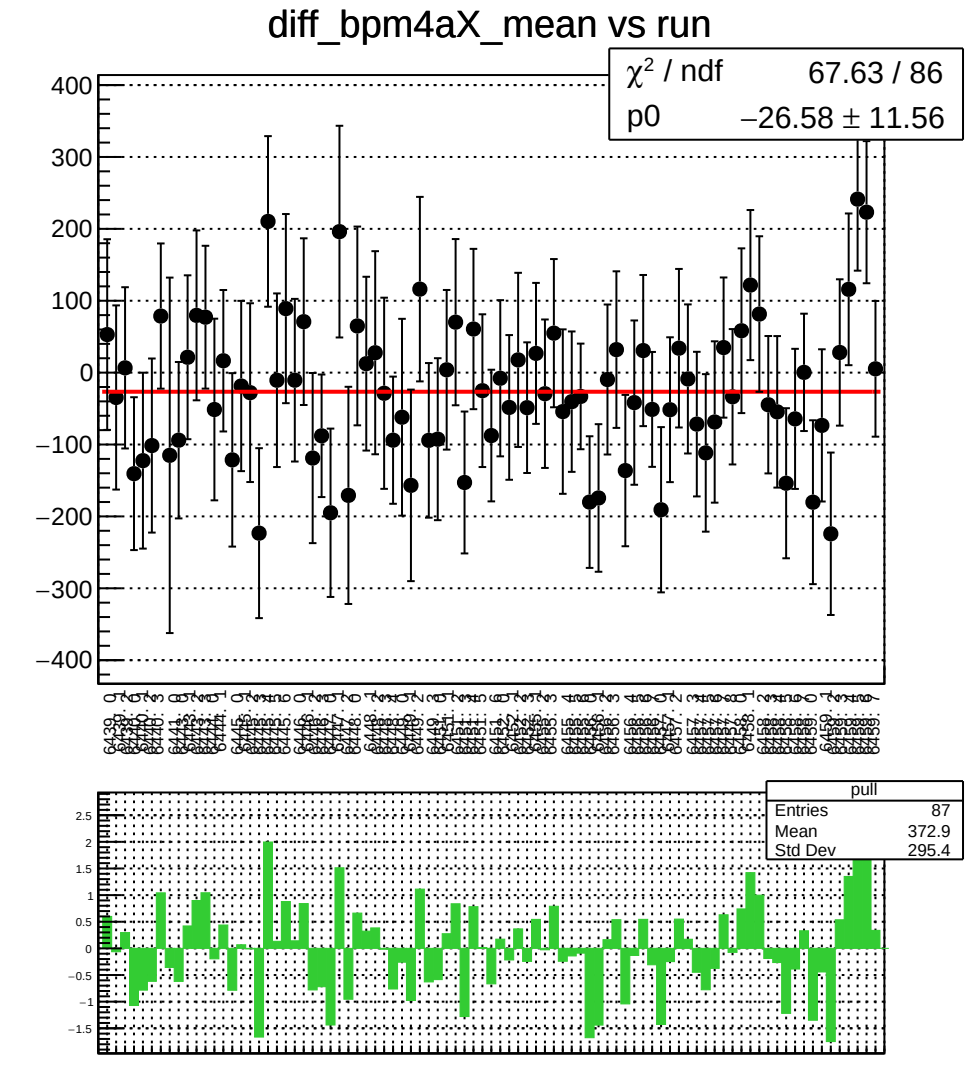
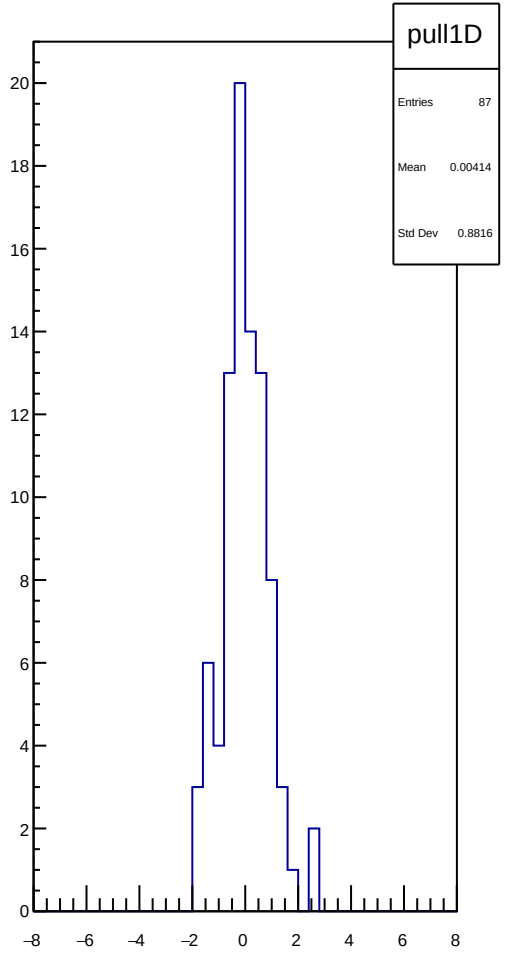
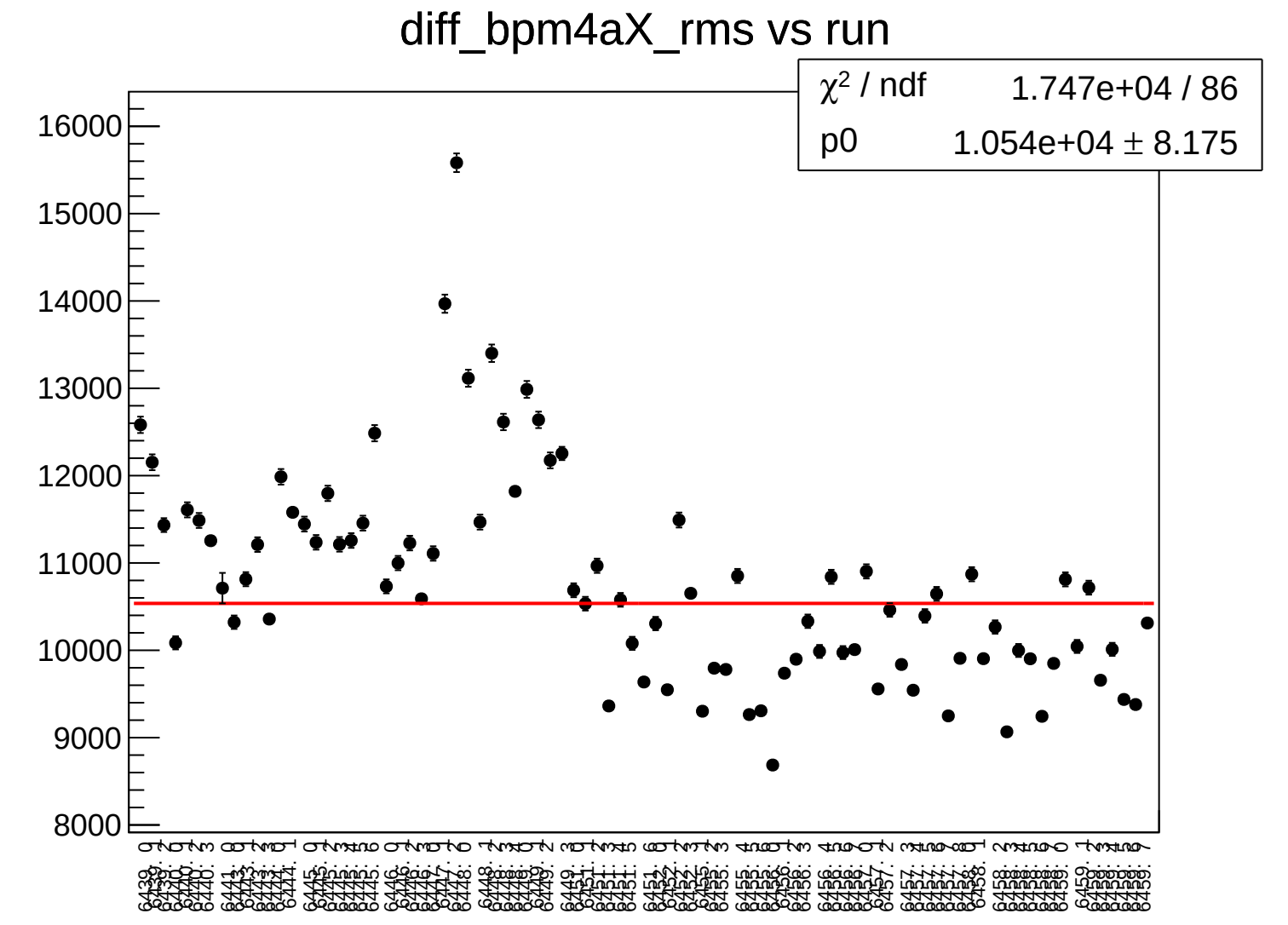
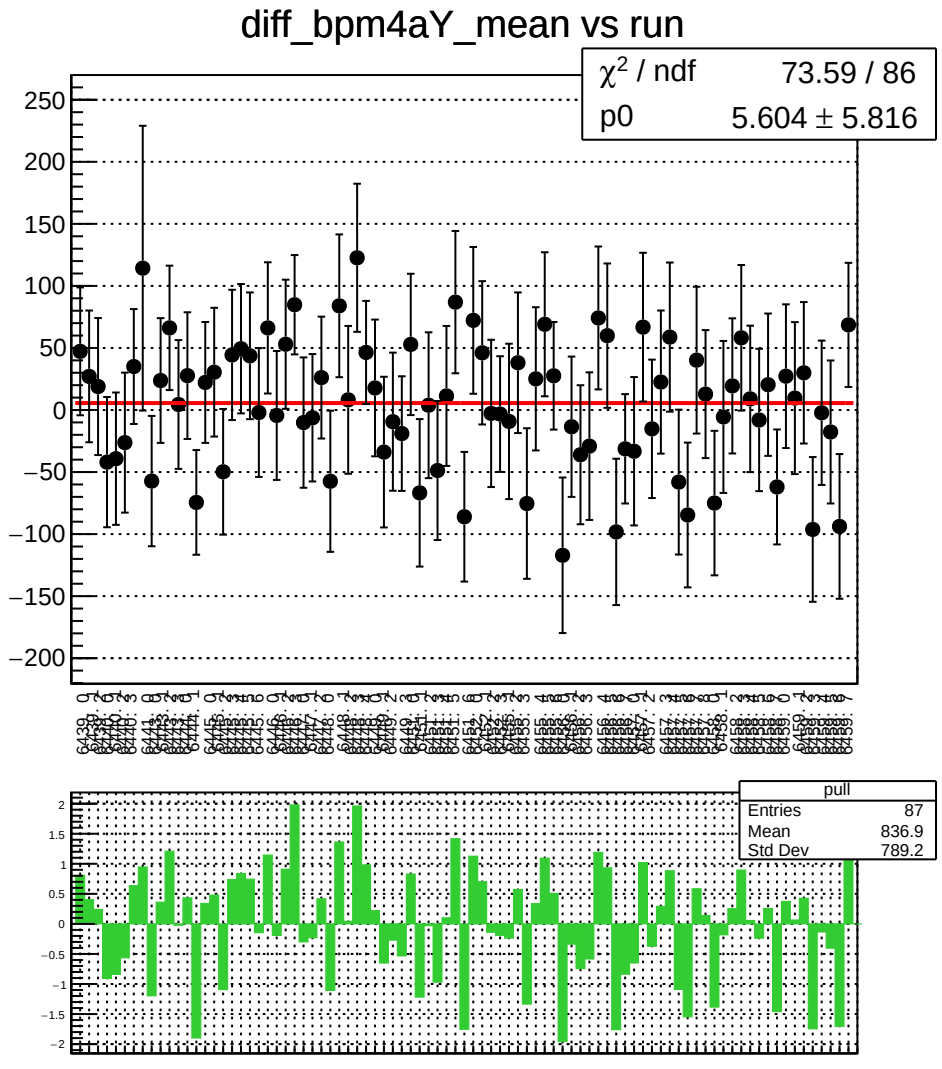
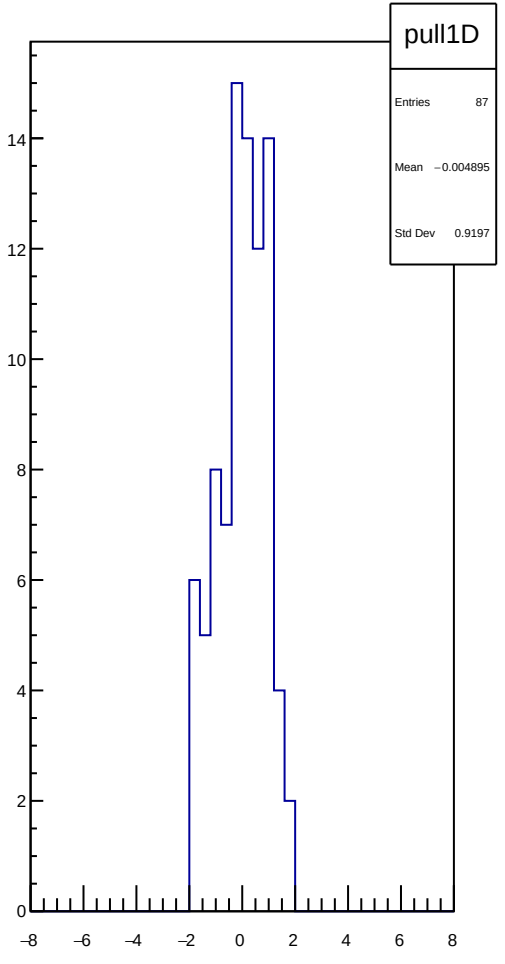
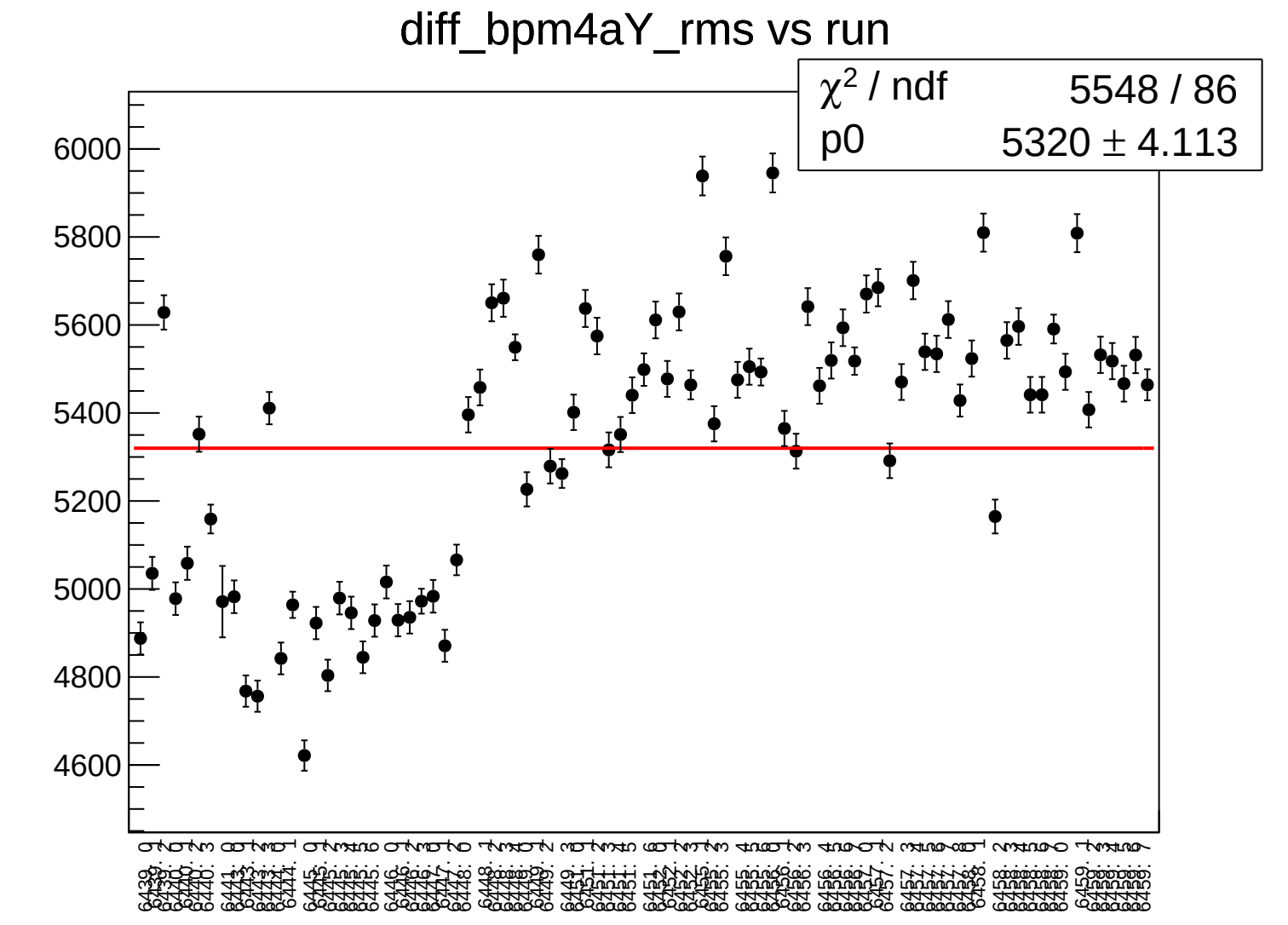

diff_bpm4aX_mean vs run
χ² / ndf 67.63 / 86
p0 −26.58 ± 11.56
pull
Entries 87
Mean 372.9
Std Dev 295.4

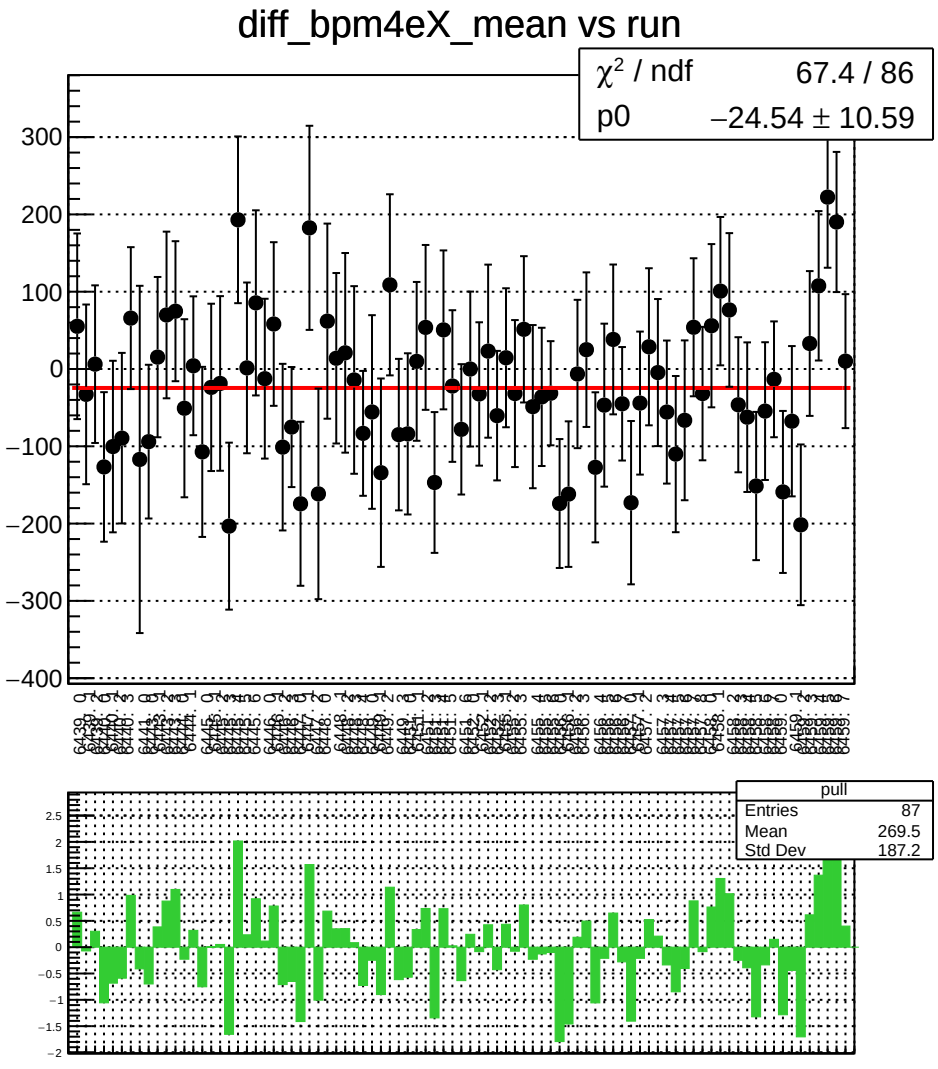

pull1D
Entries 87
Mean 0.00414
Std Dev 0.8816

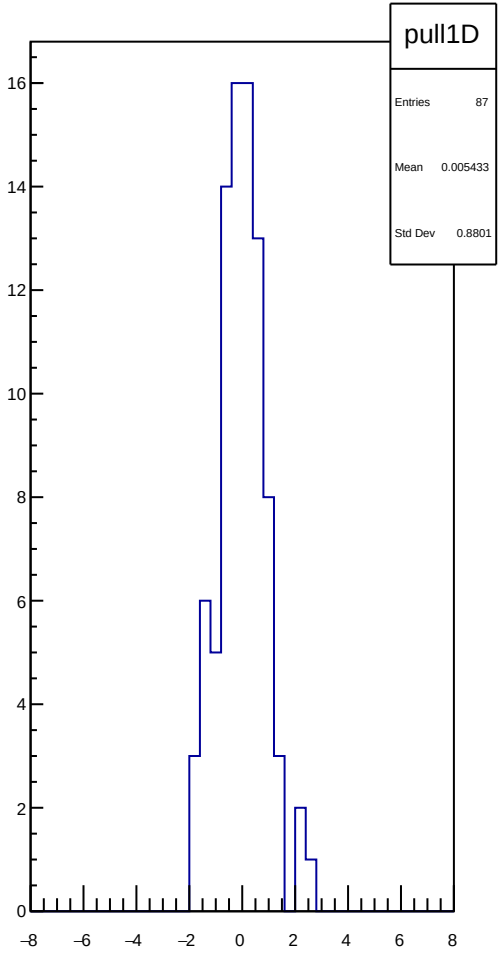

diff_bpm4aX_rms vs run
χ² / ndf 1.747e+04 / 86
p0 1.054e+04 ± 8.175
16000
15000
14000
13000
12000
11000
10000
9000
8000

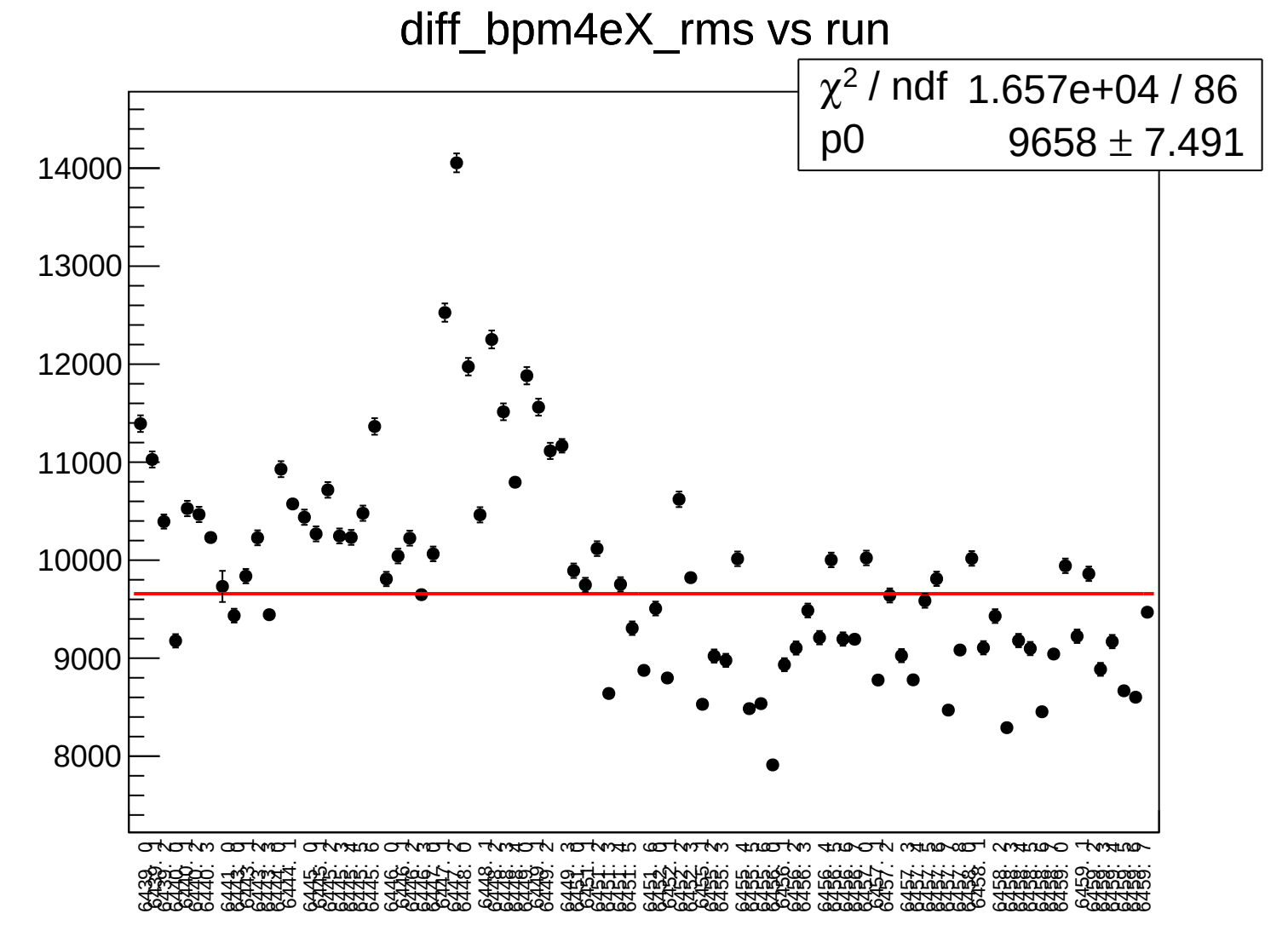

diff_bpm4aY_mean vs run
χ² / ndf 73.59 / 86
p0 5.604 ± 5.816
pull
Entries 87
Mean 836.9
Std Dev 789.2

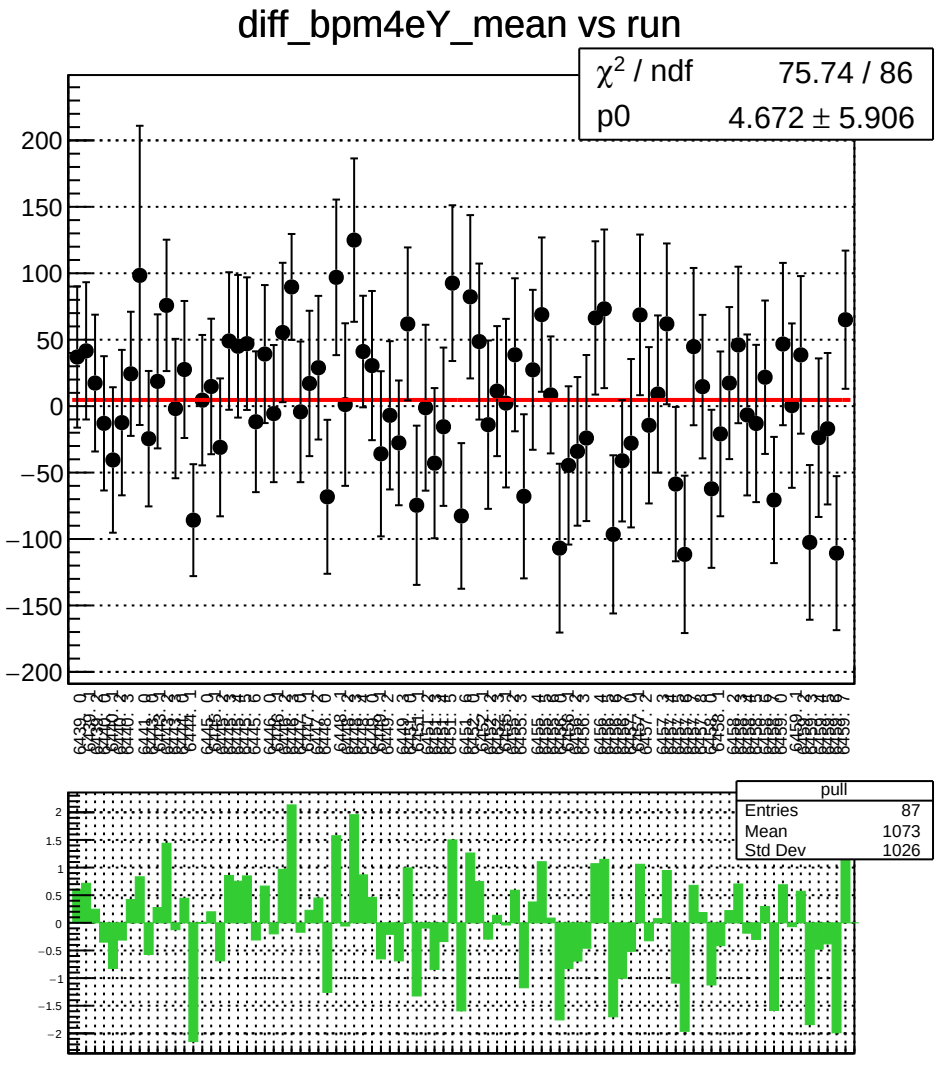

pull1D
Entries 87
Mean −0.004895
Std Dev 0.9197

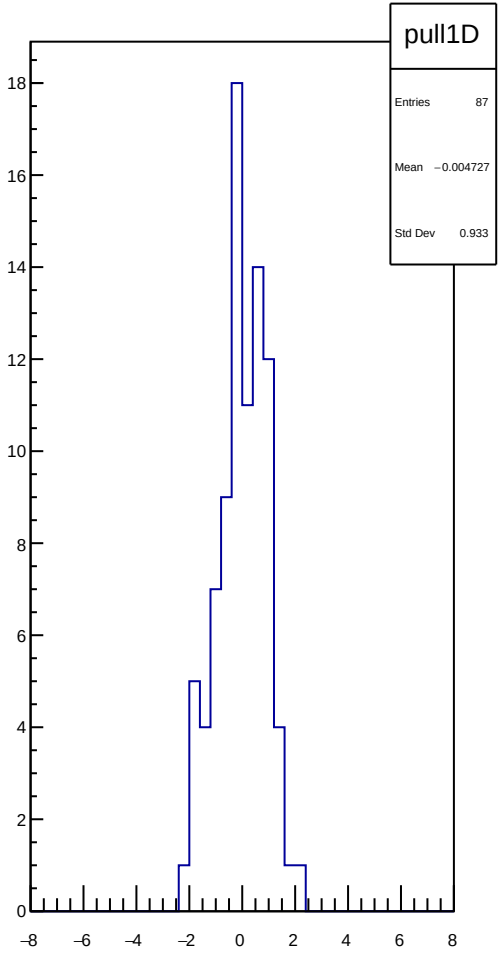

diff_bpm4aY_rms vs run
χ² / ndf 5548 / 86
p0 5320 ± 4.113
6000
5800
5600
5400
5200
5000
4800
4600

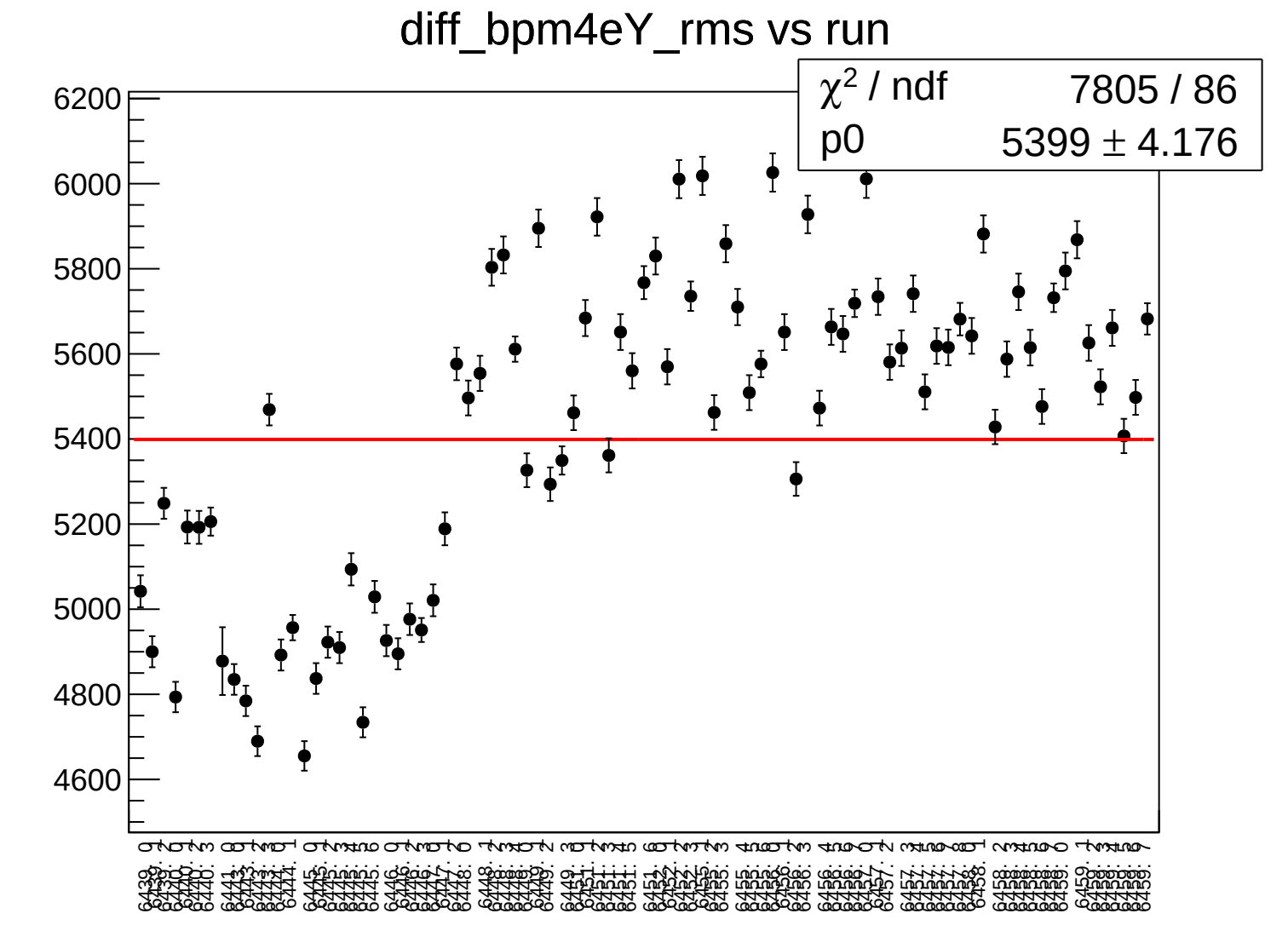

diff_bpm4eX_mean vs run
χ² / ndf 67.4 / 86
p0 −24.54 ± 10.59
pull
Entries 87
Mean 269.5
Std Dev 187.2

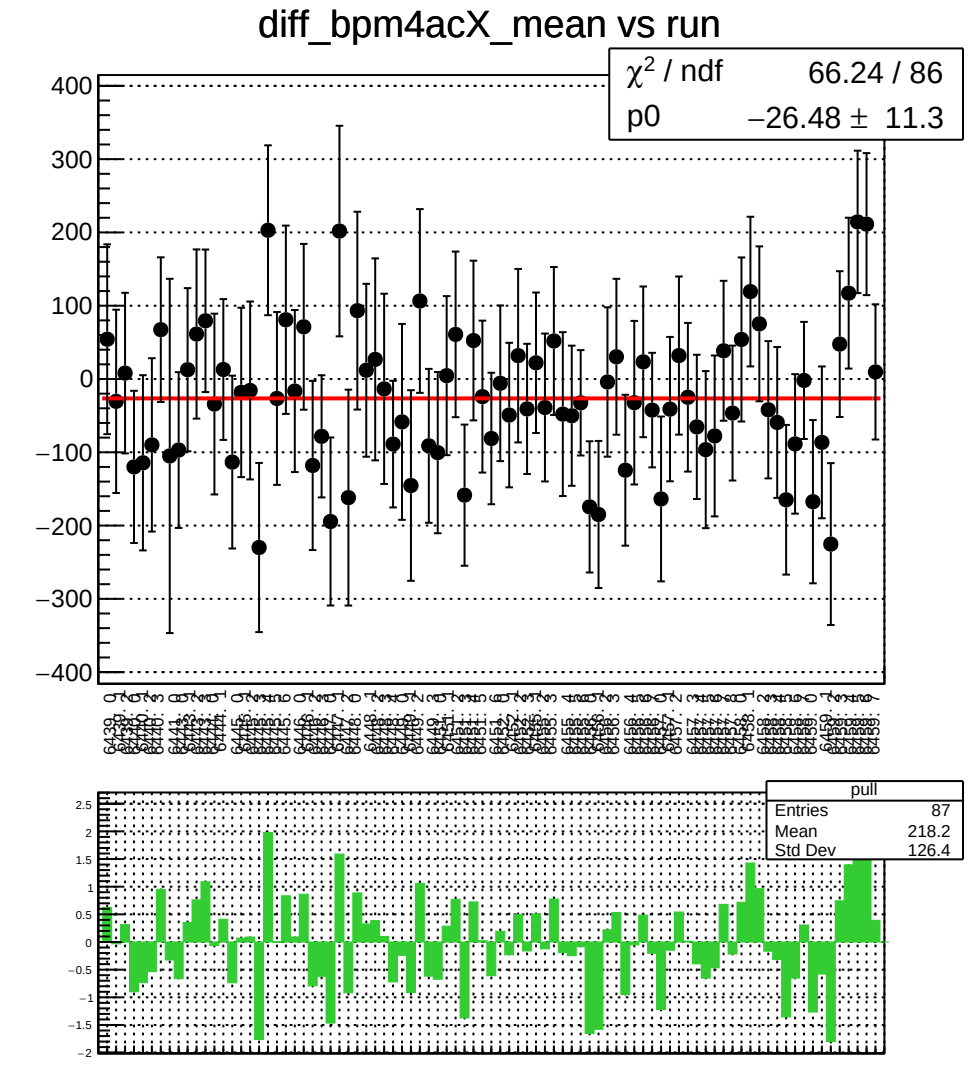

pull1D
Entries 87
Mean 0.005433
Std Dev 0.8801

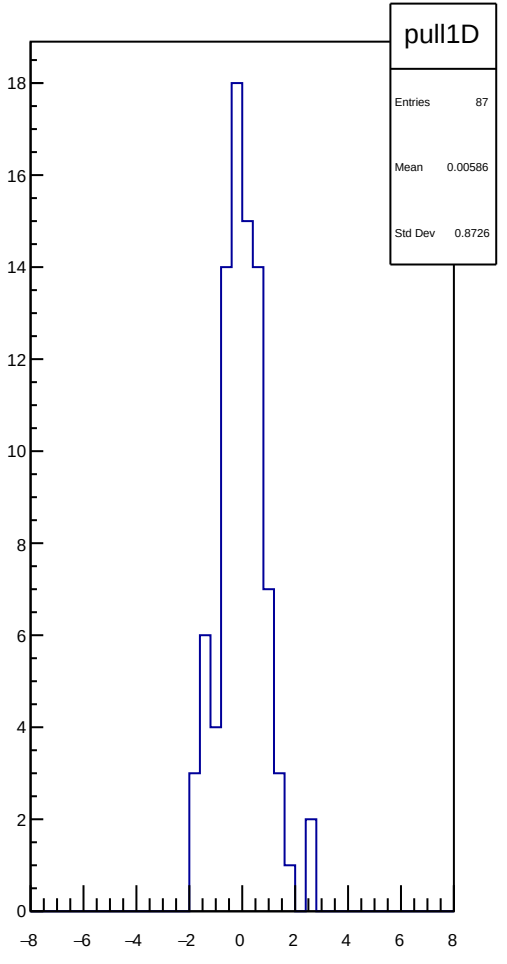

diff_bpm4eX_rms vs run
χ^2 / ndf 1.657e+04 / 86
p0 9658 ± 7.491
14000
13000
12000
11000
10000
9000
8000

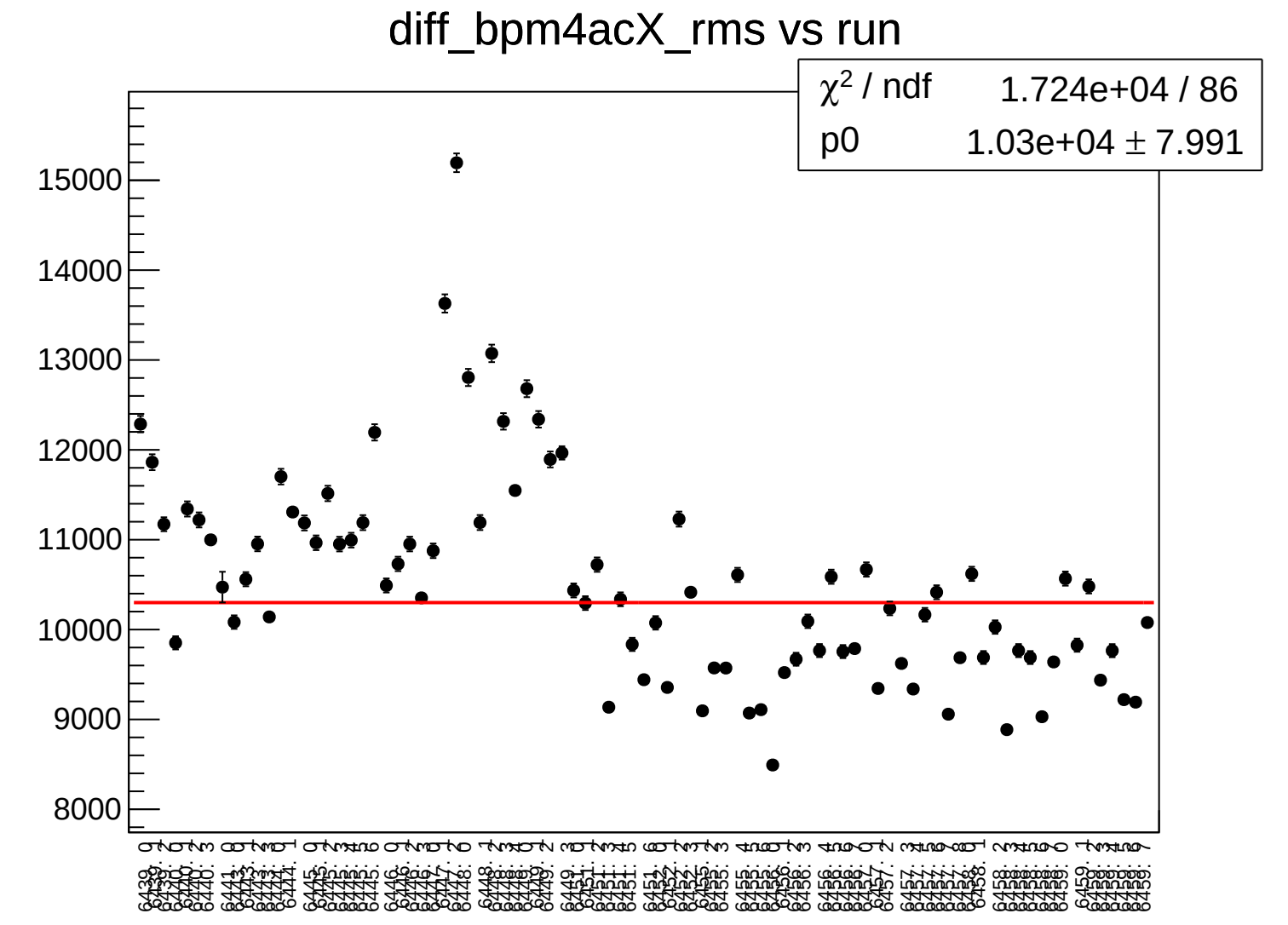

diff_bpm4eY_mean vs run
χ² / ndf 75.74 / 86
p0 4.672 ± 5.906
pull
Entries 87
Mean 1073
Std Dev 1026

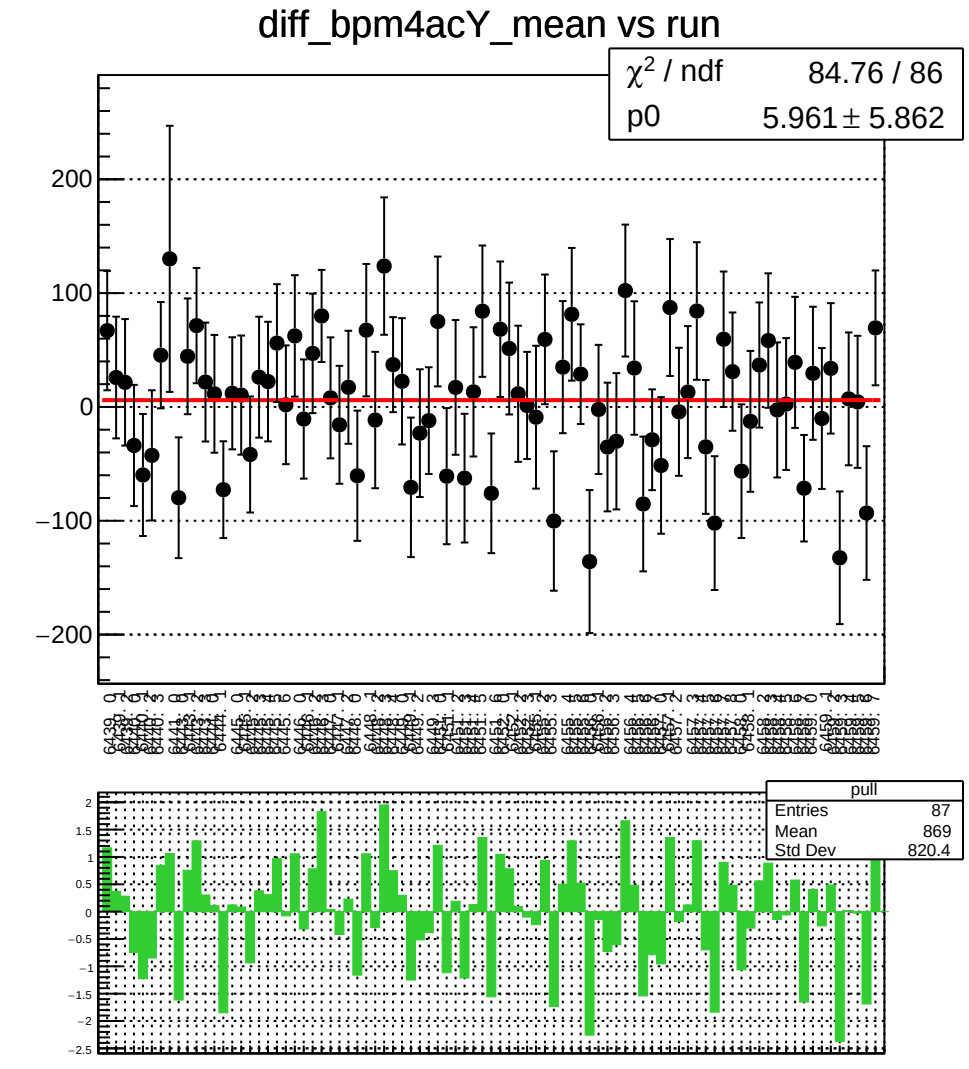

pull1D
Entries 87
Mean −0.004727
Std Dev 0.933

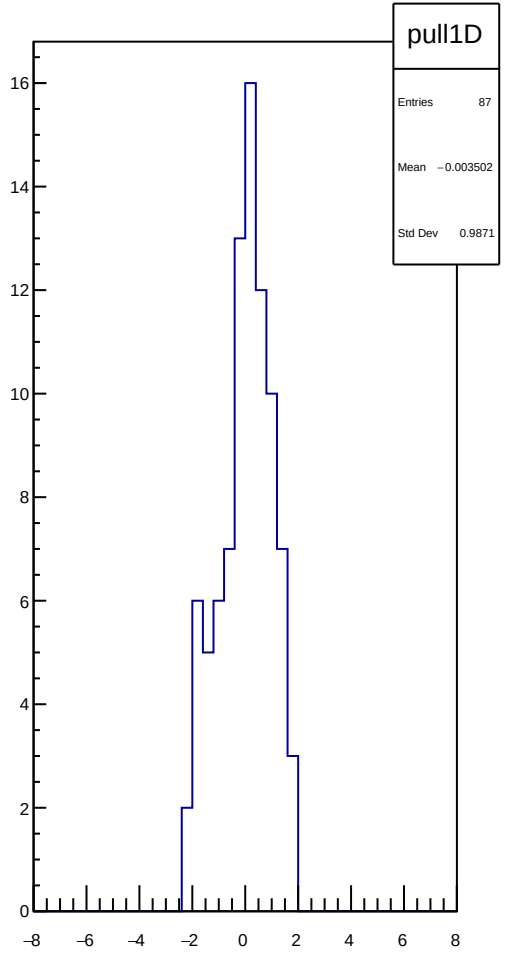

diff_bpm4eY_rms vs run
χ² / ndf 7805 / 86
p0 5399 ± 4.176
6200
6000
5800
5600
5400
5200
5000
4800
4600

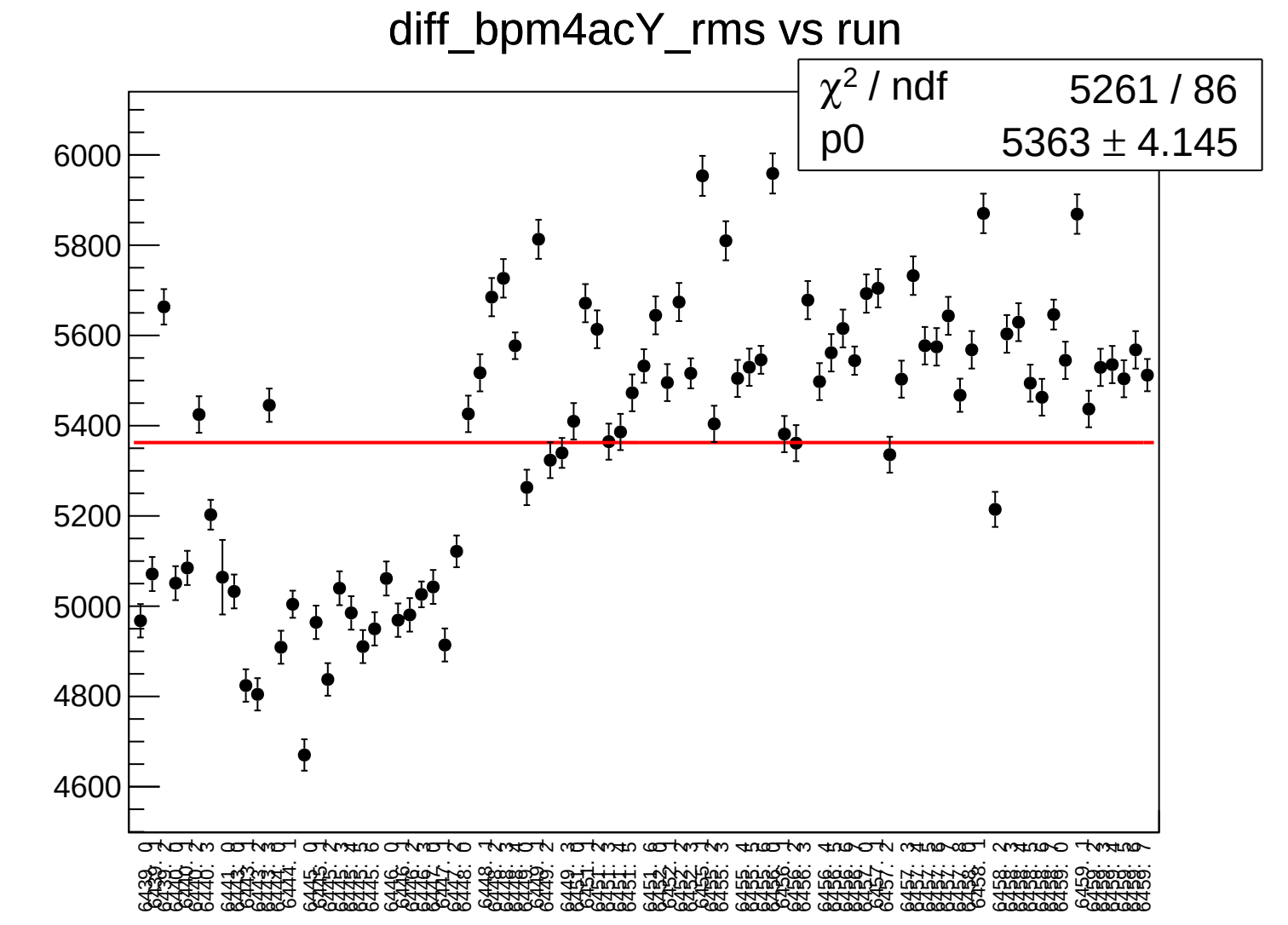

diff_bpm4acX_mean vs run
χ² / ndf 66.24 / 86
p0 −26.48 ± 11.3
pull
Entries 87
Mean 218.2
Std Dev 126.4

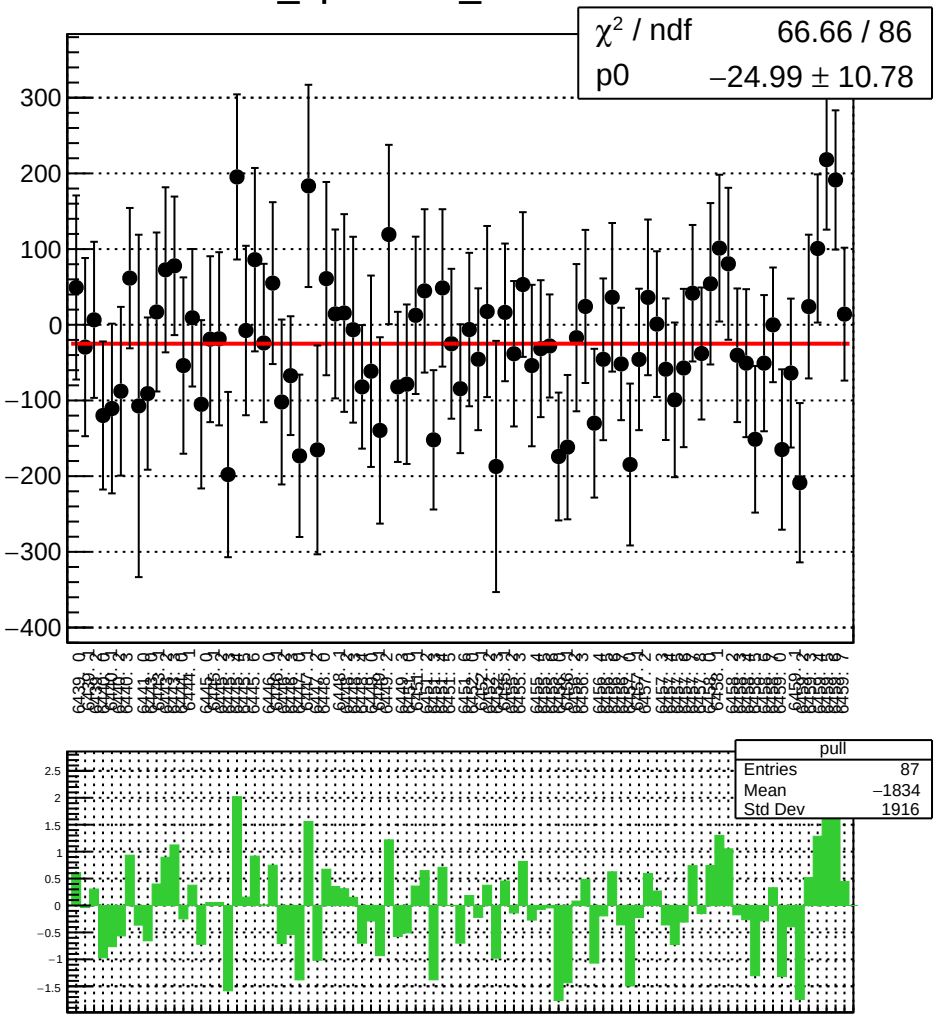

pull1D
Entries 87
Mean 0.00586
Std Dev 0.8726

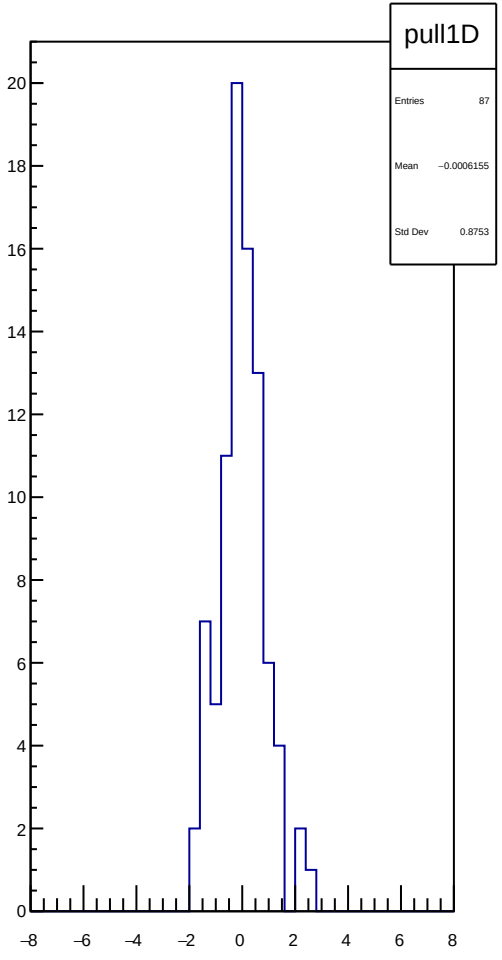

diff_bpm4acX_rms vs run
χ^2 / ndf 1.724e+04 / 86
p0 1.03e+04 ± 7.991
15000
14000
13000
12000
11000
10000
9000
8000

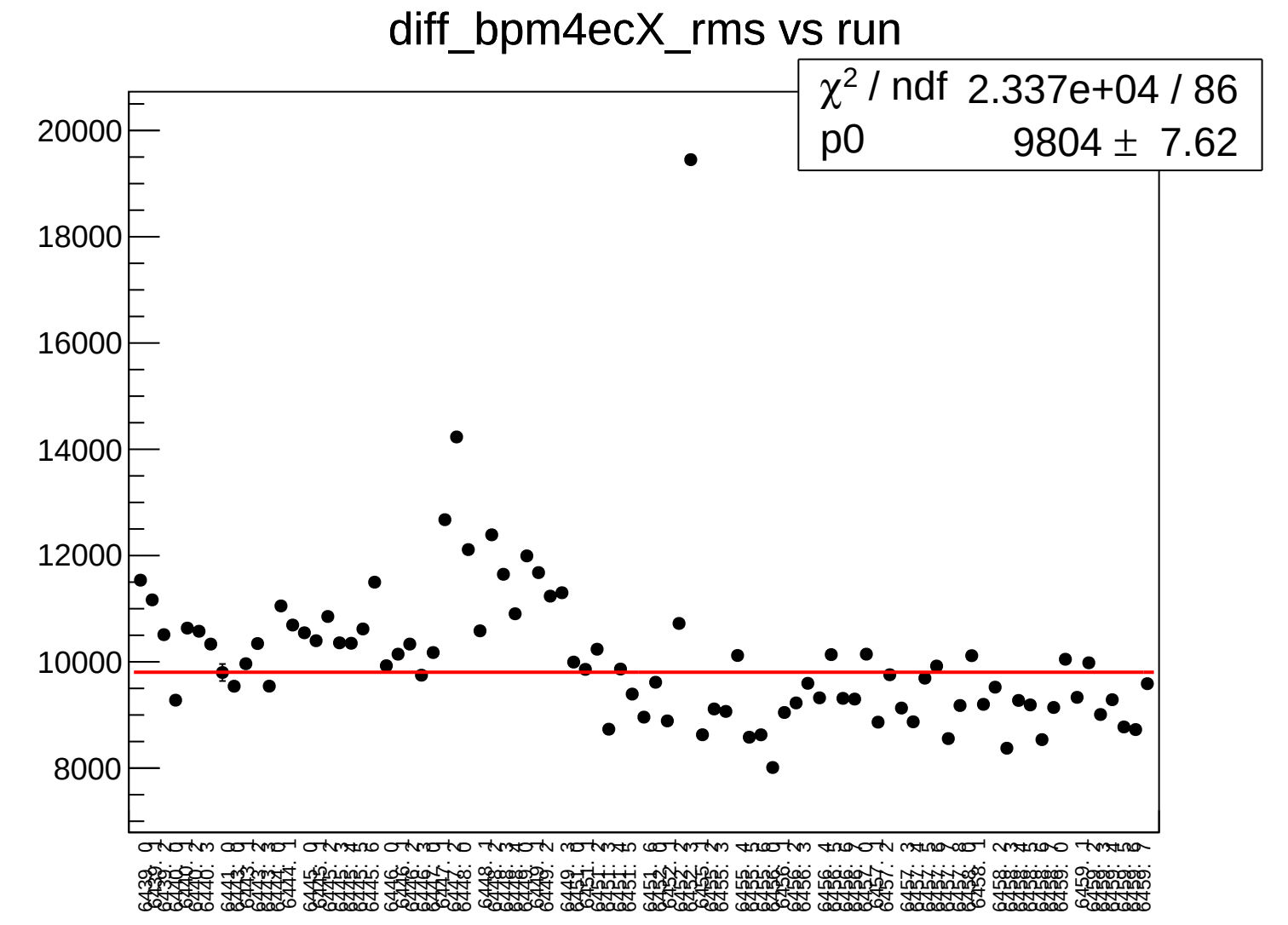

diff_bpm4acY_mean vs run
χ² / ndf 84.76 / 86
p0 5.961 ± 5.862
200
100
0
−100
−200
pull
Entries 87
Mean 869
Std Dev 820.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

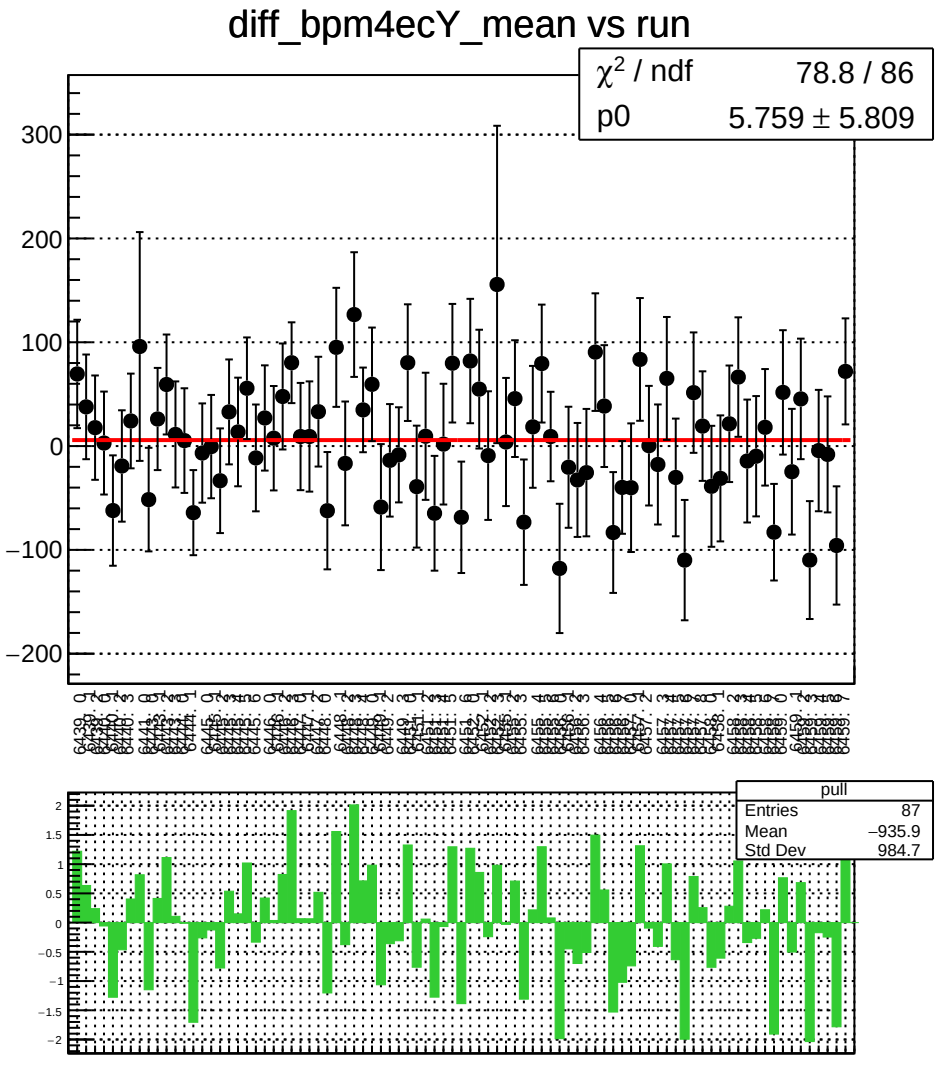

pull1D
Entries 87
Mean −0.003502
Std Dev 0.9871
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

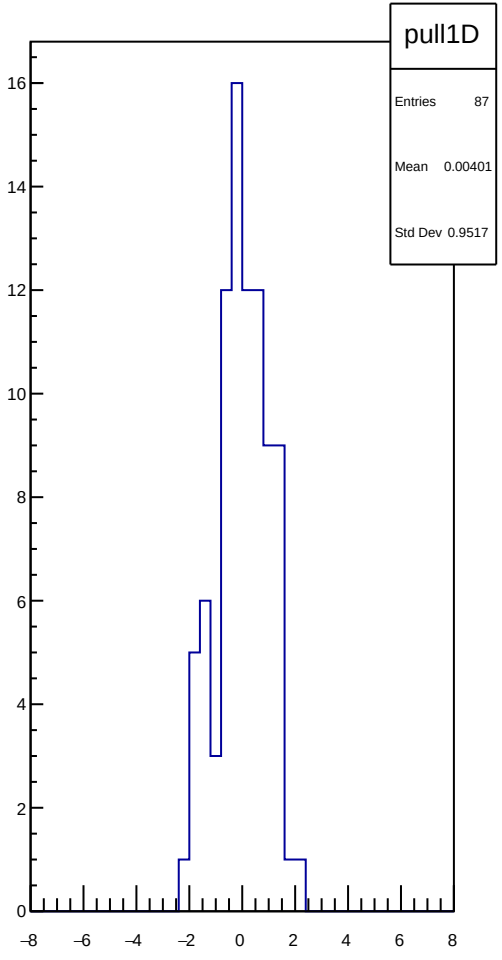

diff_bpm4acY_rms vs run
χ² / ndf 5261 / 86
p0 5363 ± 4.145
6000
5800
5600
5400
5200
5000
4800
4600

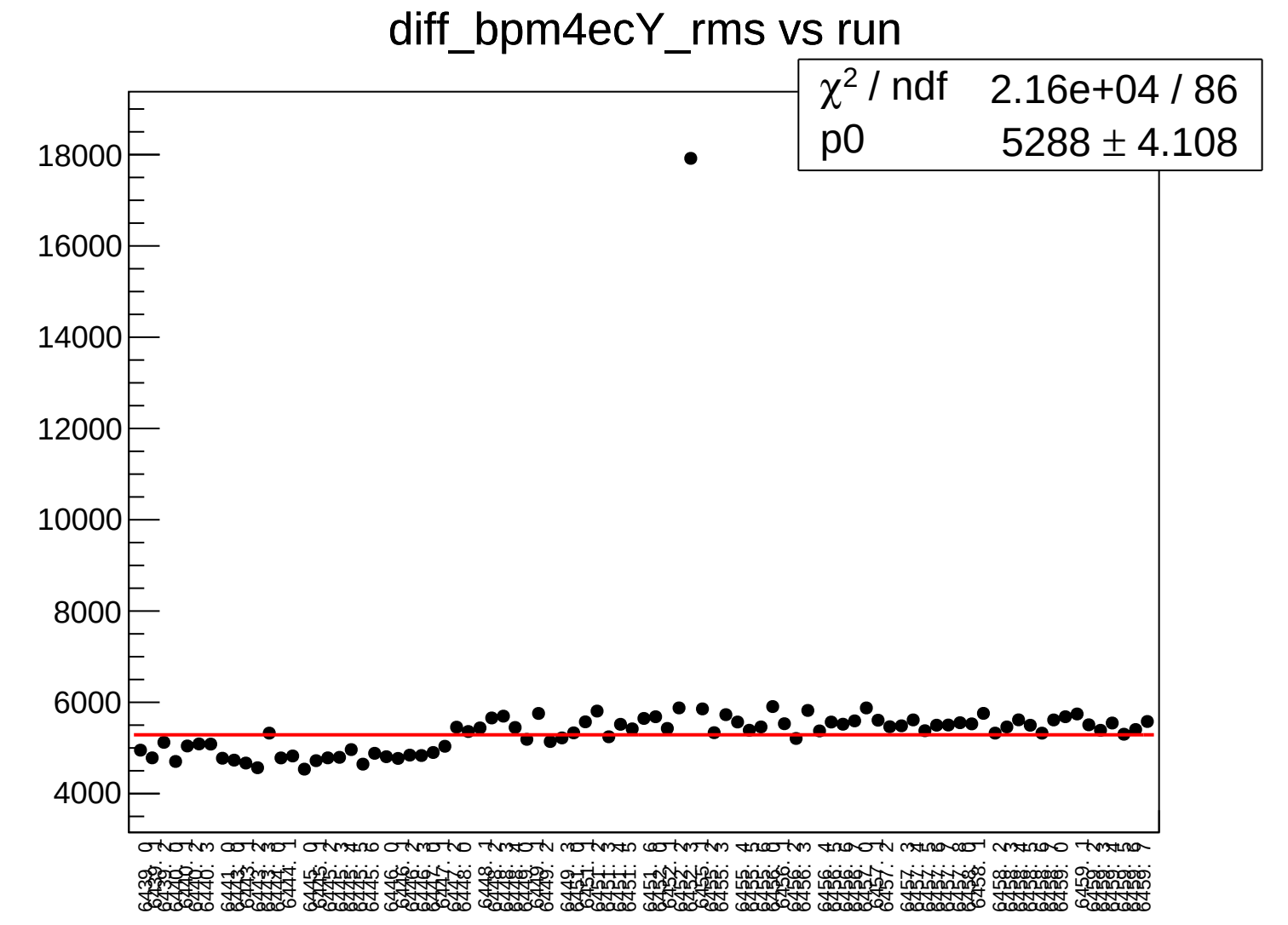

diff_bpm4ecX_mean vs run
χ^2 / ndf 66.66 / 86
p0 −24.99 ± 10.78
pull
Entries 87
Mean −1834
Std Dev 1916

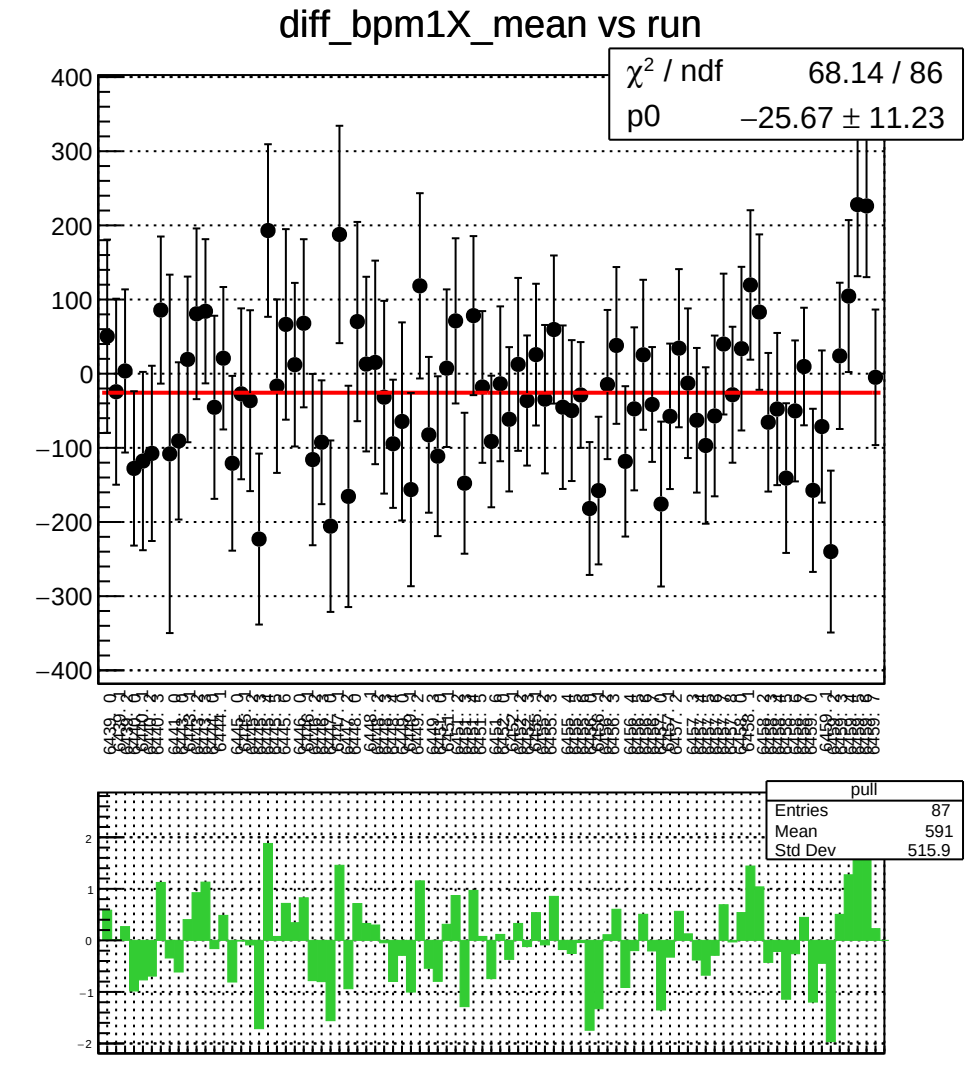

pull1D
Entries 87
Mean −0.0006155
Std Dev 0.8753

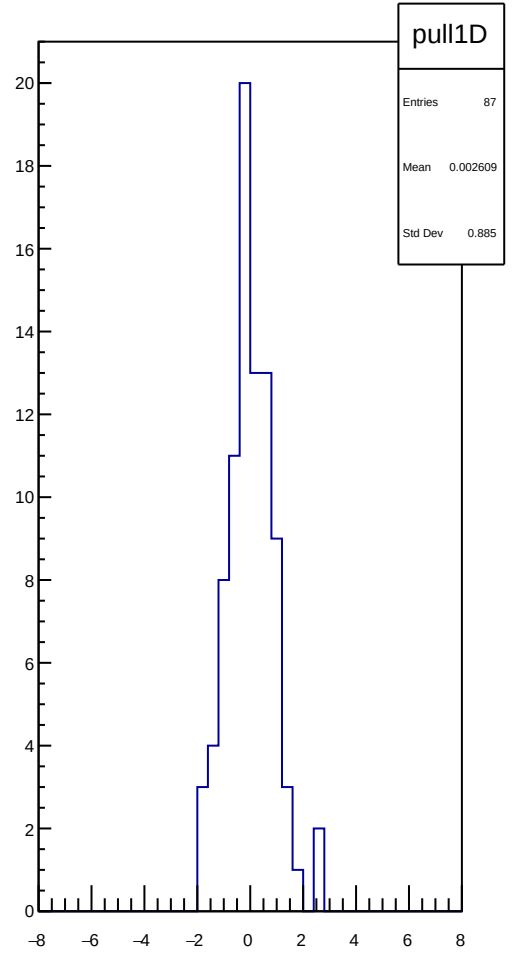

diff_bpm4ecX_rms vs run
χ² / ndf 2.337e+04 / 86
p0 9804 ± 7.62
20000
18000
16000
14000
12000
10000
8000

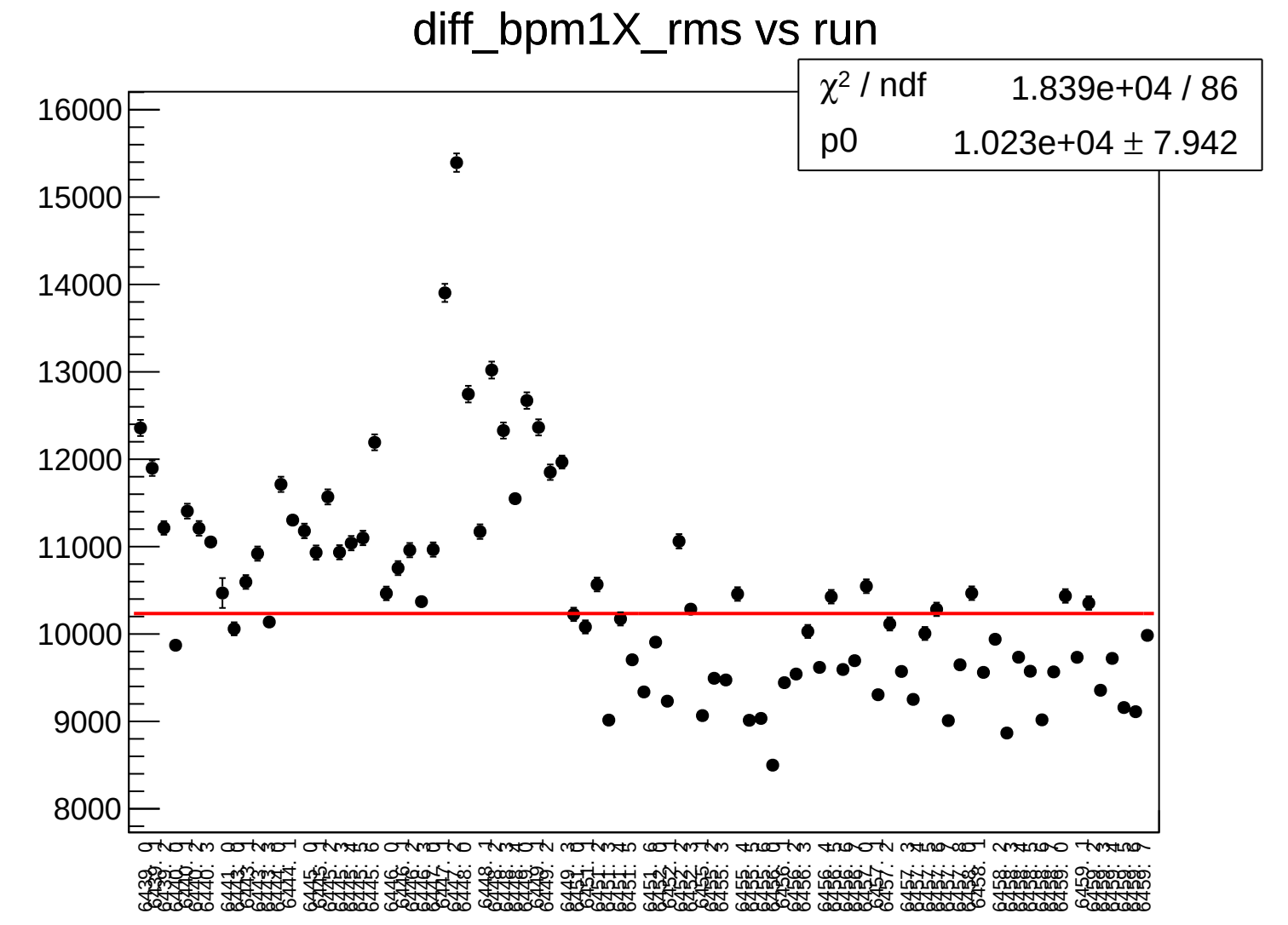

diff_bpm4ecY_mean vs run
χ² / ndf 78.8 / 86
p0 5.759 ± 5.809
pull
Entries 87
Mean −935.9
Std Dev 984.7

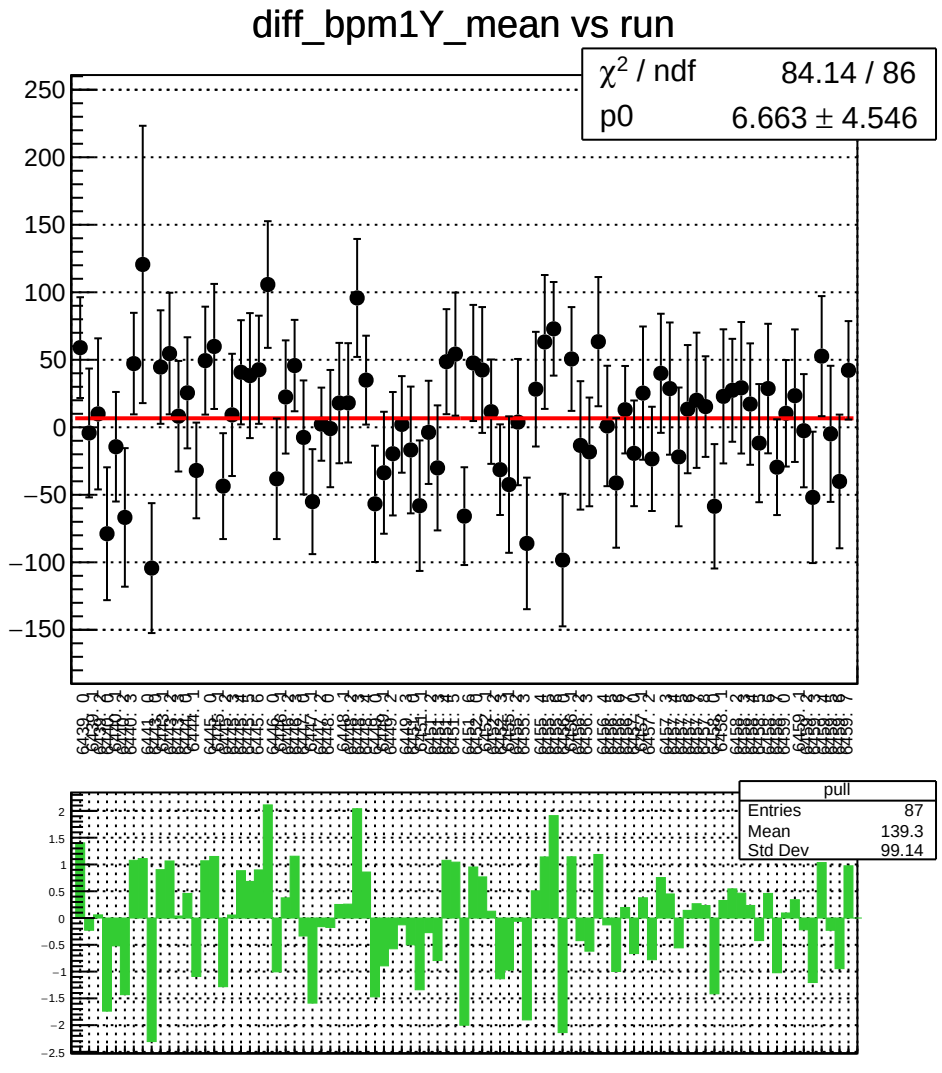

pull1D
Entries 87
Mean 0.00401
Std Dev 0.9517

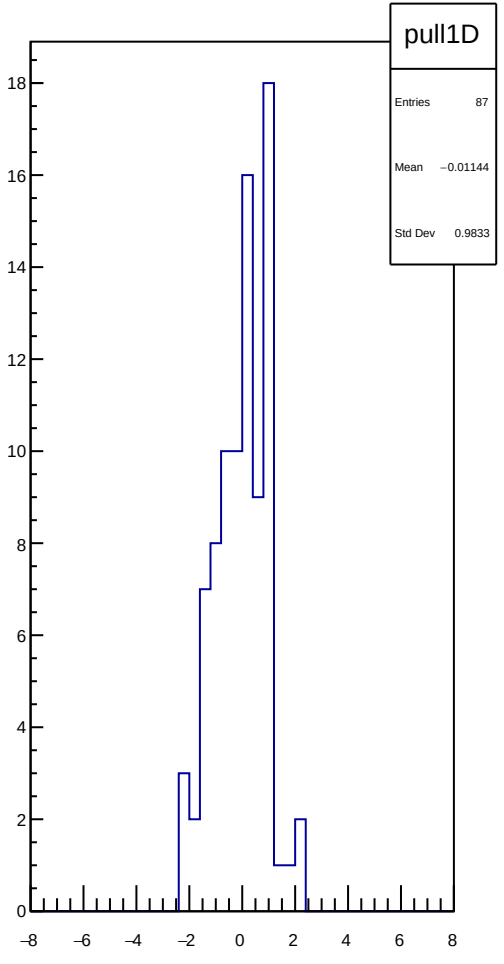

diff_bpm4ecY_rms vs run
χ² / ndf 2.16e+04 / 86
p0 5288 ± 4.108
18000
16000
14000
12000
10000
8000
6000
4000

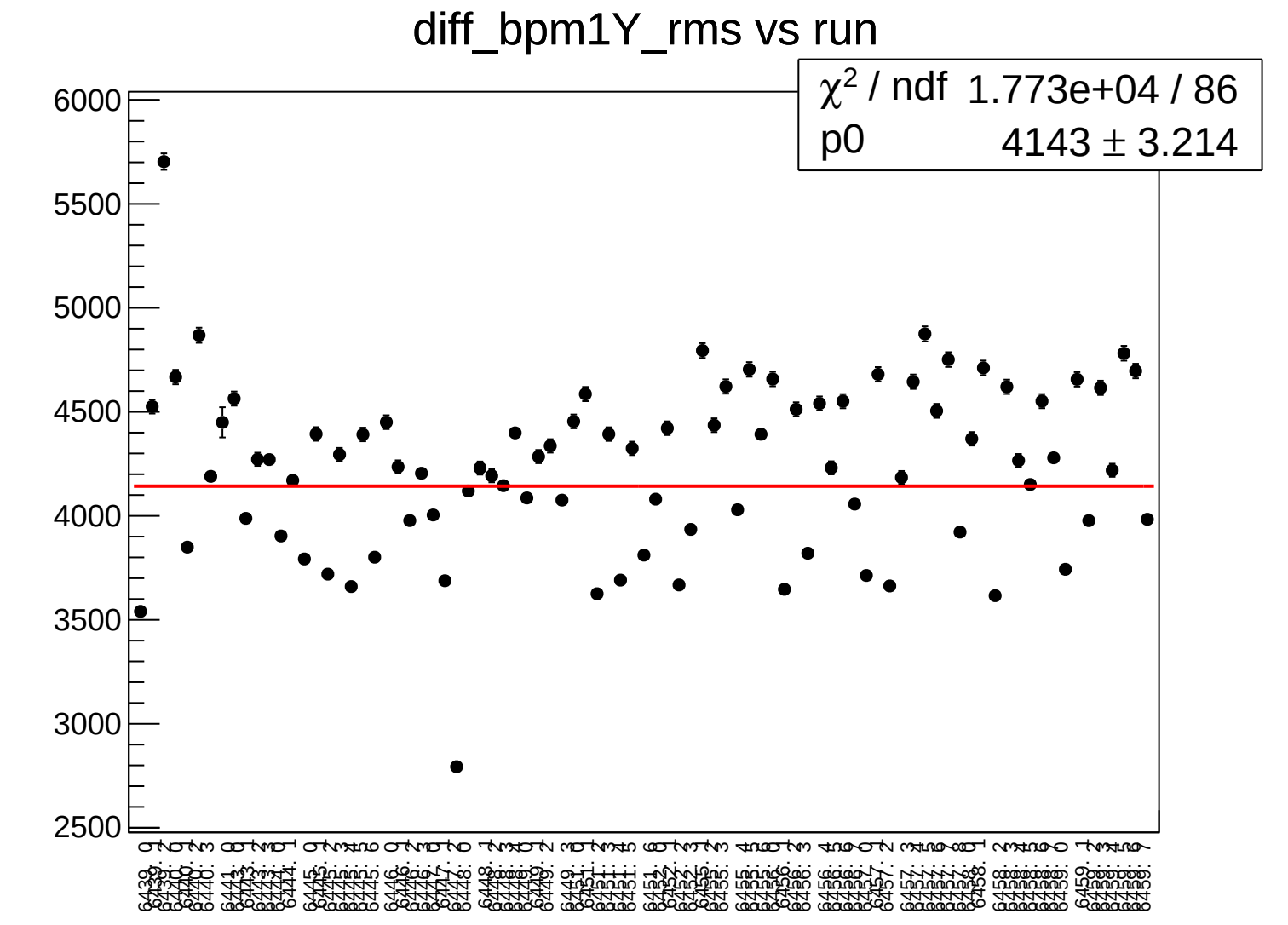

diff_bpm1X_mean vs run
χ² / ndf 68.14 / 86
p0 −25.67 ± 11.23
pull
Entries 87
Mean 591
Std Dev 515.9

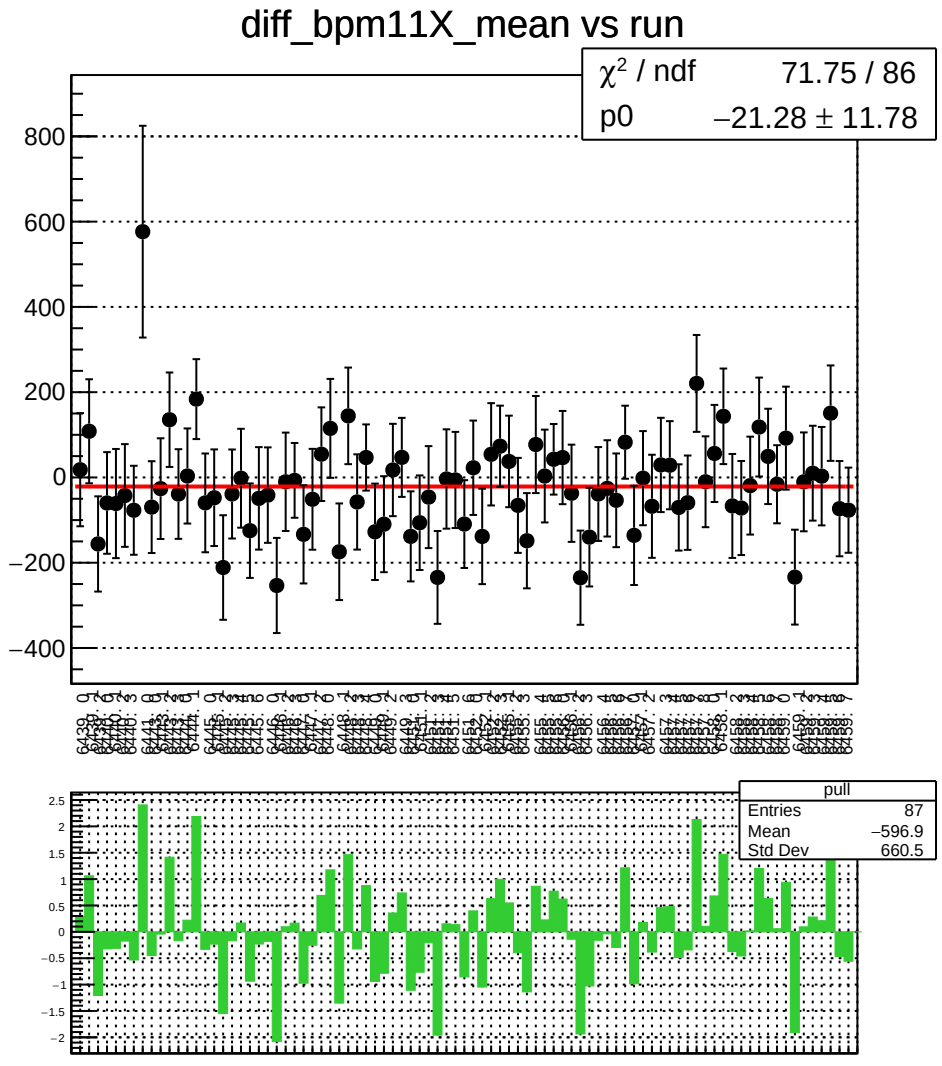

pull1D
Entries 87
Mean 0.002609
Std Dev 0.885

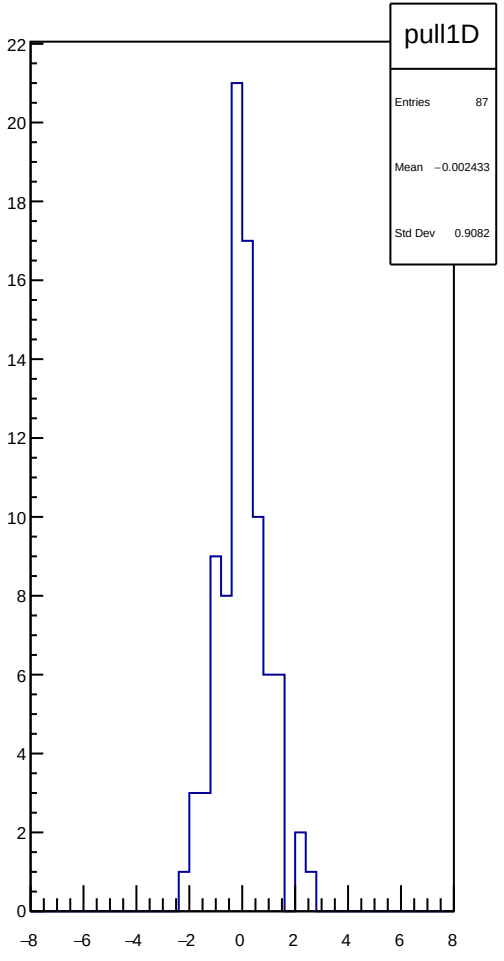

diff_bpm1X_rms vs run
χ² / ndf 1.839e+04 / 86
p0 1.023e+04 ± 7.942
16000
15000
14000
13000
12000
11000
10000
9000
8000

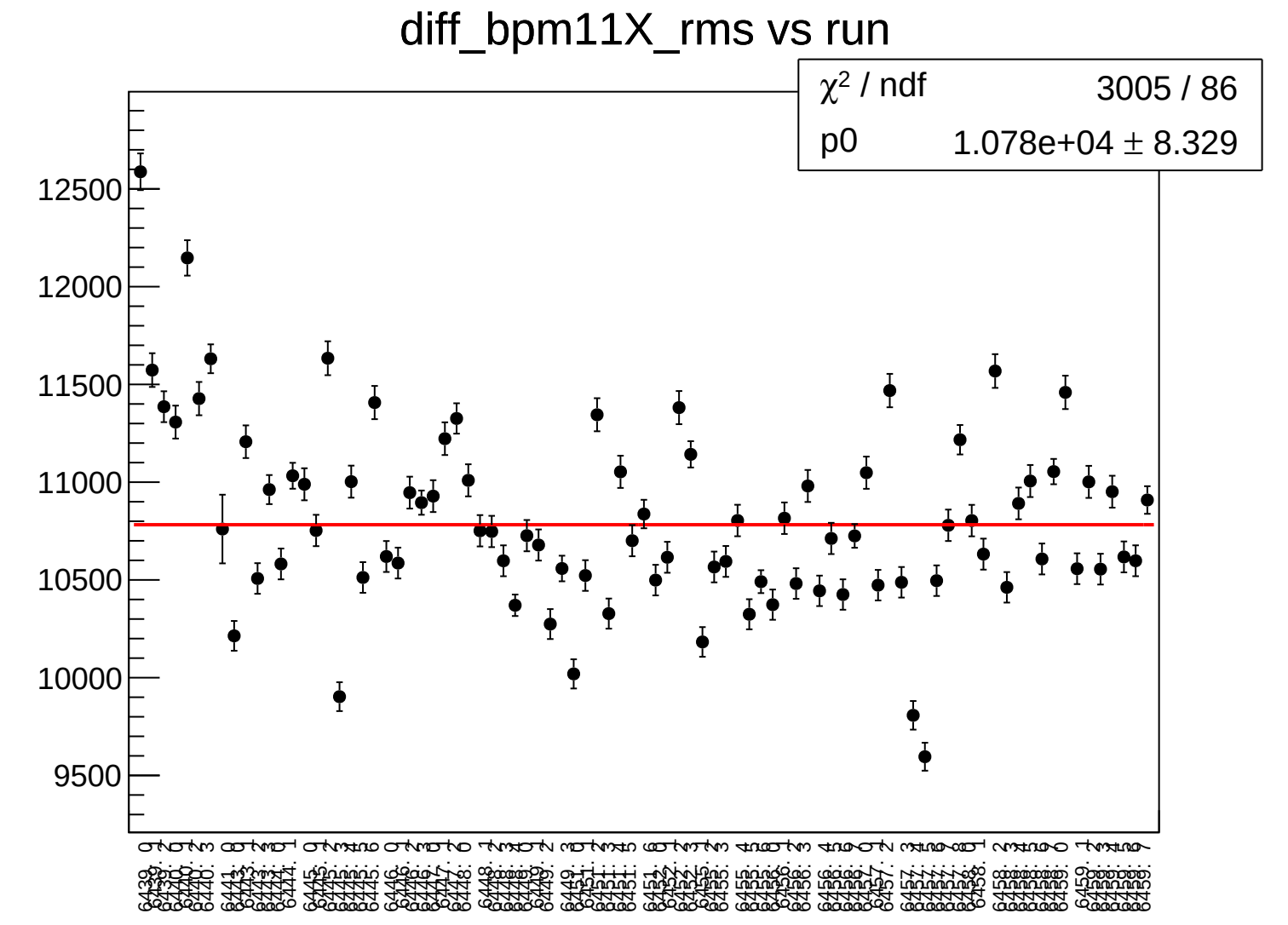

diff_bpm1Y_mean vs run
χ² / ndf 84.14 / 86
p0 6.663 ± 4.546
pull
Entries 87
Mean 139.3
Std Dev 99.14

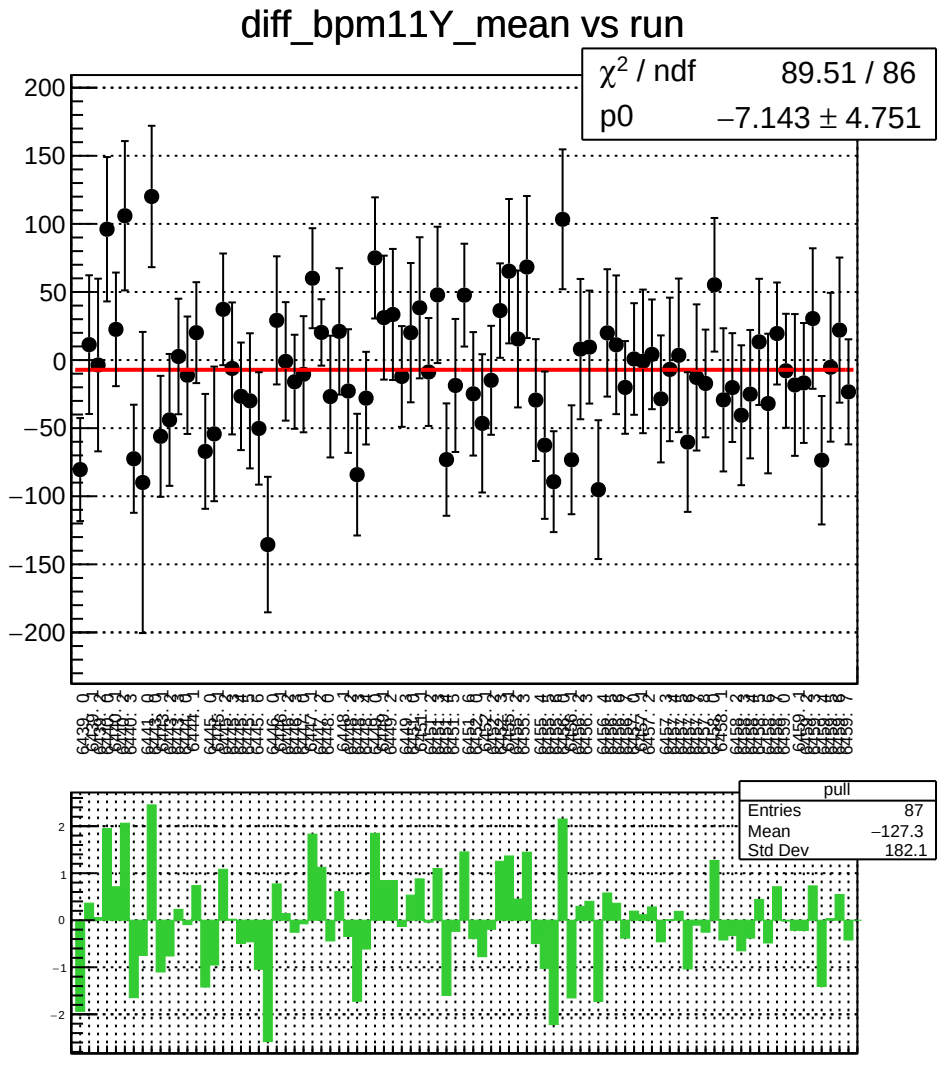

pull1D
Entries 87
Mean −0.01144
Std Dev 0.9833

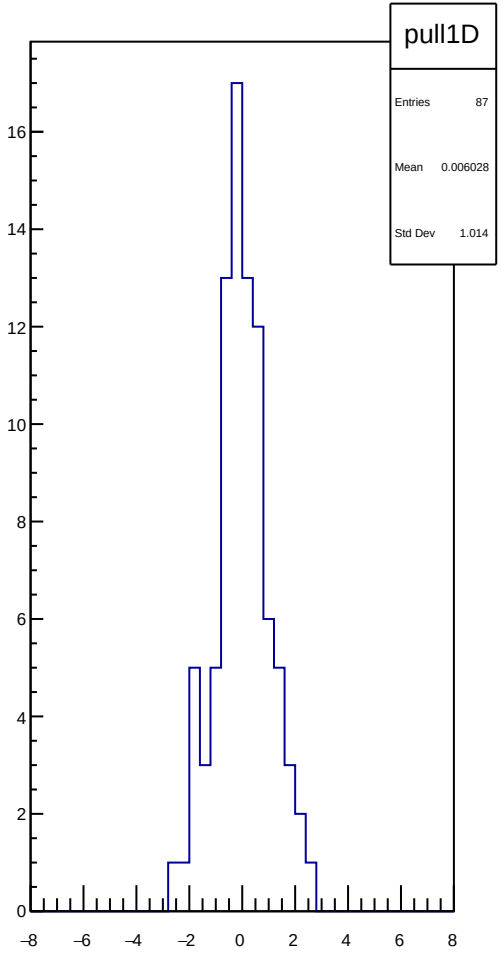

diff_bpm1Y_rms vs run
χ² / ndf 1.773e+04 / 86
p0 4143 ± 3.214
6000
5500
5000
4500
4000
3500
3000
2500

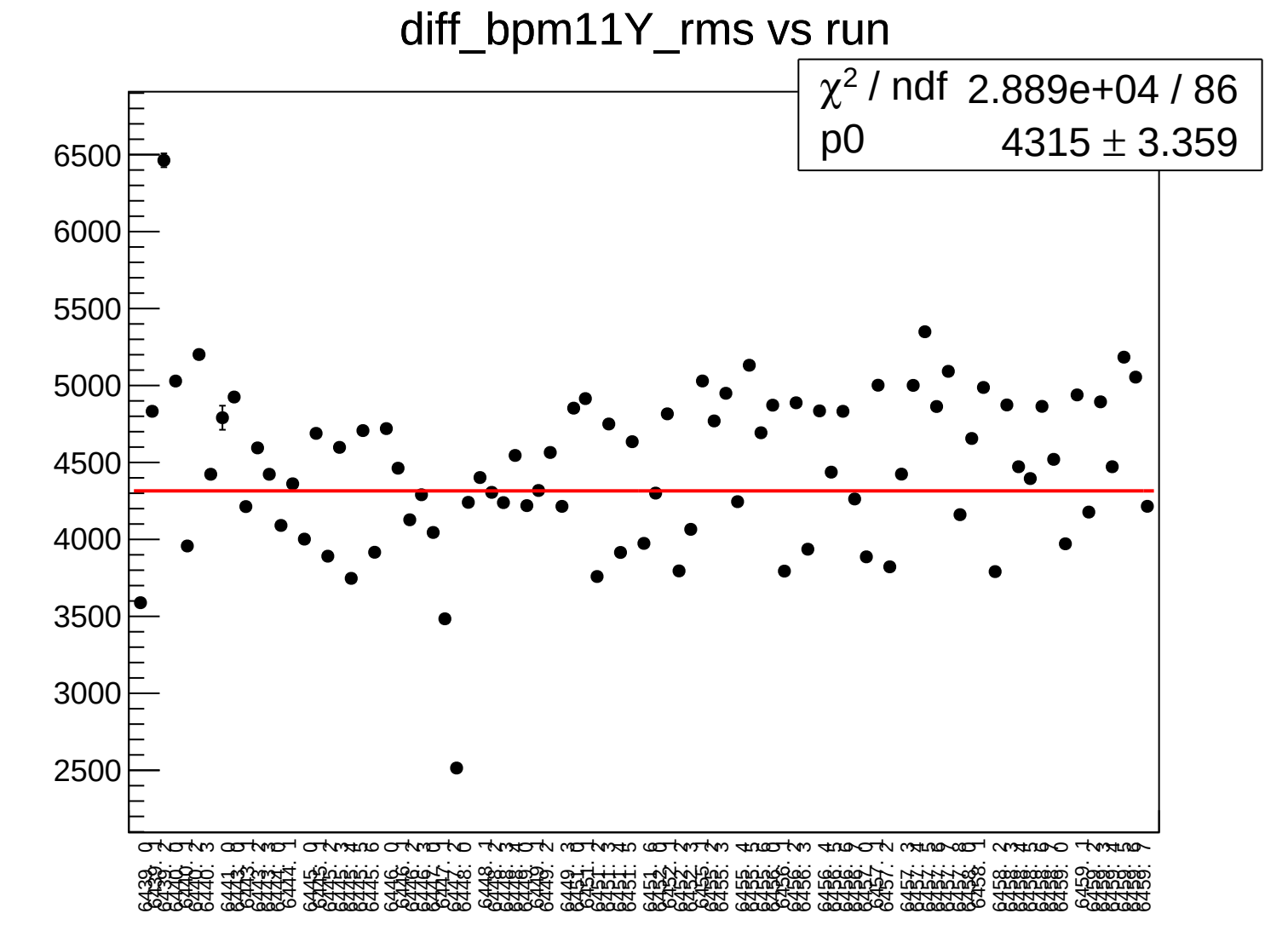

diff_bpm11X_mean vs run
χ² / ndf 71.75 / 86
p0 −21.28 ± 11.78
pull
Entries 87
Mean −596.9
Std Dev 660.5

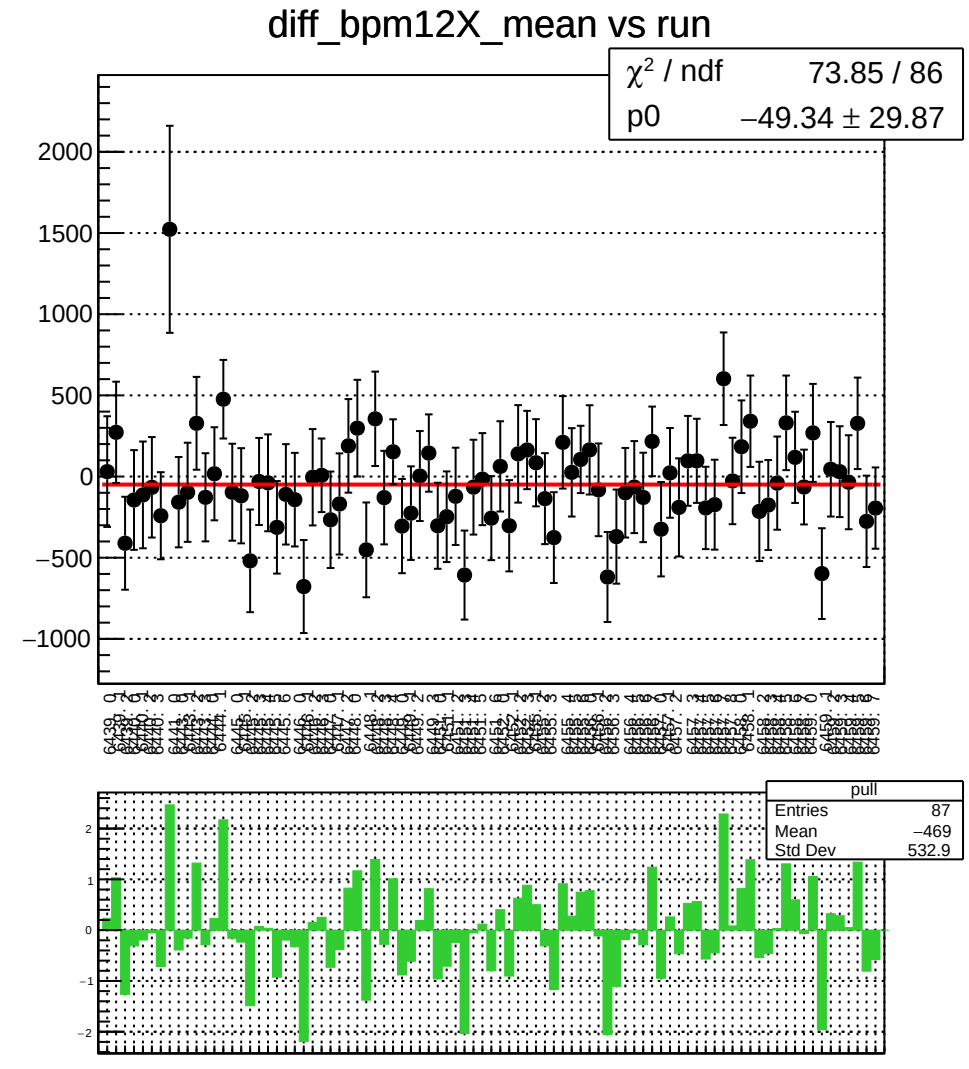

pull1D
Entries 87
Mean −0.002433
Std Dev 0.9082

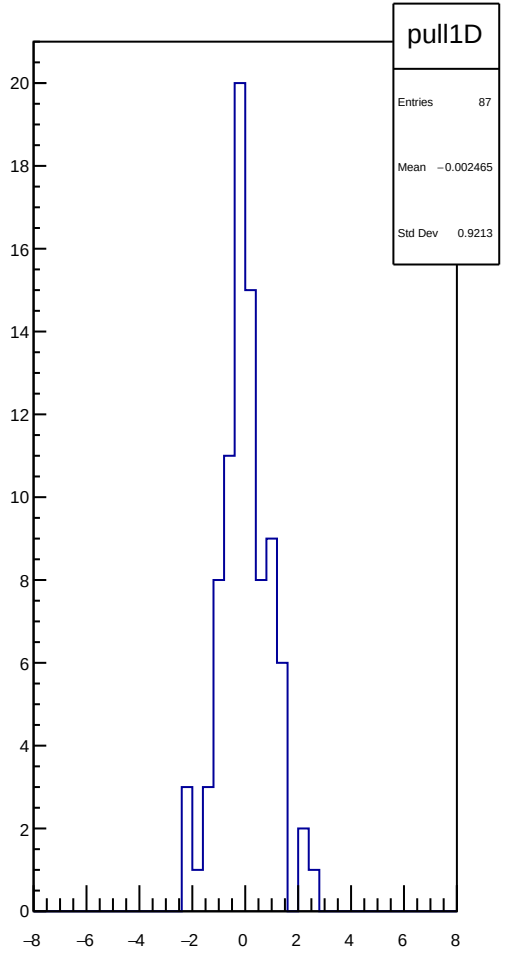

diff_bpm11X_rms vs run
χ² / ndf 3005 / 86
p0 1.078e+04 ± 8.329
12500
12000
11500
11000
10500
10000
9500

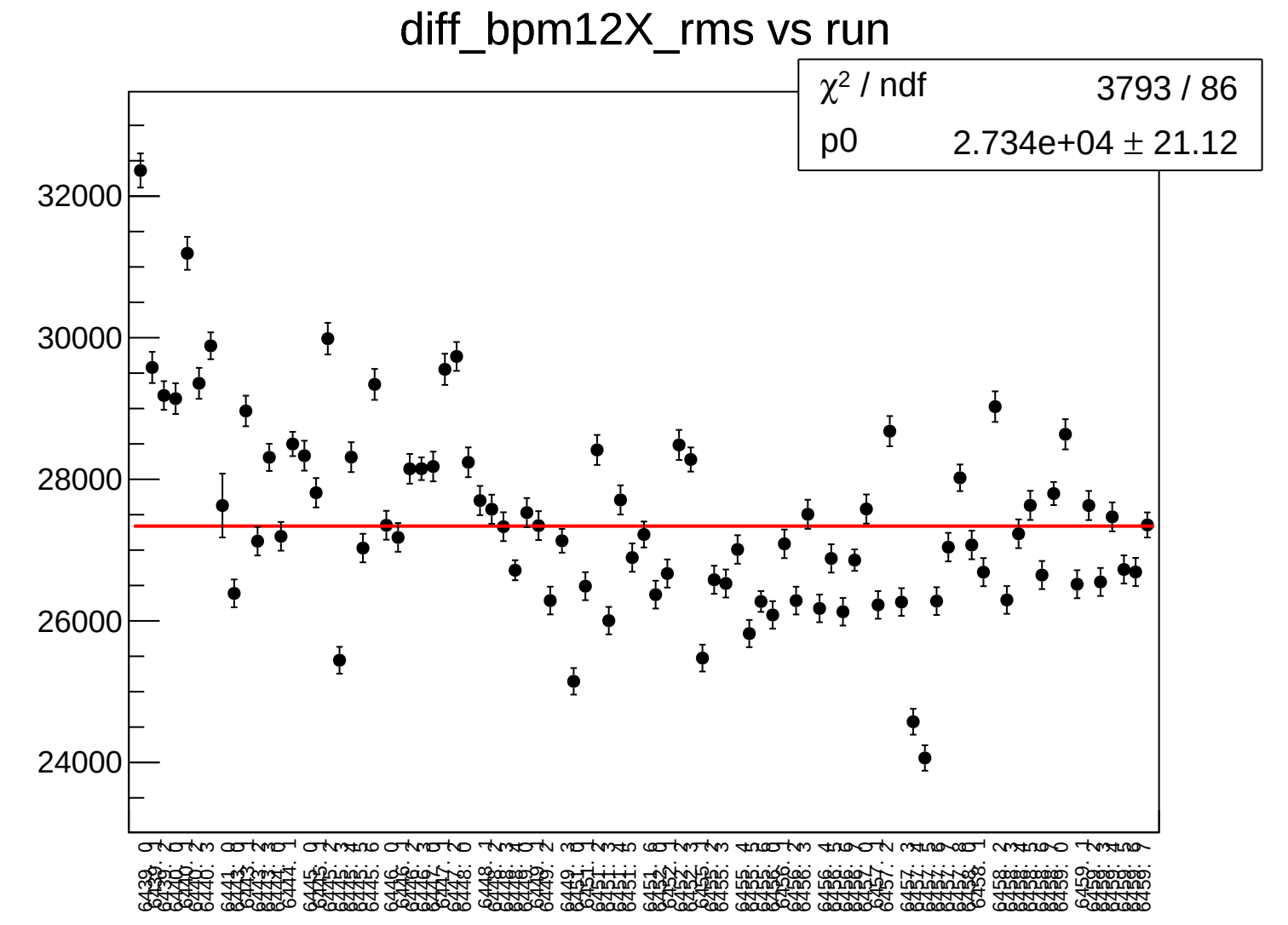

diff_bpm11Y_mean vs run
χ² / ndf 89.51 / 86
p0 −7.143 ± 4.751
pull
Entries 87
Mean −127.3
Std Dev 182.1

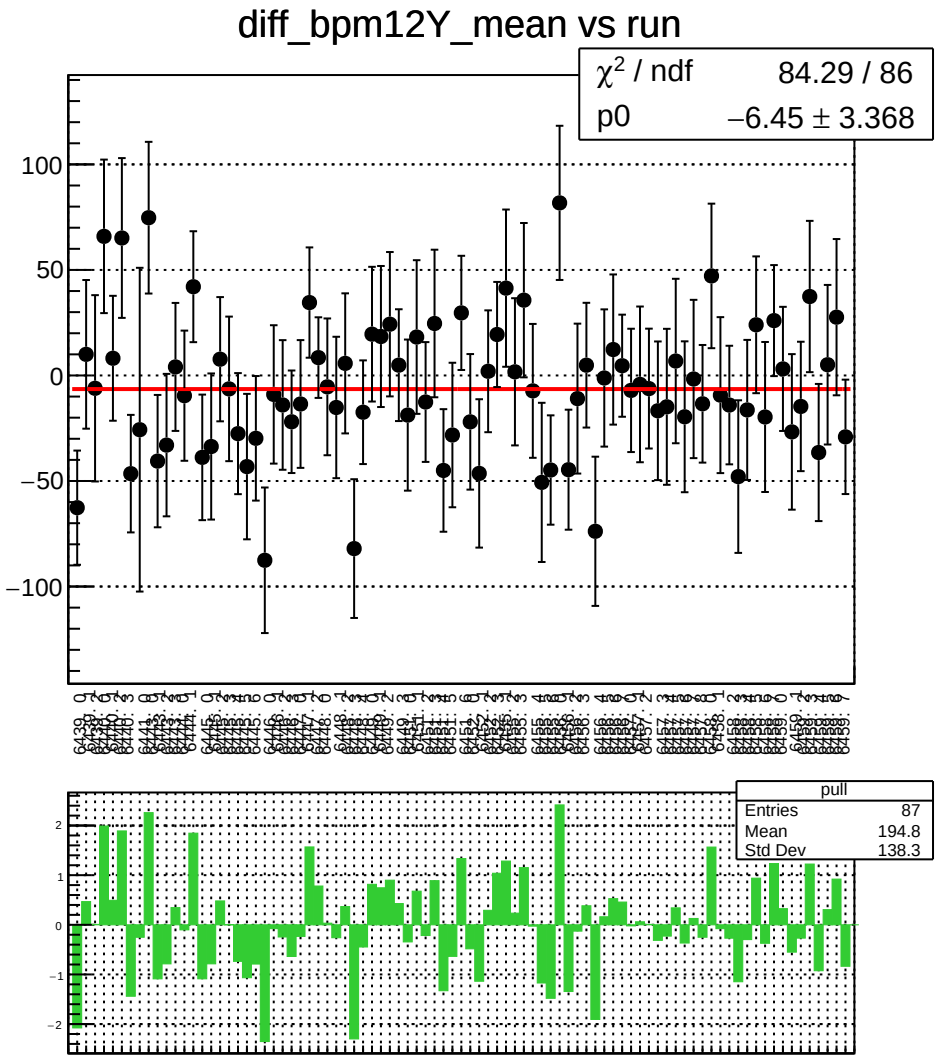

pull1D
Entries 87
Mean 0.006028
Std Dev 1.014

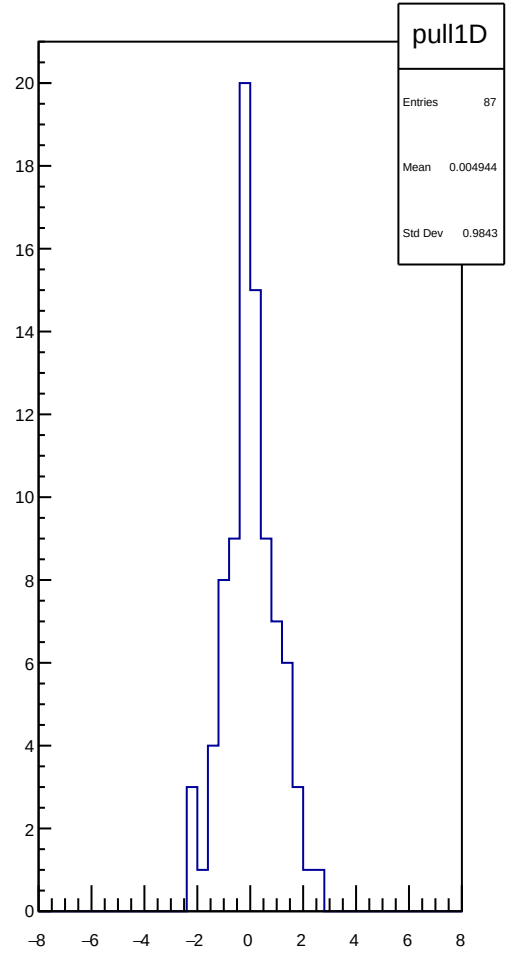

diff_bpm11Y_rms vs run
χ² / ndf 2.889e+04 / 86
p0 4315 ± 3.359
6500
6000
5500
5000
4500
4000
3500
3000
2500

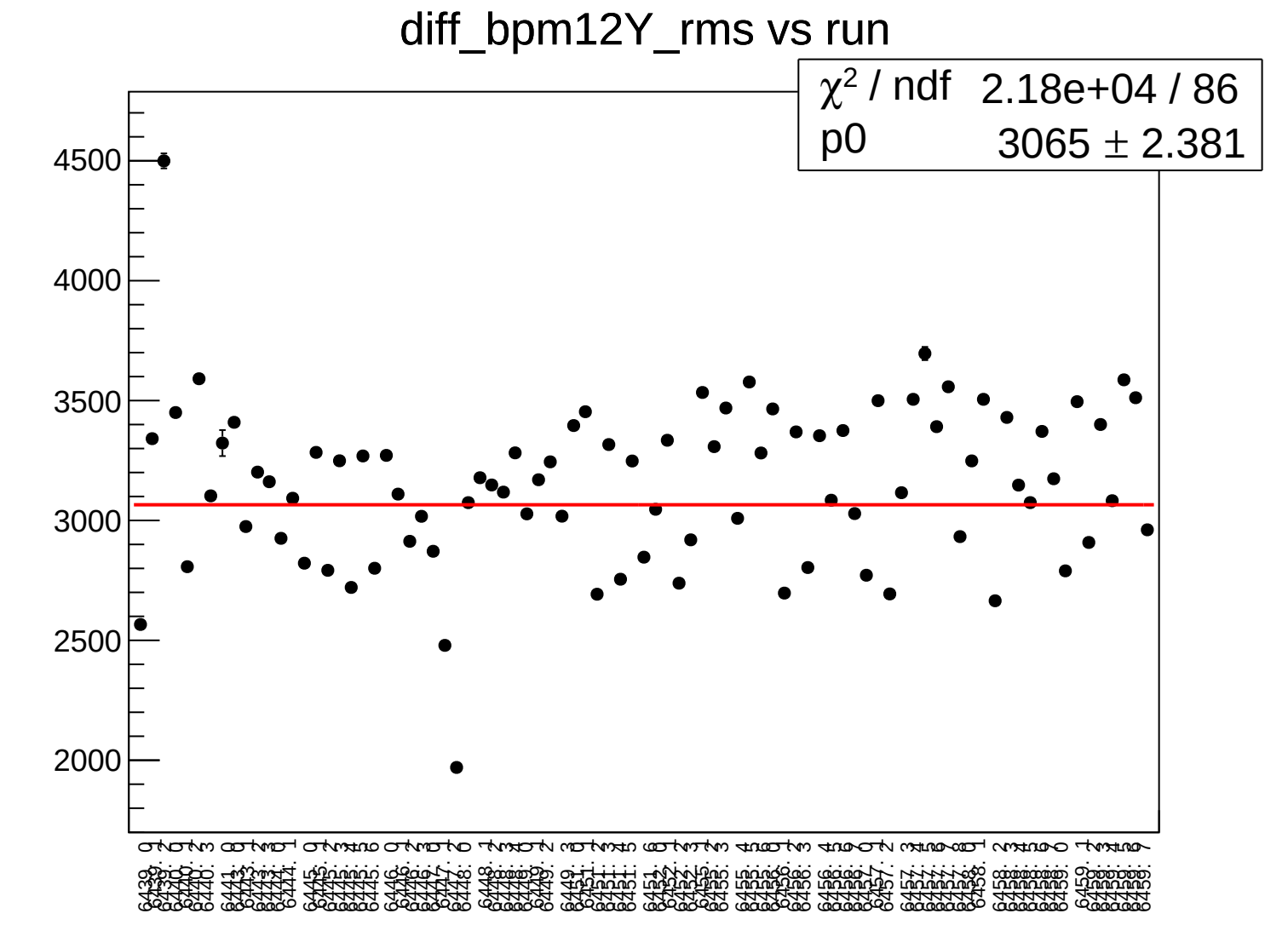

diff_bpm12X_mean vs run
χ² / ndf 73.85 / 86
p0 −49.34 ± 29.87
2000
1500
1000
500
0
−500
−1000
pull
Entries 87
Mean −469
Std Dev 532.9
2
1
0
−1
−2

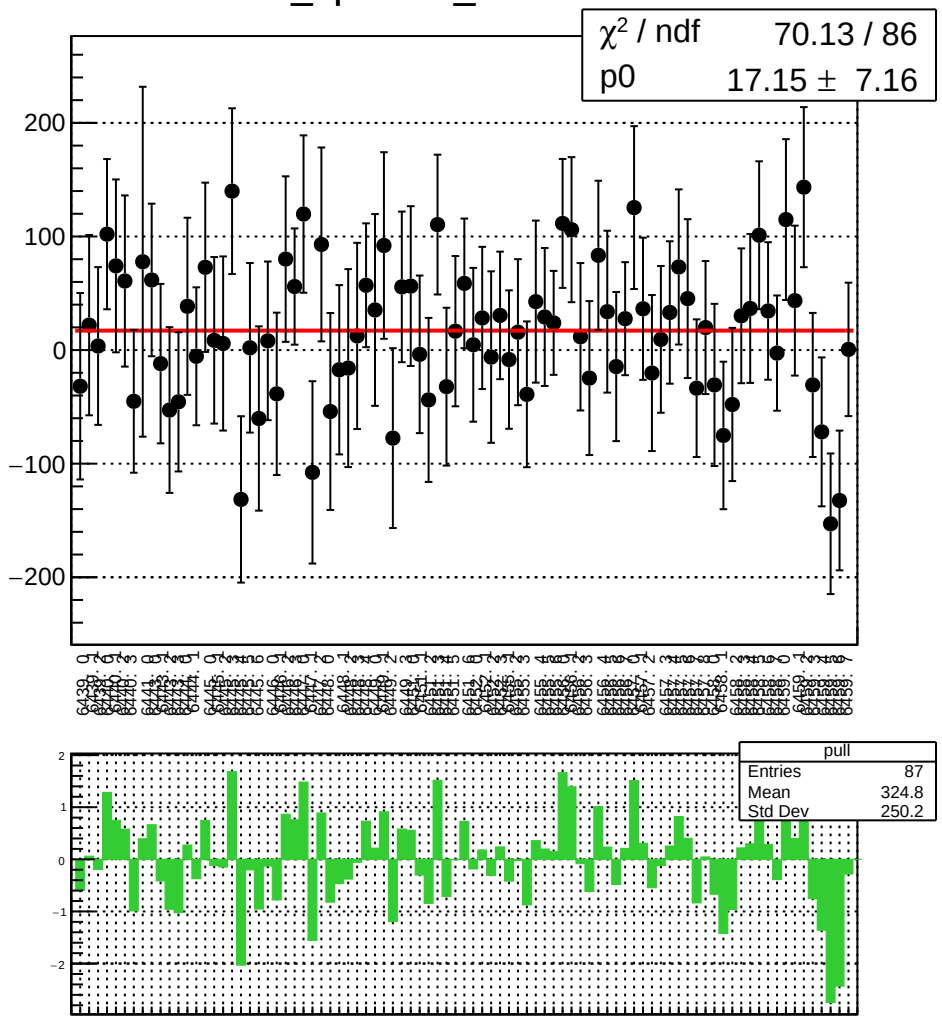

pull1D
Entries 87
Mean −0.002465
Std Dev 0.9213
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

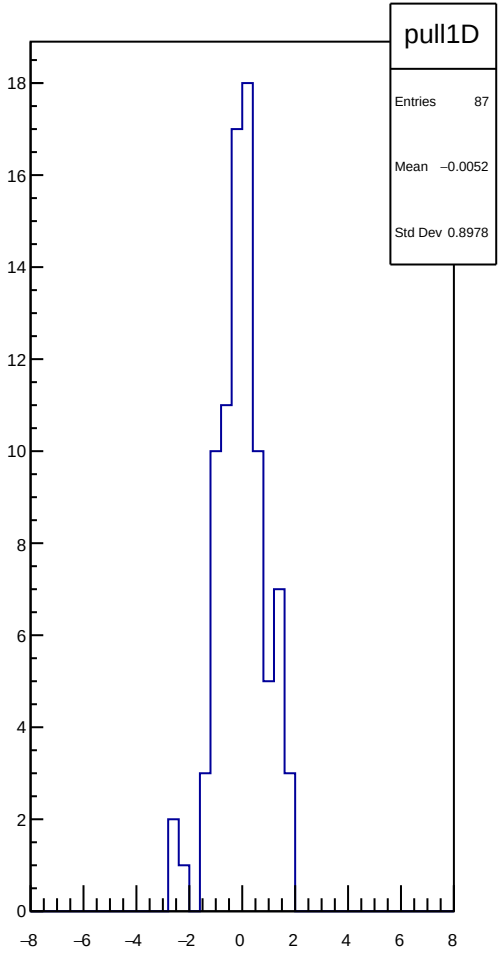

diff_bpm12X_rms vs run
χ² / ndf 3793 / 86
p0 2.734e+04 ± 21.12
32000
30000
28000
26000
24000

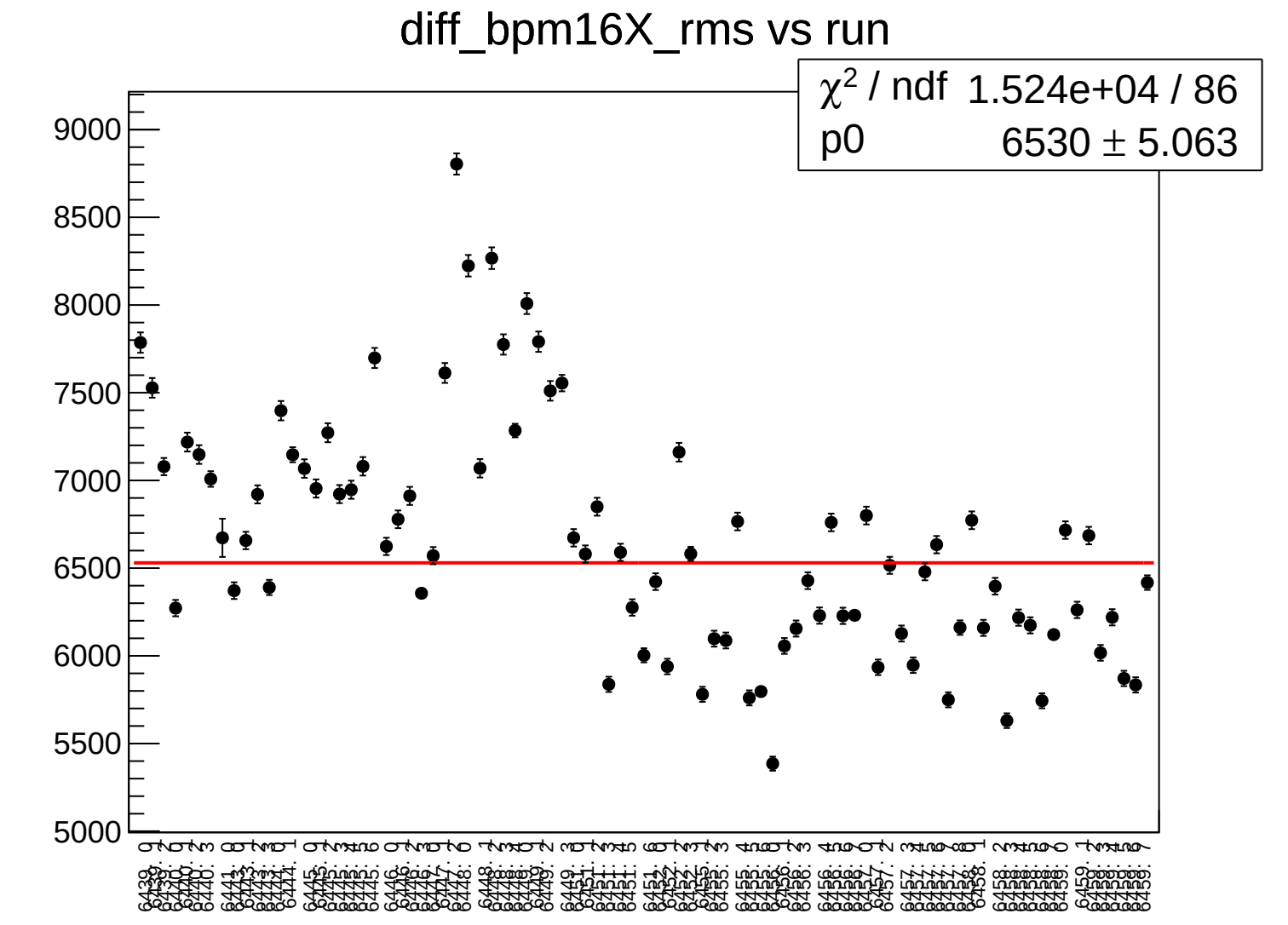

diff_bpm12Y_mean vs run
χ^2 / ndf 84.29 / 86
p0 −6.45 ± 3.368
100
50
0
−50
−100
pull
Entries 87
Mean 194.8
Std Dev 138.3
2
1
0
−1
−2

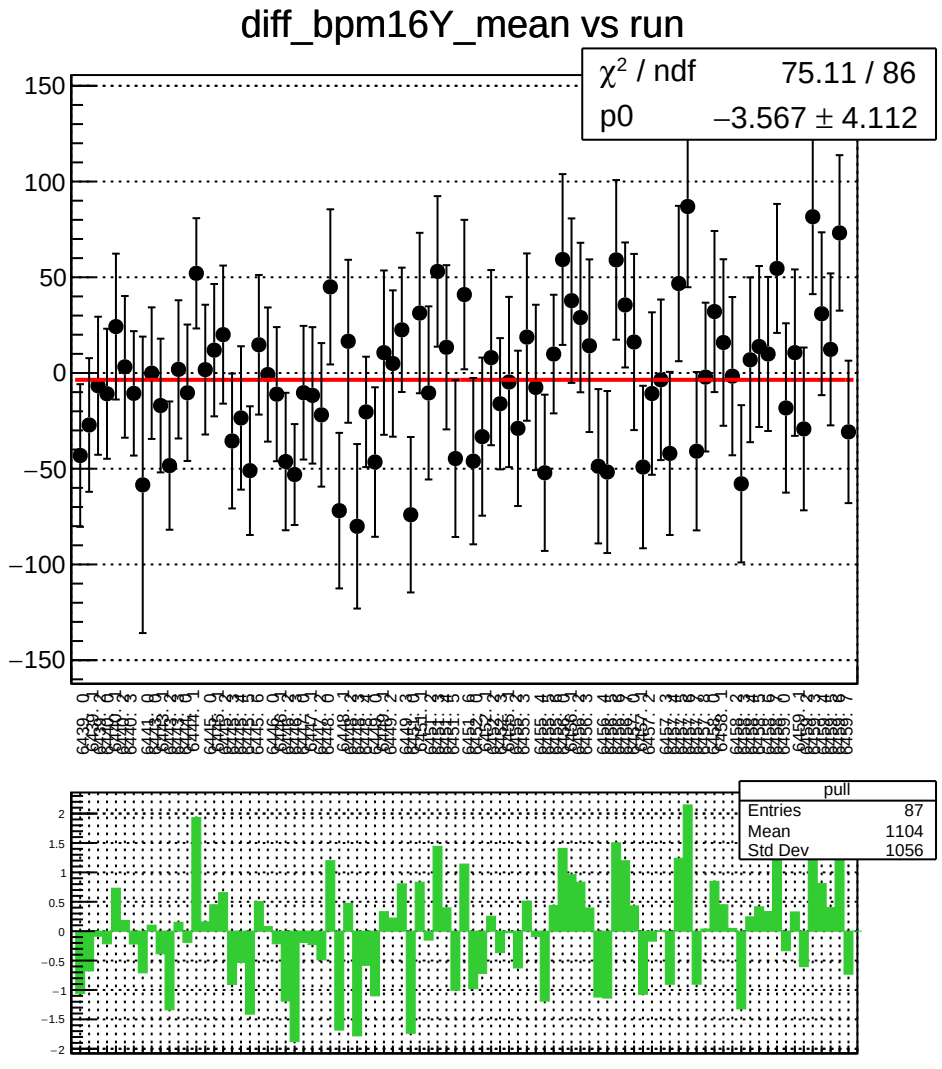

pull1D
Entries 87
Mean 0.004944
Std Dev 0.9843
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

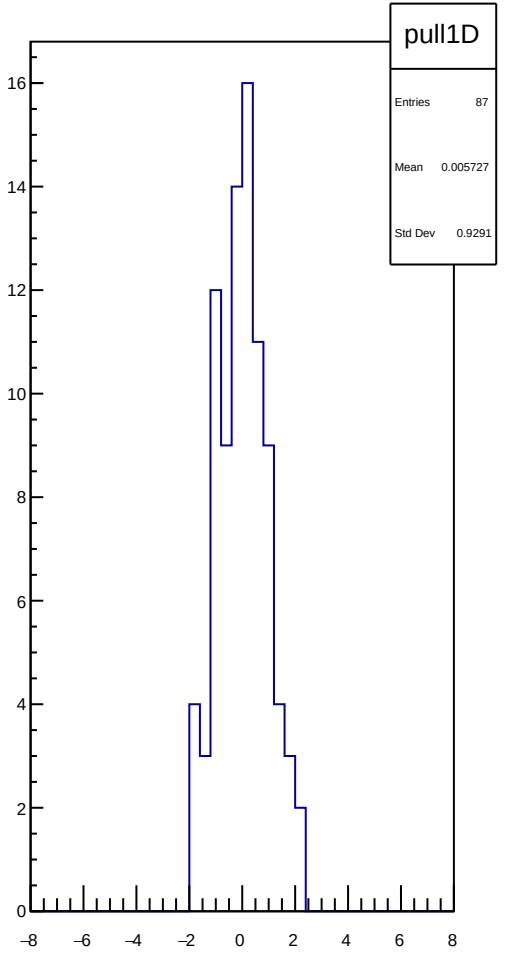

diff_bpm12Y_rms vs run
χ² / ndf 2.18e+04 / 86
p0 3065 ± 2.381
4500
4000
3500
3000
2500
2000

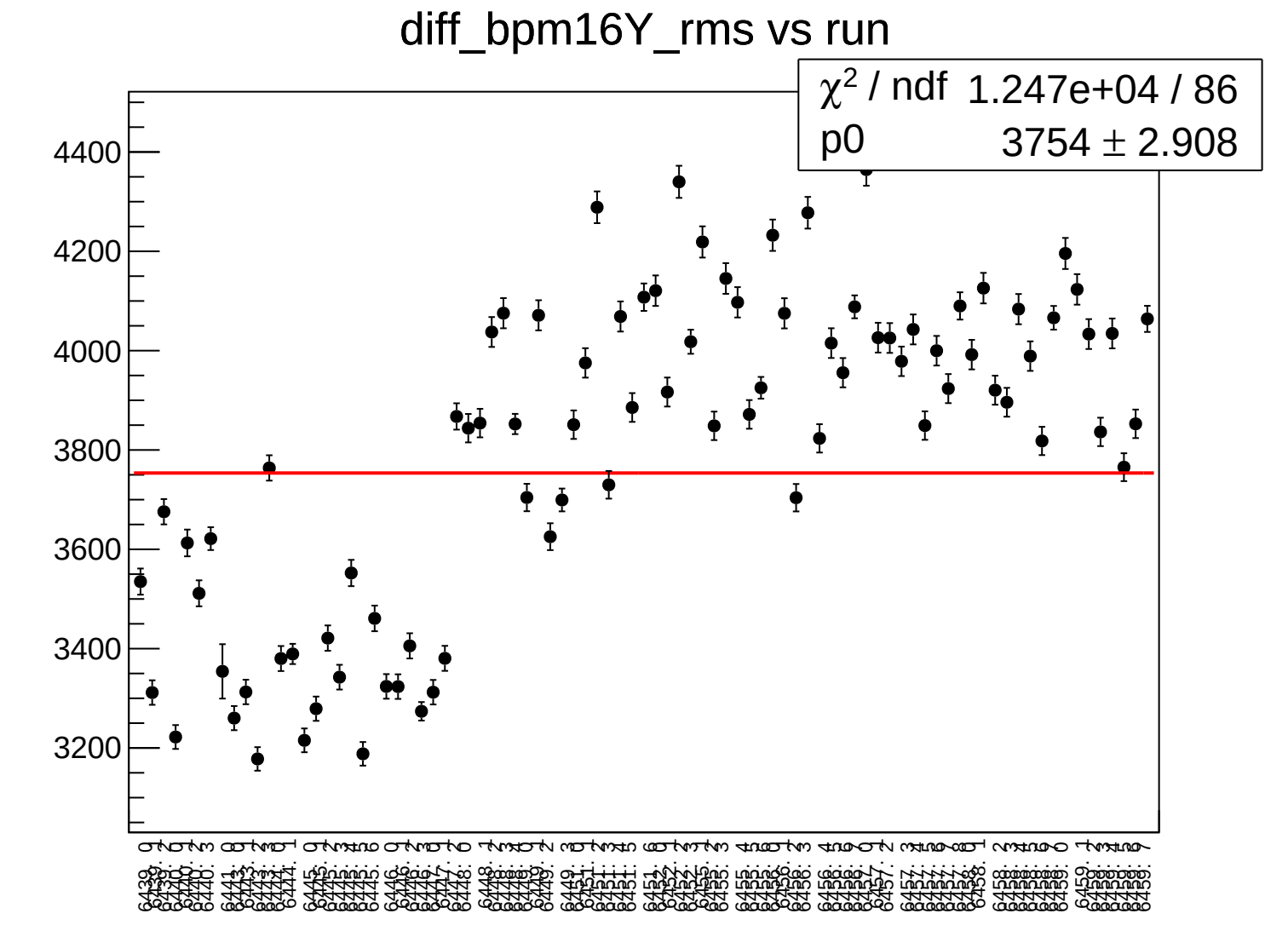

diff_bpm16X_mean vs run
χ² / ndf 70.13 / 86
p0 17.15 ± 7.16
200
100
0
−100
−200
pull
Entries 87
Mean 324.8
Std Dev 250.2
2
1
0
−1
−2

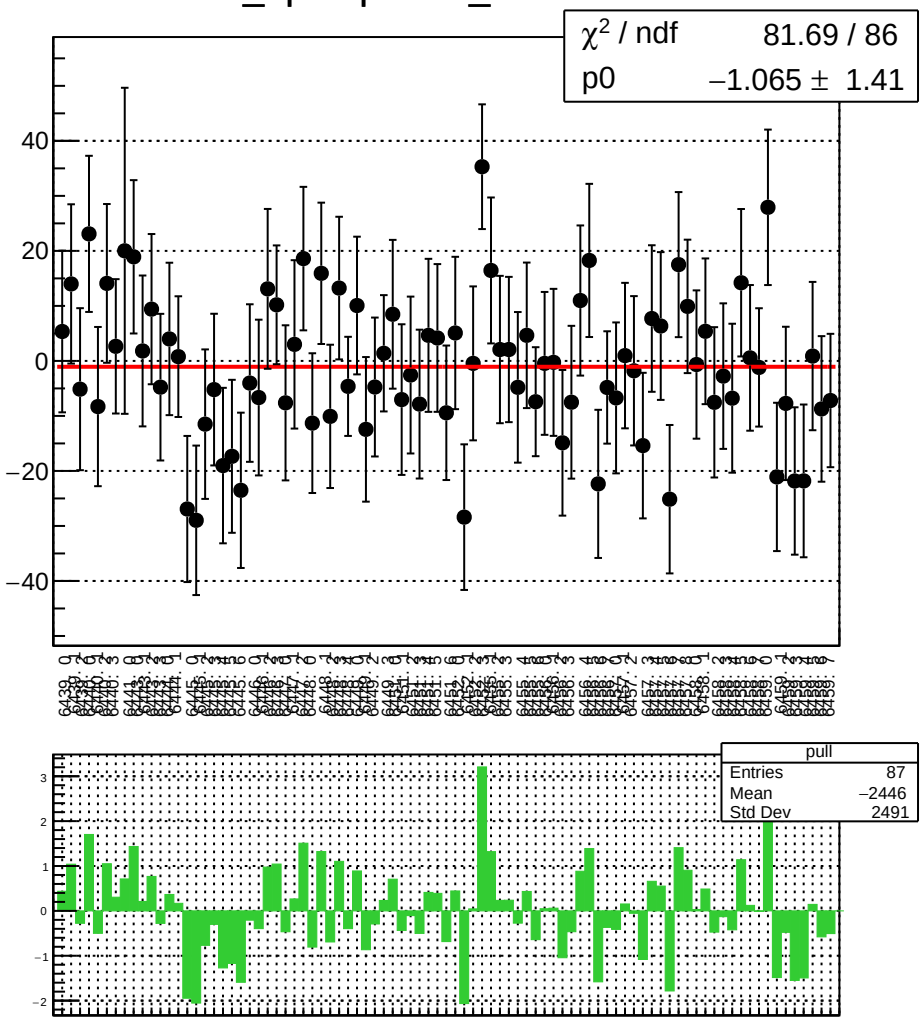

pull1D
Entries 87
Mean −0.0052
Std Dev 0.8978
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

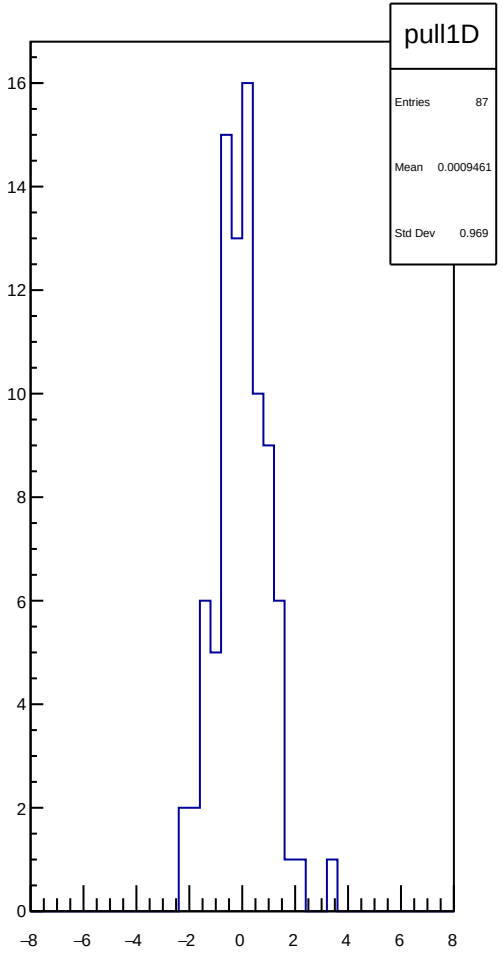

diff_bpm16X_rms vs run
χ^2 / ndf 1.524e+04 / 86
p0 6530 ± 5.063
9000
8500
8000
7500
7000
6500
6000
5500
5000

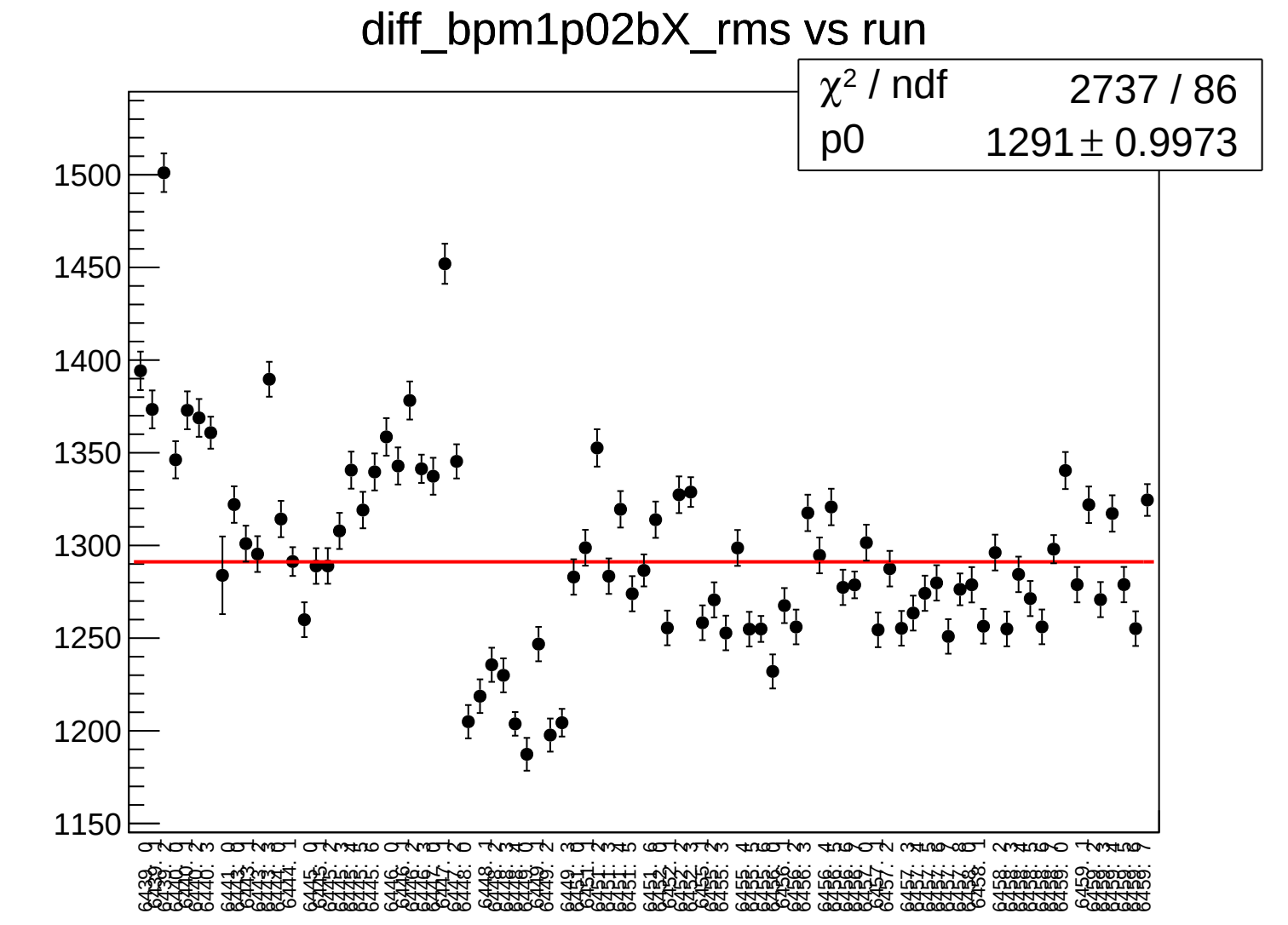

diff_bpm16Y_mean vs run
χ^2 / ndf 75.11 / 86
p0 −3.567 ± 4.112
150
100
50
0
−50
−100
−150
pull
Entries 87
Mean 1104
Std Dev 1056
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

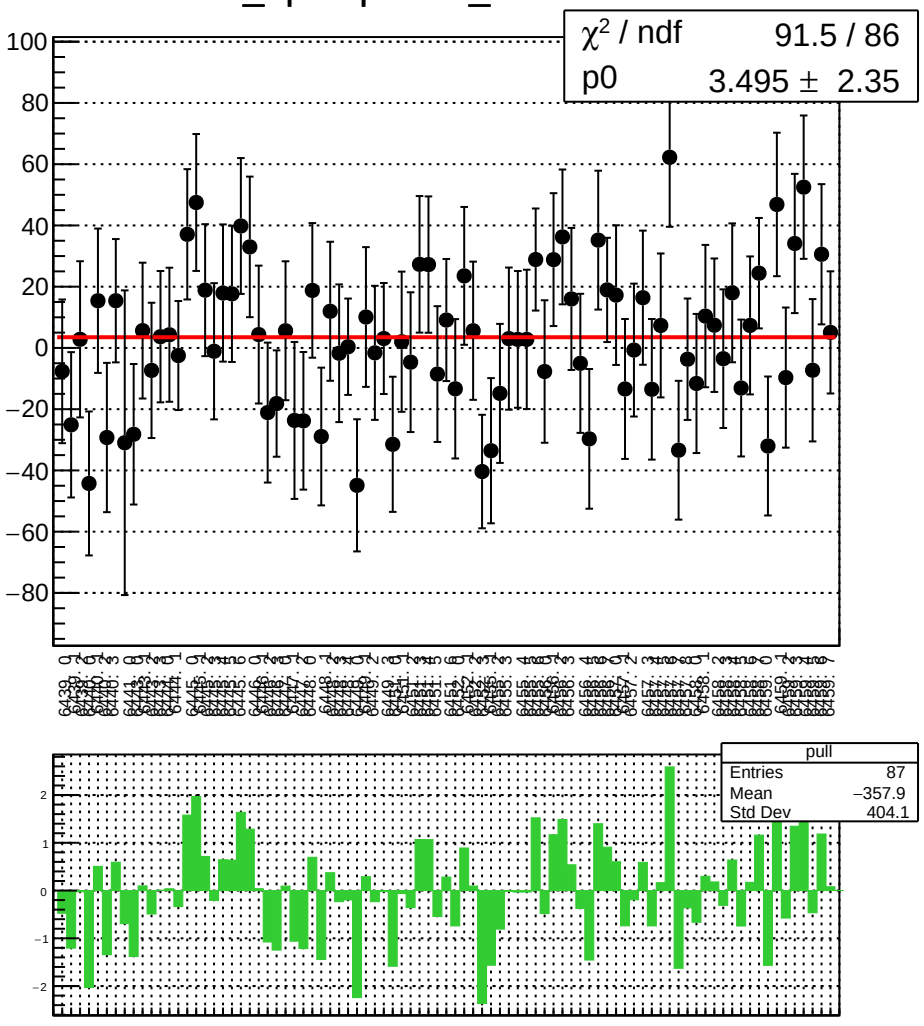

pull1D
Entries 87
Mean 0.005727
Std Dev 0.9291
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

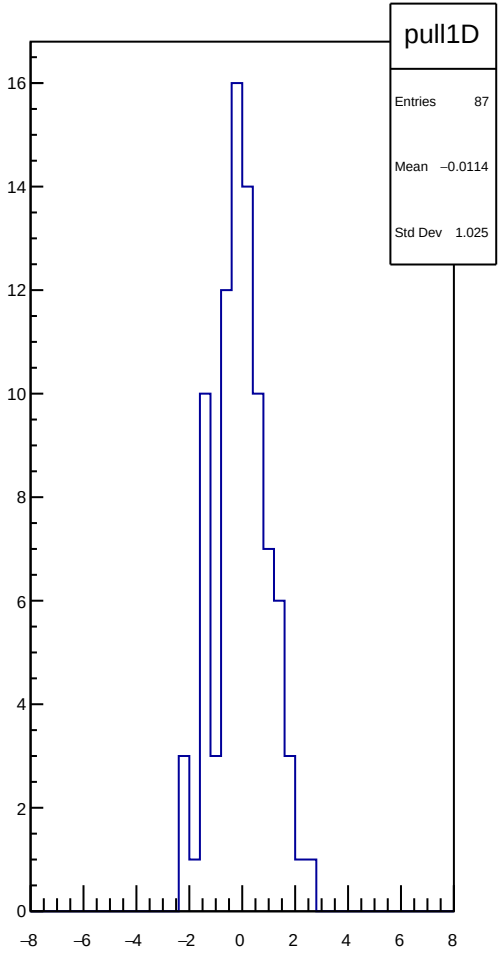

diff_bpm16Y_rms vs run
χ² / ndf 1.247e+04 / 86
p0 3754 ± 2.908
4400
4200
4000
3800
3600
3400
3200

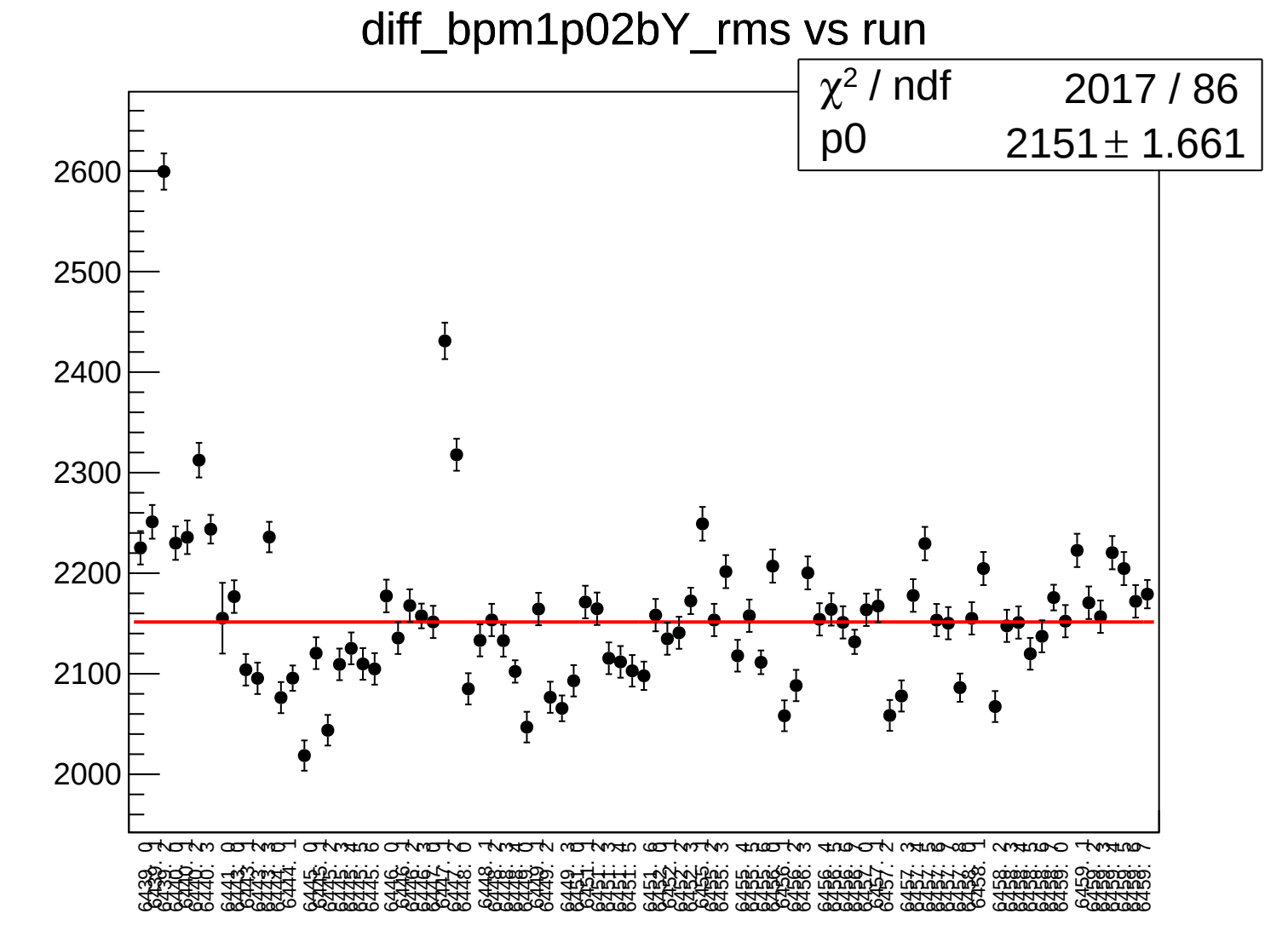

diff_bpm1p02bX_mean vs run
χ² / ndf 81.69 / 86
p0 −1.065 ± 1.41
pull
Entries 87
Mean −2446
Std Dev 2491

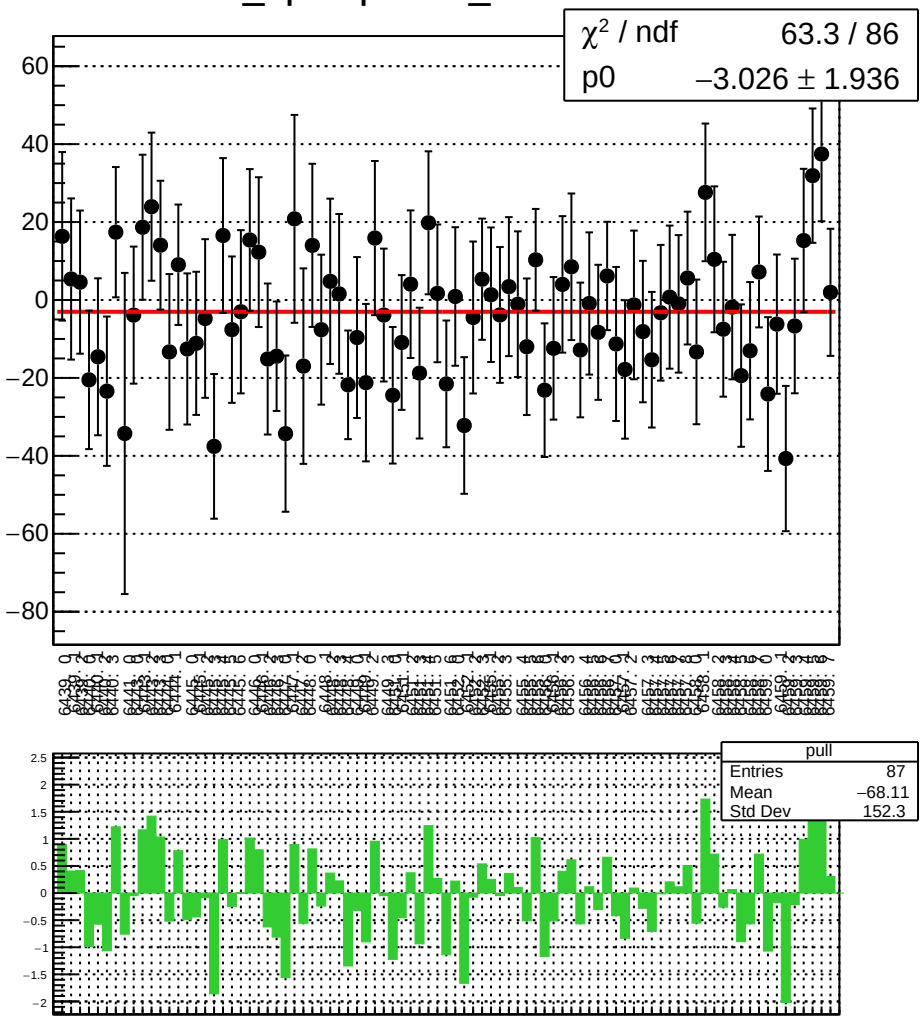

pull1D
Entries 87
Mean 0.0009461
Std Dev 0.969

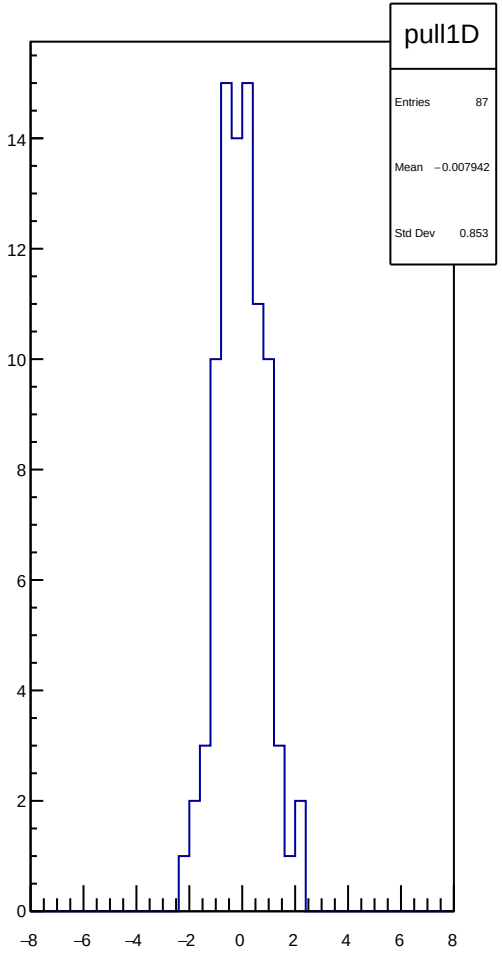

diff_bpm1p02bX_rms vs run
χ² / ndf 2737 / 86
p0 1291 ± 0.9973
1500
1450
1400
1350
1300
1250
1200
1150

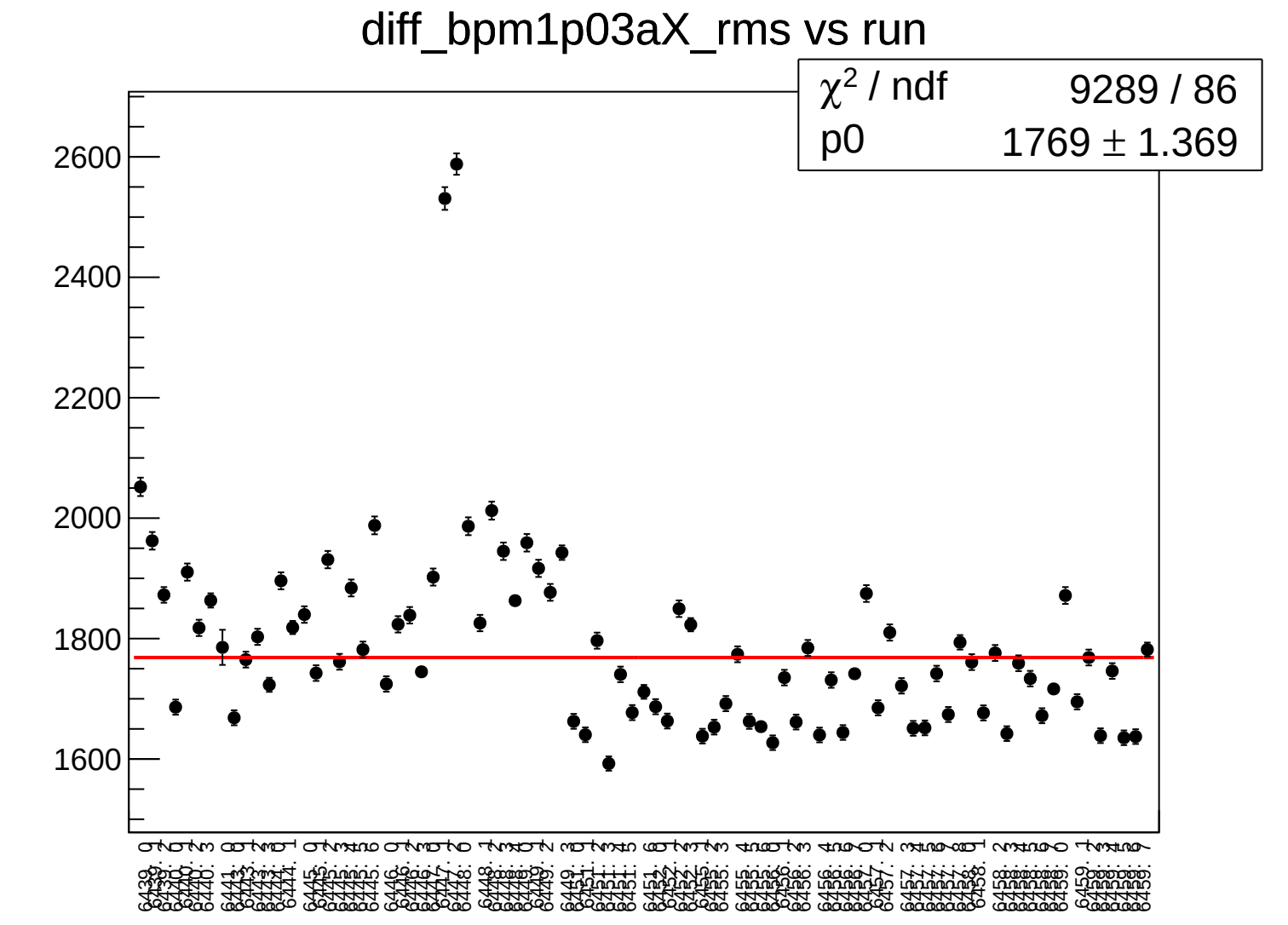

diff_bpm1p02bY_mean vs run
χ² / ndf 91.5 / 86
p0 3.495 ± 2.35
pull
Entries 87
Mean −357.9
Std Dev 404.1

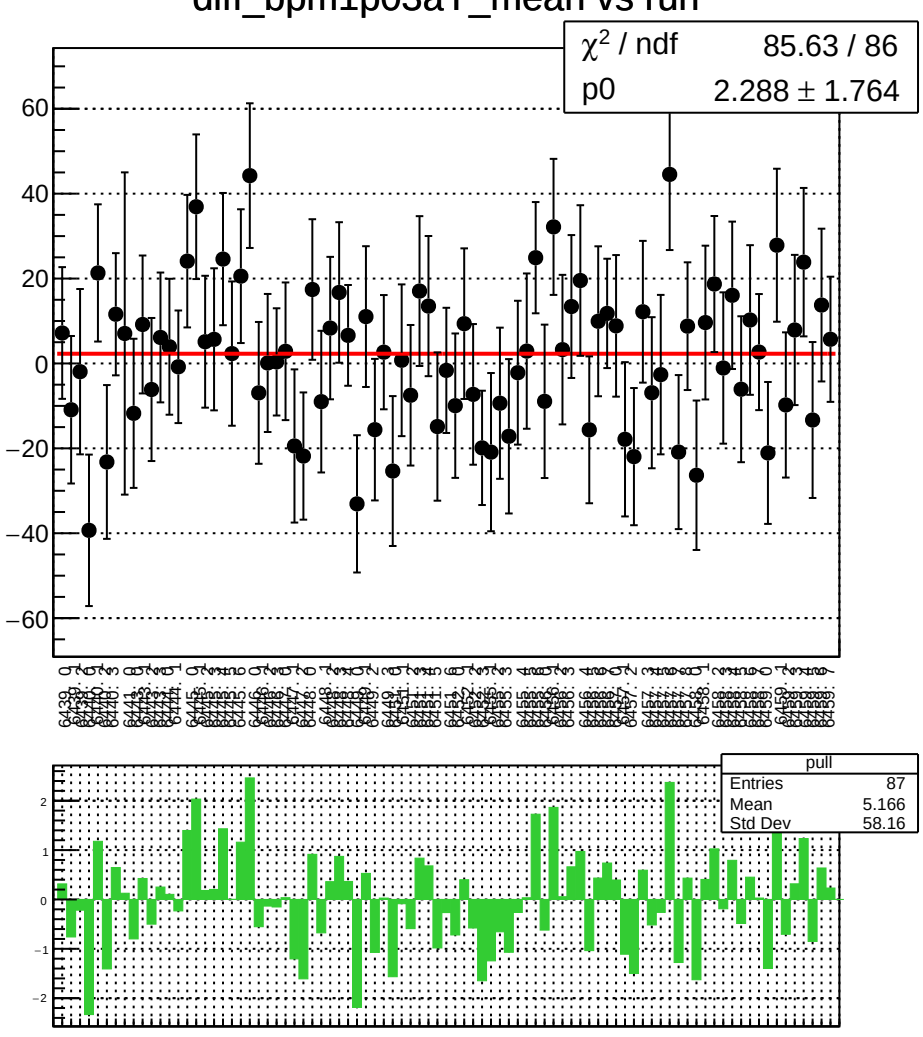

pull1D
Entries 87
Mean −0.0114
Std Dev 1.025

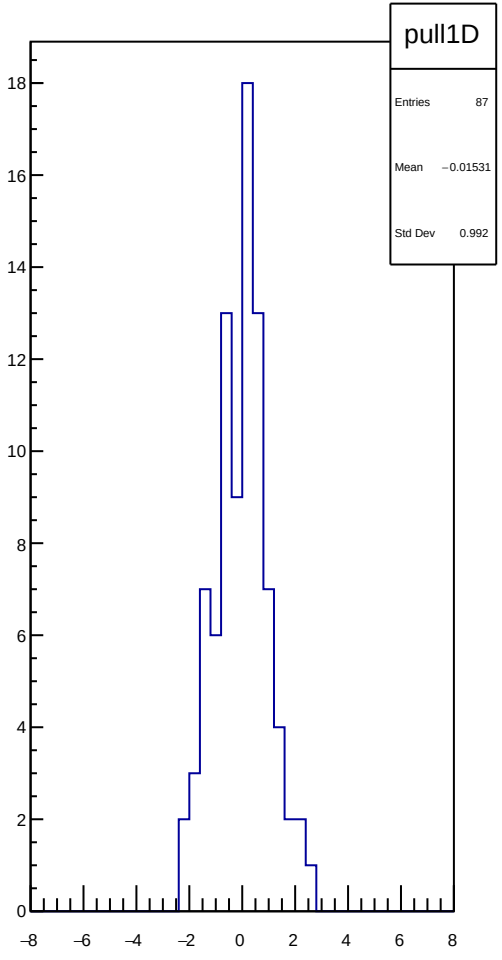

diff_bpm1p02bY_rms vs run
χ² / ndf 2017 / 86
p0 2151 ± 1.661
2600
2500
2400
2300
2200
2100
2000

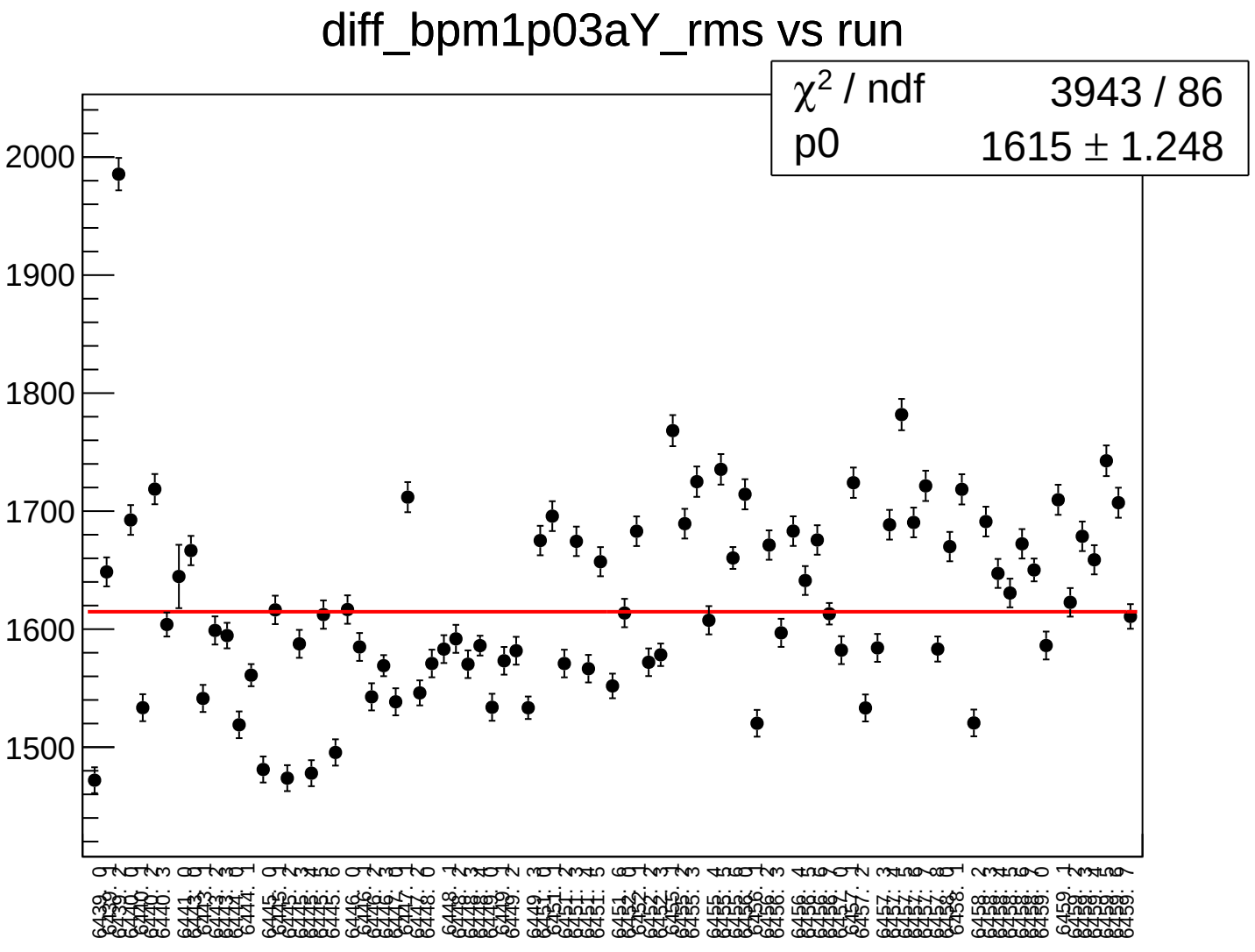

diff_bpm1p03aX_mean vs run
χ² / ndf 63.3 / 86
p0 −3.026 ± 1.936
pull
Entries 87
Mean −68.11
Std Dev 152.3

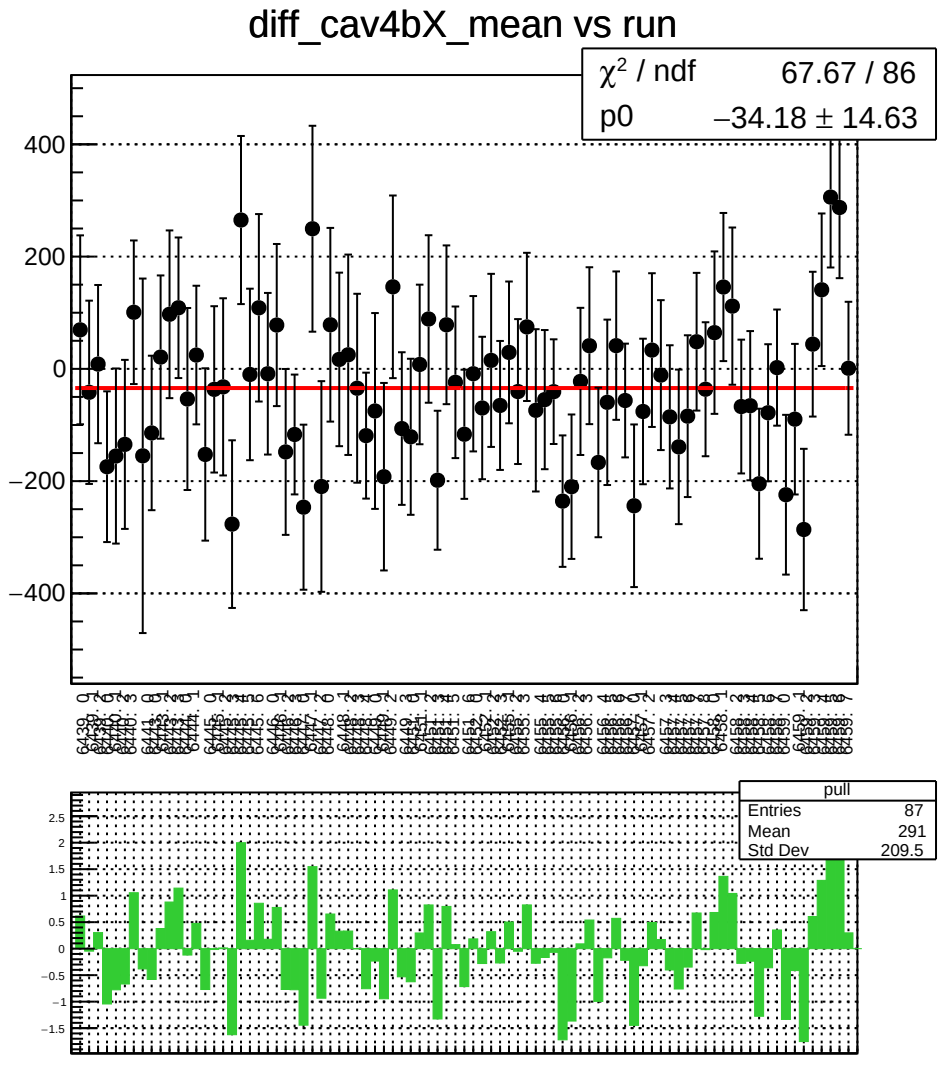

pull1D
Entries 87
Mean −0.007942
Std Dev 0.853

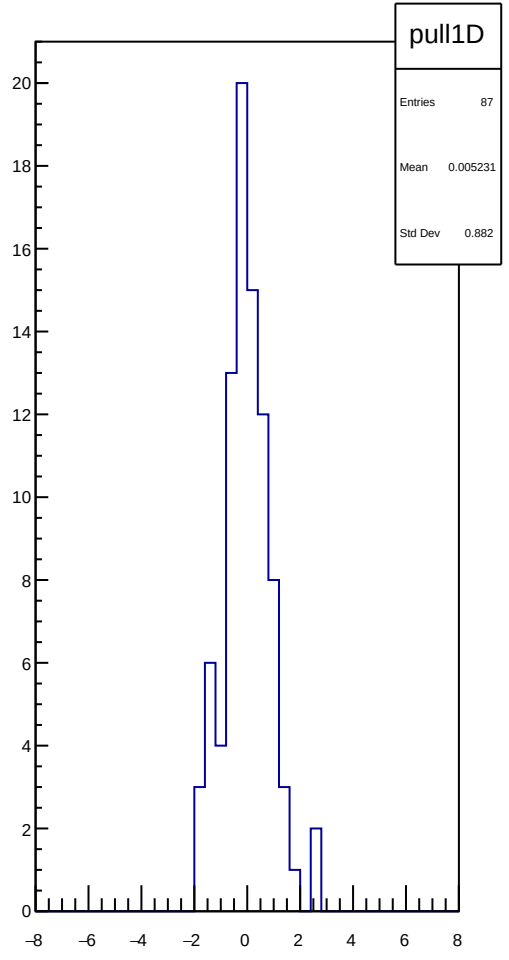

diff_bpm1p03aX_rms vs run
χ² / ndf 9289 / 86
p0 1769 ± 1.369
2600
2400
2200
2000
1800
1600

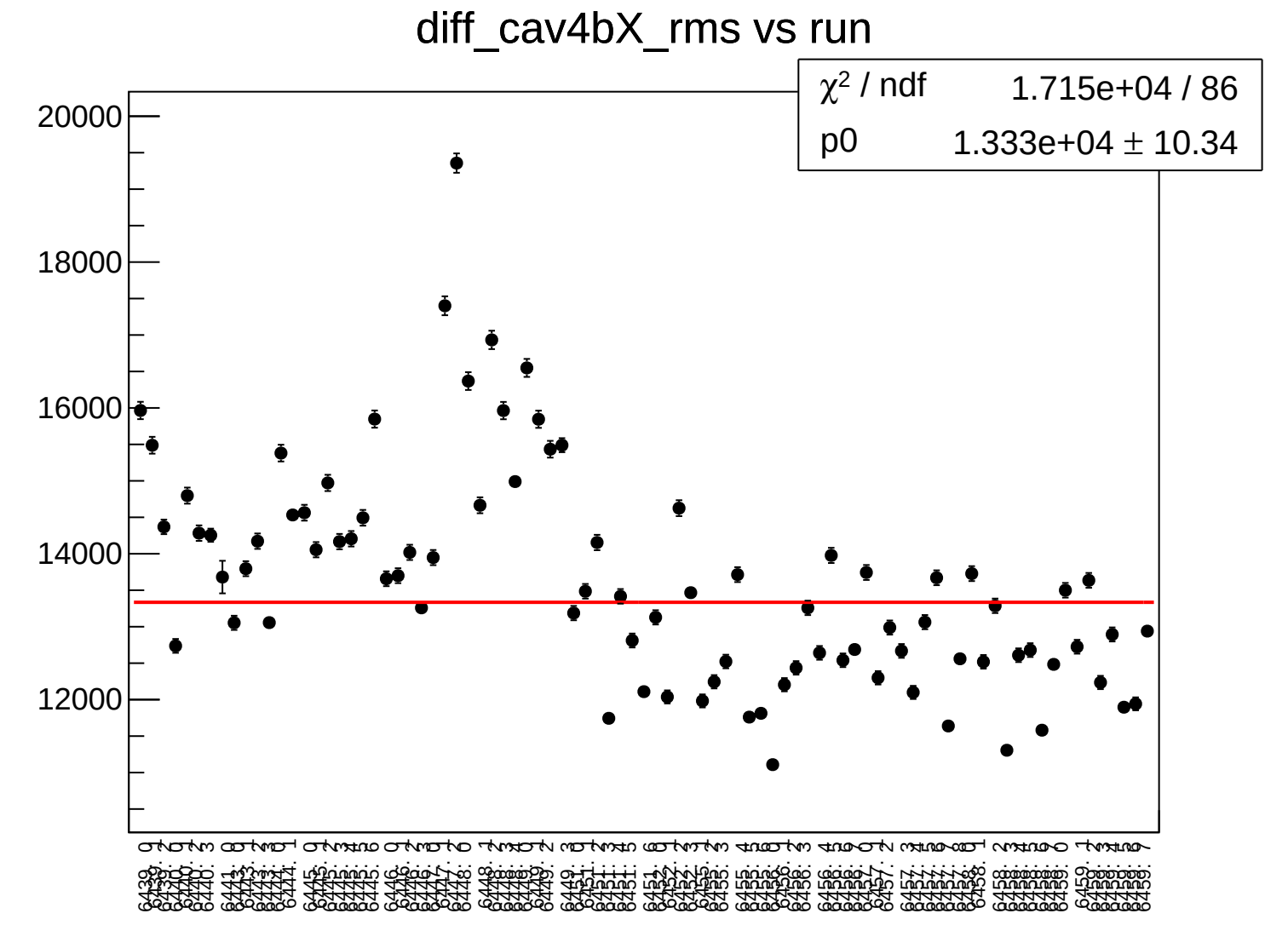

diff_bpm1p03aY_mean vs run
χ² / ndf 85.63 / 86
p0 2.288 ± 1.764
pull
Entries 87
Mean 5.166
Std Dev 58.16

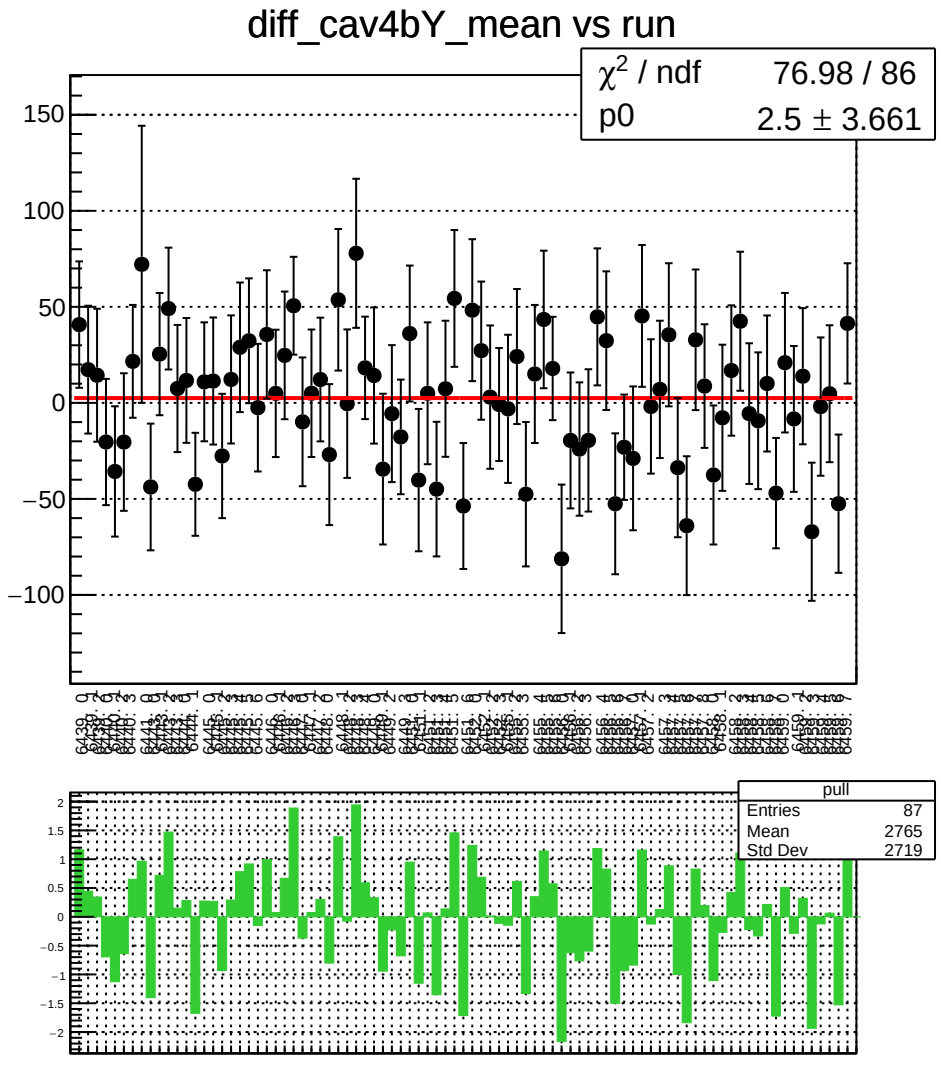

pull1D
Entries 87
Mean −0.01531
Std Dev 0.992

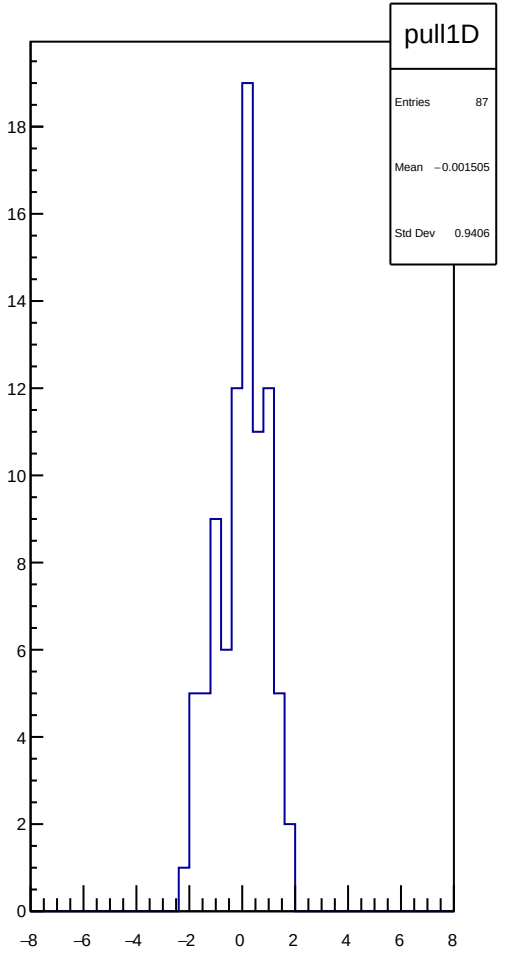

diff_bpm1p03aY_rms vs run
χ² / ndf 3943 / 86
p0 1615 ± 1.248
2000
1900
1800
1700
1600
1500

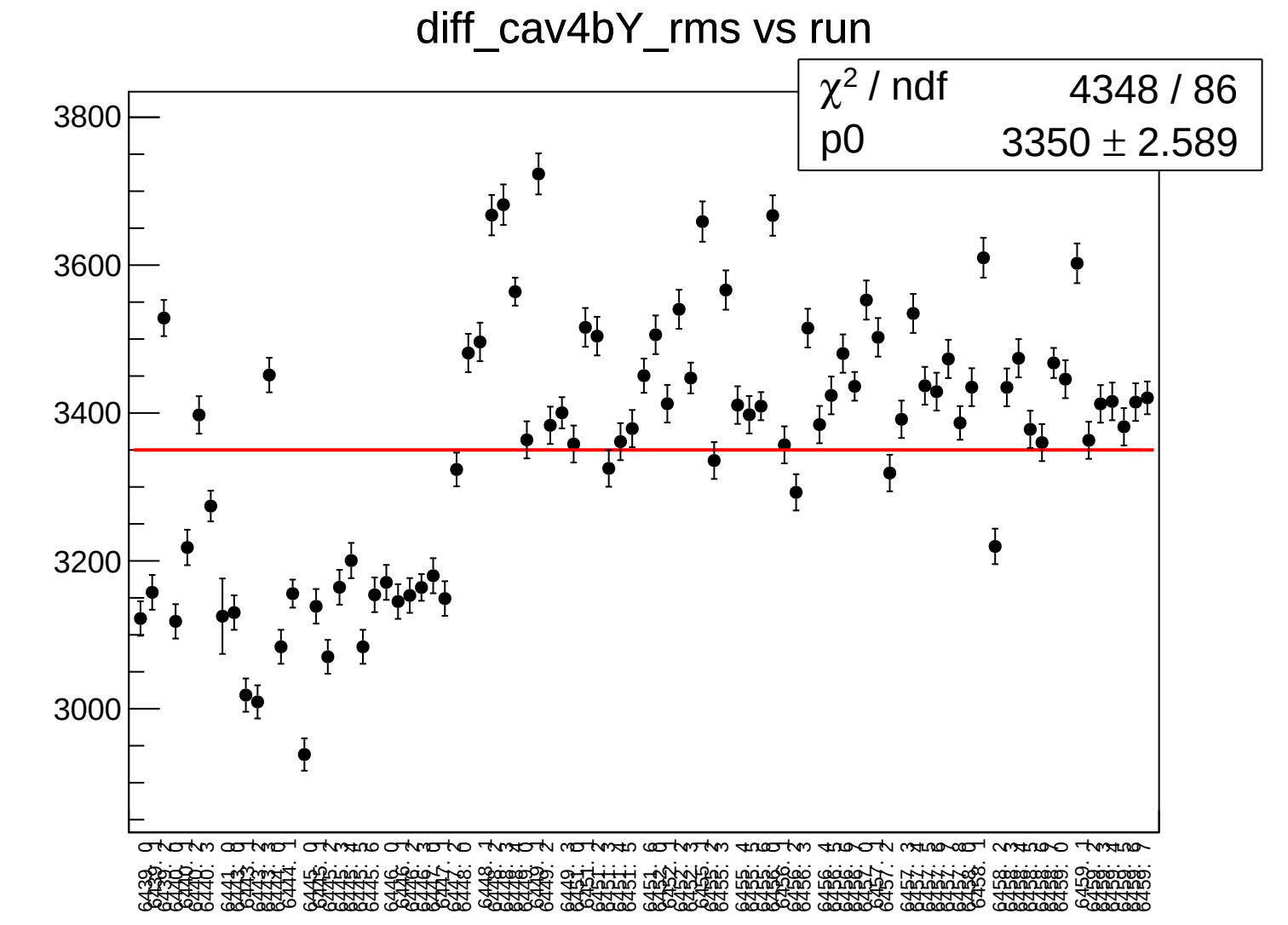

diff_cav4bX_mean vs run
χ² / ndf 67.67 / 86
p0 −34.18 ± 14.63
400
200
0
−200
−400
pull
Entries 87
Mean 291
Std Dev 209.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

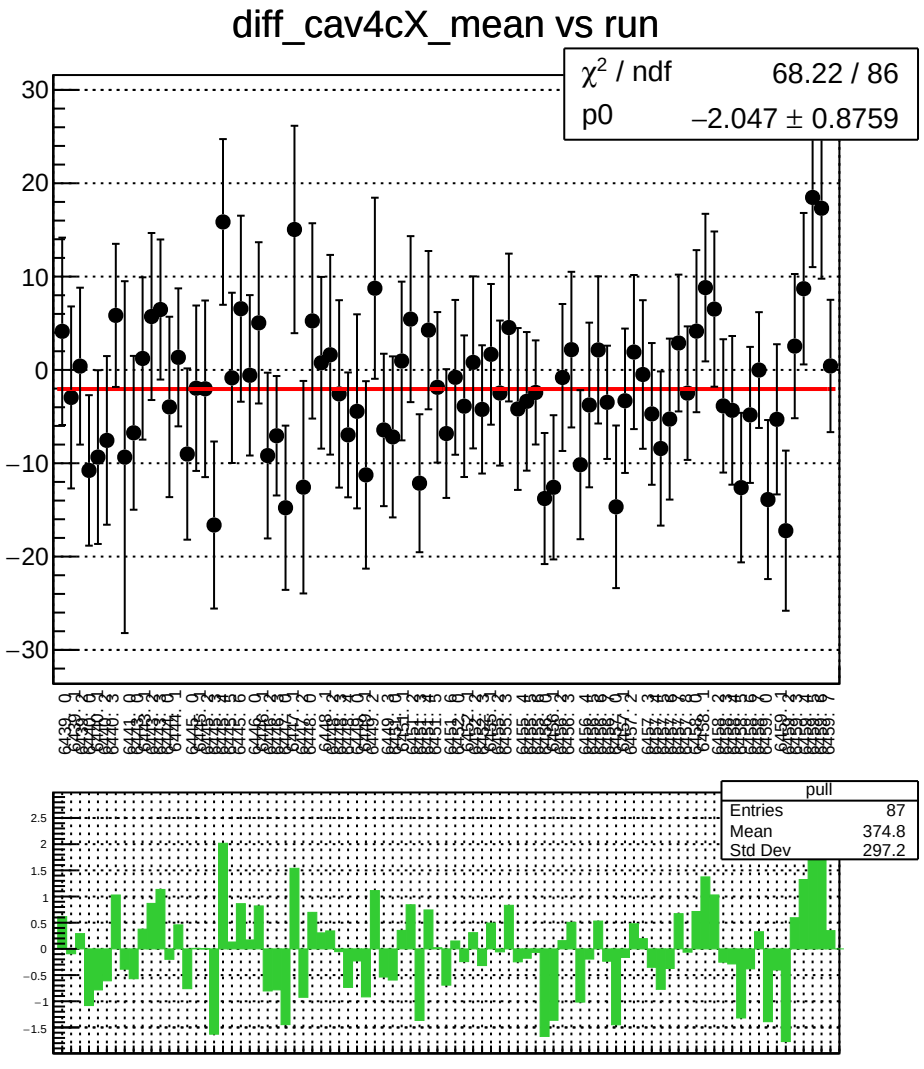

pull1D
Entries 87
Mean 0.005231
Std Dev 0.882
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

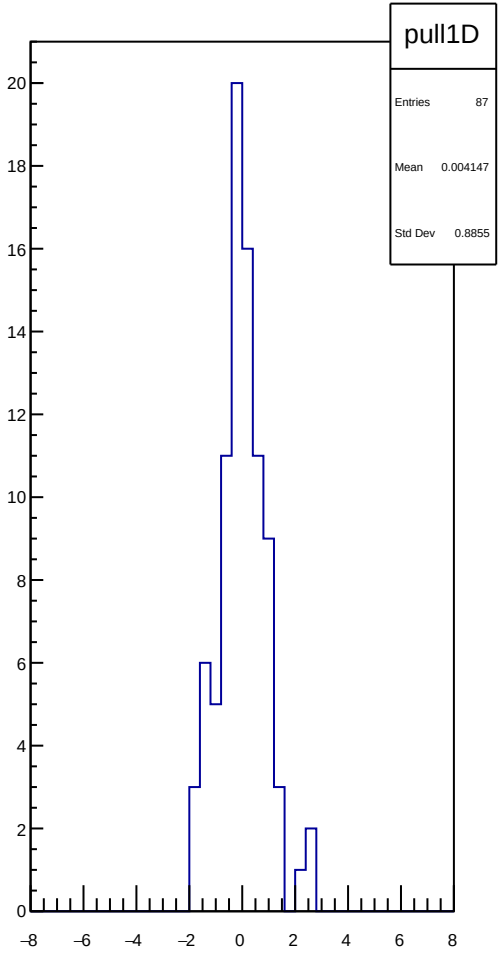

diff_cav4bX_rms vs run
χ² / ndf 1.715e+04 / 86
p0 1.333e+04 ± 10.34
20000
18000
16000
14000
12000

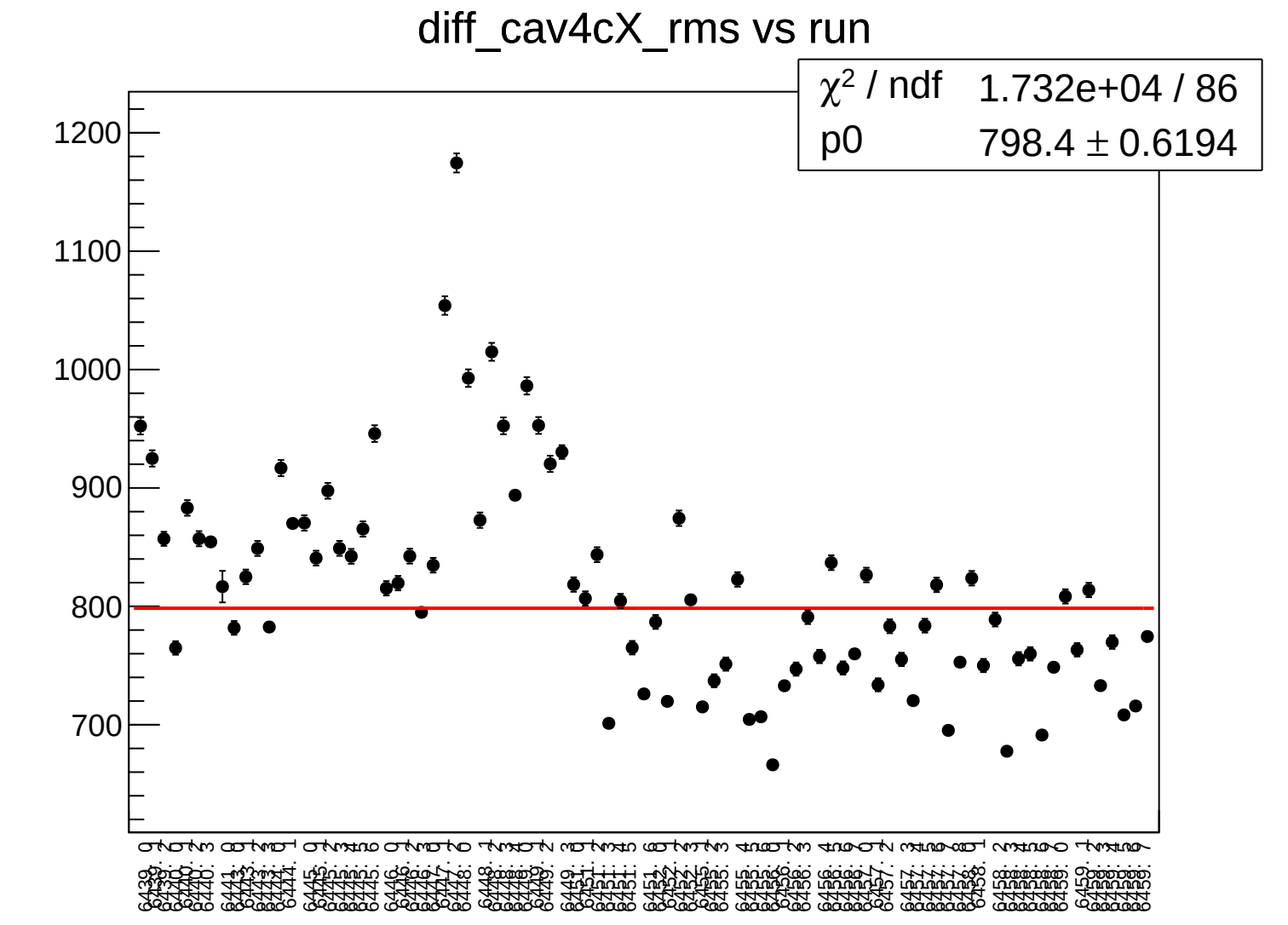

diff_cav4bY_mean vs run
χ^2 / ndf 76.98 / 86
p0 2.5 ± 3.661
150
100
50
0
−50
−100
pull
Entries 87
Mean 2765
Std Dev 2719
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

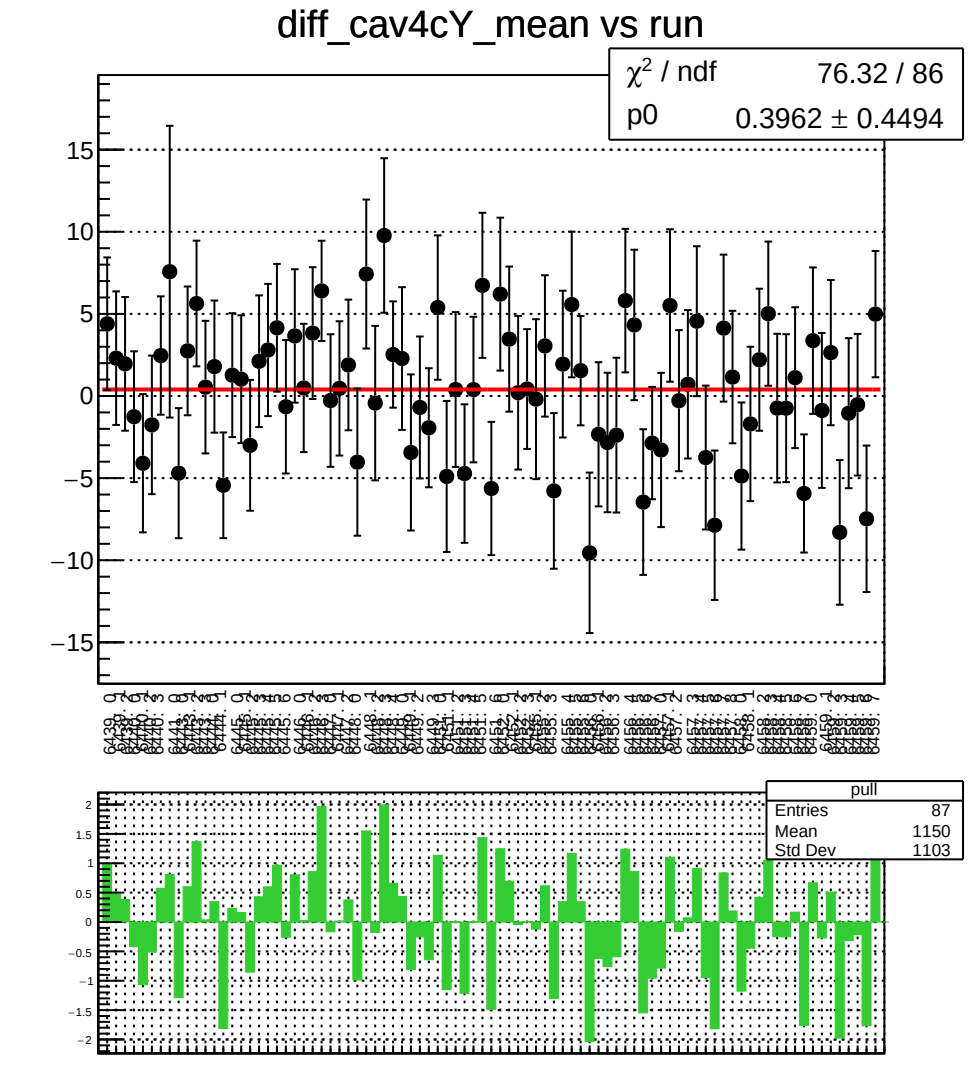

pull1D
Entries 87
Mean −0.001505
Std Dev 0.9406
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

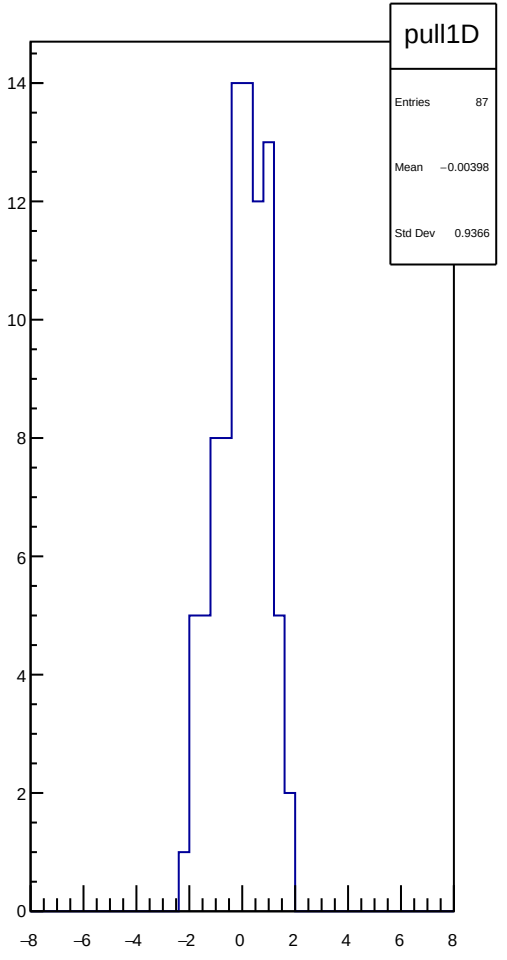

diff_cav4bY_rms vs run
χ² / ndf 4348 / 86
p0 3350 ± 2.589
3800
3600
3400
3200
3000

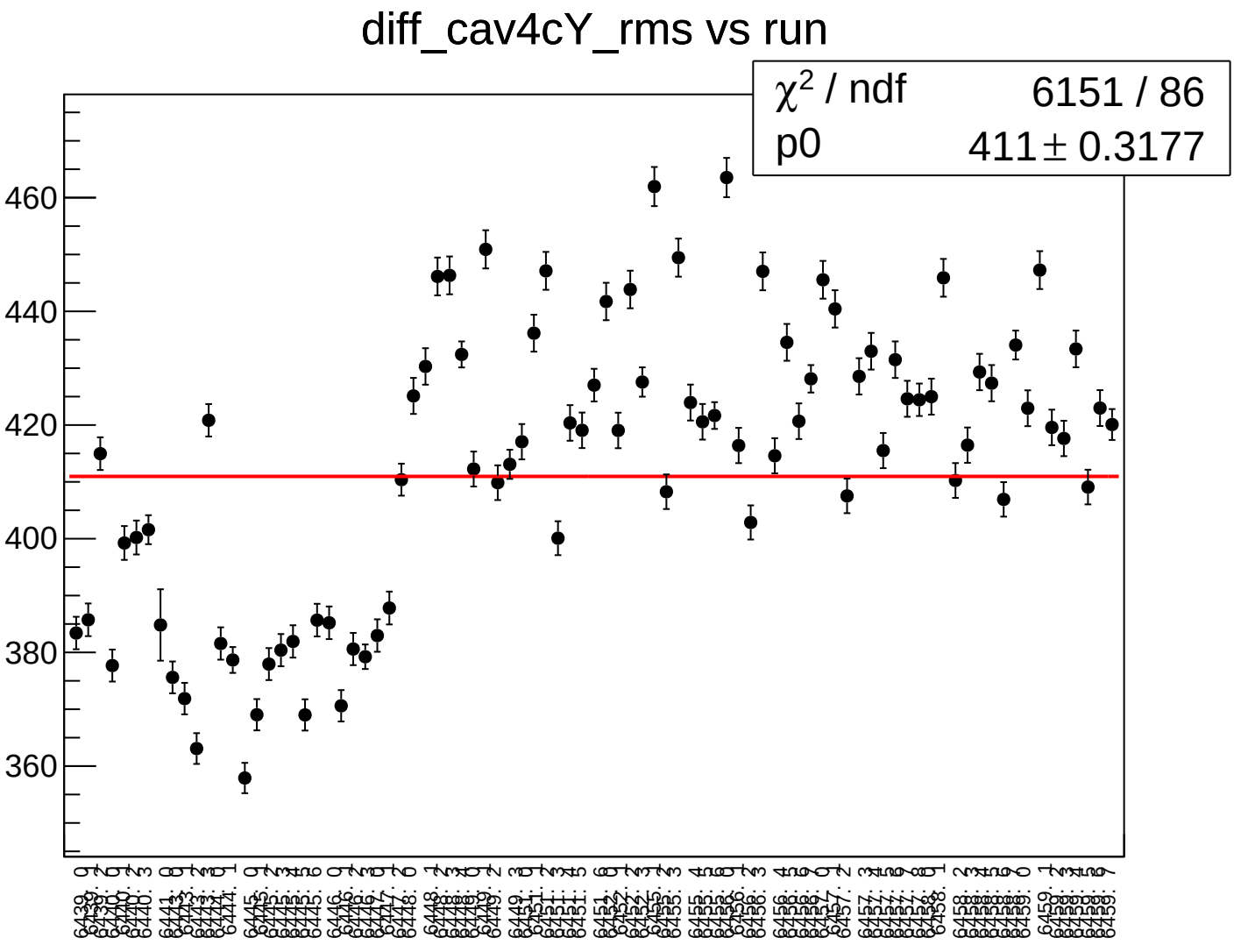

diff_cav4cX_mean vs run
χ² / ndf 68.22 / 86
p0 −2.047 ± 0.8759
pull
Entries 87
Mean 374.8
Std Dev 297.2

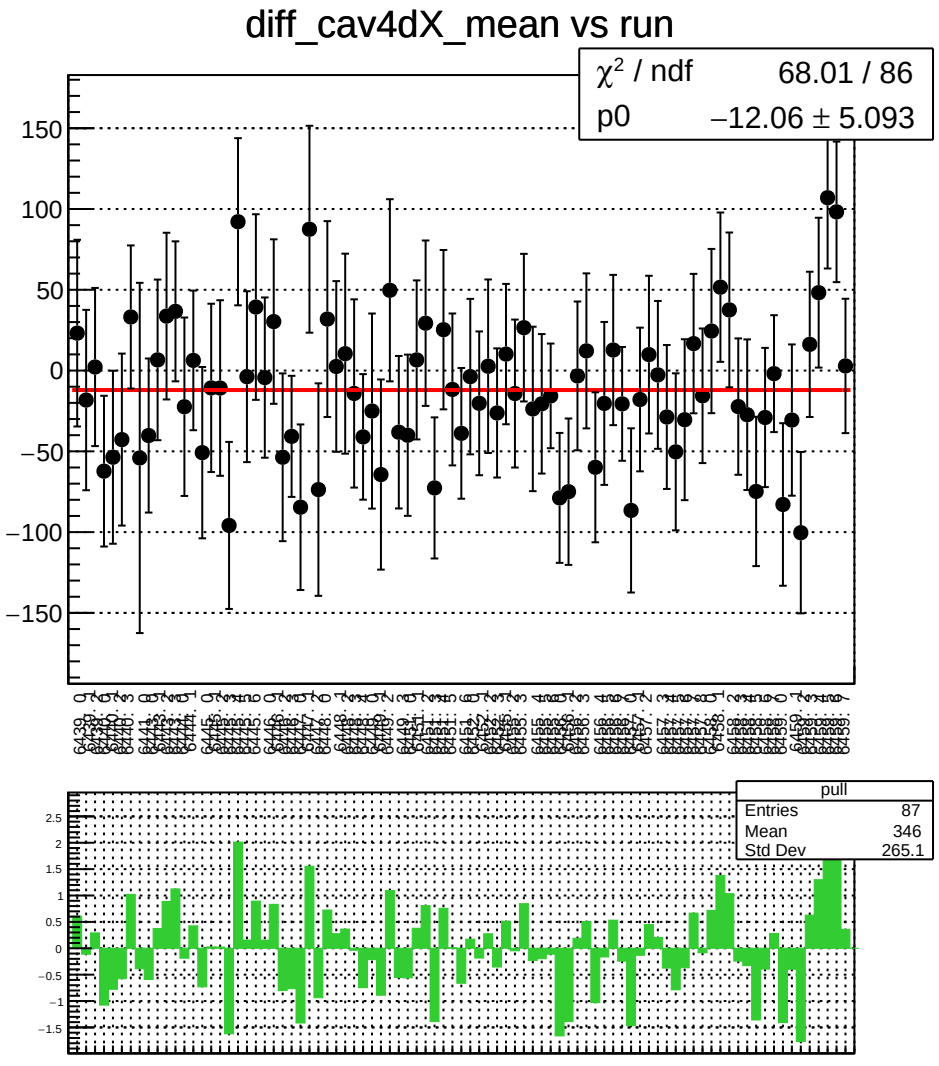

pull1D
Entries 87
Mean 0.004147
Std Dev 0.8855

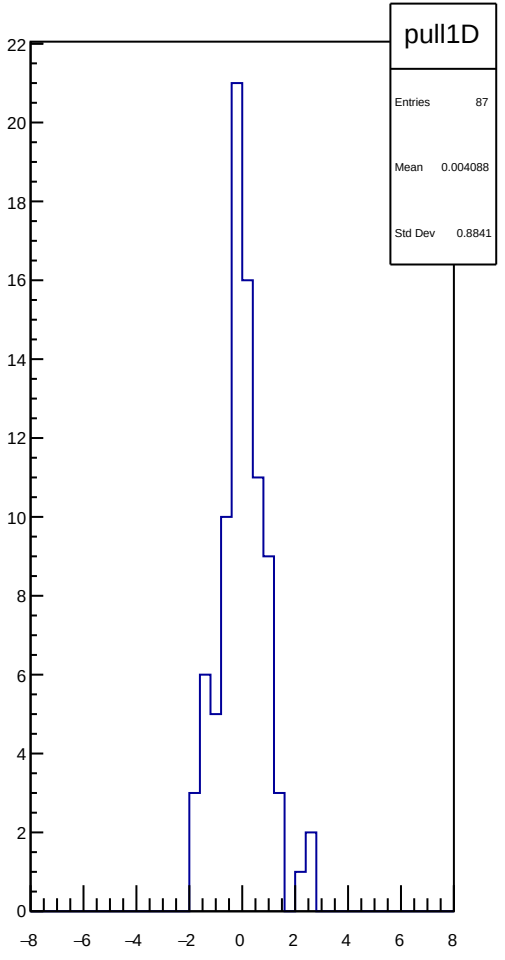

diff_cav4cX_rms vs run
χ² / ndf 1.732e+04 / 86
p0 798.4 ± 0.6194
1200
1100
1000
900
800
700

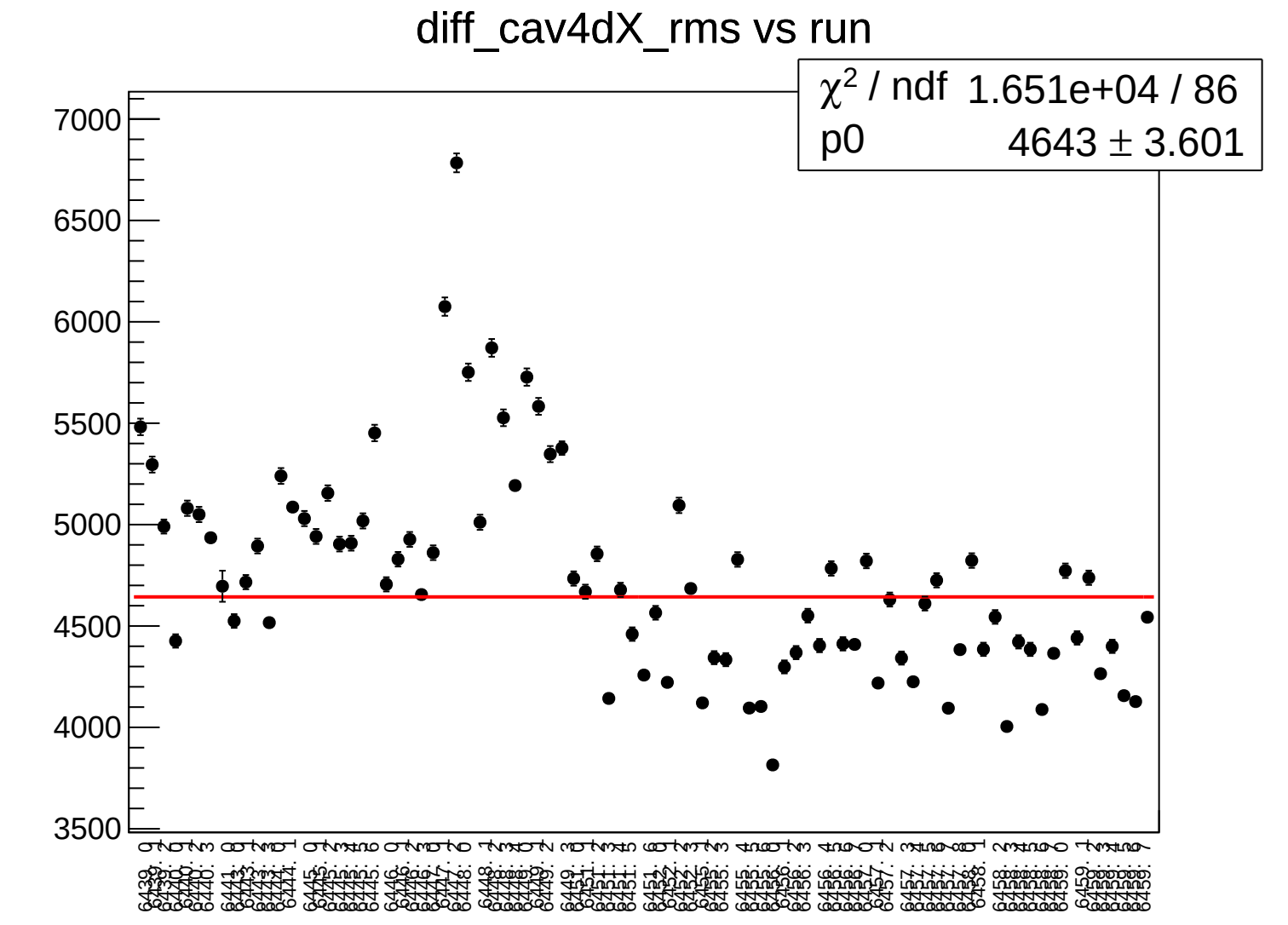

diff_cav4cY_mean vs run
χ² / ndf 76.32 / 86
p0 0.3962 ± 0.4494
pull
Entries 87
Mean 1150
Std Dev 1103

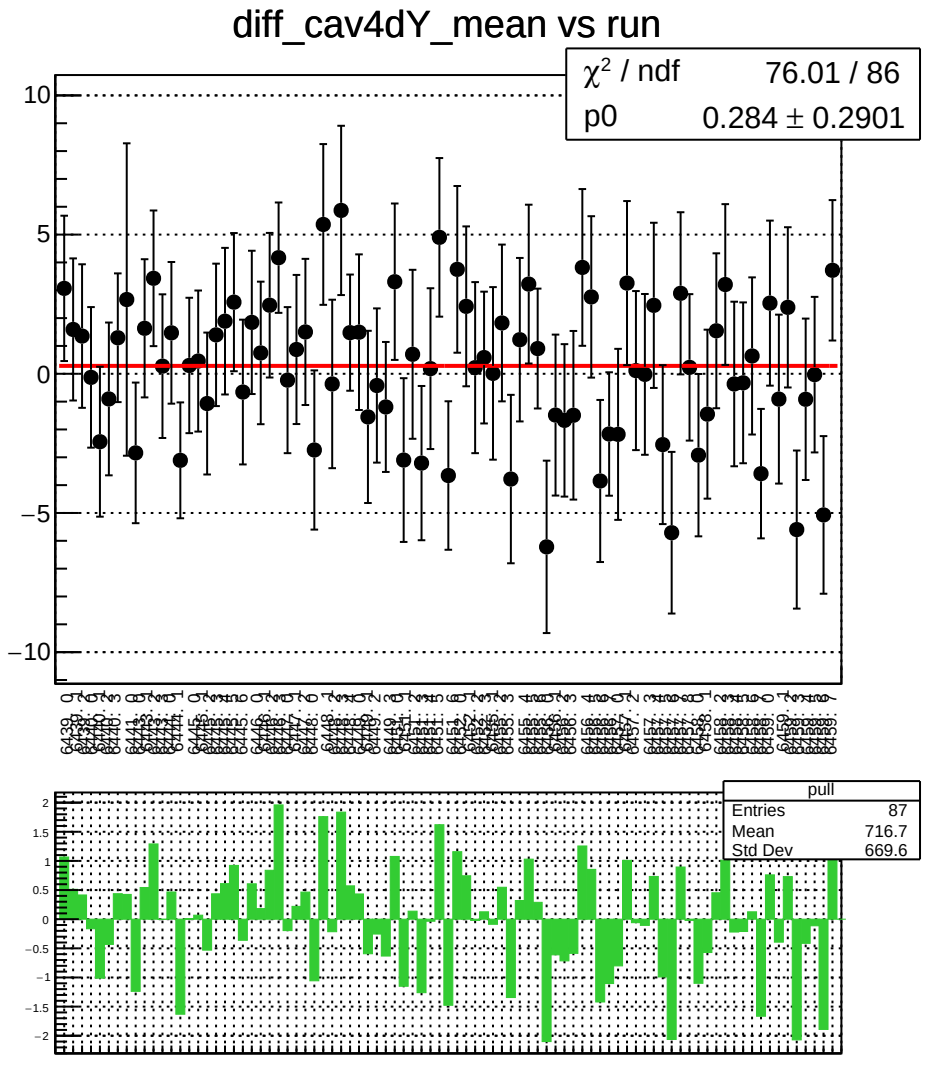

pull1D
Entries 87
Mean −0.00398
Std Dev 0.9366

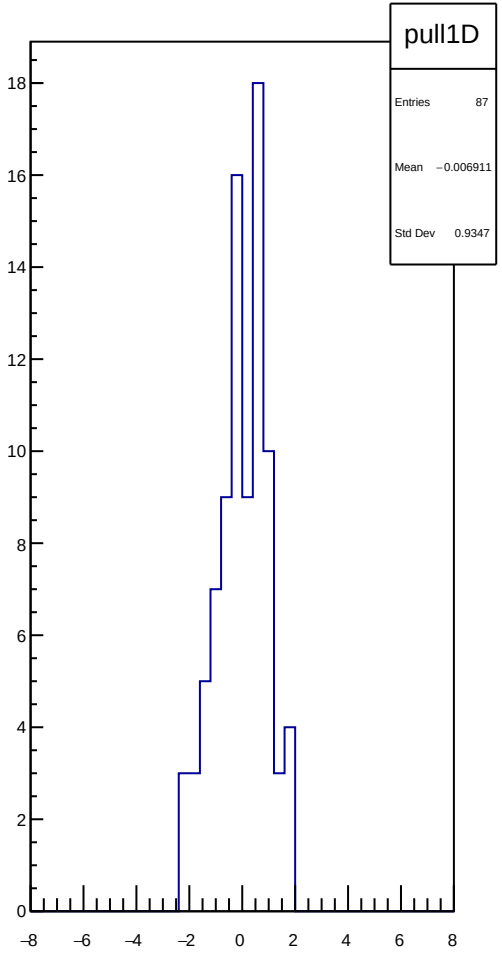

diff_cav4cY_rms vs run
χ^2 / ndf 6151 / 86
p0 411 ± 0.3177
460
440
420
400
380
360

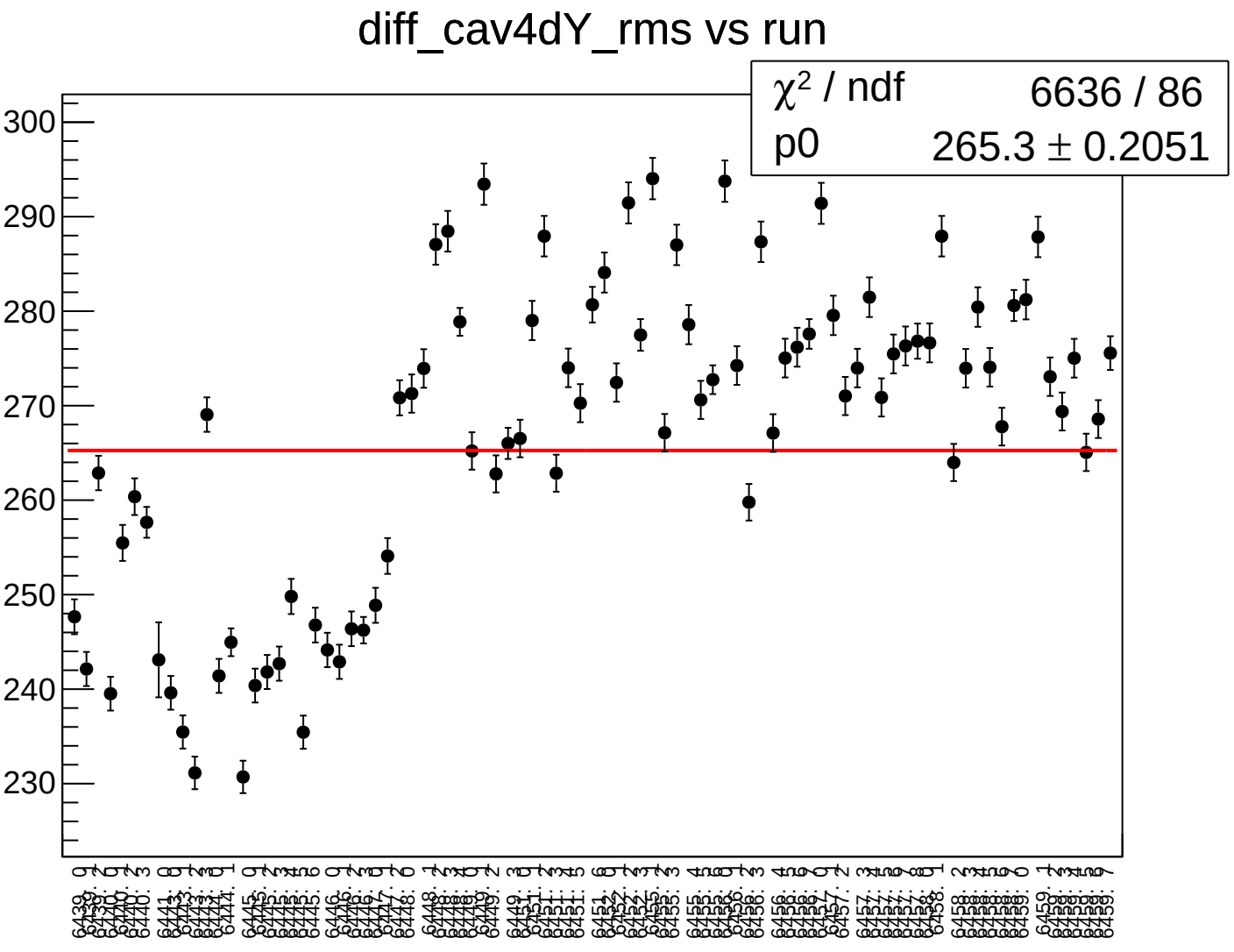

diff_cav4dX_mean vs run
χ² / ndf 68.01 / 86
p0 −12.06 ± 5.093
150
100
50
0
−50
−100
−150
pull
Entries 87
Mean 346
Std Dev 265.1
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

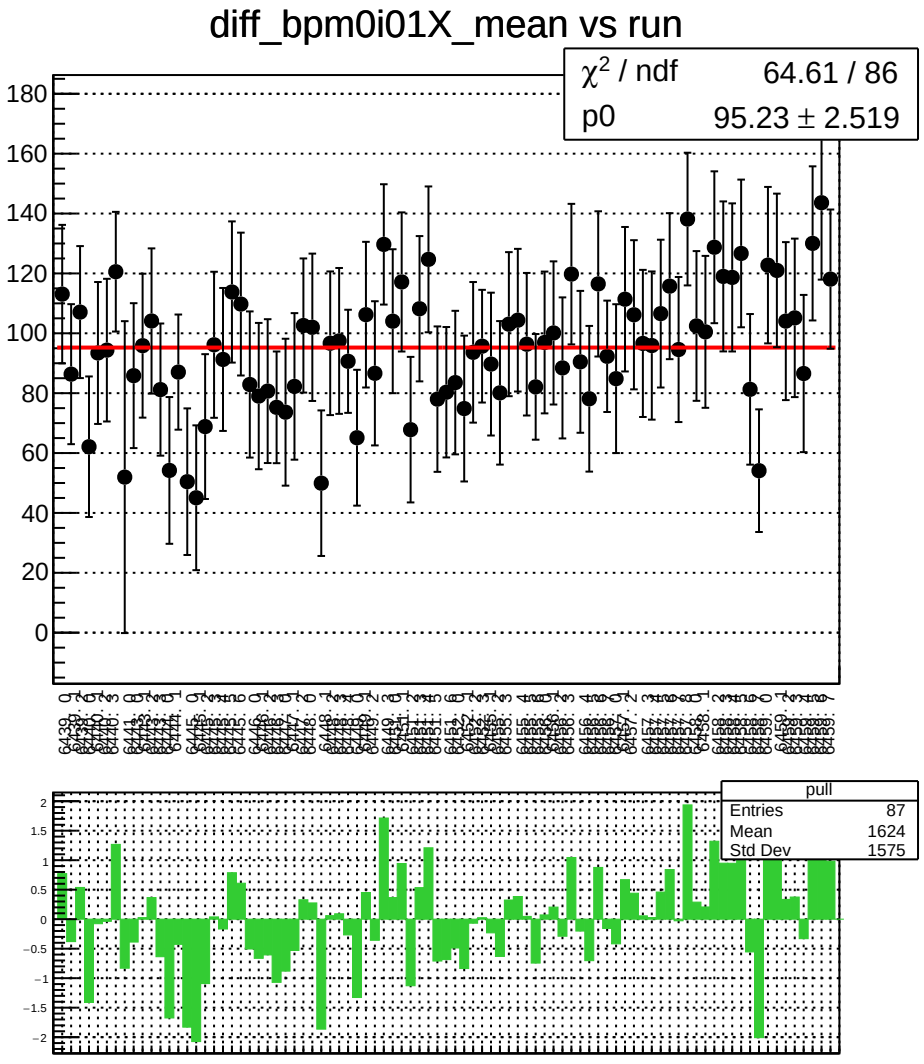

pull1D
Entries 87
Mean 0.004088
Std Dev 0.8841
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

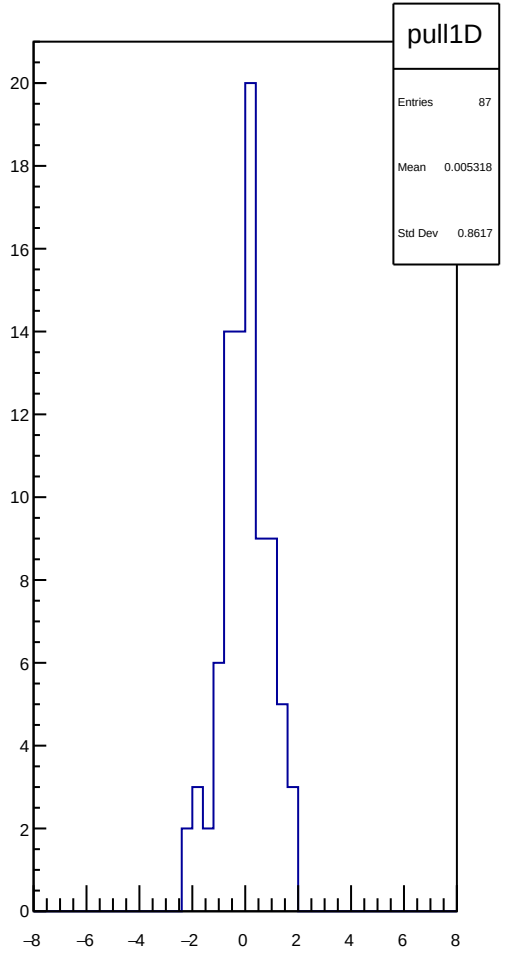

diff_cav4dX_rms vs run
χ² / ndf 1.651e+04 / 86
p0 4643 ± 3.601
7000
6500
6000
5500
5000
4500
4000
3500

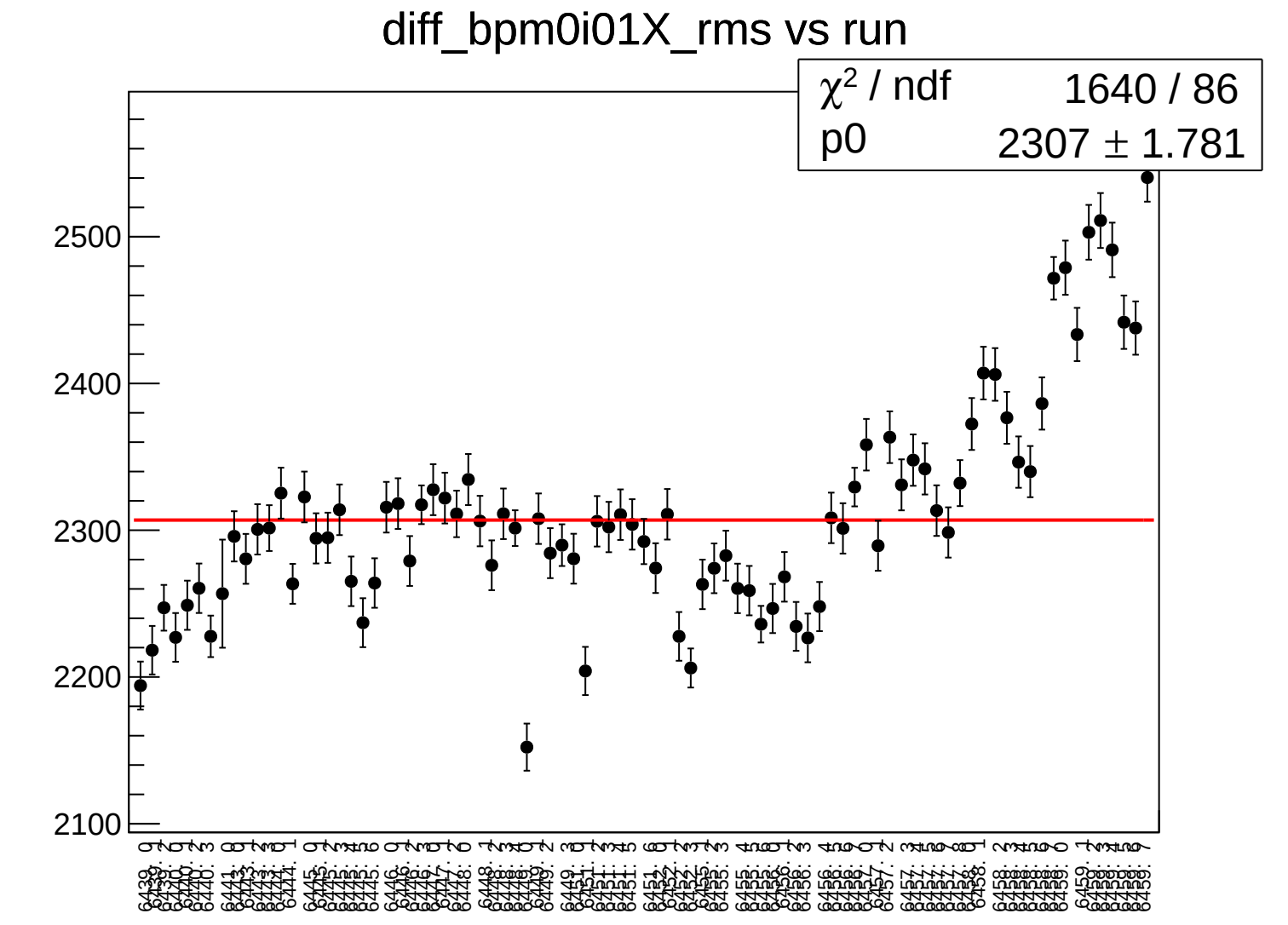

diff_cav4dY_mean vs run
χ^2 / ndf 76.01 / 86
p0 0.284 ± 0.2901
pull
Entries 87
Mean 716.7
Std Dev 669.6

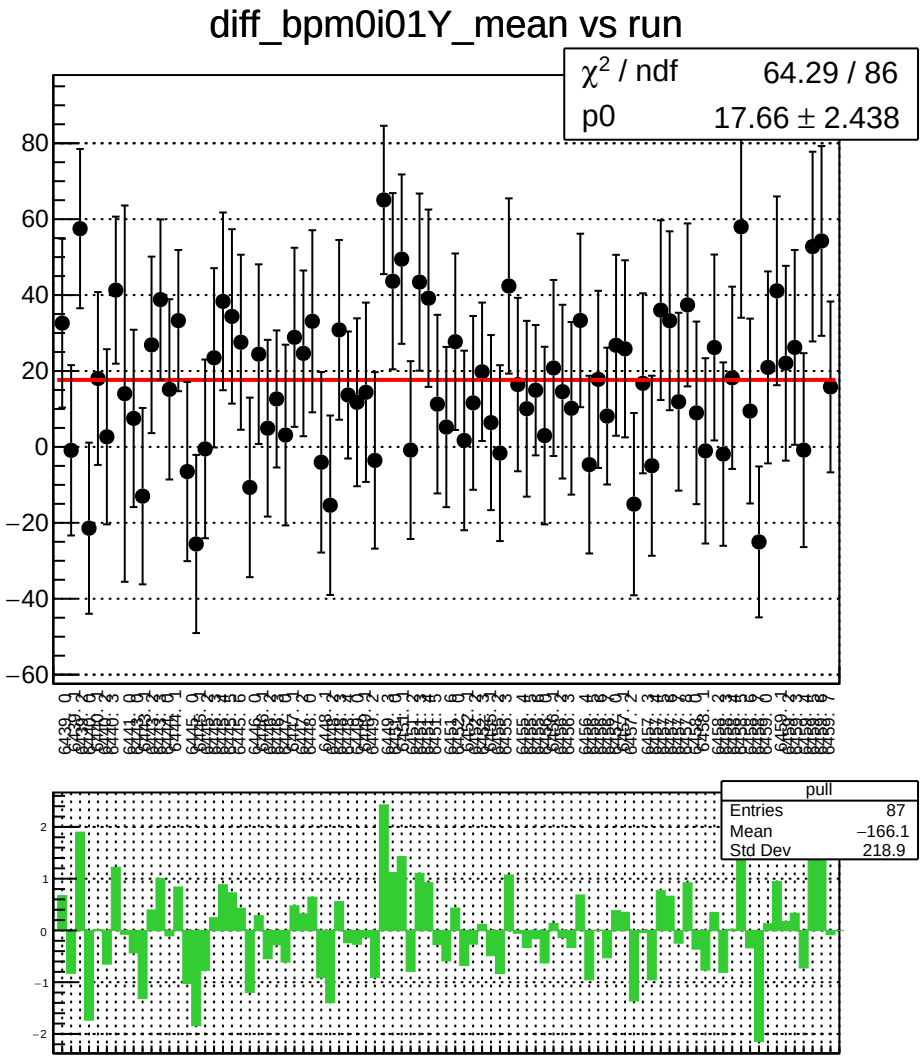

pull1D
Entries 87
Mean −0.006911
Std Dev 0.9347

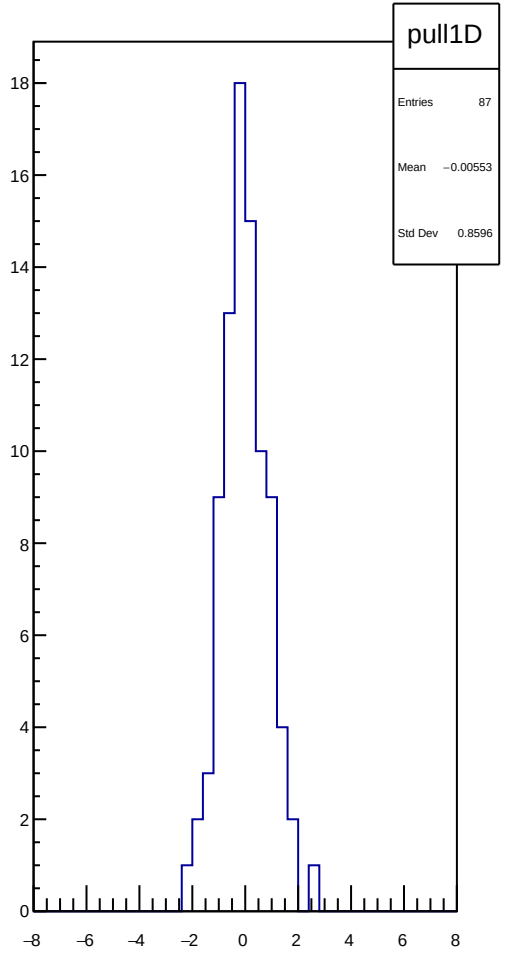

diff_cav4dY_rms vs run
χ² / ndf 6636 / 86
p0 265.3 ± 0.2051
300
290
280
270
260
250
240
230

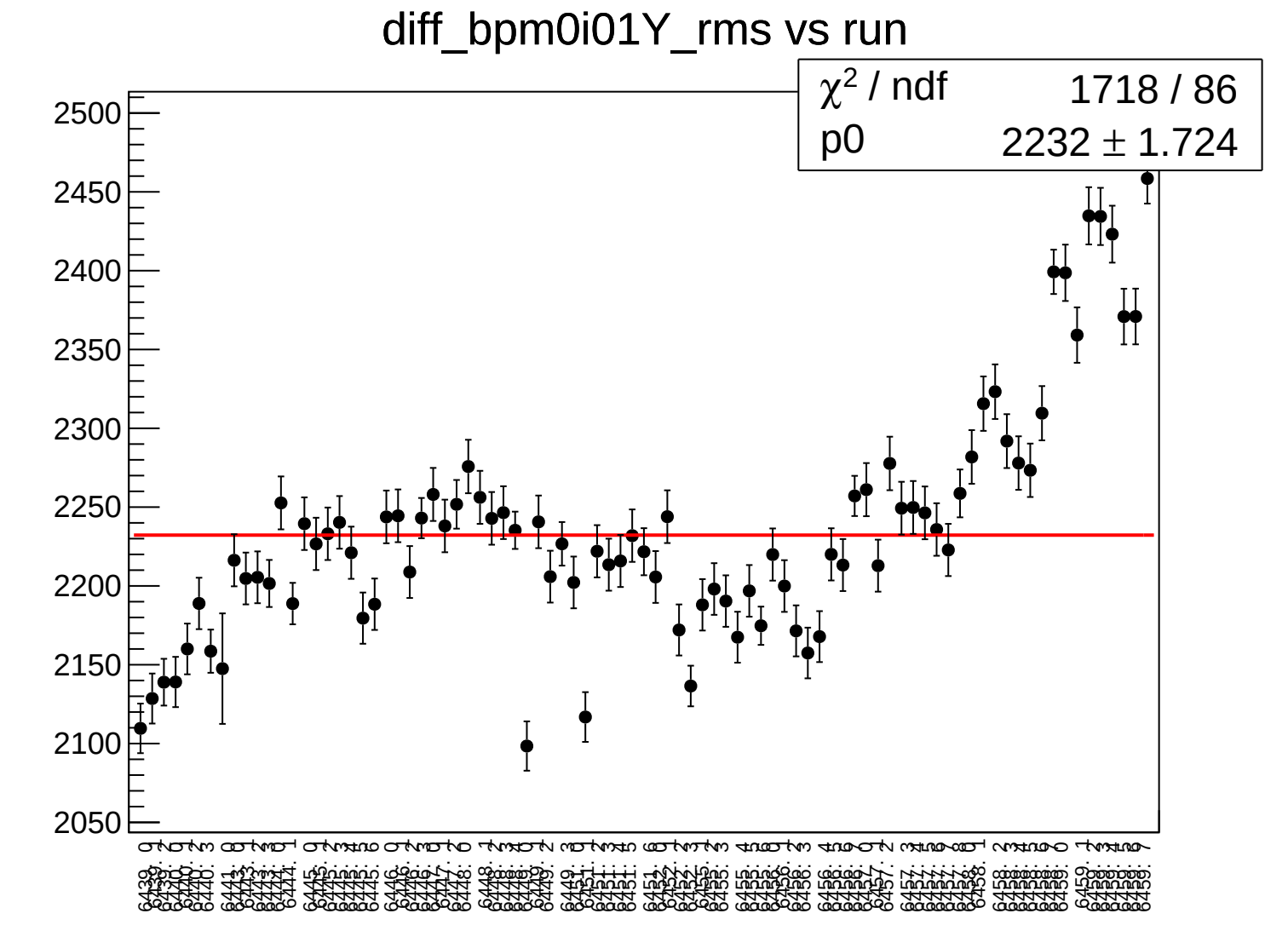

diff_bpm0i01X_mean vs run
χ^2 / ndf 64.61 / 86
p0 95.23 ± 2.519
pull
Entries 87
Mean 1624
Std Dev 1575

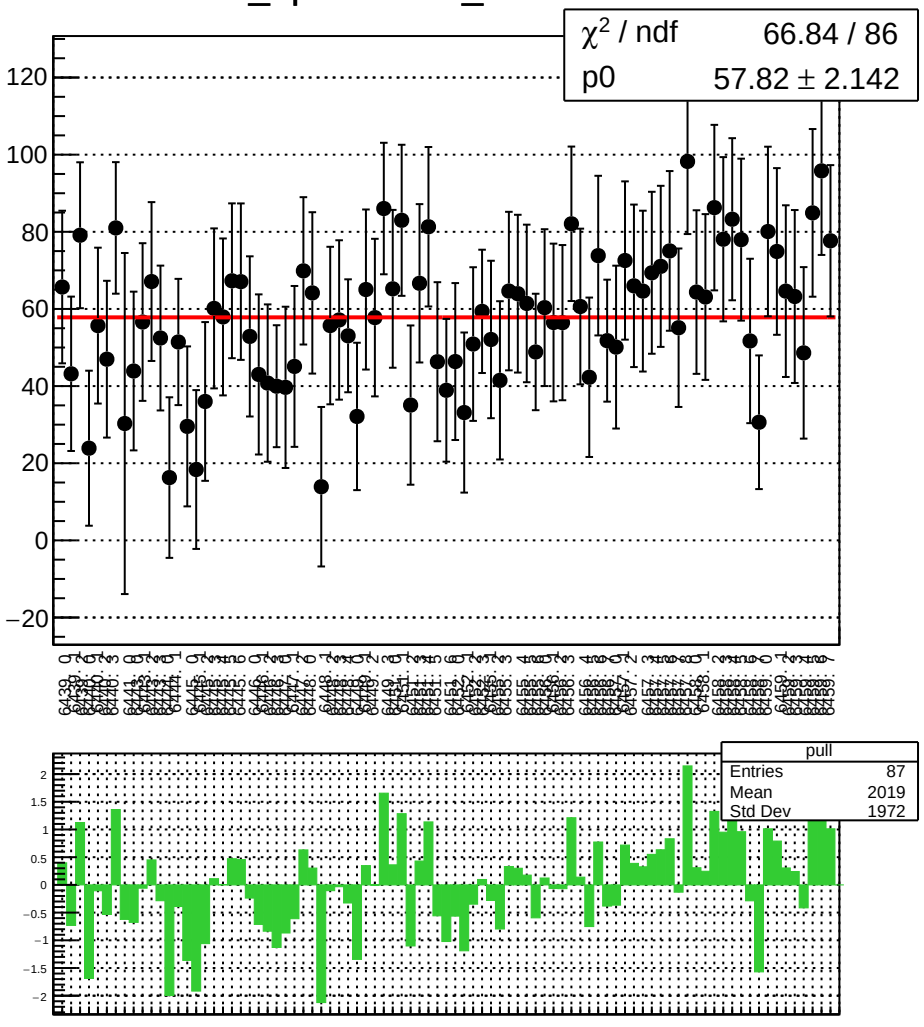

pull1D
Entries 87
Mean 0.005318
Std Dev 0.8617

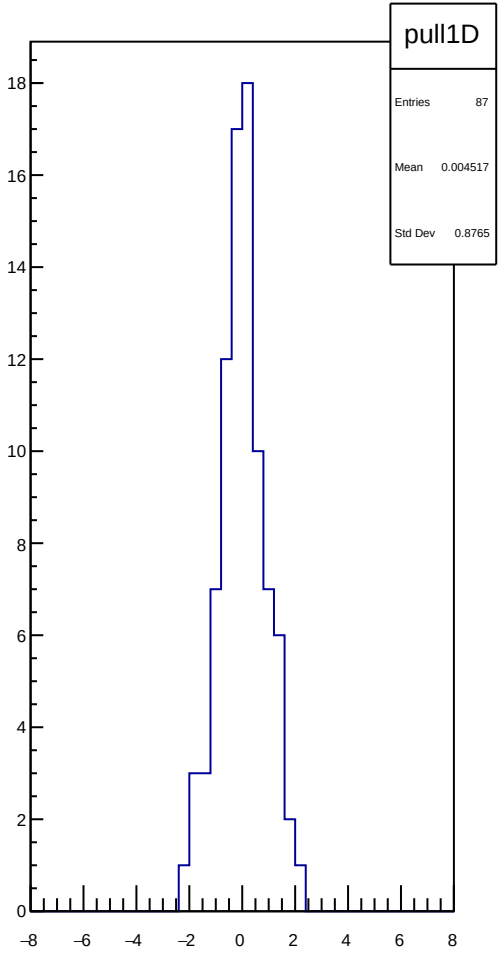

diff_bpm0i01X_rms vs run
χ² / ndf 1640 / 86
p0 2307 ± 1.781
2500
2400
2300
2200
2100

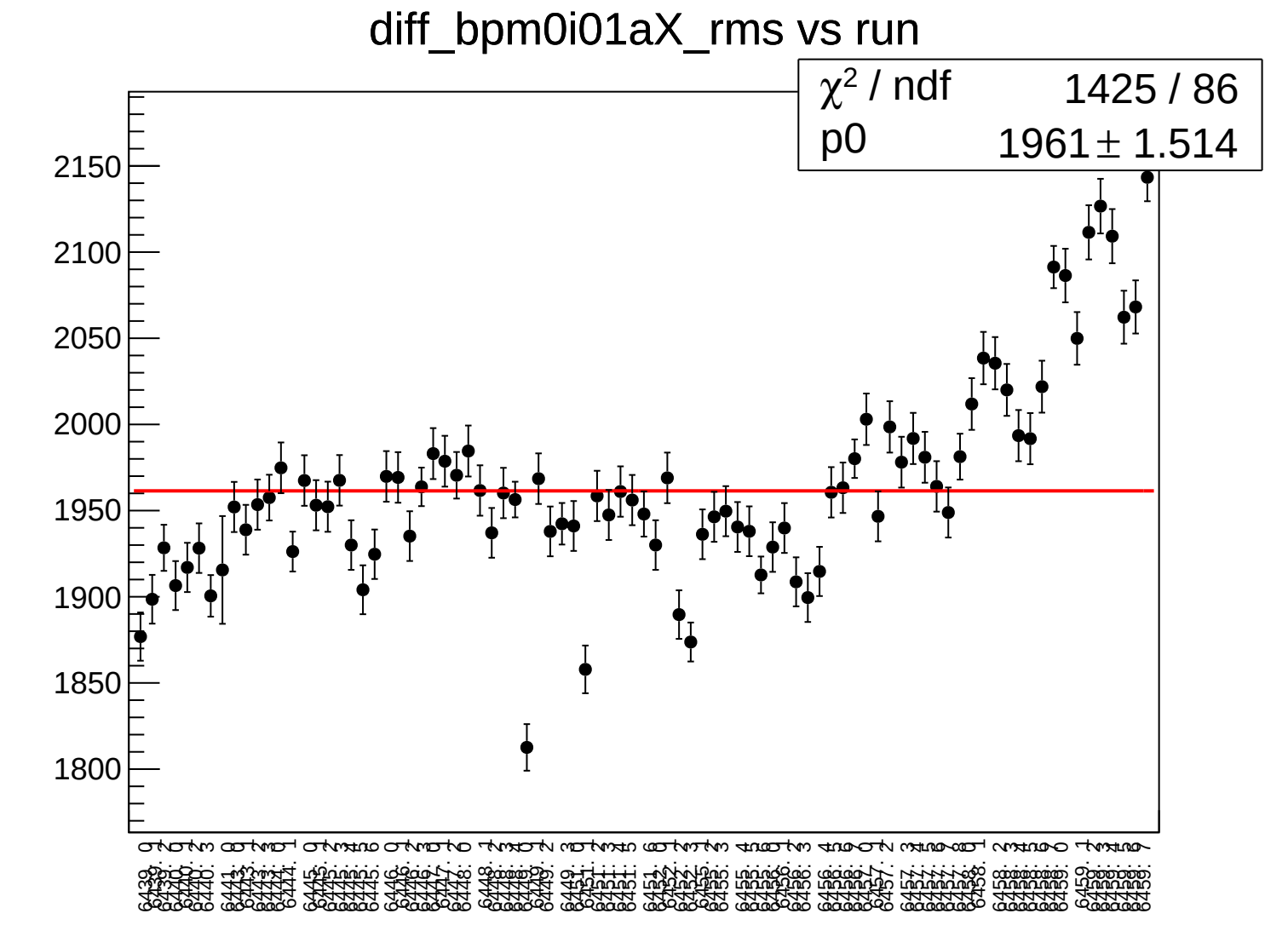

diff_bpm0i01Y_mean vs run
χ² / ndf 64.29 / 86
p0 17.66 ± 2.438
pull
Entries 87
Mean −166.1
Std Dev 218.9

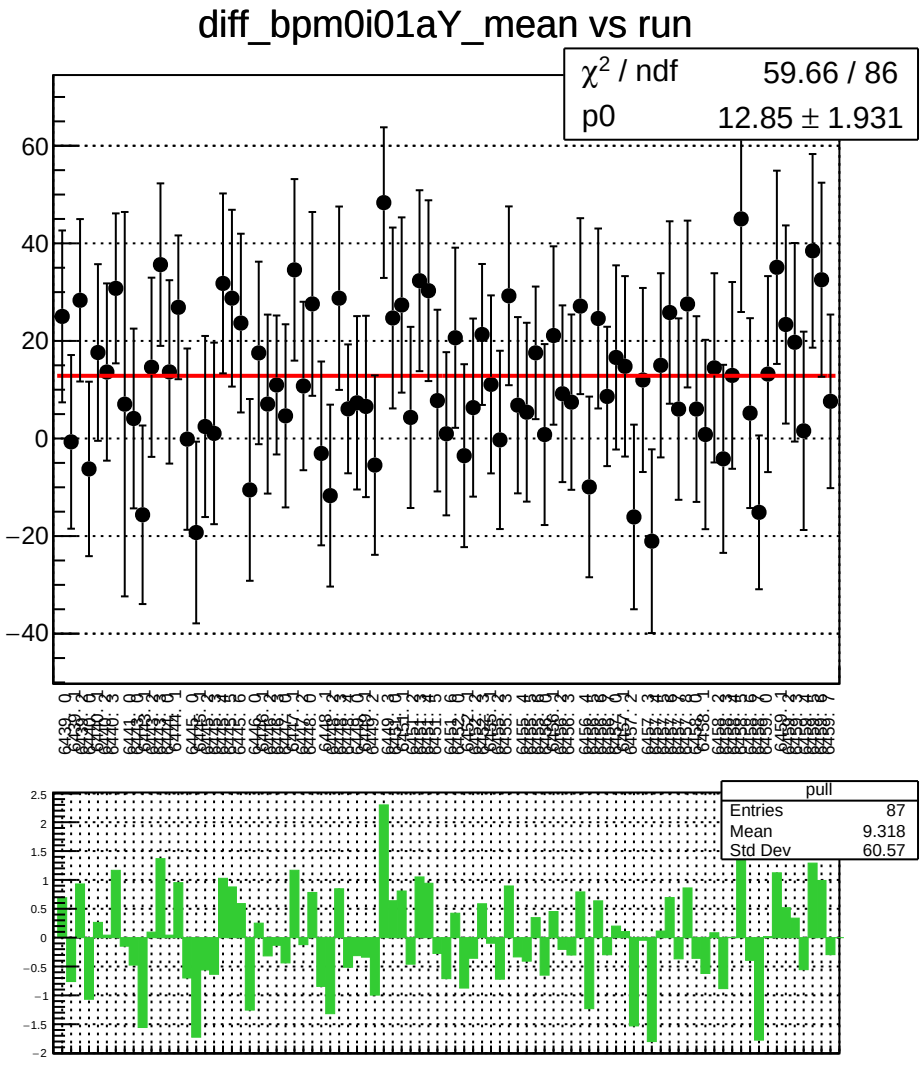

pull1D
Entries 87
Mean −0.00553
Std Dev 0.8596

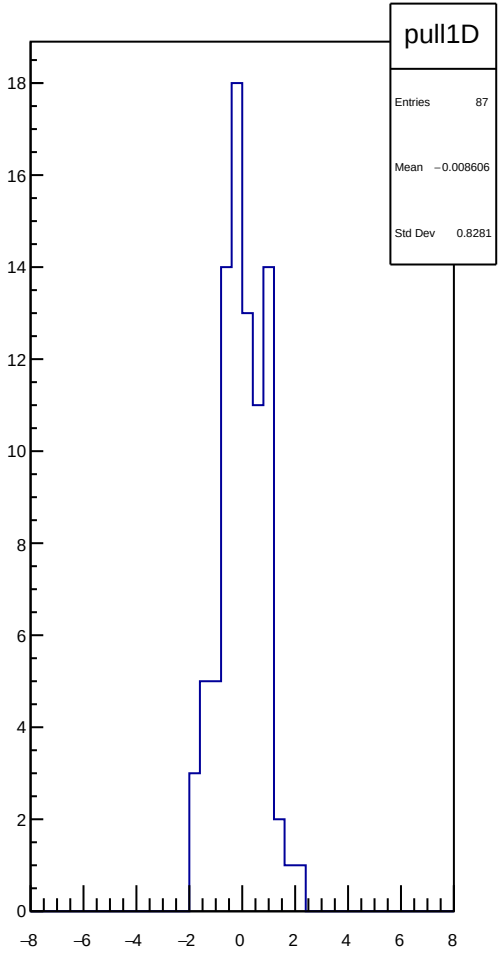

diff_bpm0i01Y_rms vs run
χ² / ndf 1718 / 86
p0 2232 ± 1.724
2500
2450
2400
2350
2300
2250
2200
2150
2100
2050

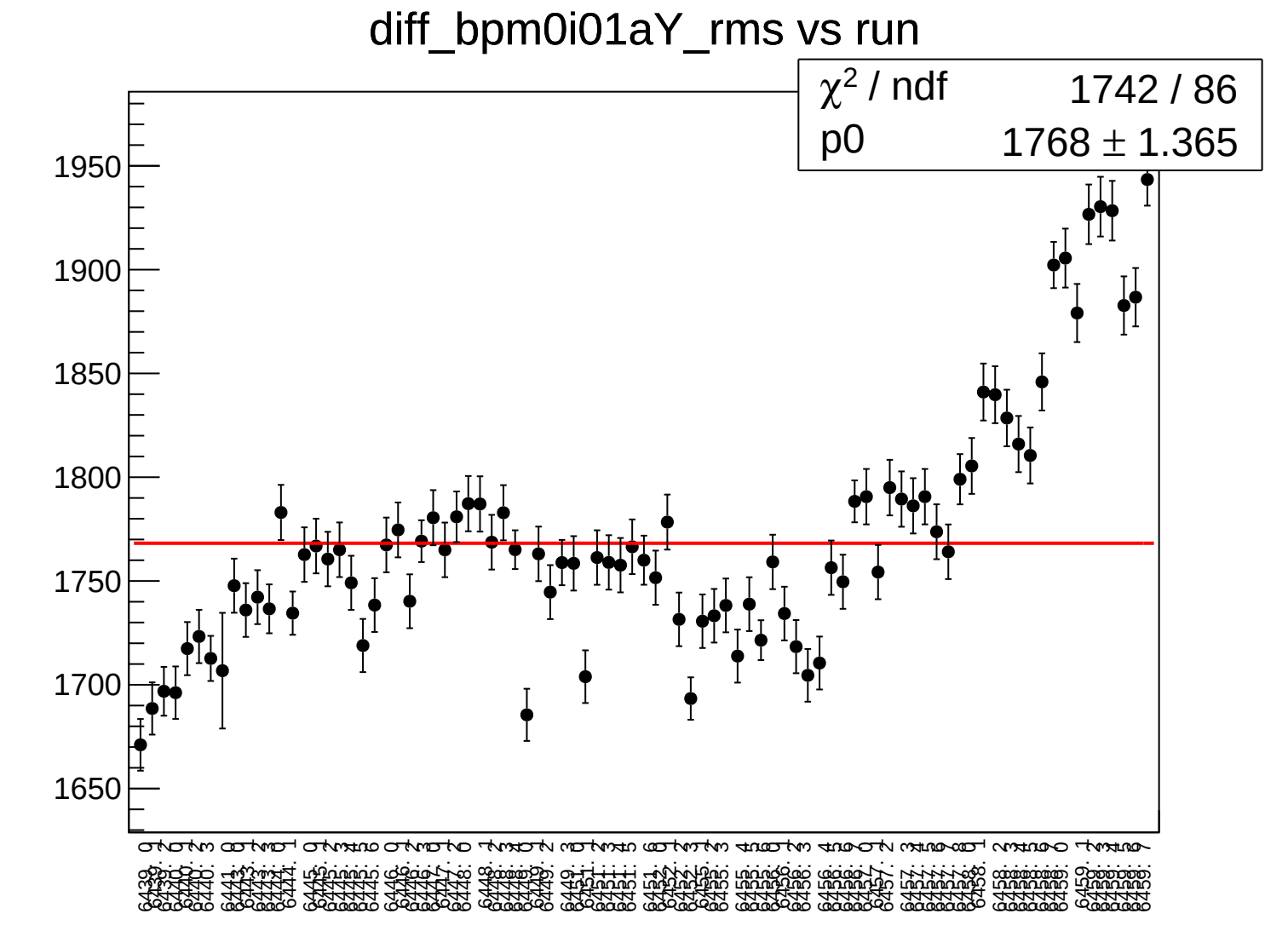

diff_bpm0i01aX_mean vs run
χ^2 / ndf 66.84 / 86
p0 57.82 ± 2.142
pull
Entries 87
Mean 2019
Std Dev 1972

