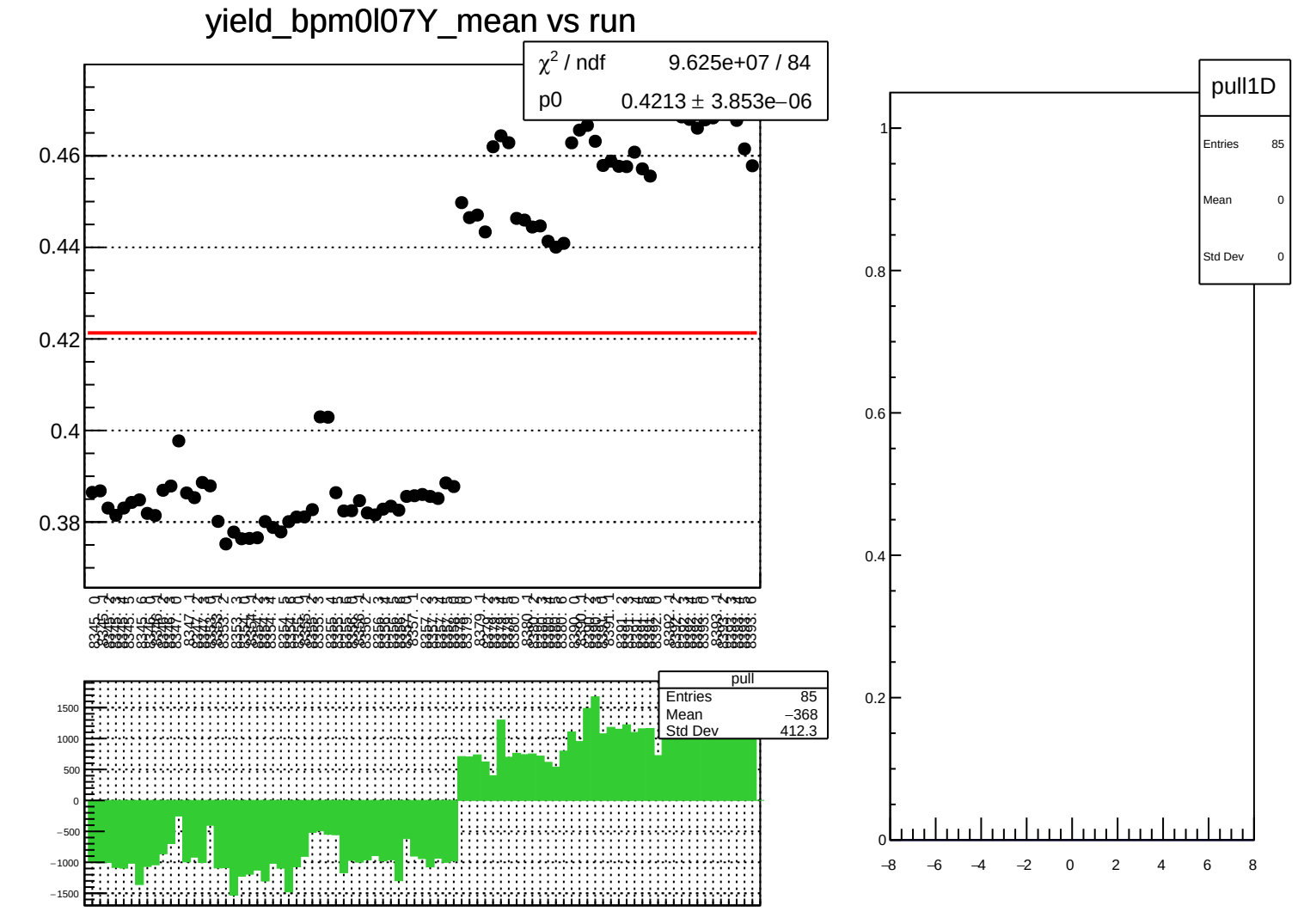

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

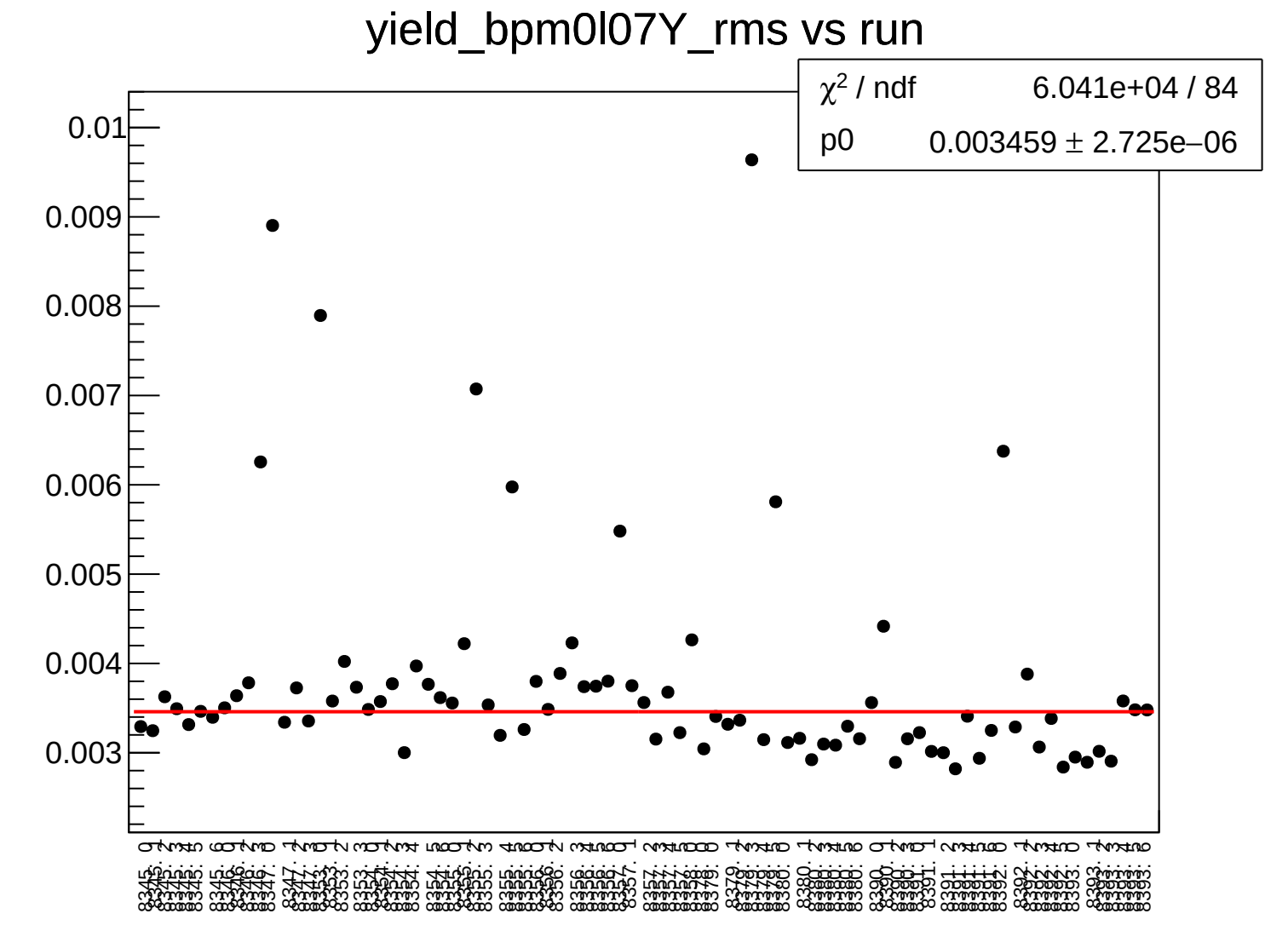

yield_bpm0l06Y_rms vs run
χ² / ndf 7.814e+04 / 84
p0 0.004134 ± 3.274e−06
0.014
0.012
0.01
0.008
0.006
0.004

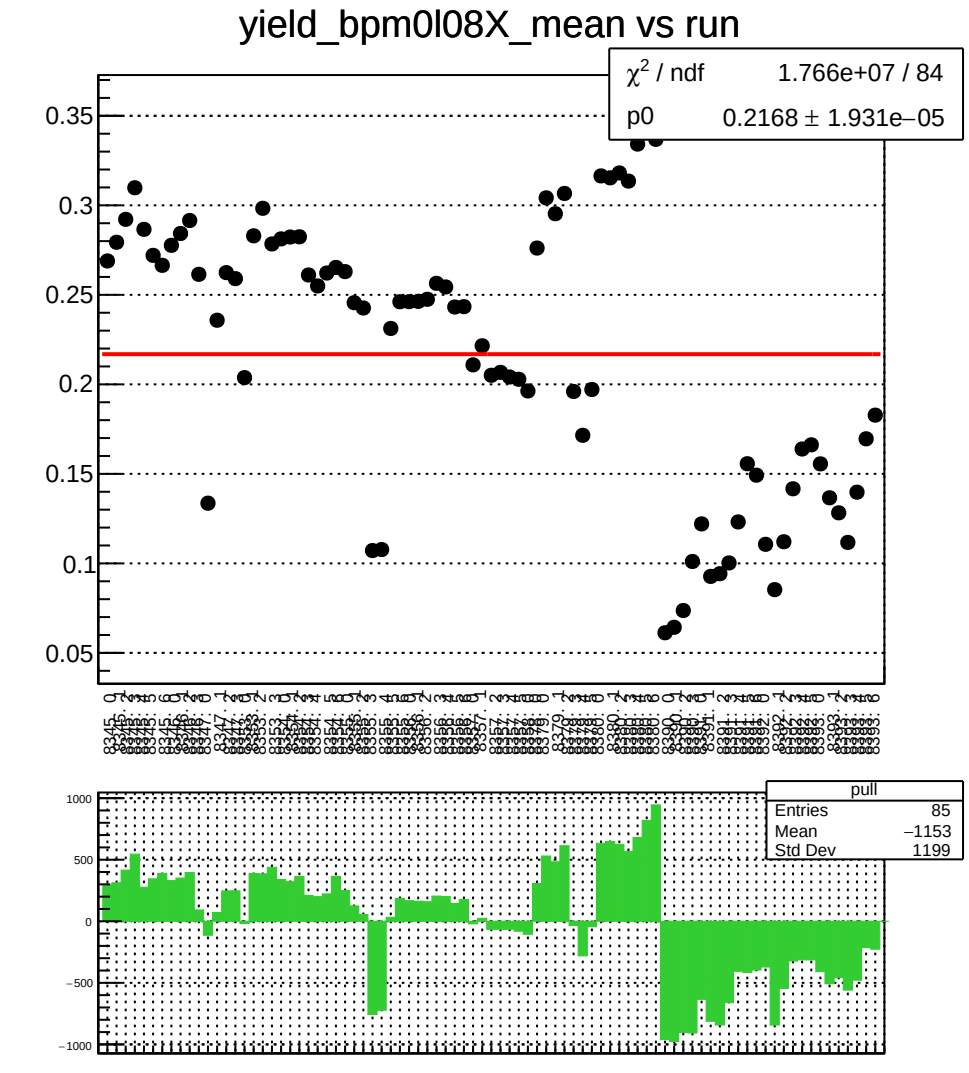

yield_bpm0l07X_mean vs run
χ² / ndf 2.113e+07 / 84
p0 −0.1031 ± 2.154e−05
pull
Entries 85
Mean −777.2
Std Dev 822.4

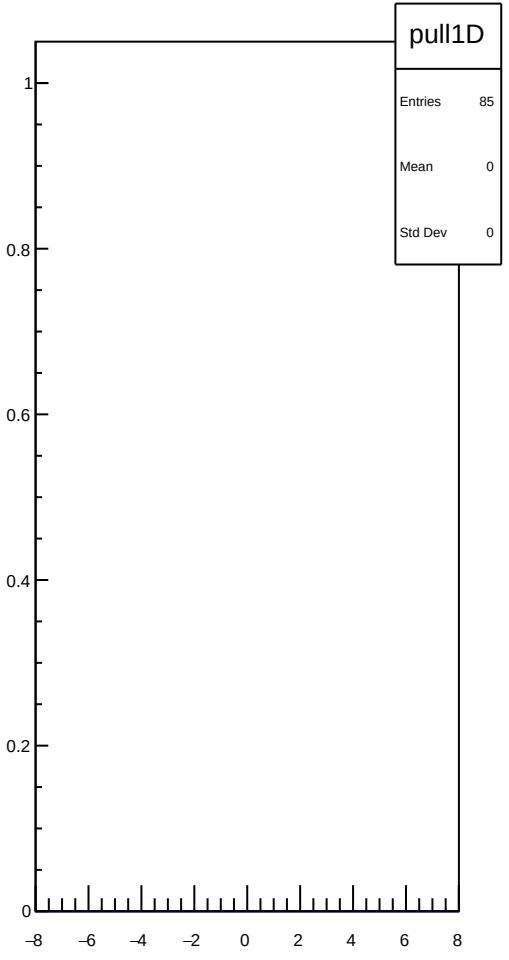

pull1D
Entries 85
Mean 2.859
Std Dev 0

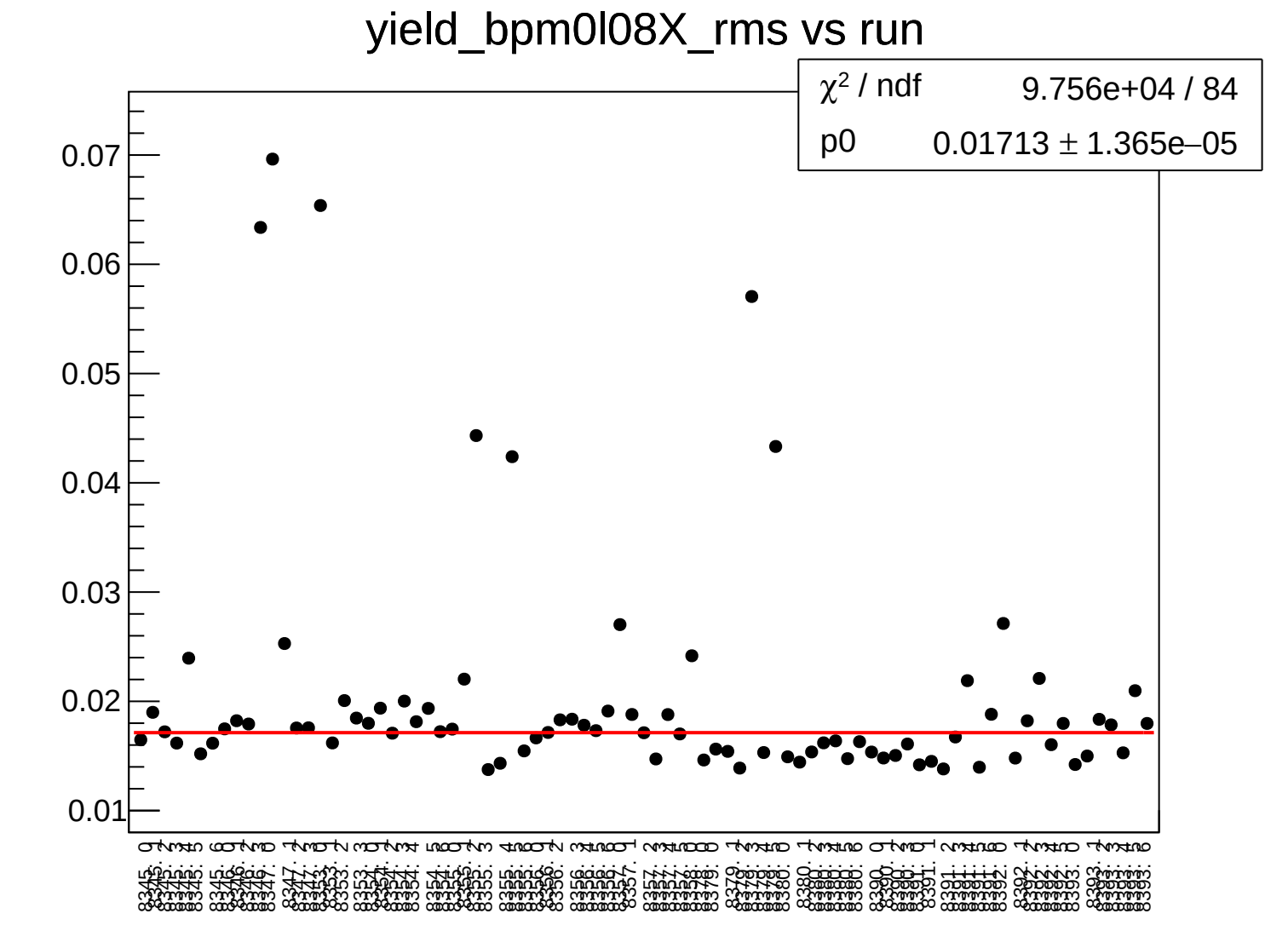

yield_bpm0l07X_rms vs run
χ^2 / ndf 1.003e+05 / 84
p0 0.0191 ± 1.523e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

