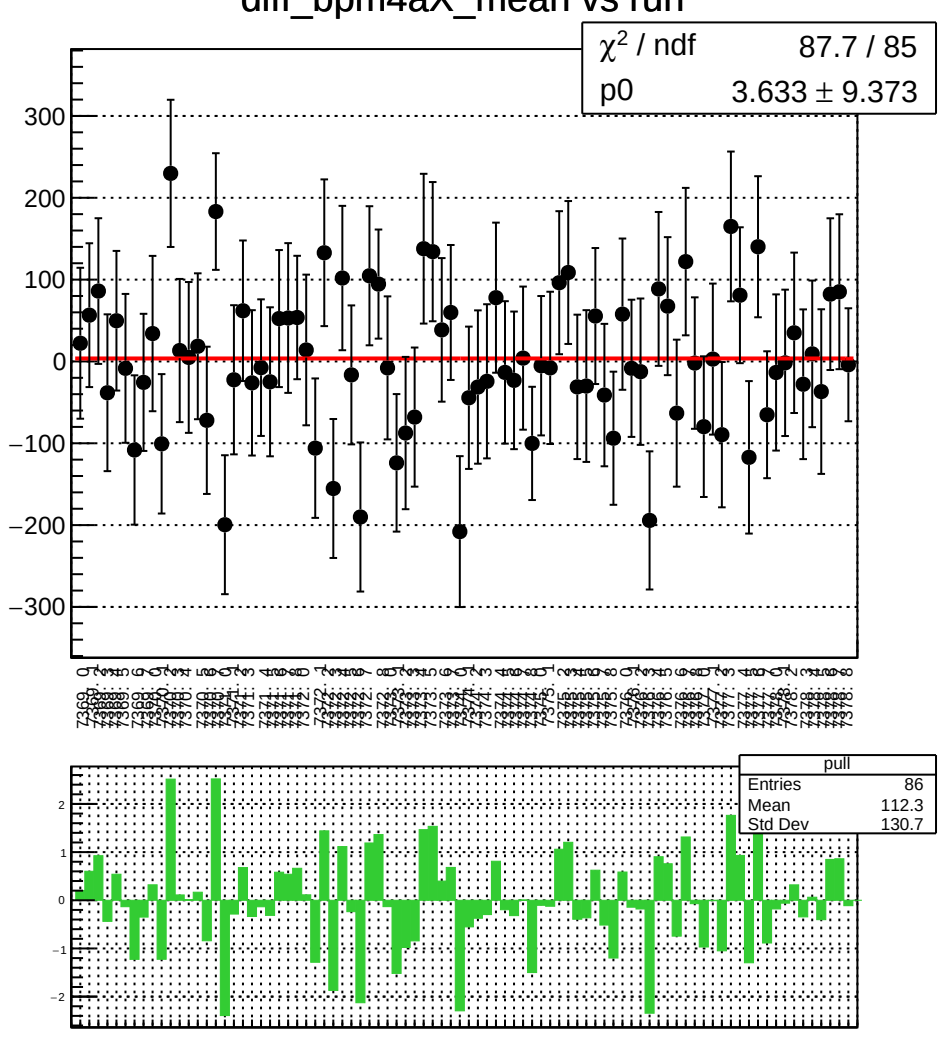
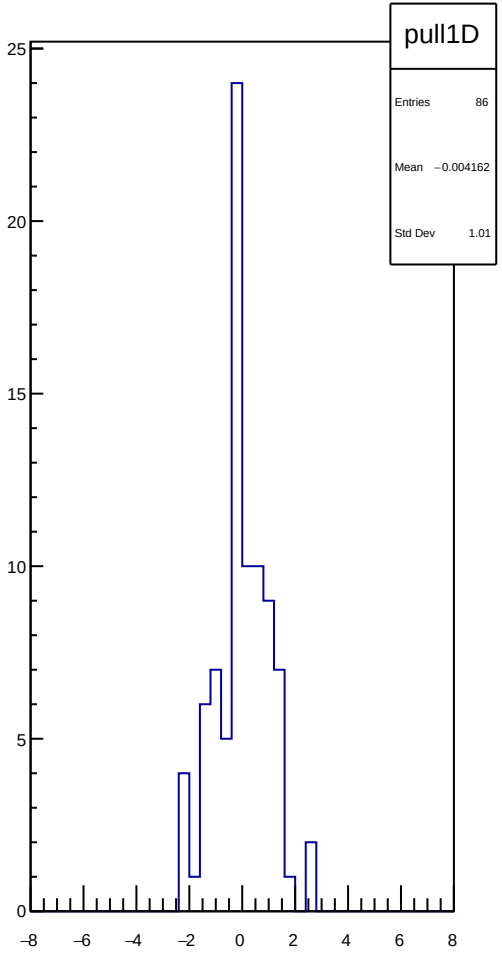
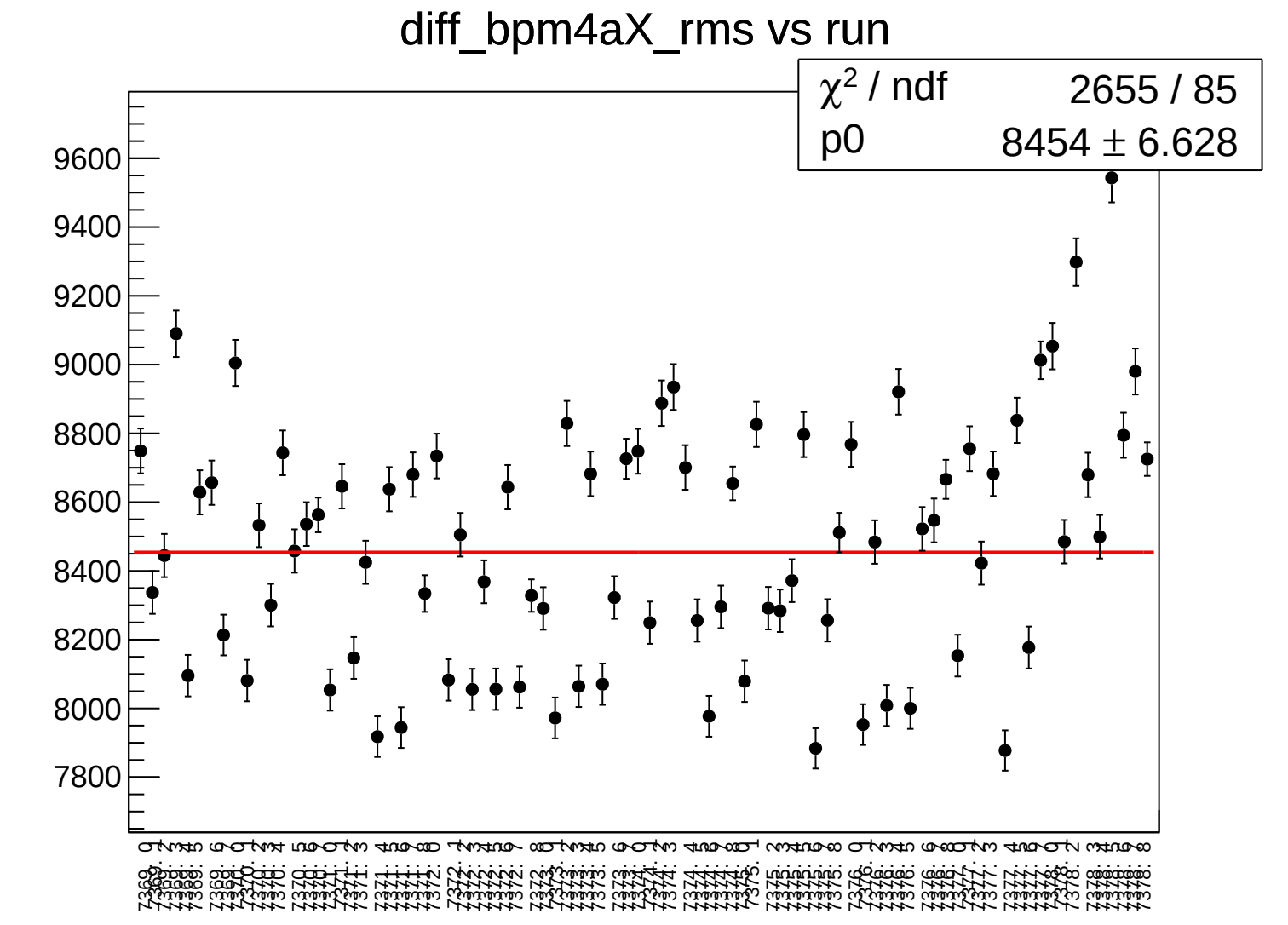
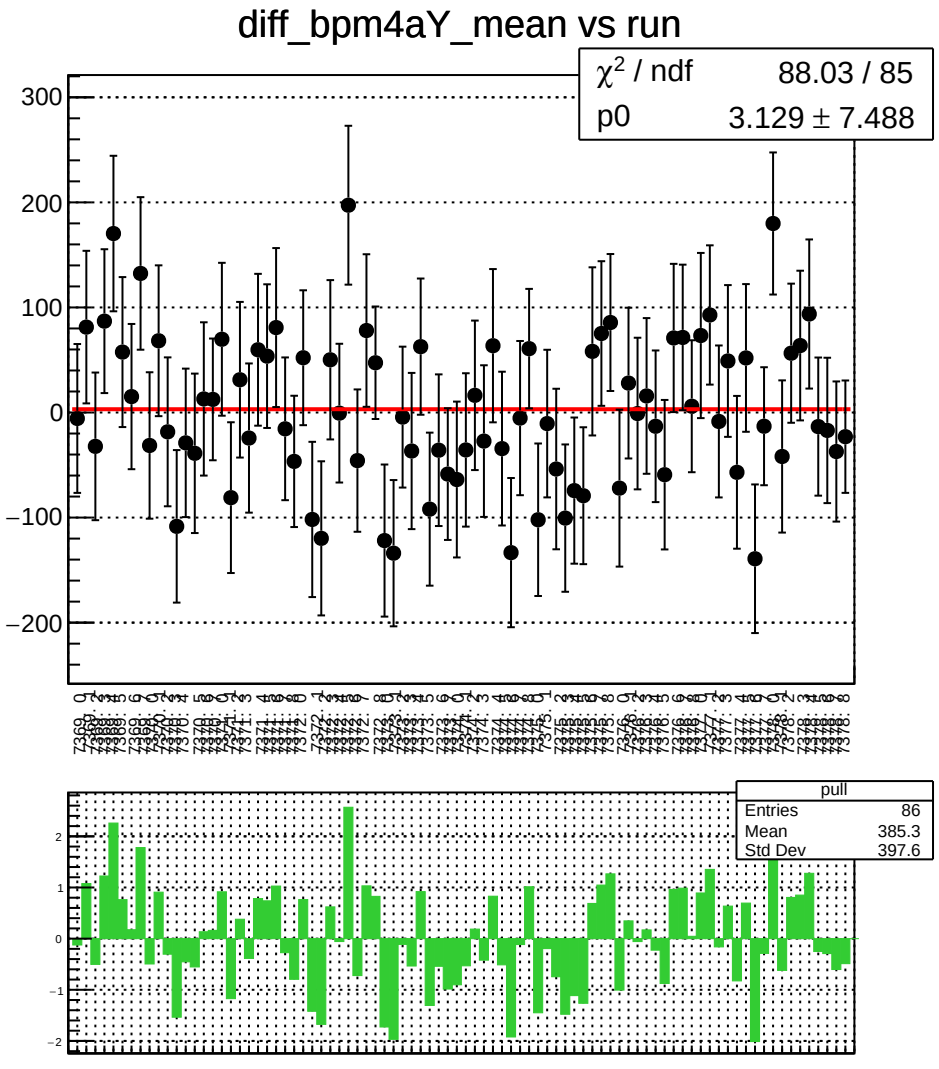
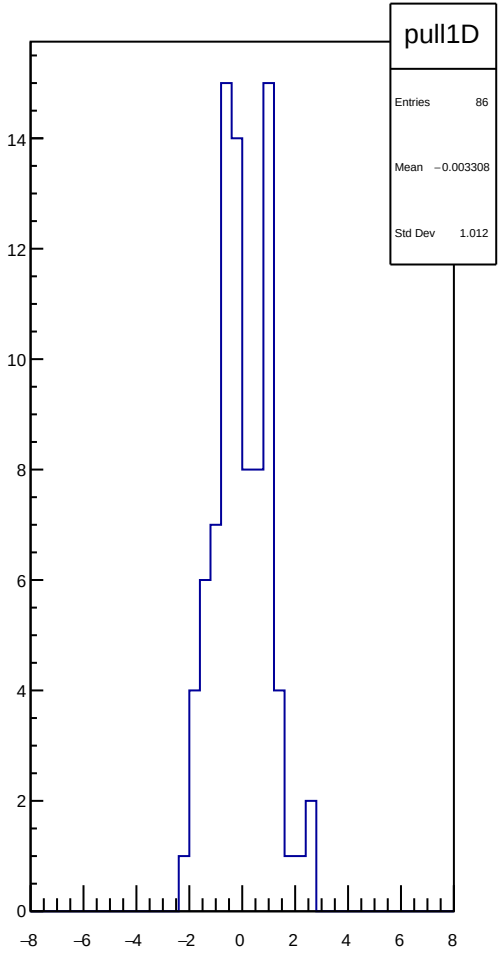
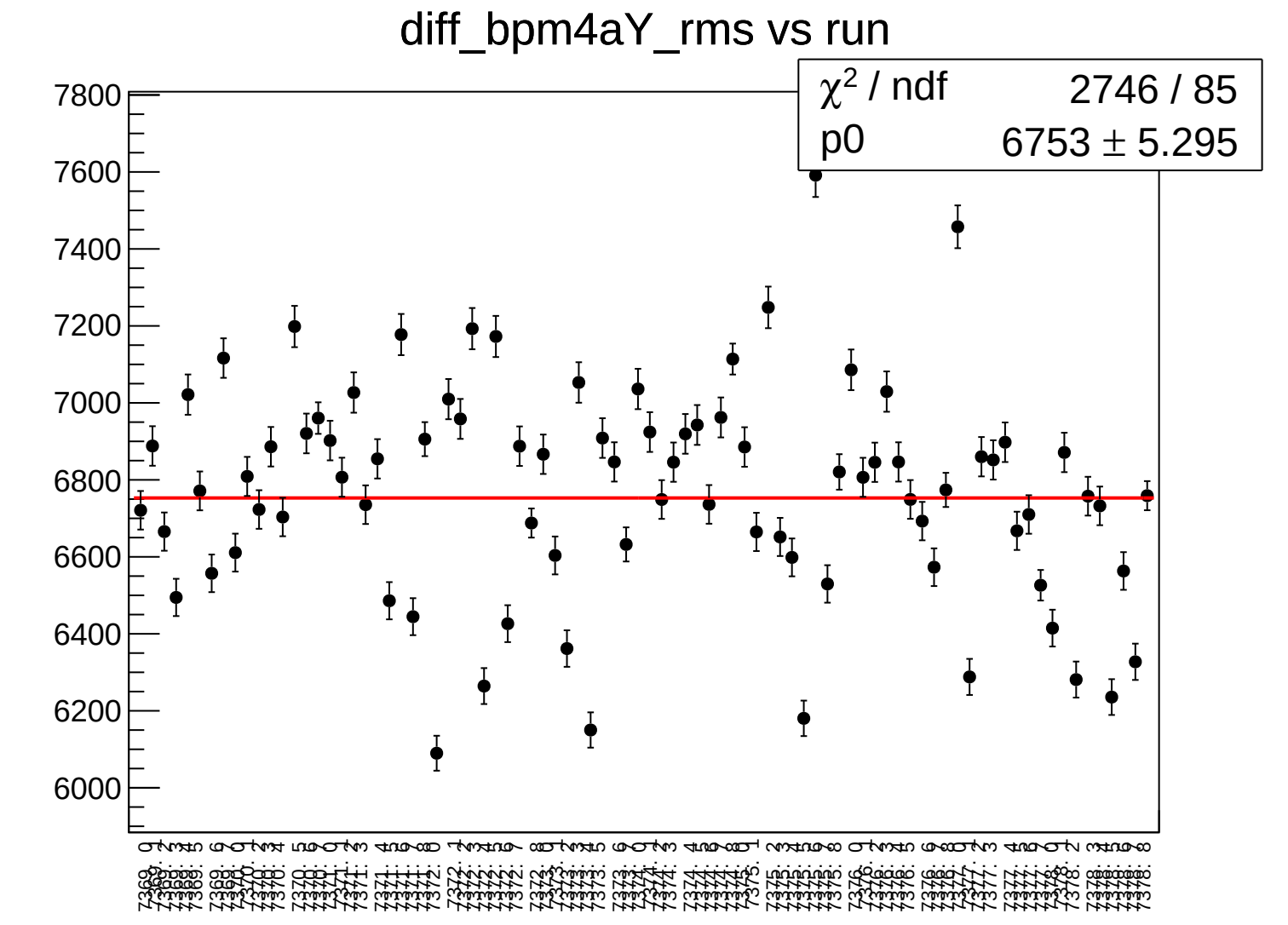

diff_bpm4aX_mean vs run
χ² / ndf 87.7 / 85
p0 3.633 ± 9.373
pull
Entries 86
Mean 112.3
Std Dev 130.7

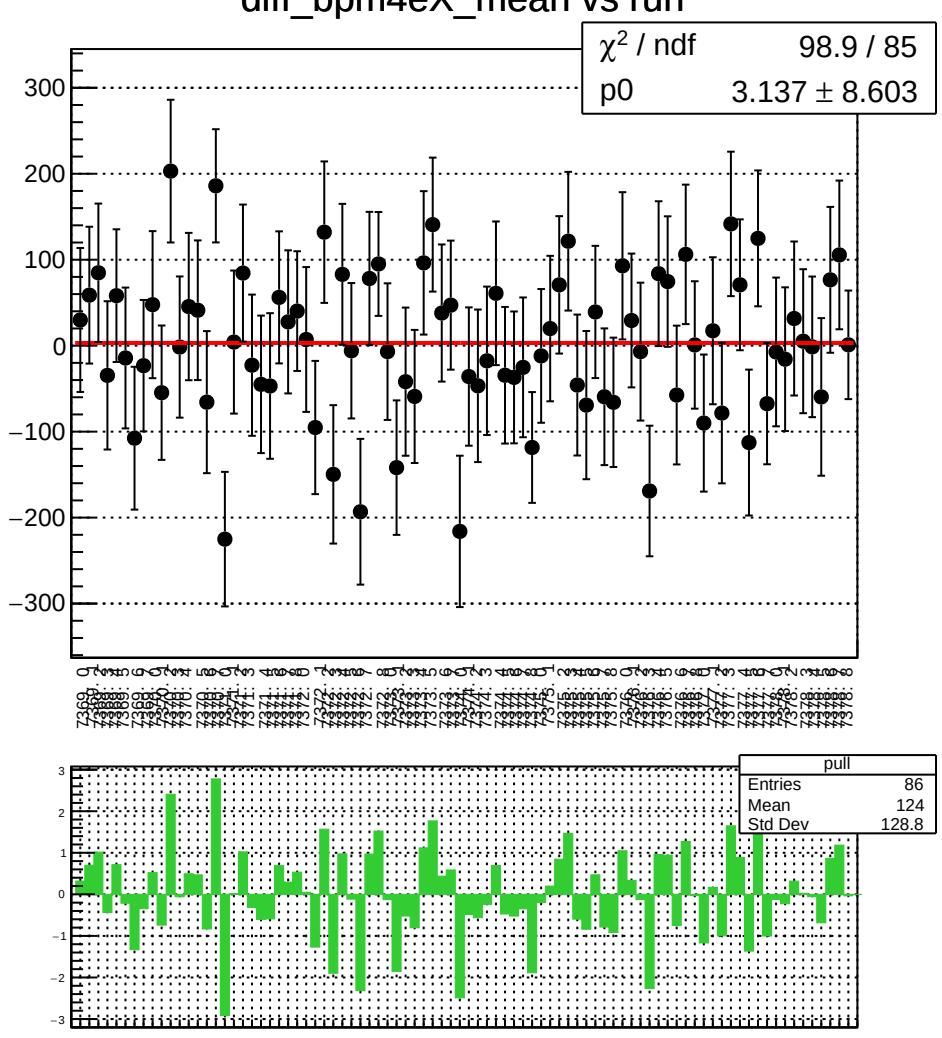

pull1D
Entries 86
Mean −0.004162
Std Dev 1.01

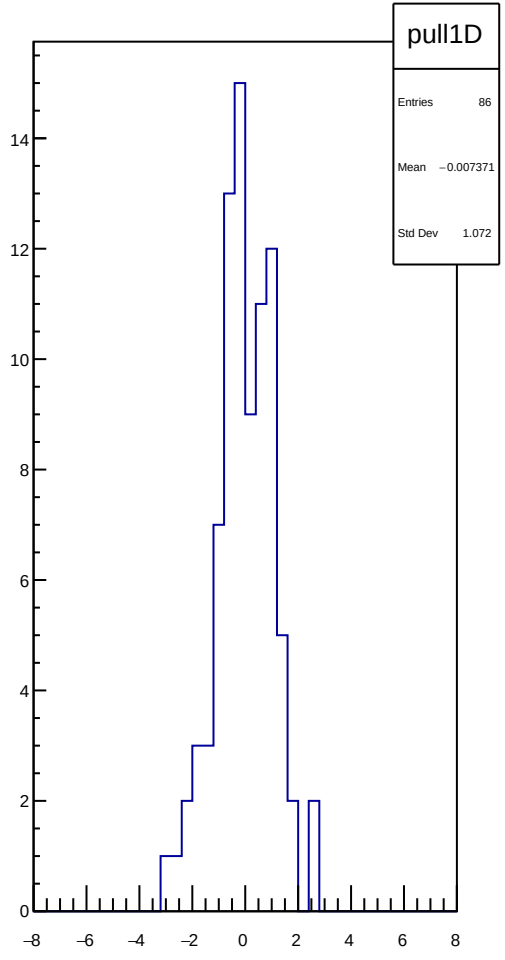

diff_bpm4aX_rms vs run
χ^2 / ndf 2655 / 85
p0 8454 ± 6.628
9600
9400
9200
9000
8800
8600
8400
8200
8000
7800

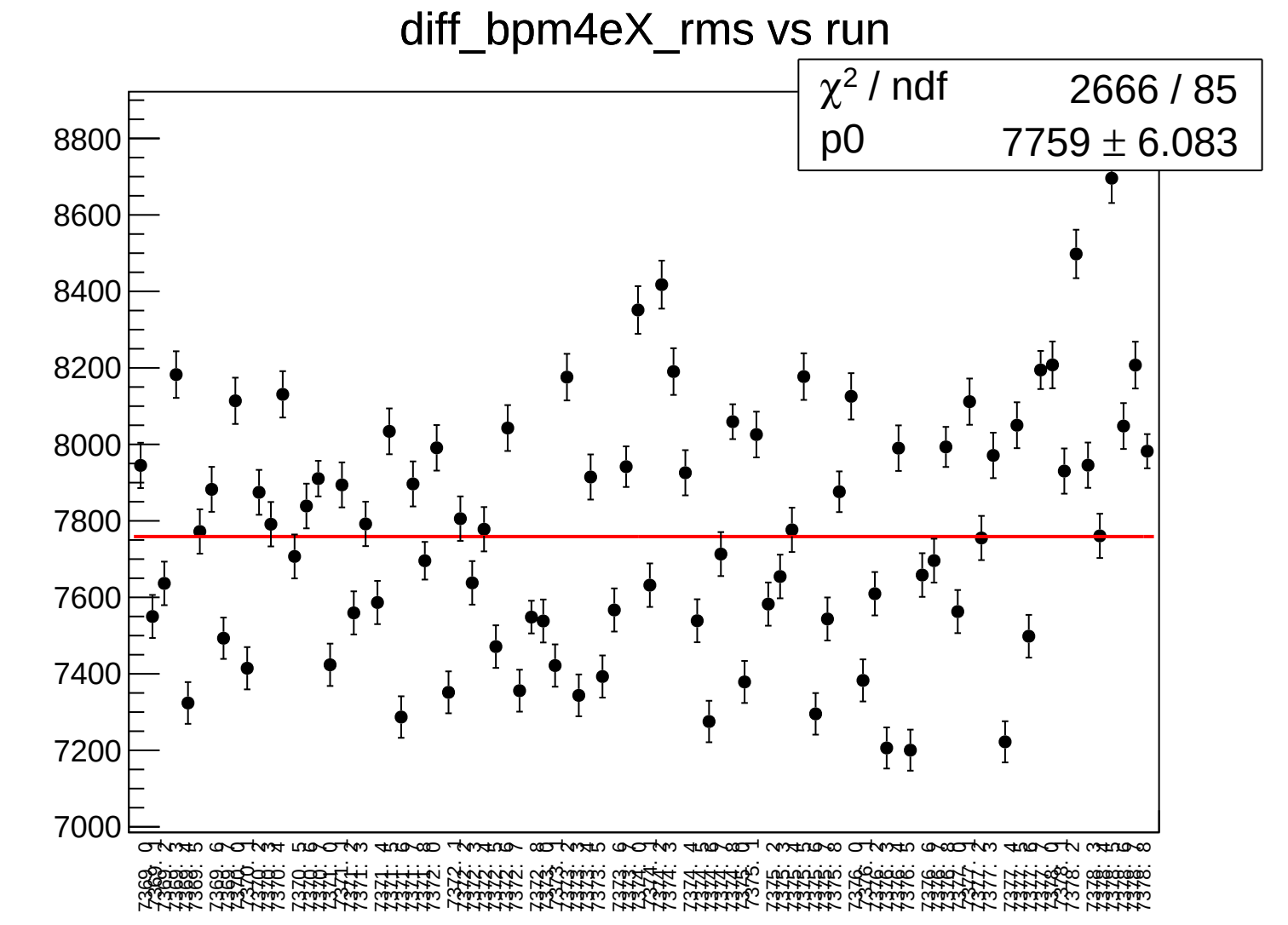

diff_bpm4aY_mean vs run
χ² / ndf 88.03 / 85
p0 3.129 ± 7.488
pull
Entries 86
Mean 385.3
Std Dev 397.6

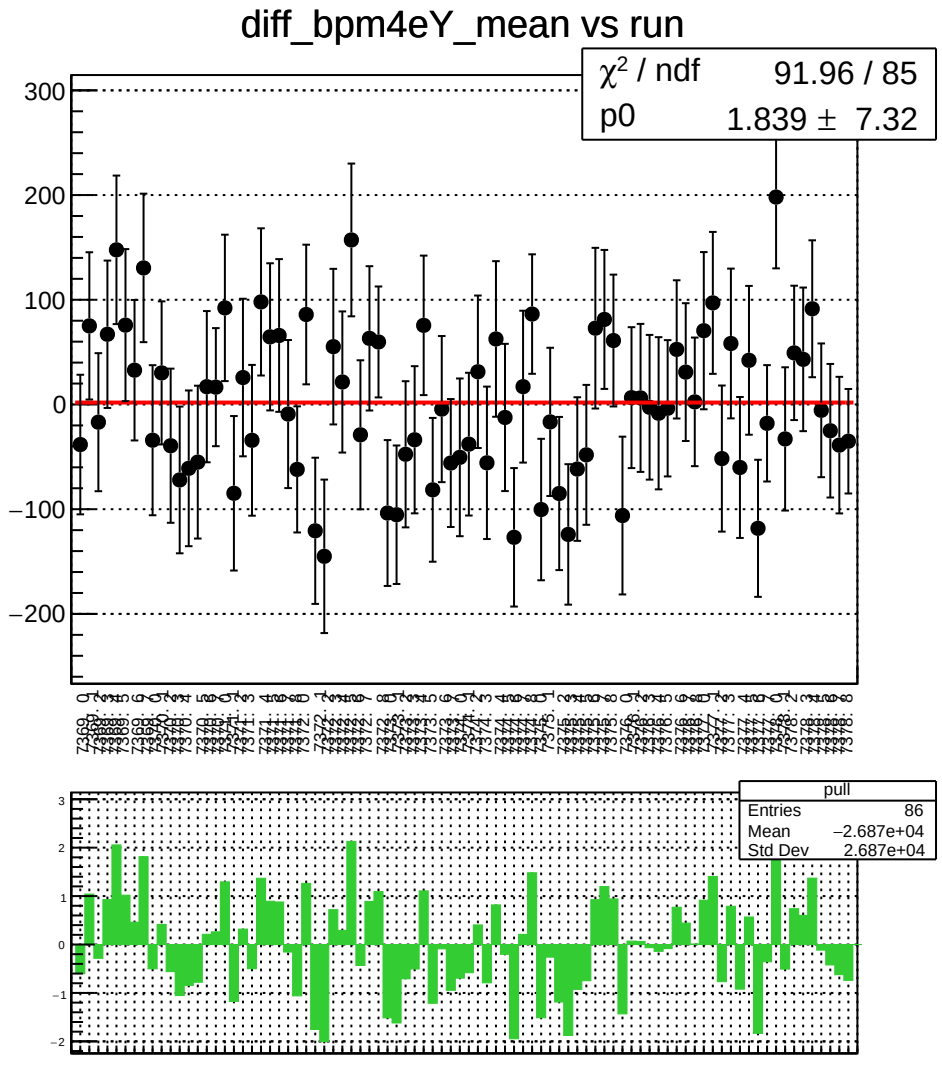

pull1D
Entries 86
Mean −0.003308
Std Dev 1.012

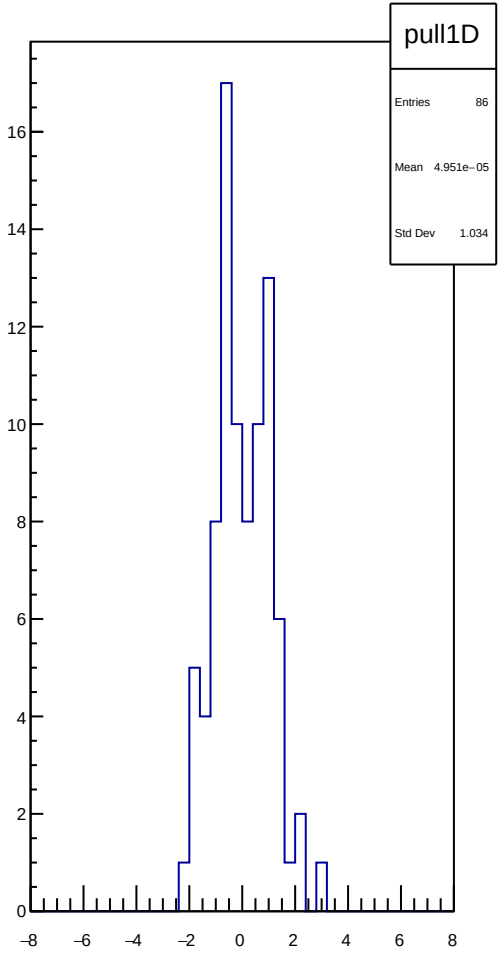

diff_bpm4aY_rms vs run
χ² / ndf 2746 / 85
p0 6753 ± 5.295
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

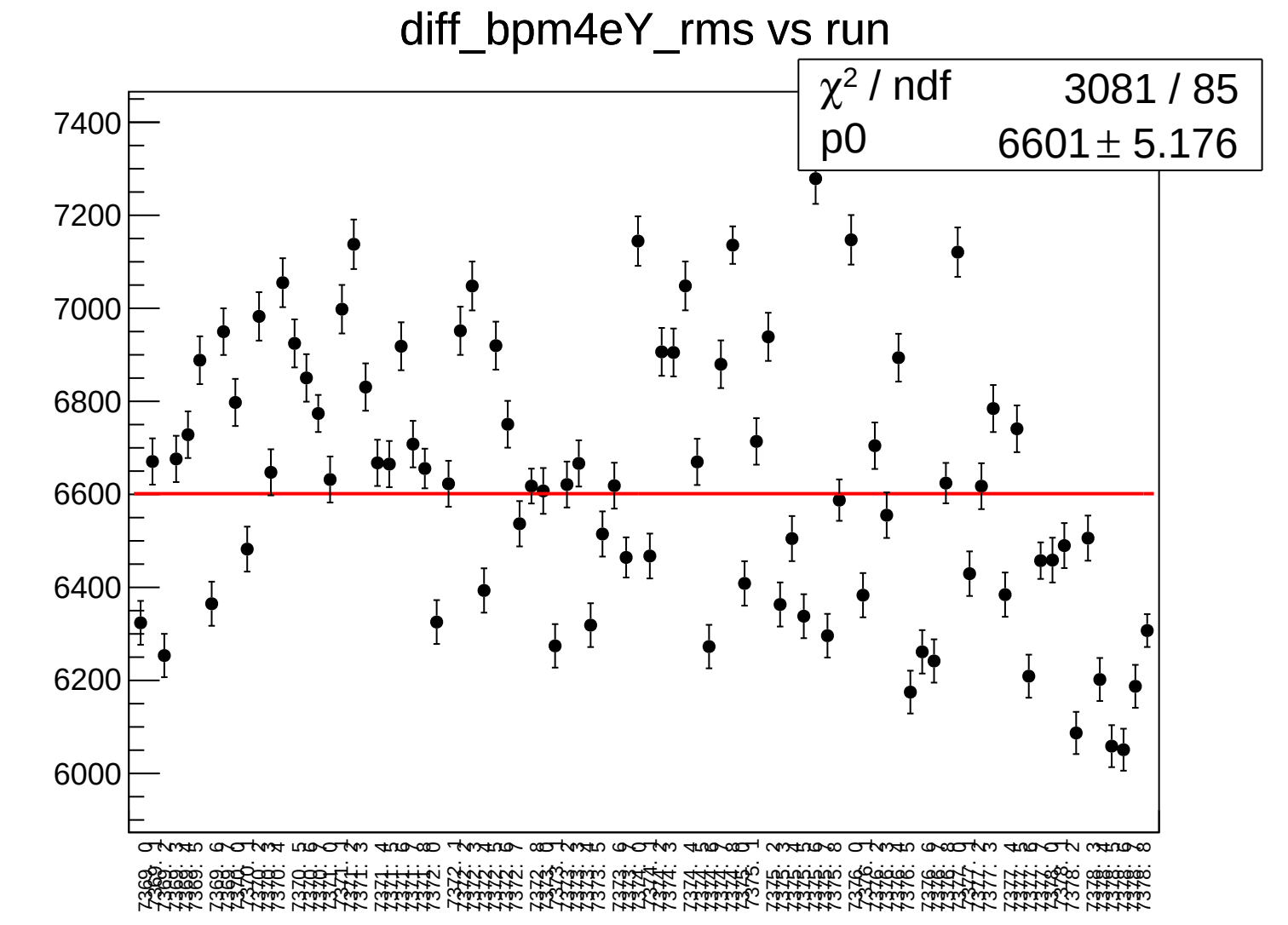

diff_bpm4eX_mean vs run
χ^2 / ndf 98.9 / 85
p0 3.137 ± 8.603
pull
Entries 86
Mean 124
Std Dev 128.8

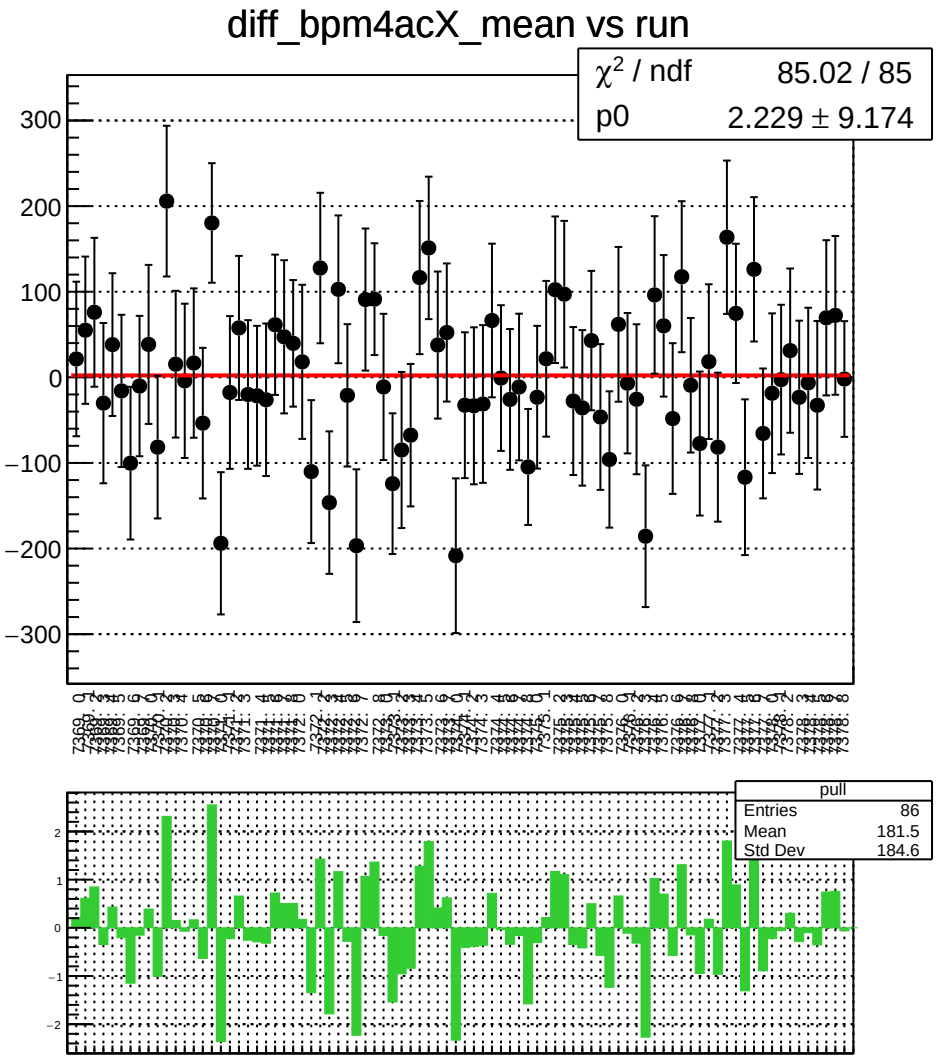

pull1D
Entries 86
Mean −0.007371
Std Dev 1.072

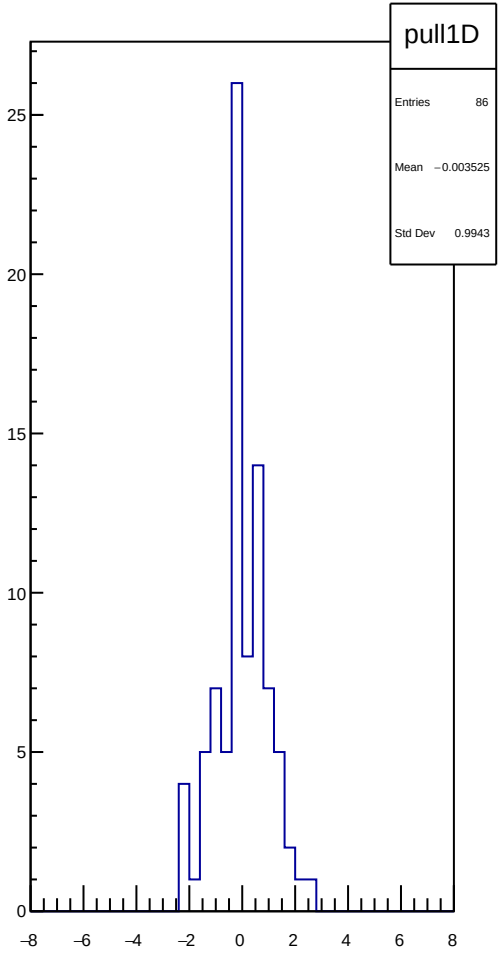

diff_bpm4eX_rms vs run
χ² / ndf 2666 / 85
p0 7759 ± 6.083
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000

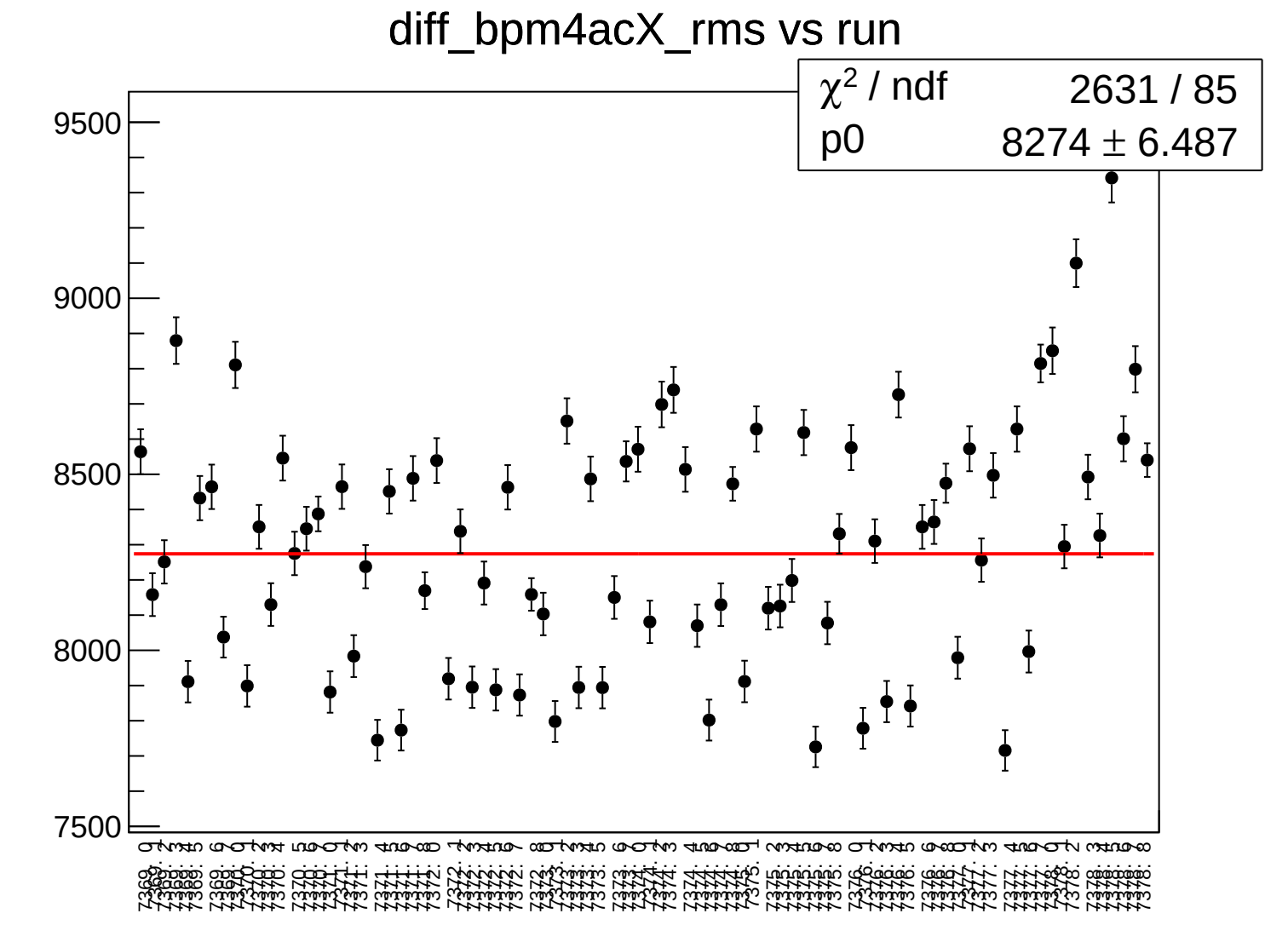

diff_bpm4eY_mean vs run
χ² / ndf 91.96 / 85
p0 1.839 ± 7.32
pull
Entries 86
Mean −2.687e+04
Std Dev 2.687e+04

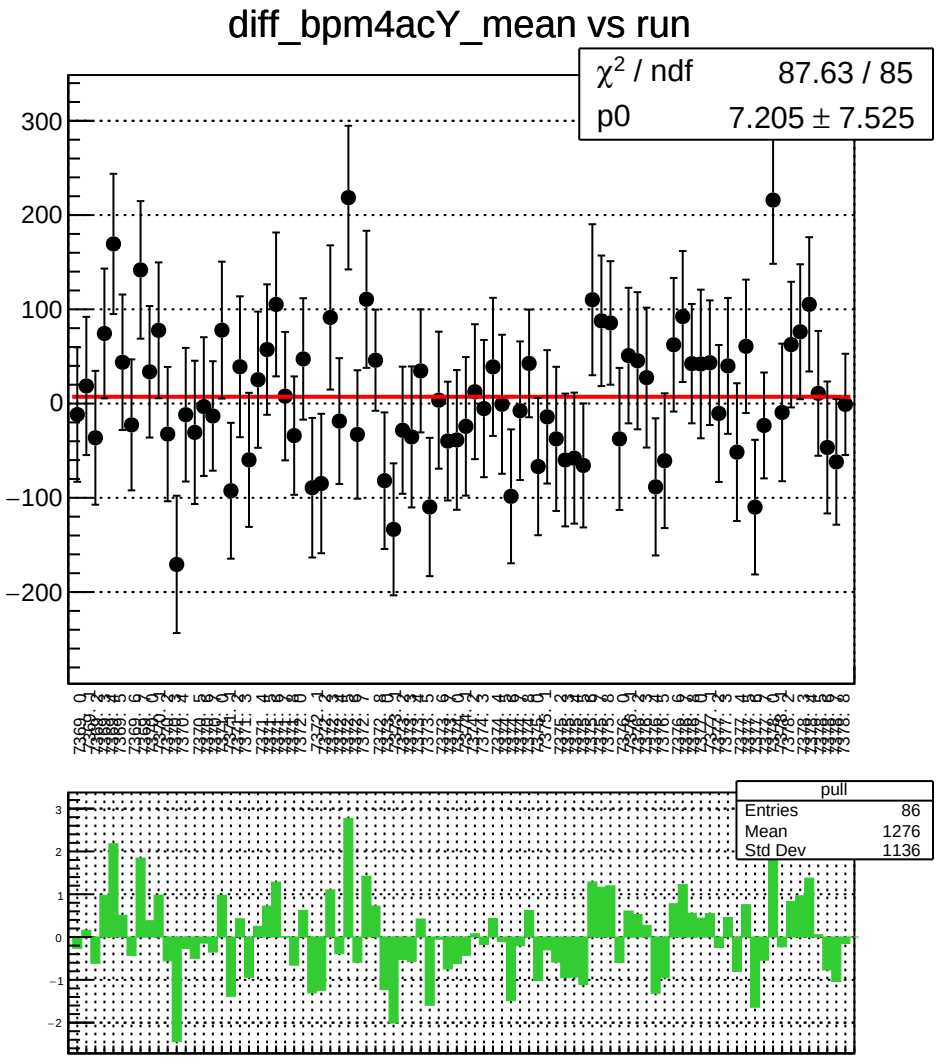

pull1D
Entries 86
Mean 4.951e−05
Std Dev 1.034

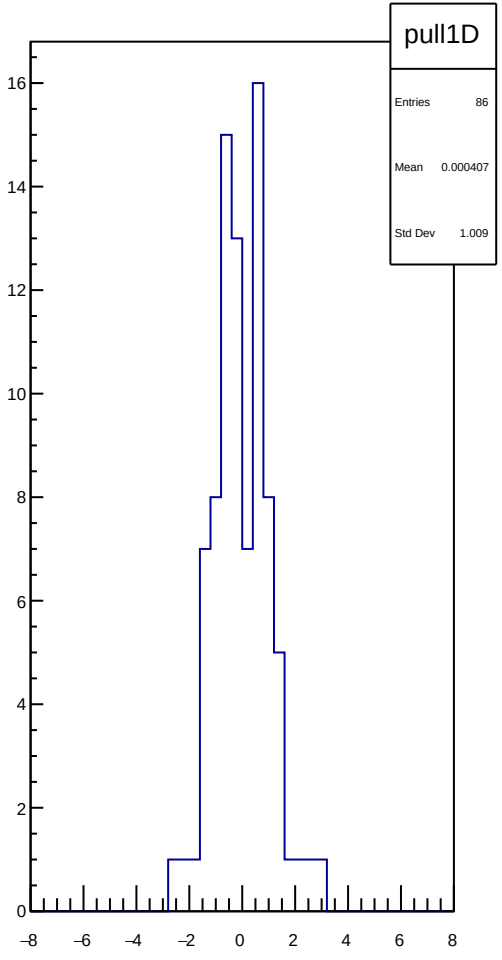

diff_bpm4eY_rms vs run
χ² / ndf 3081 / 85
p0 6601 ± 5.176
7400
7200
7000
6800
6600
6400
6200
6000

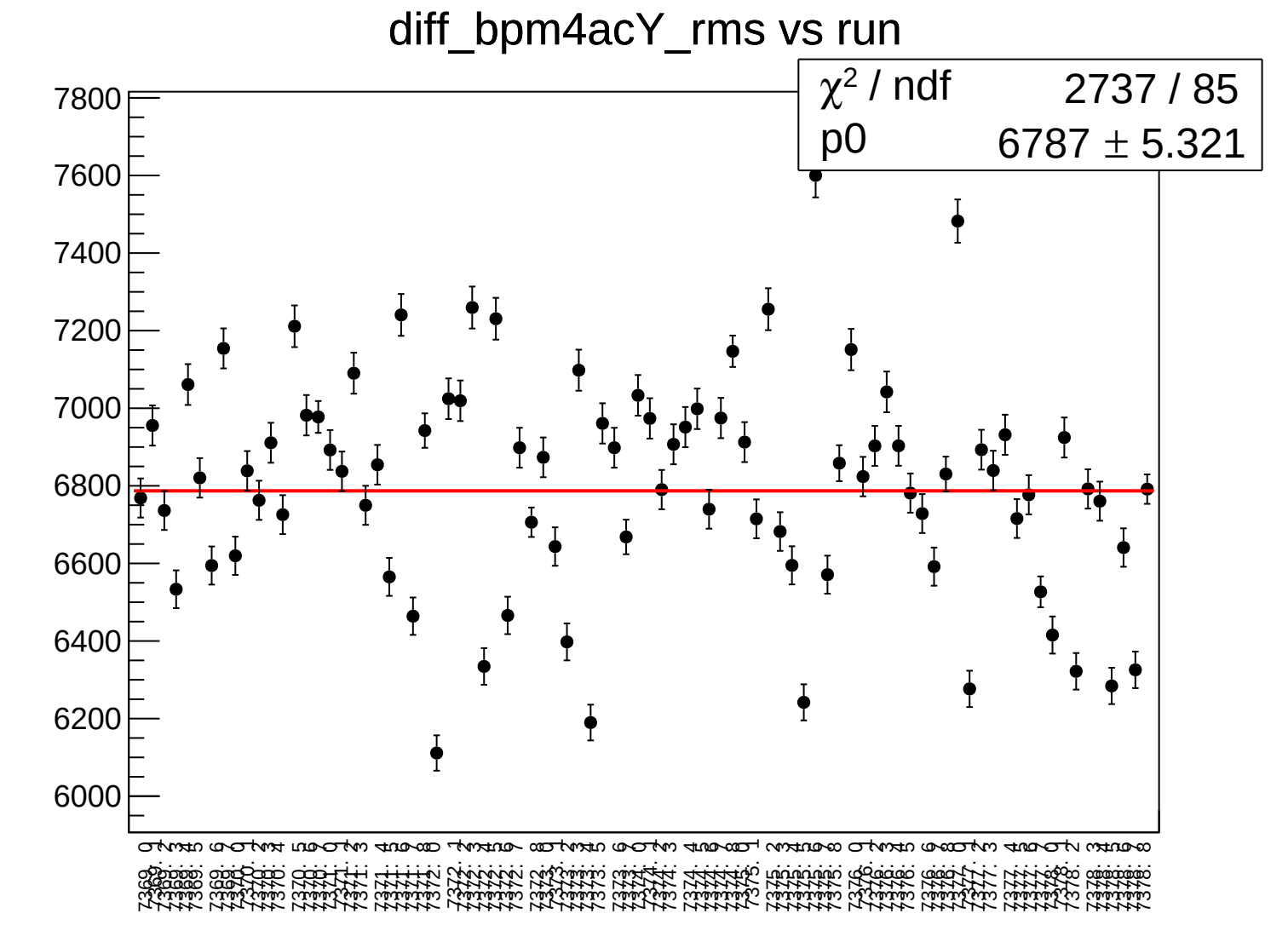

diff_bpm4acX_mean vs run
χ^2 / ndf 85.02 / 85
p0 2.229 ± 9.174
pull
Entries 86
Mean 181.5
Std Dev 184.6

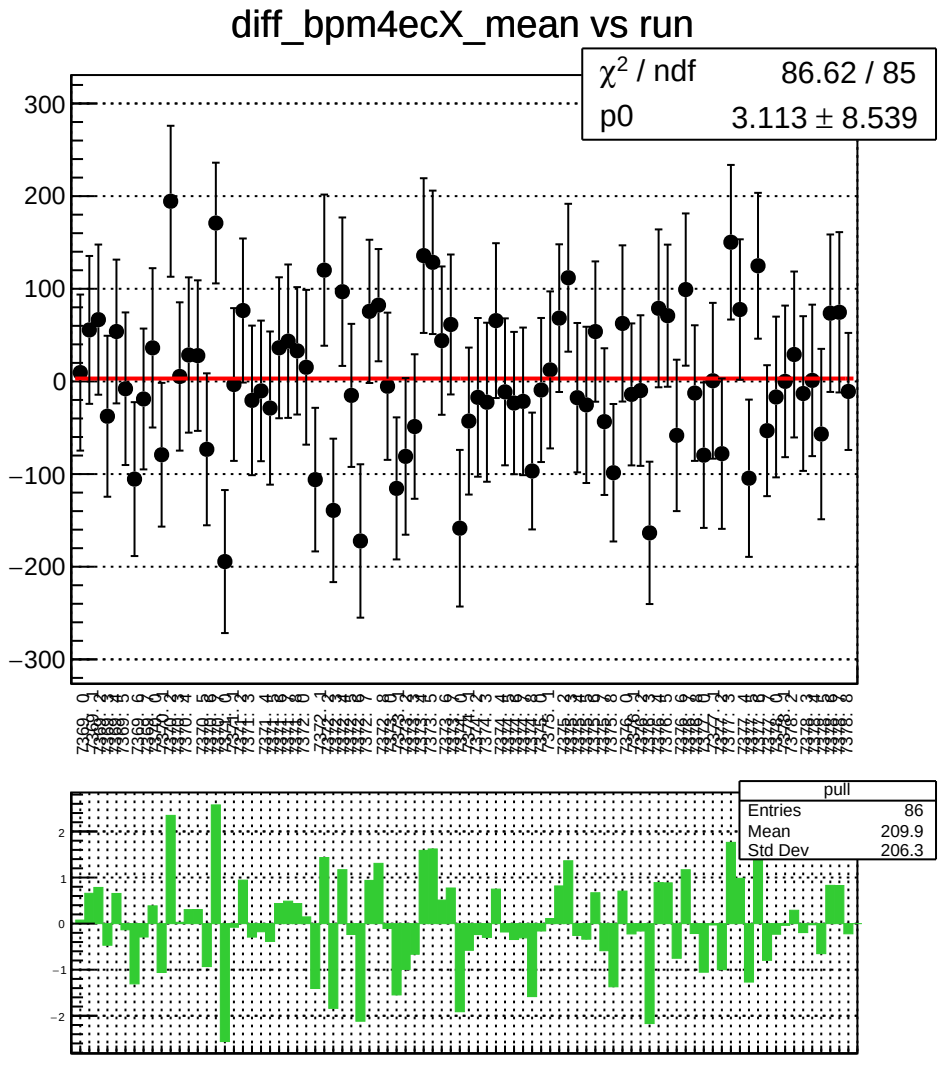

pull1D
Entries 86
Mean −0.003525
Std Dev 0.9943

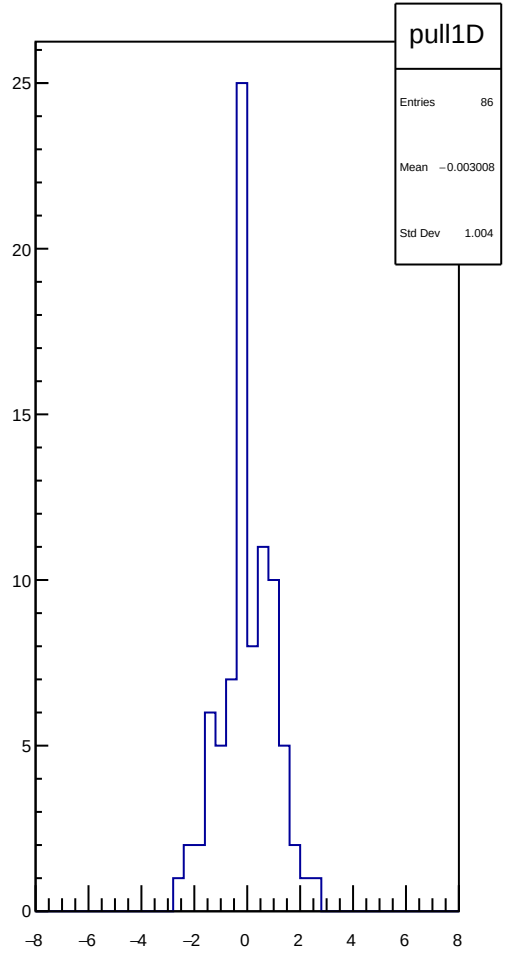

diff_bpm4acX_rms vs run
χ² / ndf 2631 / 85
p0 8274 ± 6.487
9500
9000
8500
8000
7500

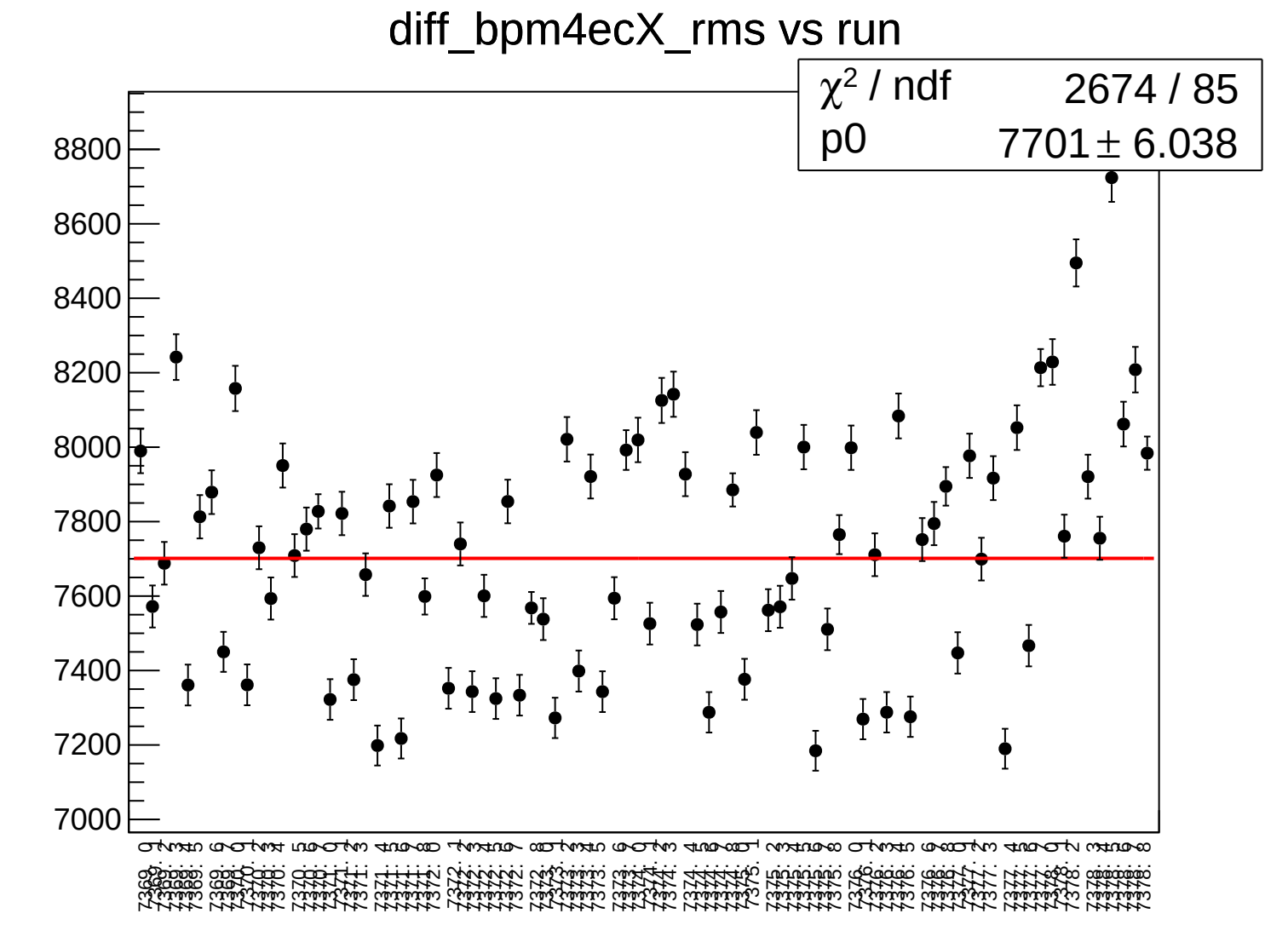

diff_bpm4acY_mean vs run
χ^2 / ndf 87.63 / 85
p0 7.205 ± 7.525
300
200
100
0
−100
−200
pull
Entries 86
Mean 1276
Std Dev 1136
3
2
1
0
−1
−2

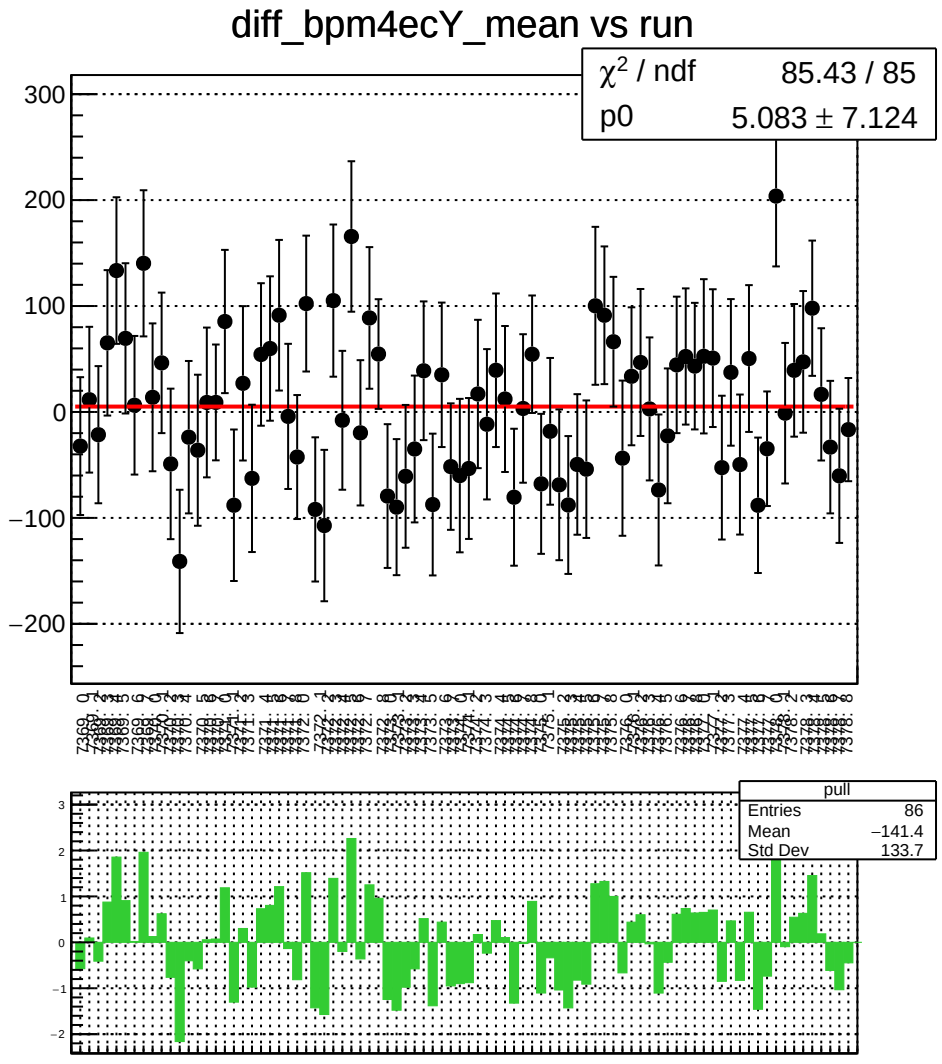

pull1D
Entries 86
Mean 0.000407
Std Dev 1.009
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

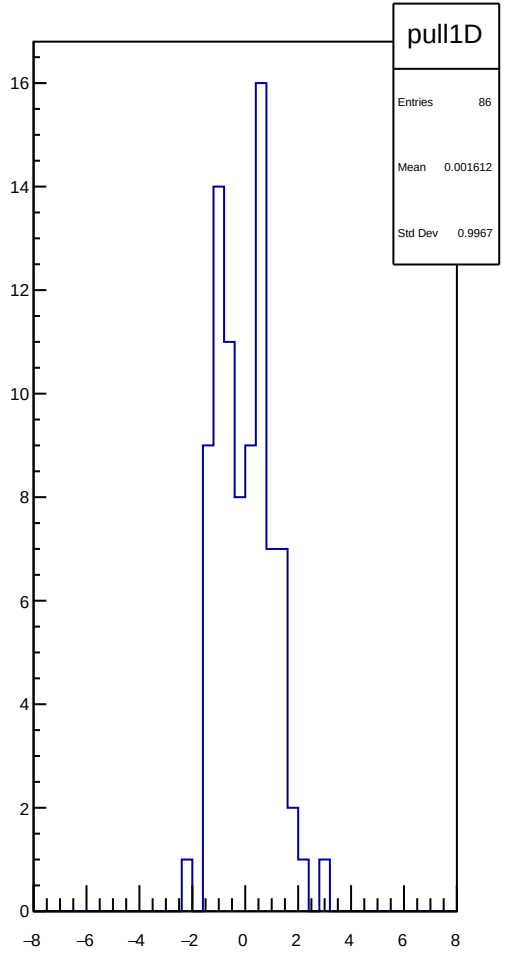

diff_bpm4acY_rms vs run
χ^2 / ndf 2737 / 85
p0 6787 ± 5.321
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

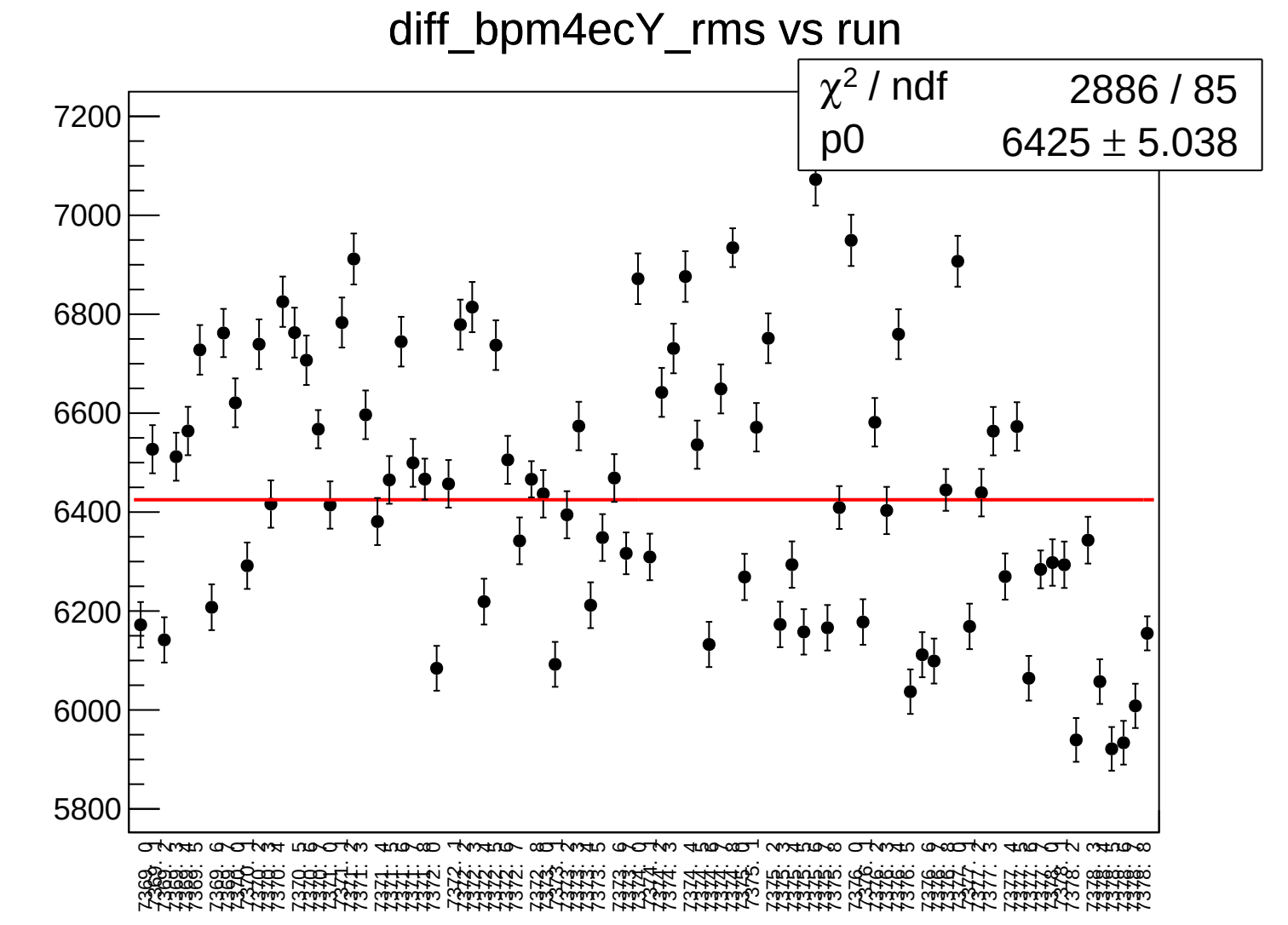

diff_bpm4ecX_mean vs run
χ^2 / ndf 86.62 / 85
p0 3.113 ± 8.539
300
200
100
0
−100
−200
−300
pull
Entries 86
Mean 209.9
Std Dev 206.3
2
1
0
−1
−2

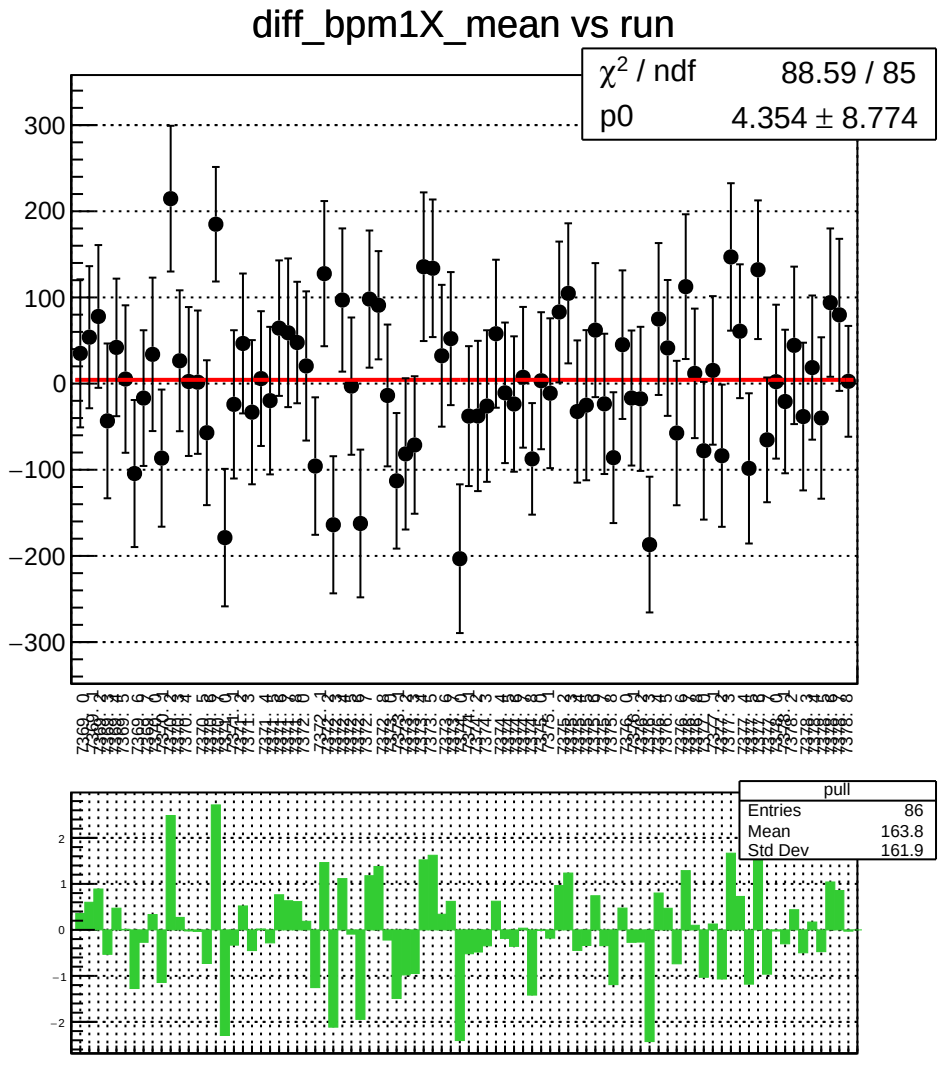

pull1D
Entries 86
Mean −0.003008
Std Dev 1.004
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

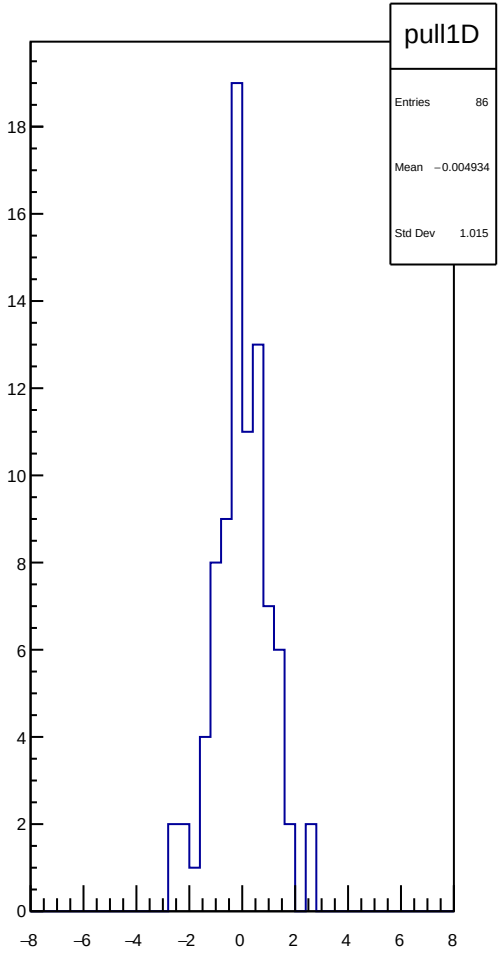

diff_bpm4ecX_rms vs run
χ² / ndf 2674 / 85
p0 7701 ± 6.038
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000

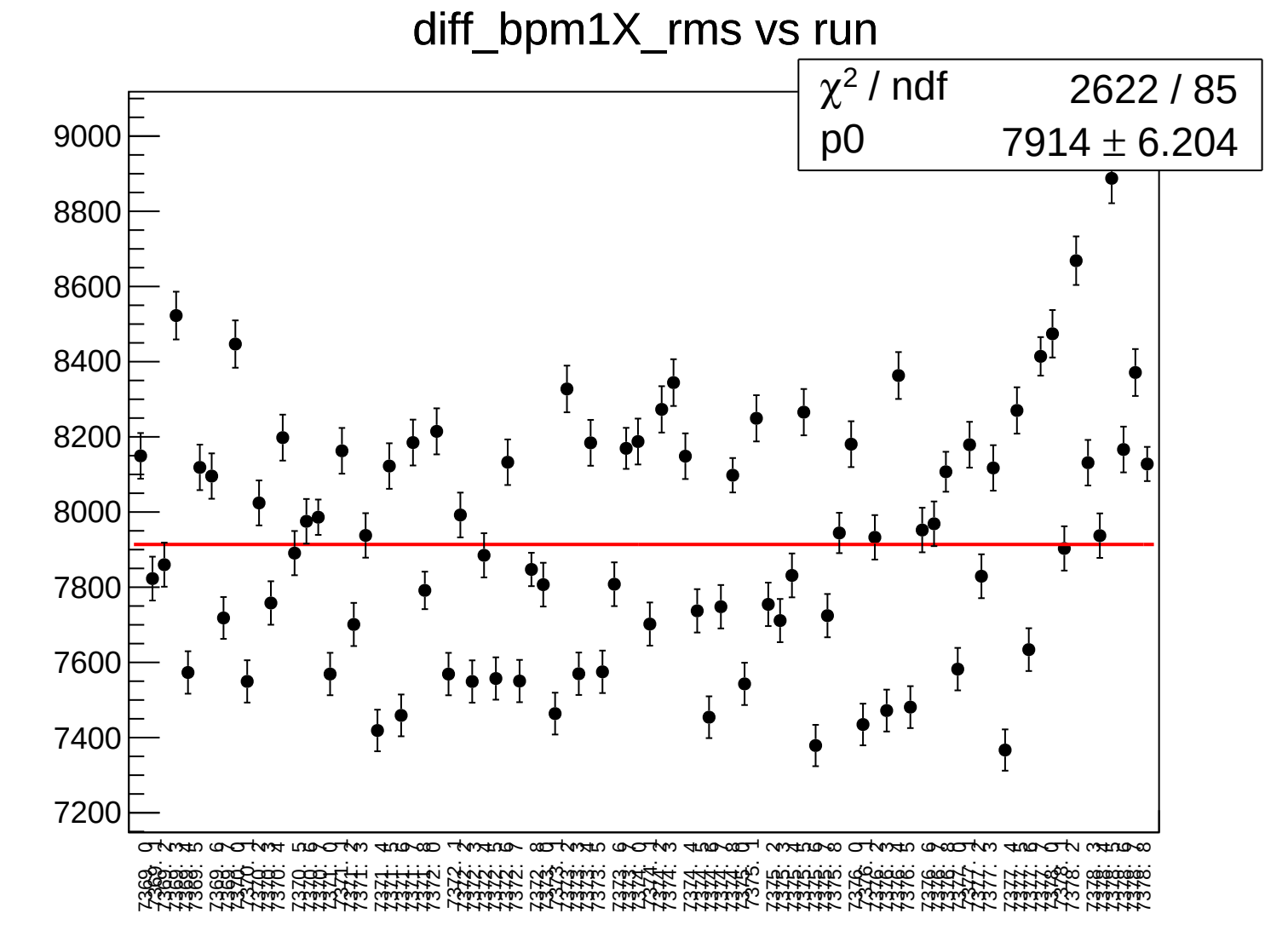

diff_bpm4ecY_mean vs run
χ² / ndf 85.43 / 85
p0 5.083 ± 7.124
300
200
100
0
−100
−200
pull
Entries 86
Mean −141.4
Std Dev 133.7
3
2
1
0
−1
−2

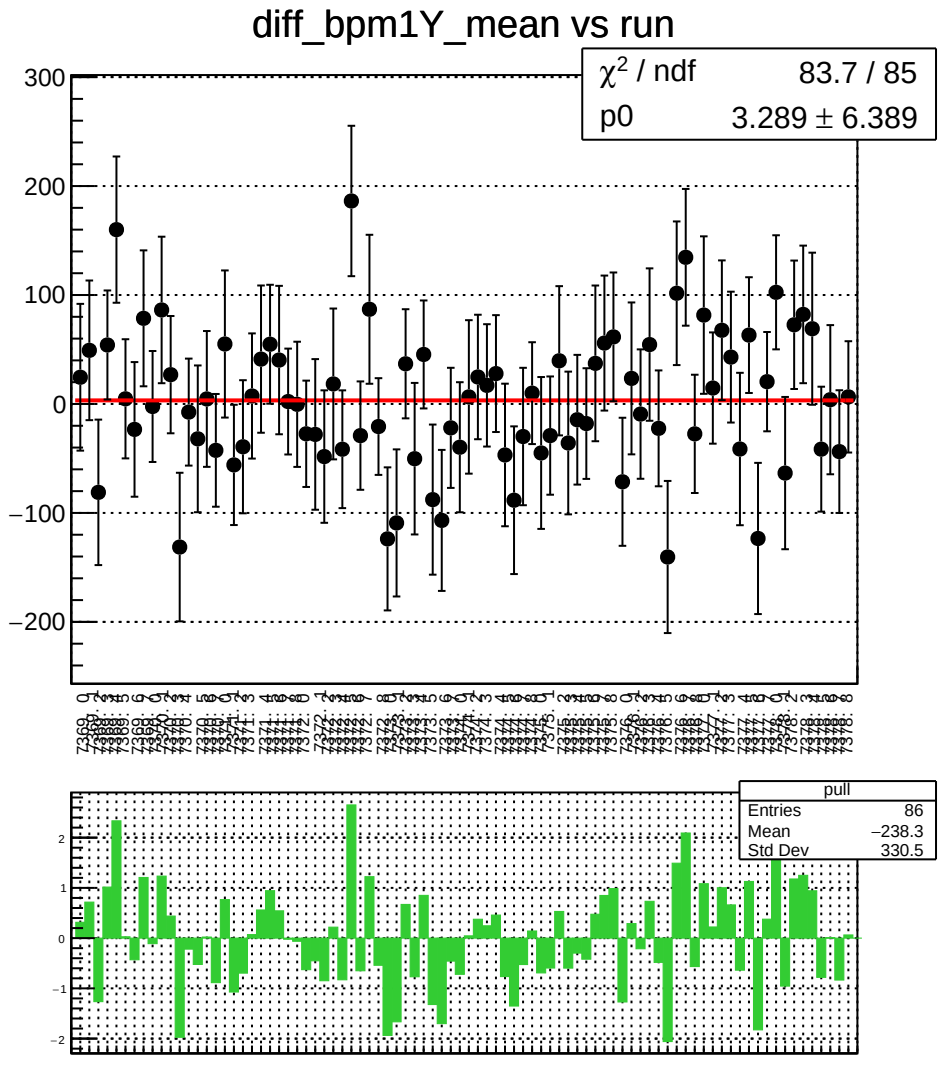

pull1D
Entries 86
Mean 0.001612
Std Dev 0.9967
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

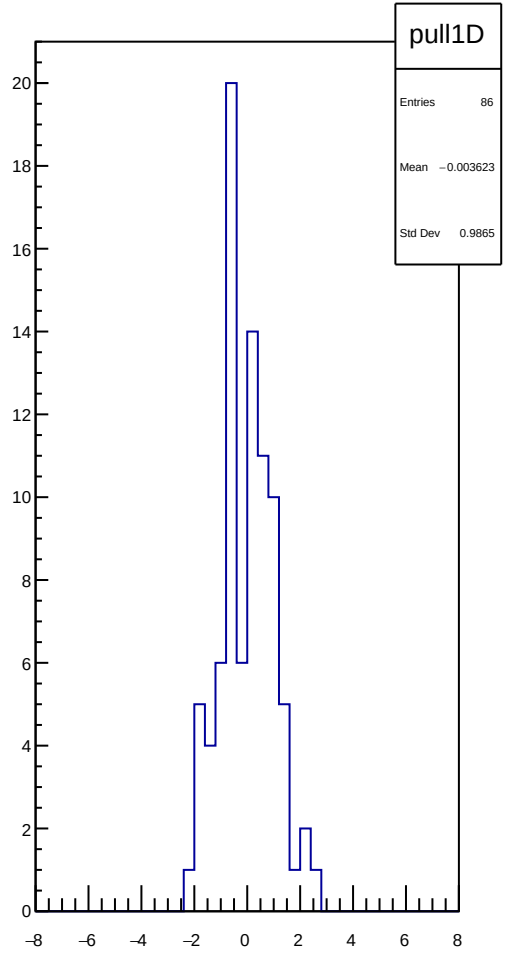

diff_bpm4ecY_rms vs run
χ² / ndf 2886 / 85
p0 6425 ± 5.038
7200
7000
6800
6600
6400
6200
6000
5800

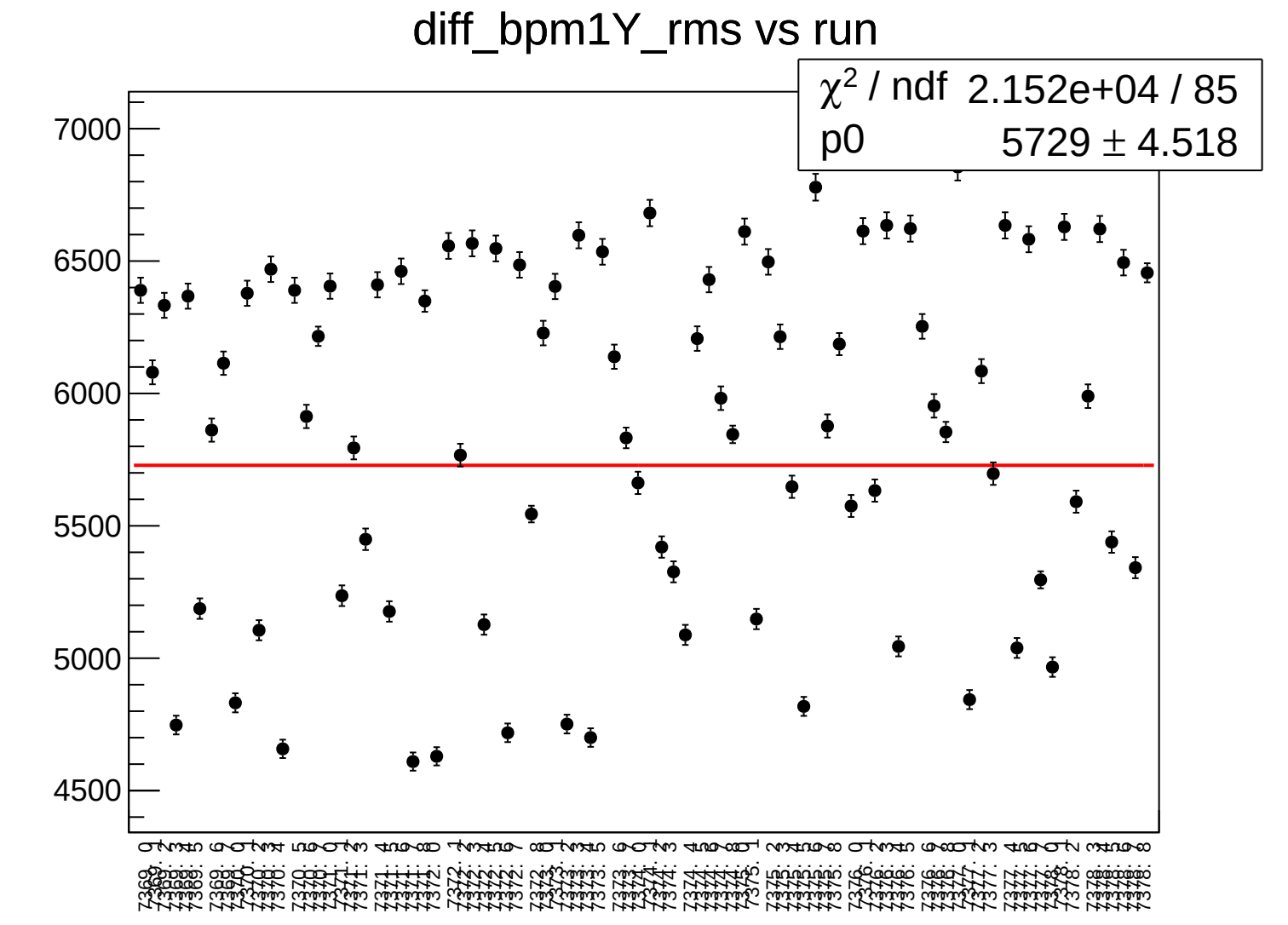

diff_bpm1X_mean vs run
χ² / ndf 88.59 / 85
p0 4.354 ± 8.774
pull
Entries 86
Mean 163.8
Std Dev 161.9

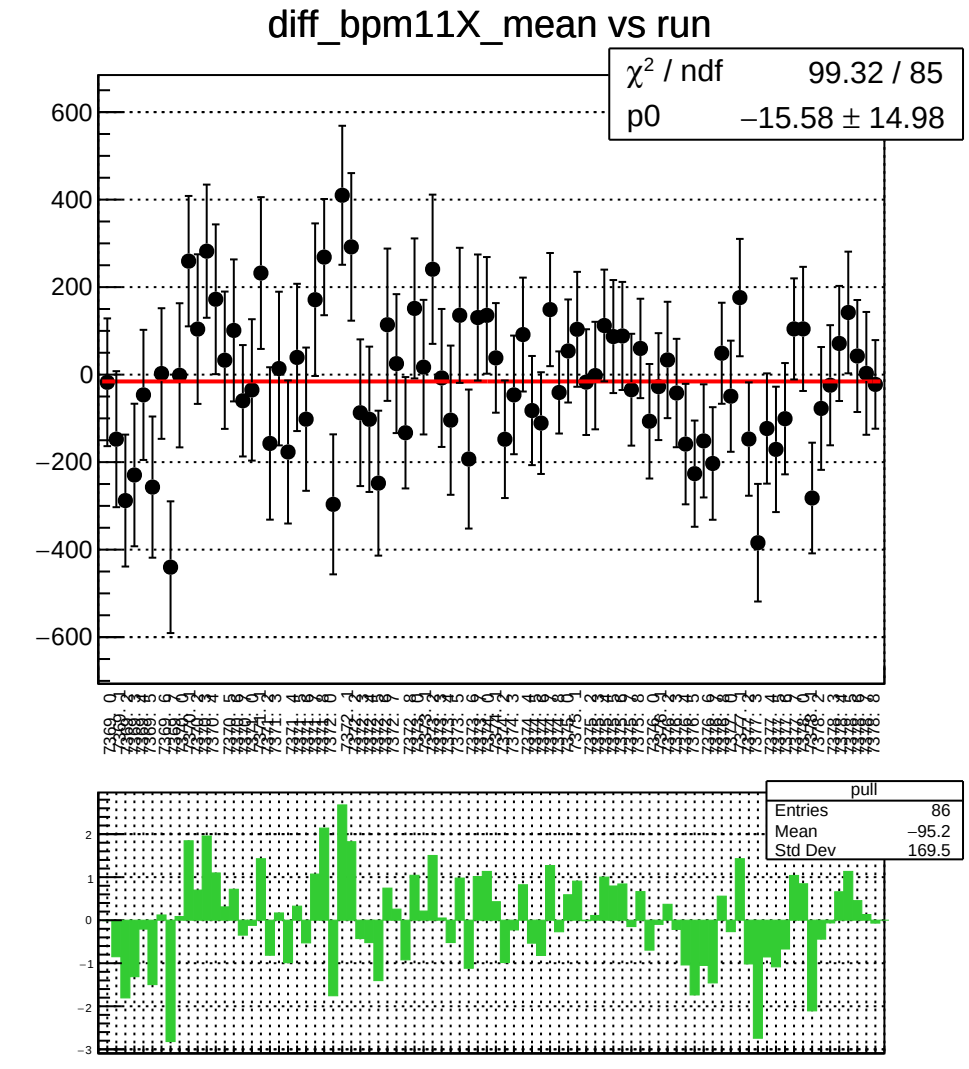

pull1D
Entries 86
Mean −0.004934
Std Dev 1.015

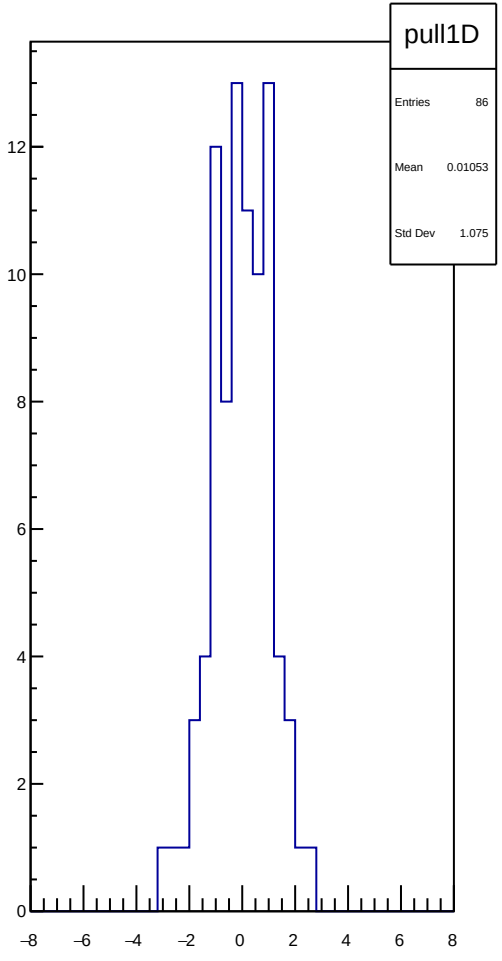

diff_bpm1X_rms vs run
χ² / ndf 2622 / 85
p0 7914 ± 6.204
9000
8800
8600
8400
8200
8000
7800
7600
7400
7200

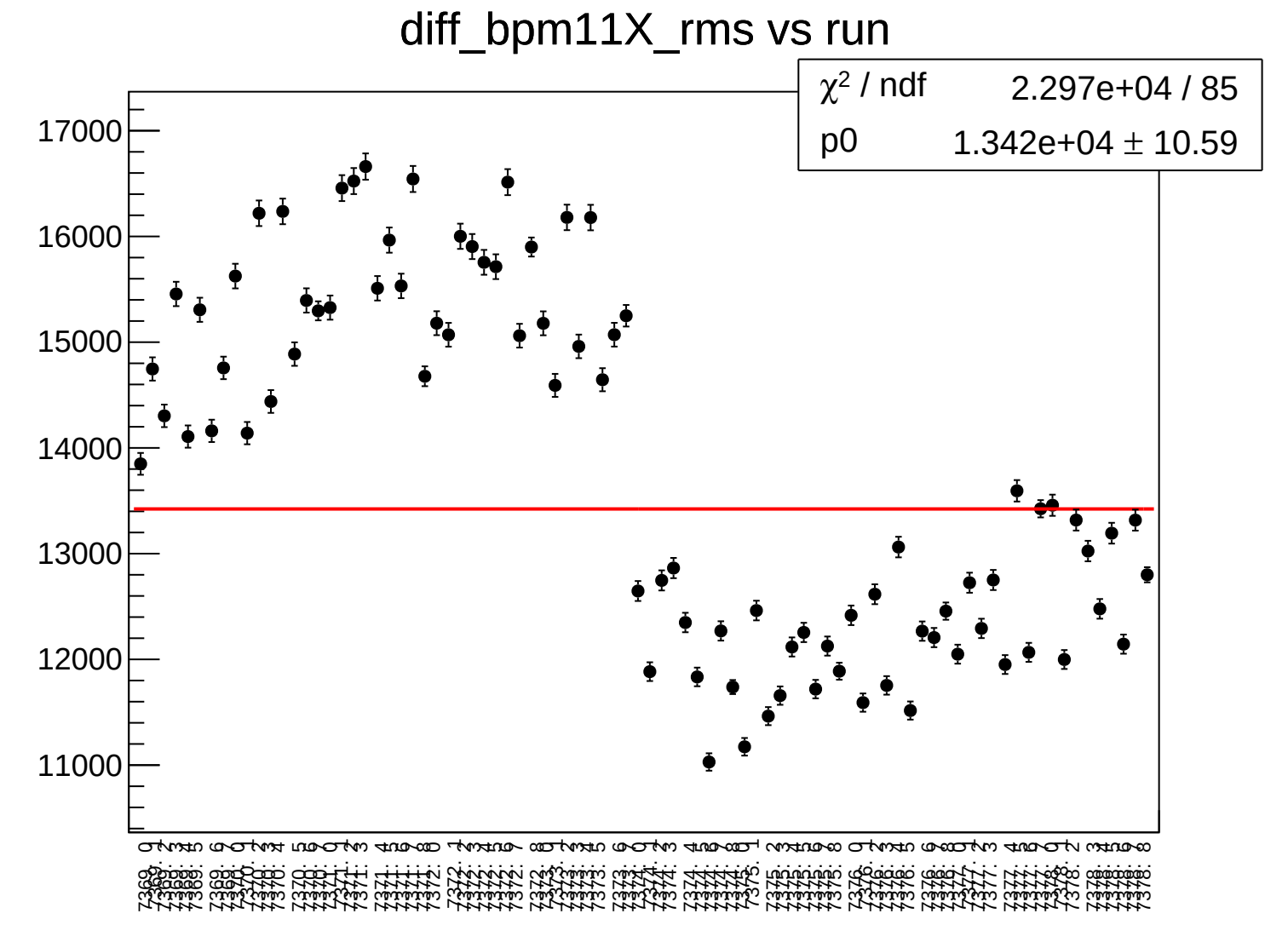

diff_bpm1Y_mean vs run
χ^2 / ndf 83.7 / 85
p0 3.289 ± 6.389
pull
Entries 86
Mean −238.3
Std Dev 330.5

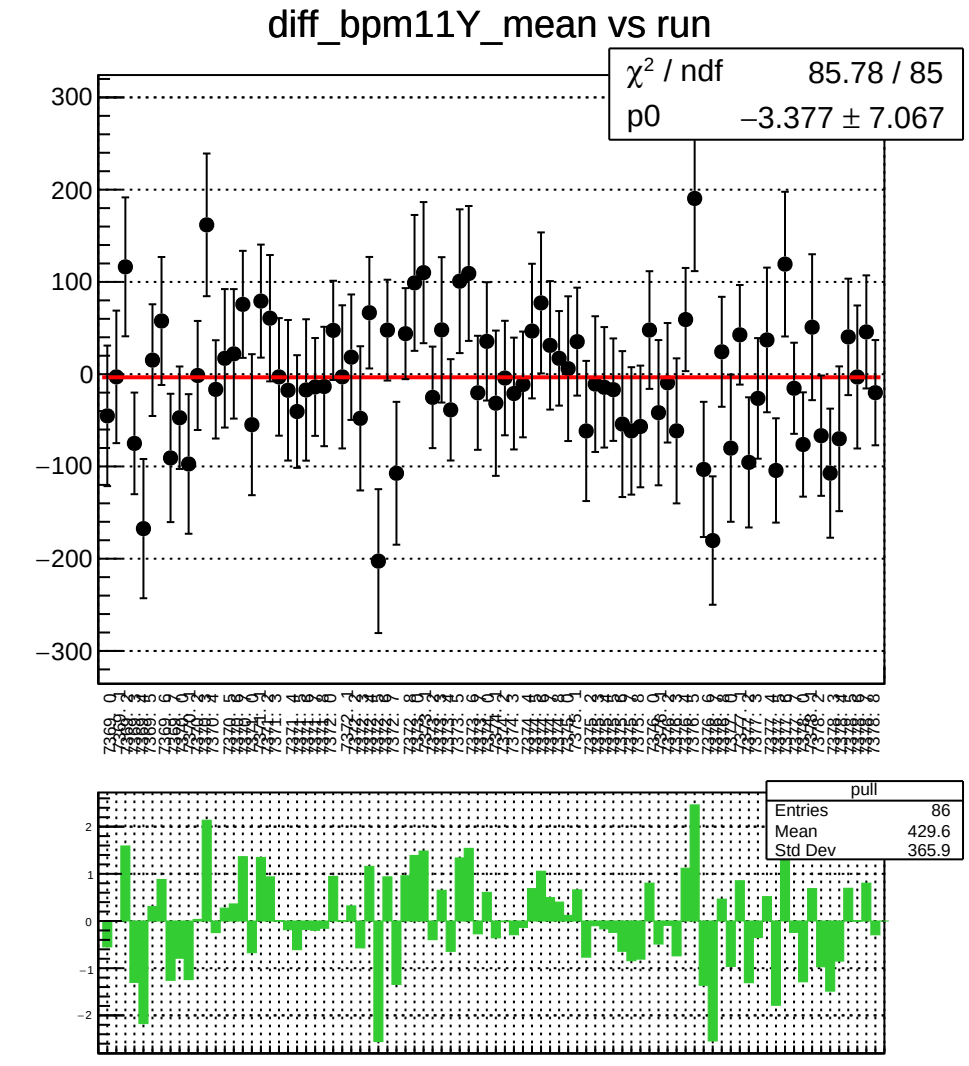

pull1D
Entries 86
Mean −0.003623
Std Dev 0.9865

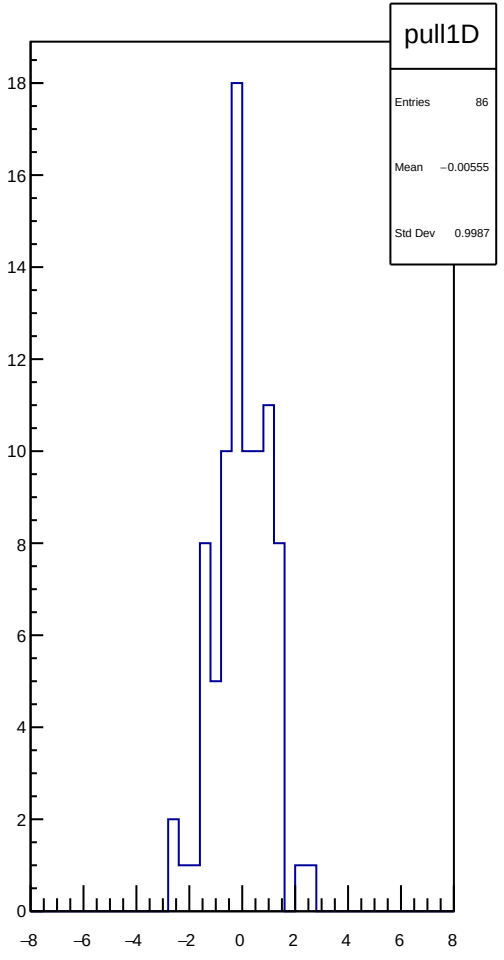

diff_bpm1Y_rms vs run
χ² / ndf 2.152e+04 / 85
p0 5729 ± 4.518
7000
6500
6000
5500
5000
4500

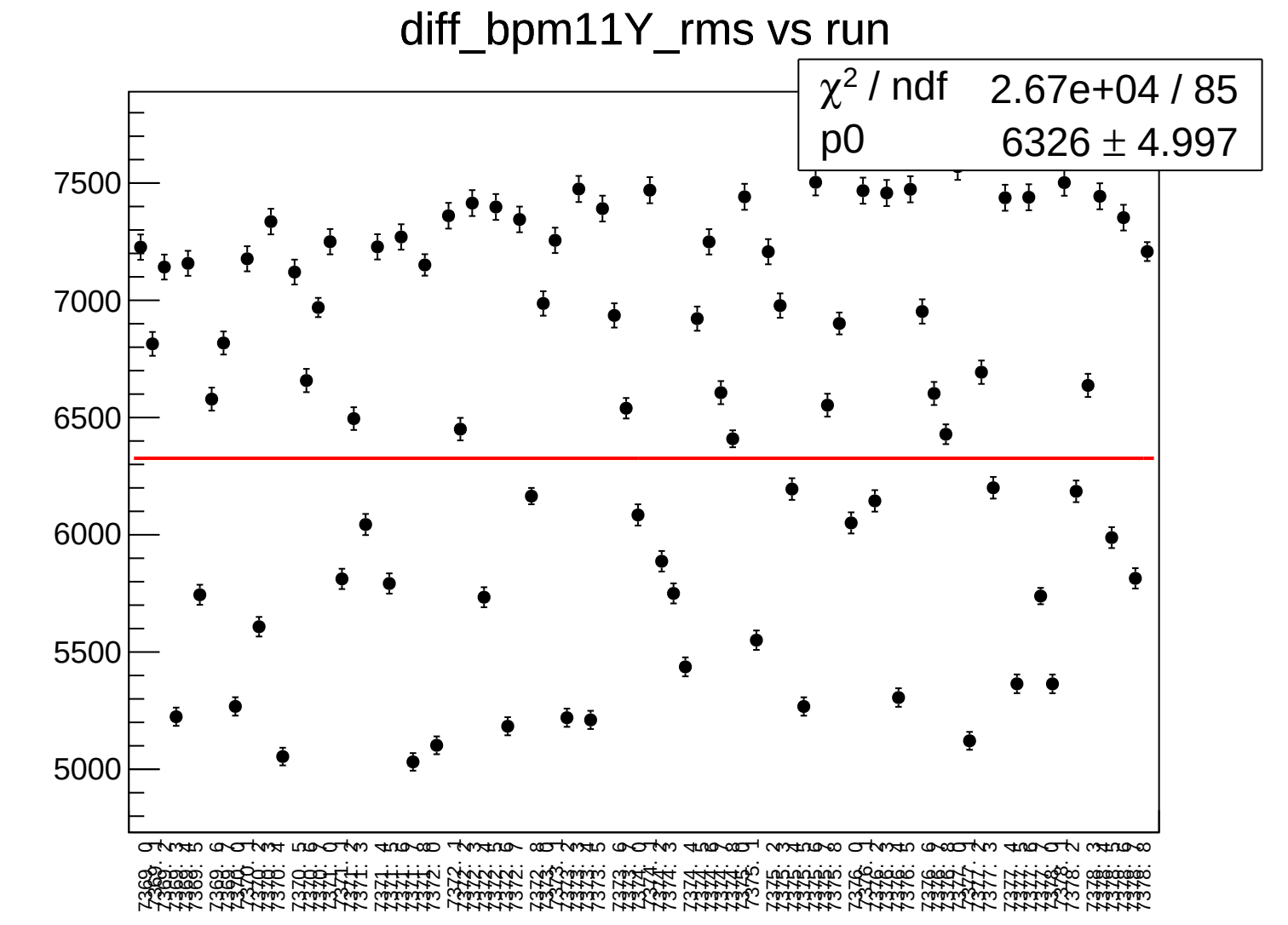

diff_bpm11X_mean vs run
χ² / ndf 99.32 / 85
p0 −15.58 ± 14.98
600
400
200
0
−200
−400
−600
pull
Entries 86
Mean −95.2
Std Dev 169.5
2
1
0
−1
−2
−3

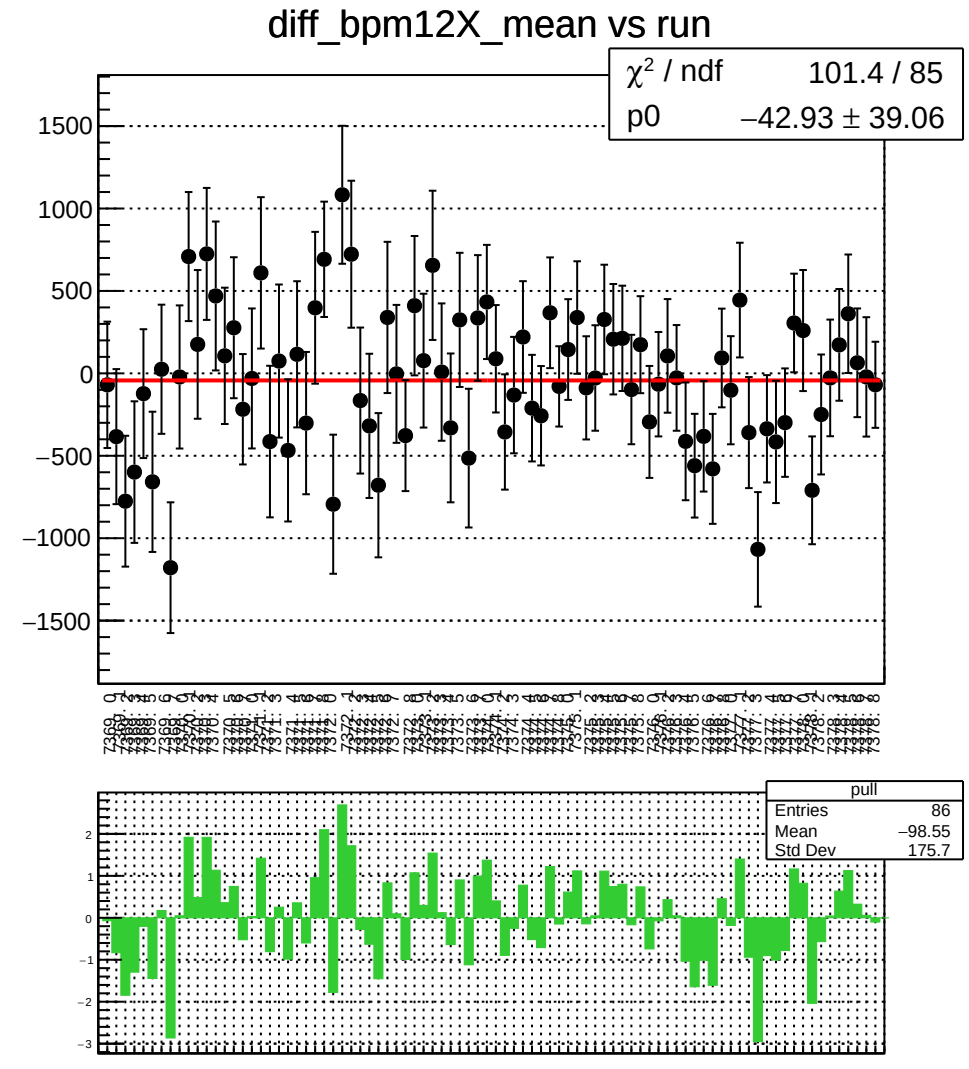

pull1D
Entries 86
Mean 0.01053
Std Dev 1.075
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

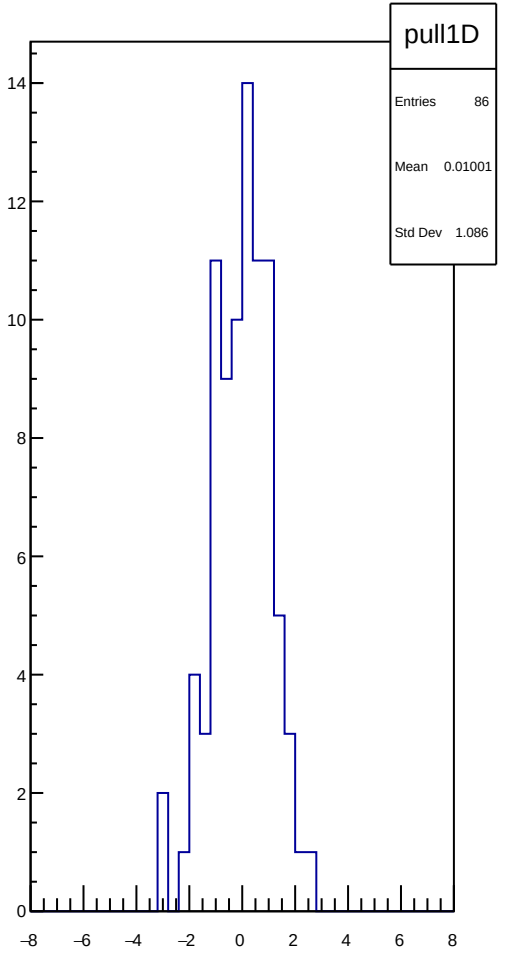

diff_bpm11X_rms vs run
χ² / ndf 2.297e+04 / 85
p0 1.342e+04 ± 10.59
17000
16000
15000
14000
13000
12000
11000

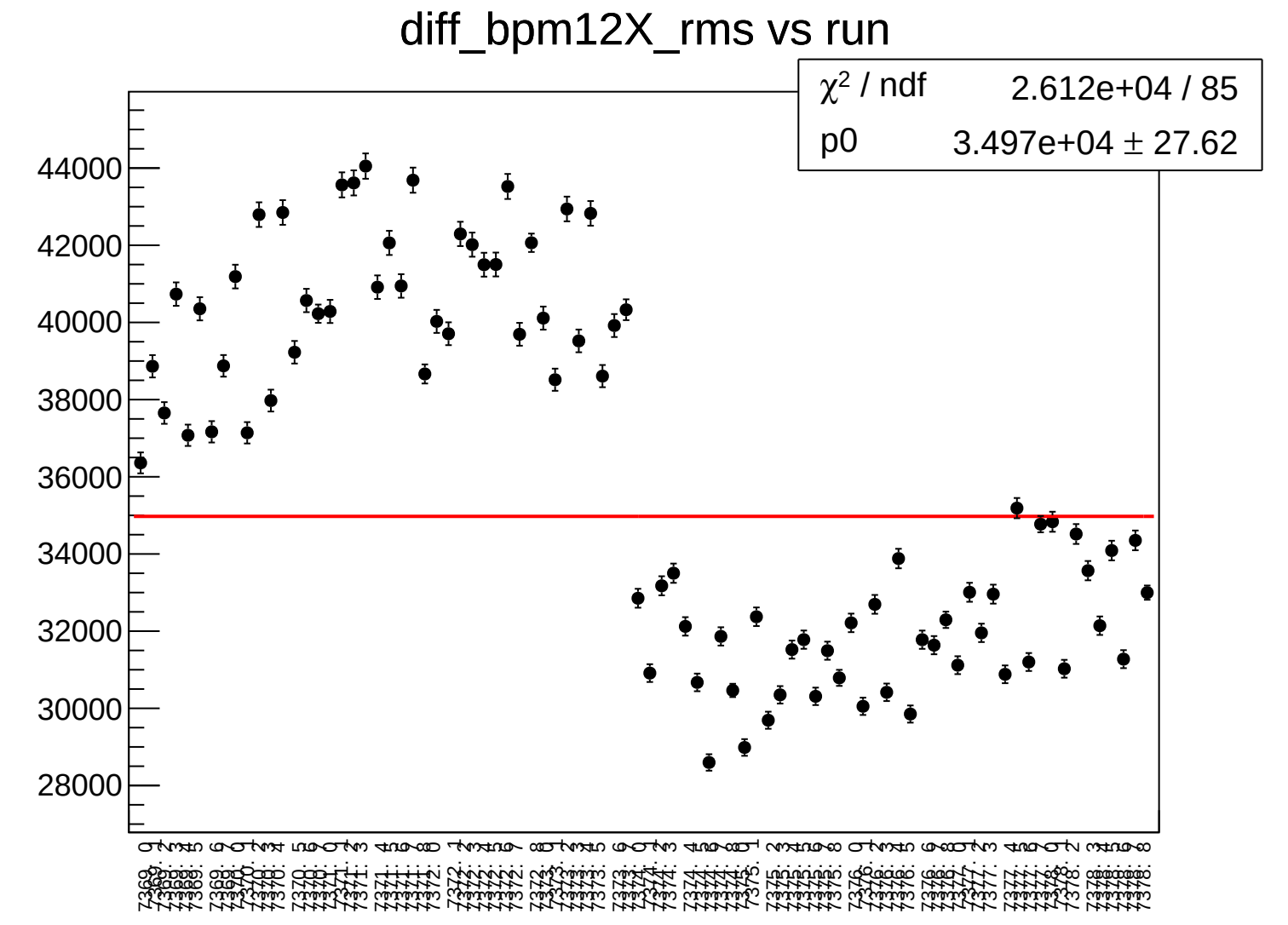

diff_bpm11Y_mean vs run
χ² / ndf 85.78 / 85
p0 −3.377 ± 7.067
pull
Entries 86
Mean 429.6
Std Dev 365.9

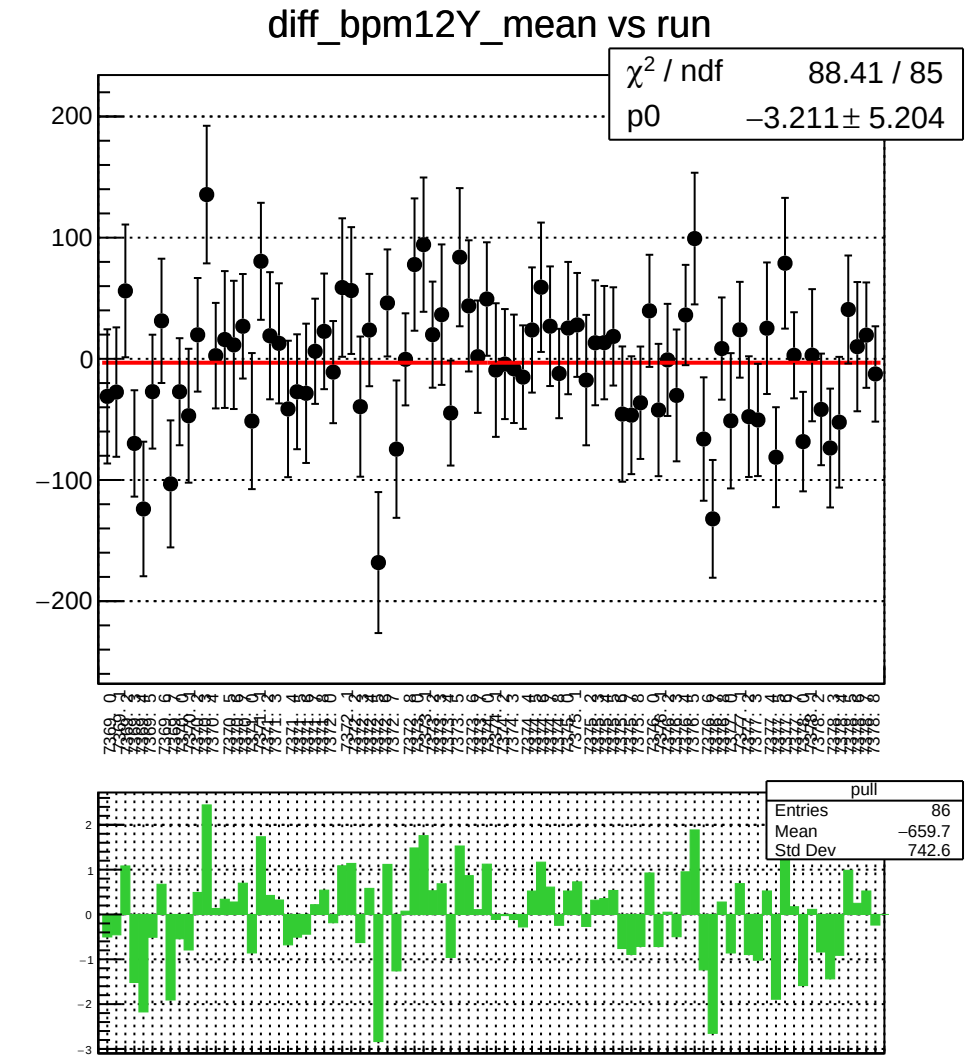

pull1D
Entries 86
Mean −0.00555
Std Dev 0.9987

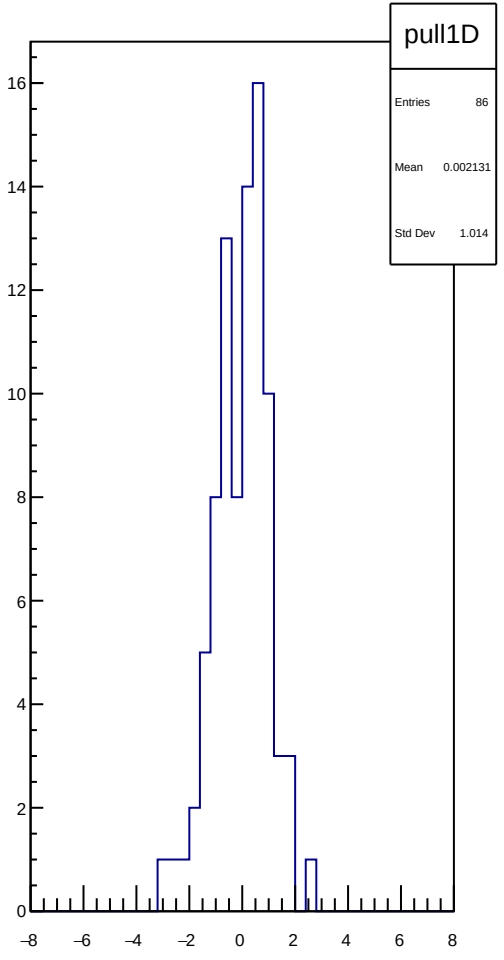

diff_bpm11Y_rms vs run
χ² / ndf 2.67e+04 / 85
p0 6326 ± 4.997
7500
7000
6500
6000
5500
5000

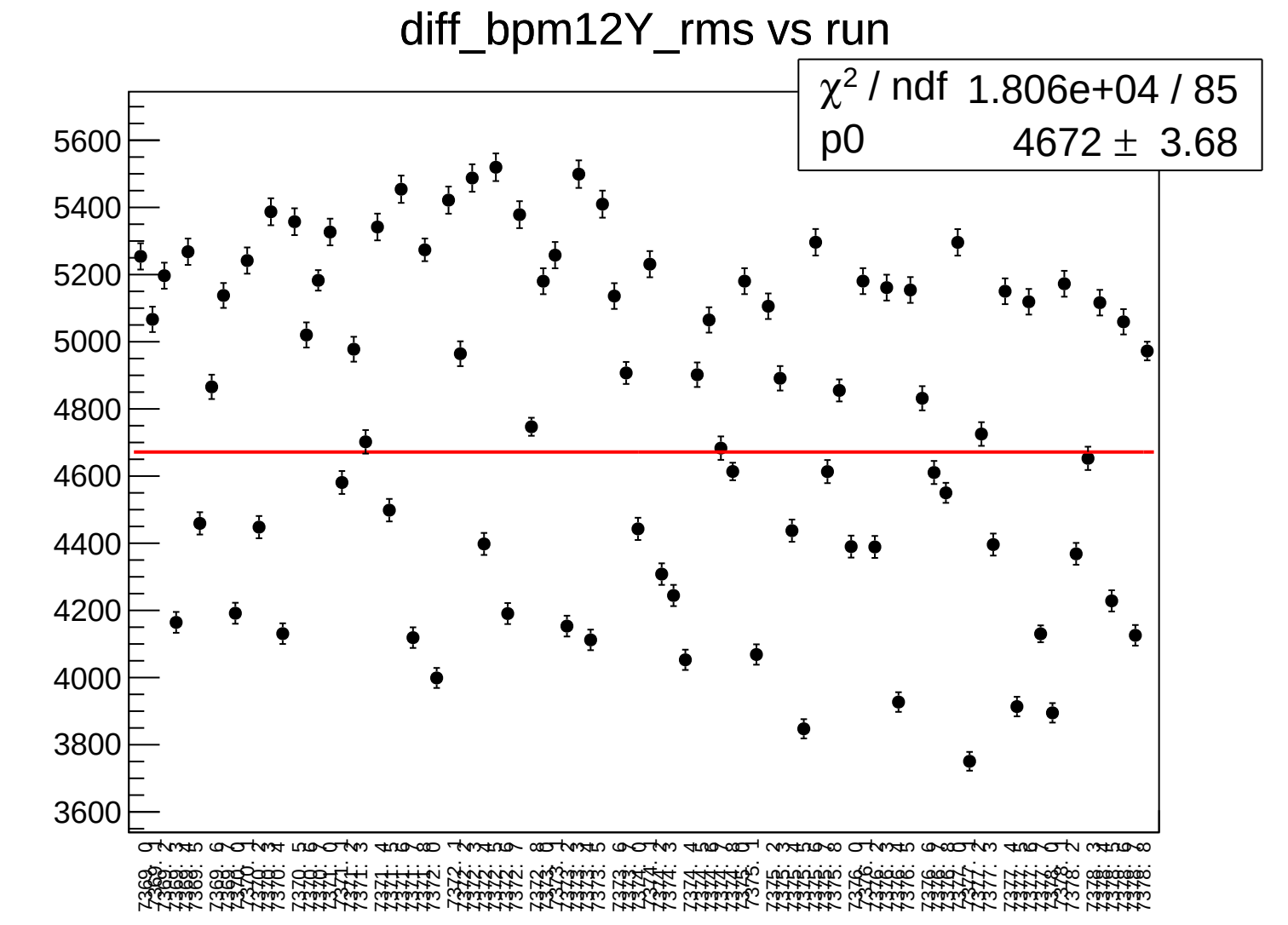

diff_bpm12X_mean vs run
χ² / ndf 101.4 / 85
p0 −42.93 ± 39.06
pull
Entries 86
Mean −98.55
Std Dev 175.7

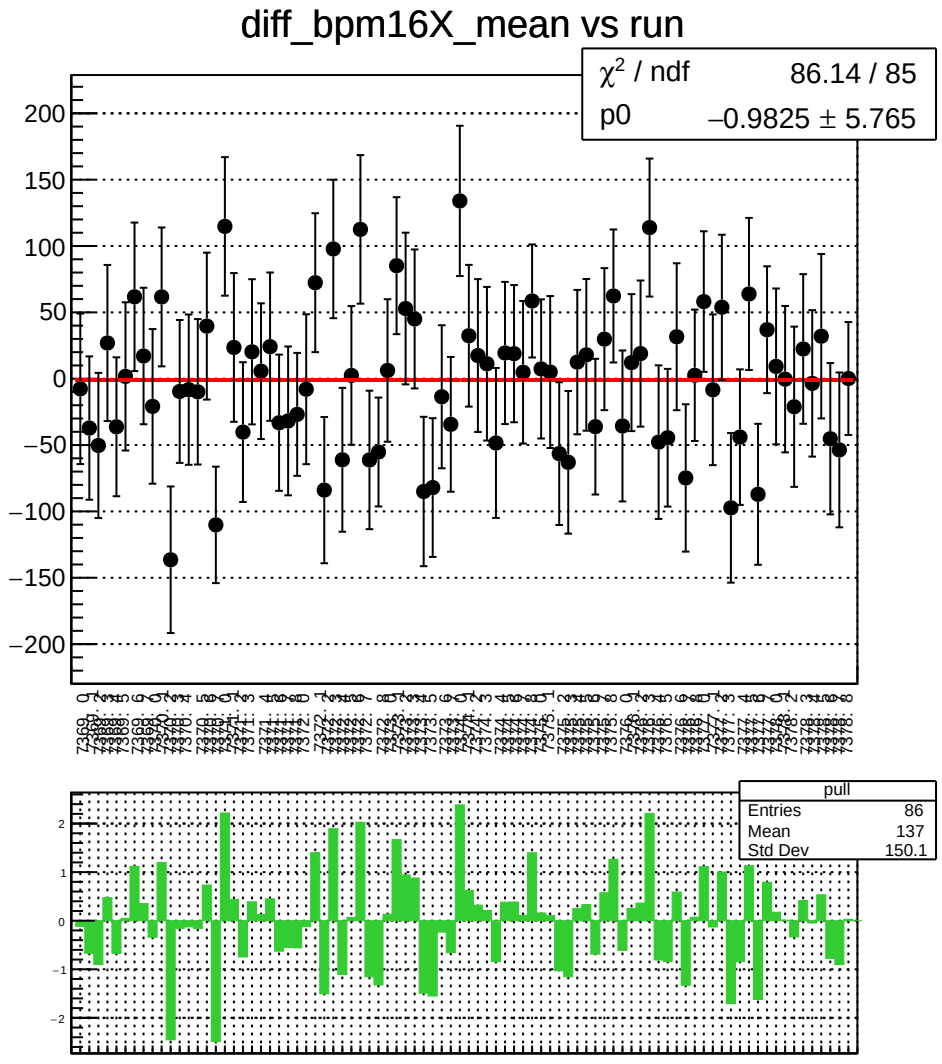

pull1D
Entries 86
Mean 0.01001
Std Dev 1.086

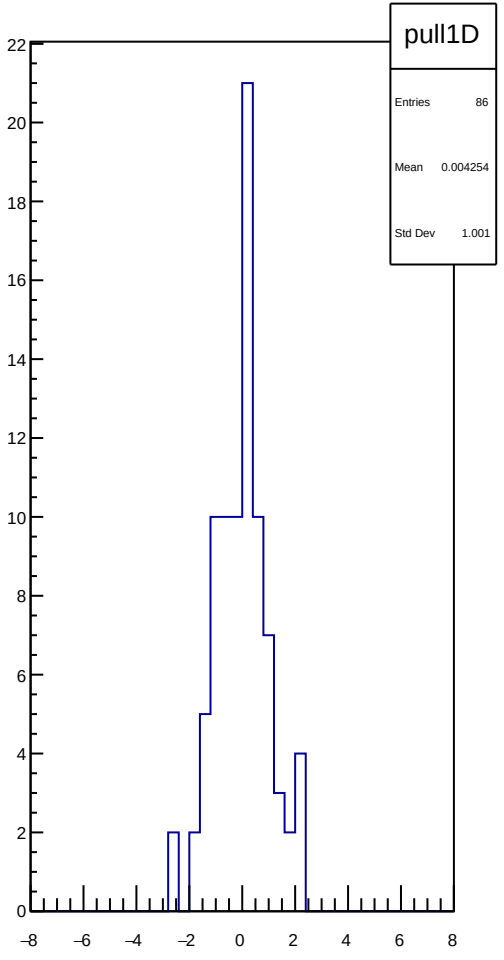

diff_bpm12X_rms vs run
χ² / ndf 2.612e+04 / 85
p0 3.497e+04 ± 27.62
44000
42000
40000
38000
36000
34000
32000
30000
28000

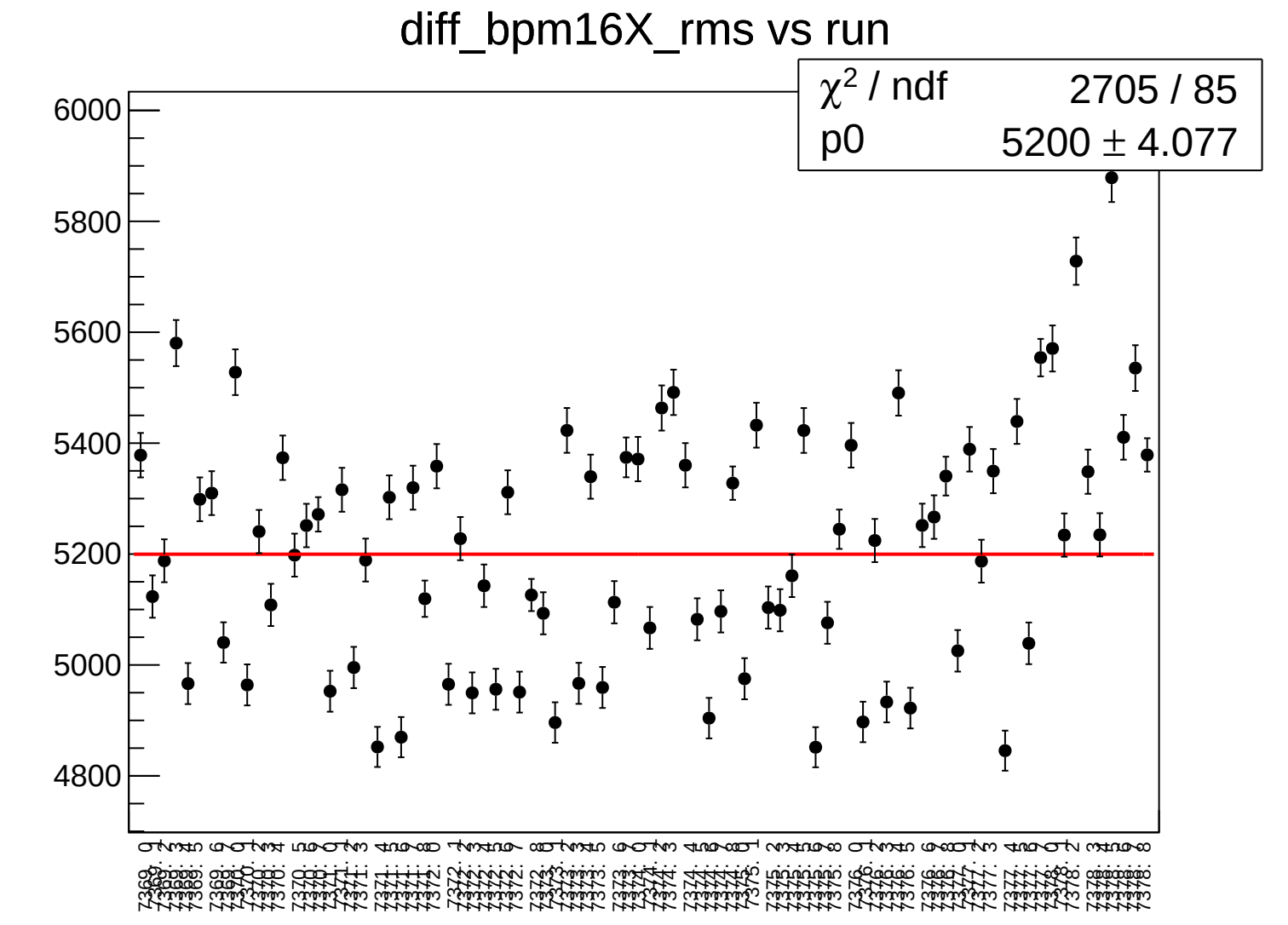

diff_bpm12Y_mean vs run
χ² / ndf 88.41 / 85
p0 −3.211 ± 5.204
pull
Entries 86
Mean −659.7
Std Dev 742.6

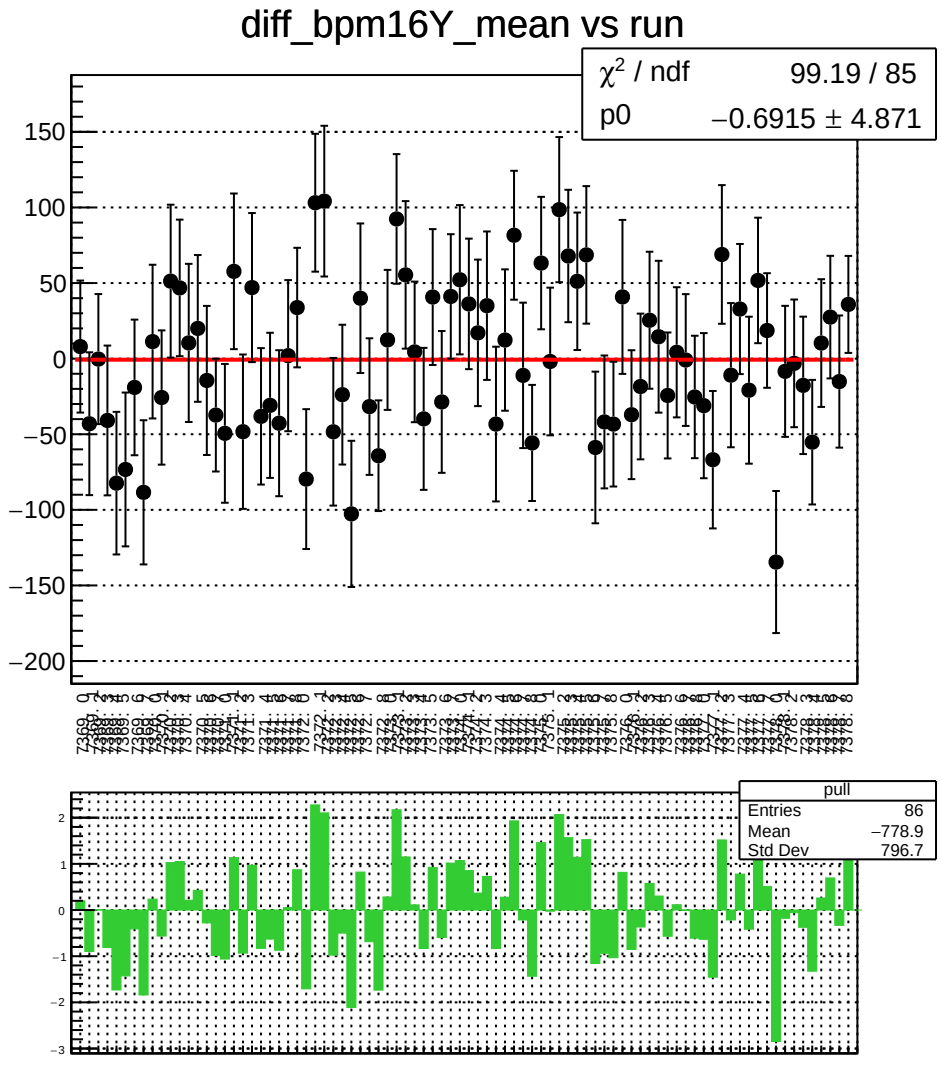

pull1D
Entries 86
Mean 0.002131
Std Dev 1.014

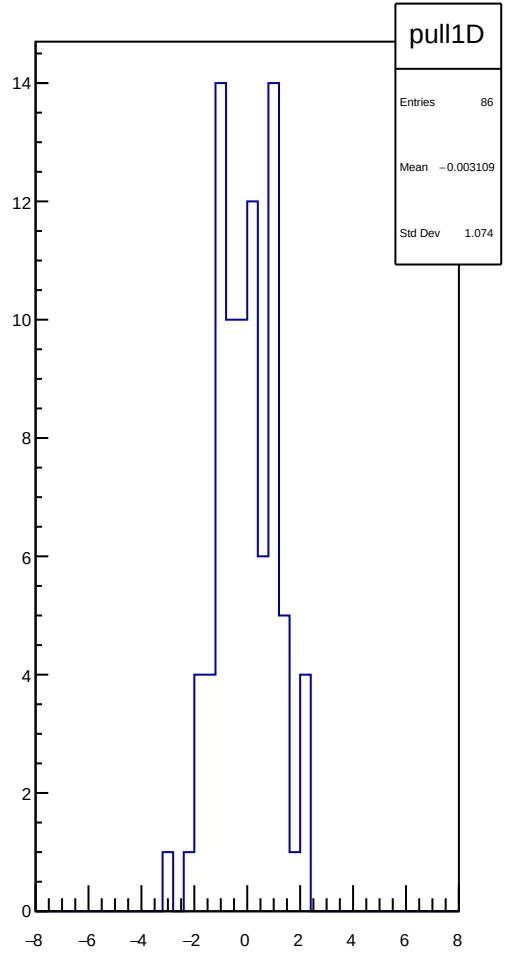

diff_bpm12Y_rms vs run
χ² / ndf 1.806e+04 / 85
p0 4672 ± 3.68
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800
3600

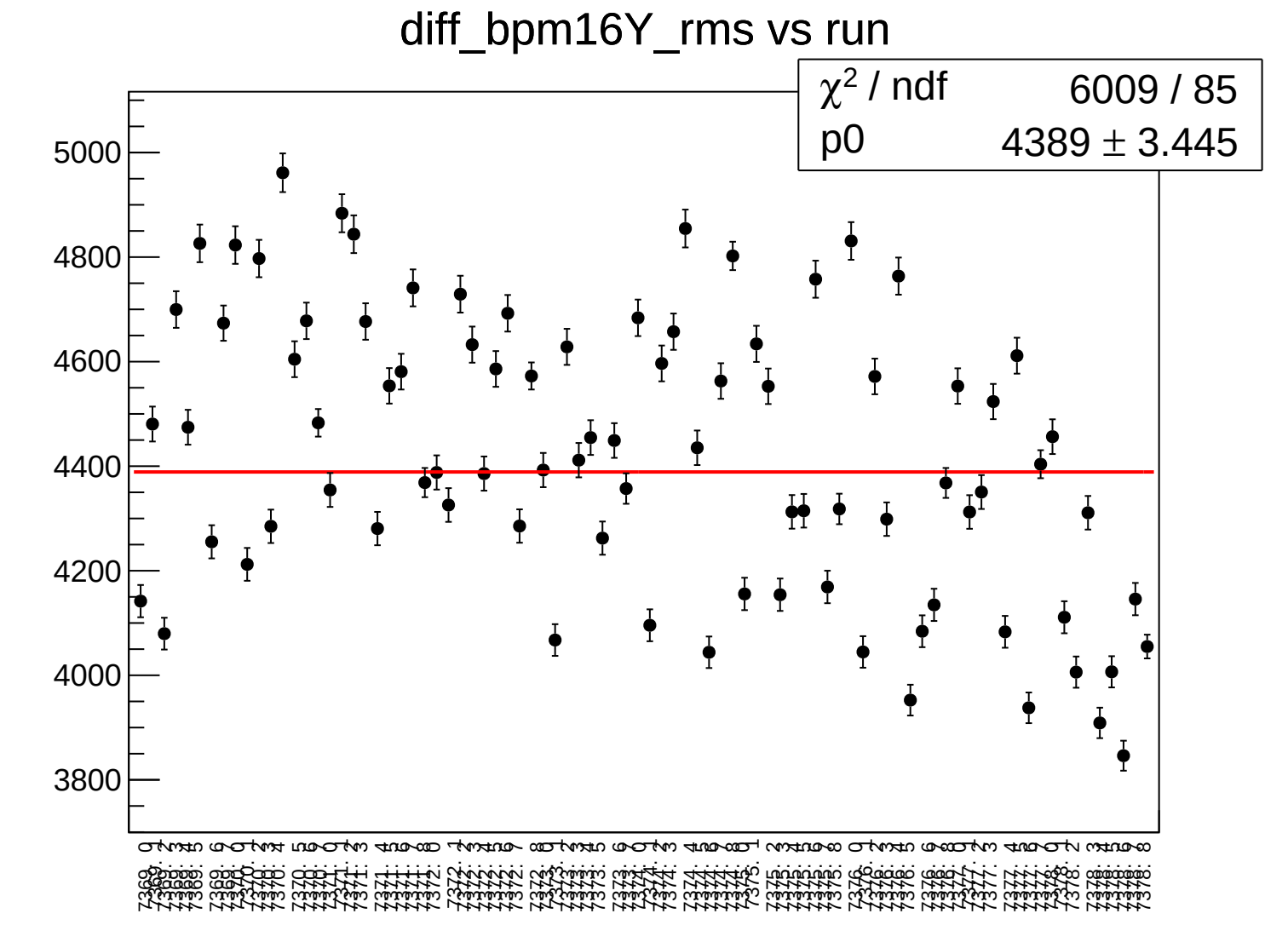

diff_bpm16X_mean vs run
χ² / ndf 86.14 / 85
p0 –0.9825 ± 5.765
pull
Entries 86
Mean 137
Std Dev 150.1

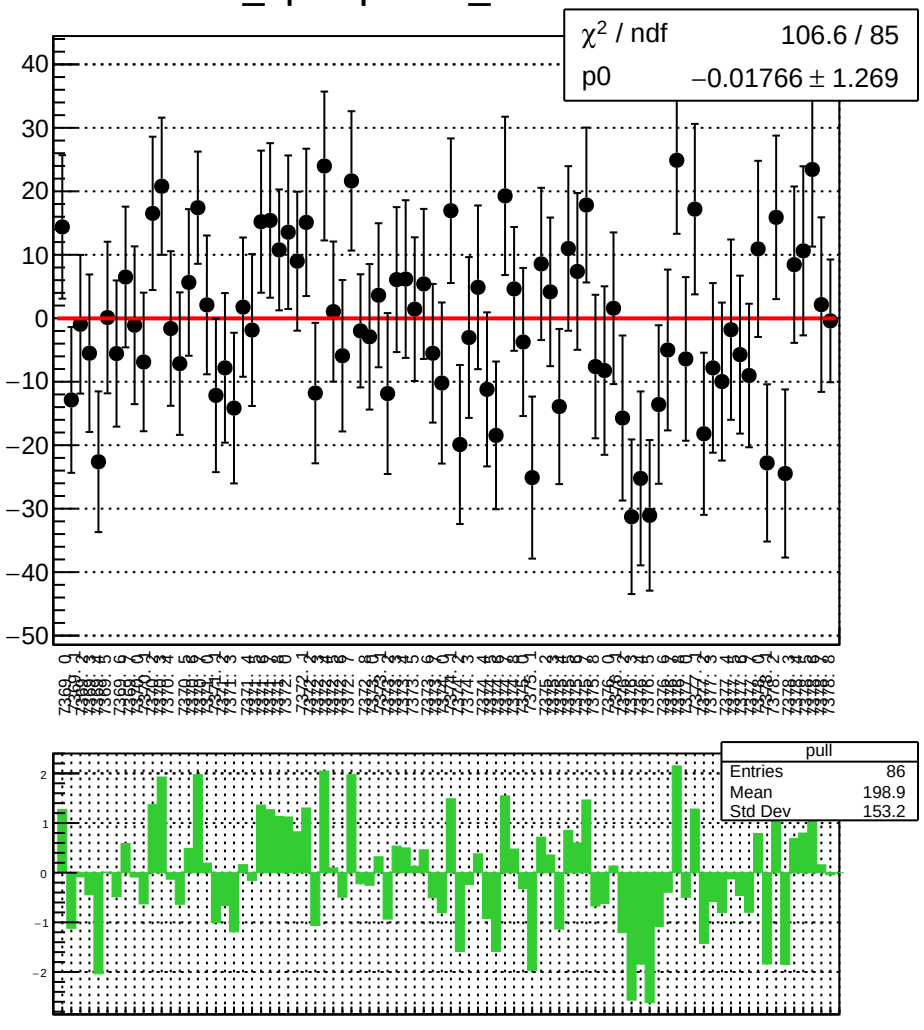

pull1D
Entries 86
Mean 0.004254
Std Dev 1.001

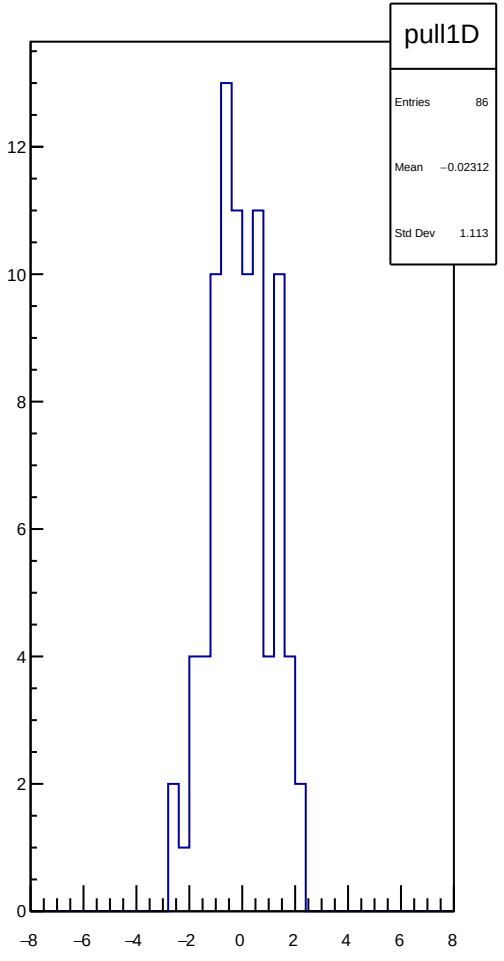

diff_bpm16X_rms vs run
χ^2 / ndf 2705 / 85
p0 5200 ± 4.077
6000
5800
5600
5400
5200
5000
4800

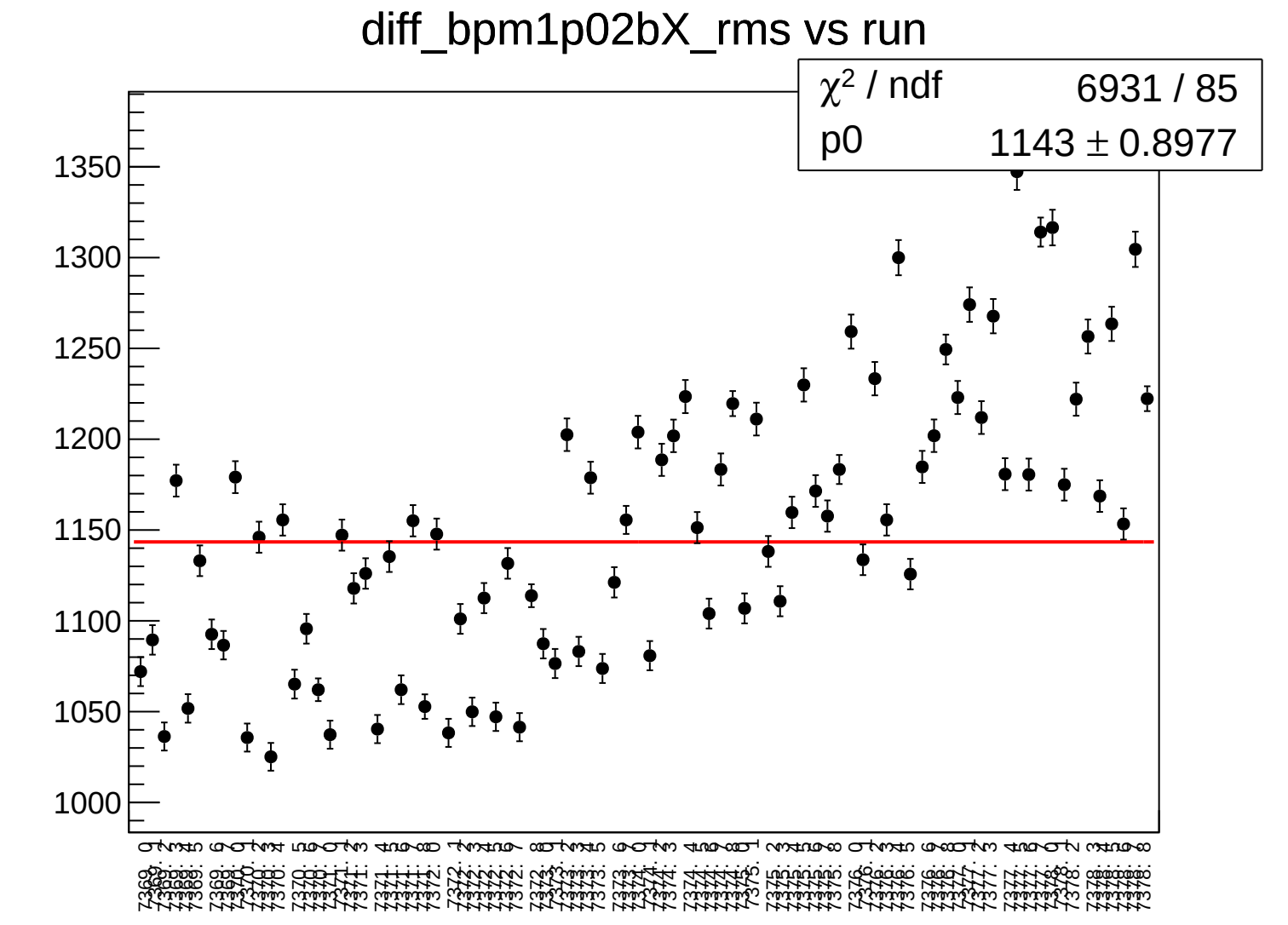

diff_bpm16Y_mean vs run
χ² / ndf 99.19 / 85
p0 −0.6915 ± 4.871
150
100
50
0
−50
−100
−150
−200
pull
Entries 86
Mean −778.9
Std Dev 796.7
2
1
0
−1
−2
−3

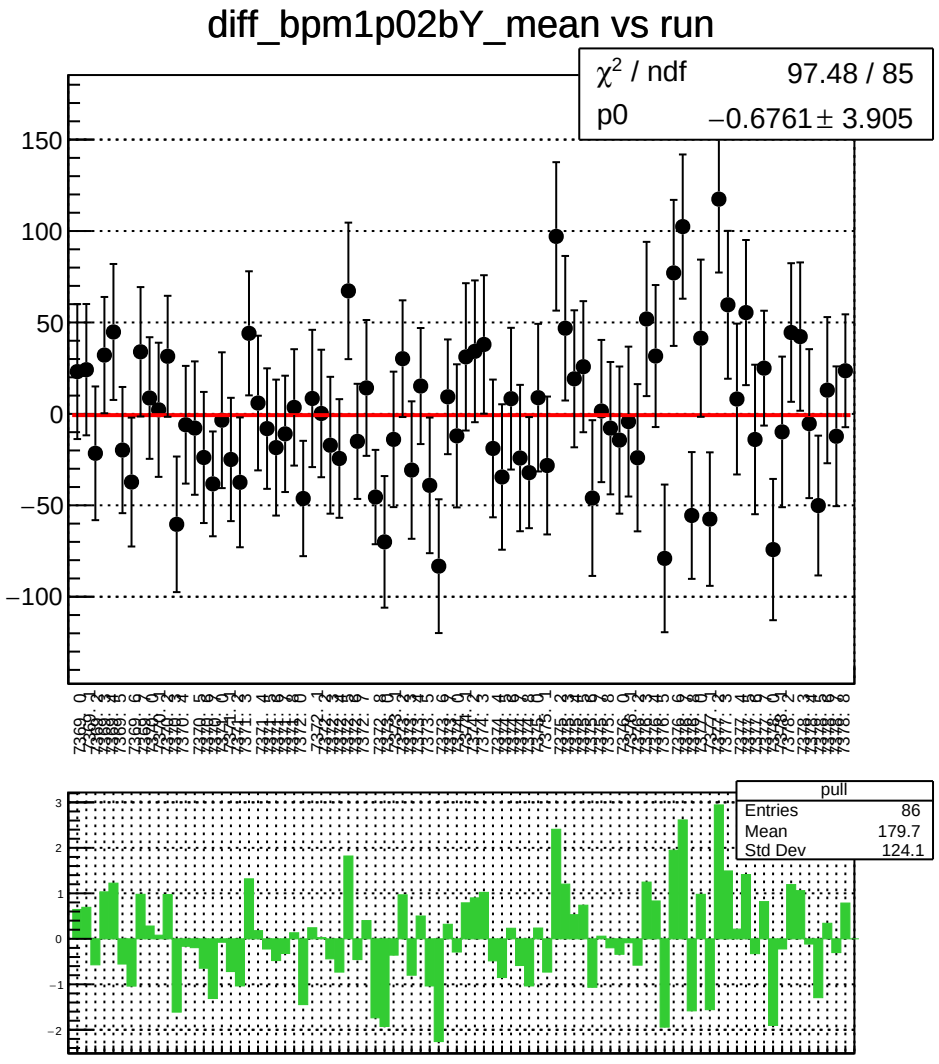

pull1D
Entries 86
Mean −0.003109
Std Dev 1.074
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

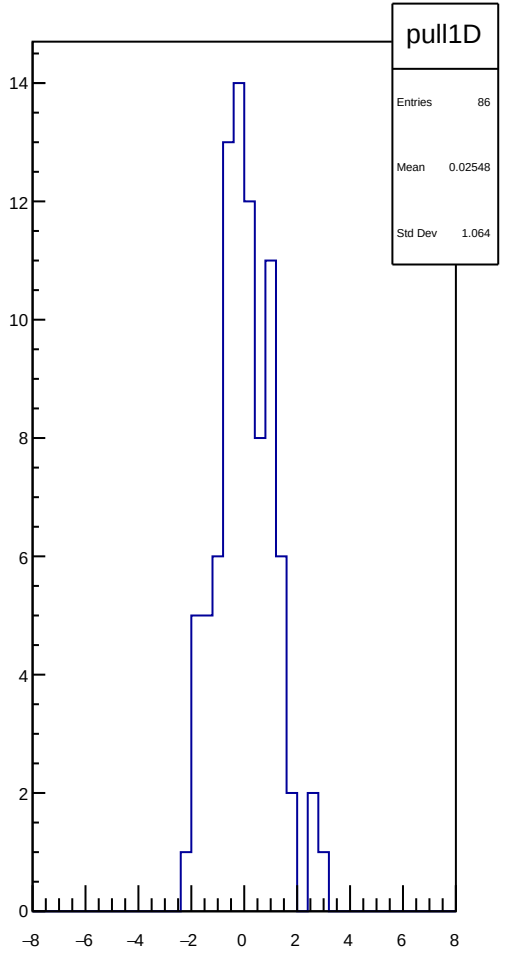

diff_bpm16Y_rms vs run
χ^2 / ndf 6009 / 85
p0 4389 ± 3.445
5000
4800
4600
4400
4200
4000
3800

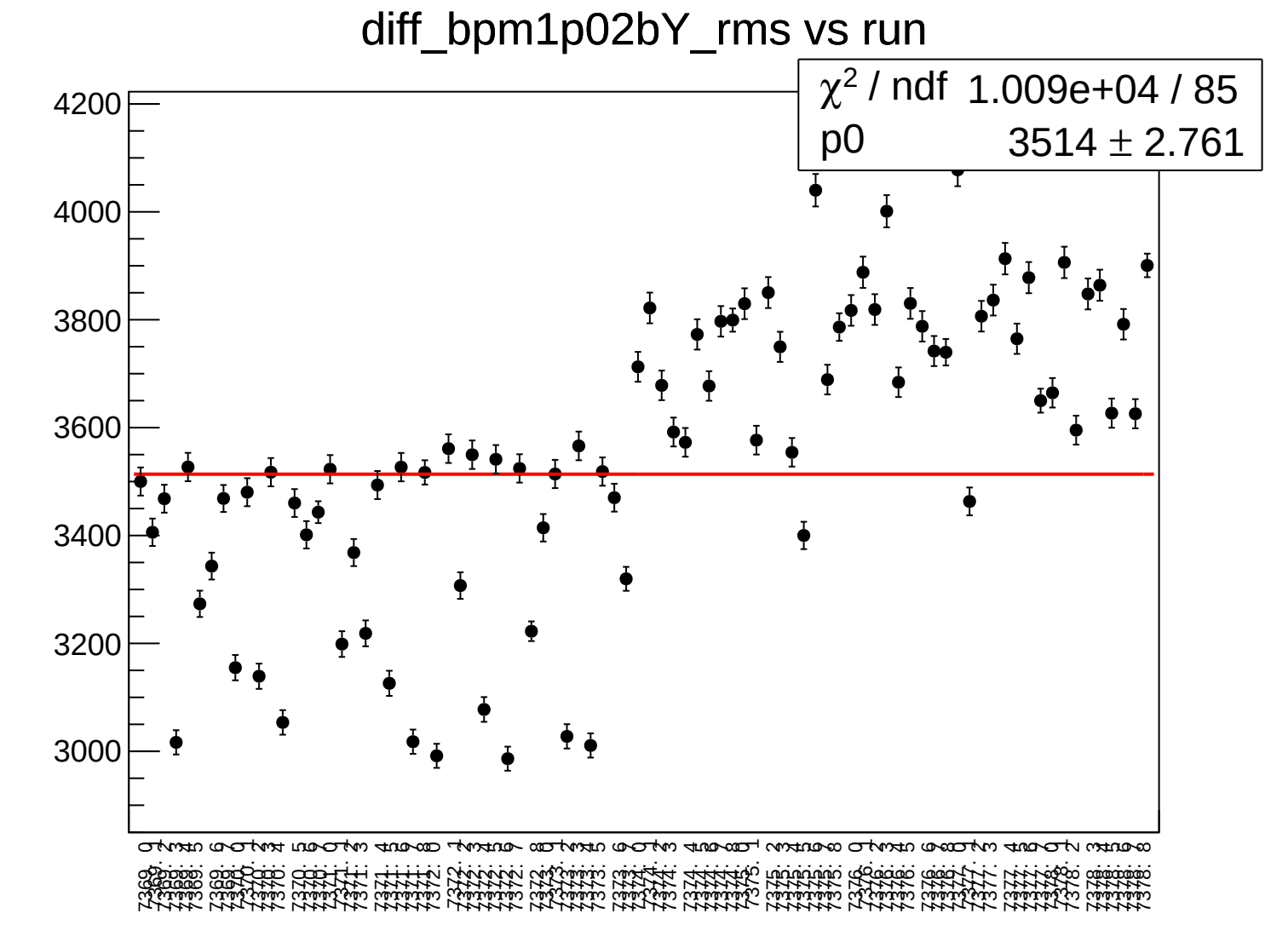

diff_bpm1p02bX_mean vs run
χ² / ndf 106.6 / 85
p0 −0.01766 ± 1.269
pull
Entries 86
Mean 198.9
Std Dev 153.2