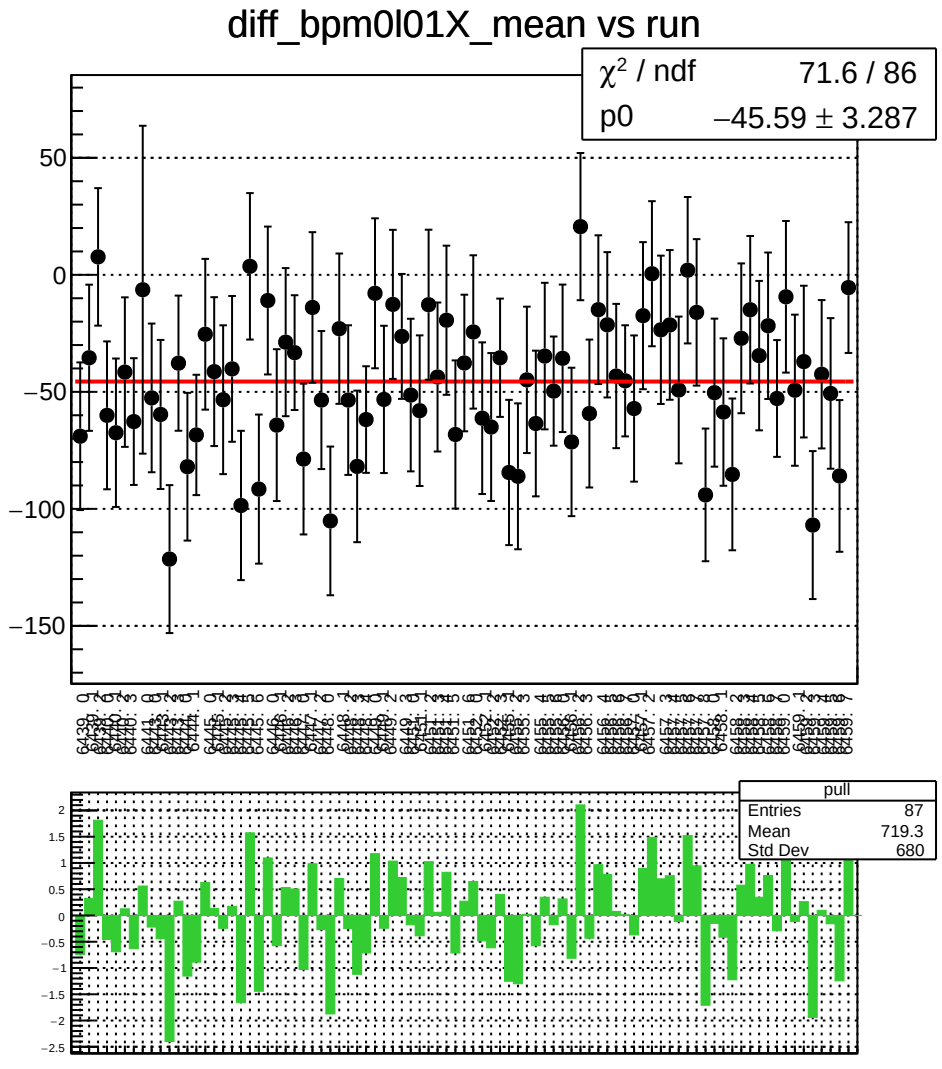

pull1D
Entries 87
Mean 0.004517
Std Dev 0.8765

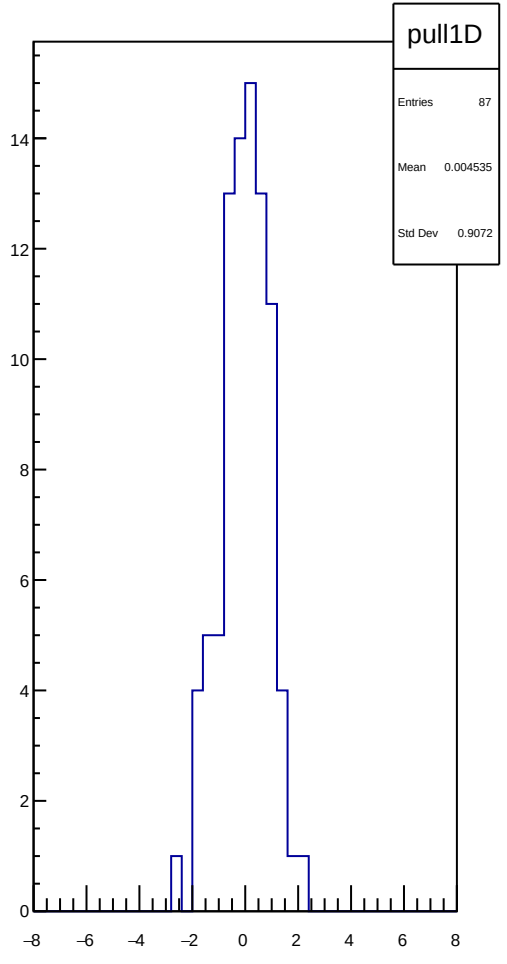

diff_bpm0i01aX_rms vs run
χ² / ndf 1425 / 86
p0 1961 ± 1.514
2150
2100
2050
2000
1950
1900
1850
1800

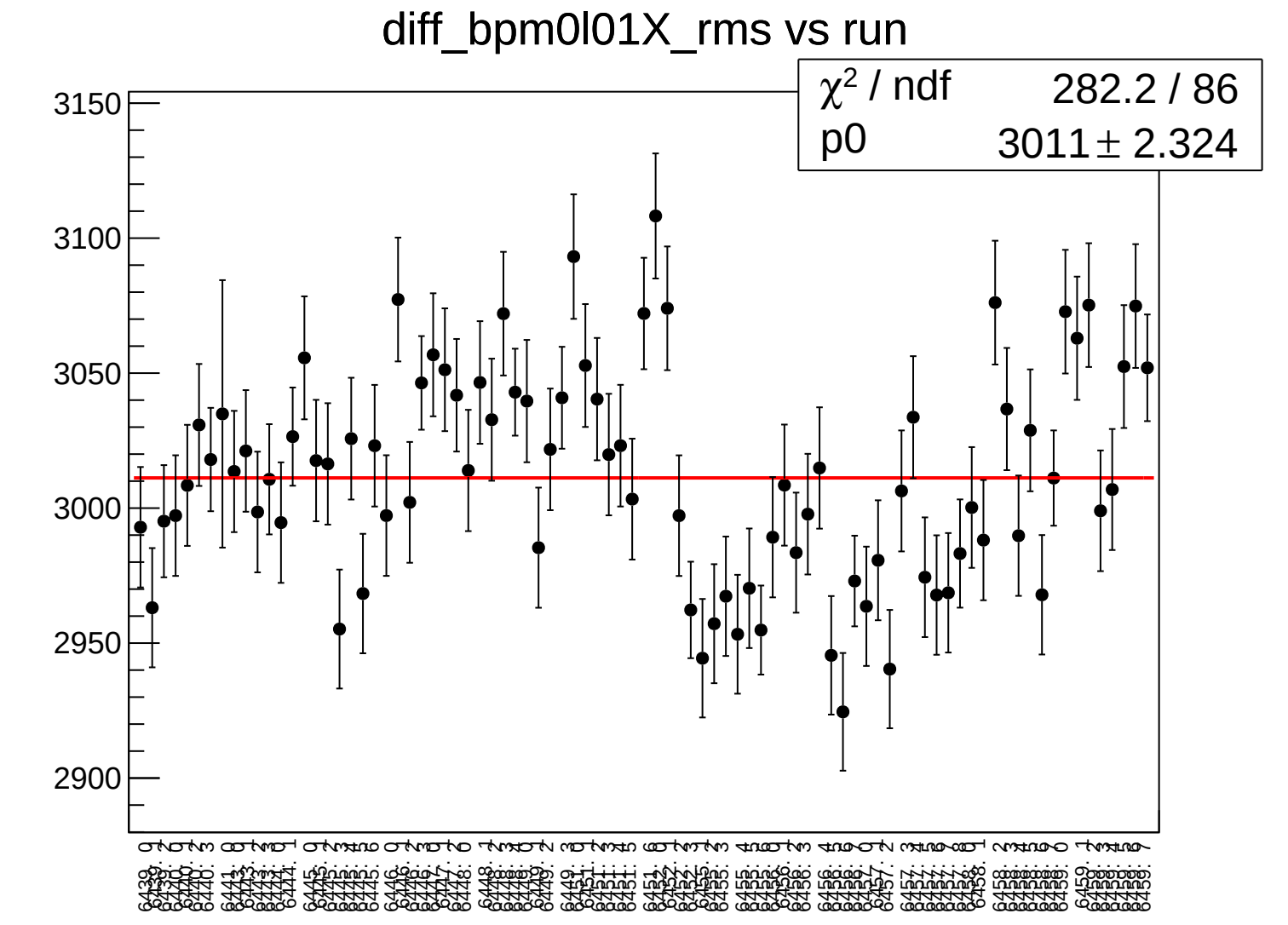

diff_bpm0i01aY_mean vs run
χ² / ndf 59.66 / 86
p0 12.85 ± 1.931
pull
Entries 87
Mean 9.318
Std Dev 60.57

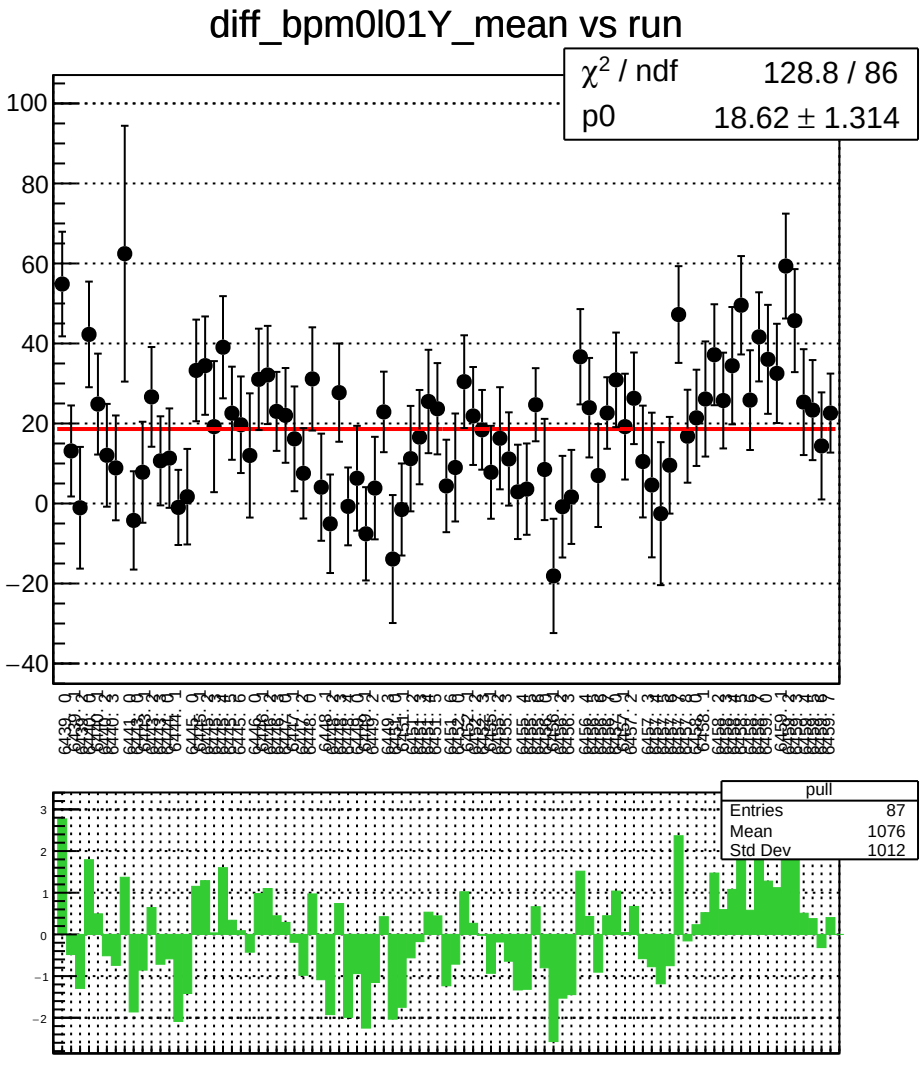

pull1D
Entries 87
Mean −0.008606
Std Dev 0.8281

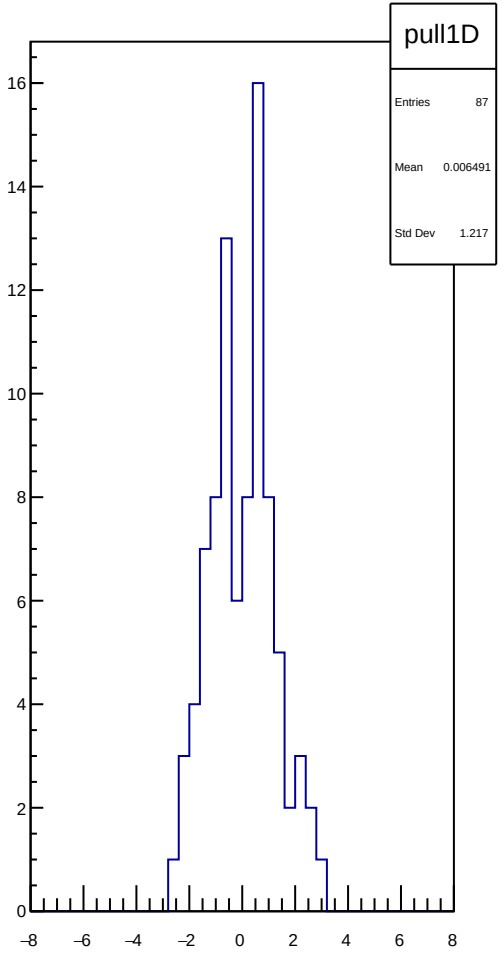

diff_bpm0i01aY_rms vs run
χ² / ndf 1742 / 86
p0 1768 ± 1.365
1950
1900
1850
1800
1750
1700
1650

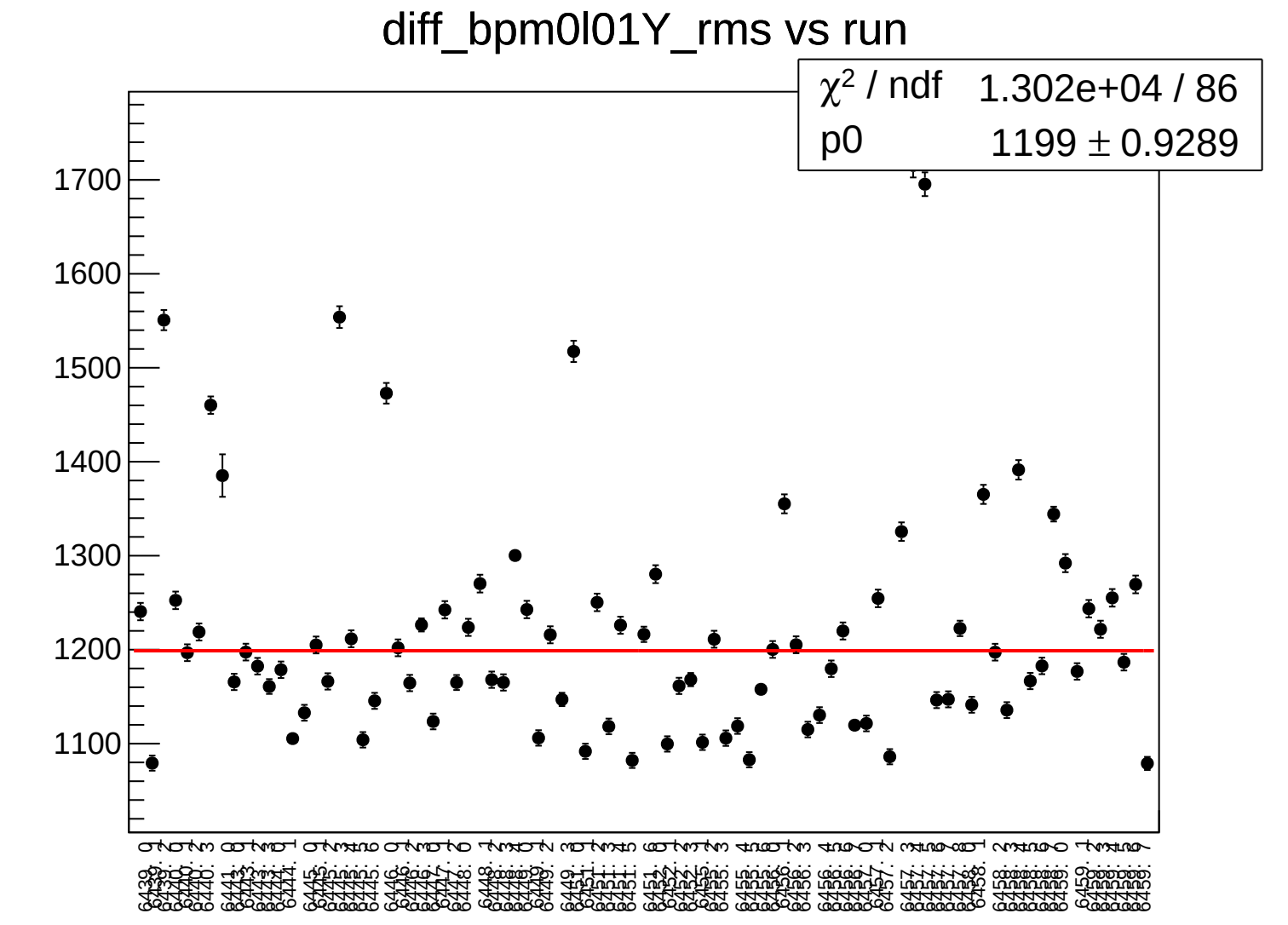

diff_bpm0l01X_mean vs run
χ² / ndf 71.6 / 86
p0 −45.59 ± 3.287
50
0
−50
−100
−150
pull
Entries 87
Mean 719.3
Std Dev 680
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

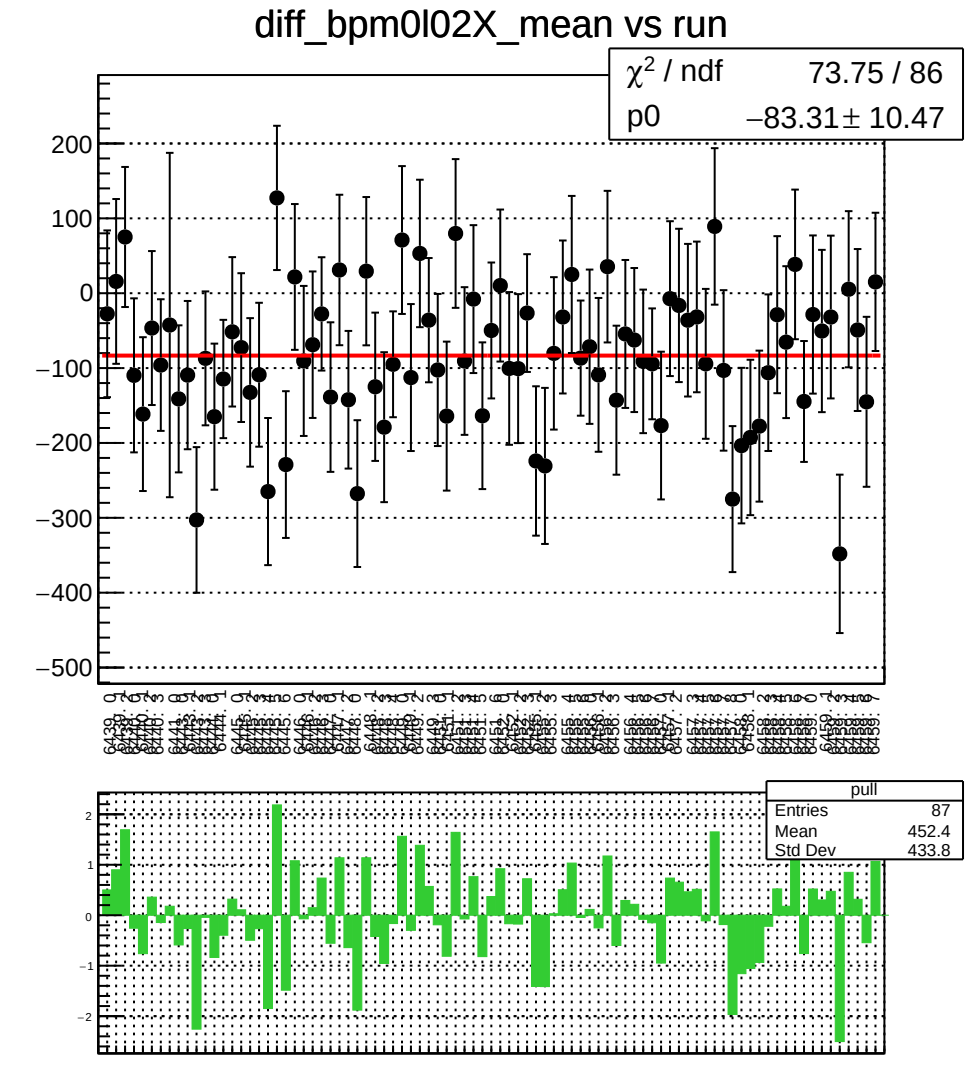

pull1D
Entries 87
Mean 0.004535
Std Dev 0.9072
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

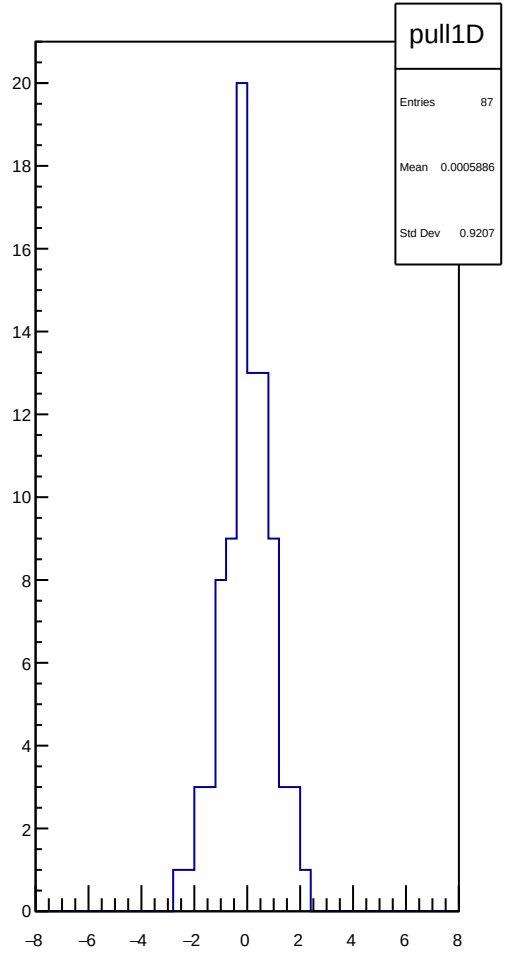

diff_bpm0l01X_rms vs run
χ² / ndf 282.2 / 86
p0 3011 ± 2.324
3150
3100
3050
3000
2950
2900

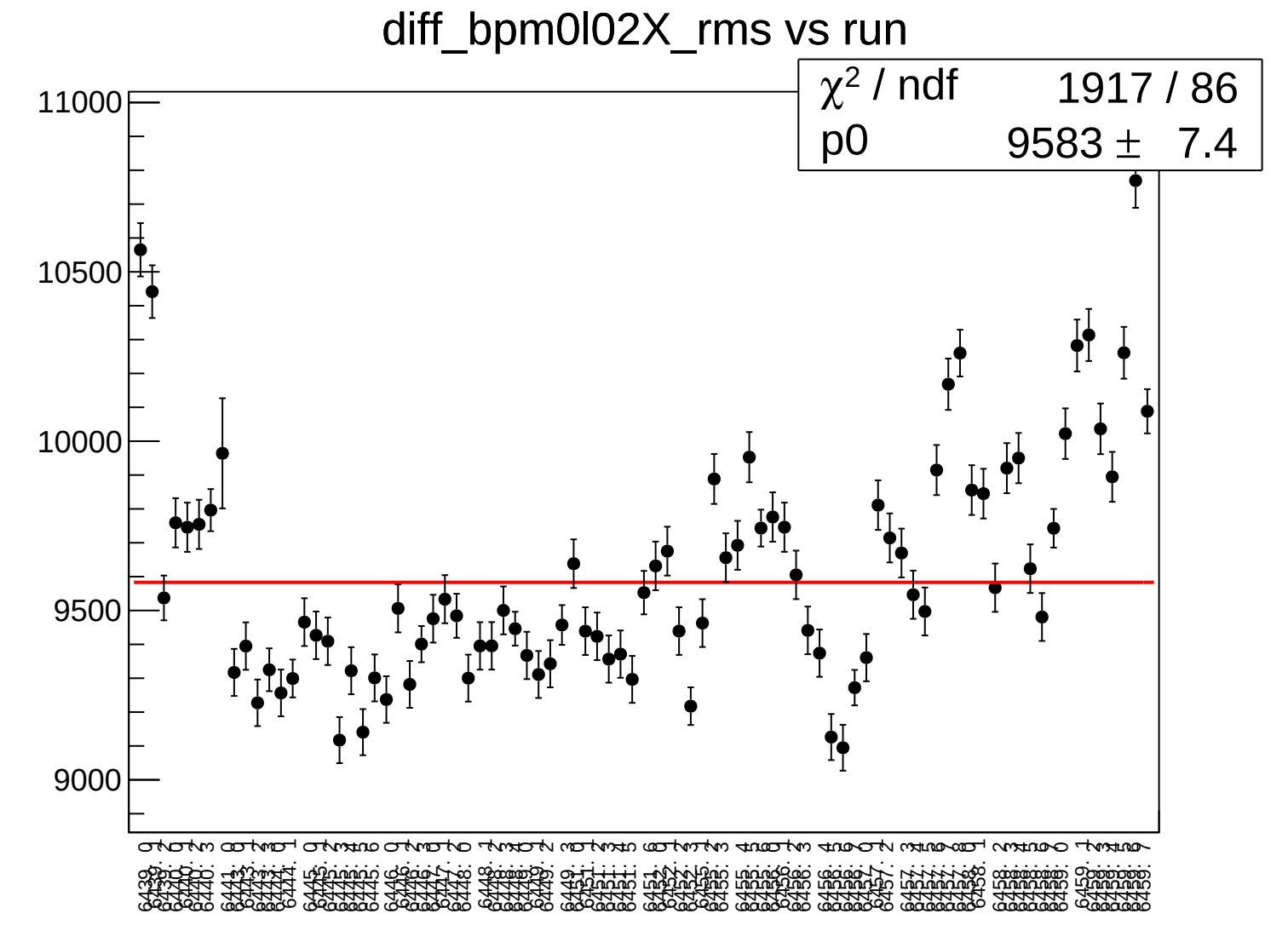

diff_bpm0l01Y_mean vs run
χ² / ndf 128.8 / 86
p0 18.62 ± 1.314
pull
Entries 87
Mean 1076
Std Dev 1012

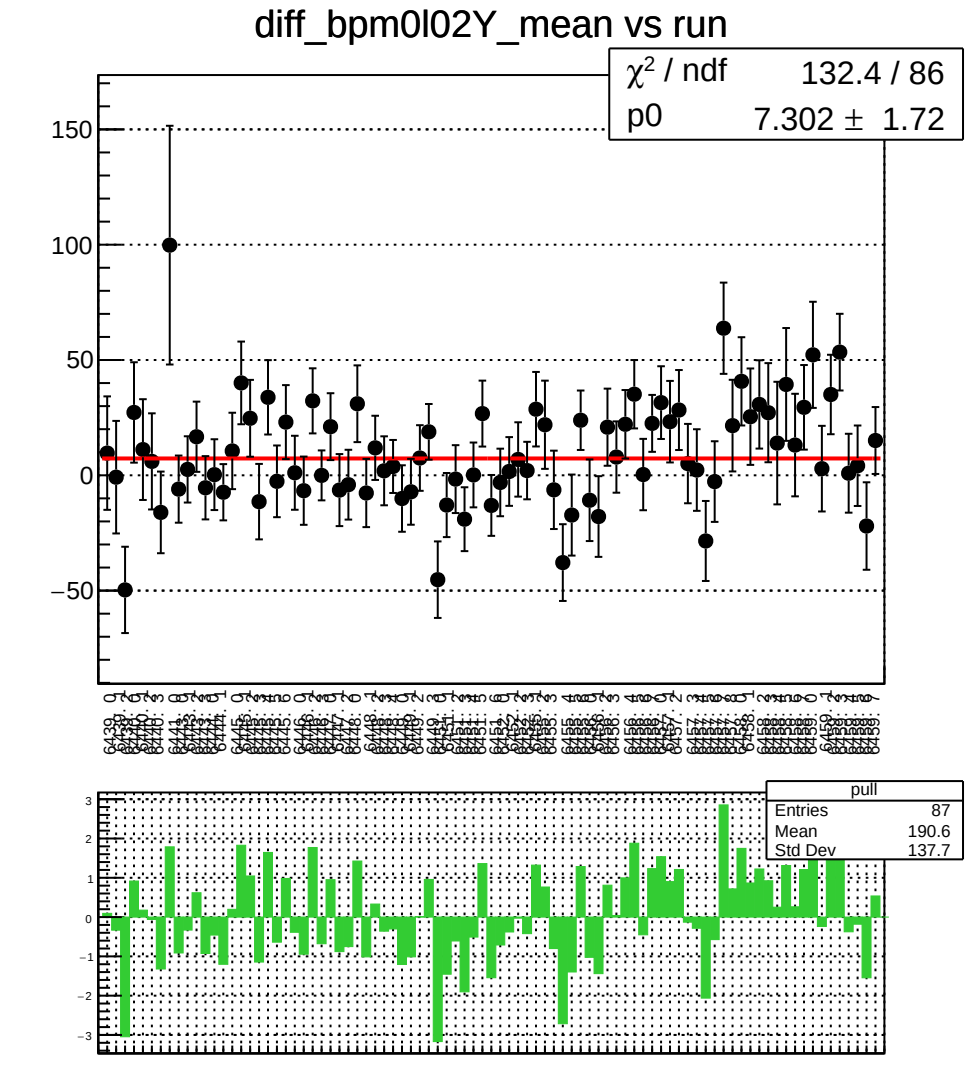

pull1D
Entries 87
Mean 0.006491
Std Dev 1.217

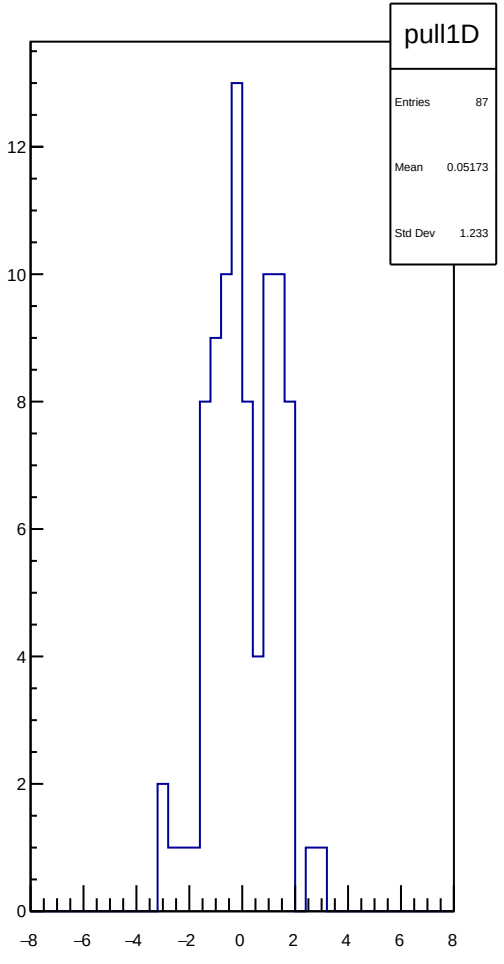

diff_bpm0l01Y_rms vs run
χ² / ndf 1.302e+04 / 86
p0 1199 ± 0.9289
1700
1600
1500
1400
1300
1200
1100

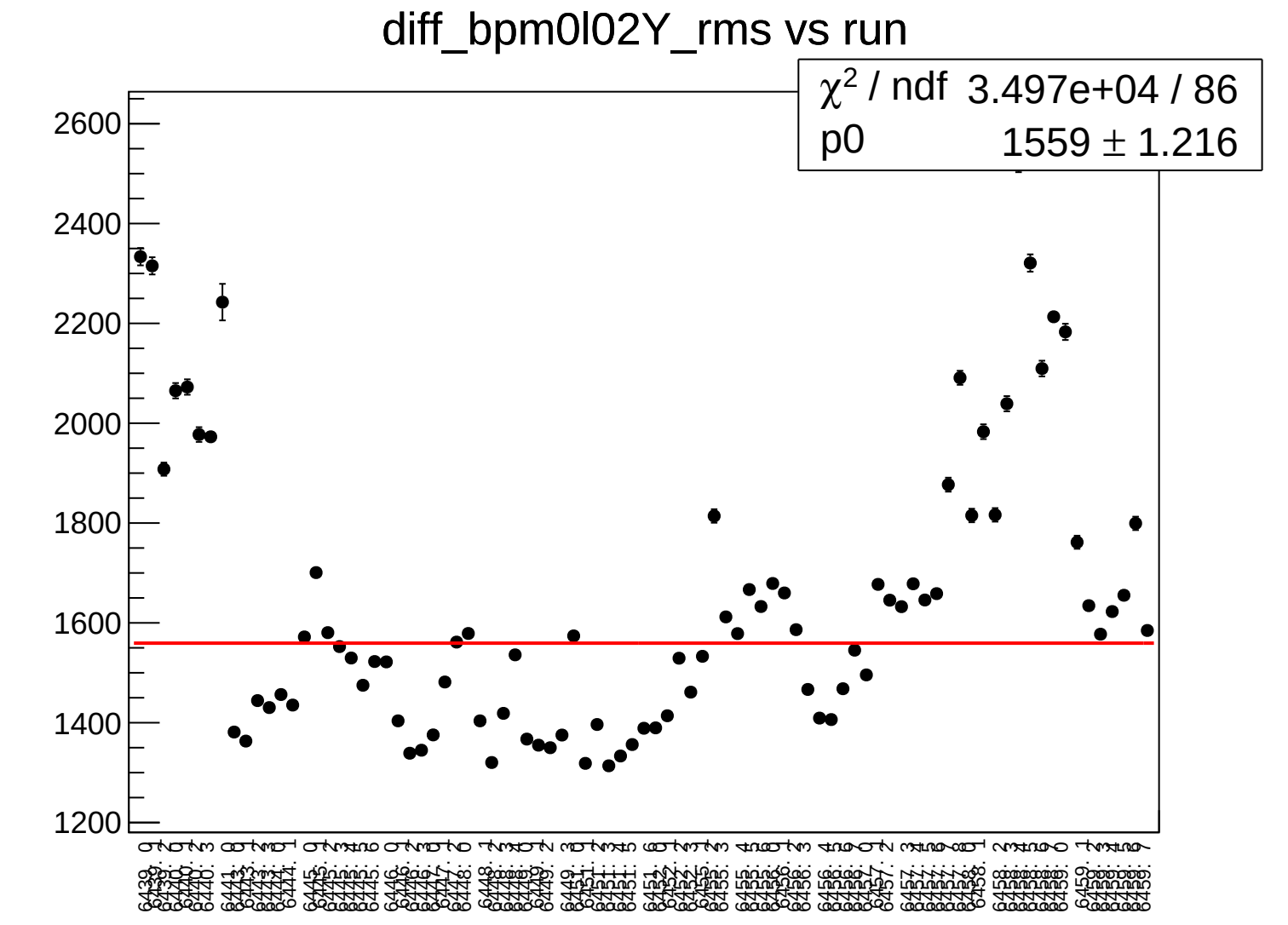

diff_bpm0l02X_mean vs run
χ² / ndf 73.75 / 86
p0 −83.31 ± 10.47
pull
Entries 87
Mean 452.4
Std Dev 433.8

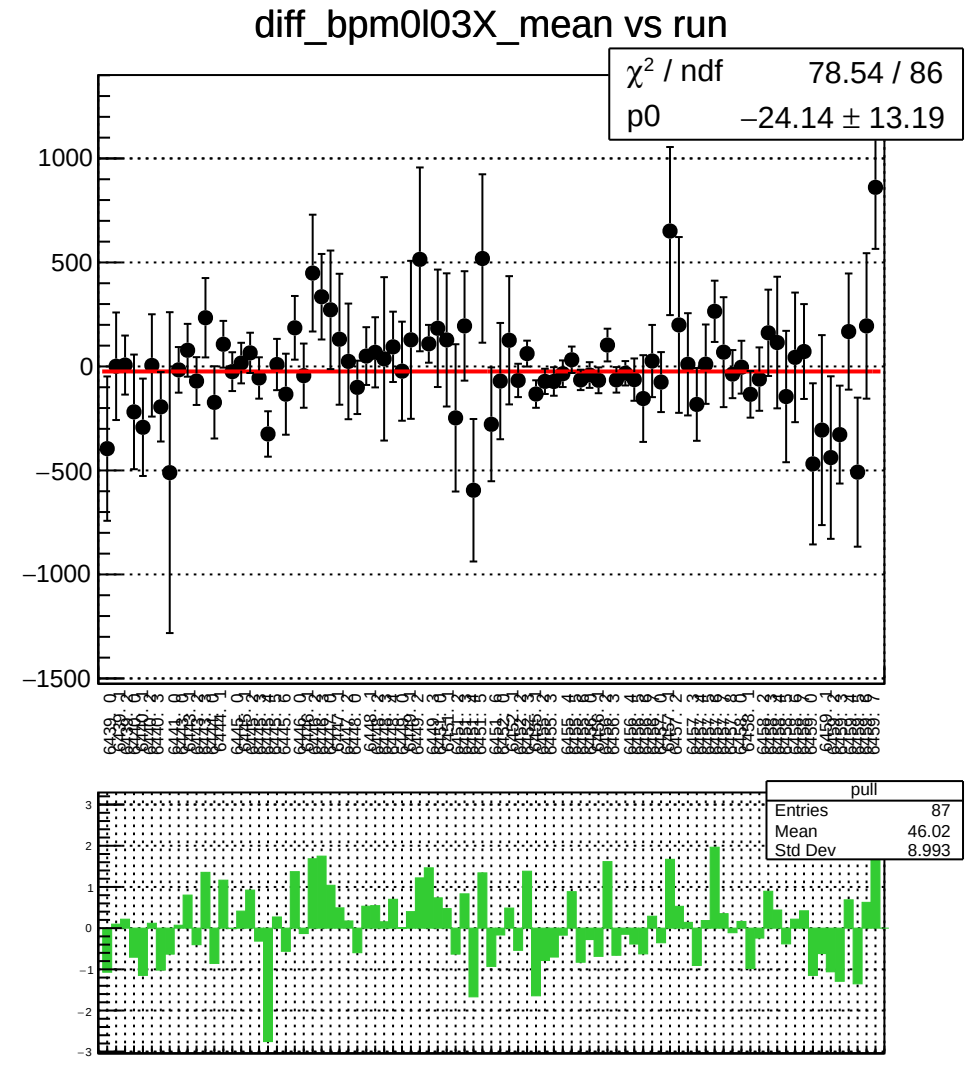

pull1D
Entries 87
Mean 0.0005886
Std Dev 0.9207

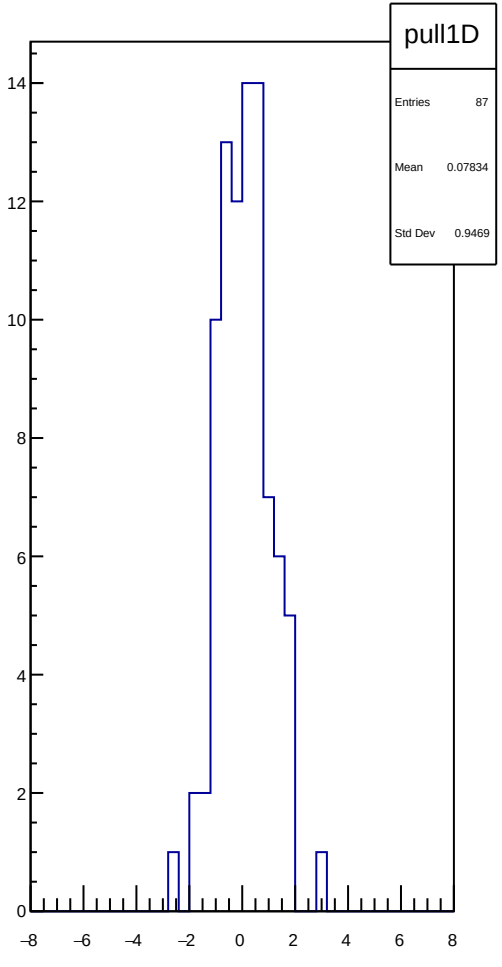

diff_bpm0l02X_rms vs run
χ² / ndf 1917 / 86
p0 9583 ± 7.4
11000
10500
10000
9500
9000

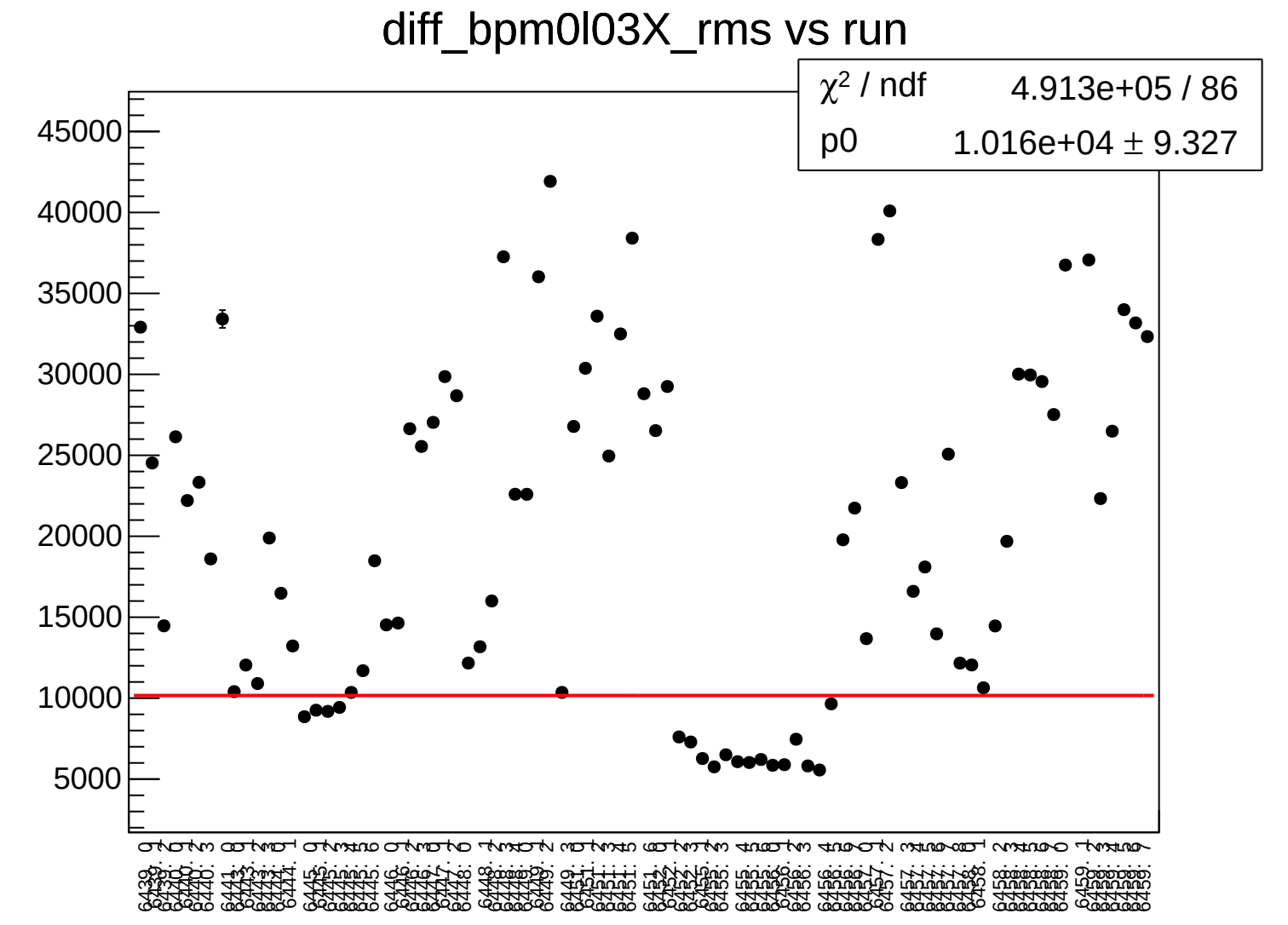

diff_bpm0l02Y_mean vs run
χ² / ndf 132.4 / 86
p0 7.302 ± 1.72
150
100
50
0
−50
pull
Entries 87
Mean 190.6
Std Dev 137.7
3
2
1
0
−1
−2
−3

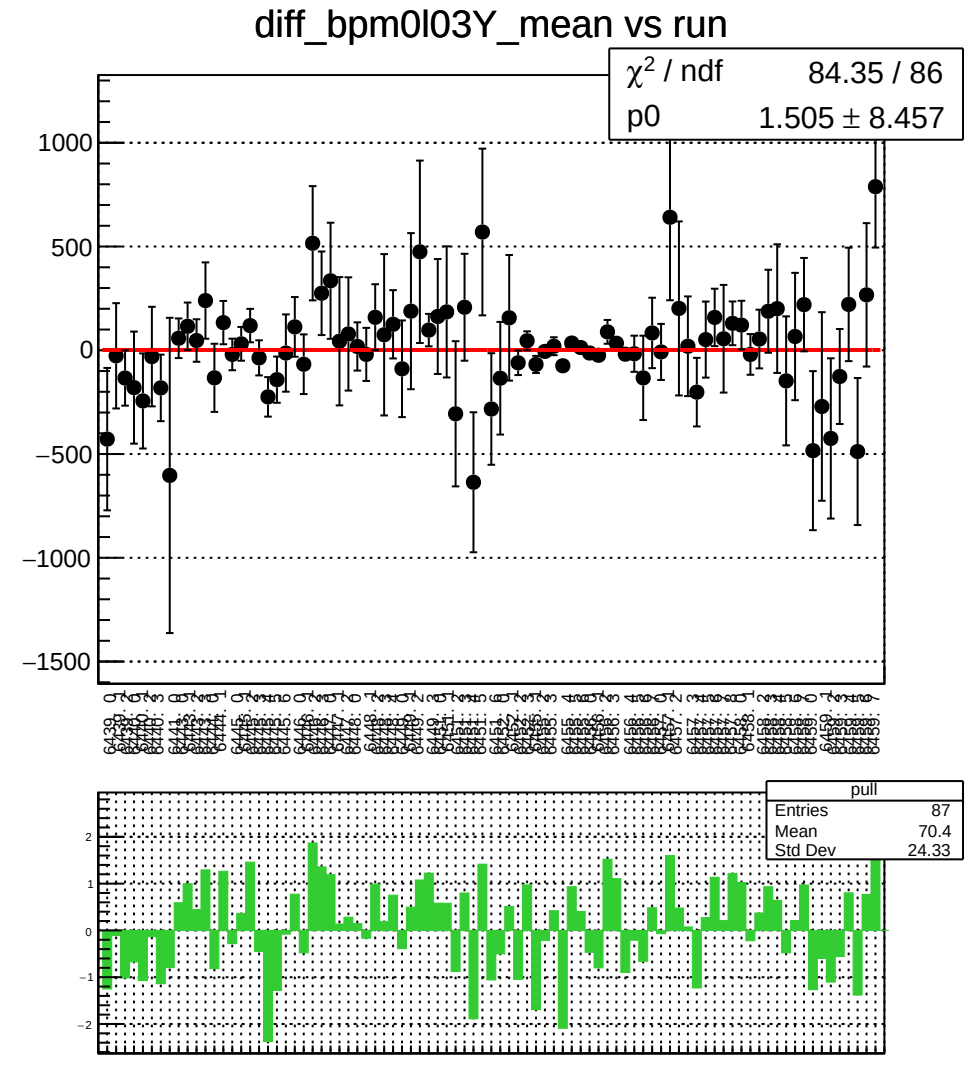

pull1D
Entries 87
Mean 0.05173
Std Dev 1.233
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

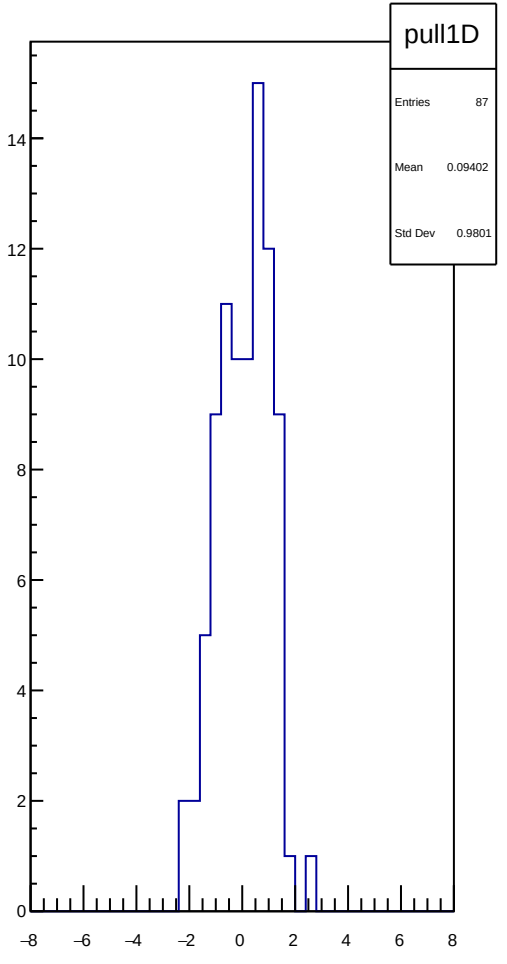

diff_bpm0l02Y_rms vs run
χ² / ndf 3.497e+04 / 86
p0 1559 ± 1.216
2600
2400
2200
2000
1800
1600
1400
1200

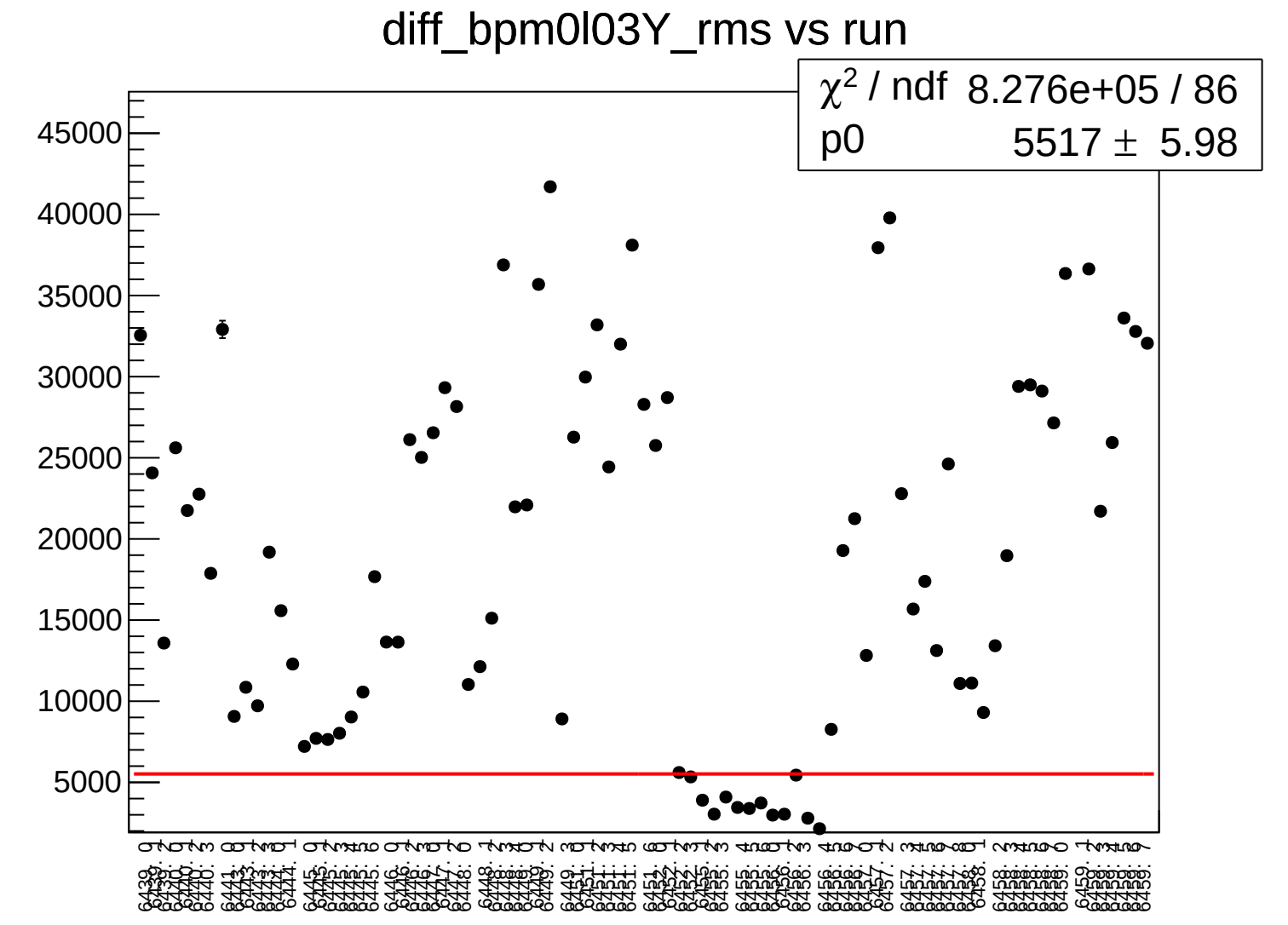

diff_bpm0l03X_mean vs run
χ² / ndf 78.54 / 86
p0 −24.14 ± 13.19
pull
Entries 87
Mean 46.02
Std Dev 8.993

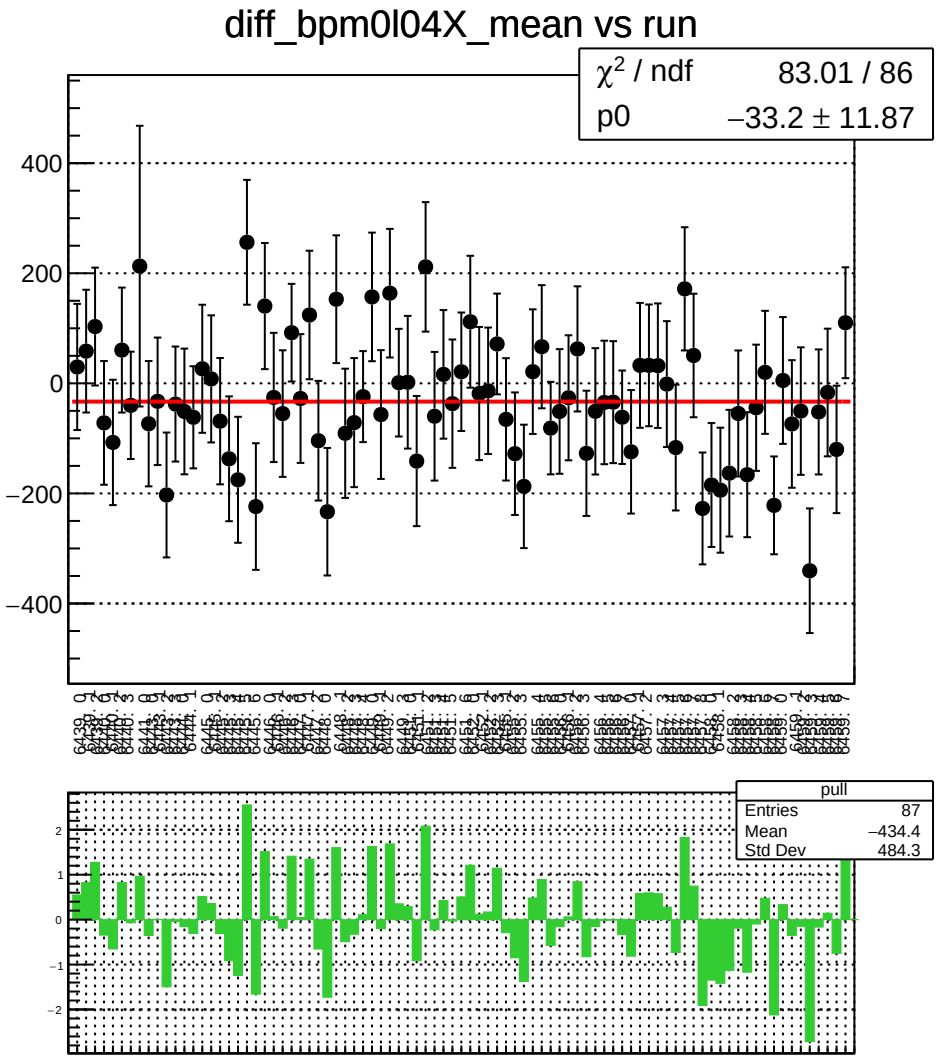

pull1D
Entries 87
Mean 0.07834
Std Dev 0.9469

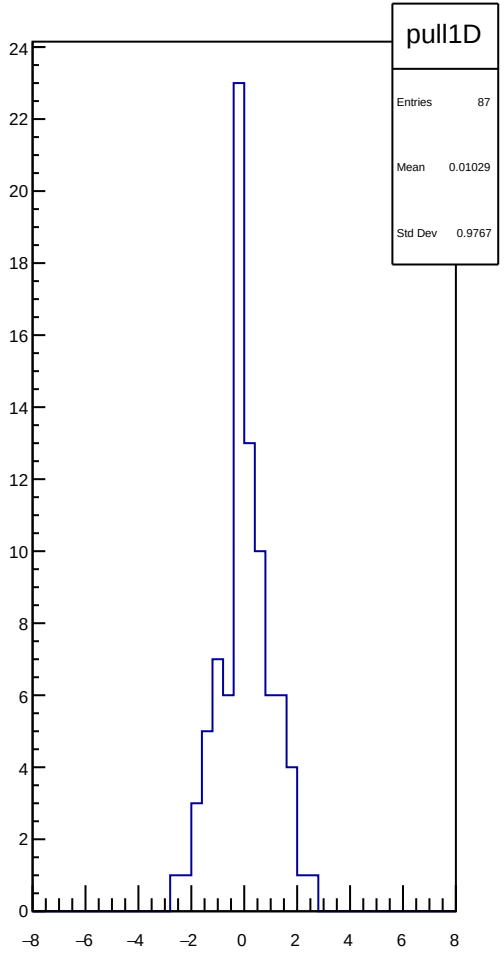

diff_bpm0l03X_rms vs run
χ² / ndf 4.913e+05 / 86
p0 1.016e+04 ± 9.327
45000
40000
35000
30000
25000
20000
15000
10000
5000

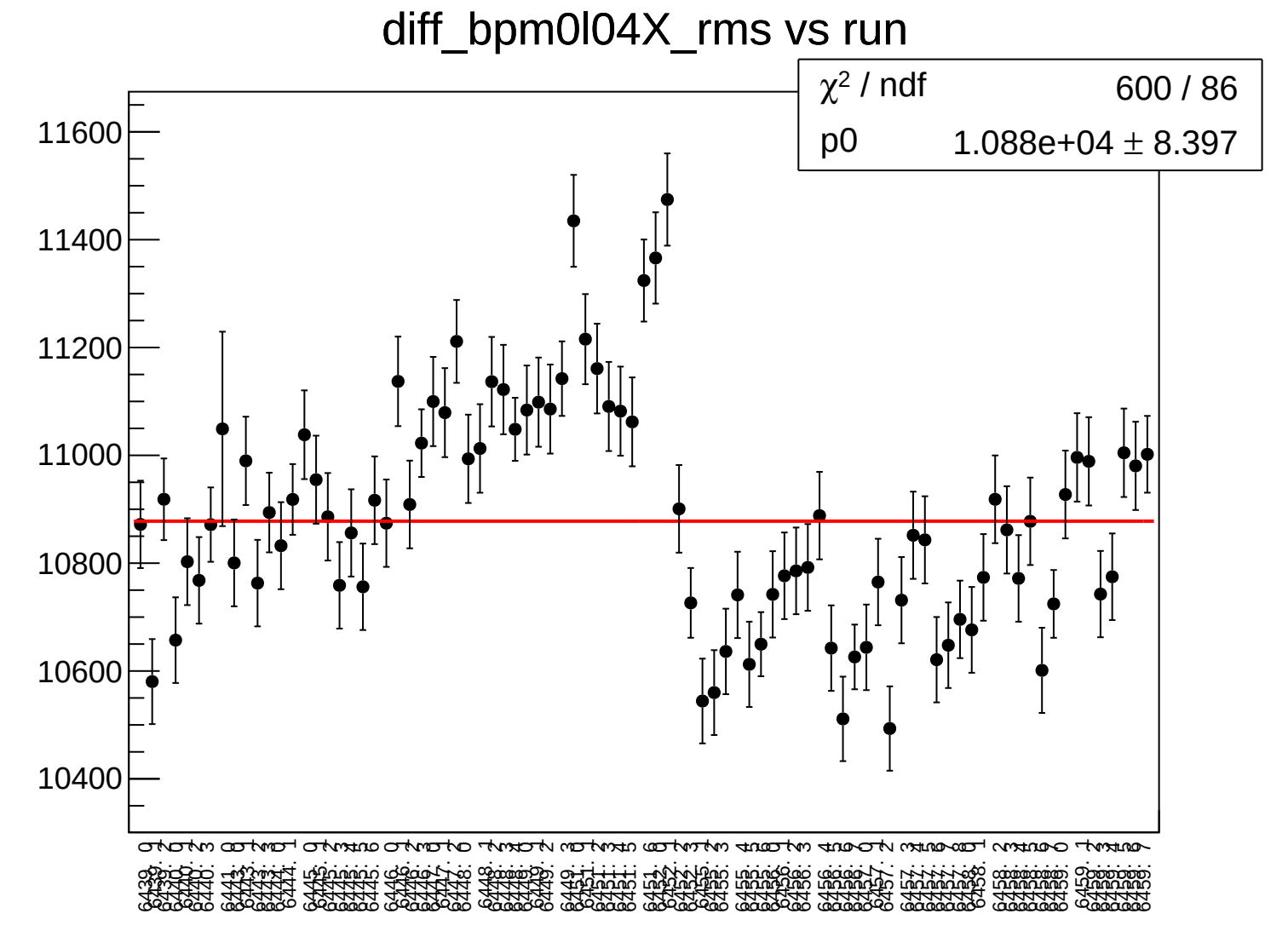

diff_bpm0l03Y_mean vs run
χ² / ndf 84.35 / 86
p0 1.505 ± 8.457
1000
500
0
−500
−1000
−1500
pull
Entries 87
Mean 70.4
Std Dev 24.33
2
1
0
−1
−2

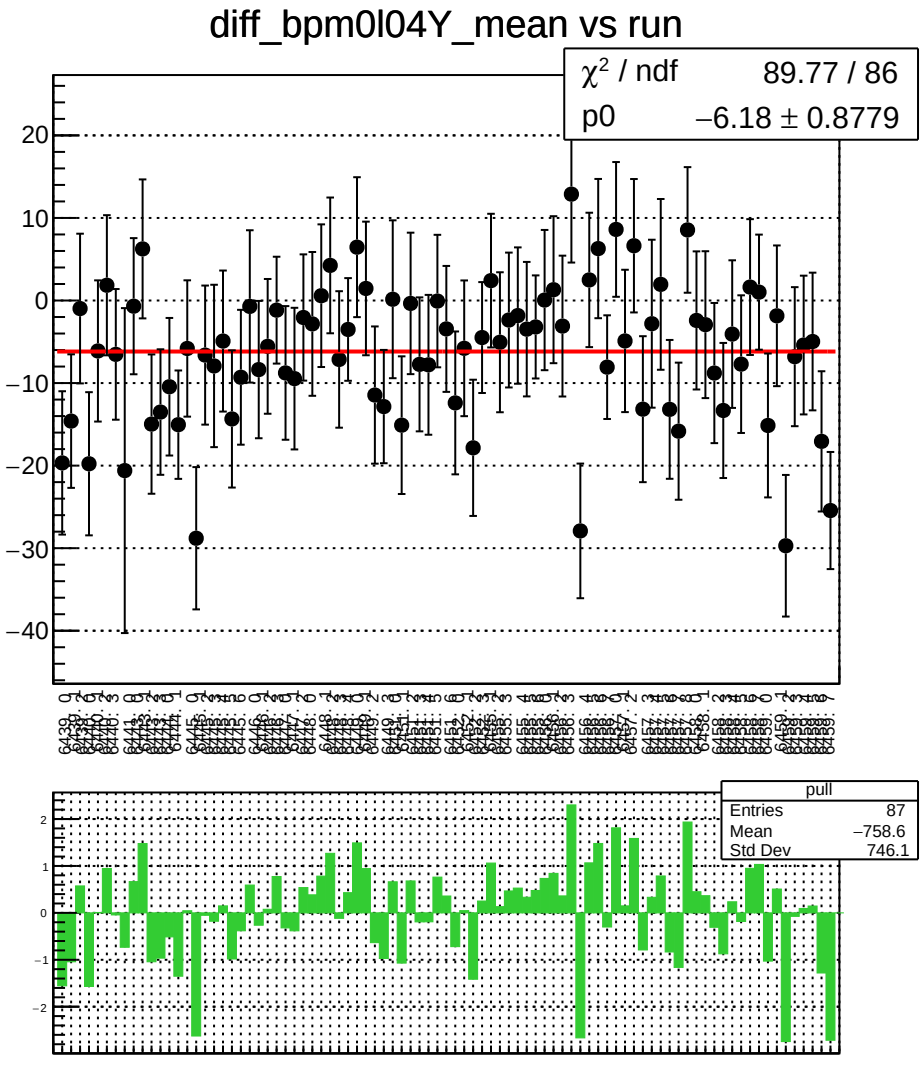

pull1D
Entries 87
Mean 0.09402
Std Dev 0.9801
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

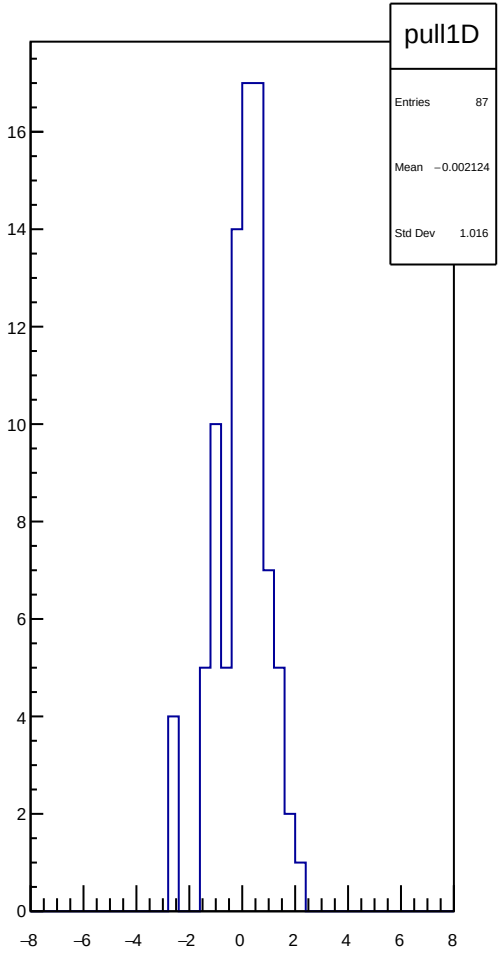

diff_bpm0l03Y_rms vs run
χ² / ndf 8.276e+05 / 86
p0 5517 ± 5.98
45000
40000
35000
30000
25000
20000
15000
10000
5000

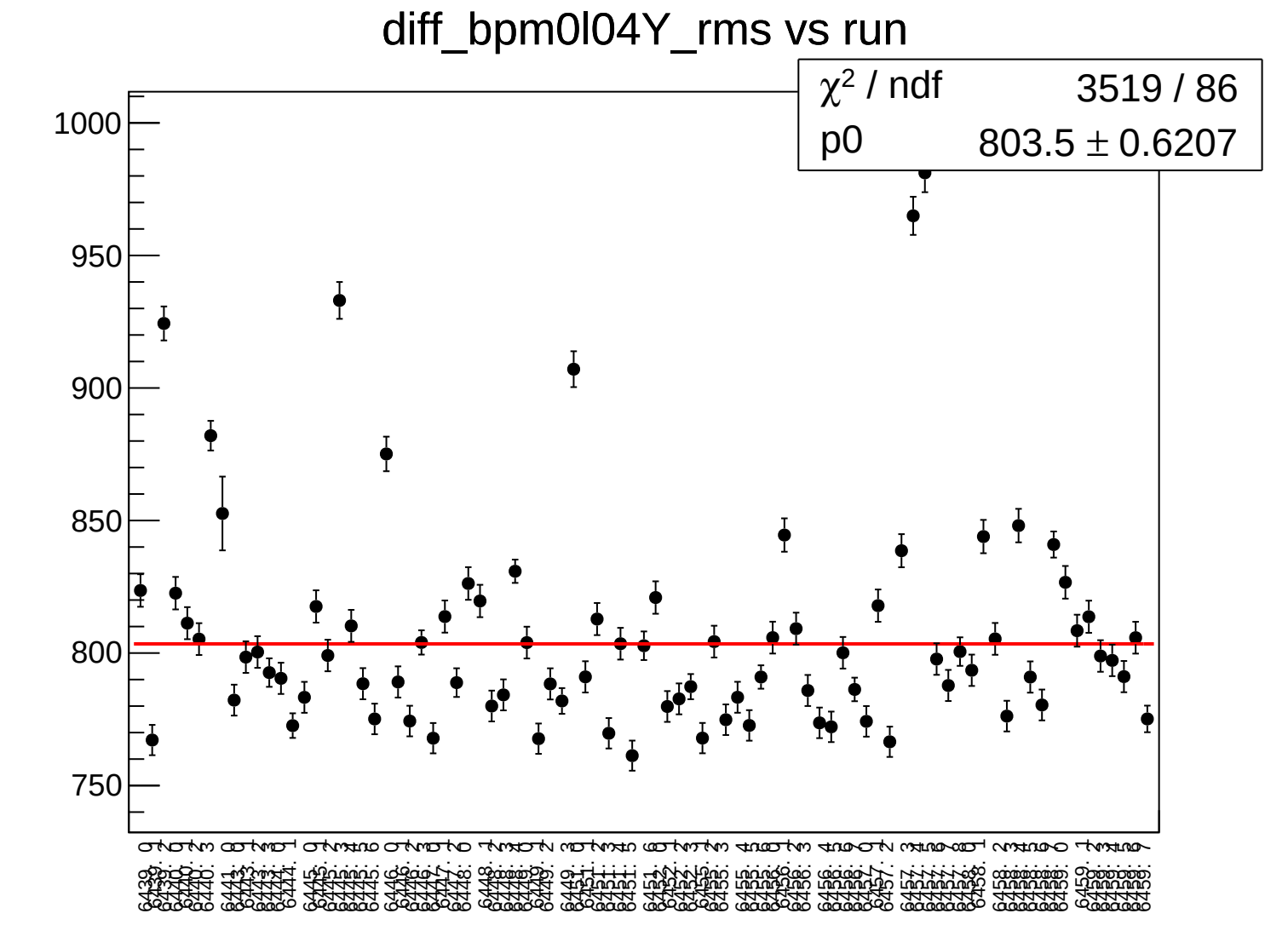

diff_bpm0l04X_mean vs run
χ^2 / ndf 83.01 / 86
p0 −33.2 ± 11.87
400
200
0
−200
−400
pull
Entries 87
Mean −434.4
Std Dev 484.3
2
1
0
−1
−2

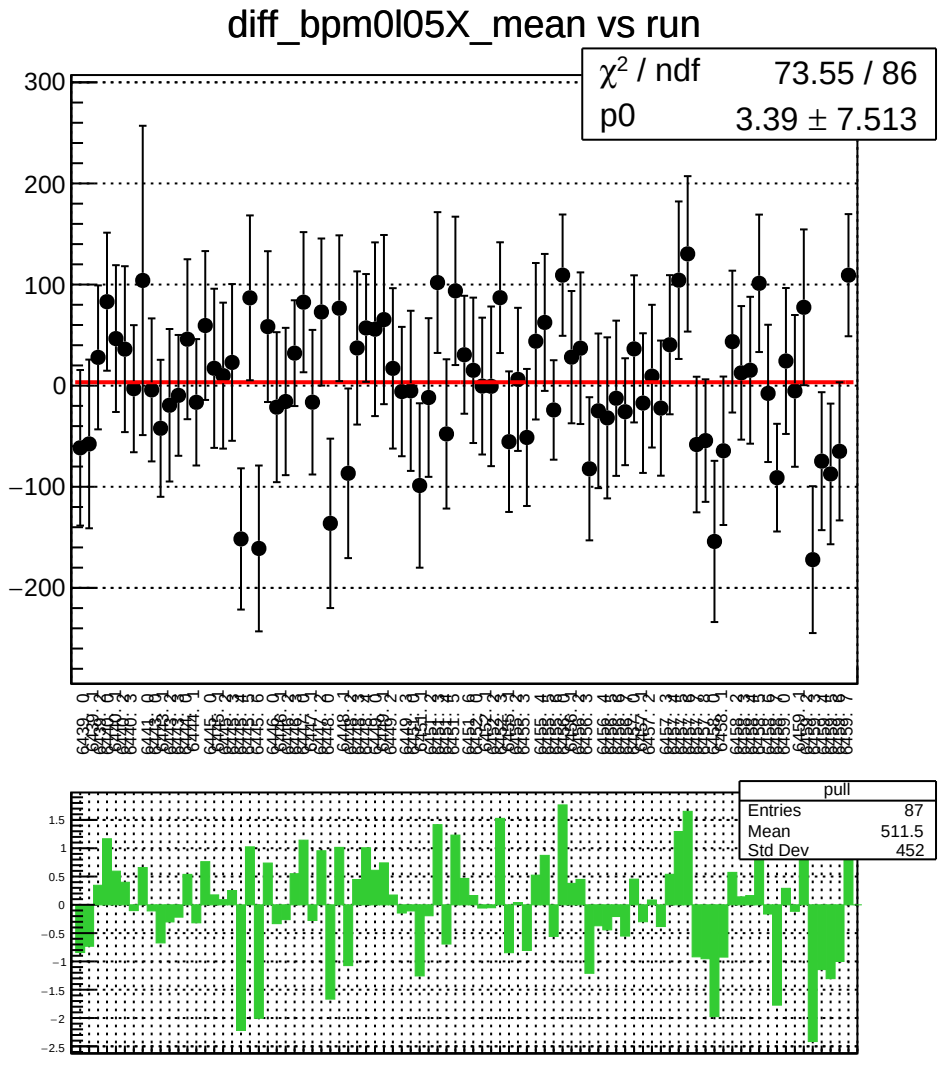

pull1D
Entries 87
Mean 0.01029
Std Dev 0.9767
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

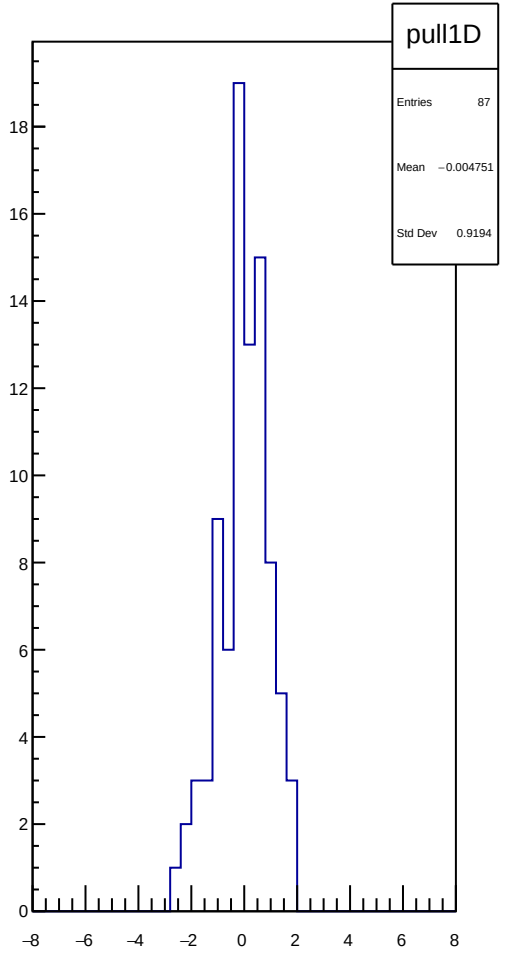

diff_bpm0l04X_rms vs run
χ² / ndf 600 / 86
p0 1.088e+04 ± 8.397
11600
11400
11200
11000
10800
10600
10400

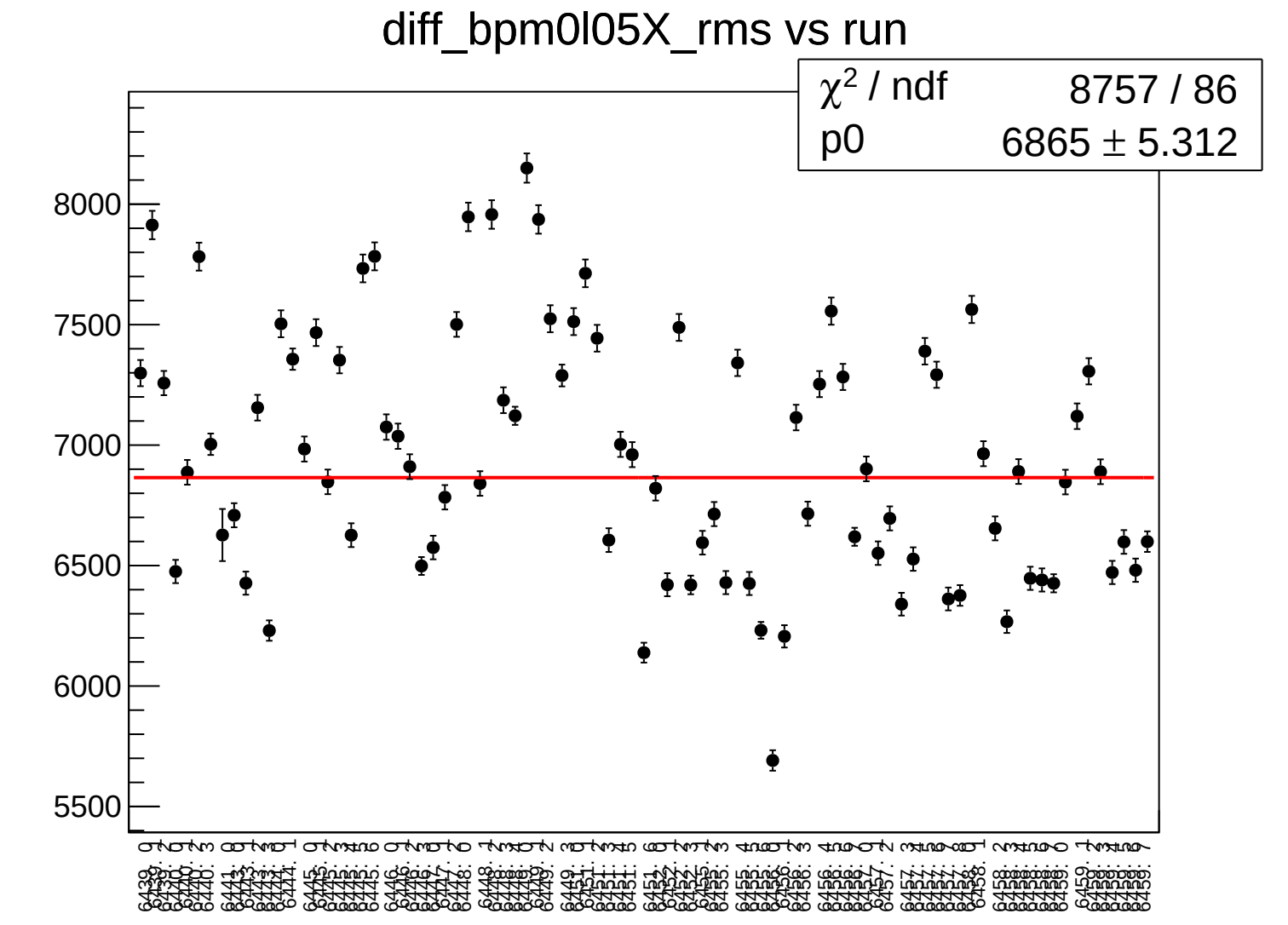

diff_bpm0l04Y_mean vs run
χ² / ndf 89.77 / 86
p0 −6.18 ± 0.8779
pull
Entries 87
Mean −758.6
Std Dev 746.1

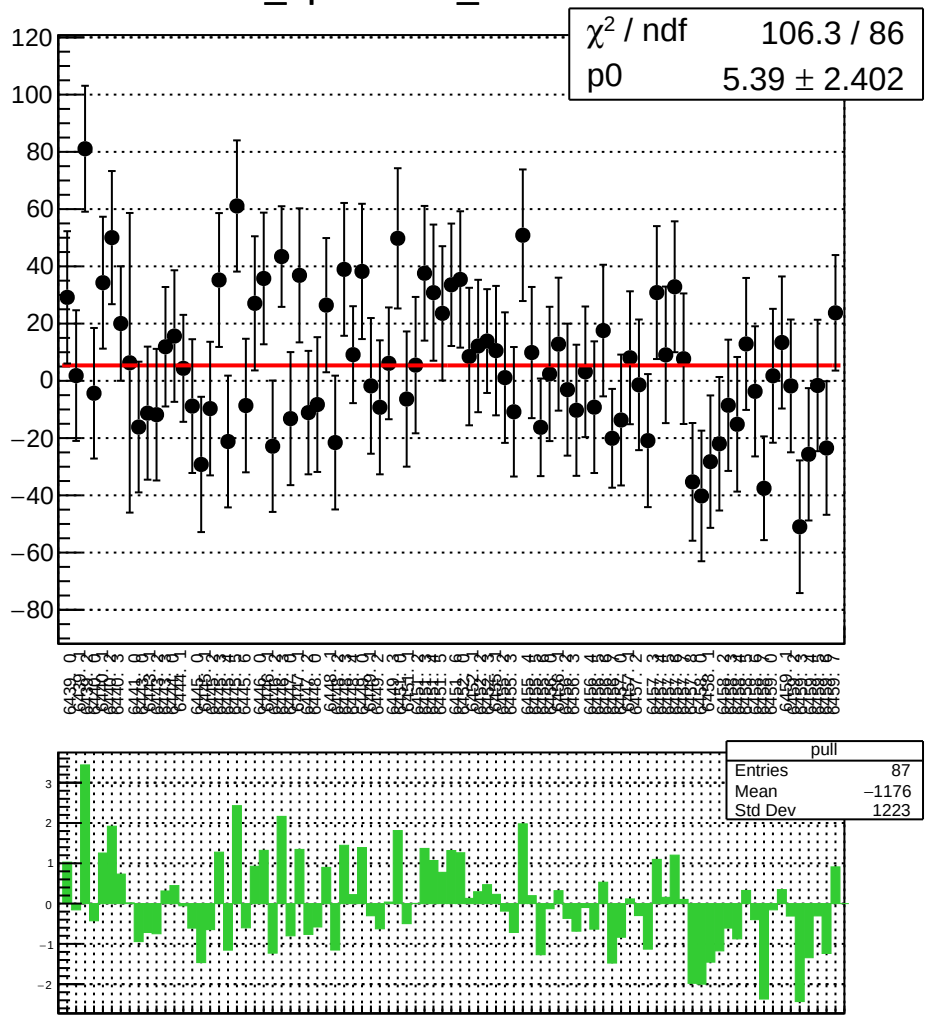

pull1D
Entries 87
Mean −0.002124
Std Dev 1.016

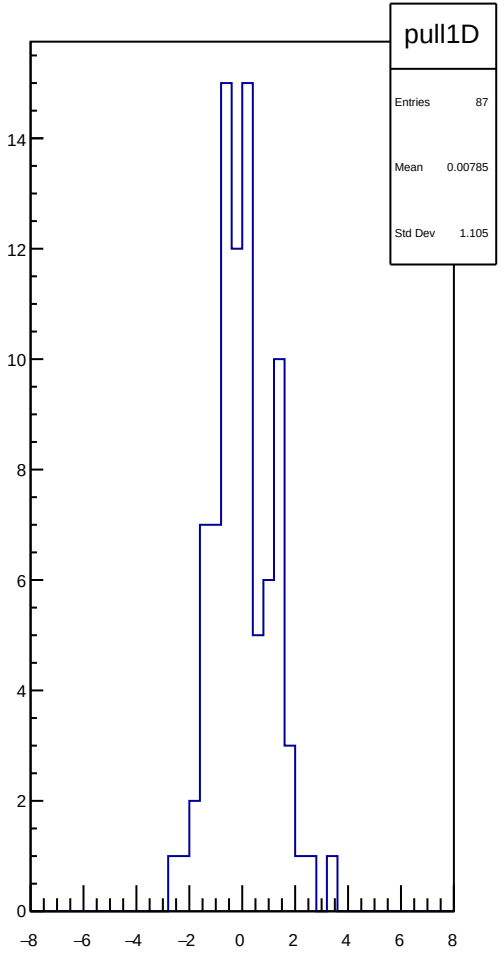

diff_bpm0l04Y_rms vs run
χ² / ndf 3519 / 86
p0 803.5 ± 0.6207
1000
950
900
850
800
750

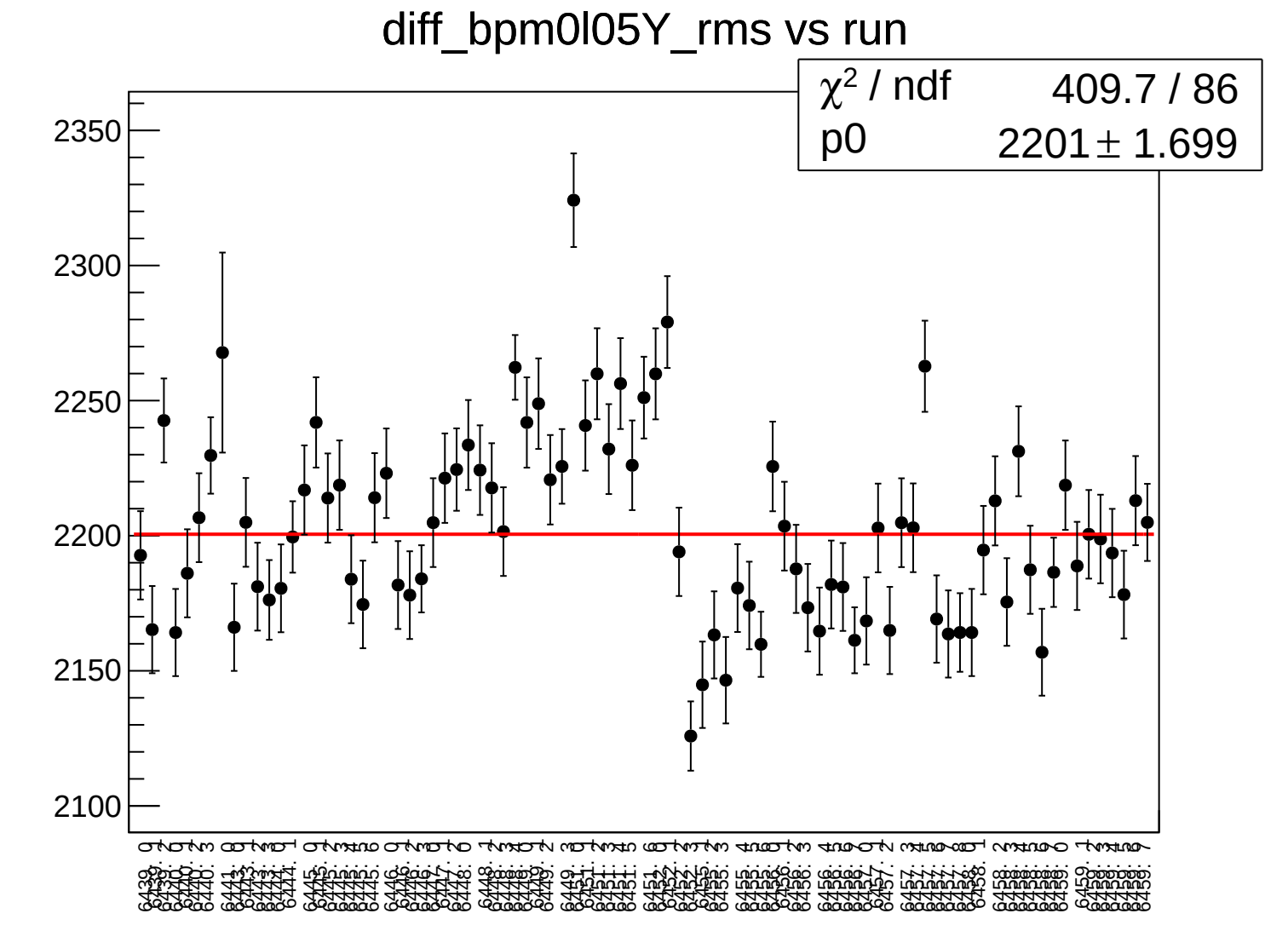

diff_bpm0l05X_mean vs run
χ² / ndf 73.55 / 86
p0 3.39 ± 7.513
pull
Entries 87
Mean 511.5
Std Dev 452

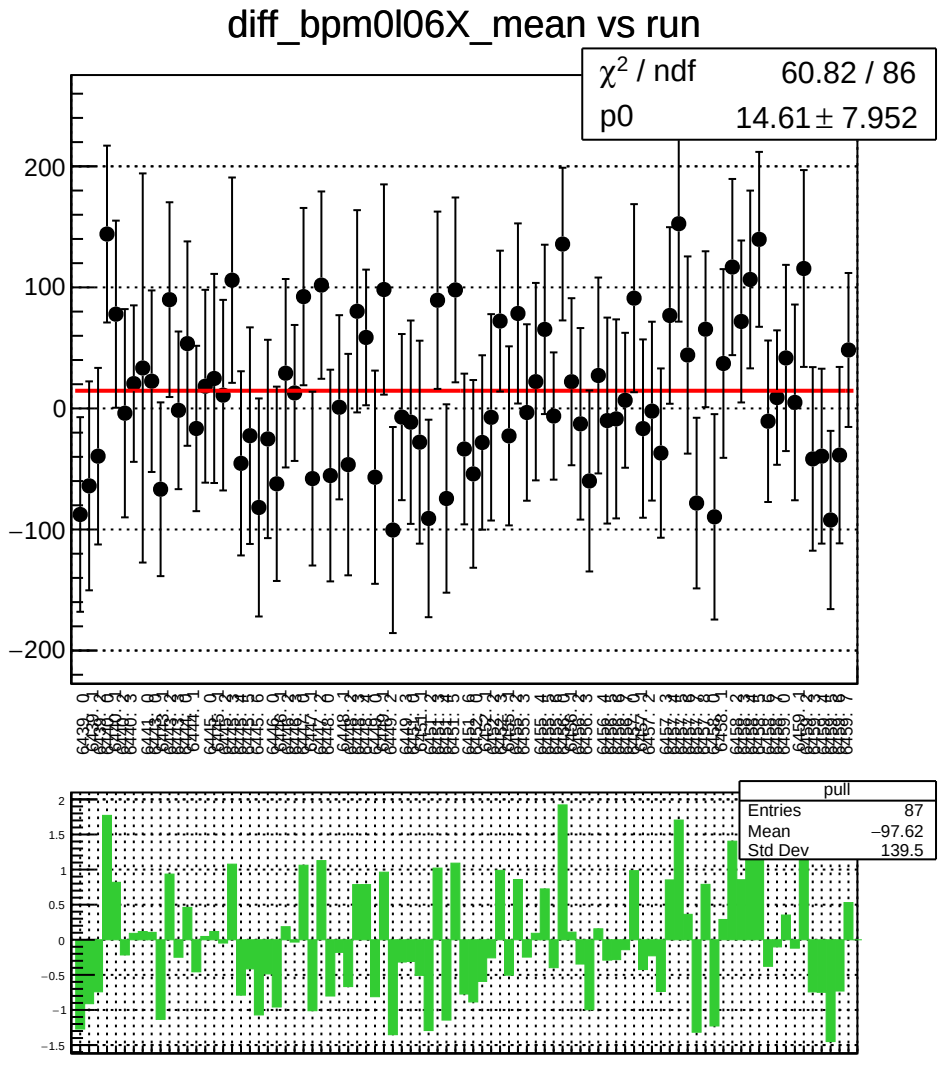

pull1D
Entries 87
Mean −0.004751
Std Dev 0.9194

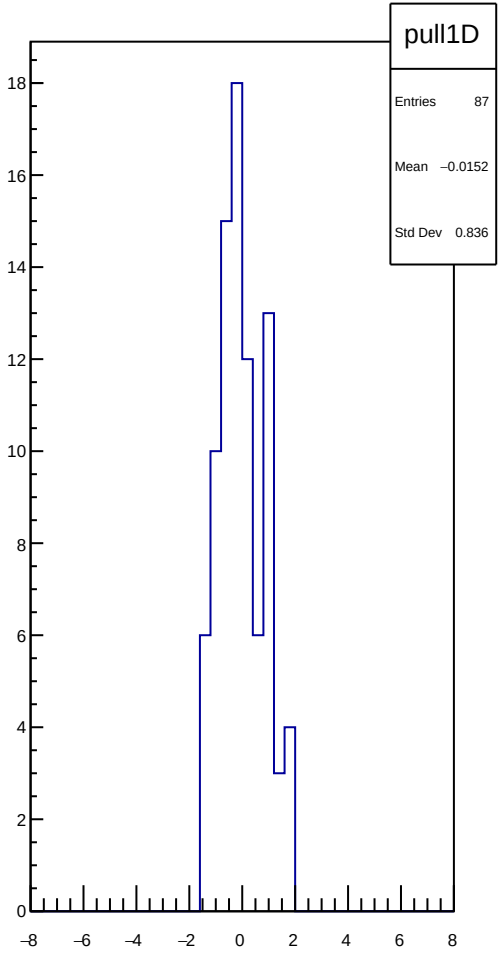

diff_bpm0l05X_rms vs run
χ² / ndf 8757 / 86
p0 6865 ± 5.312
8000
7500
7000
6500
6000
5500

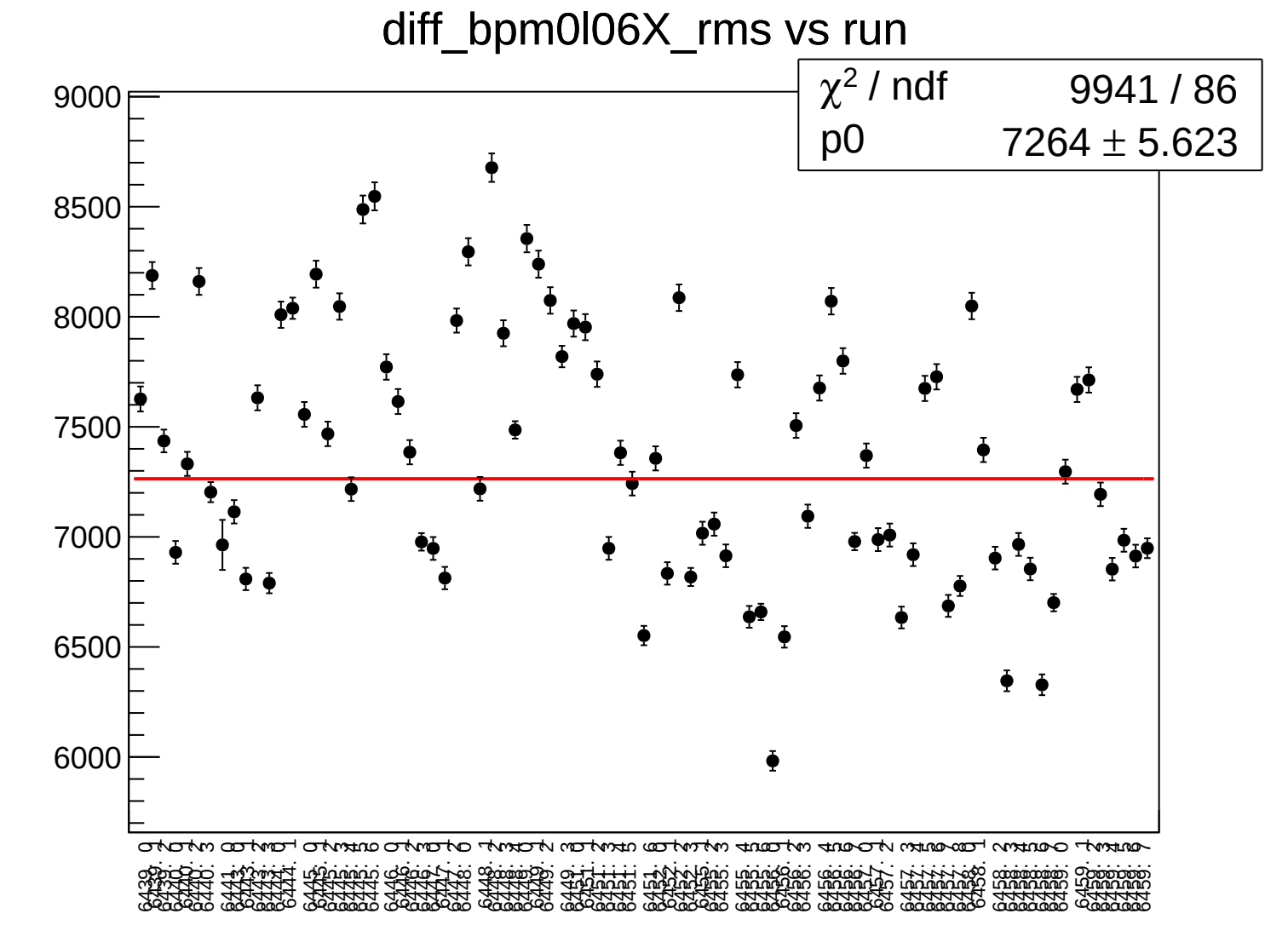

diff_bpm0l05Y_mean vs run
χ² / ndf 106.3 / 86
p0 5.39 ± 2.402
pull
Entries 87
Mean −1176
Std Dev 1223

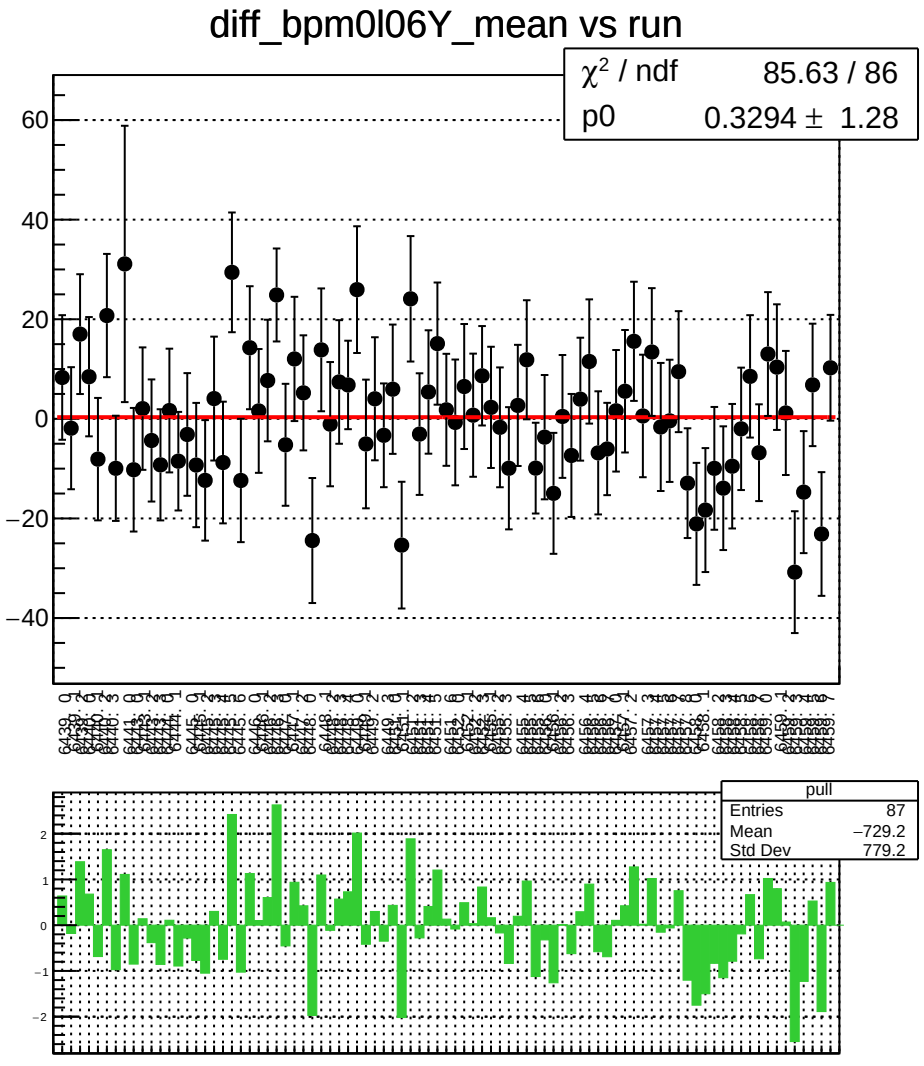

pull1D
Entries 87
Mean 0.00785
Std Dev 1.105

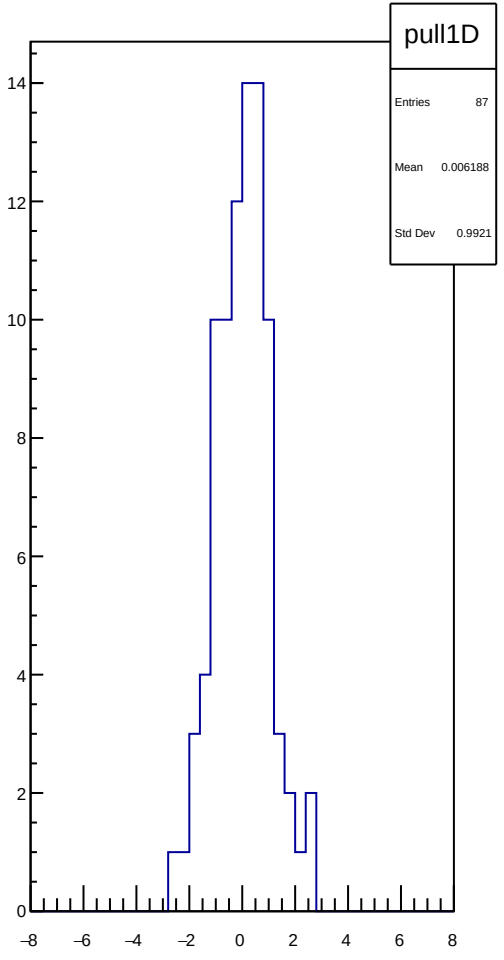

diff_bpm0l05Y_rms vs run
χ² / ndf 409.7 / 86
p0 2201 ± 1.699
2350
2300
2250
2200
2150
2100

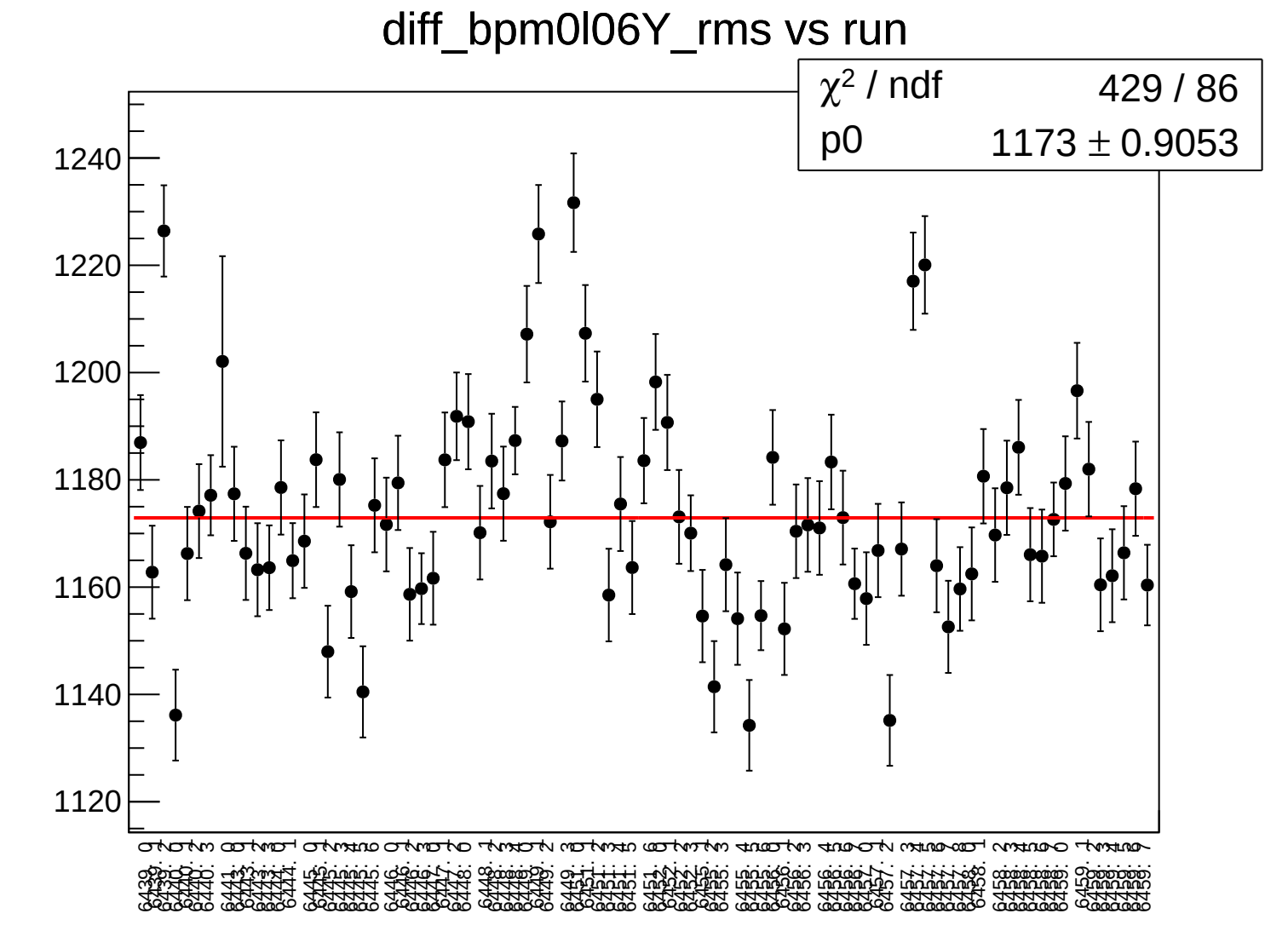

diff_bpm0l06X_mean vs run
χ^2 / ndf 60.82 / 86
p0 14.61 ± 7.952
pull
Entries 87
Mean −97.62
Std Dev 139.5

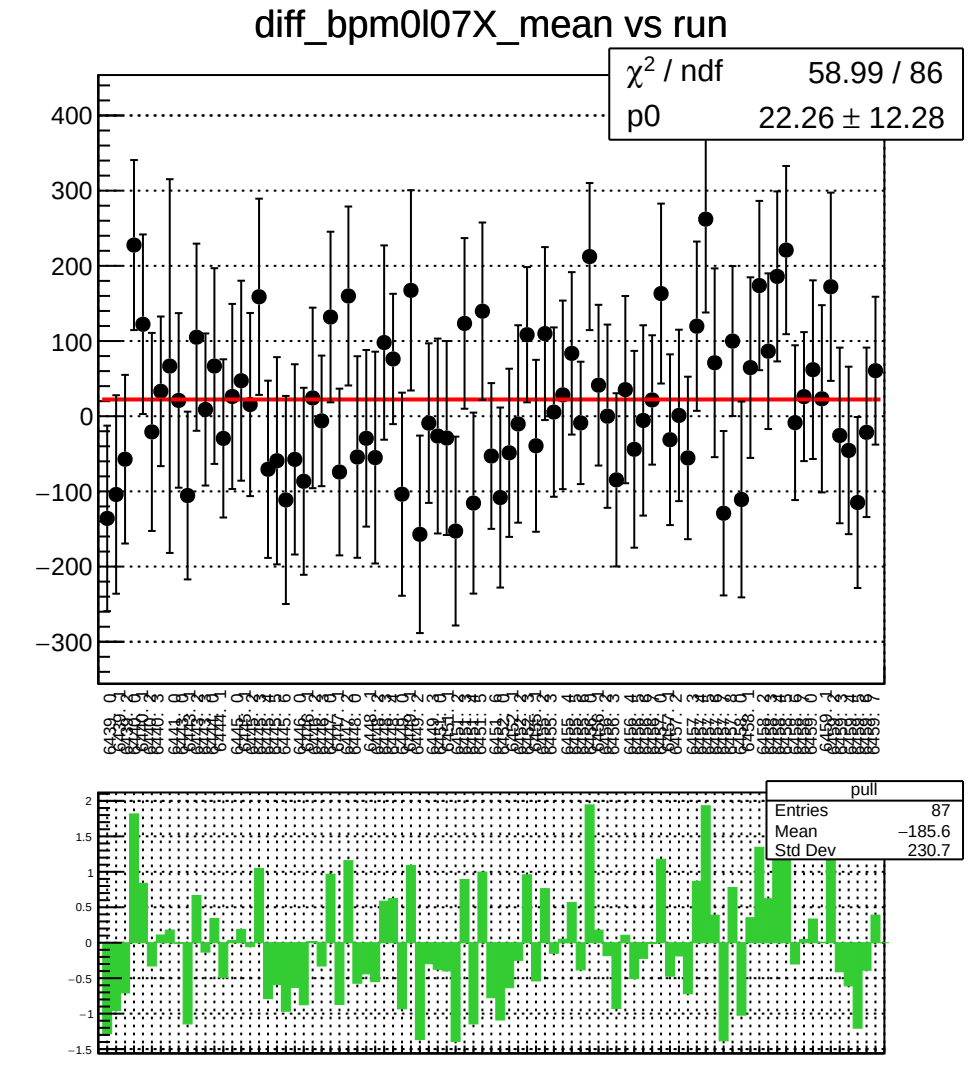

pull1D
Entries 87
Mean −0.0152
Std Dev 0.836

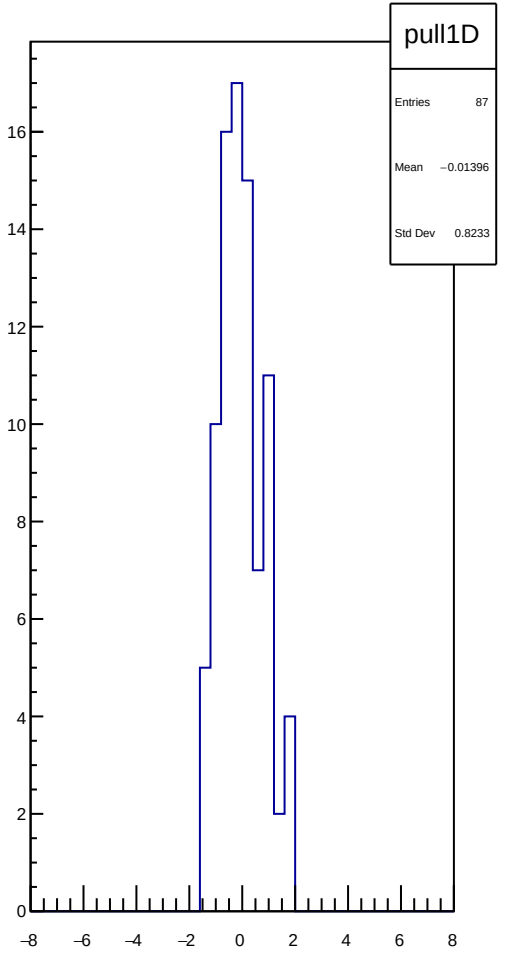

diff_bpm0l06X_rms vs run
χ² / ndf 9941 / 86
p0 7264 ± 5.623
9000
8500
8000
7500
7000
6500
6000

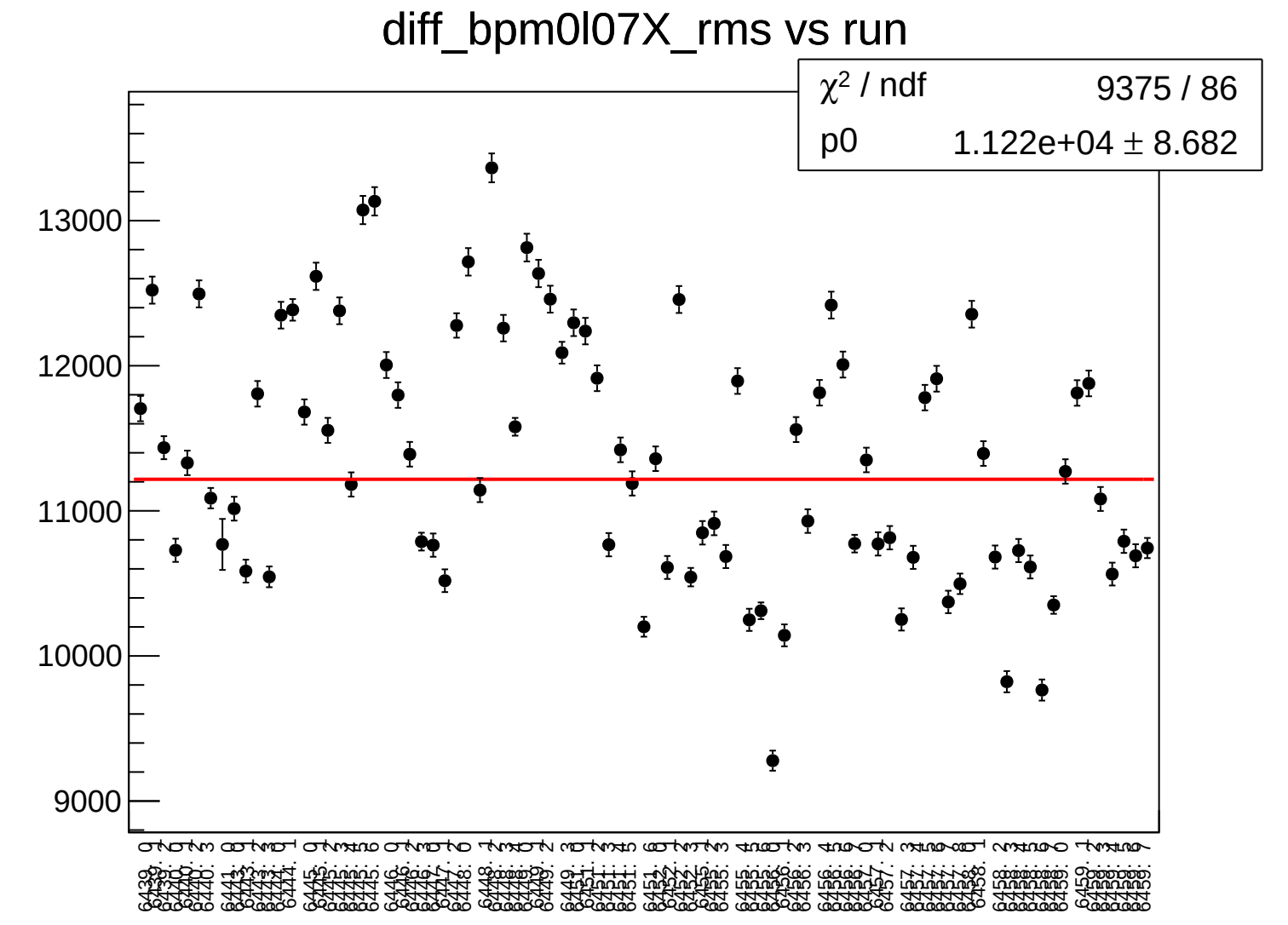

diff_bpm0l06Y_mean vs run
χ² / ndf 85.63 / 86
p0 0.3294 ± 1.28
pull
Entries 87
Mean −729.2
Std Dev 779.2

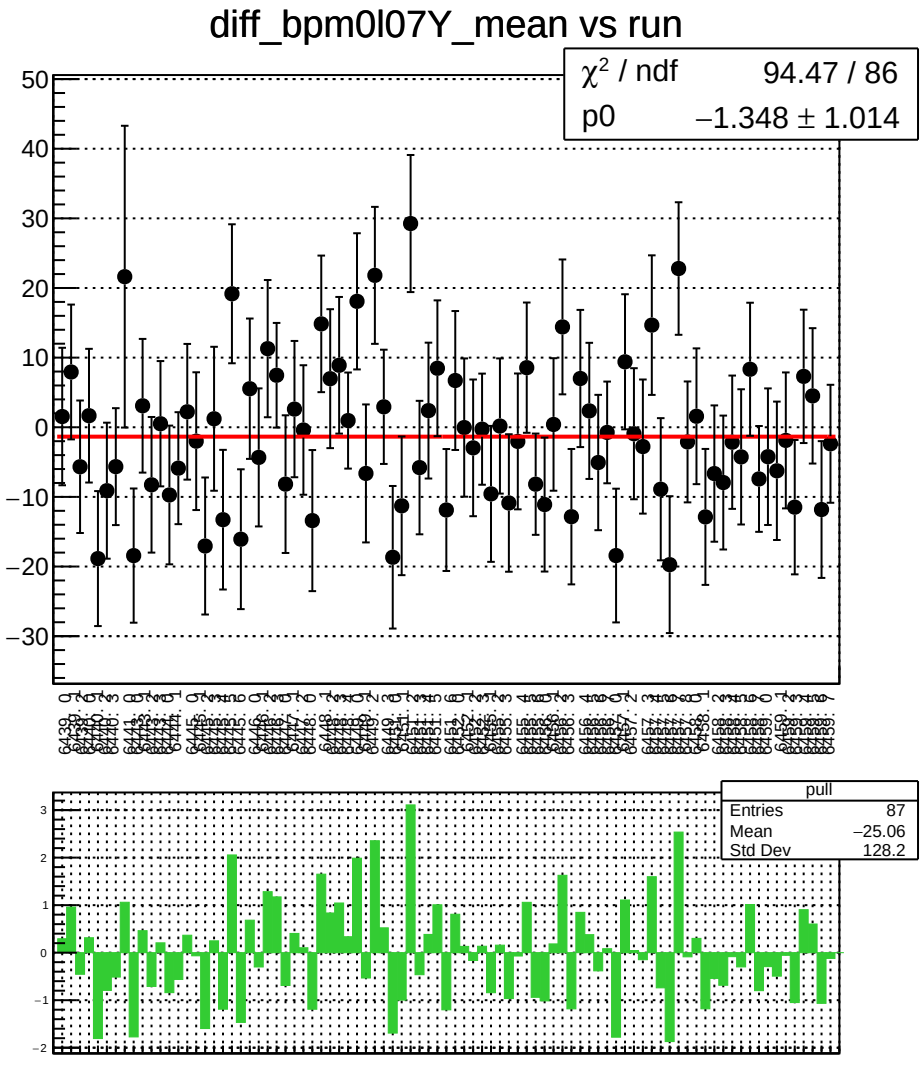

pull1D
Entries 87
Mean 0.006188
Std Dev 0.9921

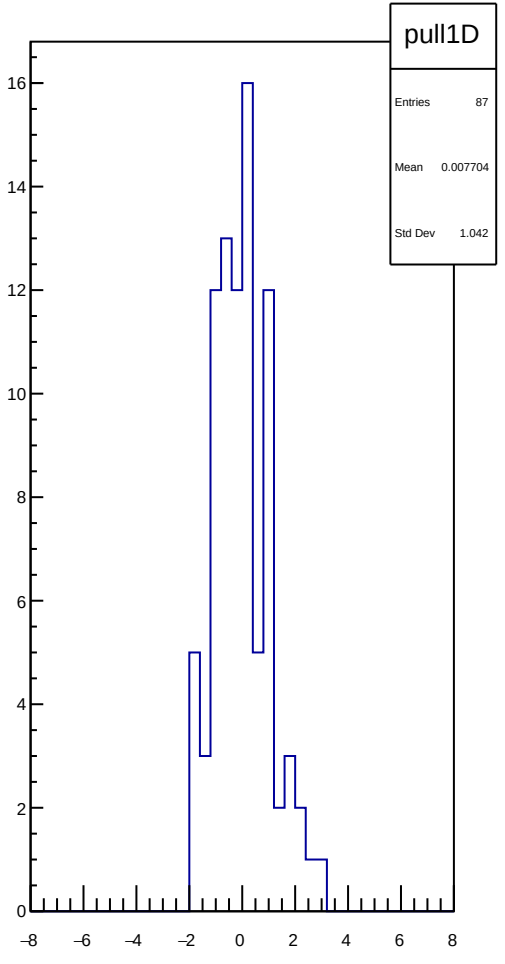

diff_bpm0l06Y_rms vs run
χ² / ndf 429 / 86
p0 1173 ± 0.9053
1240
1220
1200
1180
1160
1140
1120

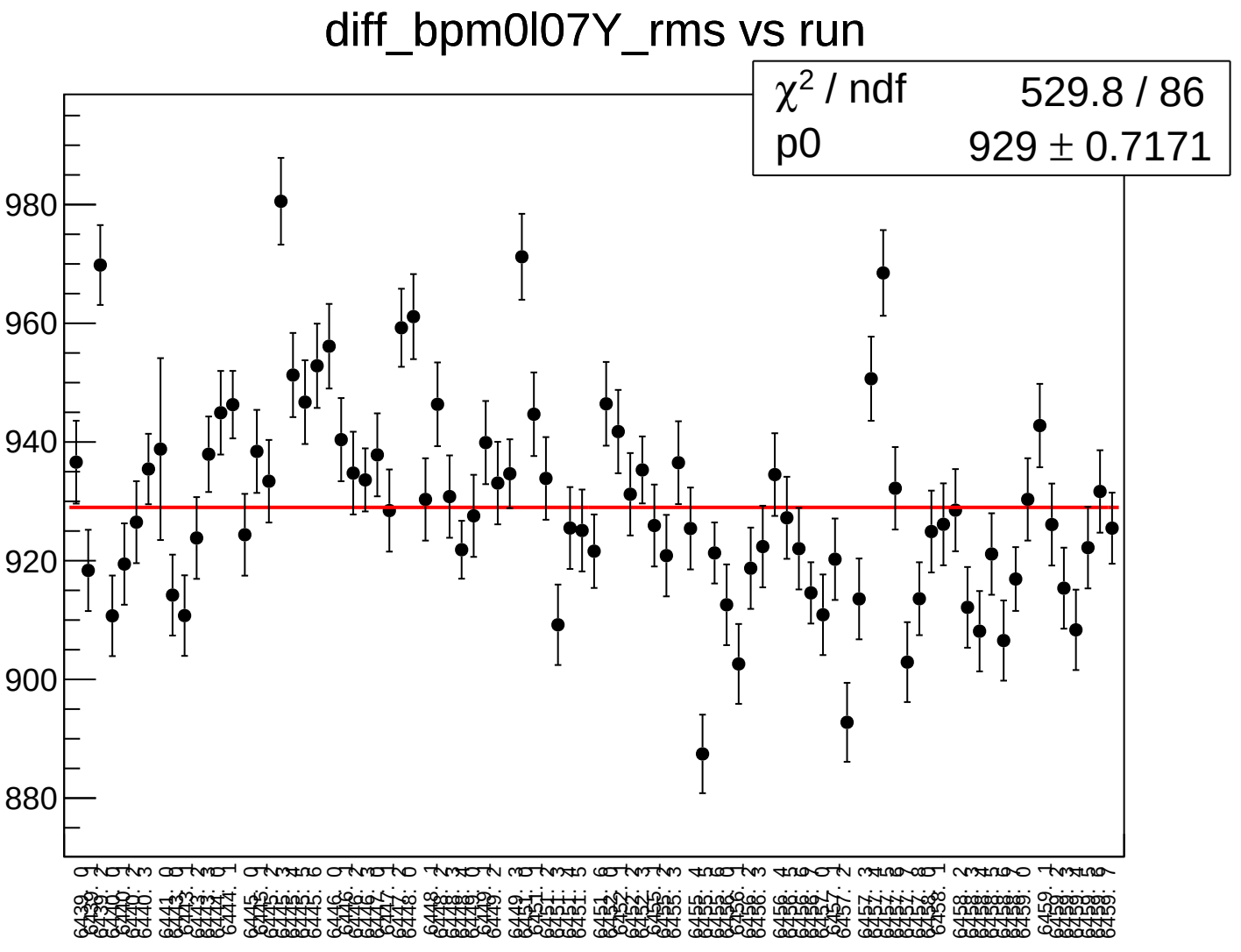

diff_bpm0l07X_mean vs run
χ² / ndf 58.99 / 86
p0 22.26 ± 12.28
pull
Entries 87
Mean −185.6
Std Dev 230.7

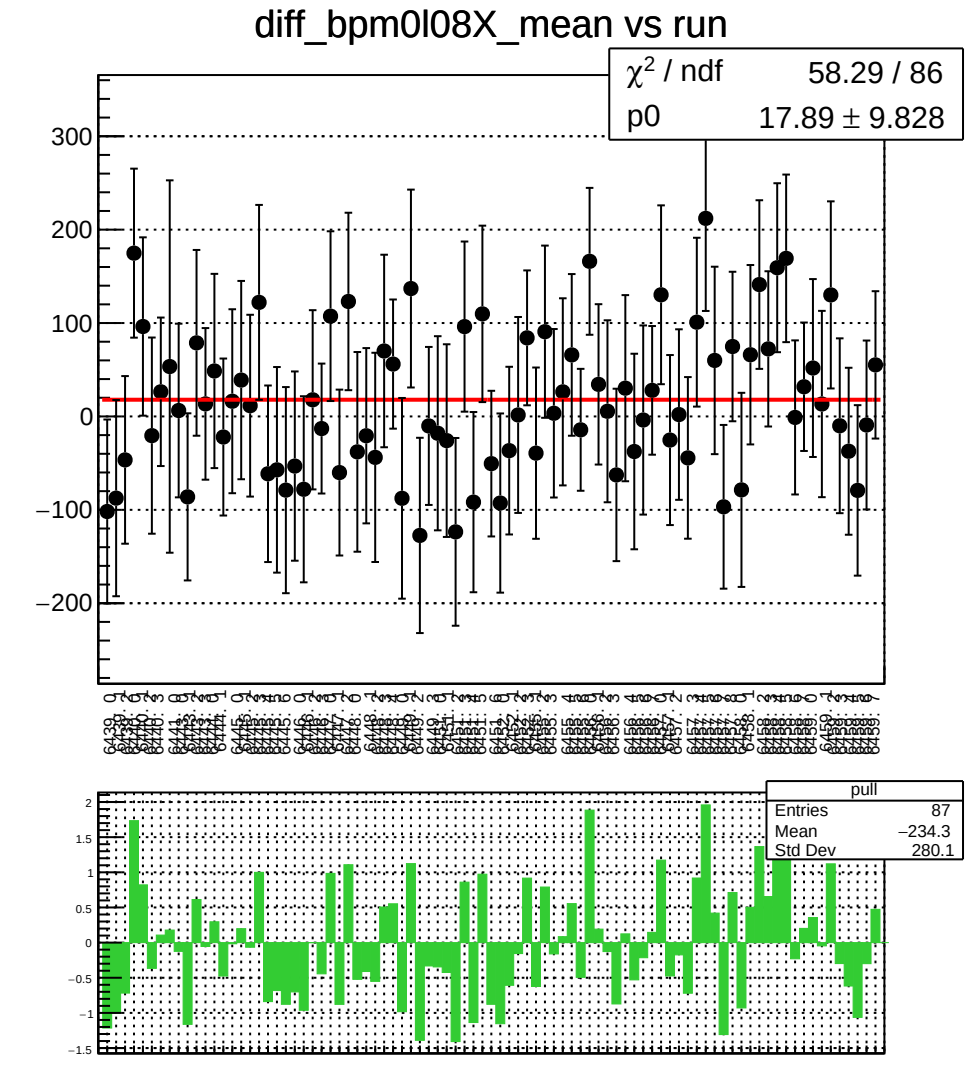

pull1D
Entries 87
Mean −0.01396
Std Dev 0.8233

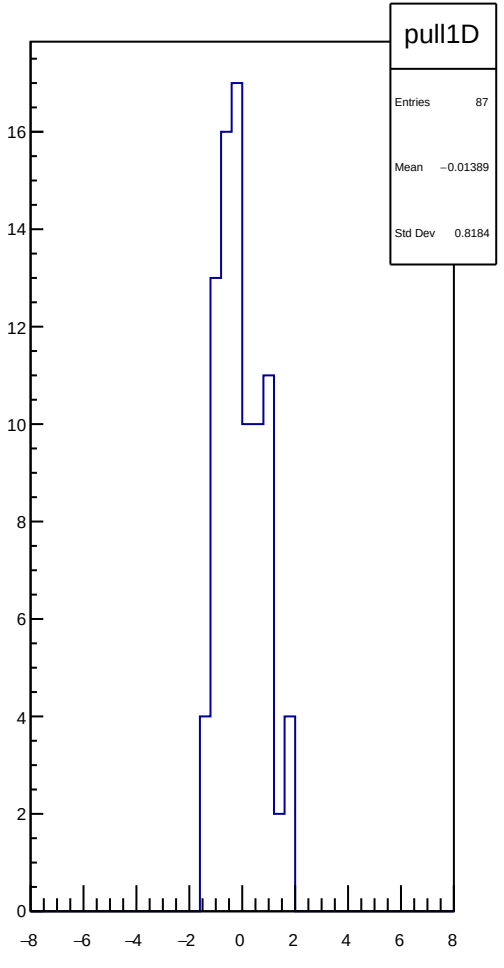

diff_bpm0l07X_rms vs run
χ² / ndf 9375 / 86
p0 1.122e+04 ± 8.682
13000
12000
11000
10000
9000

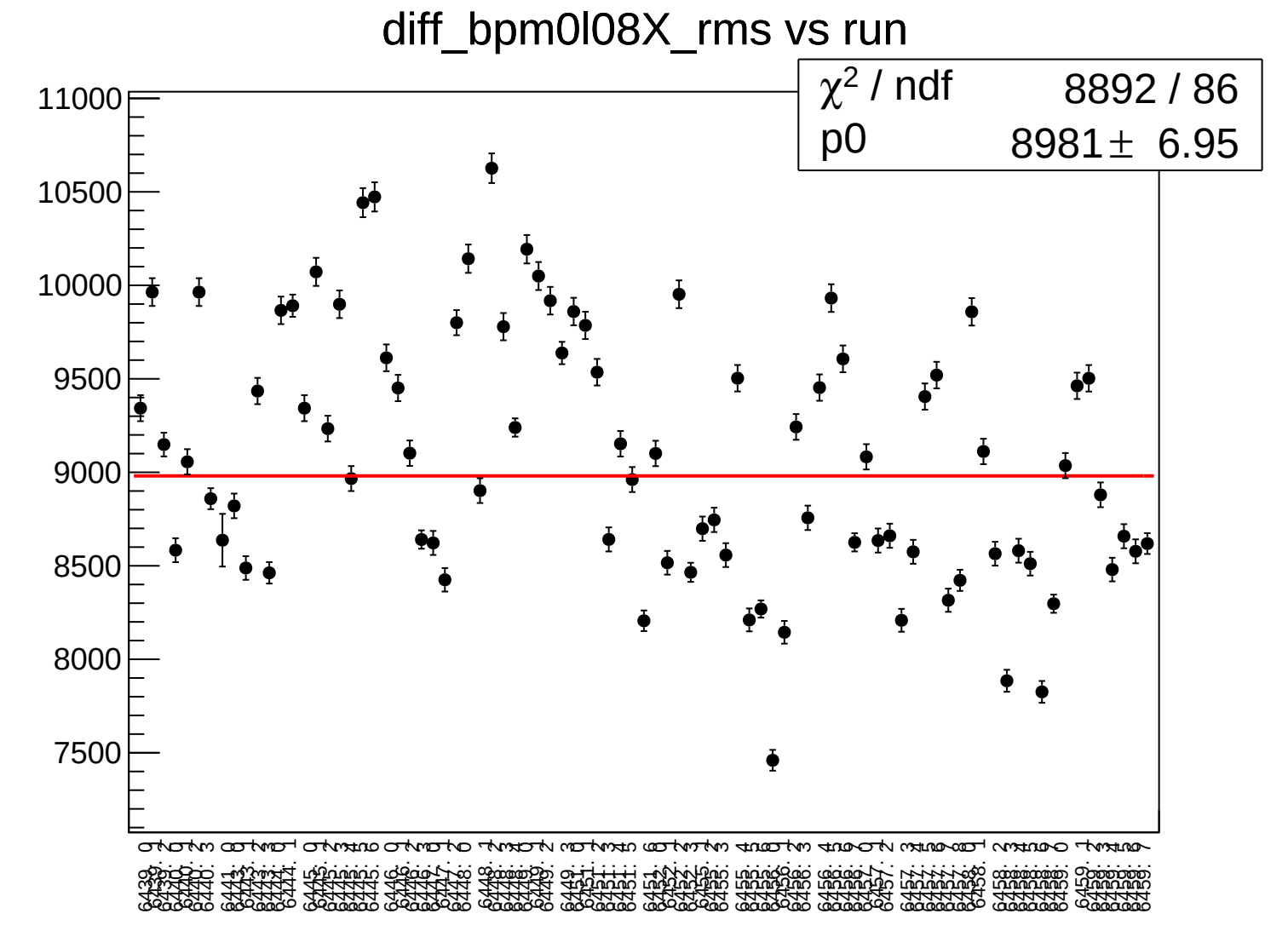

diff_bpm0l07Y_mean vs run
χ² / ndf 94.47 / 86
p0 −1.348 ± 1.014
pull
Entries 87
Mean −25.06
Std Dev 128.2

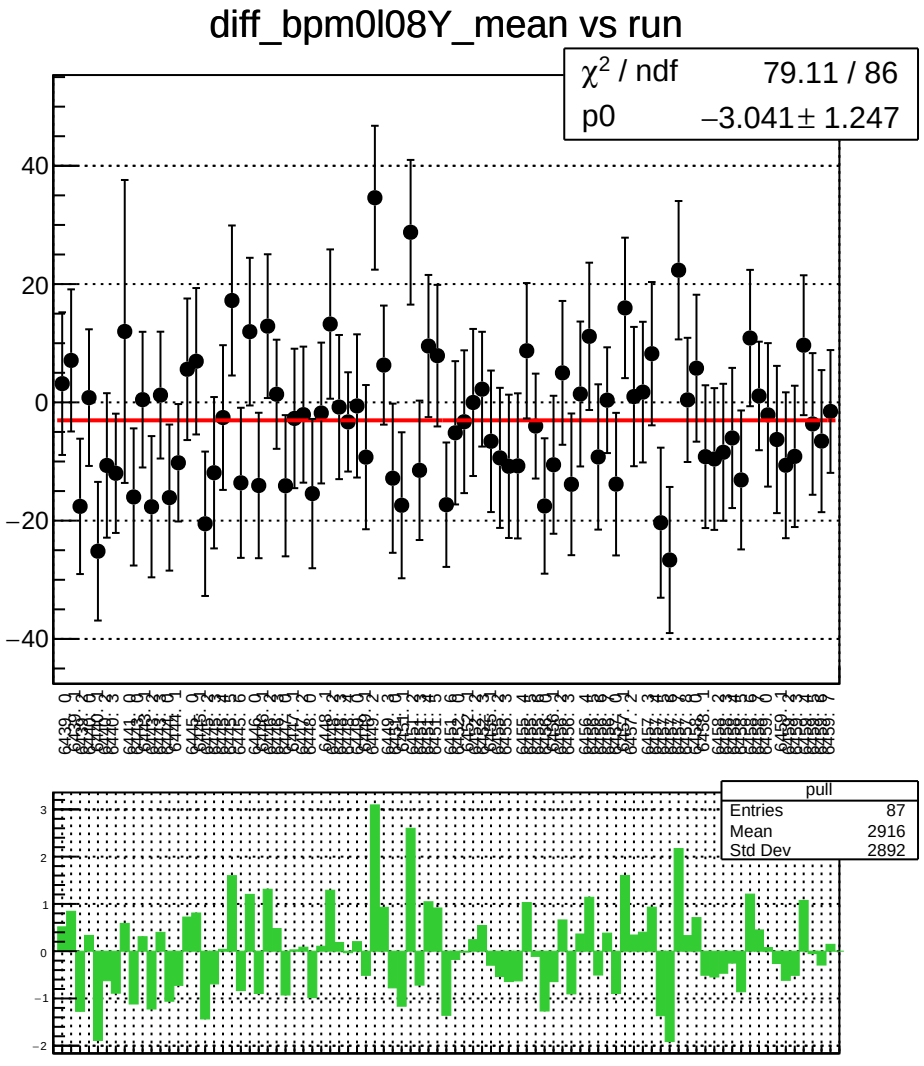

pull1D
Entries 87
Mean 0.007704
Std Dev 1.042

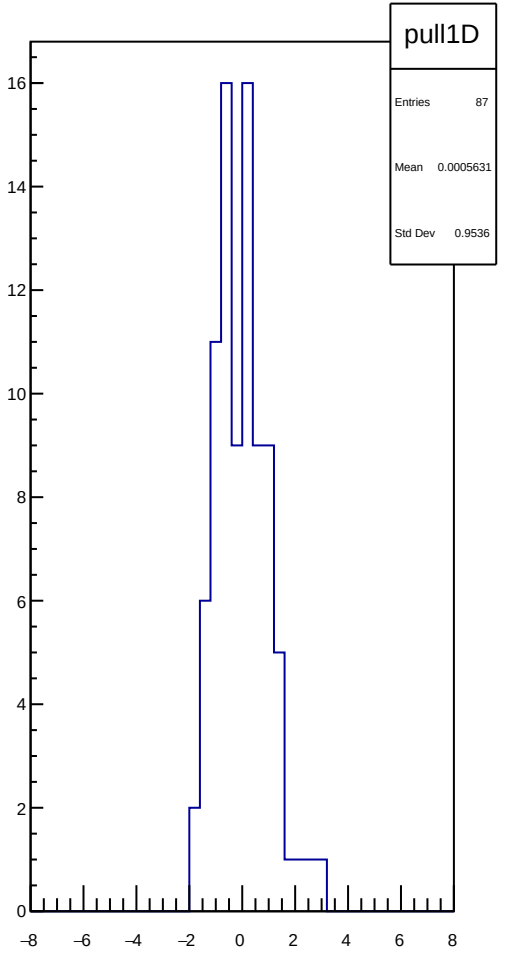

diff_bpm0l07Y_rms vs run
χ^2 / ndf 529.8 / 86
p0 929 ± 0.7171
980
960
940
920
900
880

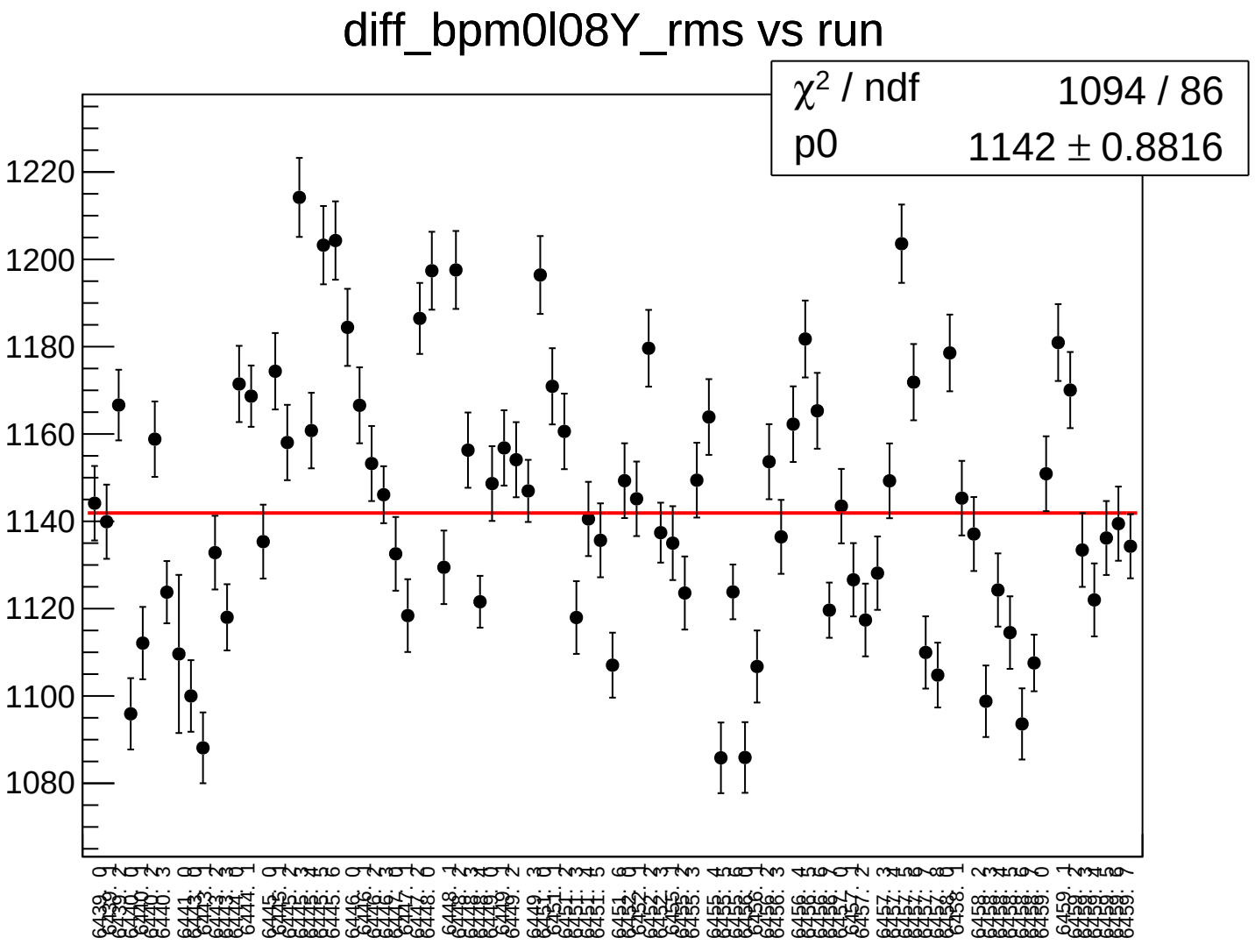

diff_bpm0l08X_mean vs run
χ² / ndf 58.29 / 86
p0 17.89 ± 9.828
pull
Entries 87
Mean −234.3
Std Dev 280.1

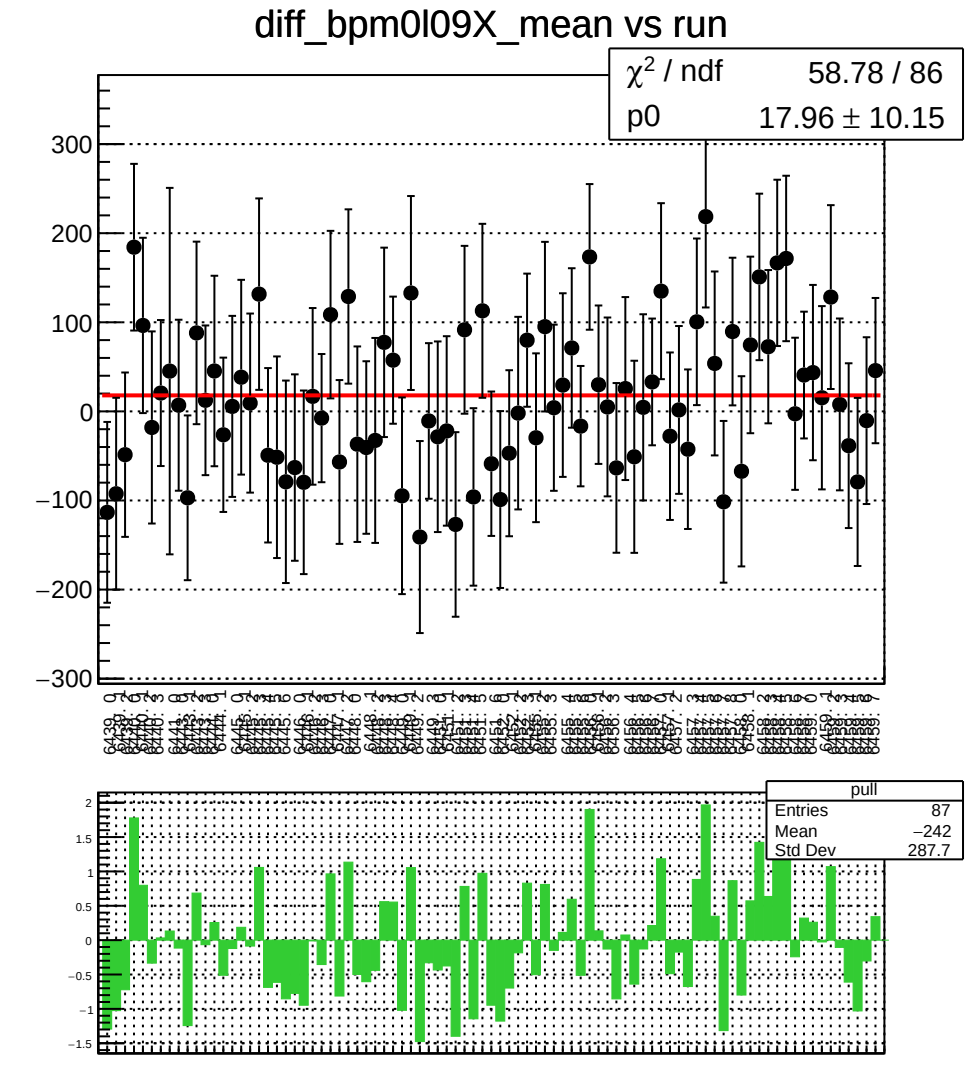

pull1D
Entries 87
Mean −0.01389
Std Dev 0.8184

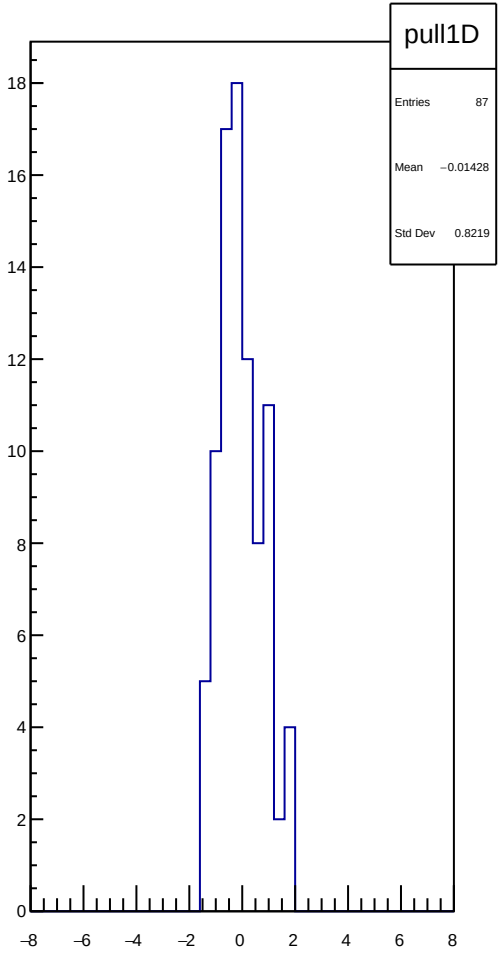

diff_bpm0l08X_rms vs run
χ² / ndf 8892 / 86
p0 8981 ± 6.95
11000
10500
10000
9500
9000
8500
8000
7500

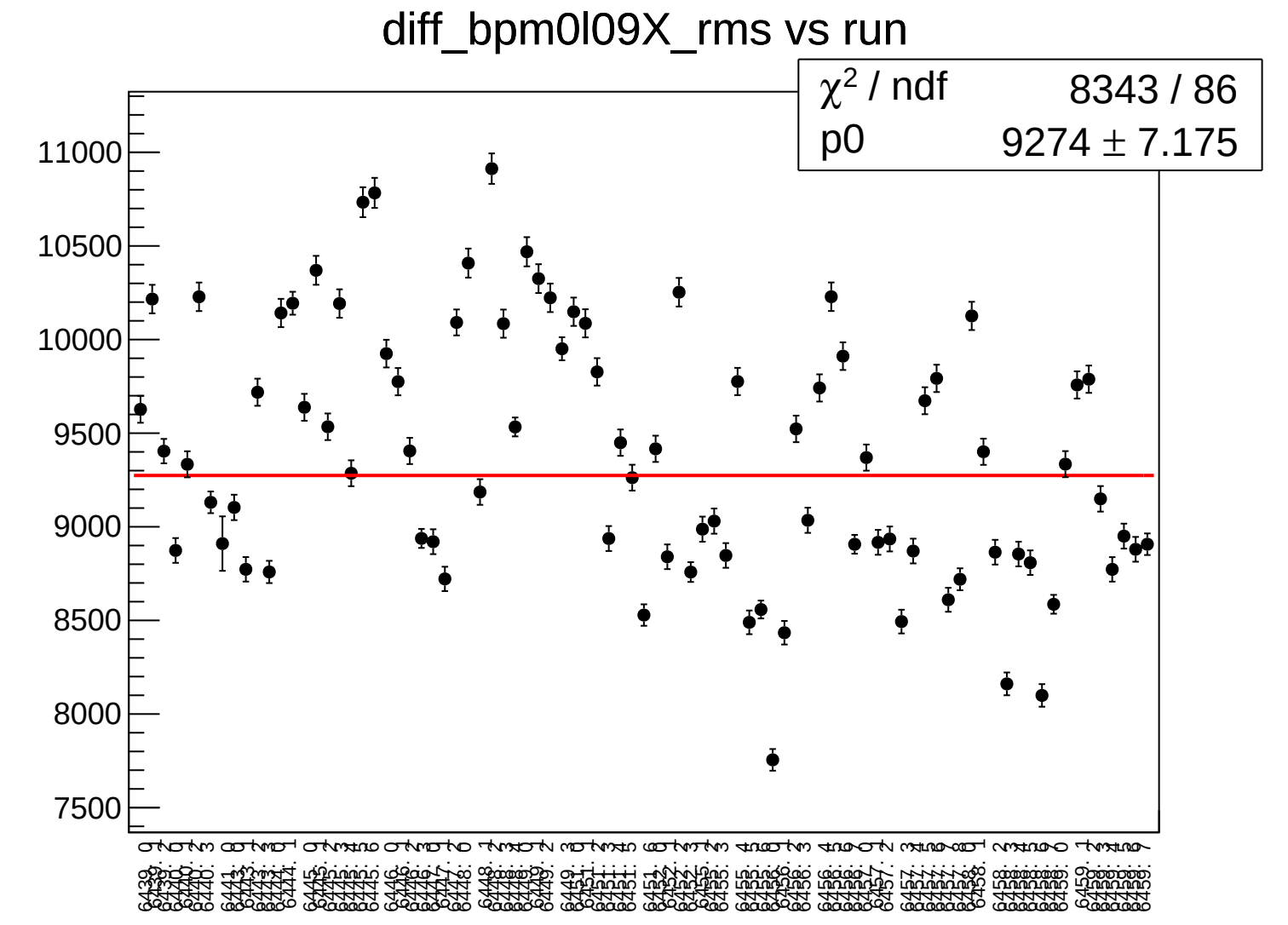

diff_bpm0l08Y_mean vs run
χ² / ndf 79.11 / 86
p0 −3.041± 1.247
pull
Entries 87
Mean 2916
Std Dev 2892

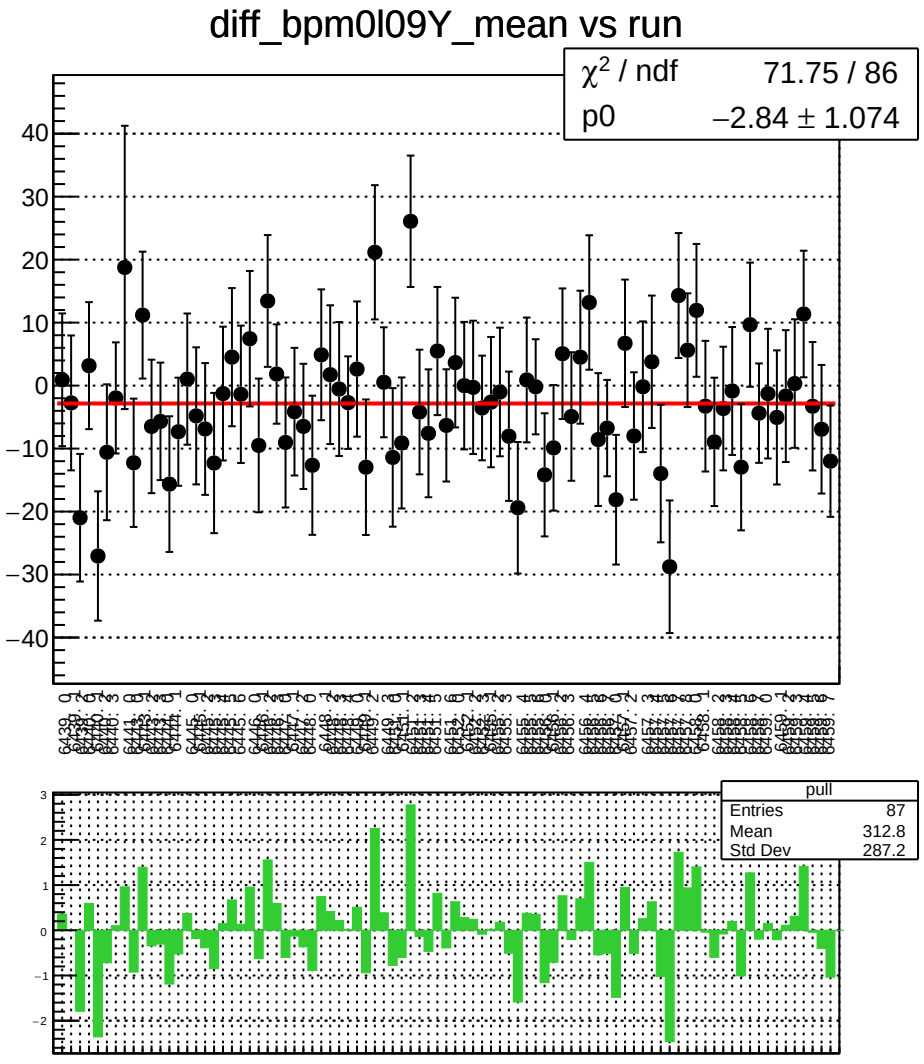

pull1D
Entries 87
Mean 0.0005631
Std Dev 0.9536

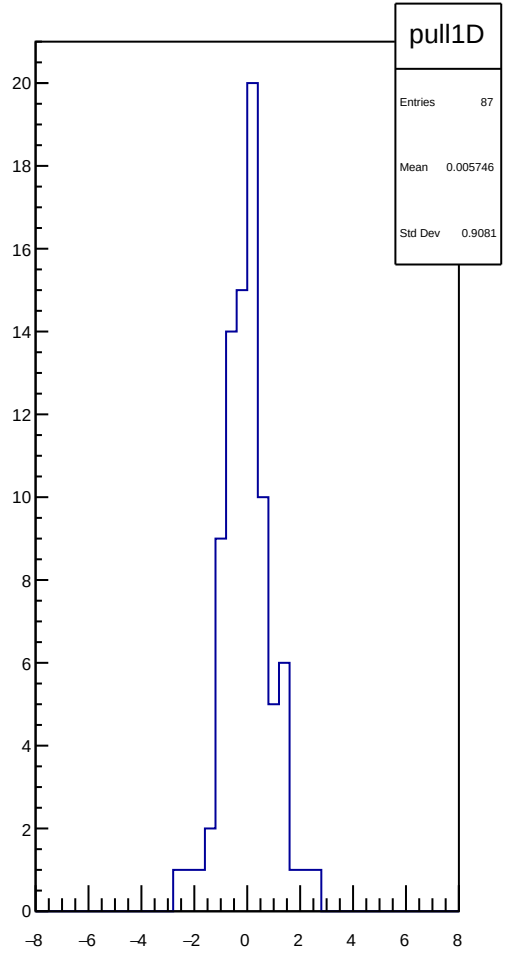

diff_bpm0l08Y_rms vs run
χ² / ndf 1094 / 86
p0 1142 ± 0.8816
1220
1200
1180
1160
1140
1120
1100
1080

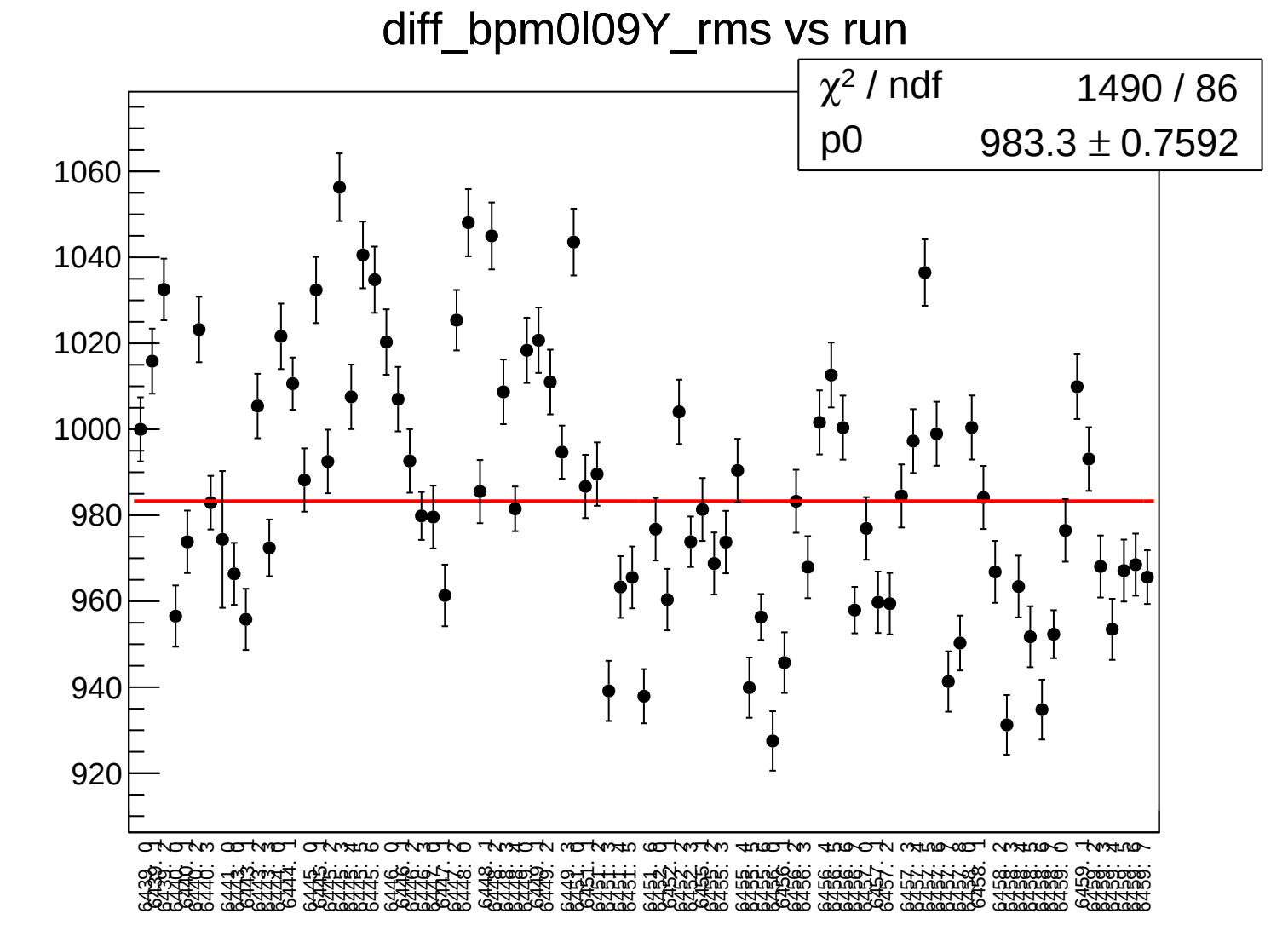

diff_bpm0l09X_mean vs run
χ² / ndf 58.78 / 86
p0 17.96 ± 10.15
pull
Entries 87
Mean −242
Std Dev 287.7

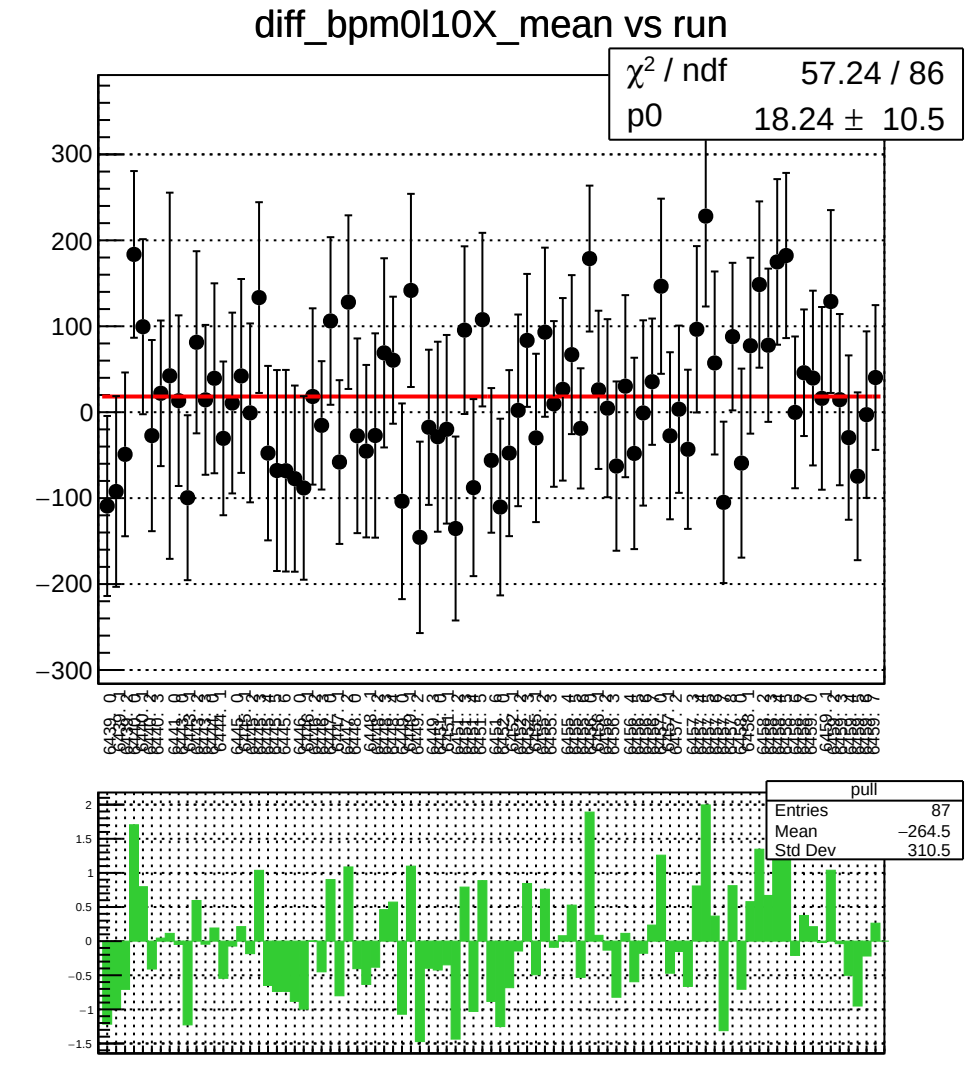

pull1D
Entries 87
Mean −0.01428
Std Dev 0.8219

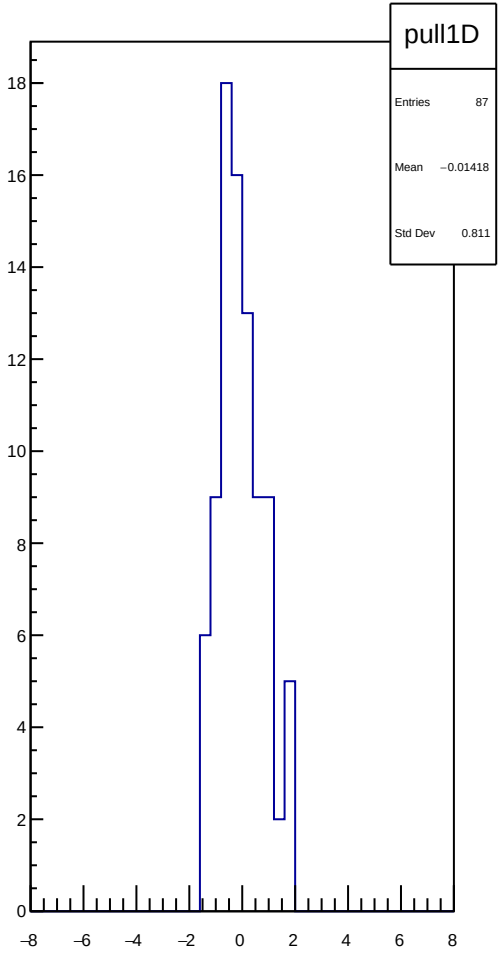

diff_bpm0l09X_rms vs run
χ² / ndf 8343 / 86
p0 9274 ± 7.175
11000
10500
10000
9500
9000
8500
8000
7500

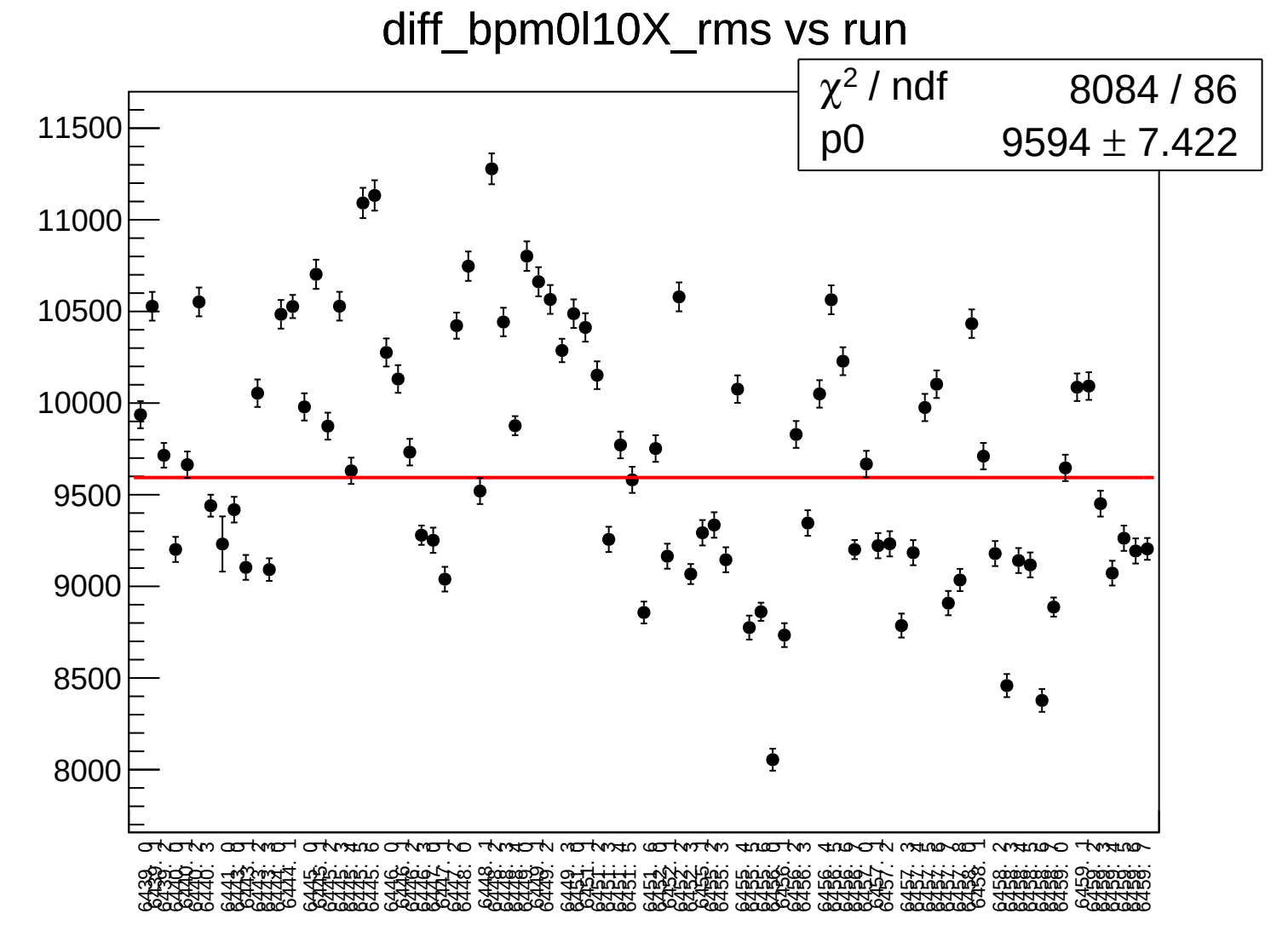

diff_bpm0l09Y_mean vs run
χ^2 / ndf 71.75 / 86
p0 −2.84 ± 1.074
pull
Entries 87
Mean 312.8
Std Dev 287.2

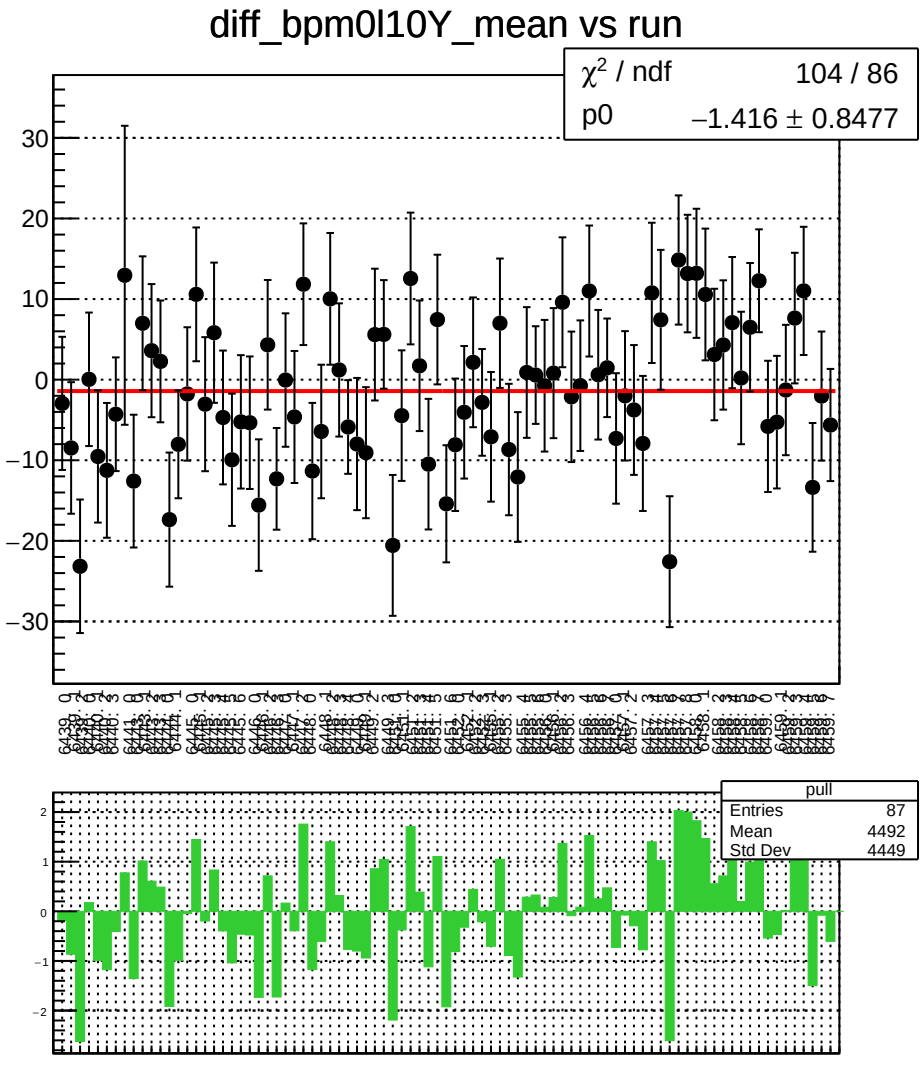

pull1D
Entries 87
Mean 0.005746
Std Dev 0.9081

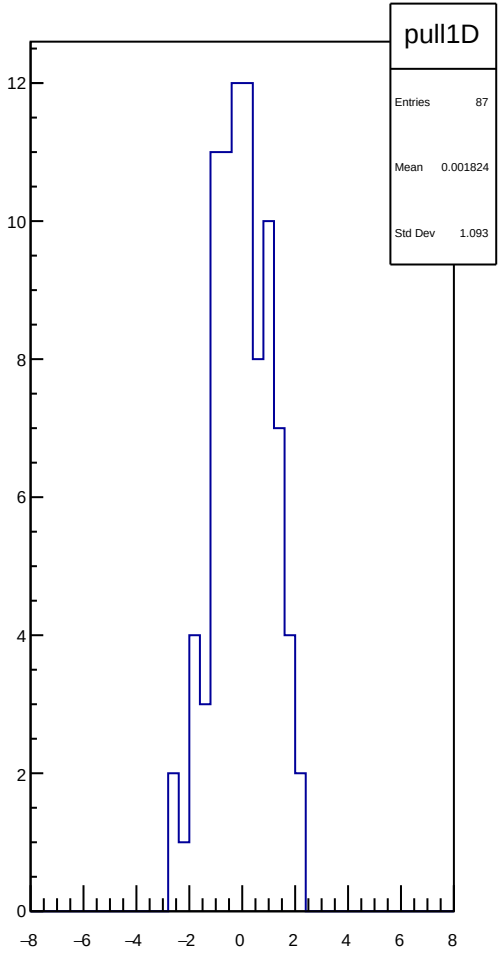

diff_bpm0l09Y_rms vs run
χ² / ndf 1490 / 86
p0 983.3 ± 0.7592
1060
1040
1020
1000
980
960
940
920

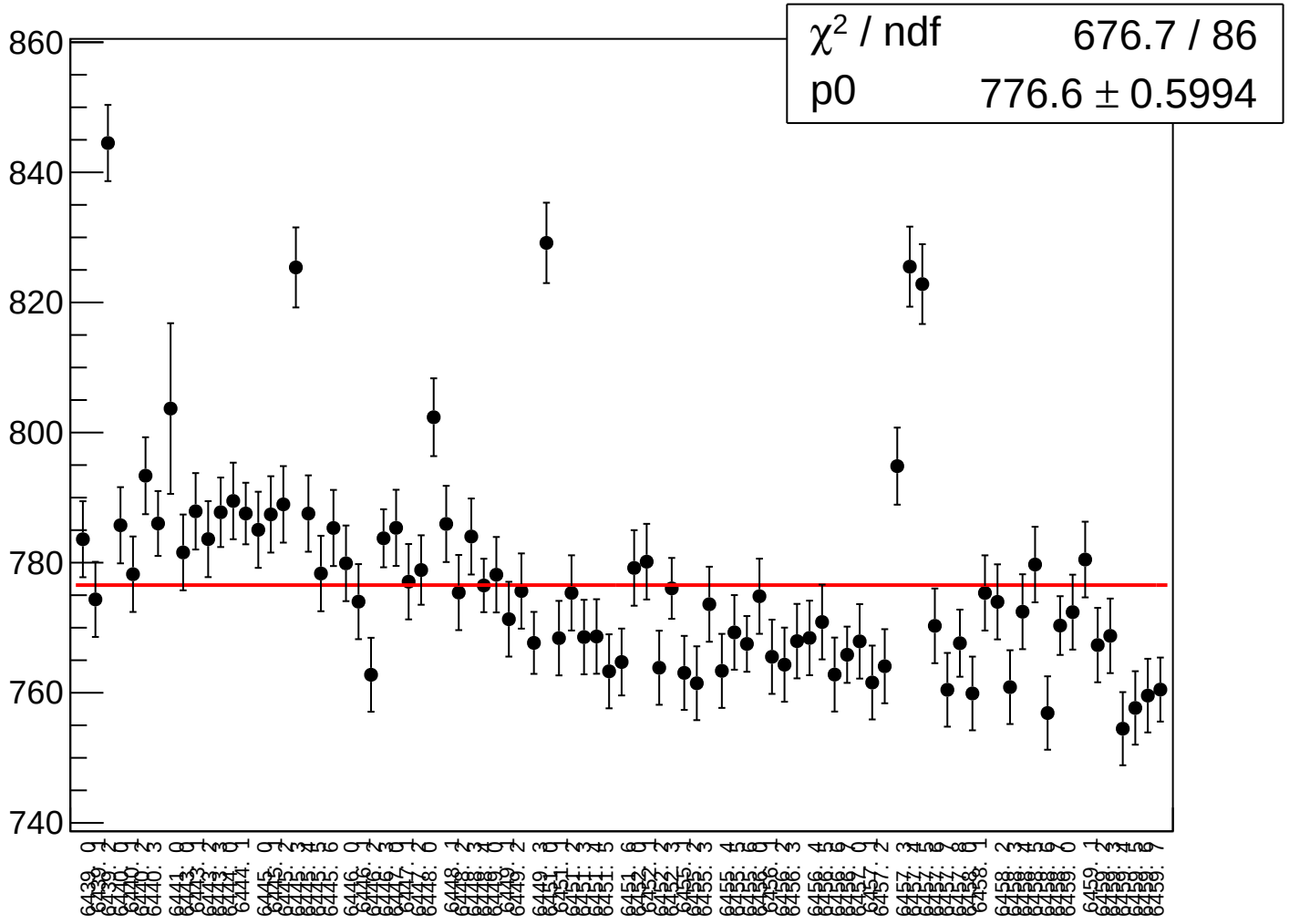

diff_bpm0l10X_mean vs run
χ² / ndf 57.24 / 86
p0 18.24 ± 10.5
pull
Entries 87
Mean −264.5
Std Dev 310.5

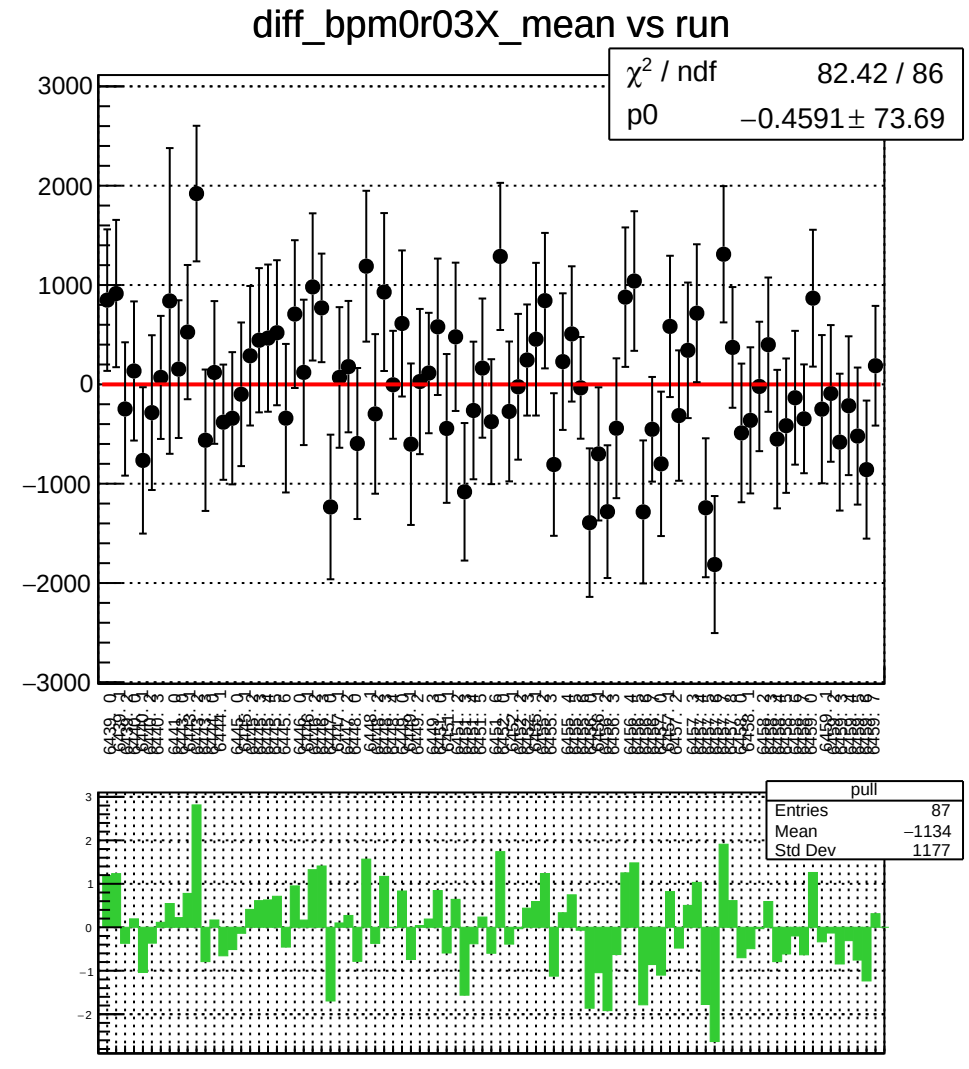

pull1D
Entries 87
Mean −0.01418
Std Dev 0.811

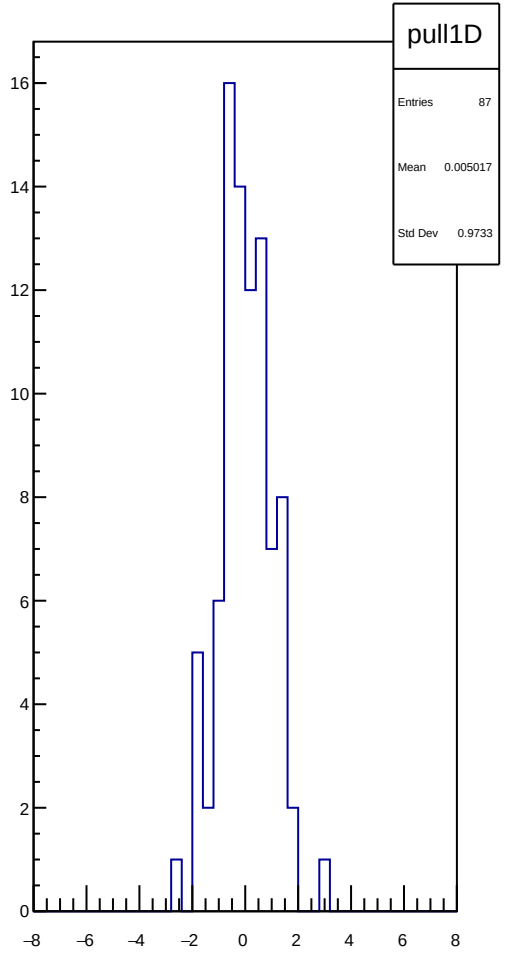

diff_bpm0l10X_rms vs run
χ² / ndf 8084 / 86
p0 9594 ± 7.422
11500
11000
10500
10000
9500
9000
8500
8000

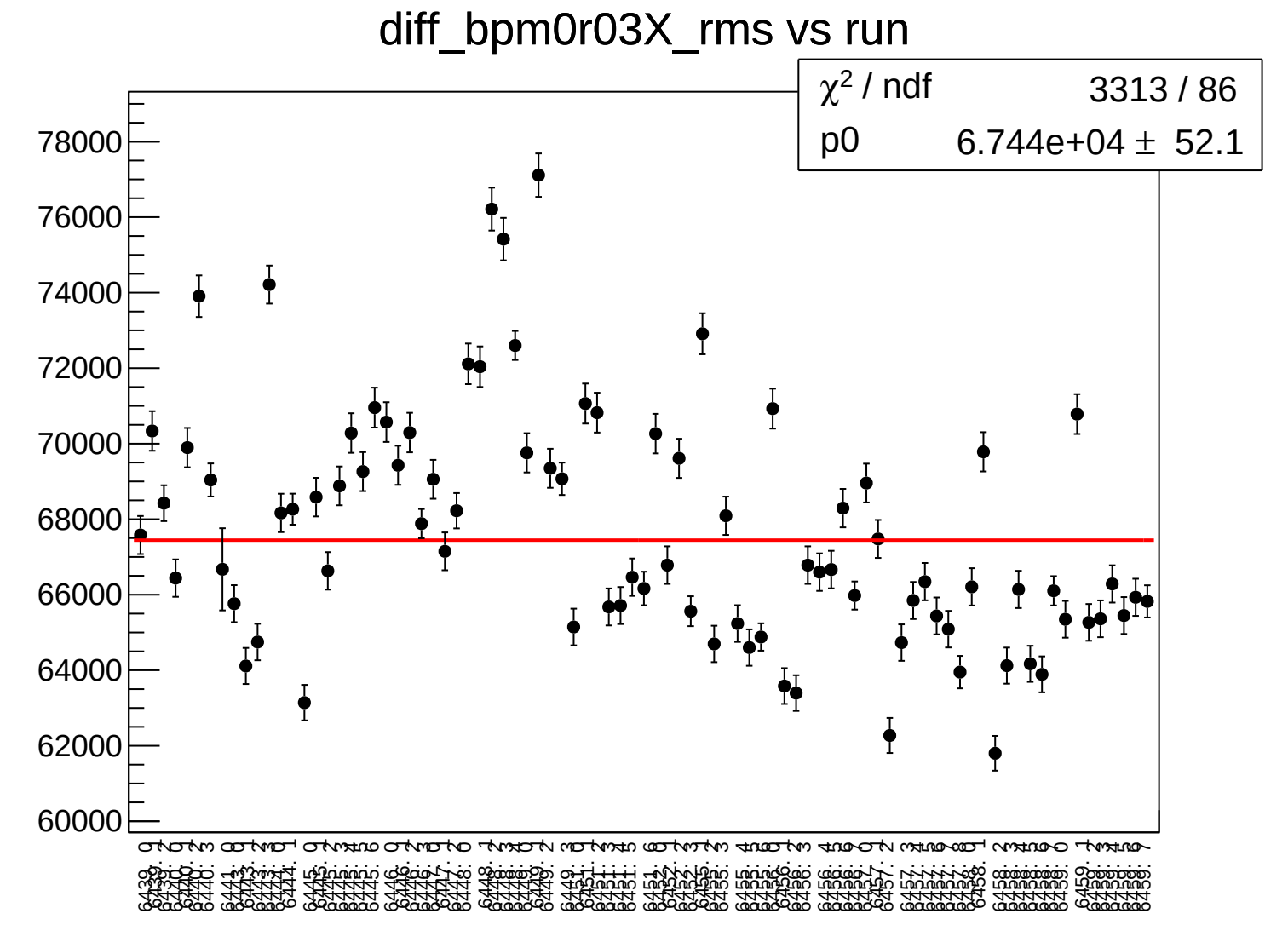

diff_bpm0l10Y_mean vs run
χ² / ndf 104 / 86
p0 −1.416 ± 0.8477
pull
Entries 87
Mean 4492
Std Dev 4449

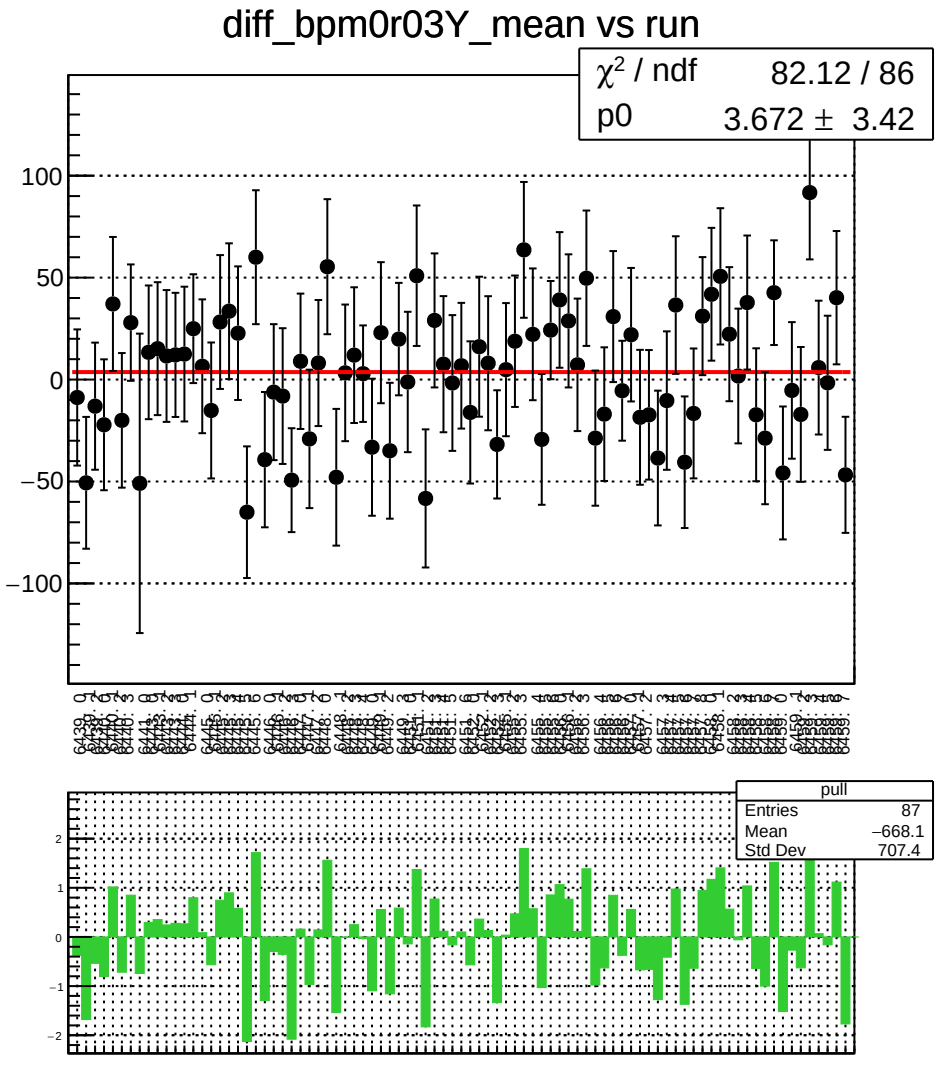

pull1D
Entries 87
Mean 0.001824
Std Dev 1.093

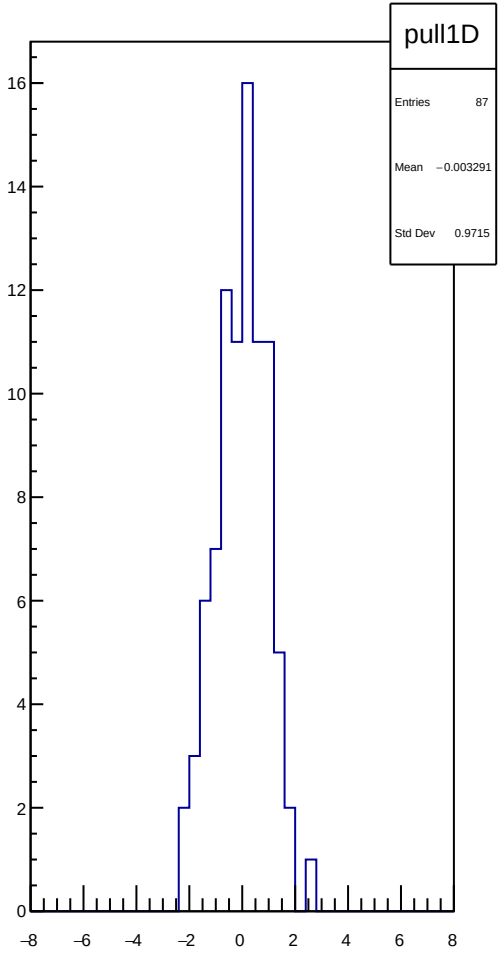

diff_bpm0l10Y_rms vs run
χ² / ndf 676.7 / 86
p0 776.6 ± 0.5994
860
840
820
800
780
760
740

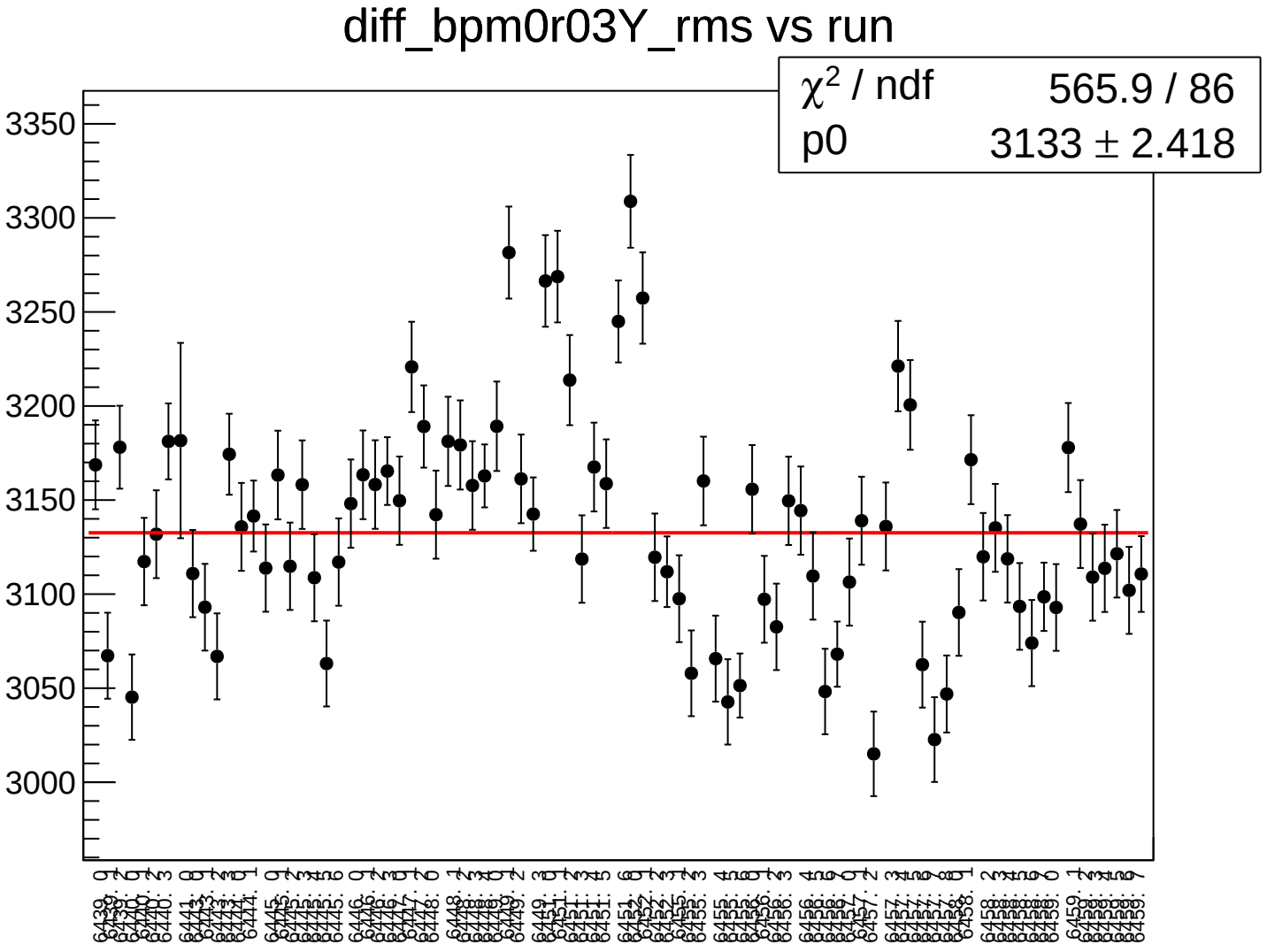

diff_bpm0r03X_mean vs run
χ² / ndf 82.42 / 86
p0 −0.4591± 73.69
pull
Entries 87
Mean −1134
Std Dev 1177

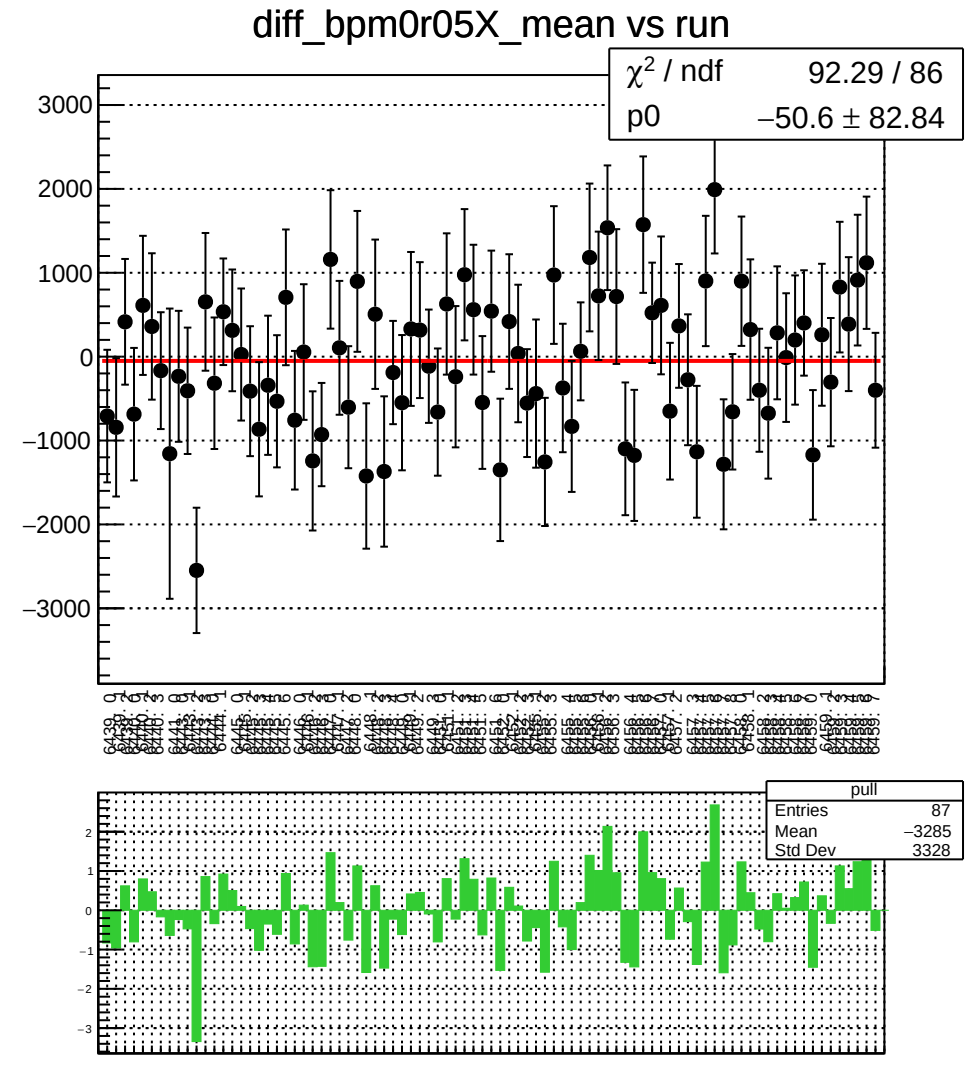

pull1D
Entries 87
Mean 0.005017
Std Dev 0.9733

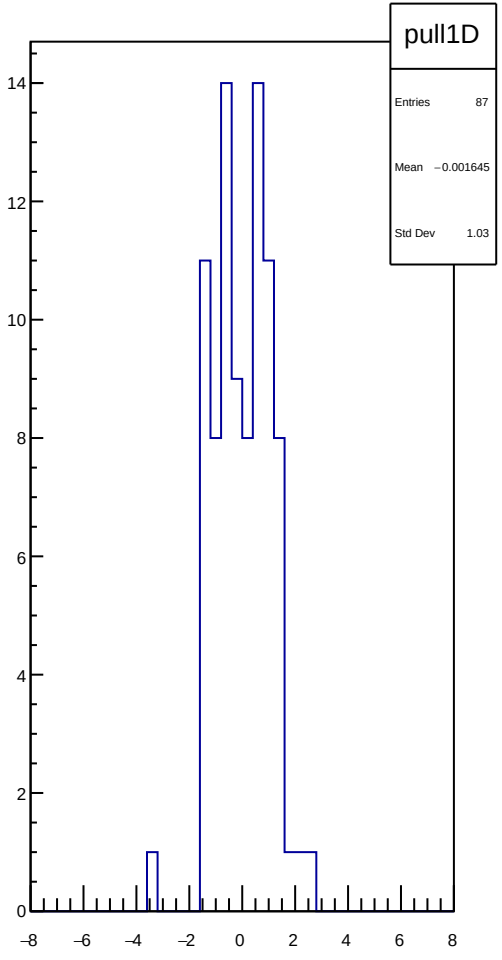

diff_bpm0r03X_rms vs run
χ² / ndf 3313 / 86
p0 6.744e+04 ± 52.1
78000
76000
74000
72000
70000
68000
66000
64000
62000
60000

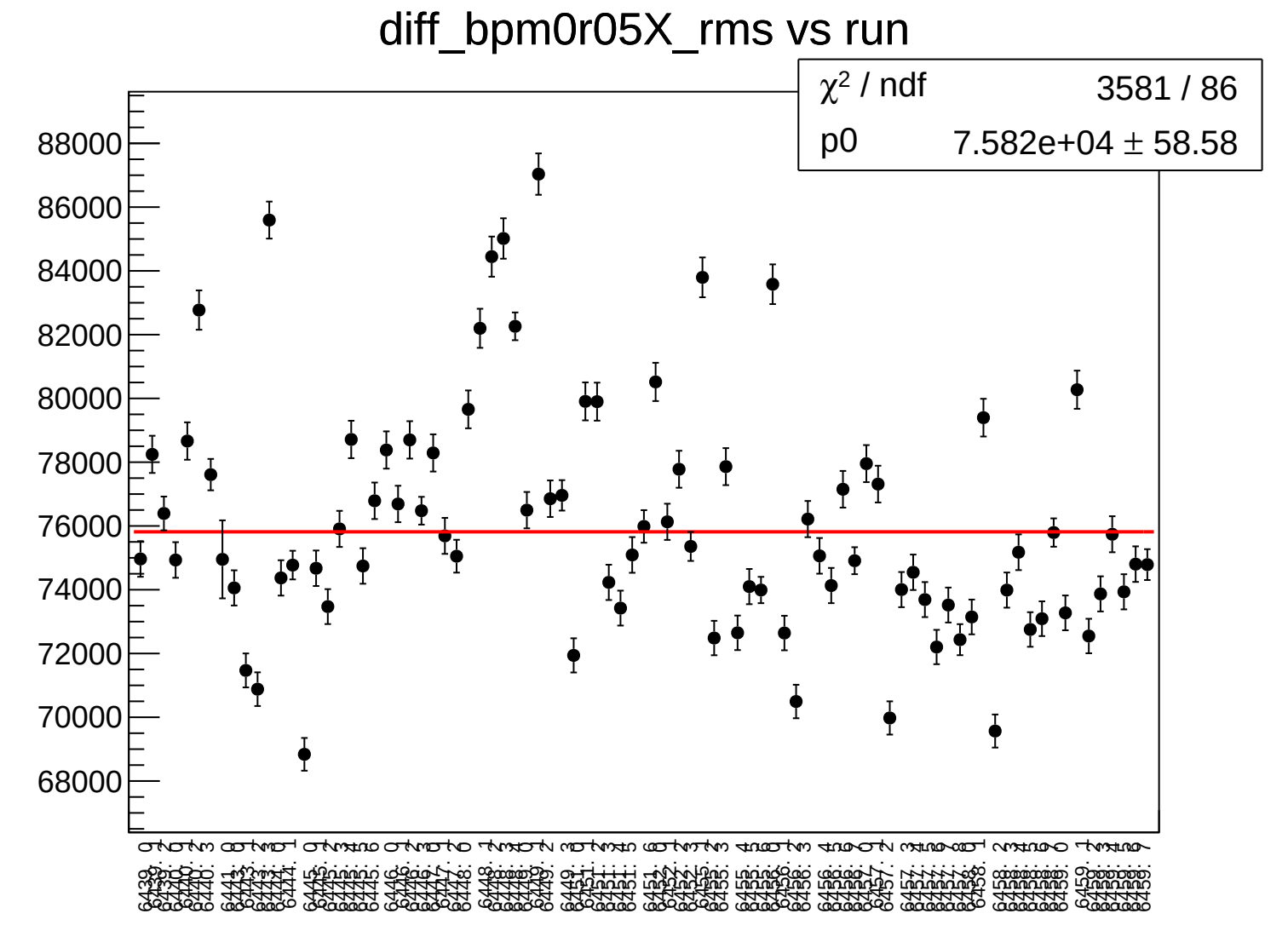

diff_bpm0r03Y_mean vs run
χ^2 / ndf 82.12 / 86
p0 3.672 ± 3.42
100
50
0
−50
−100
pull
Entries 87
Mean −668.1
Std Dev 707.4
2
1
0
−1
−2

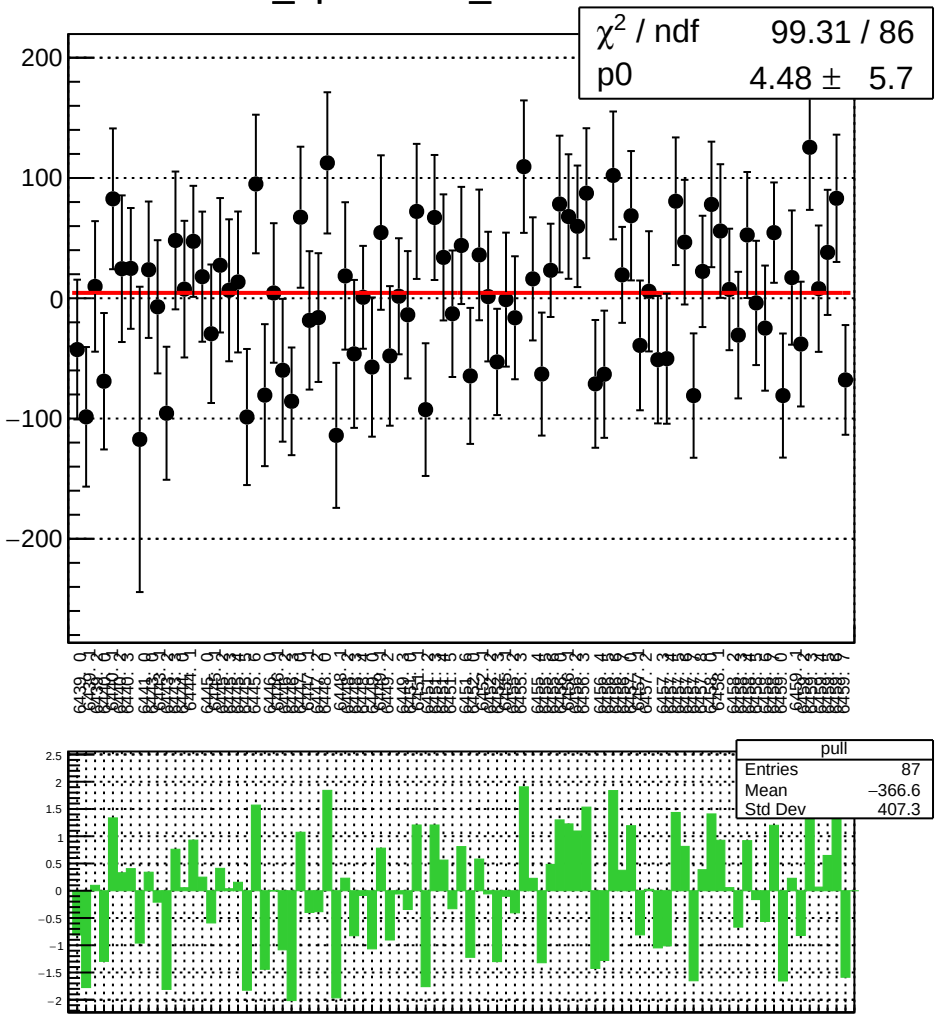

pull1D
Entries 87
Mean −0.003291
Std Dev 0.9715
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

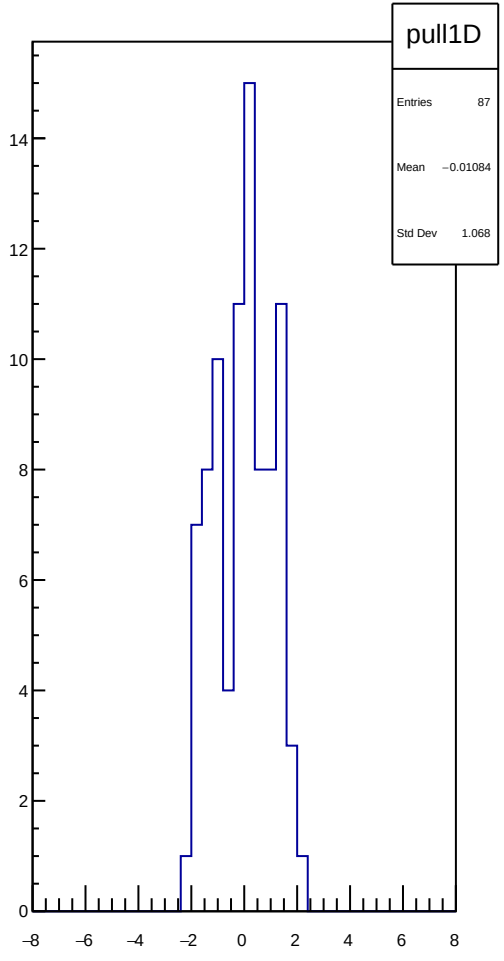

diff_bpm0r03Y_rms vs run
χ² / ndf 565.9 / 86
p0 3133 ± 2.418
3350
3300
3250
3200
3150
3100
3050
3000

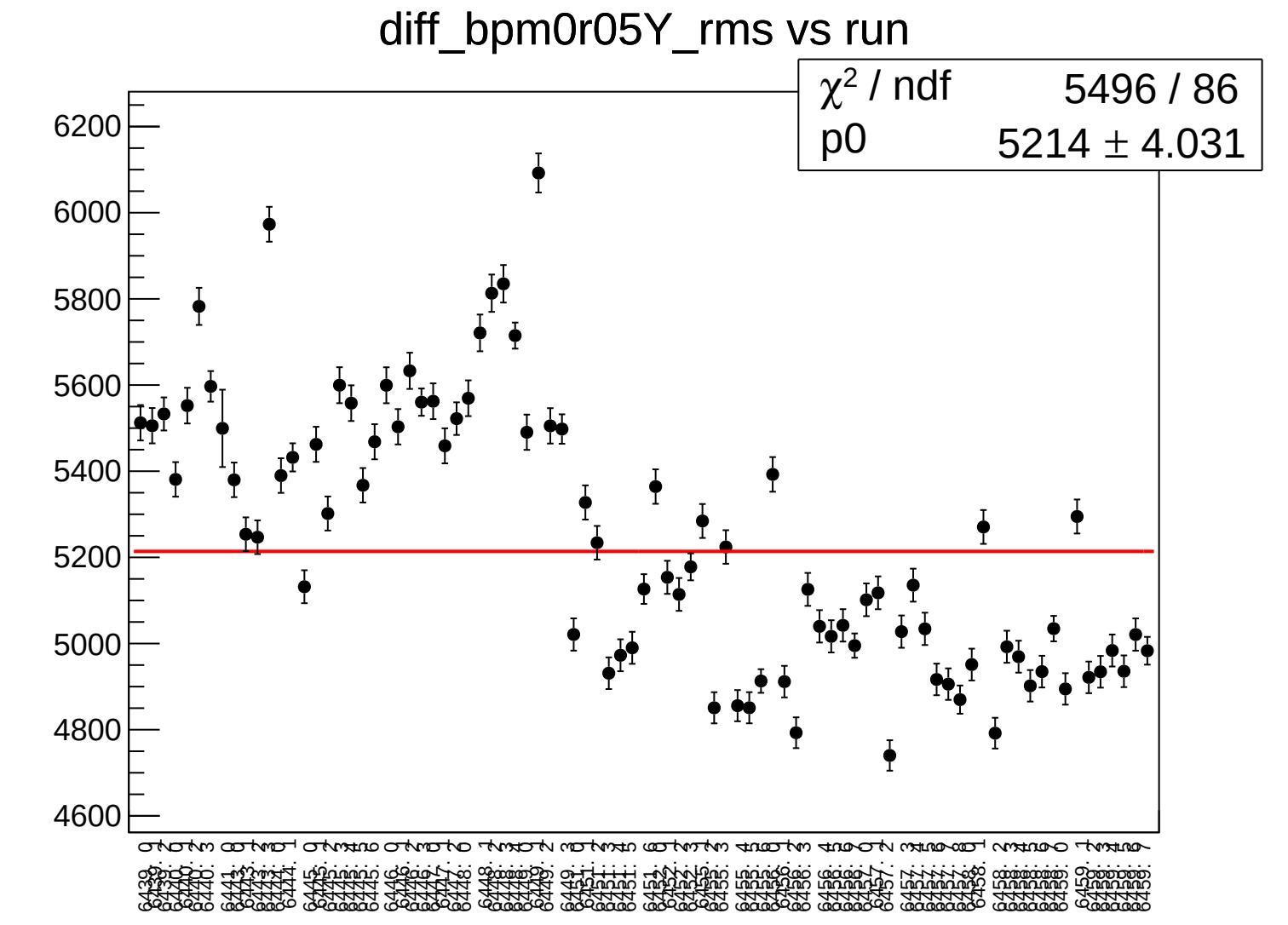

diff_bpm0r05X_mean vs run
χ² / ndf 92.29 / 86
p0 −50.6 ± 82.84
pull
Entries 87
Mean −3285
Std Dev 3328

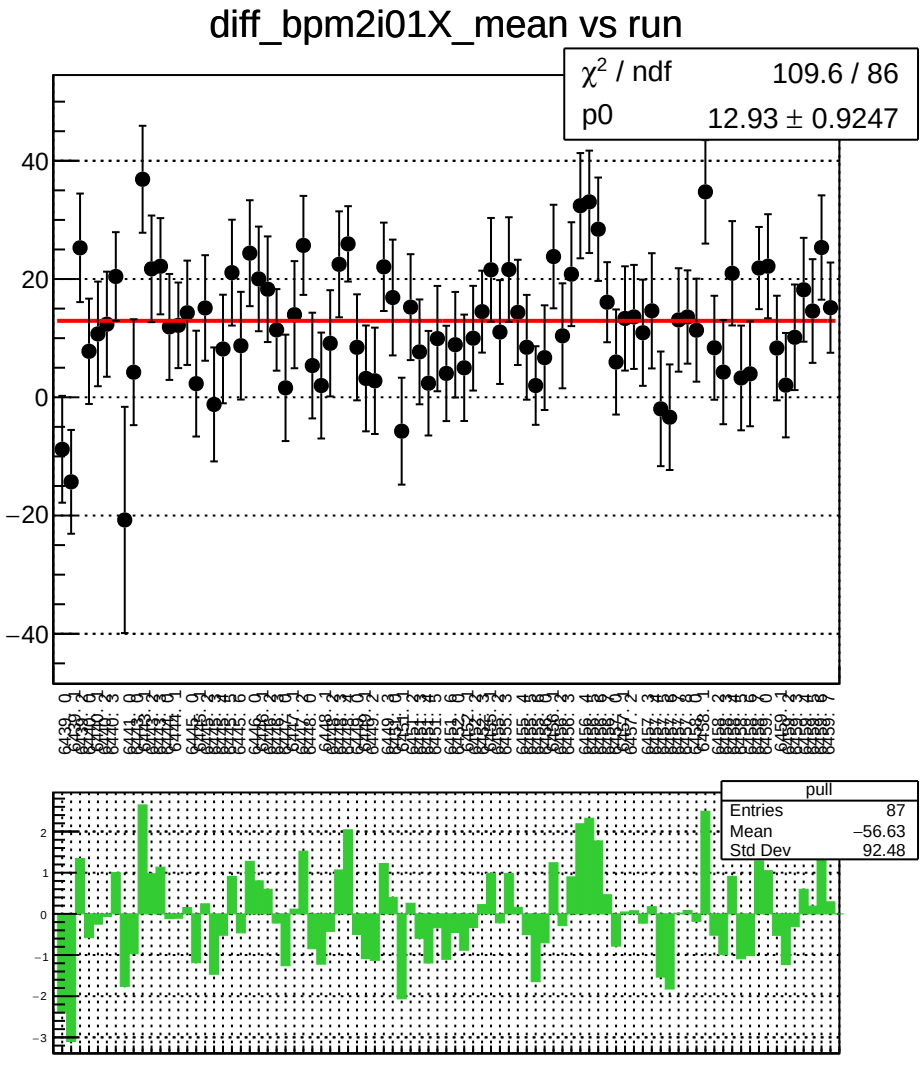

pull1D
Entries 87
Mean −0.001645
Std Dev 1.03

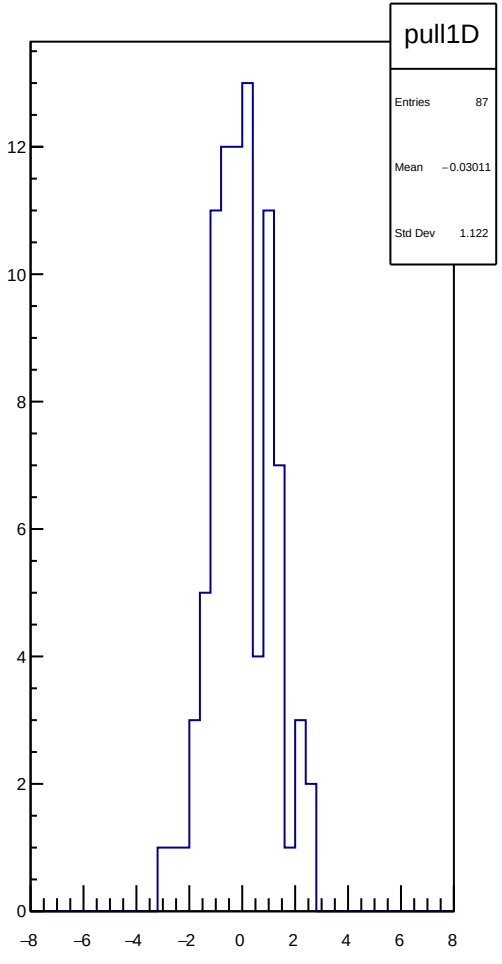

diff_bpm0r05X_rms vs run
χ² / ndf 3581 / 86
p0 7.582e+04 ± 58.58
88000
86000
84000
82000
80000
78000
76000
74000
72000
70000
68000

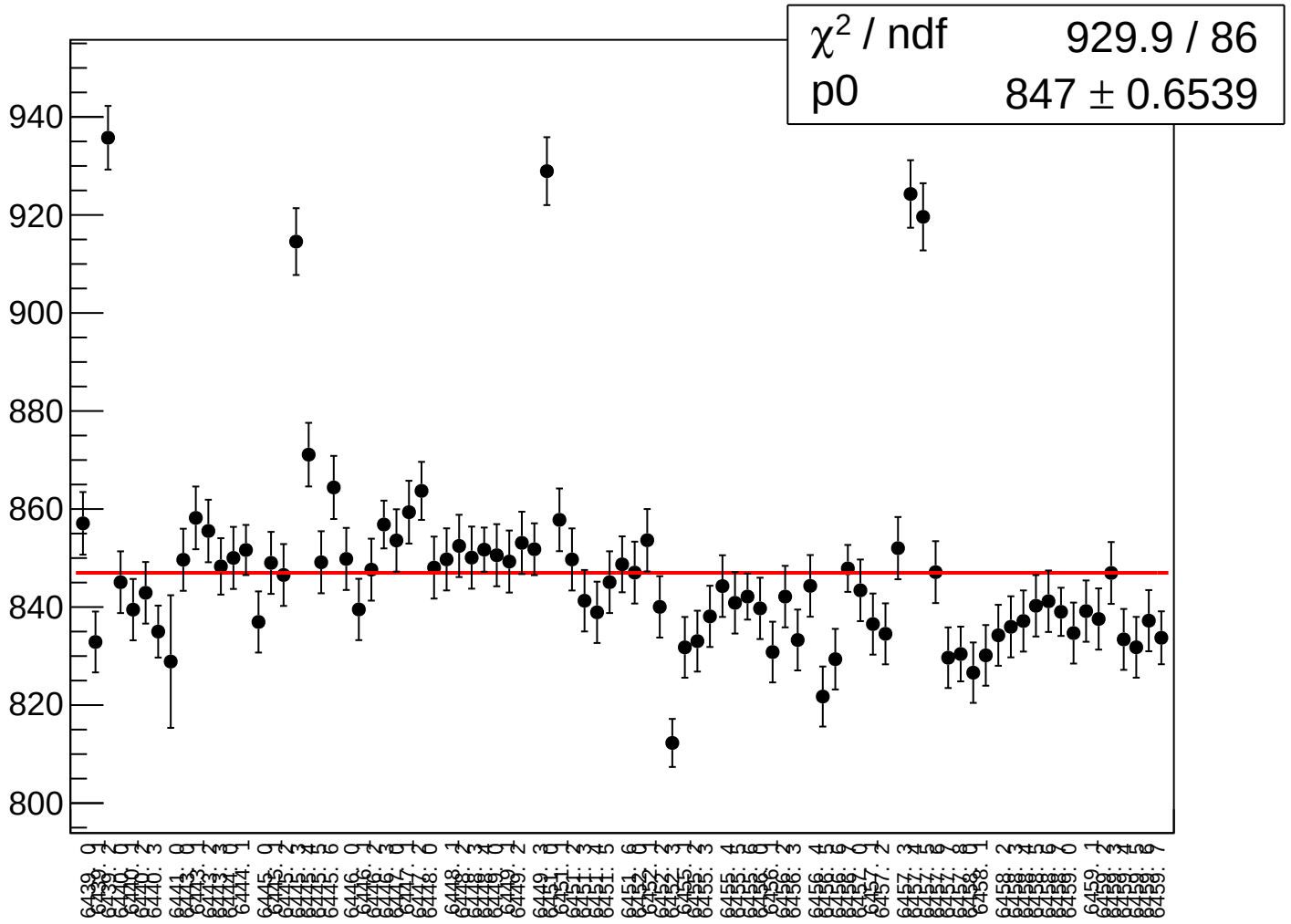

diff_bpm0r05Y_mean vs run
χ² / ndf 99.31 / 86
p0 4.48 ± 5.7
pull
Entries 87
Mean −366.6
Std Dev 407.3

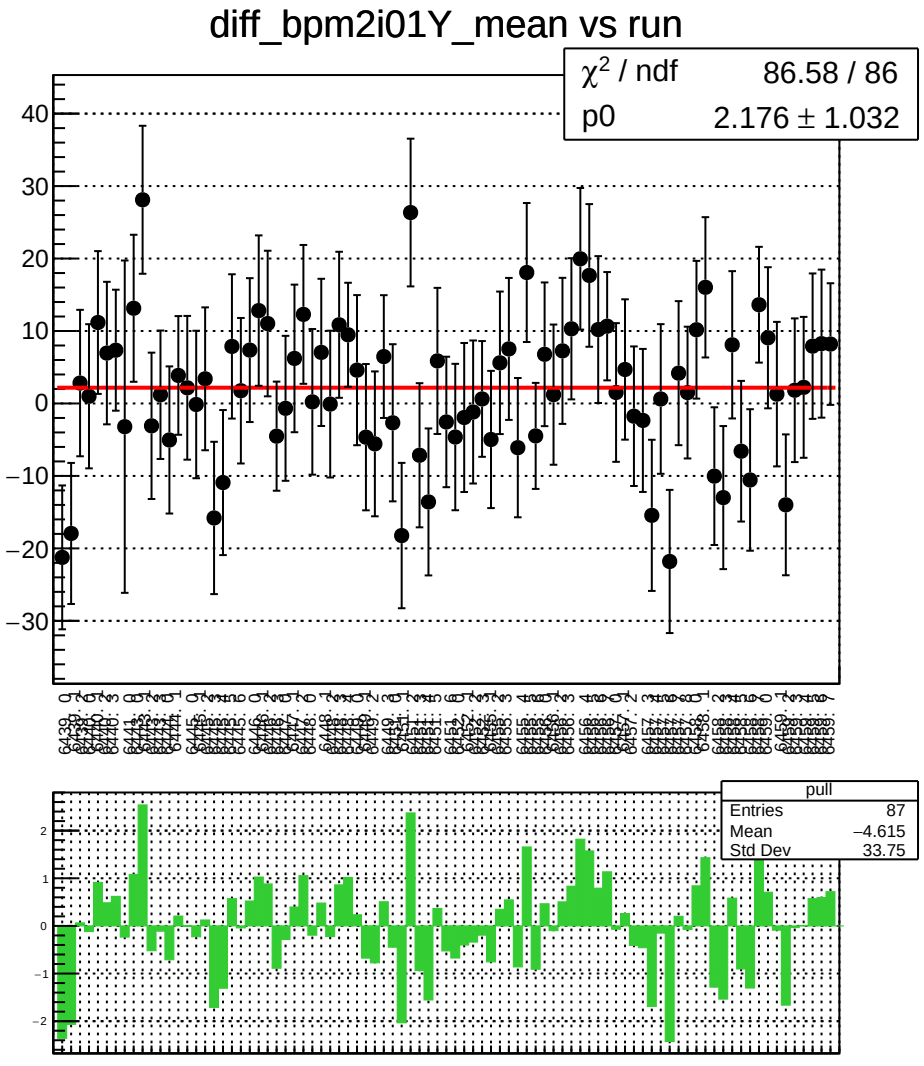

pull1D
Entries 87
Mean −0.01084
Std Dev 1.068

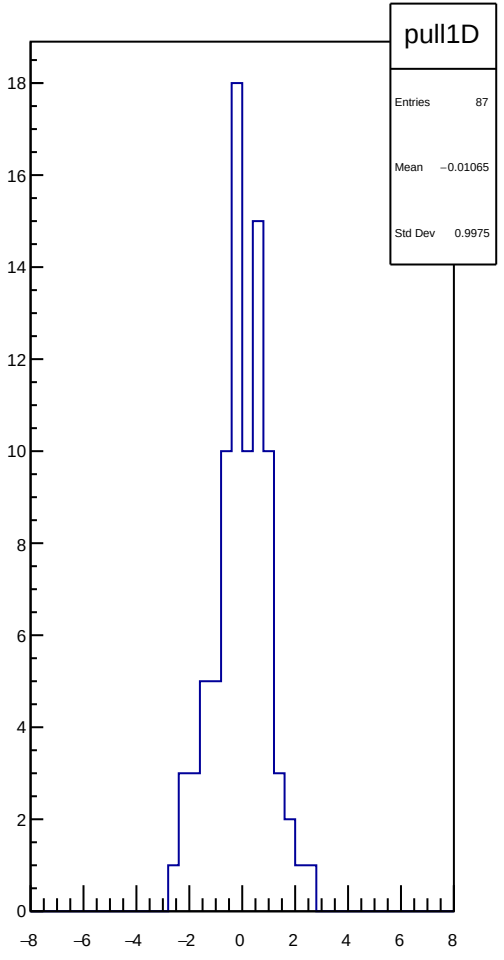

diff_bpm0r05Y_rms vs run
χ² / ndf 5496 / 86
p0 5214 ± 4.031
6200
6000
5800
5600
5400
5200
5000
4800
4600

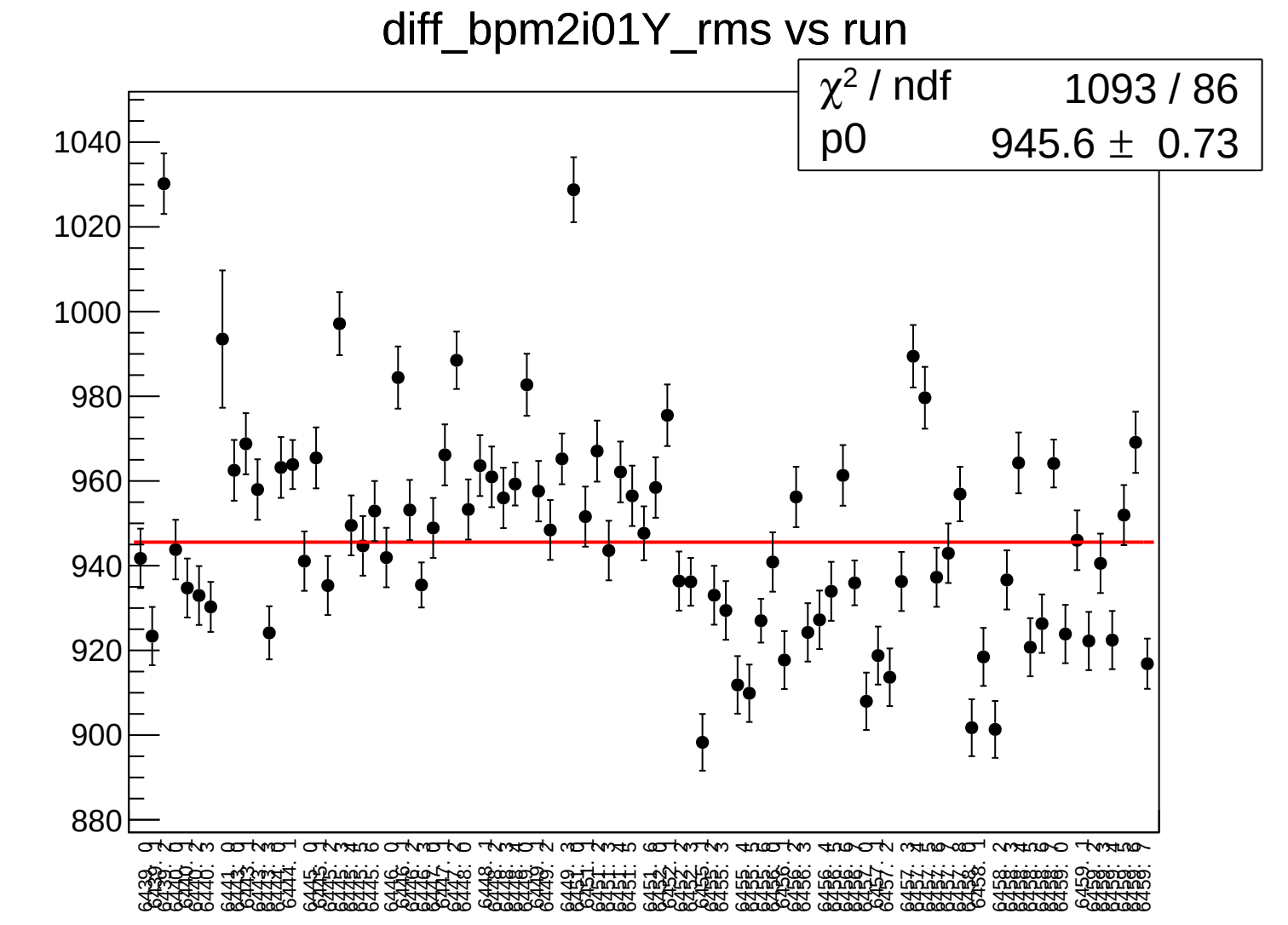

diff_bpm2i01X_mean vs run
χ² / ndf 109.6 / 86
p0 12.93 ± 0.9247
pull
Entries 87
Mean −56.63
Std Dev 92.48

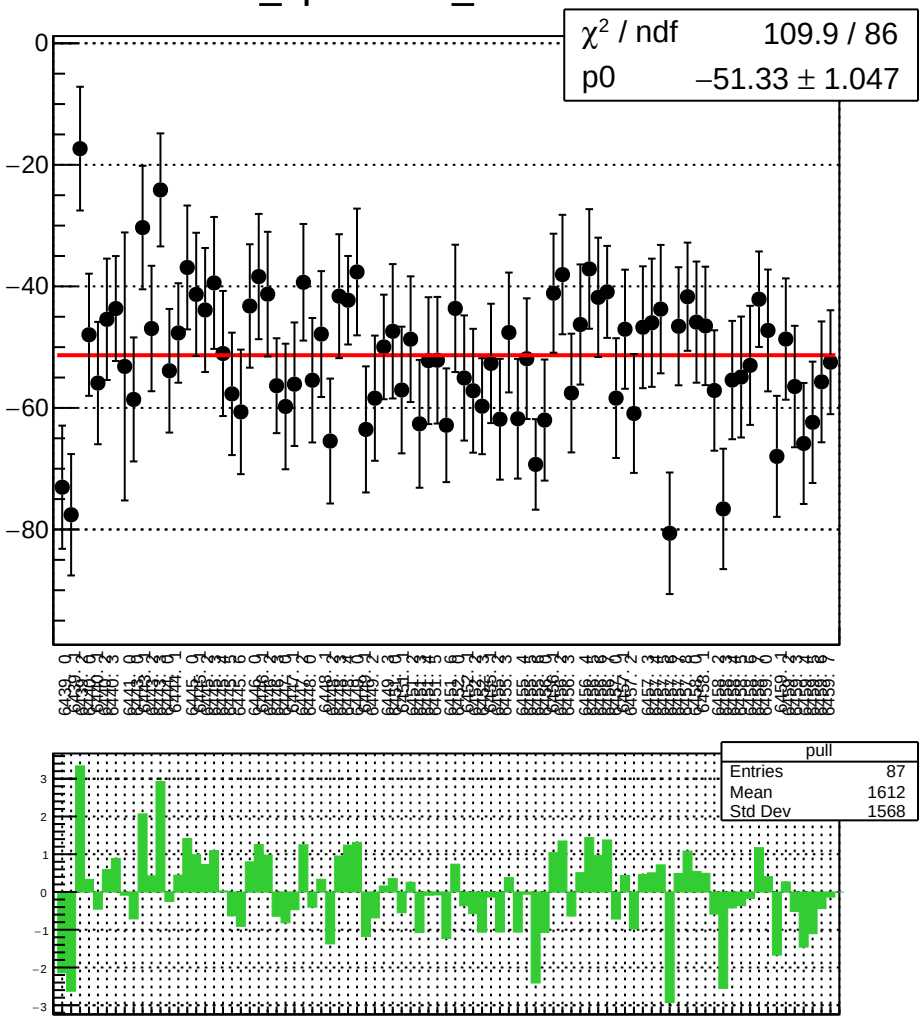

pull1D
Entries 87
Mean −0.03011
Std Dev 1.122

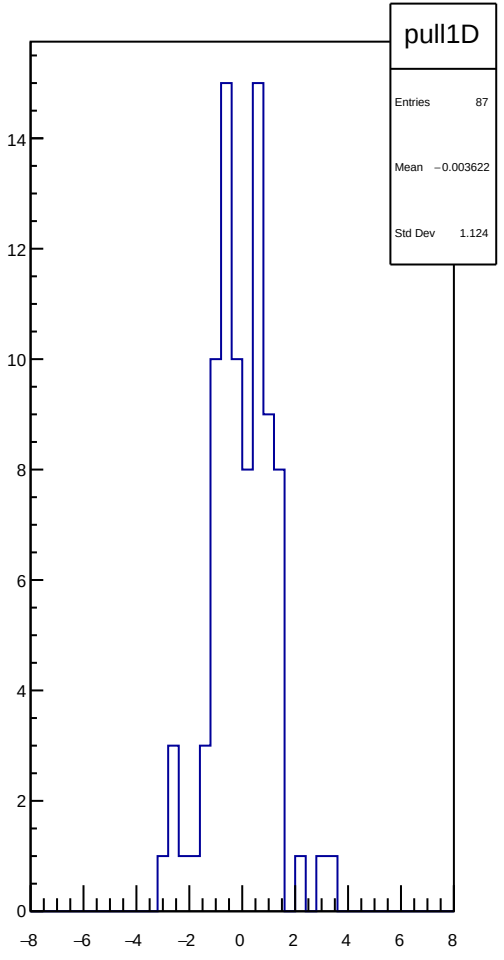

diff_bpm2i01X_rms vs run
χ^2 / ndf 929.9 / 86
p0 847 ± 0.6539
940
920
900
880
860
840
820
800

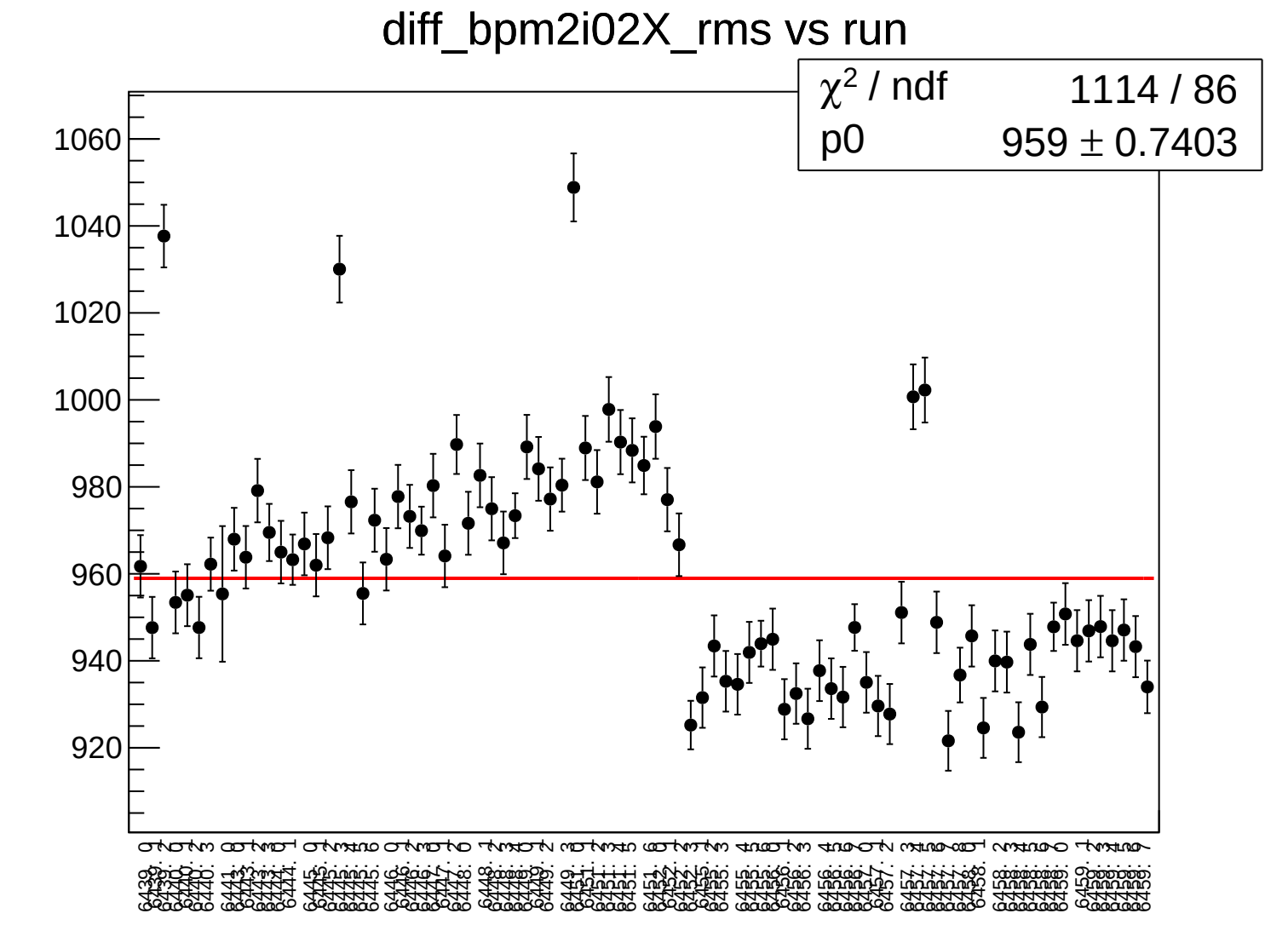

diff_bpm2i01Y_mean vs run
χ^2 / ndf 86.58 / 86
p0 2.176 ± 1.032
pull
Entries 87
Mean −4.615
Std Dev 33.75

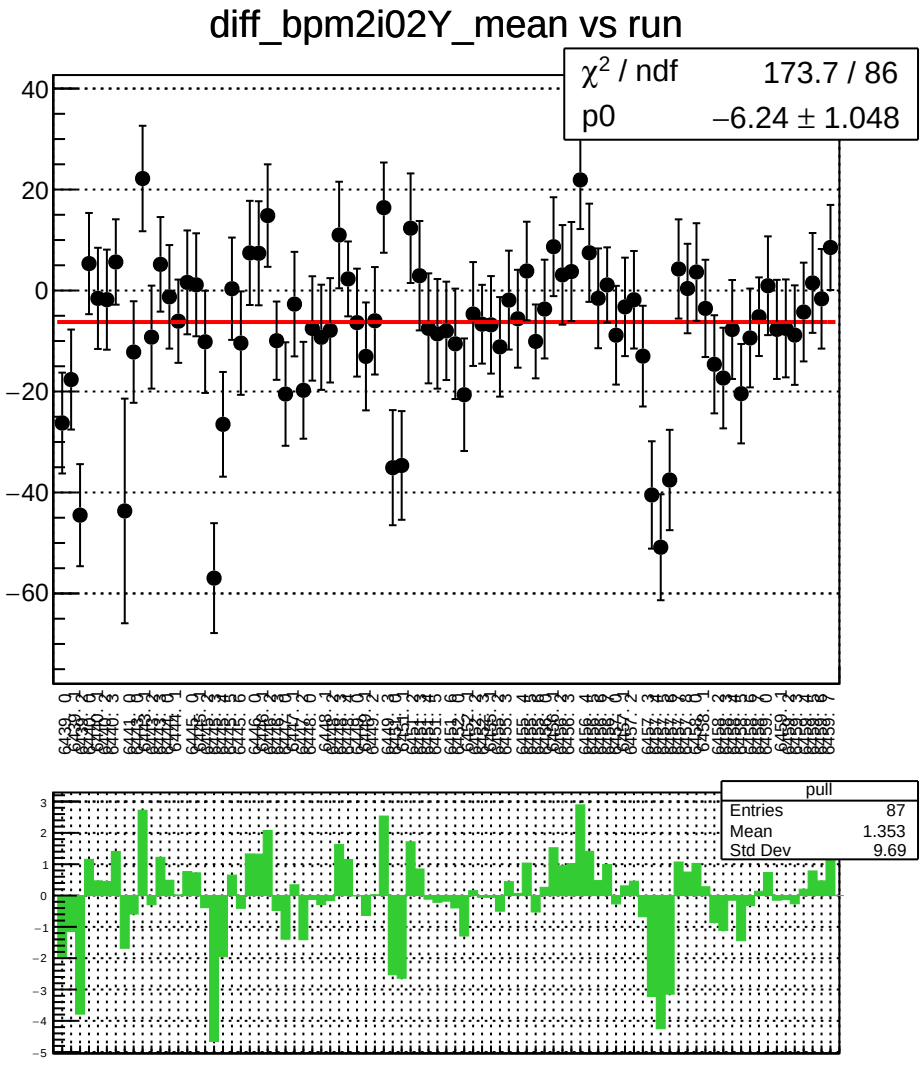

pull1D
Entries 87
Mean −0.01065
Std Dev 0.9975

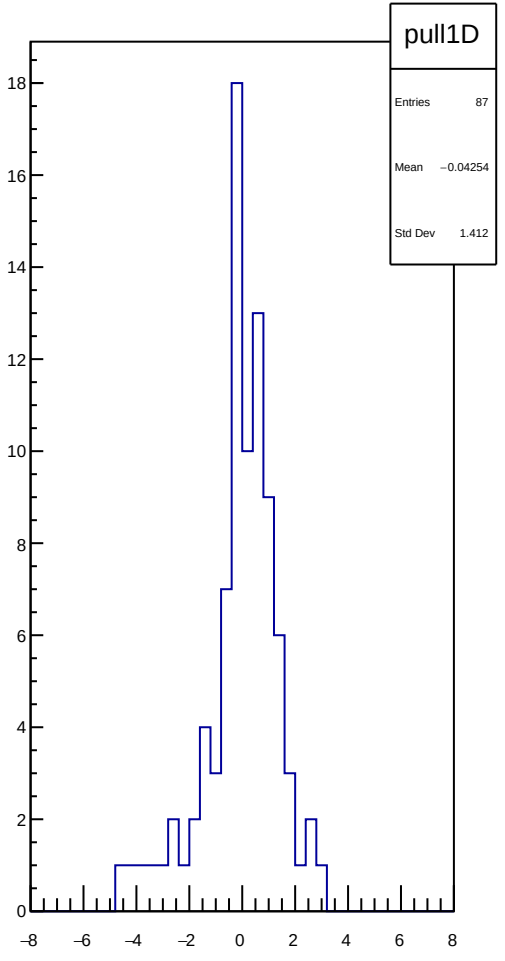

diff_bpm2i01Y_rms vs run
χ² / ndf 1093 / 86
p0 945.6 ± 0.73
1040
1020
1000
980
960
940
920
900
880

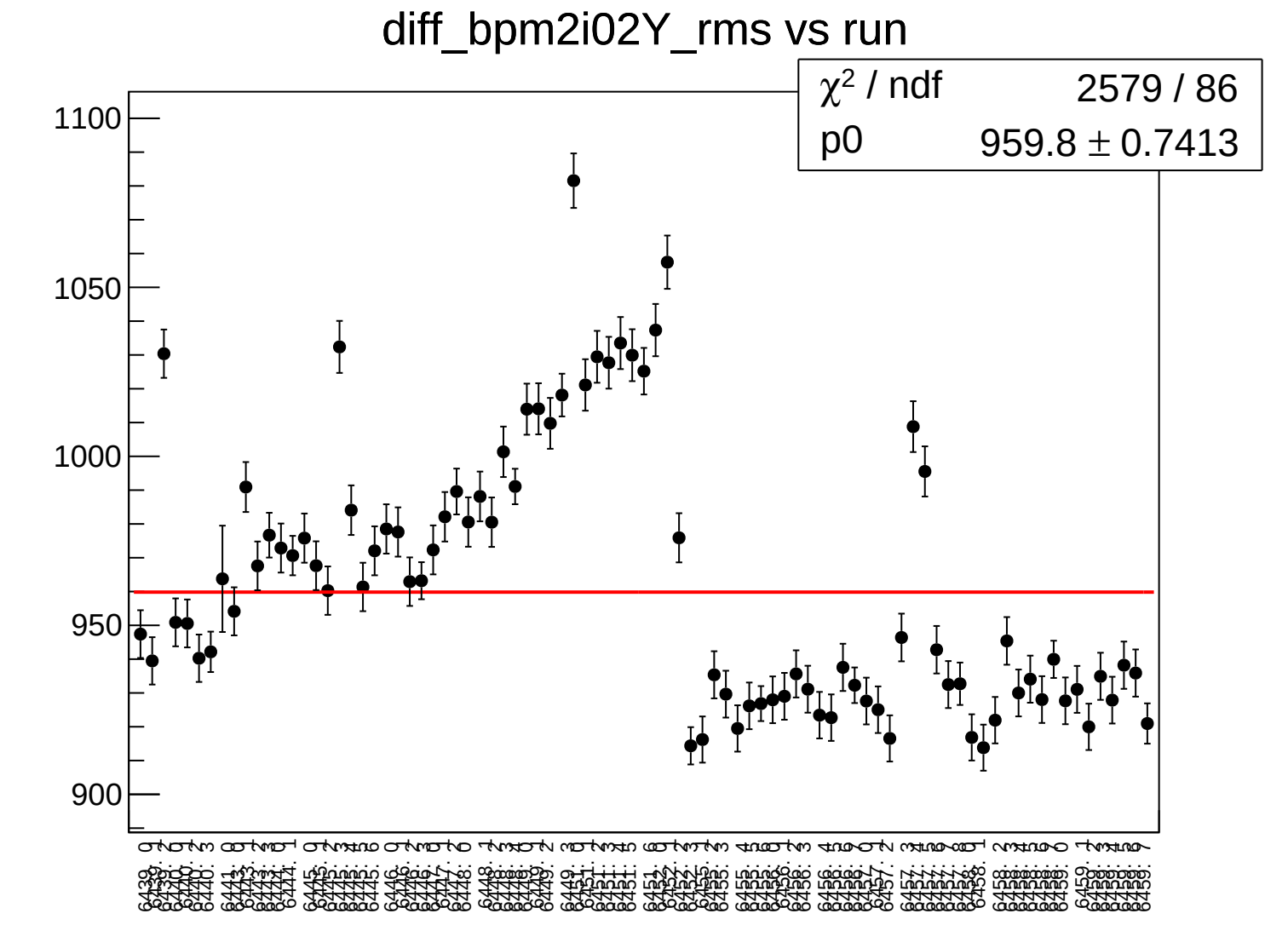

diff_bpm2i02X_mean vs run
χ² / ndf 109.9 / 86
p0 −51.33 ± 1.047
pull
Entries 87
Mean 1612
Std Dev 1568

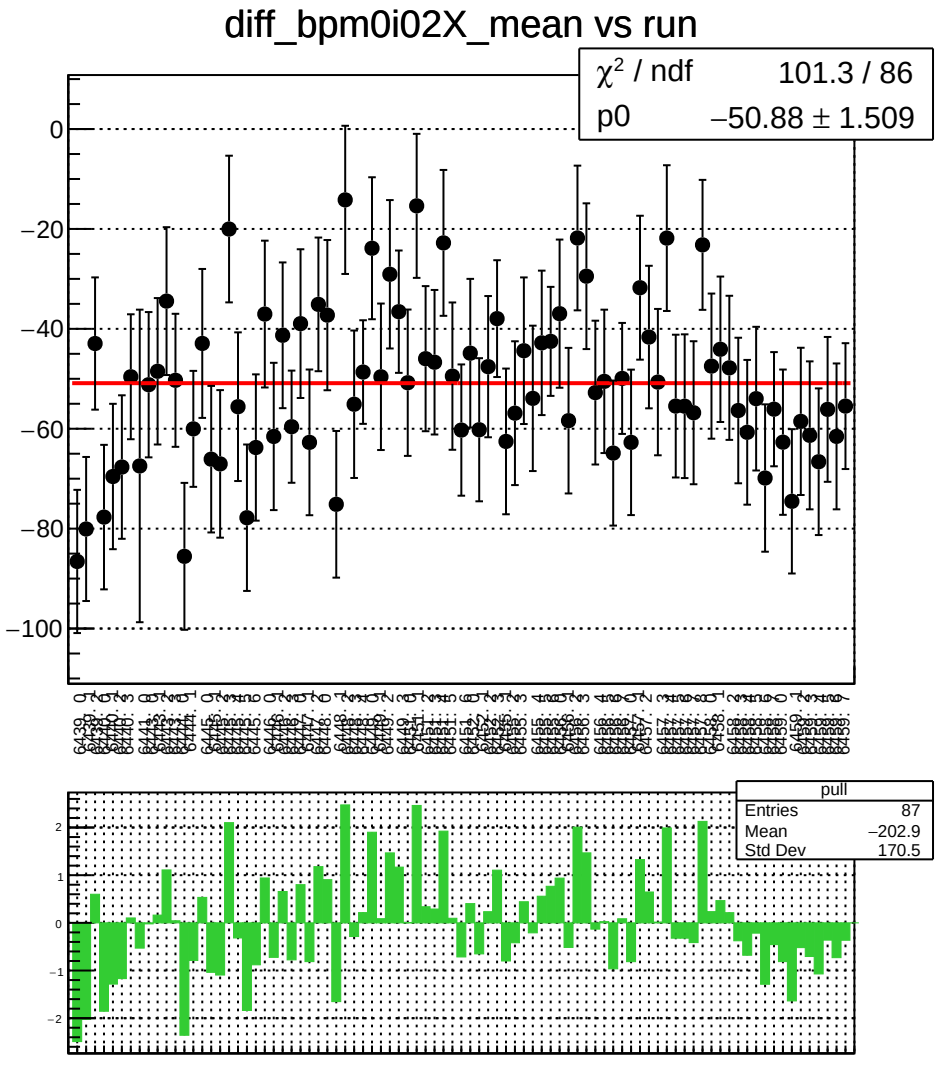

pull1D
Entries 87
Mean −0.003622
Std Dev 1.124

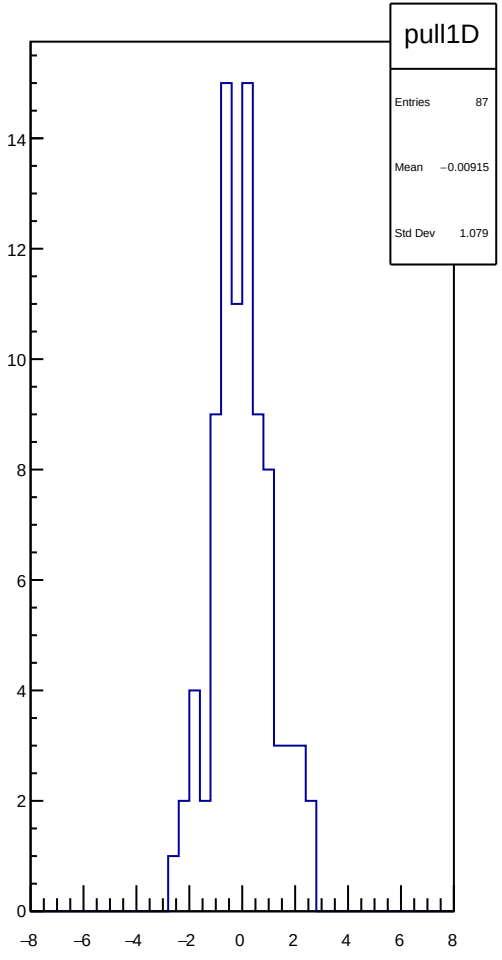

diff_bpm2i02X_rms vs run
χ² / ndf 1114 / 86
p0 959 ± 0.7403
1060
1040
1020
1000
980
960
940
920

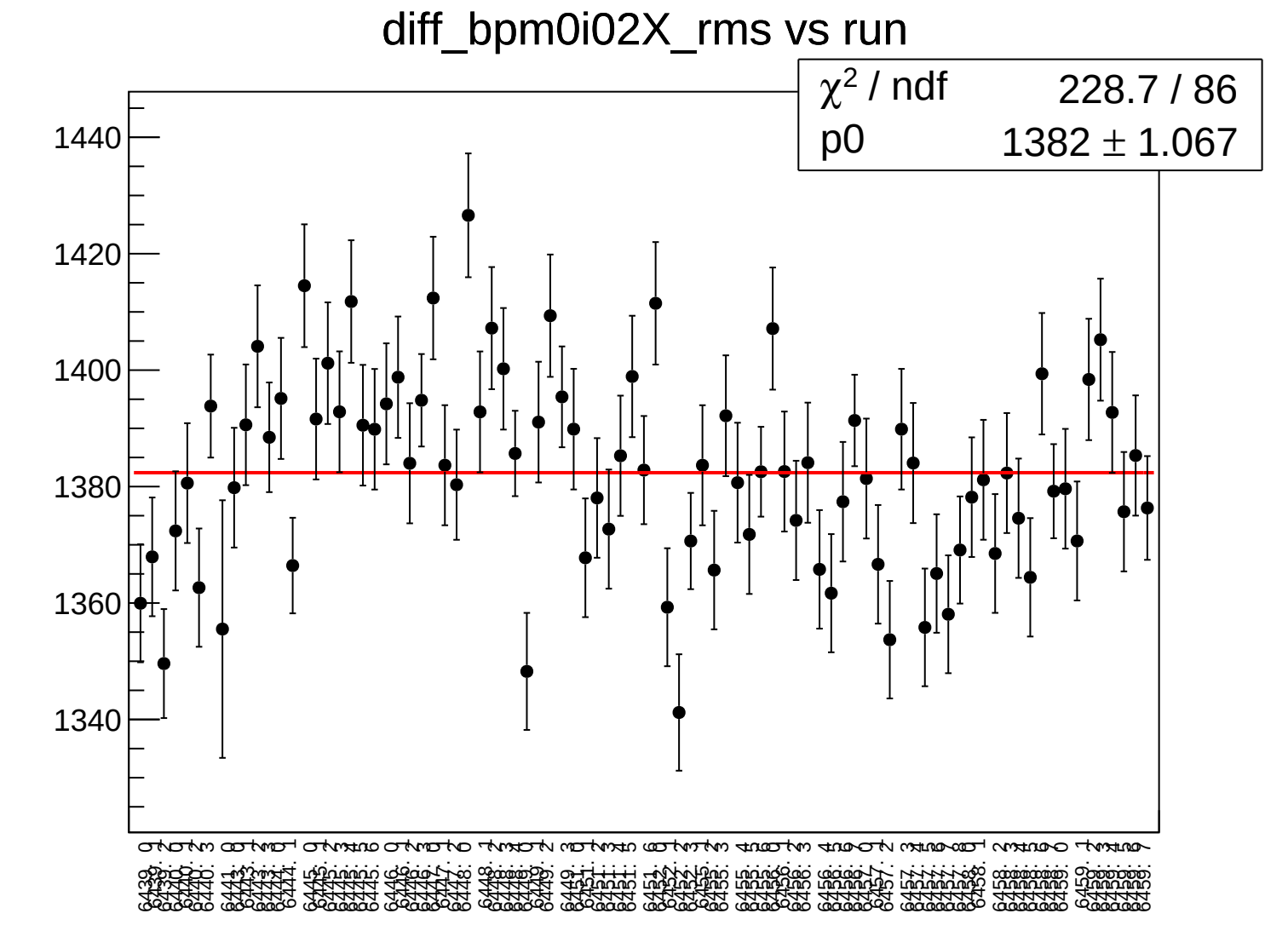

diff_bpm2i02Y_mean vs run
χ² / ndf 173.7 / 86
p0 −6.24 ± 1.048
pull
Entries 87
Mean 1.353
Std Dev 9.69

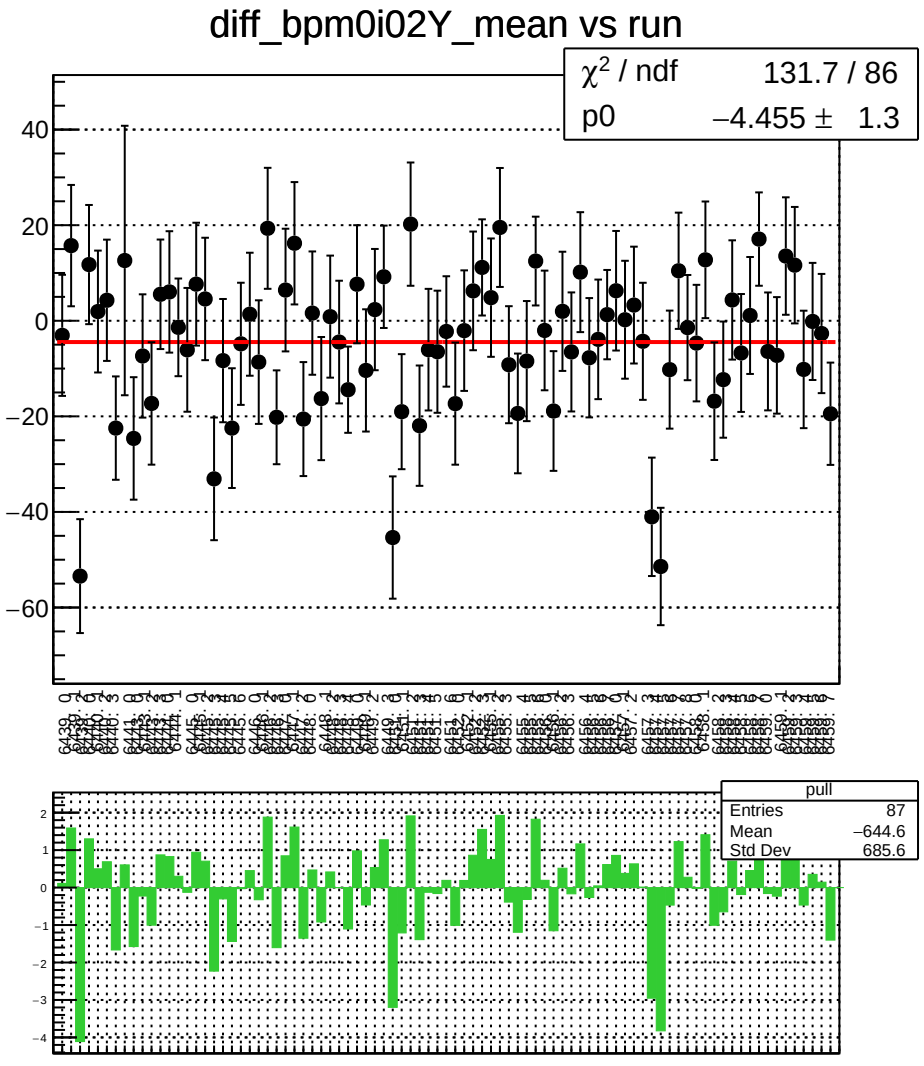

pull1D
Entries 87
Mean −0.04254
Std Dev 1.412

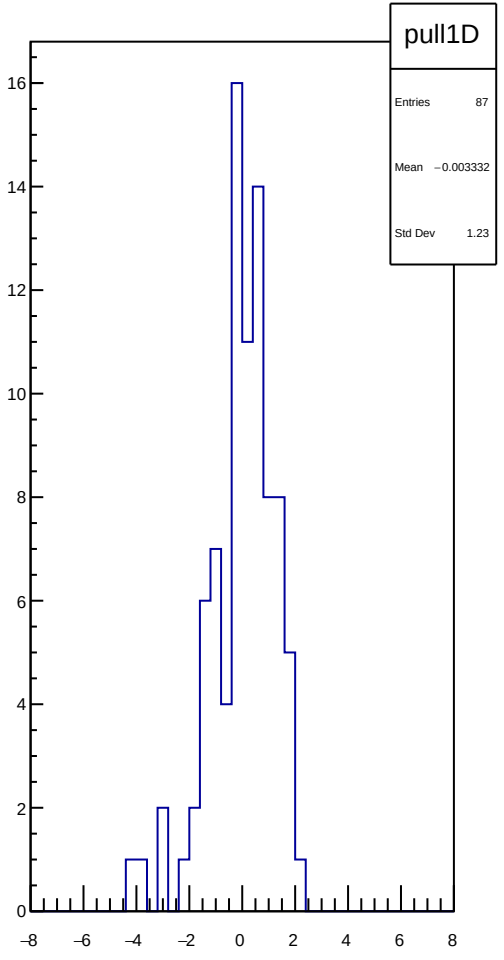

diff_bpm2i02Y_rms vs run
χ² / ndf 2579 / 86
p0 959.8 ± 0.7413
1100
1050
1000
950
900

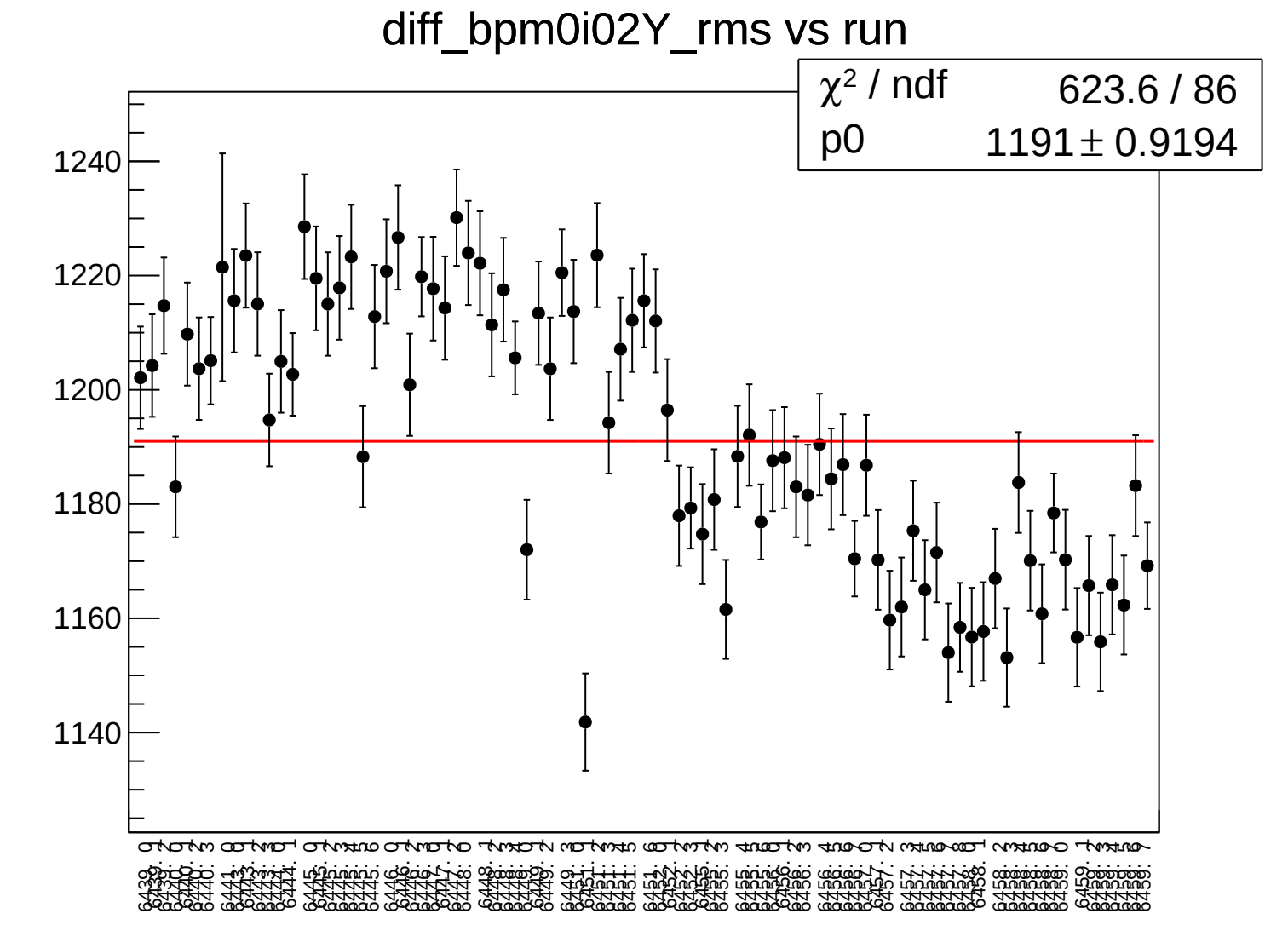

diff_bpm0i02X_mean vs run
χ² / ndf 101.3 / 86
p0 −50.88 ± 1.509
pull
Entries 87
Mean −202.9
Std Dev 170.5