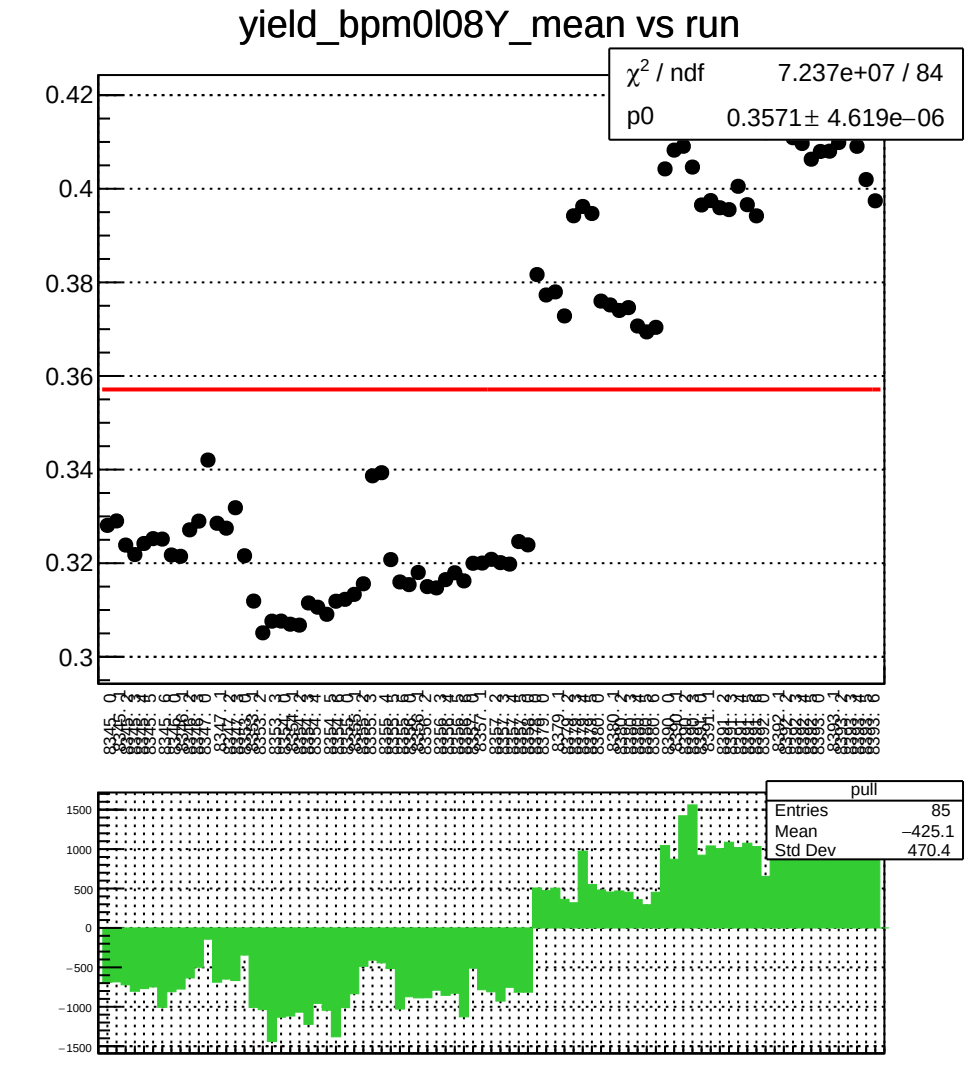

yield_bpm0l07Y_mean vs run
χ² / ndf 9.625e+07 / 84
p0 0.4213 ± 3.853e−06
0.46
0.44
0.42
0.4
0.38
pull
Entries 85
Mean −368
Std Dev 412.3
1500
1000
500
0
−500
−1000
−1500
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

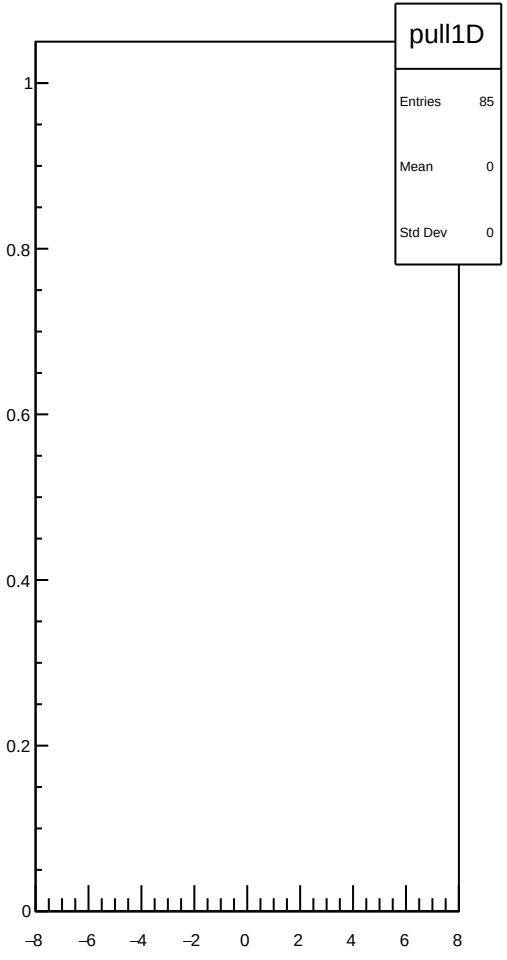

yield_bpm0l07Y_rms vs run
χ² / ndf 6.041e+04 / 84
p0 0.003459 ± 2.725e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

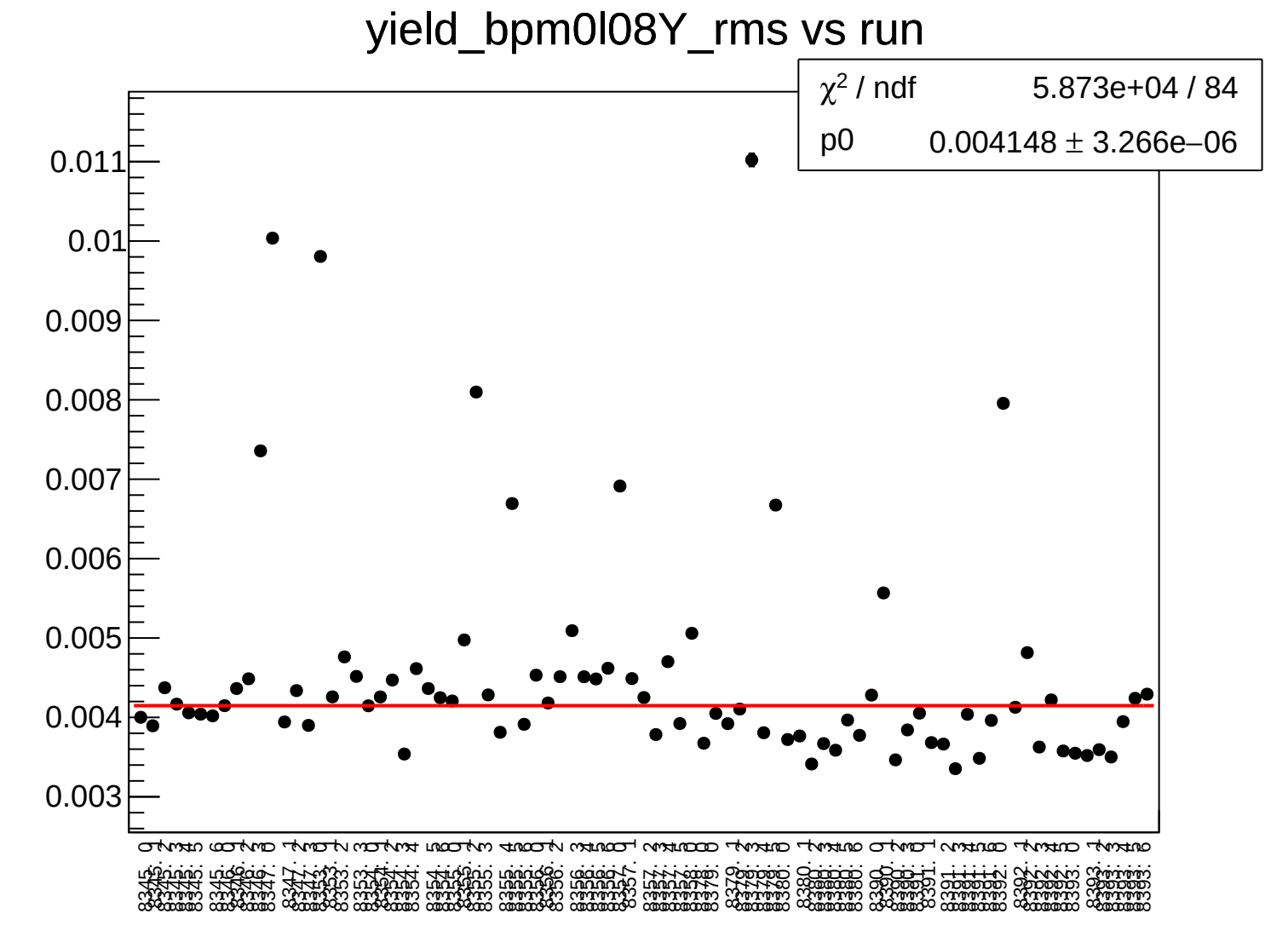

yield_bpm0l08X_mean vs run
χ² / ndf 1.766e+07 / 84
p0 0.2168 ± 1.931e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05
pull
Entries 85
Mean −1153
Std Dev 1199
1000
500
0
−500
−1000

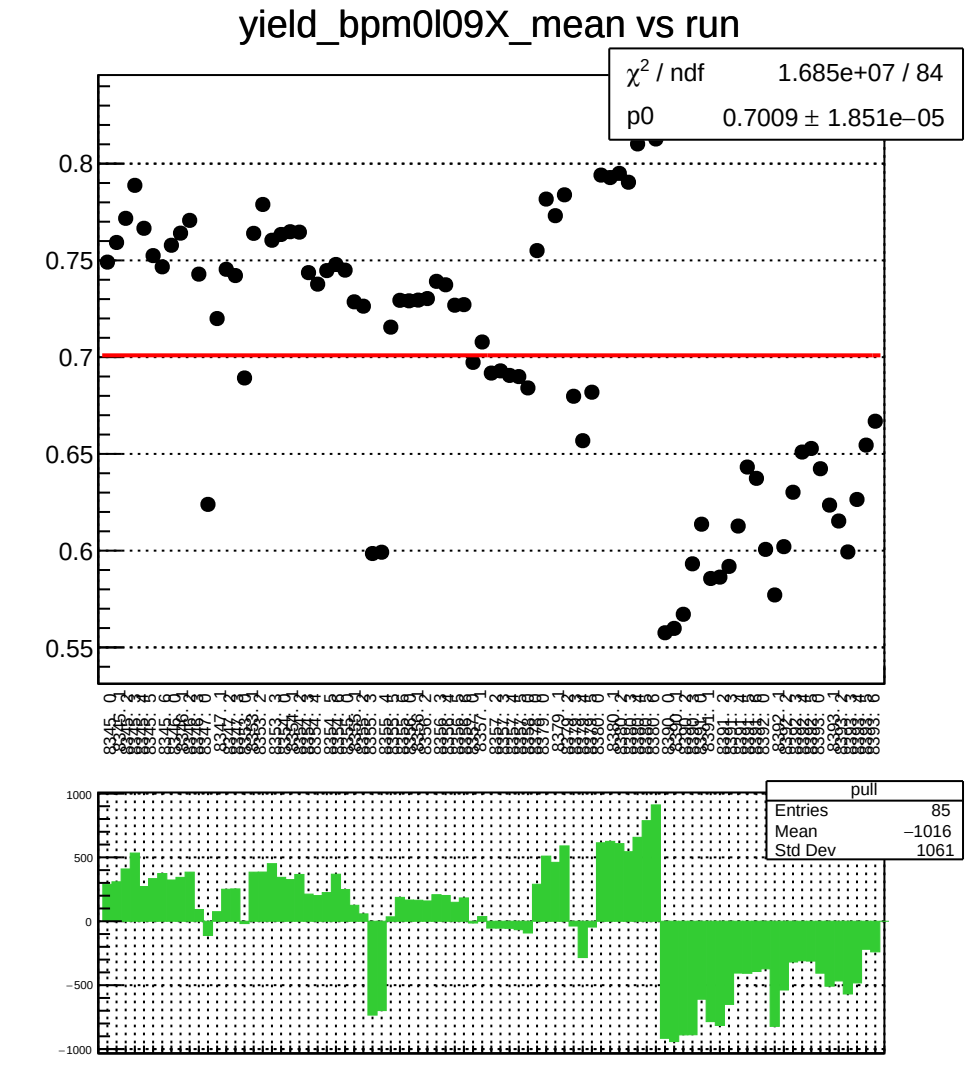

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

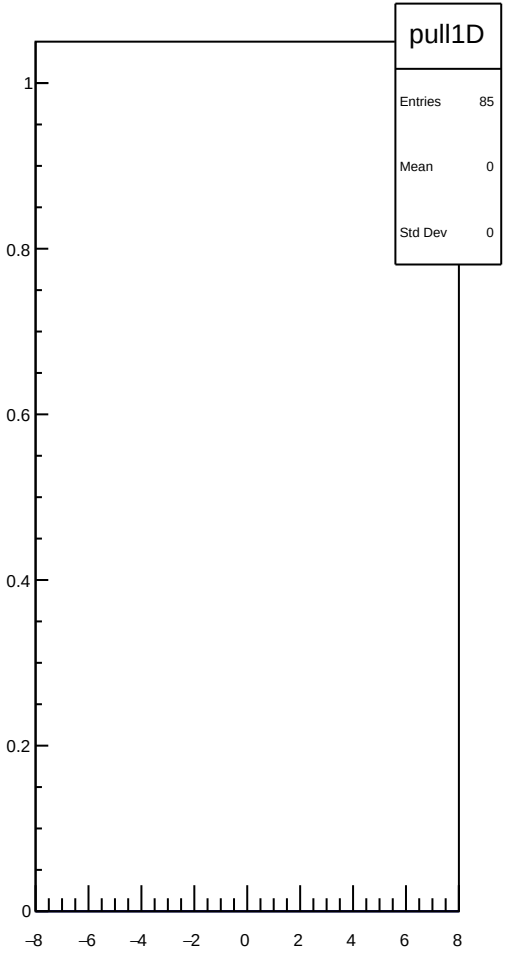

yield_bpm0l08X_rms vs run
χ² / ndf 9.756e+04 / 84
p0 0.01713 ± 1.365e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

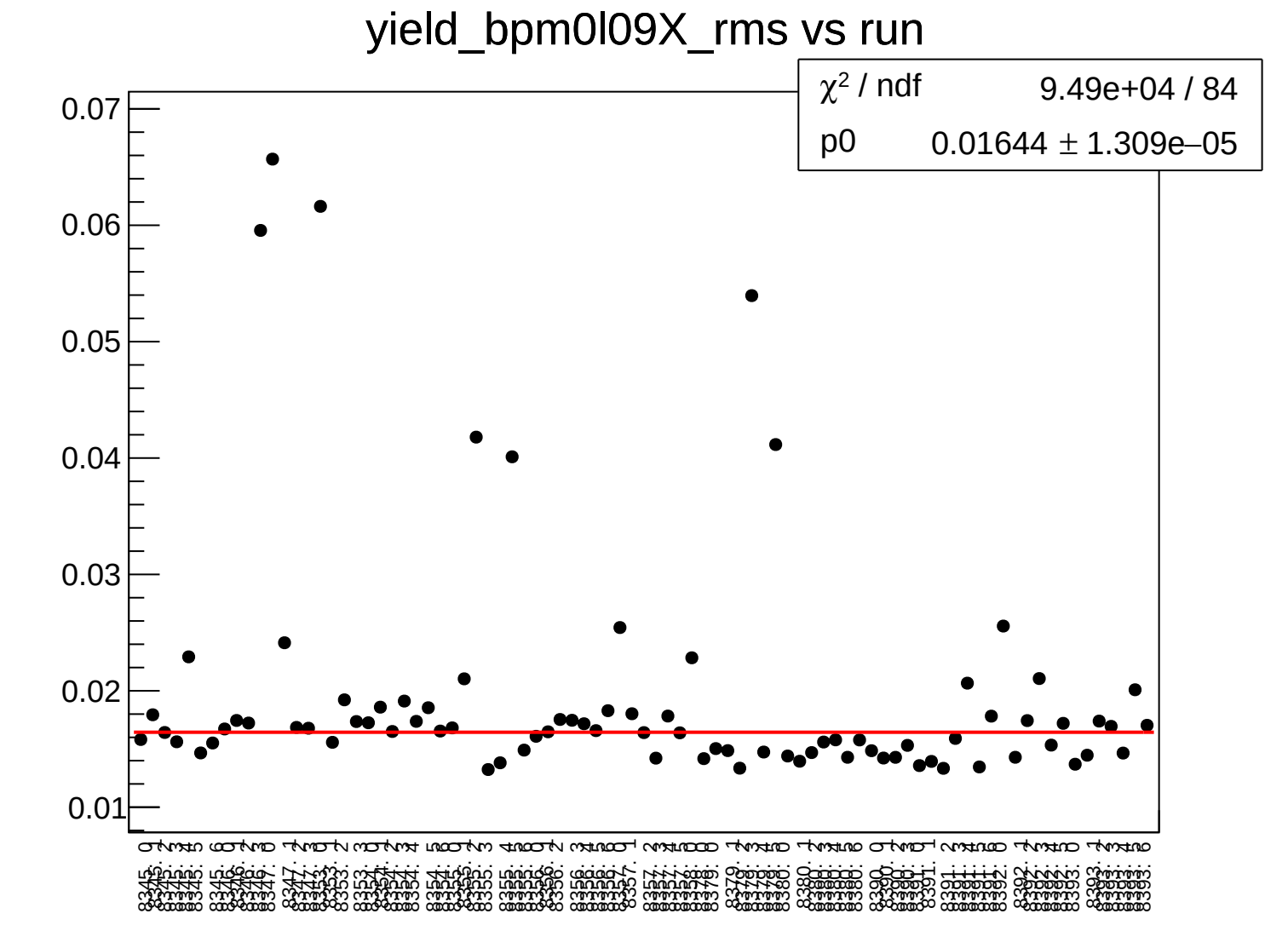

yield_bpm0l08Y_mean vs run
χ² / ndf 7.237e+07 / 84
p0 0.3571 ± 4.619e−06
0.42
0.4
0.38
0.36
0.34
0.32
0.3
pull
Entries 85
Mean −425.1
Std Dev 470.4
1500
1000
500
0
−500
−1000
−1500