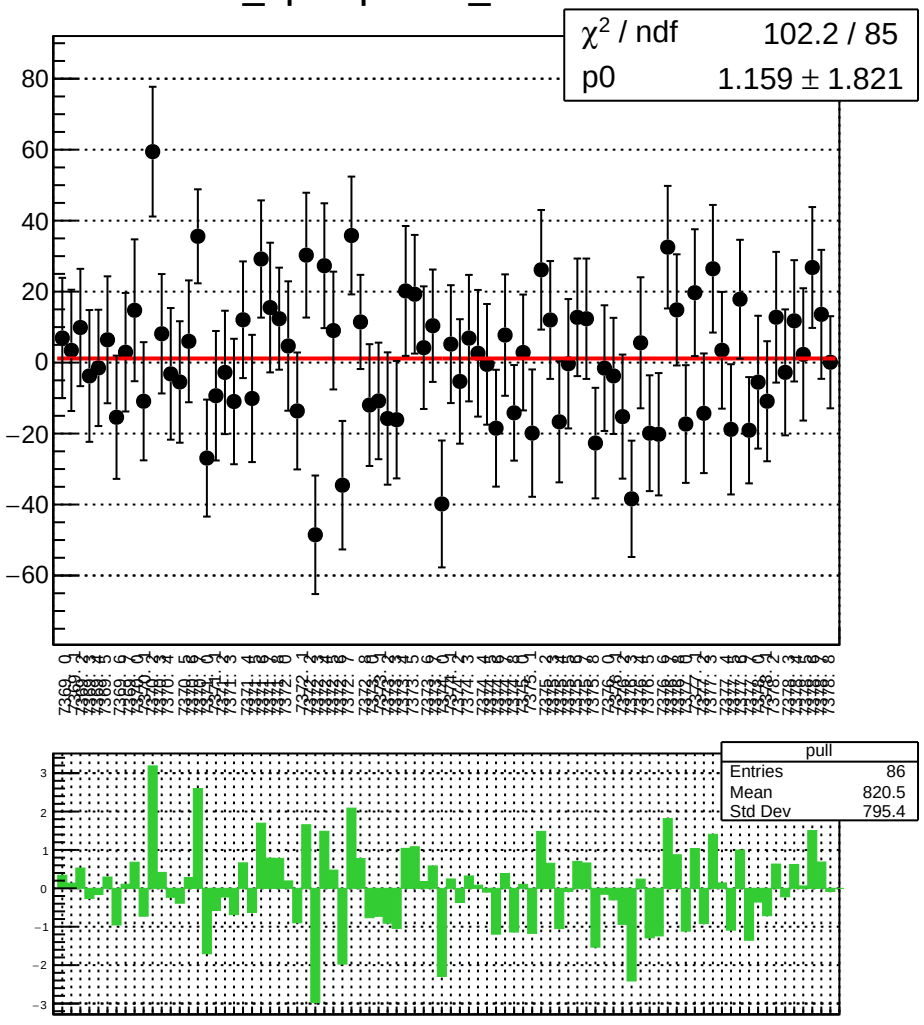

pull1D
Entries 86
Mean −0.02312
Std Dev 1.113

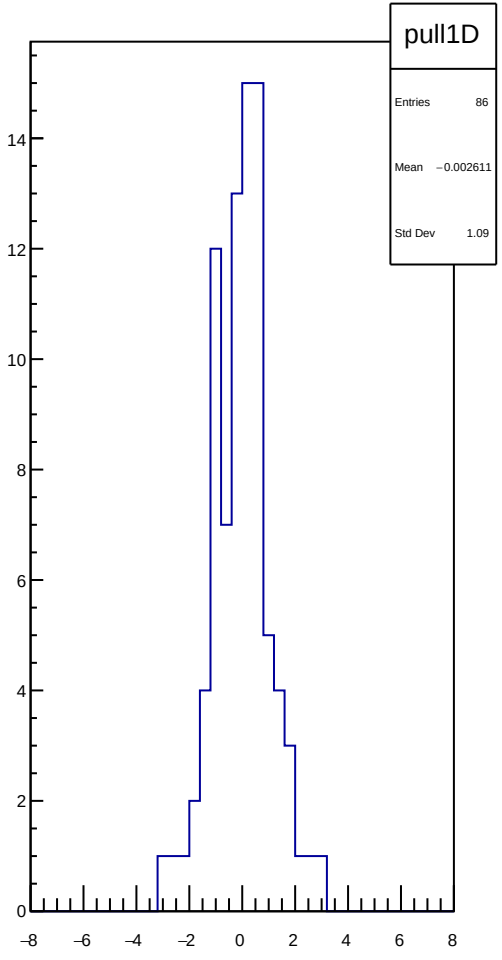

diff_bpm1p02bX_rms vs run
χ² / ndf 6931 / 85
p0 1143 ± 0.8977
1350
1300
1250
1200
1150
1100
1050
1000

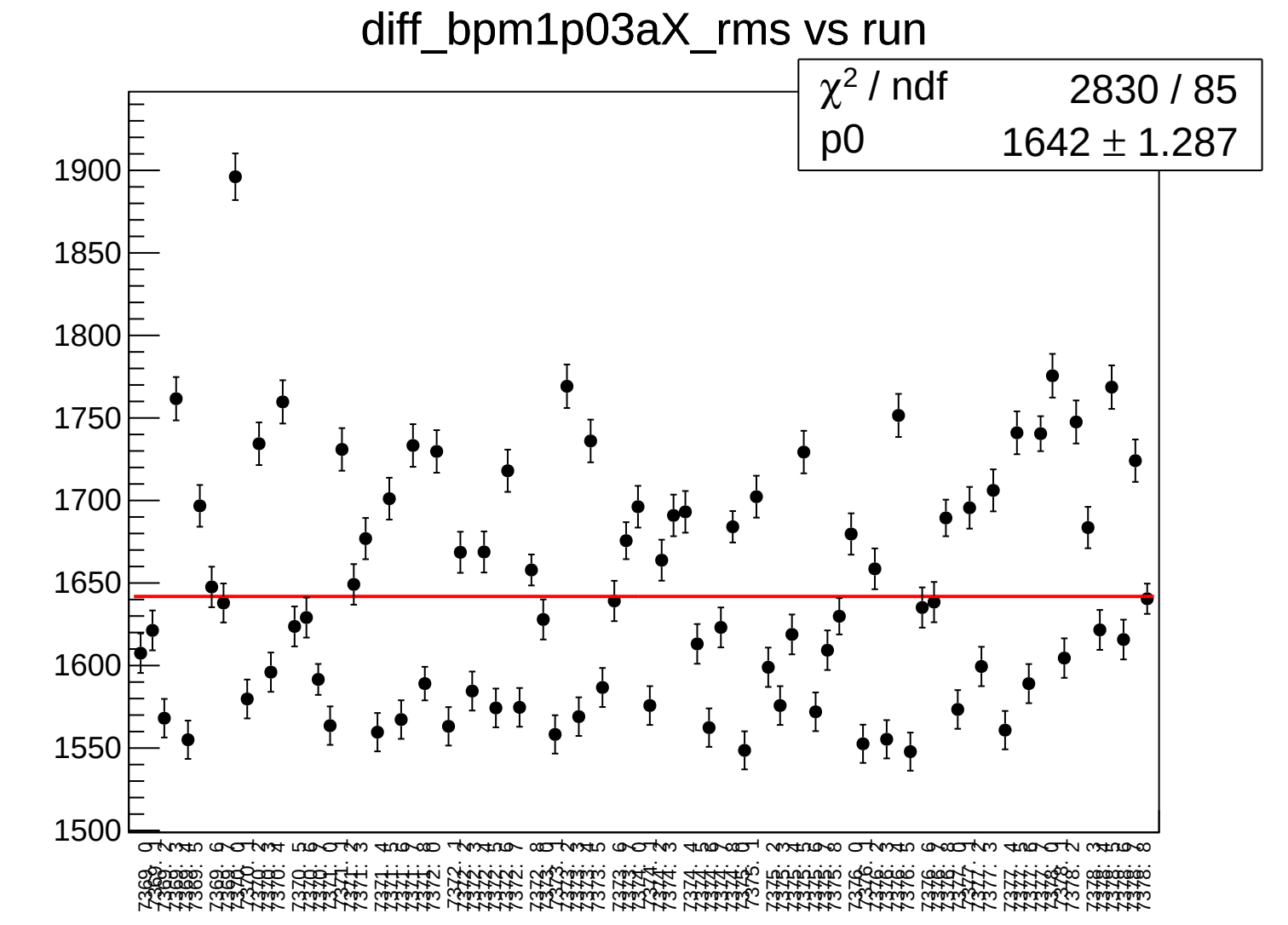

diff_bpm1p02bY_mean vs run
χ² / ndf 97.48 / 85
p0 −0.6761 ± 3.905
150
100
50
0
−50
−100
pull
Entries 86
Mean 179.7
Std Dev 124.1
3
2
1
0
−1
−2

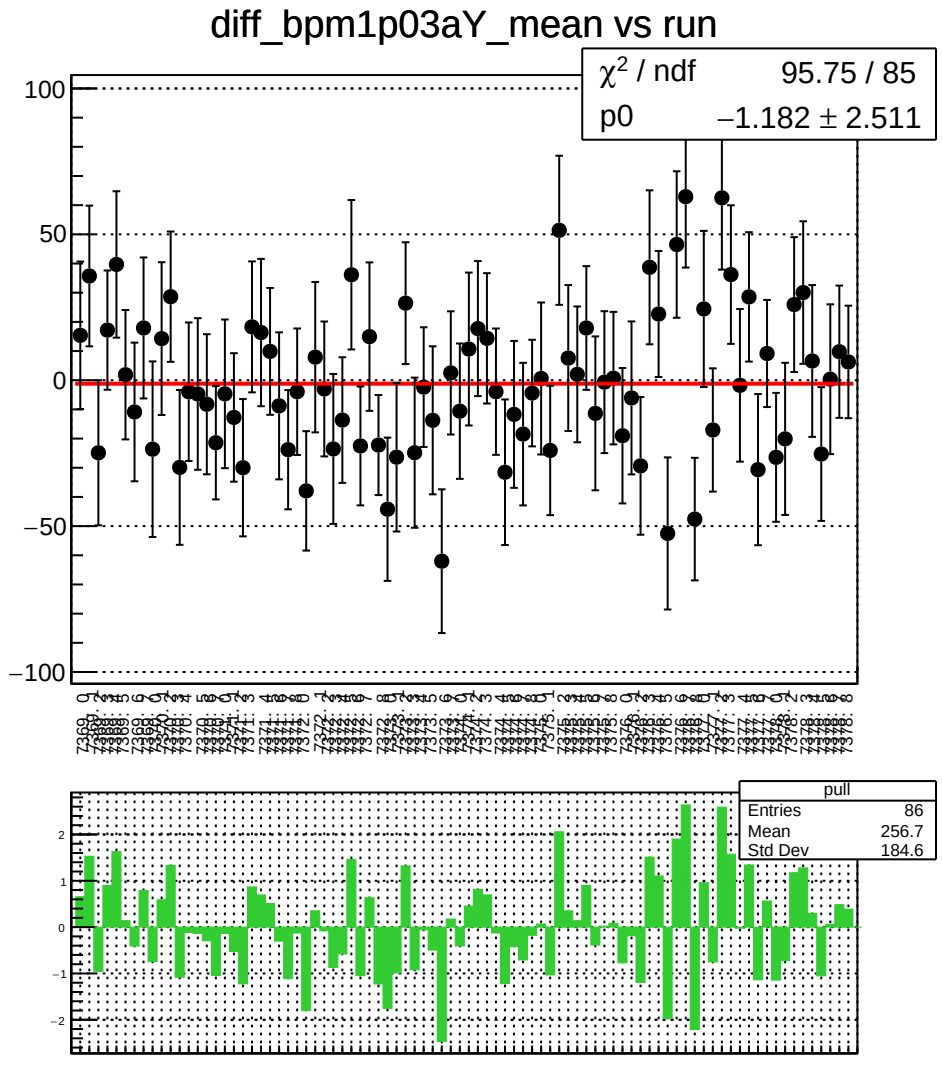

pull1D
Entries 86
Mean 0.02548
Std Dev 1.064
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

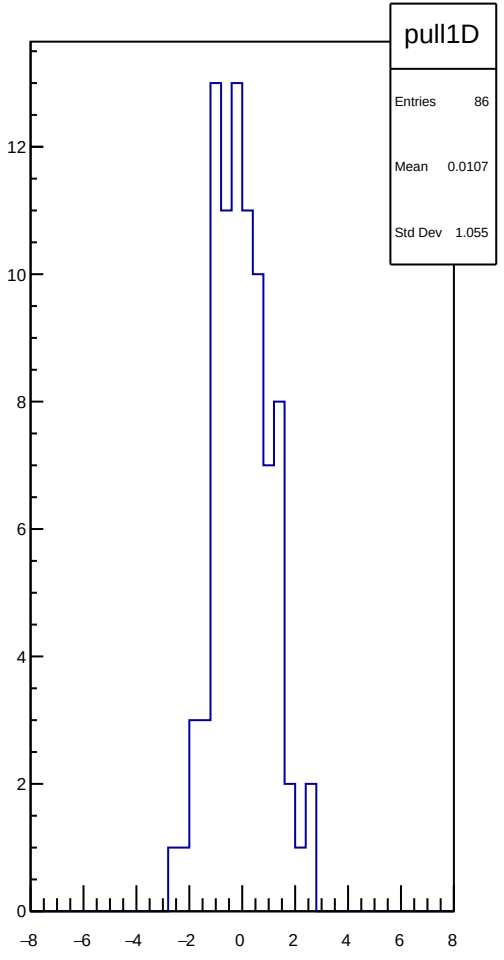

diff_bpm1p02bY_rms vs run
χ^2 / ndf 1.009e+04 / 85
p0 3514 ± 2.761
4200
4000
3800
3600
3400
3200
3000

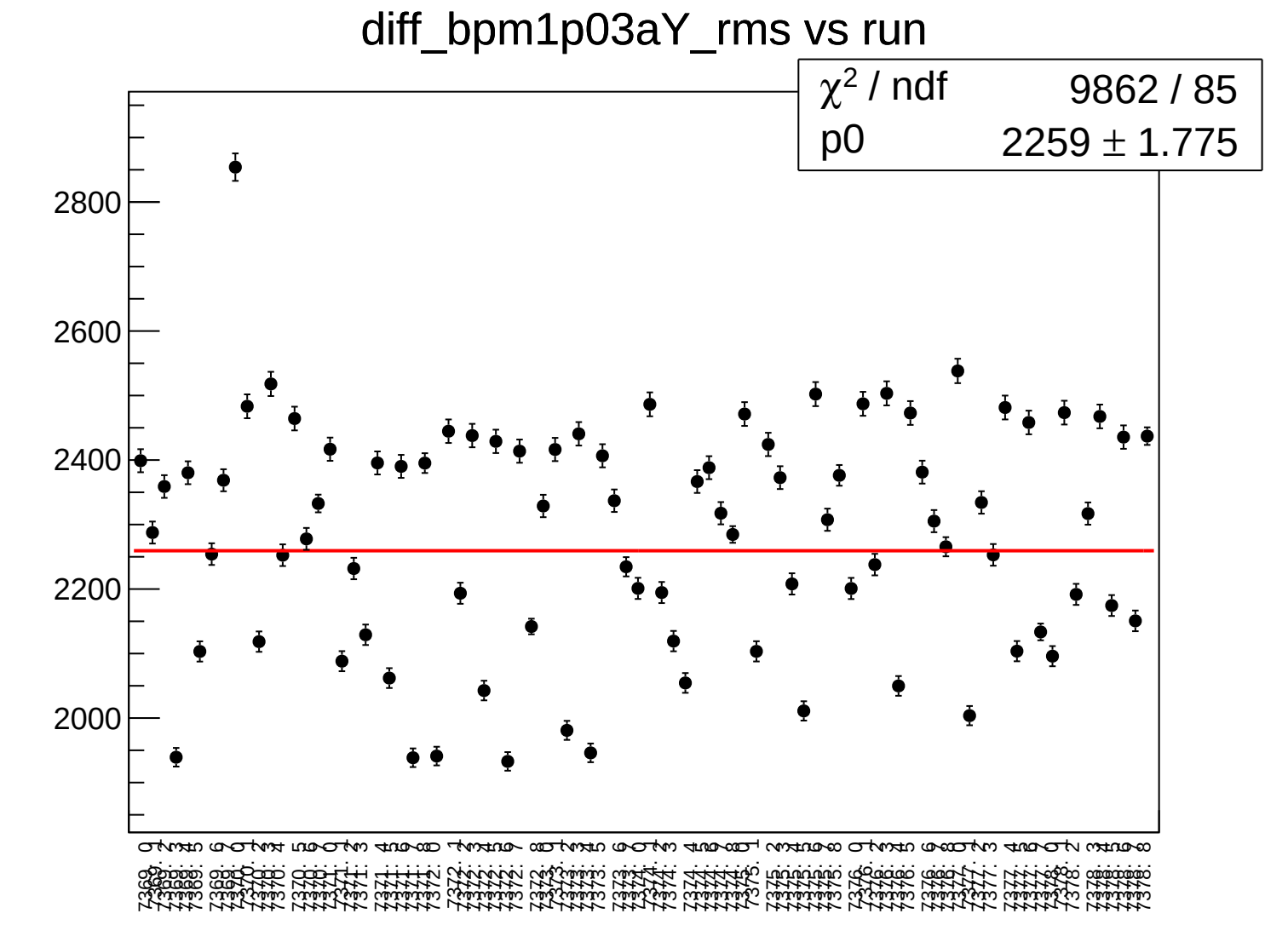

diff_bpm1p03aX_mean vs run
χ^2 / ndf 102.2 / 85
p0 1.159 ± 1.821
pull
Entries 86
Mean 820.5
Std Dev 795.4

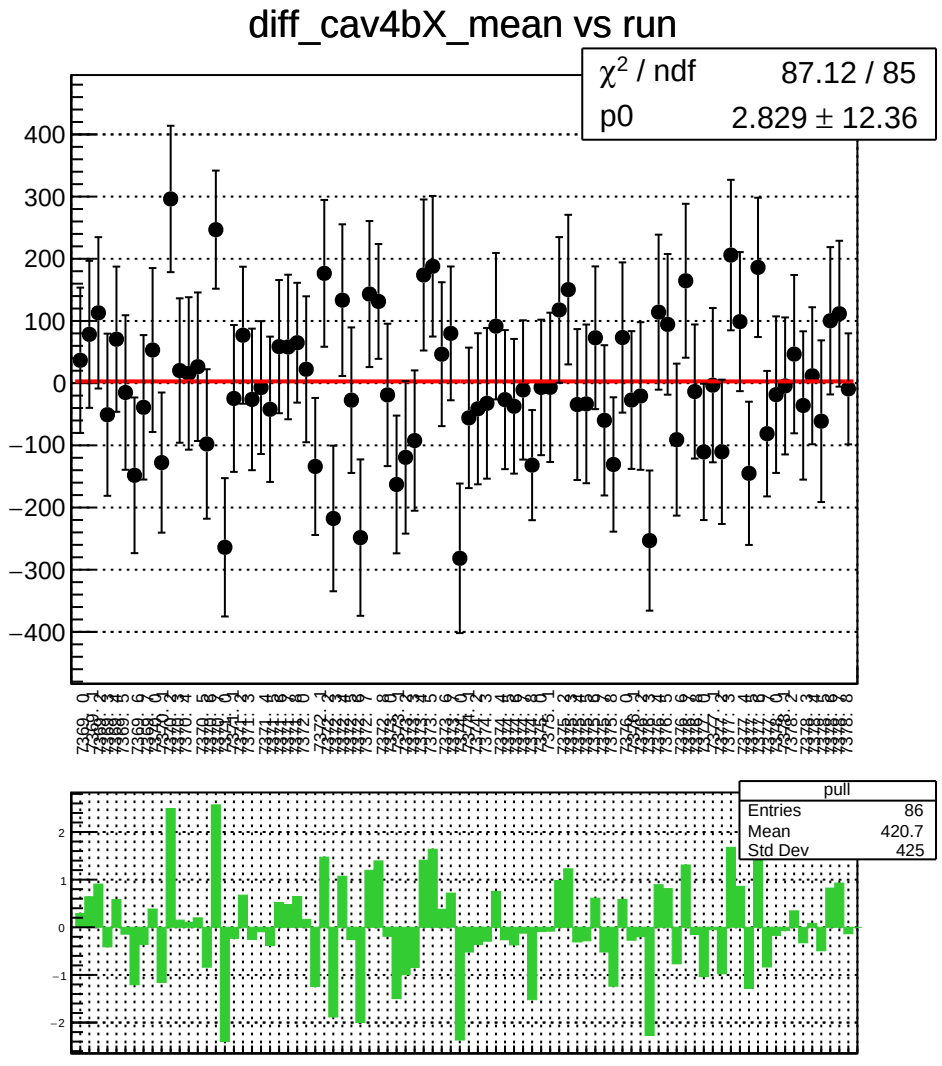

pull1D
Entries 86
Mean −0.002611
Std Dev 1.09

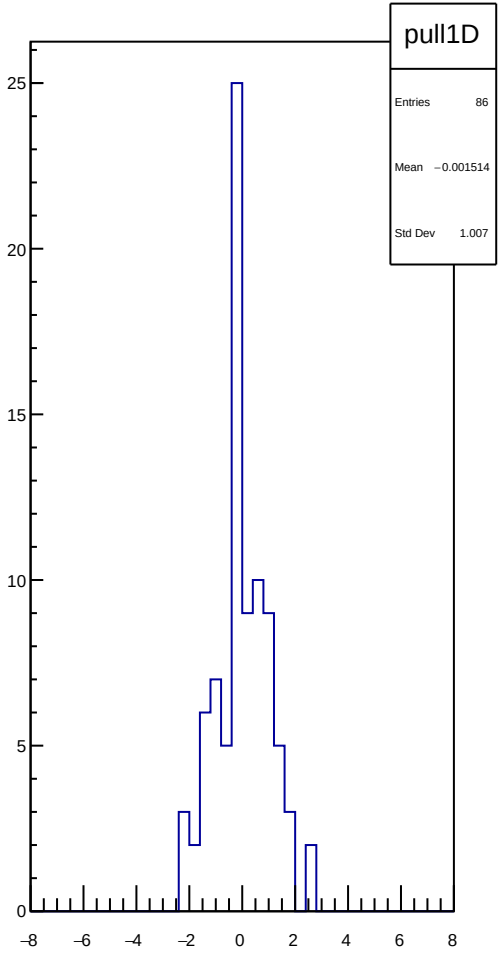

diff_bpm1p03aX_rms vs run
χ² / ndf 2830 / 85
p0 1642 ± 1.287
1900
1850
1800
1750
1700
1650
1600
1550
1500

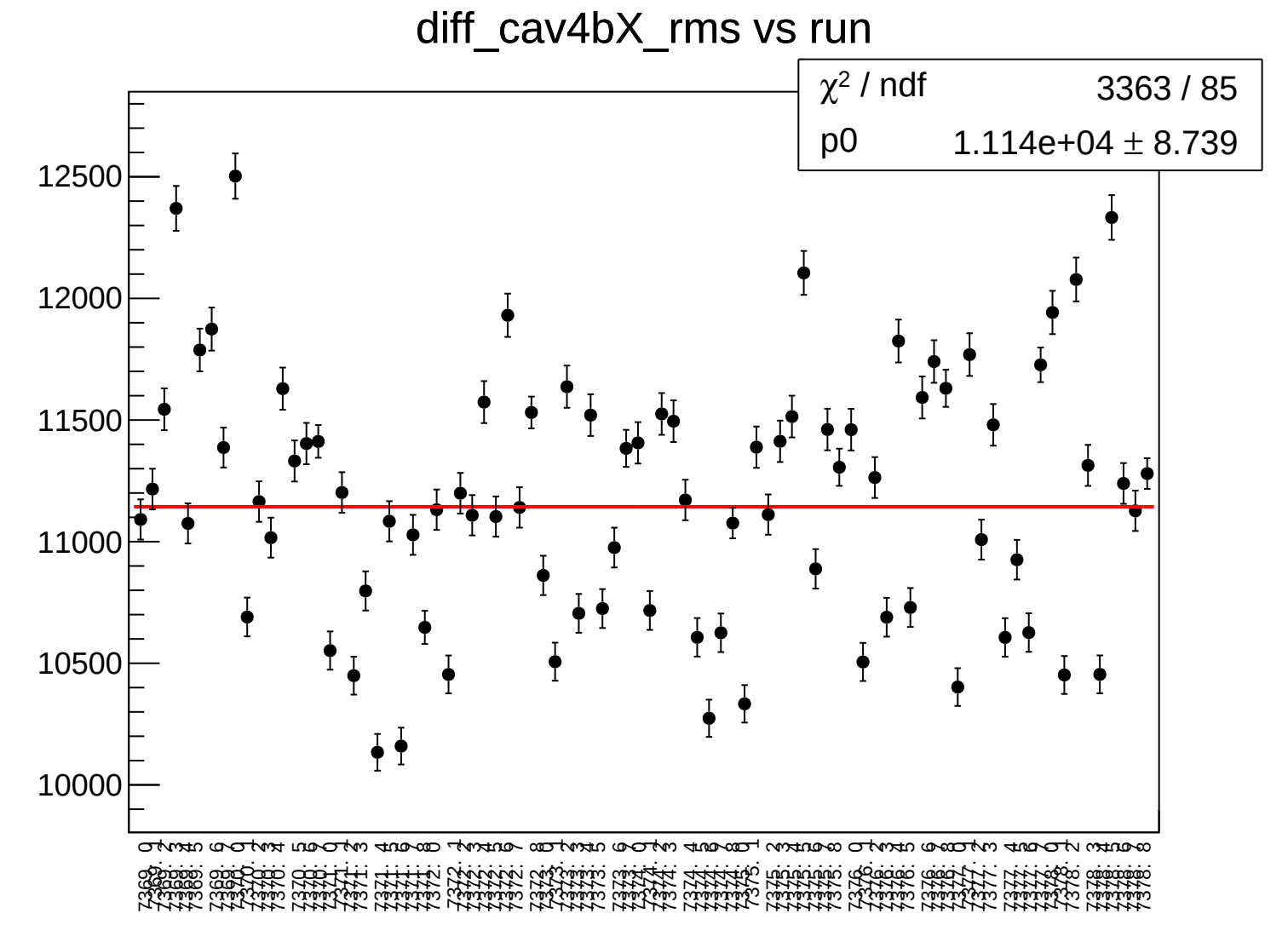

diff_bpm1p03aY_mean vs run
χ² / ndf 95.75 / 85
p0 −1.182 ± 2.511
100
50
0
−50
−100
pull
Entries 86
Mean 256.7
Std Dev 184.6
2
1
0
−1
−2

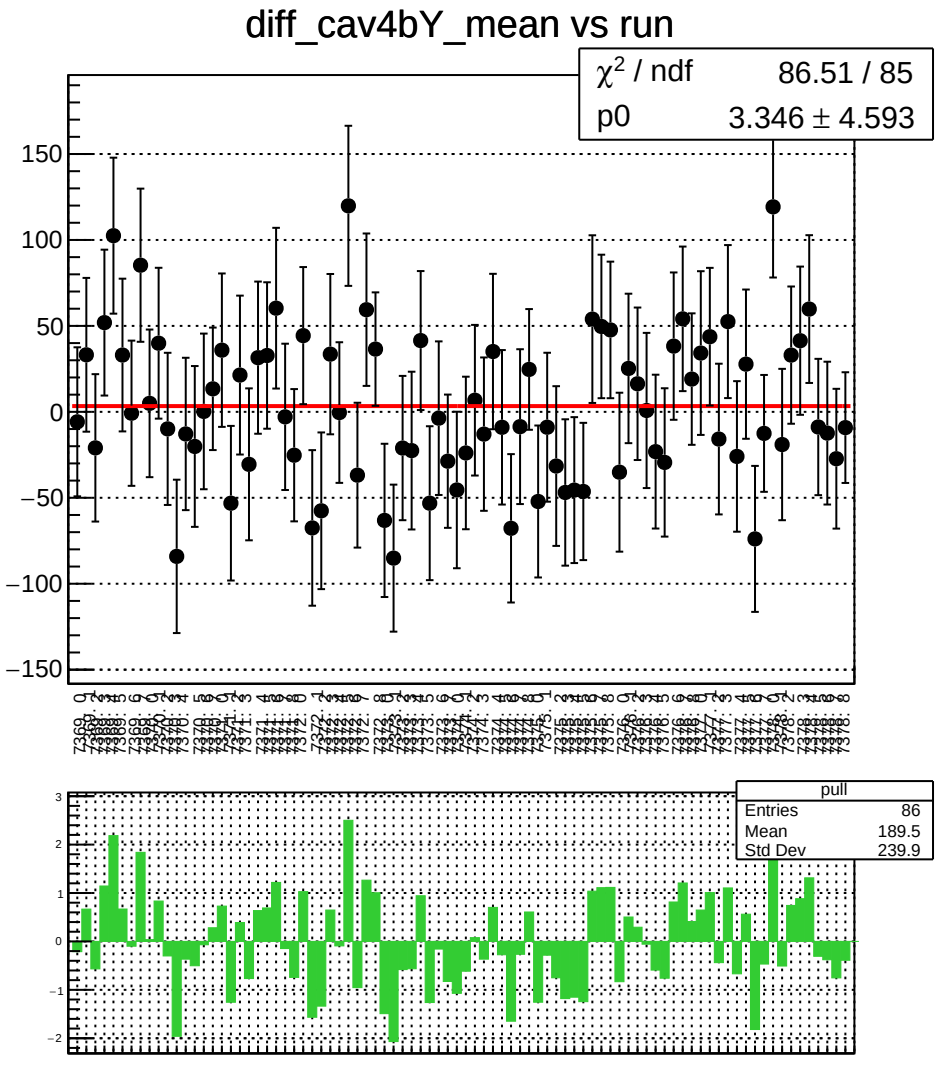

pull1D
Entries 86
Mean 0.0107
Std Dev 1.055
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

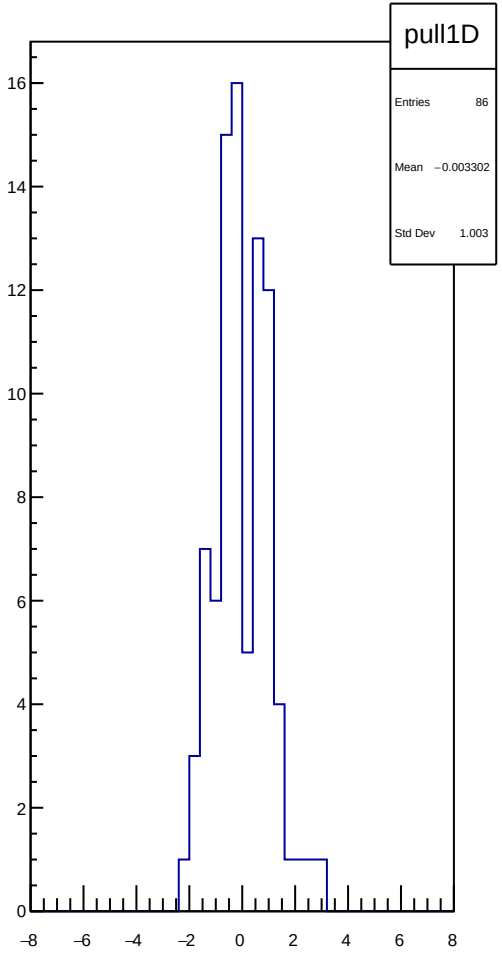

diff_bpm1p03aY_rms vs run
χ² / ndf 9862 / 85
p0 2259 ± 1.775
2800
2600
2400
2200
2000

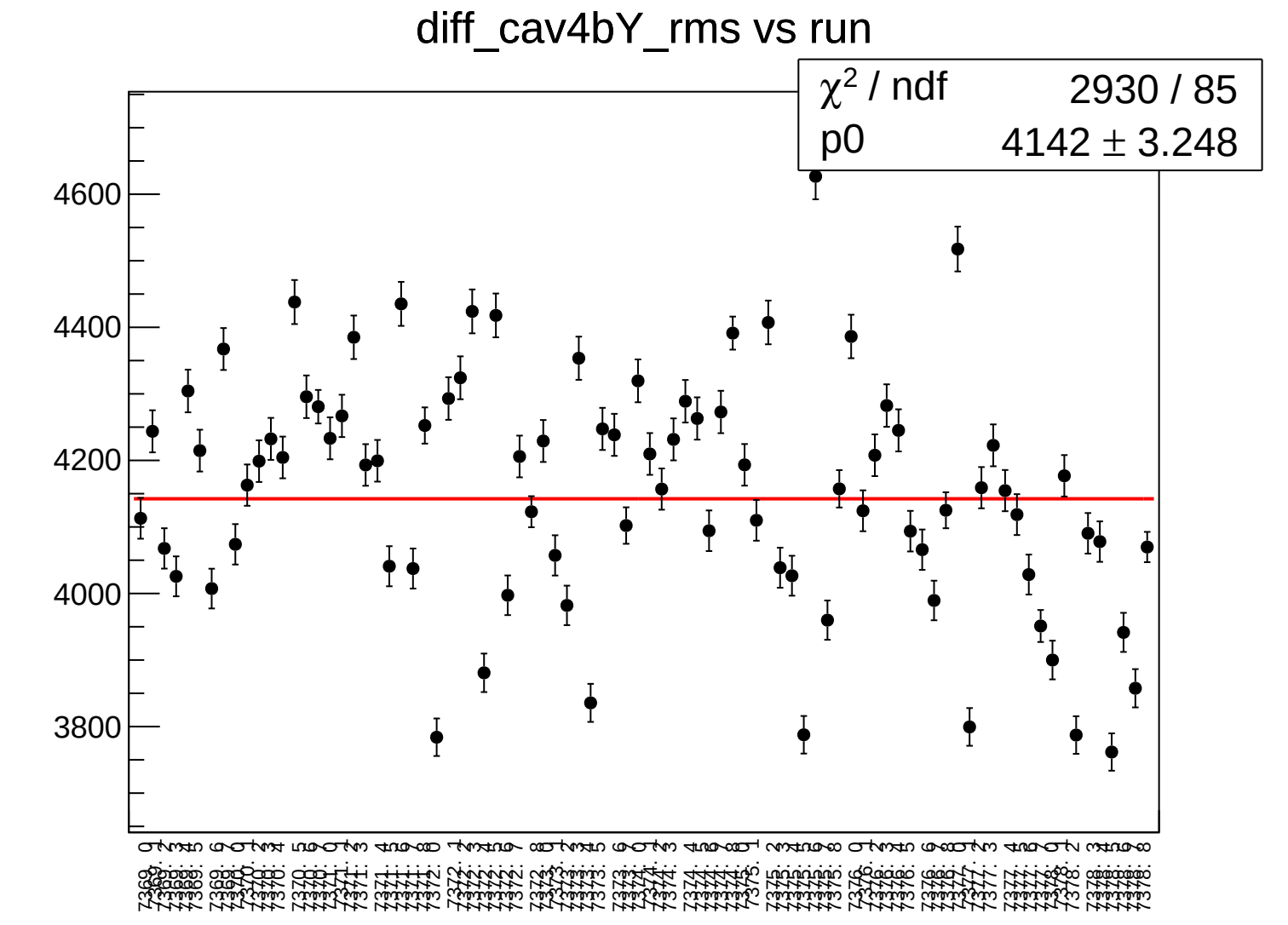

diff_cav4bX_mean vs run
χ^2 / ndf 87.12 / 85
p0 2.829 ± 12.36
pull
Entries 86
Mean 420.7
Std Dev 425

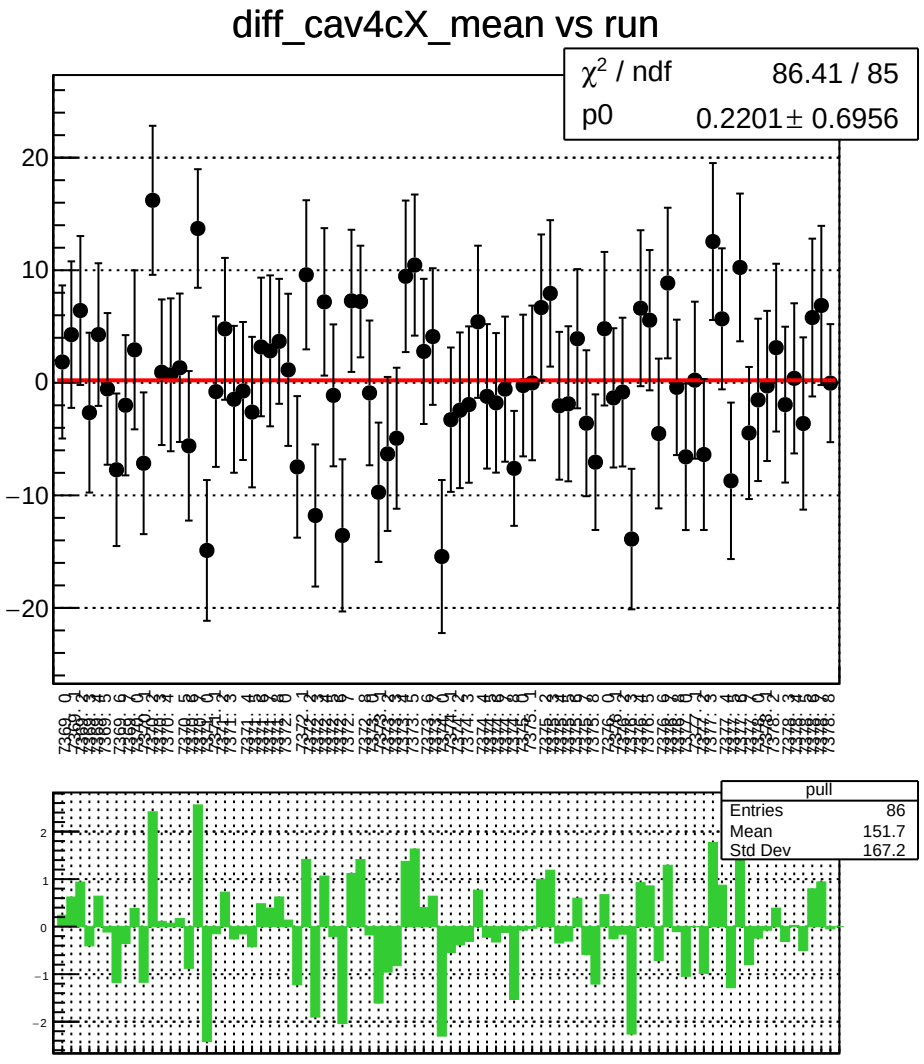

pull1D
Entries 86
Mean −0.001514
Std Dev 1.007

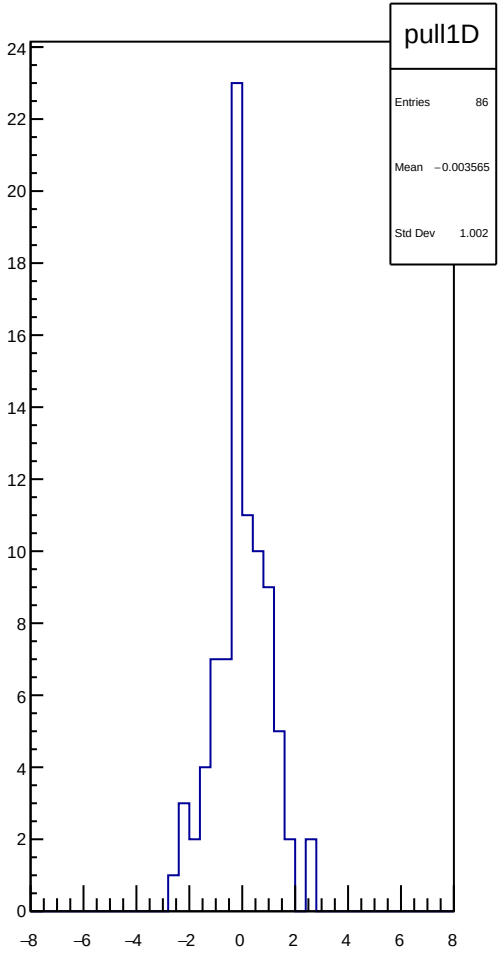

diff_cav4bX_rms vs run
χ² / ndf 3363 / 85
p0 1.114e+04 ± 8.739
12500
12000
11500
11000
10500
10000

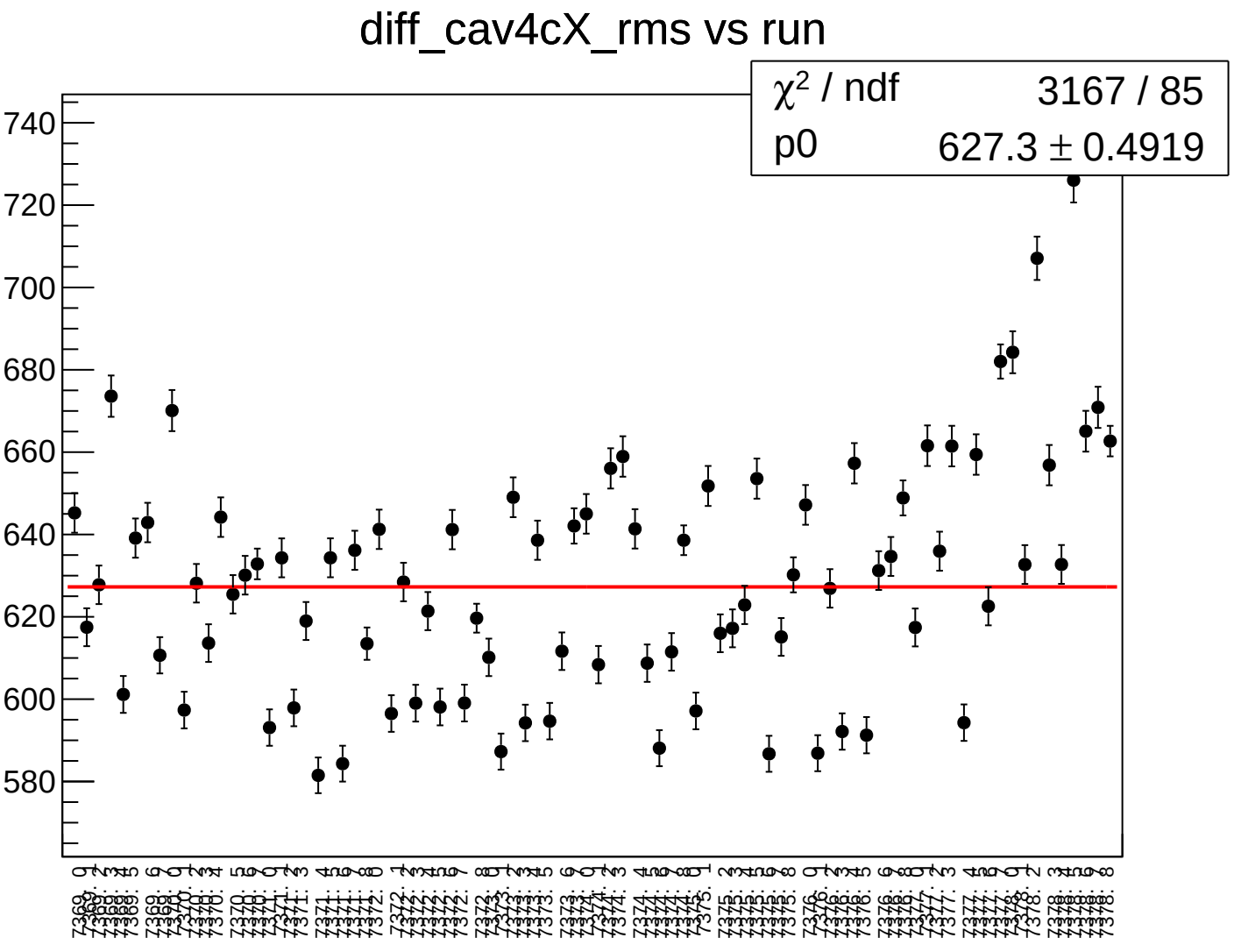

diff_cav4bY_mean vs run
χ² / ndf 86.51 / 85
p0 3.346 ± 4.593
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 189.5
Std Dev 239.9
3
2
1
0
−1
−2

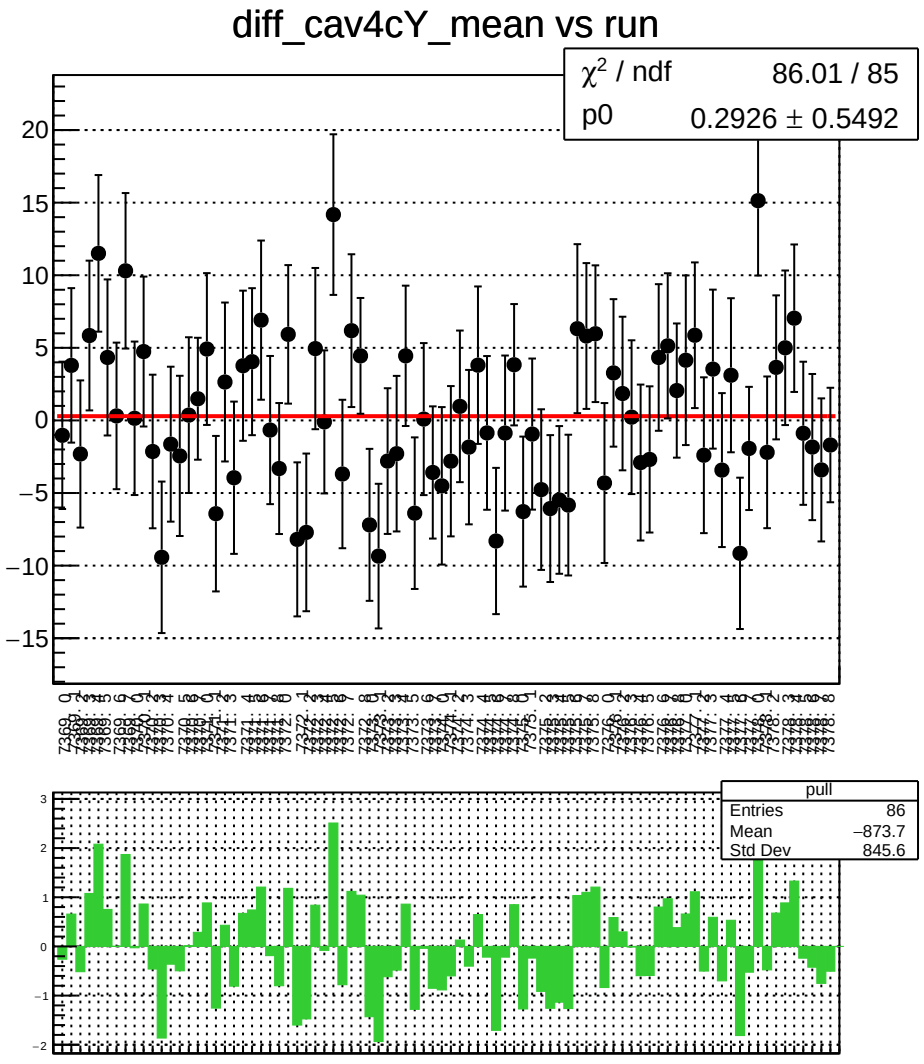

pull1D
Entries 86
Mean −0.003302
Std Dev 1.003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

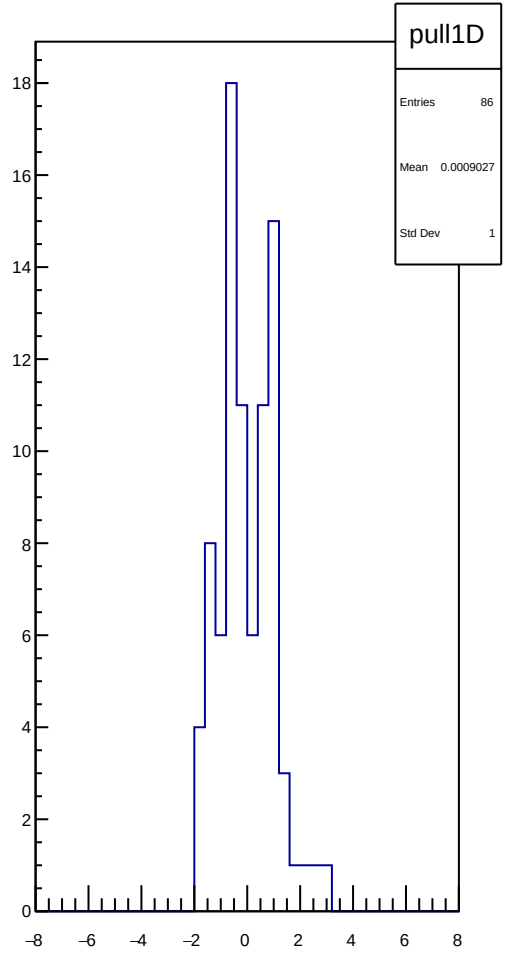

diff_cav4bY_rms vs run
χ² / ndf 2930 / 85
p0 4142 ± 3.248
4600
4400
4200
4000
3800

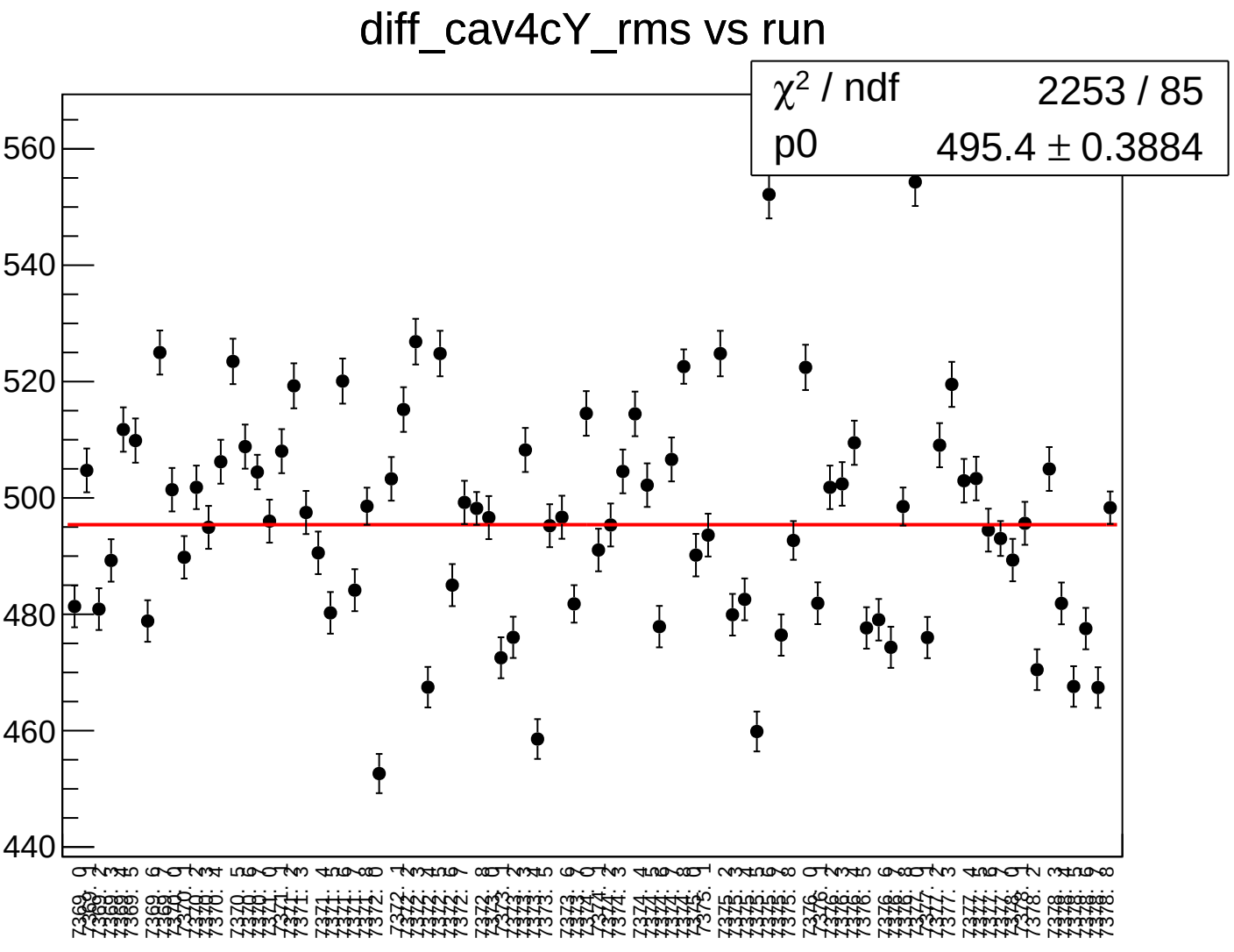

diff_cav4cX_mean vs run
χ² / ndf 86.41 / 85
p0 0.2201 ± 0.6956
pull
Entries 86
Mean 151.7
Std Dev 167.2

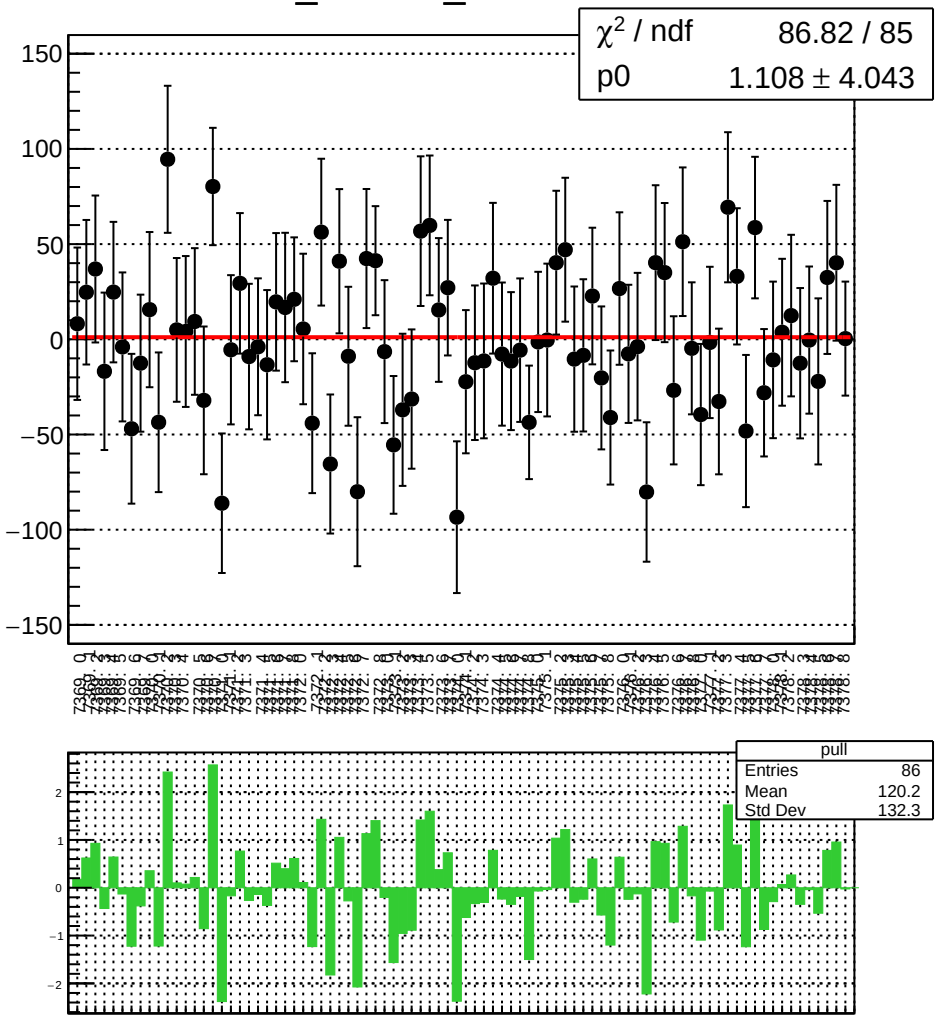

pull1D
Entries 86
Mean −0.003565
Std Dev 1.002

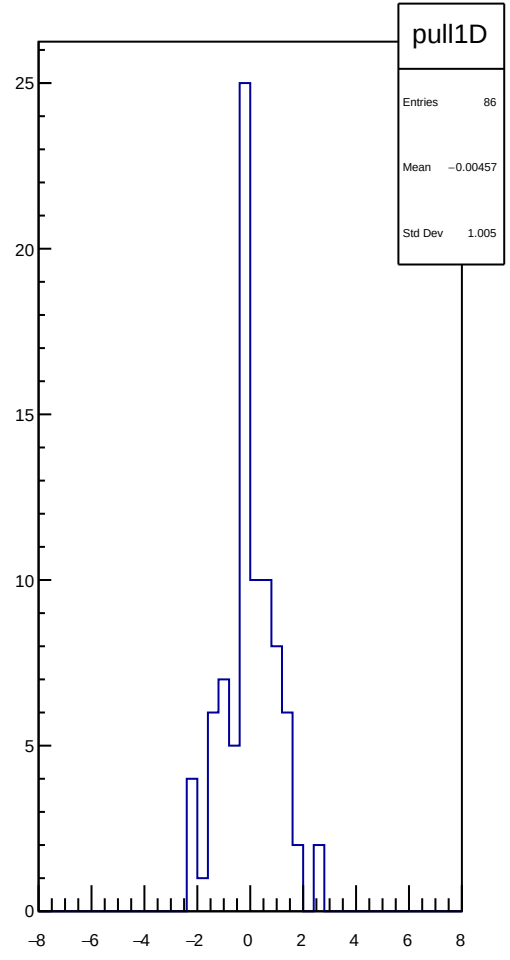

diff_cav4cX_rms vs run
χ² / ndf 3167 / 85
p0 627.3 ± 0.4919
740
720
700
680
660
640
620
600
580

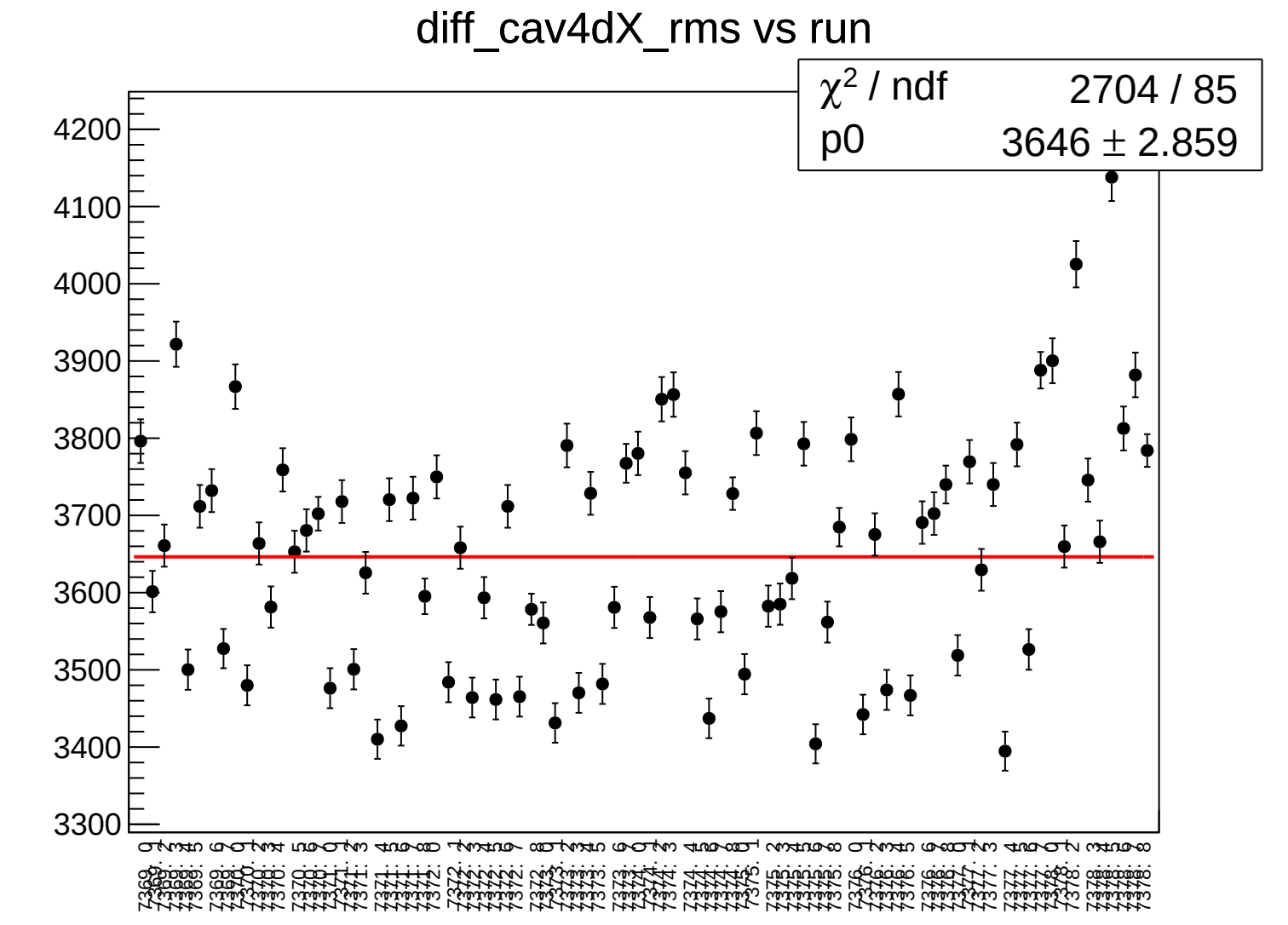

diff_cav4cY_mean vs run
χ^2 / ndf 86.01 / 85
p0 0.2926 ± 0.5492
pull
Entries 86
Mean −873.7
Std Dev 845.6

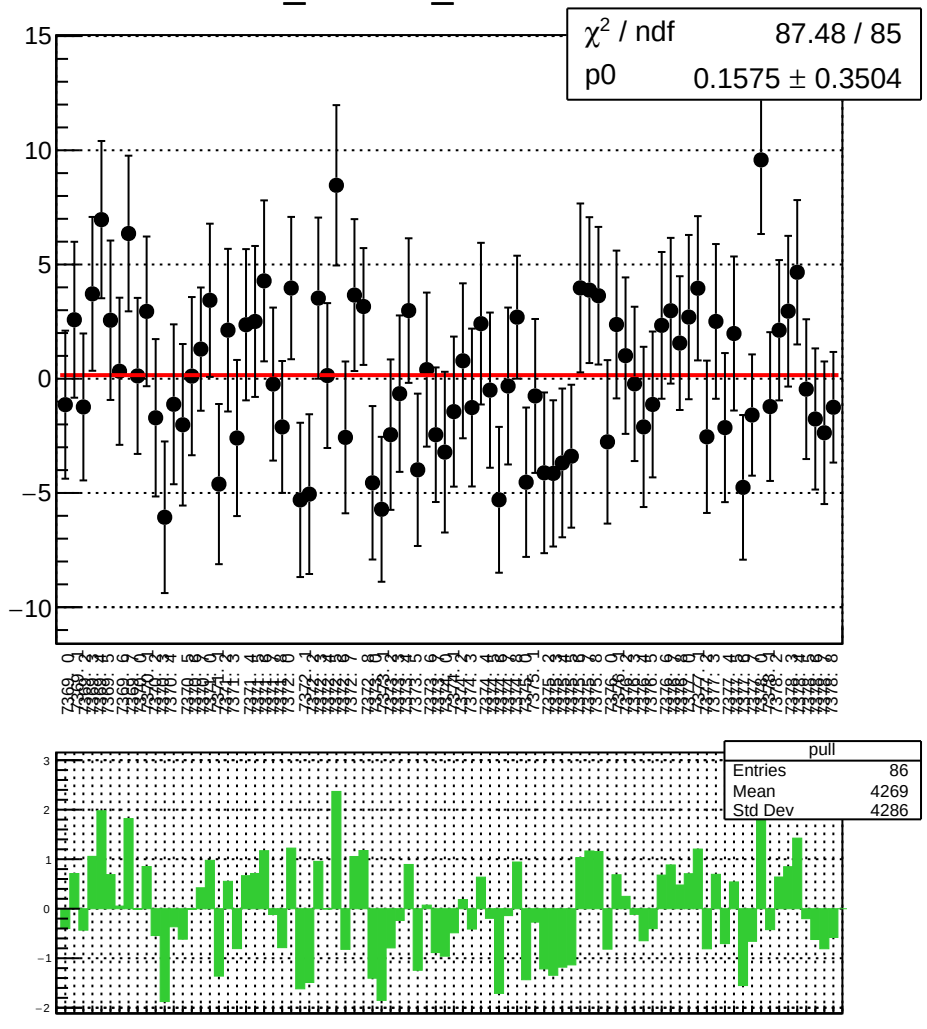

pull1D
Entries 86
Mean 0.0009027
Std Dev 1

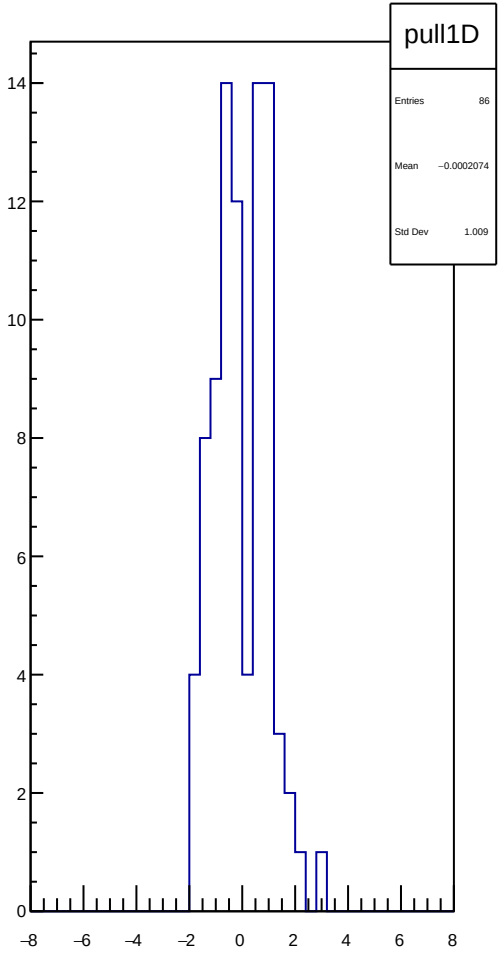

diff_cav4cY_rms vs run
χ² / ndf 2253 / 85
p0 495.4 ± 0.3884
560
540
520
500
480
460
440

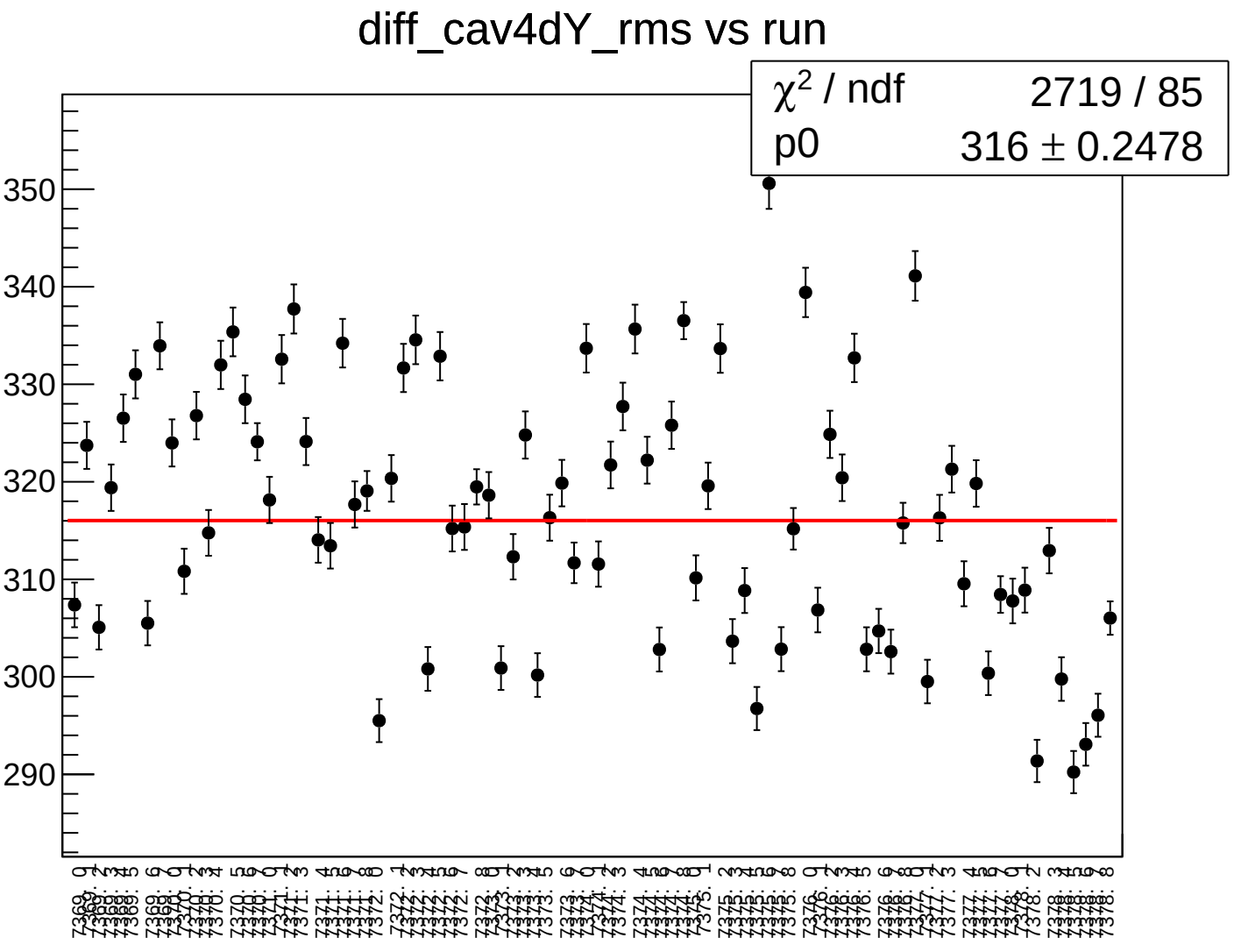

diff_cav4dX_mean vs run
χ² / ndf 86.82 / 85
p0 1.108 ± 4.043
150
100
50
0
−50
−100
−150
pull
Entries 86
Mean 120.2
Std Dev 132.3
2
1
0
−1
−2

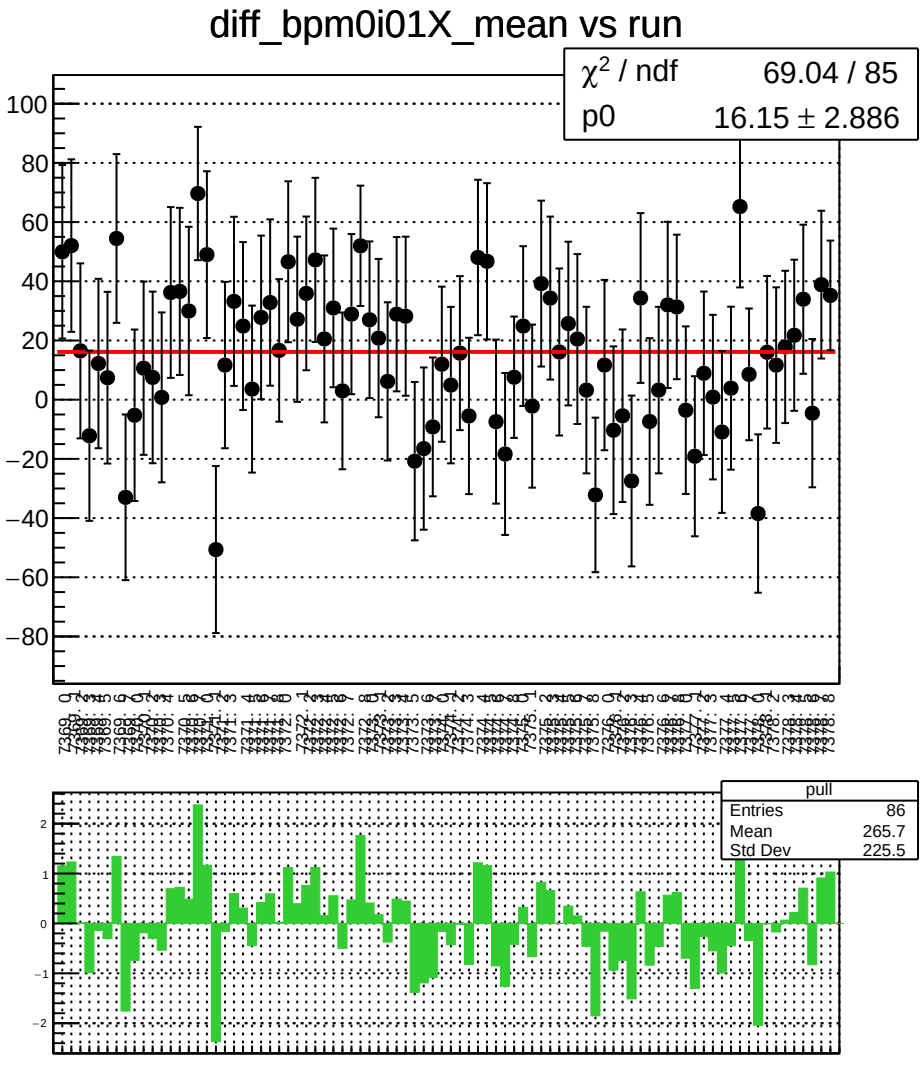

pull1D
Entries 86
Mean −0.00457
Std Dev 1.005
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

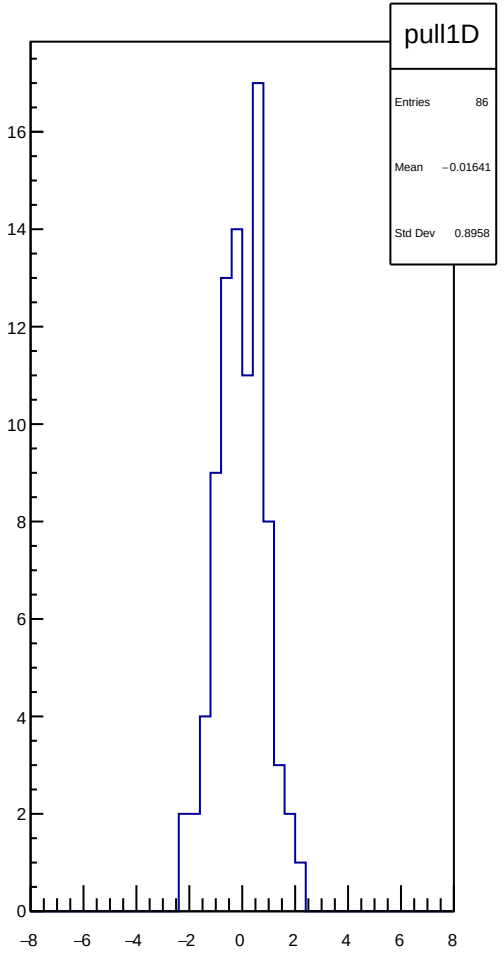

diff_cav4dX_rms vs run
χ² / ndf 2704 / 85
p0 3646 ± 2.859
4200
4100
4000
3900
3800
3700
3600
3500
3400
3300

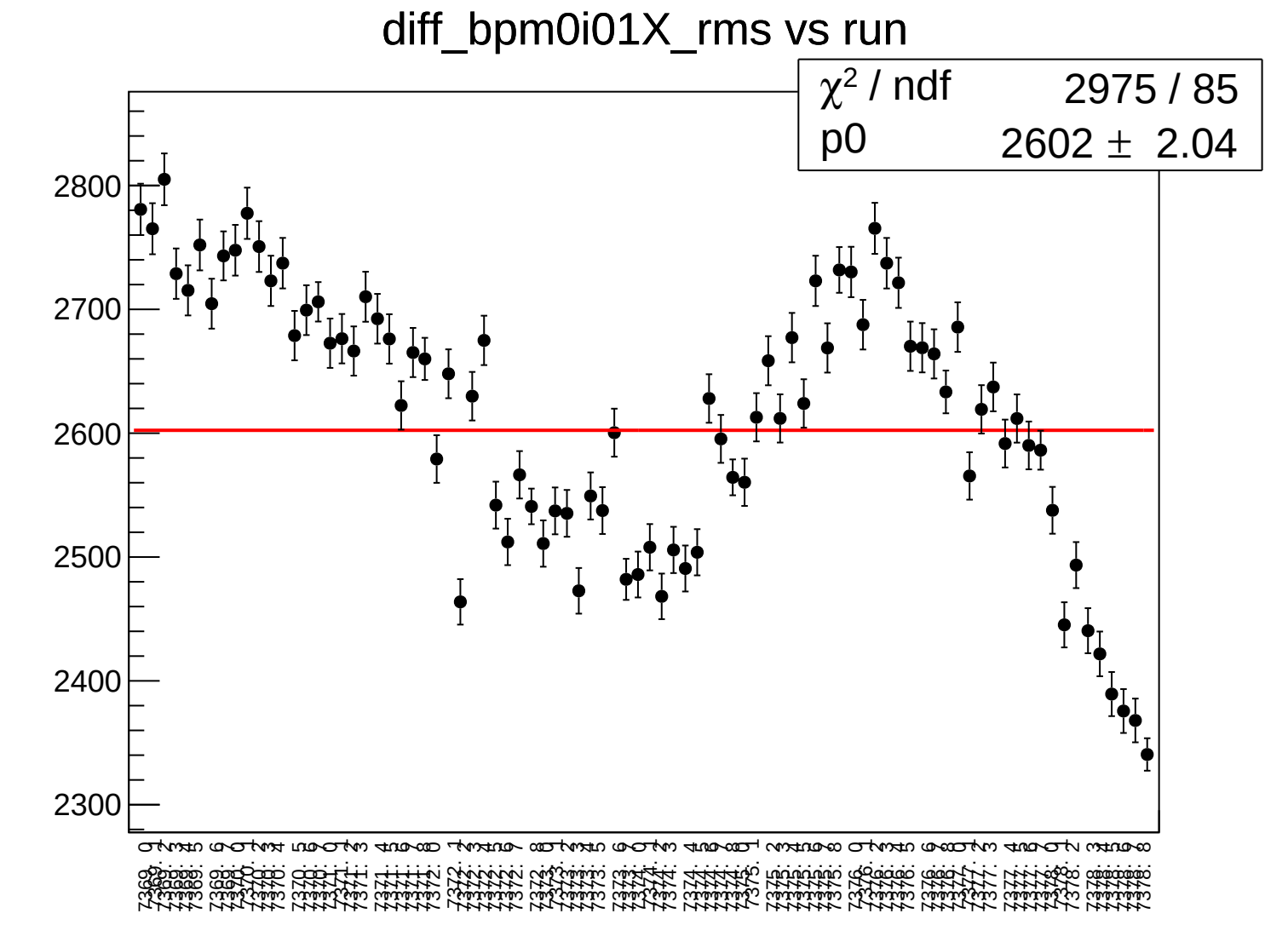

diff_cav4dY_mean vs run
χ² / ndf 87.48 / 85
p0 0.1575 ± 0.3504
pull
Entries 86
Mean 4269
Std Dev 4286

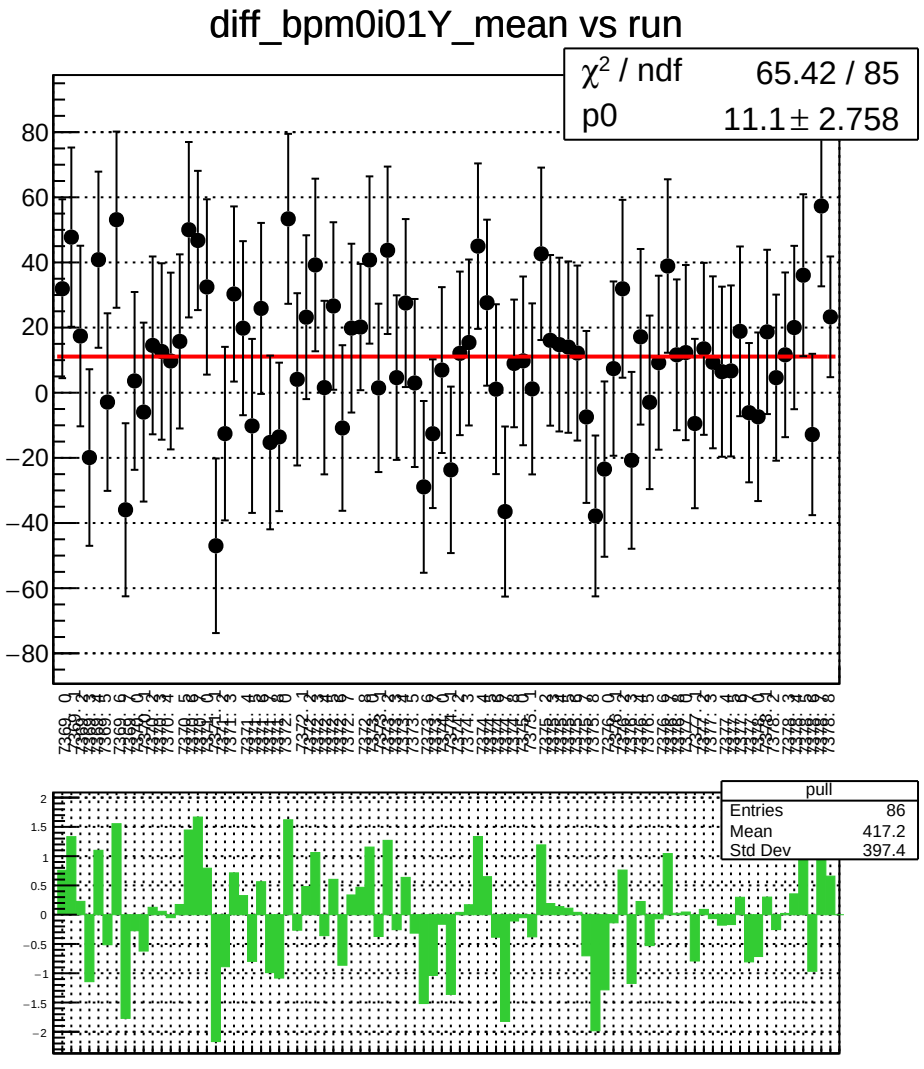

pull1D
Entries 86
Mean −0.0002074
Std Dev 1.009

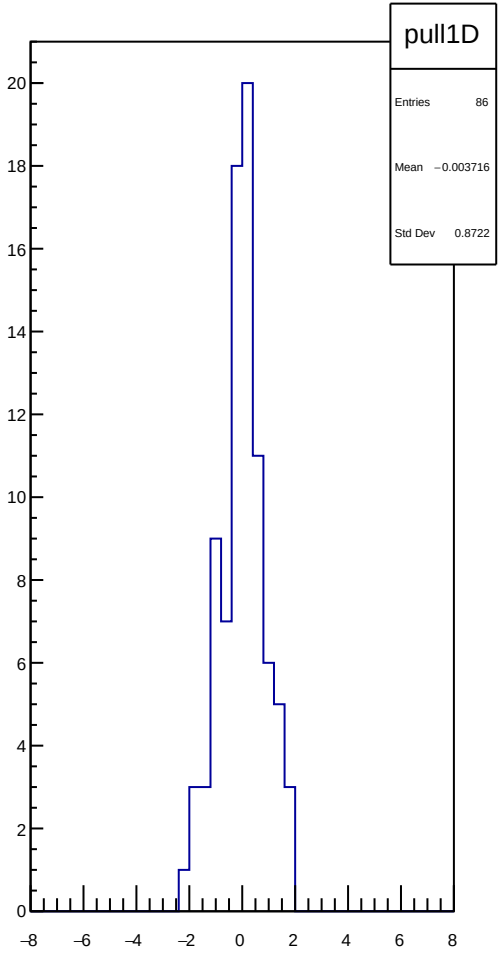

diff_cav4dY_rms vs run
χ² / ndf 2719 / 85
p0 316 ± 0.2478
350
340
330
320
310
300
290

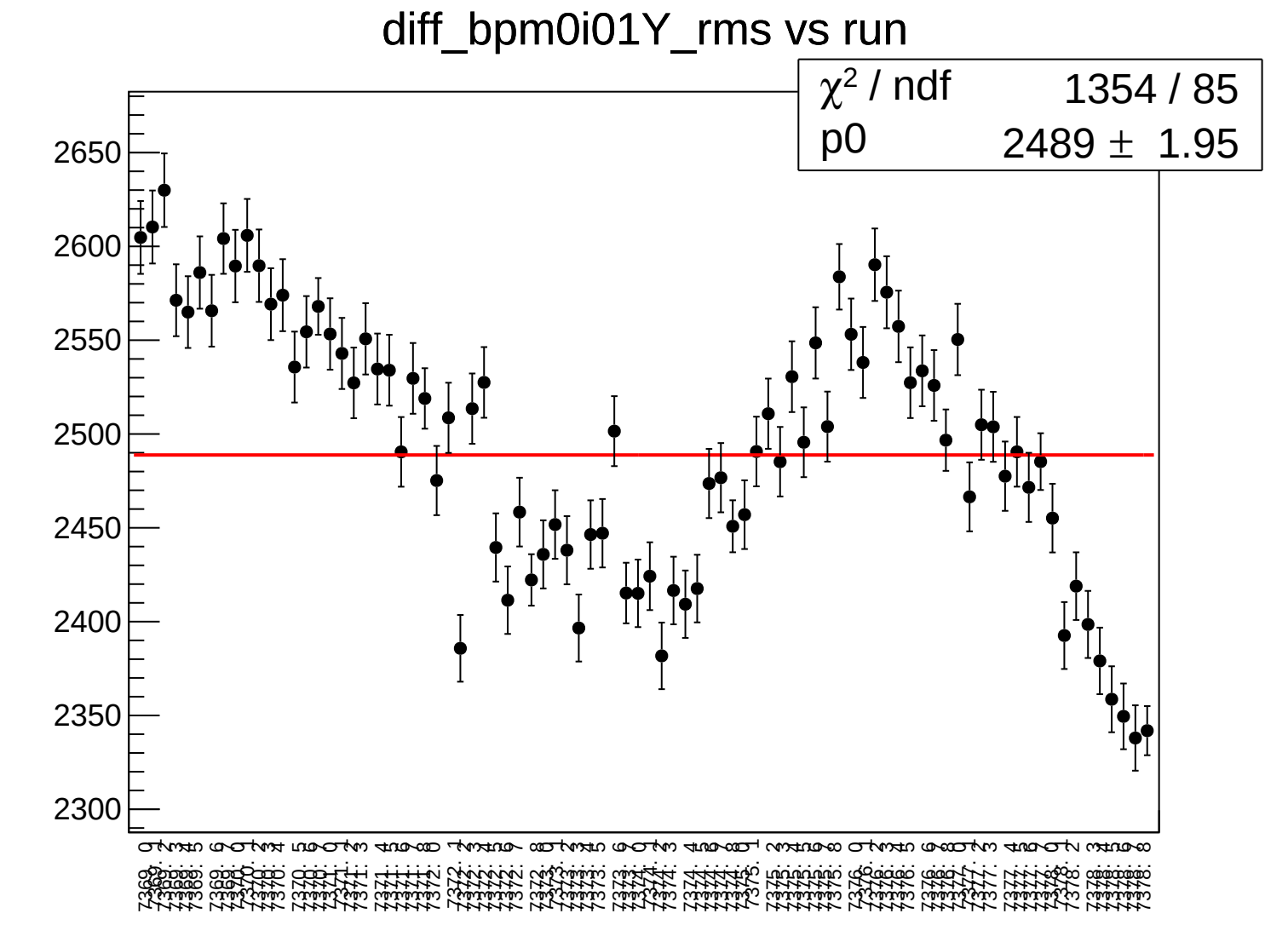

diff_bpm0i01X_mean vs run
χ^2 / ndf 69.04 / 85
p0 16.15 ± 2.886
pull
Entries 86
Mean 265.7
Std Dev 225.5

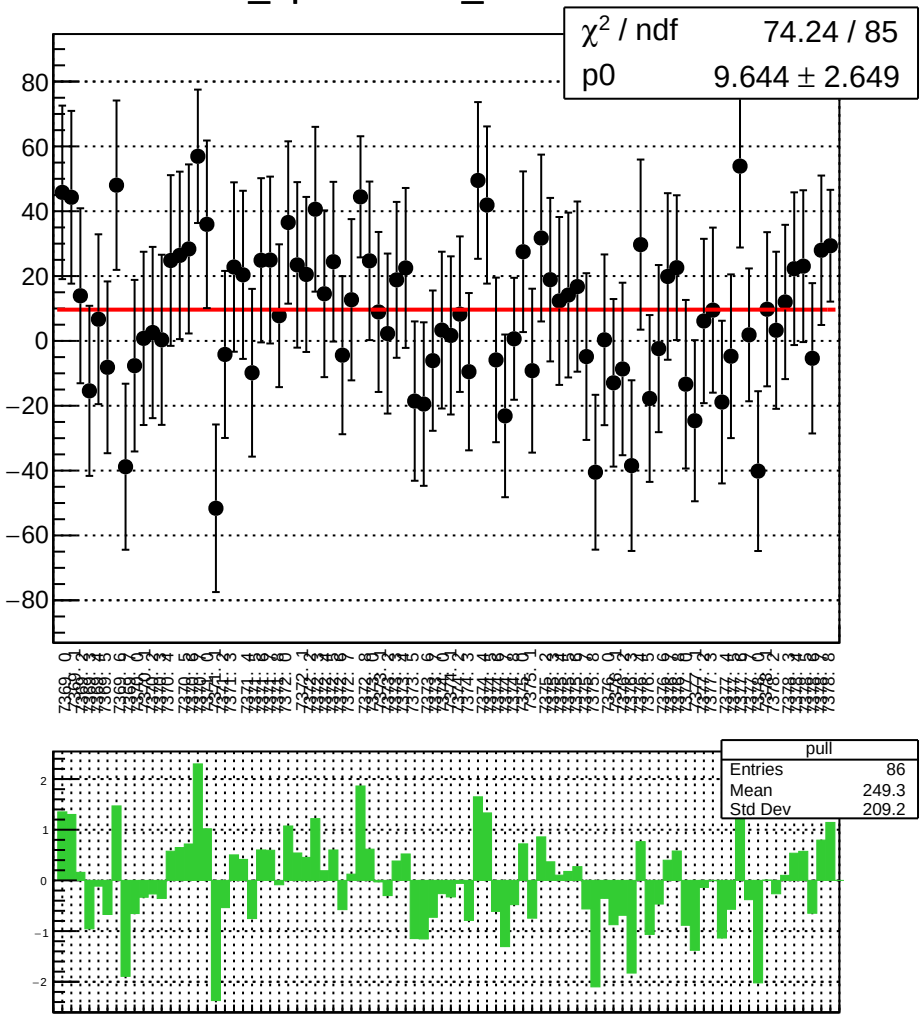

pull1D
Entries 86
Mean −0.01641
Std Dev 0.8958

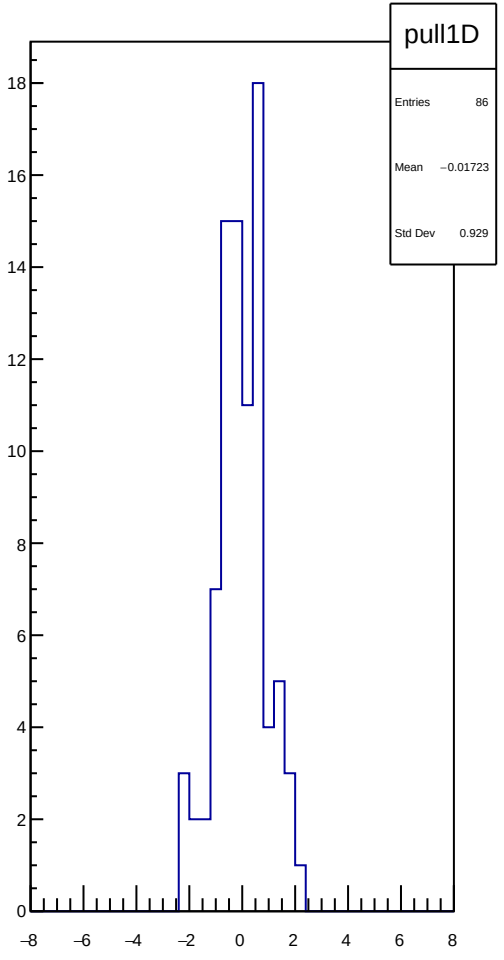

diff_bpm0i01X_rms vs run
χ² / ndf 2975 / 85
p0 2602 ± 2.04
2800
2700
2600
2500
2400
2300

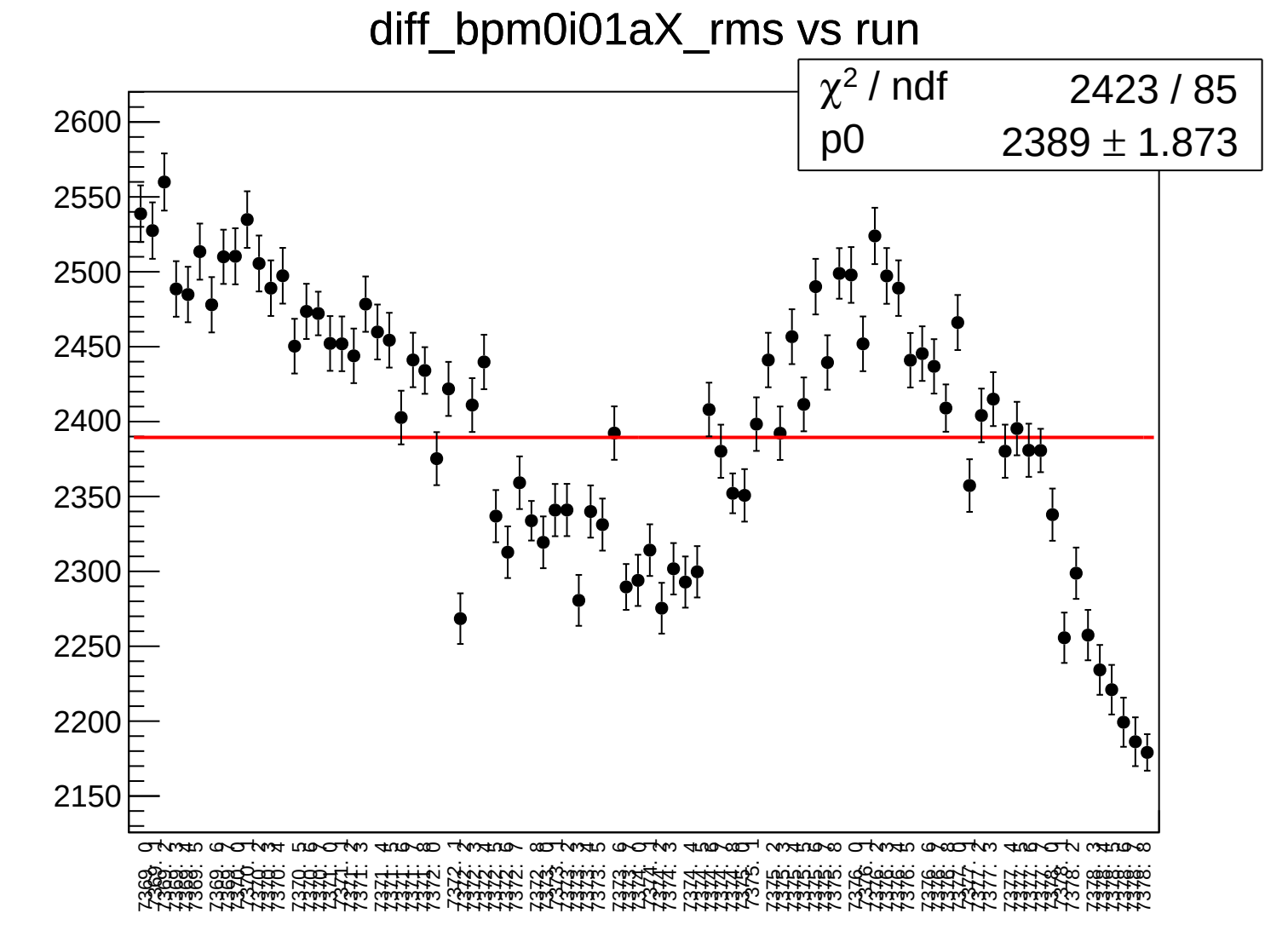

diff_bpm0i01Y_mean vs run
χ² / ndf 65.42 / 85
p0 11.1 ± 2.758
pull
Entries 86
Mean 417.2
Std Dev 397.4

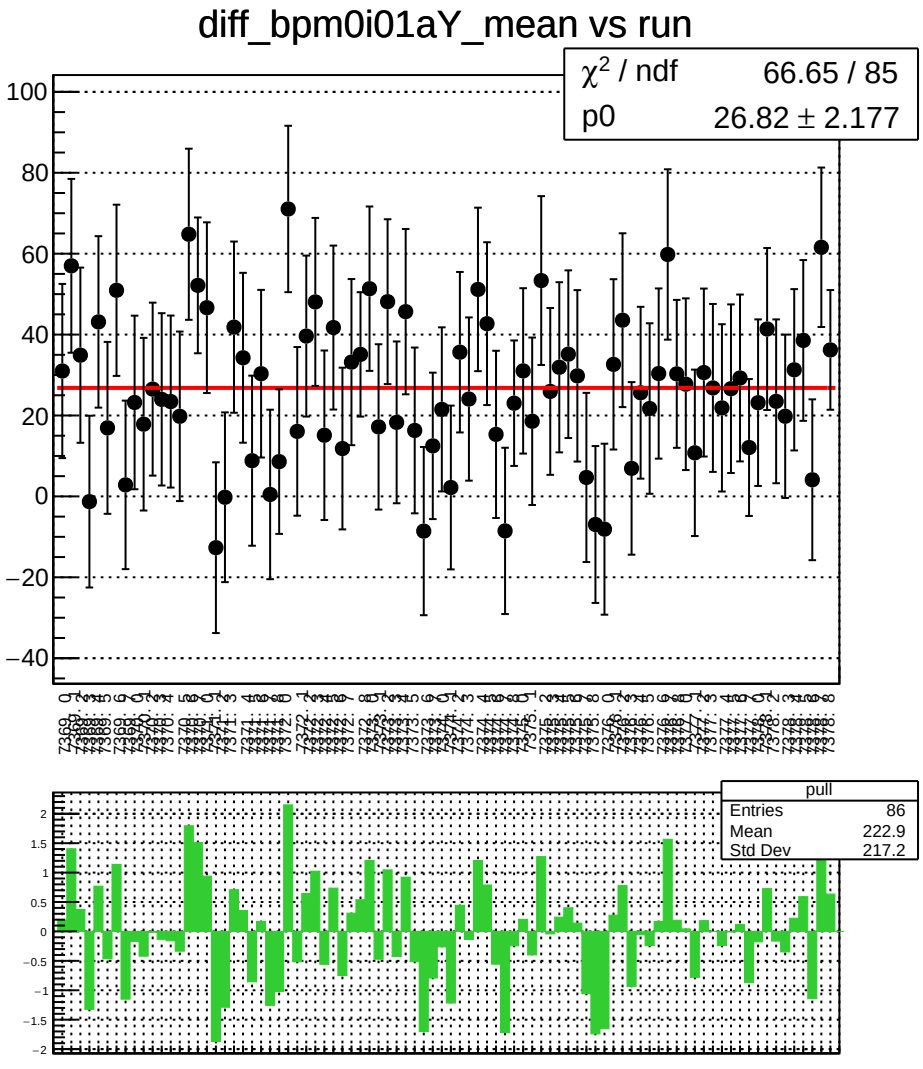

pull1D
Entries 86
Mean −0.003716
Std Dev 0.8722

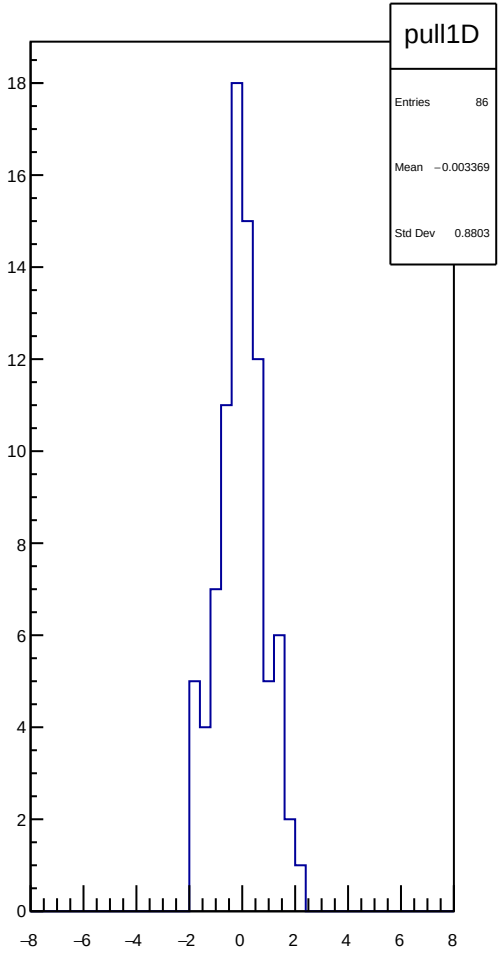

diff_bpm0i01Y_rms vs run
χ² / ndf 1354 / 85
p0 2489 ± 1.95
2650
2600
2550
2500
2450
2400
2350
2300

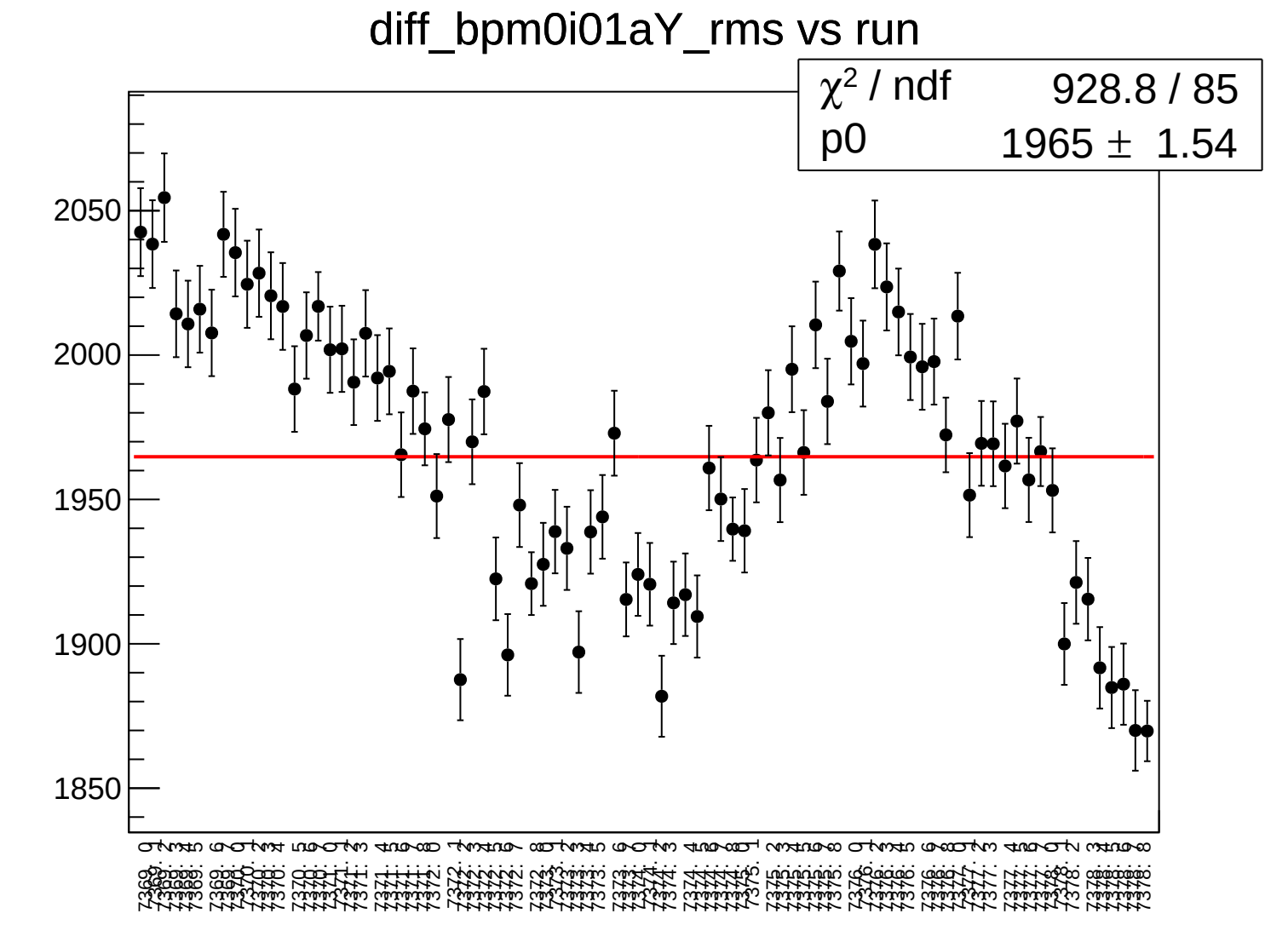

diff_bpm0i01aX_mean vs run
χ² / ndf 74.24 / 85
p0 9.644 ± 2.649
pull
Entries 86
Mean 249.3
Std Dev 209.2

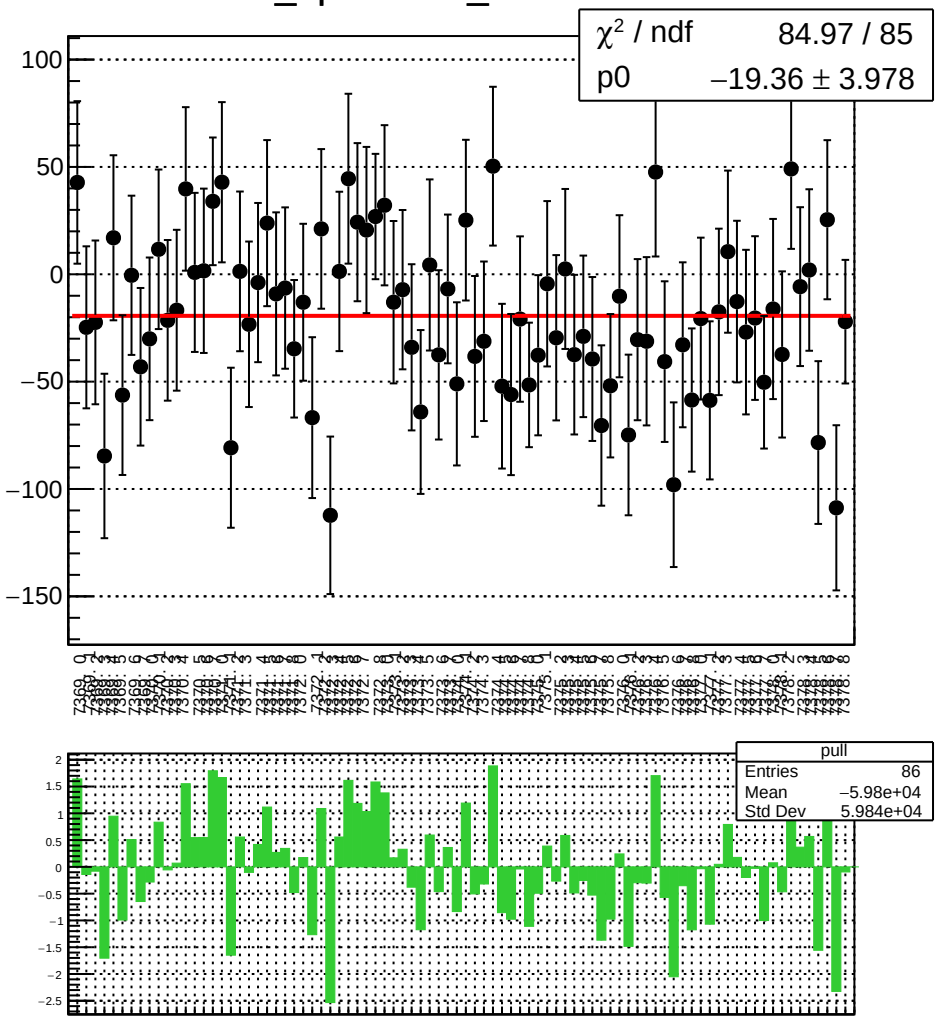

pull1D
Entries 86
Mean −0.01723
Std Dev 0.929

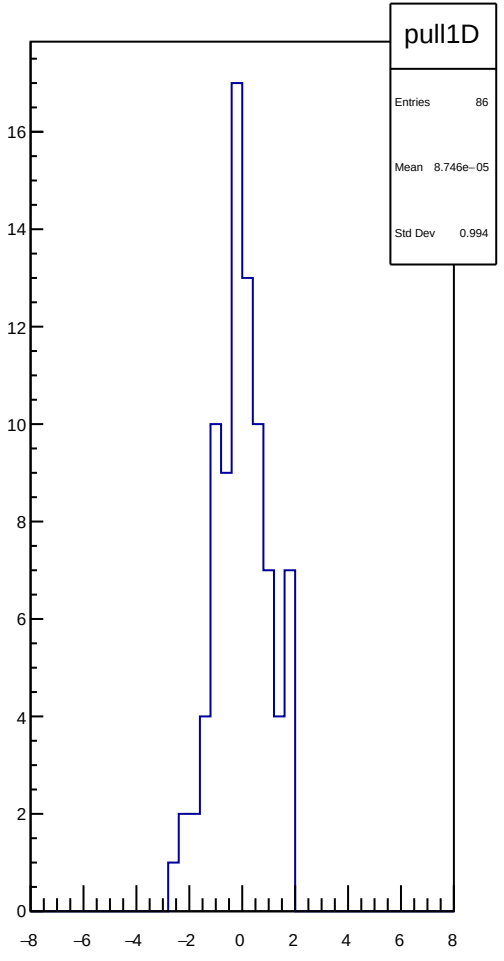

diff_bpm0i01aX_rms vs run
χ² / ndf 2423 / 85
p0 2389 ± 1.873
2600
2550
2500
2450
2400
2350
2300
2250
2200
2150

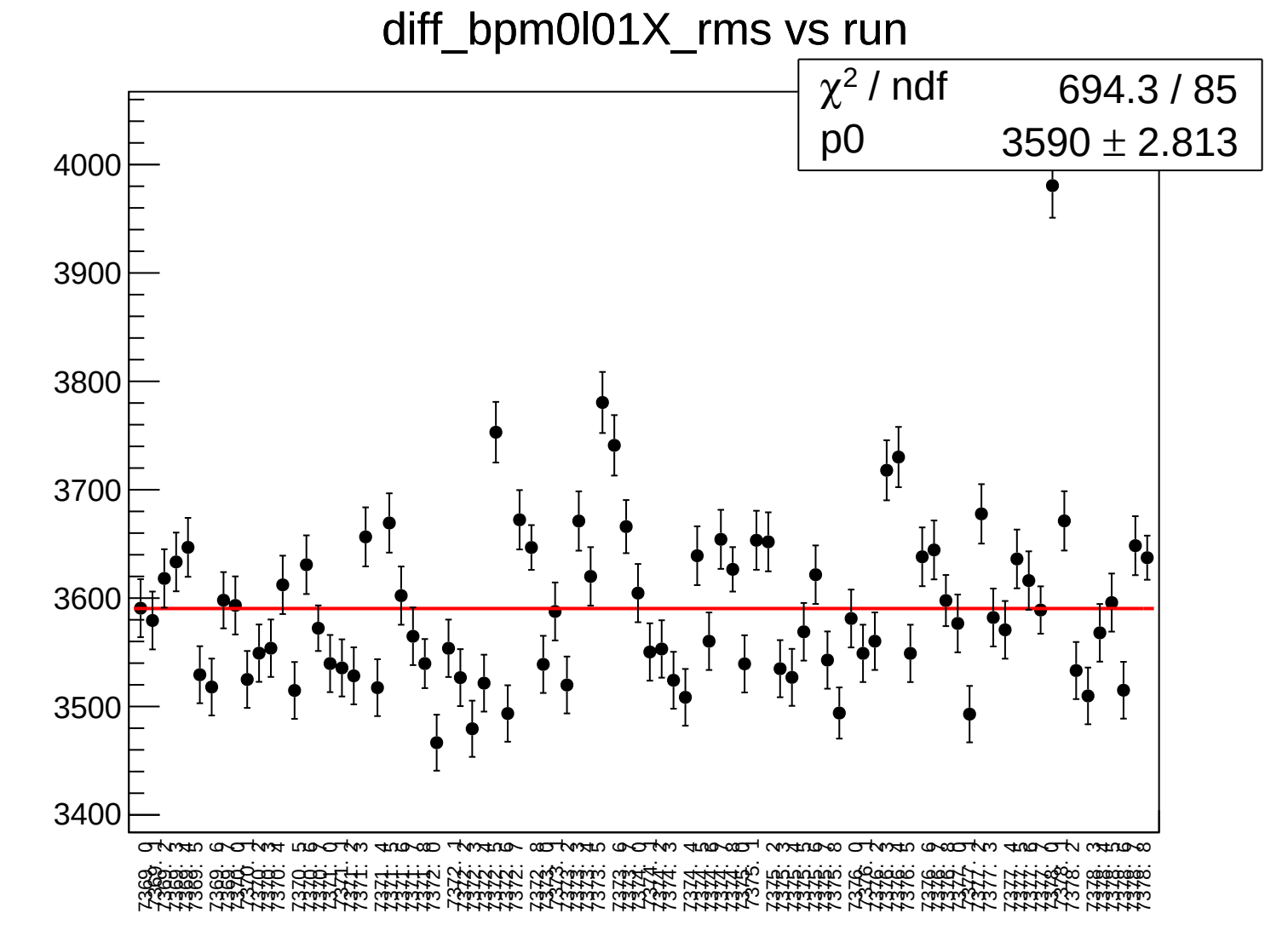

diff_bpm0i01aY_mean vs run
χ² / ndf 66.65 / 85
p0 26.82 ± 2.177
pull
Entries 86
Mean 222.9
Std Dev 217.2

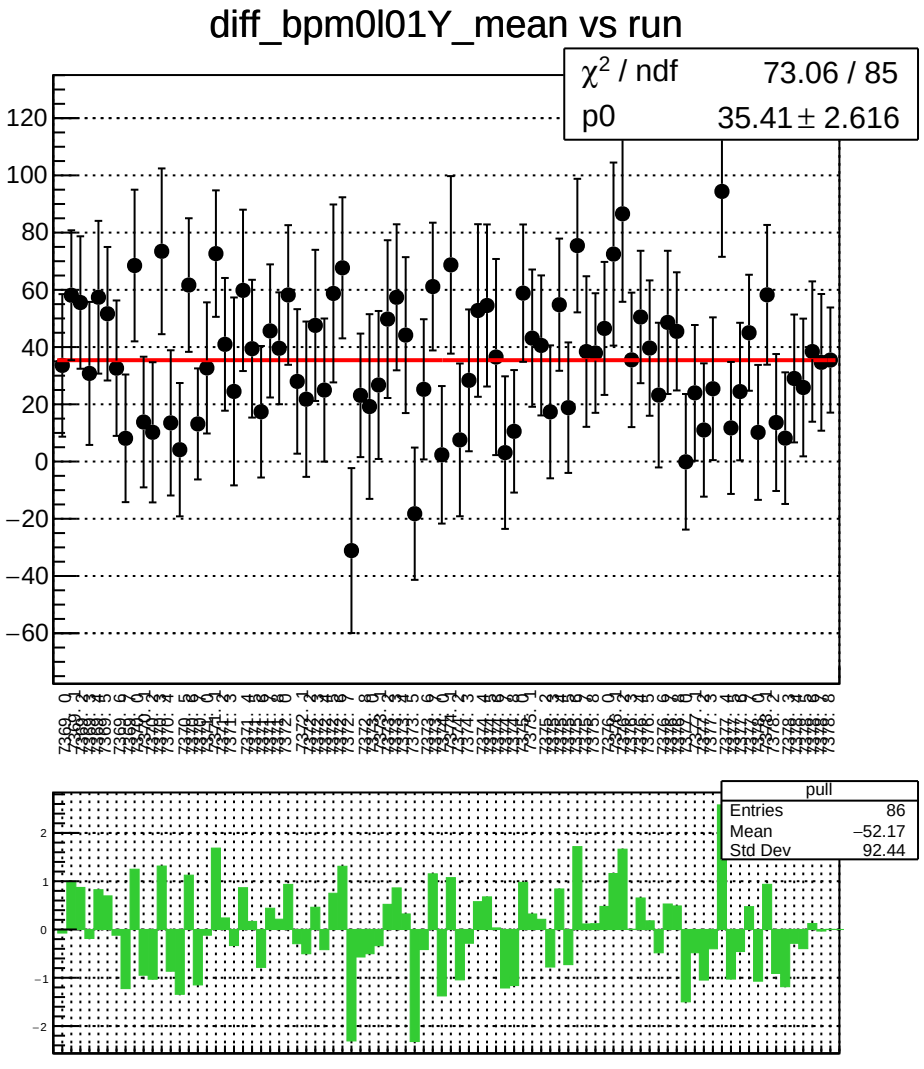

pull1D
Entries 86
Mean −0.003369
Std Dev 0.8803

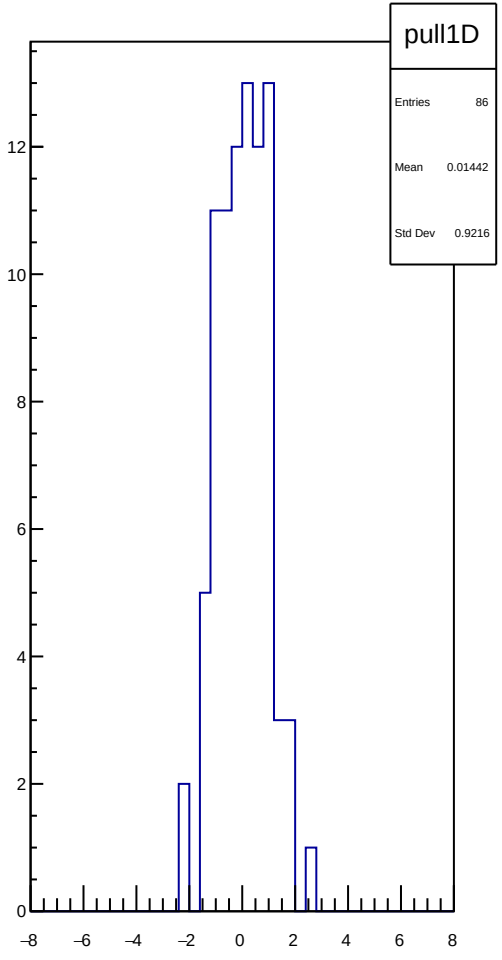

diff_bpm0i01aY_rms vs run
χ² / ndf 928.8 / 85
p0 1965 ± 1.54
2050
2000
1950
1900
1850

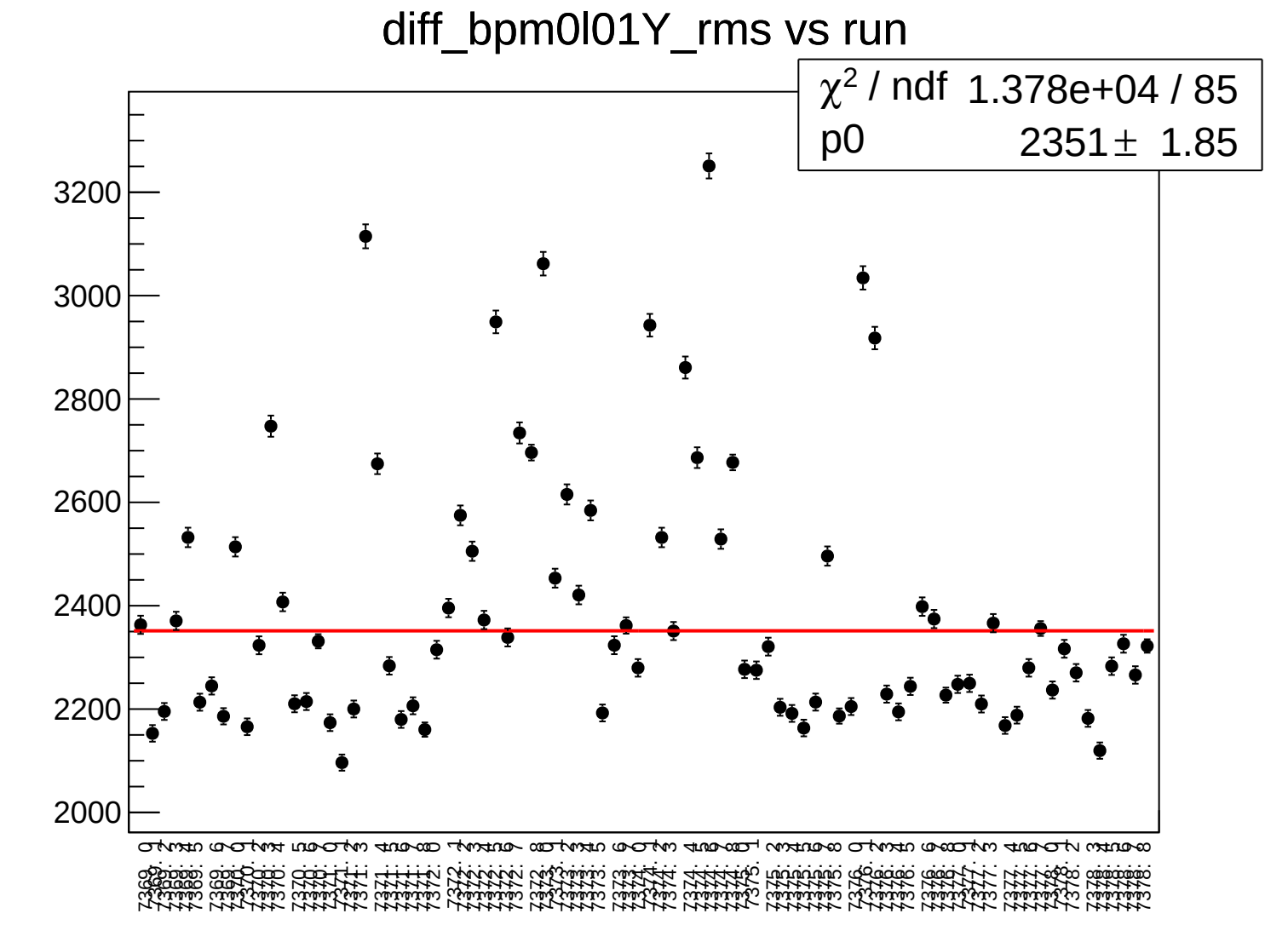

diff_bpm0l01X_mean vs run
χ^2 / ndf 84.97 / 85
p0 −19.36 ± 3.978
pull
Entries 86
Mean −5.98e+04
Std Dev 5.984e+04

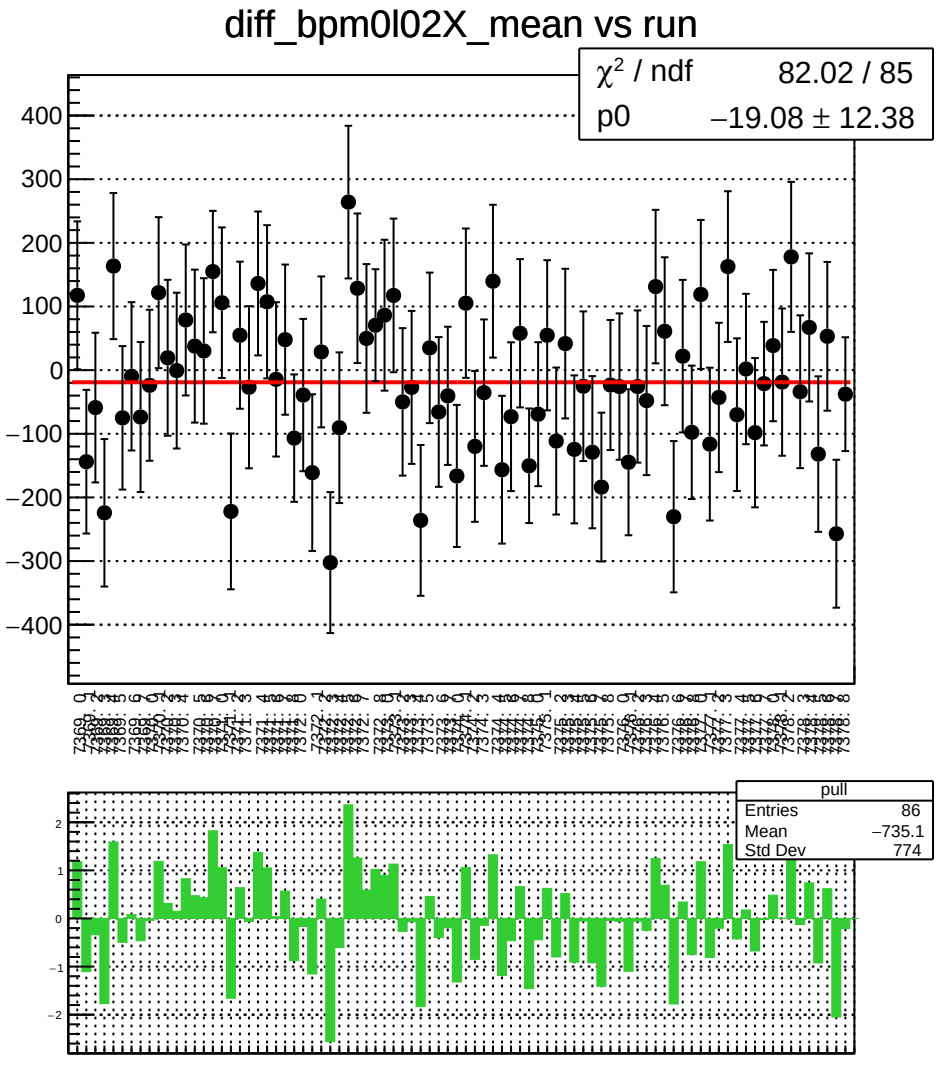

pull1D
Entries 86
Mean 8.746e−05
Std Dev 0.994

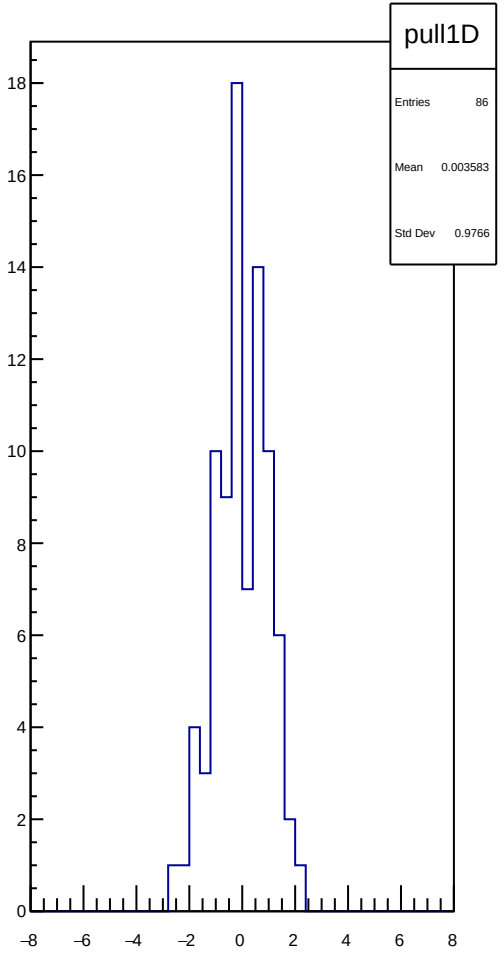

diff_bpm0l01X_rms vs run
χ² / ndf 694.3 / 85
p0 3590 ± 2.813
4000
3900
3800
3700
3600
3500
3400

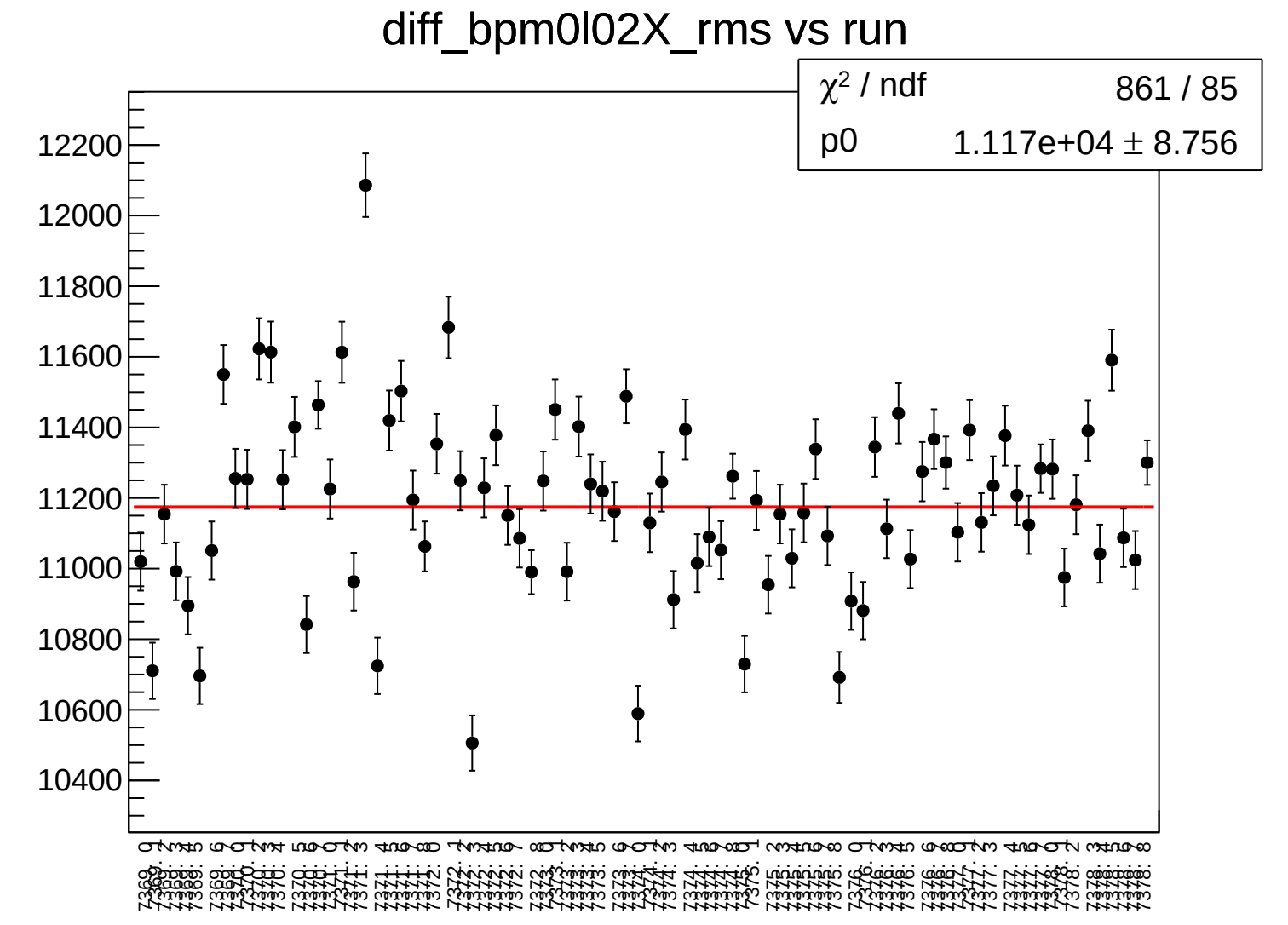

diff_bpm0l01Y_mean vs run
χ^2 / ndf 73.06 / 85
p0 35.41 ± 2.616
pull
Entries 86
Mean −52.17
Std Dev 92.44

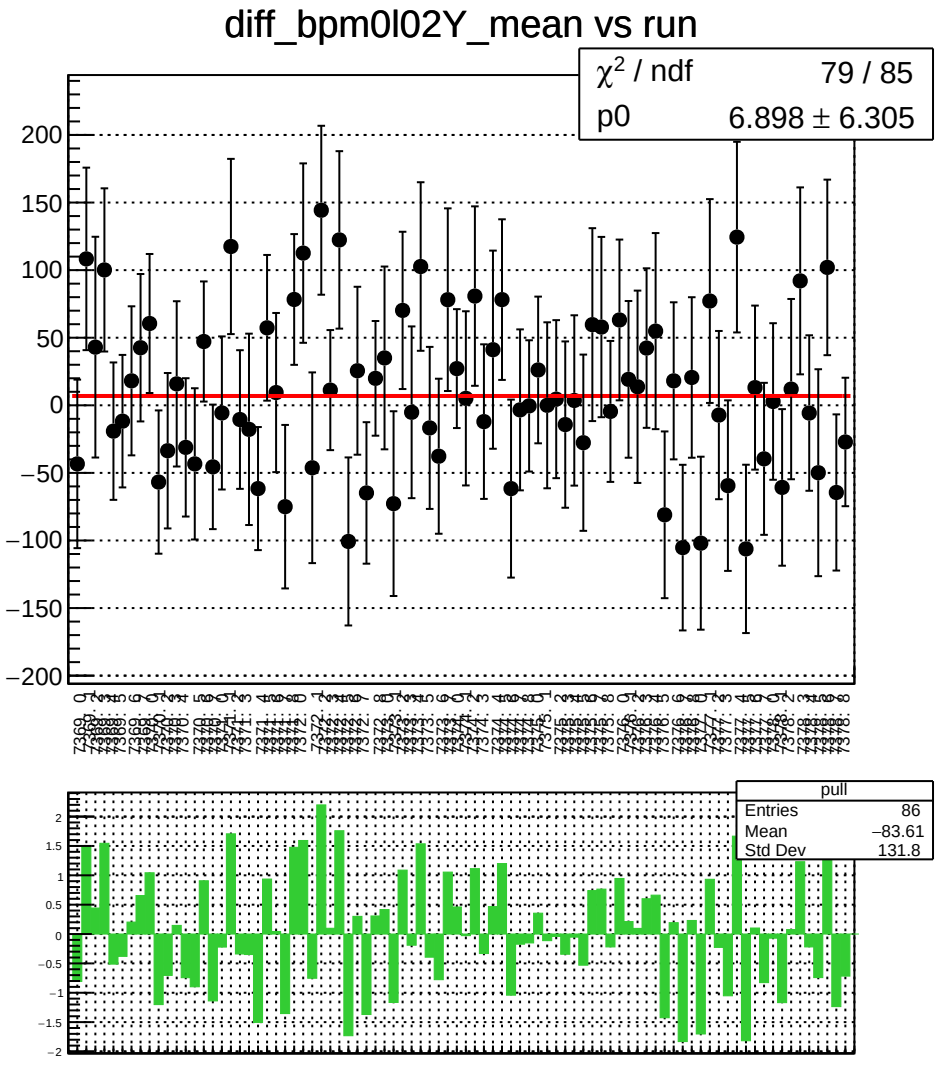

pull1D
Entries 86
Mean 0.01442
Std Dev 0.9216

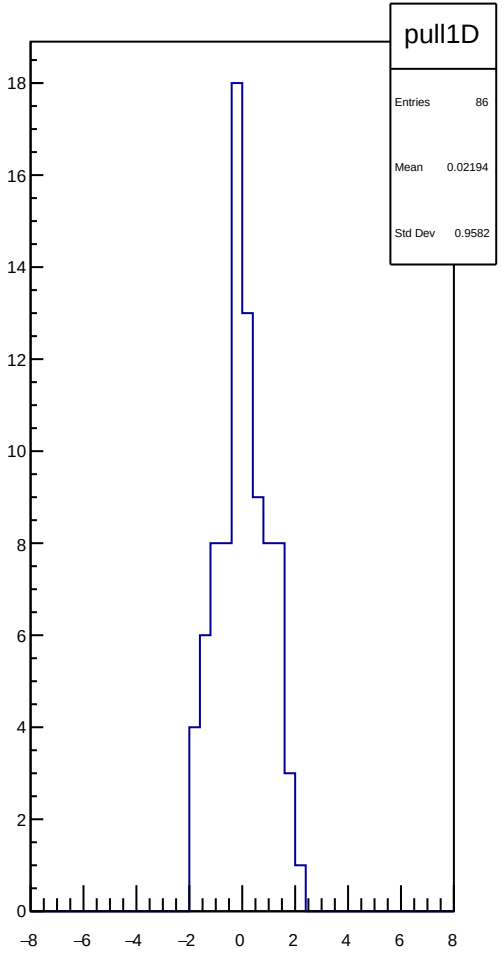

diff_bpm0l01Y_rms vs run
χ² / ndf 1.378e+04 / 85
p0 2351 ± 1.85
3200
3000
2800
2600
2400
2200
2000

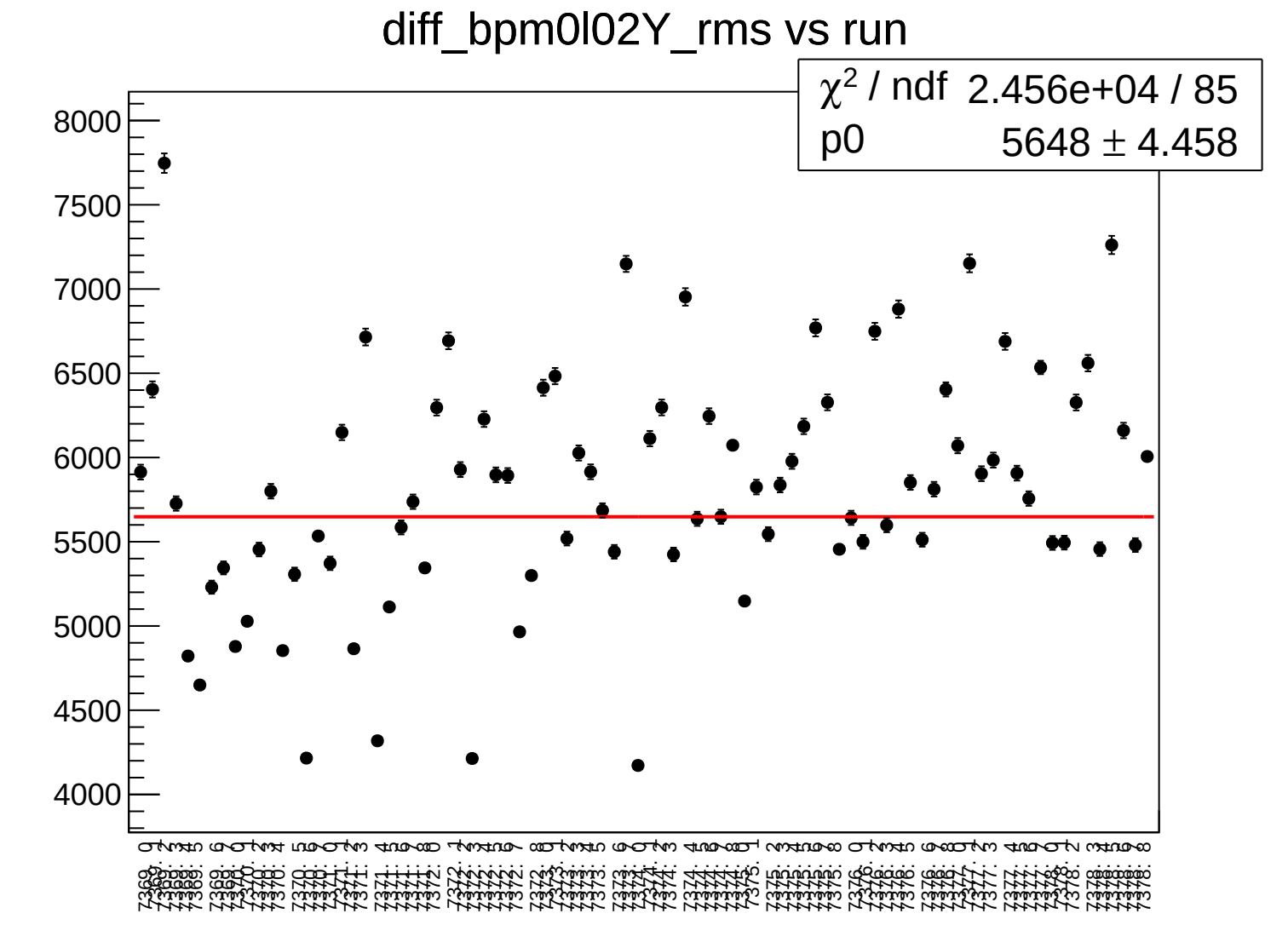

diff_bpm0l02X_mean vs run
χ² / ndf 82.02 / 85
p0 −19.08 ± 12.38
pull
Entries 86
Mean −735.1
Std Dev 774

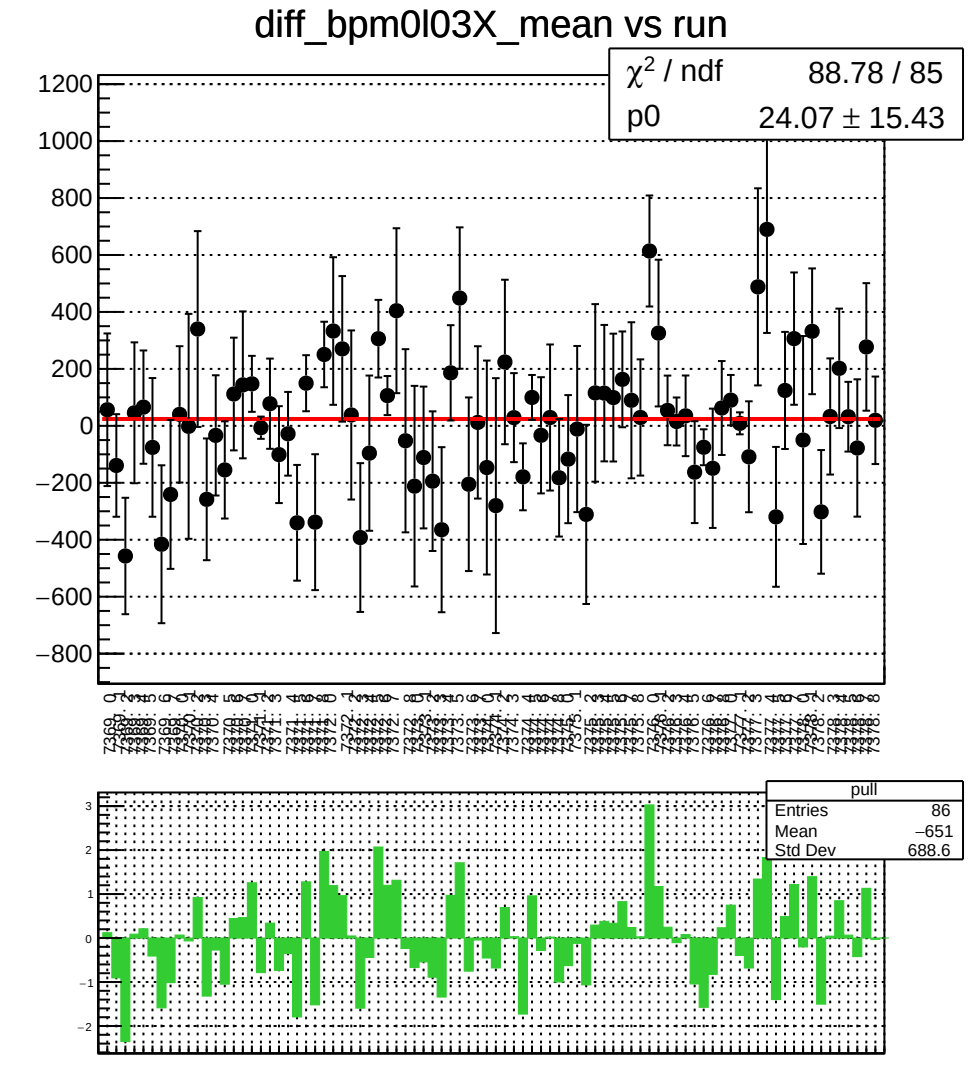

pull1D
Entries 86
Mean 0.003583
Std Dev 0.9766

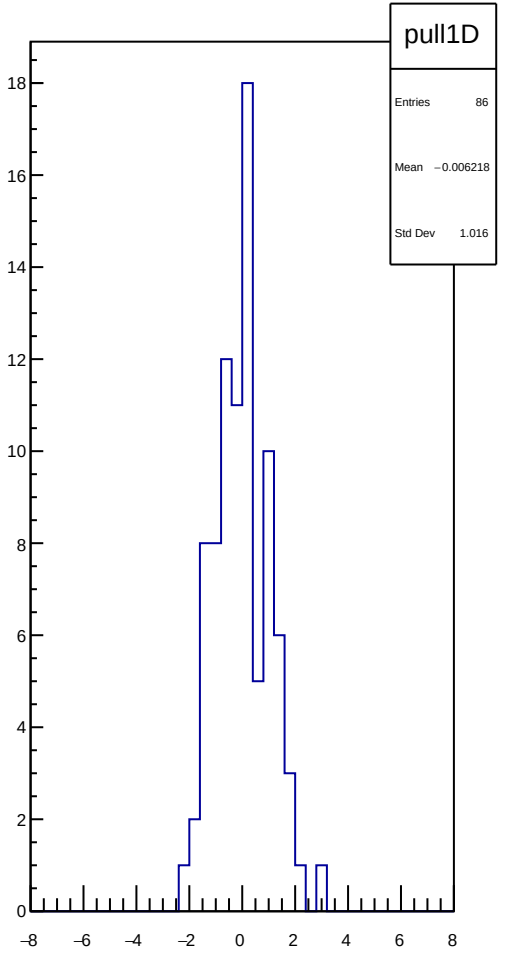

diff_bpm0l02X_rms vs run
χ² / ndf 861 / 85
p0 1.117e+04 ± 8.756
12200
12000
11800
11600
11400
11200
11000
10800
10600
10400

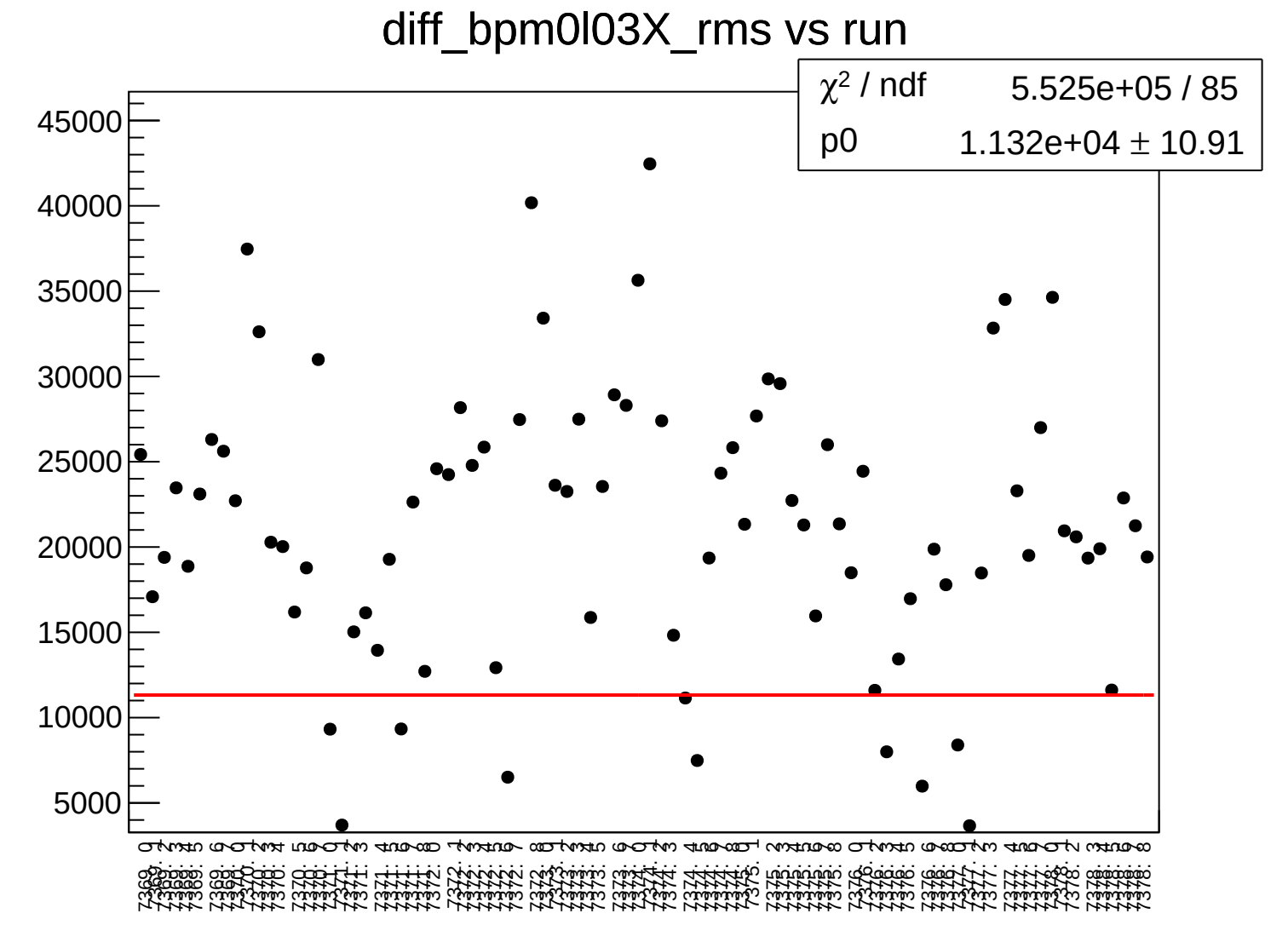

diff_bpm0l02Y_mean vs run
χ² / ndf 79 / 85
p0 6.898 ± 6.305
pull
Entries 86
Mean −83.61
Std Dev 131.8

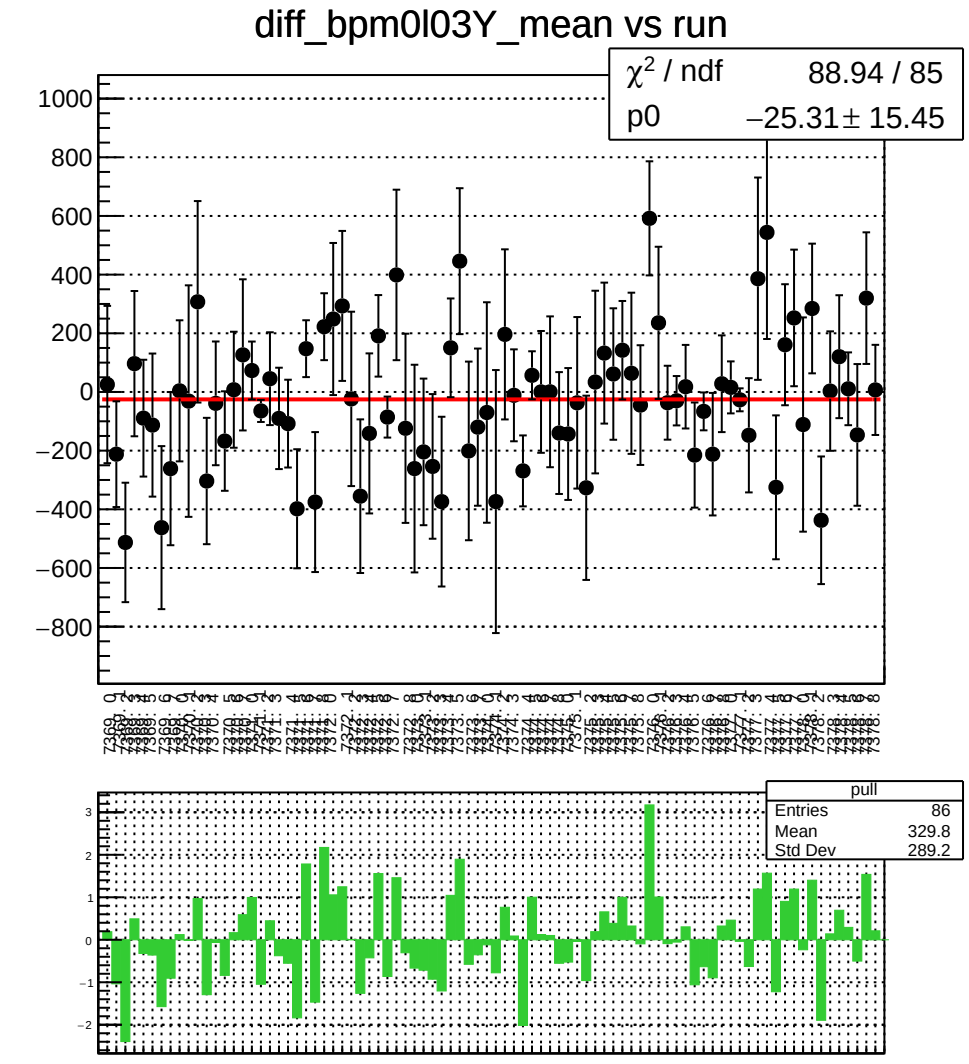

pull1D
Entries 86
Mean 0.02194
Std Dev 0.9582

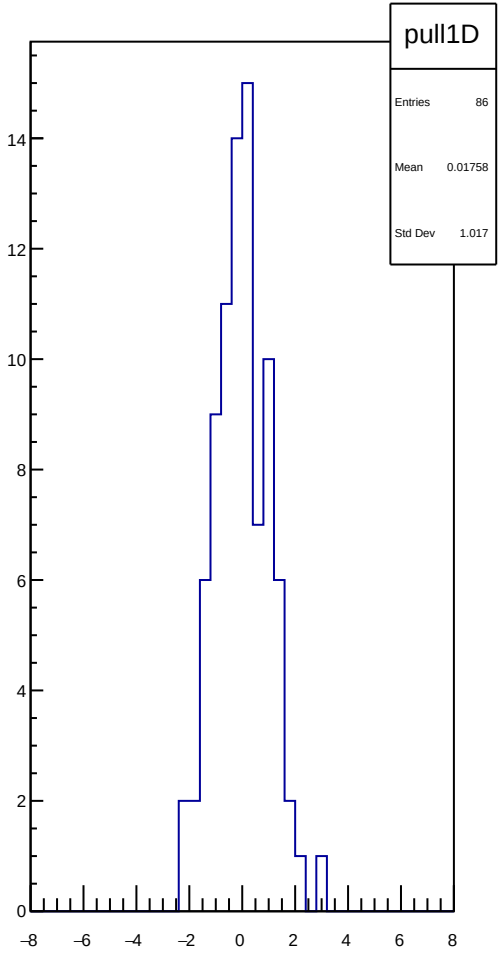

diff_bpm0l02Y_rms vs run
χ² / ndf 2.456e+04 / 85
p0 5648 ± 4.458
8000
7500
7000
6500
6000
5500
5000
4500
4000

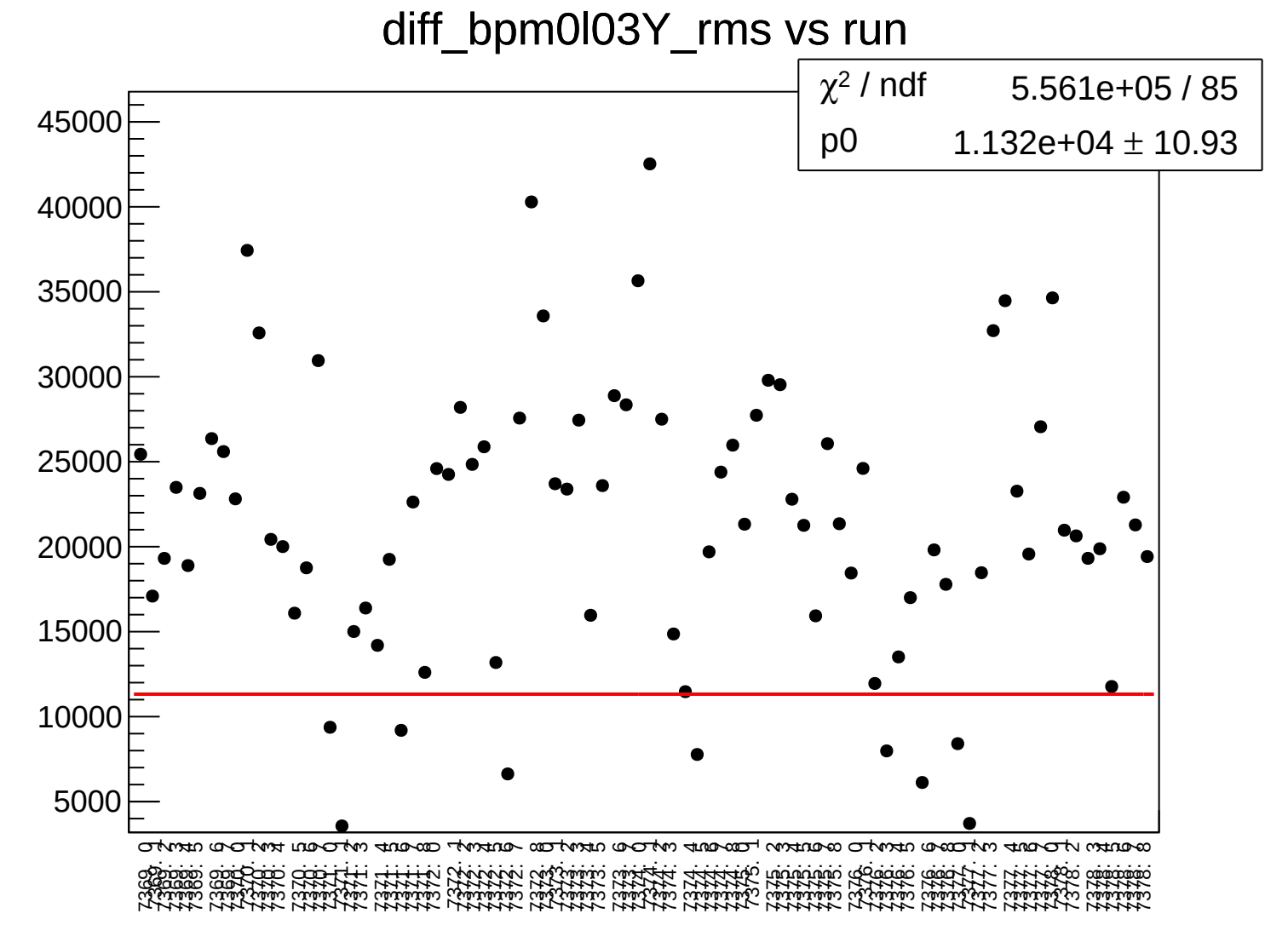

diff_bpm0l03X_mean vs run
χ^2 / ndf 88.78 / 85
p0 24.07 ± 15.43
pull
Entries 86
Mean −651
Std Dev 688.6