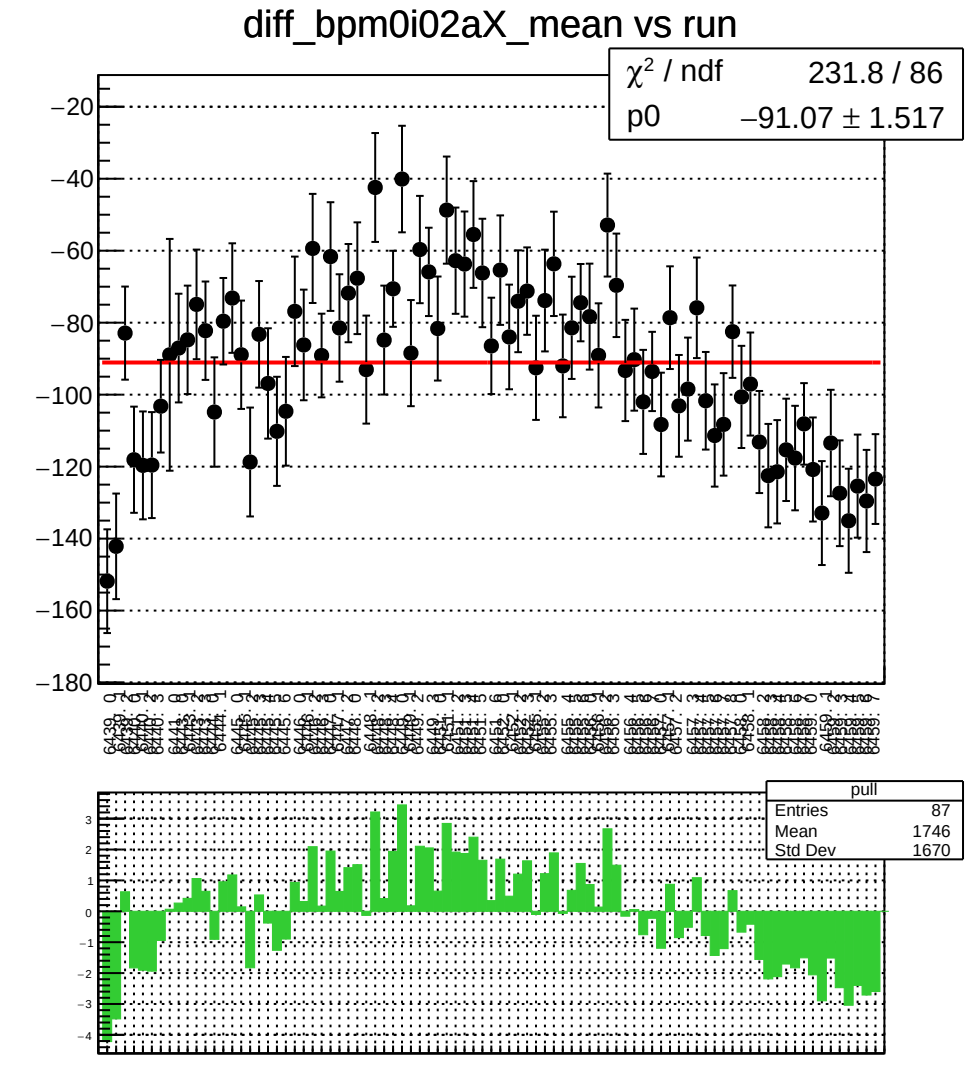

pull1D
Entries 87
Mean −0.00915
Std Dev 1.079

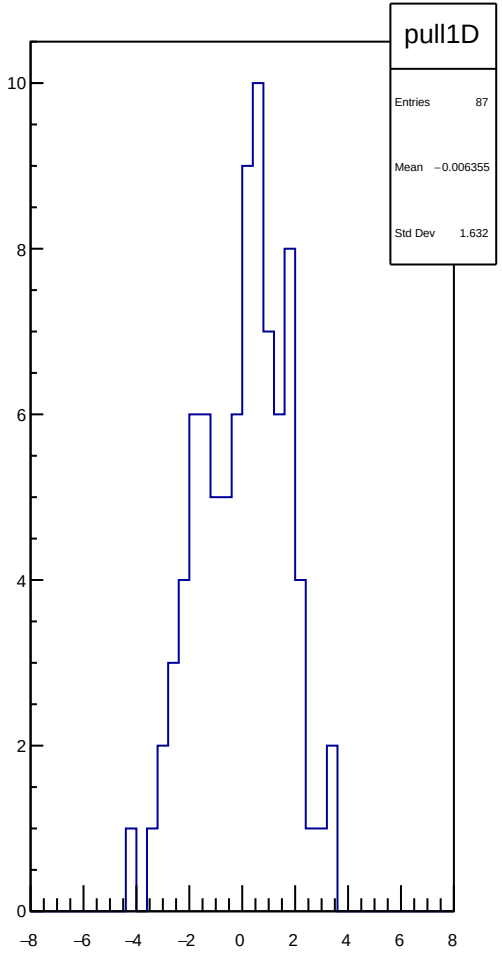

diff_bpm0i02X_rms vs run
χ² / ndf 228.7 / 86
p0 1382 ± 1.067
1440
1420
1400
1380
1360
1340

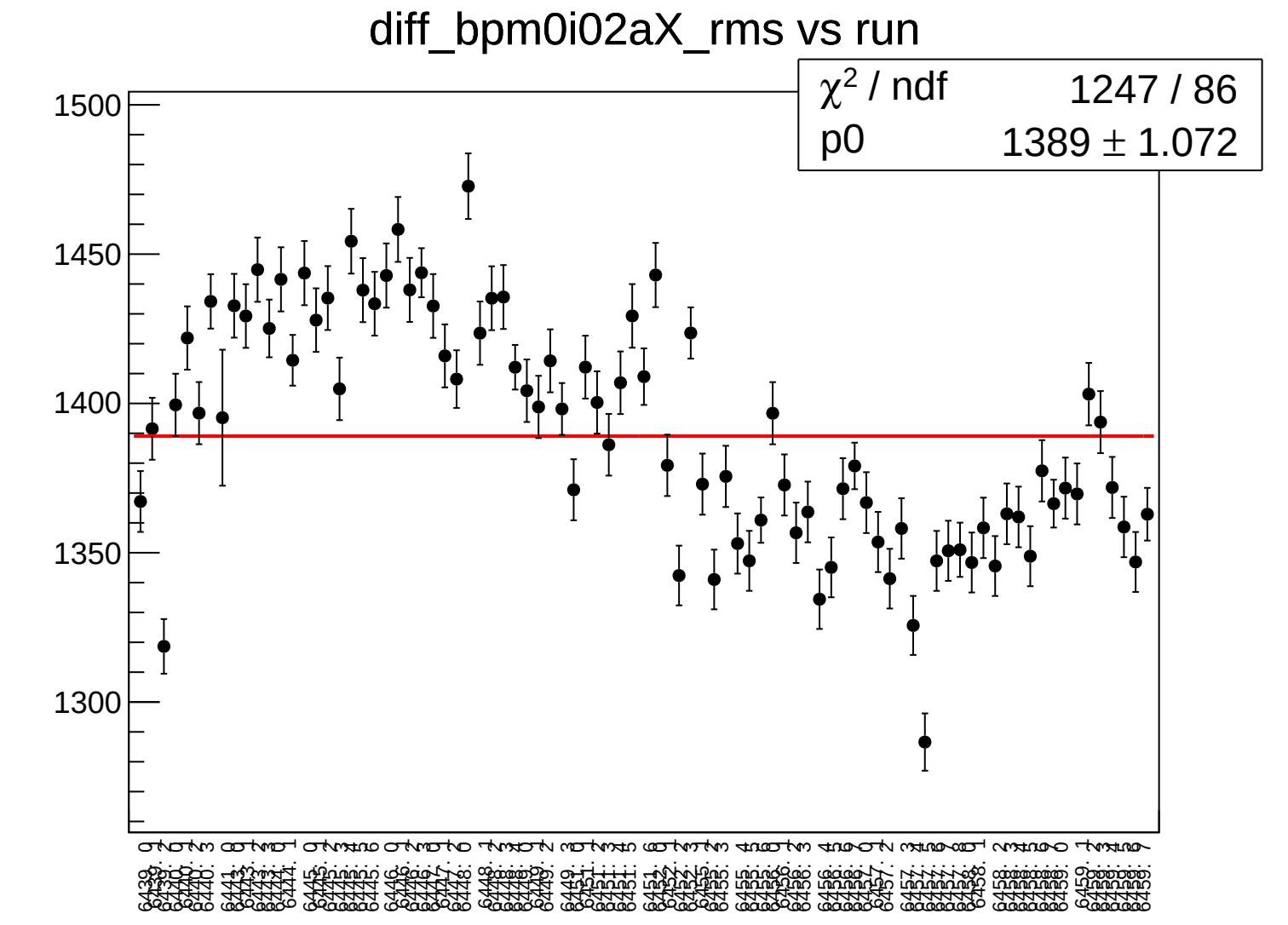

diff_bpm0i02Y_mean vs run
χ² / ndf 131.7 / 86
p0 −4.455 ± 1.3
pull
Entries 87
Mean −644.6
Std Dev 685.6

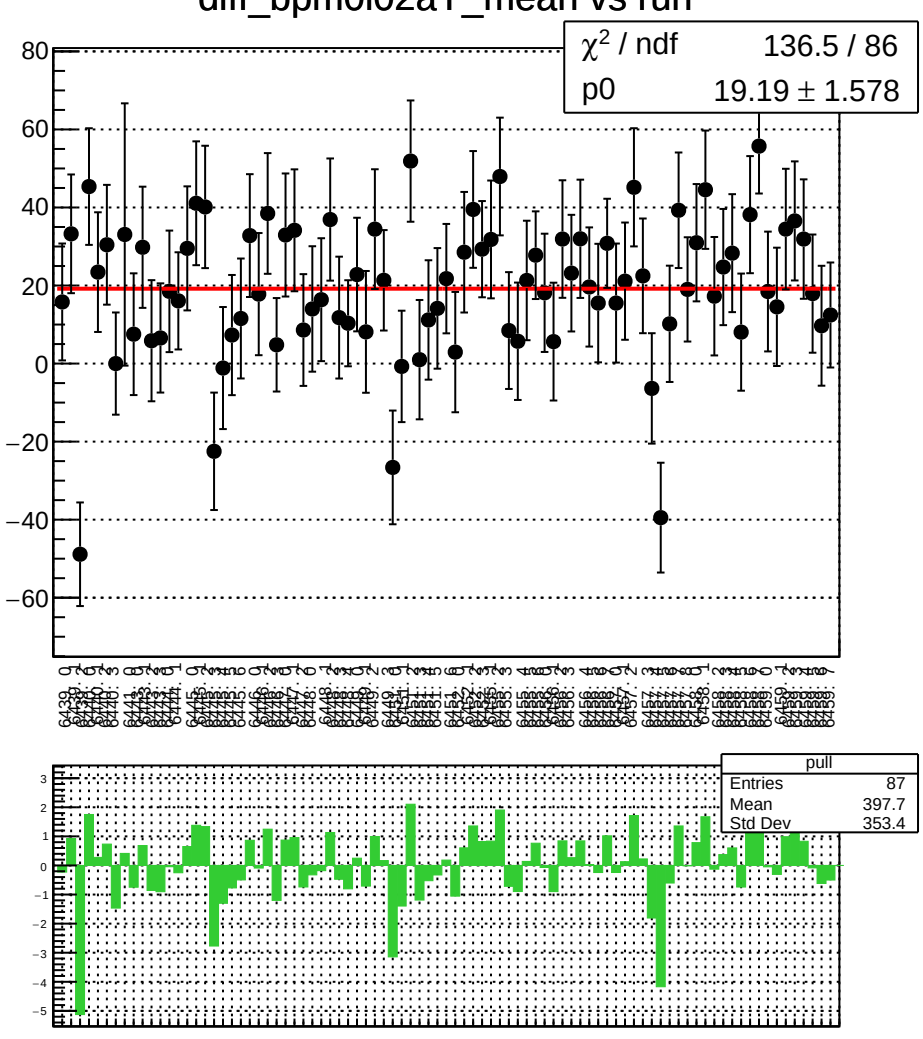

pull1D
Entries 87
Mean −0.003332
Std Dev 1.23

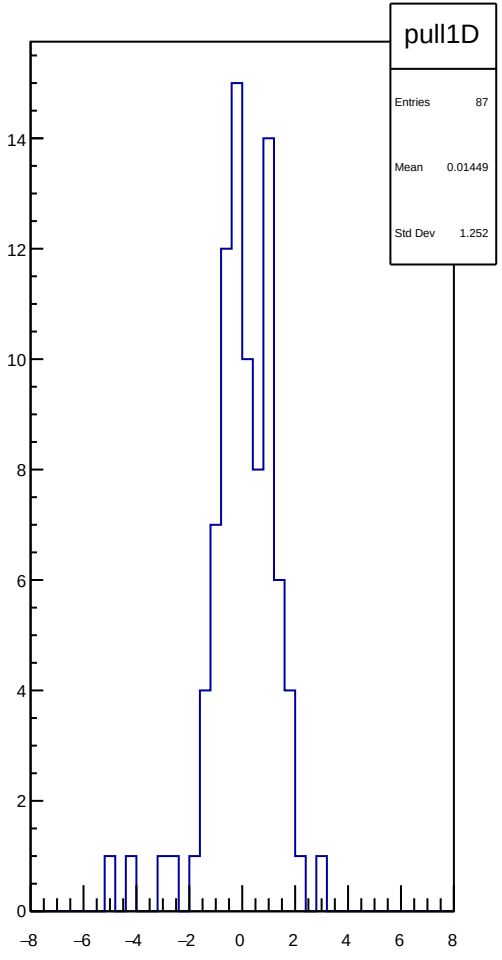

diff_bpm0i02Y_rms vs run
χ² / ndf 623.6 / 86
p0 1191 ± 0.9194
1240
1220
1200
1180
1160
1140

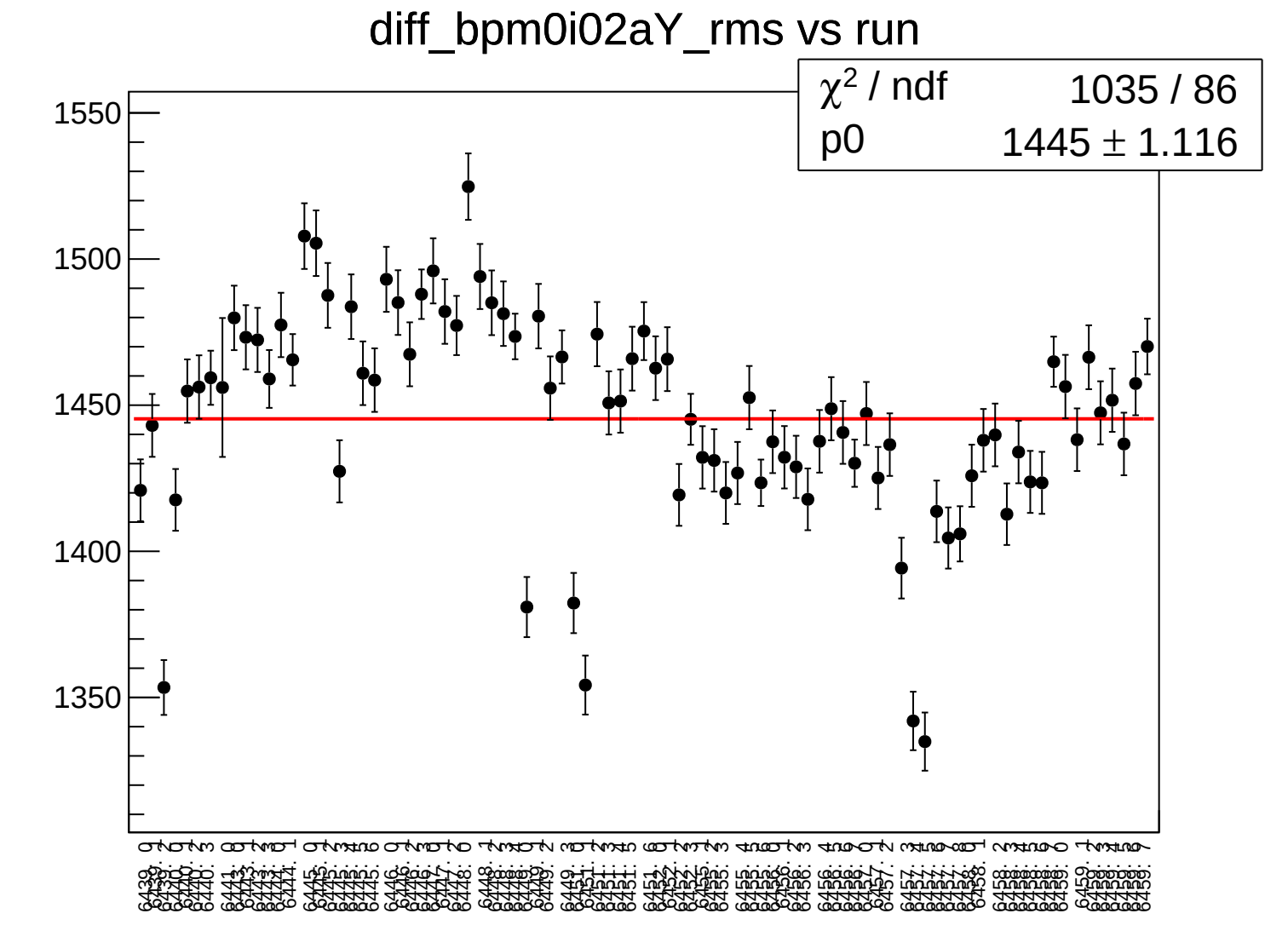

diff_bpm0i02aX_mean vs run
χ² / ndf 231.8 / 86
p0 −91.07 ± 1.517
pull
Entries 87
Mean 1746
Std Dev 1670

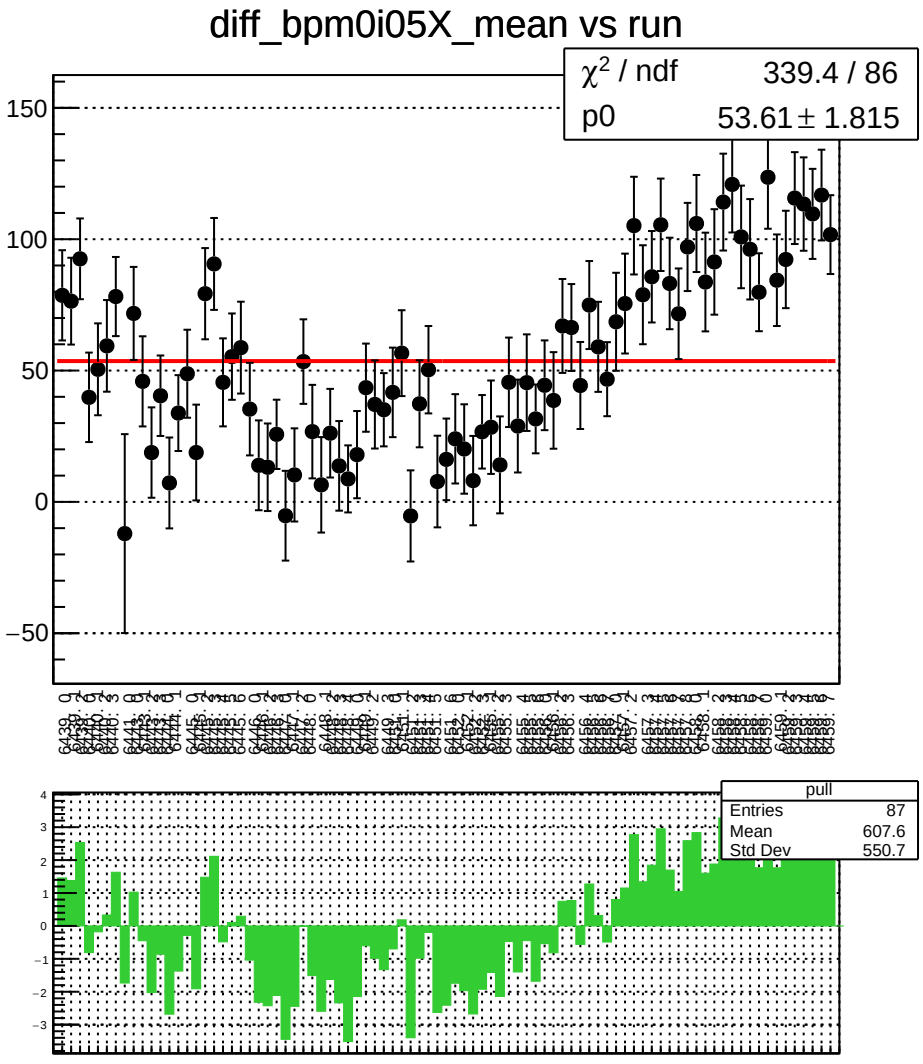

pull1D
Entries 87
Mean −0.006355
Std Dev 1.632

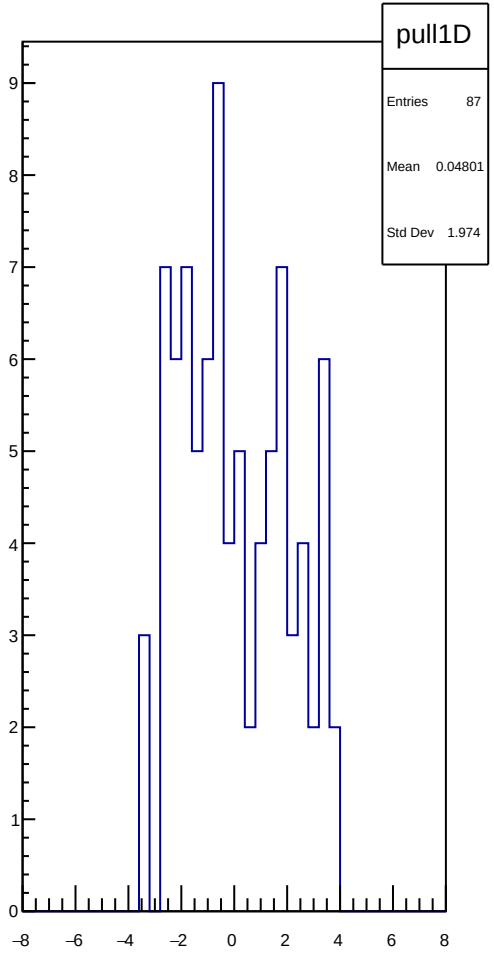

diff_bpm0i02aX_rms vs run
χ² / ndf 1247 / 86
p0 1389 ± 1.072
1500
1450
1400
1350
1300

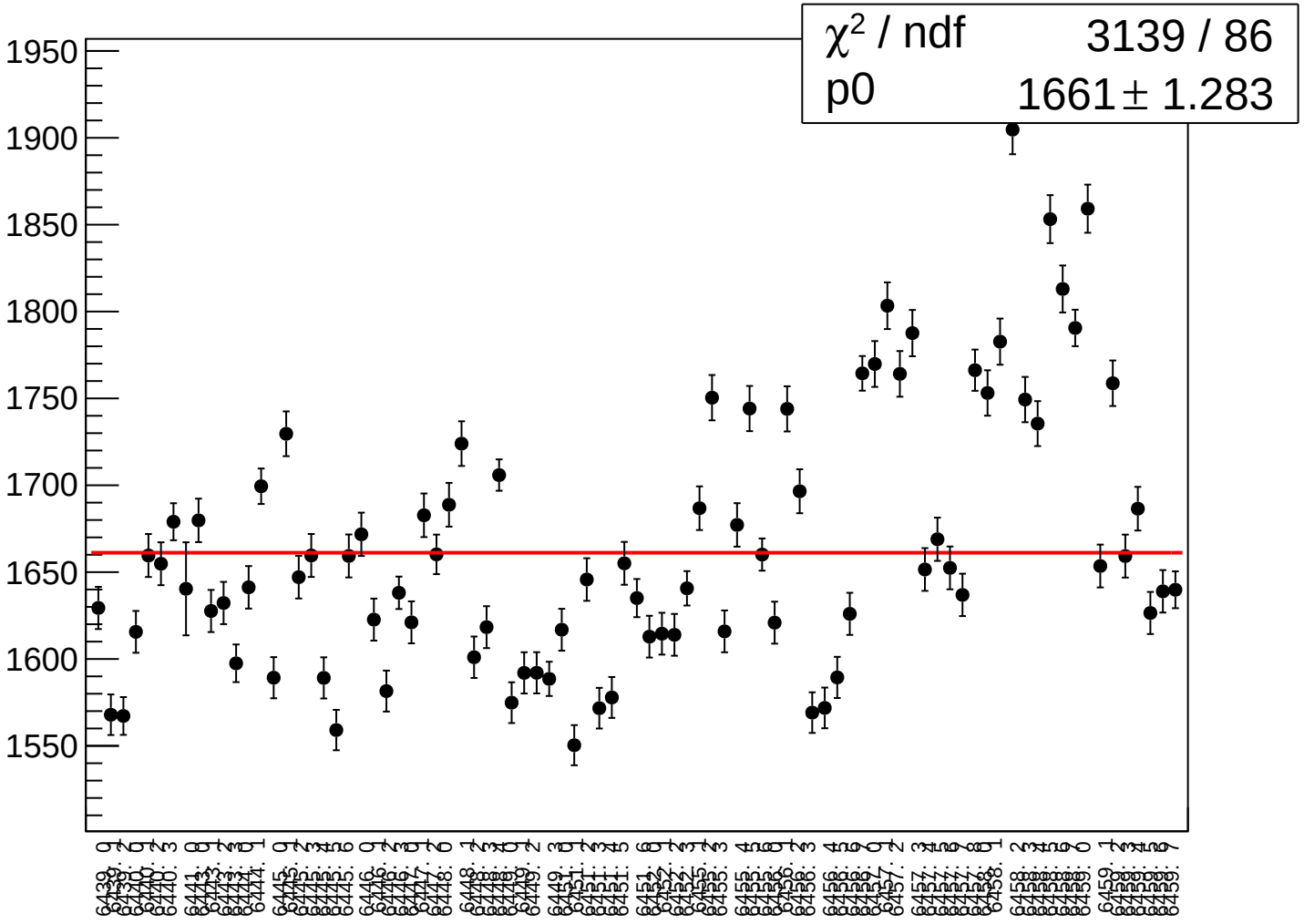

diff_bpm0i02aY_mean vs run
χ² / ndf 136.5 / 86
p0 19.19 ± 1.578
pull
Entries 87
Mean 397.7
Std Dev 353.4

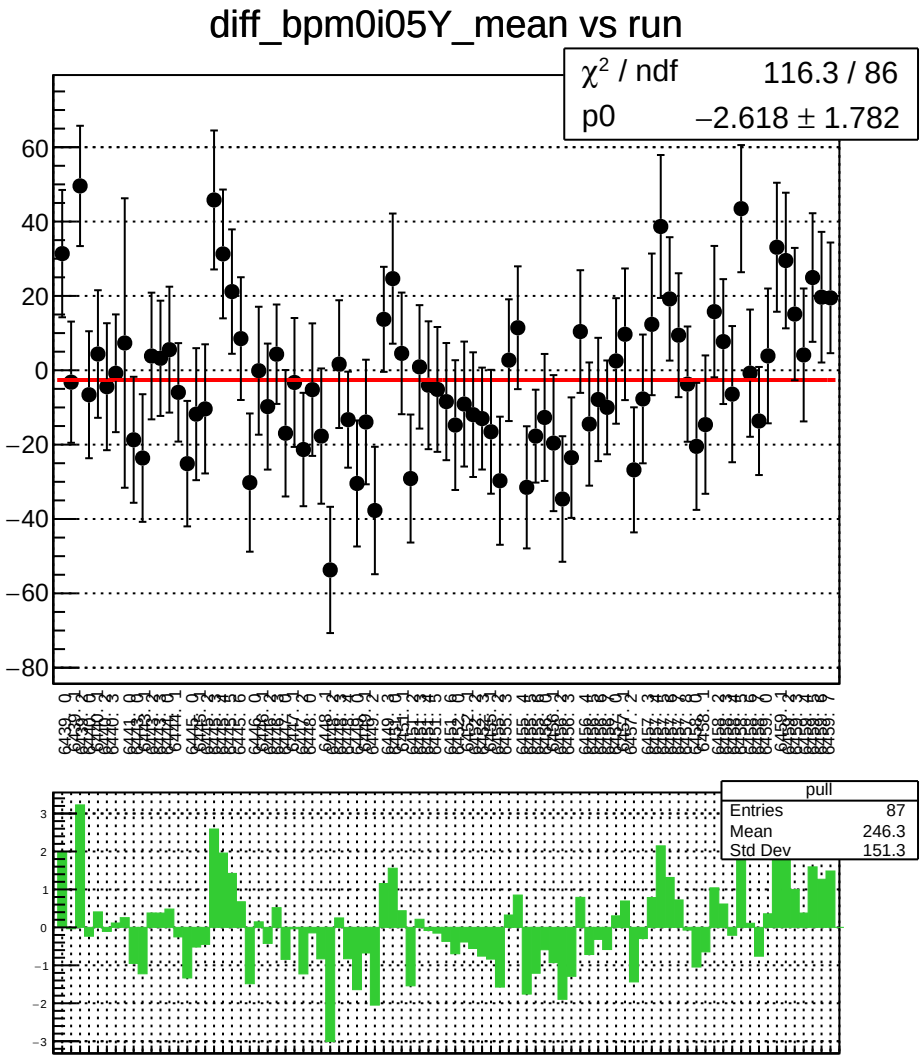

pull1D
Entries 87
Mean 0.01449
Std Dev 1.252

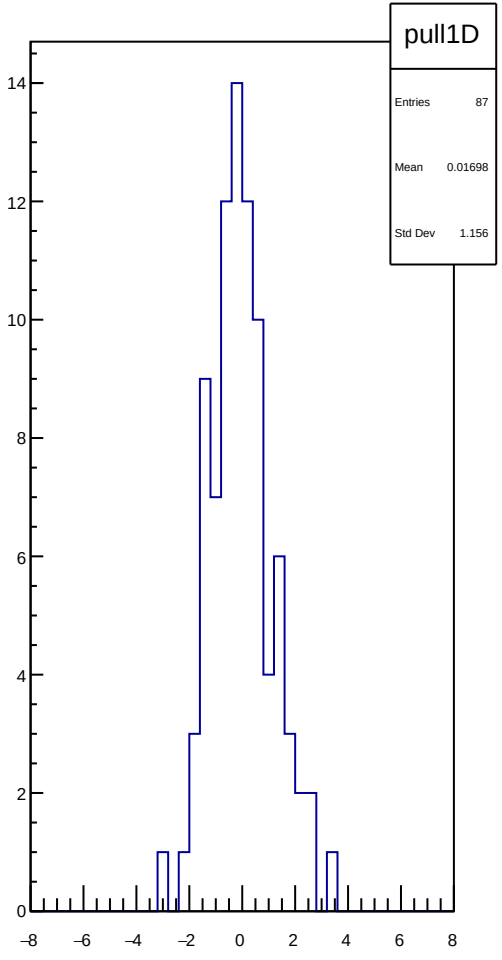

diff_bpm0i02aY_rms vs run
χ² / ndf 1035 / 86
p0 1445 ± 1.116
1550
1500
1450
1400
1350

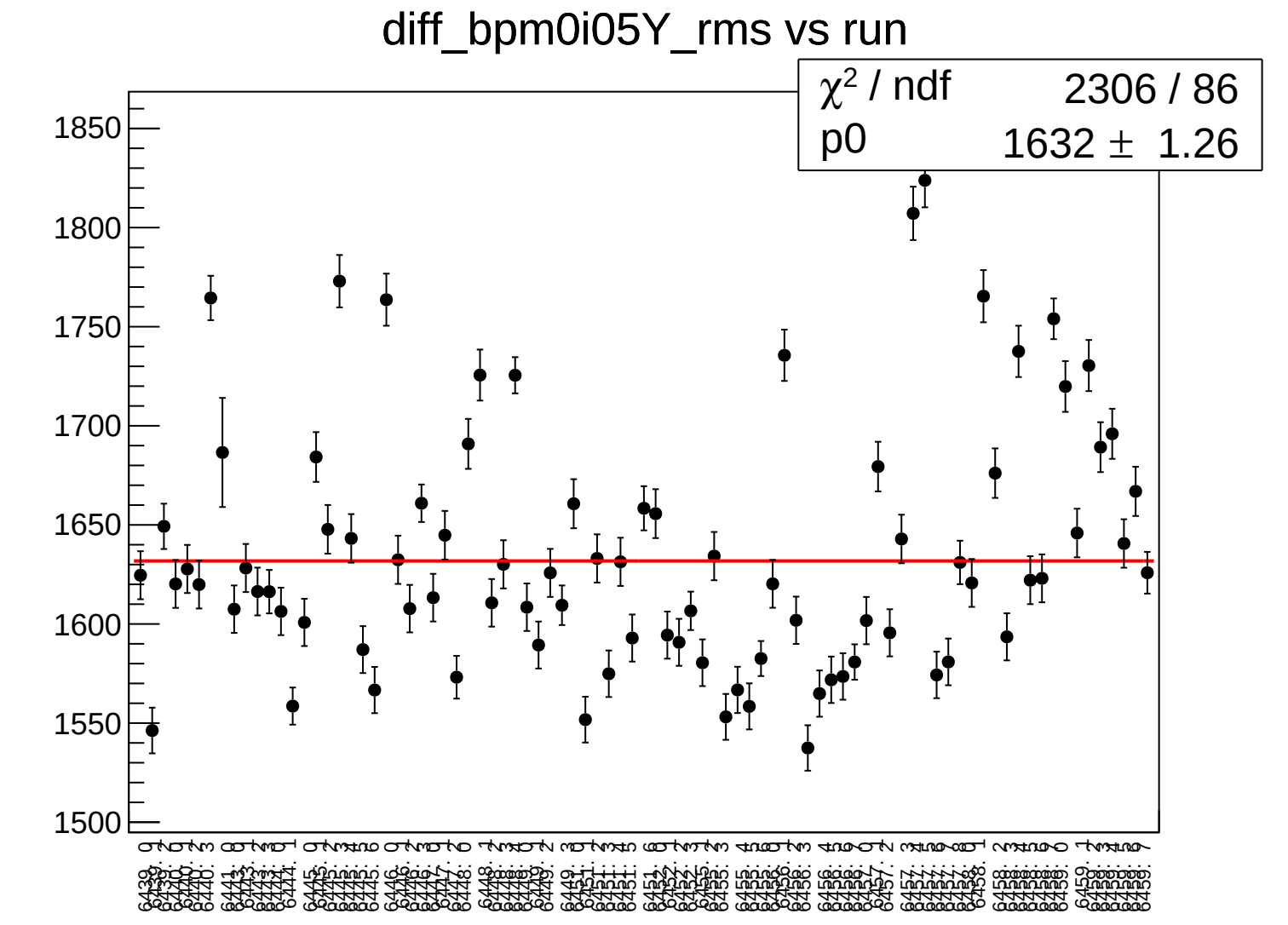

diff_bpm0i05X_mean vs run
χ² / ndf 339.4 / 86
p0 53.61 ± 1.815
150
100
50
0
−50
pull
Entries 87
Mean 607.6
Std Dev 550.7
4
3
2
1
0
−1
−2
−3

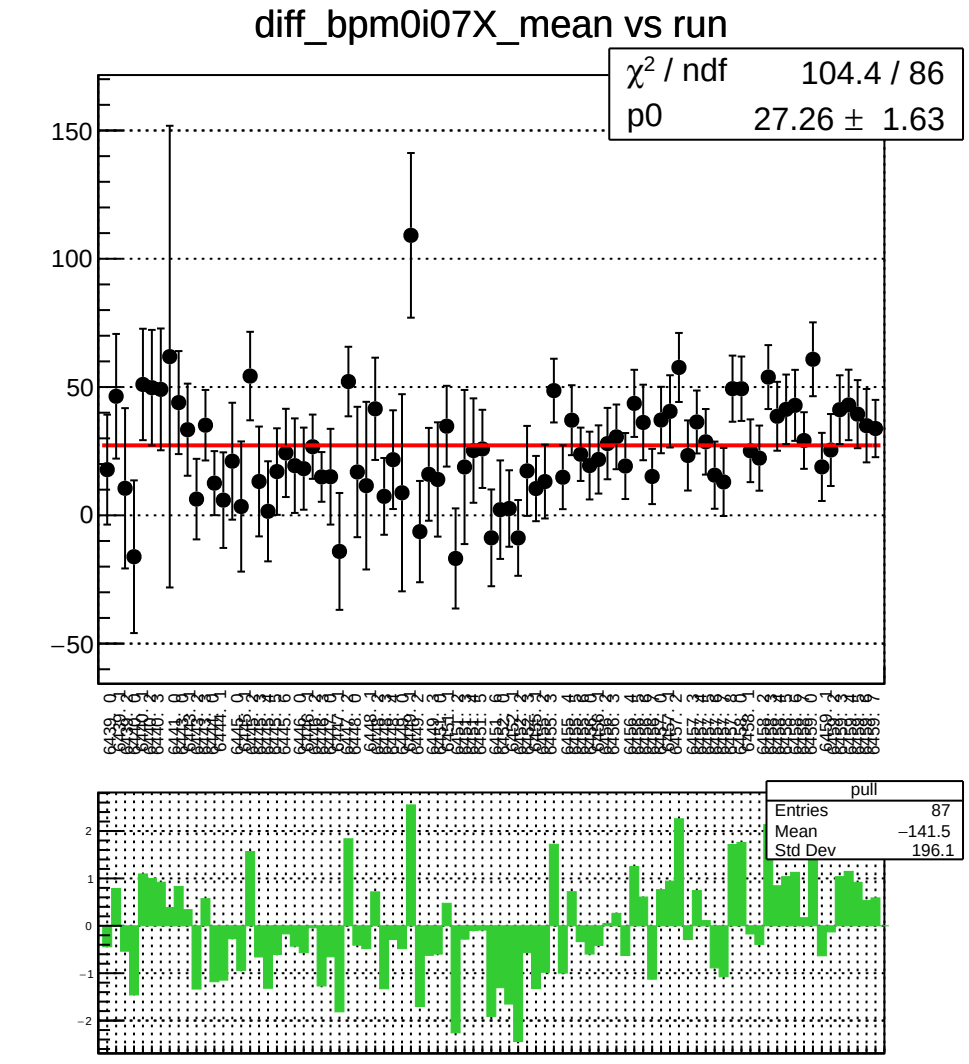

pull1D
Entries 87
Mean 0.04801
Std Dev 1.974
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

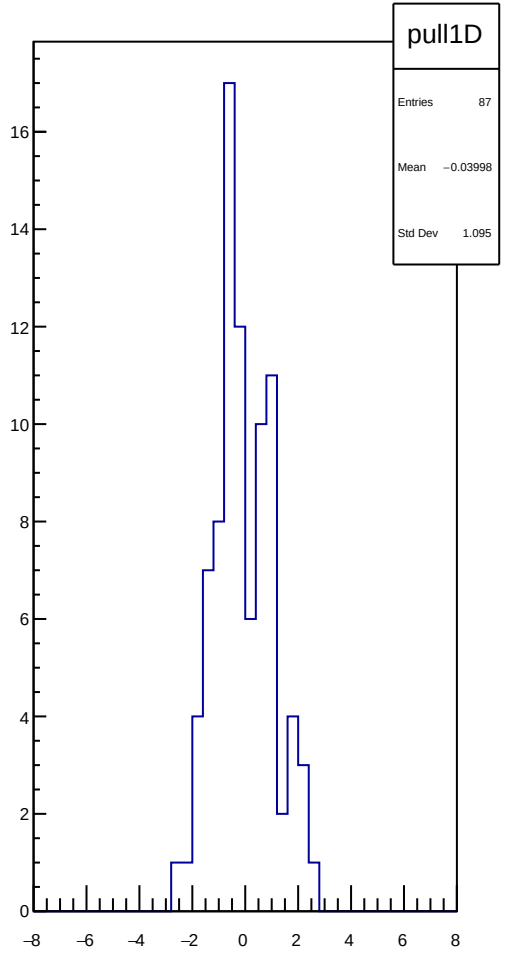

diff_bpm0i05X_rms vs run
χ² / ndf 3139 / 86
p0 1661 ± 1.283
1950
1900
1850
1800
1750
1700
1650
1600
1550

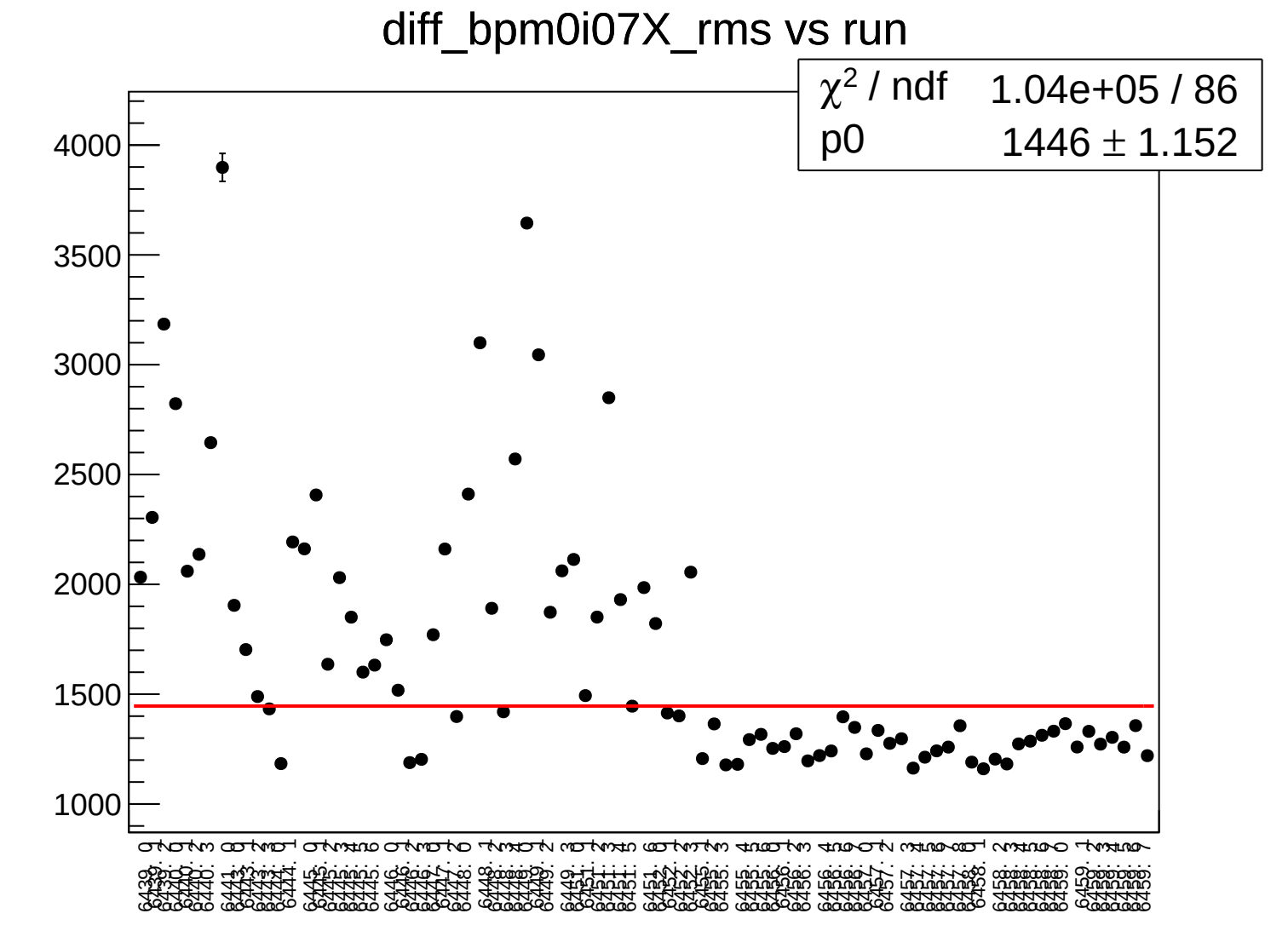

diff_bpm0i05Y_mean vs run
χ² / ndf 116.3 / 86
p0 −2.618 ± 1.782
pull
Entries 87
Mean 246.3
Std Dev 151.3

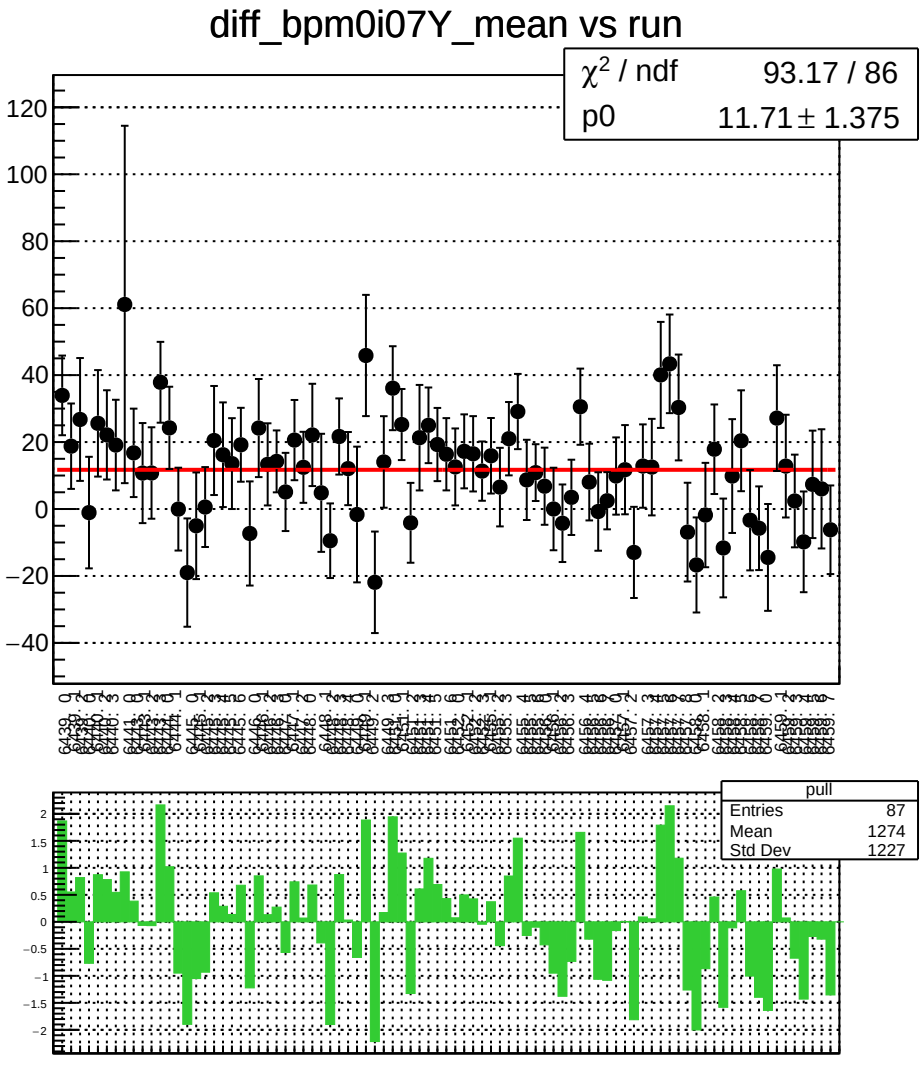

pull1D
Entries 87
Mean 0.01698
Std Dev 1.156

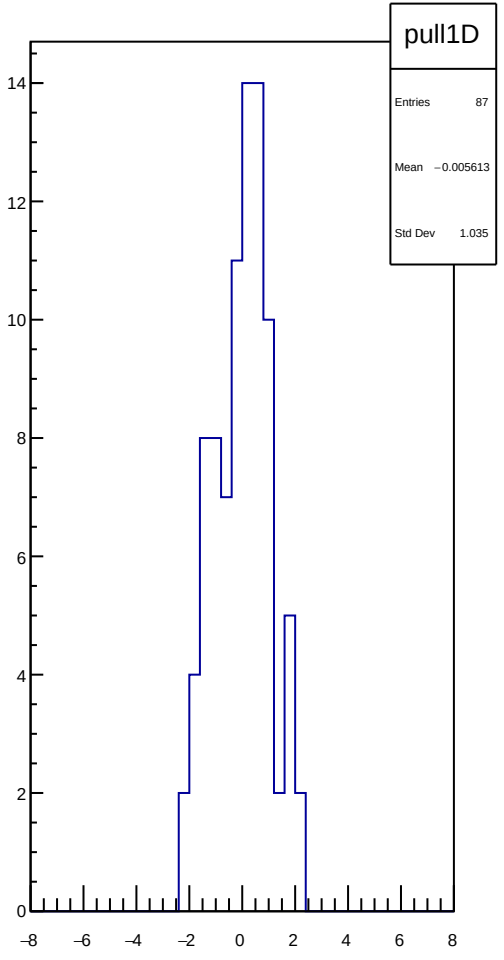

diff_bpm0i05Y_rms vs run
χ² / ndf 2306 / 86
p0 1632 ± 1.26
1850
1800
1750
1700
1650
1600
1550
1500

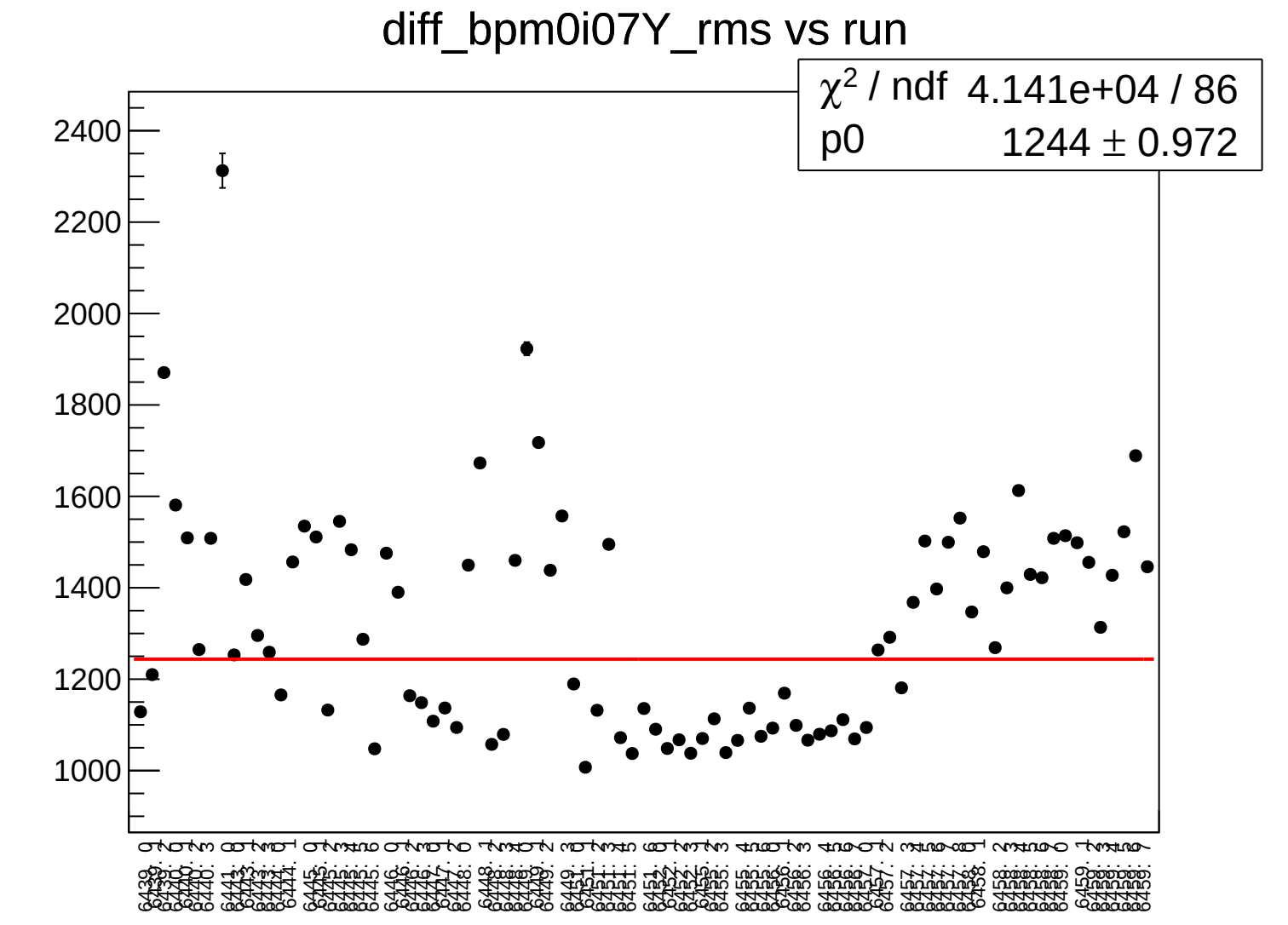

diff_bpm0i07X_mean vs run
χ² / ndf 104.4 / 86
p0 27.26 ± 1.63
150
100
50
0
−50
pull
Entries 87
Mean −141.5
Std Dev 196.1
2
1
0
−1
−2

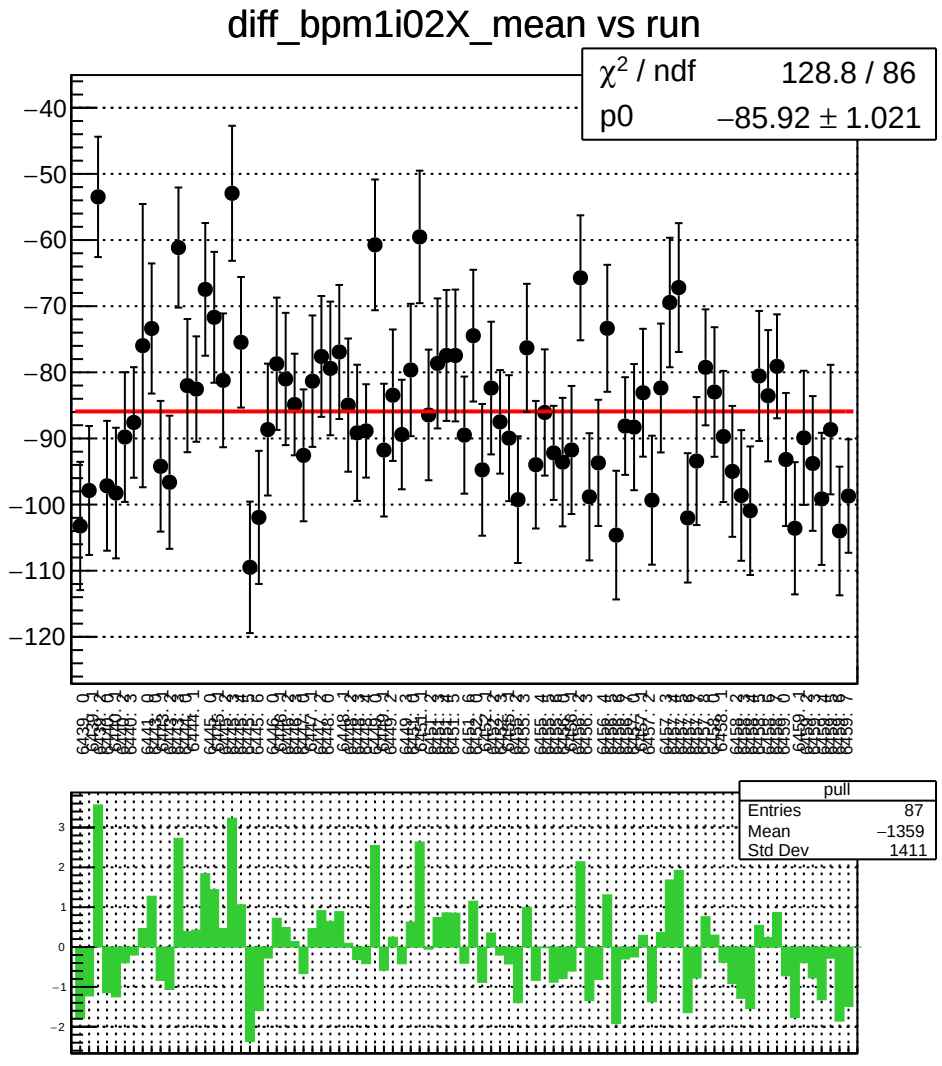

pull1D
Entries 87
Mean −0.03998
Std Dev 1.095
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

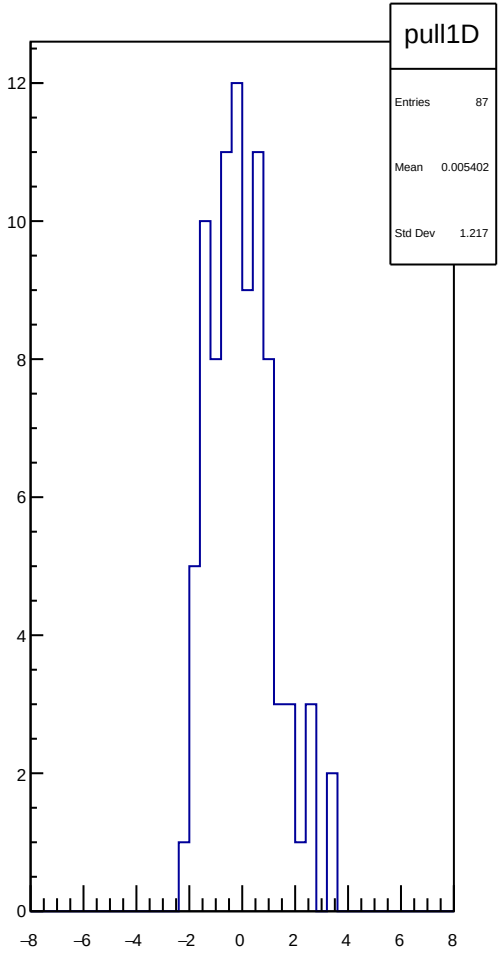

diff_bpm0i07X_rms vs run
χ² / ndf 1.04e+05 / 86
p0 1446 ± 1.152
4000
3500
3000
2500
2000
1500
1000

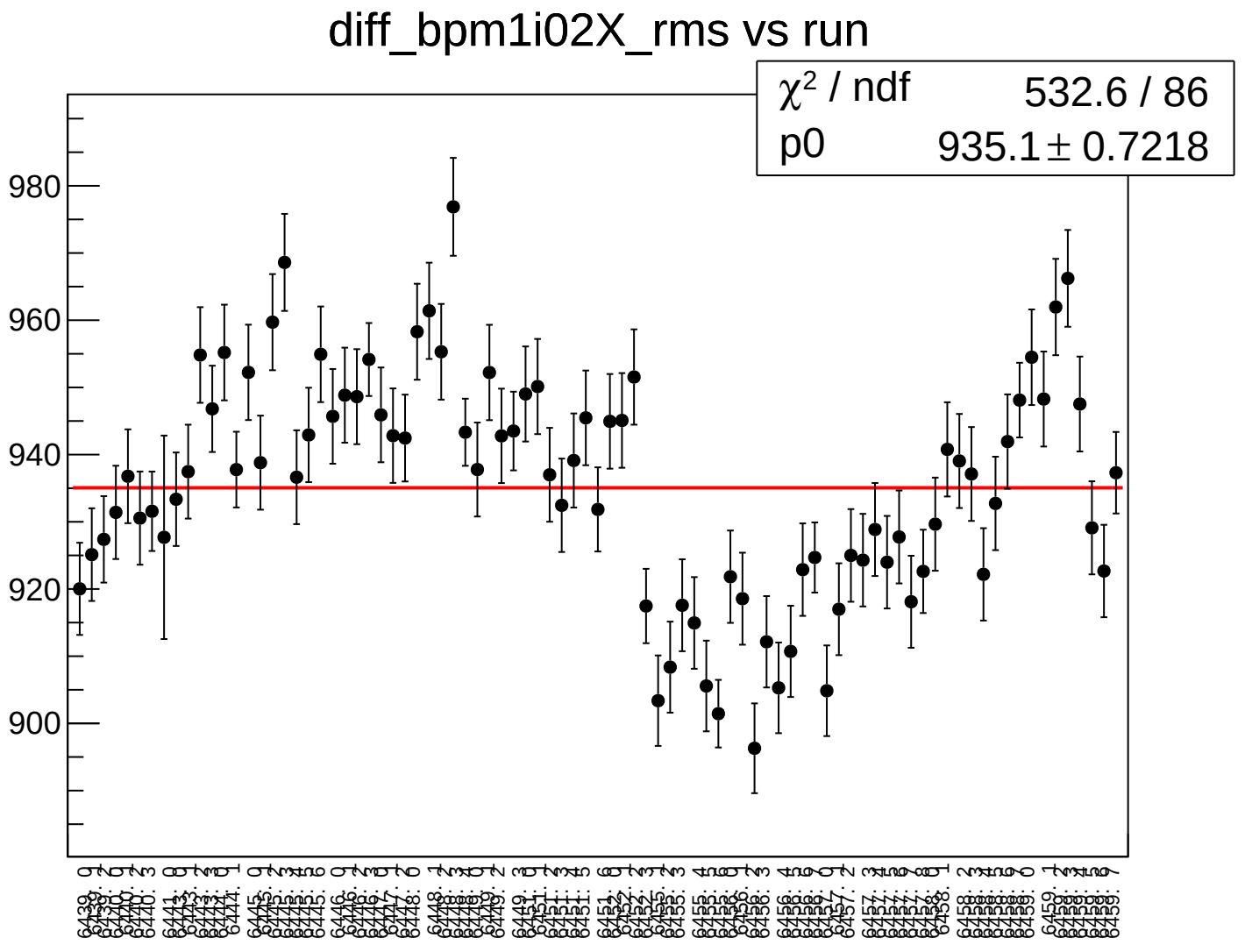

diff_bpm0i07Y_mean vs run
χ^2 / ndf 93.17 / 86
p0 11.71 ± 1.375
pull
Entries 87
Mean 1274
Std Dev 1227

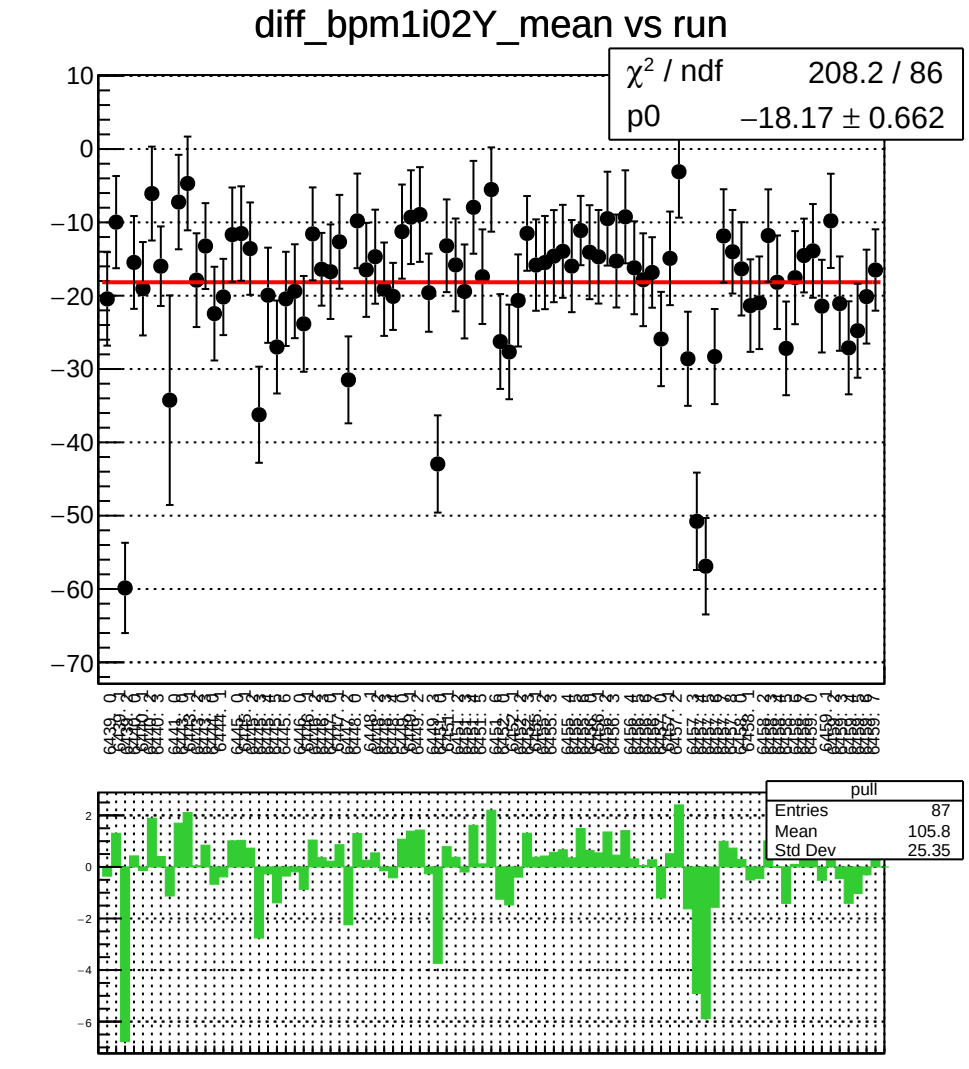

pull1D
Entries 87
Mean −0.005613
Std Dev 1.035

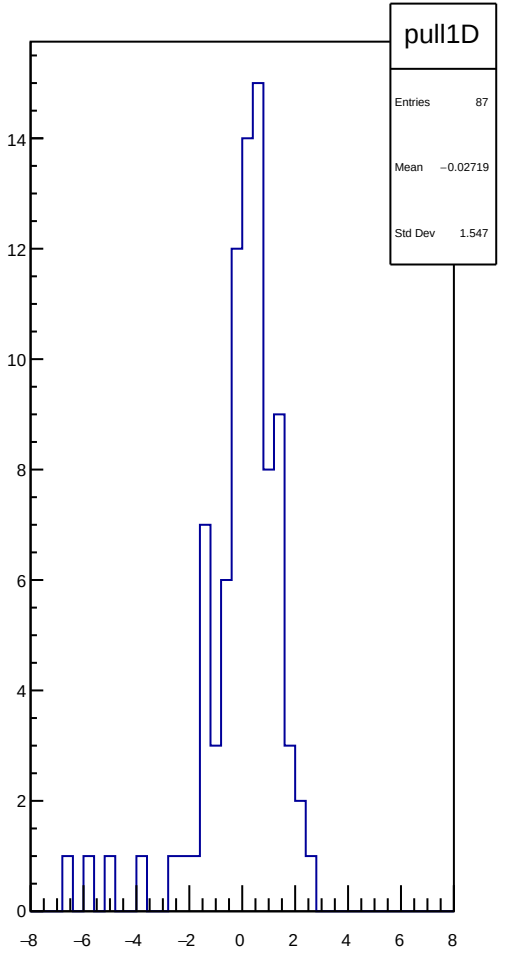

diff_bpm0i07Y_rms vs run
χ² / ndf 4.141e+04 / 86
p0 1244 ± 0.972
2400
2200
2000
1800
1600
1400
1200
1000

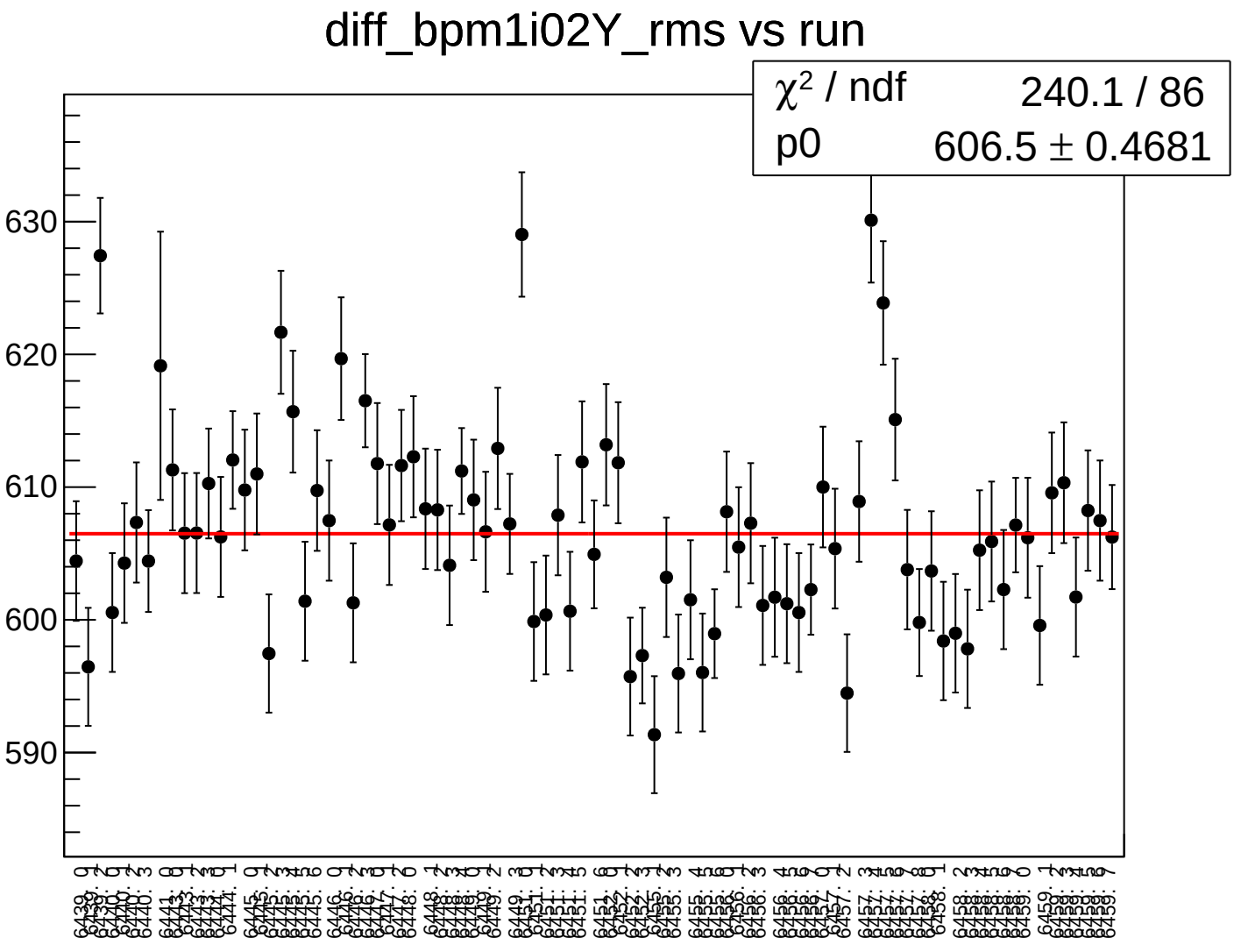

diff_bpm1i02X_mean vs run
χ² / ndf 128.8 / 86
p0 −85.92 ± 1.021
pull
Entries 87
Mean −1359
Std Dev 1411

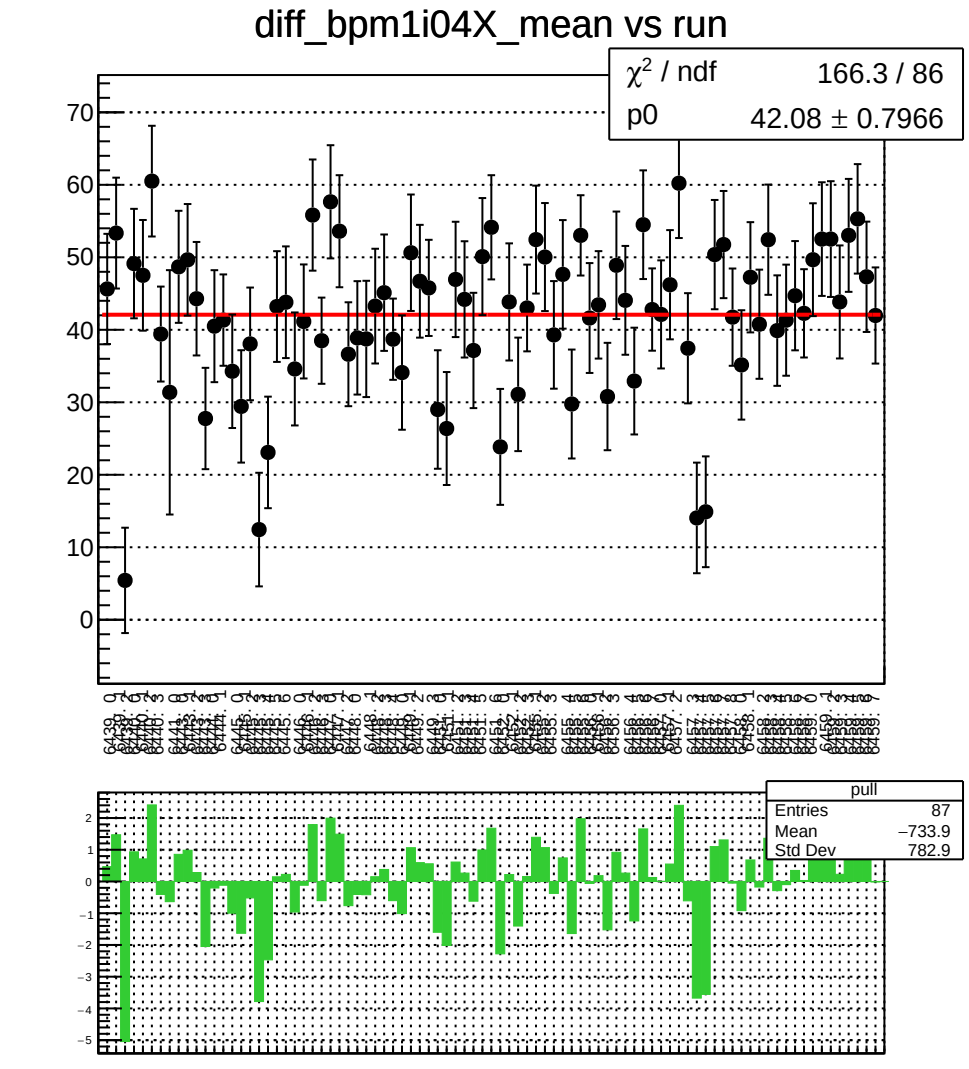

pull1D
Entries 87
Mean 0.005402
Std Dev 1.217

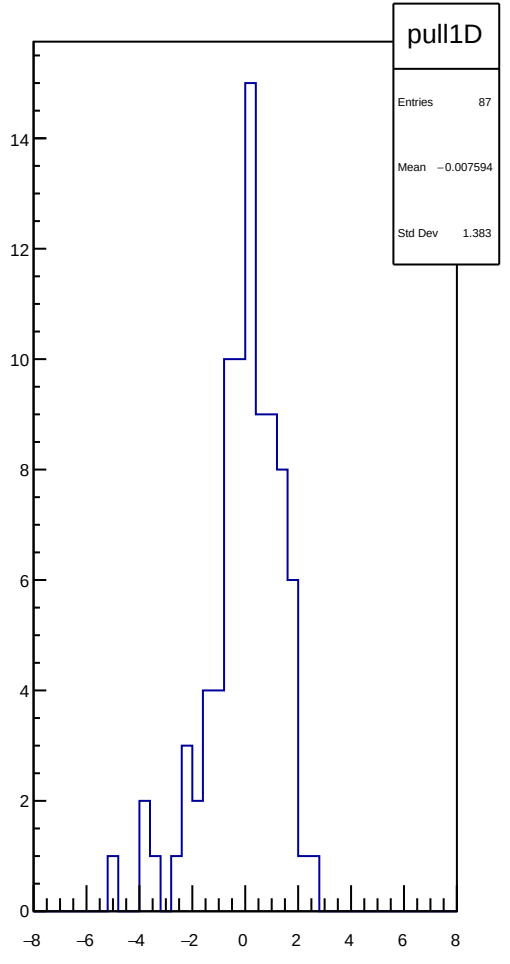

diff_bpm1i02X_rms vs run
χ² / ndf 532.6 / 86
p0 935.1 ± 0.7218
980
960
940
920
900

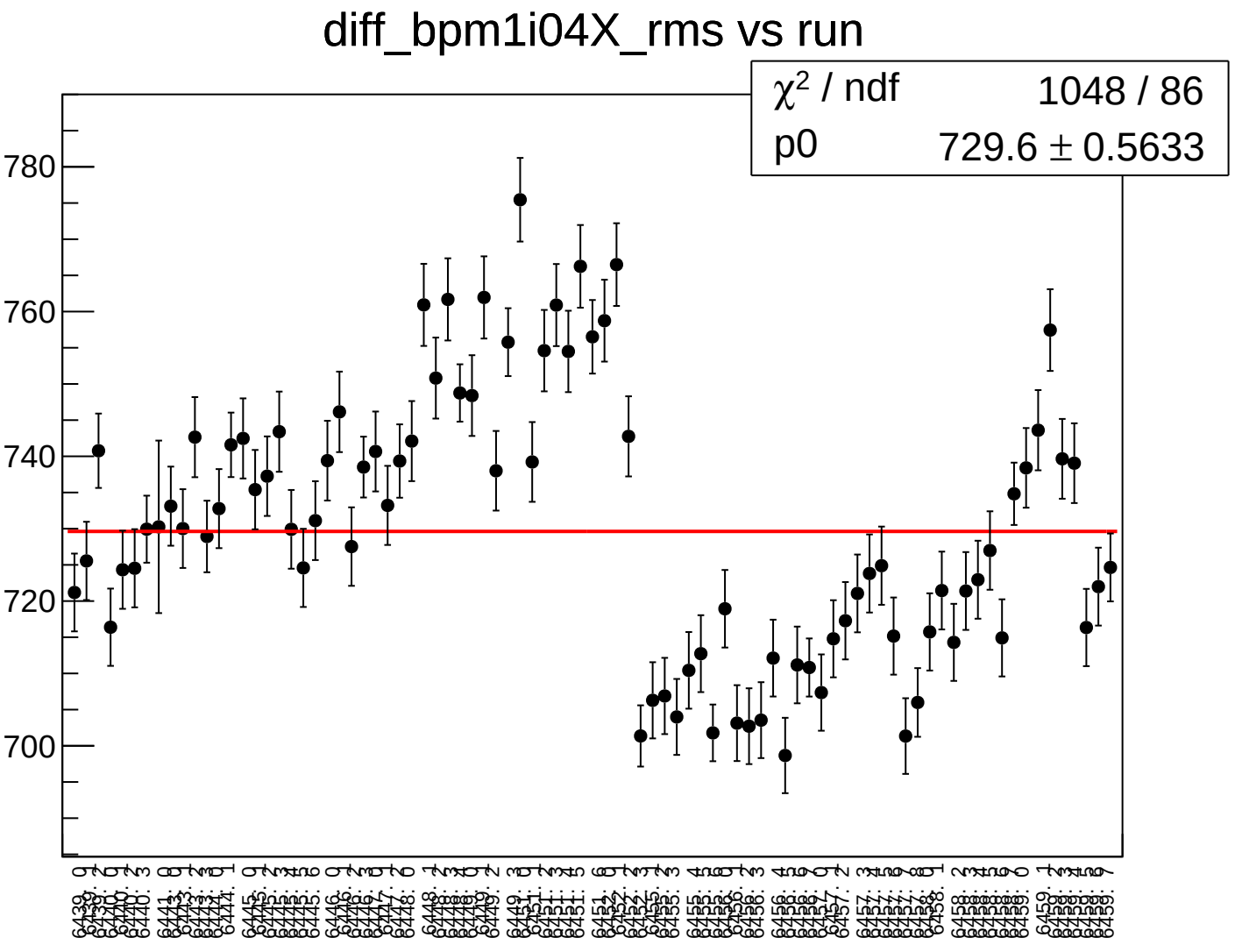

diff_bpm1i02Y_mean vs run
χ² / ndf 208.2 / 86
p0 −18.17 ± 0.662
pull
Entries 87
Mean 105.8
Std Dev 25.35

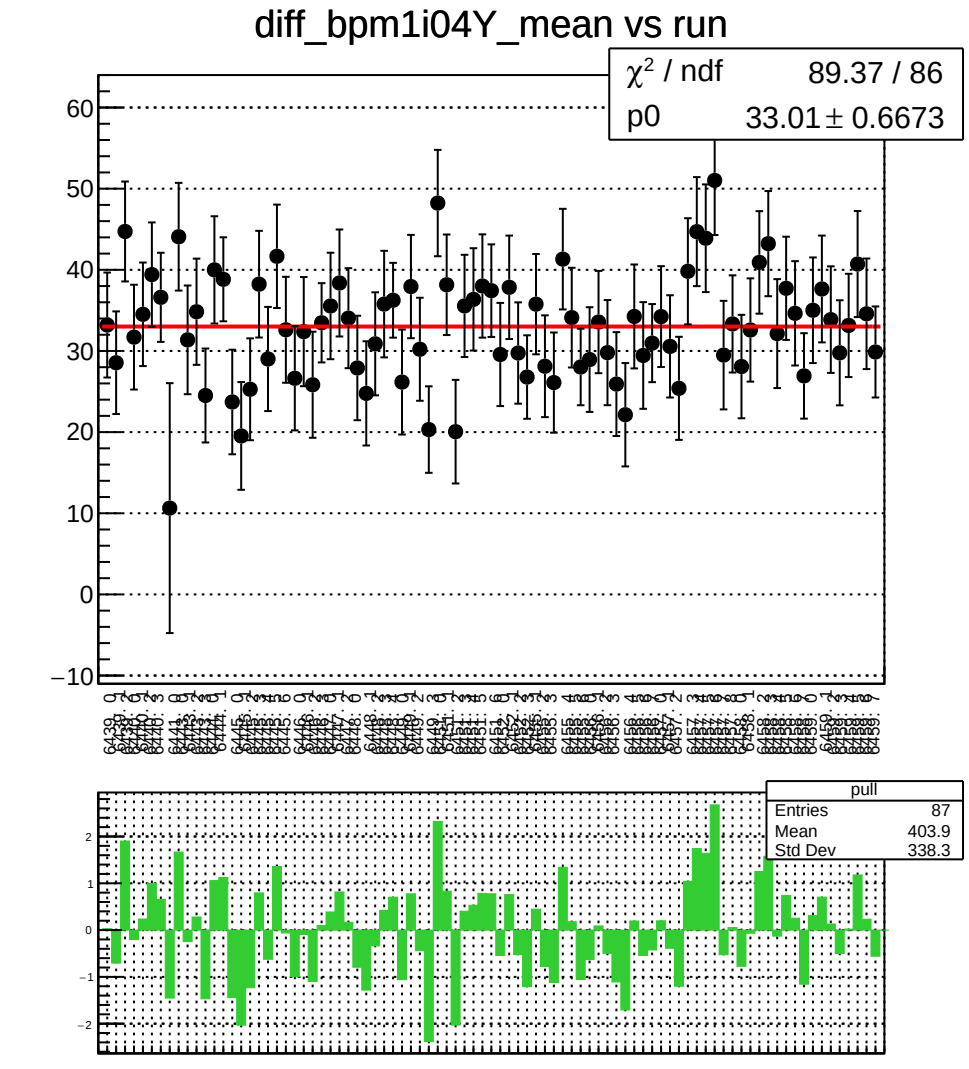

pull1D
Entries 87
Mean −0.02719
Std Dev 1.547

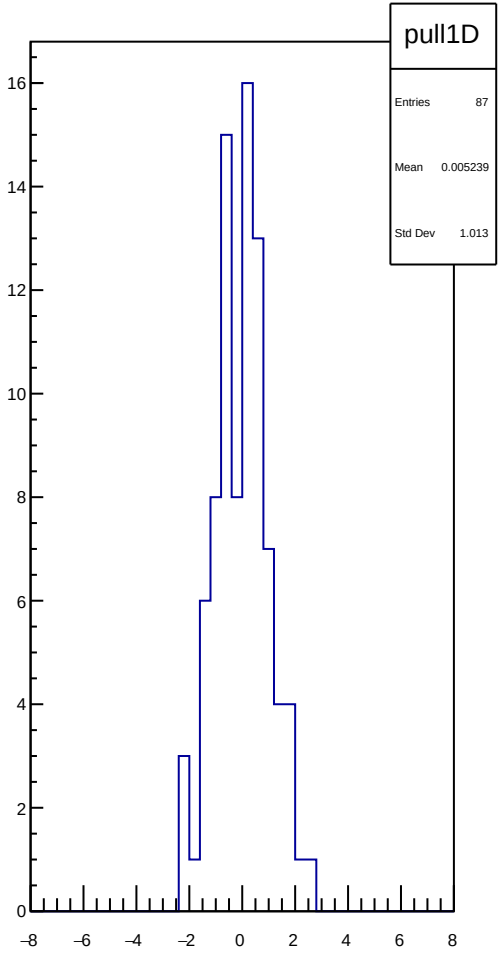

diff_bpm1i02Y_rms vs run
χ² / ndf 240.1 / 86
p0 606.5 ± 0.4681
630
620
610
600
590

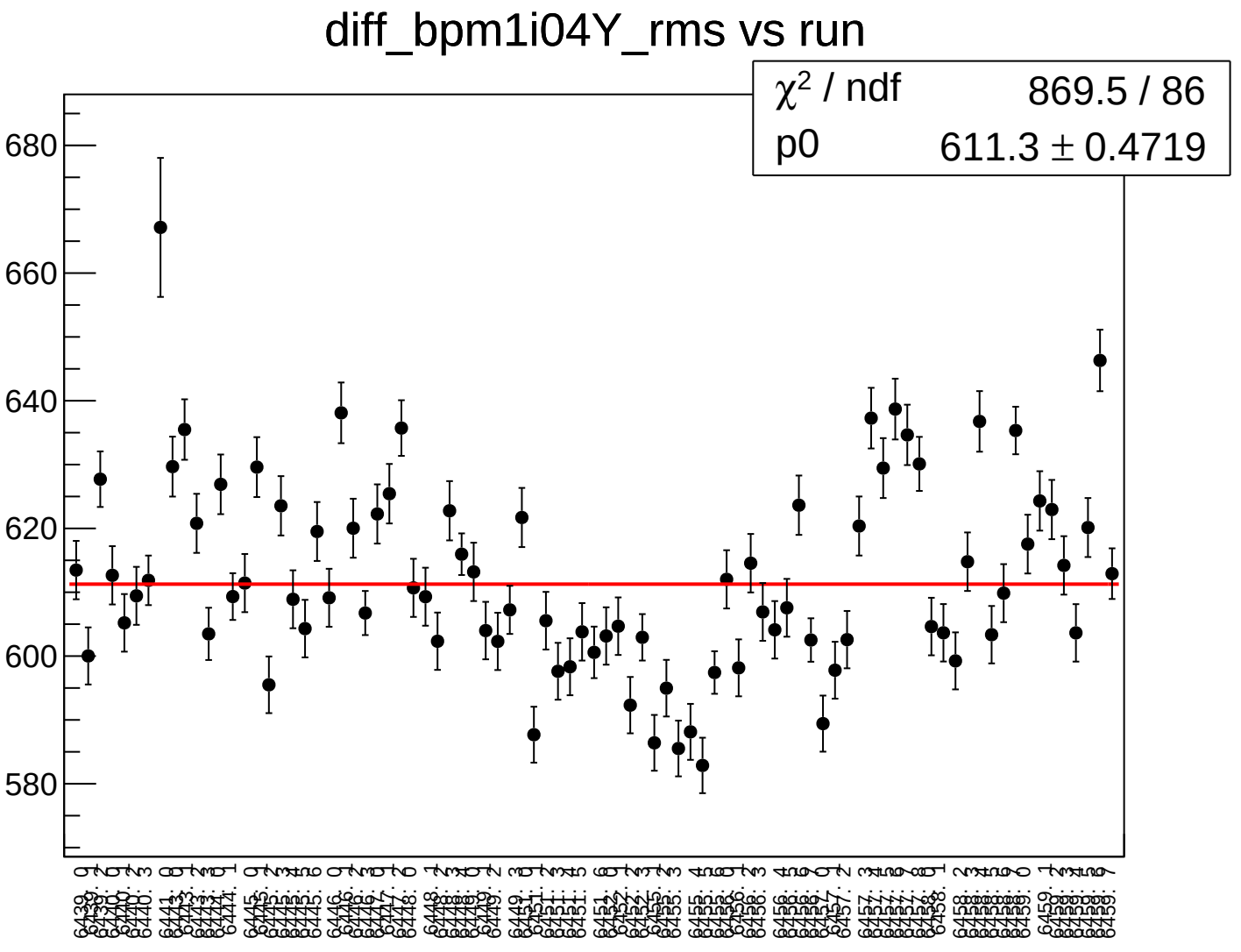

diff_bpm1i04X_mean vs run
χ² / ndf 166.3 / 86
p0 42.08 ± 0.7966
pull
Entries 87
Mean −733.9
Std Dev 782.9

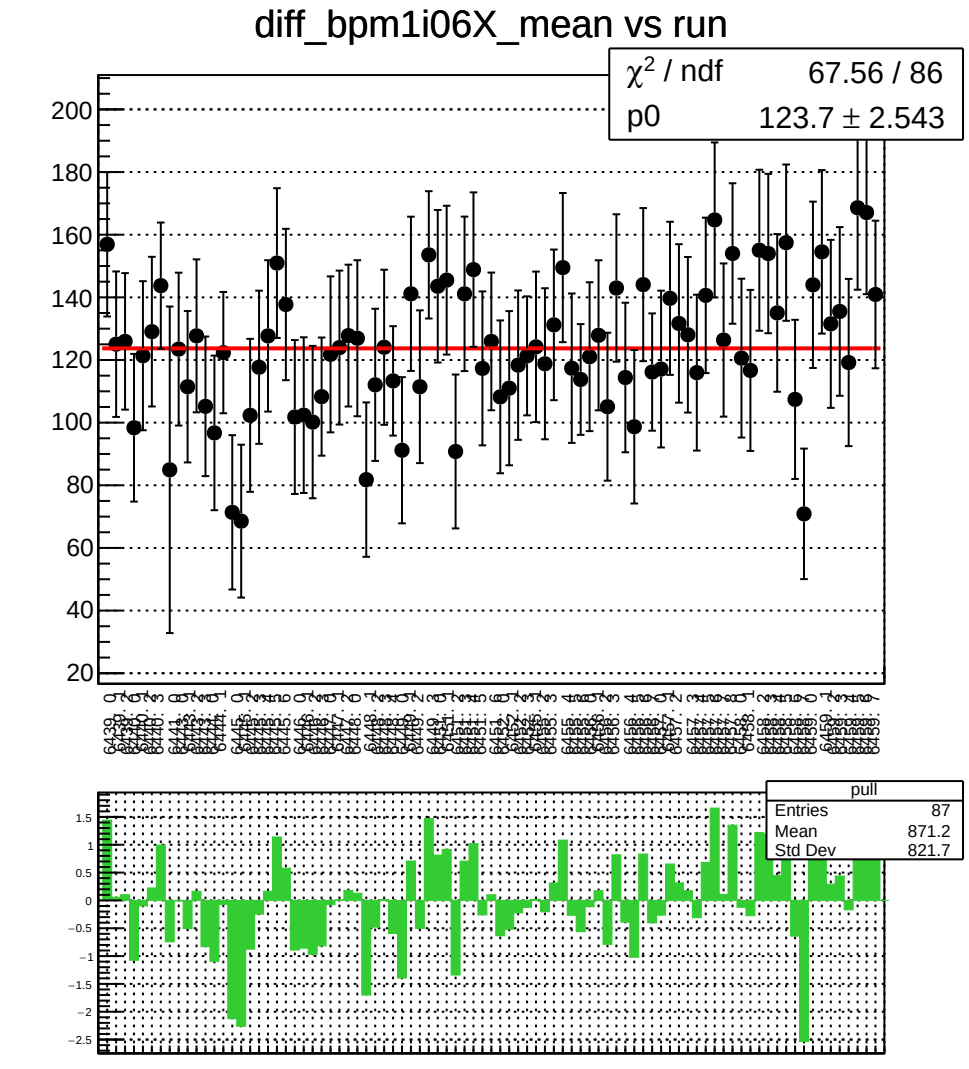

pull1D
Entries 87
Mean −0.007594
Std Dev 1.383

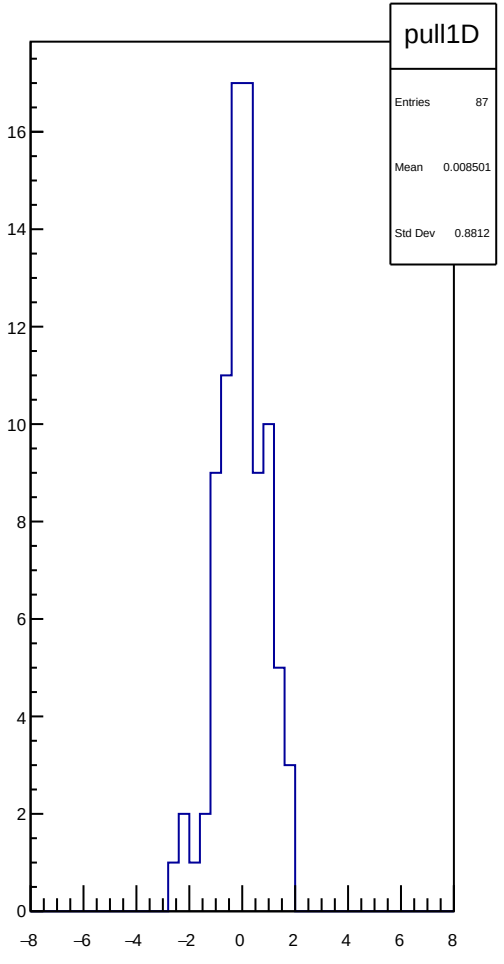

diff_bpm1i04X_rms vs run
χ² / ndf 1048 / 86
p0 729.6 ± 0.5633
780
760
740
720
700

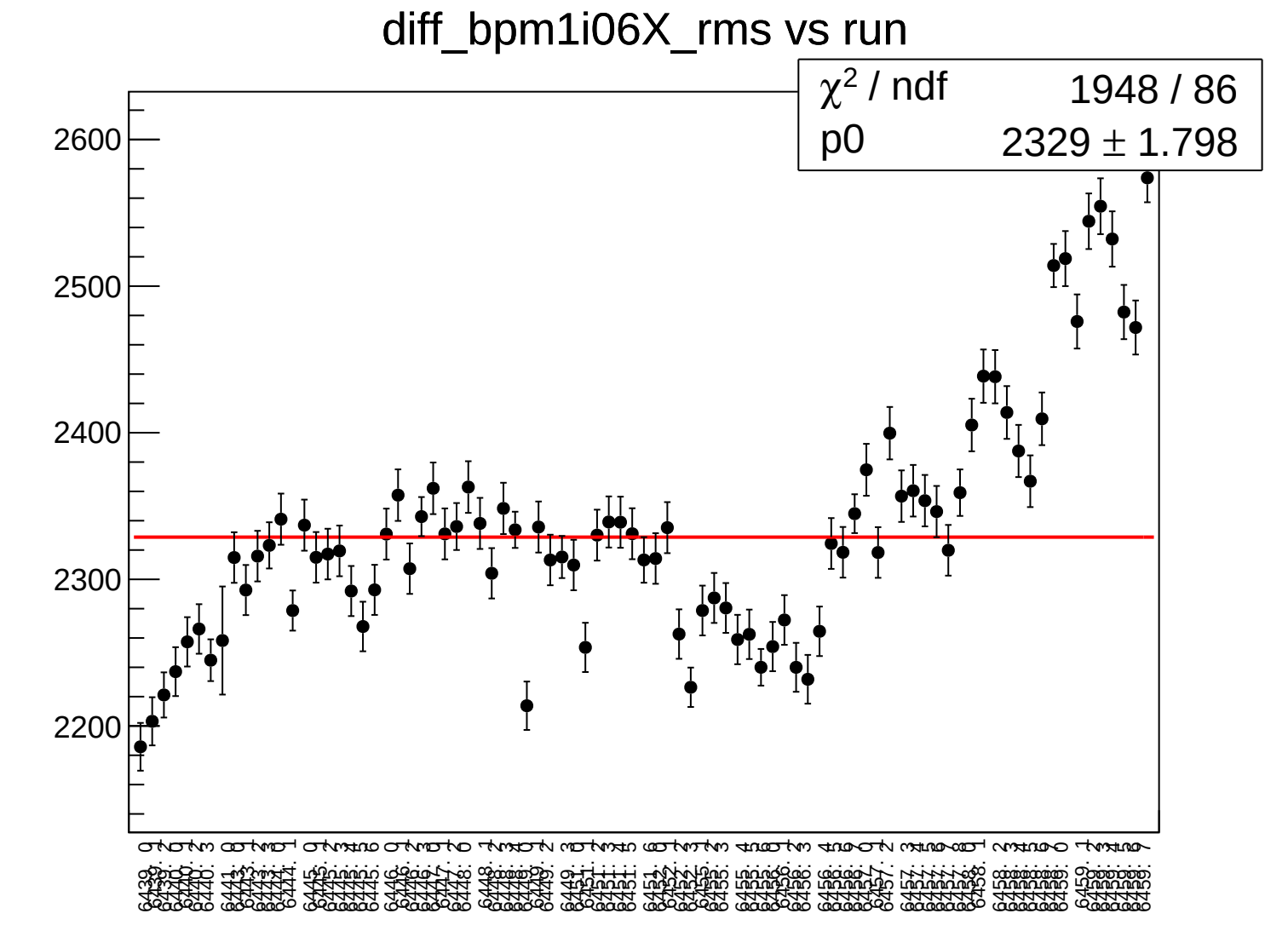

diff_bpm1i04Y_mean vs run
χ^2 / ndf 89.37 / 86
p0 33.01 ± 0.6673
pull
Entries 87
Mean 403.9
Std Dev 338.3

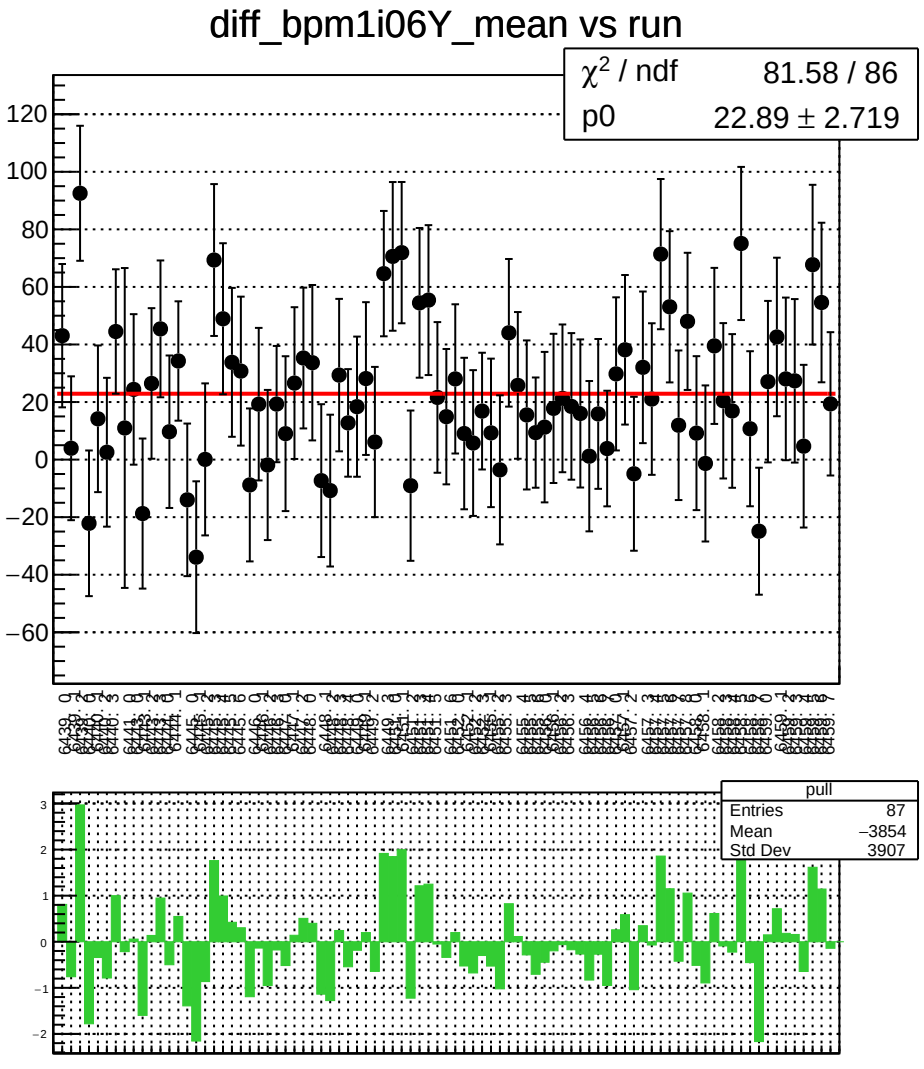

pull1D
Entries 87
Mean 0.005239
Std Dev 1.013

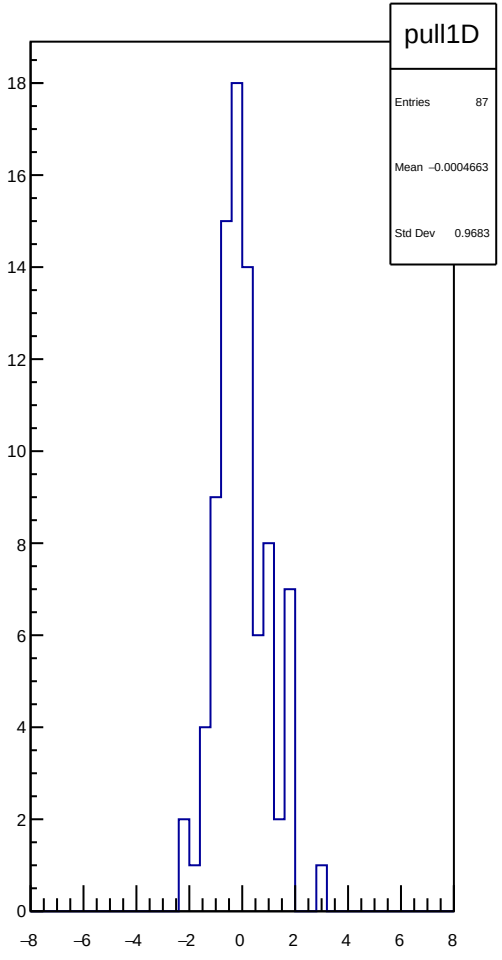

diff_bpm1i04Y_rms vs run
χ^2 / ndf 869.5 / 86
p0 611.3 ± 0.4719
680
660
640
620
600
580

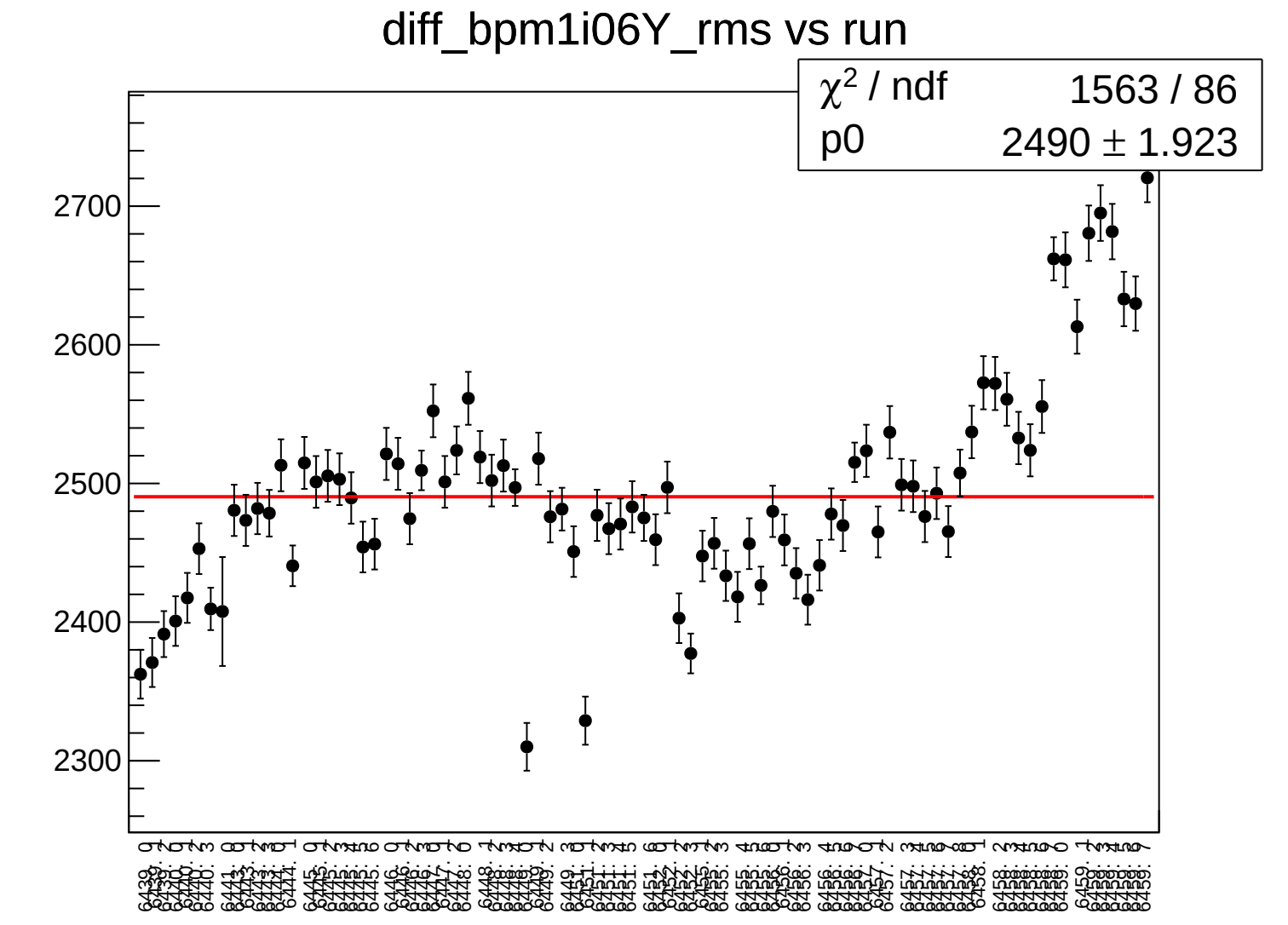

diff_bpm1i06X_mean vs run
χ^2 / ndf 67.56 / 86
p0 123.7 ± 2.543
pull
Entries 87
Mean 871.2
Std Dev 821.7

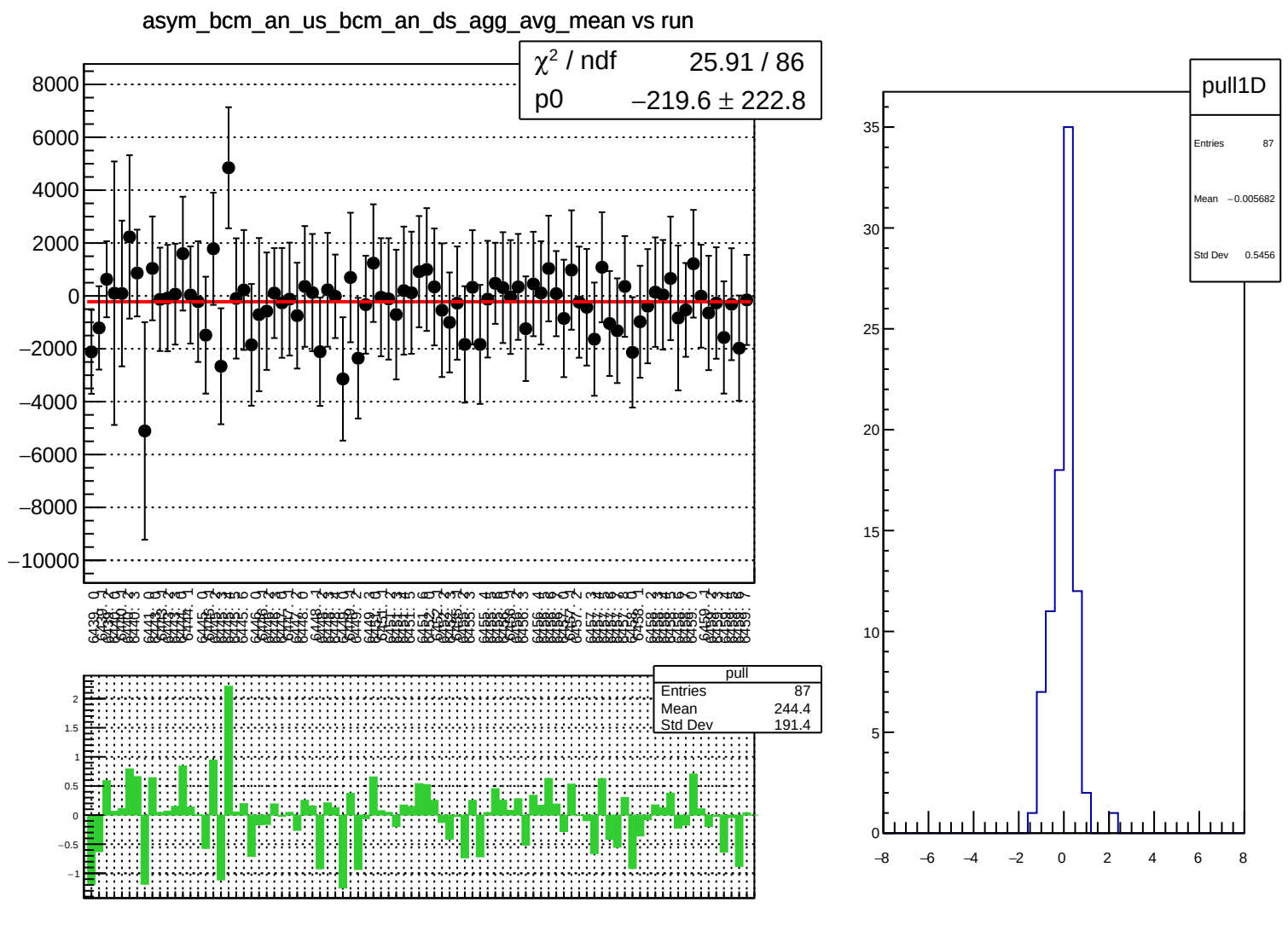

pull1D
Entries 87
Mean 0.008501
Std Dev 0.8812

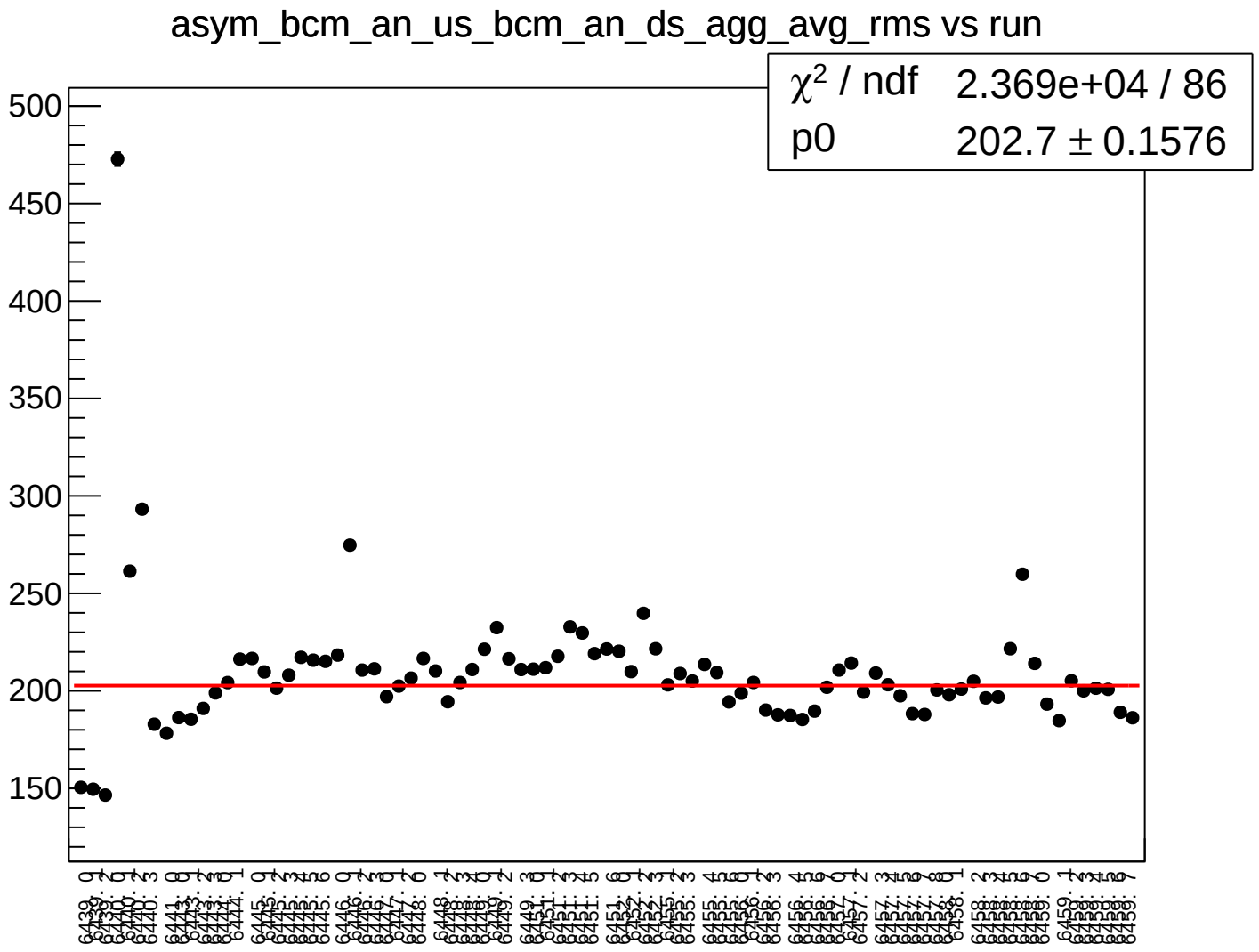

diff_bpm1i06X_rms vs run
χ² / ndf 1948 / 86
p0 2329 ± 1.798
2600
2500
2400
2300
2200

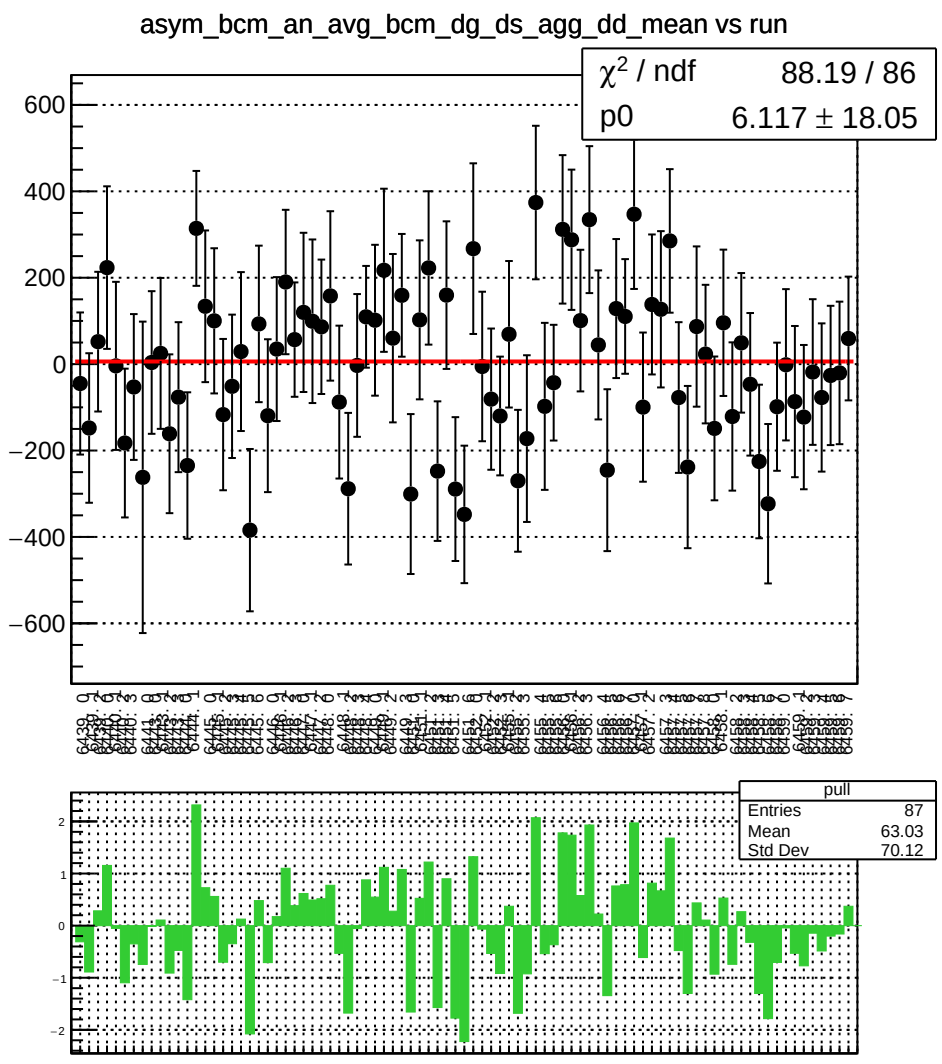

diff_bpm1i06Y_mean vs run
χ^2 / ndf 81.58 / 86
p0 22.89 ± 2.719
pull
Entries 87
Mean −3854
Std Dev 3907

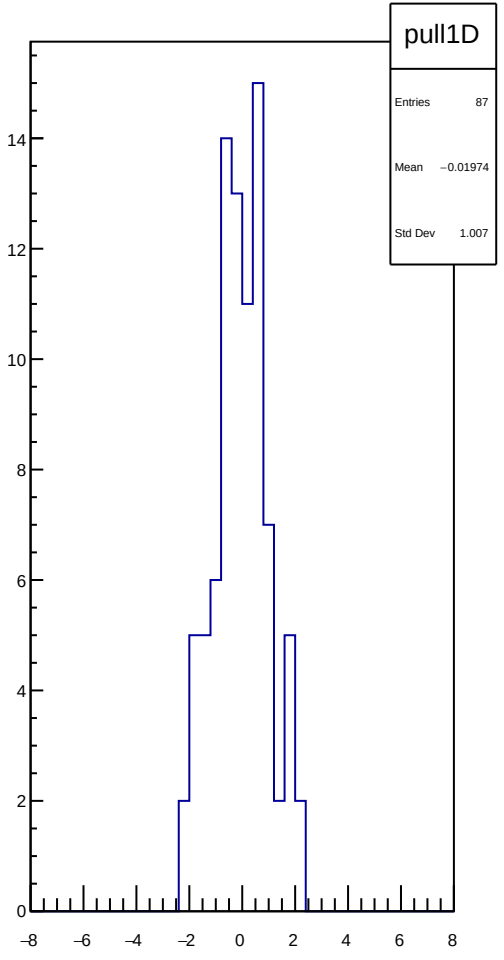

pull1D
Entries 87
Mean −0.0004663
Std Dev 0.9683

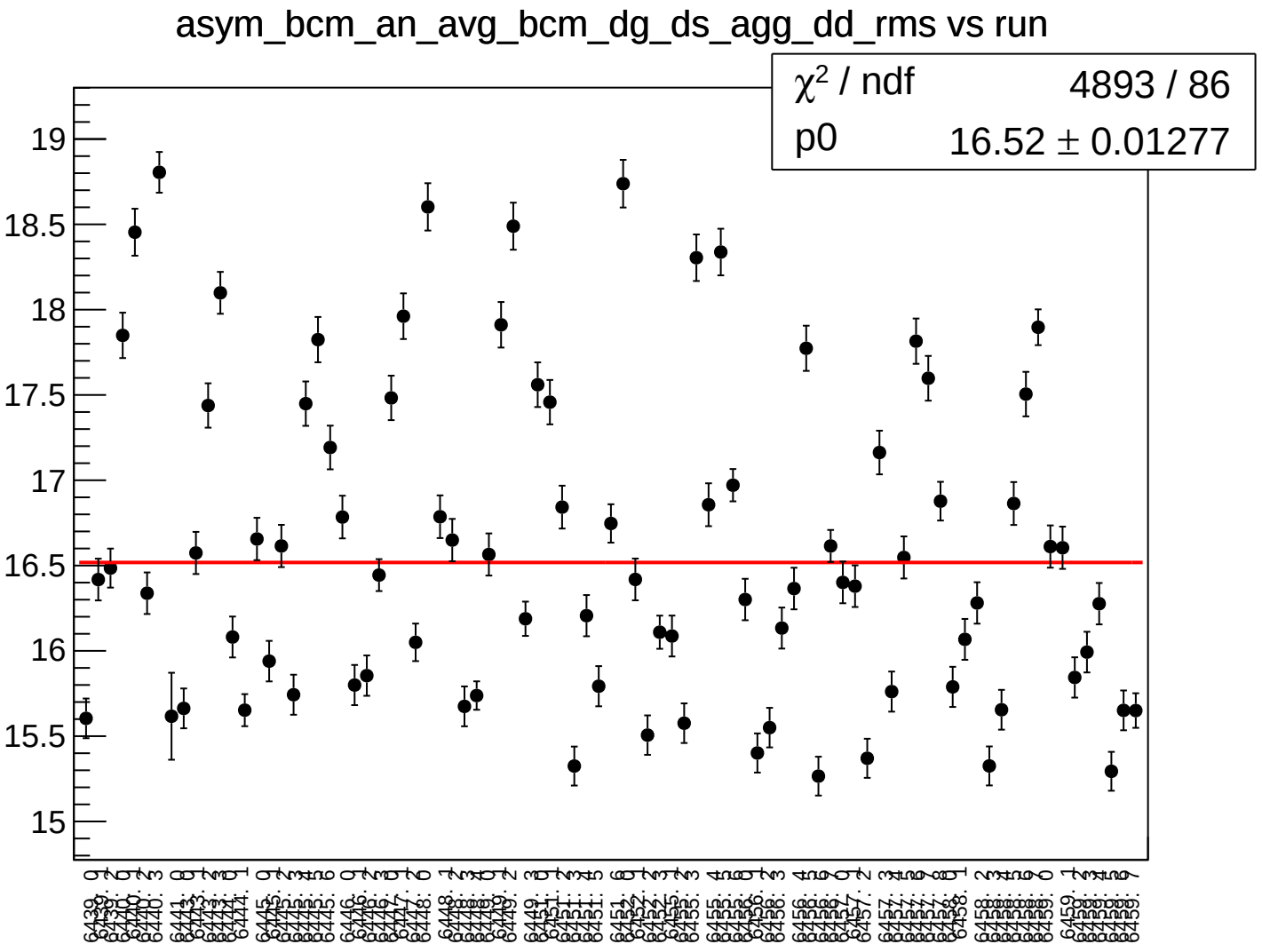

diff_bpm1i06Y_rms vs run
χ² / ndf 1563 / 86
p0 2490 ± 1.923
2700
2600
2500
2400
2300

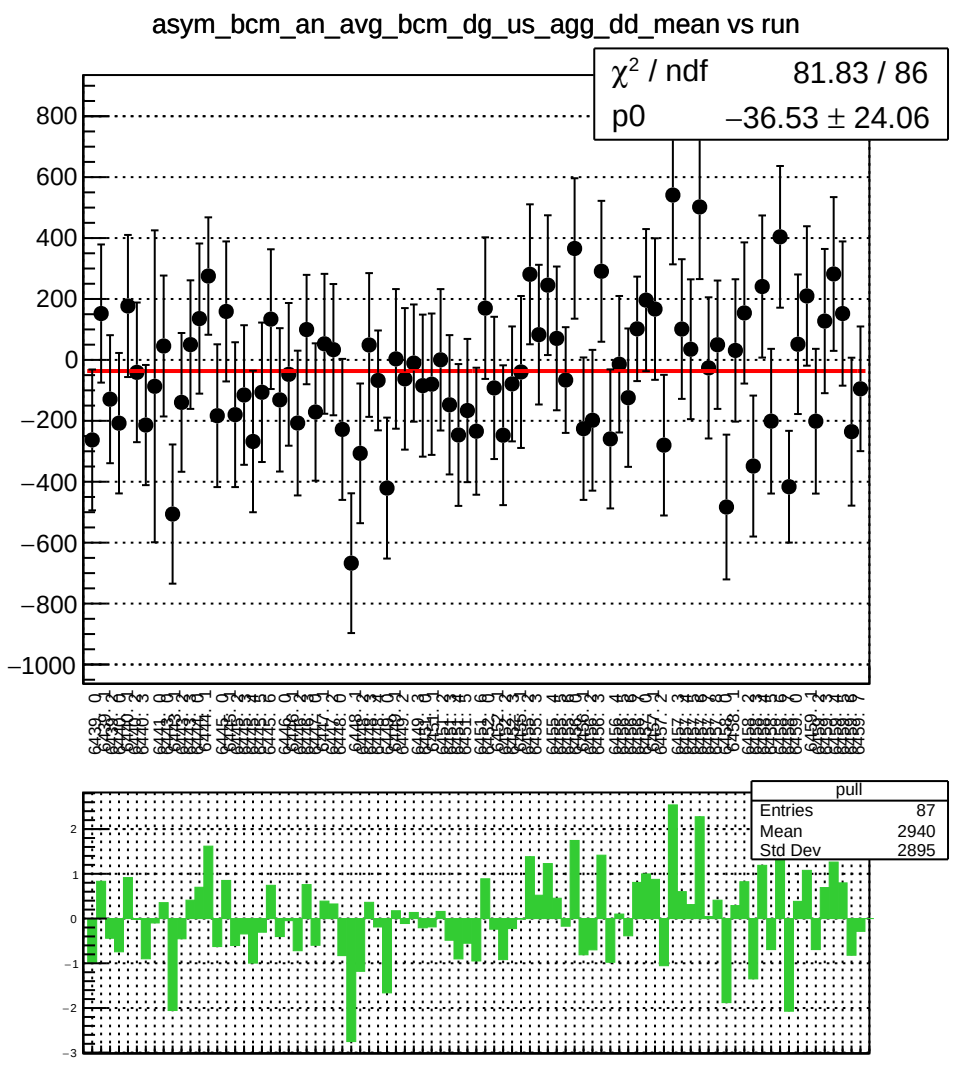

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 25.91 / 86
p0 −219.6 ± 222.8
pull
Entries 87
Mean 244.4
Std Dev 191.4
pull1D
Entries 87
Mean −0.005682
Std Dev 0.5456

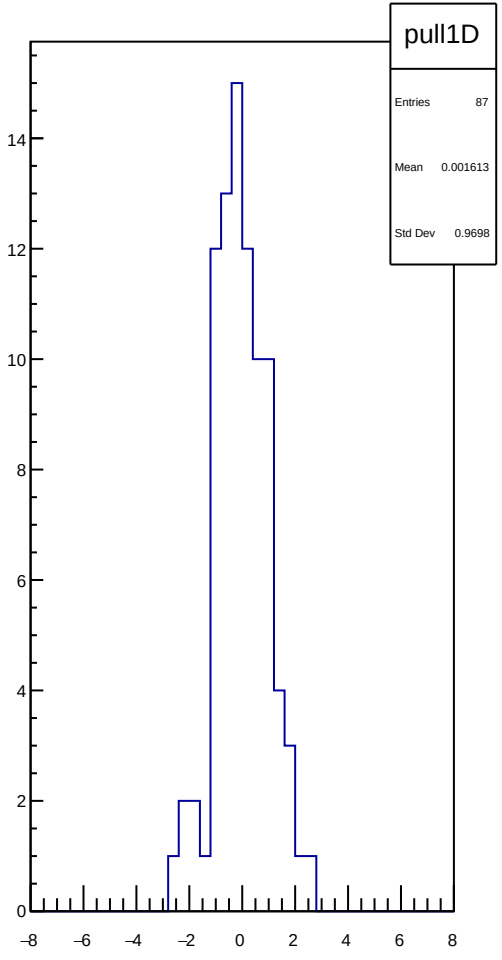

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.369e+04 / 86
p0 202.7 ± 0.1576
500
450
400
350
300
250
200
150

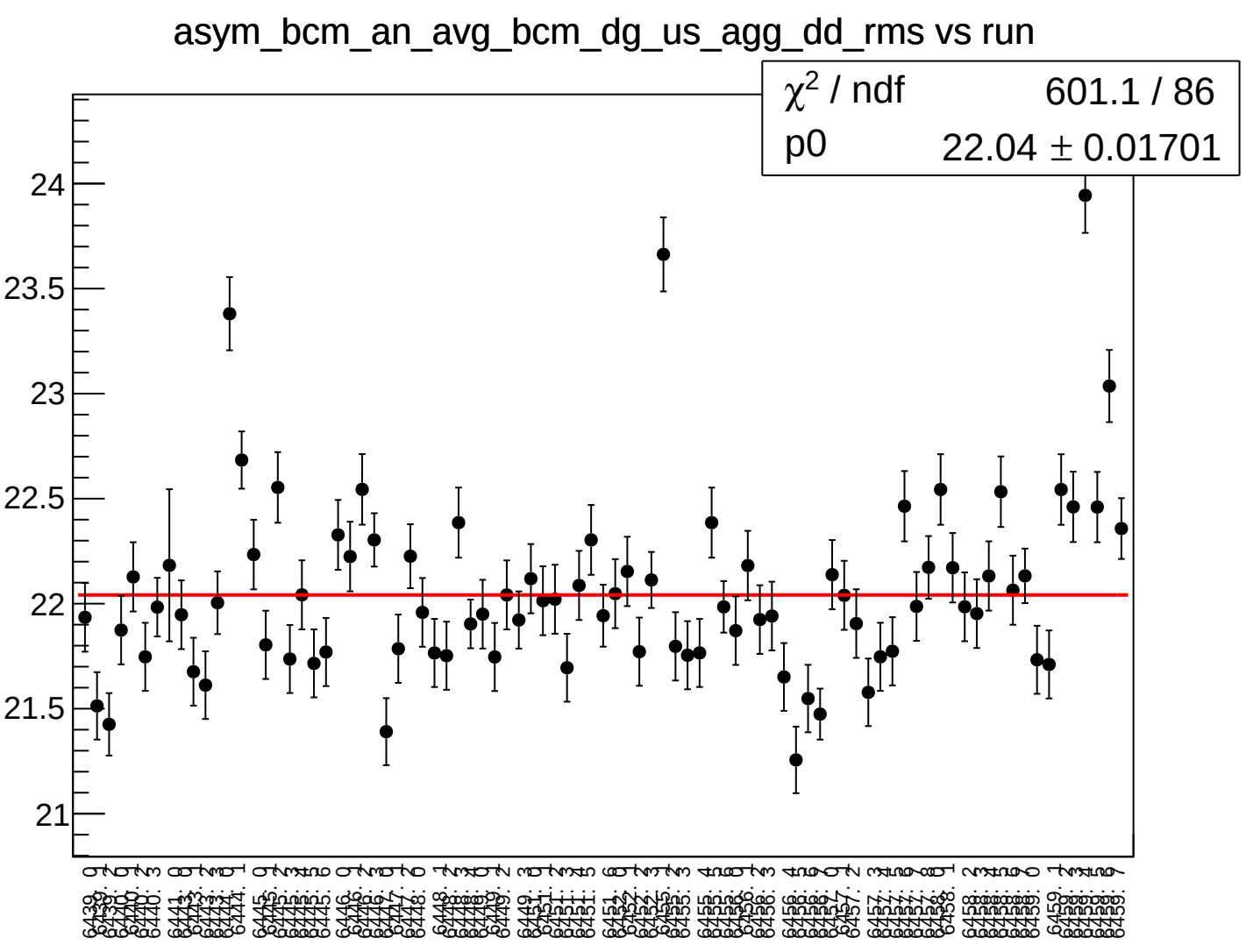

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ^2 / ndf 88.19 / 86
p0 6.117 ± 18.05
600
400
200
0
−200
−400
−600
pull
Entries 87
Mean 63.03
Std Dev 70.12
2
1
0
−1
−2

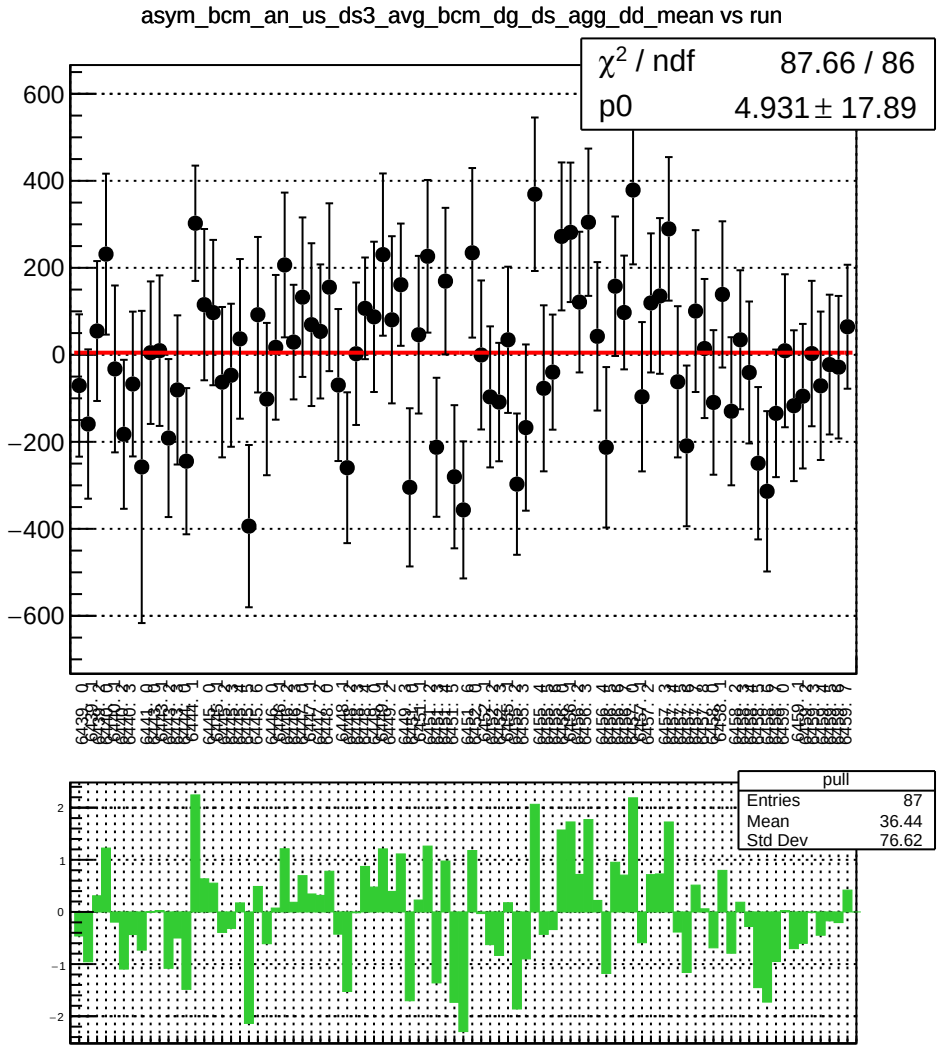

pull1D
Entries 87
Mean −0.01974
Std Dev 1.007
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

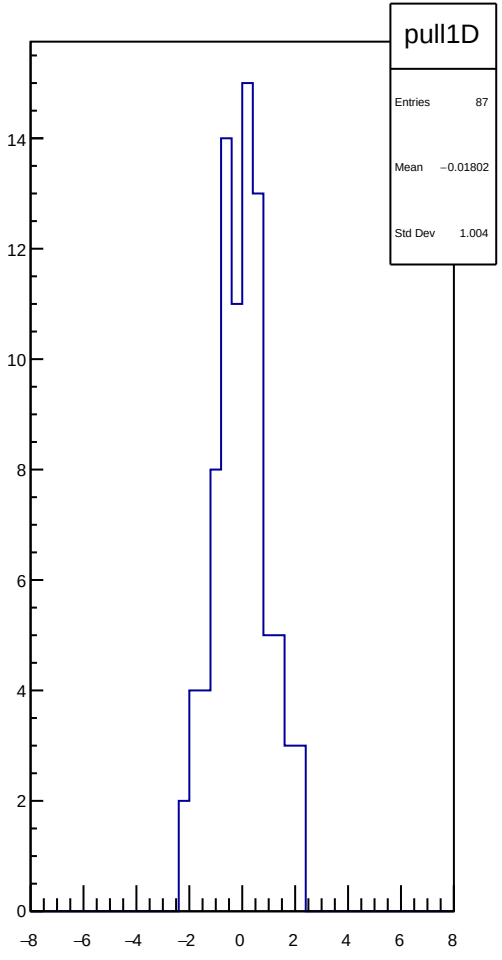

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4893 / 86
p0 16.52 ± 0.01277
19
18.5
18
17.5
17
16.5
16
15.5
15

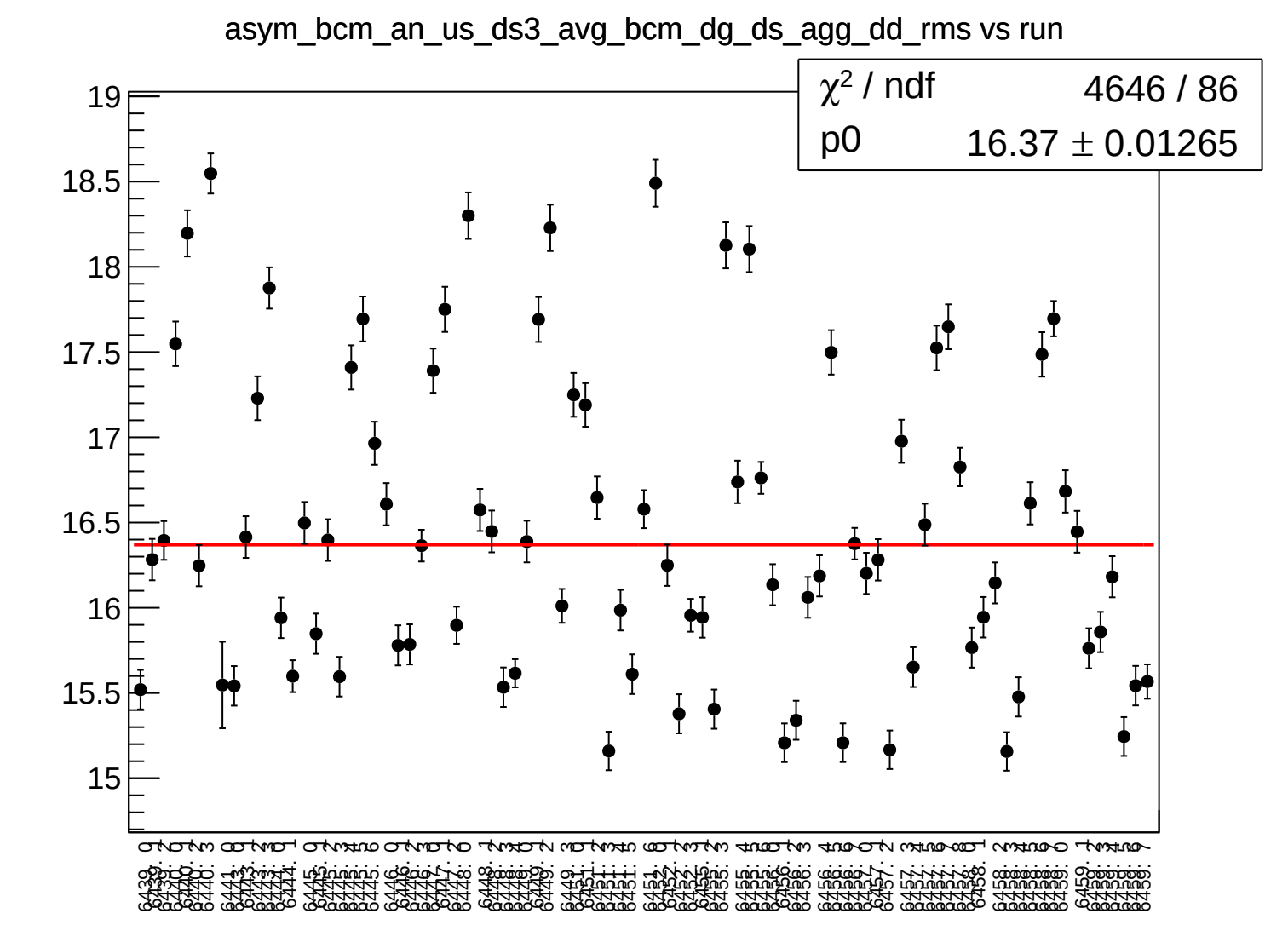

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 81.83 / 86
p0 −36.53 ± 24.06
pull
Entries 87
Mean 2940
Std Dev 2895

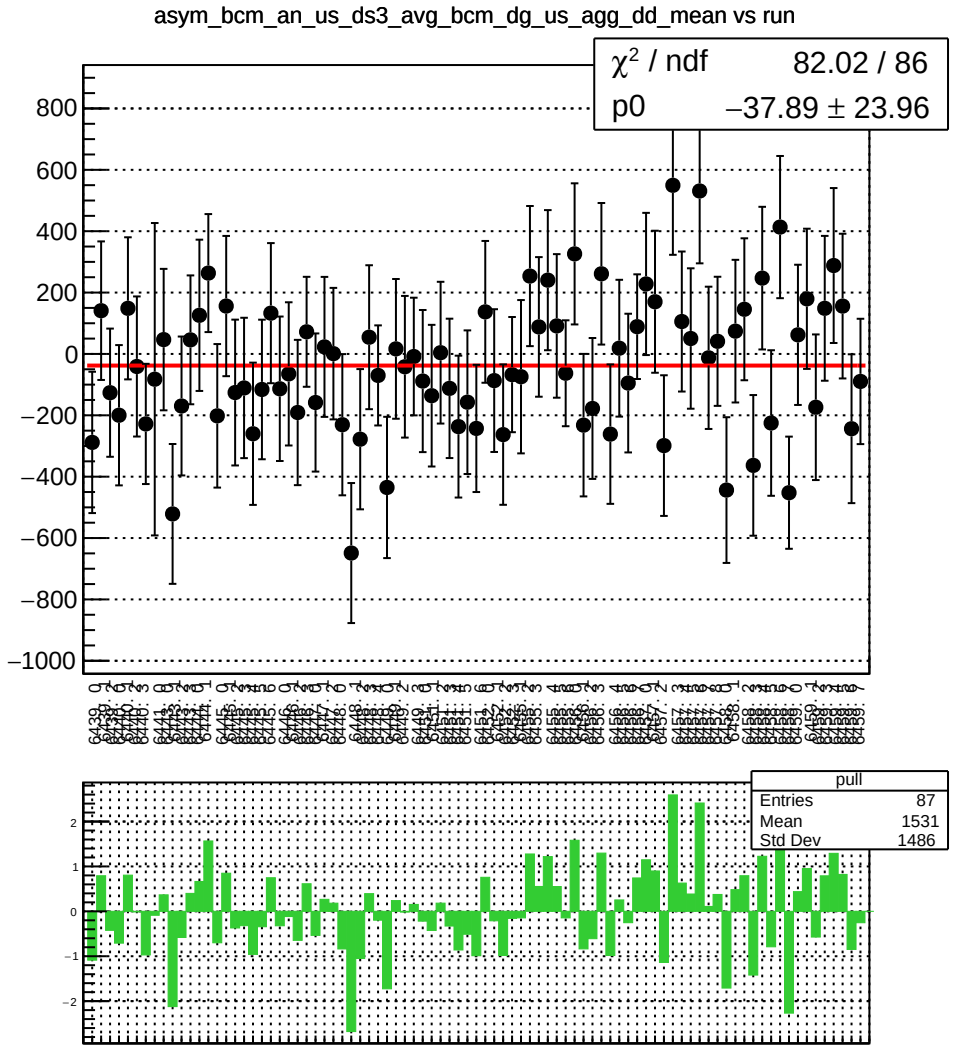

pull1D
Entries 87
Mean 0.001613
Std Dev 0.9698

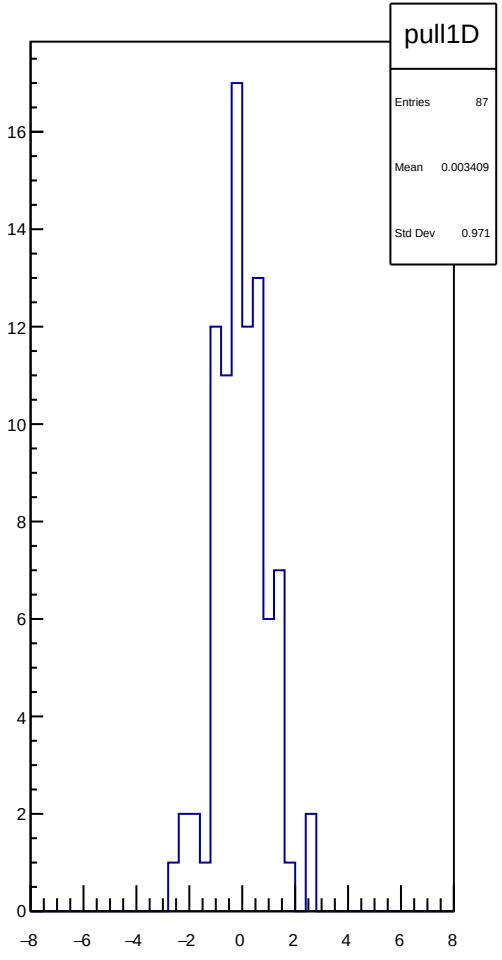

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 601.1 / 86
p0 22.04 ± 0.01701
24
23.5
23
22.5
22
21.5
21

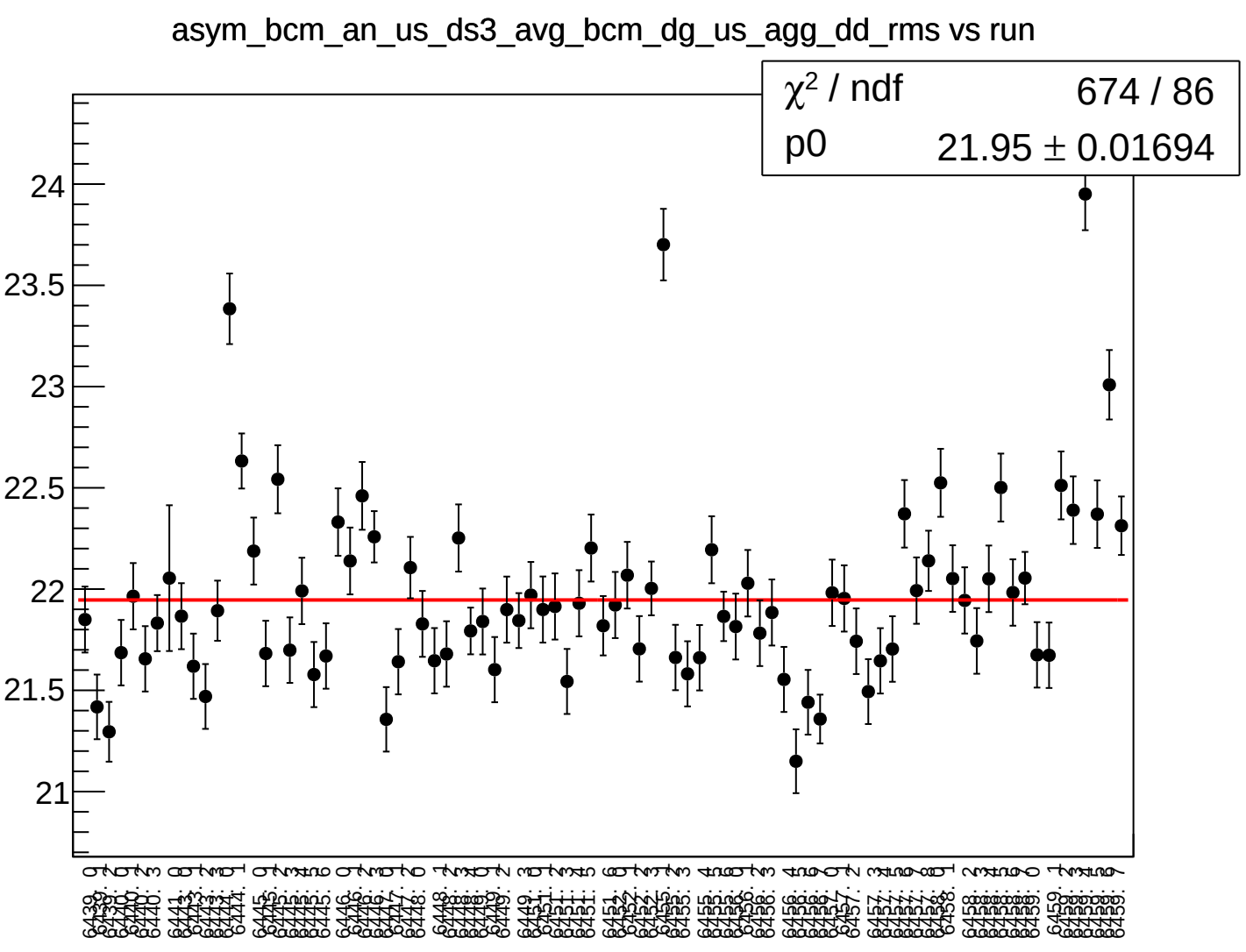

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 87.66 / 86
p0 4.931 ± 17.89
600
400
200
0
−200
−400
−600
pull
Entries 87
Mean 36.44
Std Dev 76.62
2
1
0
−1
−2

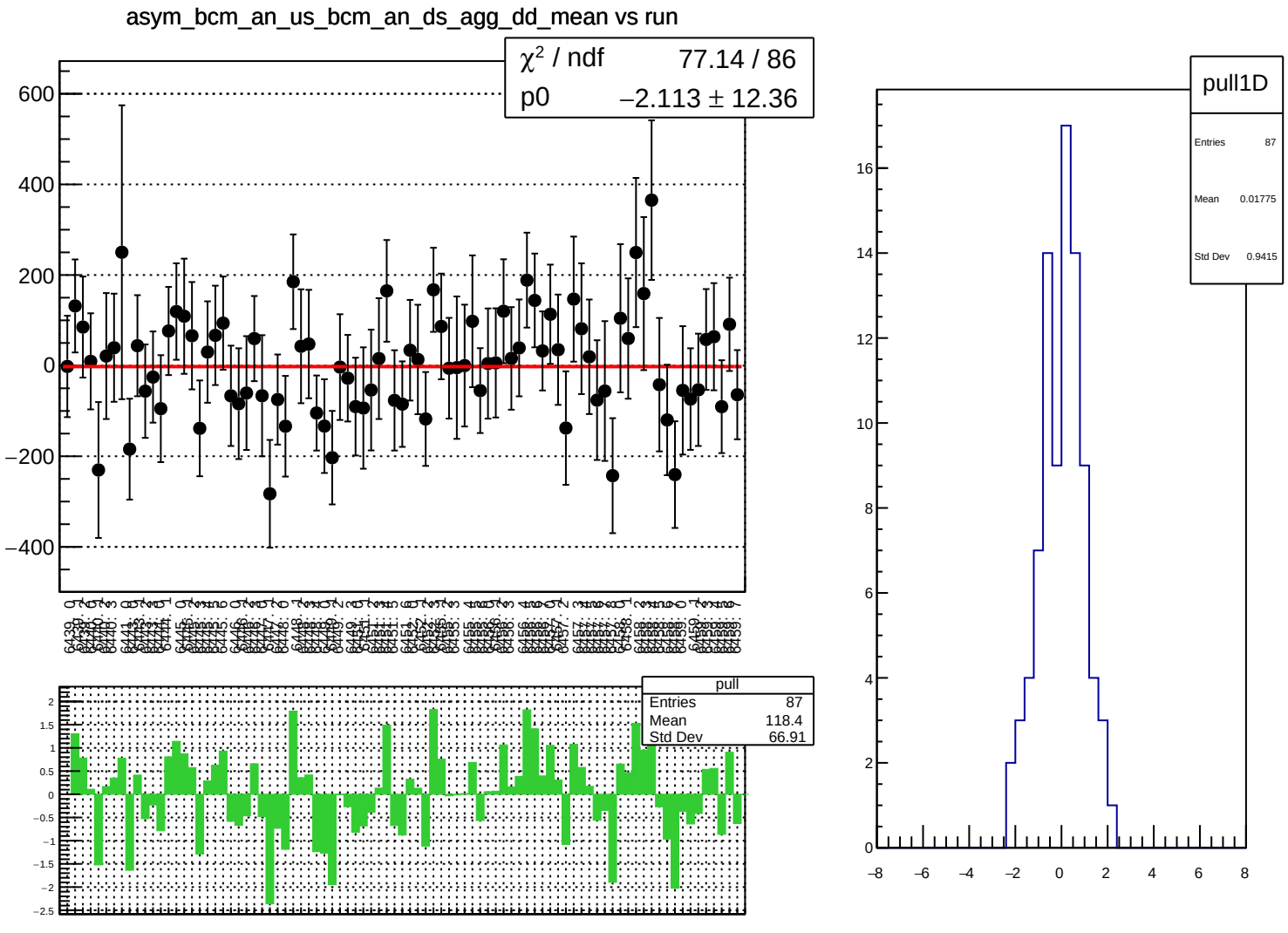

pull1D
Entries 87
Mean −0.01802
Std Dev 1.004
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

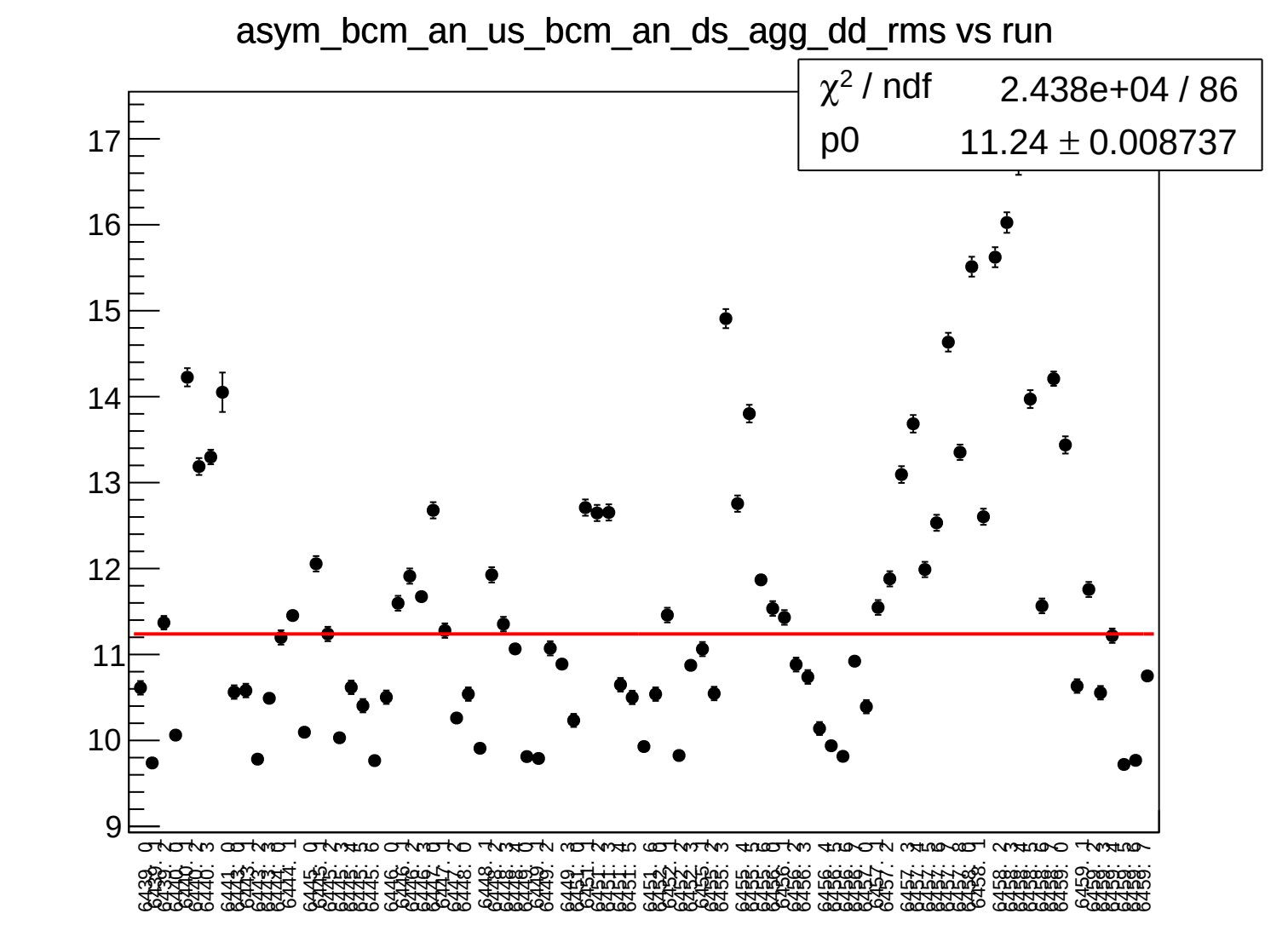

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4646 / 86
p0 16.37 ± 0.01265
19
18.5
18
17.5
17
16.5
16
15.5
15

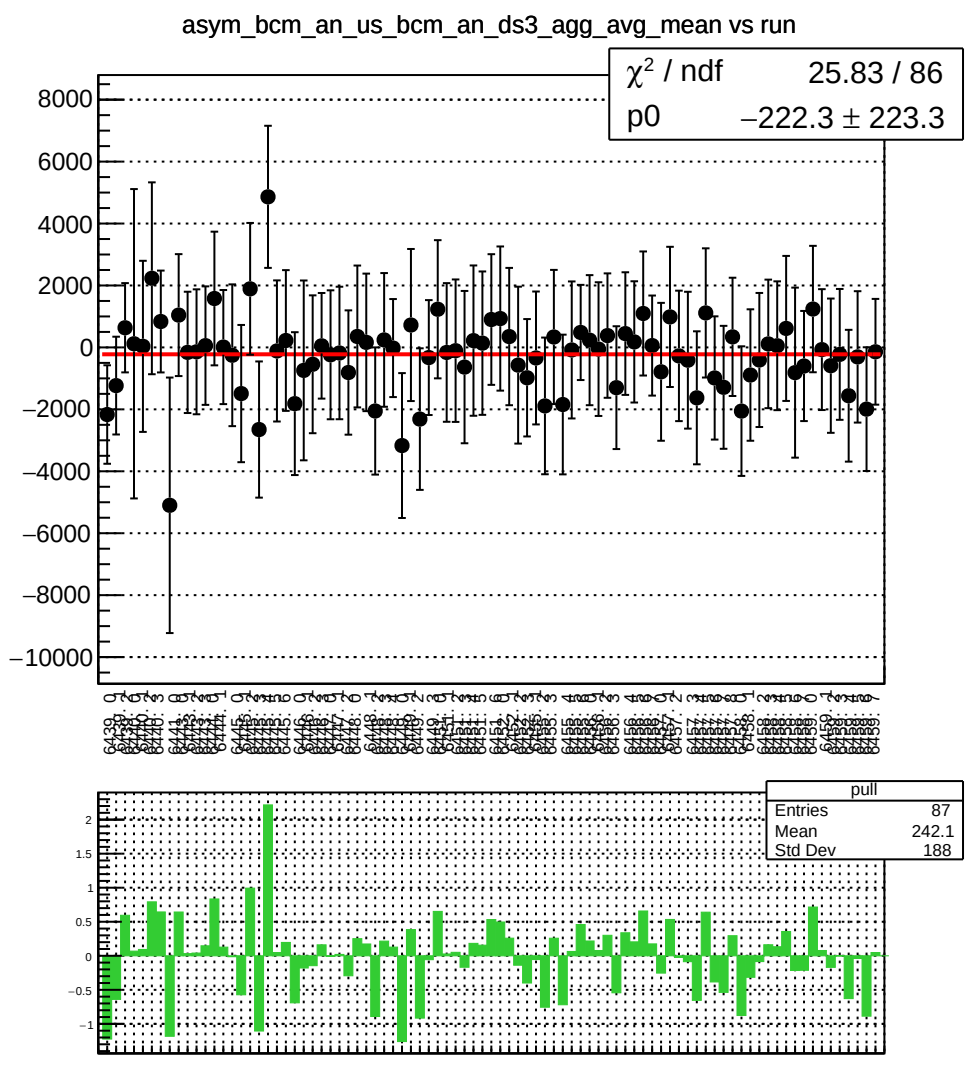

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 82.02 / 86
p0 −37.89 ± 23.96
pull
Entries 87
Mean 1531
Std Dev 1486

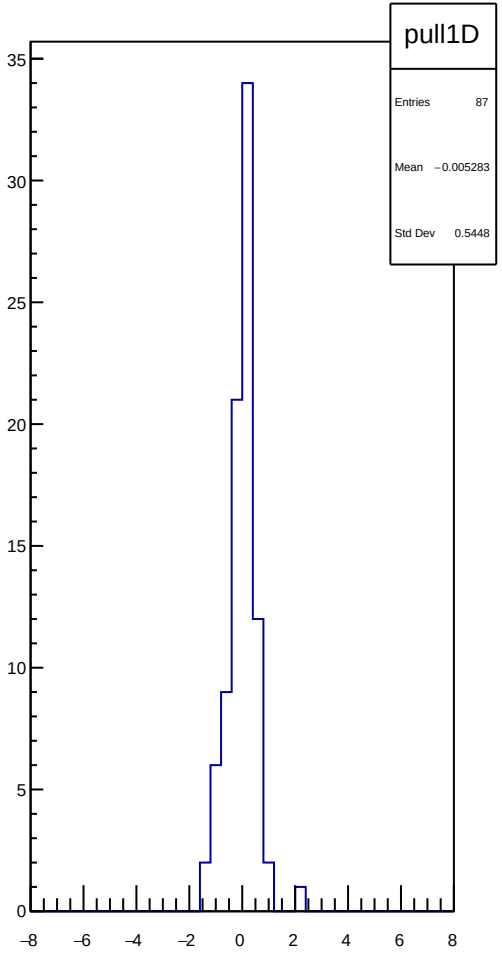

pull1D
Entries 87
Mean 0.003409
Std Dev 0.971

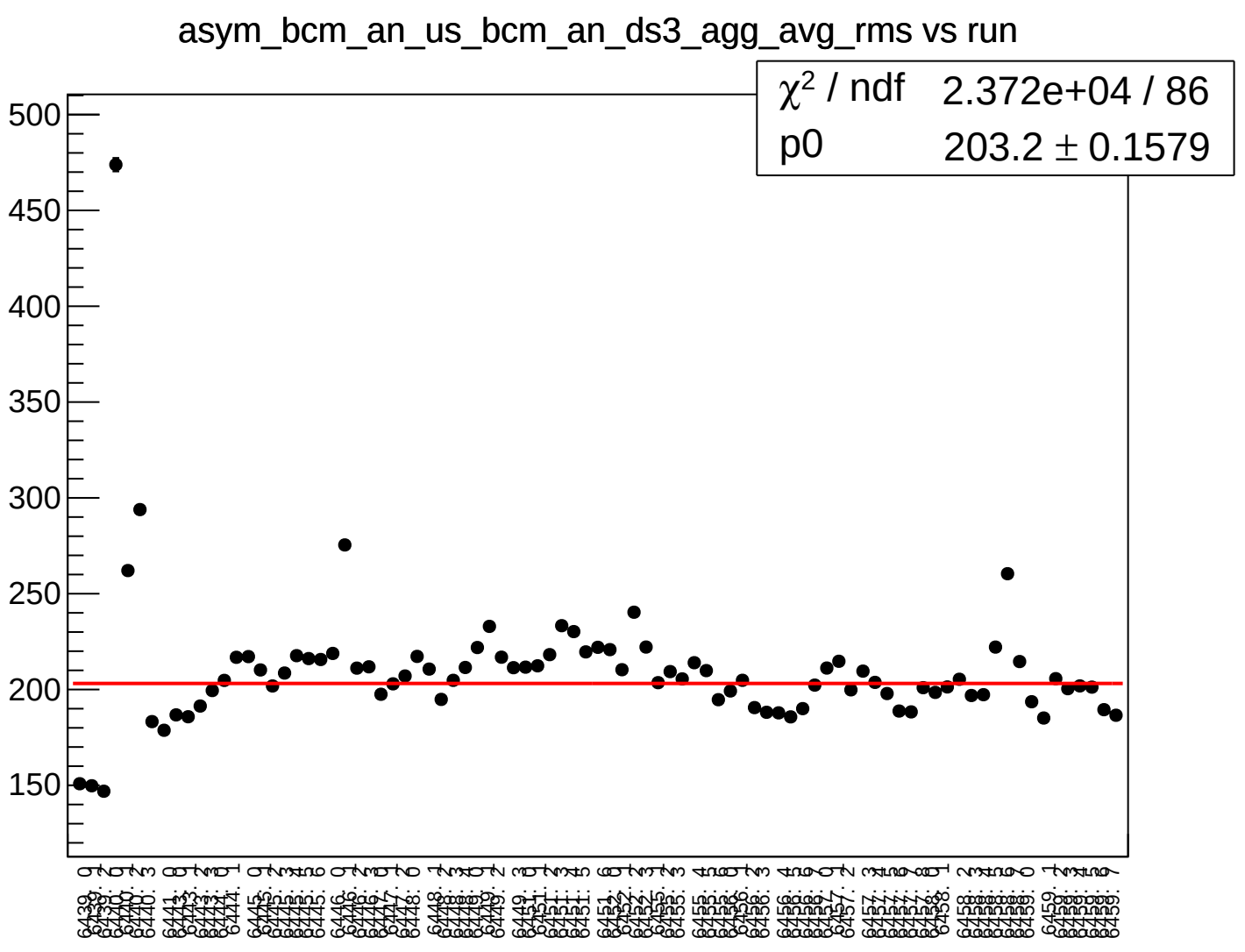

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 674 / 86
p0 21.95 ± 0.01694
24
23.5
23
22.5
22
21.5
21

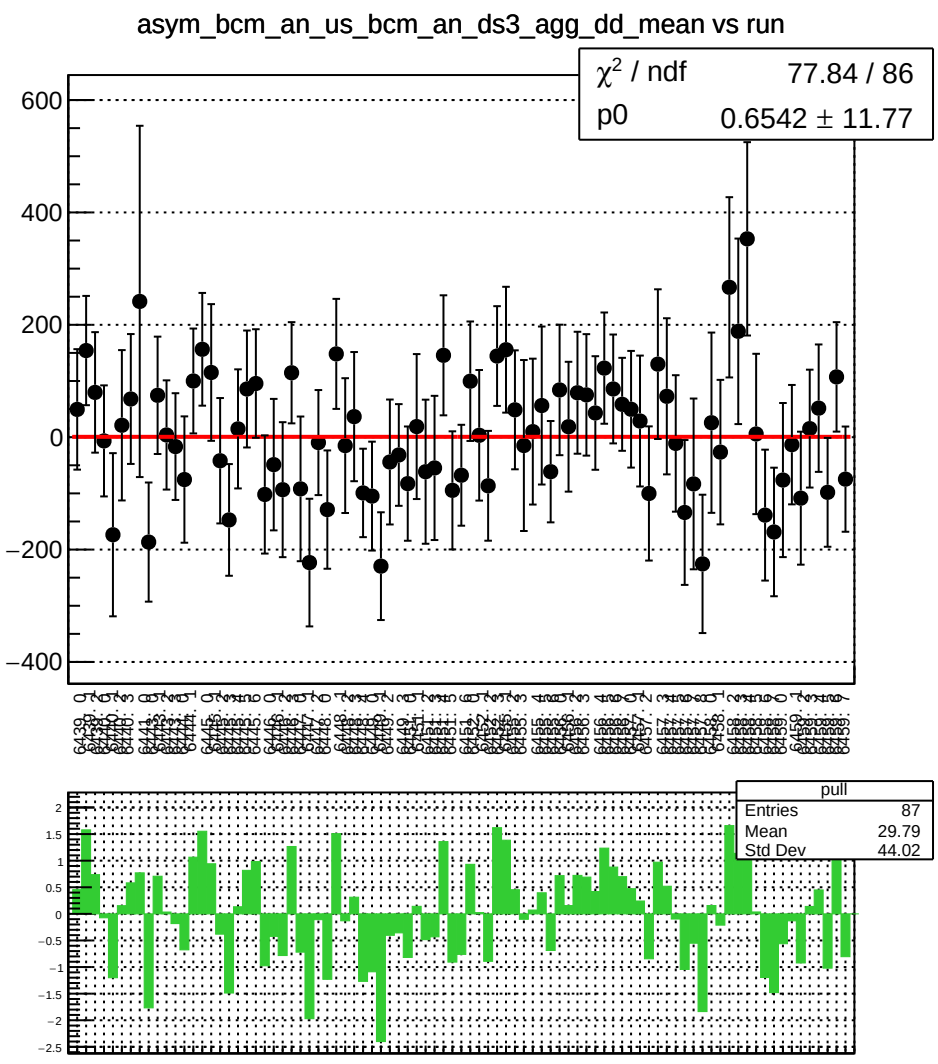

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 77.14 / 86
p0 −2.113 ± 12.36
600
400
200
0
−200
−400
pull
Entries 87
Mean 118.4
Std Dev 66.91
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 87
Mean 0.01775
Std Dev 0.9415
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

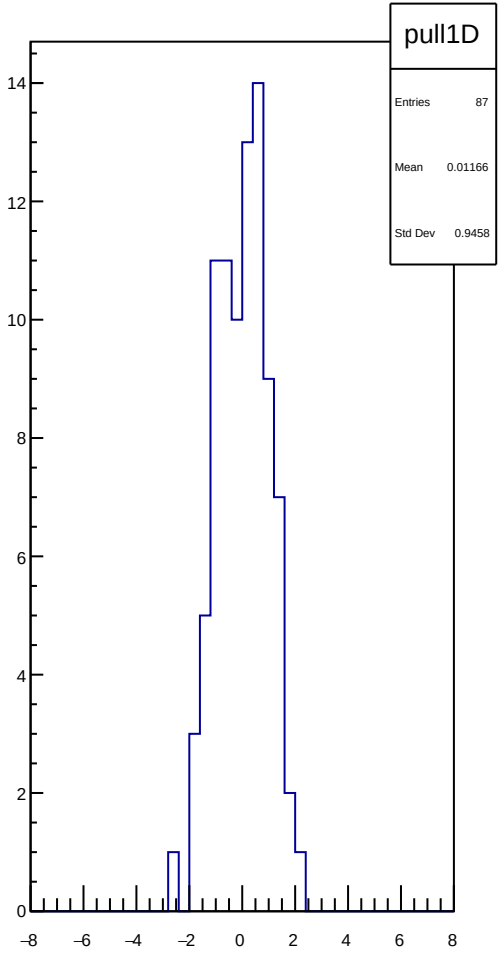

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.438e+04 / 86
p0 11.24 ± 0.008737
17
16
15
14
13
12
11
10
9

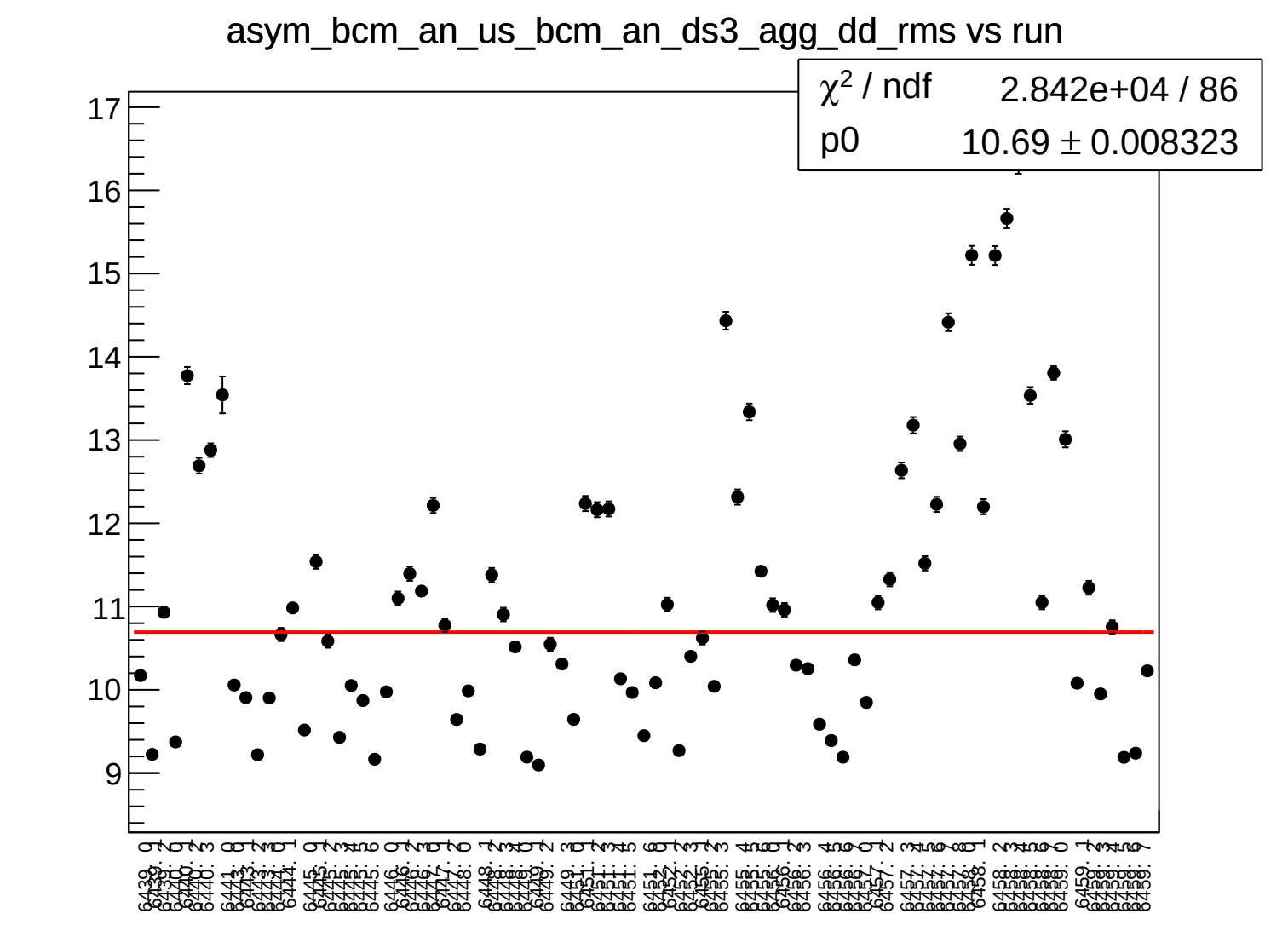

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 25.83 / 86
p0 −222.3 ± 223.3
pull
Entries 87
Mean 242.1
Std Dev 188

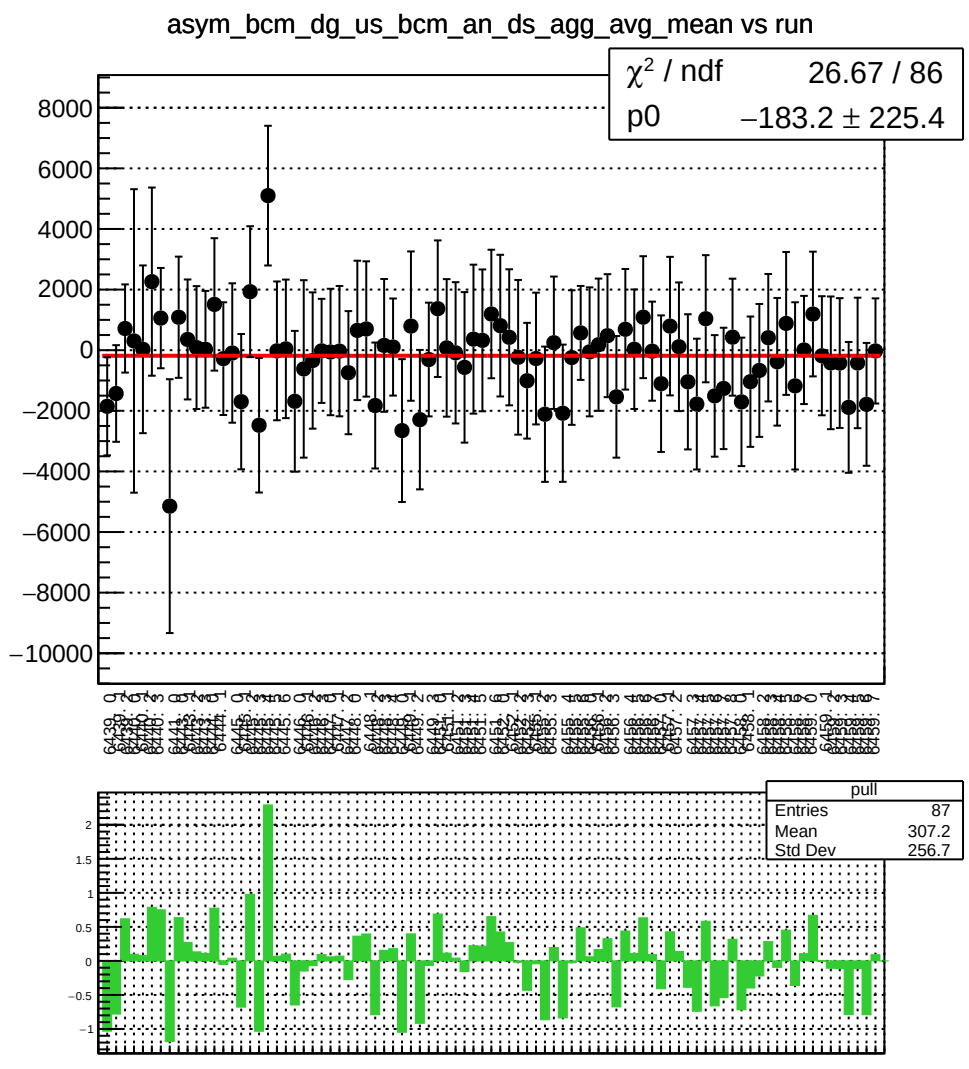

pull1D
Entries 87
Mean −0.005283
Std Dev 0.5448

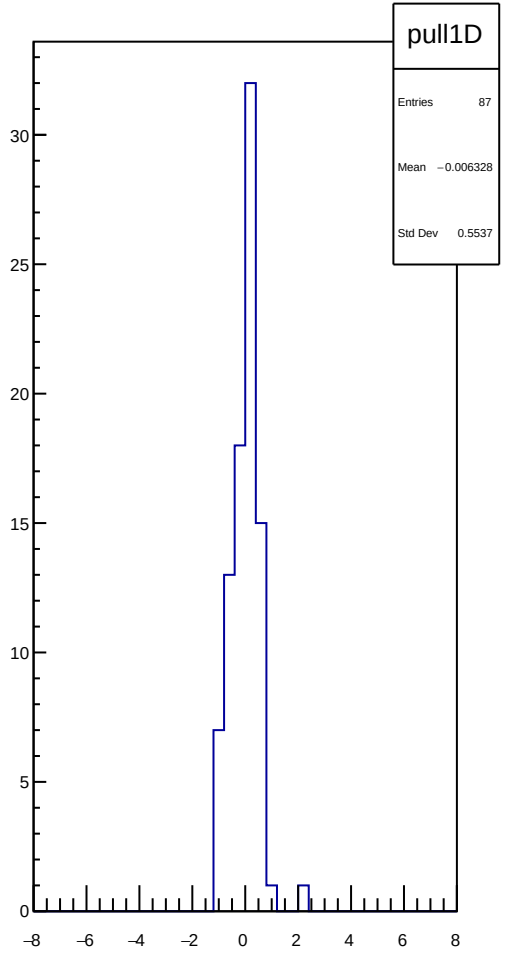

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2.372e+04 / 86
p0 203.2 ± 0.1579
500
450
400
350
300
250
200
150

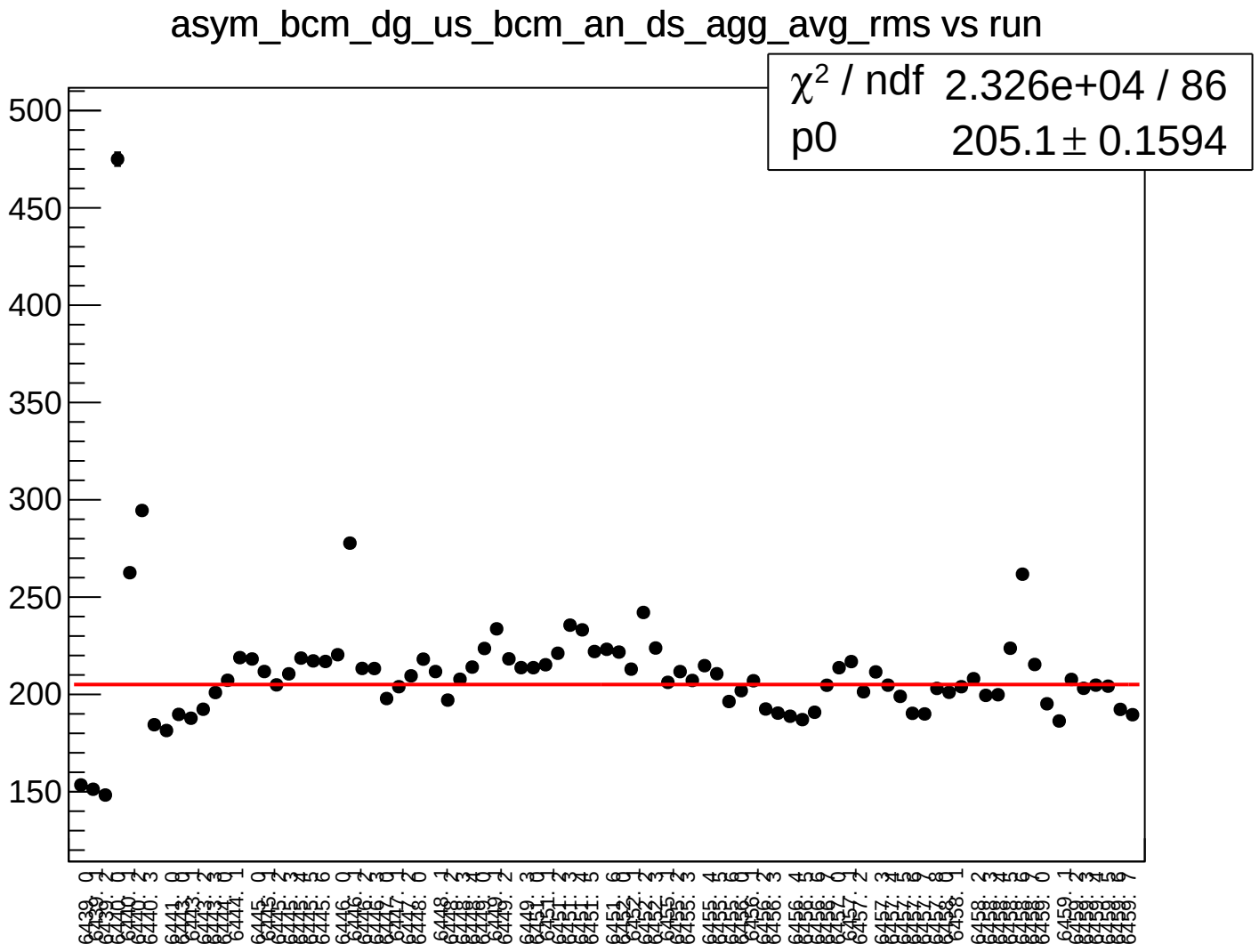

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 77.84 / 86
p0 0.6542 ± 11.77
pull
Entries 87
Mean 29.79
Std Dev 44.02

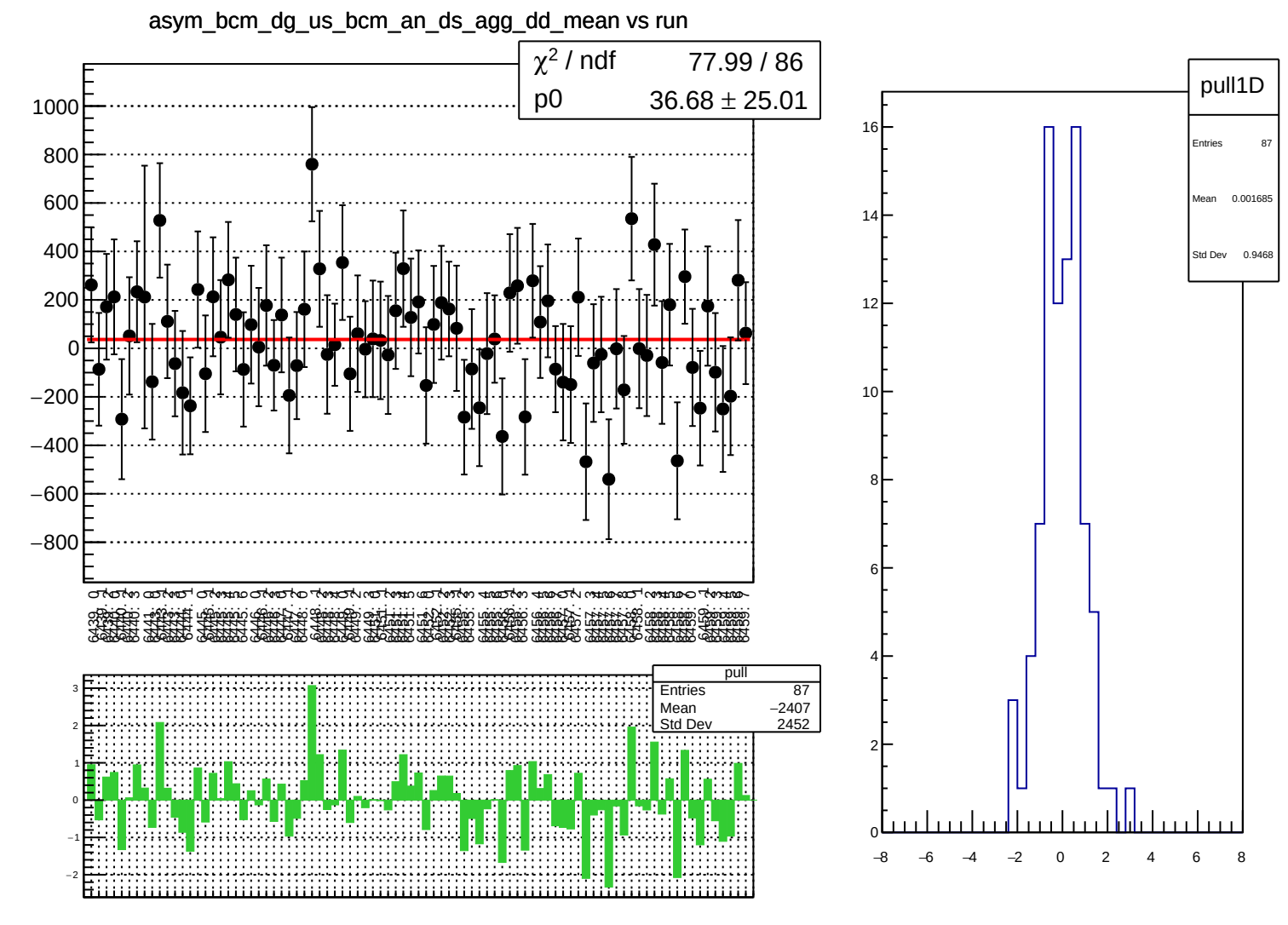

pull1D
Entries 87
Mean 0.01166
Std Dev 0.9458

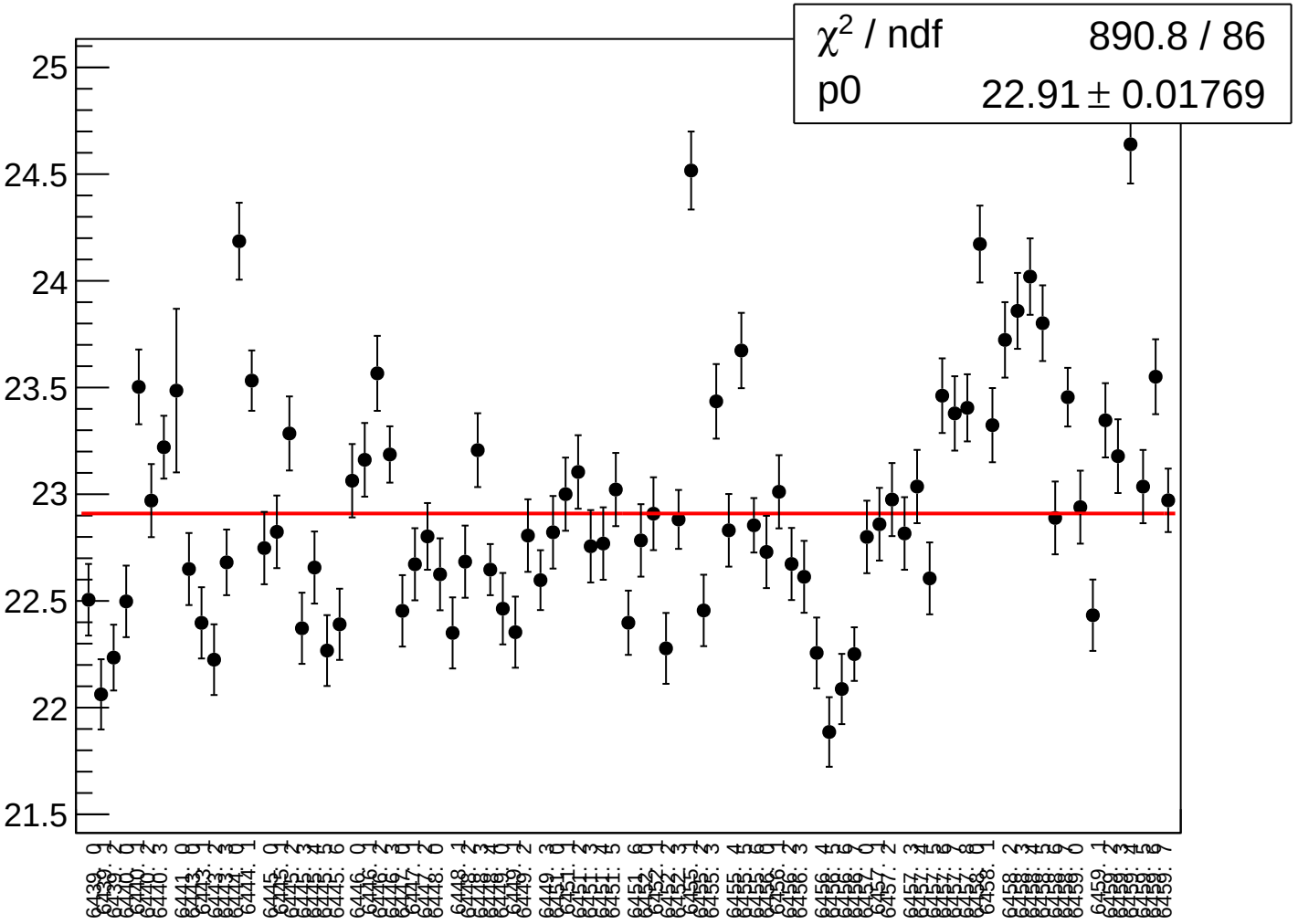

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.842e+04 / 86
p0 10.69 ± 0.008323
17
16
15
14
13
12
11
10
9

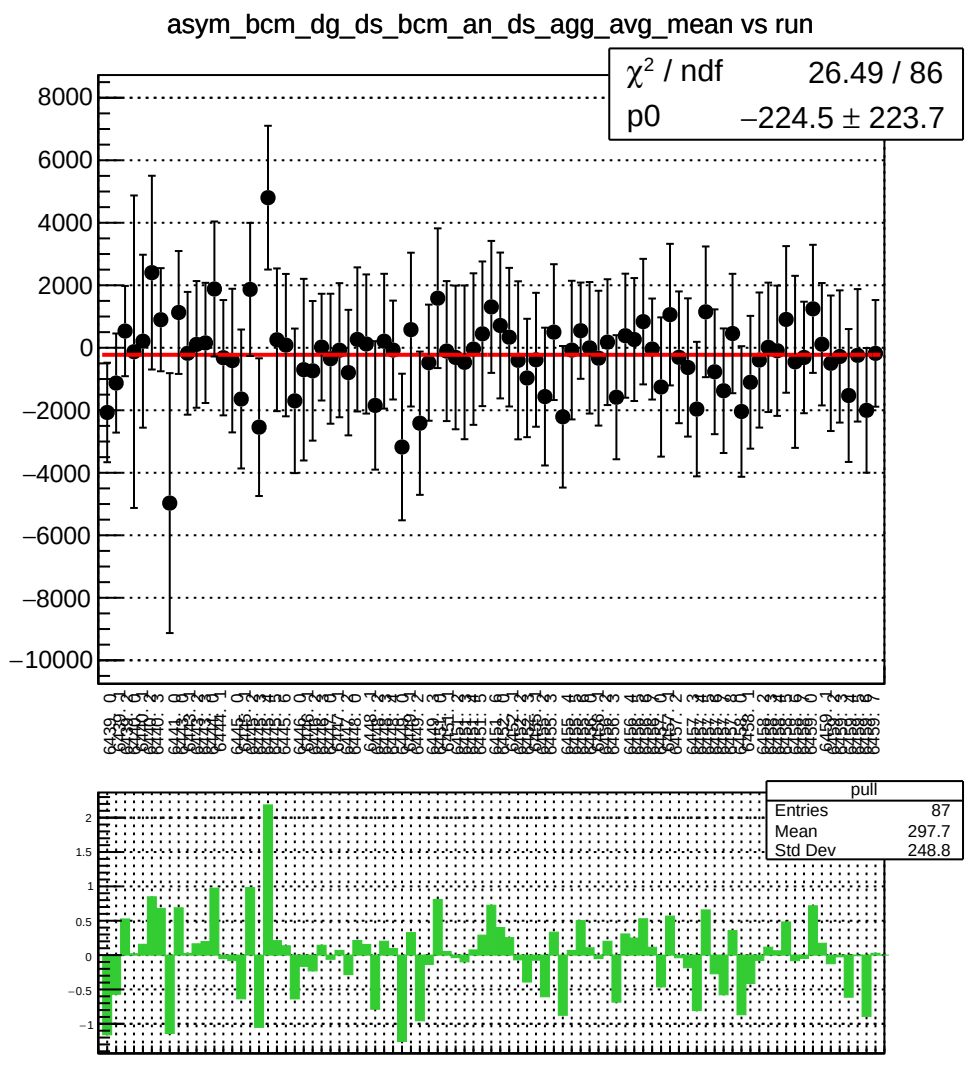

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 26.67 / 86
p0 −183.2 ± 225.4
pull
Entries 87
Mean 307.2
Std Dev 256.7

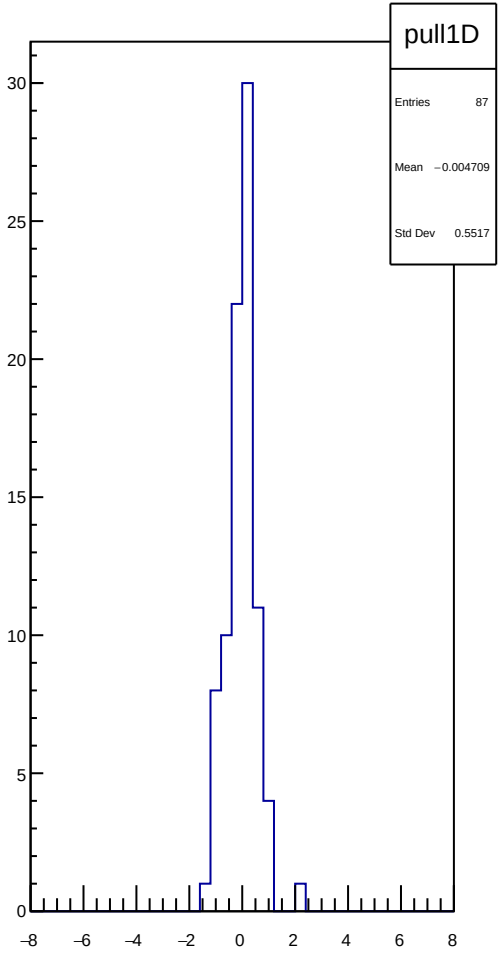

pull1D
Entries 87
Mean −0.006328
Std Dev 0.5537

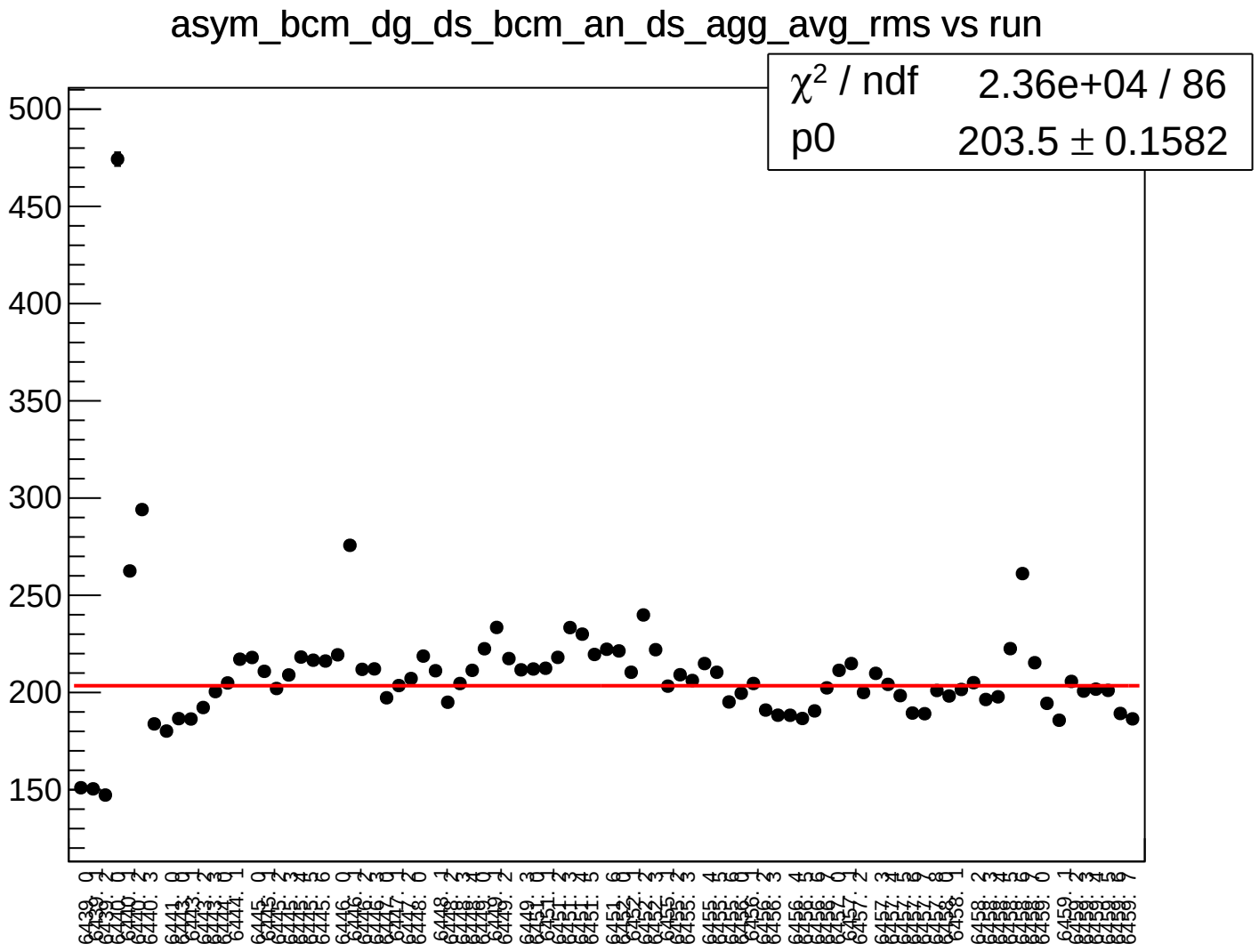

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.326e+04 / 86
p0 205.1 ± 0.1594
500
450
400
350
300
250
200
150

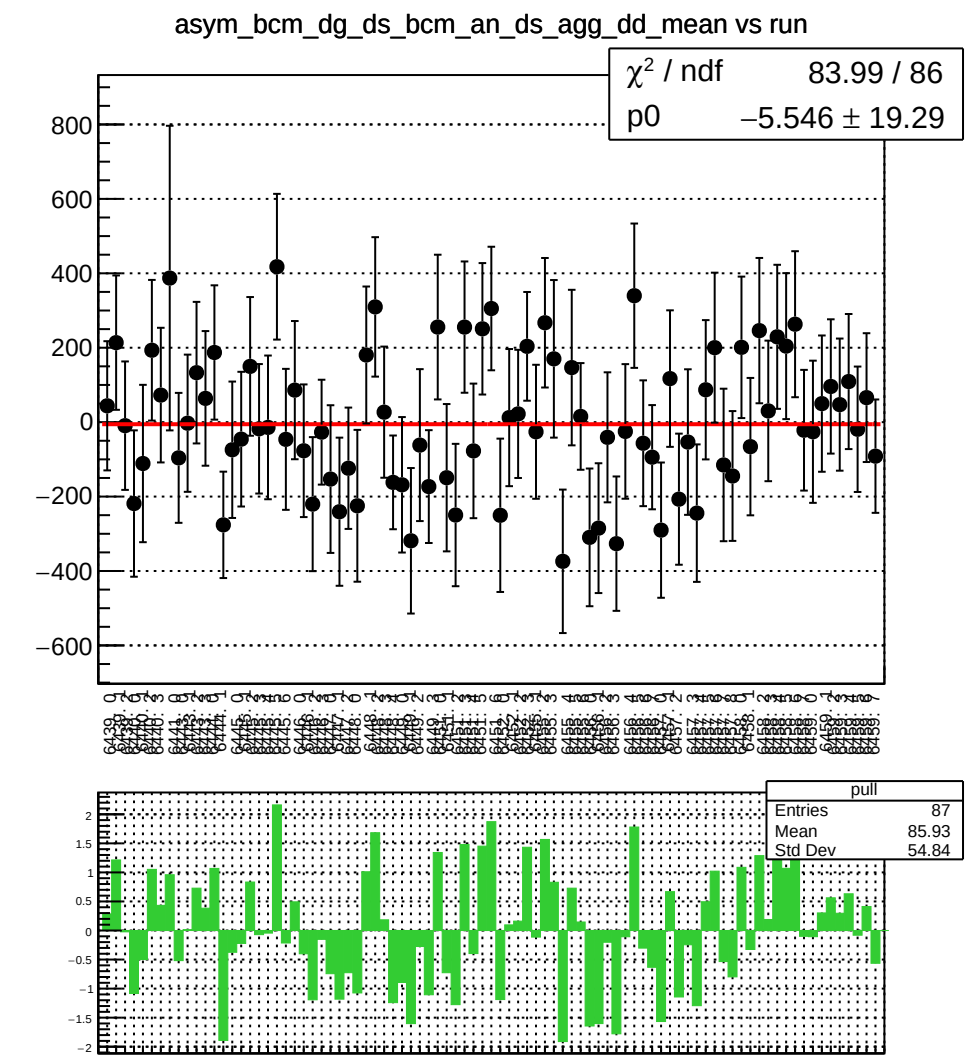

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 77.99 / 86
p0 36.68 ± 25.01
pull
Entries 87
Mean −2407
Std Dev 2452
pull1D
Entries 87
Mean 0.001685
Std Dev 0.9468

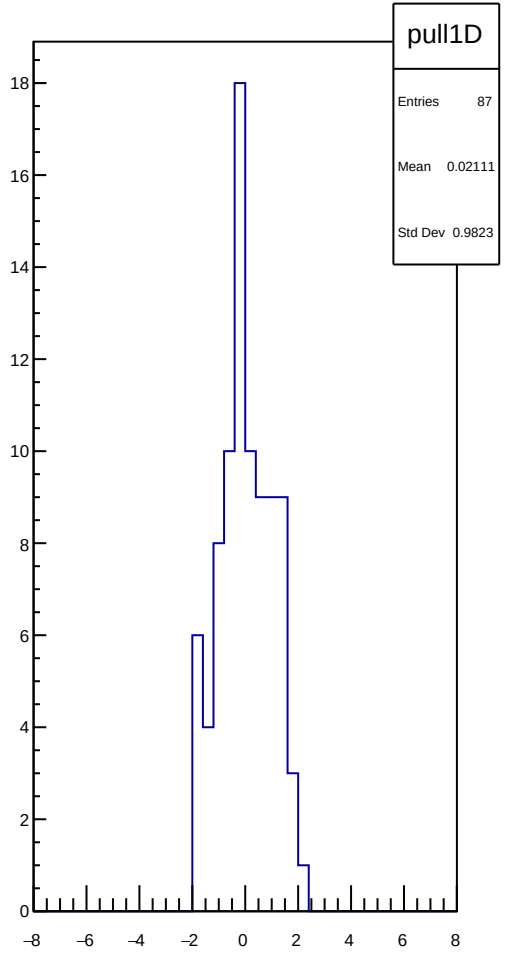

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 890.8 / 86
p0 22.91 ± 0.01769
25
24.5
24
23.5
23
22.5
22
21.5

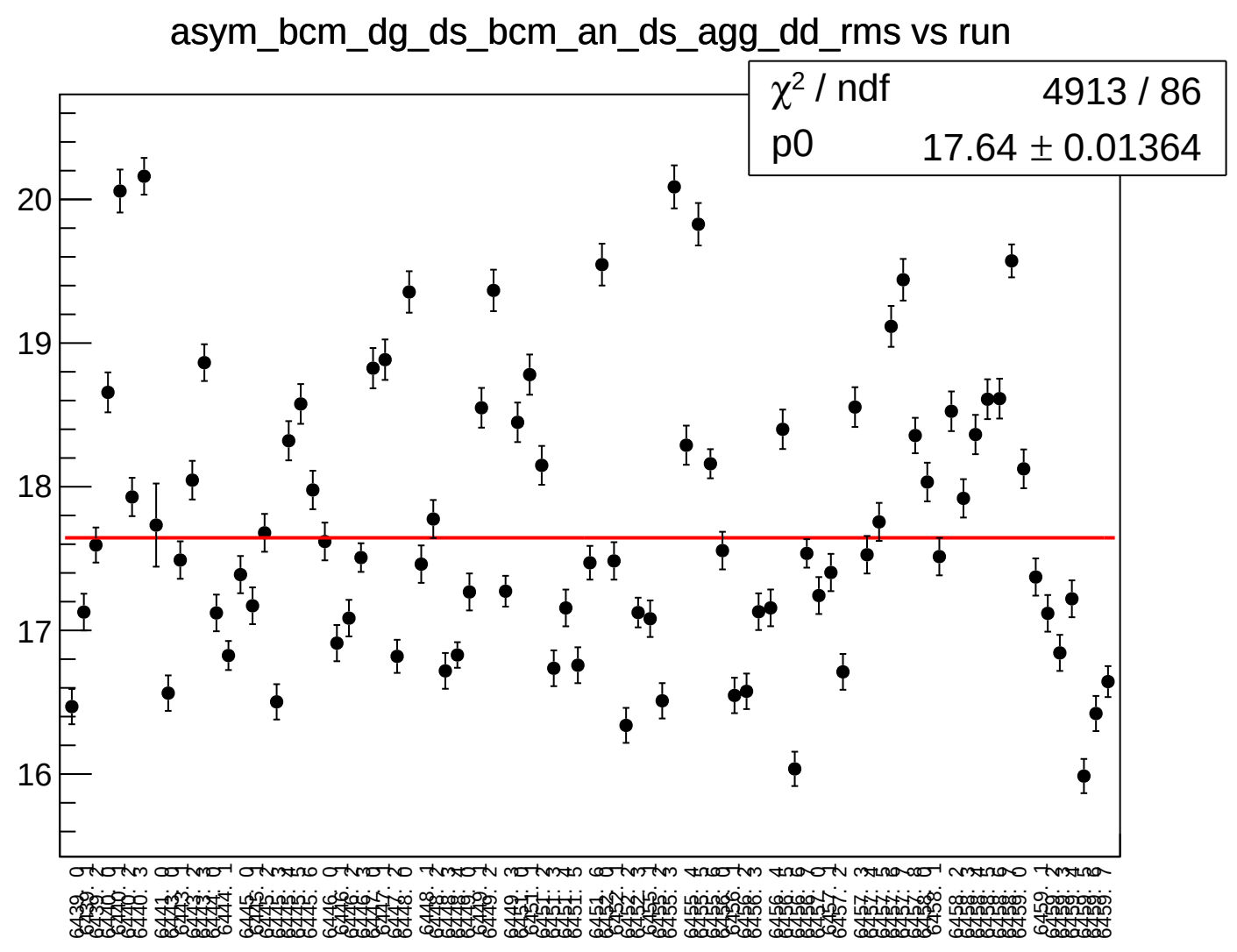

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 26.49 / 86
p0 −224.5 ± 223.7
pull
Entries 87
Mean 297.7
Std Dev 248.8

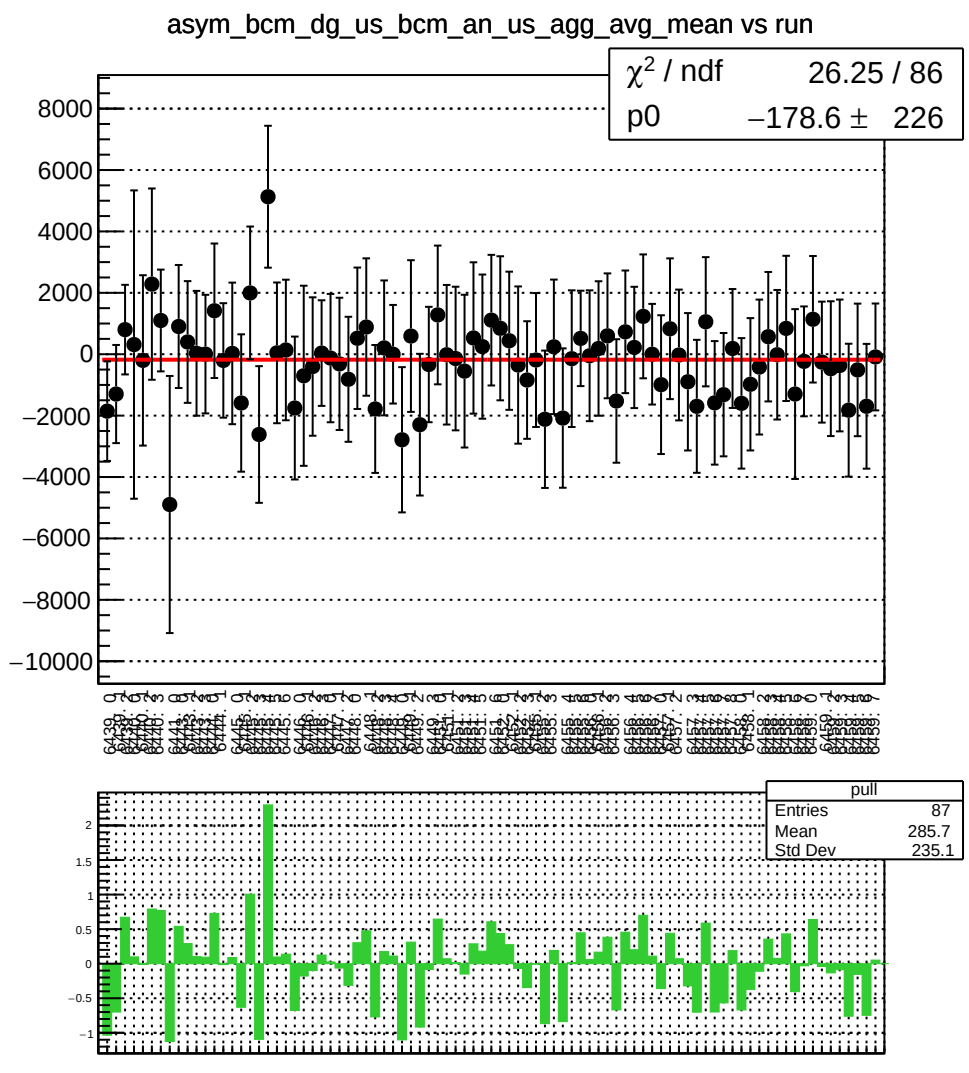

pull1D
Entries 87
Mean −0.004709
Std Dev 0.5517

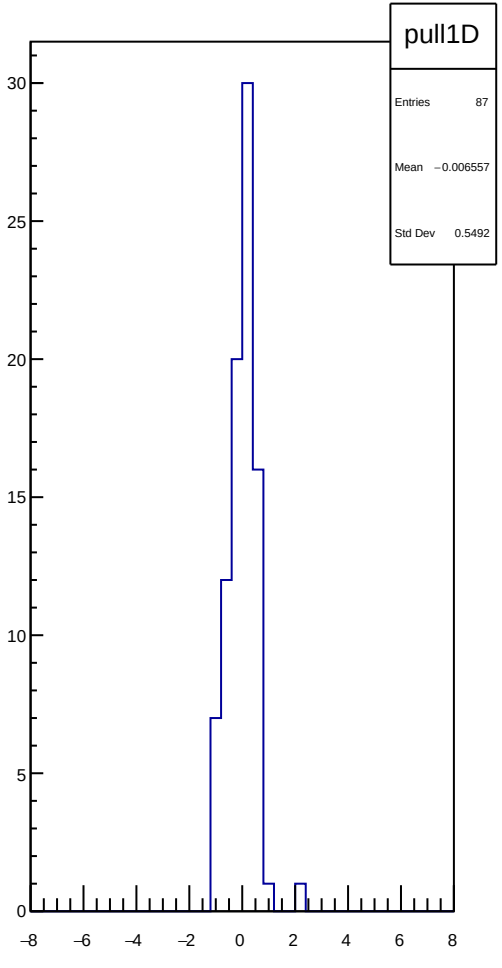

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.36e+04 / 86
p0 203.5 ± 0.1582
500
450
400
350
300
250
200
150

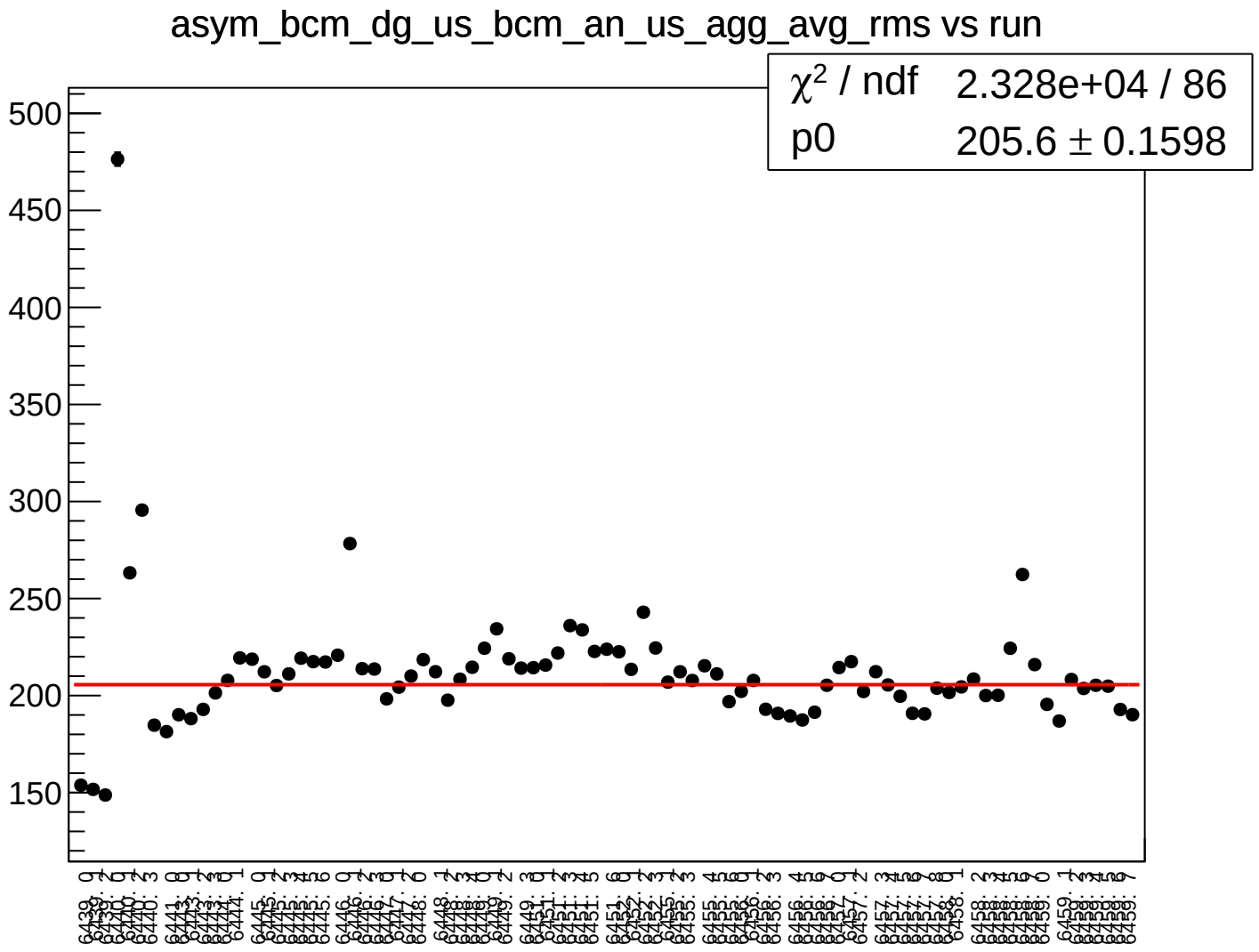

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 83.99 / 86
p0 −5.546 ± 19.29
pull
Entries 87
Mean 85.93
Std Dev 54.84

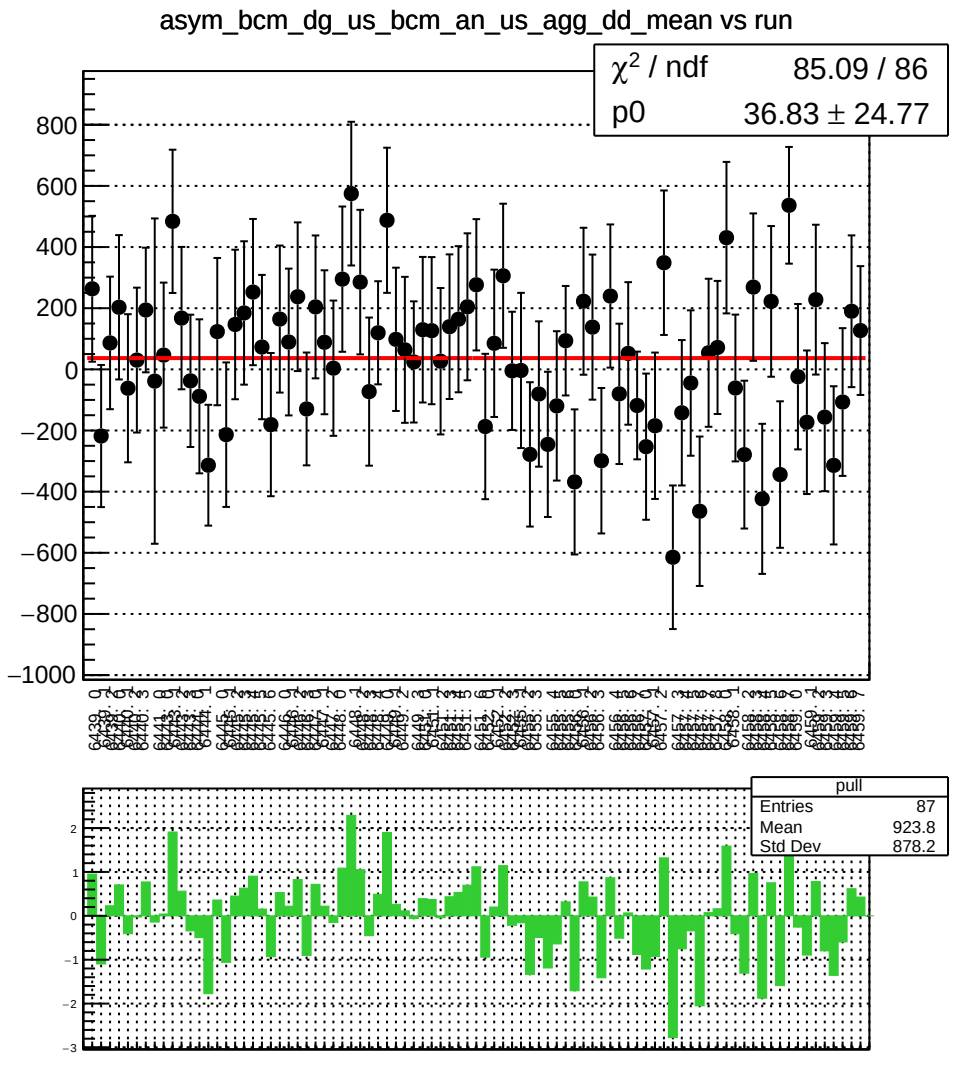

pull1D
Entries 87
Mean 0.02111
Std Dev 0.9823

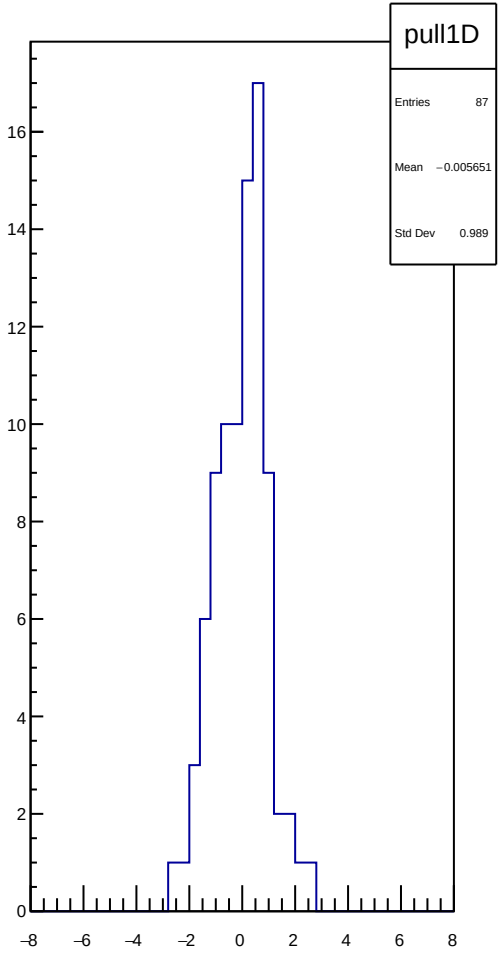

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4913 / 86
p0 17.64 ± 0.01364
20
19
18
17
16

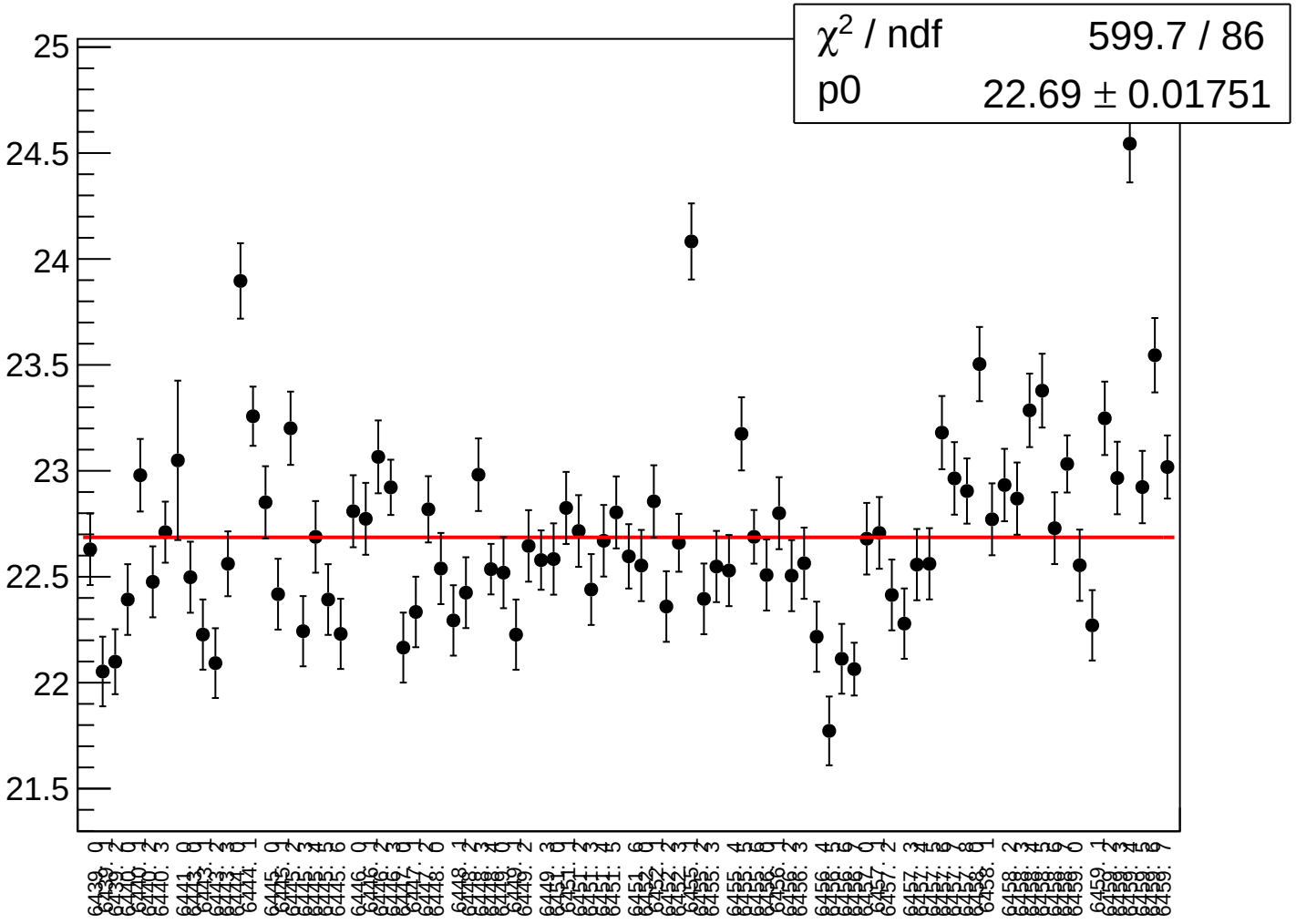

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 26.25 / 86
p0 −178.6 ± 226
pull
Entries 87
Mean 285.7
Std Dev 235.1

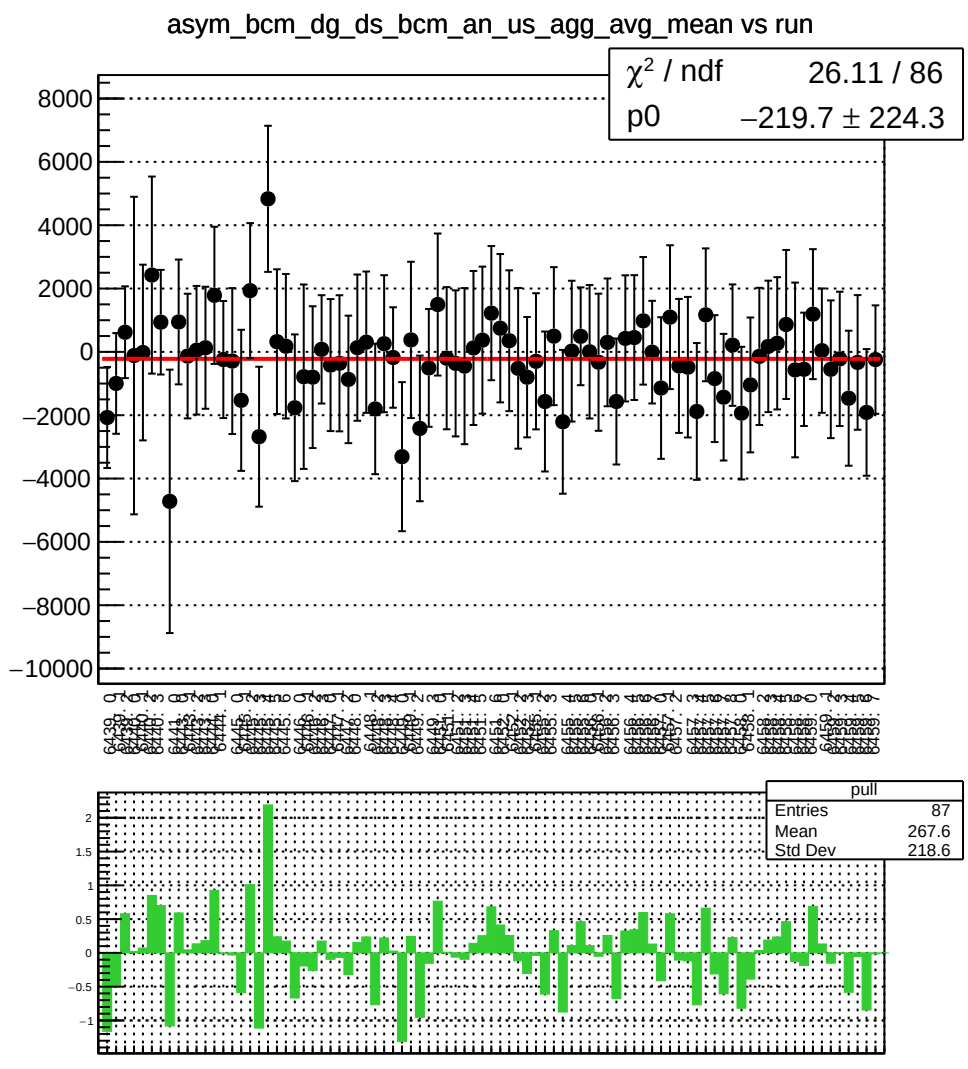

pull1D
Entries 87
Mean −0.006557
Std Dev 0.5492

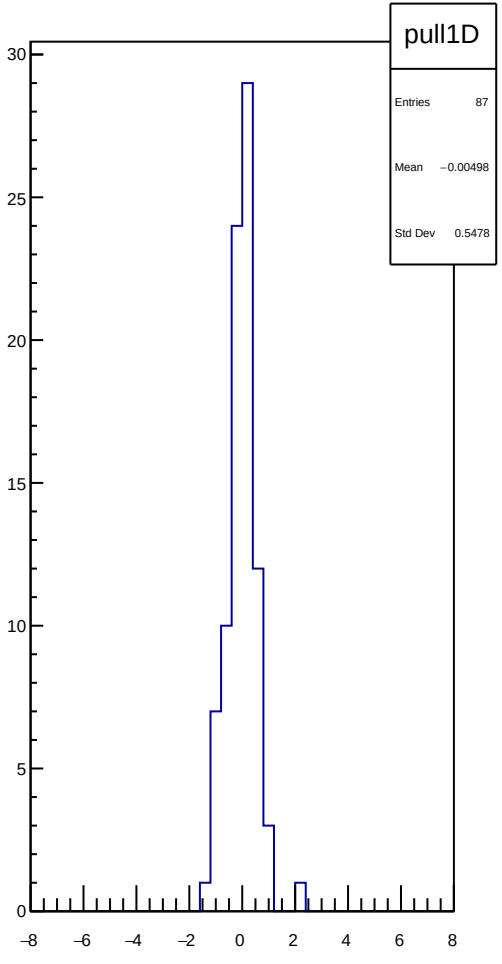

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.328e+04 / 86
p0 205.6 ± 0.1598
500
450
400
350
300
250
200
150

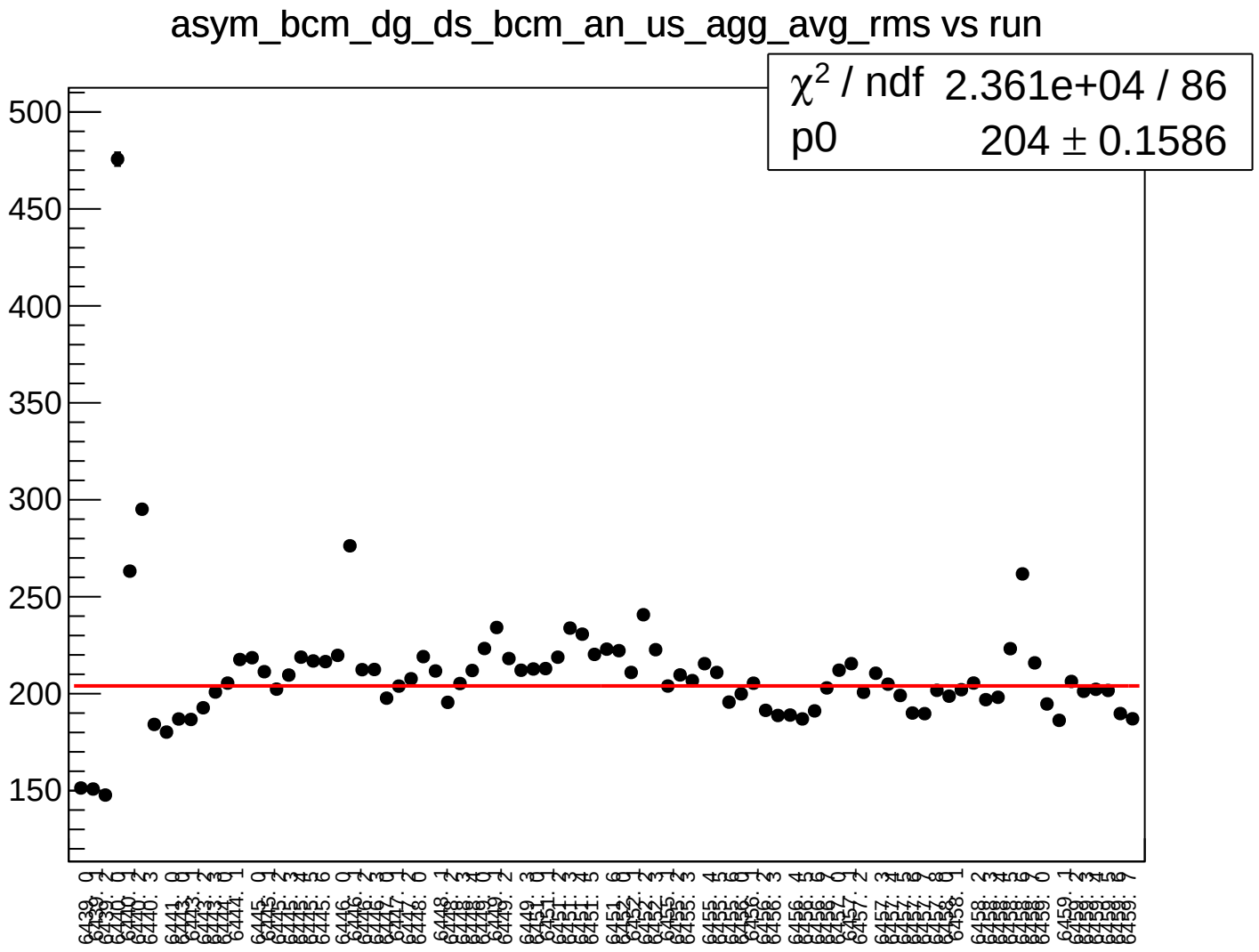

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 85.09 / 86
p0 36.83 ± 24.77
pull
Entries 87
Mean 923.8
Std Dev 878.2

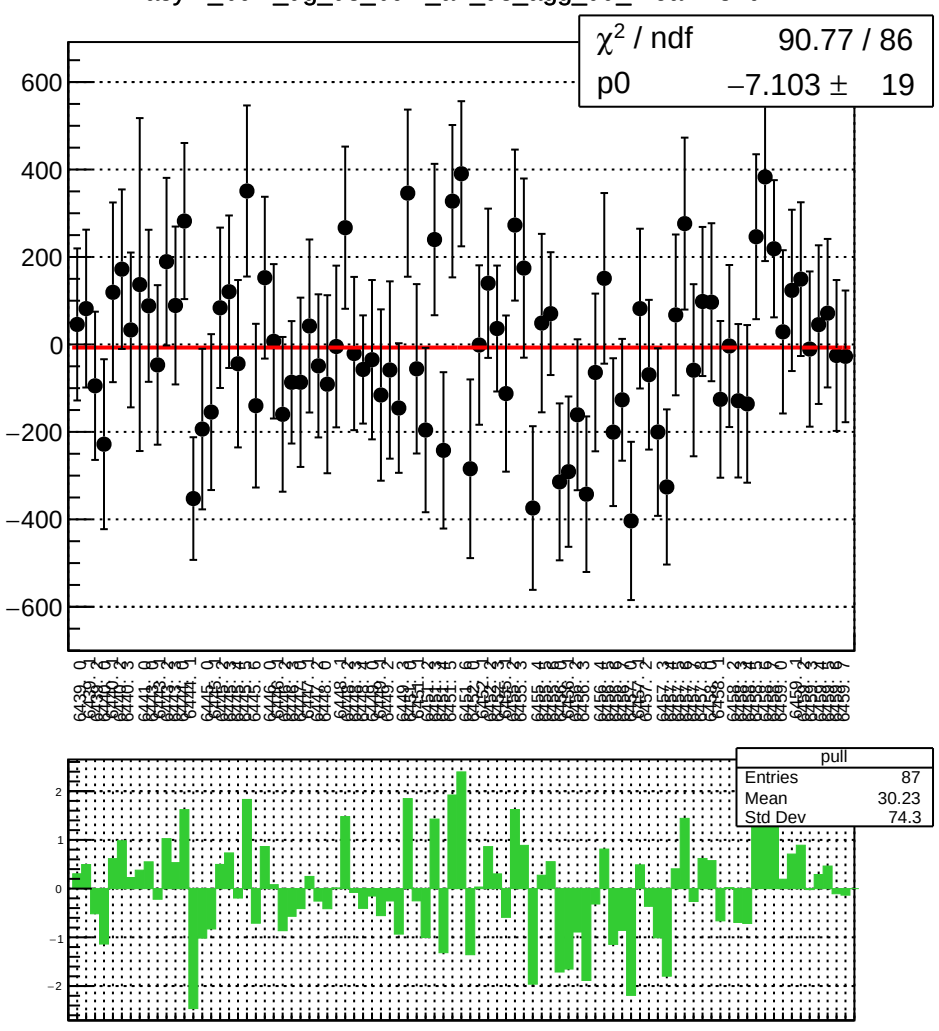

pull1D
Entries 87
Mean −0.005651
Std Dev 0.989

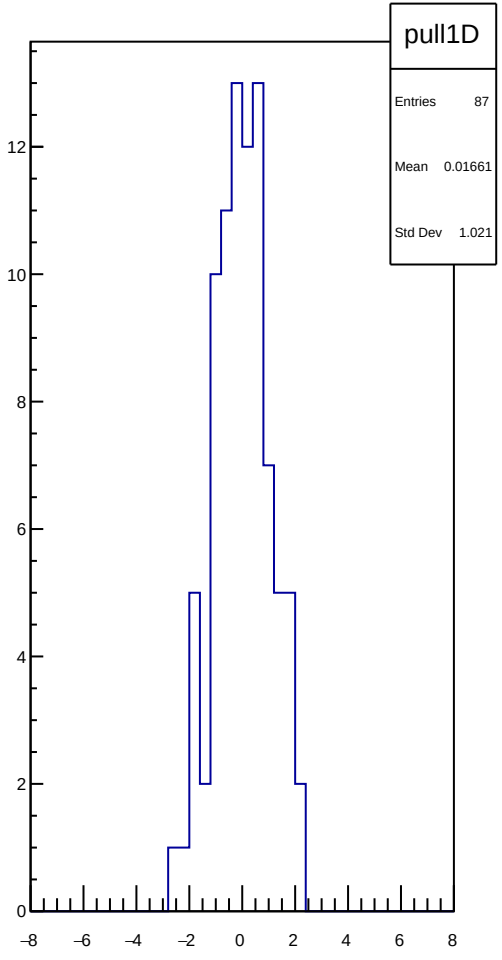

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 599.7 / 86
p0 22.69 ± 0.01751
25
24.5
24
23.5
23
22.5
22
21.5

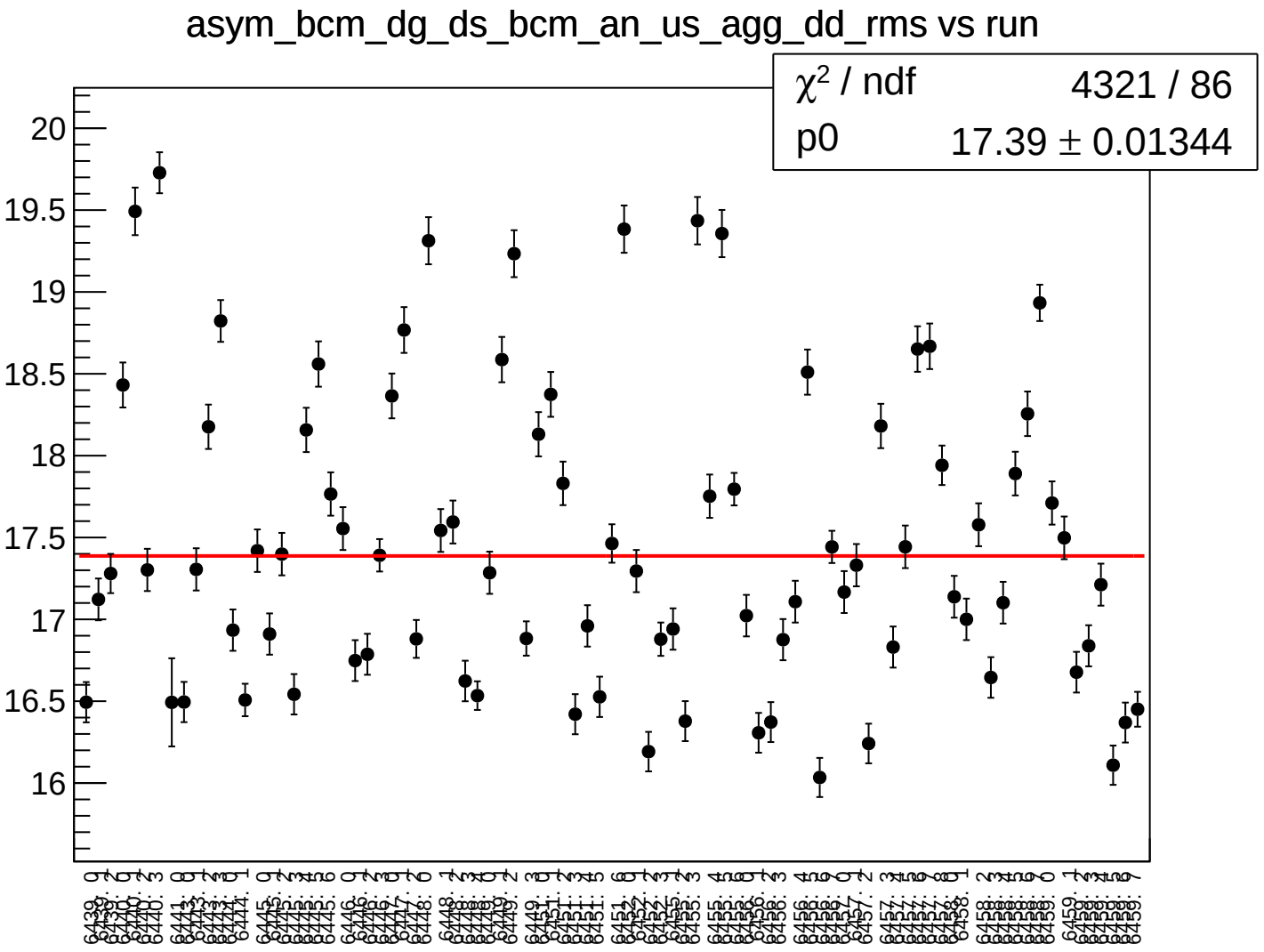

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 26.11 / 86
p0 −219.7 ± 224.3
pull
Entries 87
Mean 267.6
Std Dev 218.6

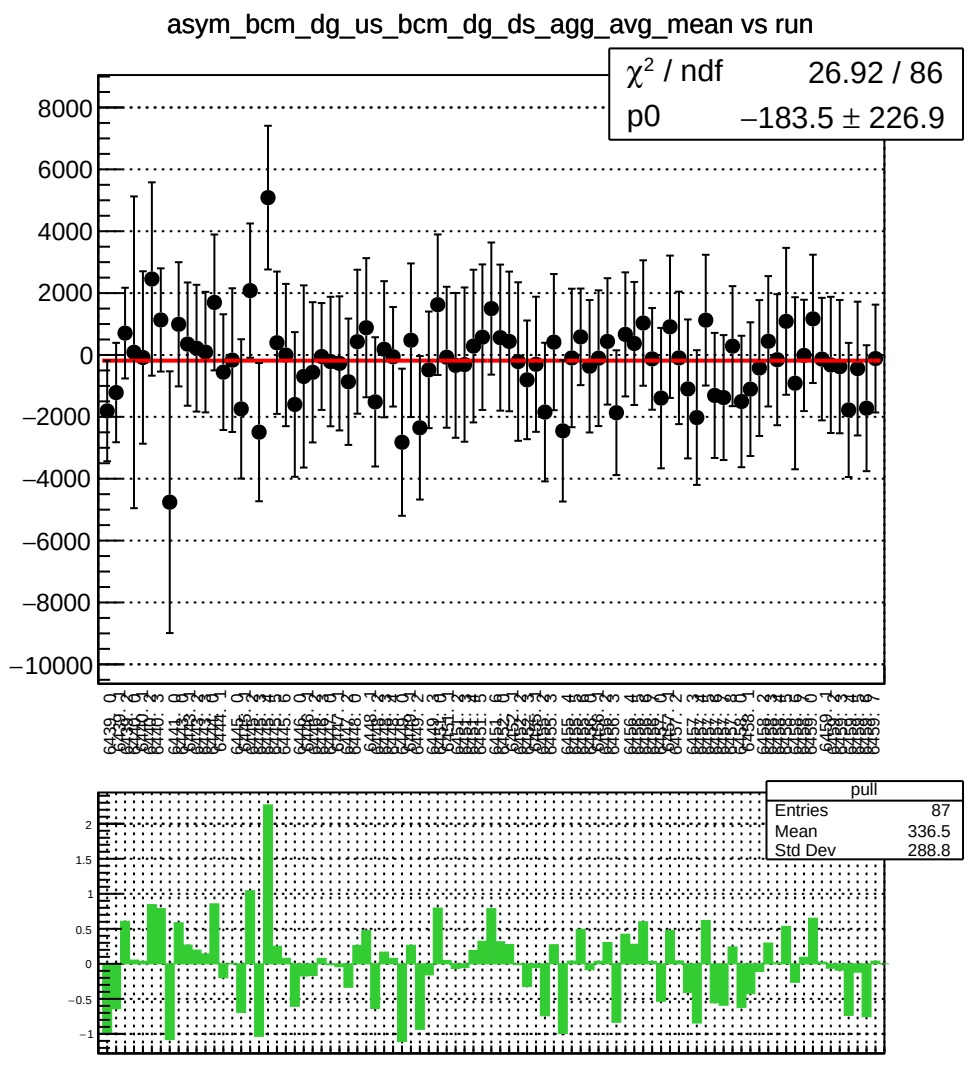

pull1D
Entries 87
Mean −0.00498
Std Dev 0.5478

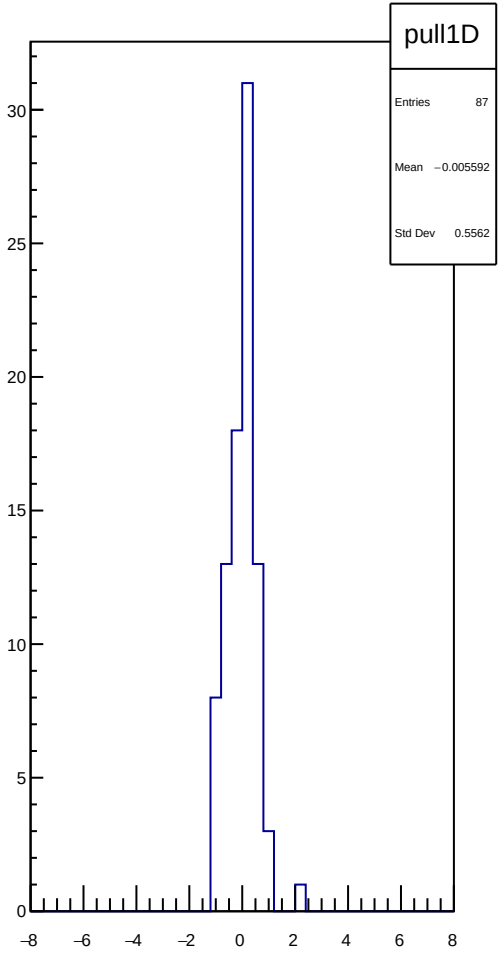

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.361e+04 / 86
p0 204 ± 0.1586
500
450
400
350
300
250
200
150

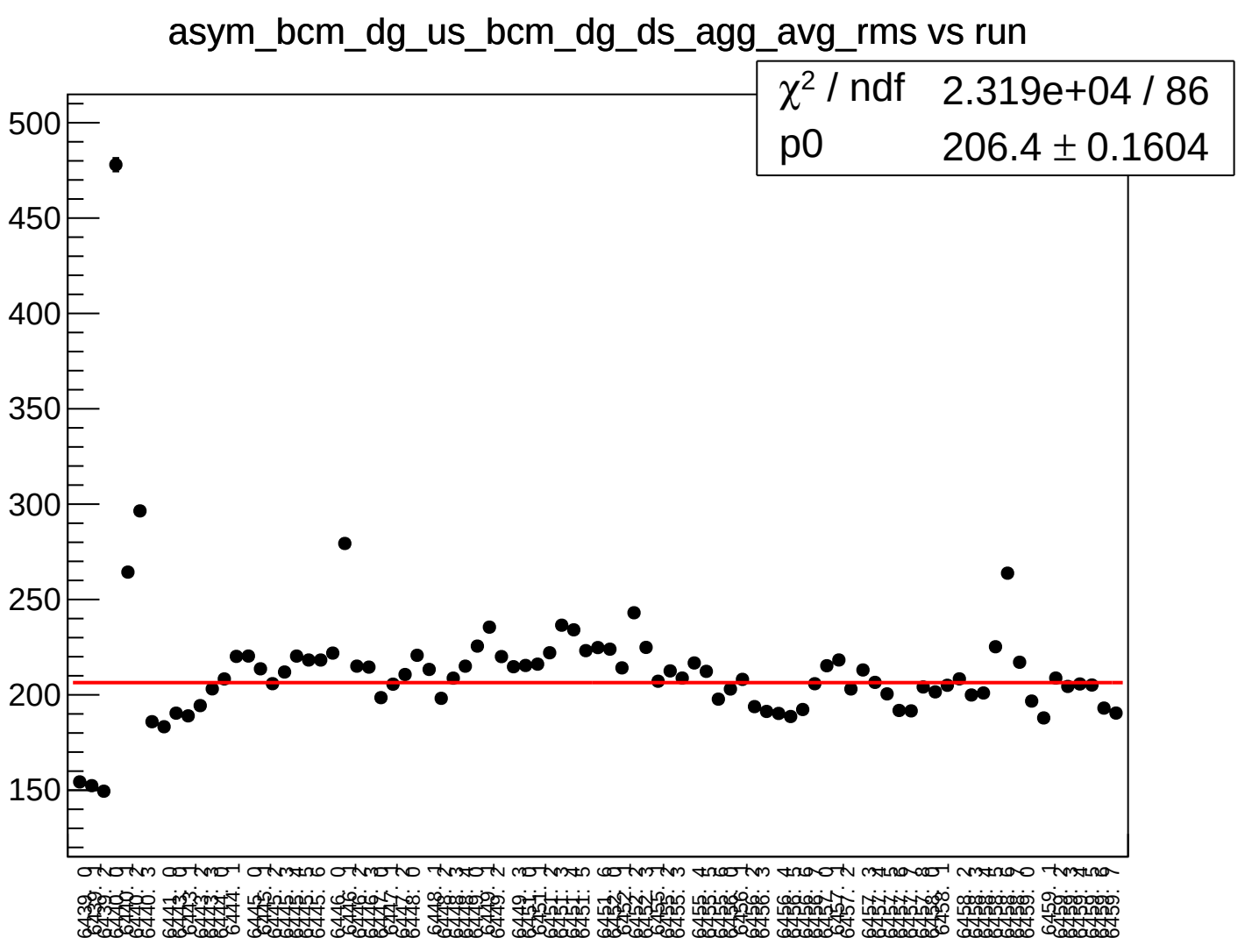

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 90.77 / 86
p0 −7.103 ± 19
pull
Entries 87
Mean 30.23
Std Dev 74.3

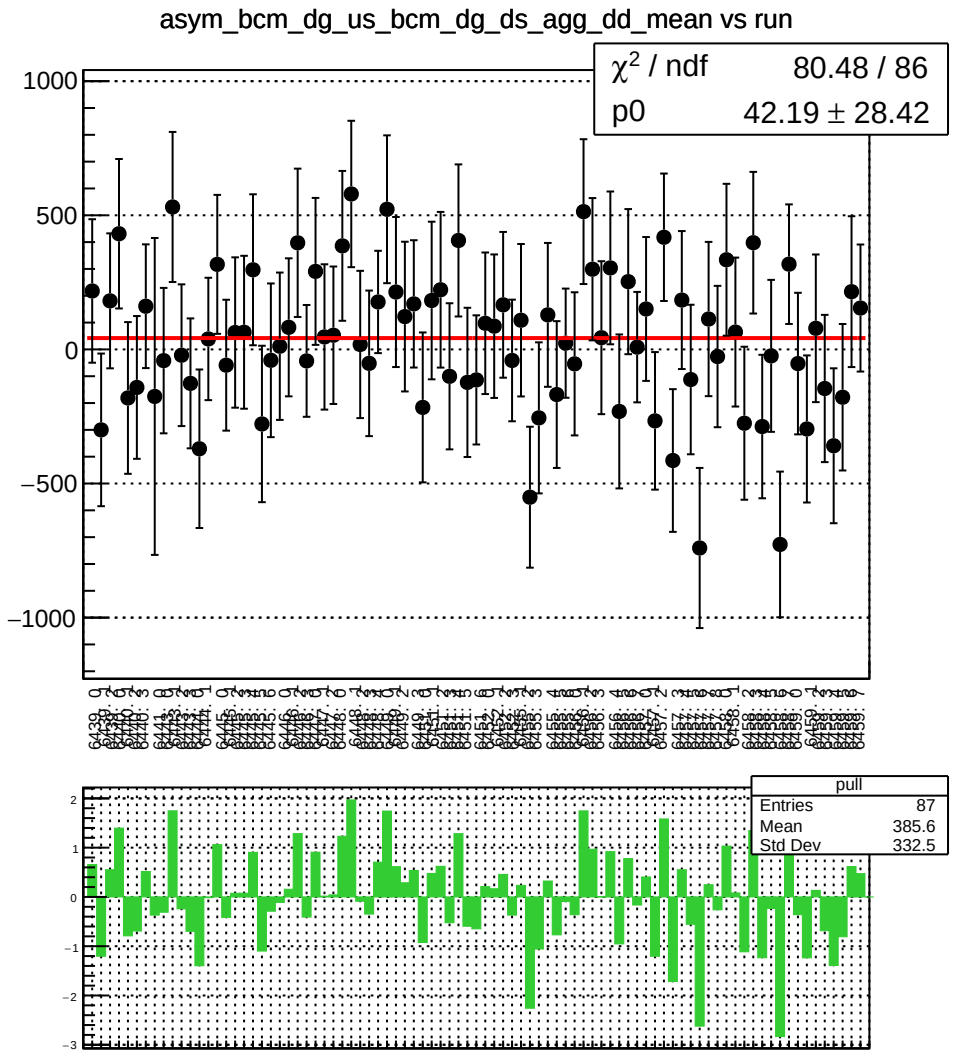

pull1D
Entries 87
Mean 0.01661
Std Dev 1.021

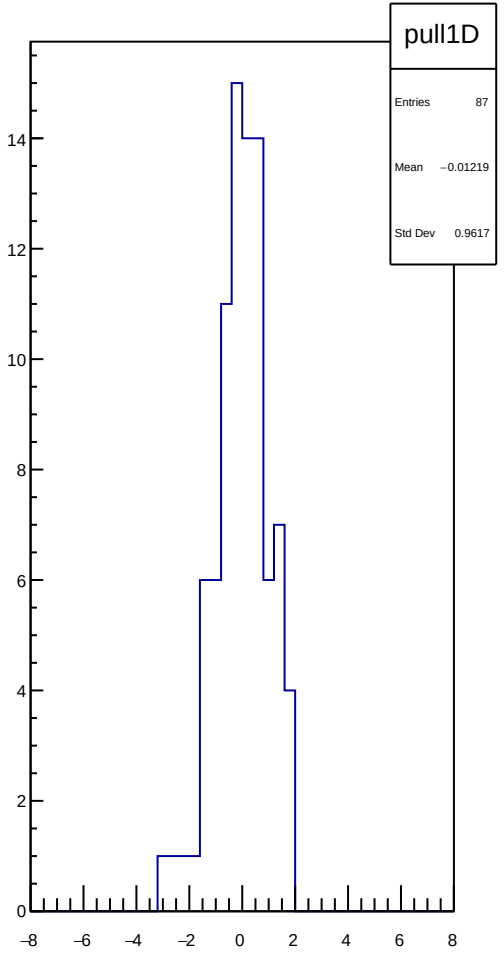

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4321 / 86
p0 17.39 ± 0.01344
20
19.5
19
18.5
18
17.5
17
16.5
16

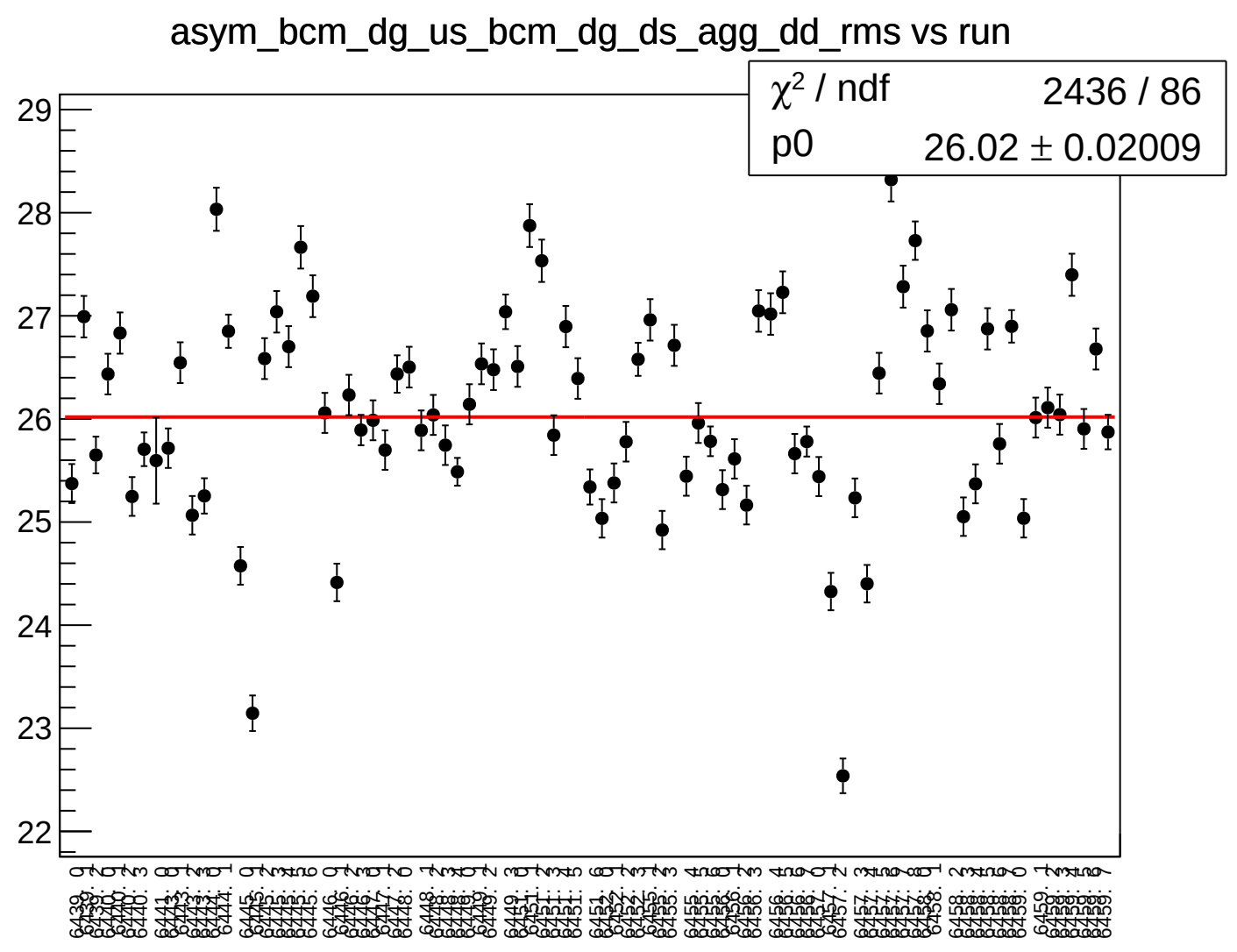

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 26.92 / 86
p0 −183.5 ± 226.9
pull
Entries 87
Mean 336.5
Std Dev 288.8

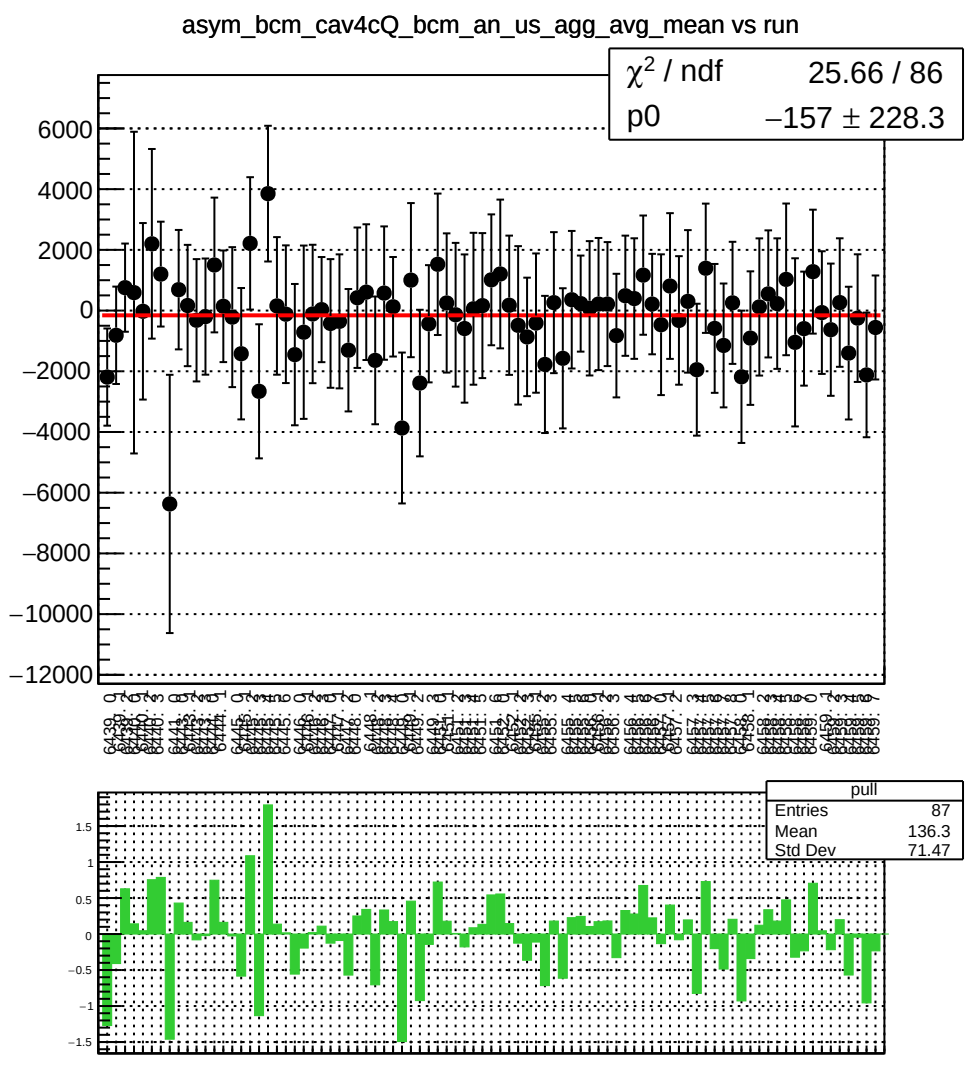

pull1D
Entries 87
Mean −0.005592
Std Dev 0.5562

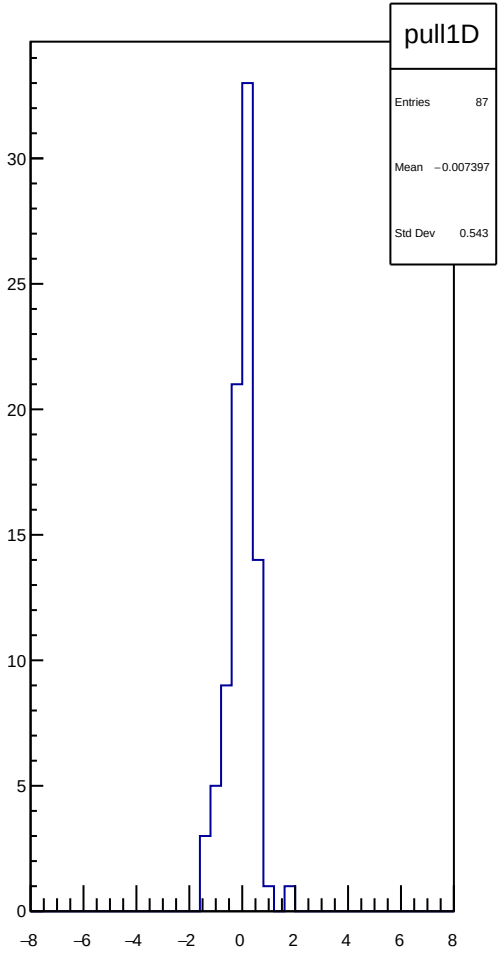

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.319e+04 / 86
p0 206.4 ± 0.1604
500
450
400
350
300
250
200
150