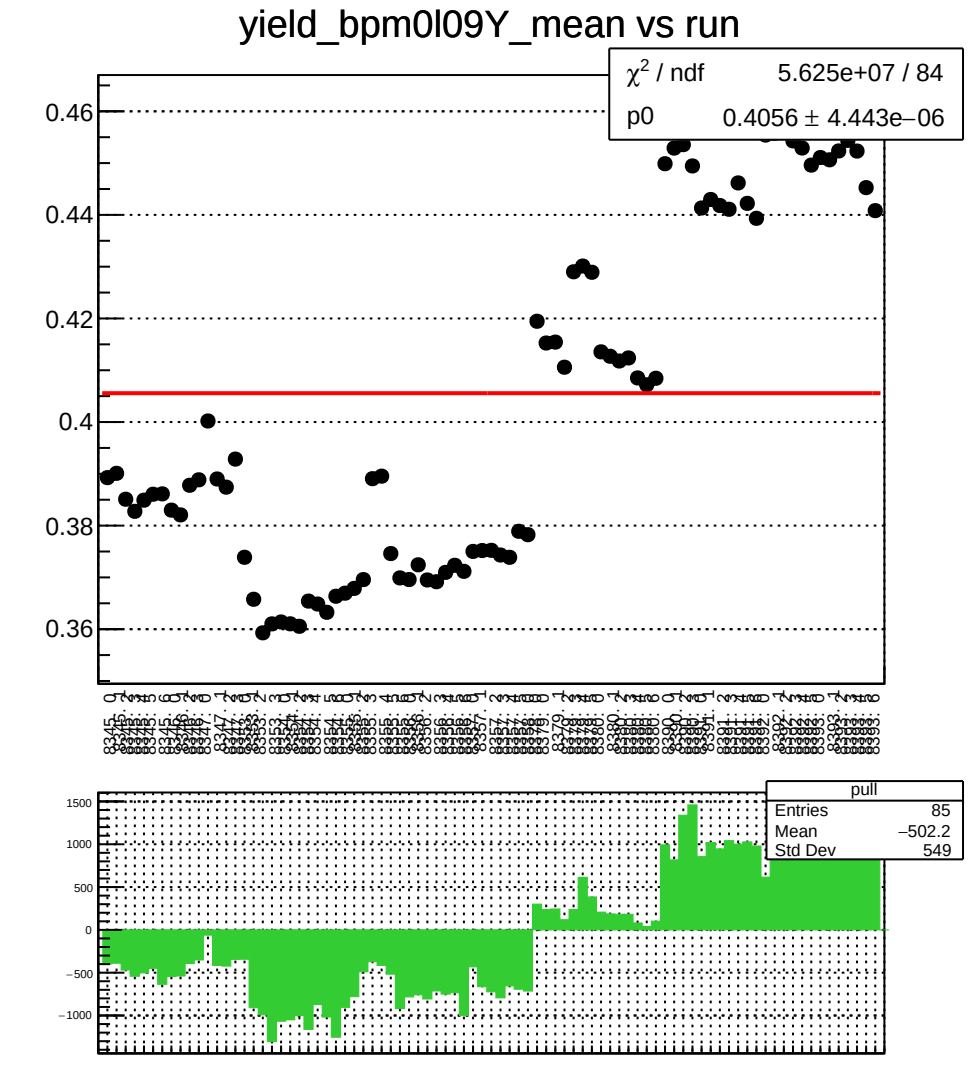

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

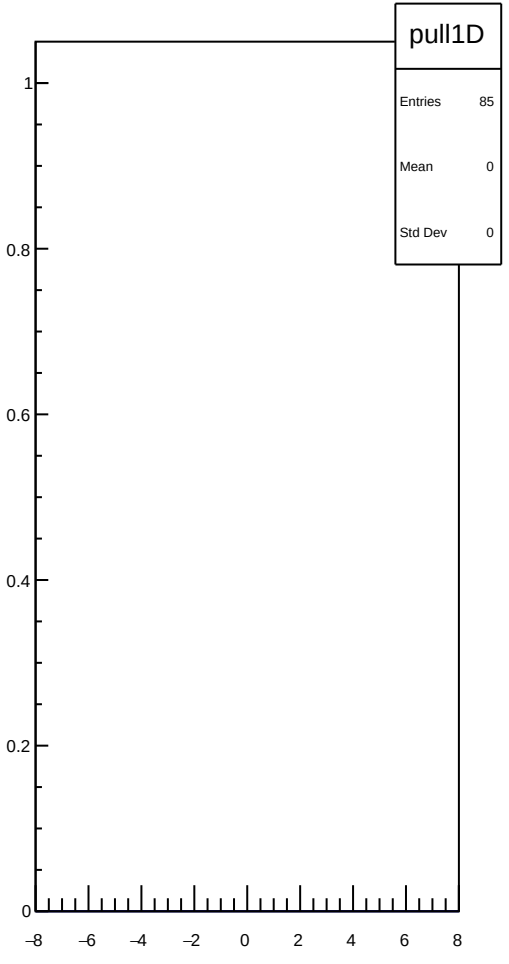

yield_bpm0l08Y_rms vs run
χ² / ndf 5.873e+04 / 84
p0 0.004148 ± 3.266e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

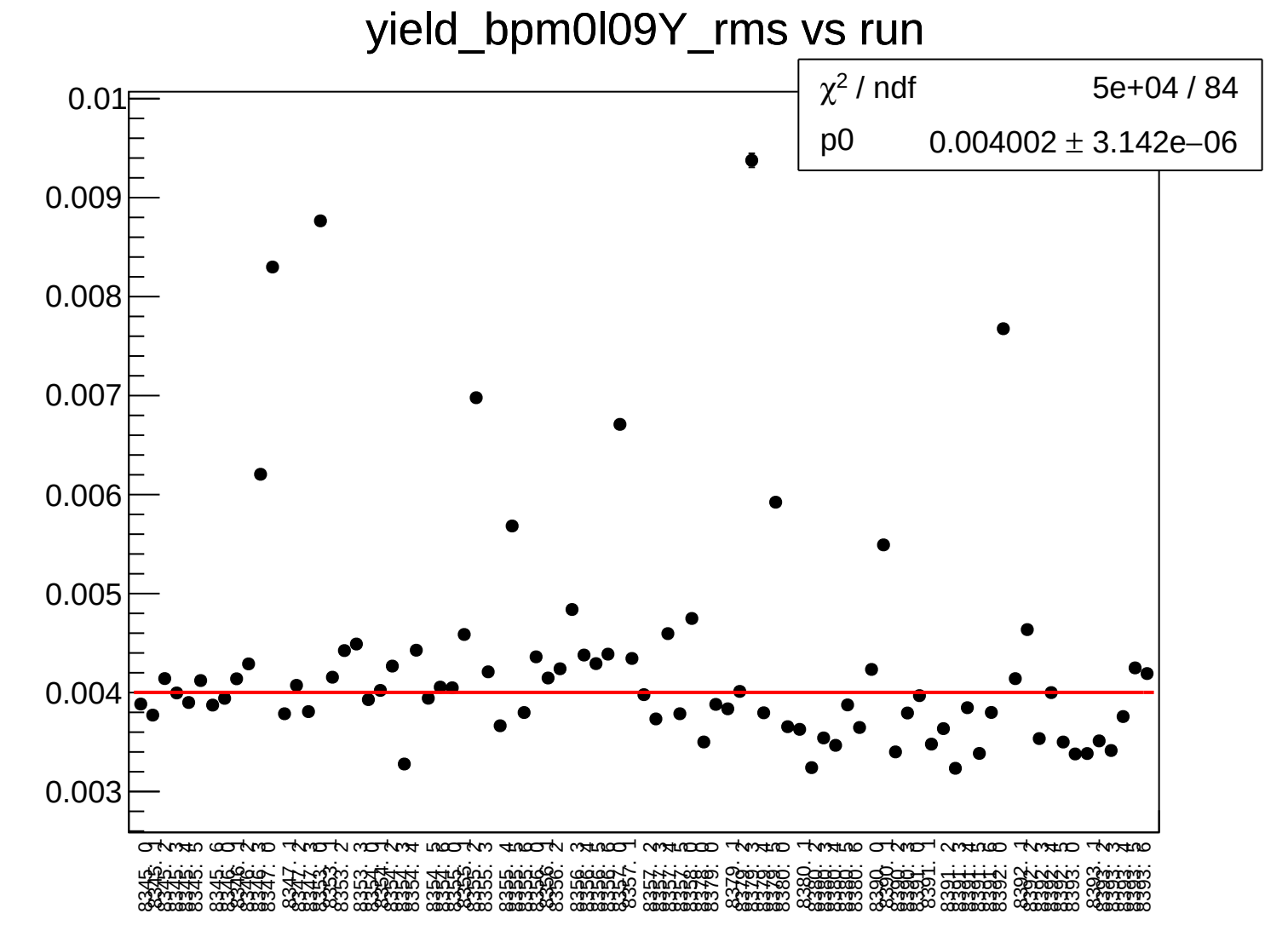

yield_bpm0l09X_mean vs run
χ² / ndf 1.685e+07 / 84
p0 0.7009 ± 1.851e−05
0.8
0.75
0.7
0.65
0.6
0.55
pull
Entries 85
Mean −1016
Std Dev 1061
1000
500
0
−500
−1000

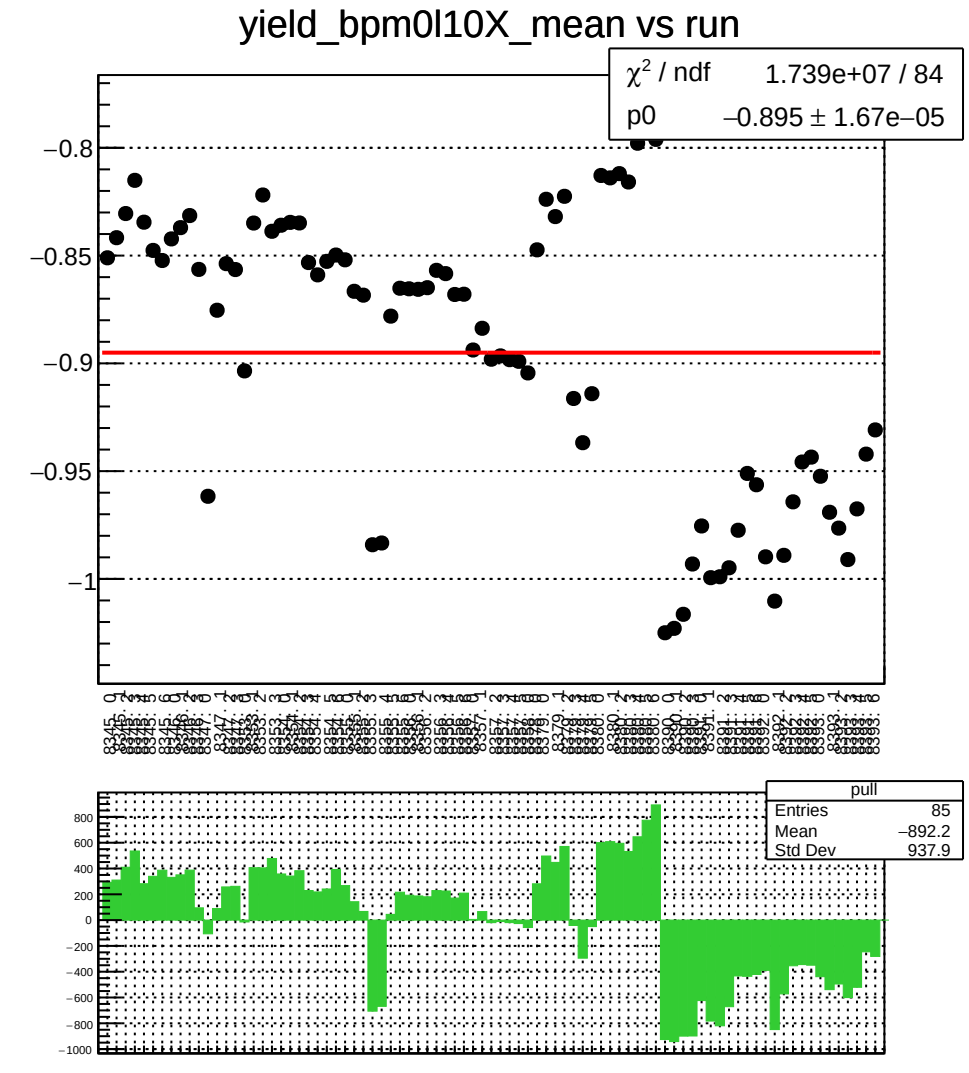

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

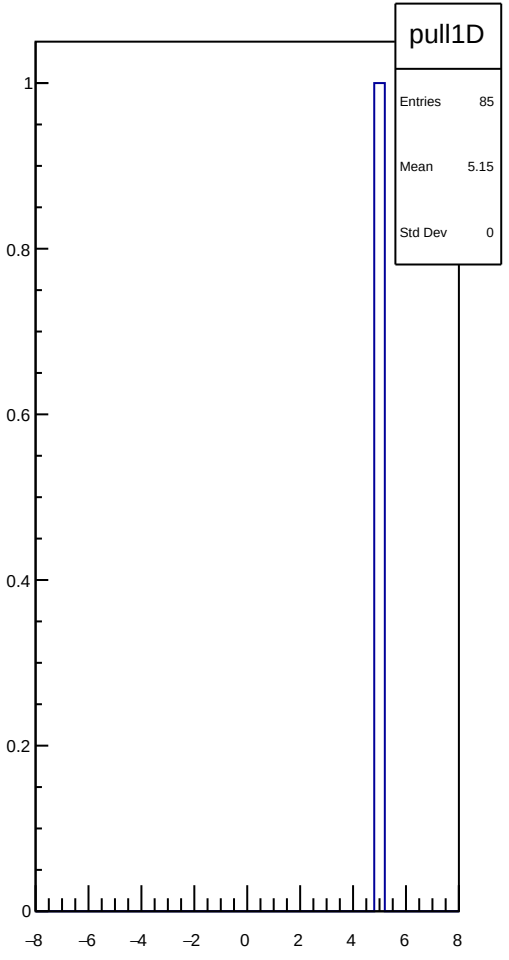

yield_bpm0l09X_rms vs run
χ² / ndf 9.49e+04 / 84
p0 0.01644 ± 1.309e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

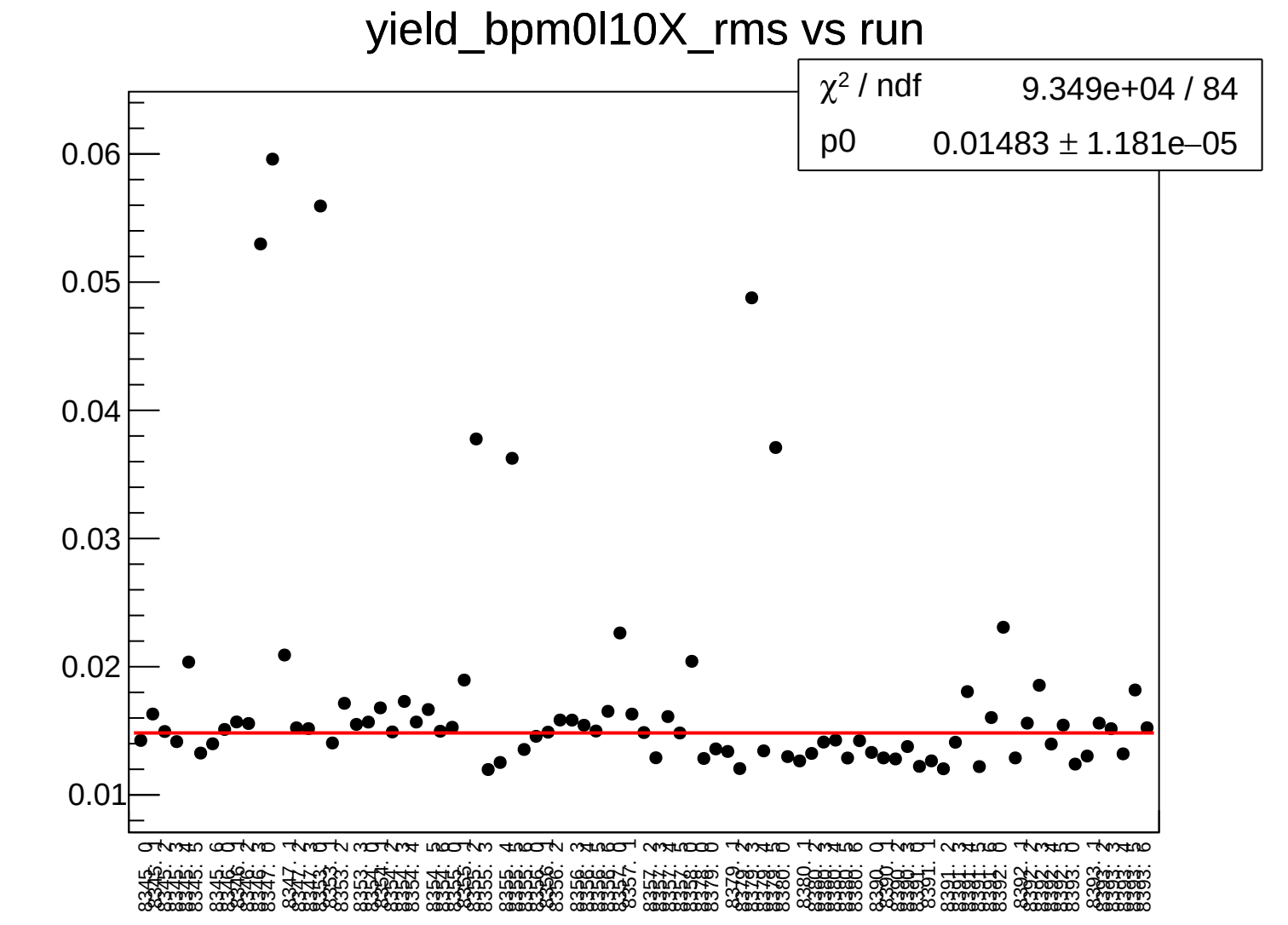

yield_bpm0l09Y_mean vs run
χ² / ndf 5.625e+07 / 84
p0 0.4056 ± 4.443e−06
0.46
0.44
0.42
0.4
0.38
0.36
pull
Entries 85
Mean −502.2
Std Dev 549
1500
1000
500
0
−500
−1000