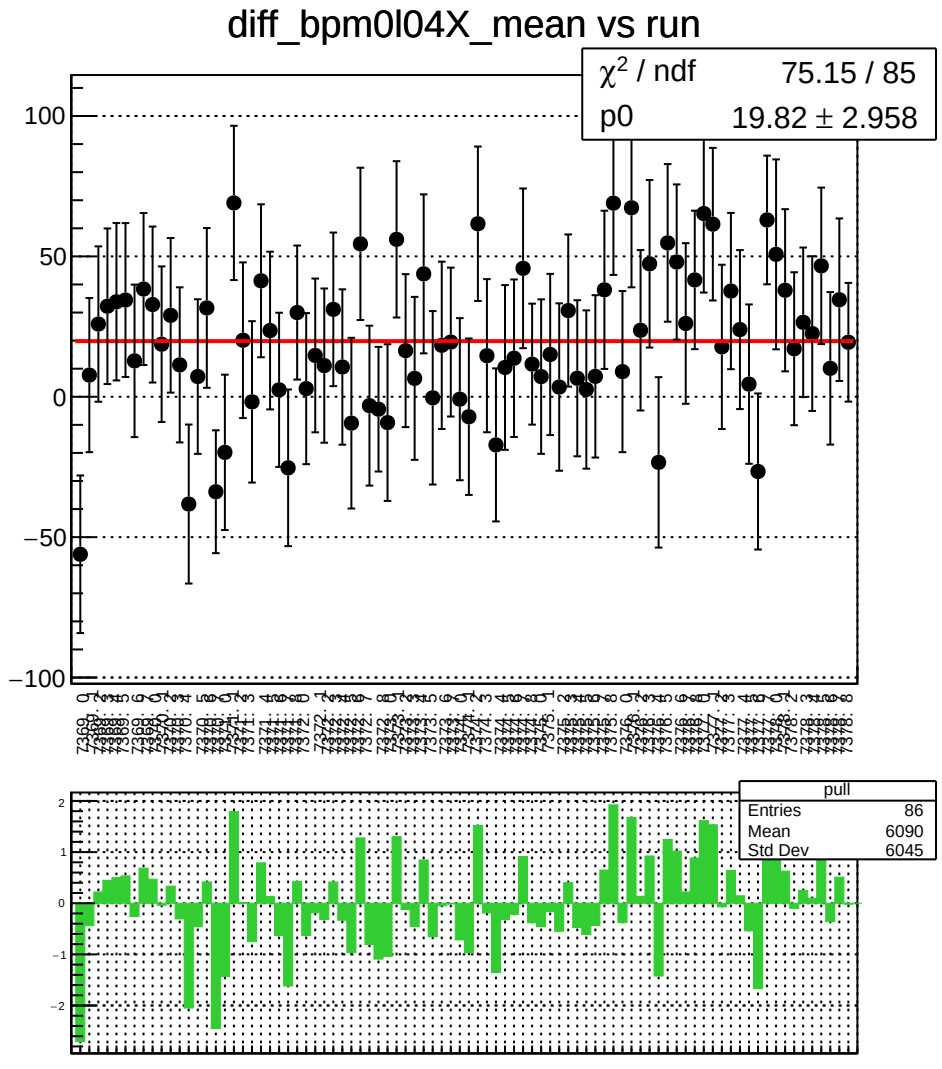

pull1D
Entries 86
Mean −0.006218
Std Dev 1.016

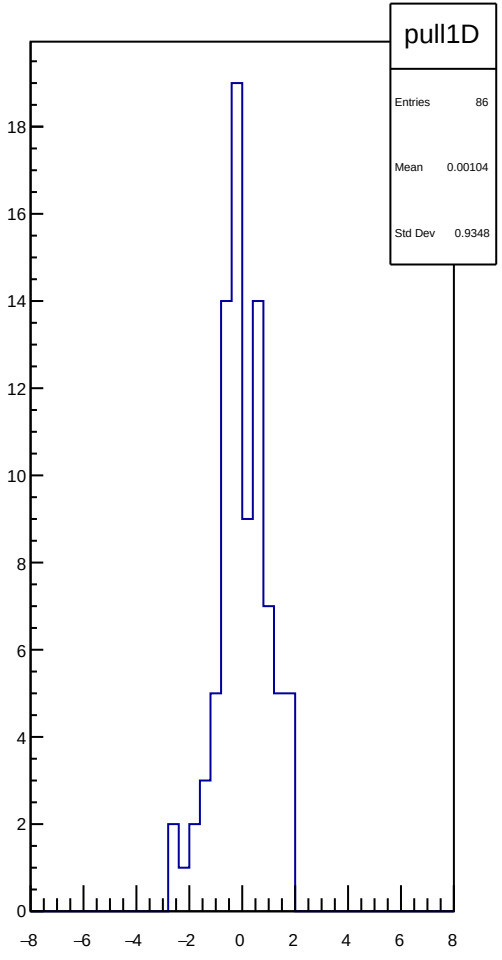

diff_bpm0l03X_rms vs run
χ² / ndf 5.525e+05 / 85
p0 1.132e+04 ± 10.91
45000
40000
35000
30000
25000
20000
15000
10000
5000

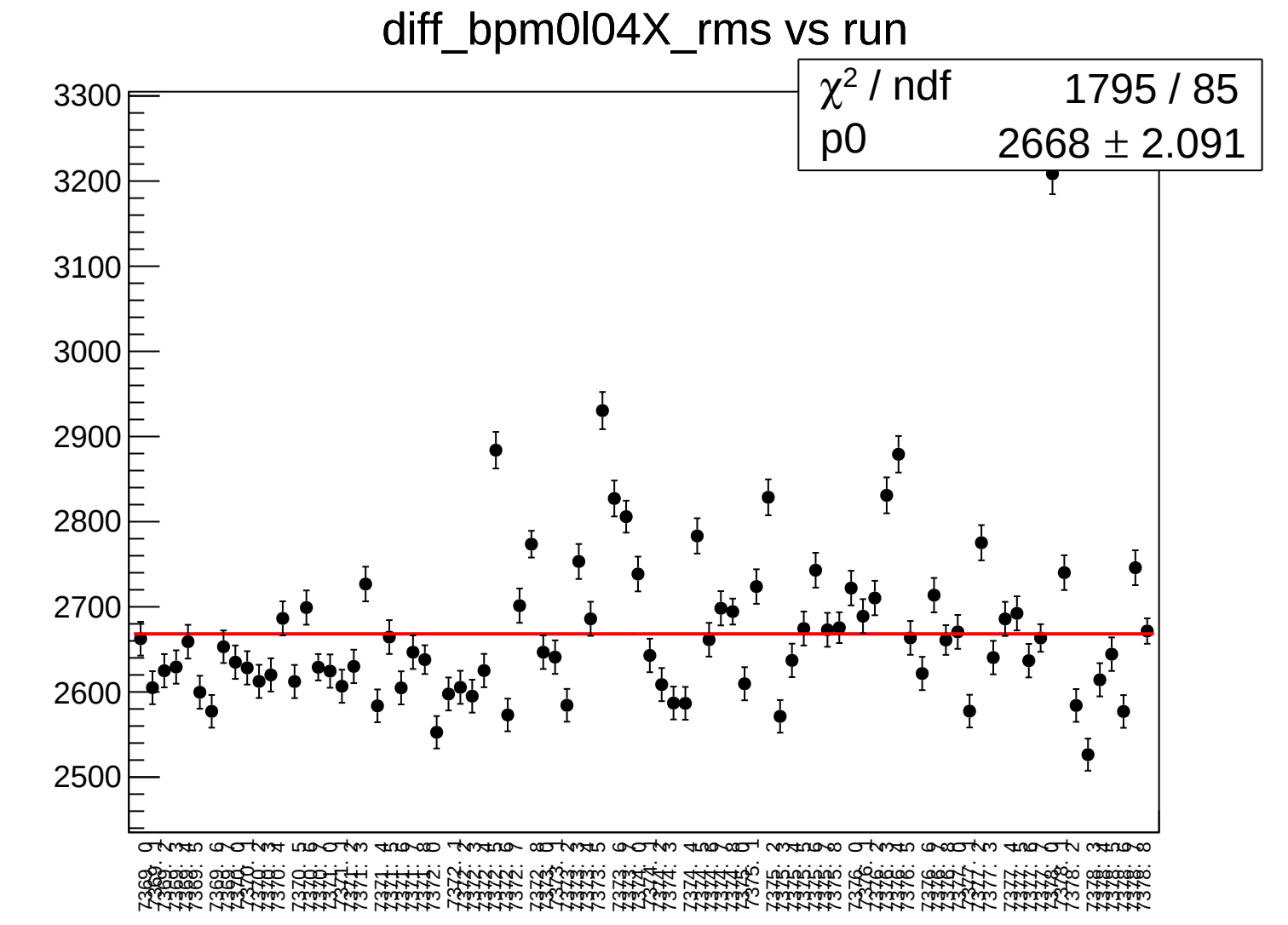

diff_bpm0l03Y_mean vs run
χ² / ndf 88.94 / 85
p0 −25.31 ± 15.45
pull
Entries 86
Mean 329.8
Std Dev 289.2

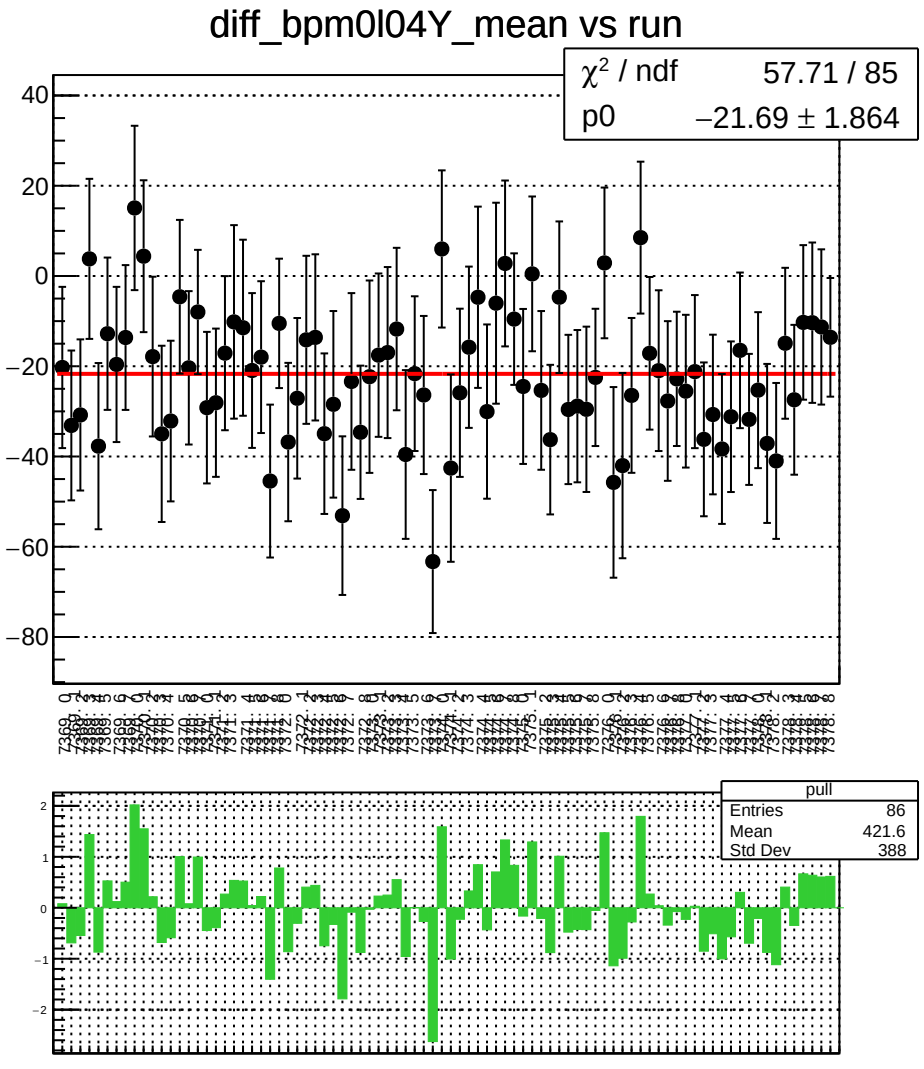

pull1D
Entries 86
Mean 0.01758
Std Dev 1.017

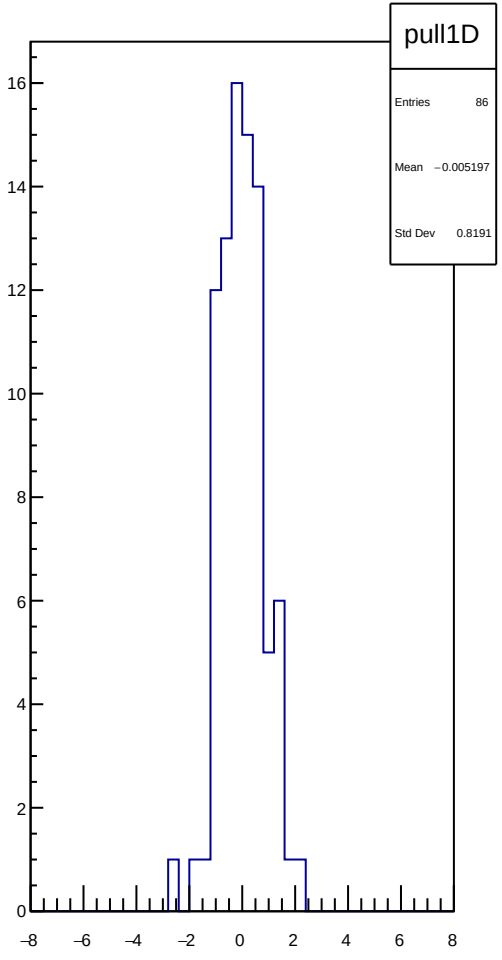

diff_bpm0l03Y_rms vs run
χ² / ndf 5.561e+05 / 85
p0 1.132e+04 ± 10.93
45000
40000
35000
30000
25000
20000
15000
10000
5000

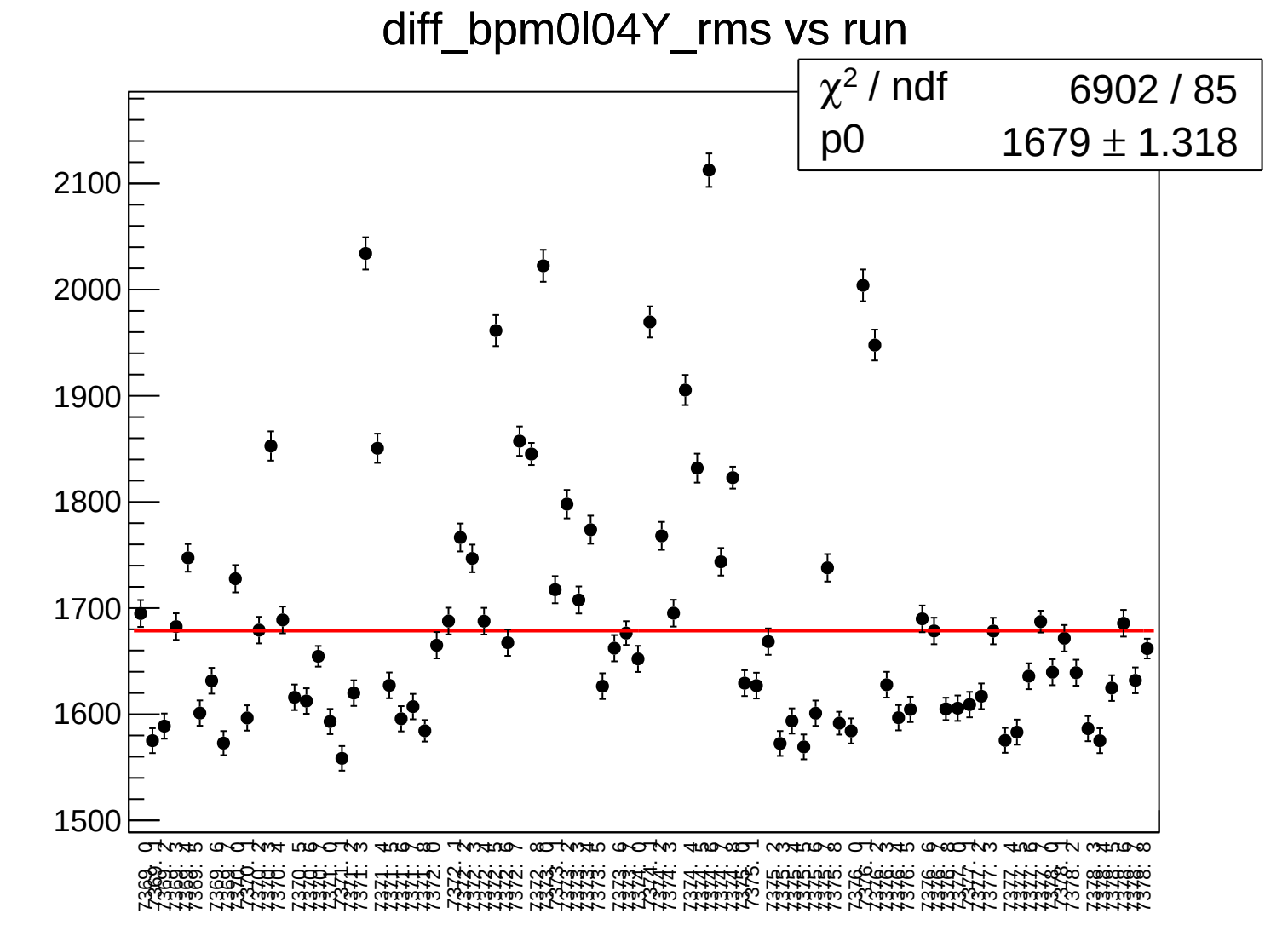

diff_bpm0l04X_mean vs run
χ^2 / ndf 75.15 / 85
p0 19.82 ± 2.958
pull
Entries 86
Mean 6090
Std Dev 6045

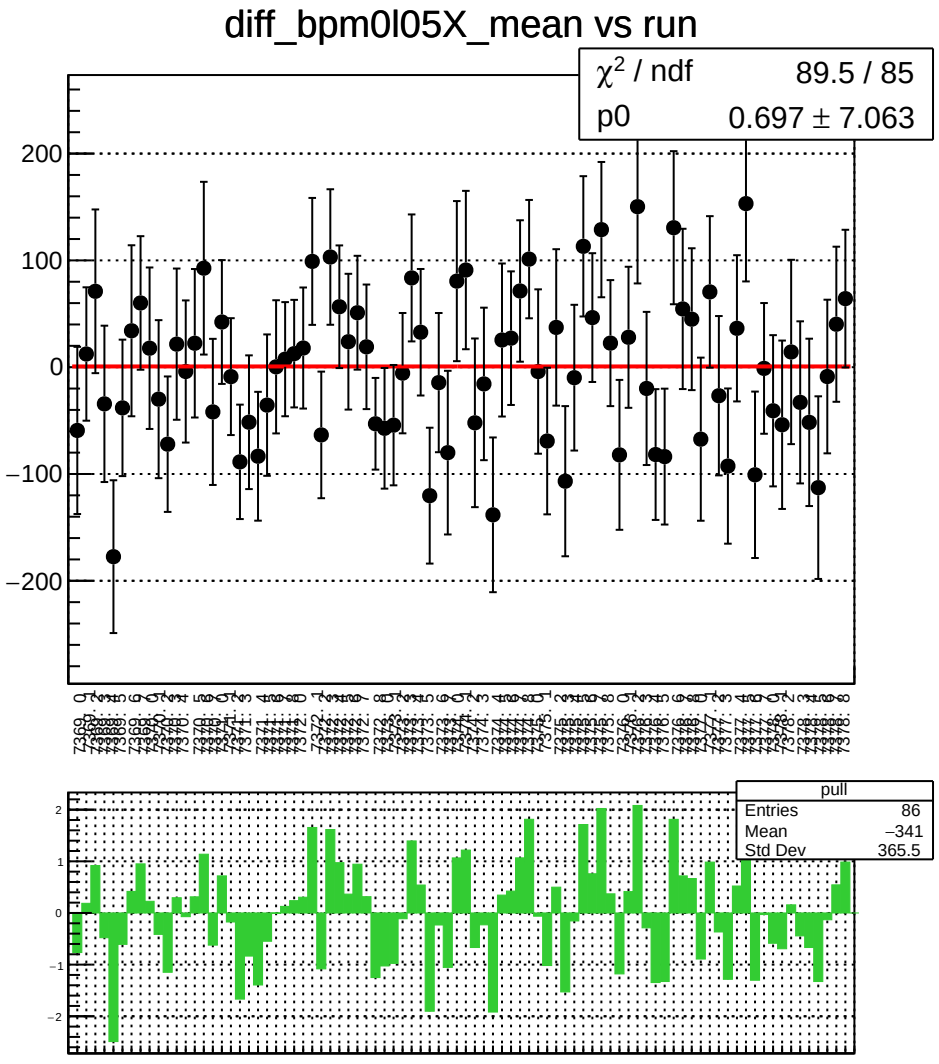

pull1D
Entries 86
Mean 0.00104
Std Dev 0.9348

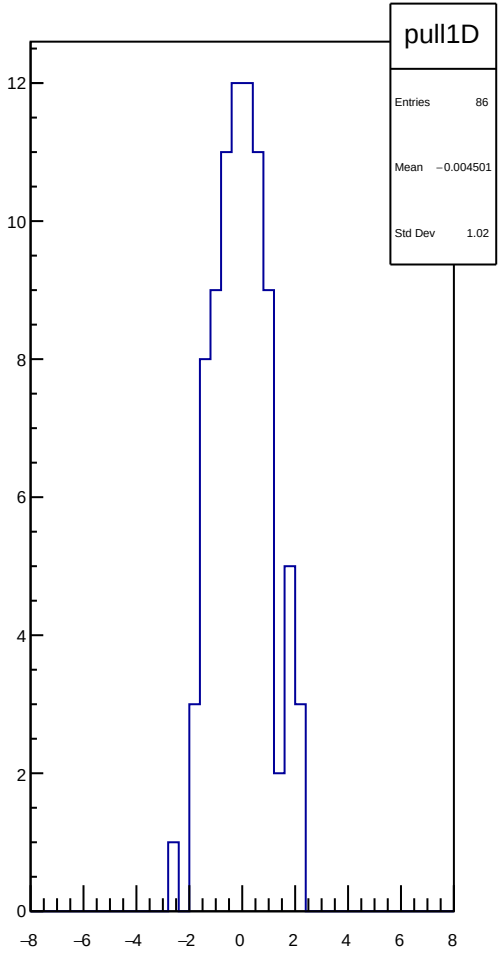

diff_bpm0l04X_rms vs run
χ² / ndf 1795 / 85
p0 2668 ± 2.091
3300
3200
3100
3000
2900
2800
2700
2600
2500

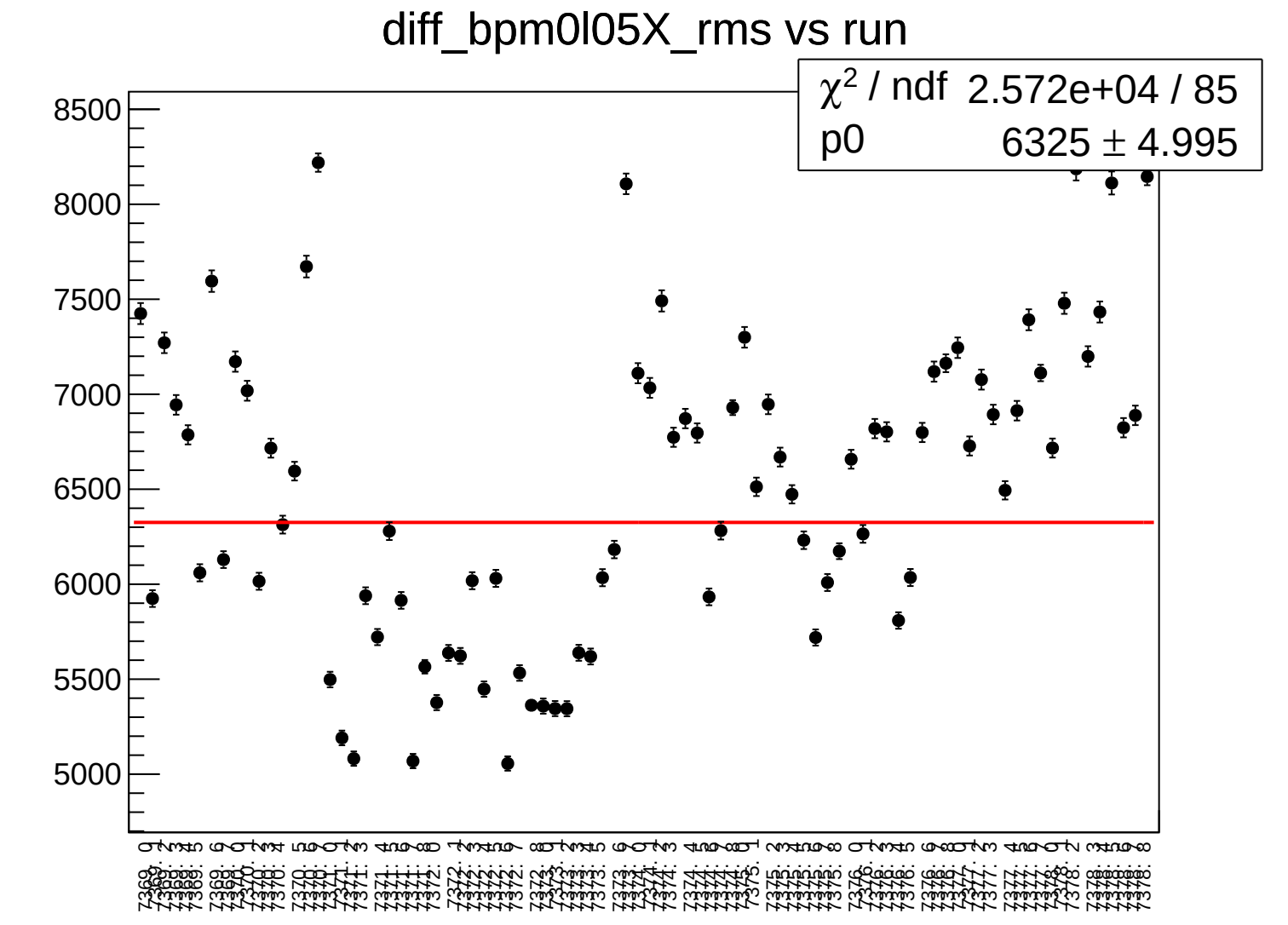

diff_bpm0l04Y_mean vs run
χ² / ndf 57.71 / 85
p0 −21.69 ± 1.864
pull
Entries 86
Mean 421.6
Std Dev 388

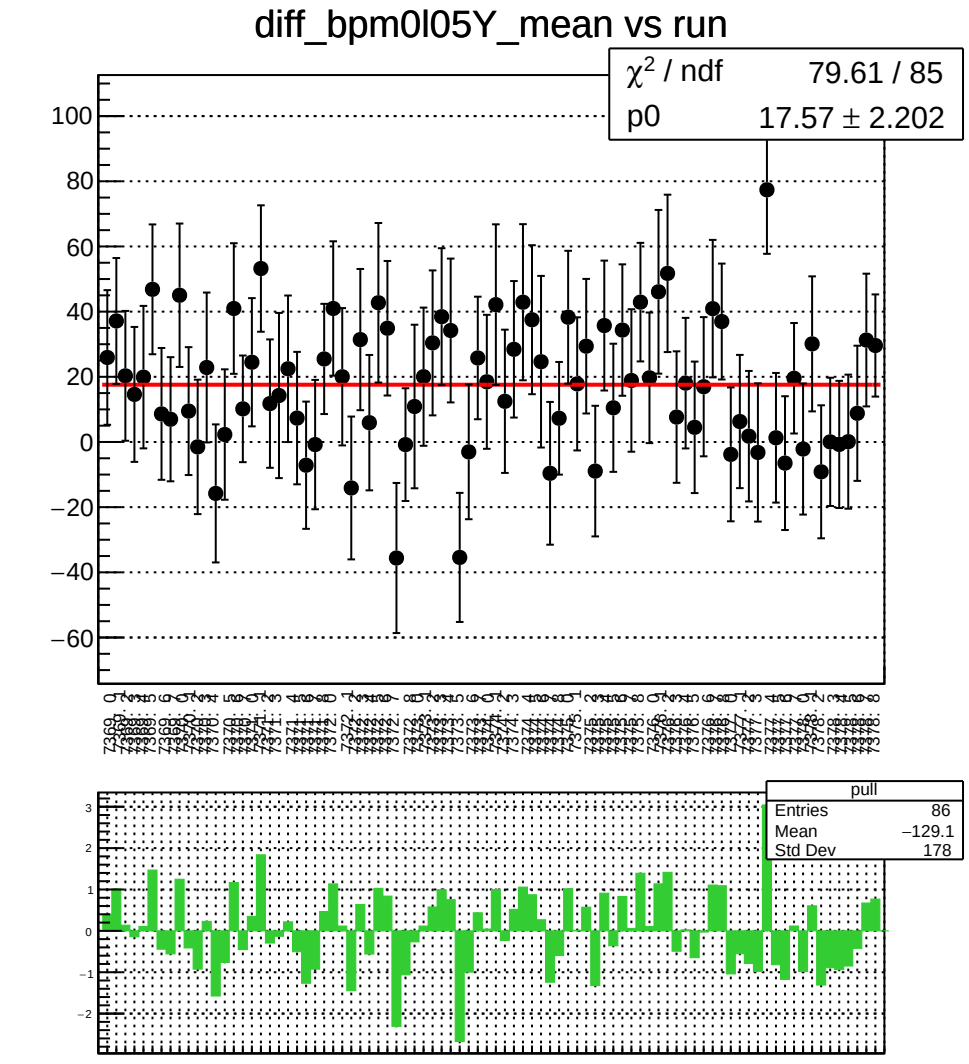

pull1D
Entries 86
Mean −0.005197
Std Dev 0.8191

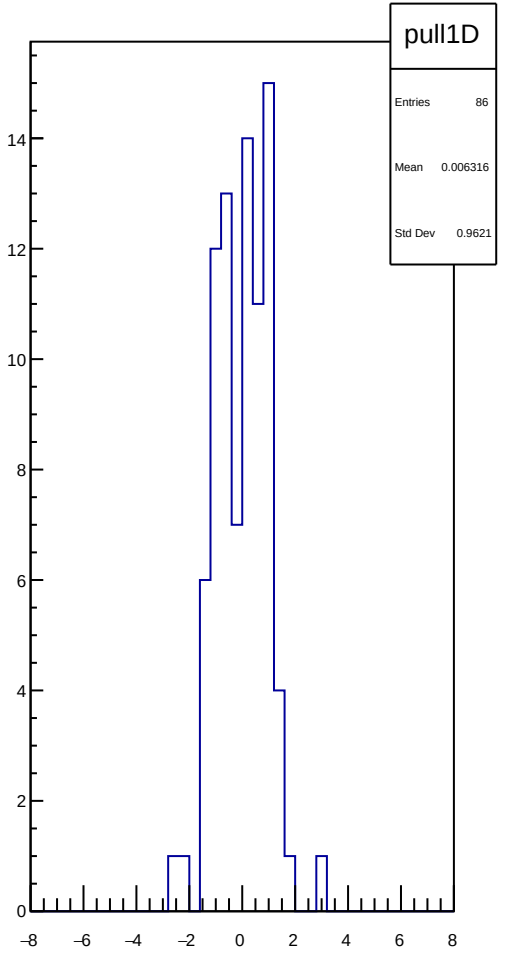

diff_bpm0l04Y_rms vs run
χ² / ndf 6902 / 85
p0 1679 ± 1.318
2100
2000
1900
1800
1700
1600
1500

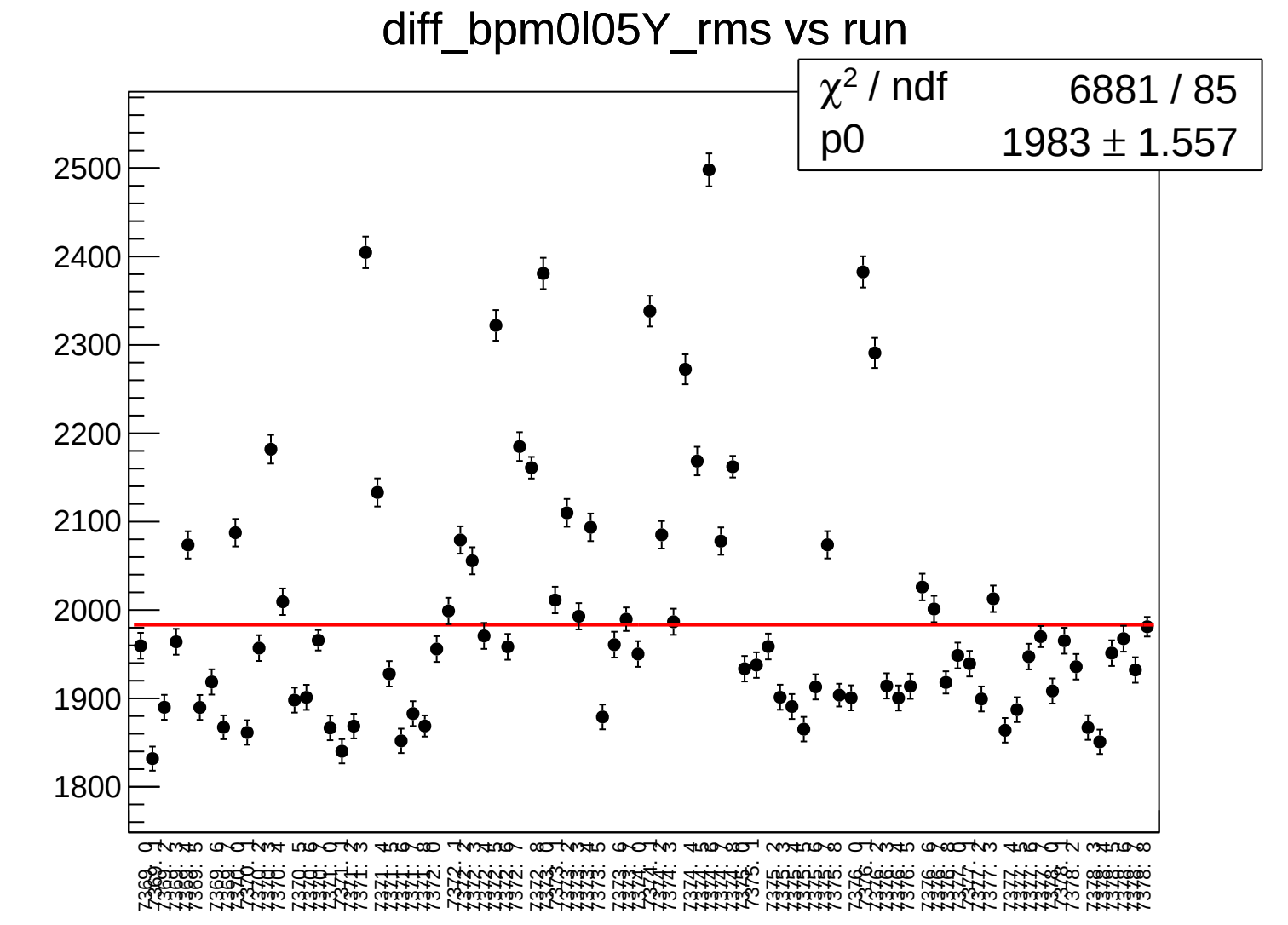

diff_bpm0l05X_mean vs run
χ^2 / ndf 89.5 / 85
p0 0.697 ± 7.063
200
100
0
−100
−200
pull
Entries 86
Mean −341
Std Dev 365.5
2
1
0
−1
−2

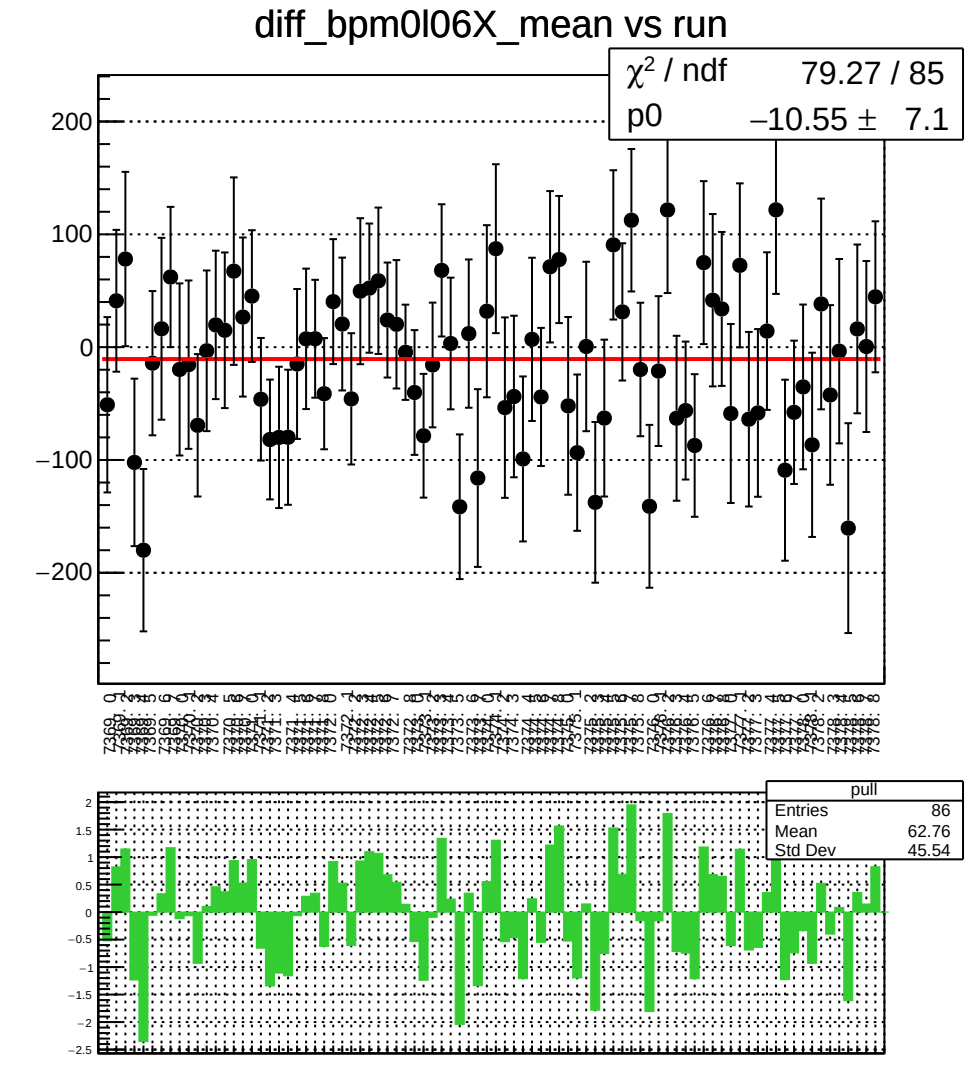

pull1D
Entries 86
Mean −0.004501
Std Dev 1.02
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

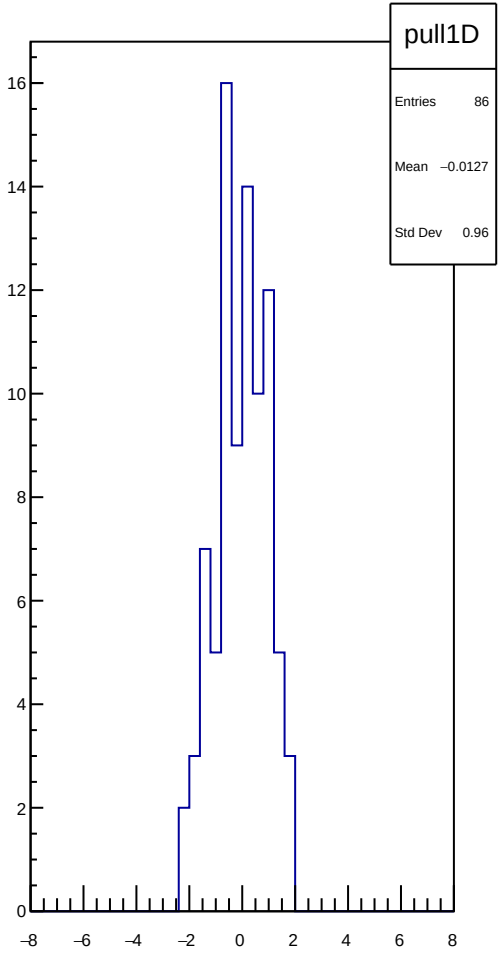

diff_bpm0l05X_rms vs run
χ² / ndf 2.572e+04 / 85
p0 6325 ± 4.995
8500
8000
7500
7000
6500
6000
5500
5000

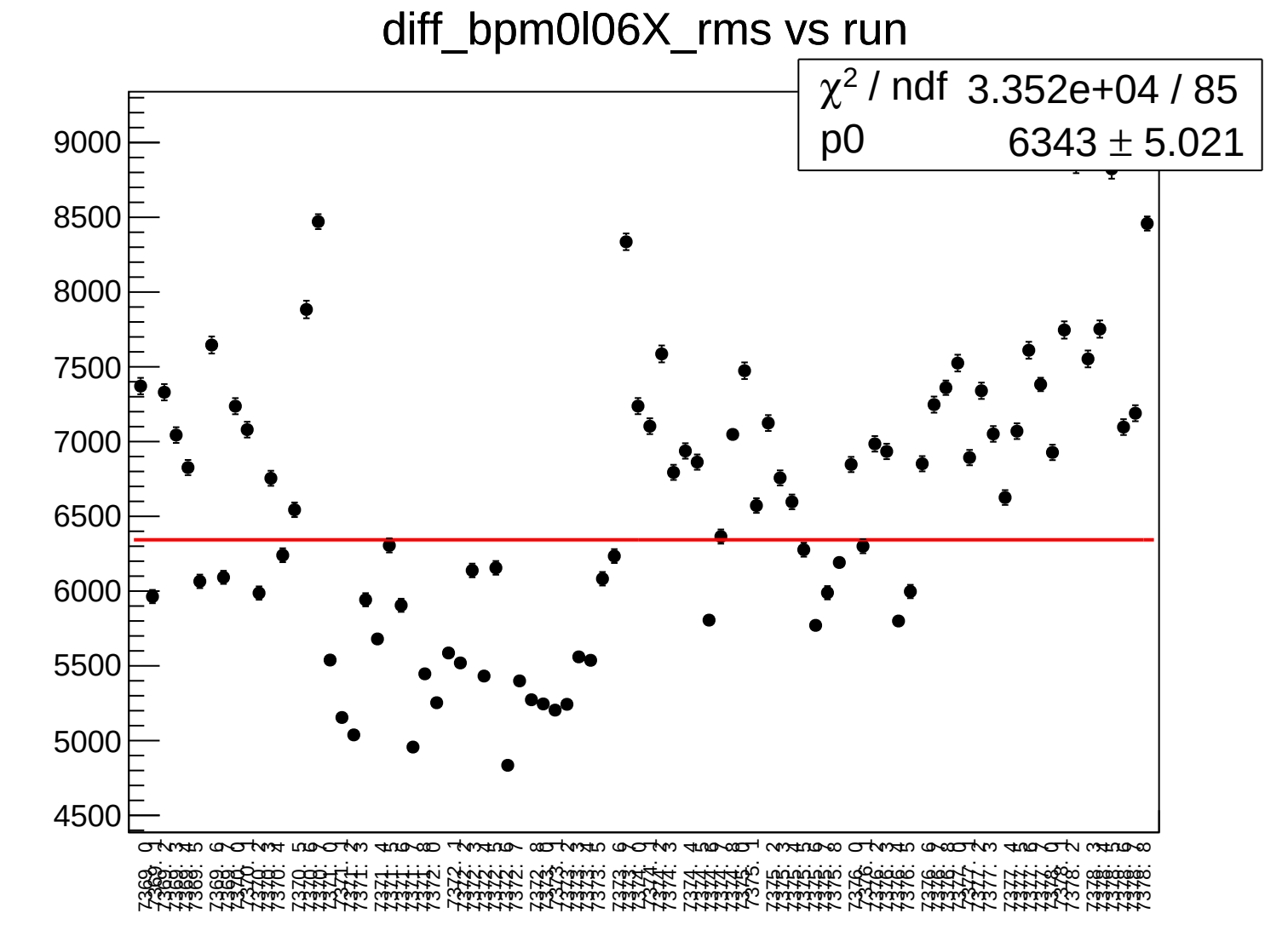

diff_bpm0l05Y_mean vs run
χ^2 / ndf 79.61 / 85
p0 17.57 ± 2.202
pull
Entries 86
Mean −129.1
Std Dev 178

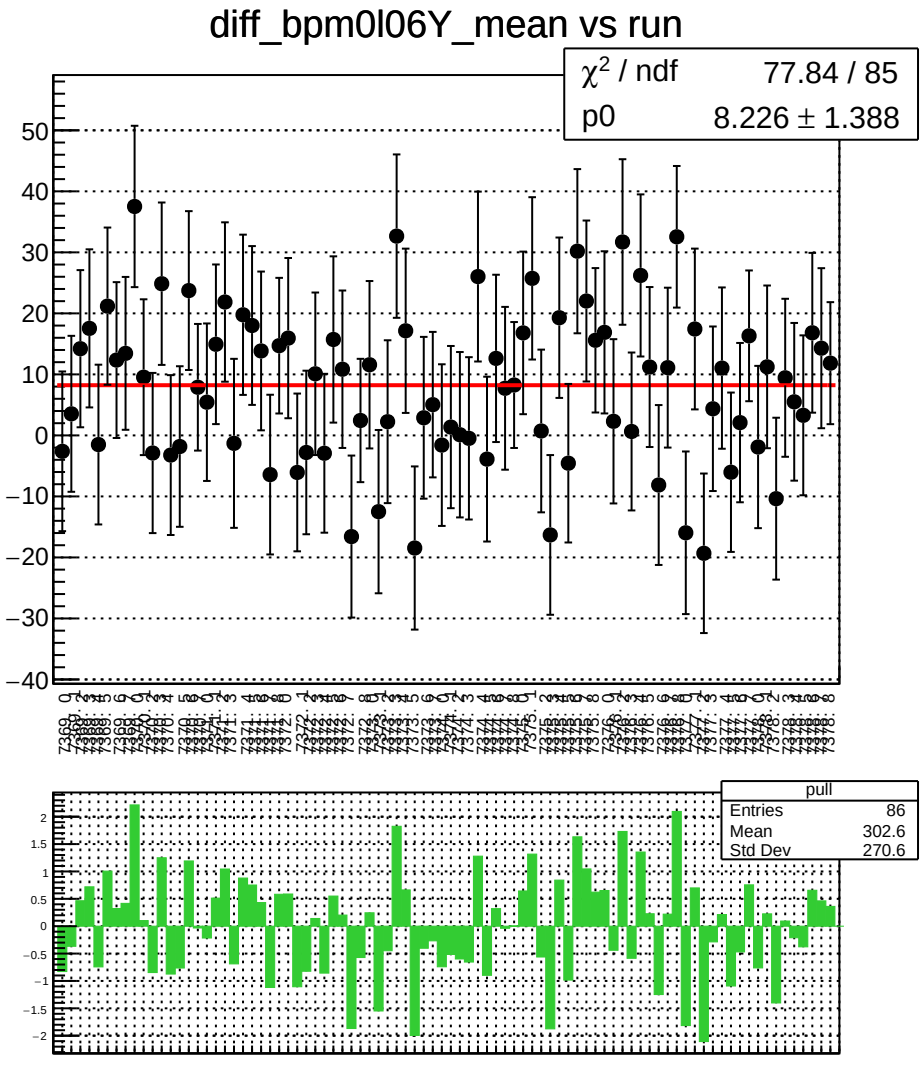

pull1D
Entries 86
Mean 0.006316
Std Dev 0.9621

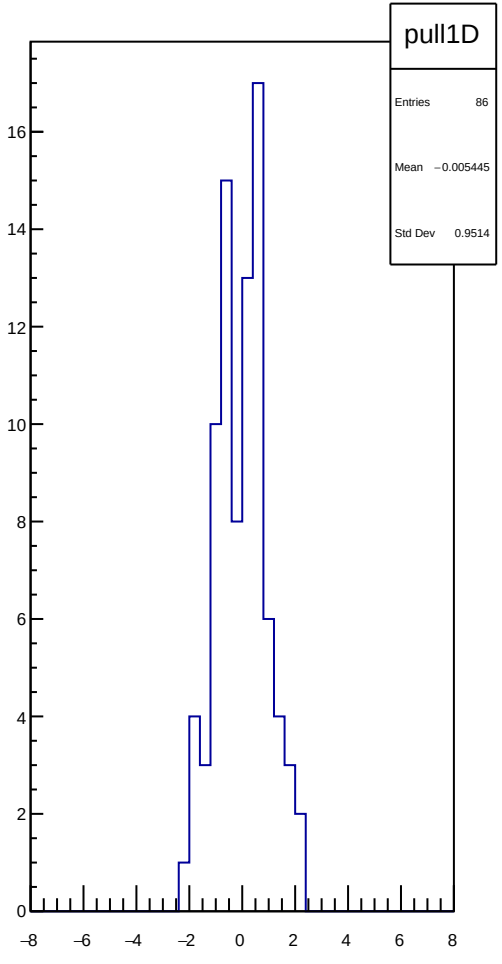

diff_bpm0l05Y_rms vs run
χ^2 / ndf 6881 / 85
p0 1983 ± 1.557
2500
2400
2300
2200
2100
2000
1900
1800

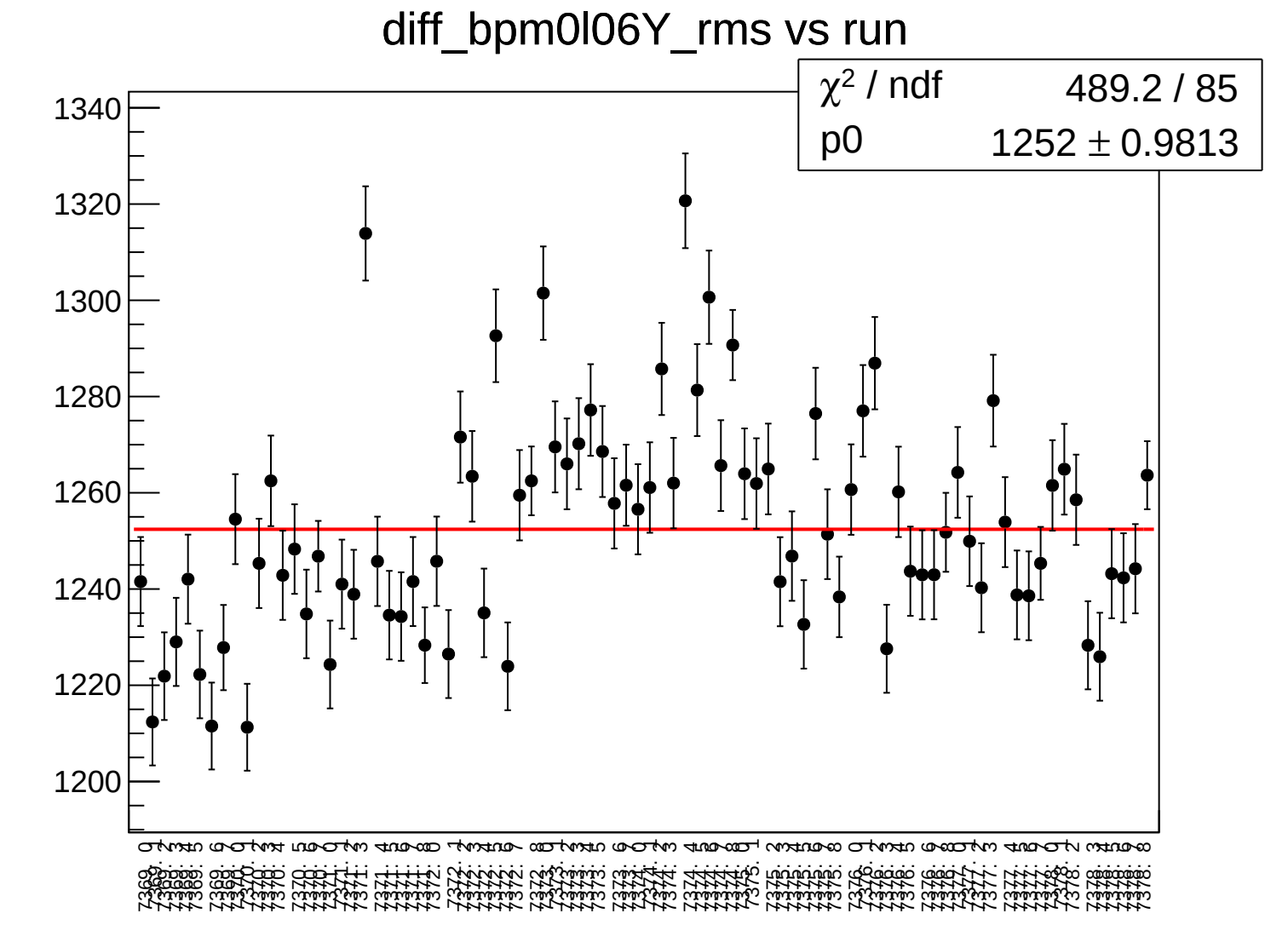

diff_bpm0l06X_mean vs run
χ² / ndf 79.27 / 85
p0 −10.55 ± 7.1
pull
Entries 86
Mean 62.76
Std Dev 45.54

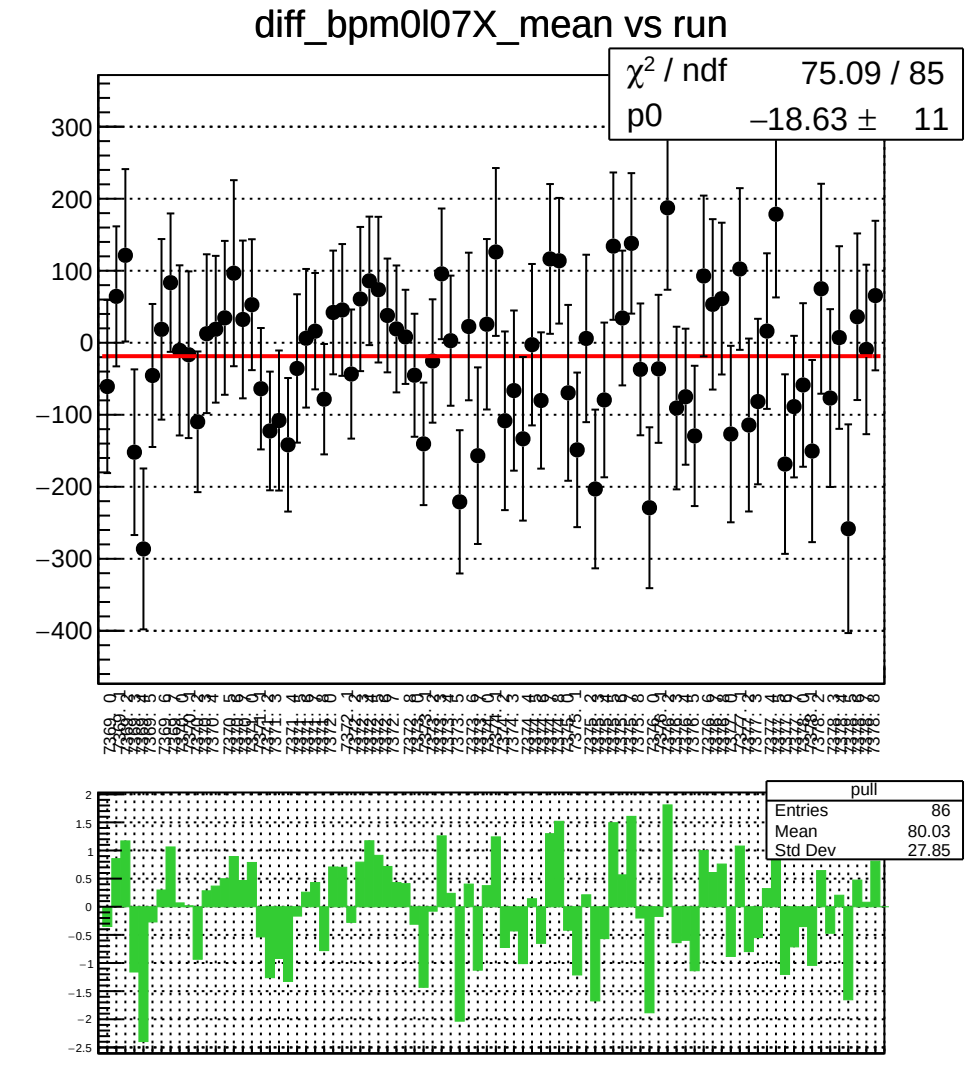

pull1D
Entries 86
Mean −0.0127
Std Dev 0.96

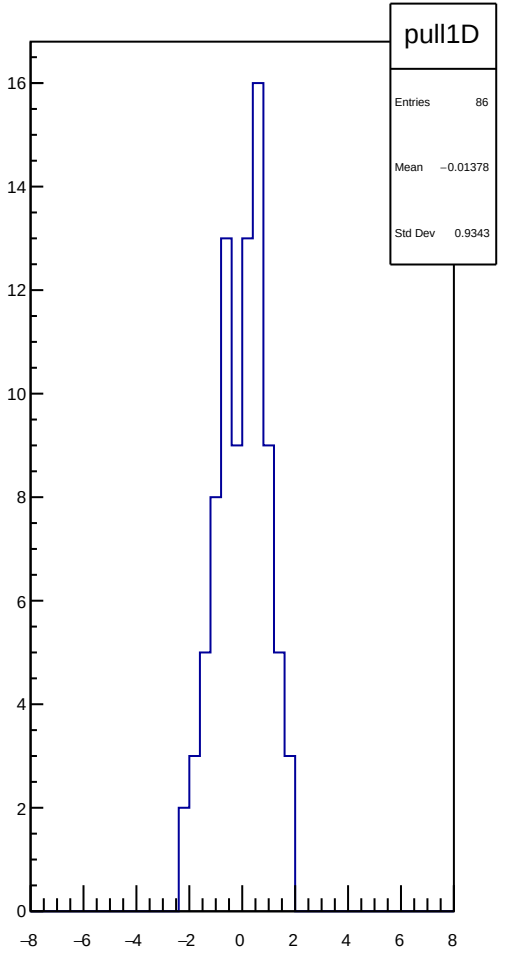

diff_bpm0l06X_rms vs run
χ^2 / ndf 3.352e+04 / 85
p0 6343 ± 5.021
9000
8500
8000
7500
7000
6500
6000
5500
5000
4500

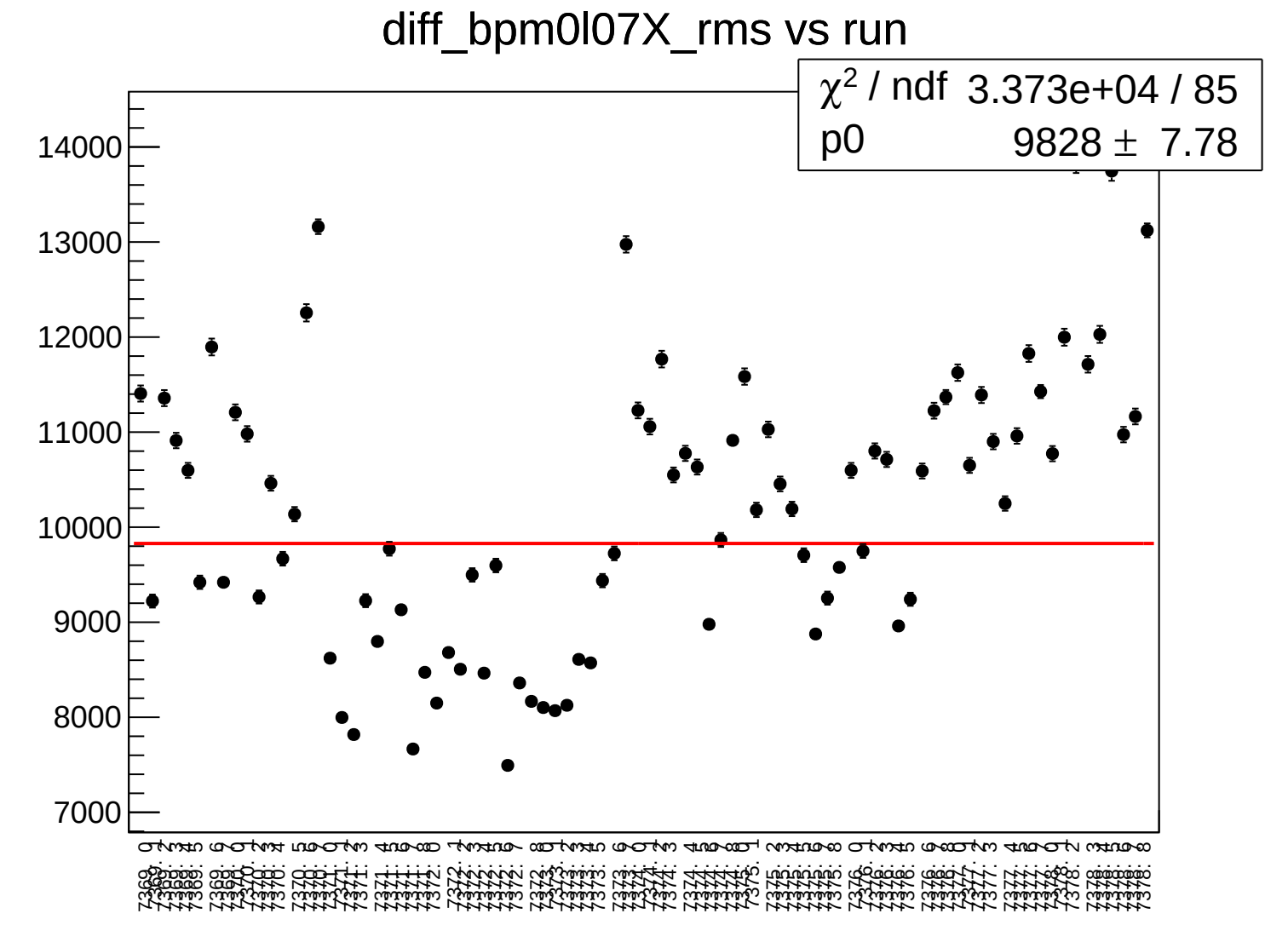

diff_bpm0l06Y_mean vs run
χ^2 / ndf 77.84 / 85
p0 8.226 ± 1.388
pull
Entries 86
Mean 302.6
Std Dev 270.6

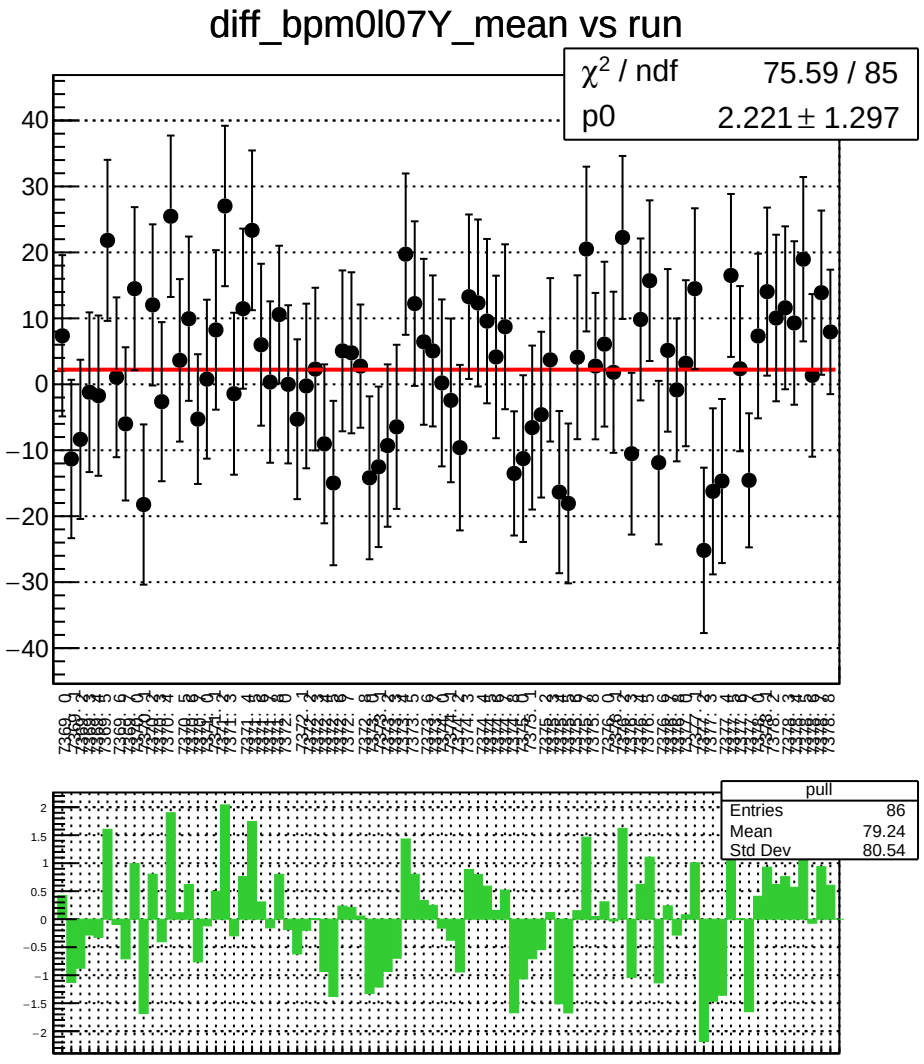

pull1D
Entries 86
Mean −0.005445
Std Dev 0.9514

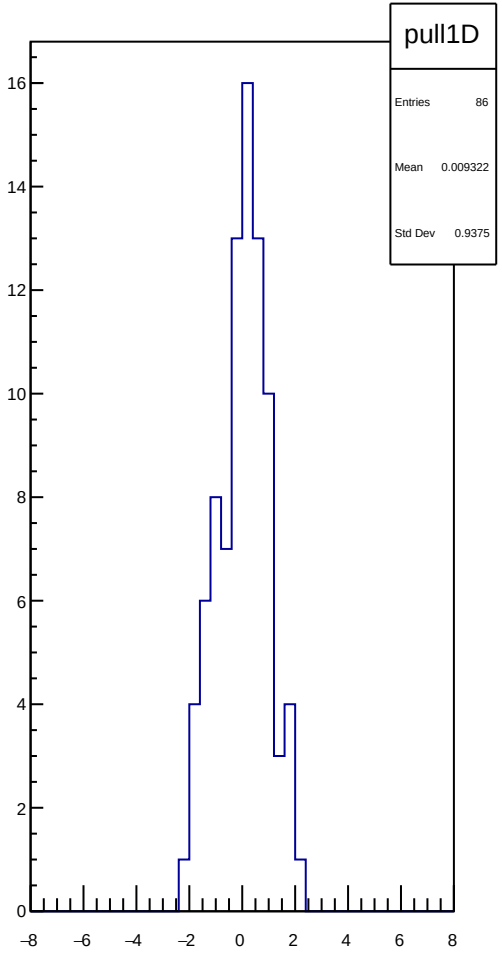

diff_bpm0l06Y_rms vs run
χ² / ndf 489.2 / 85
p0 1252 ± 0.9813
1340
1320
1300
1280
1260
1240
1220
1200

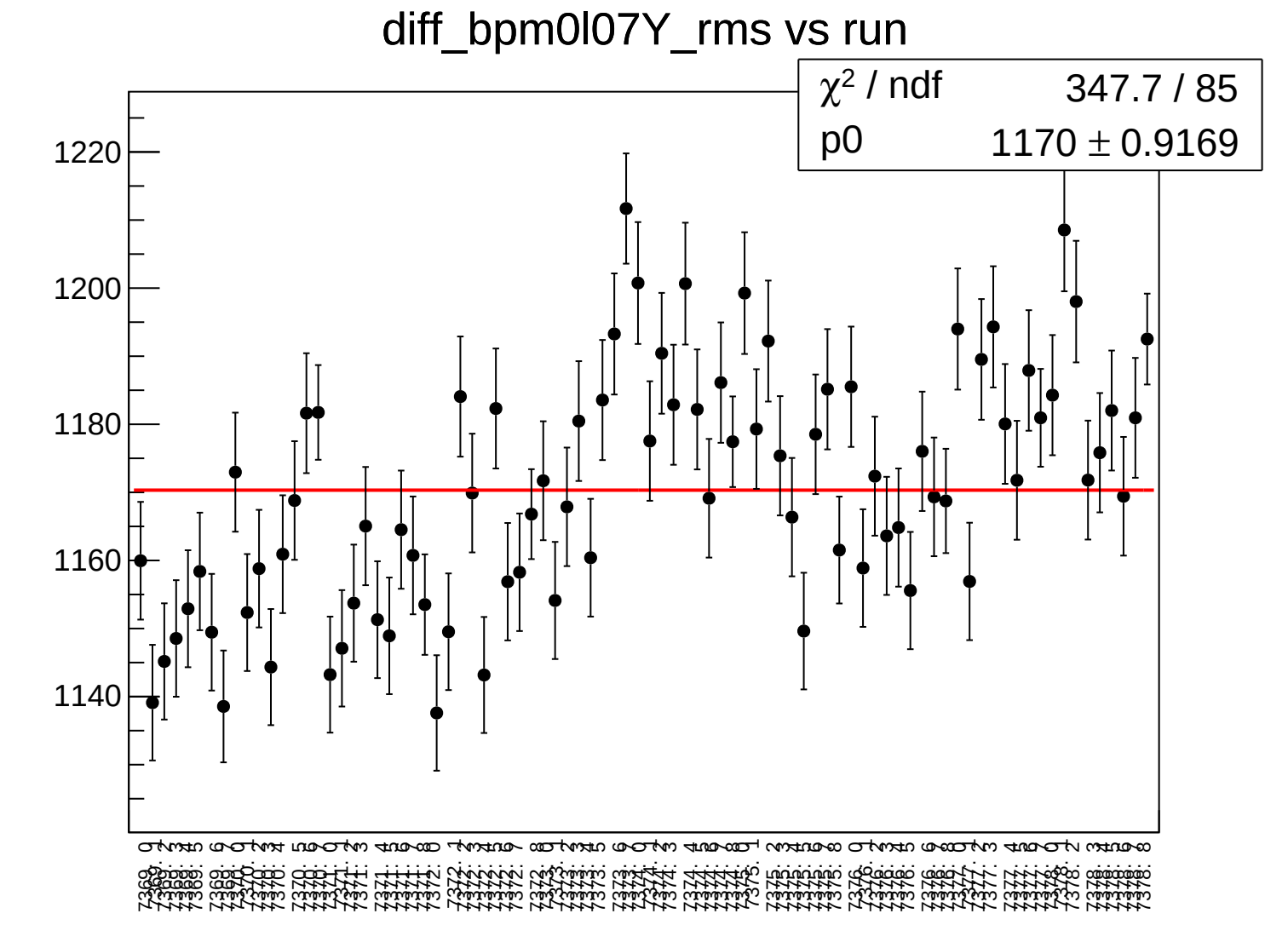

diff_bpm0l07X_mean vs run
χ² / ndf 75.09 / 85
p0 −18.63 ± 11
pull
Entries 86
Mean 80.03
Std Dev 27.85

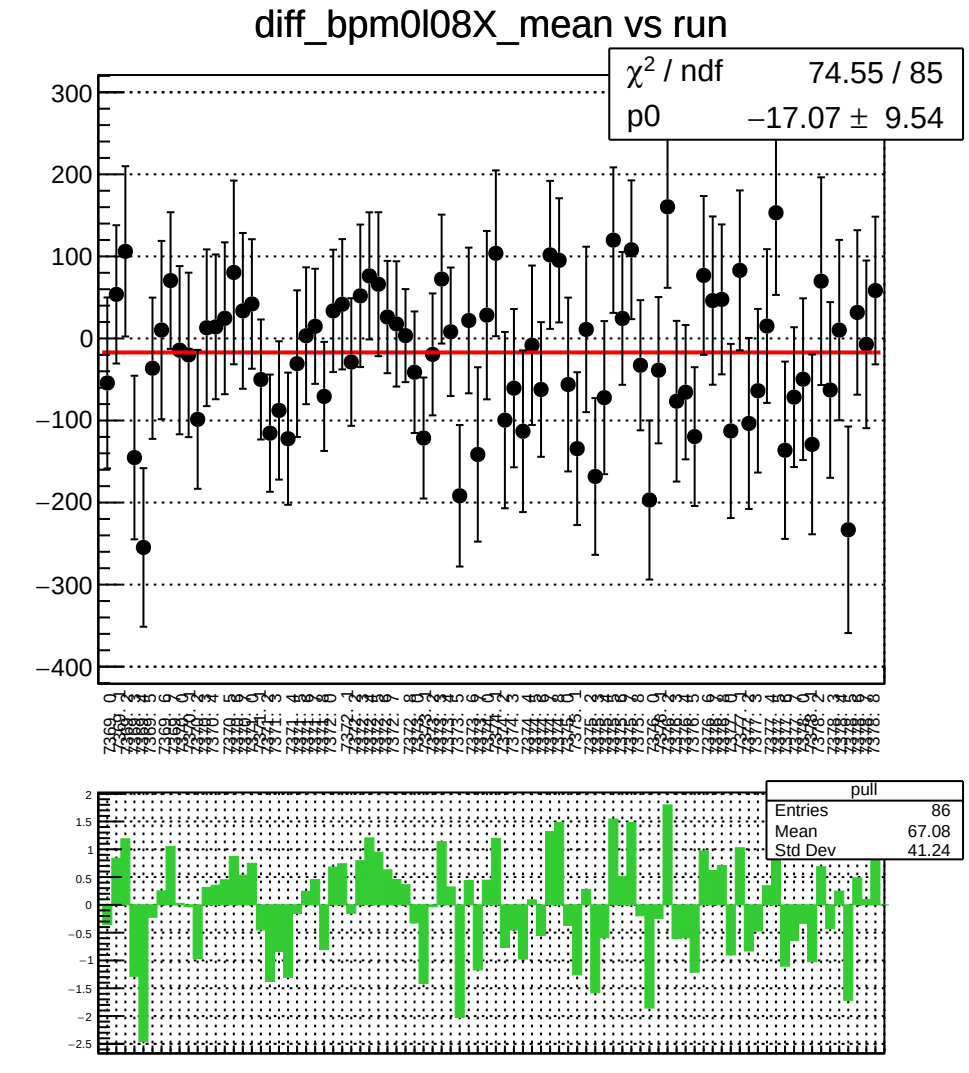

pull1D
Entries 86
Mean −0.01378
Std Dev 0.9343

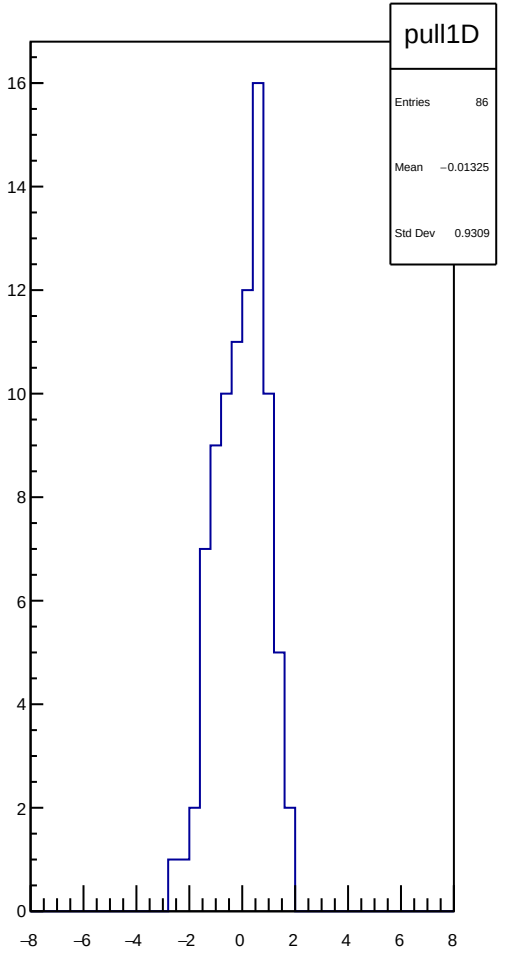

diff_bpm0l07X_rms vs run
χ^2 / ndf 3.373e+04 / 85
p0 9828 ± 7.78
14000
13000
12000
11000
10000
9000
8000
7000

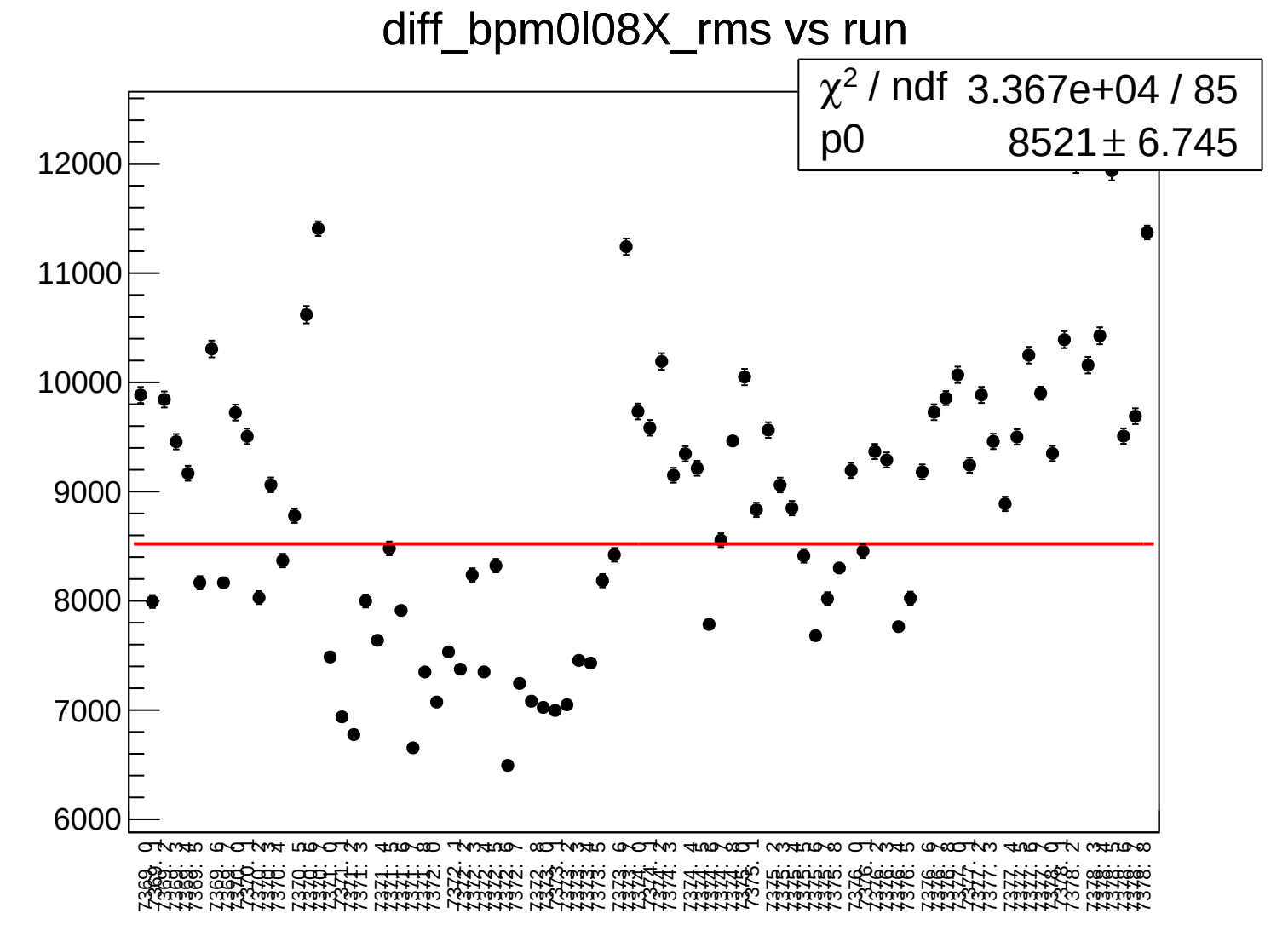

diff_bpm0l07Y_mean vs run
χ² / ndf 75.59 / 85
p0 2.221 ± 1.297
pull
Entries 86
Mean 79.24
Std Dev 80.54

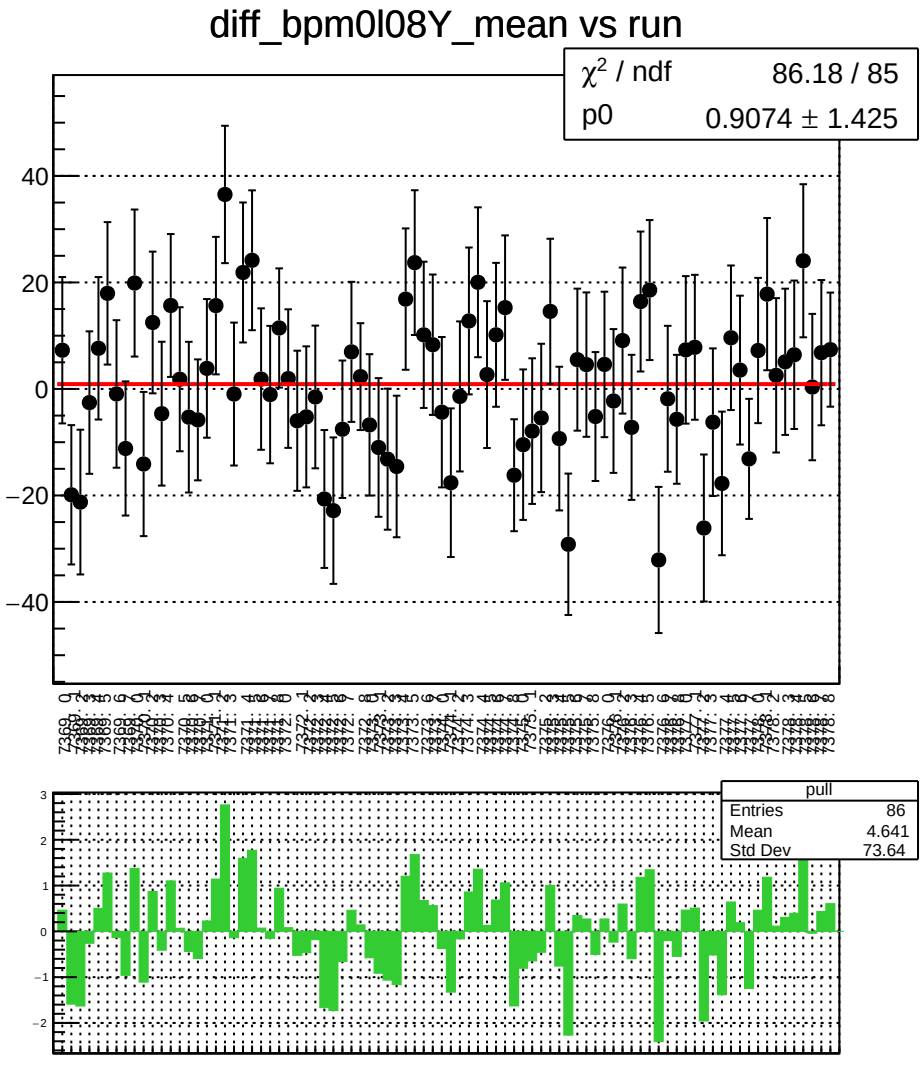

pull1D
Entries 86
Mean 0.009322
Std Dev 0.9375

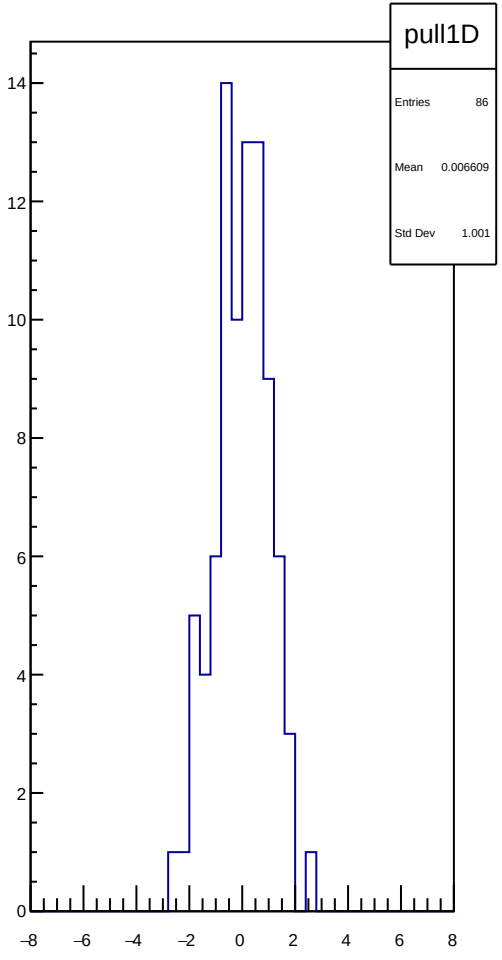

diff_bpm0l07Y_rms vs run
χ² / ndf 347.7 / 85
p0 1170 ± 0.9169
1220
1200
1180
1160
1140

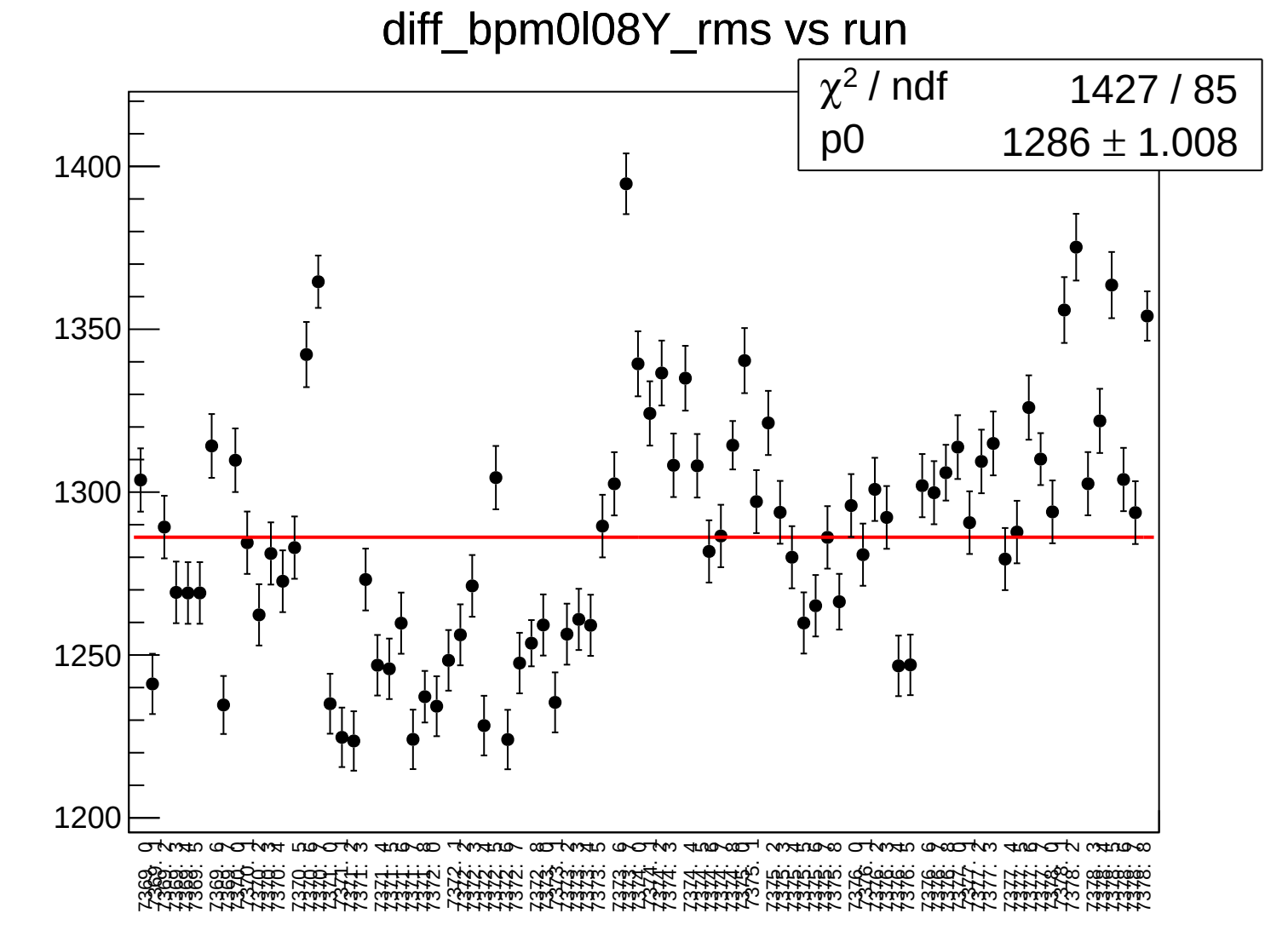

diff_bpm0l08X_mean vs run
χ² / ndf 74.55 / 85
p0 −17.07 ± 9.54
pull
Entries 86
Mean 67.08
Std Dev 41.24

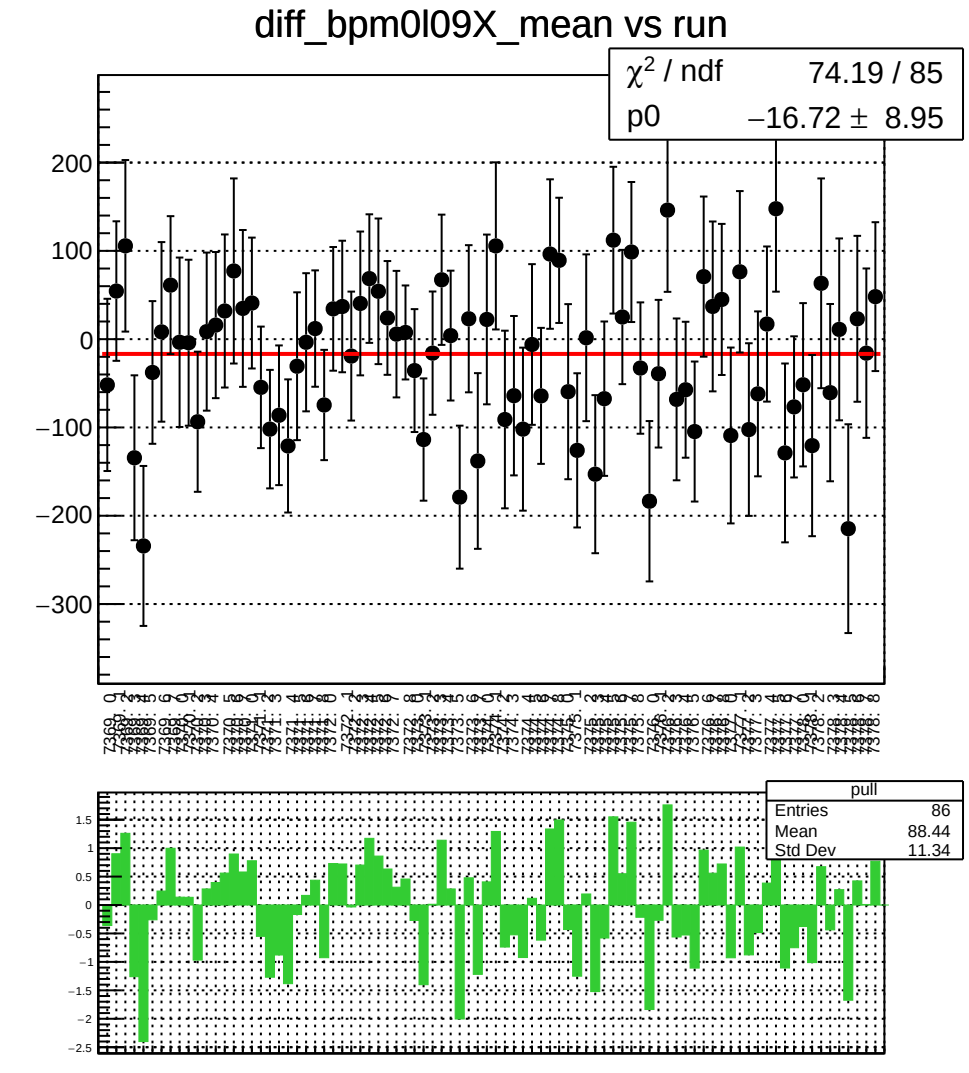

pull1D
Entries 86
Mean −0.01325
Std Dev 0.9309

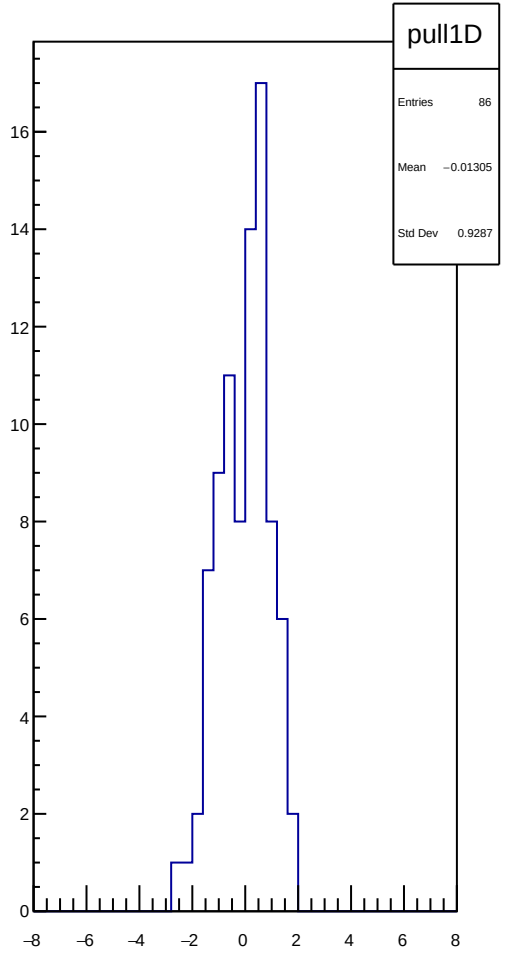

diff_bpm0l08X_rms vs run
χ² / ndf 3.367e+04 / 85
p0 8521 ± 6.745
12000
11000
10000
9000
8000
7000
6000

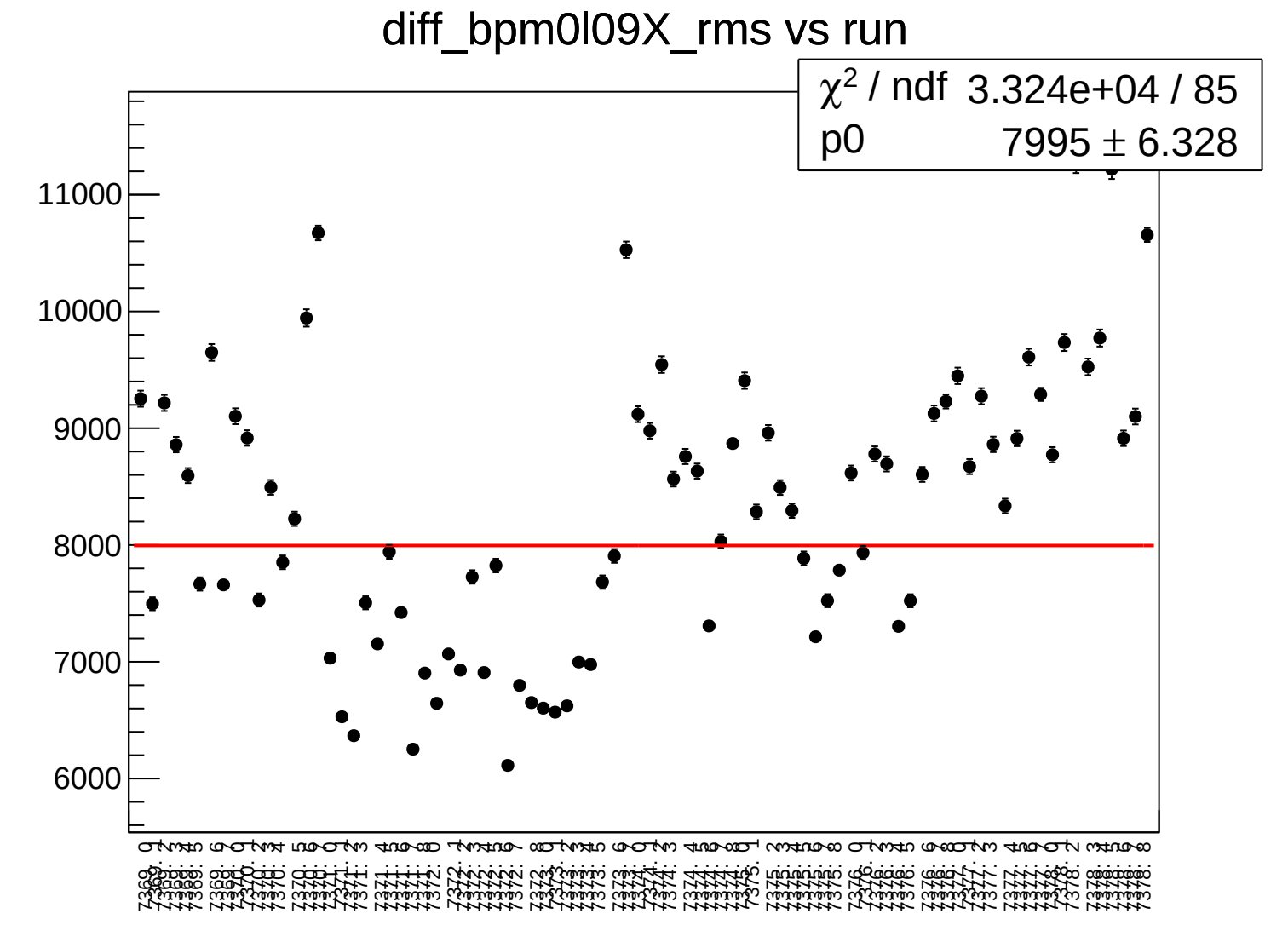

diff_bpm0l08Y_mean vs run
χ² / ndf 86.18 / 85
p0 0.9074 ± 1.425
pull
Entries 86
Mean 4.641
Std Dev 73.64

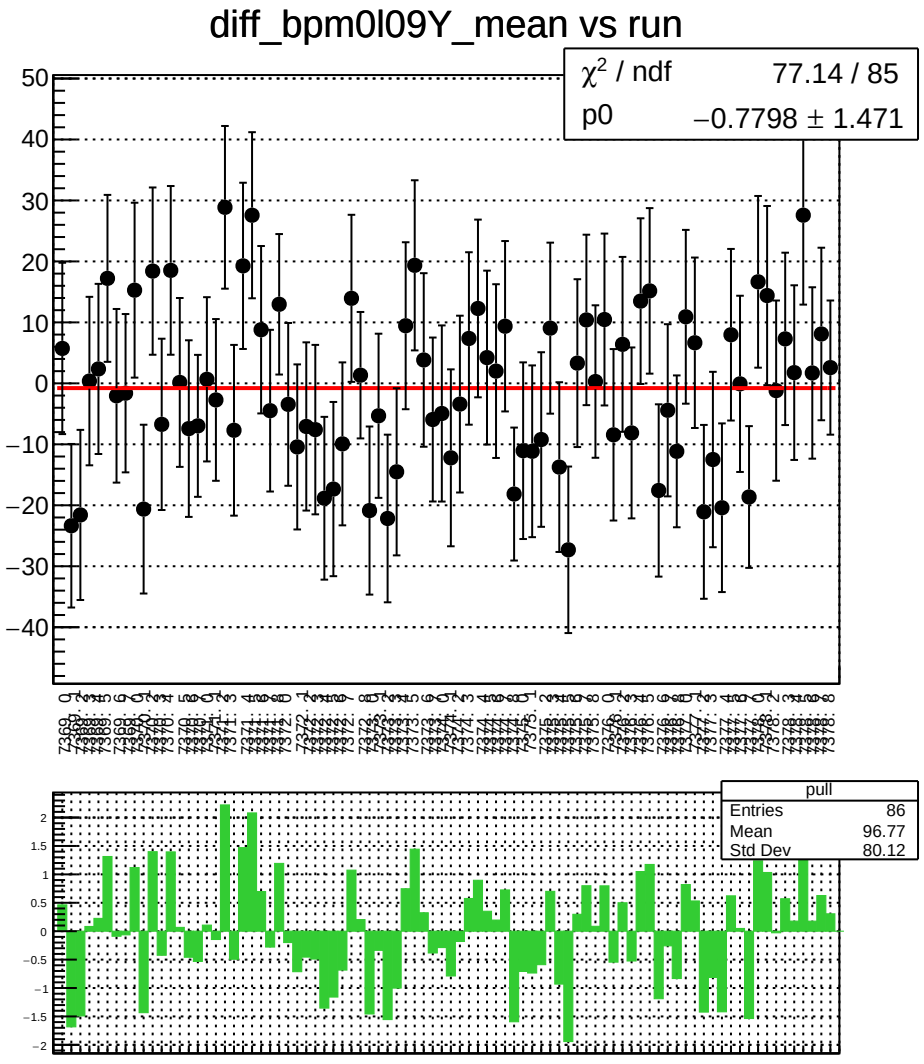

pull1D
Entries 86
Mean 0.006609
Std Dev 1.001

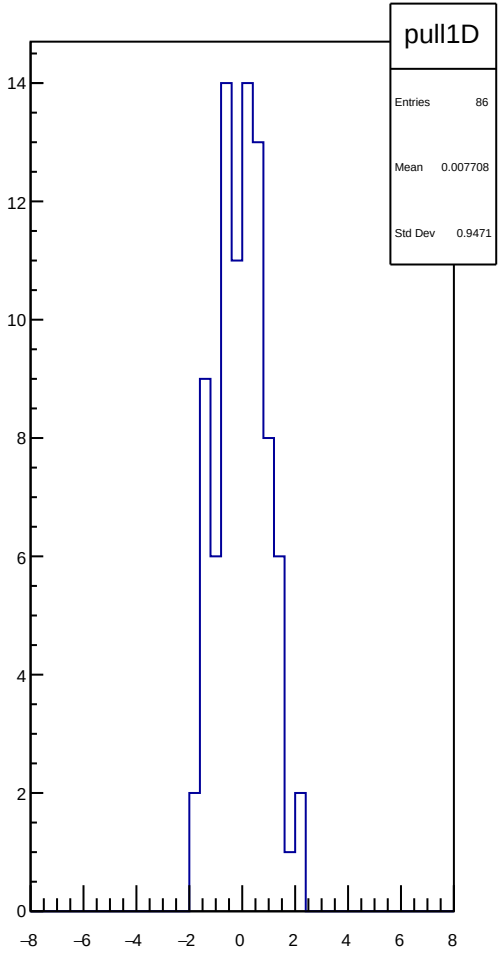

diff_bpm0l08Y_rms vs run
χ² / ndf 1427 / 85
p0 1286 ± 1.008
1400
1350
1300
1250
1200

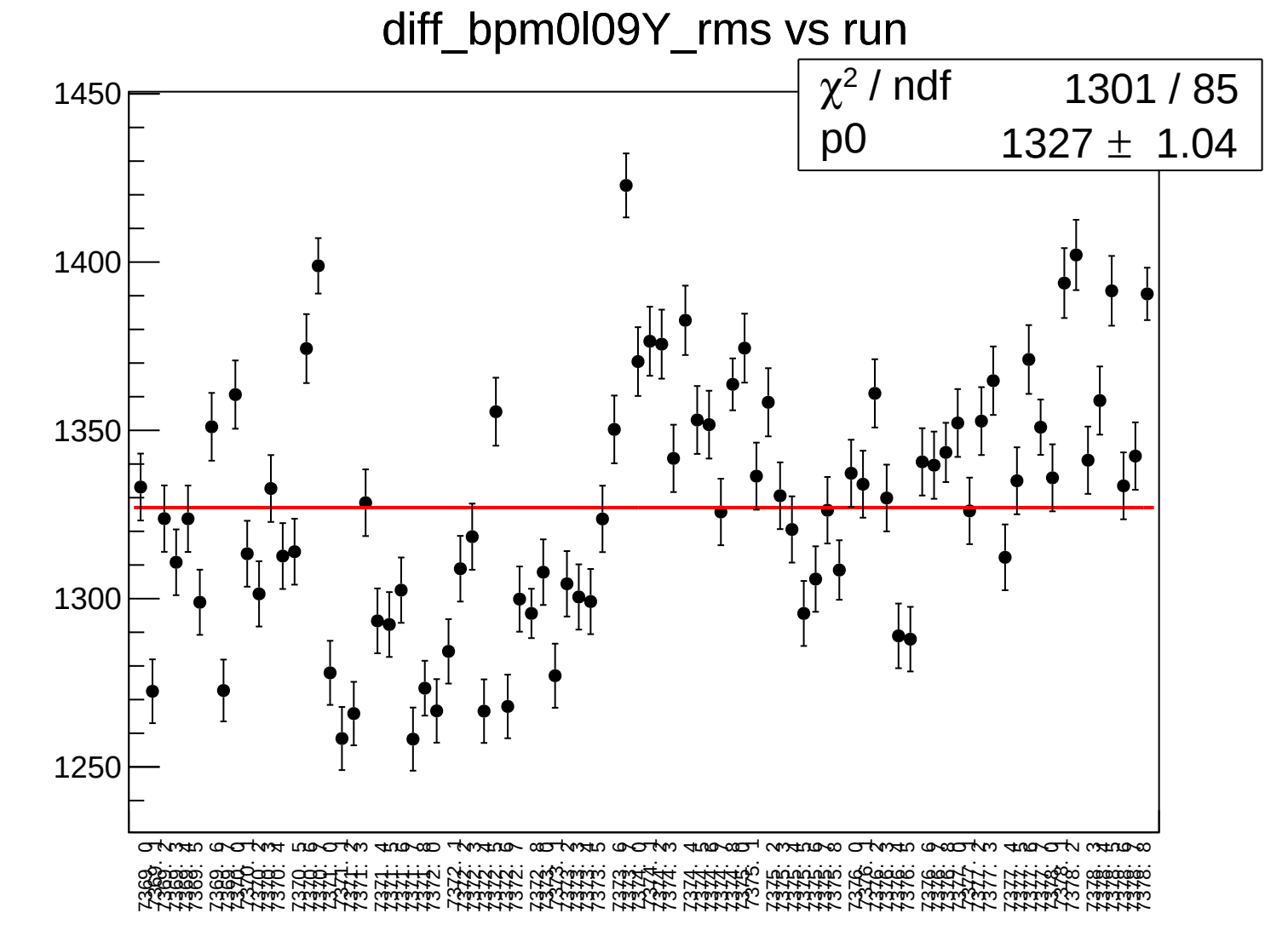

diff_bpm0l09X_mean vs run
χ² / ndf 74.19 / 85
p0 −16.72 ± 8.95
pull
Entries 86
Mean 88.44
Std Dev 11.34

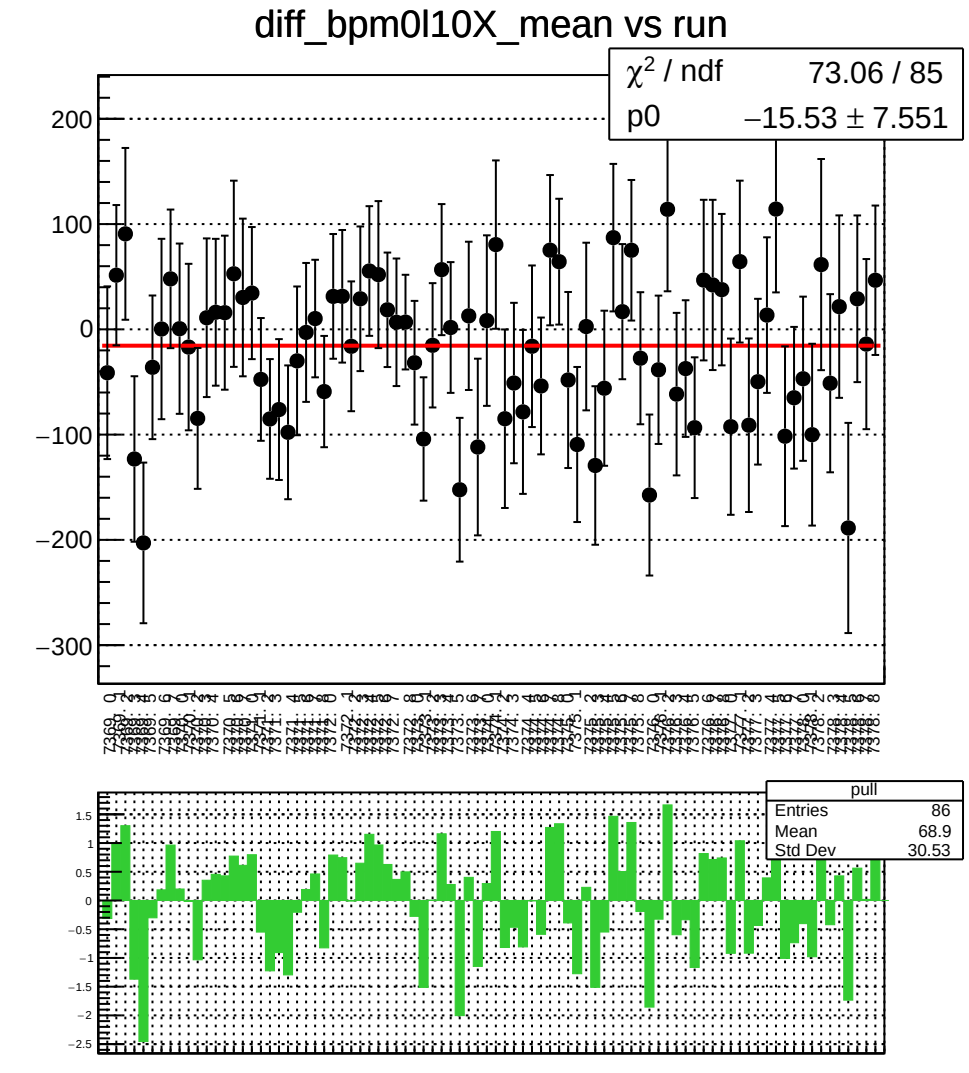

pull1D
Entries 86
Mean −0.01305
Std Dev 0.9287

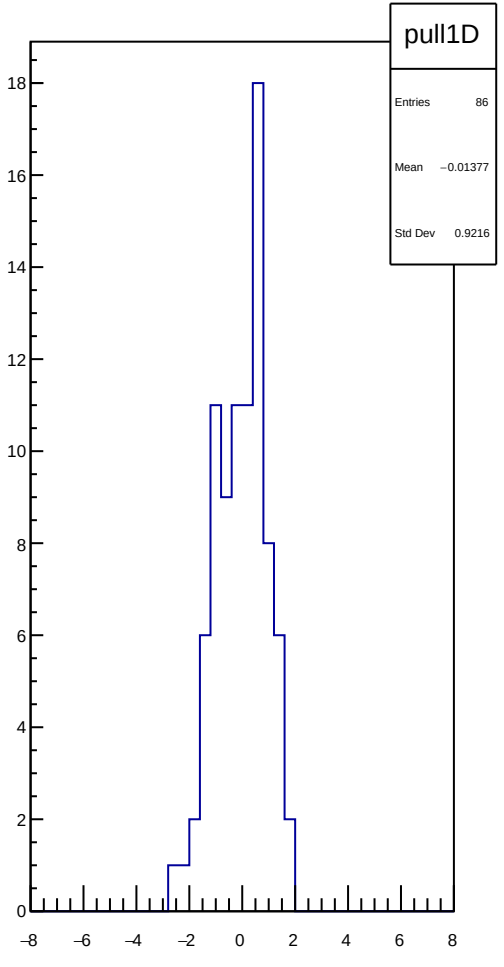

diff_bpm0l09X_rms vs run
χ^2 / ndf 3.324e+04 / 85
p0 7995 ± 6.328
11000
10000
9000
8000
7000
6000

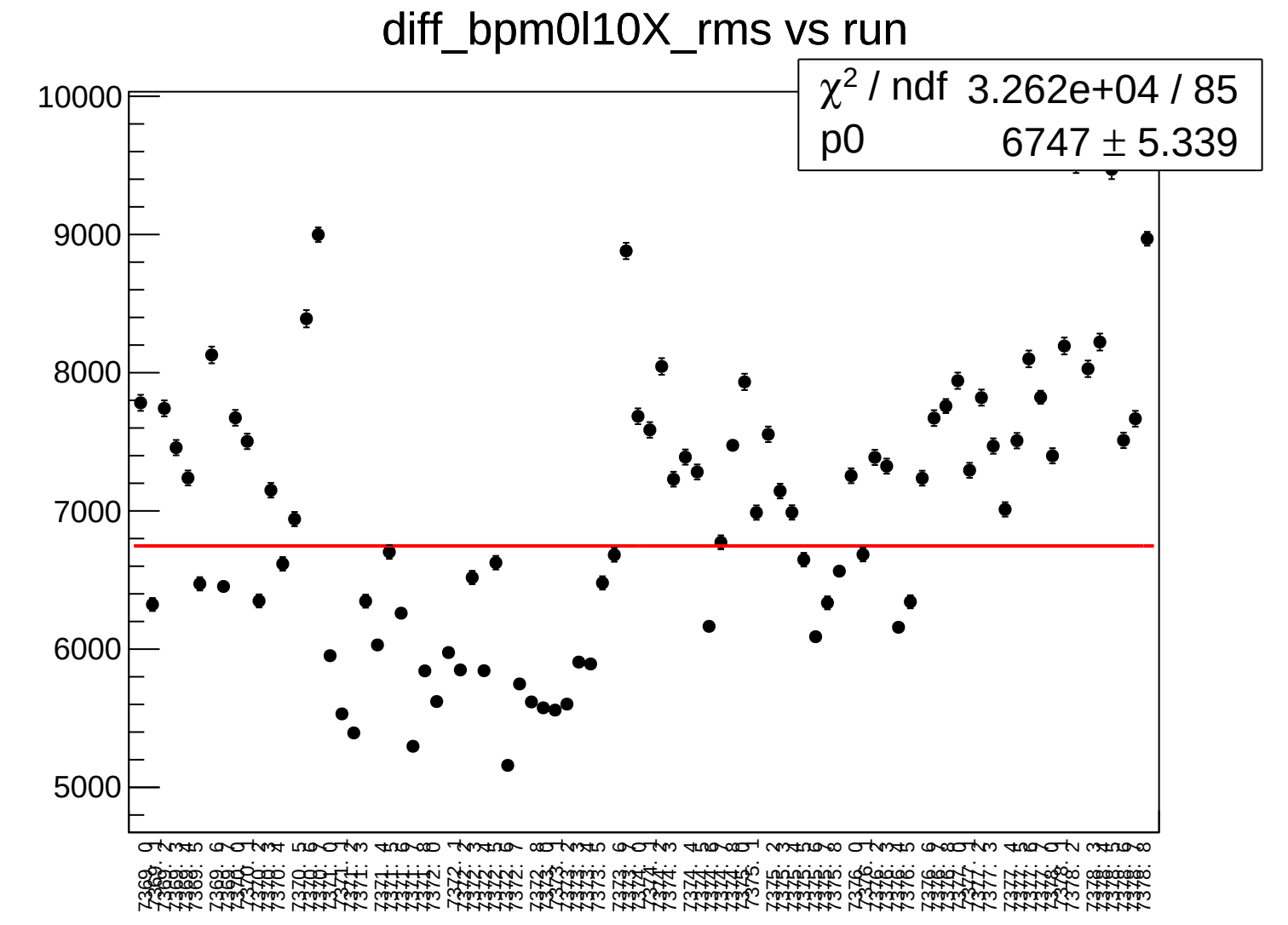

diff_bpm0l09Y_mean vs run
χ² / ndf 77.14 / 85
p0 −0.7798 ± 1.471
pull
Entries 86
Mean 96.77
Std Dev 80.12

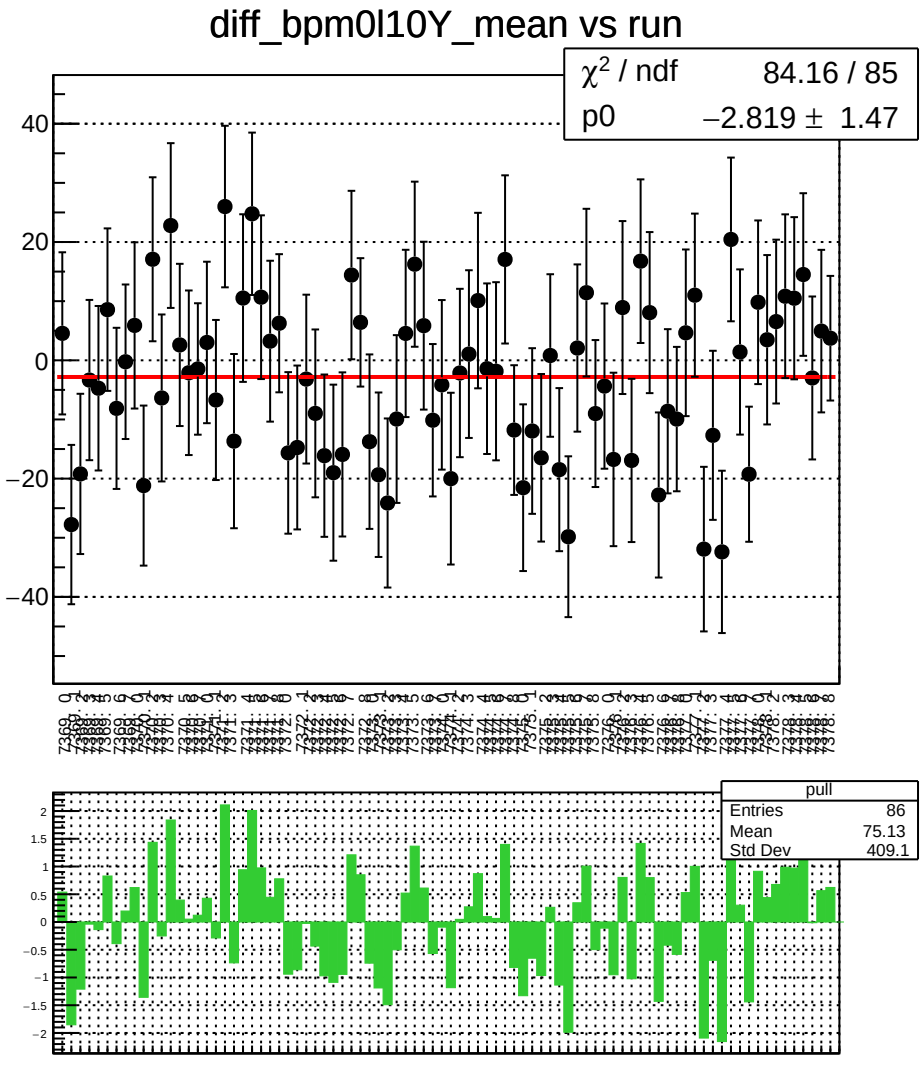

pull1D
Entries 86
Mean 0.007708
Std Dev 0.9471

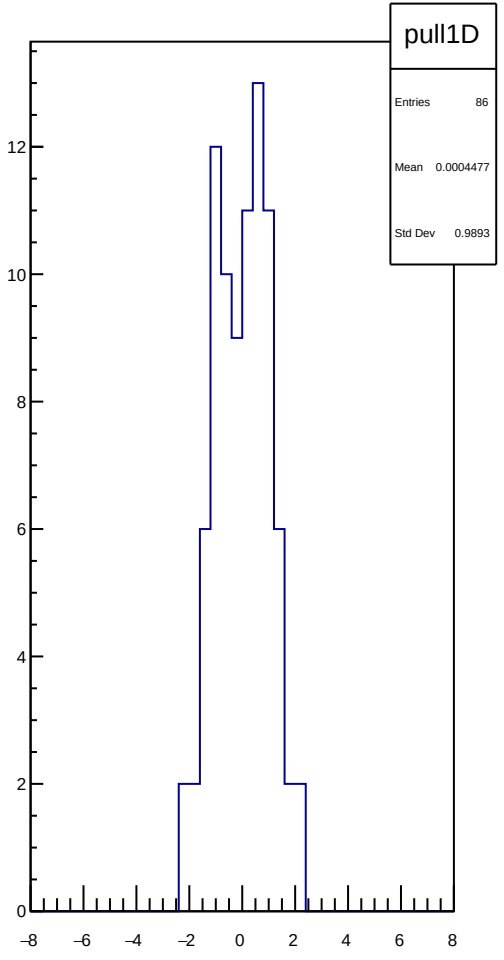

diff_bpm0l09Y_rms vs run
χ² / ndf 1301 / 85
p0 1327 ± 1.04
1450
1400
1350
1300
1250

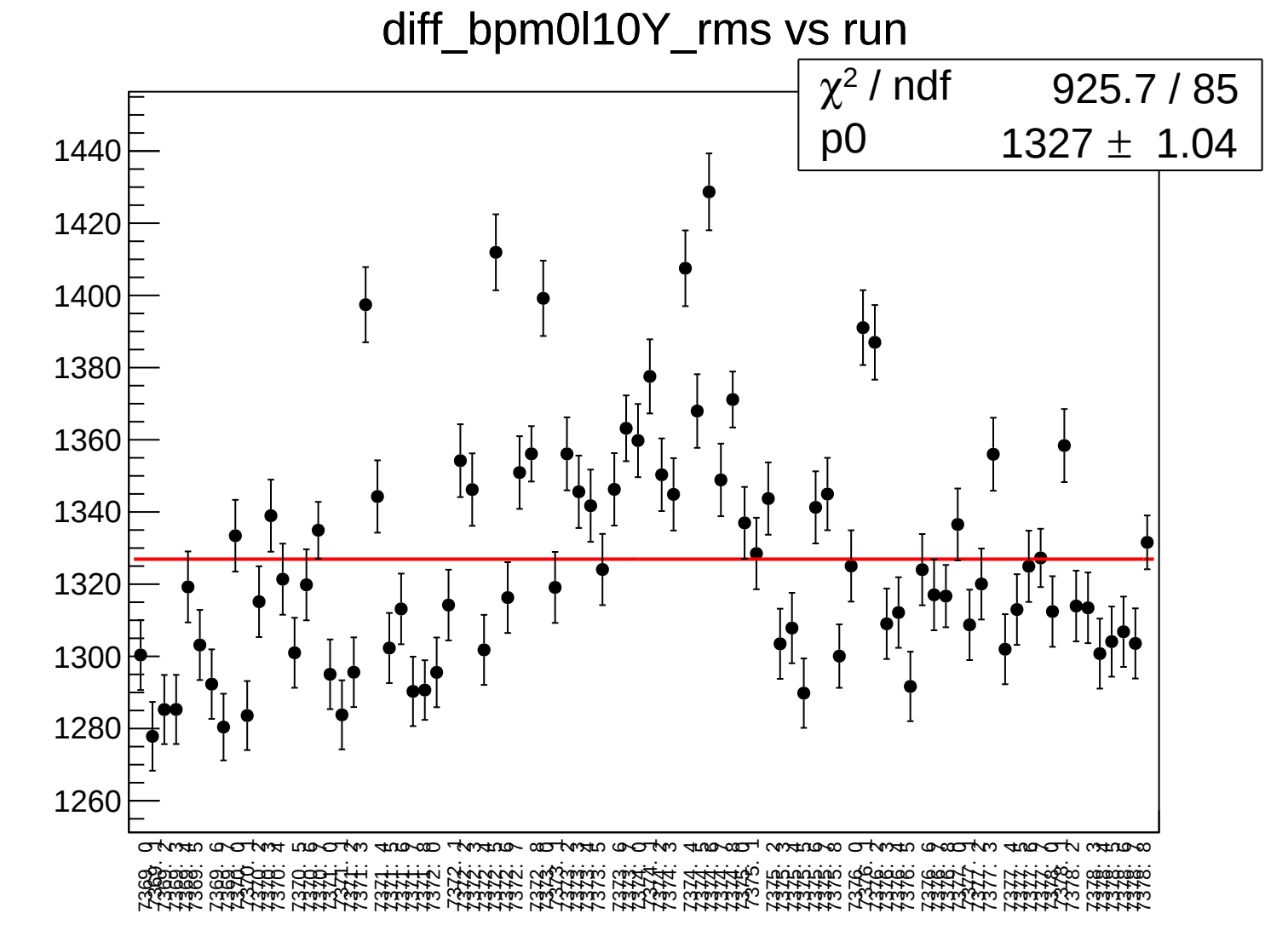

diff_bpm0l10X_mean vs run
χ^2 / ndf 73.06 / 85
p0 −15.53 ± 7.551
pull
Entries 86
Mean 68.9
Std Dev 30.53

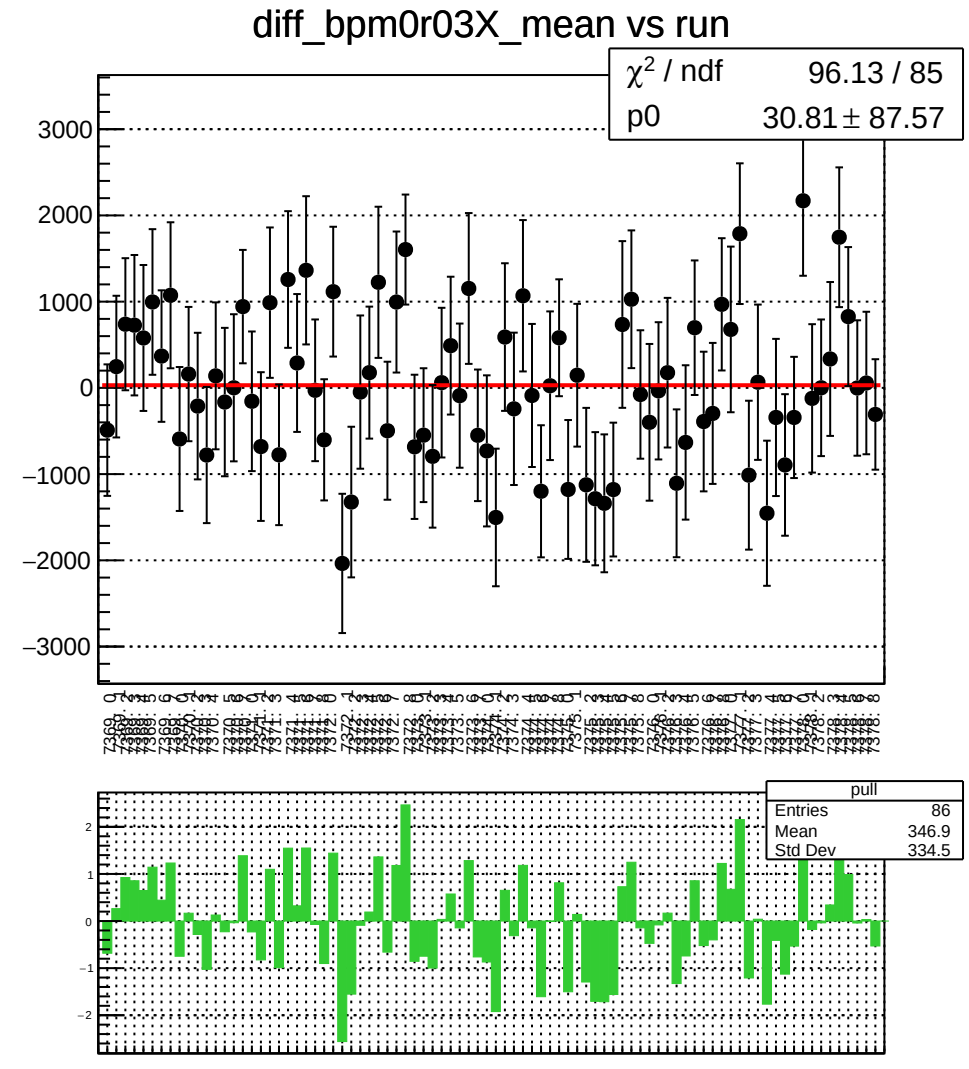

pull1D
Entries 86
Mean −0.01377
Std Dev 0.9216

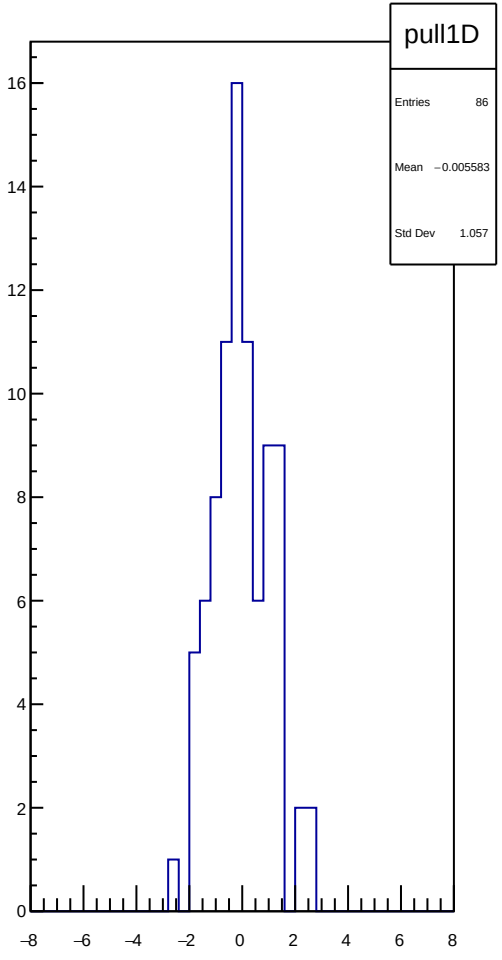

diff_bpm0l10X_rms vs run
χ² / ndf 3.262e+04 / 85
p0 6747 ± 5.339
10000
9000
8000
7000
6000
5000

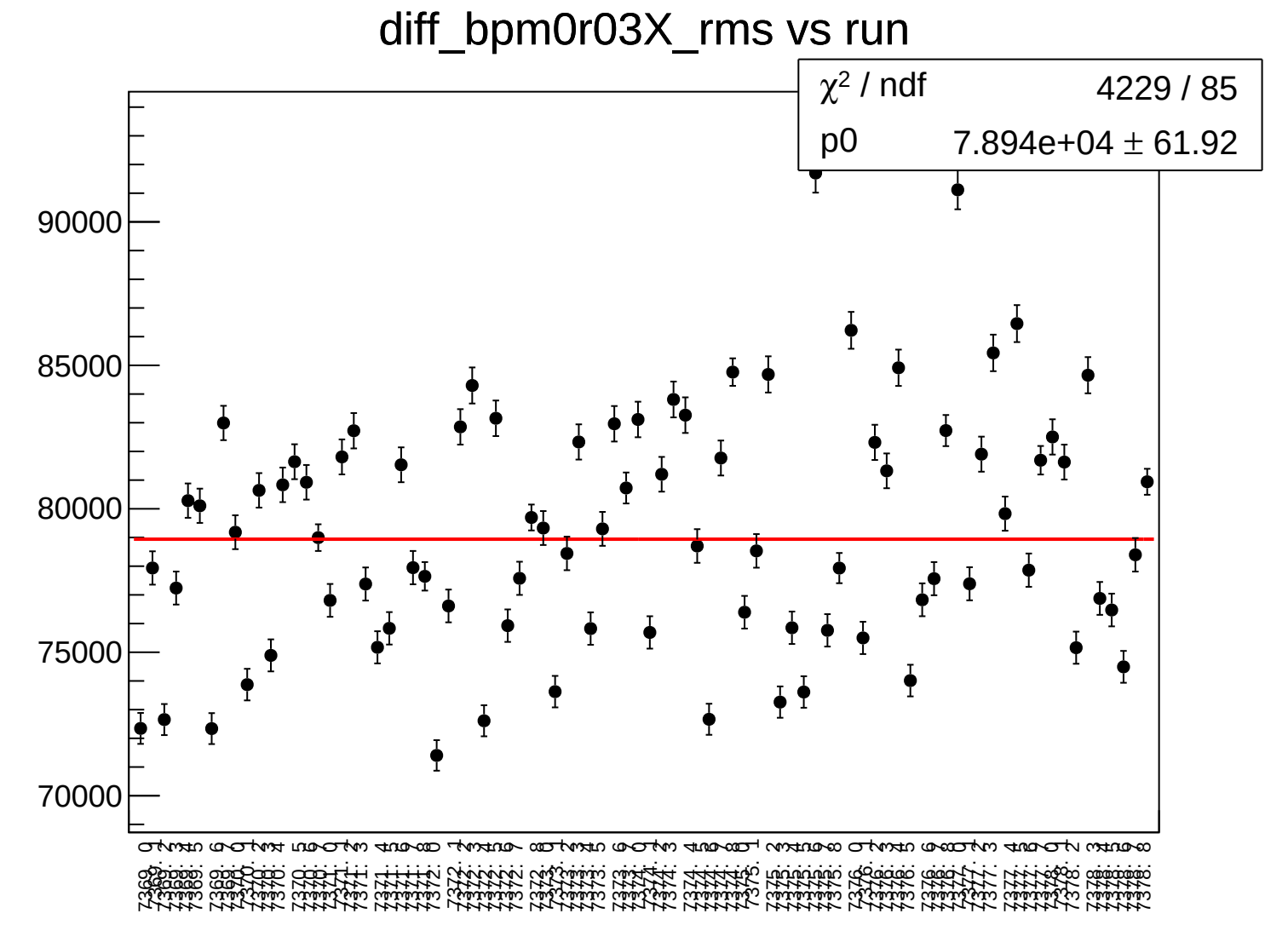

diff_bpm0l10Y_mean vs run
χ² / ndf 84.16 / 85
p0 −2.819 ± 1.47
pull
Entries 86
Mean 75.13
Std Dev 409.1

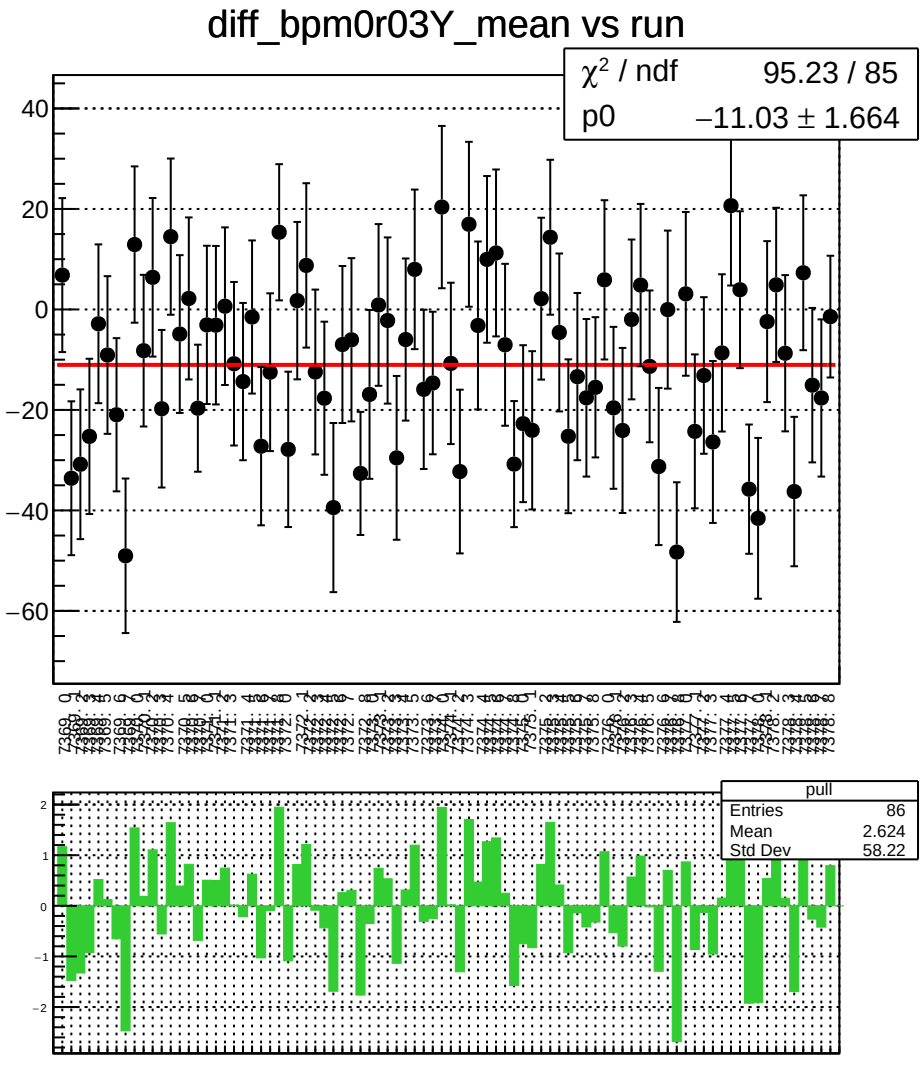

pull1D
Entries 86
Mean 0.0004477
Std Dev 0.9893

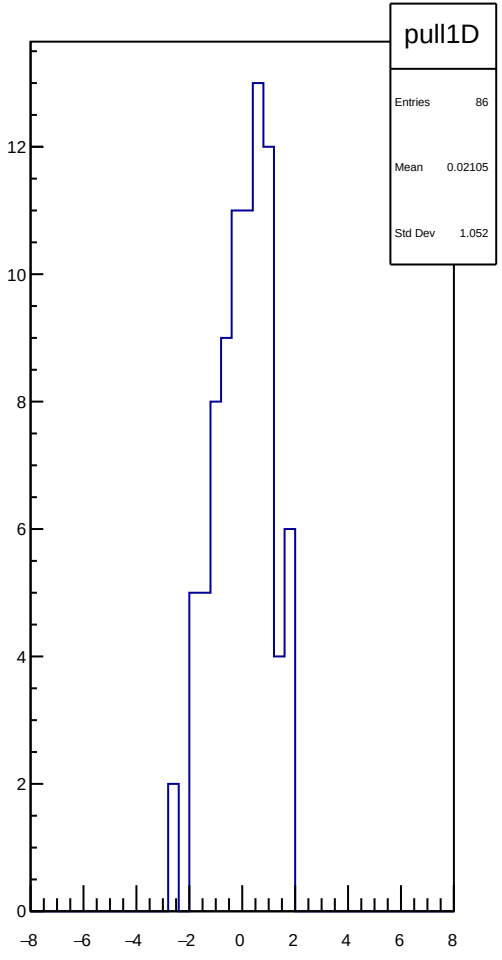

diff_bpm0l10Y_rms vs run
χ² / ndf 925.7 / 85
p0 1327 ± 1.04
1440
1420
1400
1380
1360
1340
1320
1300
1280
1260

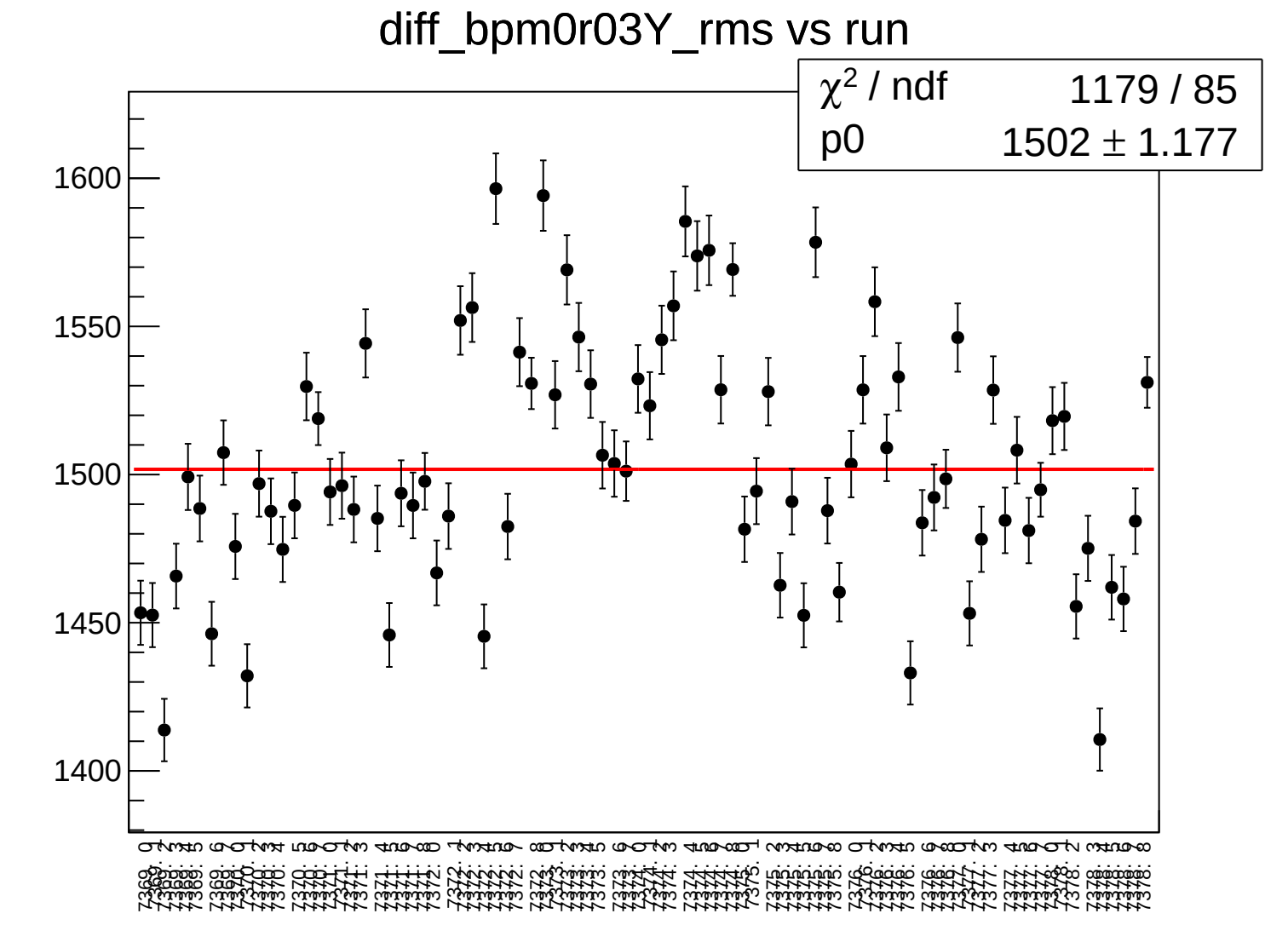

diff_bpm0r03X_mean vs run
χ^2 / ndf 96.13 / 85
p0 30.81 ± 87.57
pull
Entries 86
Mean 346.9
Std Dev 334.5

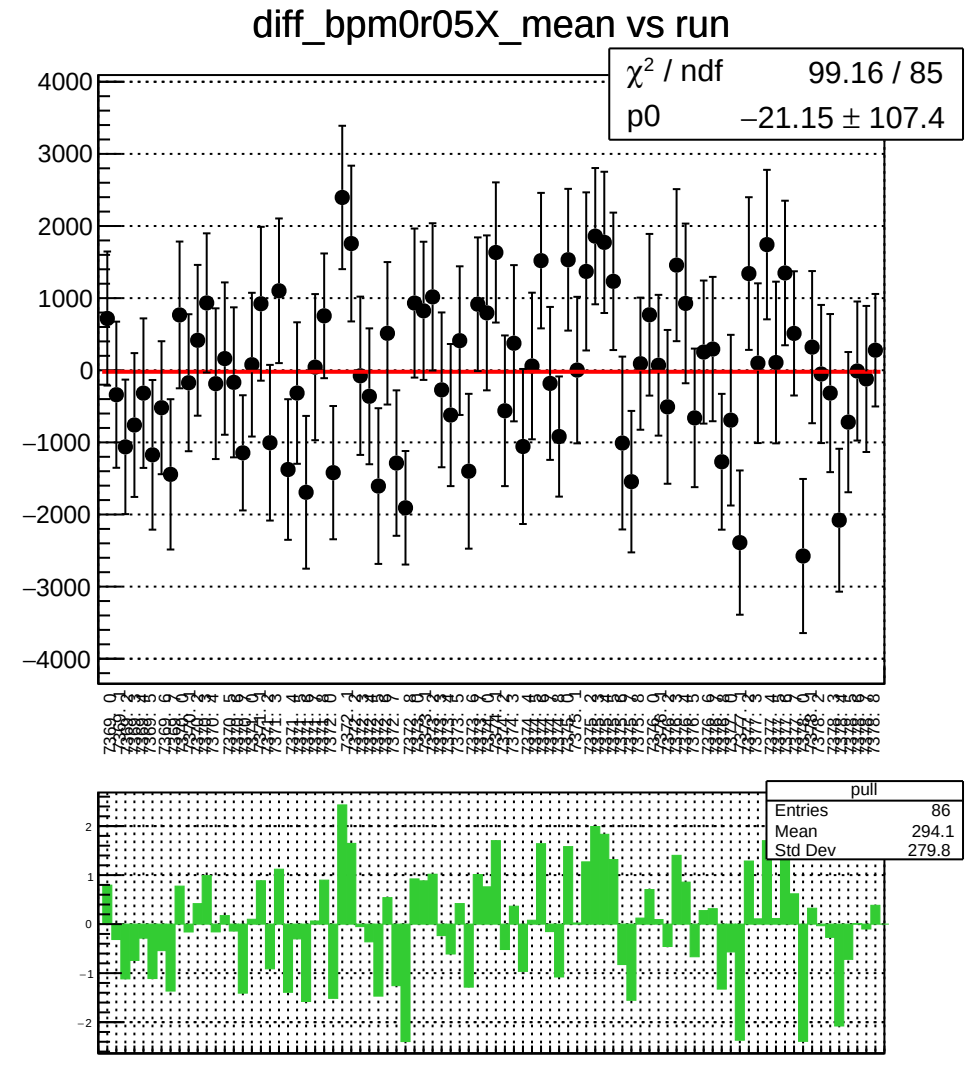

pull1D
Entries 86
Mean −0.005583
Std Dev 1.057

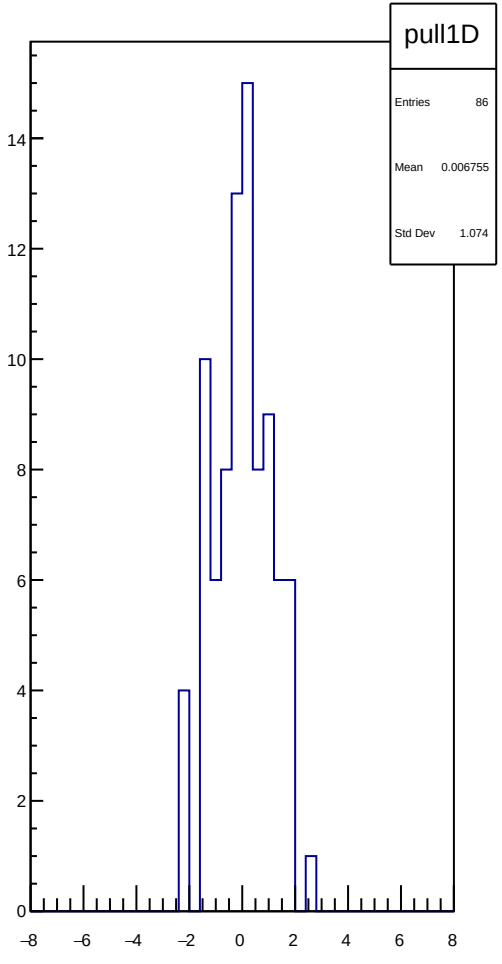

diff_bpm0r03X_rms vs run
χ² / ndf 4229 / 85
p0 7.894e+04 ± 61.92
90000
85000
80000
75000
70000

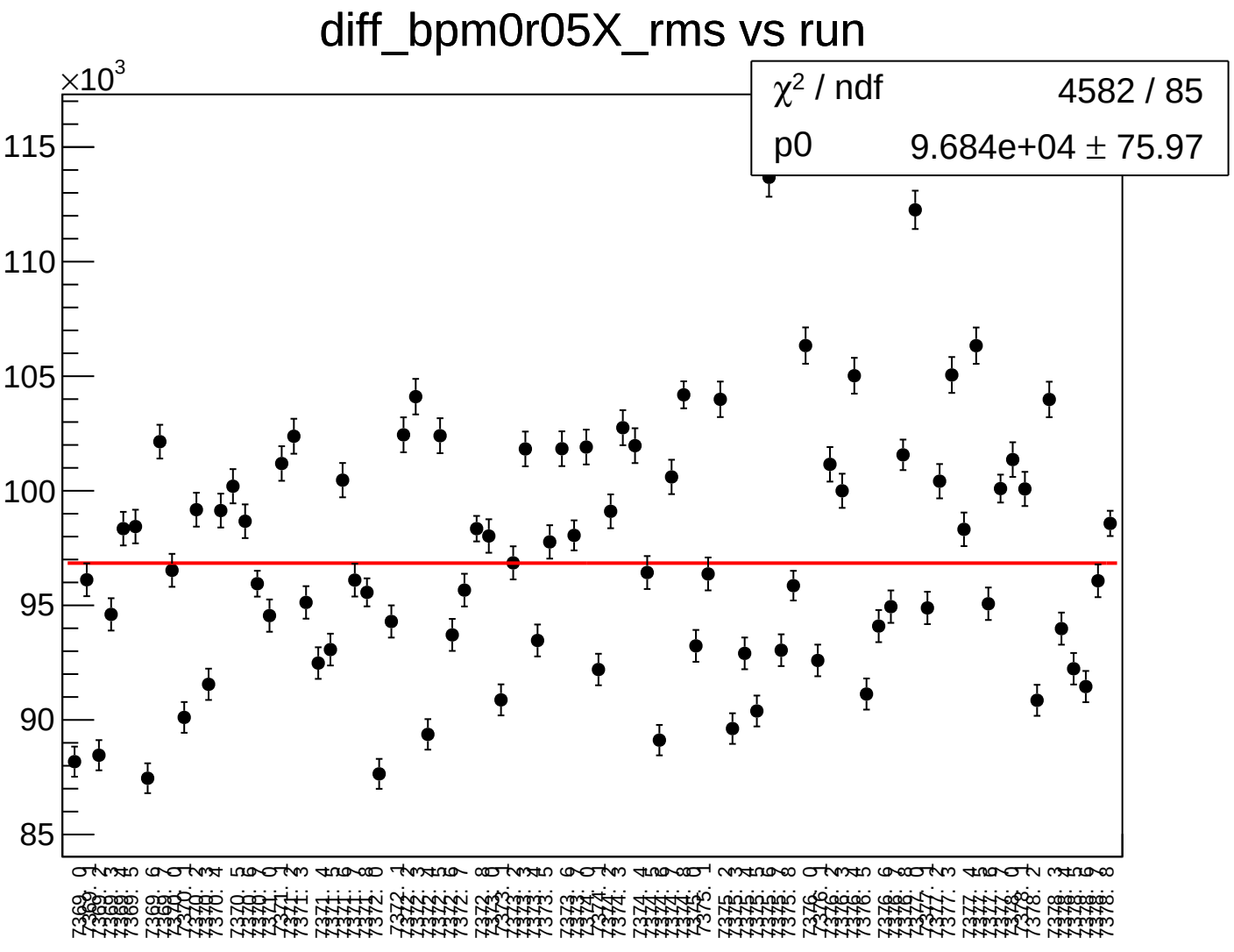

diff_bpm0r03Y_mean vs run
χ² / ndf 95.23 / 85
p0 −11.03 ± 1.664
pull
Entries 86
Mean 2.624
Std Dev 58.22

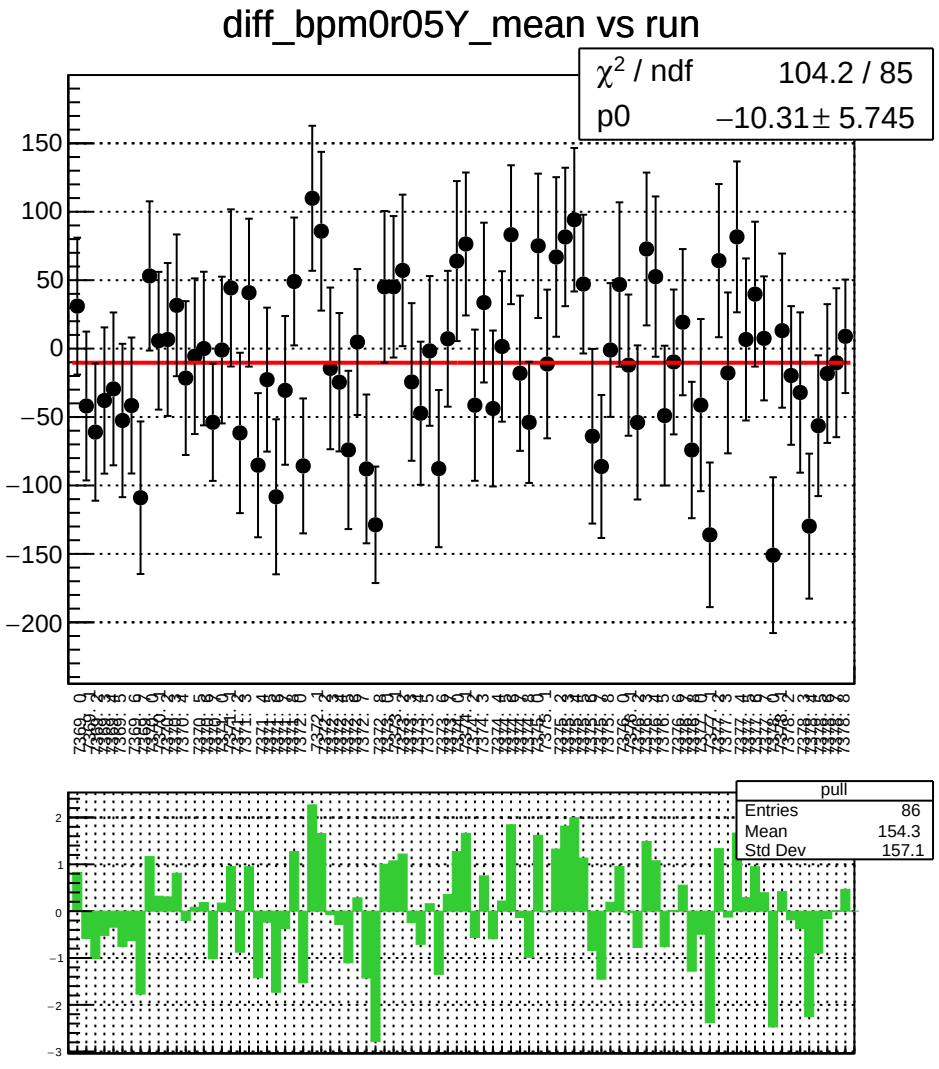

pull1D
Entries 86
Mean 0.02105
Std Dev 1.052

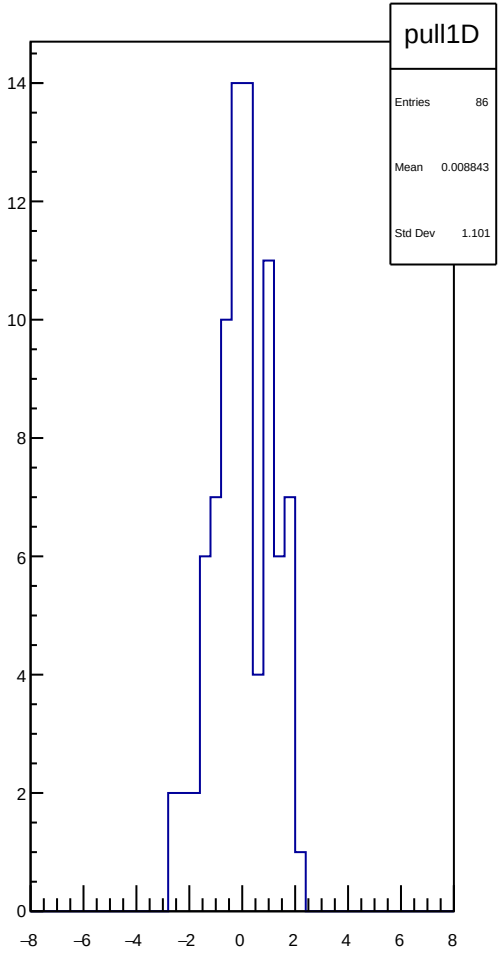

diff_bpm0r03Y_rms vs run
χ² / ndf 1179 / 85
p0 1502 ± 1.177
1600
1550
1500
1450
1400