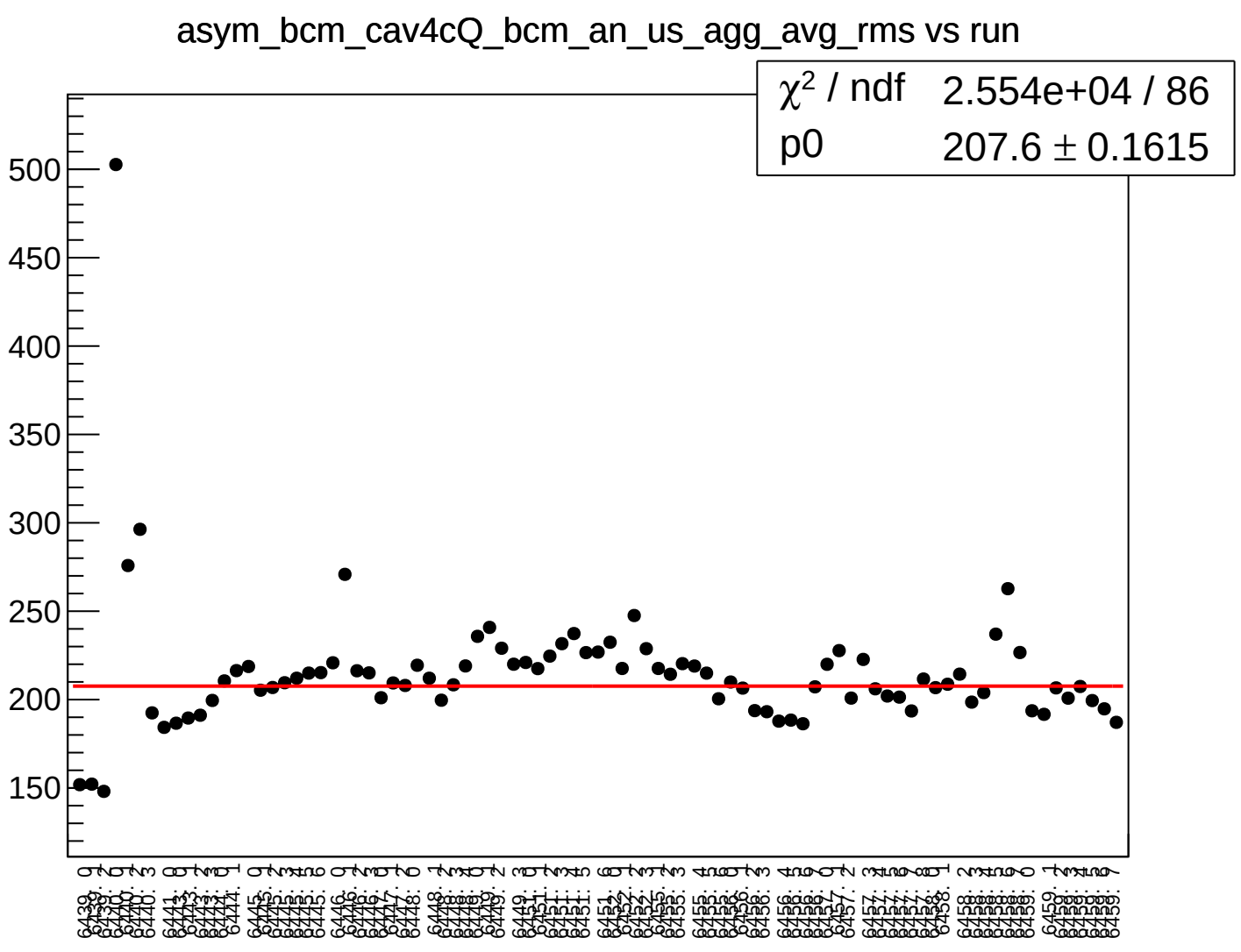

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 80.48 / 86
p0 42.19 ± 28.42
1000
500
0
−500
−1000
pull
Entries 87
Mean 385.6
Std Dev 332.5
2
1
0
−1
−2
−3

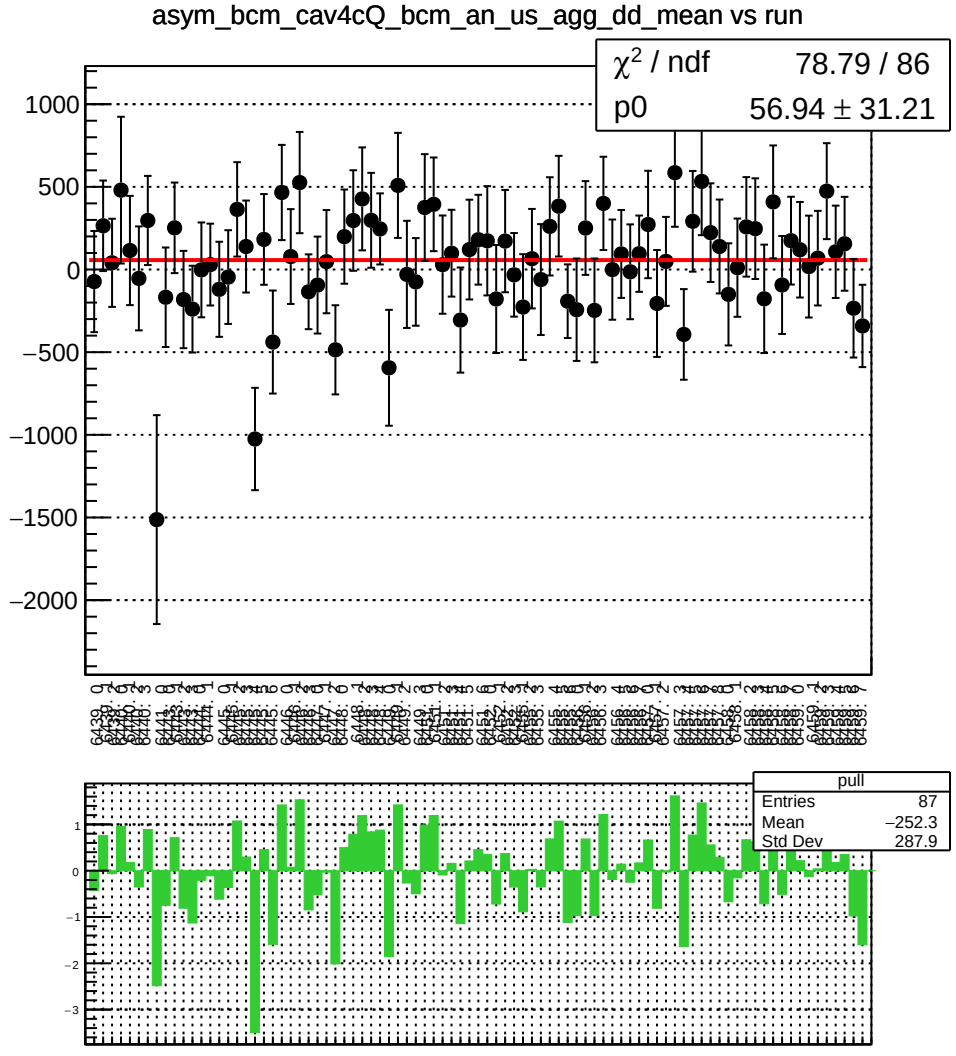

pull1D
Entries 87
Mean −0.01219
Std Dev 0.9617
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

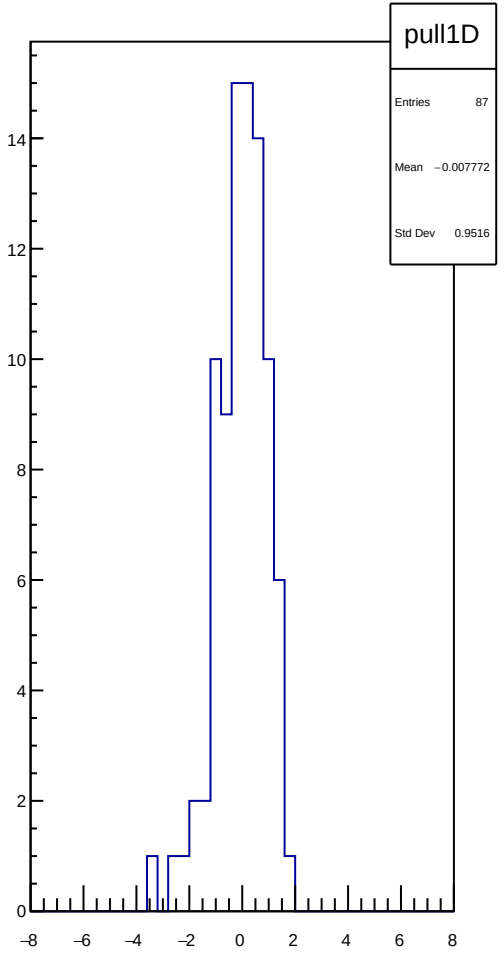

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2436 / 86
p0 26.02 ± 0.02009
29
28
27
26
25
24
23
22

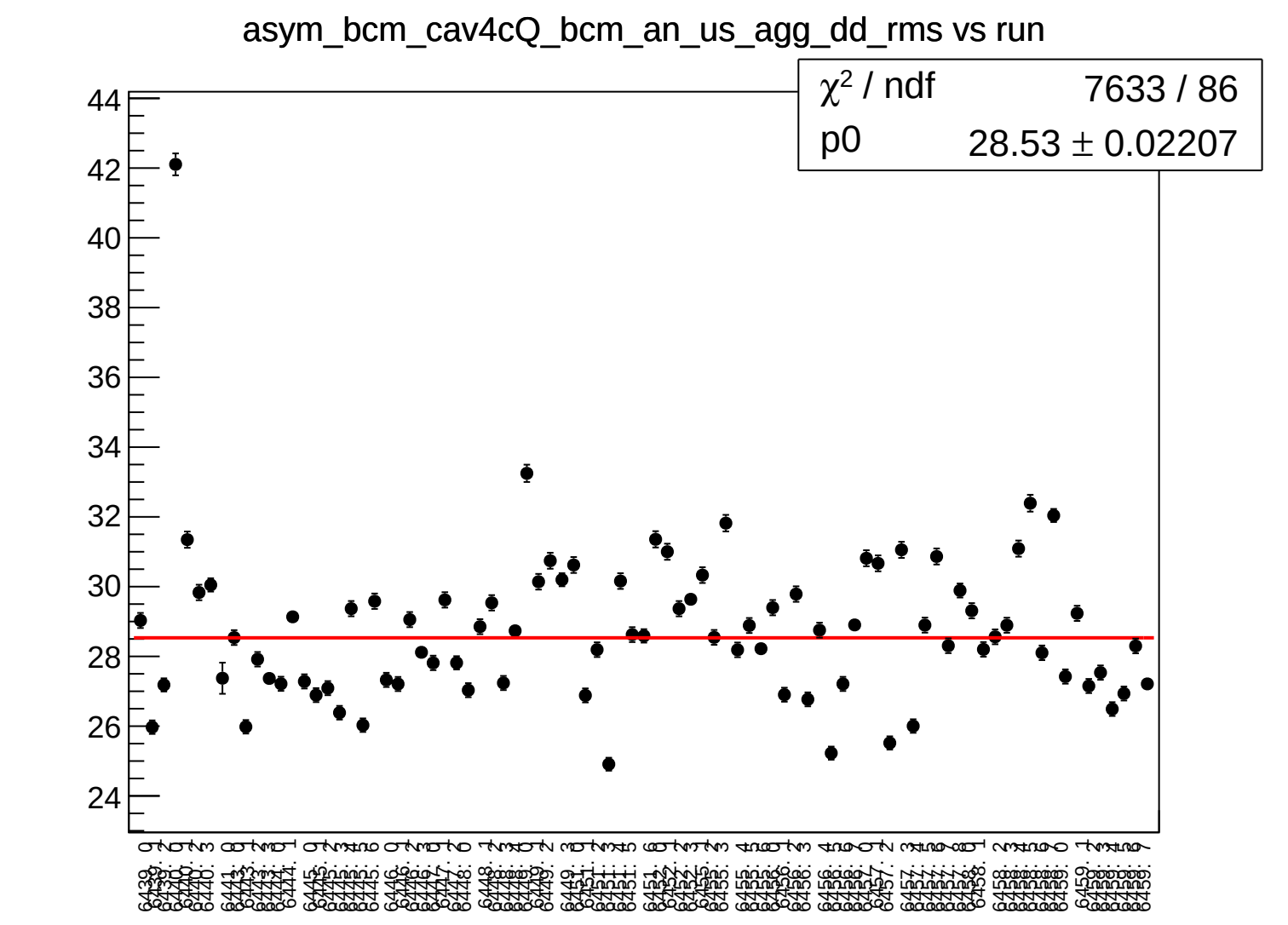

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 25.66 / 86
p0 −157 ± 228.3
pull
Entries 87
Mean 136.3
Std Dev 71.47

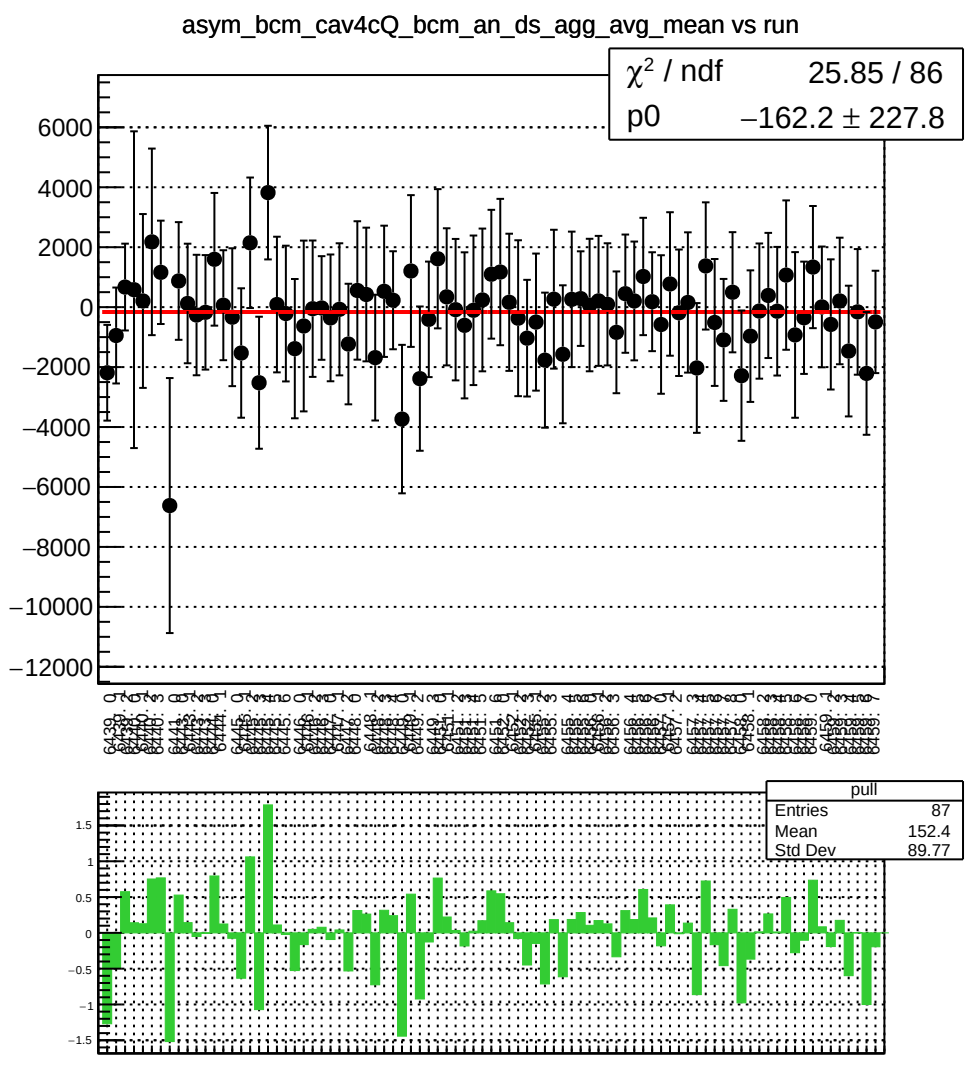

pull1D
Entries 87
Mean −0.007397
Std Dev 0.543

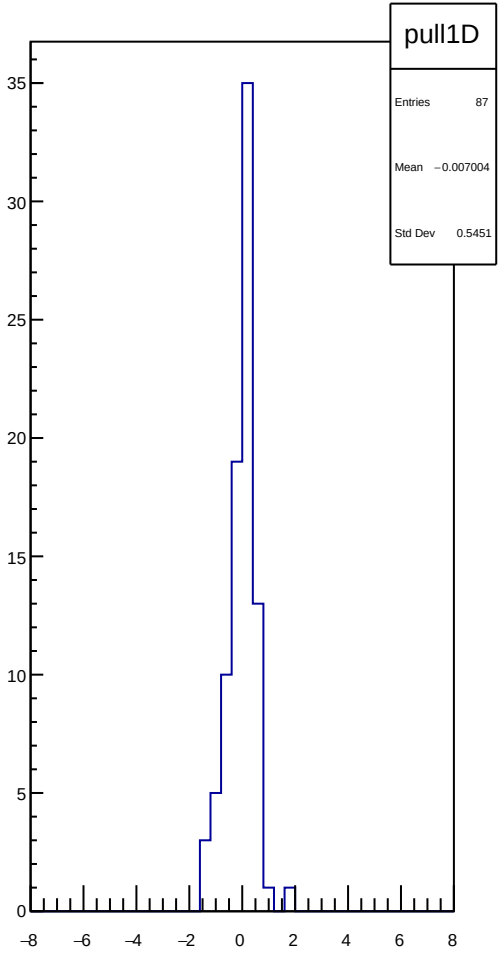

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.554e+04 / 86
p0 207.6 ± 0.1615
500
450
400
350
300
250
200
150

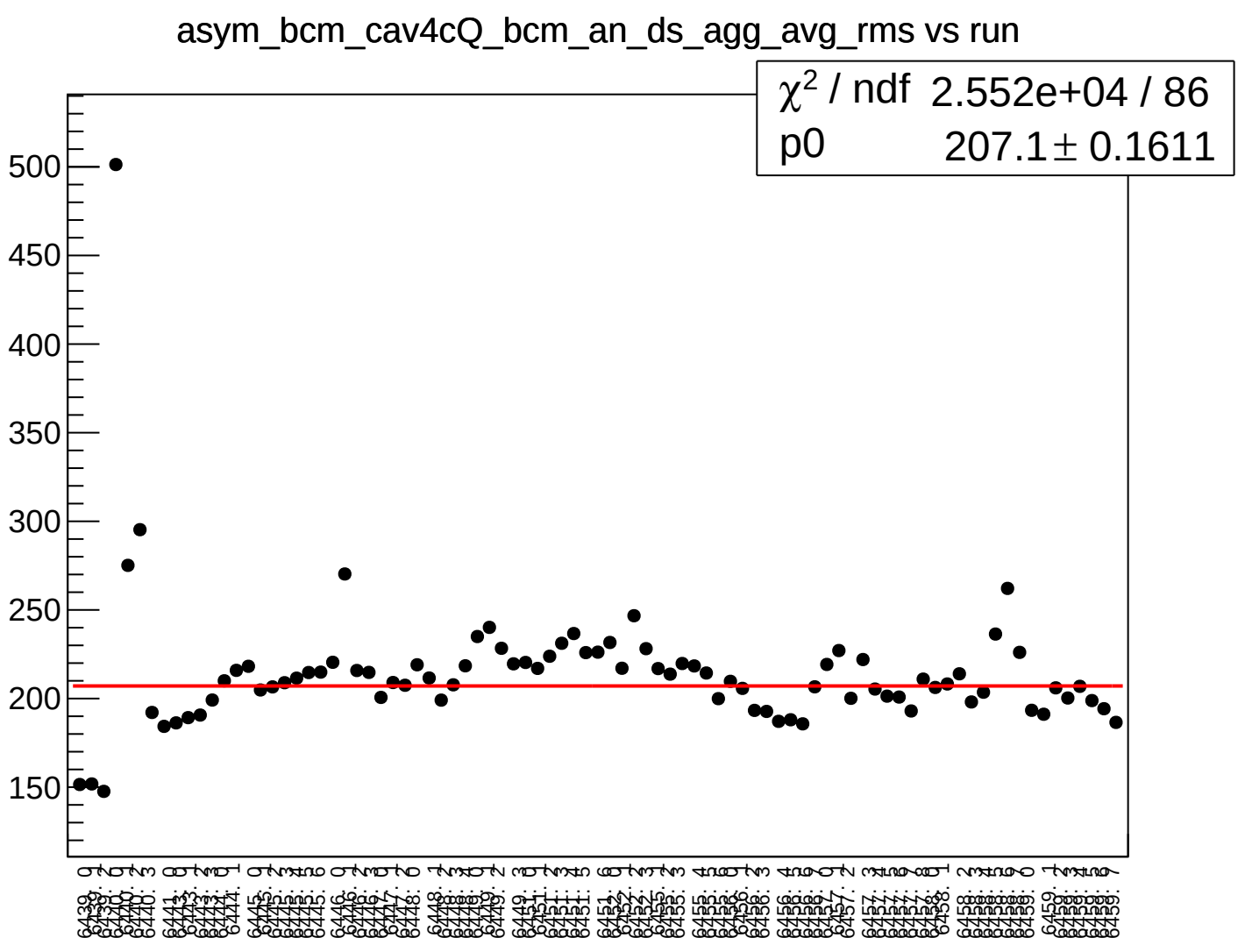

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 78.79 / 86
p0 56.94 ± 31.21
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 87
Mean −252.3
Std Dev 287.9
1
0
−1
−2
−3

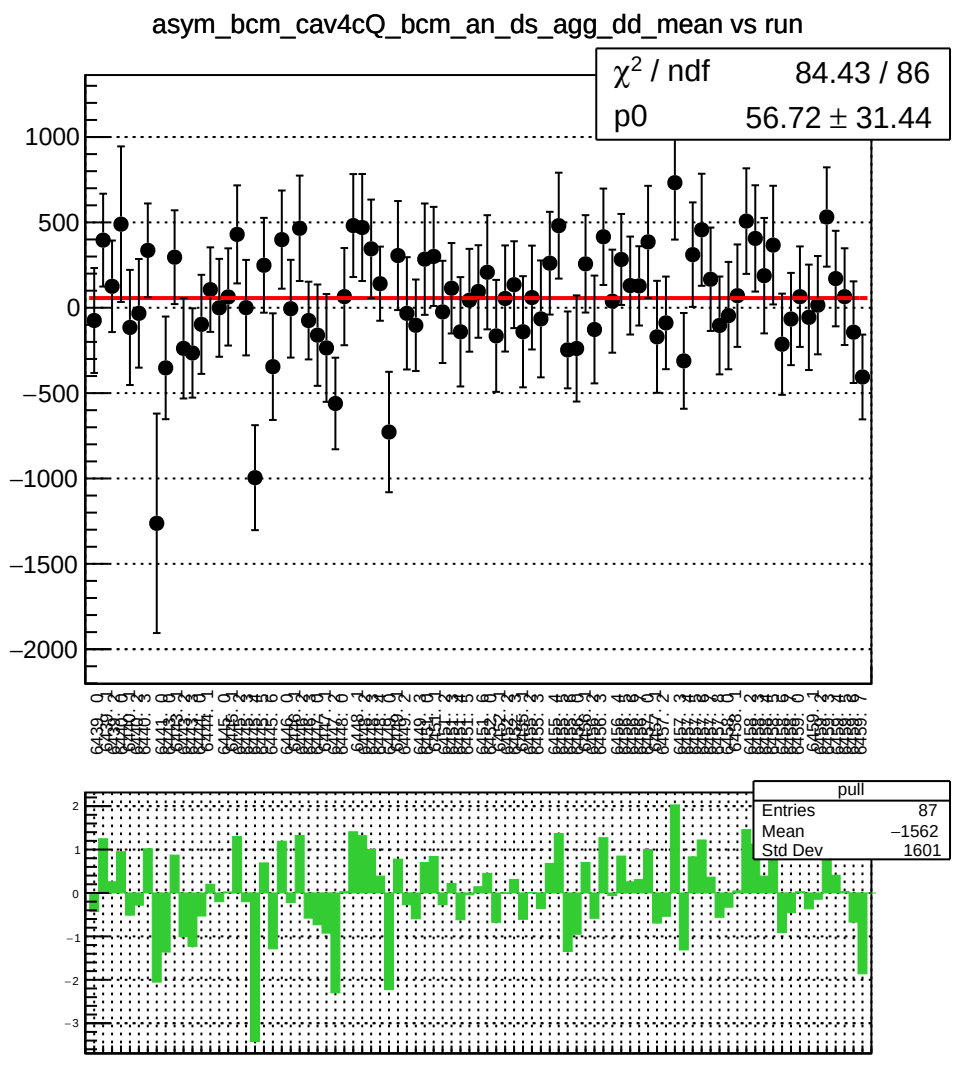

pull1D
Entries 87
Mean −0.007772
Std Dev 0.9516
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

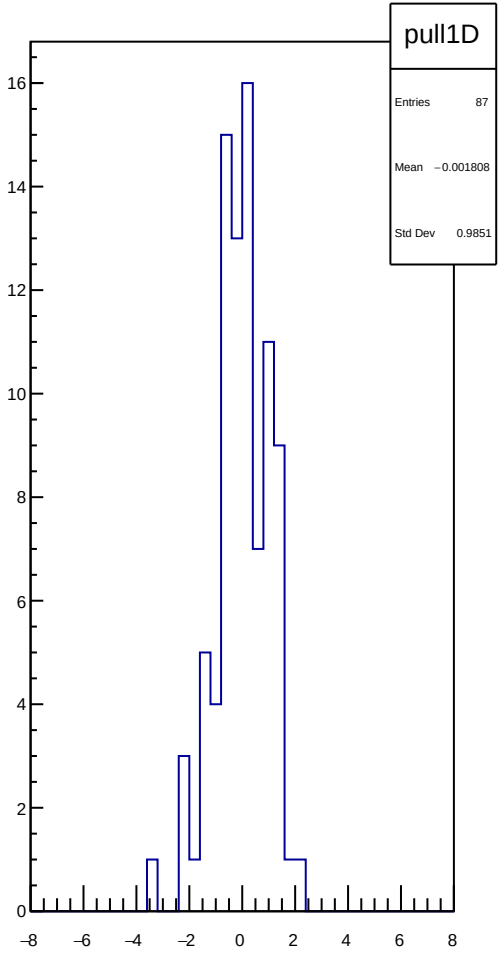

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 7633 / 86
p0 28.53 ± 0.02207
44
42
40
38
36
34
32
30
28
26
24

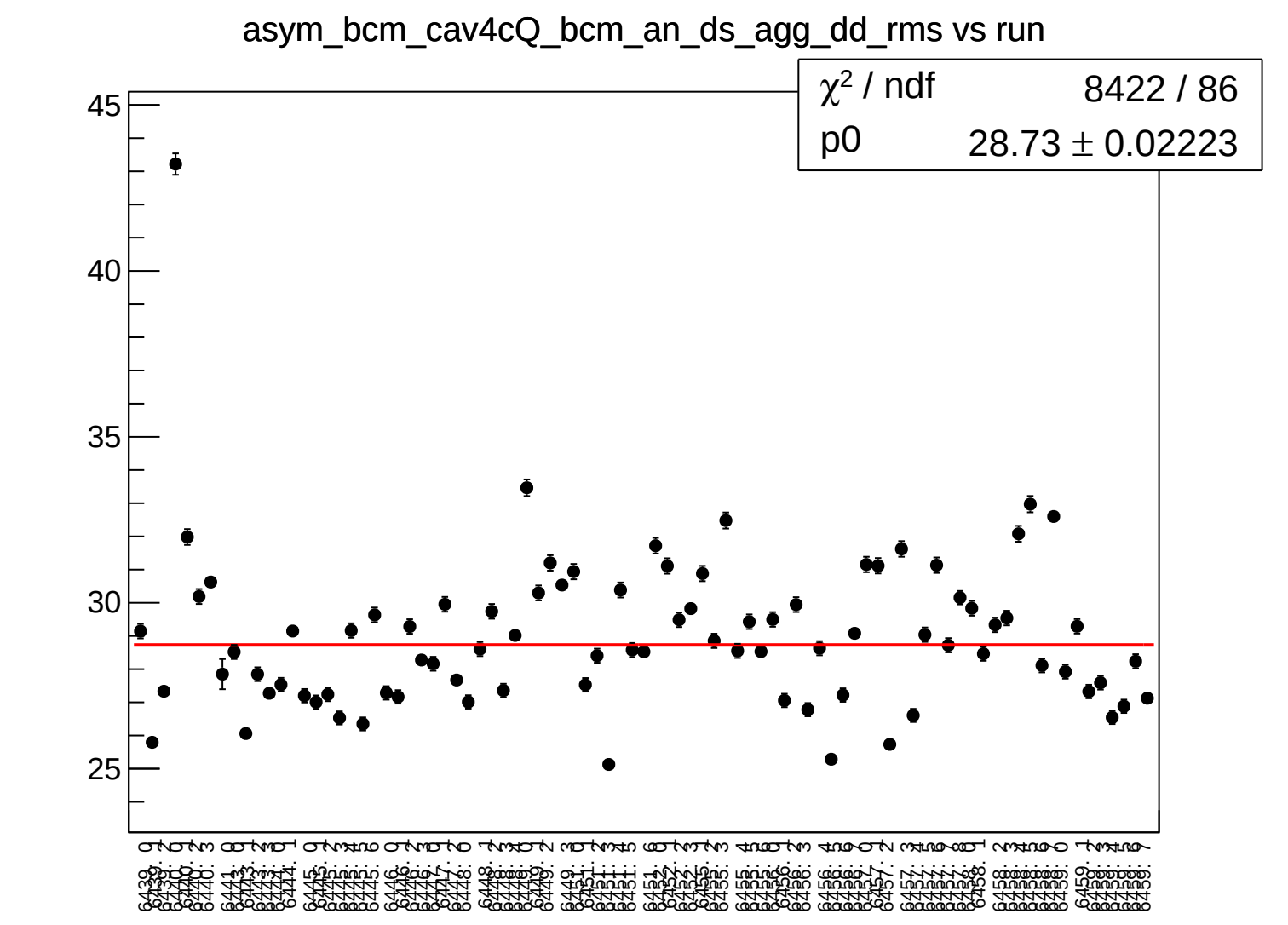

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 25.85 / 86
p0 −162.2 ± 227.8
pull
Entries 87
Mean 152.4
Std Dev 89.77

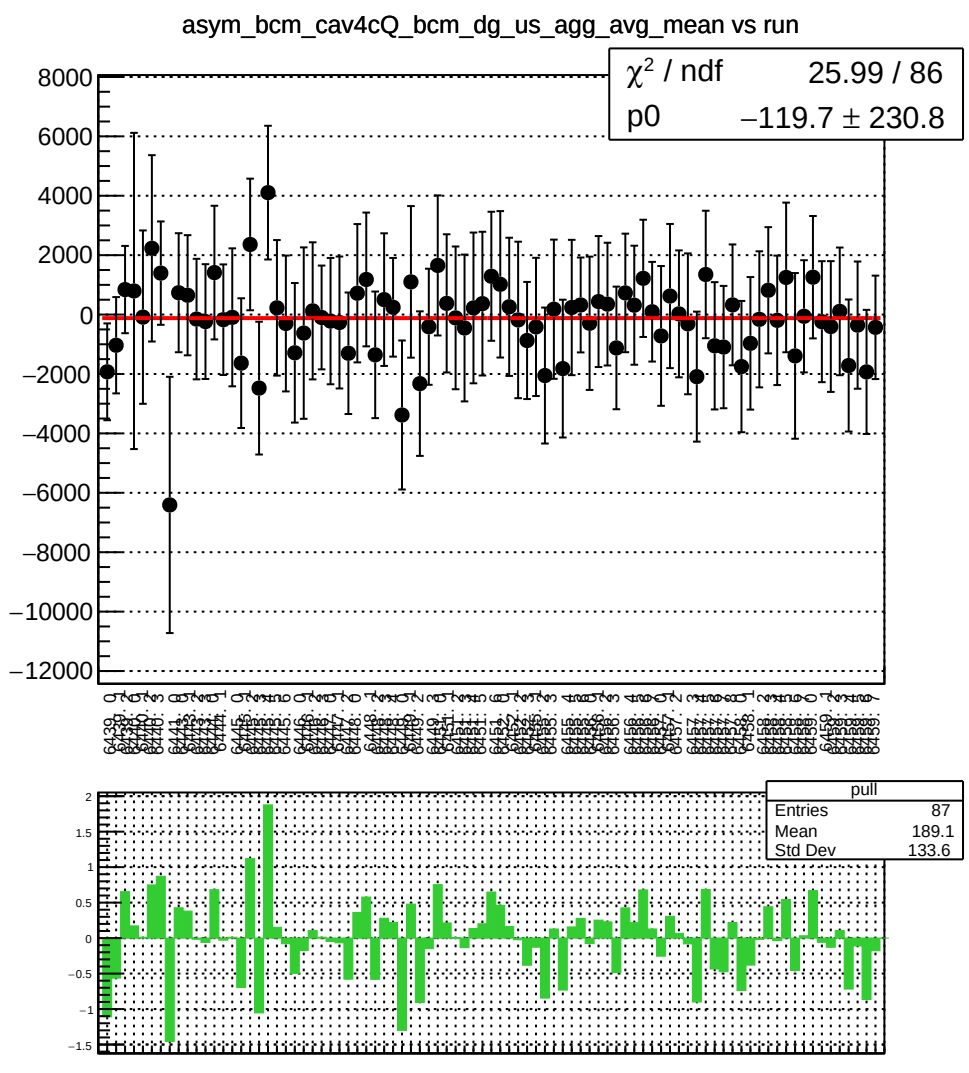

pull1D
Entries 87
Mean −0.007004
Std Dev 0.5451

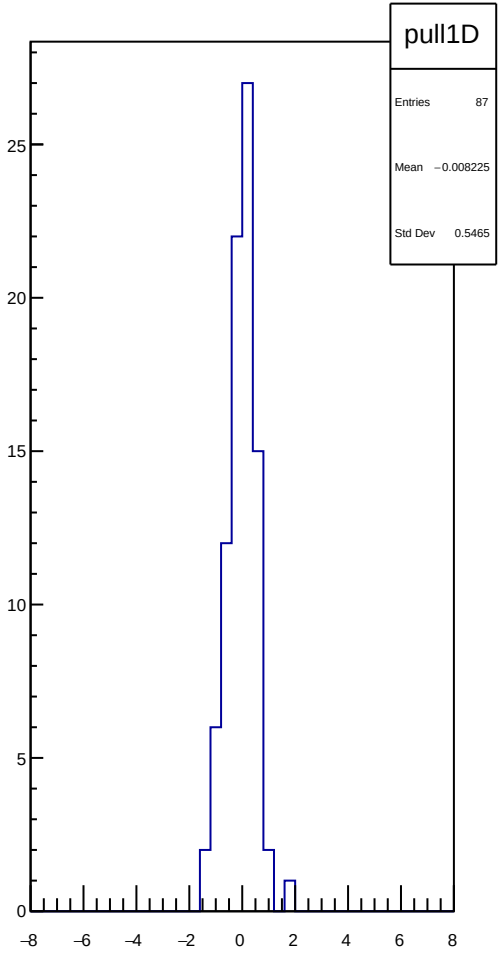

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.552e+04 / 86
p0 207.1 ± 0.1611
500
450
400
350
300
250
200
150

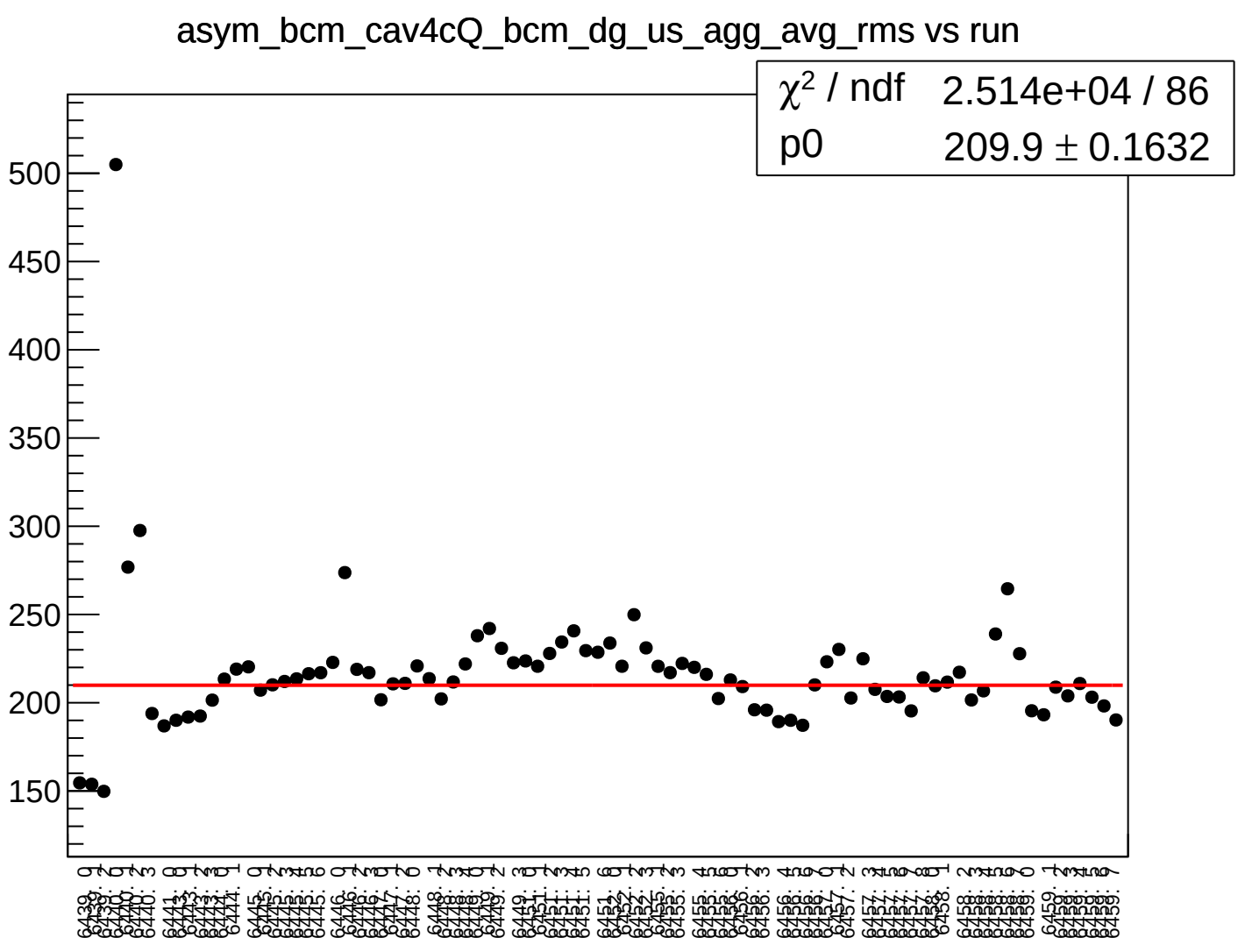

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 84.43 / 86
p0 56.72 ± 31.44
1000
500
0
−500
−1000
−1500
−2000
pull
Entries 87
Mean −1562
Std Dev 1601
2
1
0
−1
−2
−3

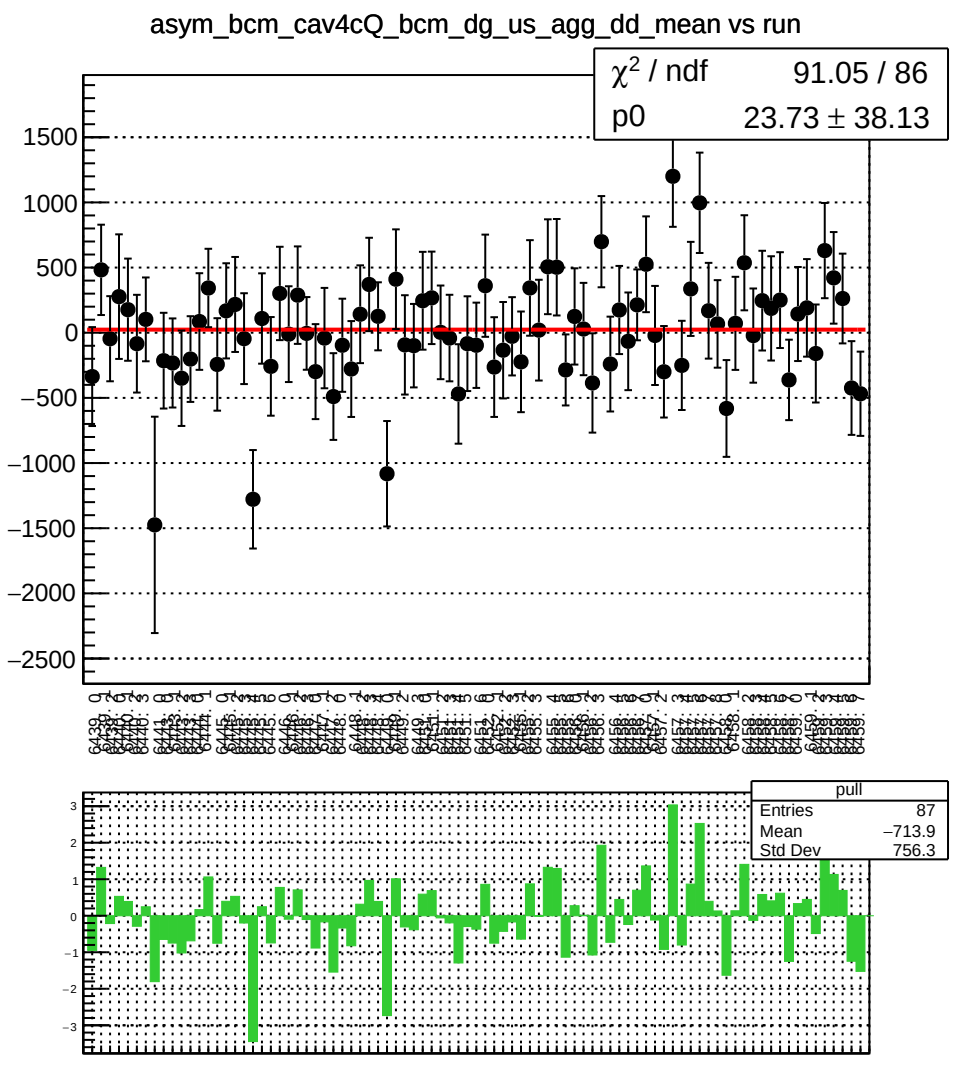

pull1D
Entries 87
Mean −0.001808
Std Dev 0.9851
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

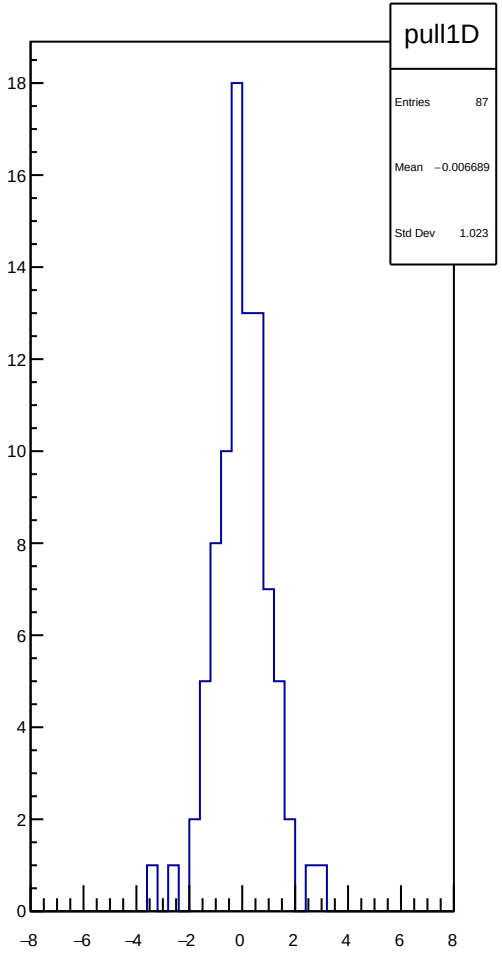

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 8422 / 86
p0 28.73 ± 0.02223
45
40
35
30
25

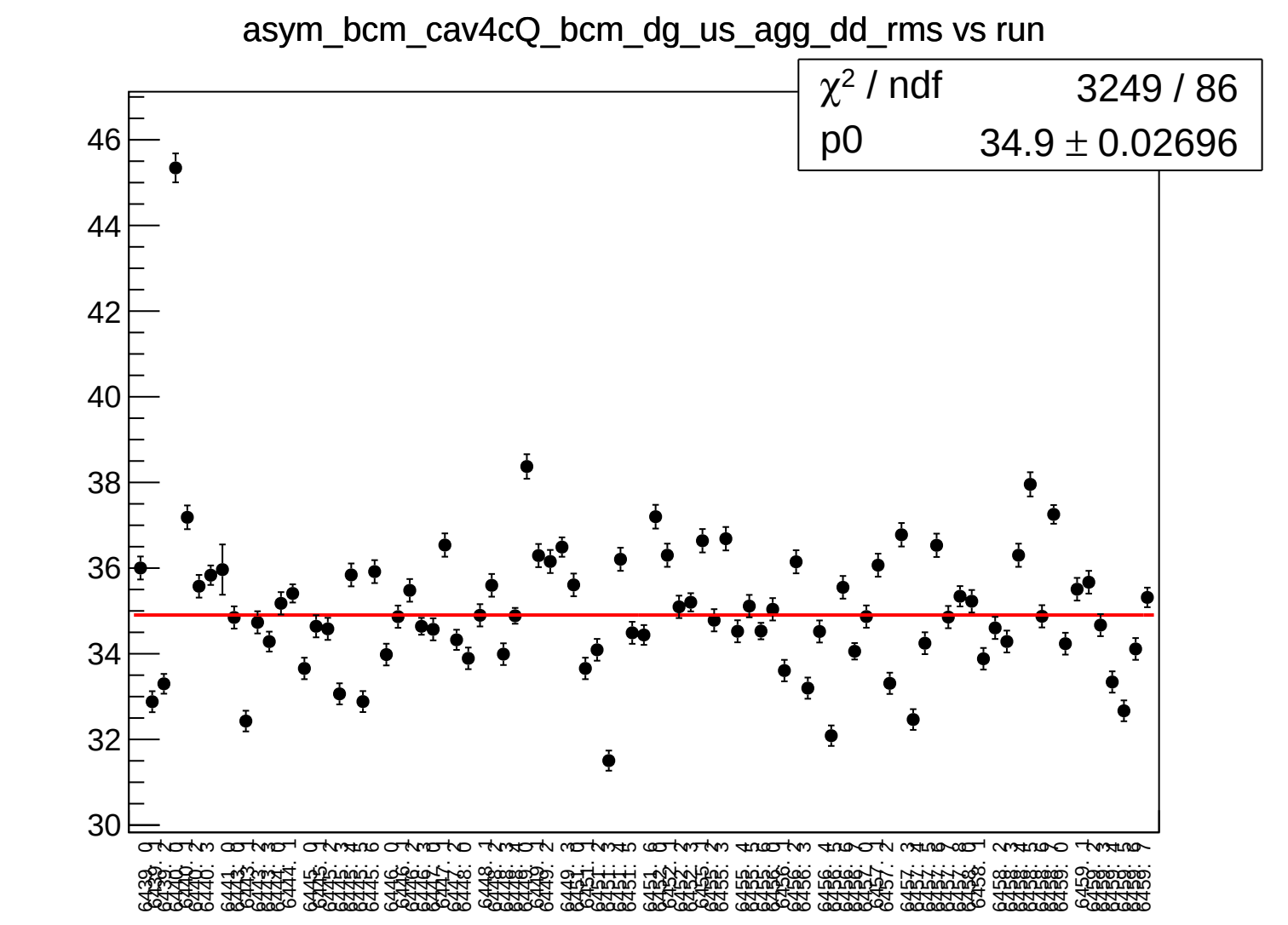

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 25.99 / 86
p0 −119.7 ± 230.8
pull
Entries 87
Mean 189.1
Std Dev 133.6

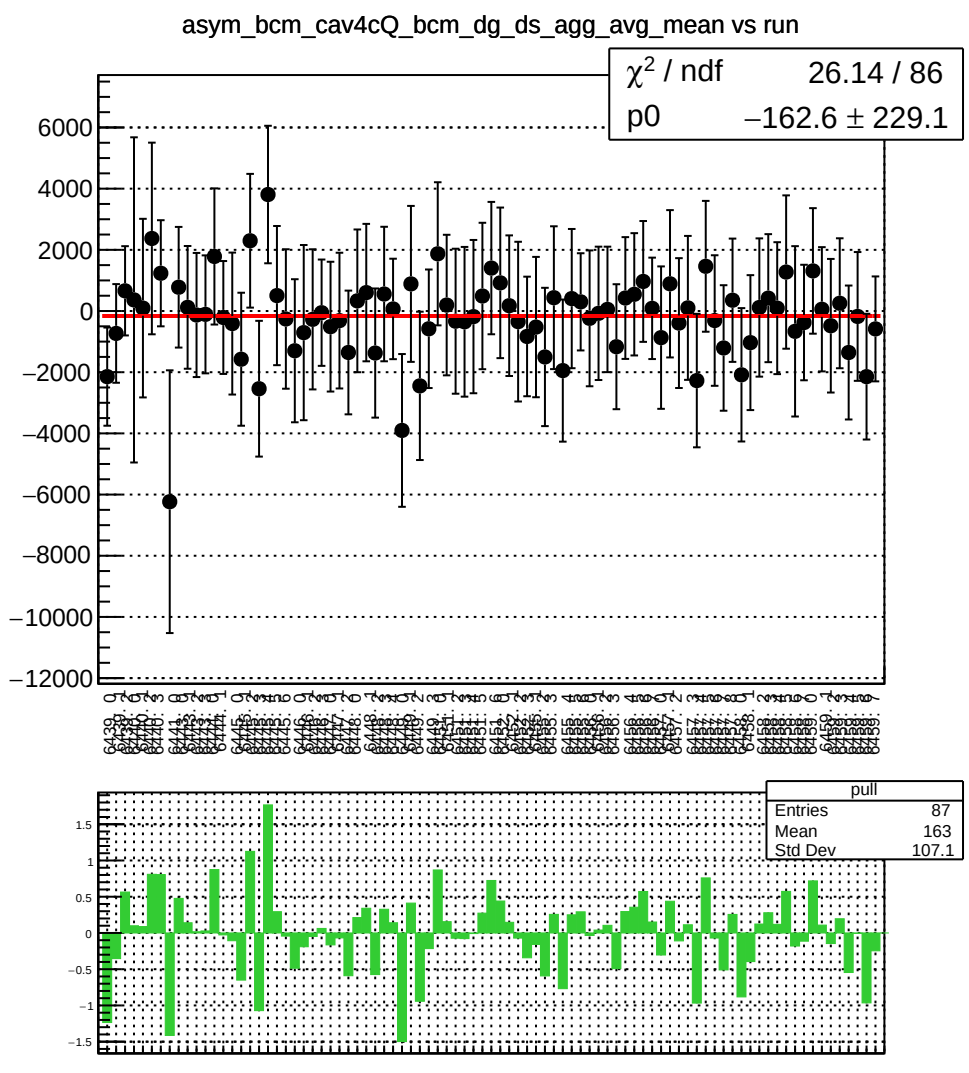

pull1D
Entries 87
Mean −0.008225
Std Dev 0.5465

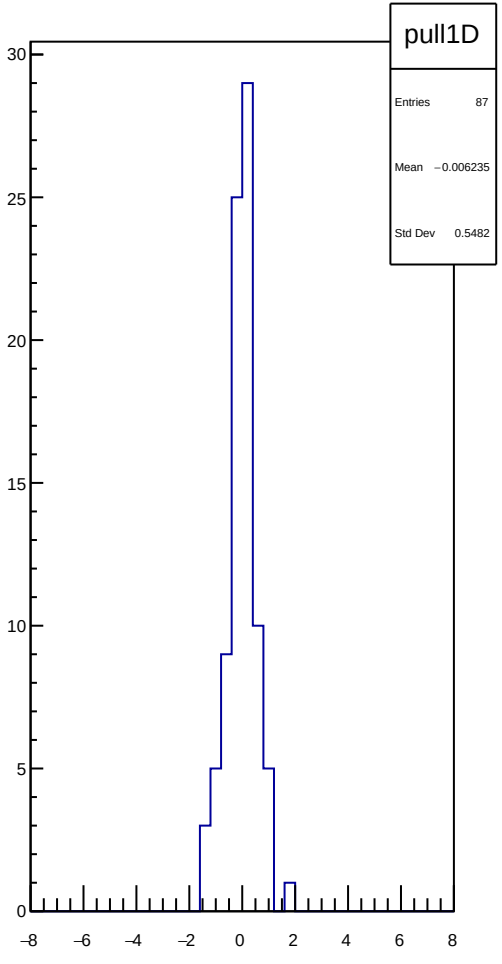

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2.514e+04 / 86
p0 209.9 ± 0.1632
500
450
400
350
300
250
200
150

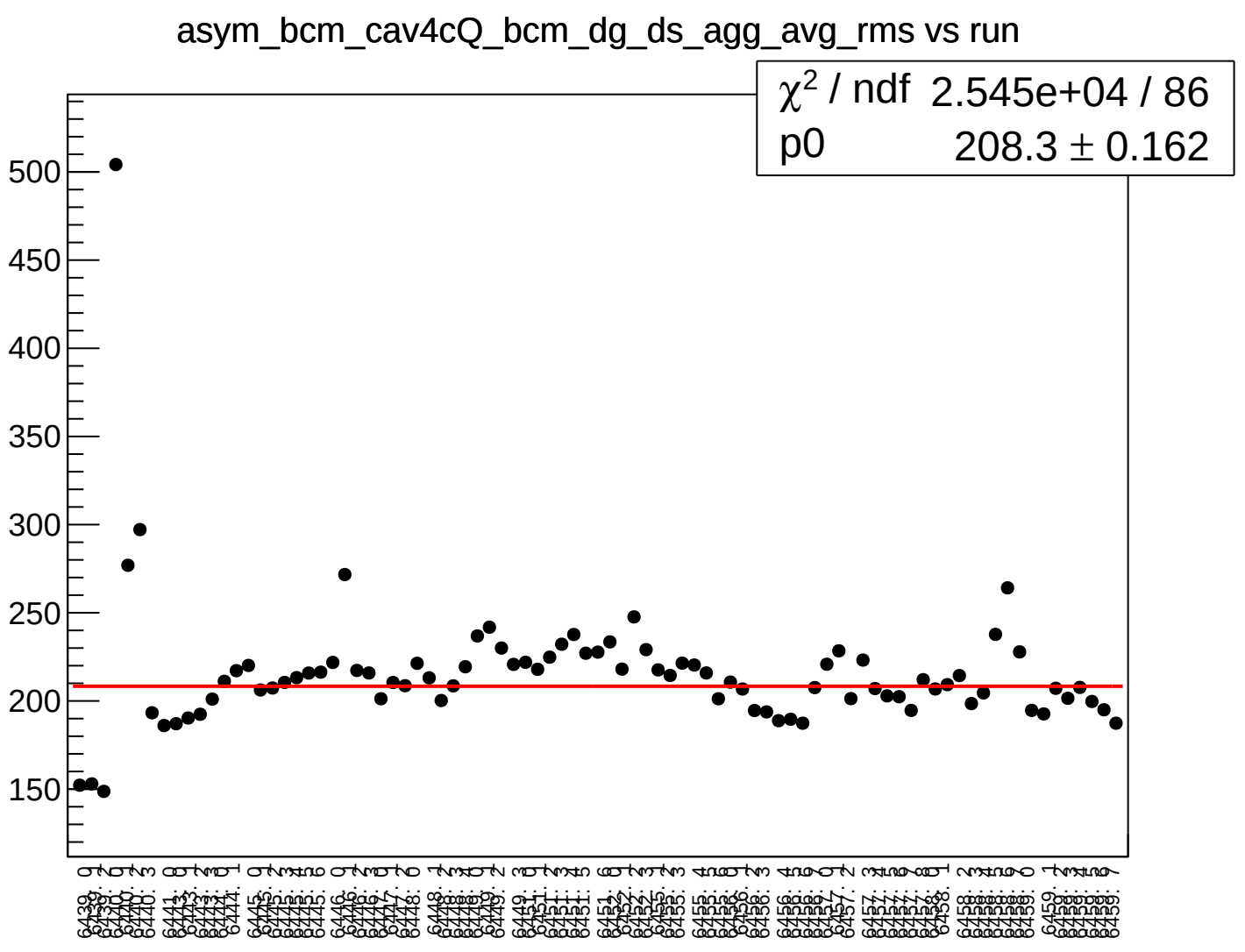

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 91.05 / 86
p0 23.73 ± 38.13
pull
Entries 87
Mean −713.9
Std Dev 756.3

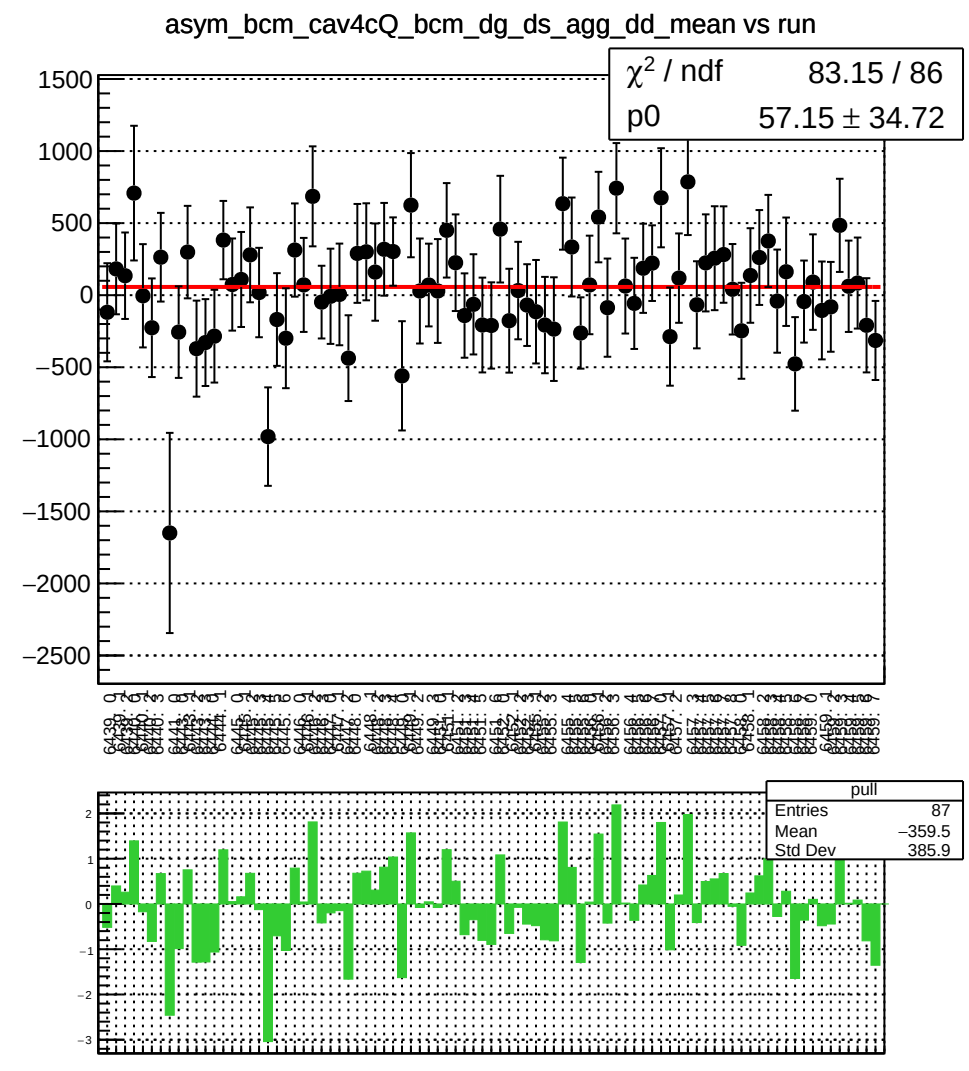

pull1D
Entries 87
Mean −0.006689
Std Dev 1.023

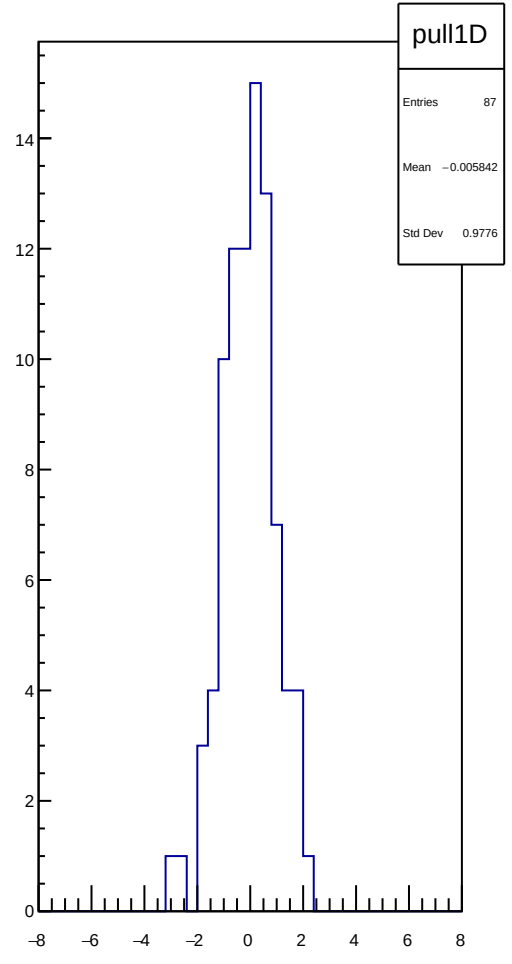

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 3249 / 86
p0 34.9 ± 0.02696
46
44
42
40
38
36
34
32
30

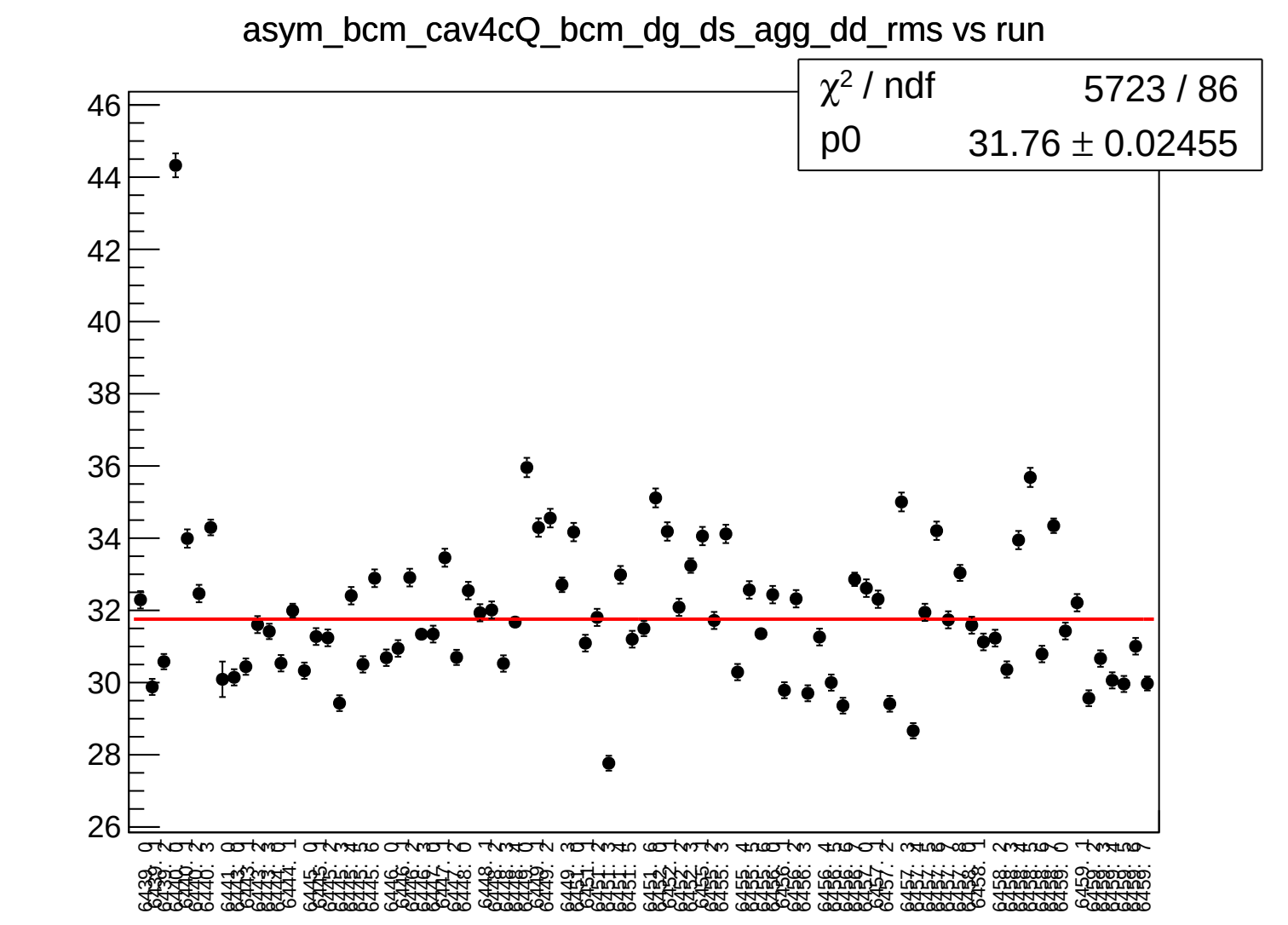

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 26.14 / 86
p0 −162.6 ± 229.1
pull
Entries 87
Mean 163
Std Dev 107.1

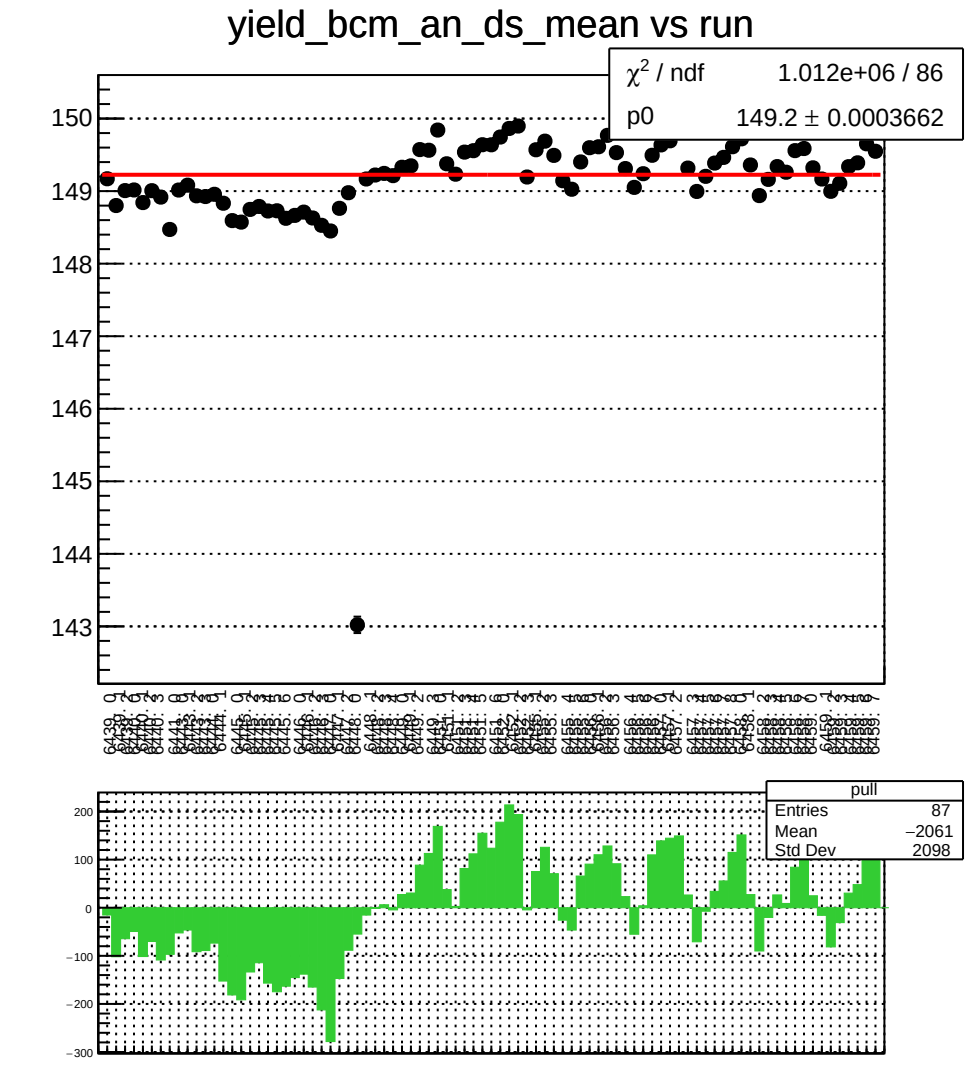

pull1D
Entries 87
Mean −0.006235
Std Dev 0.5482

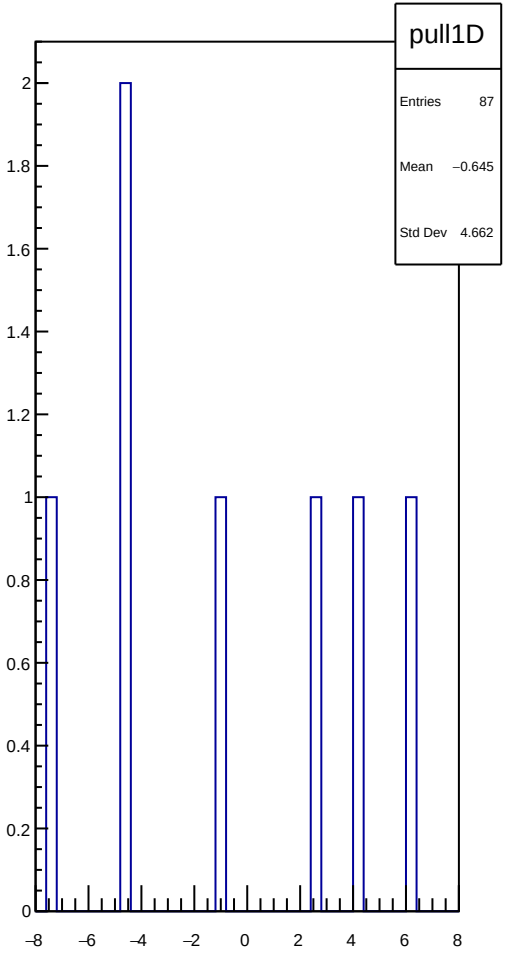

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.545e+04 / 86
p0 208.3 ± 0.162
500
450
400
350
300
250
200
150

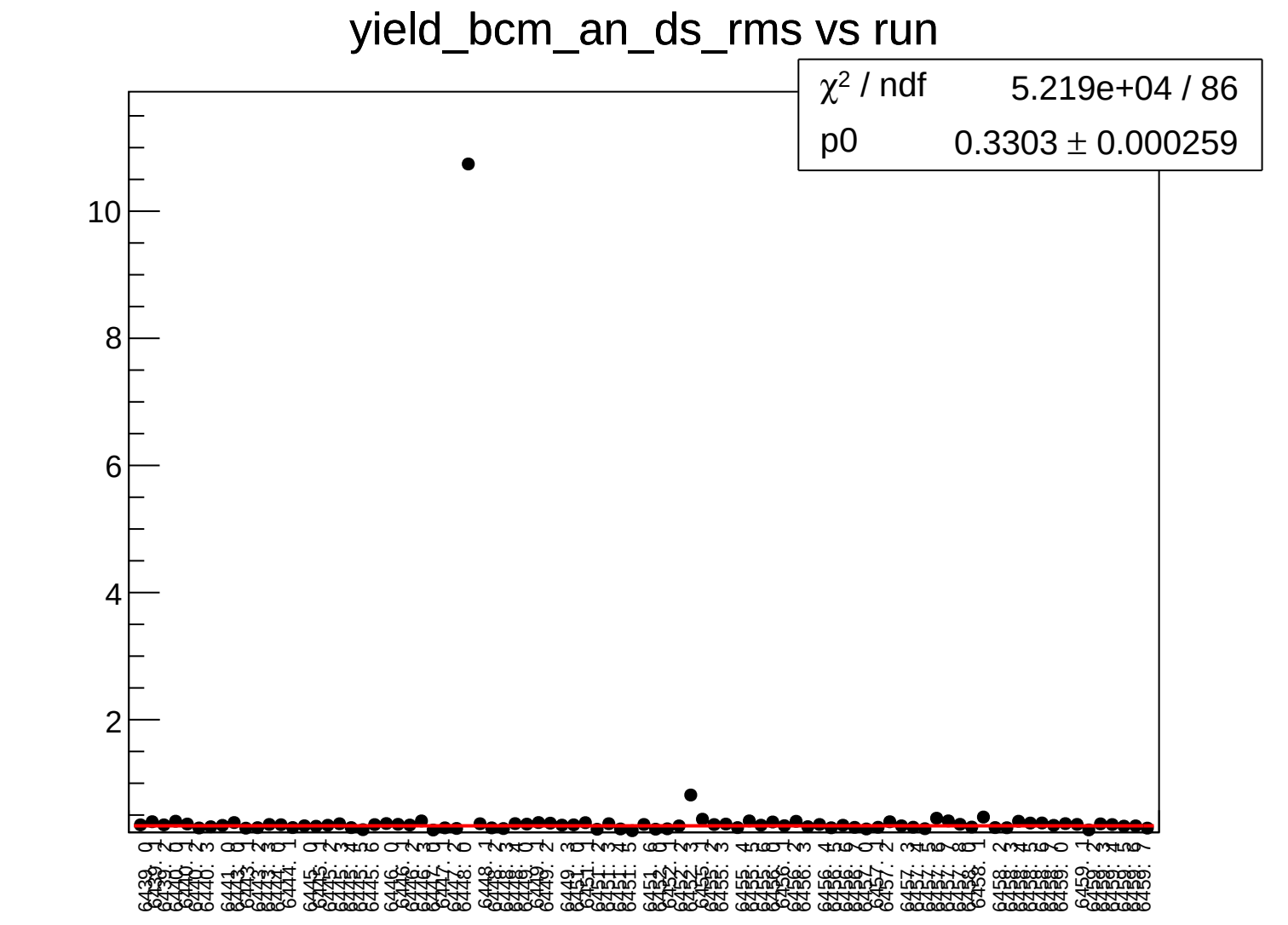

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 83.15 / 86
p0 57.15 ± 34.72
pull
Entries 87
Mean −359.5
Std Dev 385.9

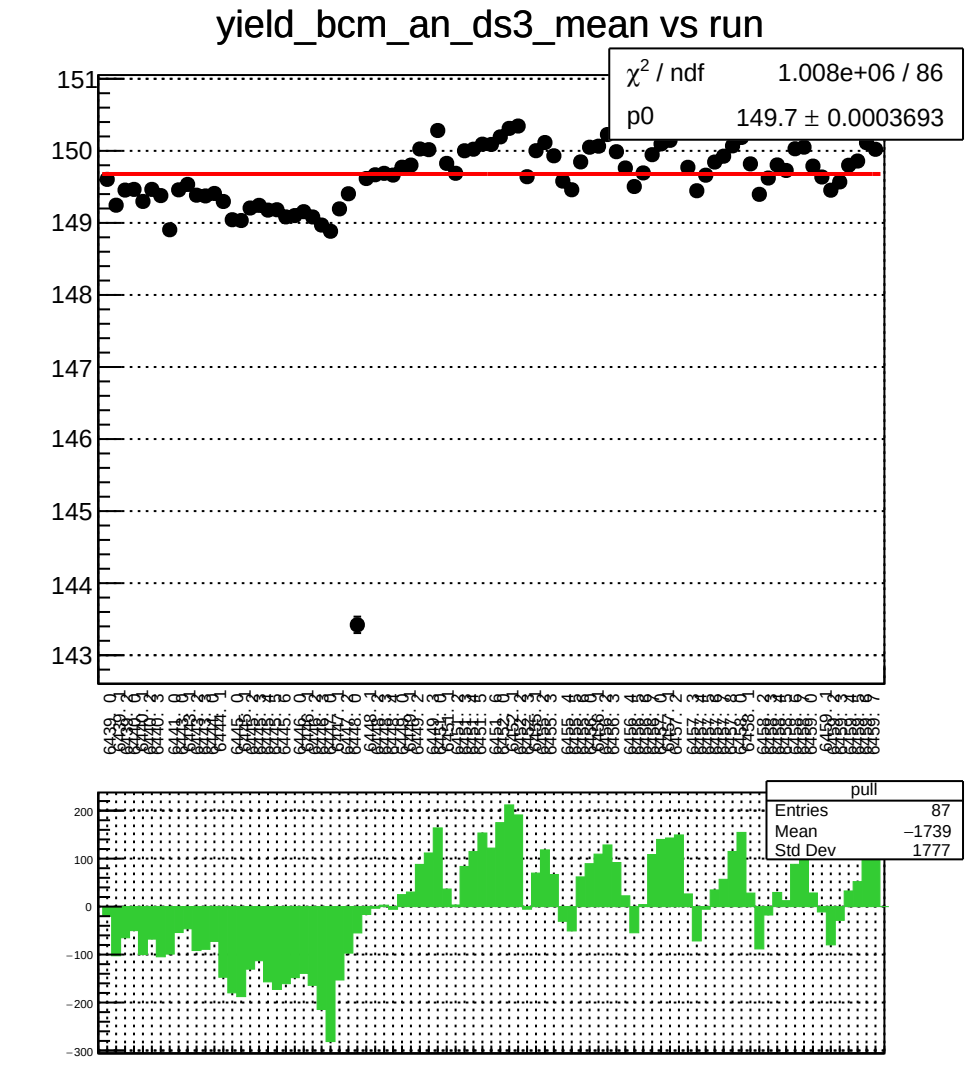

pull1D
Entries 87
Mean −0.005842
Std Dev 0.9776

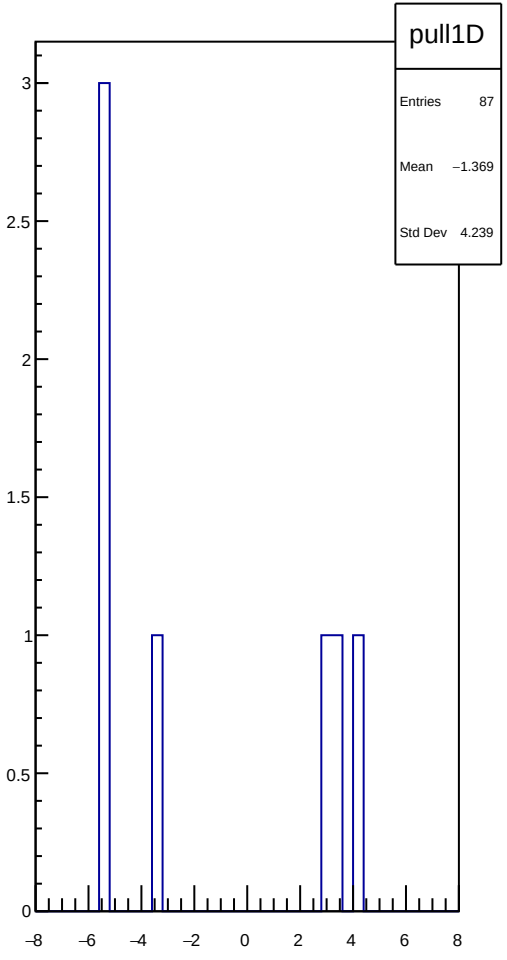

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 5723 / 86
p0 31.76 ± 0.02455
46
44
42
40
38
36
34
32
30
28
26

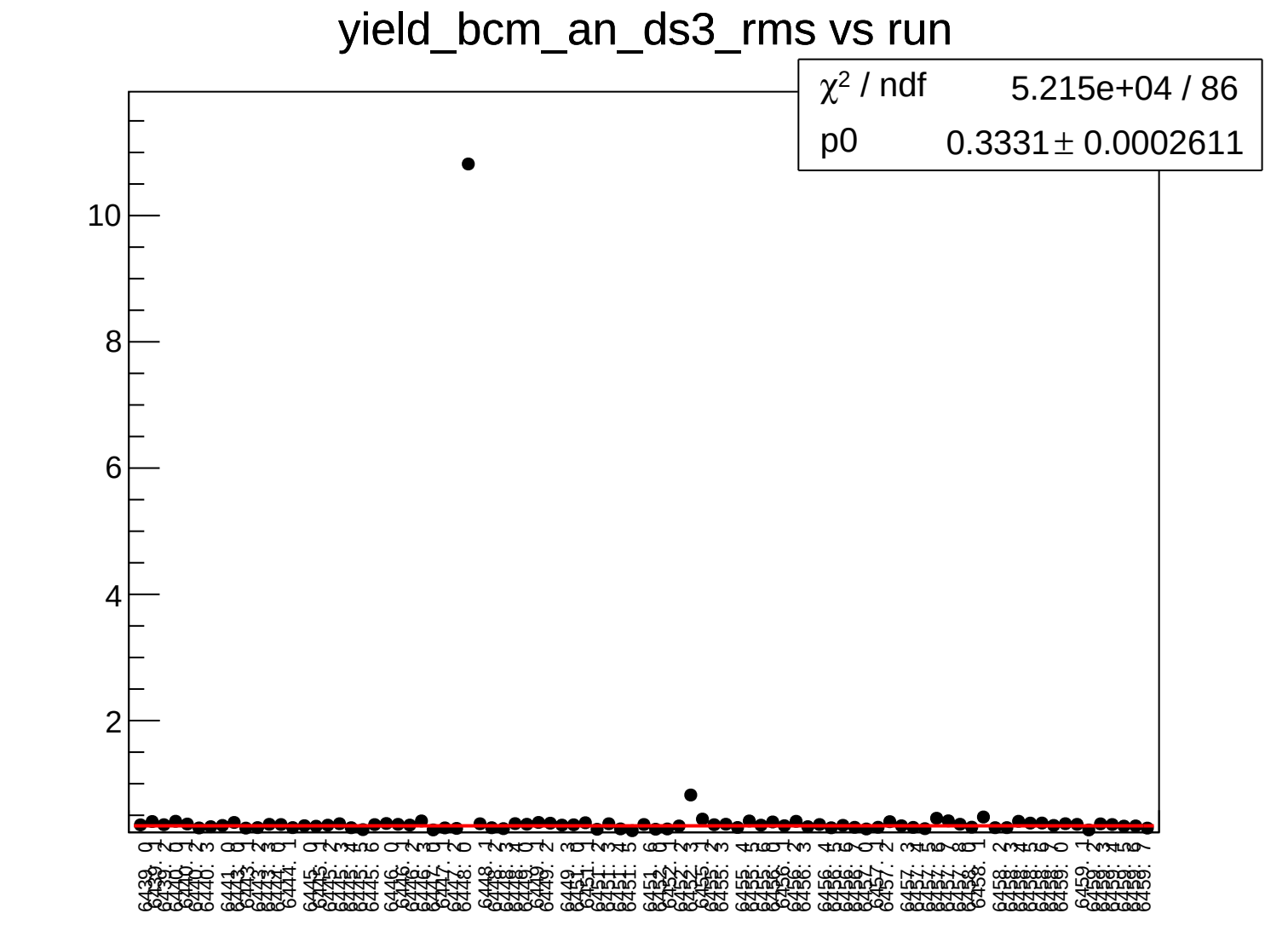

yield_bcm_an_ds_mean vs run
χ² / ndf 1.012e+06 / 86
p0 149.2 ± 0.0003662
150
149
148
147
146
145
144
143
pull
Entries 87
Mean −2061
Std Dev 2098
200
100
0
−100
−200
−300

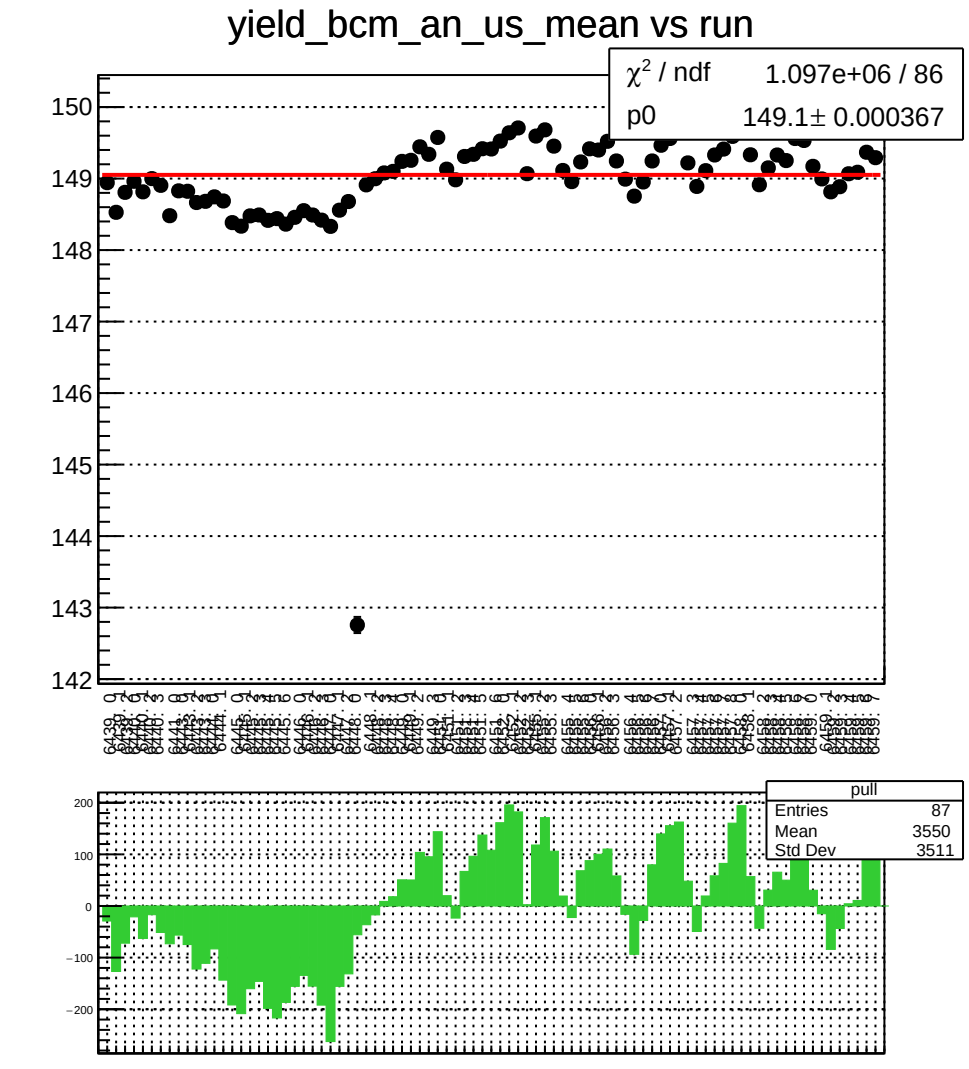

pull1D
Entries 87
Mean −0.645
Std Dev 4.662
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

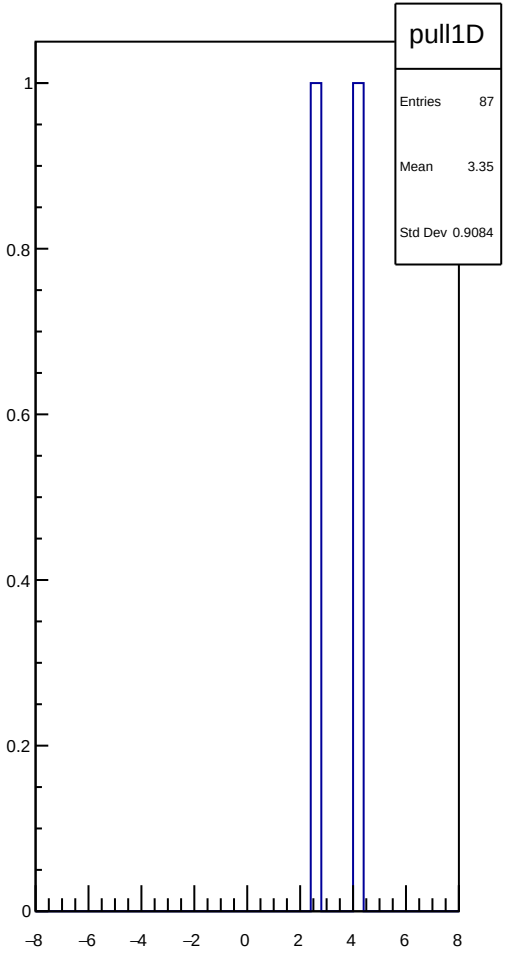

yield_bcm_an_ds_rms vs run
χ^2 / ndf 5.219e+04 / 86
p0 0.3303 ± 0.000259
10
8
6
4
2

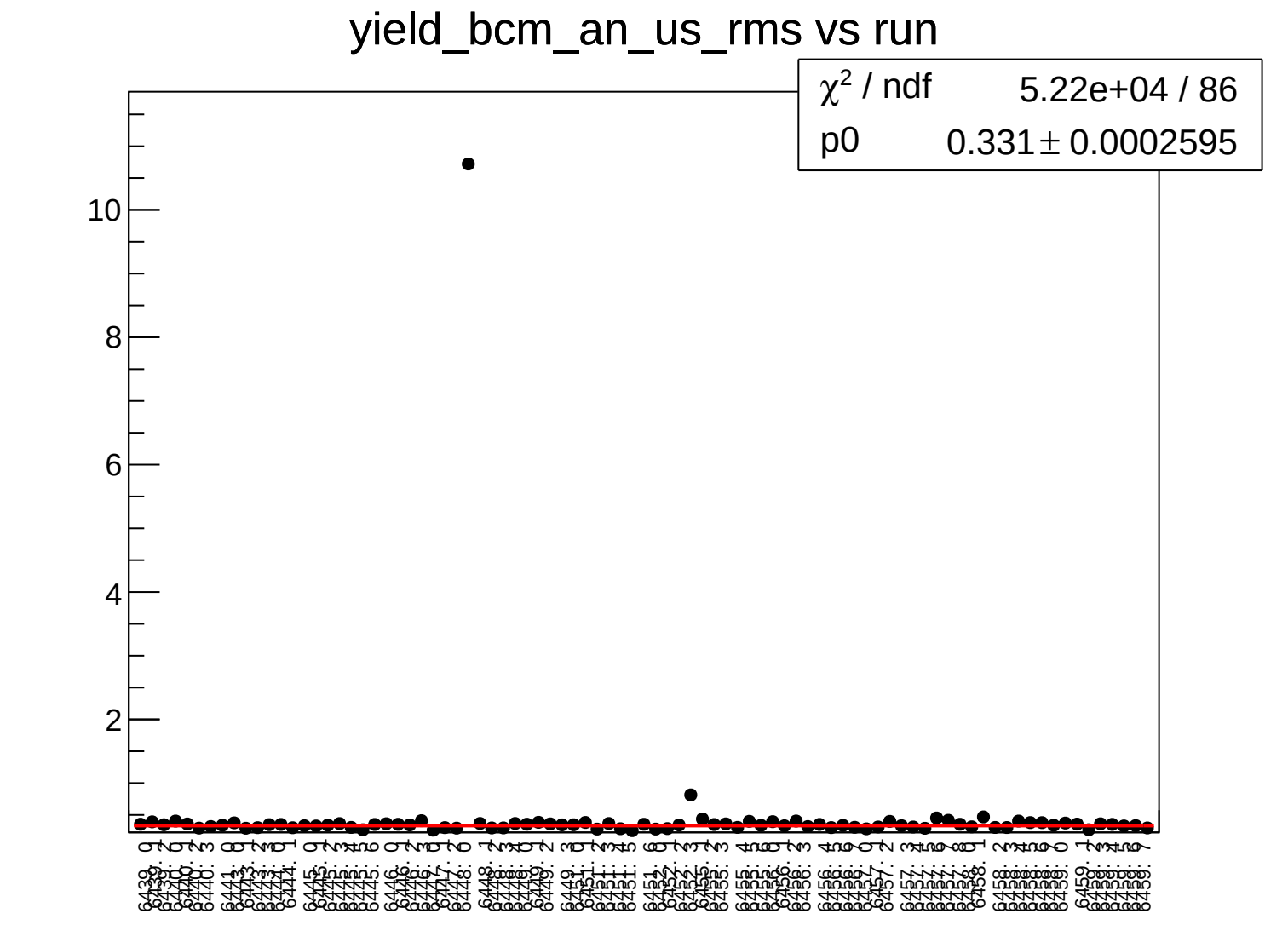

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.008e+06 / 86
p0 149.7 ± 0.0003693
151
150
149
148
147
146
145
144
143
pull
Entries 87
Mean −1739
Std Dev 1777
200
100
0
−100
−200
−300

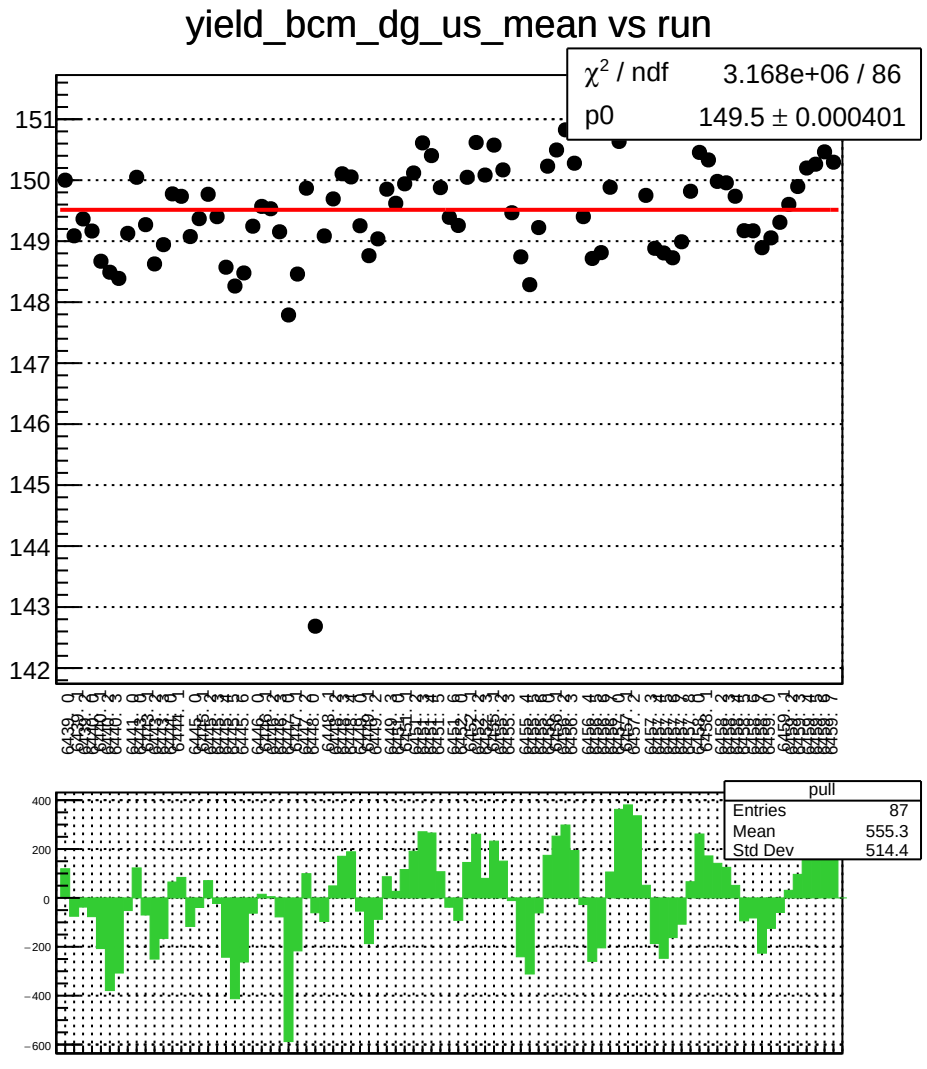

pull1D
Entries 87
Mean −1.369
Std Dev 4.239
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

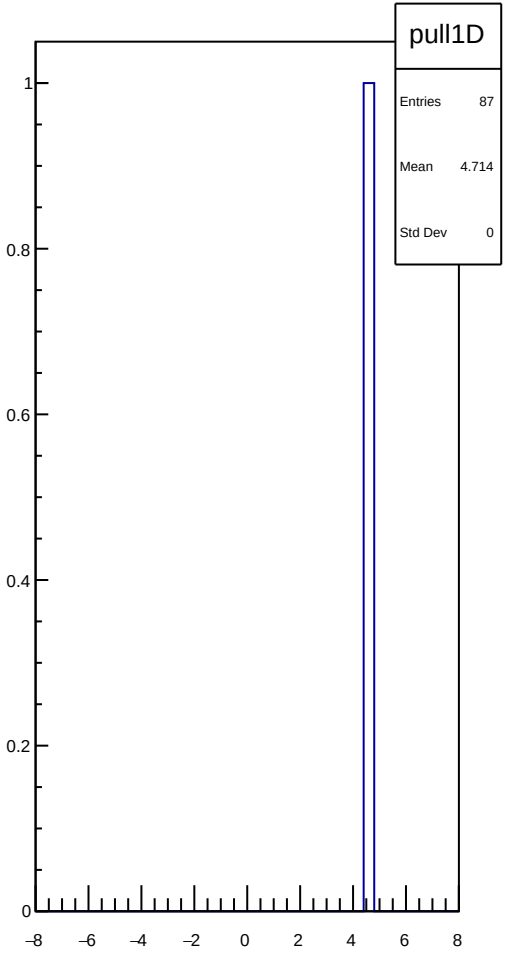

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 5.215e+04 / 86
p0 0.3331 ± 0.0002611
10
8
6
4
2

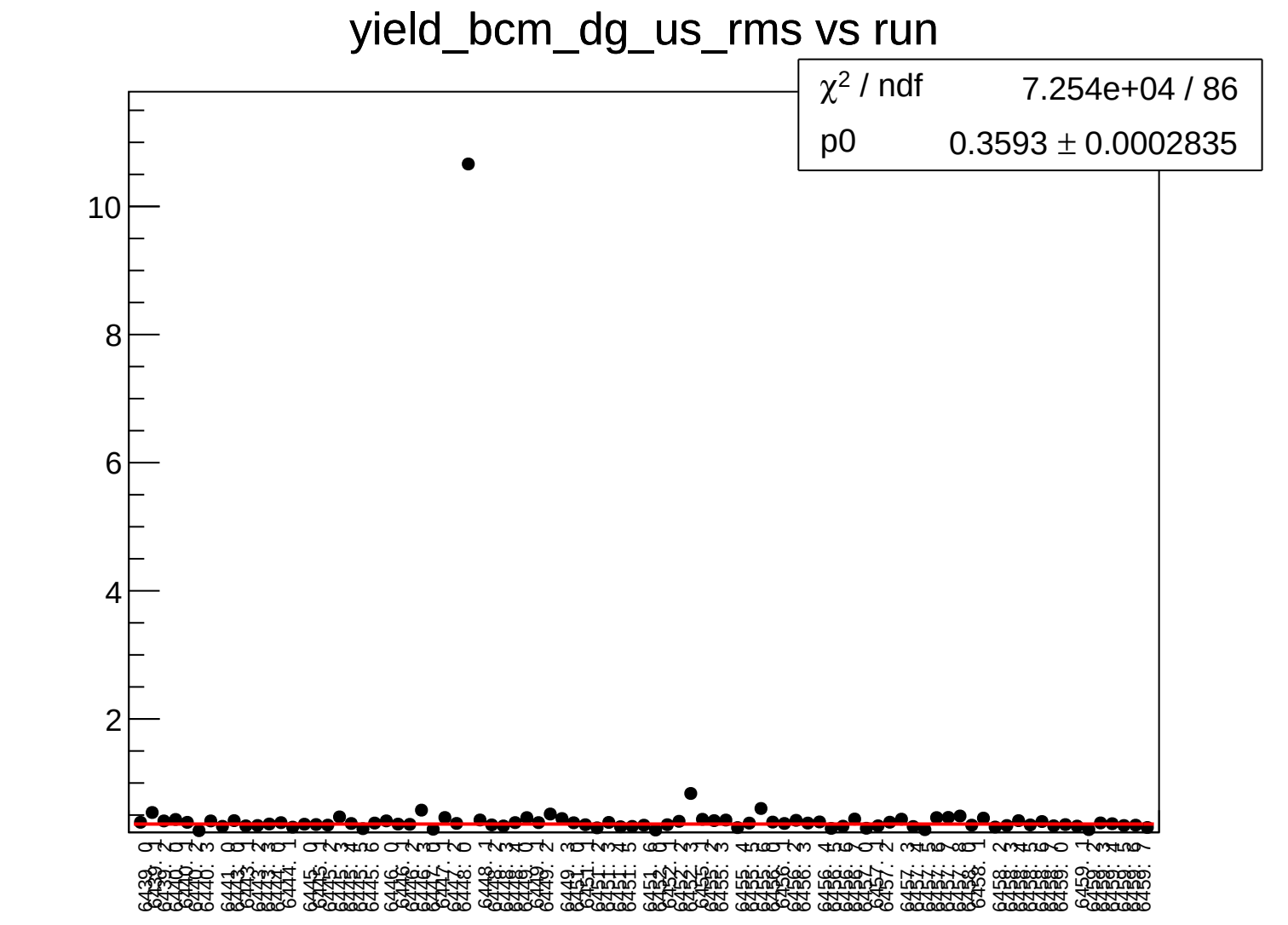

yield_bcm_an_us_mean vs run
χ² / ndf 1.097e+06 / 86
p0 149.1± 0.000367
150
149
148
147
146
145
144
143
142
pull
Entries 87
Mean 3550
Std Dev 3511
200
100
0
−100
−200

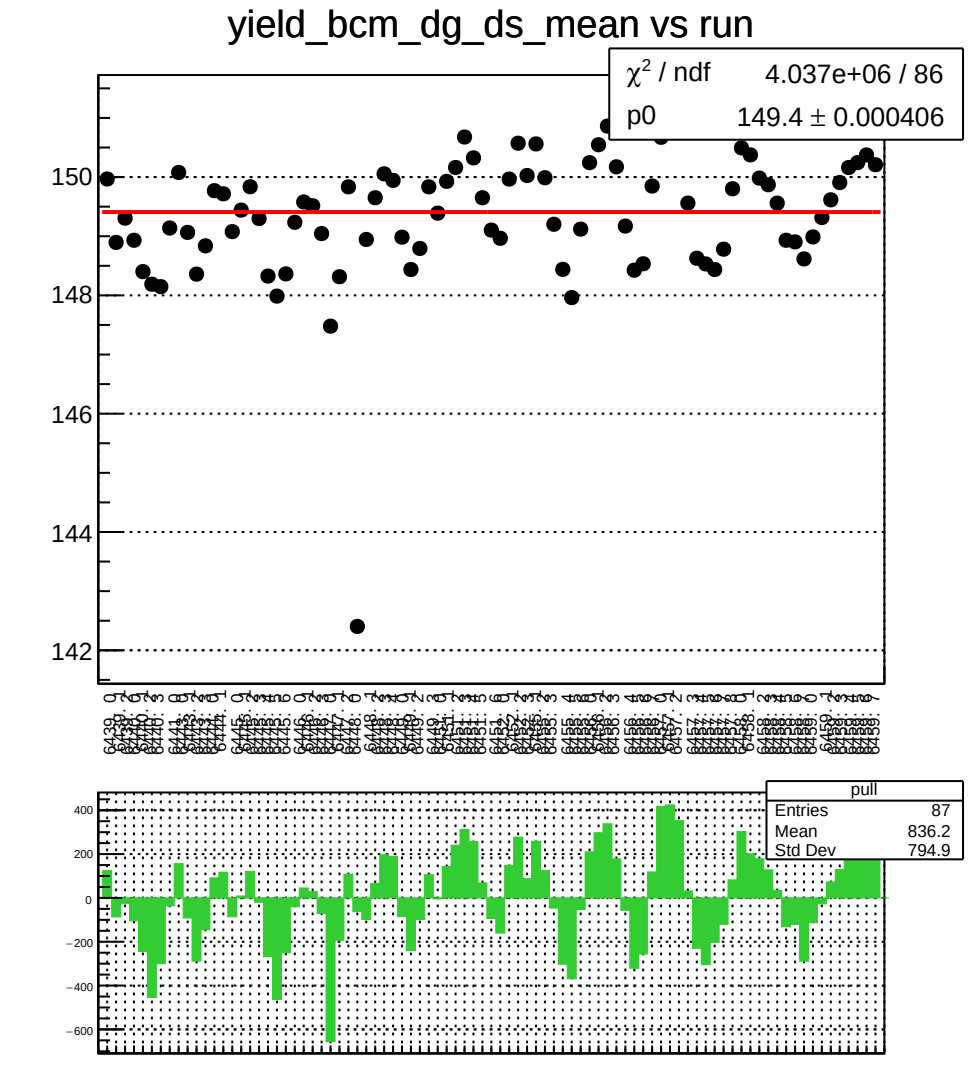

pull1D
Entries 87
Mean 3.35
Std Dev 0.9084
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

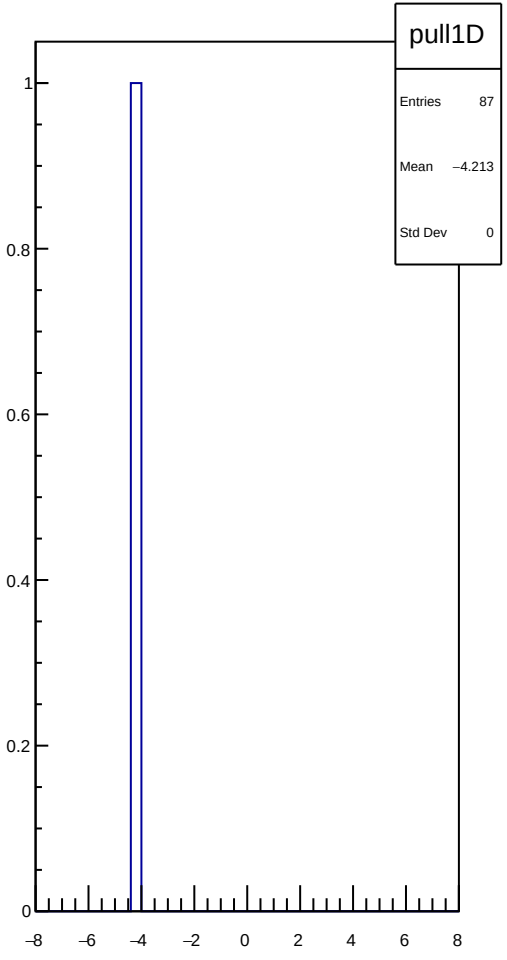

yield_bcm_an_us_rms vs run
χ^2 / ndf 5.22e+04 / 86
p0 0.331 ± 0.0002595
10
8
6
4
2

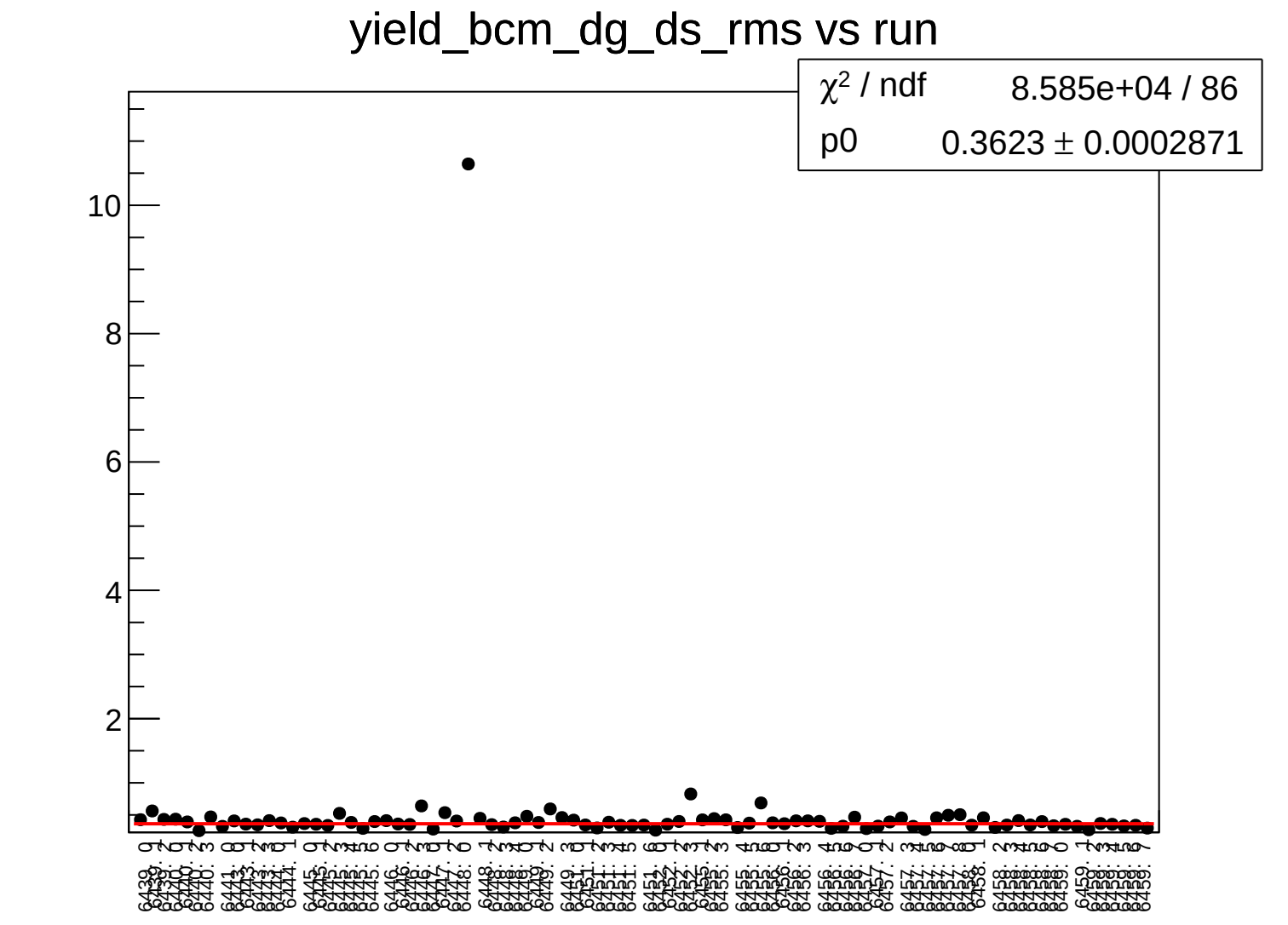

yield_bcm_dg_us_mean vs run
χ² / ndf 3.168e+06 / 86
p0 149.5 ± 0.000401
151
150
149
148
147
146
145
144
143
142
pull
Entries 87
Mean 555.3
Std Dev 514.4
400
200
0
−200
−400
−600

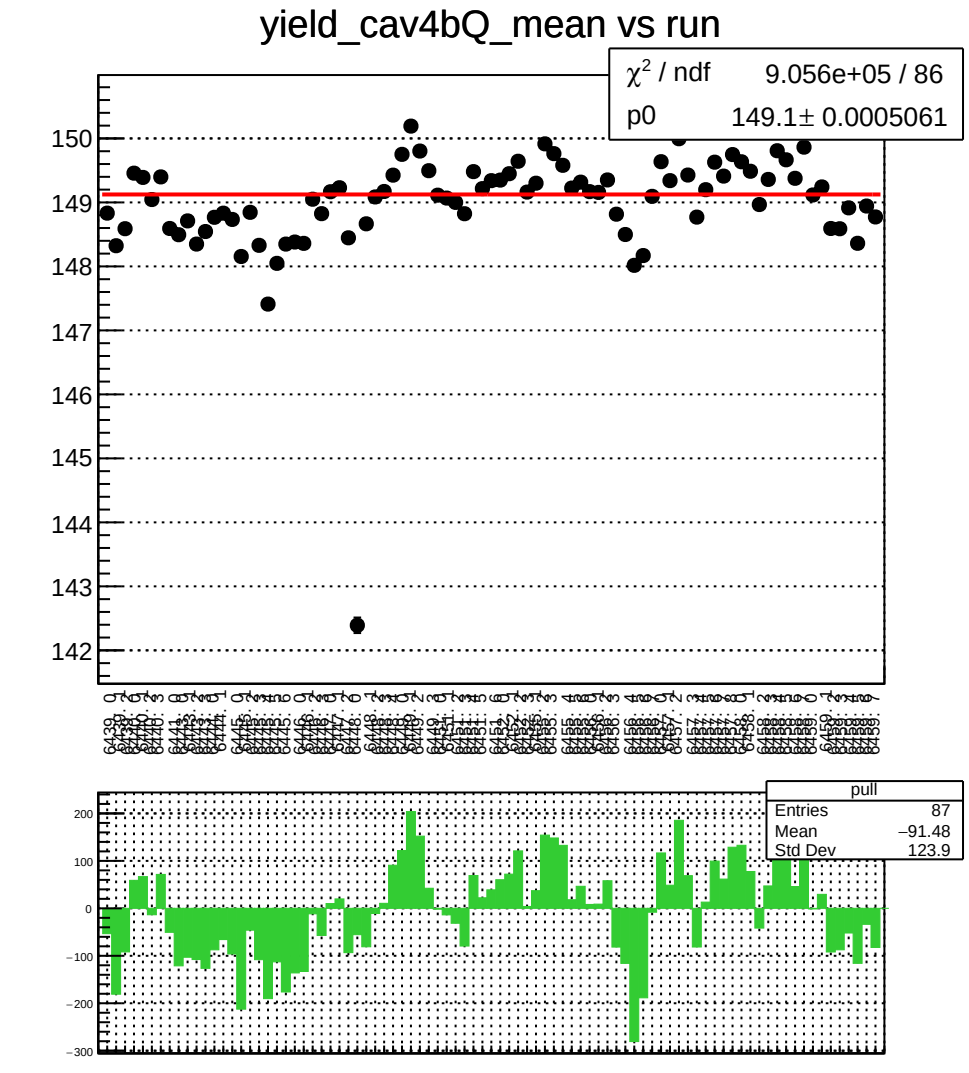

pull1D
Entries 87
Mean 4.714
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

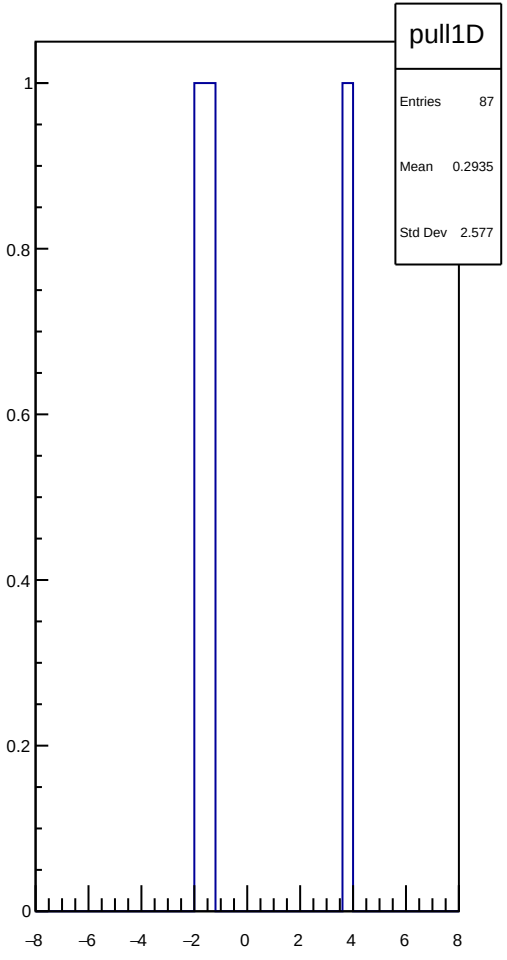

yield_bcm_dg_us_rms vs run
χ² / ndf 7.254e+04 / 86
p0 0.3593 ± 0.0002835
10
8
6
4
2

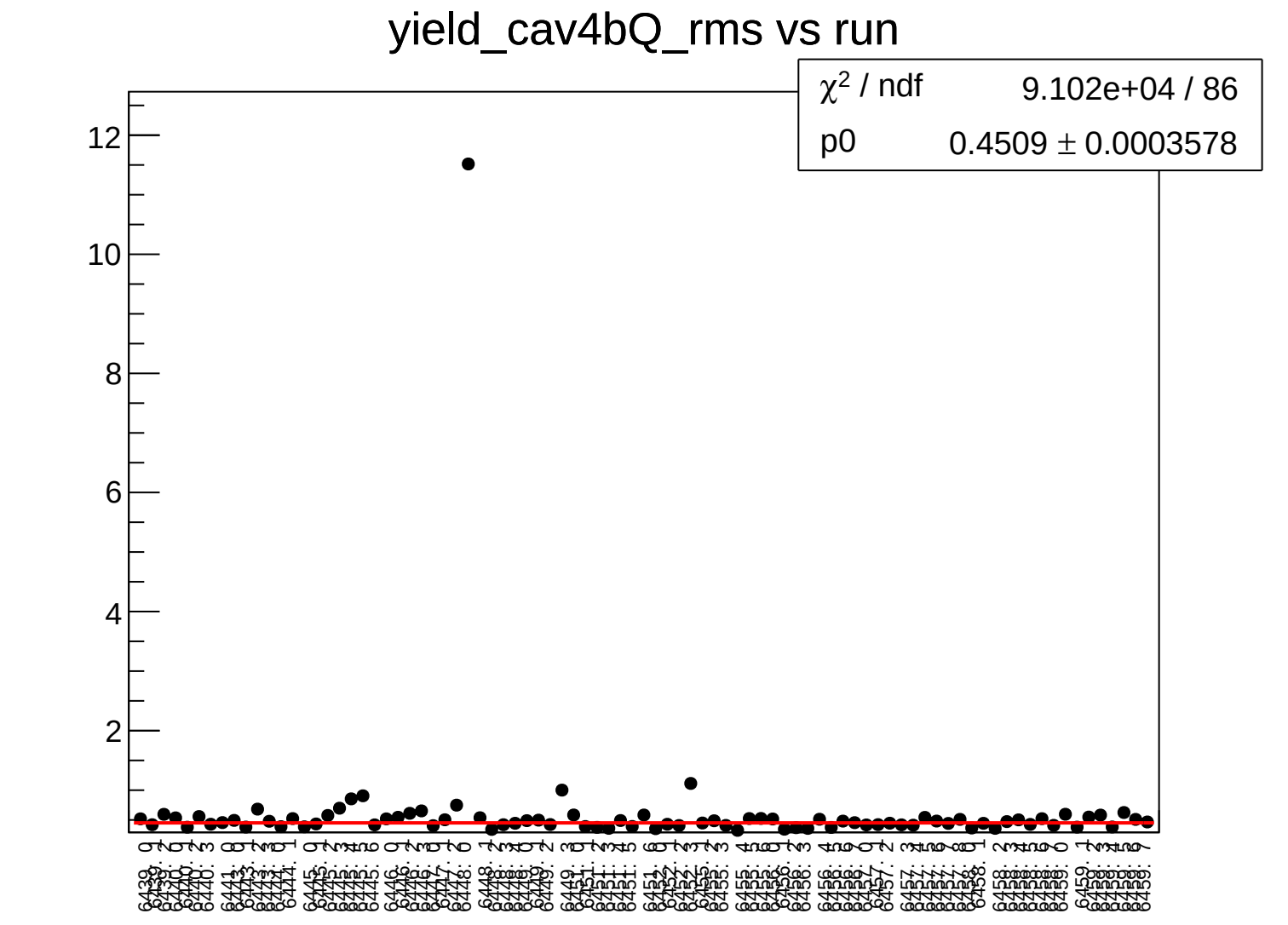

yield_bcm_dg_ds_mean vs run
χ² / ndf 4.037e+06 / 86
p0 149.4 ± 0.000406
150
148
146
144
142
pull
Entries 87
Mean 836.2
Std Dev 794.9
400
200
0
−200
−400
−600

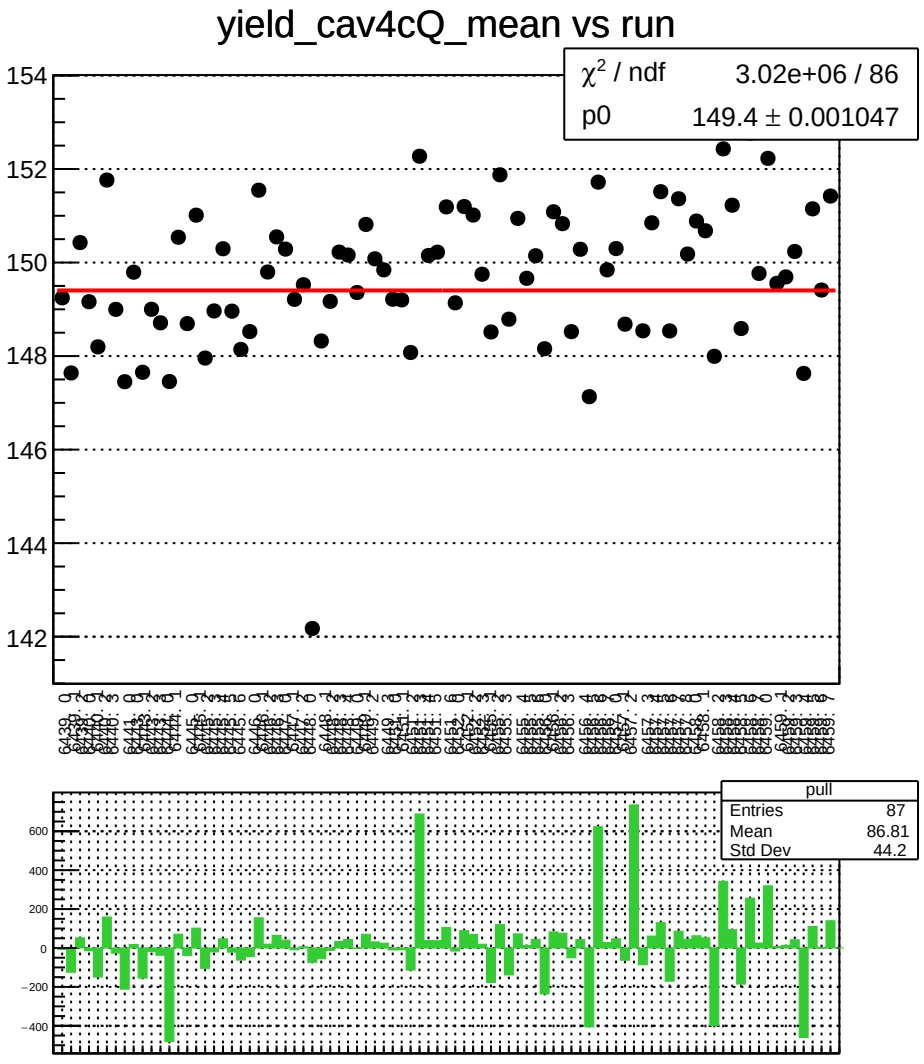

pull1D
Entries 87
Mean −4.213
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

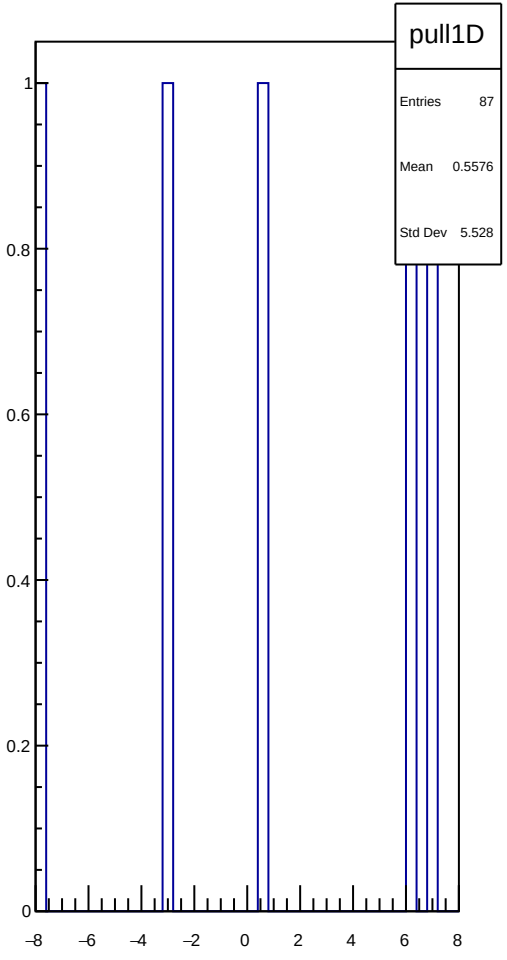

yield_bcm_dg_ds_rms vs run
χ² / ndf 8.585e+04 / 86
p0 0.3623 ± 0.0002871
10
8
6
4
2

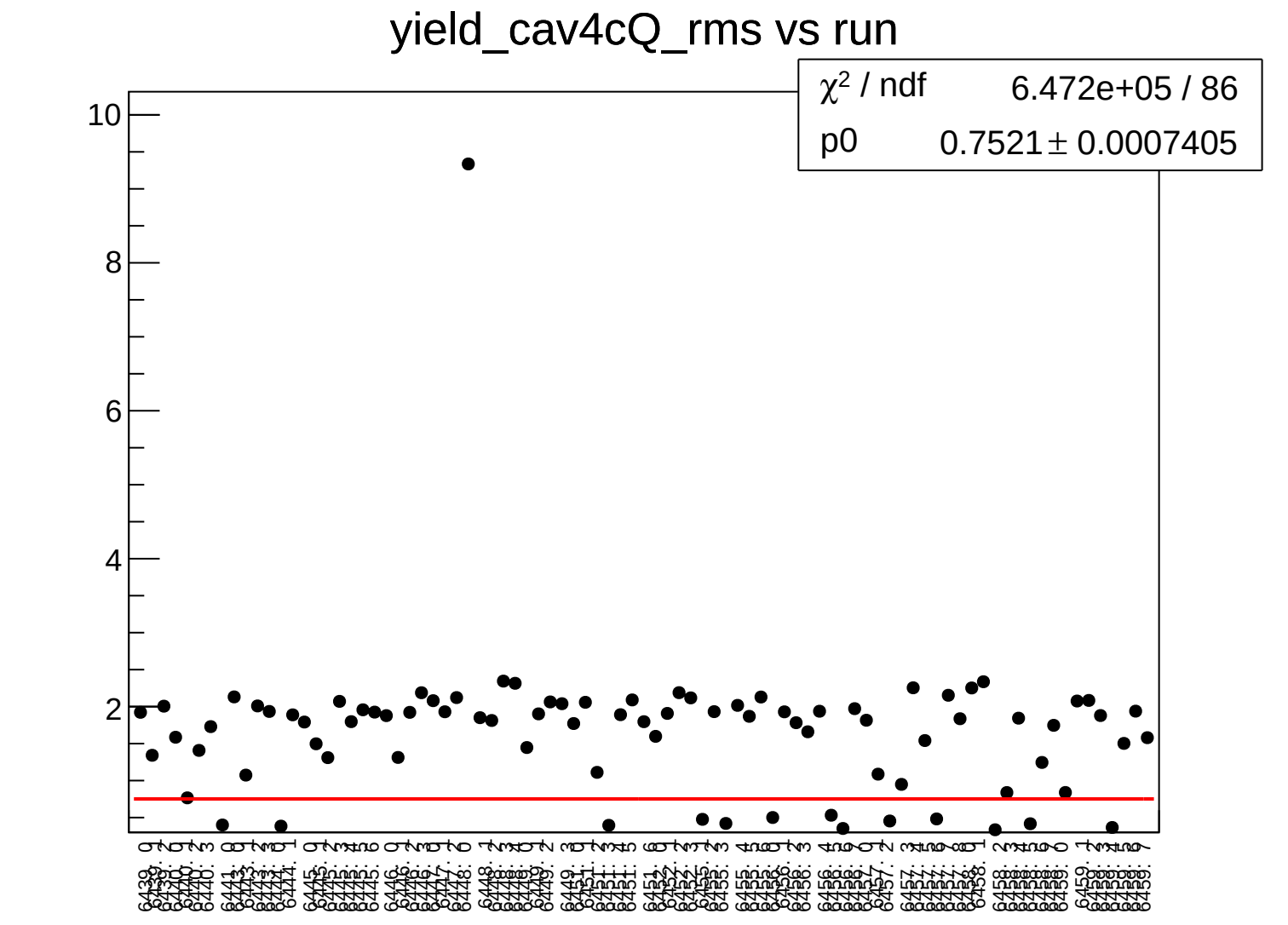

yield_cav4bQ_mean vs run
χ² / ndf 9.056e+05 / 86
p0 149.1± 0.0005061
150
149
148
147
146
145
144
143
142
pull
Entries 87
Mean −91.48
Std Dev 123.9
200
100
0
−100
−200
−300

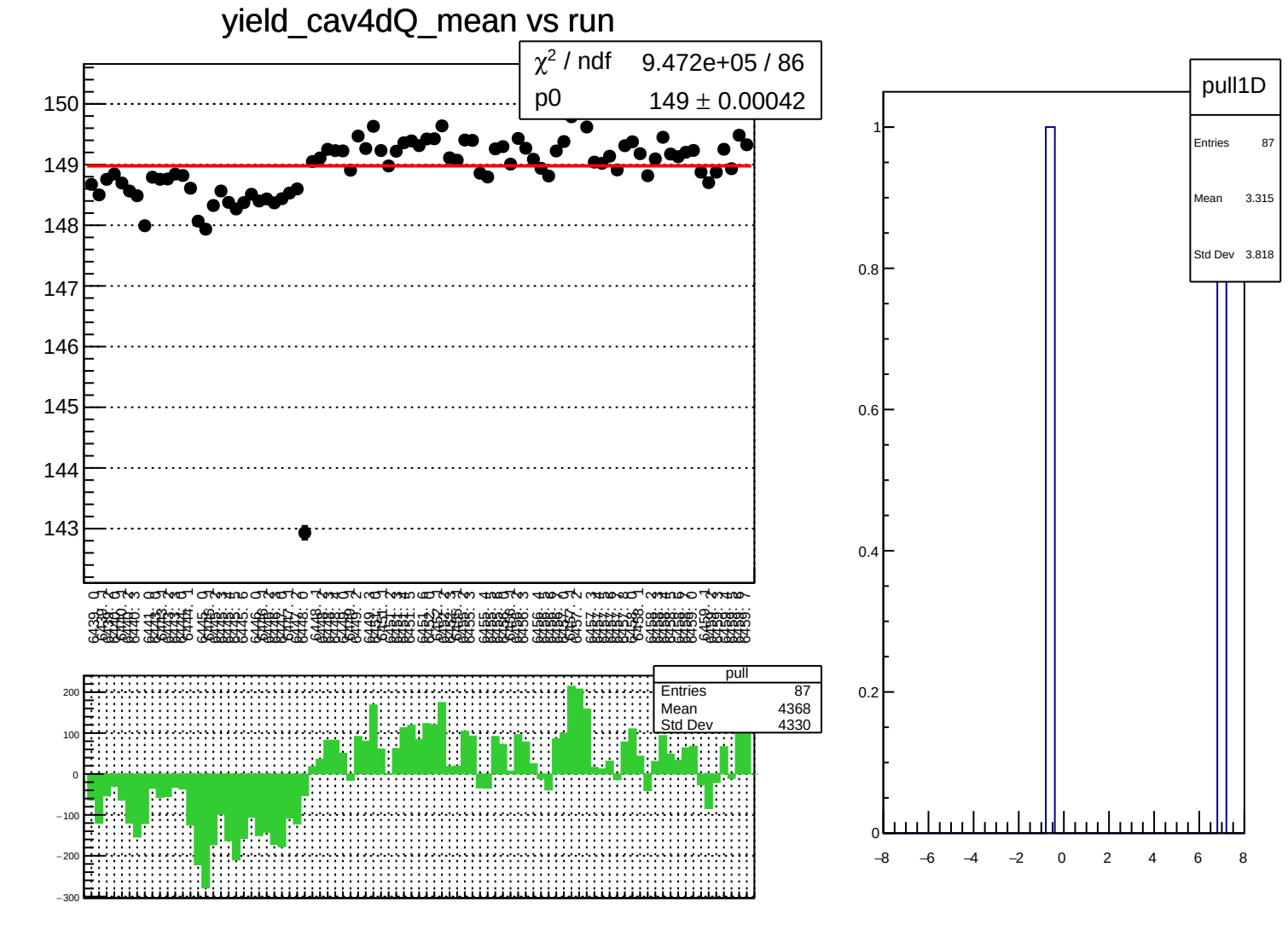

pull1D
Entries 87
Mean 0.2935
Std Dev 2.577
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

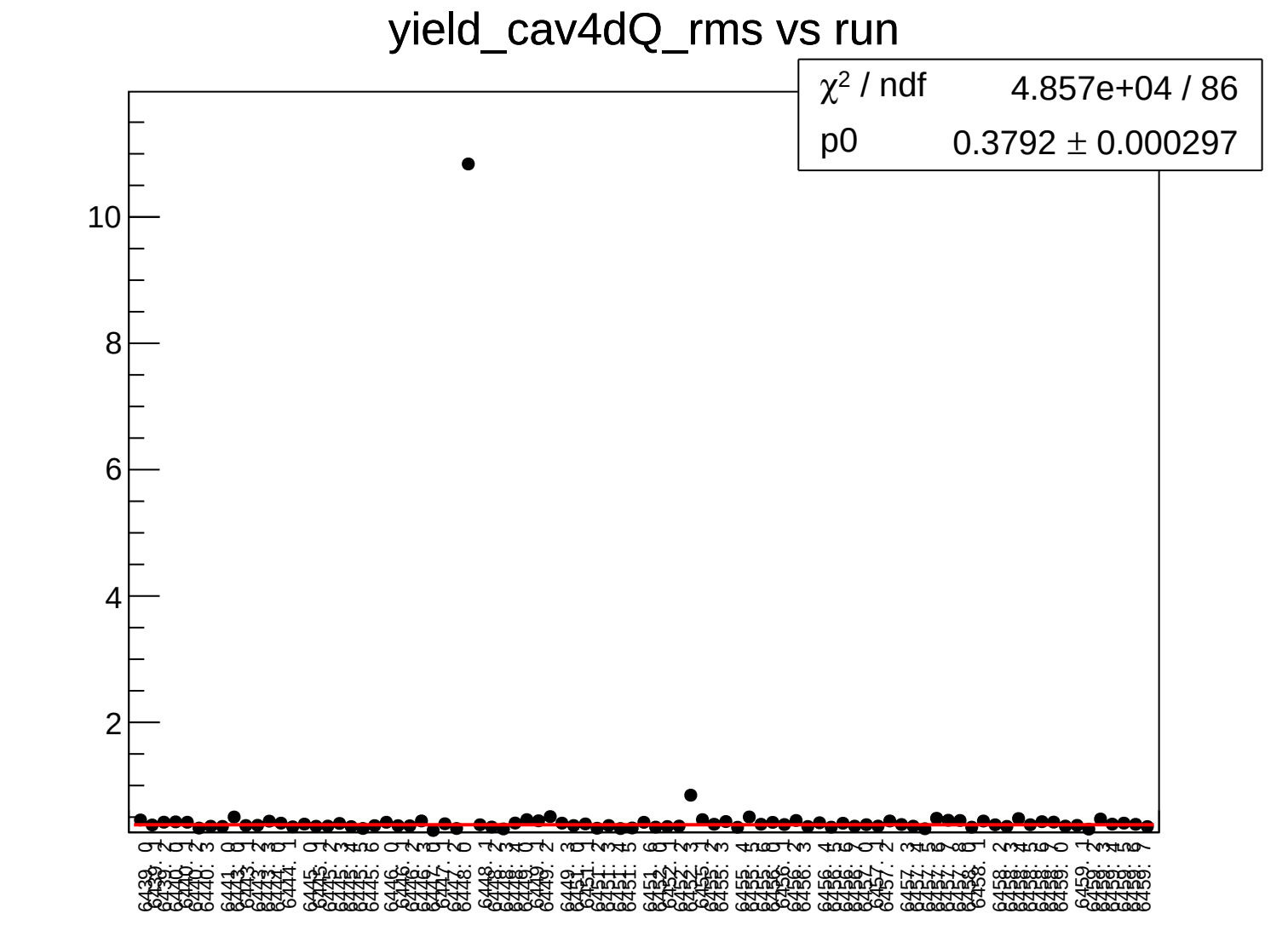

yield_cav4bQ_rms vs run
χ² / ndf 9.102e+04 / 86
p0 0.4509 ± 0.0003578
12
10
8
6
4
2

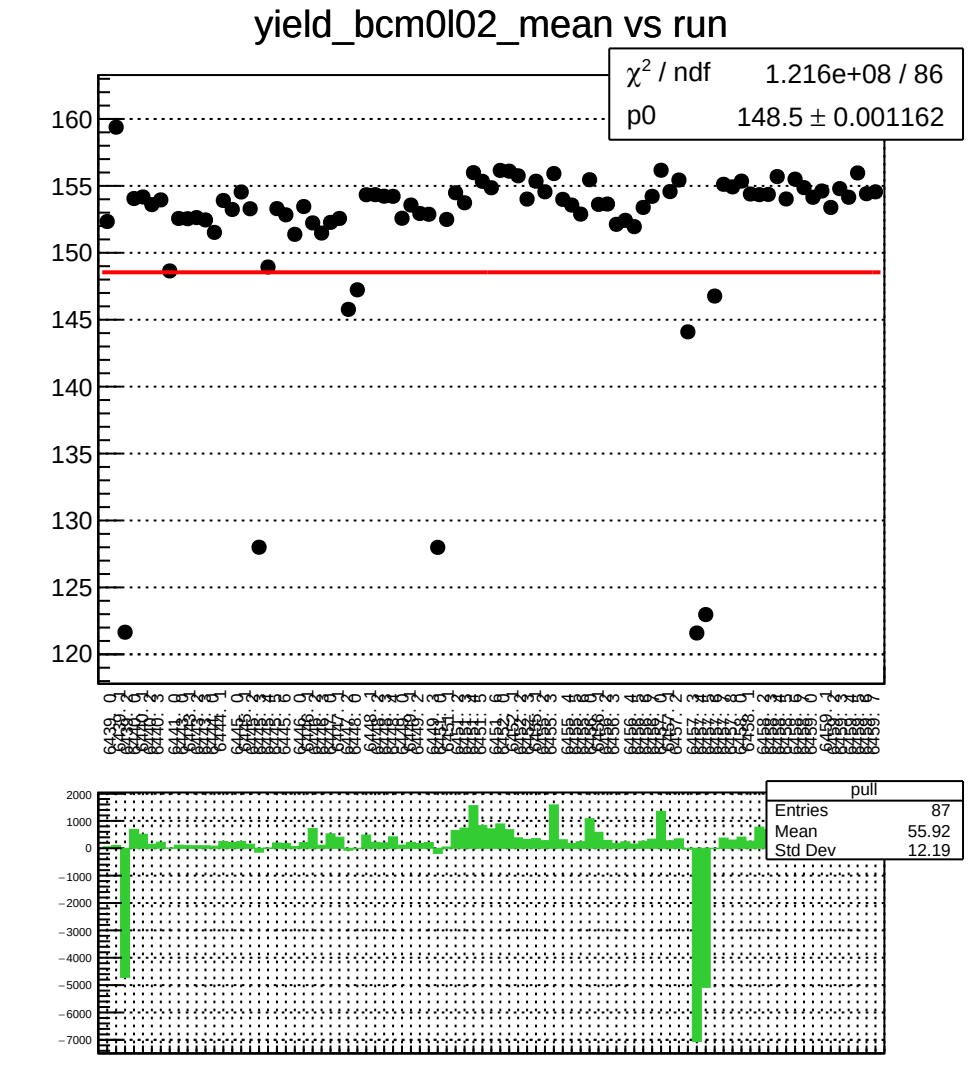

yield_cav4cQ_mean vs run
χ² / ndf 3.02e+06 / 86
p0 149.4 ± 0.001047
154
152
150
148
146
144
142
pull
Entries 87
Mean 86.81
Std Dev 44.2
600
400
200
0
−200
−400

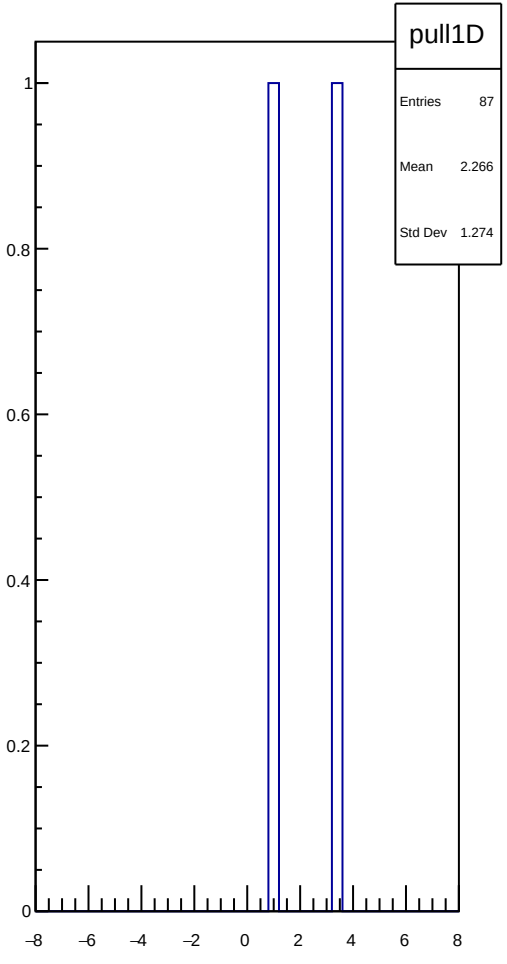

pull1D
Entries 87
Mean 0.5576
Std Dev 5.528
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

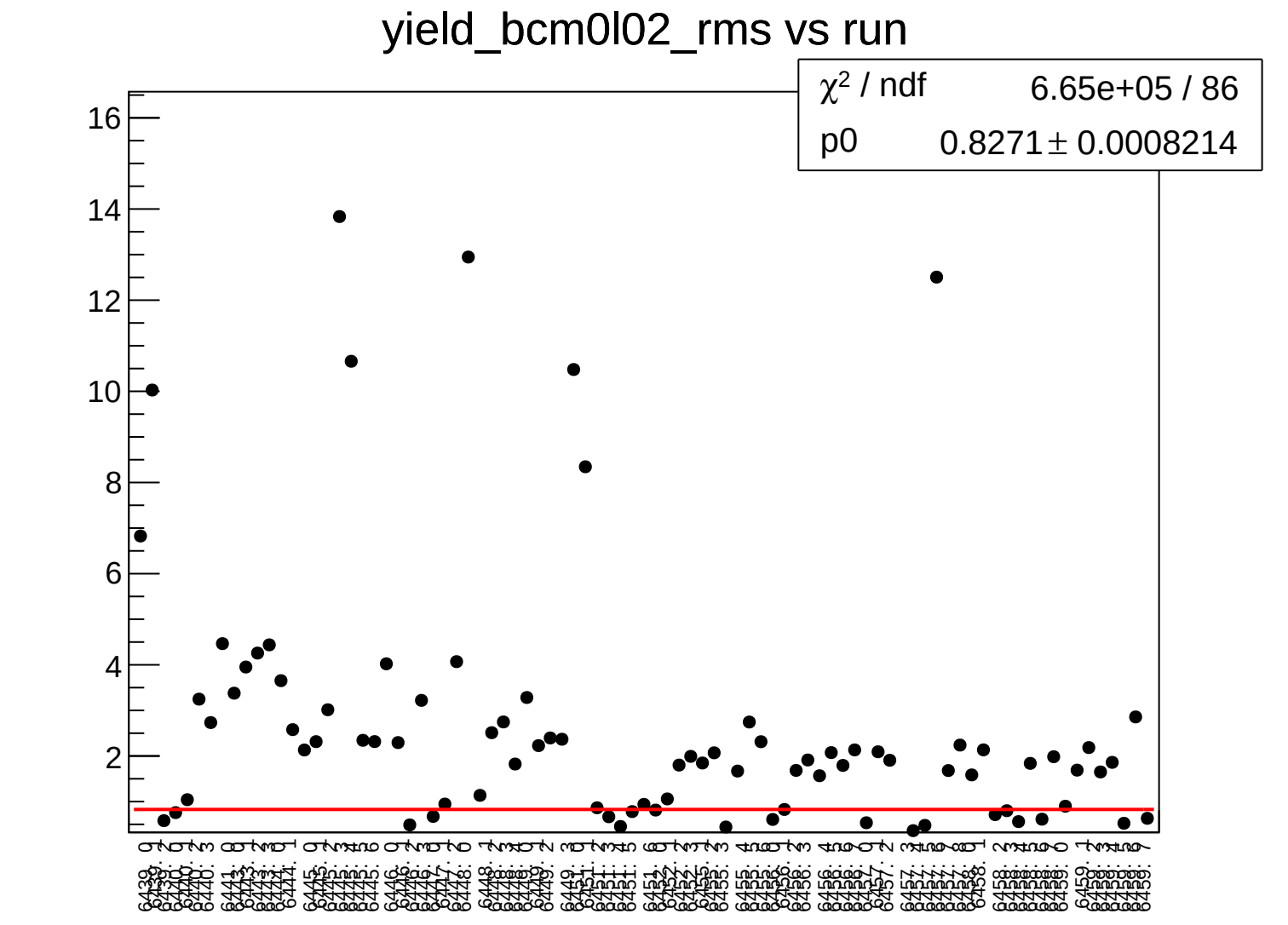

yield_cav4cQ_rms vs run
χ² / ndf 6.472e+05 / 86
p0 0.7521 ± 0.0007405
10
8
6
4
2

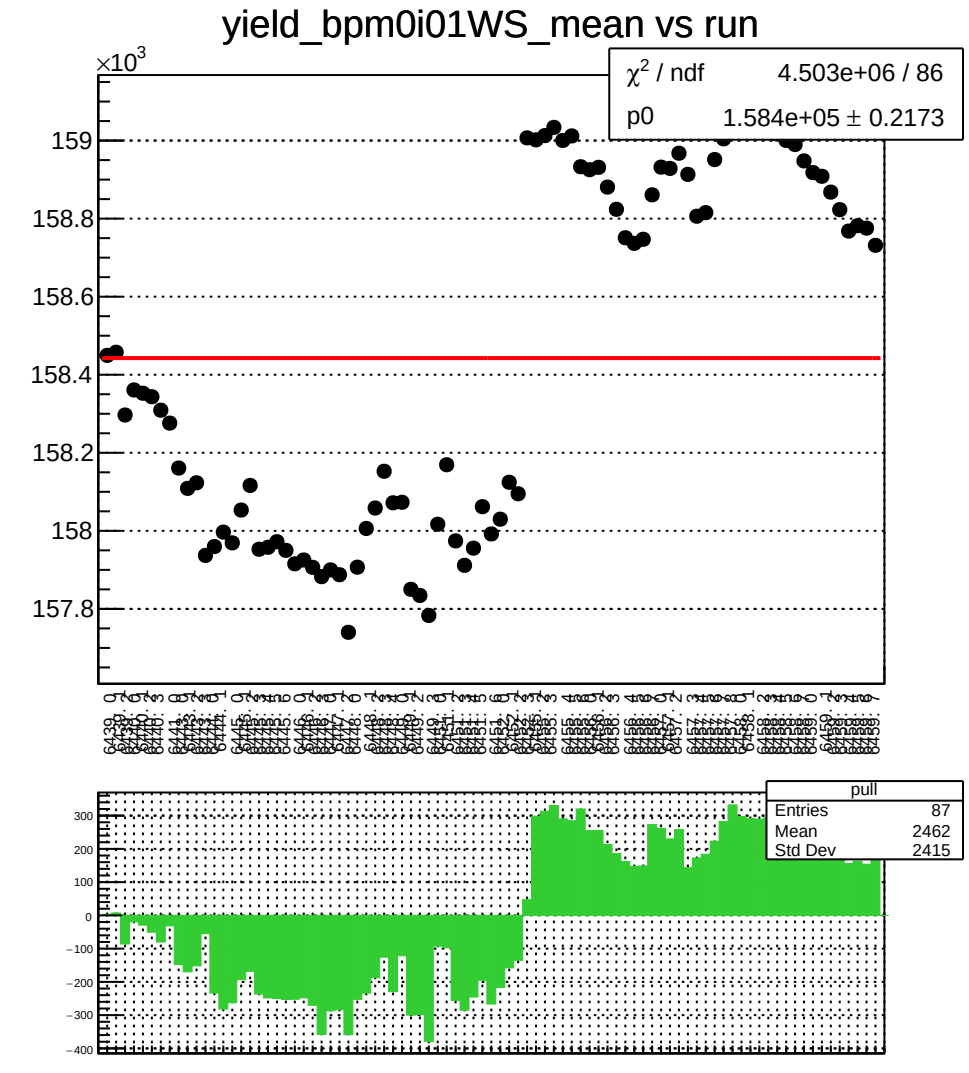

yield_cav4dQ_mean vs run
χ² / ndf 9.472e+05 / 86
p0 149 ± 0.00042
150
149
148
147
146
145
144
143
pull
Entries 87
Mean 4368
Std Dev 4330
200
100
0
−100
−200
−300
pull1D
Entries 87
Mean 3.315
Std Dev 3.818
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

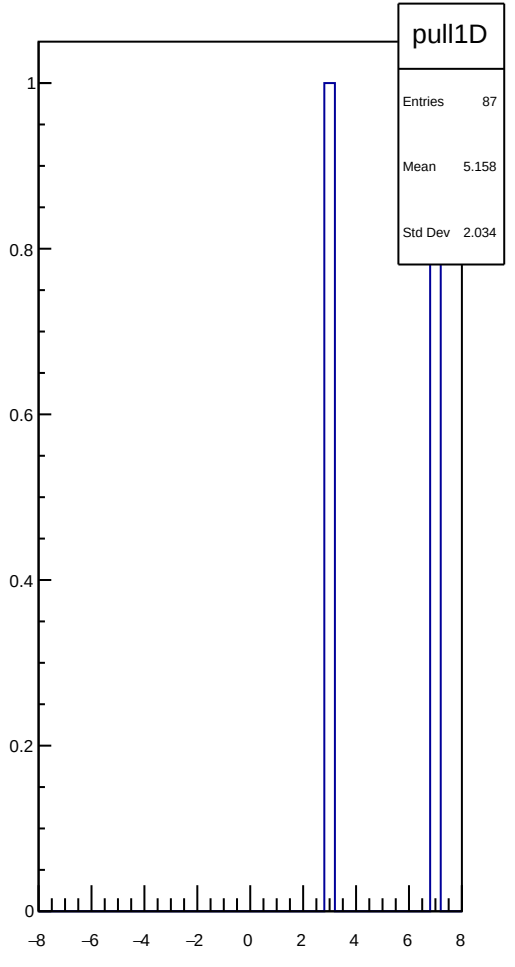

yield_cav4dQ_rms vs run
χ² / ndf 4.857e+04 / 86
p0 0.3792 ± 0.000297
10
8
6
4
2

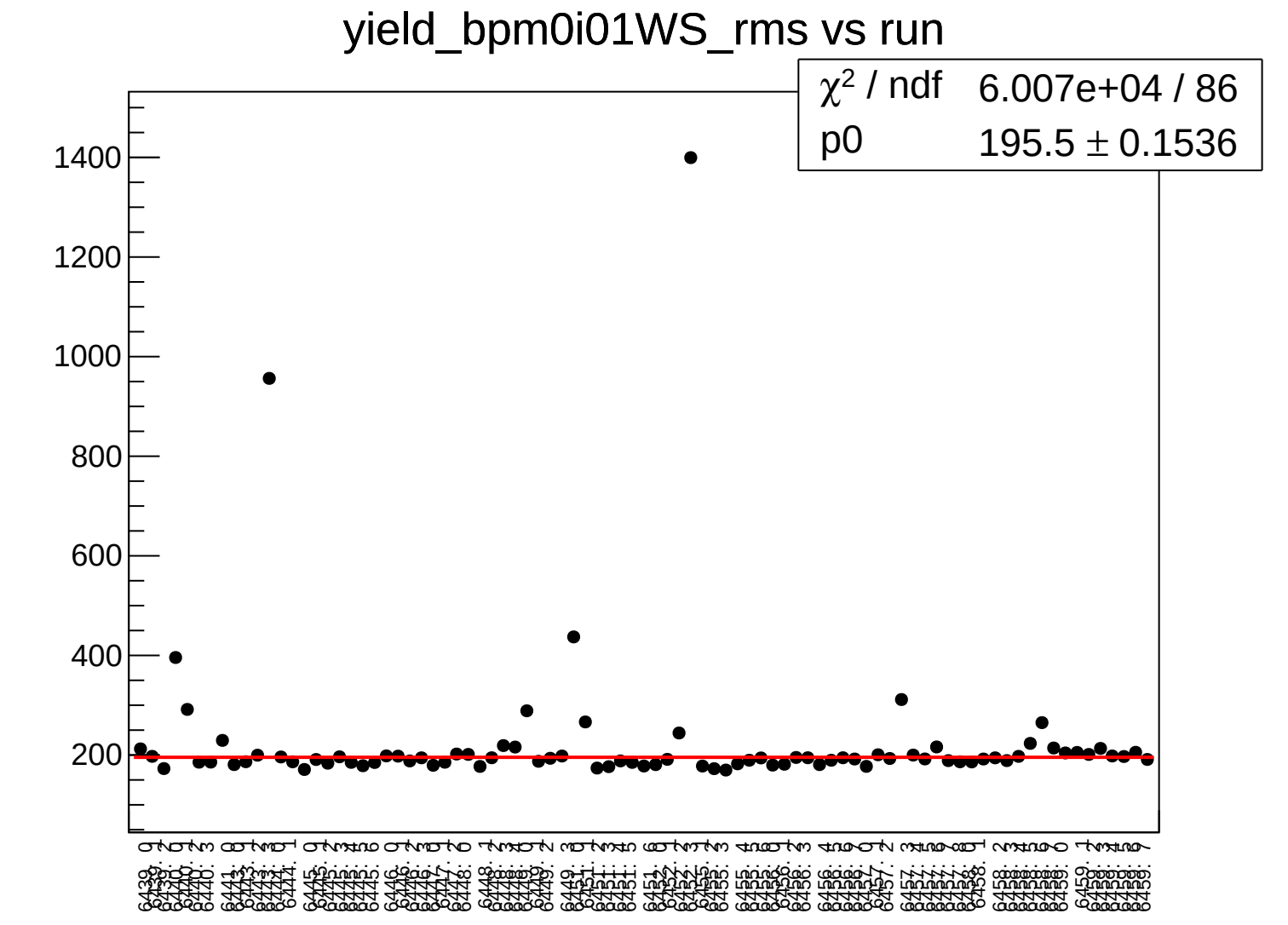

yield_bcm0l02_mean vs run
χ² / ndf 1.216e+08 / 86
p0 148.5 ± 0.001162
160
155
150
145
140
135
130
125
120
pull
Entries 87
Mean 55.92
Std Dev 12.19
2000
1000
0
−1000
−2000
−3000
−4000
−5000
−6000
−7000

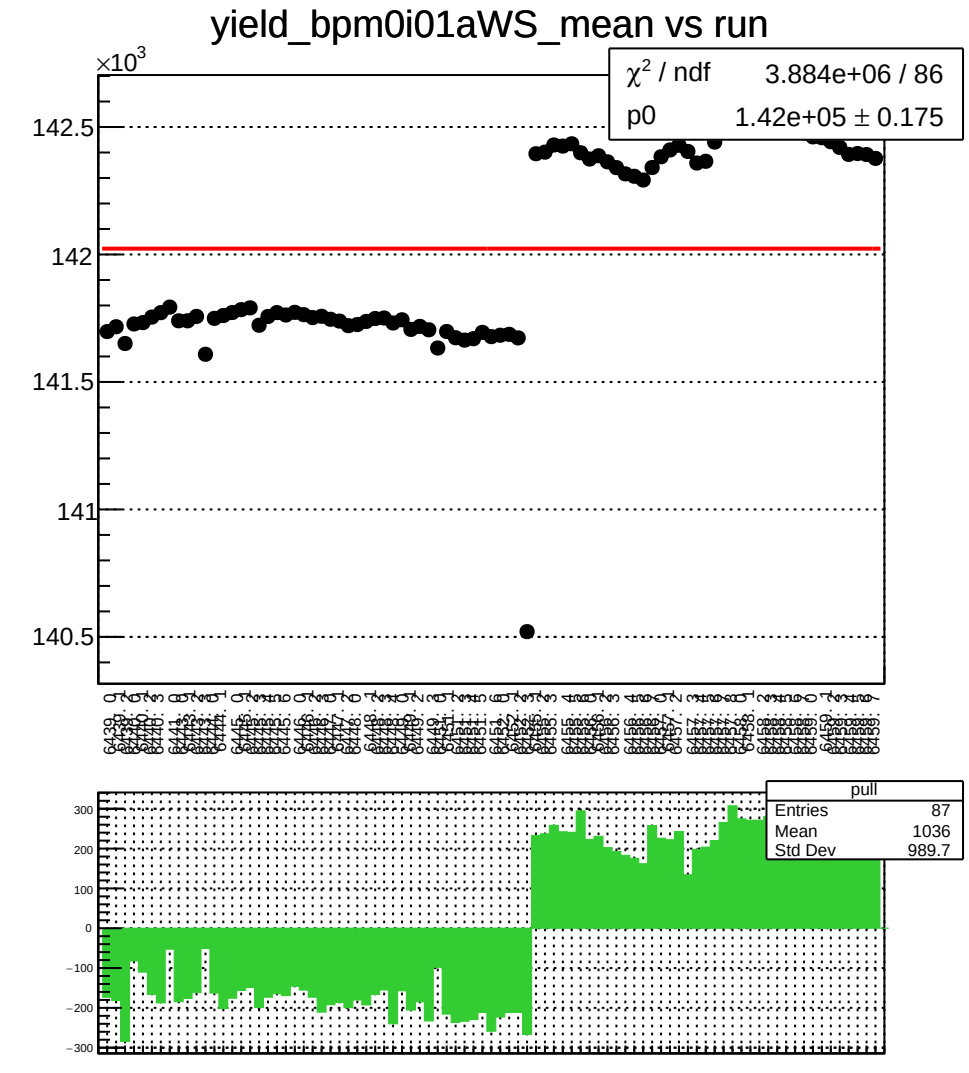

pull1D
Entries 87
Mean 2.266
Std Dev 1.274
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

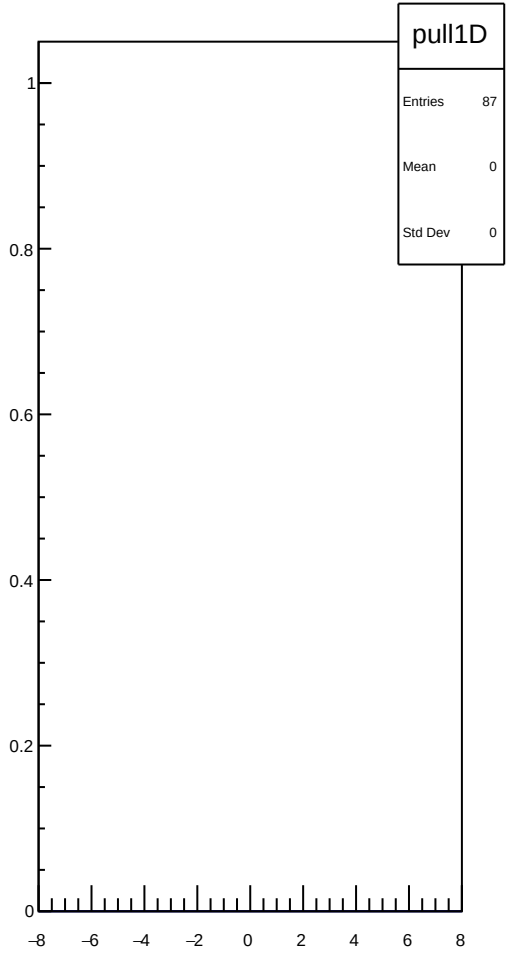

yield_bcm0l02_rms vs run
χ² / ndf 6.65e+05 / 86
p0 0.8271 ± 0.0008214
16
14
12
10
8
6
4
2

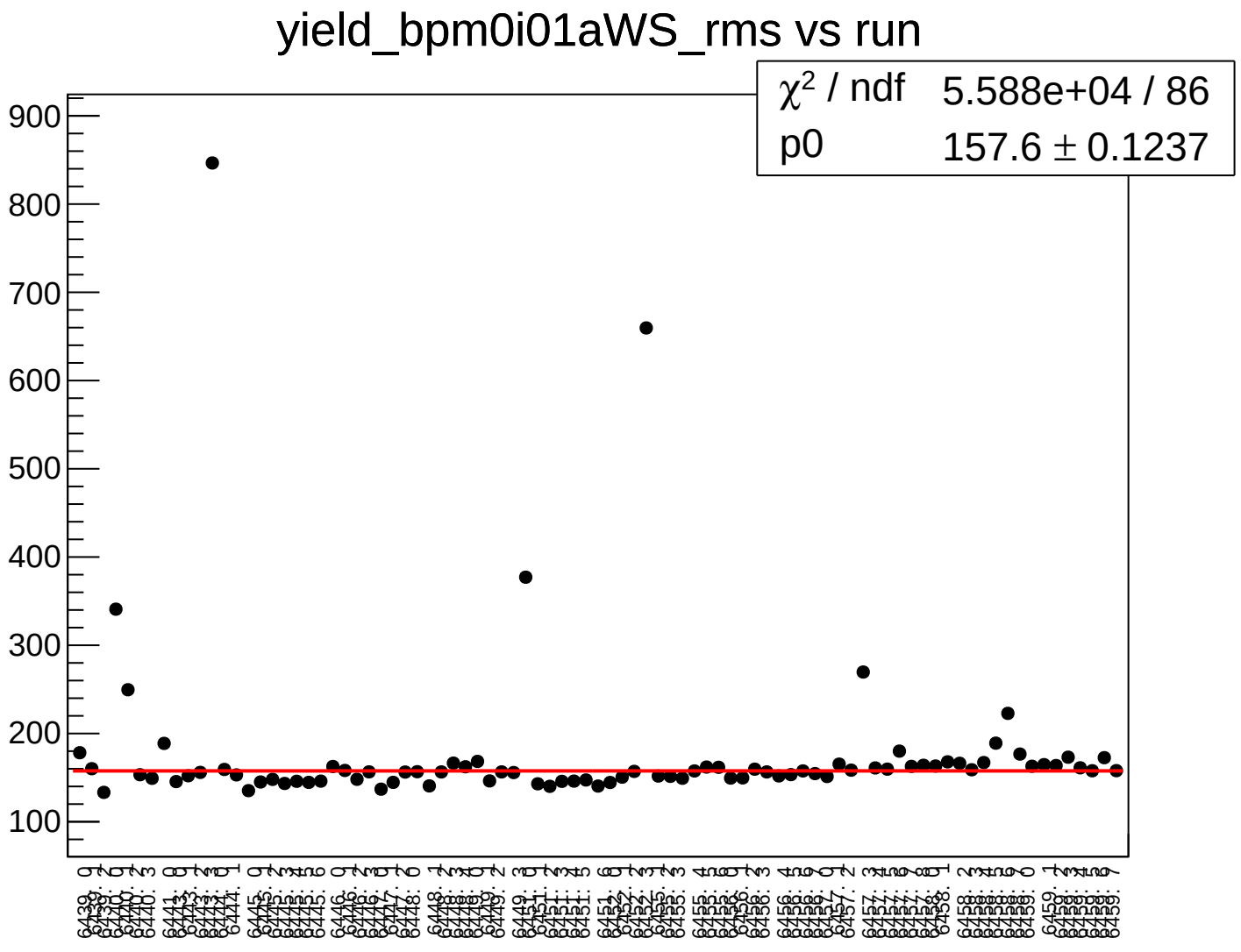

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 4.503e+06 / 86
p0 1.584e+05 ± 0.2173
159
158.8
158.6
158.4
158.2
158
157.8
pull
Entries 87
Mean 2462
Std Dev 2415
300
200
100
0
−100
−200
−300
−400

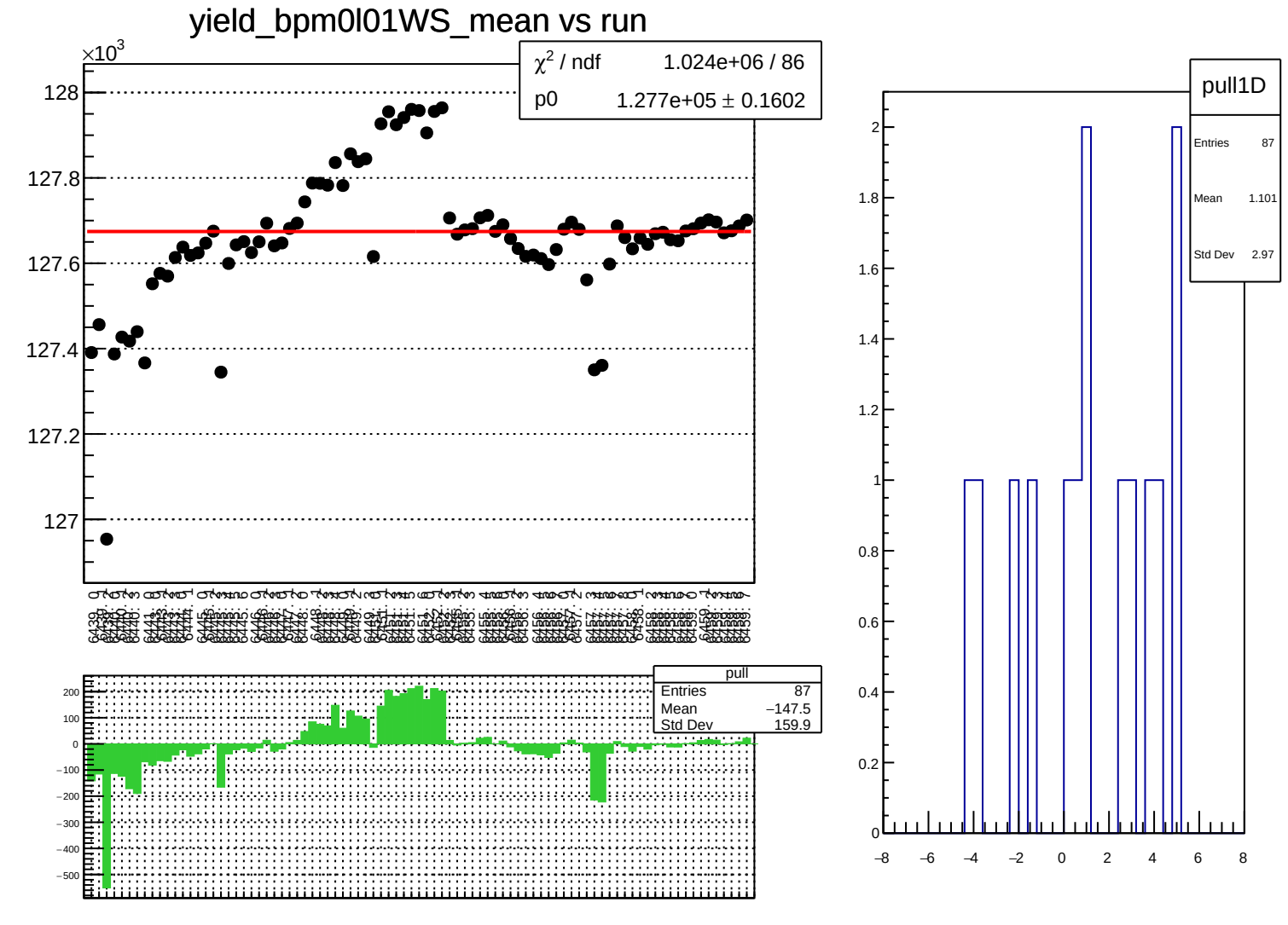

pull1D
Entries 87
Mean 5.158
Std Dev 2.034
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

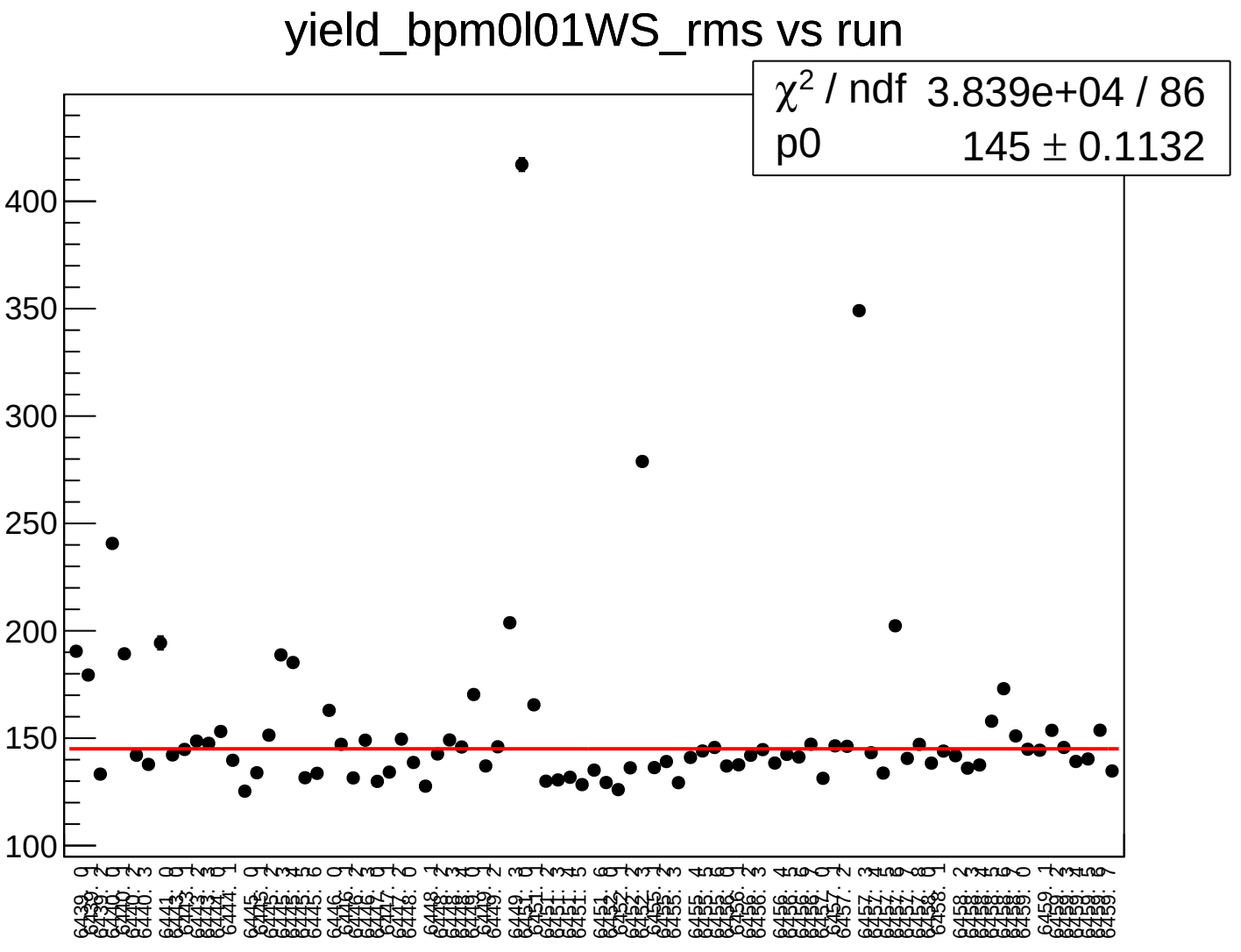

yield_bpm0i01WS_rms vs run
χ² / ndf 6.007e+04 / 86
p0 195.5 ± 0.1536
1400
1200
1000
800
600
400
200

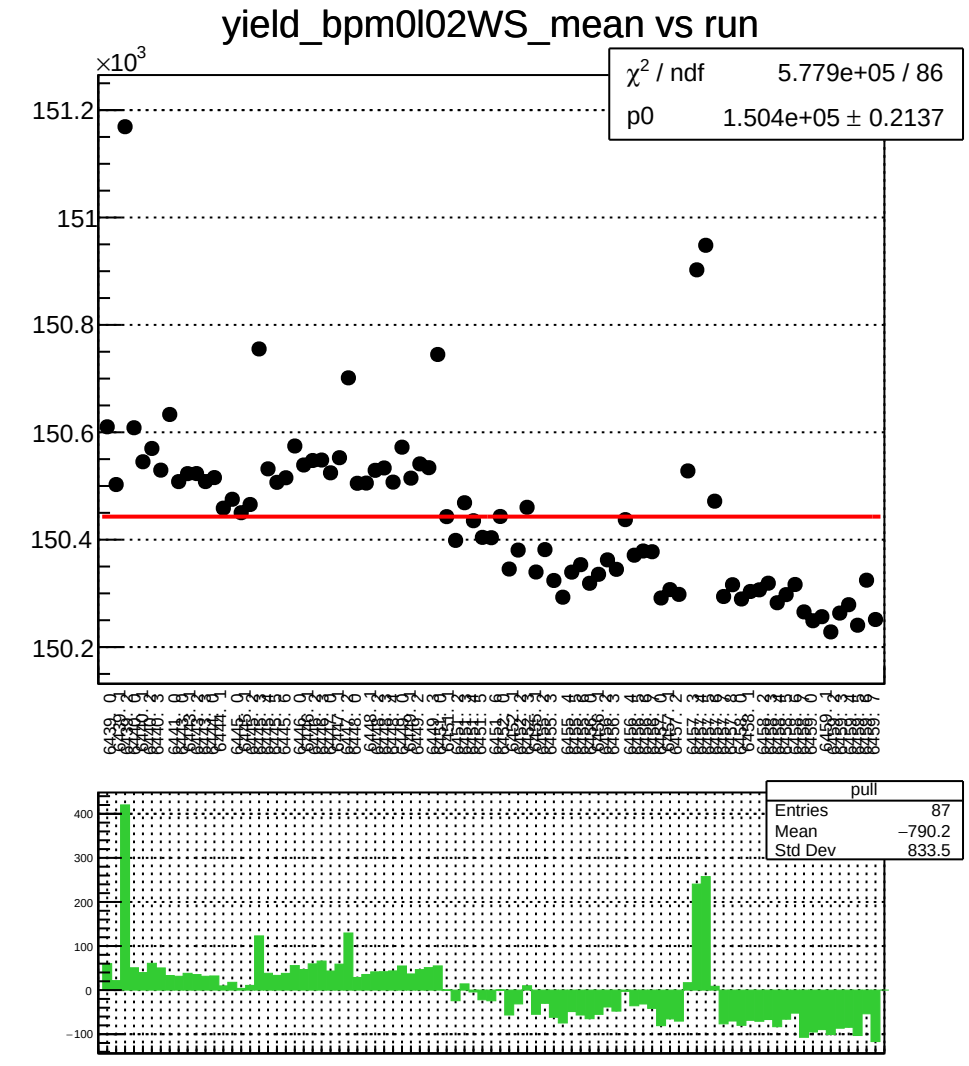

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 3.884e+06 / 86
p0 1.42e+05 ± 0.175
142.5
142
141.5
141
140.5
pull
Entries 87
Mean 1036
Std Dev 989.7
300
200
100
0
−100
−200
−300

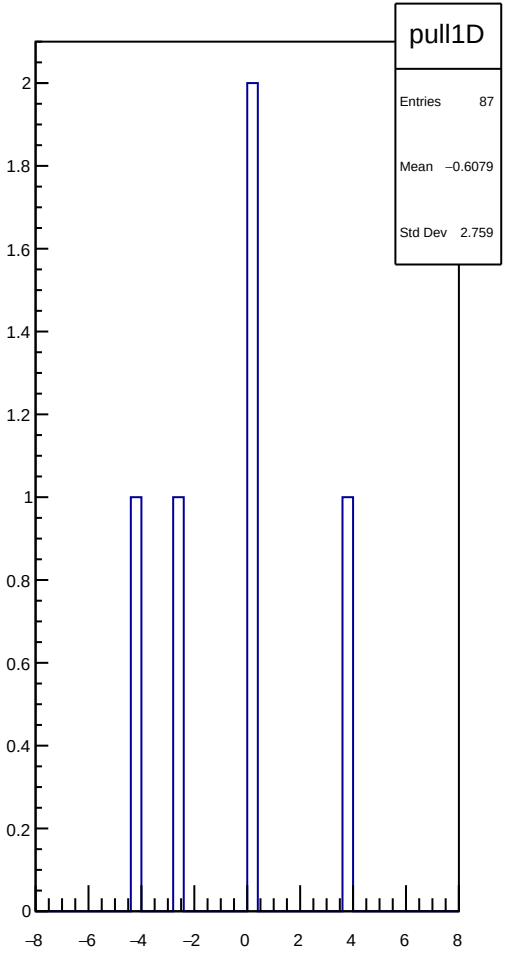

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

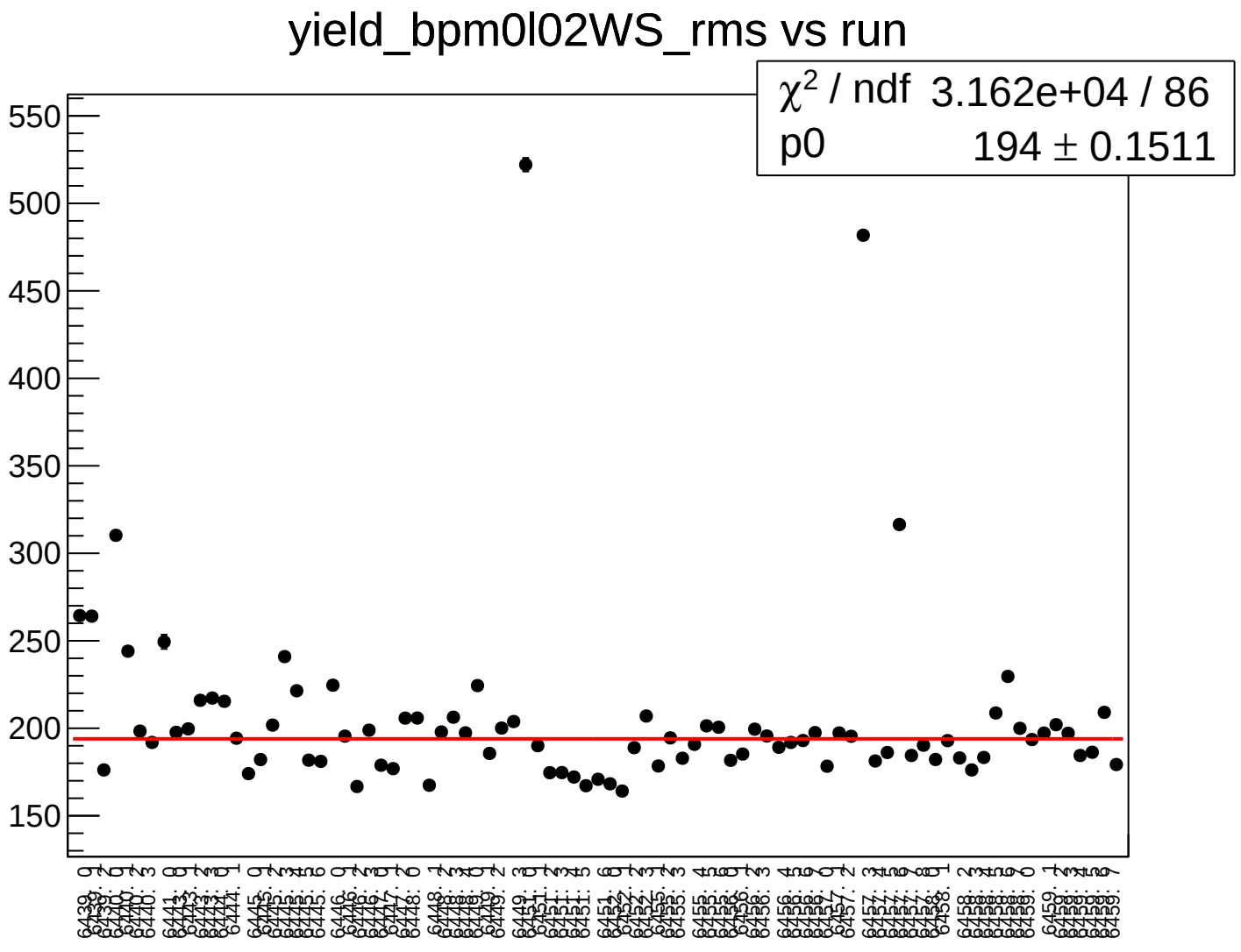

yield_bpm0i01aWS_rms vs run
χ² / ndf 5.588e+04 / 86
p0 157.6 ± 0.1237
900
800
700
600
500
400
300
200
100

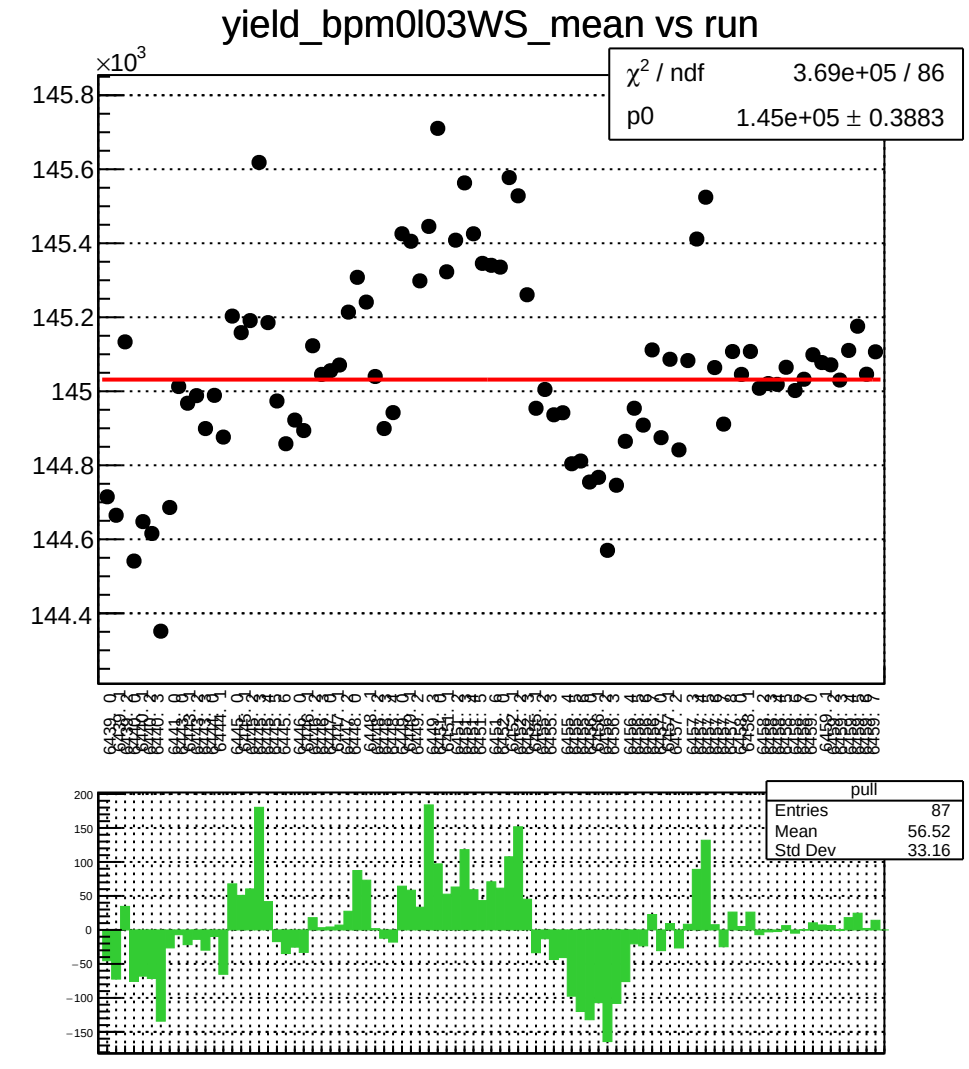

yield_bpm0l01WS_mean vs run
×10^3
χ^2 / ndf 1.024e+06 / 86
p0 1.277e+05 ± 0.1602
128
127.8
127.6
127.4
127.2
127
pull
Entries 87
Mean −147.5
Std Dev 159.9
200
100
0
−100
−200
−300
−400
−500
pull1D
Entries 87
Mean 1.101
Std Dev 2.97
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

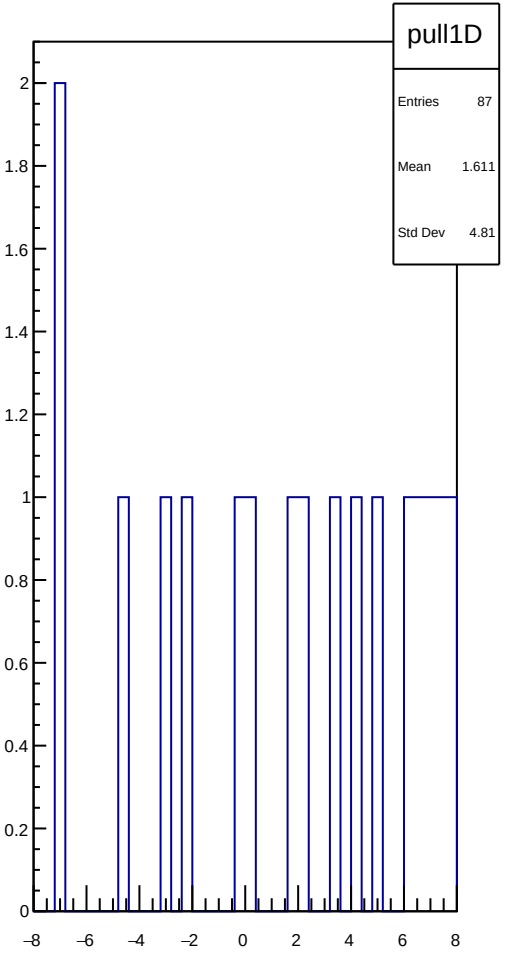

yield_bpm0l01WS_rms vs run
χ^2 / ndf 3.839e+04 / 86
p0 145 ± 0.1132
400
350
300
250
200
150
100

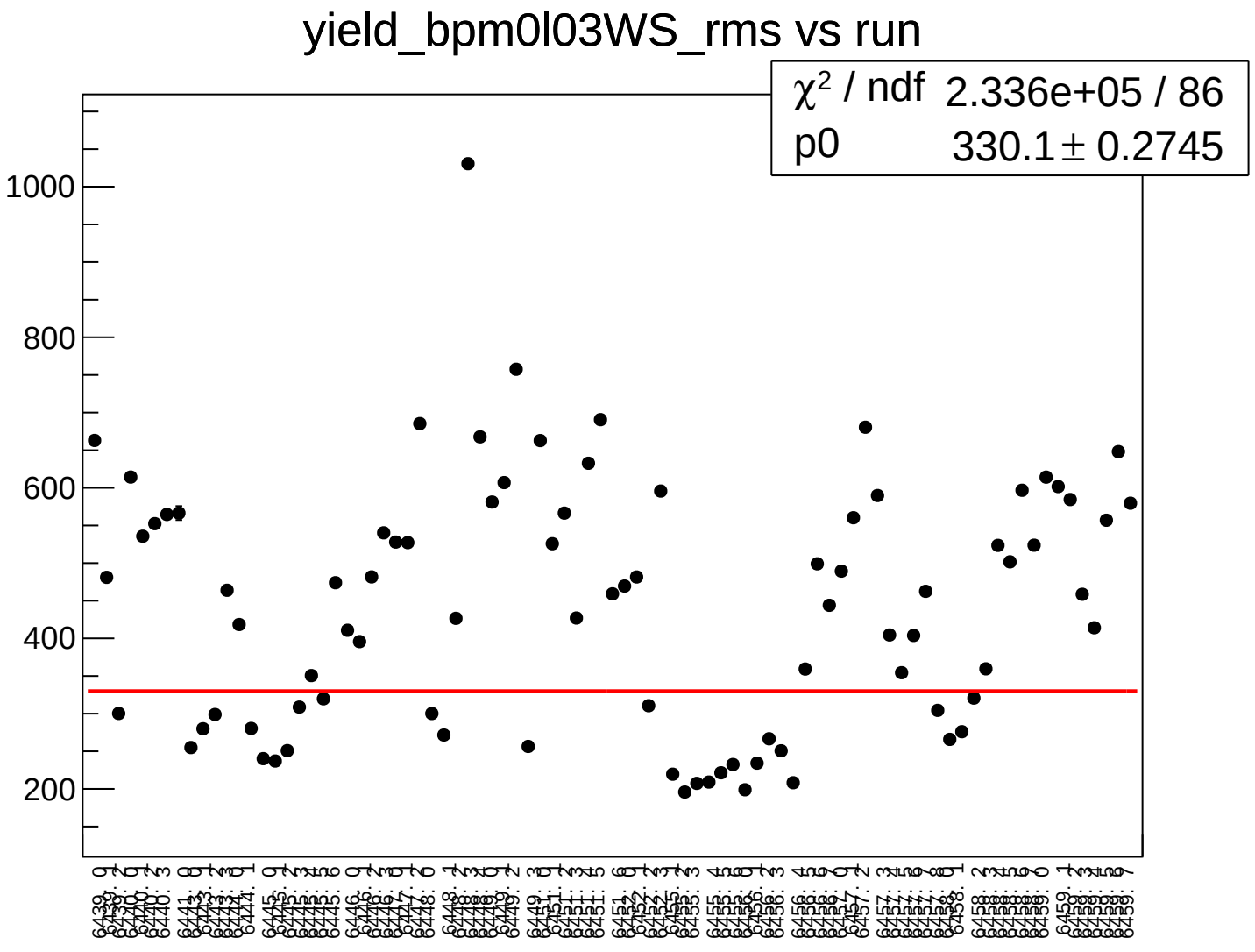

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 5.779e+05 / 86
p0 1.504e+05 ± 0.2137
151.2
151
150.8
150.6
150.4
150.2
pull
Entries 87
Mean −790.2
Std Dev 833.5
400
300
200
100
0
−100

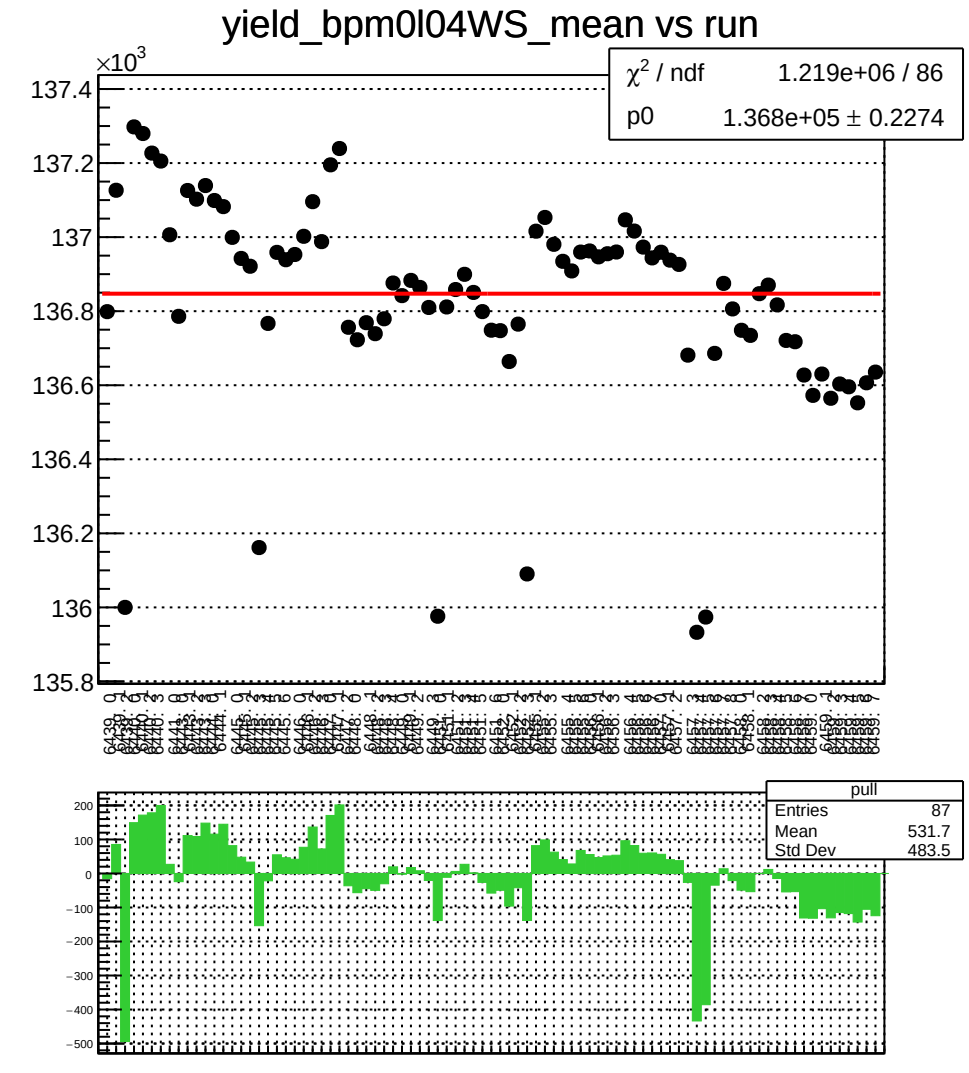

pull1D
Entries 87
Mean −0.6079
Std Dev 2.759
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

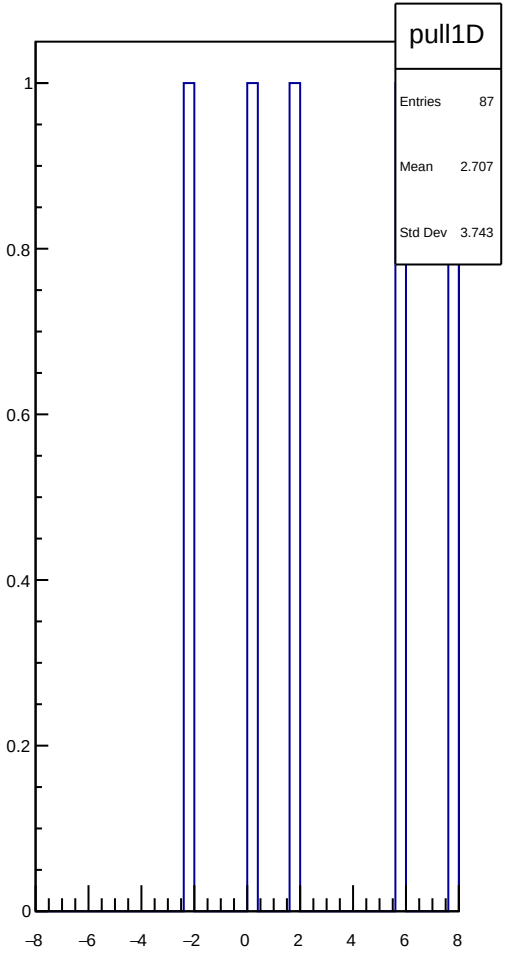

yield_bpm0l02WS_rms vs run
χ^2 / ndf 3.162e+04 / 86
p0 194 ± 0.1511
550
500
450
400
350
300
250
200
150

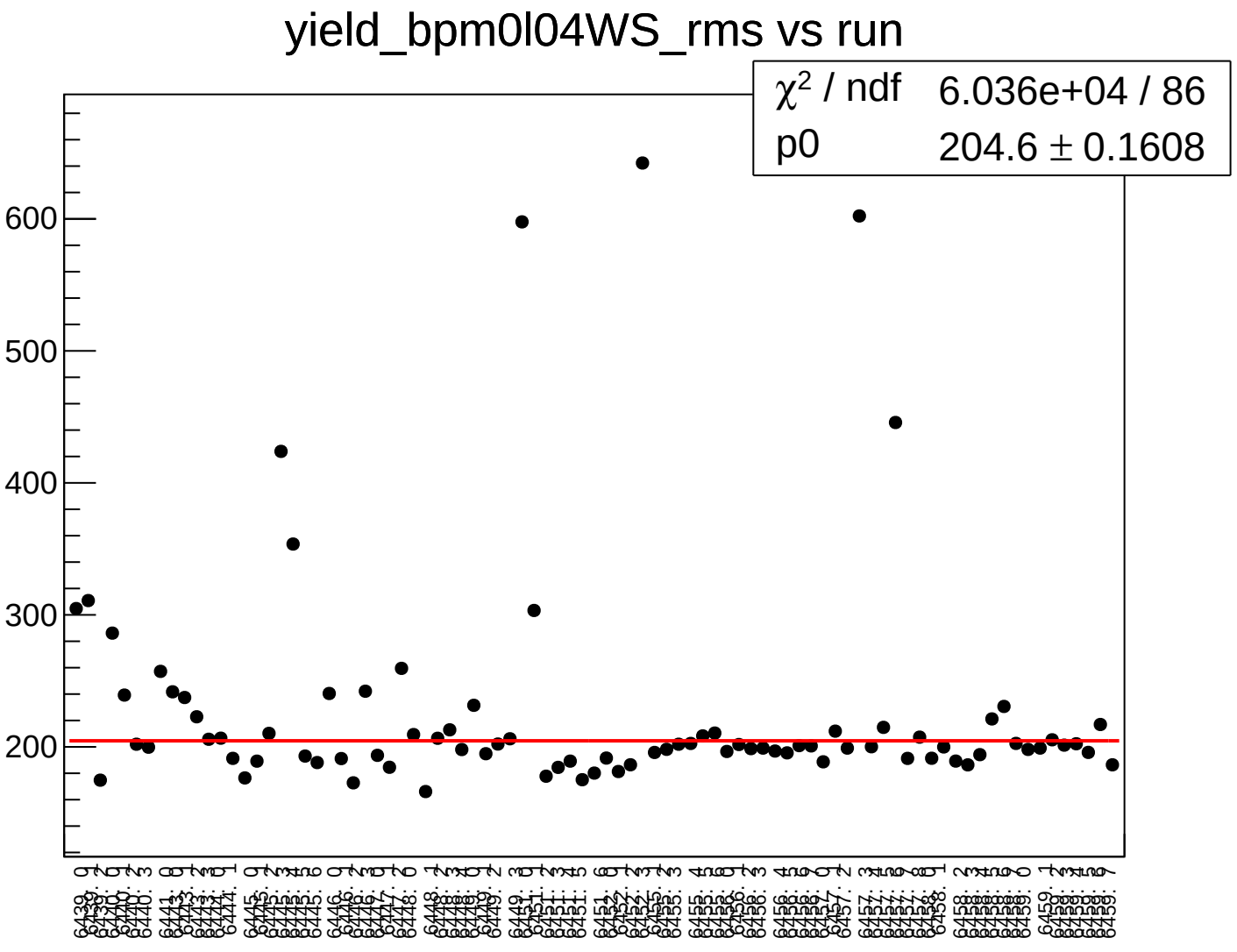

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 3.69e+05 / 86
p0 1.45e+05 ± 0.3883
145.8
145.6
145.4
145.2
145
144.8
144.6
144.4
pull
Entries 87
Mean 56.52
Std Dev 33.16
200
150
100
50
0
−50
−100
−150

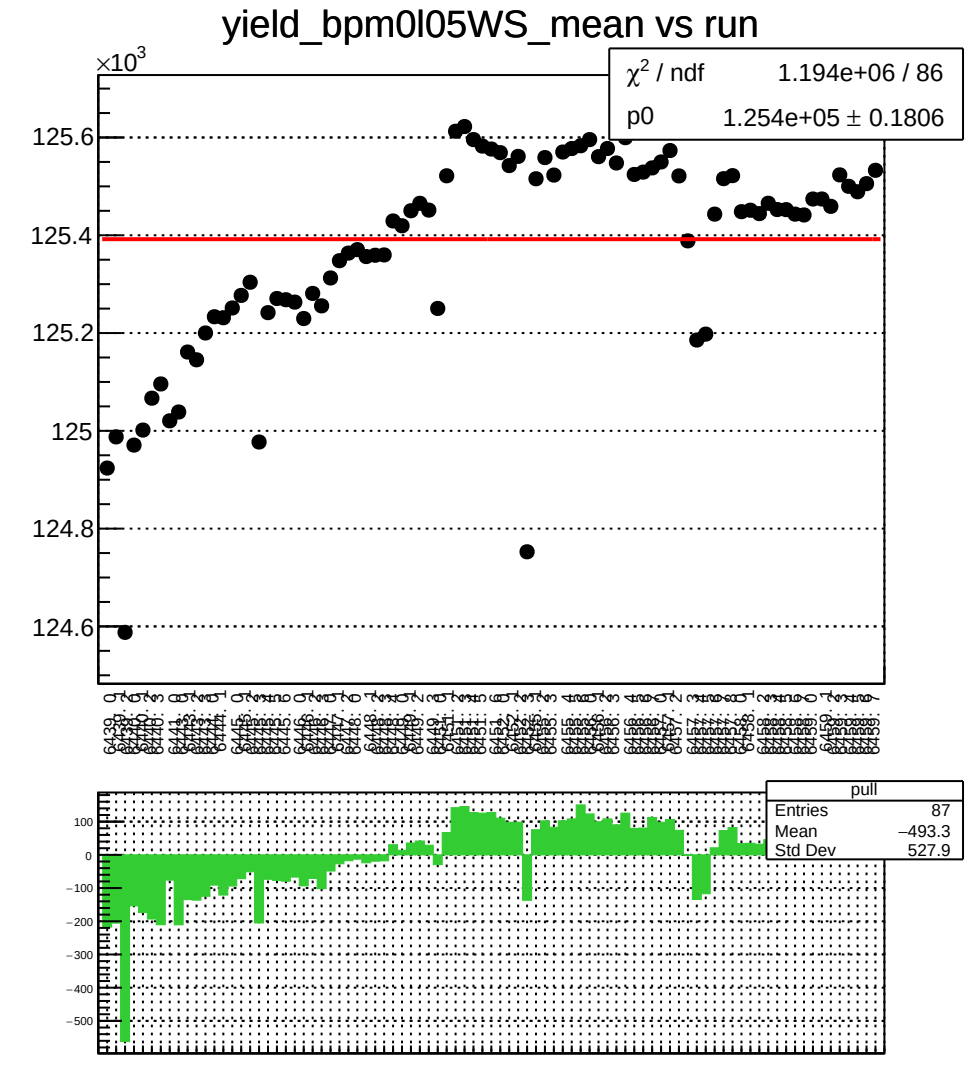

pull1D
Entries 87
Mean 1.611
Std Dev 4.81
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

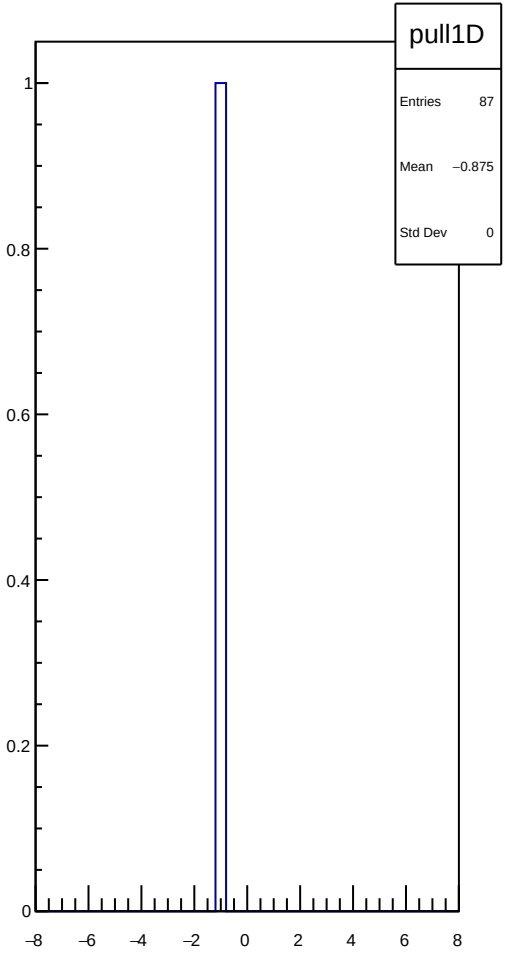

yield_bpm0l03WS_rms vs run
χ² / ndf 2.336e+05 / 86
p0 330.1 ± 0.2745
1000
800
600
400
200

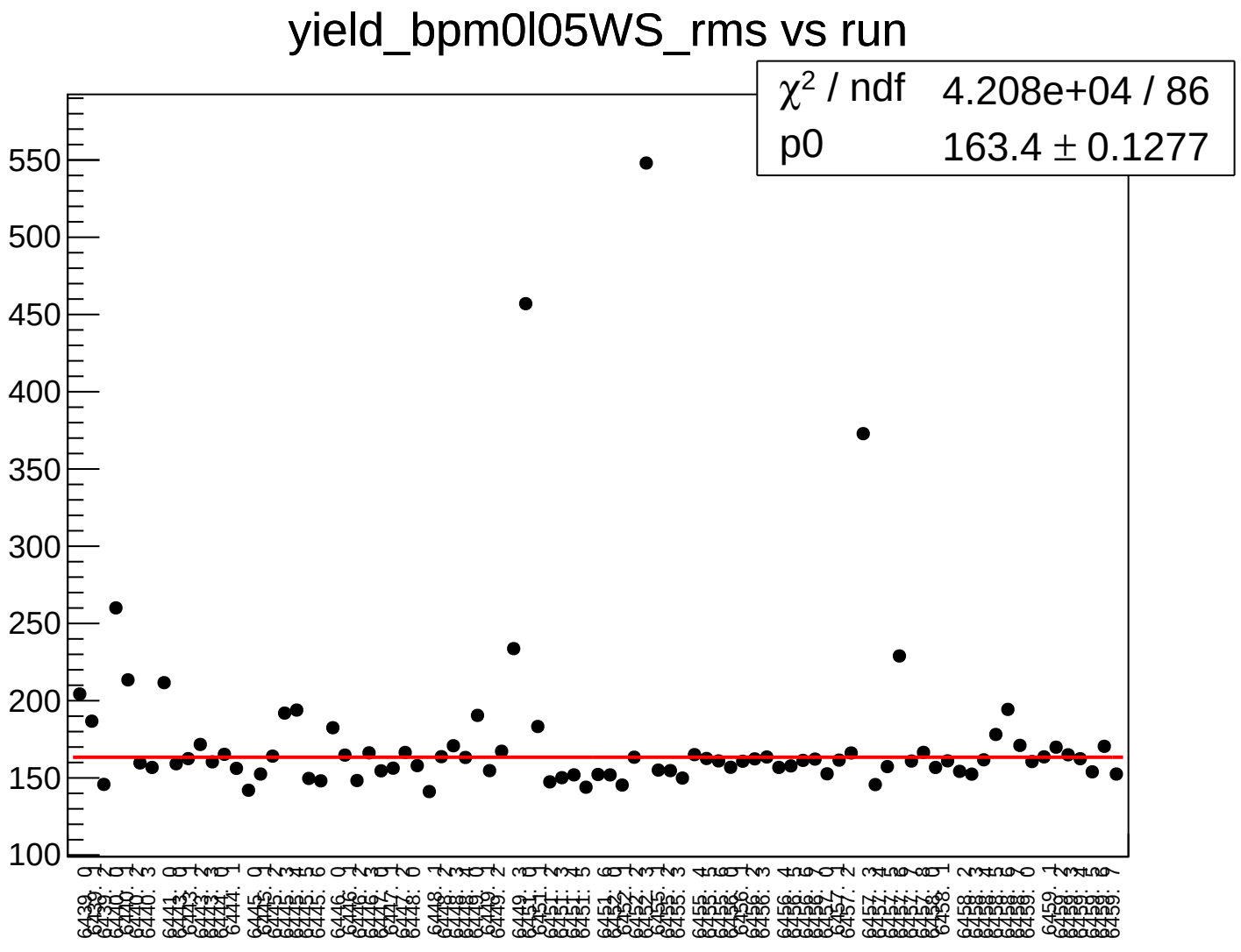

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 1.219e+06 / 86
p0 1.368e+05 ± 0.2274
137.4
137.2
137
136.8
136.6
136.4
136.2
136
135.8
pull
Entries 87
Mean 531.7
Std Dev 483.5
200
100
0
−100
−200
−300
−400
−500

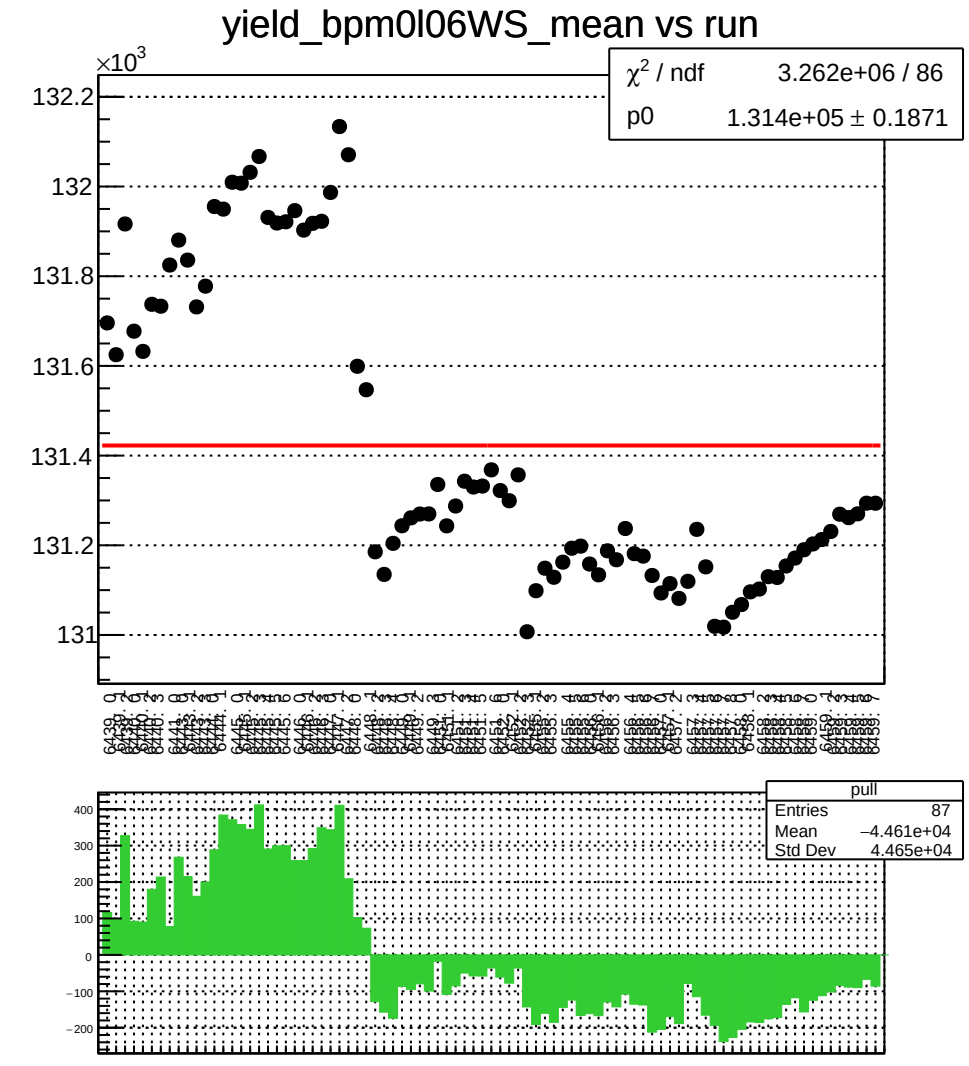

pull1D
Entries 87
Mean 2.707
Std Dev 3.743
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

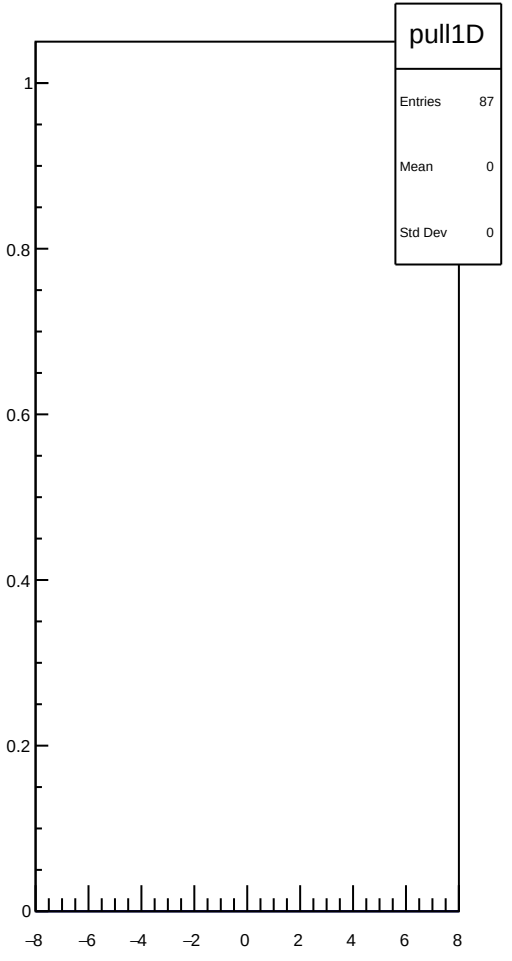

yield_bpm0l04WS_rms vs run
χ² / ndf 6.036e+04 / 86
p0 204.6 ± 0.1608
600
500
400
300
200

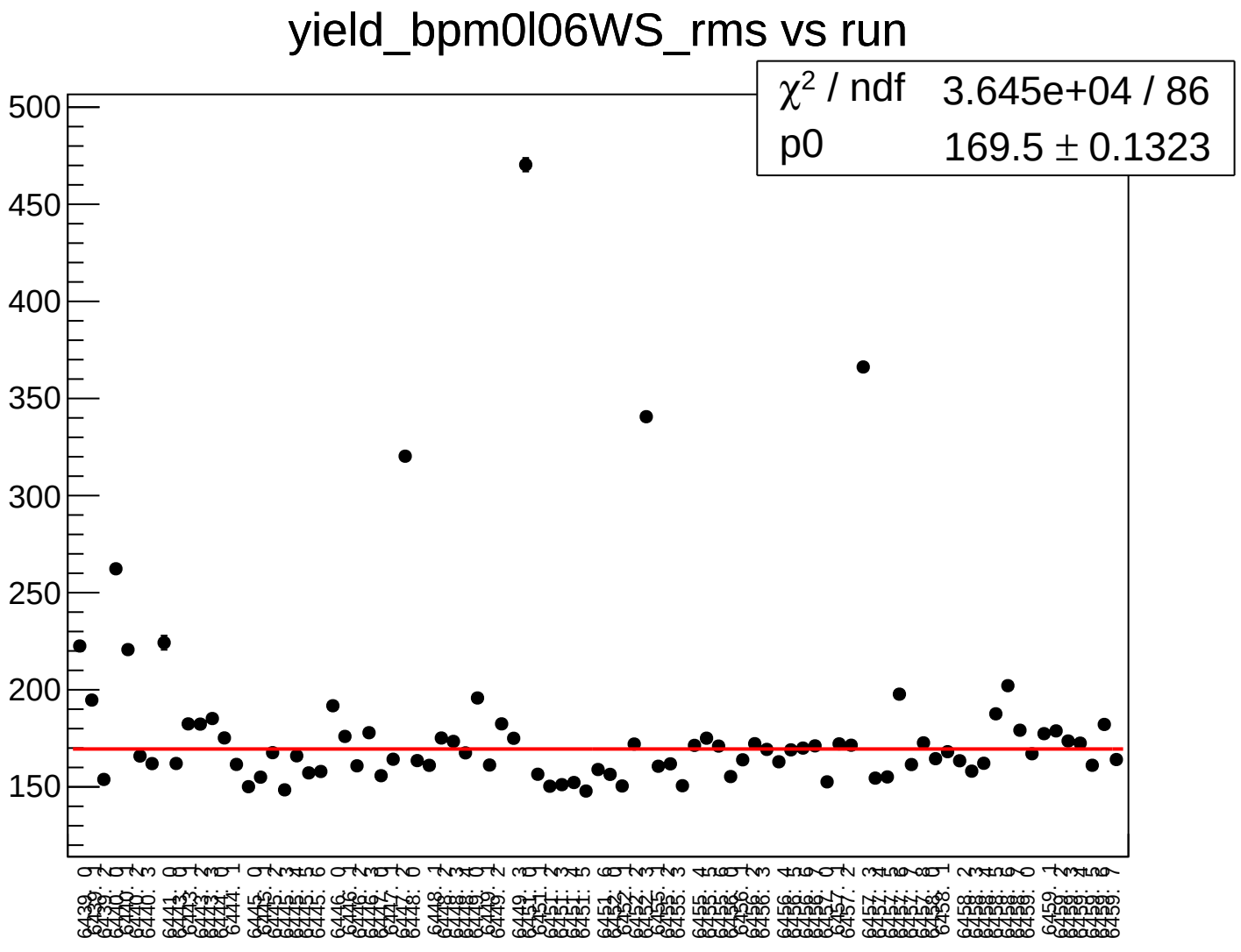

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 1.194e+06 / 86
p0 1.254e+05 ± 0.1806
125.6
125.4
125.2
125
124.8
124.6
pull
Entries 87
Mean −493.3
Std Dev 527.9
100
0
−100
−200
−300
−400
−500

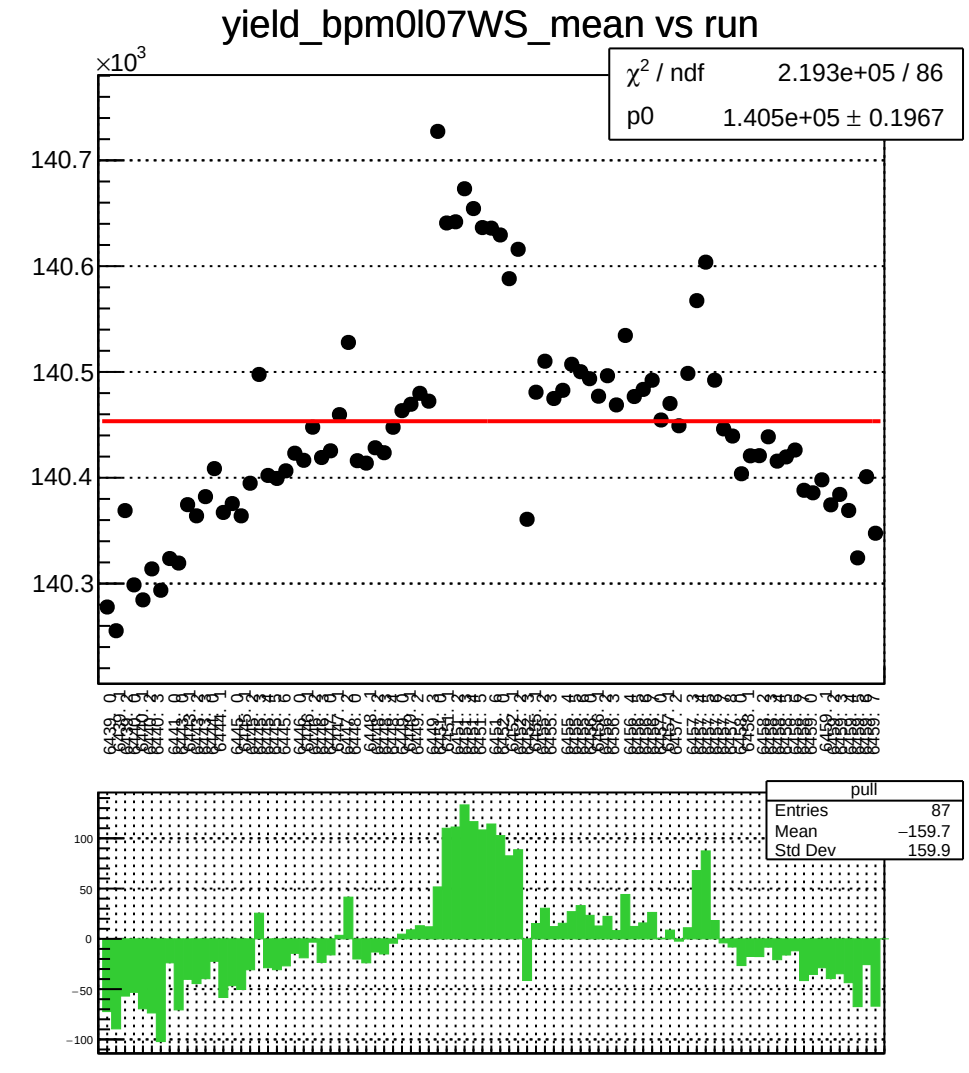

pull1D
Entries 87
Mean −0.875
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

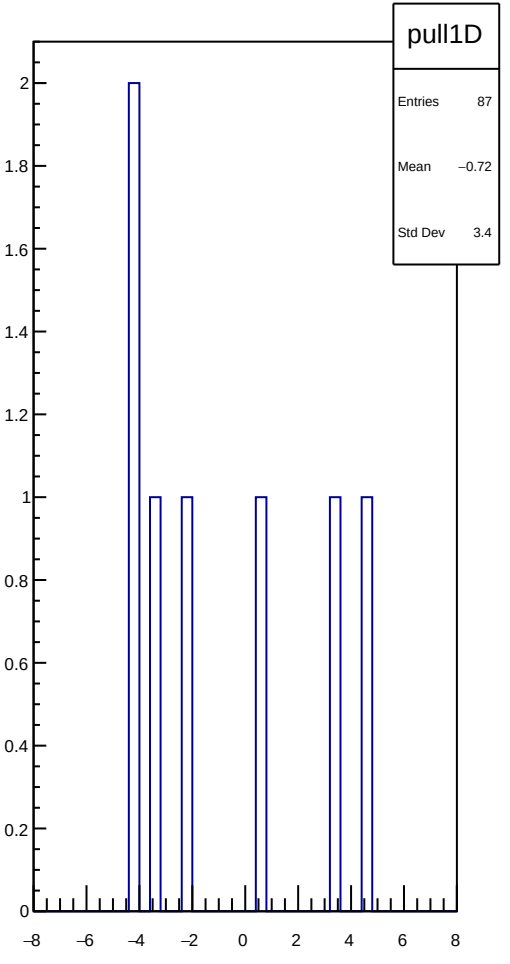

yield_bpm0l05WS_rms vs run
χ² / ndf 4.208e+04 / 86
p0 163.4 ± 0.1277
550
500
450
400
350
300
250
200
150
100

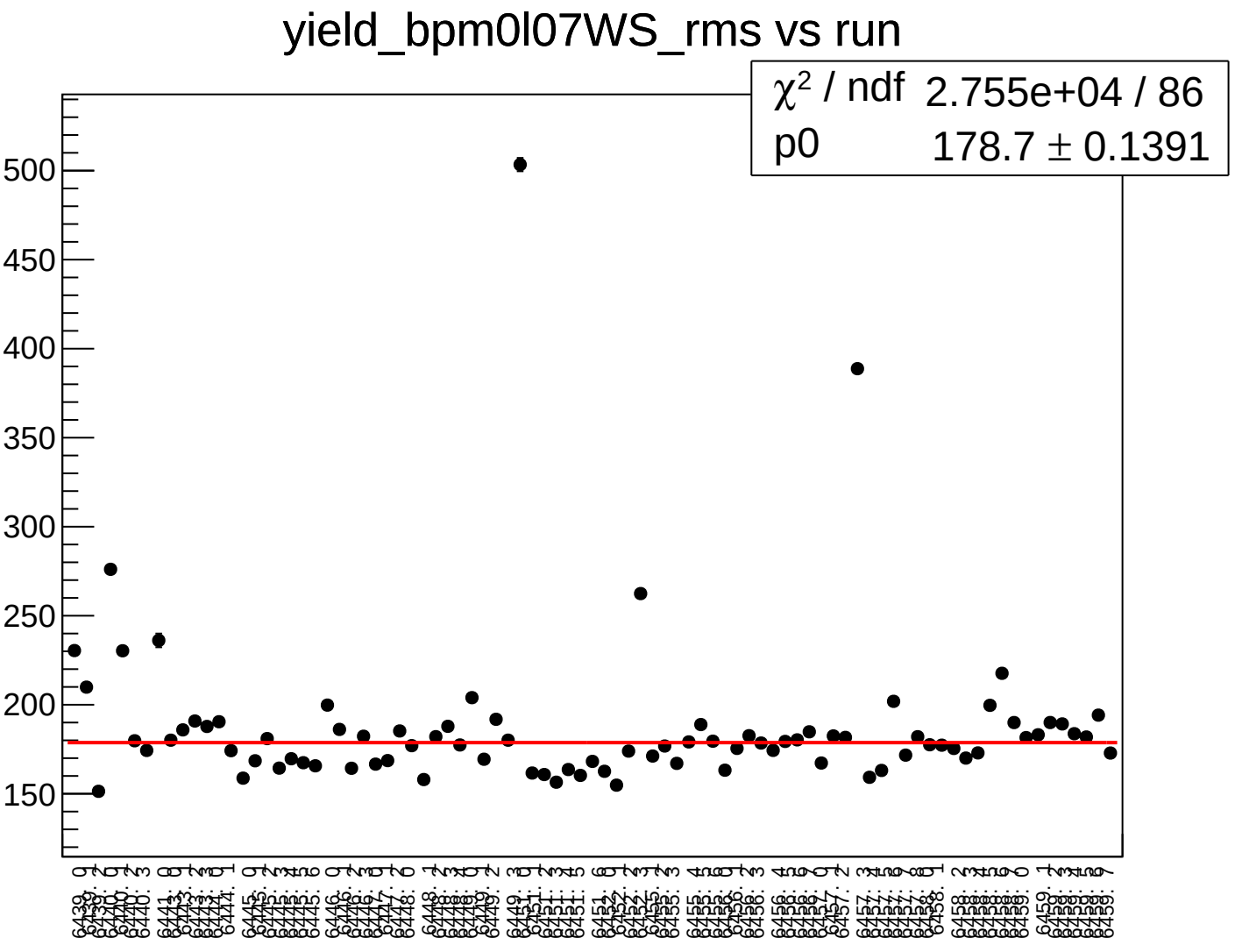

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 3.262e+06 / 86
p0 1.314e+05 ± 0.1871
132.2
132
131.8
131.6
131.4
131.2
131
pull
Entries 87
Mean −4.461e+04
Std Dev 4.465e+04
400
300
200
100
0
−100
−200

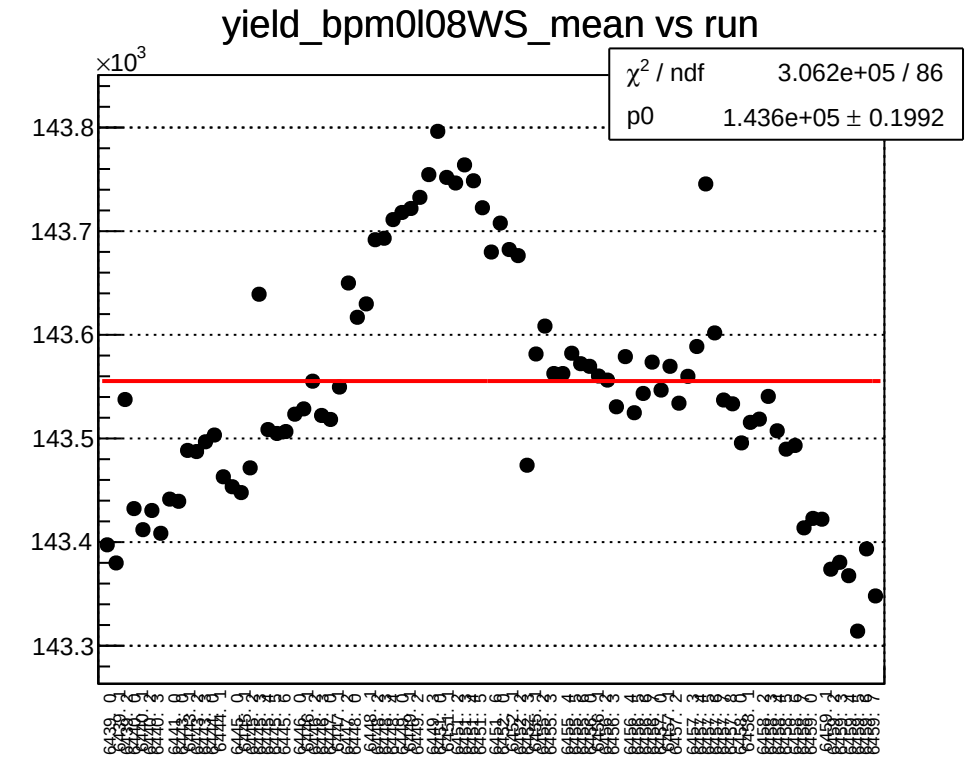

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

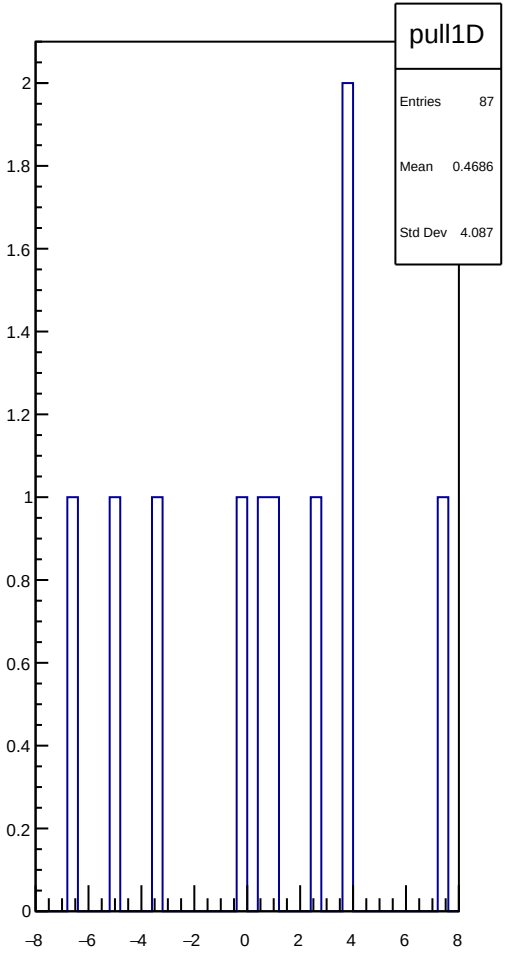

yield_bpm0l06WS_rms vs run
χ² / ndf 3.645e+04 / 86
p0 169.5 ± 0.1323
500
450
400
350
300
250
200
150

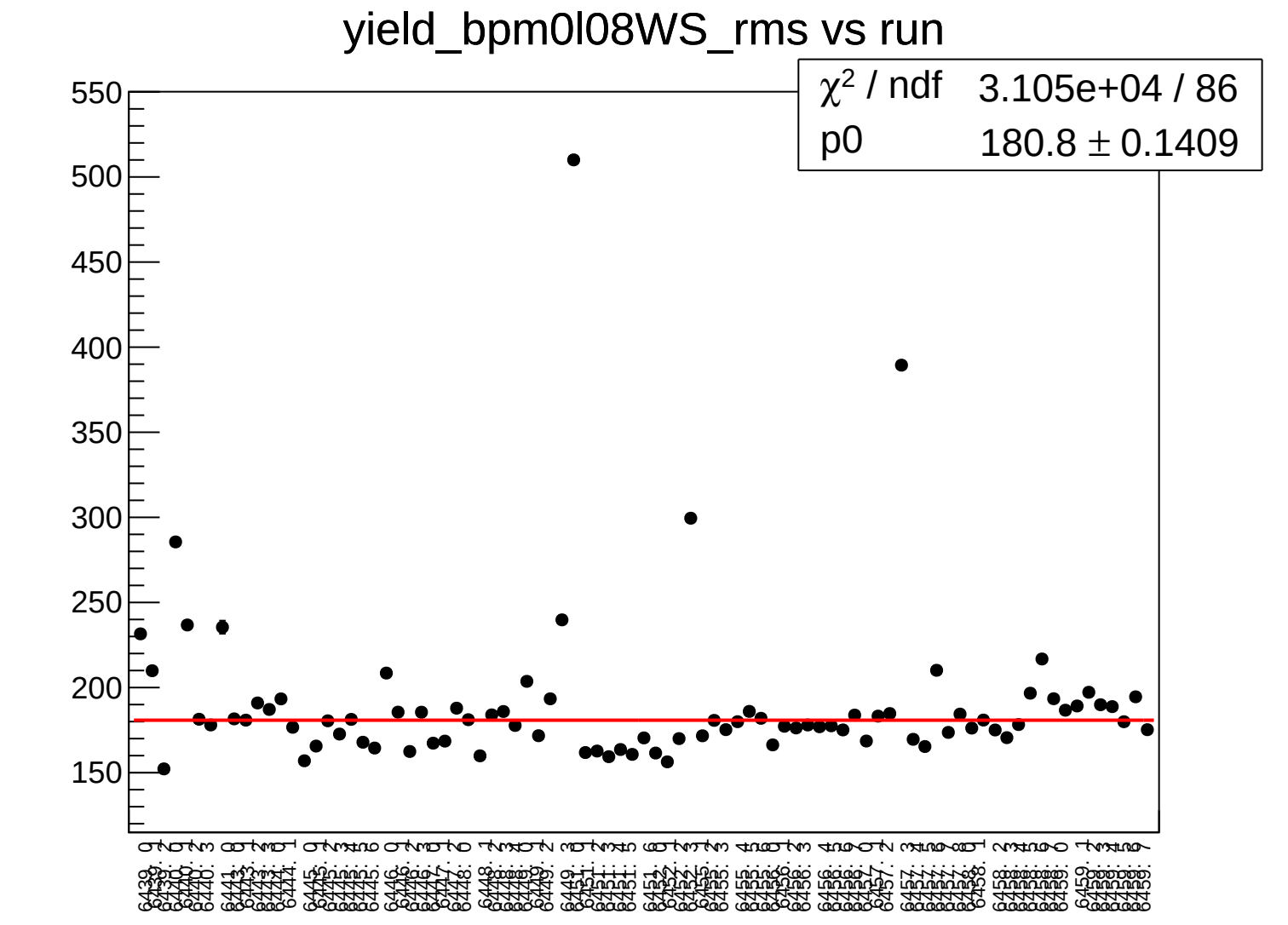

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 2.193e+05 / 86
p0 1.405e+05 ± 0.1967
140.7
140.6
140.5
140.4
140.3
pull
Entries 87
Mean −159.7
Std Dev 159.9
100
50
0
−50
−100

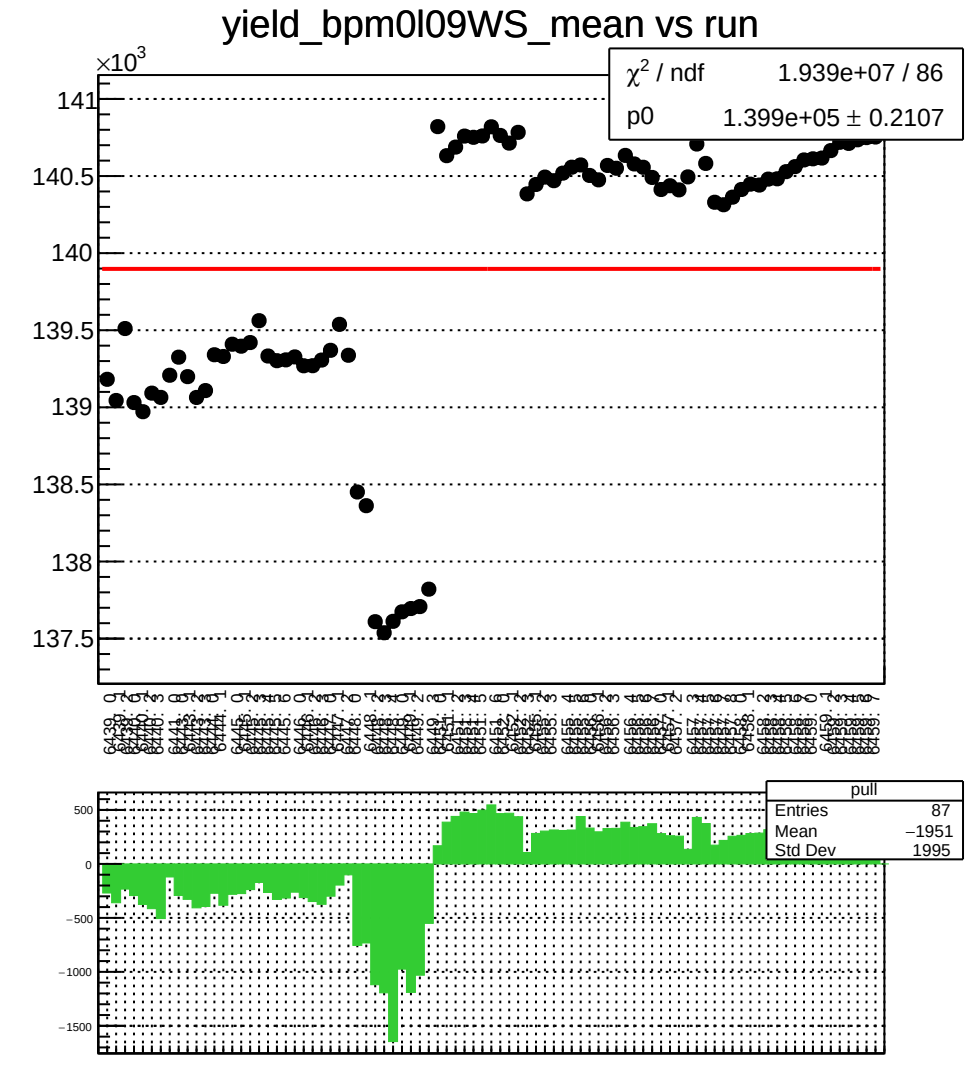

pull1D
Entries 87
Mean −0.72
Std Dev 3.4
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

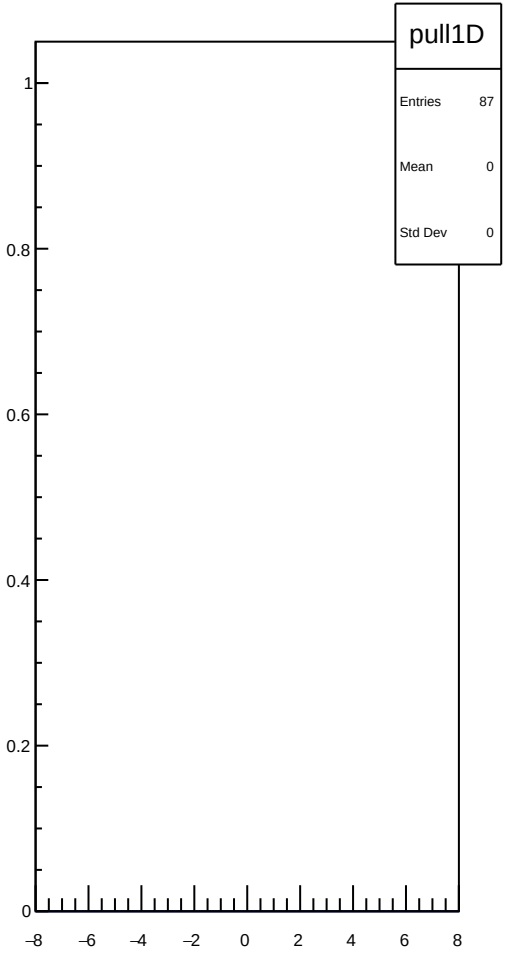

yield_bpm0l07WS_rms vs run
χ² / ndf 2.755e+04 / 86
p0 178.7 ± 0.1391
500
450
400
350
300
250
200
150

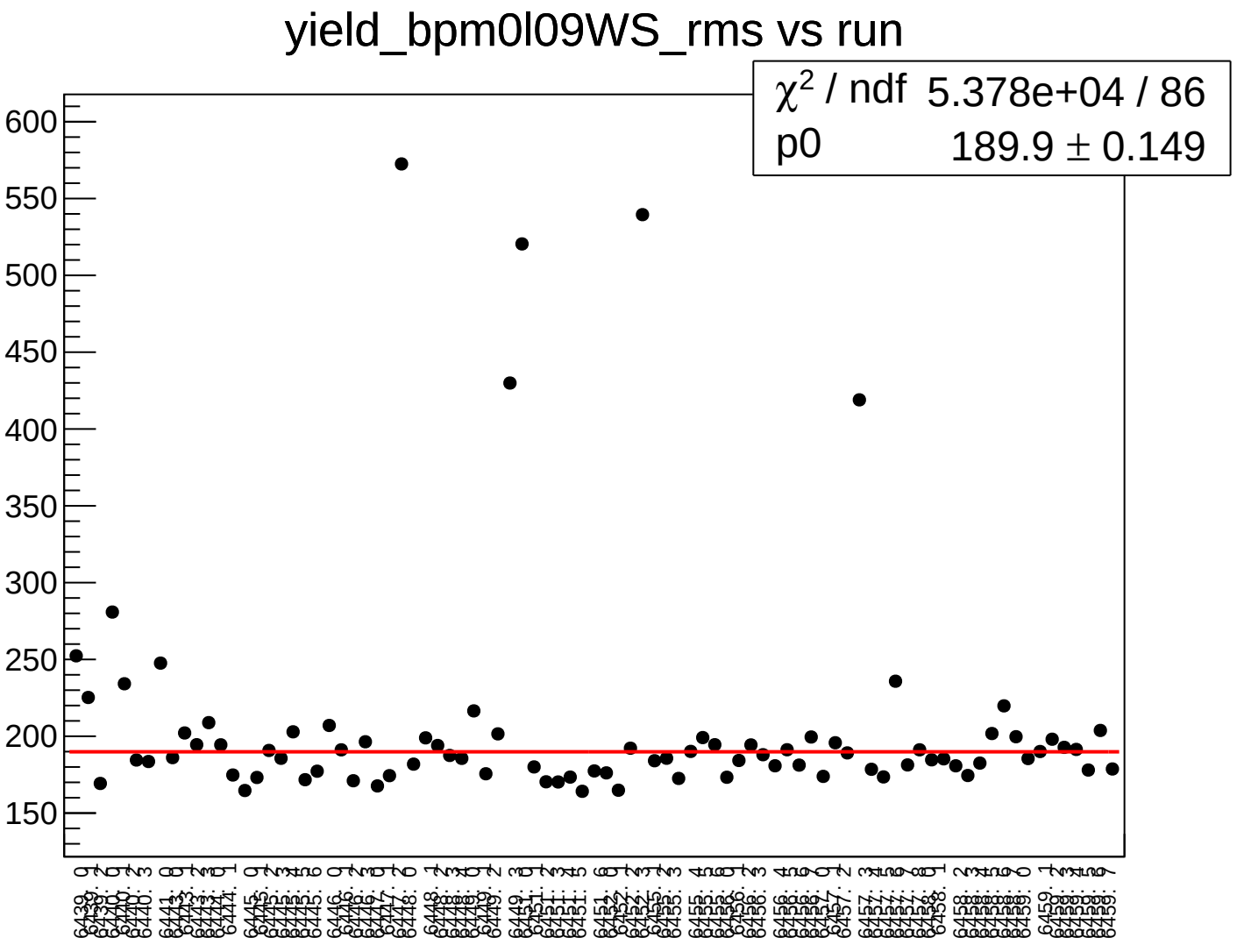

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 3.062e+05 / 86
p0 1.436e+05 ± 0.1992
143.8
143.7
143.6
143.5
143.4
143.3
pull
Entries 87
Mean 130.6
Std Dev 100.5
100
50
0
−50
−100

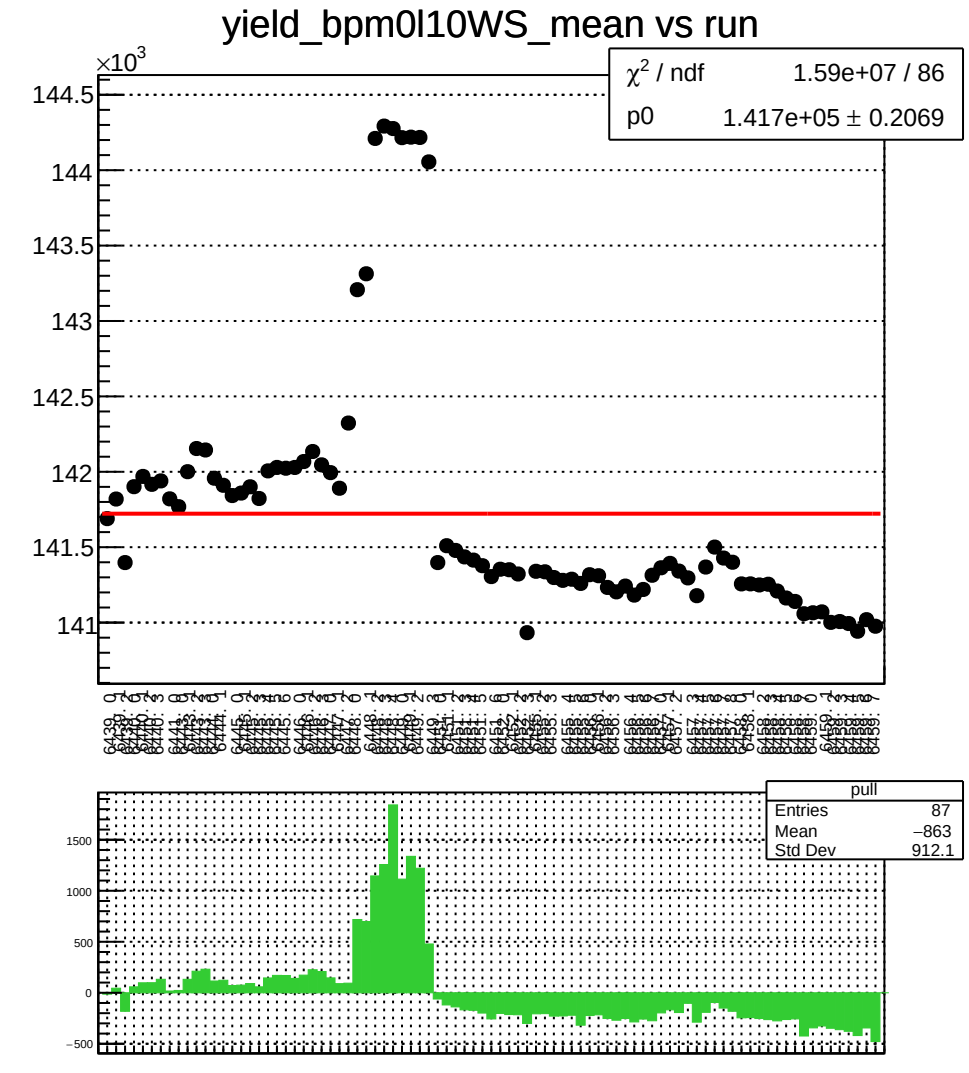

pull1D
Entries 87
Mean 0.4686
Std Dev 4.087
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

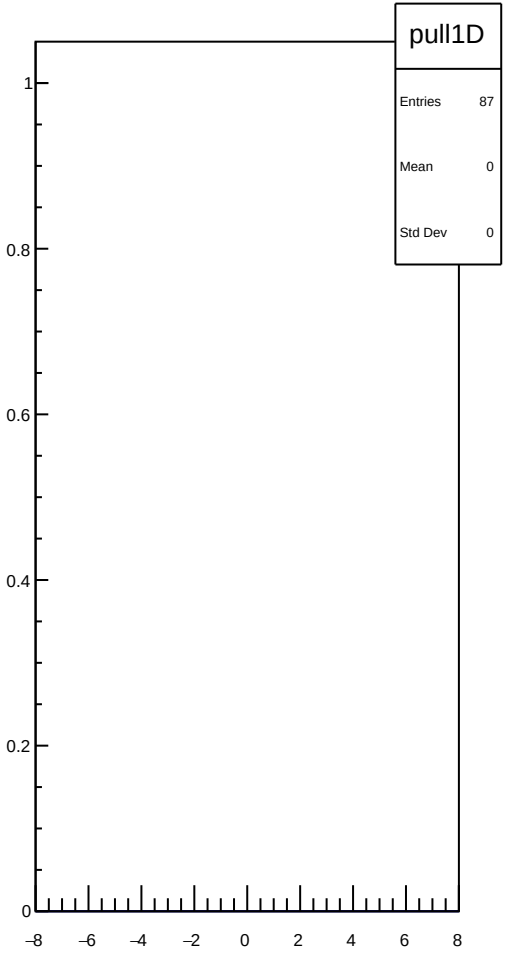

yield_bpm0l08WS_rms vs run
χ^2 / ndf 3.105e+04 / 86
p0 180.8 ± 0.1409
550
500
450
400
350
300
250
200
150

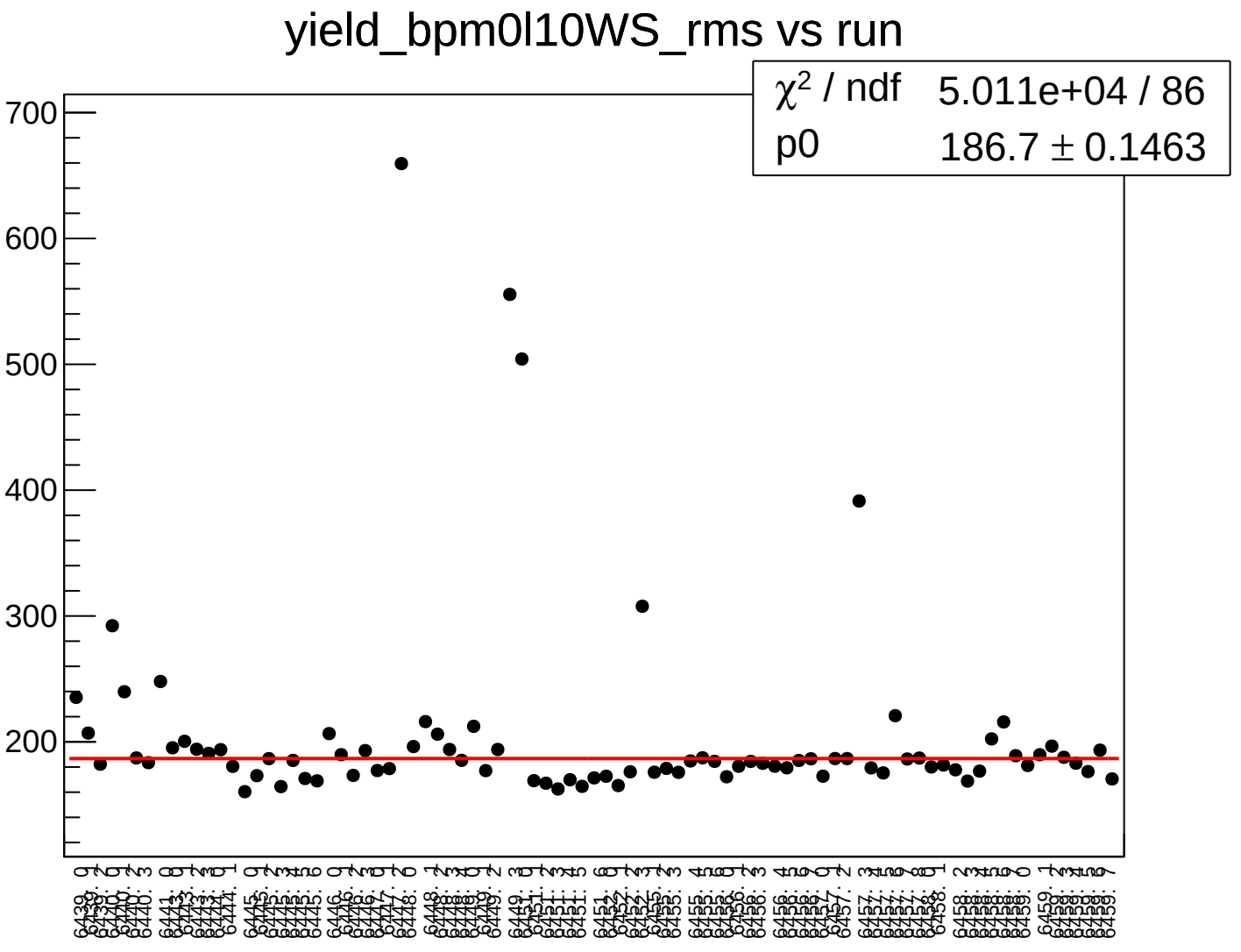

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 1.939e+07 / 86
p0 1.399e+05 ± 0.2107
141
140.5
140
139.5
139
138.5
138
137.5
pull
Entries 87
Mean −1951
Std Dev 1995
500
0
−500
−1000
−1500

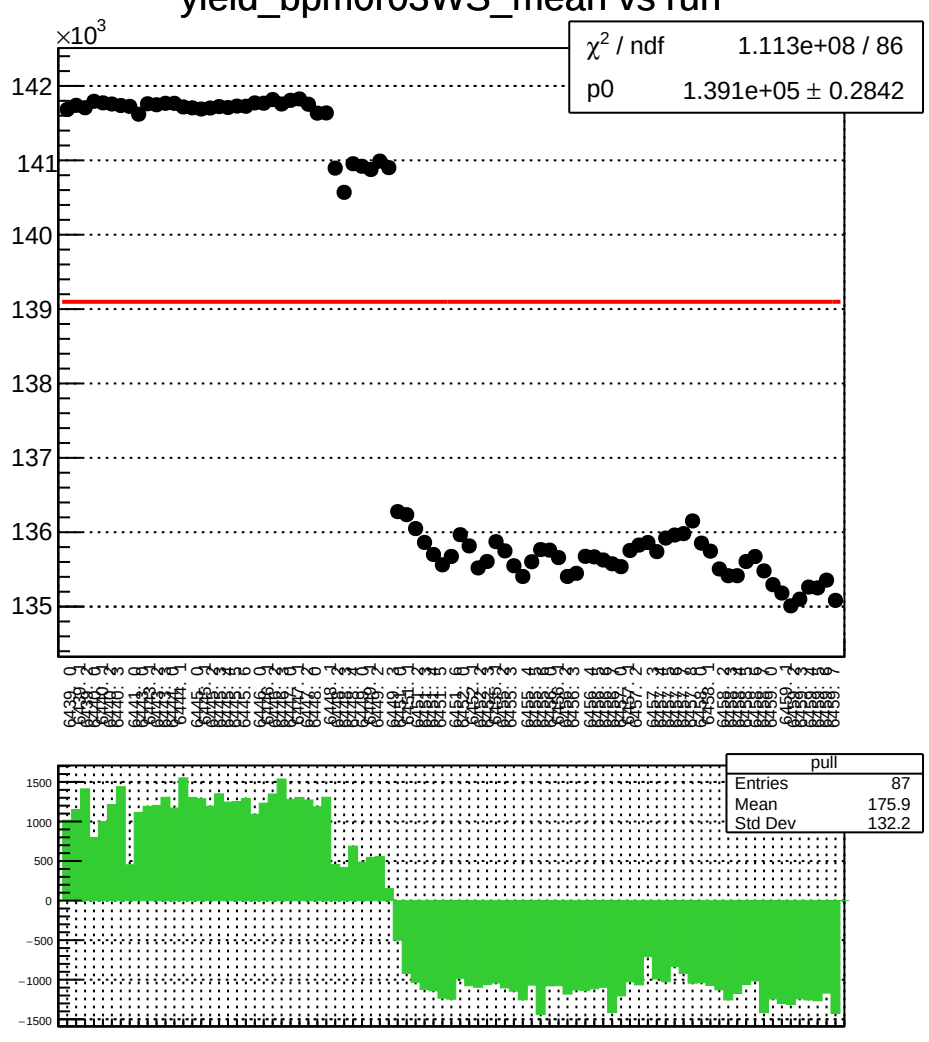

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

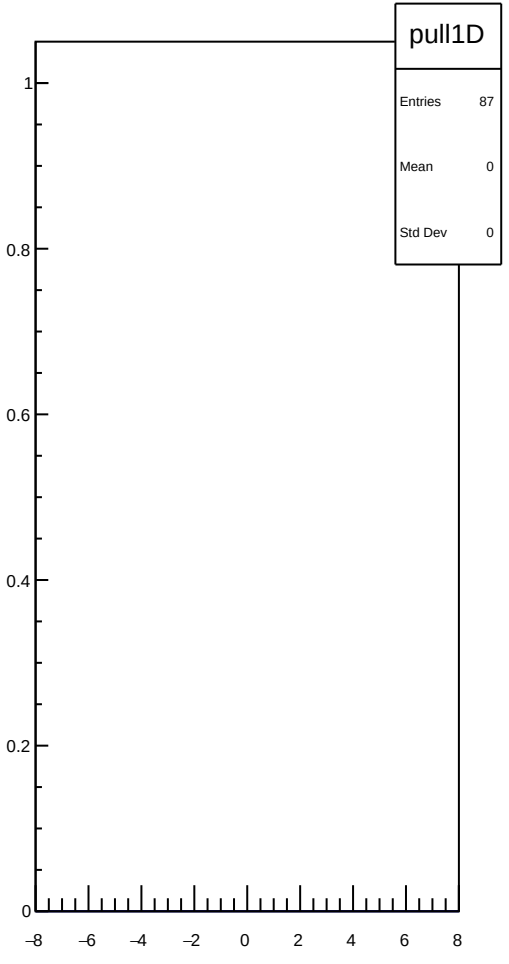

yield_bpm0l09WS_rms vs run
χ^2 / ndf 5.378e+04 / 86
p0 189.9 ± 0.149
600
550
500
450
400
350
300
250
200
150

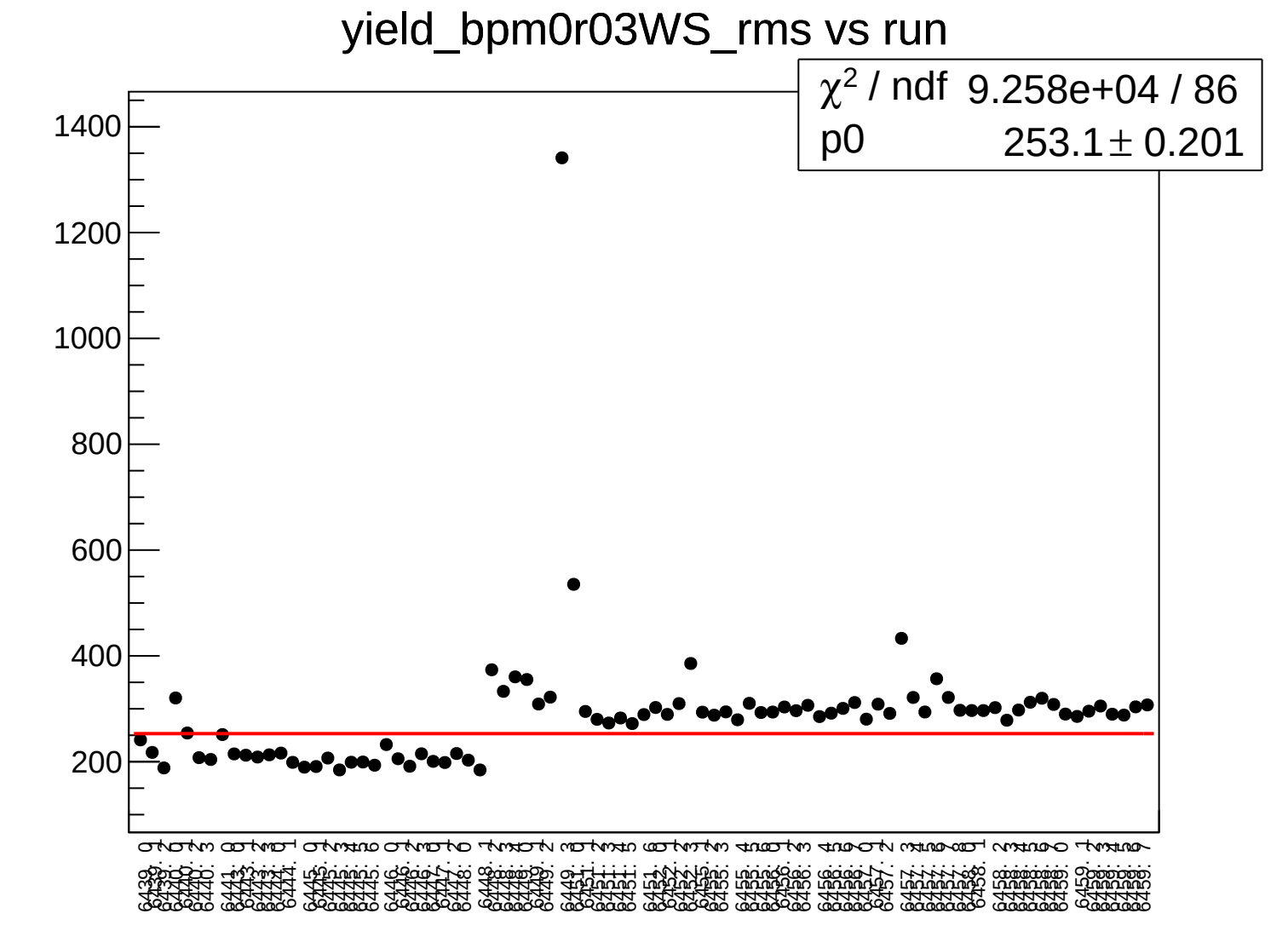

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 1.59e+07 / 86
p0 1.417e+05 ± 0.2069
144.5
144
143.5
143
142.5
142
141.5
141
pull
Entries 87
Mean −863
Std Dev 912.1
1500
1000
500
0
−500

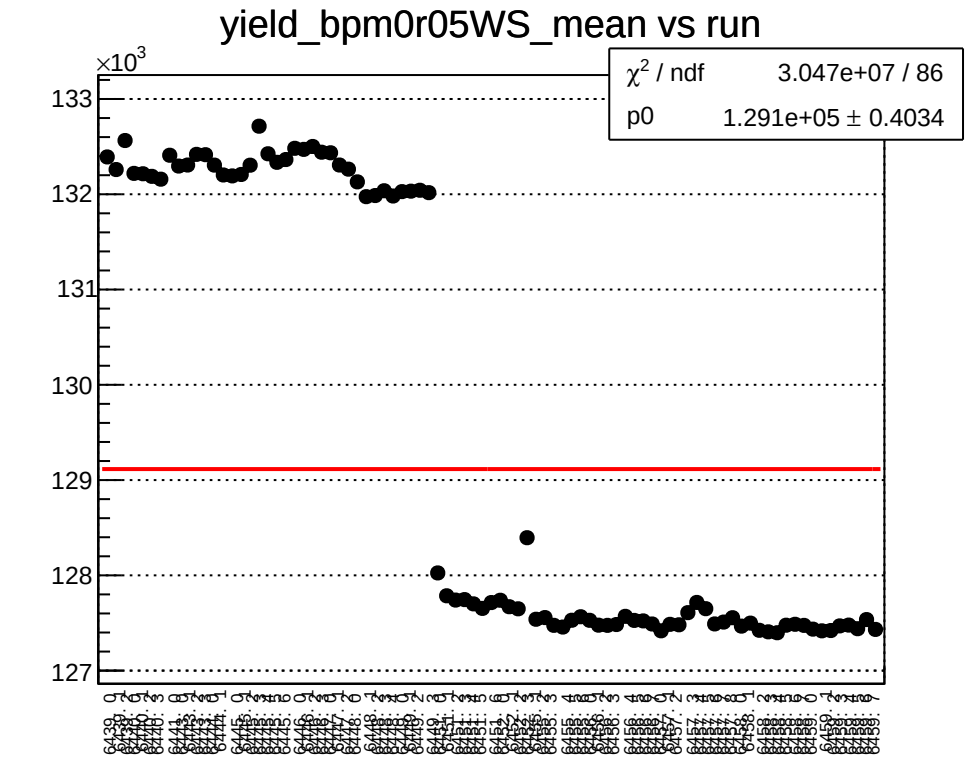

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

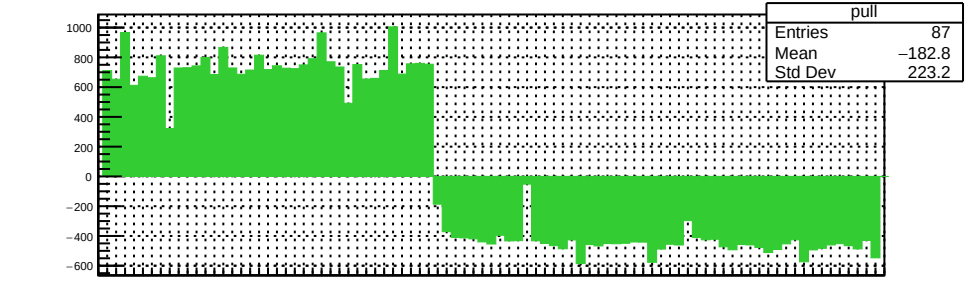

yield_bpm0l10WS_rms vs run
χ² / ndf 5.011e+04 / 86
p0 186.7 ± 0.1463
700
600
500
400
300
200