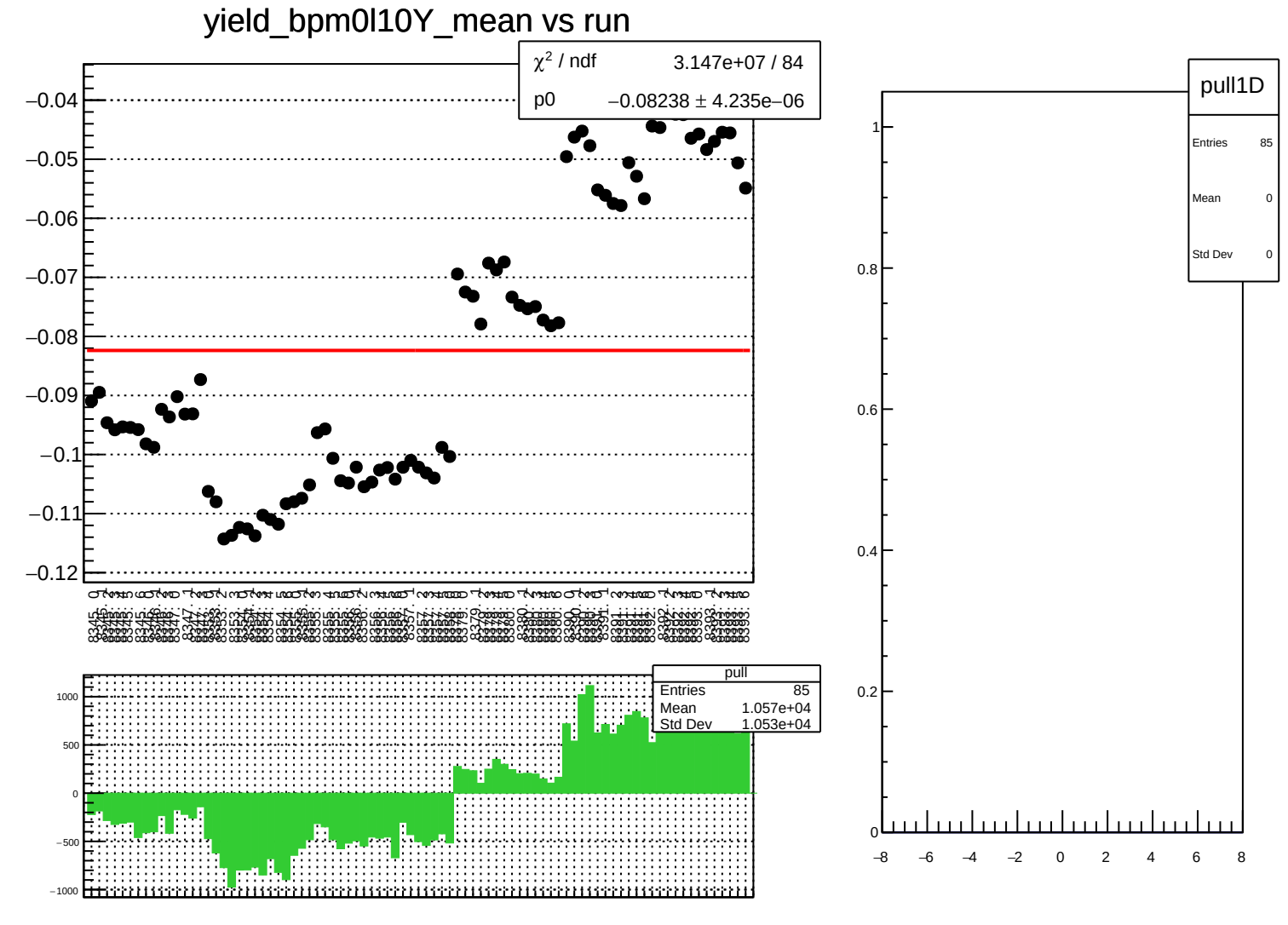

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

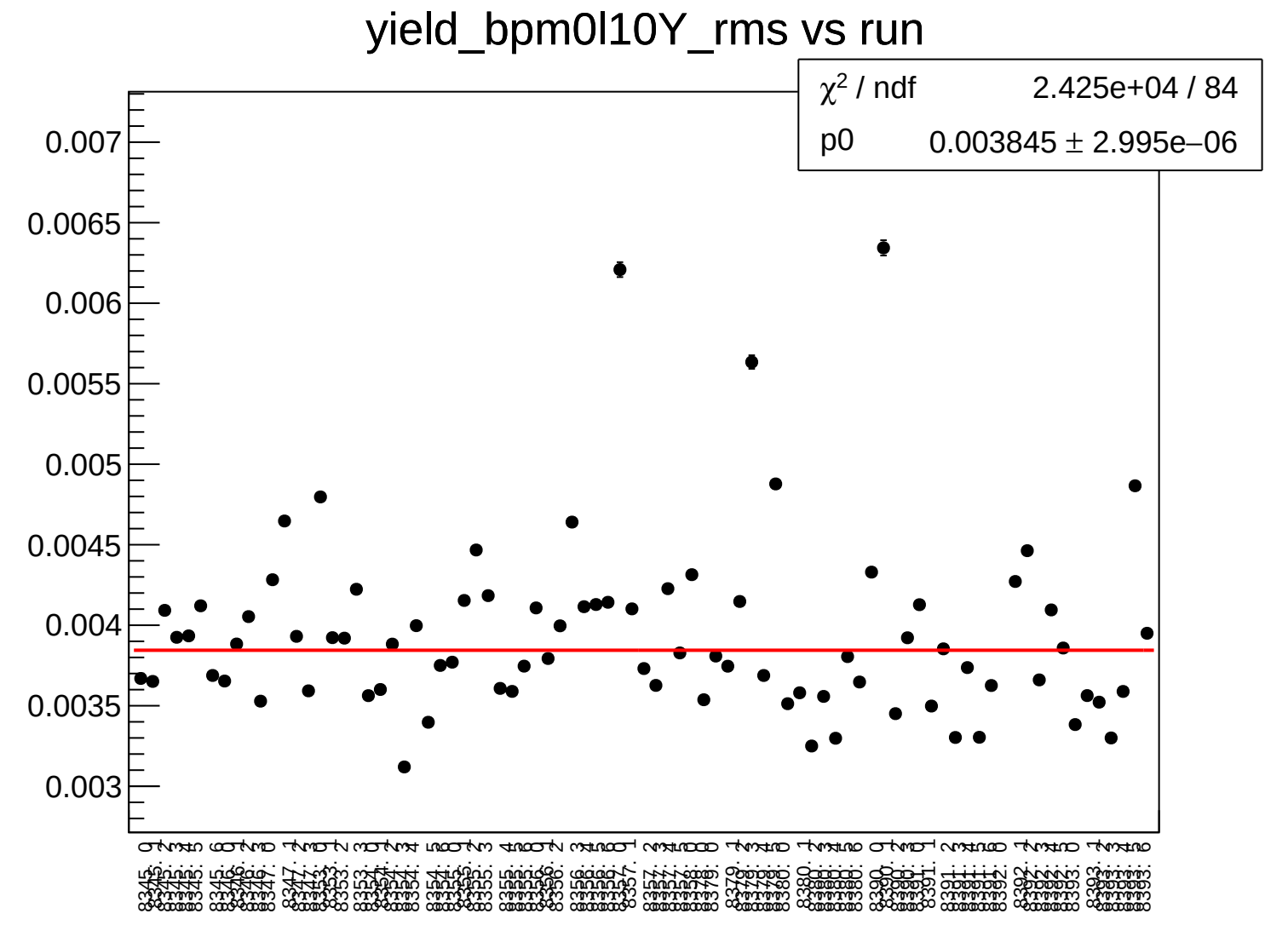

yield_bpm0l09Y_rms vs run
χ² / ndf 5e+04 / 84
p0 0.004002 ± 3.142e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

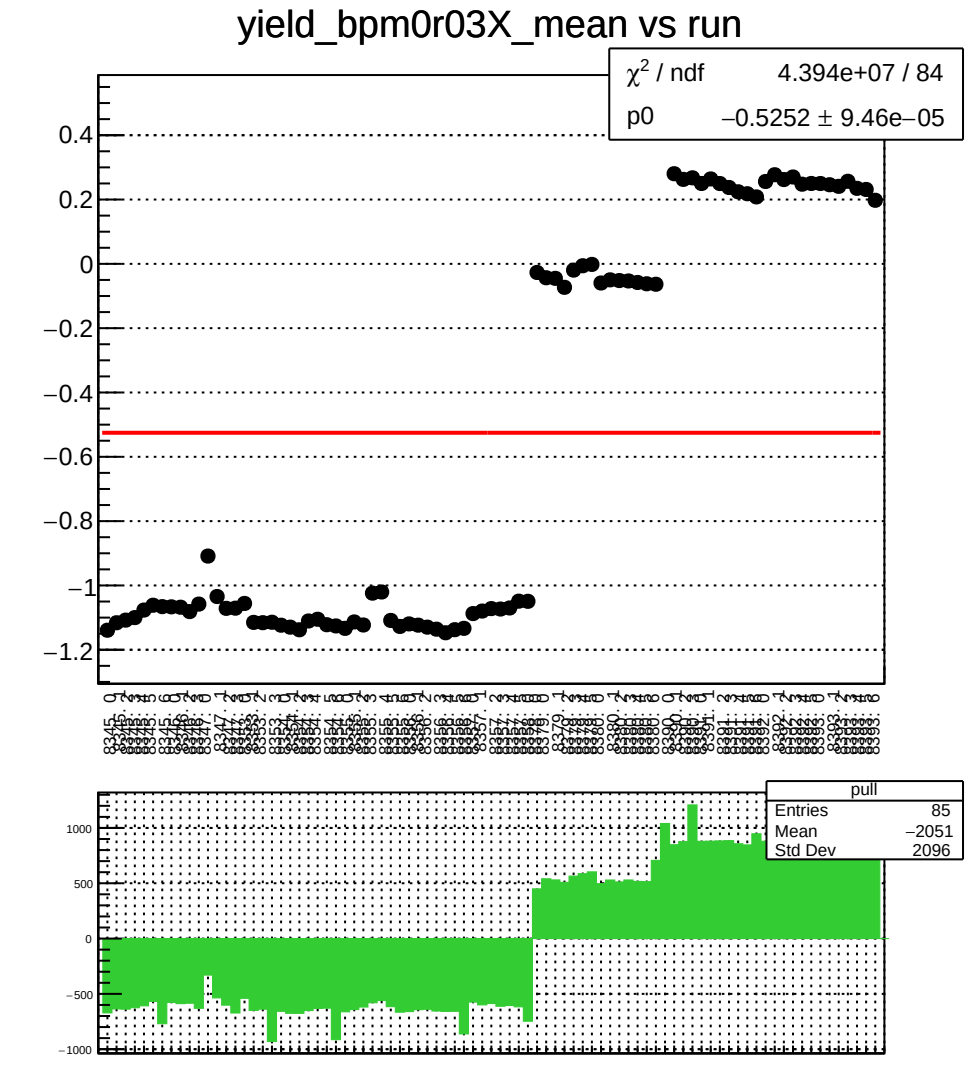

yield_bpm0l10X_mean vs run
χ² / ndf 1.739e+07 / 84
p0 –0.895 ± 1.67e–05
–0.8
–0.85
–0.9
–0.95
–1
pull
Entries 85
Mean –892.2
Std Dev 937.9
800
600
400
200
0
–200
–400
–600
–800
–1000

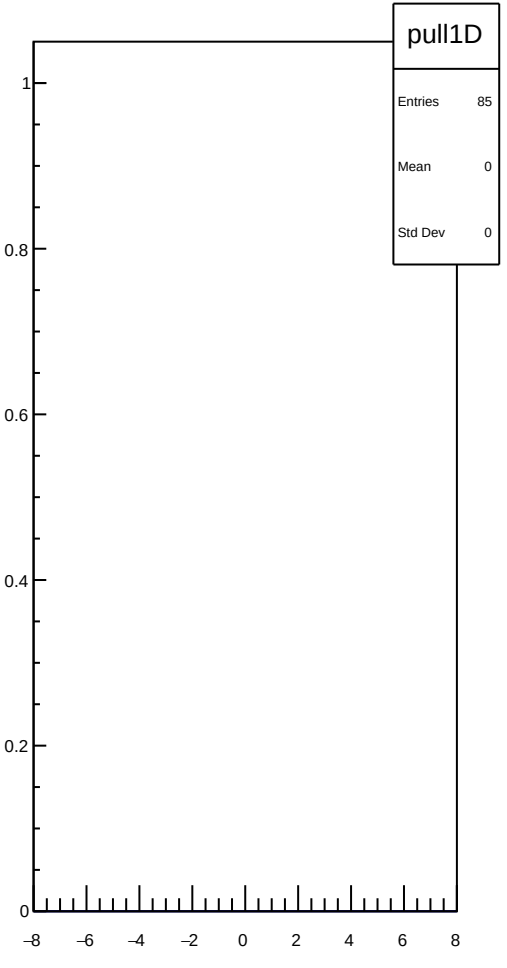

pull1D
Entries 85
Mean 5.15
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

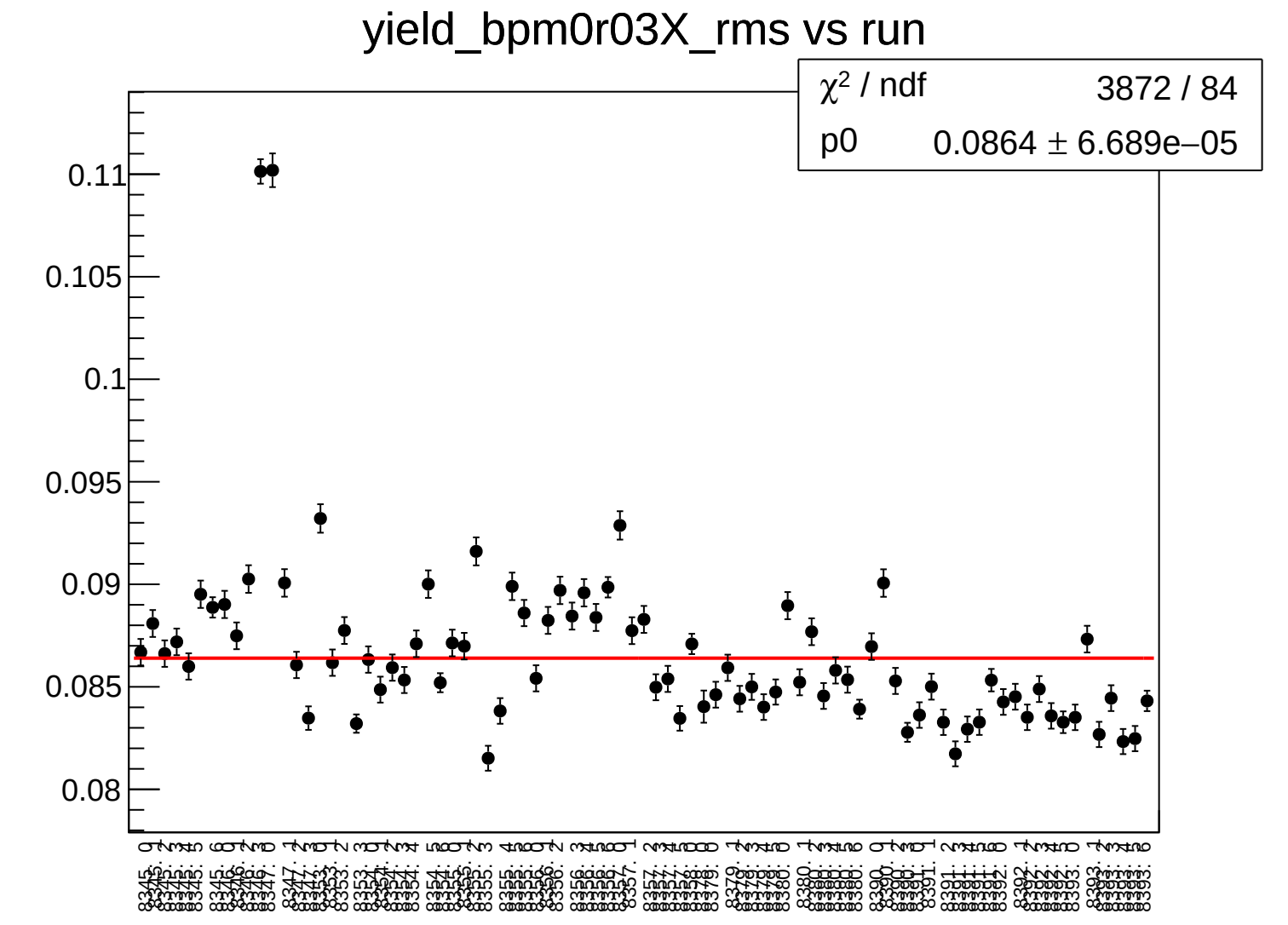

yield_bpm0l10X_rms vs run
χ² / ndf 9.349e+04 / 84
p0 0.01483 ± 1.181e–05
0.06
0.05
0.04
0.03
0.02
0.01