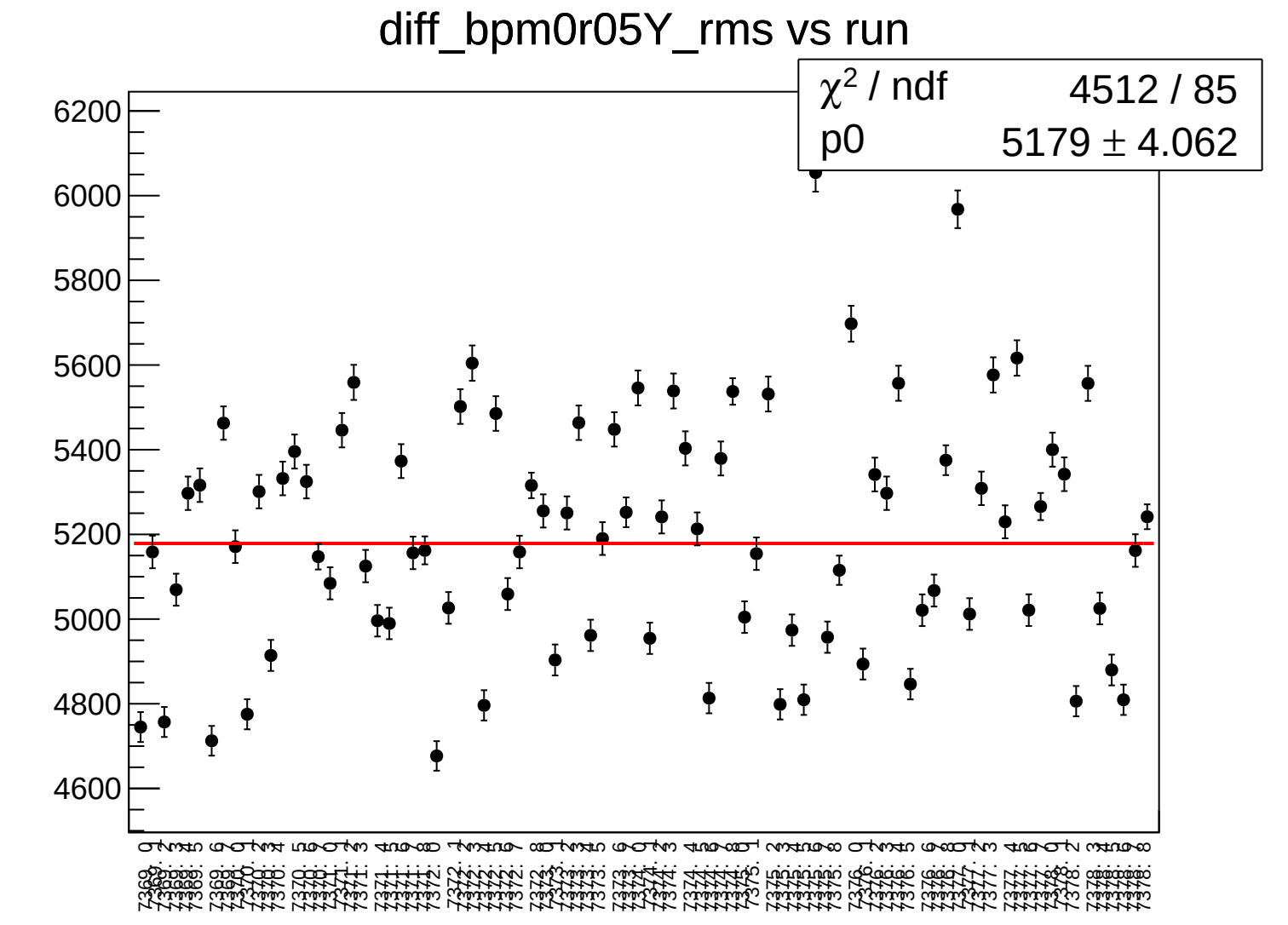

diff_bpm0r05X_mean vs run
χ² / ndf 99.16 / 85
p0 −21.15 ± 107.4
pull
Entries 86
Mean 294.1
Std Dev 279.8

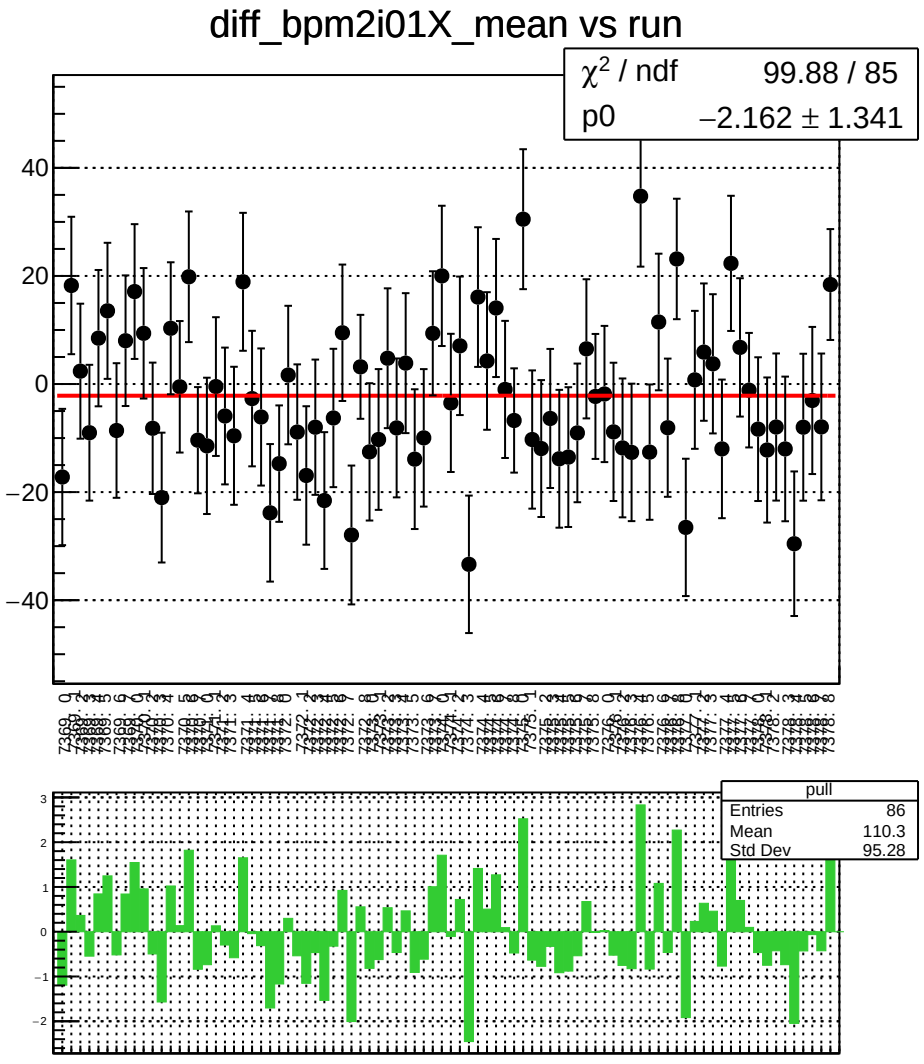

pull1D
Entries 86
Mean 0.006755
Std Dev 1.074

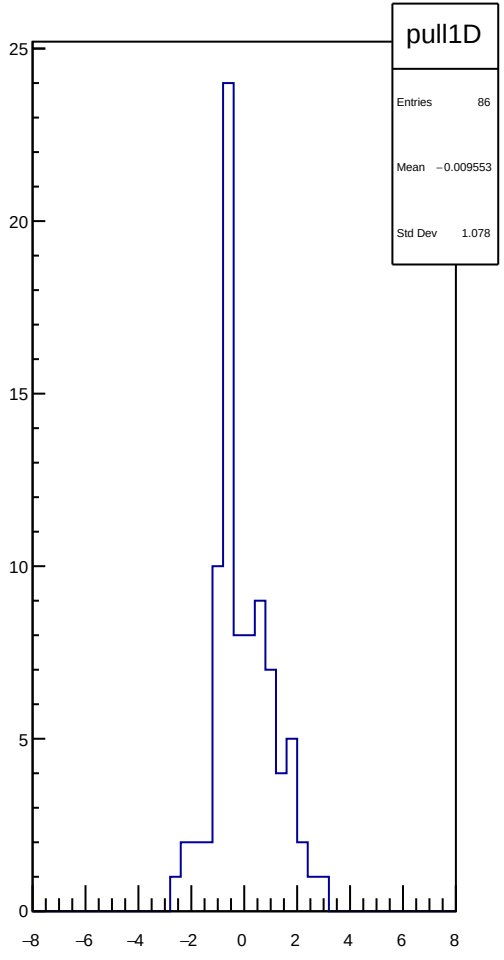

diff_bpm0r05X_rms vs run
×10^3
115
110
105
100
95
90
85
χ² / ndf 4582 / 85
p0 9.684e+04 ± 75.97

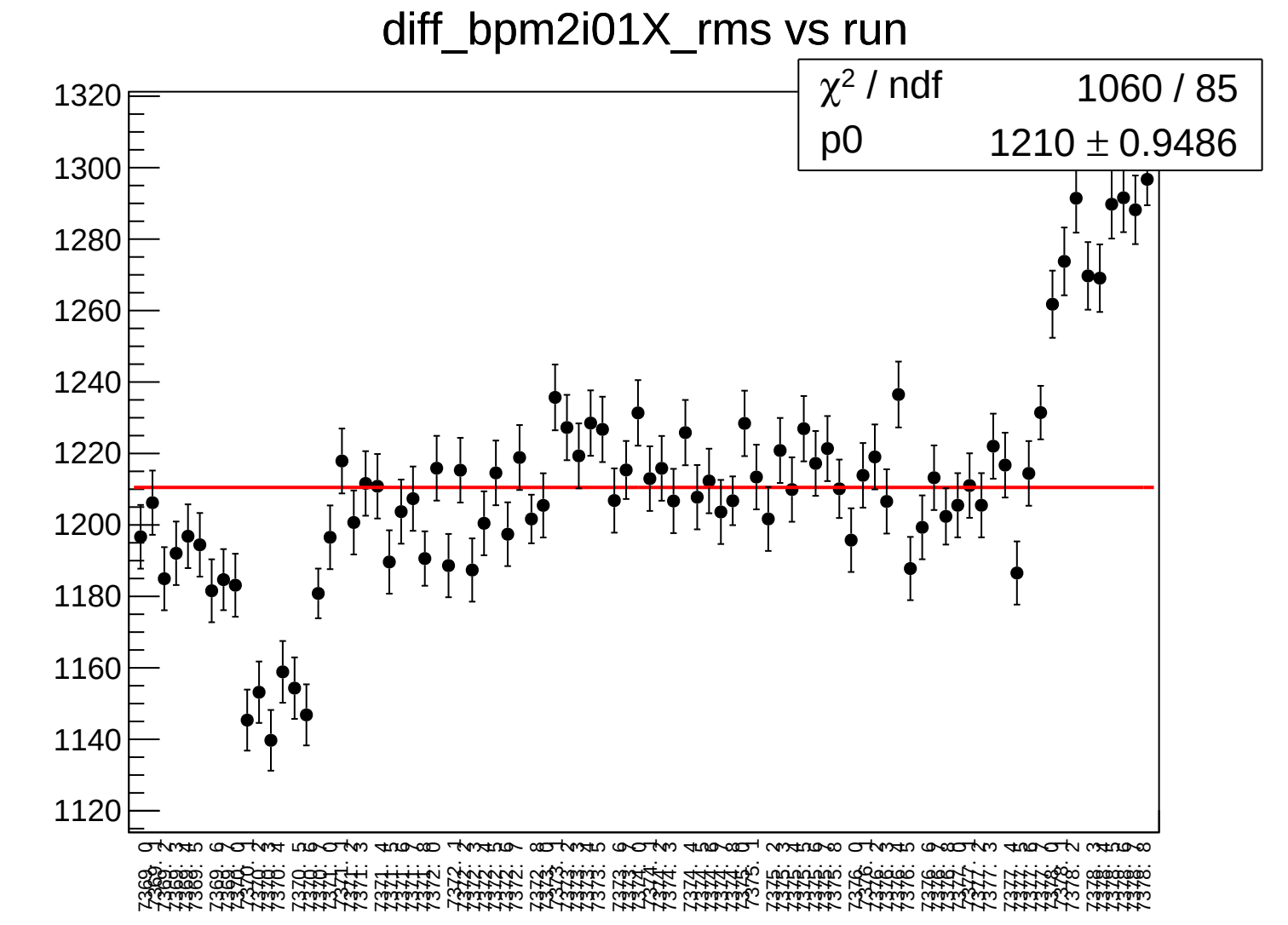

diff_bpm0r05Y_mean vs run
χ² / ndf 104.2 / 85
p0 −10.31 ± 5.745
pull
Entries 86
Mean 154.3
Std Dev 157.1

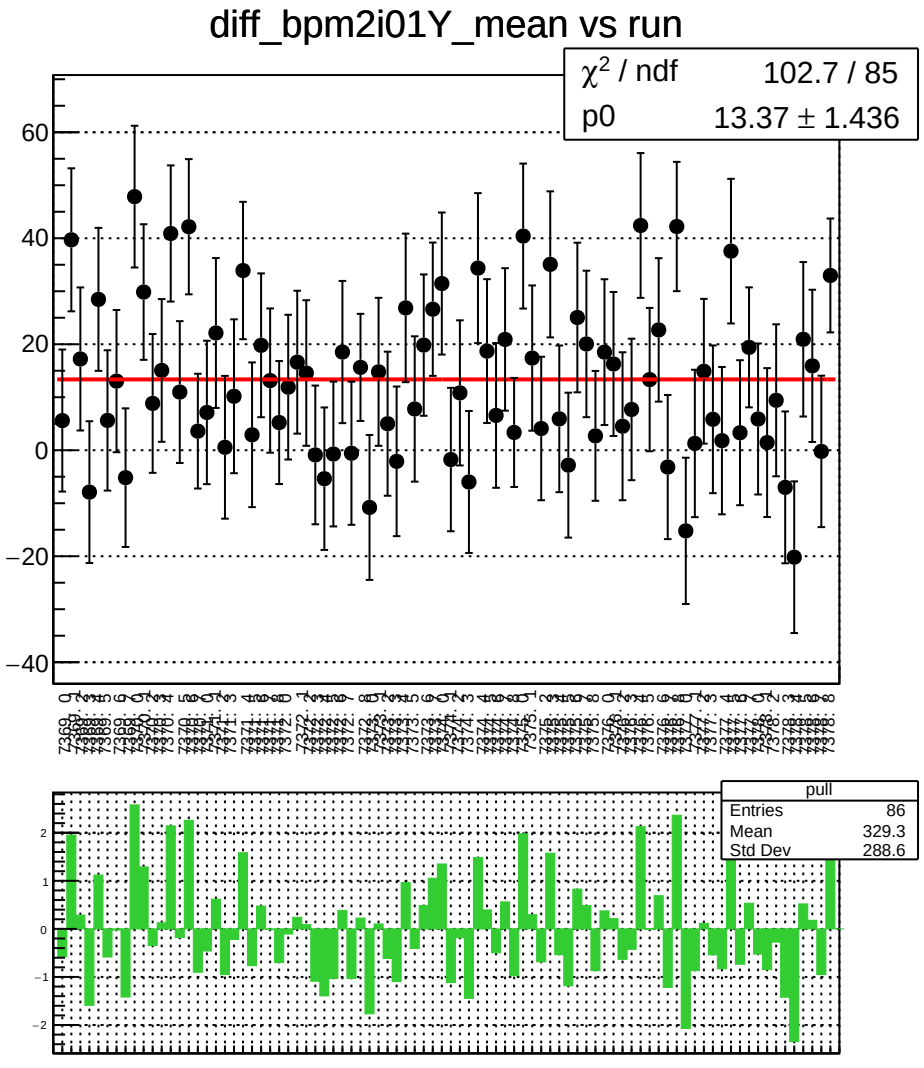

pull1D
Entries 86
Mean 0.008843
Std Dev 1.101

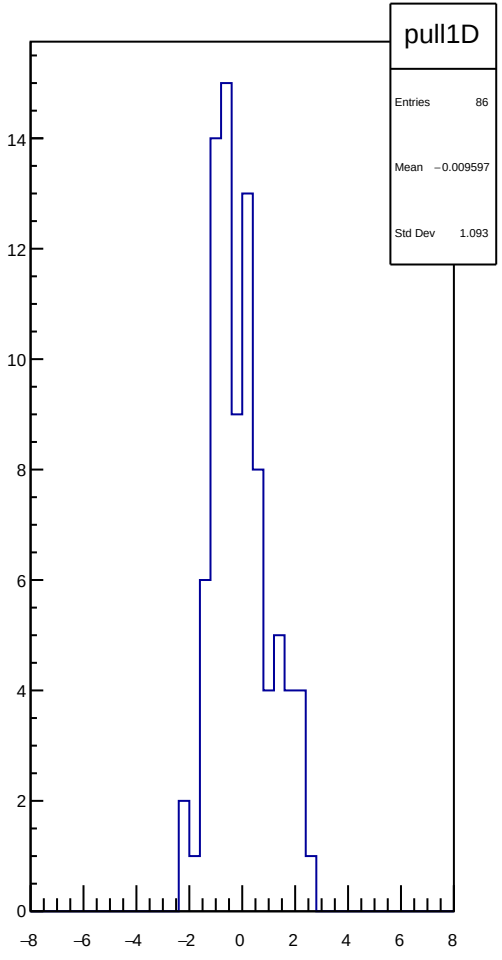

diff_bpm0r05Y_rms vs run
χ² / ndf 4512 / 85
p0 5179 ± 4.062
6200
6000
5800
5600
5400
5200
5000
4800
4600

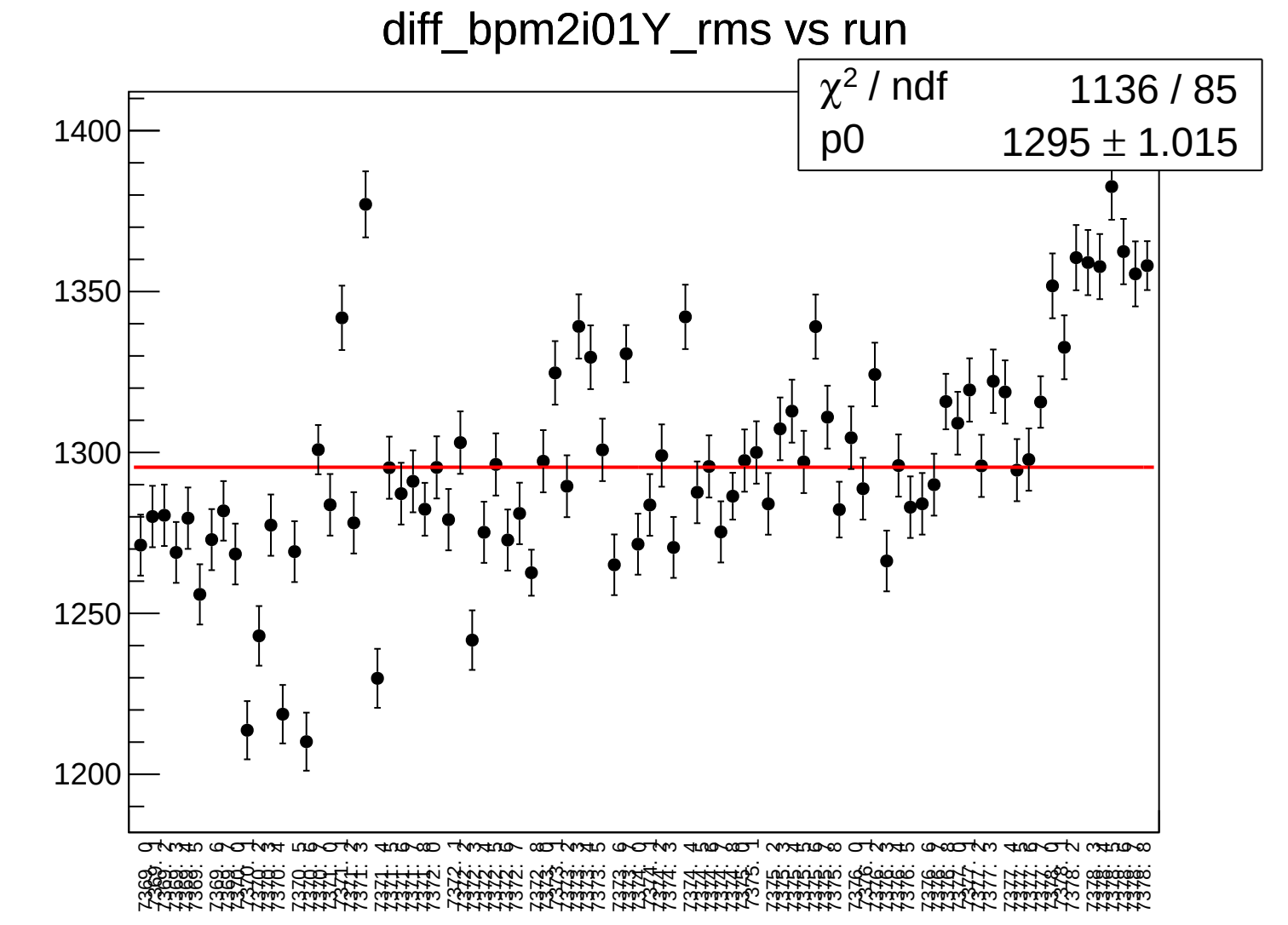

diff_bpm2i01X_mean vs run
χ^2 / ndf 99.88 / 85
p0 −2.162 ± 1.341
40
20
0
−20
−40
pull
Entries 86
Mean 110.3
Std Dev 95.28
3
2
1
0
−1
−2

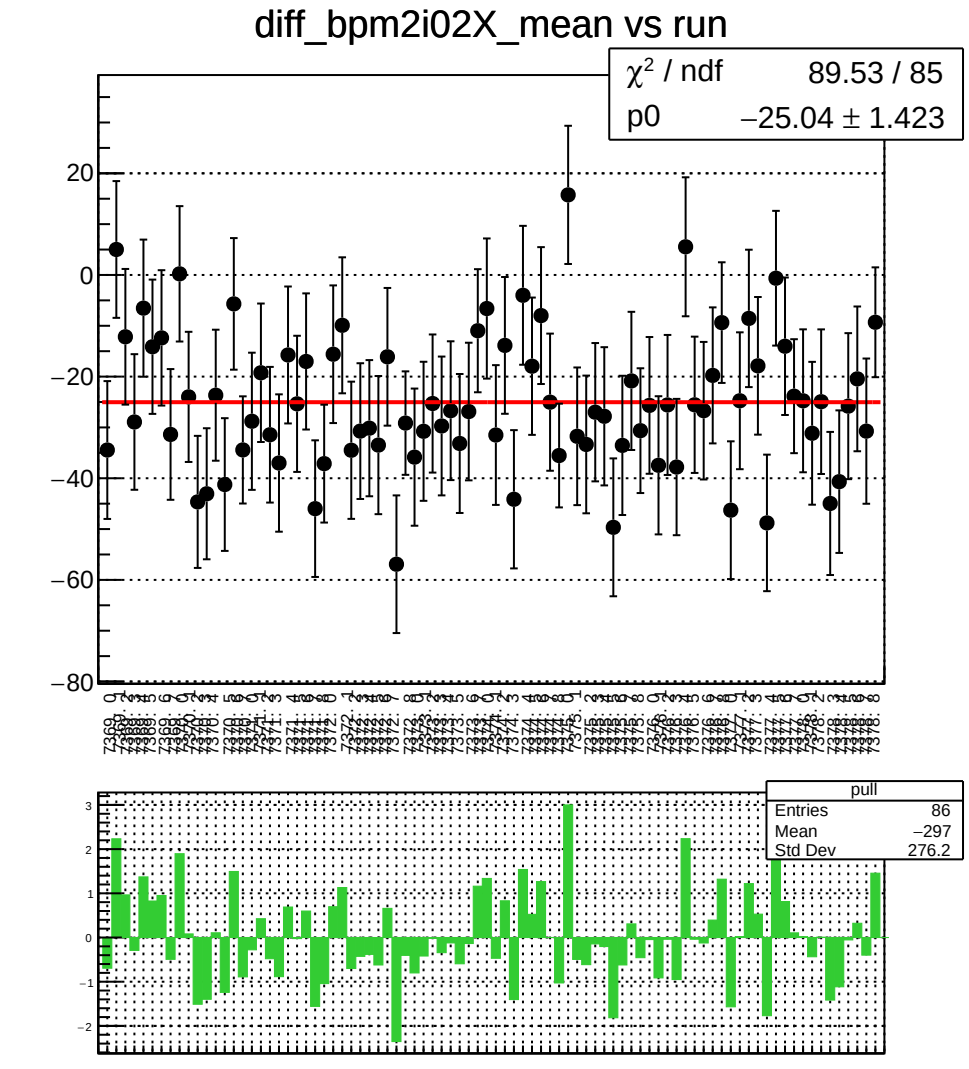

pull1D
Entries 86
Mean −0.009553
Std Dev 1.078
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

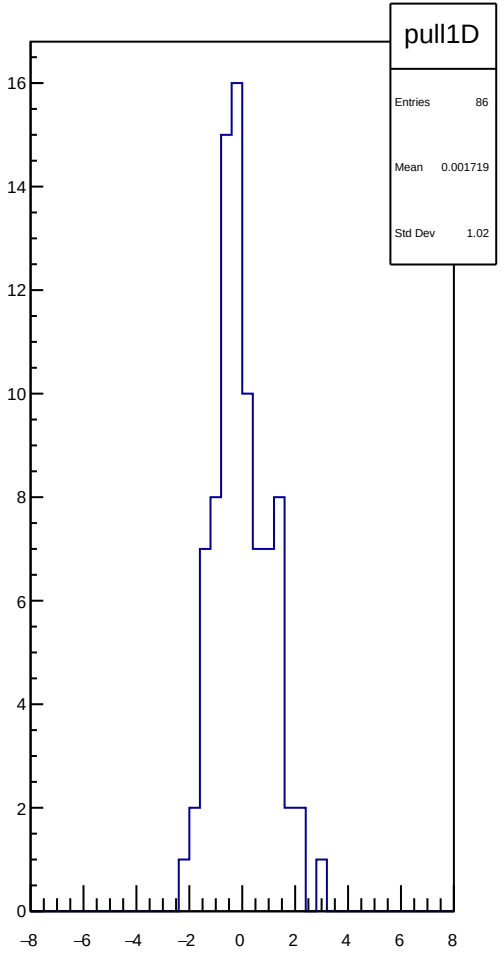

diff_bpm2i01X_rms vs run
χ² / ndf 1060 / 85
p0 1210 ± 0.9486
1320
1300
1280
1260
1240
1220
1200
1180
1160
1140
1120

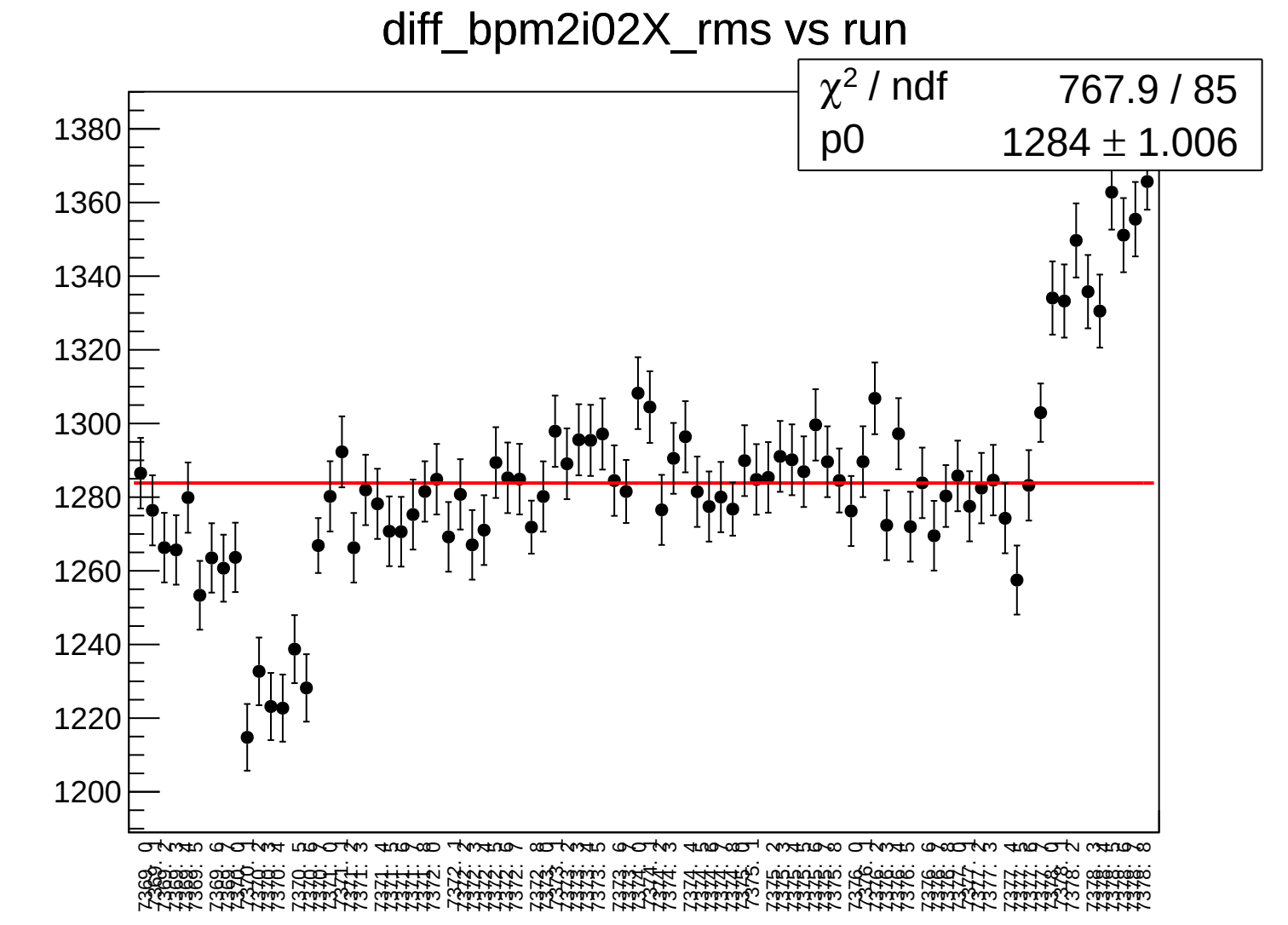

diff_bpm2i01Y_mean vs run
χ^2 / ndf 102.7 / 85
p0 13.37 ± 1.436
pull
Entries 86
Mean 329.3
Std Dev 288.6

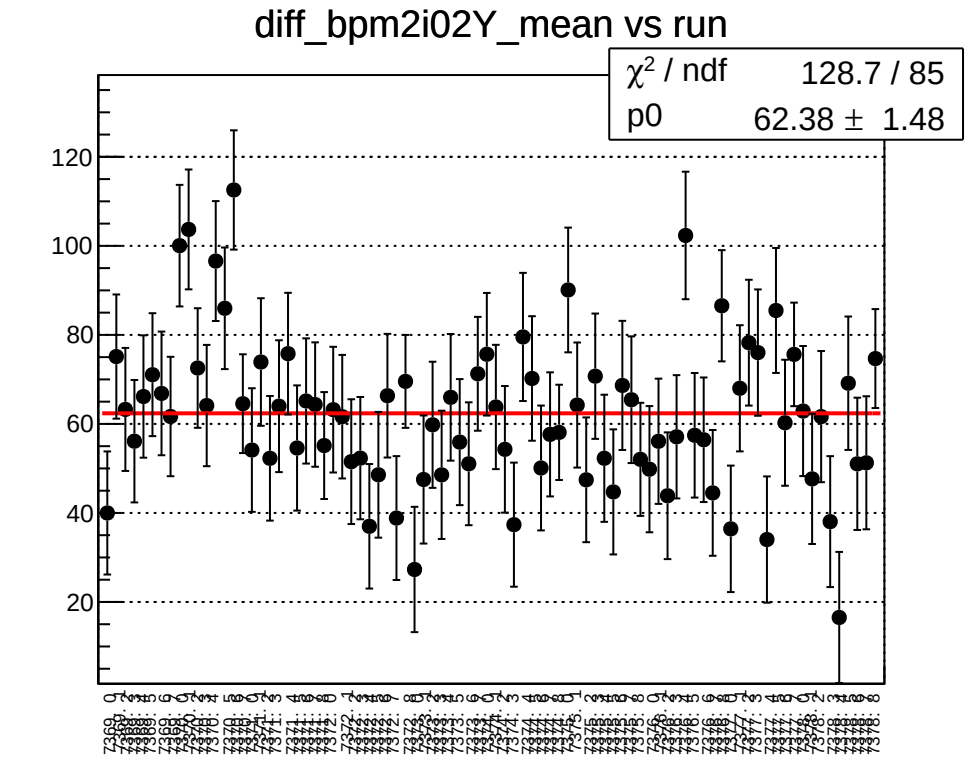

pull1D
Entries 86
Mean −0.009597
Std Dev 1.093

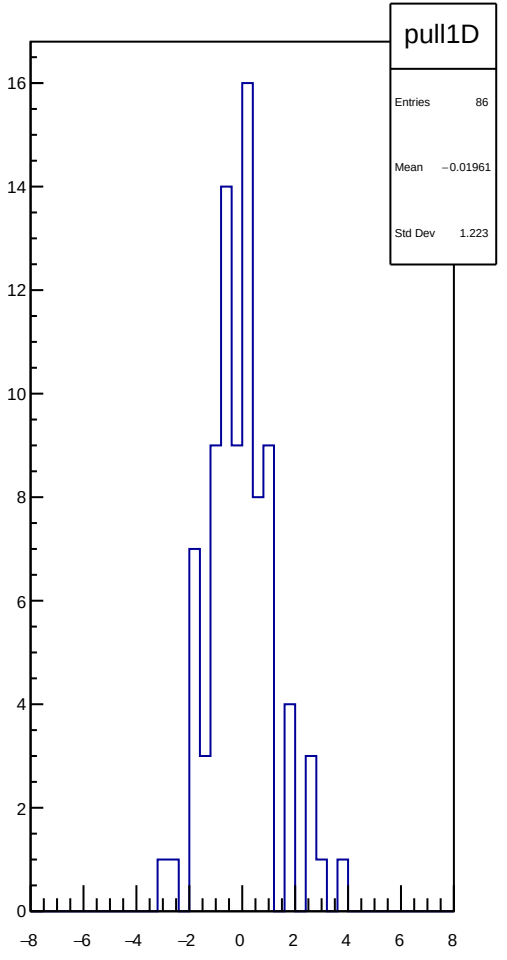

diff_bpm2i01Y_rms vs run
χ² / ndf 1136 / 85
p0 1295 ± 1.015
1400
1350
1300
1250
1200

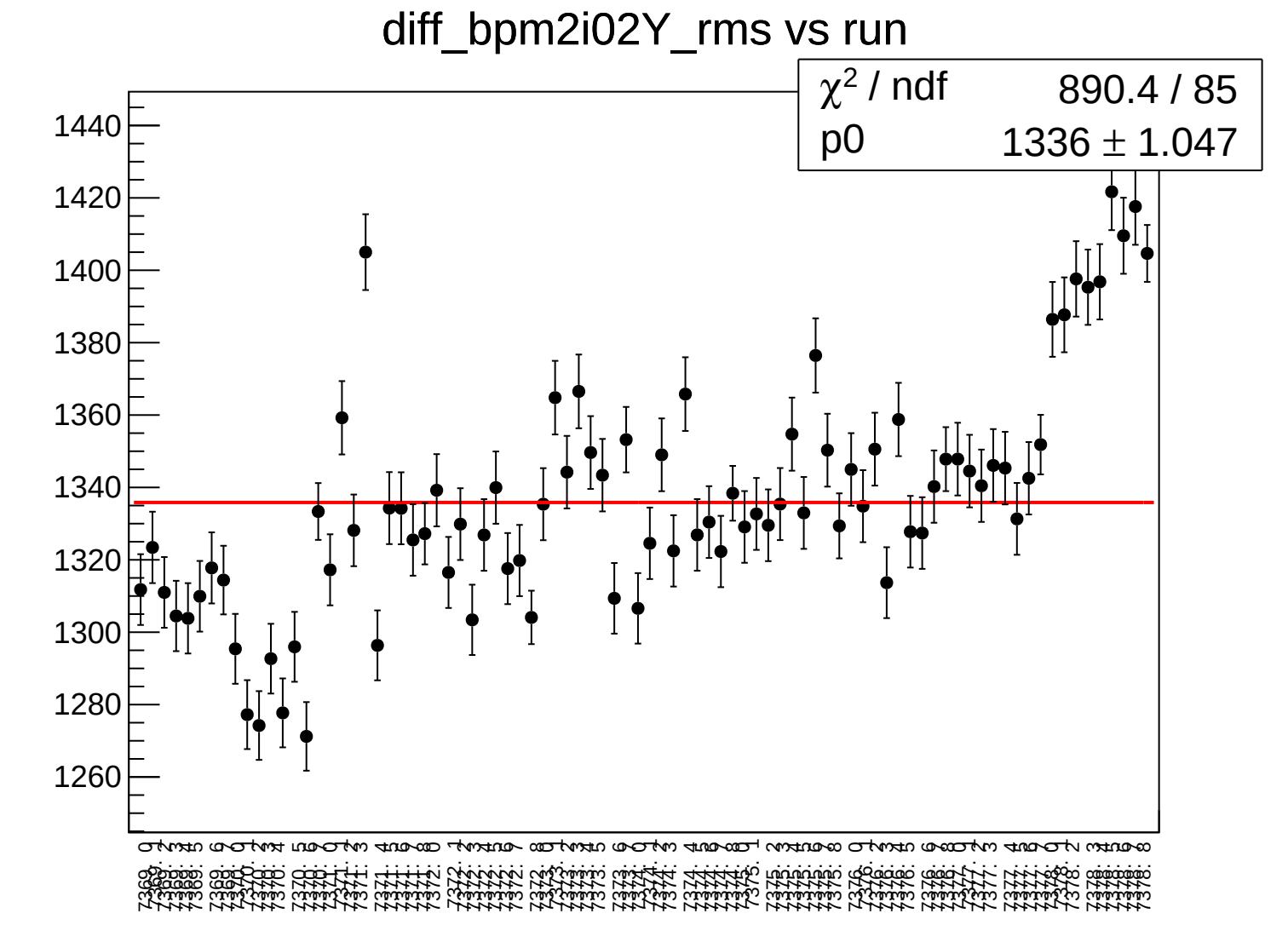

diff_bpm2i02X_mean vs run
χ² / ndf 89.53 / 85
p0 −25.04 ± 1.423
pull
Entries 86
Mean −297
Std Dev 276.2

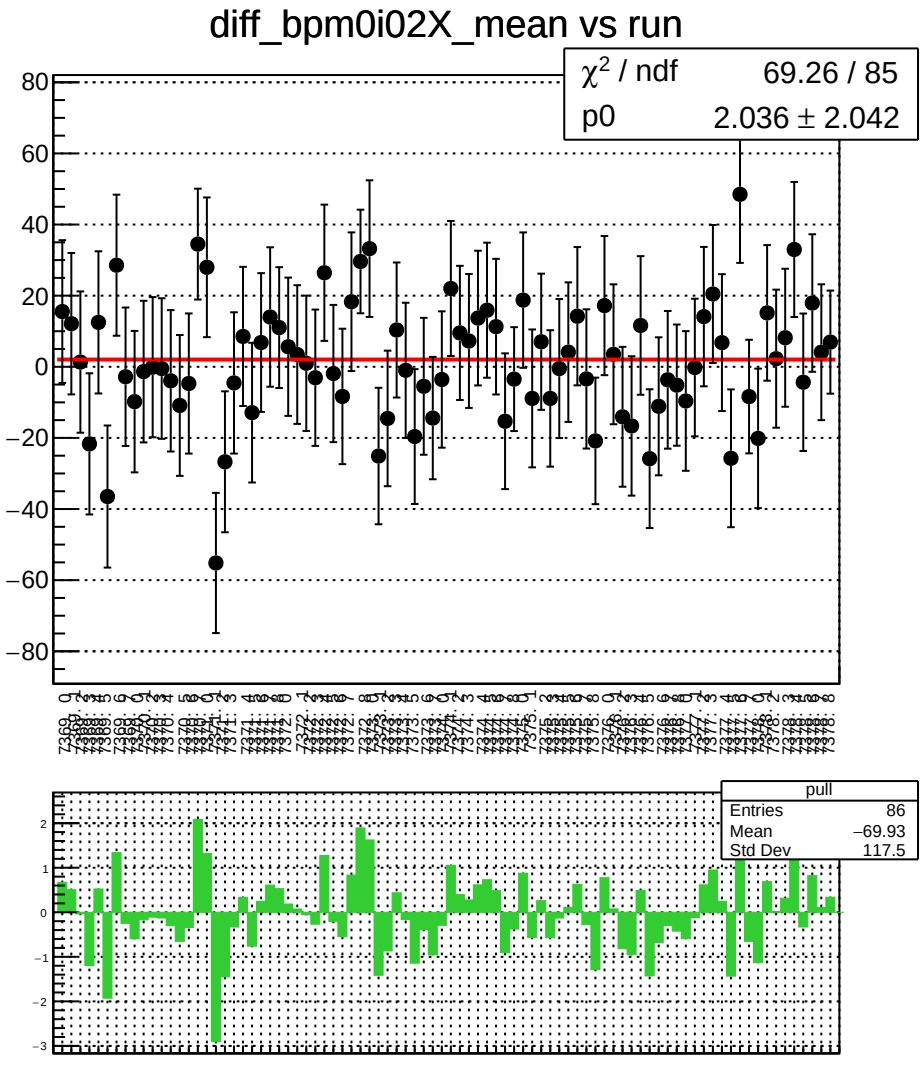

pull1D
Entries 86
Mean 0.001719
Std Dev 1.02

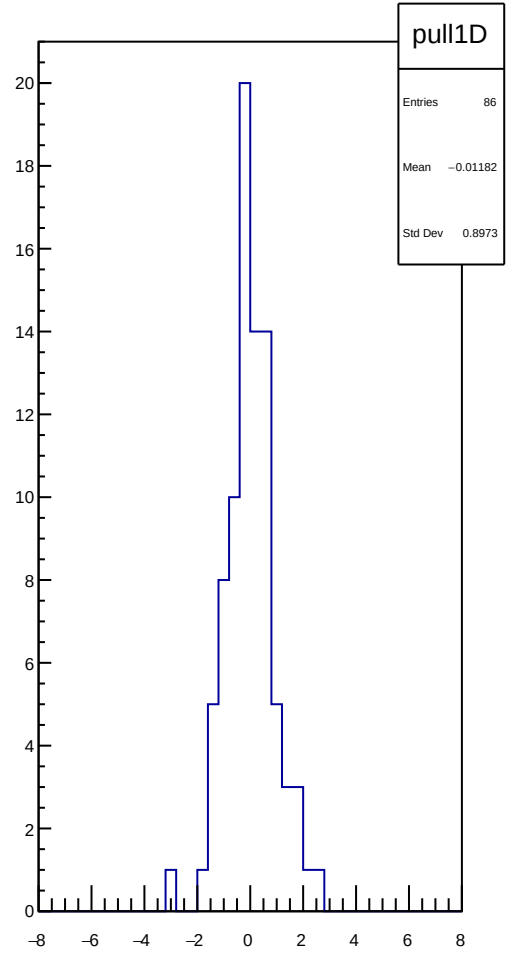

diff_bpm2i02X_rms vs run
χ^2 / ndf 767.9 / 85
p0 1284 ± 1.006
1380
1360
1340
1320
1300
1280
1260
1240
1220
1200

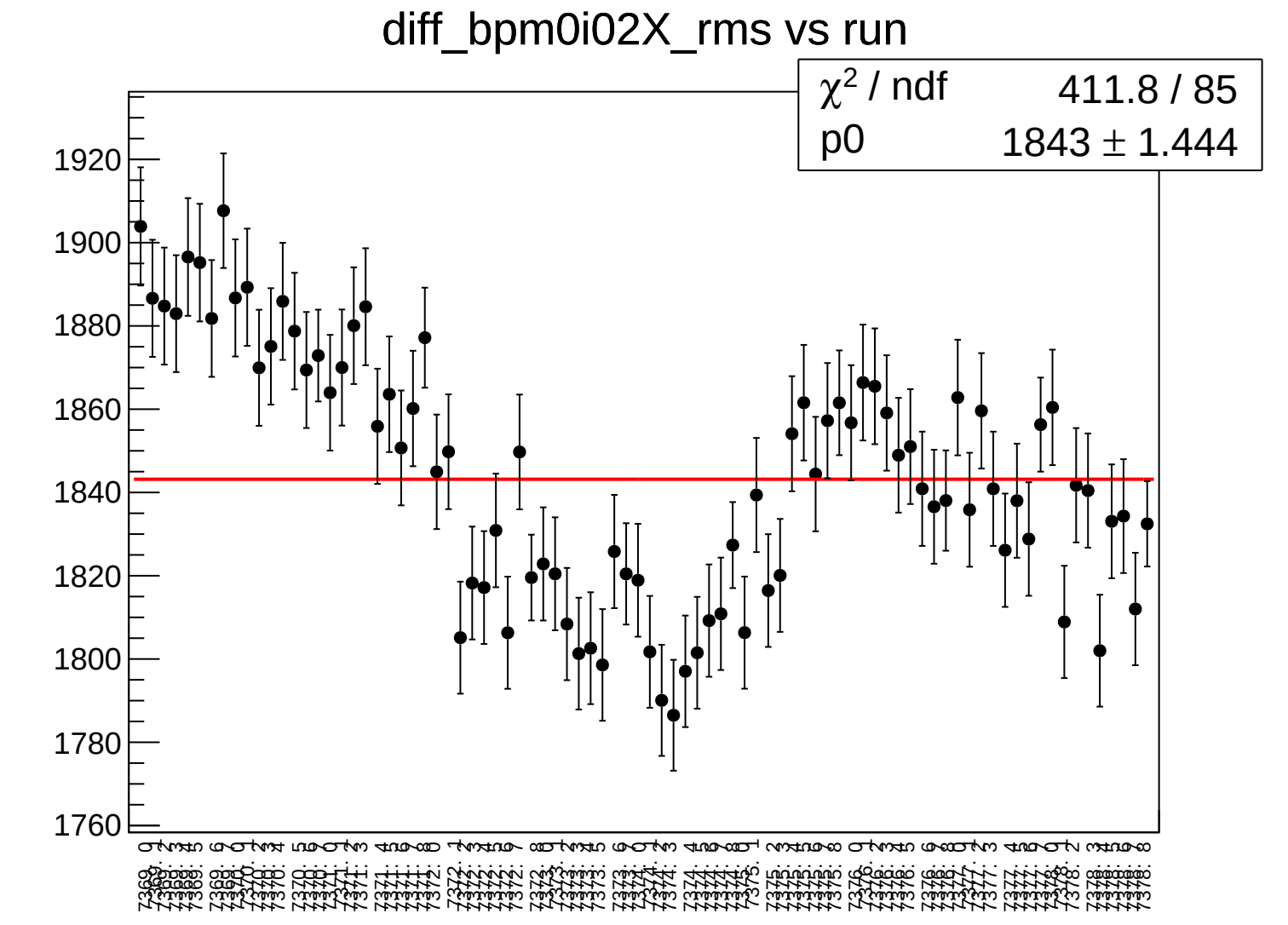

diff_bpm2i02Y_mean vs run
χ² / ndf 128.7 / 85
p0 62.38 ± 1.48
120
100
80
60
40
20
pull
Entries 86
Mean 366.8
Std Dev 329.8
4
3
2
1
0
−1
−2
−3

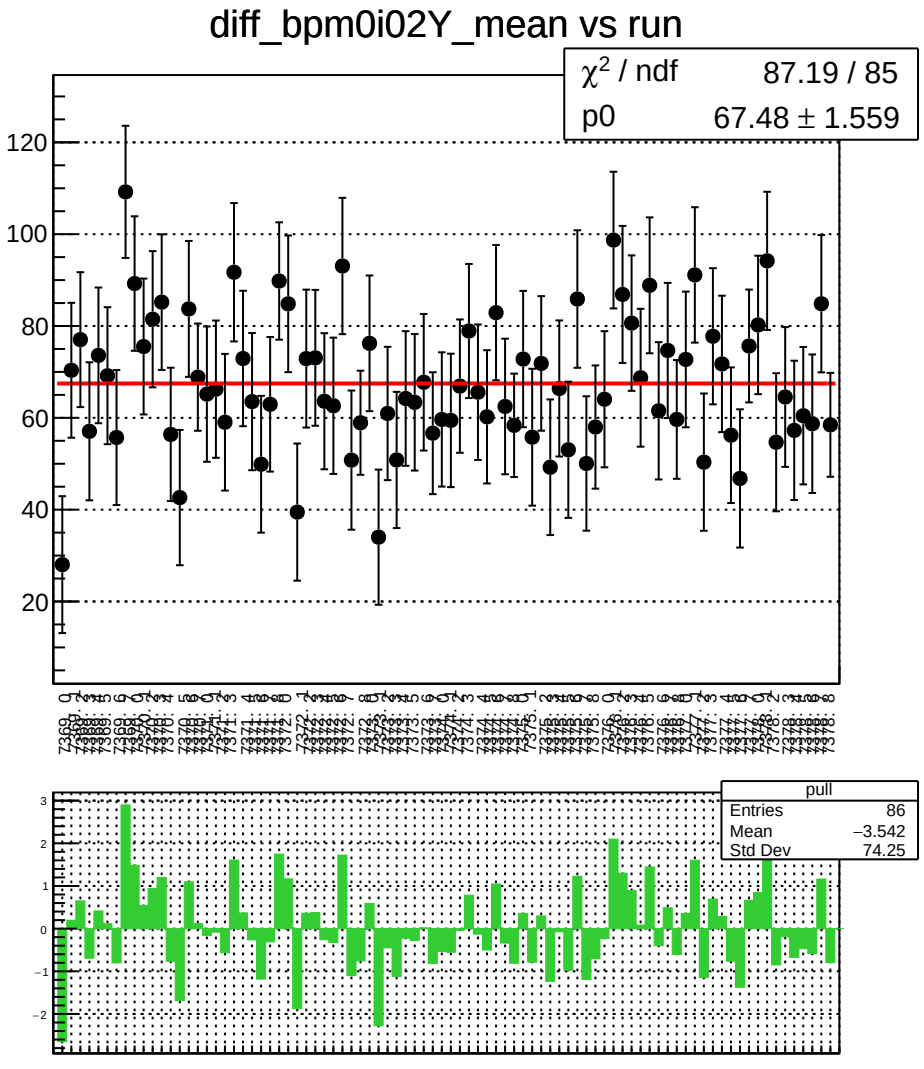

pull1D
Entries 86
Mean −0.01961
Std Dev 1.223
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

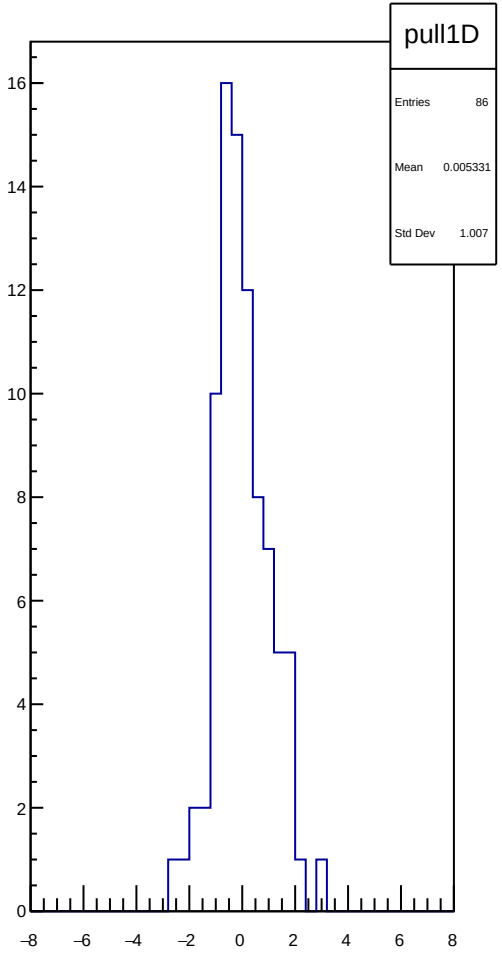

diff_bpm2i02Y_rms vs run
χ² / ndf 890.4 / 85
p0 1336 ± 1.047
1440
1420
1400
1380
1360
1340
1320
1300
1280
1260

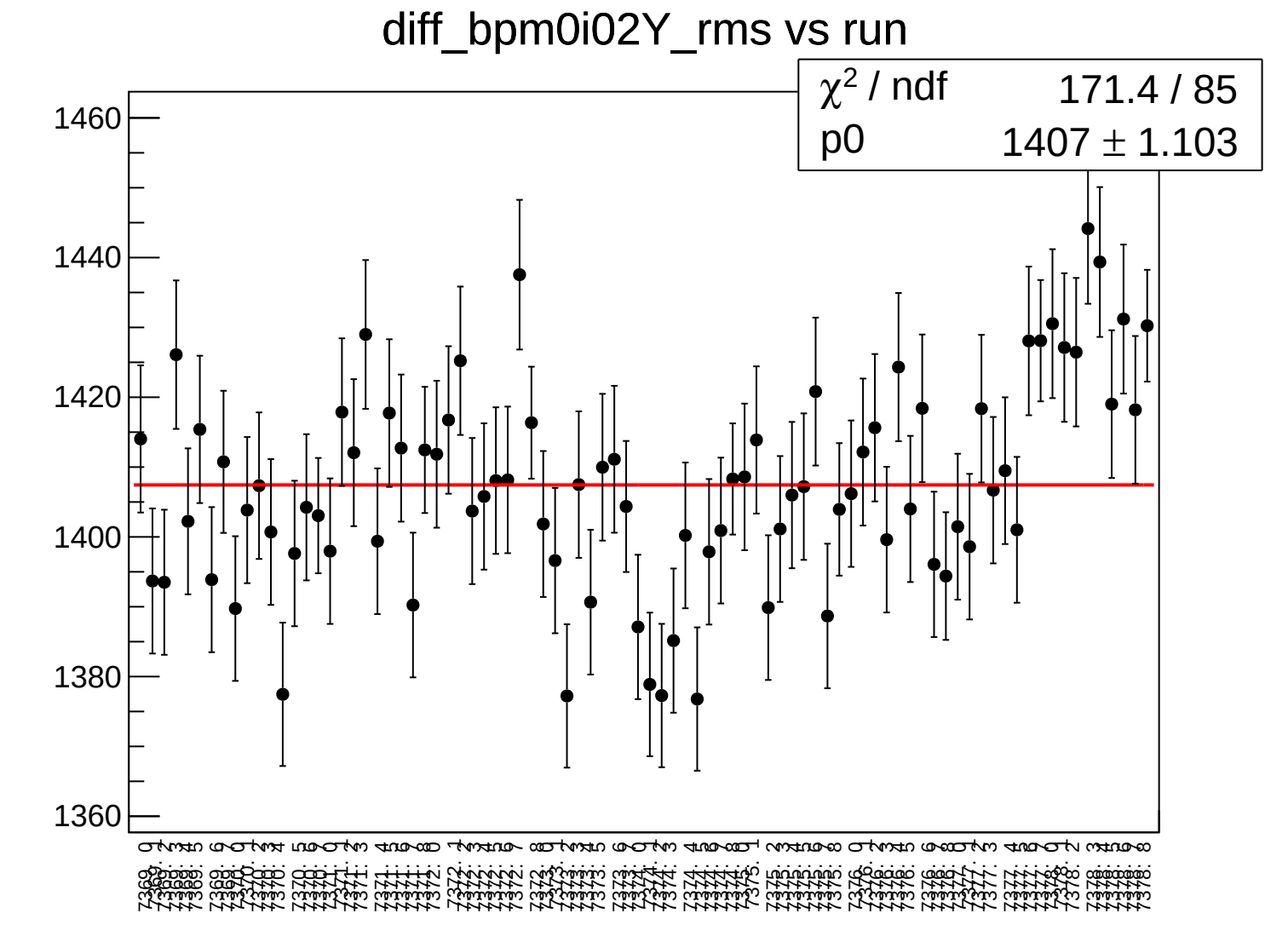

diff_bpm0i02X_mean vs run
χ^2 / ndf 69.26 / 85
p0 2.036 ± 2.042
pull
Entries 86
Mean −69.93
Std Dev 117.5

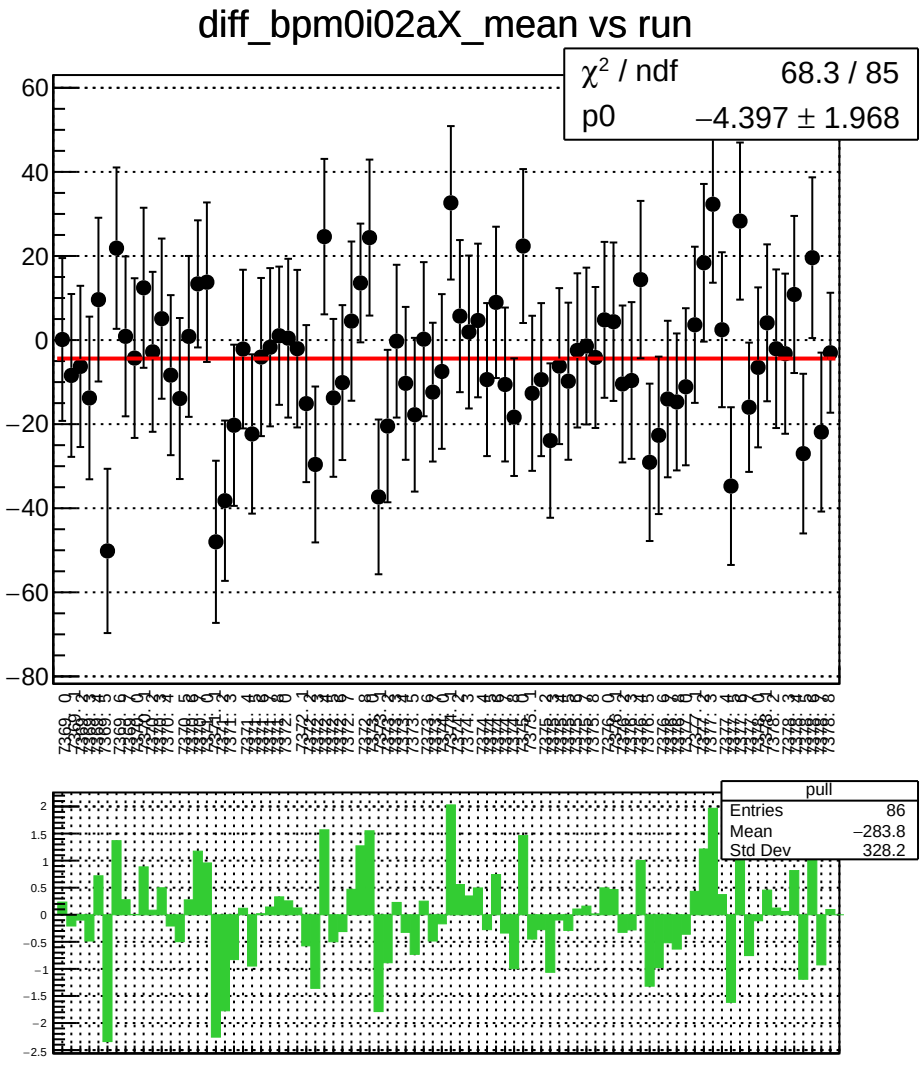

pull1D
Entries 86
Mean −0.01182
Std Dev 0.8973

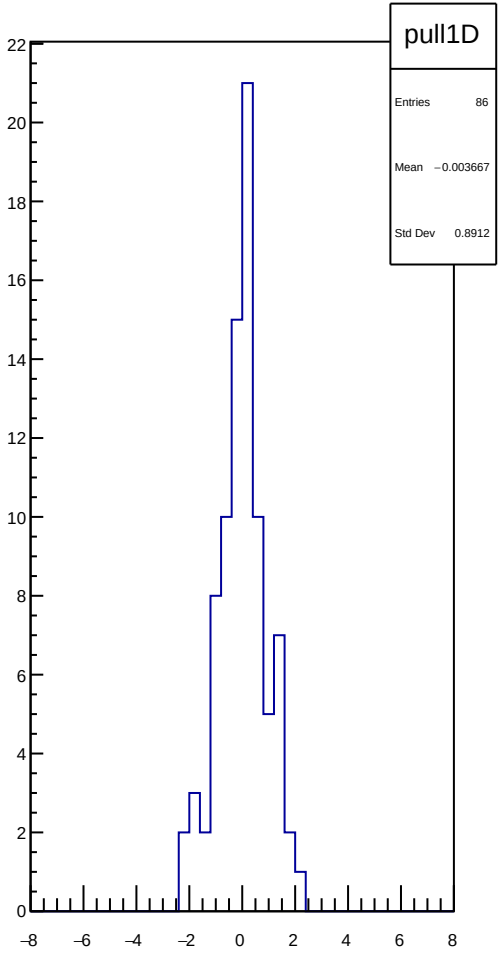

diff_bpm0i02X_rms vs run
χ^2 / ndf 411.8 / 85
p0 1843 ± 1.444
1920
1900
1880
1860
1840
1820
1800
1780
1760

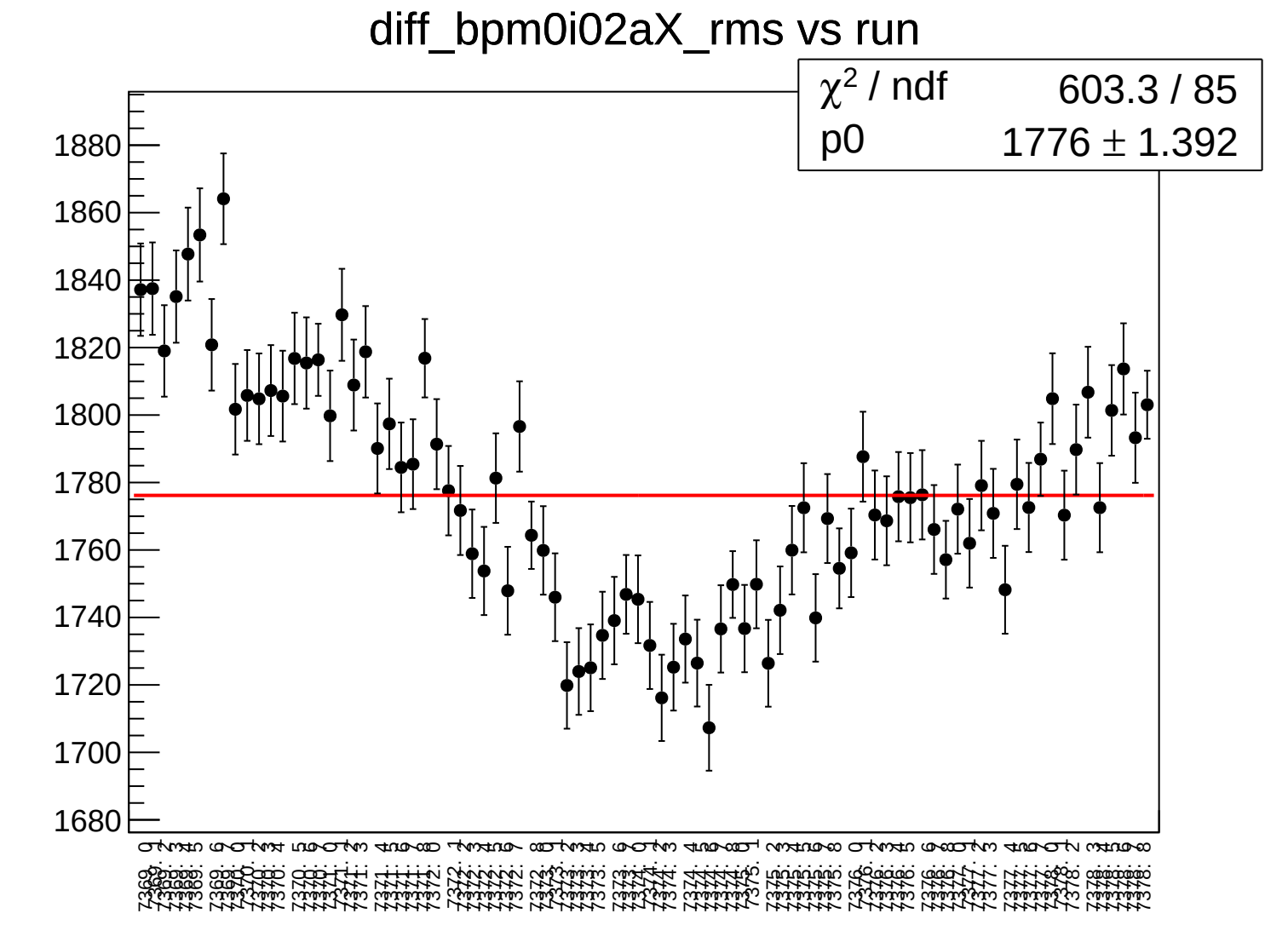

diff_bpm0i02Y_mean vs run
χ^2 / ndf 87.19 / 85
p0 67.48 ± 1.559
pull
Entries 86
Mean −3.542
Std Dev 74.25

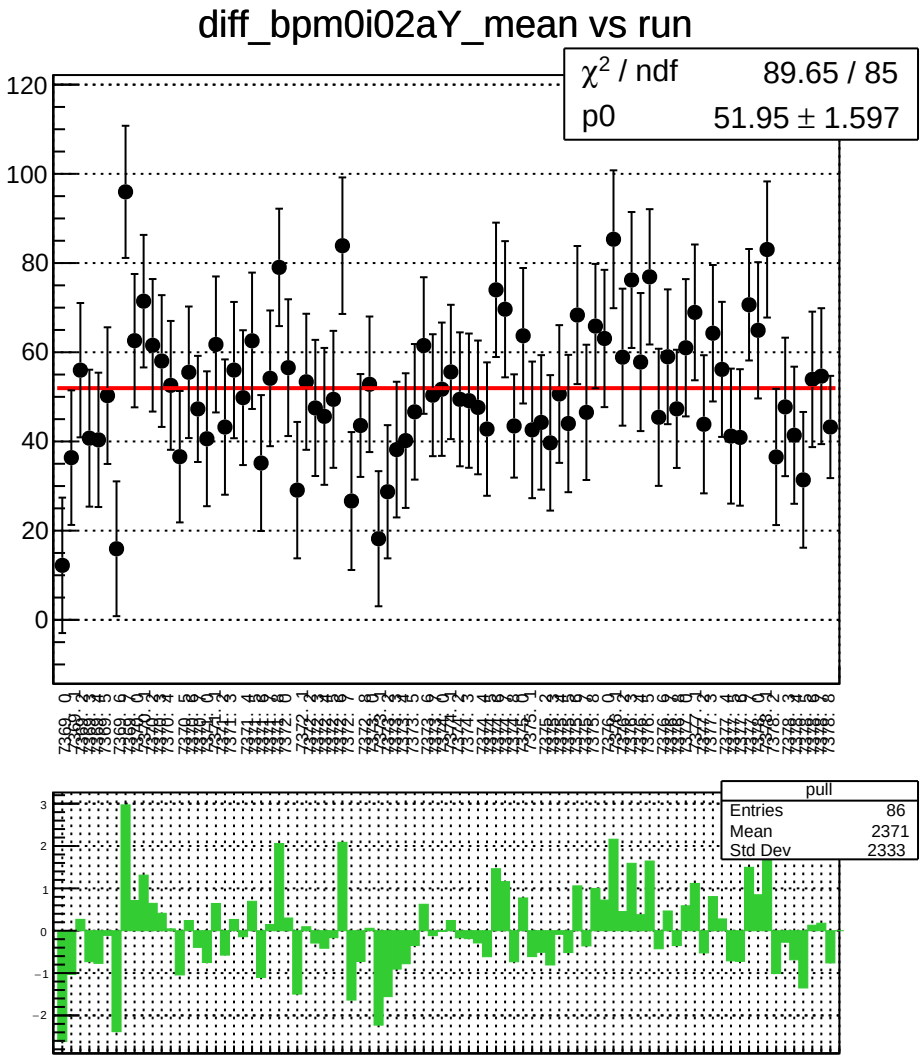

pull1D
Entries 86
Mean 0.005331
Std Dev 1.007

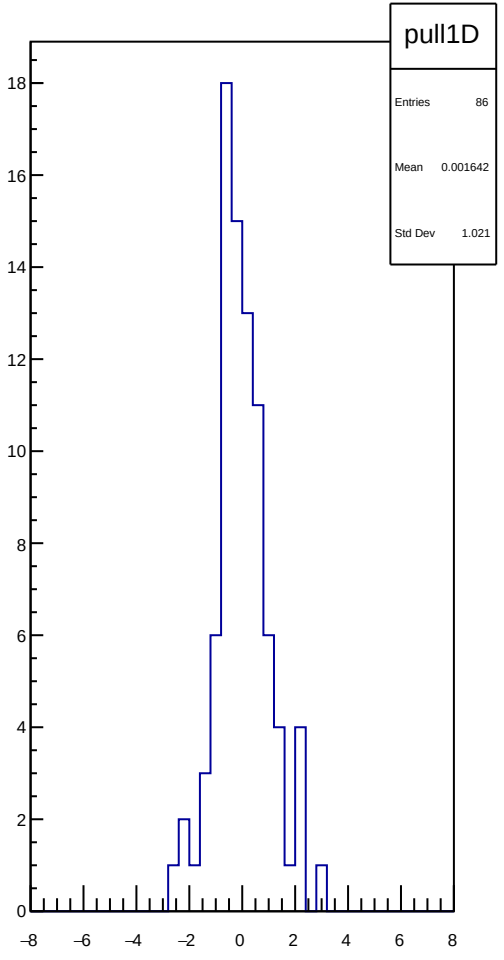

diff_bpm0i02Y_rms vs run
χ² / ndf 171.4 / 85
p0 1407 ± 1.103
1460
1440
1420
1400
1380
1360

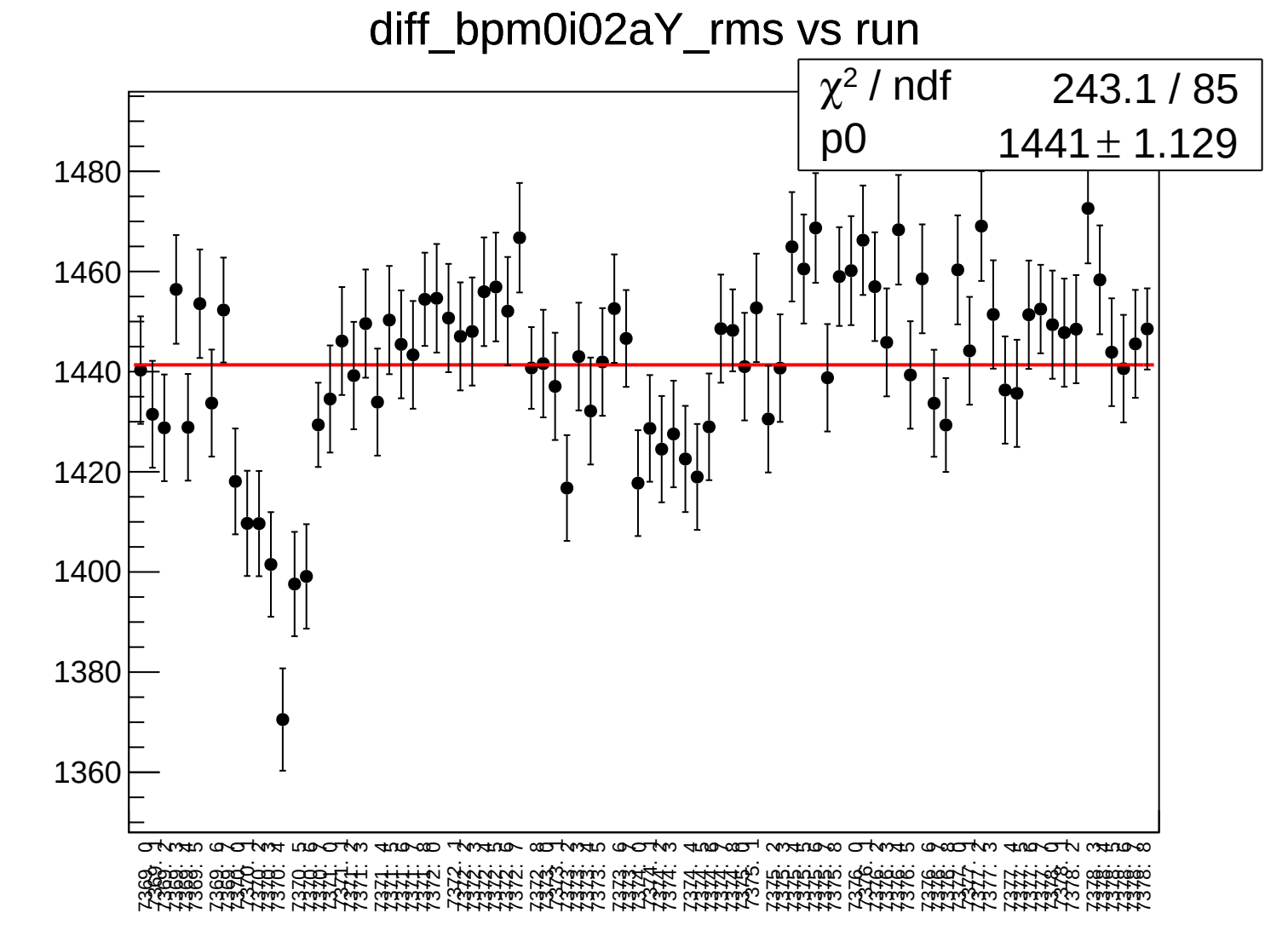

diff_bpm0i02aX_mean vs run
χ² / ndf 68.3 / 85
p0 −4.397 ± 1.968
pull
Entries 86
Mean −283.8
Std Dev 328.2

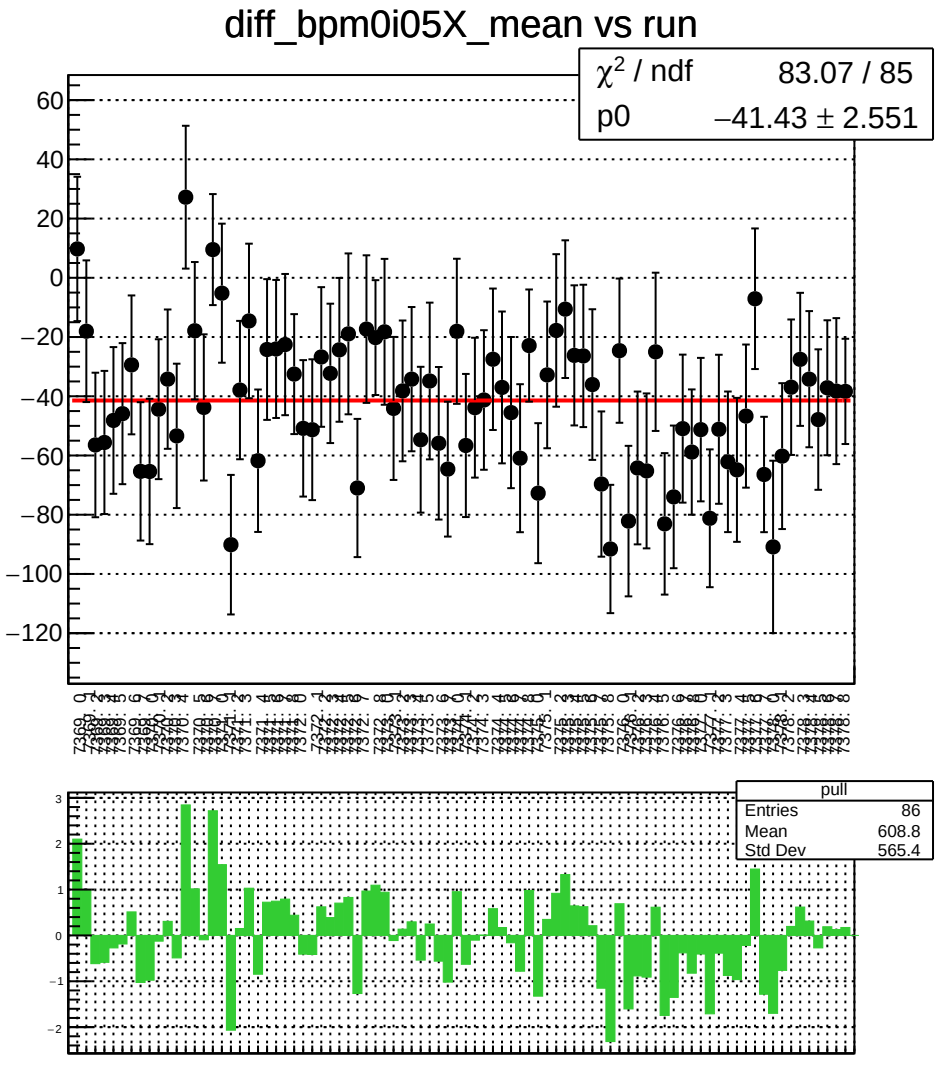

pull1D
Entries 86
Mean −0.003667
Std Dev 0.8912

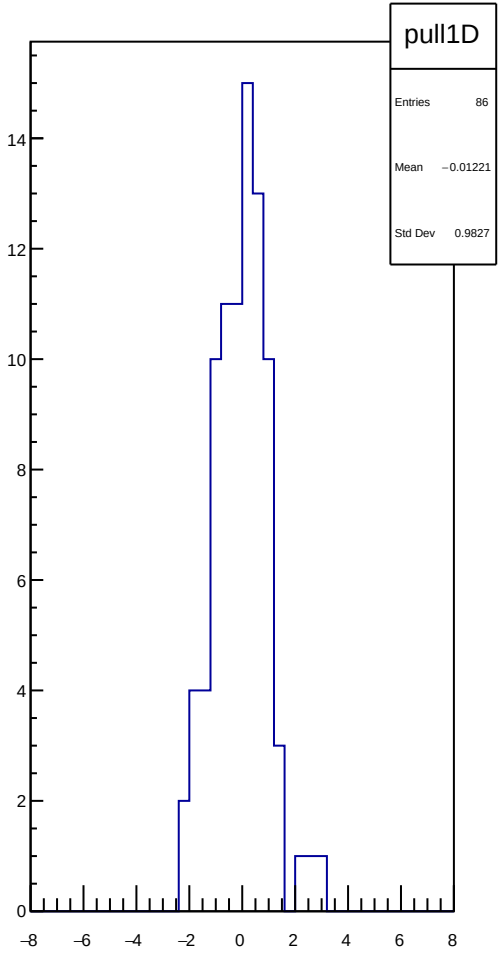

diff_bpm0i02aX_rms vs run
χ² / ndf 603.3 / 85
p0 1776 ± 1.392
1880
1860
1840
1820
1800
1780
1760
1740
1720
1700
1680

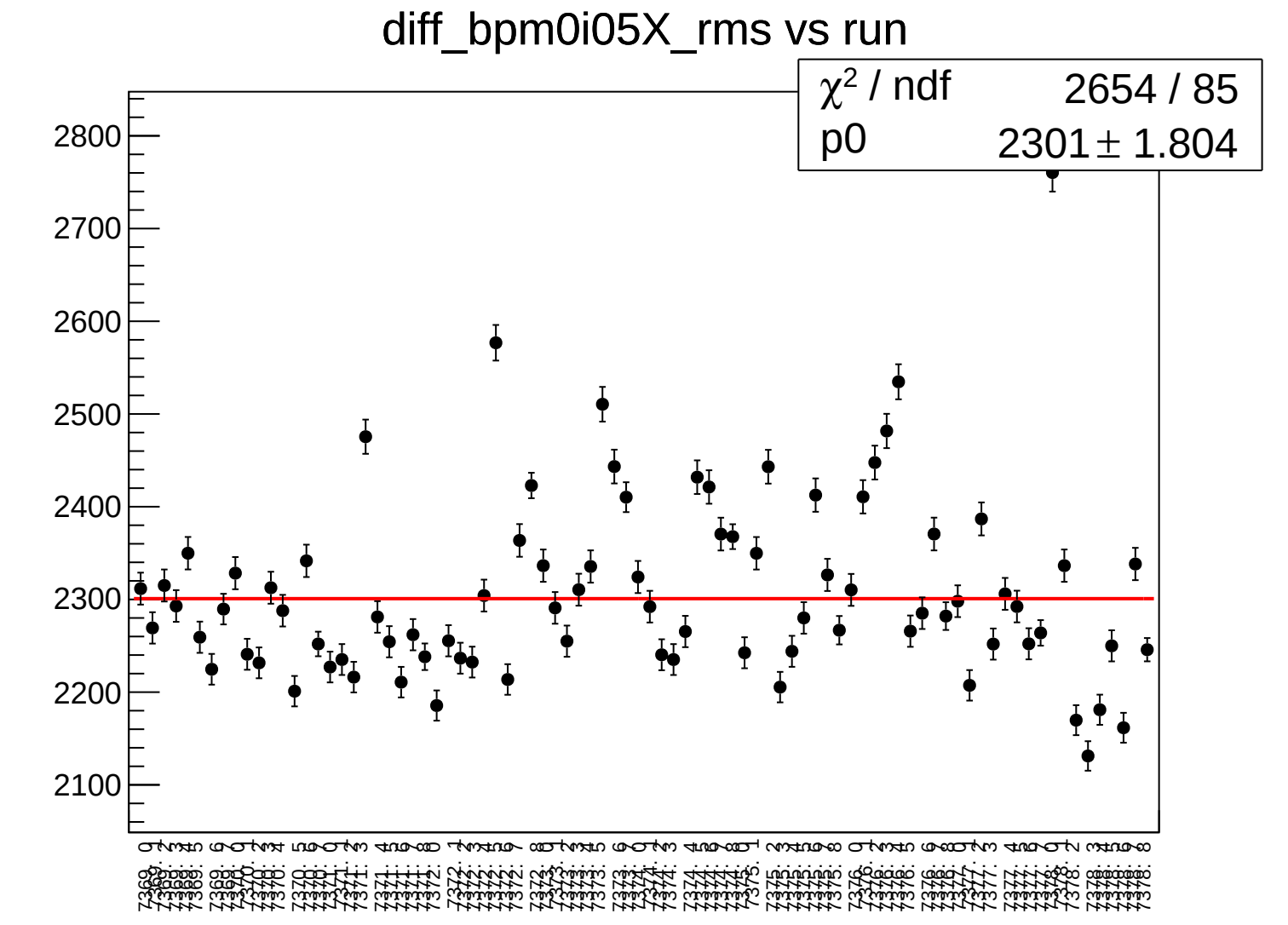

diff_bpm0i02aY_mean vs run
χ^2 / ndf 89.65 / 85
p0 51.95 ± 1.597
pull
Entries 86
Mean 2371
Std Dev 2333

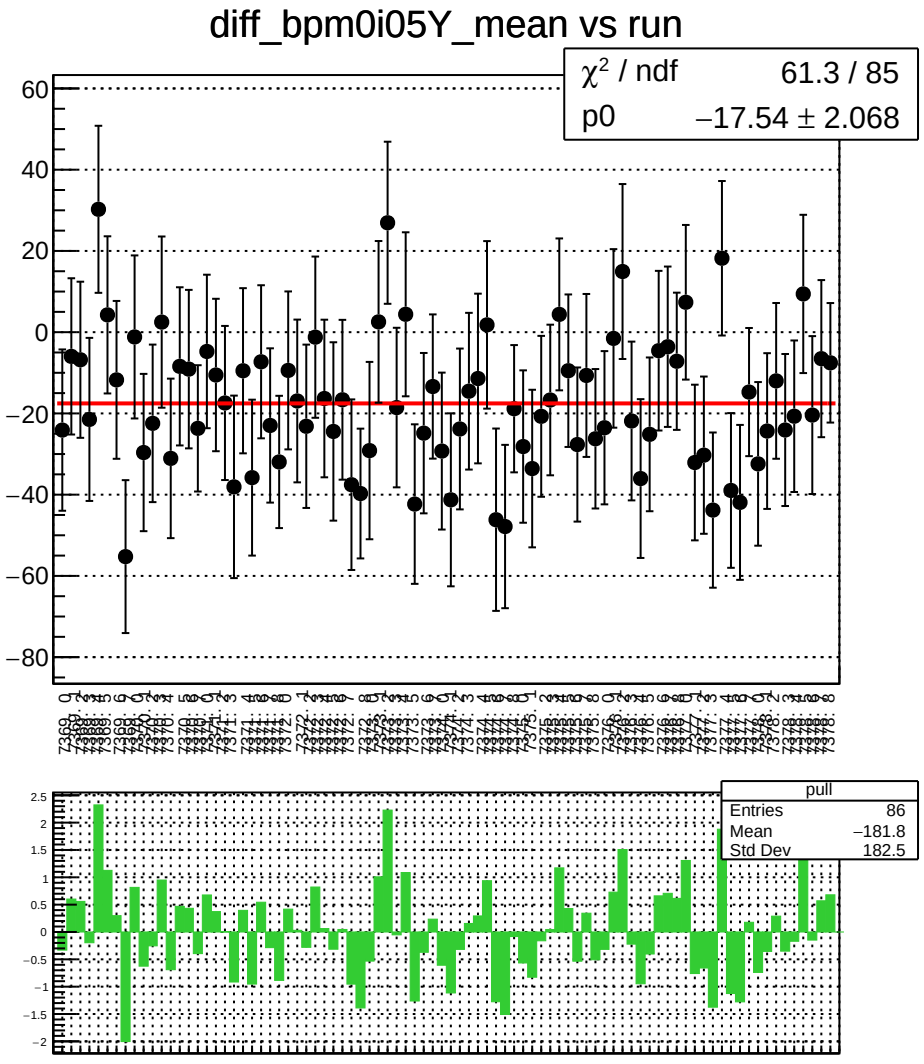

pull1D
Entries 86
Mean 0.001642
Std Dev 1.021

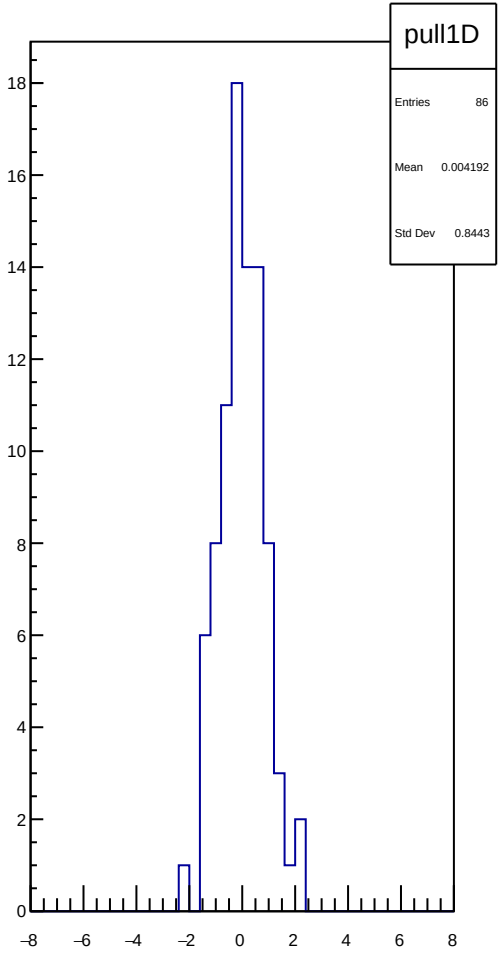

diff_bpm0i02aY_rms vs run
χ² / ndf 243.1 / 85
p0 1441 ± 1.129
1480
1460
1440
1420
1400
1380
1360

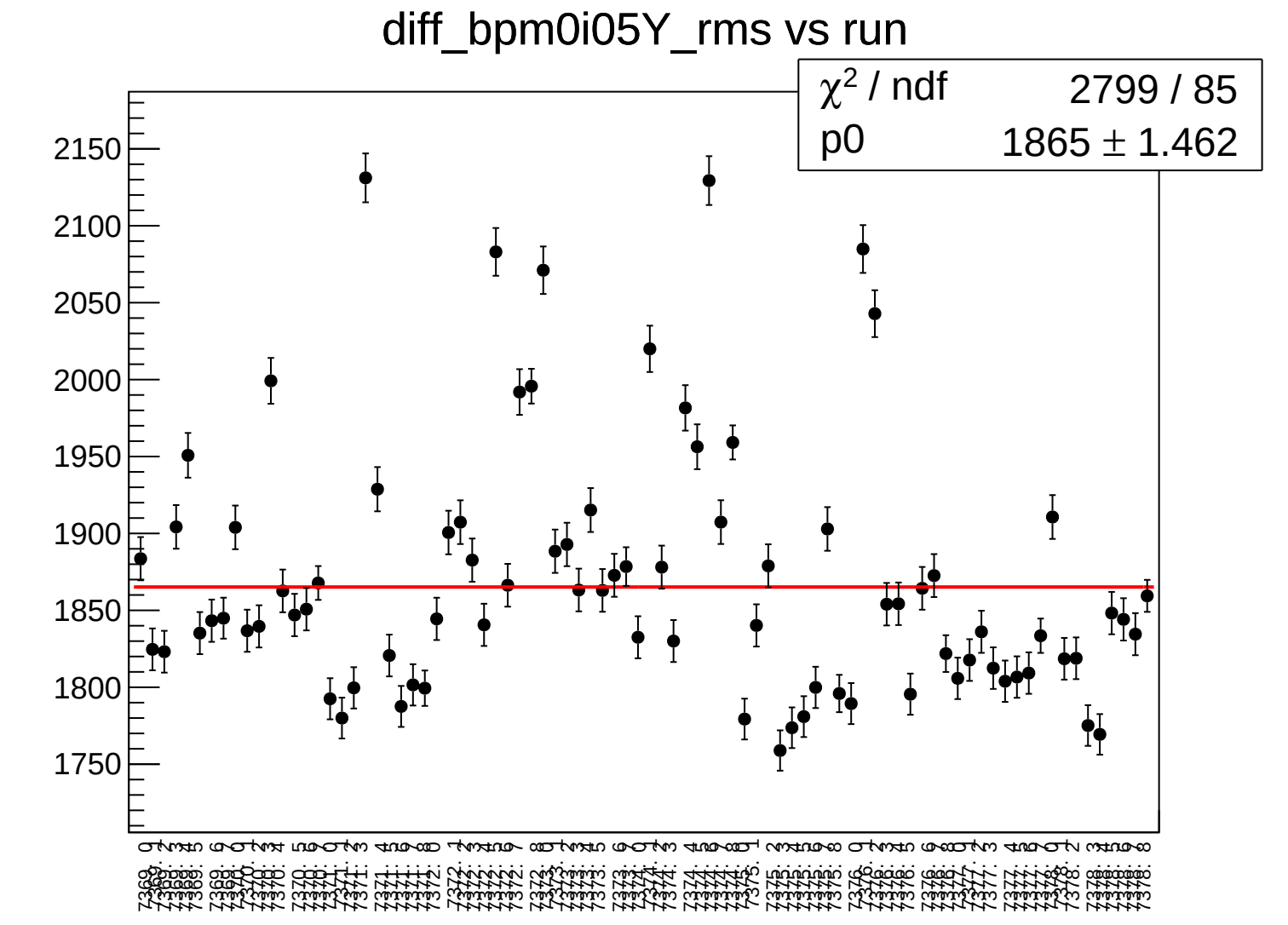

diff_bpm0i05X_mean vs run
χ² / ndf 83.07 / 85
p0 −41.43 ± 2.551
pull
Entries 86
Mean 608.8
Std Dev 565.4

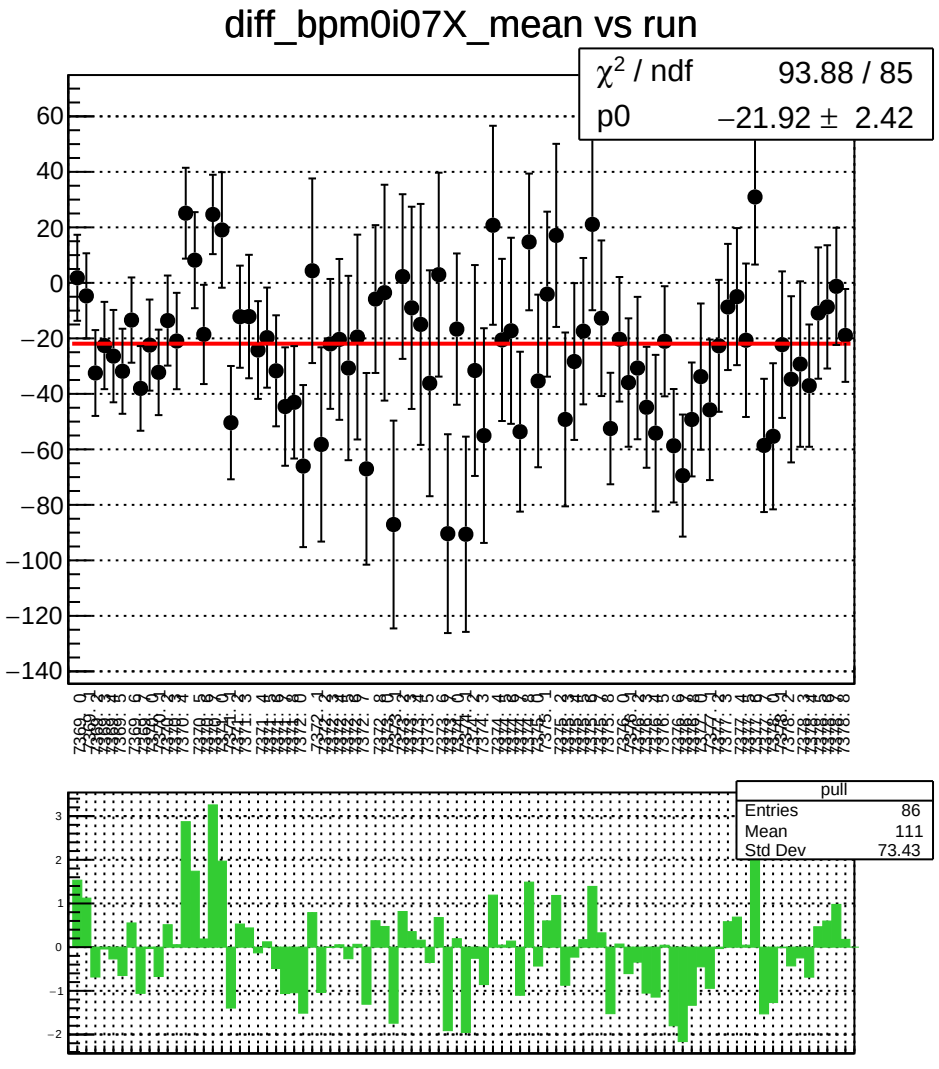

pull1D
Entries 86
Mean −0.01221
Std Dev 0.9827

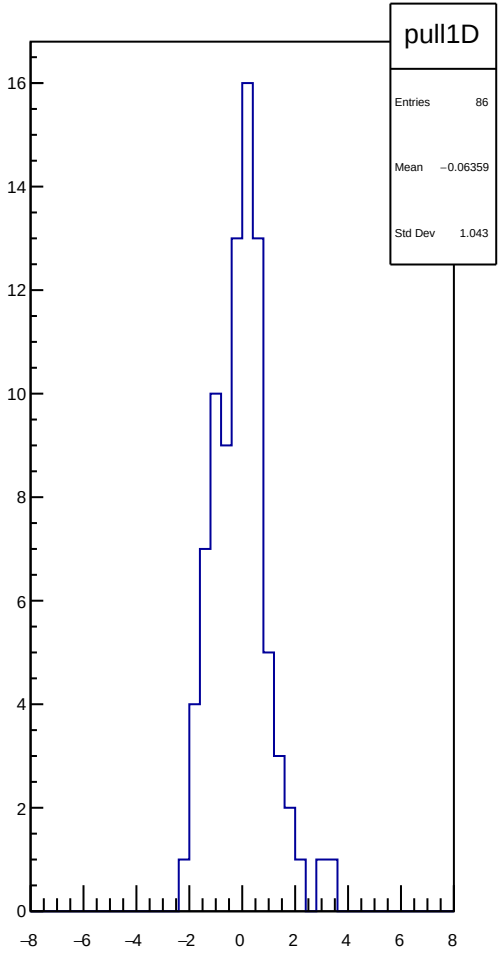

diff_bpm0i05X_rms vs run
χ² / ndf 2654 / 85
p0 2301 ± 1.804
2800
2700
2600
2500
2400
2300
2200
2100

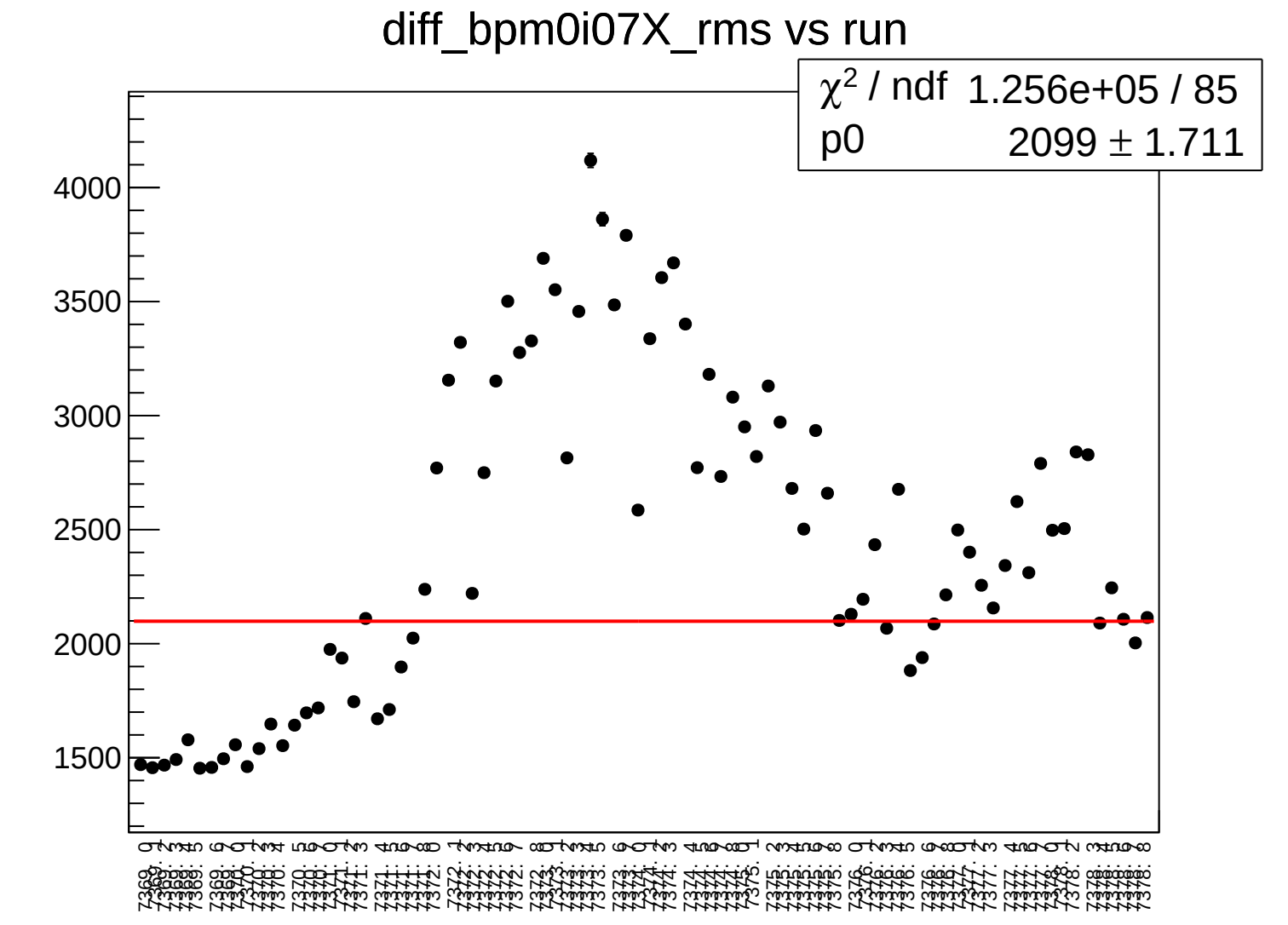

diff_bpm0i05Y_mean vs run
χ² / ndf 61.3 / 85
p0 −17.54 ± 2.068
pull
Entries 86
Mean −181.8
Std Dev 182.5

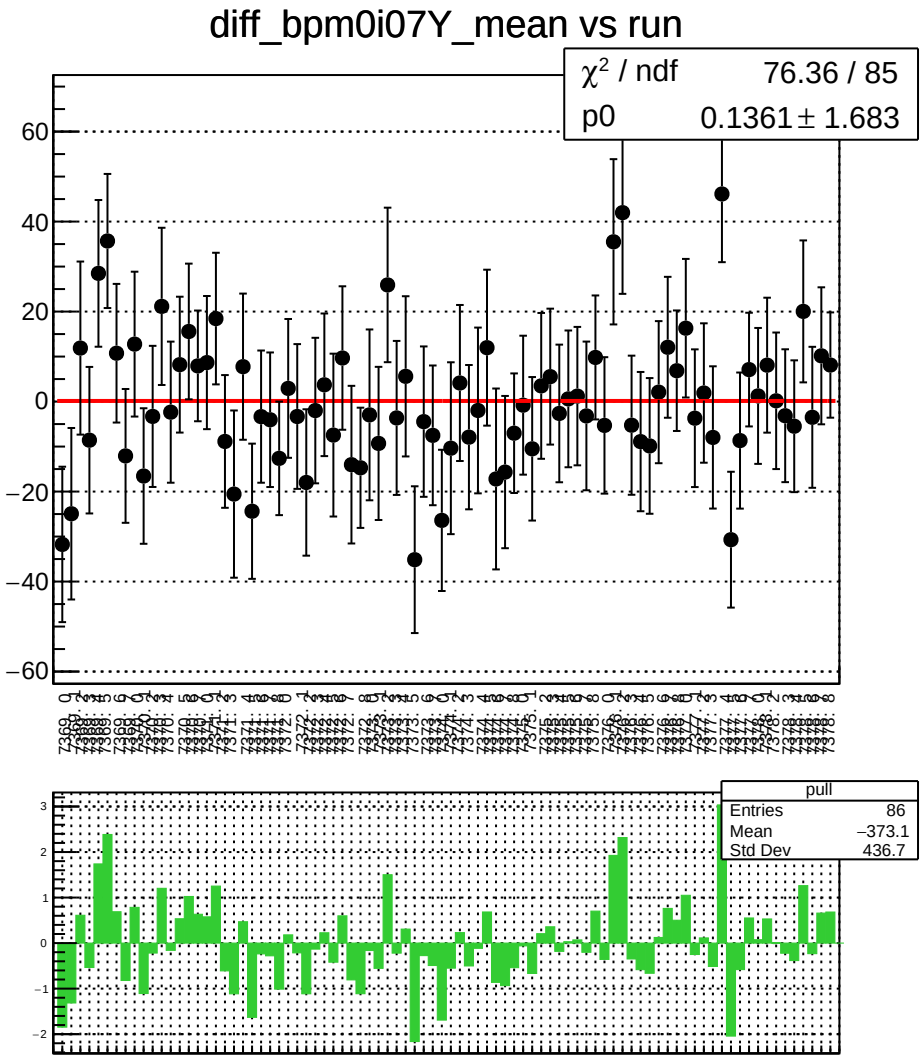

pull1D
Entries 86
Mean 0.004192
Std Dev 0.8443

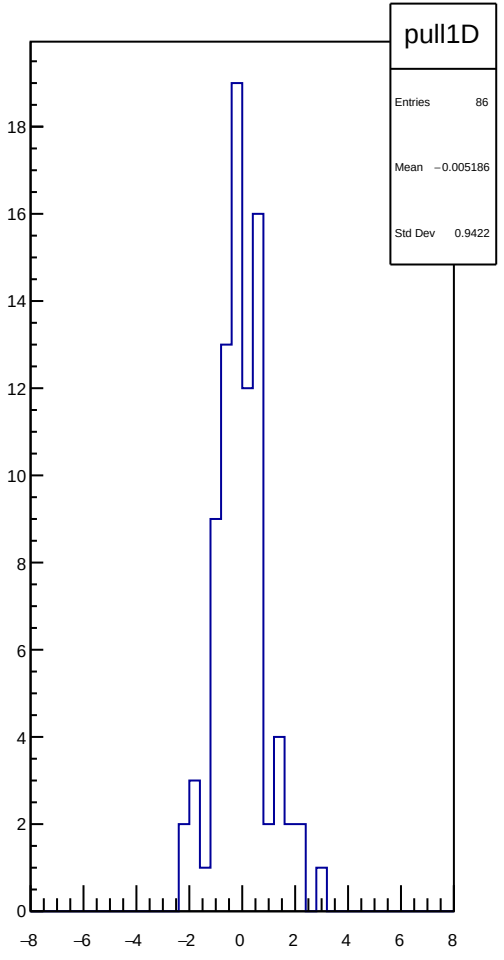

diff_bpm0i05Y_rms vs run
χ² / ndf 2799 / 85
p0 1865 ± 1.462
2150
2100
2050
2000
1950
1900
1850
1800
1750

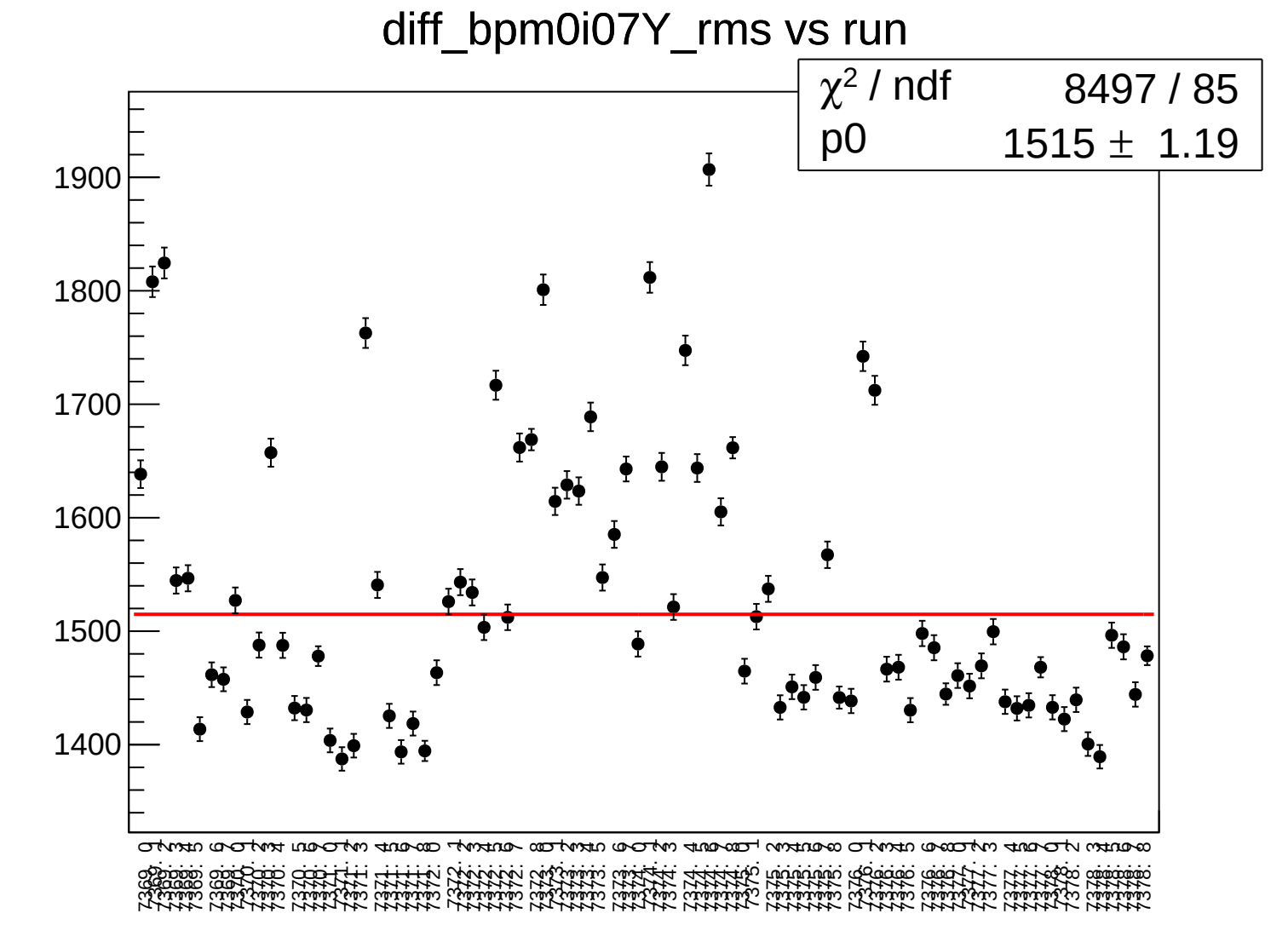

diff_bpm0i07X_mean vs run
χ^2 / ndf 93.88 / 85
p0 −21.92 ± 2.42
pull
Entries 86
Mean 111
Std Dev 73.43

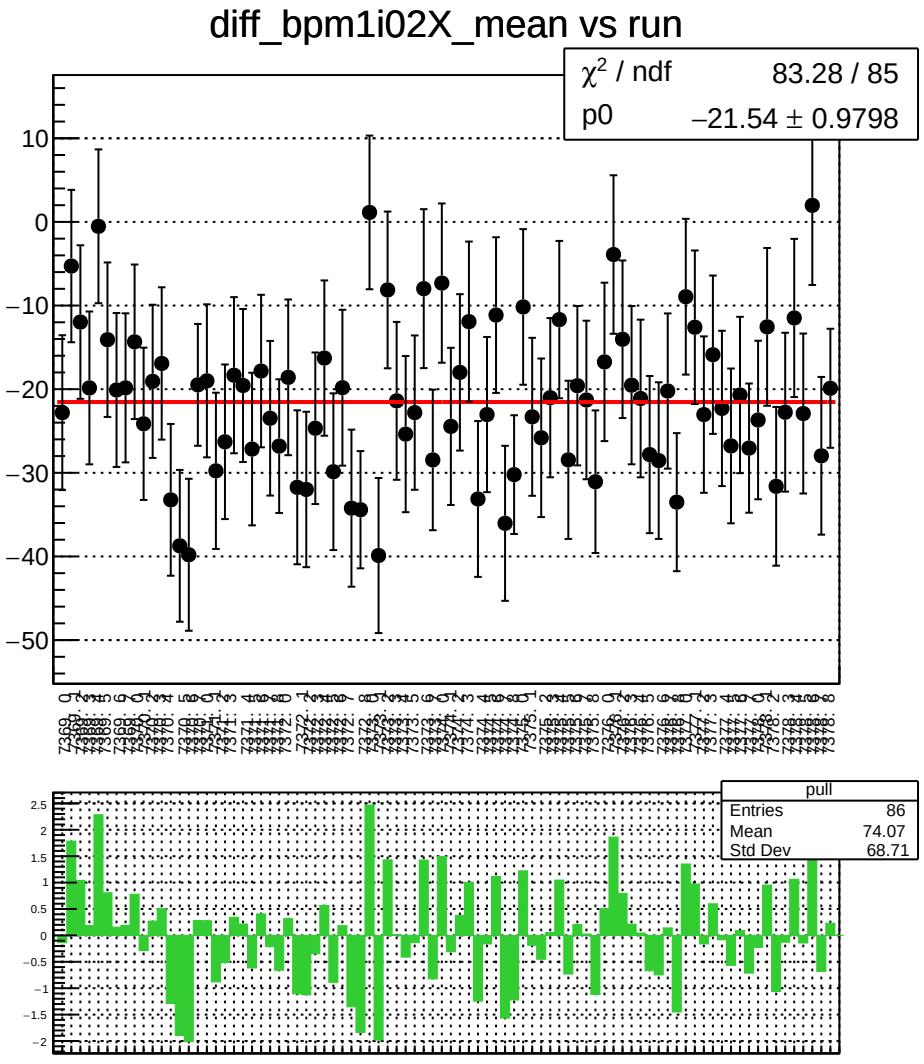

pull1D
Entries 86
Mean −0.06359
Std Dev 1.043

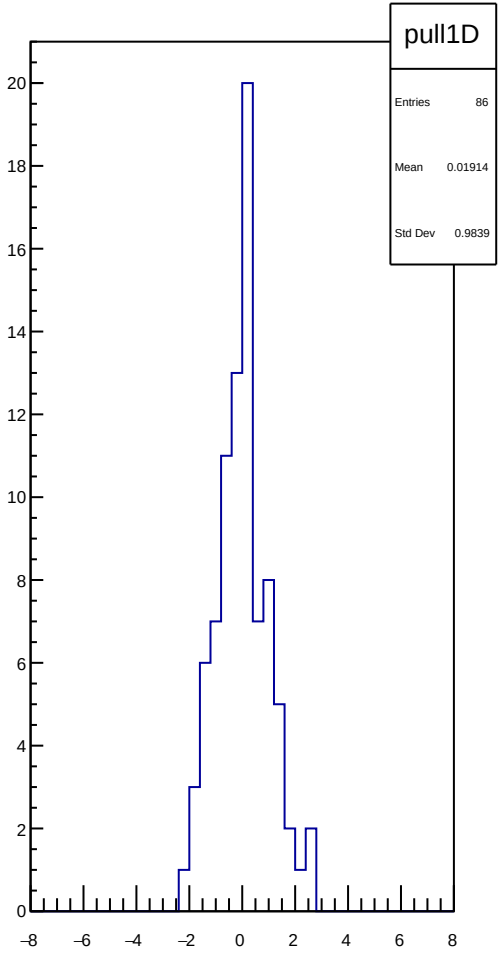

diff_bpm0i07X_rms vs run
χ² / ndf 1.256e+05 / 85
p0 2099 ± 1.711
4000
3500
3000
2500
2000
1500

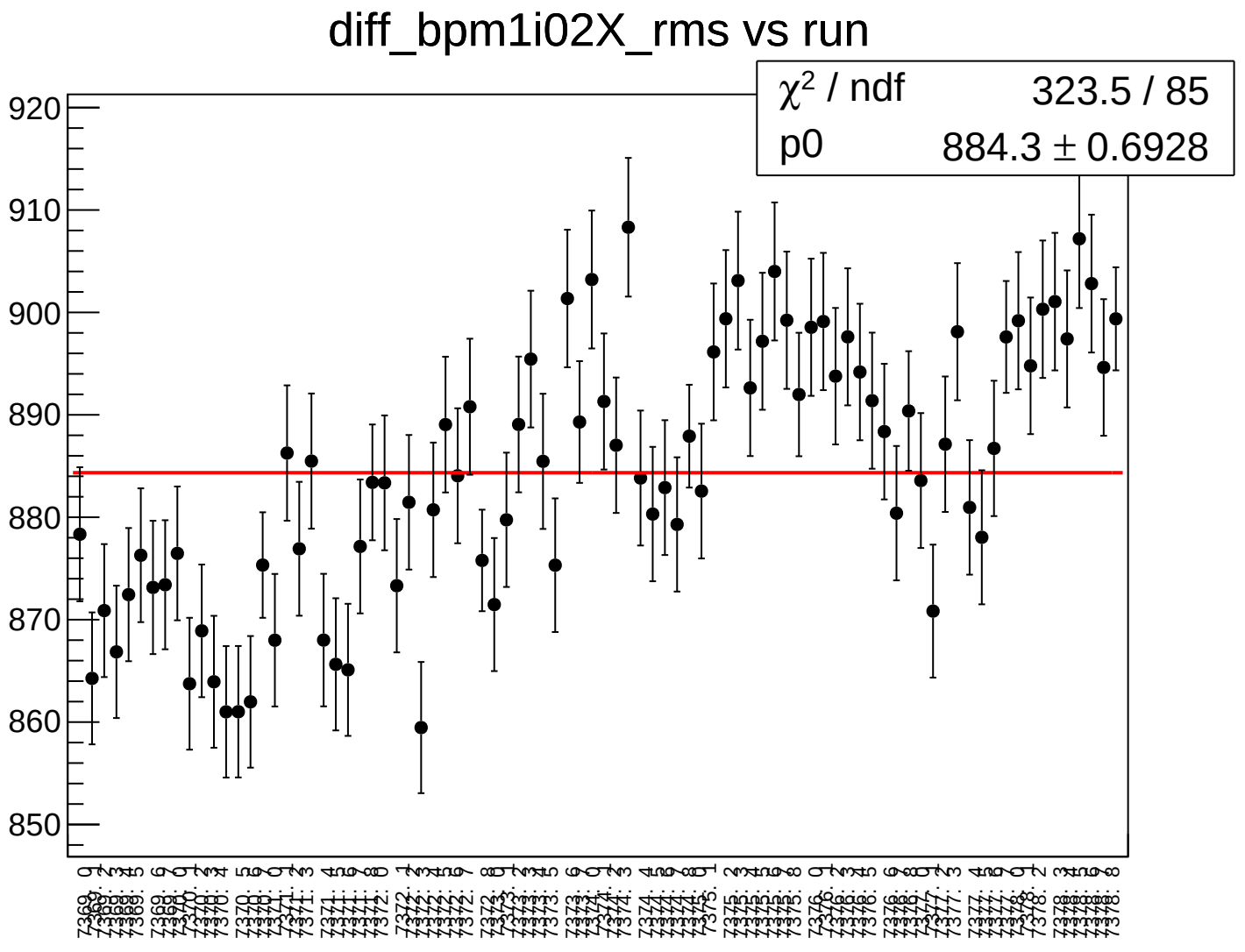

diff_bpm0i07Y_mean vs run
χ^2 / ndf 76.36 / 85
p0 0.1361 ± 1.683
pull
Entries 86
Mean −373.1
Std Dev 436.7

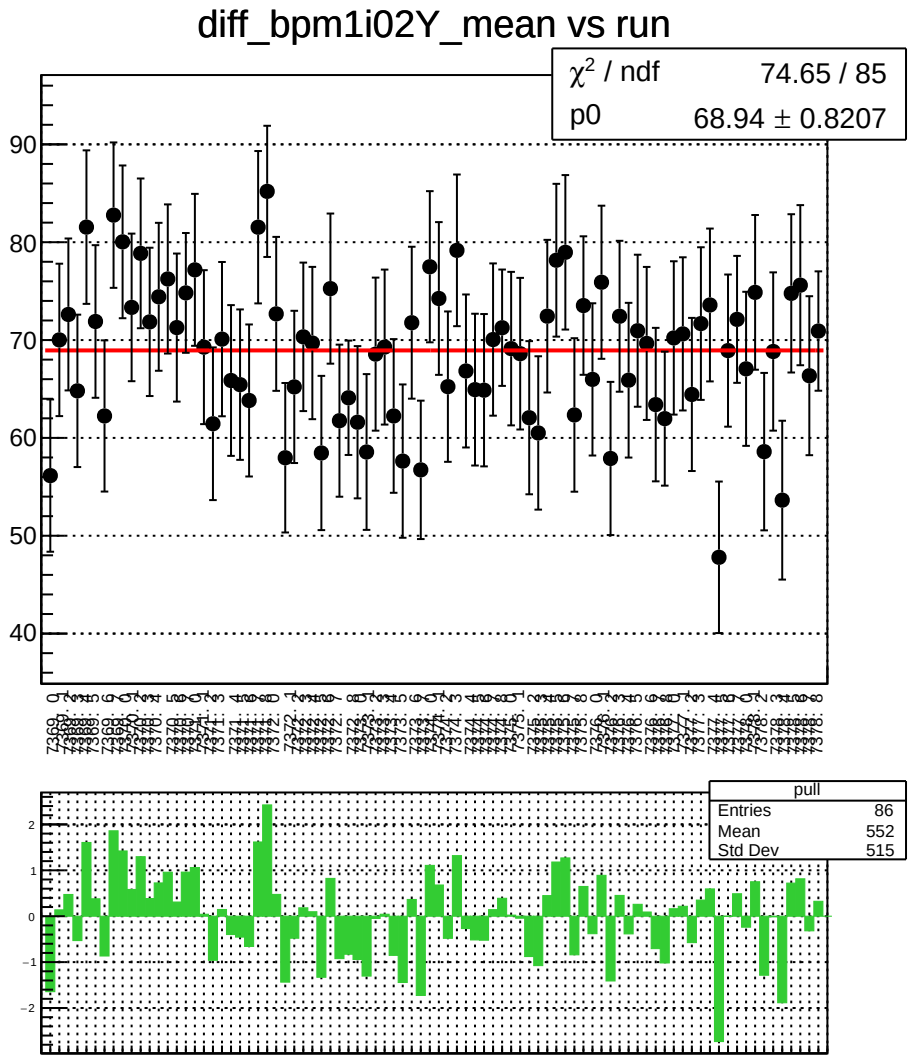

pull1D
Entries 86
Mean −0.005186
Std Dev 0.9422

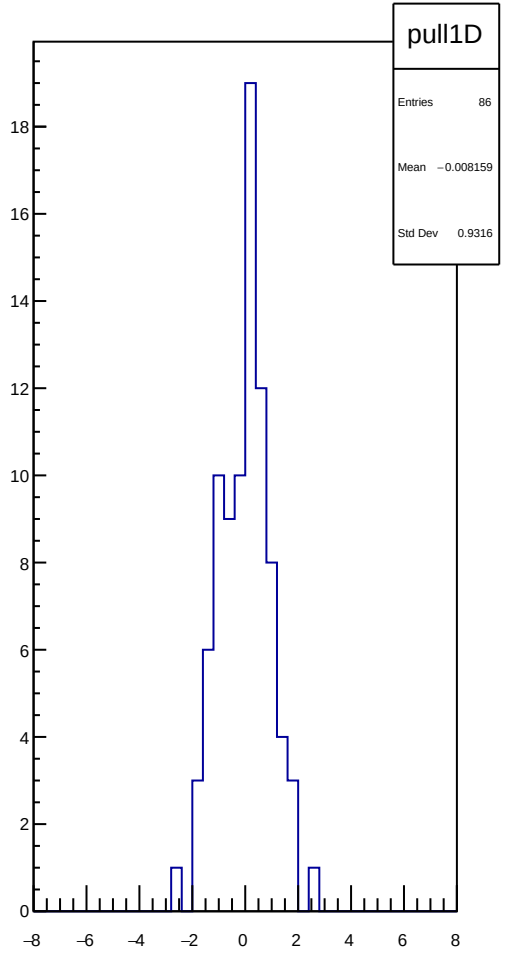

diff_bpm0i07Y_rms vs run
χ^2 / ndf 8497 / 85
p0 1515 ± 1.19
1900
1800
1700
1600
1500
1400

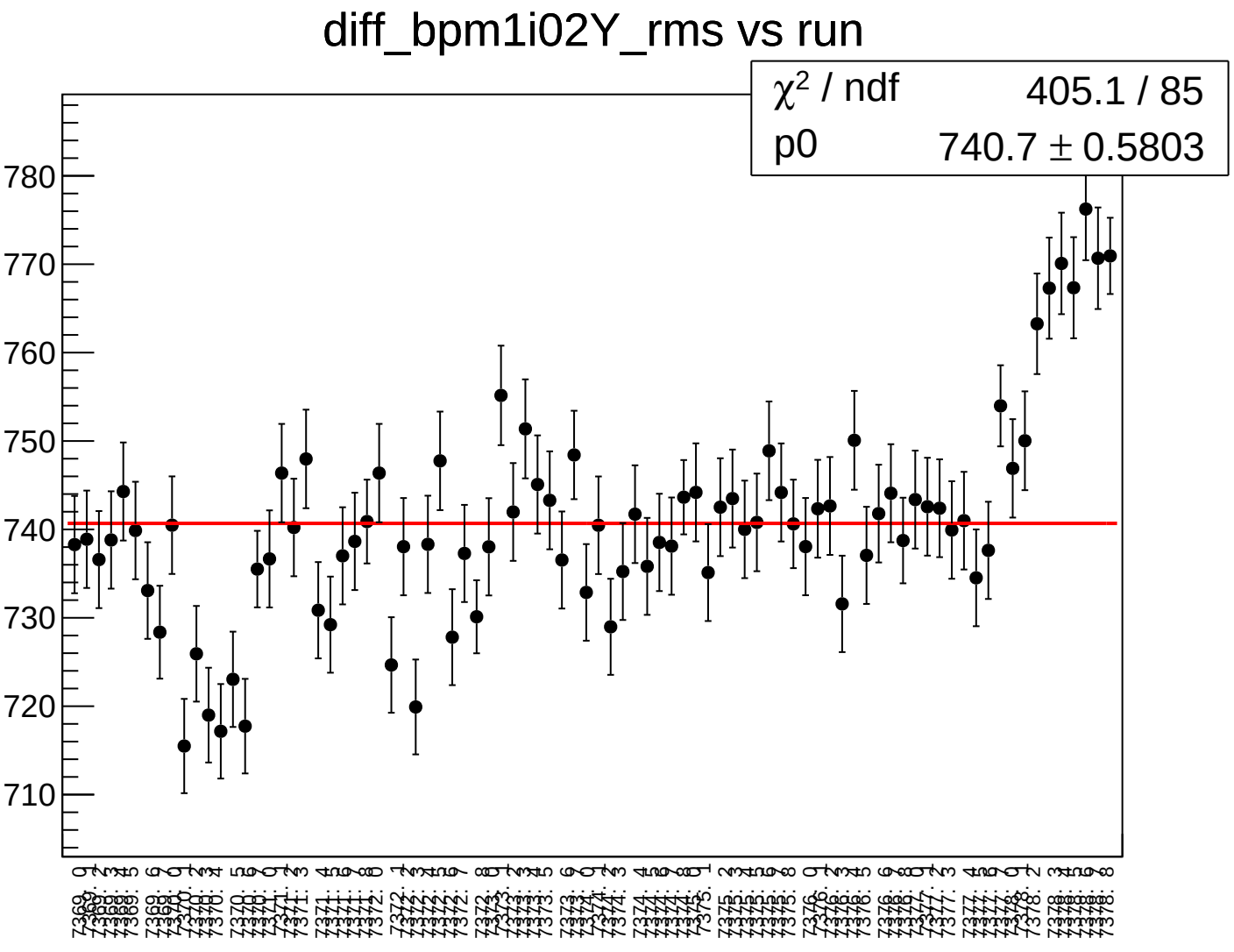

diff_bpm1i02X_mean vs run
χ² / ndf 83.28 / 85
p0 −21.54 ± 0.9798
pull
Entries 86
Mean 74.07
Std Dev 68.71

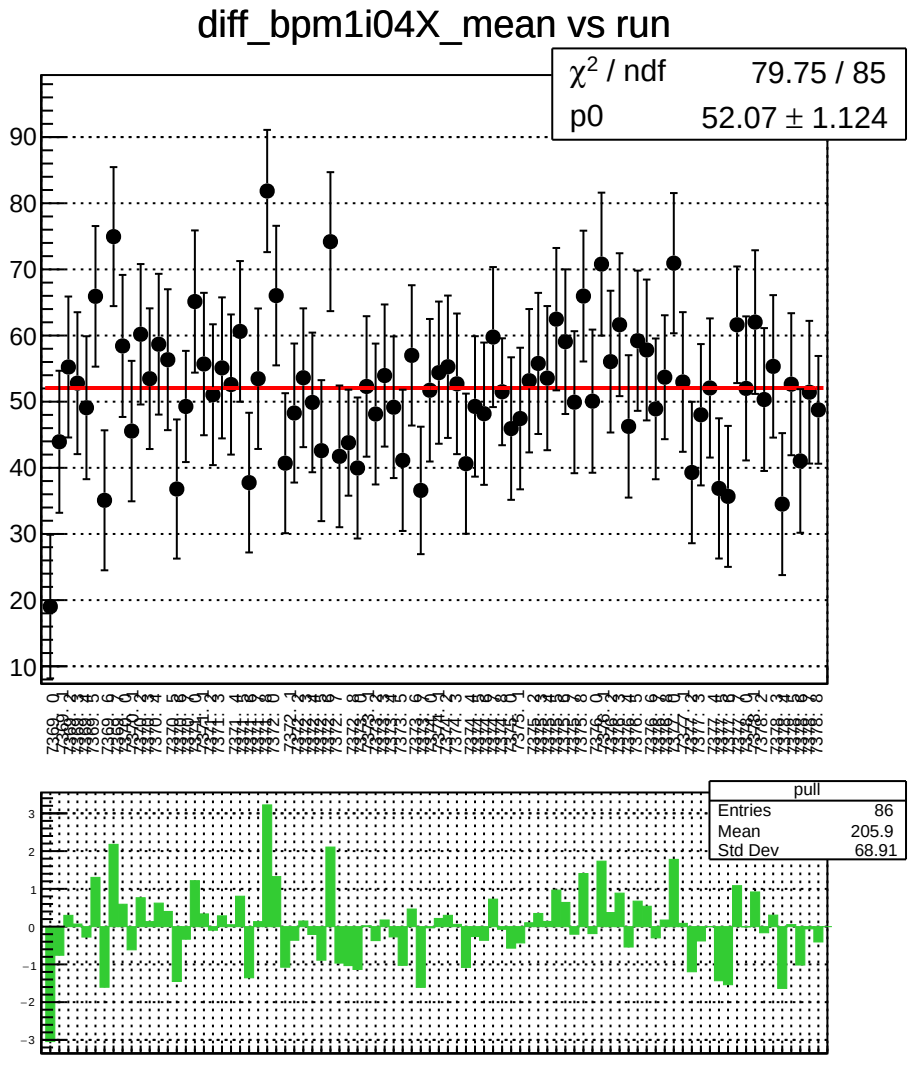

pull1D
Entries 86
Mean 0.01914
Std Dev 0.9839

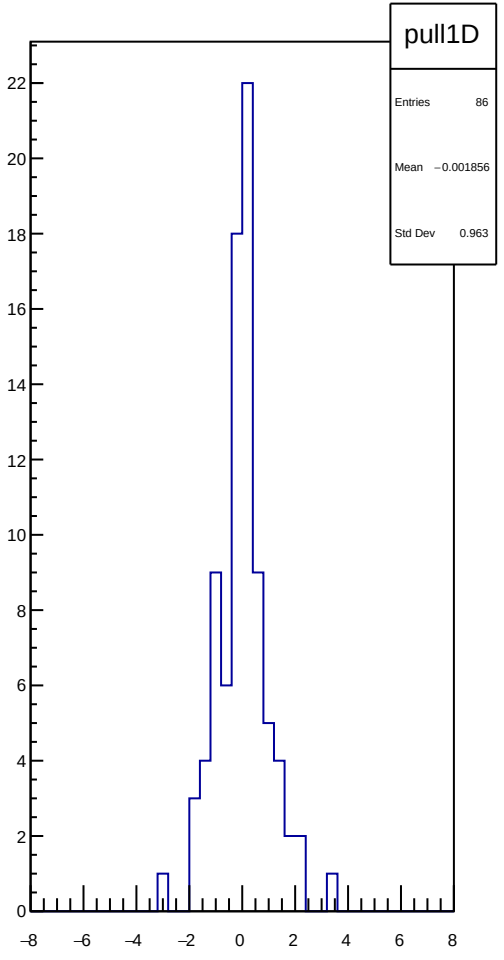

diff_bpm1i02X_rms vs run
χ² / ndf 323.5 / 85
p0 884.3 ± 0.6928
920
910
900
890
880
870
860
850

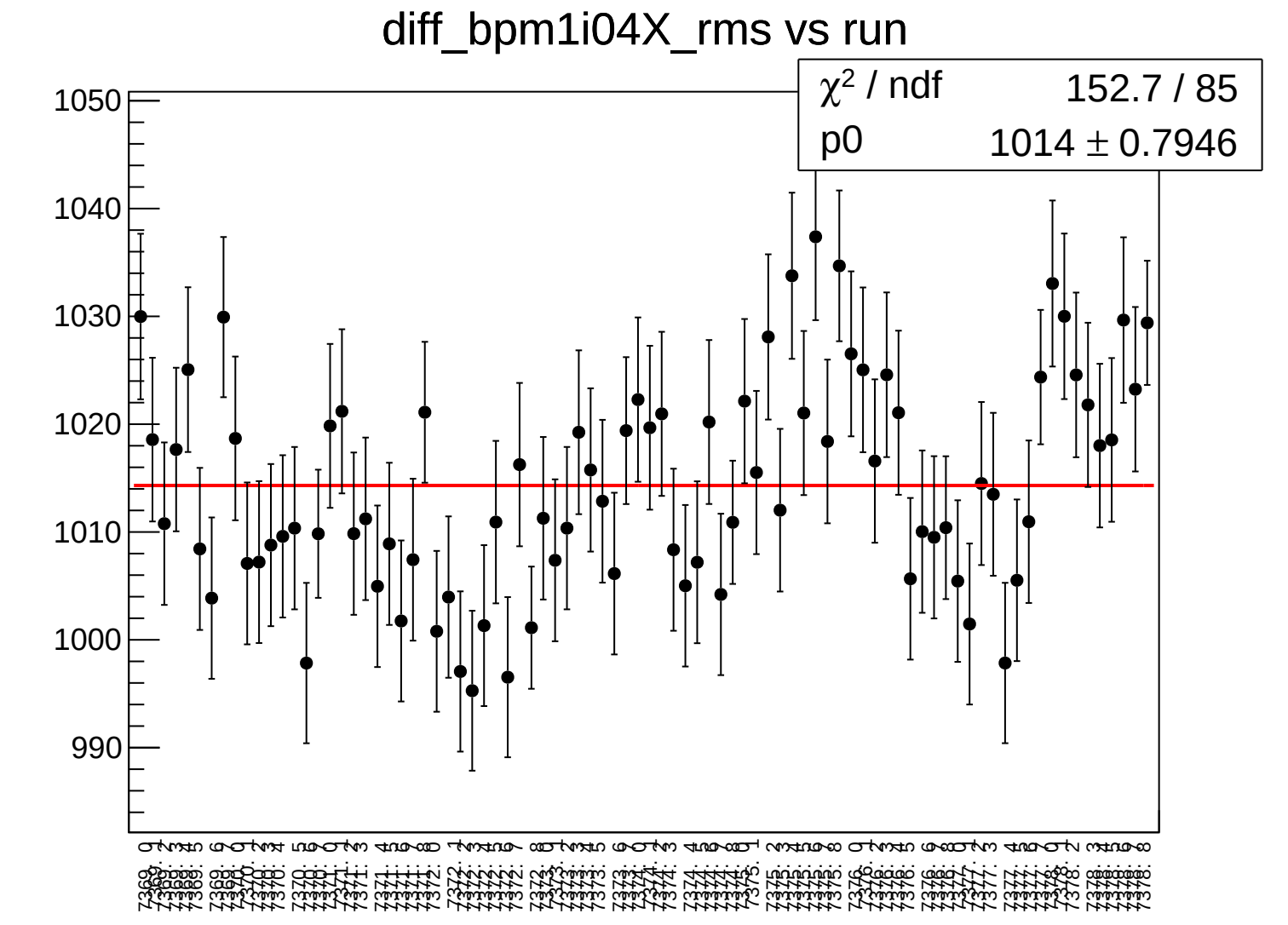

diff_bpm1i02Y_mean vs run
χ² / ndf 74.65 / 85
p0 68.94 ± 0.8207
pull
Entries 86
Mean 552
Std Dev 515

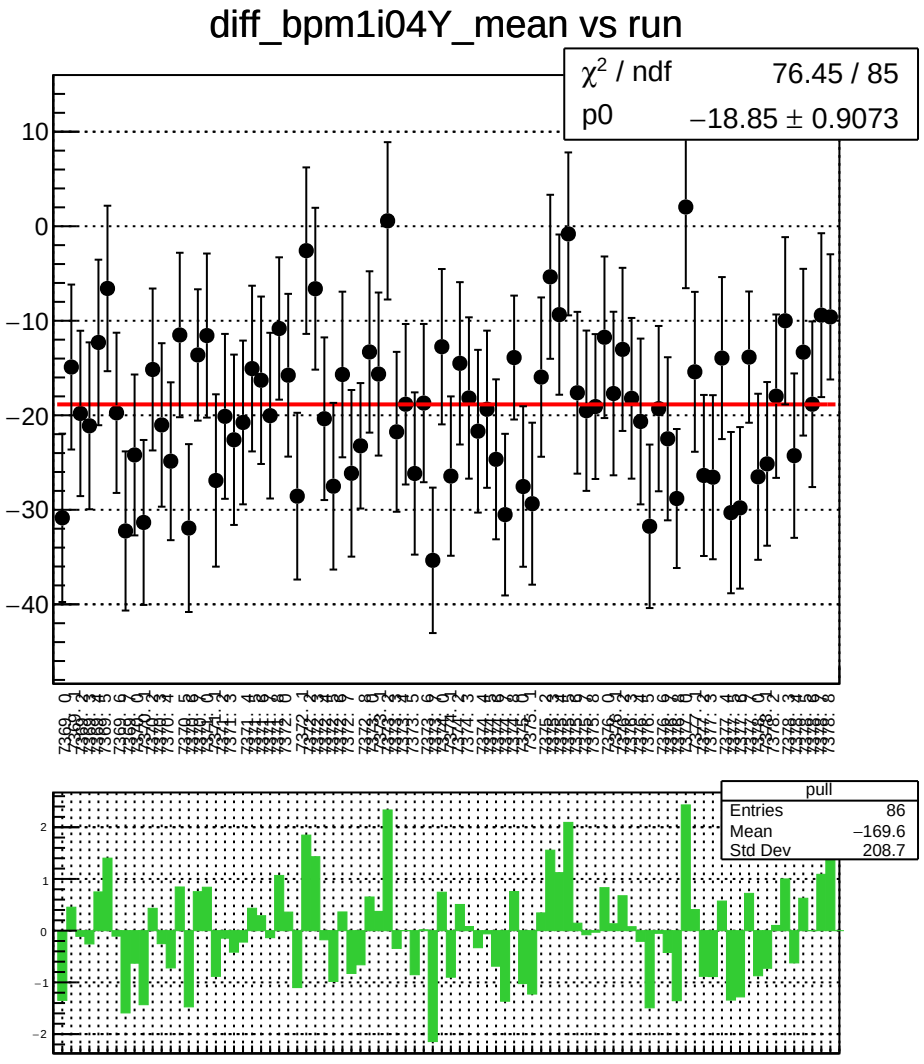

pull1D
Entries 86
Mean −0.008159
Std Dev 0.9316

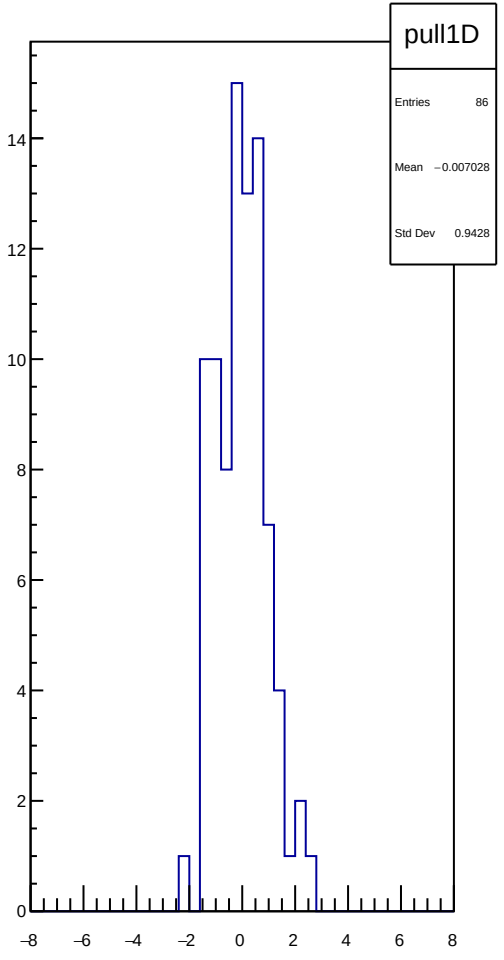

diff_bpm1i02Y_rms vs run
χ² / ndf 405.1 / 85
p0 740.7 ± 0.5803
780
770
760
750
740
730
720
710

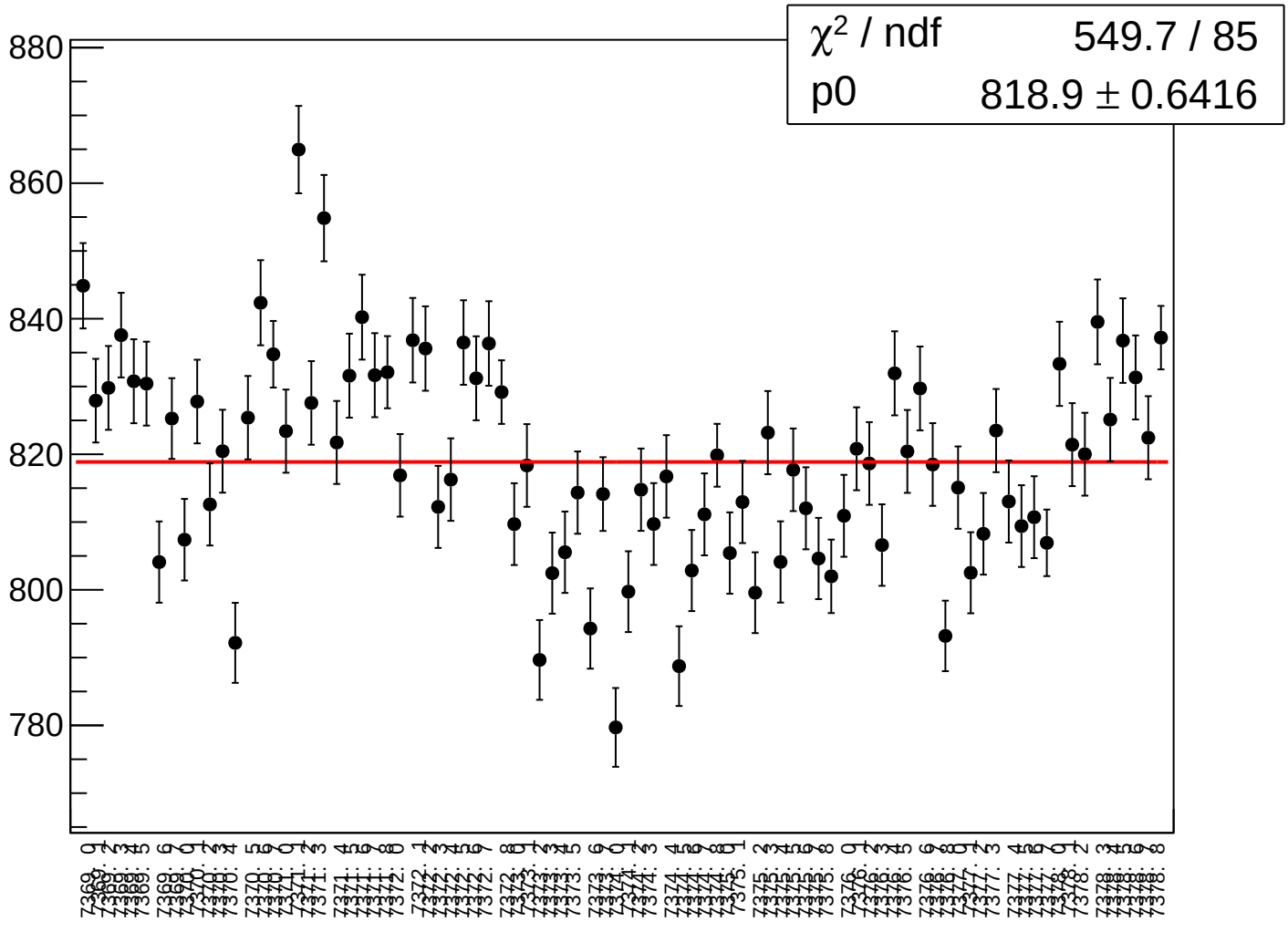

diff_bpm1i04X_mean vs run
χ^2 / ndf 79.75 / 85
p0 52.07 ± 1.124
pull
Entries 86
Mean 205.9
Std Dev 68.91

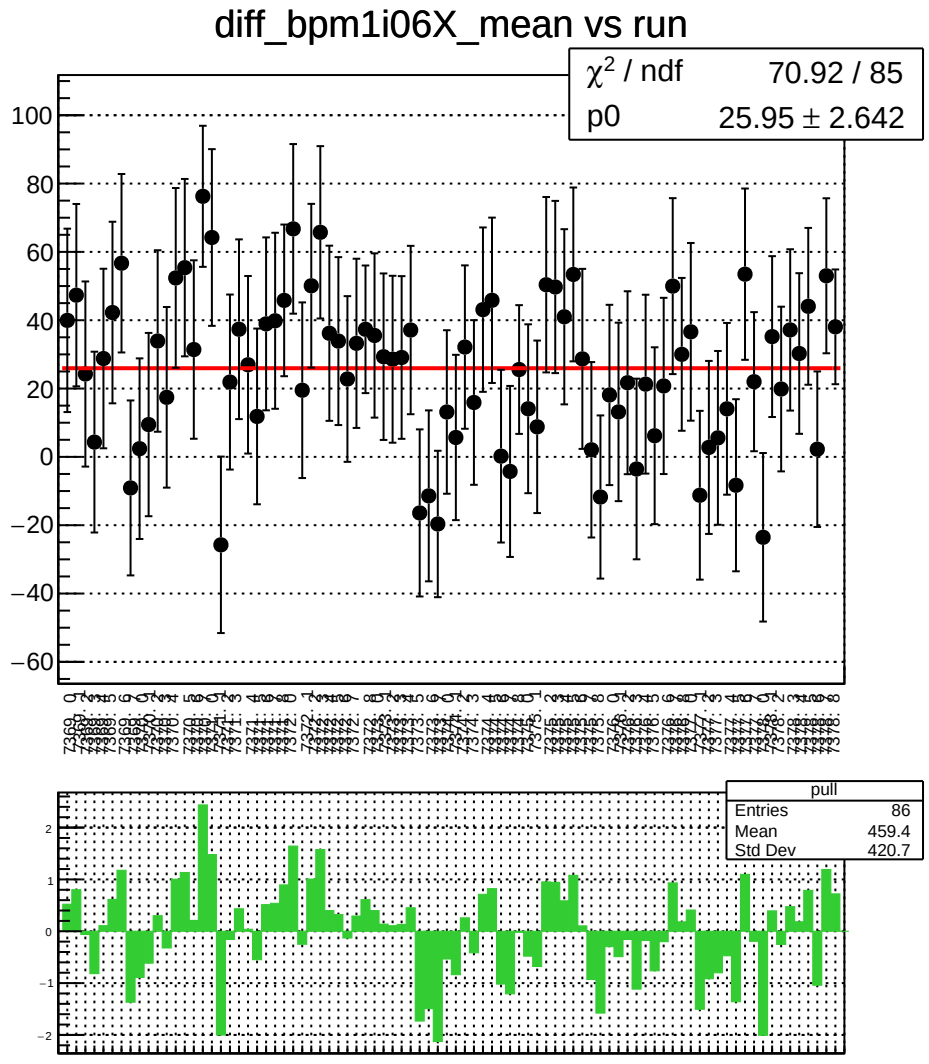

pull1D
Entries 86
Mean −0.001856
Std Dev 0.963

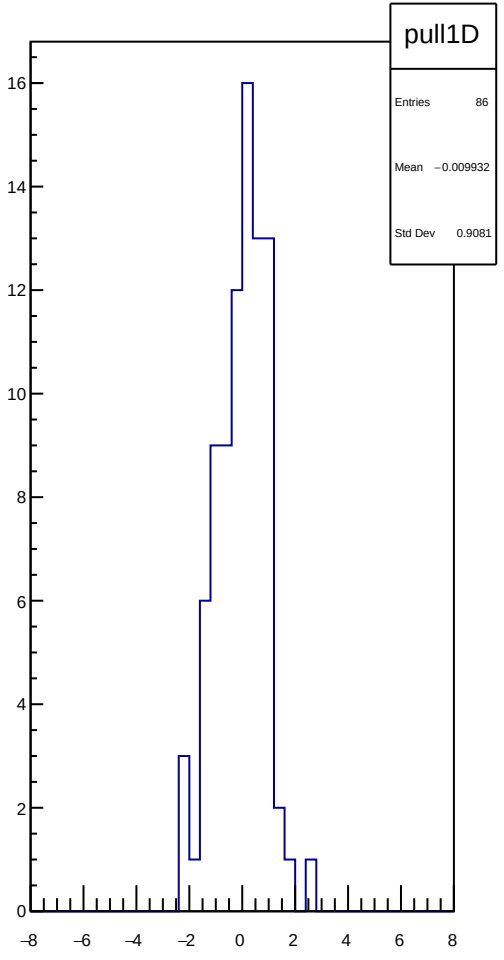

diff_bpm1i04X_rms vs run
χ² / ndf 152.7 / 85
p0 1014 ± 0.7946
1050
1040
1030
1020
1010
1000
990

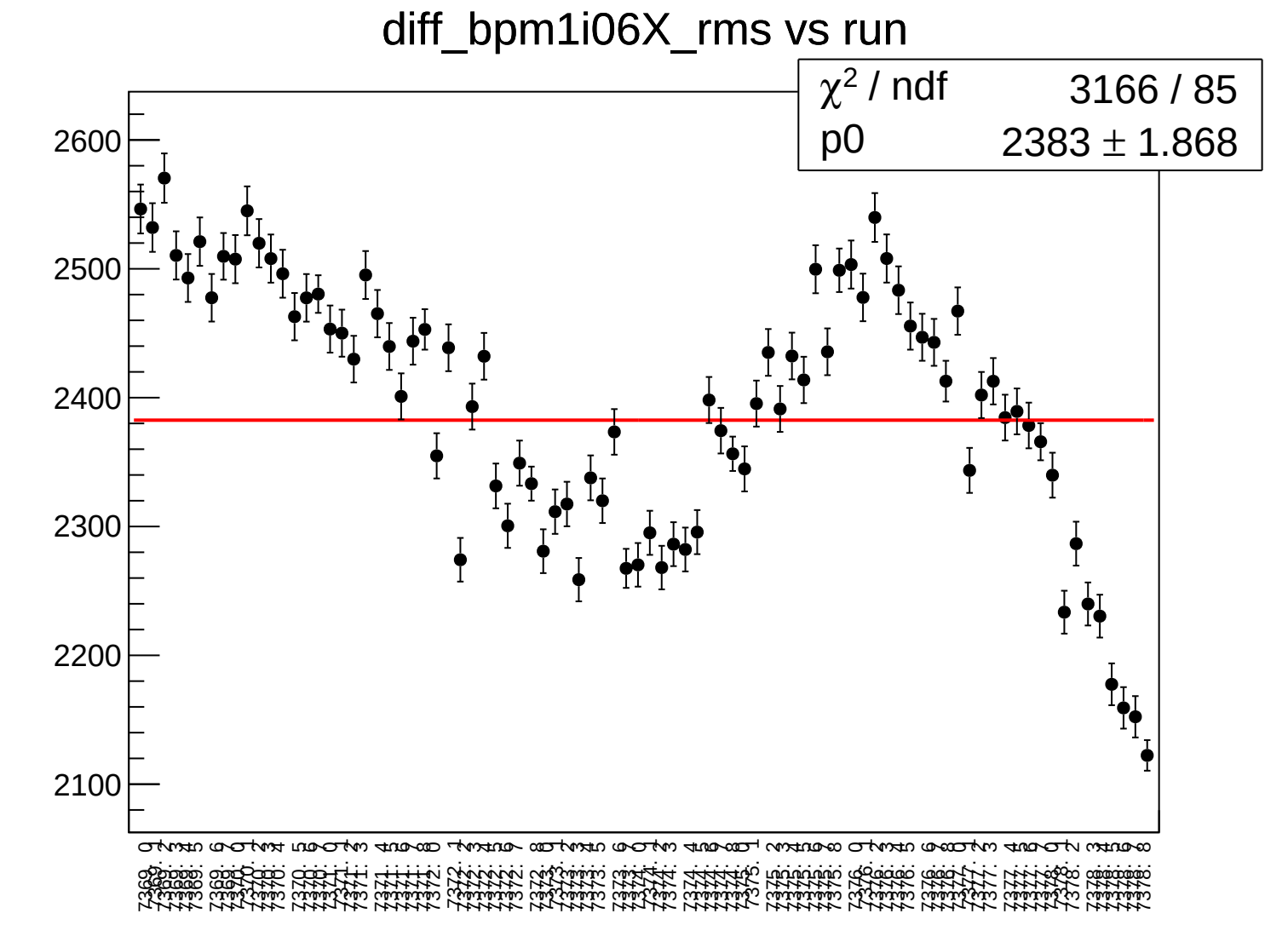

diff_bpm1i04Y_mean vs run
χ² / ndf 76.45 / 85
p0 −18.85 ± 0.9073
pull
Entries 86
Mean −169.6
Std Dev 208.7

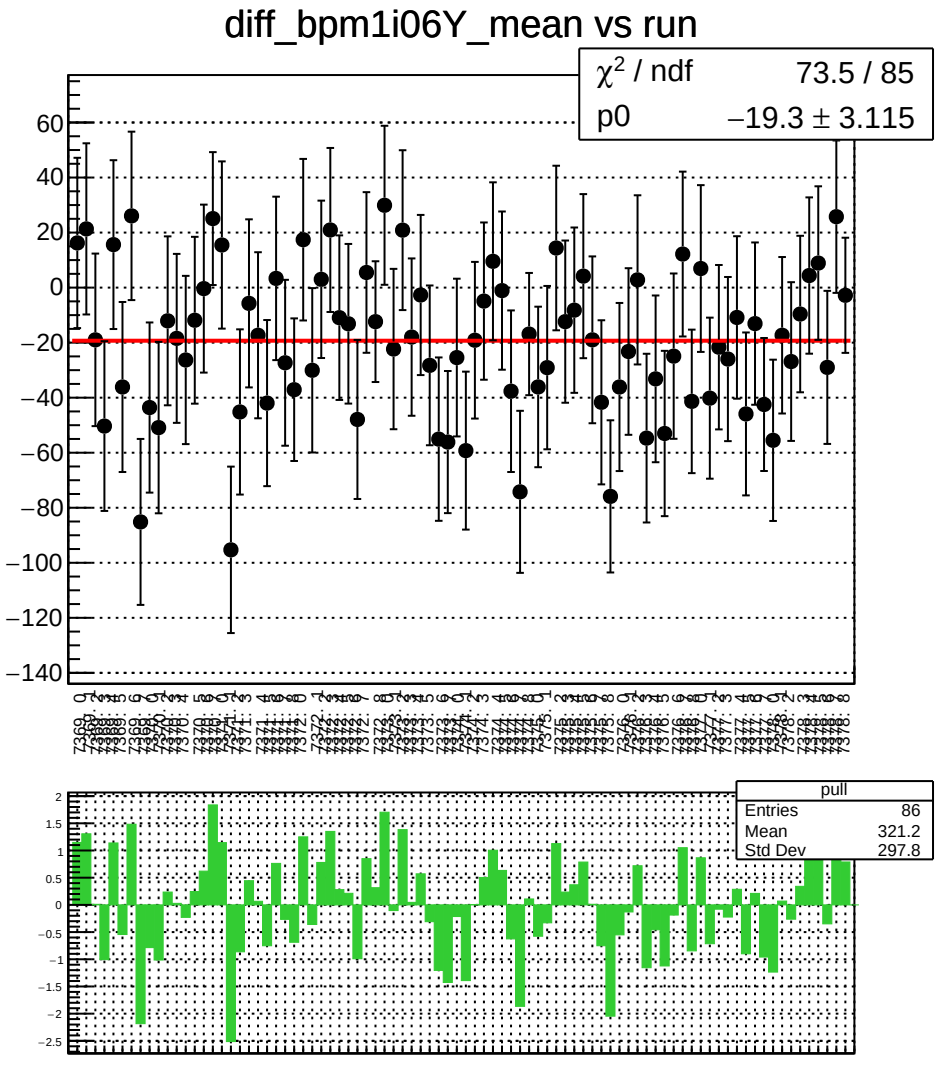

pull1D
Entries 86
Mean −0.007028
Std Dev 0.9428

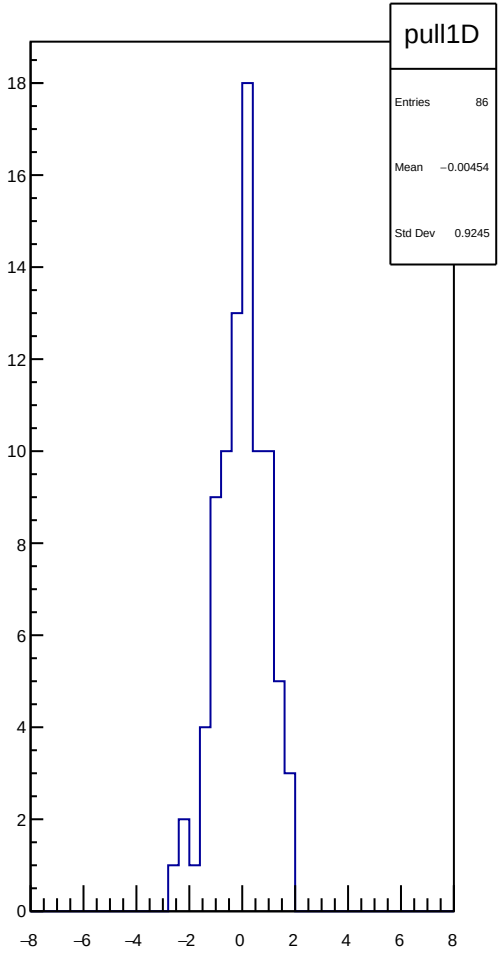

diff_bpm1i04Y_rms vs run
χ² / ndf 549.7 / 85
p0 818.9 ± 0.6416
880
860
840
820
800
780