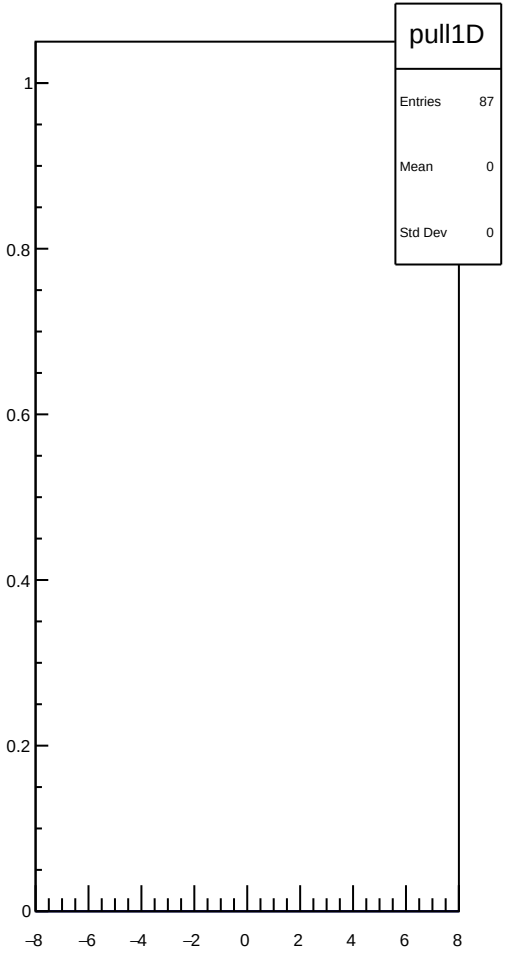

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 1.113e+08 / 86
p0 1.391e+05 ± 0.2842
142
141
140
139
138
137
136
135
pull
Entries 87
Mean 175.9
Std Dev 132.2
1500
1000
500
0
−500
−1000
−1500

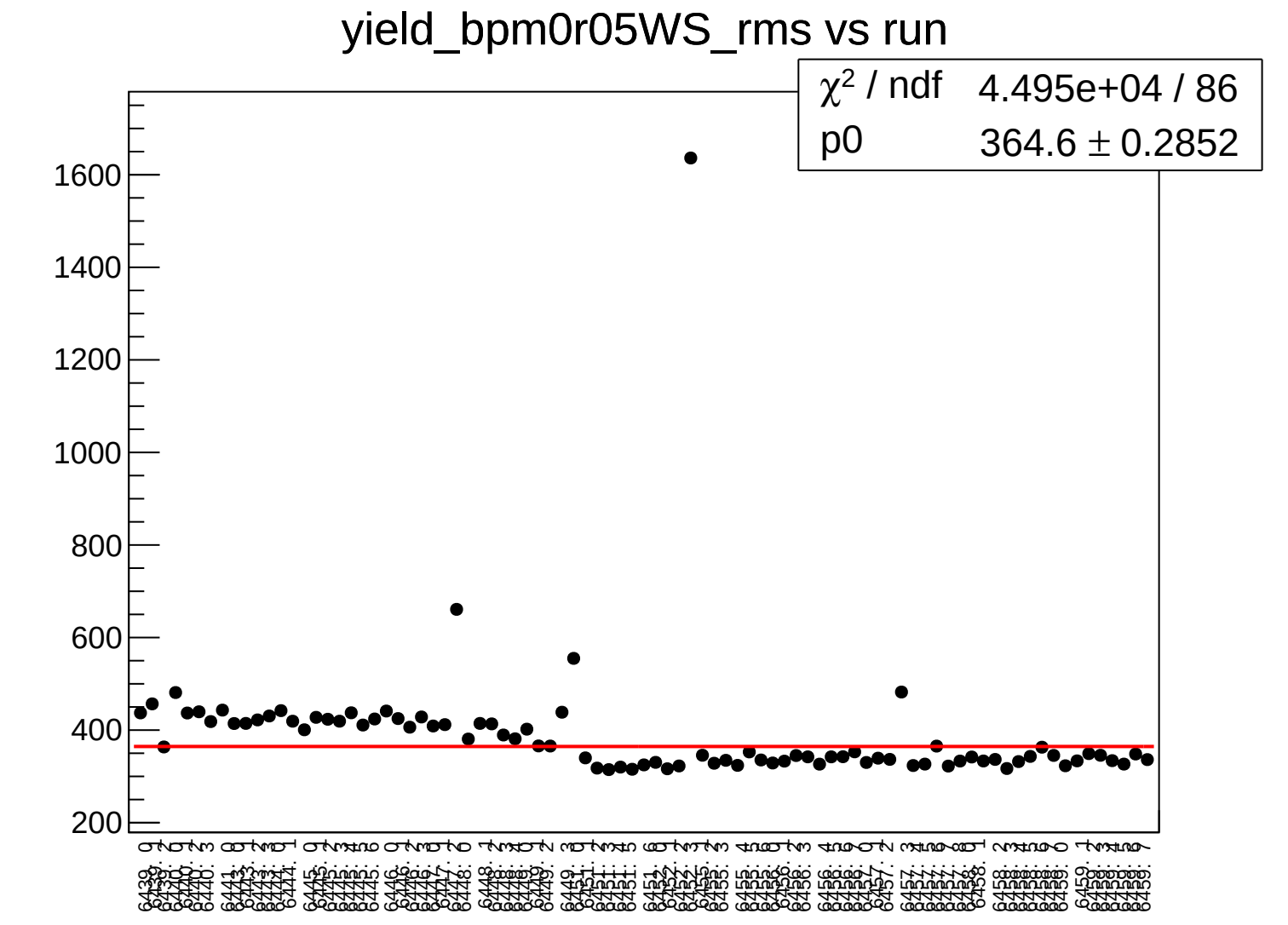

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

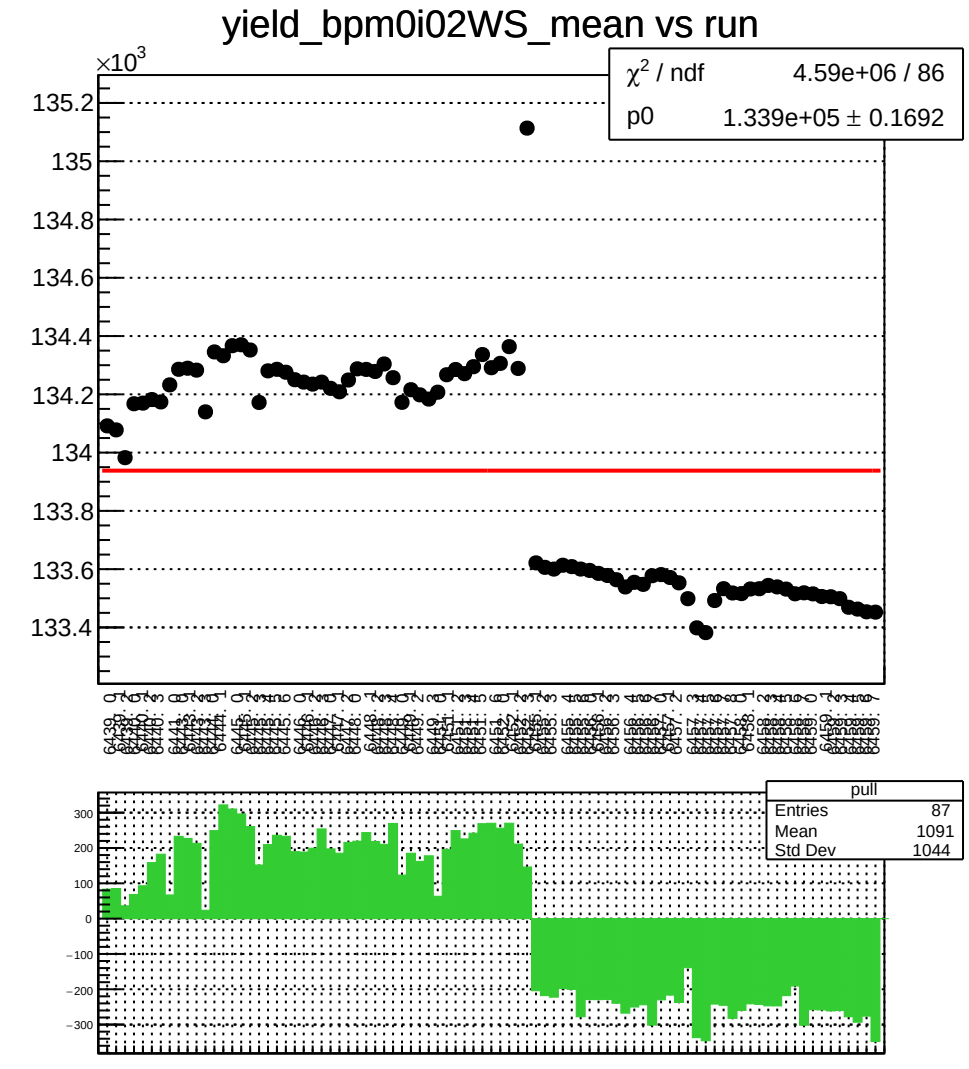

yield_bpm0r03WS_rms vs run
χ² / ndf 9.258e+04 / 86
p0 253.1 ± 0.201
1400
1200
1000
800
600
400
200

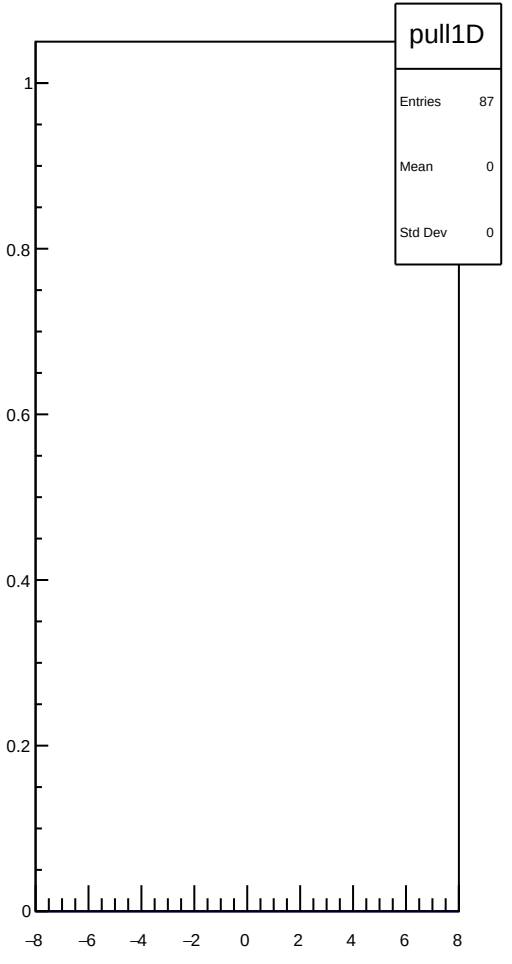

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 3.047e+07 / 86
p0 1.291e+05 ± 0.4034
133
132
131
130
129
128
127

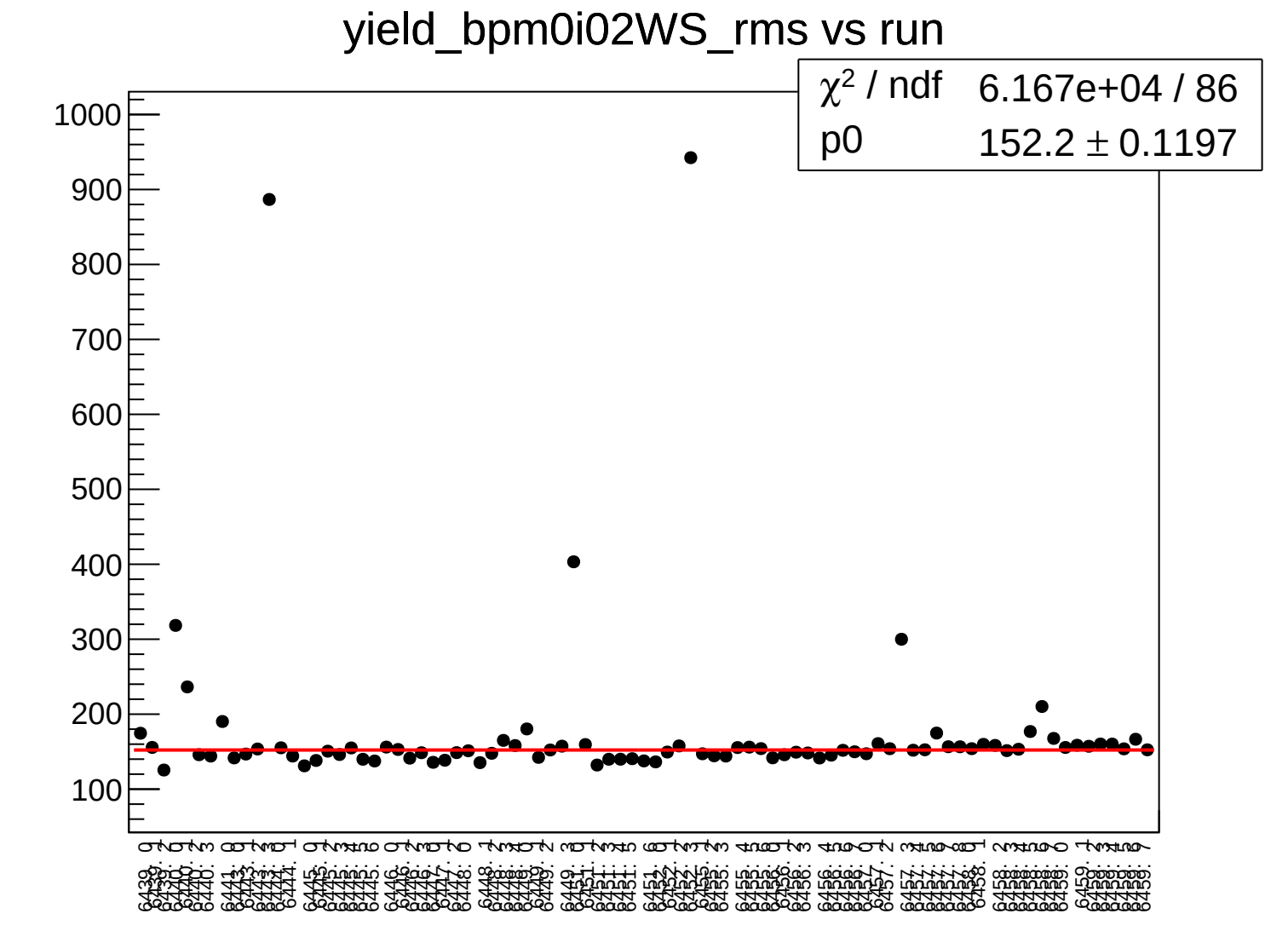

pull
Entries 87
Mean −182.8
Std Dev 223.2
1000
800
600
400
200
0
−200
−400
−600

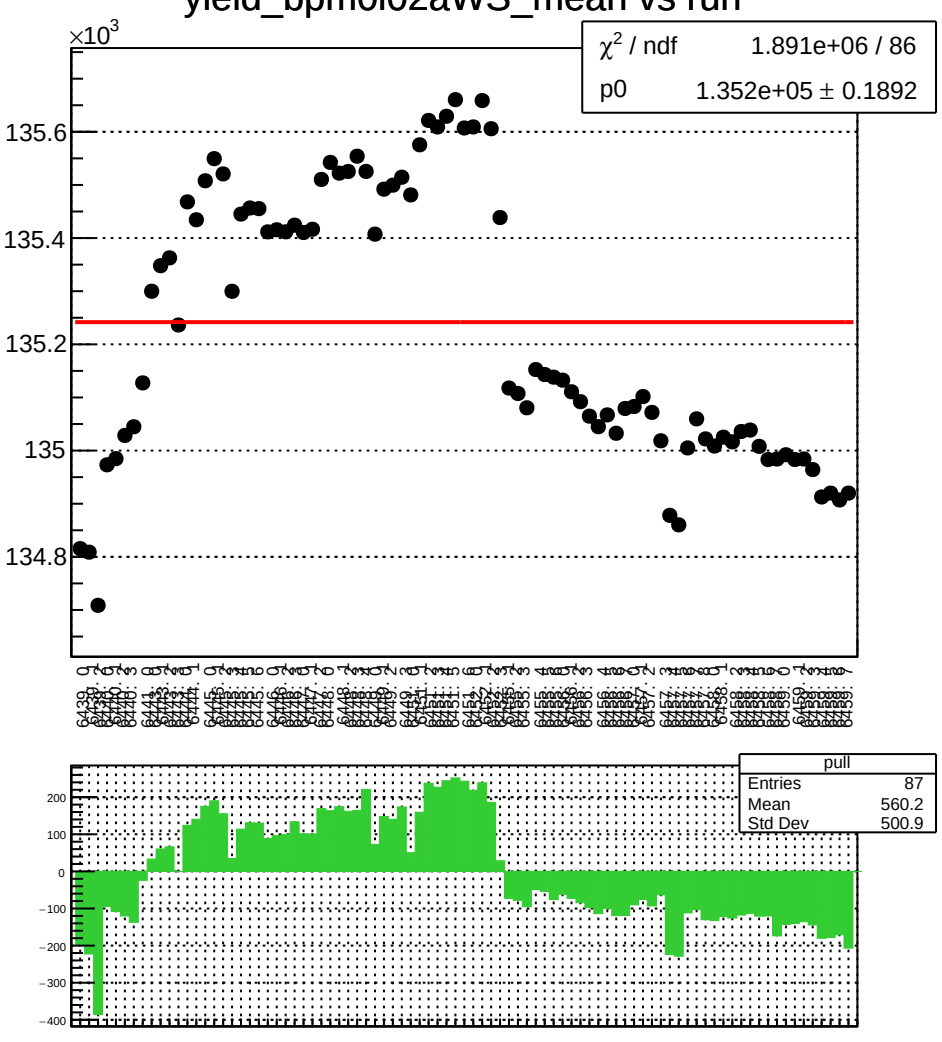

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

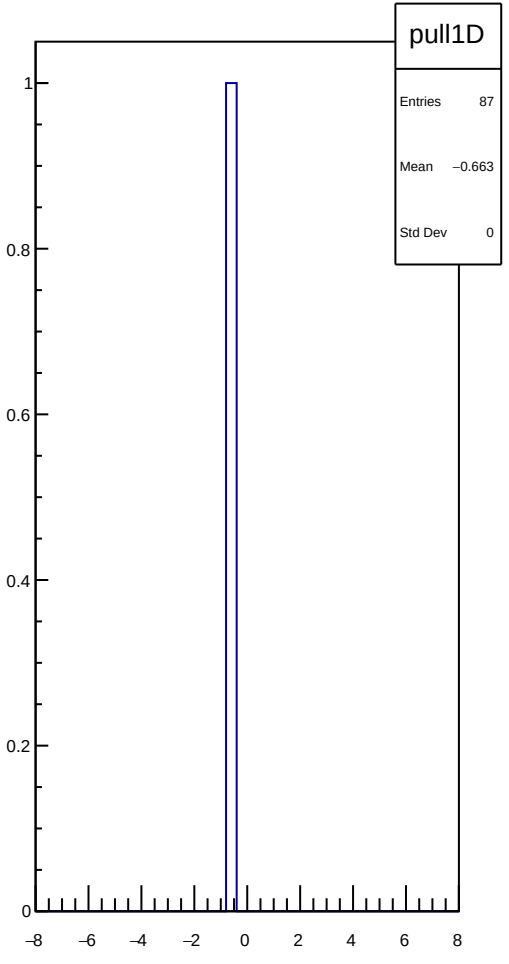

yield_bpm0r05WS_rms vs run
χ² / ndf 4.495e+04 / 86
p0 364.6 ± 0.2852
1600
1400
1200
1000
800
600
400
200

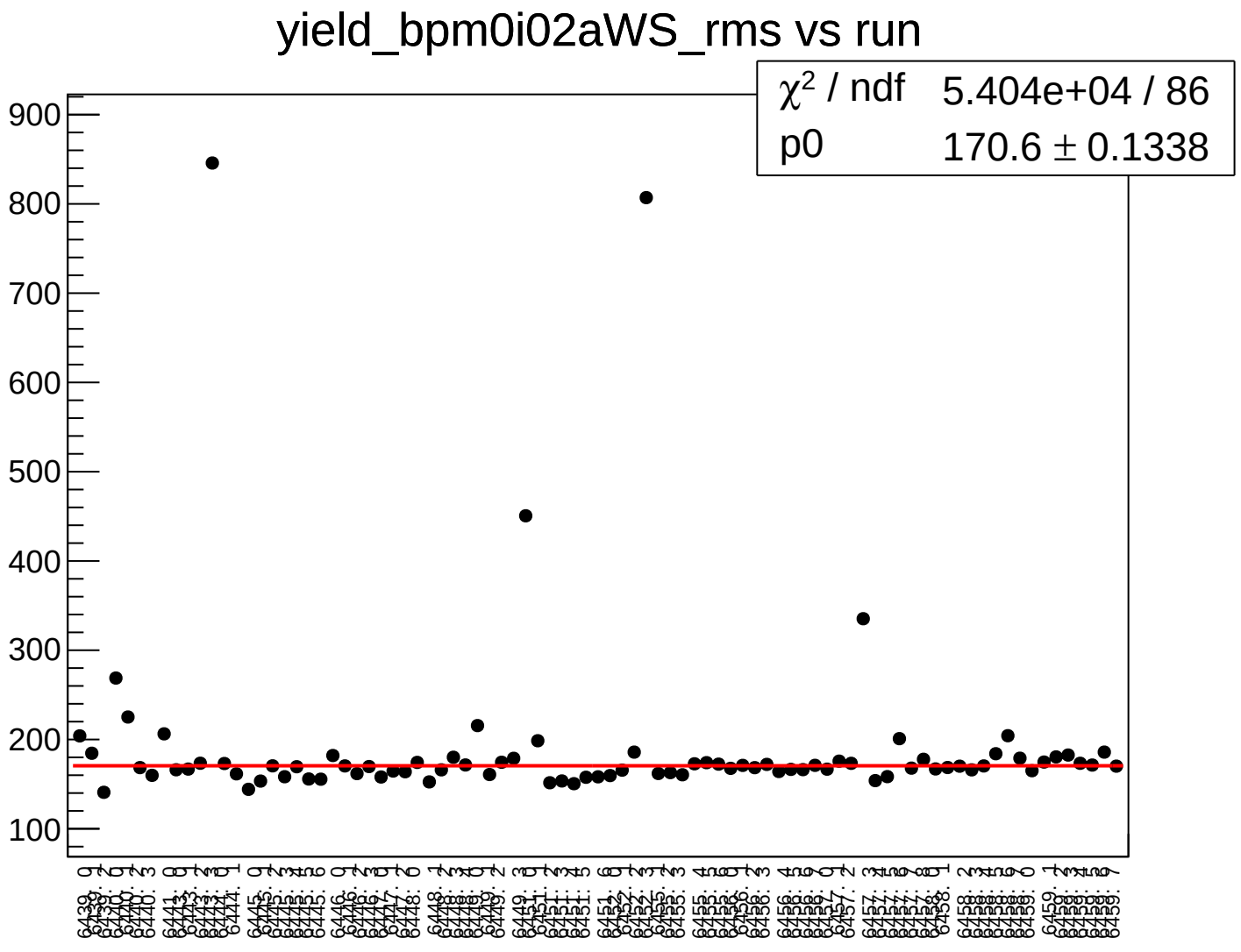

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 4.59e+06 / 86
p0 1.339e+05 ± 0.1692
135.2
135
134.8
134.6
134.4
134.2
134
133.8
133.6
133.4
pull
Entries 87
Mean 1091
Std Dev 1044
300
200
100
0
−100
−200
−300

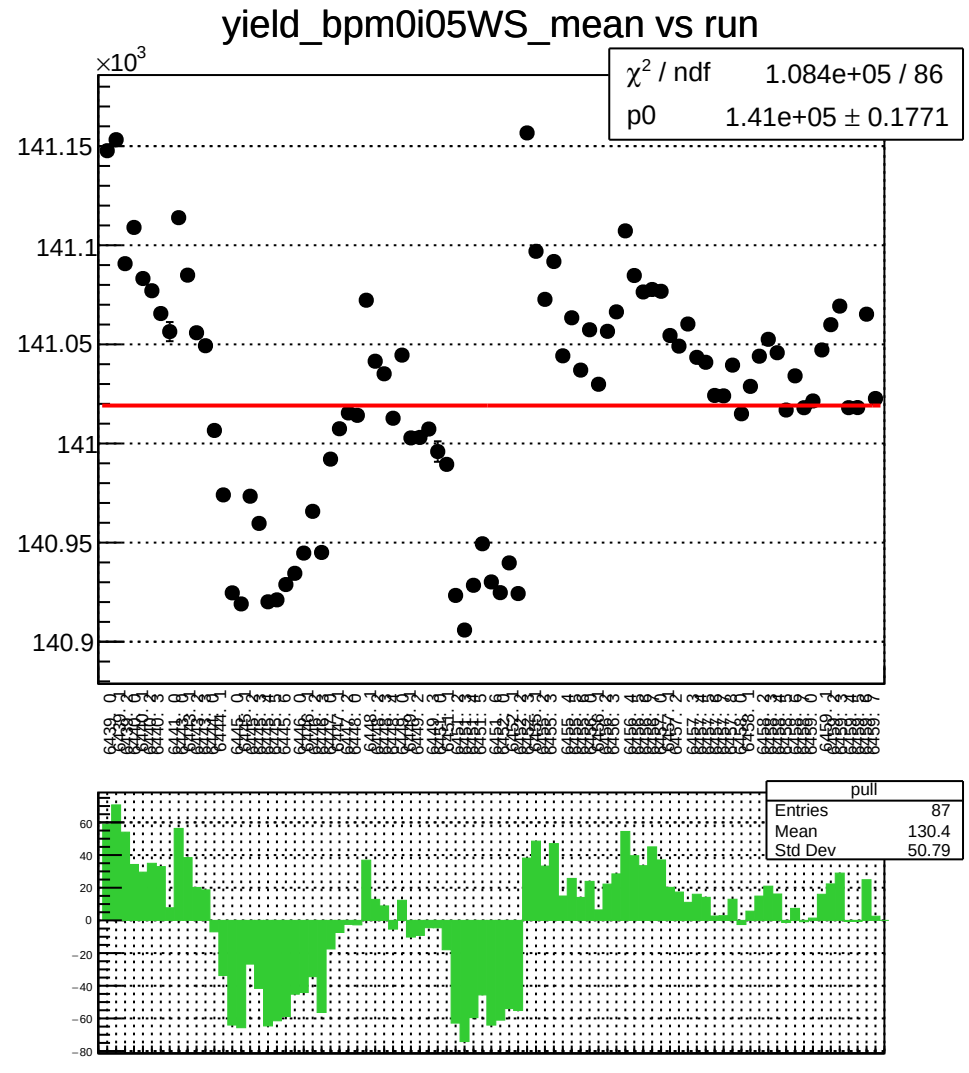

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

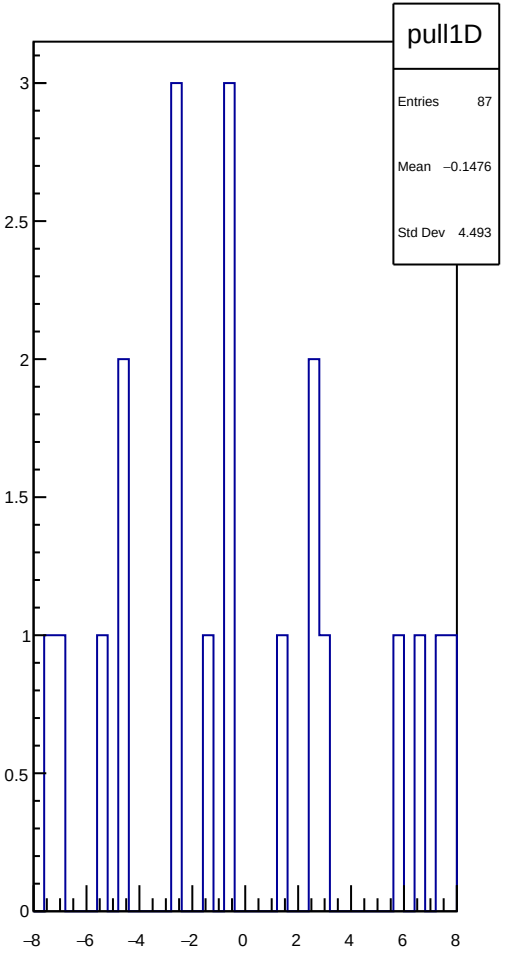

yield_bpm0i02WS_rms vs run
χ² / ndf 6.167e+04 / 86
p0 152.2 ± 0.1197
1000
900
800
700
600
500
400
300
200
100

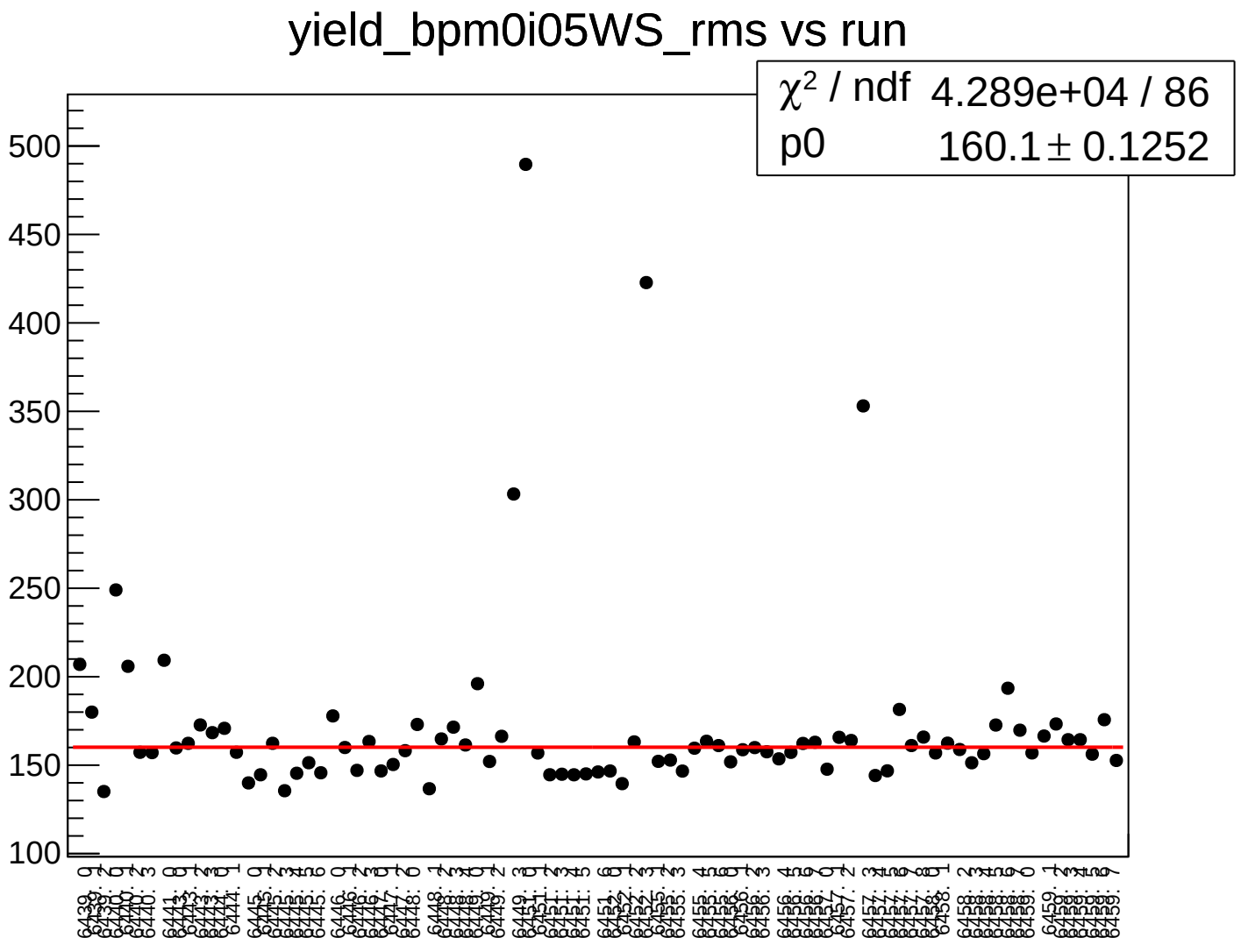

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 1.891e+06 / 86
p0 1.352e+05 ± 0.1892
135.6
135.4
135.2
135
134.8
pull
Entries 87
Mean 560.2
Std Dev 500.9
200
100
0
−100
−200
−300
−400

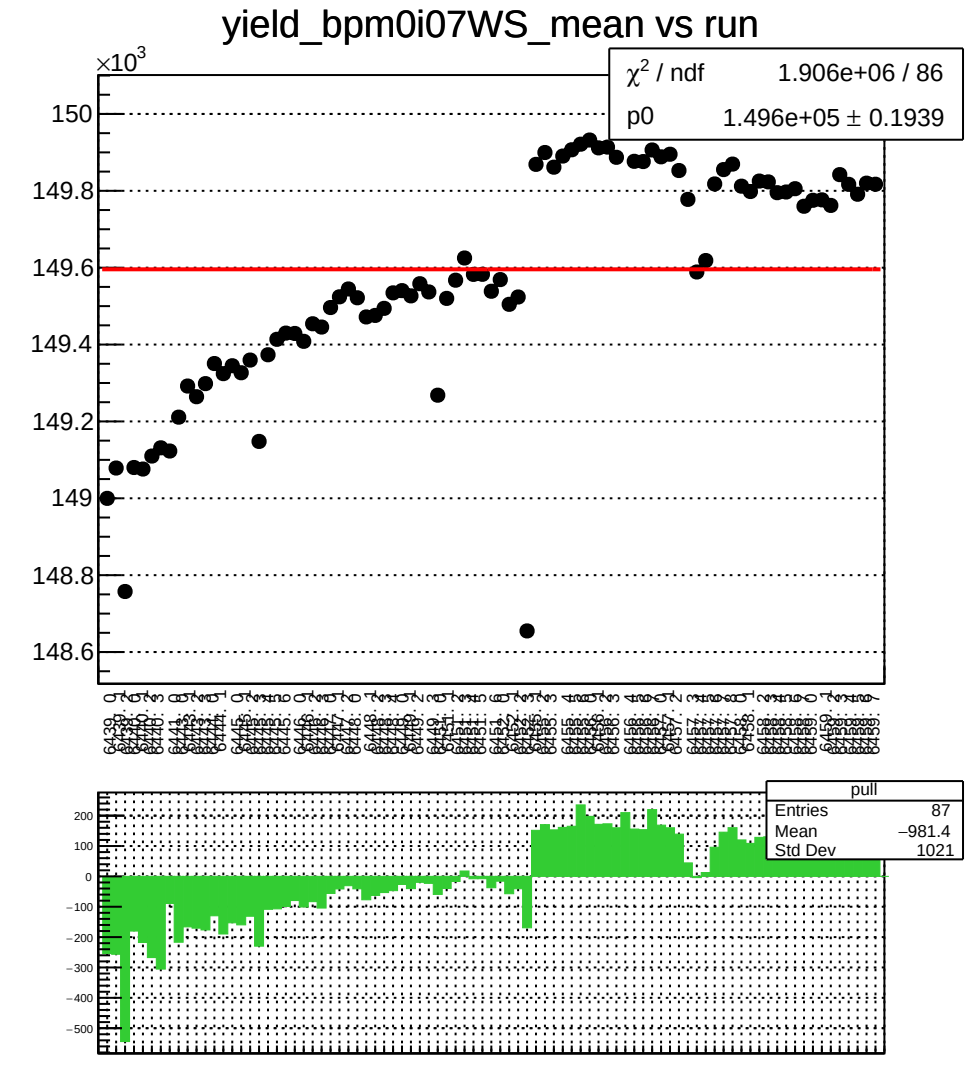

pull1D
Entries 87
Mean −0.663
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

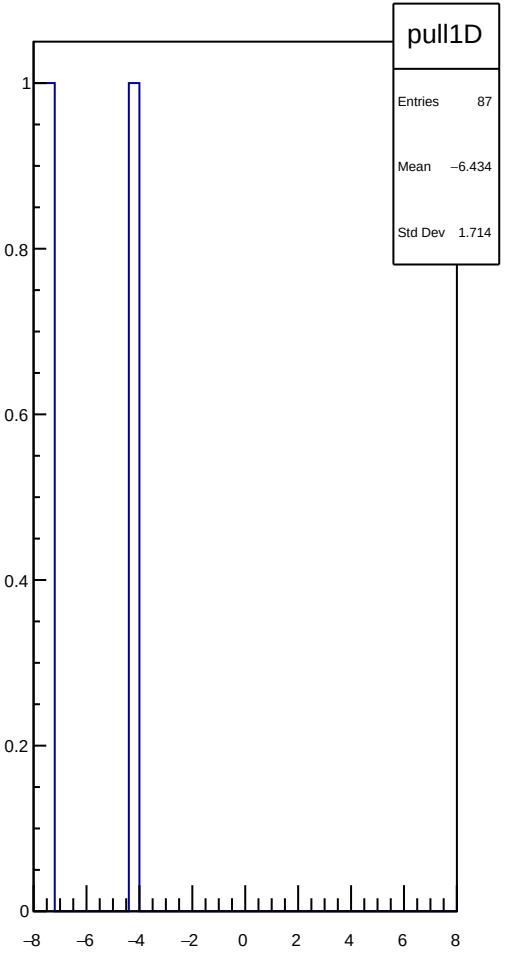

yield_bpm0i02aWS_rms vs run
χ² / ndf 5.404e+04 / 86
p0 170.6 ± 0.1338
900
800
700
600
500
400
300
200
100

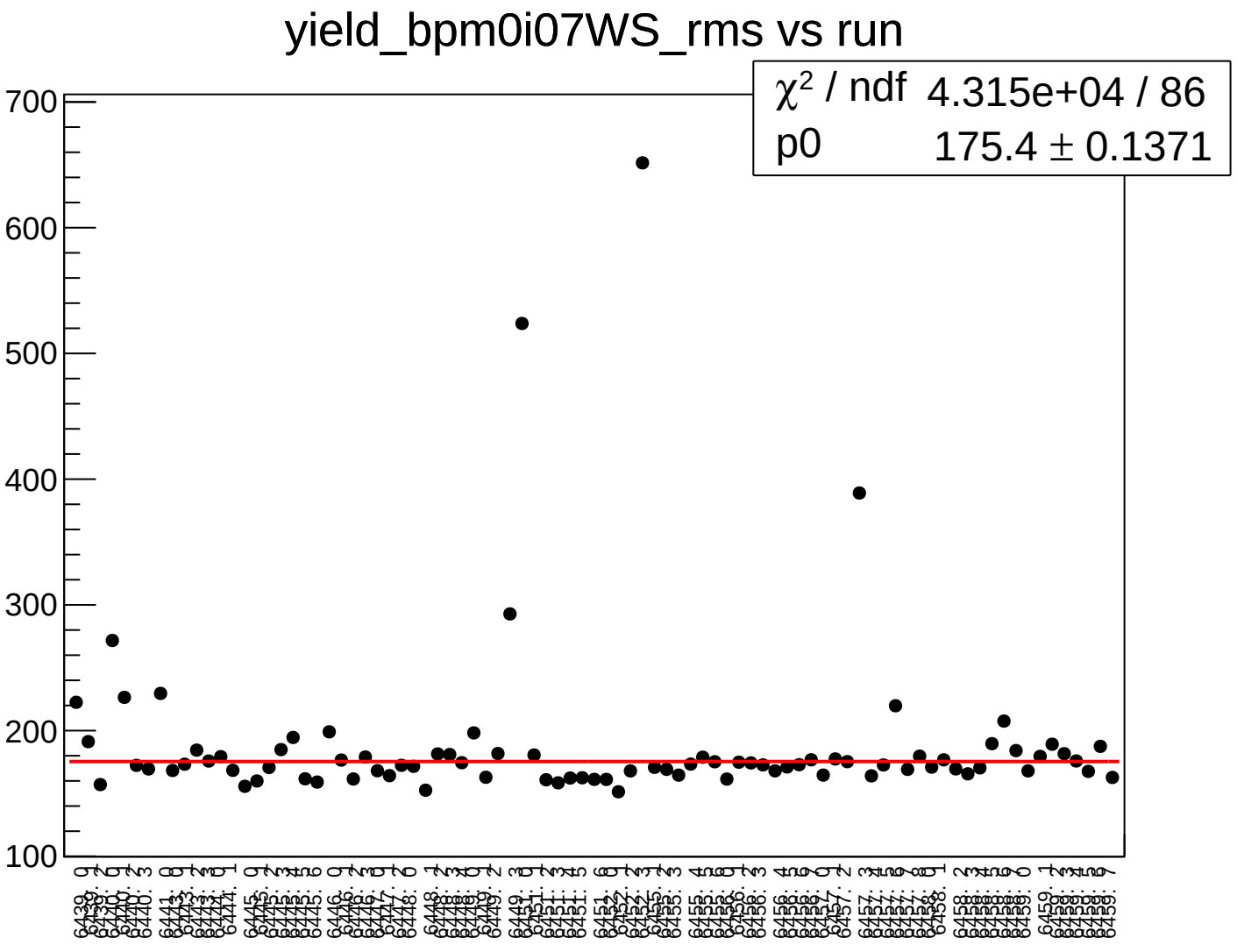

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 1.084e+05 / 86
p0 1.41e+05 ± 0.1771
141.15
141.1
141.05
141
140.95
140.9
pull
Entries 87
Mean 130.4
Std Dev 50.79
60
40
20
0
−20
−40
−60
−80

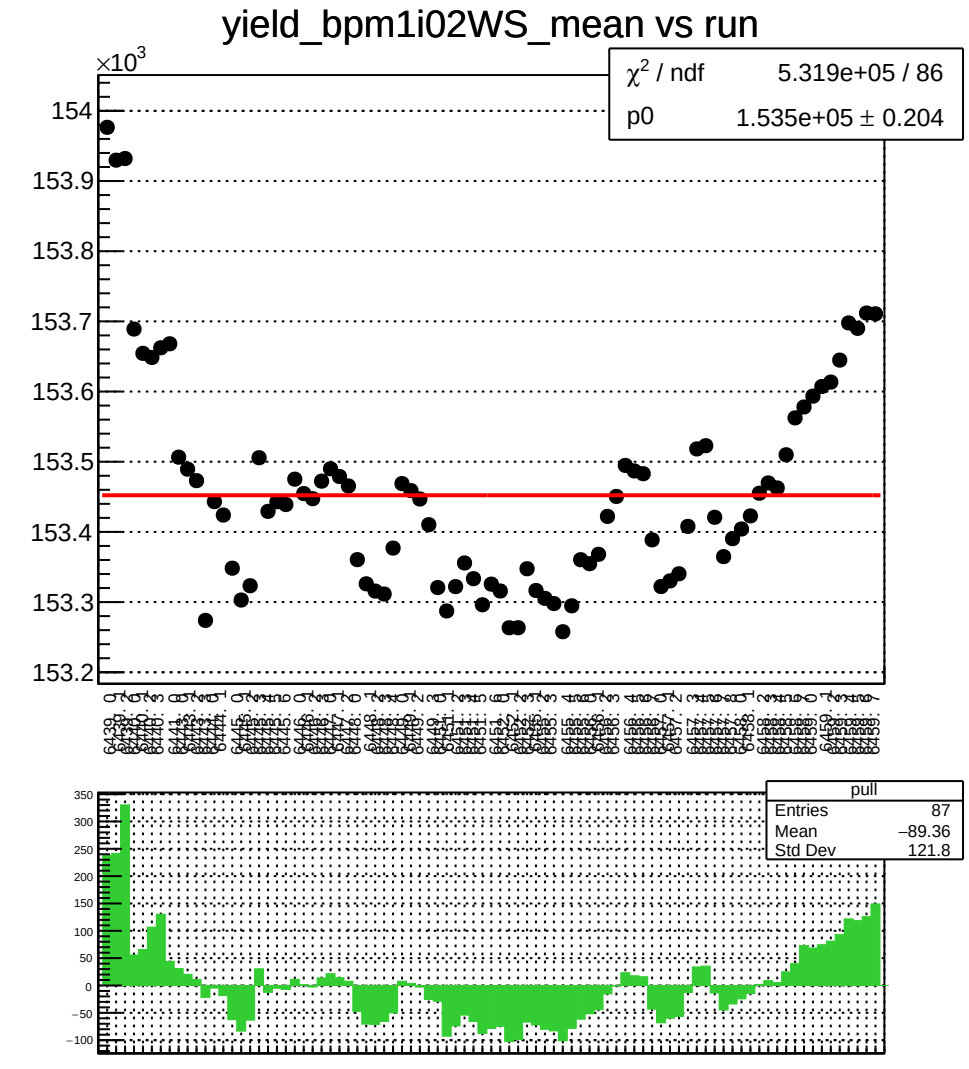

pull1D
Entries 87
Mean −0.1476
Std Dev 4.493
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

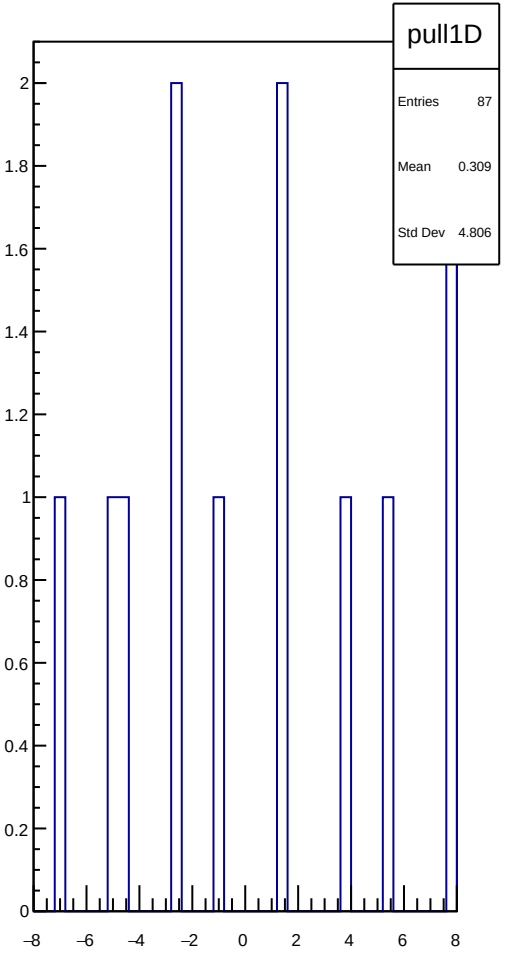

yield_bpm0i05WS_rms vs run
χ² / ndf 4.289e+04 / 86
p0 160.1 ± 0.1252
500
450
400
350
300
250
200
150
100

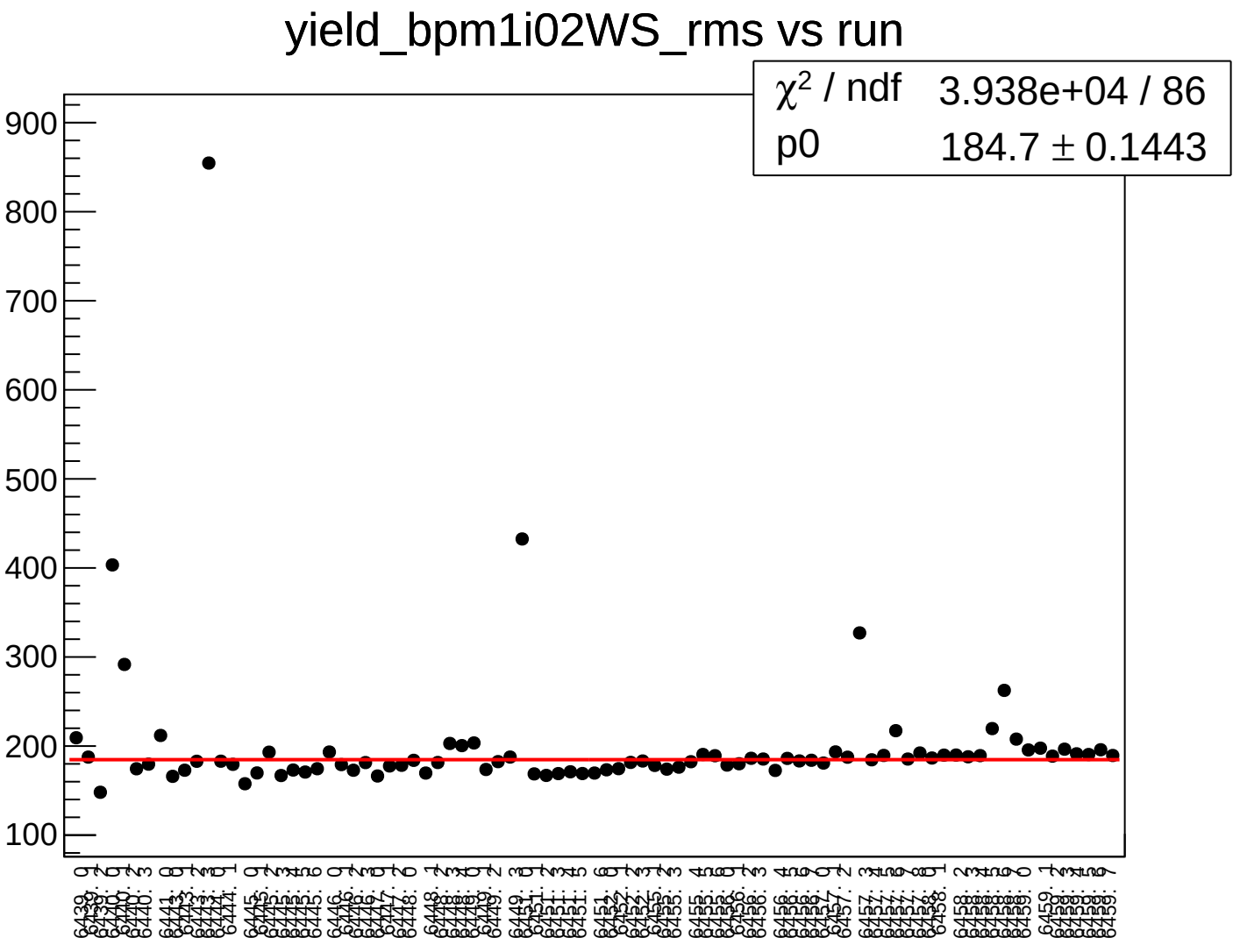

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 1.906e+06 / 86
p0 1.496e+05 ± 0.1939
150
149.8
149.6
149.4
149.2
149
148.8
148.6
pull
Entries 87
Mean −981.4
Std Dev 1021
200
100
0
−100
−200
−300
−400
−500

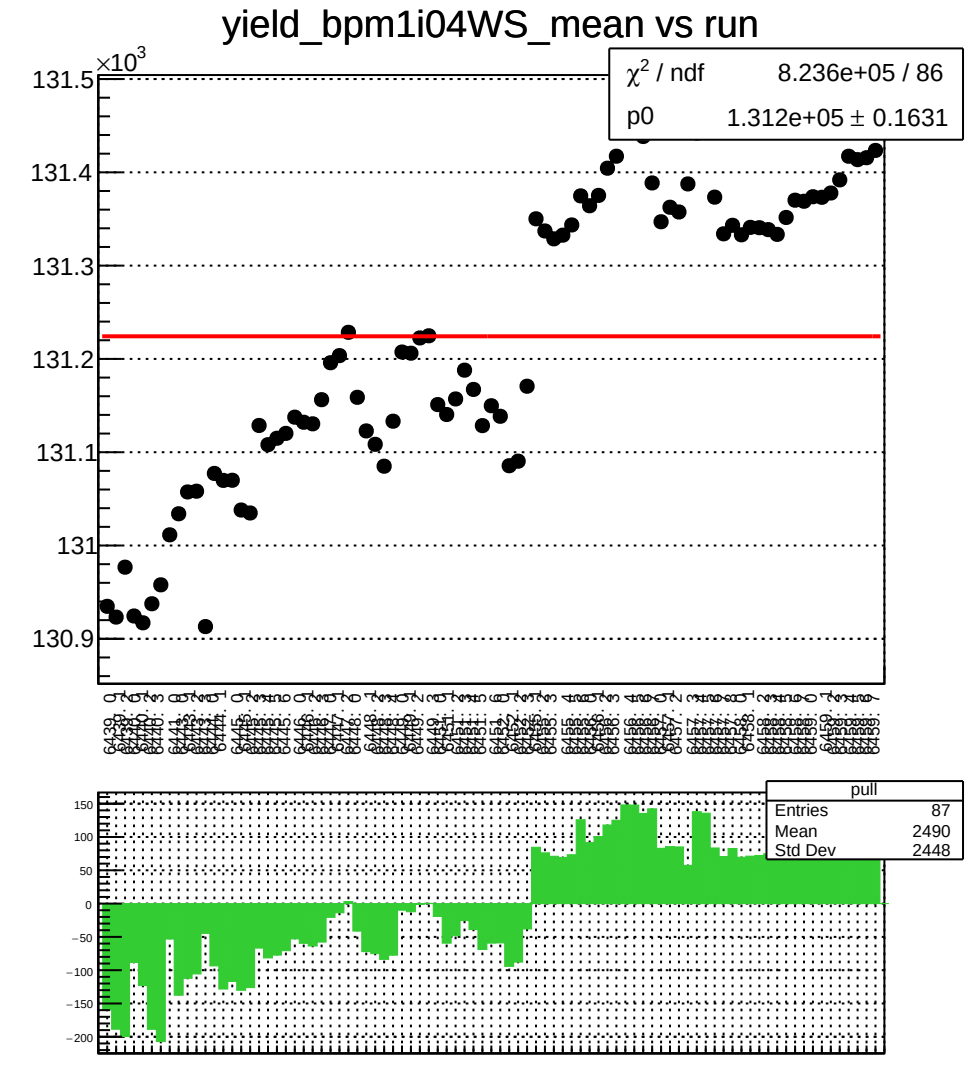

pull1D
Entries 87
Mean −6.434
Std Dev 1.714
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

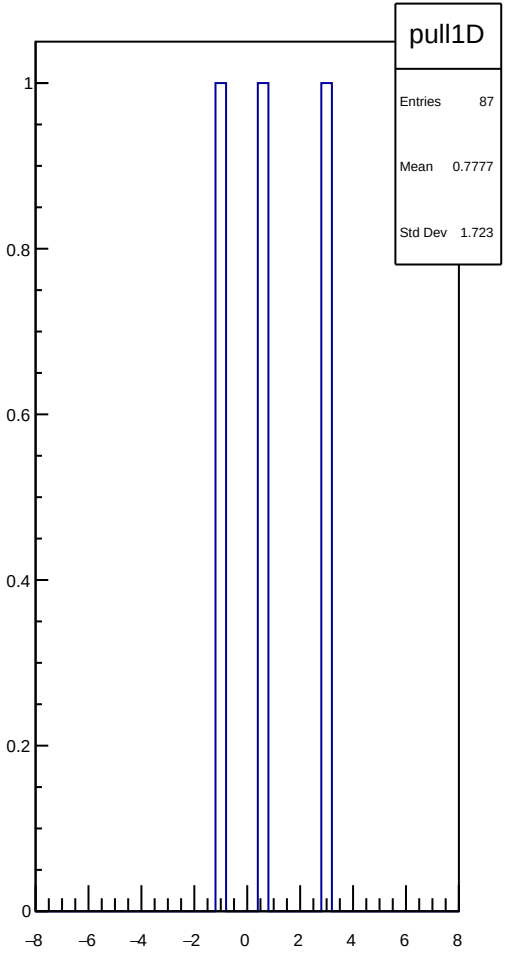

yield_bpm0i07WS_rms vs run
χ² / ndf 4.315e+04 / 86
p0 175.4 ± 0.1371
700
600
500
400
300
200
100

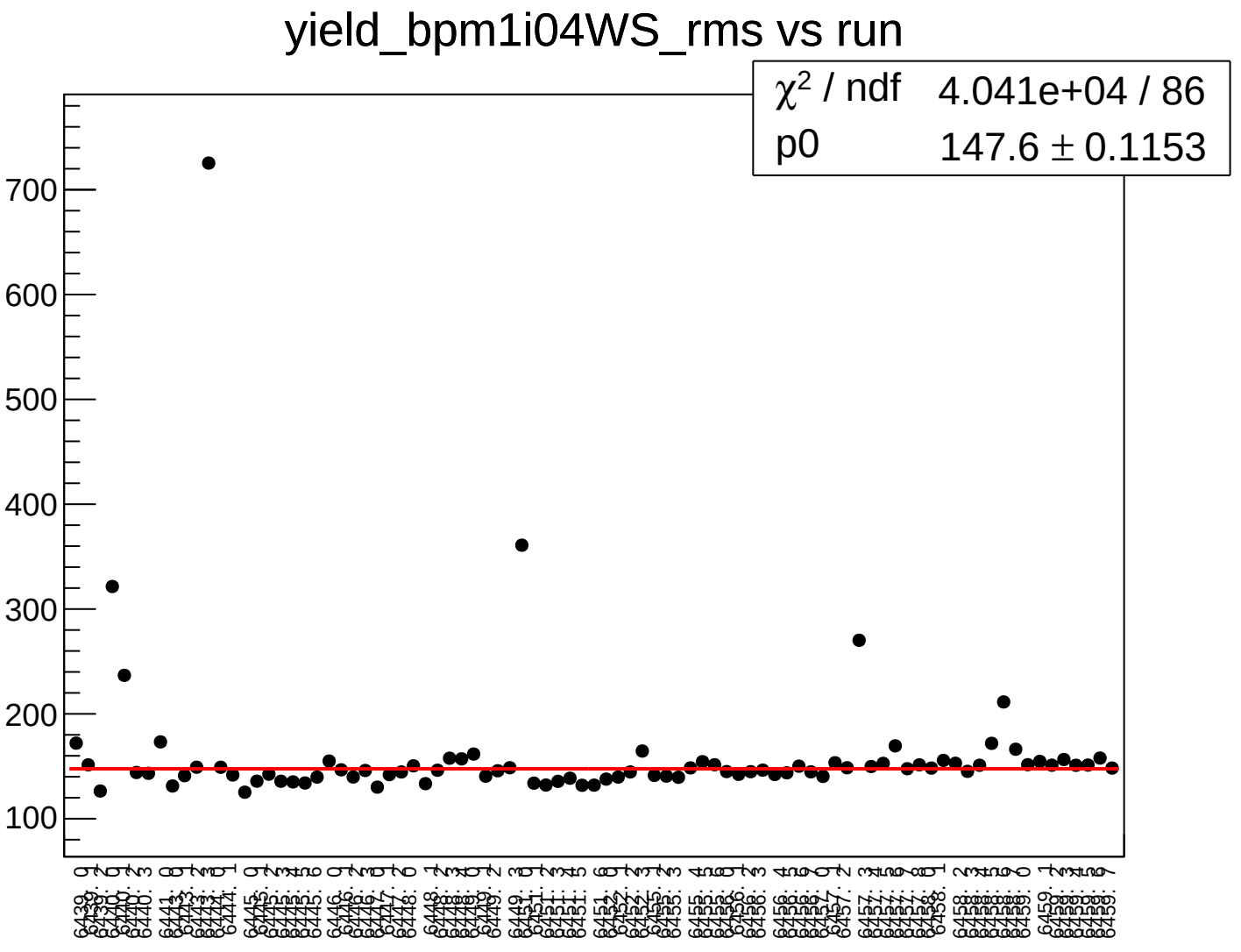

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 5.319e+05 / 86
p0 1.535e+05 ± 0.204
154
153.9
153.8
153.7
153.6
153.5
153.4
153.3
153.2
pull
Entries 87
Mean −89.36
Std Dev 121.8
350
300
250
200
150
100
50
0
−50
−100

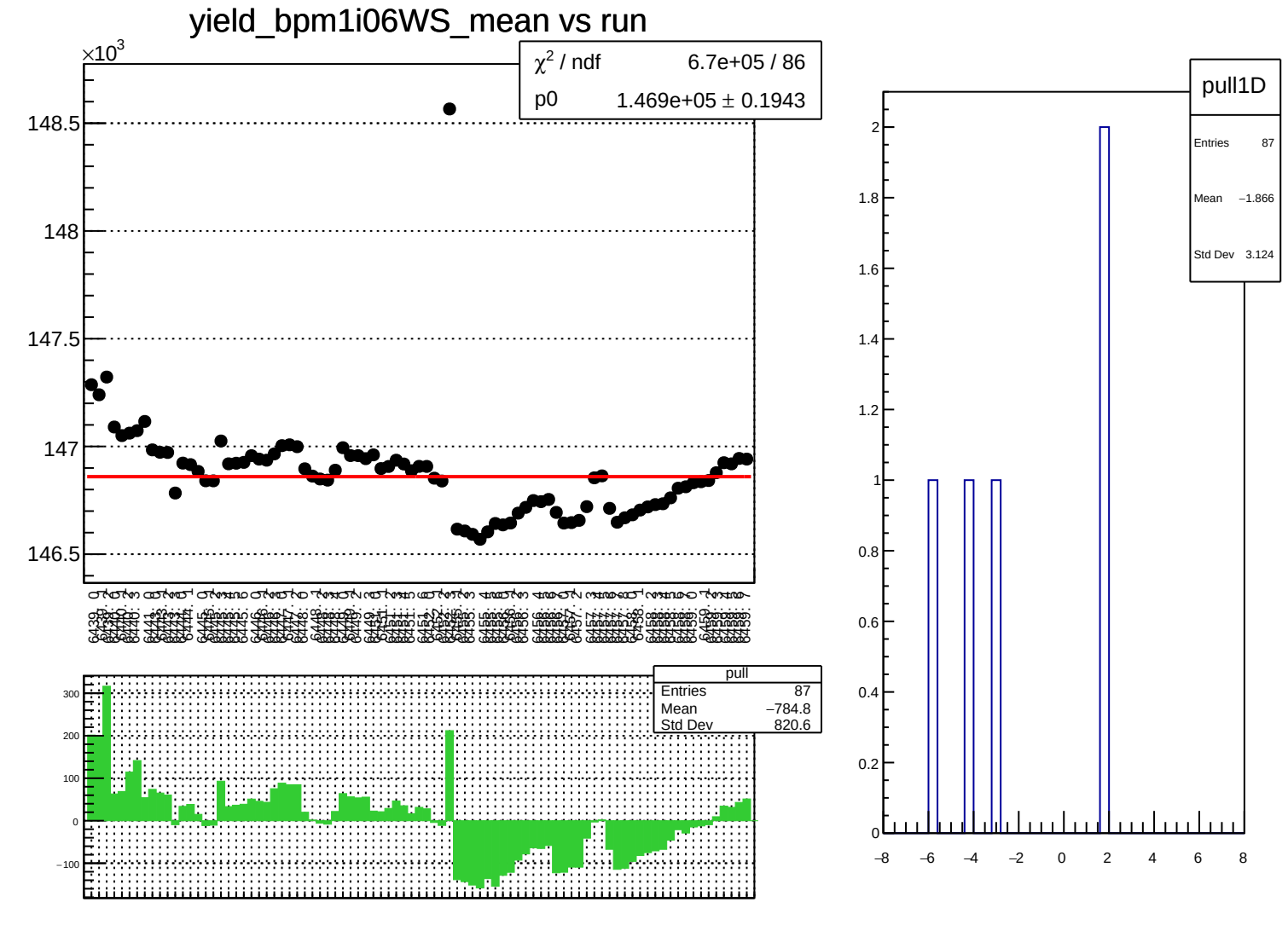

pull1D
Entries 87
Mean 0.309
Std Dev 4.806
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

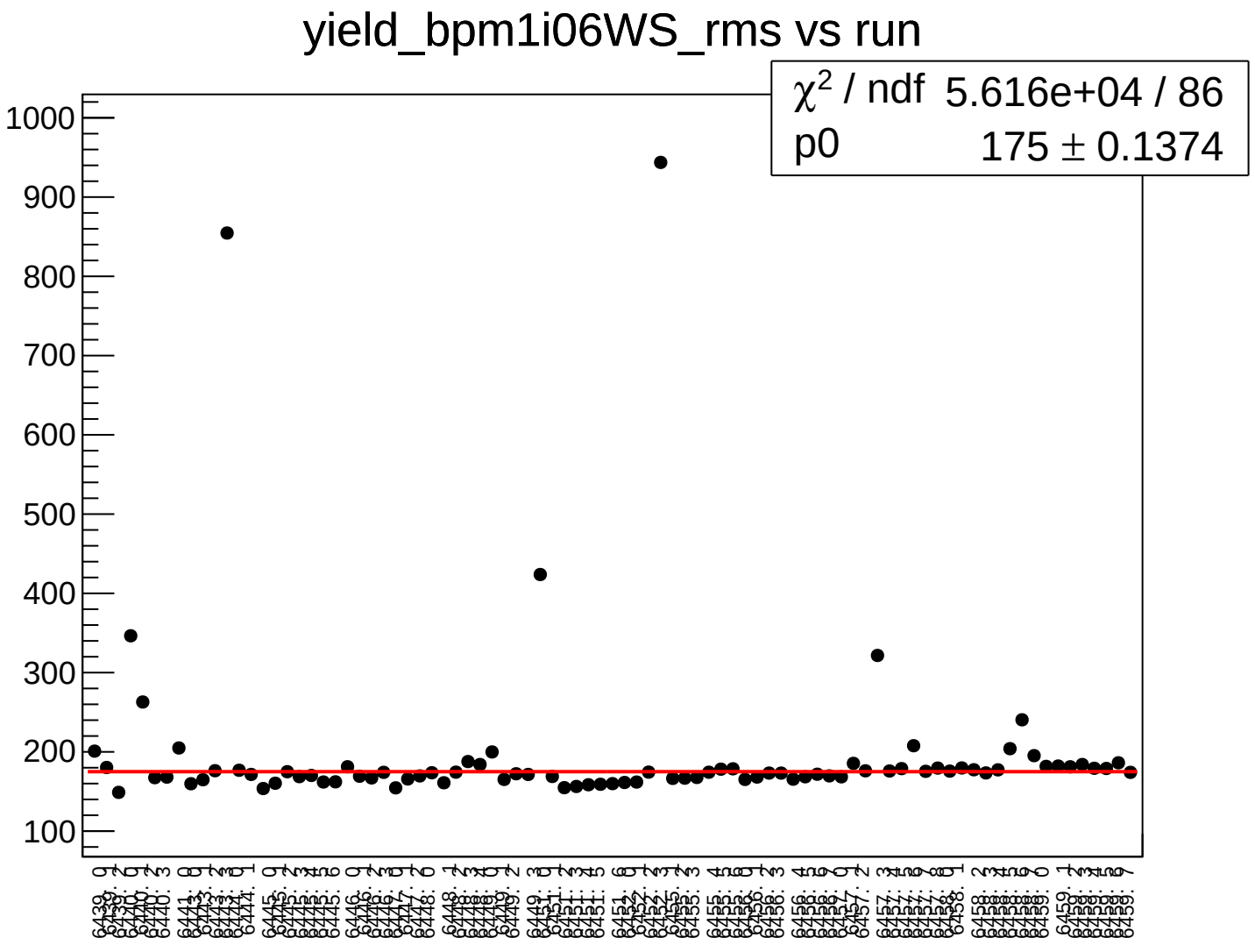

yield_bpm1i02WS_rms vs run
χ² / ndf 3.938e+04 / 86
p0 184.7 ± 0.1443
900
800
700
600
500
400
300
200
100

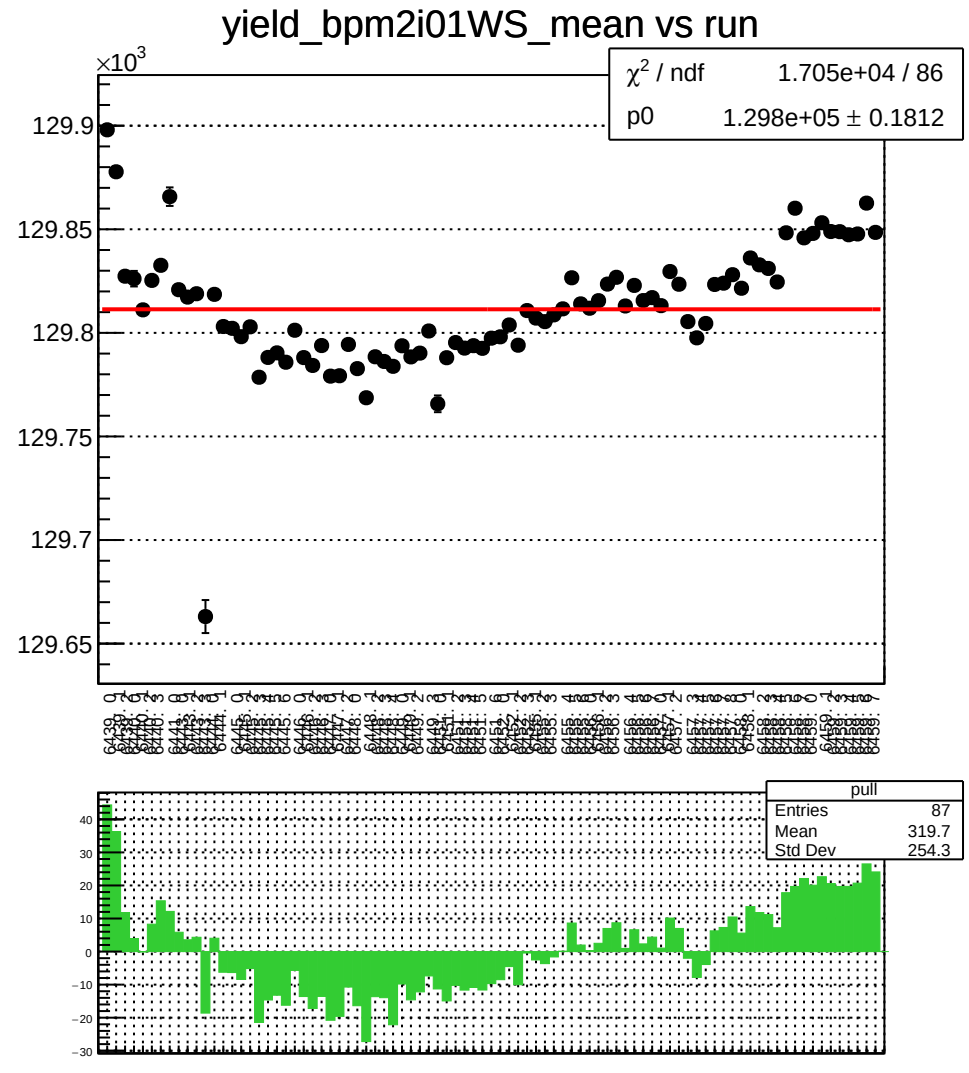

yield_bpm1i04WS_mean vs run
×10^3
131.5
131.4
131.3
131.2
131.1
131
130.9
χ² / ndf 8.236e+05 / 86
p0 1.312e+05 ± 0.1631
pull
Entries 87
Mean 2490
Std Dev 2448
150
100
50
0
−50
−100
−150
−200

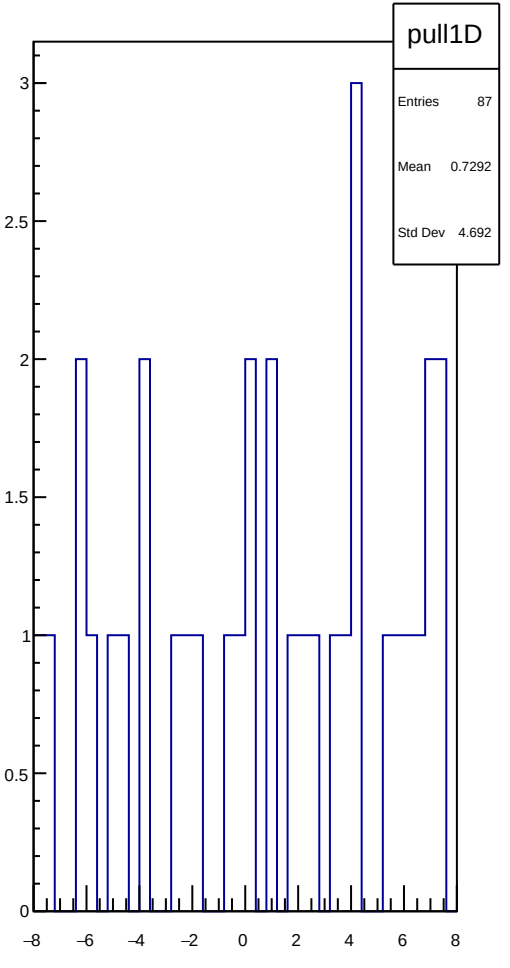

pull1D
Entries 87
Mean 0.7777
Std Dev 1.723
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

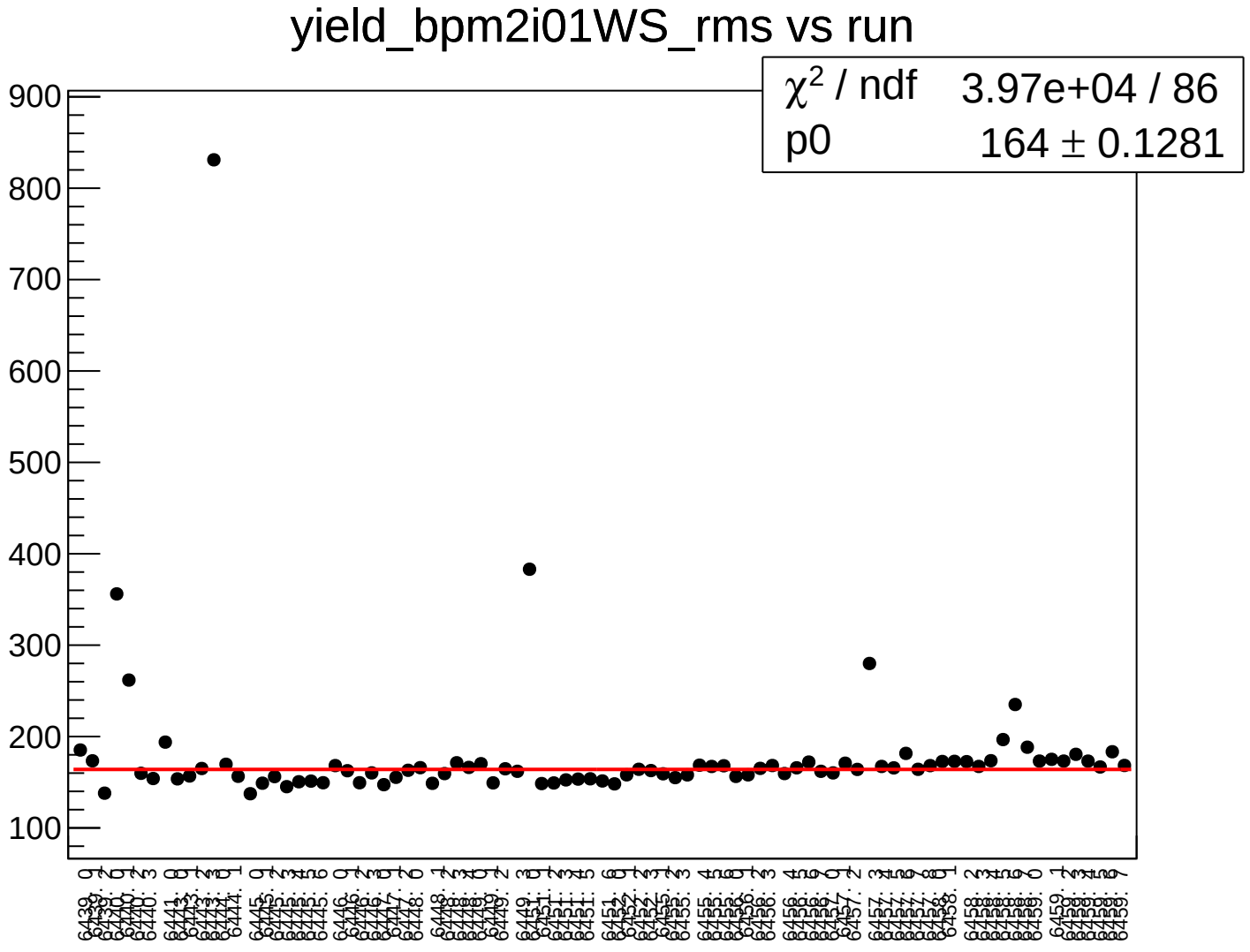

yield_bpm1i04WS_rms vs run
χ² / ndf 4.041e+04 / 86
p0 147.6 ± 0.1153
700
600
500
400
300
200
100

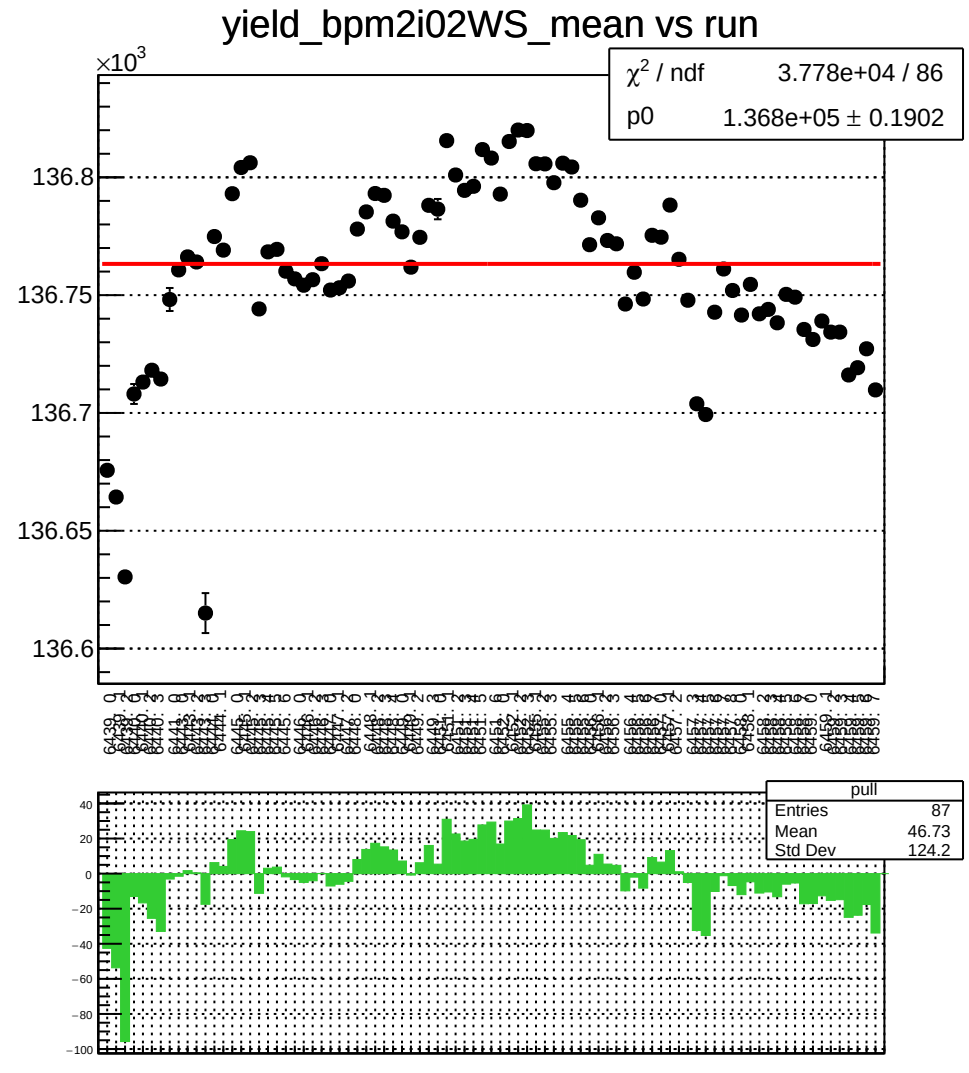

yield_bpm1i06WS_mean vs run
χ² / ndf 6.7e+05 / 86
p0 1.469e+05 ± 0.1943
×10³
148.5
148
147.5
147
146.5
pull
Entries 87
Mean −784.8
Std Dev 820.6
300
200
100
0
−100
pull1D
Entries 87
Mean −1.866
Std Dev 3.124
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

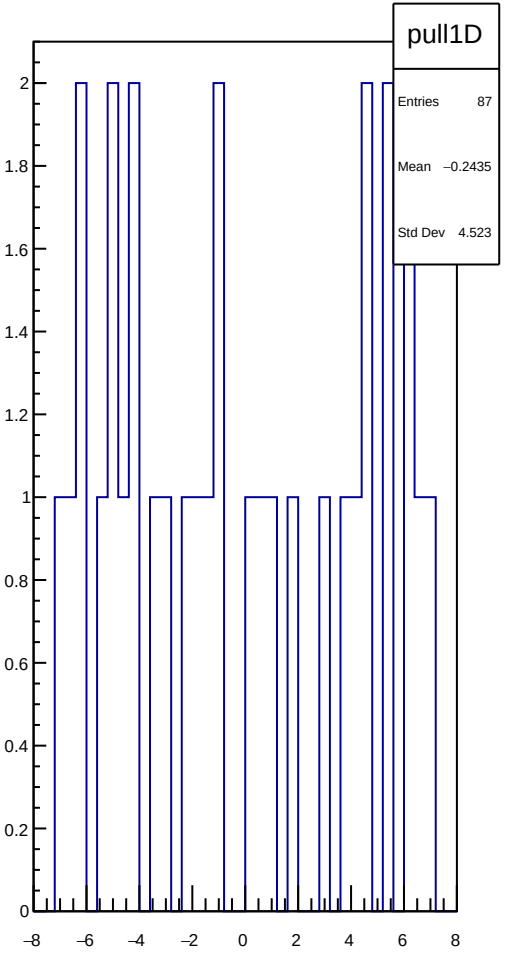

yield_bpm1i06WS_rms vs run
χ^2 / ndf 5.616e+04 / 86
p0 175 ± 0.1374
1000
900
800
700
600
500
400
300
200
100

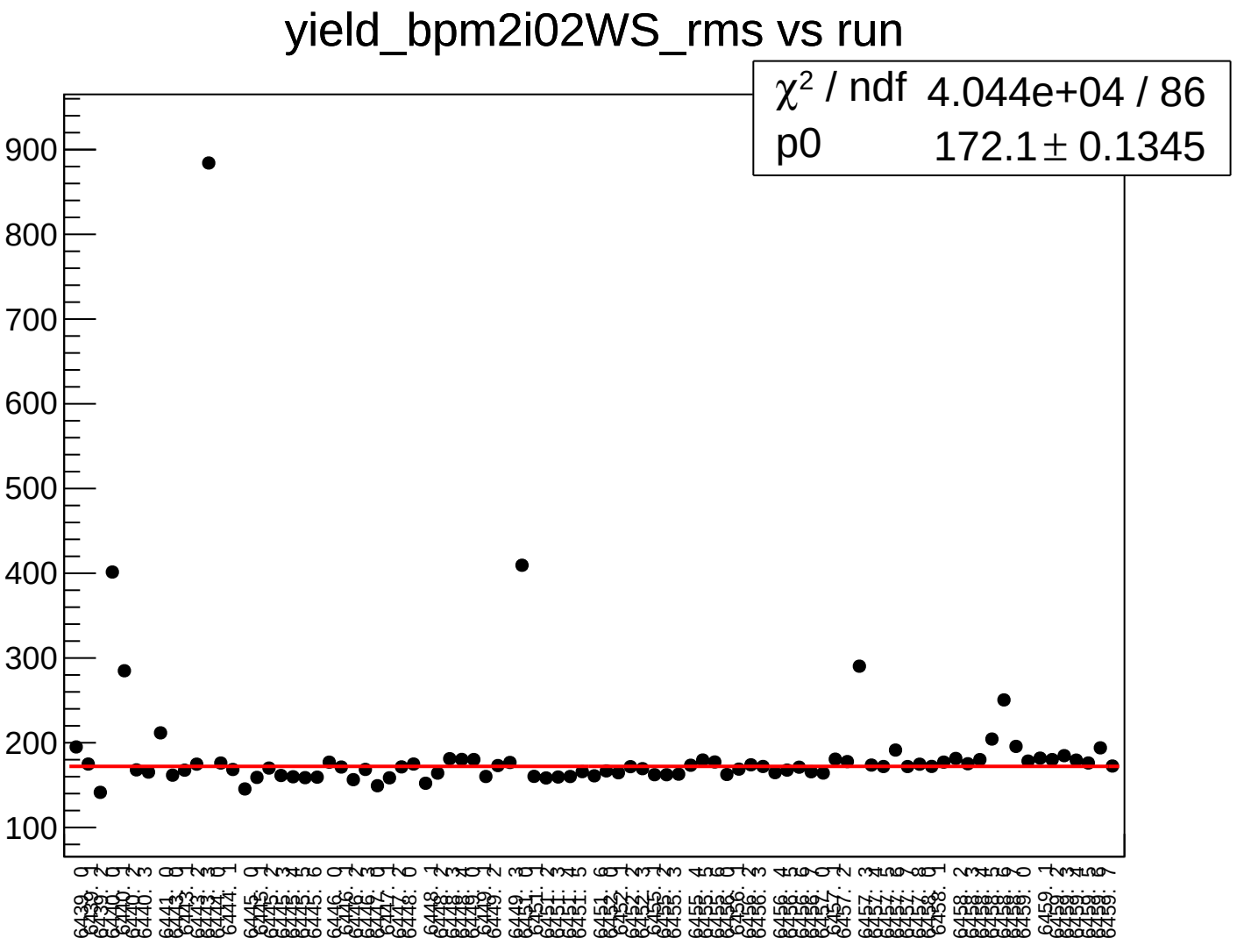

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 1.705e+04 / 86
p0 1.298e+05 ± 0.1812
129.9
129.85
129.8
129.75
129.7
129.65
pull
Entries 87
Mean 319.7
Std Dev 254.3
40
30
20
10
0
−10
−20
−30

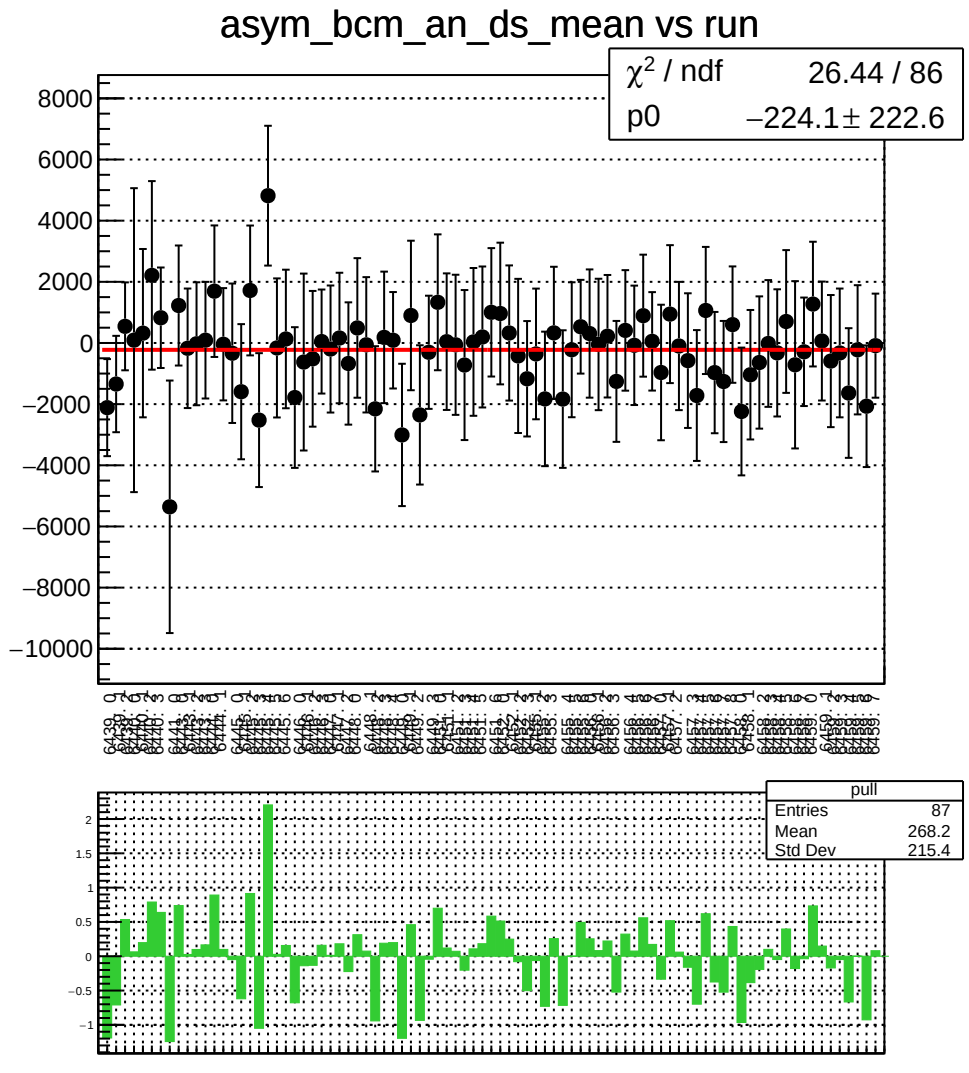

pull1D
Entries 87
Mean 0.7292
Std Dev 4.692
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

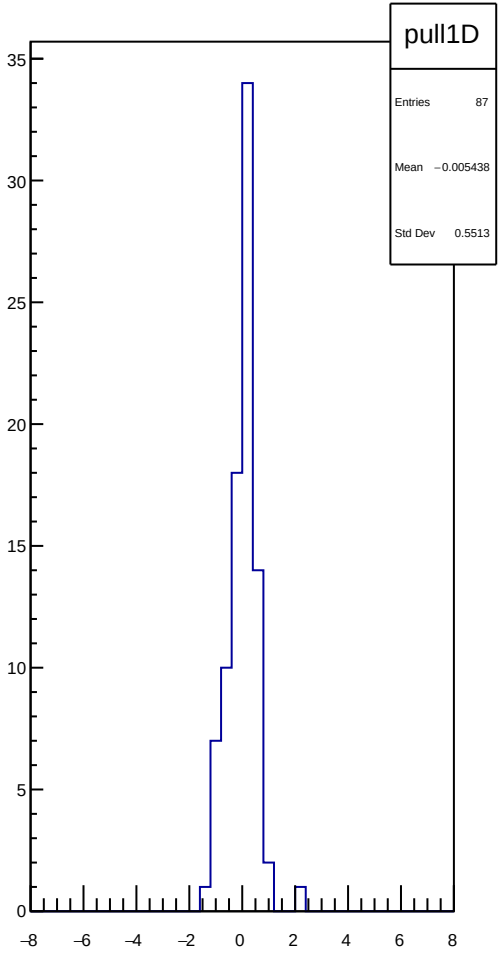

yield_bpm2i01WS_rms vs run
χ^2 / ndf 3.97e+04 / 86
p0 164 ± 0.1281
900
800
700
600
500
400
300
200
100

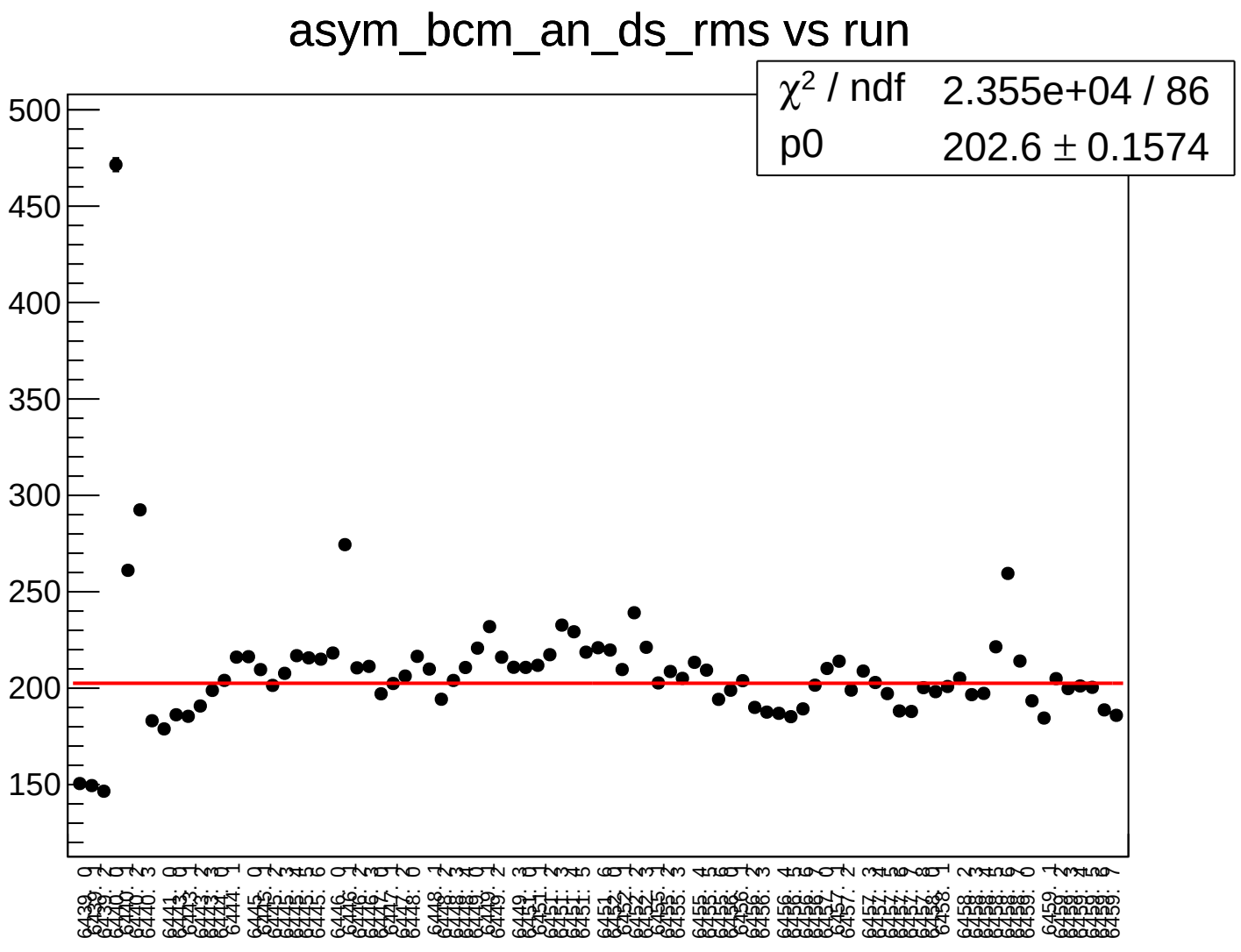

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 3.778e+04 / 86
p0 1.368e+05 ± 0.1902
136.8
136.75
136.7
136.65
136.6
pull
Entries 87
Mean 46.73
Std Dev 124.2
40
20
0
−20
−40
−60
−80
−100

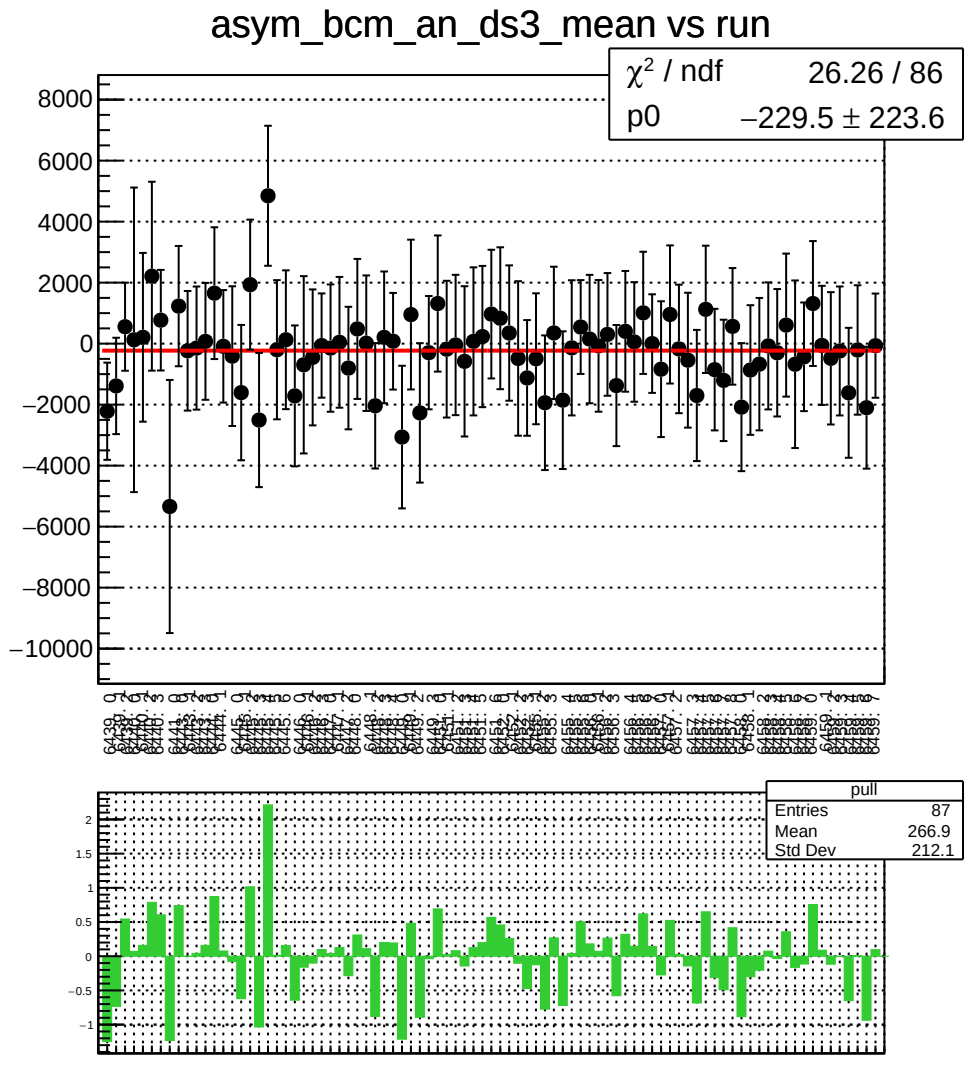

pull1D
Entries 87
Mean −0.2435
Std Dev 4.523
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

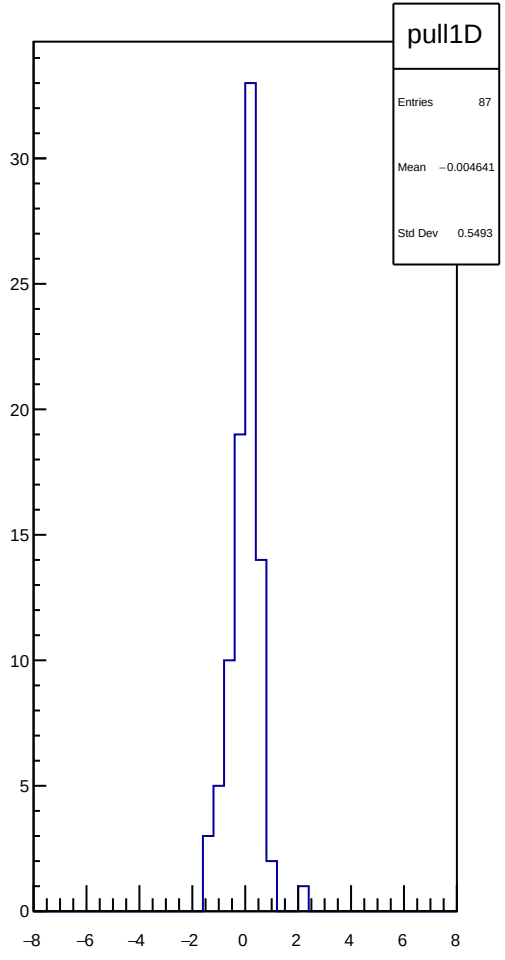

yield_bpm2i02WS_rms vs run
χ² / ndf 4.044e+04 / 86
p0 172.1 ± 0.1345
900
800
700
600
500
400
300
200
100

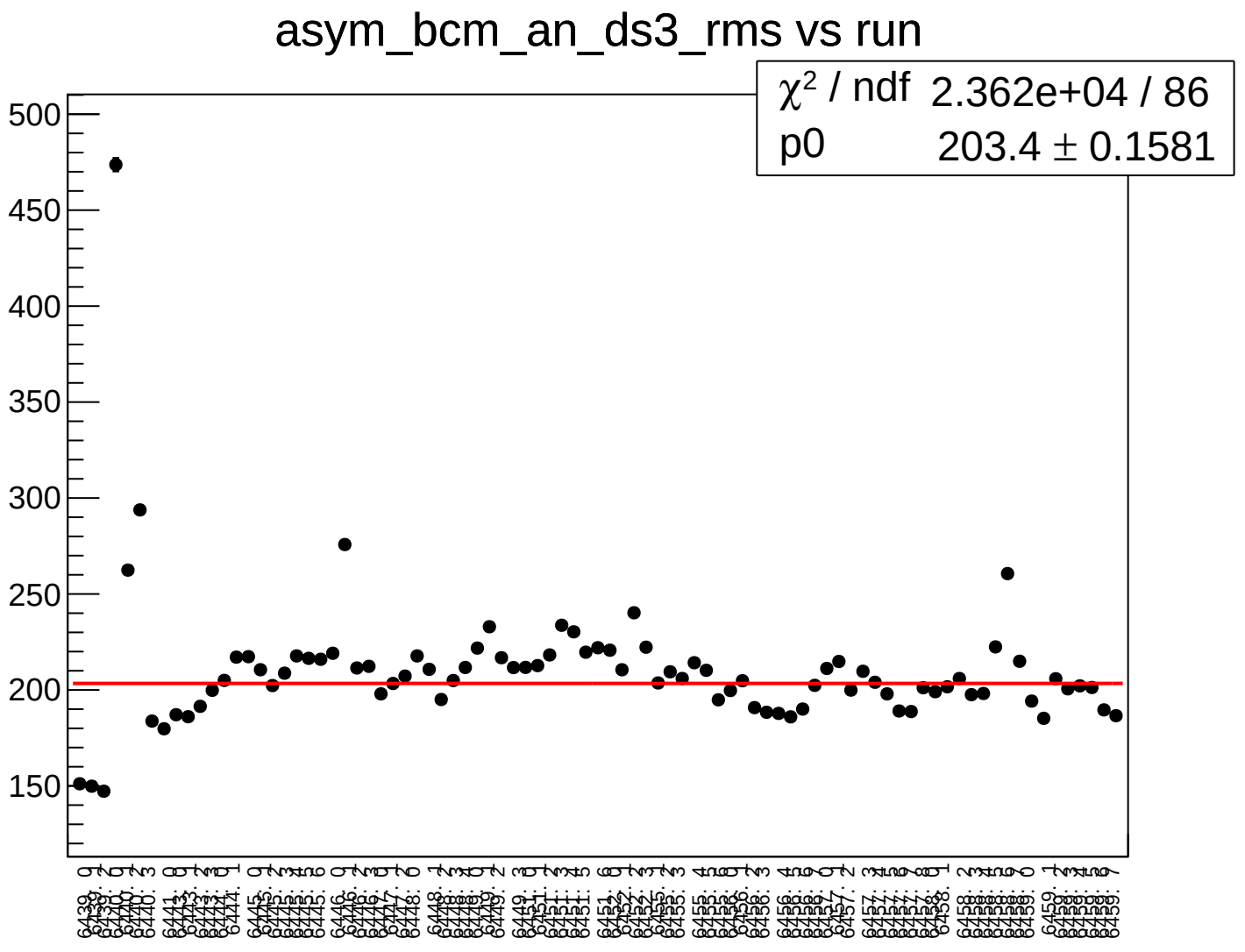

asym_bcm_an_ds_mean vs run
χ² / ndf 26.44 / 86
p0 −224.1± 222.6
pull
Entries 87
Mean 268.2
Std Dev 215.4

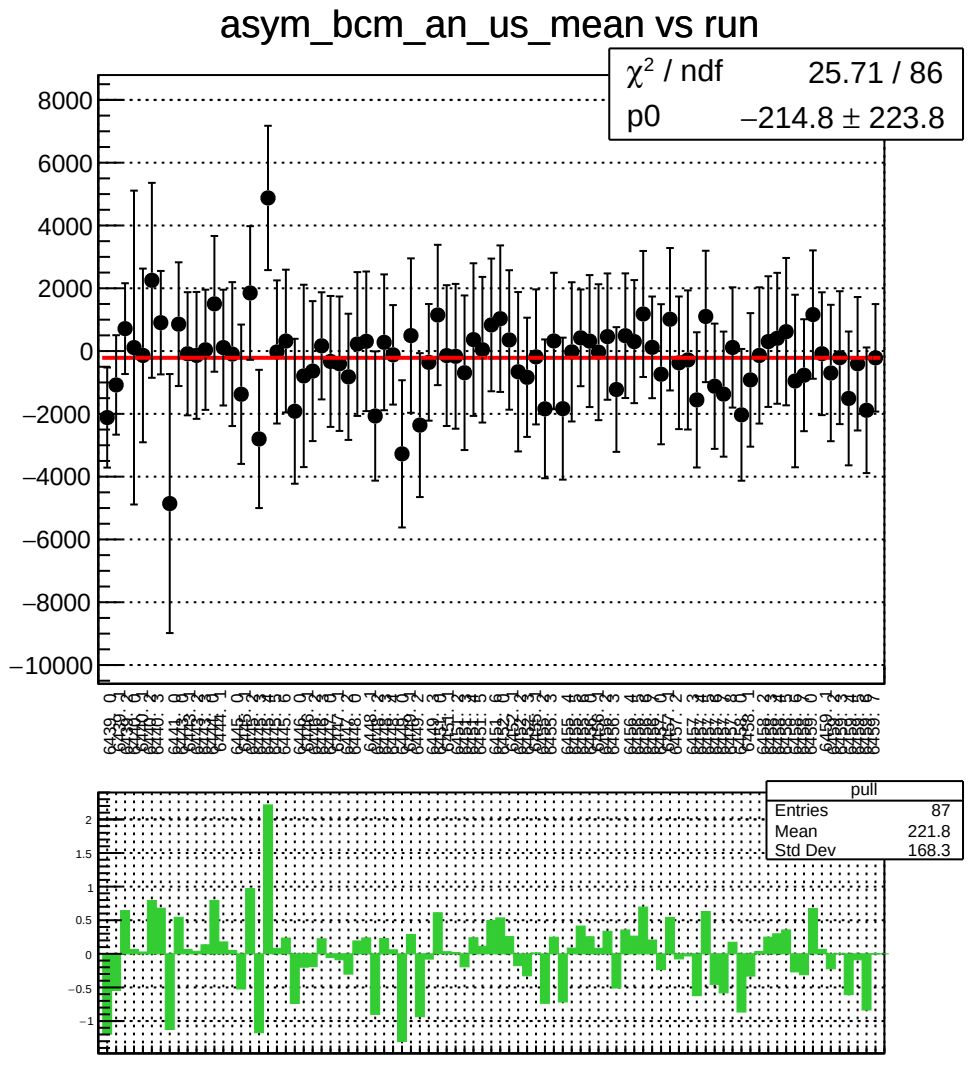

pull1D
Entries 87
Mean −0.005438
Std Dev 0.5513

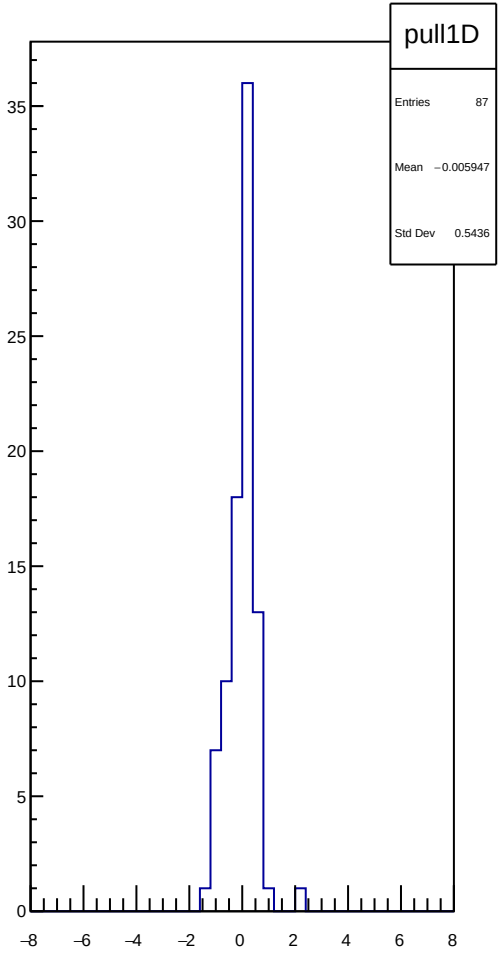

asym_bcm_an_ds_rms vs run
χ² / ndf 2.355e+04 / 86
p0 202.6 ± 0.1574
500
450
400
350
300
250
200
150

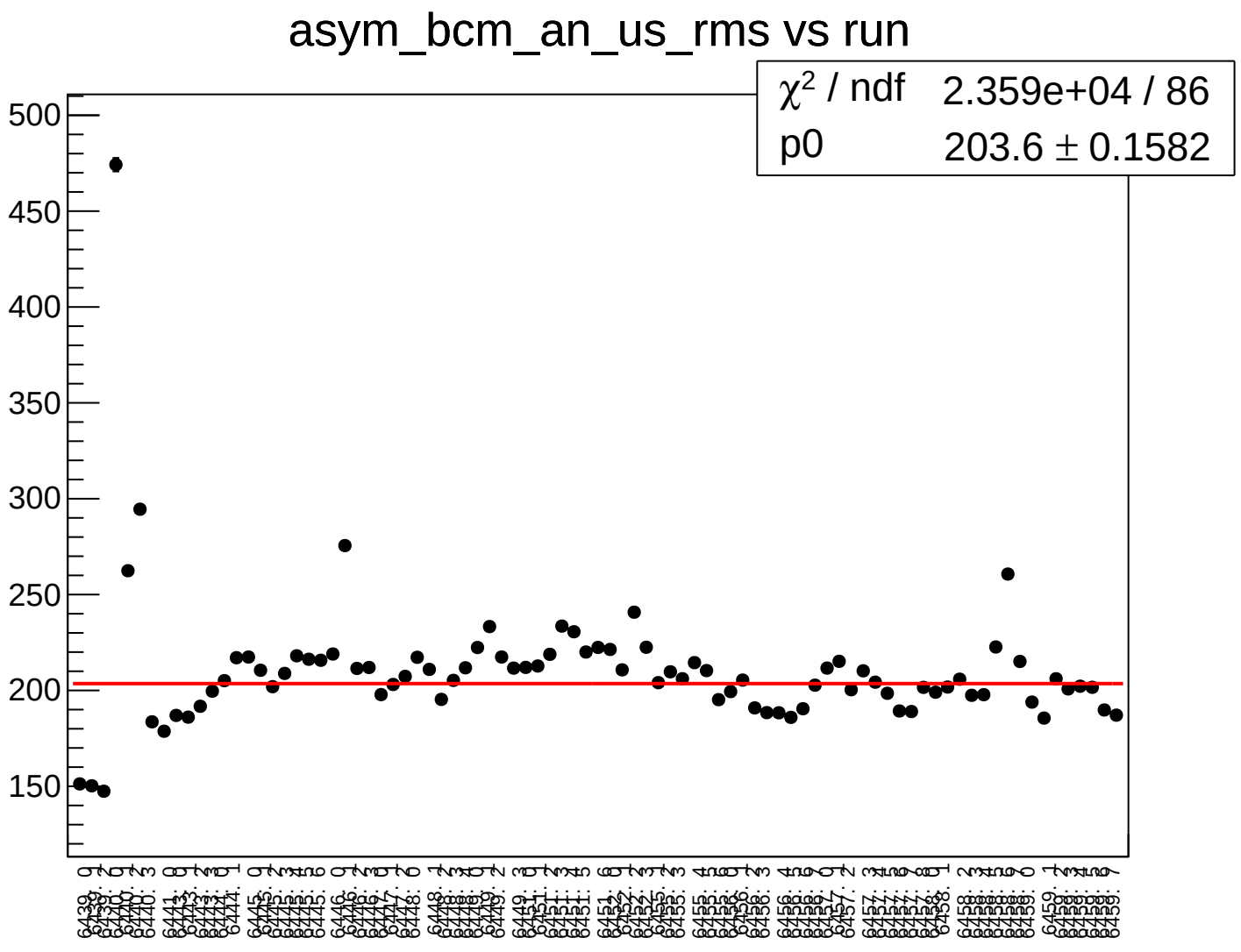

asym_bcm_an_ds3_mean vs run
χ² / ndf 26.26 / 86
p0 −229.5 ± 223.6
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
pull
Entries 87
Mean 266.9
Std Dev 212.1
2
1.5
1
0.5
0
−0.5
−1

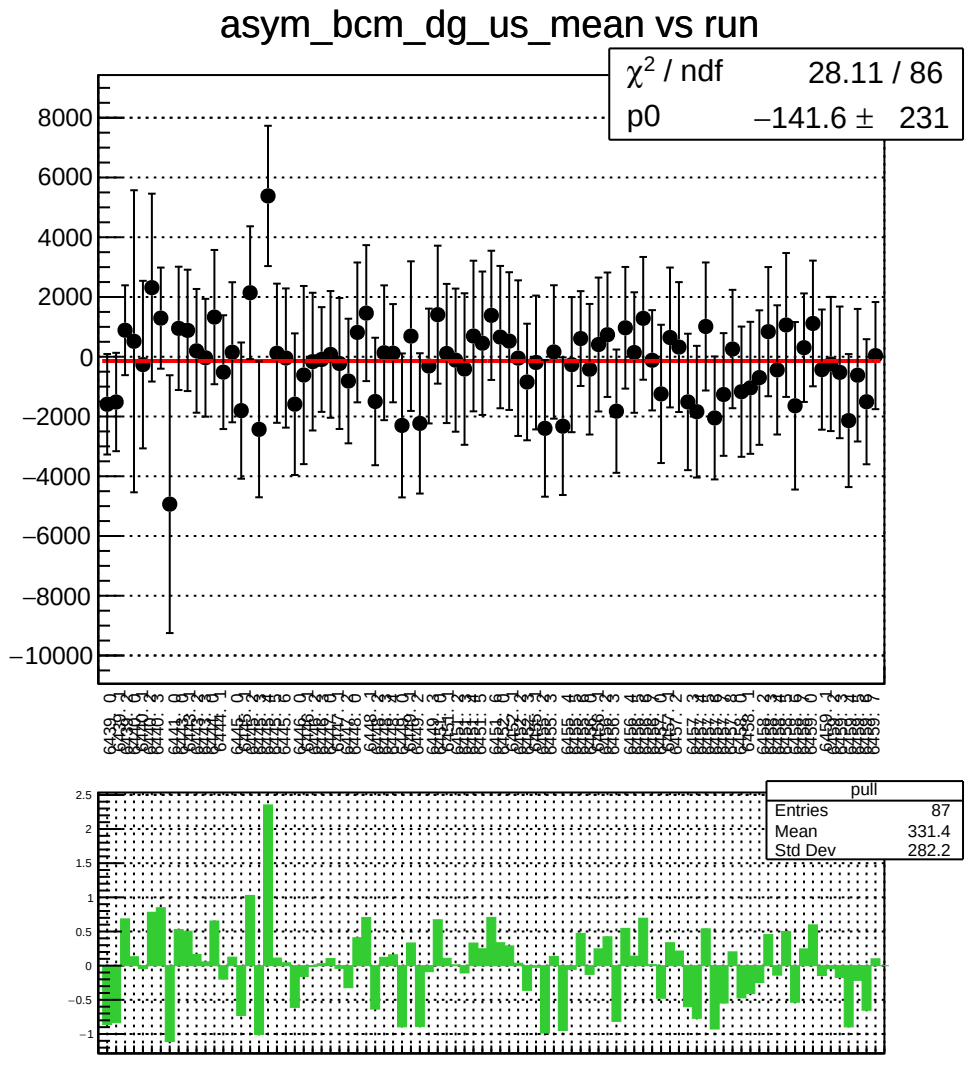

pull1D
Entries 87
Mean −0.004641
Std Dev 0.5493
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

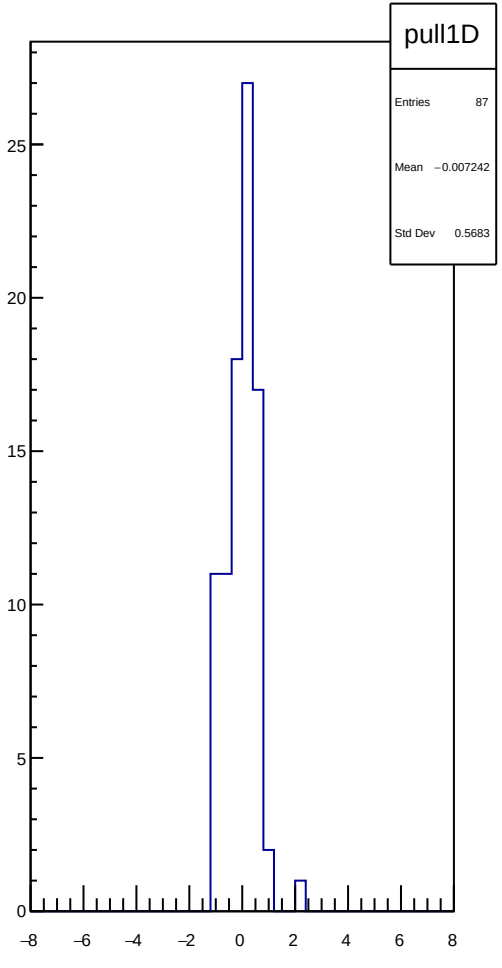

asym_bcm_an_ds3_rms vs run
χ² / ndf 2.362e+04 / 86
p0 203.4 ± 0.1581
500
450
400
350
300
250
200
150

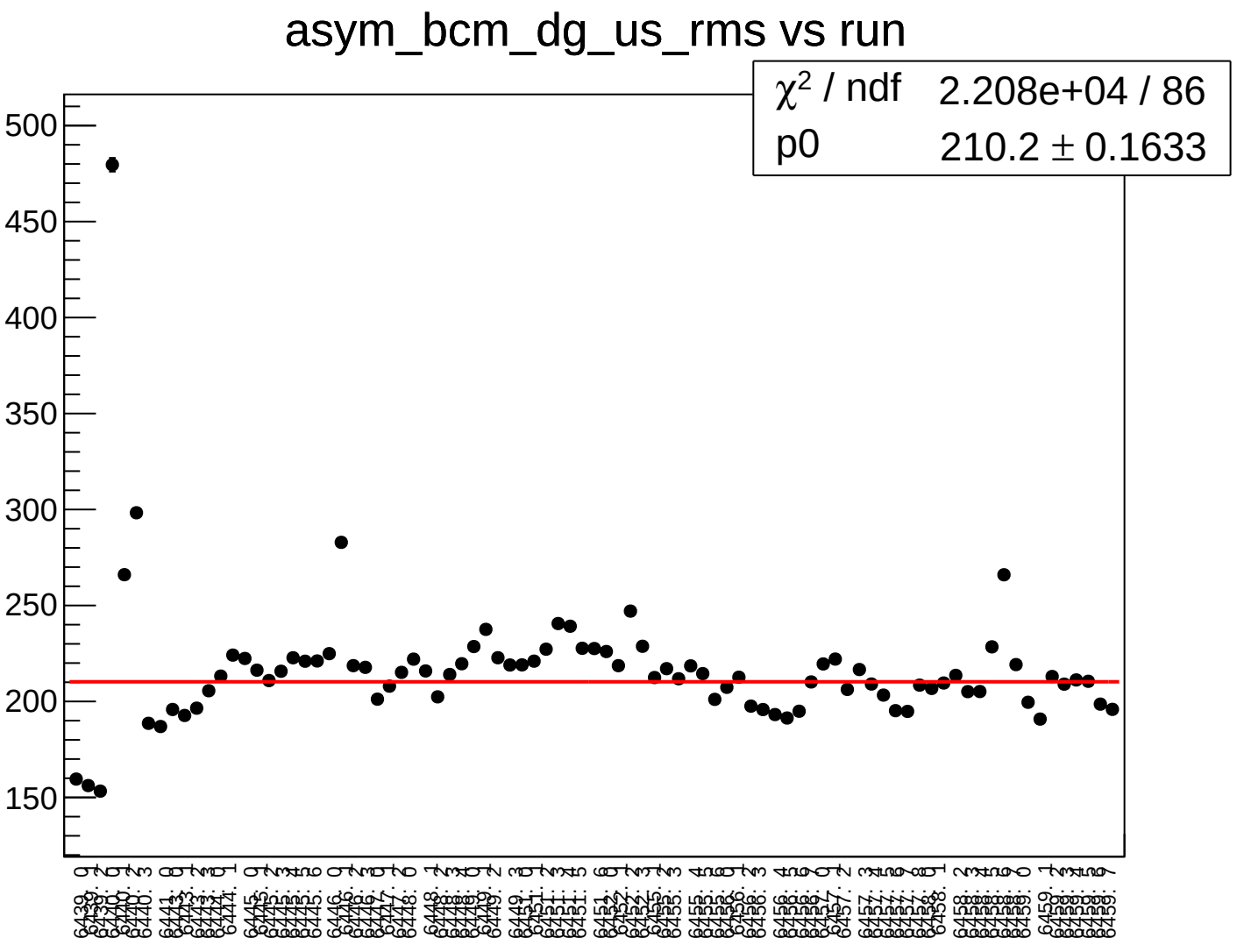

asym_bcm_an_us_mean vs run
χ² / ndf 25.71 / 86
p0 −214.8 ± 223.8
pull
Entries 87
Mean 221.8
Std Dev 168.3

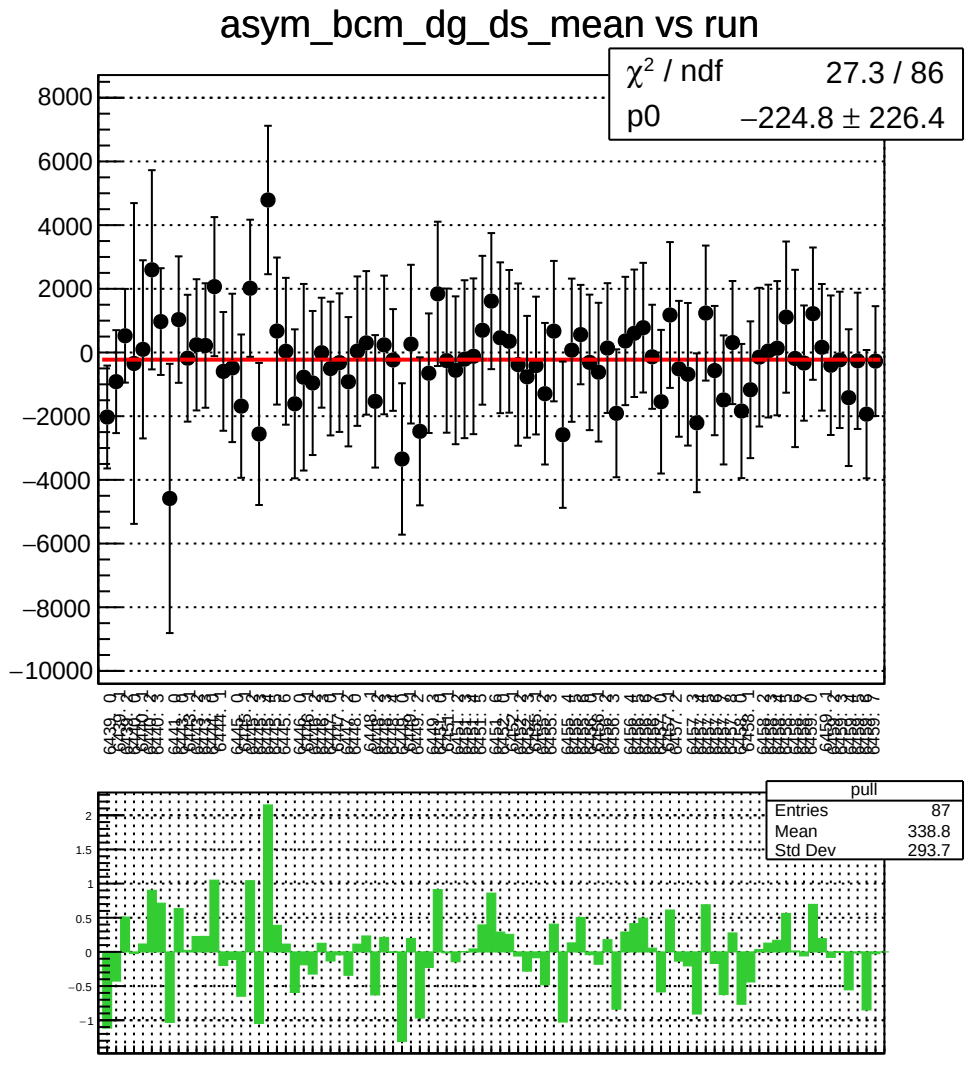

pull1D
Entries 87
Mean −0.005947
Std Dev 0.5436

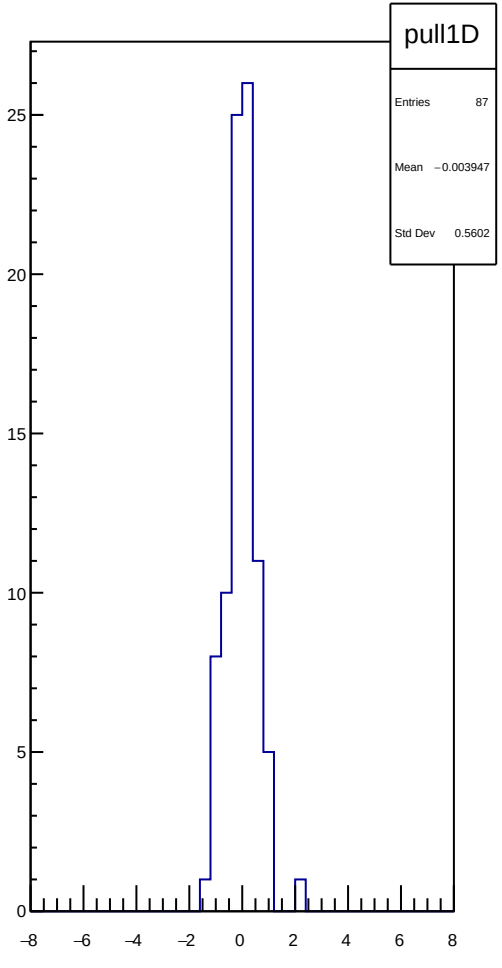

asym_bcm_an_us_rms vs run
χ² / ndf 2.359e+04 / 86
p0 203.6 ± 0.1582
500
450
400
350
300
250
200
150

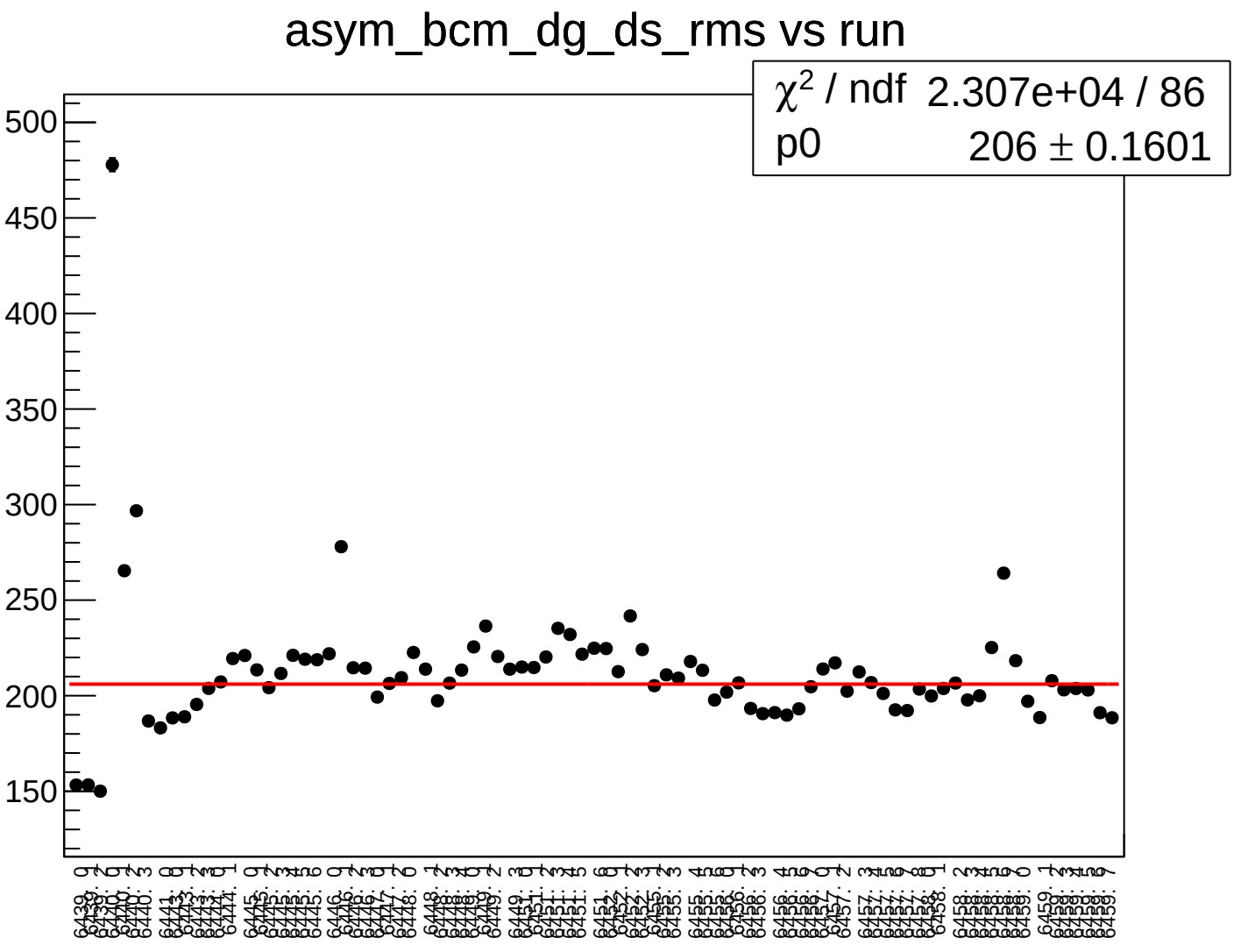

asym_bcm_dg_us_mean vs run
χ² / ndf 28.11 / 86
p0 −141.6 ± 231
pull
Entries 87
Mean 331.4
Std Dev 282.2

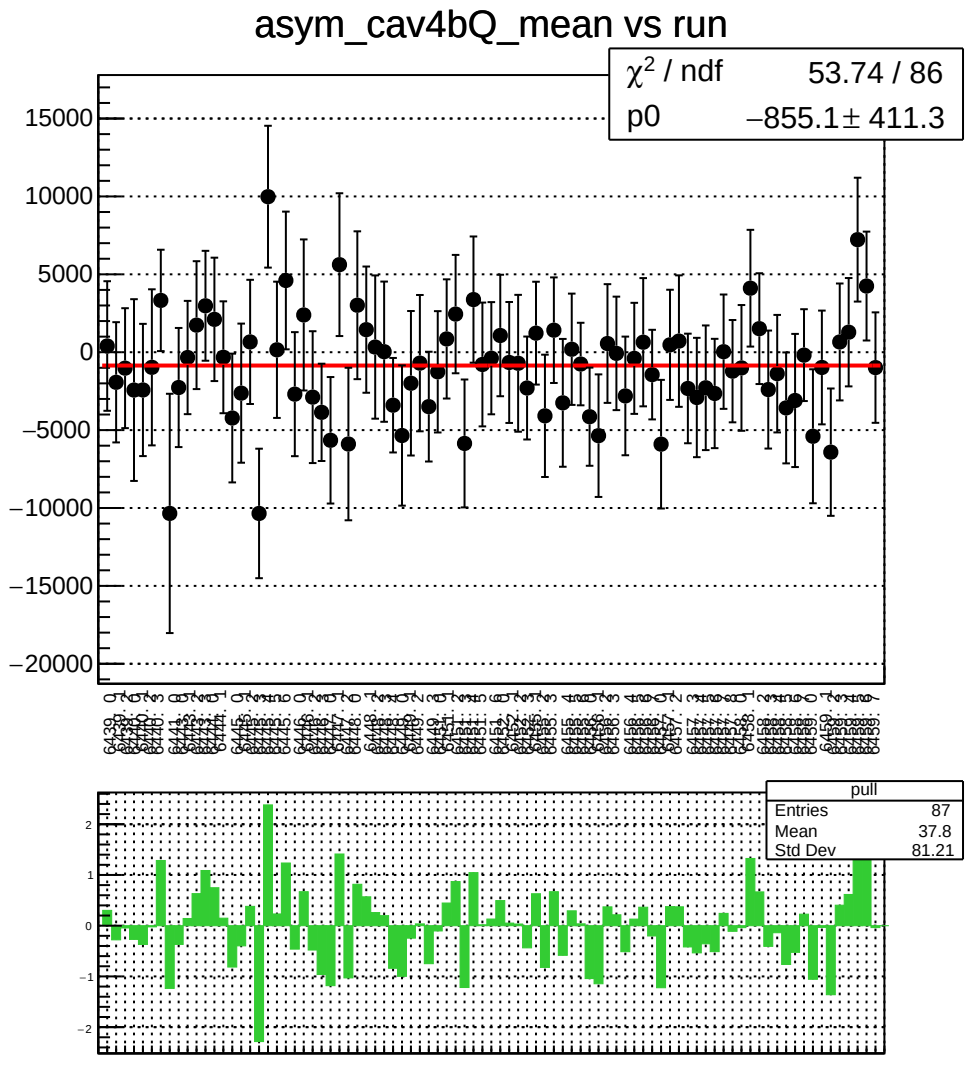

pull1D
Entries 87
Mean −0.007242
Std Dev 0.5683

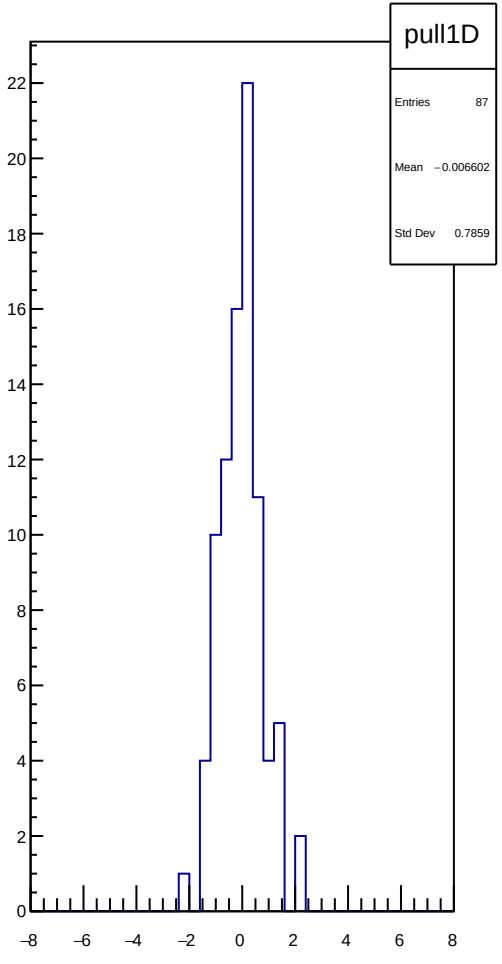

asym_bcm_dg_us_rms vs run
χ² / ndf 2.208e+04 / 86
p0 210.2 ± 0.1633
500
450
400
350
300
250
200
150

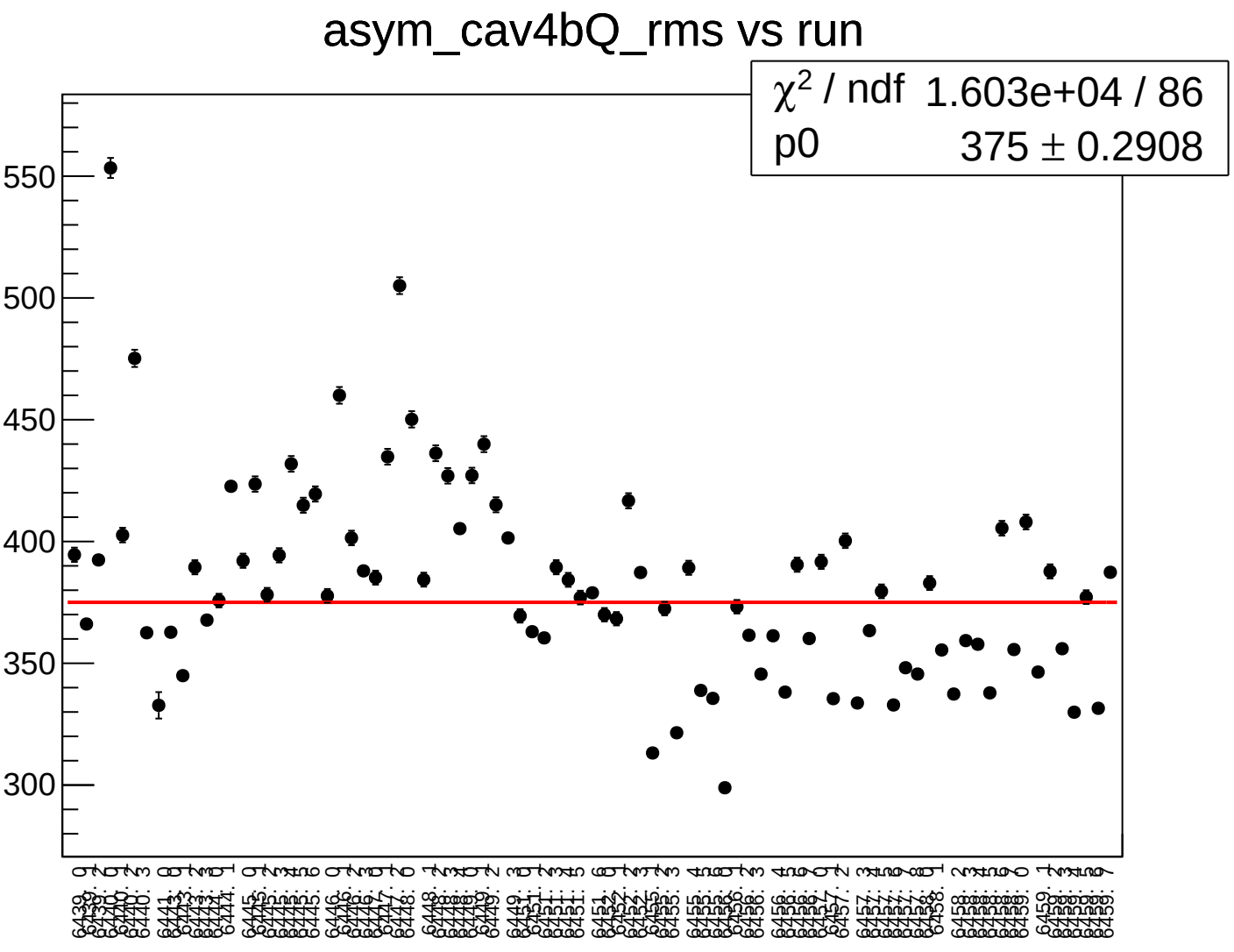

asym_bcm_dg_ds_mean vs run
χ² / ndf 27.3 / 86
p0 −224.8 ± 226.4
pull
Entries 87
Mean 338.8
Std Dev 293.7

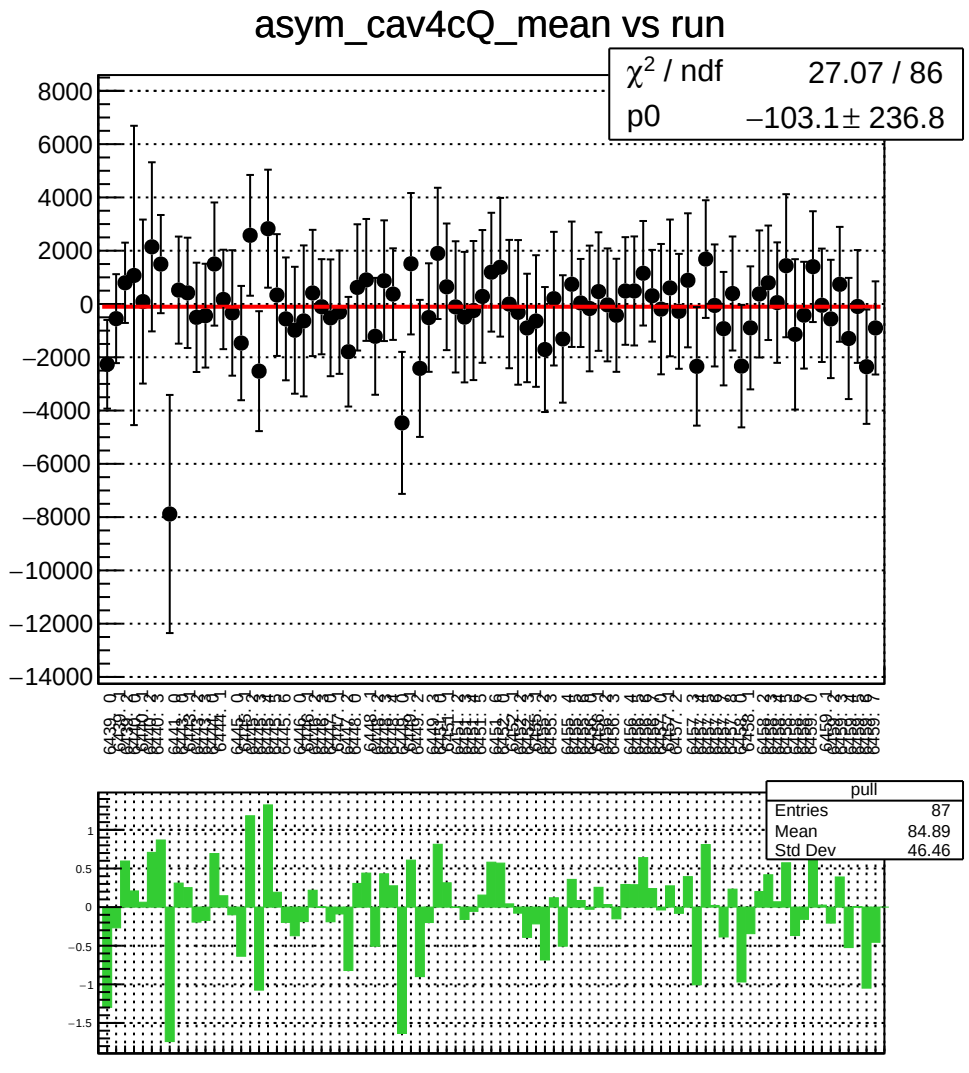

pull1D
Entries 87
Mean −0.003947
Std Dev 0.5602

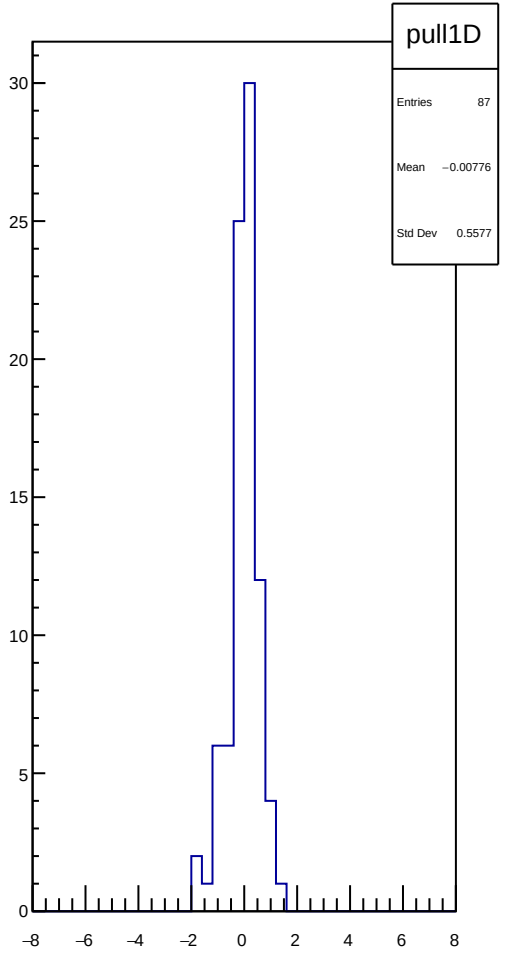

asym_bcm_dg_ds_rms vs run
χ² / ndf 2.307e+04 / 86
p0 206 ± 0.1601
500
450
400
350
300
250
200
150

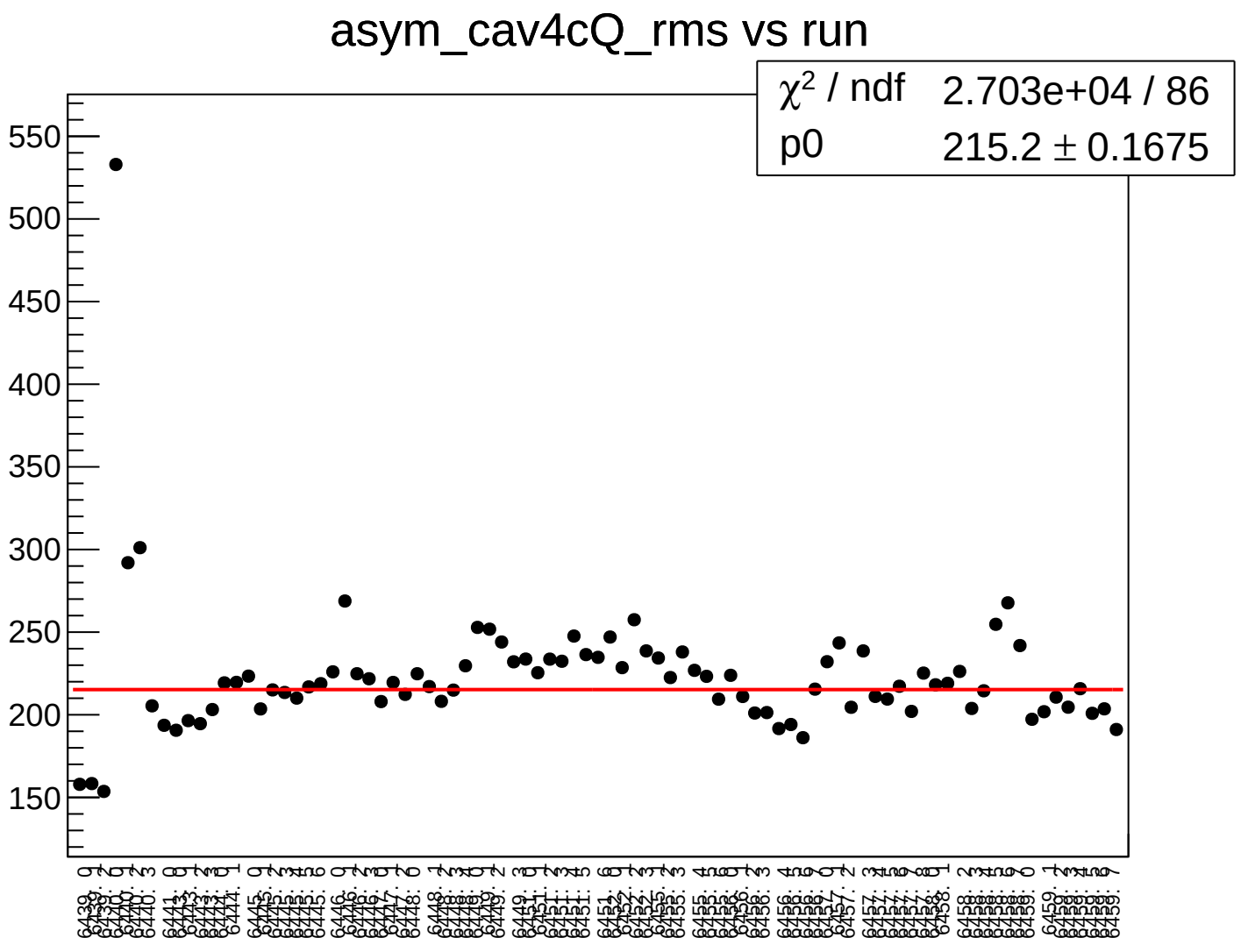

asym_cav4bQ_mean vs run
χ² / ndf 53.74 / 86
p0 −855.1 ± 411.3
pull
Entries 87
Mean 37.8
Std Dev 81.21

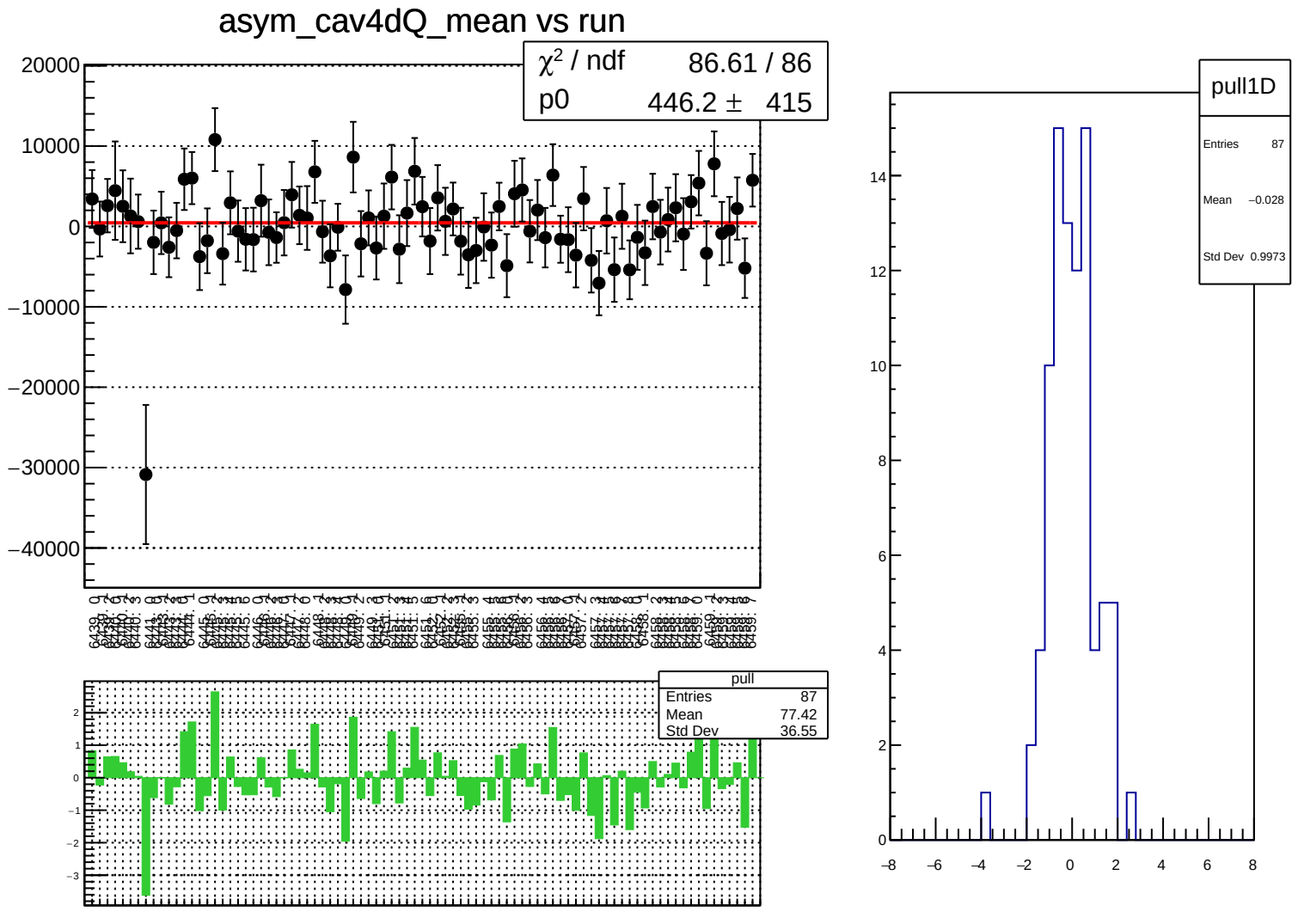

pull1D
Entries 87
Mean −0.006602
Std Dev 0.7859

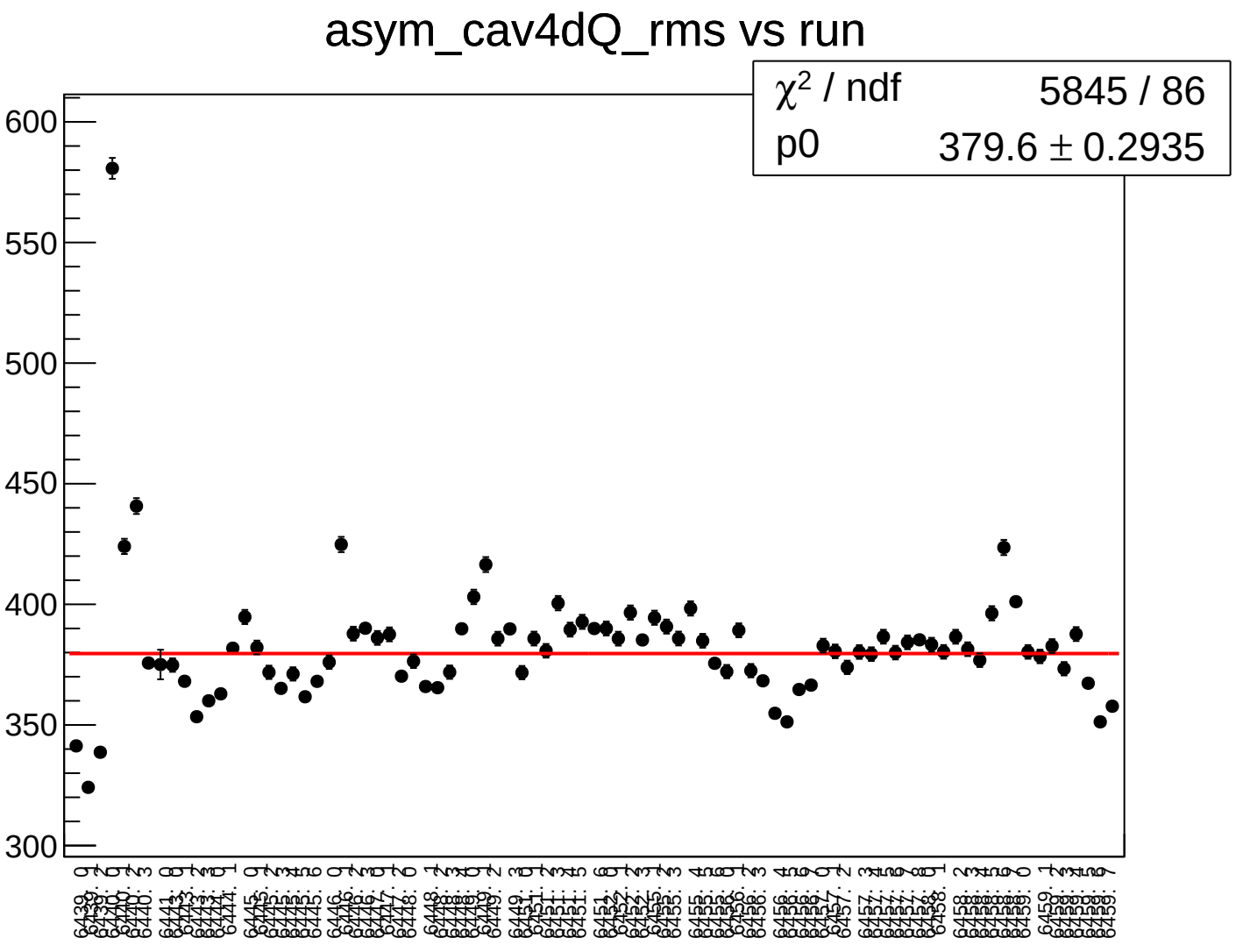

asym_cav4bQ_rms vs run
χ^2 / ndf 1.603e+04 / 86
p0 375 ± 0.2908
550
500
450
400
350
300

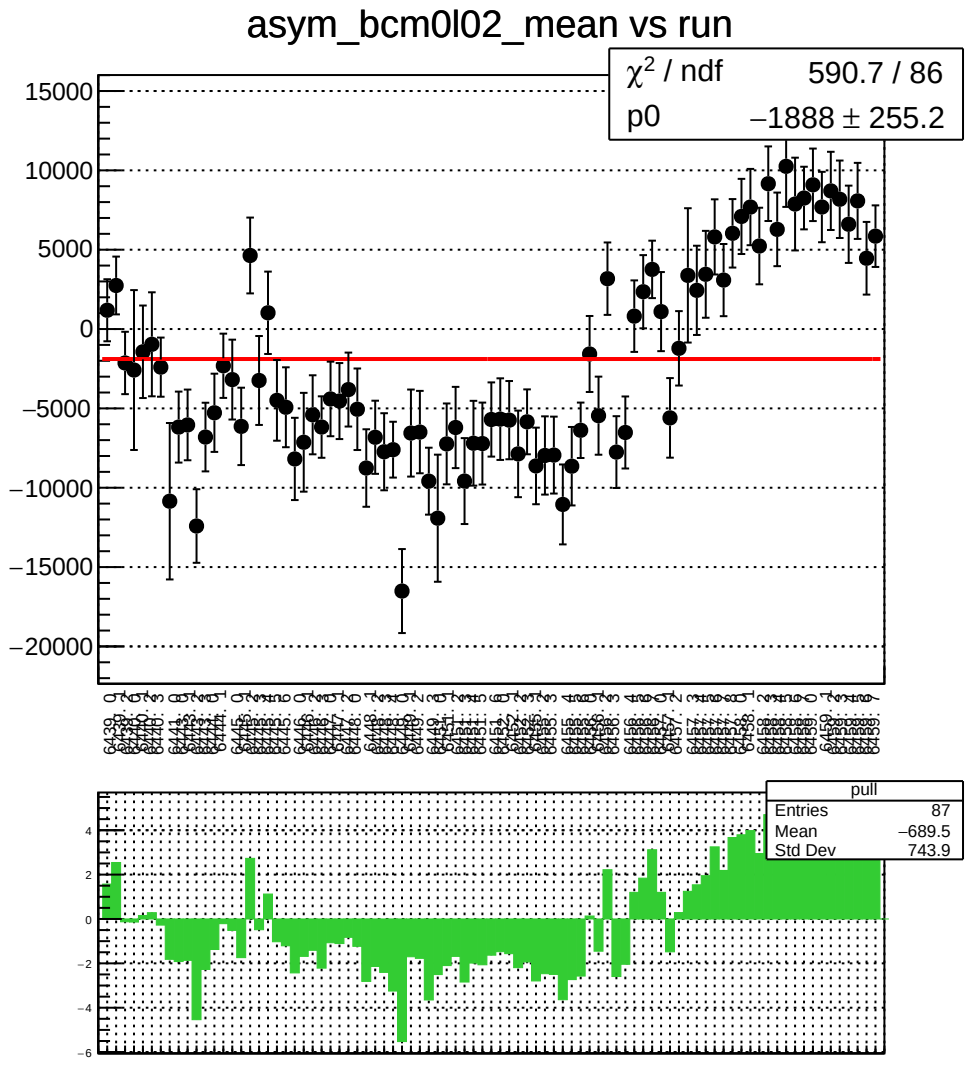

asym_cav4cQ_mean vs run
χ² / ndf 27.07 / 86
p0 −103.1± 236.8
pull
Entries 87
Mean 84.89
Std Dev 46.46

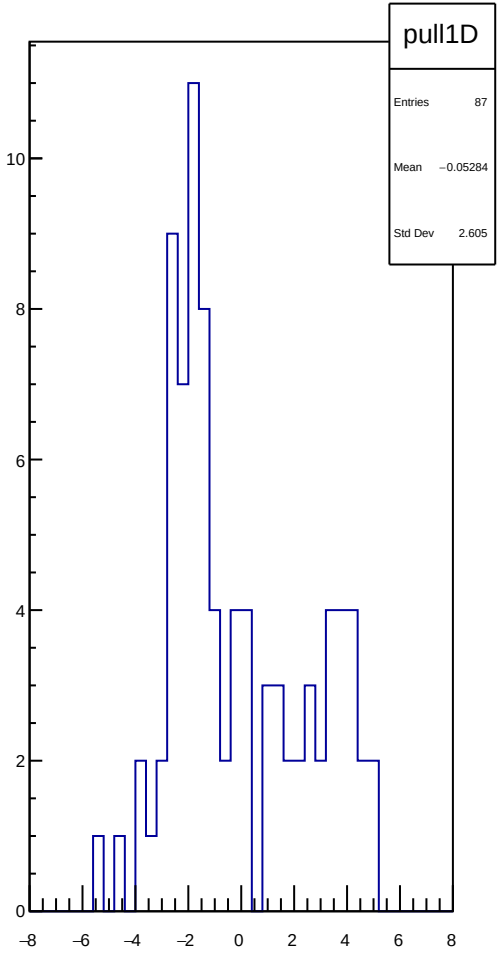

pull1D
Entries 87
Mean −0.00776
Std Dev 0.5577

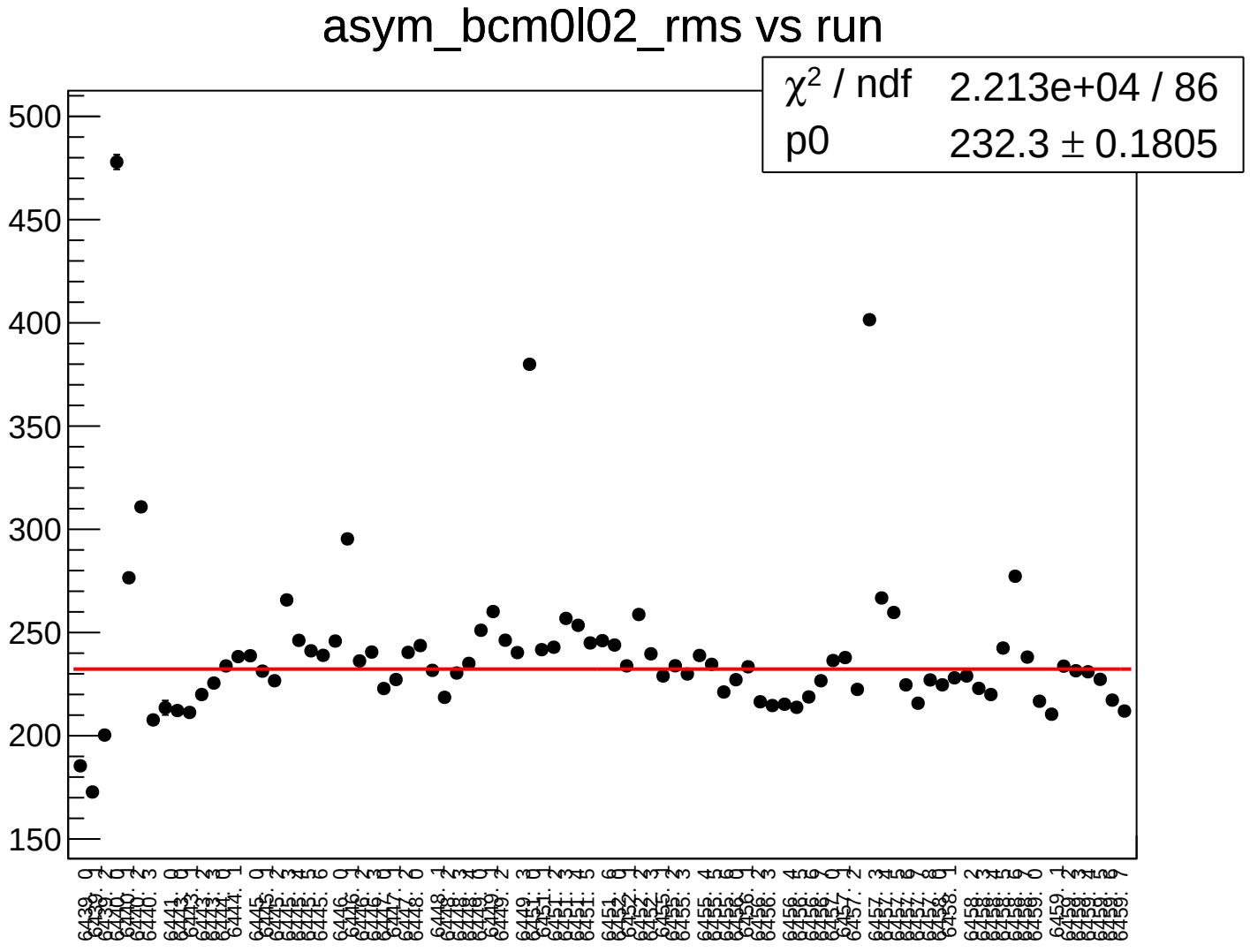

asym_cav4cQ_rms vs run
χ^2 / ndf 2.703e+04 / 86
p0 215.2 ± 0.1675
550
500
450
400
350
300
250
200
150

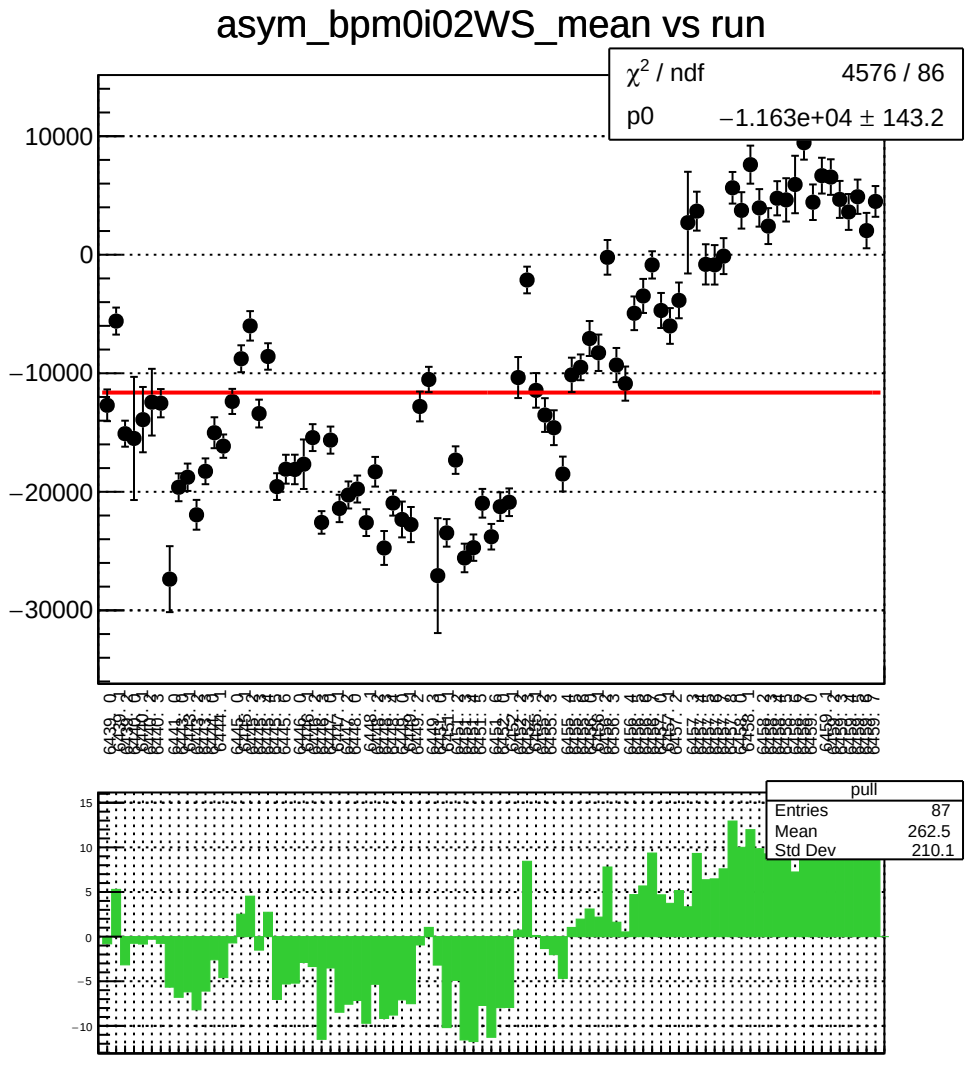

asym_cav4dQ_mean vs run
χ² / ndf 86.61 / 86
p0 446.2 ± 415
pull
Entries 87
Mean 77.42
Std Dev 36.55
pull1D
Entries 87
Mean −0.028
Std Dev 0.9973

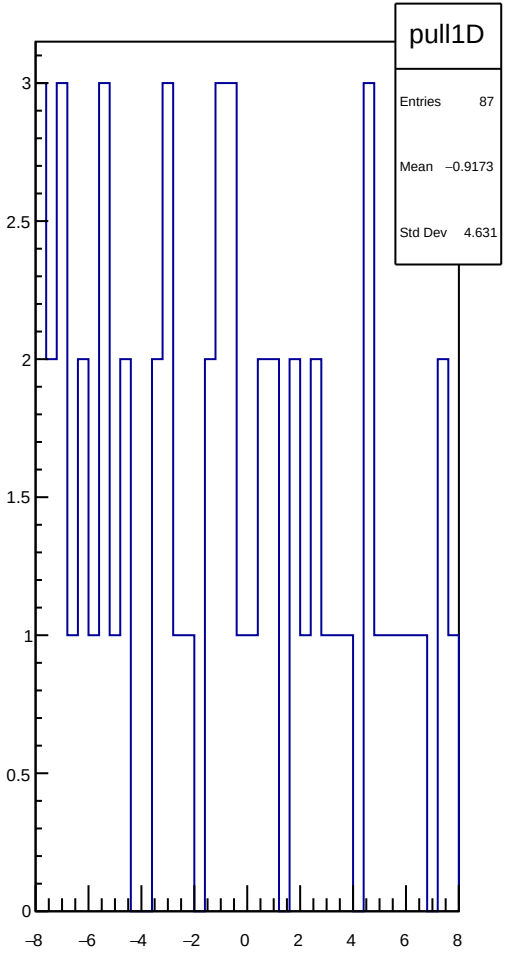

asym_cav4dQ_rms vs run
χ² / ndf 5845 / 86
p0 379.6 ± 0.2935
600
550
500
450
400
350
300

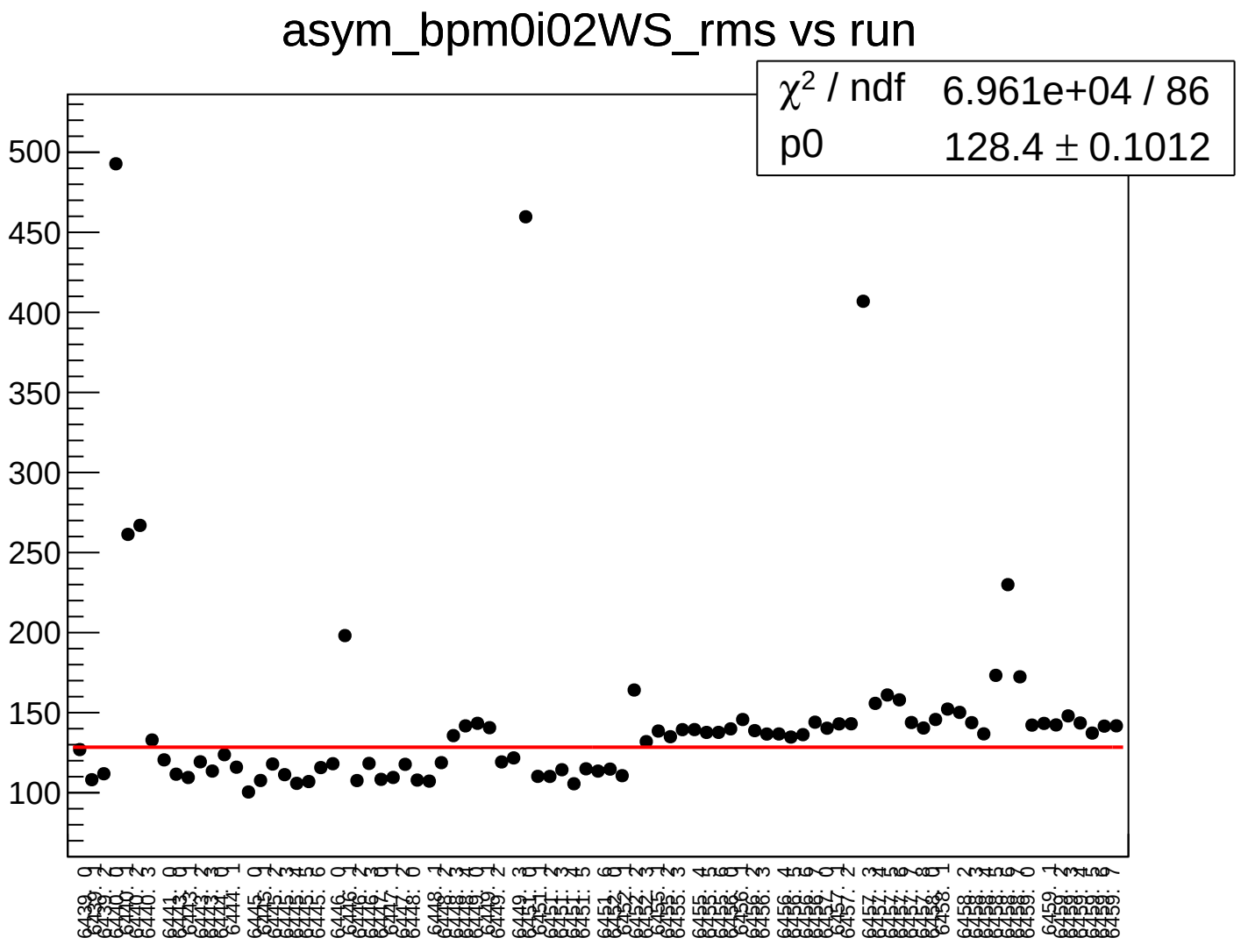

asym_bcm0l02_mean vs run
χ² / ndf 590.7 / 86
p0 −1888 ± 255.2
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 87
Mean −689.5
Std Dev 743.9
4
2
0
−2
−4
−6

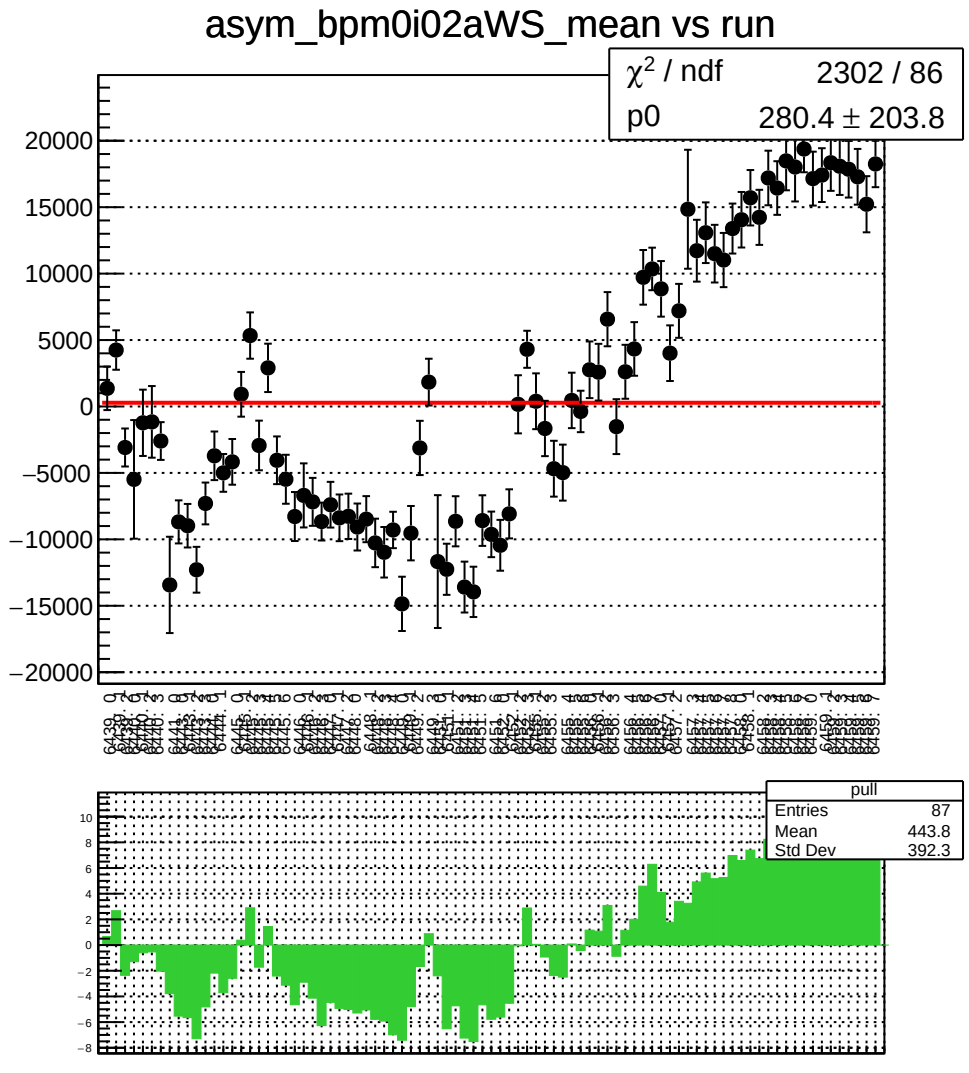

pull1D
Entries 87
Mean −0.05284
Std Dev 2.605
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

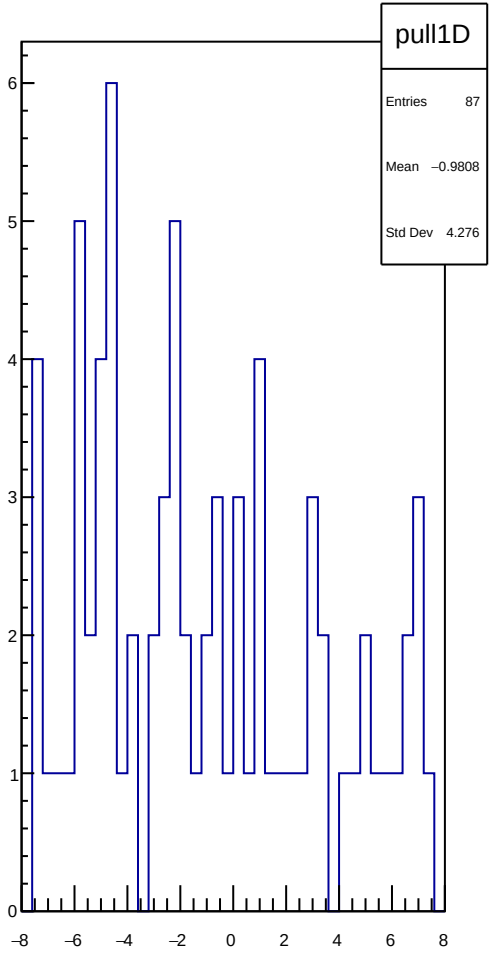

asym_bcm0l02_rms vs run
χ² / ndf 2.213e+04 / 86
p0 232.3 ± 0.1805
500
450
400
350
300
250
200
150

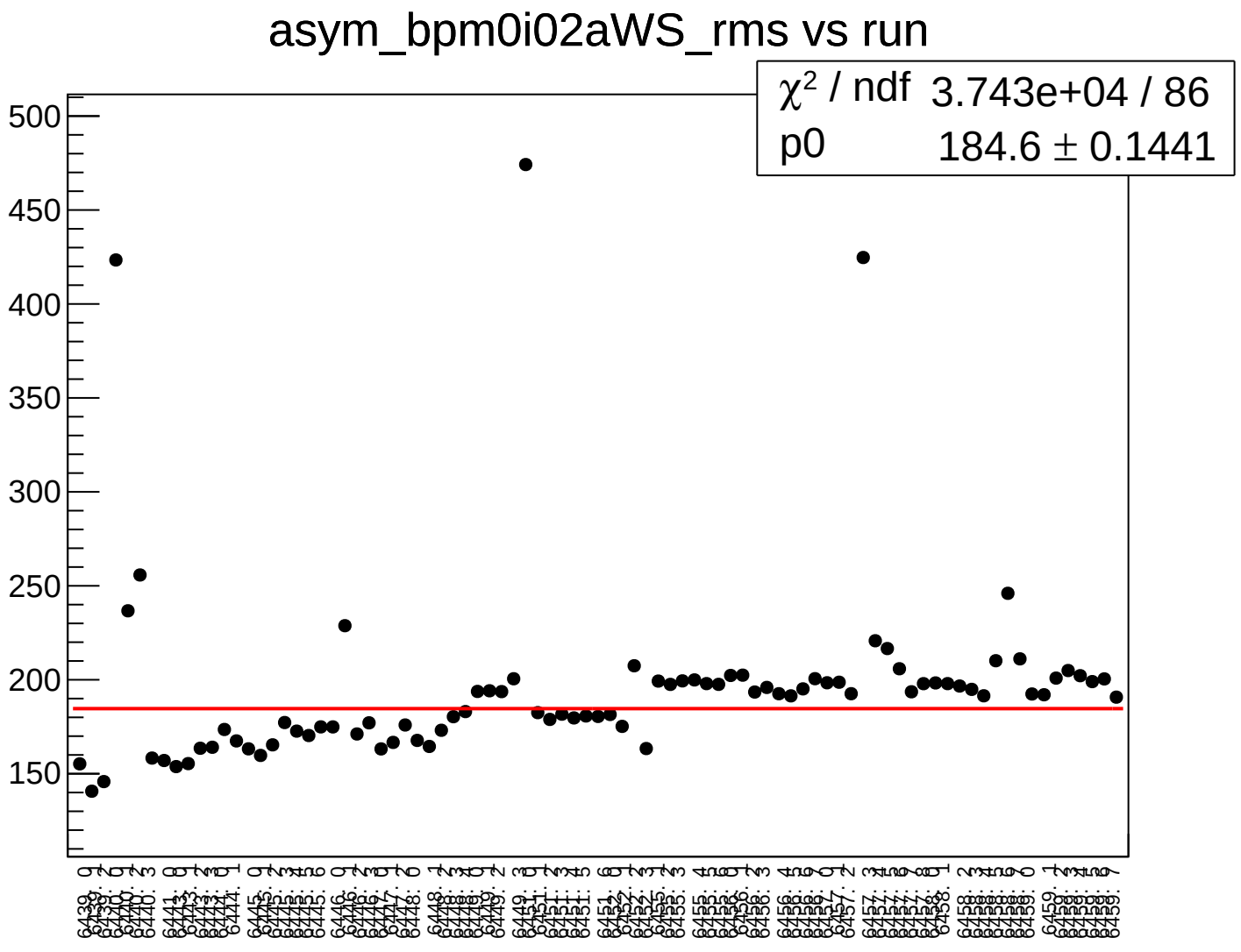

asym_bpm0i02WS_mean vs run
χ² / ndf 4576 / 86
p0 −1.163e+04 ± 143.2
10000
0
−10000
−20000
−30000
pull
Entries 87
Mean 262.5
Std Dev 210.1
15
10
5
0
−5
−10

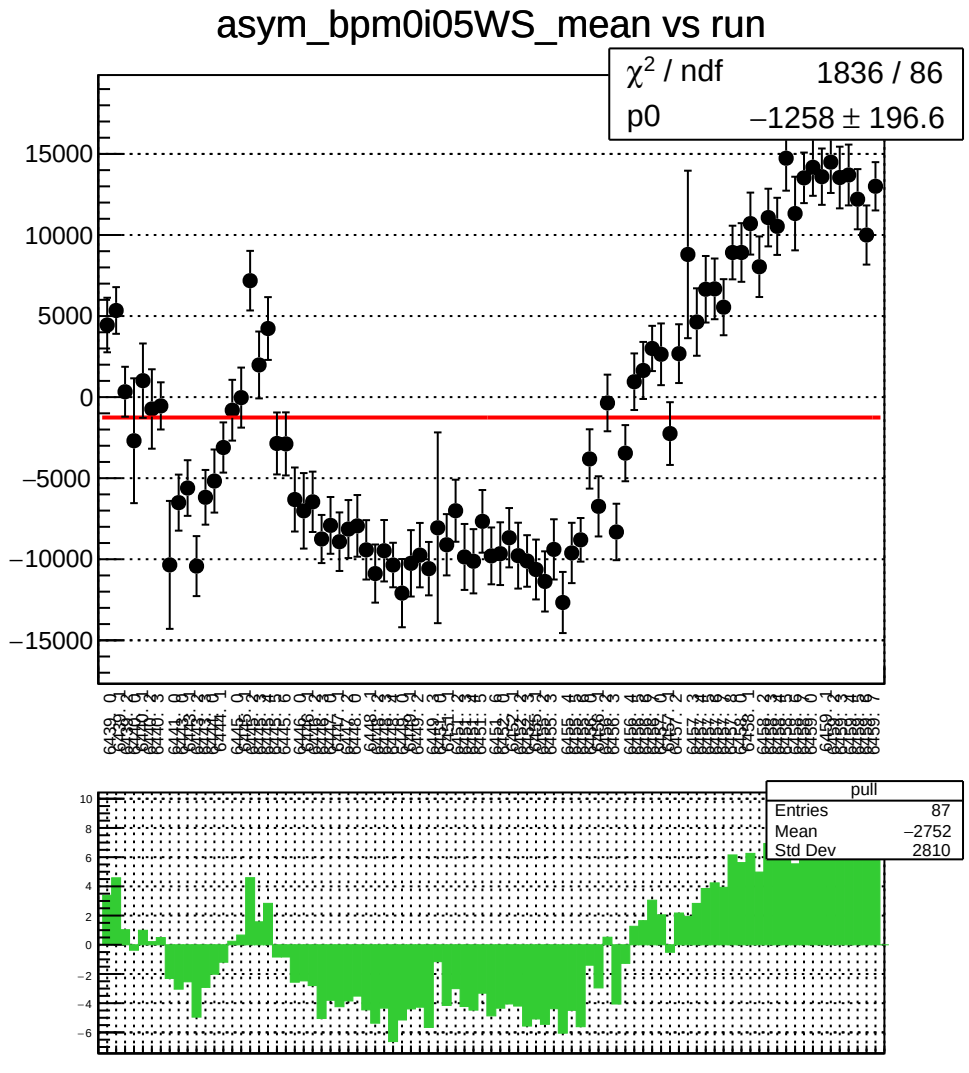

pull1D
Entries 87
Mean −0.9173
Std Dev 4.631
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

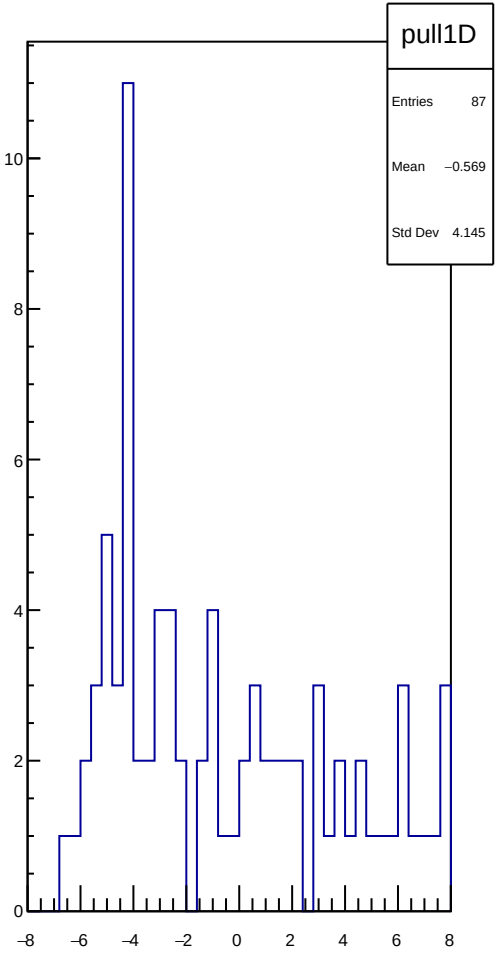

asym_bpm0i02WS_rms vs run
χ^2 / ndf 6.961e+04 / 86
p0 128.4 ± 0.1012
500
450
400
350
300
250
200
150
100

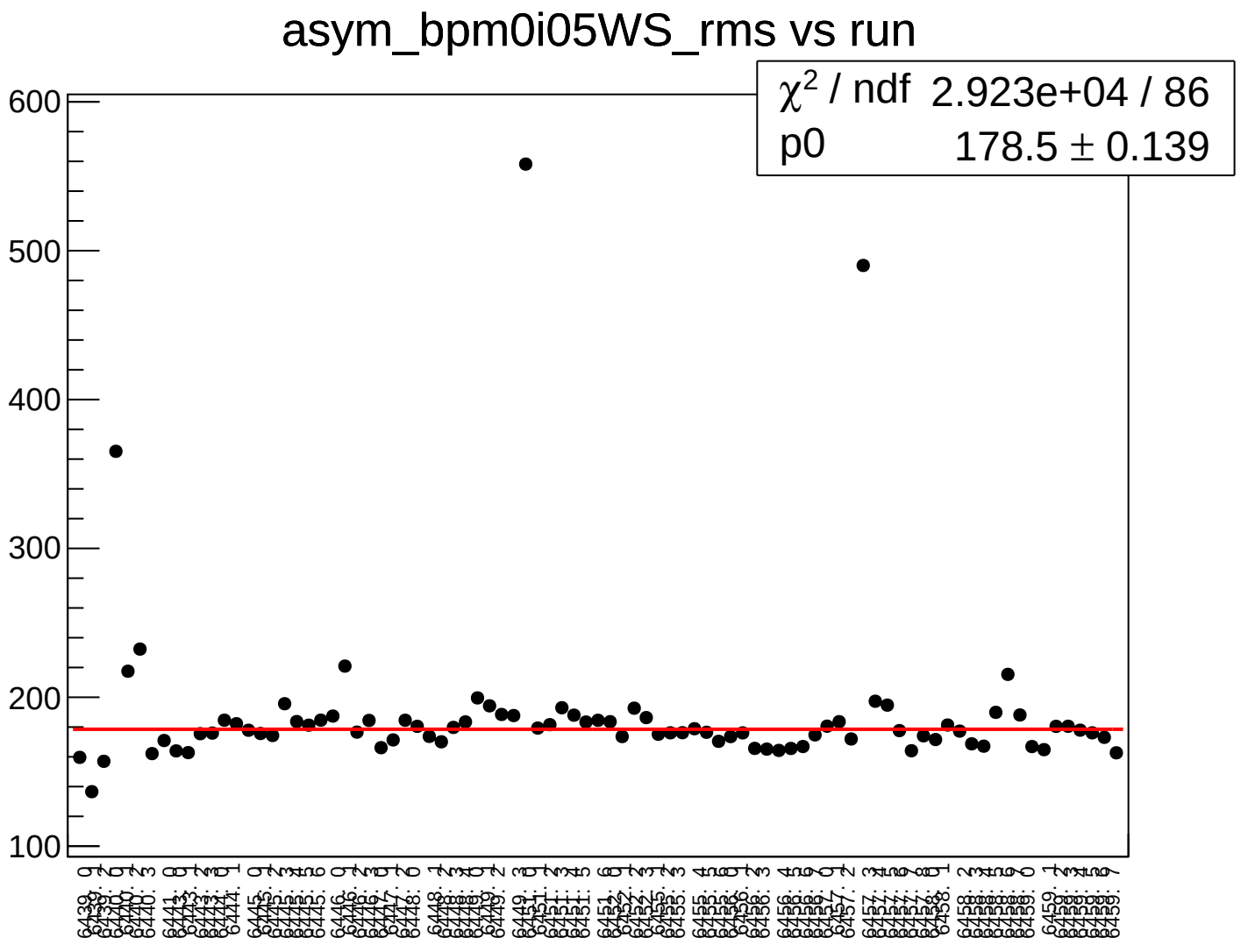

asym_bpm0i02aWS_mean vs run
χ² / ndf 2302 / 86
p0 280.4 ± 203.8
pull
Entries 87
Mean 443.8
Std Dev 392.3

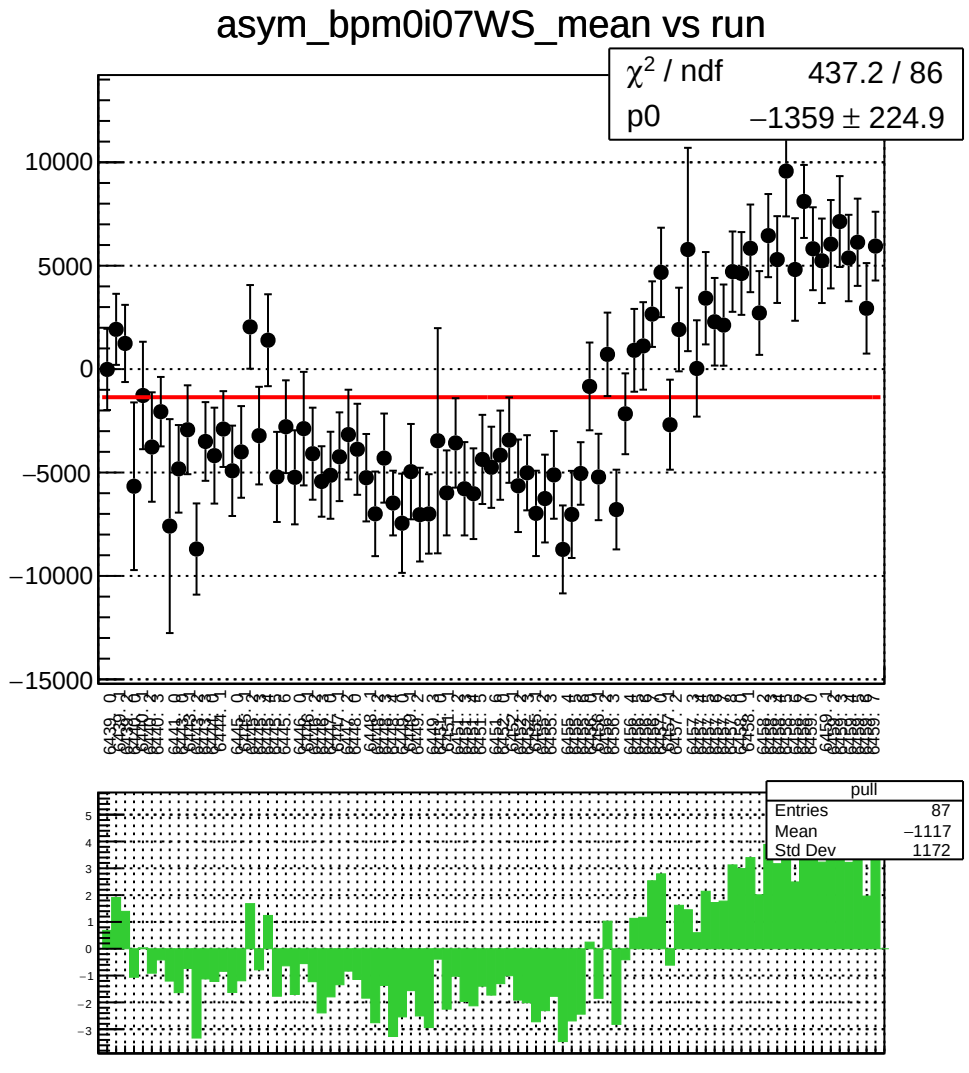

pull1D
Entries 87
Mean −0.9808
Std Dev 4.276

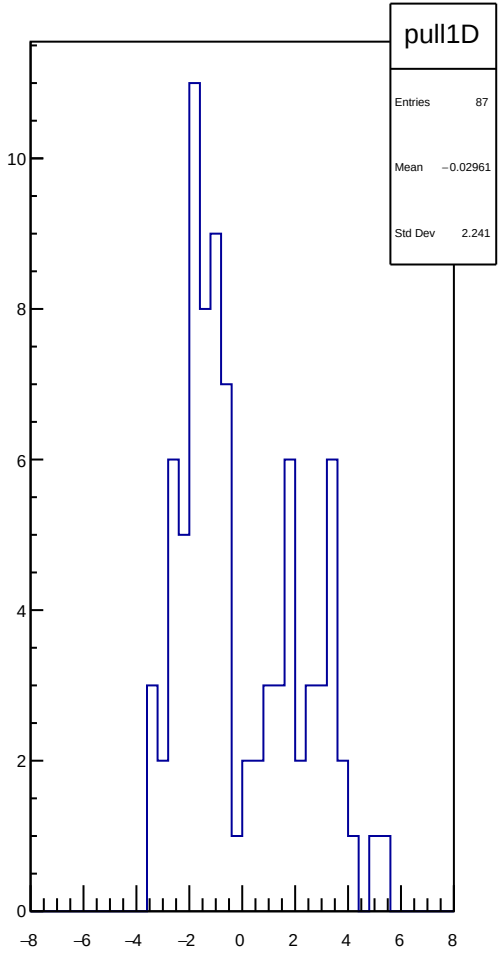

asym_bpm0i02aWS_rms vs run
χ² / ndf 3.743e+04 / 86
p0 184.6 ± 0.1441
500
450
400
350
300
250
200
150

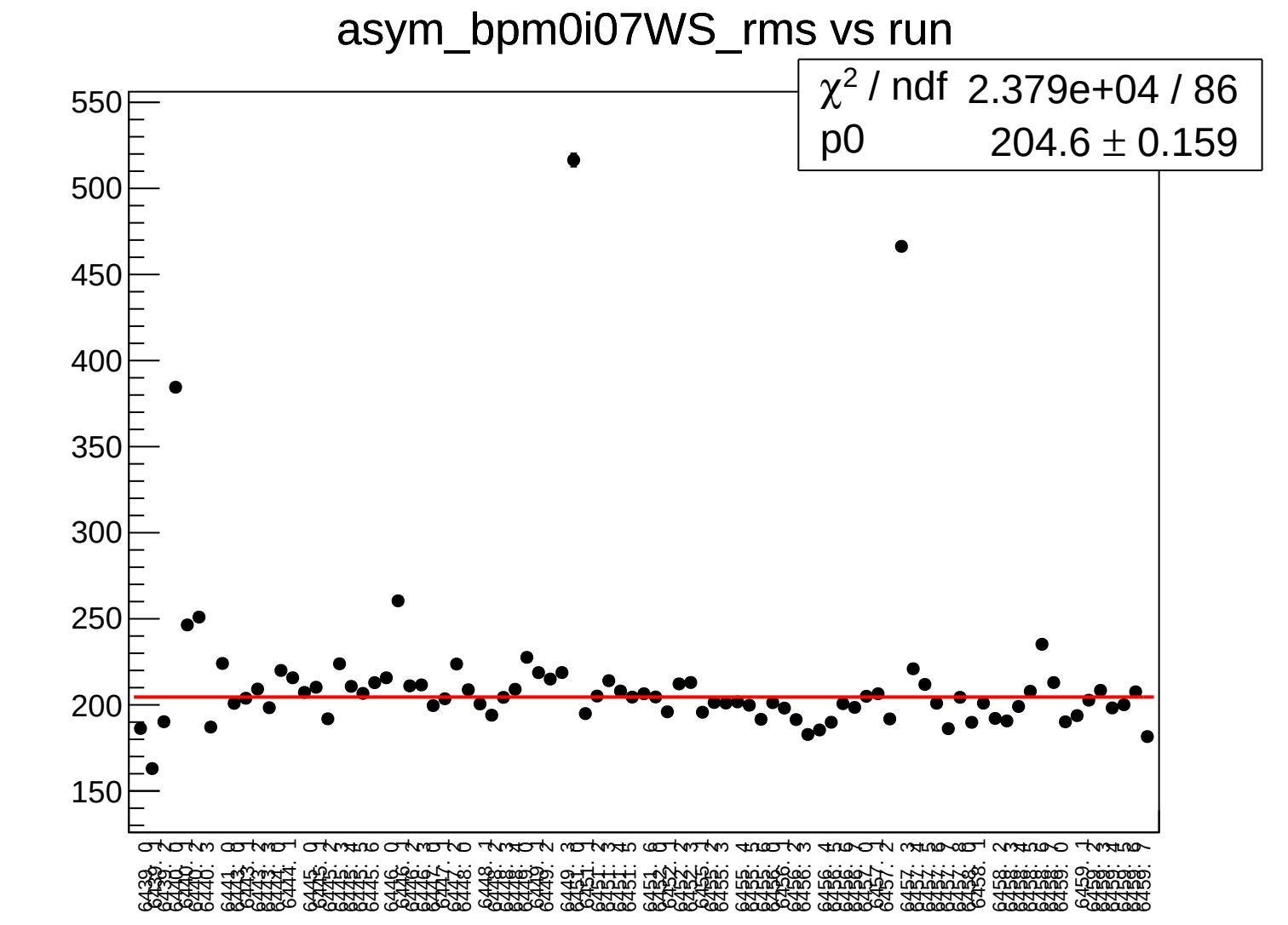

asym_bpm0i05WS_mean vs run
χ² / ndf 1836 / 86
p0 −1258 ± 196.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 87
Mean −2752
Std Dev 2810
10
8
6
4
2
0
−2
−4
−6

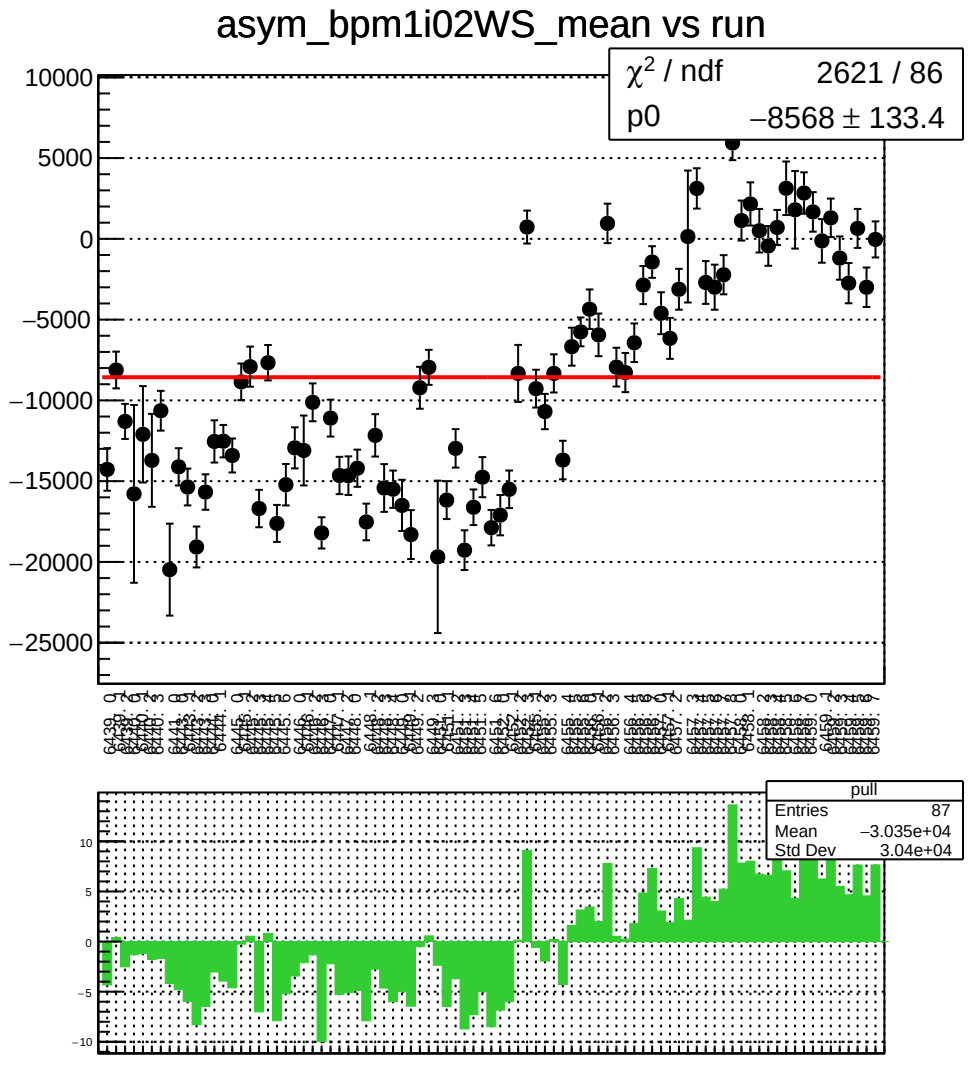

pull1D
Entries 87
Mean −0.569
Std Dev 4.145
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

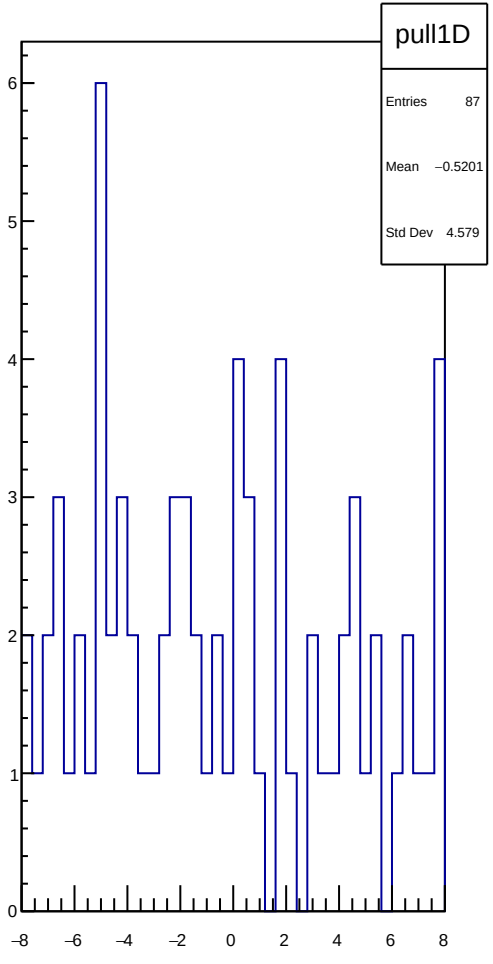

asym_bpm0i05WS_rms vs run
χ^2 / ndf 2.923e+04 / 86
p0 178.5 ± 0.139
600
500
400
300
200
100

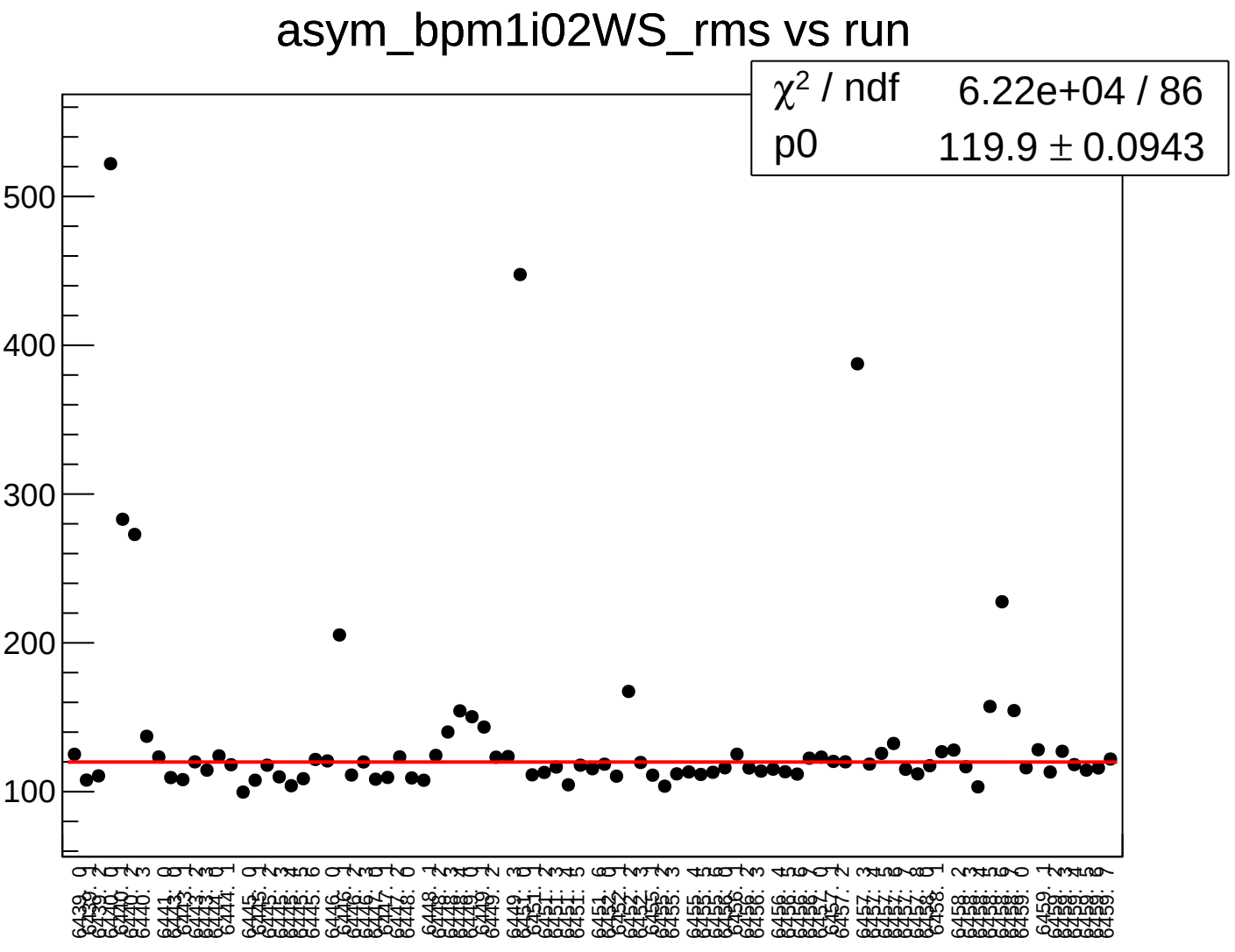

asym_bpm0i07WS_mean vs run
χ^2 / ndf 437.2 / 86
p0 −1359 ± 224.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 87
Mean −1117
Std Dev 1172
5
4
3
2
1
0
−1
−2
−3

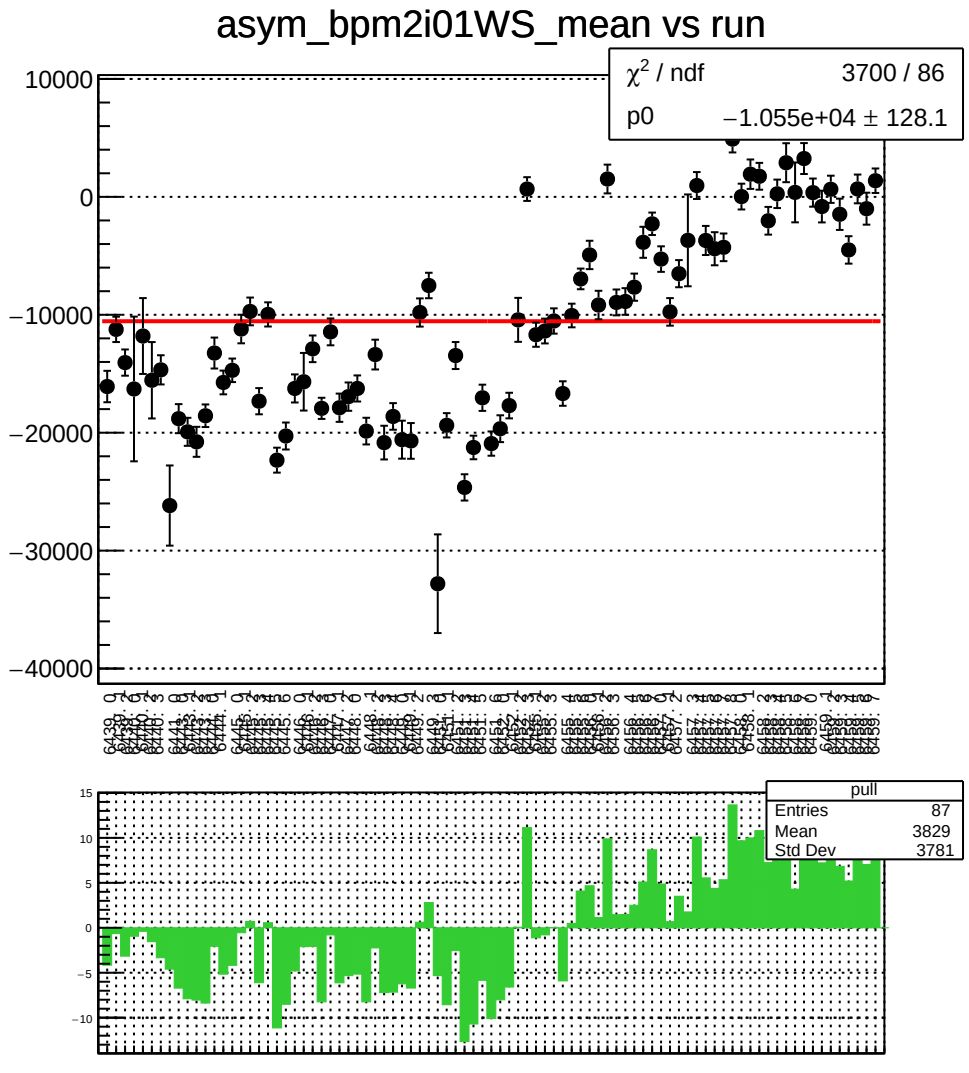

pull1D
Entries 87
Mean −0.02961
Std Dev 2.241
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

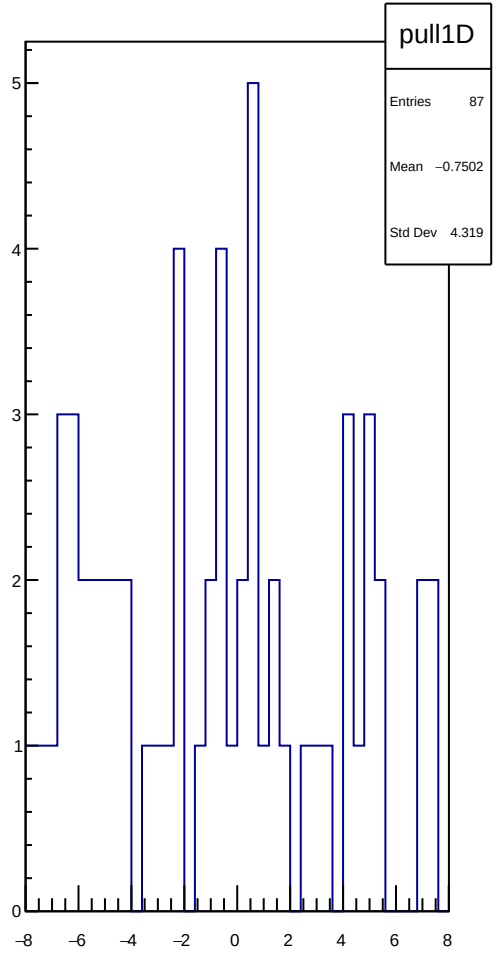

asym_bpm0i07WS_rms vs run
χ^2 / ndf 2.379e+04 / 86
p0 204.6 ± 0.159
550
500
450
400
350
300
250
200
150

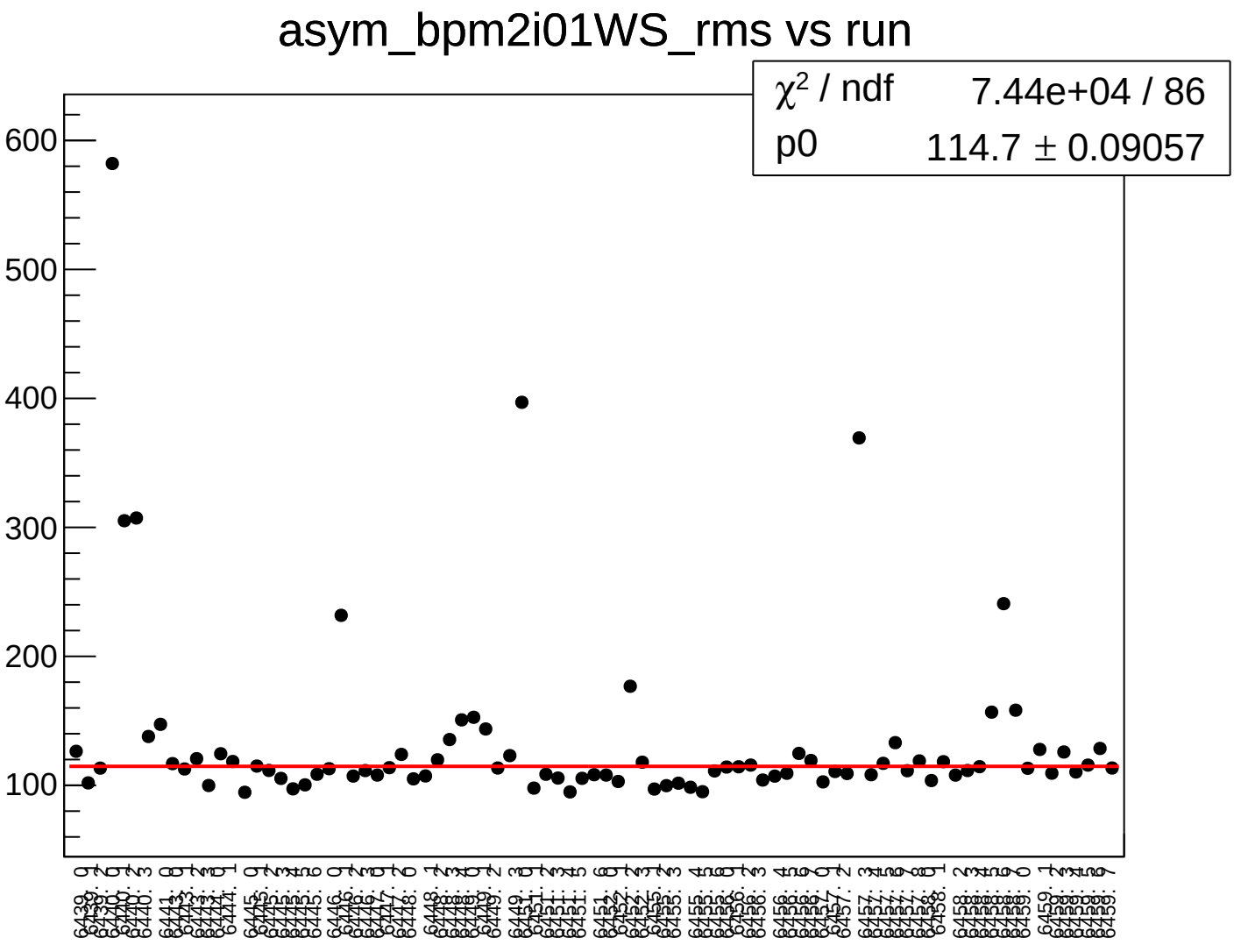

asym_bpm1i02WS_mean vs run
χ² / ndf 2621 / 86
p0 −8568 ± 133.4
pull
Entries 87
Mean −3.035e+04
Std Dev 3.04e+04

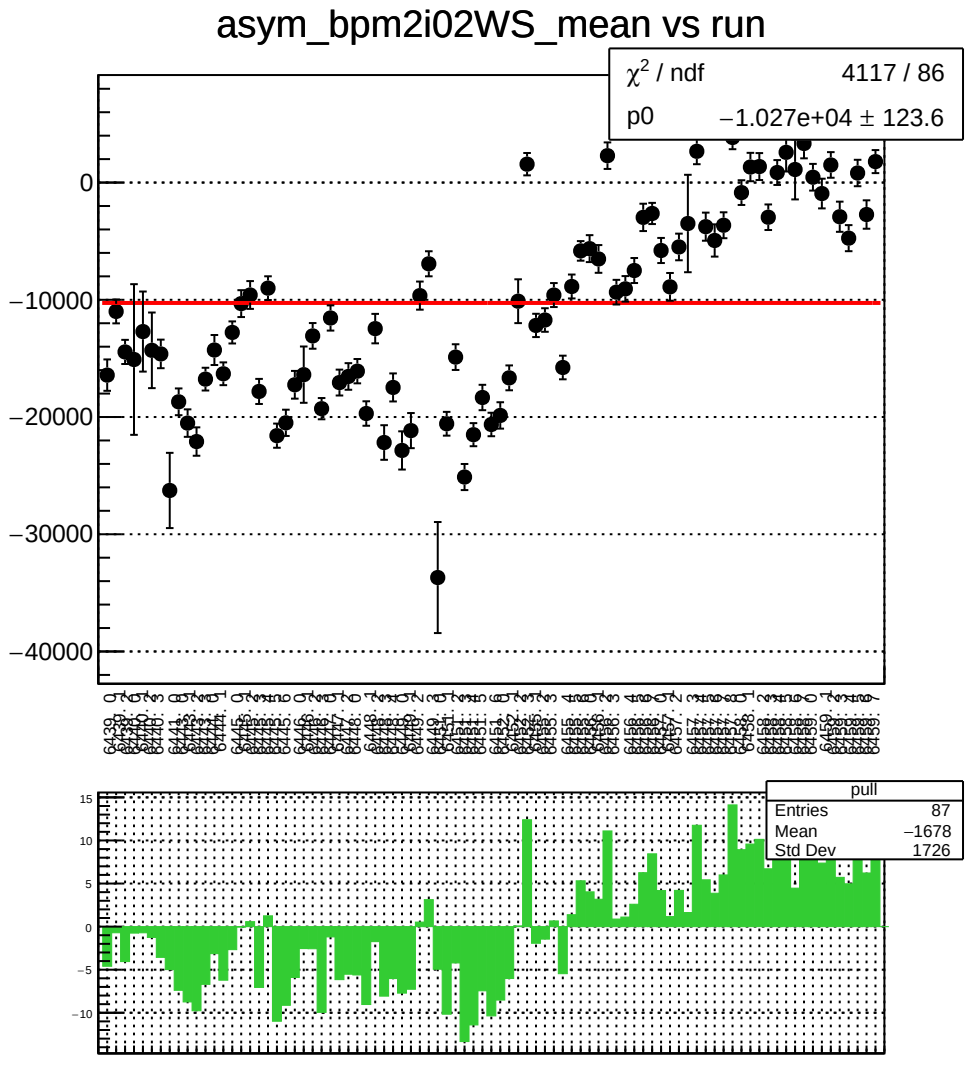

pull1D
Entries 87
Mean −0.5201
Std Dev 4.579

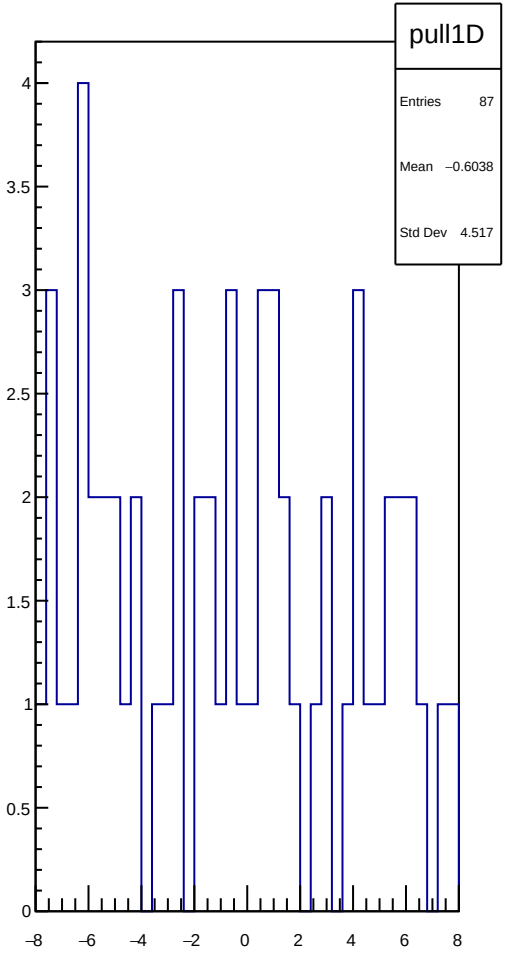

asym_bpm1i02WS_rms vs run
χ^2 / ndf 6.22e+04 / 86
p0 119.9 ± 0.0943
500
400
300
200
100

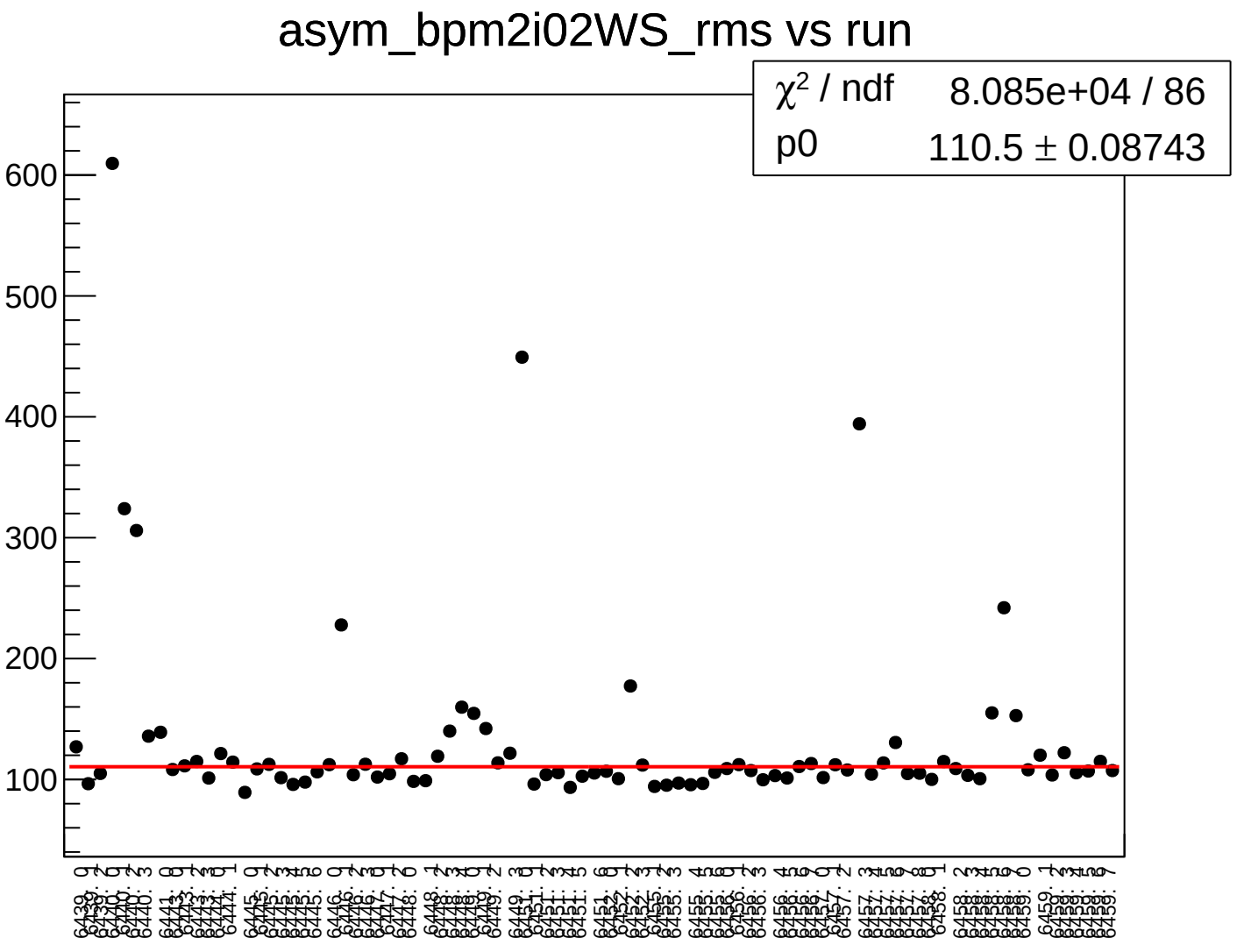

asym_bpm2i01WS_mean vs run
χ² / ndf 3700 / 86
p0 −1.055e+04 ± 128.1
10000
0
−10000
−20000
−30000
−40000
pull
Entries 87
Mean 3829
Std Dev 3781
15
10
5
0
−5
−10

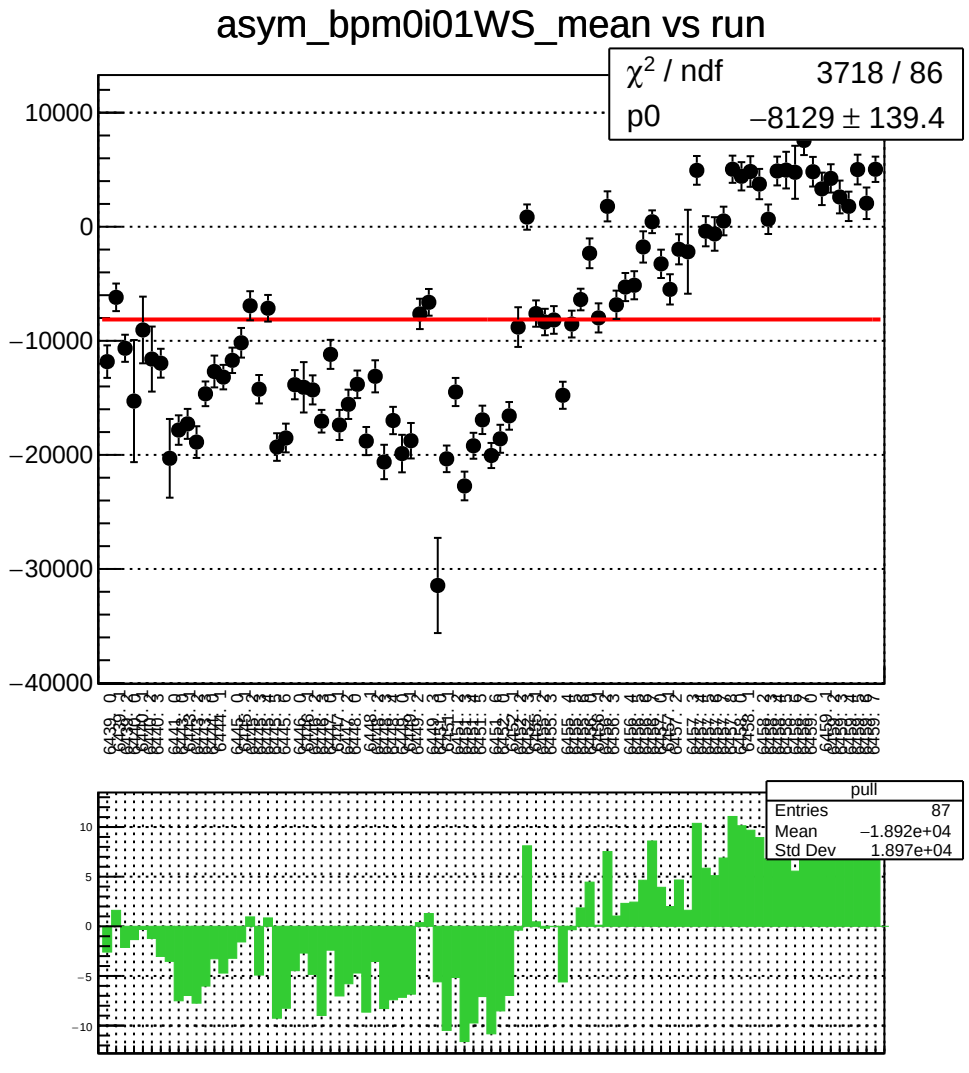

pull1D
Entries 87
Mean −0.7502
Std Dev 4.319
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

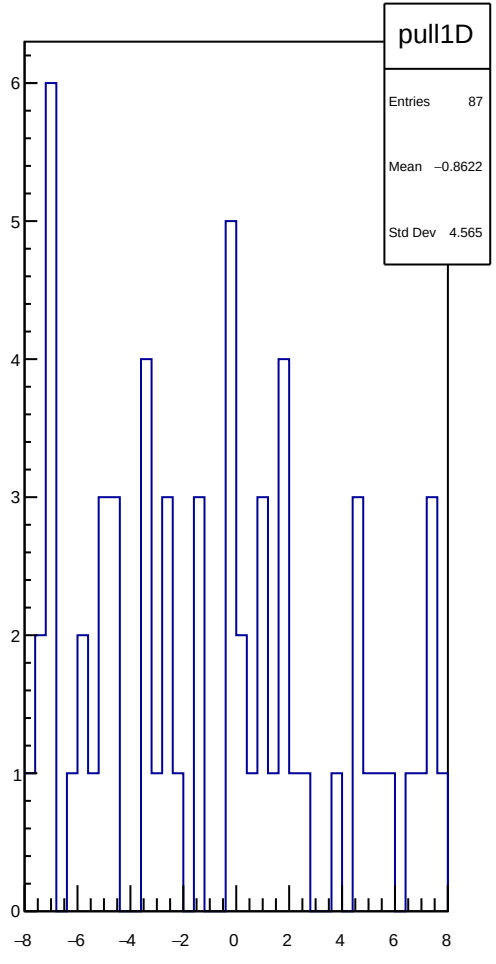

asym_bpm2i01WS_rms vs run
χ^2 / ndf 7.44e+04 / 86
p0 114.7 ± 0.09057
600
500
400
300
200
100

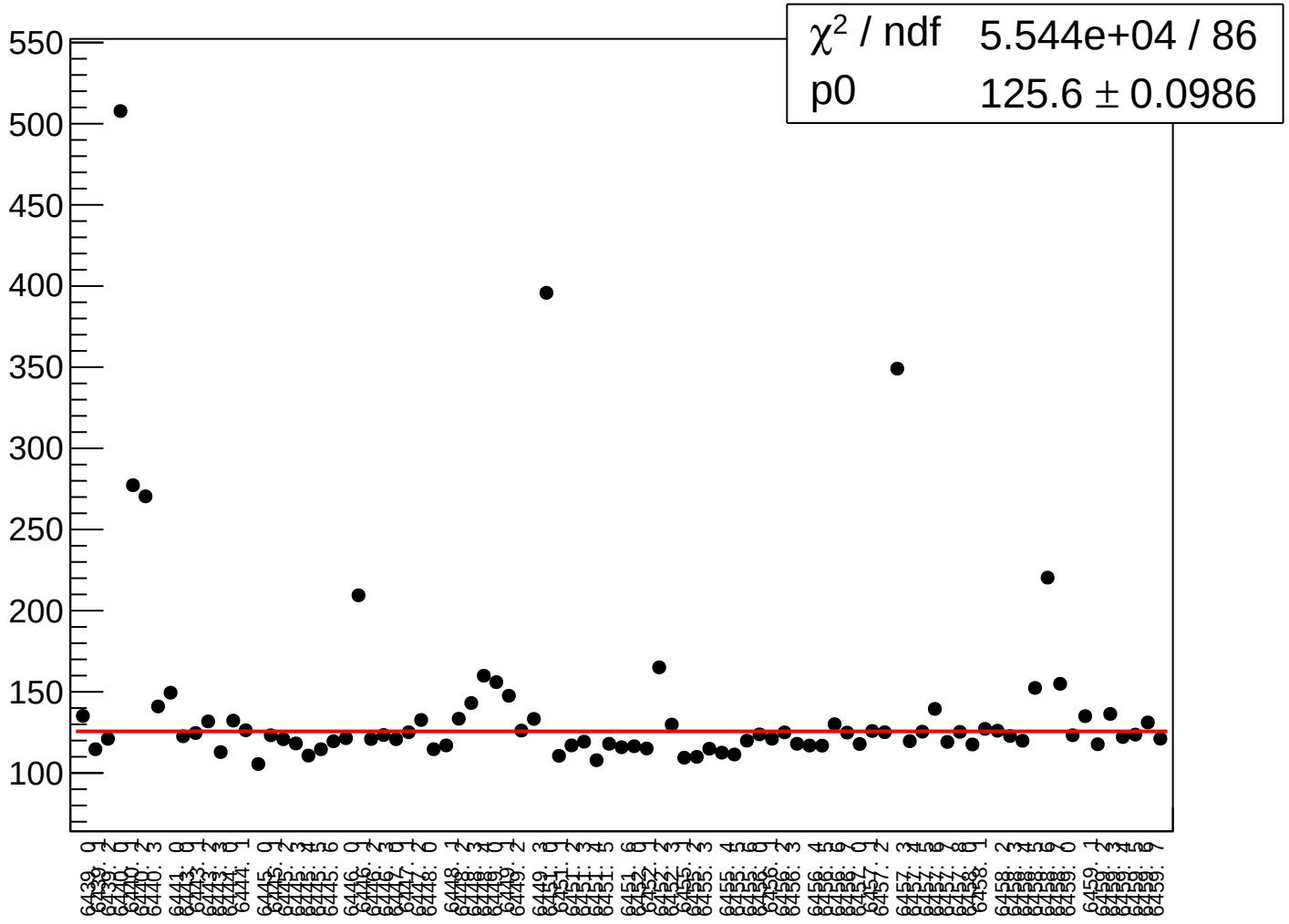

asym_bpm2i02WS_mean vs run
χ² / ndf 4117 / 86
p0 −1.027e+04 ± 123.6
0
−10000
−20000
−30000
−40000
pull
Entries 87
Mean −1678
Std Dev 1726
15
10
5
0
−5
−10

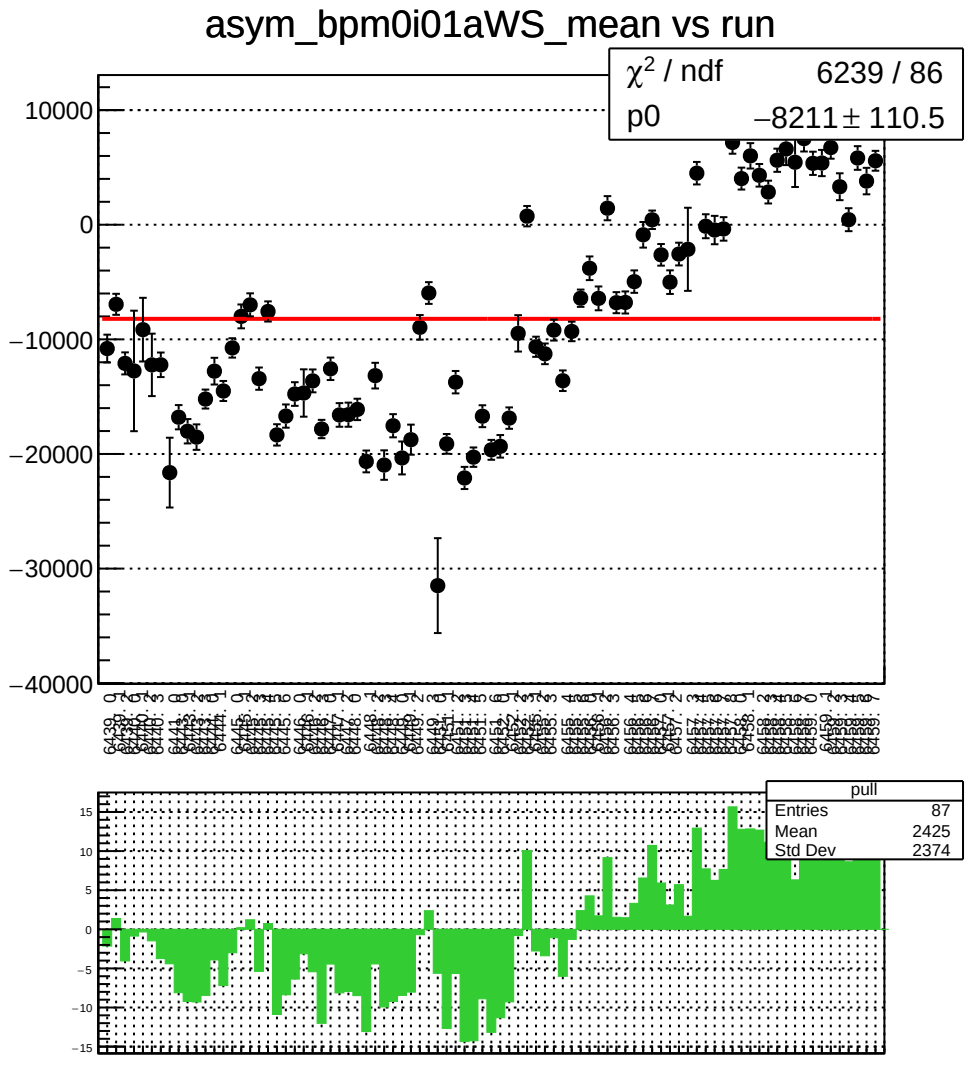

pull1D
Entries 87
Mean −0.6038
Std Dev 4.517
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

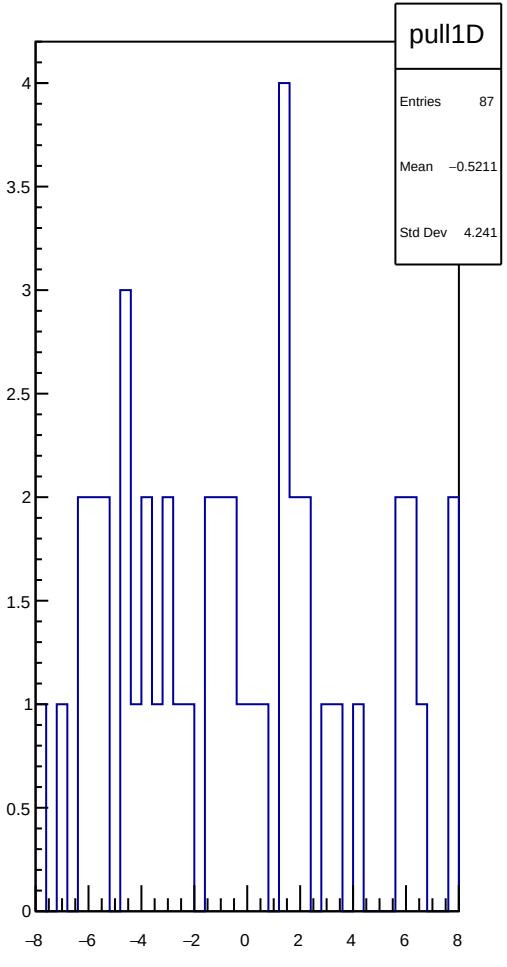

asym_bpm2i02WS_rms vs run
χ^2 / ndf 8.085e+04 / 86
p0 110.5 ± 0.08743
600
500
400
300
200
100

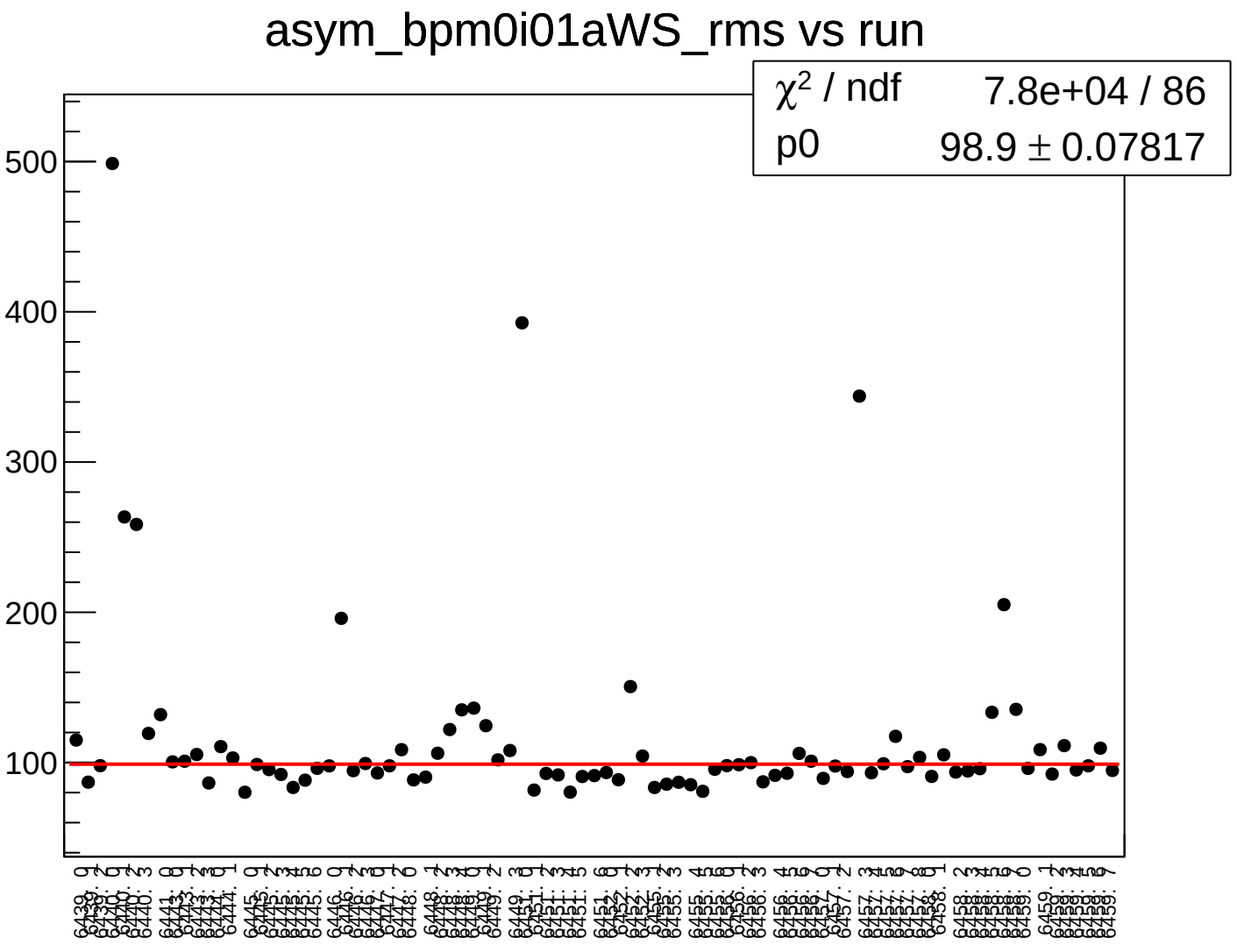

asym_bpm0i01WS_mean vs run
χ² / ndf 3718 / 86
p0 −8129 ± 139.4
10000
0
−10000
−20000
−30000
−40000
pull
Entries 87
Mean −1.892e+04
Std Dev 1.897e+04
10
5
0
−5
−10

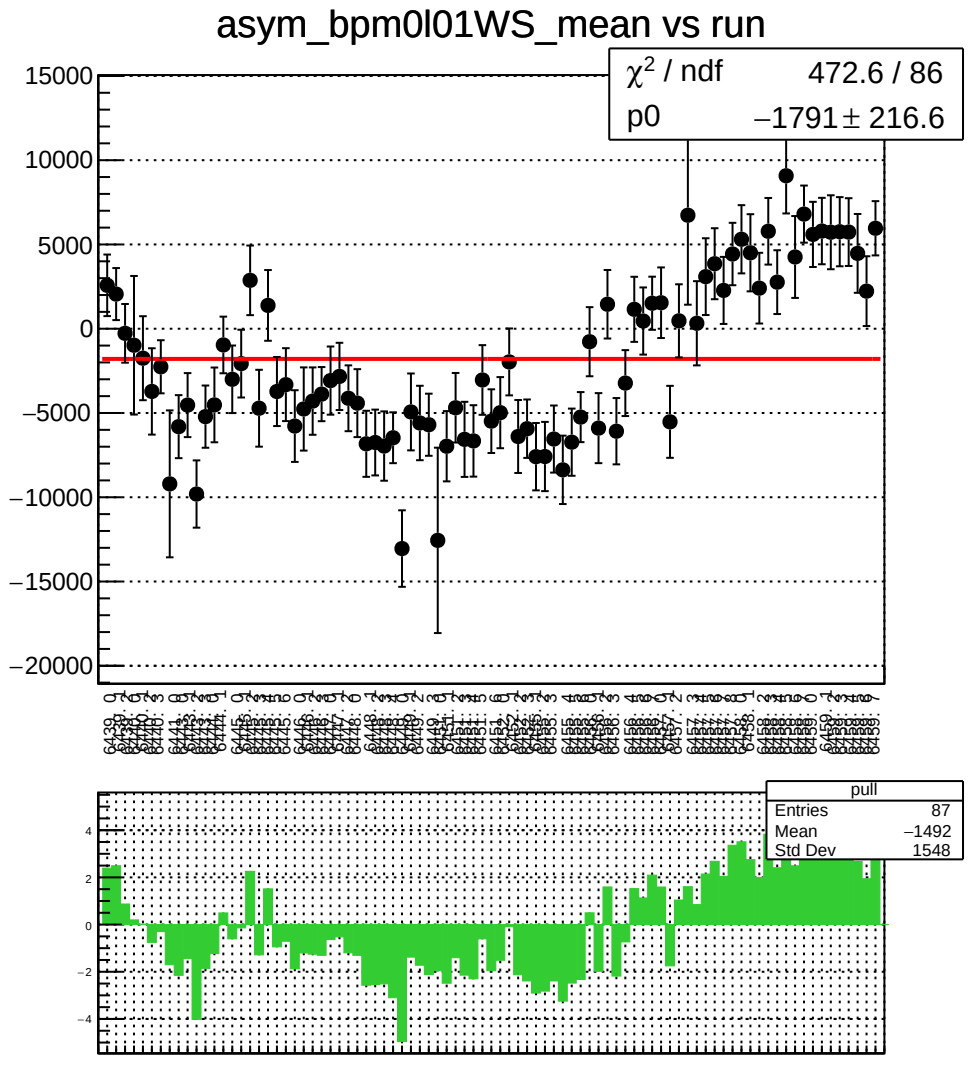

pull1D
Entries 87
Mean −0.8622
Std Dev 4.565
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

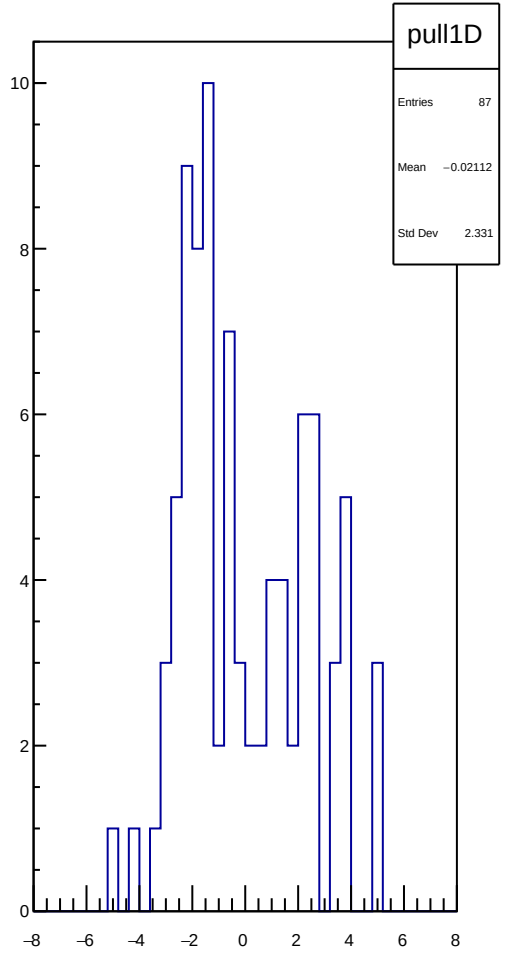

asym_bpm0i01WS_rms vs run
χ^2 / ndf 5.544e+04 / 86
p0 125.6 ± 0.0986
550
500
450
400
350
300
250
200
150
100

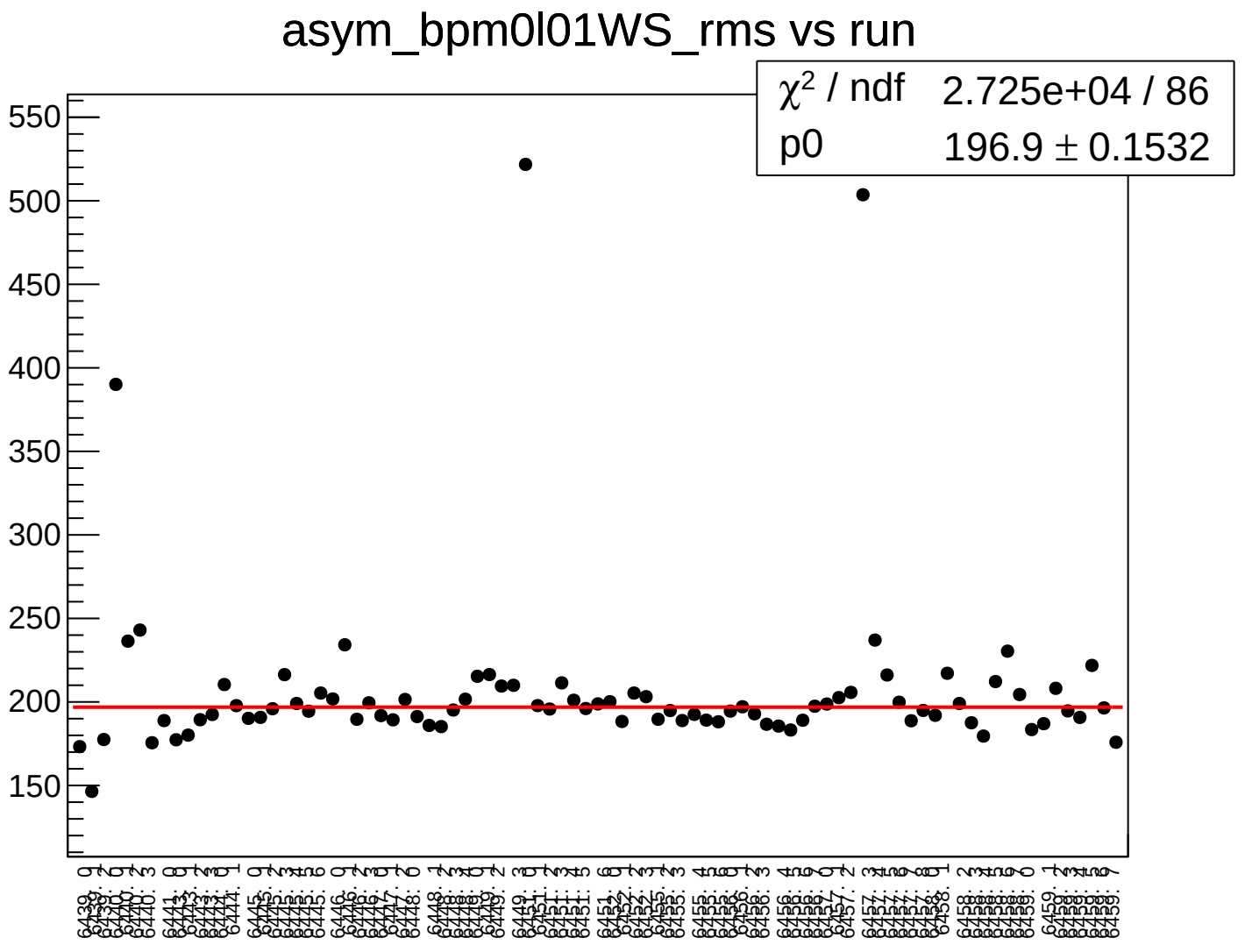

asym_bpm0i01aWS_mean vs run
χ² / ndf 6239 / 86
p0 −8211 ± 110.5
10000
0
−10000
−20000
−30000
−40000
pull
Entries 87
Mean 2425
Std Dev 2374
15
10
5
0
−5
−10
−15

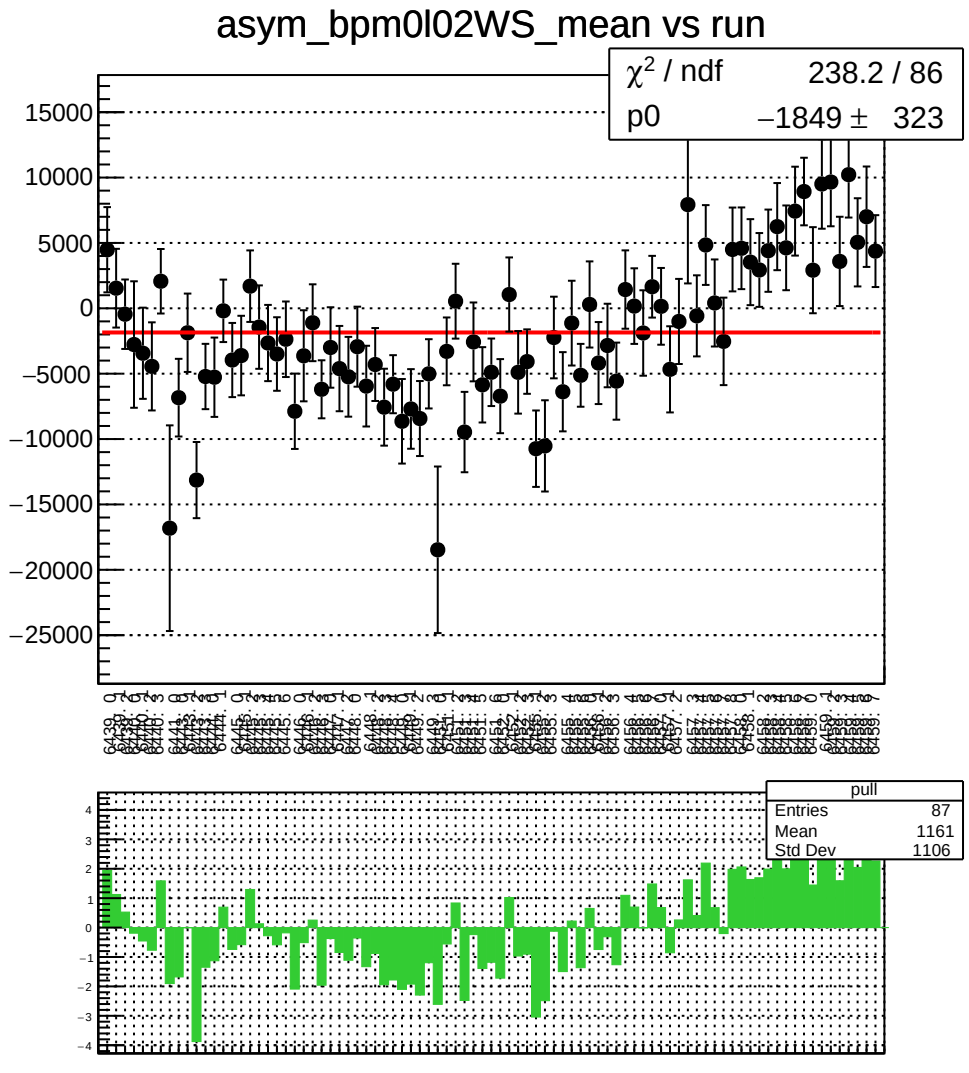

pull1D
Entries 87
Mean −0.5211
Std Dev 4.241
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

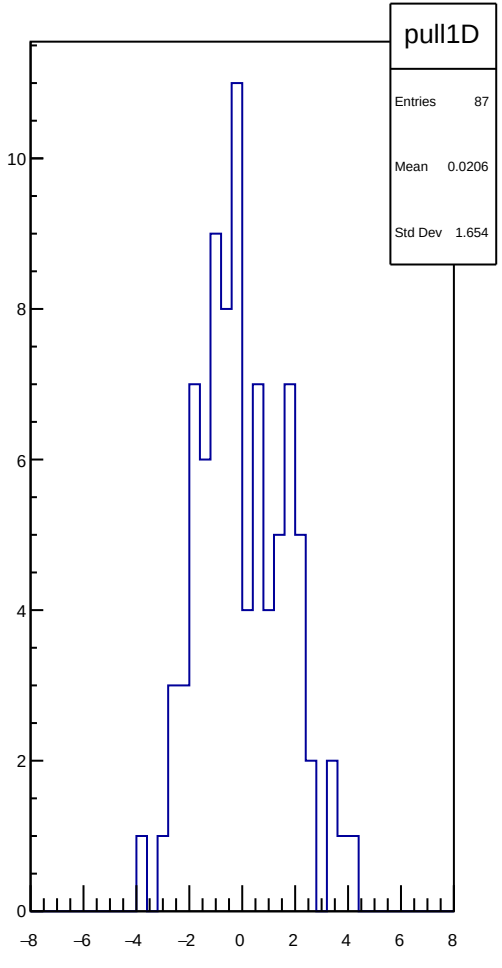

asym_bpm0i01aWS_rms vs run
χ² / ndf 7.8e+04 / 86
p0 98.9 ± 0.07817
500
400
300
200
100

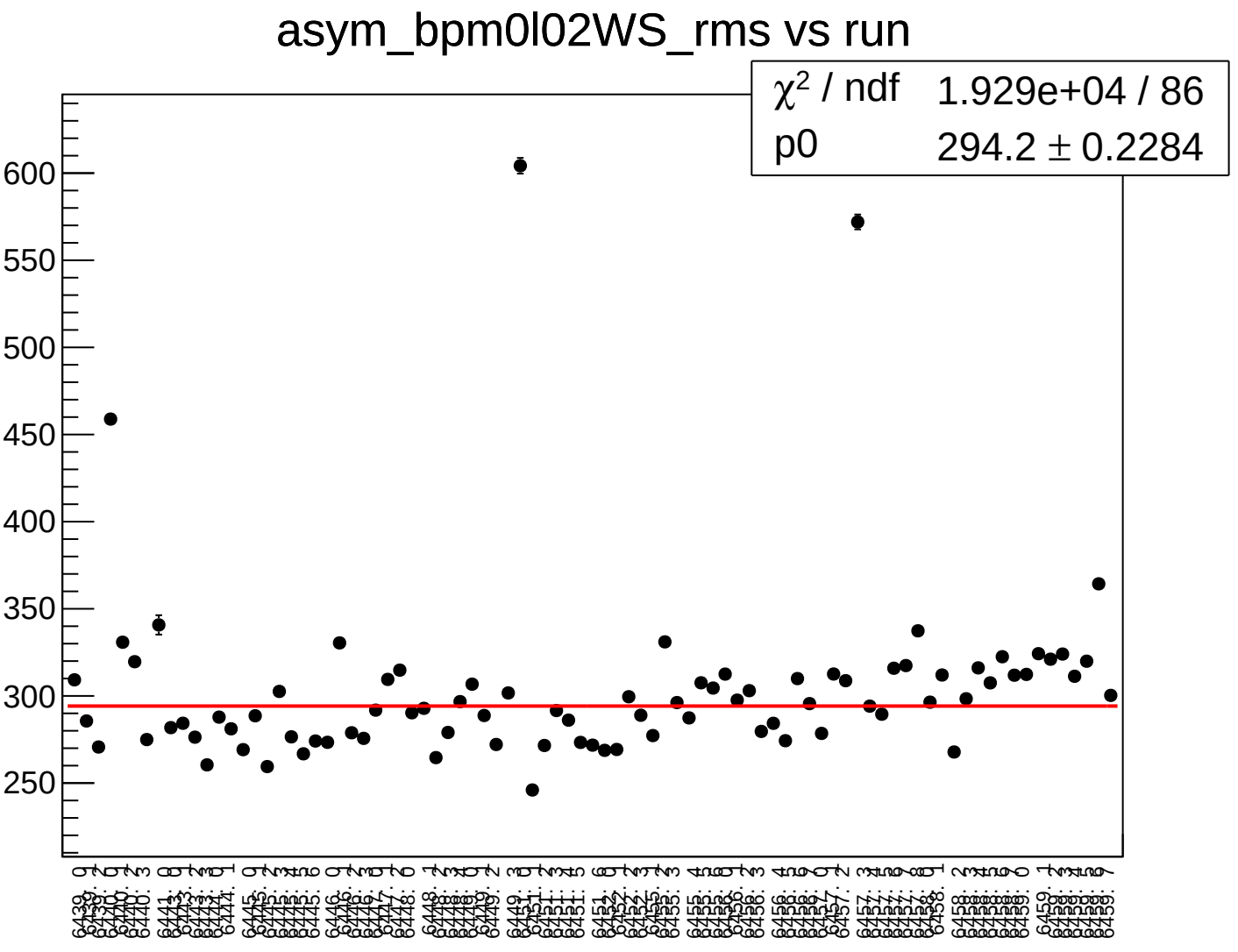

asym_bpm0l01WS_mean vs run
χ² / ndf 472.6 / 86
p0 −1791 ± 216.6
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 87
Mean −1492
Std Dev 1548
4
2
0
−2
−4

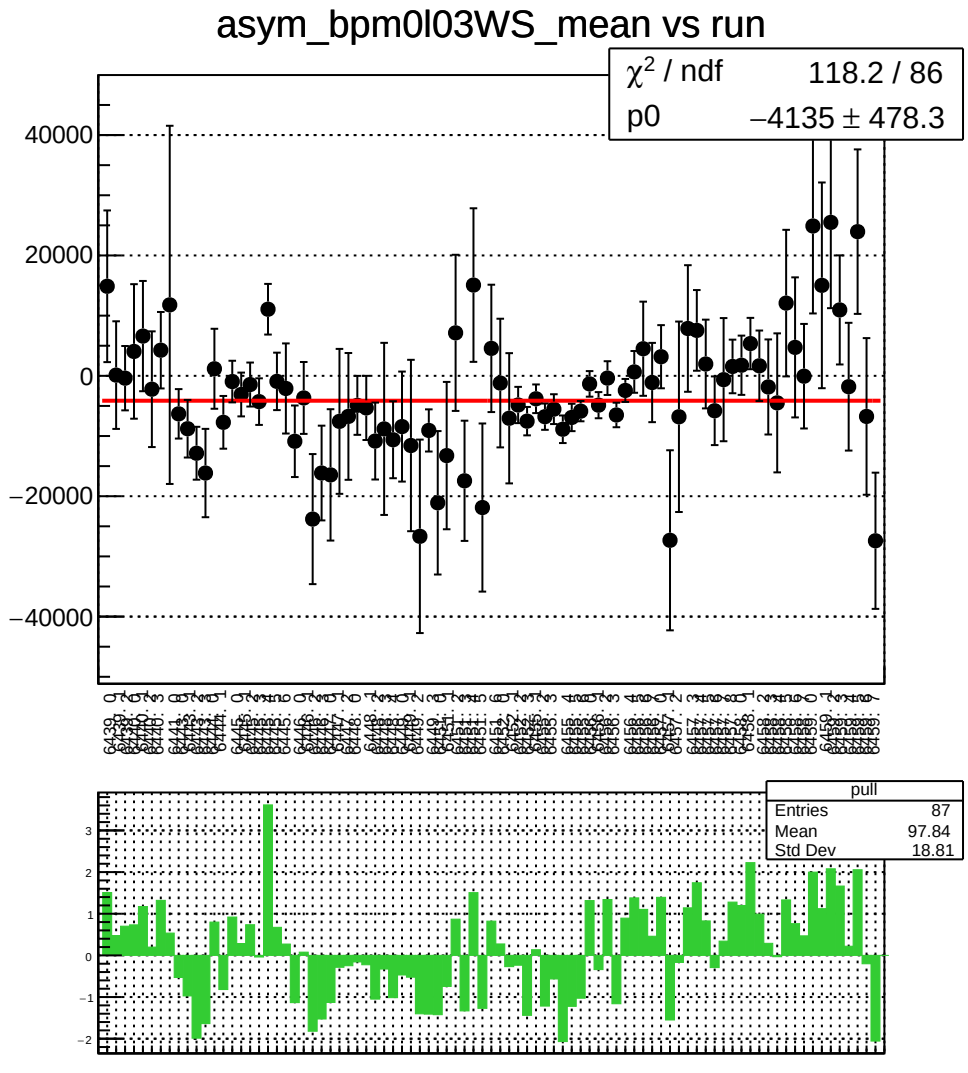

pull1D
Entries 87
Mean −0.02112
Std Dev 2.331
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