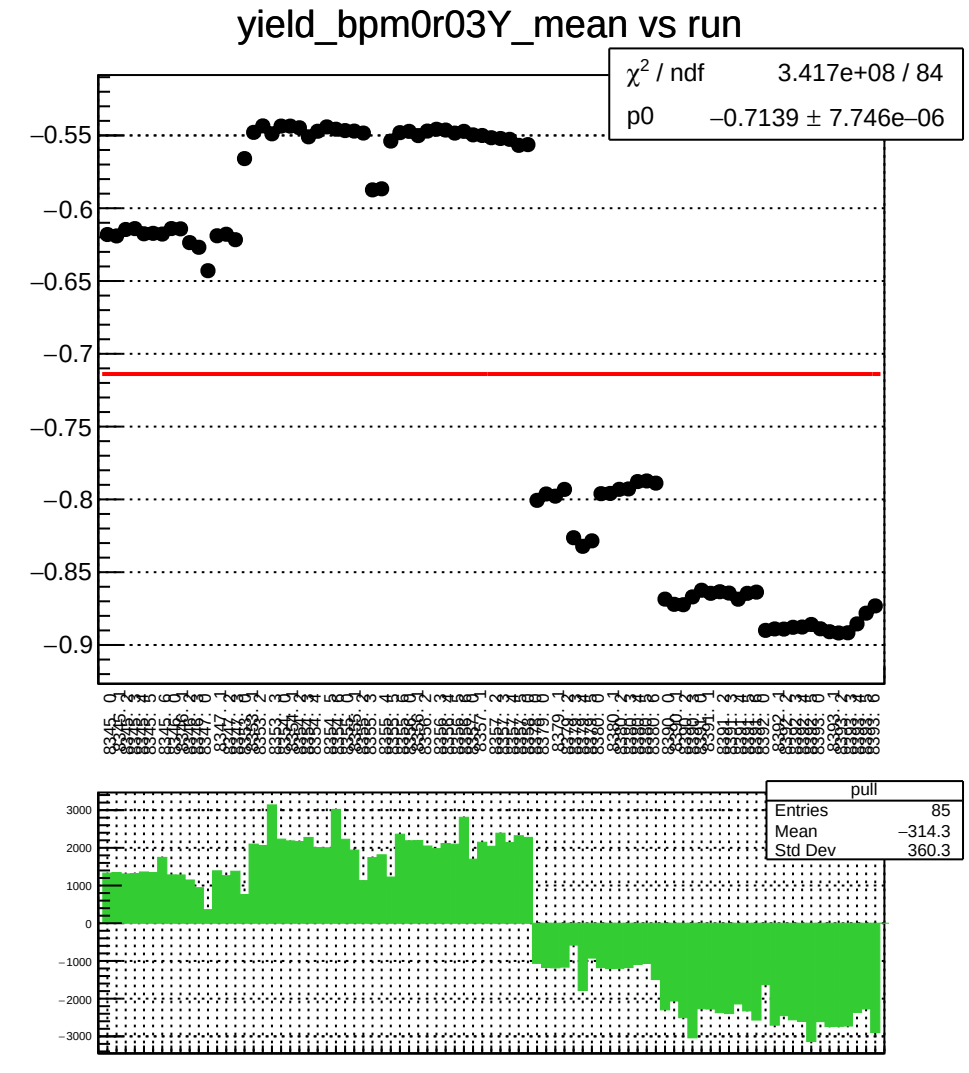

yield_bpm0l10Y_mean vs run
χ² / ndf 3.147e+07 / 84
p0 −0.08238 ± 4.235e−06
−0.04
−0.05
−0.06
−0.07
−0.08
−0.09
−0.1
−0.11
−0.12
pull
Entries 85
Mean 1.057e+04
Std Dev 1.053e+04
1000
500
0
−500
−1000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

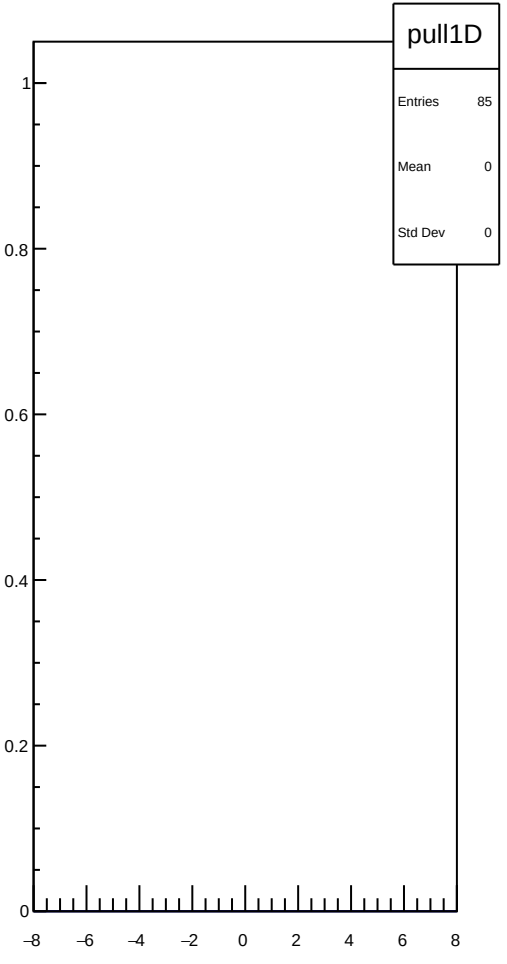

yield_bpm0l10Y_rms vs run
χ² / ndf 2.425e+04 / 84
p0 0.003845 ± 2.995e−06
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

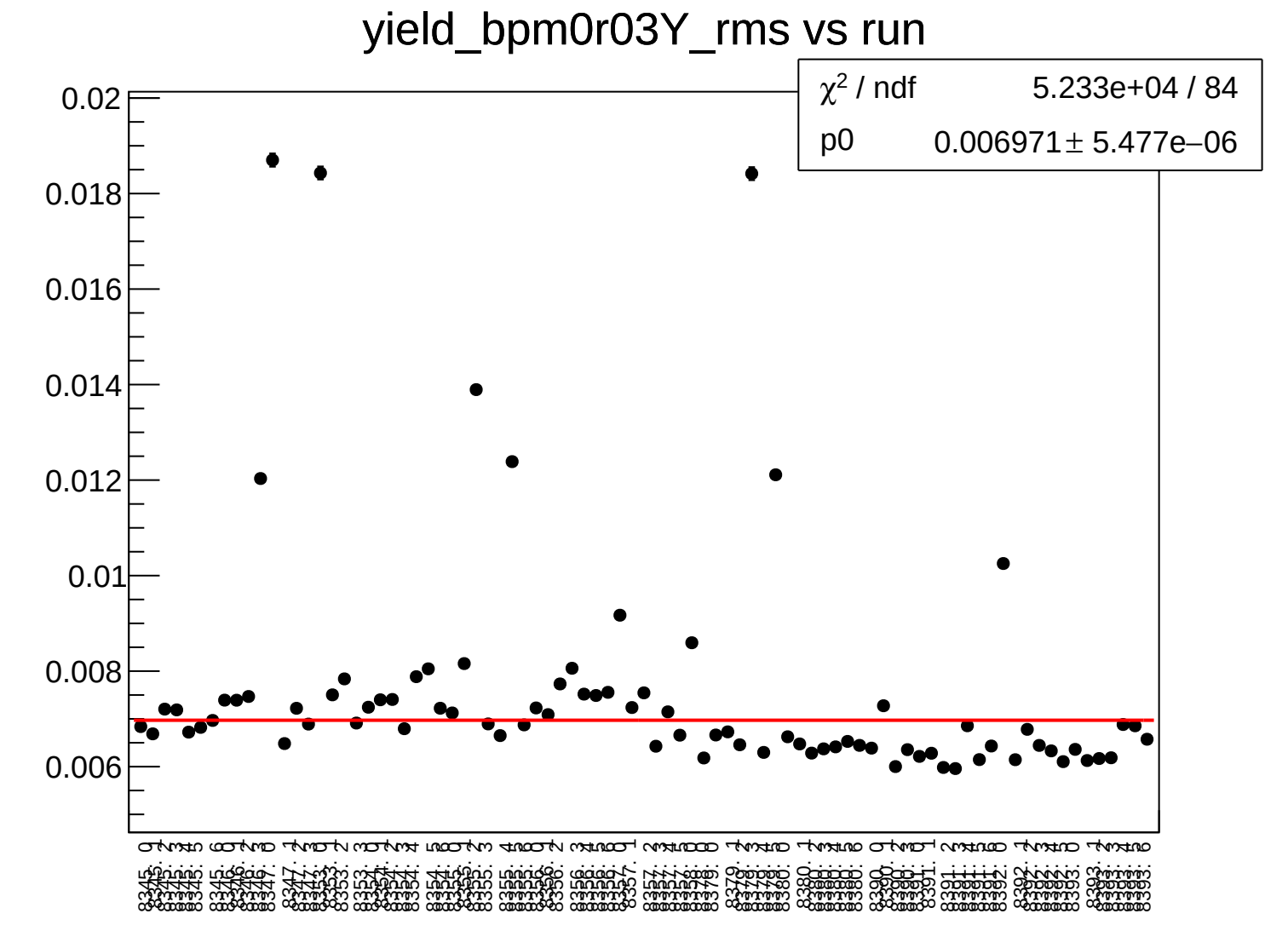

yield_bpm0r03X_mean vs run
χ² / ndf 4.394e+07 / 84
p0 −0.5252 ± 9.46e−05
pull
Entries 85
Mean −2051
Std Dev 2096

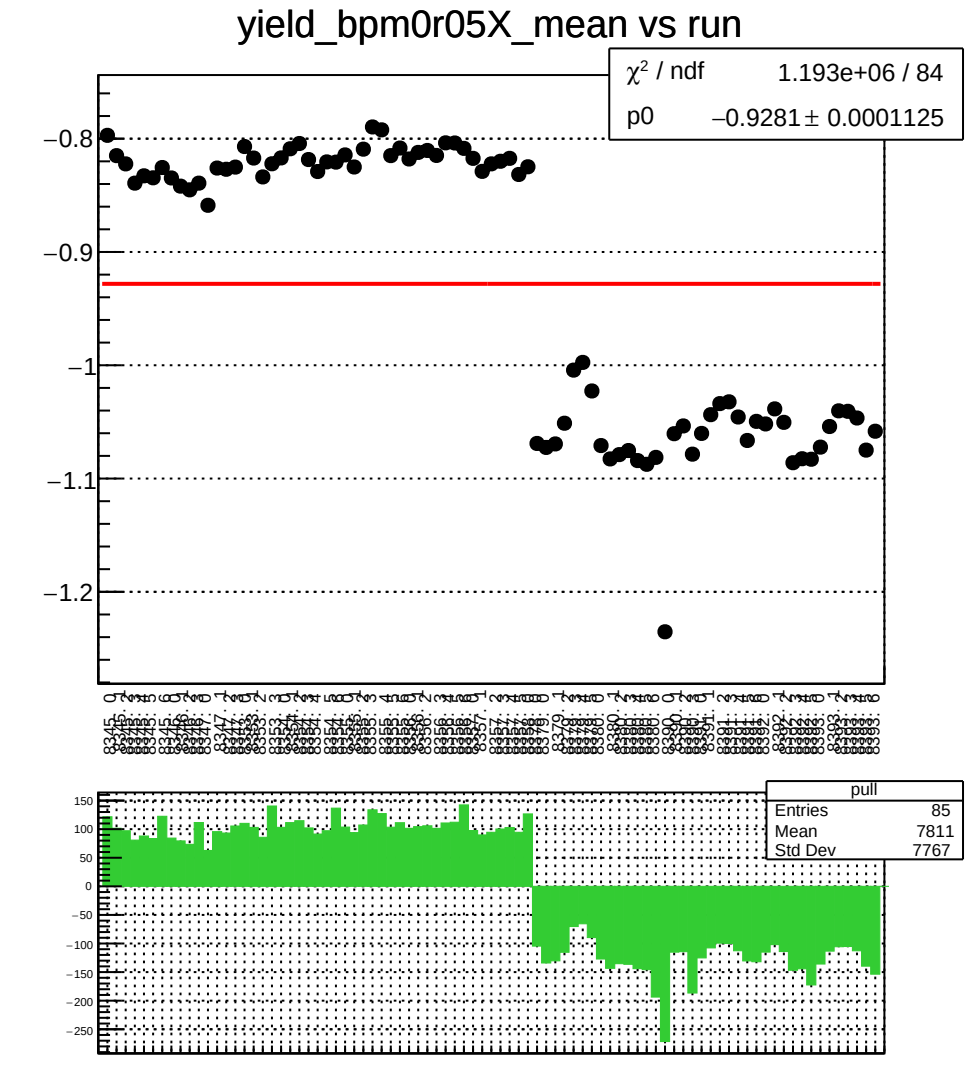

pull1D
Entries 85
Mean 0
Std Dev 0

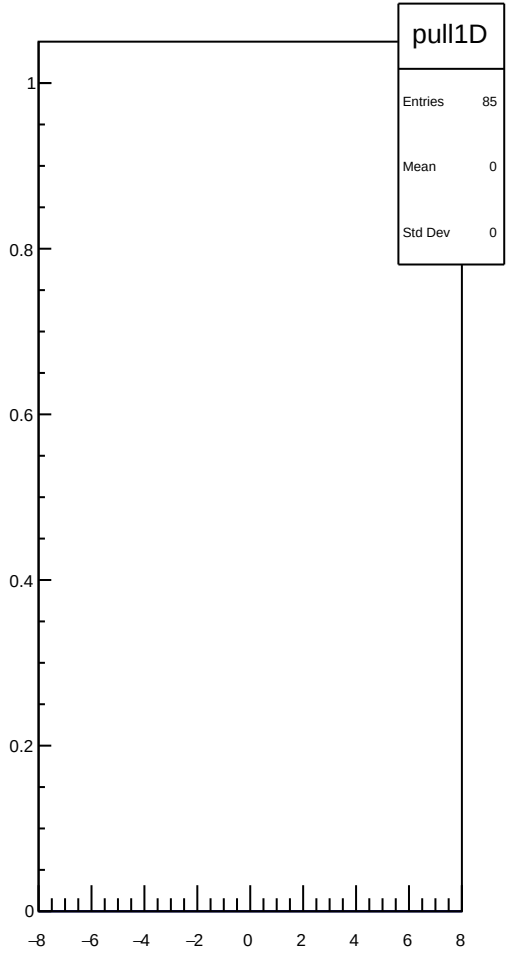

yield_bpm0r03X_rms vs run
χ² / ndf 3872 / 84
p0 0.0864 ± 6.689e−05
0.11
0.105
0.1
0.095
0.09
0.085
0.08

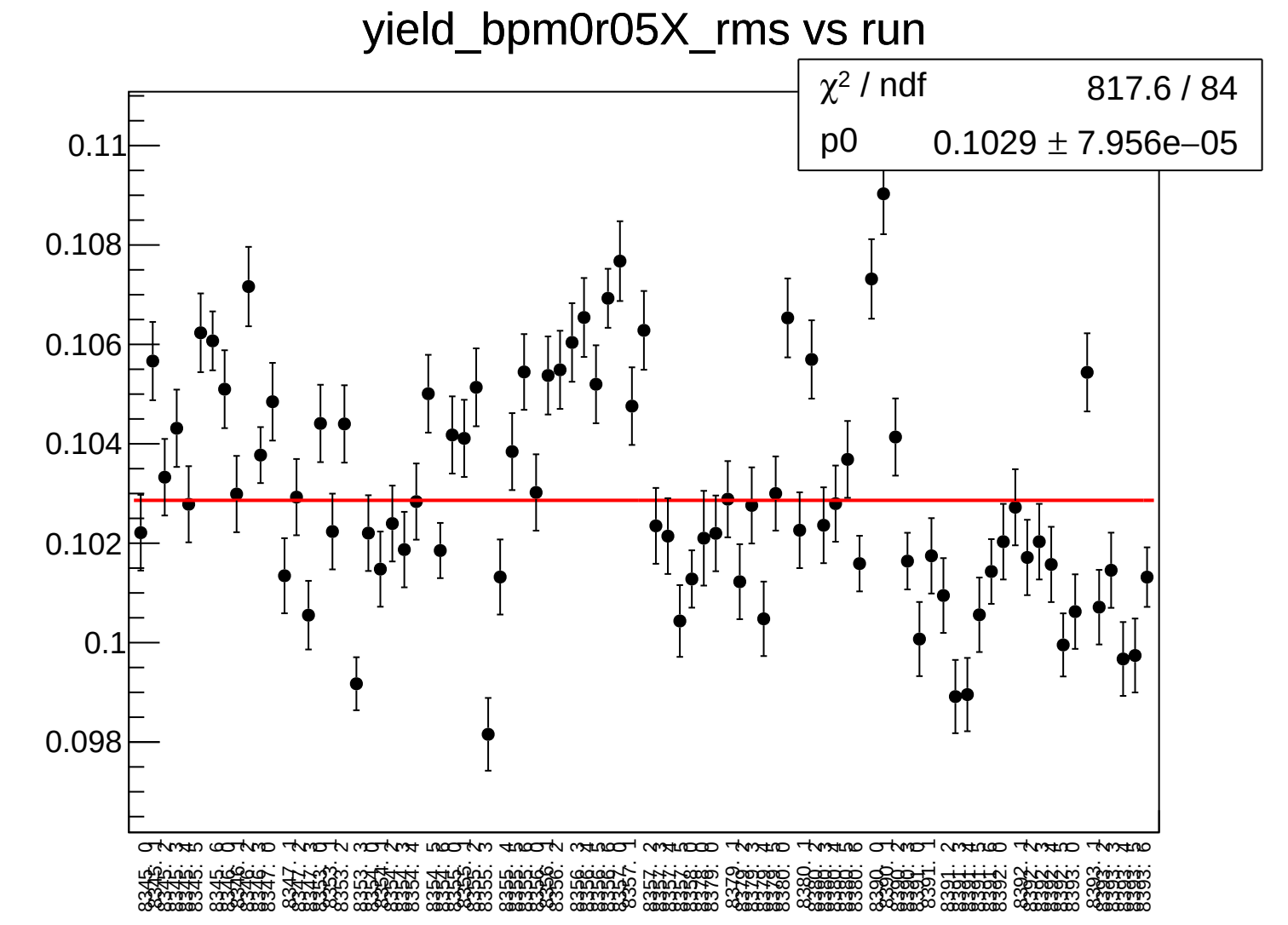

yield_bpm0r03Y_mean vs run
χ² / ndf 3.417e+08 / 84
p0 −0.7139 ± 7.746e−06
pull
Entries 85
Mean −314.3
Std Dev 360.3