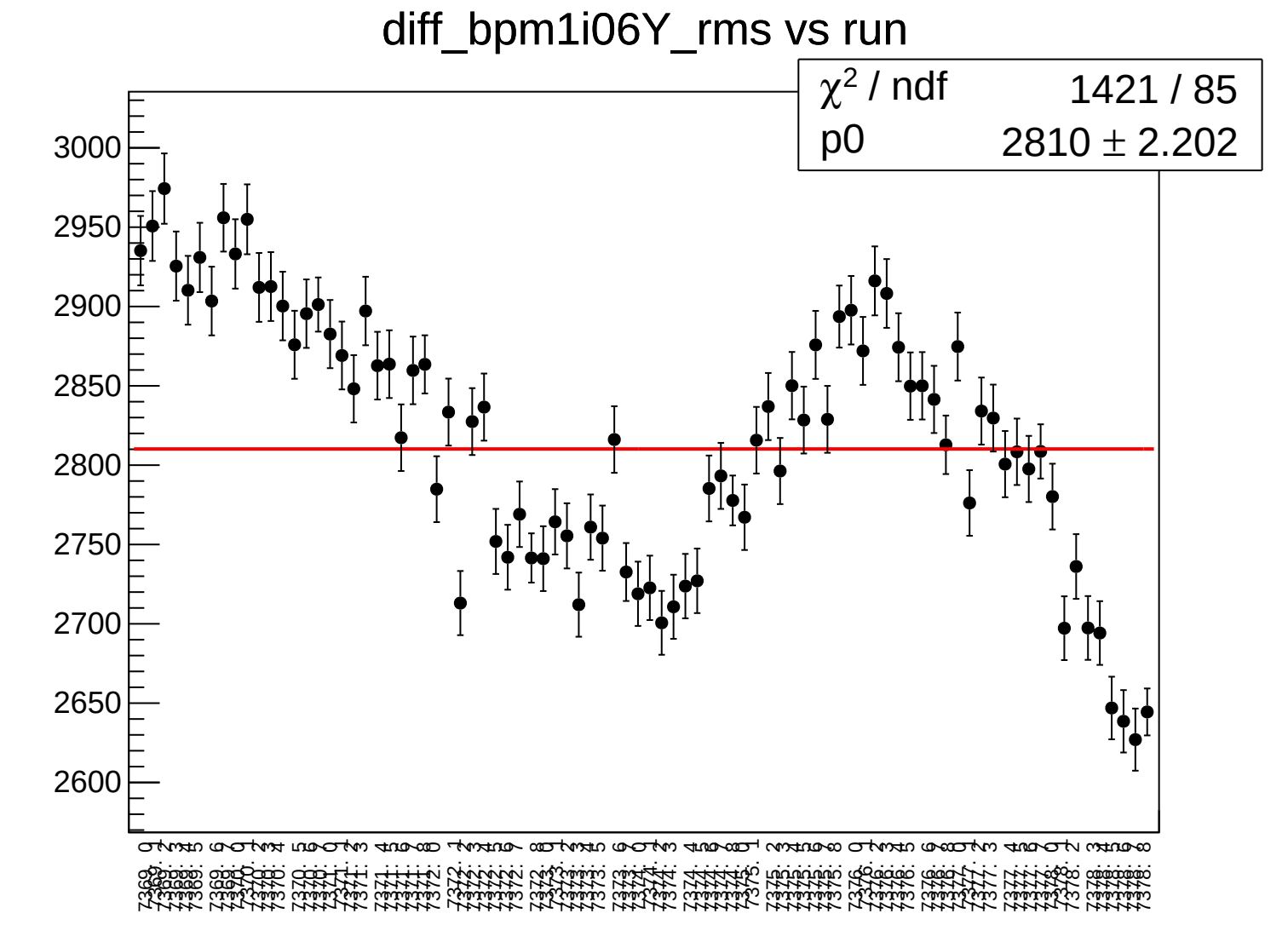

diff_bpm1i06X_mean vs run
χ^2 / ndf 70.92 / 85
p0 25.95 ± 2.642
pull
Entries 86
Mean 459.4
Std Dev 420.7

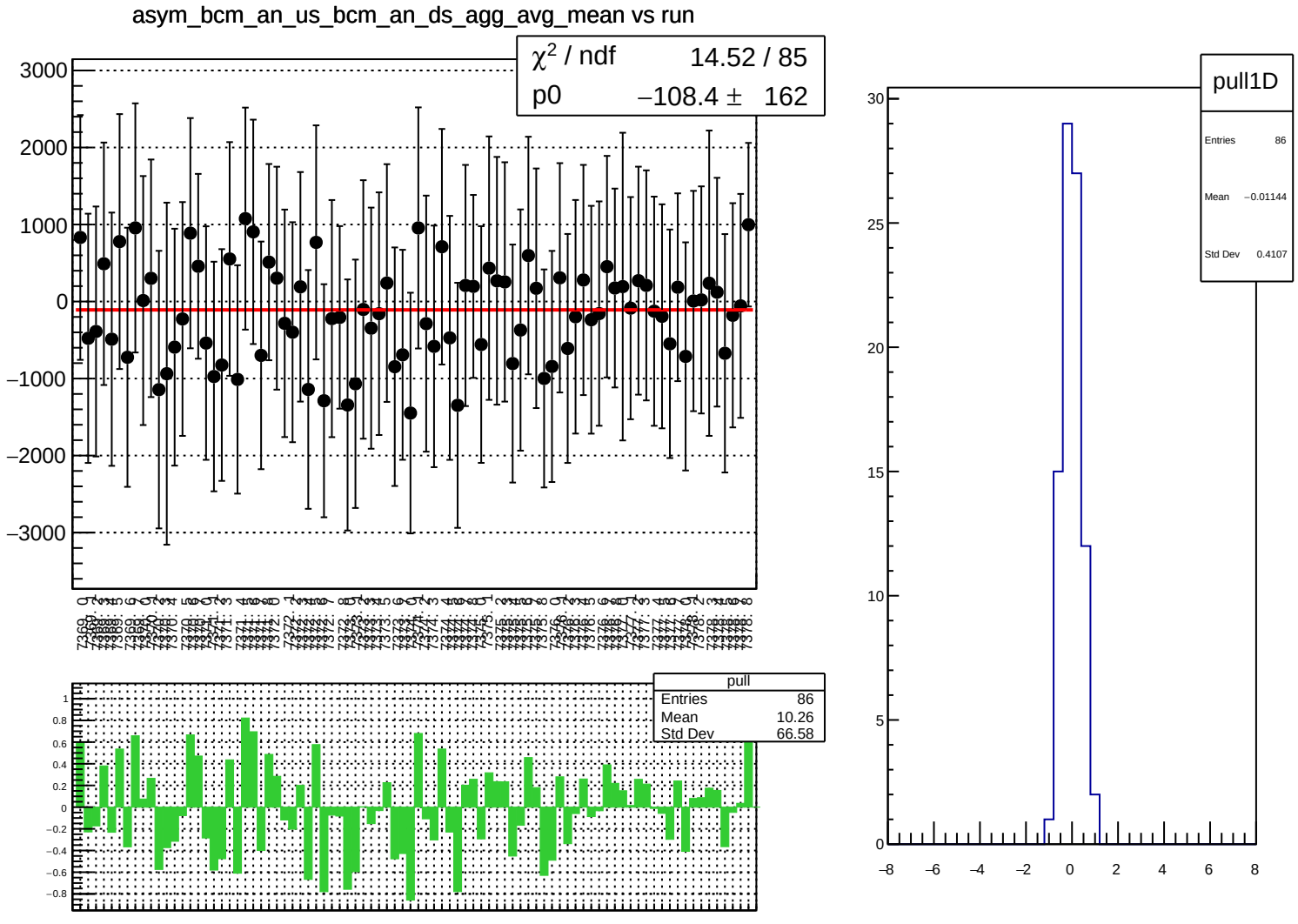

pull1D
Entries 86
Mean −0.009932
Std Dev 0.9081

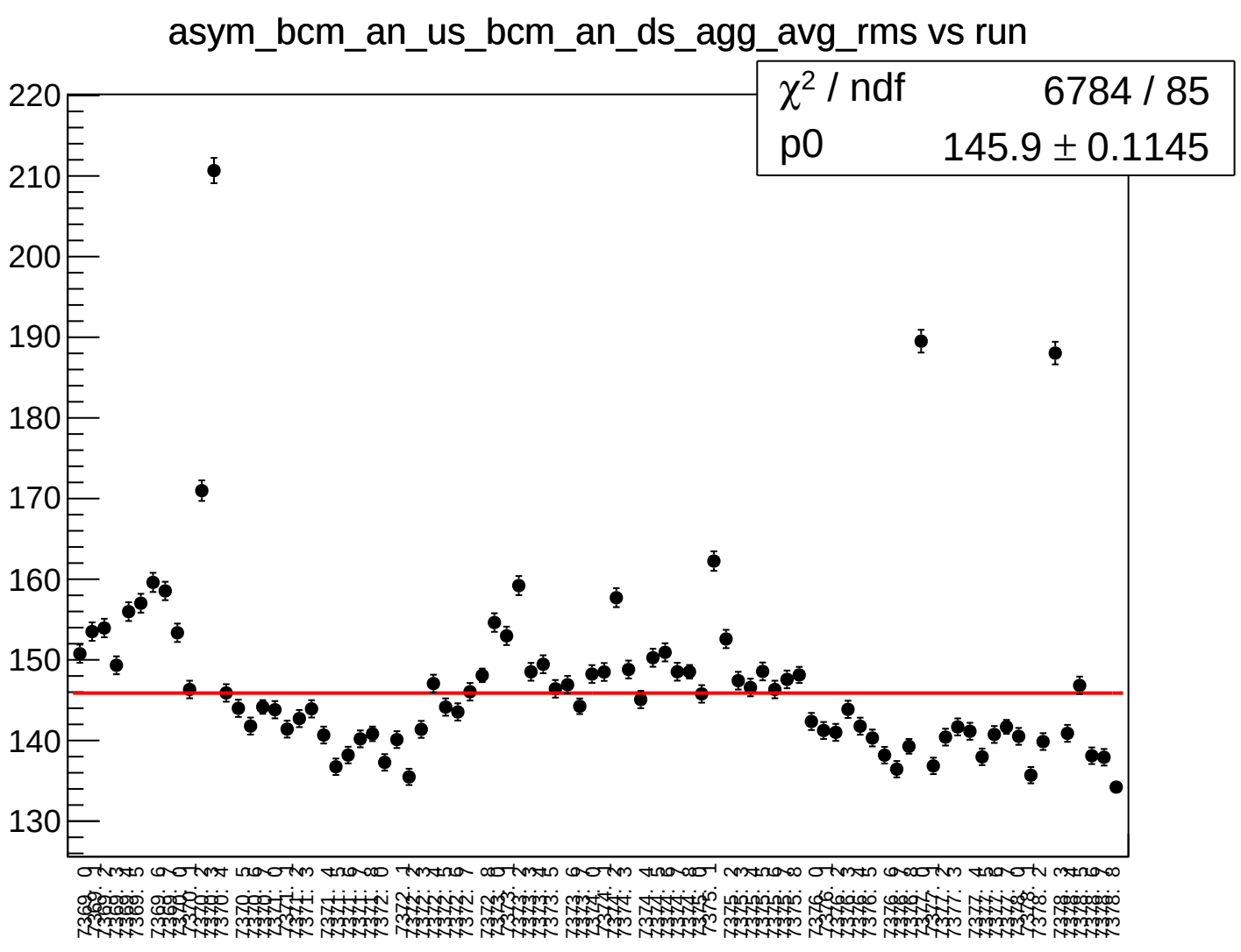

diff_bpm1i06X_rms vs run
χ² / ndf 3166 / 85
p0 2383 ± 1.868
2600
2500
2400
2300
2200
2100

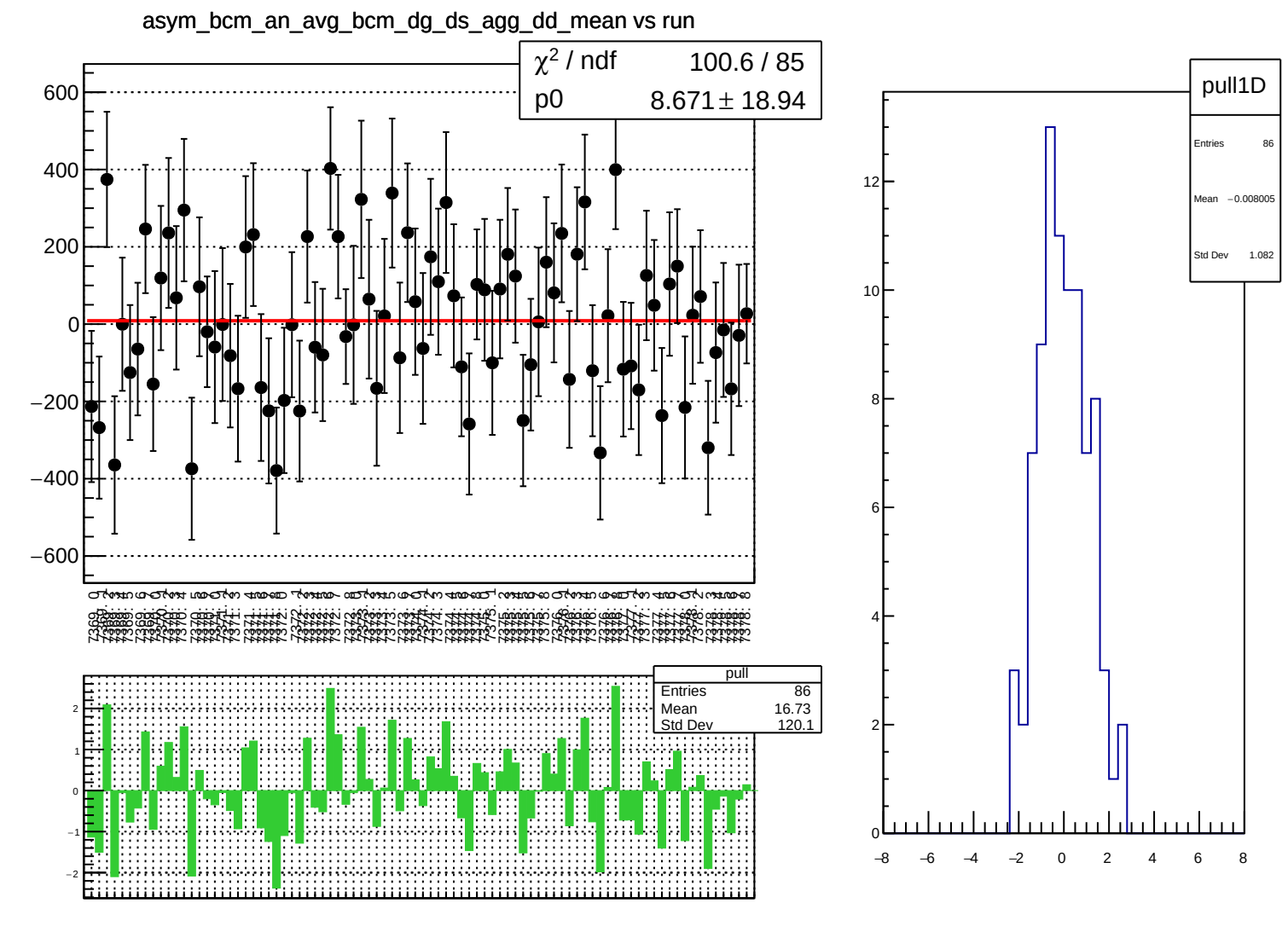

diff_bpm1i06Y_mean vs run
χ² / ndf 73.5 / 85
p0 −19.3 ± 3.115
pull
Entries 86
Mean 321.2
Std Dev 297.8

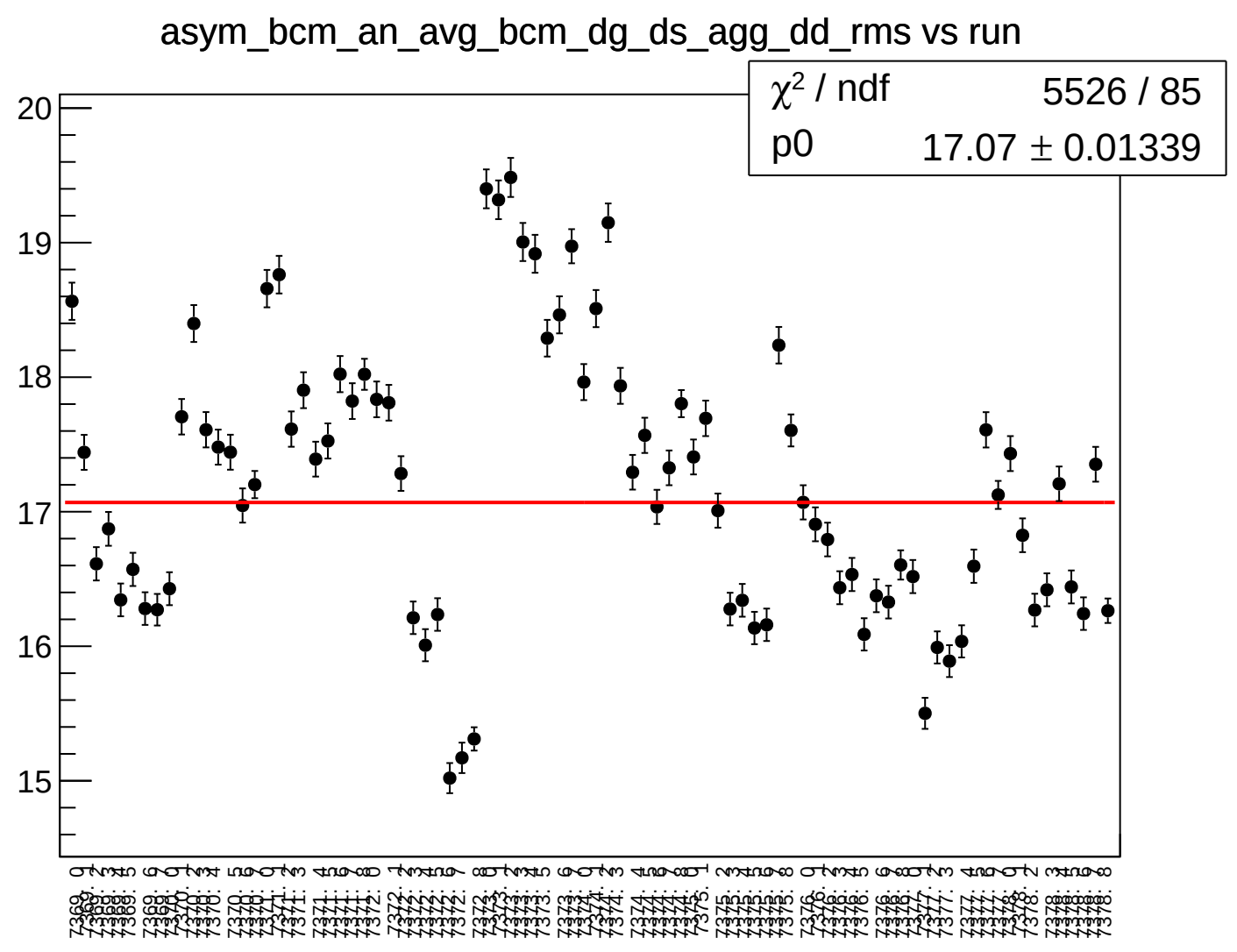

pull1D
Entries 86
Mean −0.00454
Std Dev 0.9245

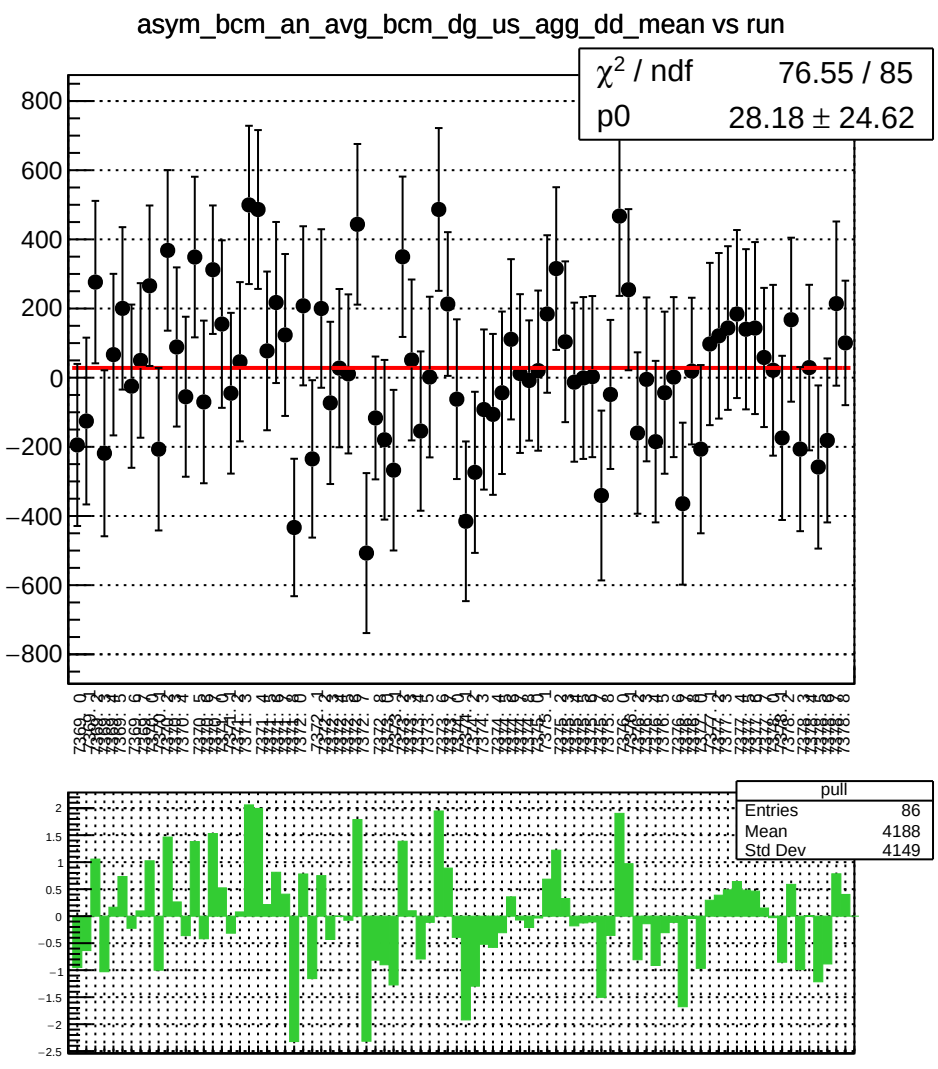

diff_bpm1i06Y_rms vs run
χ^2 / ndf 1421 / 85
p0 2810 ± 2.202
3000
2950
2900
2850
2800
2750
2700
2650
2600

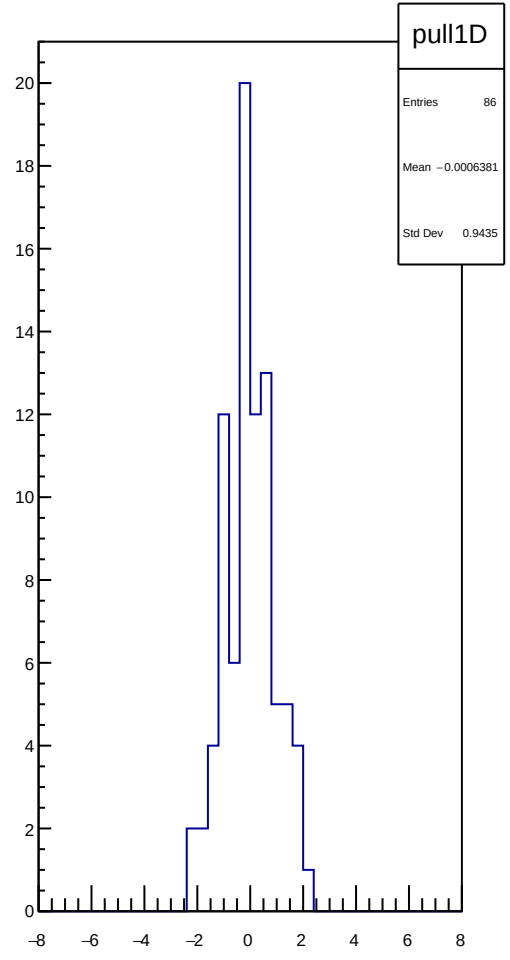

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.52 / 85
p0 −108.4 ± 162
pull
Entries 86
Mean 10.26
Std Dev 66.58
pull1D
Entries 86
Mean −0.01144
Std Dev 0.4107

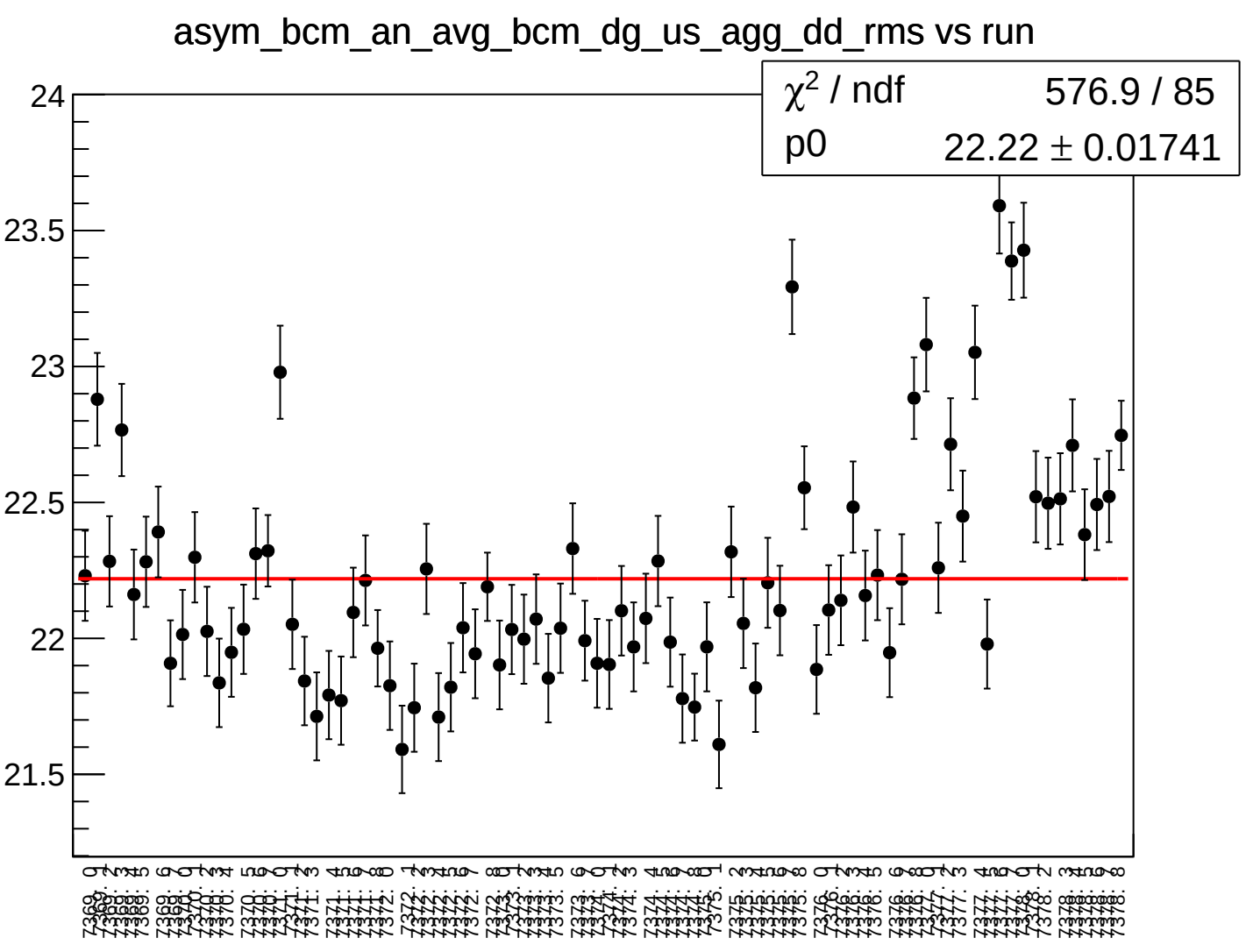

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 6784 / 85
p0 145.9 ± 0.1145
220
210
200
190
180
170
160
150
140
130

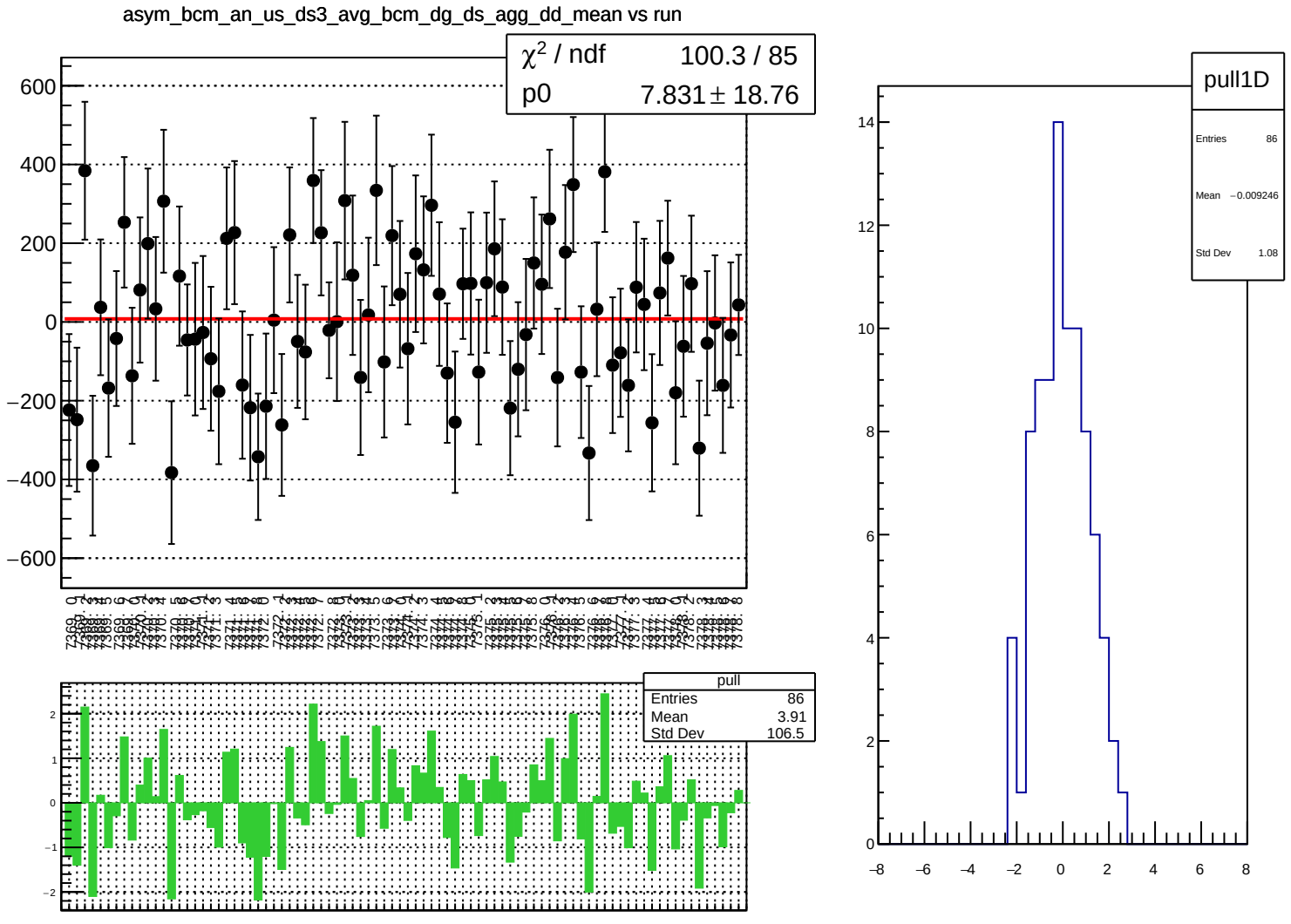

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 100.6 / 85
p0 8.671 ± 18.94
pull
Entries 86
Mean 16.73
Std Dev 120.1
pull1D
Entries 86
Mean −0.008005
Std Dev 1.082

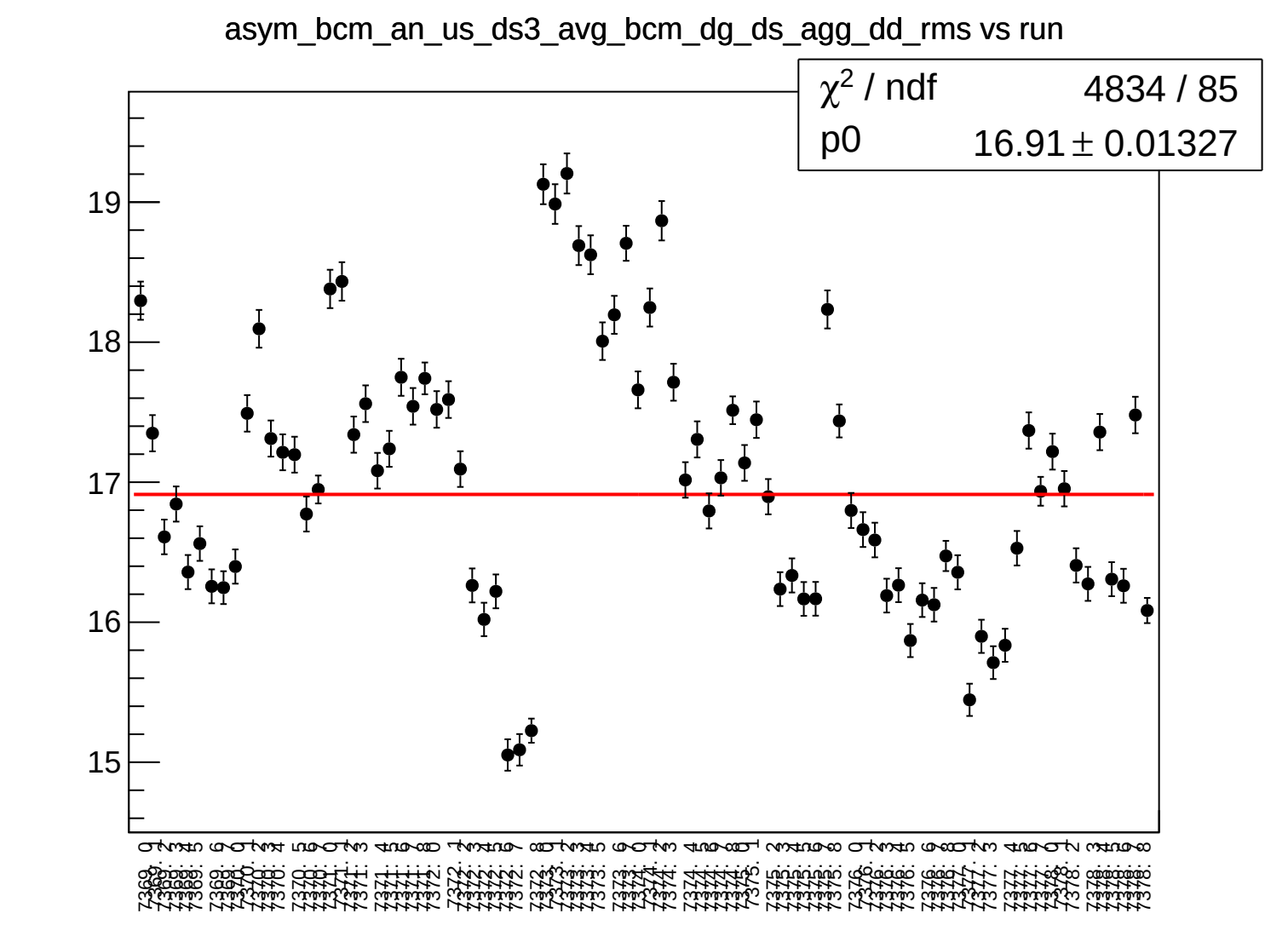

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 5526 / 85
p0 17.07 ± 0.01339
20
19
18
17
16
15

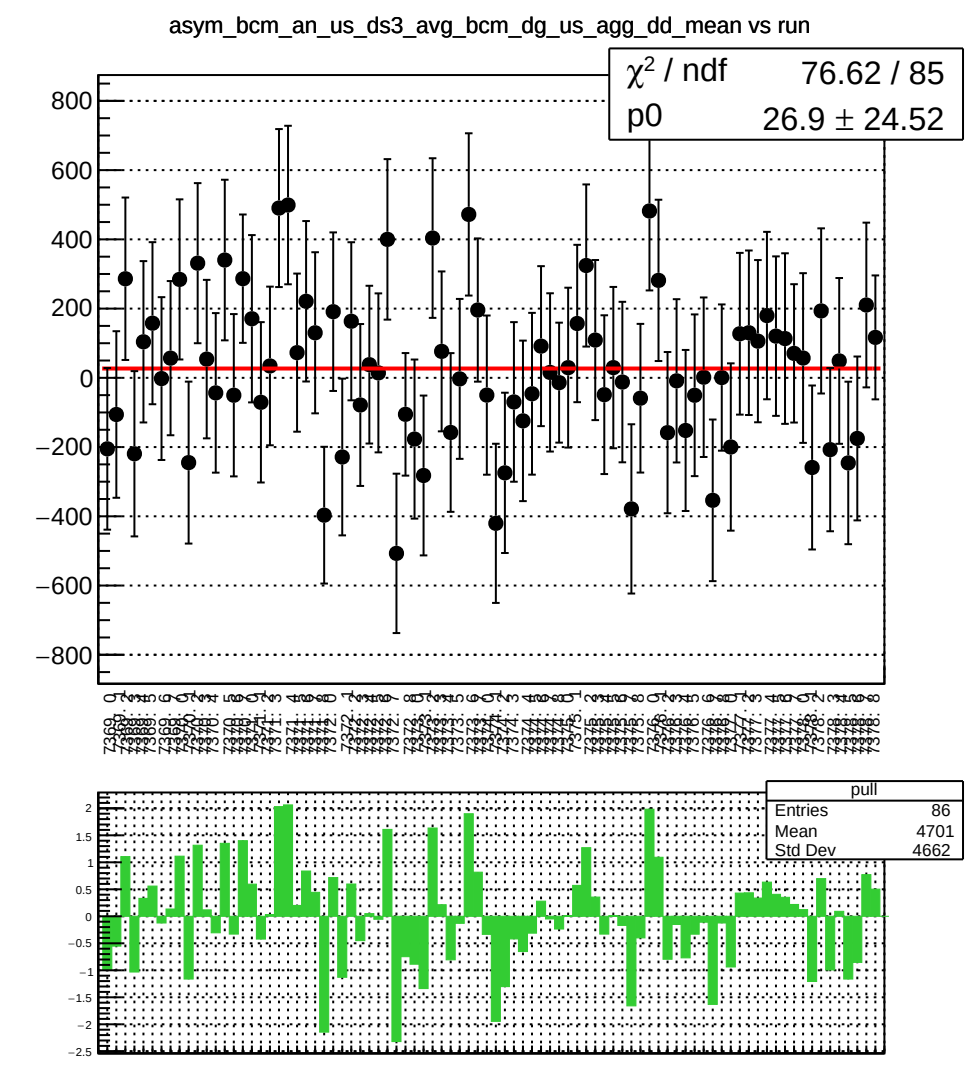

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 76.55 / 85
p0 28.18 ± 24.62
pull
Entries 86
Mean 4188
Std Dev 4149

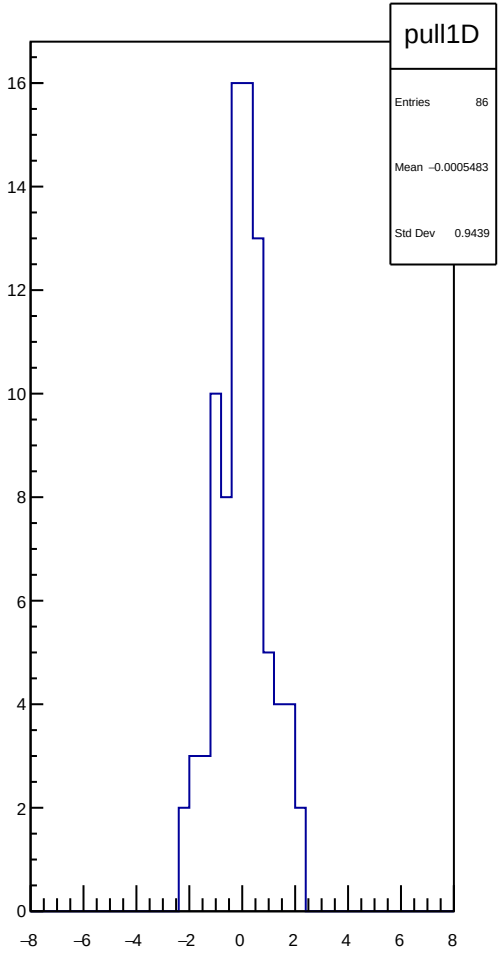

pull1D
Entries 86
Mean −0.0006381
Std Dev 0.9435

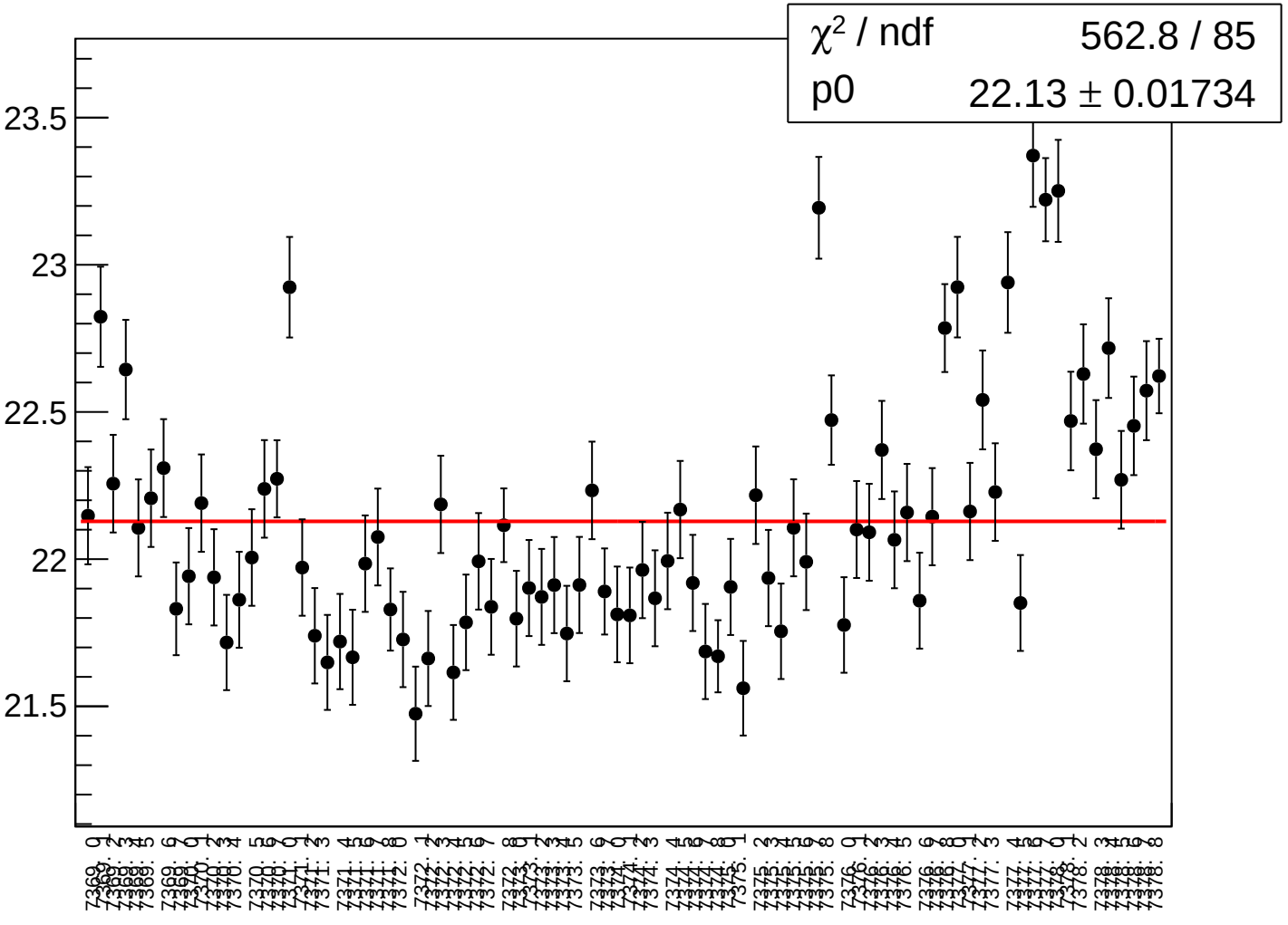

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 576.9 / 85
p0 22.22 ± 0.01741
24
23.5
23
22.5
22
21.5

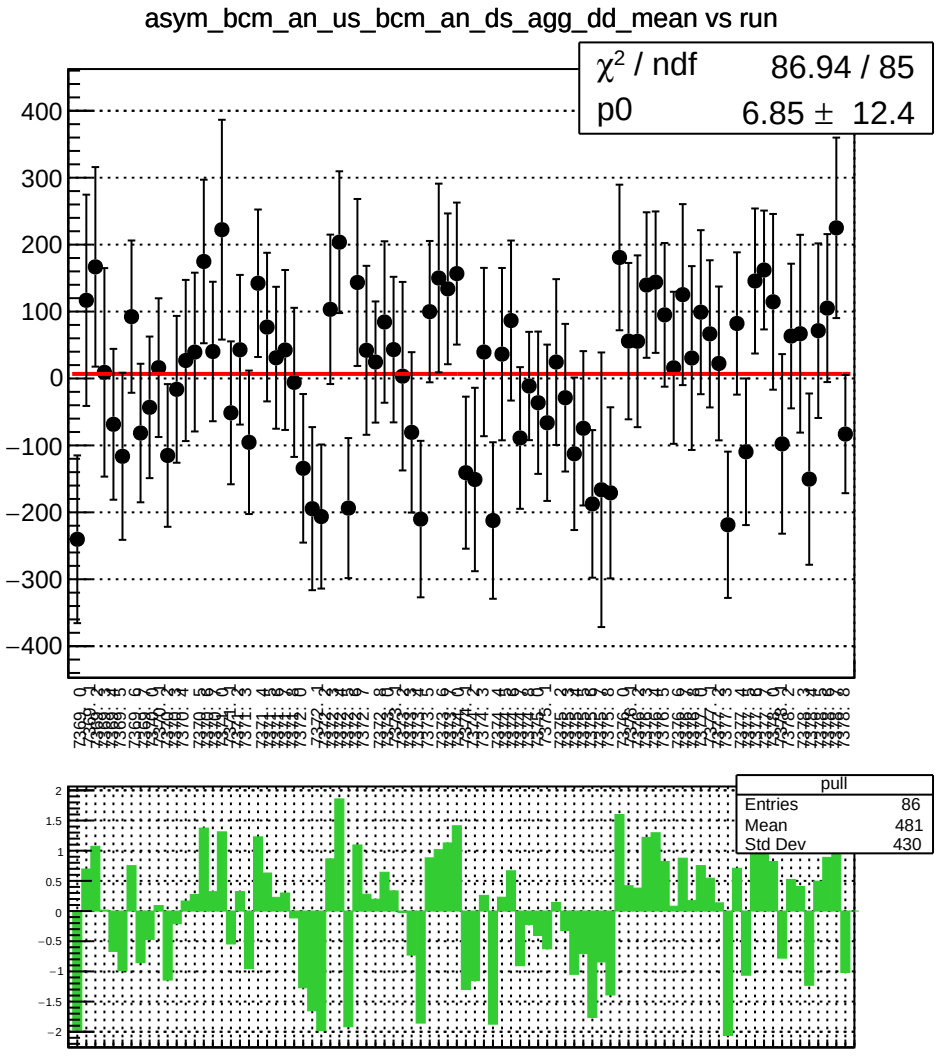

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 100.3 / 85
p0 7.831 ± 18.76
pull
Entries 86
Mean 3.91
Std Dev 106.5
pull1D
Entries 86
Mean −0.009246
Std Dev 1.08

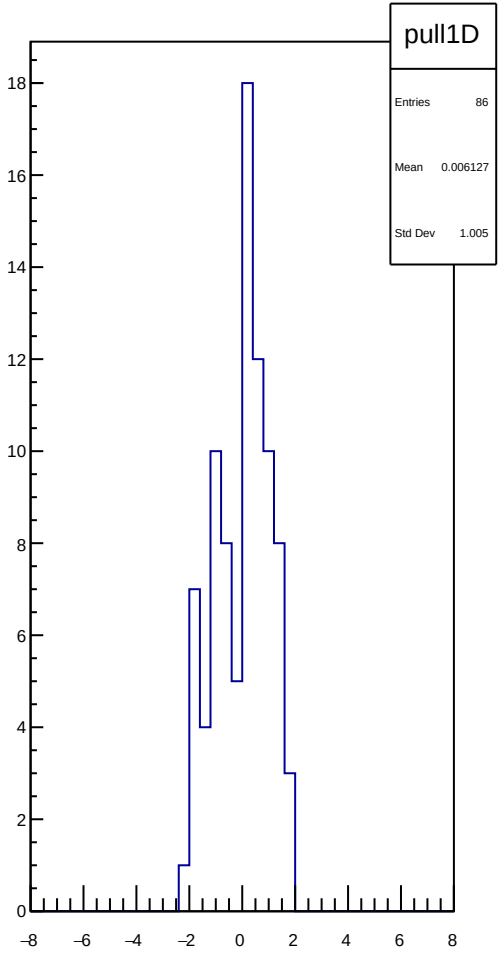

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4834 / 85
p0 16.91 ± 0.01327
19
18
17
16
15

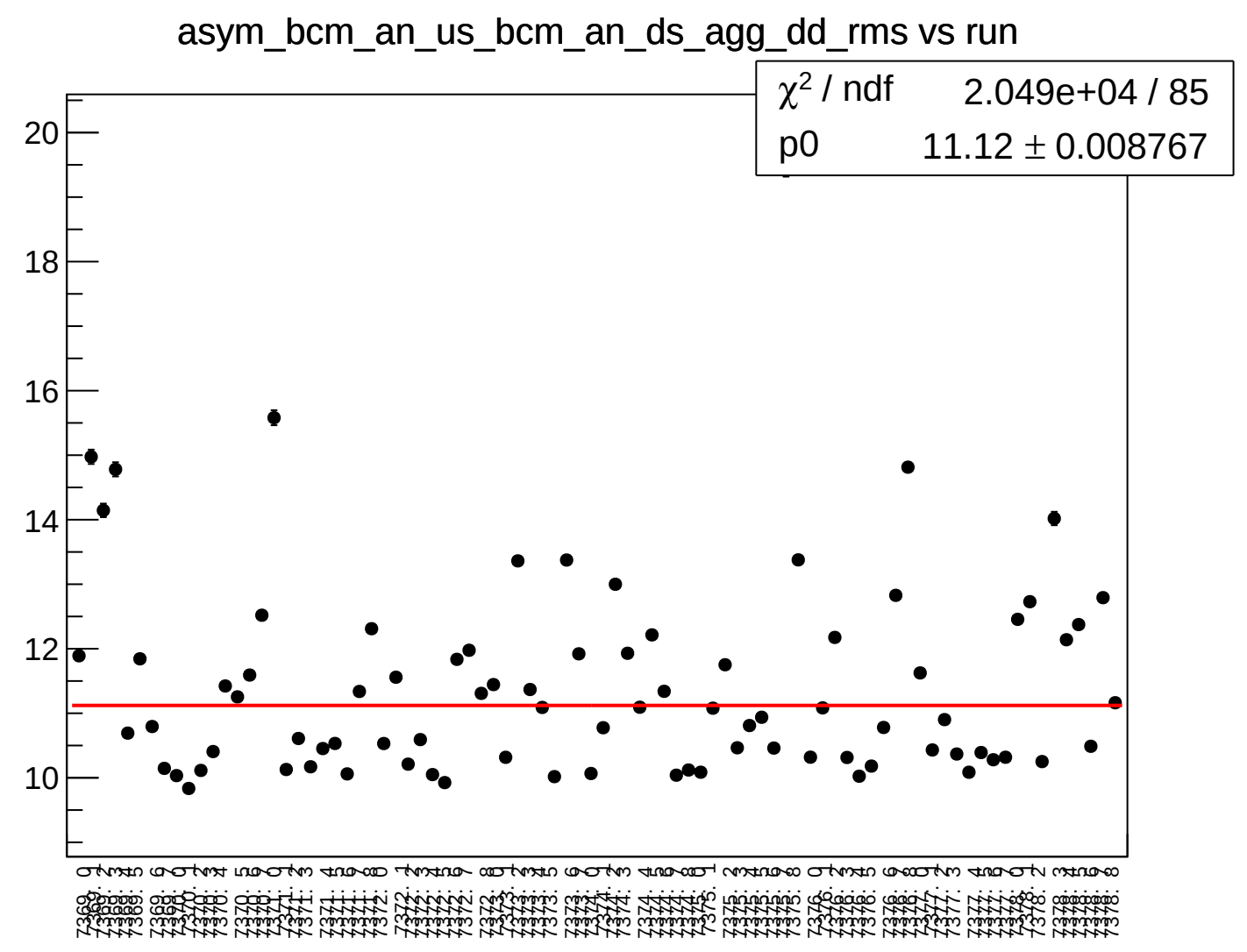

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 76.62 / 85
p0 26.9 ± 24.52
pull
Entries 86
Mean 4701
Std Dev 4662

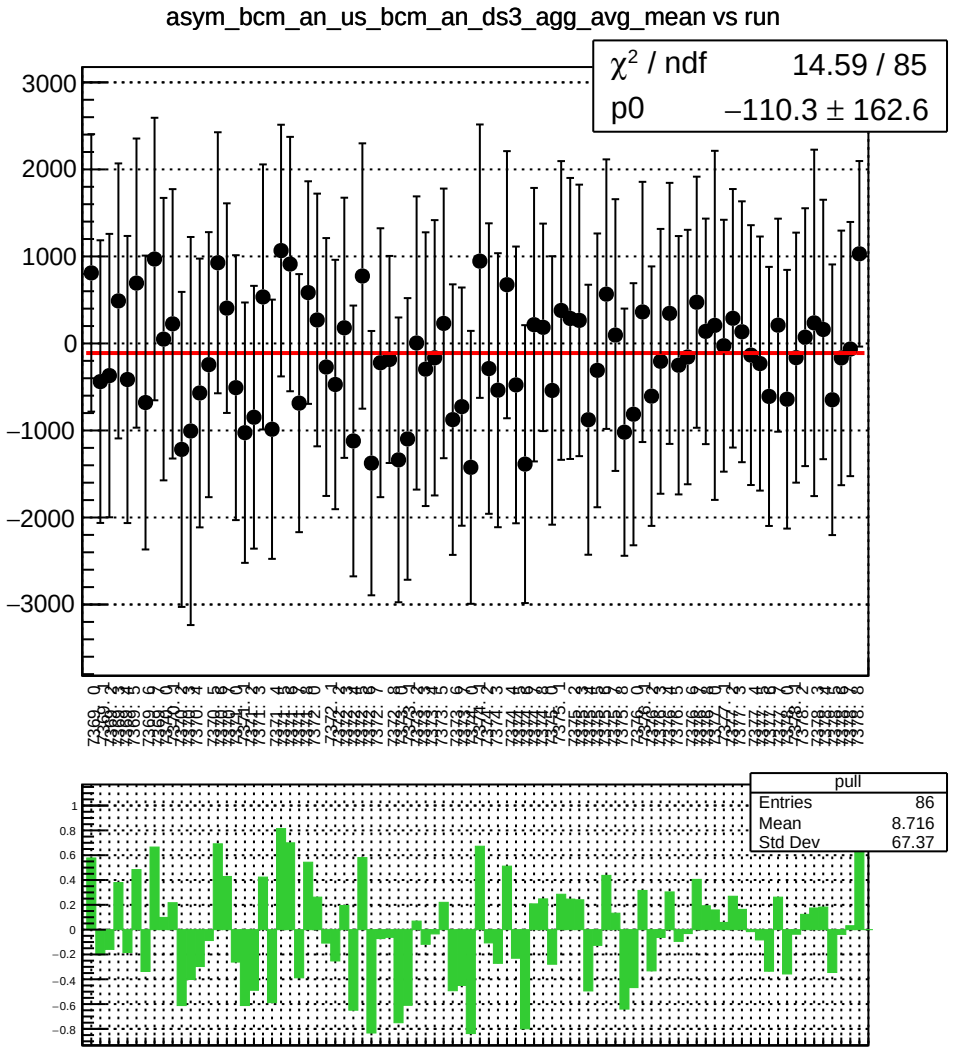

pull1D
Entries 86
Mean −0.0005483
Std Dev 0.9439

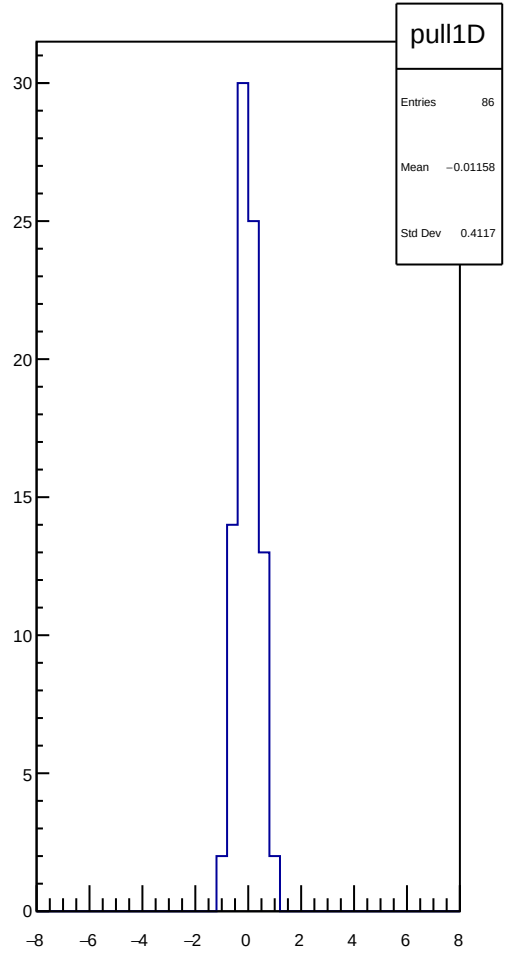

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 562.8 / 85
p0 22.13 ± 0.01734
23.5
23
22.5
22
21.5

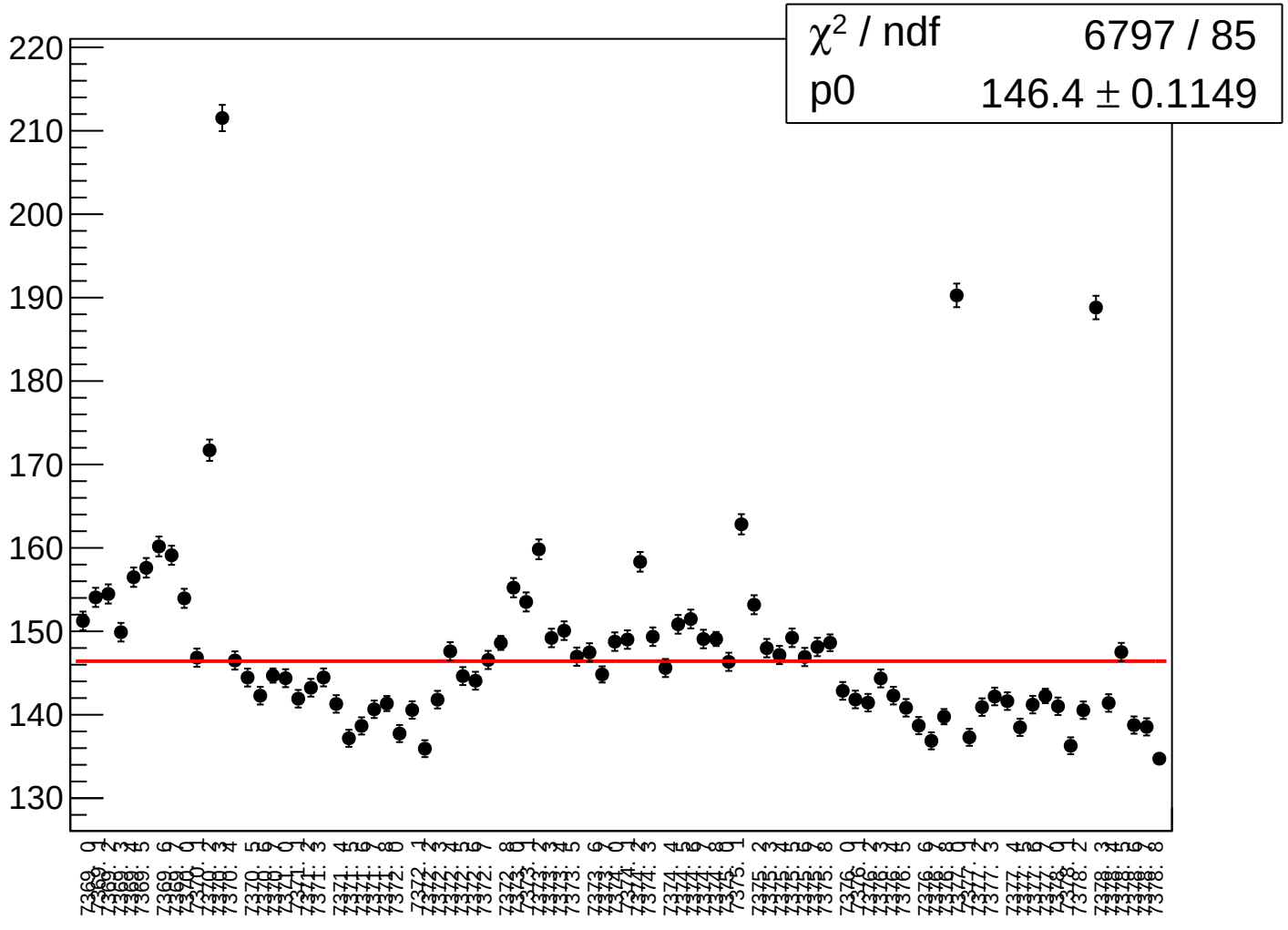

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 86.94 / 85
p0 6.85 ± 12.4
pull
Entries 86
Mean 481
Std Dev 430

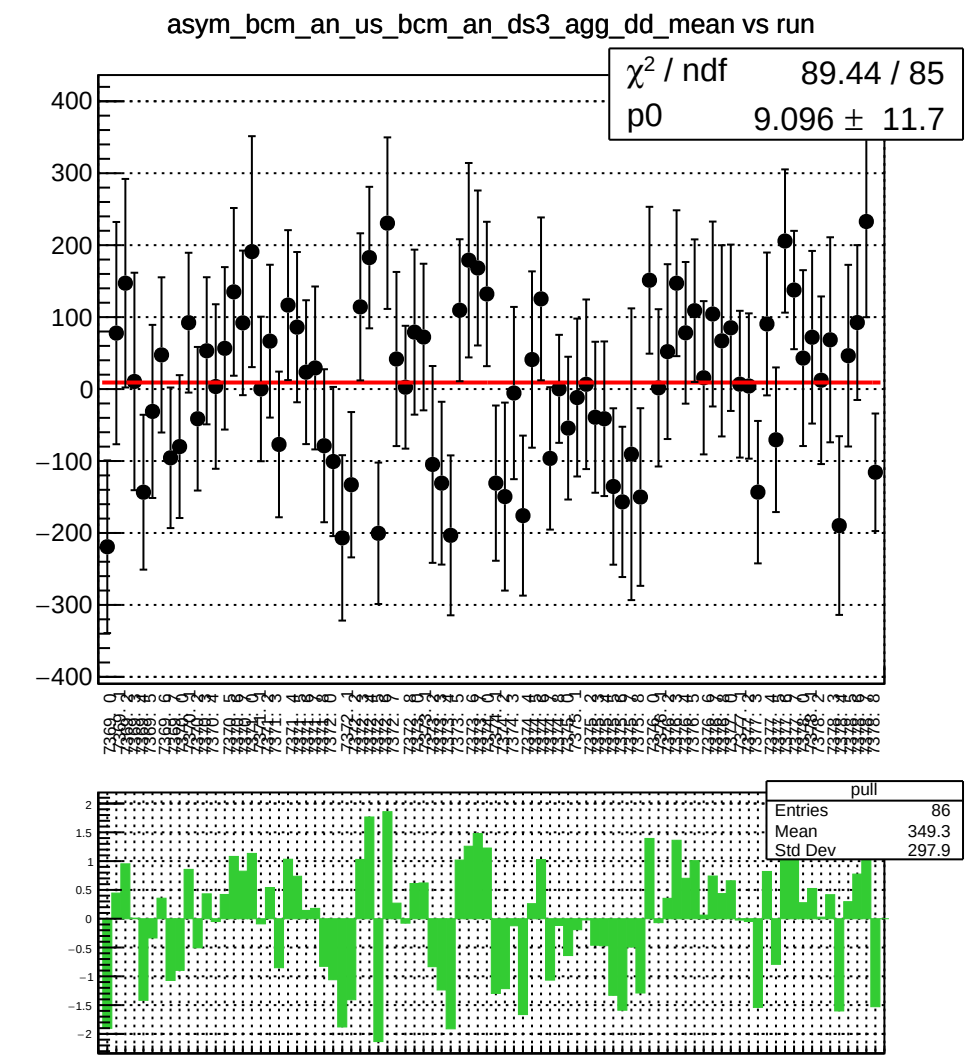

pull1D
Entries 86
Mean 0.006127
Std Dev 1.005

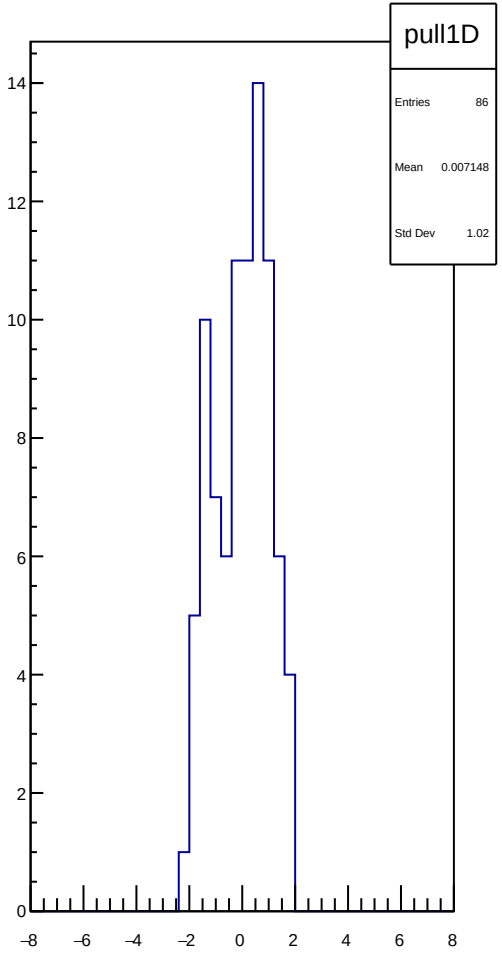

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.049e+04 / 85
p0 11.12 ± 0.008767
20
18
16
14
12
10

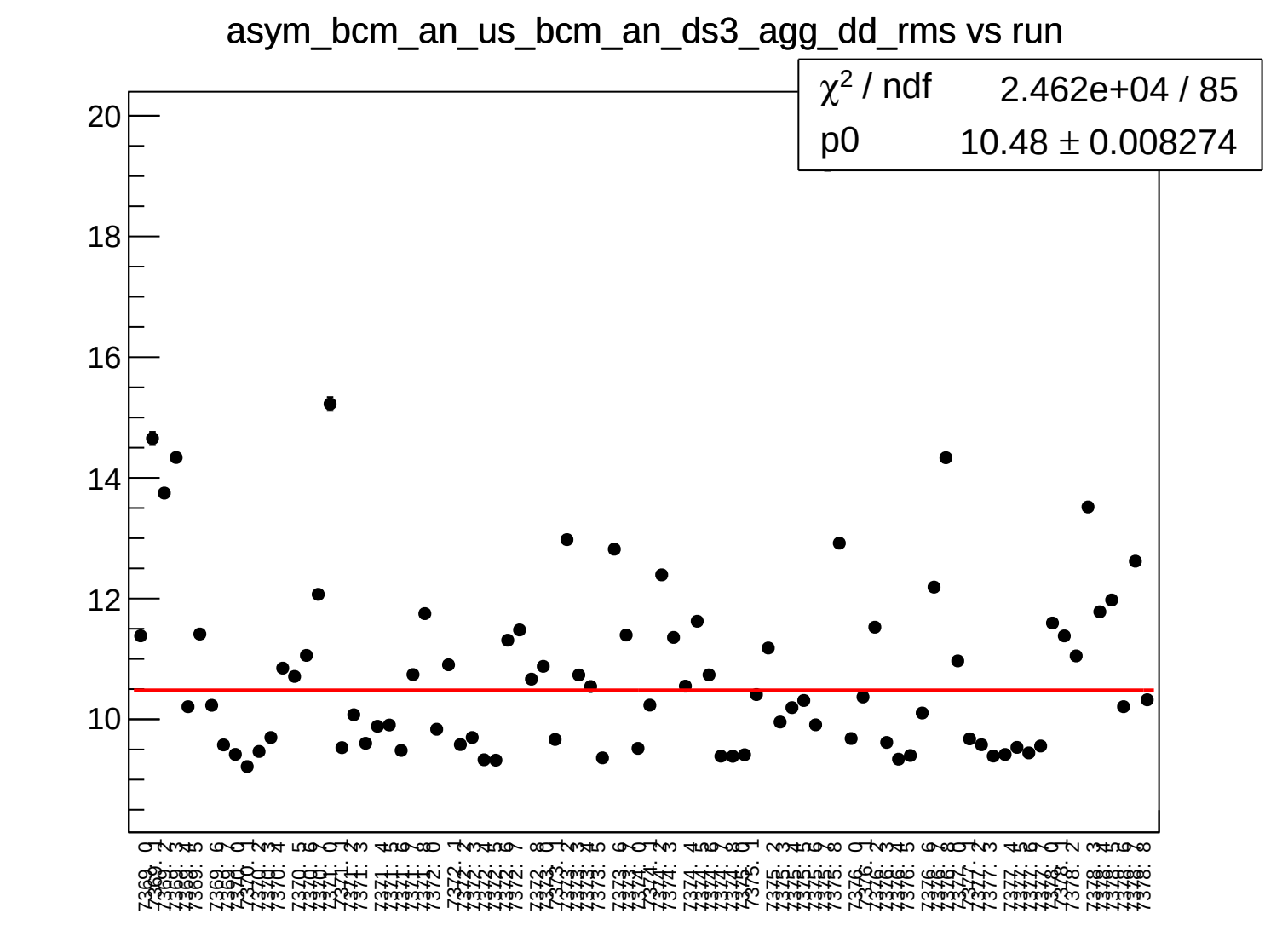

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.59 / 85
p0 −110.3 ± 162.6
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 8.716
Std Dev 67.37
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

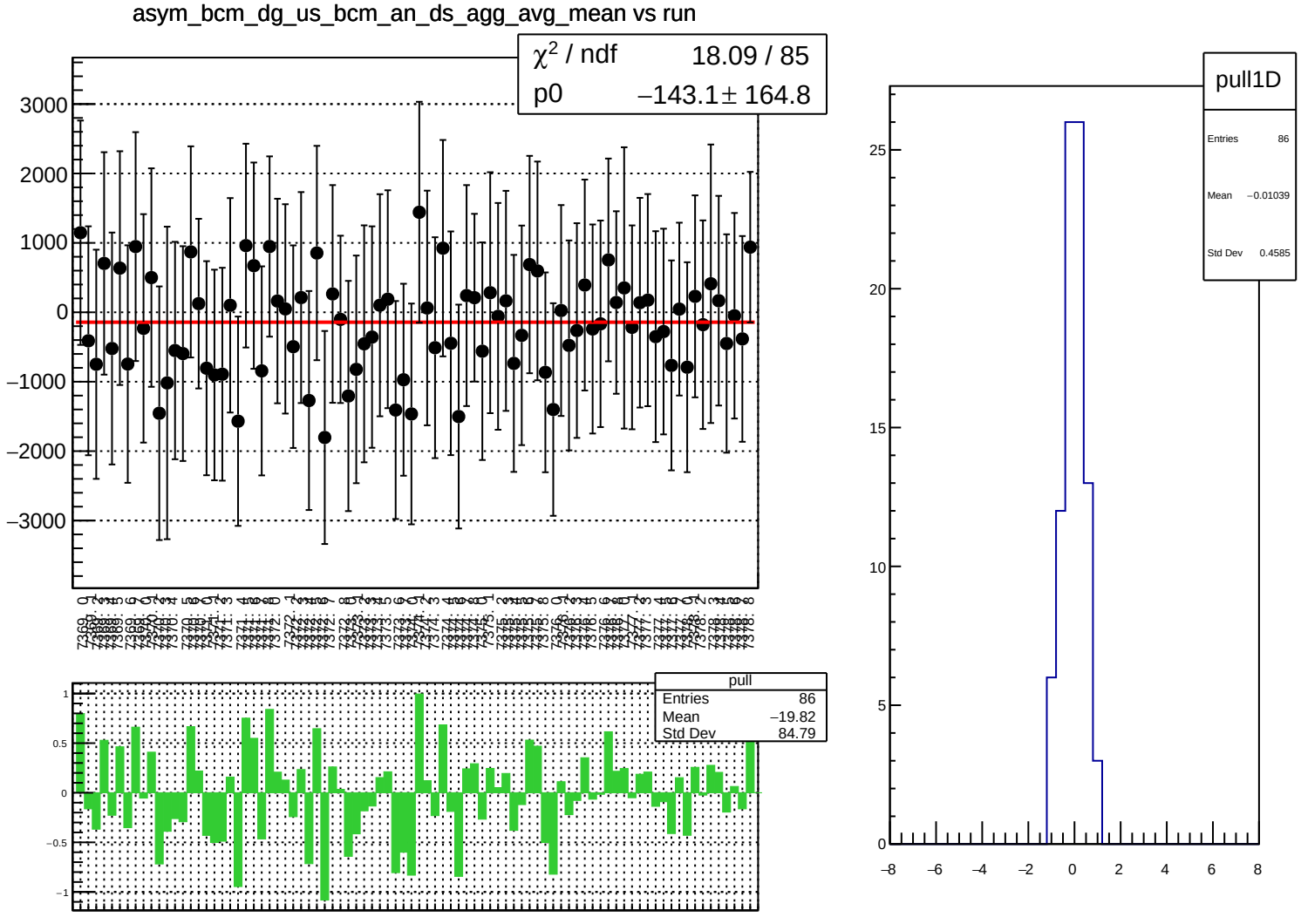

pull1D
Entries 86
Mean −0.01158
Std Dev 0.4117
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

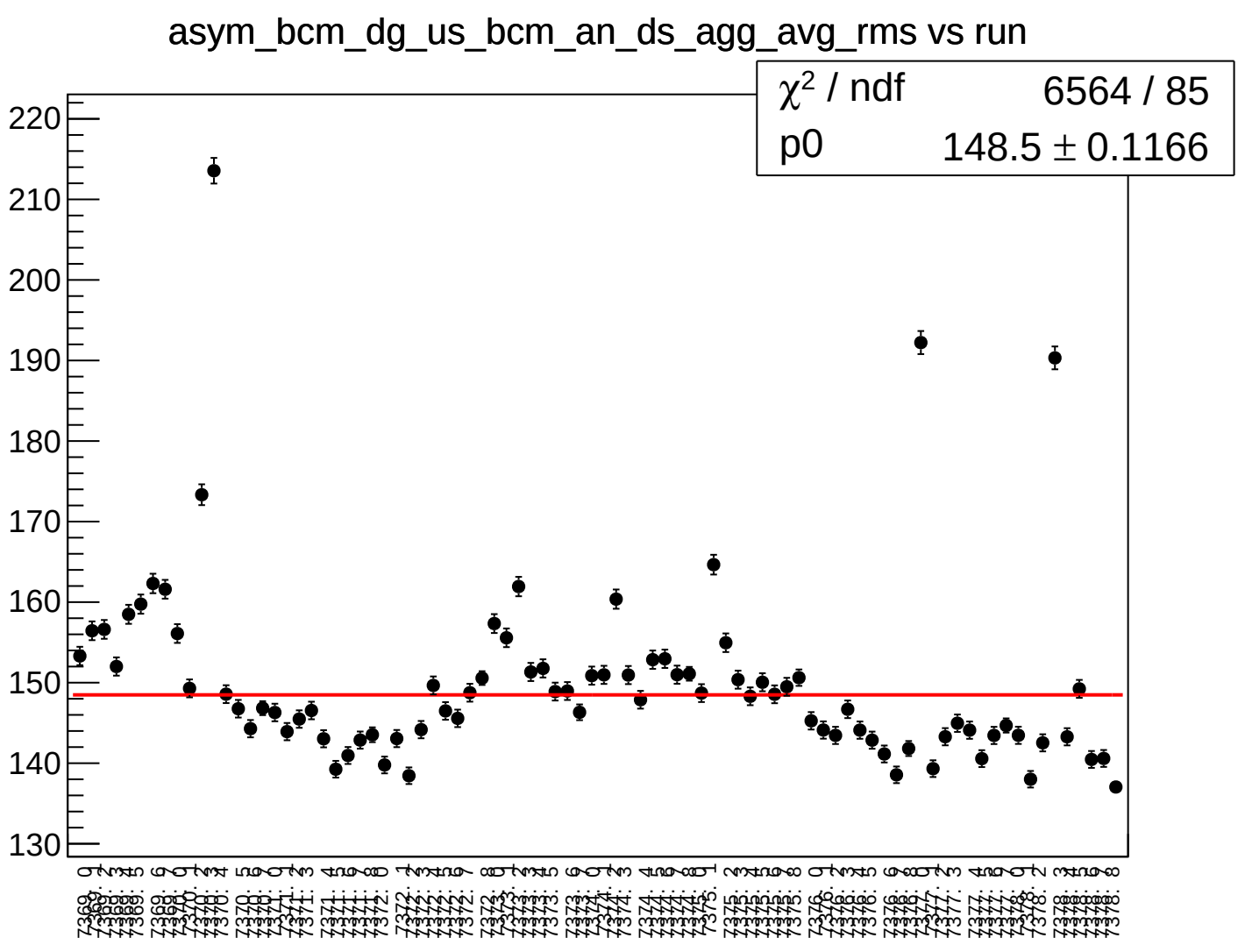

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 6797 / 85
p0 146.4 ± 0.1149
220
210
200
190
180
170
160
150
140
130

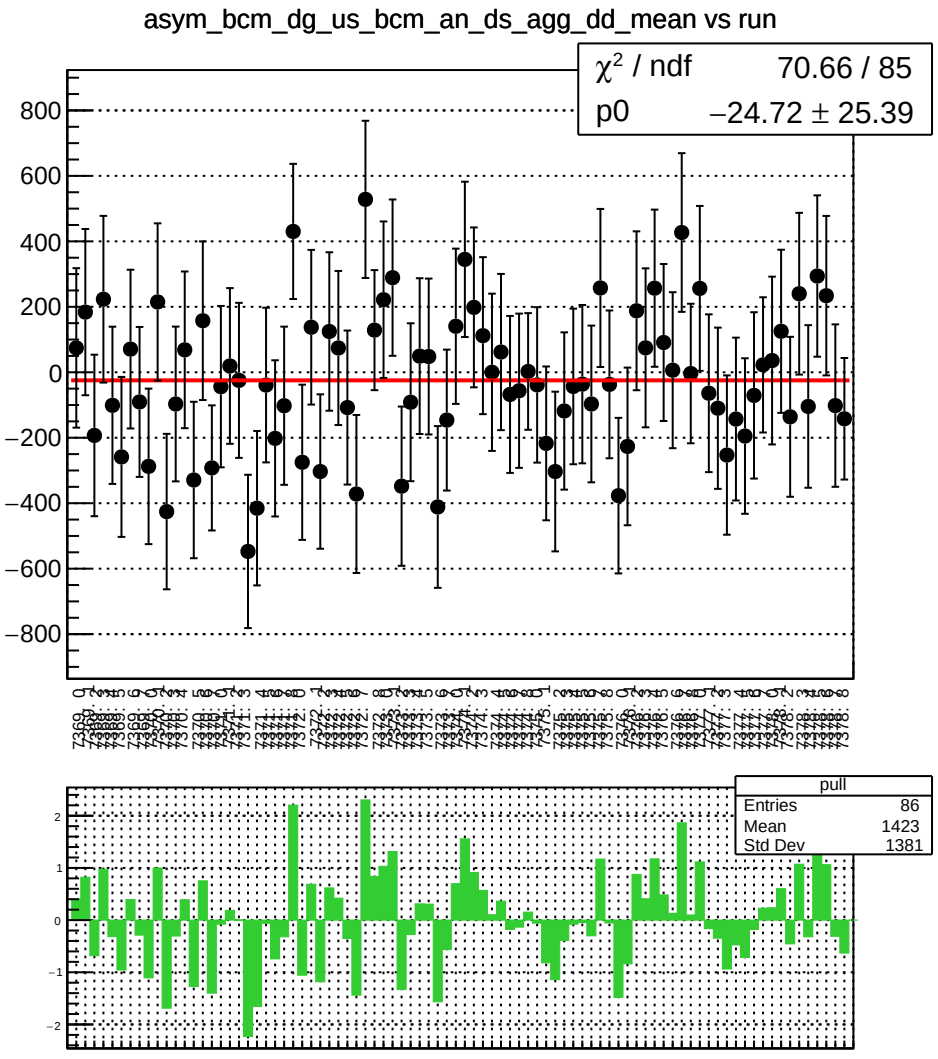

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 89.44 / 85
p0 9.096 ± 11.7
pull
Entries 86
Mean 349.3
Std Dev 297.9

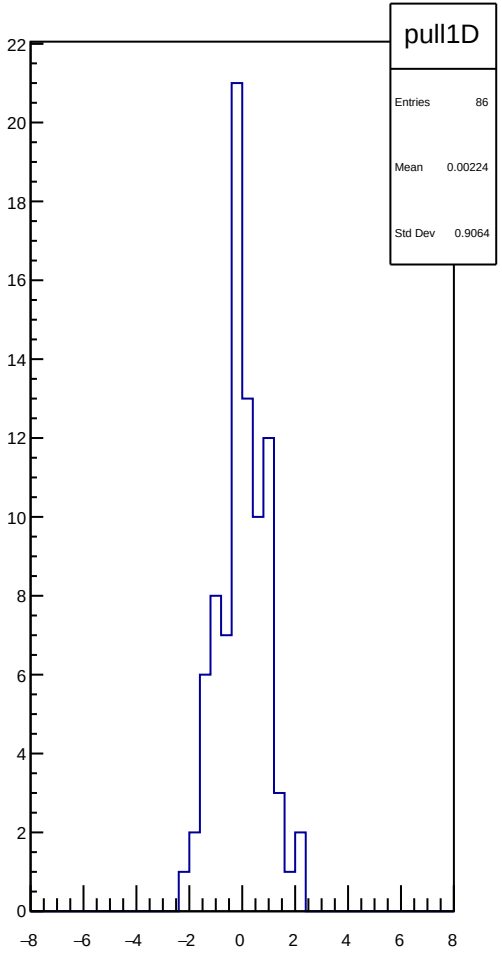

pull1D
Entries 86
Mean 0.007148
Std Dev 1.02

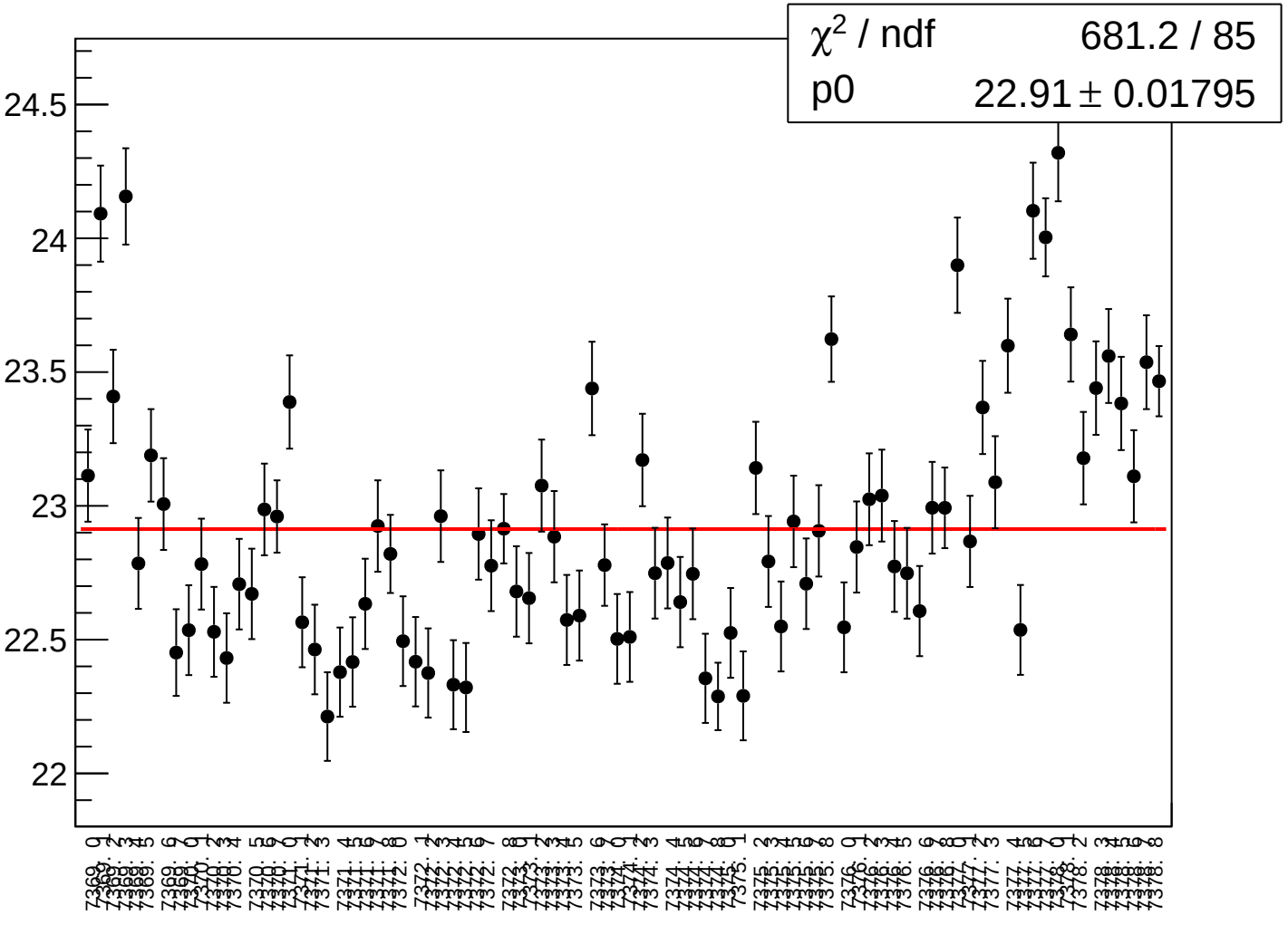

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.462e+04 / 85
p0 10.48 ± 0.008274
20
18
16
14
12
10

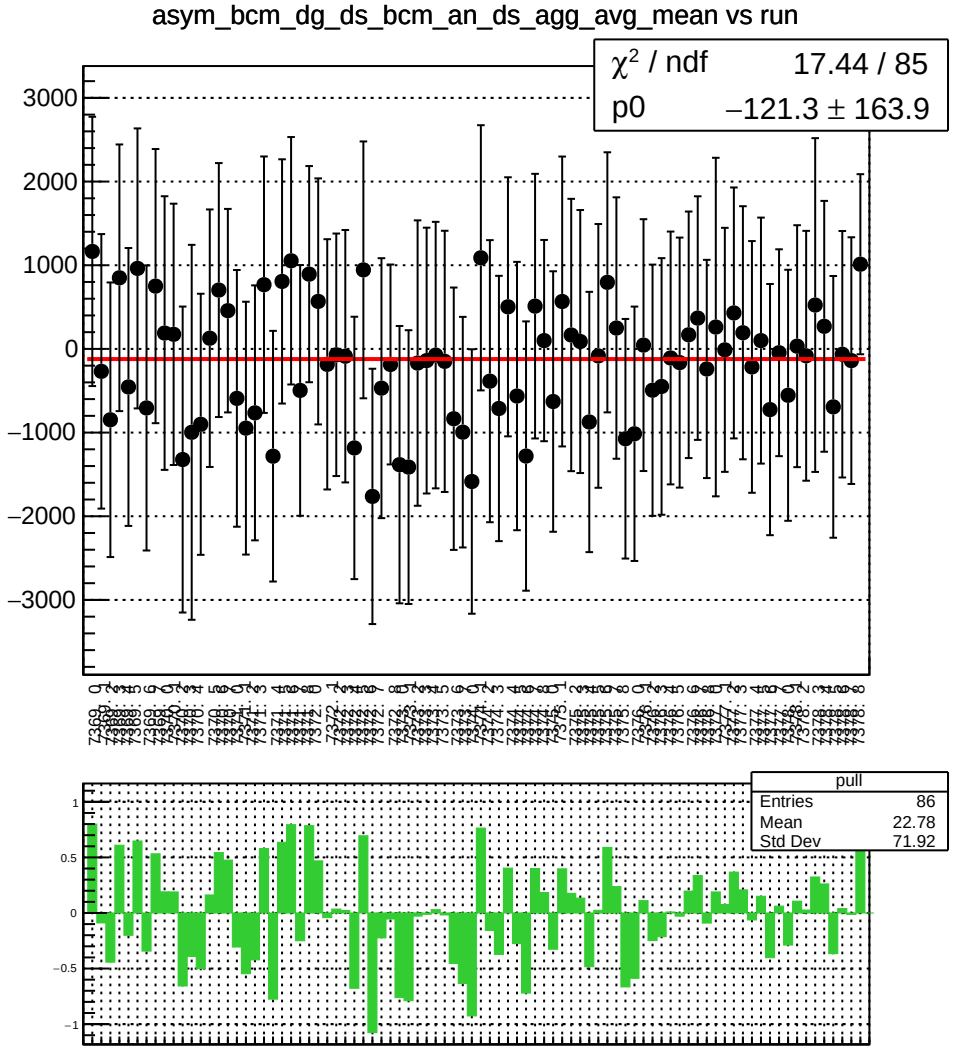

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.09 / 85
p0 −143.1± 164.8
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −19.82
Std Dev 84.79
1
0.5
0
−0.5
−1
pull1D
Entries 86
Mean −0.01039
Std Dev 0.4585
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

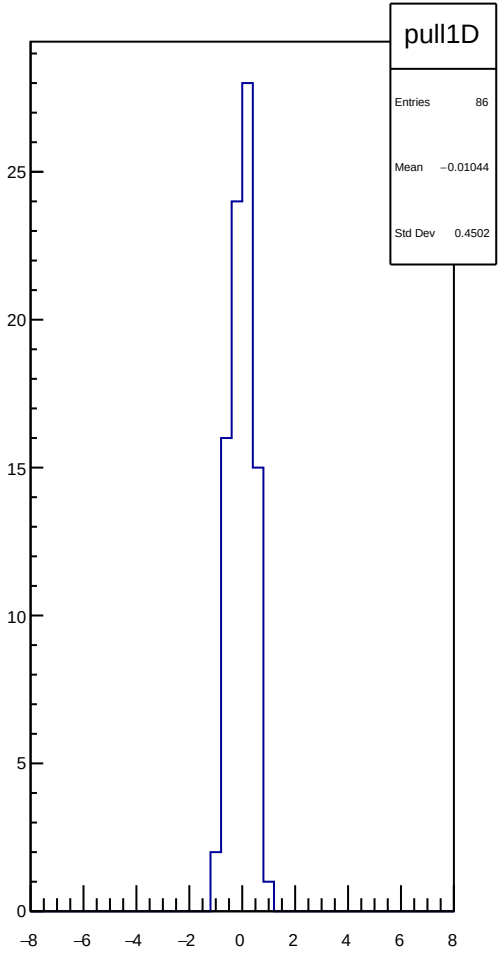

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 6564 / 85
p0 148.5 ± 0.1166
220
210
200
190
180
170
160
150
140
130

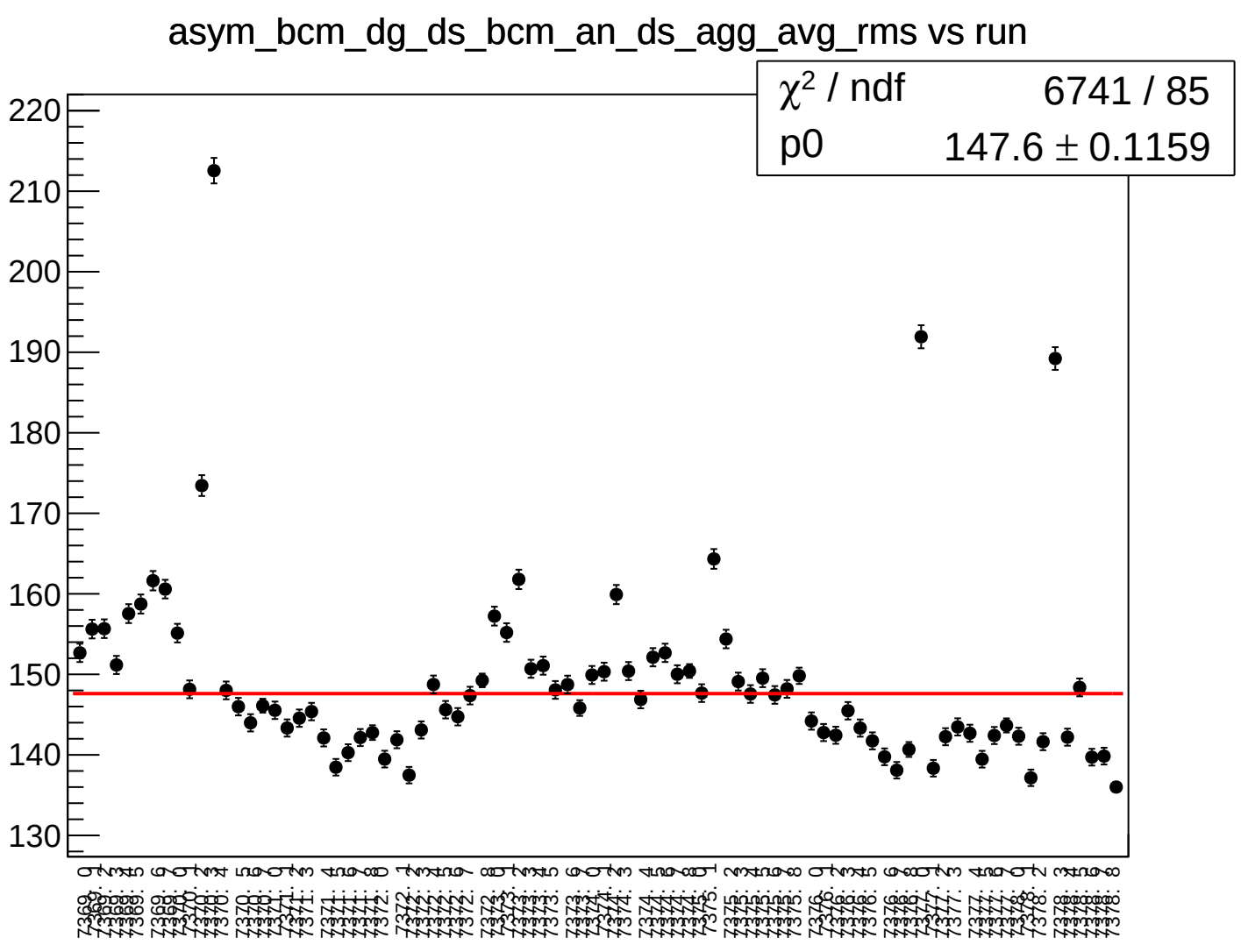

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 70.66 / 85
p0 −24.72 ± 25.39
pull
Entries 86
Mean 1423
Std Dev 1381

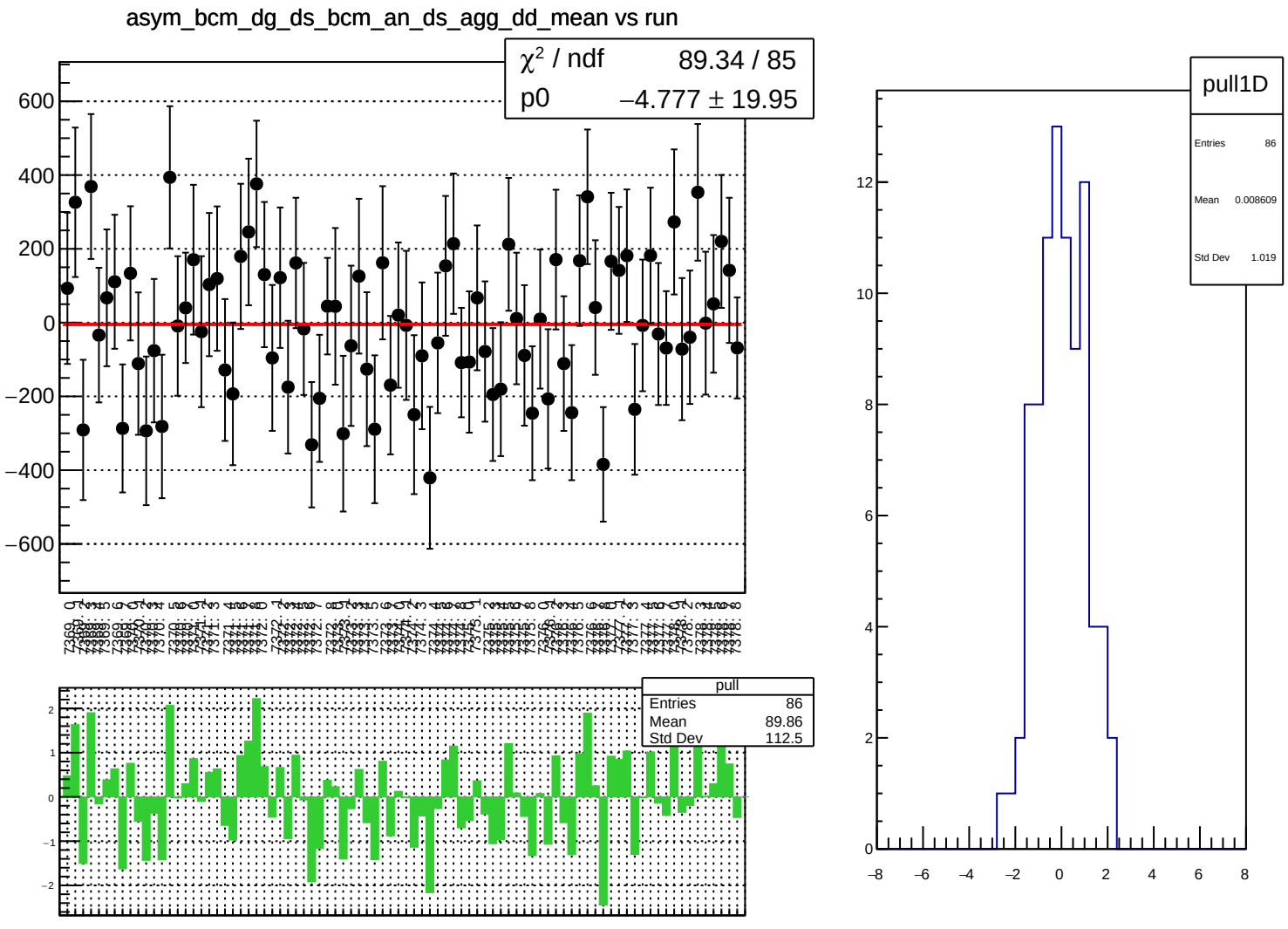

pull1D
Entries 86
Mean 0.00224
Std Dev 0.9064

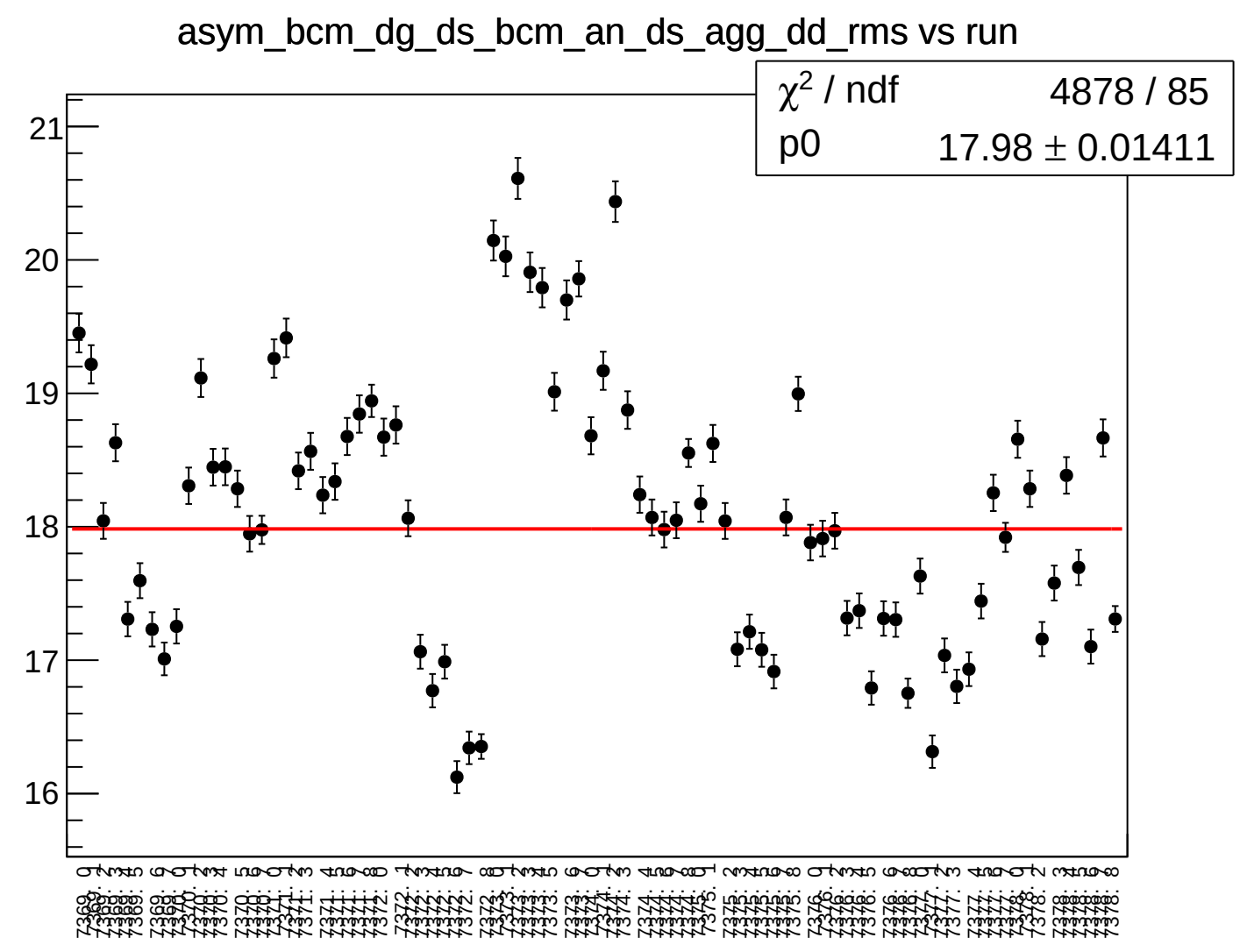

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 681.2 / 85
p0 22.91 ± 0.01795
24.5
24
23.5
23
22.5
22

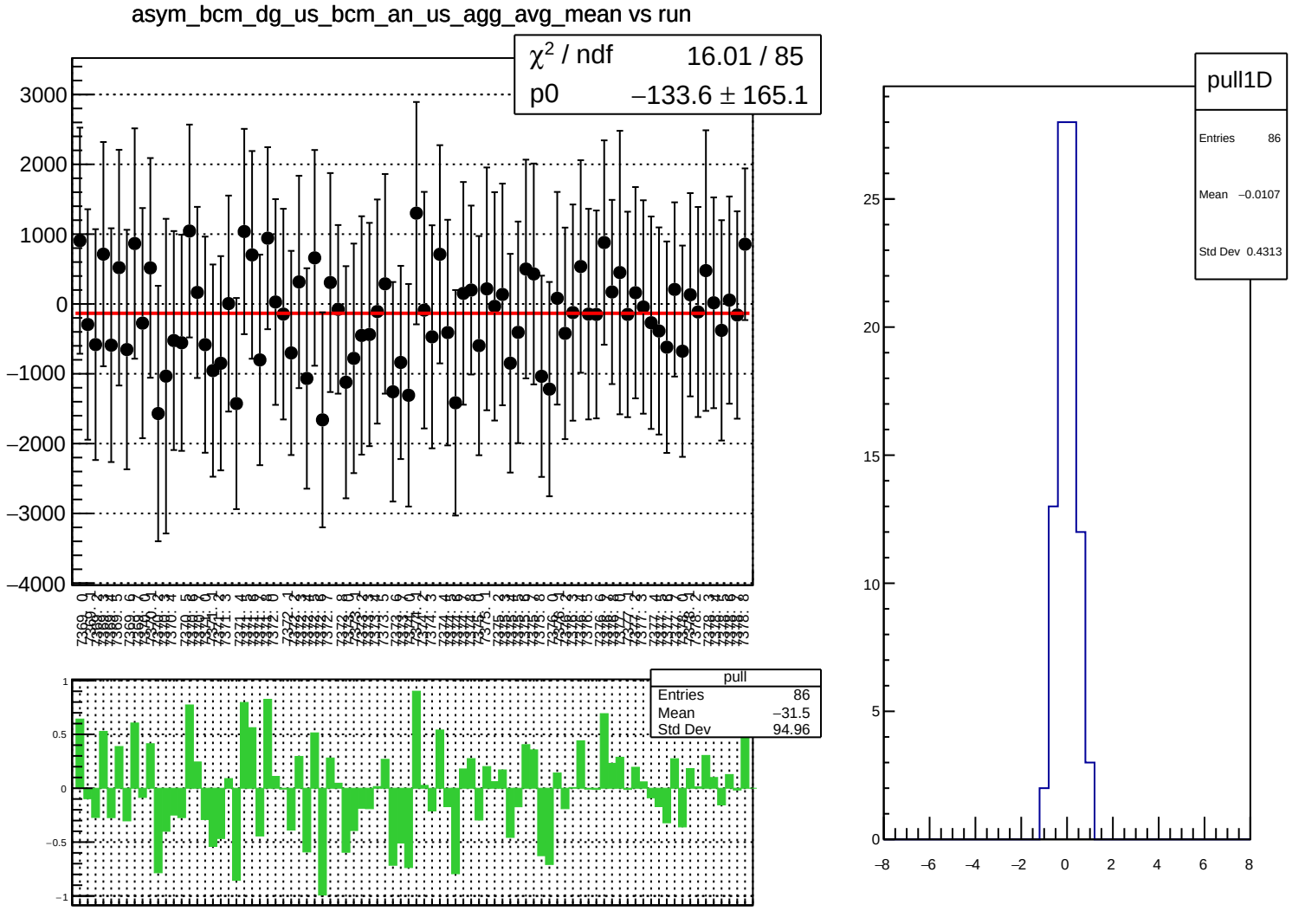

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.44 / 85
p0 −121.3 ± 163.9
pull
Entries 86
Mean 22.78
Std Dev 71.92

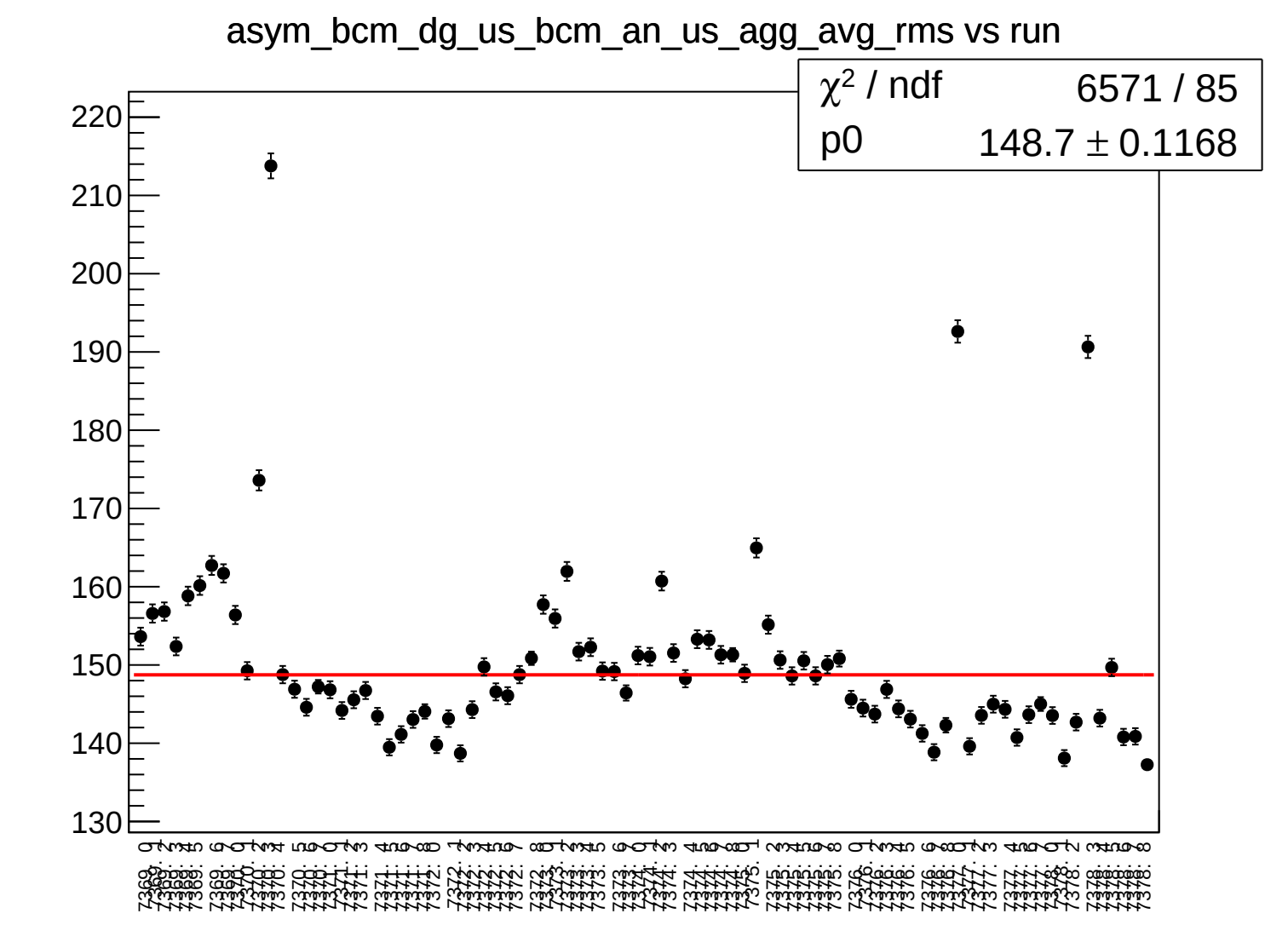

pull1D
Entries 86
Mean −0.01044
Std Dev 0.4502

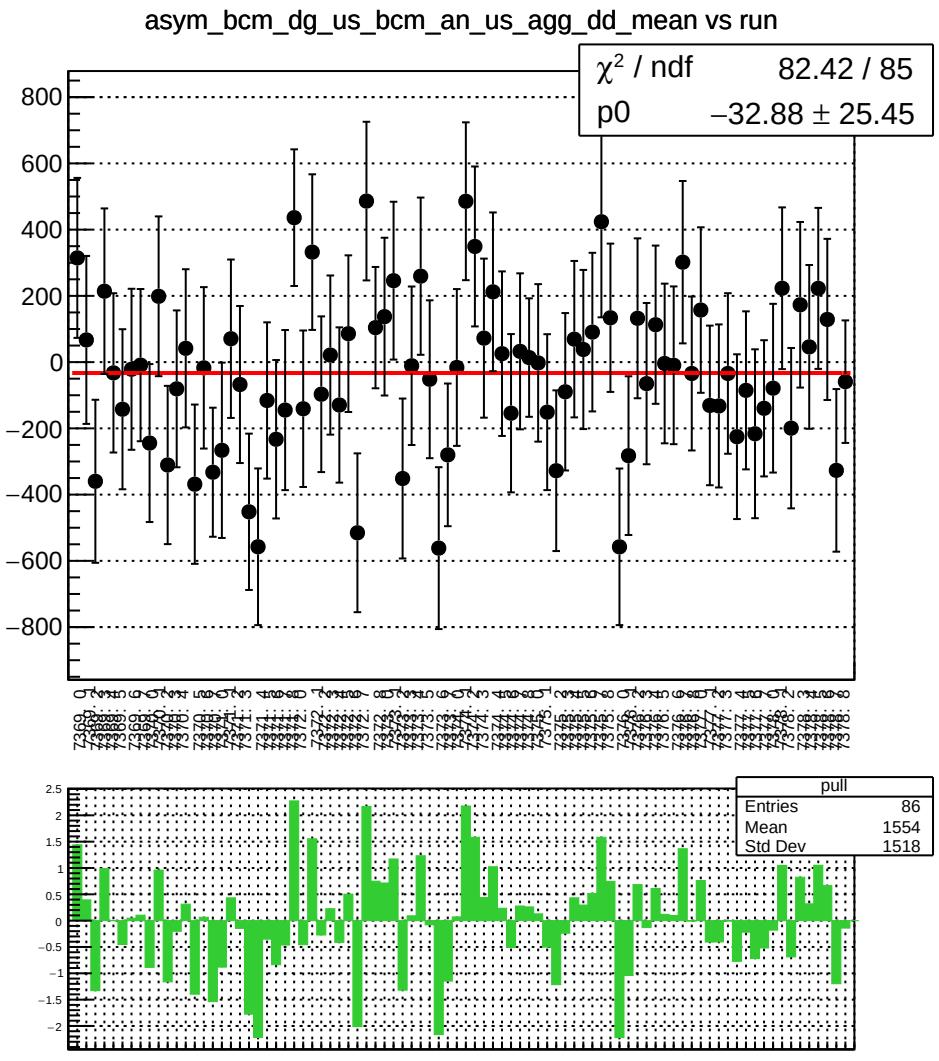

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 6741 / 85
p0 147.6 ± 0.1159
220
210
200
190
180
170
160
150
140
130

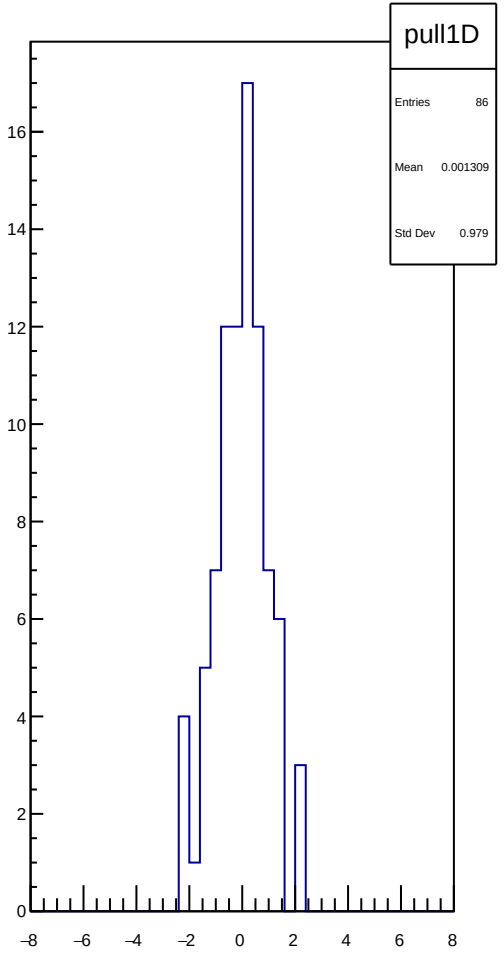

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 89.34 / 85
p0 −4.777 ± 19.95
pull
Entries 86
Mean 89.86
Std Dev 112.5
pull1D
Entries 86
Mean 0.008609
Std Dev 1.019

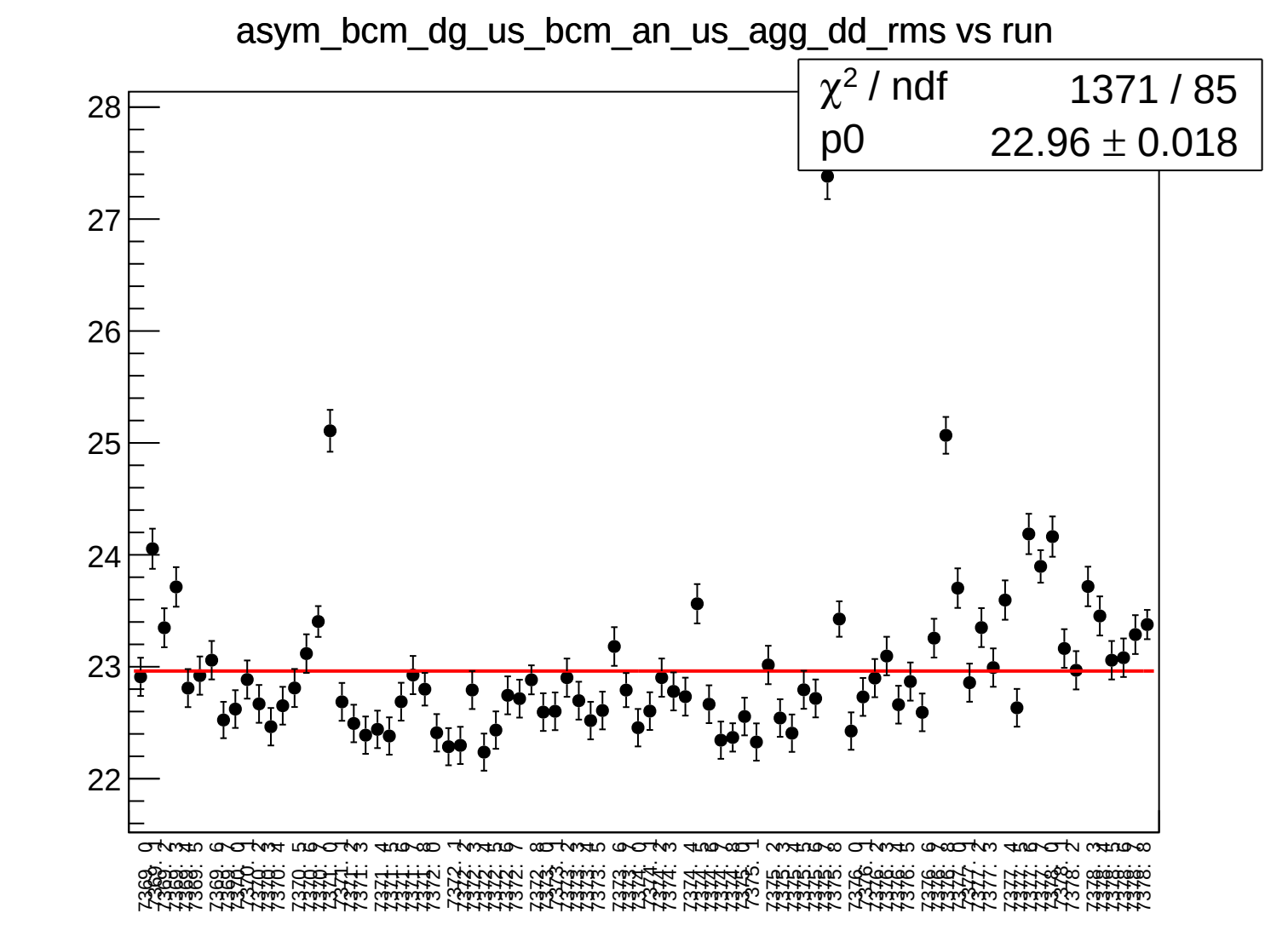

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4878 / 85
p0 17.98 ± 0.01411
21
20
19
18
17
16

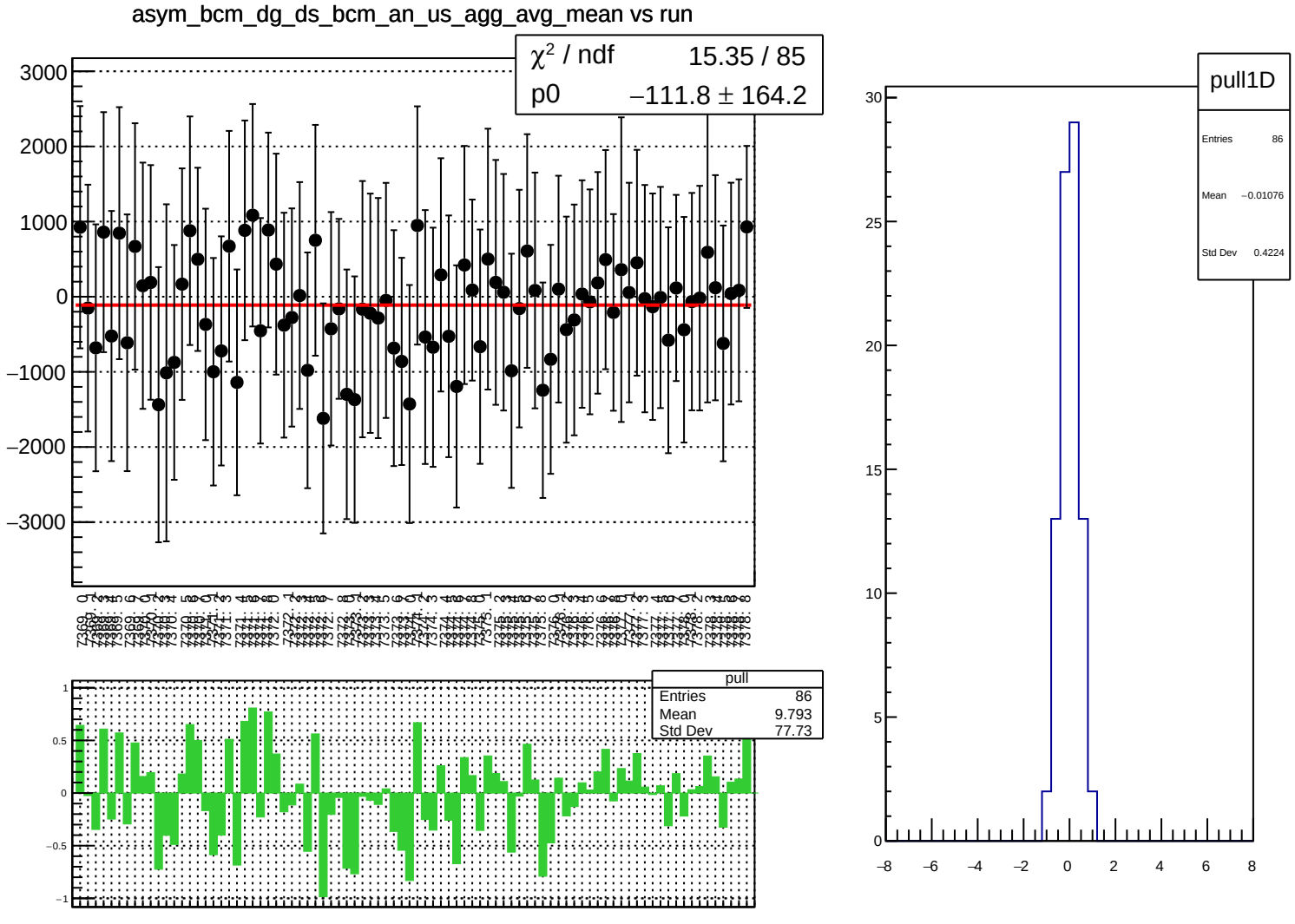

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.01 / 85
p0 −133.6 ± 165.1
pull
Entries 86
Mean −31.5
Std Dev 94.96
pull1D
Entries 86
Mean −0.0107
Std Dev 0.4313

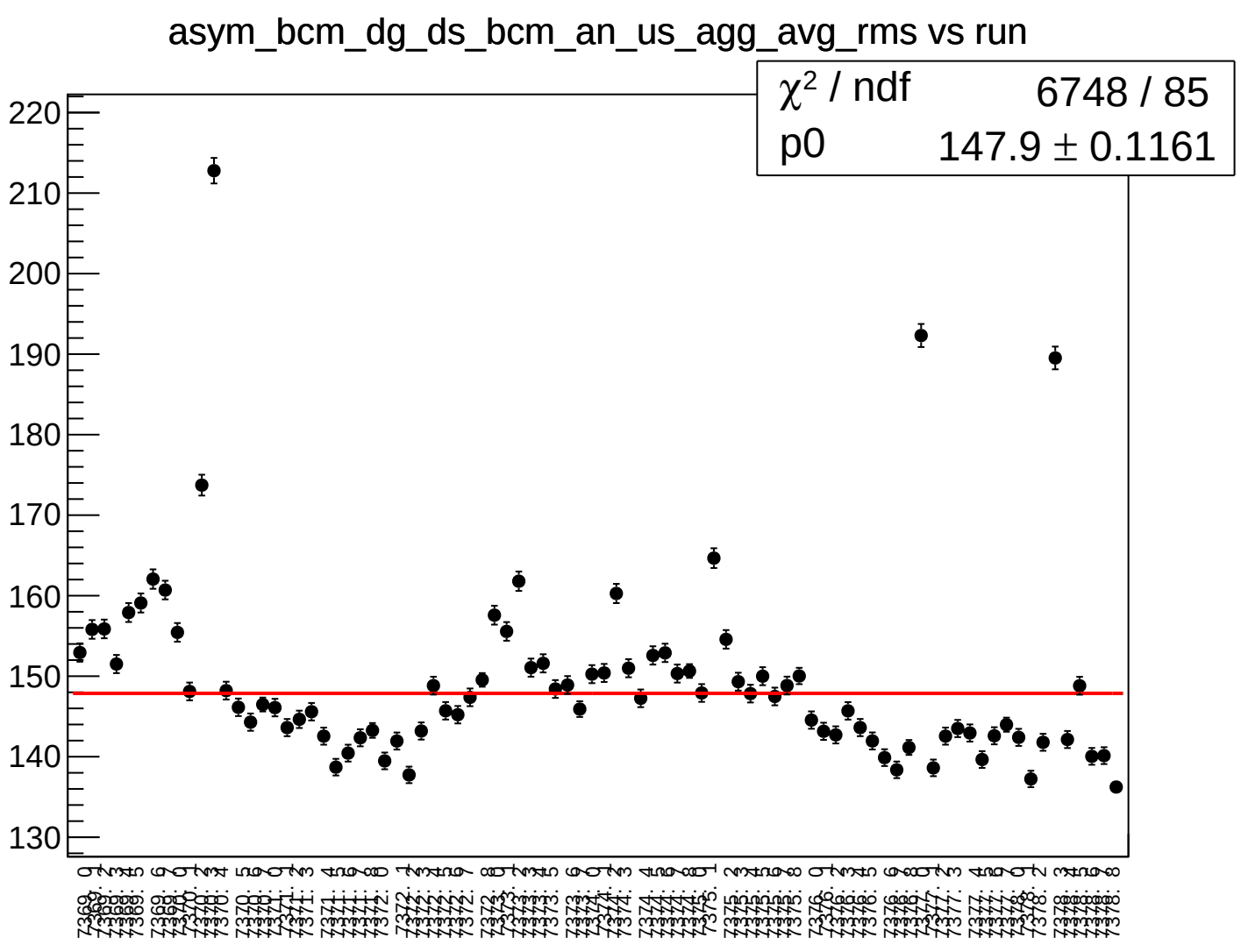

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 6571 / 85
p0 148.7 ± 0.1168
220
210
200
190
180
170
160
150
140
130

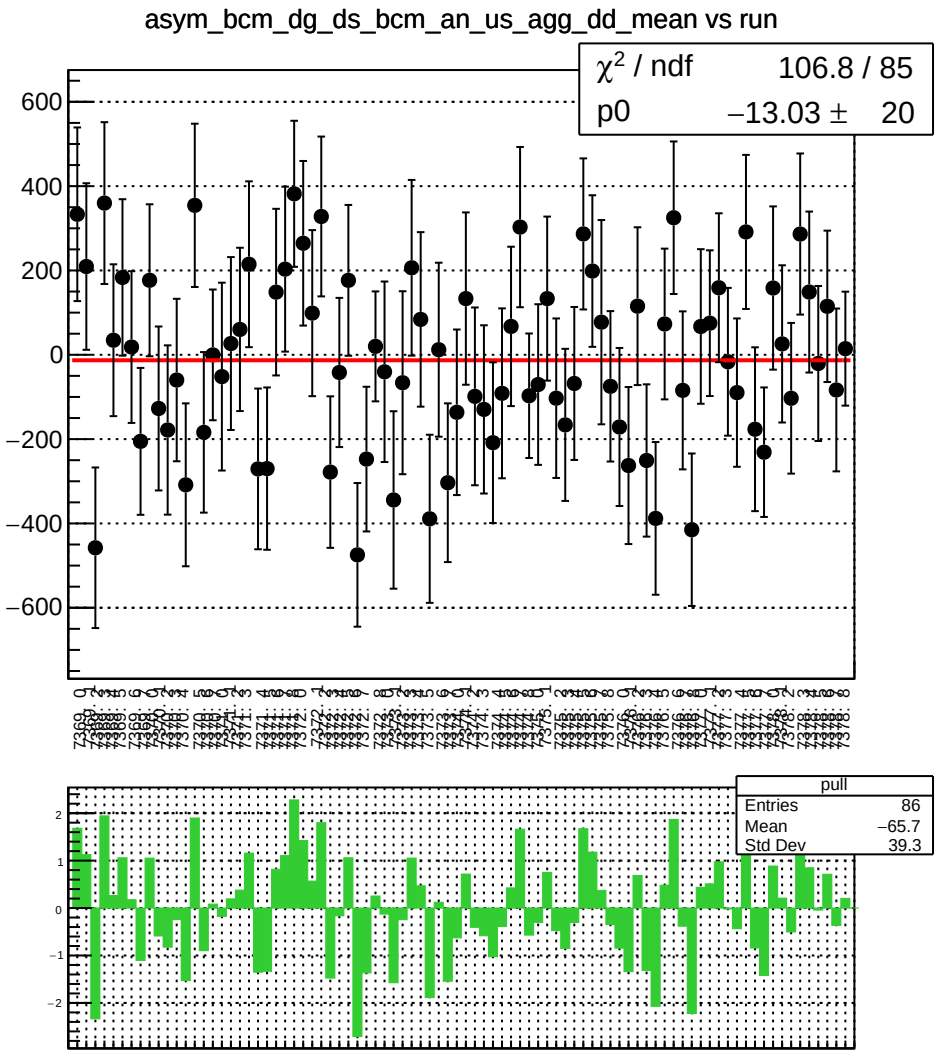

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.42 / 85
p0 −32.88 ± 25.45
pull
Entries 86
Mean 1554
Std Dev 1518

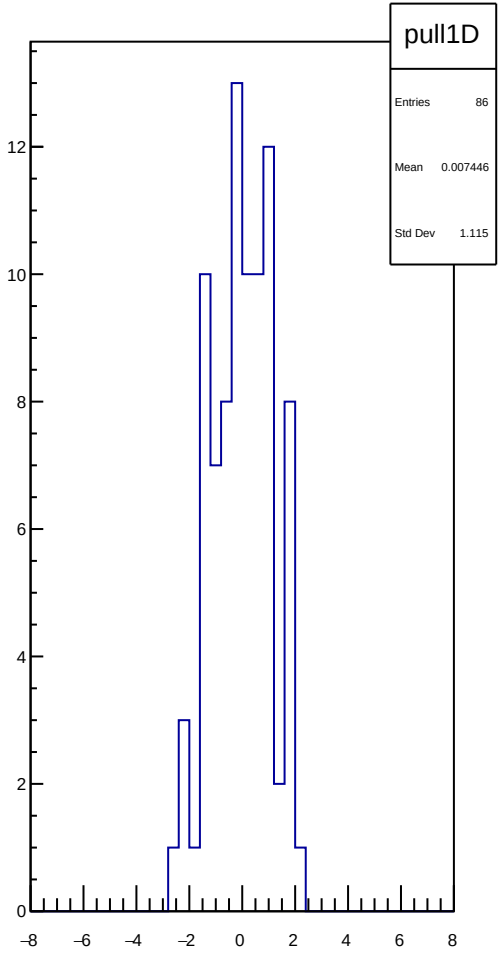

pull1D
Entries 86
Mean 0.001309
Std Dev 0.979

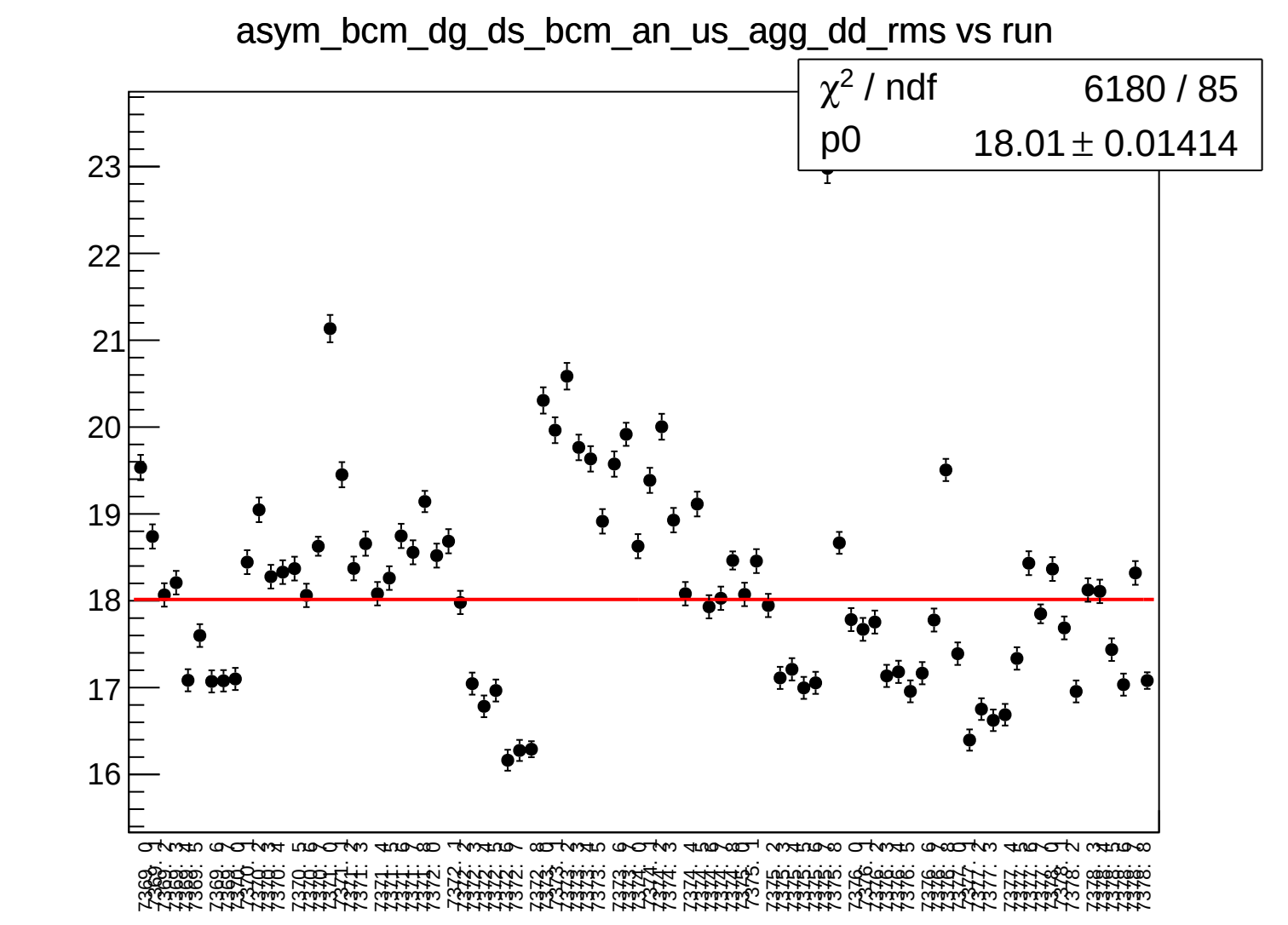

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1371 / 85
p0 22.96 ± 0.018
28
27
26
25
24
23
22

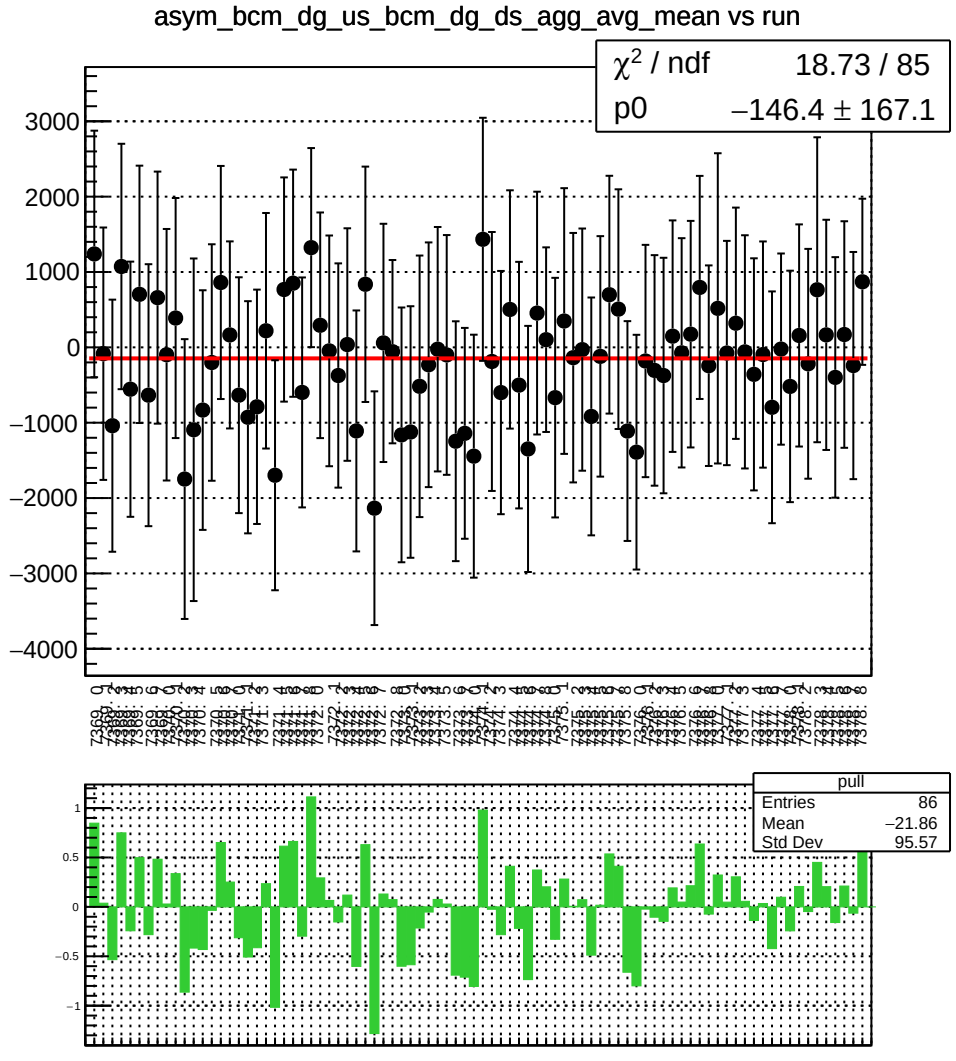

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.35 / 85
p0 −111.8 ± 164.2
pull
Entries 86
Mean 9.793
Std Dev 77.73
pull1D
Entries 86
Mean −0.01076
Std Dev 0.4224

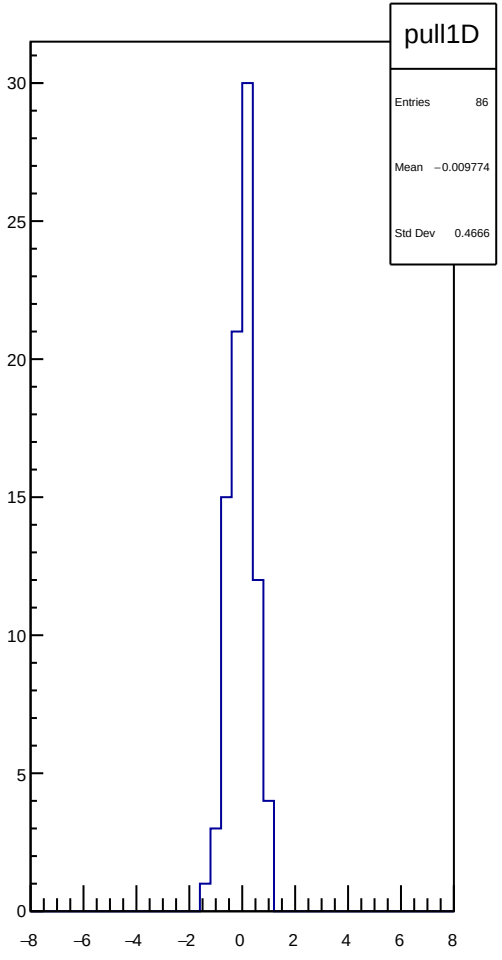

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 6748 / 85
p0 147.9 ± 0.1161
220
210
200
190
180
170
160
150
140
130

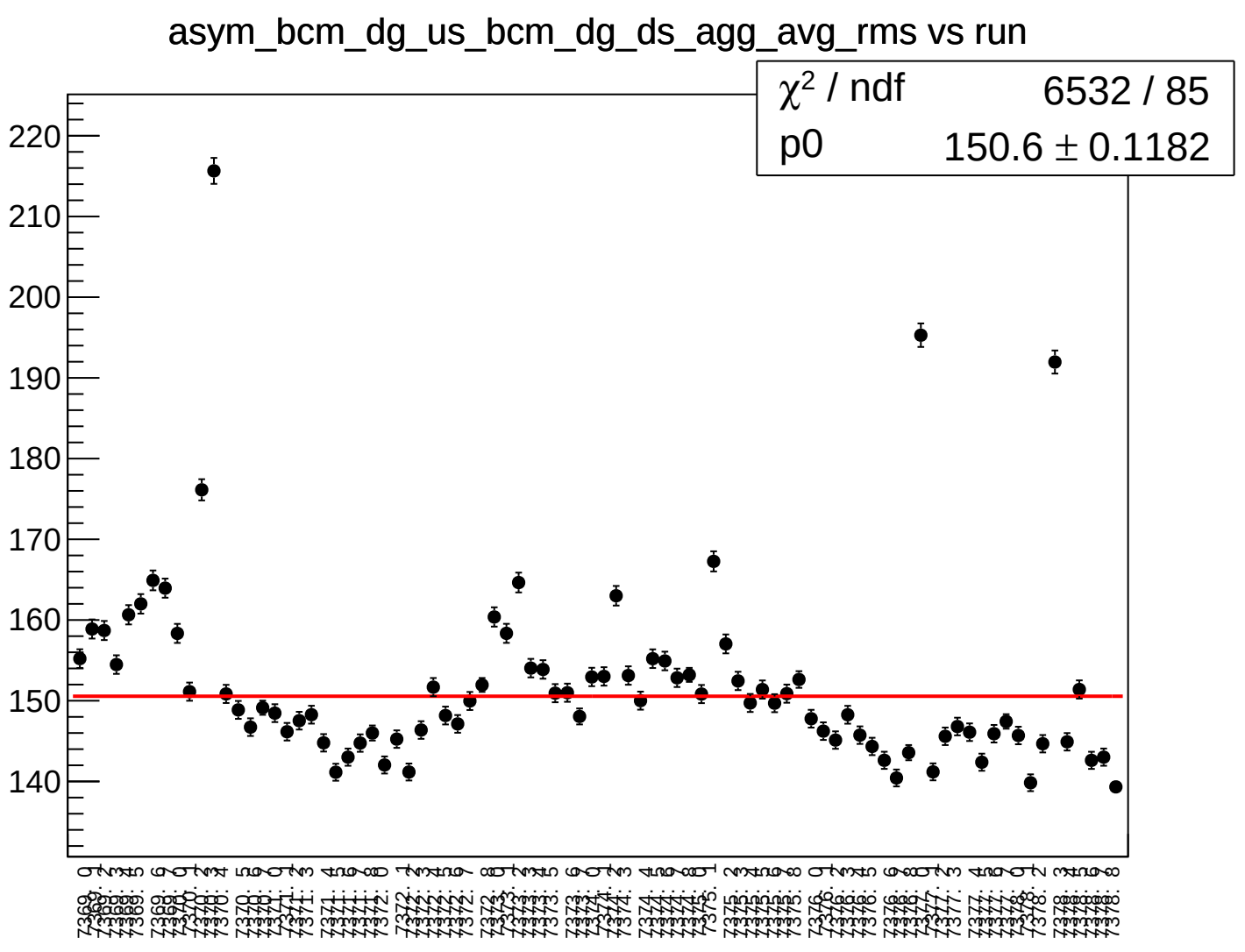

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 106.8 / 85
p0 −13.03 ± 20
600
400
200
0
−200
−400
−600
pull
Entries 86
Mean −65.7
Std Dev 39.3
2
1
0
−1
−2

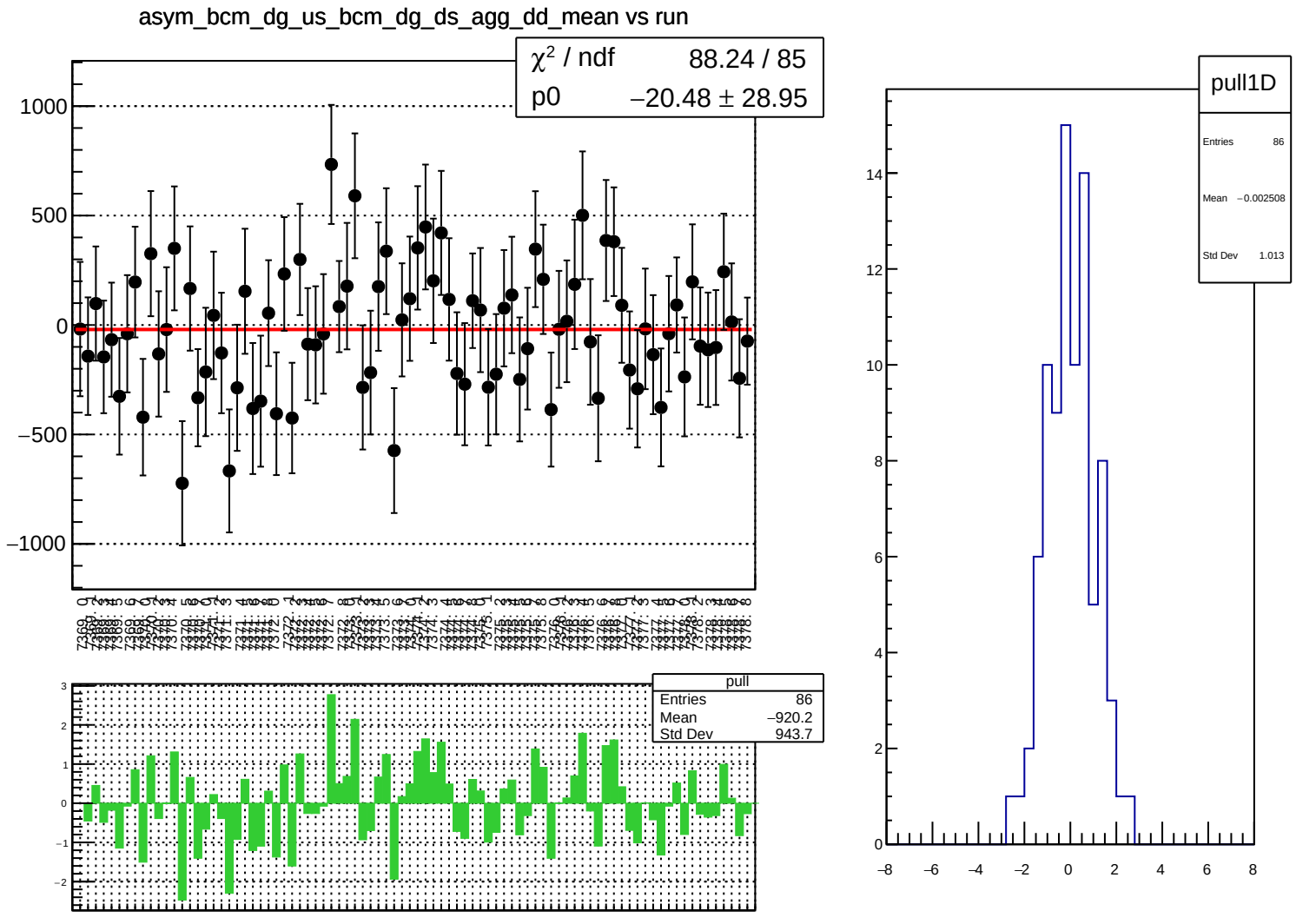

pull1D
Entries 86
Mean 0.007446
Std Dev 1.115
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

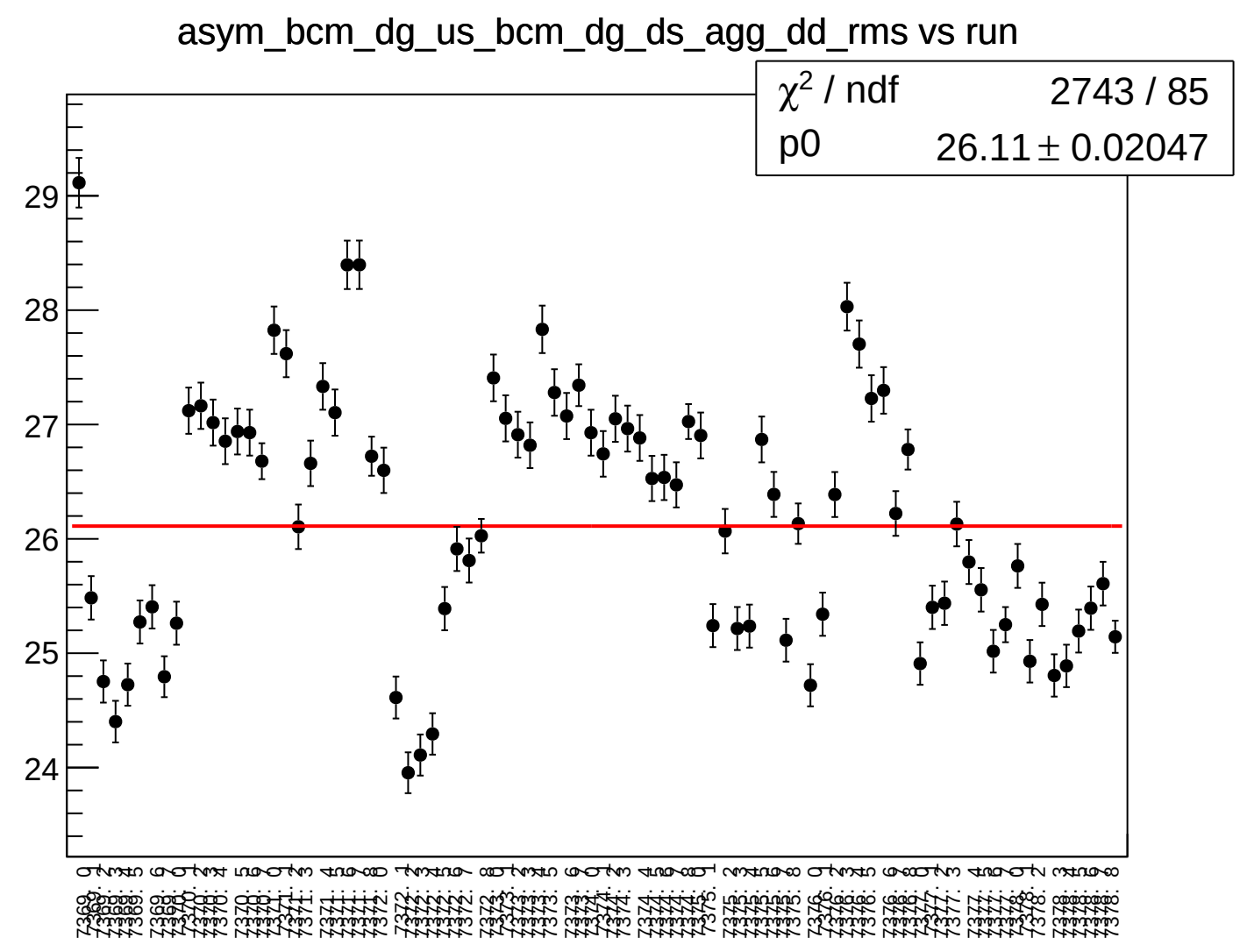

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 6180 / 85
p0 18.01 ± 0.01414
23
22
21
20
19
18
17
16

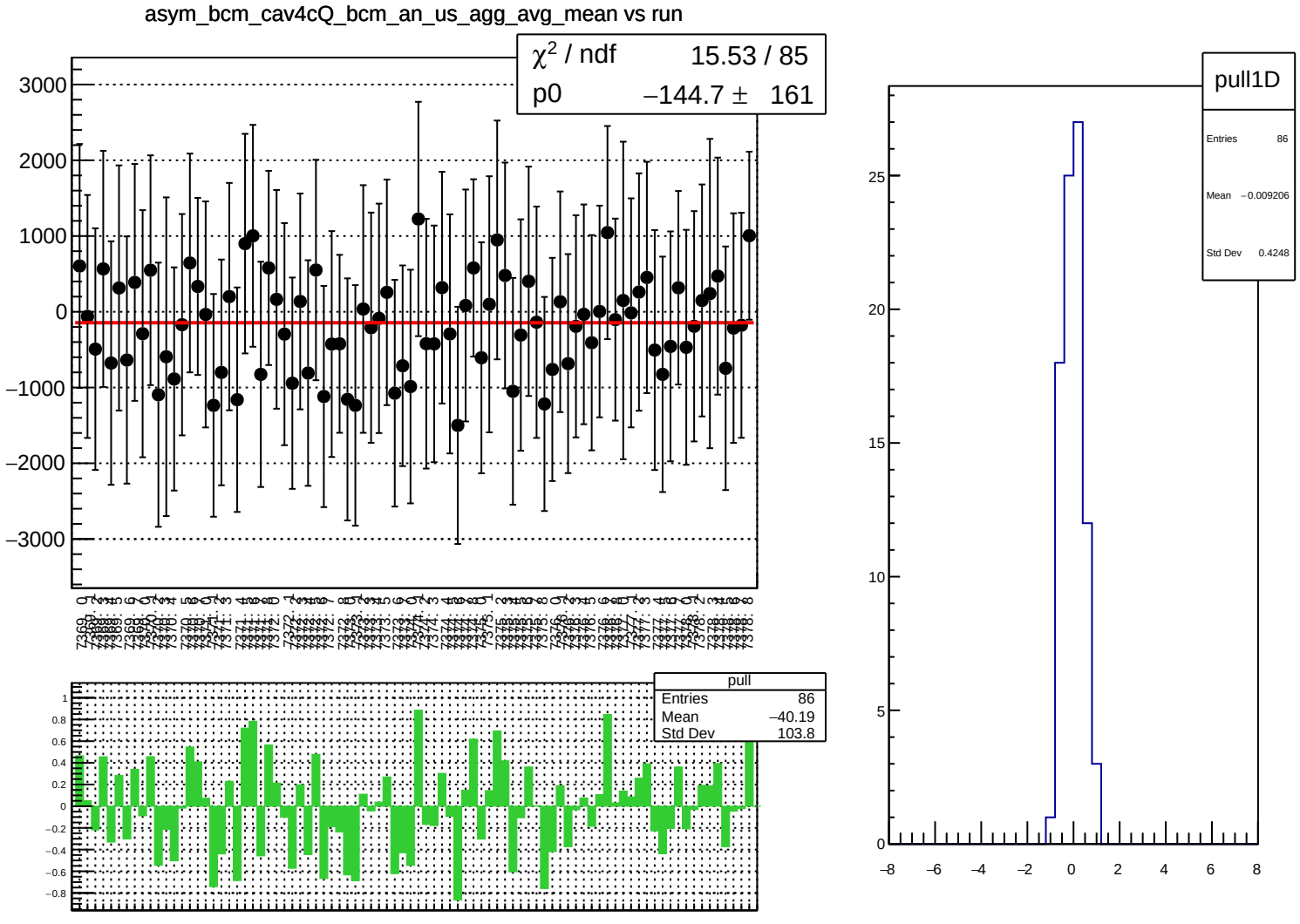

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.73 / 85
p0 −146.4 ± 167.1
pull
Entries 86
Mean −21.86
Std Dev 95.57