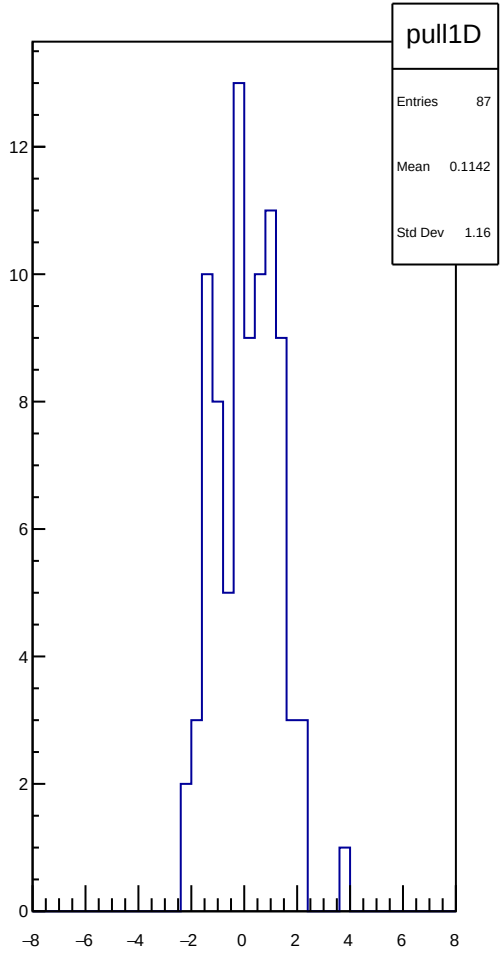

asym_bpm0l01WS_rms vs run
χ² / ndf 2.725e+04 / 86
p0 196.9 ± 0.1532
550
500
450
400
350
300
250
200
150

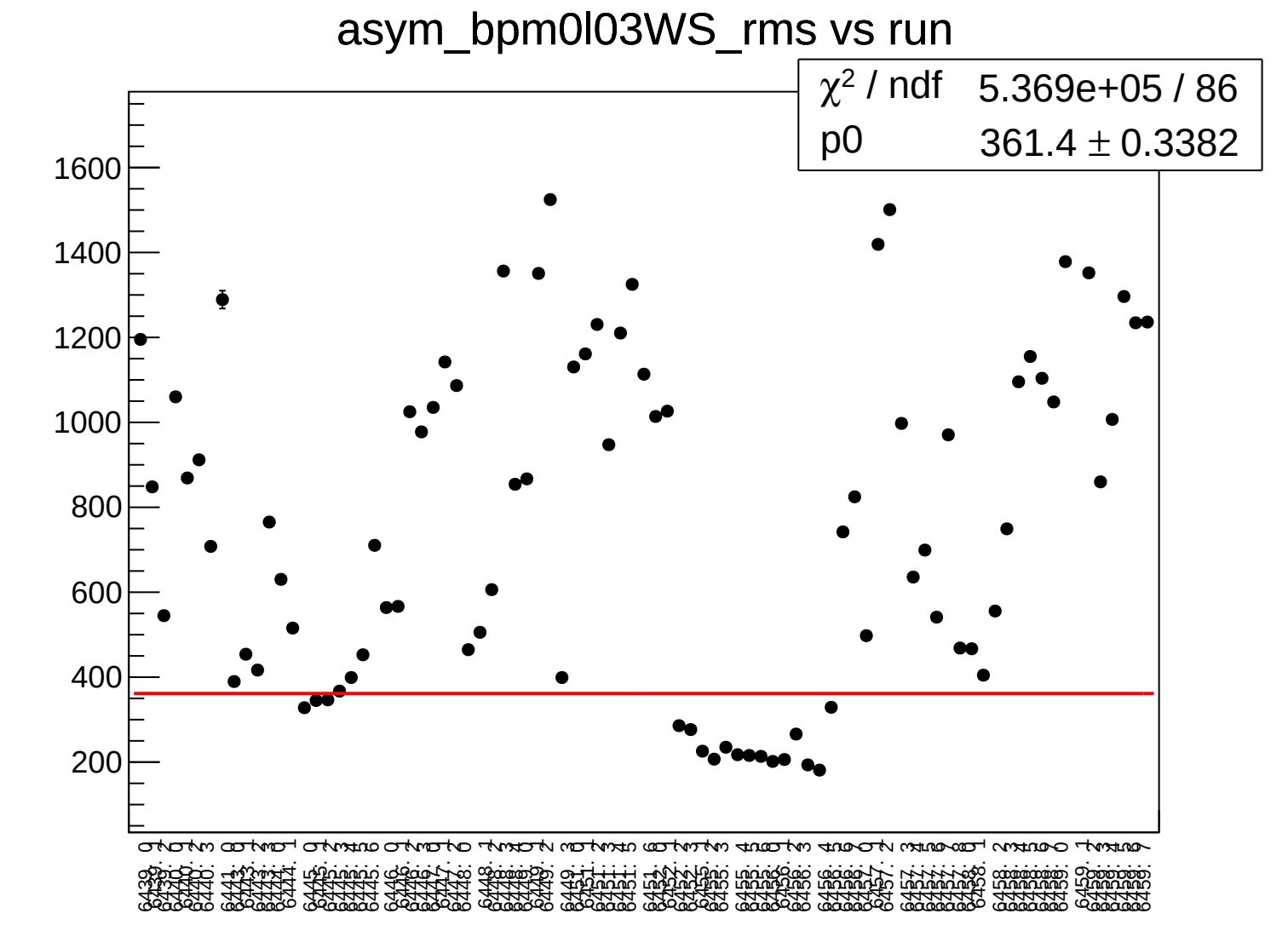

asym_bpm0l02WS_mean vs run
χ² / ndf 238.2 / 86
p0 −1849 ± 323
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 87
Mean 1161
Std Dev 1106
4
3
2
1
0
−1
−2
−3
−4

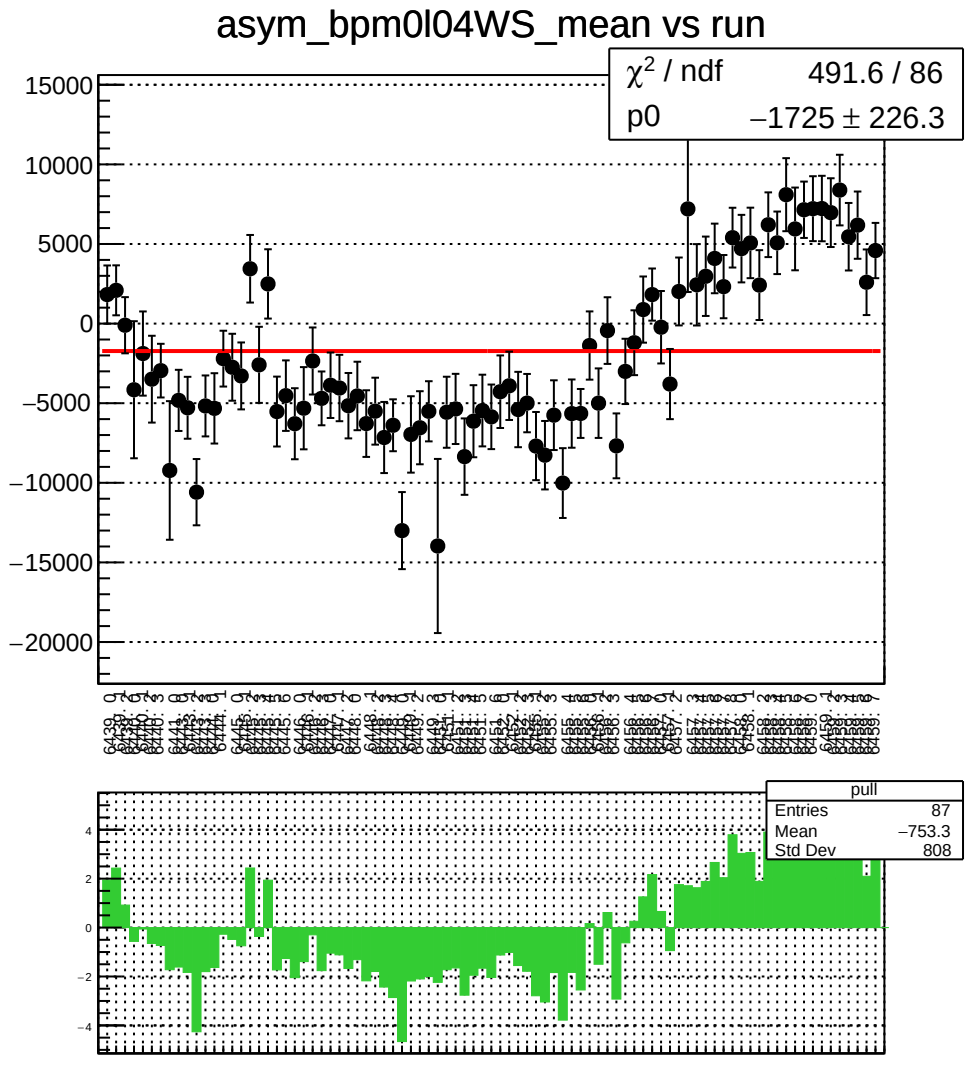

pull1D
Entries 87
Mean 0.0206
Std Dev 1.654
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

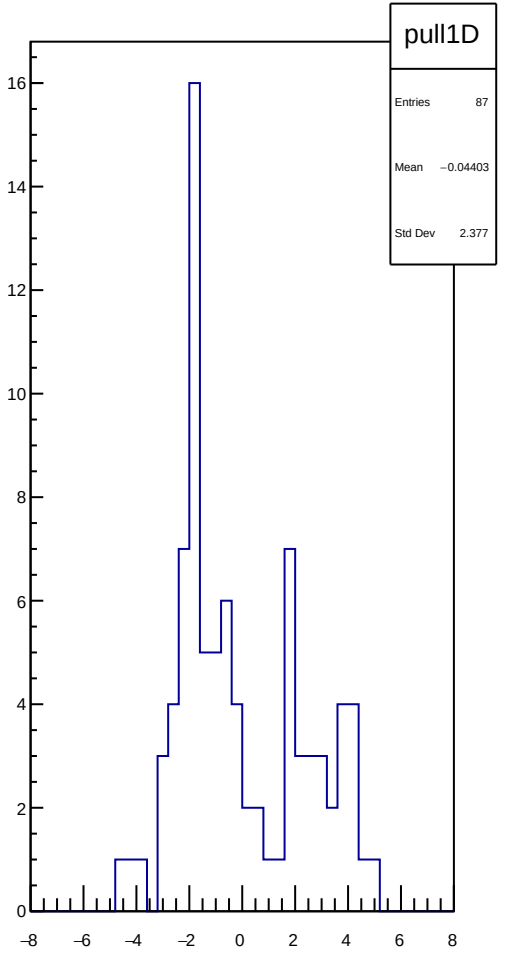

asym_bpm0l02WS_rms vs run
χ^2 / ndf 1.929e+04 / 86
p0 294.2 ± 0.2284
600
550
500
450
400
350
300
250

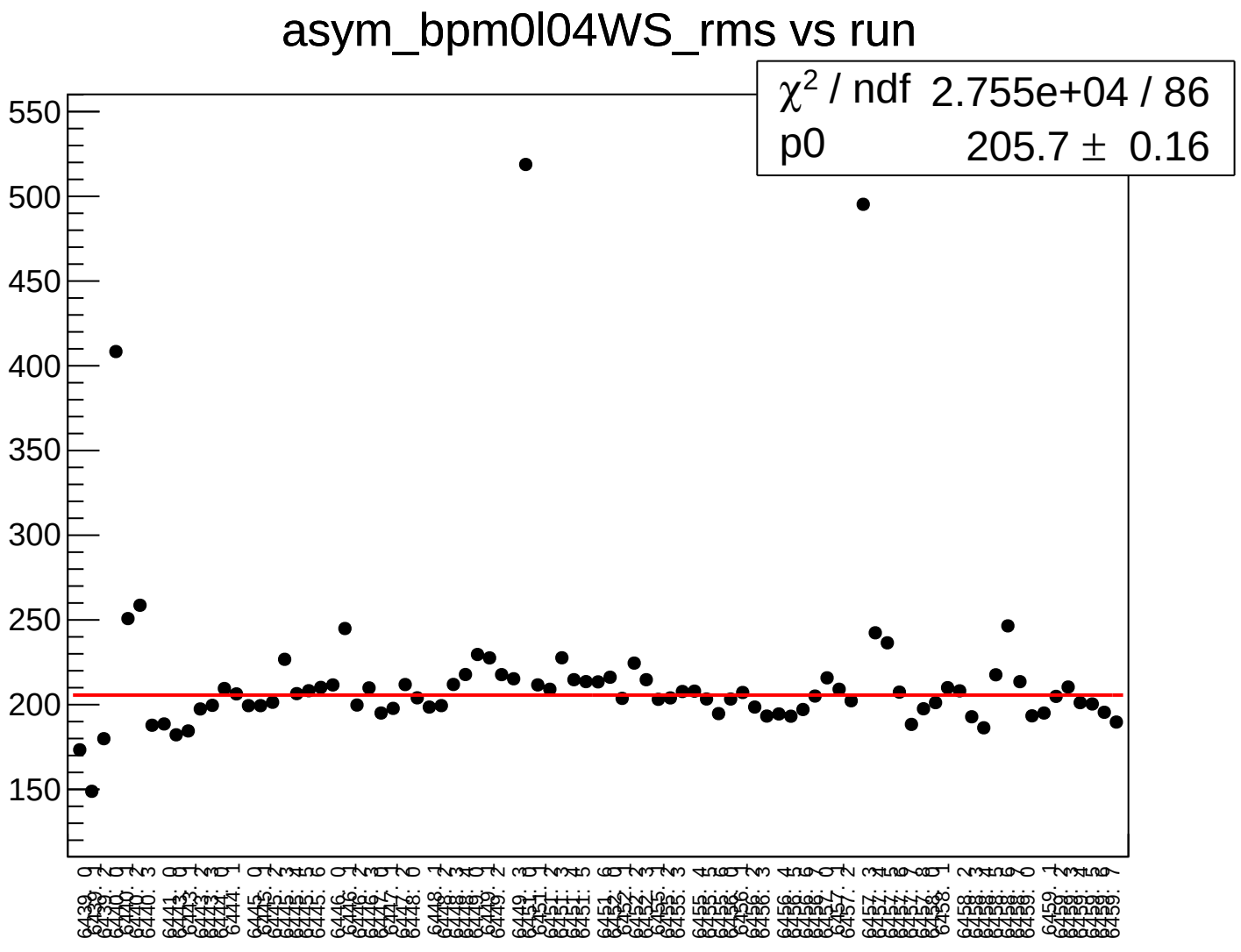

asym_bpm0l03WS_mean vs run
χ² / ndf 118.2 / 86
p0 −4135 ± 478.3
40000
20000
0
−20000
−40000
pull
Entries 87
Mean 97.84
Std Dev 18.81
3
2
1
0
−1
−2

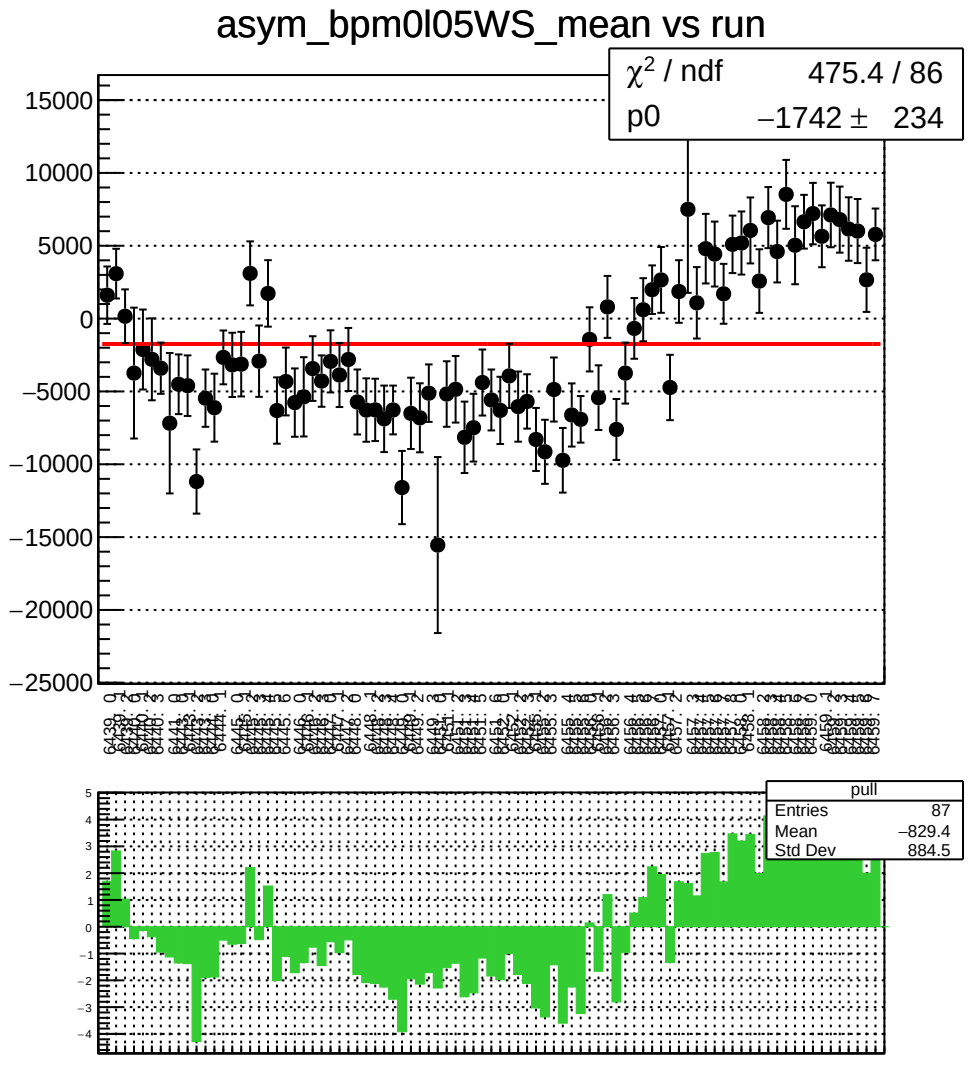

pull1D
Entries 87
Mean 0.1142
Std Dev 1.16
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

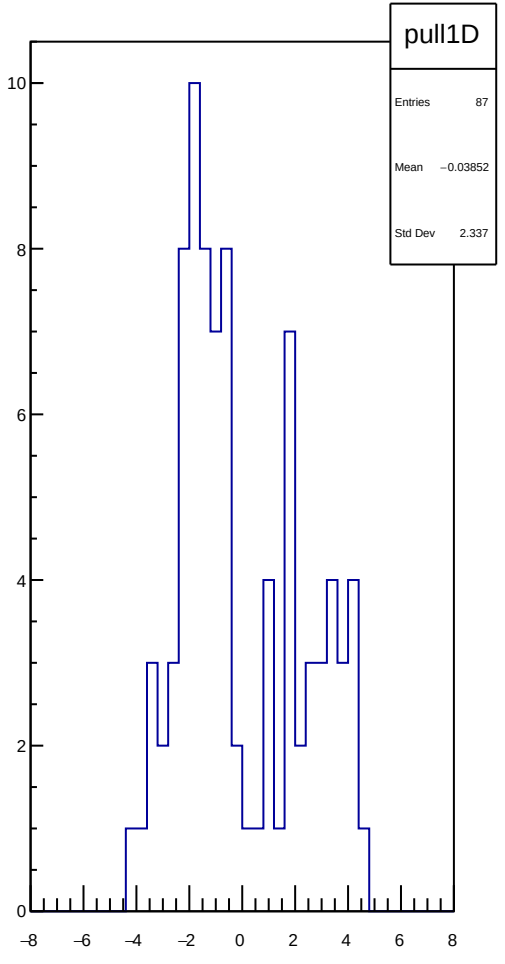

asym_bpm0l03WS_rms vs run
χ² / ndf 5.369e+05 / 86
p0 361.4 ± 0.3382
1600
1400
1200
1000
800
600
400
200

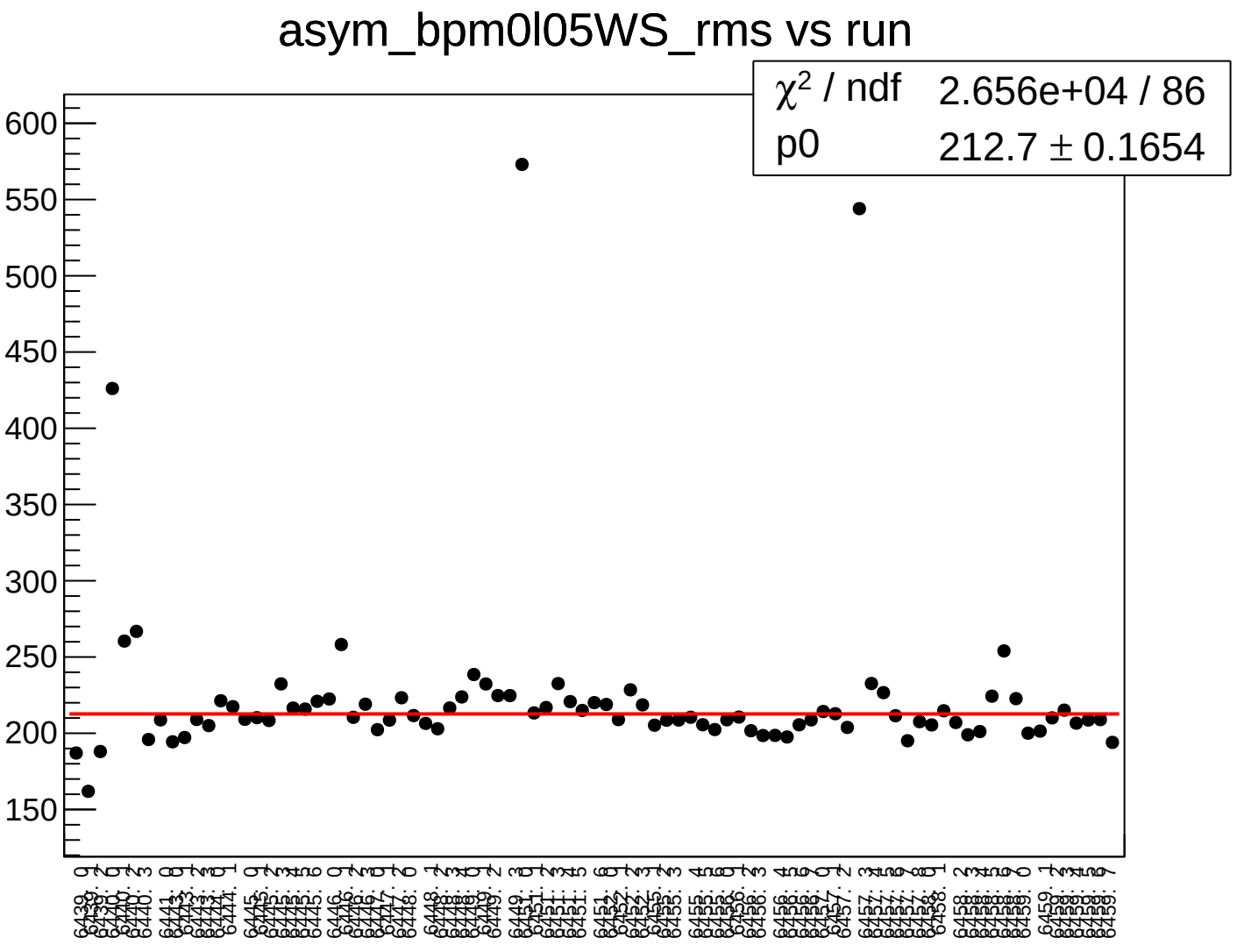

asym_bpm0l04WS_mean vs run
χ² / ndf 491.6 / 86
p0 −1725 ± 226.3
pull
Entries 87
Mean −753.3
Std Dev 808

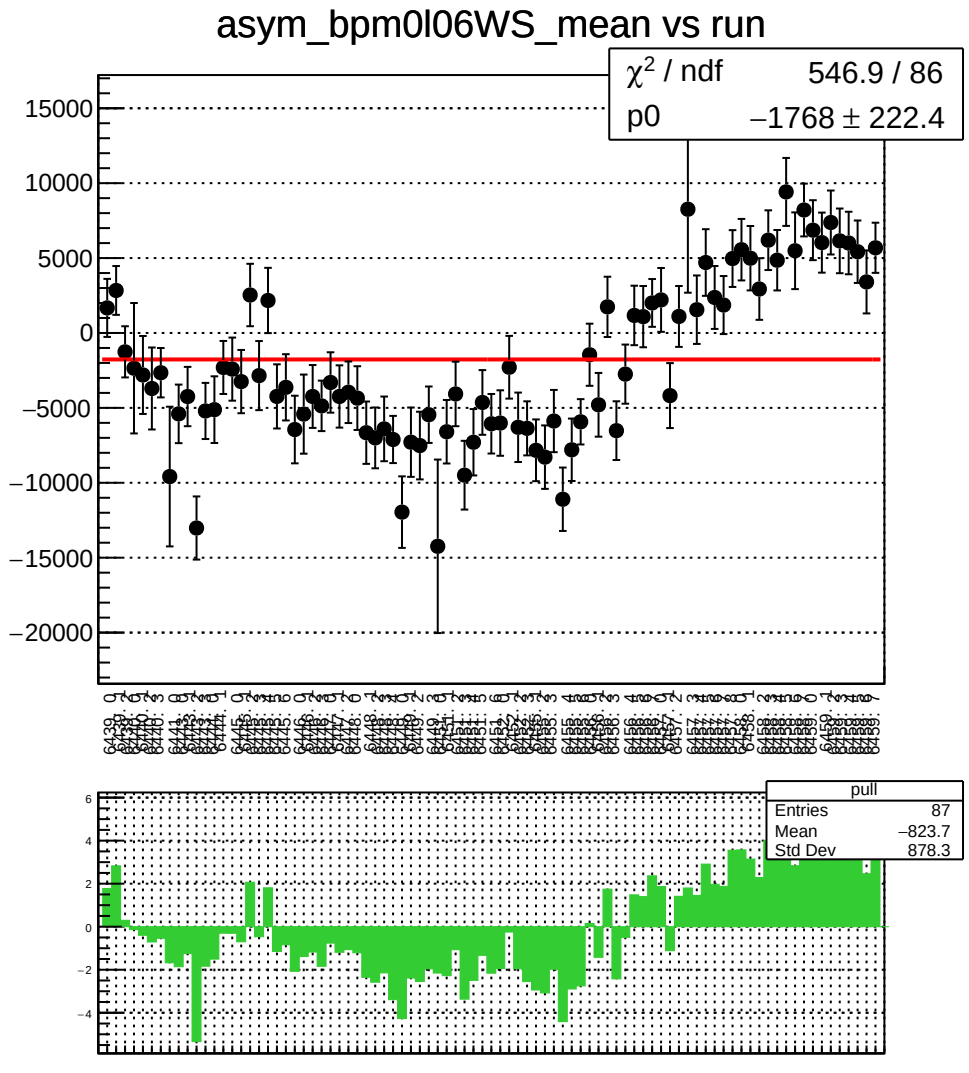

pull1D
Entries 87
Mean −0.04403
Std Dev 2.377

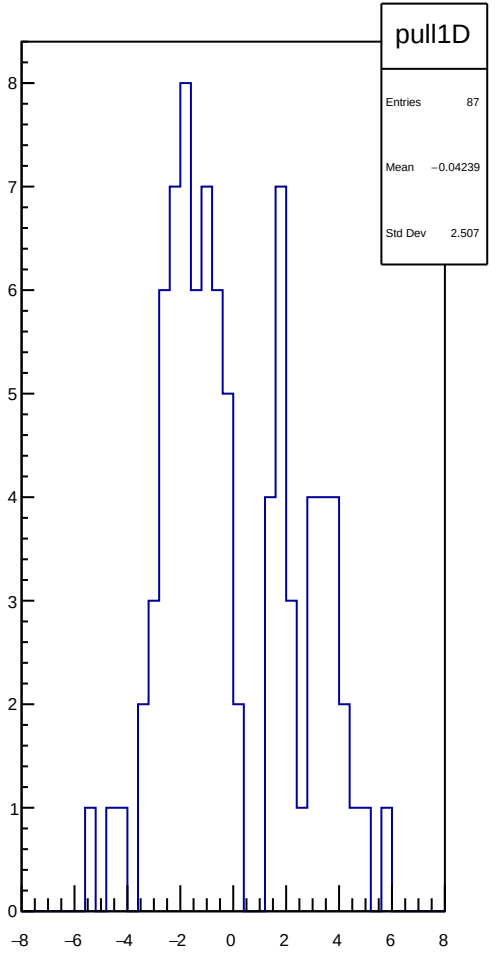

asym_bpm0l04WS_rms vs run
χ² / ndf 2.755e+04 / 86
p0 205.7 ± 0.16
550
500
450
400
350
300
250
200
150

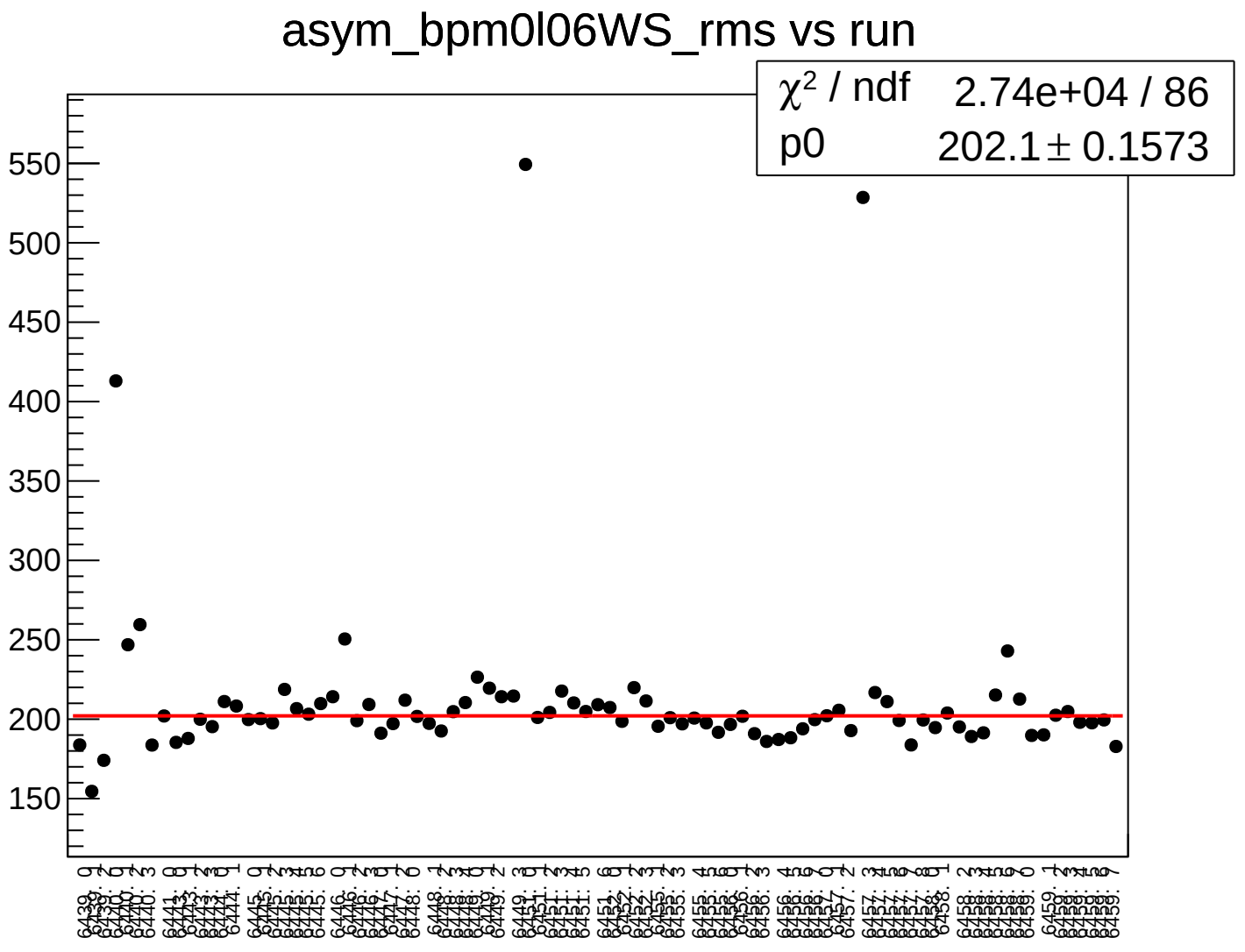

asym_bpm0l05WS_mean vs run
χ² / ndf 475.4 / 86
p0 −1742 ± 234
pull
Entries 87
Mean −829.4
Std Dev 884.5

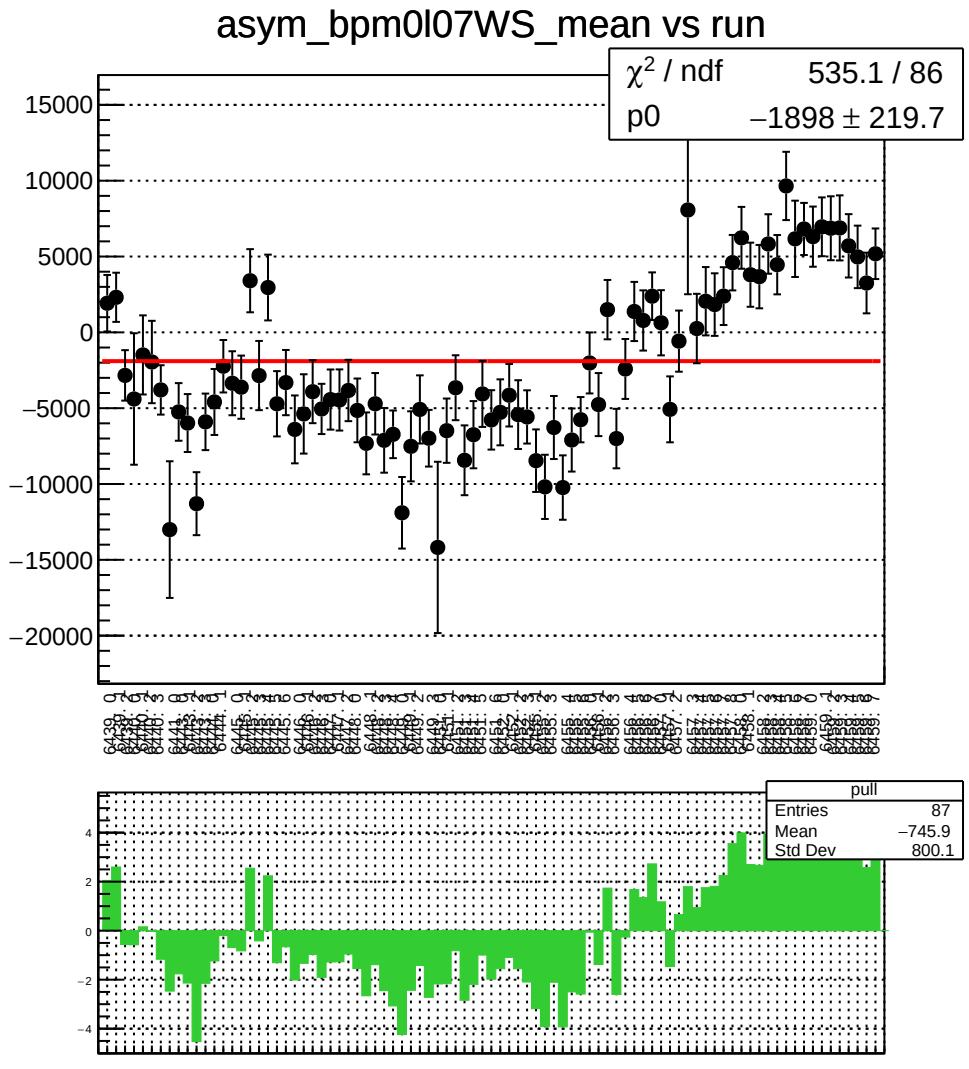

pull1D
Entries 87
Mean −0.03852
Std Dev 2.337

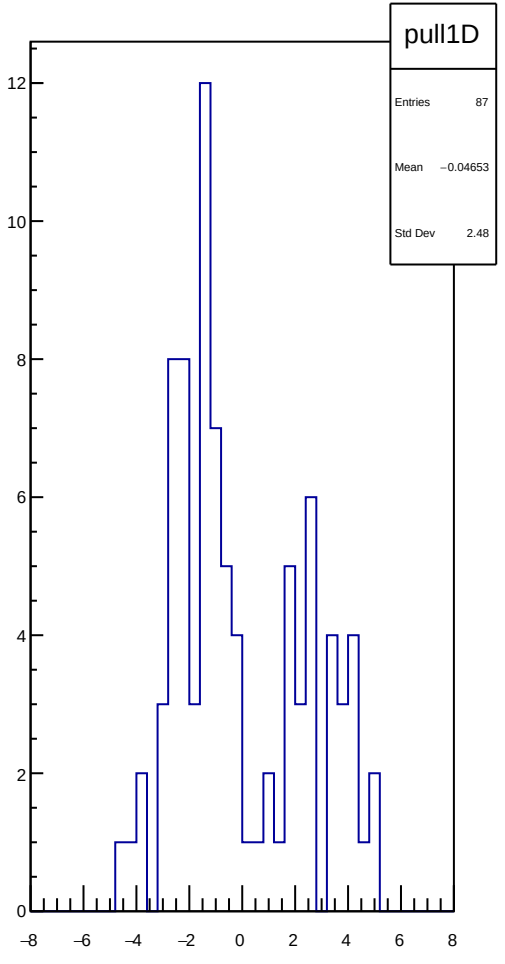

asym_bpm0l05WS_rms vs run
χ^2 / ndf 2.656e+04 / 86
p0 212.7 ± 0.1654
600
550
500
450
400
350
300
250
200
150

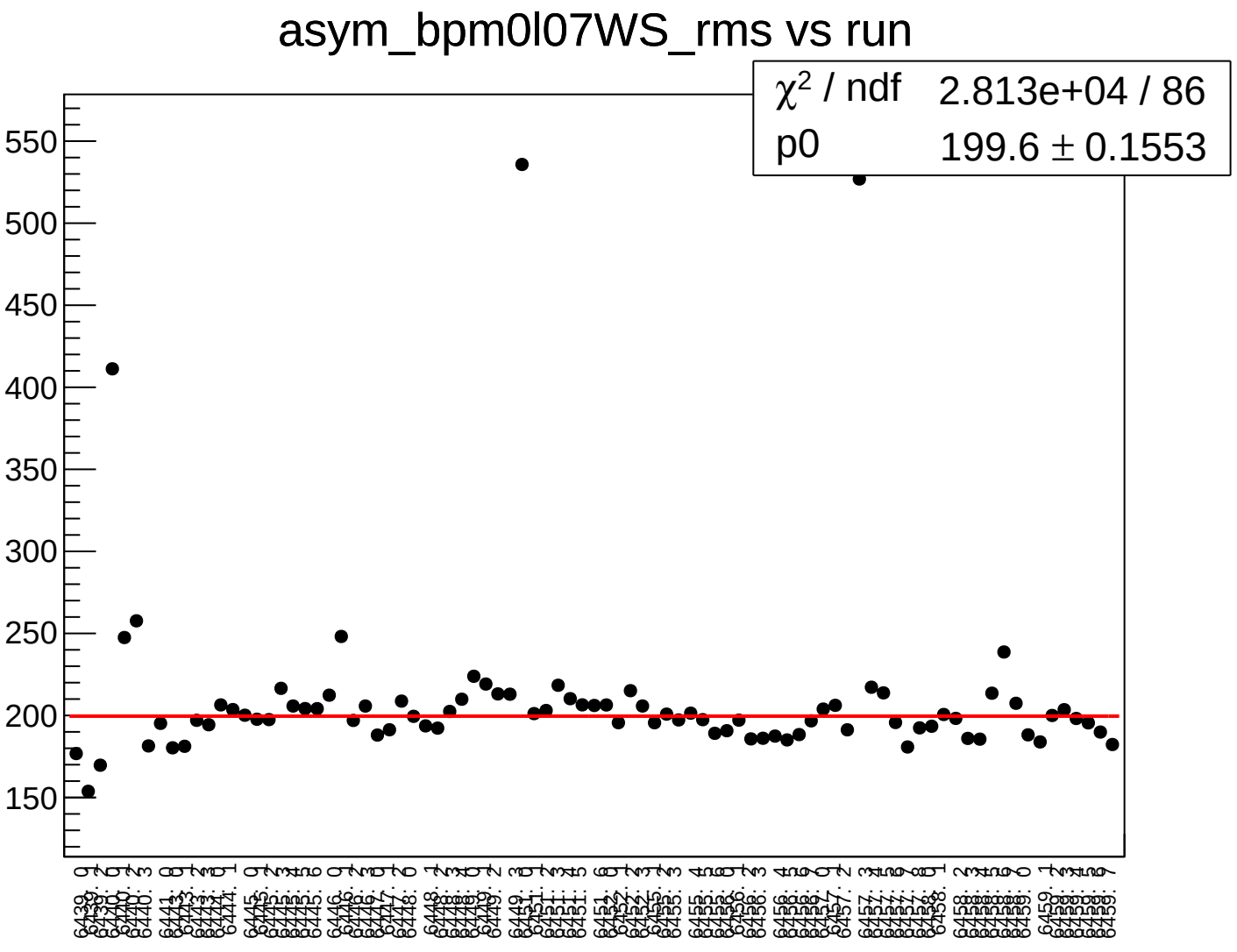

asym_bpm0l06WS_mean vs run
χ² / ndf 546.9 / 86
p0 −1768 ± 222.4
pull
Entries 87
Mean −823.7
Std Dev 878.3

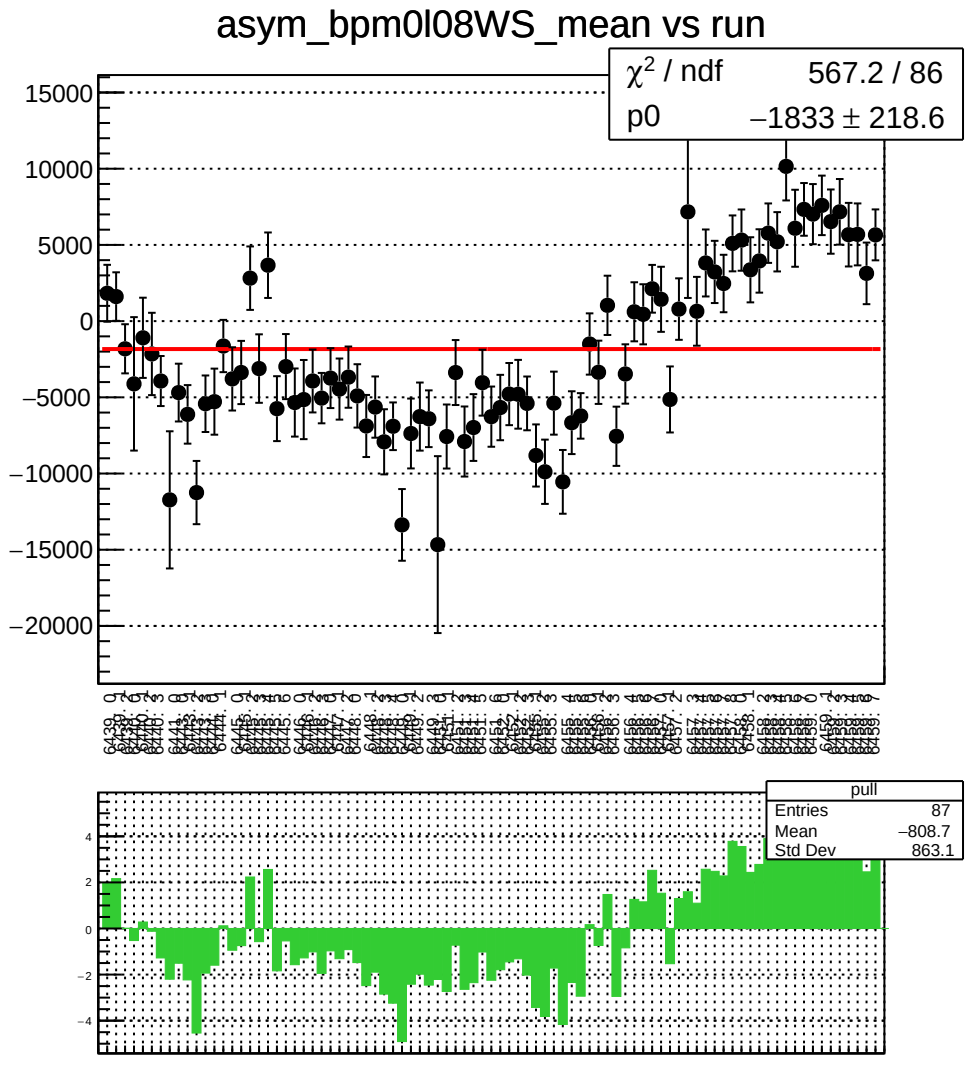

pull1D
Entries 87
Mean −0.04239
Std Dev 2.507

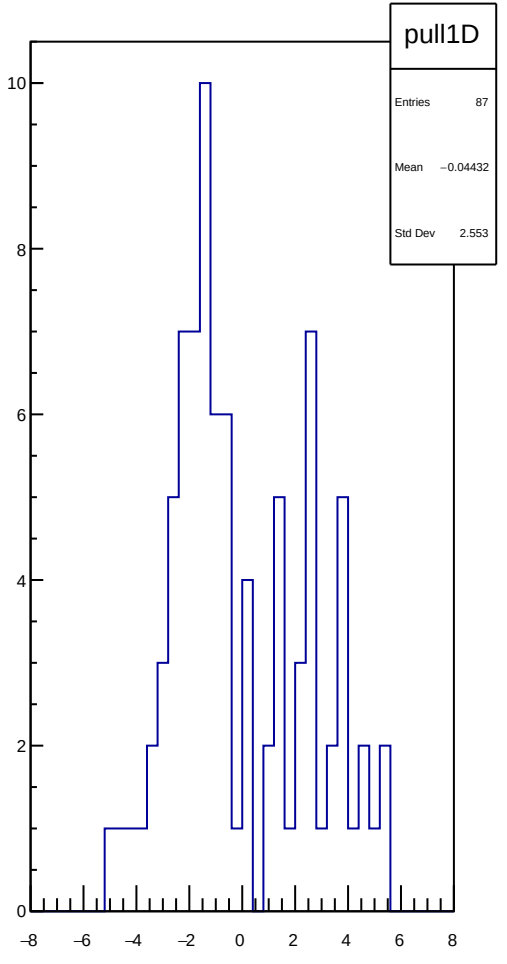

asym_bpm0l06WS_rms vs run
χ² / ndf 2.74e+04 / 86
p0 202.1 ± 0.1573
550
500
450
400
350
300
250
200
150

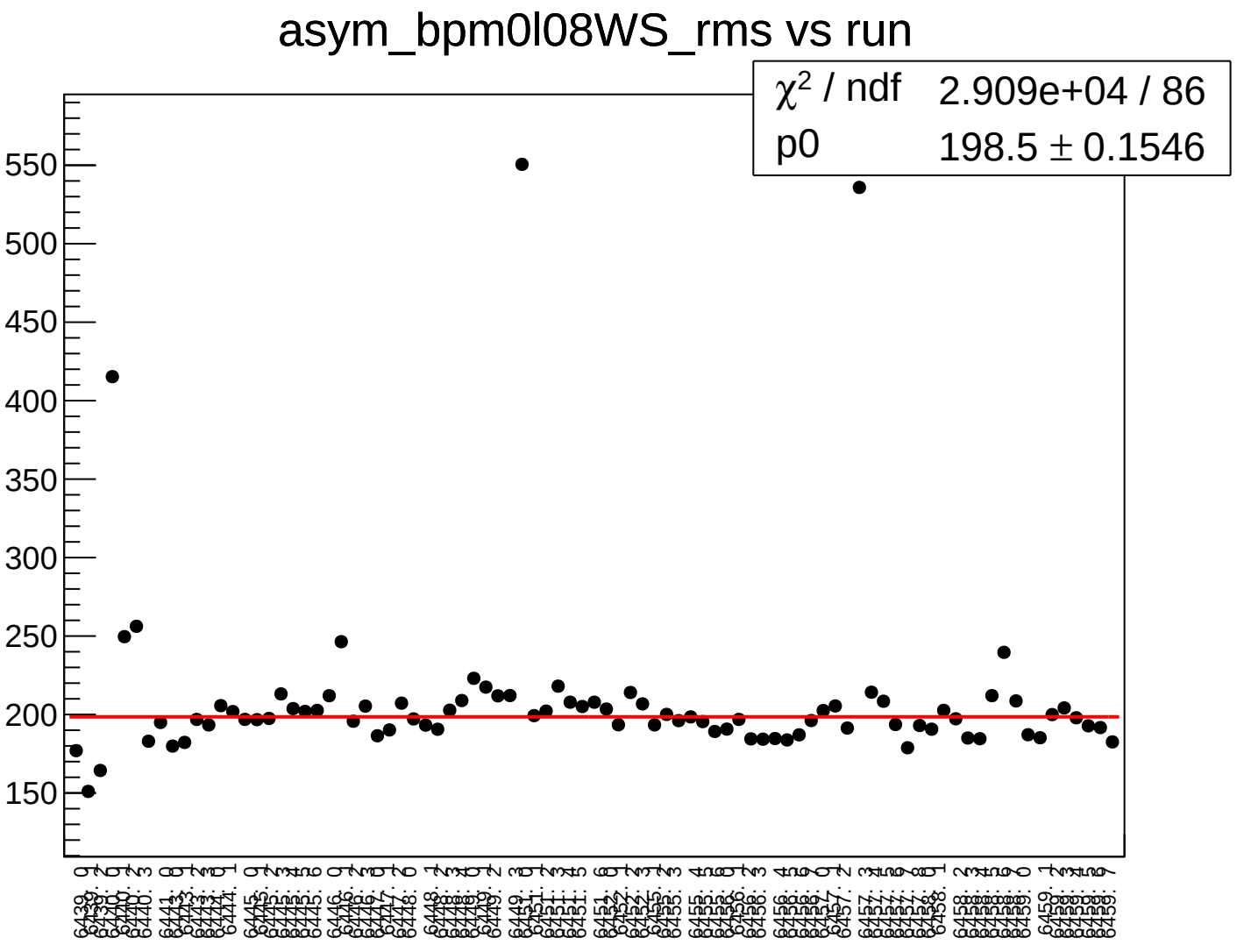

asym_bpm0l07WS_mean vs run
χ² / ndf 535.1 / 86
p0 −1898 ± 219.7
pull
Entries 87
Mean −745.9
Std Dev 800.1

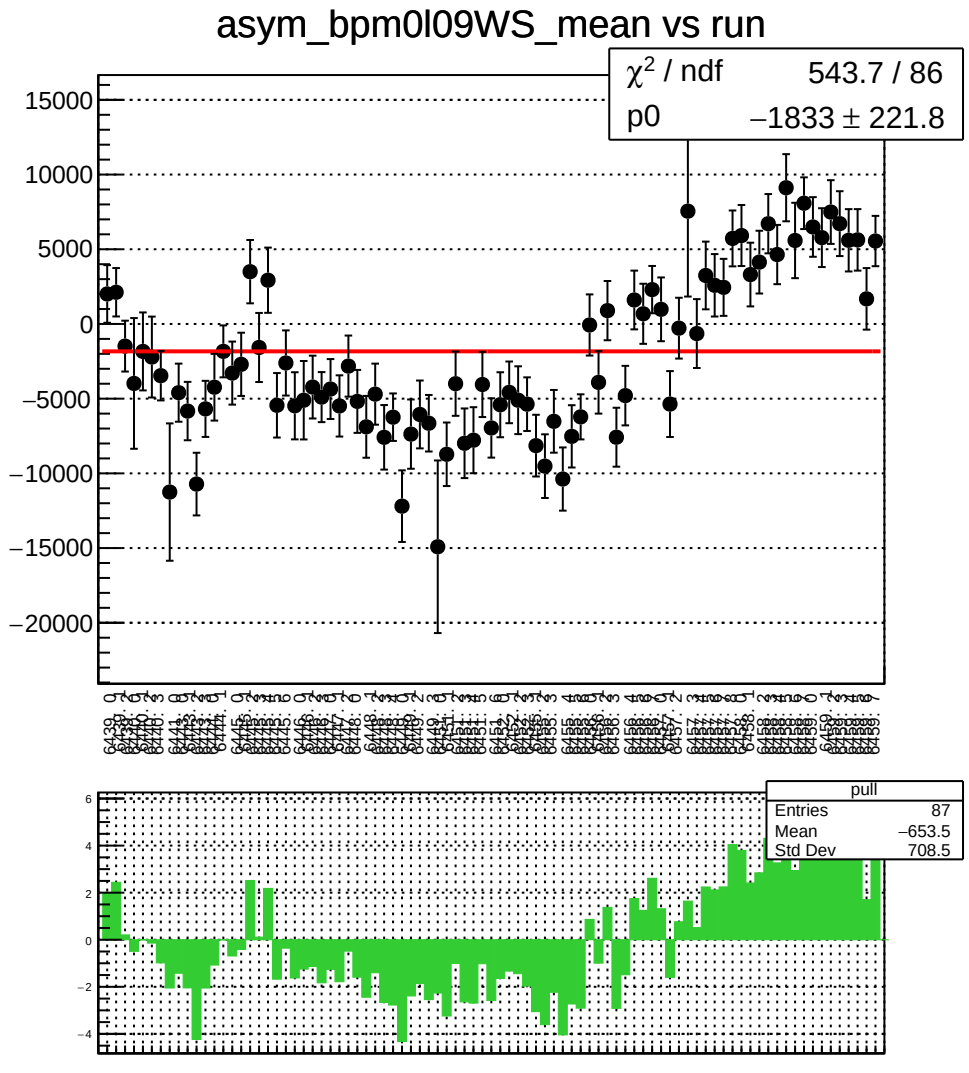

pull1D
Entries 87
Mean −0.04653
Std Dev 2.48

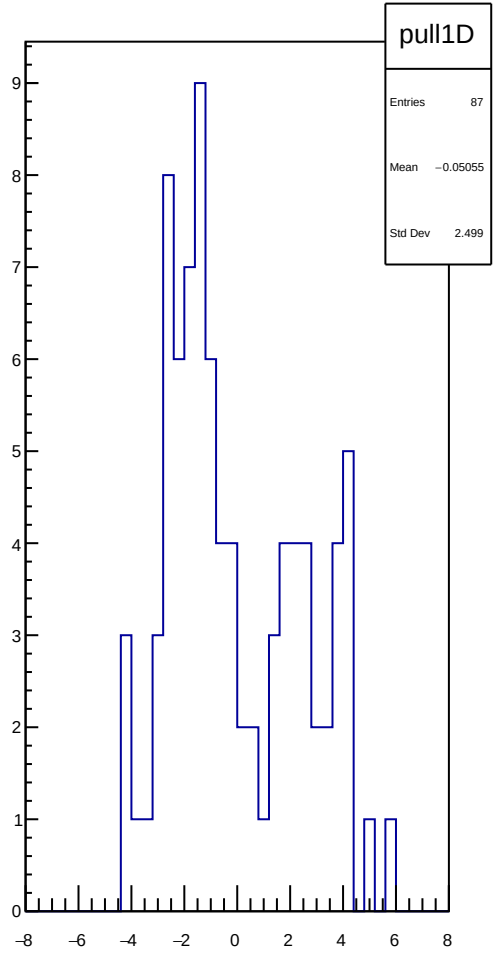

asym_bpm0l07WS_rms vs run
χ² / ndf 2.813e+04 / 86
p0 199.6 ± 0.1553
550
500
450
400
350
300
250
200
150

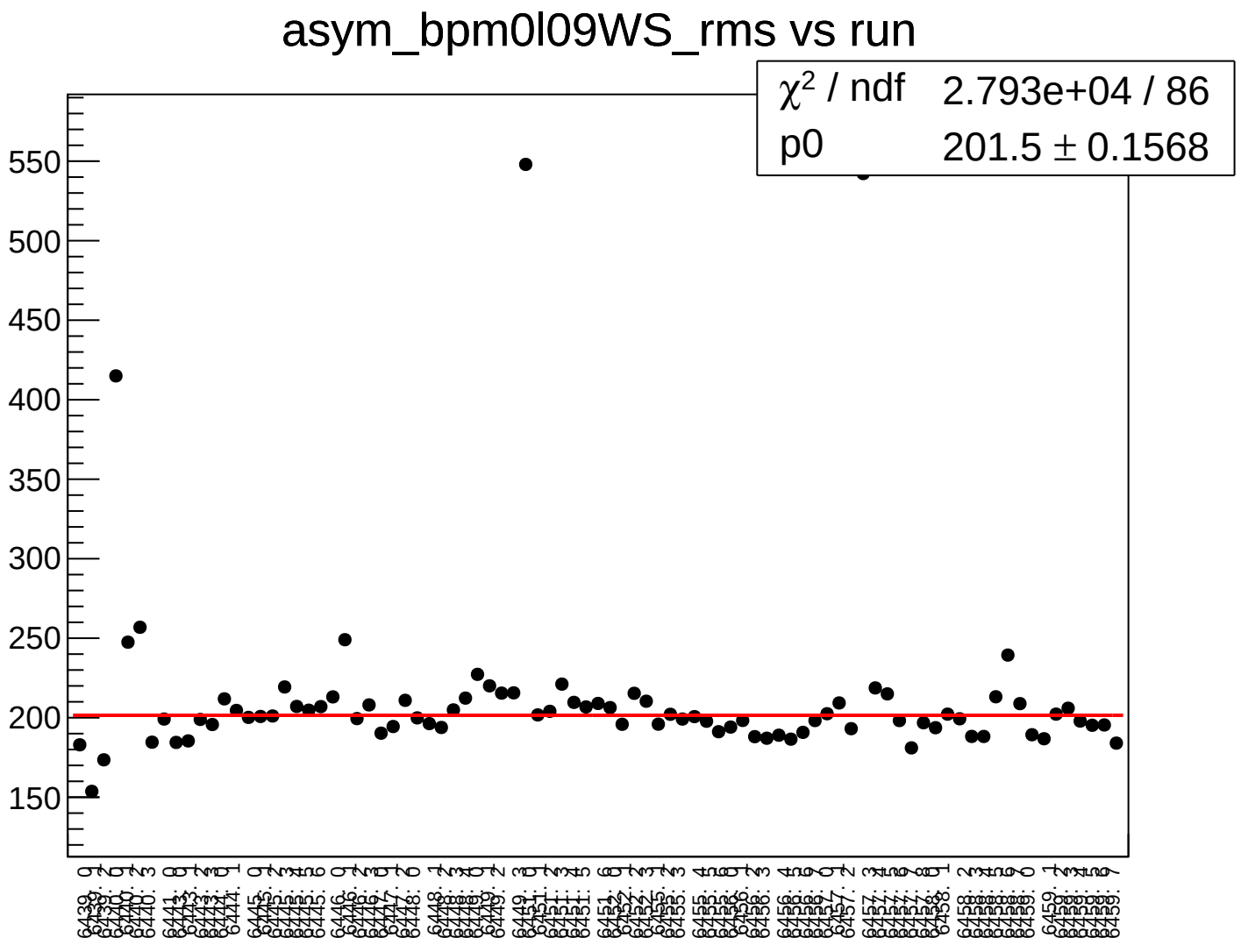

asym_bpm0l08WS_mean vs run
χ² / ndf 567.2 / 86
p0 −1833 ± 218.6
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 87
Mean −808.7
Std Dev 863.1
4
2
0
−2
−4

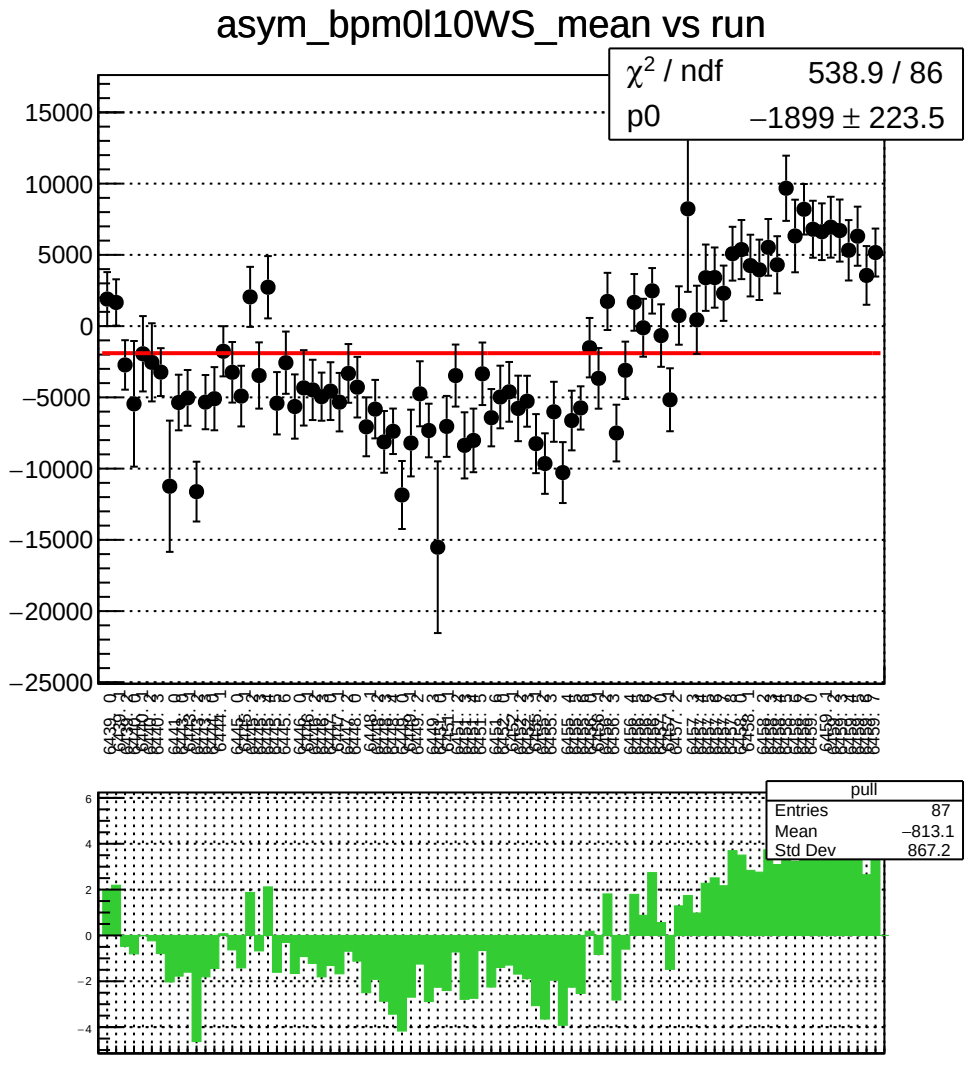

pull1D
Entries 87
Mean −0.04432
Std Dev 2.553
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

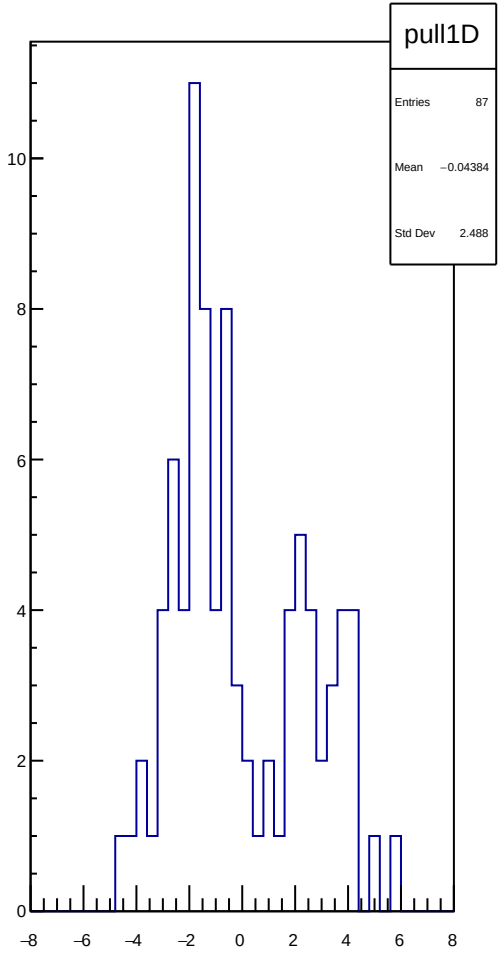

asym_bpm0l08WS_rms vs run
χ² / ndf 2.909e+04 / 86
p0 198.5 ± 0.1546
550
500
450
400
350
300
250
200
150

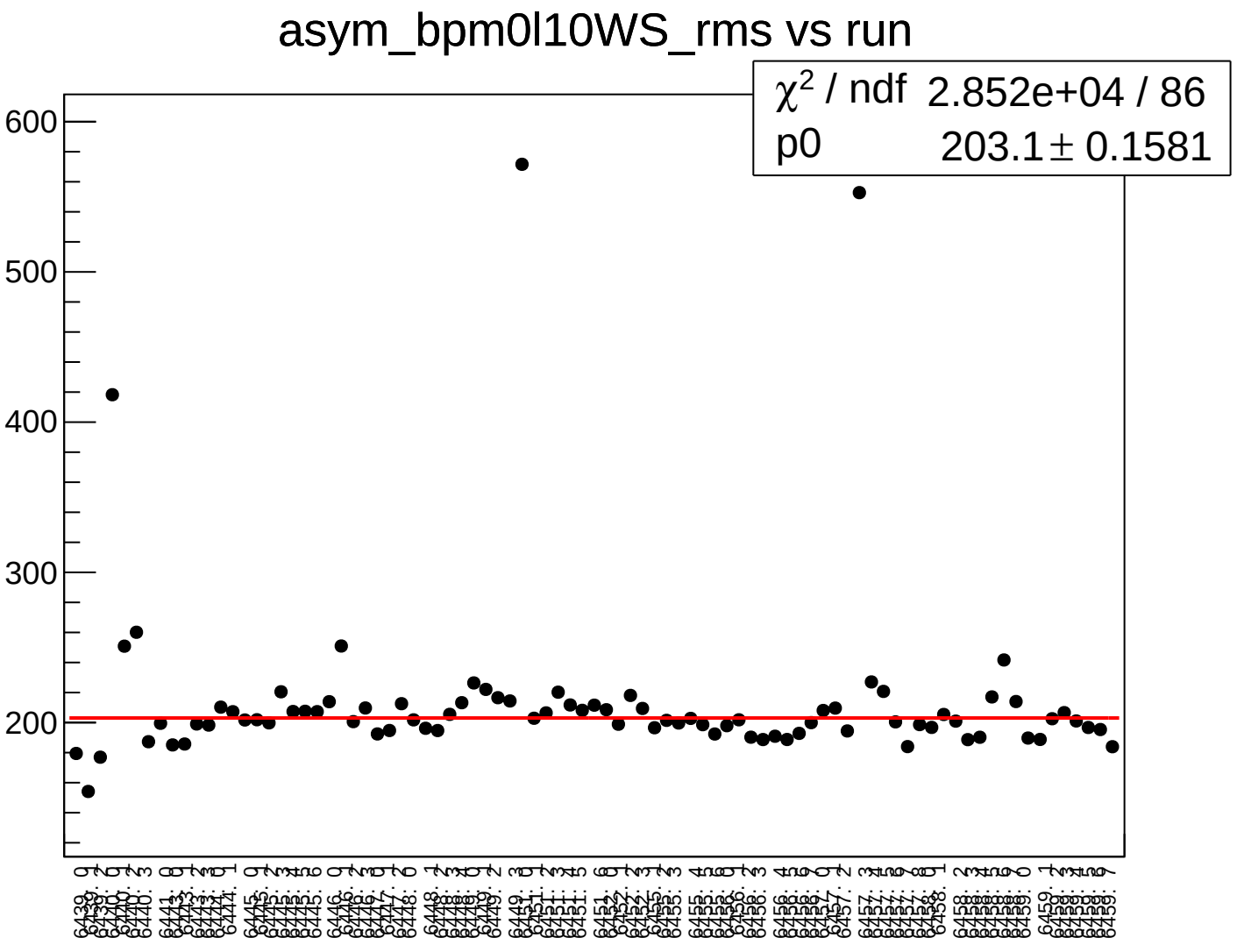

asym_bpm0l09WS_mean vs run
χ² / ndf 543.7 / 86
p0 −1833 ± 221.8
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 87
Mean −653.5
Std Dev 708.5
6
4
2
0
−2
−4

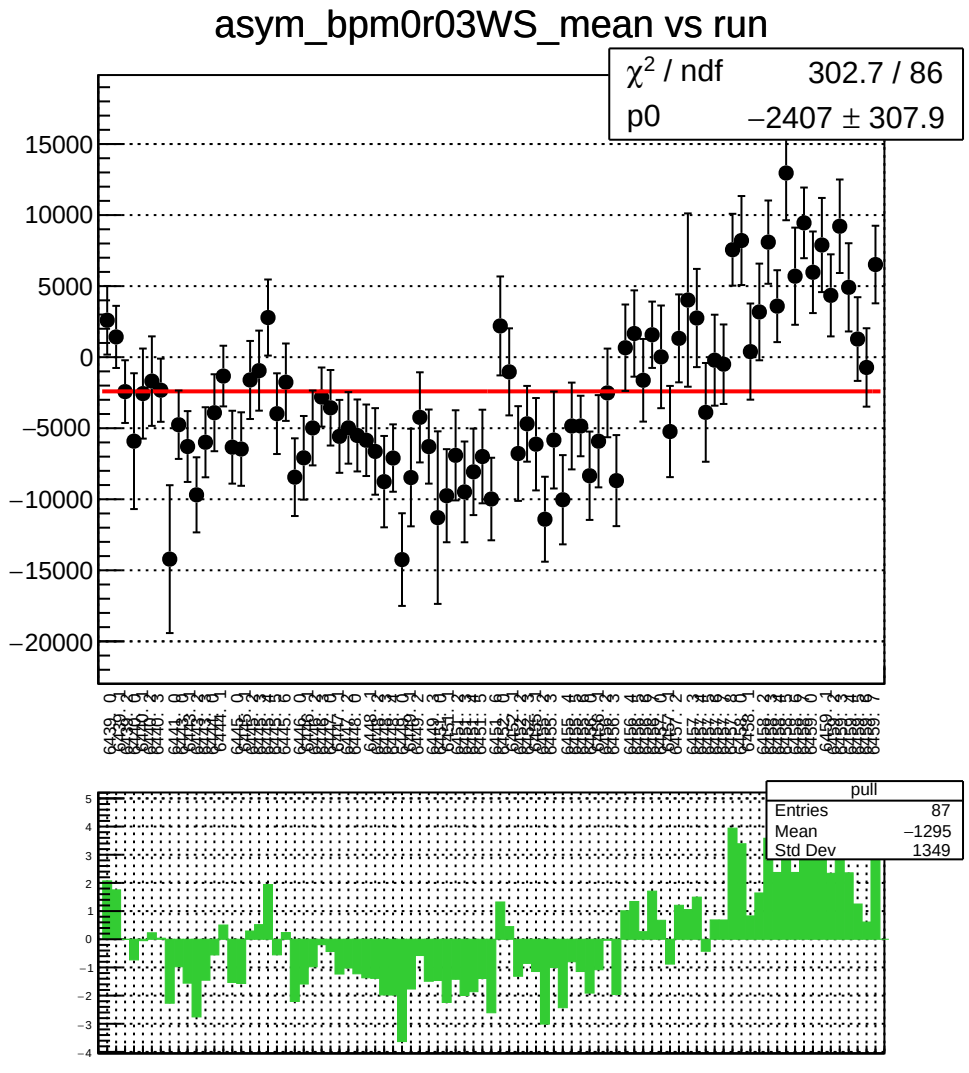

pull1D
Entries 87
Mean −0.05055
Std Dev 2.499
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

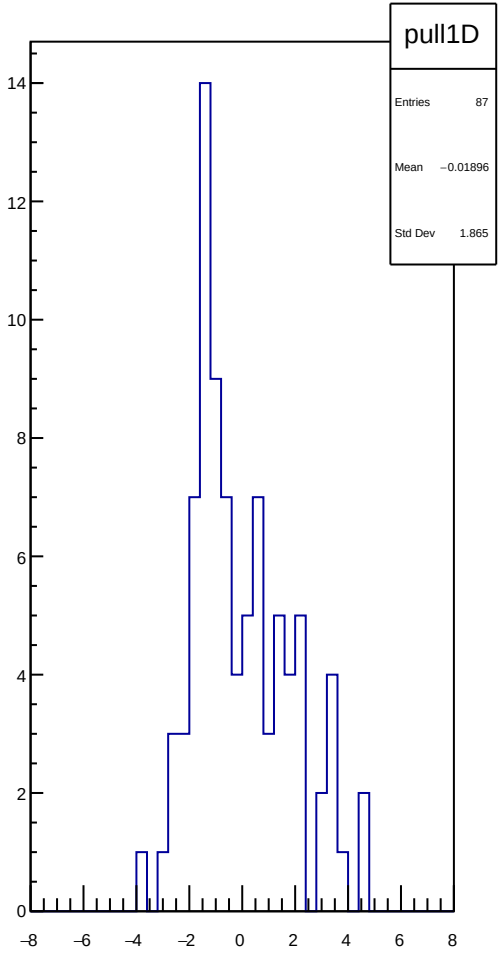

asym_bpm0l09WS_rms vs run
χ² / ndf 2.793e+04 / 86
p0 201.5 ± 0.1568
550
500
450
400
350
300
250
200
150

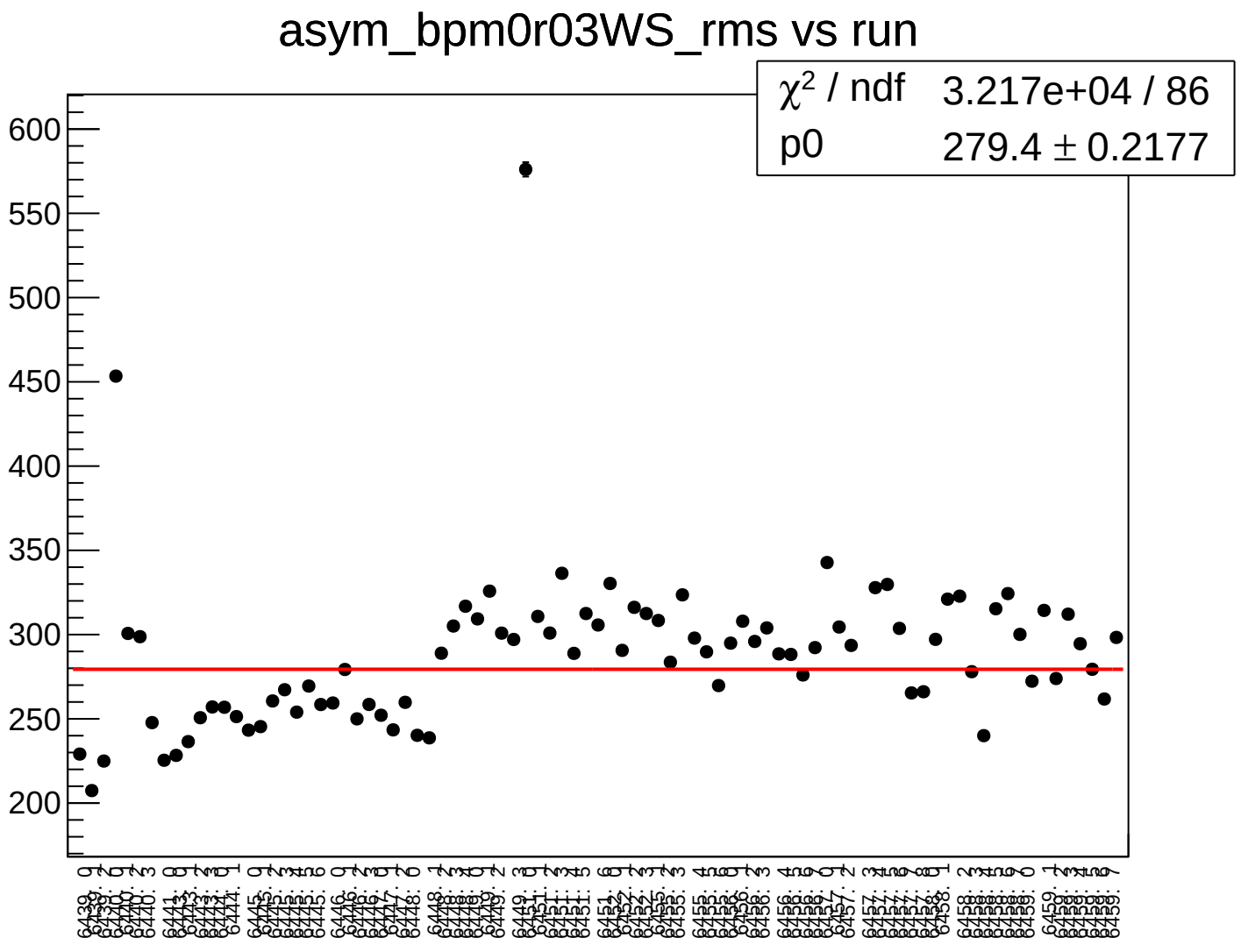

asym_bpm0l10WS_mean vs run
χ² / ndf 538.9 / 86
p0 −1899 ± 223.5
pull
Entries 87
Mean −813.1
Std Dev 867.2

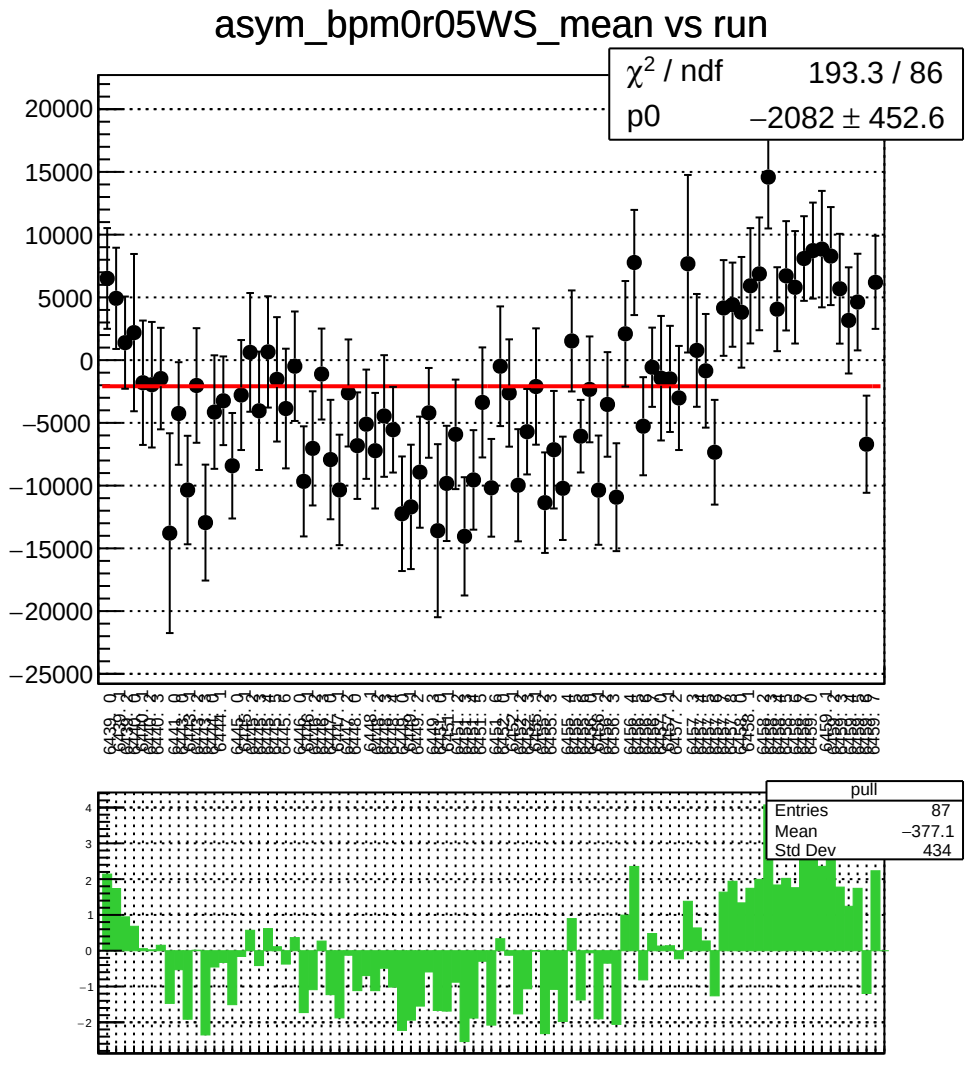

pull1D
Entries 87
Mean −0.04384
Std Dev 2.488

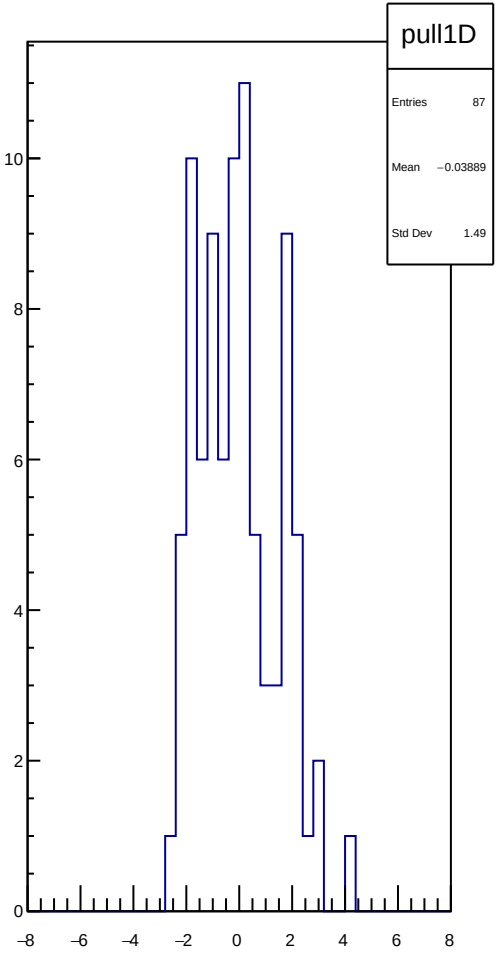

asym_bpm0l10WS_rms vs run
χ^2 / ndf 2.852e+04 / 86
p0 203.1 ± 0.1581
600
500
400
300
200

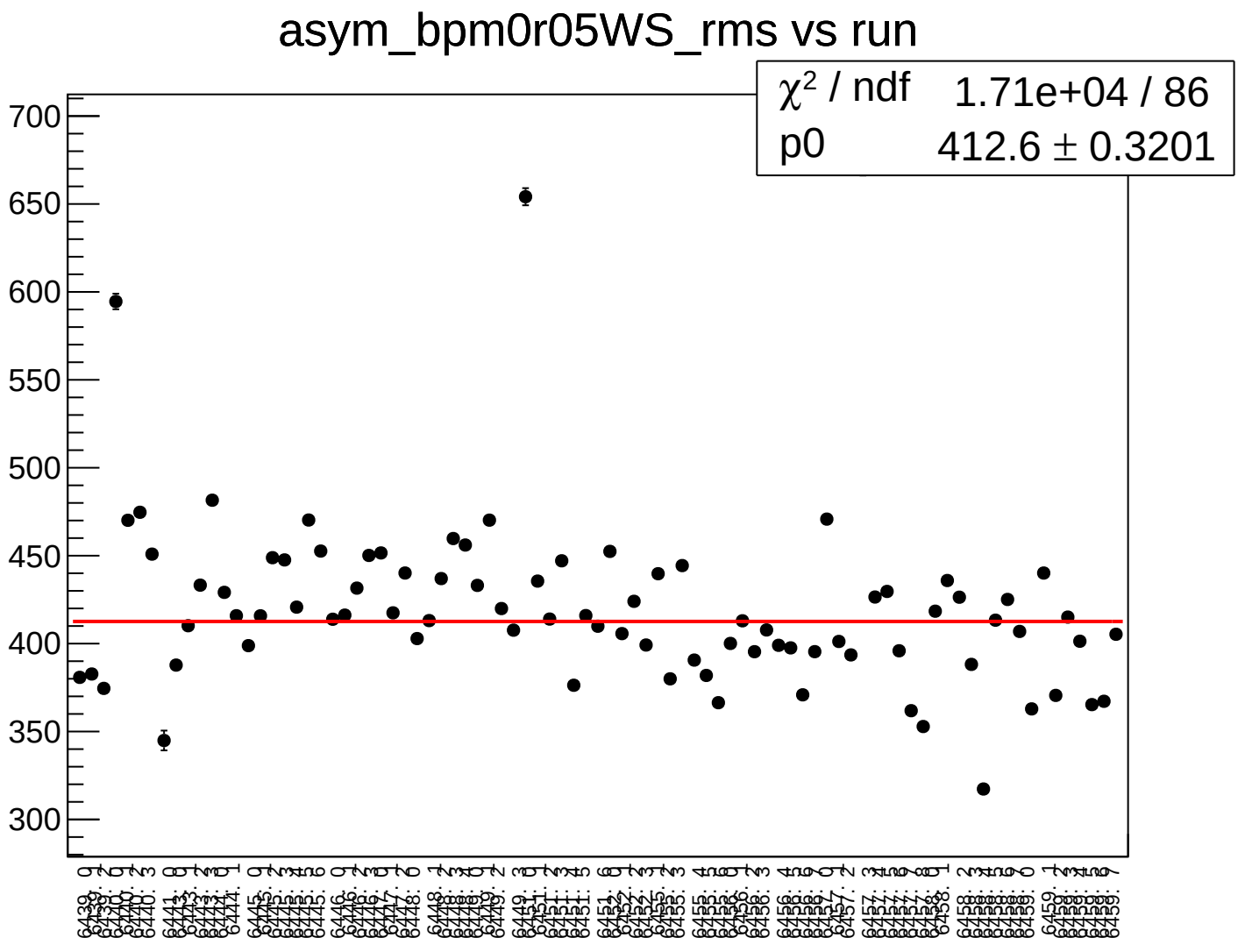

asym_bpm0r03WS_mean vs run
χ² / ndf 302.7 / 86
p0 −2407 ± 307.9
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 87
Mean −1295
Std Dev 1349
5
4
3
2
1
0
−1
−2
−3
−4

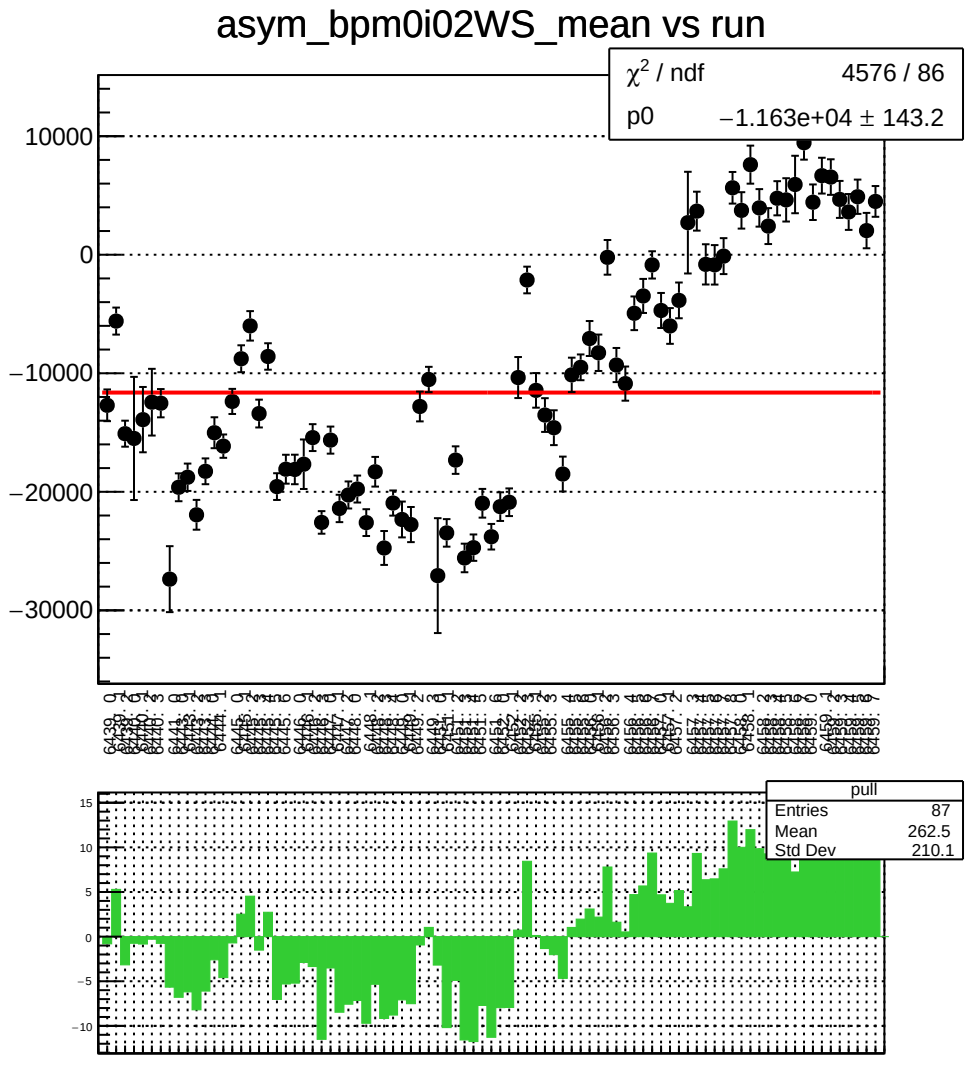

pull1D
Entries 87
Mean −0.01896
Std Dev 1.865
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

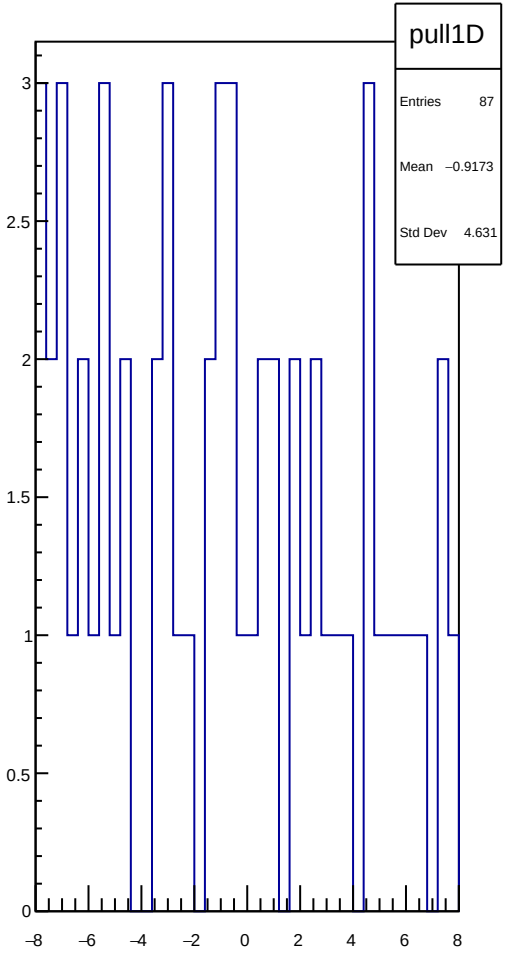

asym_bpm0r03WS_rms vs run
χ^2 / ndf 3.217e+04 / 86
p0 279.4 ± 0.2177
600
550
500
450
400
350
300
250
200

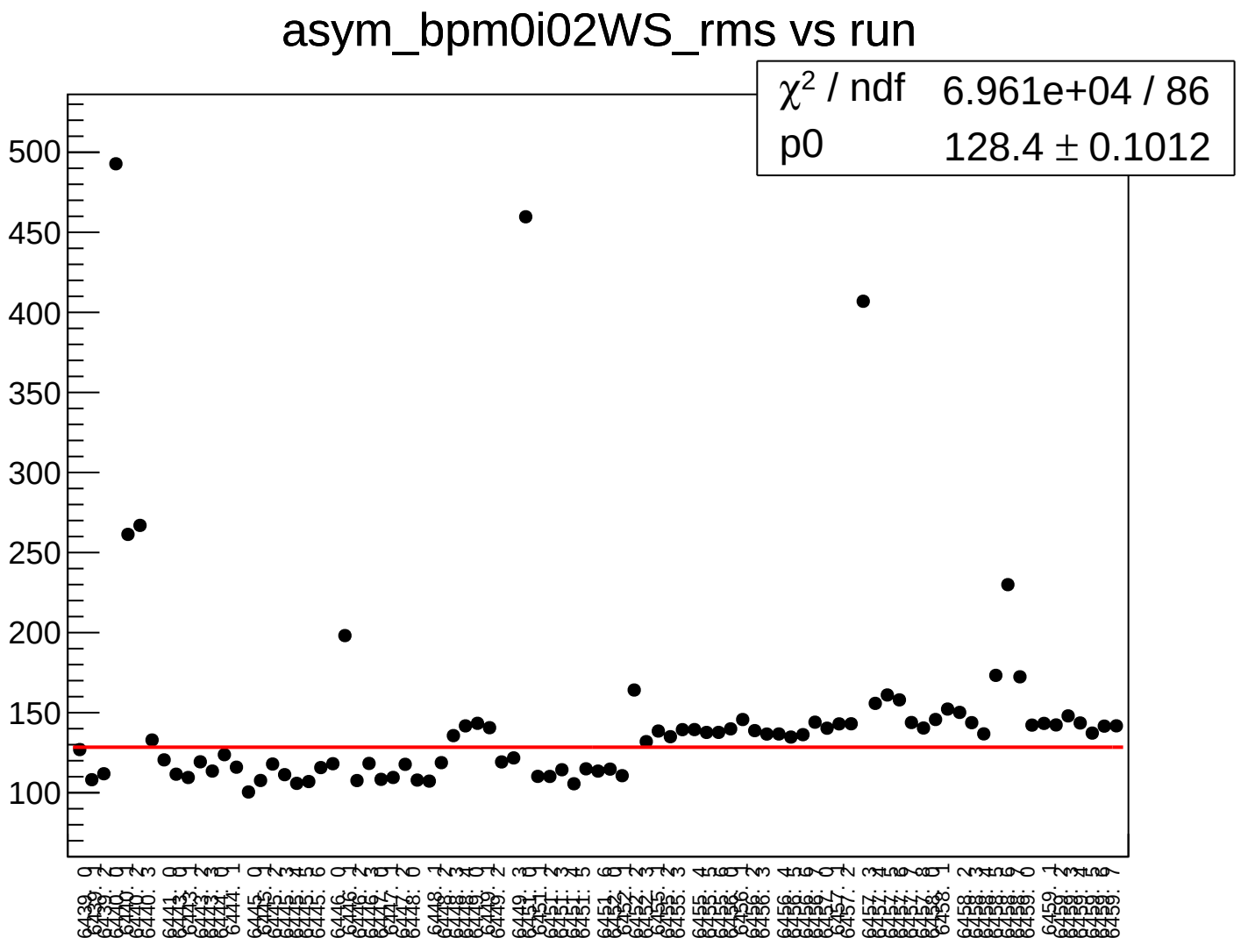

asym_bpm0r05WS_mean vs run
χ² / ndf 193.3 / 86
p0 −2082 ± 452.6
pull
Entries 87
Mean −377.1
Std Dev 434

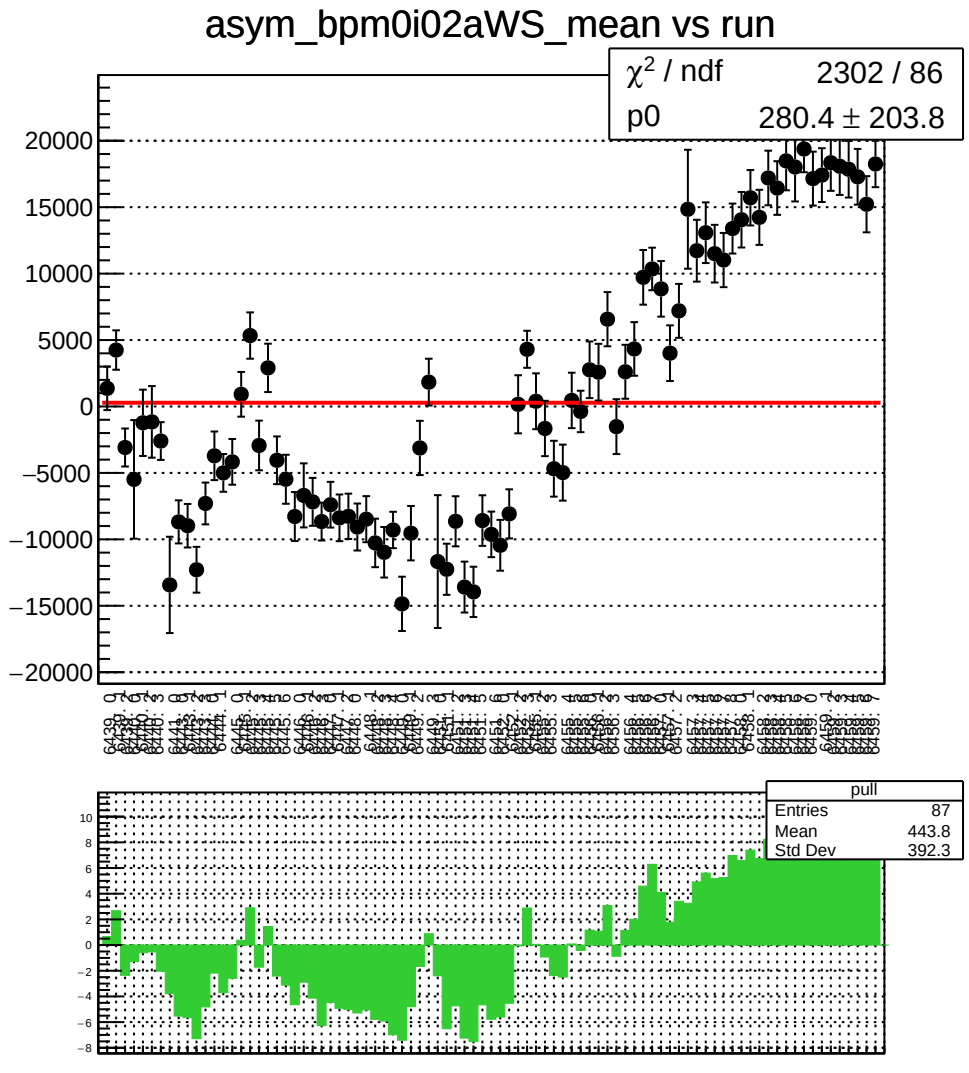

pull1D
Entries 87
Mean −0.03889
Std Dev 1.49

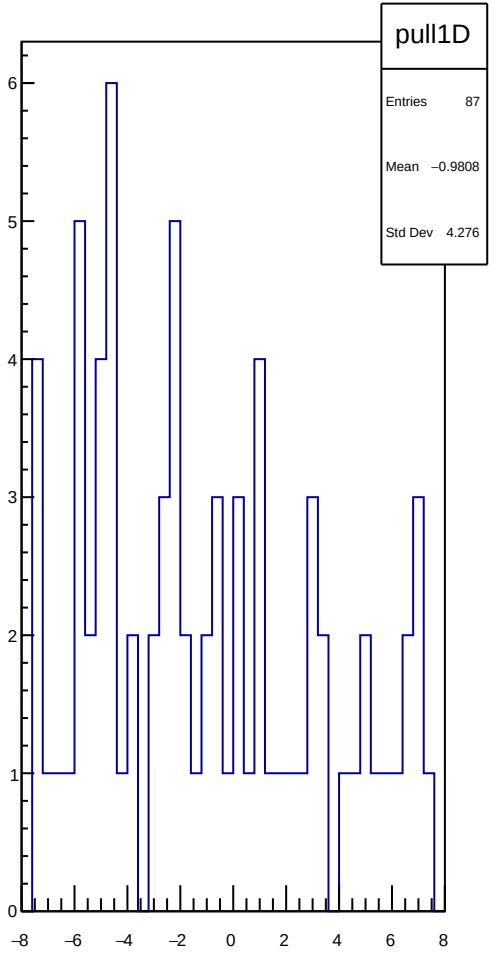

asym_bpm0r05WS_rms vs run
χ² / ndf 1.71e+04 / 86
p0 412.6 ± 0.3201
700
650
600
550
500
450
400
350
300

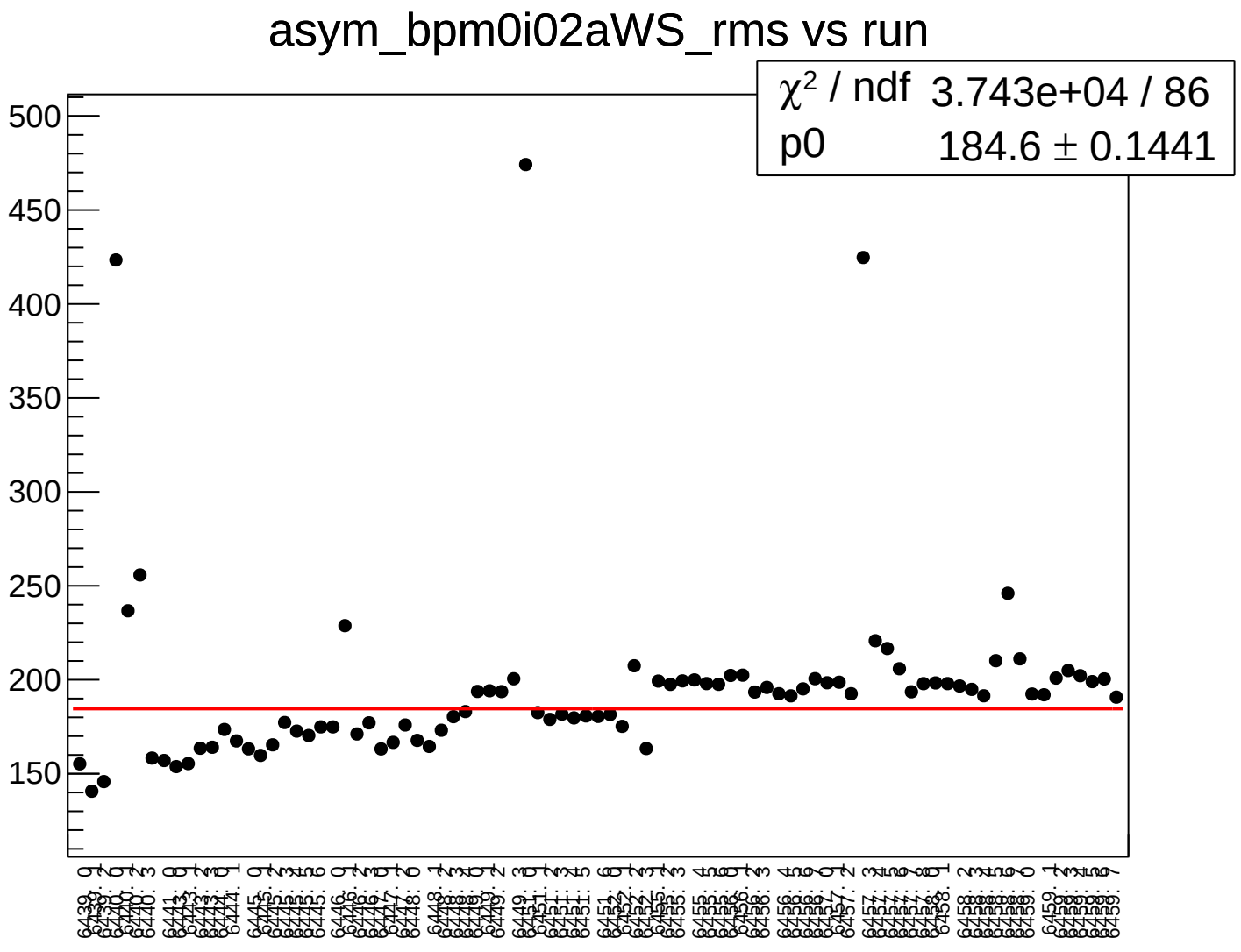

asym_bpm0i02WS_mean vs run
χ² / ndf 4576 / 86
p0 −1.163e+04 ± 143.2
10000
0
−10000
−20000
−30000
pull
Entries 87
Mean 262.5
Std Dev 210.1
15
10
5
0
−5
−10

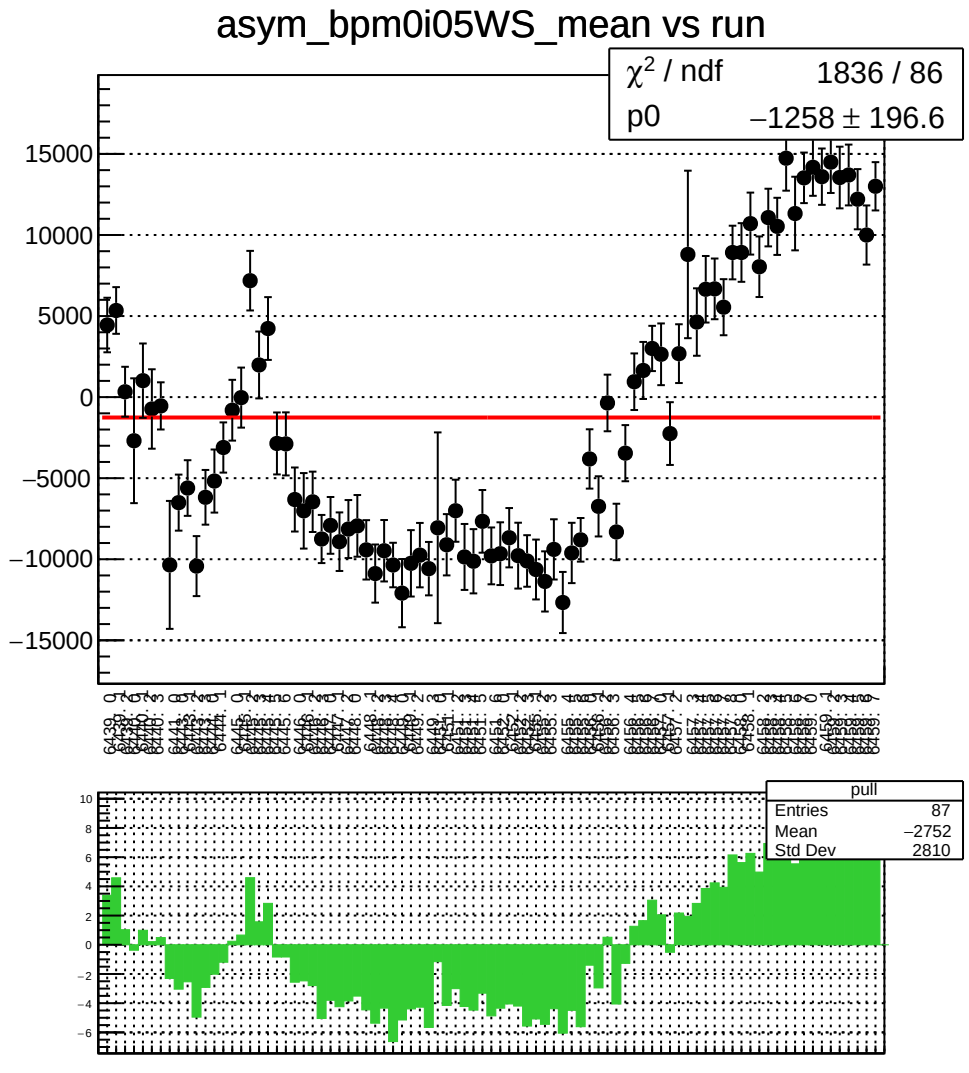

pull1D
Entries 87
Mean −0.9173
Std Dev 4.631
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

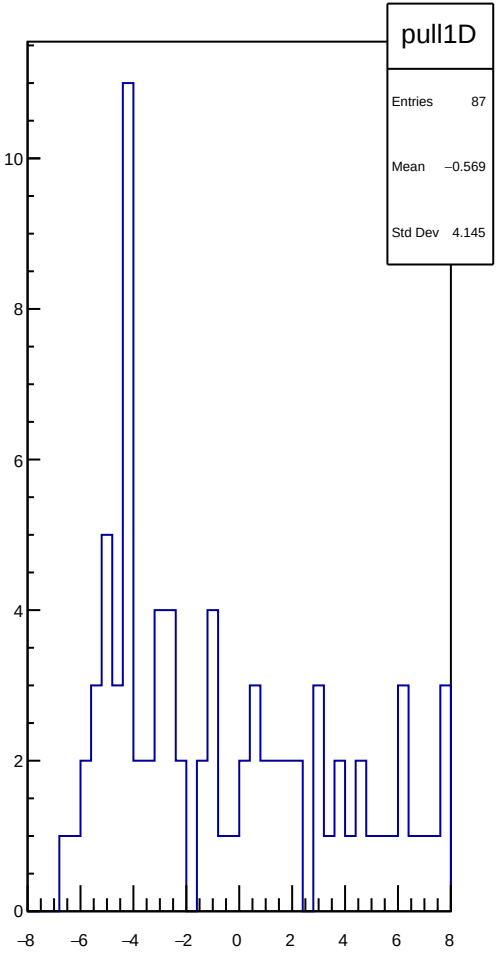

asym_bpm0i02WS_rms vs run
χ^2 / ndf 6.961e+04 / 86
p0 128.4 ± 0.1012
500
450
400
350
300
250
200
150
100

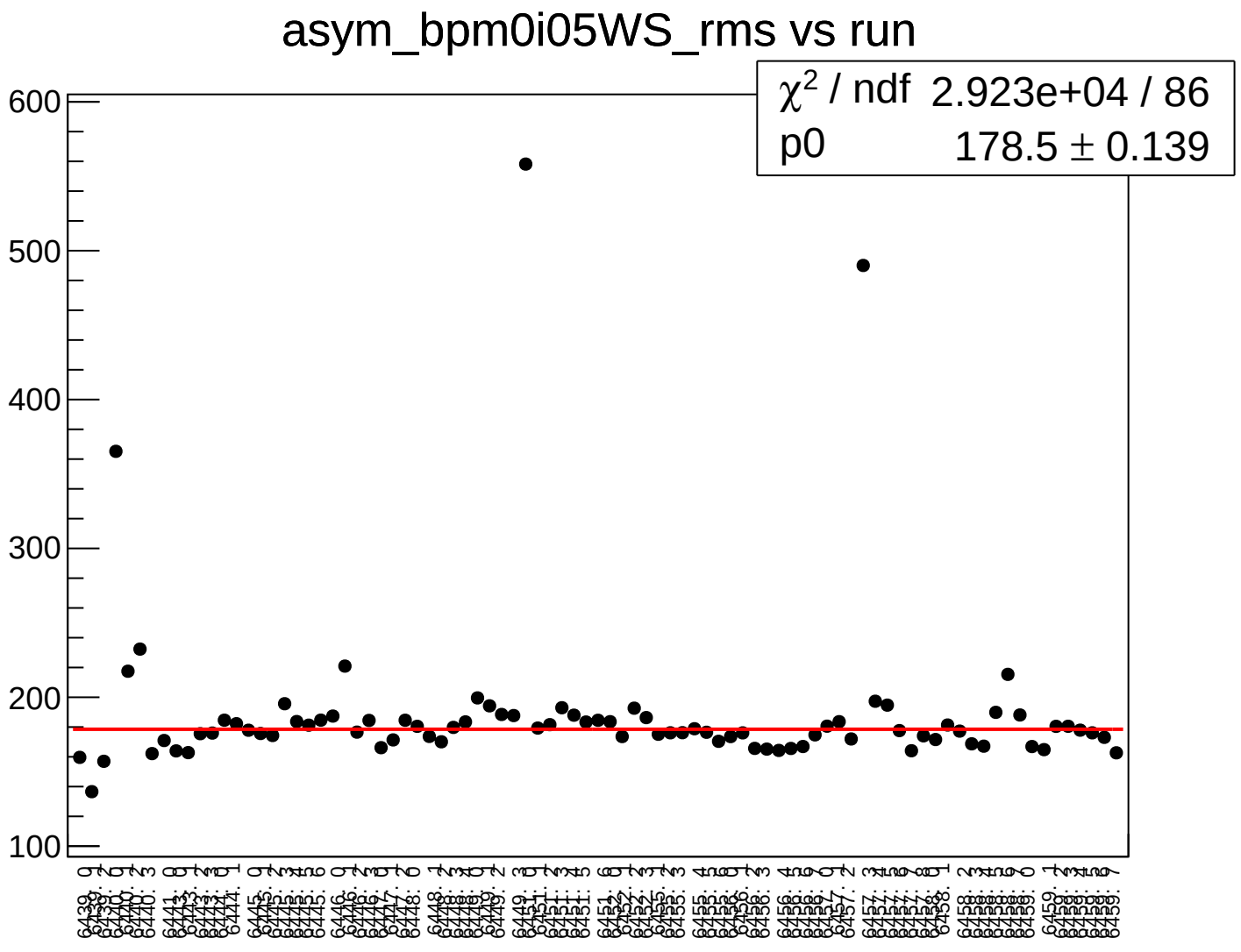

asym_bpm0i02aWS_mean vs run
χ² / ndf 2302 / 86
p0 280.4 ± 203.8
pull
Entries 87
Mean 443.8
Std Dev 392.3

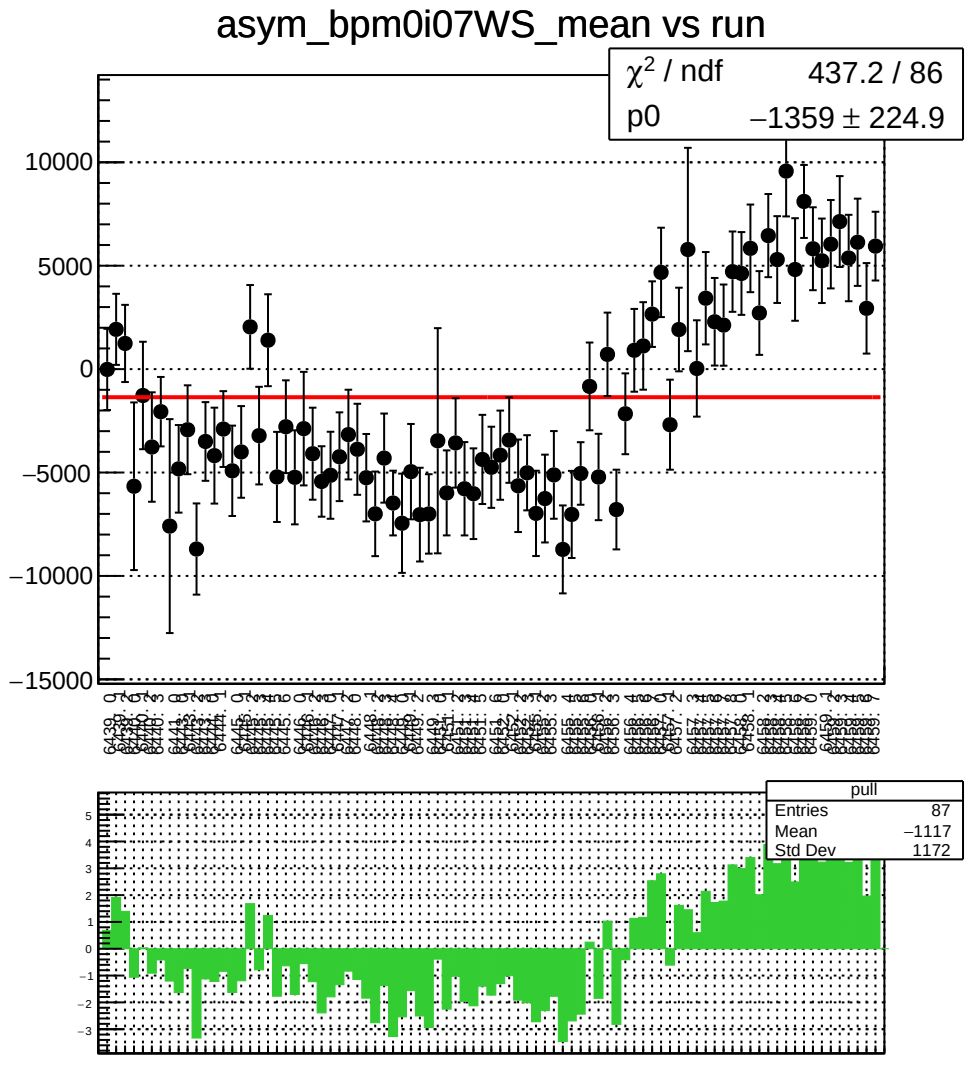

pull1D
Entries 87
Mean −0.9808
Std Dev 4.276

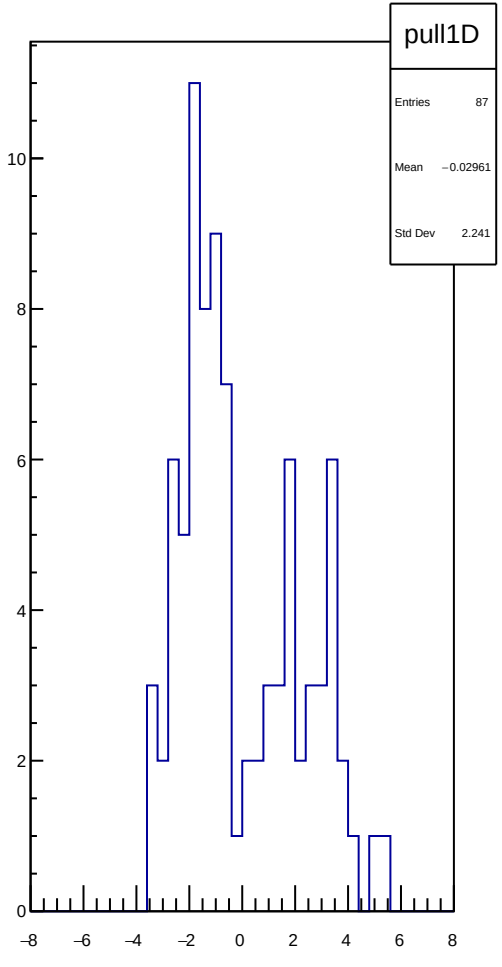

asym_bpm0i02aWS_rms vs run
χ² / ndf 3.743e+04 / 86
p0 184.6 ± 0.1441
500
450
400
350
300
250
200
150

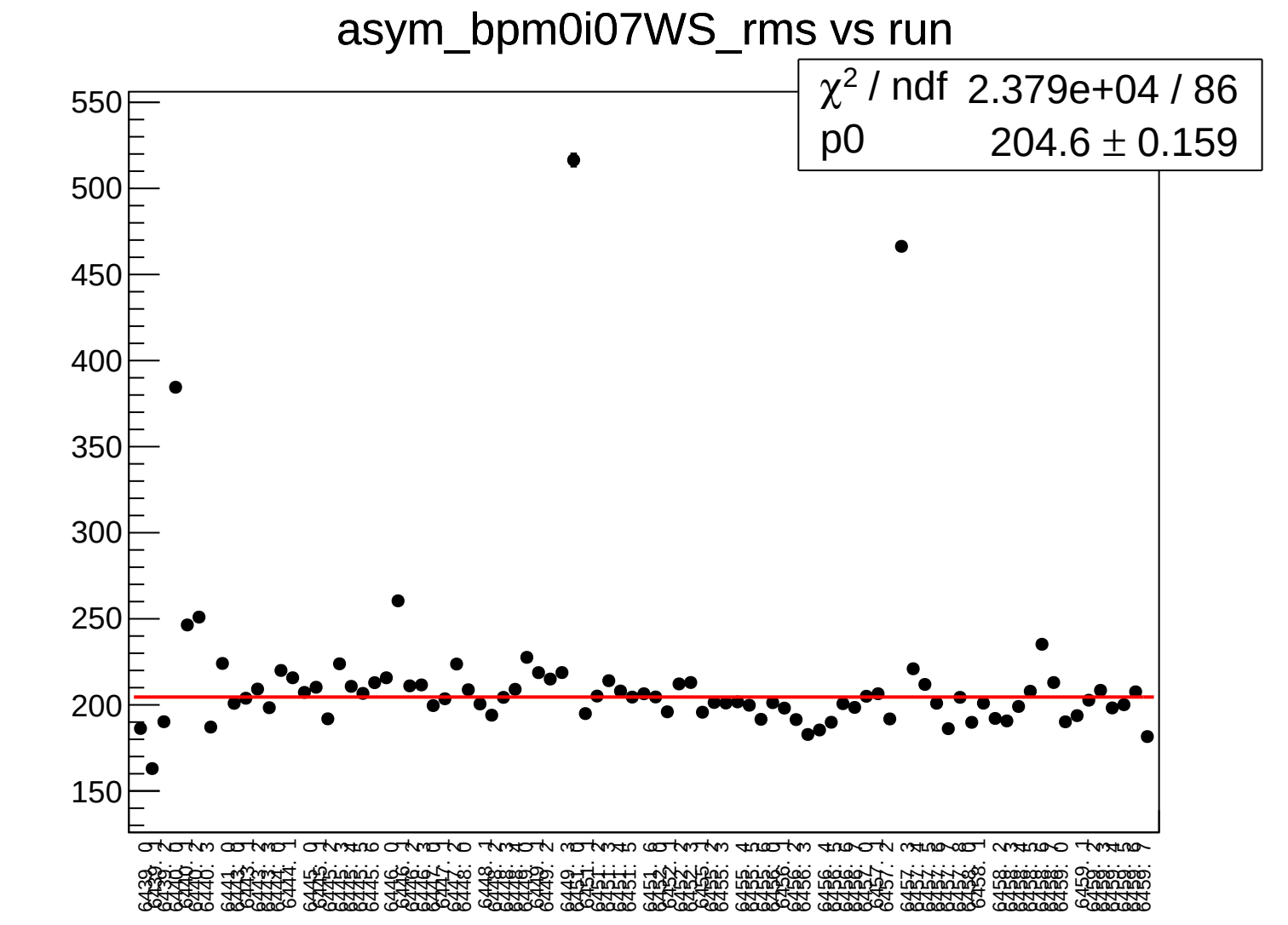

asym_bpm0i05WS_mean vs run
χ² / ndf 1836 / 86
p0 −1258 ± 196.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 87
Mean −2752
Std Dev 2810
10
8
6
4
2
0
−2
−4
−6

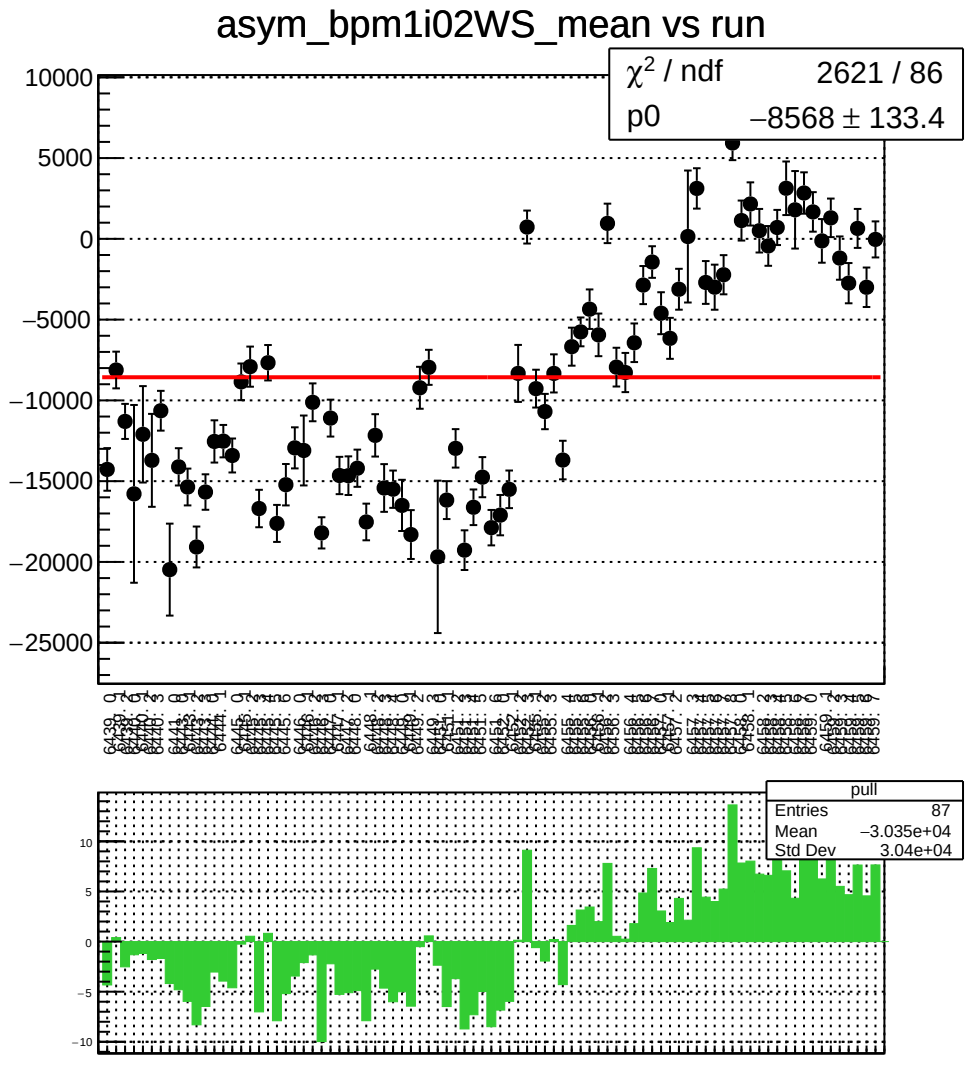

pull1D
Entries 87
Mean −0.569
Std Dev 4.145
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

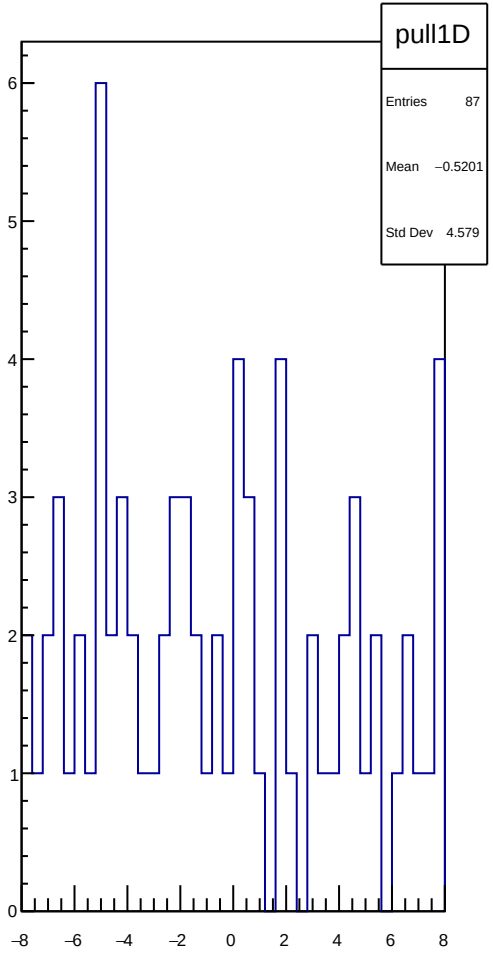

asym_bpm0i05WS_rms vs run
χ^2 / ndf 2.923e+04 / 86
p0 178.5 ± 0.139
600
500
400
300
200
100

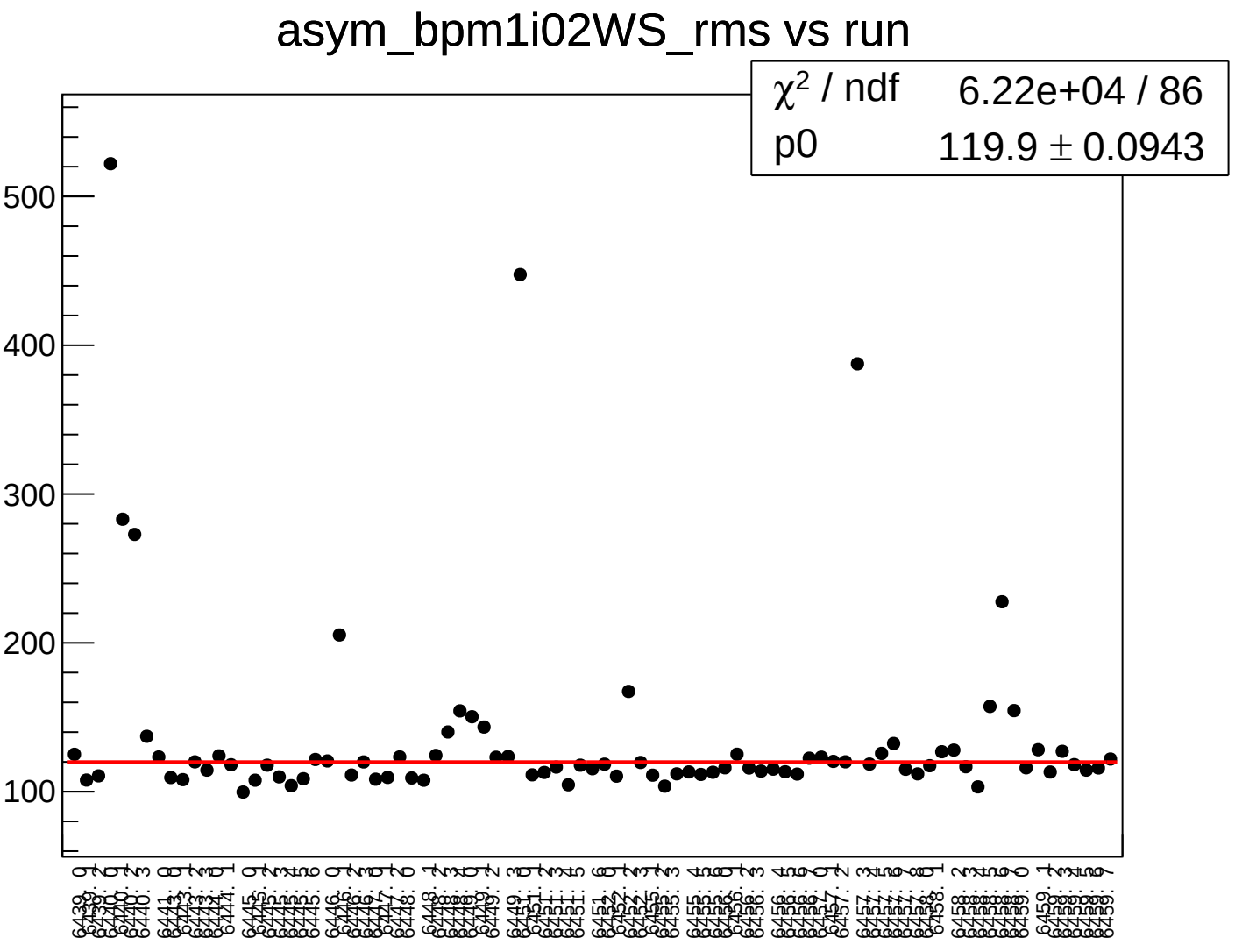

asym_bpm0i07WS_mean vs run
χ^2 / ndf 437.2 / 86
p0 −1359 ± 224.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 87
Mean −1117
Std Dev 1172
5
4
3
2
1
0
−1
−2
−3

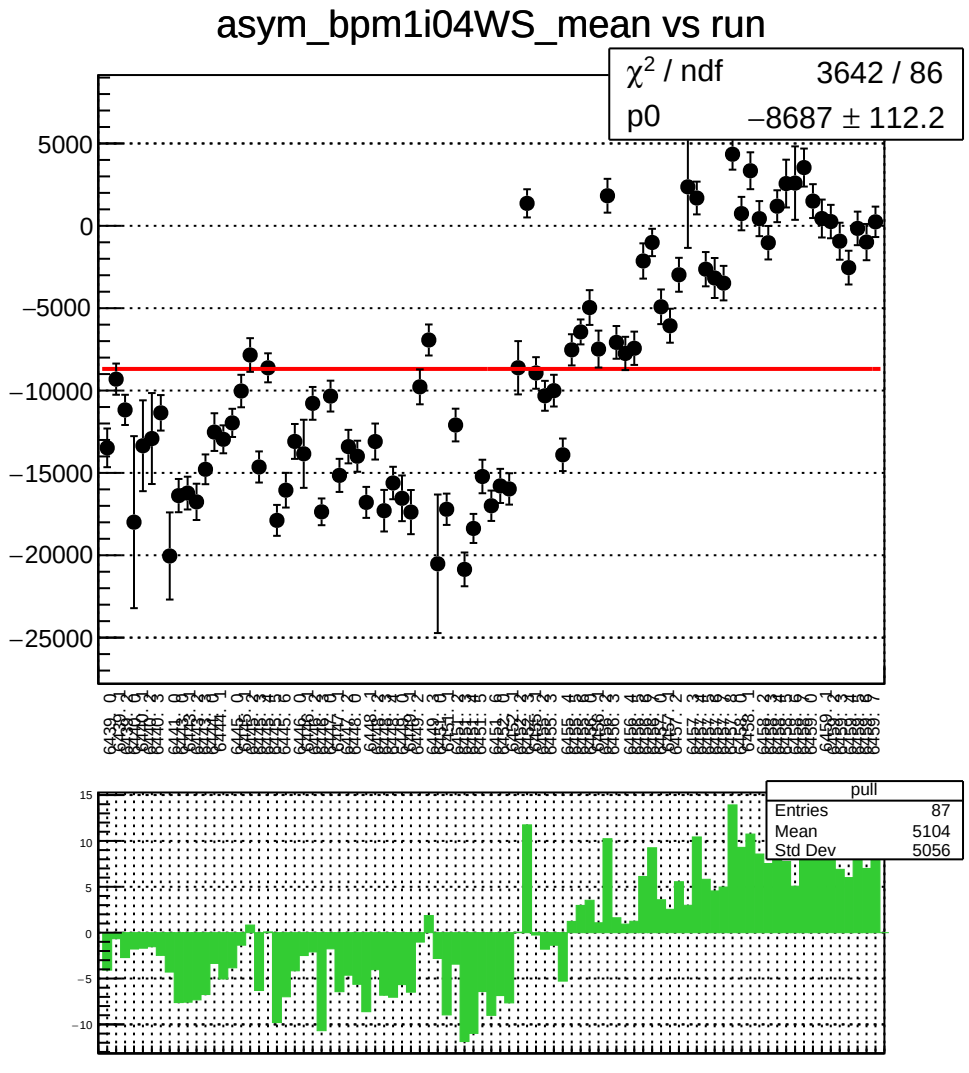

pull1D
Entries 87
Mean −0.02961
Std Dev 2.241
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

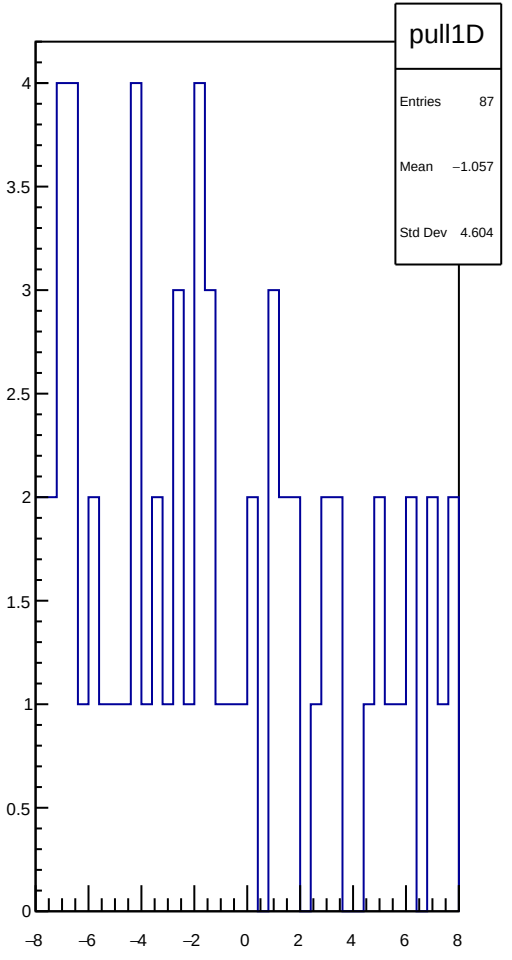

asym_bpm0i07WS_rms vs run
χ^2 / ndf 2.379e+04 / 86
p0 204.6 ± 0.159
550
500
450
400
350
300
250
200
150

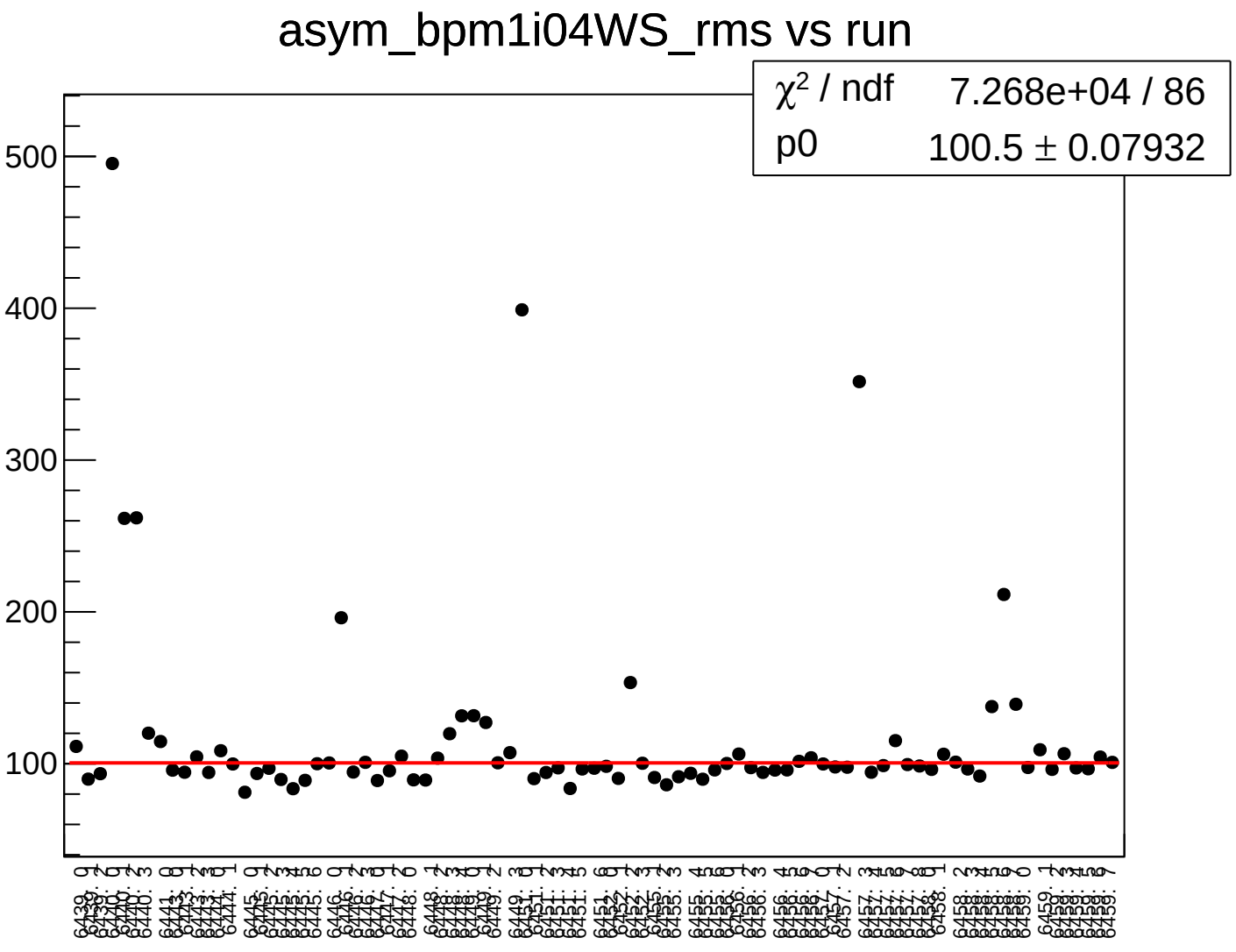

asym_bpm1i02WS_mean vs run
χ² / ndf 2621 / 86
p0 −8568 ± 133.4
pull
Entries 87
Mean −3.035e+04
Std Dev 3.04e+04

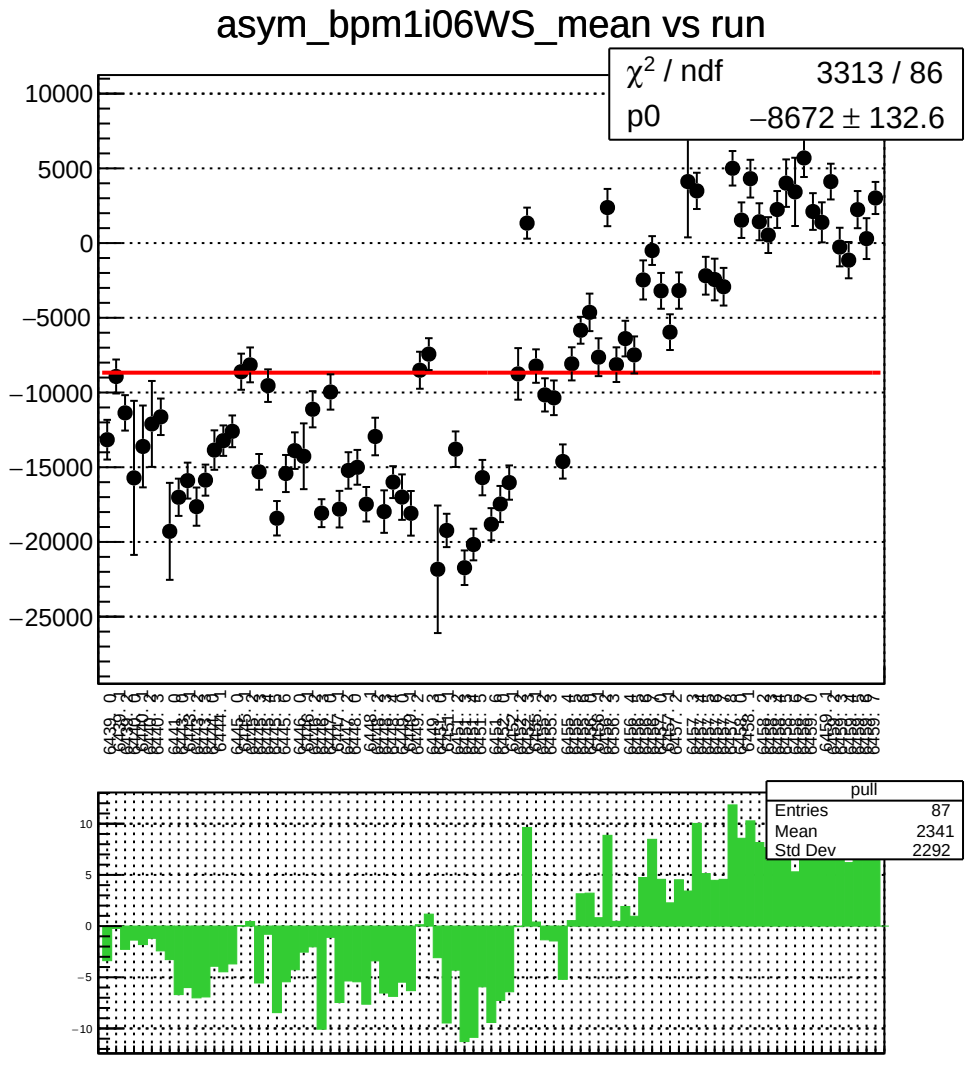

pull1D
Entries 87
Mean −0.5201
Std Dev 4.579

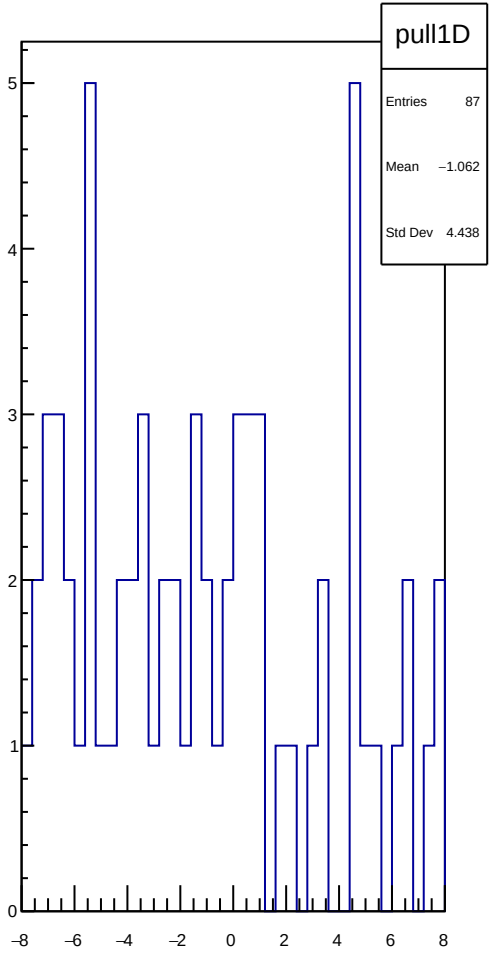

asym_bpm1i02WS_rms vs run
χ^2 / ndf 6.22e+04 / 86
p0 119.9 ± 0.0943
500
400
300
200
100

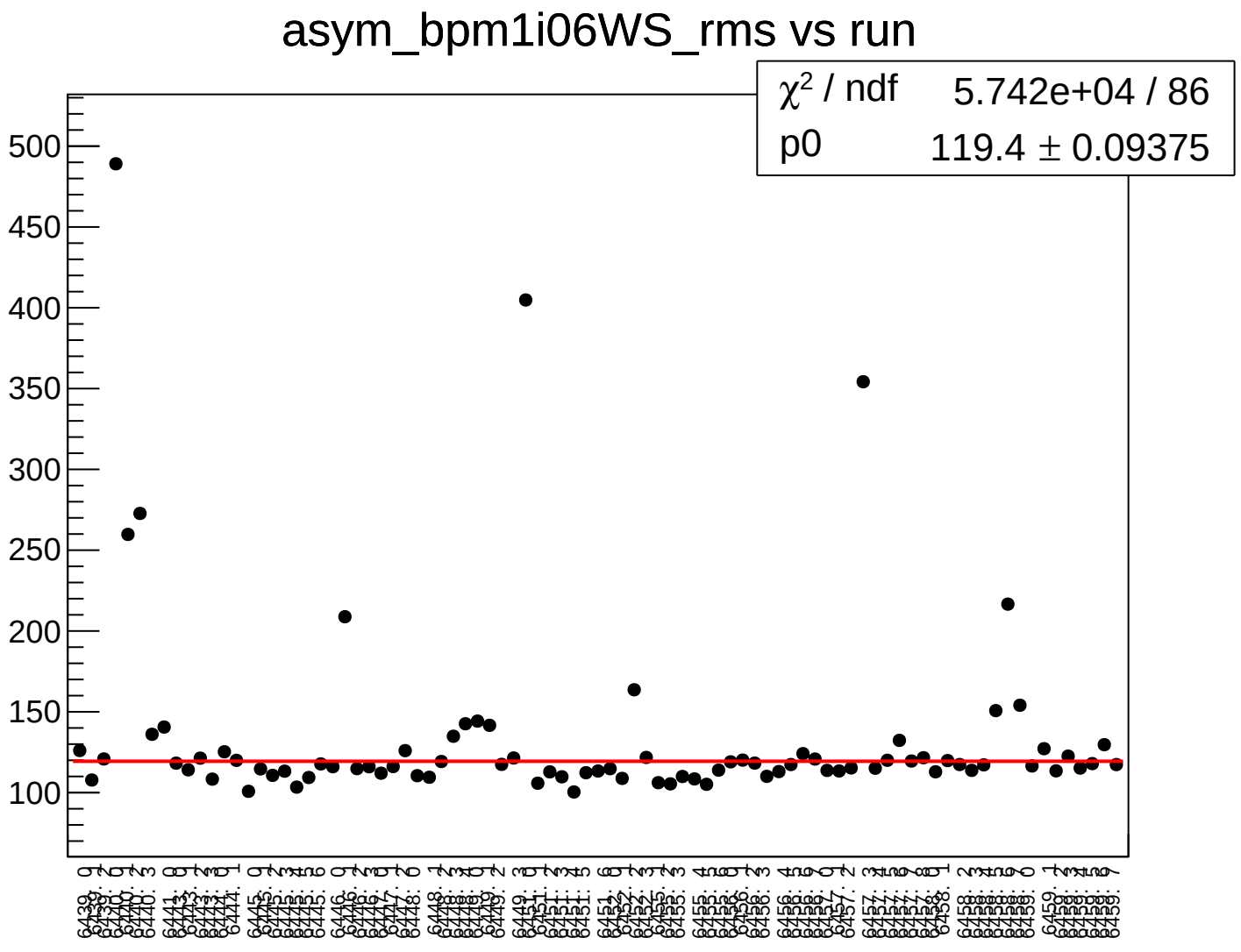

asym_bpm1i04WS_mean vs run
χ² / ndf 3642 / 86
p0 −8687 ± 112.2
pull
Entries 87
Mean 5104
Std Dev 5056

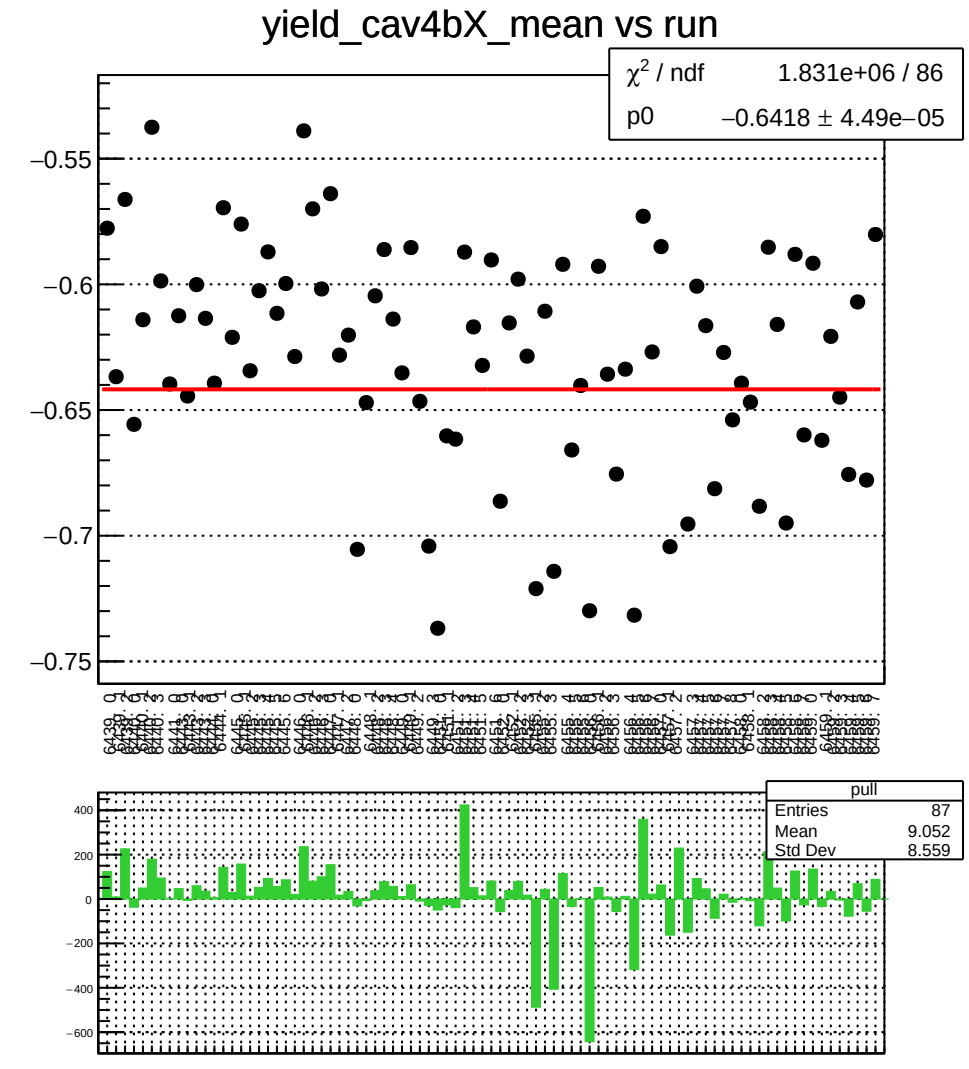

pull1D
Entries 87
Mean −1.057
Std Dev 4.604

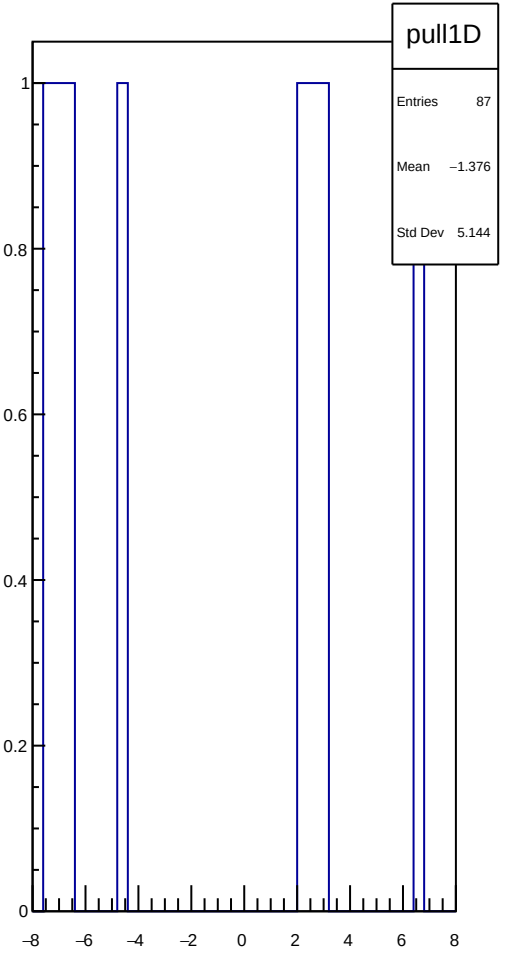

asym_bpm1i04WS_rms vs run
χ² / ndf 7.268e+04 / 86
p0 100.5 ± 0.07932
500
400
300
200
100

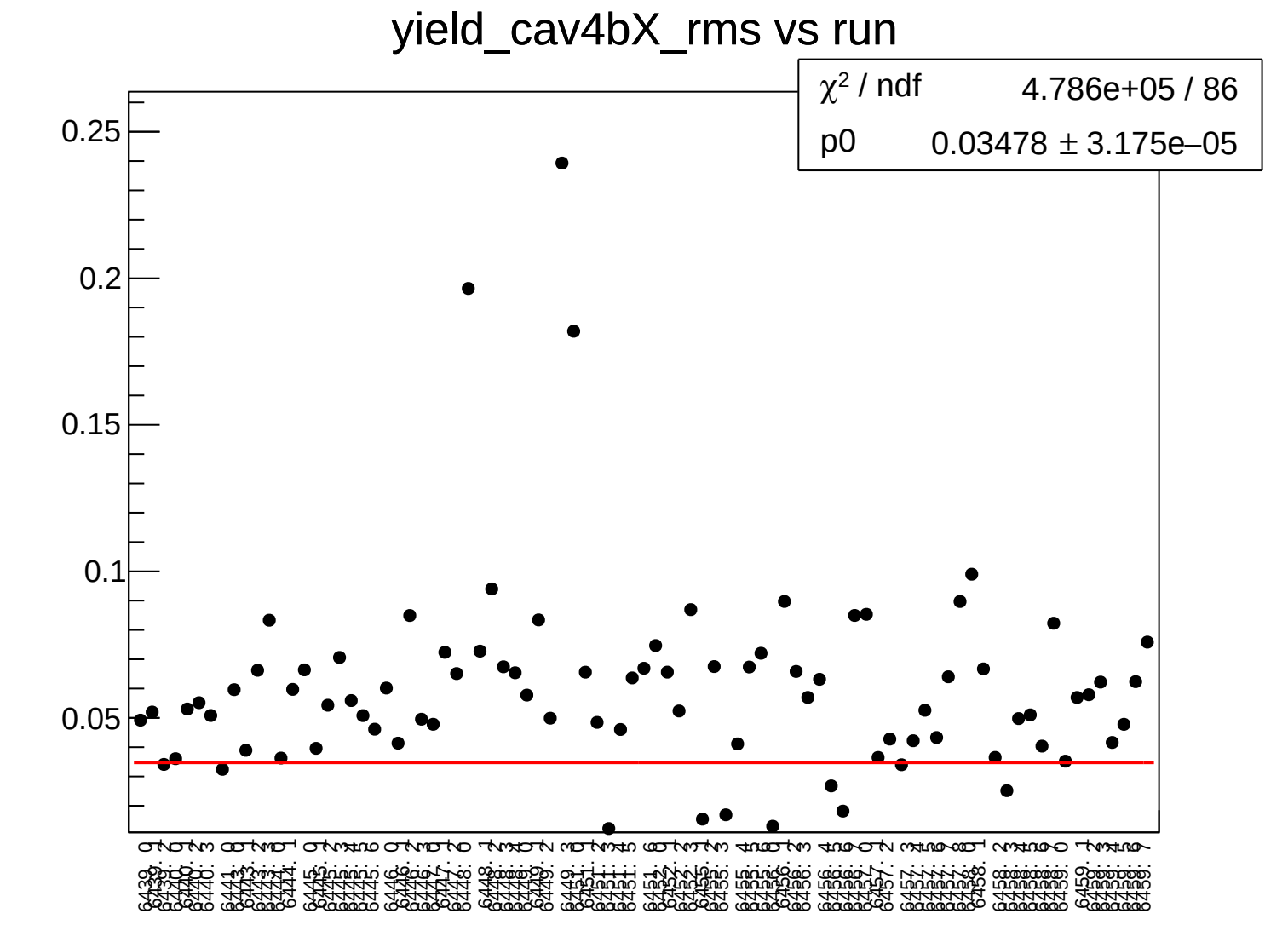

asym_bpm1i06WS_mean vs run
χ² / ndf 3313 / 86
p0 −8672 ± 132.6
pull
Entries 87
Mean 2341
Std Dev 2292

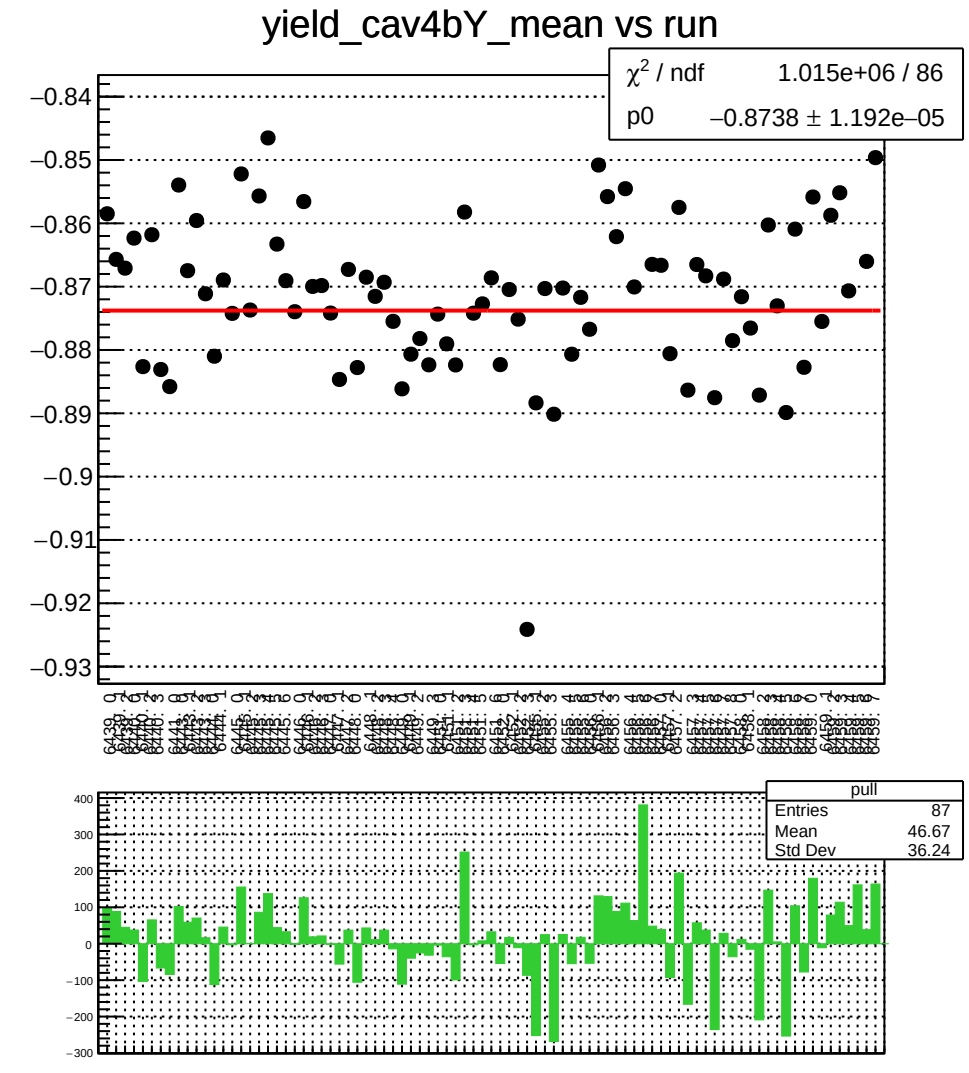

pull1D
Entries 87
Mean −1.062
Std Dev 4.438

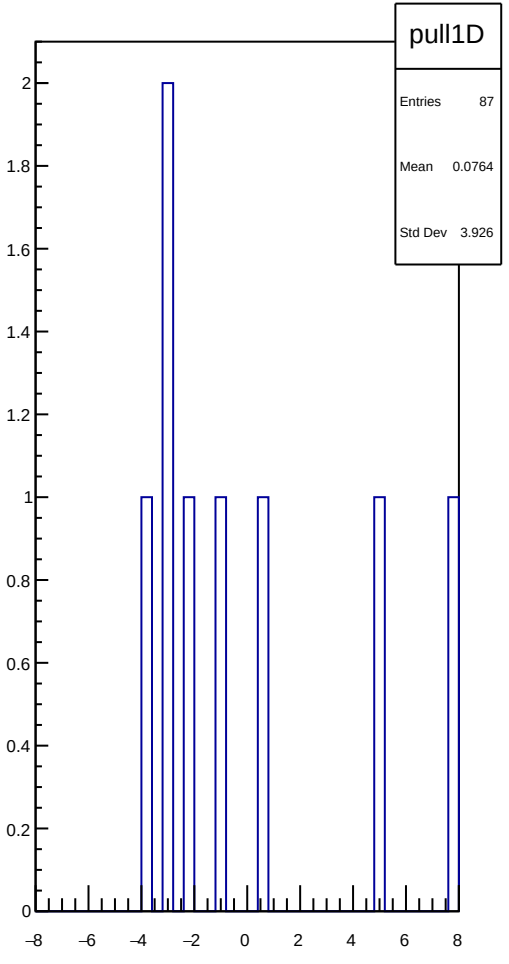

asym_bpm1i06WS_rms vs run
χ^2 / ndf 5.742e+04 / 86
p0 119.4 ± 0.09375
500
450
400
350
300
250
200
150
100

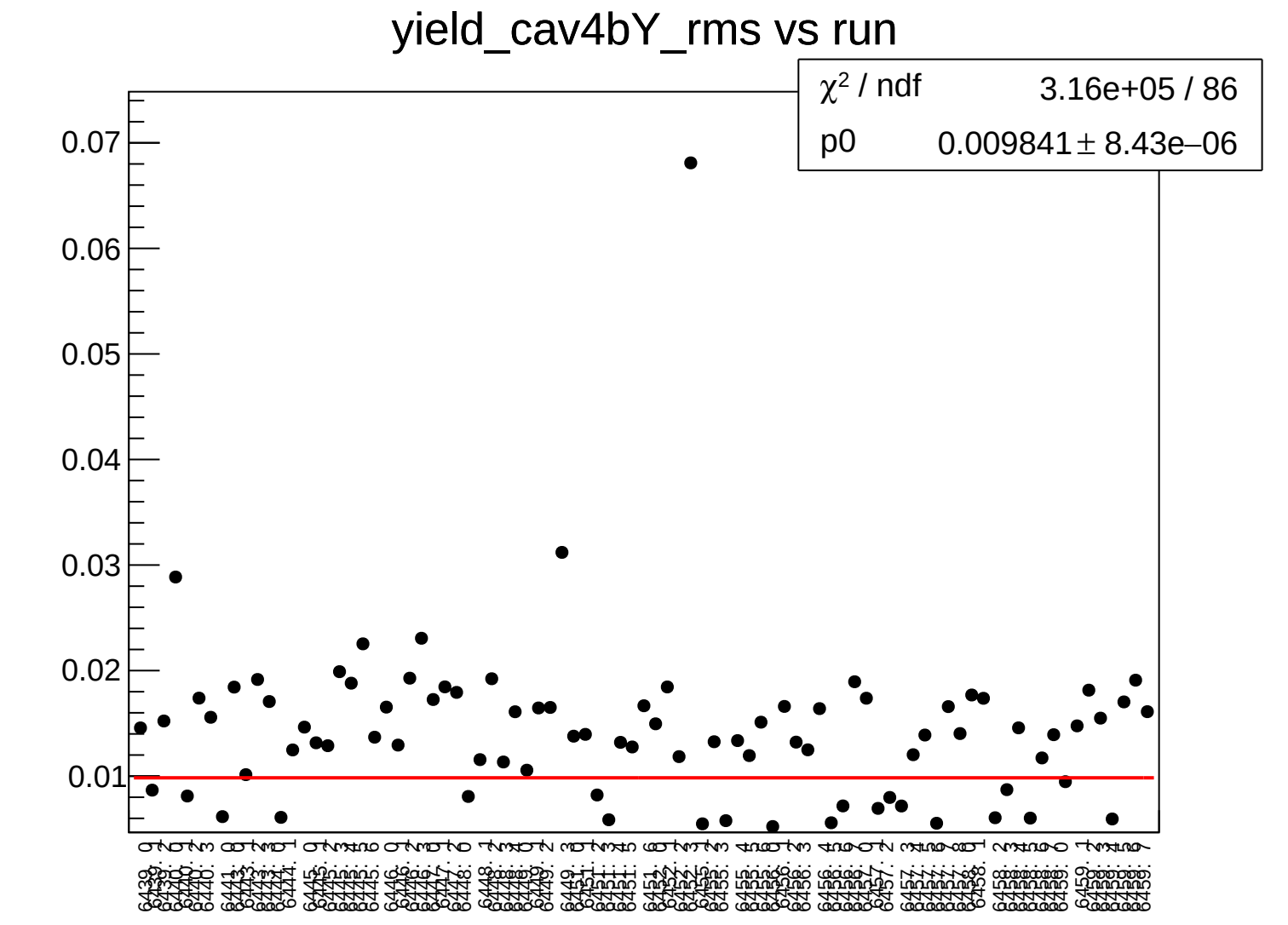

yield_cav4bX_mean vs run
χ² / ndf 1.831e+06 / 86
p0 −0.6418 ± 4.49e−05
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 87
Mean 9.052
Std Dev 8.559
400
200
0
−200
−400
−600

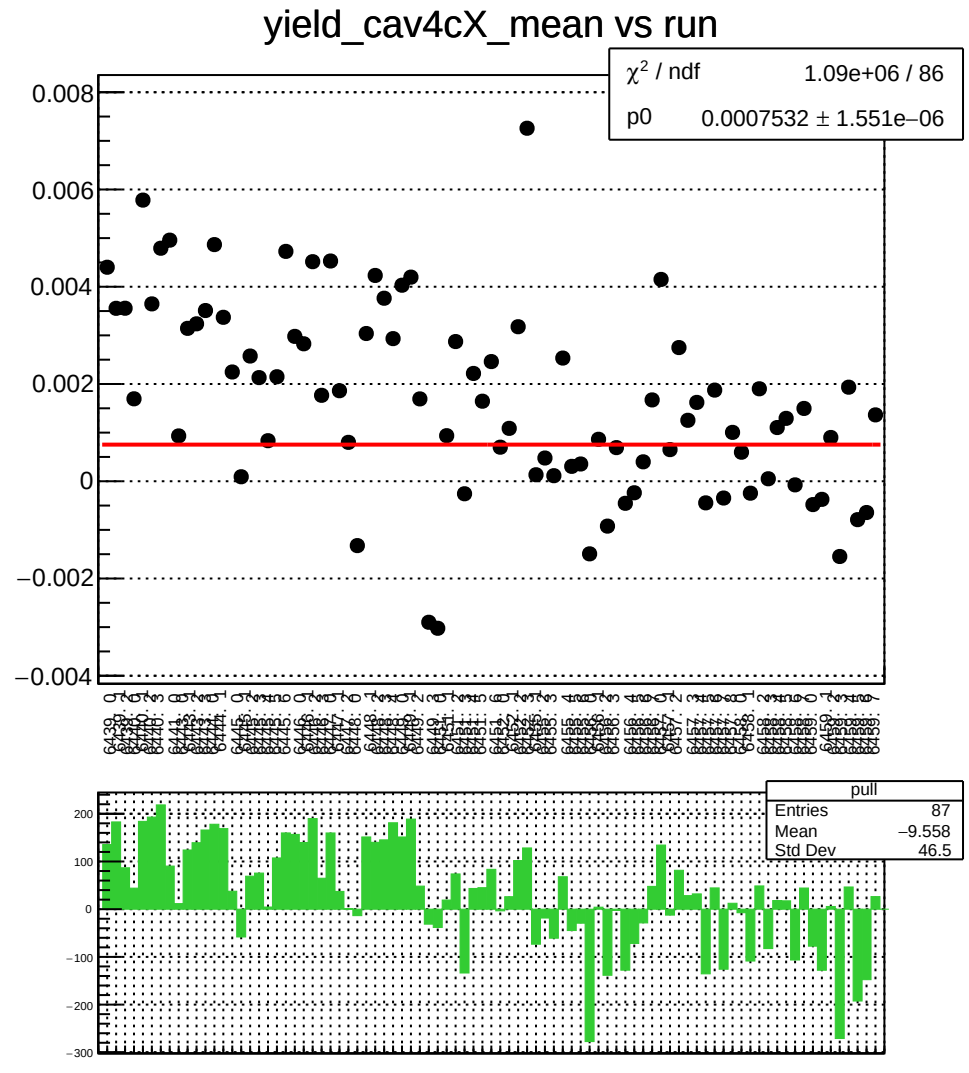

pull1D
Entries 87
Mean −1.376
Std Dev 5.144
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

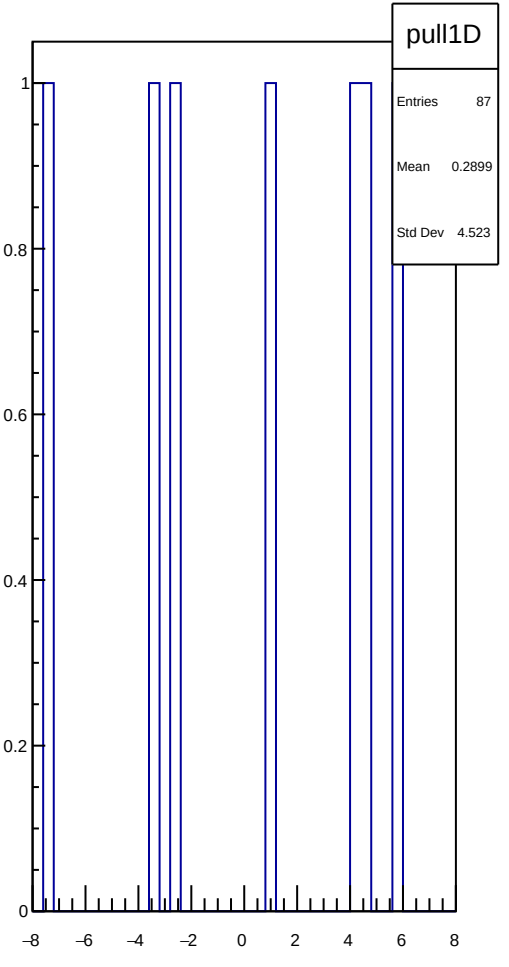

yield_cav4bX_rms vs run
χ² / ndf 4.786e+05 / 86
p0 0.03478 ± 3.175e−05
0.25
0.2
0.15
0.1
0.05

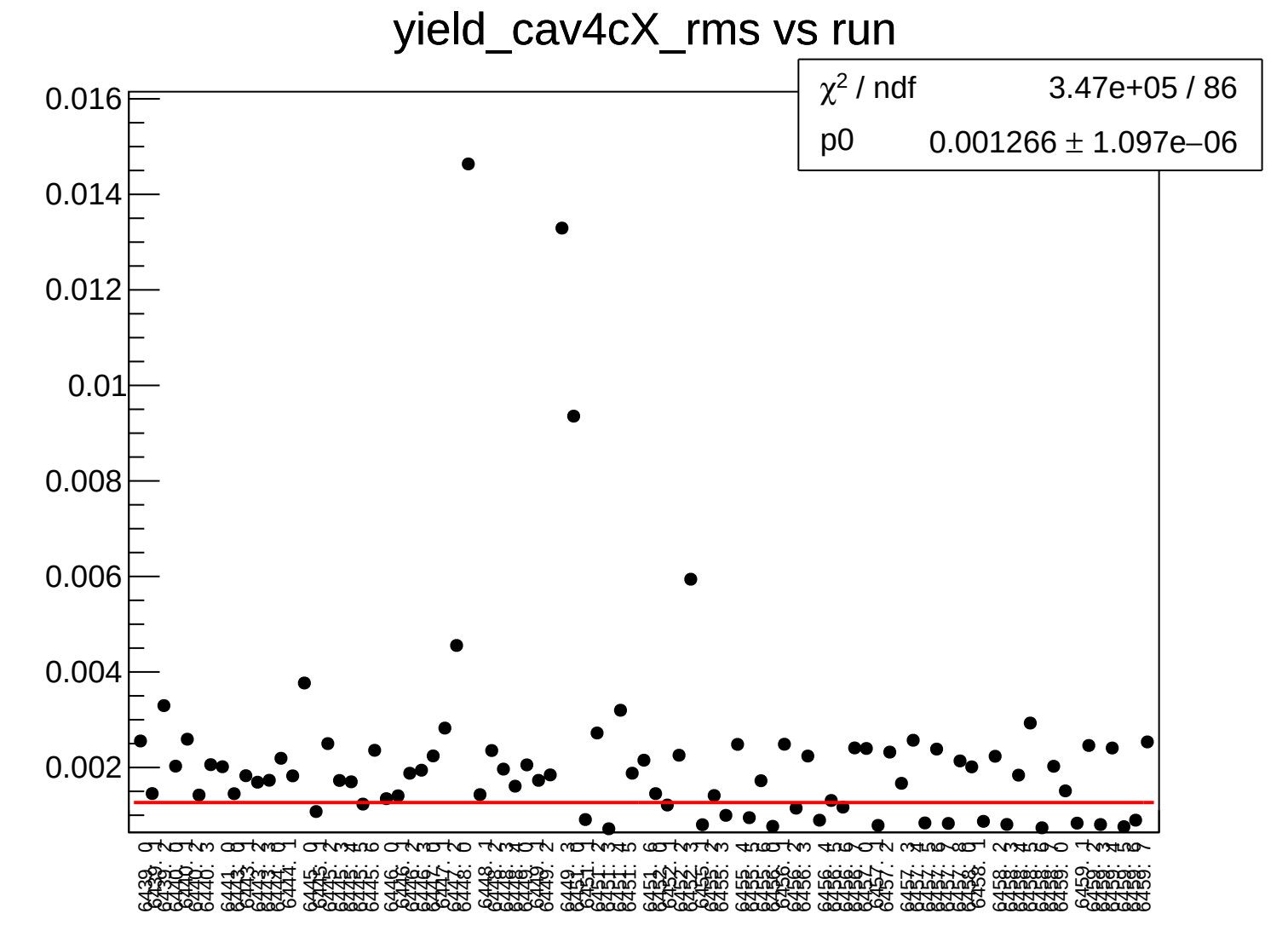

yield_cav4bY_mean vs run
χ² / ndf 1.015e+06 / 86
p0 −0.8738 ± 1.192e−05
pull
Entries 87
Mean 46.67
Std Dev 36.24

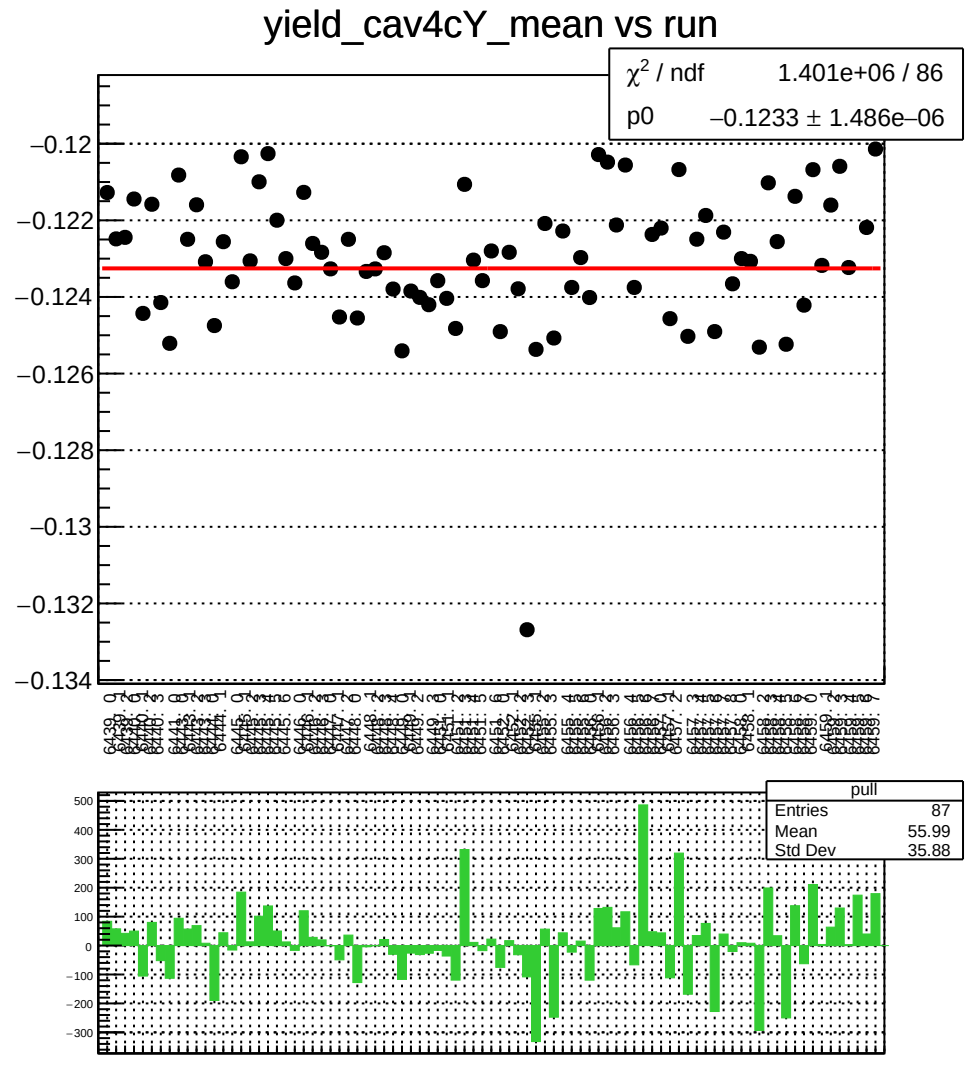

pull1D
Entries 87
Mean 0.0764
Std Dev 3.926

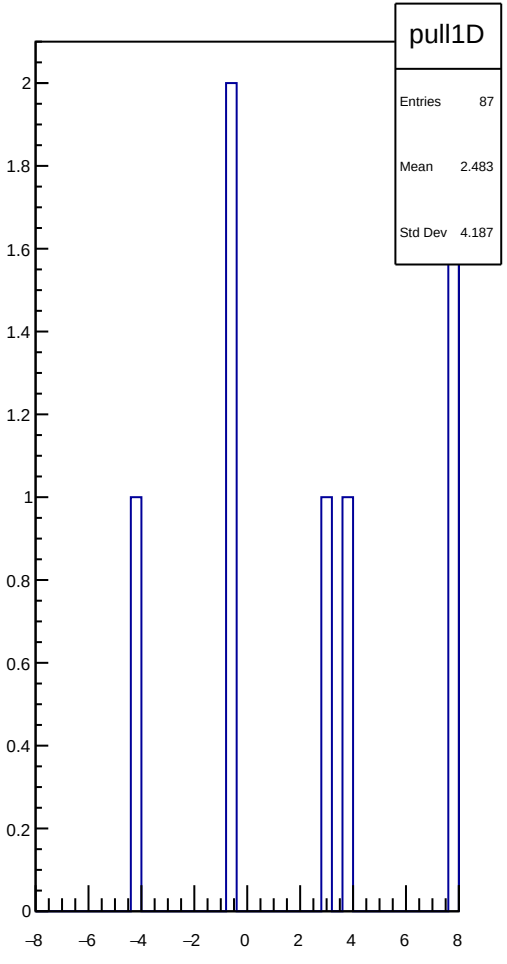

yield_cav4bY_rms vs run
χ² / ndf 3.16e+05 / 86
p0 0.009841 ± 8.43e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

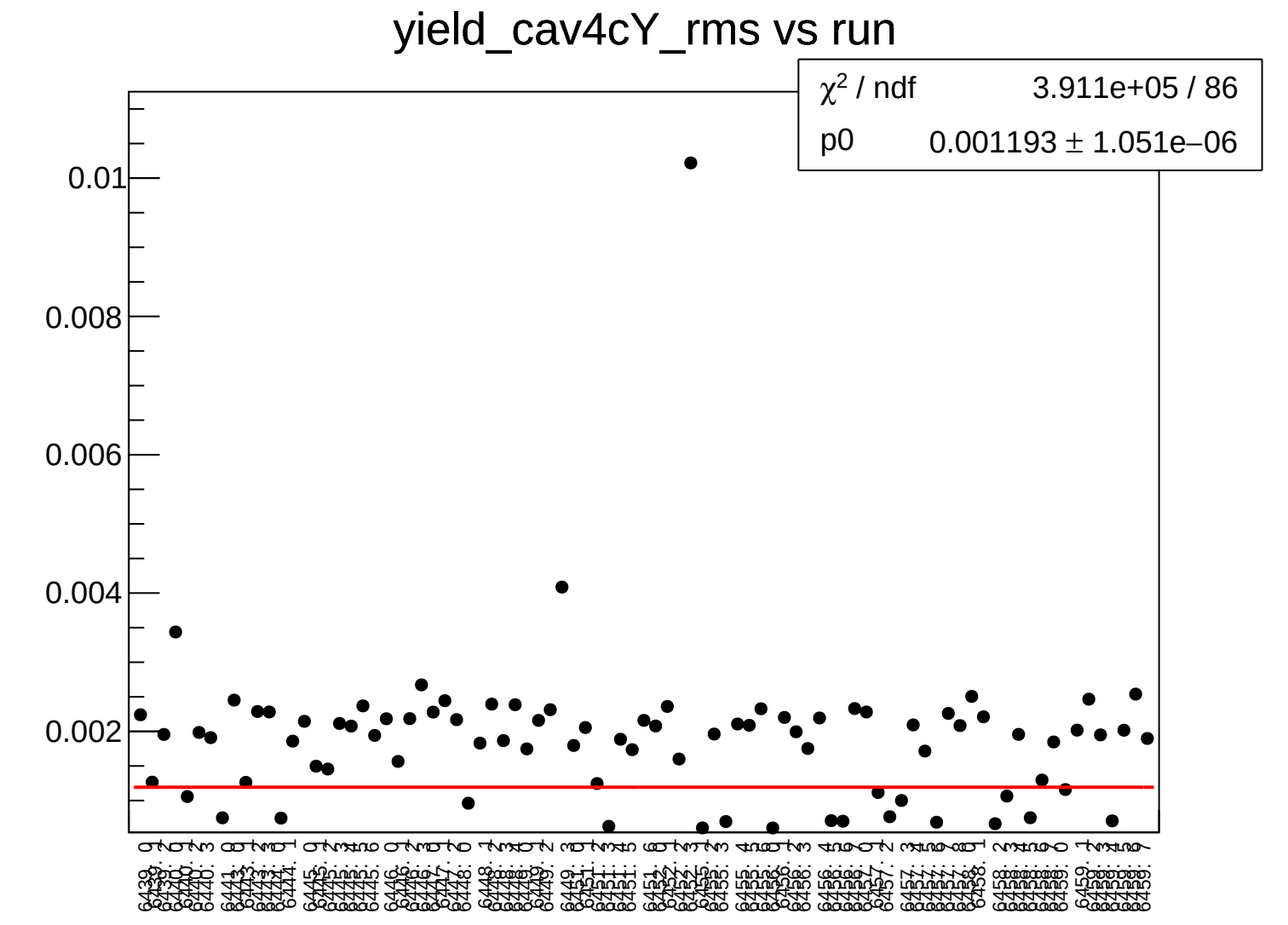

yield_cav4cX_mean vs run
χ² / ndf 1.09e+06 / 86
p0 0.0007532 ± 1.551e−06
0.008
0.006
0.004
0.002
0
−0.002
−0.004
pull
Entries 87
Mean −9.558
Std Dev 46.5
200
100
0
−100
−200
−300

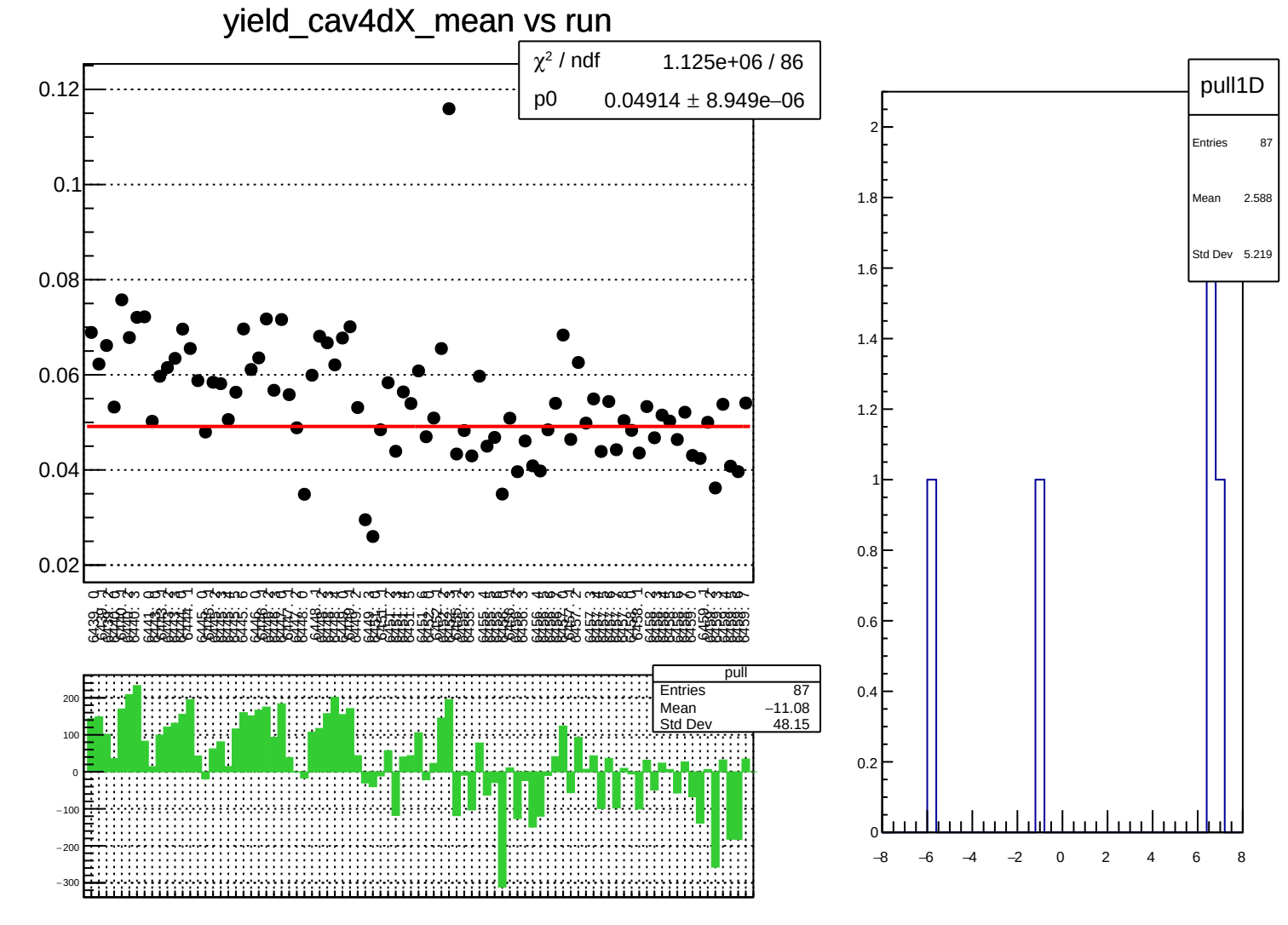

pull1D
Entries 87
Mean 0.2899
Std Dev 4.523
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


yield_cav4cX_rms vs run
χ² / ndf 3.47e+05 / 86
p0 0.001266 ± 1.097e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

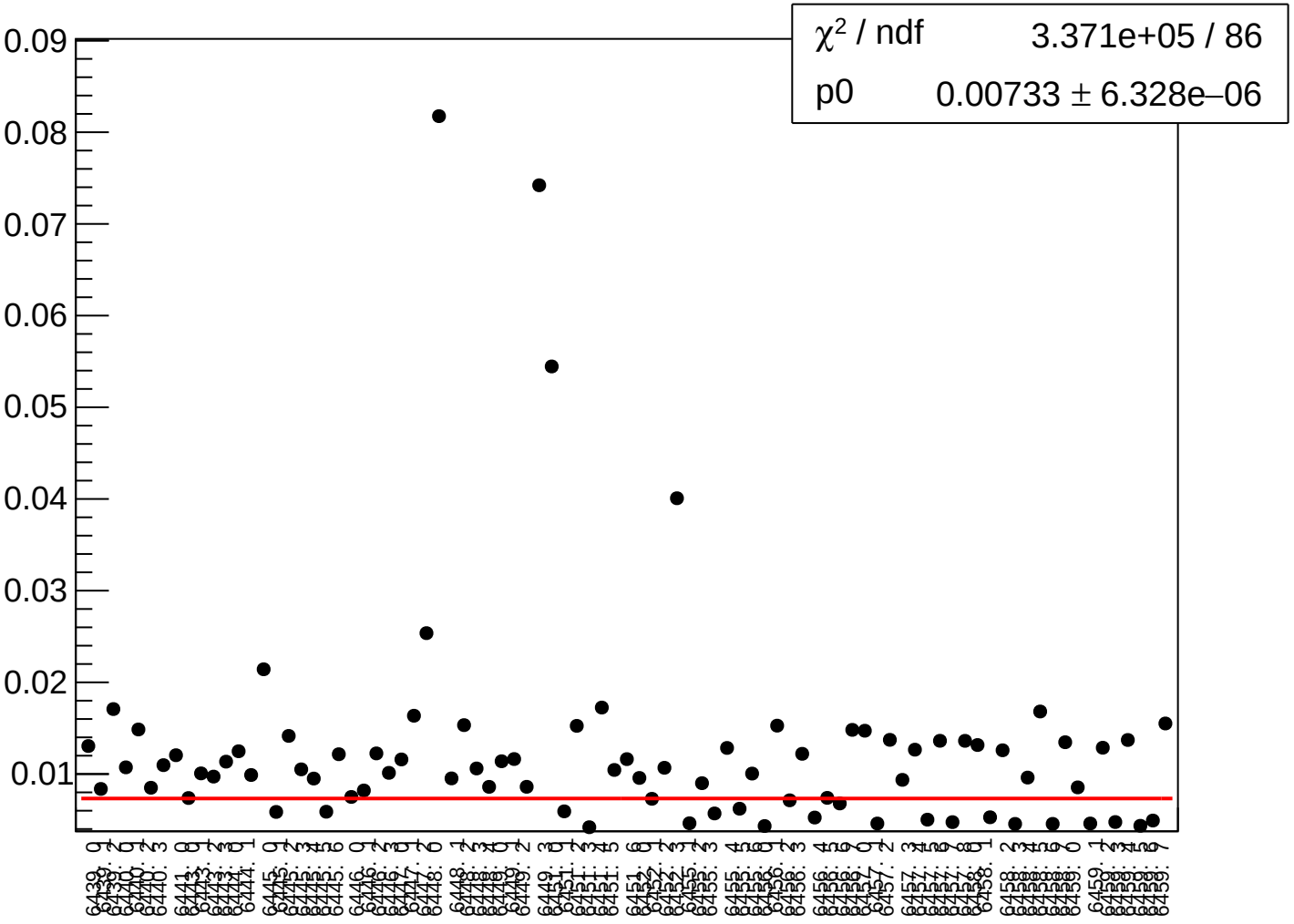

yield_cav4cY_mean vs run
χ² / ndf 1.401e+06 / 86
p0 −0.1233 ± 1.486e−06
−0.12
−0.122
−0.124
−0.126
−0.128
−0.13
−0.132
−0.134
pull
Entries 87
Mean 55.99
Std Dev 35.88
500
400
300
200
100
0
−100
−200
−300

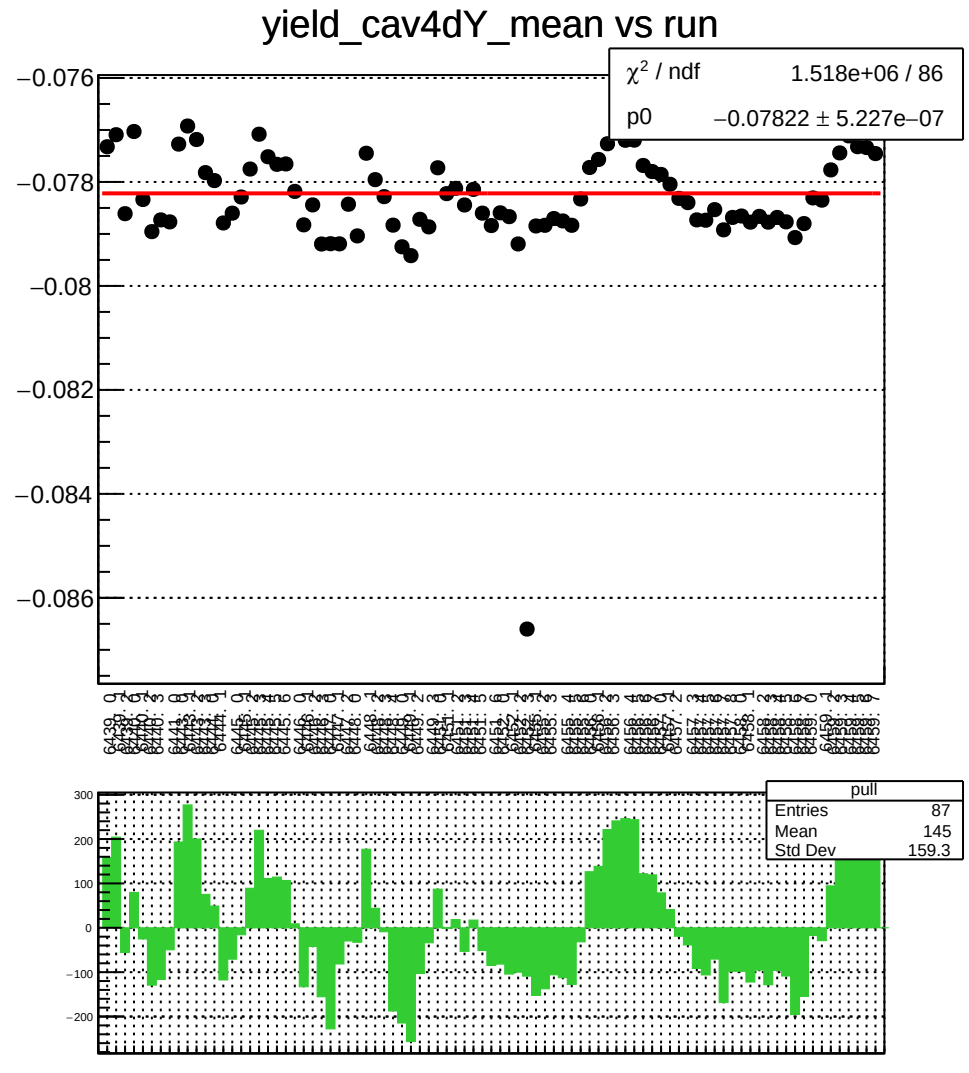

pull1D
Entries 87
Mean 2.483
Std Dev 4.187
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

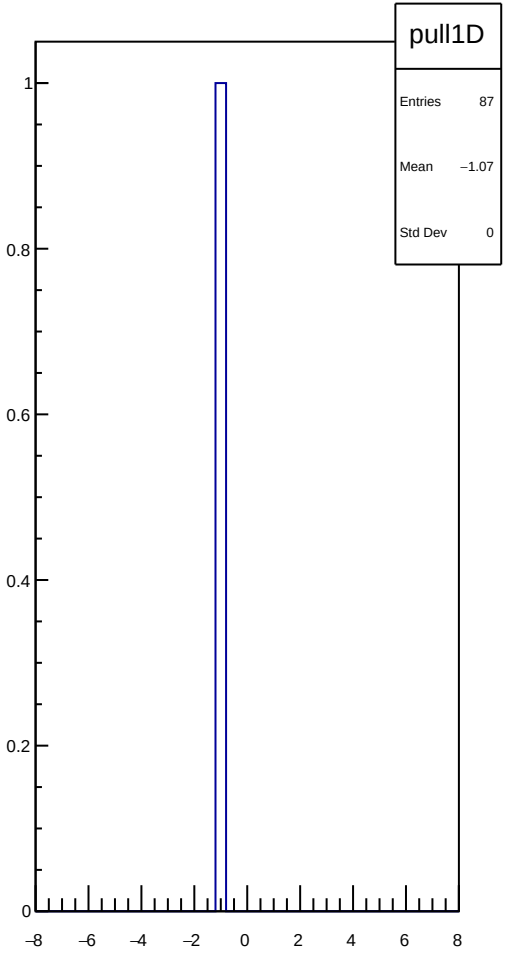

yield_cav4cY_rms vs run
χ² / ndf 3.911e+05 / 86
p0 0.001193 ± 1.051e−06
0.01
0.008
0.006
0.004
0.002

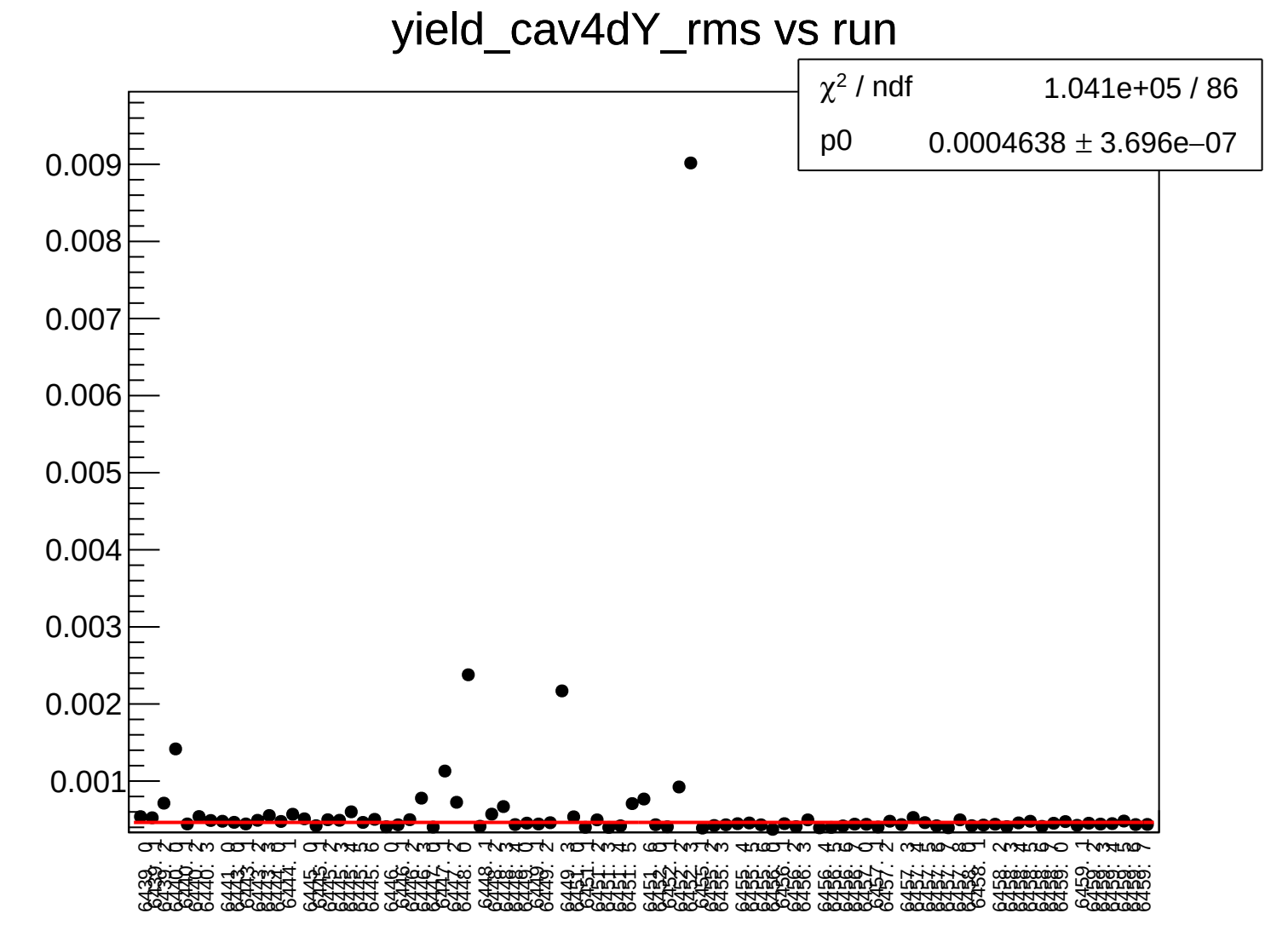

yield_cav4dX_mean vs run
χ² / ndf 1.125e+06 / 86
p0 0.04914 ± 8.949e−06
0.12
0.1
0.08
0.06
0.04
0.02
pull
Entries 87
Mean −11.08
Std Dev 48.15
200
100
0
−100
−200
−300
pull1D
Entries 87
Mean 2.588
Std Dev 5.219
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

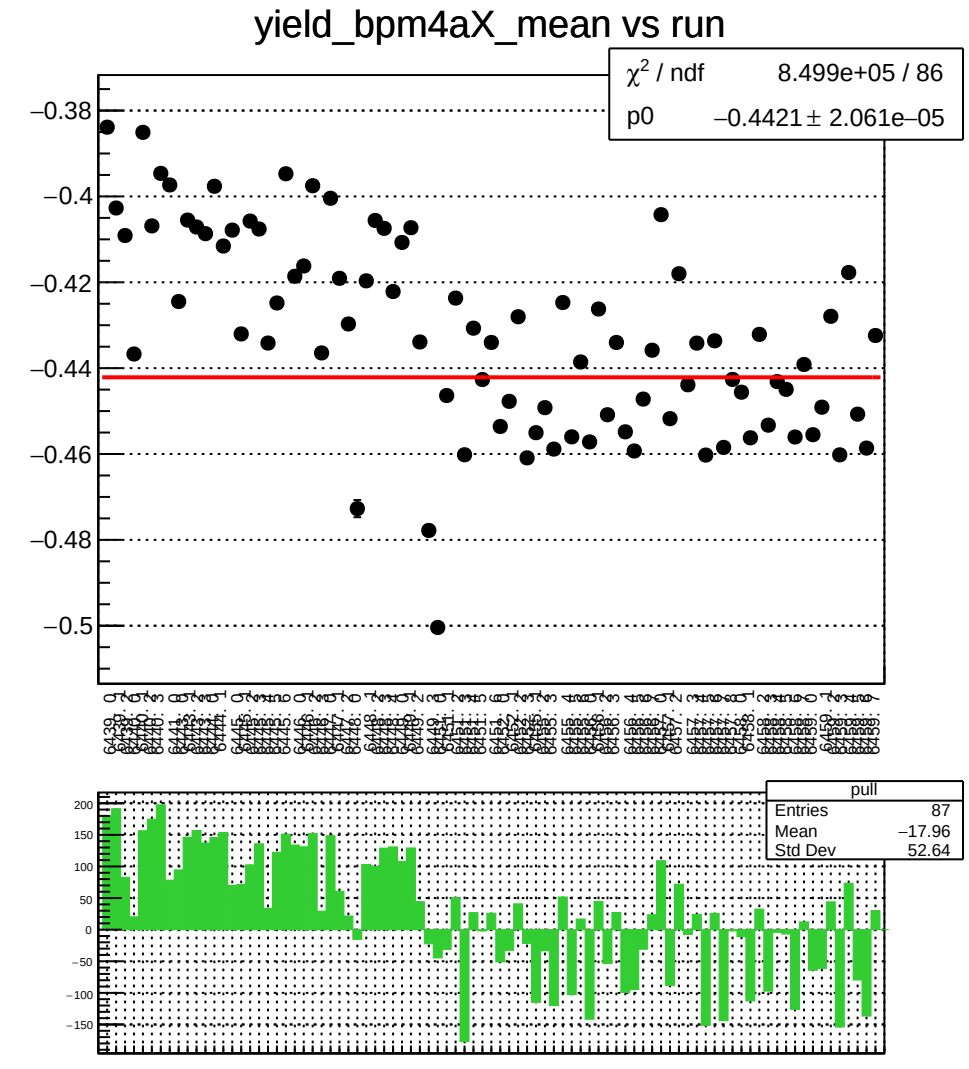
yield_cav4dX_rms vs run

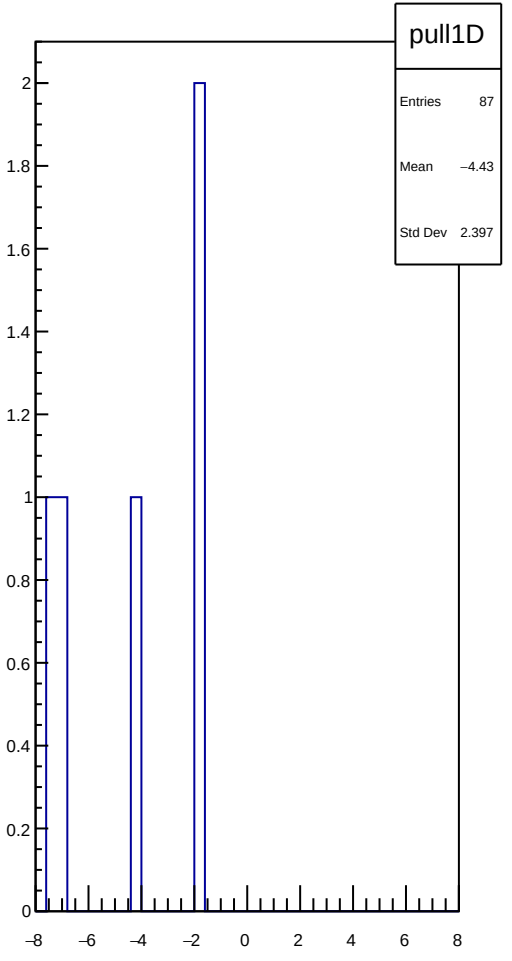


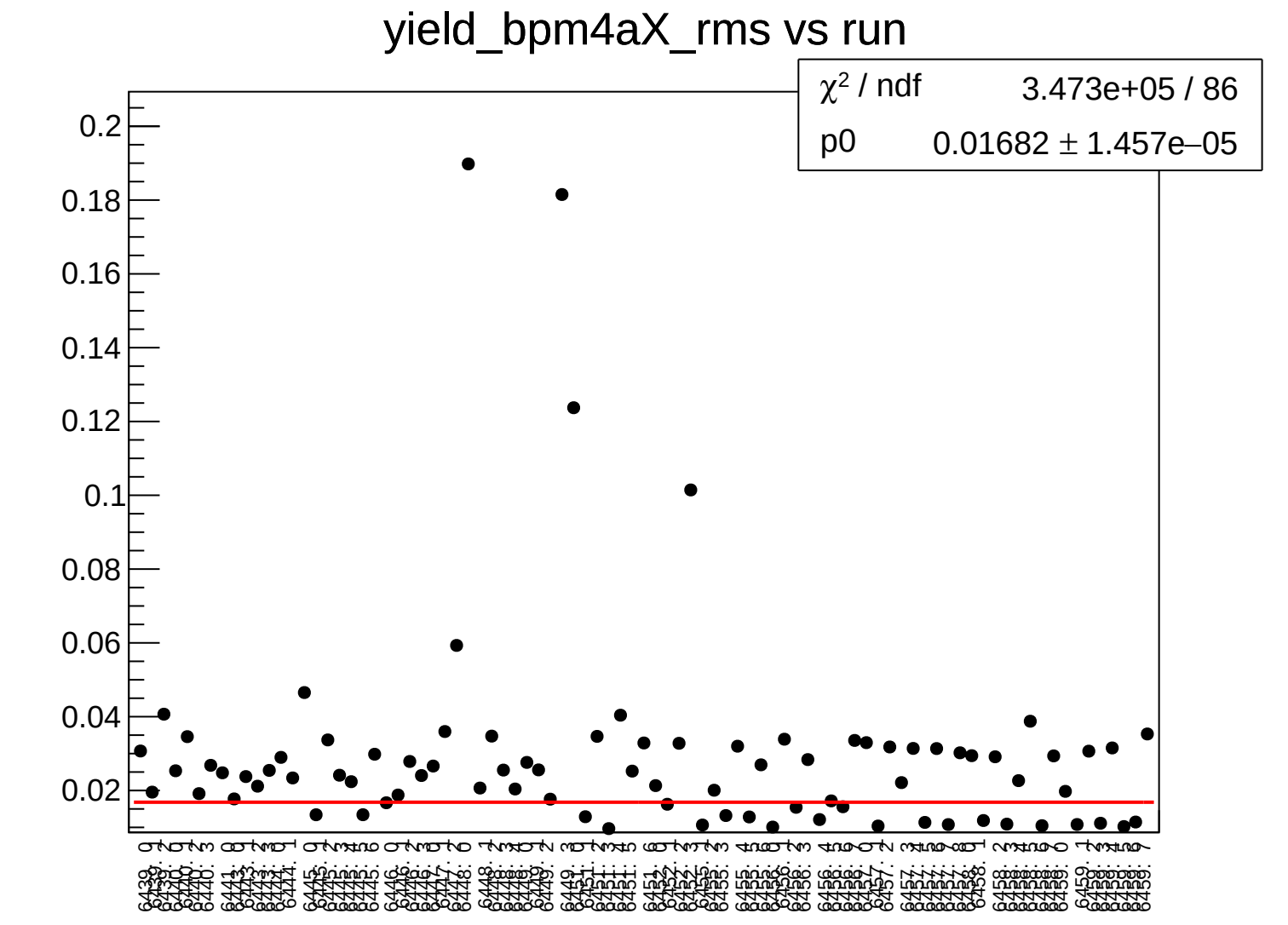

yield_cav4dY_mean vs run
χ² / ndf 1.518e+06 / 86
p0 −0.07822 ± 5.227e−07
−0.076
−0.078
−0.08
−0.082
−0.084
−0.086
pull
Entries 87
Mean 145
Std Dev 159.3
300
200
100
0
−100
−200

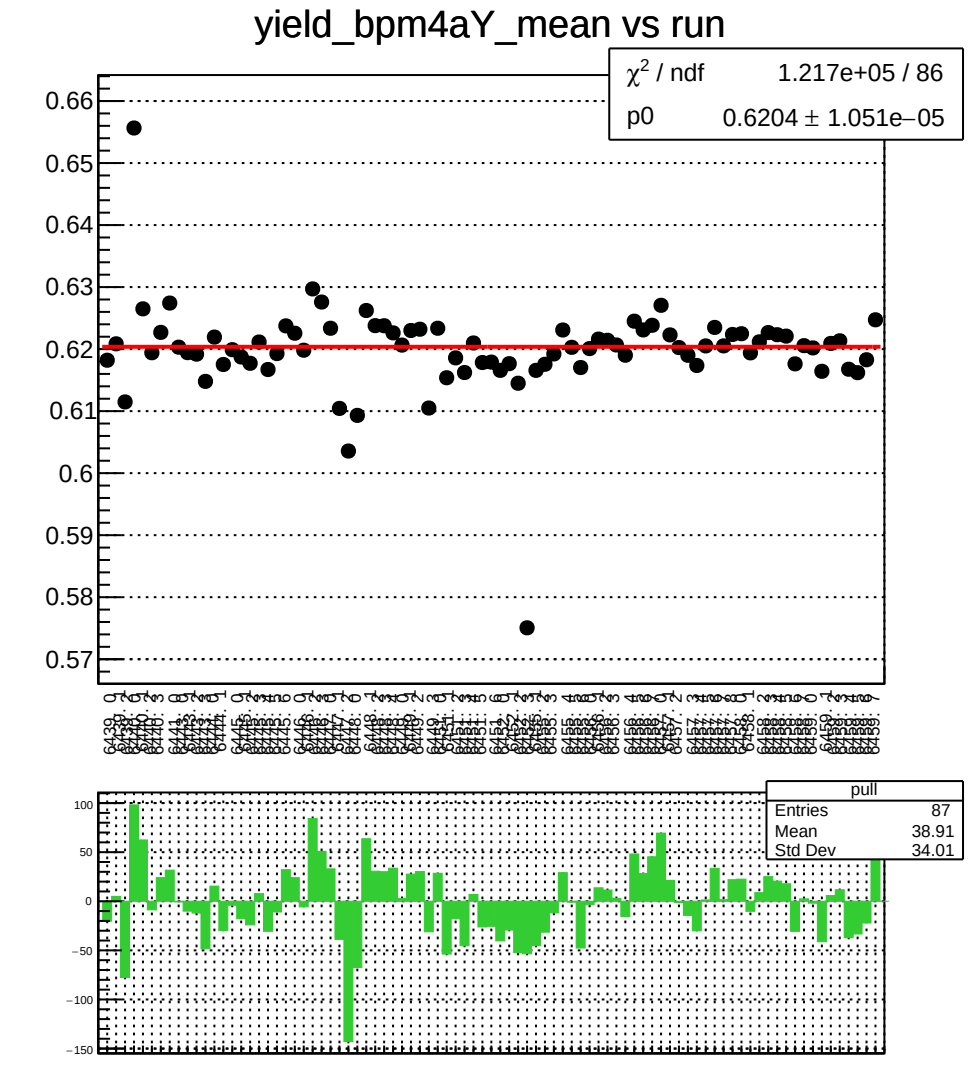

pull1D
Entries 87
Mean −1.07
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

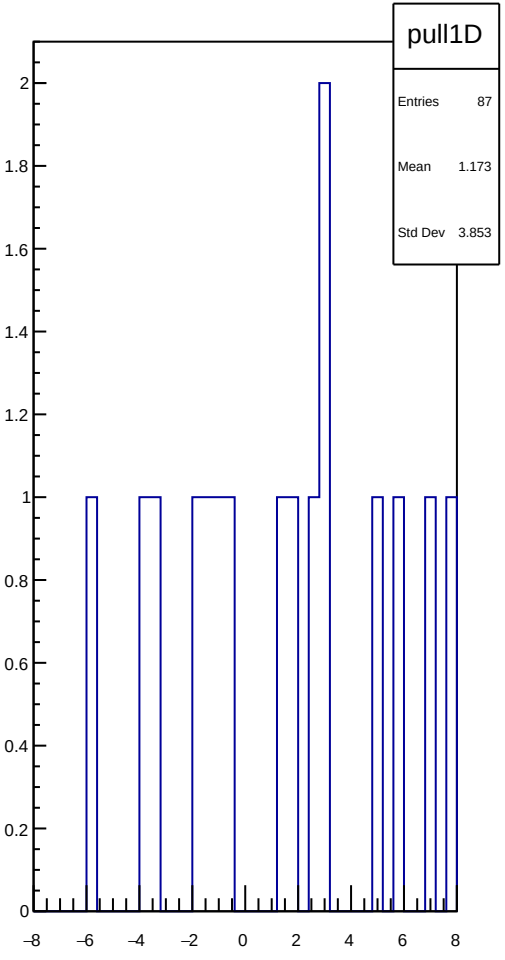

yield_cav4dY_rms vs run
χ² / ndf 1.041e+05 / 86
p0 0.0004638 ± 3.696e−07
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

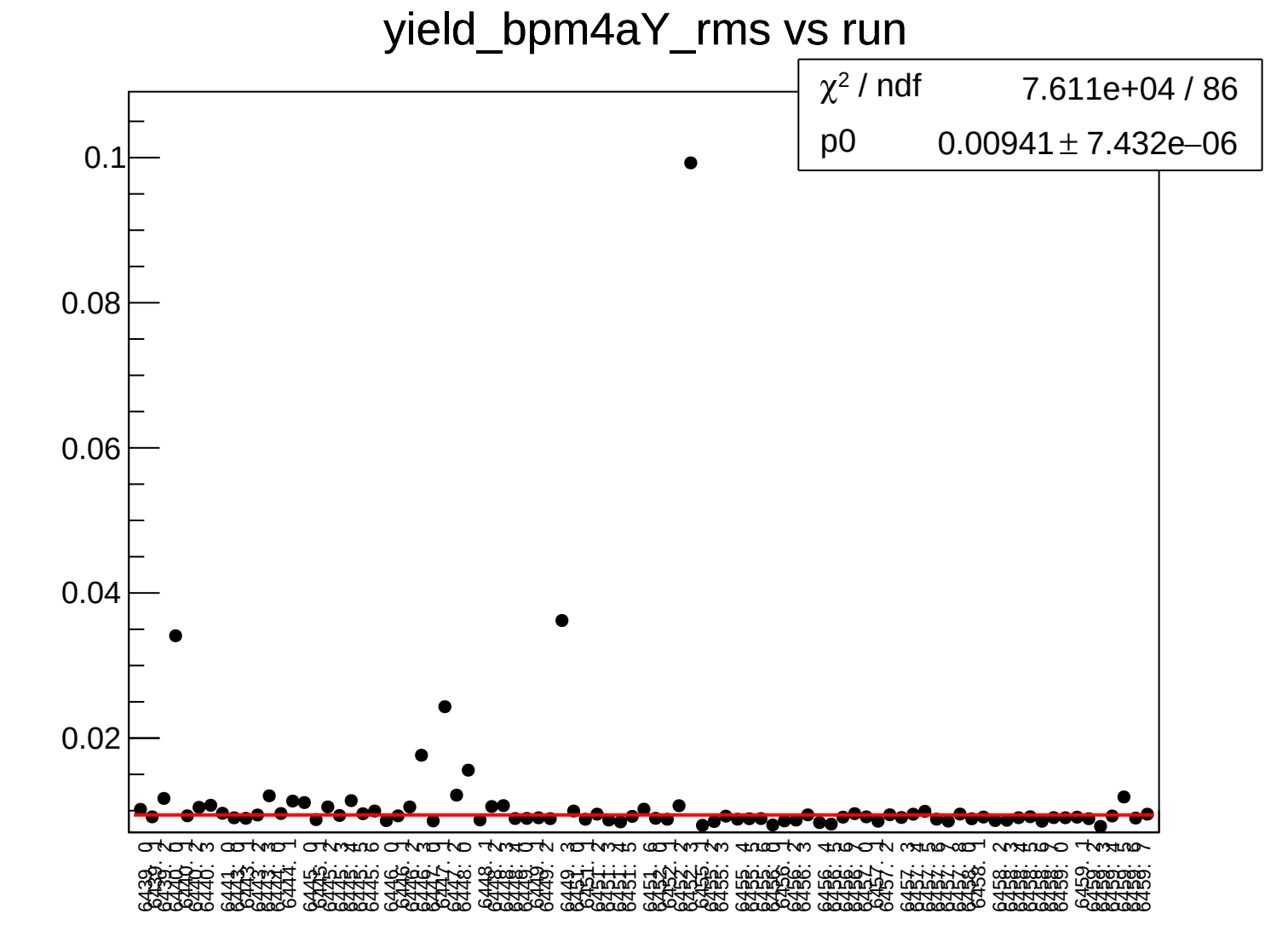

yield_bpm4aX_mean vs run
χ² / ndf 8.499e+05 / 86
p0 −0.4421 ± 2.061e−05
−0.38
−0.4
−0.42
−0.44
−0.46
−0.48
−0.5
pull
Entries 87
Mean −17.96
Std Dev 52.64
200
150
100
50
0
−50
−100
−150

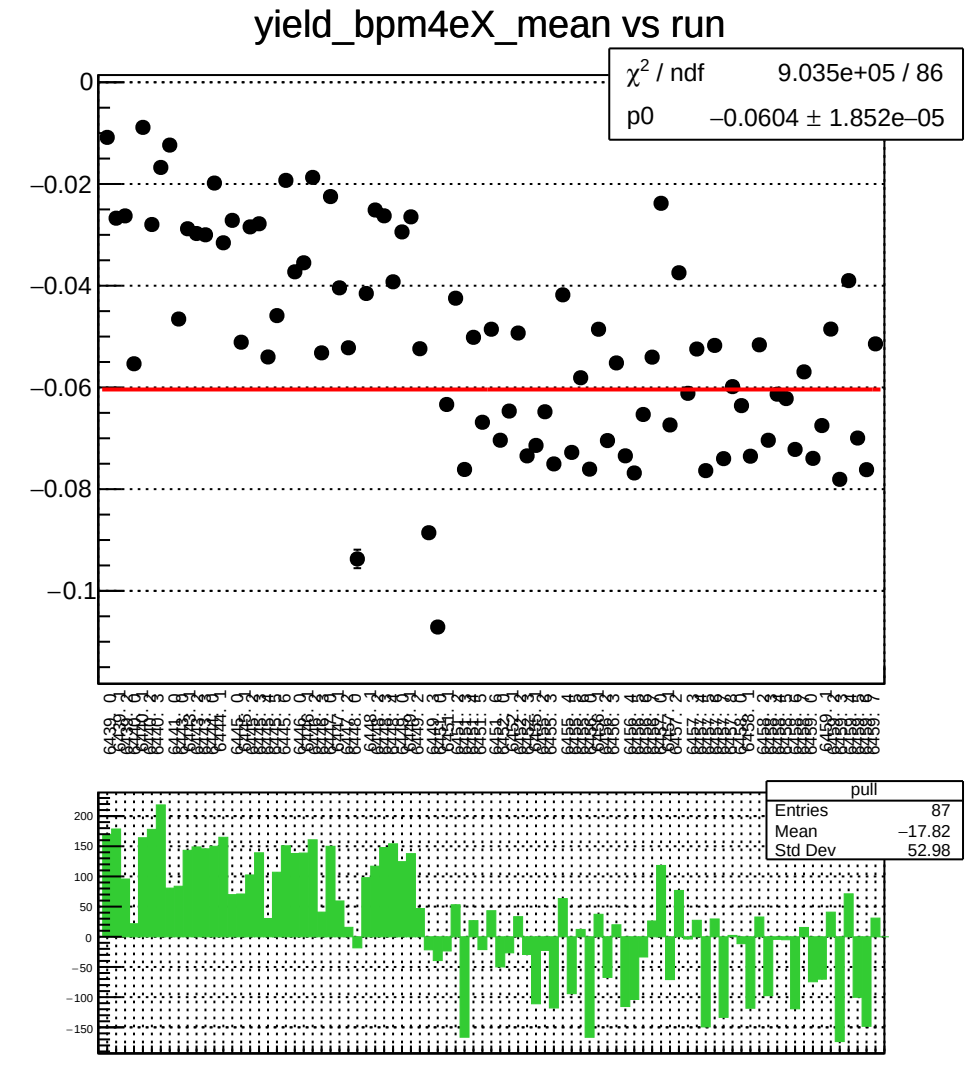

pull1D
Entries 87
Mean −4.43
Std Dev 2.397
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

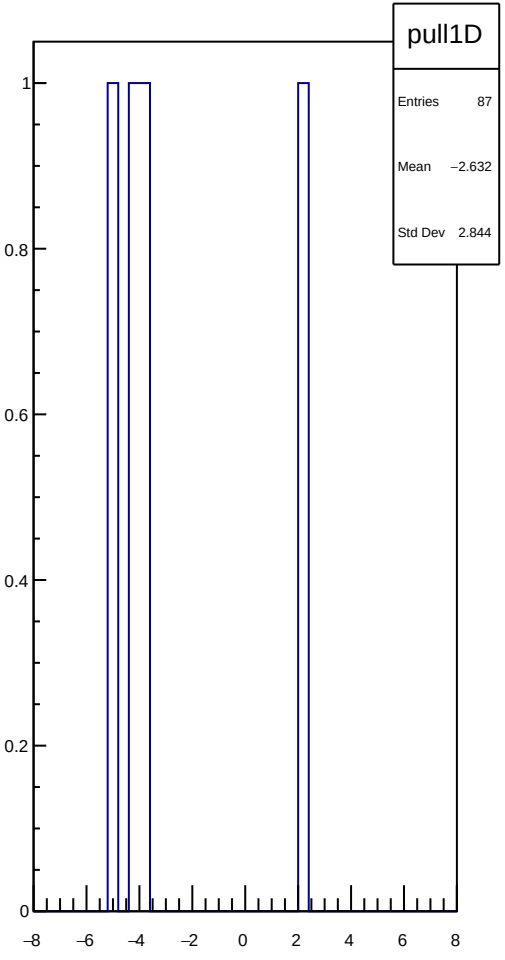

yield_bpm4aX_rms vs run
χ² / ndf 3.473e+05 / 86
p0 0.01682 ± 1.457e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

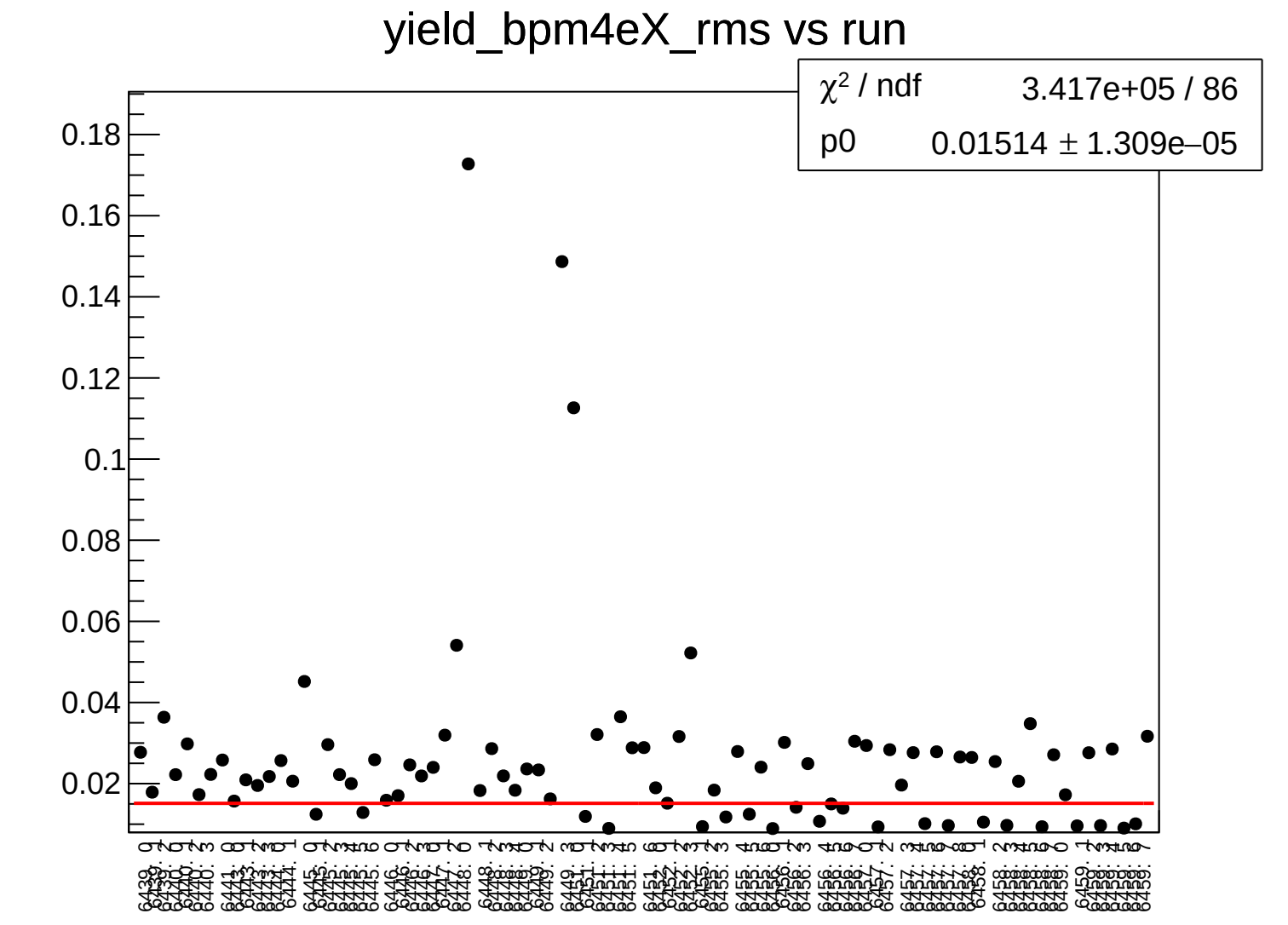

yield_bpm4aY_mean vs run
χ² / ndf 1.217e+05 / 86
p0 0.6204 ± 1.051e−05
pull
Entries 87
Mean 38.91
Std Dev 34.01

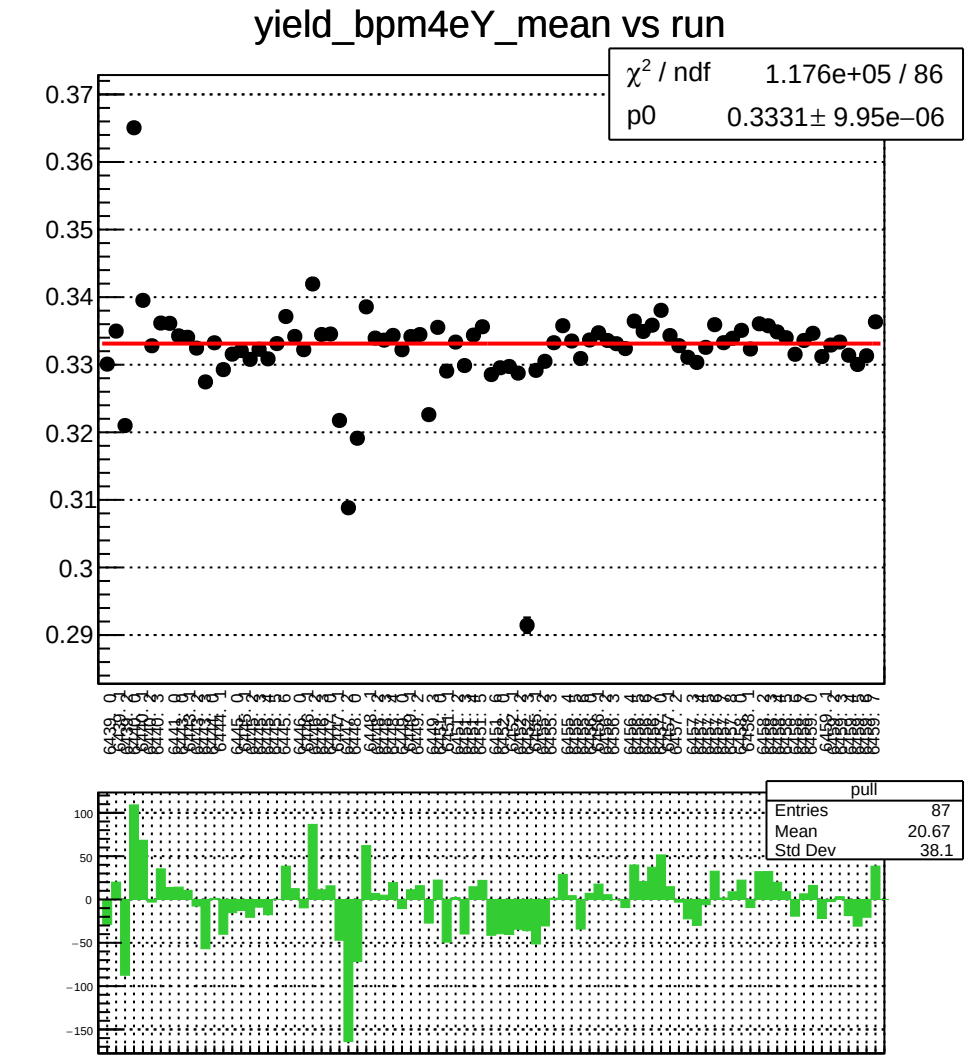

pull1D
Entries 87
Mean 1.173
Std Dev 3.853

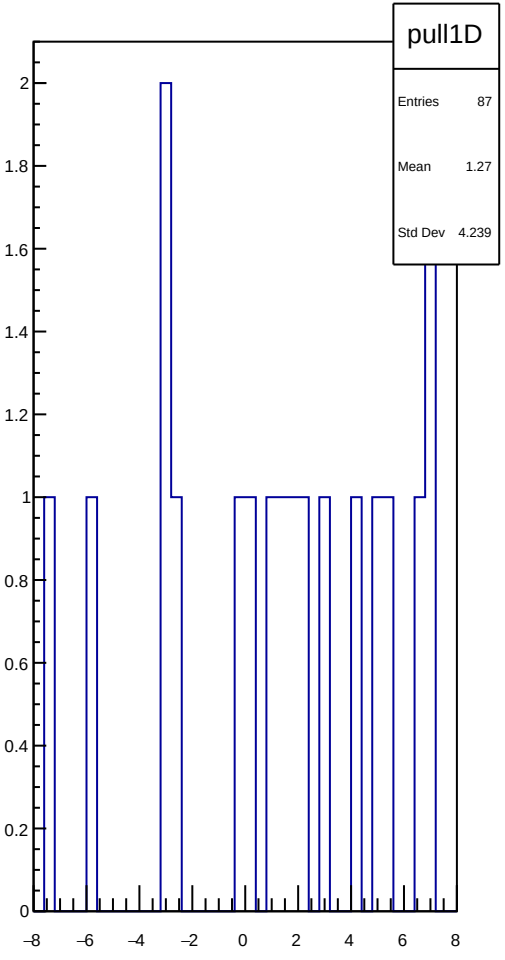

yield_bpm4aY_rms vs run
χ² / ndf 7.611e+04 / 86
p0 0.00941 ± 7.432e–06
0.1
0.08
0.06
0.04
0.02

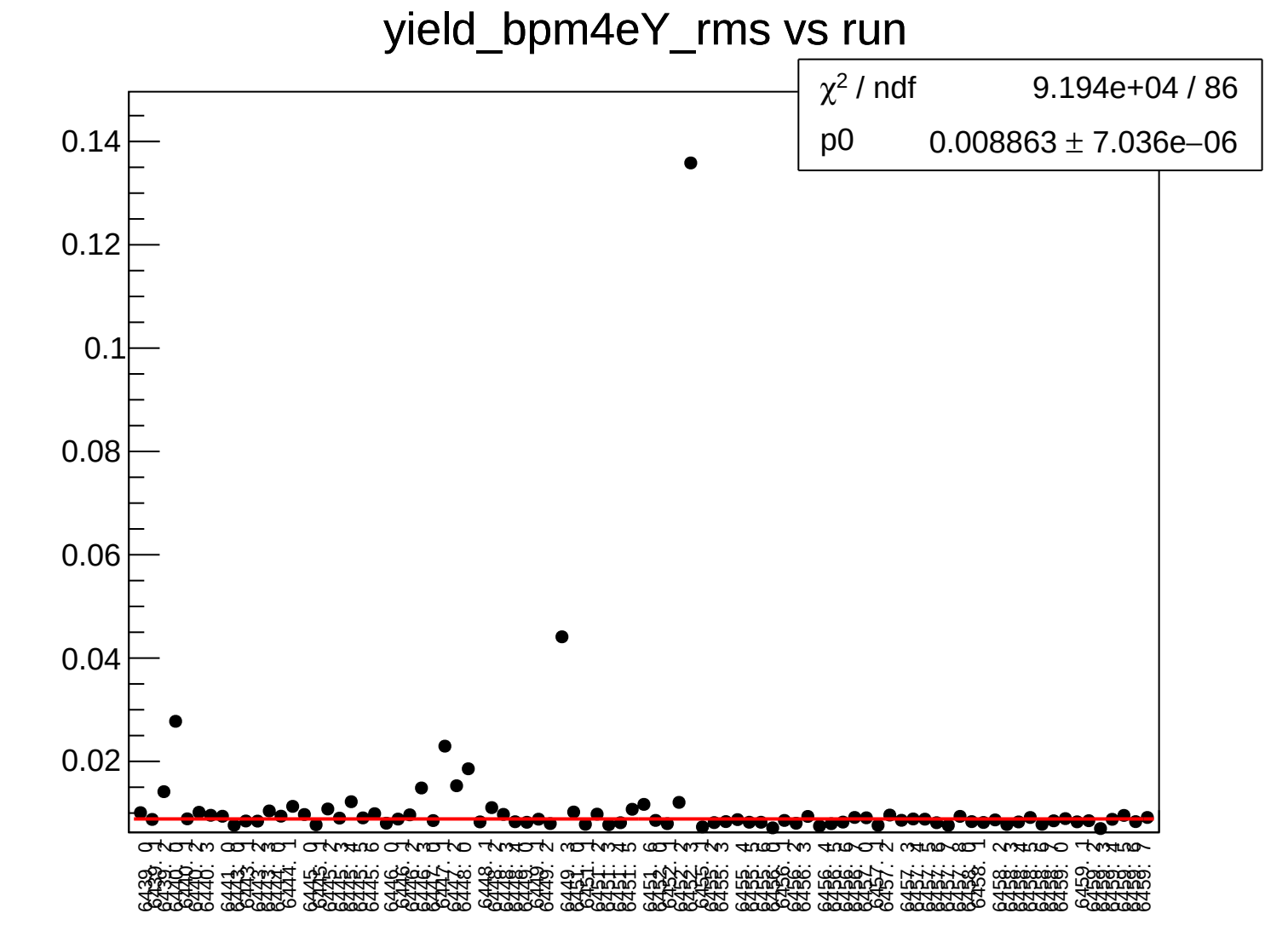

yield_bpm4eX_mean vs run
χ² / ndf 9.035e+05 / 86
p0 −0.0604 ± 1.852e−05
pull
Entries 87
Mean −17.82
Std Dev 52.98

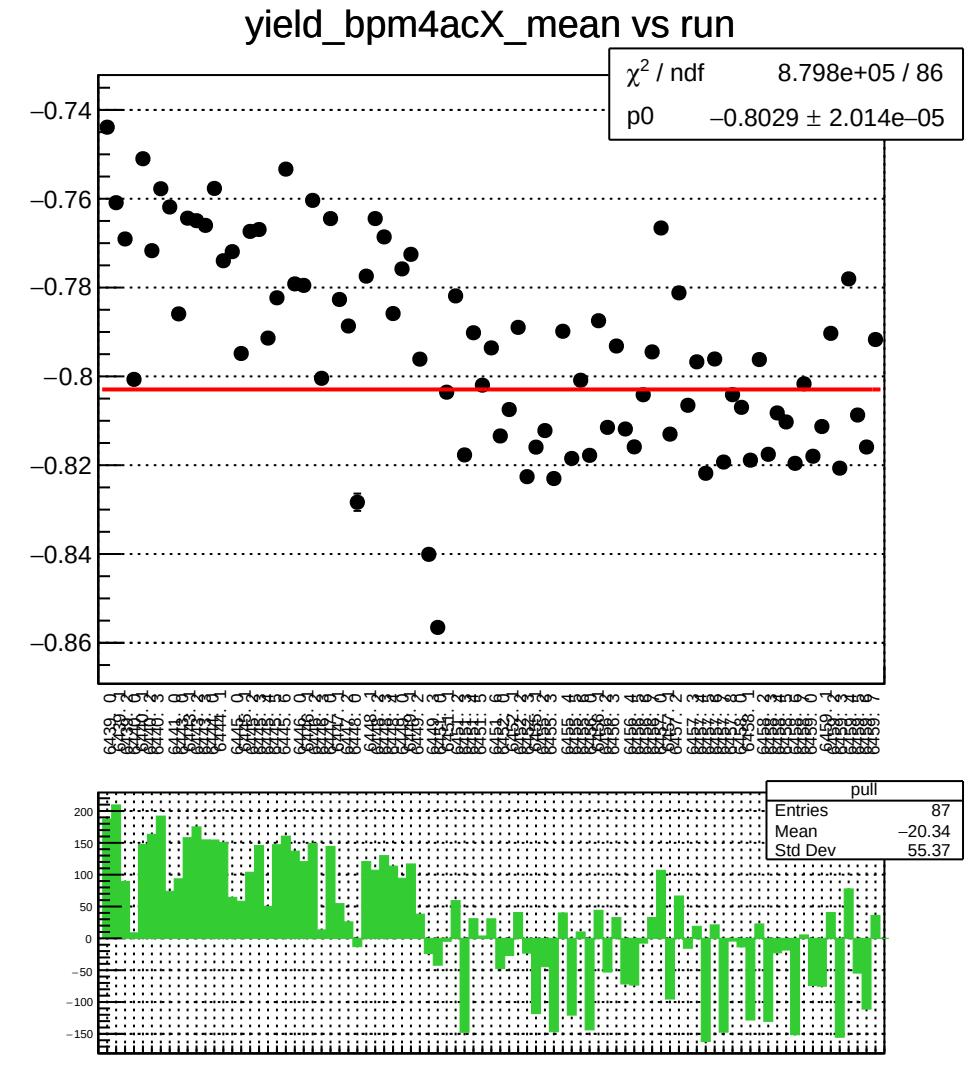

pull1D
Entries 87
Mean −2.632
Std Dev 2.844

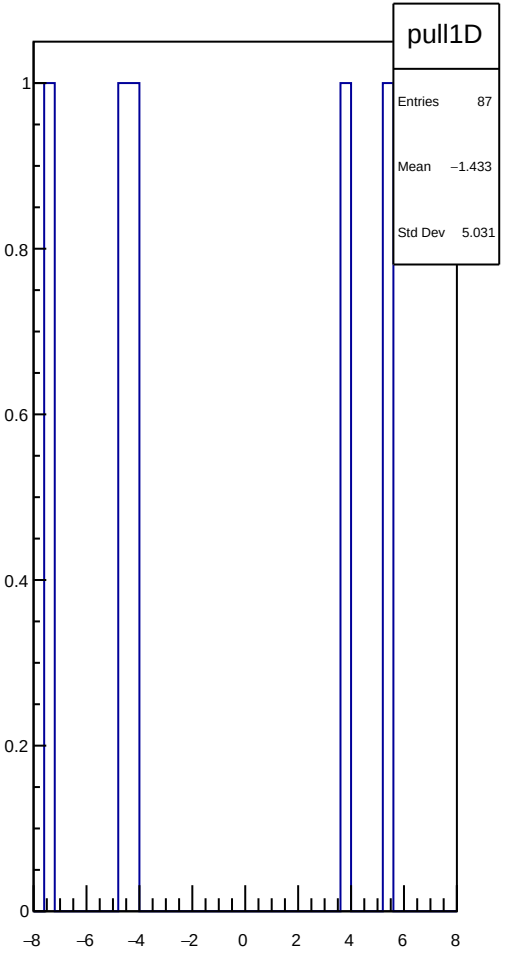

yield_bpm4eX_rms vs run
χ² / ndf 3.417e+05 / 86
p0 0.01514 ± 1.309e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

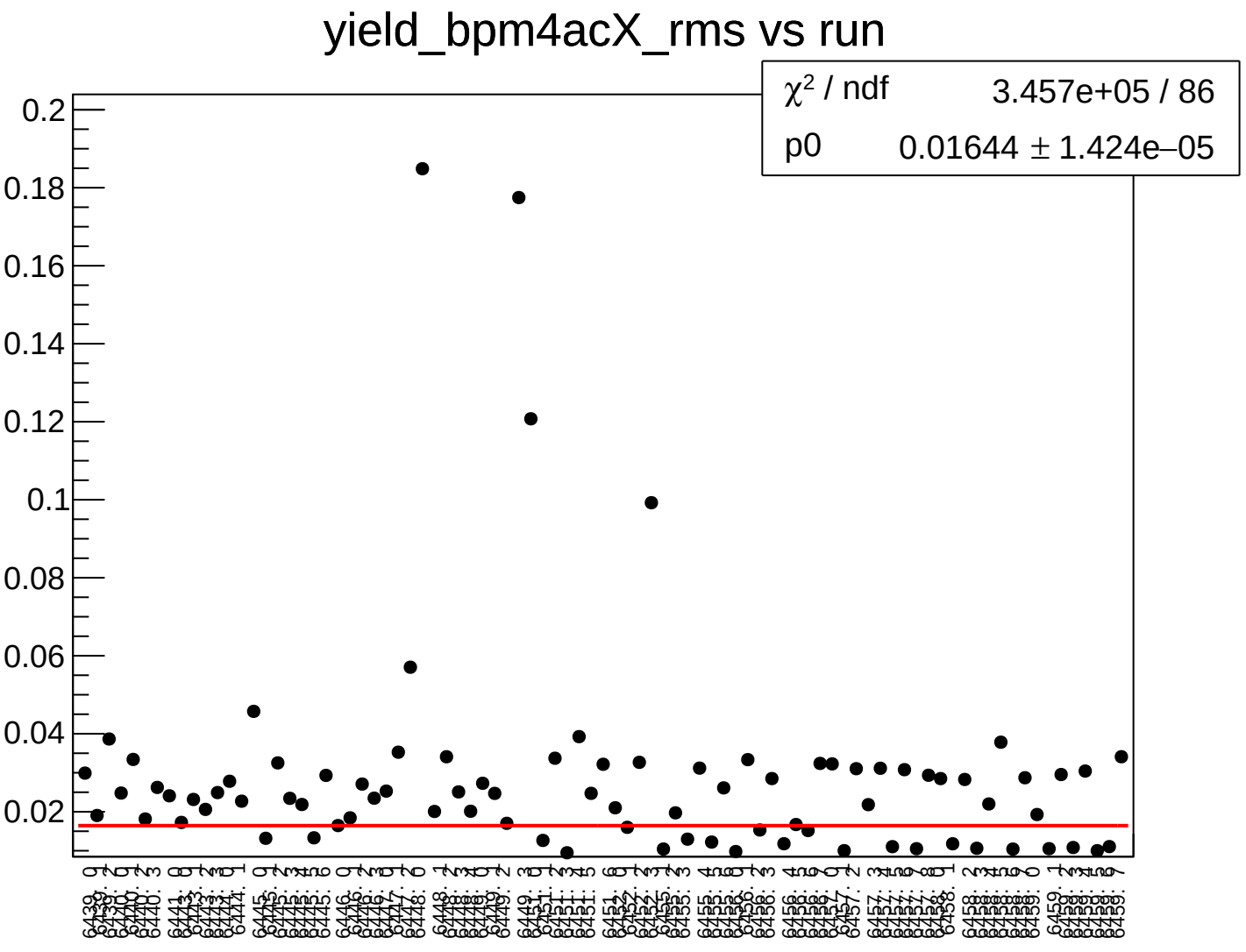

yield_bpm4eY_mean vs run
χ² / ndf 1.176e+05 / 86
p0 0.3331± 9.95e−06
pull
Entries 87
Mean 20.67
Std Dev 38.1

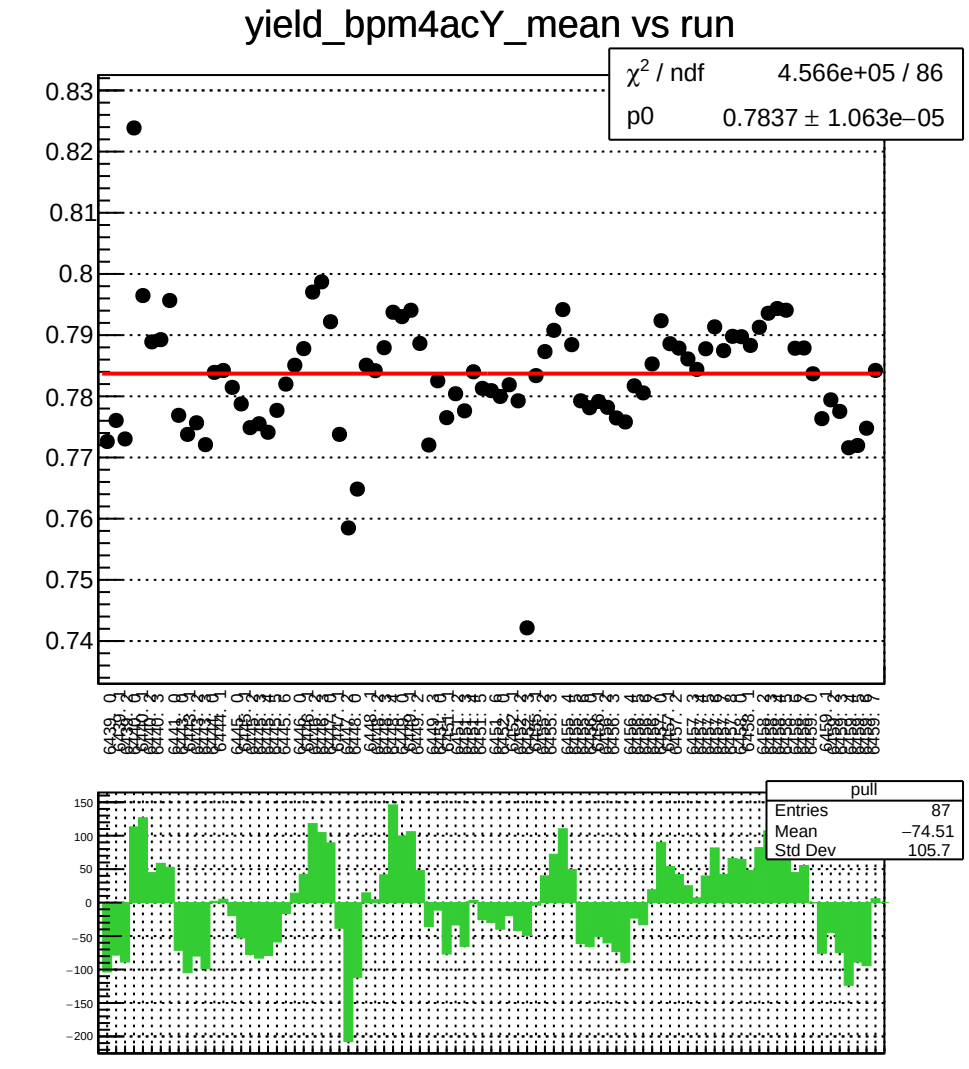

pull1D
Entries 87
Mean 1.27
Std Dev 4.239

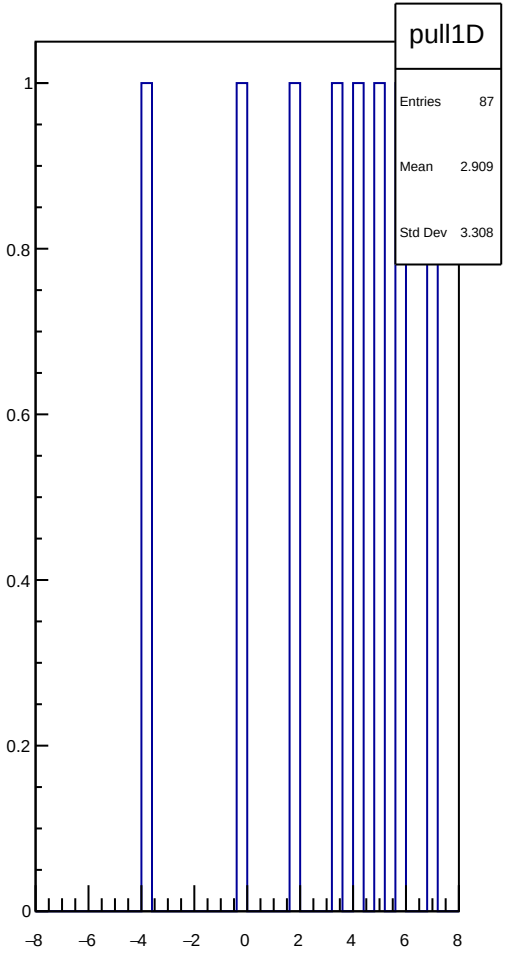

yield_bpm4eY_rms vs run
χ² / ndf 9.194e+04 / 86
p0 0.008863 ± 7.036e−06
0.14
0.12
0.1
0.08
0.06
0.04
0.02

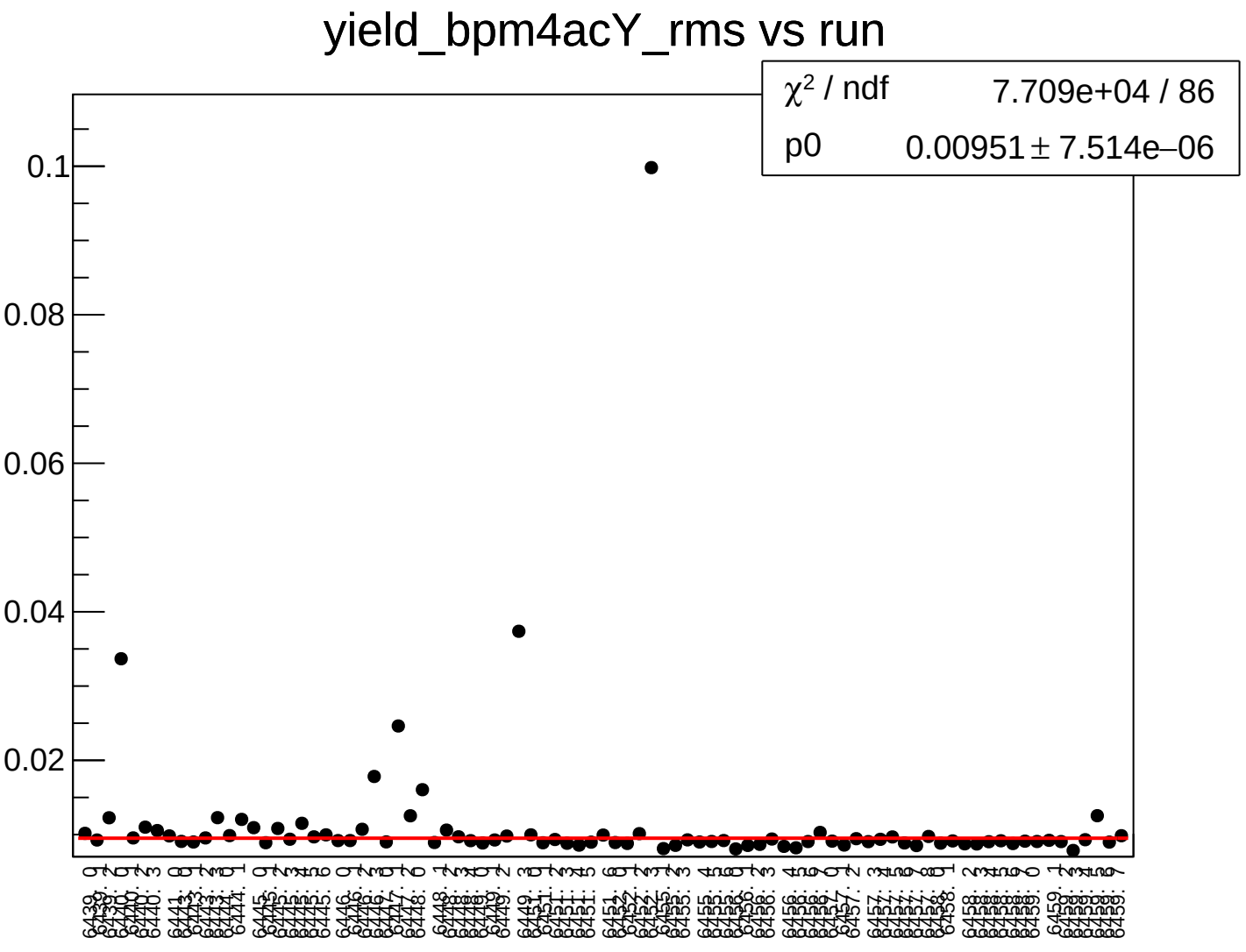

yield_bpm4acX_mean vs run
χ² / ndf 8.798e+05 / 86
p0 −0.8029 ± 2.014e−05
−0.74
−0.76
−0.78
−0.8
−0.82
−0.84
−0.86
pull
Entries 87
Mean −20.34
Std Dev 55.37
200
150
100
50
0
−50
−100
−150

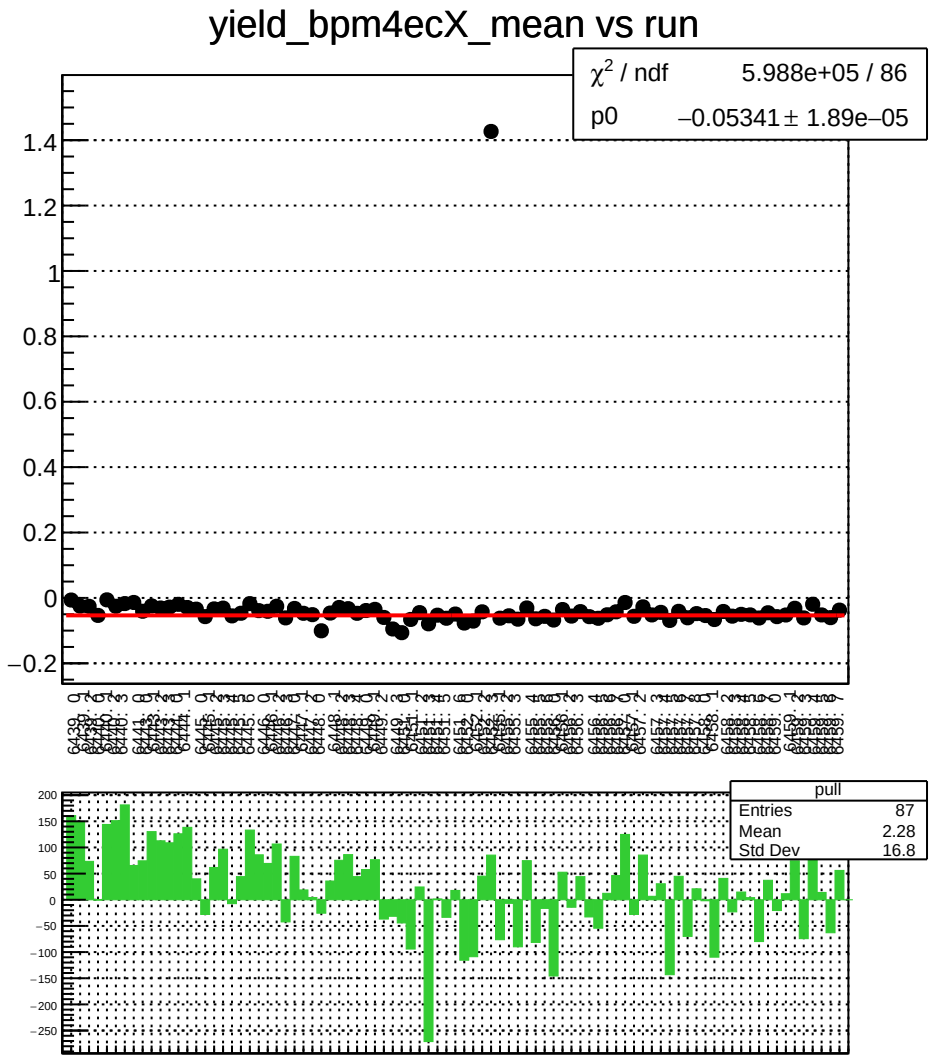

pull1D
Entries 87
Mean −1.433
Std Dev 5.031
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

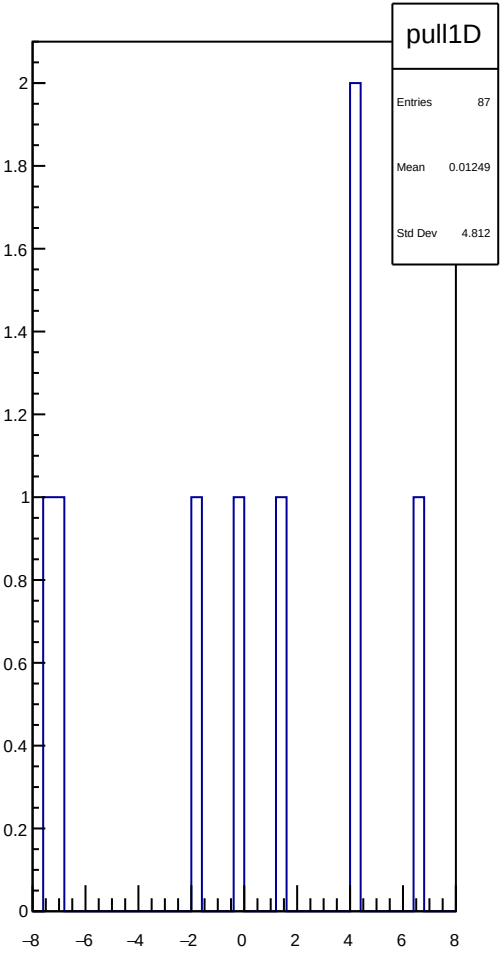

yield_bpm4acX_rms vs run
χ² / ndf 3.457e+05 / 86
p0 0.01644 ± 1.424e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

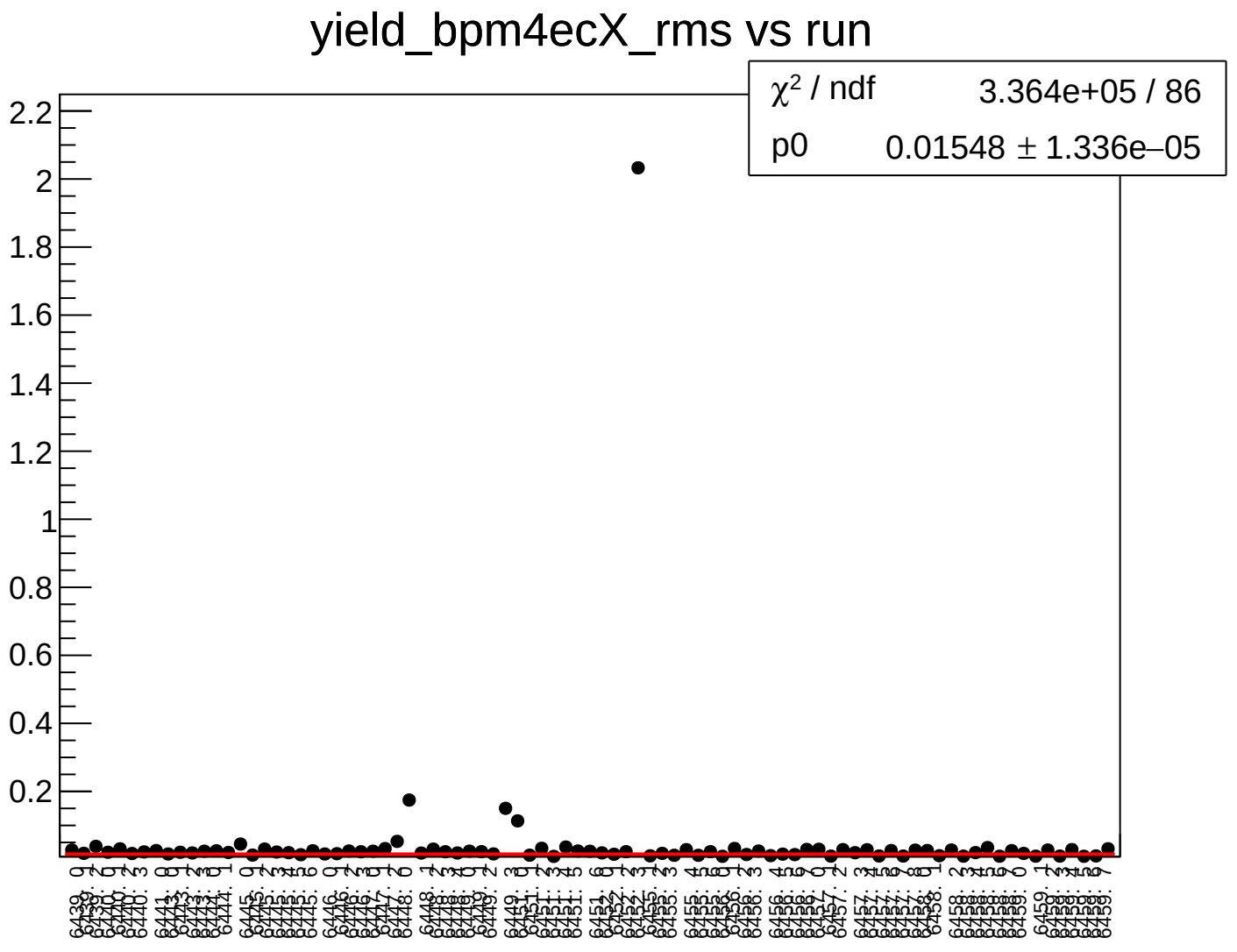

yield_bpm4acY_mean vs run
χ² / ndf 4.566e+05 / 86
p0 0.7837 ± 1.063e−05
pull
Entries 87
Mean −74.51
Std Dev 105.7