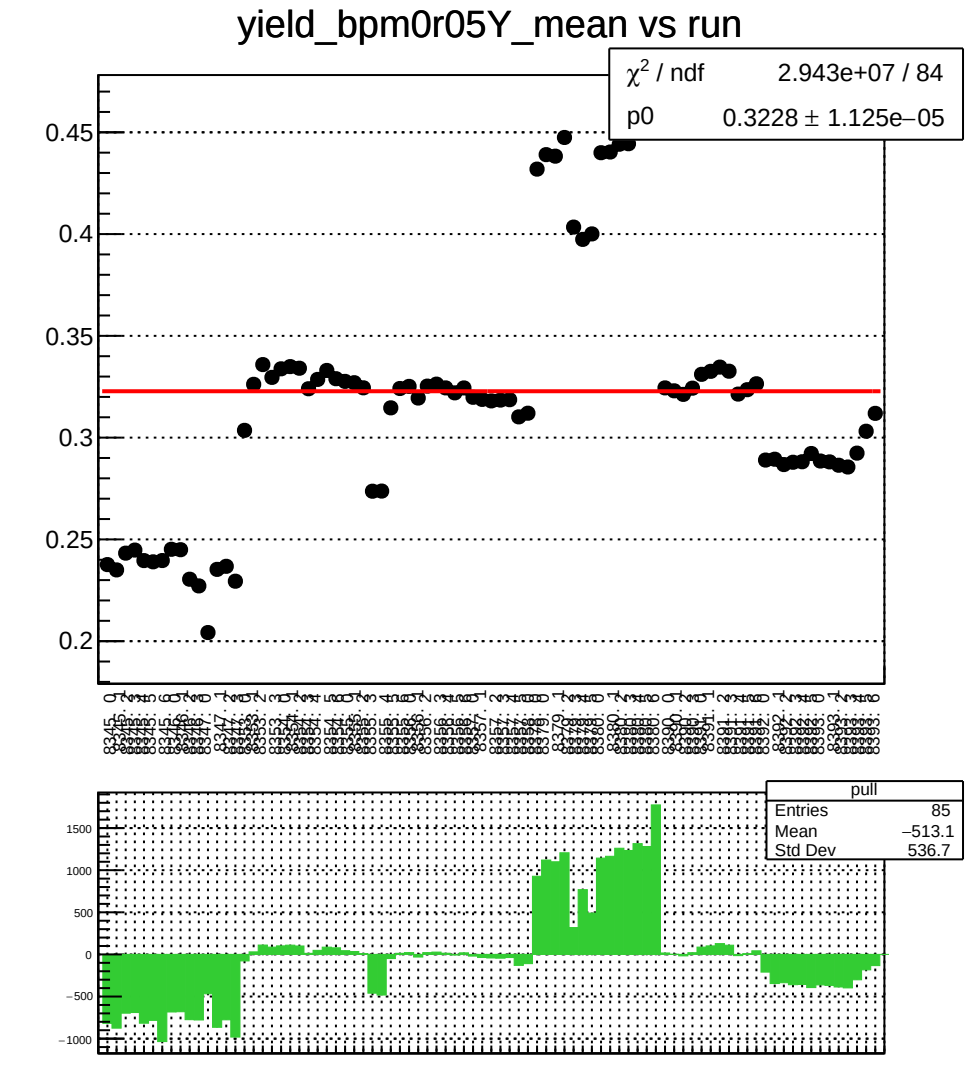

pull1D
Entries 85
Mean 0
Std Dev 0

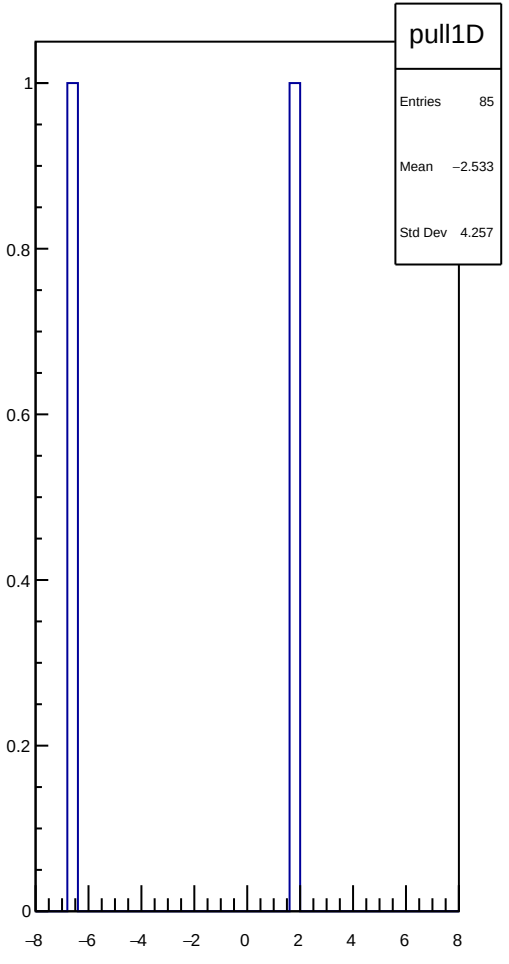

yield_bpm0r03Y_rms vs run
χ² / ndf 5.233e+04 / 84
p0 0.006971 ± 5.477e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

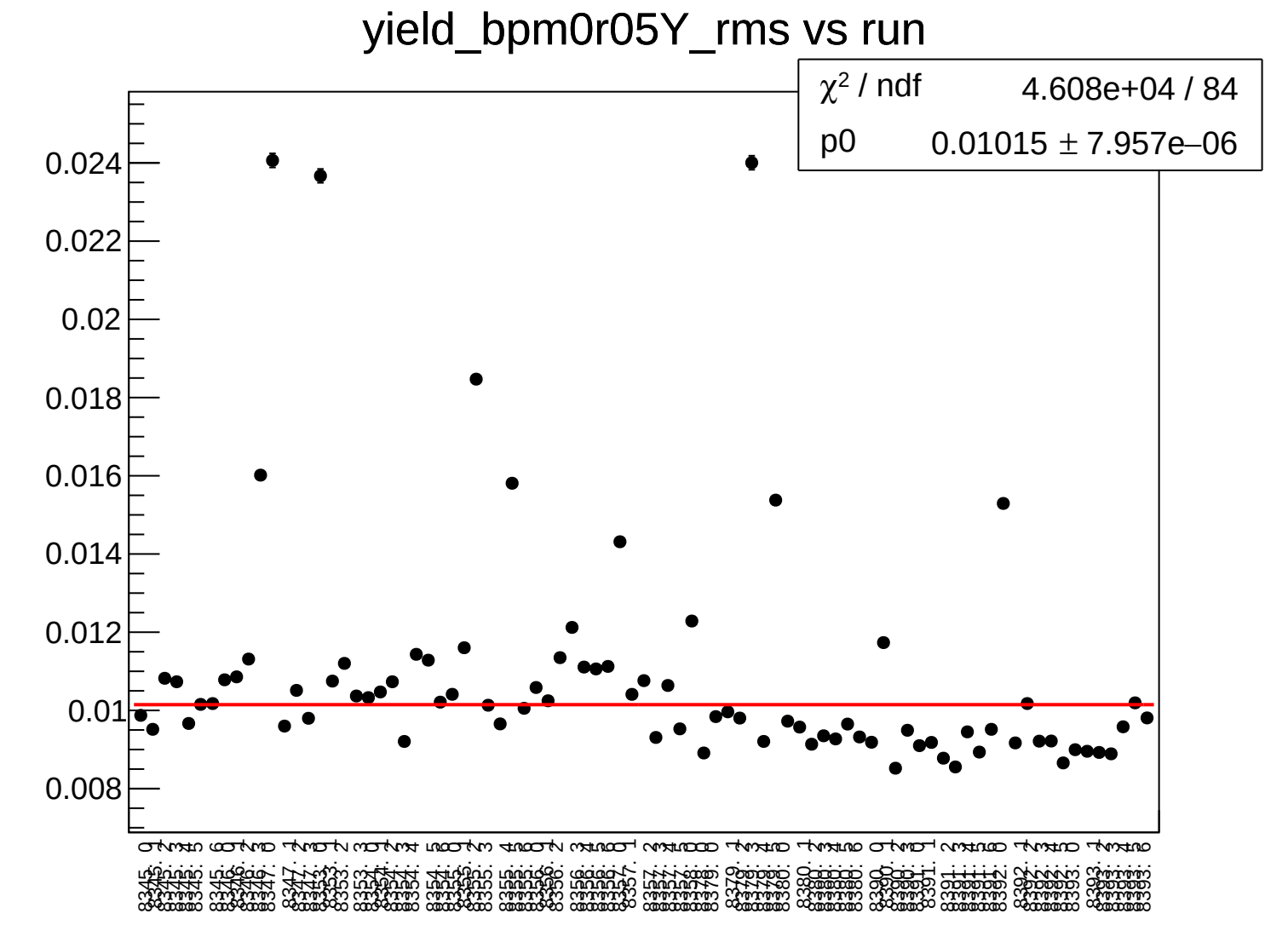

yield_bpm0r05X_mean vs run
χ² / ndf 1.193e+06 / 84
p0 −0.9281 ± 0.0001125
−0.8
−0.9
−1
−1.1
−1.2
pull
Entries 85
Mean 7811
Std Dev 7767
150
100
50
0
−50
−100
−150
−200
−250

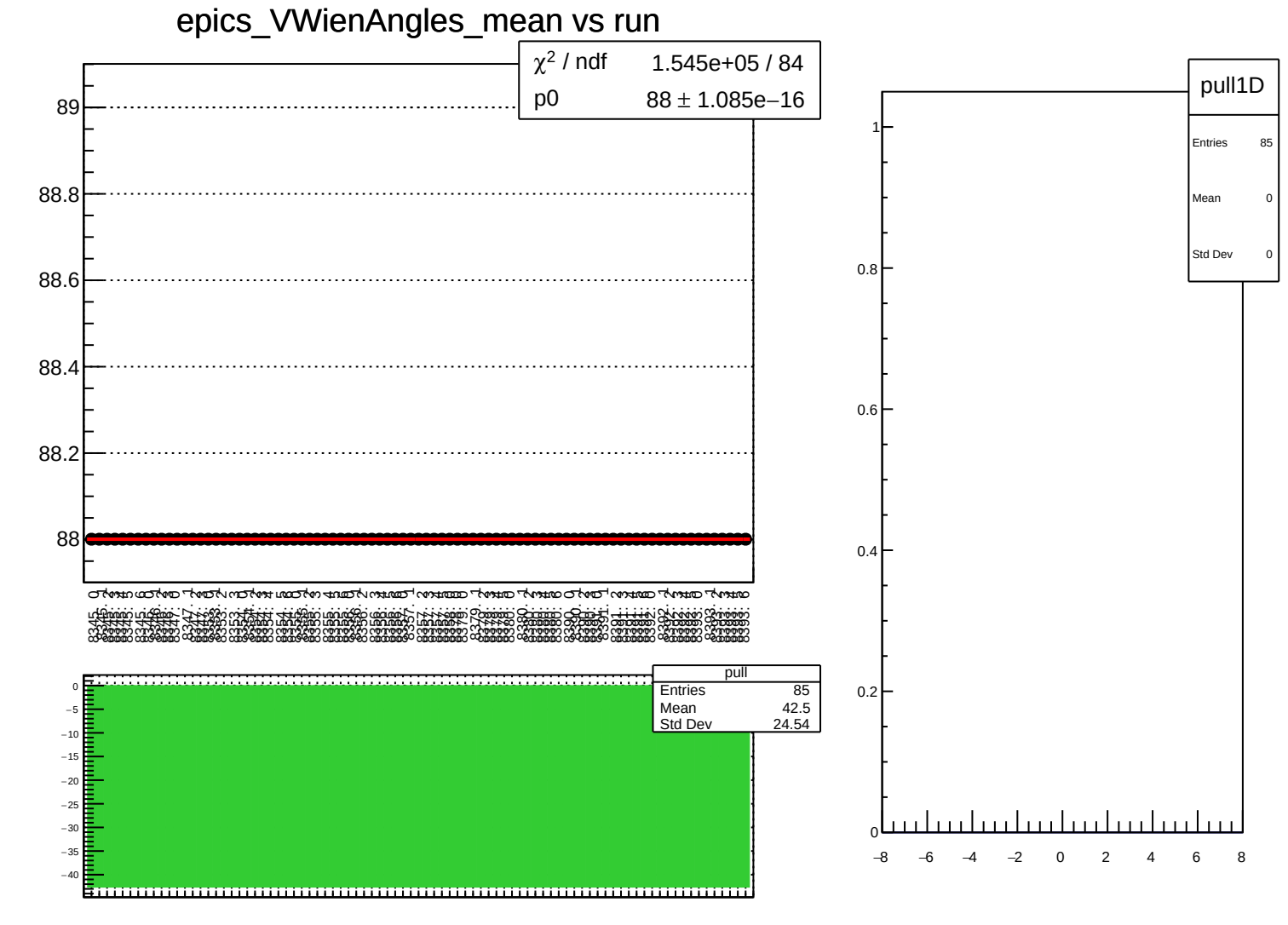

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

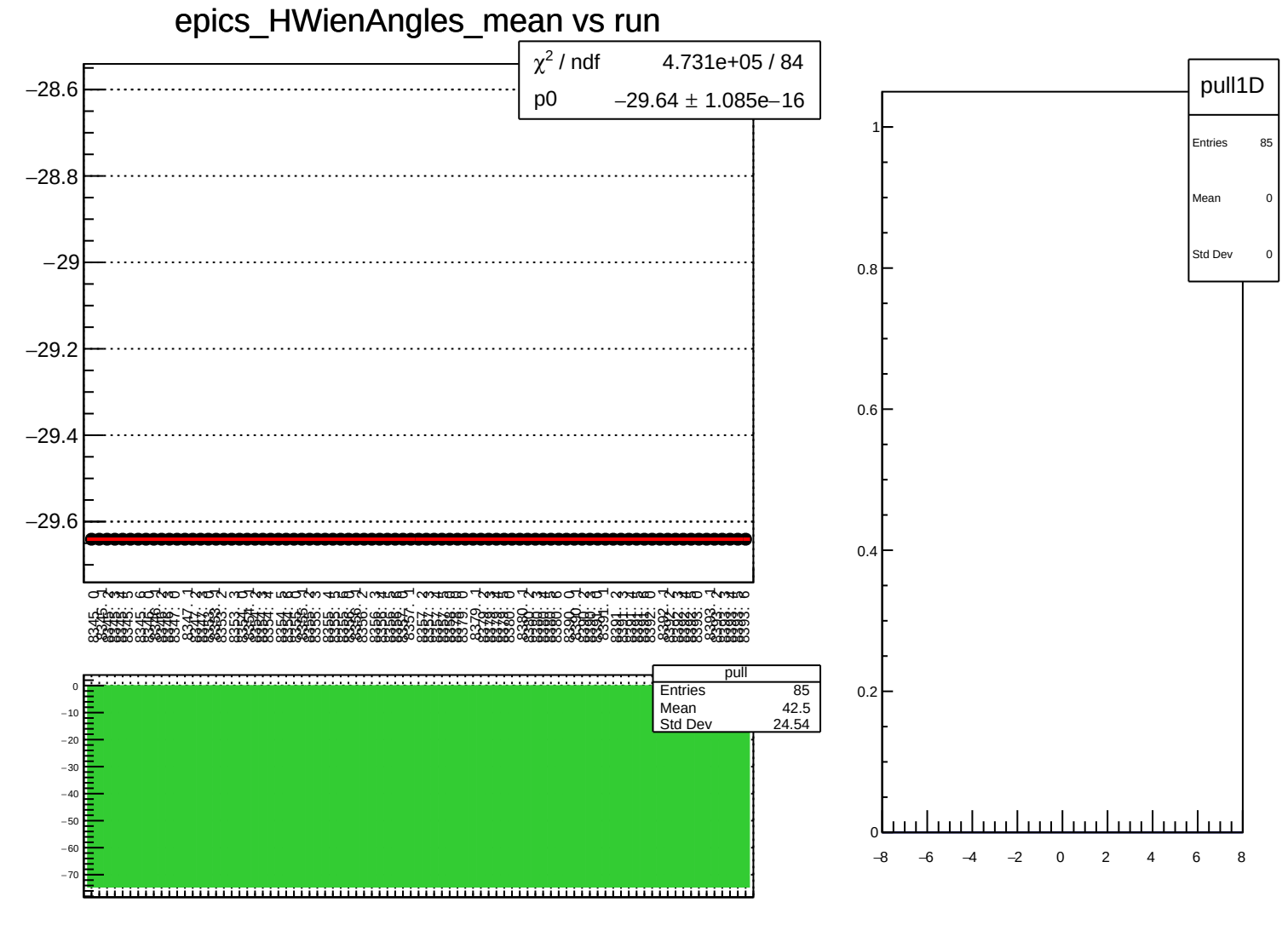

yield_bpm0r05X_rms vs run
χ² / ndf 817.6 / 84
p0 0.1029 ± 7.956e−05
0.11
0.108
0.106
0.104
0.102
0.1
0.098