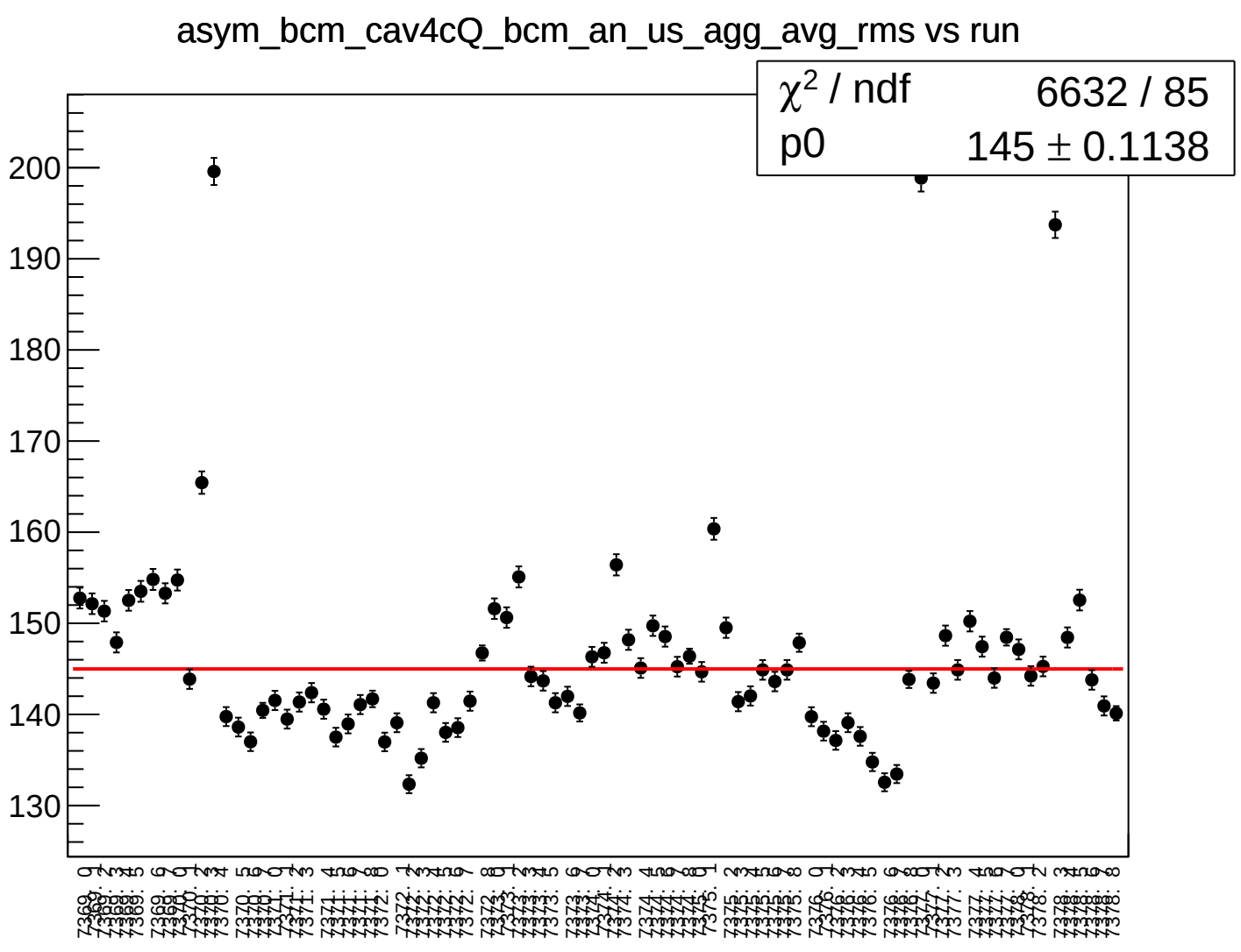

pull1D
Entries 86
Mean −0.009774
Std Dev 0.4666

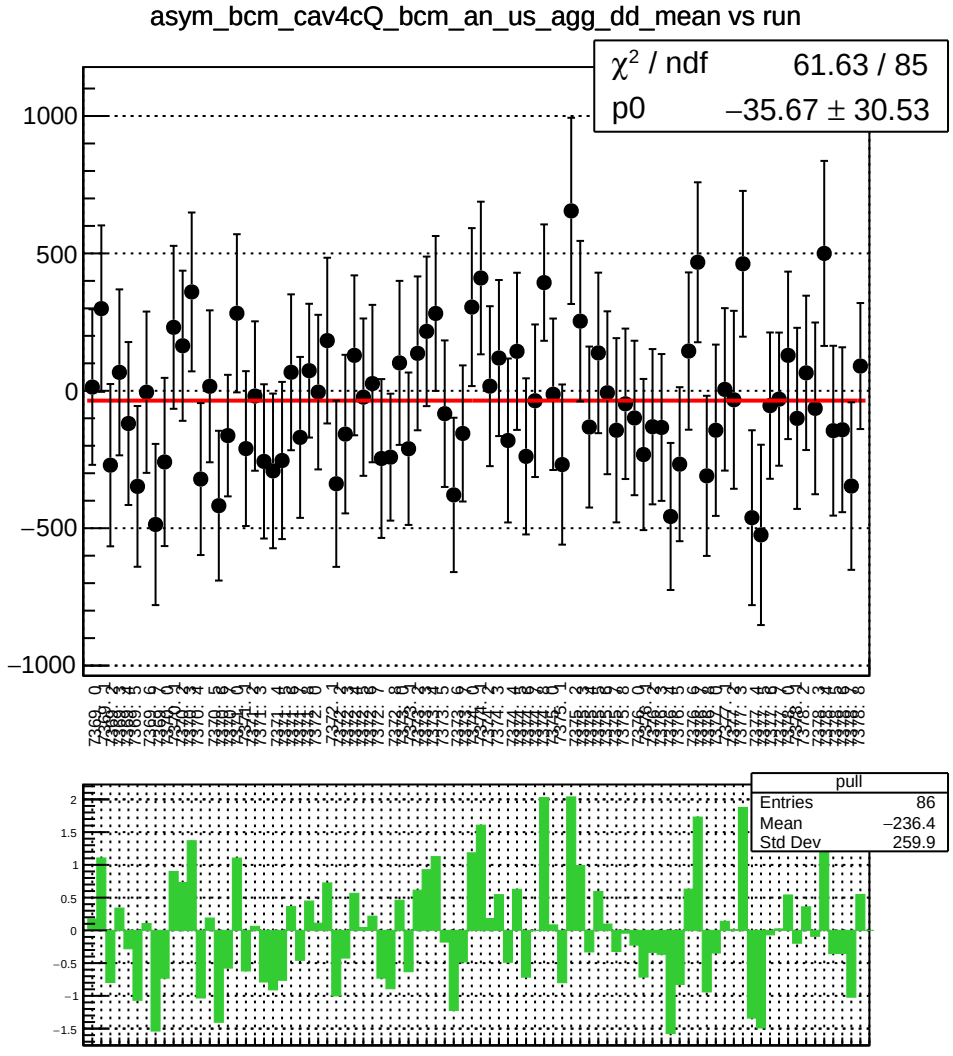

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 6532 / 85
p0 150.6 ± 0.1182
220
210
200
190
180
170
160
150
140

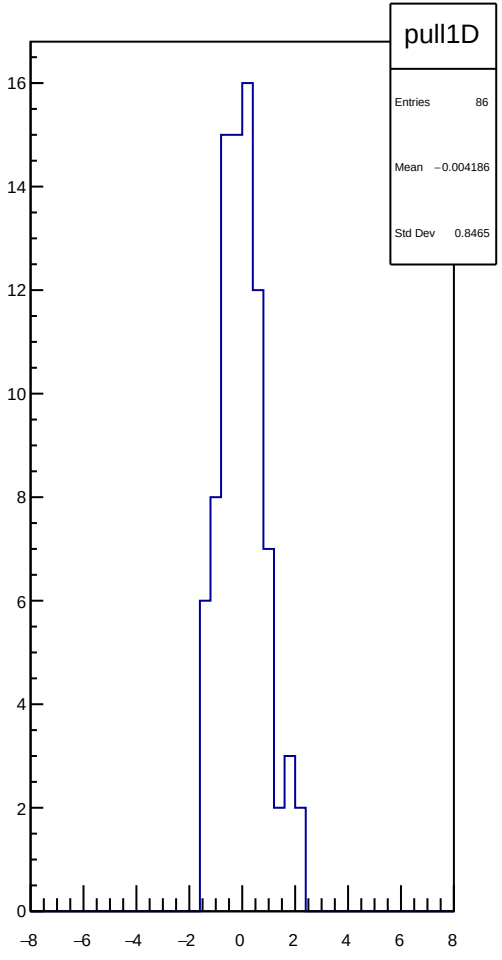

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 88.24 / 85
p0 −20.48 ± 28.95
1000
500
0
−500
−1000
pull
Entries 86
Mean −920.2
Std Dev 943.7
3
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.002508
Std Dev 1.013
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

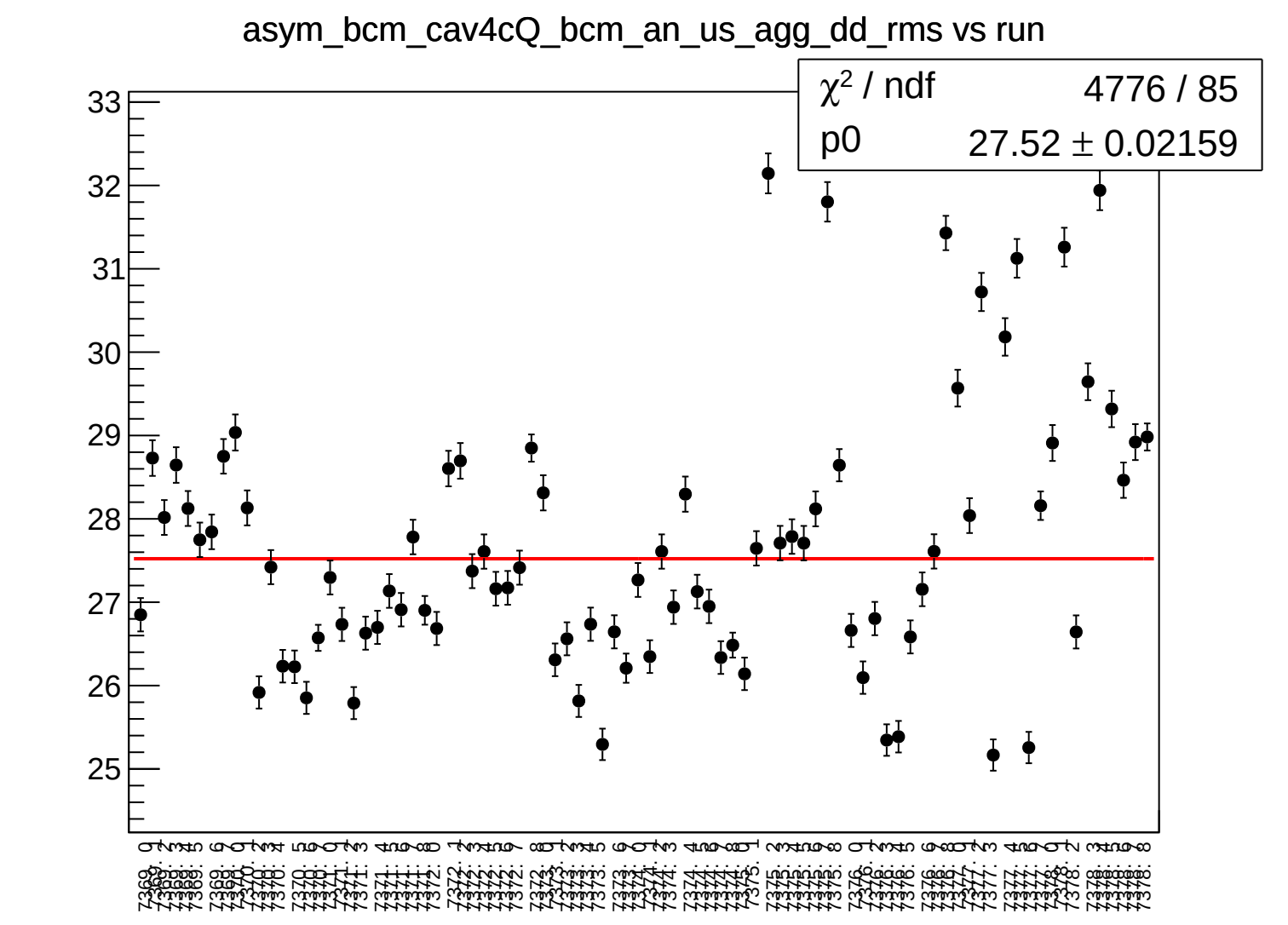

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2743 / 85
p0 26.11 ± 0.02047
29
28
27
26
25
24

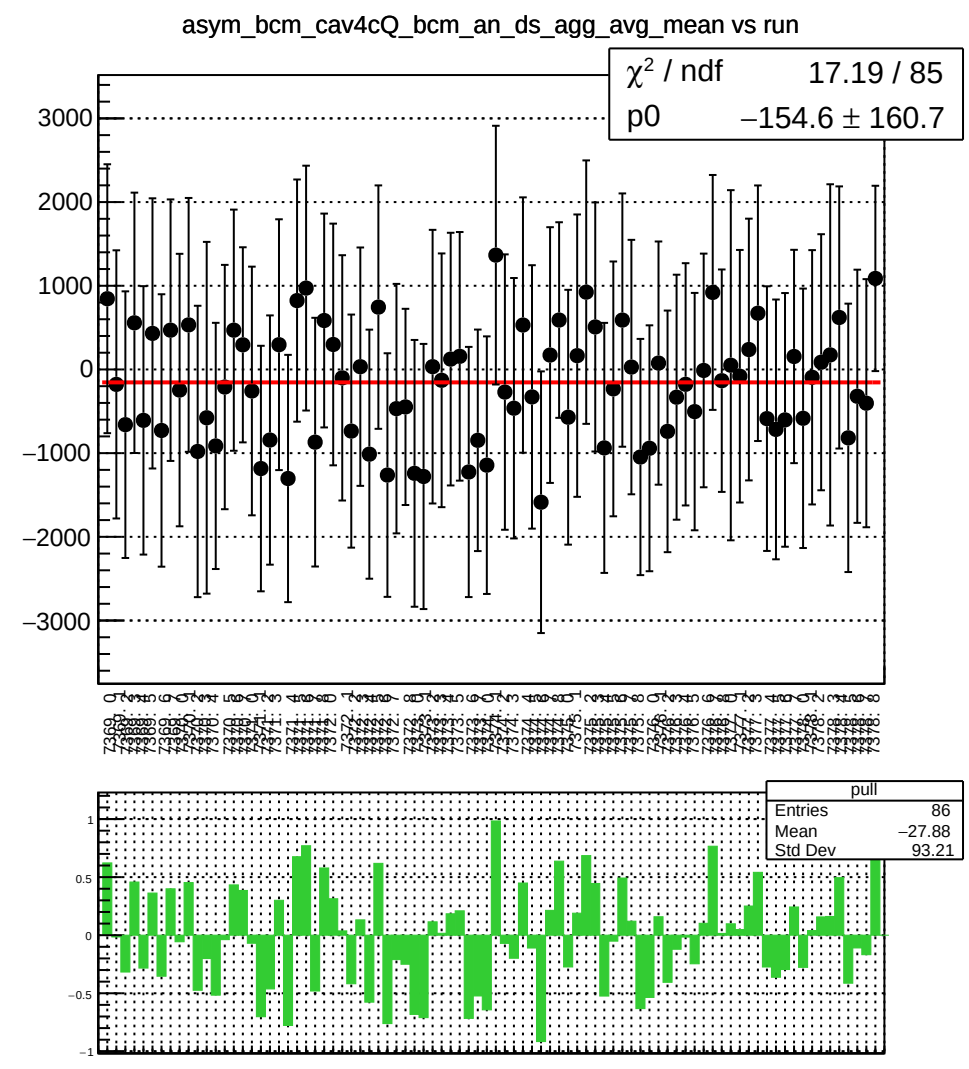

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.53 / 85
p0 −144.7 ± 161
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −40.19
Std Dev 103.8
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 86
Mean −0.009206
Std Dev 0.4248
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

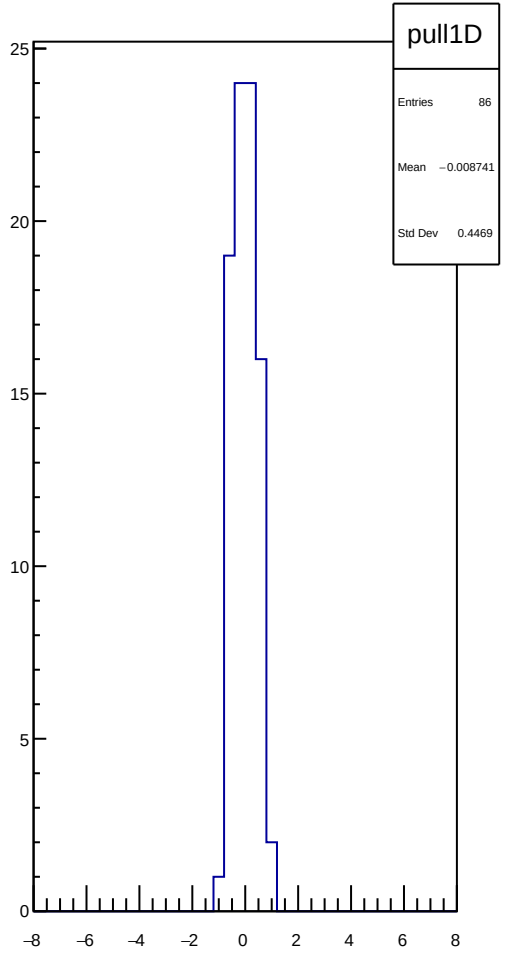

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 6632 / 85
p0 145 ± 0.1138
200
190
180
170
160
150
140
130

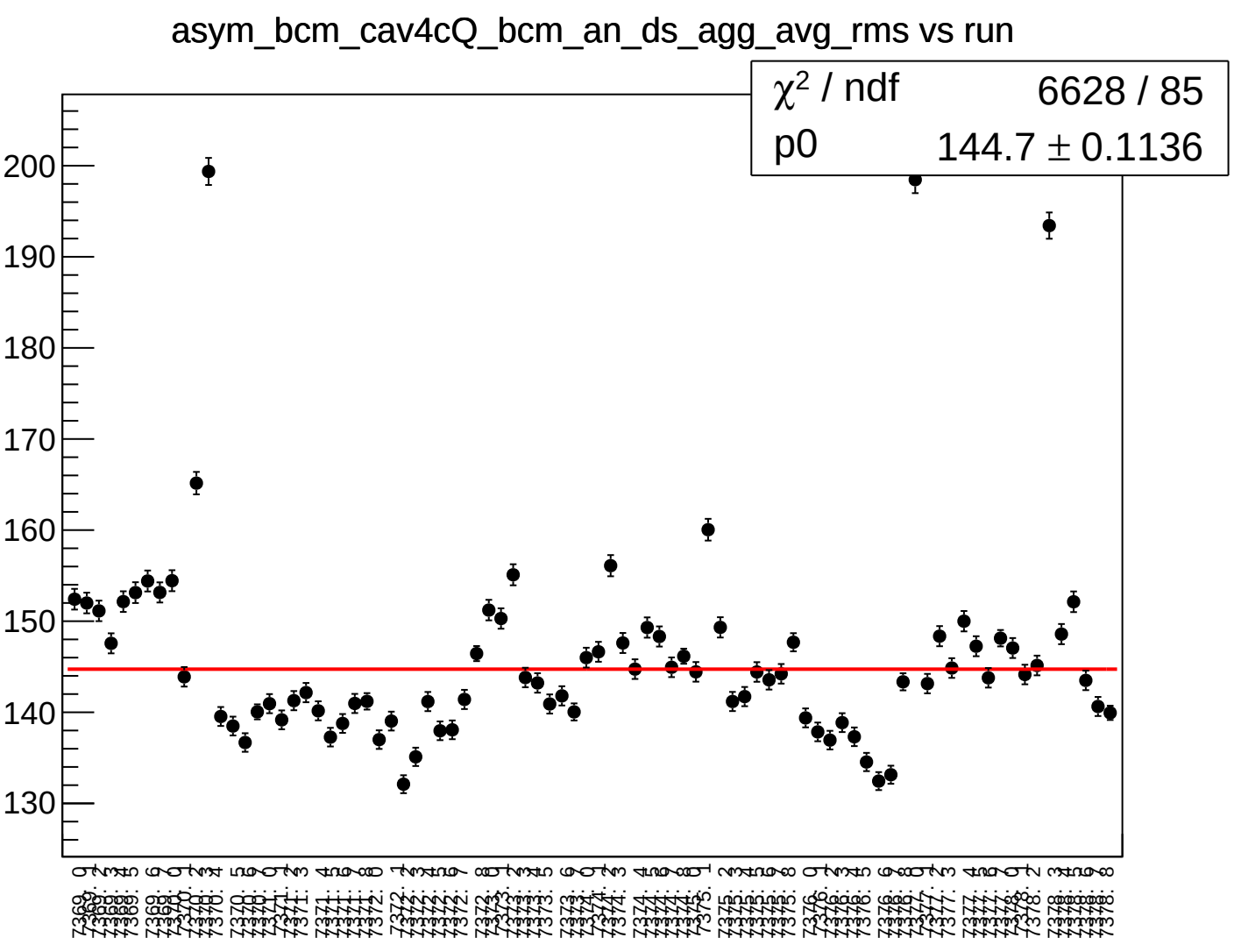

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 61.63 / 85
p0 −35.67 ± 30.53
1000
500
0
−500
−1000
pull
Entries 86
Mean −236.4
Std Dev 259.9
2
1.5
1
0.5
0
−0.5
−1
−1.5

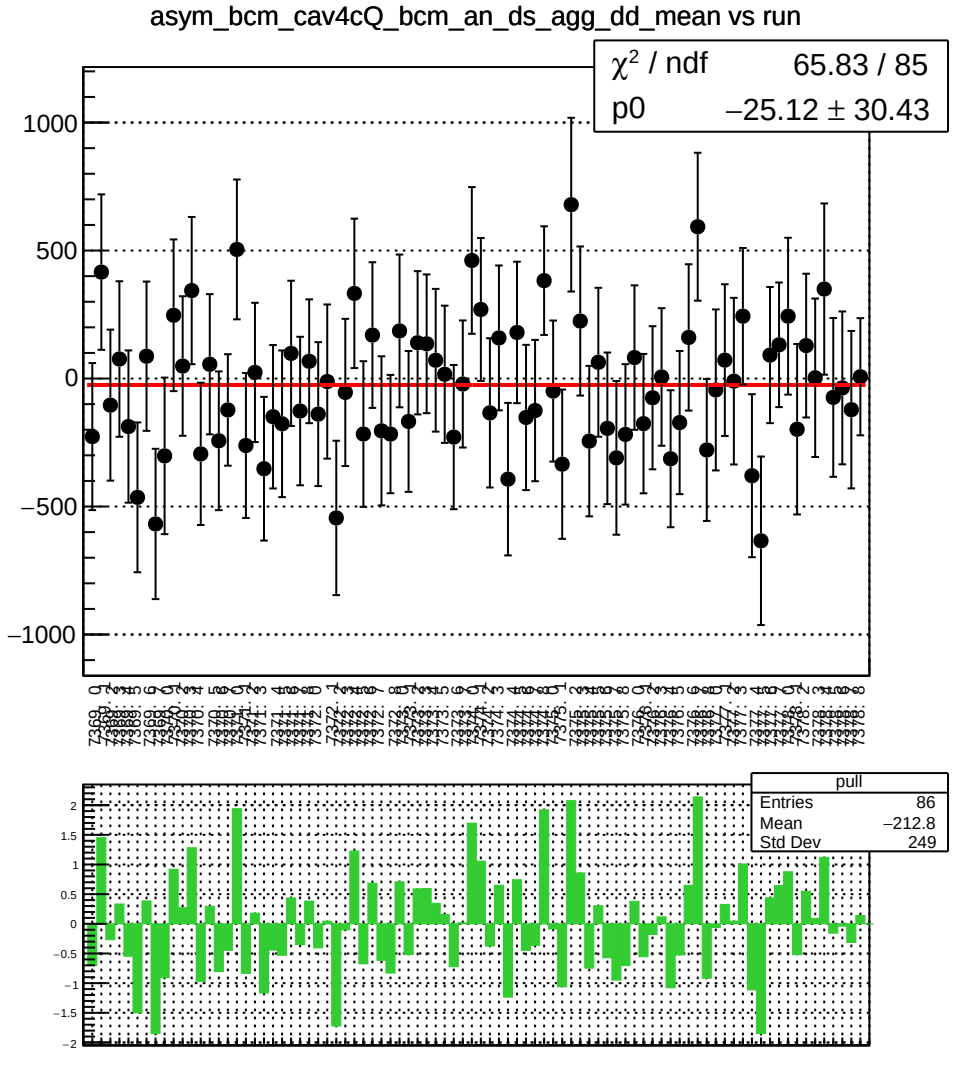

pull1D
Entries 86
Mean −0.004186
Std Dev 0.8465
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

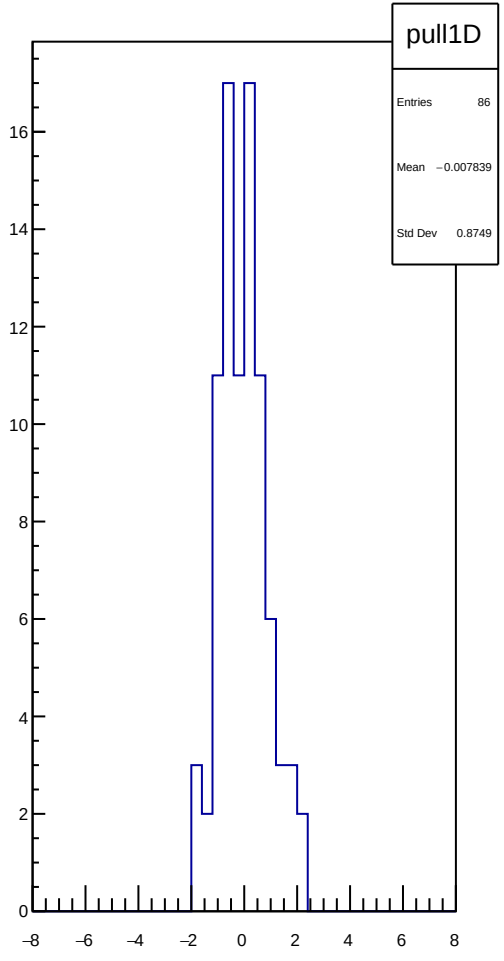

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4776 / 85
p0 27.52 ± 0.02159
33
32
31
30
29
28
27
26
25

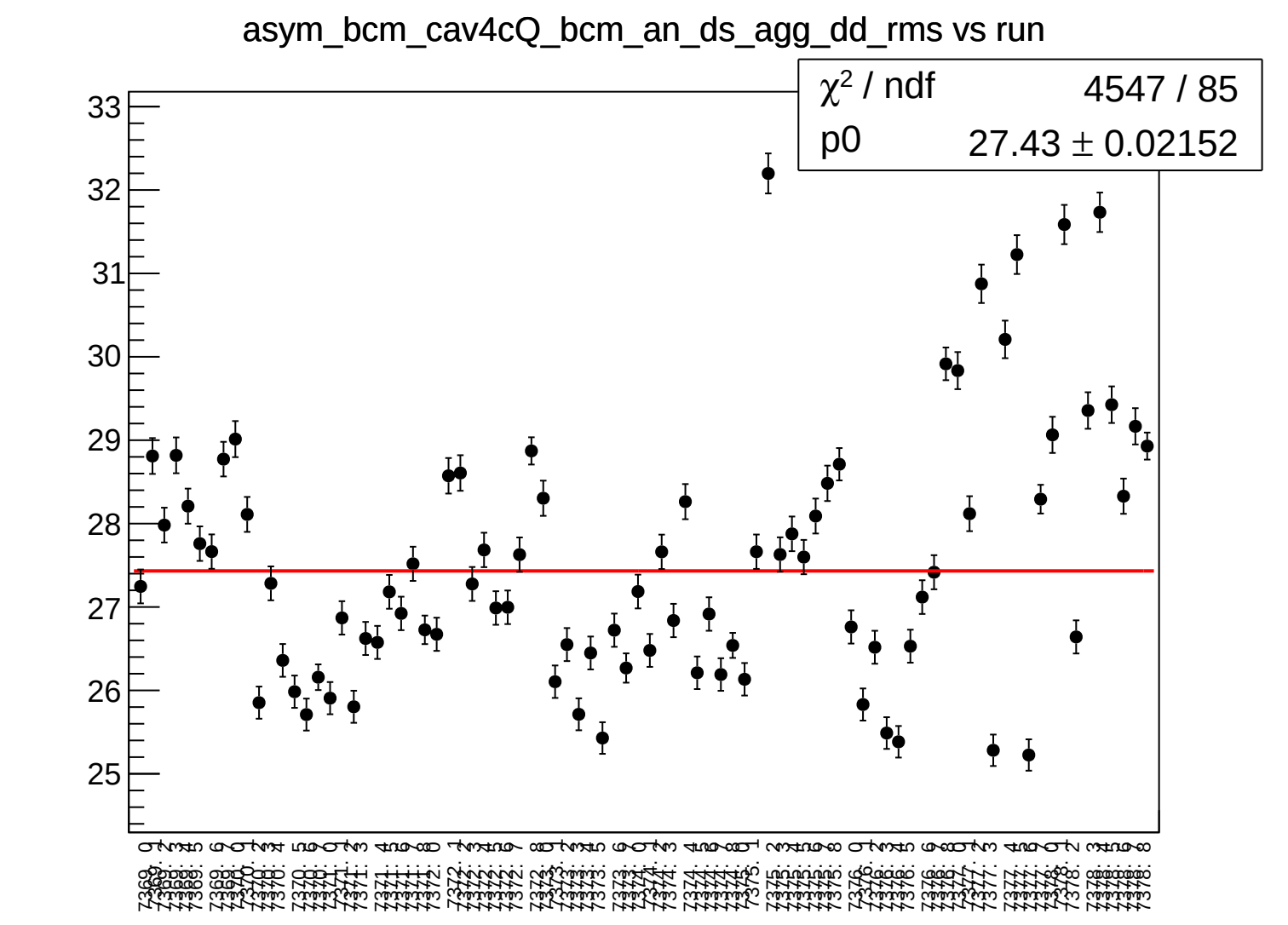

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.19 / 85
p0 −154.6 ± 160.7
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −27.88
Std Dev 93.21
1
0.5
0
−0.5
−1

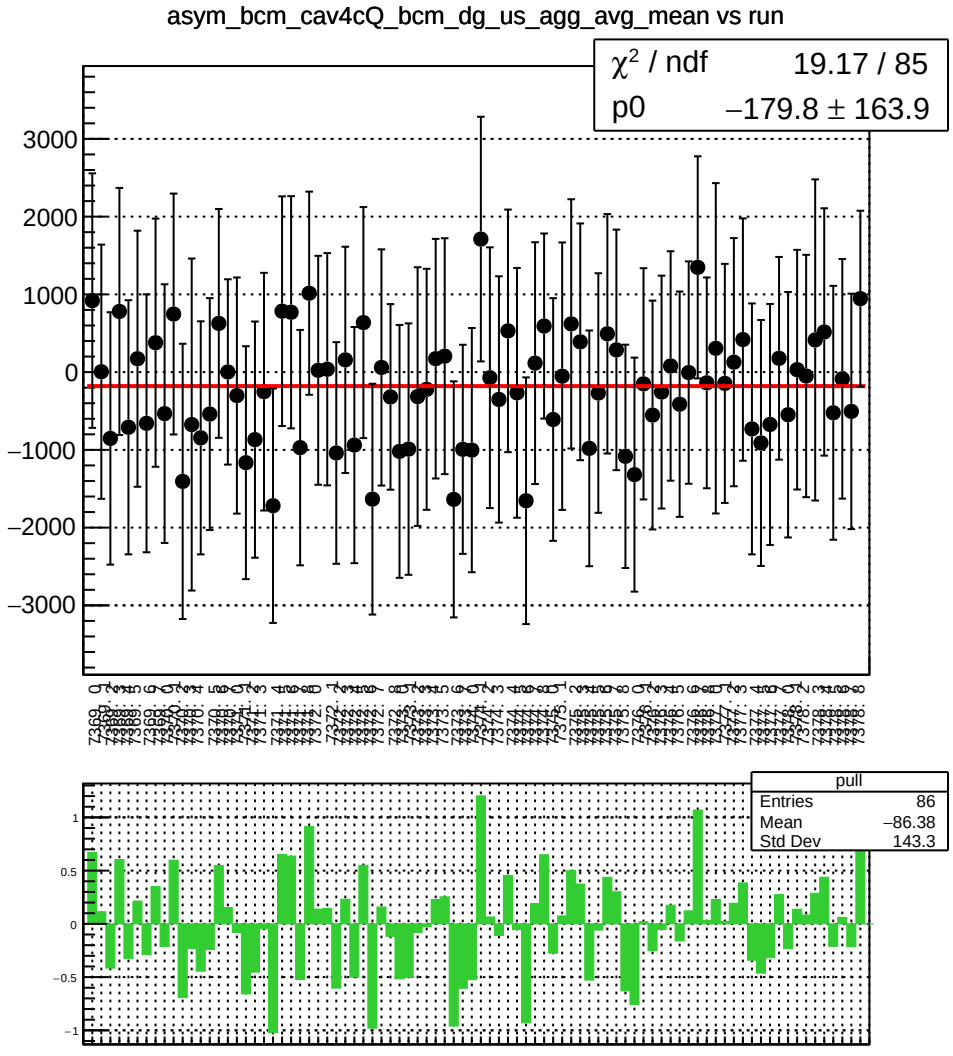

pull1D
Entries 86
Mean −0.008741
Std Dev 0.4469
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

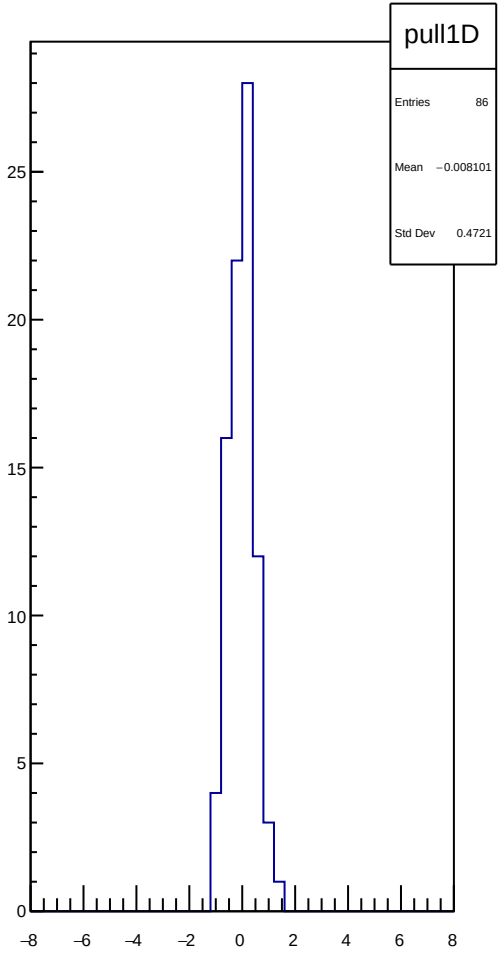

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 6628 / 85
p0 144.7 ± 0.1136
200
190
180
170
160
150
140
130

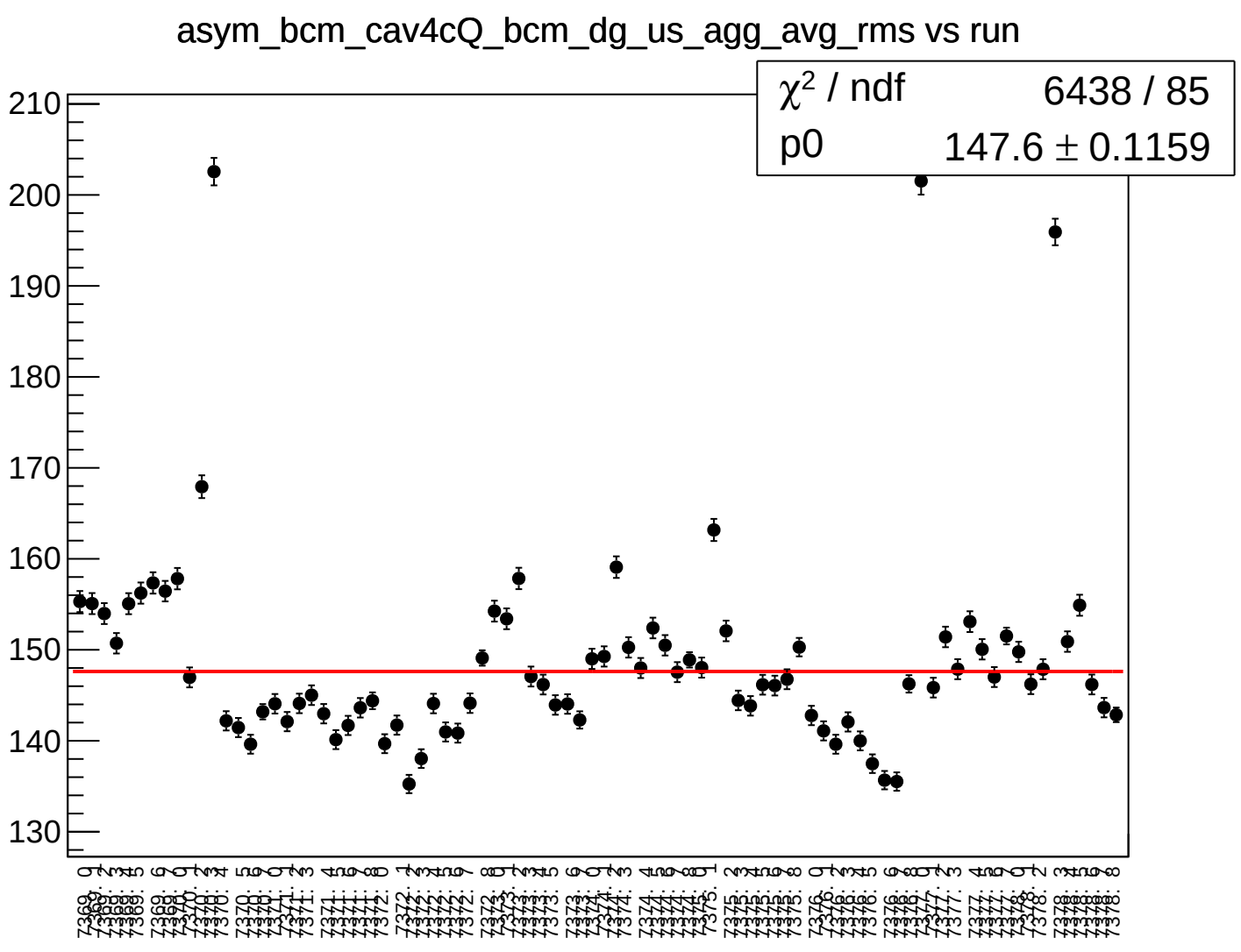

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 65.83 / 85
p0 −25.12 ± 30.43
1000
500
0
−500
−1000
pull
Entries 86
Mean −212.8
Std Dev 249
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

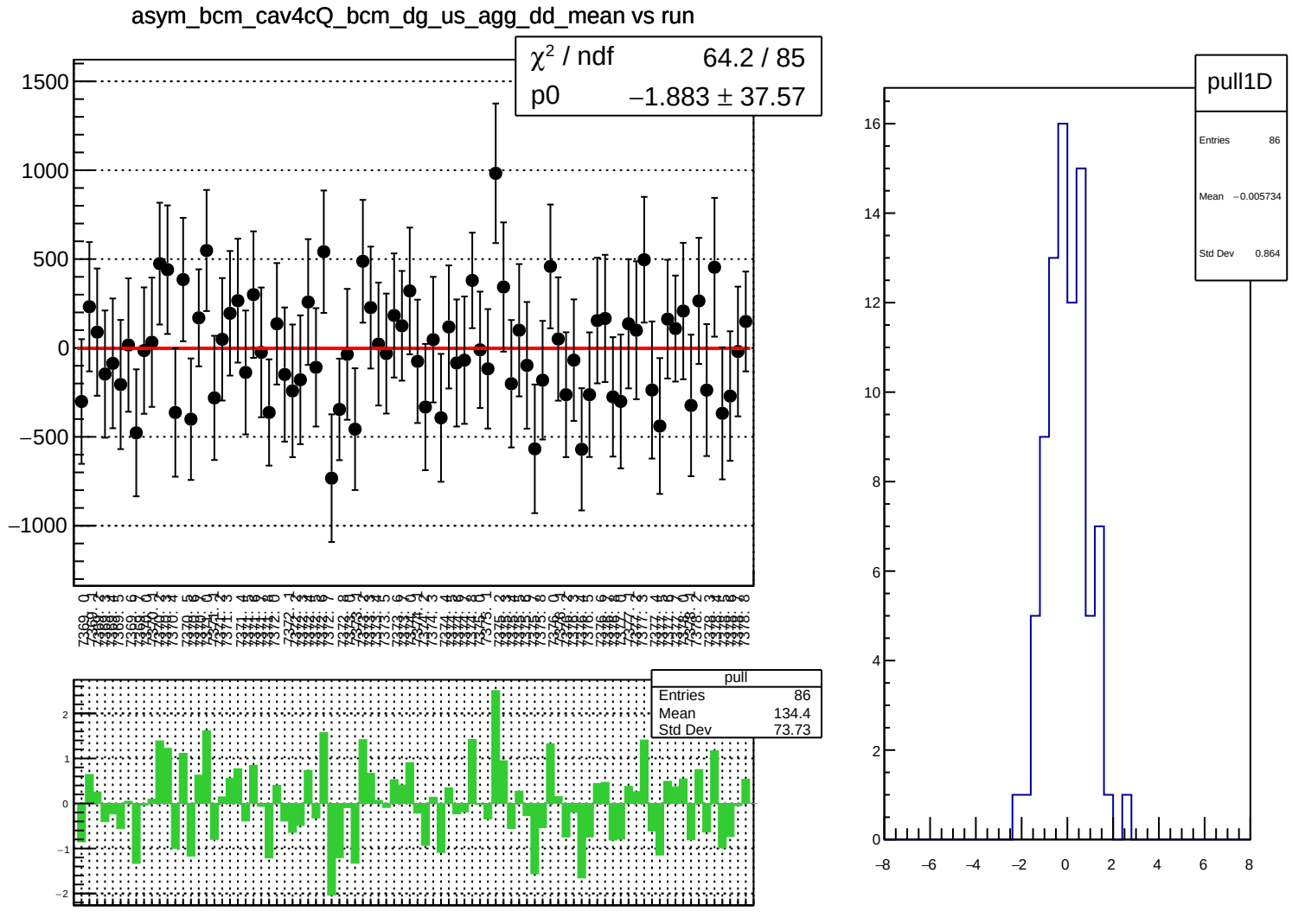

pull1D
Entries 86
Mean −0.007839
Std Dev 0.8749
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

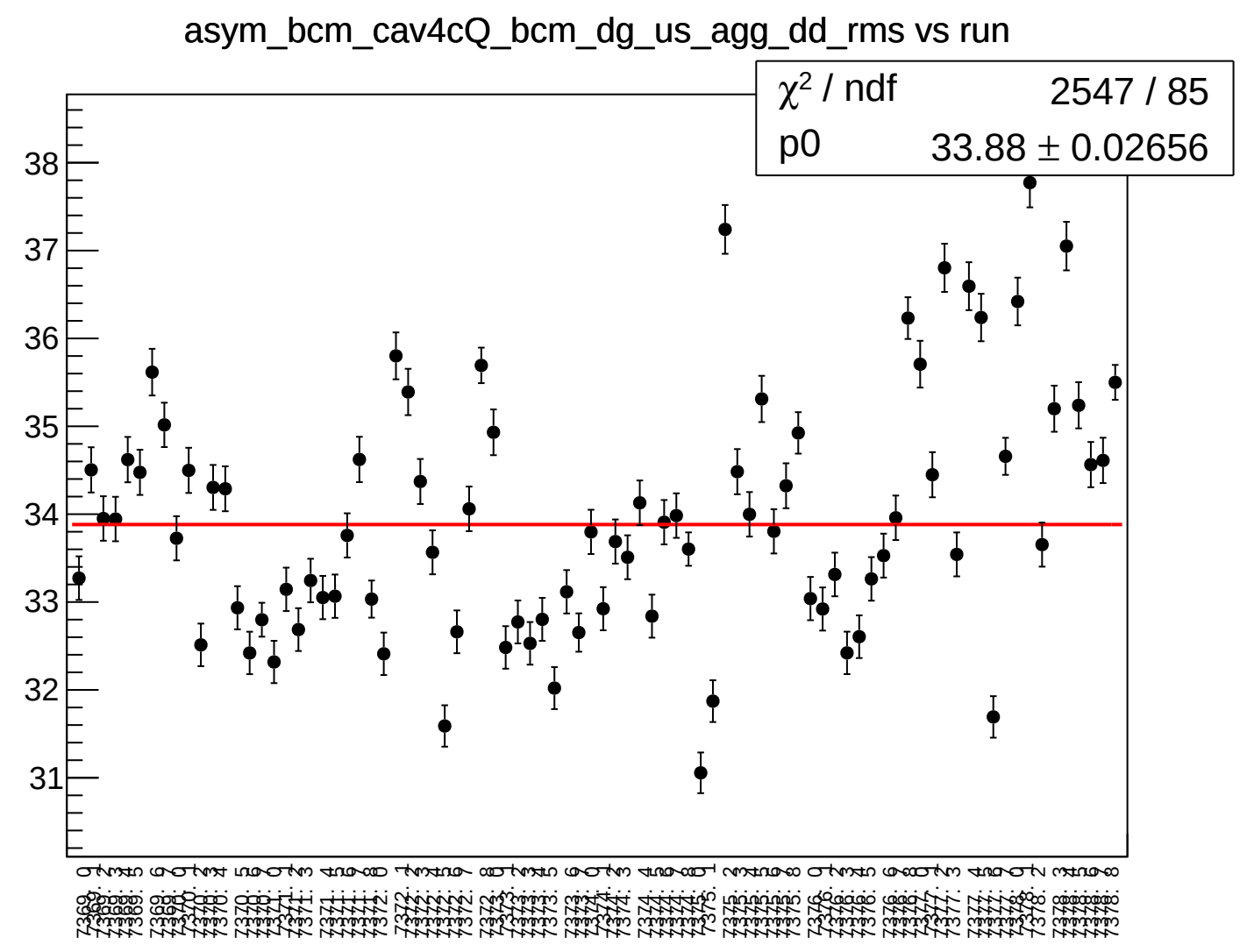

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4547 / 85
p0 27.43 ± 0.02152
33
32
31
30
29
28
27
26
25

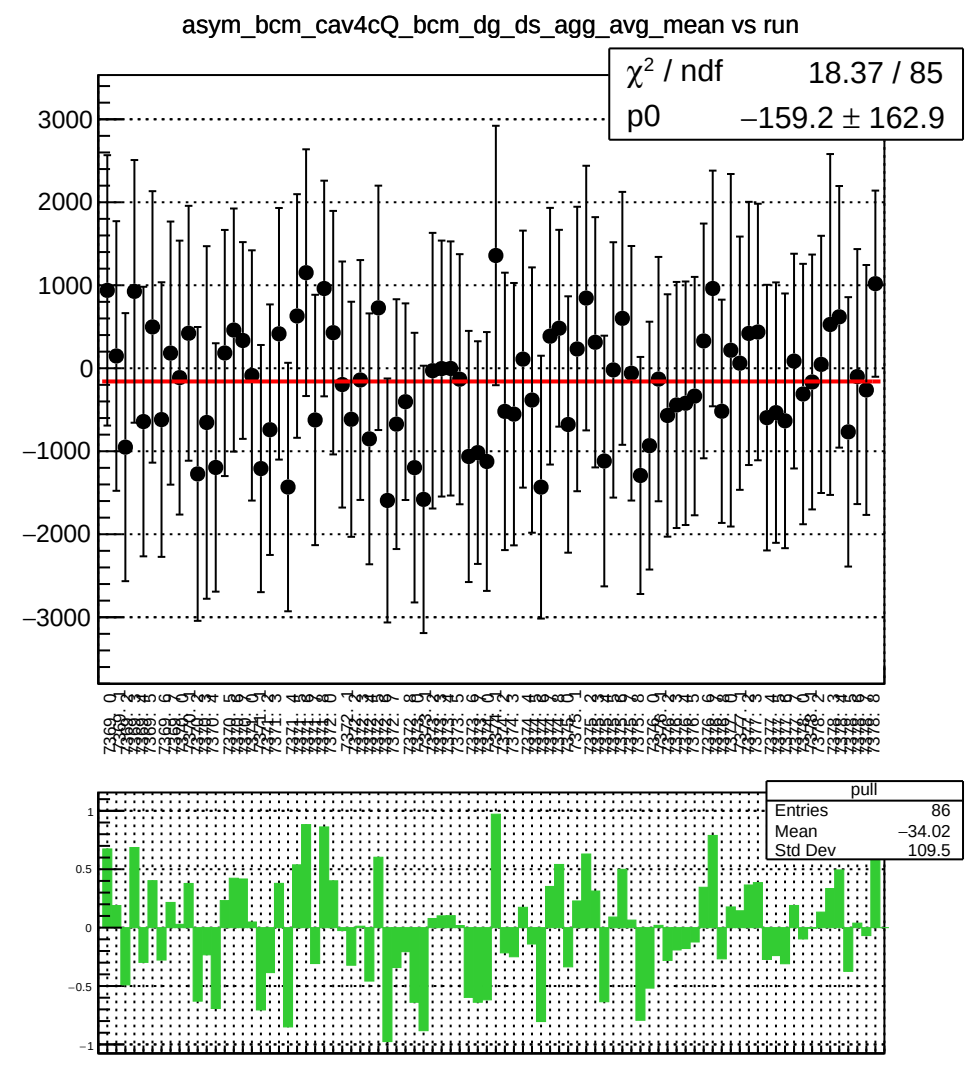

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 19.17 / 85
p0 −179.8 ± 163.9
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −86.38
Std Dev 143.3
1
0.5
0
−0.5
−1

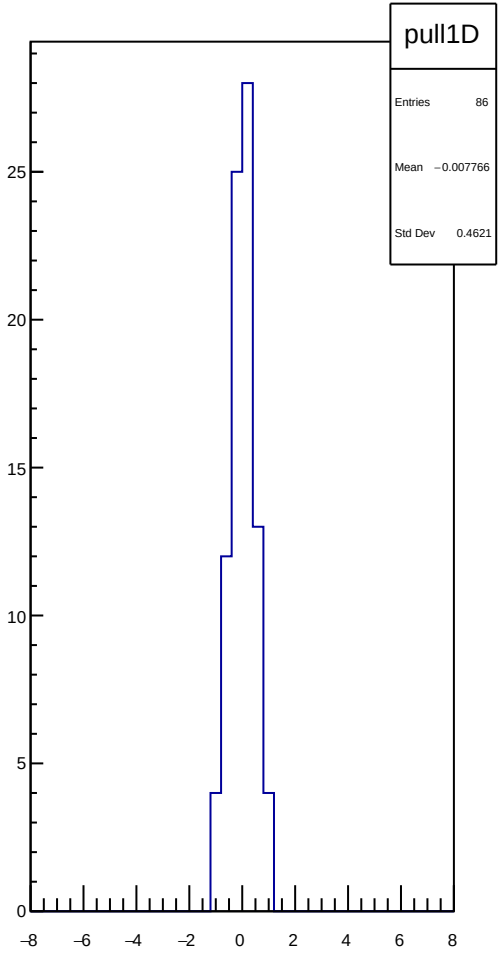

pull1D
Entries 86
Mean −0.008101
Std Dev 0.4721
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

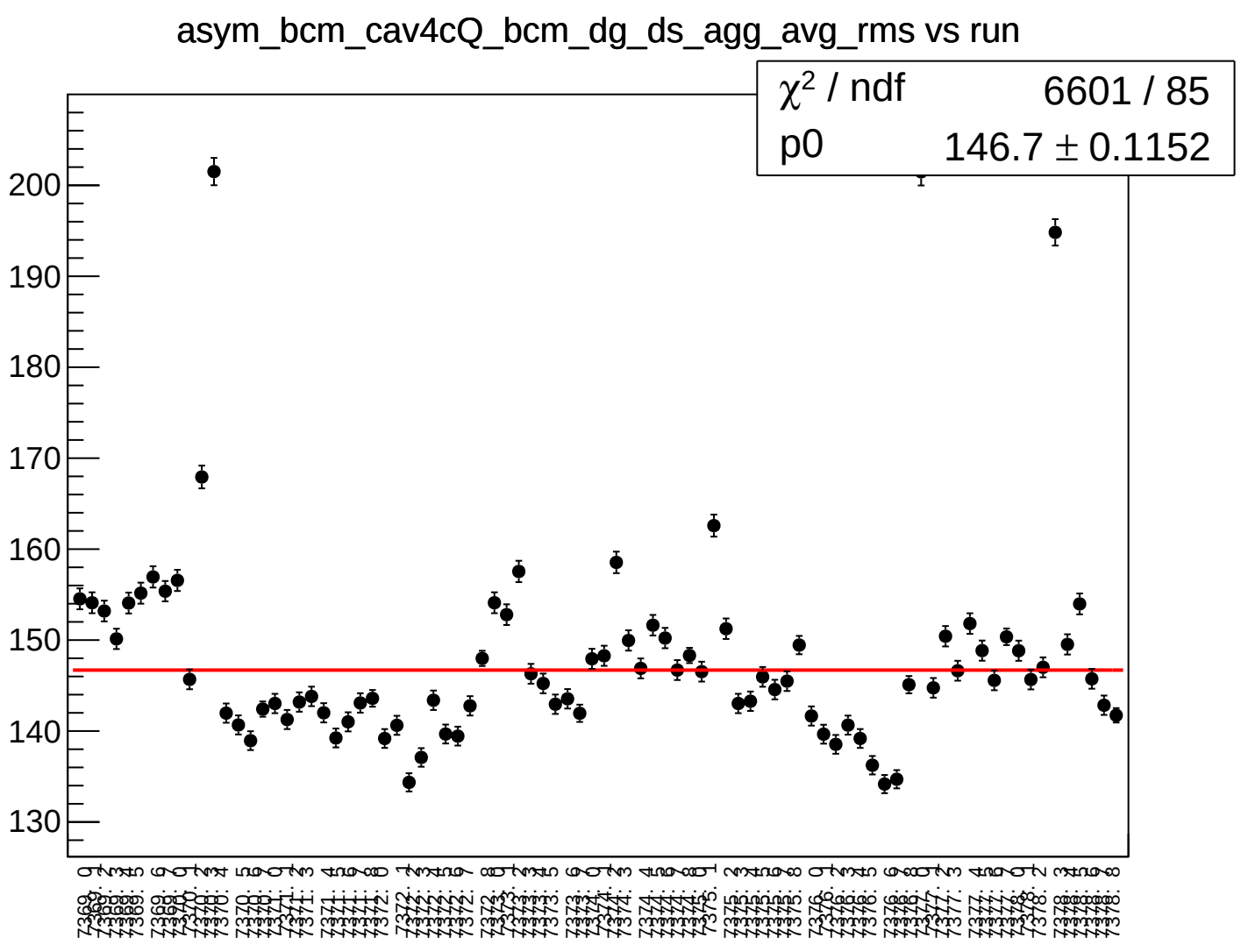

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 6438 / 85
p0 147.6 ± 0.1159
210
200
190
180
170
160
150
140
130

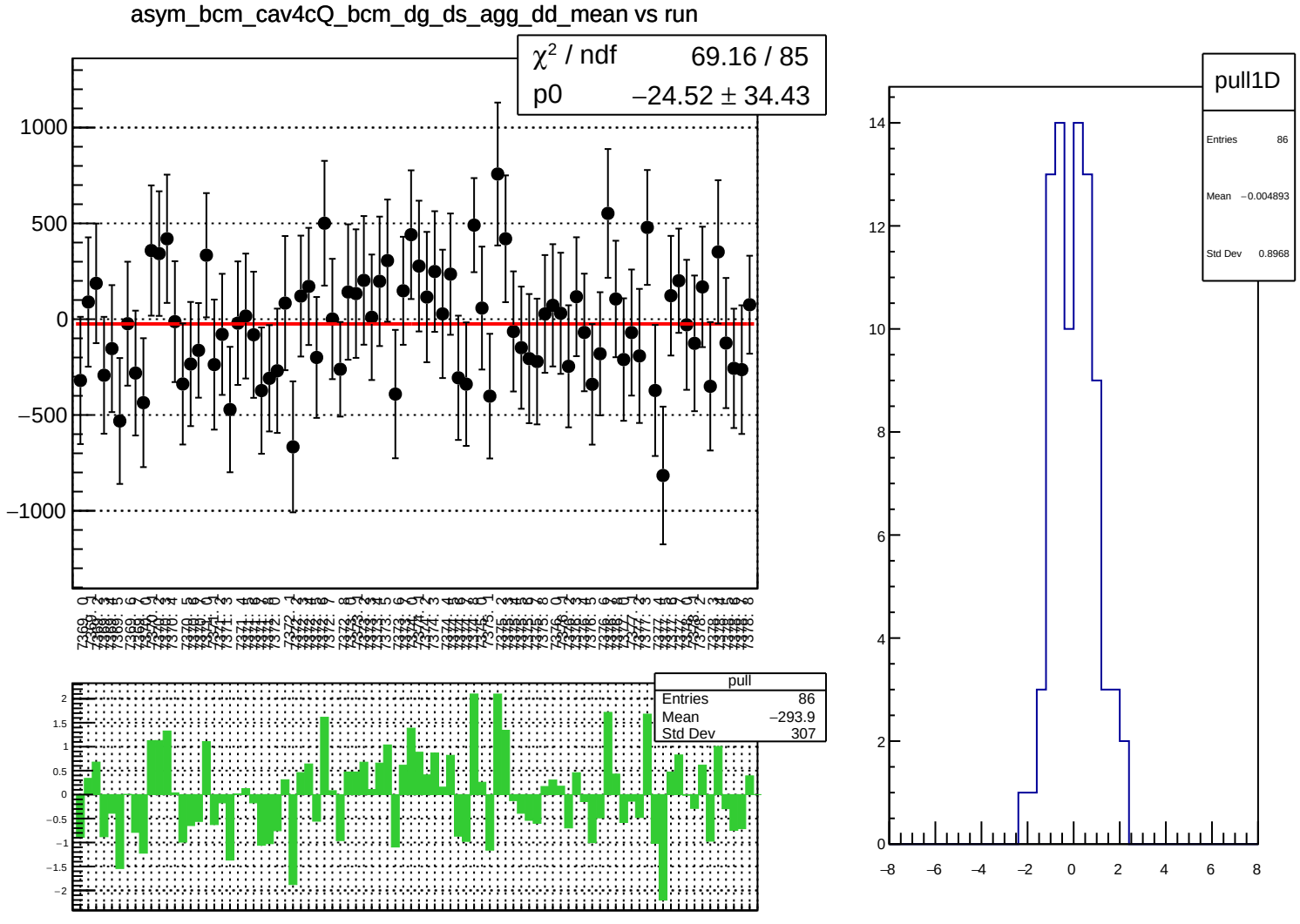

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 64.2 / 85
p0 −1.883 ± 37.57
1500
1000
500
0
−500
−1000
pull
Entries 86
Mean 134.4
Std Dev 73.73
2
1
0
−1
−2
pull1D
Entries 86
Mean −0.005734
Std Dev 0.864
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

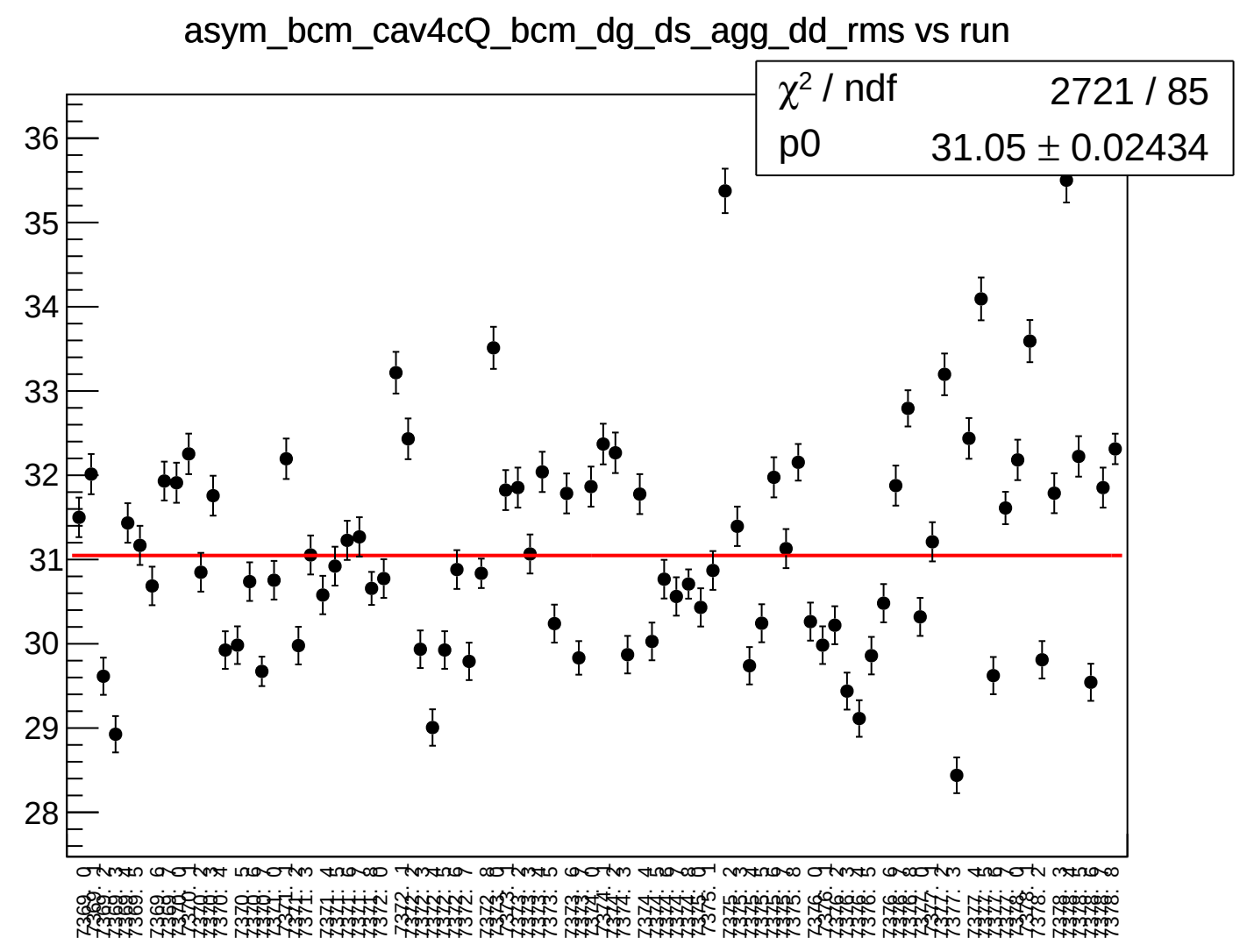

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2547 / 85
p0 33.88 ± 0.02656
38
37
36
35
34
33
32
31

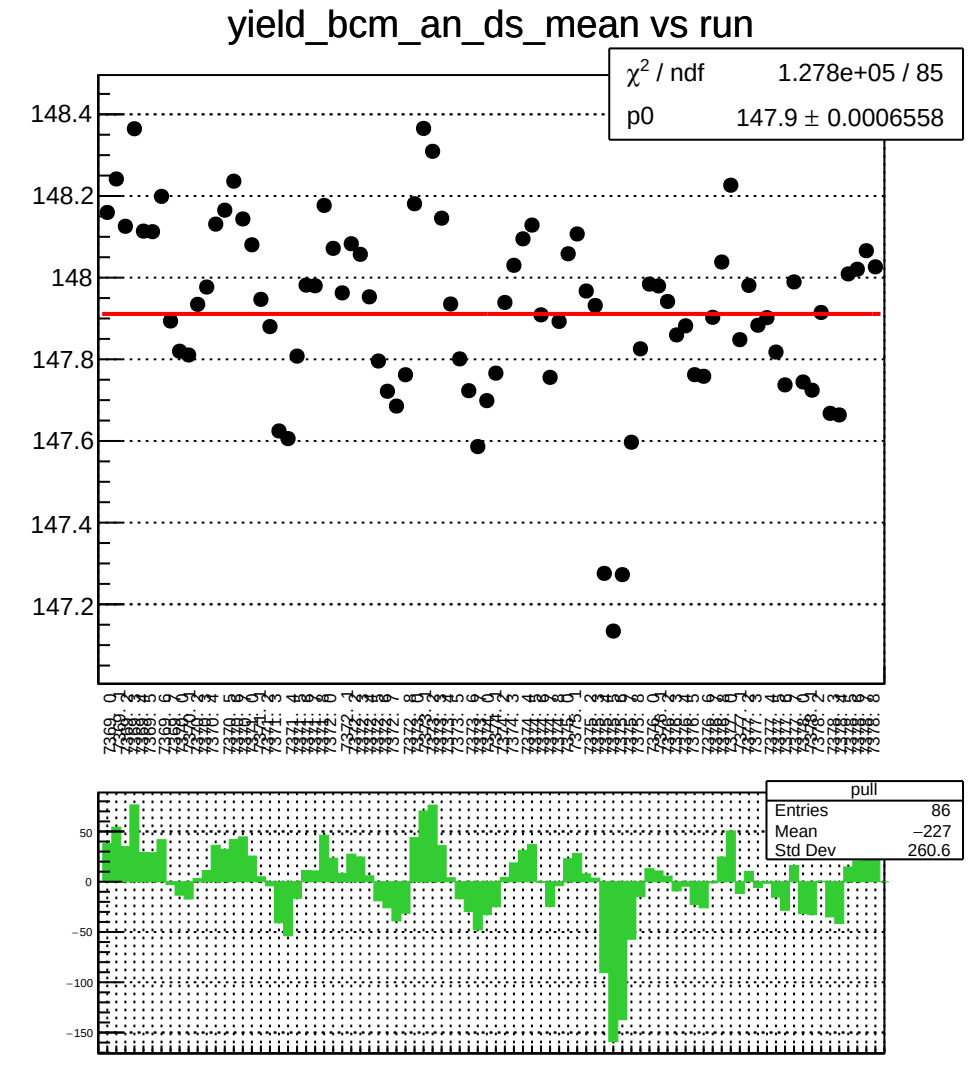

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.37 / 85
p0 −159.2 ± 162.9
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −34.02
Std Dev 109.5
1
0.5
0
−0.5
−1

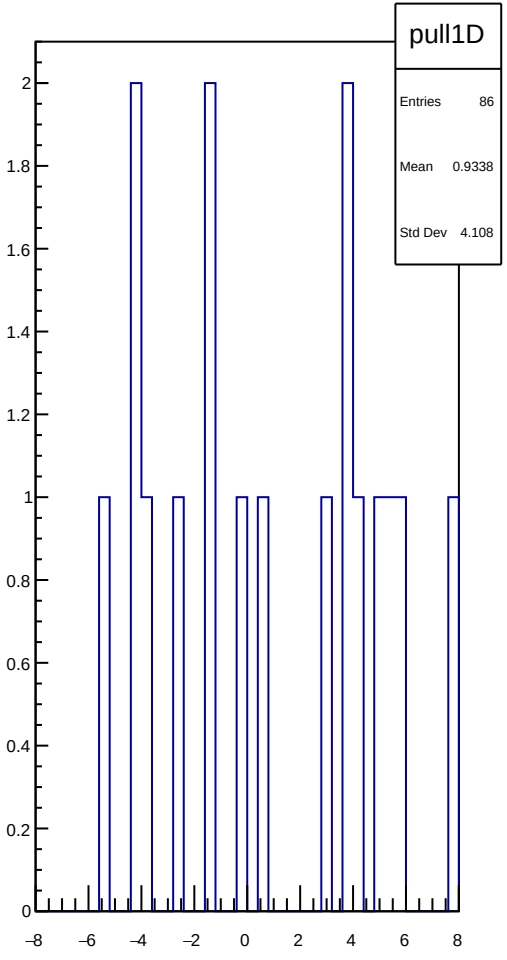

pull1D
Entries 86
Mean −0.007766
Std Dev 0.4621
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

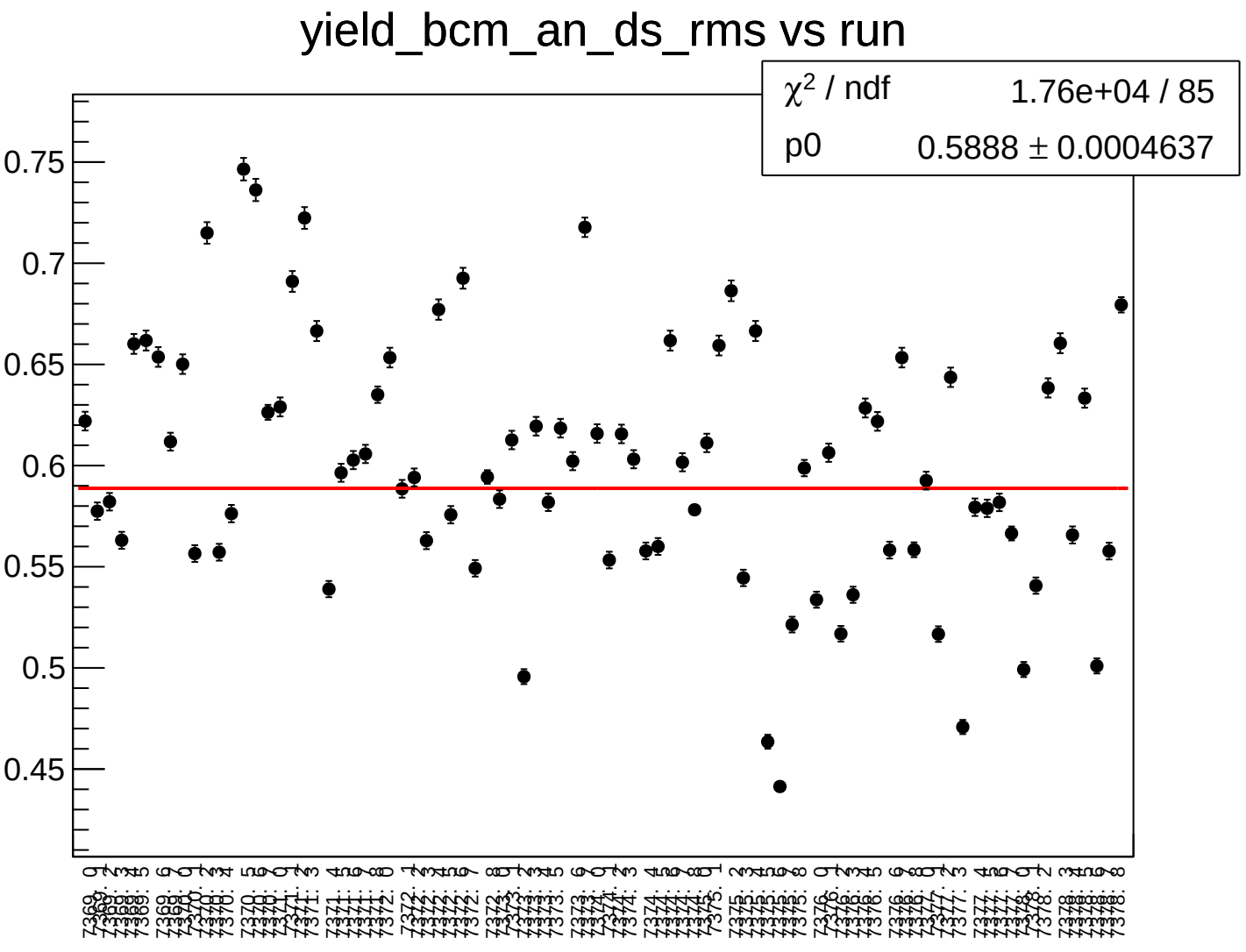

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 6601 / 85
p0 146.7 ± 0.1152
200
190
180
170
160
150
140
130

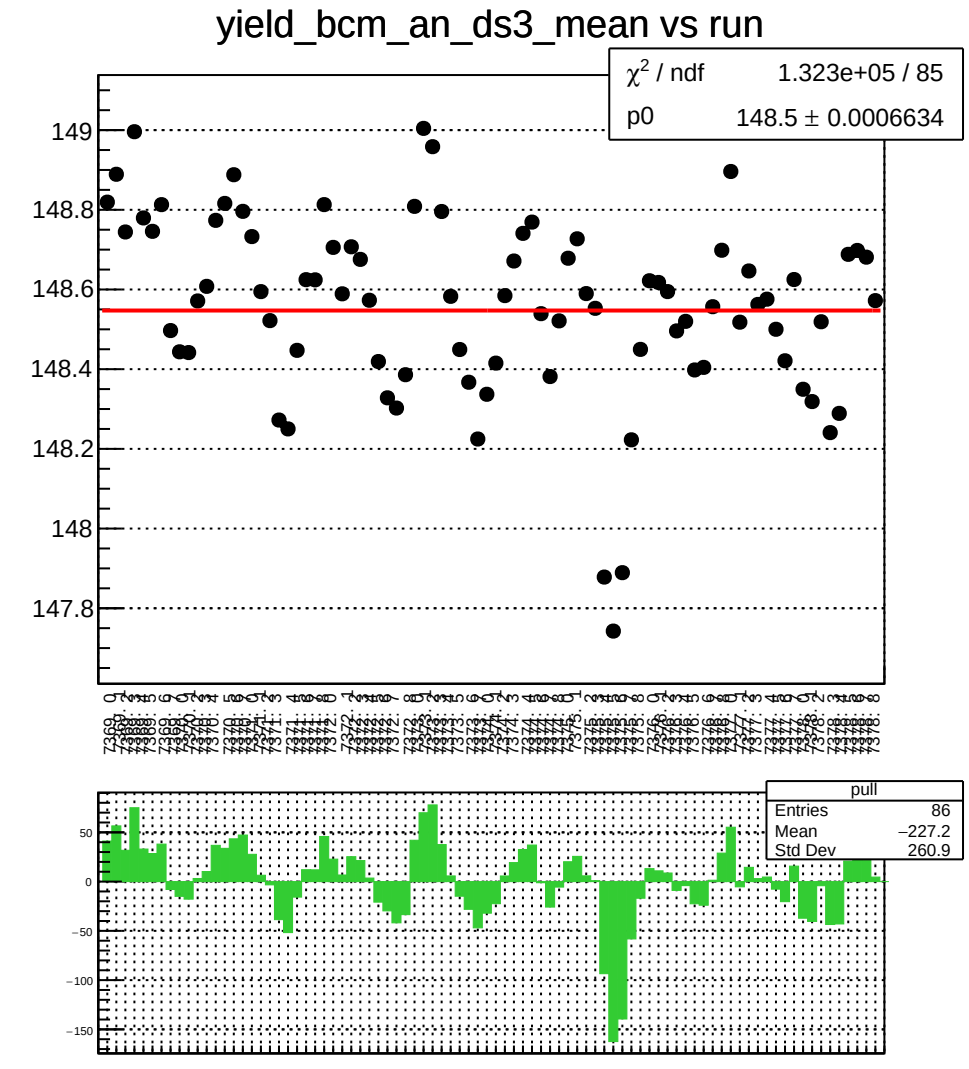

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 69.16 / 85
p0 −24.52 ± 34.43
1000
500
0
−500
−1000
pull
Entries 86
Mean −293.9
Std Dev 307
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 86
Mean −0.004893
Std Dev 0.8968
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

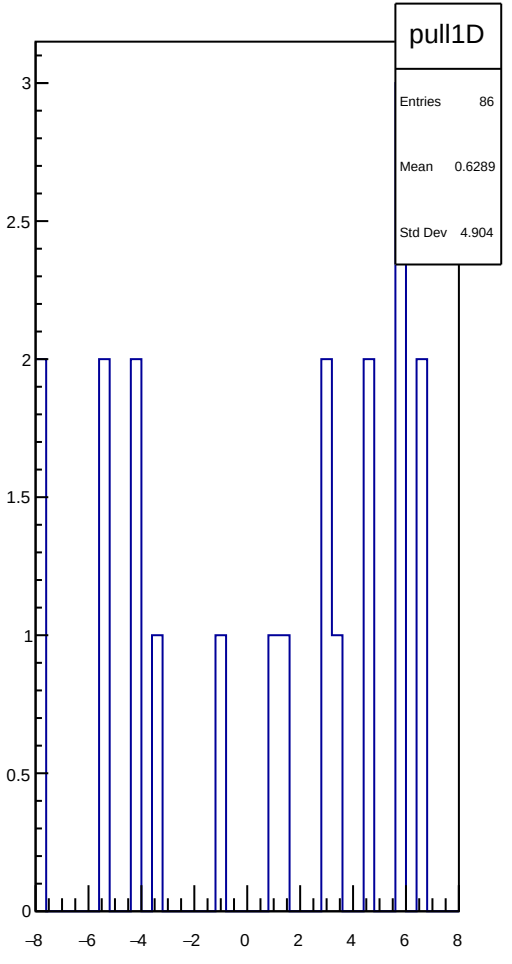

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2721 / 85
p0 31.05 ± 0.02434
36
35
34
33
32
31
30
29
28

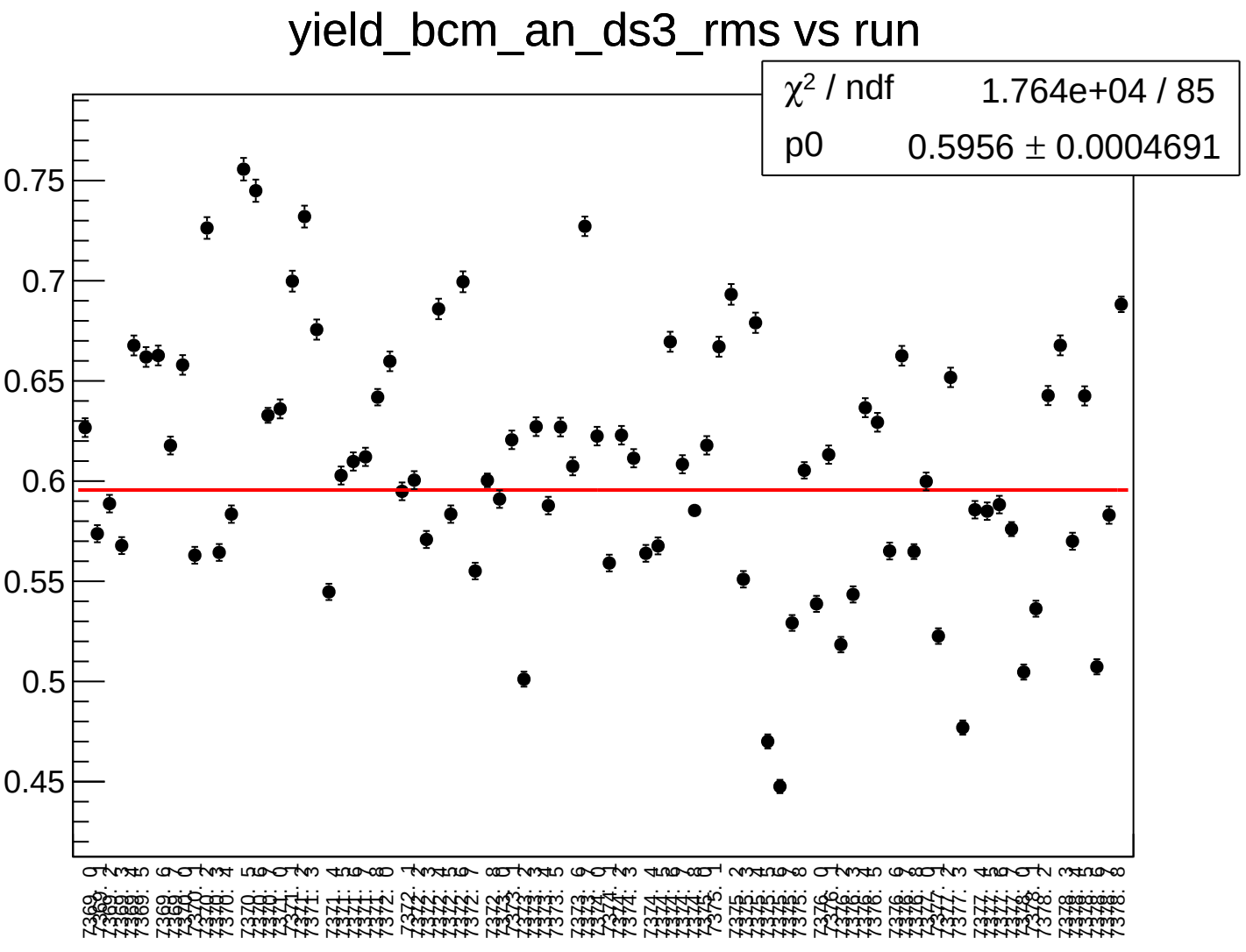

yield_bcm_an_ds_mean vs run
χ² / ndf 1.278e+05 / 85
p0 147.9 ± 0.0006558
148.4
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 86
Mean −227
Std Dev 260.6
50
0
−50
−100
−150

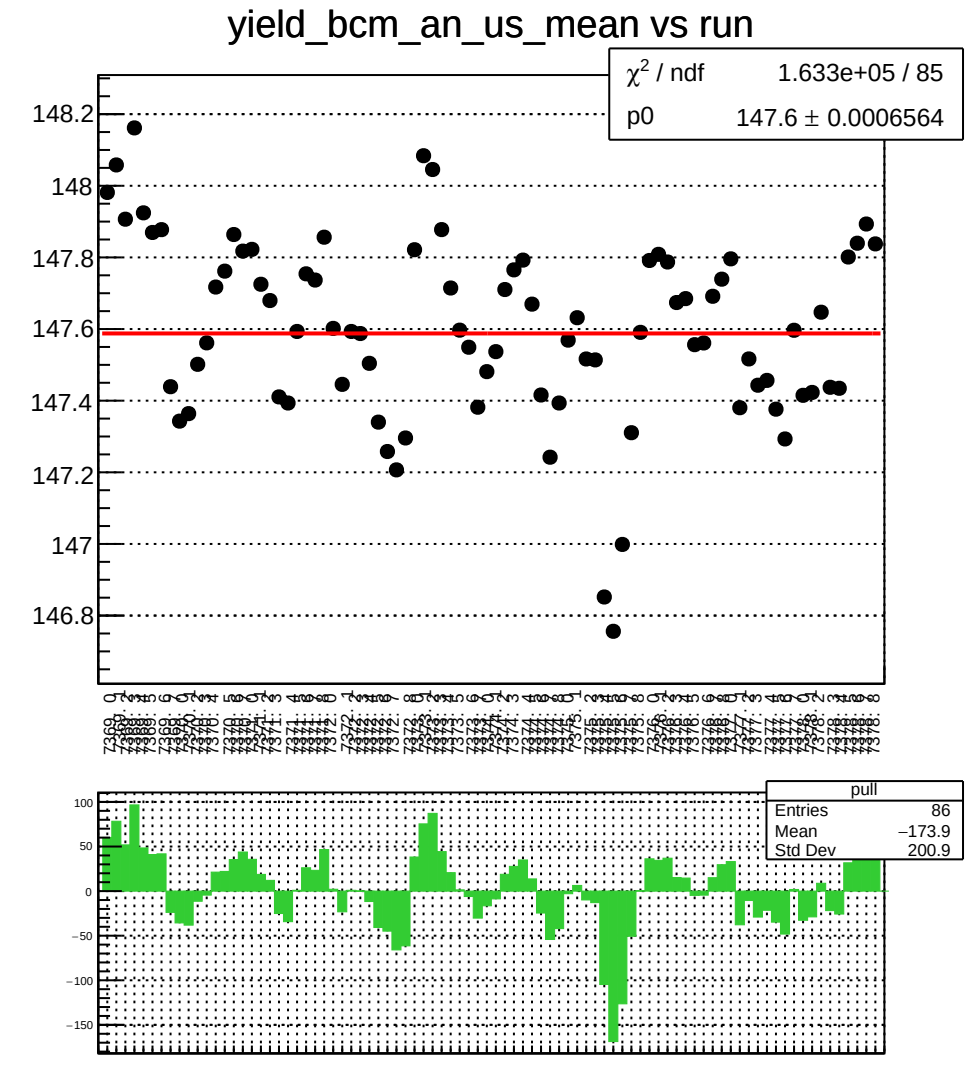

pull1D
Entries 86
Mean 0.9338
Std Dev 4.108
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

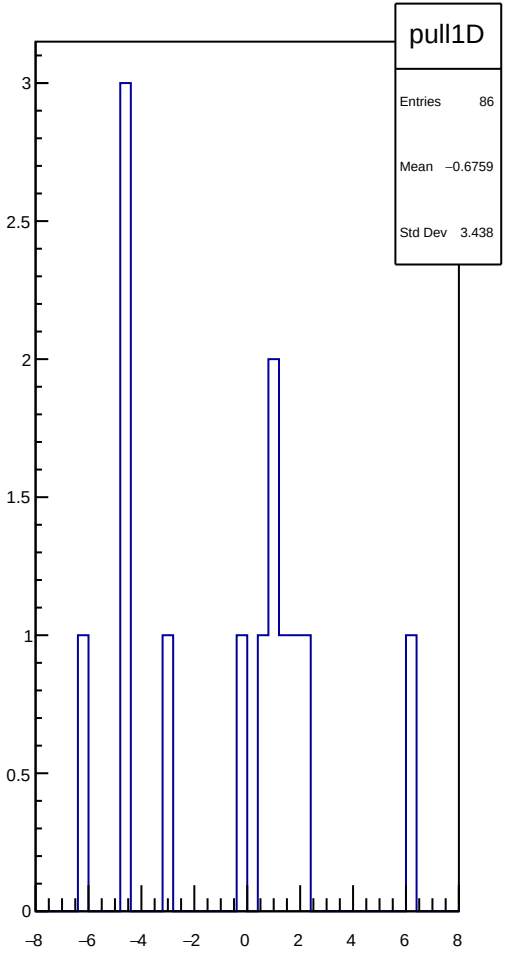

yield_bcm_an_ds_rms vs run
χ² / ndf 1.76e+04 / 85
p0 0.5888 ± 0.0004637
0.75
0.7
0.65
0.6
0.55
0.5
0.45

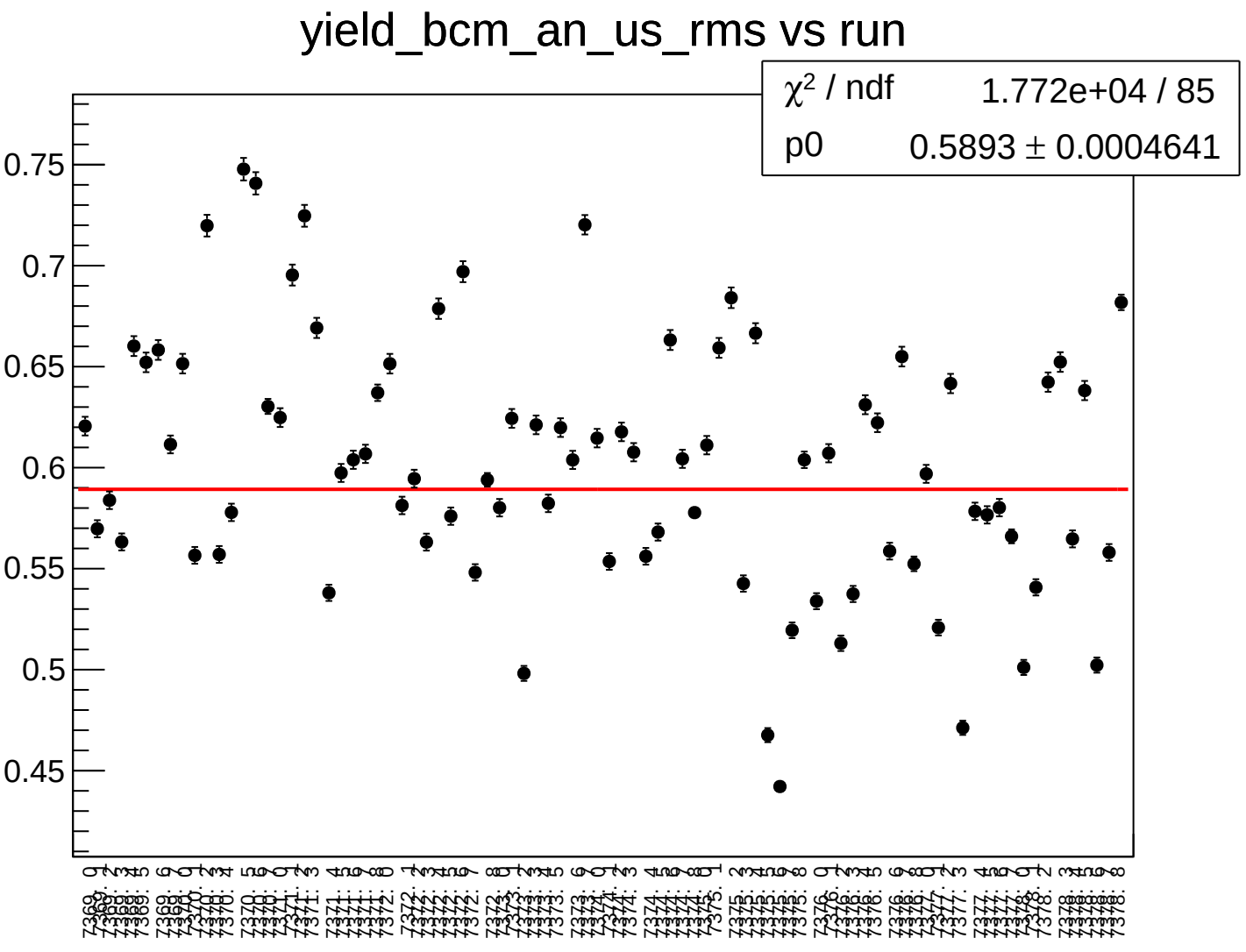

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.323e+05 / 85
p0 148.5 ± 0.0006634
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 86
Mean −227.2
Std Dev 260.9
50
0
−50
−100
−150

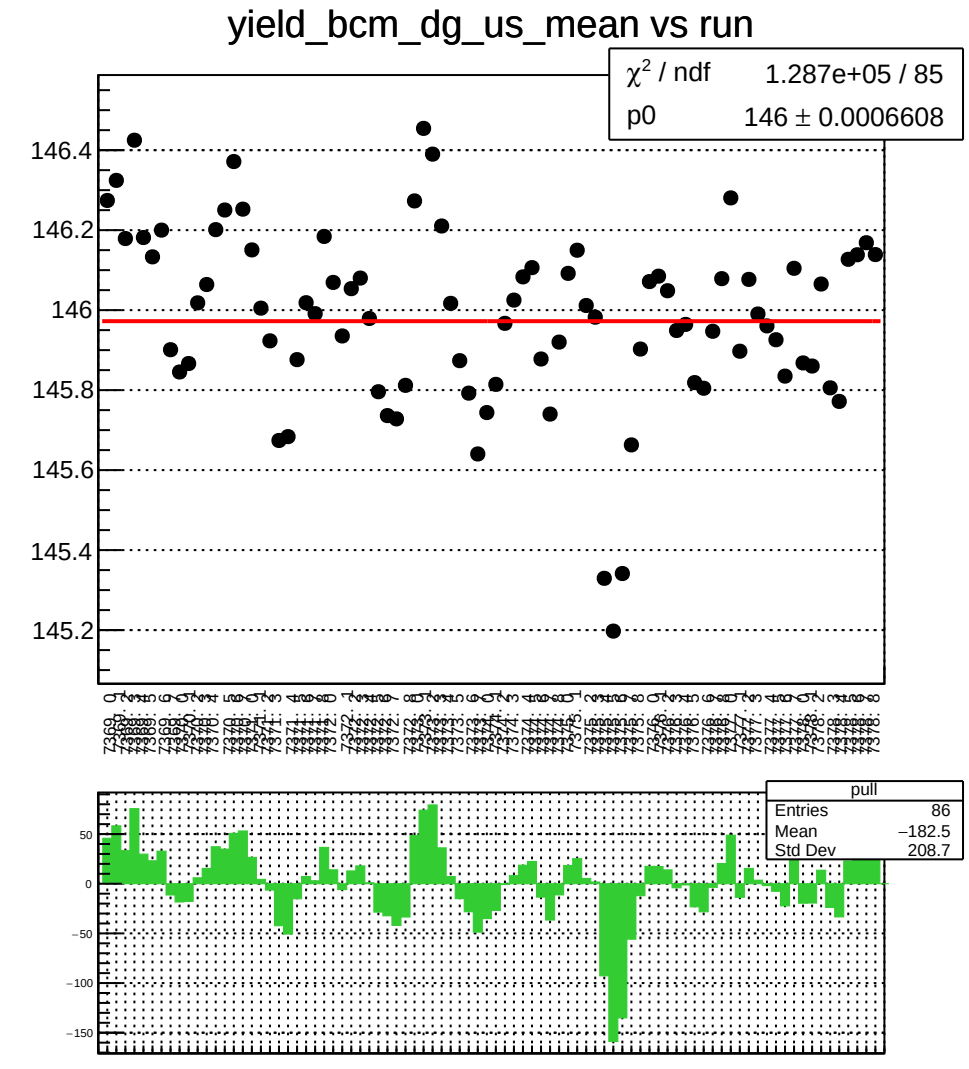

pull1D
Entries 86
Mean 0.6289
Std Dev 4.904
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

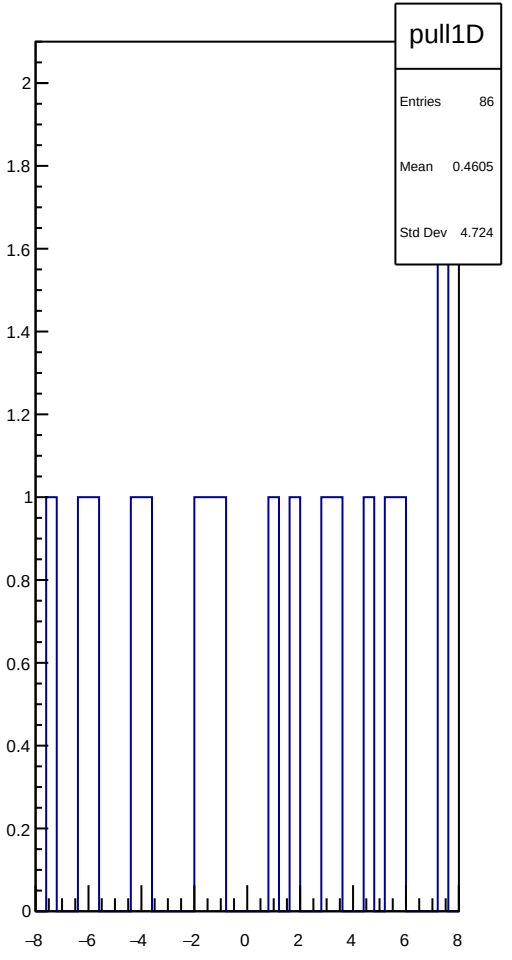

yield_bcm_an_ds3_rms vs run
χ² / ndf 1.764e+04 / 85
p0 0.5956 ± 0.0004691
0.75
0.7
0.65
0.6
0.55
0.5
0.45

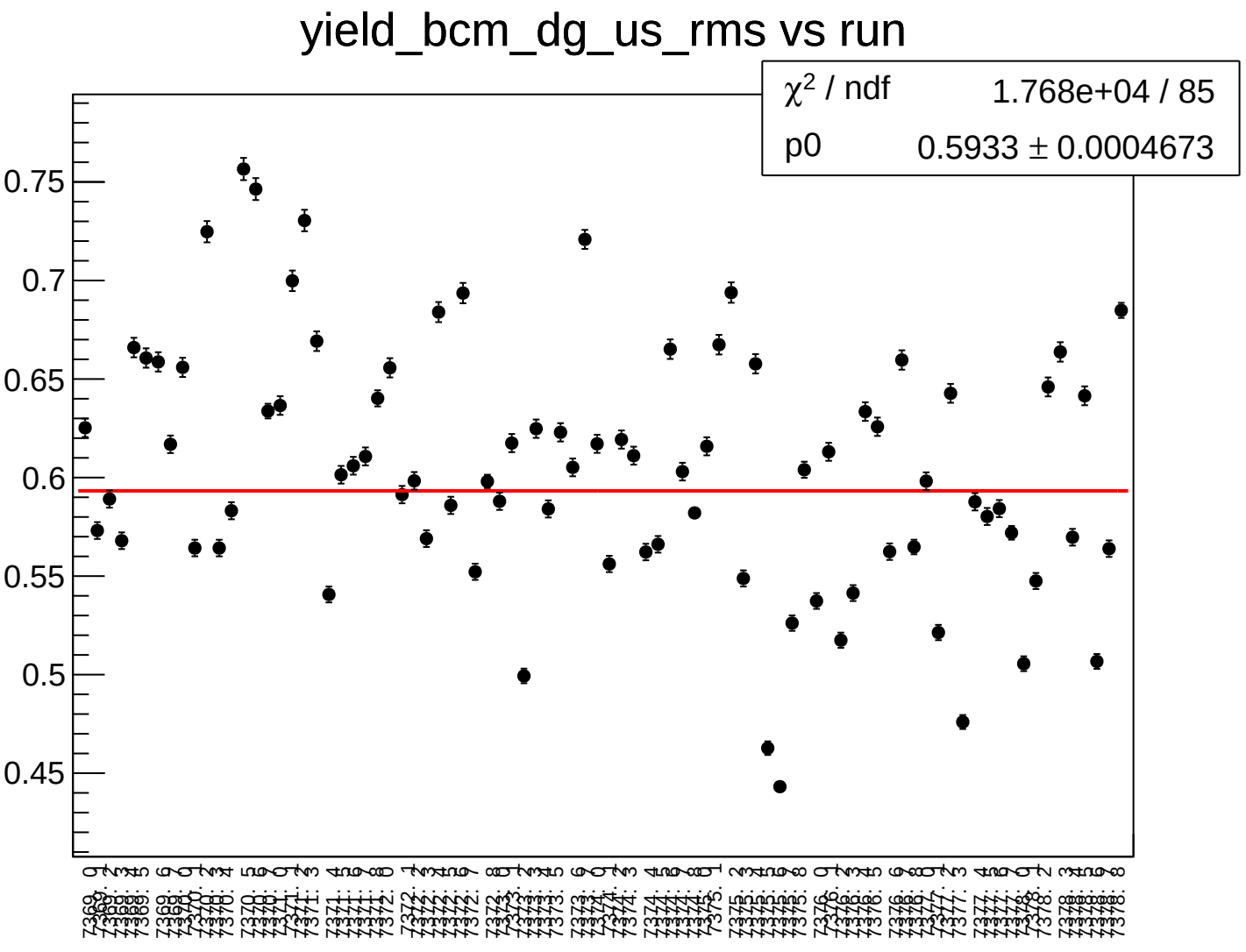

yield_bcm_an_us_mean vs run
χ² / ndf 1.633e+05 / 85
p0 147.6 ± 0.0006564
148.2
148
147.8
147.6
147.4
147.2
147
146.8
pull
Entries 86
Mean −173.9
Std Dev 200.9
100
50
0
−50
−100
−150

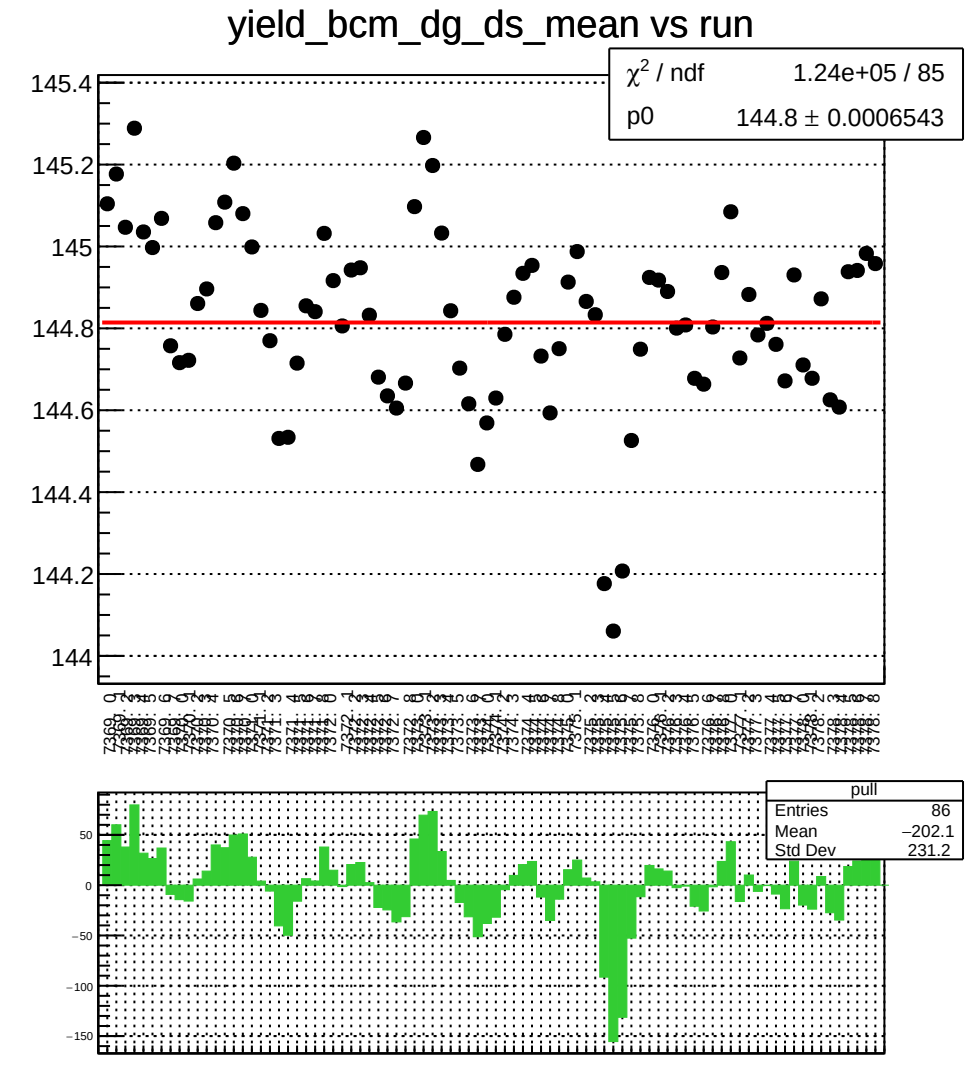

pull1D
Entries 86
Mean −0.6759
Std Dev 3.438
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

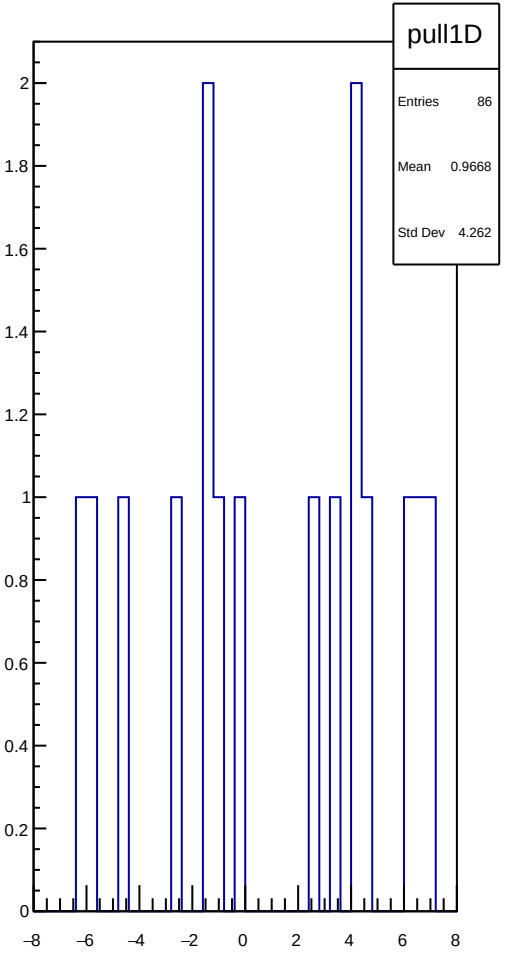

yield_bcm_an_us_rms vs run
χ² / ndf 1.772e+04 / 85
p0 0.5893 ± 0.0004641
0.75
0.7
0.65
0.6
0.55
0.5
0.45

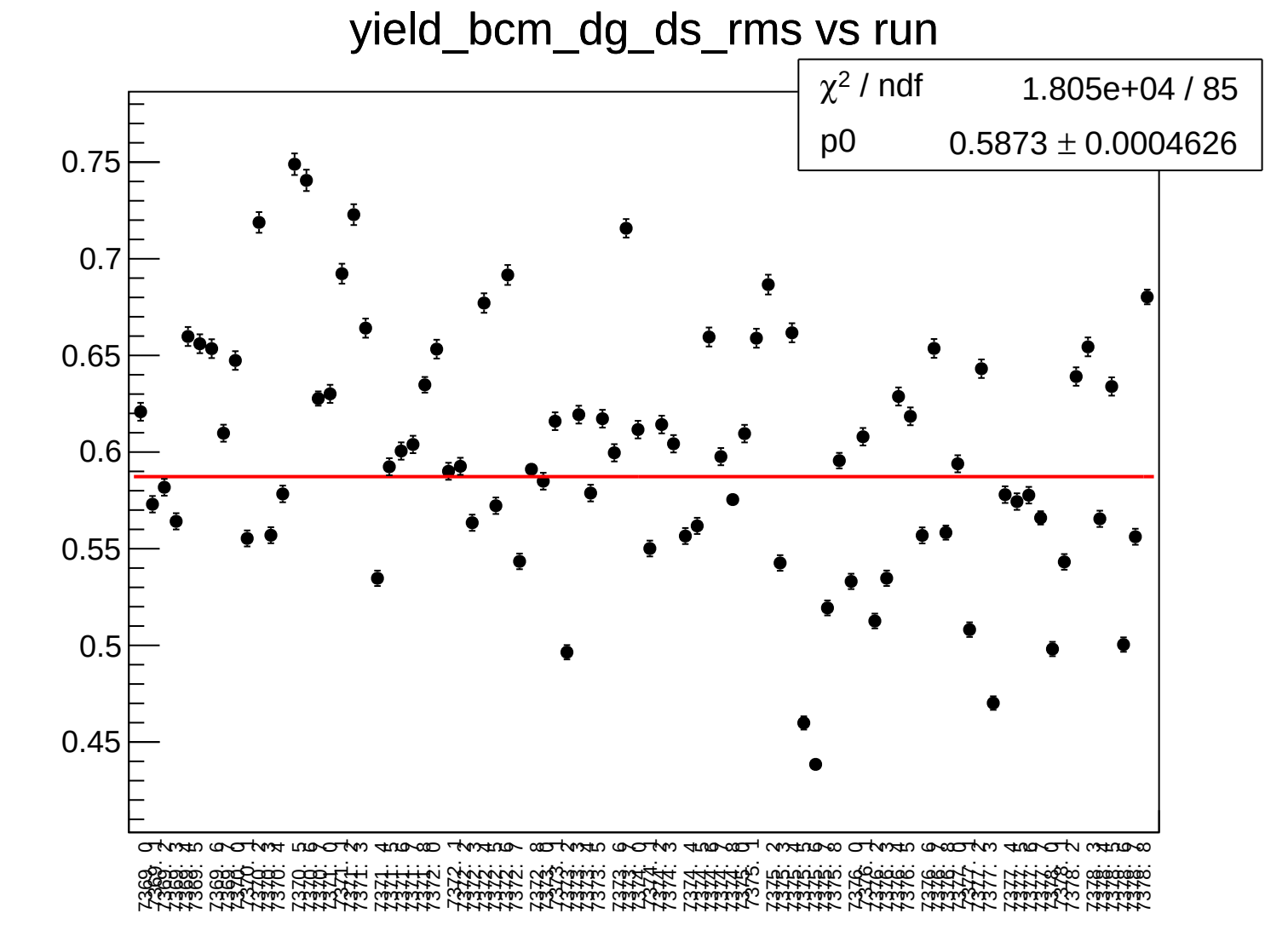

yield_bcm_dg_us_mean vs run
χ² / ndf 1.287e+05 / 85
p0 146 ± 0.0006608
146.4
146.2
146
145.8
145.6
145.4
145.2
pull
Entries 86
Mean −182.5
Std Dev 208.7
50
0
−50
−100
−150

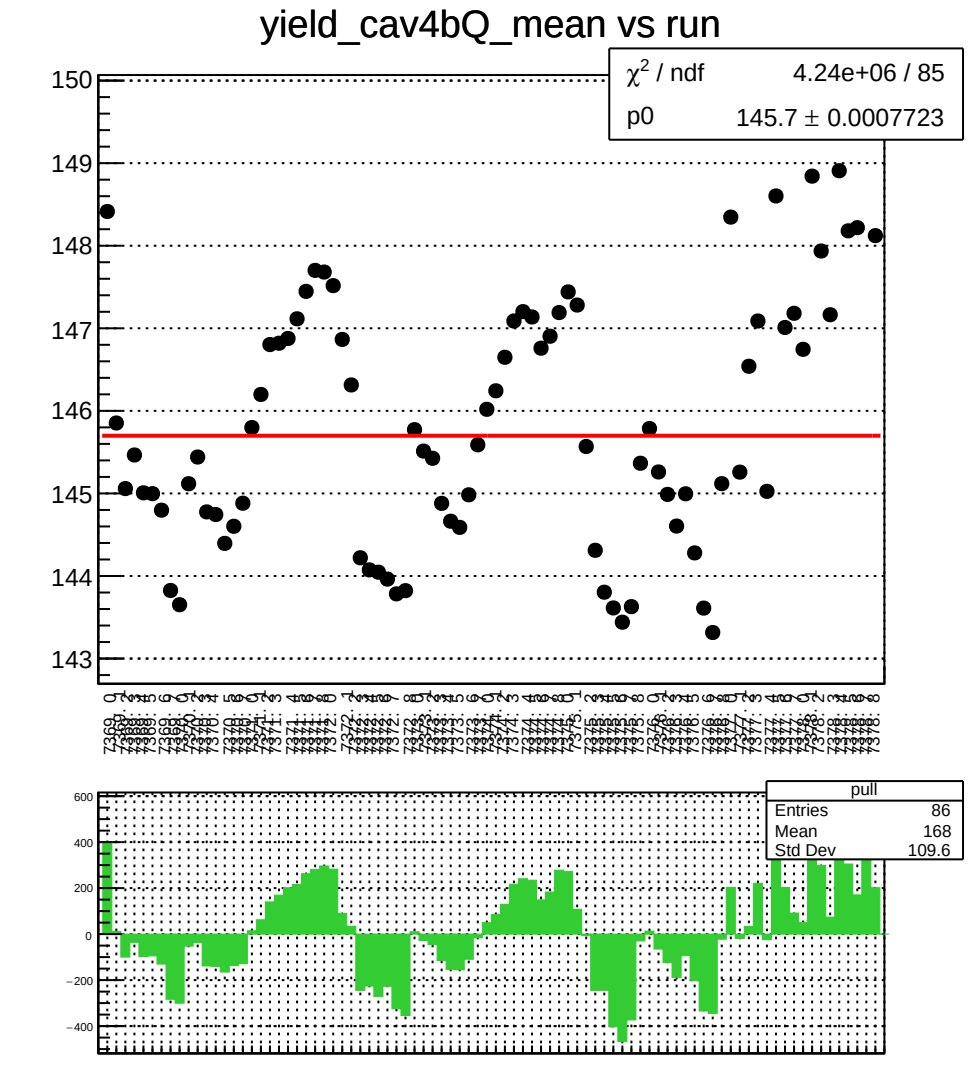

pull1D
Entries 86
Mean 0.4605
Std Dev 4.724
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

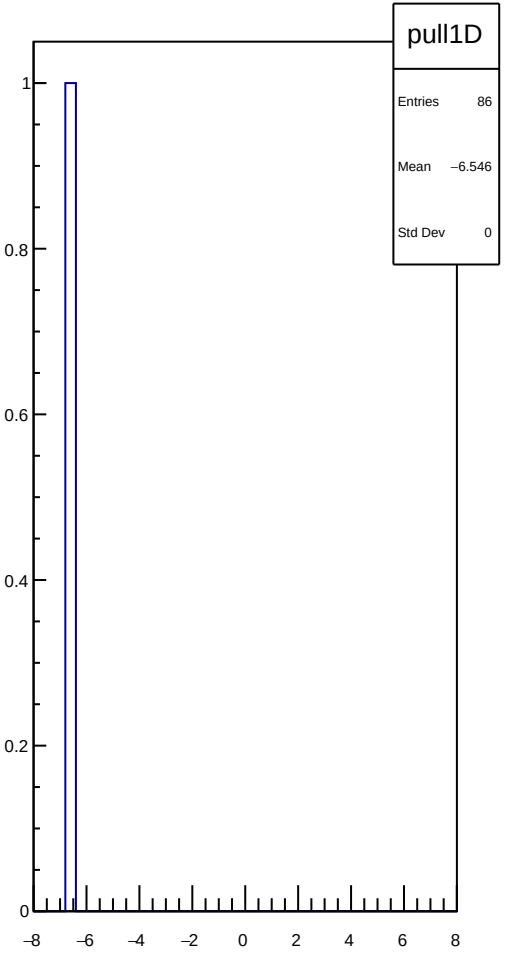

yield_bcm_dg_us_rms vs run
χ² / ndf 1.768e+04 / 85
p0 0.5933 ± 0.0004673
0.75
0.7
0.65
0.6
0.55
0.5
0.45

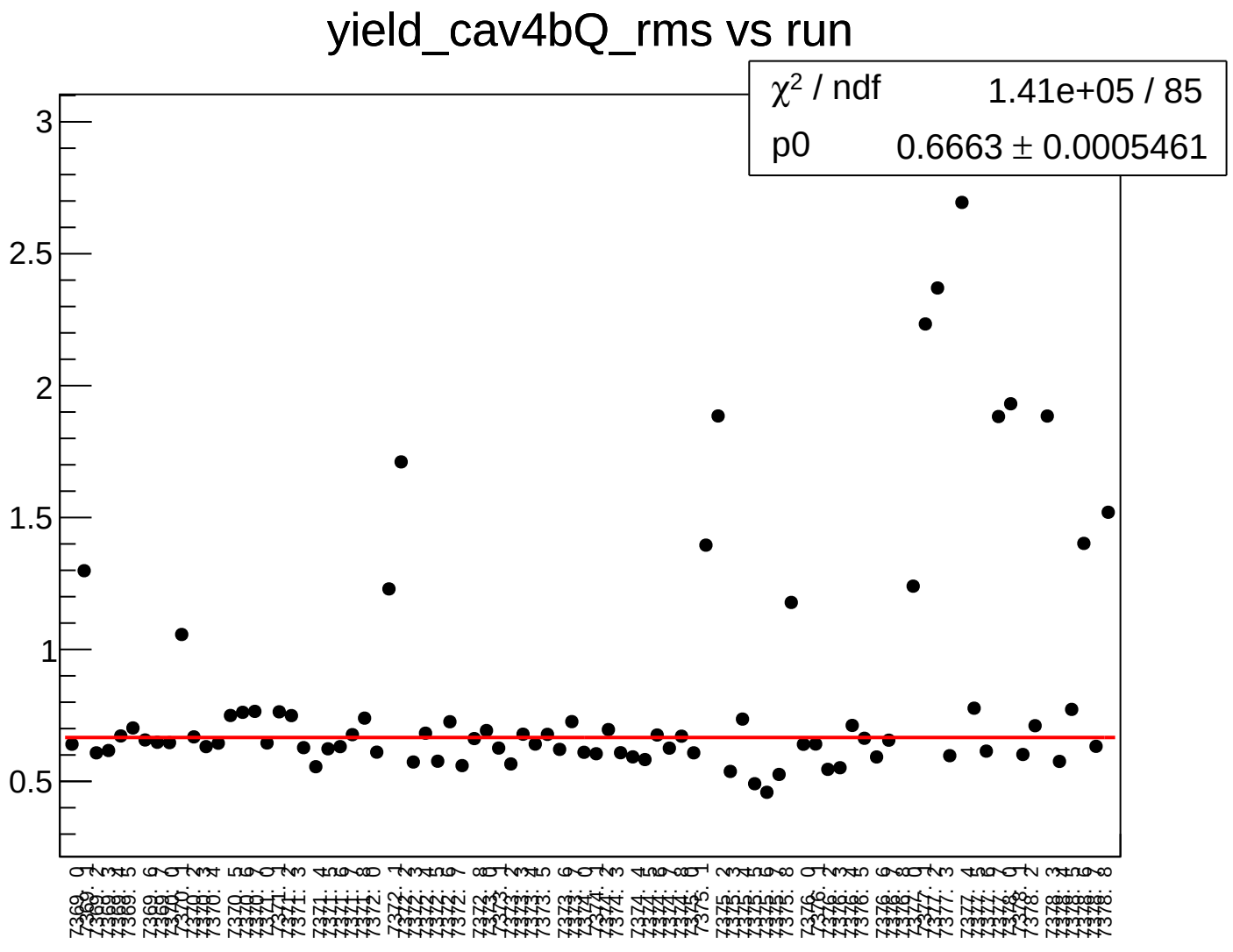

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.24e+05 / 85
p0 144.8 ± 0.0006543
145.4
145.2
145
144.8
144.6
144.4
144.2
144
pull
Entries 86
Mean −202.1
Std Dev 231.2
50
0
−50
−100
−150

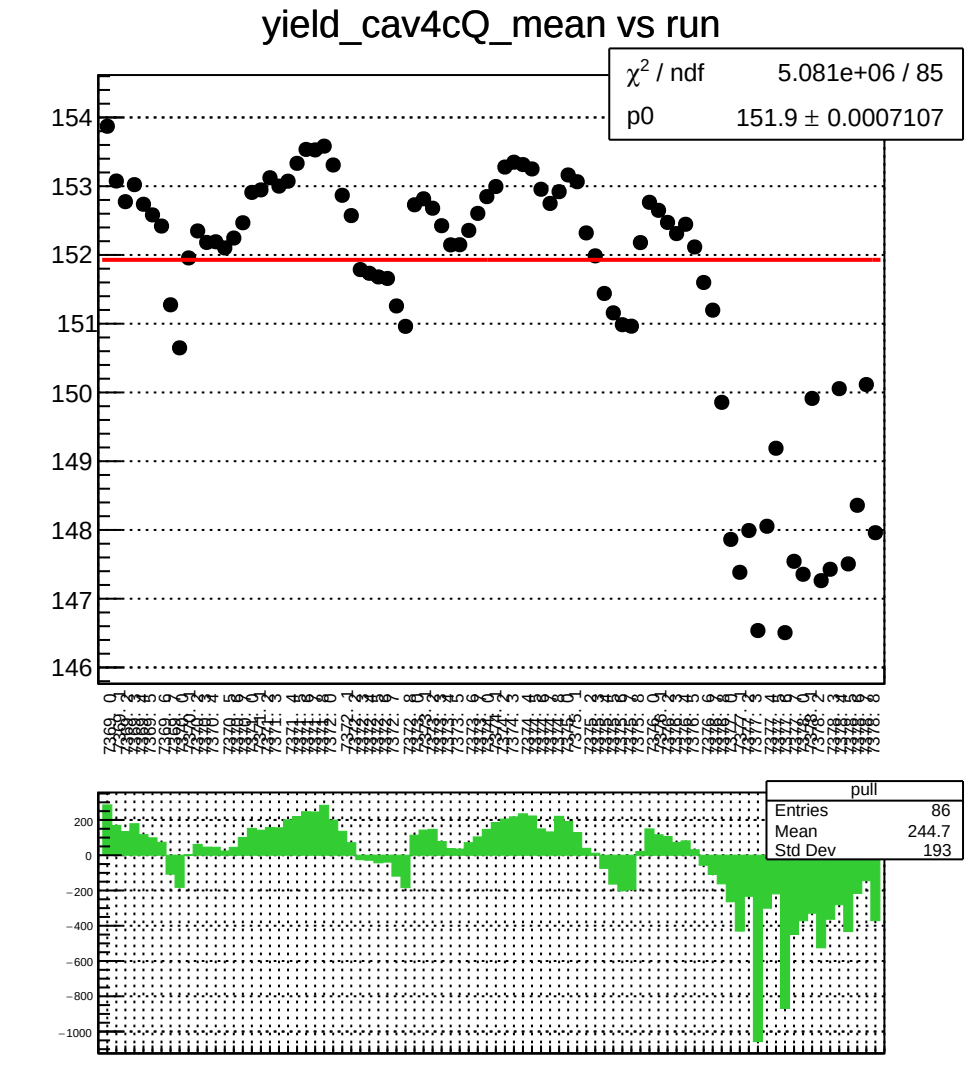

pull1D
Entries 86
Mean 0.9668
Std Dev 4.262
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

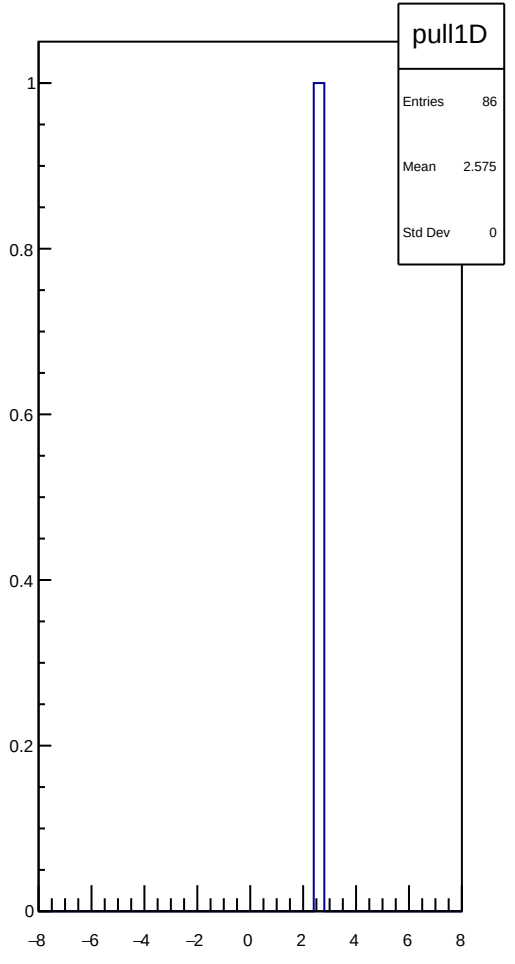

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.805e+04 / 85
p0 0.5873 ± 0.0004626
0.75
0.7
0.65
0.6
0.55
0.5
0.45

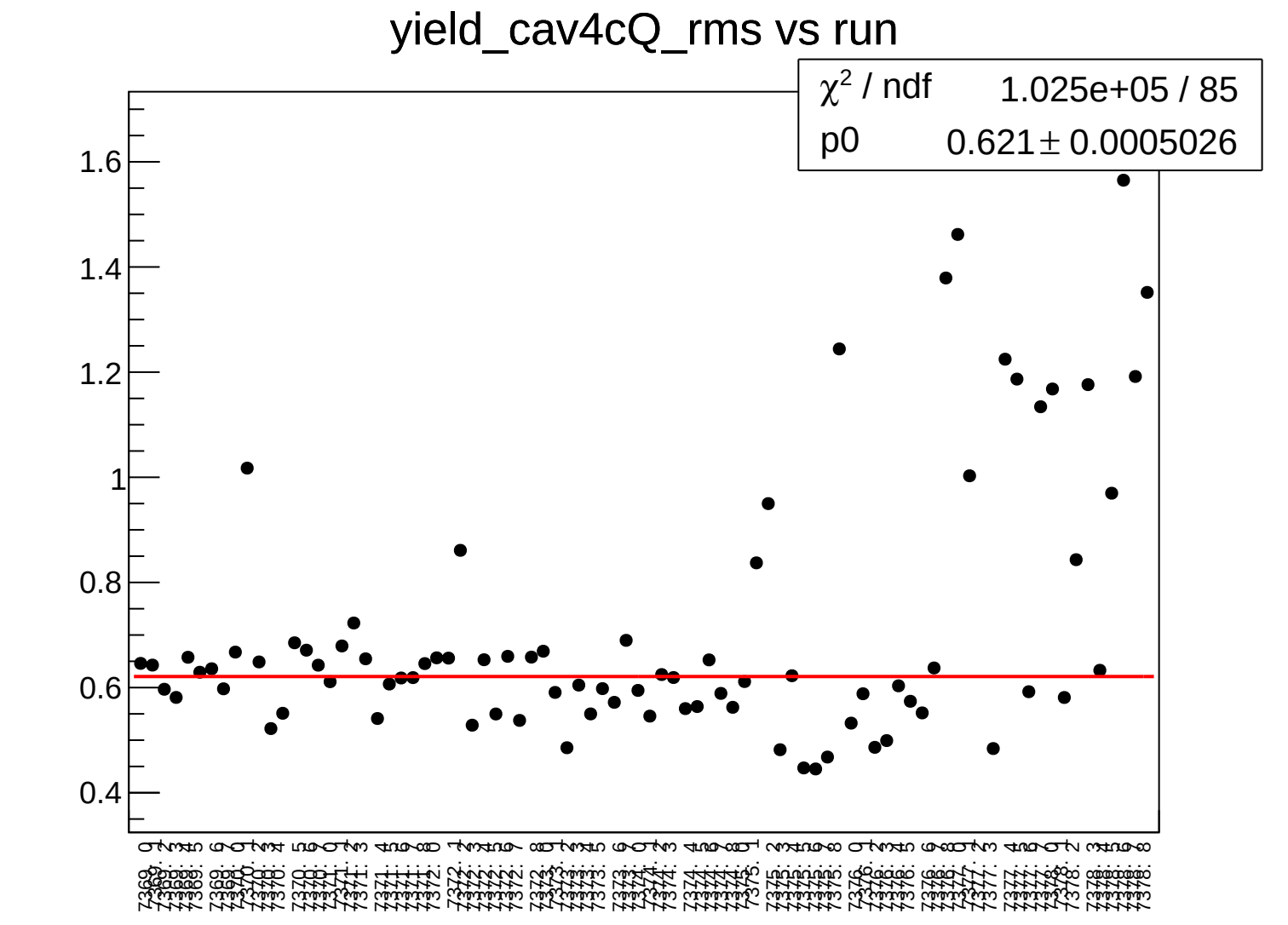

yield_cav4bQ_mean vs run
χ² / ndf 4.24e+06 / 85
p0 145.7 ± 0.0007723
150
149
148
147
146
145
144
143
pull
Entries 86
Mean 168
Std Dev 109.6
600
400
200
0
−200
−400

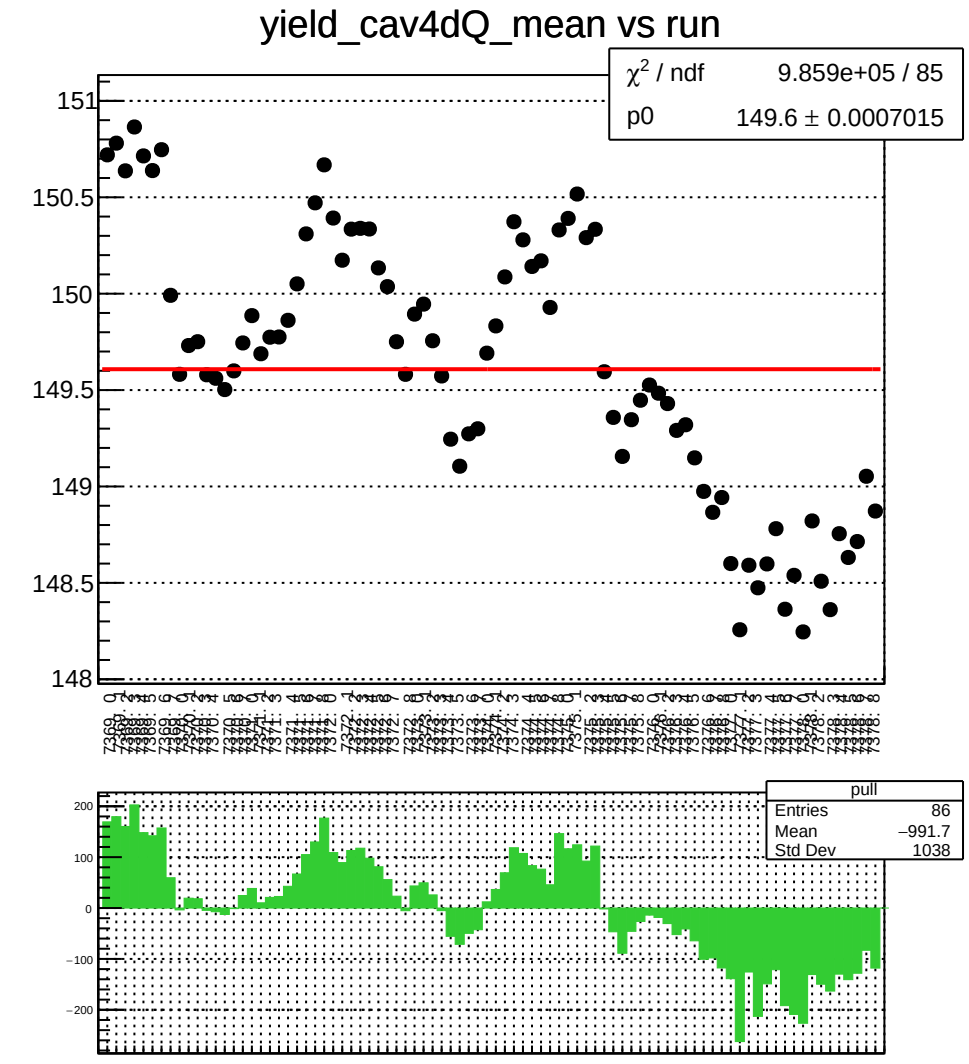

pull1D
Entries 86
Mean −6.546
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

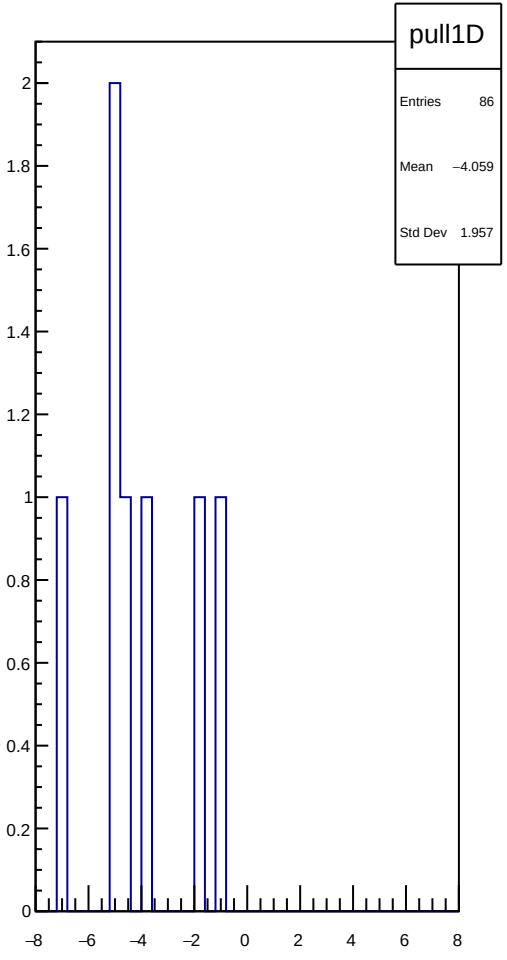

yield_cav4bQ_rms vs run
χ² / ndf 1.41e+05 / 85
p0 0.6663 ± 0.0005461
3
2.5
2
1.5
1
0.5

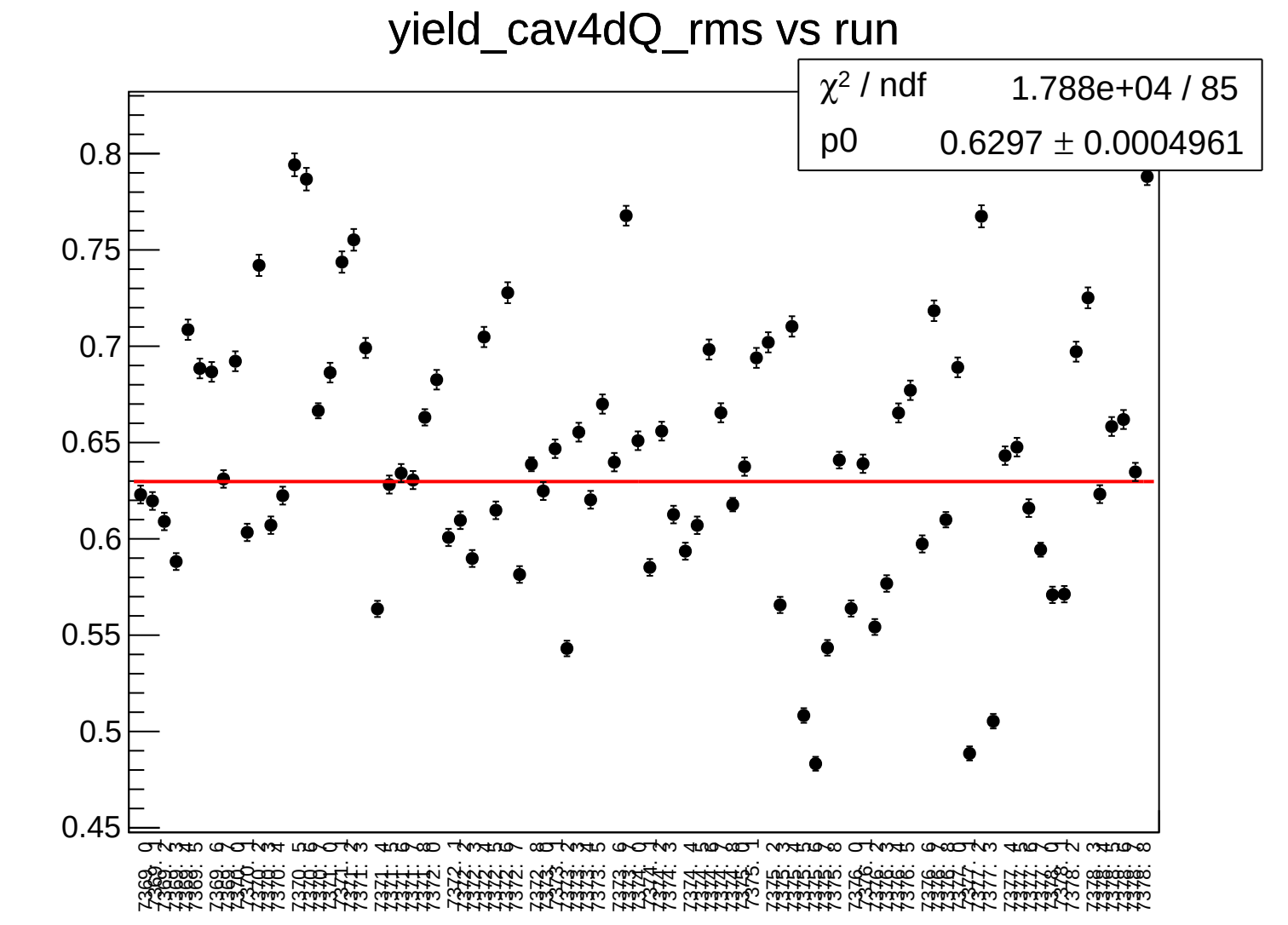

yield_cav4cQ_mean vs run
χ² / ndf 5.081e+06 / 85
p0 151.9 ± 0.0007107
154
153
152
151
150
149
148
147
146
pull
Entries 86
Mean 244.7
Std Dev 193
200
0
−200
−400
−600
−800
−1000

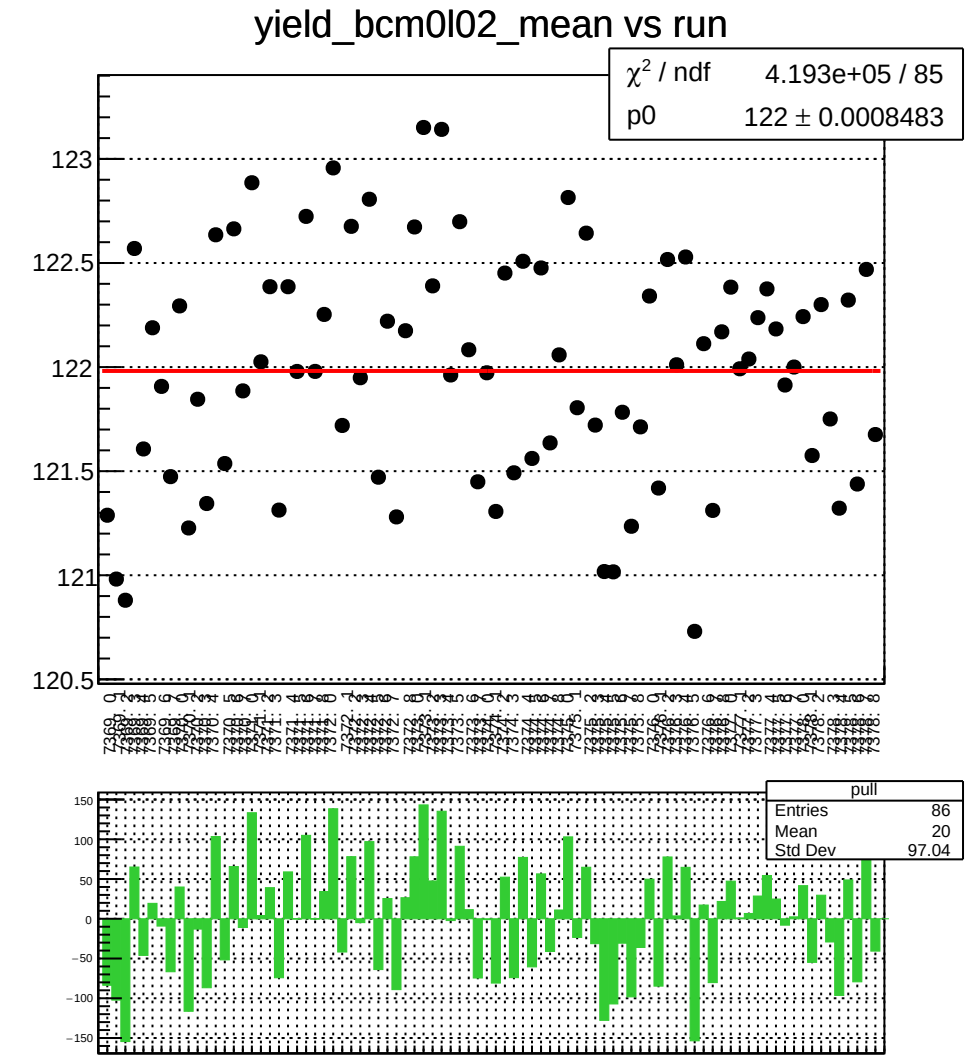

pull1D
Entries 86
Mean 2.575
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

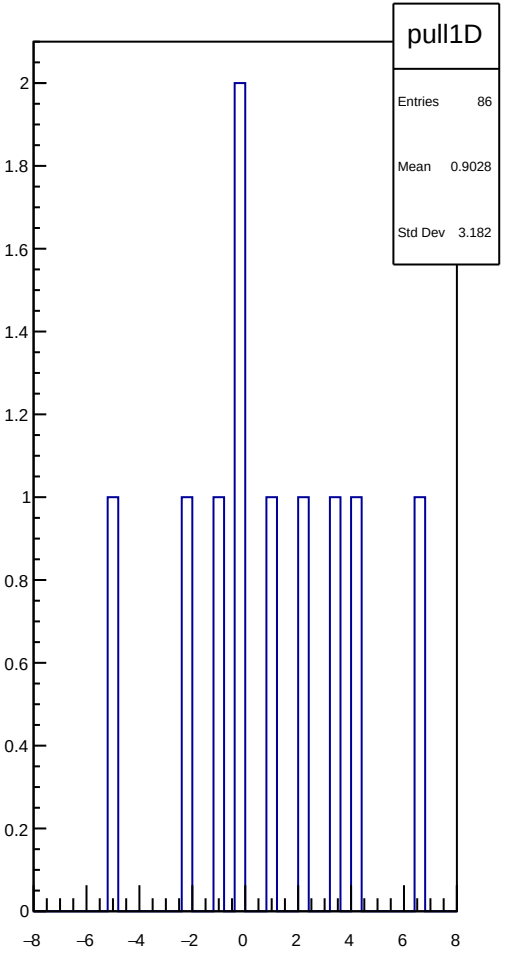

yield_cav4cQ_rms vs run
χ² / ndf 1.025e+05 / 85
p0 0.621 ± 0.0005026
1.6
1.4
1.2
1
0.8
0.6
0.4

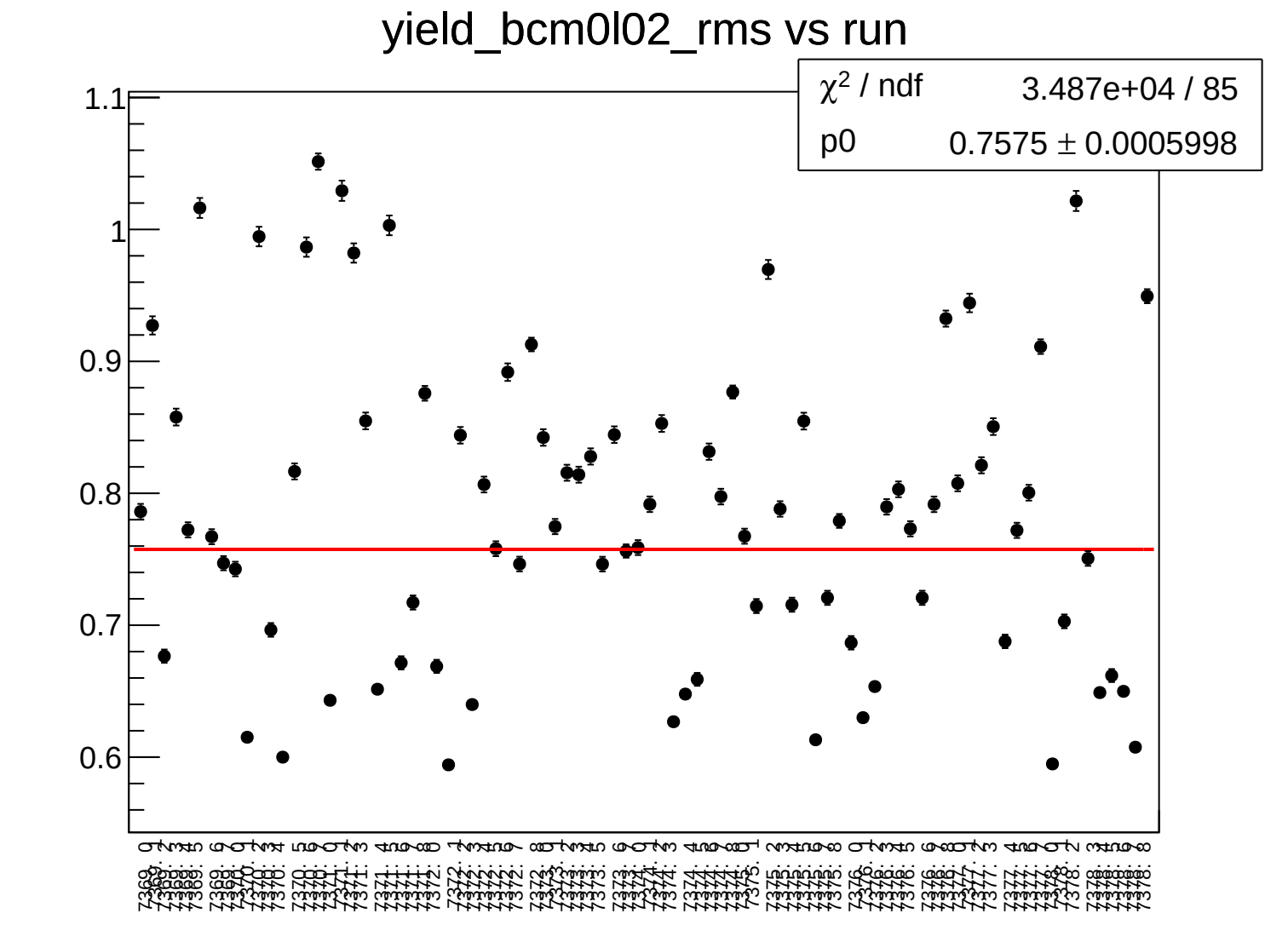

yield_cav4dQ_mean vs run
χ² / ndf 9.859e+05 / 85
p0 149.6 ± 0.0007015
151
150.5
150
149.5
149
148.5
148
pull
Entries 86
Mean −991.7
Std Dev 1038
200
100
0
−100
−200

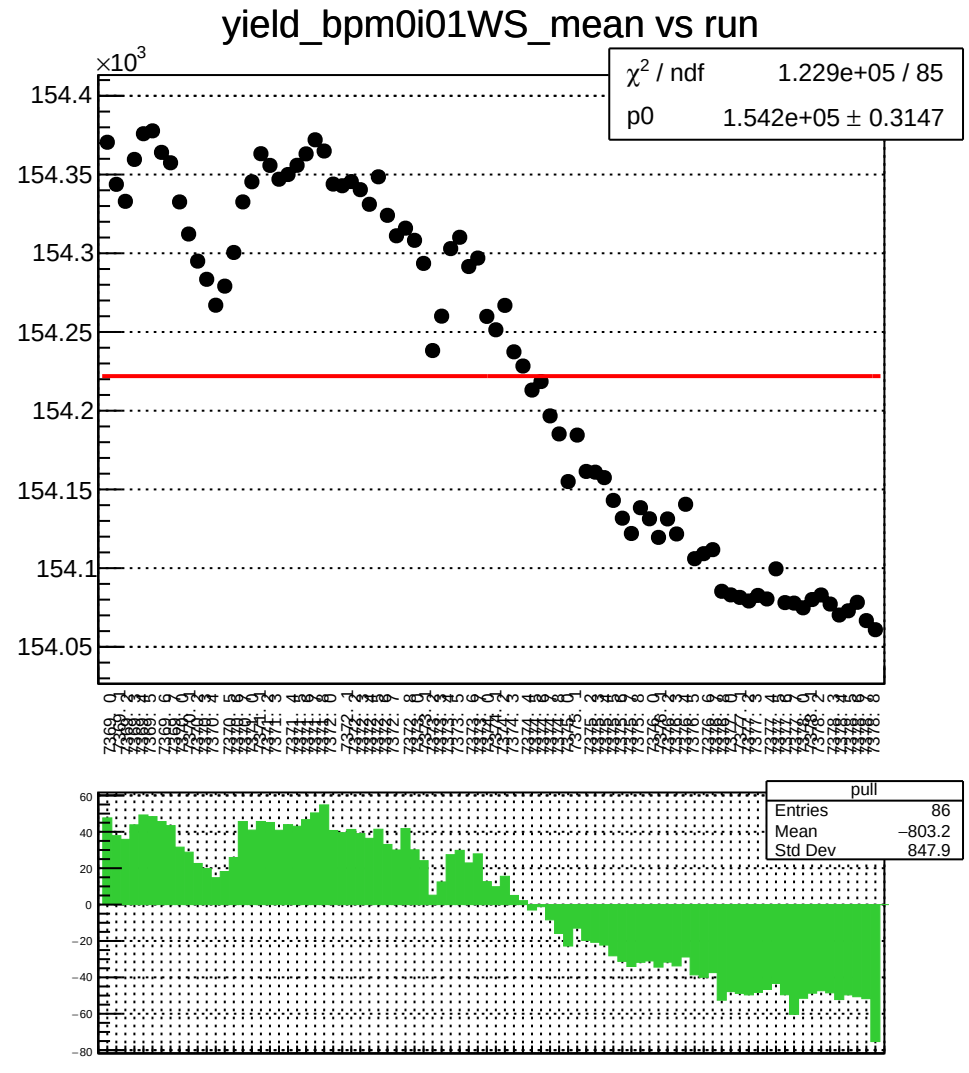

pull1D
Entries 86
Mean −4.059
Std Dev 1.957
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

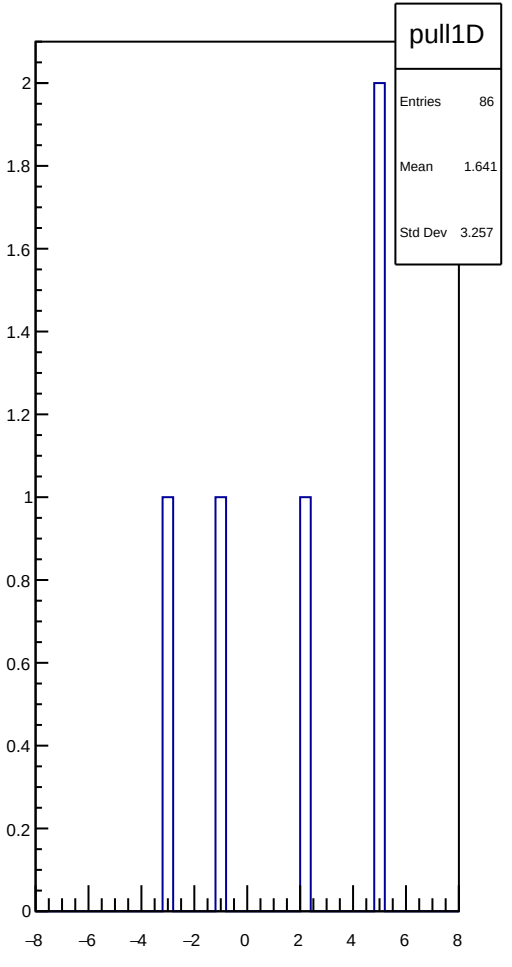

yield_cav4dQ_rms vs run
χ² / ndf 1.788e+04 / 85
p0 0.6297 ± 0.0004961
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

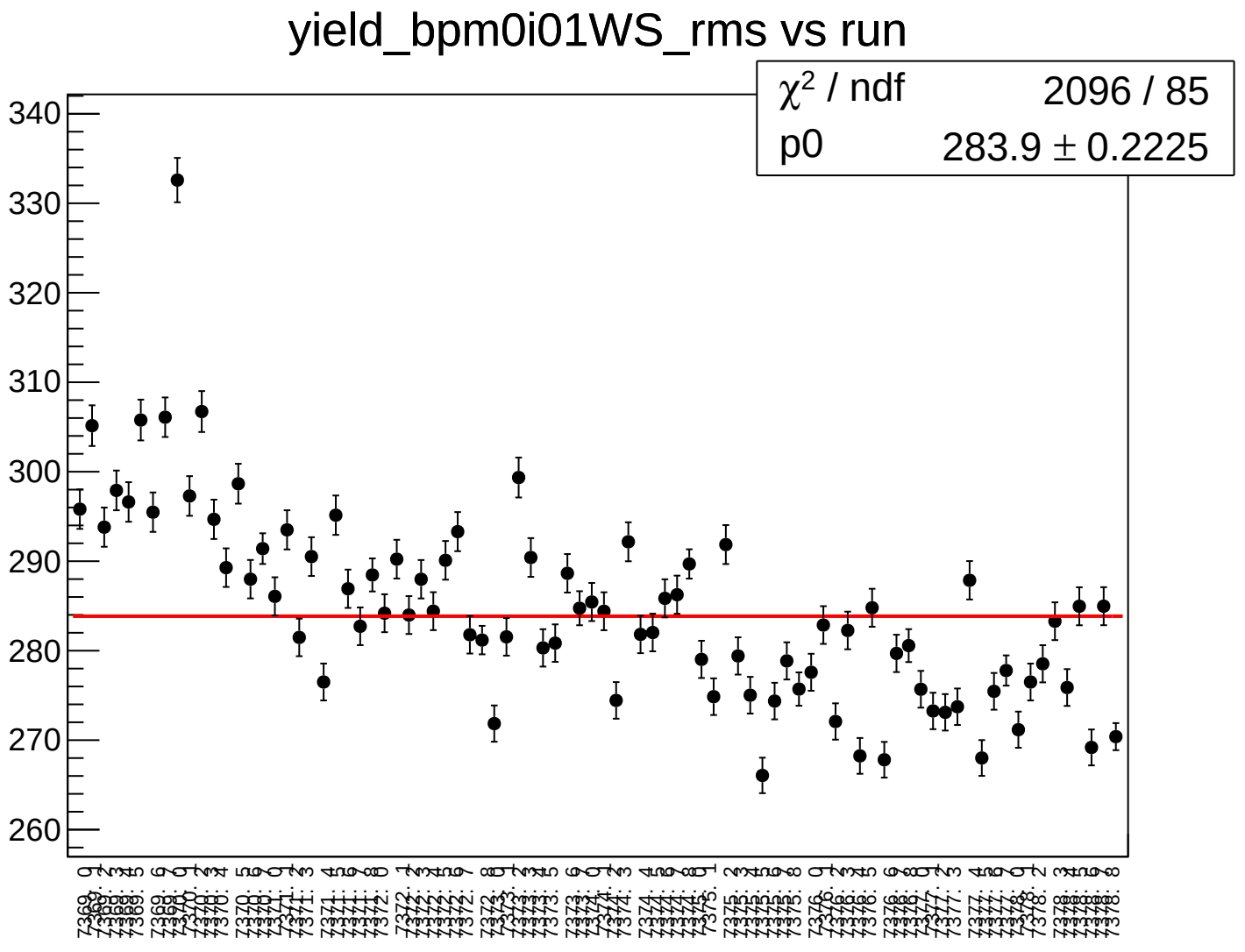

yield_bcm0l02_mean vs run
χ² / ndf 4.193e+05 / 85
p0 122 ± 0.0008483
123
122.5
122
121.5
121
120.5
pull
Entries 86
Mean 20
Std Dev 97.04
150
100
50
0
−50
−100
−150

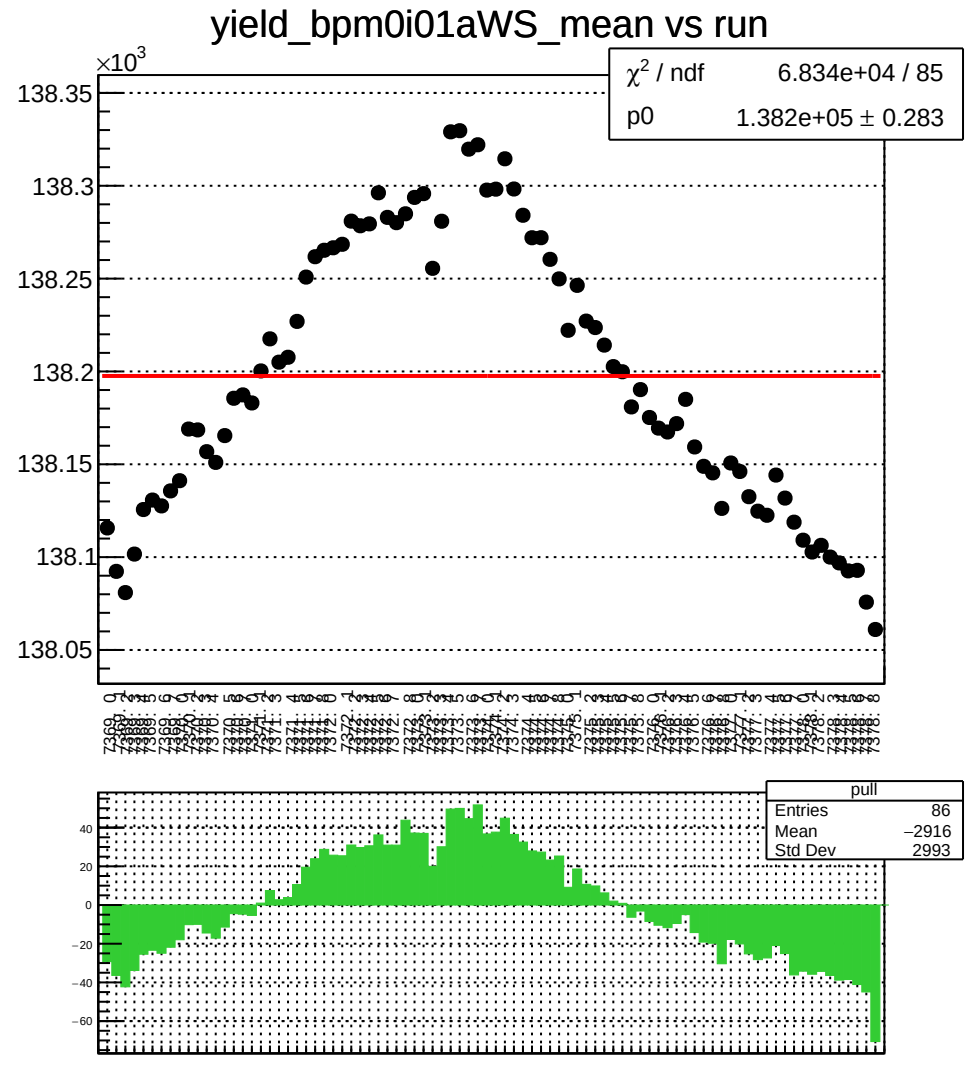

pull1D
Entries 86
Mean 0.9028
Std Dev 3.182
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

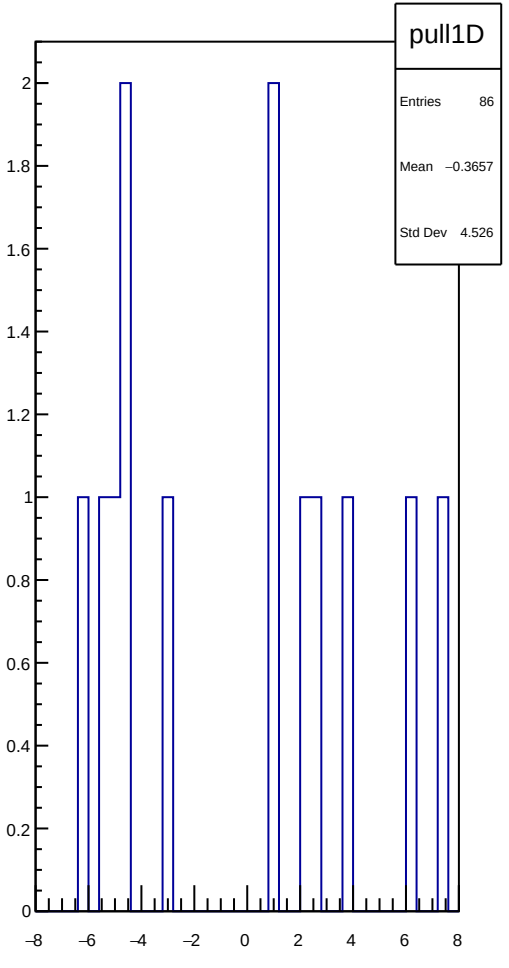

yield_bcm0l02_rms vs run
χ2 / ndf 3.487e+04 / 85
p0 0.7575 ± 0.0005998
1.1
1
0.9
0.8
0.7
0.6