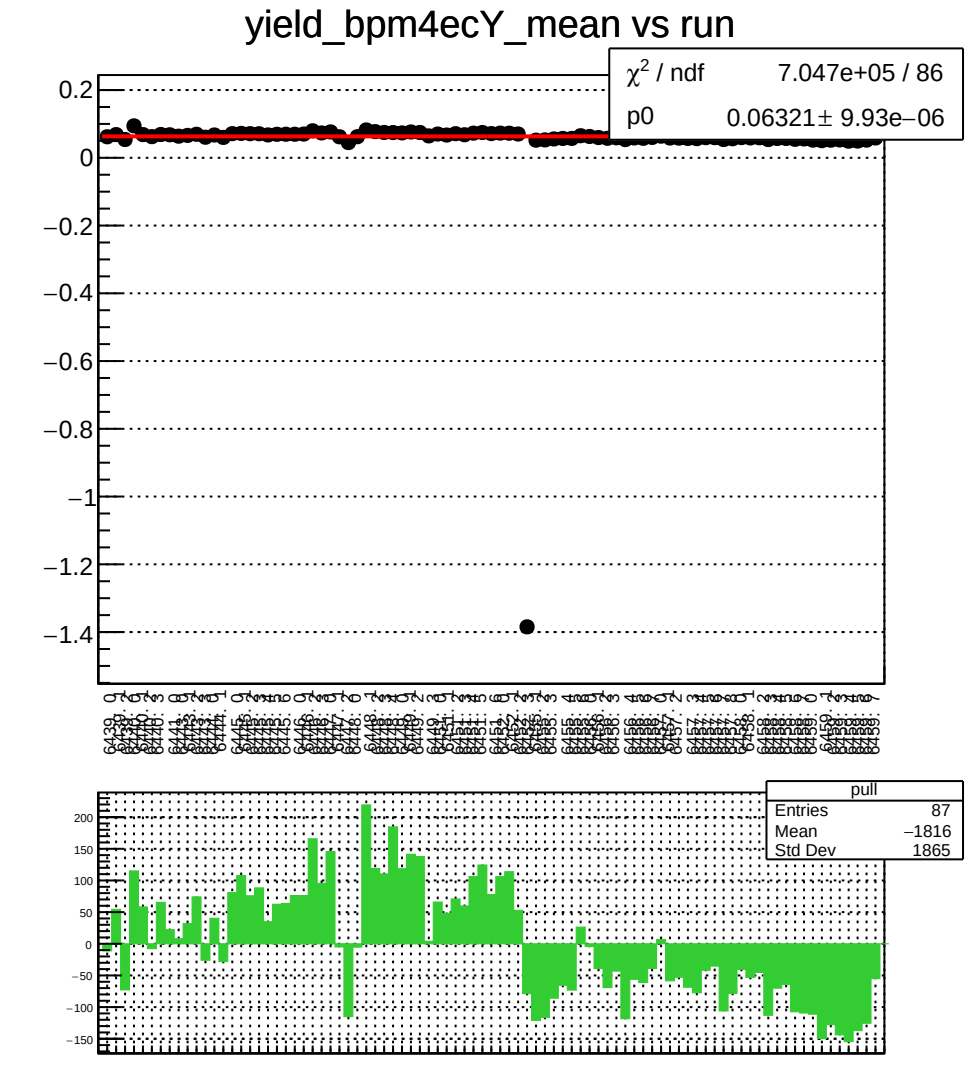

pull1D
Entries 87
Mean 2.909
Std Dev 3.308

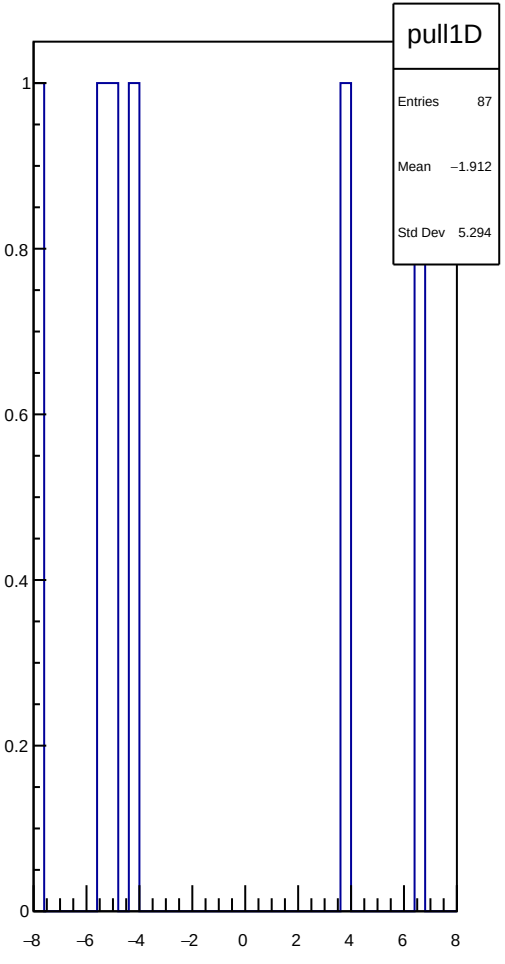

yield_bpm4acY_rms vs run
χ² / ndf 7.709e+04 / 86
p0 0.00951 ± 7.514e–06
0.1
0.08
0.06
0.04
0.02

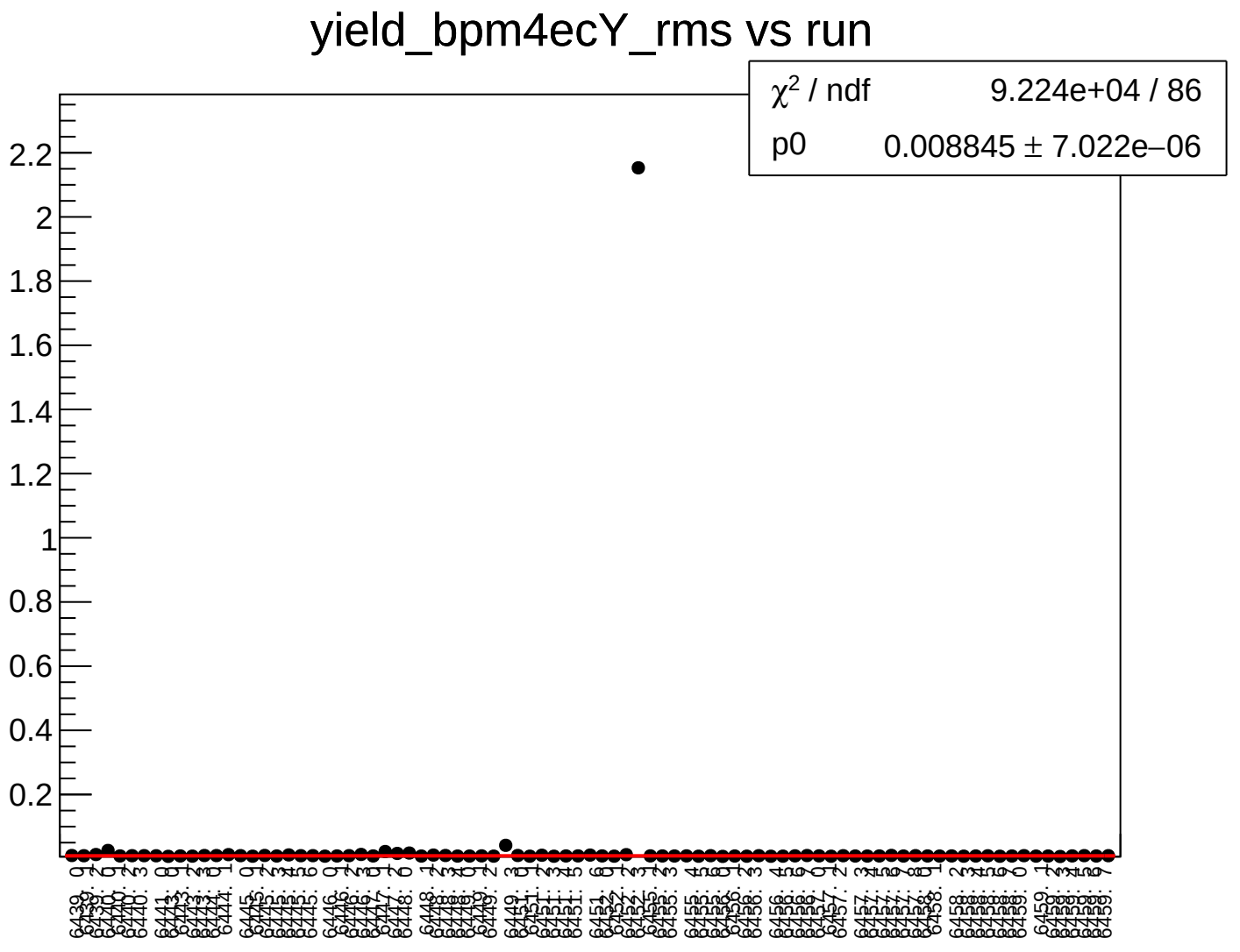

yield_bpm4ecX_mean vs run
χ² / ndf 5.988e+05 / 86
p0 −0.05341 ± 1.89e−05
pull
Entries 87
Mean 2.28
Std Dev 16.8

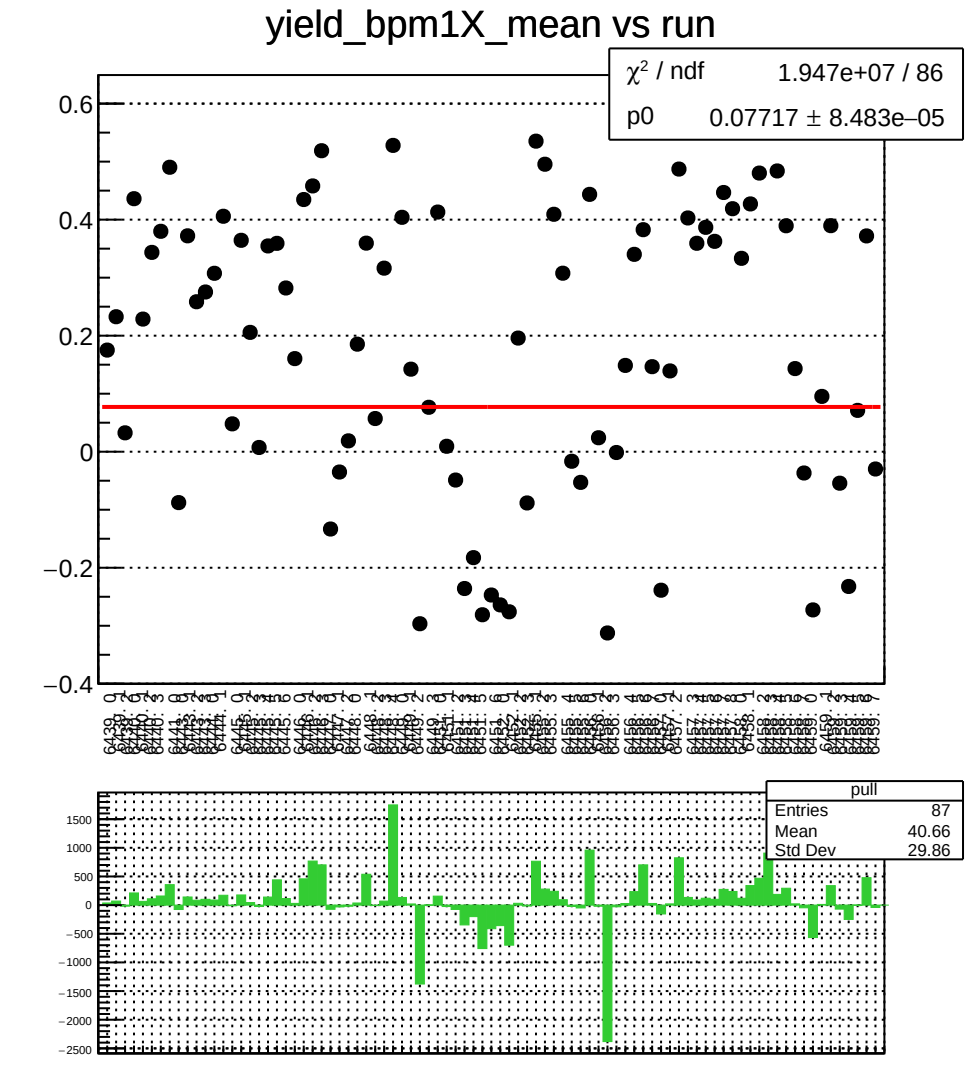

pull1D
Entries 87
Mean 0.01249
Std Dev 4.812

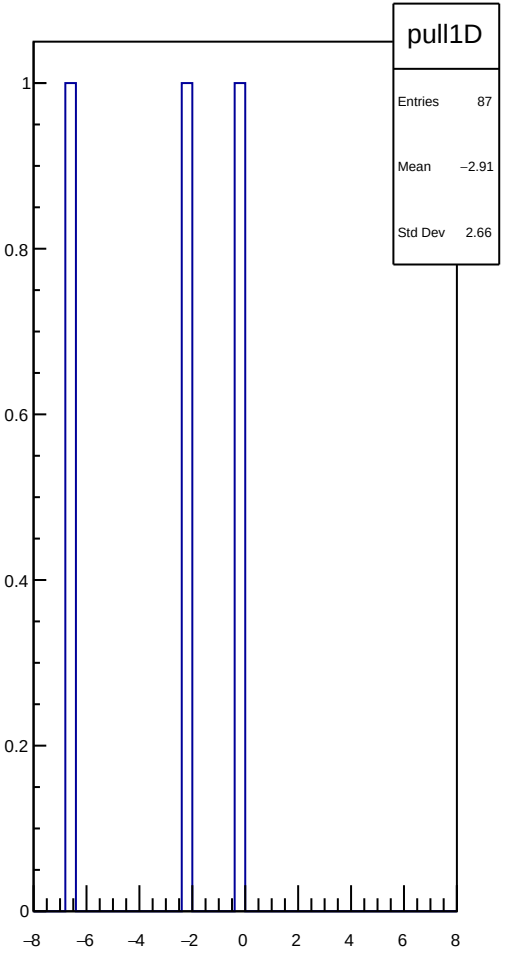

yield_bpm4ecX_rms vs run
χ² / ndf 3.364e+05 / 86
p0 0.01548 ± 1.336e−05
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

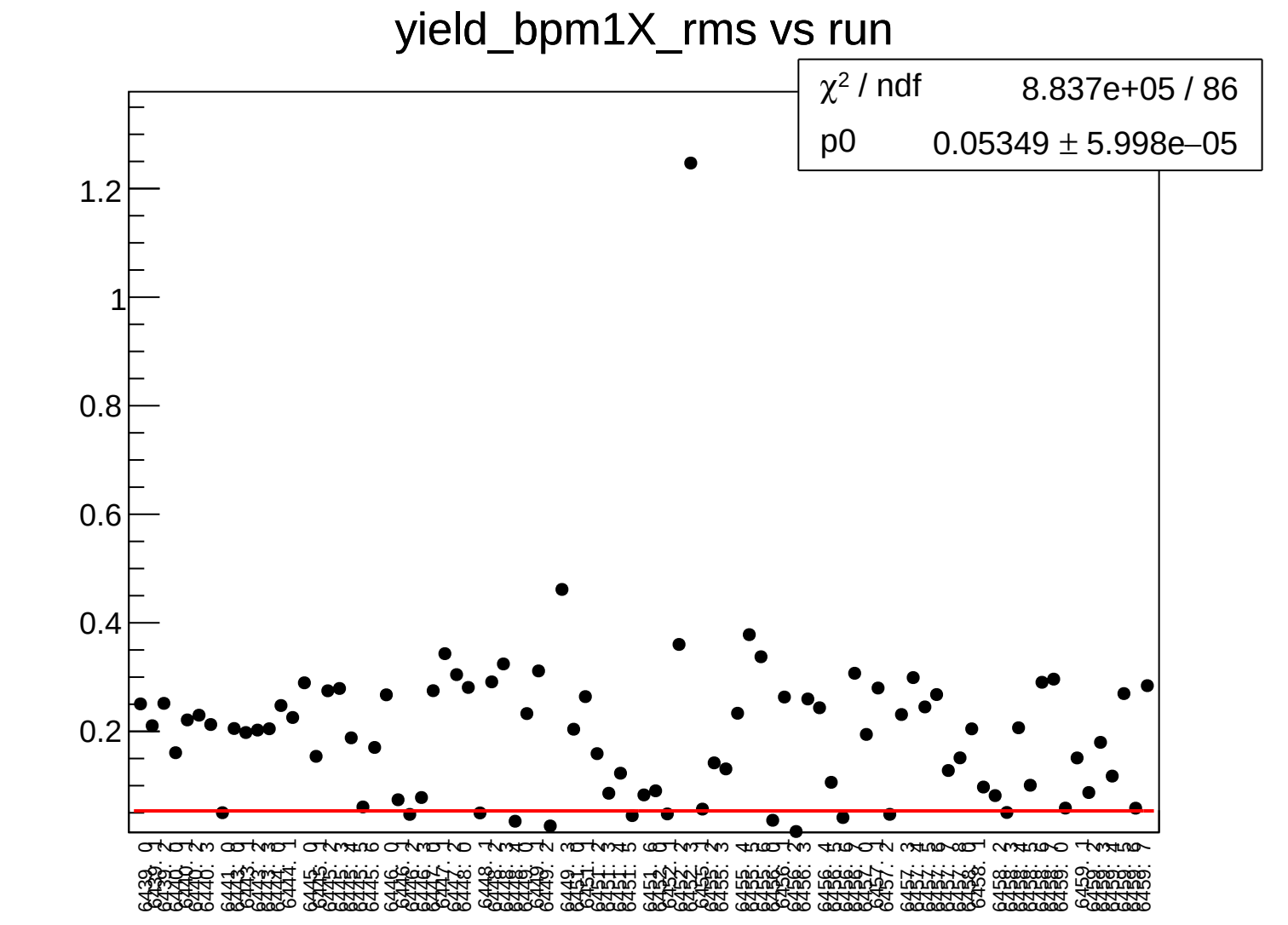

yield_bpm4ecY_mean vs run
χ² / ndf 7.047e+05 / 86
p0 0.06321 ± 9.93e−06
pull
Entries 87
Mean −1816
Std Dev 1865

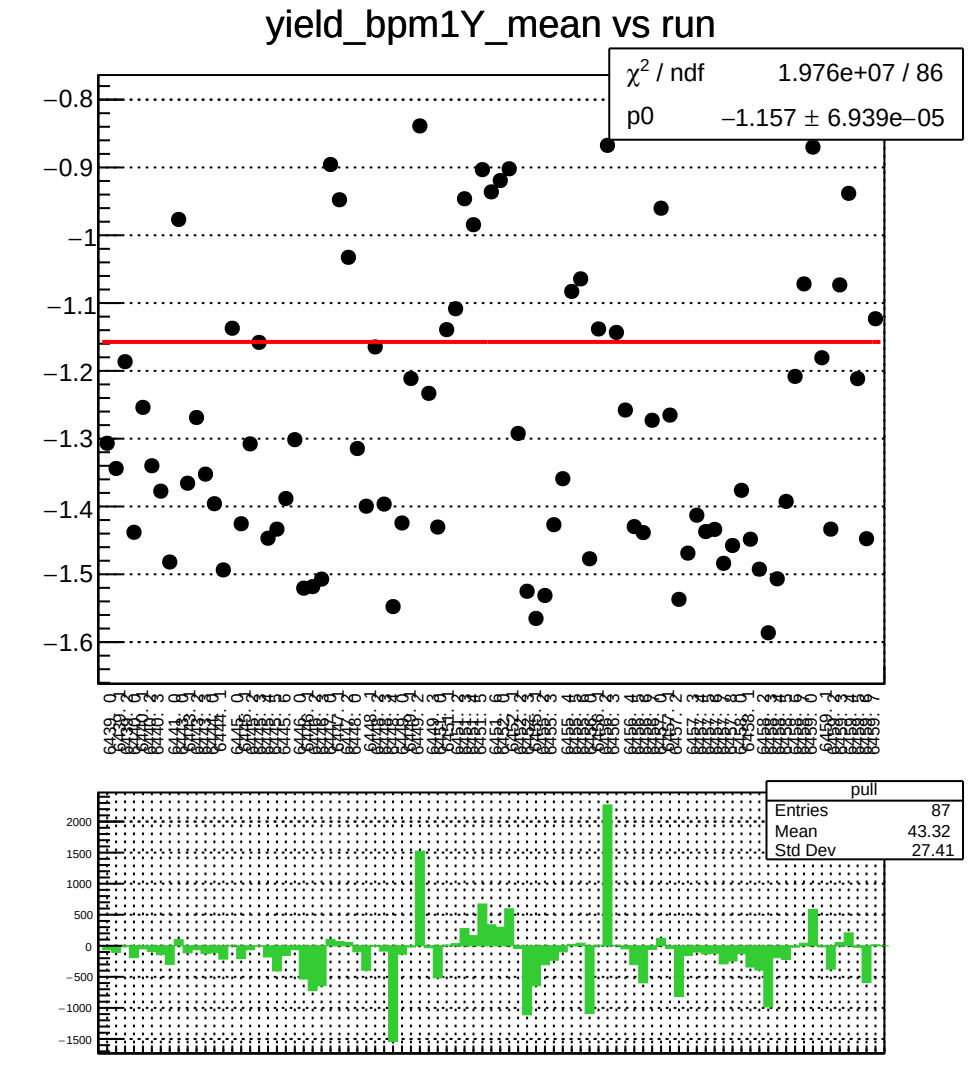

pull1D
Entries 87
Mean −1.912
Std Dev 5.294

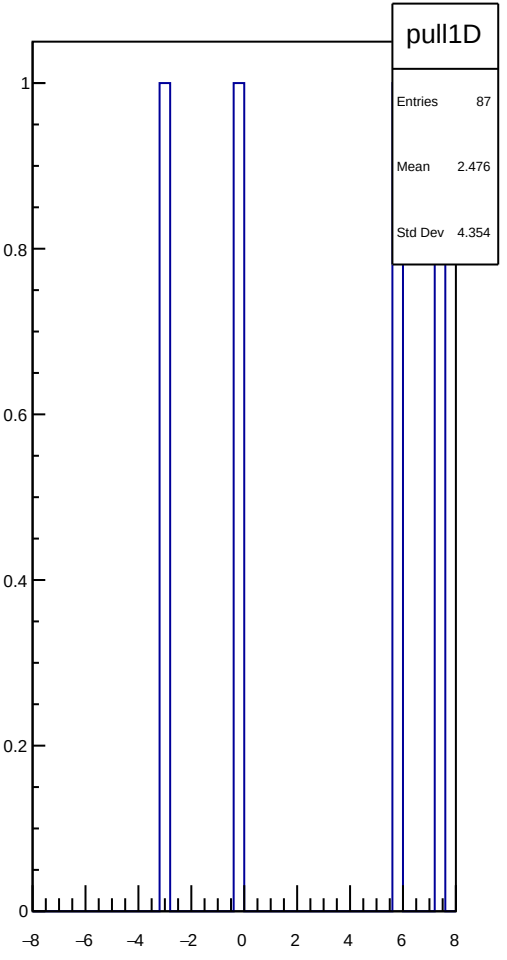

yield_bpm4ecY_rms vs run
χ^2 / ndf 9.224e+04 / 86
p0 0.008845 ± 7.022e−06
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

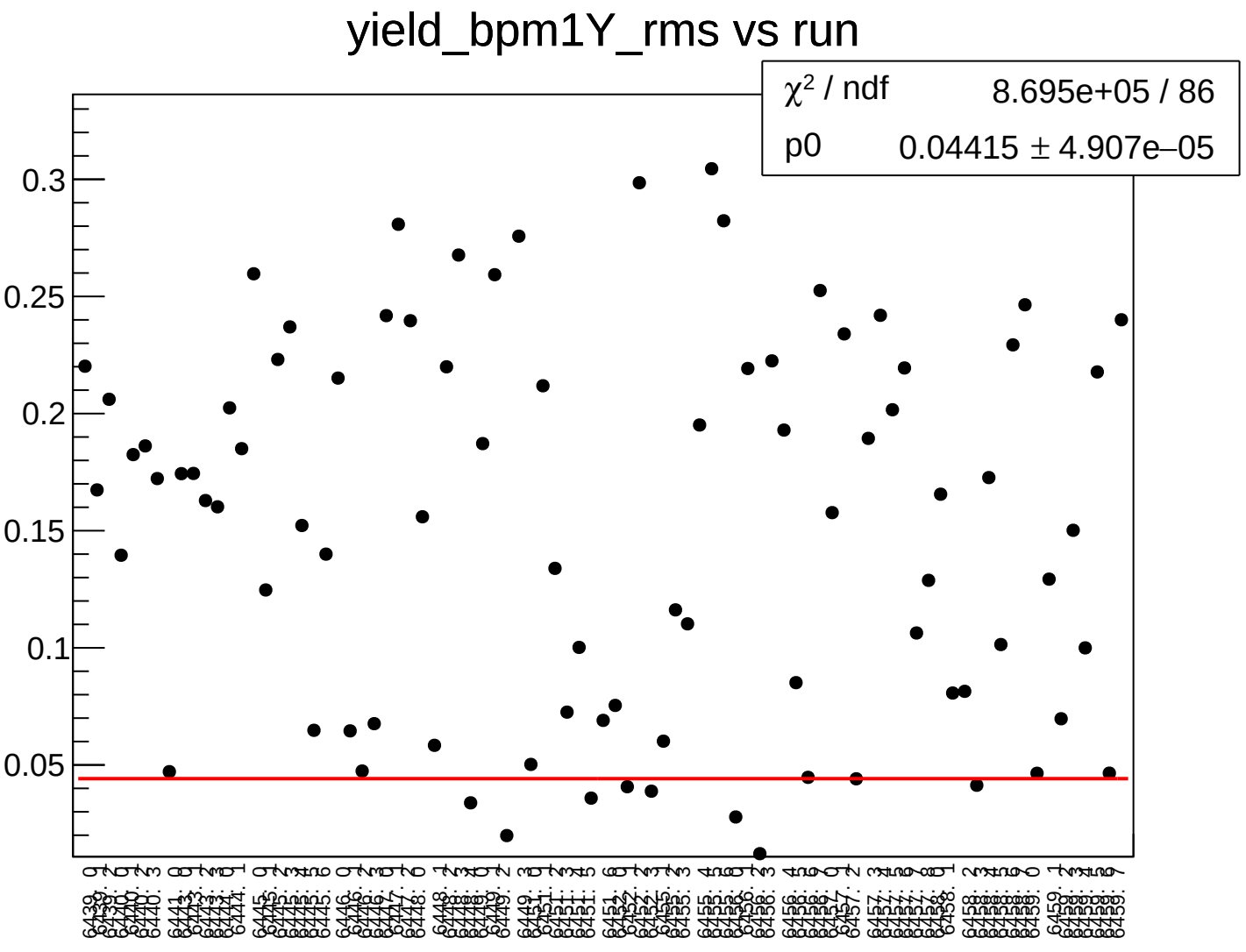

yield_bpm1X_mean vs run
χ² / ndf 1.947e+07 / 86
p0 0.07717 ± 8.483e−05
pull
Entries 87
Mean 40.66
Std Dev 29.86

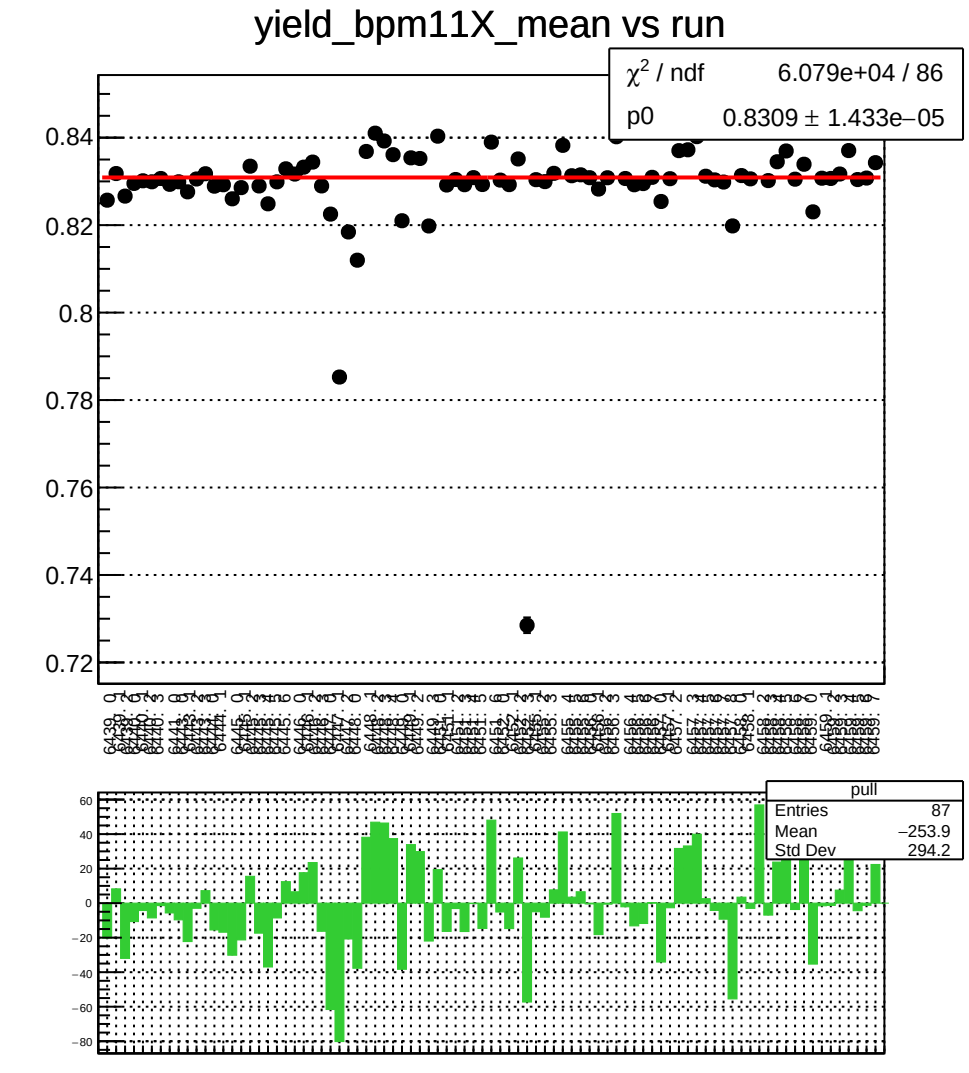

pull1D
Entries 87
Mean −2.91
Std Dev 2.66

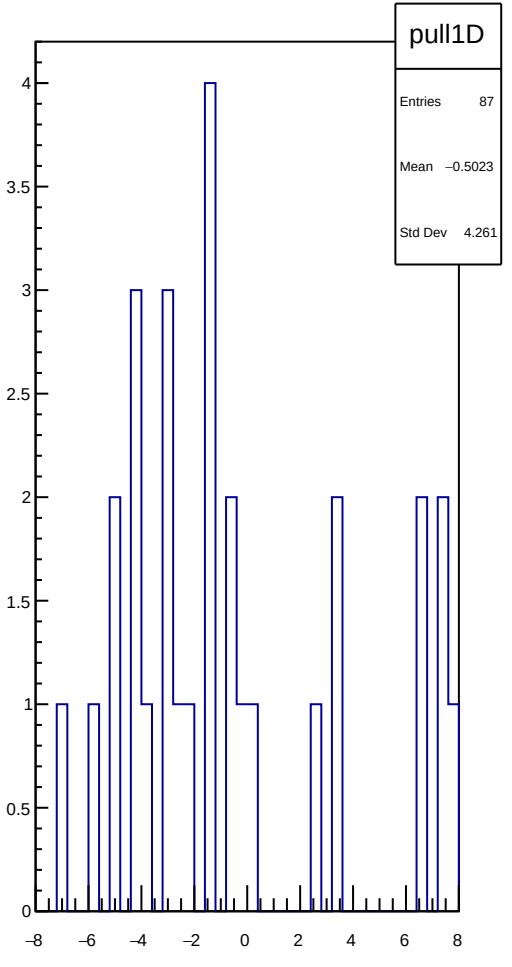

yield_bpm1X_rms vs run
χ² / ndf 8.837e+05 / 86
p0 0.05349 ± 5.998e−05
1.2
1
0.8
0.6
0.4
0.2

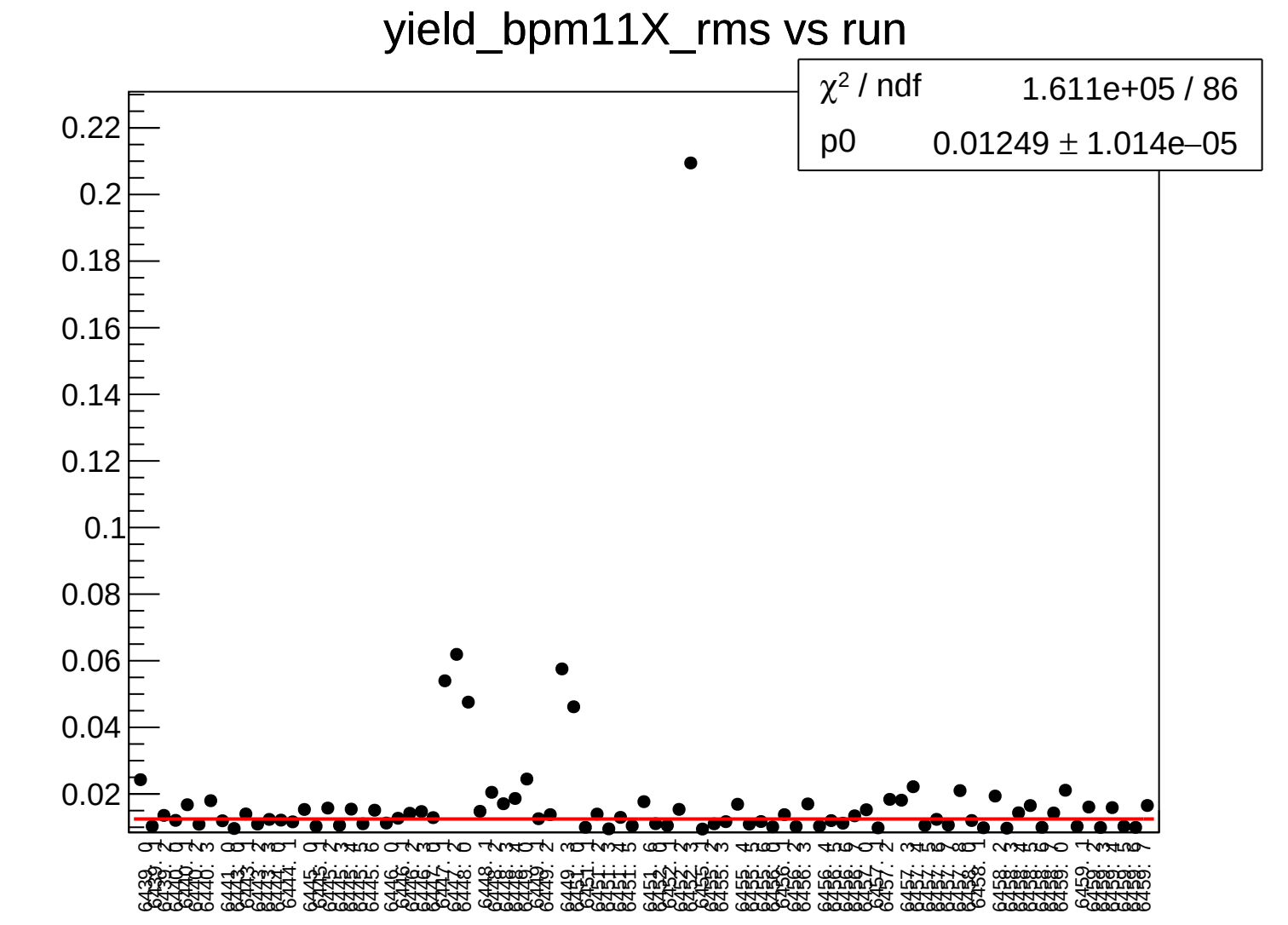

yield_bpm1Y_mean vs run
χ² / ndf 1.976e+07 / 86
p0 −1.157 ± 6.939e−05
pull
Entries 87
Mean 43.32
Std Dev 27.41

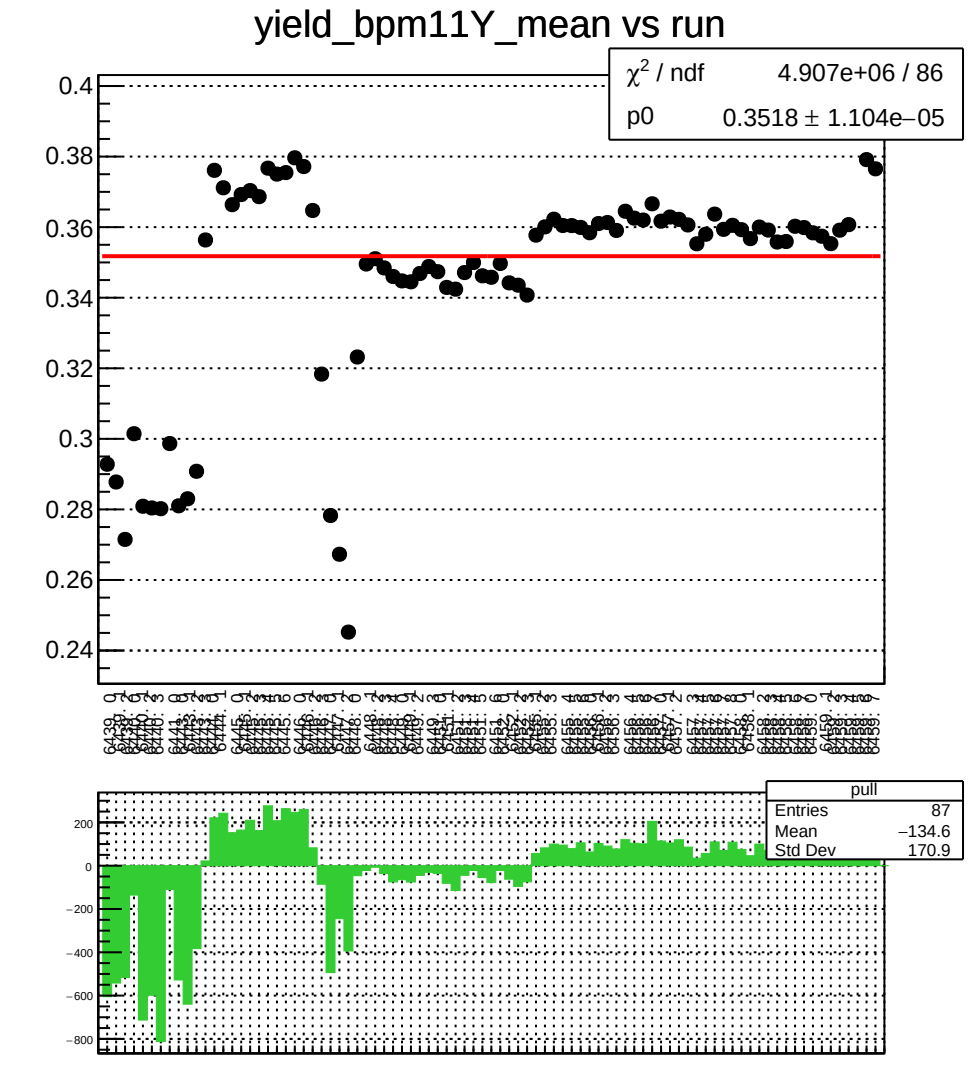

pull1D
Entries 87
Mean 2.476
Std Dev 4.354

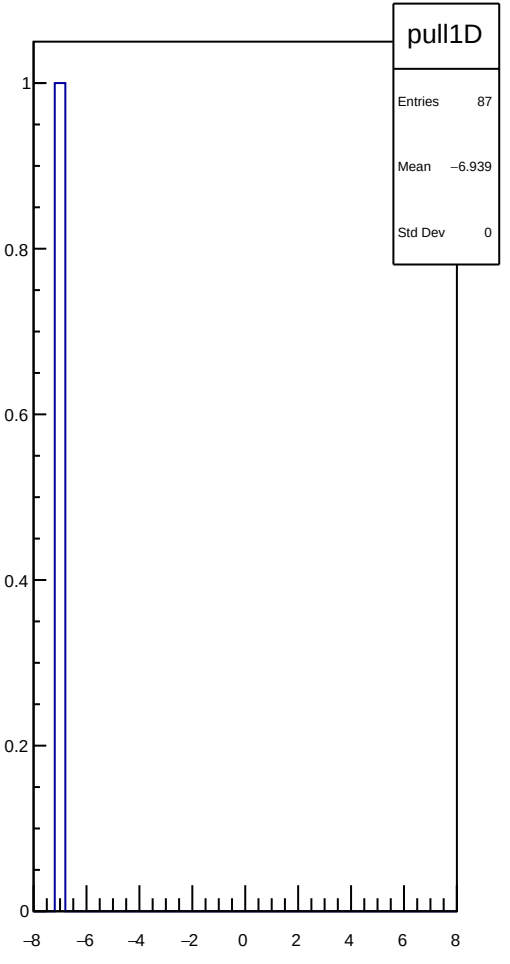

yield_bpm1Y_rms vs run
χ² / ndf 8.695e+05 / 86
p0 0.04415 ± 4.907e−05
0.3
0.25
0.2
0.15
0.1
0.05

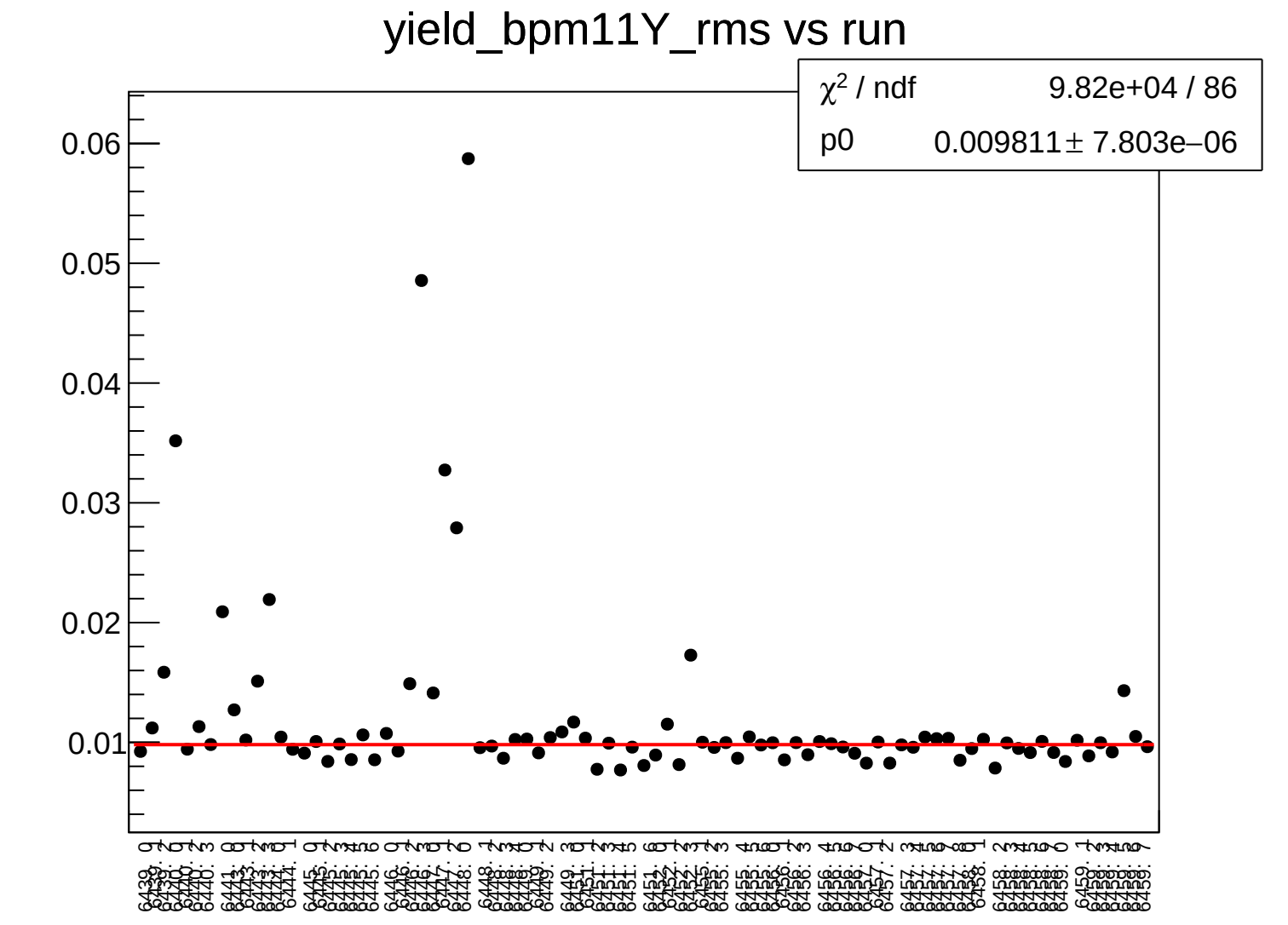

yield_bpm11X_mean vs run
χ² / ndf 6.079e+04 / 86
p0 0.8309 ± 1.433e−05
0.84
0.82
0.8
0.78
0.76
0.74
0.72
pull
Entries 87
Mean −253.9
Std Dev 294.2
60
40
20
0
−20
−40
−60
−80

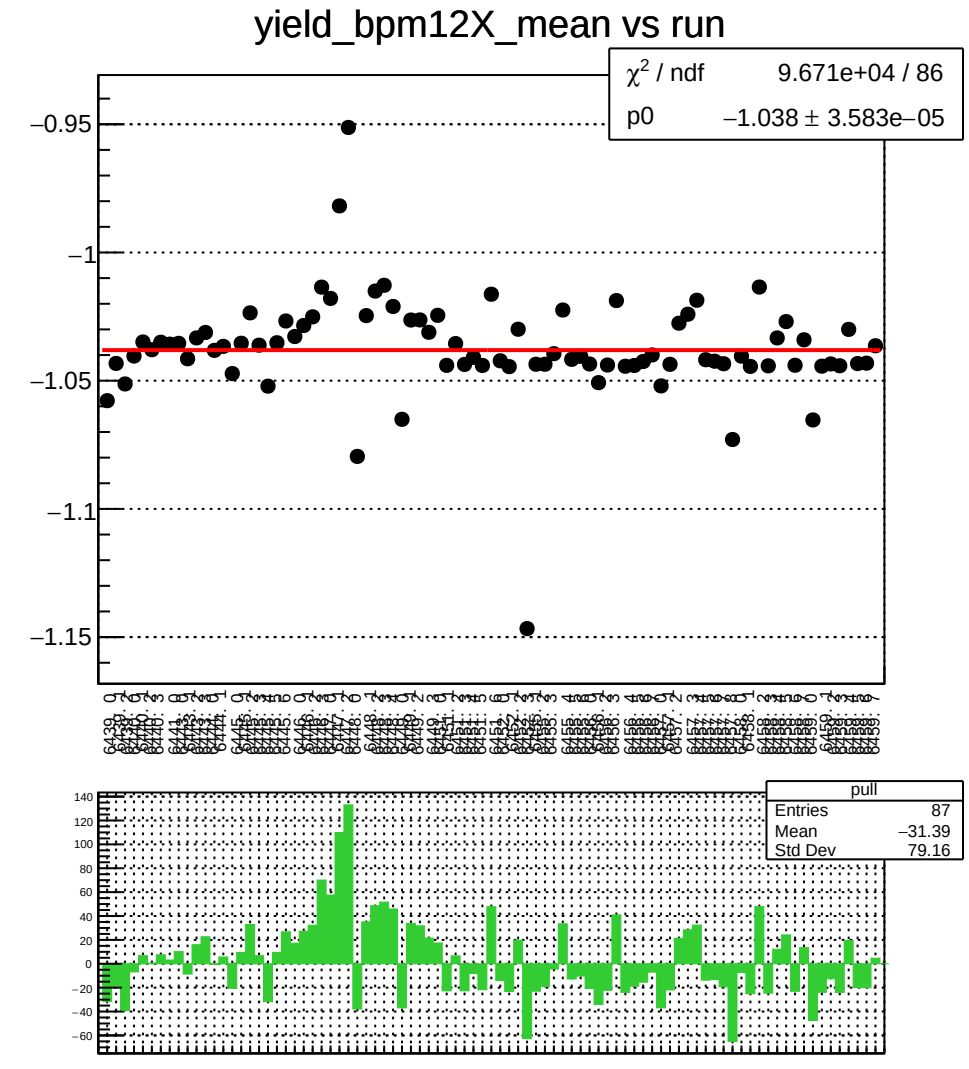

pull1D
Entries 87
Mean −0.5023
Std Dev 4.261
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

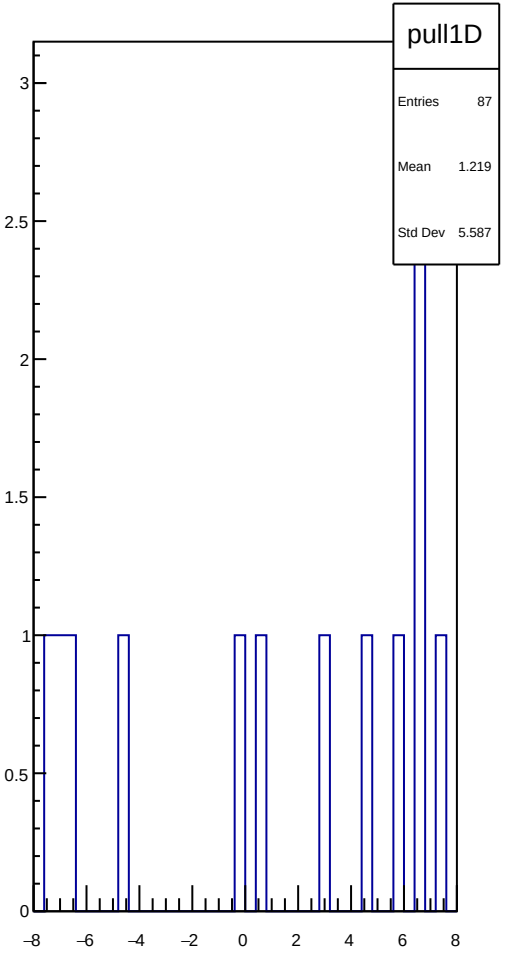

yield_bpm11X_rms vs run
χ² / ndf 1.611e+05 / 86
p0 0.01249 ± 1.014e−05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

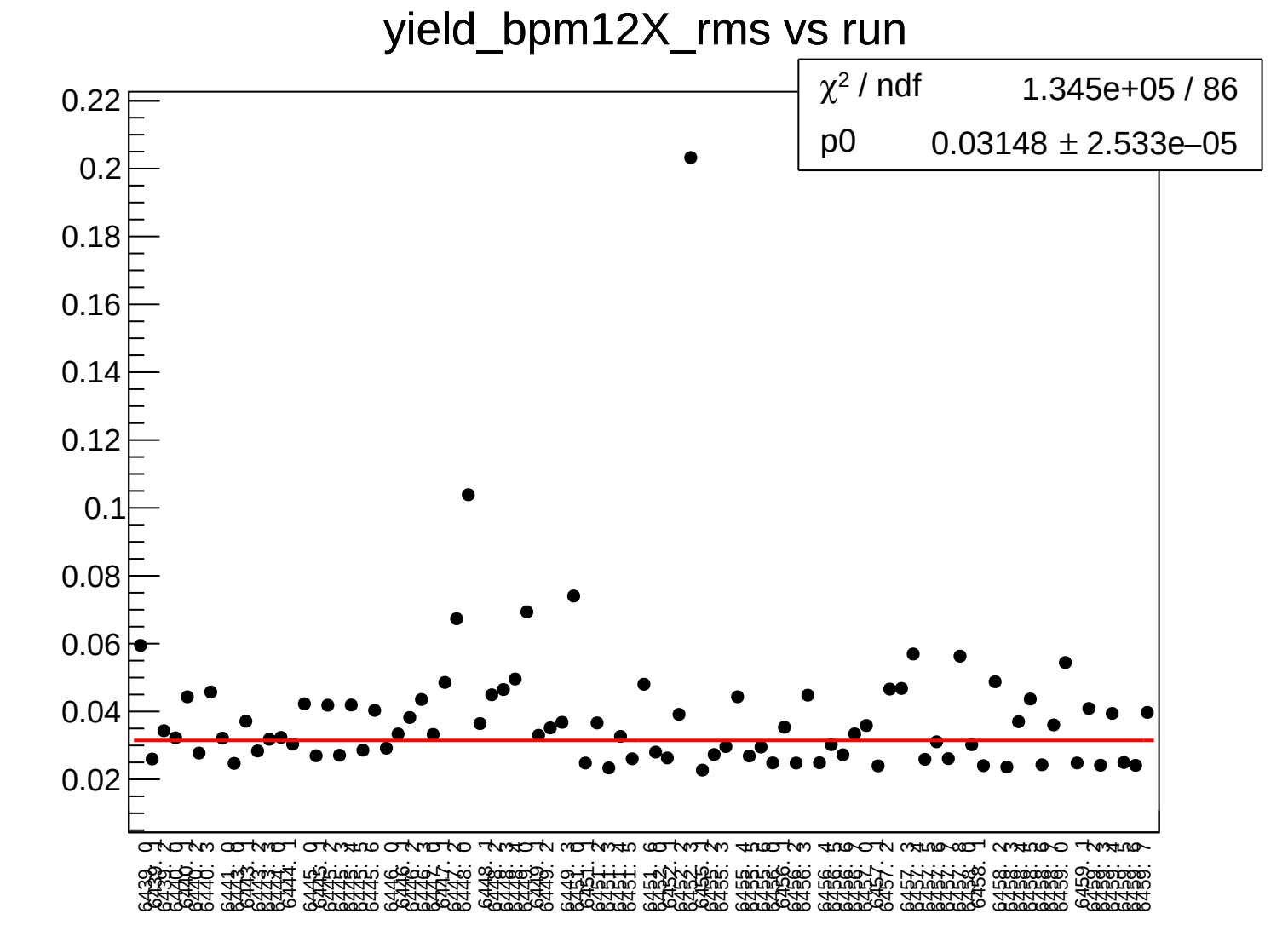

yield_bpm11Y_mean vs run
χ² / ndf 4.907e+06 / 86
p0 0.3518 ± 1.104e−05
0.4
0.38
0.36
0.34
0.32
0.3
0.28
0.26
0.24
pull
Entries 87
Mean −134.6
Std Dev 170.9
200
0
−200
−400
−600
−800

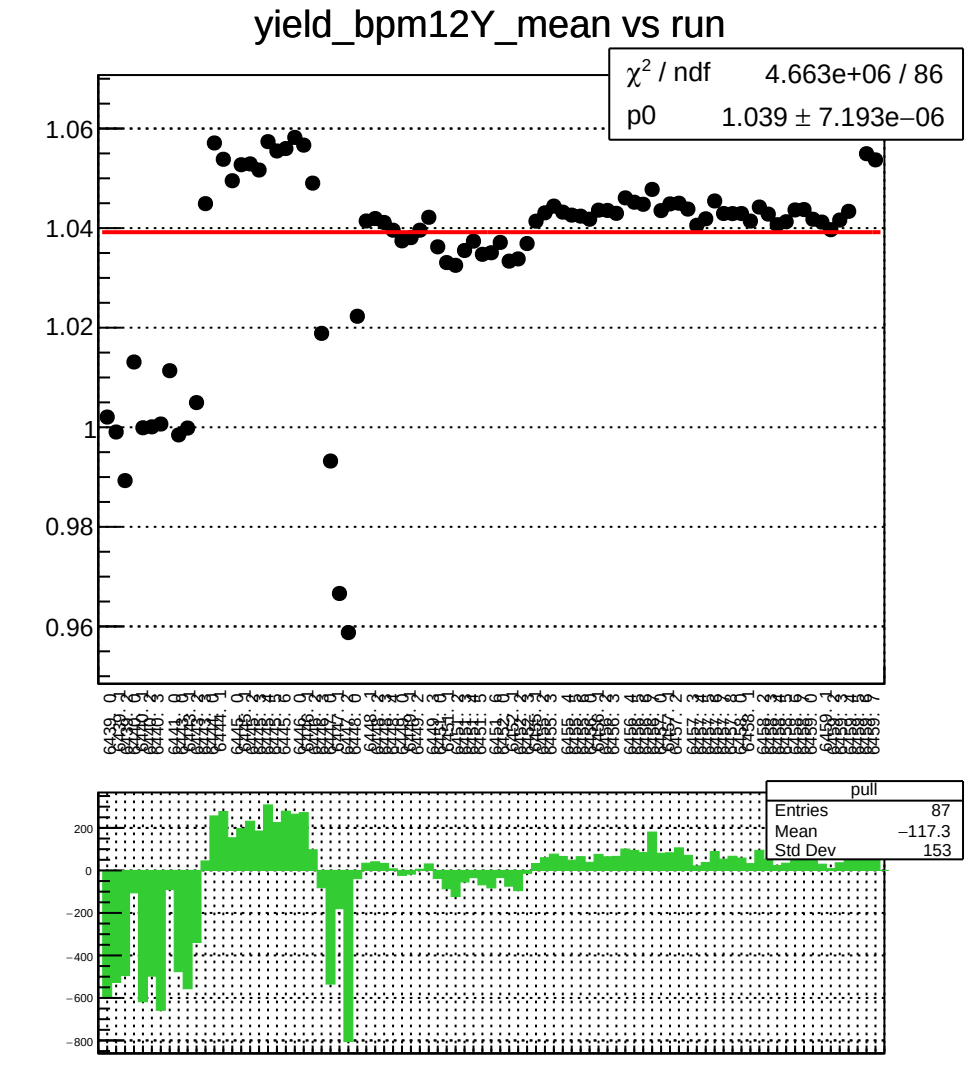

pull1D
Entries 87
Mean −6.939
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

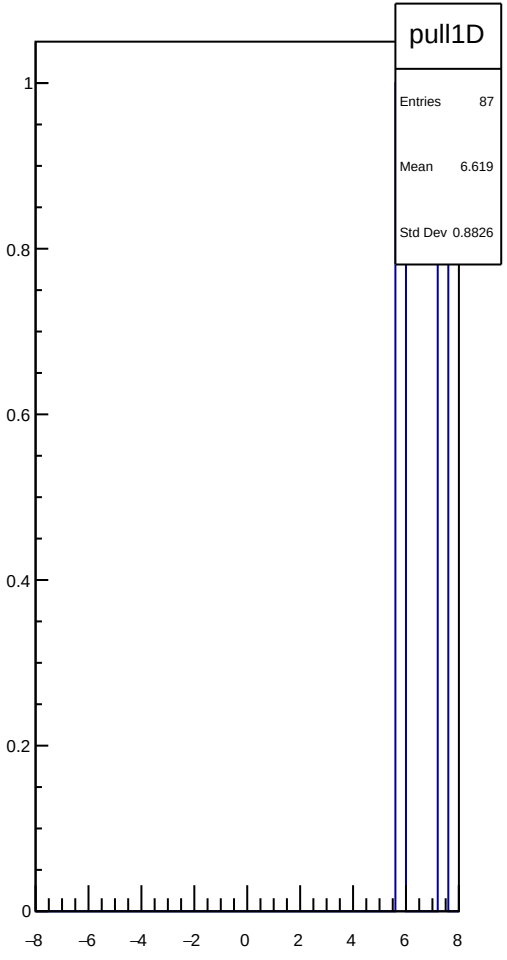

yield_bpm11Y_rms vs run
χ^2 / ndf 9.82e+04 / 86
p0 0.009811 ± 7.803e−06
0.06
0.05
0.04
0.03
0.02
0.01

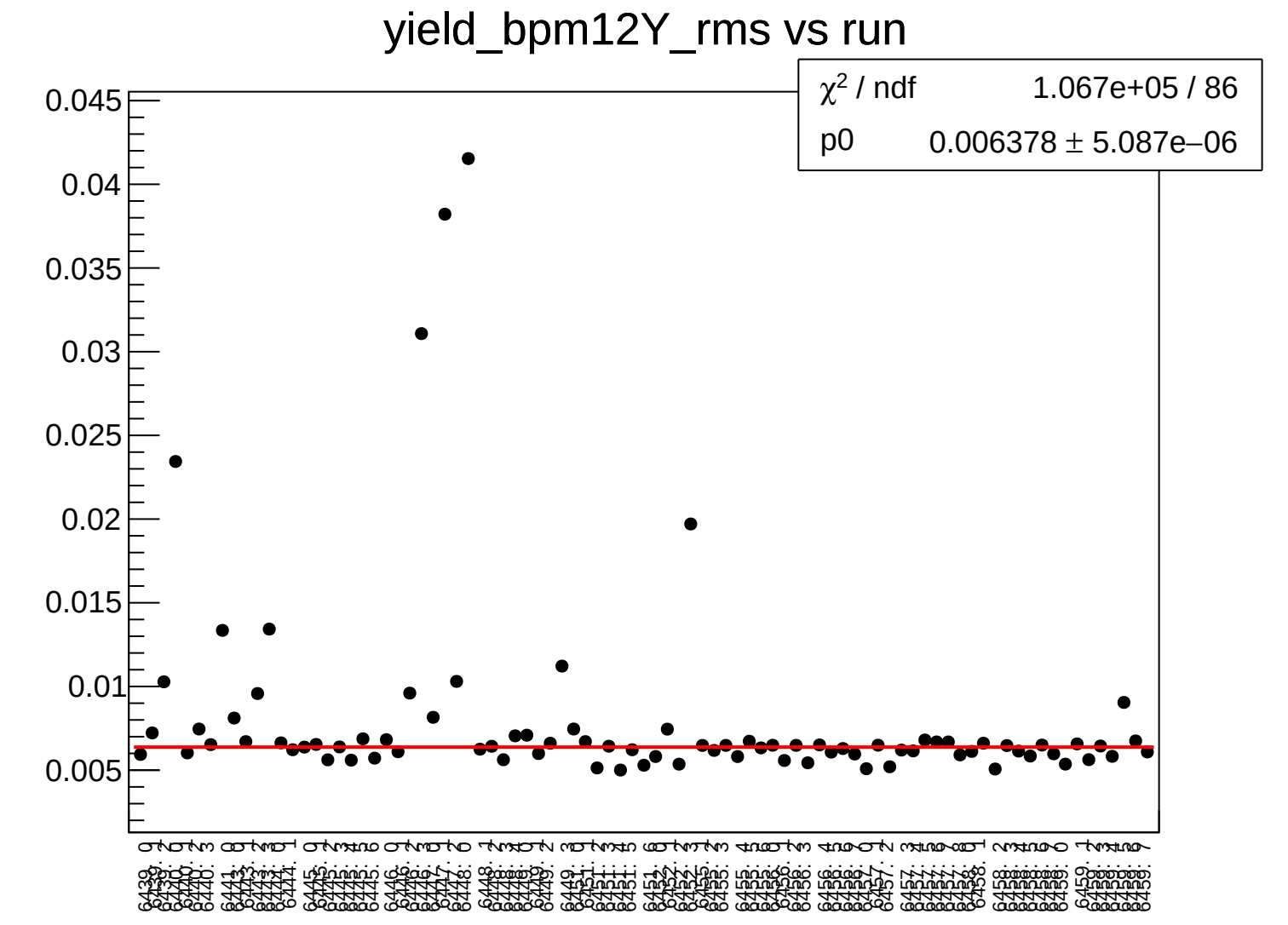

yield_bpm12X_mean vs run
χ² / ndf 9.671e+04 / 86
p0 −1.038 ± 3.583e−05
−0.95
−1
−1.05
−1.1
−1.15
pull
Entries 87
Mean −31.39
Std Dev 79.16
140
120
100
80
60
40
20
0
−20
−40
−60

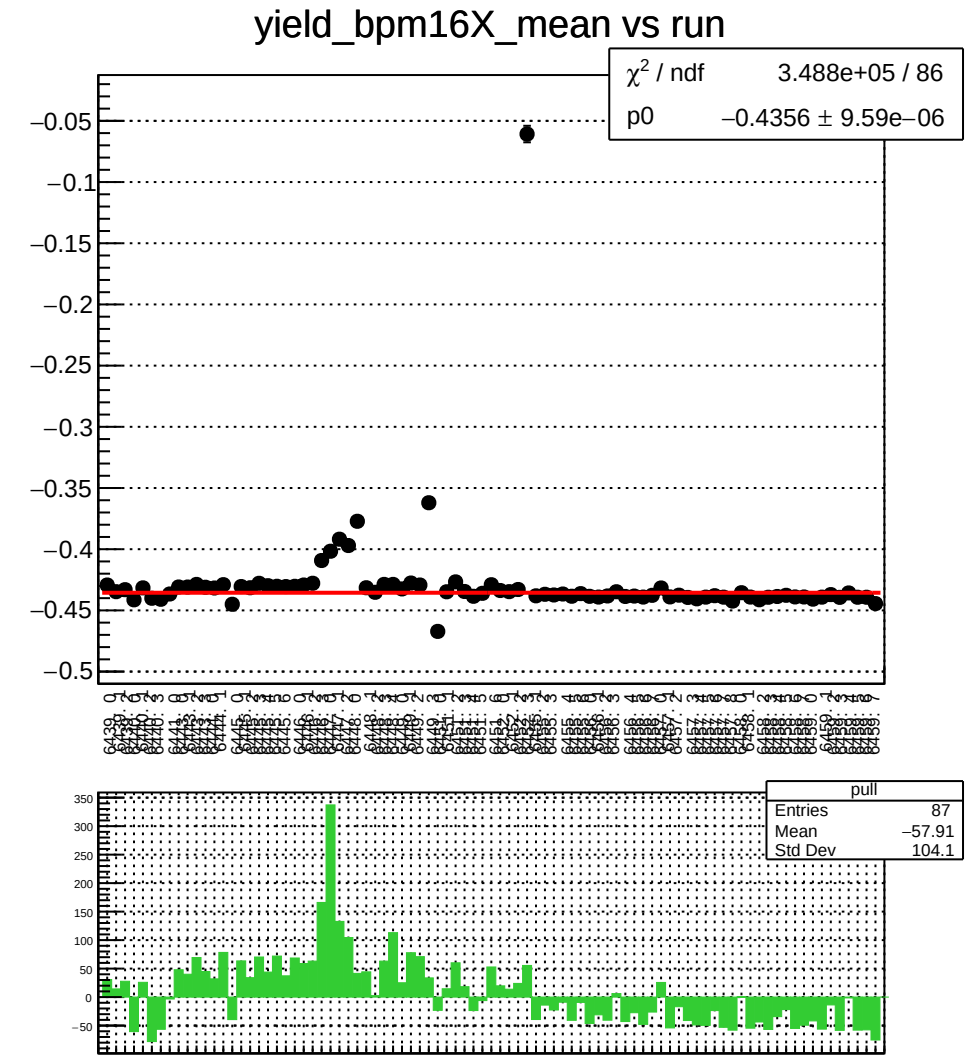

pull1D
Entries 87
Mean 1.219
Std Dev 5.587
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

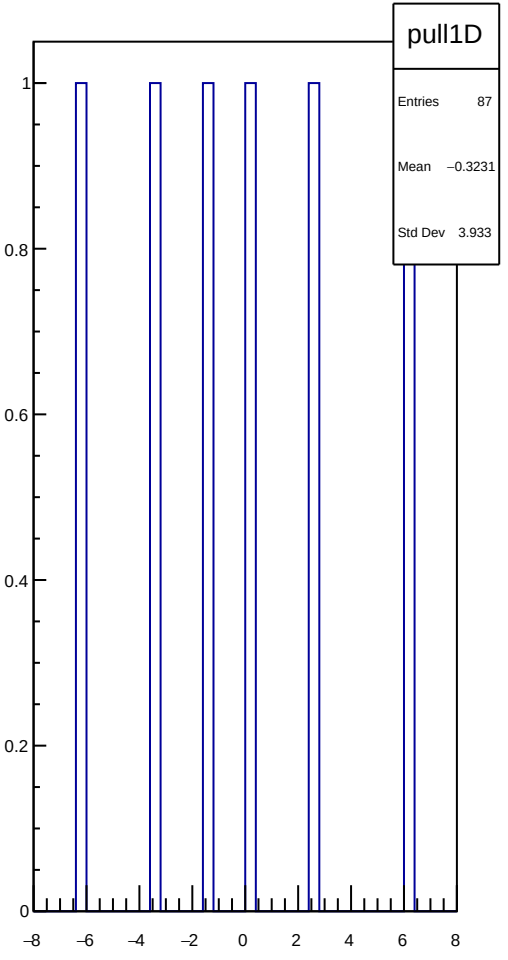

yield_bpm12X_rms vs run
χ² / ndf 1.345e+05 / 86
p0 0.03148 ± 2.533e–05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

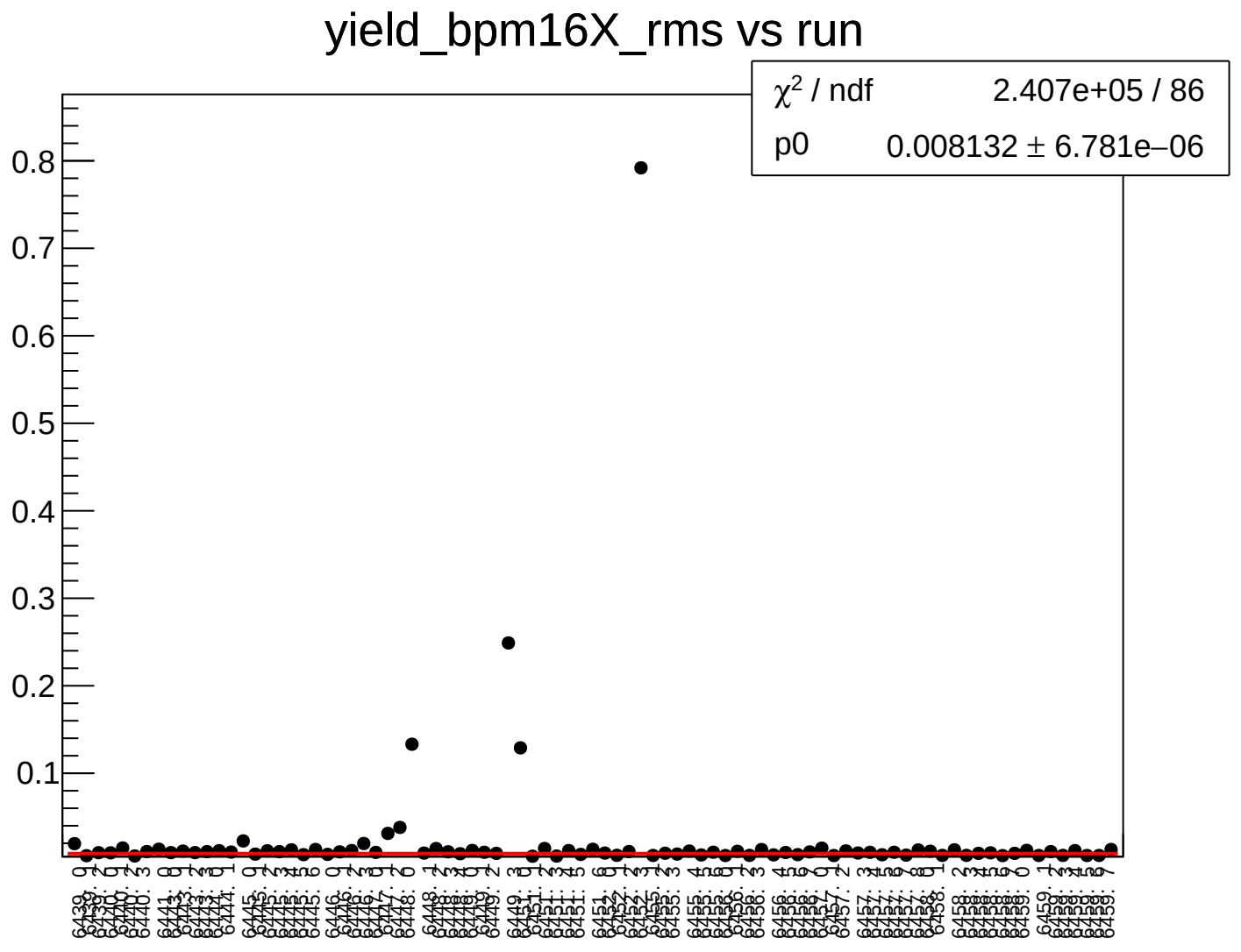

yield_bpm12Y_mean vs run
χ² / ndf 4.663e+06 / 86
p0 1.039 ± 7.193e−06
1.06
1.04
1.02
1
0.98
0.96
pull
Entries 87
Mean −117.3
Std Dev 153
200
0
−200
−400
−600
−800

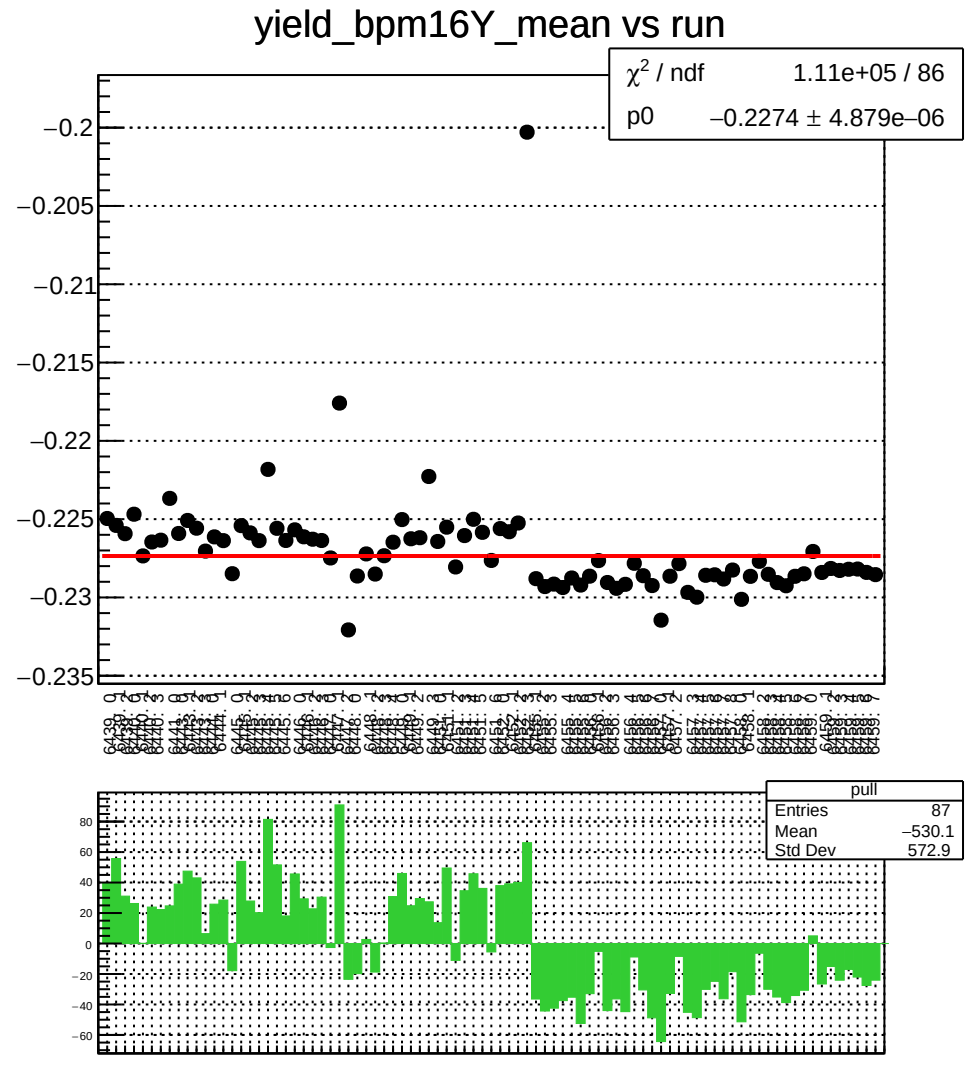

pull1D
Entries 87
Mean 6.619
Std Dev 0.8826
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

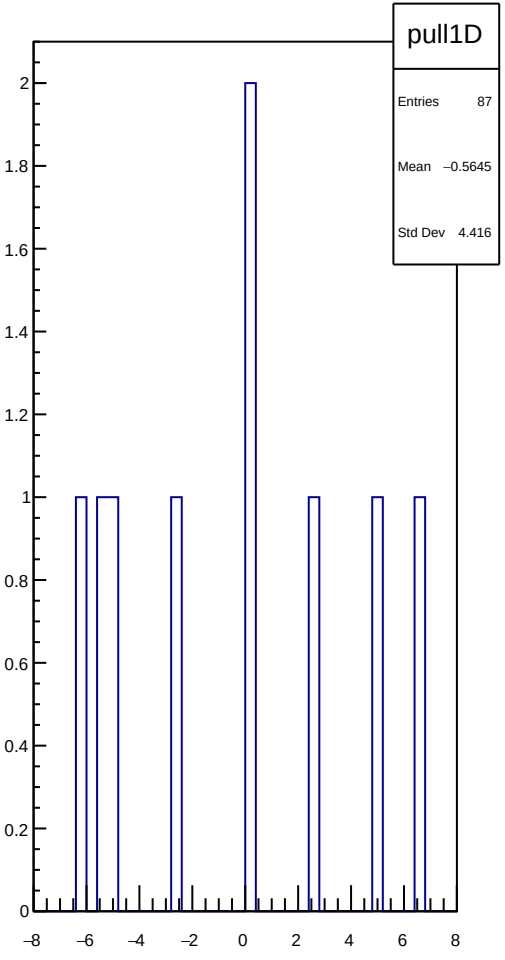

yield_bpm12Y_rms vs run
χ^2 / ndf 1.067e+05 / 86
p0 0.006378 ± 5.087e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

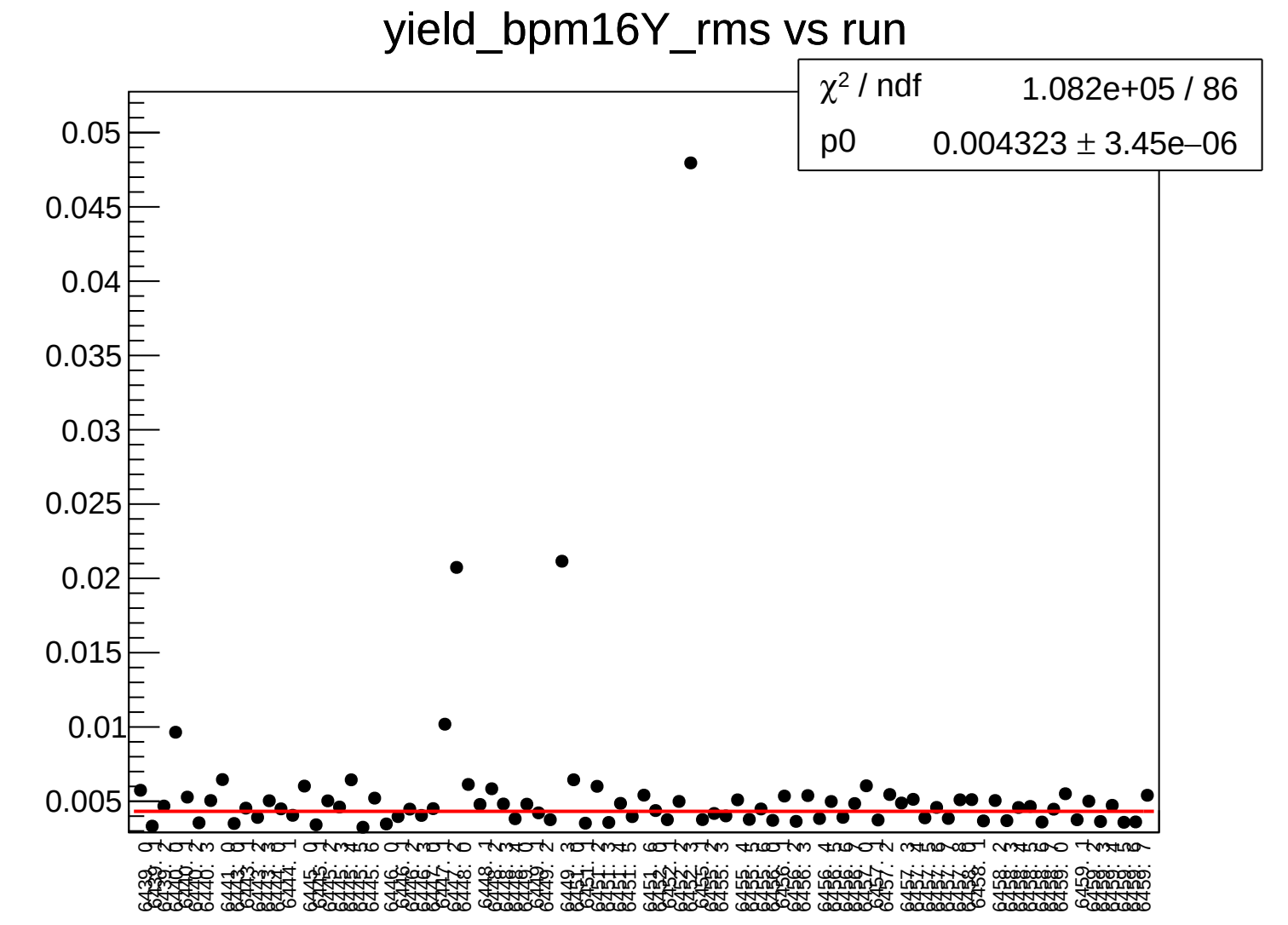

yield_bpm16X_mean vs run
χ² / ndf 3.488e+05 / 86
p0 −0.4356 ± 9.59e−06
pull
Entries 87
Mean −57.91
Std Dev 104.1

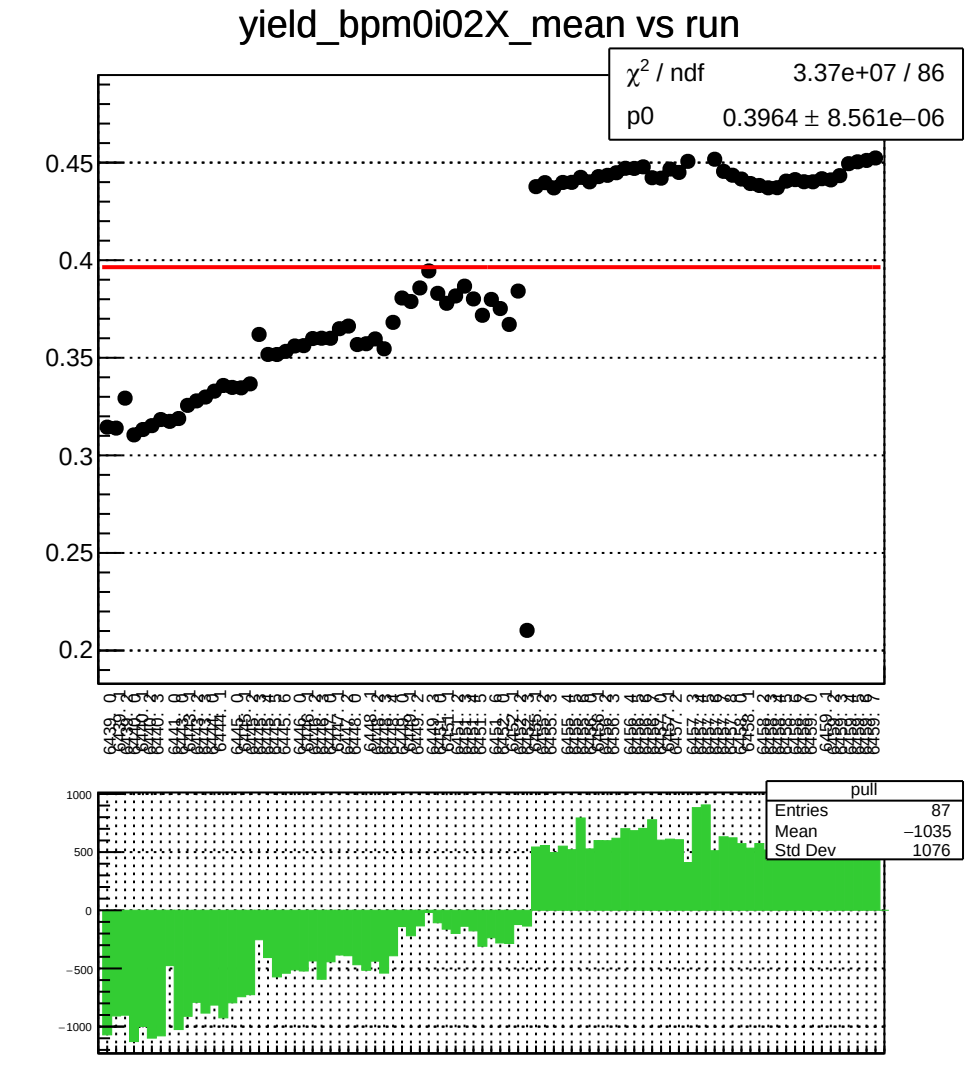

pull1D
Entries 87
Mean −0.3231
Std Dev 3.933

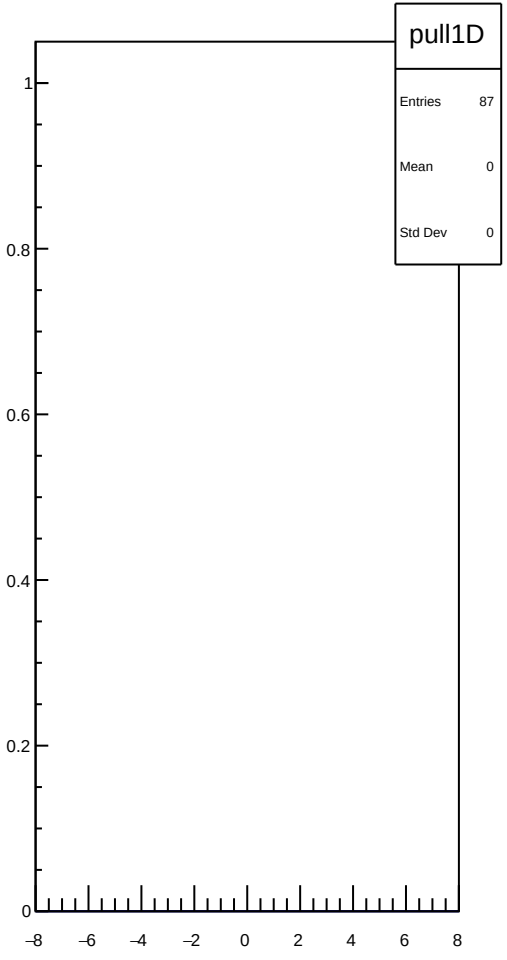

yield_bpm16X_rms vs run
χ² / ndf 2.407e+05 / 86
p0 0.008132 ± 6.781e−06
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

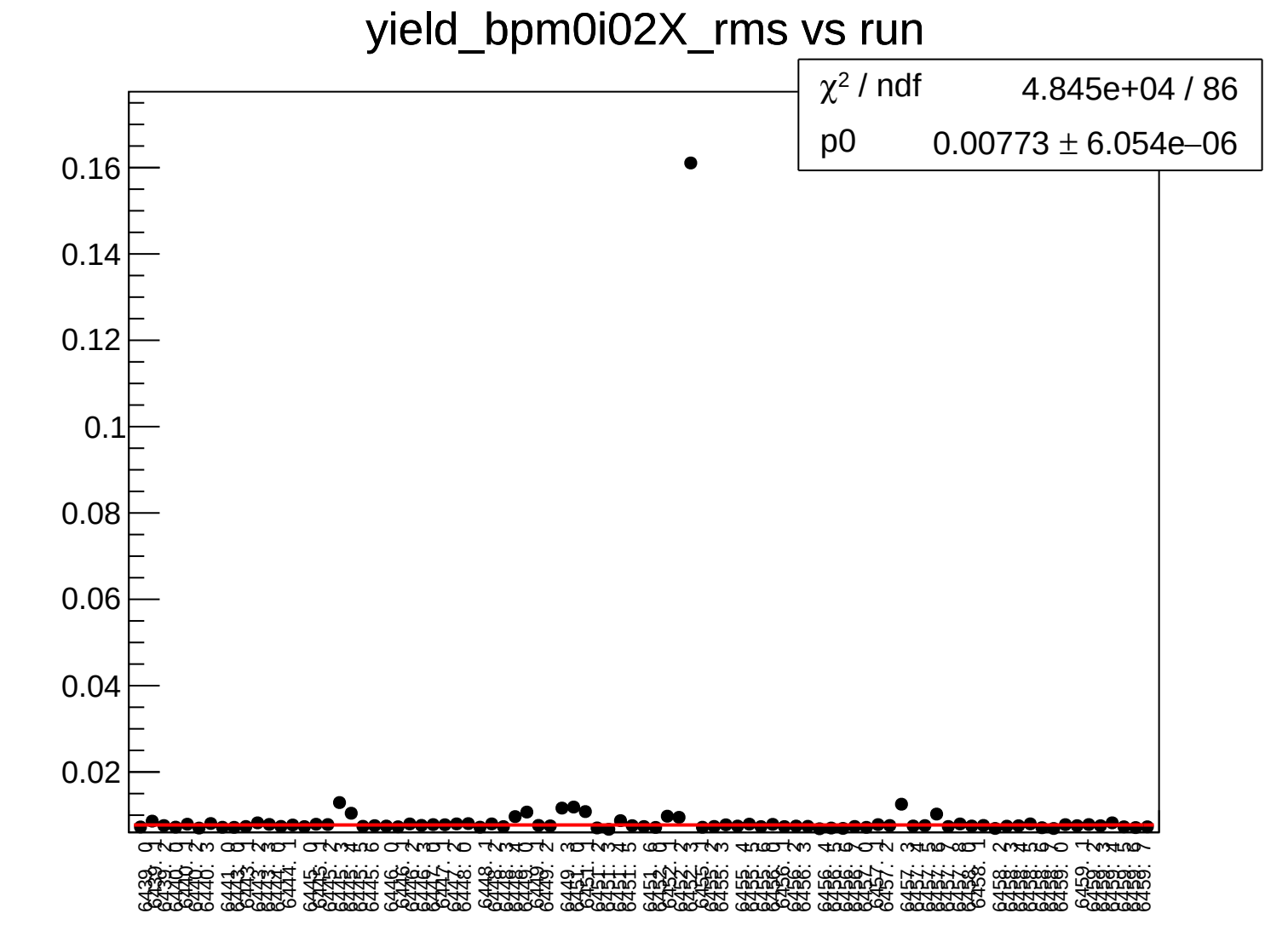

yield_bpm16Y_mean vs run
χ² / ndf 1.11e+05 / 86
p0 −0.2274 ± 4.879e−06
pull
Entries 87
Mean −530.1
Std Dev 572.9

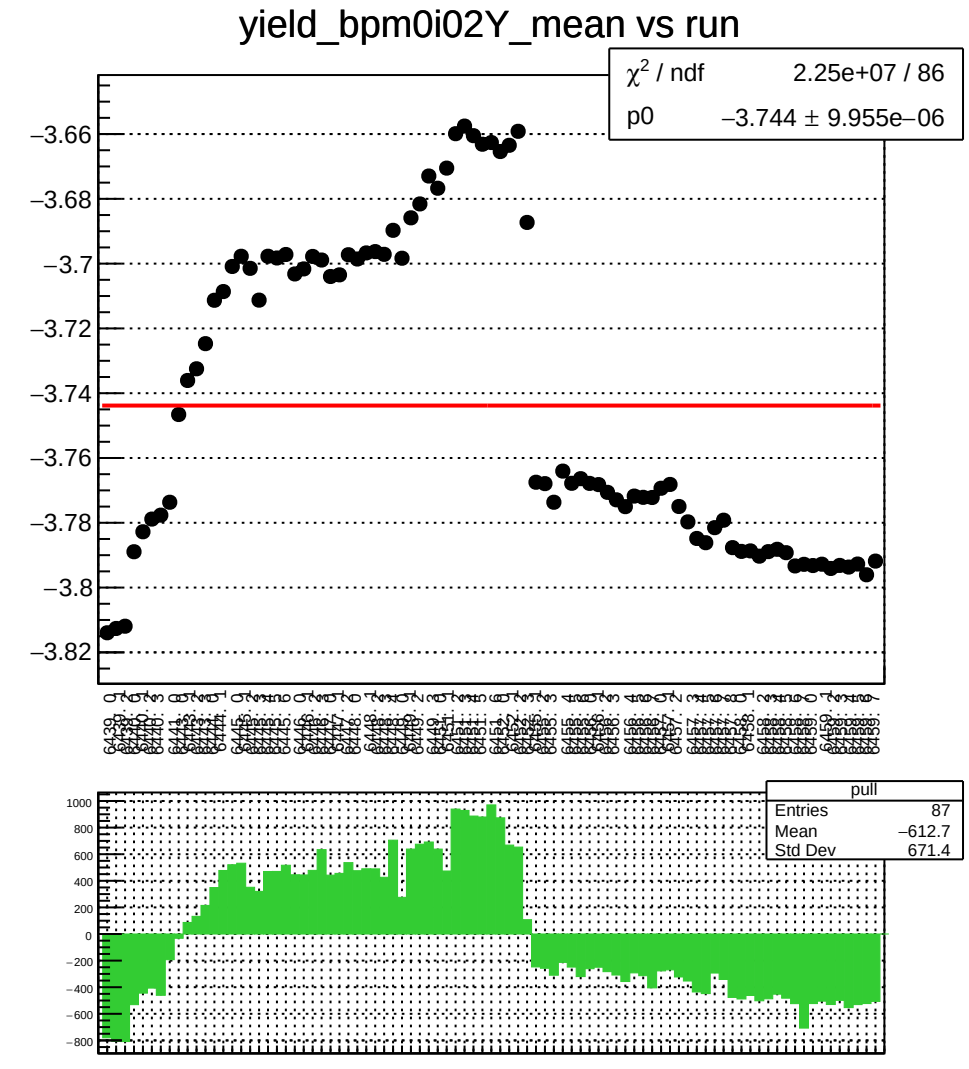

pull1D
Entries 87
Mean −0.5645
Std Dev 4.416

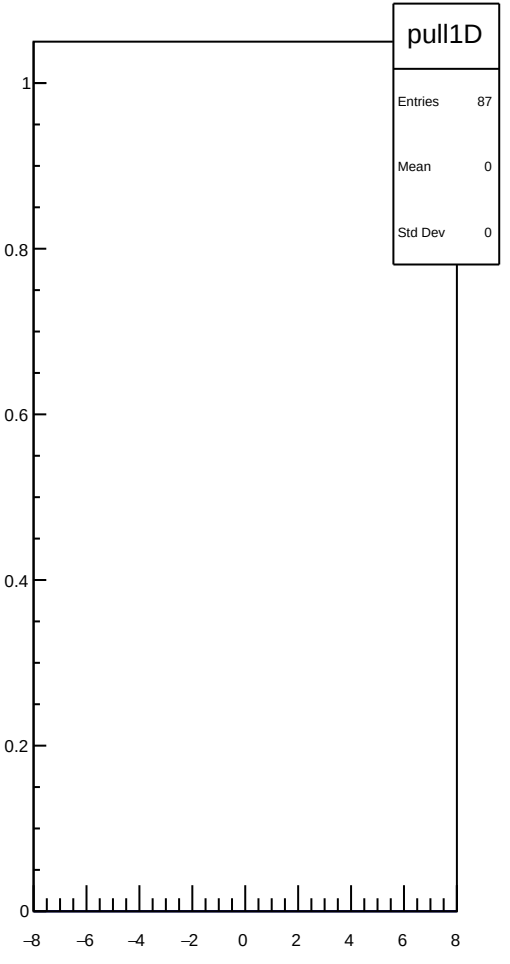

yield_bpm16Y_rms vs run
χ² / ndf 1.082e+05 / 86
p0 0.004323 ± 3.45e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

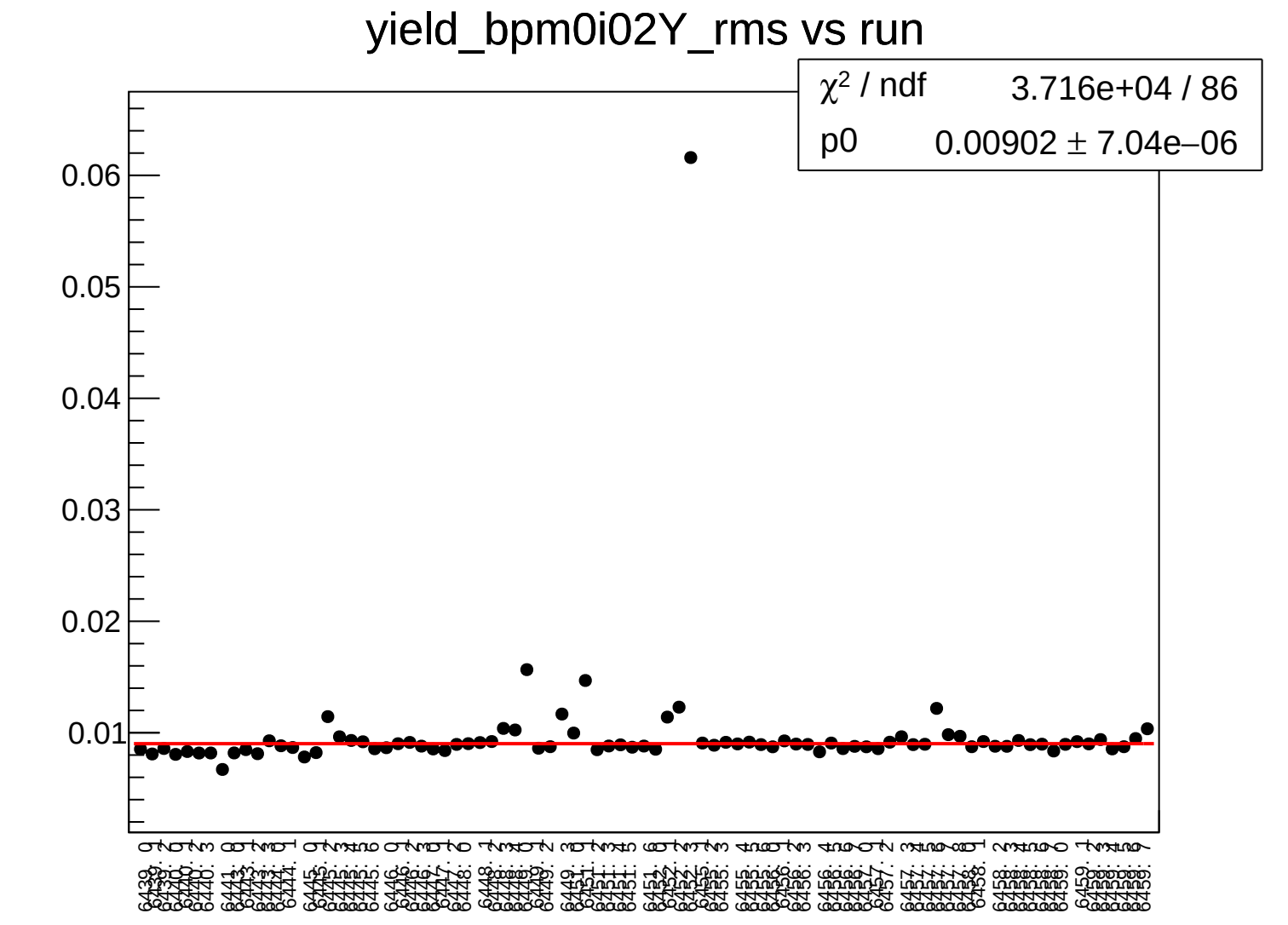

yield_bpm0i02X_mean vs run
χ² / ndf 3.37e+07 / 86
p0 0.3964 ± 8.561e−06
0.45
0.4
0.35
0.3
0.25
0.2
pull
Entries 87
Mean −1035
Std Dev 1076
1000
500
0
−500
−1000

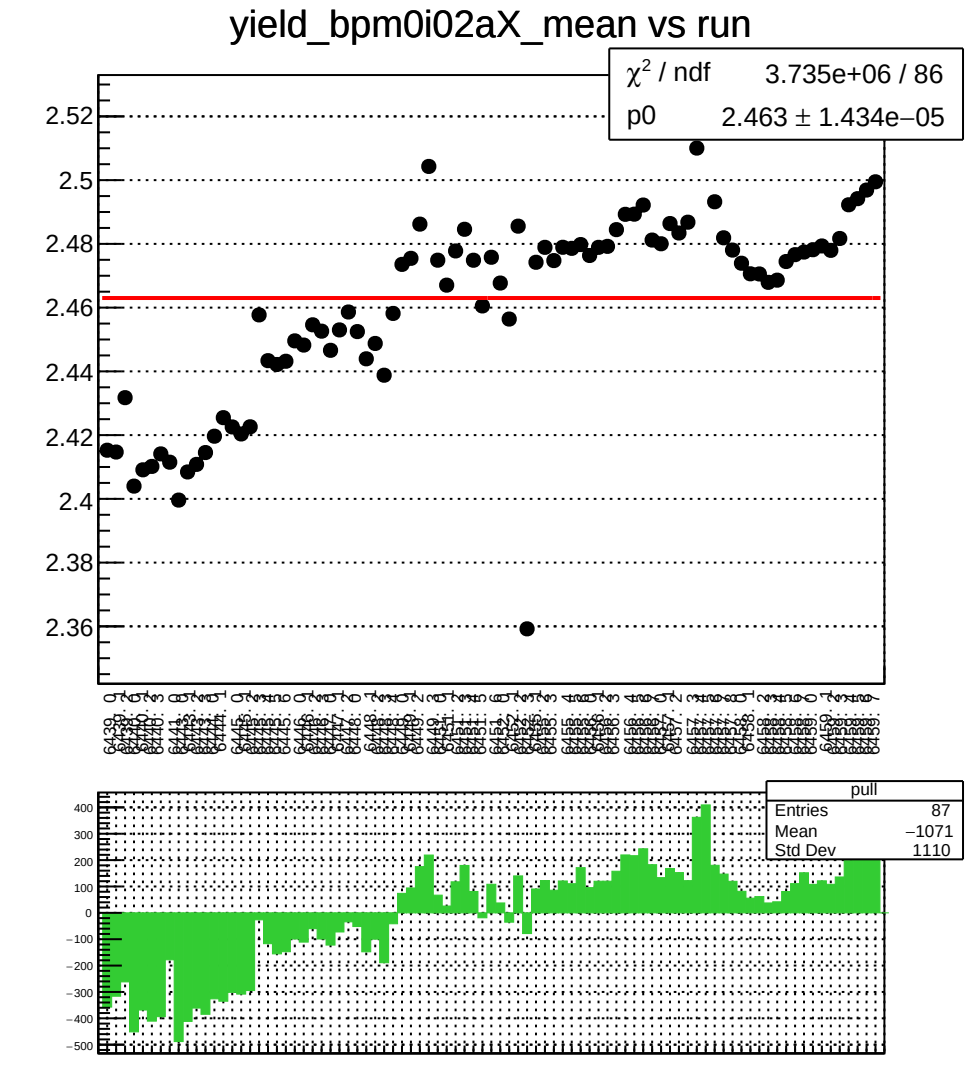

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

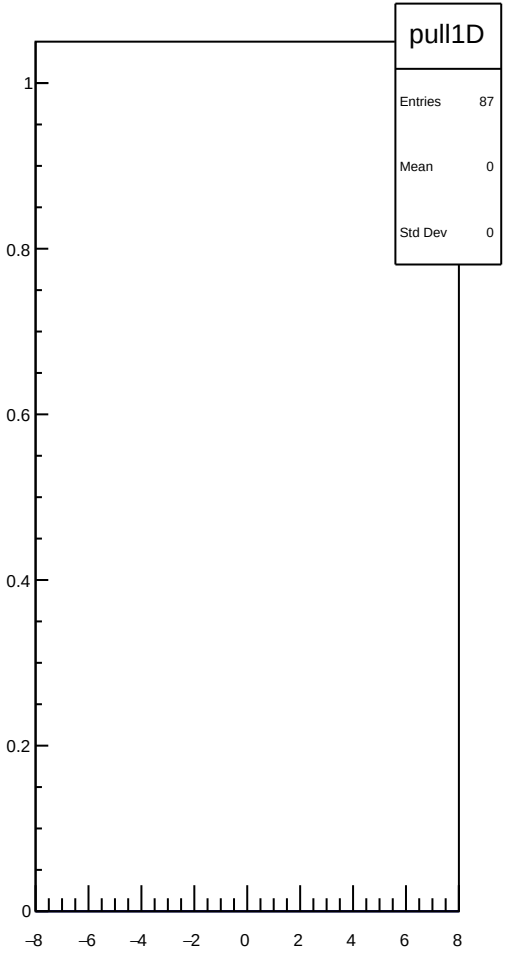

yield_bpm0i02X_rms vs run
χ² / ndf 4.845e+04 / 86
p0 0.00773 ± 6.054e−06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

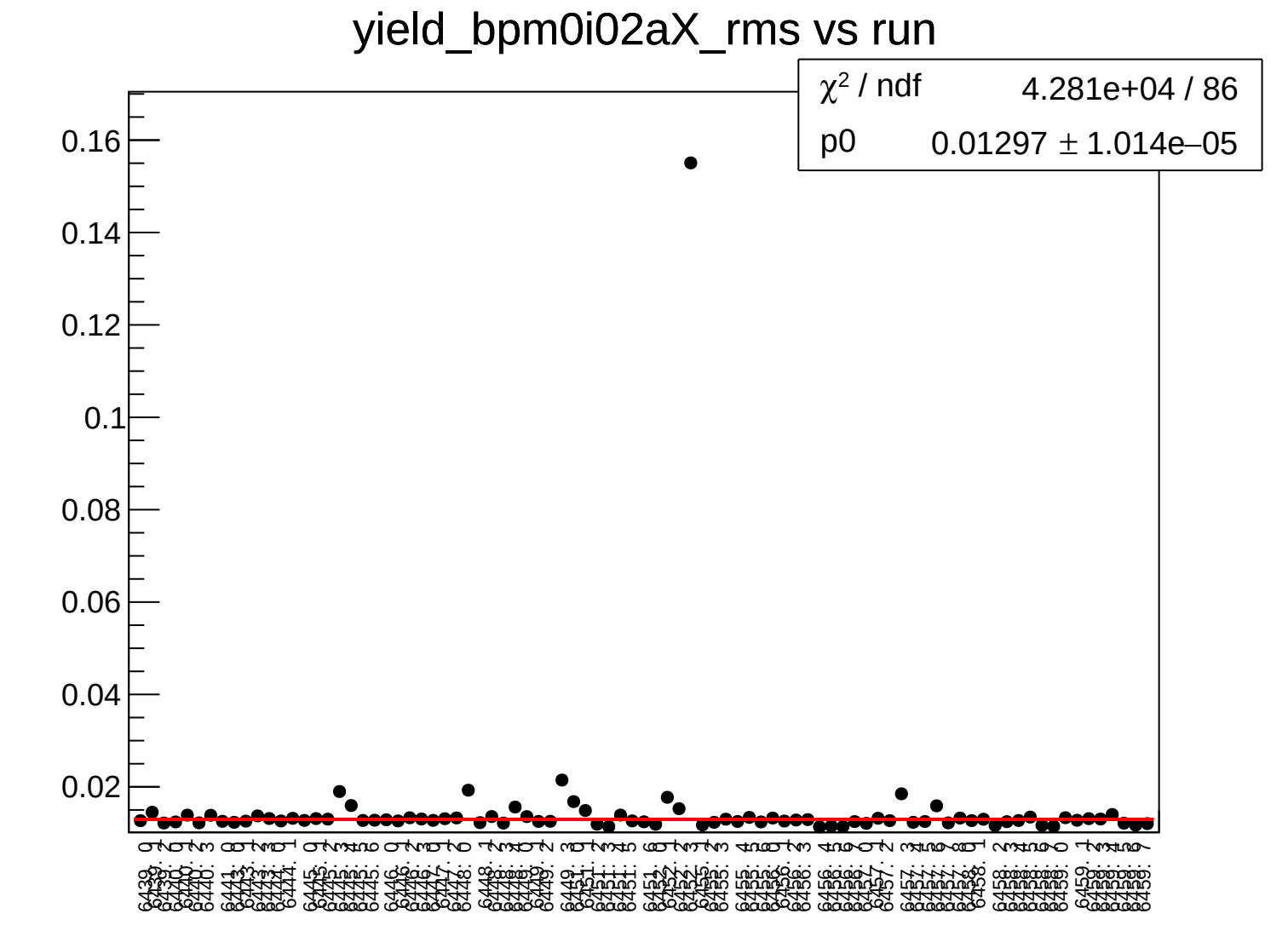

yield_bpm0i02Y_mean vs run
χ² / ndf 2.25e+07 / 86
p0 −3.744 ± 9.955e−06
−3.66
−3.68
−3.7
−3.72
−3.74
−3.76
−3.78
−3.8
−3.82
pull
Entries 87
Mean −612.7
Std Dev 671.4
1000
800
600
400
200
0
−200
−400
−600
−800

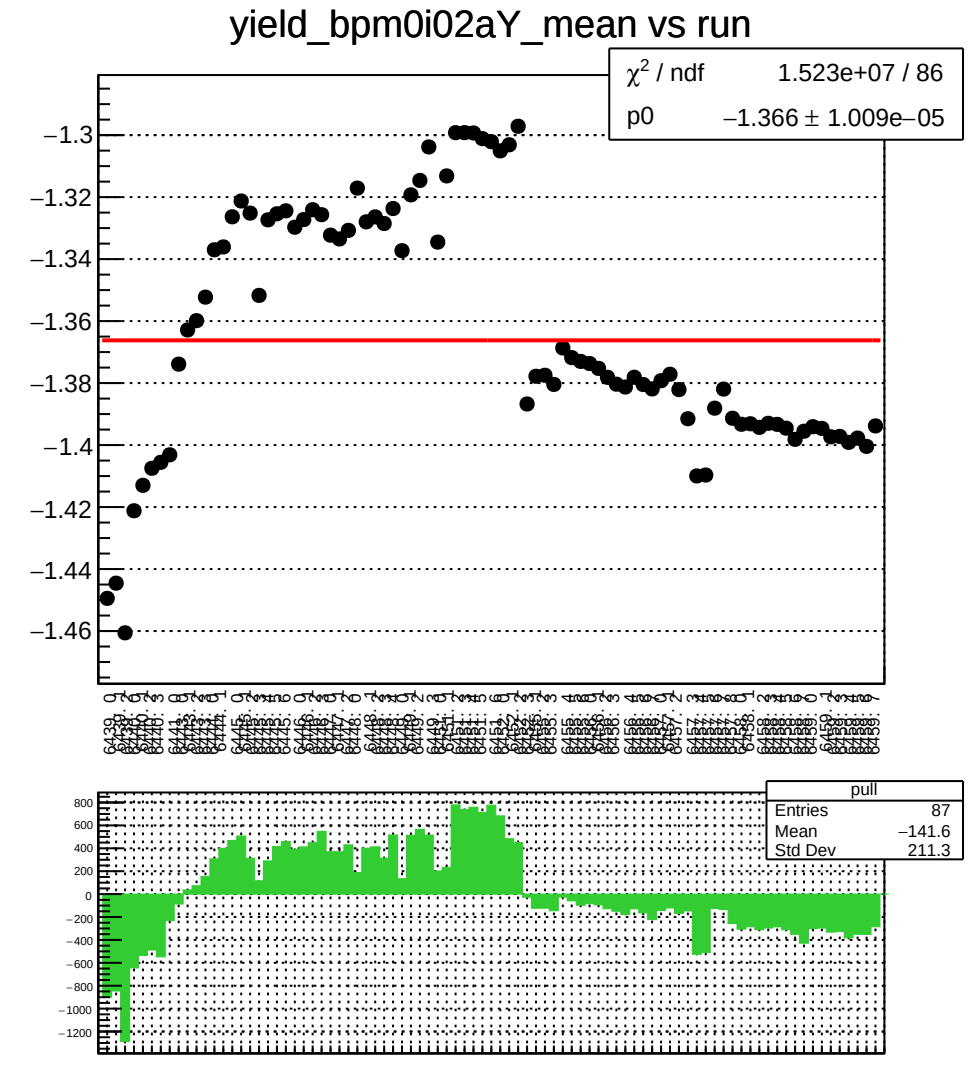

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

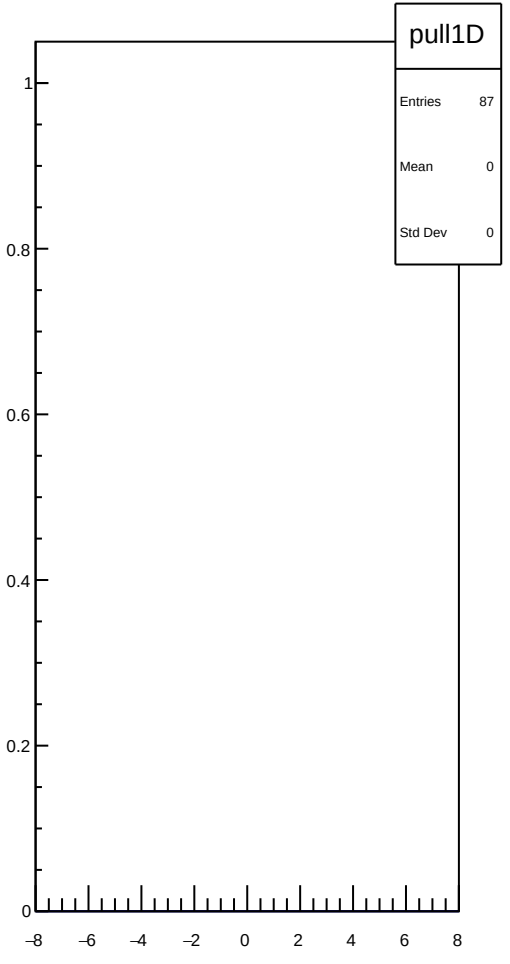

yield_bpm0i02Y_rms vs run
χ² / ndf 3.716e+04 / 86
p0 0.00902 ± 7.04e−06
0.06
0.05
0.04
0.03
0.02
0.01

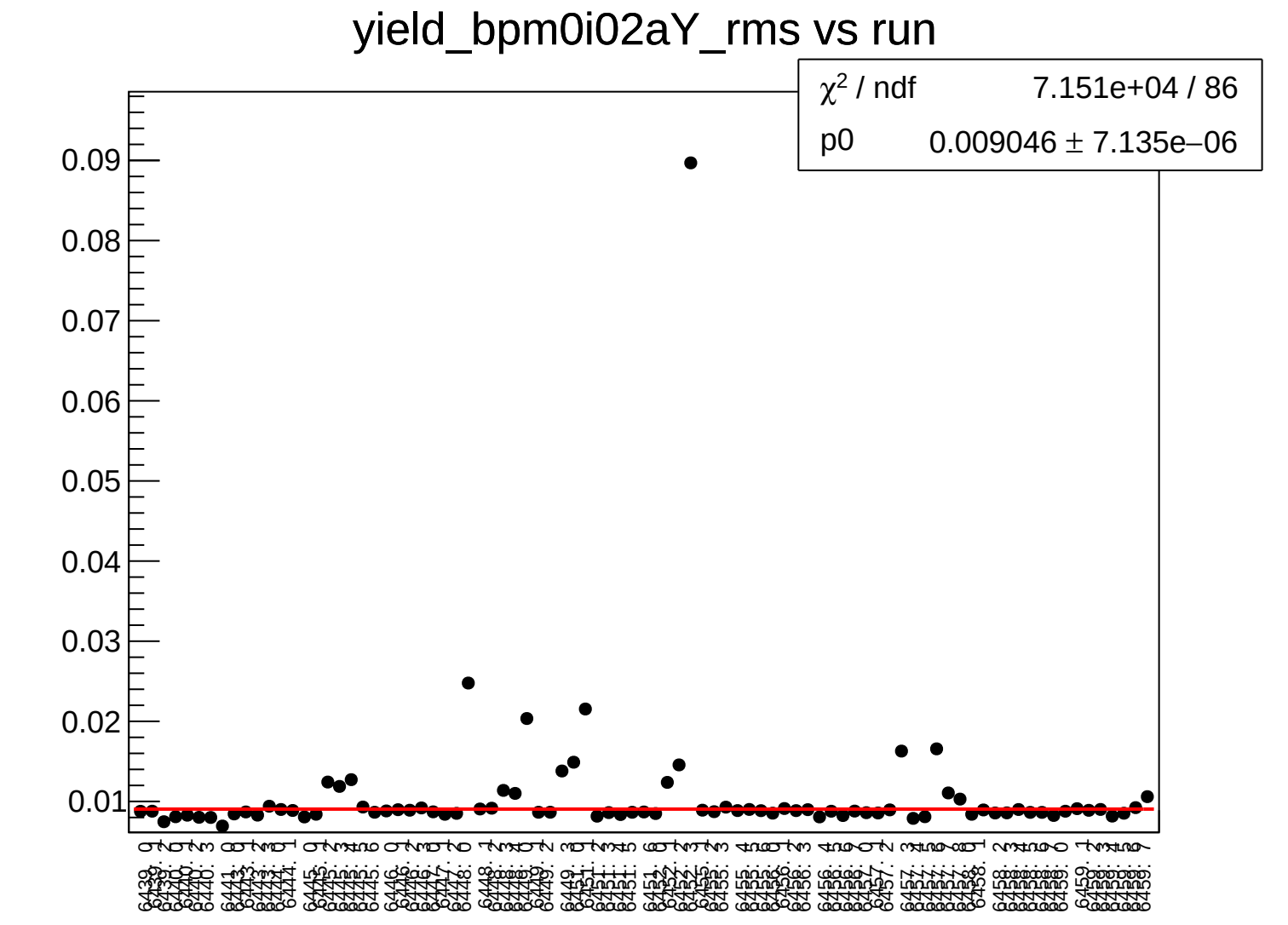

yield_bpm0i02aX_mean vs run
χ² / ndf 3.735e+06 / 86
p0 2.463 ± 1.434e−05
2.52
2.5
2.48
2.46
2.44
2.42
2.4
2.38
2.36
pull
Entries 87
Mean −1071
Std Dev 1110
400
300
200
100
0
−100
−200
−300
−400
−500

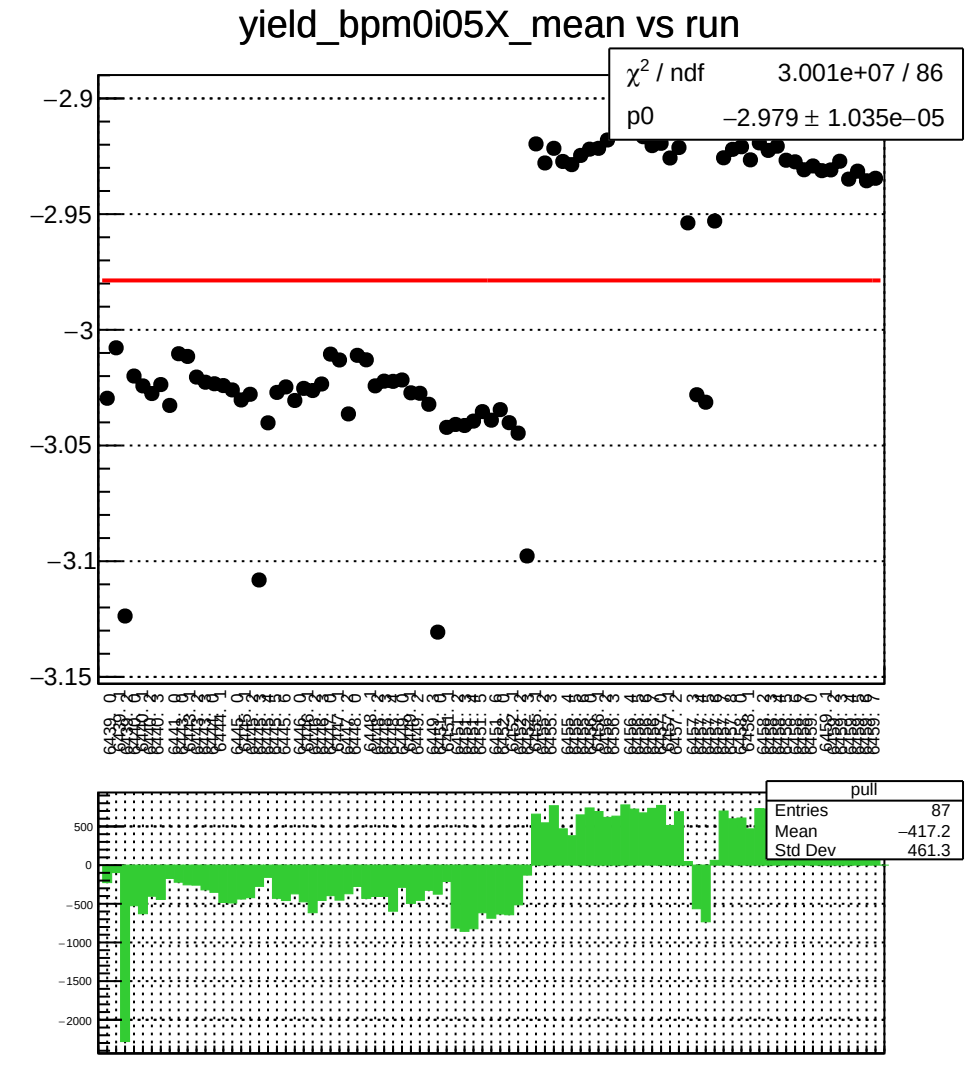

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

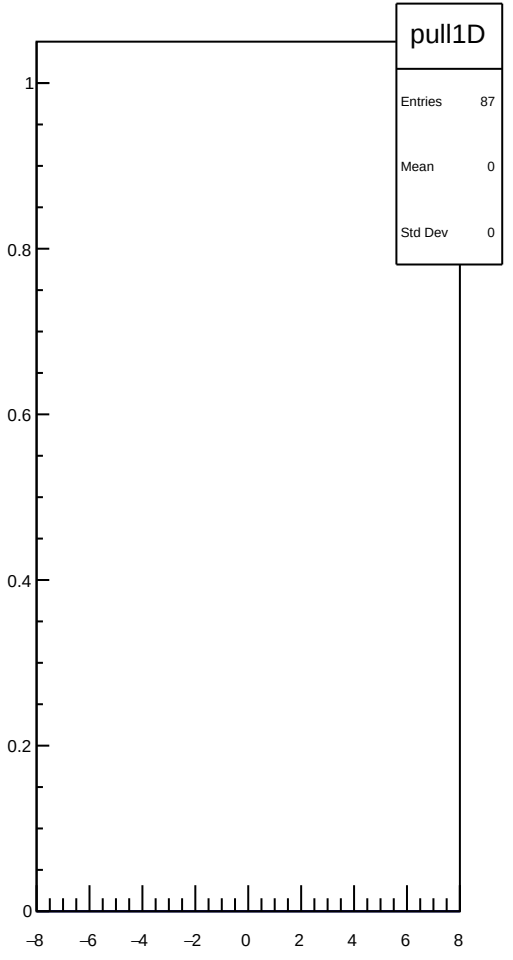

yield_bpm0i02aX_rms vs run
χ² / ndf 4.281e+04 / 86
p0 0.01297 ± 1.014e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

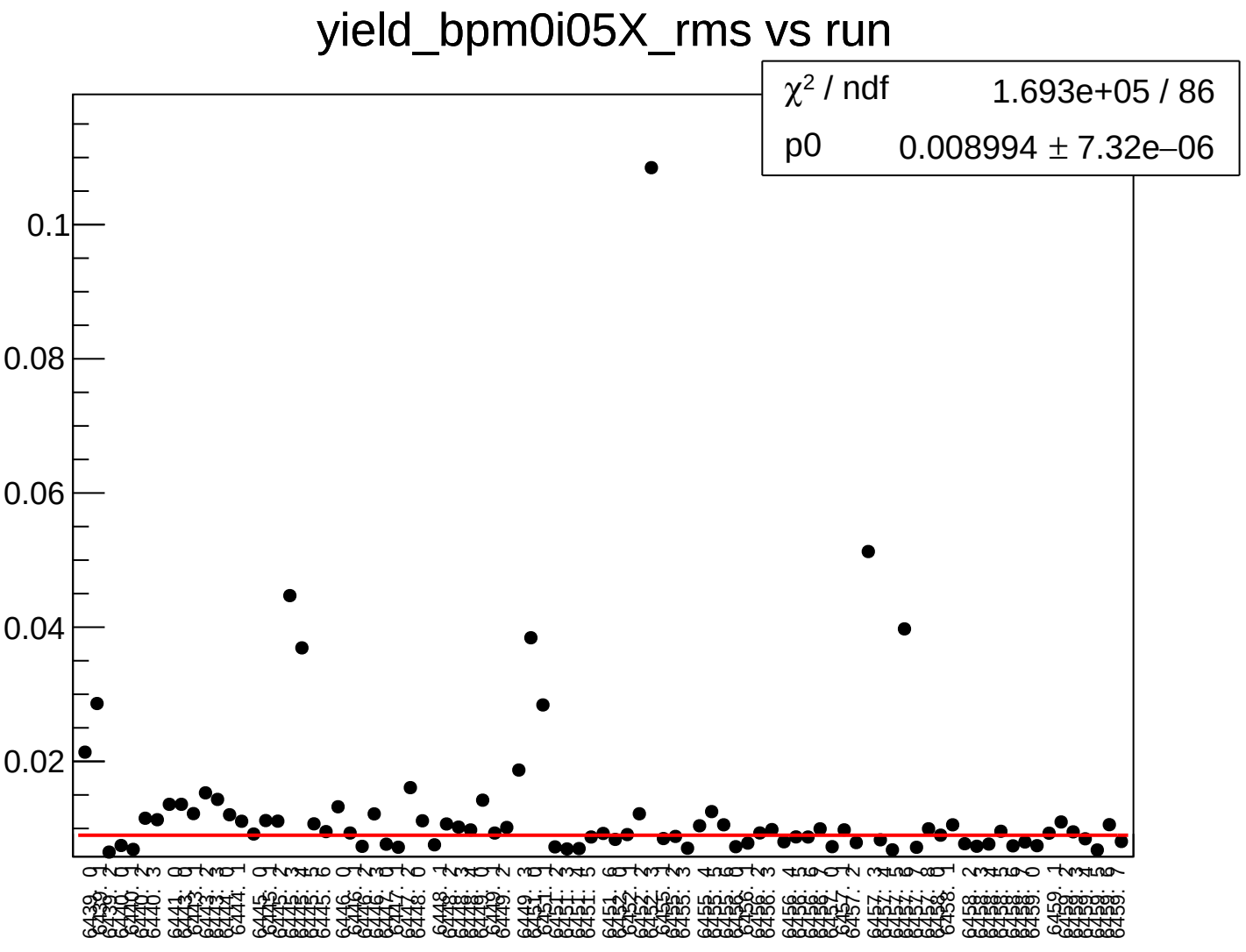

yield_bpm0i02aY_mean vs run
χ² / ndf 1.523e+07 / 86
p0 −1.366 ± 1.009e−05
pull
Entries 87
Mean −141.6
Std Dev 211.3

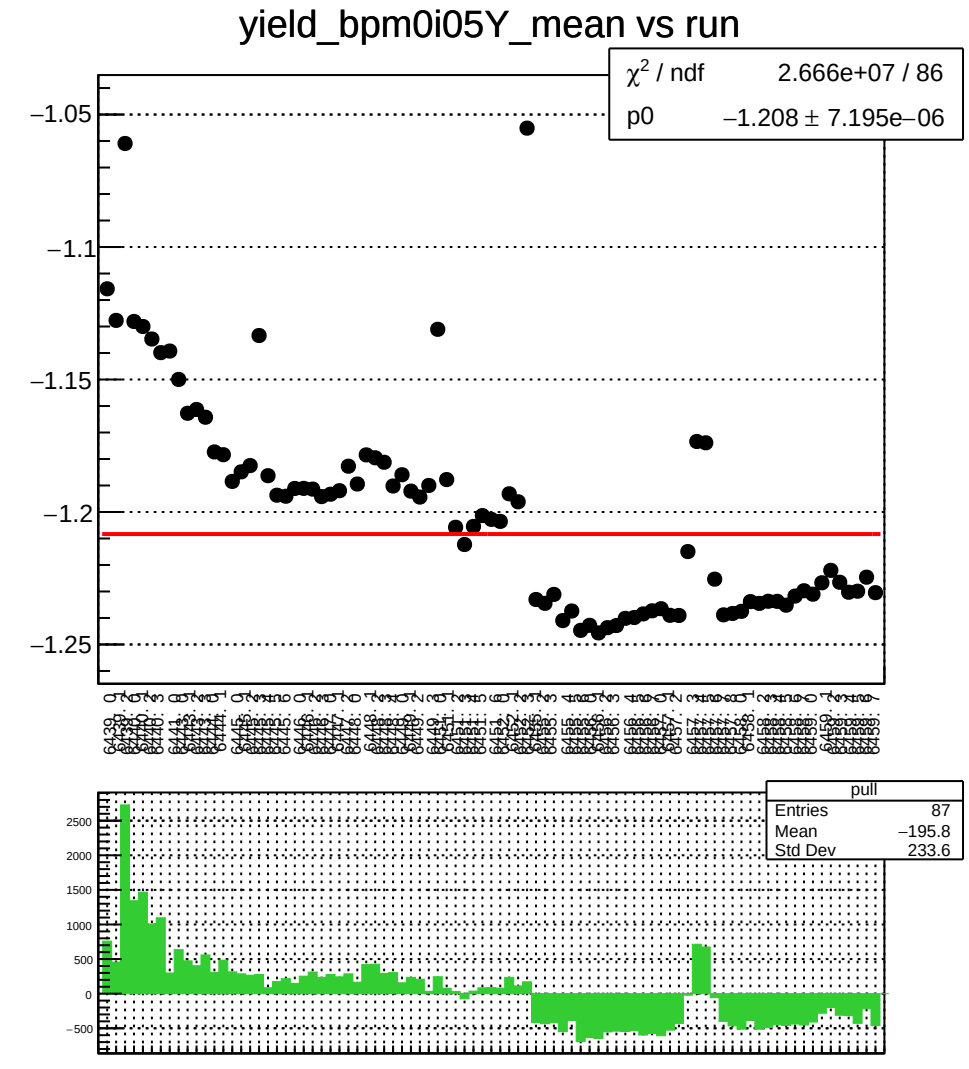

pull1D
Entries 87
Mean 0
Std Dev 0

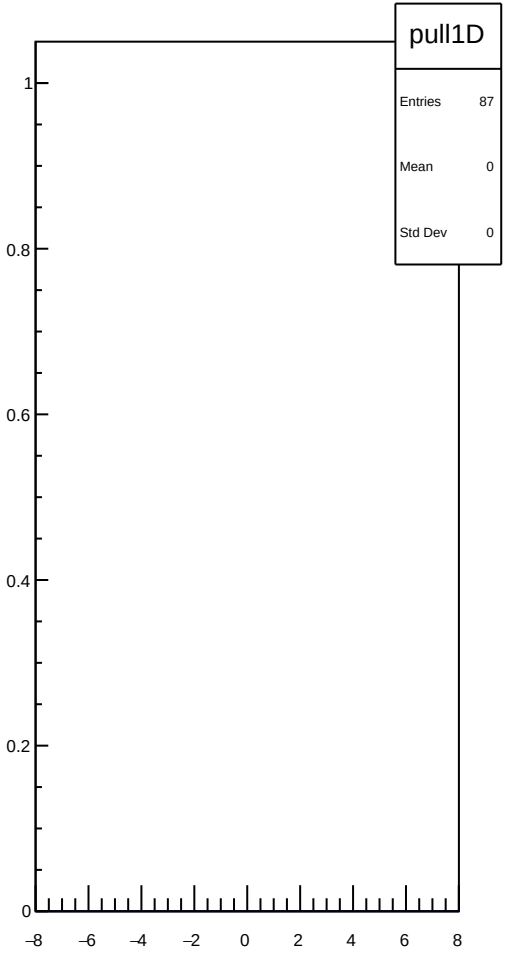

yield_bpm0i02aY_rms vs run
χ² / ndf 7.151e+04 / 86
p0 0.009046 ± 7.135e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

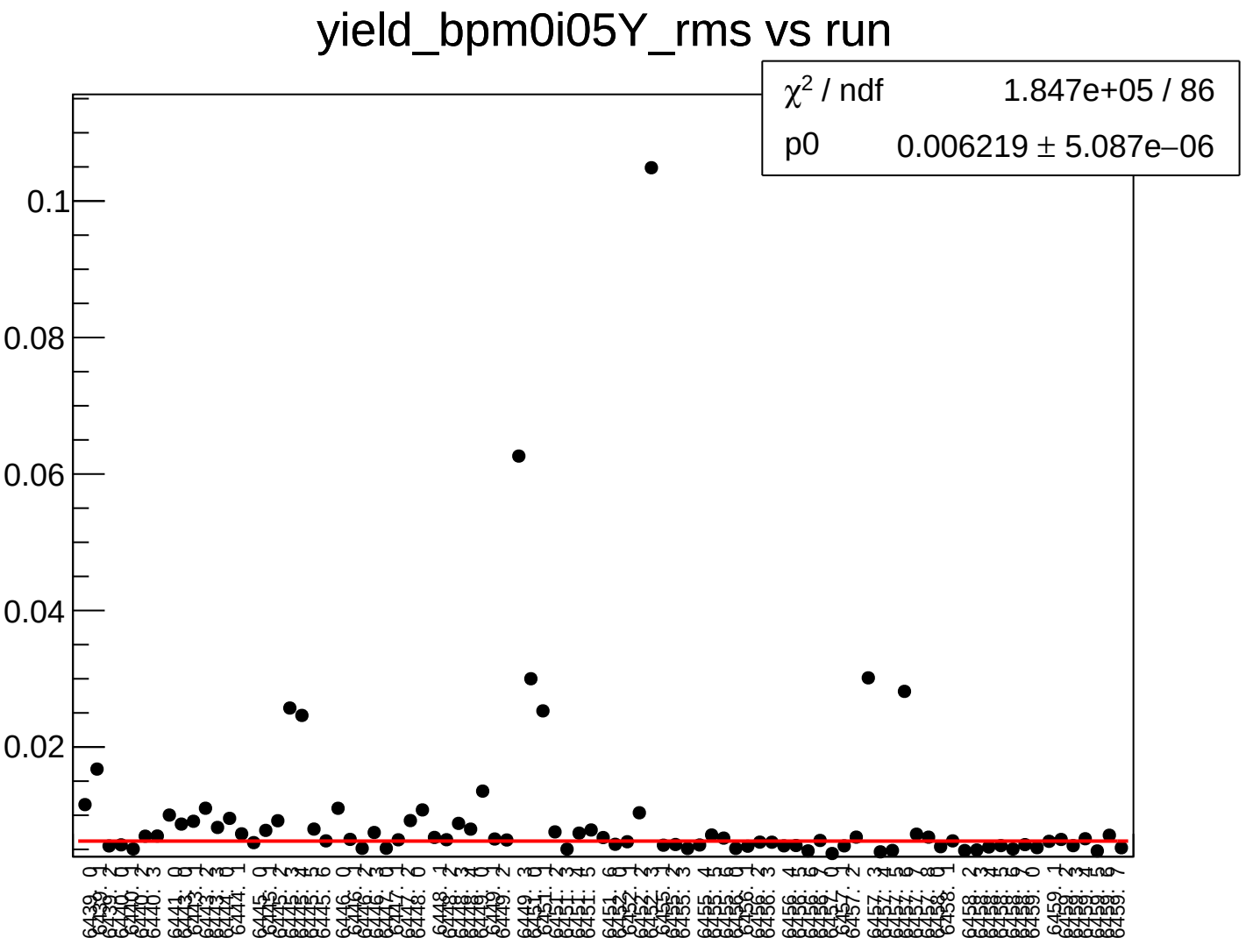

yield_bpm0i05X_mean vs run
χ² / ndf 3.001e+07 / 86
p0 −2.979 ± 1.035e−05
−2.9
−2.95
−3
−3.05
−3.1
−3.15
pull
Entries 87
Mean −417.2
Std Dev 461.3
500
0
−500
−1000
−1500
−2000

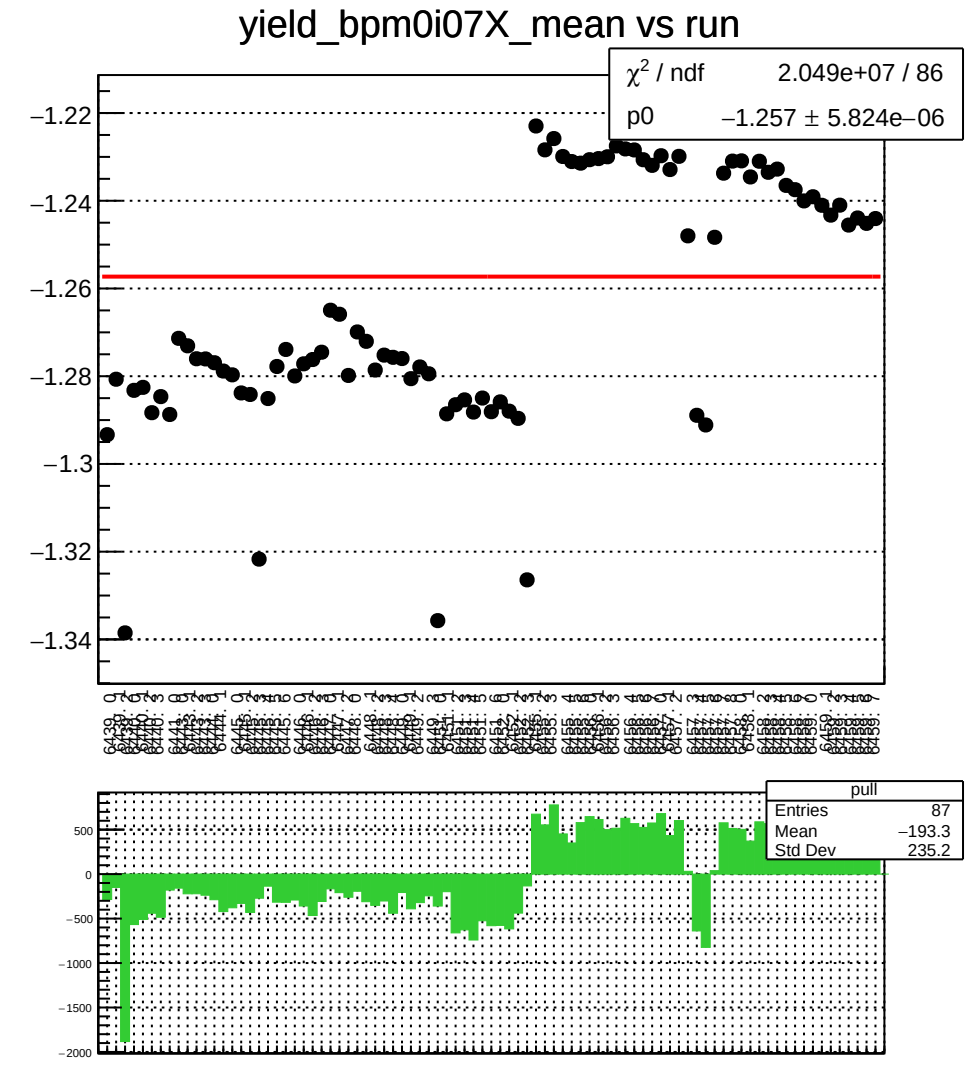

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

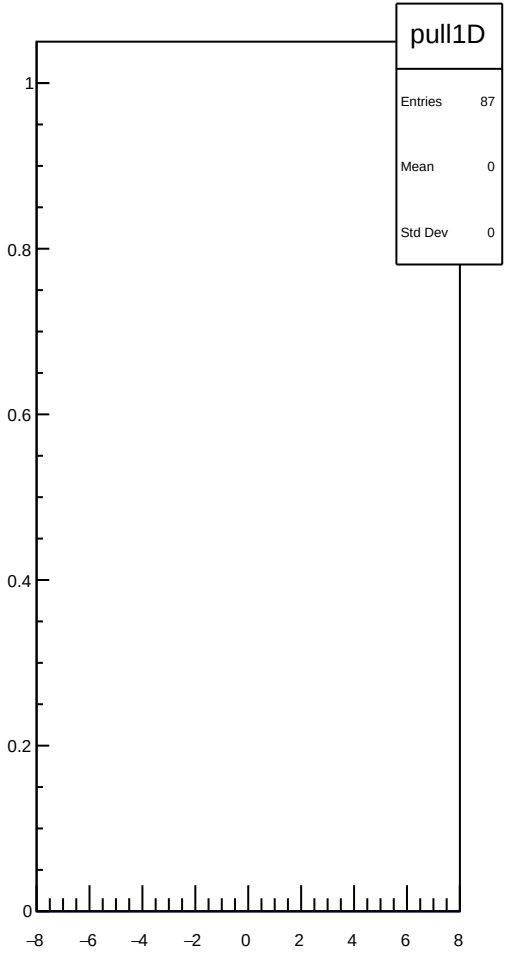

yield_bpm0i05X_rms vs run
χ² / ndf 1.693e+05 / 86
p0 0.008994 ± 7.32e–06
0.1
0.08
0.06
0.04
0.02

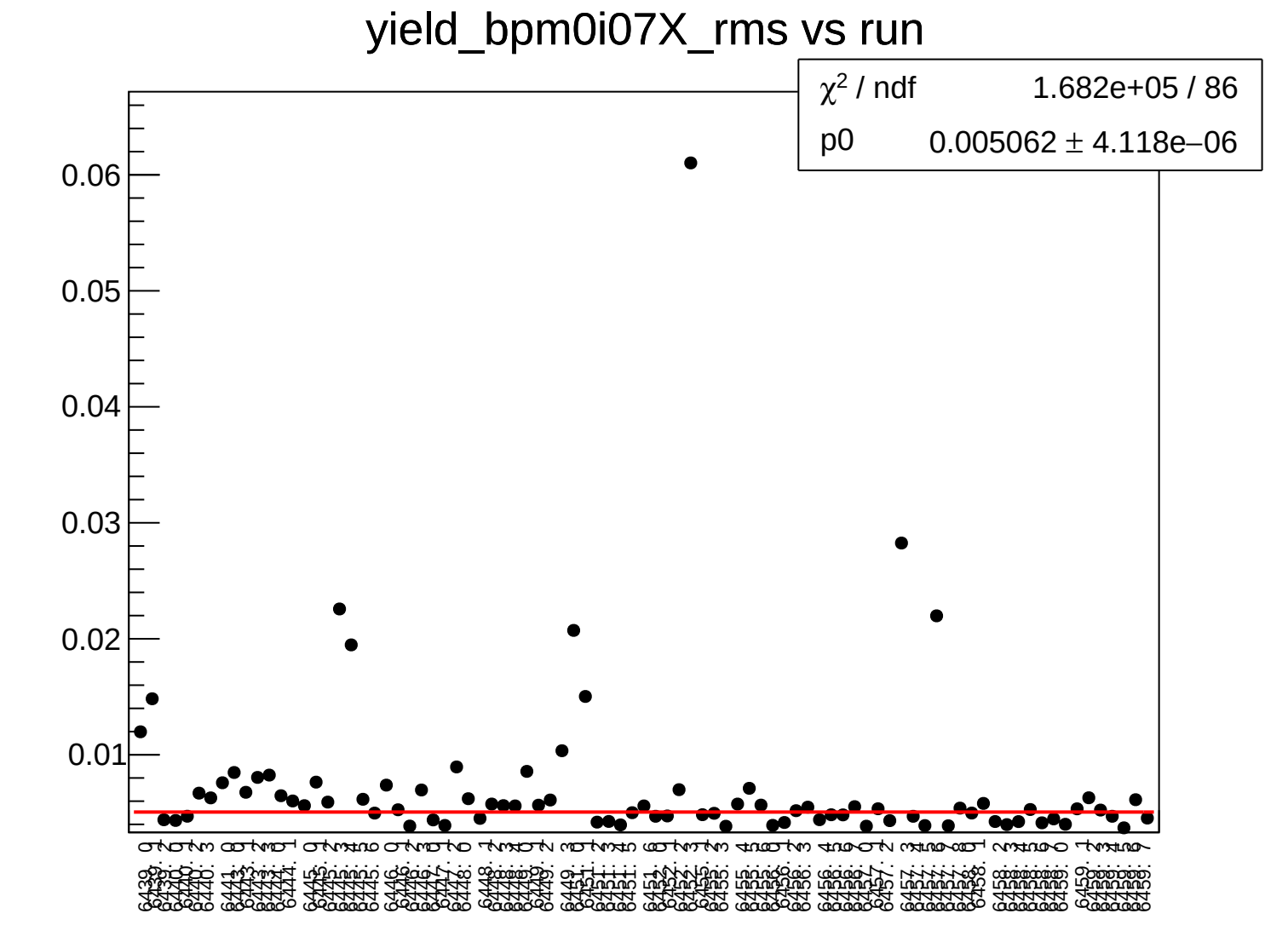

yield_bpm0i05Y_mean vs run
χ² / ndf 2.666e+07 / 86
p0 −1.208 ± 7.195e−06
−1.05
−1.1
−1.15
−1.2
−1.25
pull
Entries 87
Mean −195.8
Std Dev 233.6
2500
2000
1500
1000
500
0
−500

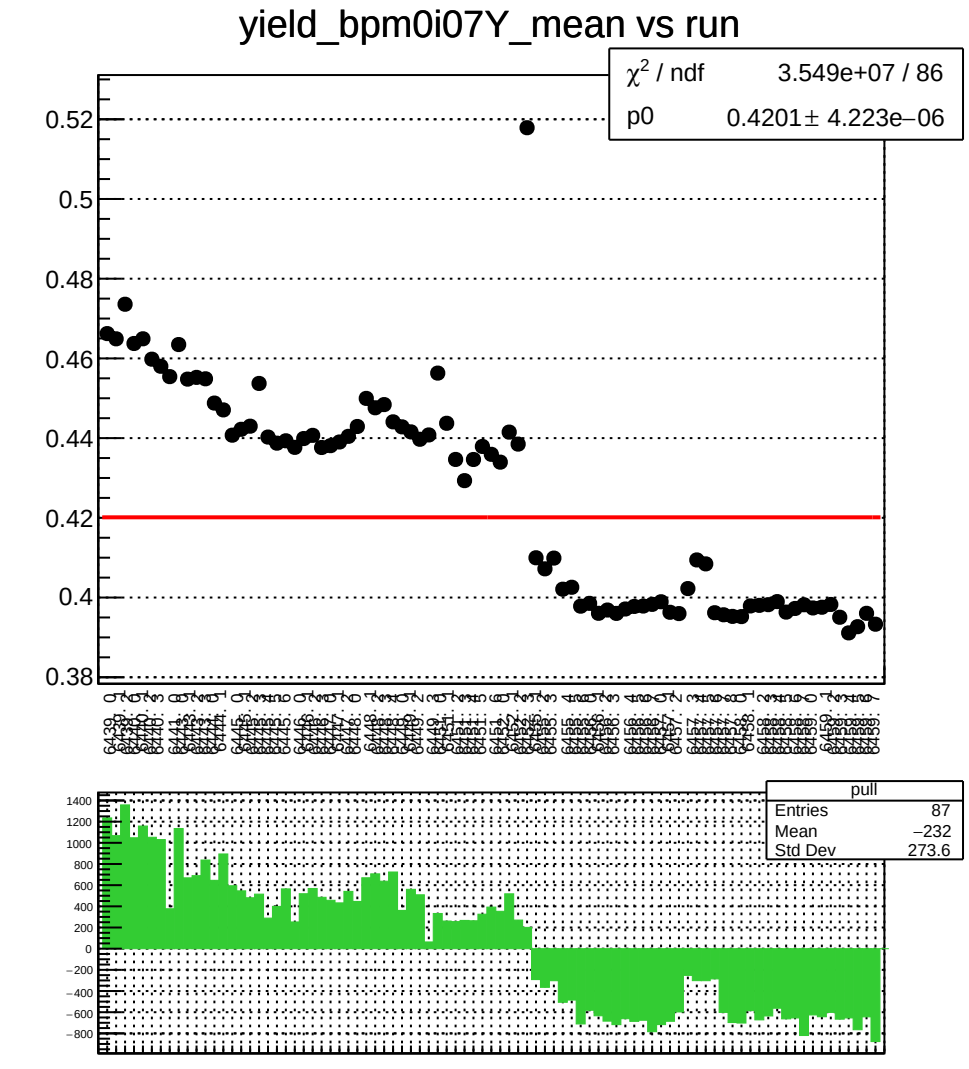

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

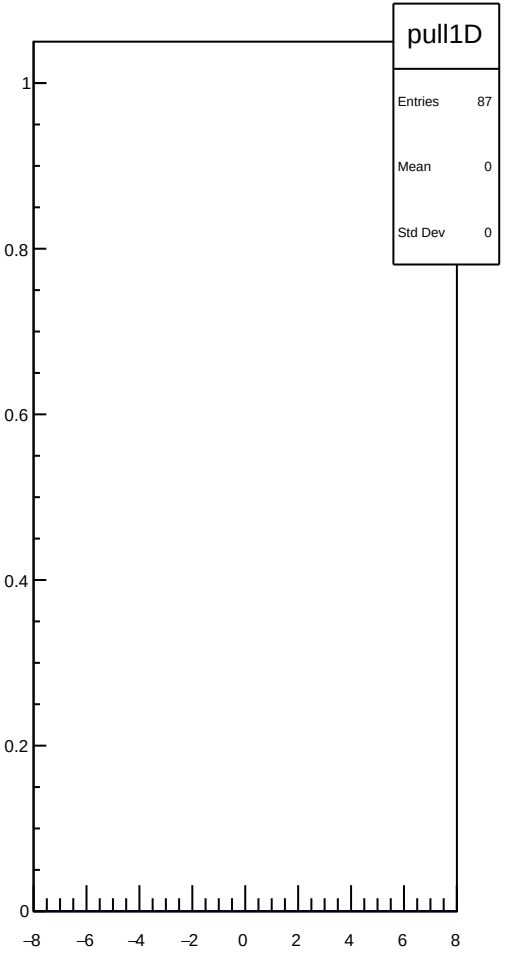

yield_bpm0i05Y_rms vs run
χ² / ndf 1.847e+05 / 86
p0 0.006219 ± 5.087e−06
0.1
0.08
0.06
0.04
0.02

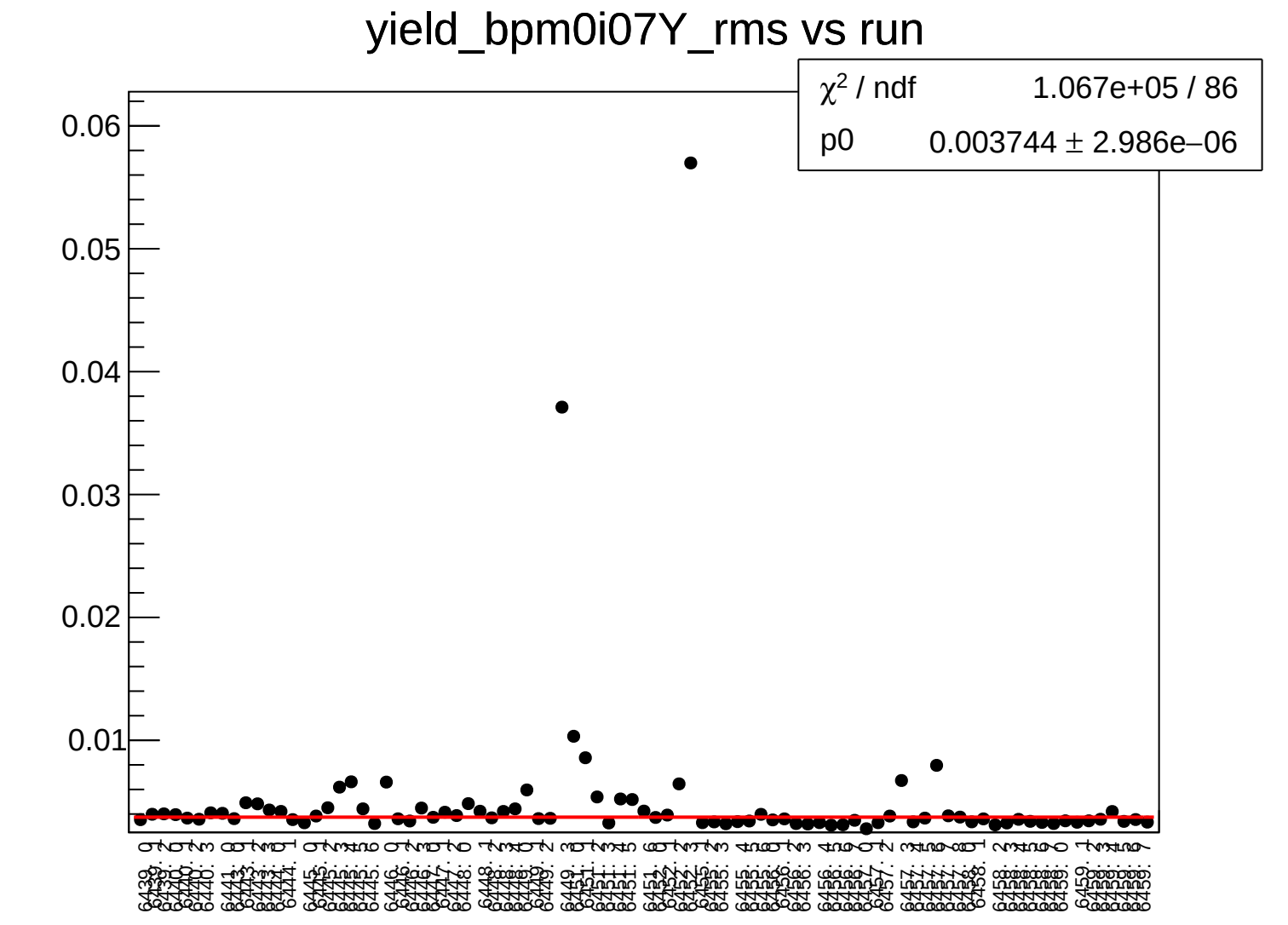

yield_bpm0i07X_mean vs run
χ² / ndf 2.049e+07 / 86
p0 −1.257 ± 5.824e−06
−1.22
−1.24
−1.26
−1.28
−1.3
−1.32
−1.34
pull
Entries 87
Mean −193.3
Std Dev 235.2
500
0
−500
−1000
−1500
−2000

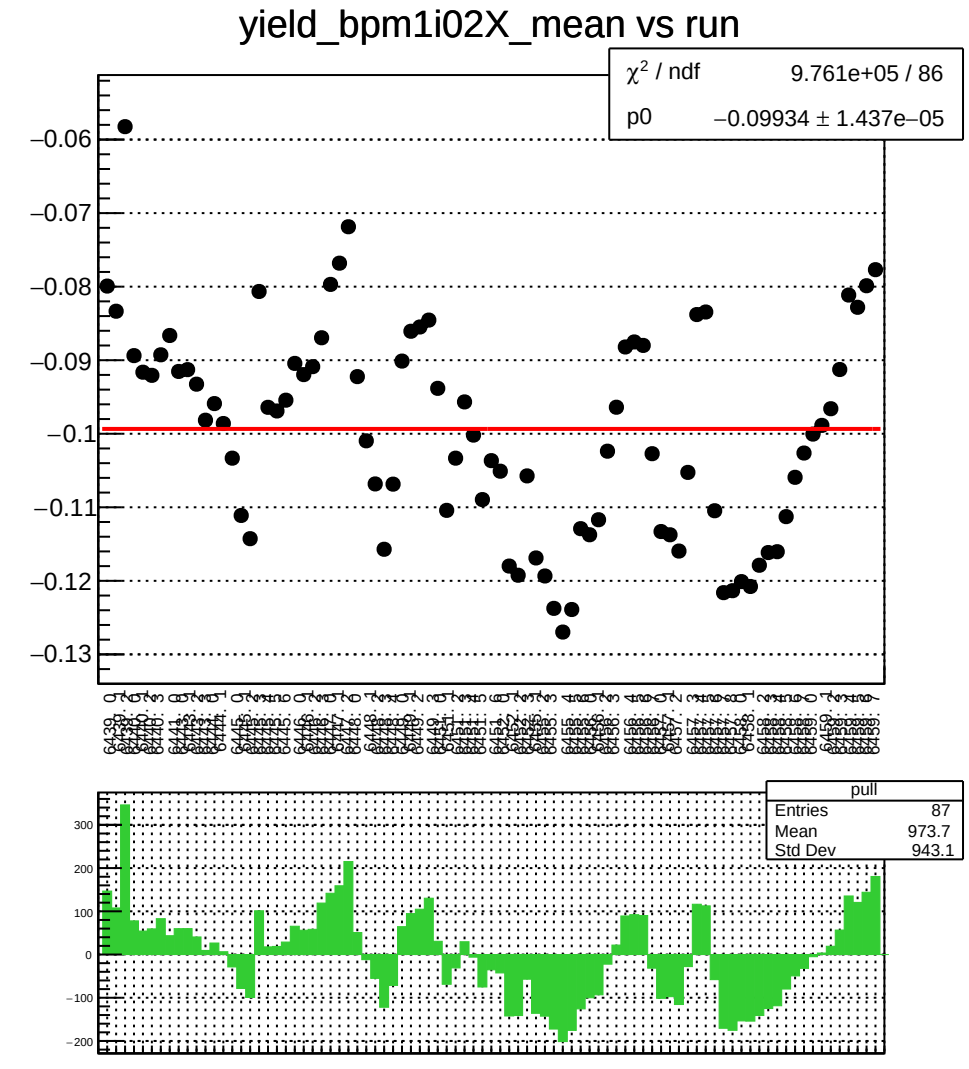

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

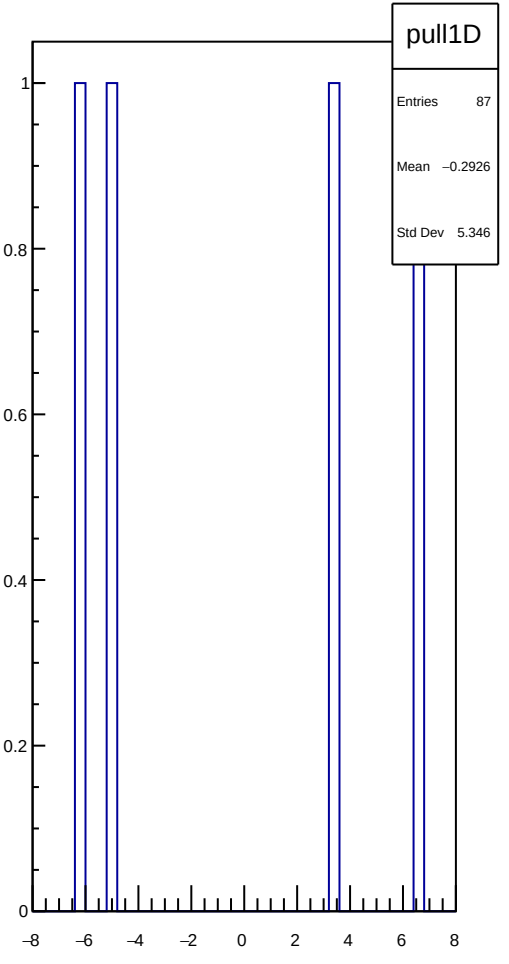

yield_bpm0i07X_rms vs run
χ^2 / ndf 1.682e+05 / 86
p0 0.005062 ± 4.118e−06
0.06
0.05
0.04
0.03
0.02
0.01

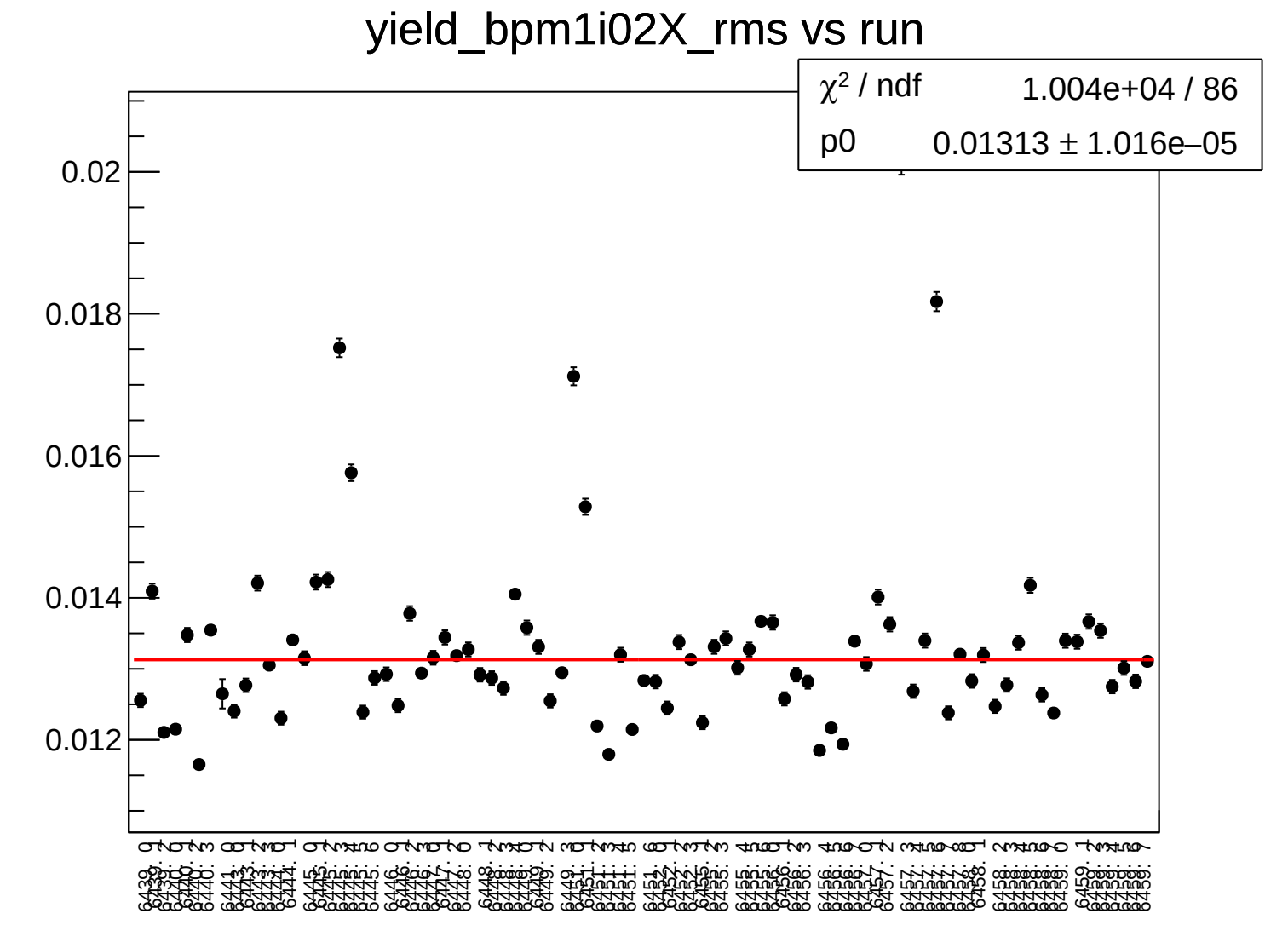

yield_bpm0i07Y_mean vs run
χ² / ndf 3.549e+07 / 86
p0 0.4201 ± 4.223e−06
0.52
0.5
0.48
0.46
0.44
0.42
0.4
0.38
pull
Entries 87
Mean −232
Std Dev 273.6
1400
1200
1000
800
600
400
200
0
−200
−400
−600
−800

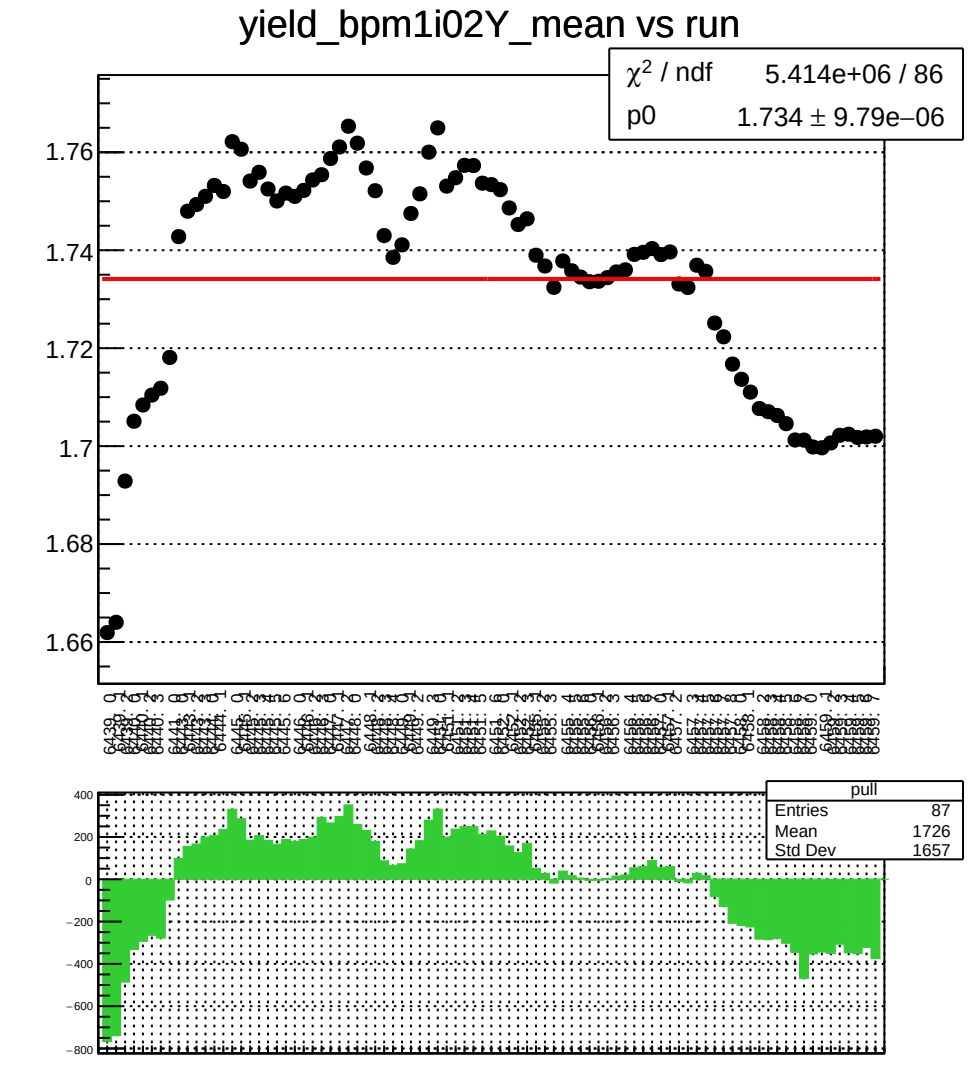

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

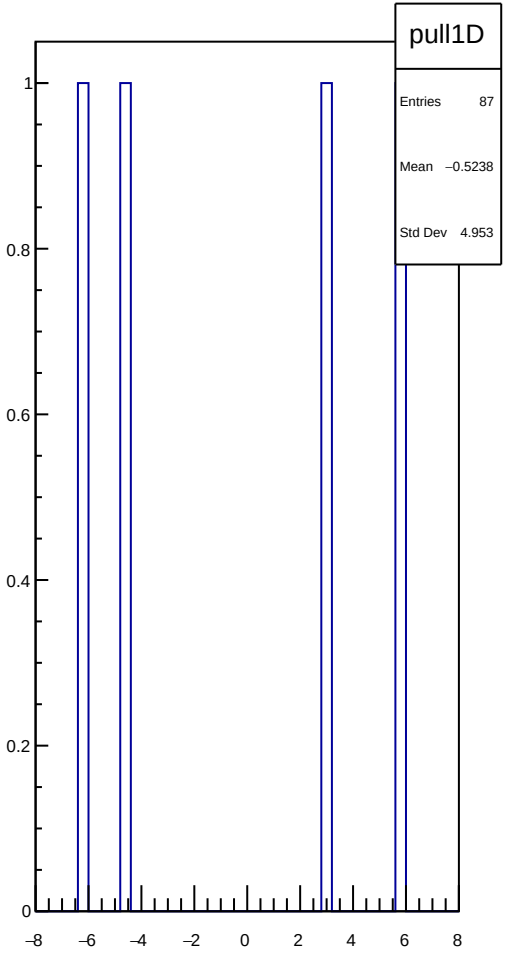

yield_bpm0i07Y_rms vs run
χ² / ndf 1.067e+05 / 86
p0 0.003744 ± 2.986e−06
0.06
0.05
0.04
0.03
0.02
0.01

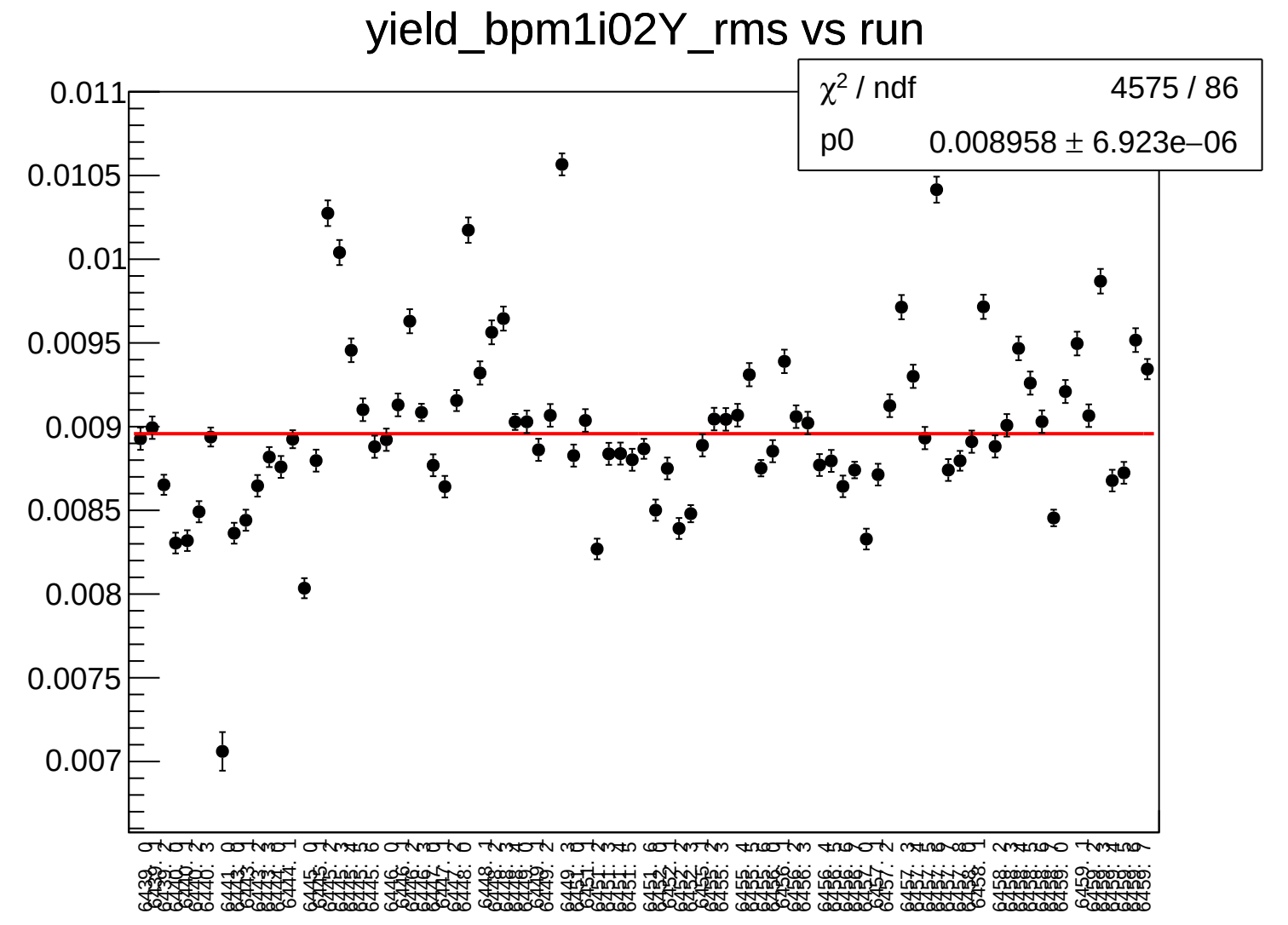

yield_bpm1i02X_mean vs run
χ² / ndf 9.761e+05 / 86
p0 −0.09934 ± 1.437e−05
−0.06
−0.07
−0.08
−0.09
−0.1
−0.11
−0.12
−0.13
pull
Entries 87
Mean 973.7
Std Dev 943.1
300
200
100
0
−100
−200

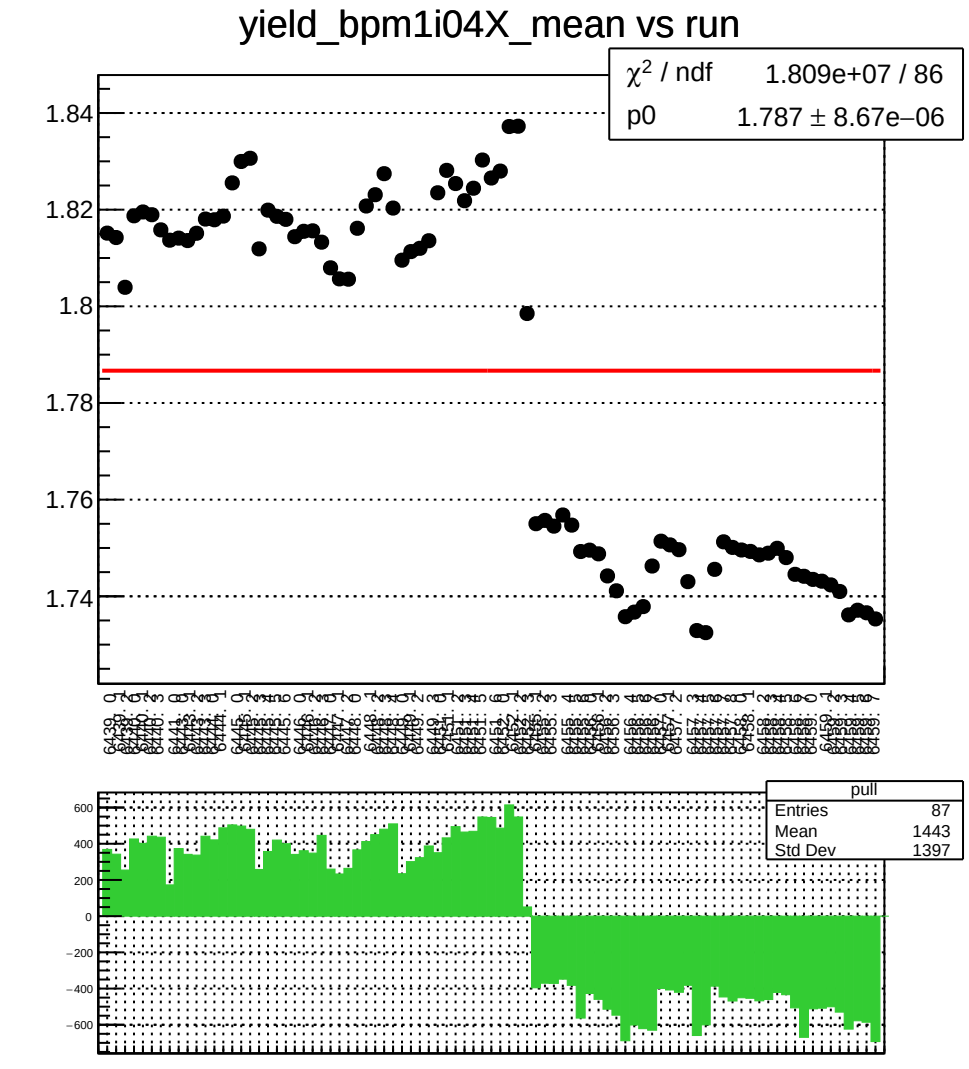

pull1D
Entries 87
Mean −0.2926
Std Dev 5.346
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

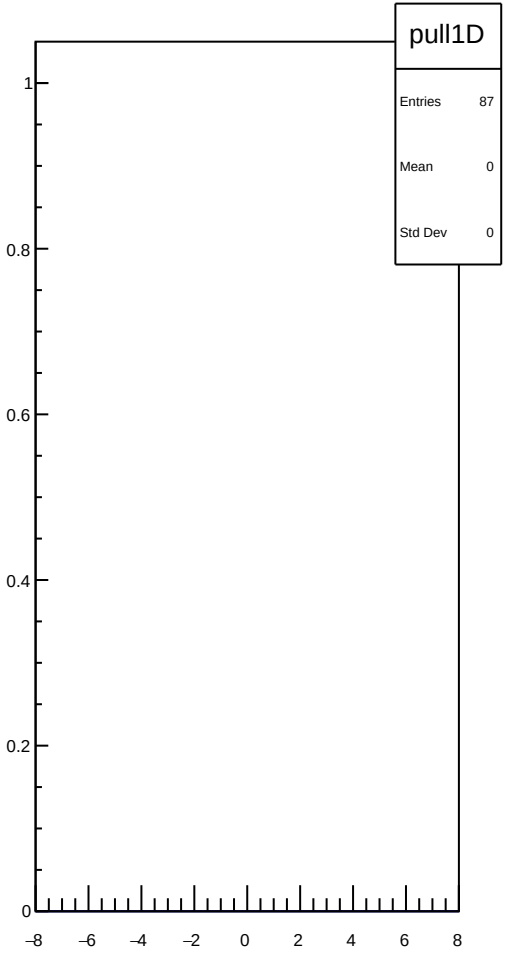

yield_bpm1i02X_rms vs run
χ² / ndf 1.004e+04 / 86
p0 0.01313 ± 1.016e−05
0.02
0.018
0.016
0.014
0.012

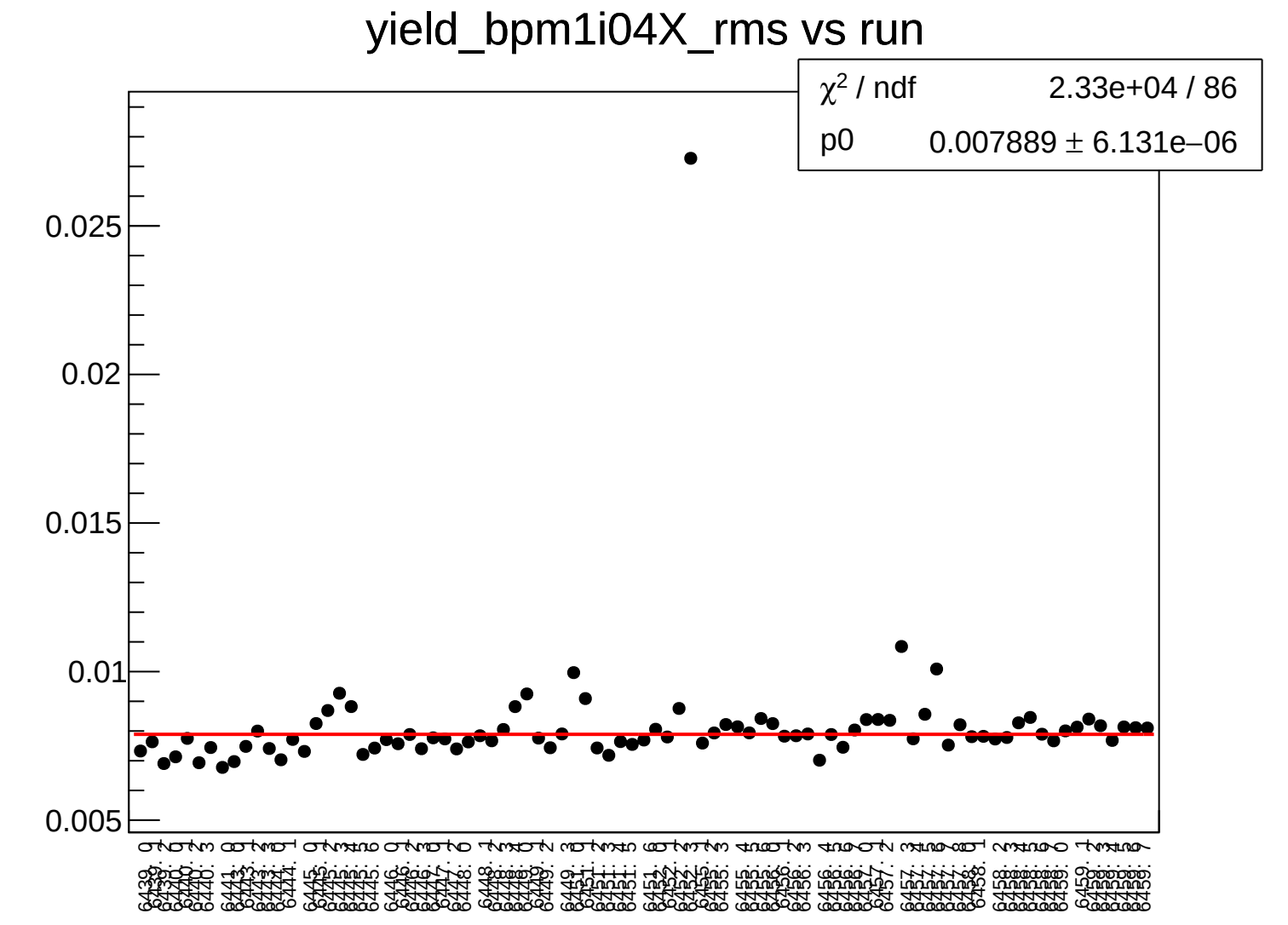

yield_bpm1i02Y_mean vs run
χ² / ndf 5.414e+06 / 86
p0 1.734 ± 9.79e−06
1.76
1.74
1.72
1.7
1.68
1.66
pull
Entries 87
Mean 1726
Std Dev 1657
400
200
0
−200
−400
−600
−800

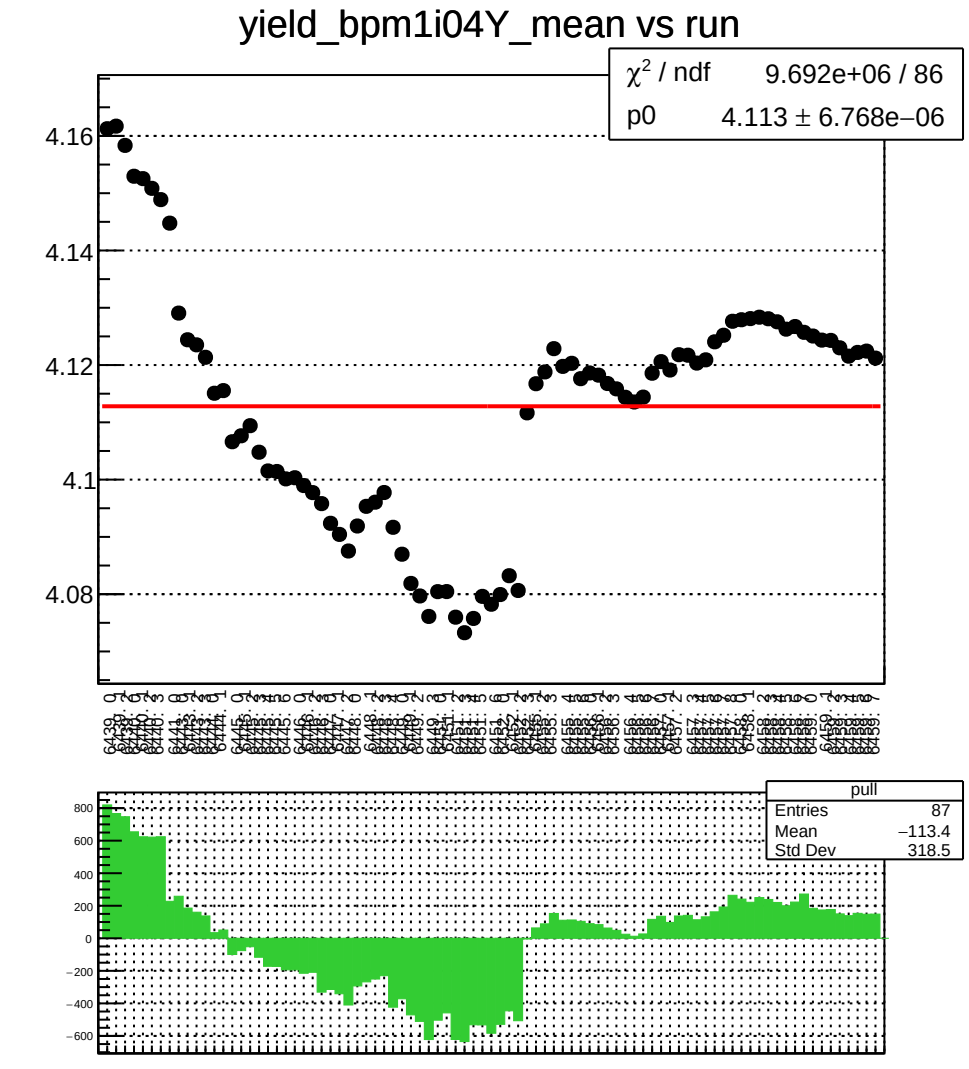

pull1D
Entries 87
Mean −0.5238
Std Dev 4.953
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

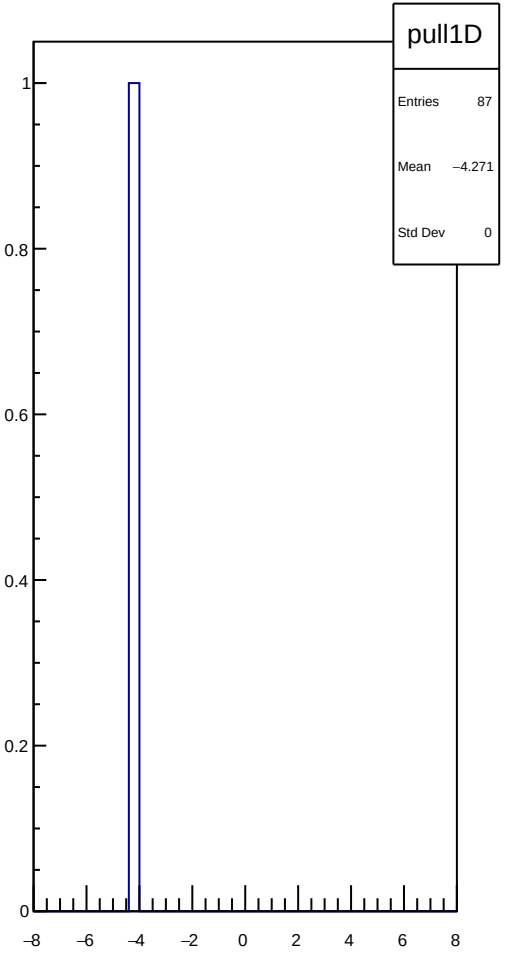

yield_bpm1i02Y_rms vs run
χ² / ndf 4575 / 86
p0 0.008958 ± 6.923e−06
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007


yield_bpm1i04X_mean vs run
χ² / ndf 1.809e+07 / 86
p0 1.787 ± 8.67e−06
1.84
1.82
1.8
1.78
1.76
1.74
pull
Entries 87
Mean 1443
Std Dev 1397
600
400
200
0
−200
−400
−600

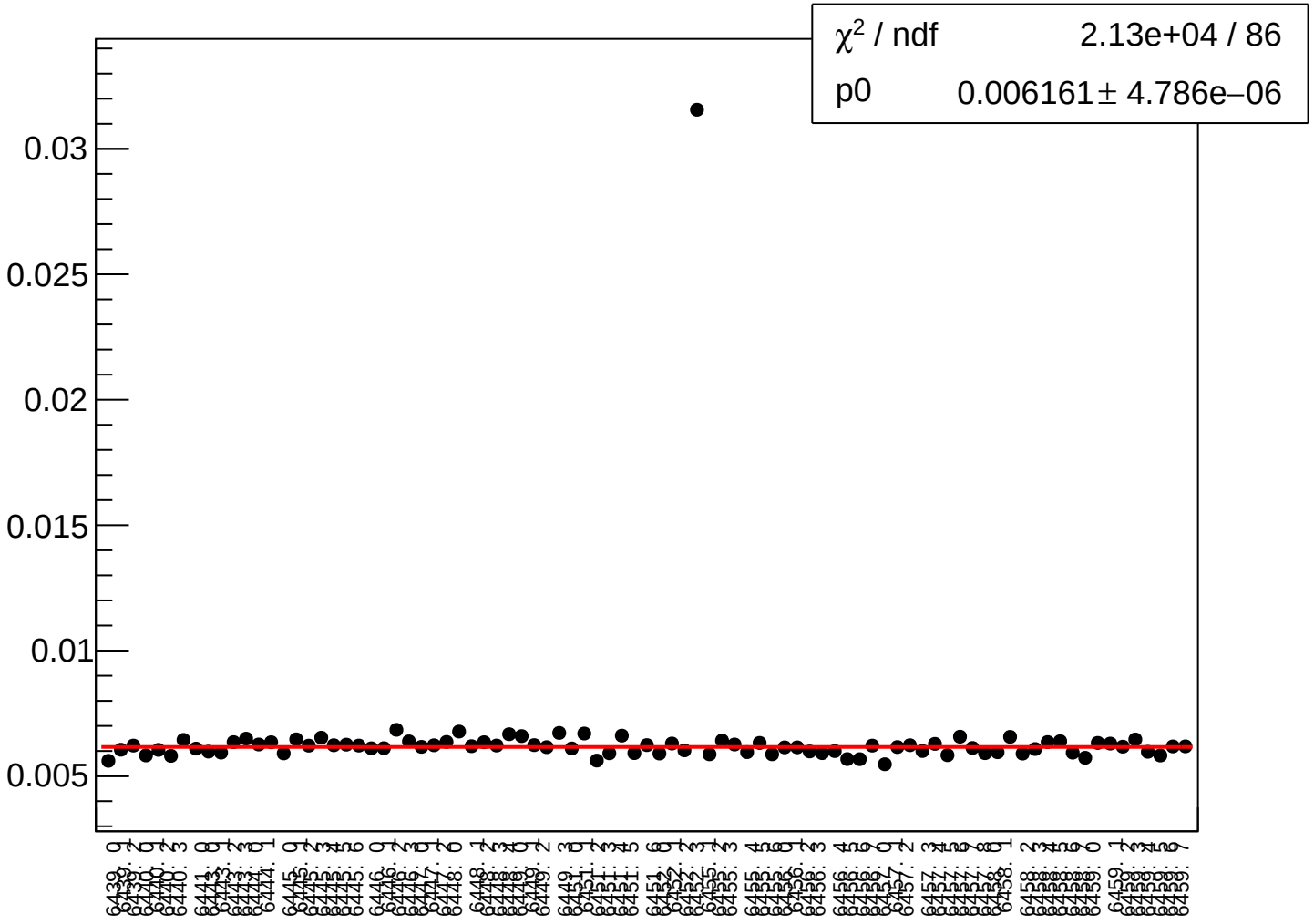

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

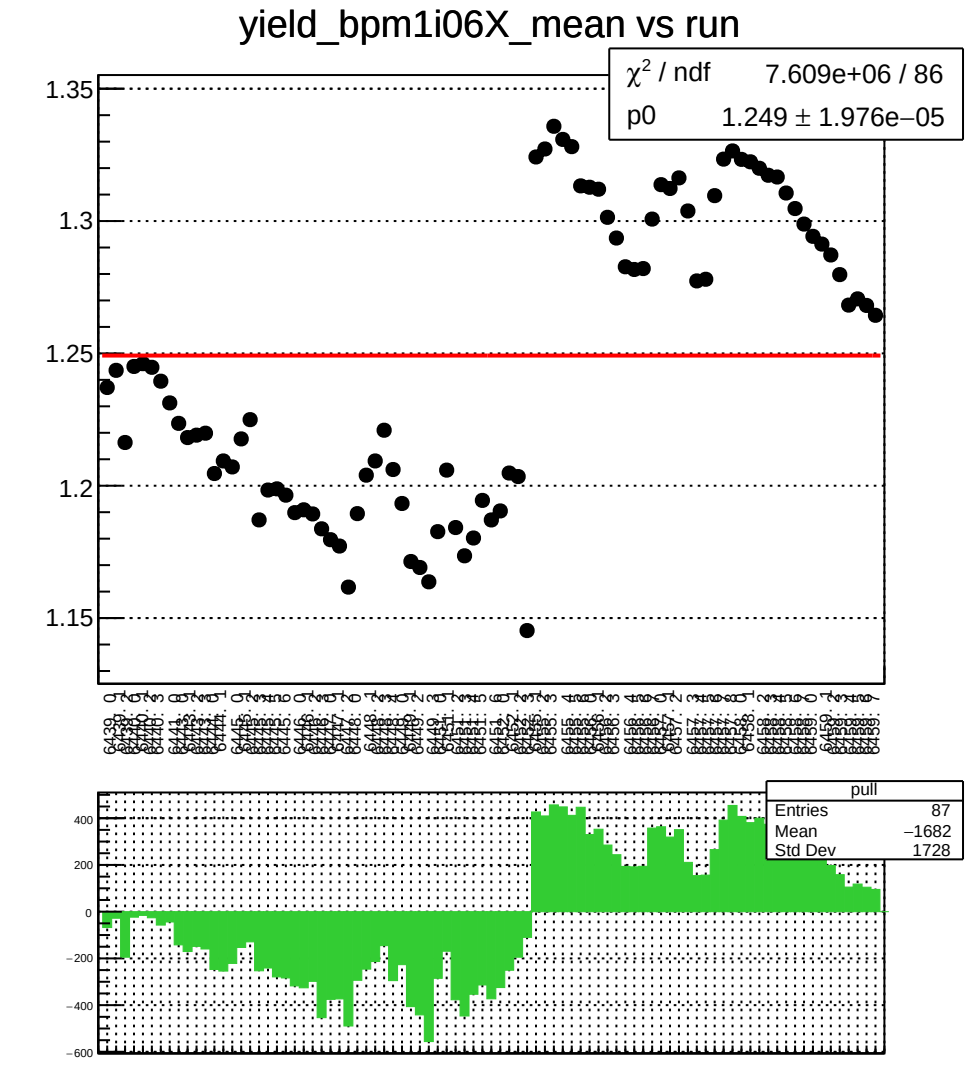

yield_bpm1i04X_rms vs run
χ² / ndf 2.33e+04 / 86
p0 0.007889 ± 6.131e−06
0.025
0.02
0.015
0.01
0.005

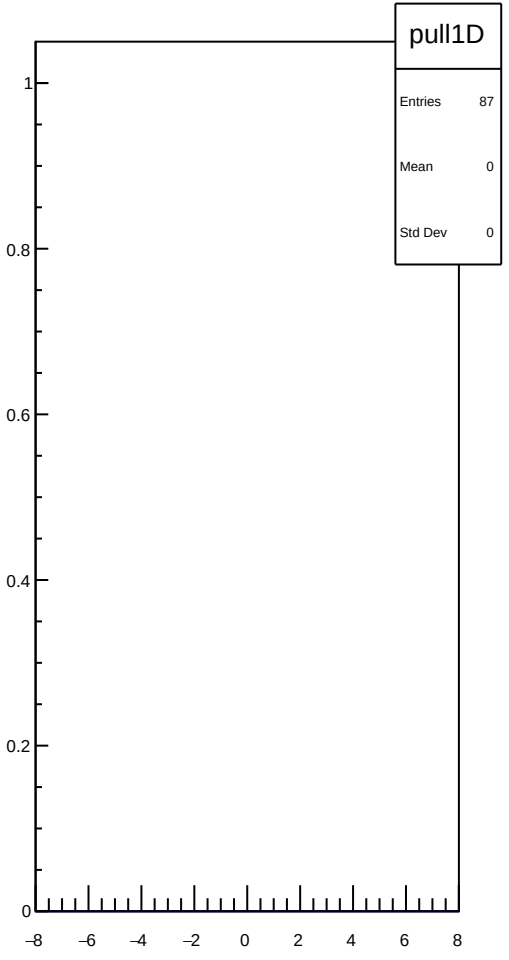

yield_bpm1i04Y_mean vs run
χ² / ndf 9.692e+06 / 86
p0 4.113 ± 6.768e−06
4.16
4.14
4.12
4.1
4.08
pull
Entries 87
Mean −113.4
Std Dev 318.5
800
600
400
200
0
−200
−400
−600

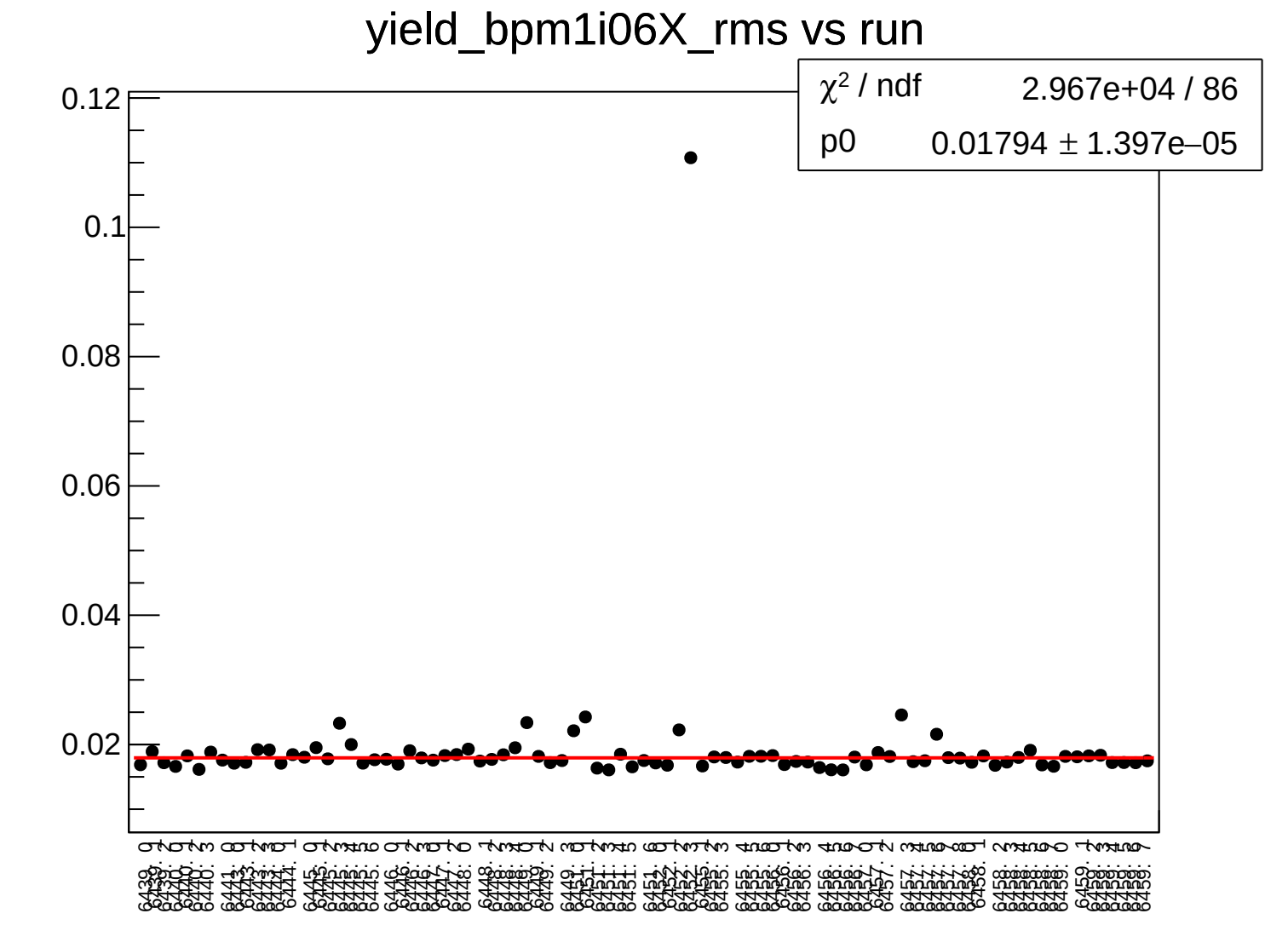

pull1D
Entries 87
Mean −4.271
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

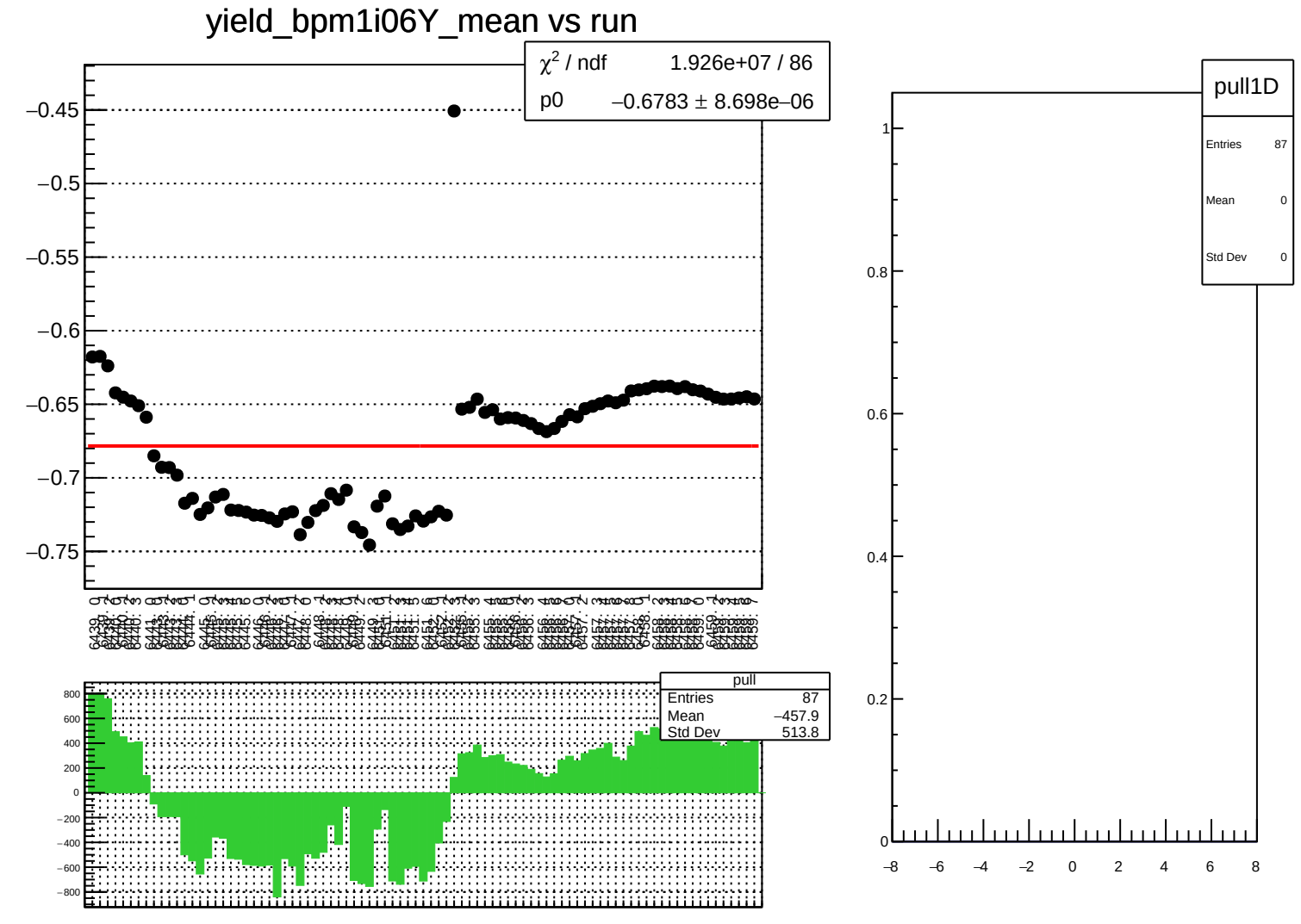
yield_bpm1i04Y_rms vs run

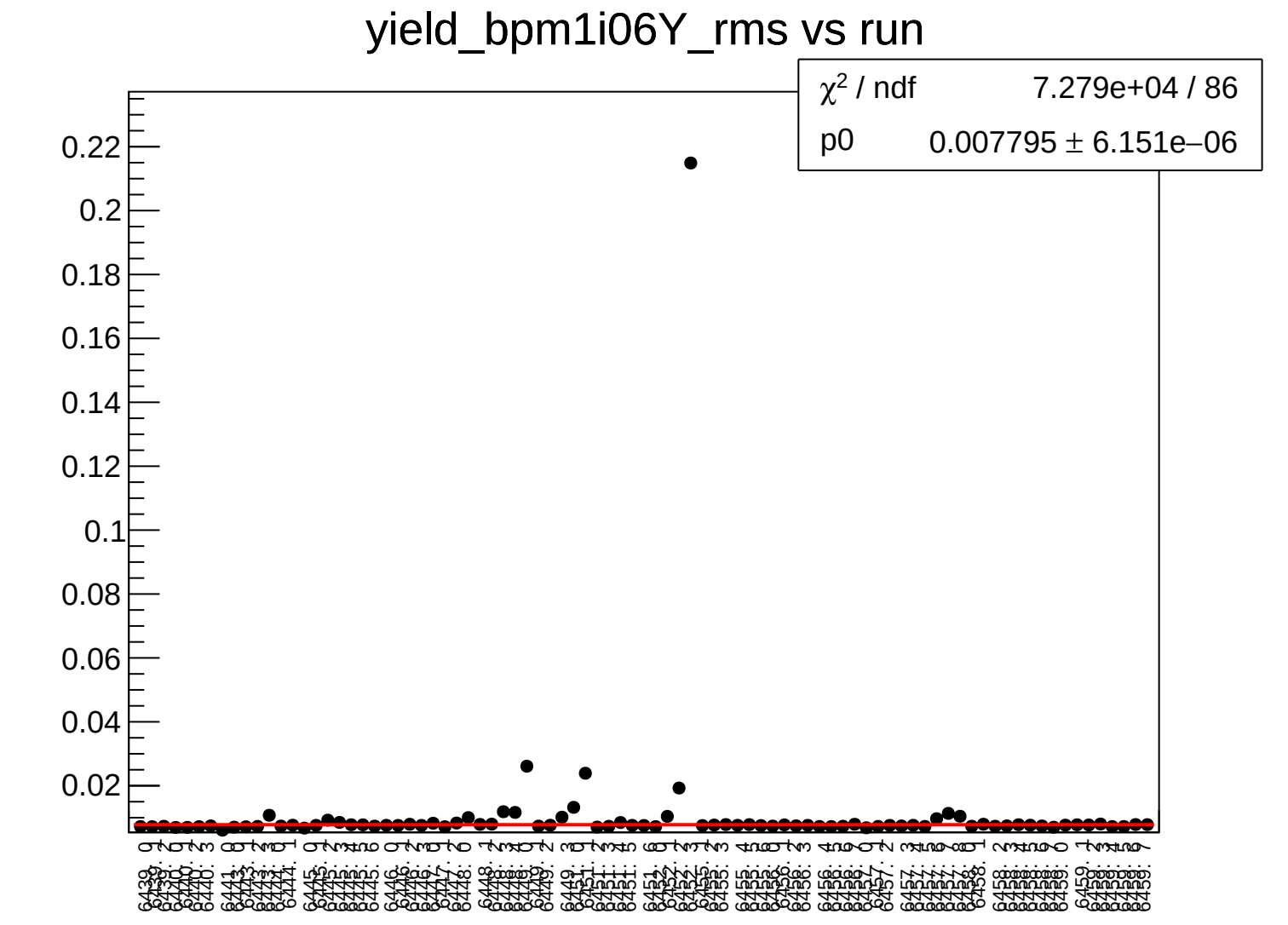


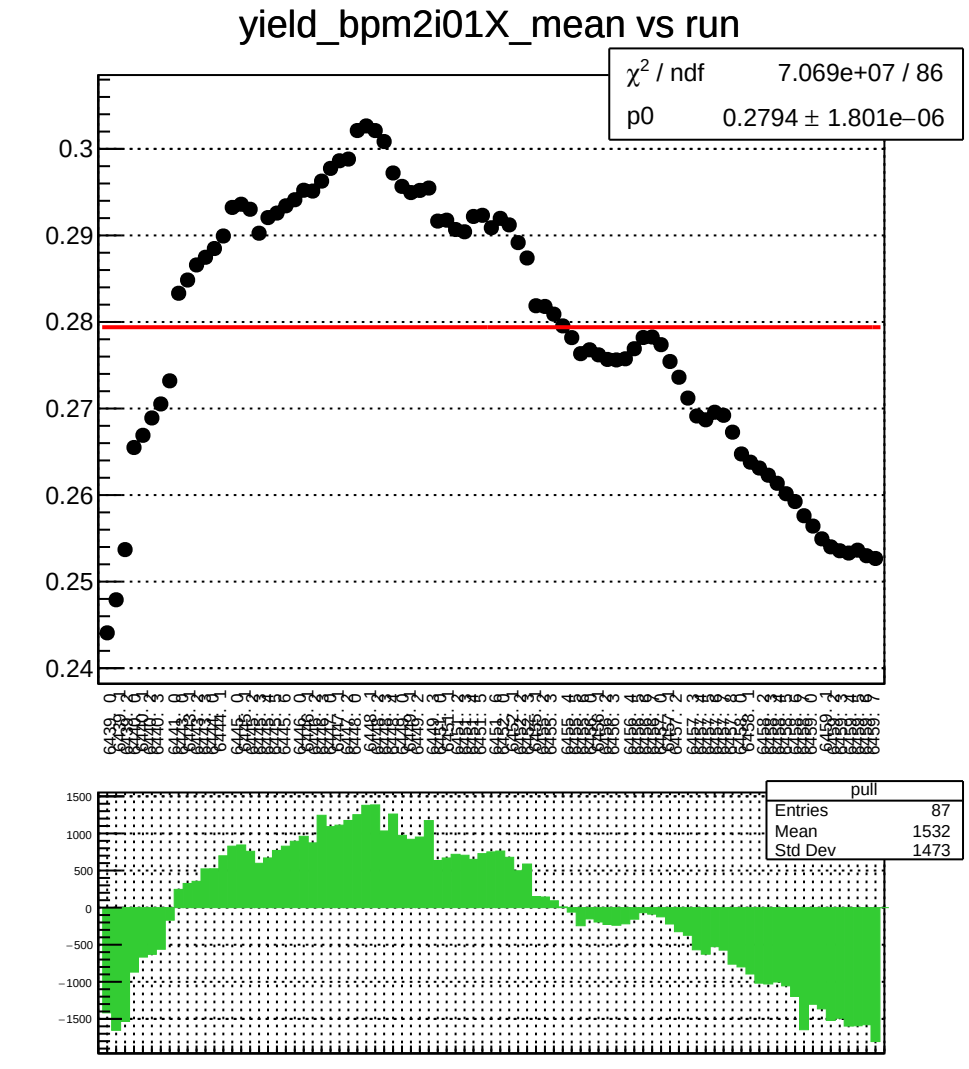

yield_bpm1i06X_mean vs run
χ² / ndf 7.609e+06 / 86
p0 1.249 ± 1.976e−05
1.35
1.3
1.25
1.2
1.15
pull
Entries 87
Mean −1682
Std Dev 1728
400
200
0
−200
−400
−600

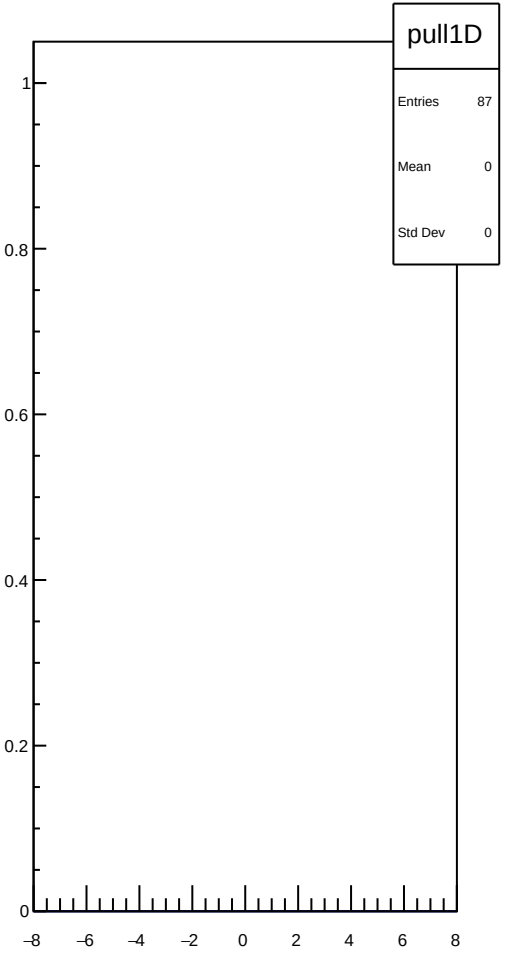

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

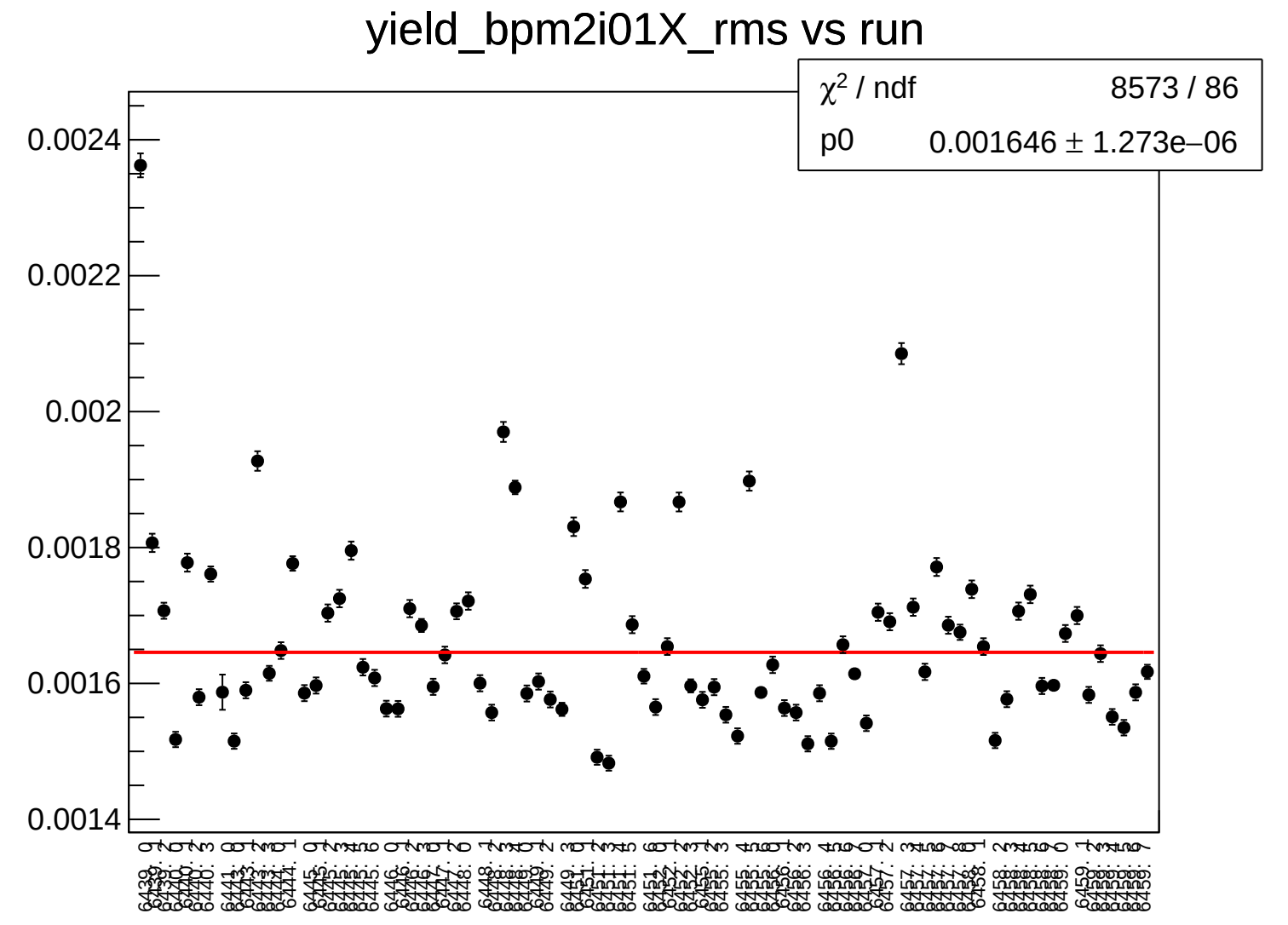

yield_bpm1i06X_rms vs run
χ² / ndf 2.967e+04 / 86
p0 0.01794 ± 1.397e–05
0.12
0.1
0.08
0.06
0.04
0.02

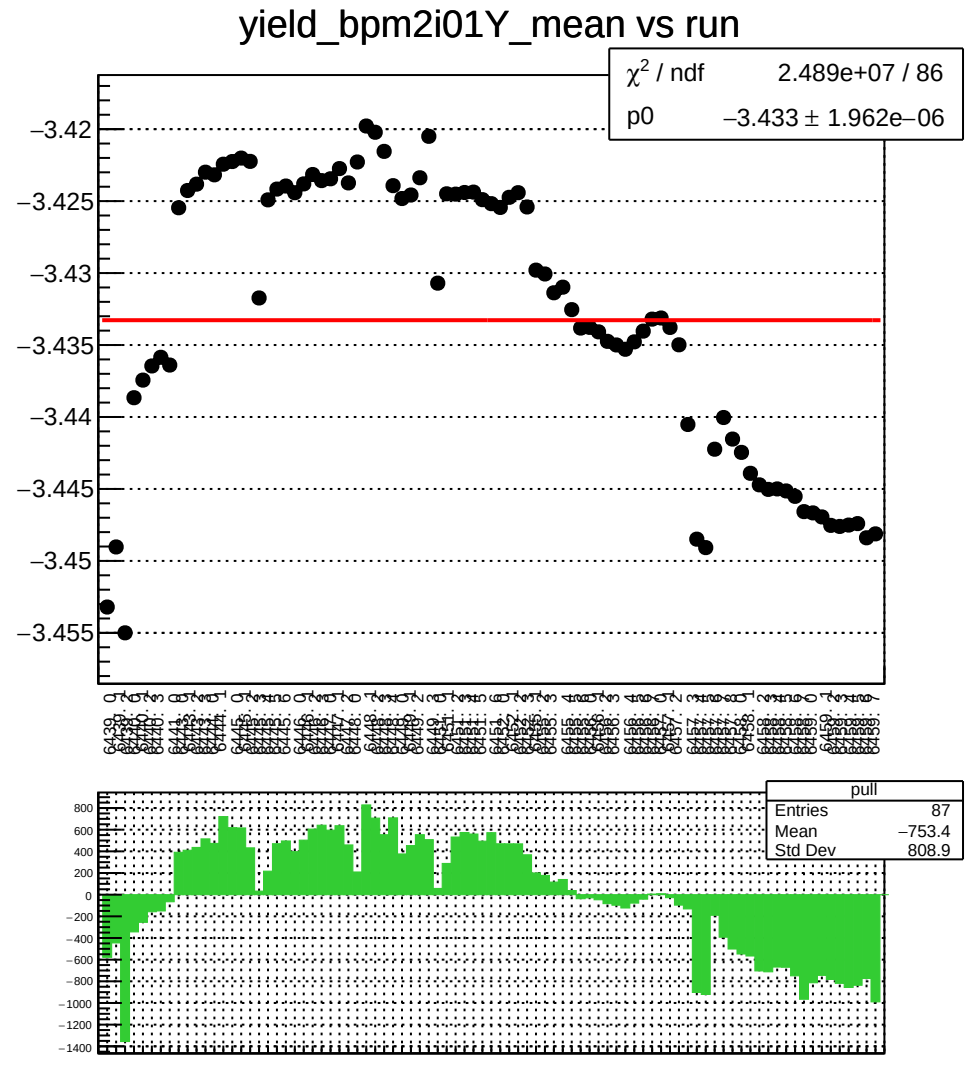

yield_bpm1i06Y_mean vs run
χ² / ndf 1.926e+07 / 86
p0 −0.6783 ± 8.698e−06
−0.45
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 87
Mean −457.9
Std Dev 513.8
800
600
400
200
0
−200
−400
−600
−800
pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

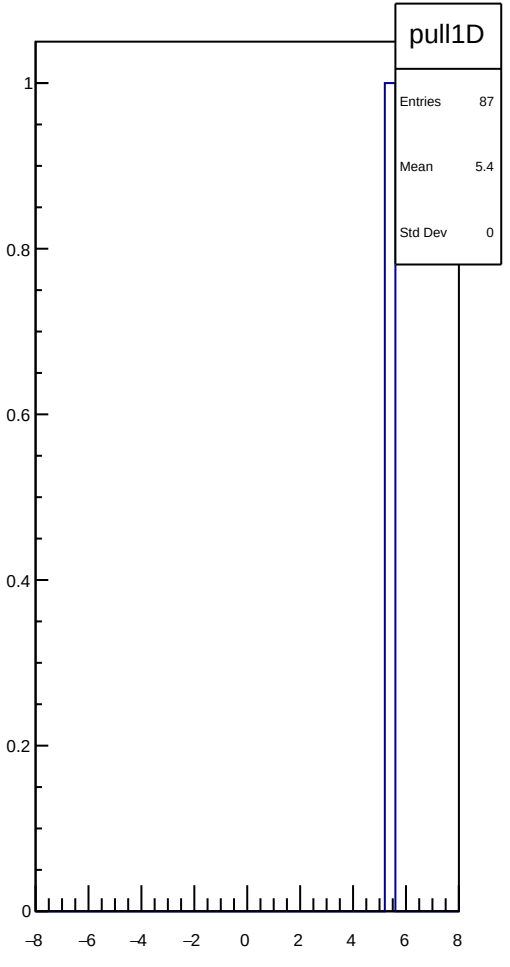

yield_bpm1i06Y_rms vs run
χ² / ndf 7.279e+04 / 86
p0 0.007795 ± 6.151e−06
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

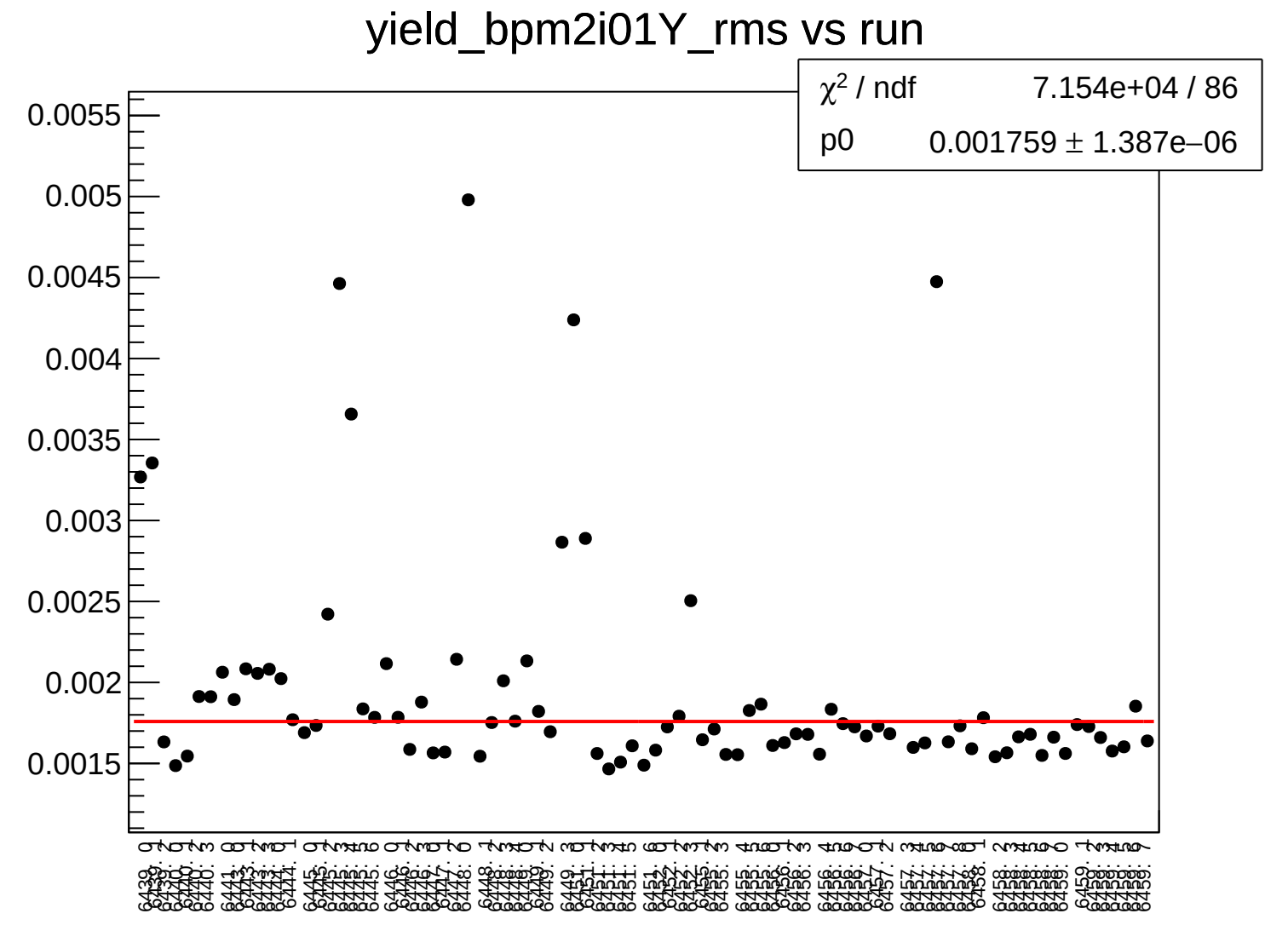

yield_bpm2i01X_mean vs run
χ² / ndf 7.069e+07 / 86
p0 0.2794 ± 1.801e−06
0.3
0.29
0.28
0.27
0.26
0.25
0.24
pull
Entries 87
Mean 1532
Std Dev 1473
1500
1000
500
0
−500
−1000
−1500

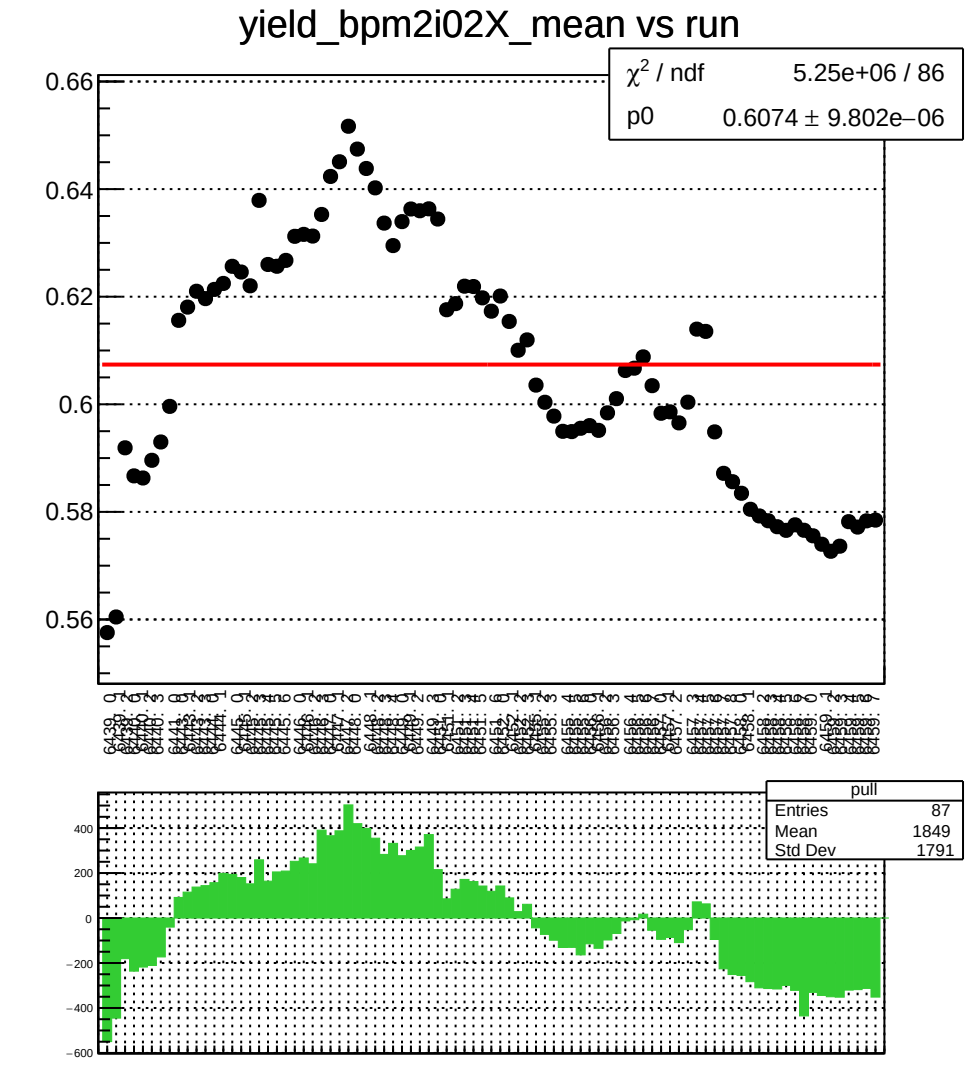

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

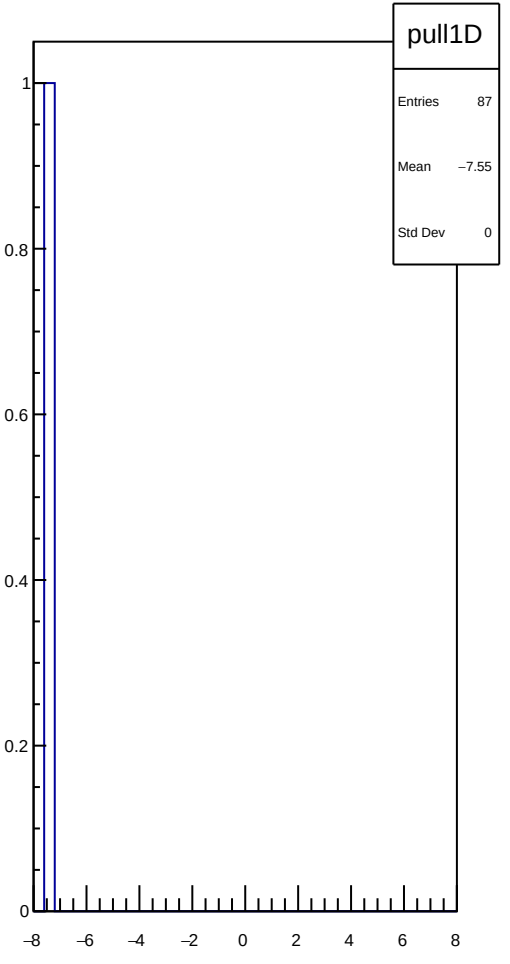

yield_bpm2i01X_rms vs run
χ² / ndf 8573 / 86
p0 0.001646 ± 1.273e−06
0.0024
0.0022
0.002
0.0018
0.0016
0.0014

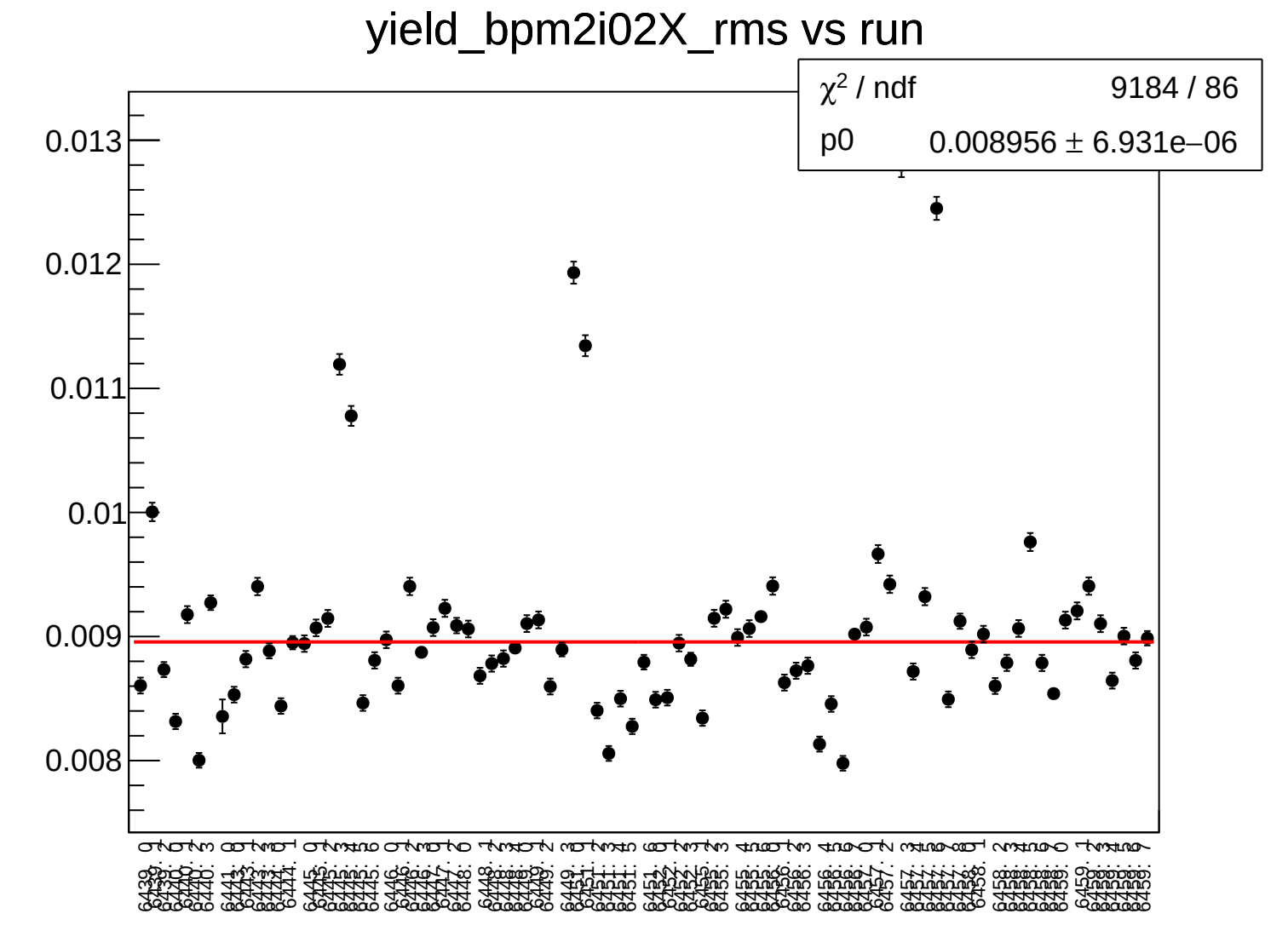

yield_bpm2i01Y_mean vs run
χ² / ndf 2.489e+07 / 86
p0 −3.433 ± 1.962e−06
−3.42
−3.425
−3.43
−3.435
−3.44
−3.445
−3.45
−3.455
pull
Entries 87
Mean −753.4
Std Dev 808.9
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

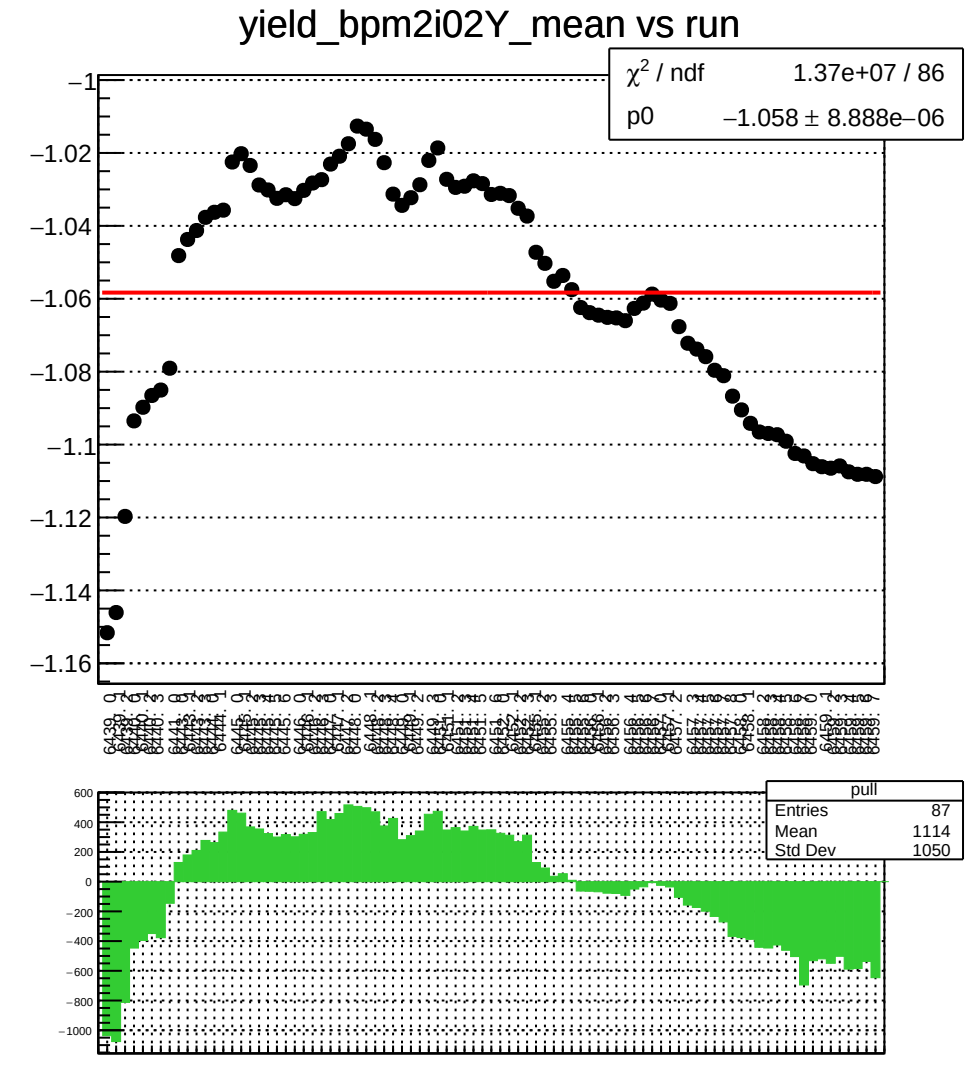

pull1D
Entries 87
Mean 5.4
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

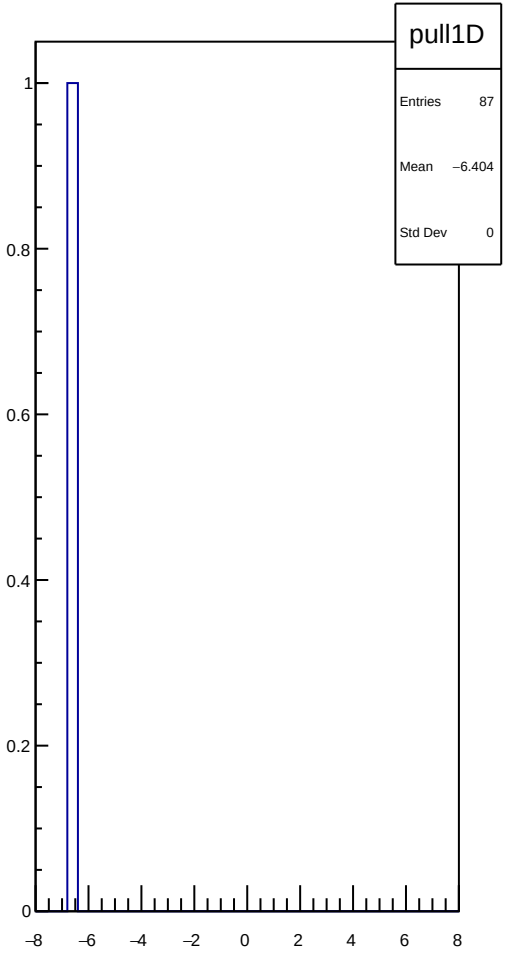

yield_bpm2i01Y_rms vs run
χ² / ndf 7.154e+04 / 86
p0 0.001759 ± 1.387e−06
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015

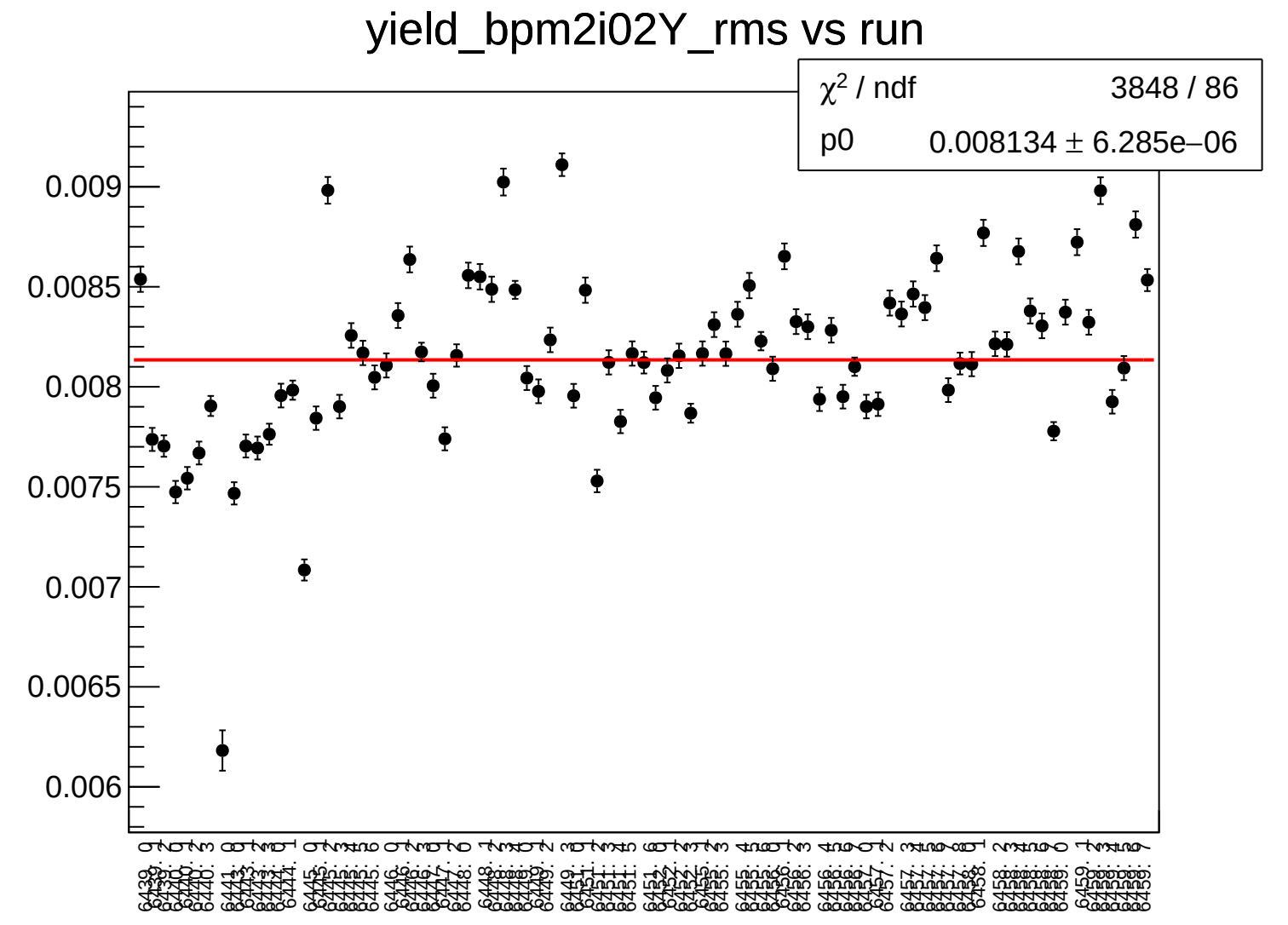

yield_bpm2i02X_mean vs run
χ² / ndf 5.25e+06 / 86
p0 0.6074 ± 9.802e−06
0.66
0.64
0.62
0.6
0.58
0.56
pull
Entries 87
Mean 1849
Std Dev 1791
400
200
0
−200
−400
−600

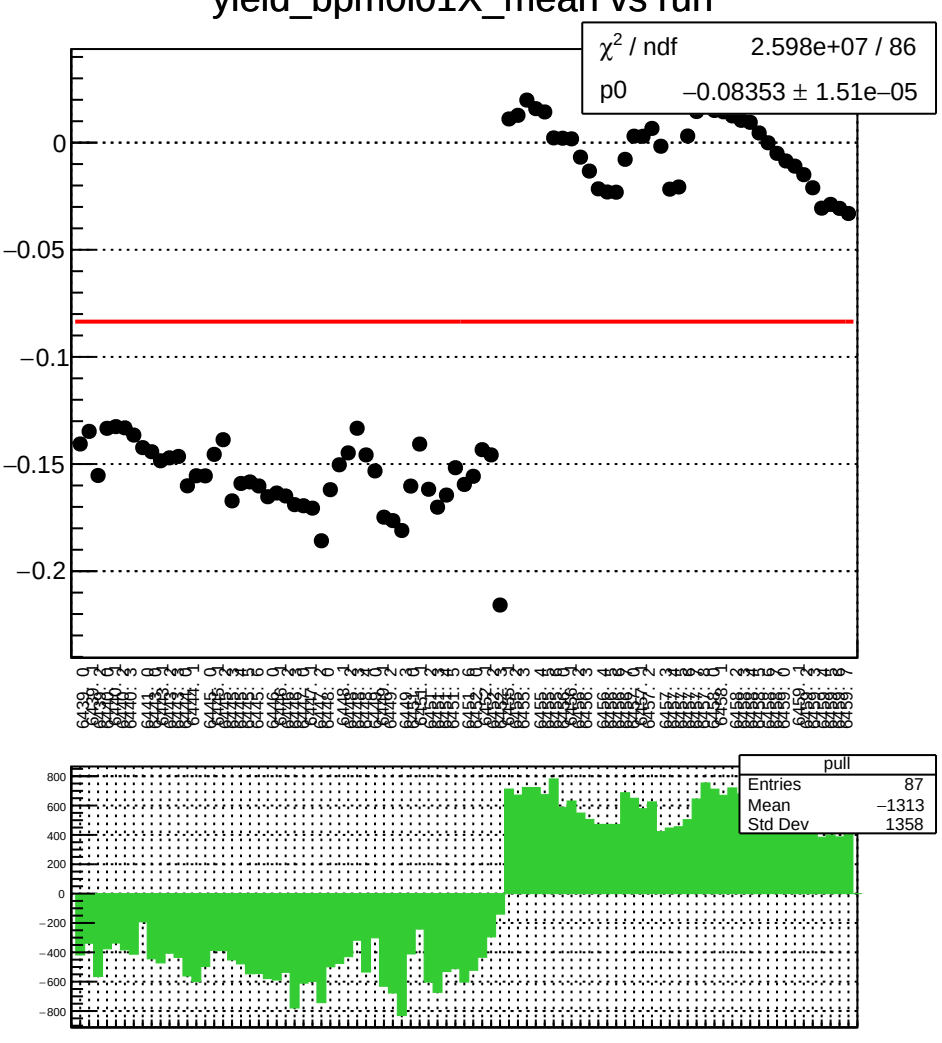

pull1D
Entries 87
Mean −7.55
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

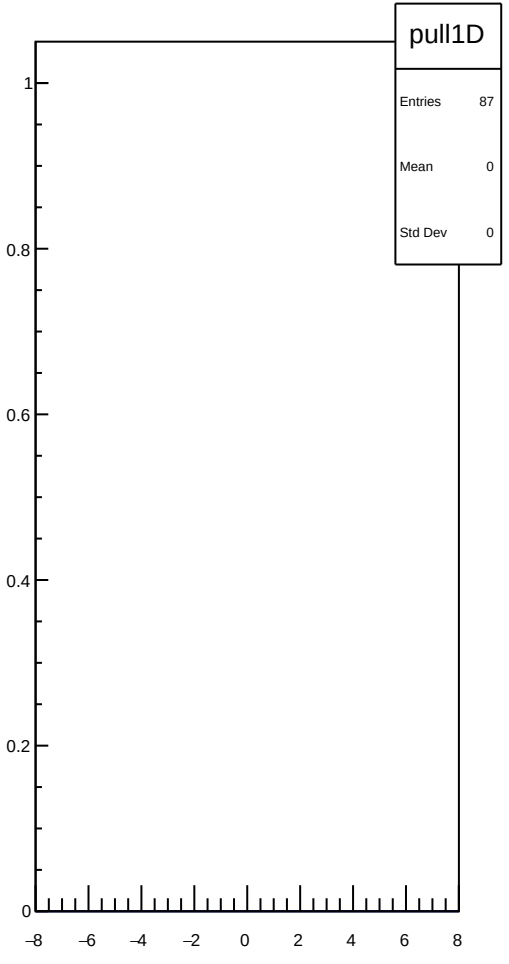

yield_bpm2i02X_rms vs run
χ² / ndf 9184 / 86
p0 0.008956 ± 6.931e−06
0.013
0.012
0.011
0.01
0.009
0.008

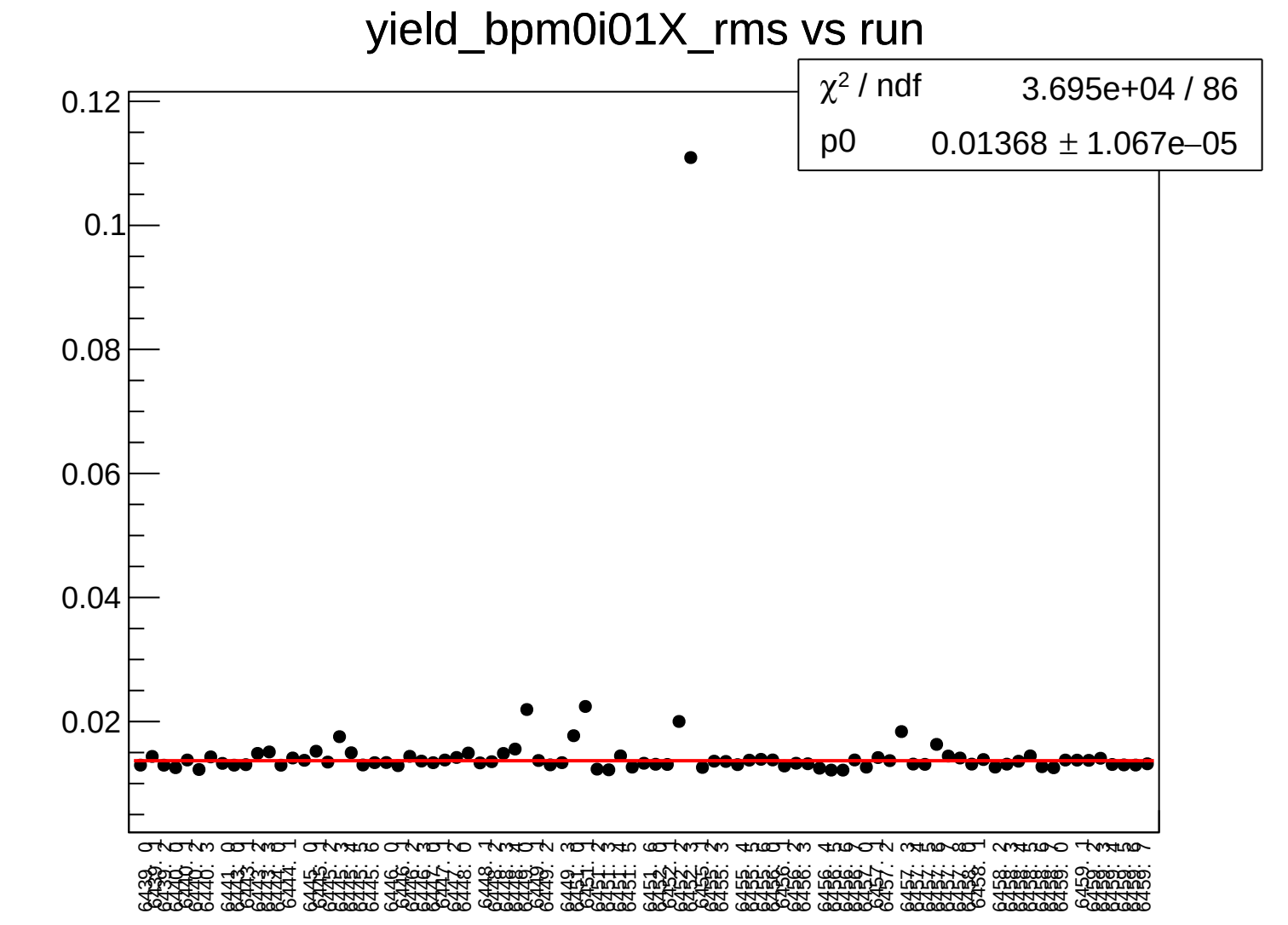

yield_bpm2i02Y_mean vs run
χ² / ndf 1.37e+07 / 86
p0 −1.058 ± 8.888e−06
pull
Entries 87
Mean 1114
Std Dev 1050

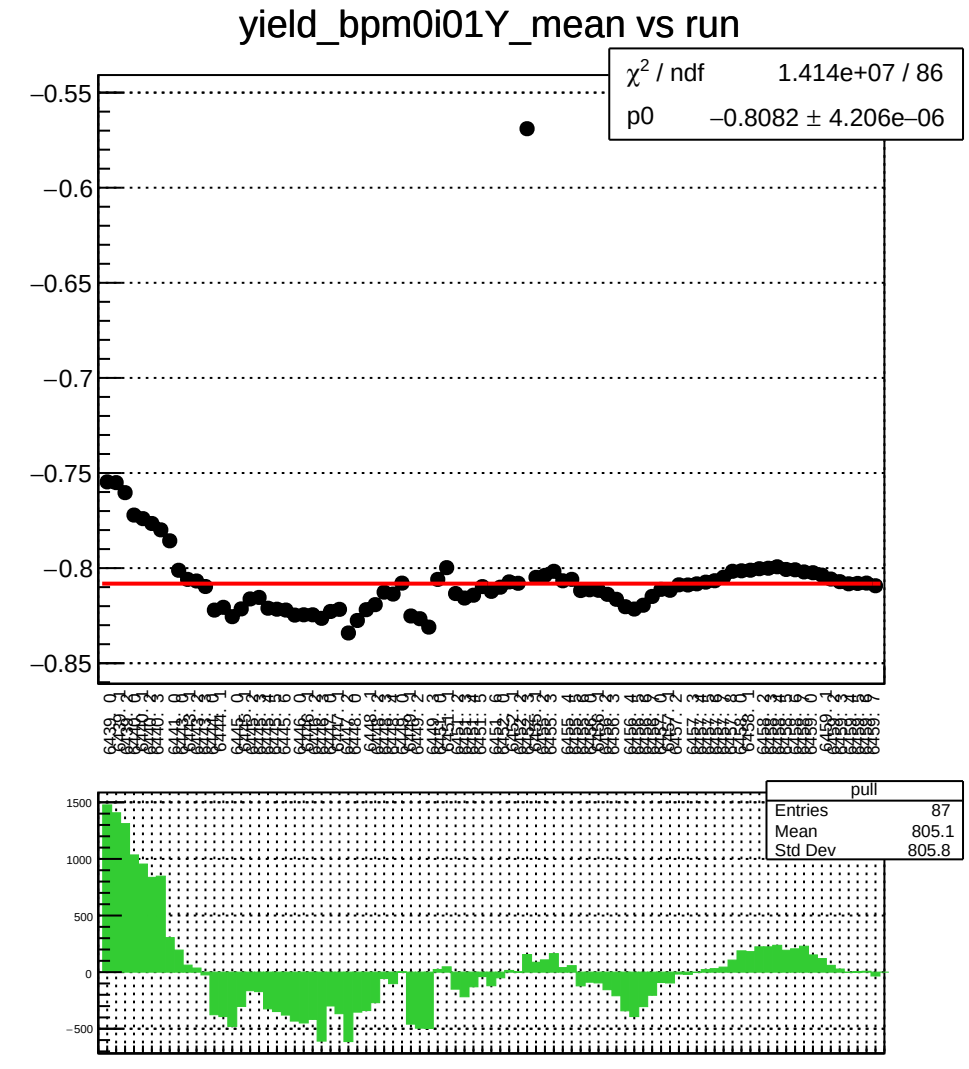

pull1D
Entries 87
Mean −6.404
Std Dev 0

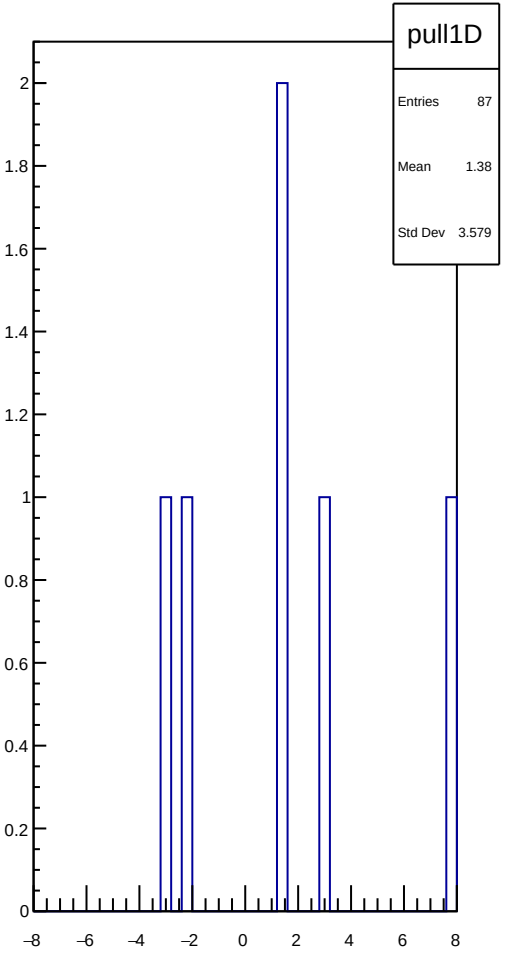

yield_bpm2i02Y_rms vs run
χ² / ndf 3848 / 86
p0 0.008134 ± 6.285e−06
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006

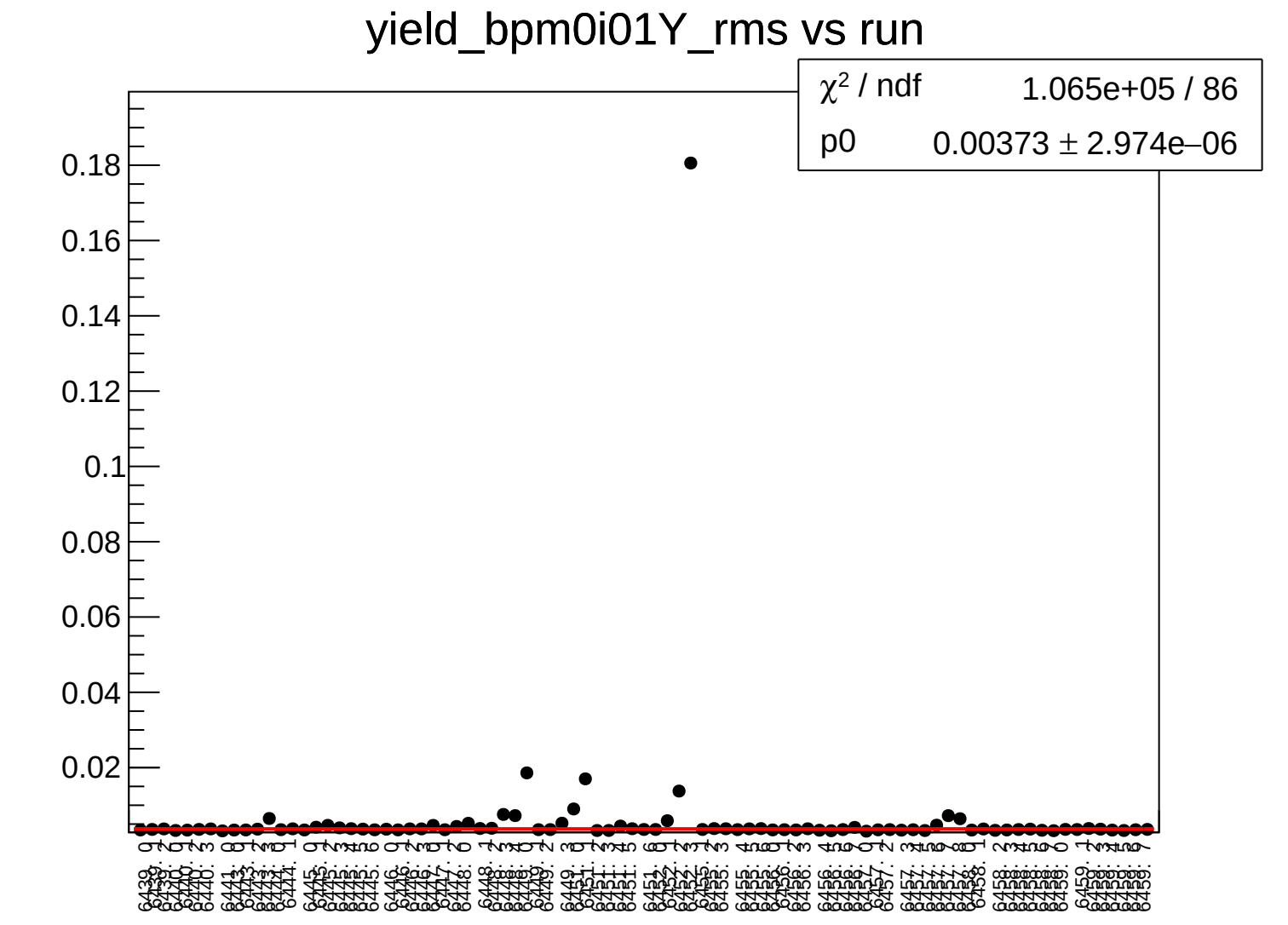

yield_bpm0i01X_mean vs run
χ² / ndf 2.598e+07 / 86
p0 −0.08353 ± 1.51e−05
0
−0.05
−0.1
−0.15
−0.2
pull
Entries 87
Mean −1313
Std Dev 1358
800
600
400
200
0
−200
−400
−600
−800

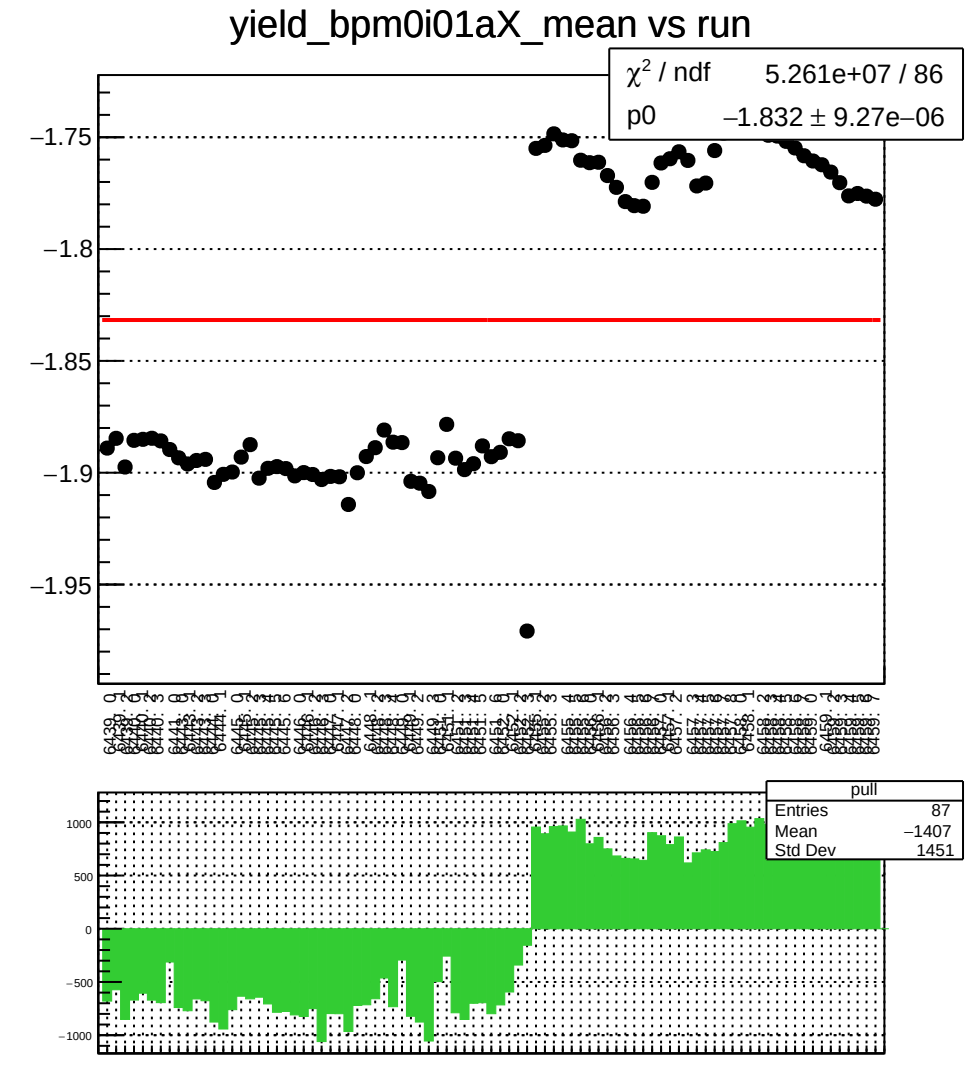

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

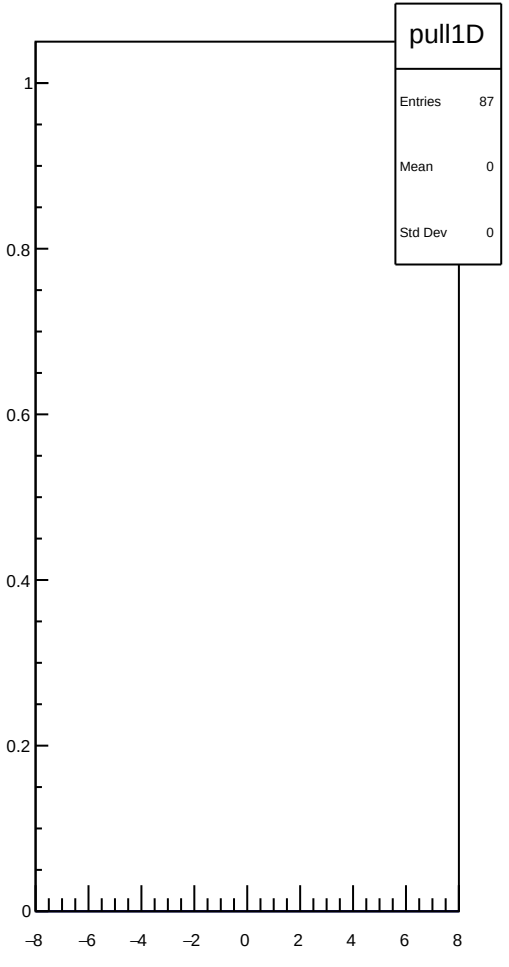

yield_bpm0i01X_rms vs run
χ² / ndf 3.695e+04 / 86
p0 0.01368 ± 1.067e−05
0.12
0.1
0.08
0.06
0.04
0.02