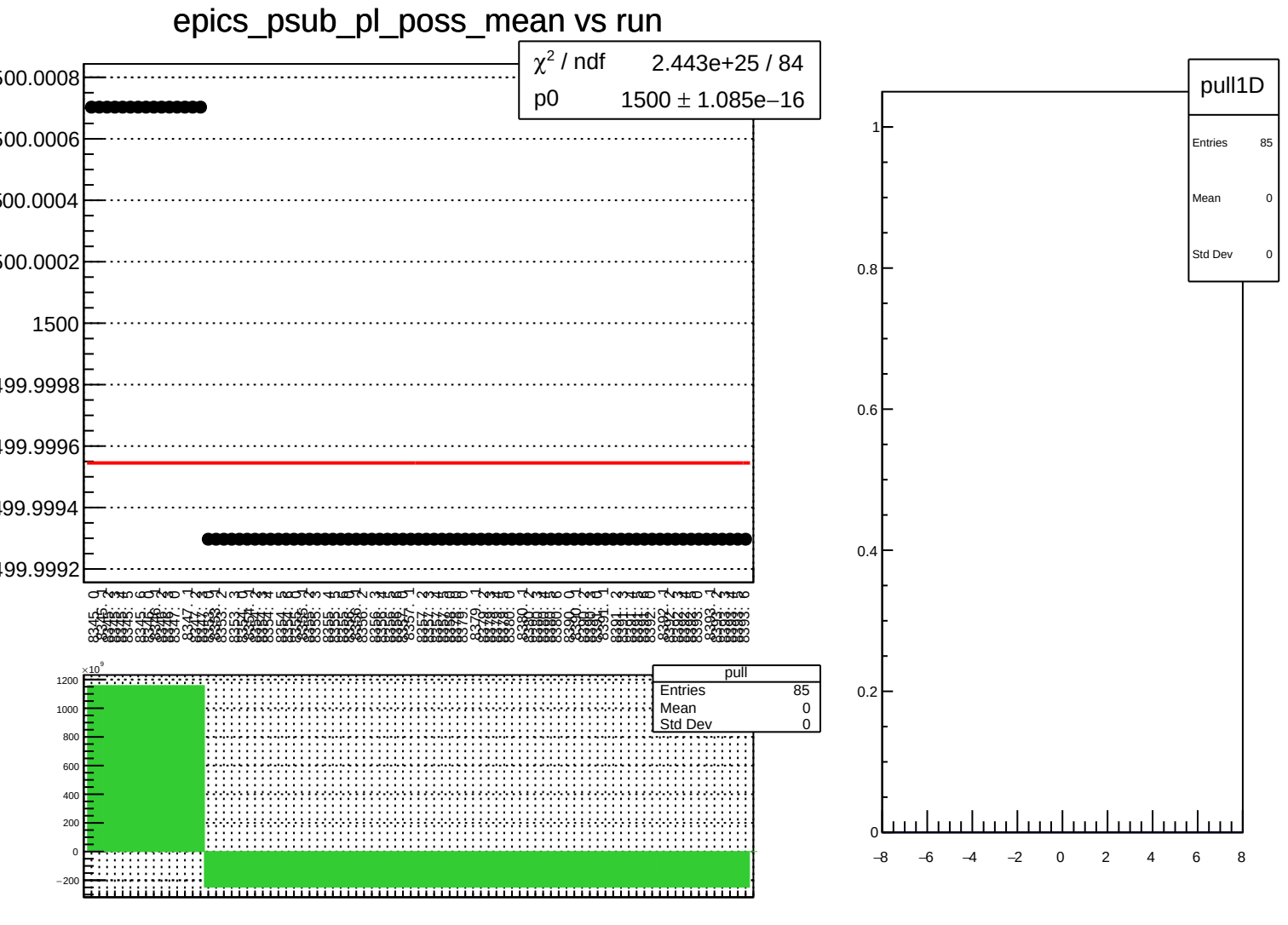

yield_bpm0r05Y_mean vs run
χ² / ndf 2.943e+07 / 84
p0 0.3228 ± 1.125e−05
0.45
0.4
0.35
0.3
0.25
0.2
pull
Entries 85
Mean −513.1
Std Dev 536.7
1500
1000
500
0
−500
−1000

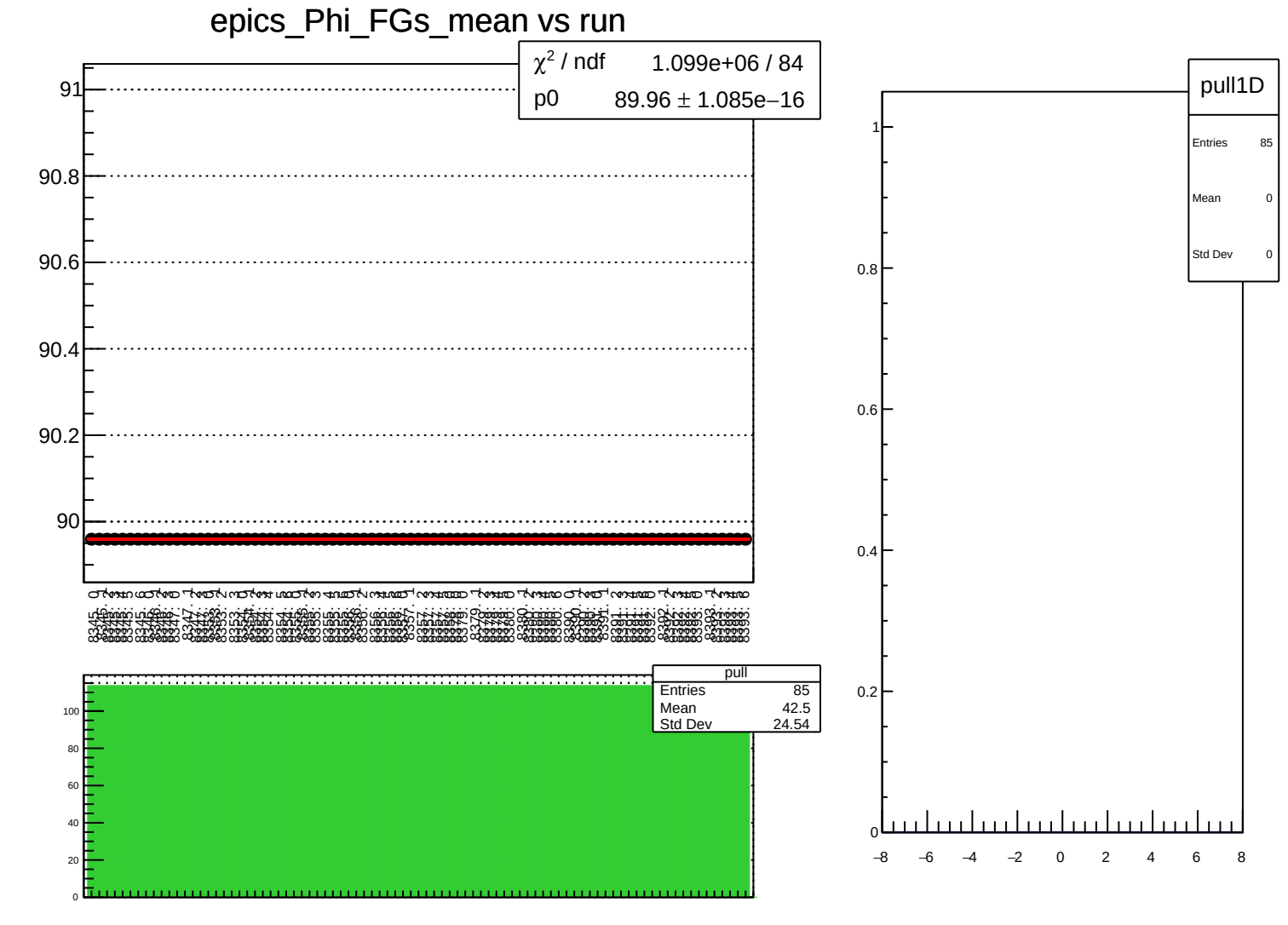

pull1D
Entries 85
Mean −2.533
Std Dev 4.257
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

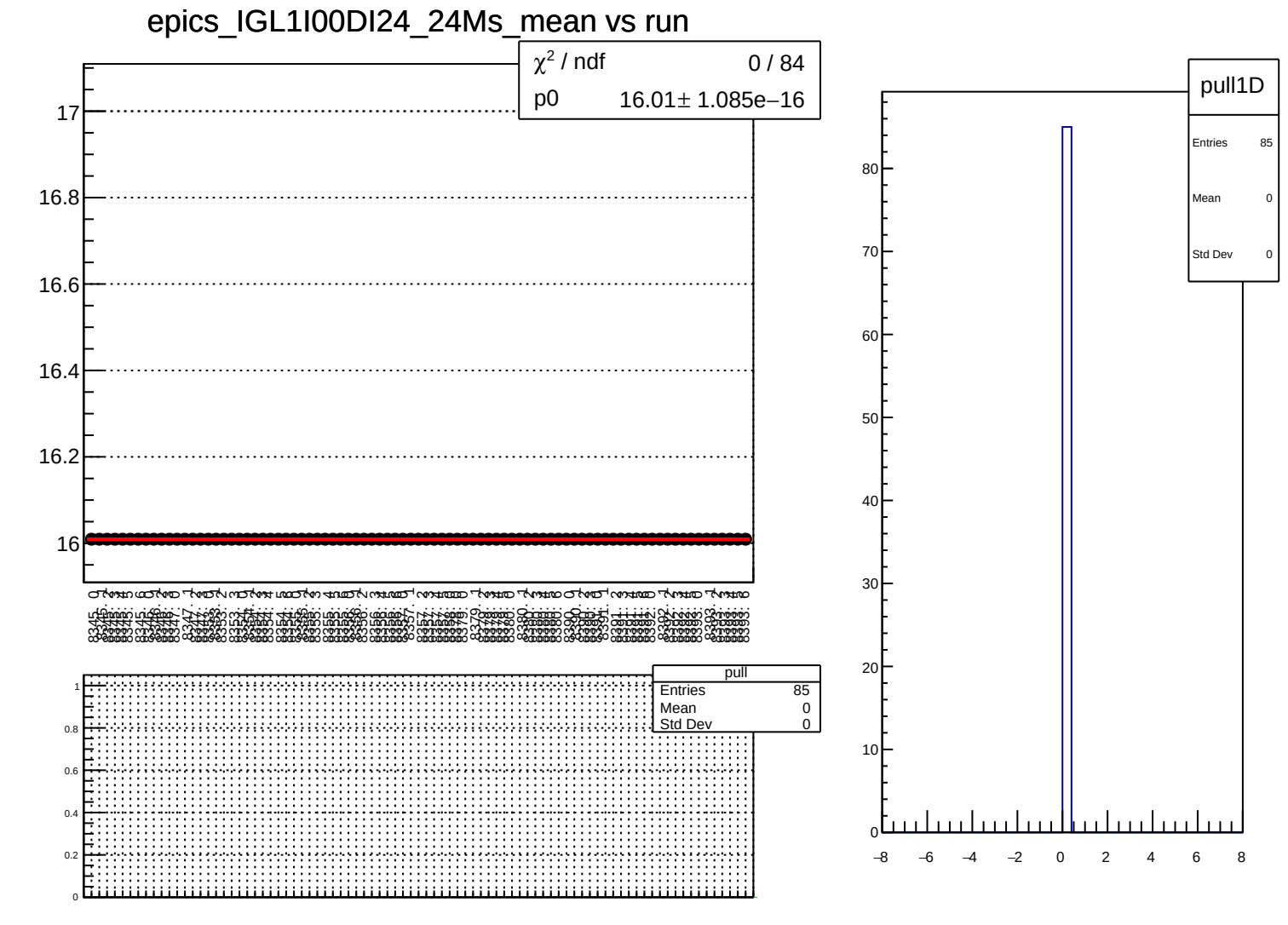

yield_bpm0r05Y_rms vs run
χ² / ndf 4.608e+04 / 84
p0 0.01015 ± 7.957e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

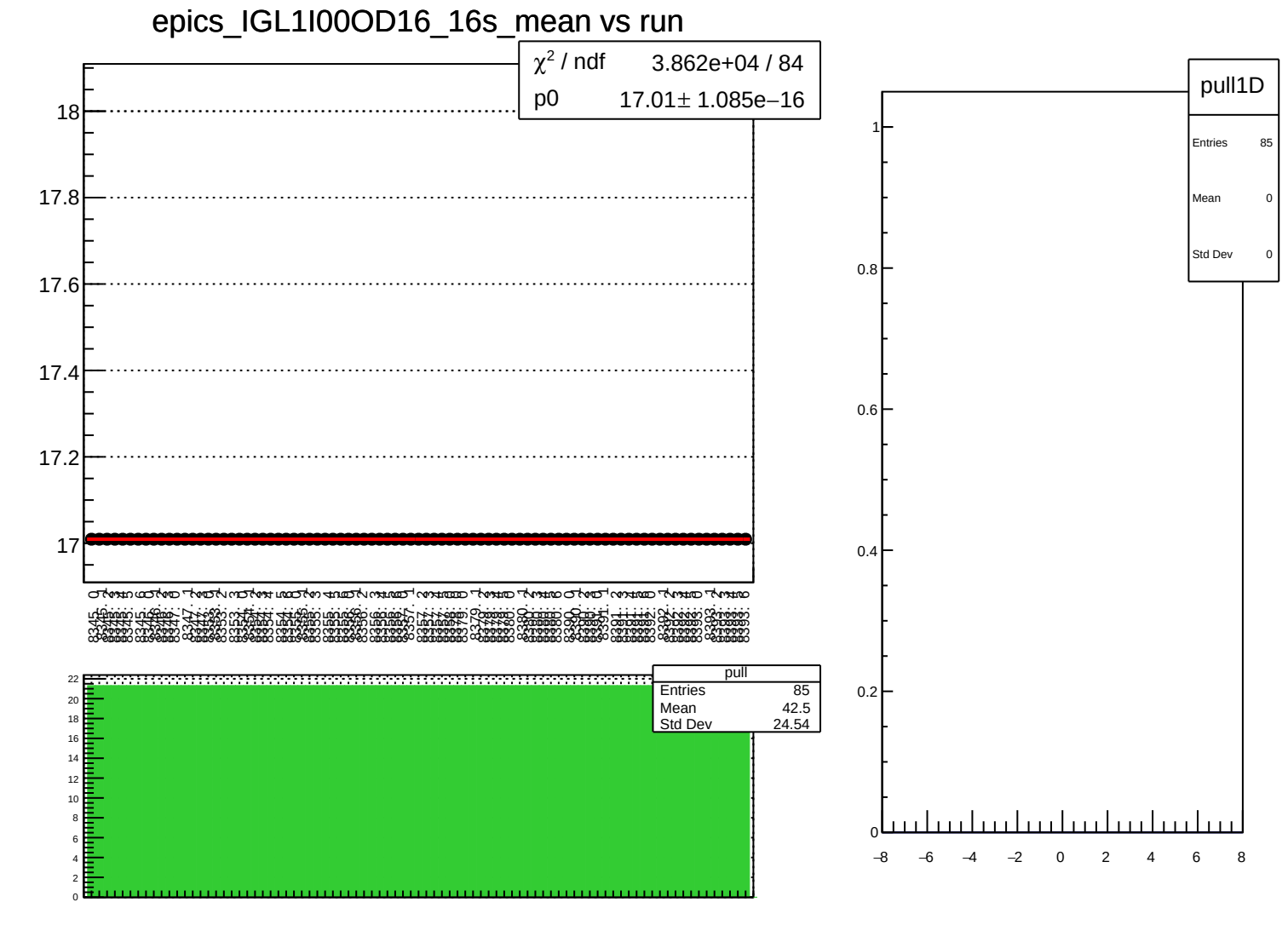

epics_VWienAngles_mean vs run
χ² / ndf 1.545e+05 / 84
p0 88 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−5
−10
−15
−20
−25
−30
−35
−40
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