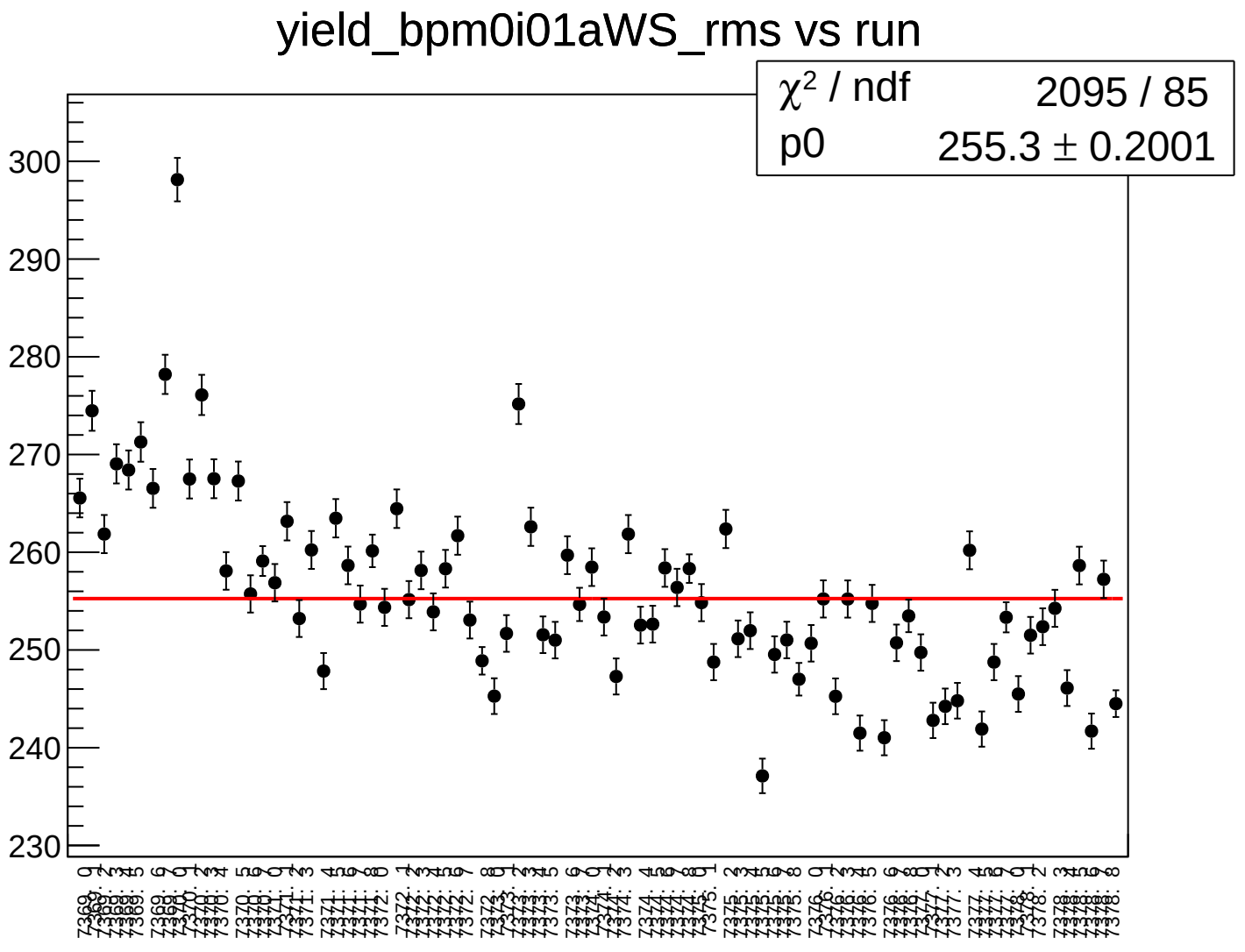

yield_bpm0i01WS_mean vs run
×10^3
χ^2 / ndf 1.229e+05 / 85
p0 1.542e+05 ± 0.3147
154.4
154.35
154.3
154.25
154.2
154.15
154.1
154.05
pull
Entries 86
Mean −803.2
Std Dev 847.9
60
40
20
0
−20
−40
−60
−80

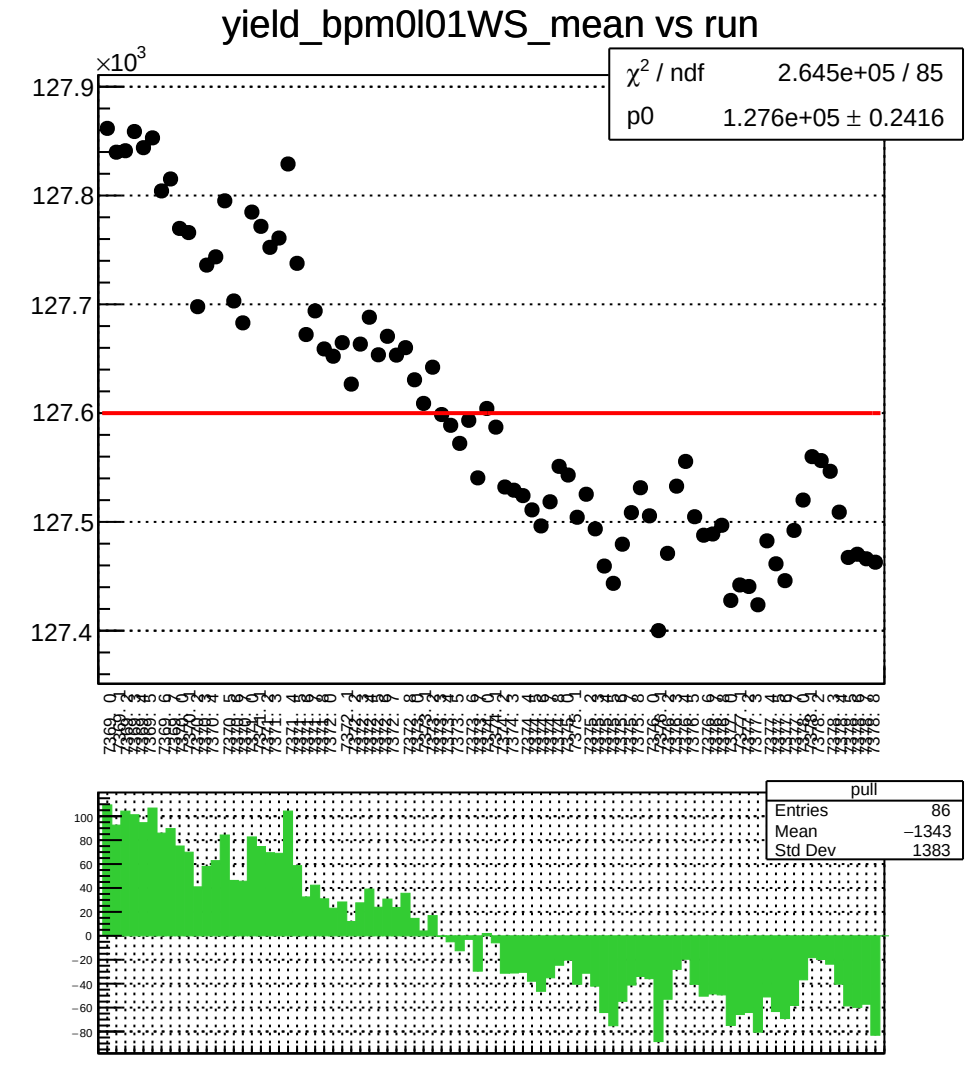

pull1D
Entries 86
Mean 1.641
Std Dev 3.257
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

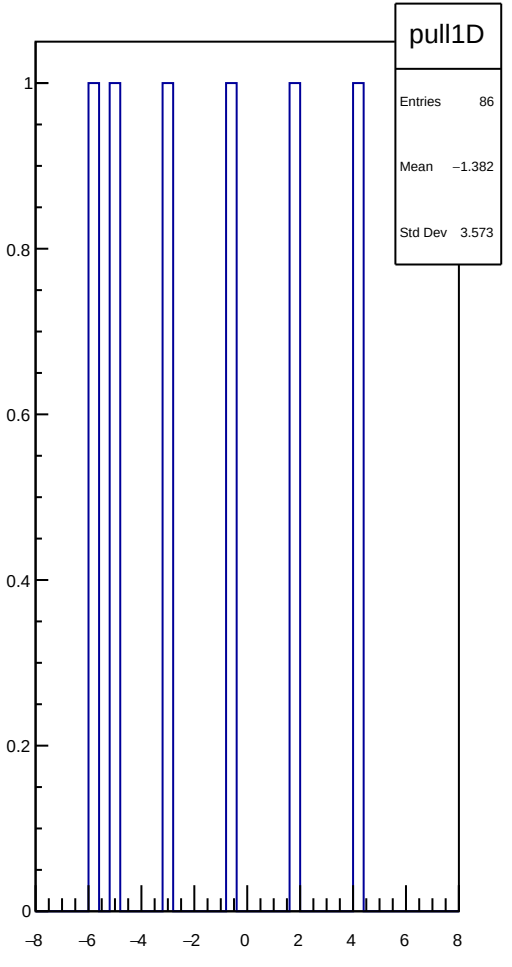

yield_bpm0i01WS_rms vs run
χ² / ndf 2096 / 85
p0 283.9 ± 0.2225
340
330
320
310
300
290
280
270
260

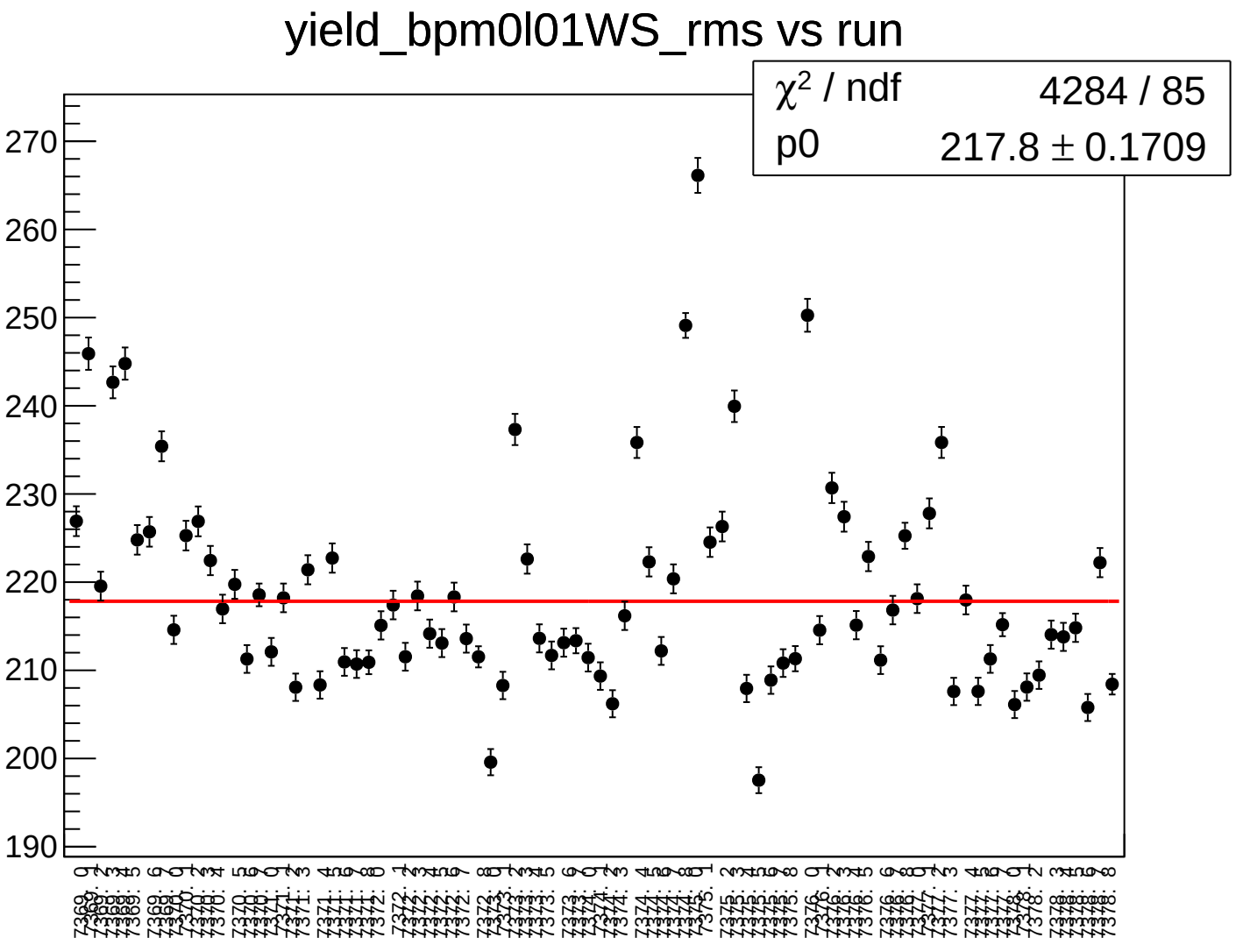

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 6.834e+04 / 85
p0 1.382e+05 ± 0.283
138.35
138.3
138.25
138.2
138.15
138.1
138.05
pull
Entries 86
Mean −2916
Std Dev 2993
40
20
0
−20
−40
−60

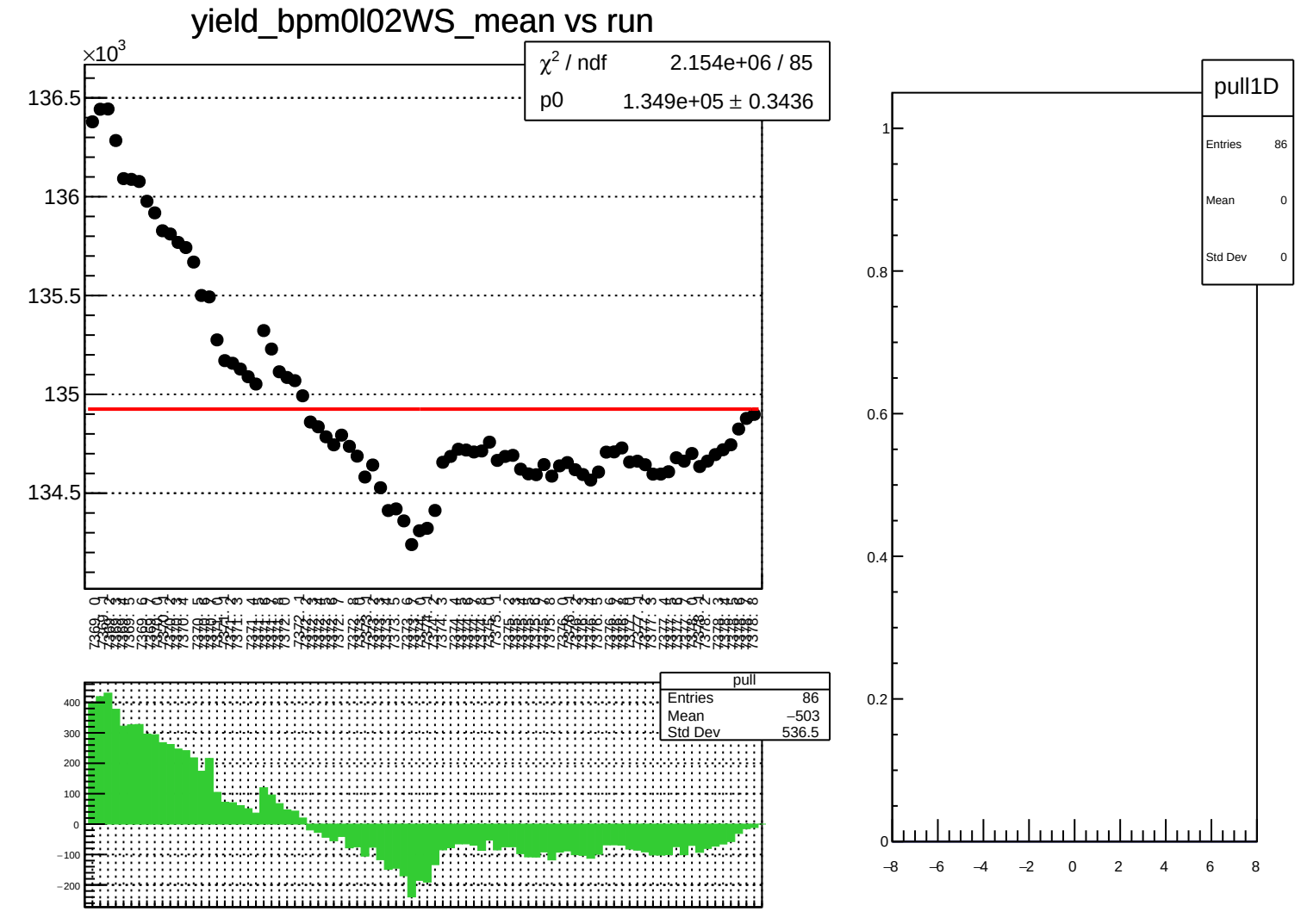

pull1D
Entries 86
Mean −0.3657
Std Dev 4.526
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

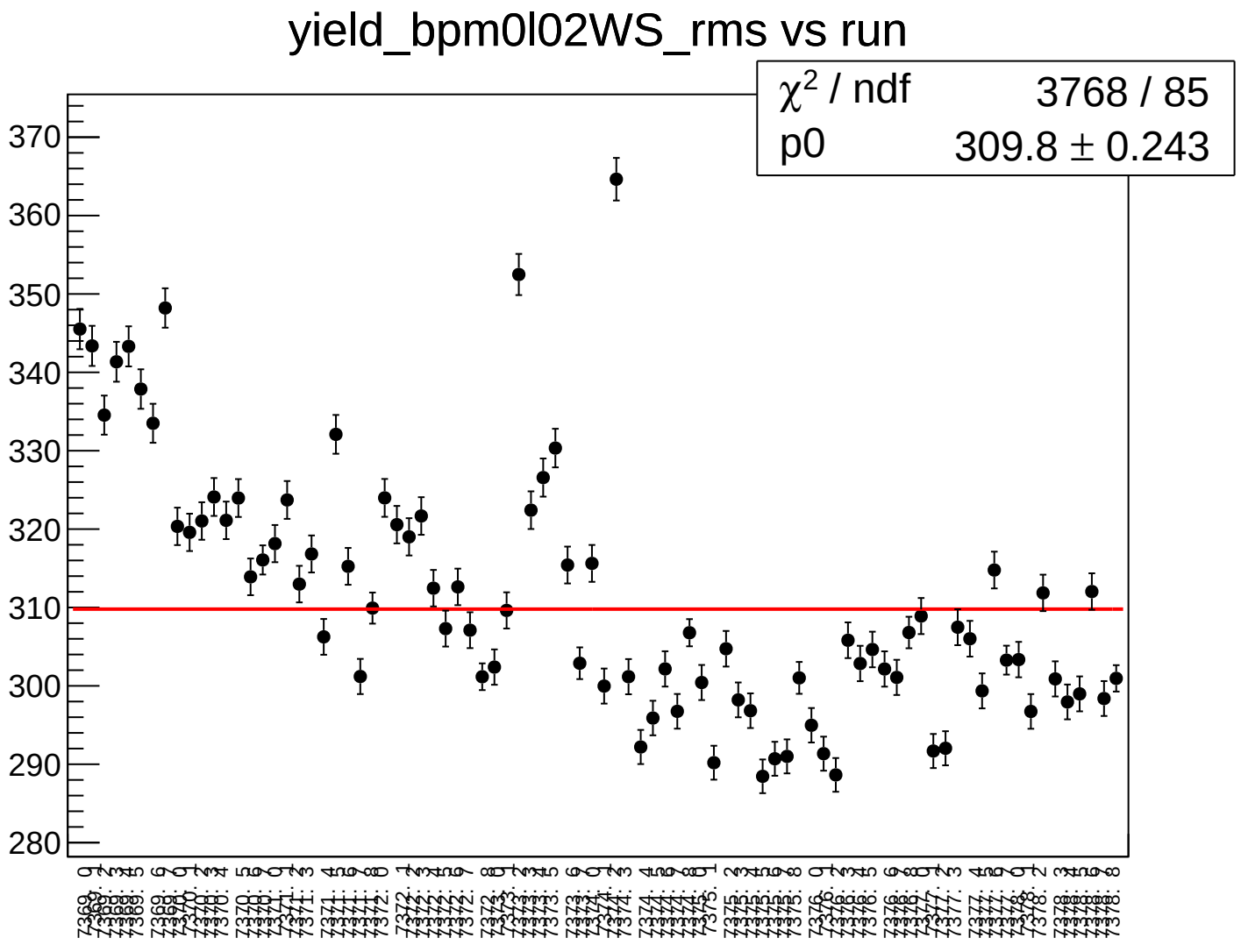

yield_bpm0i01aWS_rms vs run
χ² / ndf 2095 / 85
p0 255.3 ± 0.2001
300
290
280
270
260
250
240
230

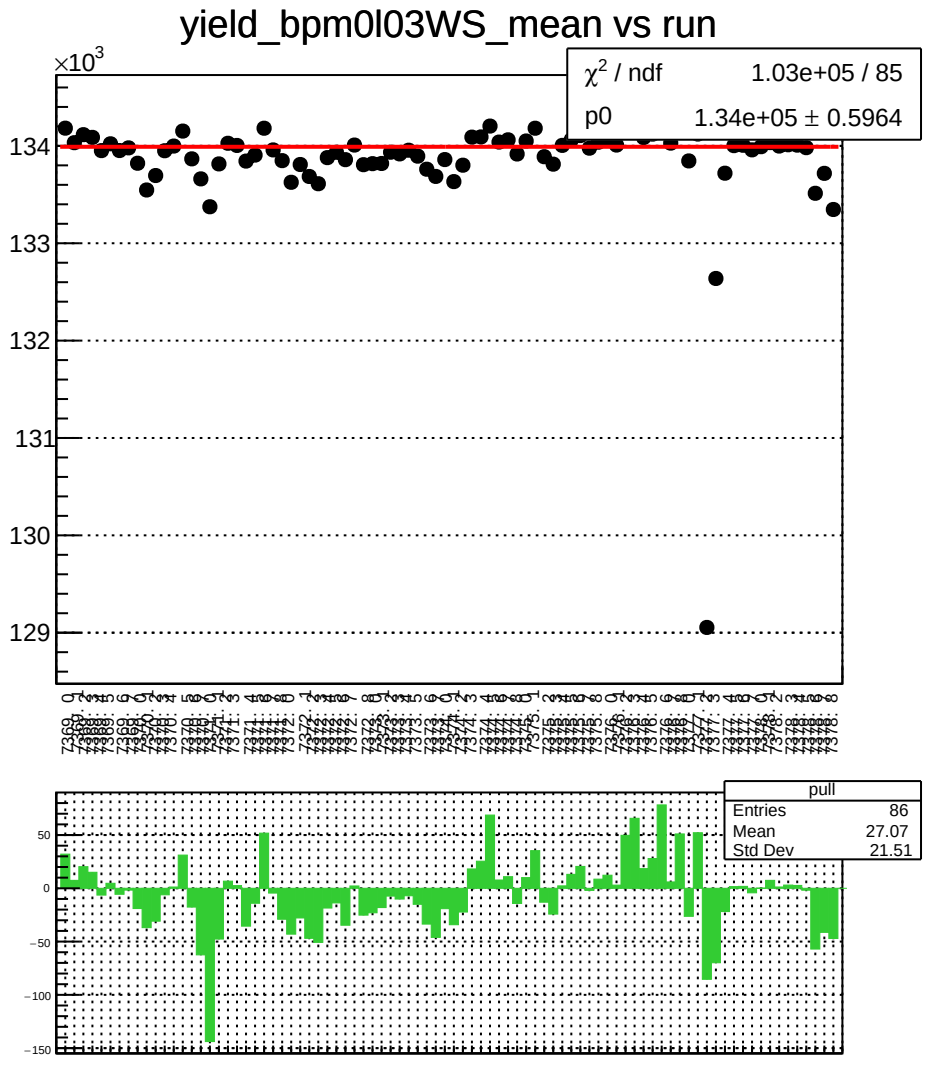

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.645e+05 / 85
p0 1.276e+05 ± 0.2416
127.9
127.8
127.7
127.6
127.5
127.4
pull
Entries 86
Mean −1343
Std Dev 1383
100
80
60
40
20
0
−20
−40
−60
−80

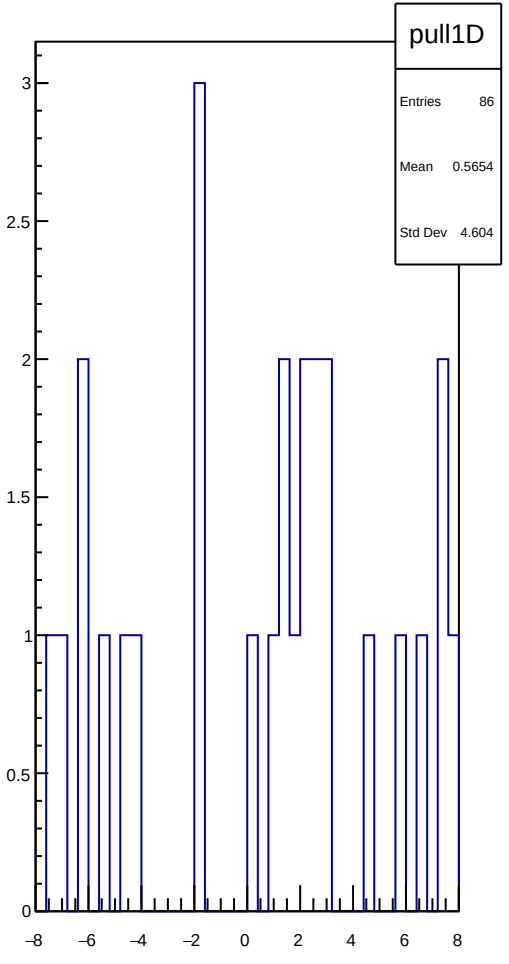

pull1D
Entries 86
Mean −1.382
Std Dev 3.573
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

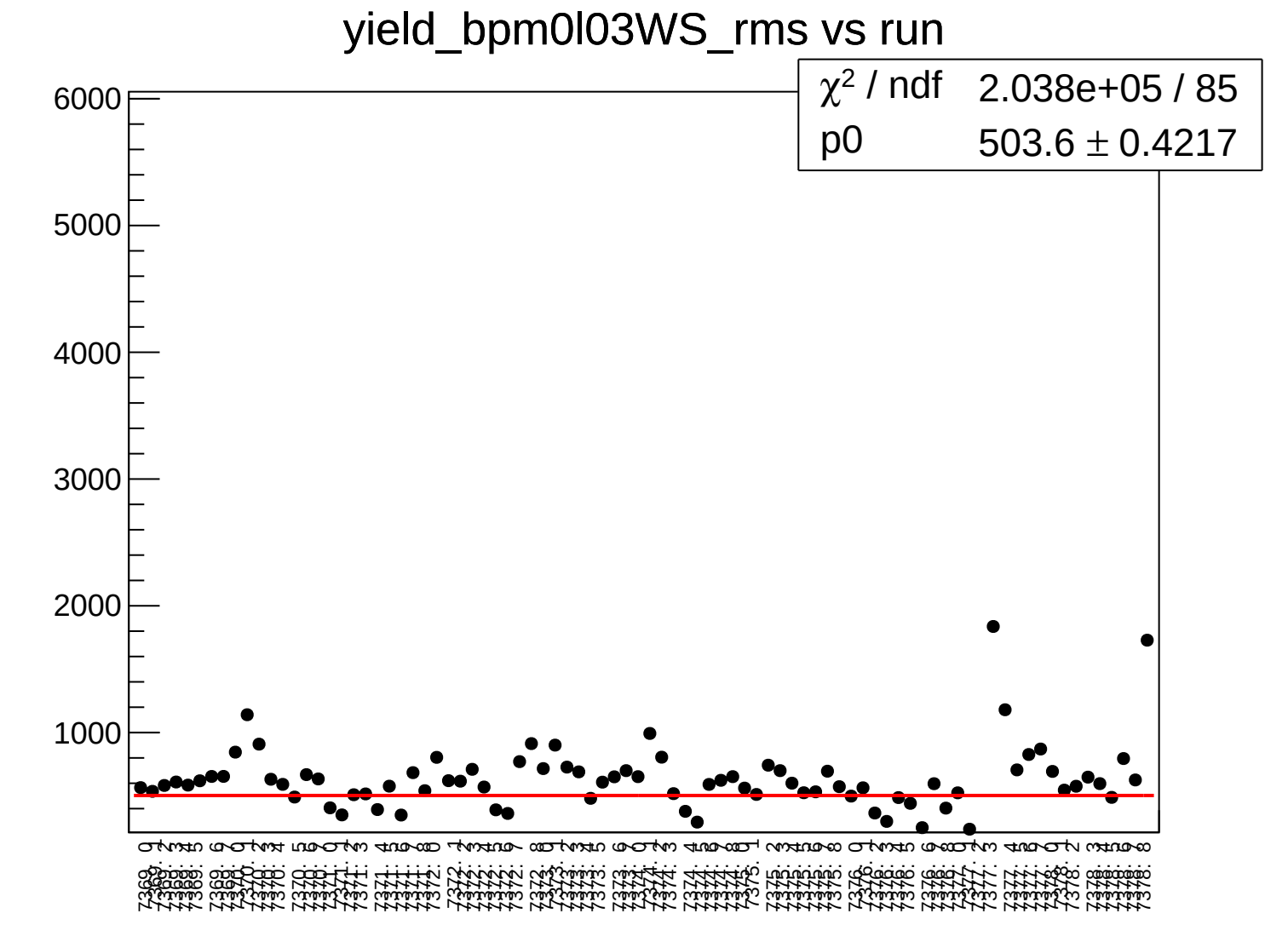

yield_bpm0l01WS_rms vs run
χ² / ndf 4284 / 85
p0 217.8 ± 0.1709
270
260
250
240
230
220
210
200
190

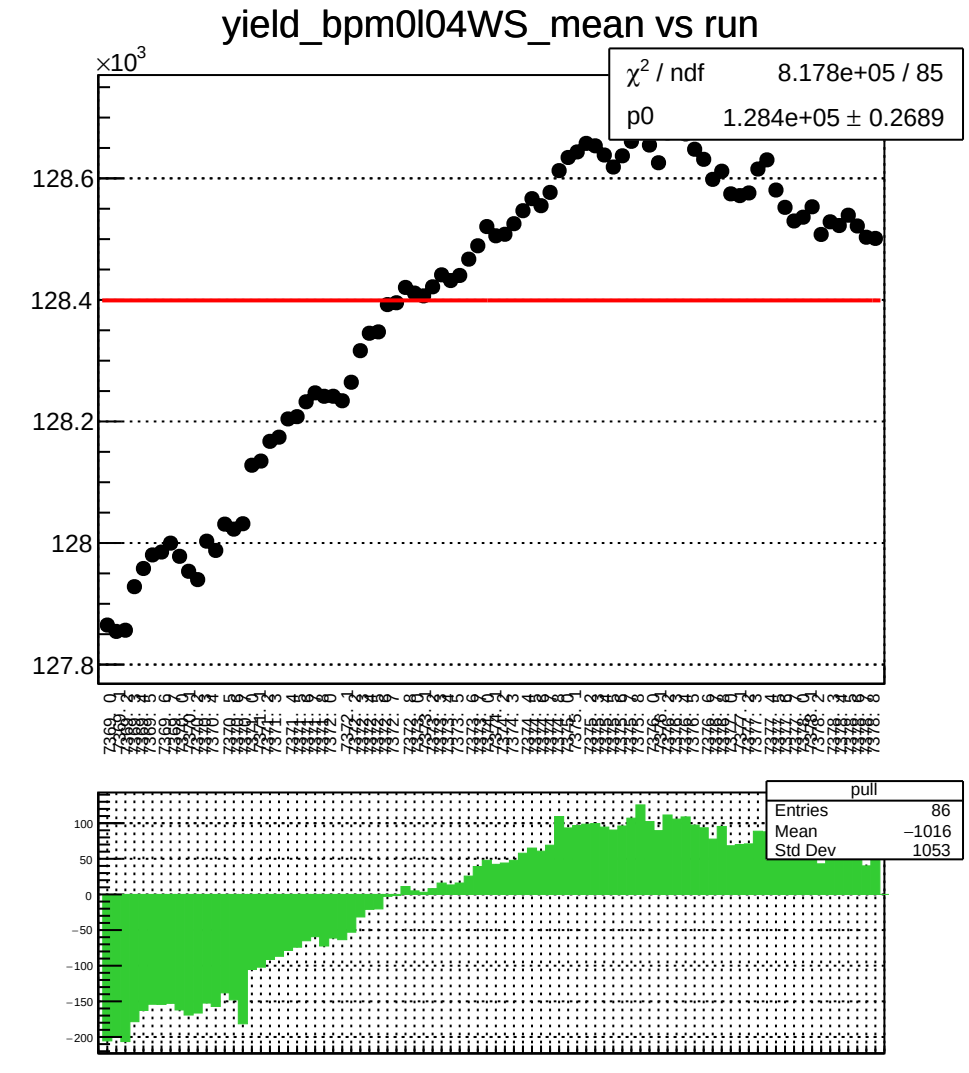

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 2.154e+06 / 85
p0 1.349e+05 ± 0.3436
136.5
136
135.5
135
134.5
pull
Entries 86
Mean −503
Std Dev 536.5
400
300
200
100
0
−100
−200
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

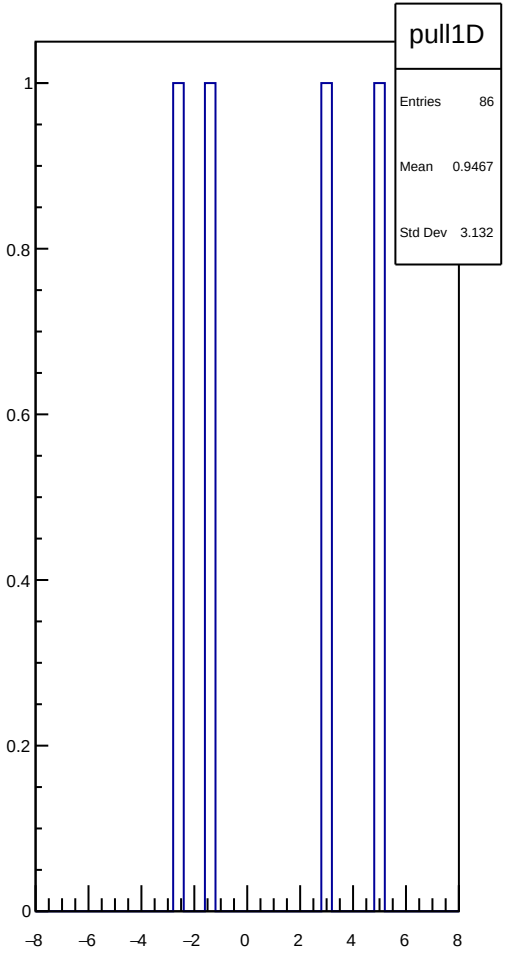

yield_bpm0l02WS_rms vs run
χ² / ndf 3768 / 85
p0 309.8 ± 0.243
370
360
350
340
330
320
310
300
290
280

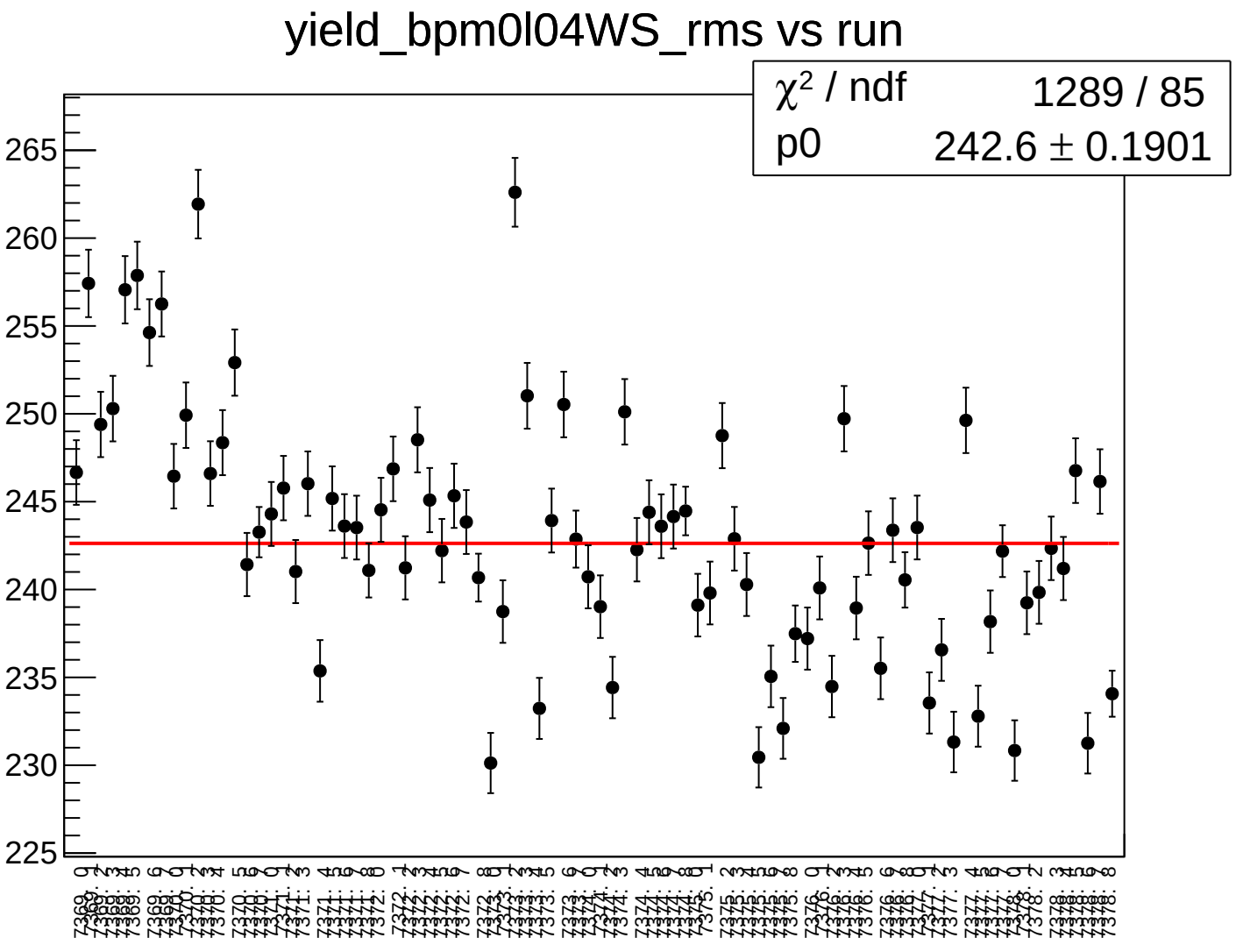

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 1.03e+05 / 85
p0 1.34e+05 ± 0.5964
134
133
132
131
130
129
pull
Entries 86
Mean 27.07
Std Dev 21.51
50
0
−50
−100
−150

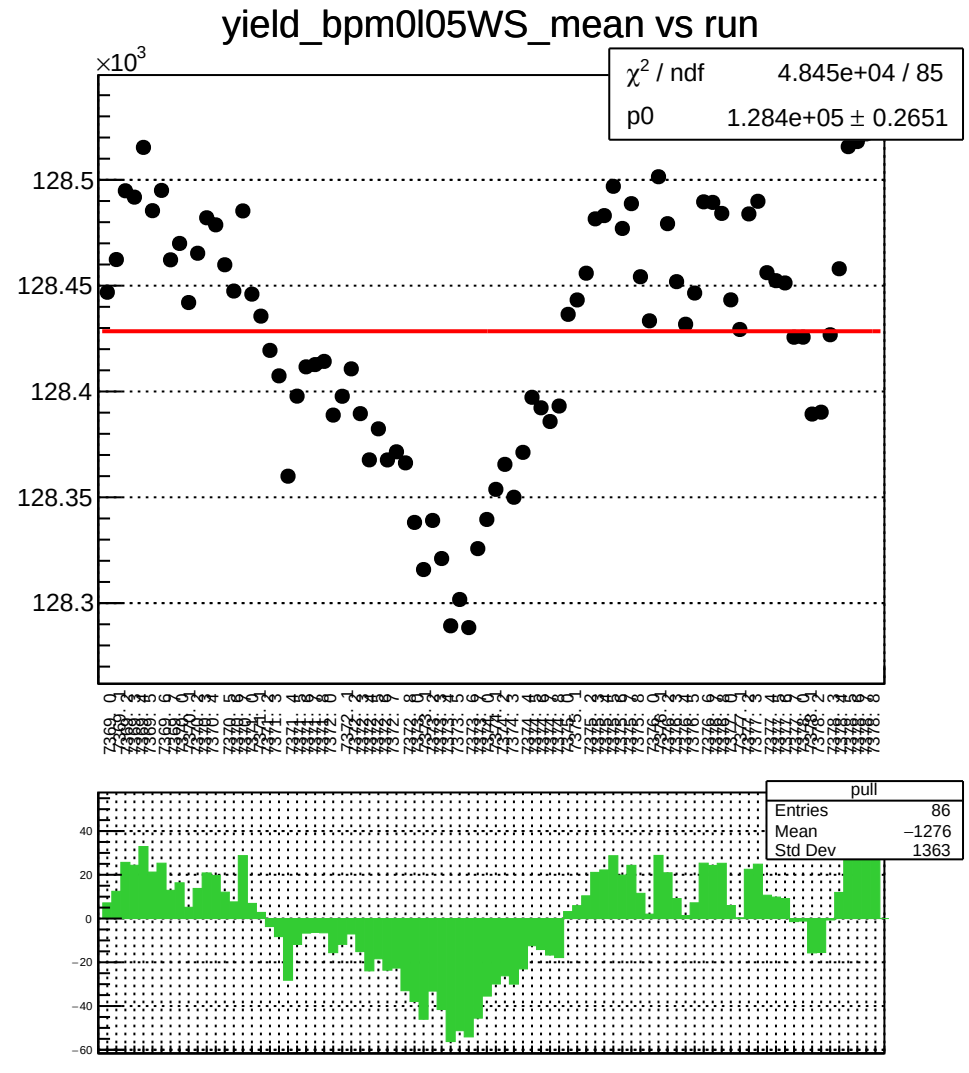

pull1D
Entries 86
Mean 0.5654
Std Dev 4.604
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

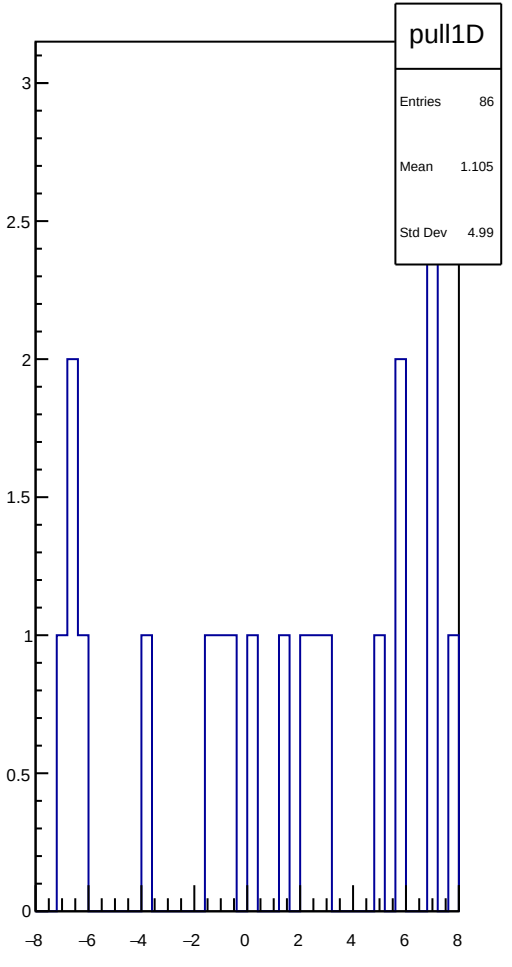

yield_bpm0l03WS_rms vs run
χ² / ndf 2.038e+05 / 85
p0 503.6 ± 0.4217
6000
5000
4000
3000
2000
1000

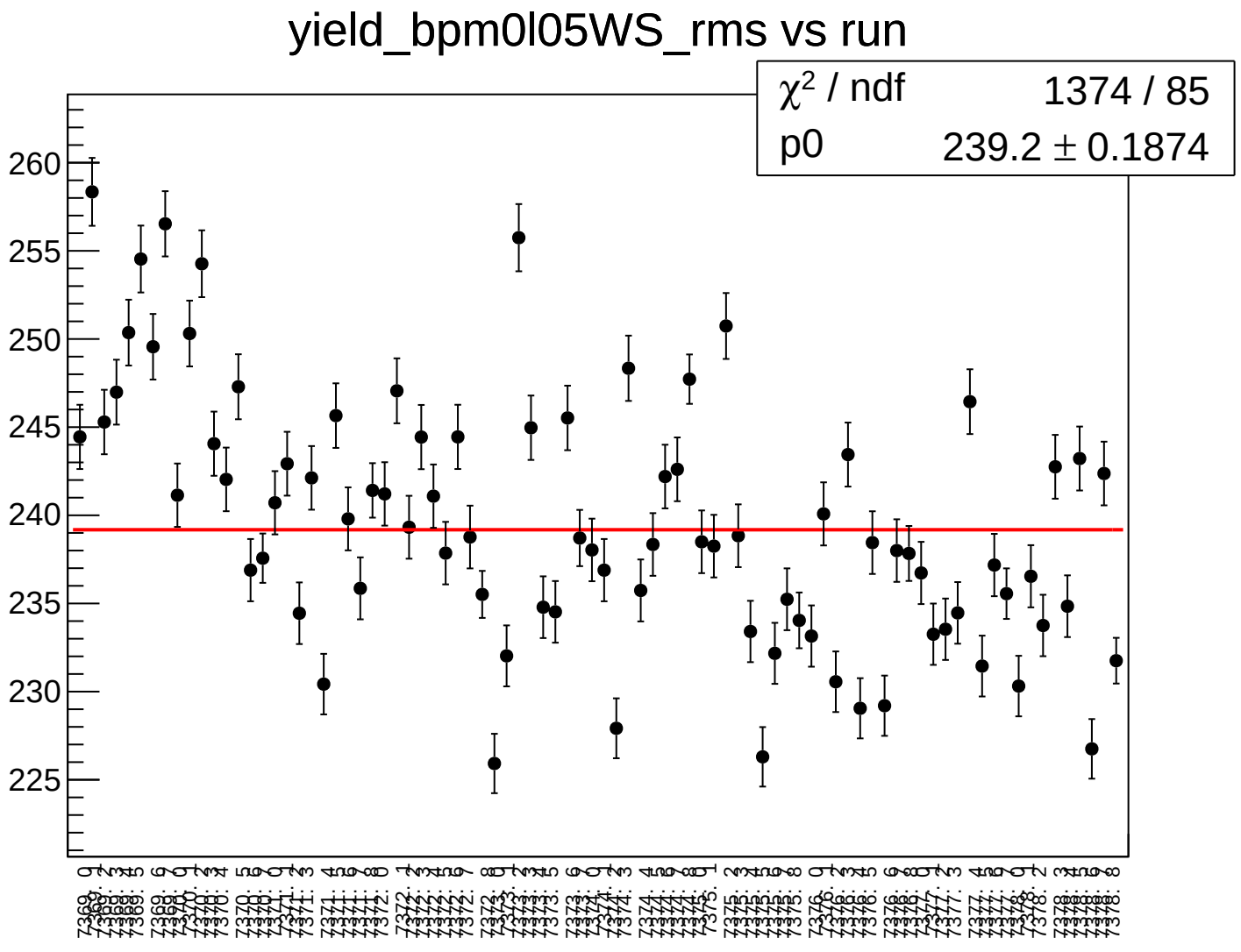

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 8.178e+05 / 85
p0 1.284e+05 ± 0.2689
128.6
128.4
128.2
128
127.8
pull
Entries 86
Mean −1016
Std Dev 1053
100
50
0
−50
−100
−150
−200

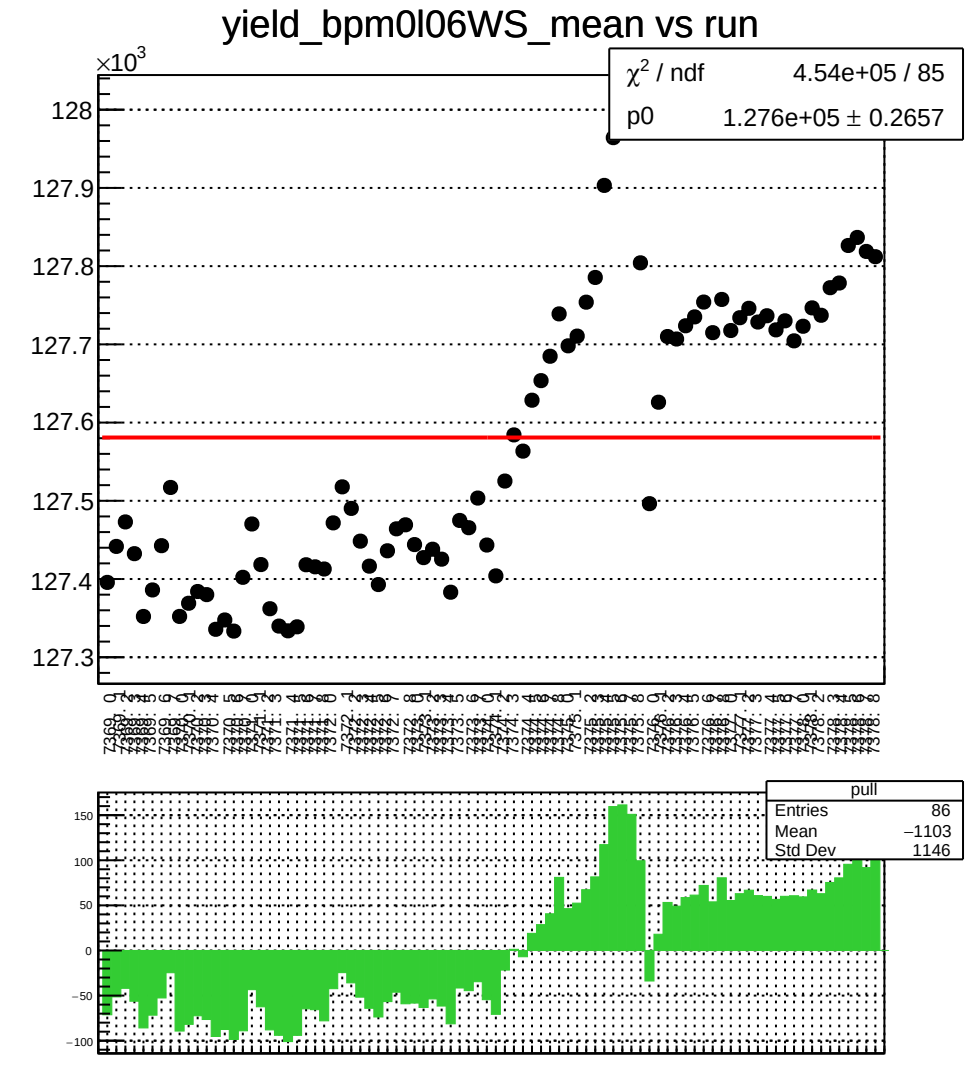

pull1D
Entries 86
Mean 0.9467
Std Dev 3.132
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

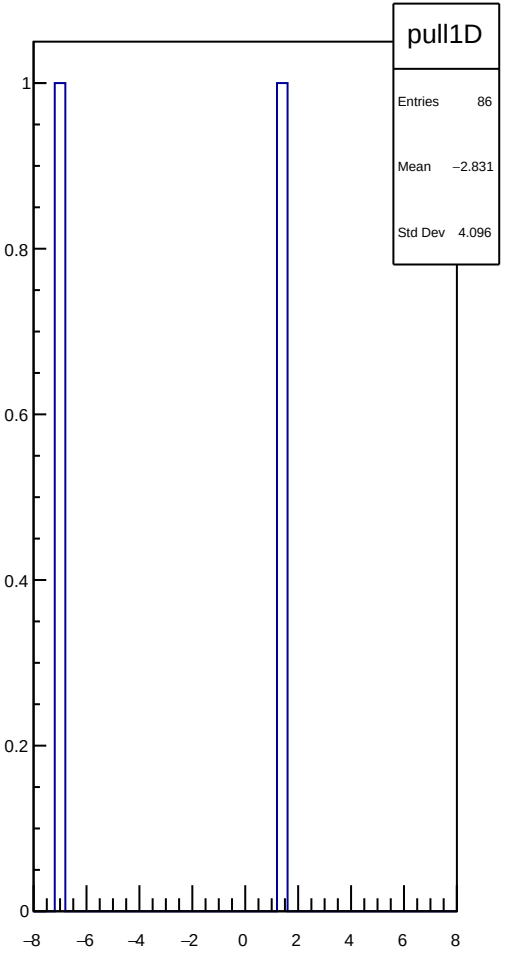

yield_bpm0l04WS_rms vs run
χ² / ndf 1289 / 85
p0 242.6 ± 0.1901
265
260
255
250
245
240
235
230
225

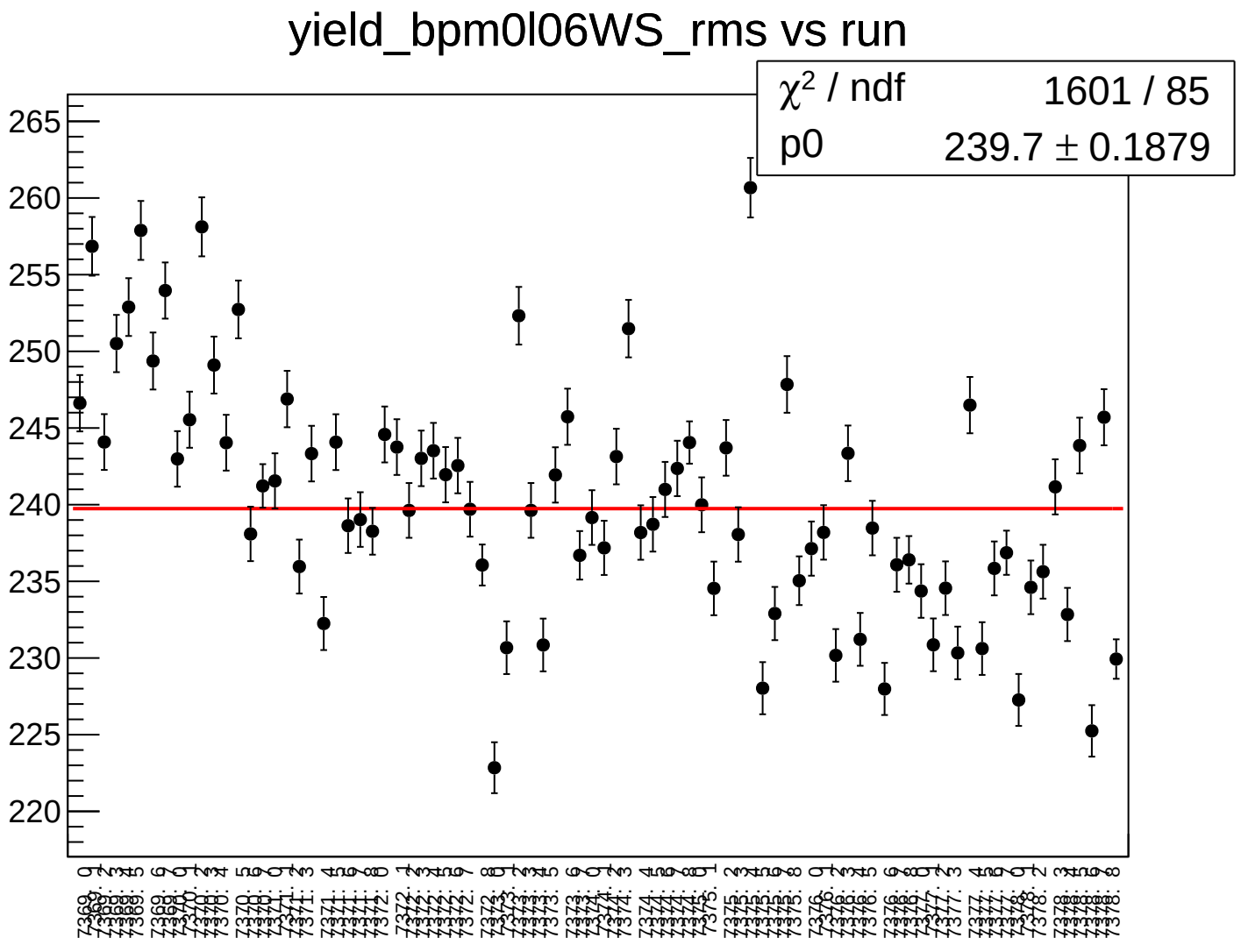

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 4.845e+04 / 85
p0 1.284e+05 ± 0.2651
128.5
128.45
128.4
128.35
128.3
pull
Entries 86
Mean −1276
Std Dev 1363
40
20
0
−20
−40
−60

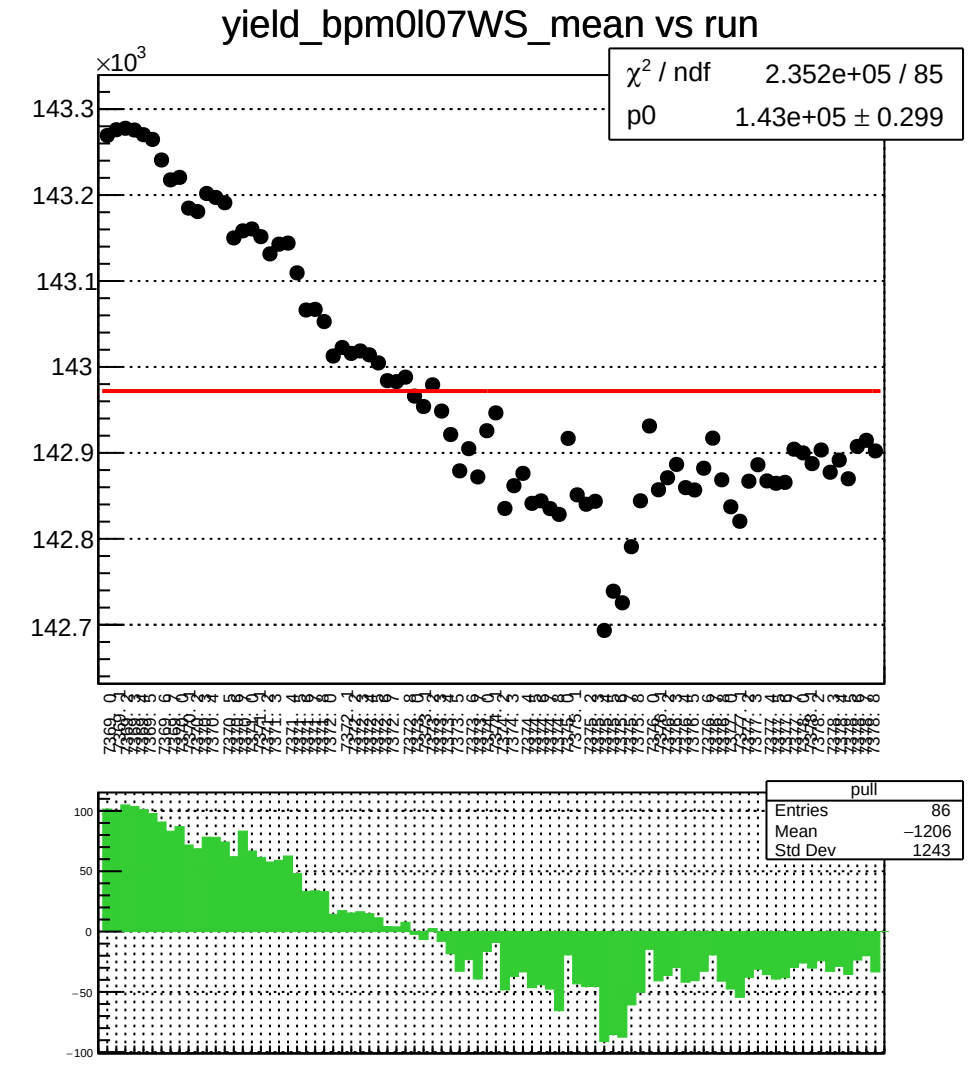

pull1D
Entries 86
Mean 1.105
Std Dev 4.99
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

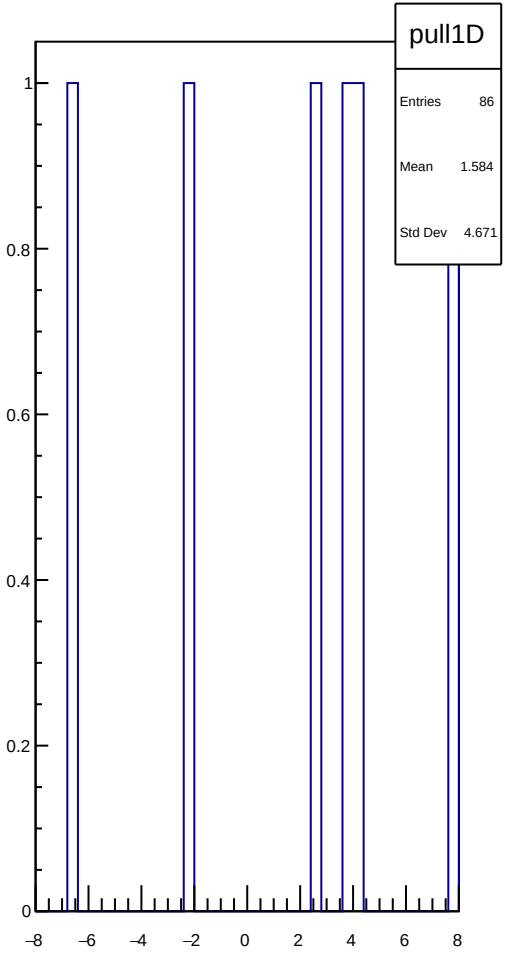

yield_bpm0l05WS_rms vs run
χ² / ndf 1374 / 85
p0 239.2 ± 0.1874
260
255
250
245
240
235
230
225

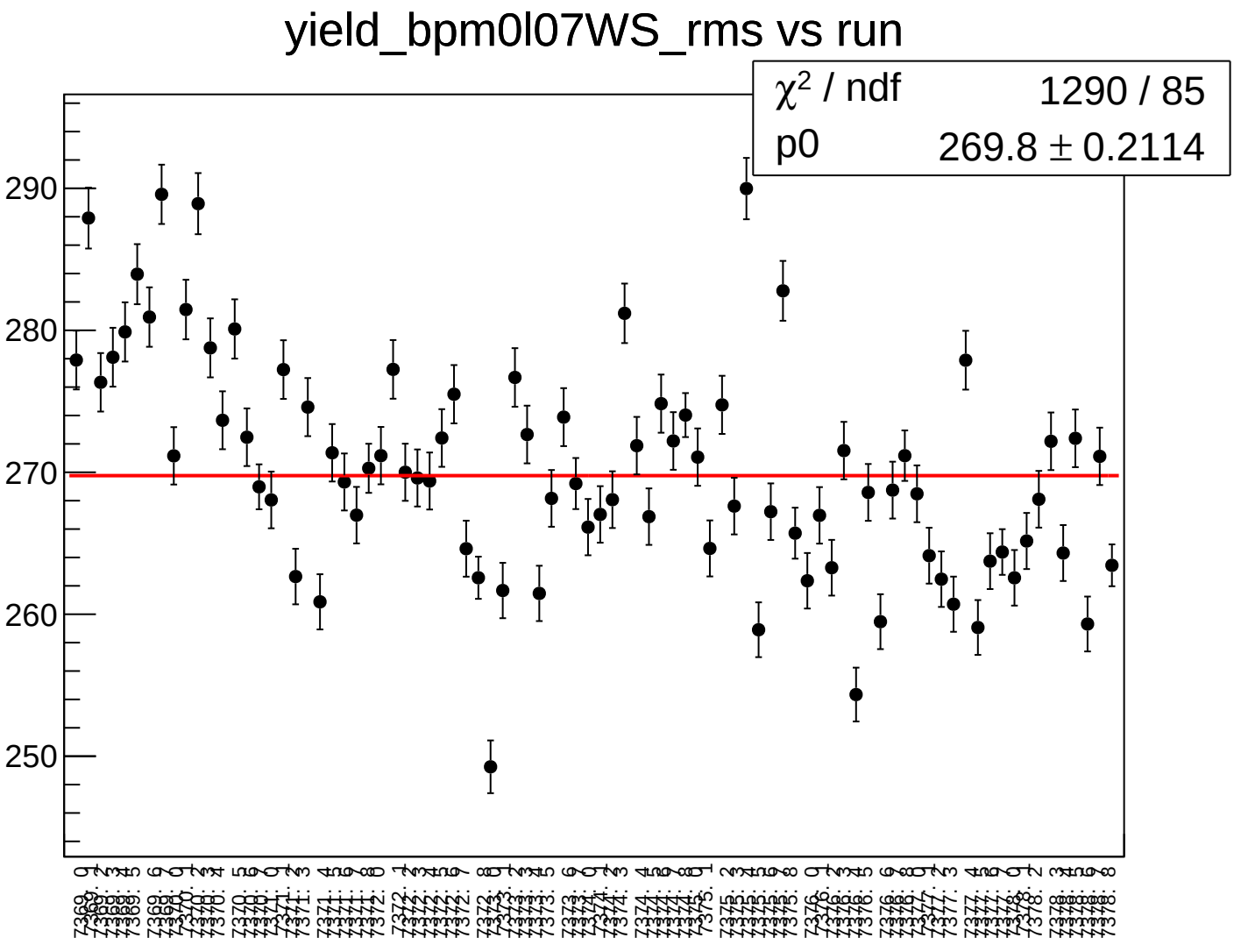

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 4.54e+05 / 85
p0 1.276e+05 ± 0.2657
128
127.9
127.8
127.7
127.6
127.5
127.4
127.3
pull
Entries 86
Mean −1103
Std Dev 1146
150
100
50
0
−50
−100

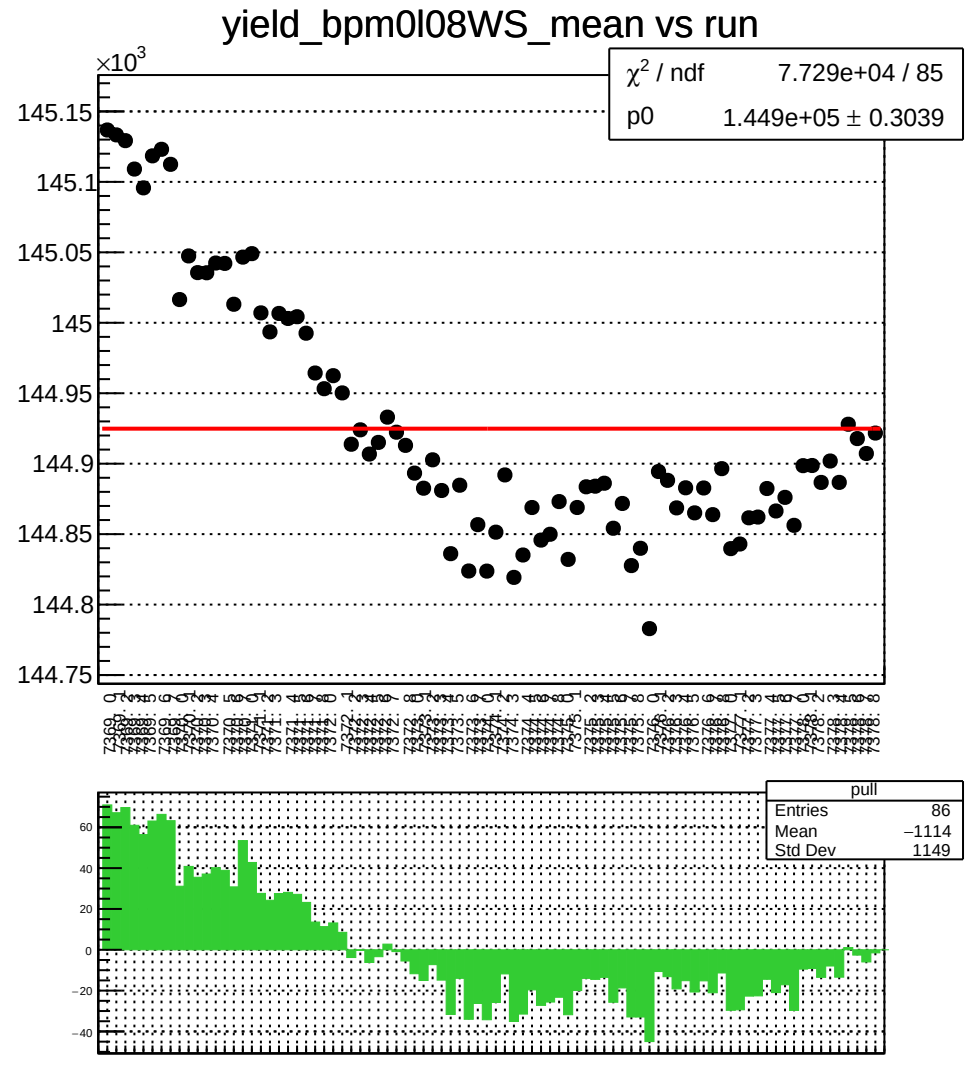

pull1D
Entries 86
Mean −2.831
Std Dev 4.096
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

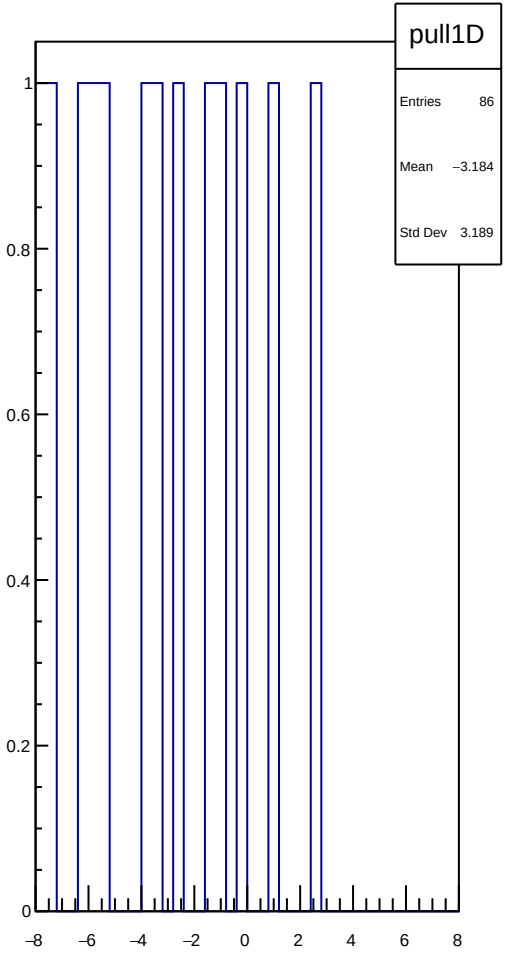

yield_bpm0l06WS_rms vs run
χ² / ndf 1601 / 85
p0 239.7 ± 0.1879
265
260
255
250
245
240
235
230
225
220

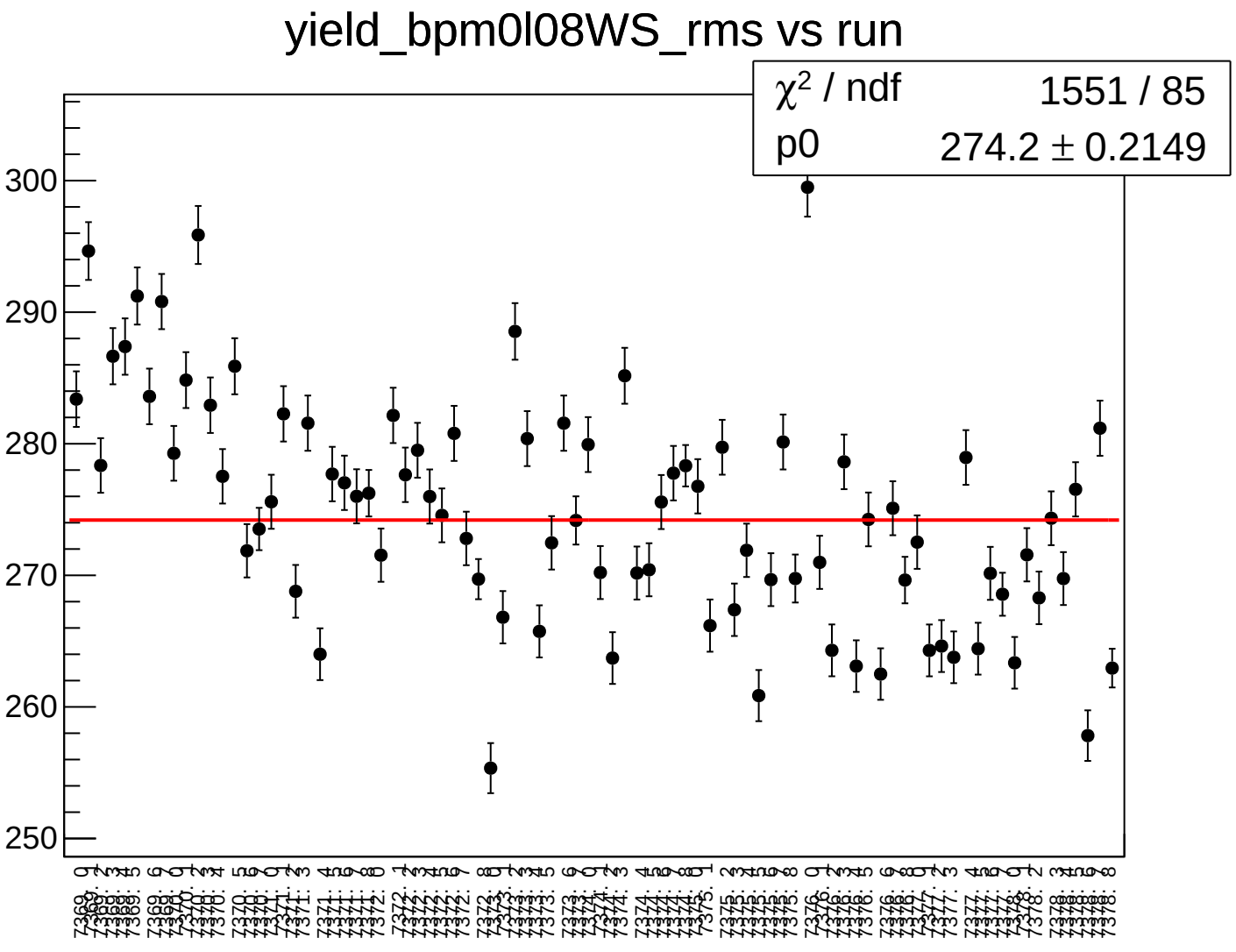

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 2.352e+05 / 85
p0 1.43e+05 ± 0.299
143.3
143.2
143.1
143
142.9
142.8
142.7
pull
Entries 86
Mean −1206
Std Dev 1243
100
50
0
−50
−100

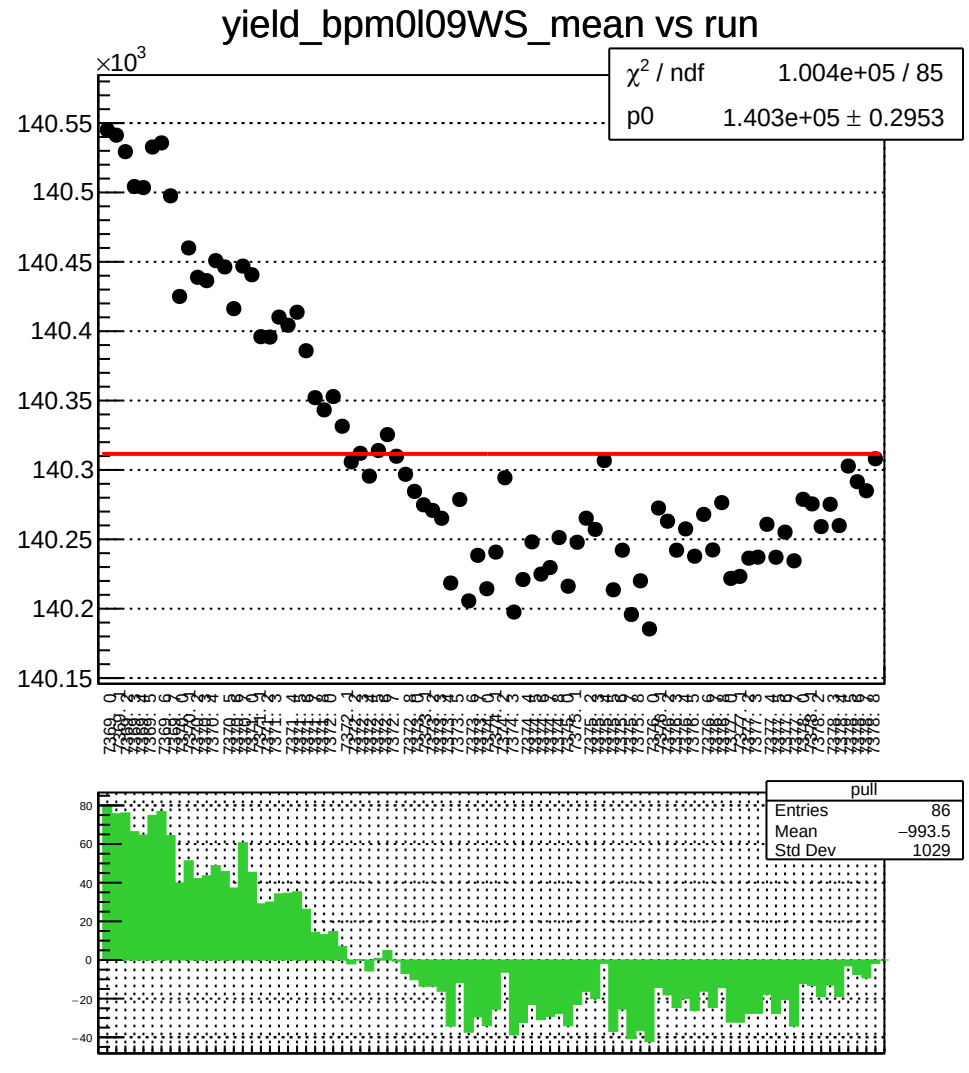

pull1D
Entries 86
Mean 1.584
Std Dev 4.671
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

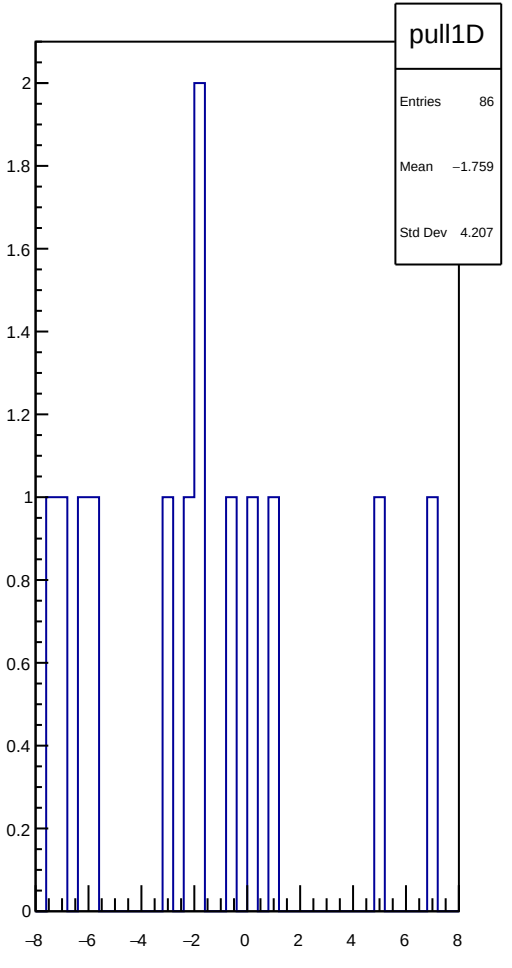

yield_bpm0l07WS_rms vs run
χ² / ndf 1290 / 85
p0 269.8 ± 0.2114
290
280
270
260
250

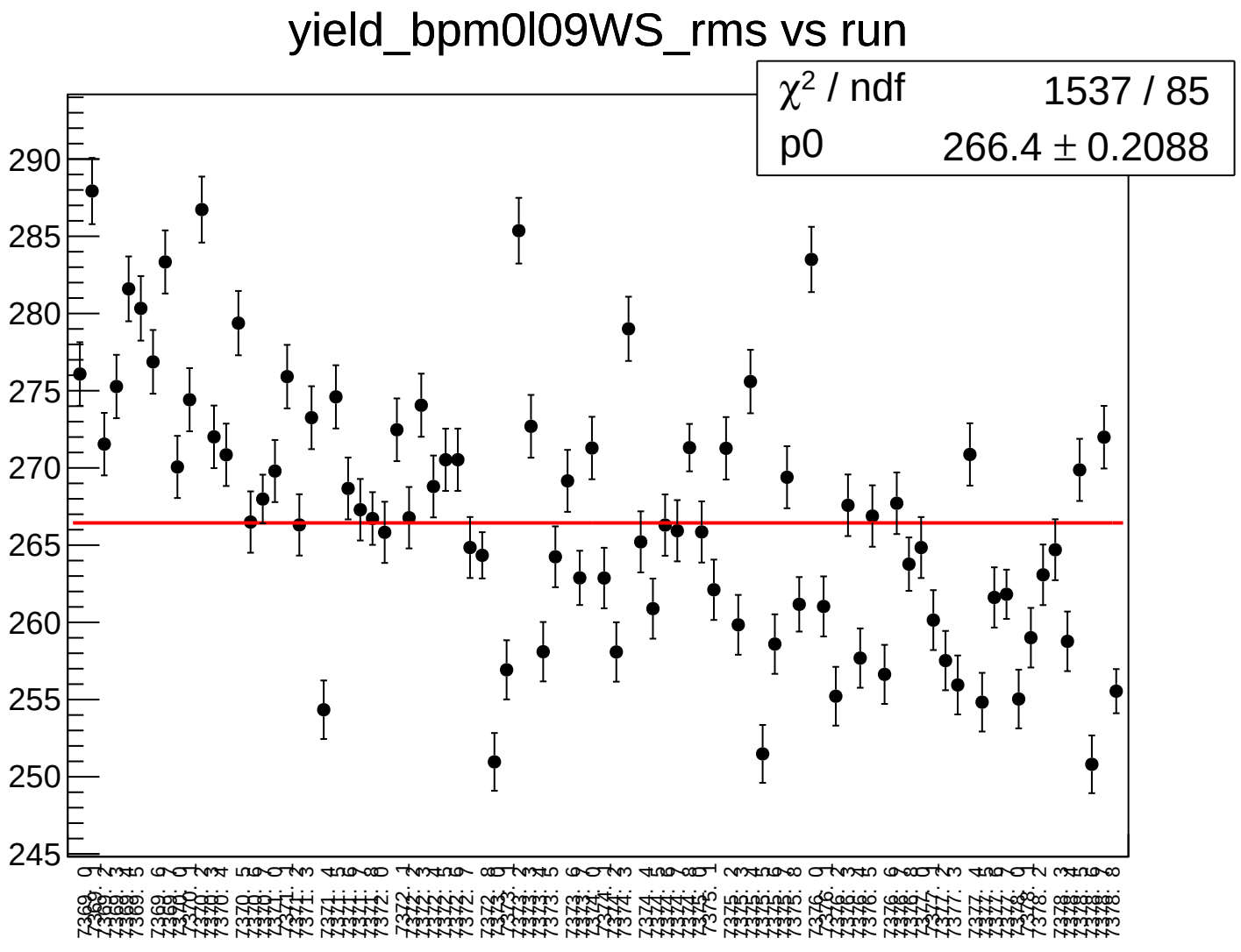

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 7.729e+04 / 85
p0 1.449e+05 ± 0.3039
145.15
145.1
145.05
145
144.95
144.9
144.85
144.8
144.75
pull
Entries 86
Mean −1114
Std Dev 1149
60
40
20
0
−20
−40

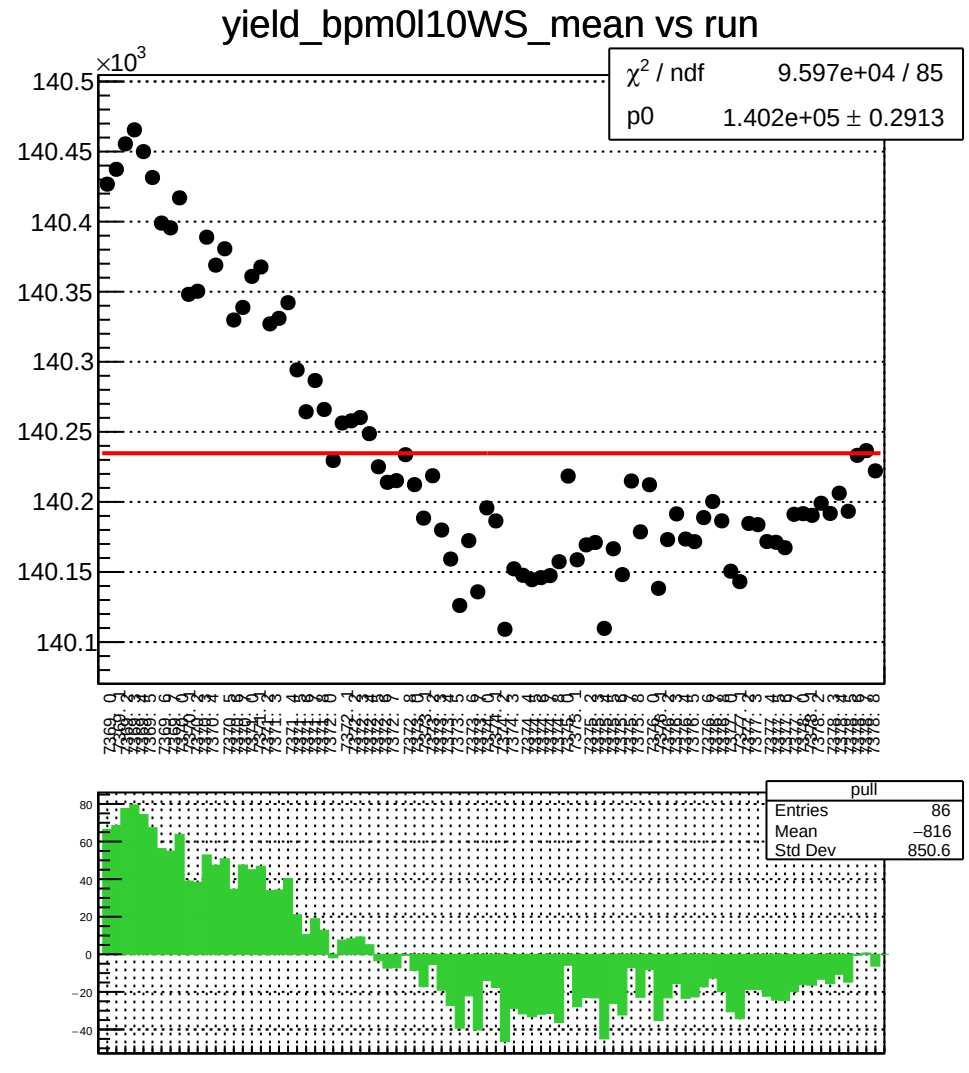

pull1D
Entries 86
Mean −3.184
Std Dev 3.189
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

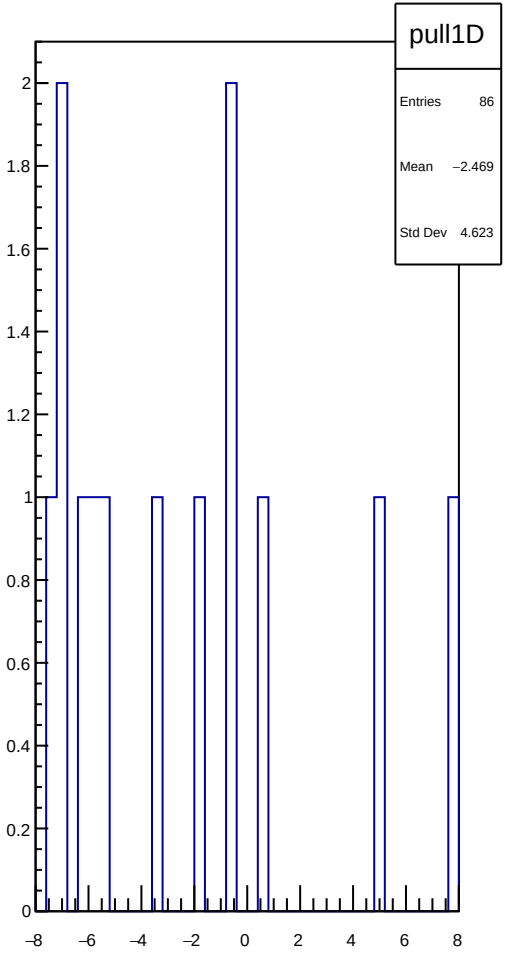

yield_bpm0l08WS_rms vs run
χ² / ndf 1551 / 85
p0 274.2 ± 0.2149
300
290
280
270
260
250

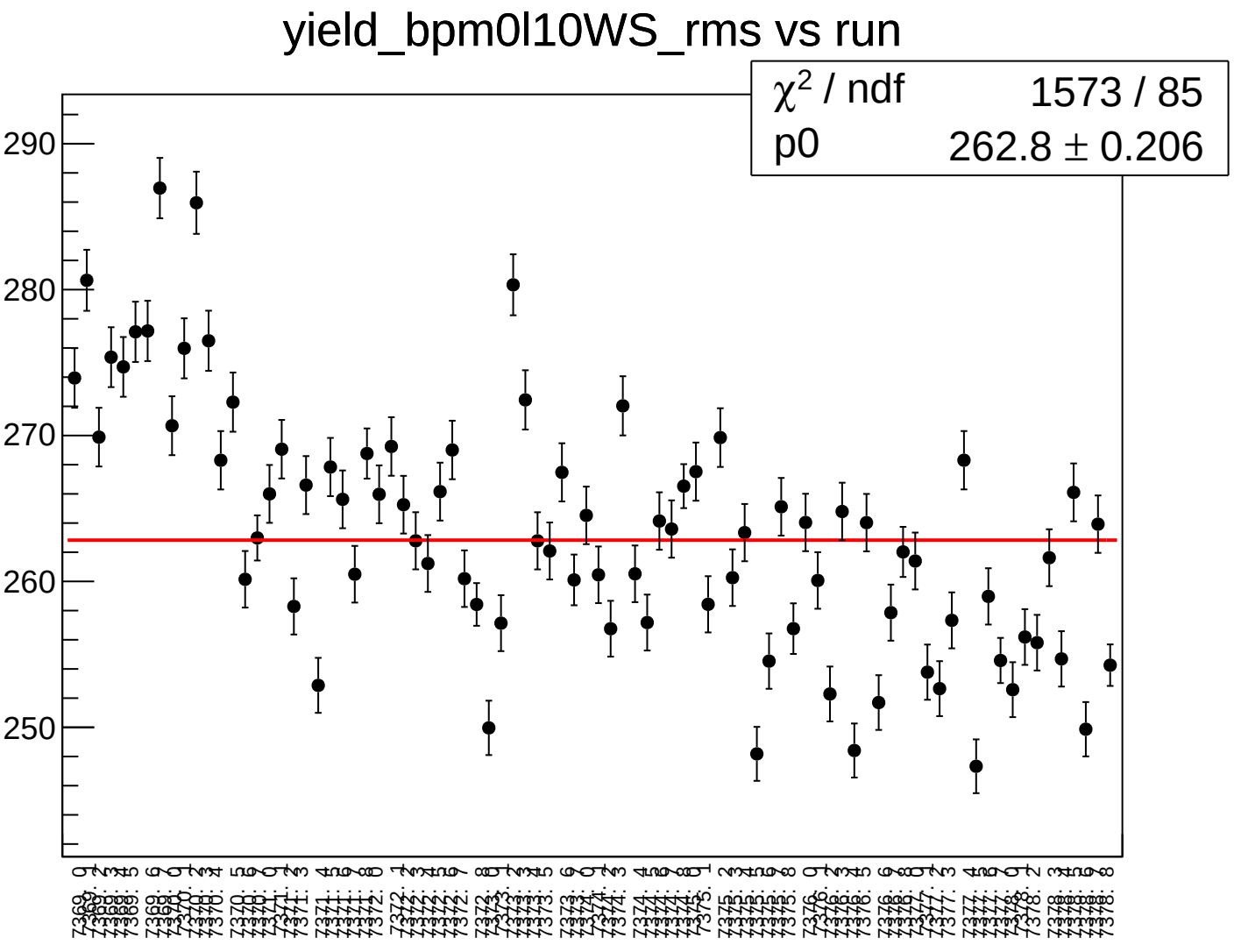

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 1.004e+05 / 85
p0 1.403e+05 ± 0.2953
140.55
140.5
140.45
140.4
140.35
140.3
140.25
140.2
140.15
pull
Entries 86
Mean −993.5
Std Dev 1029
80
60
40
20
0
−20
−40

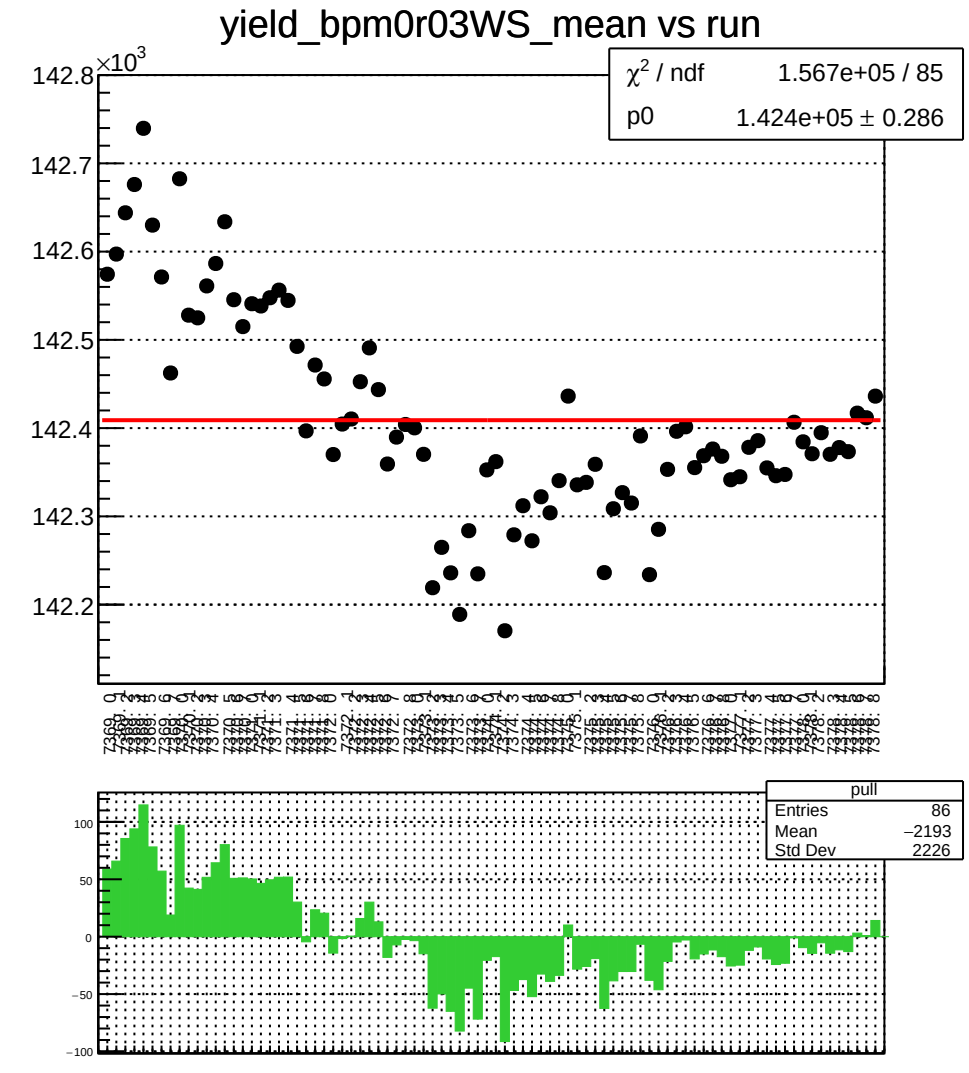

pull1D
Entries 86
Mean −1.759
Std Dev 4.207
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

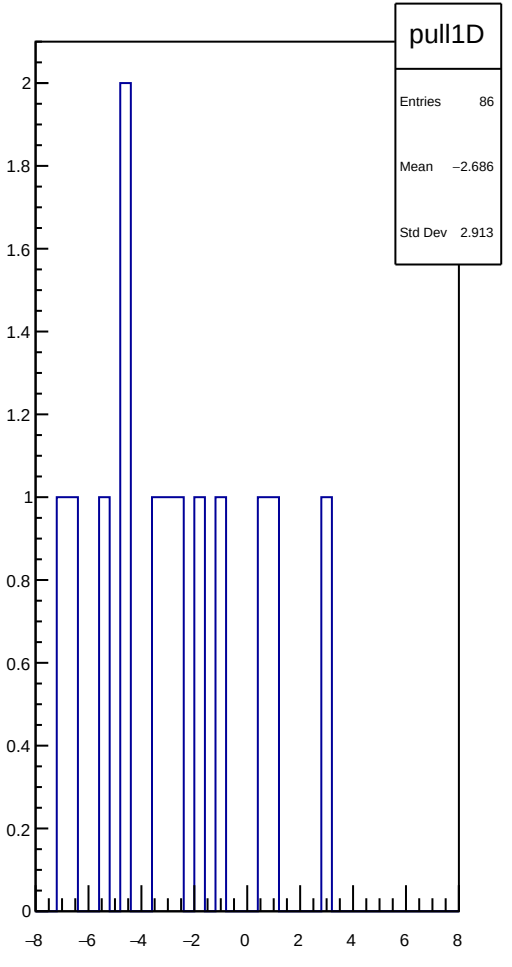

yield_bpm0l09WS_rms vs run
χ² / ndf 1537 / 85
p0 266.4 ± 0.2088
290
285
280
275
270
265
260
255
250
245

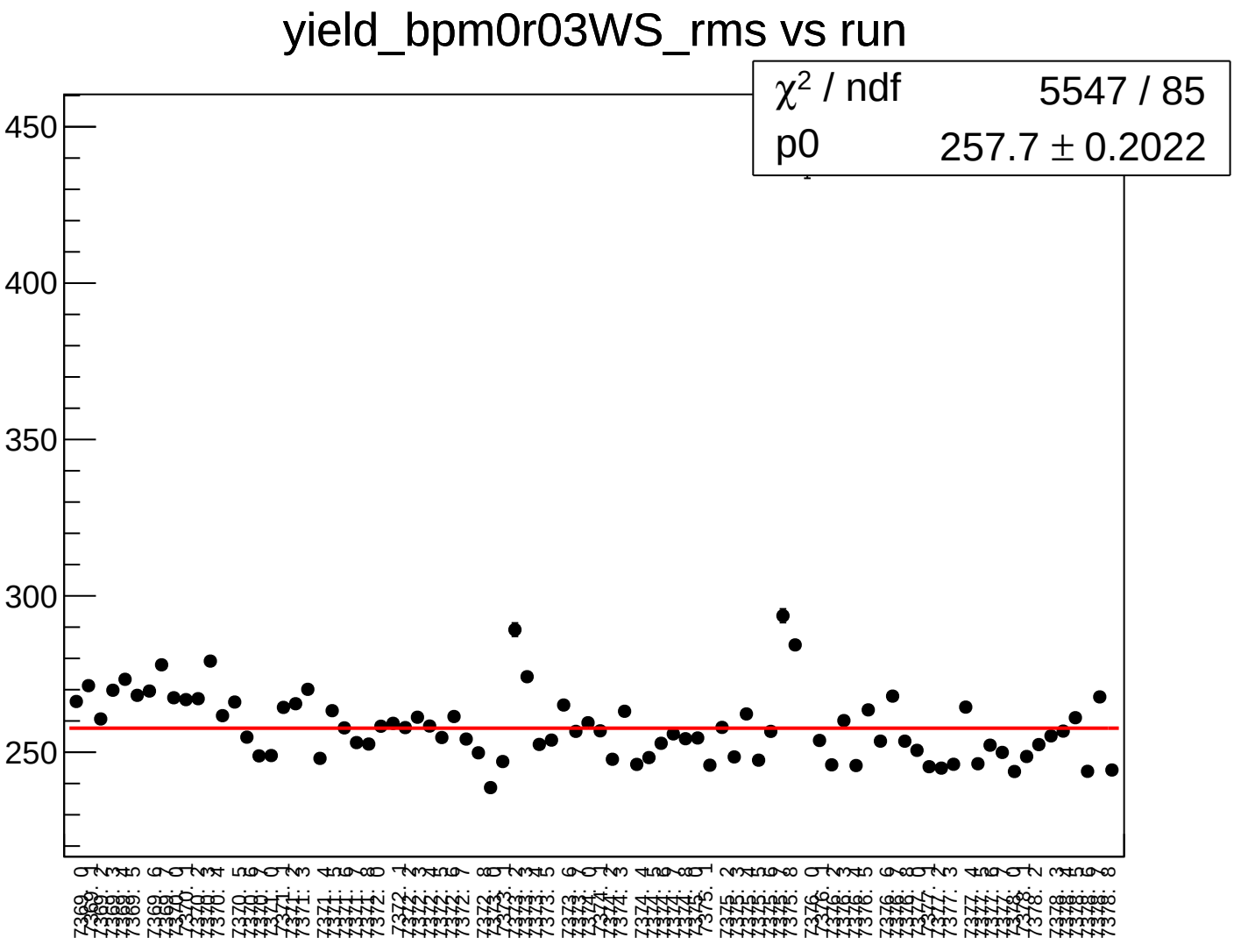

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 9.597e+04 / 85
p0 1.402e+05 ± 0.2913
140.5
140.45
140.4
140.35
140.3
140.25
140.2
140.15
140.1
pull
Entries 86
Mean −816
Std Dev 850.6
80
60
40
20
0
−20
−40

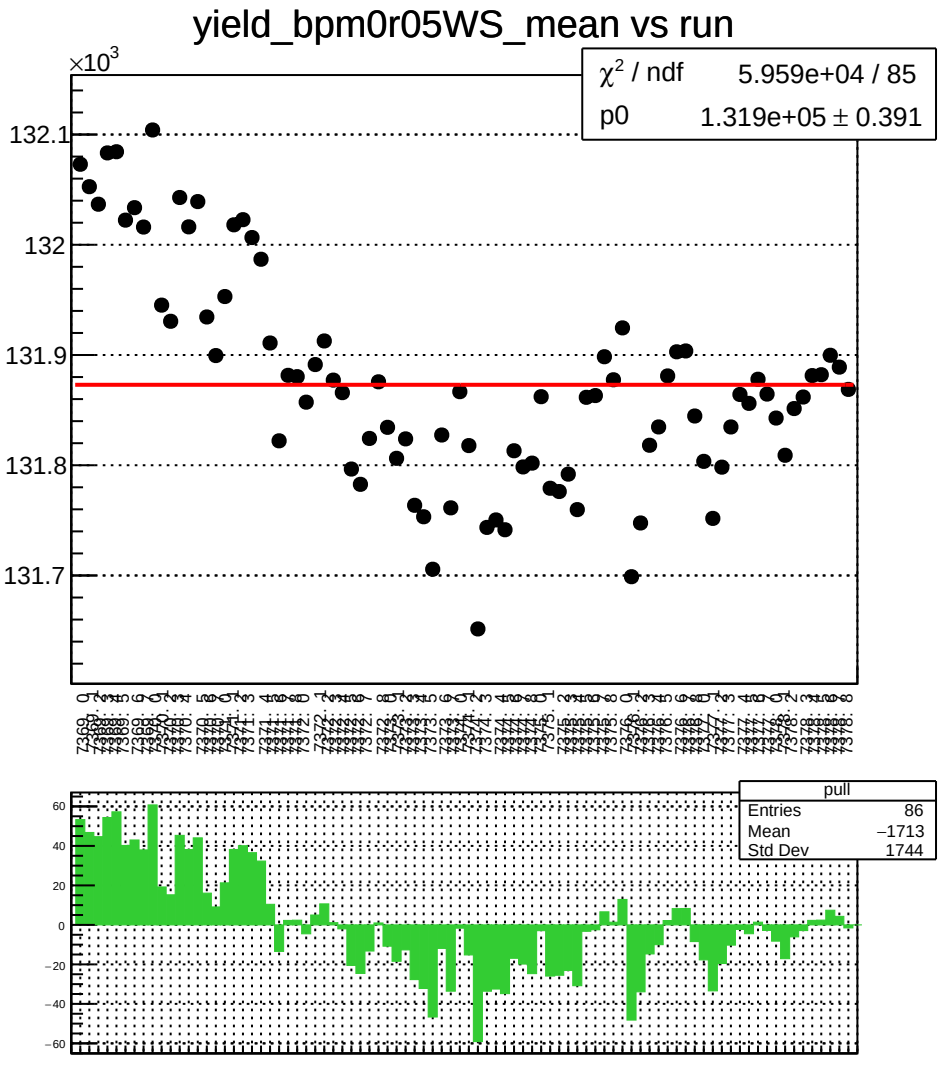

pull1D
Entries 86
Mean −2.469
Std Dev 4.623
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

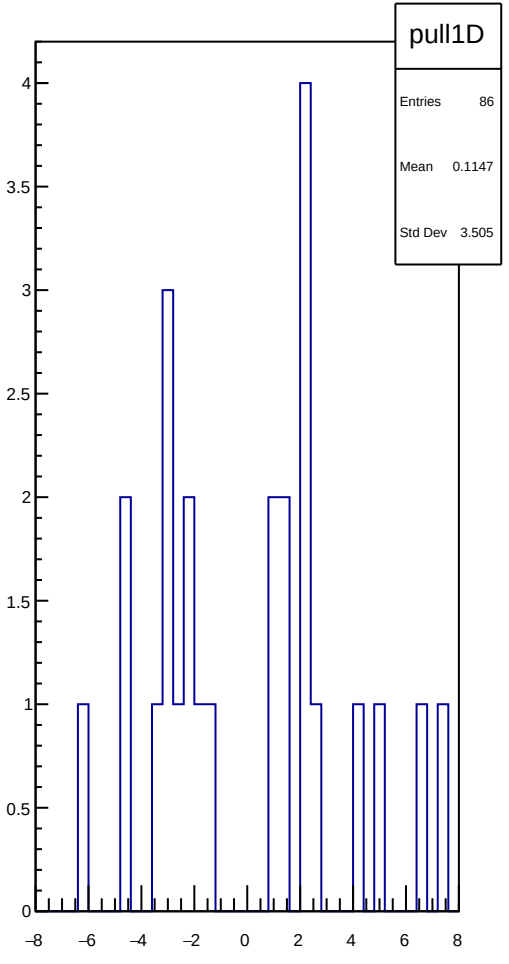

yield_bpm0l10WS_rms vs run
χ² / ndf 1573 / 85
p0 262.8 ± 0.206
290
280
270
260
250

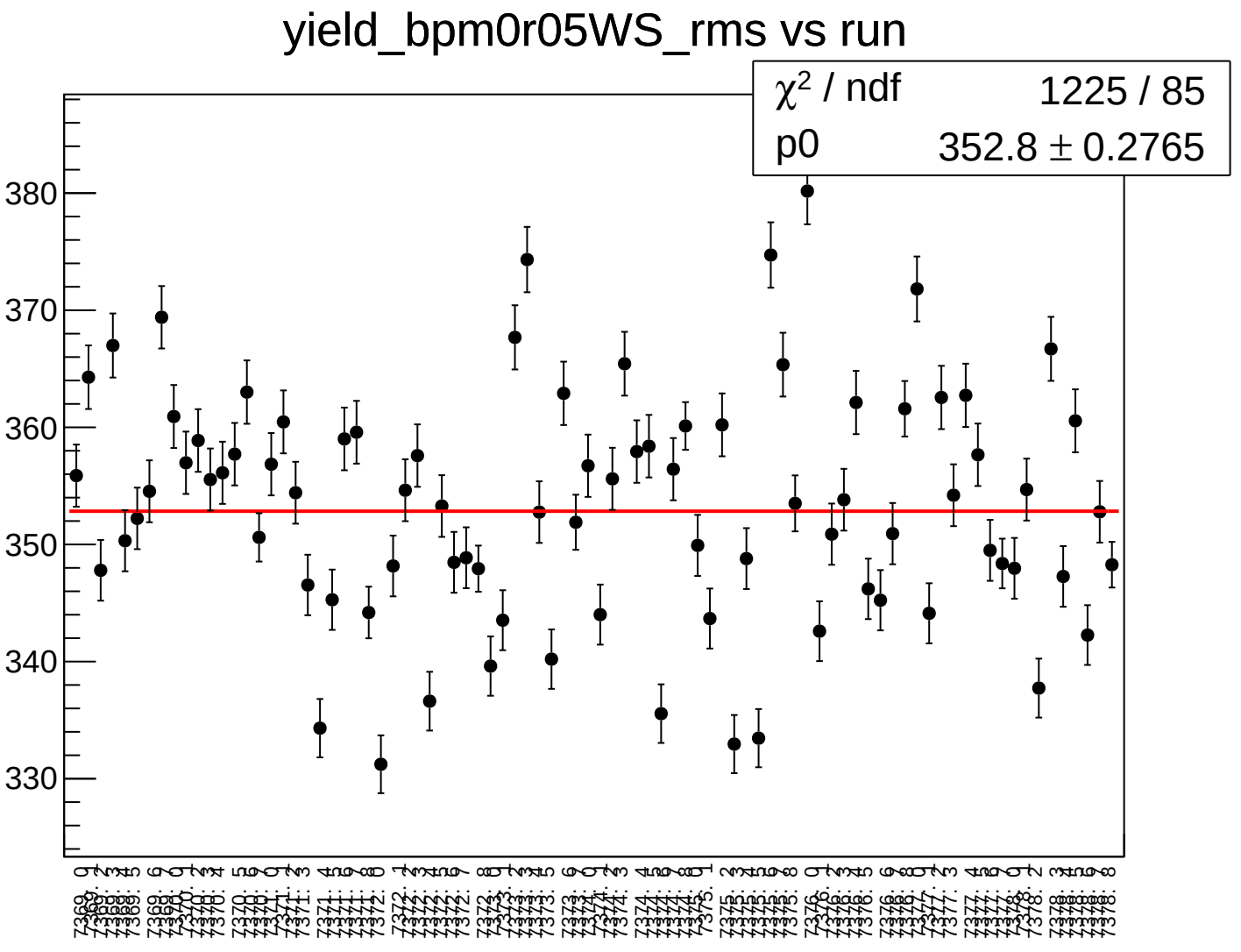

yield_bpm0r03WS_mean vs run
χ² / ndf 1.567e+05 / 85
p0 1.424e+05 ± 0.286
×10³
142.8
142.7
142.6
142.5
142.4
142.3
142.2
pull
Entries 86
Mean −2193
Std Dev 2226
100
50
0
−50
−100

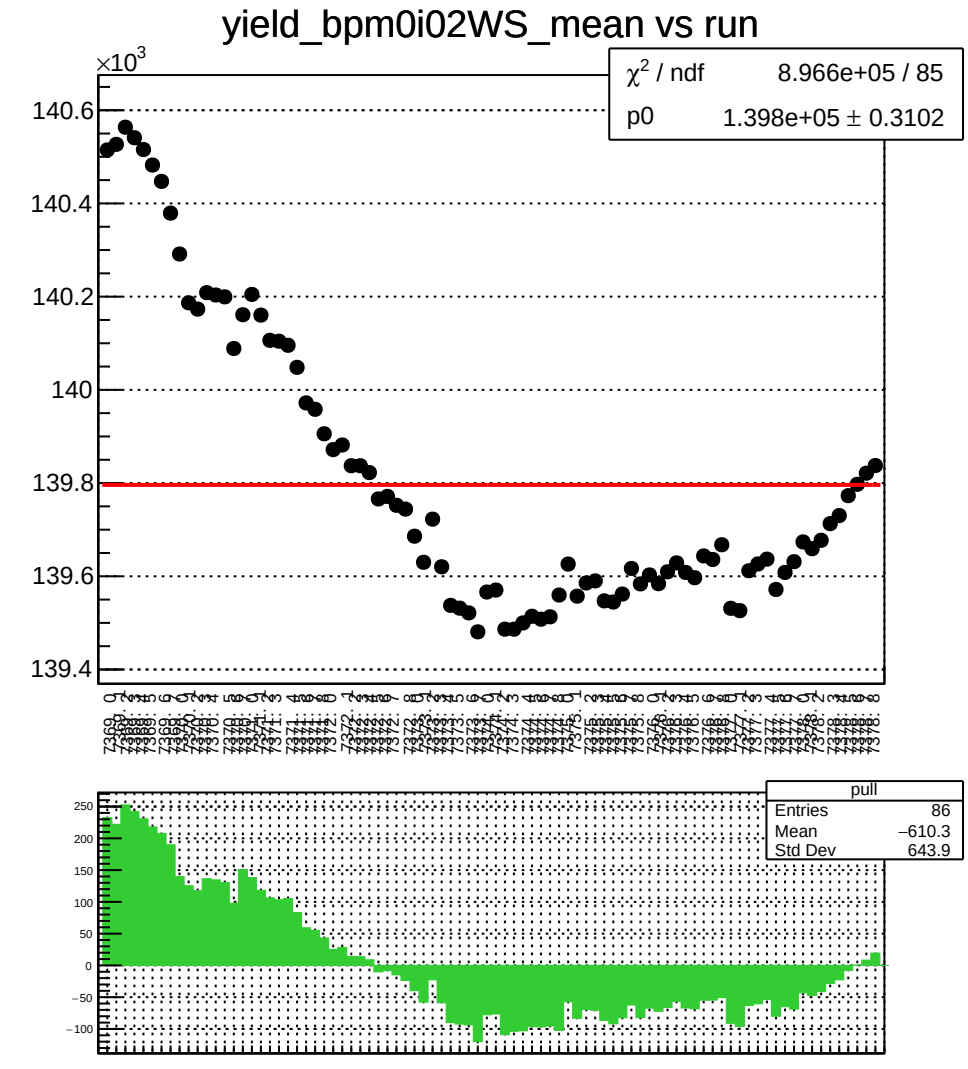

pull1D
Entries 86
Mean −2.686
Std Dev 2.913
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

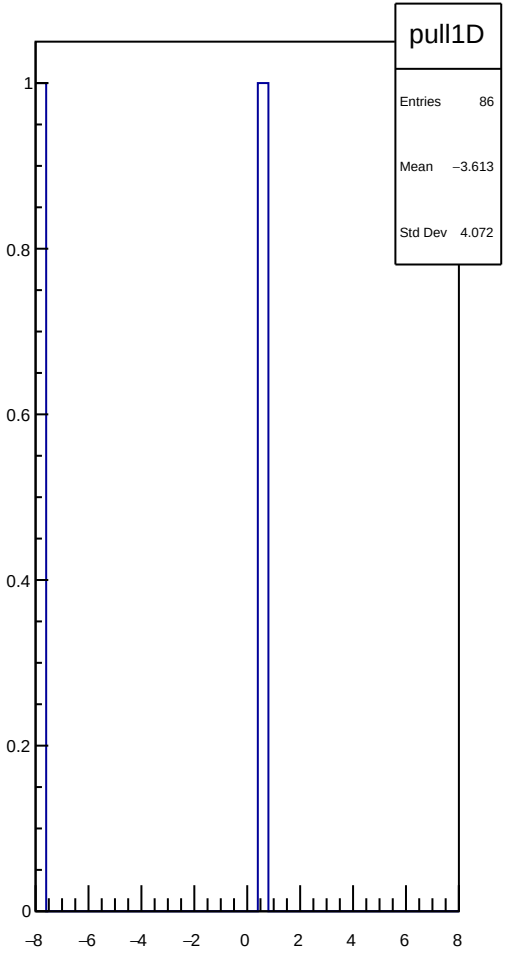

yield_bpm0r03WS_rms vs run
χ² / ndf 5547 / 85
p0 257.7 ± 0.2022
450
400
350
300
250

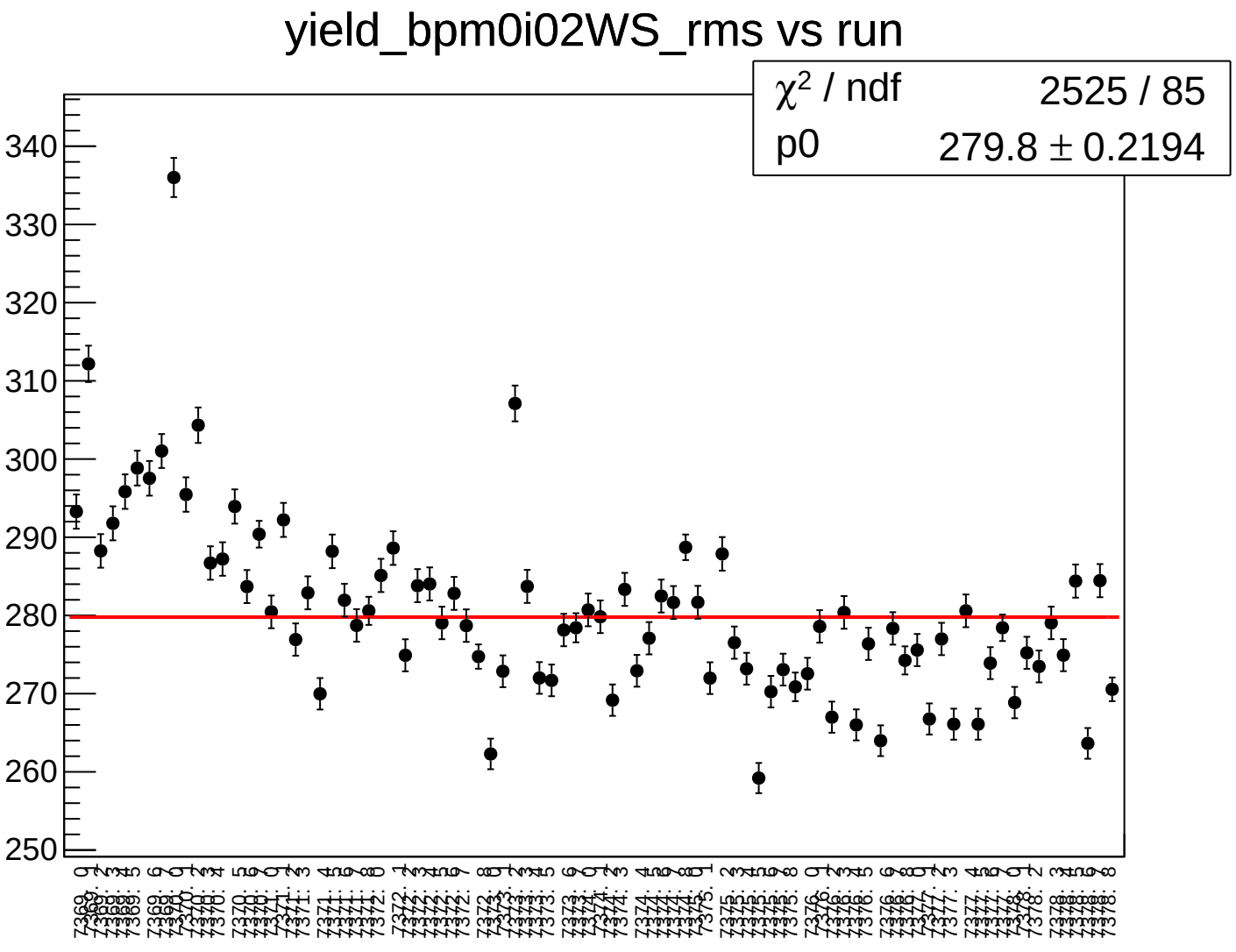

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 5.959e+04 / 85
p0 1.319e+05 ± 0.391
132.1
132
131.9
131.8
131.7
pull
Entries 86
Mean −1713
Std Dev 1744
60
40
20
0
−20
−40
−60

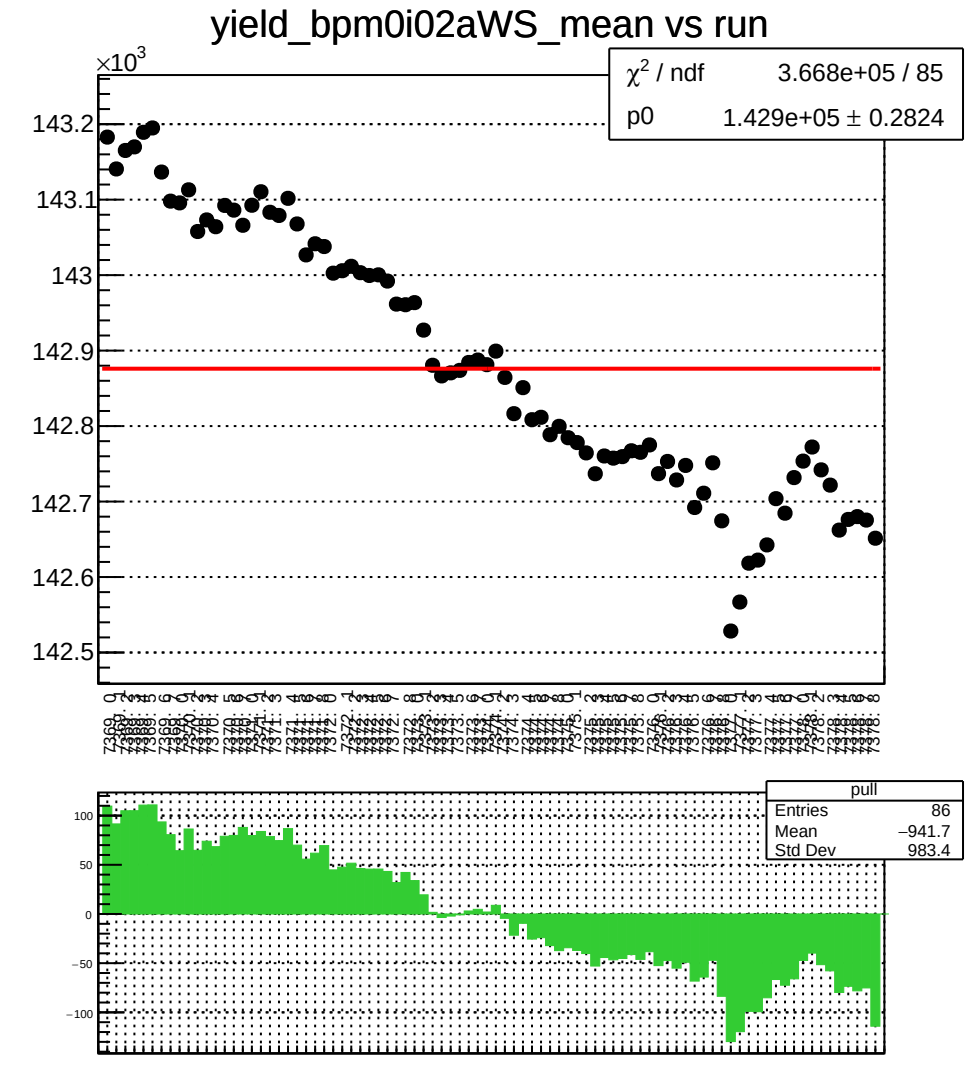

pull1D
Entries 86
Mean 0.1147
Std Dev 3.505
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

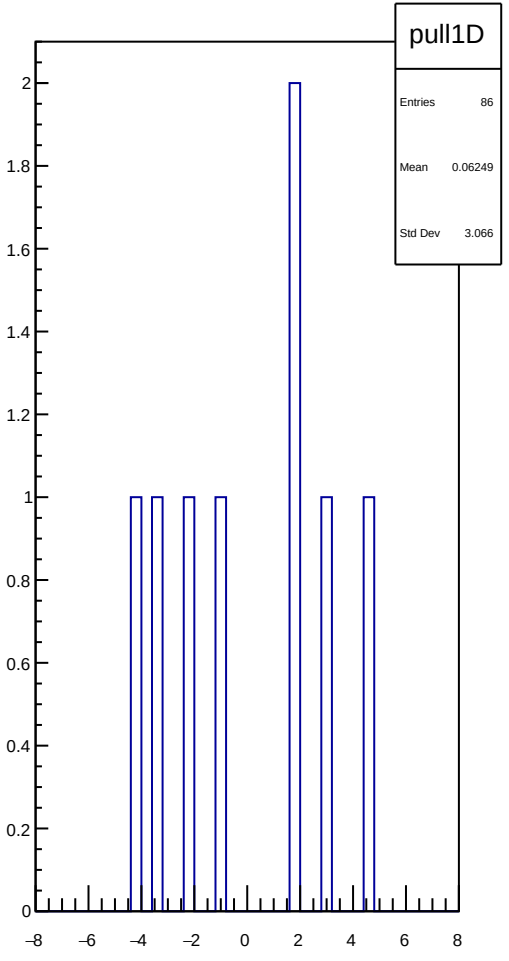

yield_bpm0r05WS_rms vs run
χ² / ndf 1225 / 85
p0 352.8 ± 0.2765
380
370
360
350
340
330

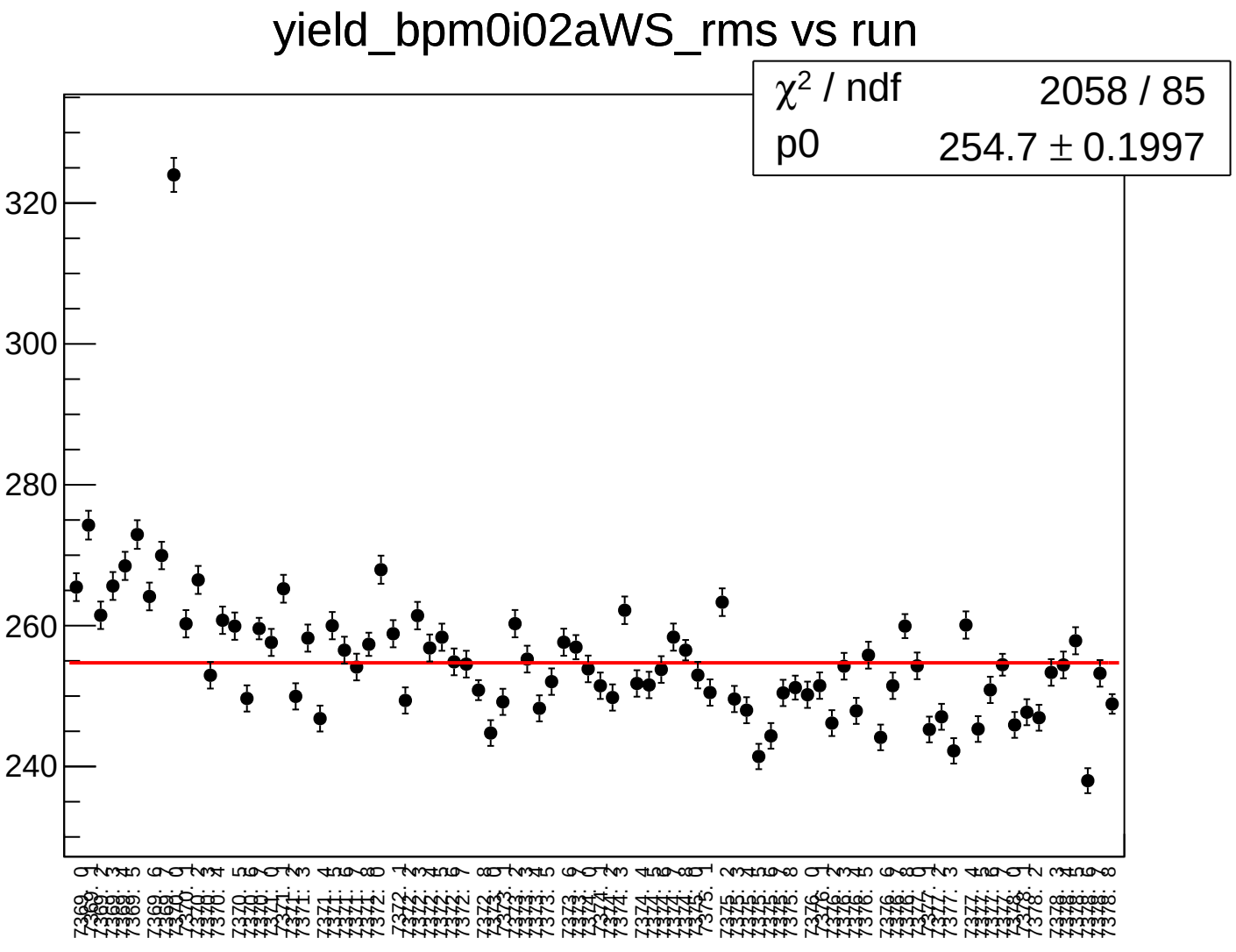

yield_bpm0i02WS_mean vs run
χ² / ndf 8.966e+05 / 85
p0 1.398e+05 ± 0.3102
×10³
140.6
140.4
140.2
140
139.8
139.6
139.4
pull
Entries 86
Mean −610.3
Std Dev 643.9
250
200
150
100
50
0
−50
−100

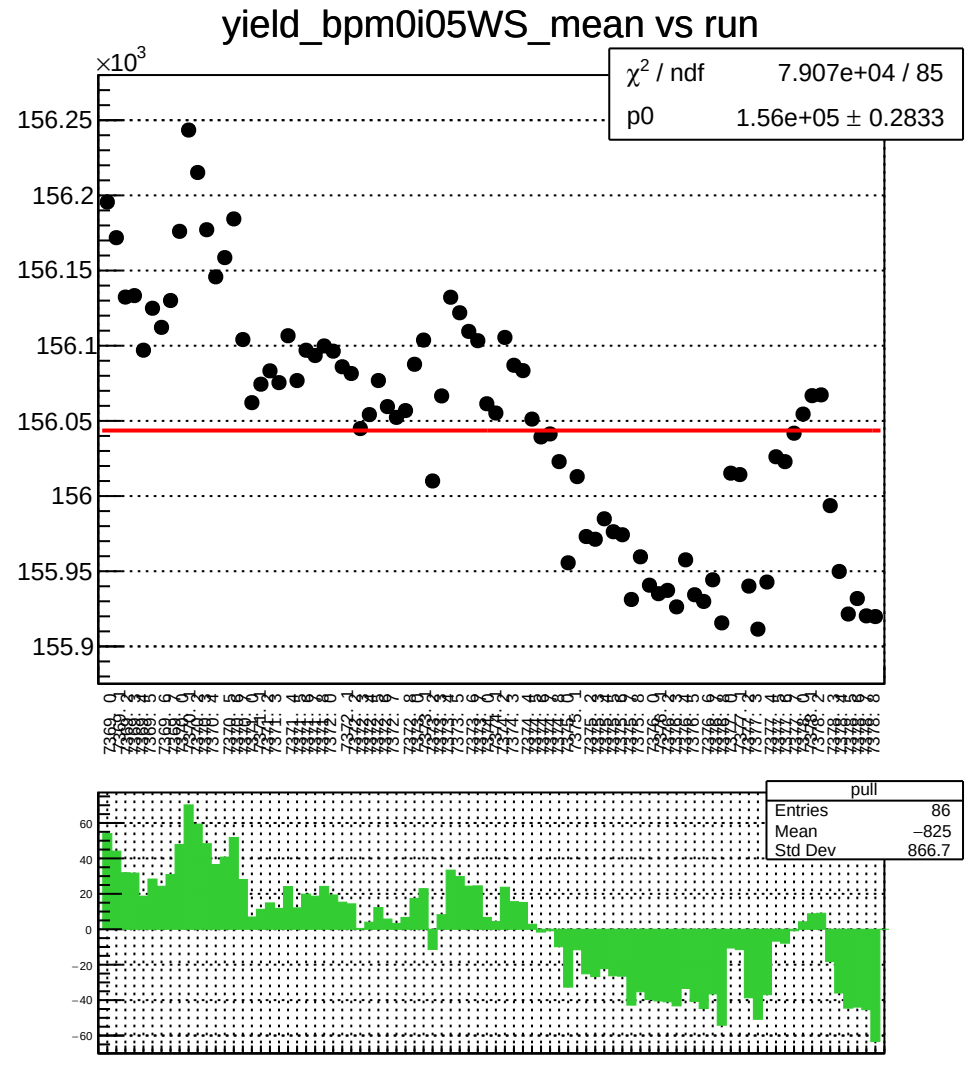

pull1D
Entries 86
Mean −3.613
Std Dev 4.072
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

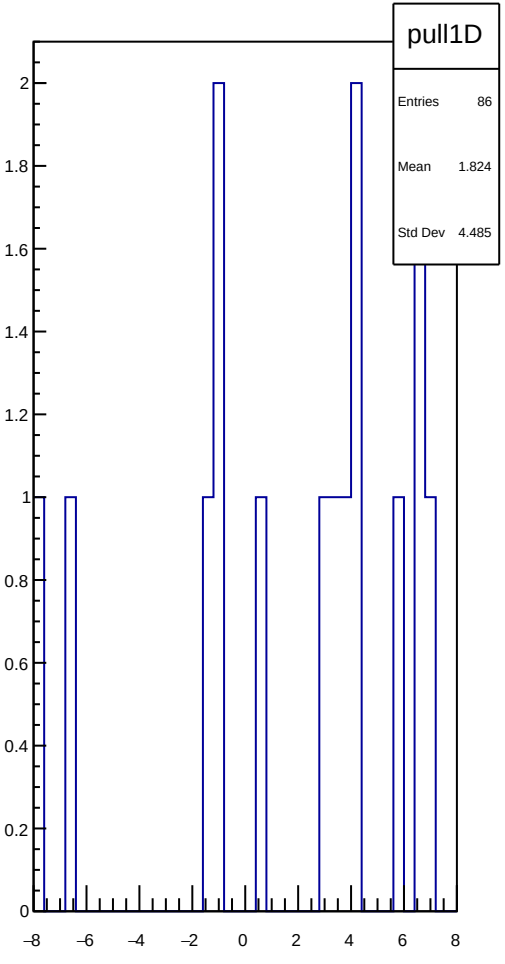

yield_bpm0i02WS_rms vs run
χ² / ndf 2525 / 85
p0 279.8 ± 0.2194
340
330
320
310
300
290
280
270
260
250

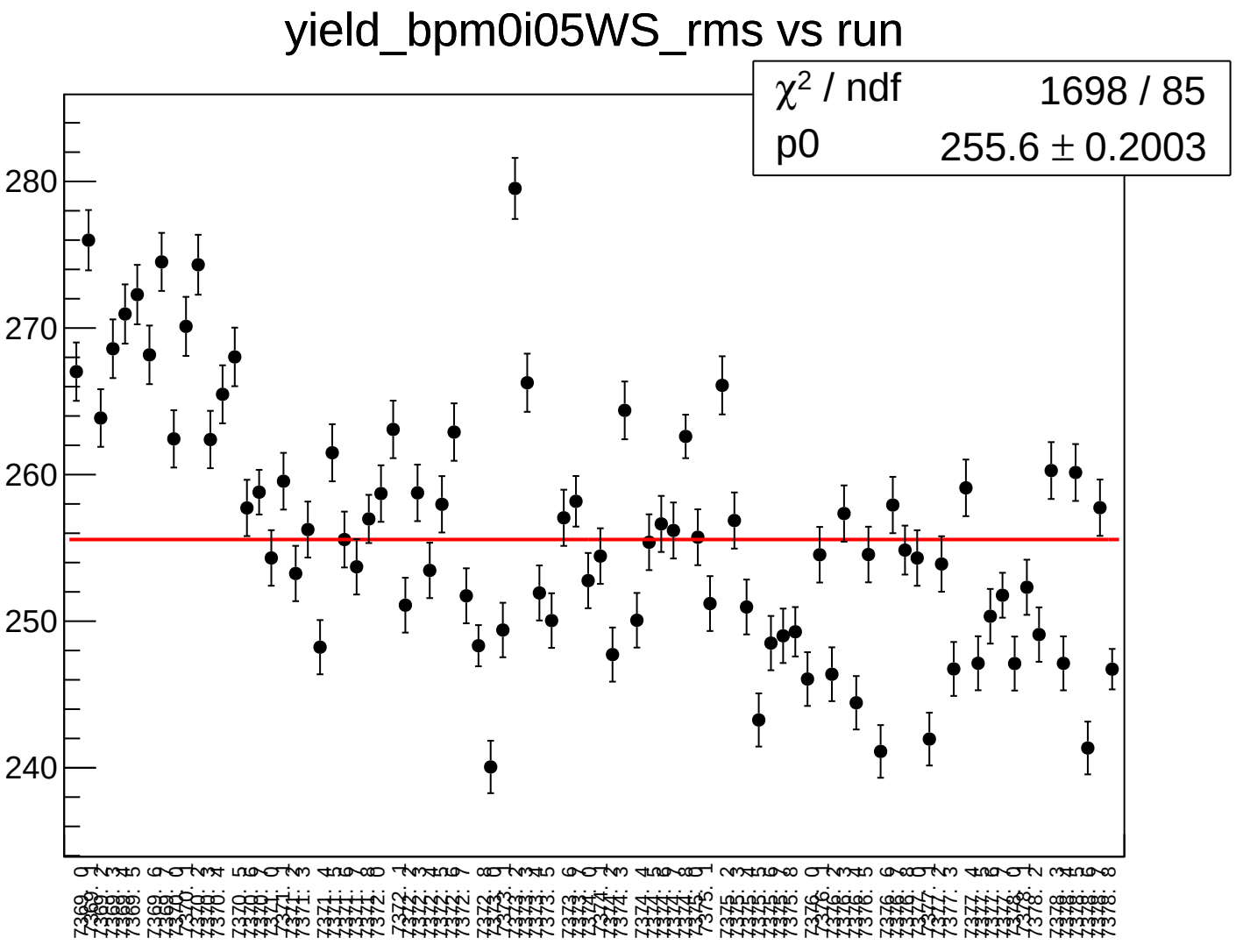

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 3.668e+05 / 85
p0 1.429e+05 ± 0.2824
143.2
143.1
143
142.9
142.8
142.7
142.6
142.5
pull
Entries 86
Mean −941.7
Std Dev 983.4
100
50
0
−50
−100

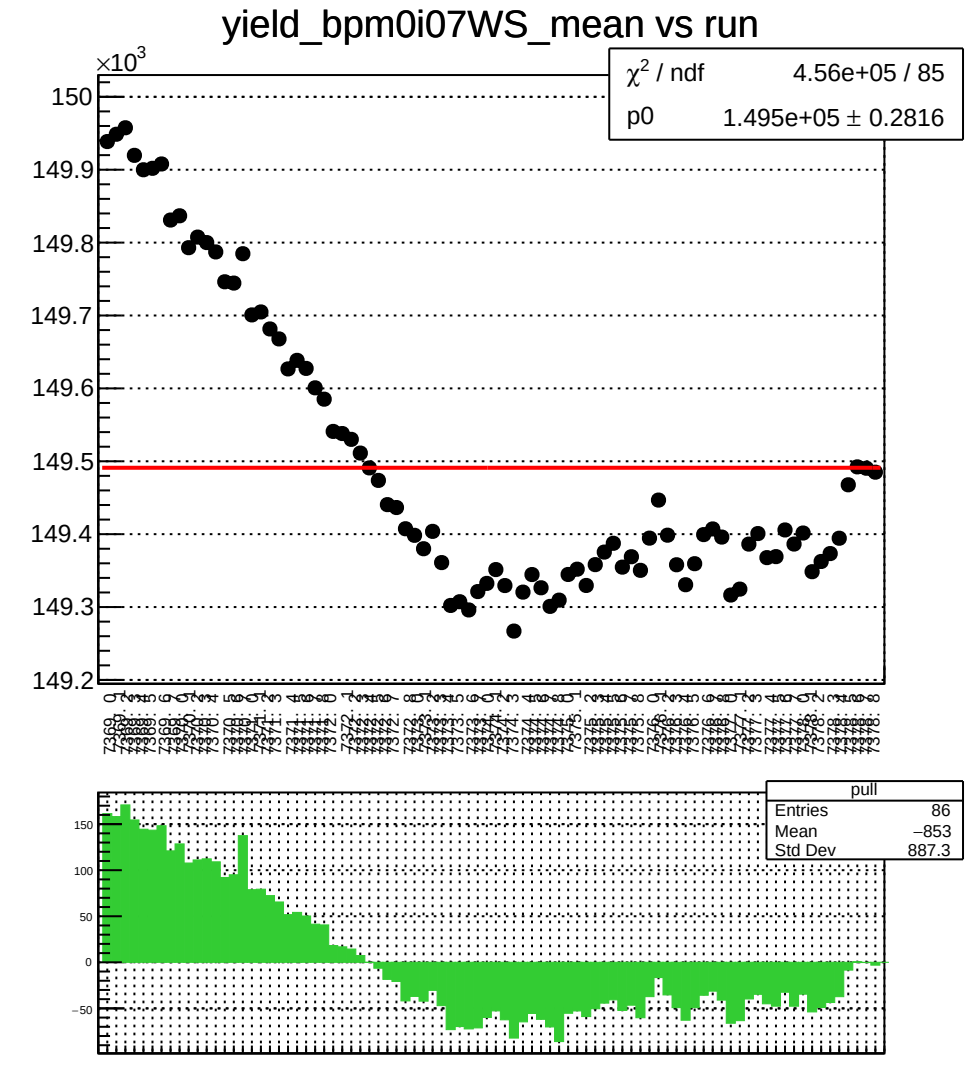

pull1D
Entries 86
Mean 0.06249
Std Dev 3.066
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

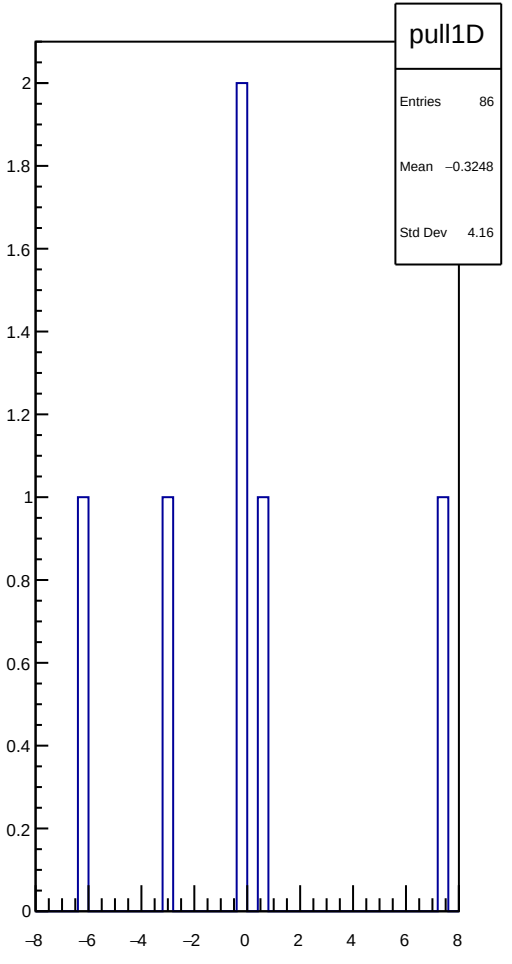

yield_bpm0i02aWS_rms vs run
χ² / ndf 2058 / 85
p0 254.7 ± 0.1997
320
300
280
260
240

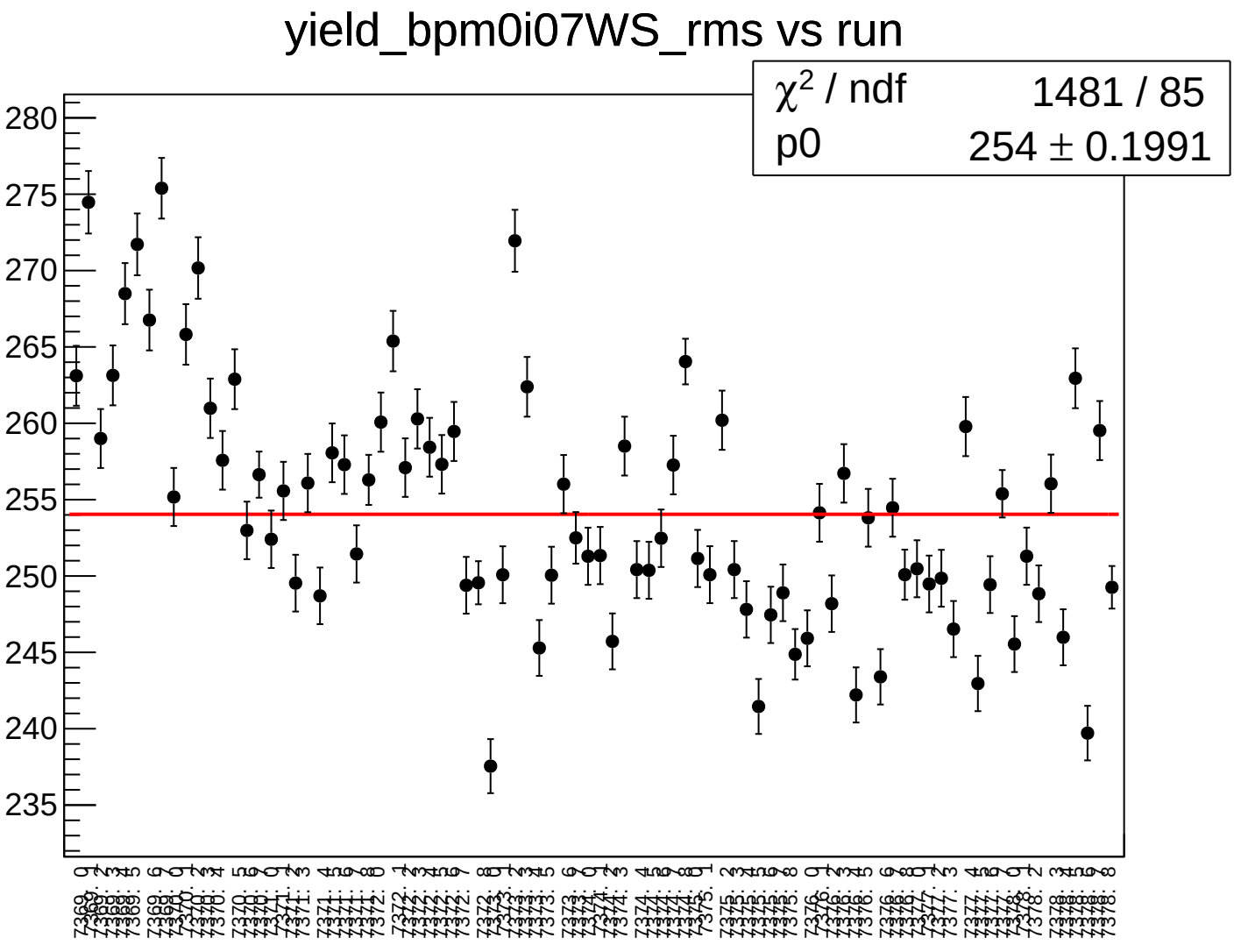

yield_bpm0i05WS_mean vs run
×10^3
χ^2 / ndf 7.907e+04 / 85
p0 1.56e+05 ± 0.2833
156.25
156.2
156.15
156.1
156.05
156
155.95
155.9
pull
Entries 86
Mean −825
Std Dev 866.7
60
40
20
0
−20
−40
−60

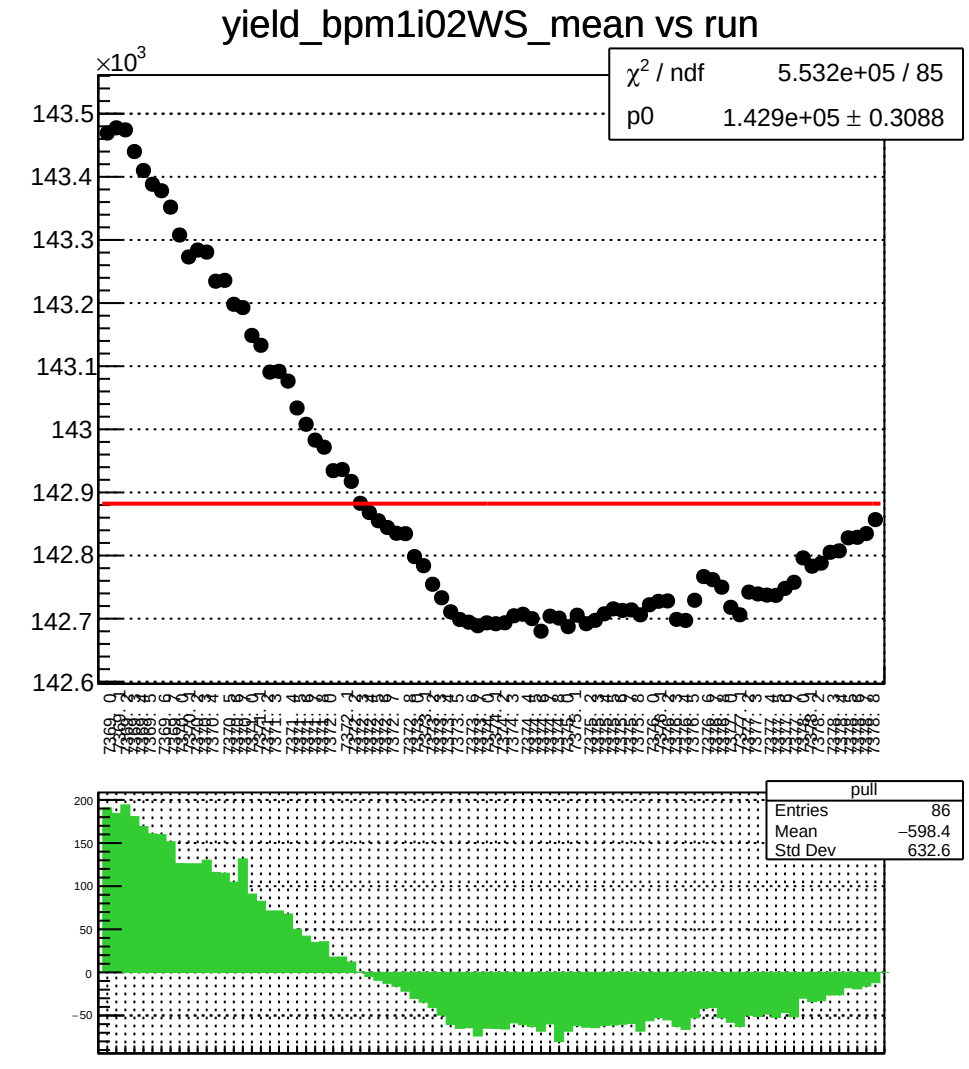

pull1D
Entries 86
Mean 1.824
Std Dev 4.485
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

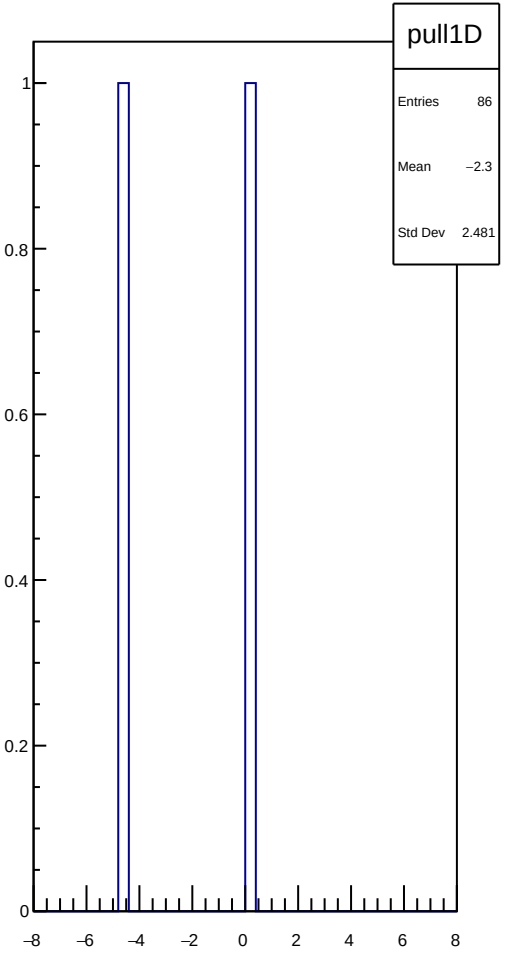

yield_bpm0i05WS_rms vs run
χ² / ndf 1698 / 85
p0 255.6 ± 0.2003
280
270
260
250
240

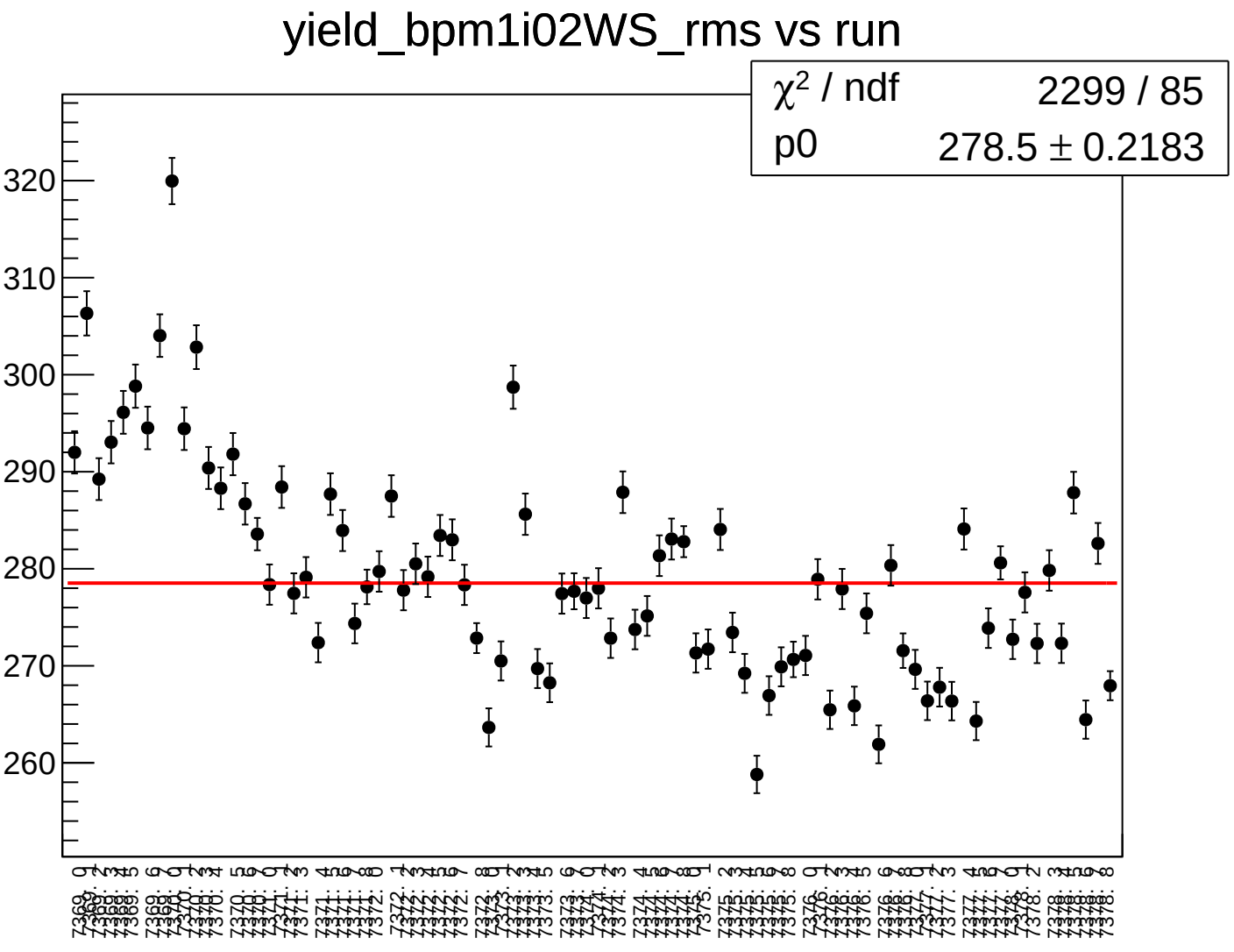

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 4.56e+05 / 85
p0 1.495e+05 ± 0.2816
150
149.9
149.8
149.7
149.6
149.5
149.4
149.3
149.2
pull
Entries 86
Mean −853
Std Dev 887.3
150
100
50
0
−50

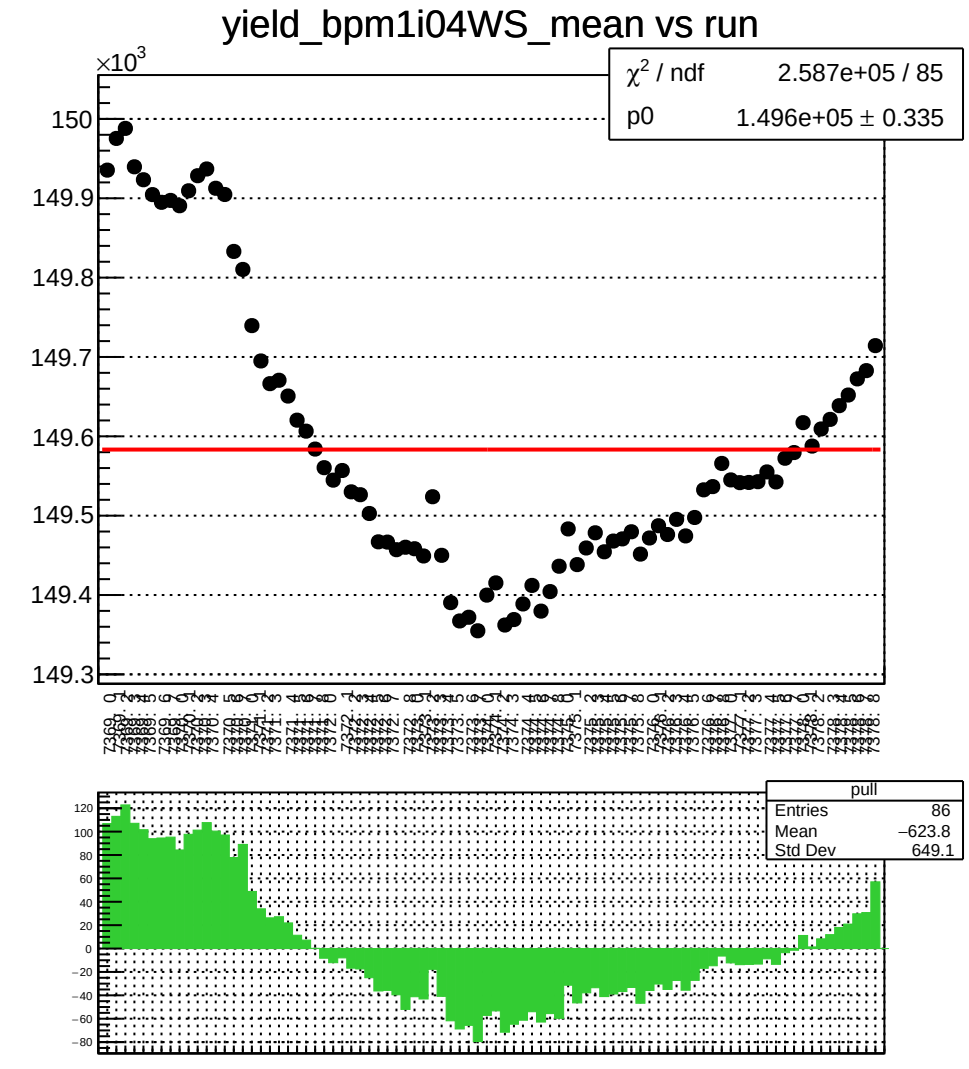

pull1D
Entries 86
Mean −0.3248
Std Dev 4.16
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