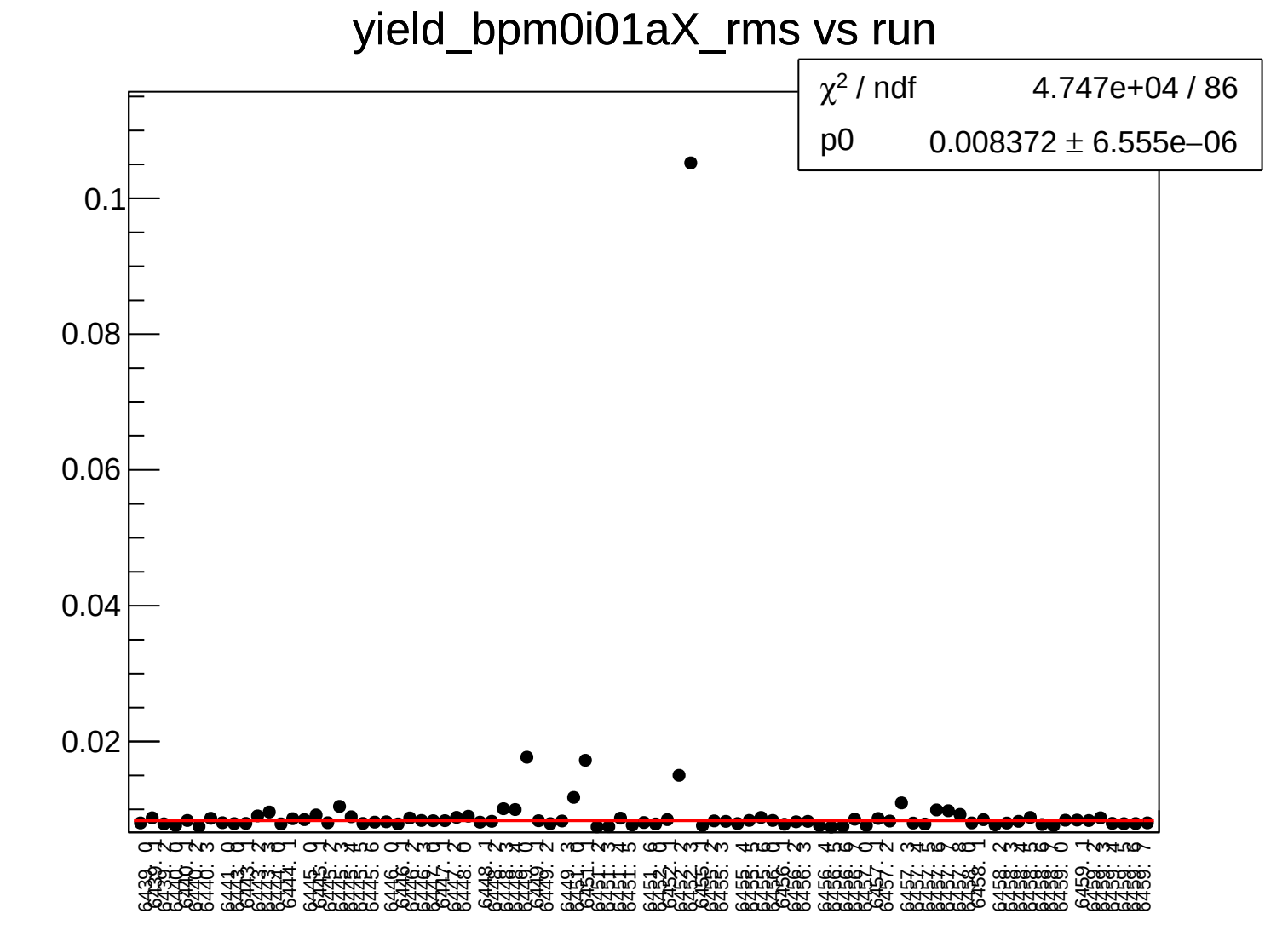

yield_bpm0i01Y_mean vs run
χ² / ndf 1.414e+07 / 86
p0 −0.8082 ± 4.206e−06
pull
Entries 87
Mean 805.1
Std Dev 805.8

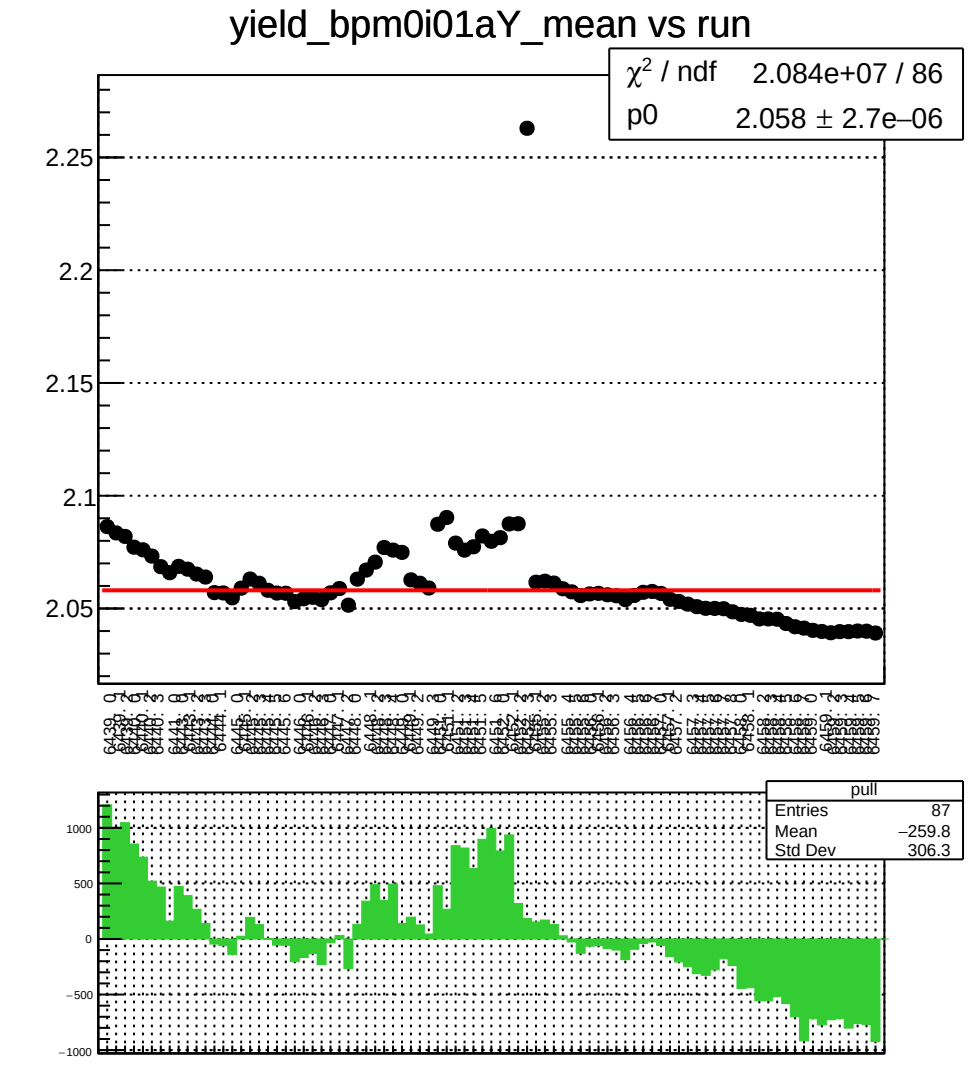

pull1D
Entries 87
Mean 1.38
Std Dev 3.579

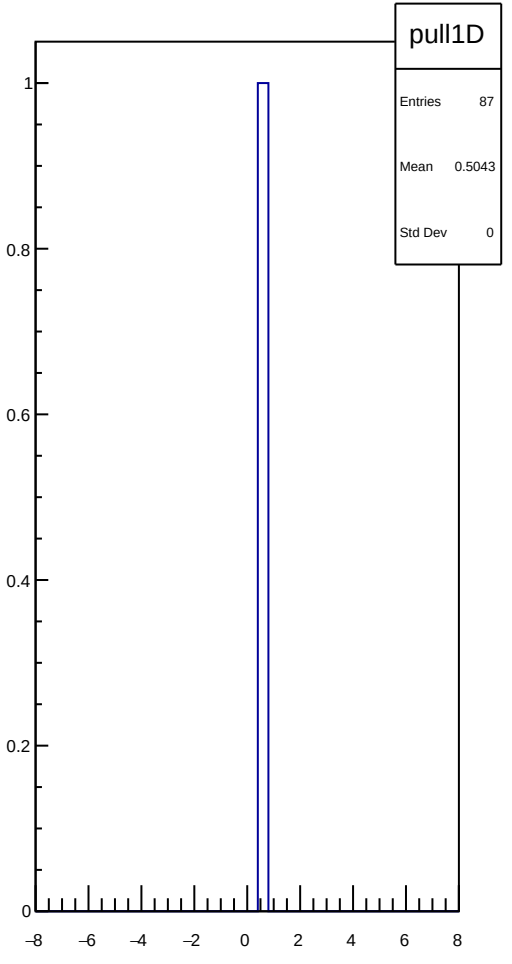

yield_bpm0i01Y_rms vs run
χ² / ndf 1.065e+05 / 86
p0 0.00373 ± 2.974e−06
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

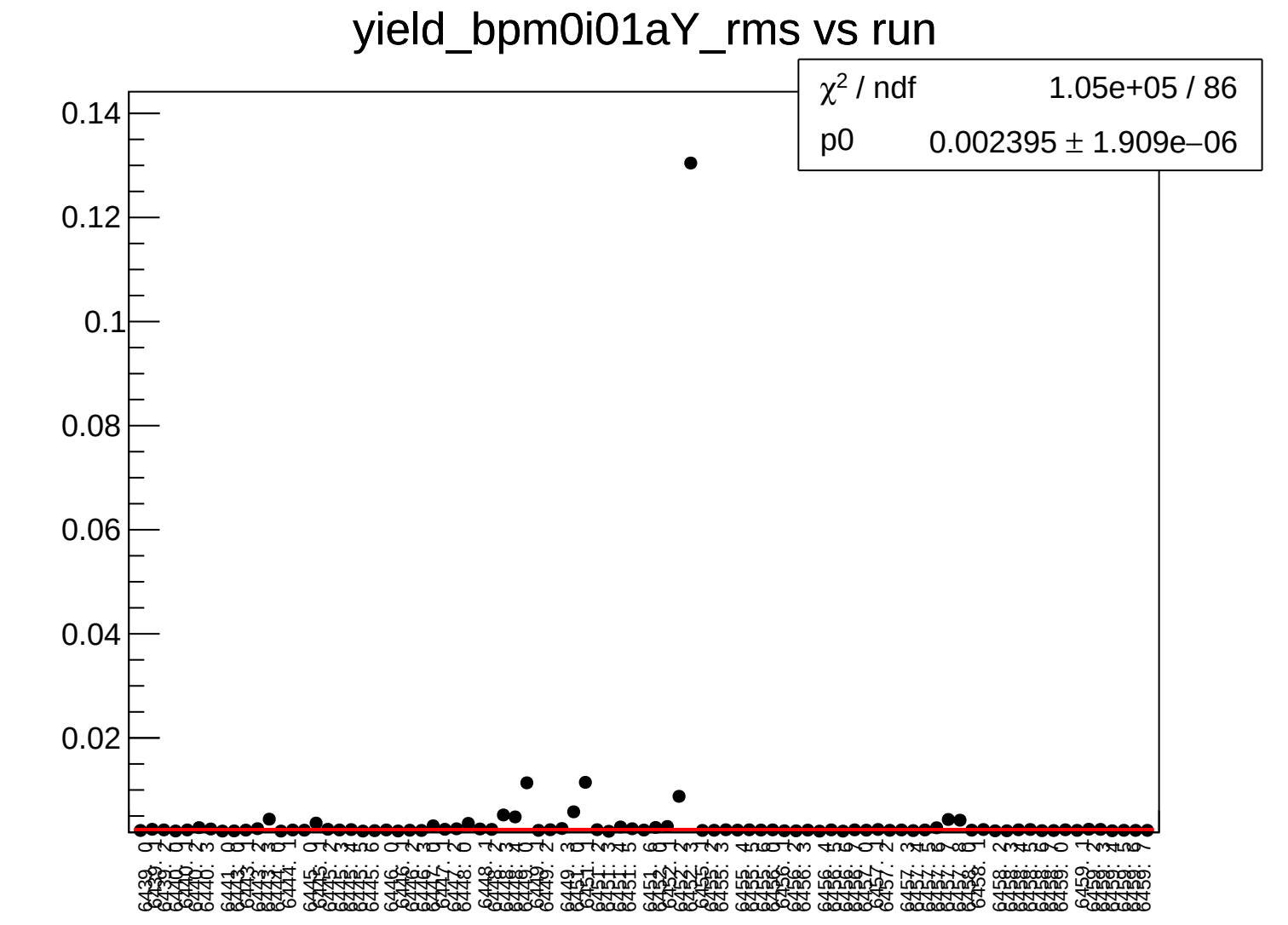

yield_bpm0i01aX_mean vs run
χ² / ndf 5.261e+07 / 86
p0 −1.832 ± 9.27e−06
−1.75
−1.8
−1.85
−1.9
−1.95
pull
Entries 87
Mean −1407
Std Dev 1451
1000
500
0
−500
−1000

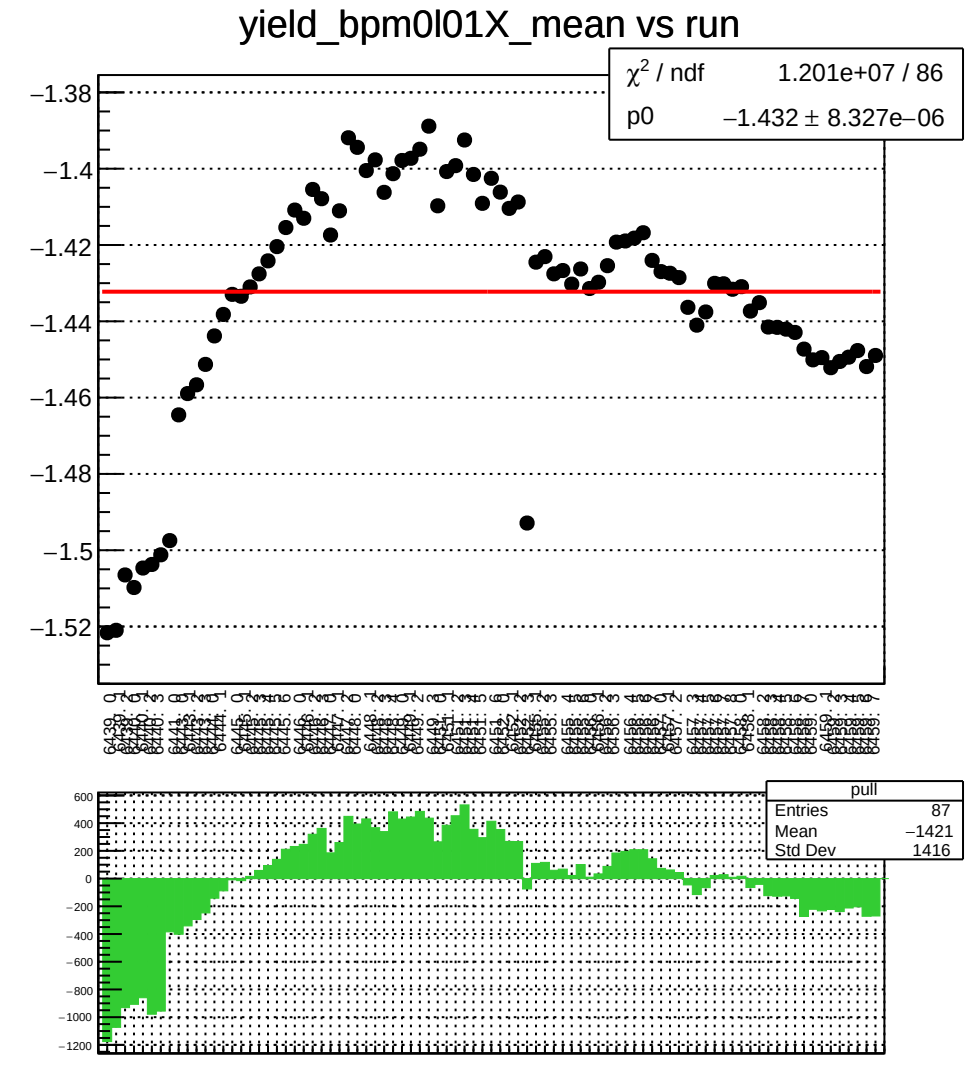

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

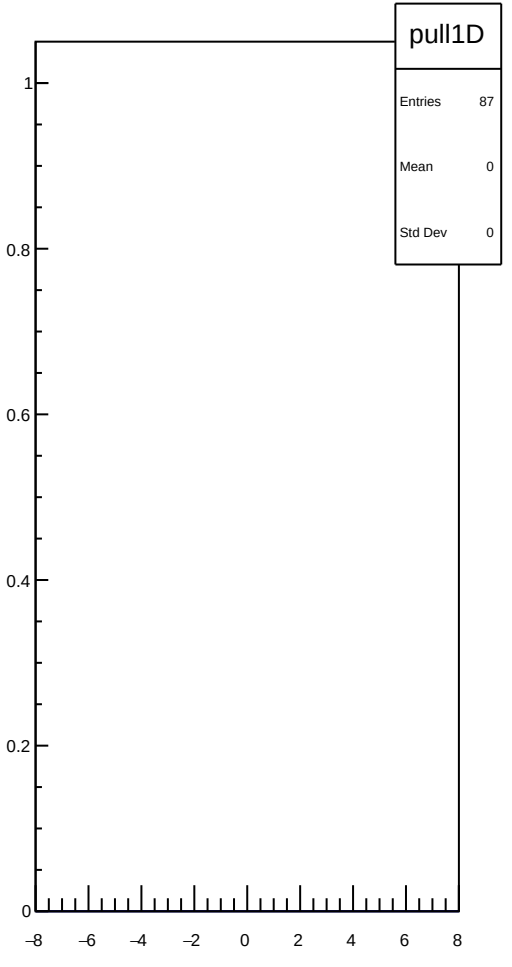

yield_bpm0i01aX_rms vs run
χ² / ndf 4.747e+04 / 86
p0 0.008372 ± 6.555e−06
0.1
0.08
0.06
0.04
0.02

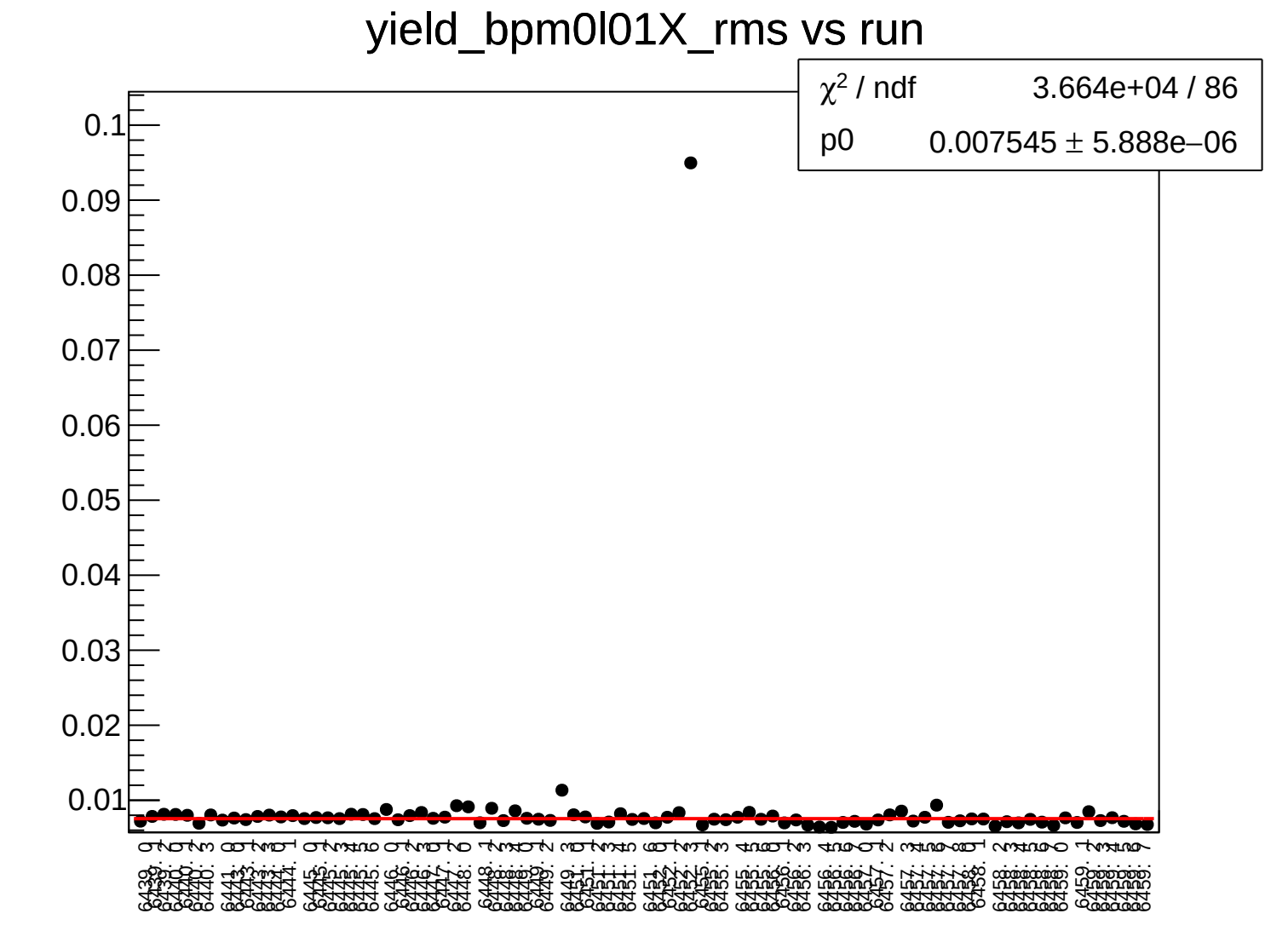

yield_bpm0i01aY_mean vs run
χ² / ndf 2.084e+07 / 86
p0 2.058 ± 2.7e–06
2.25
2.2
2.15
2.1
2.05
pull
Entries 87
Mean –259.8
Std Dev 306.3
1000
500
0
–500
–1000

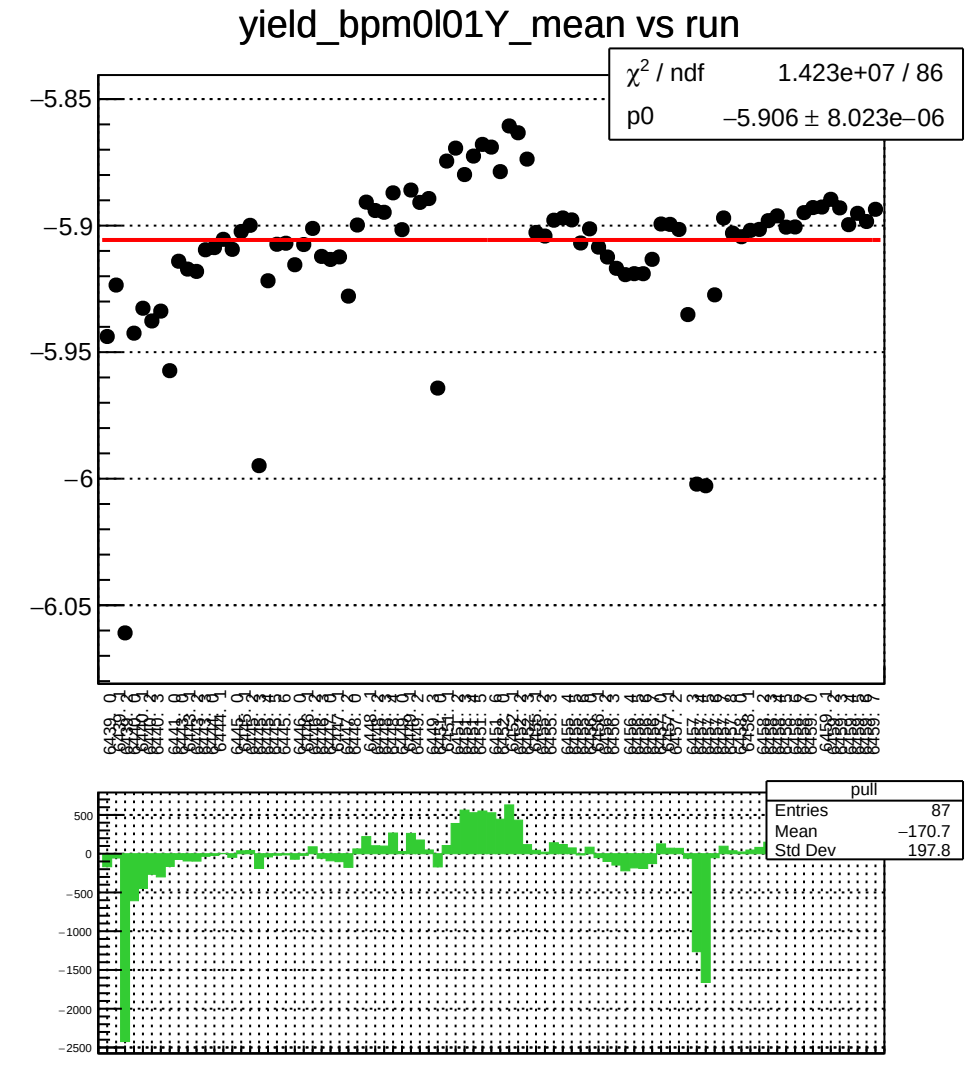

pull1D
Entries 87
Mean 0.5043
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

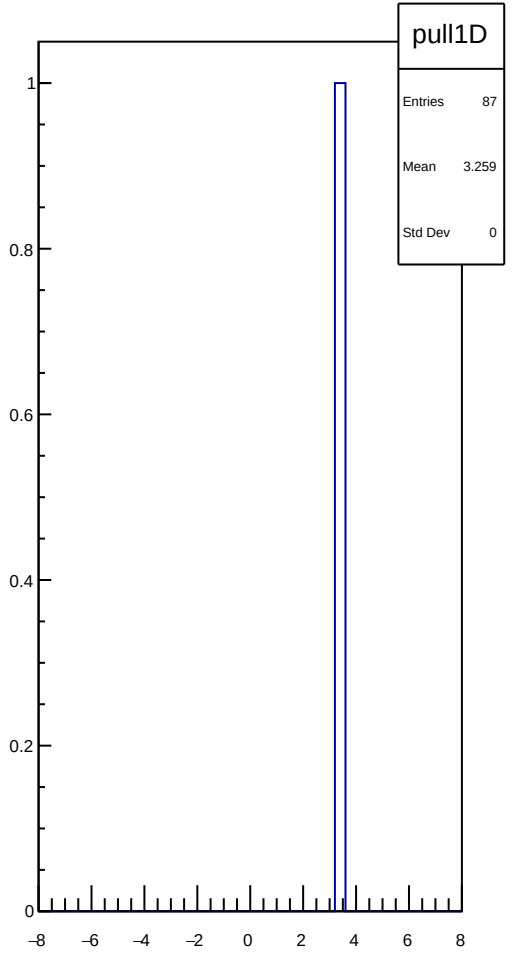

yield_bpm0i01aY_rms vs run
χ² / ndf 1.05e+05 / 86
p0 0.002395 ± 1.909e−06
0.14
0.12
0.1
0.08
0.06
0.04
0.02

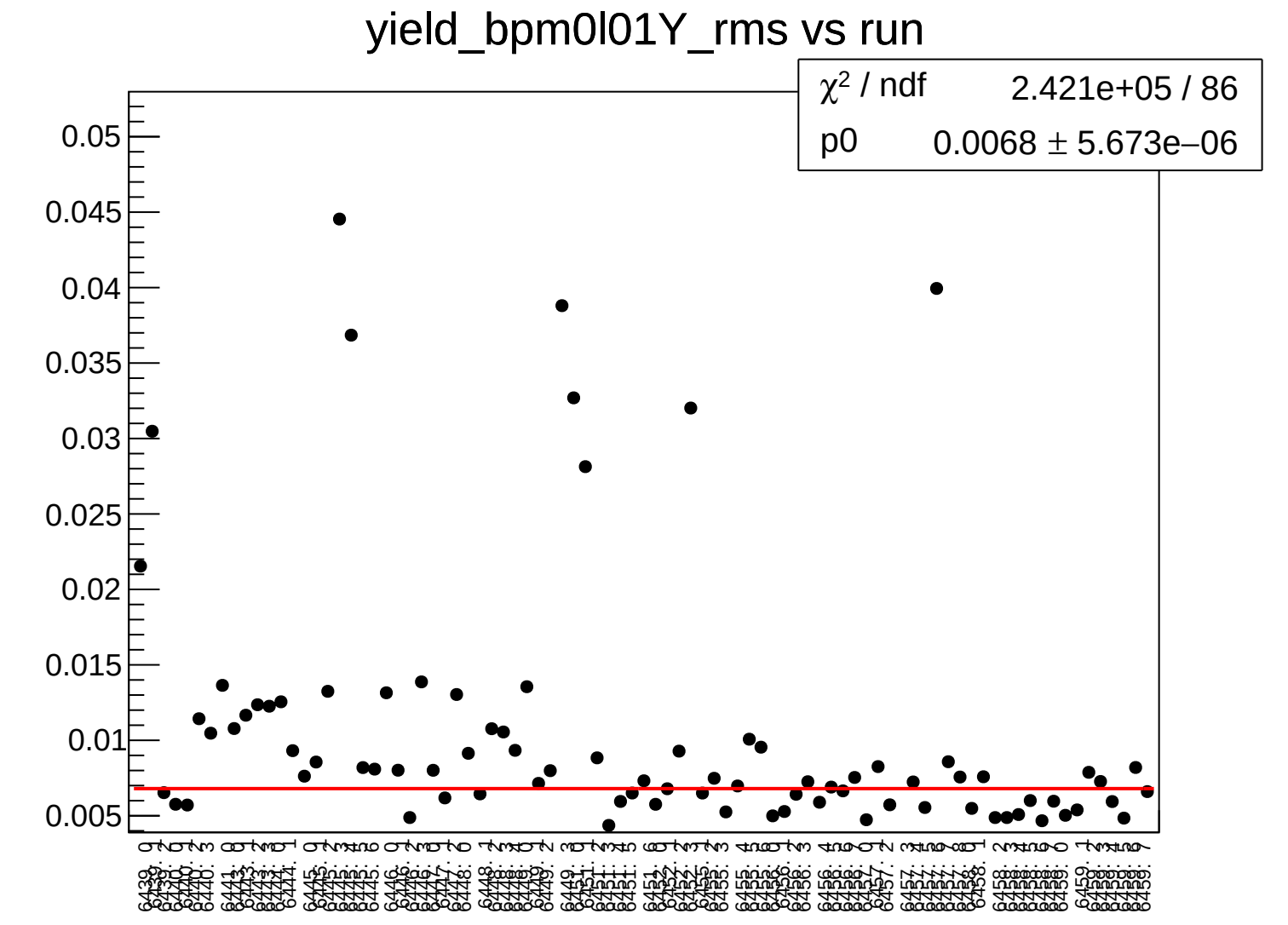

yield_bpm0l01X_mean vs run
χ² / ndf 1.201e+07 / 86
p0 −1.432 ± 8.327e−06
−1.38
−1.4
−1.42
−1.44
−1.46
−1.48
−1.5
−1.52
pull
Entries 87
Mean −1421
Std Dev 1416
600
400
200
0
−200
−400
−600
−800
−1000
−1200

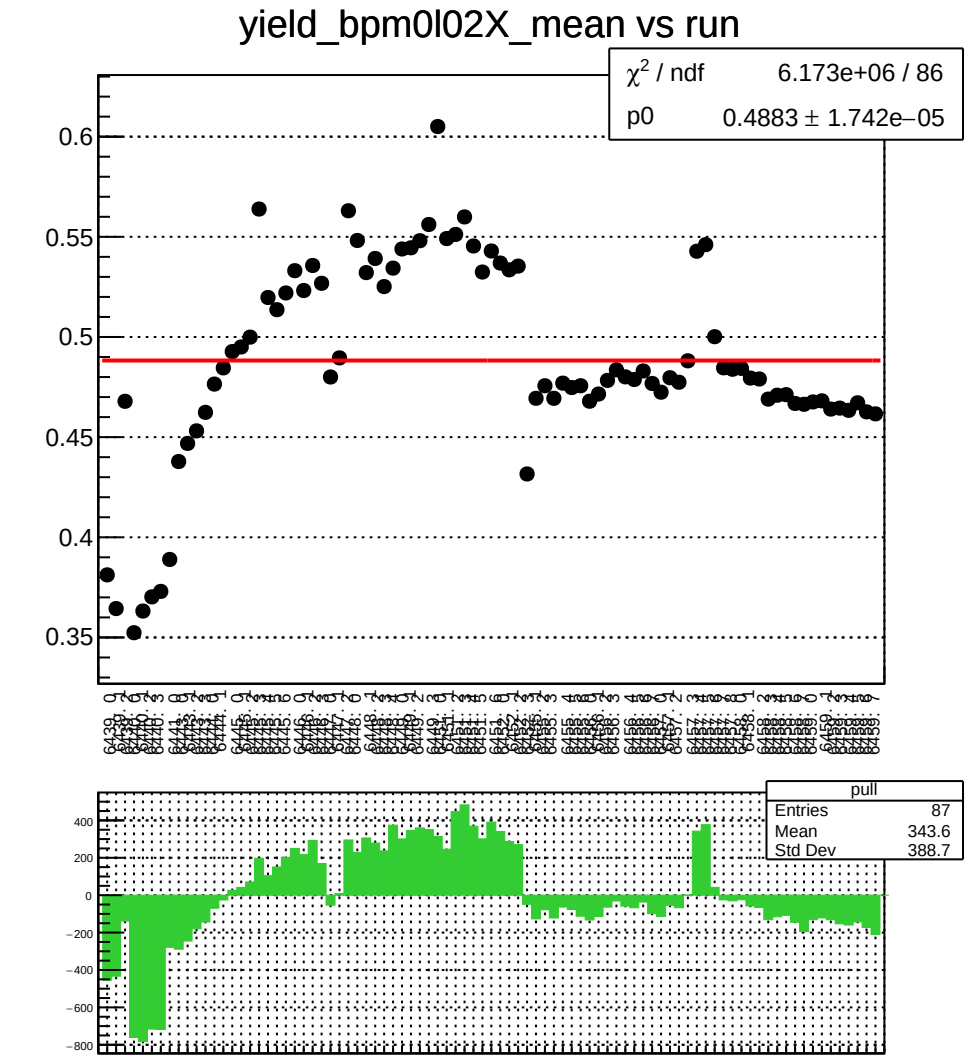

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

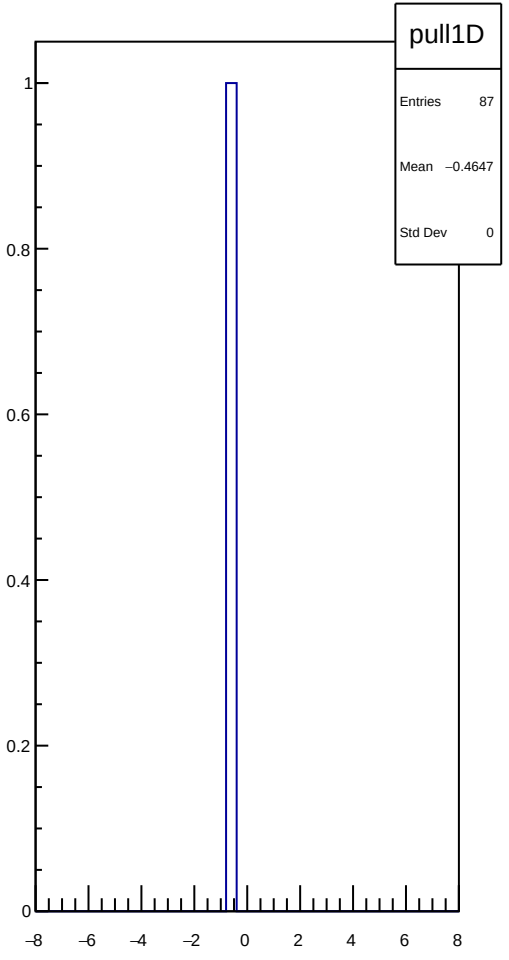

yield_bpm0l01X_rms vs run
χ² / ndf 3.664e+04 / 86
p0 0.007545 ± 5.888e−06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

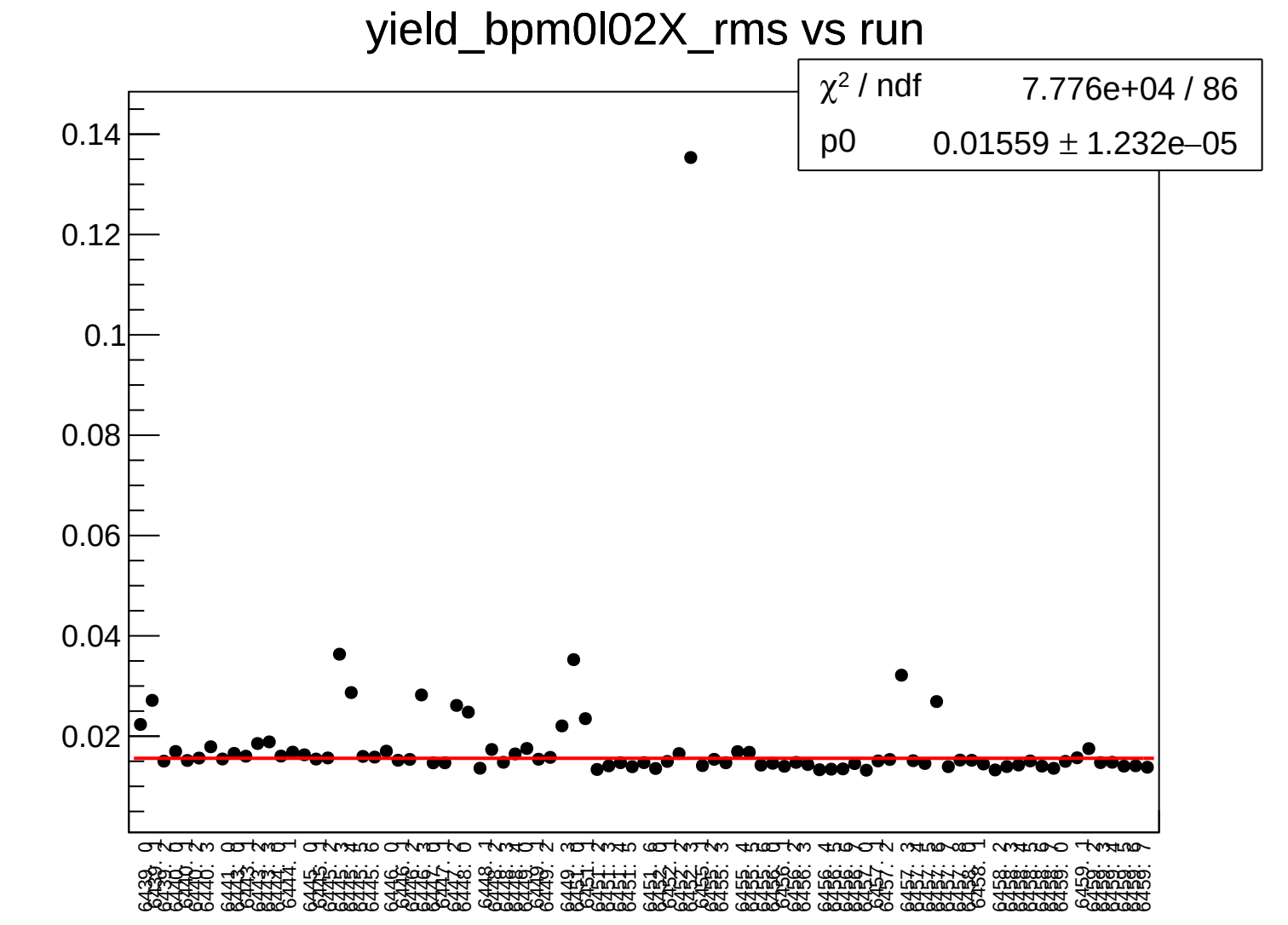

yield_bpm0l01Y_mean vs run
χ² / ndf 1.423e+07 / 86
p0 −5.906 ± 8.023e−06
−5.85
−5.9
−5.95
−6
−6.05
pull
Entries 87
Mean −170.7
Std Dev 197.8
500
0
−500
−1000
−1500
−2000
−2500

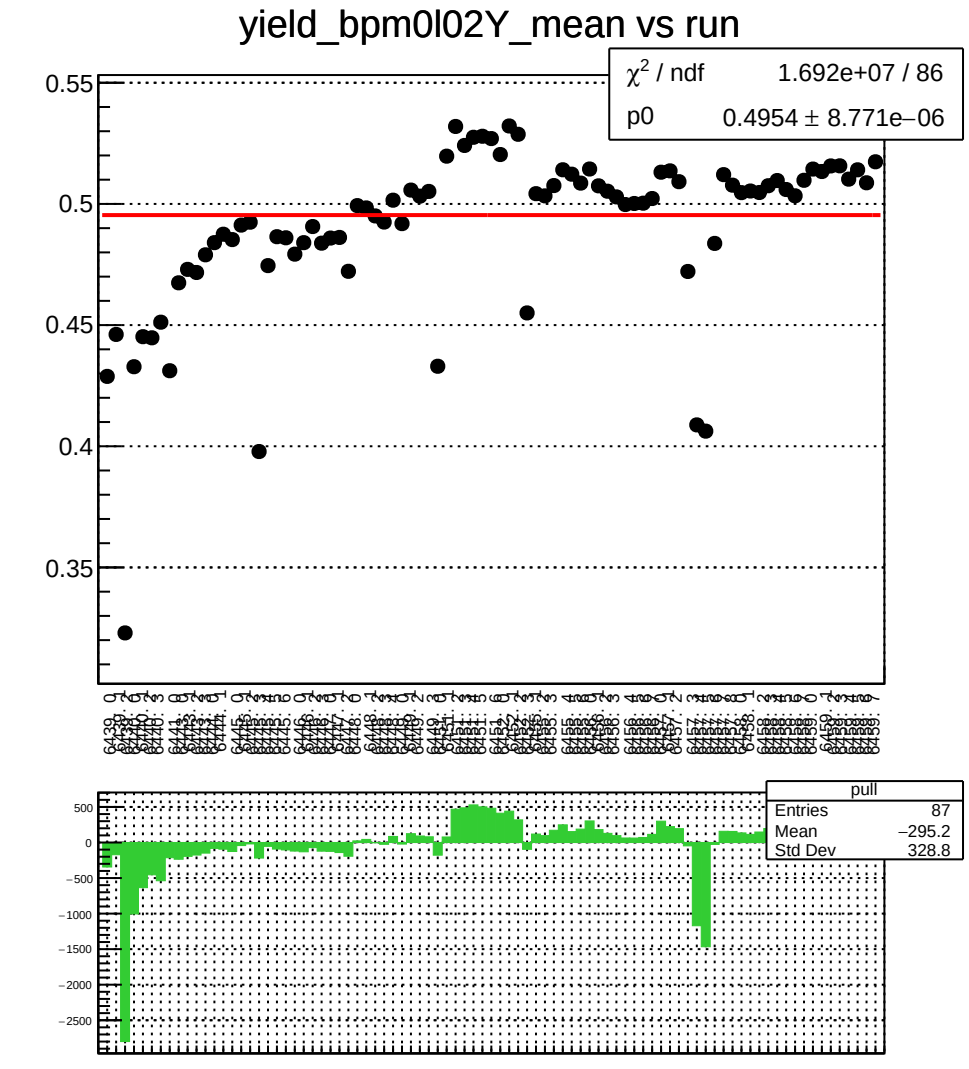

pull1D
Entries 87
Mean 3.259
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

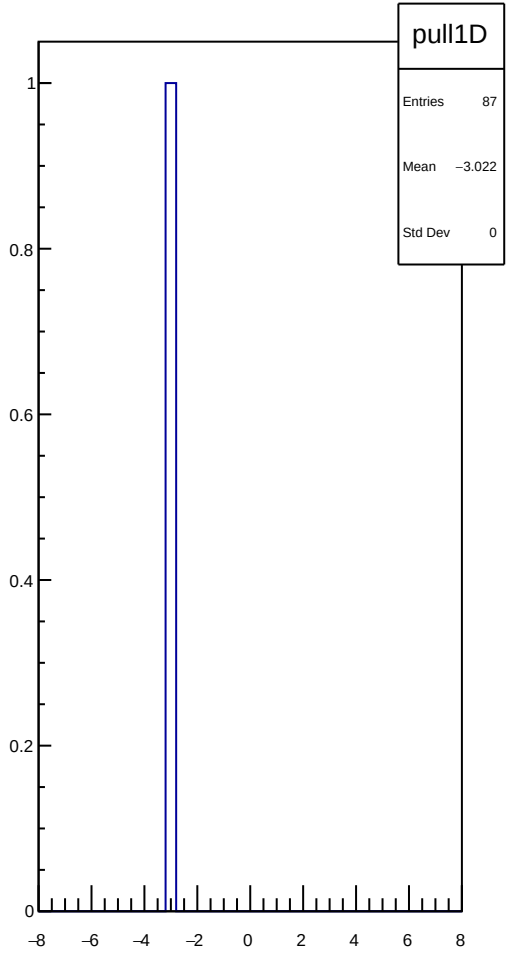

yield_bpm0l01Y_rms vs run
χ² / ndf 2.421e+05 / 86
p0 0.0068 ± 5.673e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

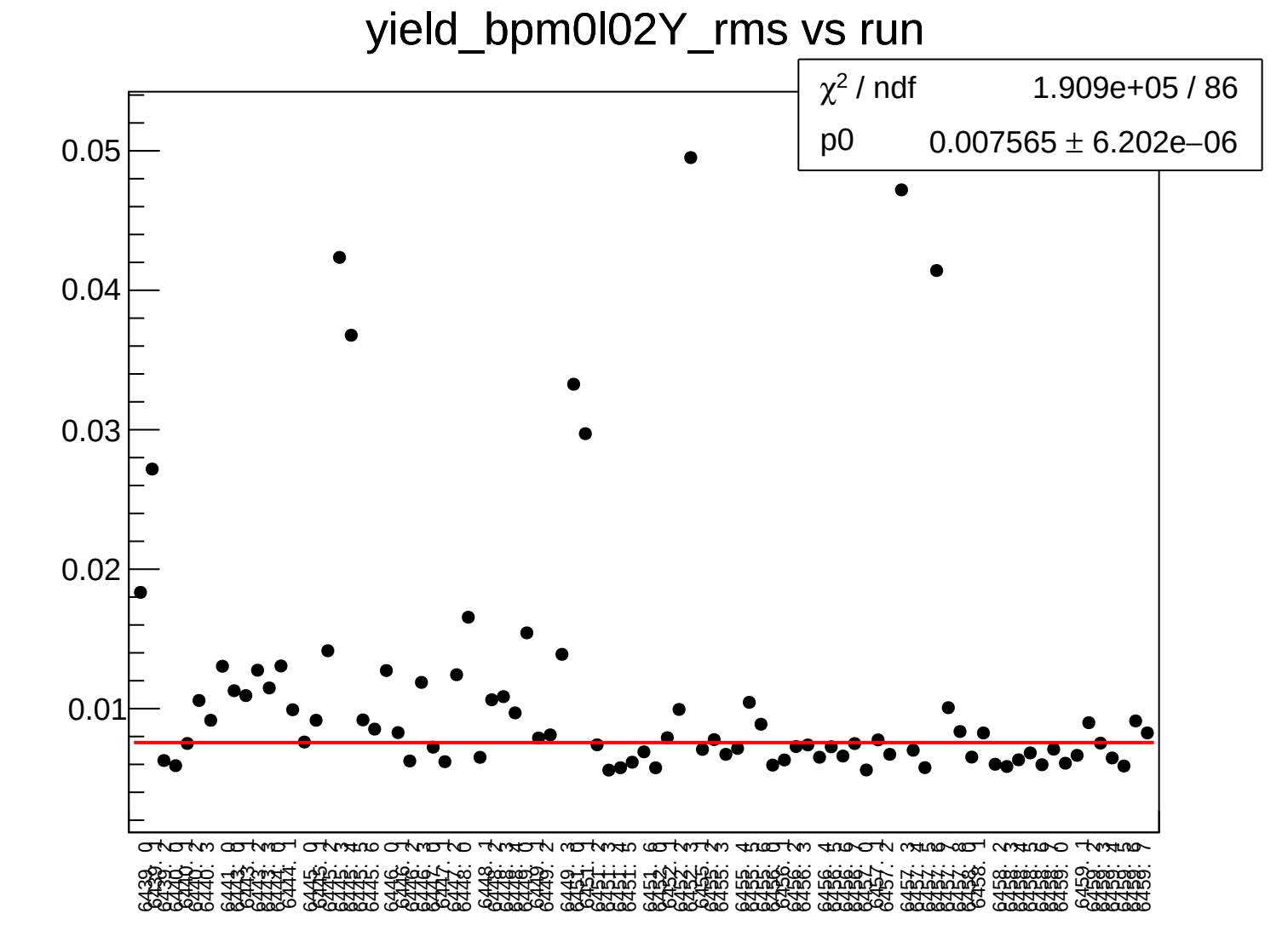

yield_bpm0l02X_mean vs run
χ² / ndf 6.173e+06 / 86
p0 0.4883 ± 1.742e−05
0.6
0.55
0.5
0.45
0.4
0.35
pull
Entries 87
Mean 343.6
Std Dev 388.7
400
200
0
−200
−400
−600
−800

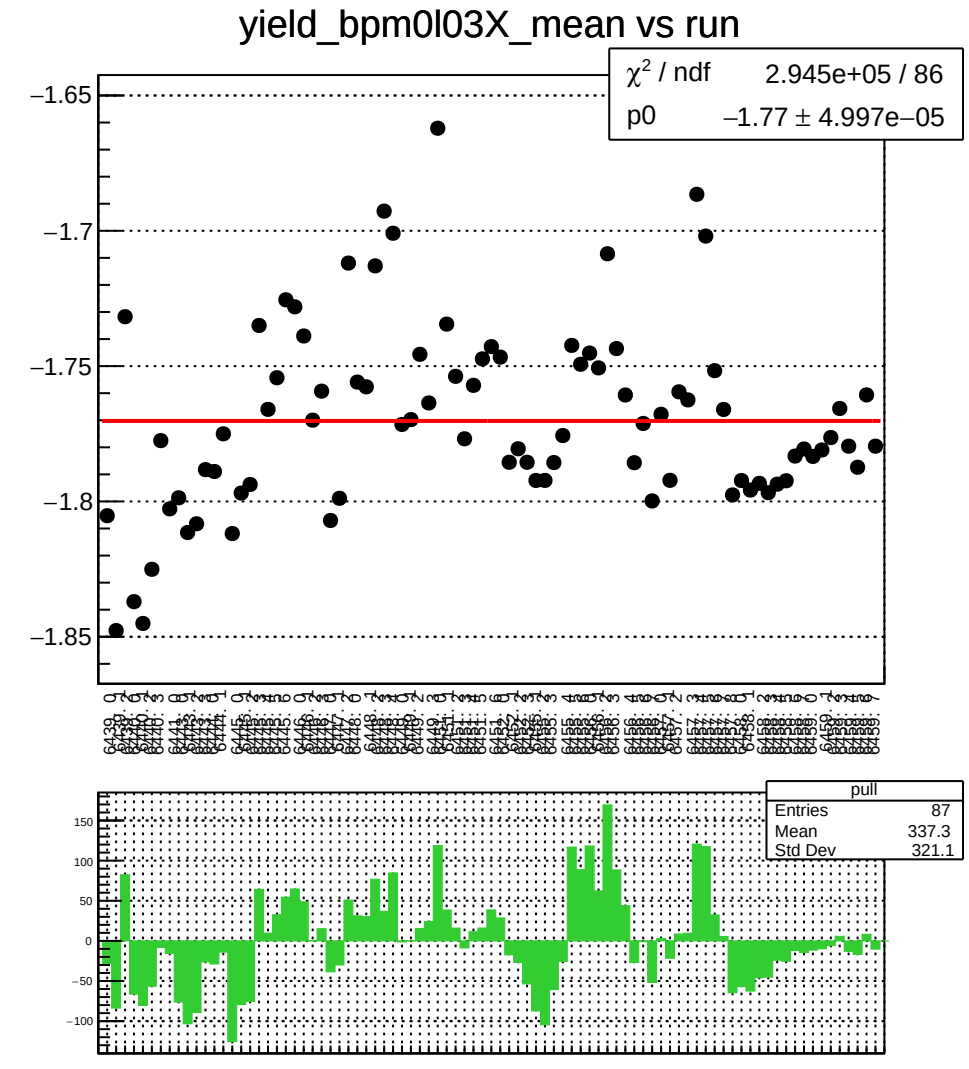

pull1D
Entries 87
Mean −0.4647
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

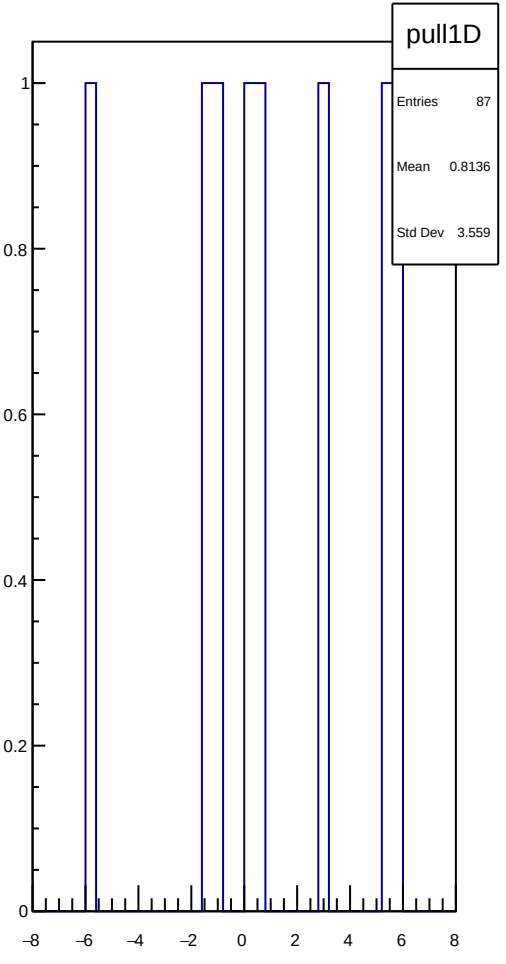

yield_bpm0l02X_rms vs run
χ² / ndf 7.776e+04 / 86
p0 0.01559 ± 1.232e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

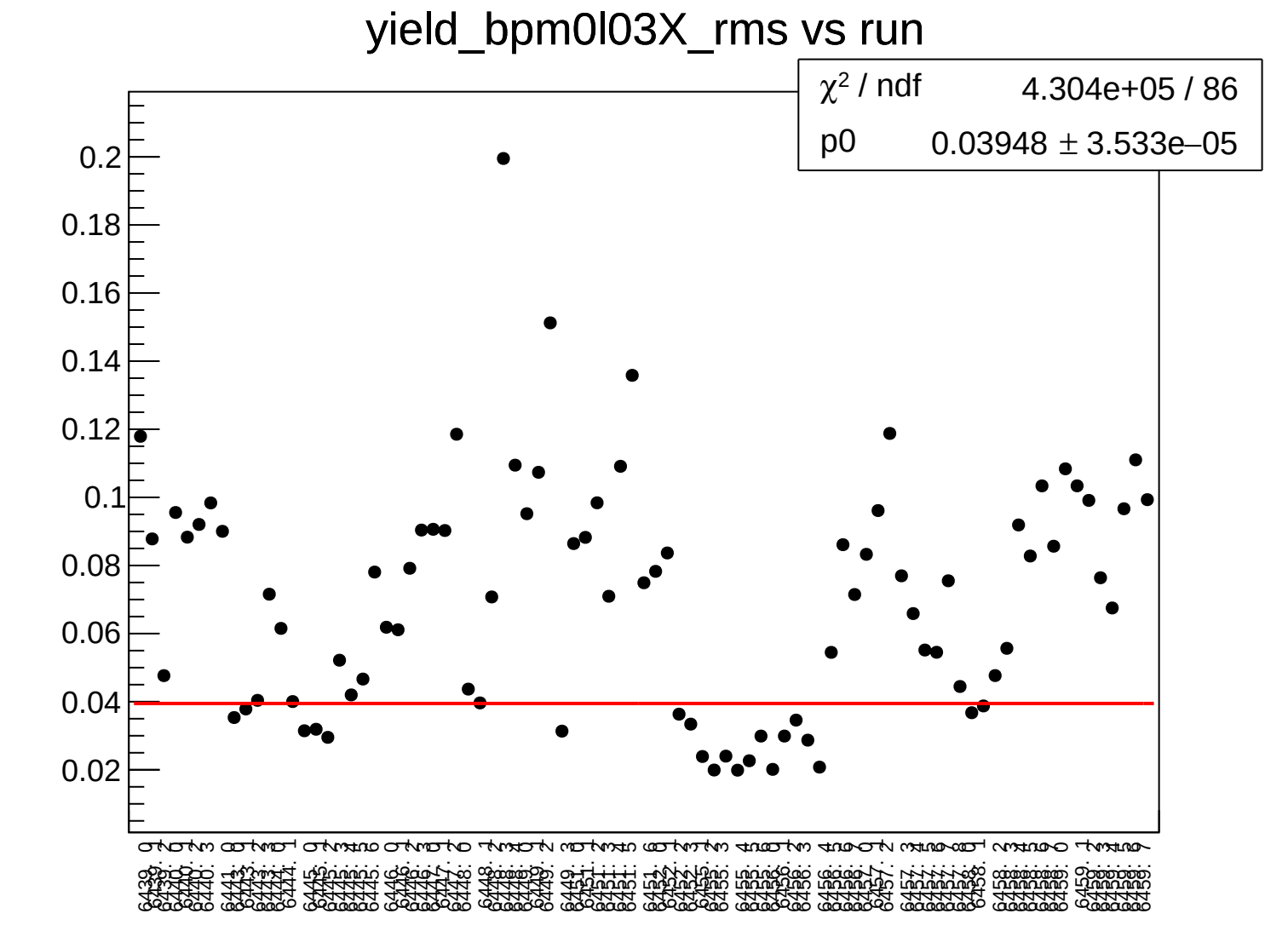

yield_bpm0l02Y_mean vs run
χ² / ndf 1.692e+07 / 86
p0 0.4954 ± 8.771e−06
0.55
0.5
0.45
0.4
0.35
pull
Entries 87
Mean −295.2
Std Dev 328.8
500
0
−500
−1000
−1500
−2000
−2500

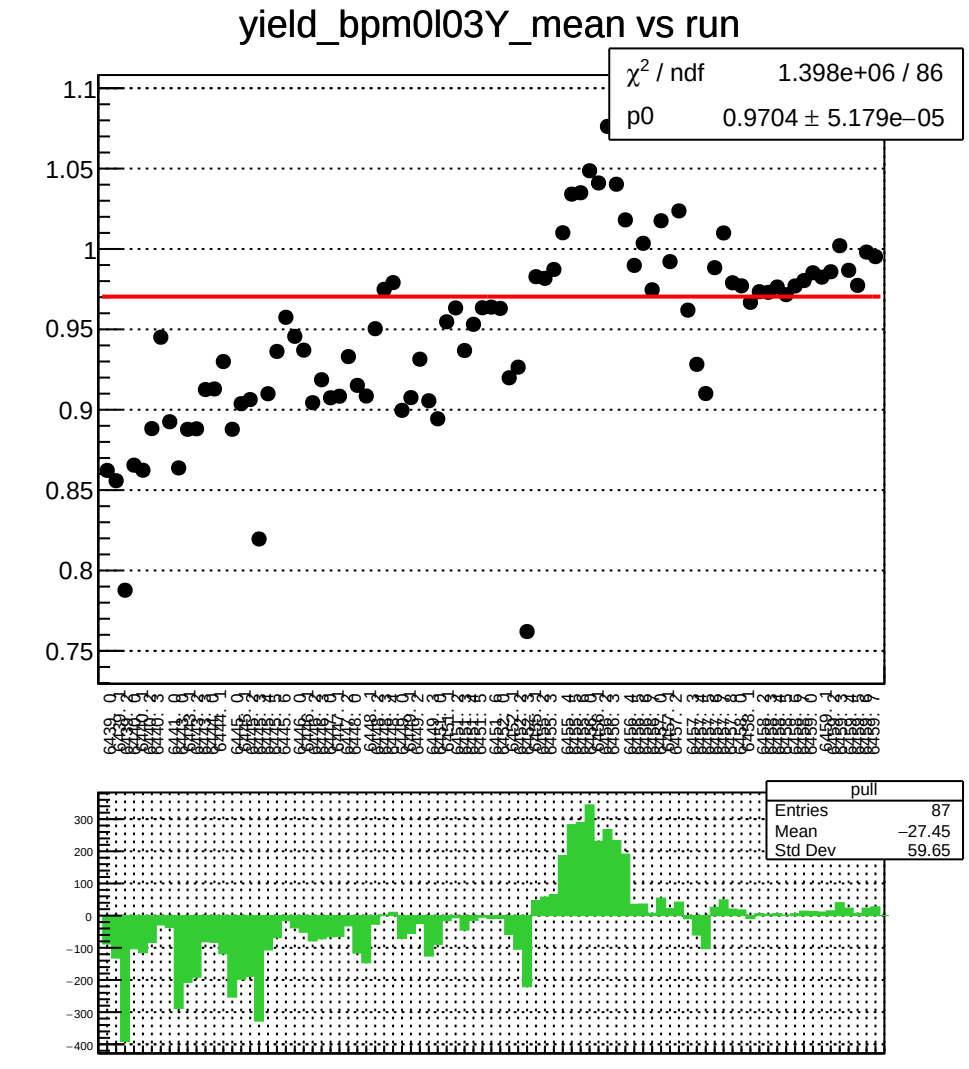

pull1D
Entries 87
Mean −3.022
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

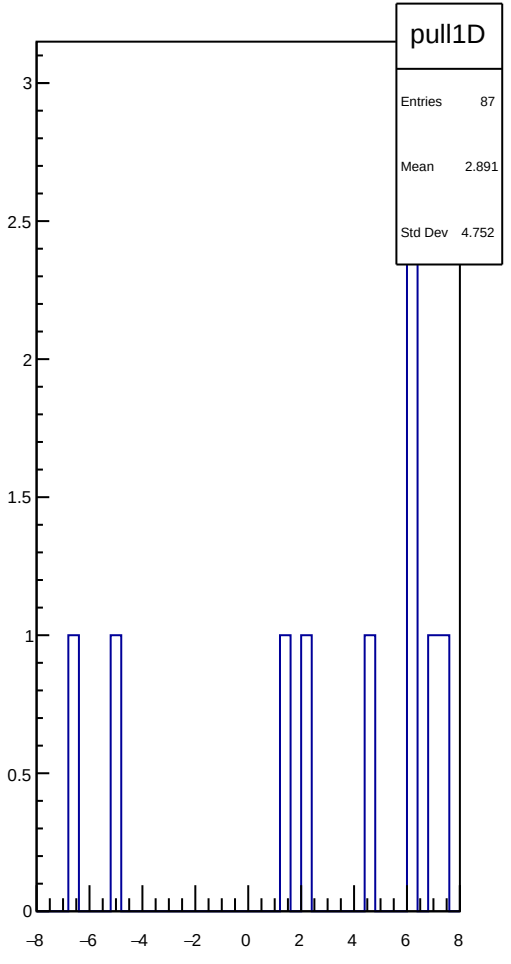

yield_bpm0l02Y_rms vs run
χ^2 / ndf 1.909e+05 / 86
p0 0.007565 ± 6.202e−06
0.05
0.04
0.03
0.02
0.01

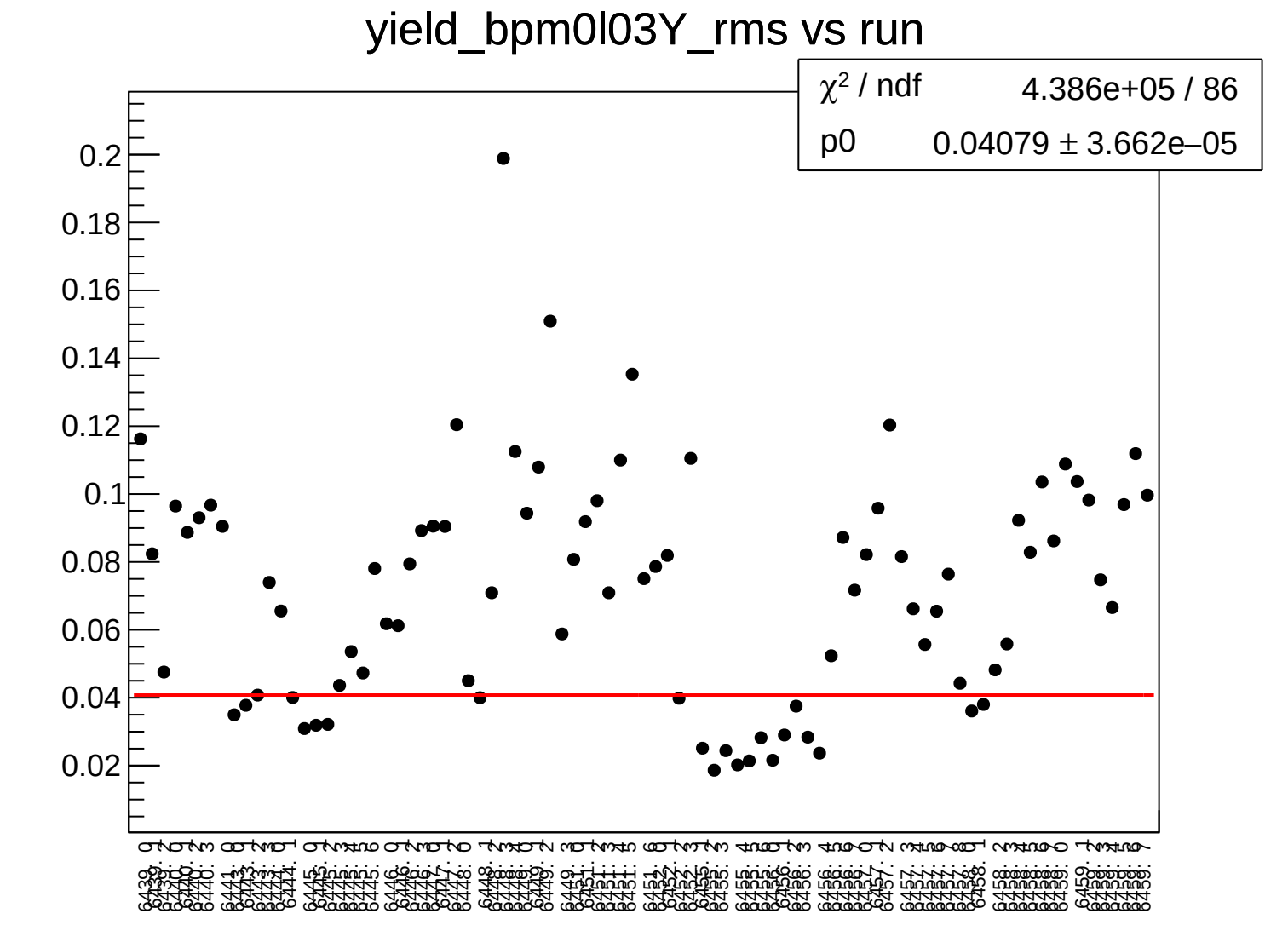

yield_bpm0l03X_mean vs run
χ² / ndf 2.945e+05 / 86
p0 −1.77 ± 4.997e−05
−1.65
−1.7
−1.75
−1.8
−1.85
pull
Entries 87
Mean 337.3
Std Dev 321.1
150
100
50
0
−50
−100

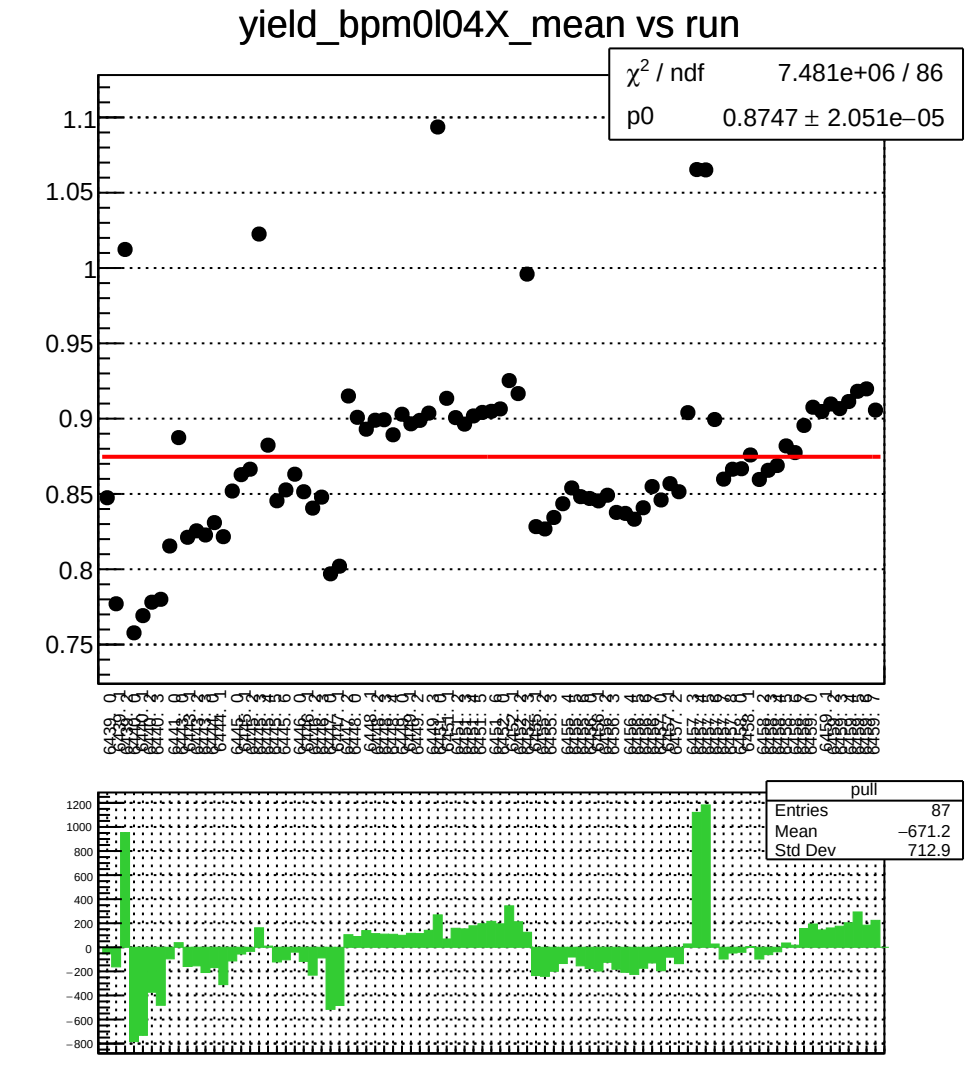

pull1D
Entries 87
Mean 0.8136
Std Dev 3.559
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

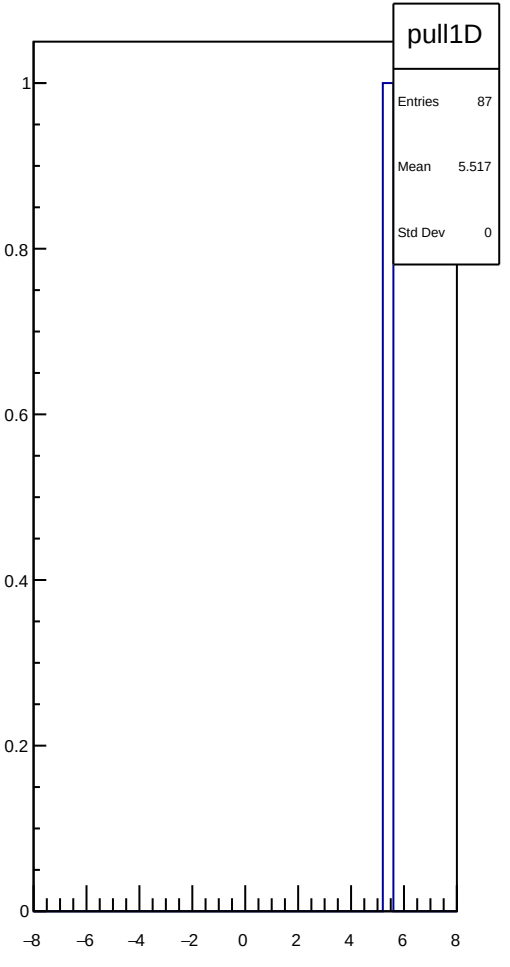

yield_bpm0l03X_rms vs run
χ² / ndf 4.304e+05 / 86
p0 0.03948 ± 3.533e–05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

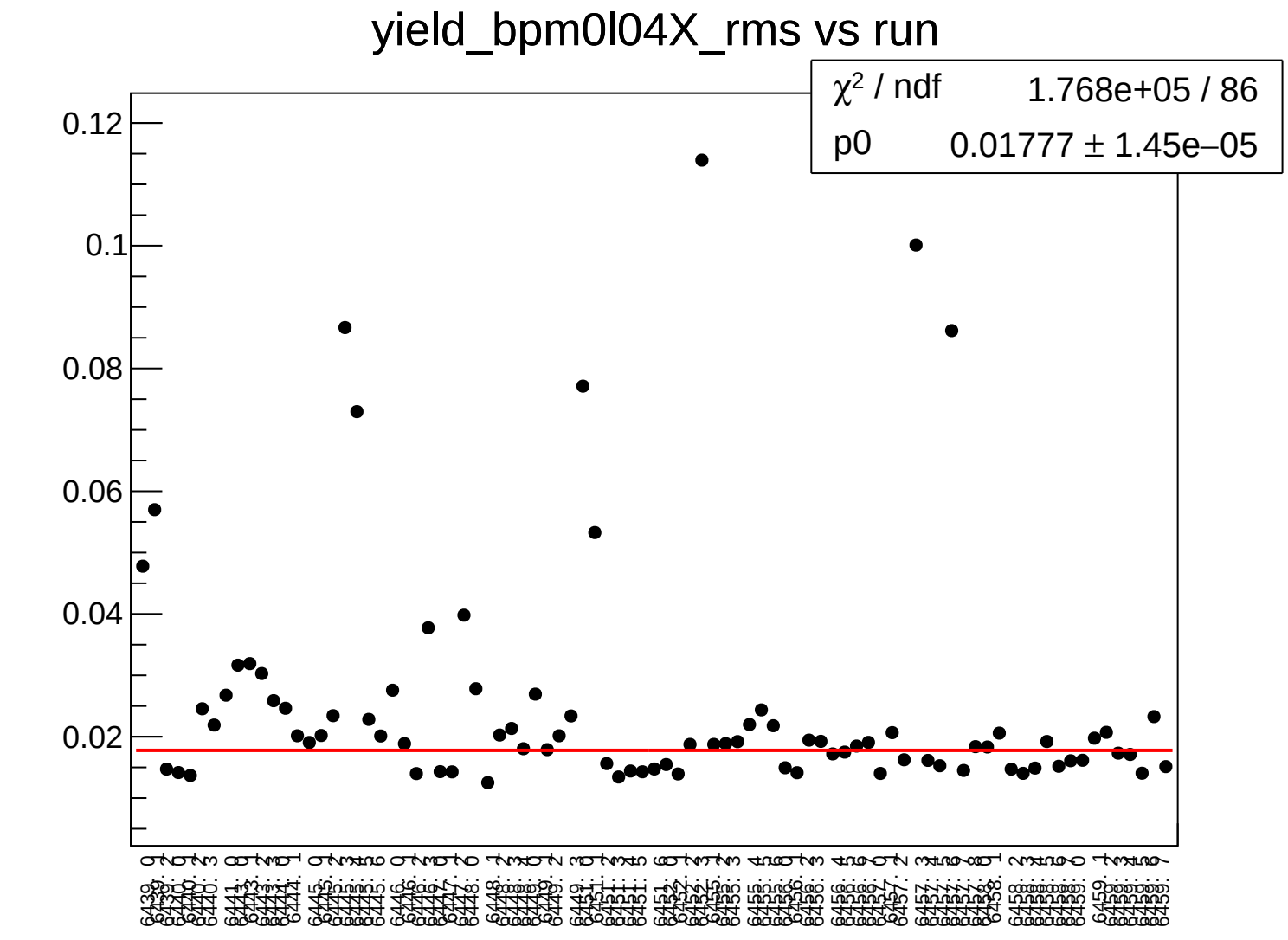

yield_bpm0l03Y_mean vs run
χ² / ndf 1.398e+06 / 86
p0 0.9704 ± 5.179e−05
pull
Entries 87
Mean −27.45
Std Dev 59.65

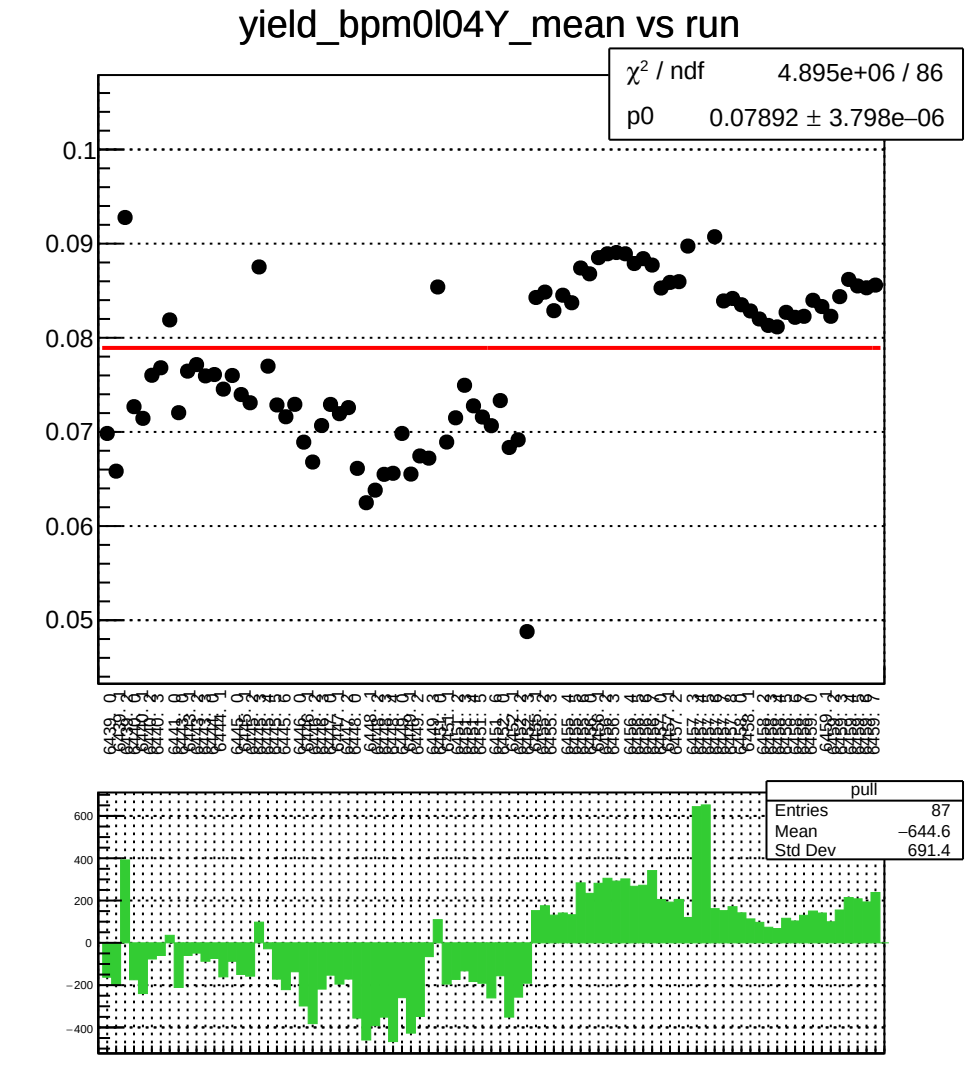

pull1D
Entries 87
Mean 2.891
Std Dev 4.752

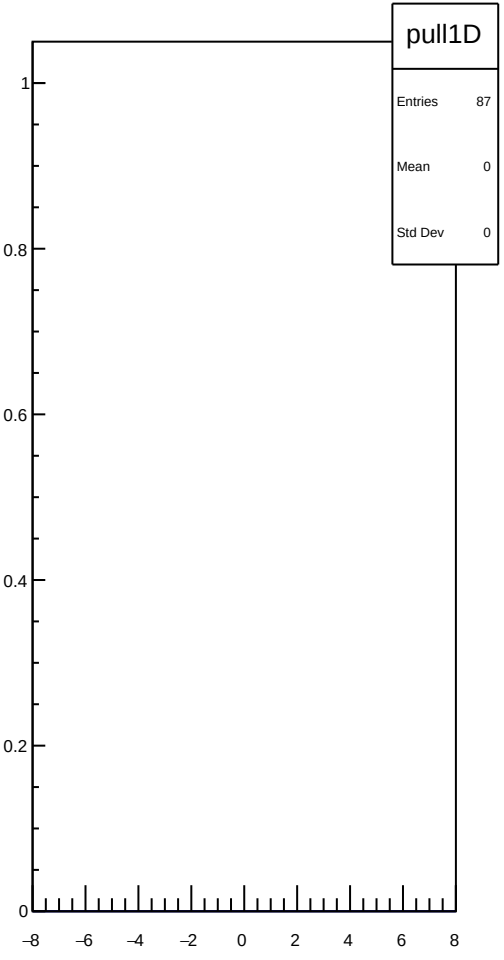

yield_bpm0l03Y_rms vs run
χ² / ndf 4.386e+05 / 86
p0 0.04079 ± 3.662e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

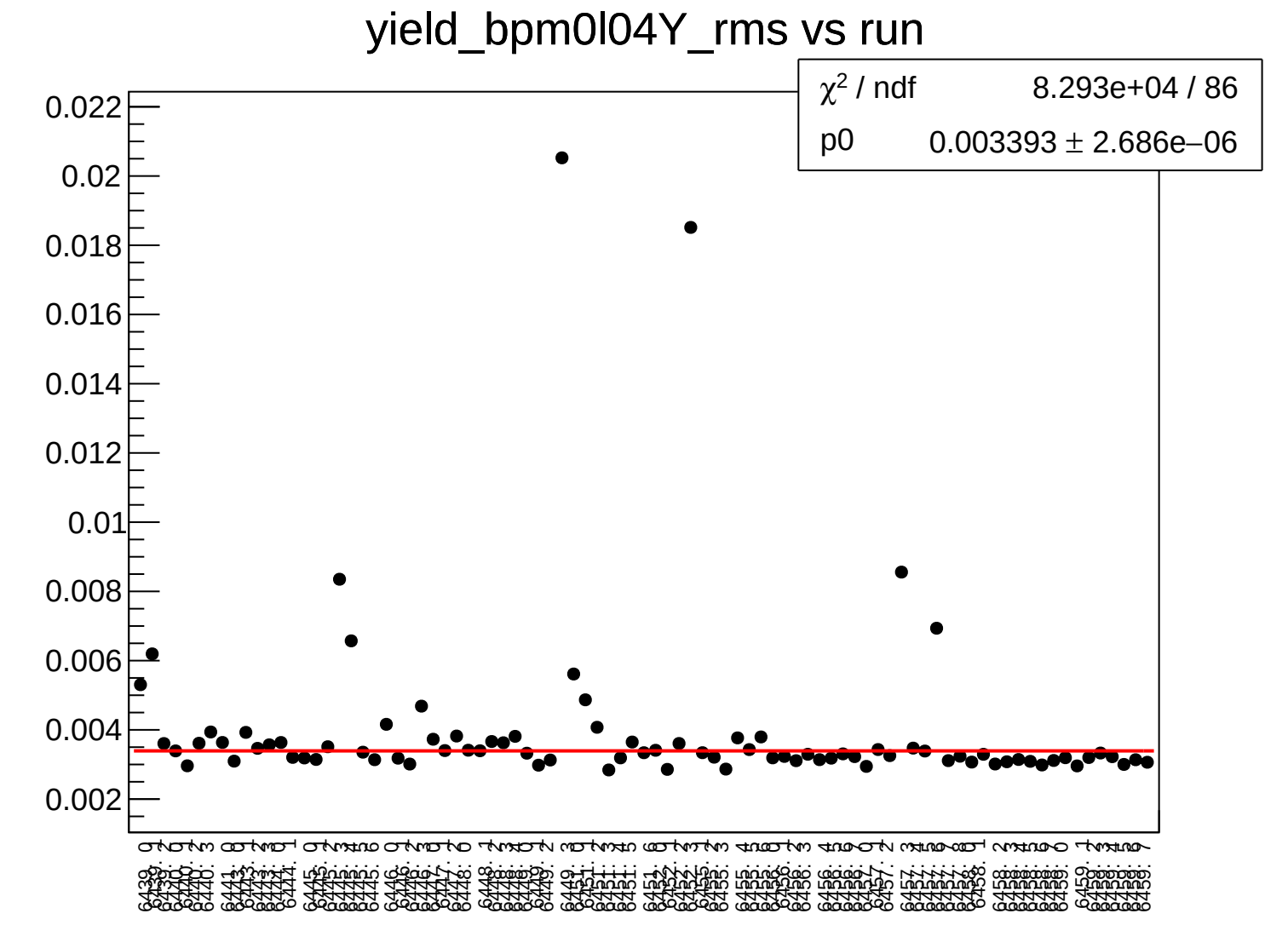

yield_bpm0l04X_mean vs run
χ² / ndf 7.481e+06 / 86
p0 0.8747 ± 2.051e−05
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
pull
Entries 87
Mean −671.2
Std Dev 712.9
1200
1000
800
600
400
200
0
−200
−400
−600
−800

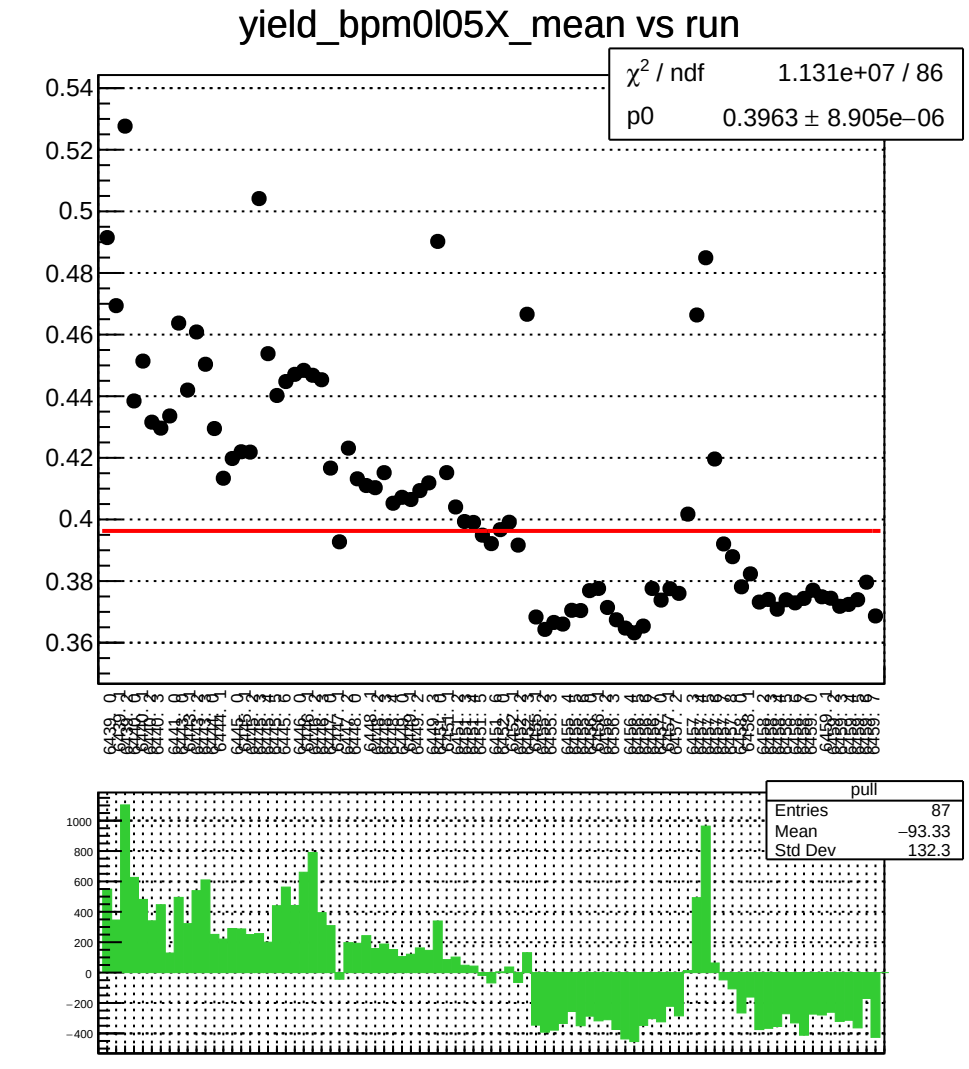

pull1D
Entries 87
Mean 5.517
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

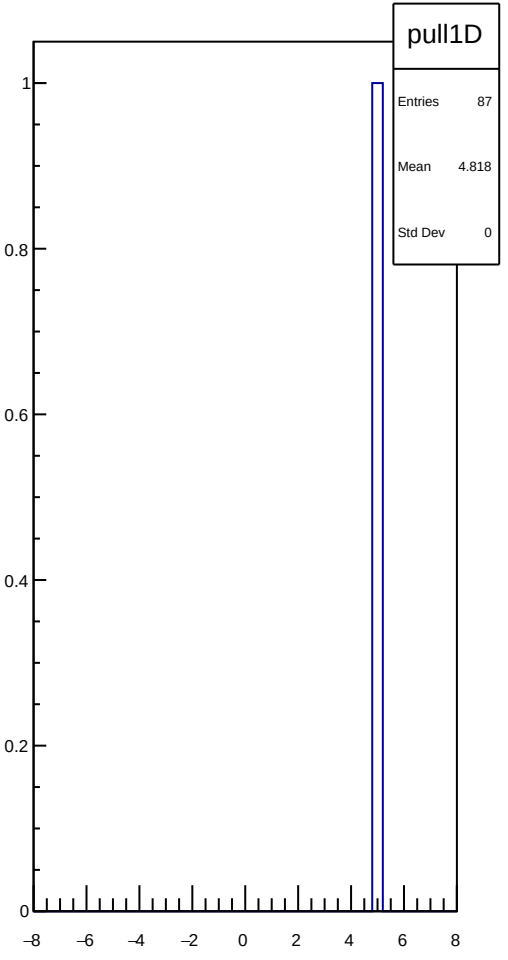

yield_bpm0l04X_rms vs run
χ² / ndf 1.768e+05 / 86
p0 0.01777 ± 1.45e−05
0.12
0.1
0.08
0.06
0.04
0.02


yield_bpm0l04Y_mean vs run
χ² / ndf 4.895e+06 / 86
p0 0.07892 ± 3.798e−06
0.1
0.09
0.08
0.07
0.06
0.05
pull
Entries 87
Mean −644.6
Std Dev 691.4
600
400
200
0
−200
−400

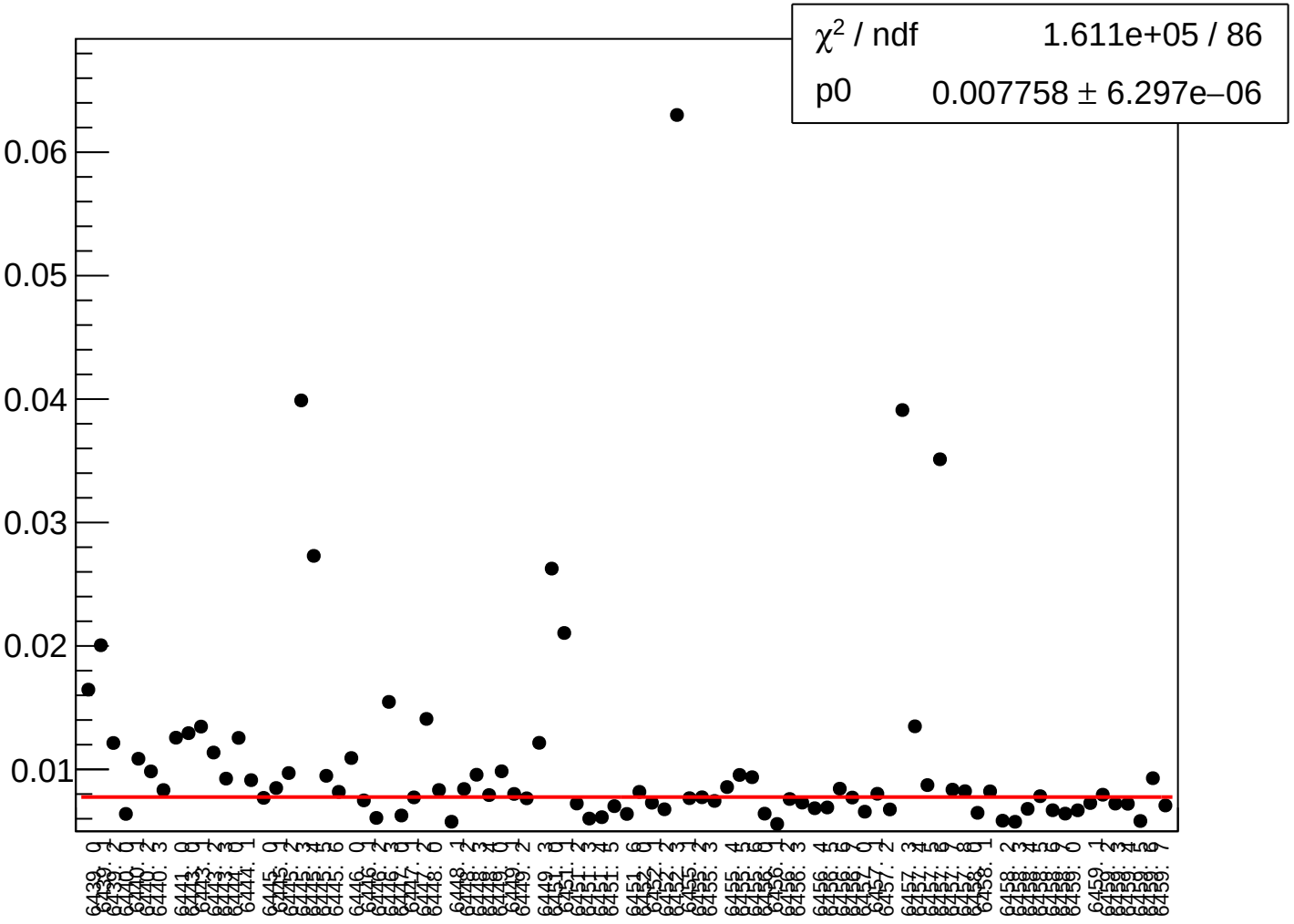

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

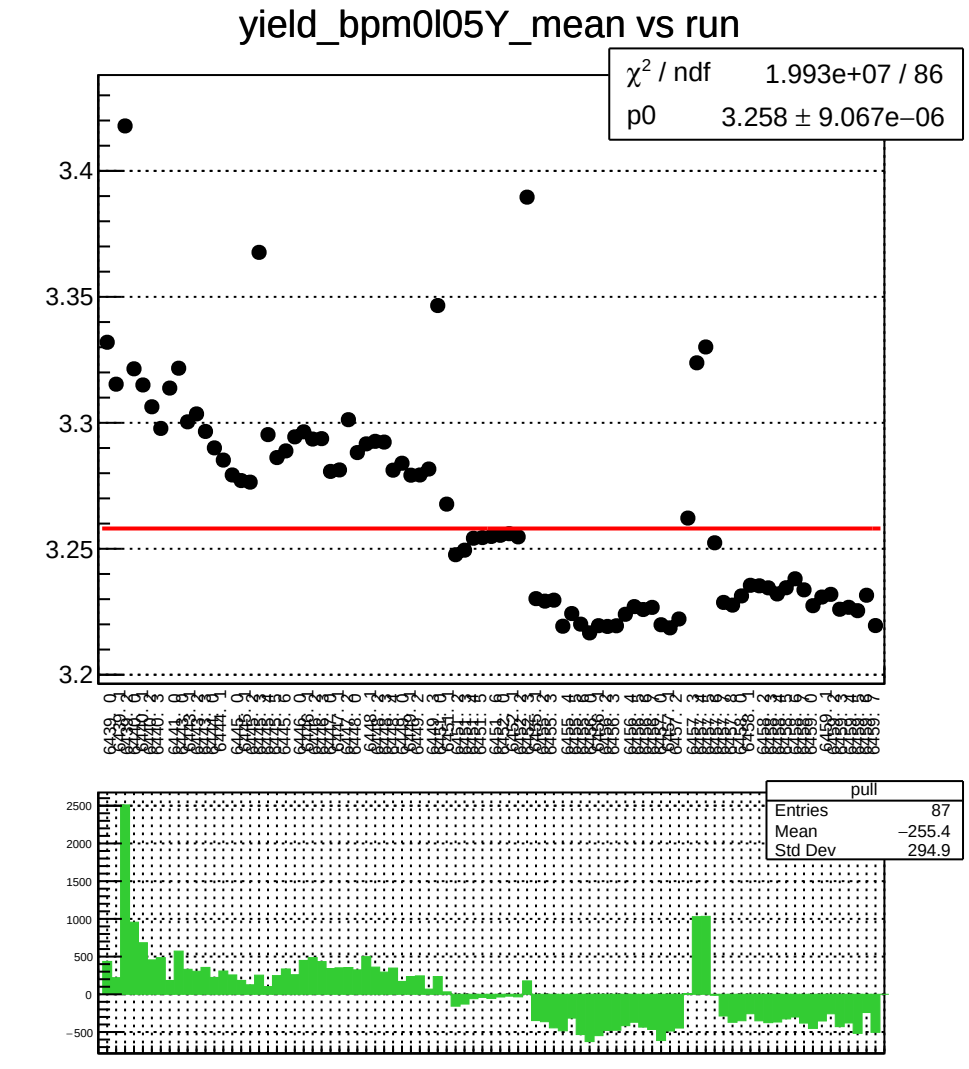

yield_bpm0l04Y_rms vs run
χ² / ndf 8.293e+04 / 86
p0 0.003393 ± 2.686e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

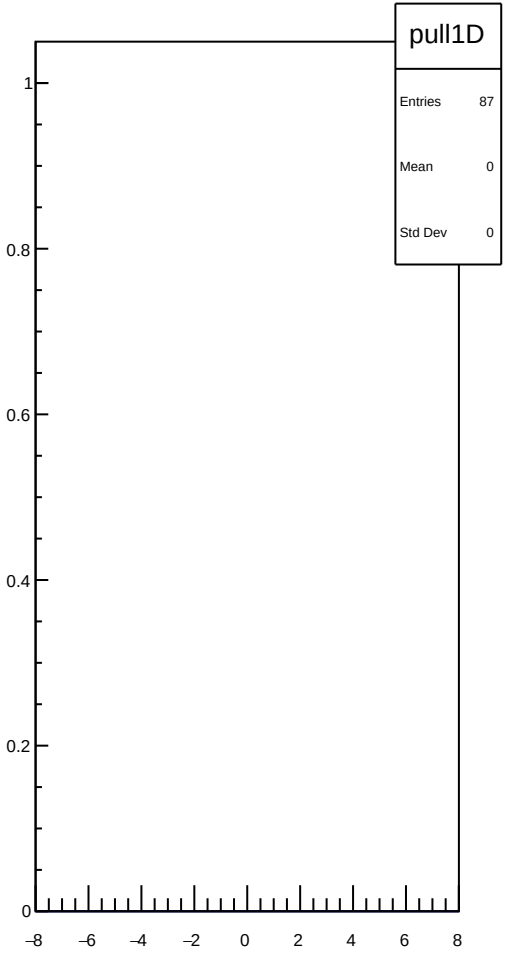

yield_bpm0l05X_mean vs run
χ² / ndf 1.131e+07 / 86
p0 0.3963 ± 8.905e−06
pull
Entries 87
Mean −93.33
Std Dev 132.3

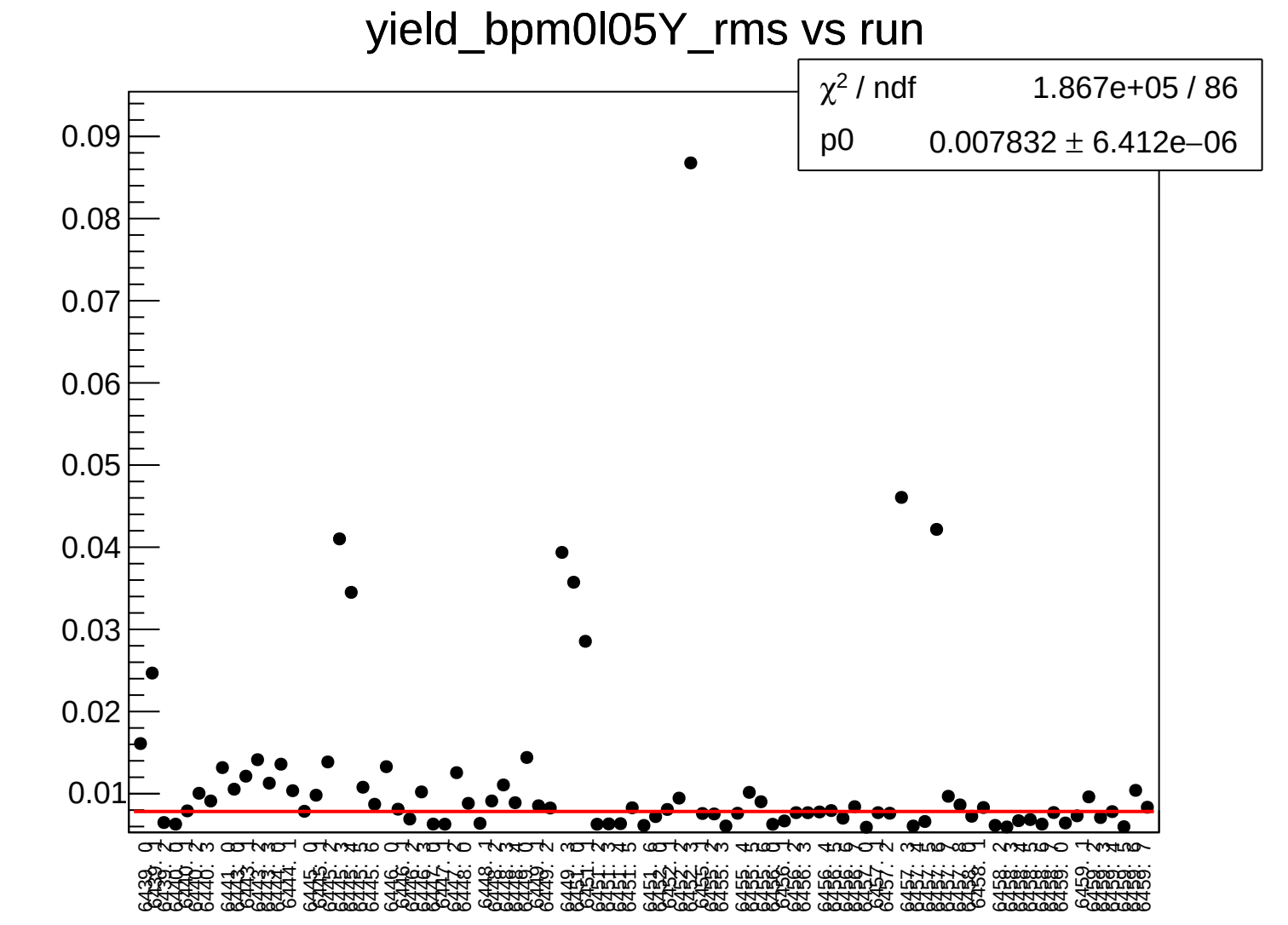

pull1D
Entries 87
Mean 4.818
Std Dev 0

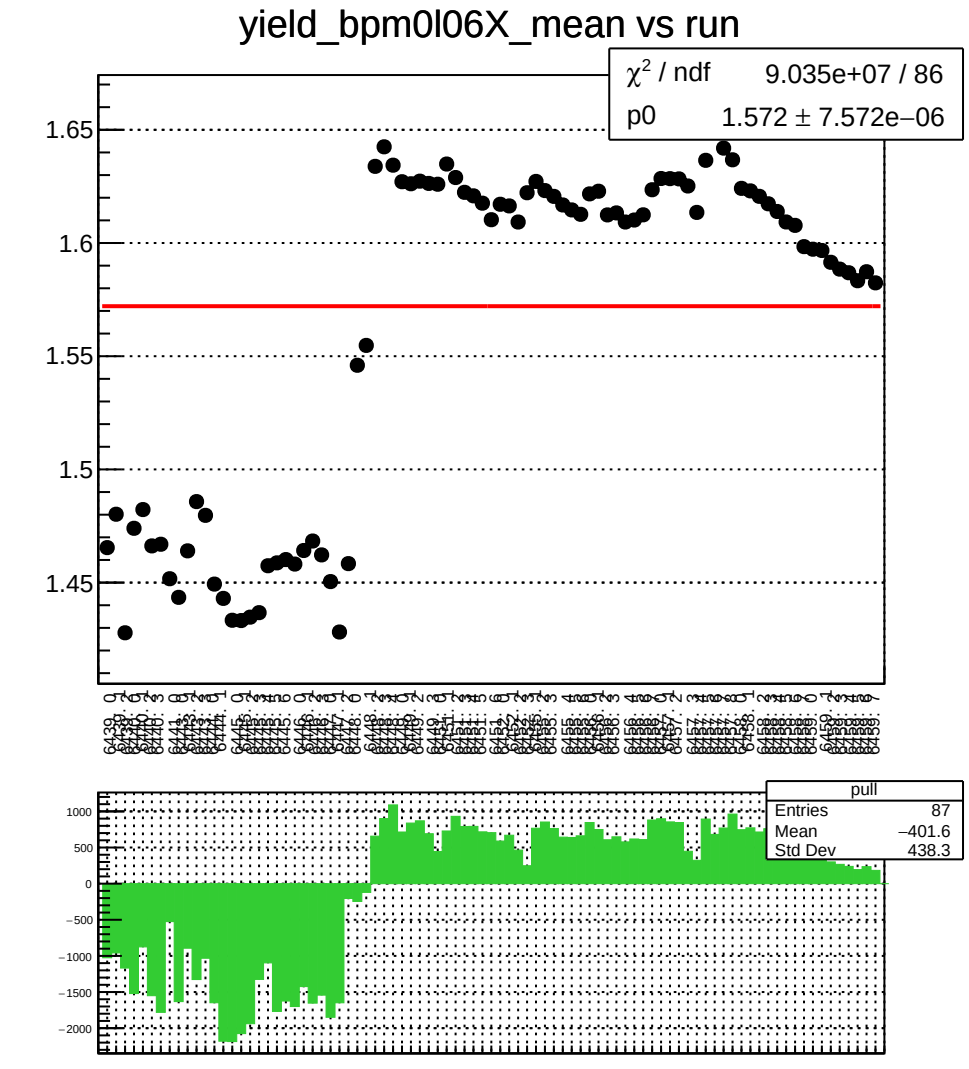
yield_bpm0l05X_rms vs run

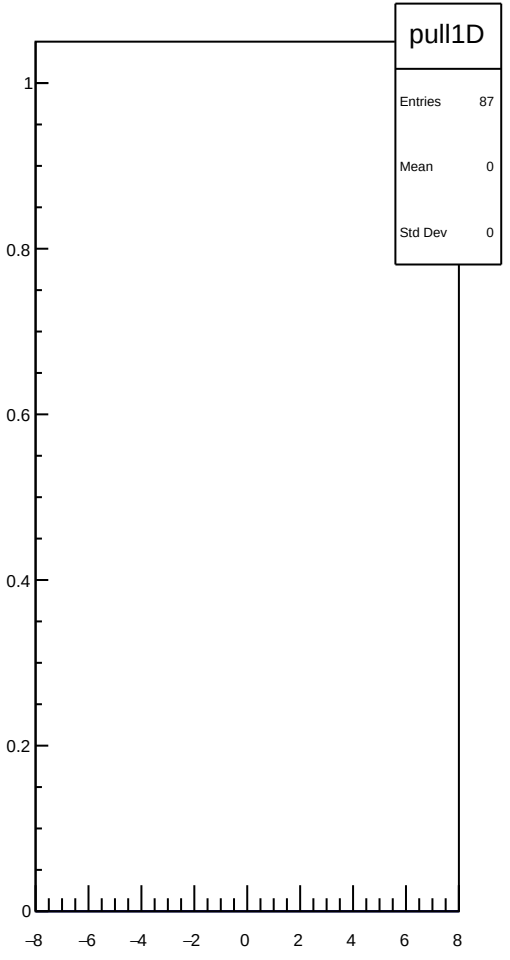


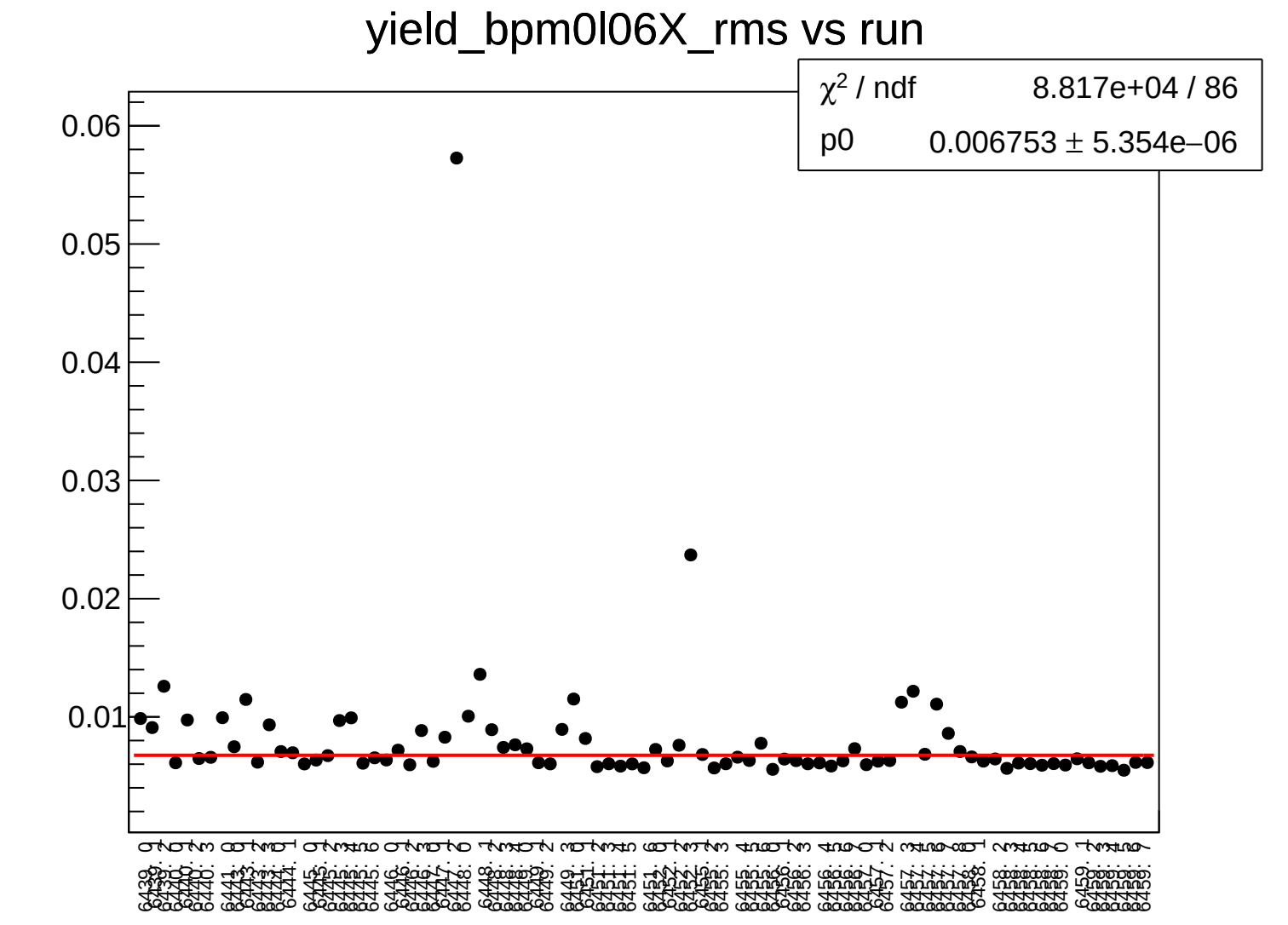

yield_bpm0l05Y_mean vs run
χ² / ndf 1.993e+07 / 86
p0 3.258 ± 9.067e−06
3.4
3.35
3.3
3.25
3.2
pull
Entries 87
Mean −255.4
Std Dev 294.9
2500
2000
1500
1000
500
0
−500

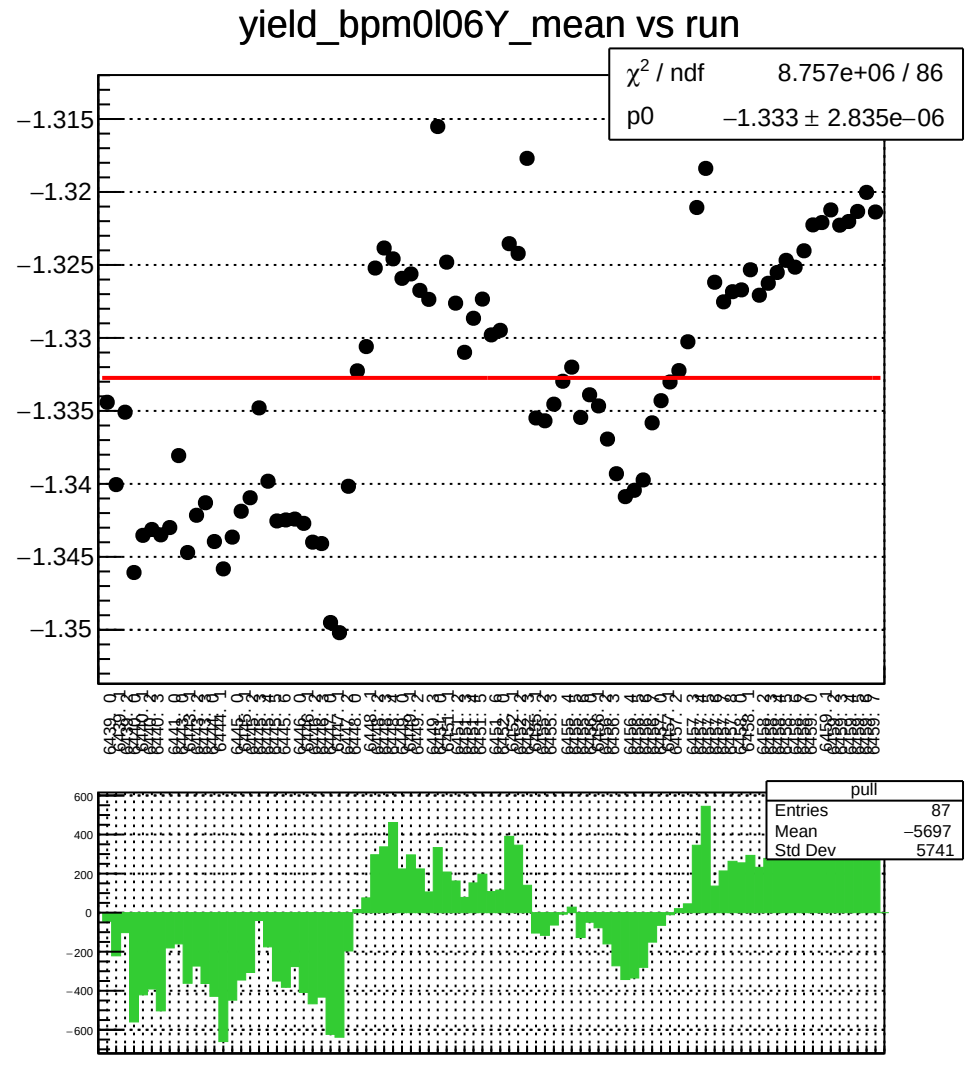

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

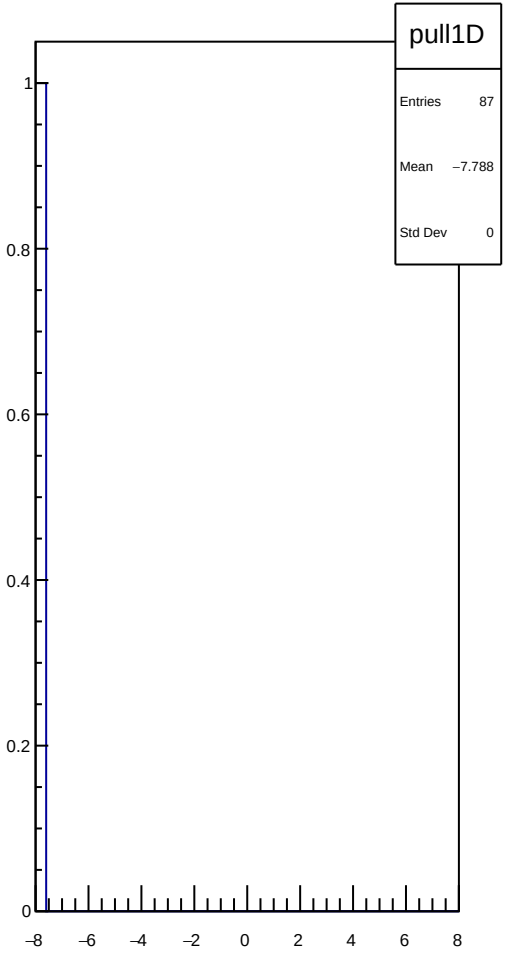

yield_bpm0l05Y_rms vs run
χ² / ndf 1.867e+05 / 86
p0 0.007832 ± 6.412e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01


yield_bpm0l06X_mean vs run
χ² / ndf 9.035e+07 / 86
p0 1.572 ± 7.572e−06
1.65
1.6
1.55
1.5
1.45
pull
Entries 87
Mean −401.6
Std Dev 438.3
1000
500
0
−500
−1000
−1500
−2000

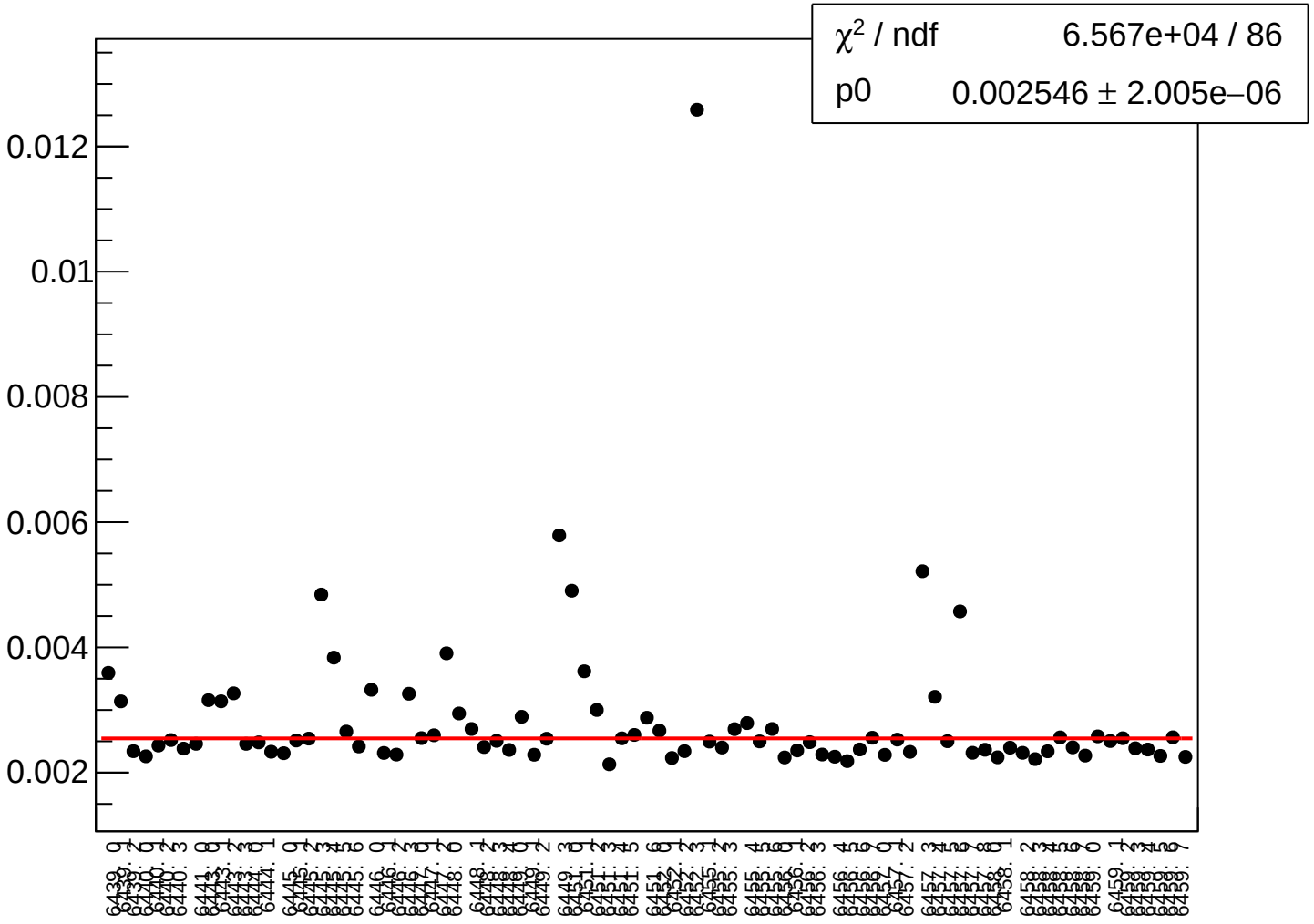

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

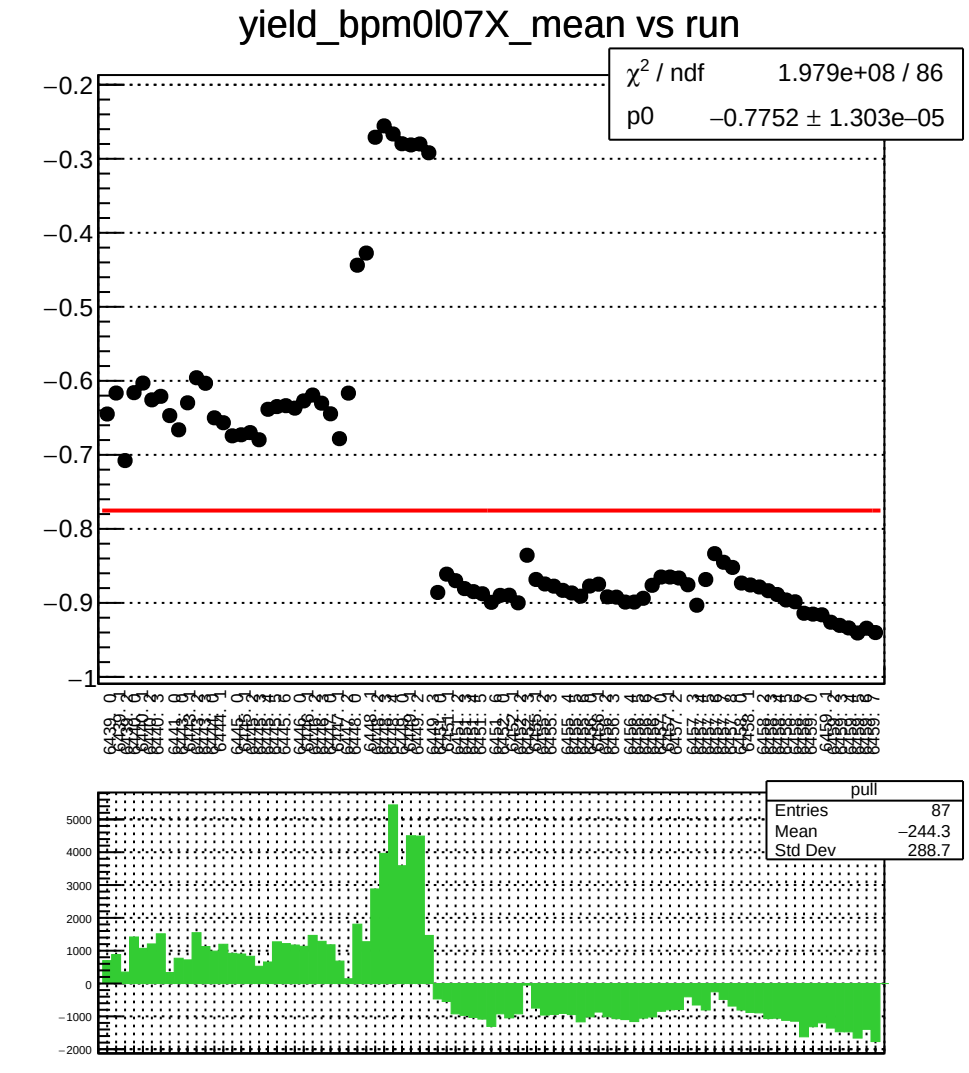

yield_bpm0l06X_rms vs run
χ^2 / ndf 8.817e+04 / 86
p0 0.006753 ± 5.354e−06
0.06
0.05
0.04
0.03
0.02
0.01

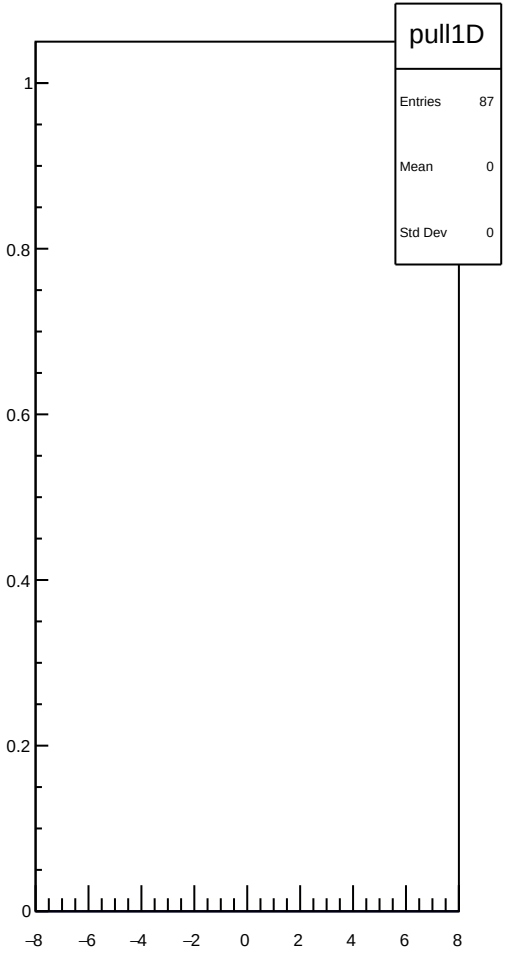

yield_bpm0l06Y_mean vs run
χ² / ndf 8.757e+06 / 86
p0 −1.333 ± 2.835e−06
−1.315
−1.32
−1.325
−1.33
−1.335
−1.34
−1.345
−1.35
pull
Entries 87
Mean −5697
Std Dev 5741
600
400
200
0
−200
−400
−600

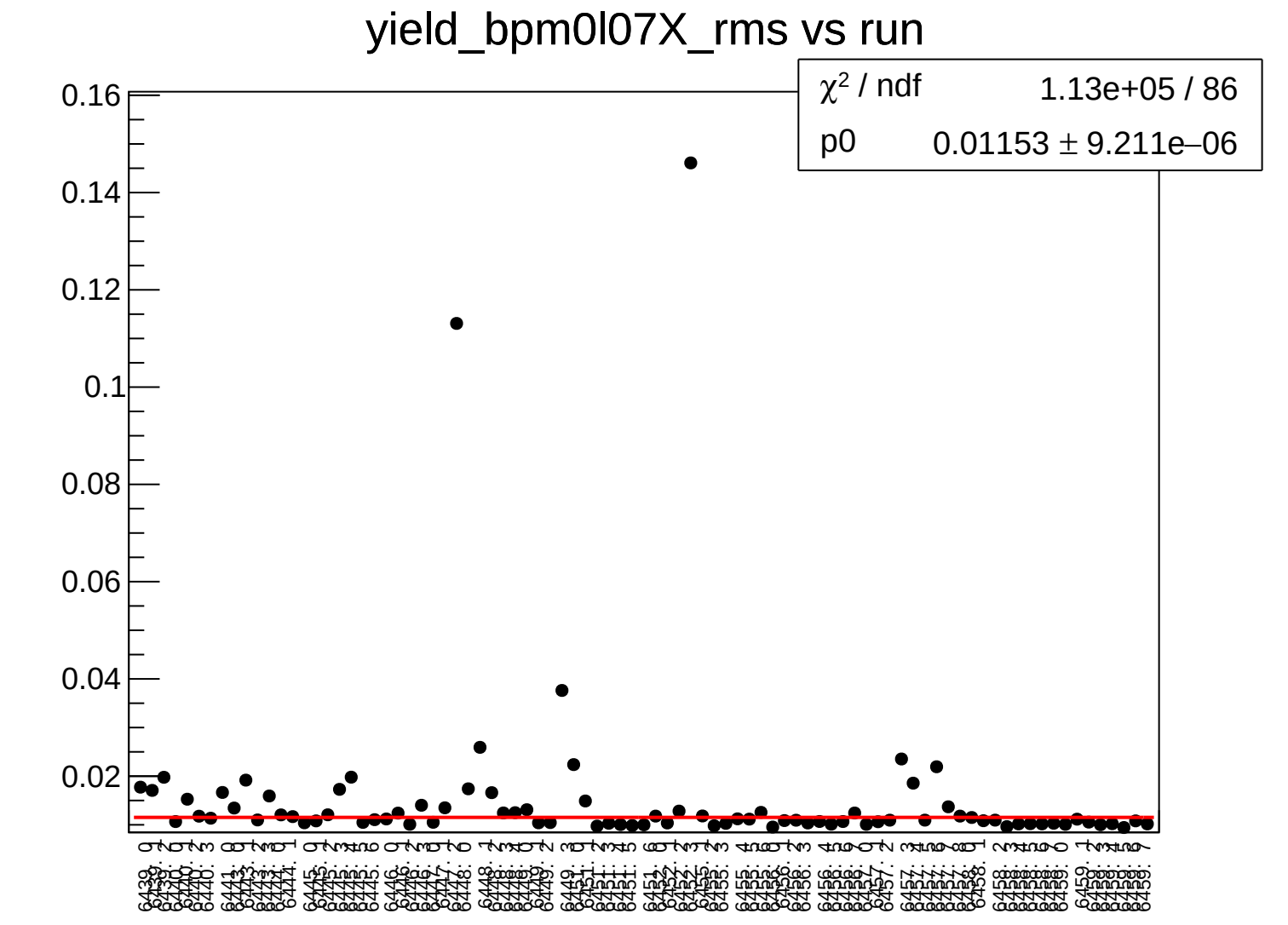

pull1D
Entries 87
Mean −7.788
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

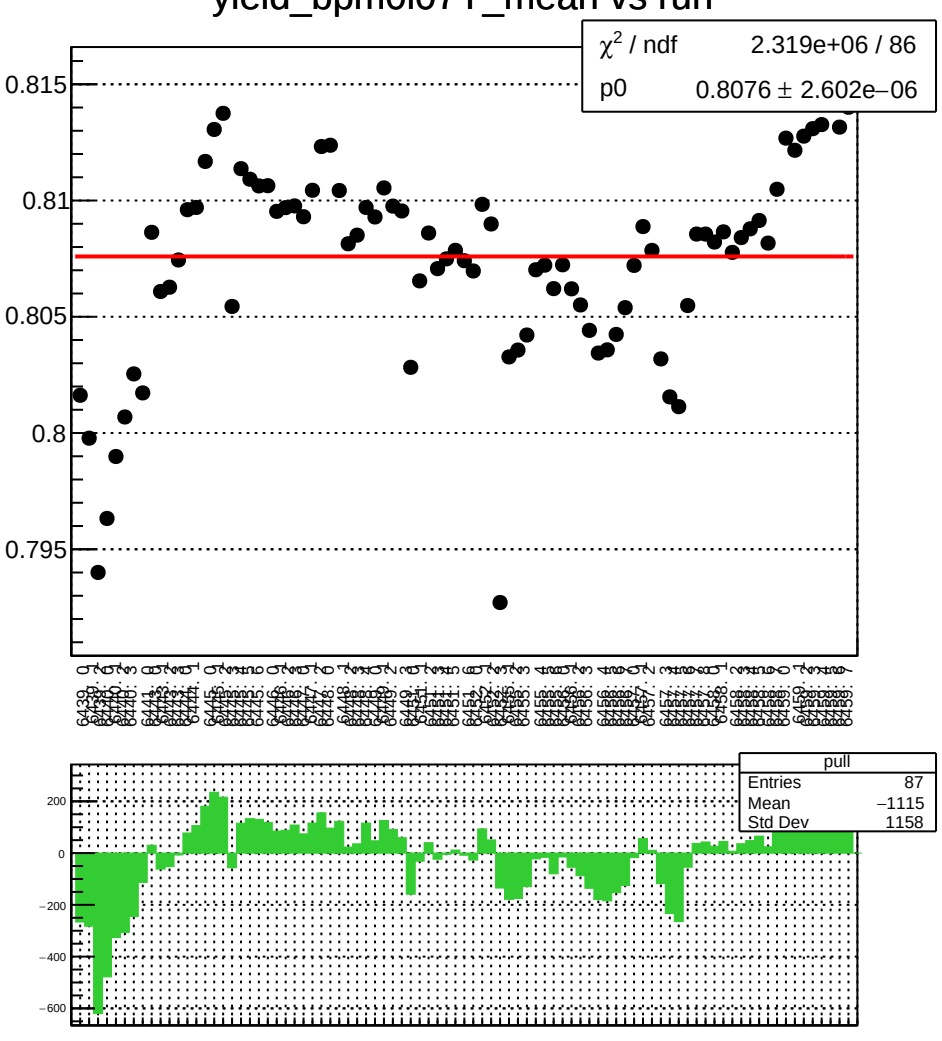
yield_bpm0l06Y_rms vs run

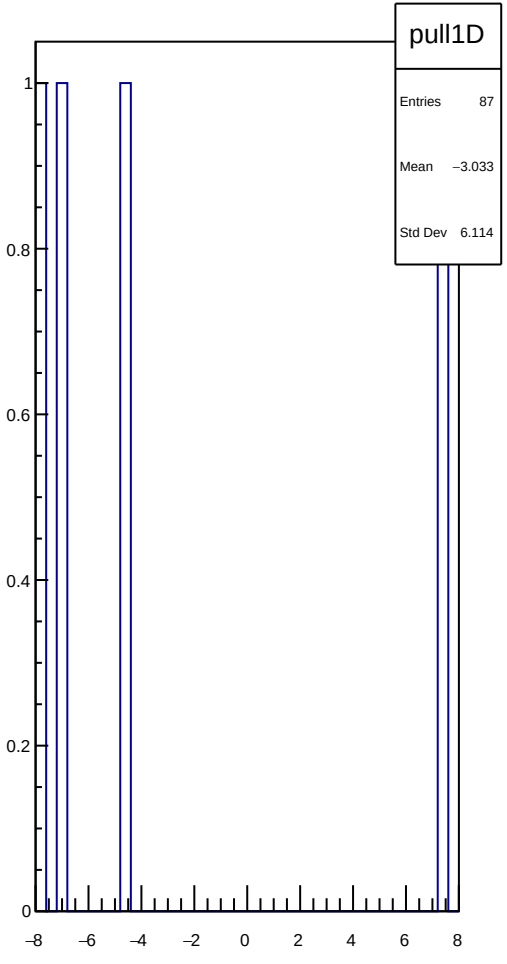


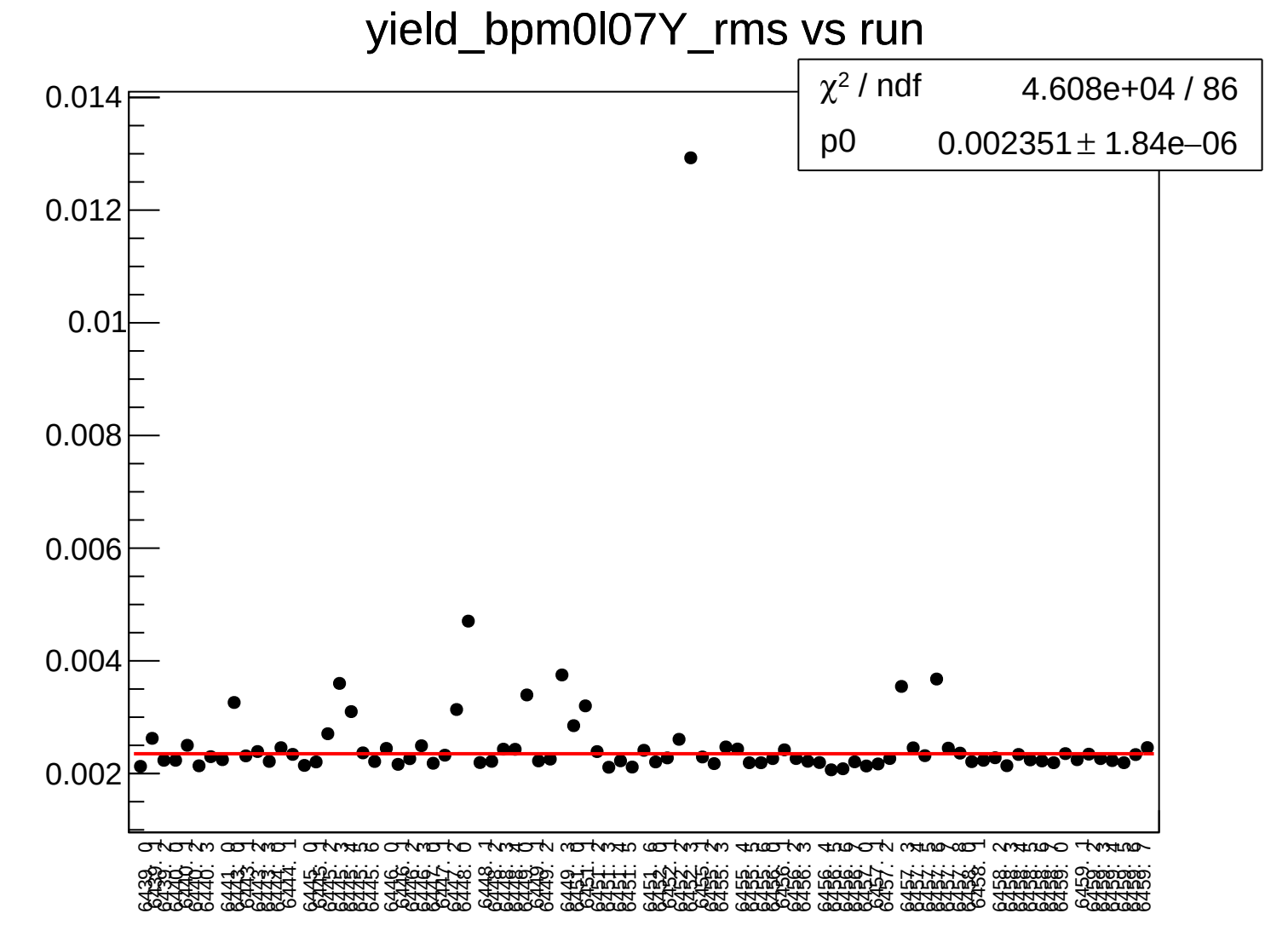

yield_bpm0l07X_mean vs run
χ² / ndf 1.979e+08 / 86
p0 −0.7752 ± 1.303e−05
pull
Entries 87
Mean −244.3
Std Dev 288.7

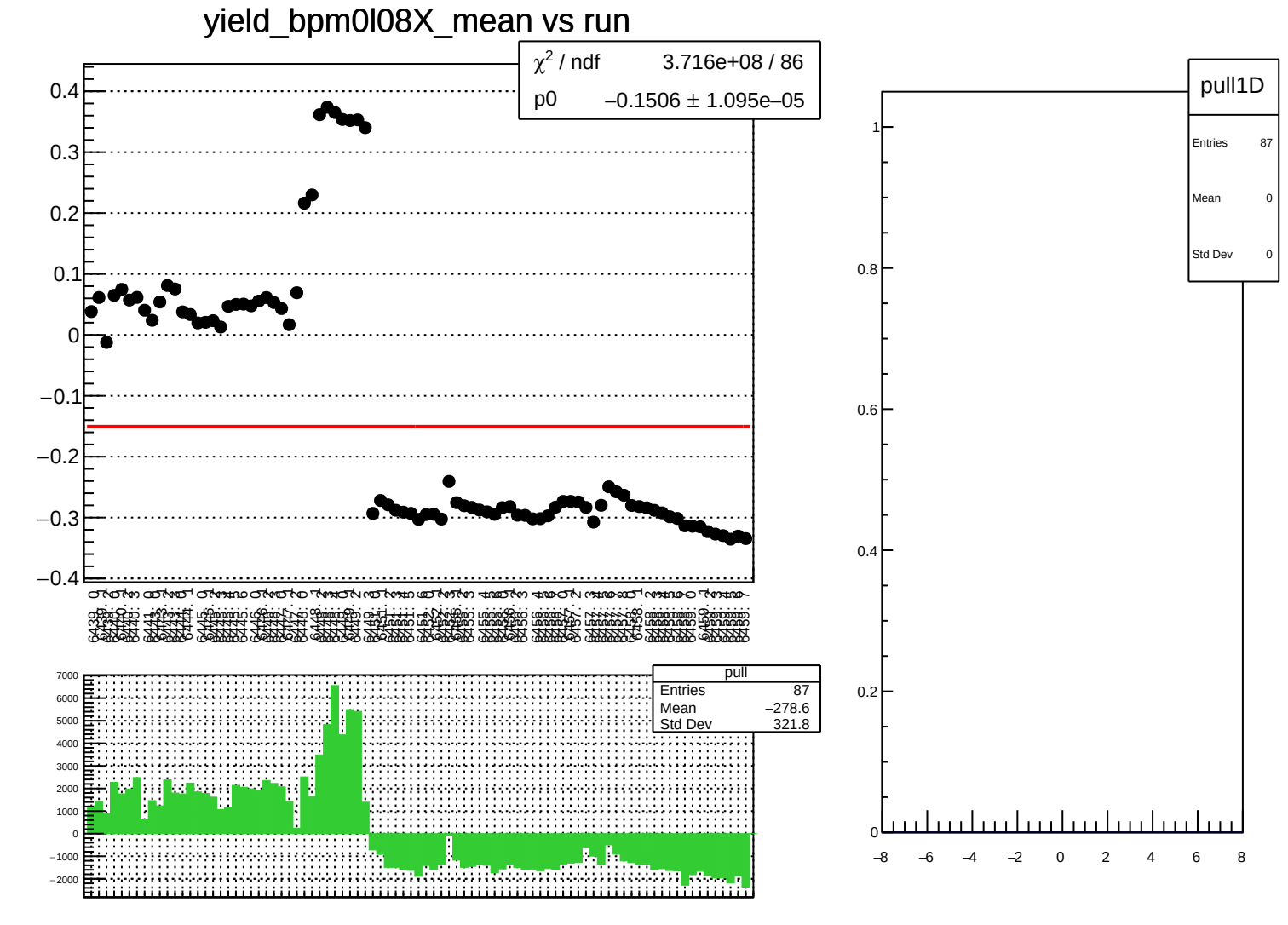

pull1D
Entries 87
Mean 0
Std Dev 0

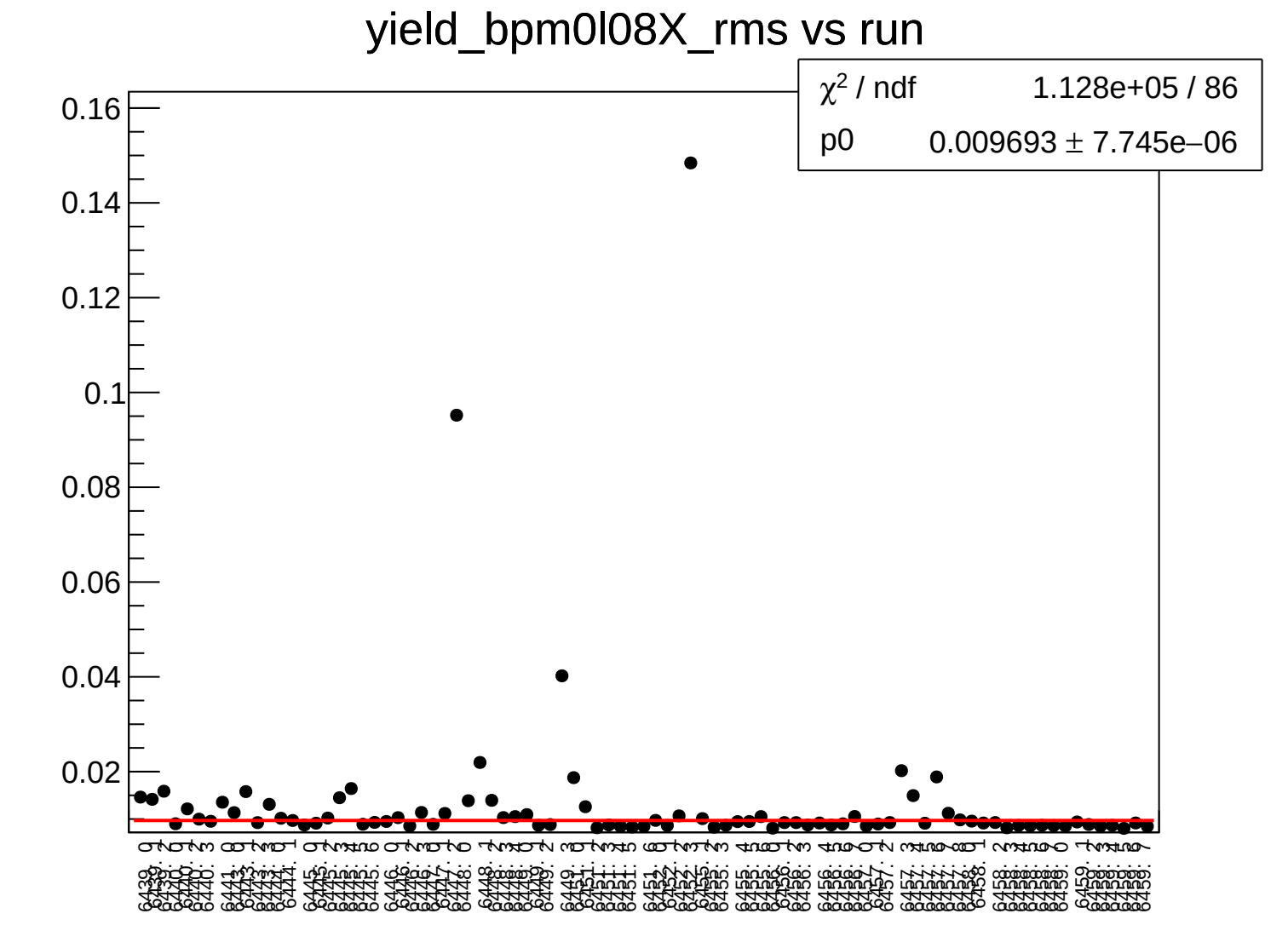

yield_bpm0l07X_rms vs run
χ² / ndf 1.13e+05 / 86
p0 0.01153 ± 9.211e–06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

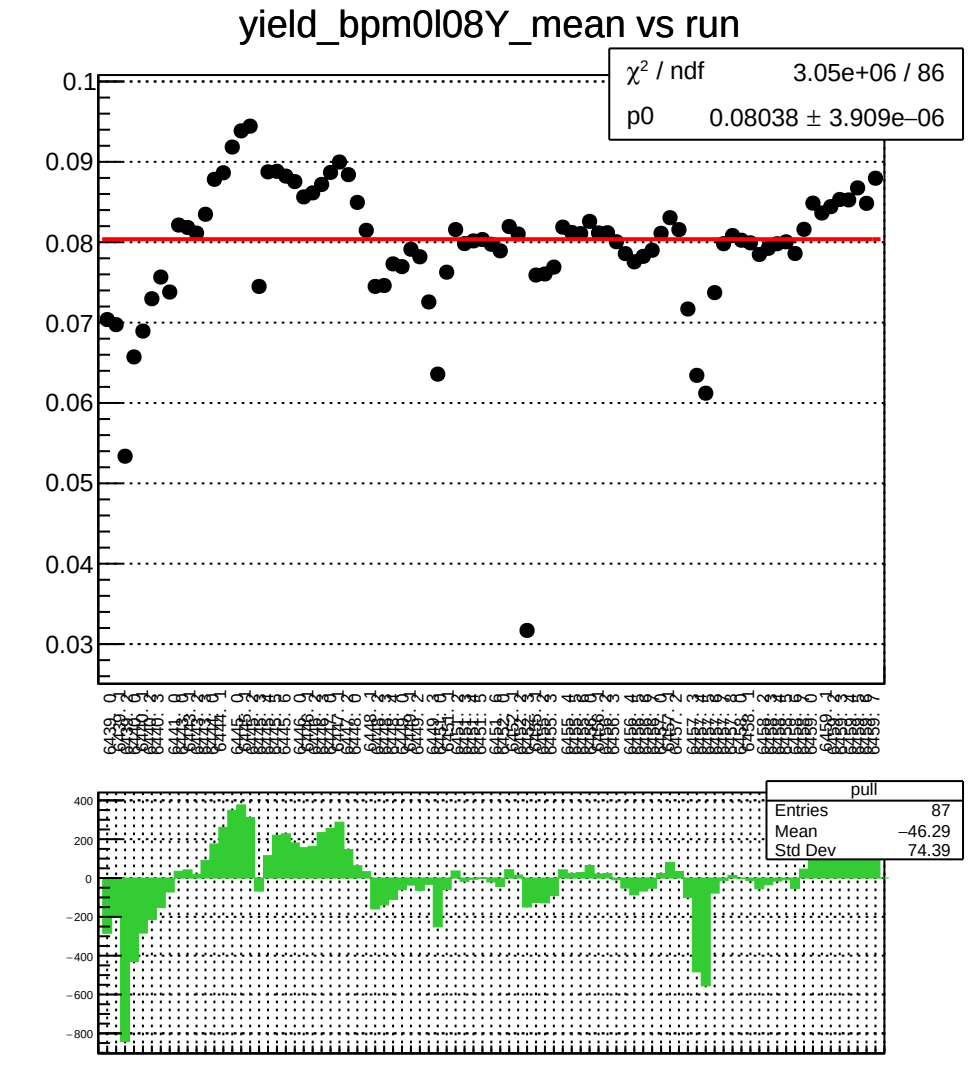

yield_bpm0l07Y_mean vs run
χ² / ndf 2.319e+06 / 86
p0 0.8076 ± 2.602e−06
0.815
0.81
0.805
0.8
0.795
pull
Entries 87
Mean −1115
Std Dev 1158
200
0
−200
−400
−600

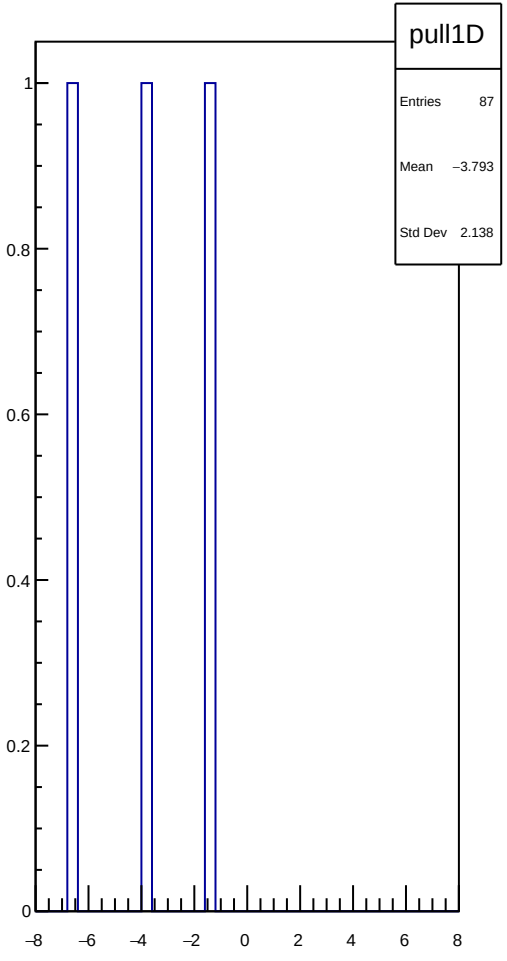

pull1D
Entries 87
Mean −3.033
Std Dev 6.114
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

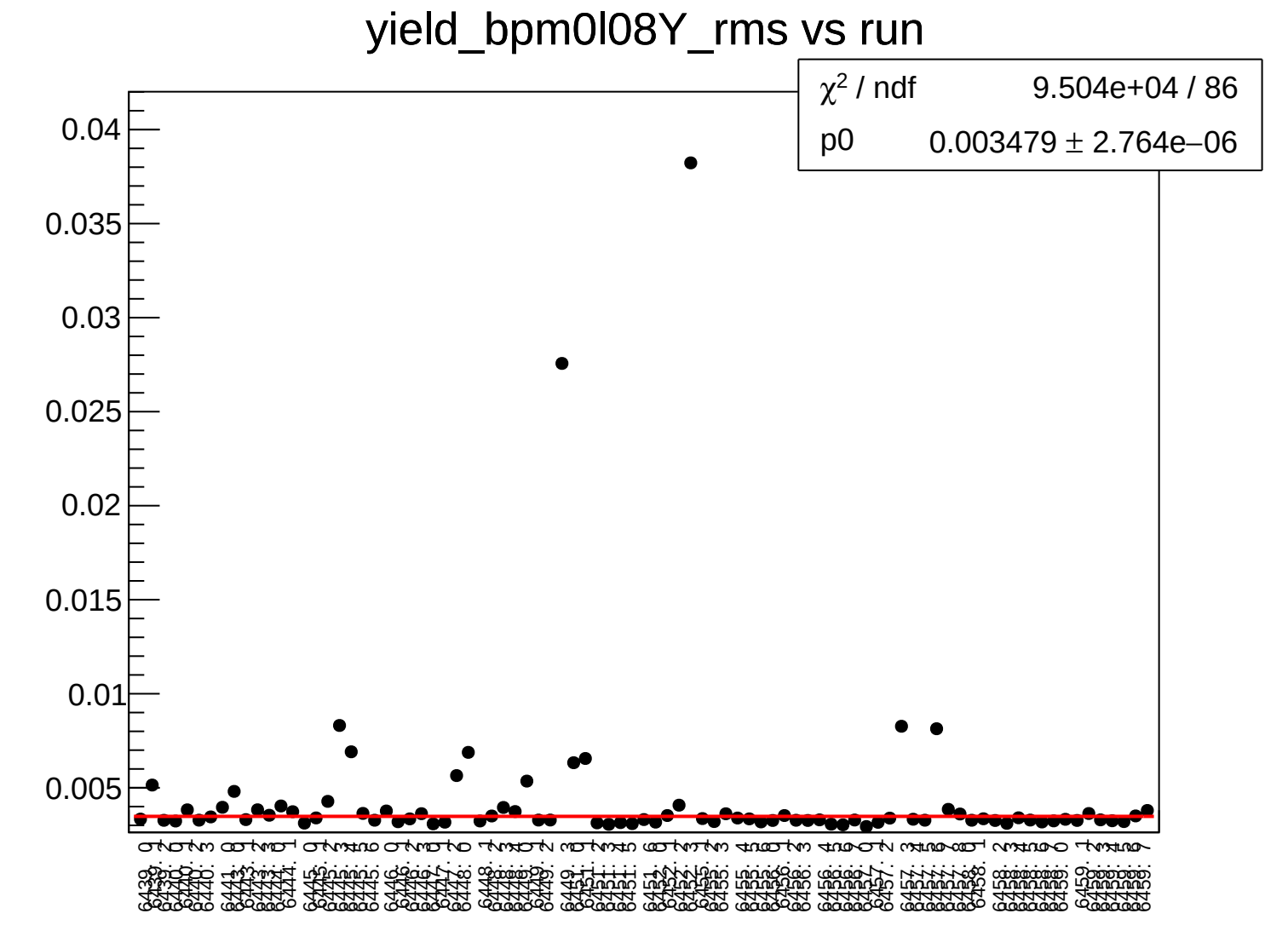

yield_bpm0l07Y_rms vs run
χ² / ndf 4.608e+04 / 86
p0 0.002351 ± 1.84e–06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

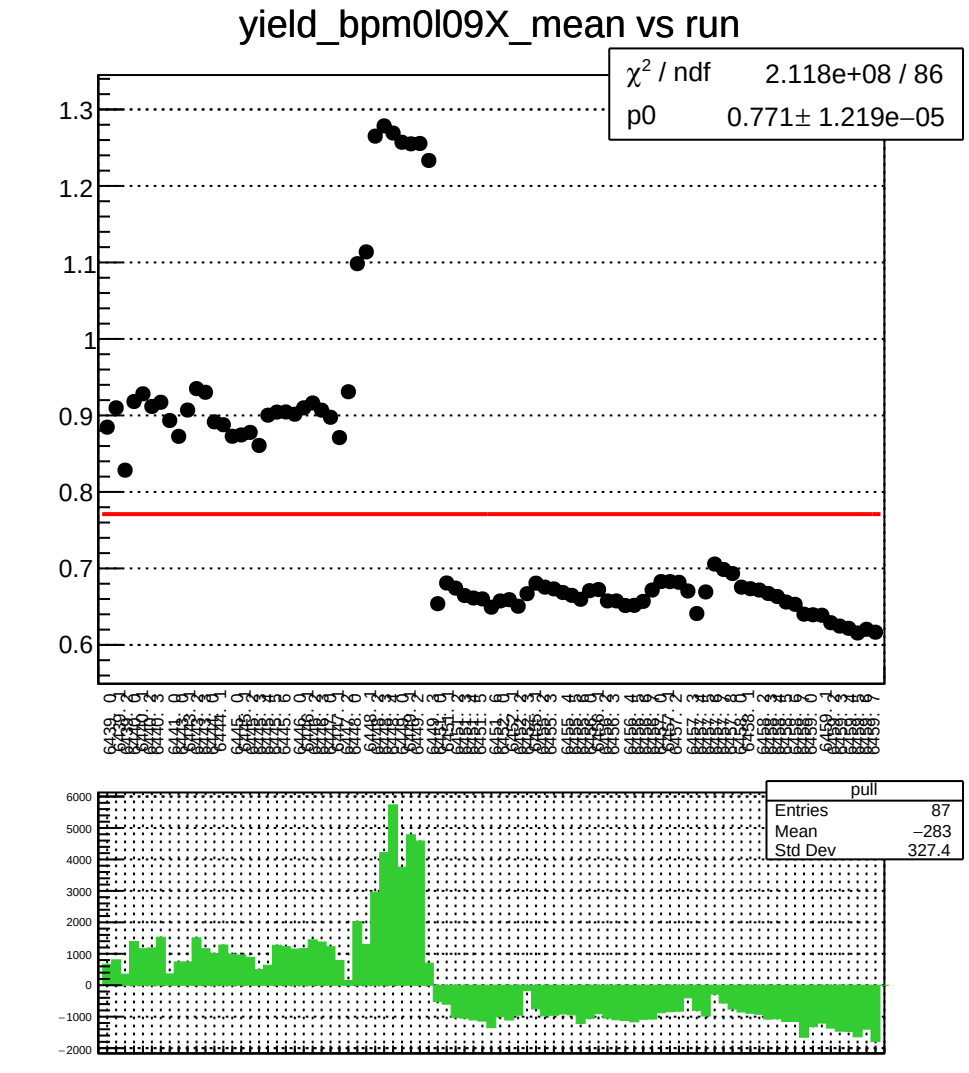

yield_bpm0l08X_mean vs run
χ² / ndf 3.716e+08 / 86
p0 −0.1506 ± 1.095e−05
pull
Entries 87
Mean −278.6
Std Dev 321.8
pull1D
Entries 87
Mean 0
Std Dev 0

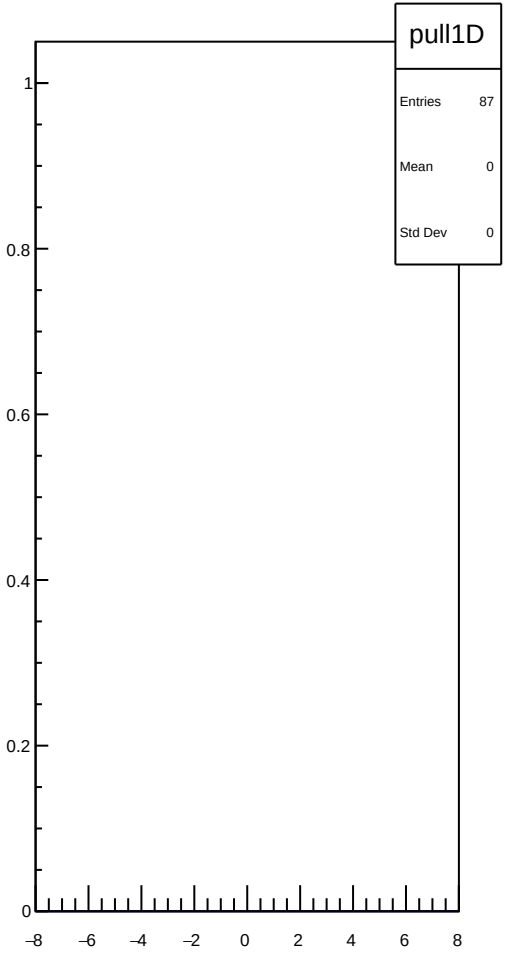

yield_bpm0l08X_rms vs run
χ² / ndf 1.128e+05 / 86
p0 0.009693 ± 7.745e−06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

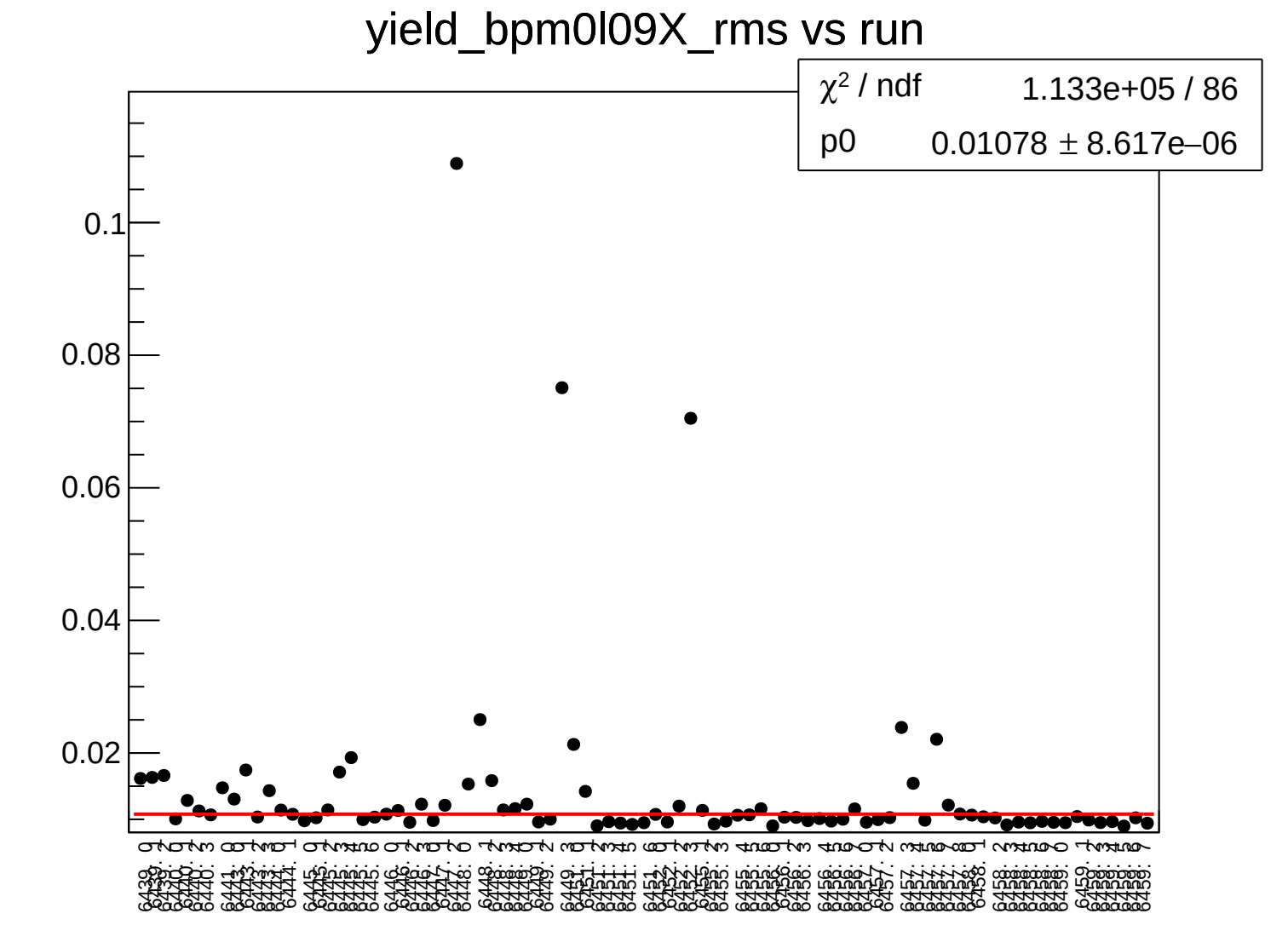

yield_bpm0l08Y_mean vs run
χ² / ndf 3.05e+06 / 86
p0 0.08038 ± 3.909e−06
pull
Entries 87
Mean −46.29
Std Dev 74.39

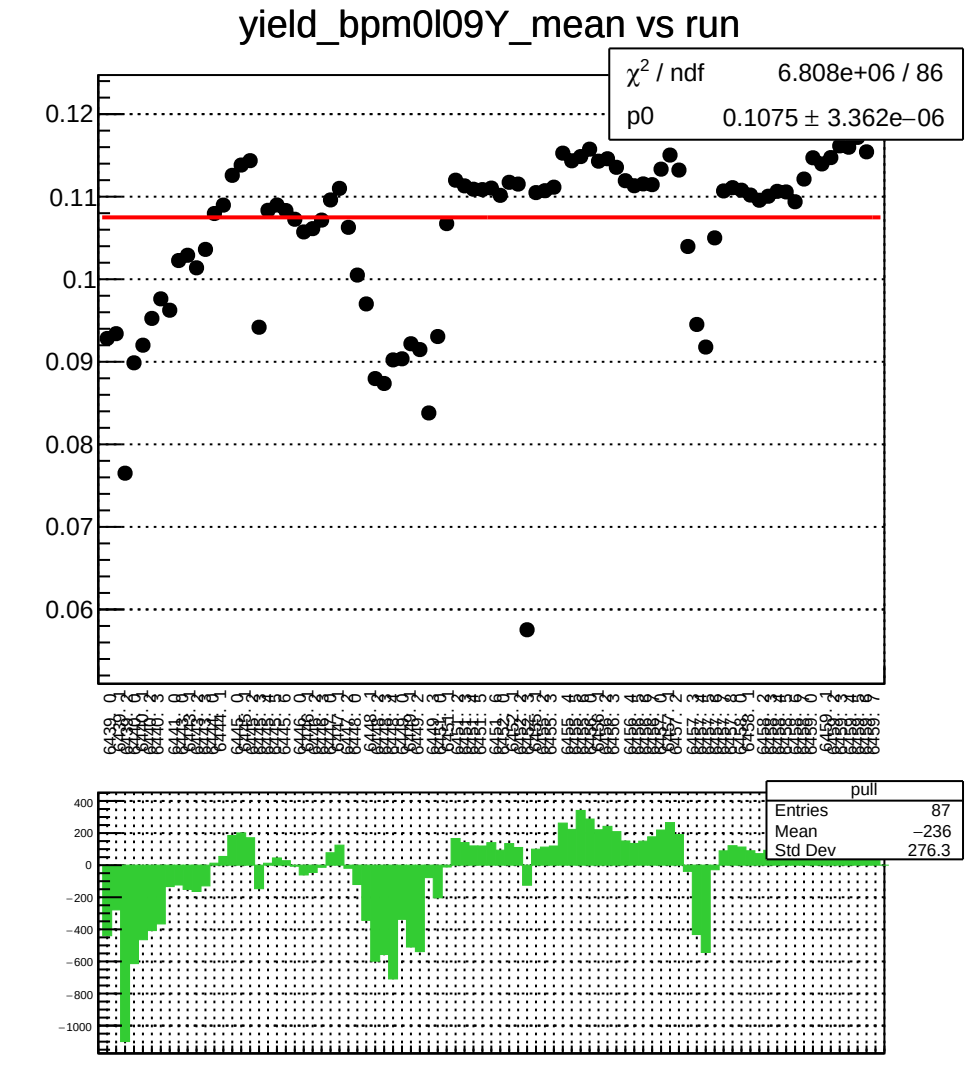

pull1D
Entries 87
Mean −3.793
Std Dev 2.138

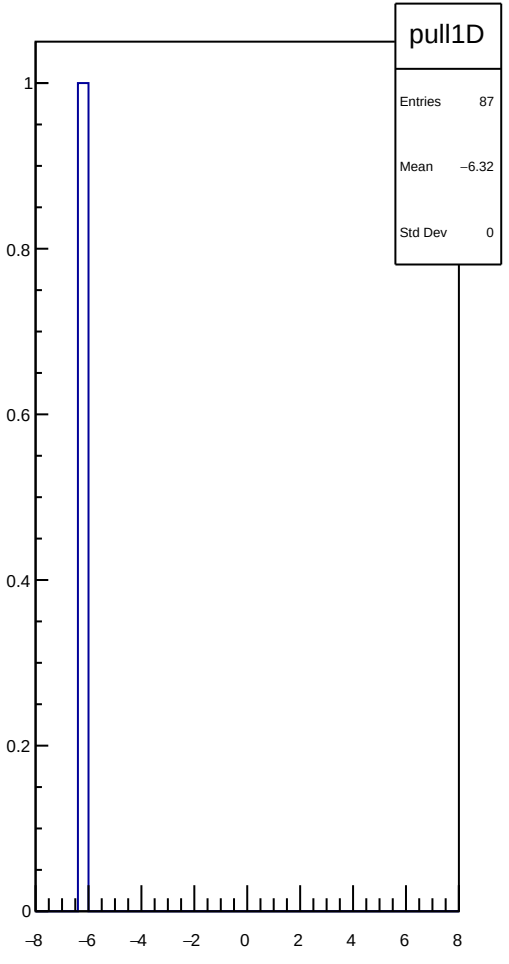

yield_bpm0l08Y_rms vs run
χ^2 / ndf 9.504e+04 / 86
p0 0.003479 ± 2.764e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

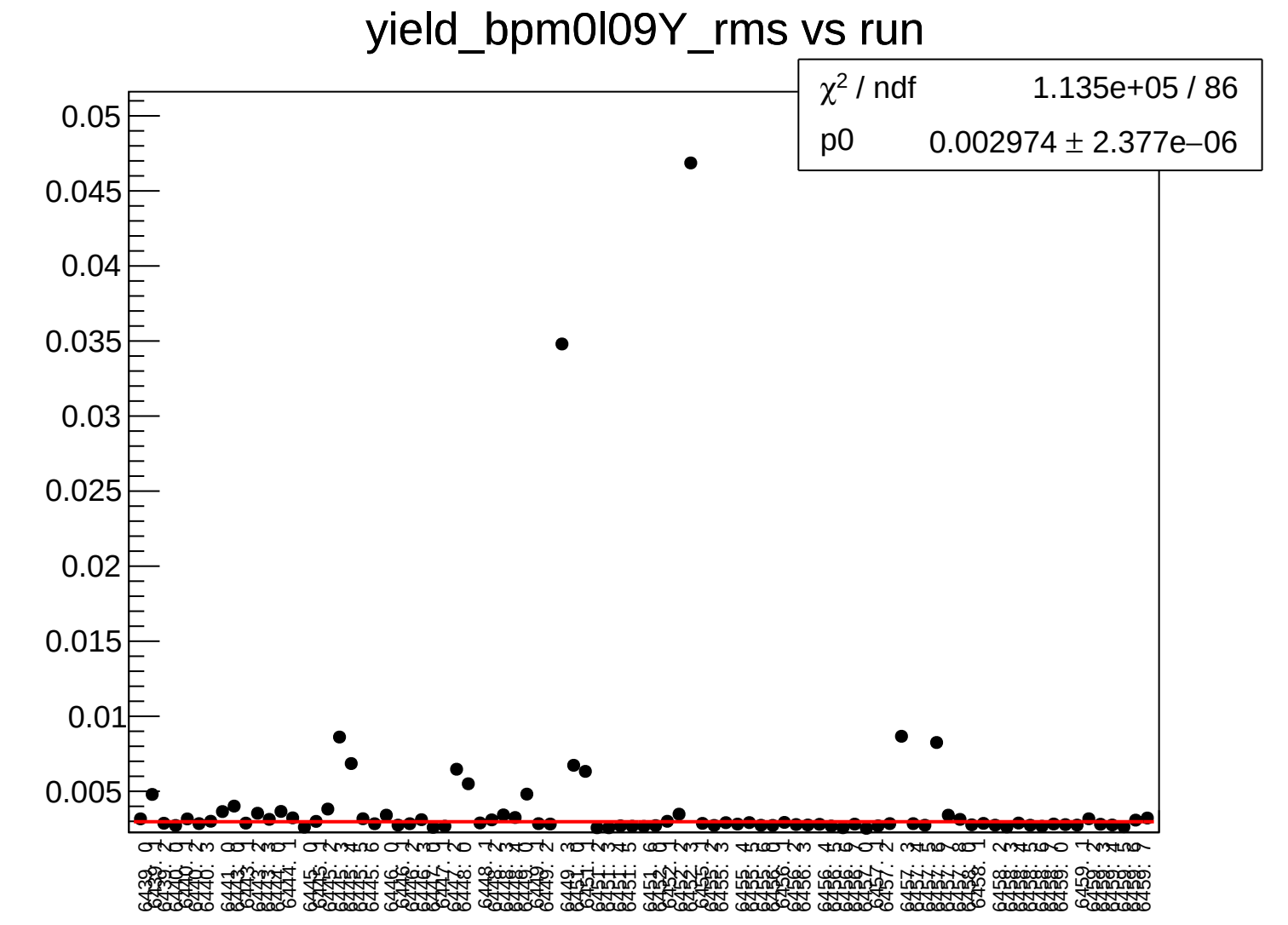

yield_bpm0l09X_mean vs run
χ² / ndf 2.118e+08 / 86
p0 0.771± 1.219e−05
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
pull
Entries 87
Mean −283
Std Dev 327.4
6000
5000
4000
3000
2000
1000
0
−1000
−2000

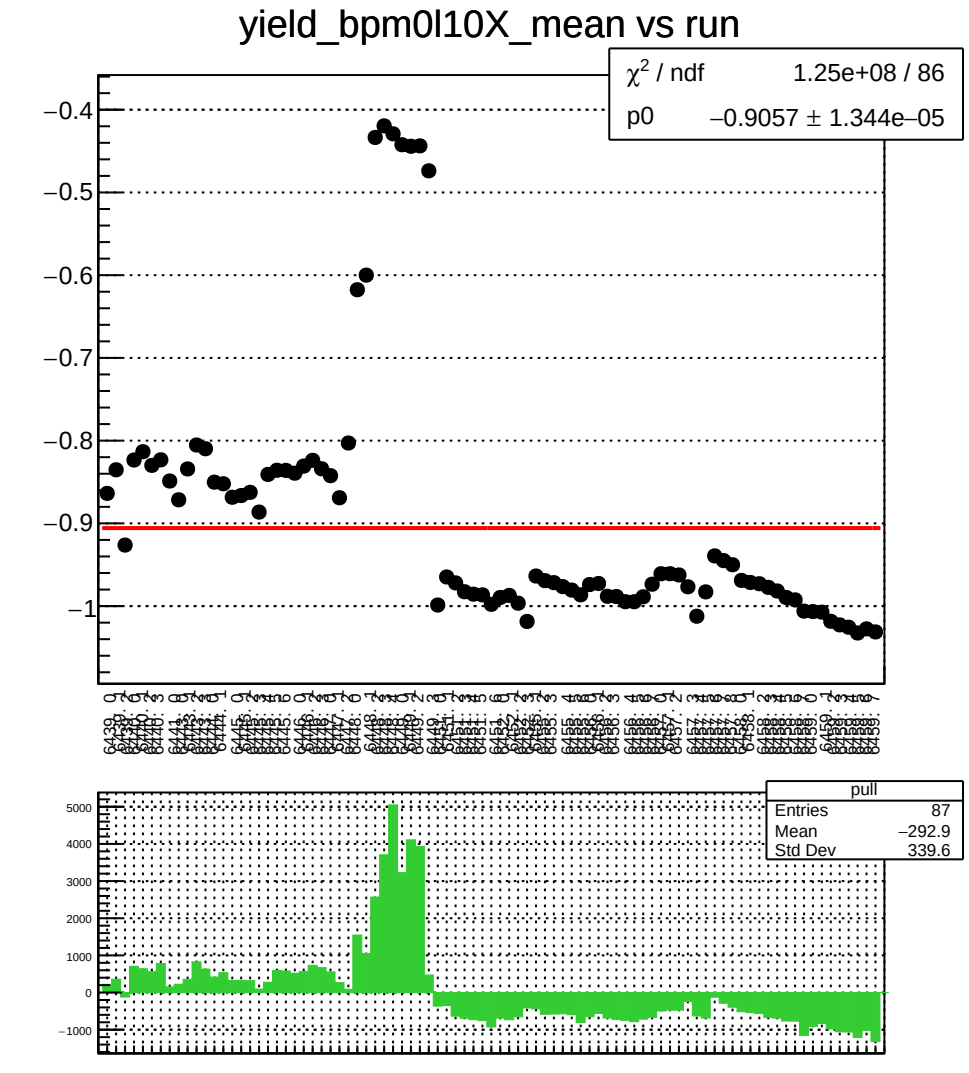

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

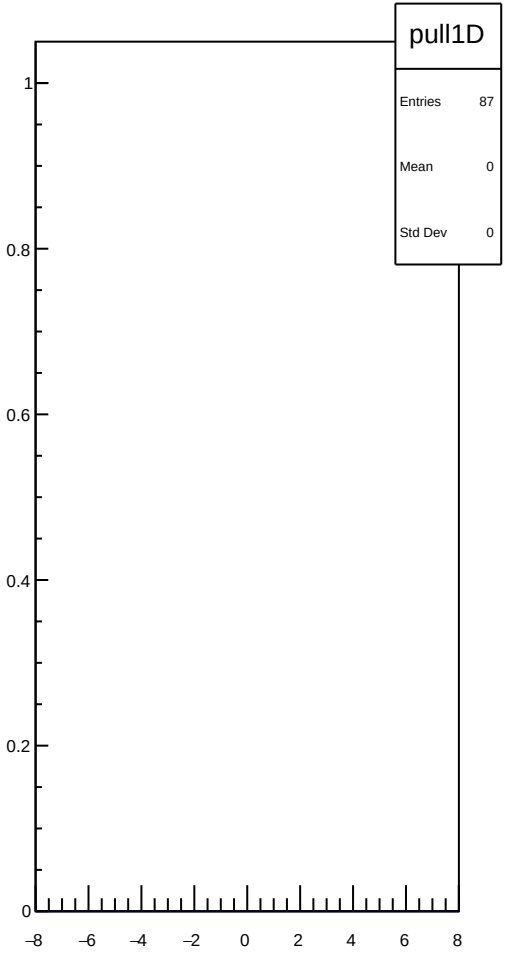

yield_bpm0l09X_rms vs run
χ² / ndf 1.133e+05 / 86
p0 0.01078 ± 8.617e–06
0.1
0.08
0.06
0.04
0.02

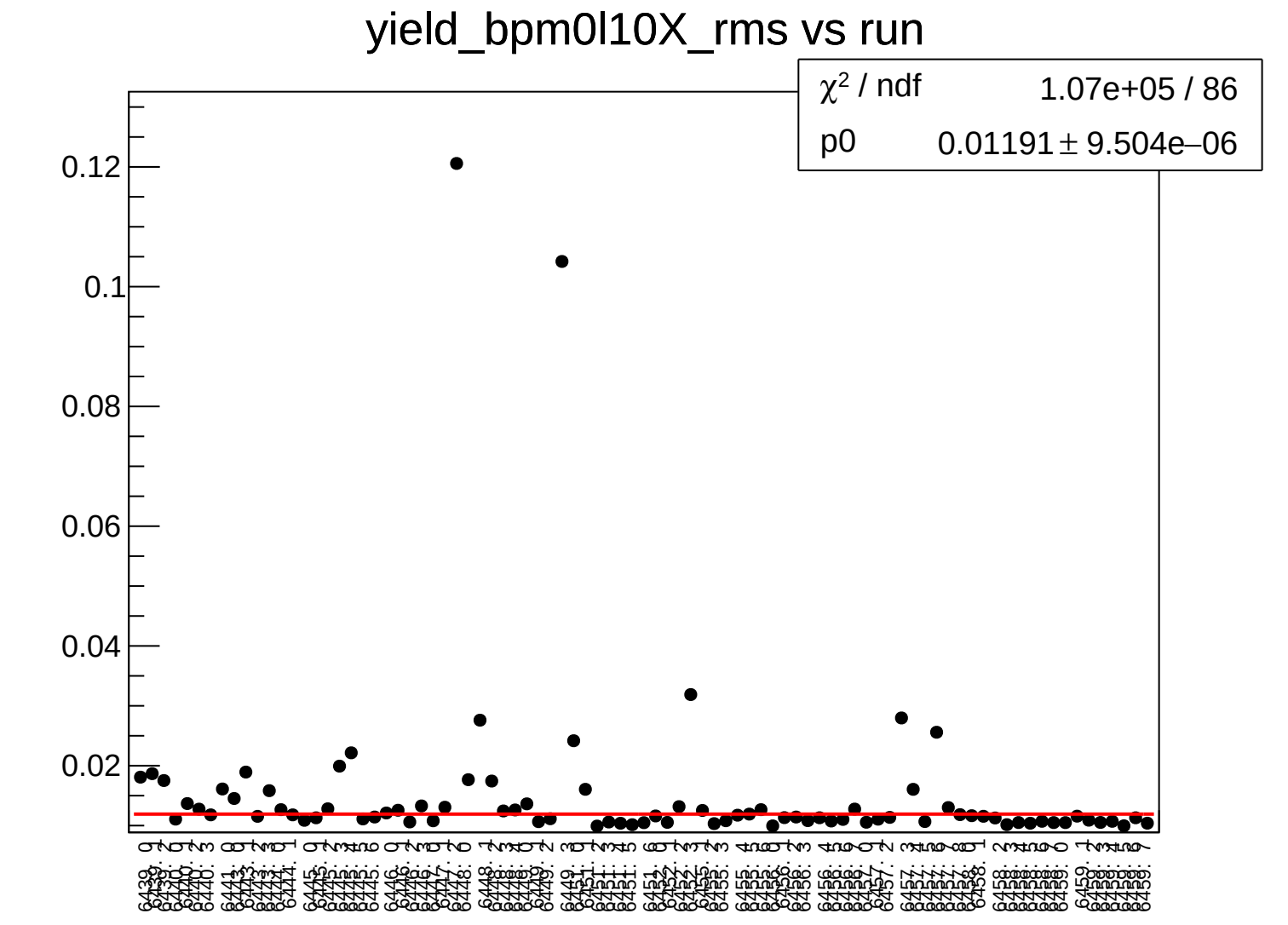

yield_bpm0l09Y_mean vs run
χ² / ndf 6.808e+06 / 86
p0 0.1075 ± 3.362e−06
0.12
0.11
0.1
0.09
0.08
0.07
0.06
pull
Entries 87
Mean −236
Std Dev 276.3
400
200
0
−200
−400
−600
−800
−1000

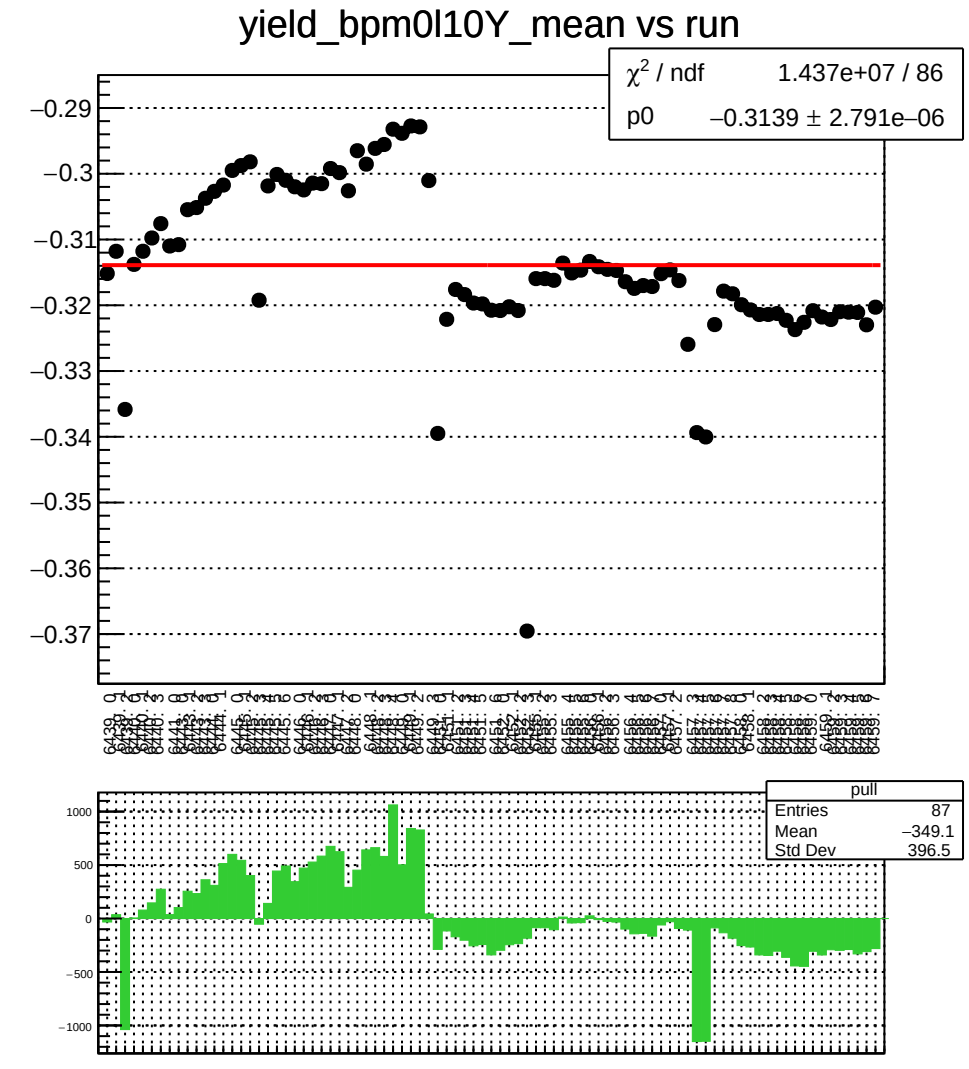

pull1D
Entries 87
Mean −6.32
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

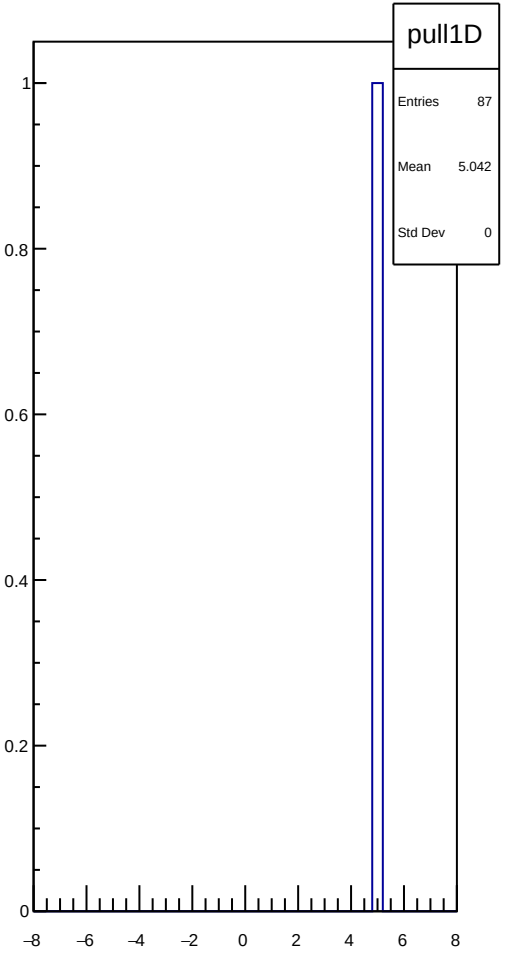

yield_bpm0l09Y_rms vs run
χ² / ndf 1.135e+05 / 86
p0 0.002974 ± 2.377e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

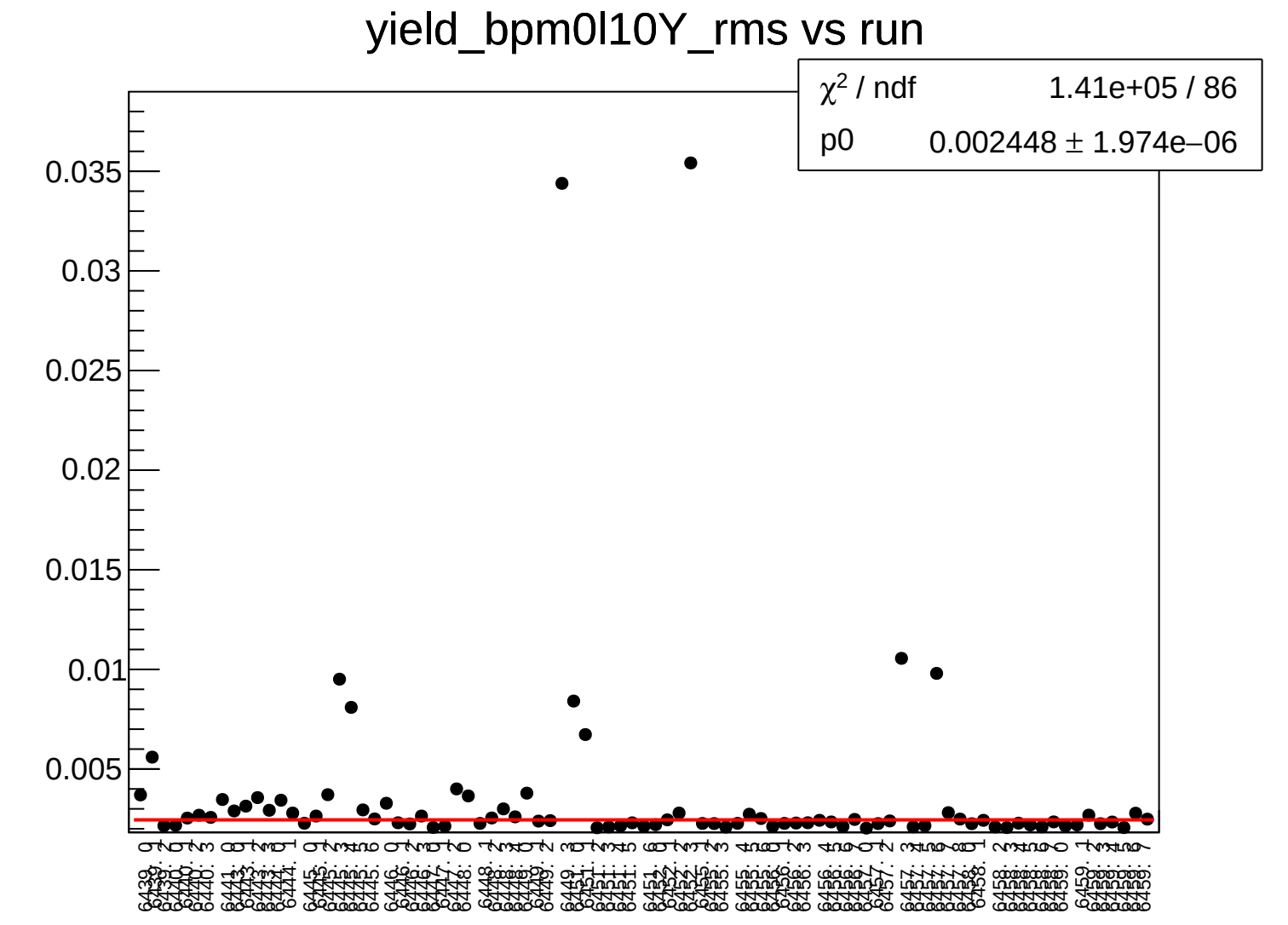

yield_bpm0l10X_mean vs run
χ² / ndf 1.25e+08 / 86
p0 −0.9057 ± 1.344e−05
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
−1
pull
Entries 87
Mean −292.9
Std Dev 339.6
5000
4000
3000
2000
1000
0
−1000

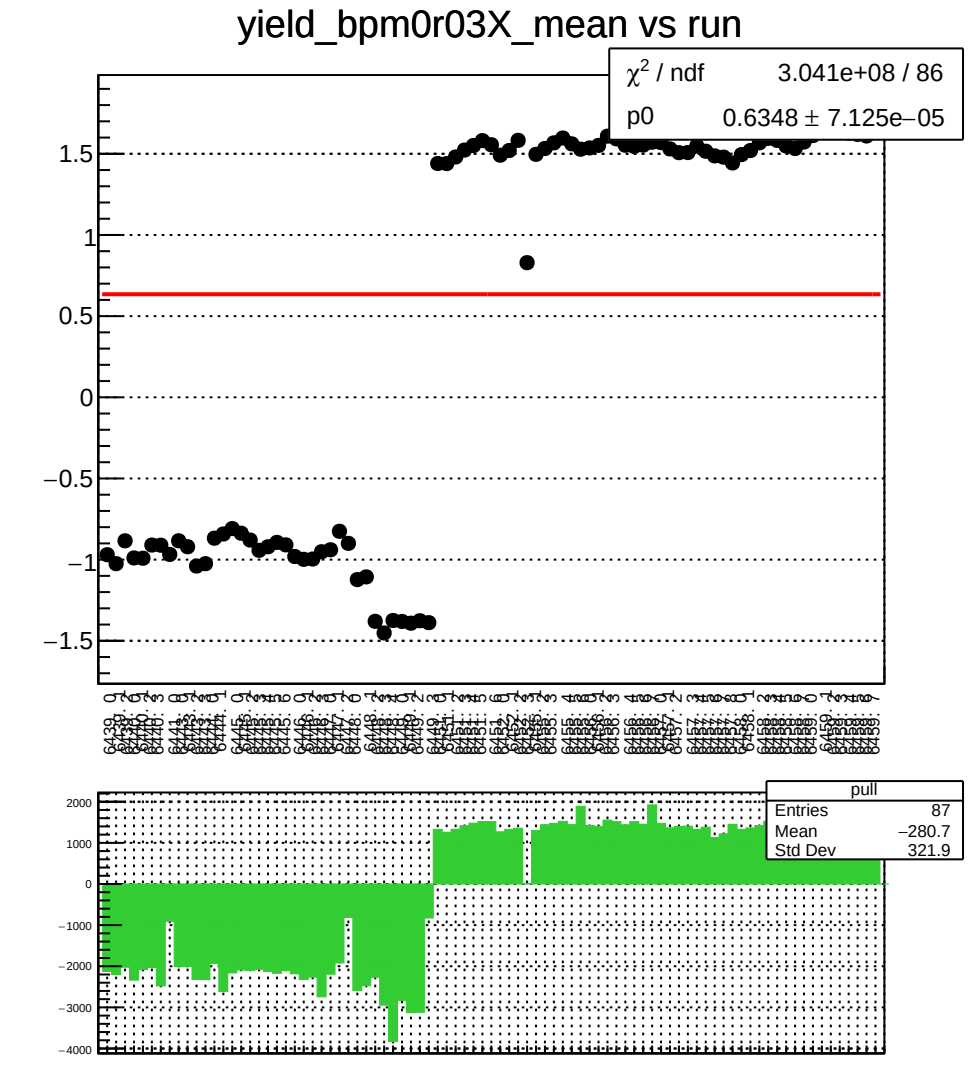

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

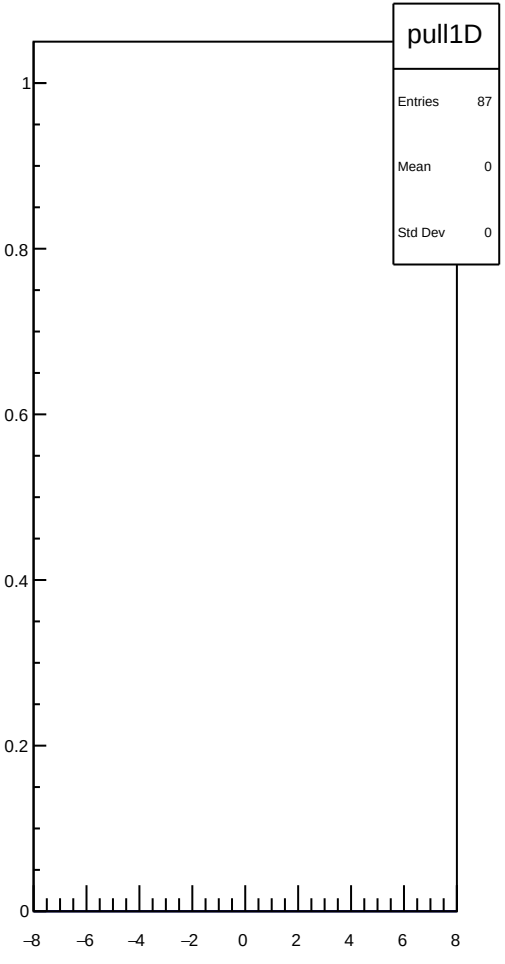

yield_bpm0l10X_rms vs run
χ² / ndf 1.07e+05 / 86
p0 0.01191 ± 9.504e–06
0.12
0.1
0.08
0.06
0.04
0.02

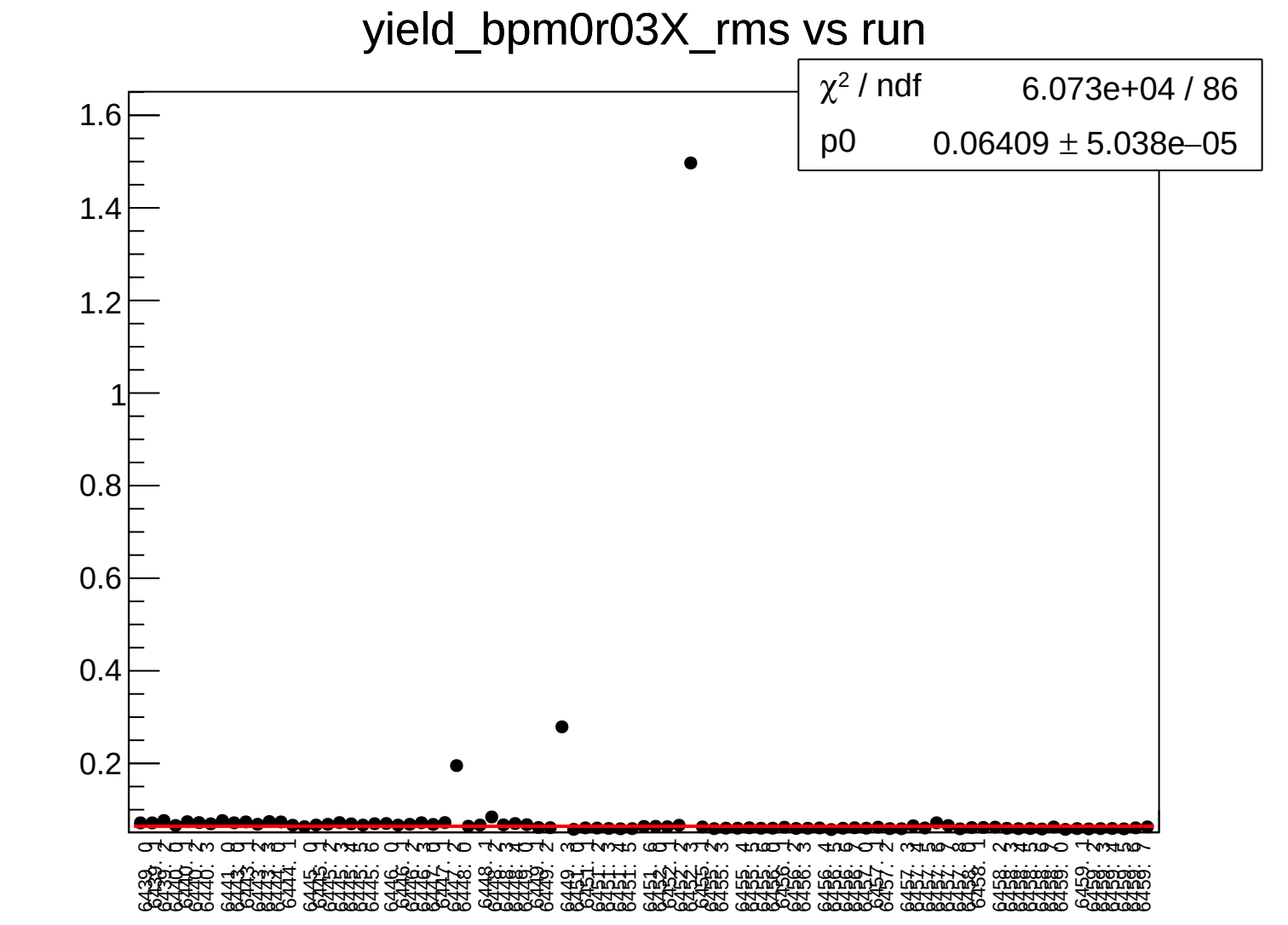

yield_bpm0l10Y_mean vs run
χ² / ndf 1.437e+07 / 86
p0 −0.3139 ± 2.791e−06
−0.29
−0.3
−0.31
−0.32
−0.33
−0.34
−0.35
−0.36
−0.37
pull
Entries 87
Mean −349.1
Std Dev 396.5
1000
500
0
−500
−1000

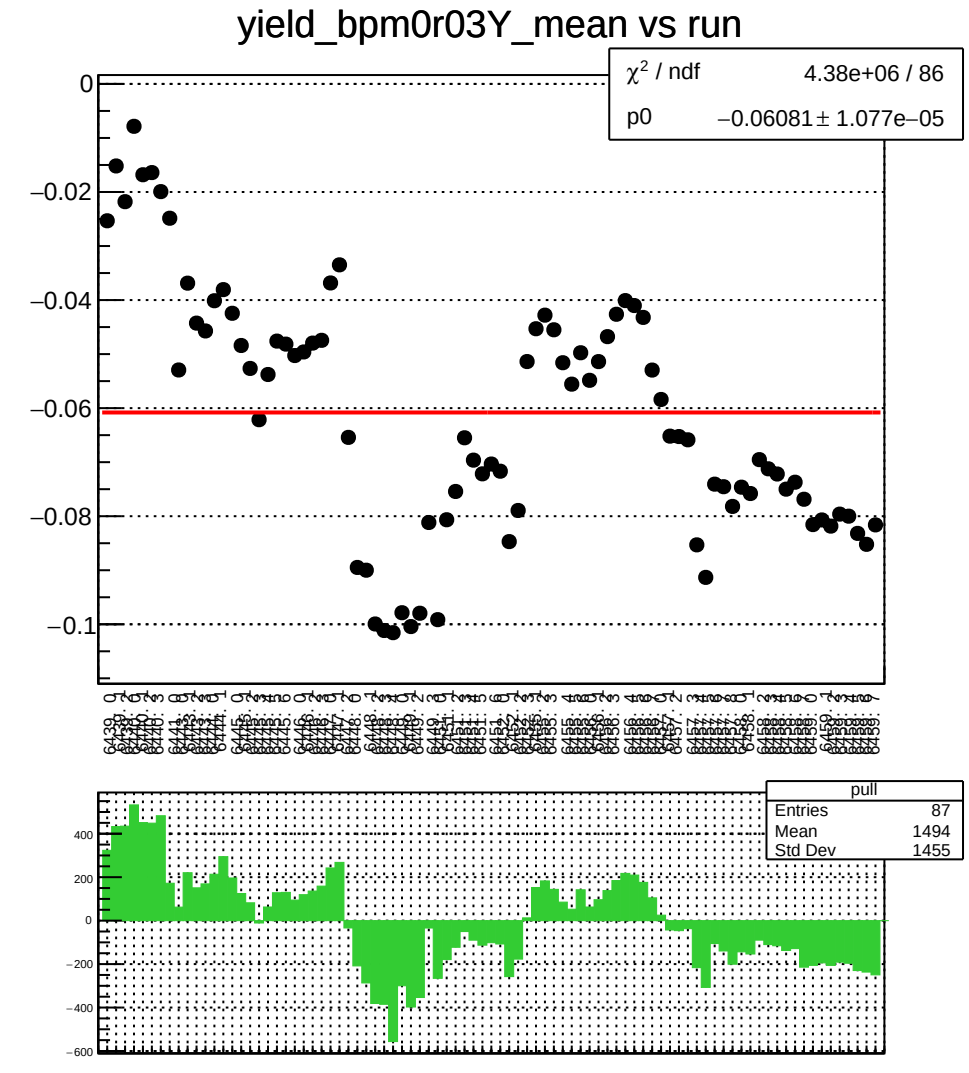

pull1D
Entries 87
Mean 5.042
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

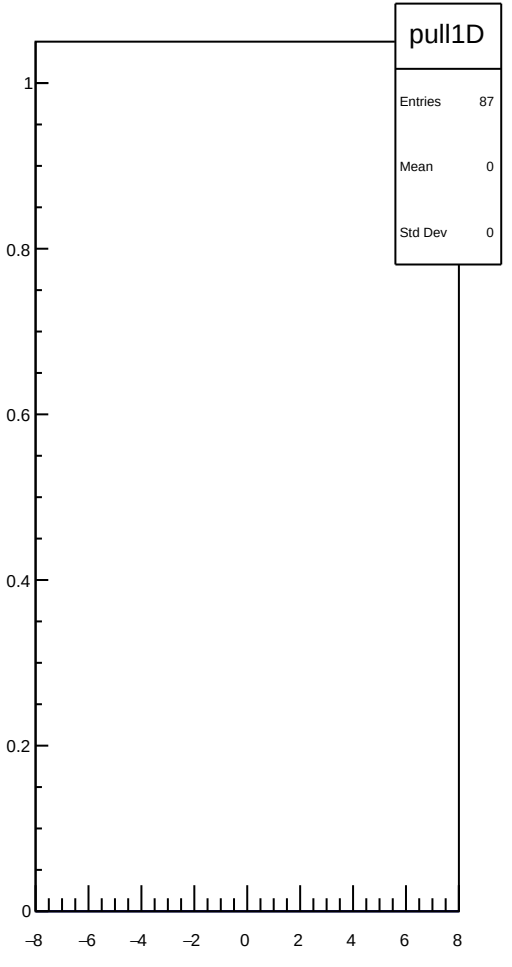

yield_bpm0l10Y_rms vs run
χ^2 / ndf 1.41e+05 / 86
p0 0.002448 ± 1.974e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

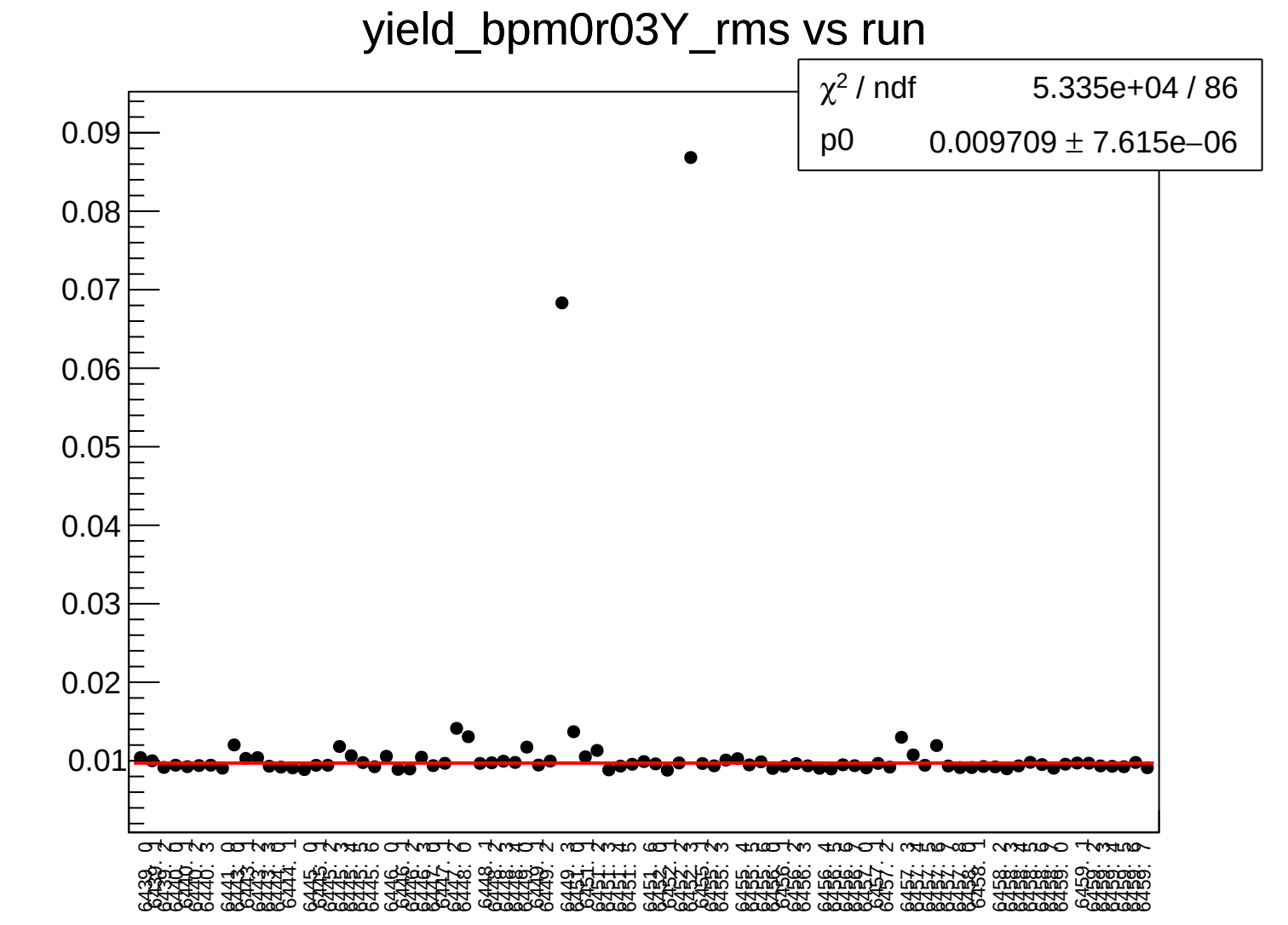

yield_bpm0r03X_mean vs run
χ² / ndf 3.041e+08 / 86
p0 0.6348 ± 7.125e−05
pull
Entries 87
Mean −280.7
Std Dev 321.9

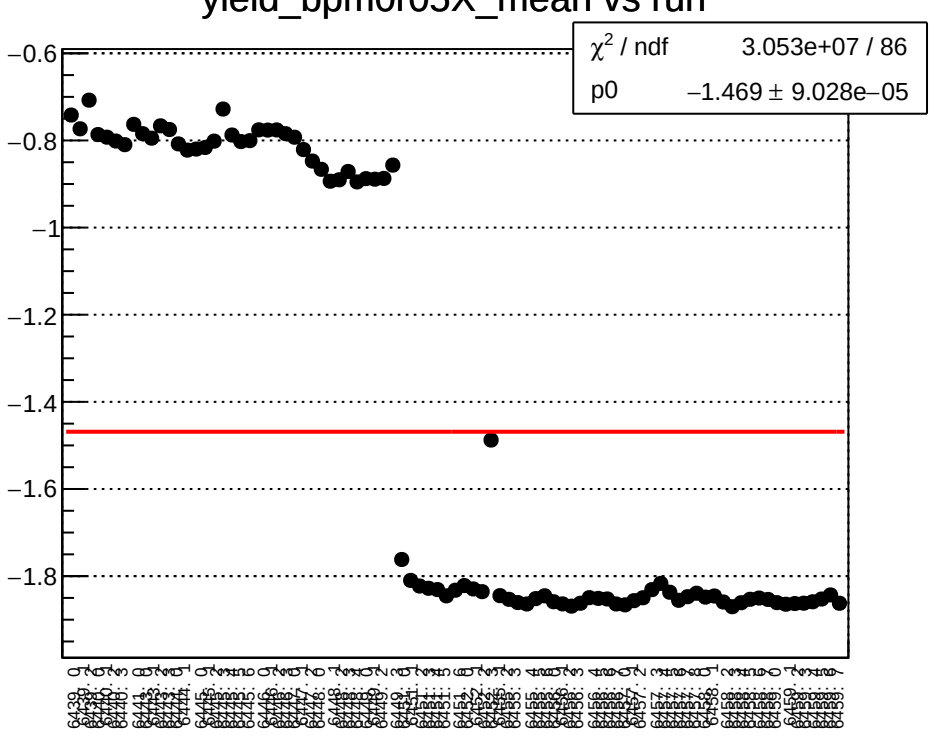

pull1D
Entries 87
Mean 0
Std Dev 0

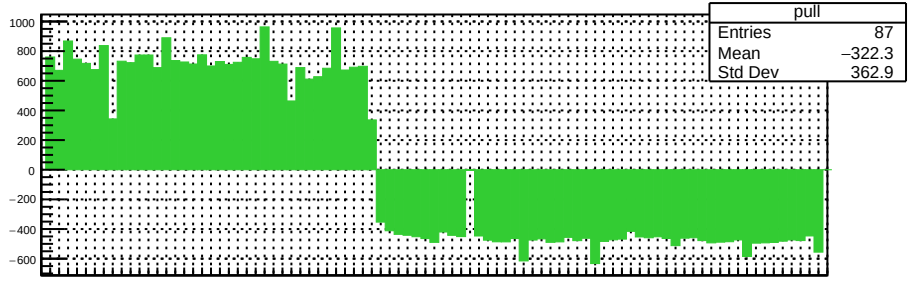

yield_bpm0r03X_rms vs run
χ² / ndf 6.073e+04 / 86
p0 0.06409 ± 5.038e–05
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

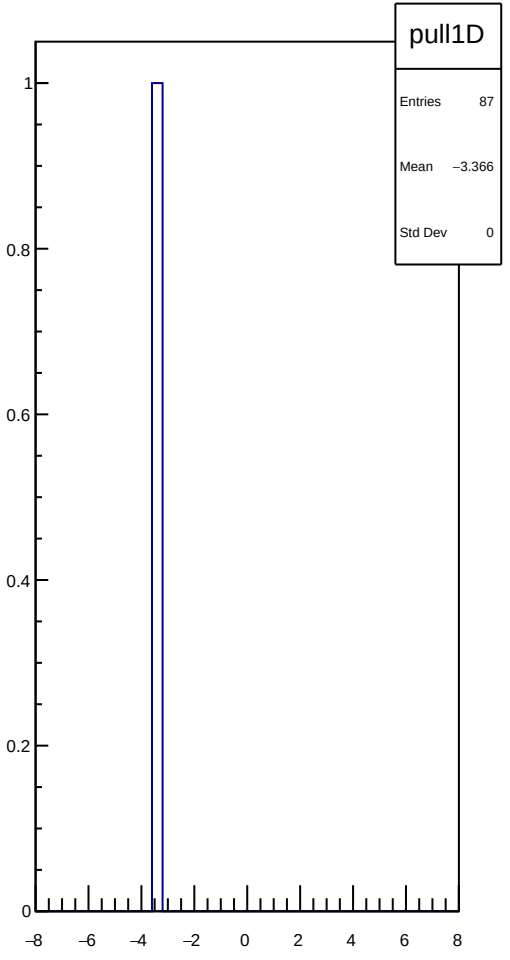

yield_bpm0r03Y_mean vs run
χ² / ndf 4.38e+06 / 86
p0 −0.06081 ± 1.077e−05
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull
Entries 87
Mean 1494
Std Dev 1455
400
200
0
−200
−400
−600

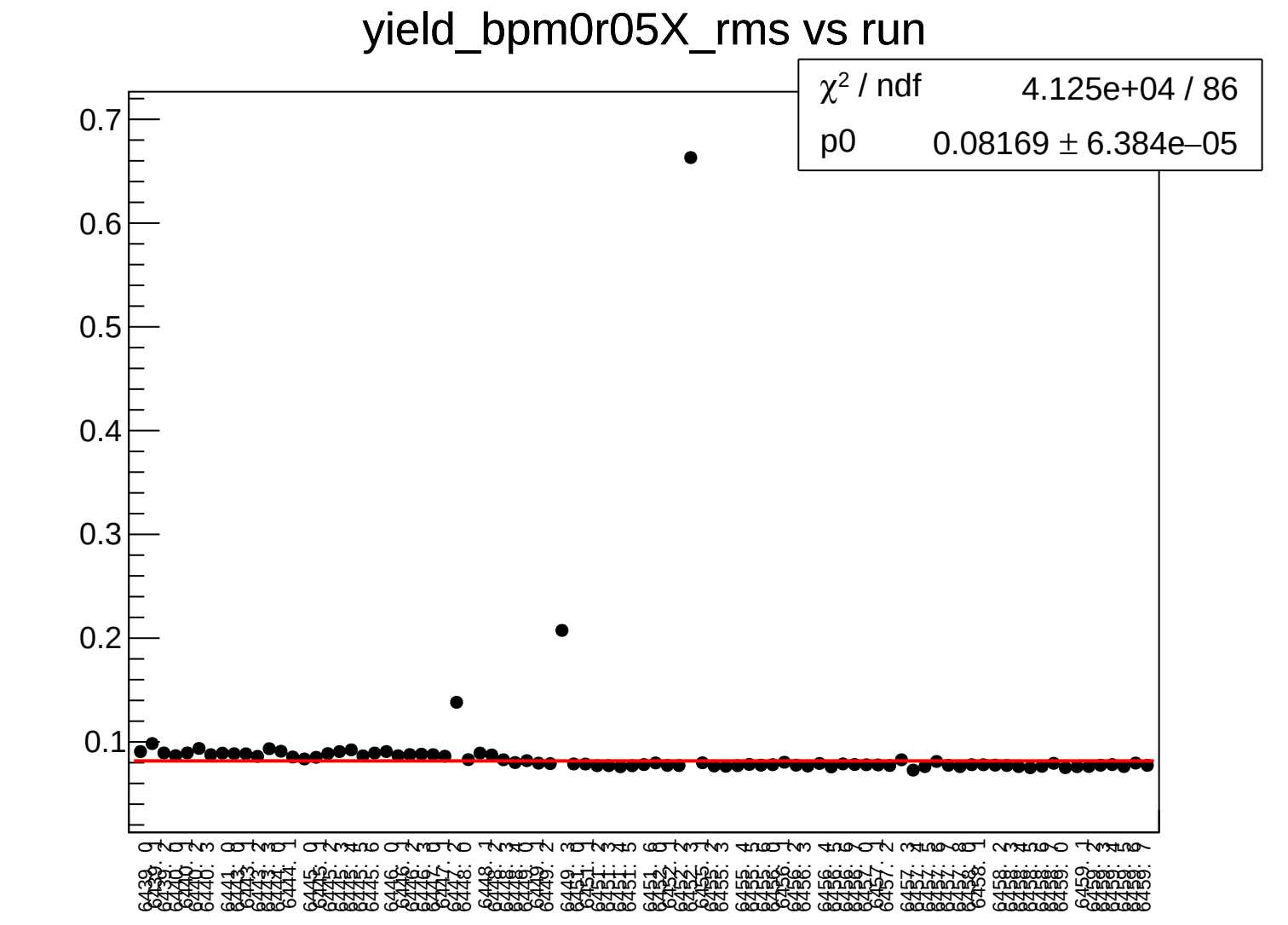

pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

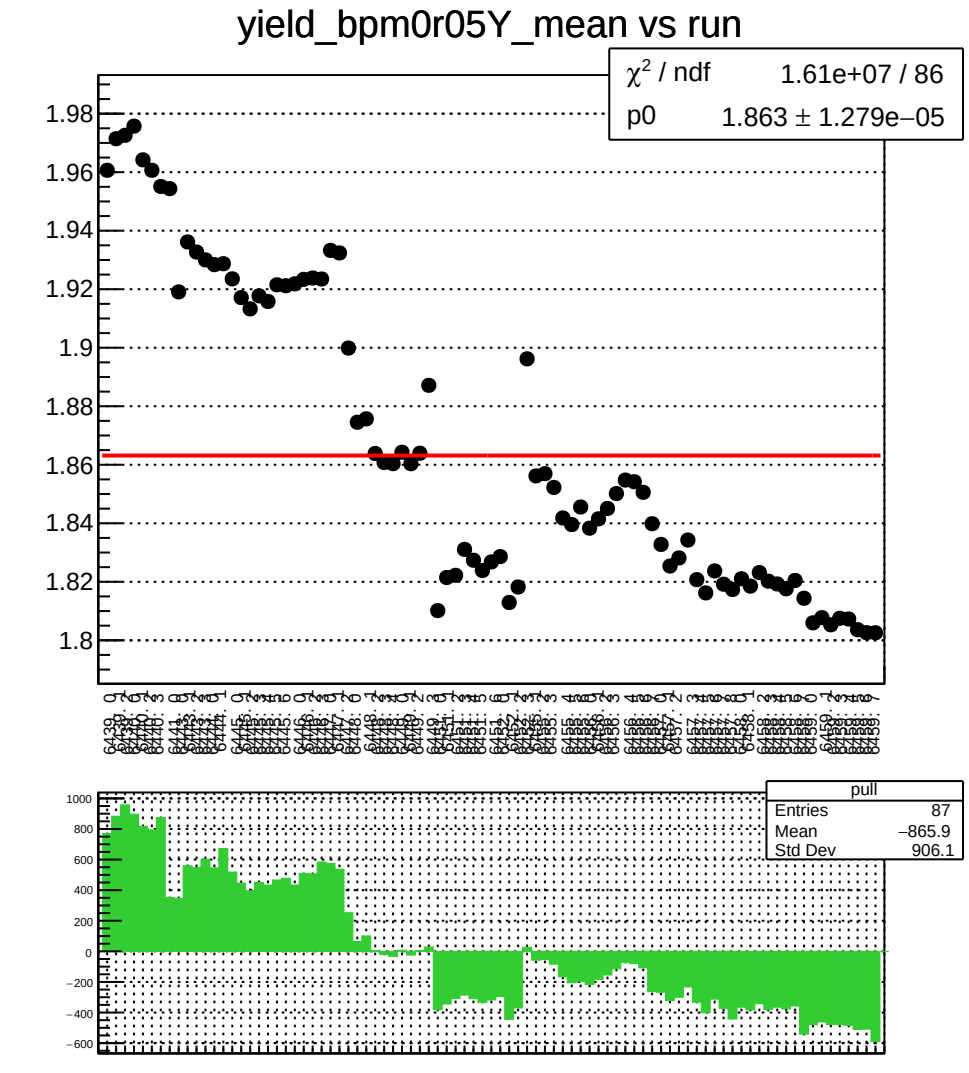

yield_bpm0r03Y_rms vs run
χ² / ndf 5.335e+04 / 86
p0 0.009709 ± 7.615e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

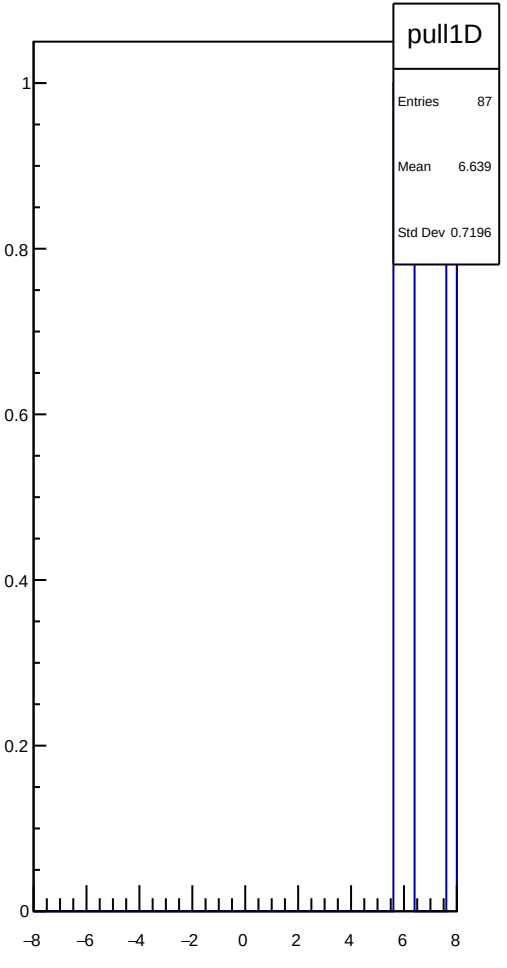

yield_bpm0r05X_mean vs run
χ² / ndf 3.053e+07 / 86
p0 −1.469 ± 9.028e−05
−0.6
−0.8
−1
−1.2
−1.4
−1.6
−1.8

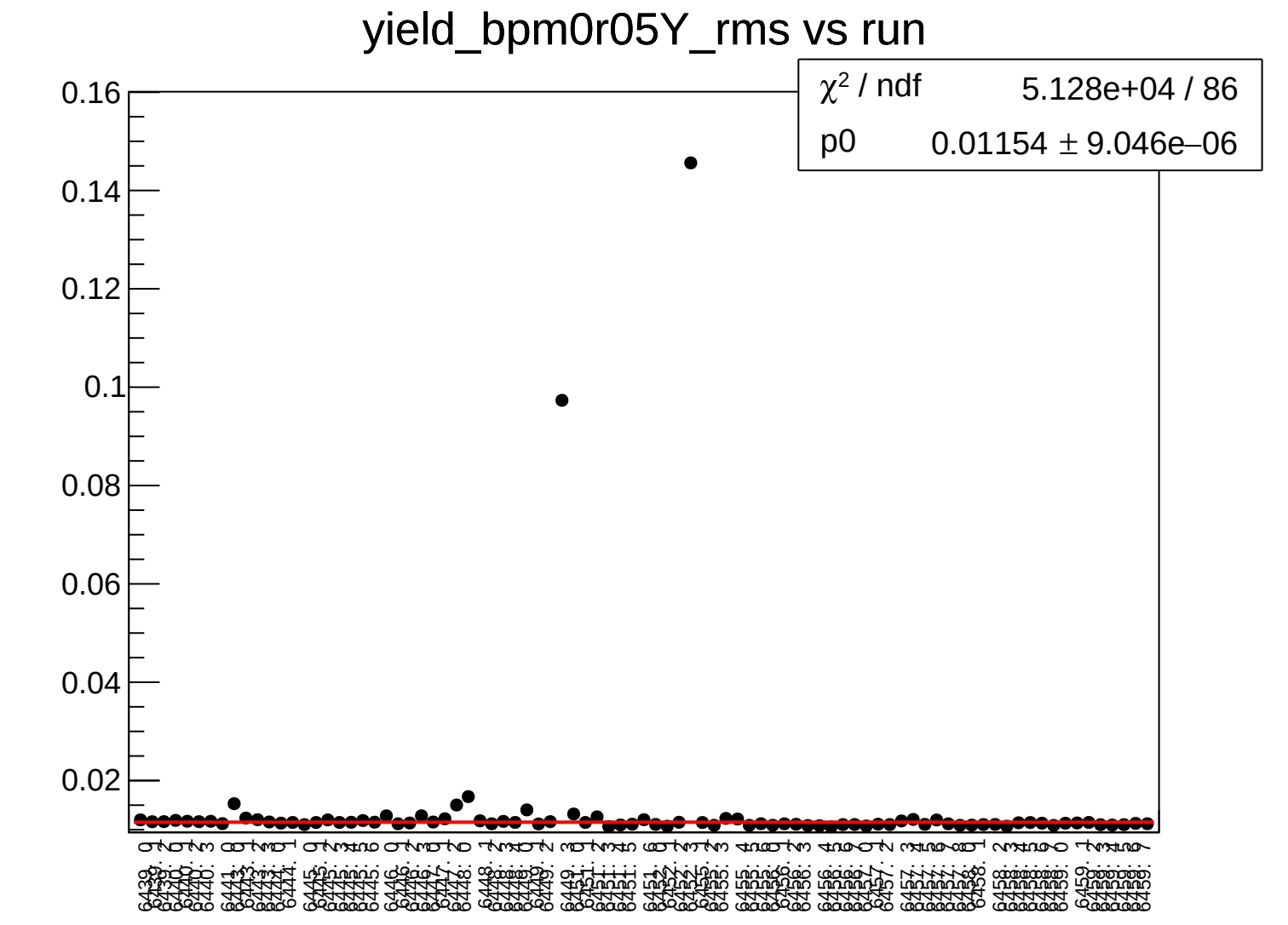

pull
Entries 87
Mean −322.3
Std Dev 362.9
1000
800
600
400
200
0
−200
−400
−600

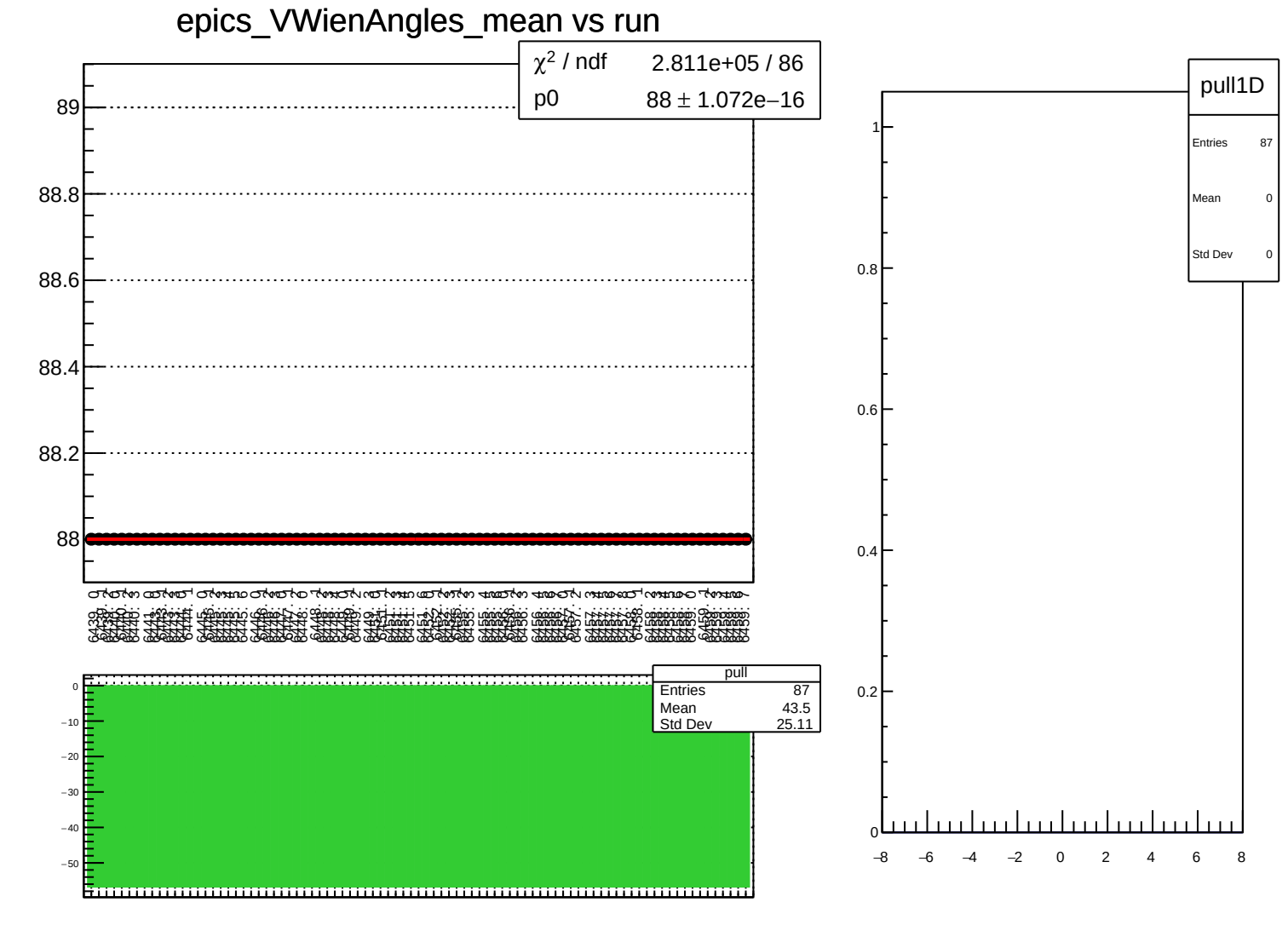

pull1D
Entries 87
Mean −3.366
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

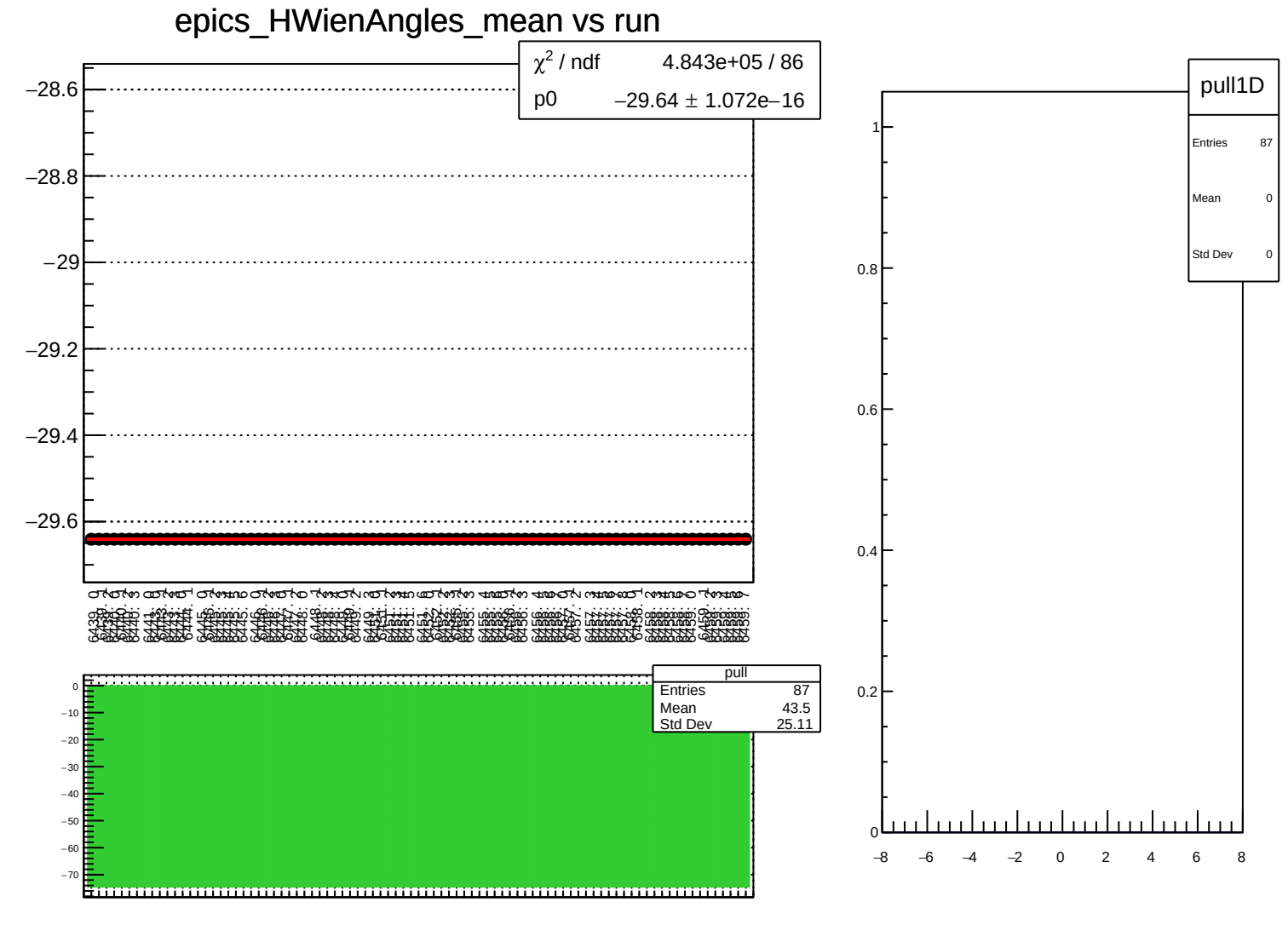

yield_bpm0r05X_rms vs run
χ² / ndf 4.125e+04 / 86
p0 0.08169 ± 6.384e–05
0.7
0.6
0.5
0.4
0.3
0.2
0.1

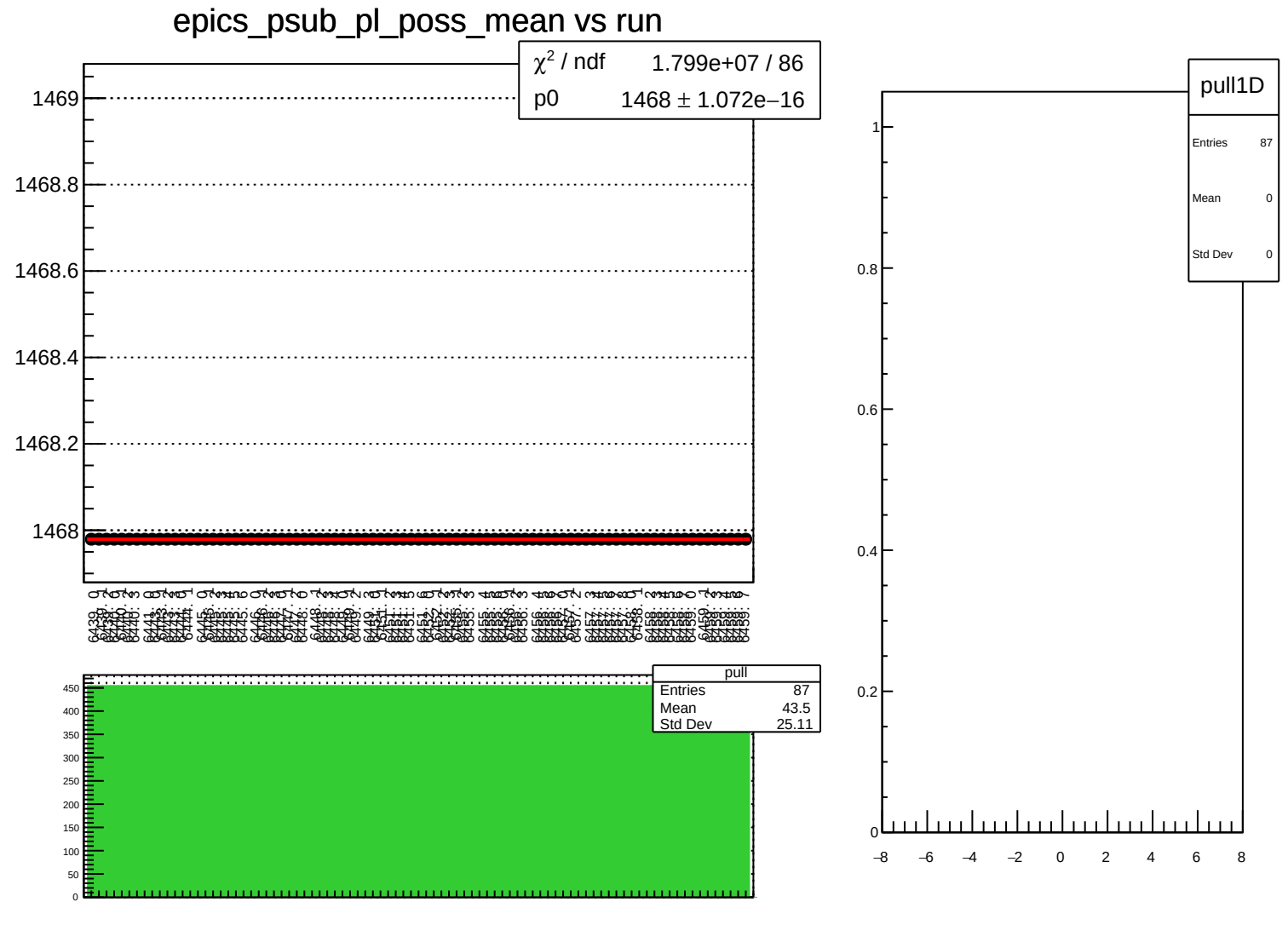

yield_bpm0r05Y_mean vs run
χ² / ndf 1.61e+07 / 86
p0 1.863 ± 1.279e−05
pull
Entries 87
Mean −865.9
Std Dev 906.1

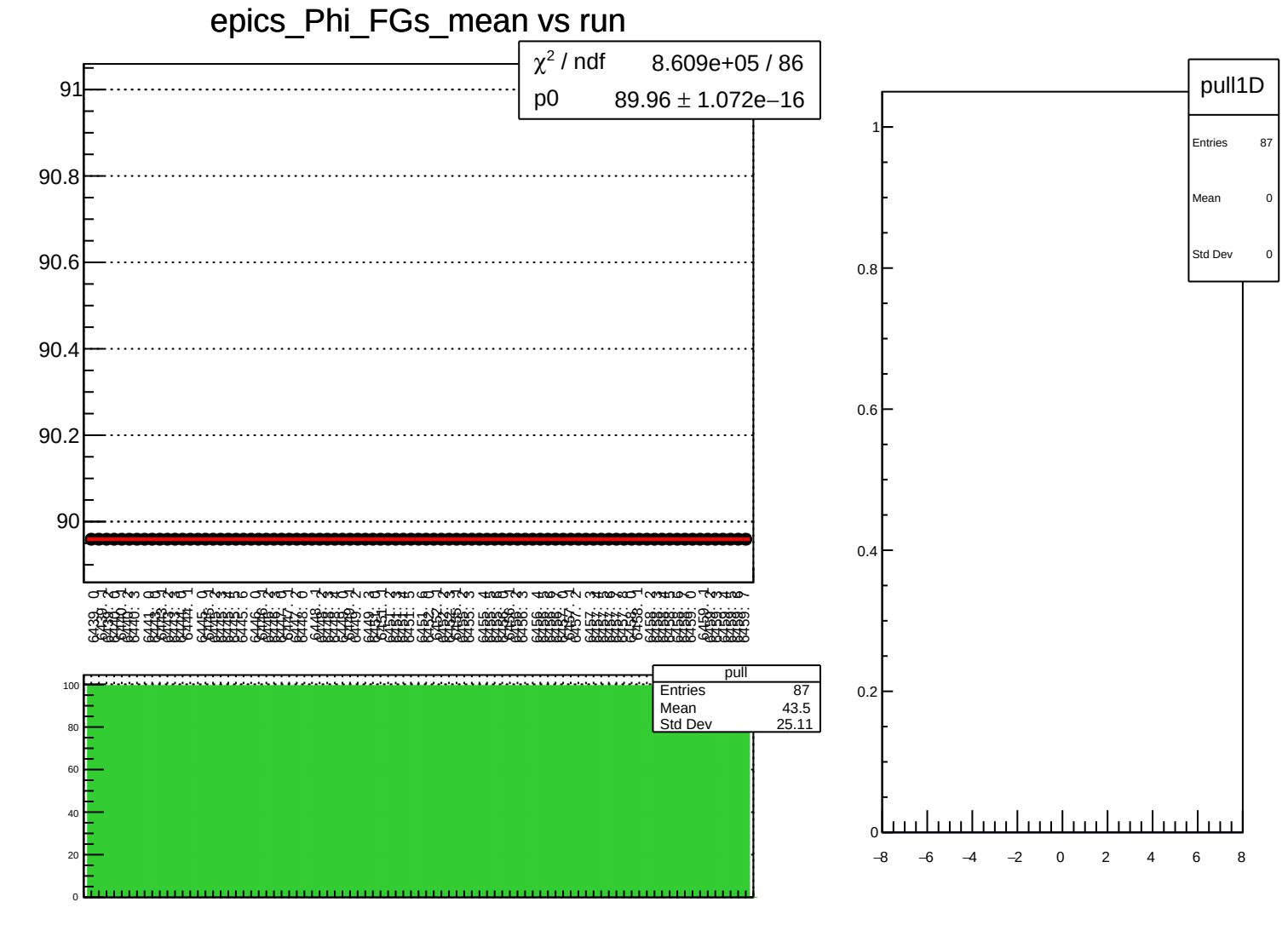

pull1D
Entries 87
Mean 6.639
Std Dev 0.7196

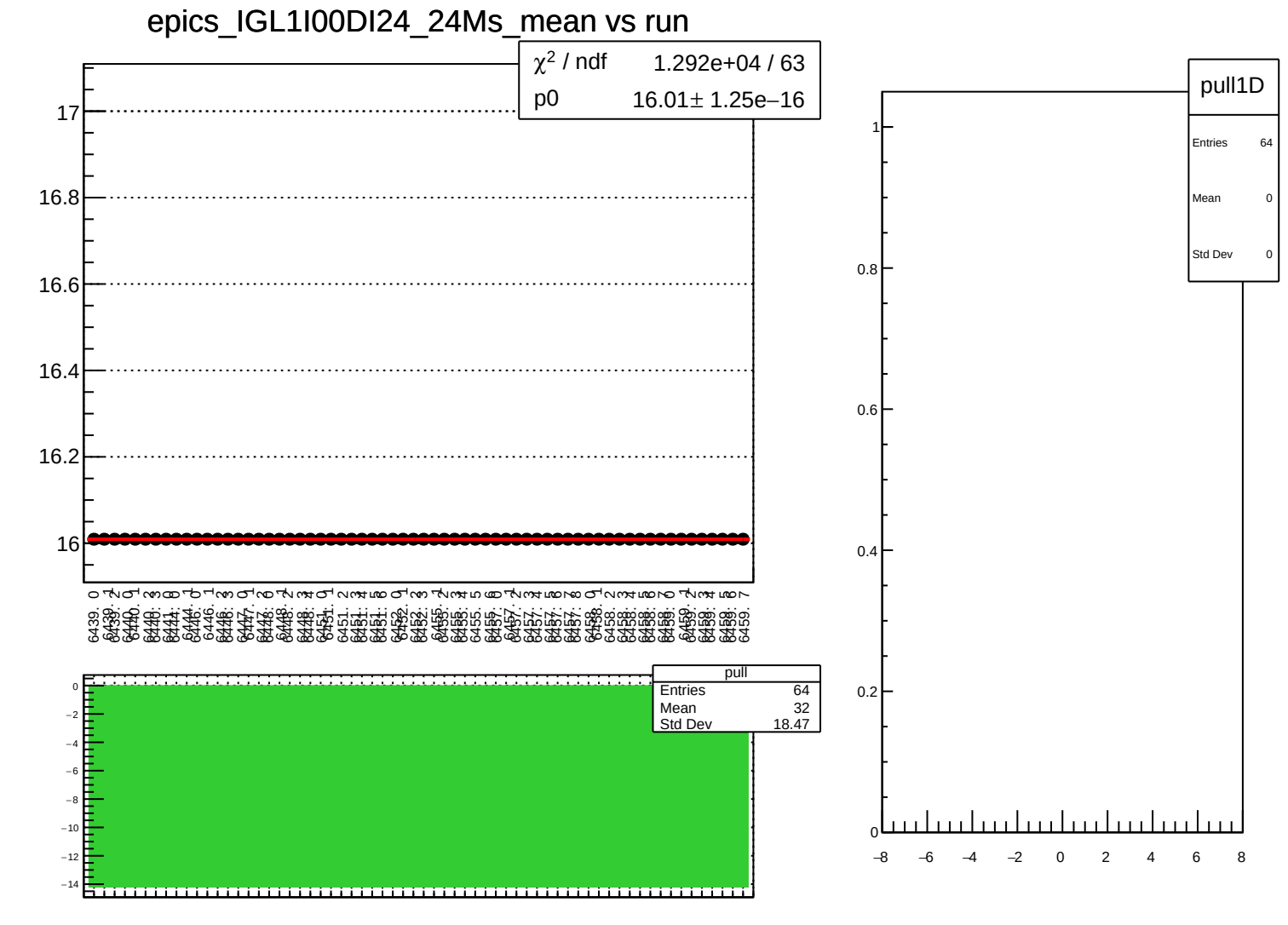

yield_bpm0r05Y_rms vs run
χ² / ndf 5.128e+04 / 86
p0 0.01154 ± 9.046e−06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

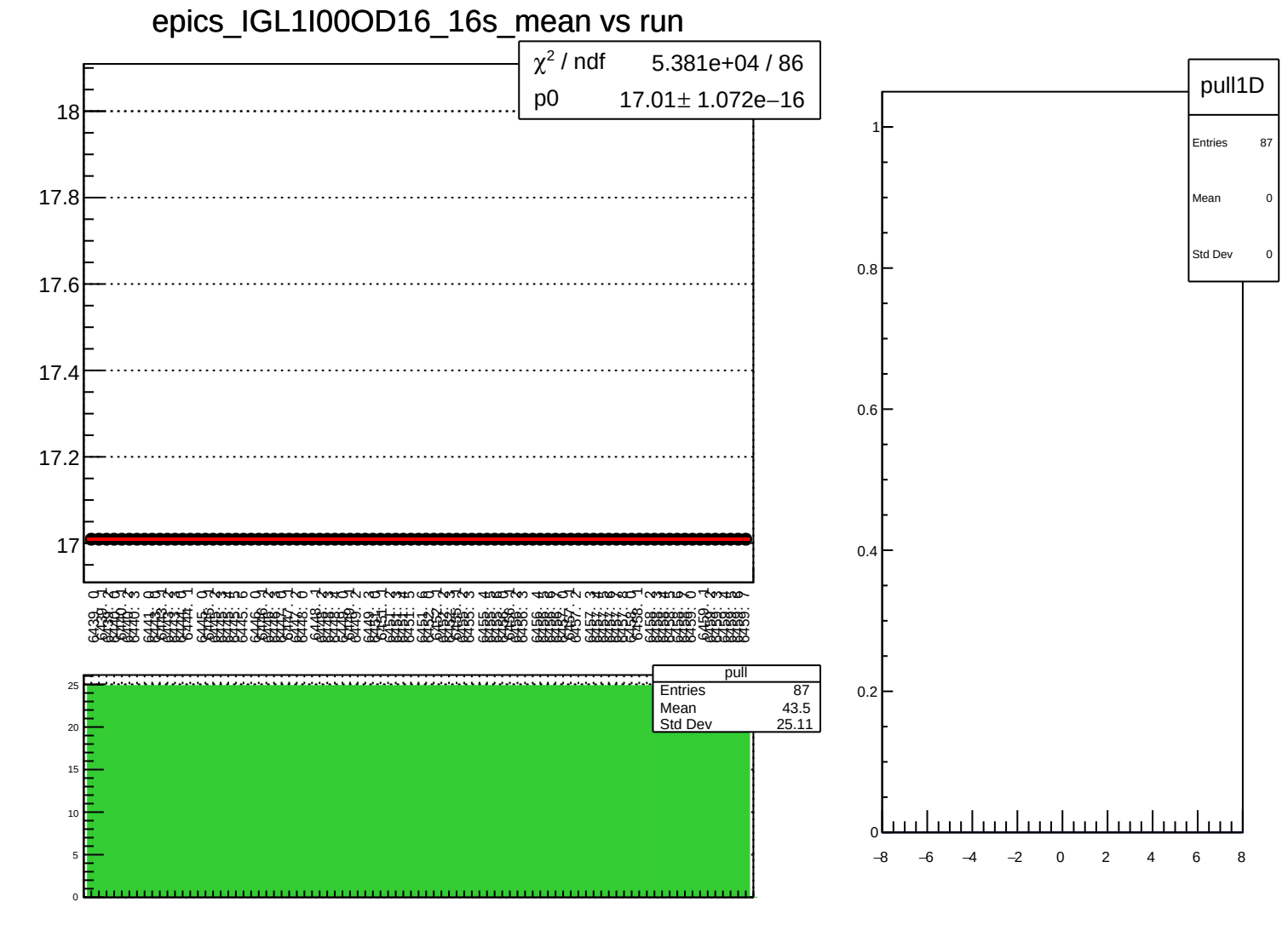

epics_VWienAngles_mean vs run
χ² / ndf 2.811e+05 / 86
p0 88 ± 1.072e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 87
Mean 43.5
Std Dev 25.11
0
−10
−20
−30
−40
−50
pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

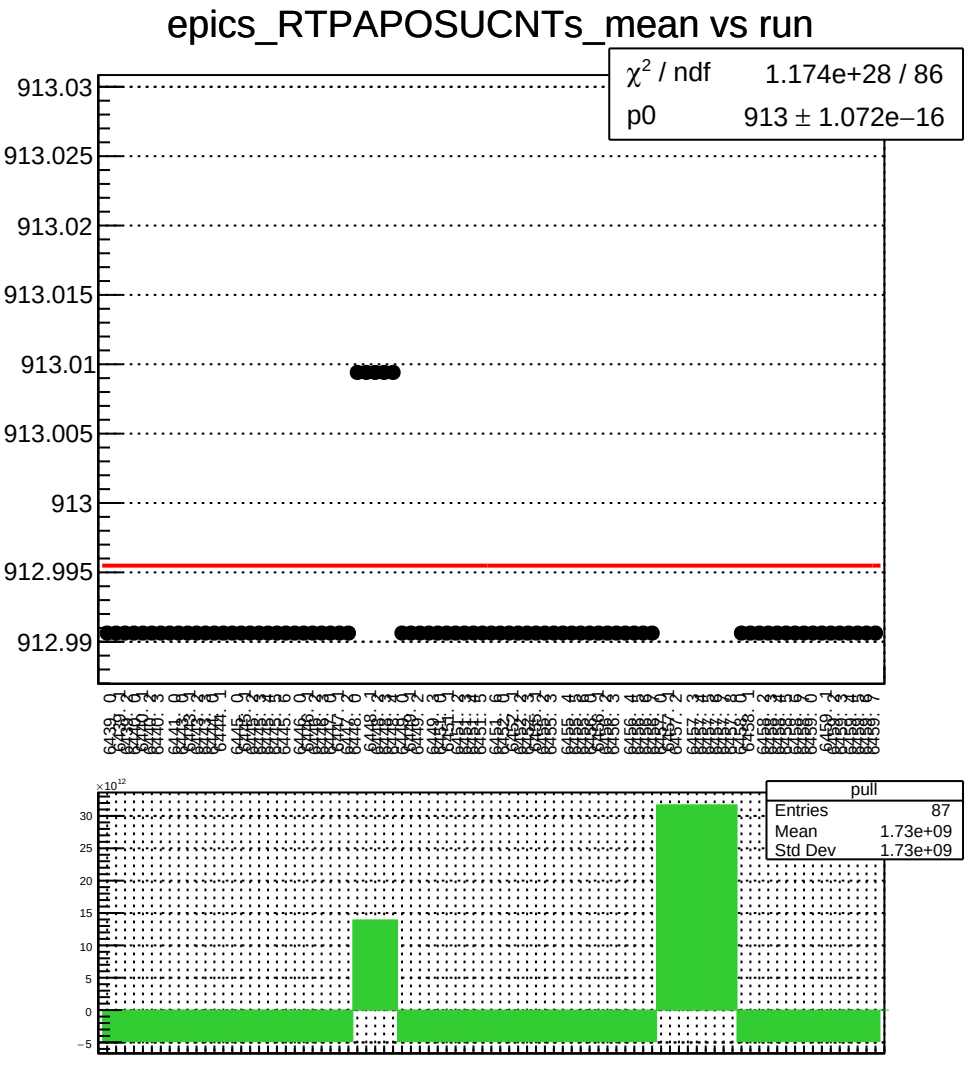

epics_HWienAngles_mean vs run
χ² / ndf 4.843e+05 / 86
p0 −29.64 ± 1.072e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 87
Mean 43.5
Std Dev 25.11
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

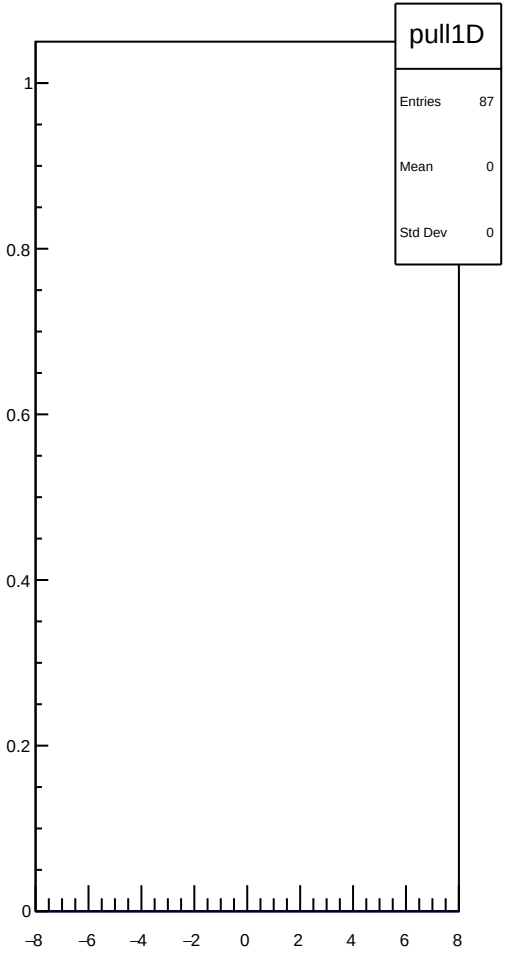

epics_psub_pl_poss_mean vs run
χ² / ndf 1.799e+07 / 86
p0 1468 ± 1.072e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 87
Mean 43.5
Std Dev 25.11
450
400
350
300
250
200
150
100
50
0
pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

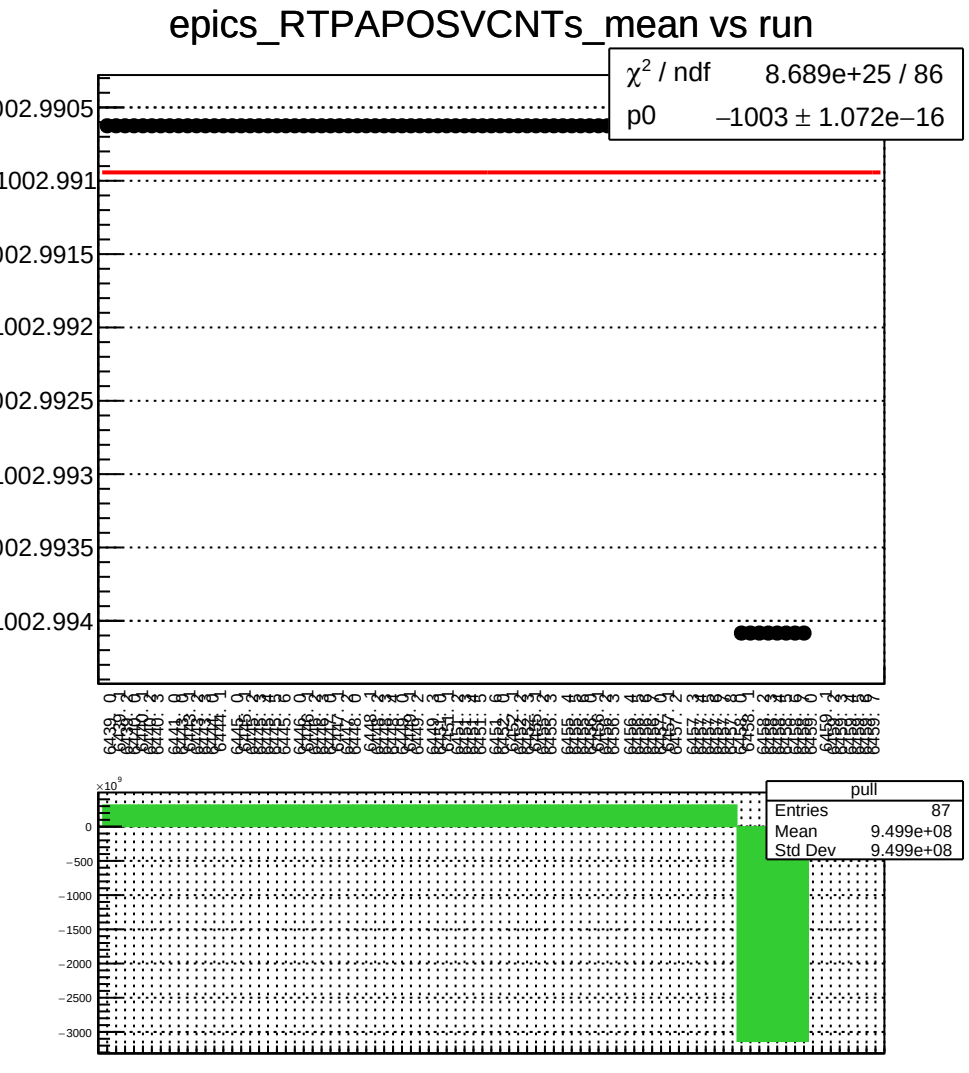

epics_Phi_FGs_mean vs run
χ² / ndf 8.609e+05 / 86
p0 89.96 ± 1.072e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 87
Mean 43.5
Std Dev 25.11
100
80
60
40
20
0
pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

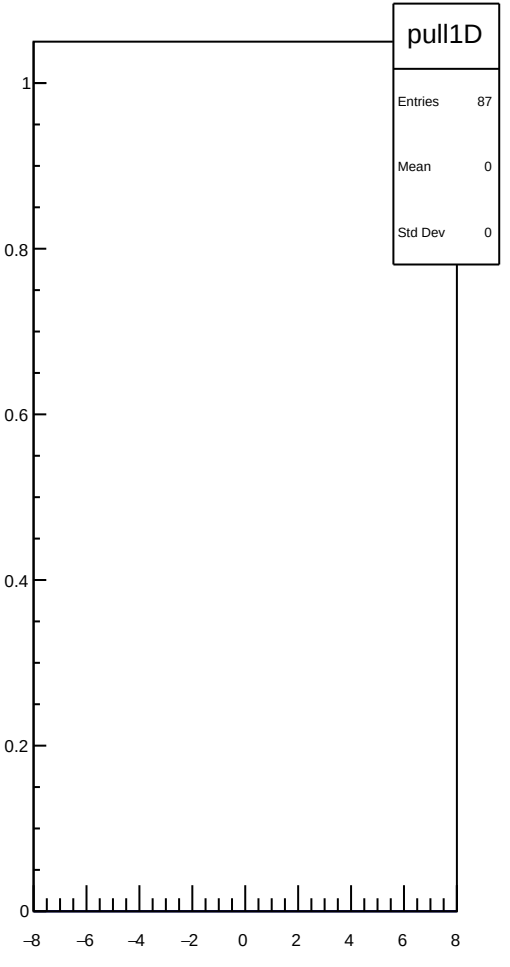

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 1.292e+04 / 63
p0 16.01± 1.25e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 64
Mean 32
Std Dev 18.47
0
−2
−4
−6
−8
−10
−12
−14
pull1D
Entries 64
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 5.381e+04 / 86
p0 17.01± 1.072e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 87
Mean 43.5
Std Dev 25.11
25
20
15
10
5
0
pull1D
Entries 87
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 1.174e+28 / 86
p0 913 ± 1.072e−16
913.03
913.025
913.02
913.015
913.01
913.005
913
912.995
912.99
pull
Entries 87
Mean 1.73e+09
Std Dev 1.73e+09
×10¹²
30
25
20
15
10
5
0
−5


pull1D
Entries 87
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 8.689e+25 / 86
p0 −1003 ± 1.072e−16
002.9905
1002.991
002.9915
1002.992
002.9925
1002.993
002.9935
1002.994
pull
Entries 87
Mean 9.499e+08
Std Dev 9.499e+08
×10⁹
0
−500
−1000
−1500
−2000
−2500
−3000


pull1D
Entries 87
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8