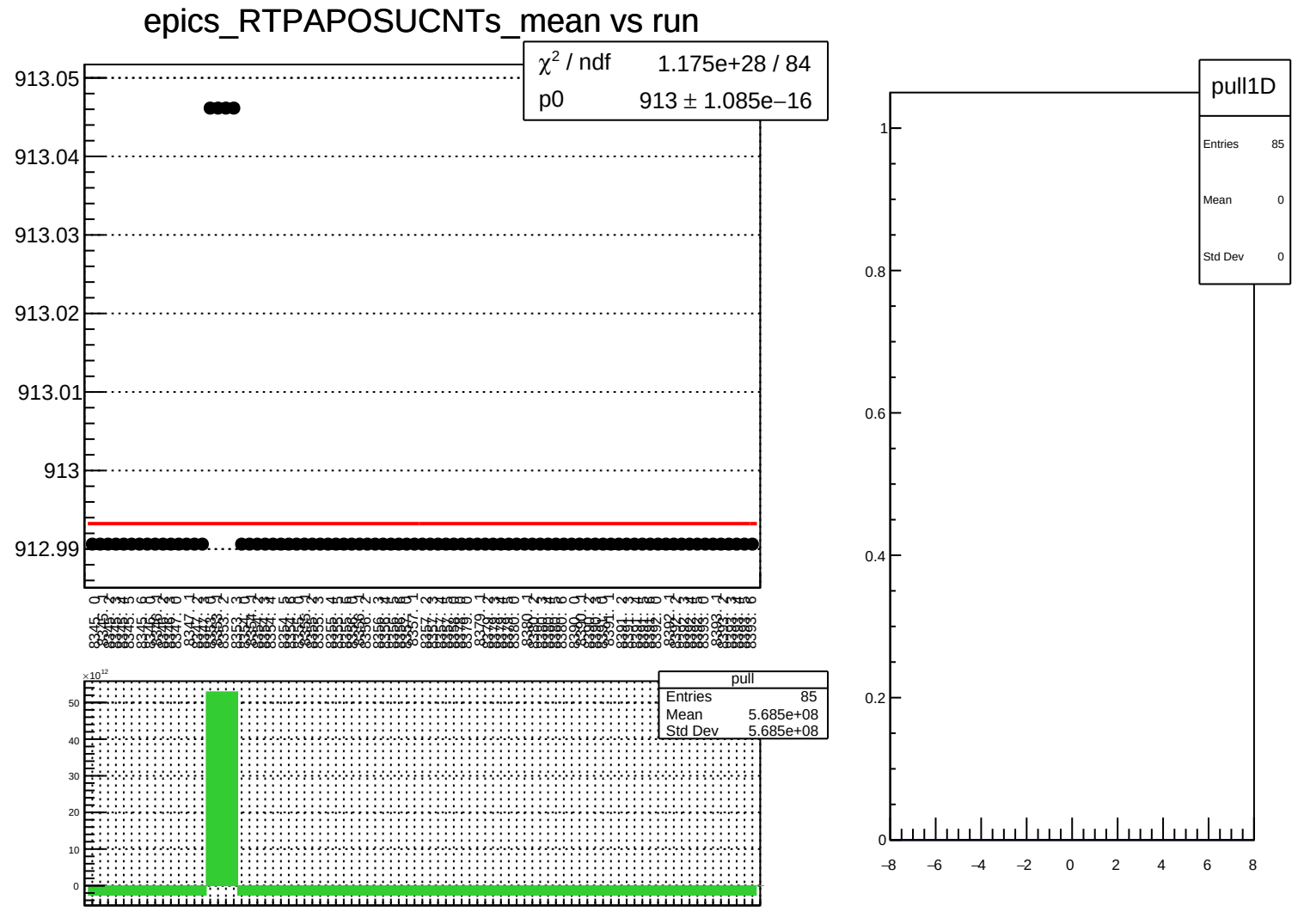

epics_HWienAngles_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

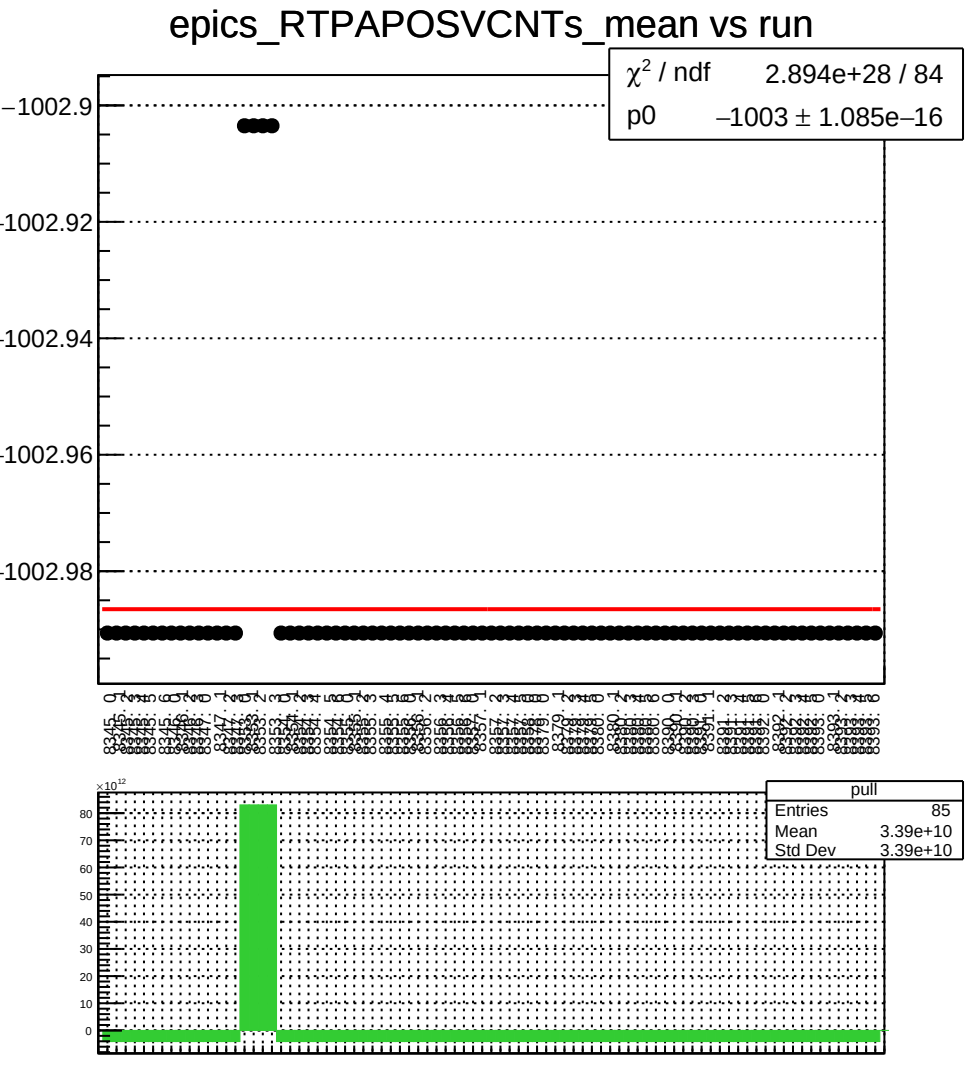

epics_psub_pl_poss_mean vs run
χ² / ndf 2.443e+25 / 84
p0 1500 ± 1.085e−16
1500.0008
1500.0006
1500.0004
1500.0002
1500
1499.9998
1499.9996
1499.9994
1499.9992
×10⁹
1200
1000
800
600
400
200
0
−200
pull
Entries 85
Mean 0
Std Dev 0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

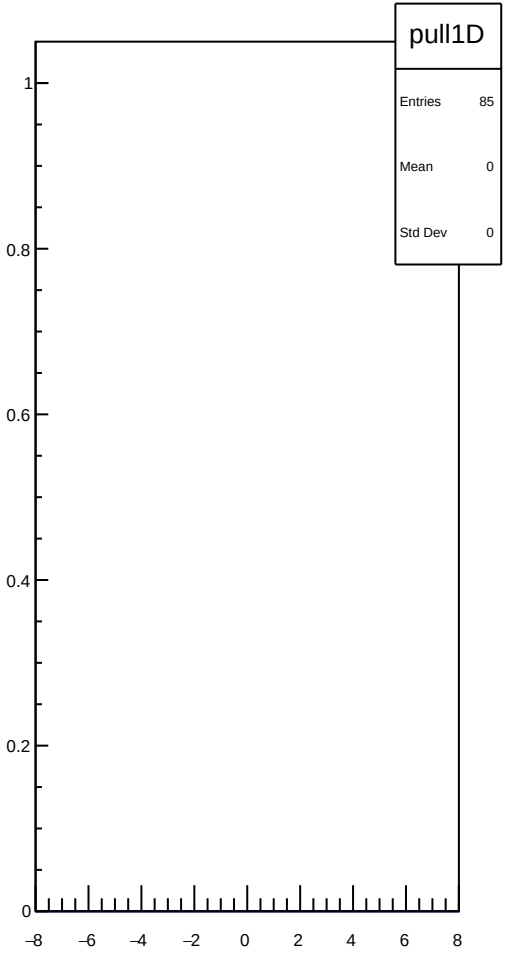

epics_Phi_FGs_mean vs run
χ² / ndf 1.099e+06 / 84
p0 89.96 ± 1.085e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 85
Mean 42.5
Std Dev 24.54
100
80
60
40
20
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

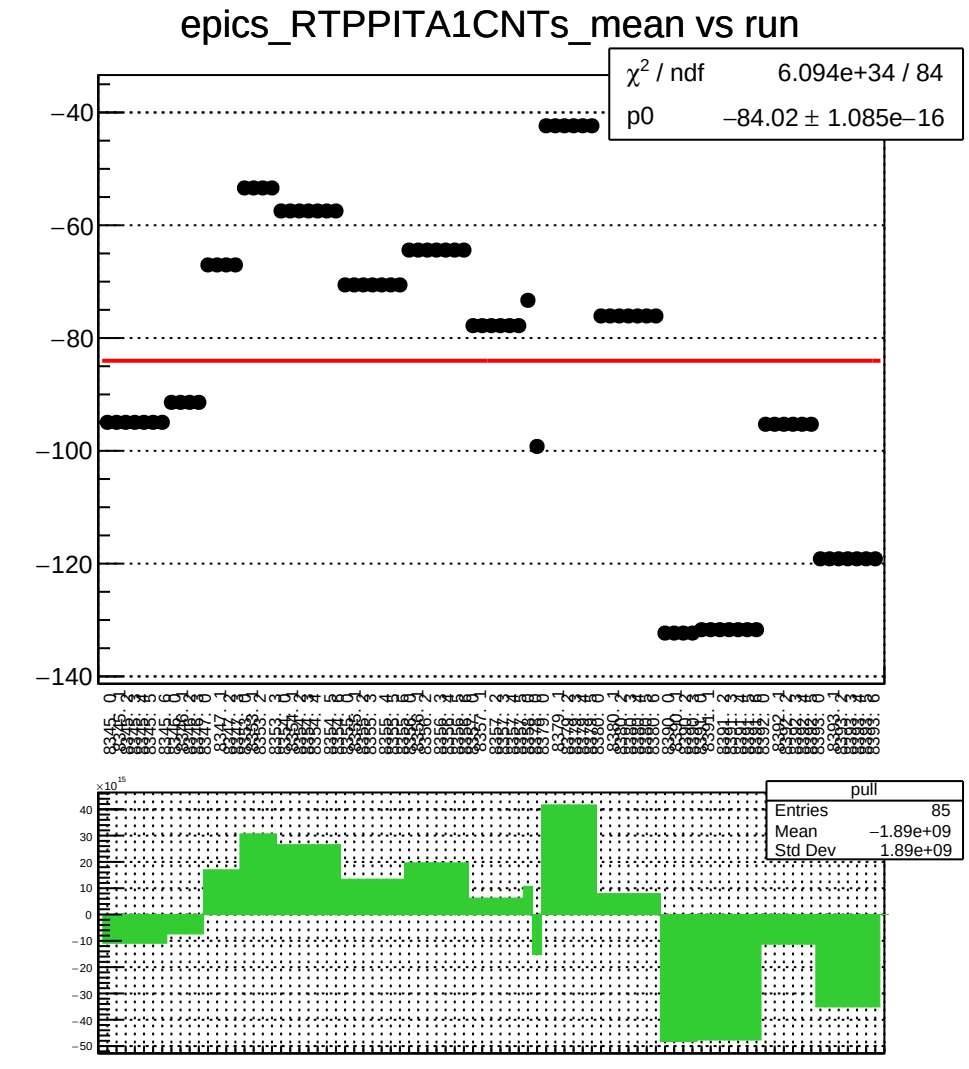

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 0 / 84
p0 16.01± 1.085e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 85
Mean 0
Std Dev 0
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

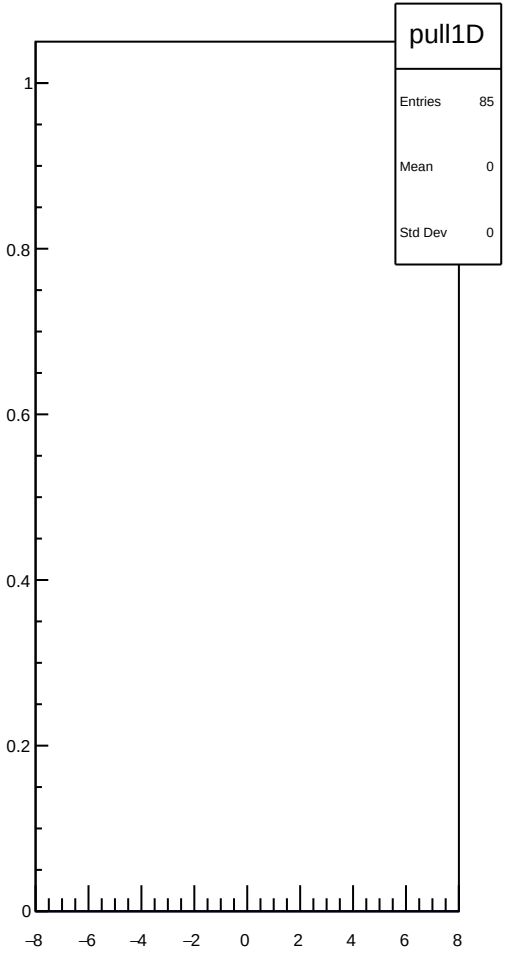

epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 3.862e+04 / 84
p0 17.01± 1.085e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 85
Mean 42.5
Std Dev 24.54
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

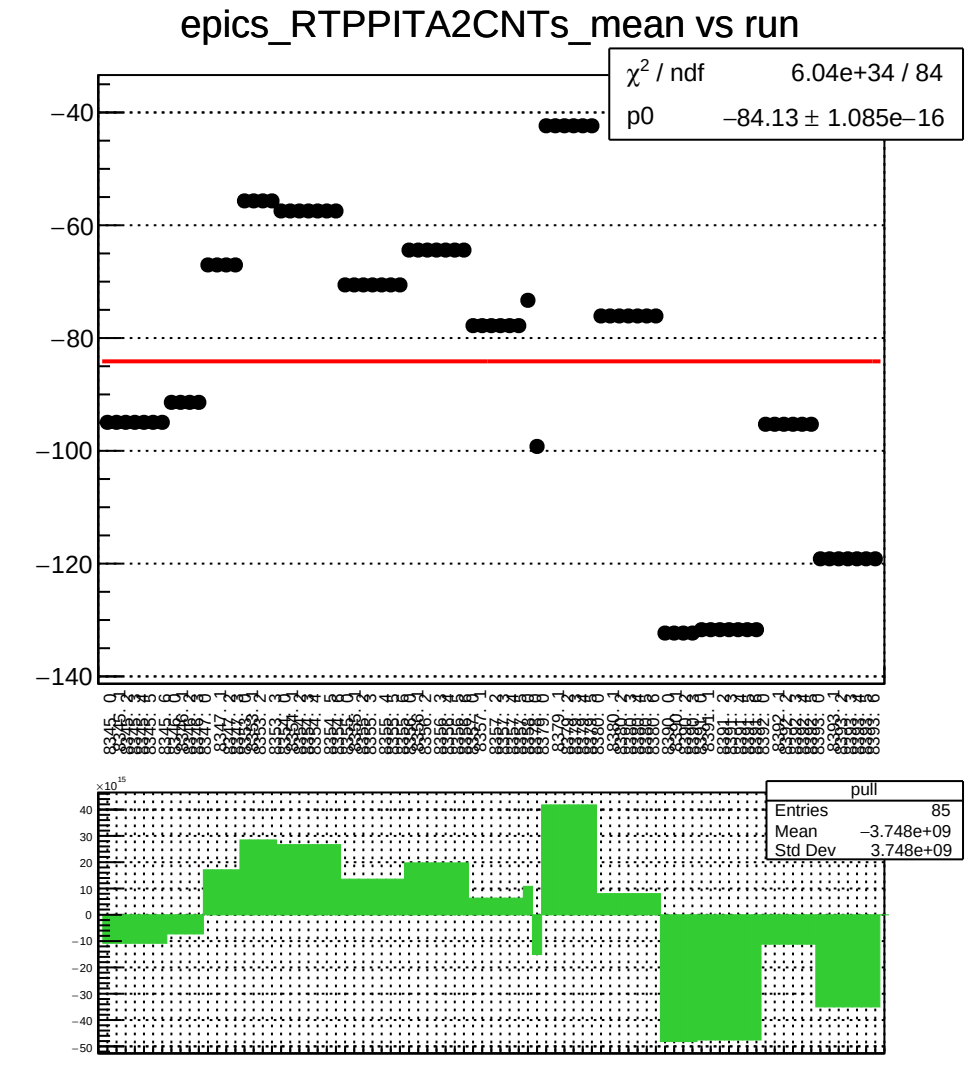

epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 1.175e+28 / 84
p0 913 ± 1.085e−16
913.05
913.04
913.03
913.02
913.01
913
912.99
pull
Entries 85
Mean 5.685e+08
Std Dev 5.685e+08
×10¹²
50
40
30
20
10
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

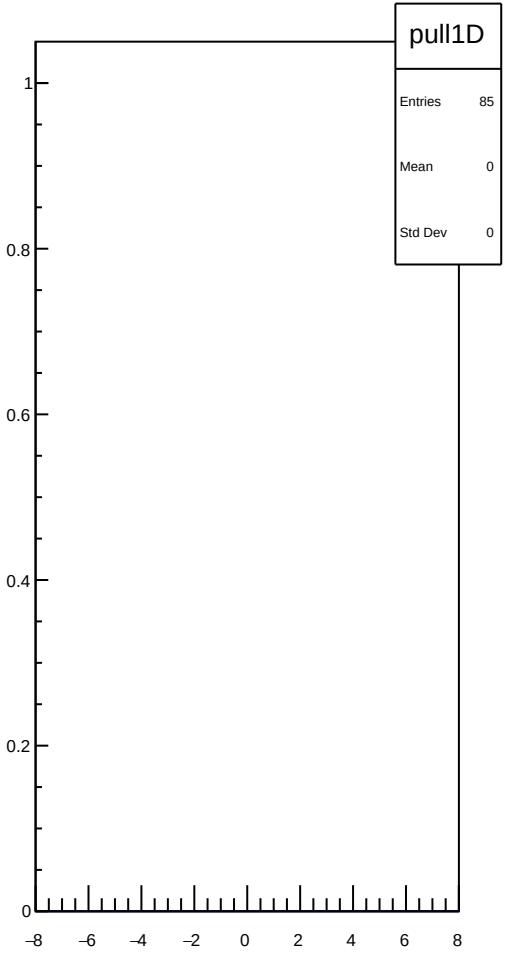

epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 2.894e+28 / 84
p0 −1003 ± 1.085e−16
−1002.9
−1002.92
−1002.94
−1002.96
−1002.98
pull
Entries 85
Mean 3.39e+10
Std Dev 3.39e+10
×10¹²
80
70
60
50
40
30
20
10
0


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_RTPPITA1CNTs_mean vs run
χ² / ndf 6.094e+34 / 84
p0 −84.02 ± 1.085e−16
−40
−60
−80
−100
−120
−140
pull
Entries 85
Mean −1.89e+09
Std Dev 1.89e+09
×10¹⁵
40
30
20
10
0
−10
−20
−30
−40
−50


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_RTPPITA2CNTs_mean vs run
χ² / ndf 6.04e+34 / 84
p0 −84.13 ± 1.085e−16
−40
−60
−80
−100
−120
−140
pull
Entries 85
Mean −3.748e+09
Std Dev 3.748e+09
×10¹⁵
40
30
20
10
0
−10
−20
−30
−40
−50


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