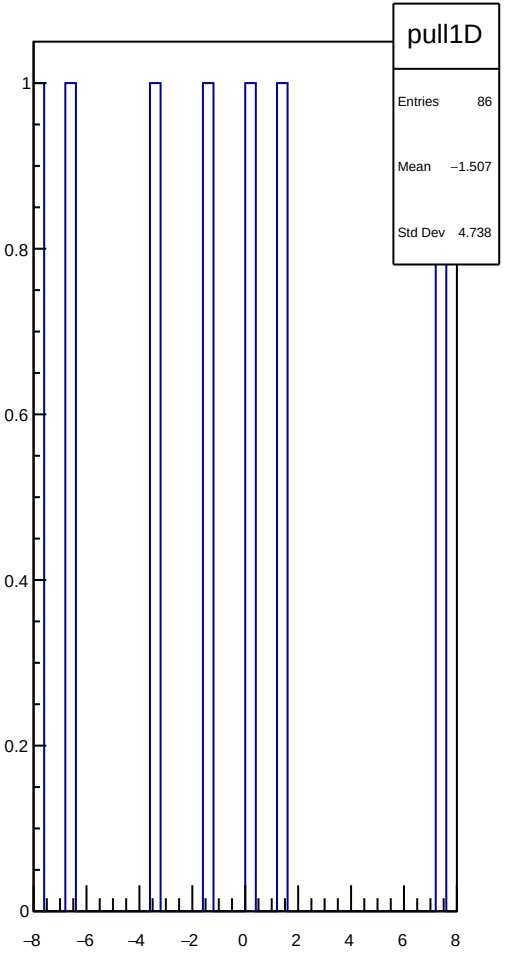

yield_bpm0i07WS_rms vs run
χ² / ndf 1481 / 85
p0 254 ± 0.1991
280
275
270
265
260
255
250
245
240
235

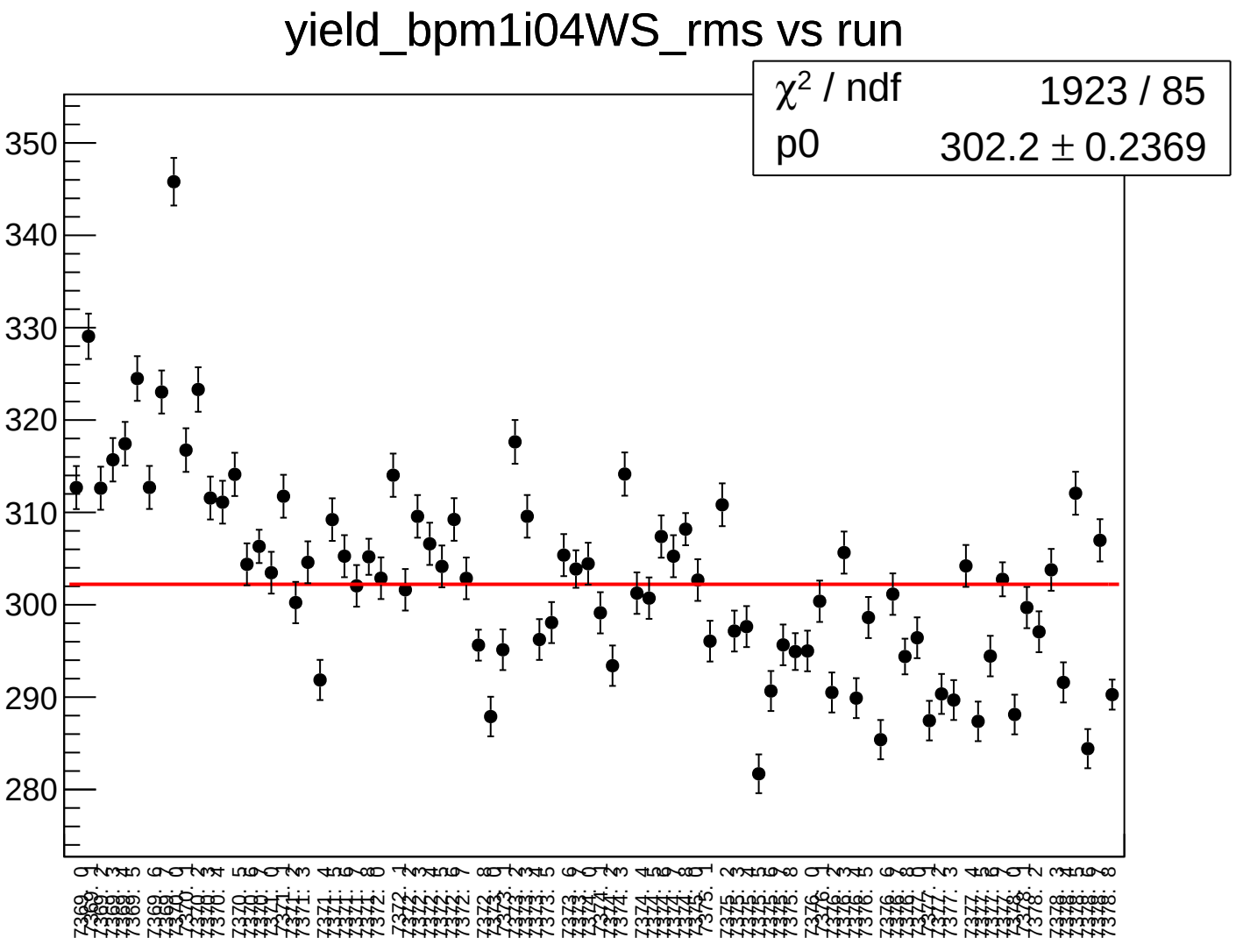

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 5.532e+05 / 85
p0 1.429e+05 ± 0.3088
143.5
143.4
143.3
143.2
143.1
143
142.9
142.8
142.7
142.6
pull
Entries 86
Mean −598.4
Std Dev 632.6
200
150
100
50
0
−50

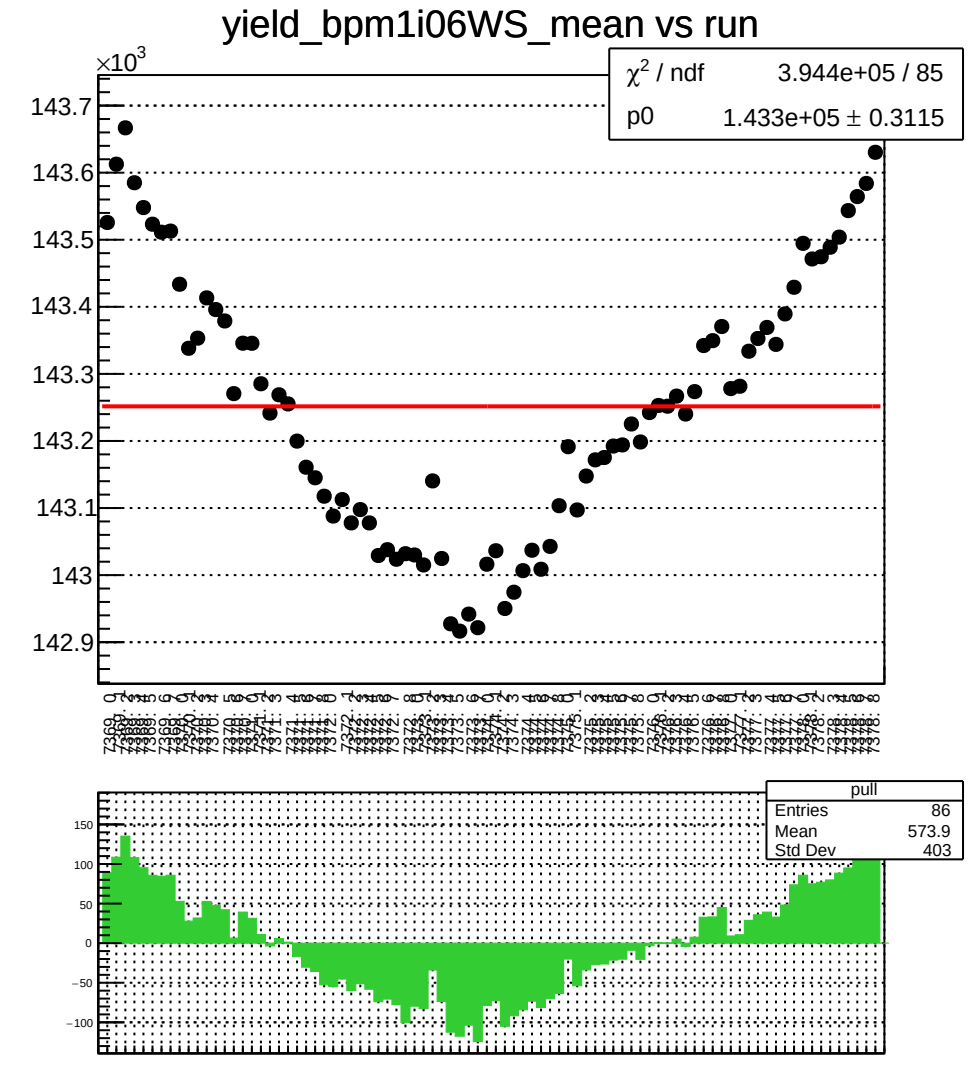

pull1D
Entries 86
Mean −2.3
Std Dev 2.481
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

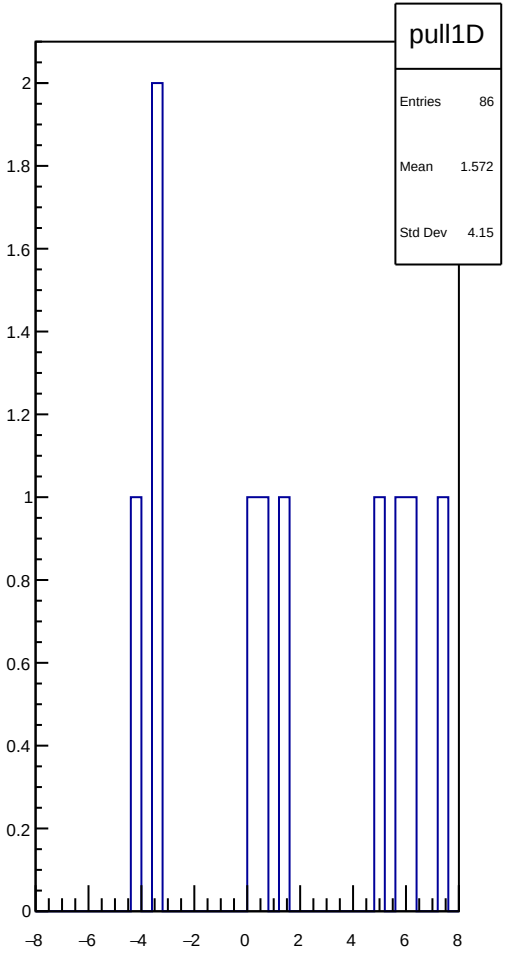

yield_bpm1i02WS_rms vs run
χ² / ndf 2299 / 85
p0 278.5 ± 0.2183
320
310
300
290
280
270
260

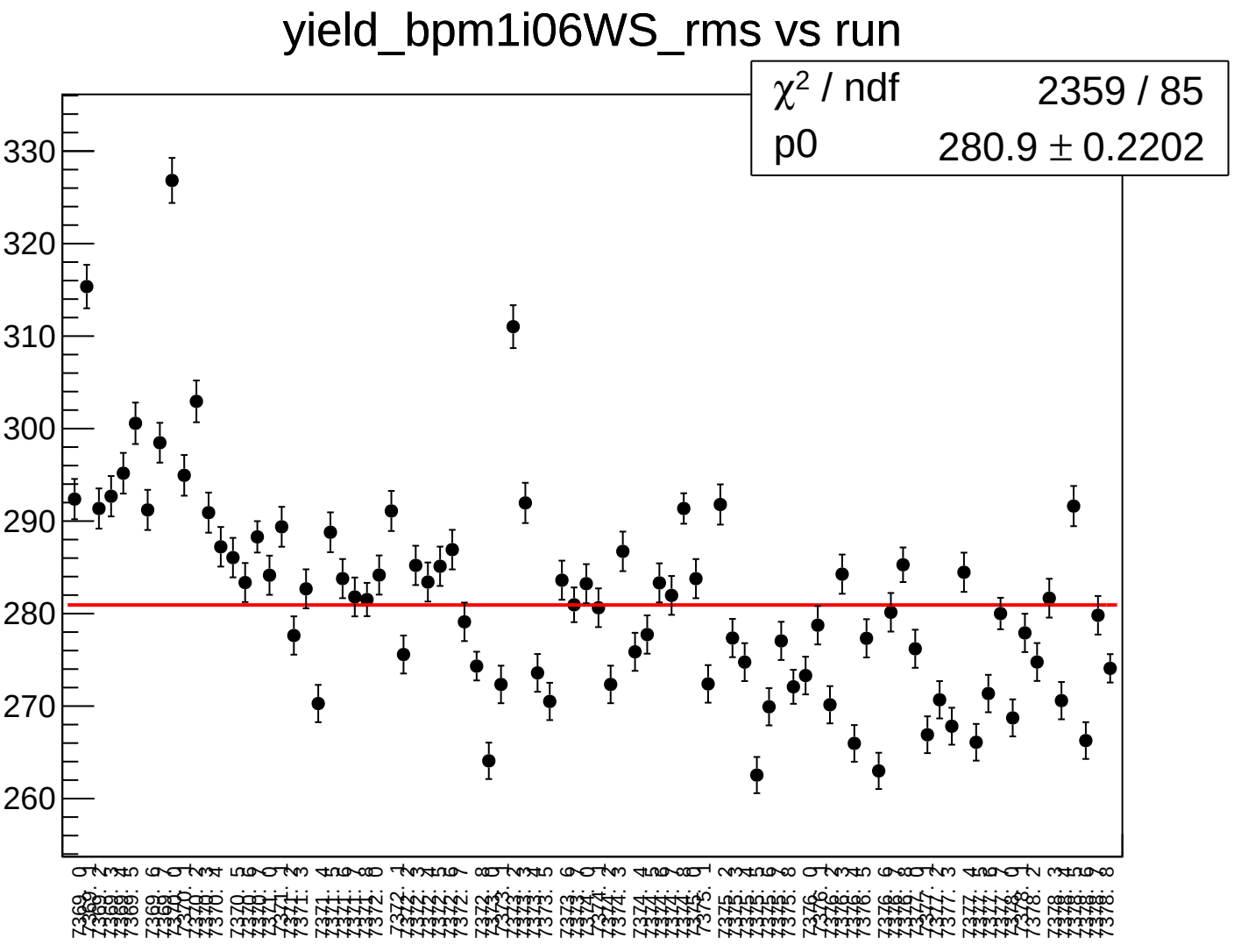

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 2.587e+05 / 85
p0 1.496e+05 ± 0.335
150
149.9
149.8
149.7
149.6
149.5
149.4
149.3
pull
Entries 86
Mean −623.8
Std Dev 649.1
120
100
80
60
40
20
0
−20
−40
−60
−80

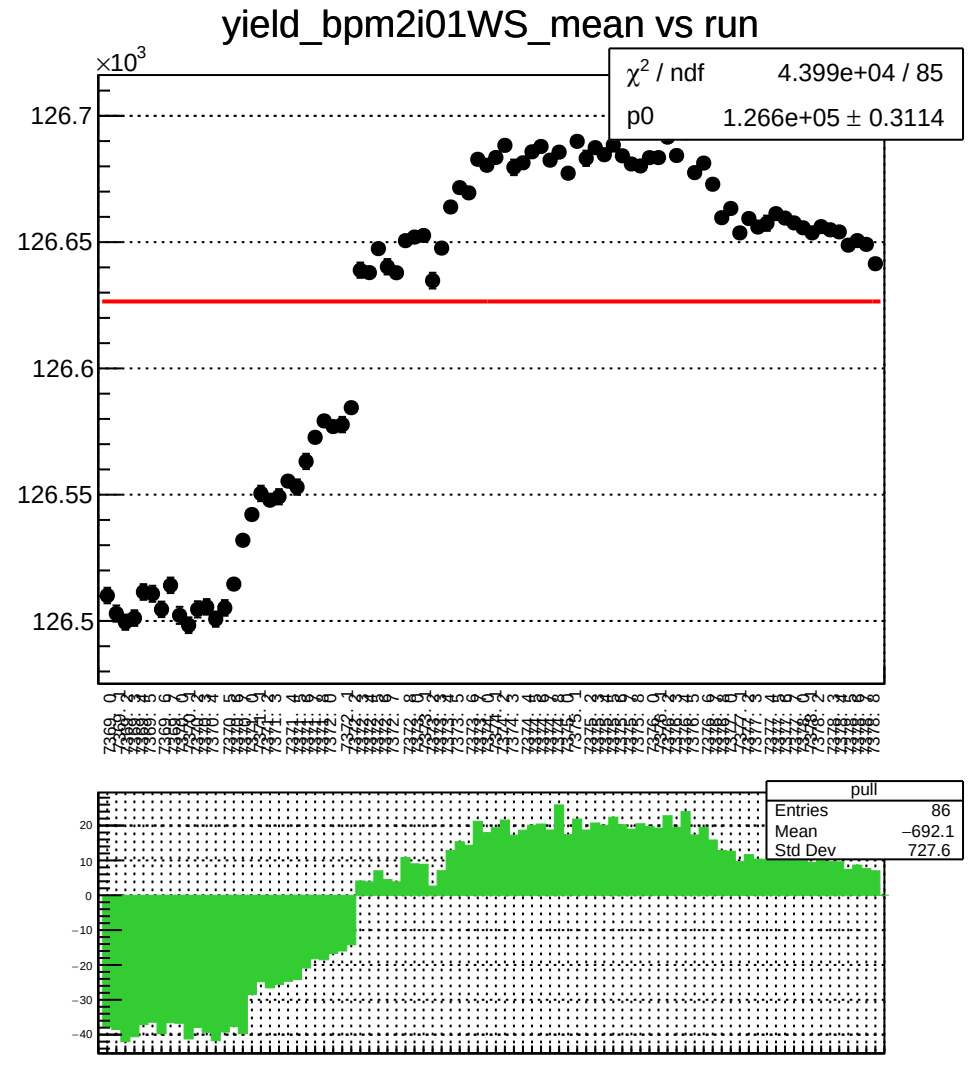

pull1D
Entries 86
Mean −1.507
Std Dev 4.738
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

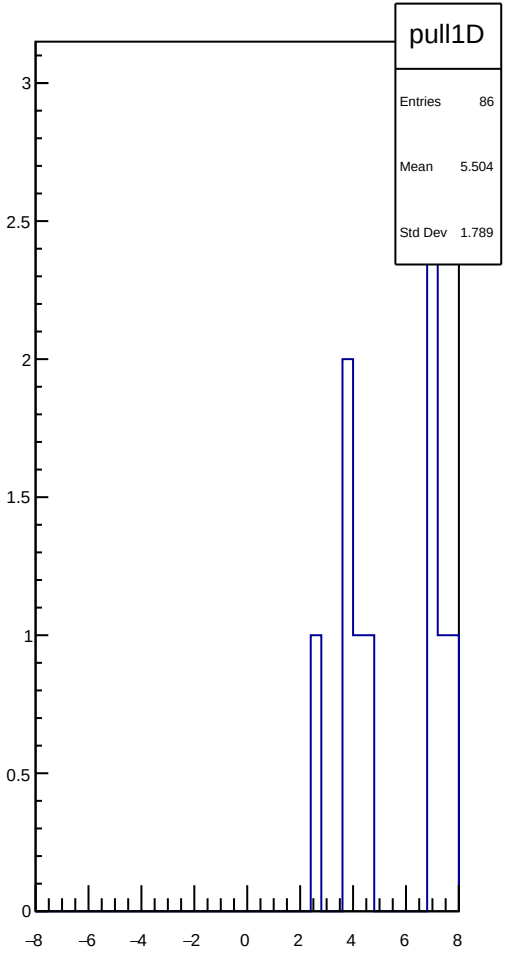

yield_bpm1i04WS_rms vs run
χ² / ndf 1923 / 85
p0 302.2 ± 0.2369
350
340
330
320
310
300
290
280

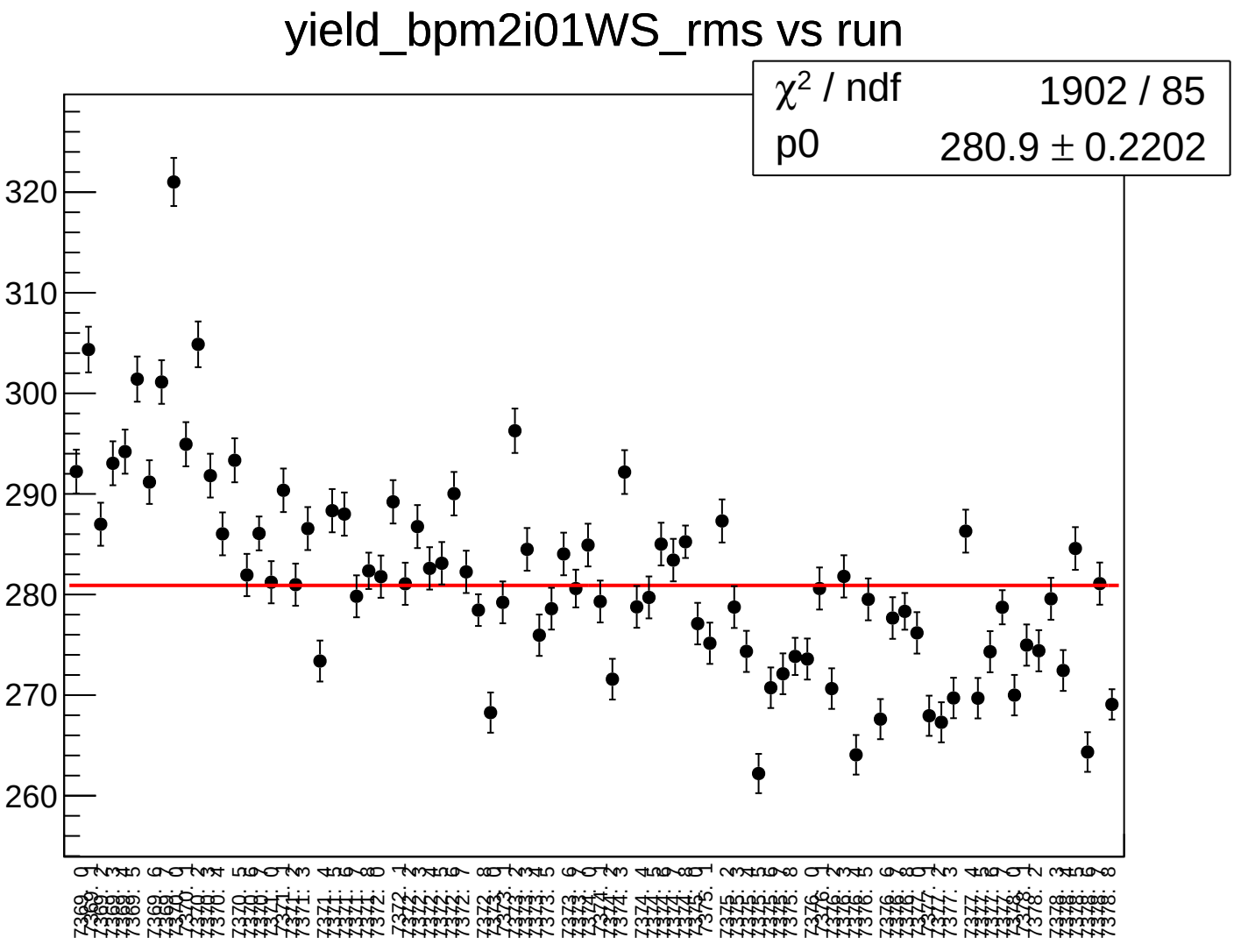

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 3.944e+05 / 85
p0 1.433e+05 ± 0.3115
143.7
143.6
143.5
143.4
143.3
143.2
143.1
143
142.9
pull
Entries 86
Mean 573.9
Std Dev 403
150
100
50
0
−50
−100

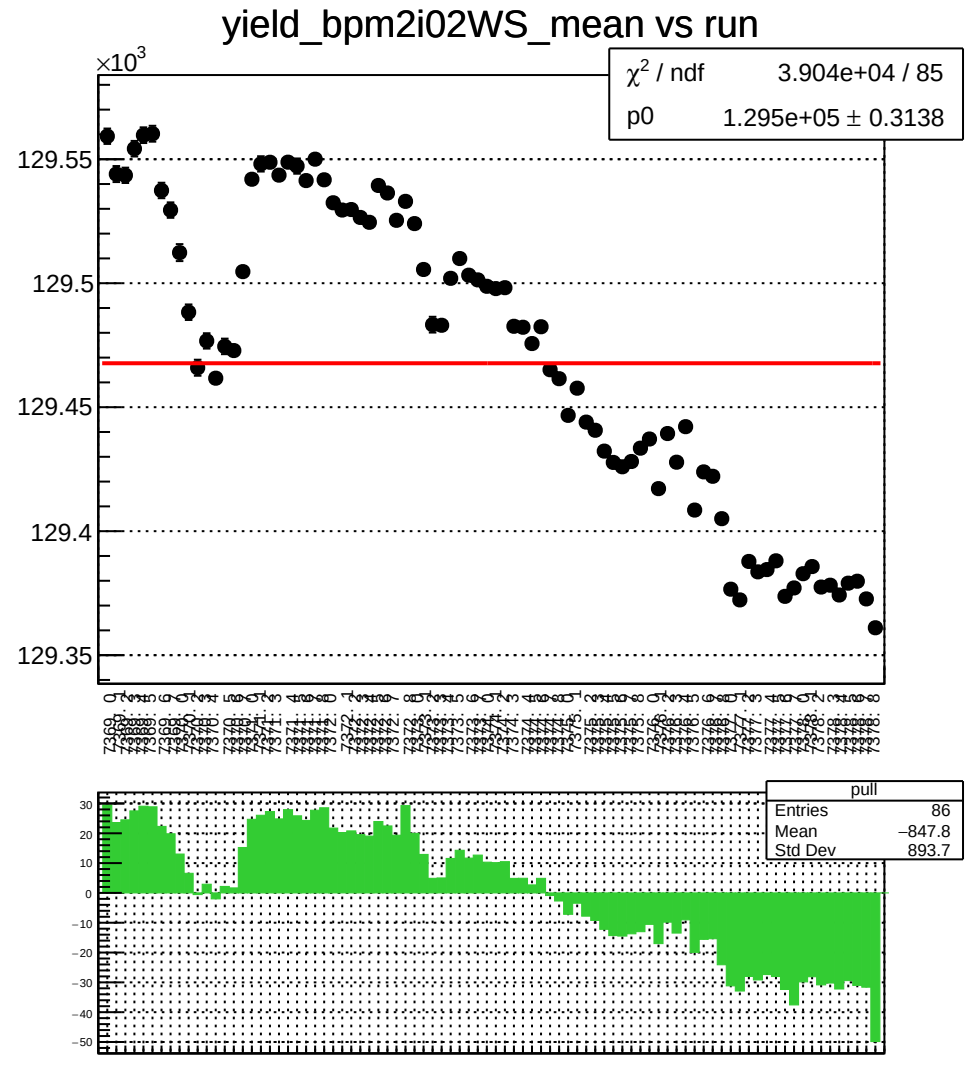

pull1D
Entries 86
Mean 1.572
Std Dev 4.15
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

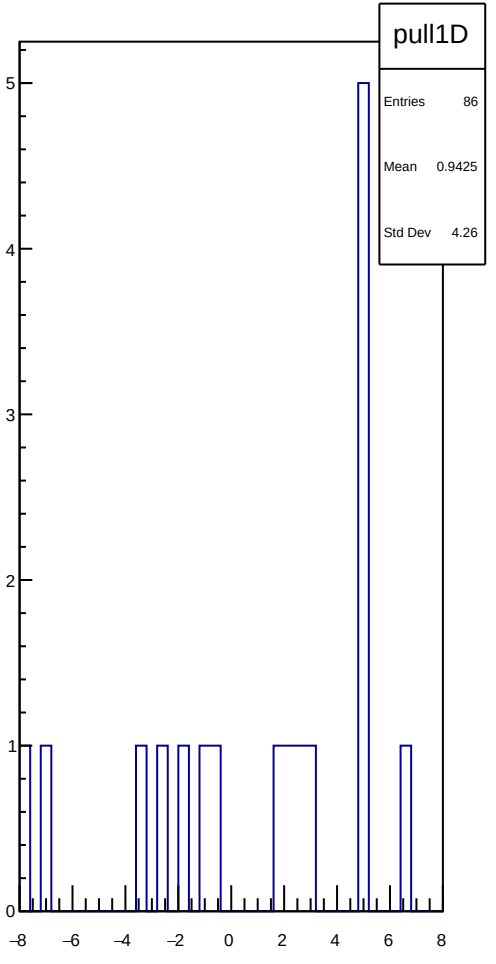

yield_bpm1i06WS_rms vs run
χ² / ndf 2359 / 85
p0 280.9 ± 0.2202
330
320
310
300
290
280
270
260

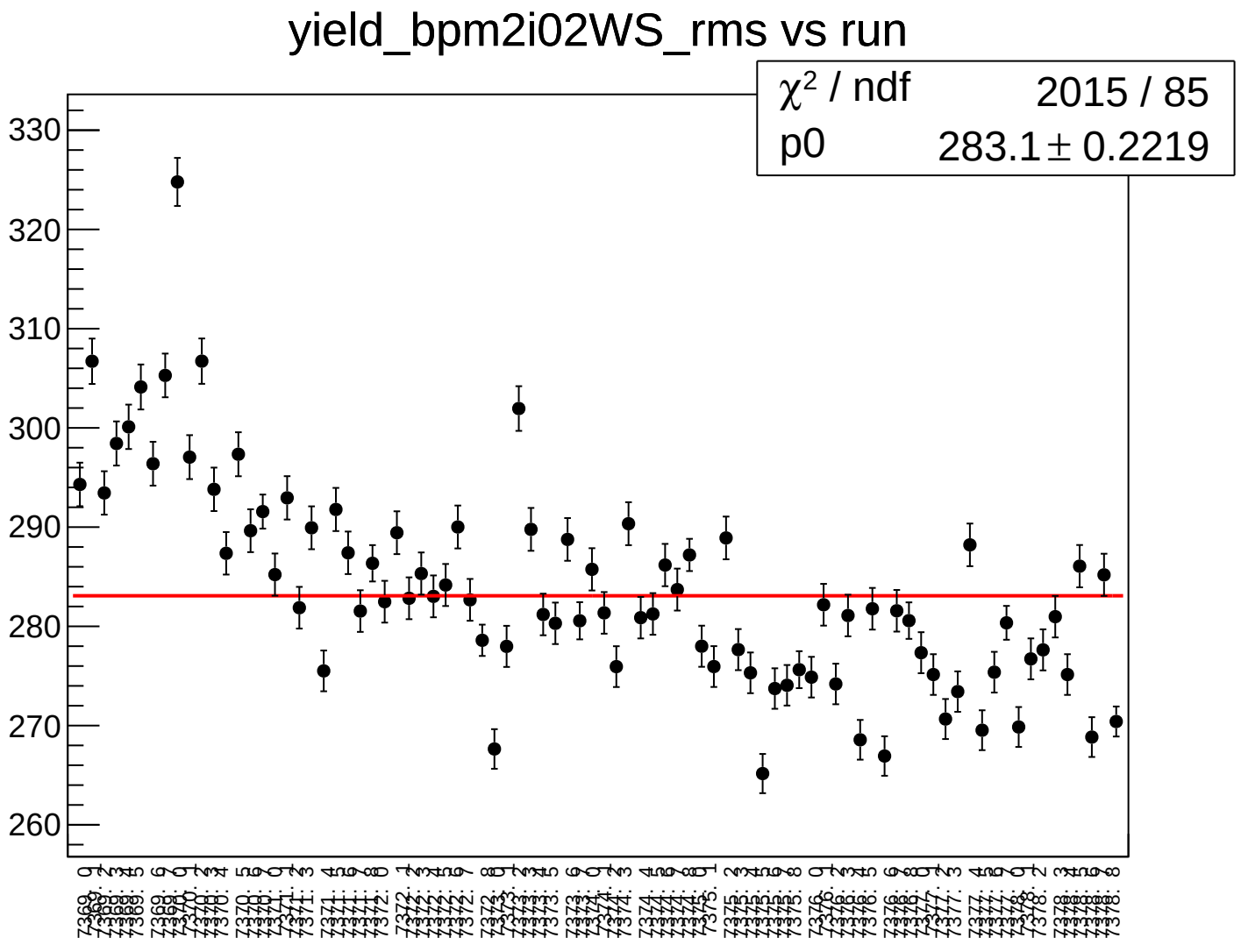

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 4.399e+04 / 85
p0 1.266e+05 ± 0.3114
126.7
126.65
126.6
126.55
126.5
pull
Entries 86
Mean −692.1
Std Dev 727.6
20
10
0
−10
−20
−30
−40

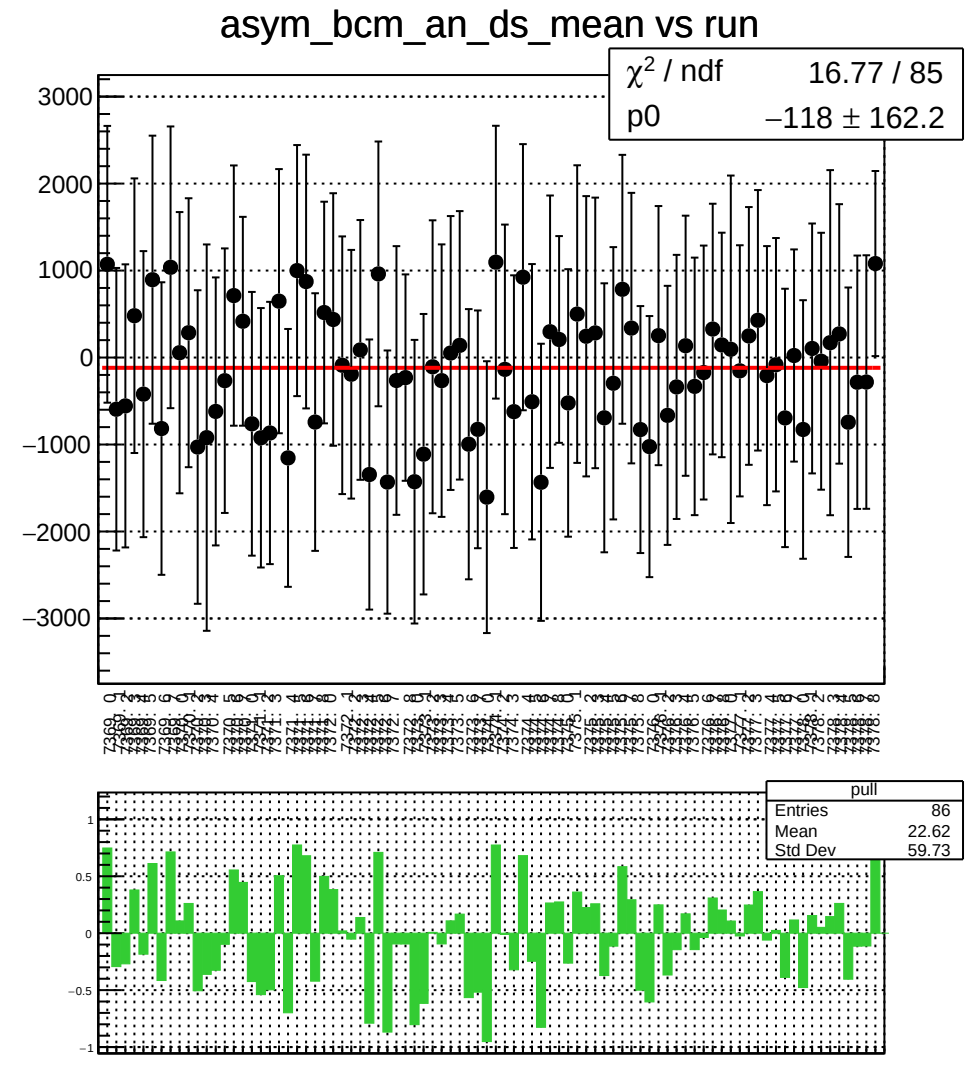

pull1D
Entries 86
Mean 5.504
Std Dev 1.789
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

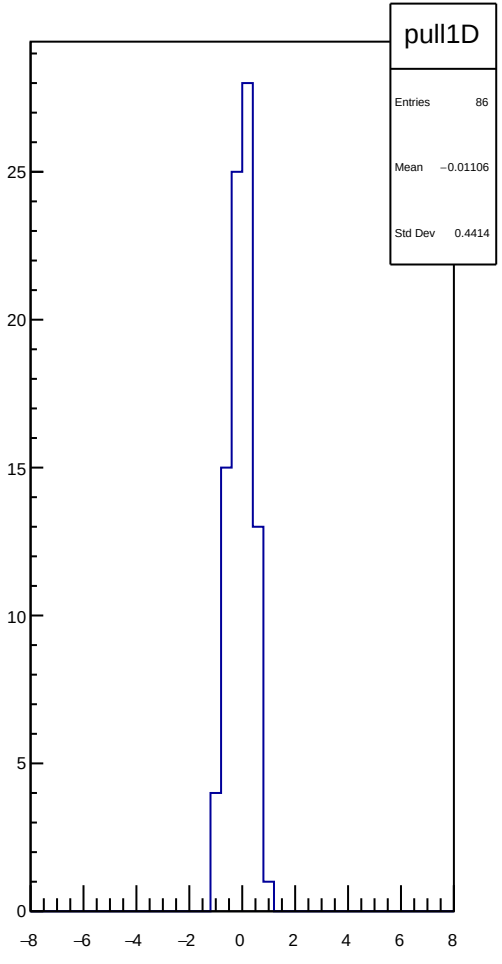

yield_bpm2i01WS_rms vs run
χ² / ndf 1902 / 85
p0 280.9 ± 0.2202
320
310
300
290
280
270
260

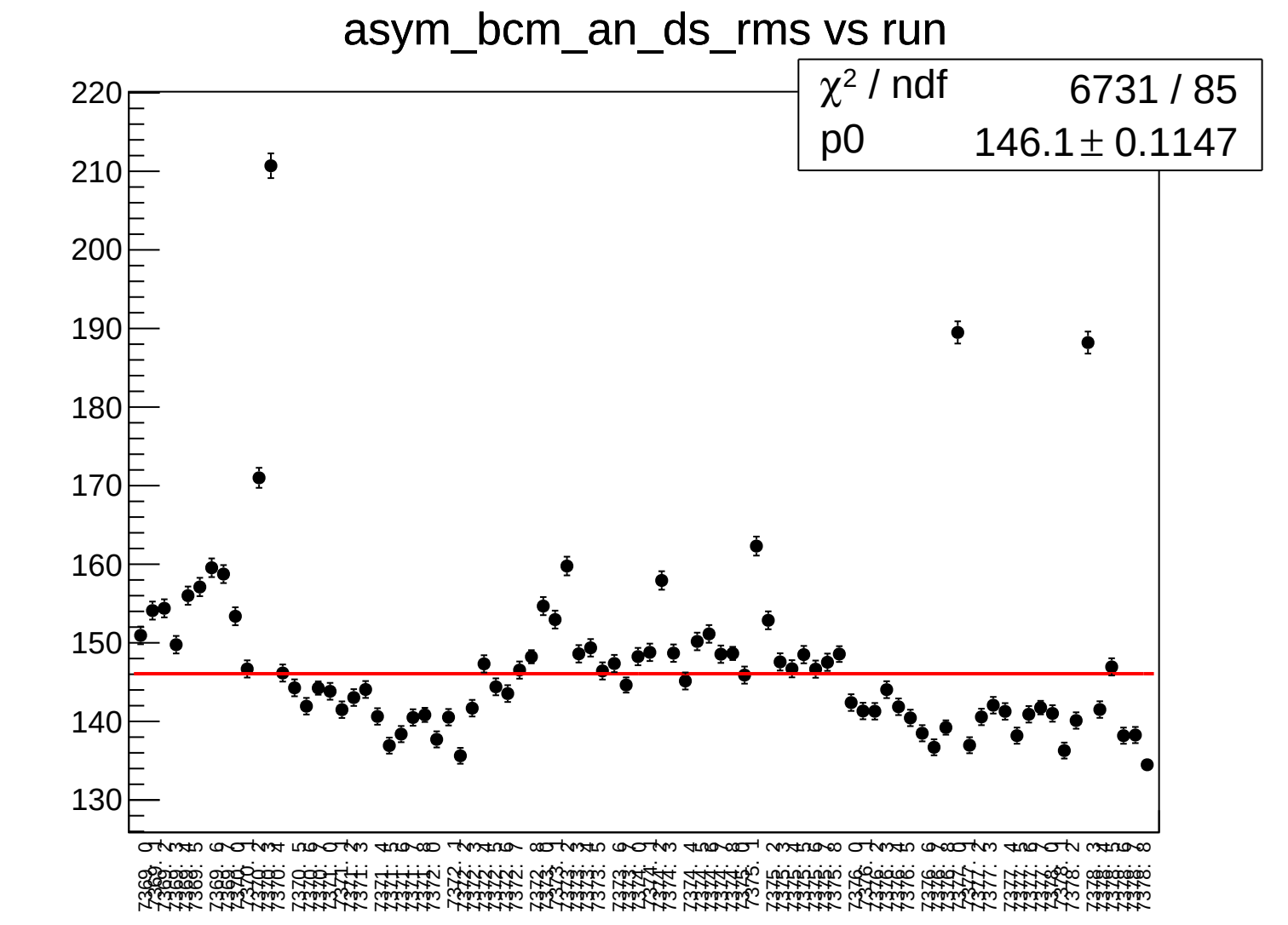

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 3.904e+04 / 85
p0 1.295e+05 ± 0.3138
129.55
129.5
129.45
129.4
129.35
pull
Entries 86
Mean −847.8
Std Dev 893.7
30
20
10
0
−10
−20
−30
−40
−50

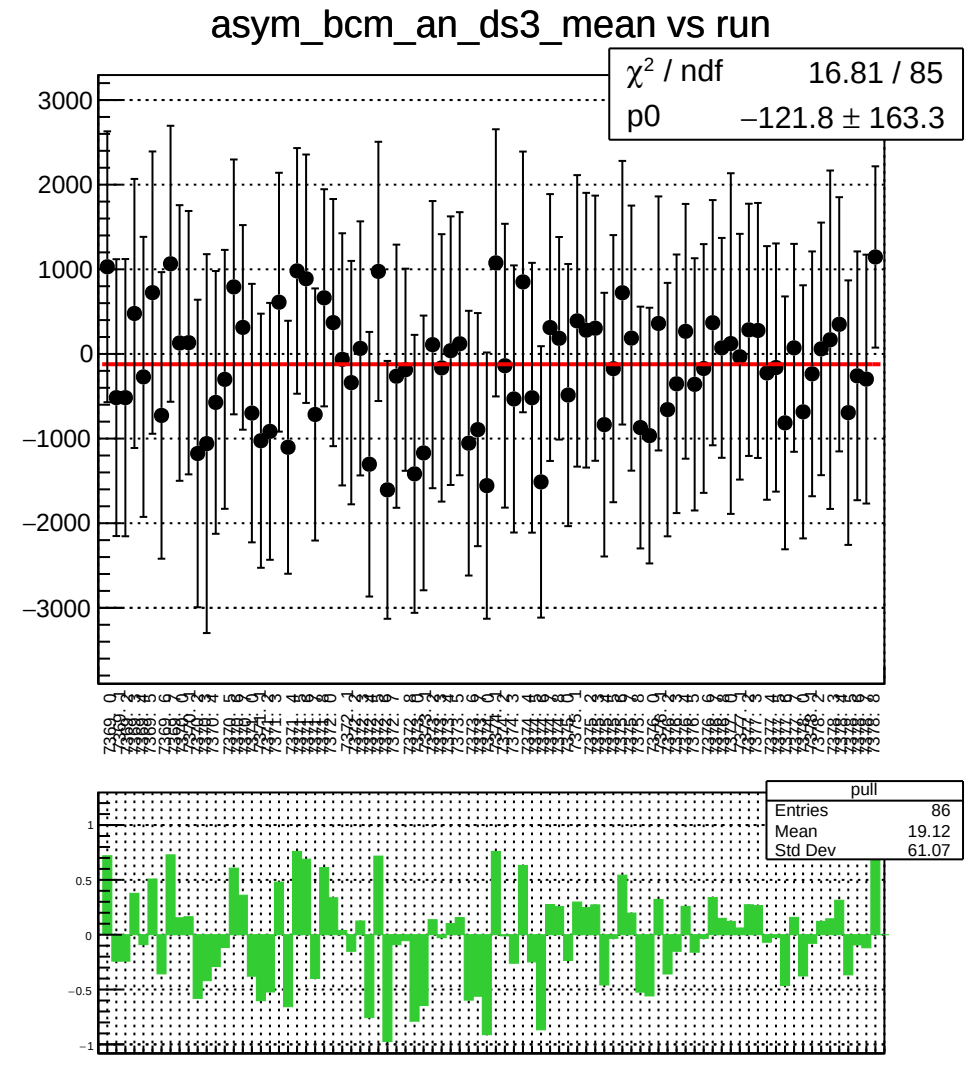

pull1D
Entries 86
Mean 0.9425
Std Dev 4.26
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

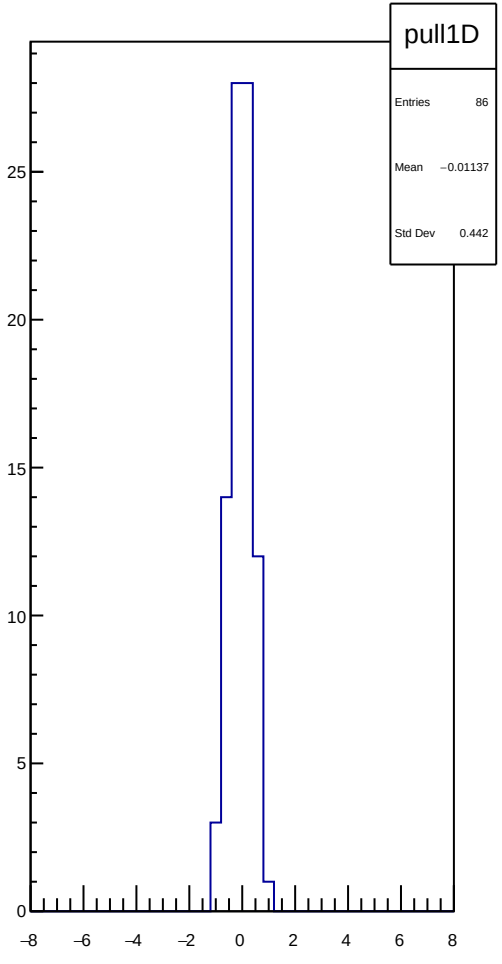

yield_bpm2i02WS_rms vs run
χ² / ndf 2015 / 85
p0 283.1 ± 0.2219
330
320
310
300
290
280
270
260

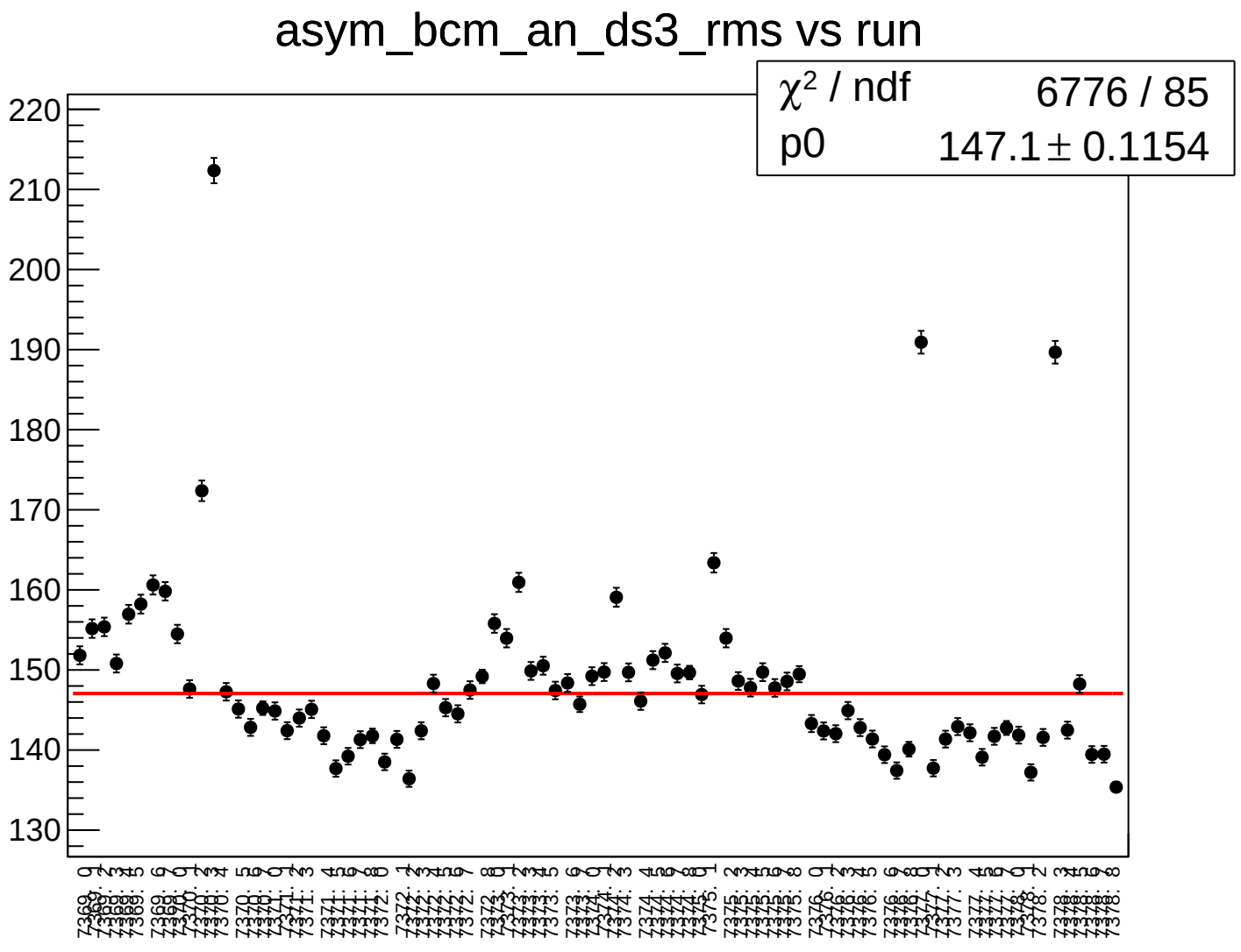

asym_bcm_an_ds_mean vs run
χ² / ndf 16.77 / 85
p0 −118 ± 162.2
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean 22.62
Std Dev 59.73
1
0.5
0
−0.5
−1

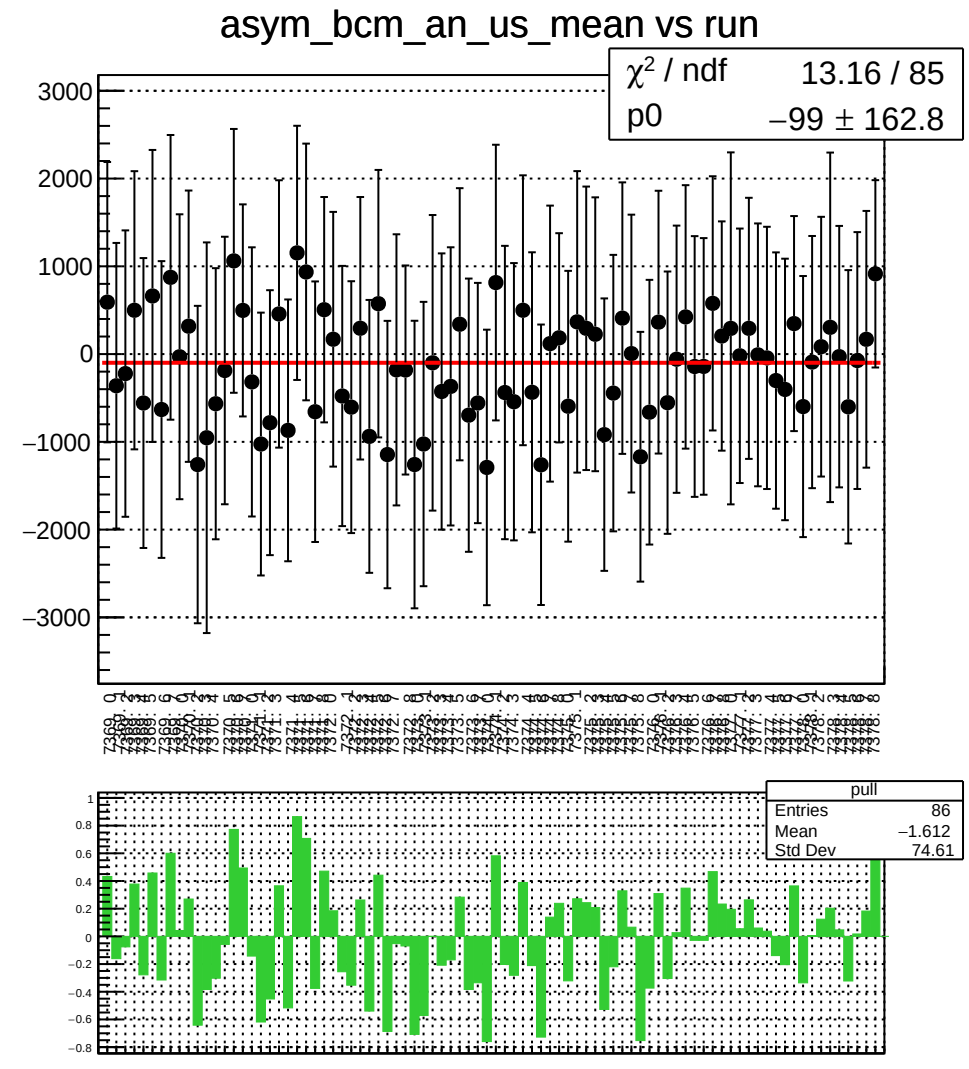

pull1D
Entries 86
Mean −0.01106
Std Dev 0.4414
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

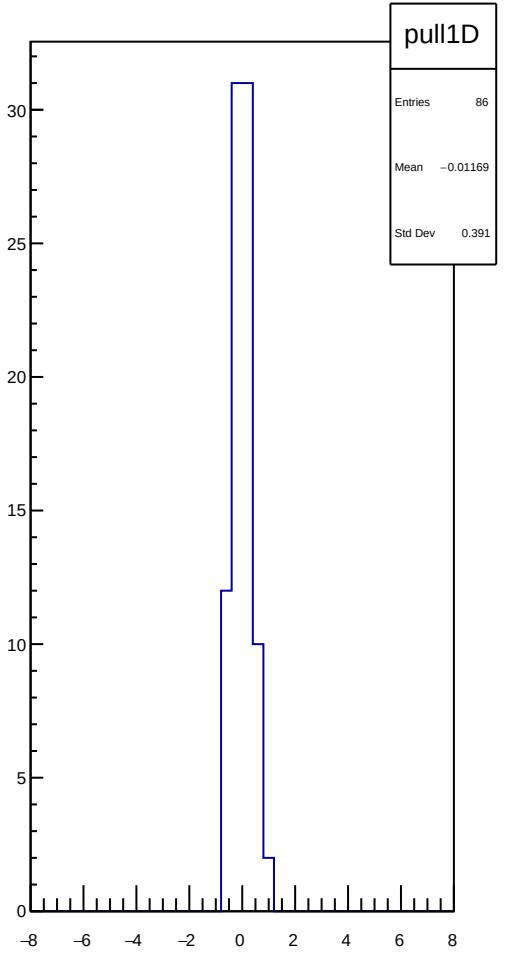

asym_bcm_an_ds_rms vs run
χ^2 / ndf 6731 / 85
p0 146.1 ± 0.1147
220
210
200
190
180
170
160
150
140
130

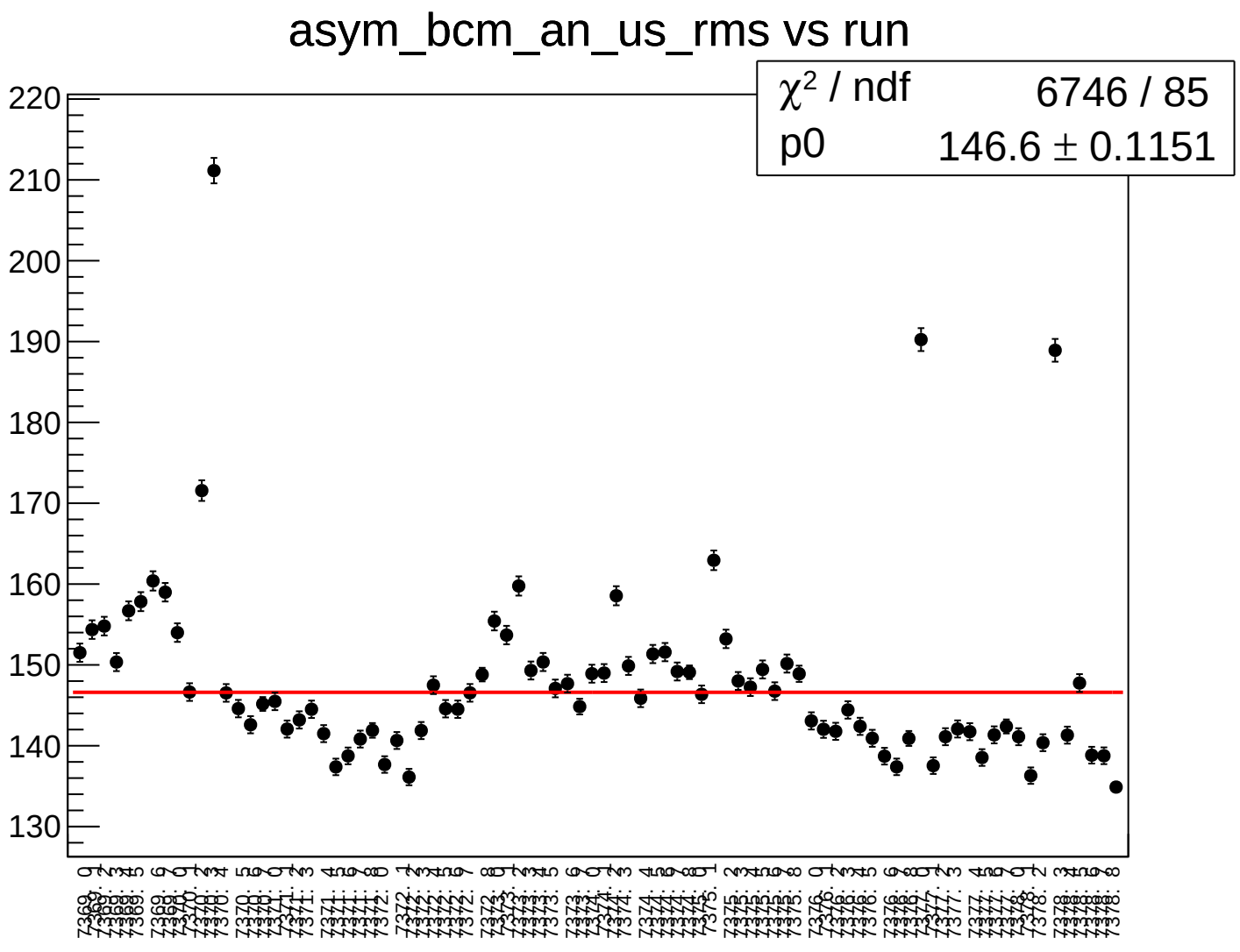

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.81 / 85
p0 −121.8 ± 163.3
pull
Entries 86
Mean 19.12
Std Dev 61.07

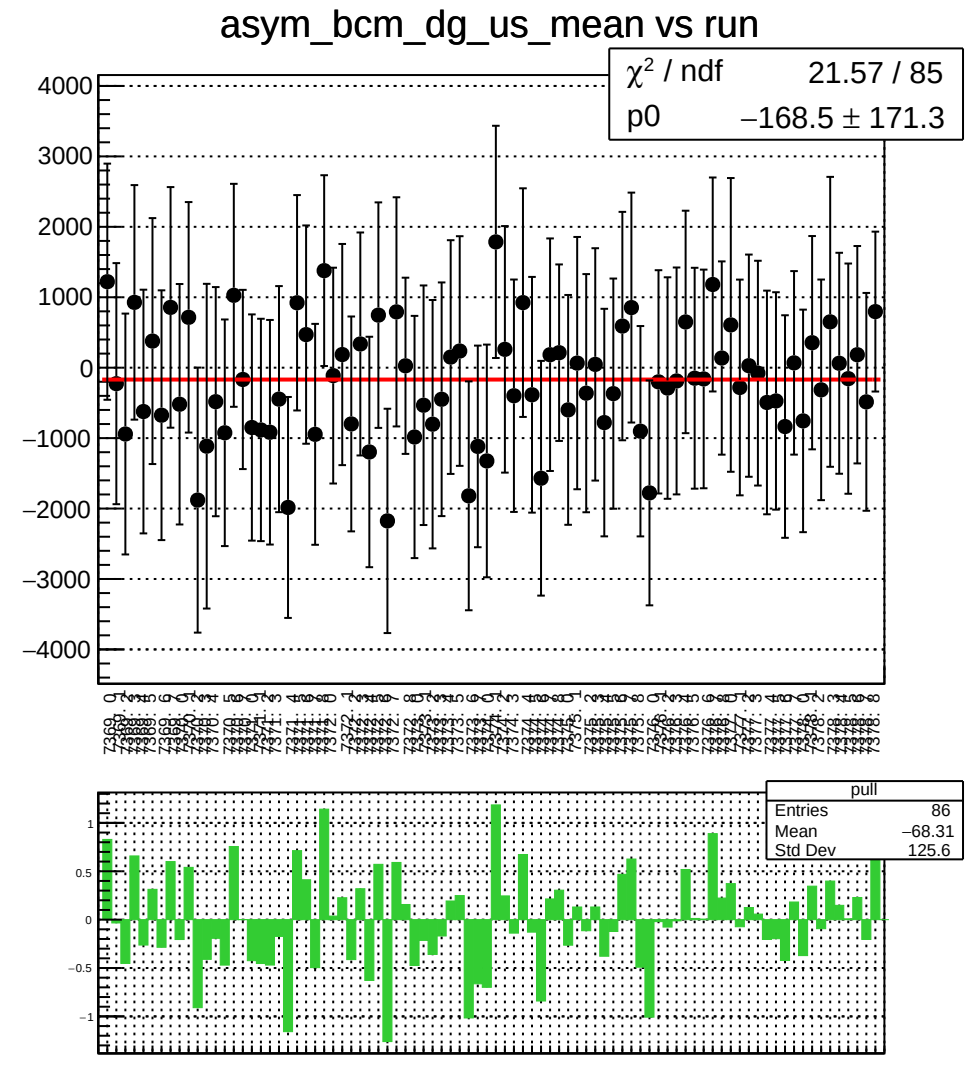

pull1D
Entries 86
Mean −0.01137
Std Dev 0.442

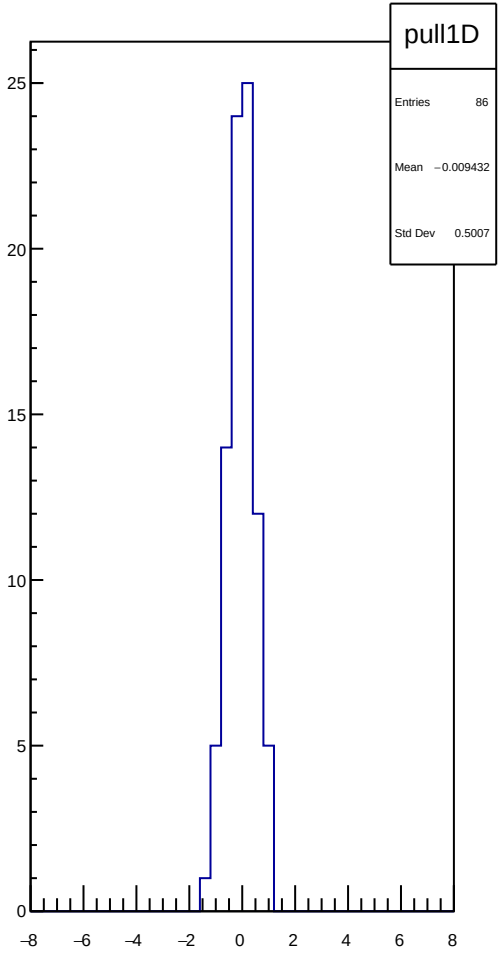

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 6776 / 85
p0 147.1 ± 0.1154
220
210
200
190
180
170
160
150
140
130

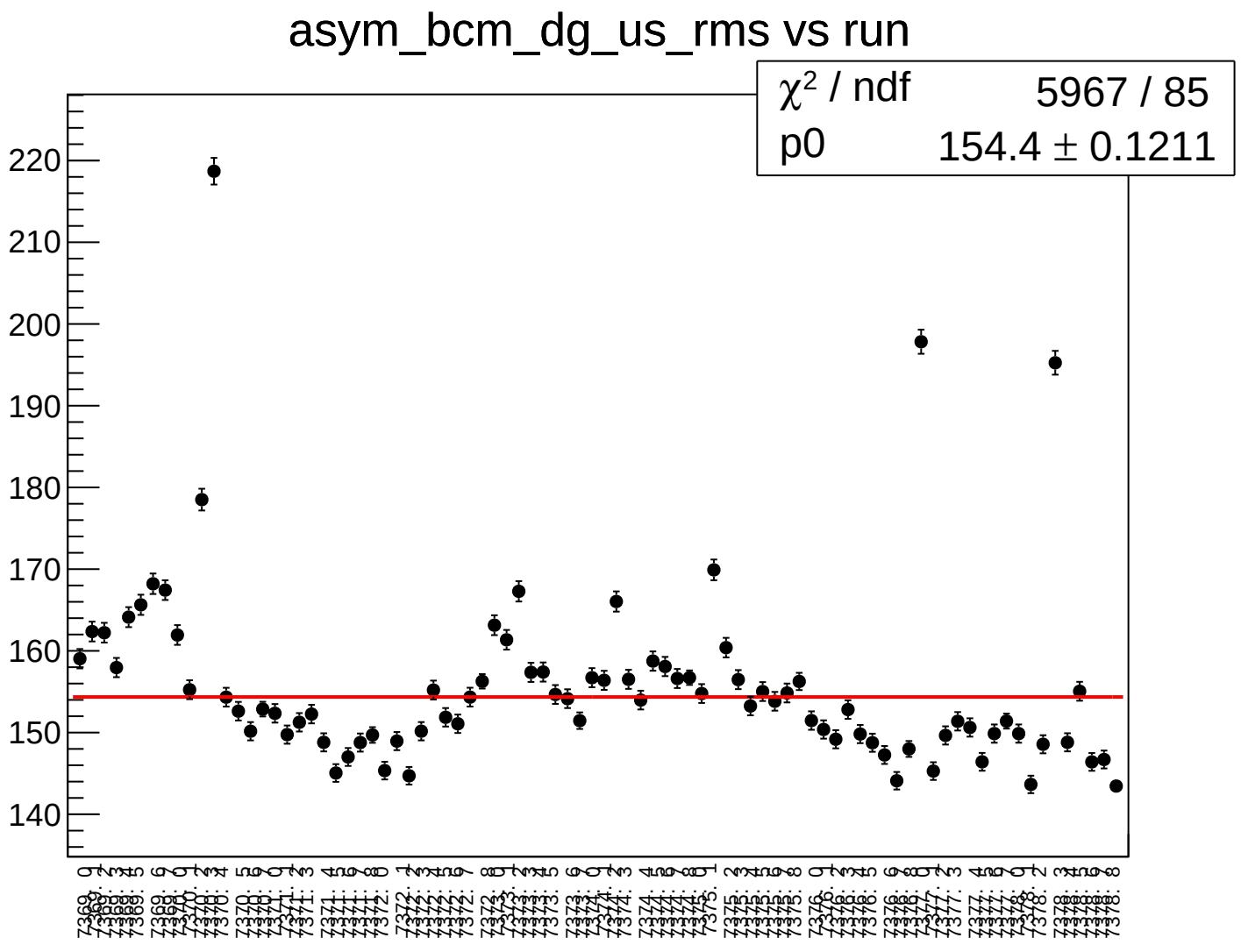

asym_bcm_an_us_mean vs run
χ² / ndf 13.16 / 85
p0 −99 ± 162.8
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −1.612
Std Dev 74.61
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

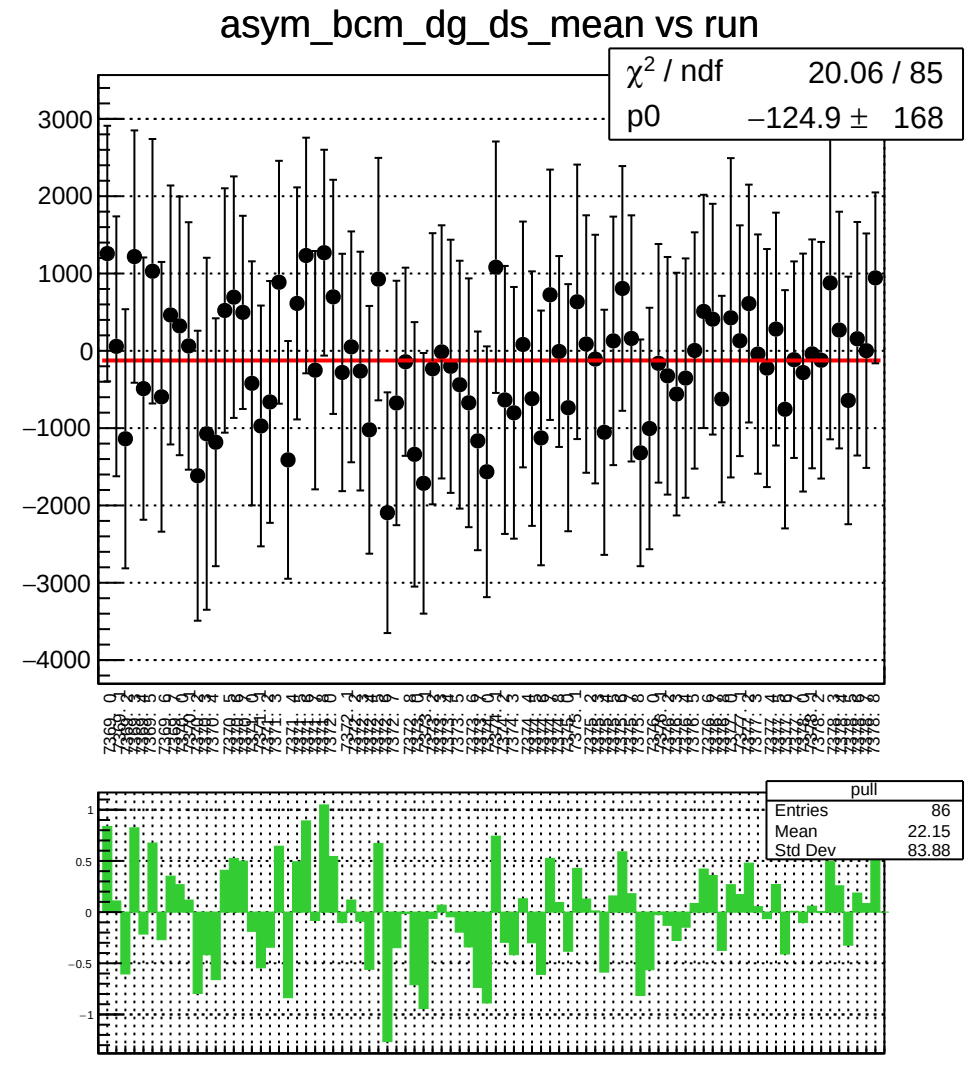

pull1D
Entries 86
Mean −0.01169
Std Dev 0.391
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

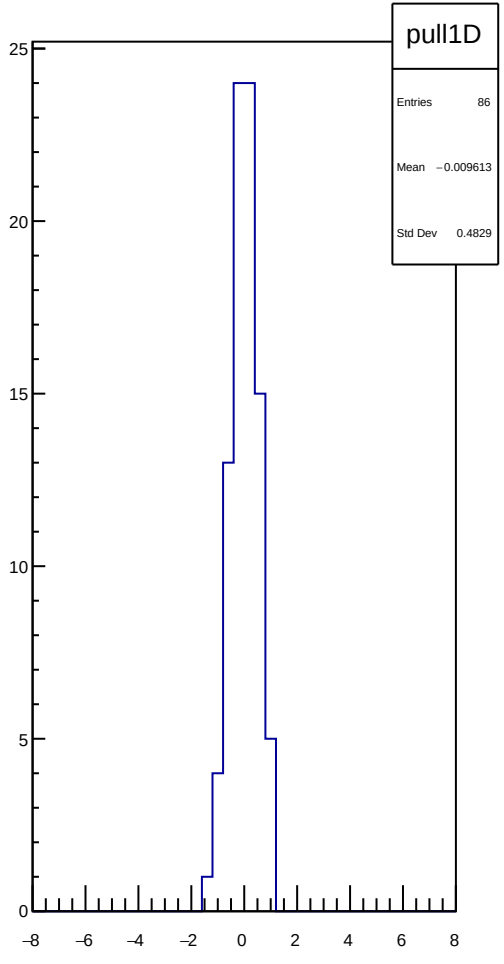

asym_bcm_an_us_rms vs run
χ² / ndf 6746 / 85
p0 146.6 ± 0.1151
220
210
200
190
180
170
160
150
140
130

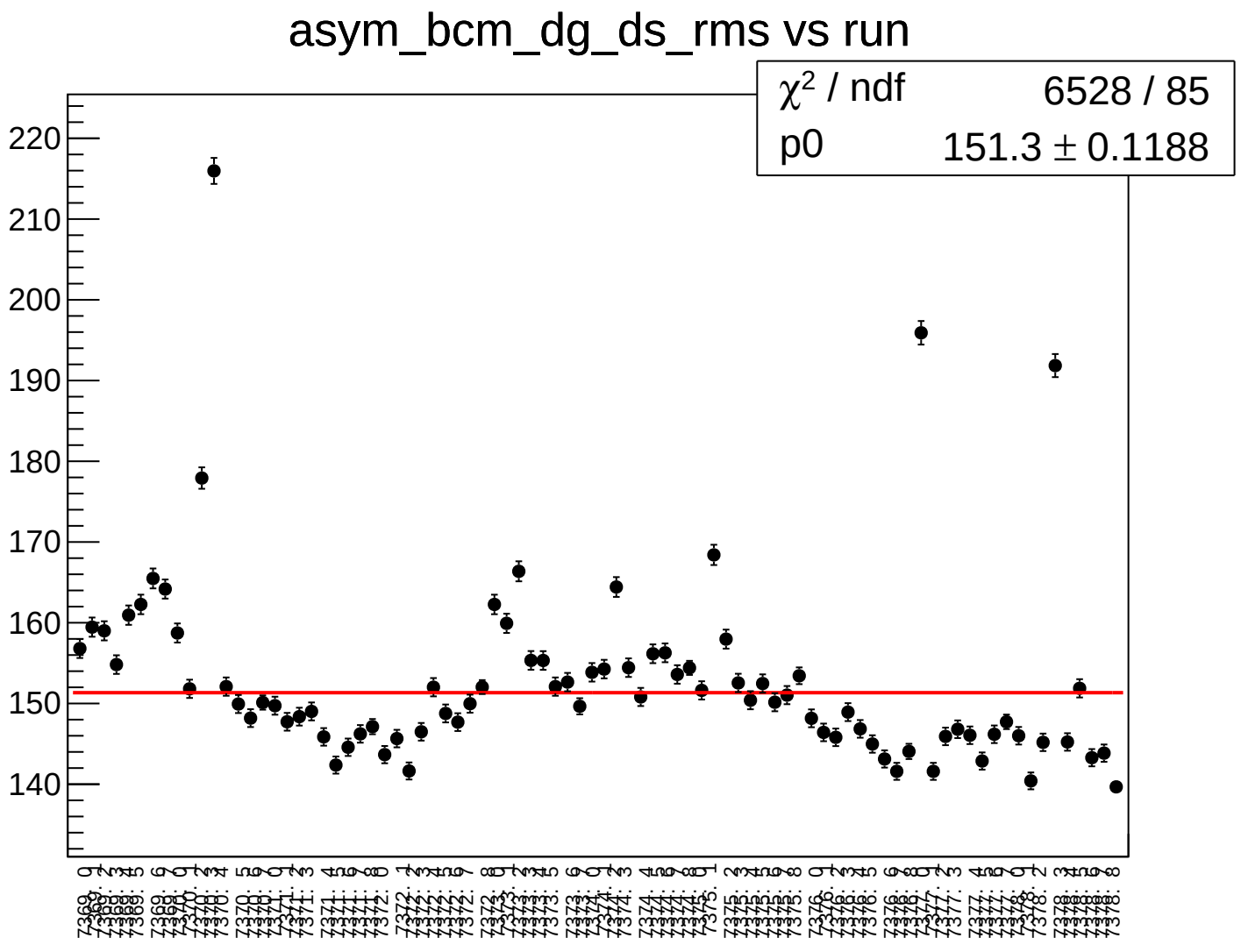

asym_bcm_dg_us_mean vs run
χ² / ndf 21.57 / 85
p0 −168.5 ± 171.3
pull
Entries 86
Mean −68.31
Std Dev 125.6

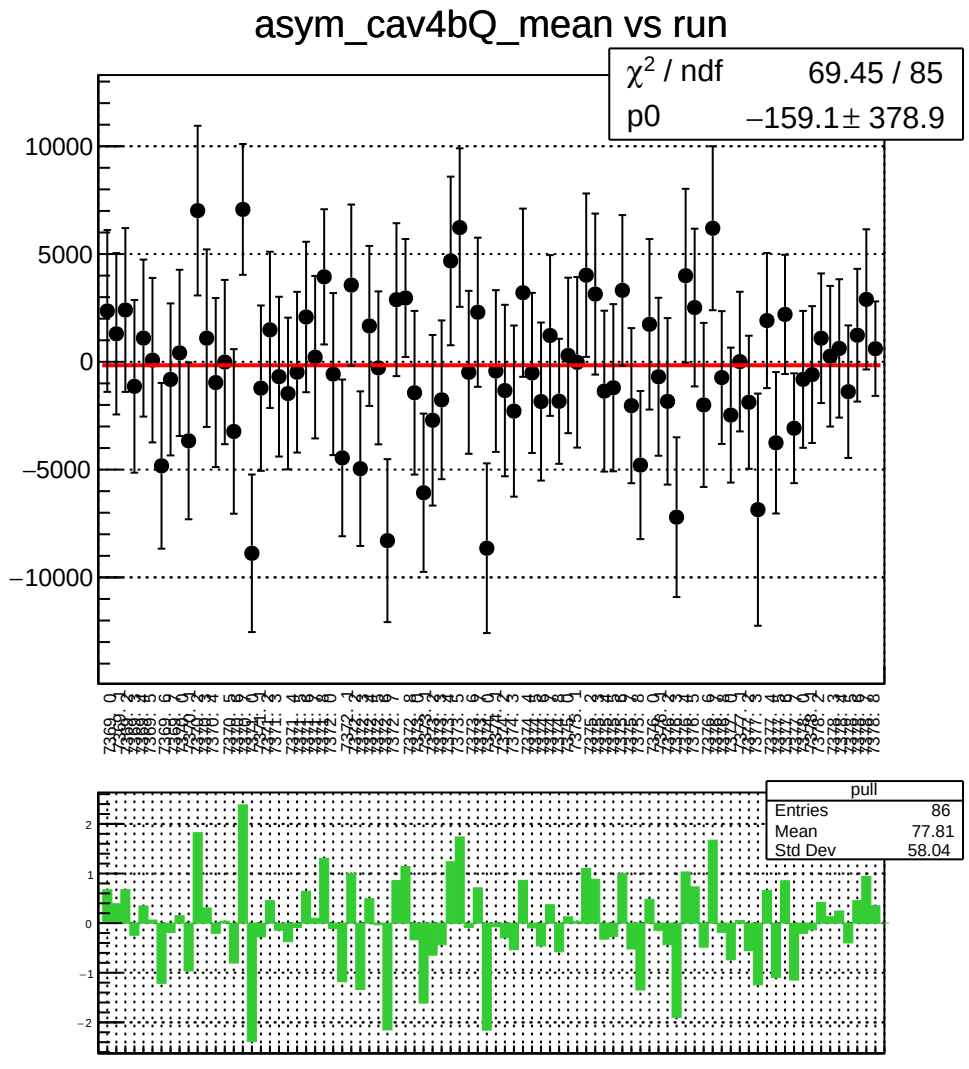

pull1D
Entries 86
Mean −0.009432
Std Dev 0.5007

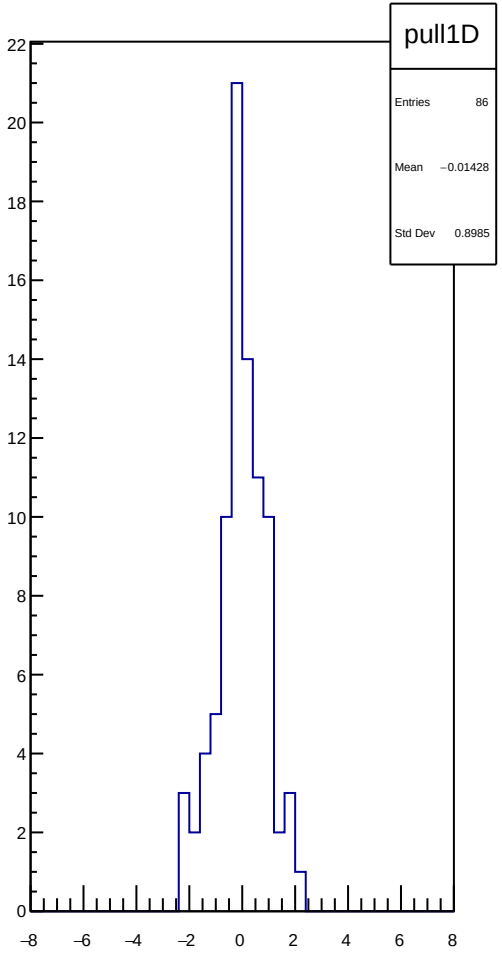

asym_bcm_dg_us_rms vs run
χ² / ndf 5967 / 85
p0 154.4 ± 0.1211
220
210
200
190
180
170
160
150
140

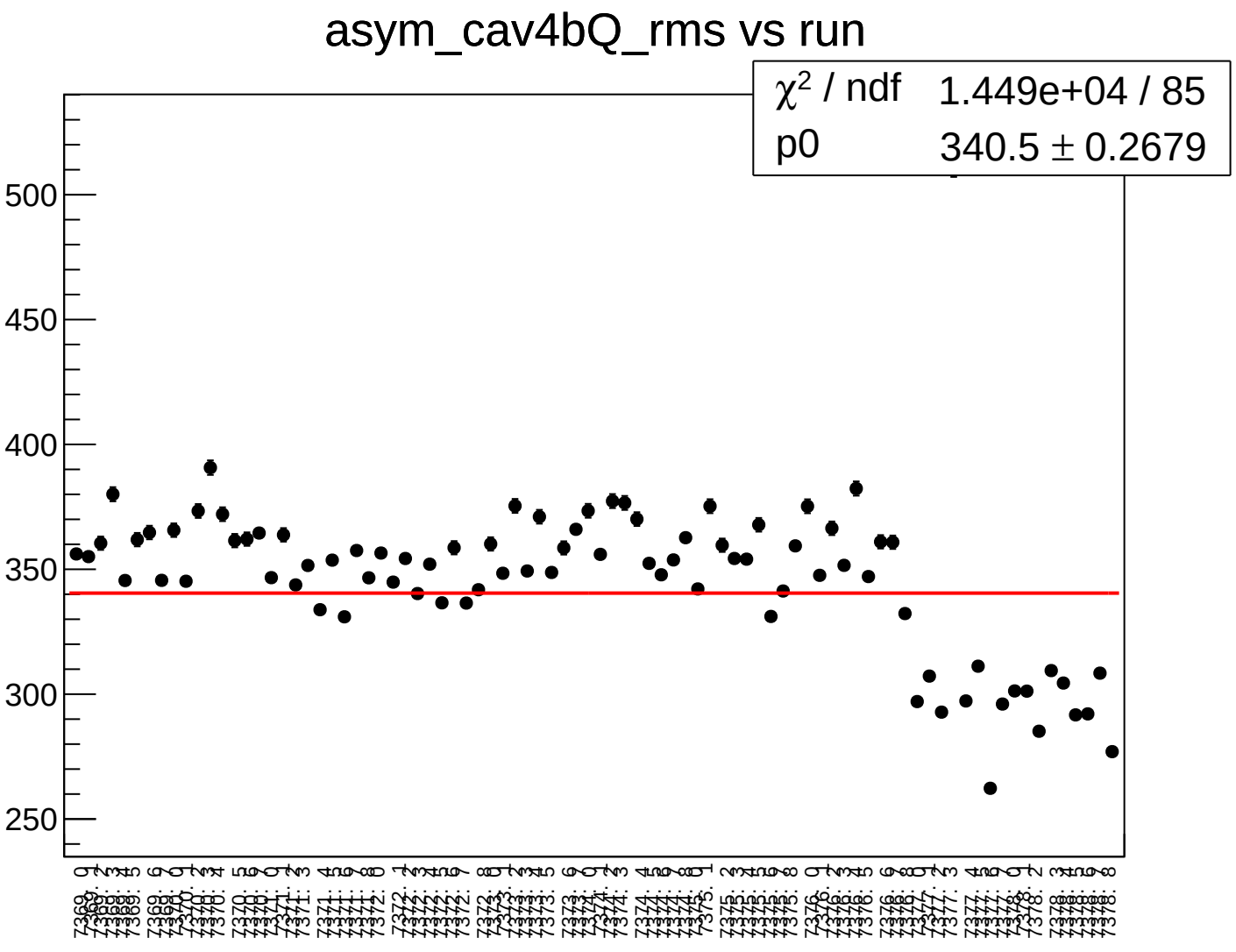

asym_bcm_dg_ds_mean vs run
χ² / ndf 20.06 / 85
p0 −124.9 ± 168
pull
Entries 86
Mean 22.15
Std Dev 83.88

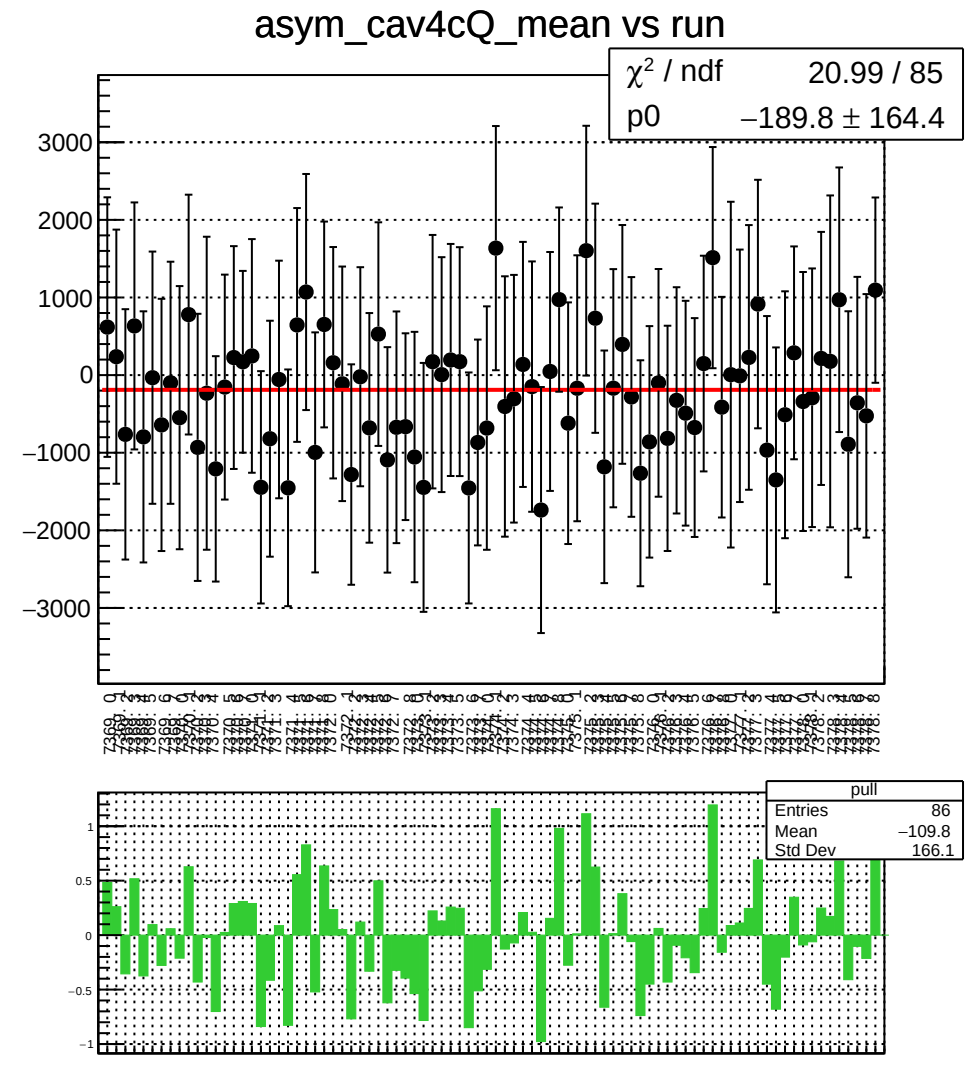

pull1D
Entries 86
Mean −0.009613
Std Dev 0.4829

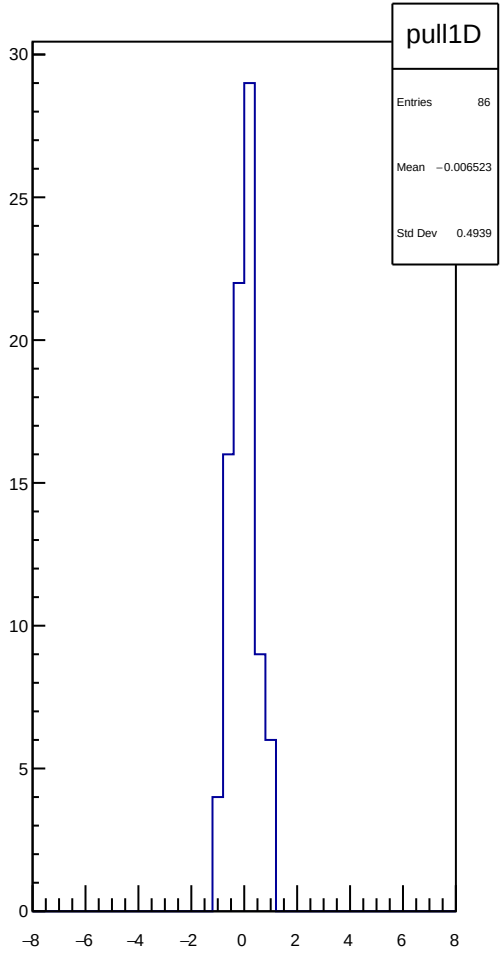

asym_bcm_dg_ds_rms vs run
χ² / ndf 6528 / 85
p0 151.3 ± 0.1188
220
210
200
190
180
170
160
150
140

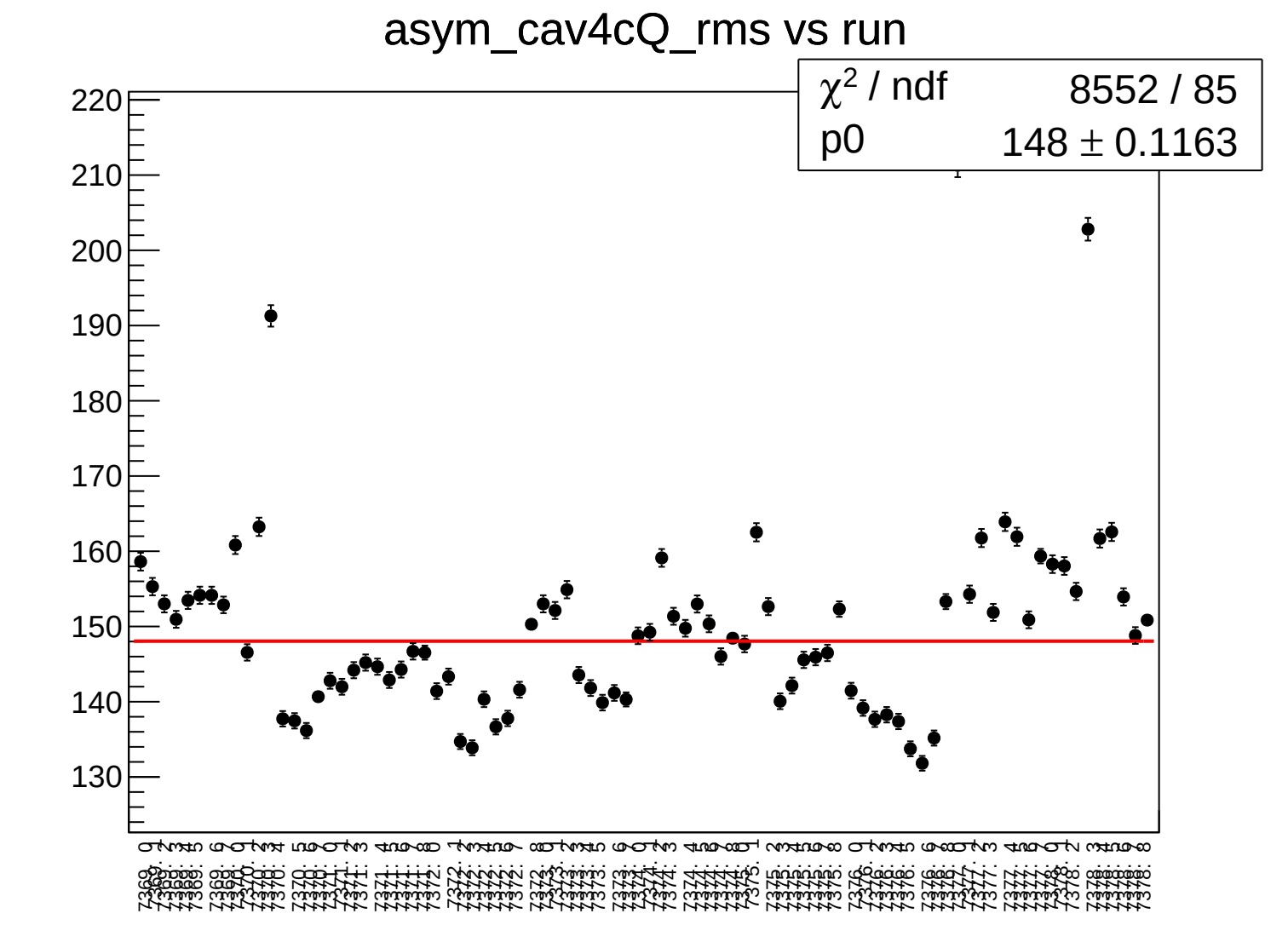

asym_cav4bQ_mean vs run
χ² / ndf 69.45 / 85
p0 −159.1± 378.9
10000
5000
0
−5000
−10000
pull
Entries 86
Mean 77.81
Std Dev 58.04
2
1
0
−1
−2

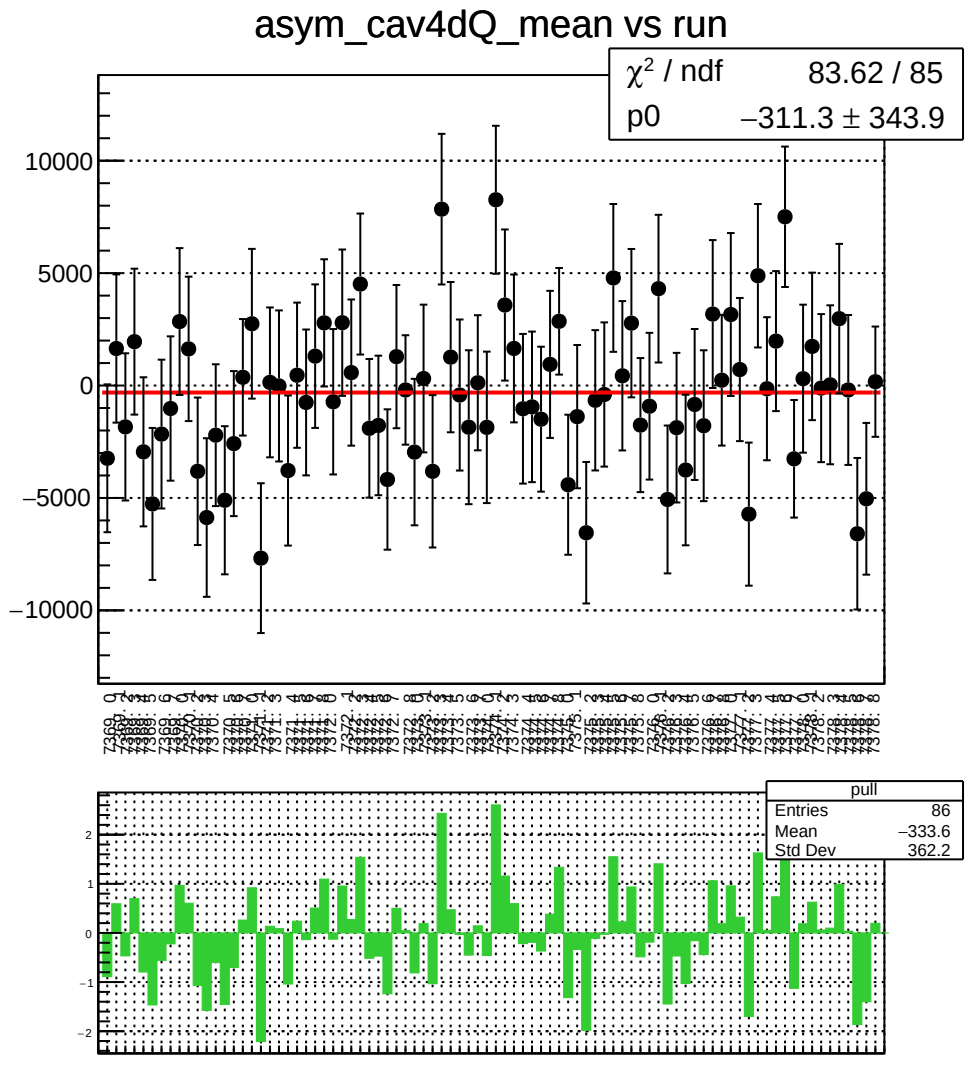

pull1D
Entries 86
Mean −0.01428
Std Dev 0.8985
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

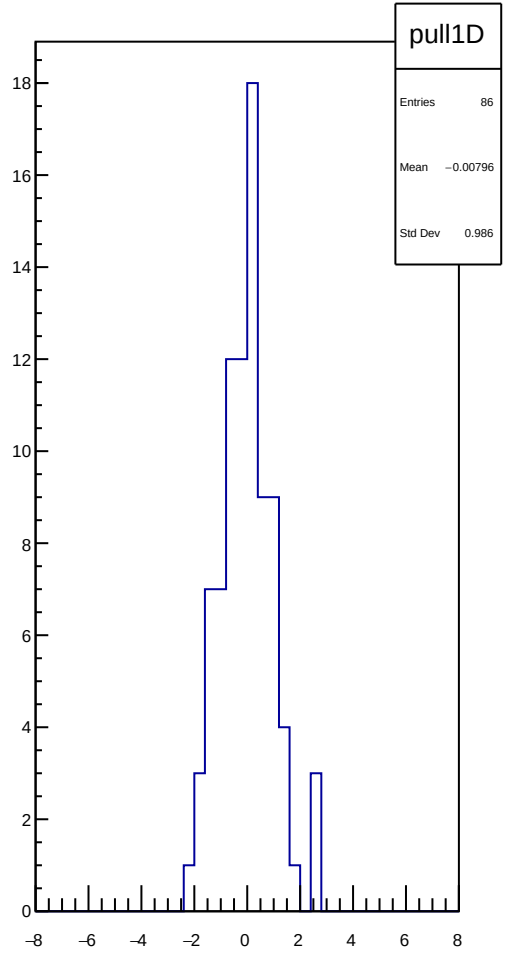

asym_cav4bQ_rms vs run
χ² / ndf 1.449e+04 / 85
p0 340.5 ± 0.2679
500
450
400
350
300
250

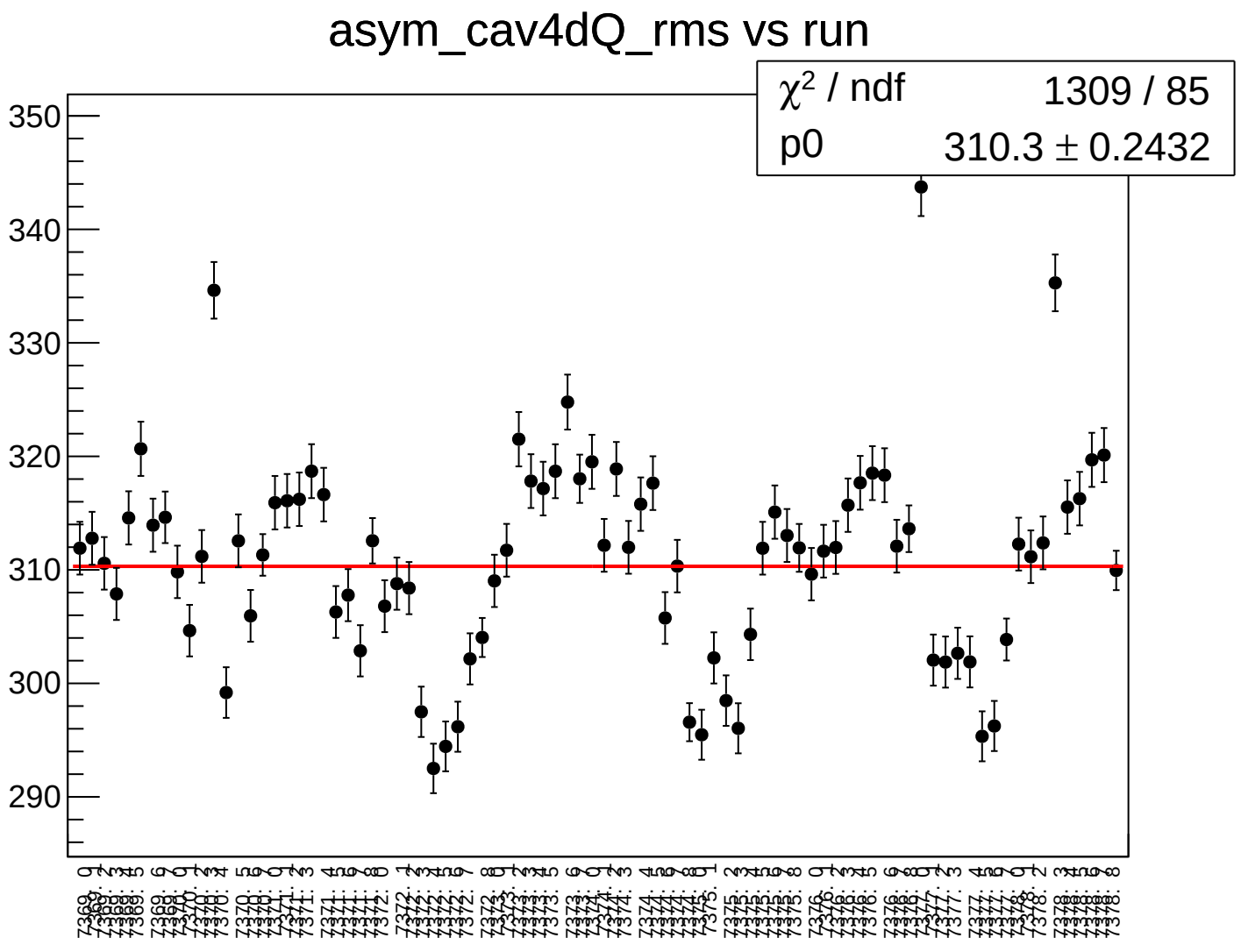

asym_cav4cQ_mean vs run
χ² / ndf 20.99 / 85
p0 −189.8 ± 164.4
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 86
Mean −109.8
Std Dev 166.1
1
0.5
0
−0.5
−1

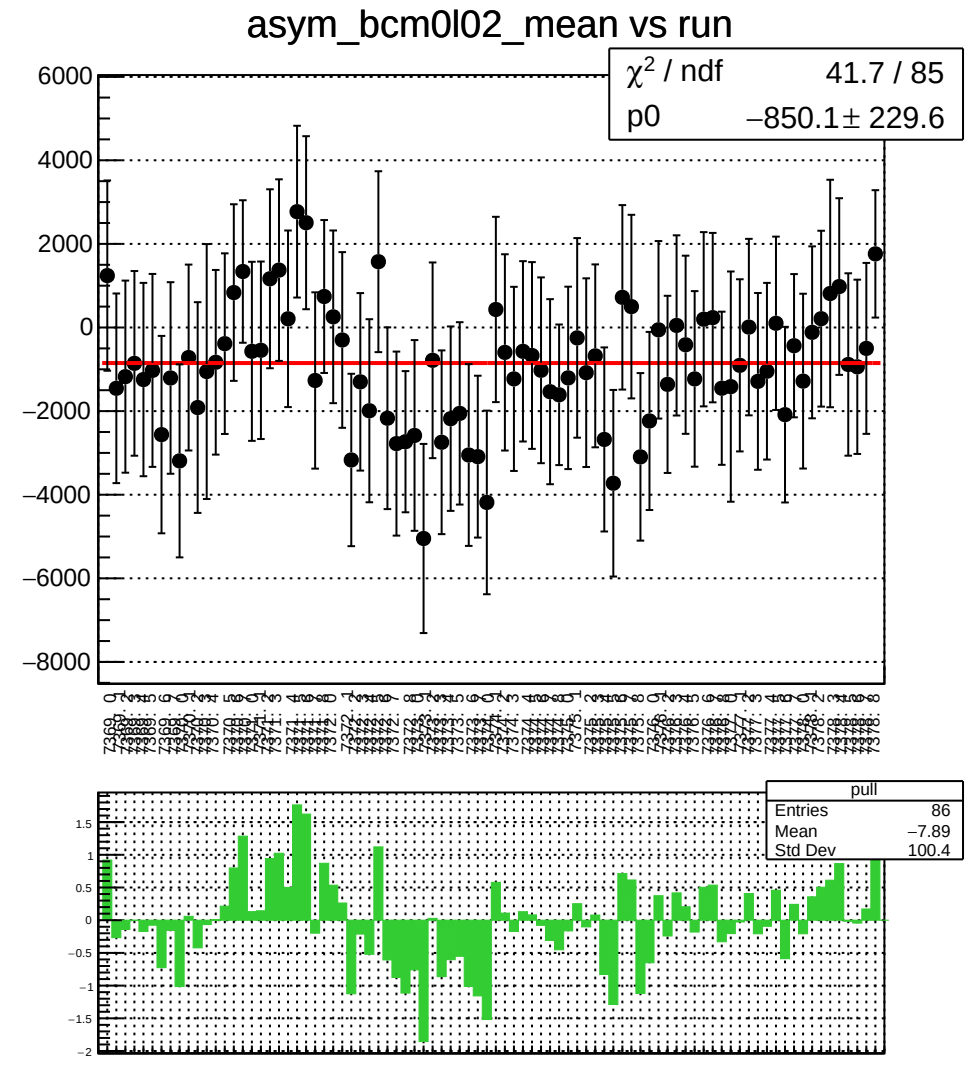

pull1D
Entries 86
Mean −0.006523
Std Dev 0.4939
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

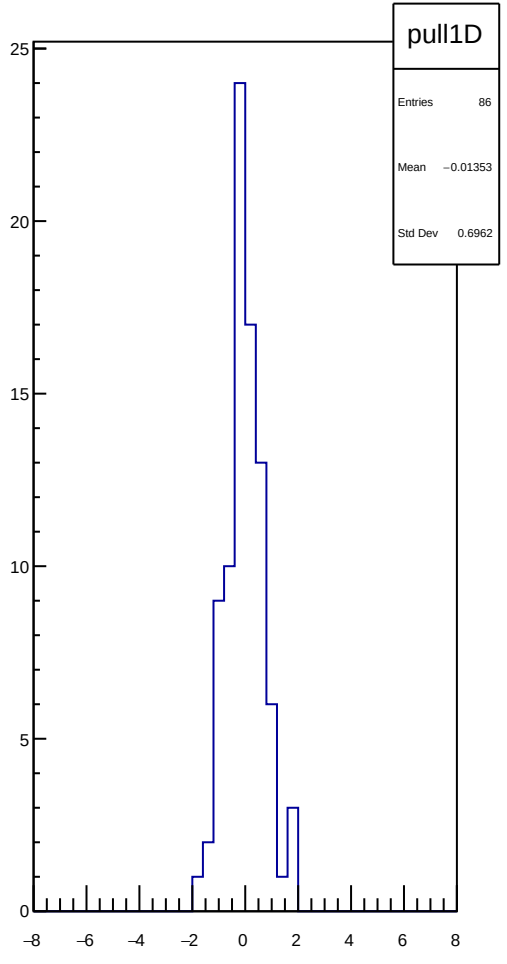

asym_cav4cQ_rms vs run
χ^2 / ndf 8552 / 85
p0 148 ± 0.1163
220
210
200
190
180
170
160
150
140
130

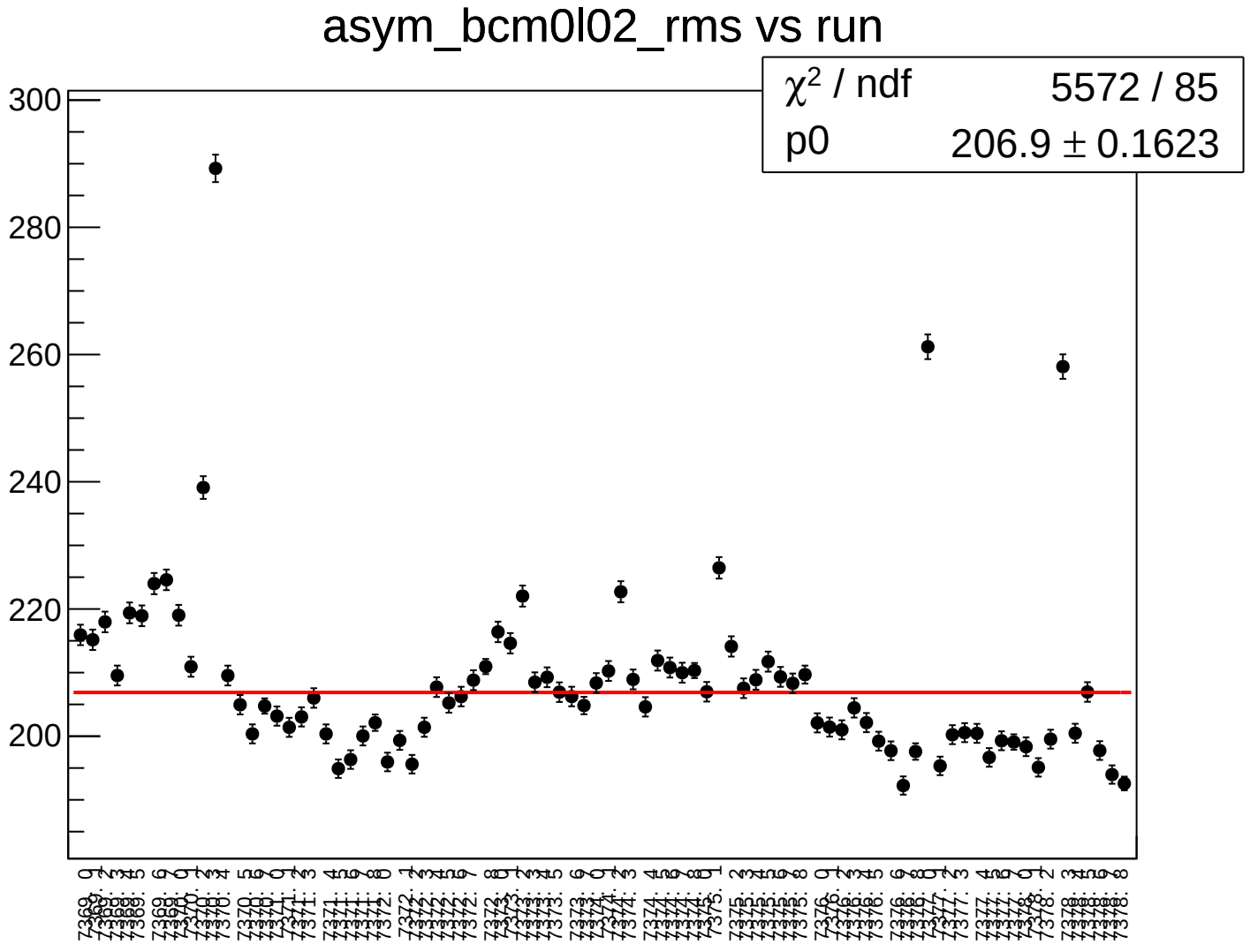

asym_cav4dQ_mean vs run
χ² / ndf 83.62 / 85
p0 −311.3 ± 343.9
10000
5000
0
−5000
−10000
pull
Entries 86
Mean −333.6
Std Dev 362.2
2
1
0
−1
−2

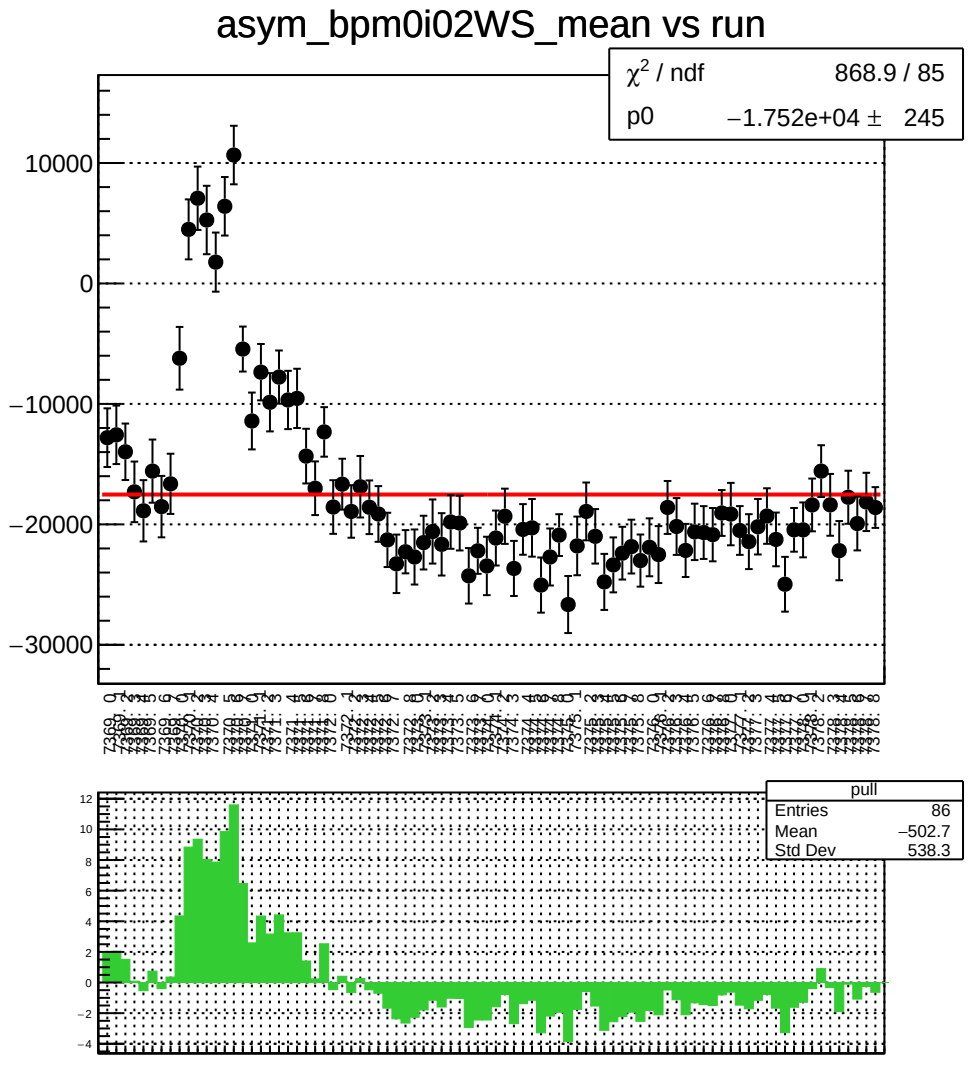

pull1D
Entries 86
Mean −0.00796
Std Dev 0.986
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

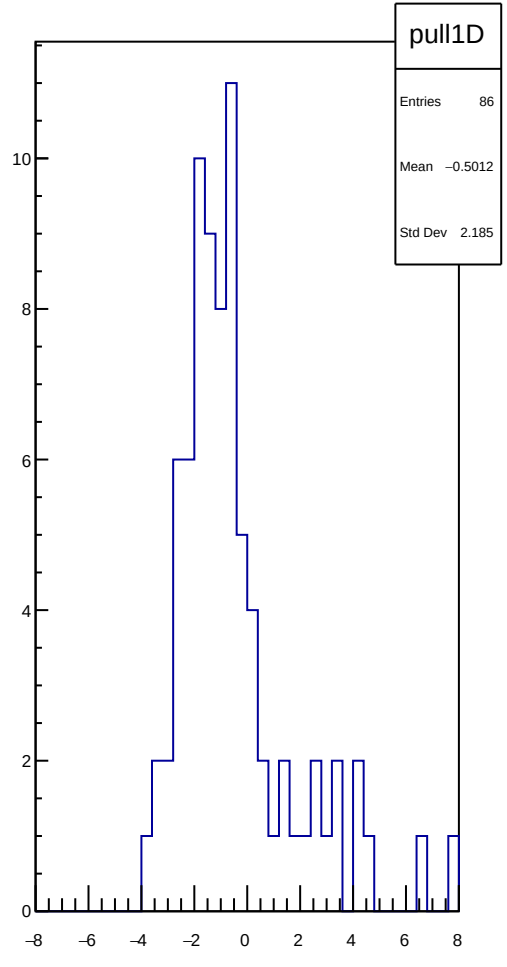

asym_cav4dQ_rms vs run
χ² / ndf 1309 / 85
p0 310.3 ± 0.2432
350
340
330
320
310
300
290

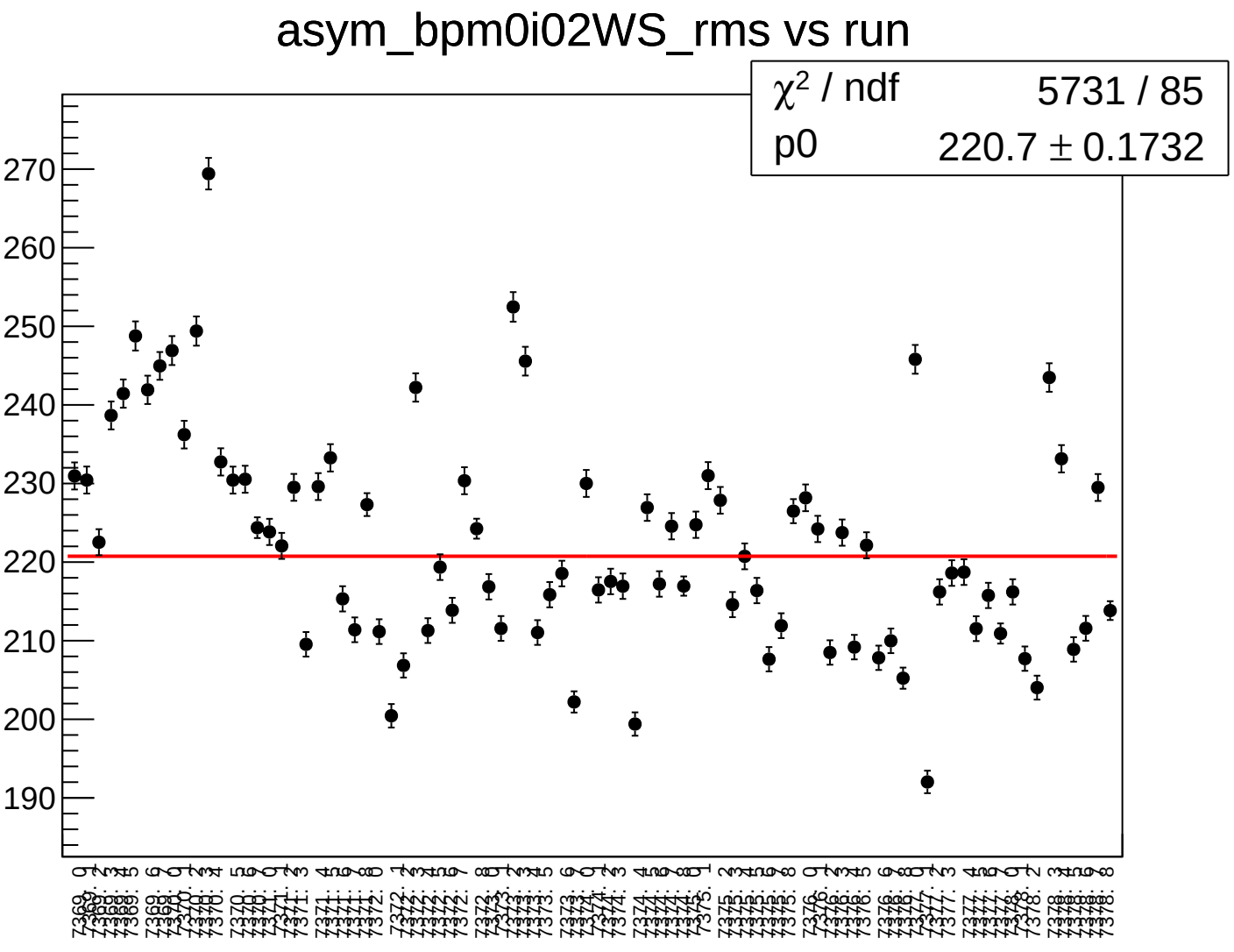

asym_bcm0l02_mean vs run
χ² / ndf 41.7 / 85
p0 −850.1± 229.6
pull
Entries 86
Mean −7.89
Std Dev 100.4

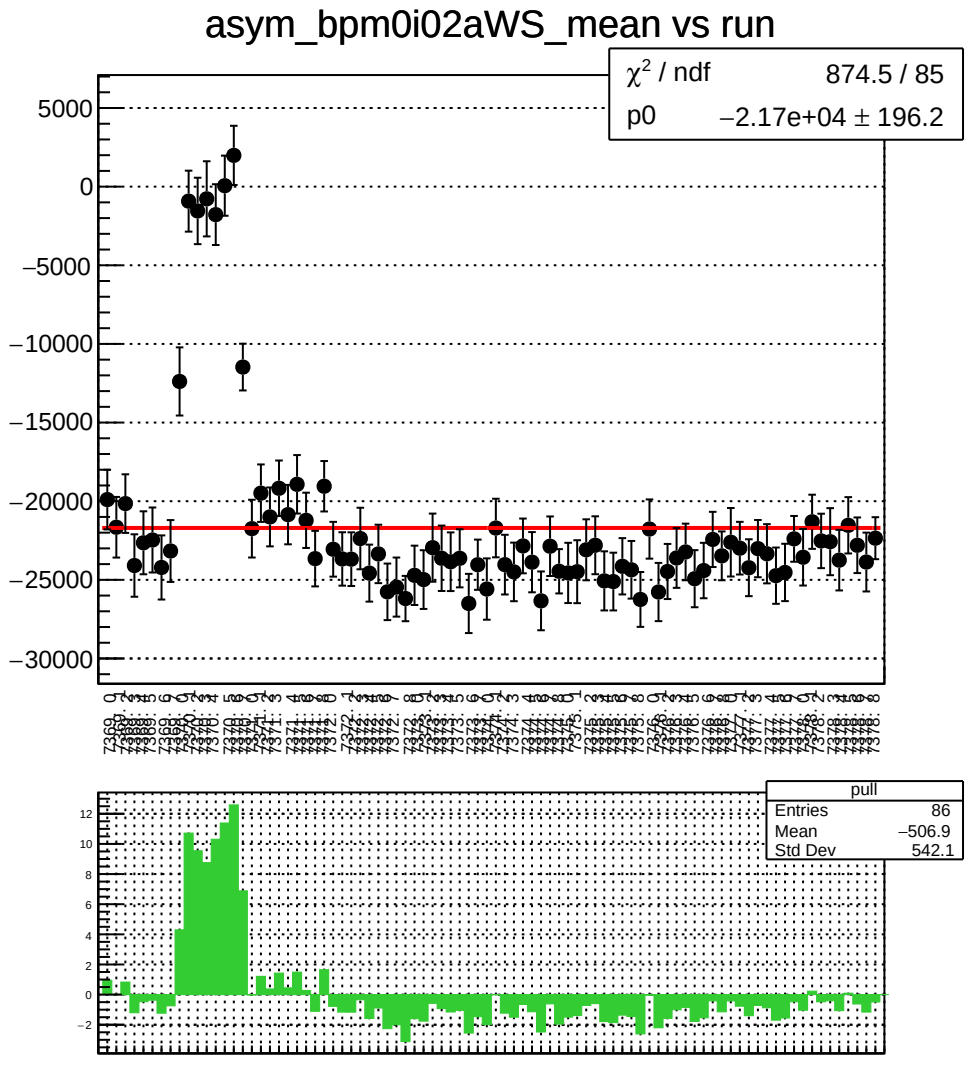

pull1D
Entries 86
Mean −0.01353
Std Dev 0.6962

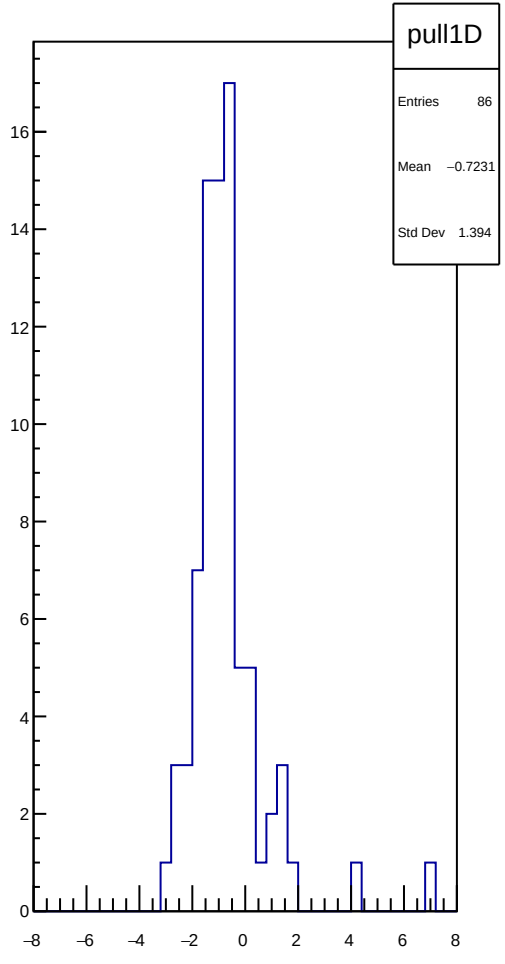

asym_bcm0l02_rms vs run
χ² / ndf 5572 / 85
p0 206.9 ± 0.1623
300
280
260
240
220
200

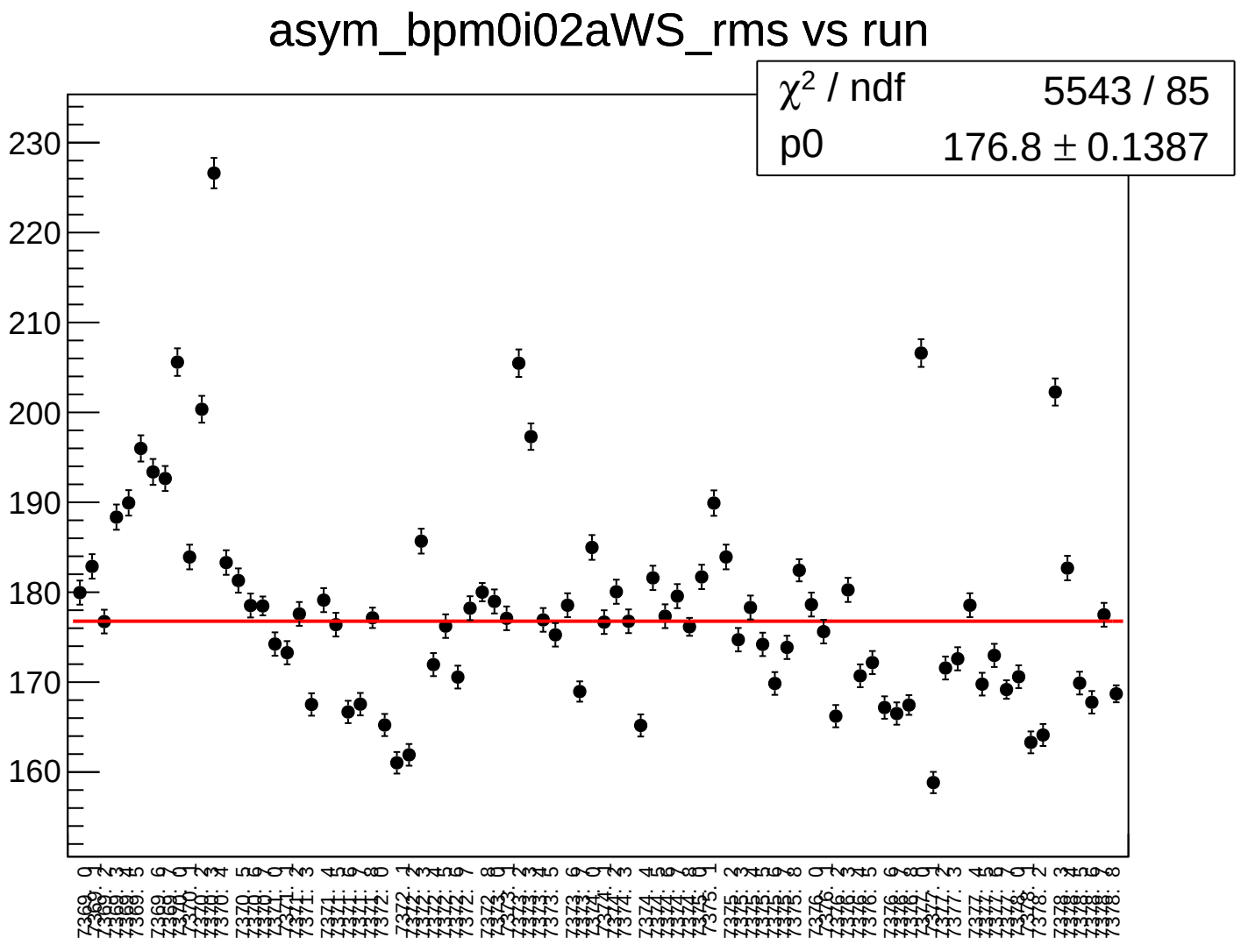

asym_bpm0i02WS_mean vs run
χ² / ndf 868.9 / 85
p0 −1.752e+04 ± 245
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −502.7
Std Dev 538.3
12
10
8
6
4
2
0
−2
−4

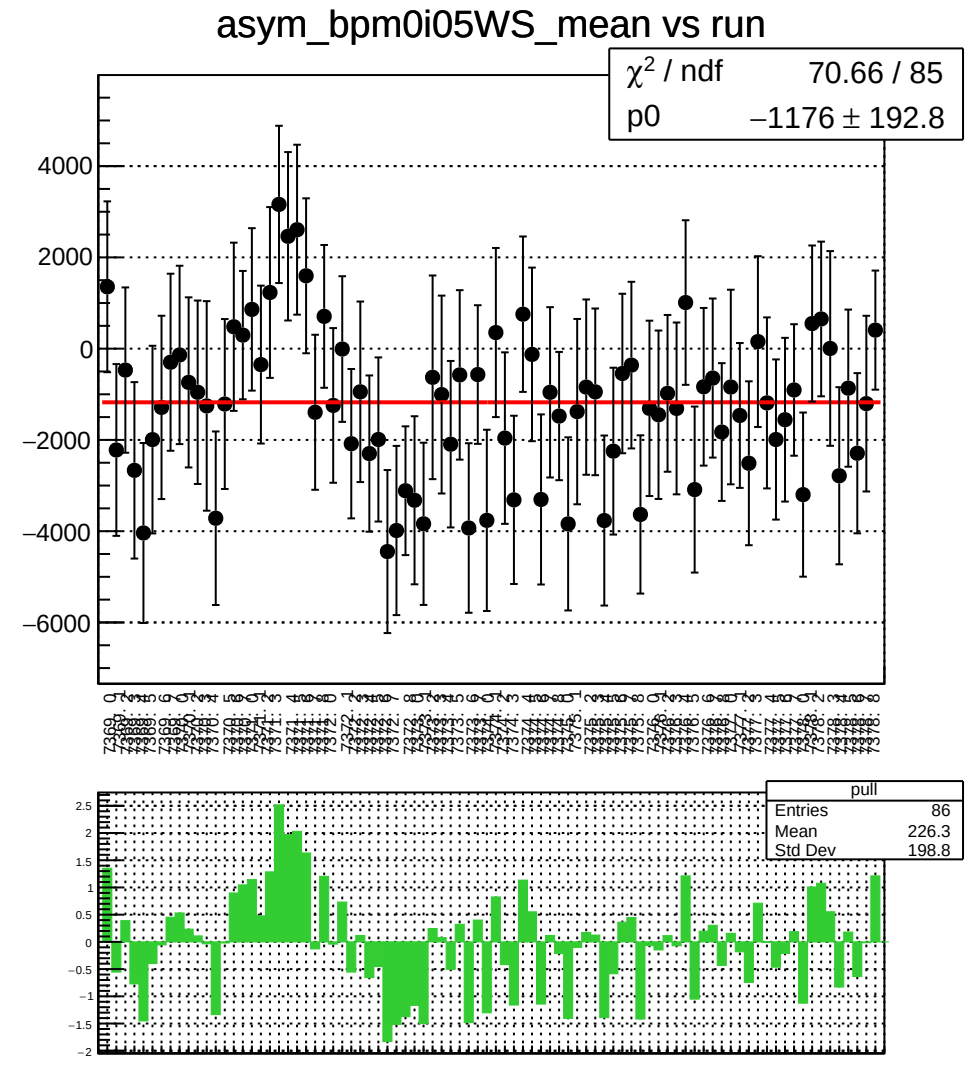

pull1D
Entries 86
Mean −0.5012
Std Dev 2.185
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

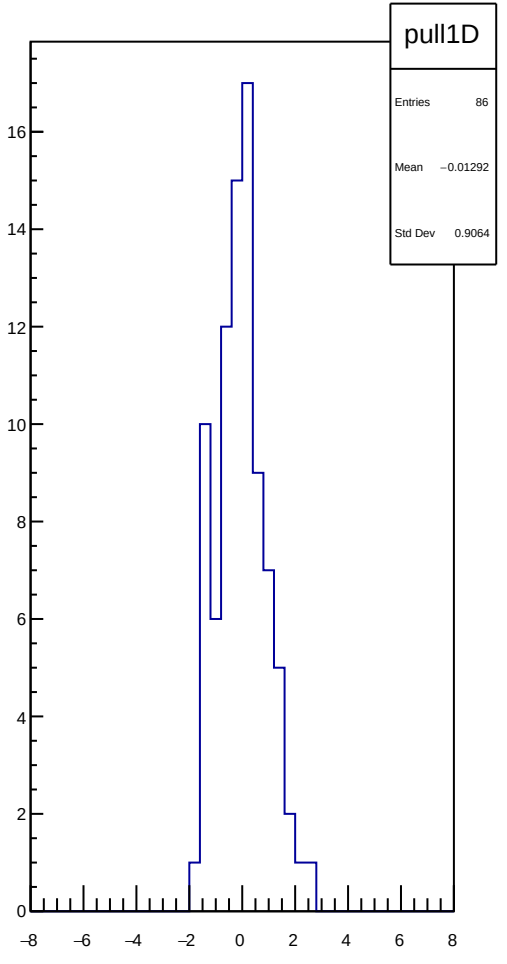

asym_bpm0i02WS_rms vs run
χ^2 / ndf 5731 / 85
p0 220.7 ± 0.1732
270
260
250
240
230
220
210
200
190

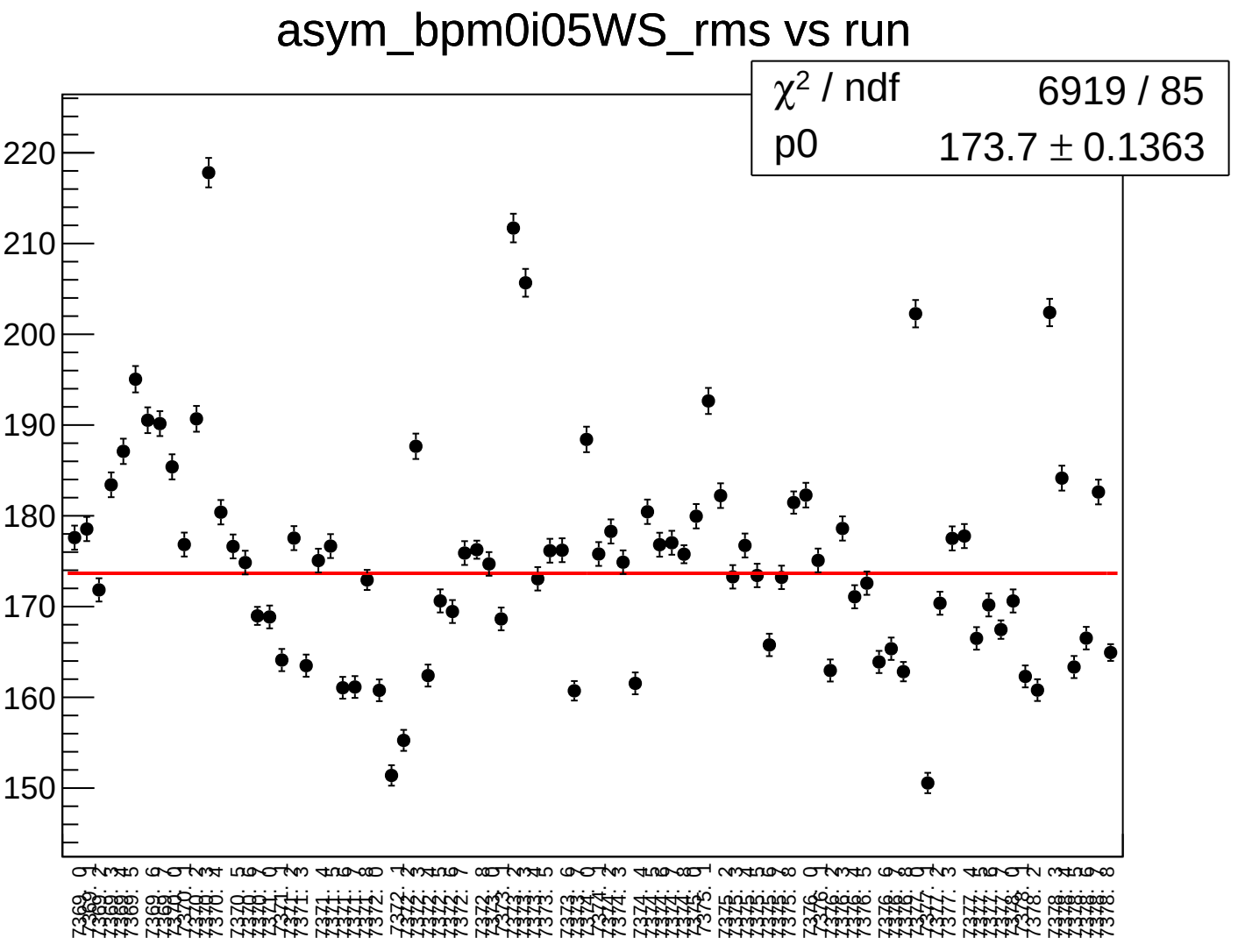

asym_bpm0i02aWS_mean vs run
χ² / ndf 874.5 / 85
p0 −2.17e+04 ± 196.2
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 86
Mean −506.9
Std Dev 542.1
12
10
8
6
4
2
0
−2

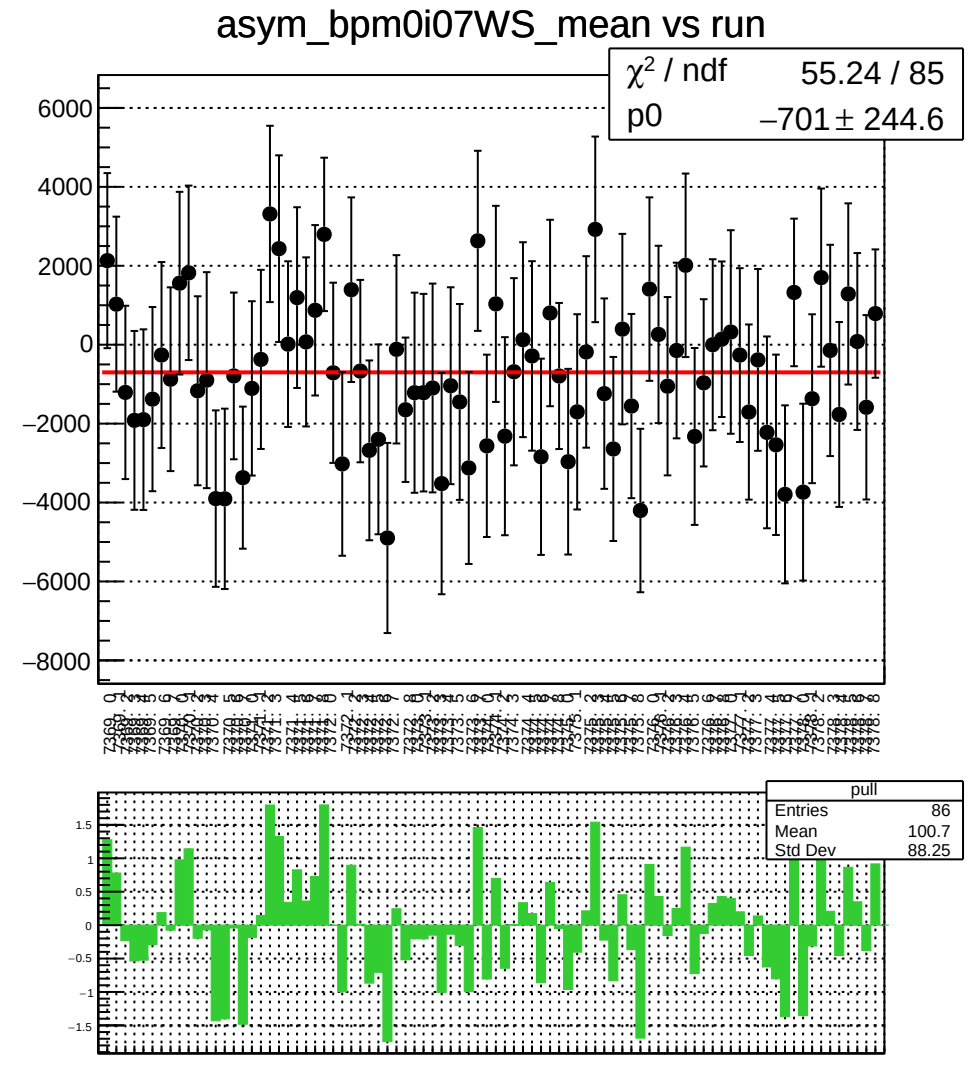

pull1D
Entries 86
Mean −0.7231
Std Dev 1.394
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

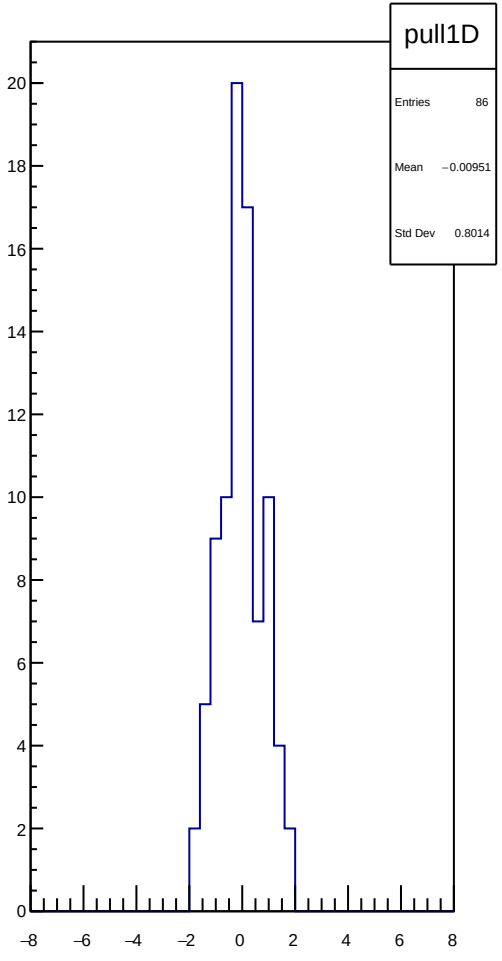

asym_bpm0i02aWS_rms vs run
χ² / ndf 5543 / 85
p0 176.8 ± 0.1387
230
220
210
200
190
180
170
160

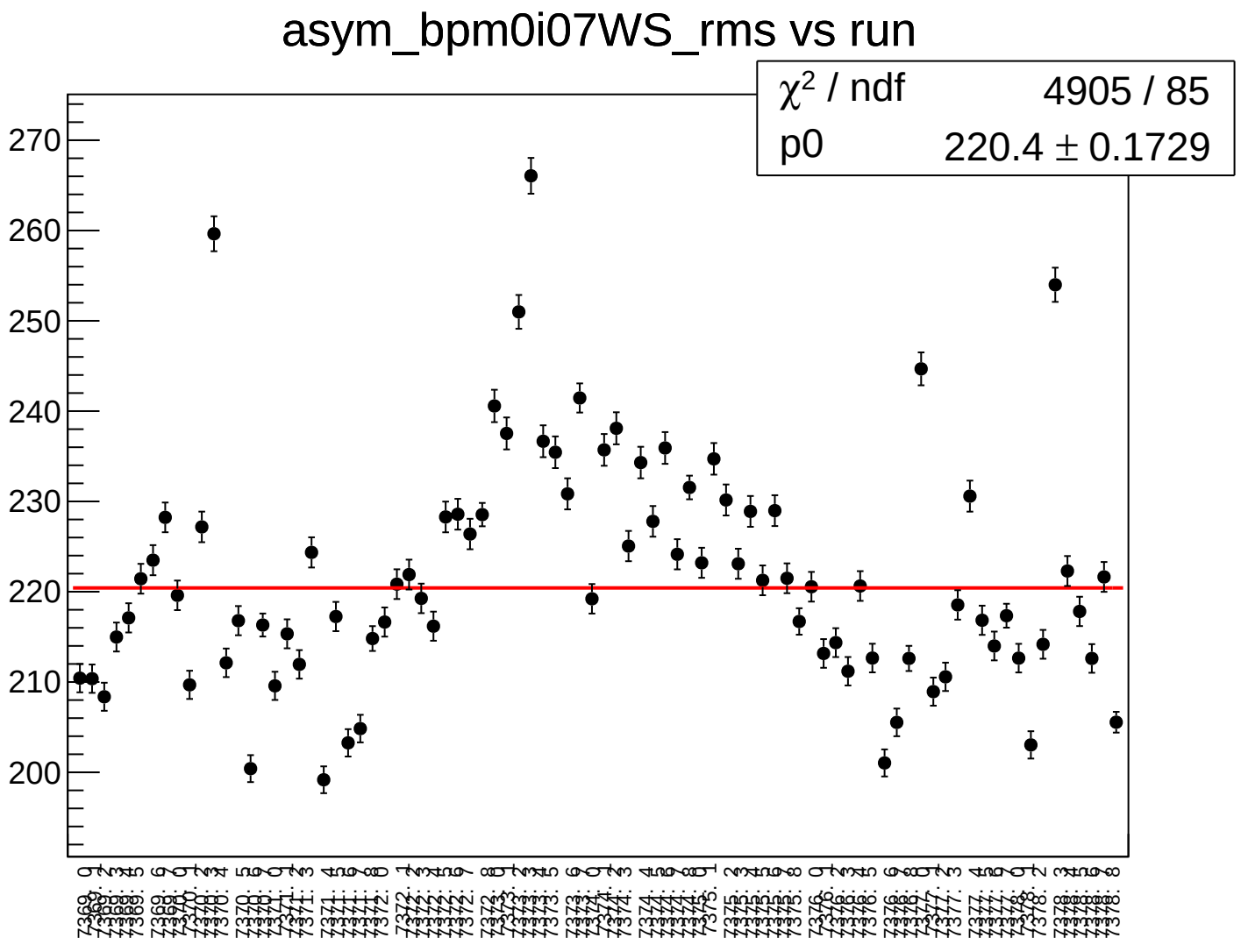

asym_bpm0i05WS_mean vs run
χ^2 / ndf 70.66 / 85
p0 −1176 ± 192.8
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 226.3
Std Dev 198.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

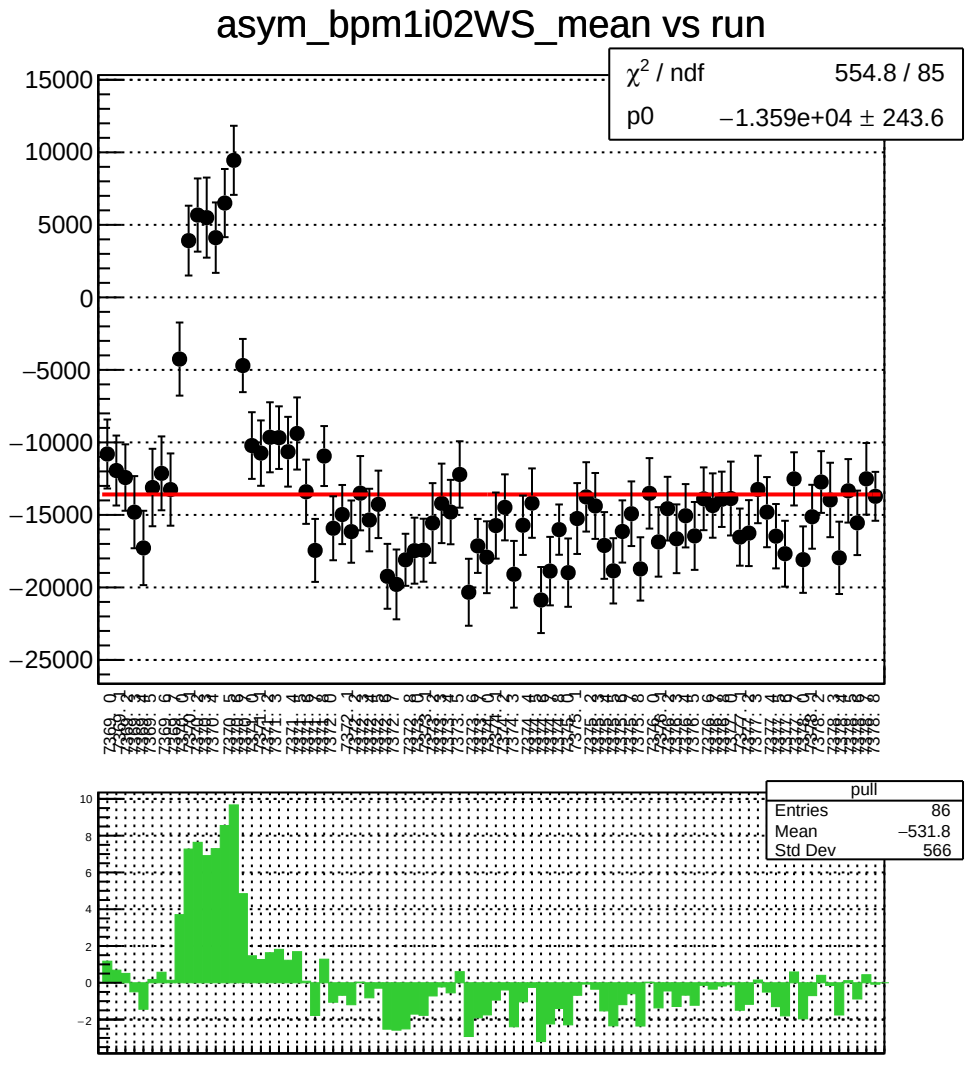

pull1D
Entries 86
Mean −0.01292
Std Dev 0.9064
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

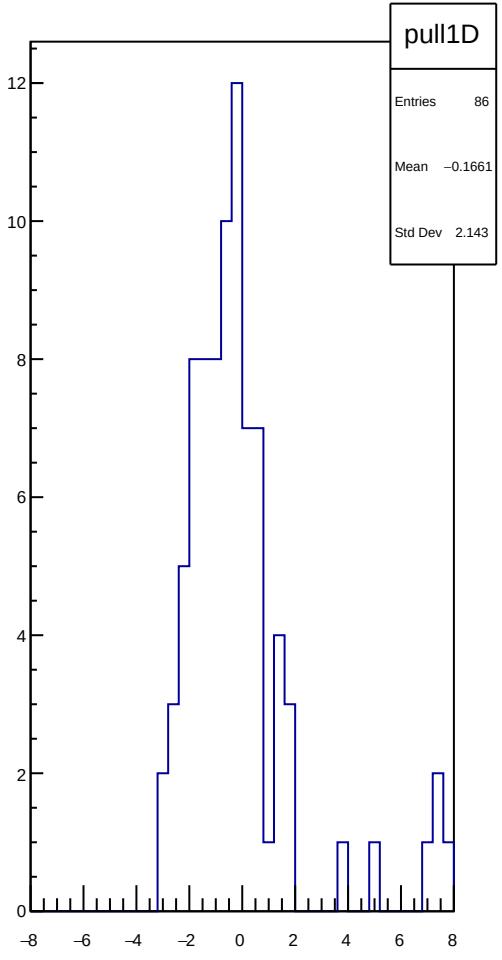

asym_bpm0i05WS_rms vs run
χ² / ndf 6919 / 85
p0 173.7 ± 0.1363
220
210
200
190
180
170
160
150

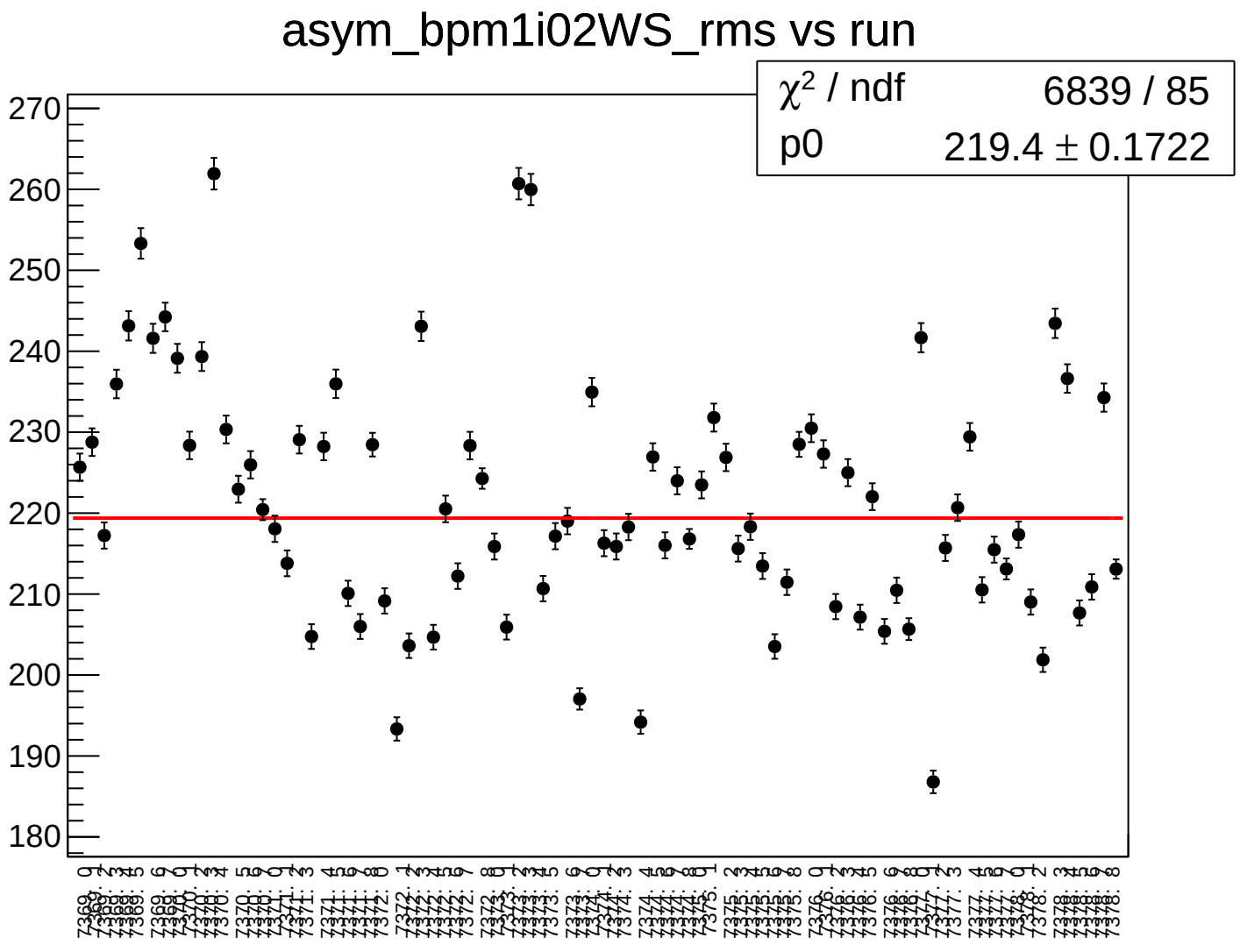

asym_bpm0i07WS_mean vs run
χ² / ndf 55.24 / 85
p0 −701 ± 244.6
pull
Entries 86
Mean 100.7
Std Dev 88.25

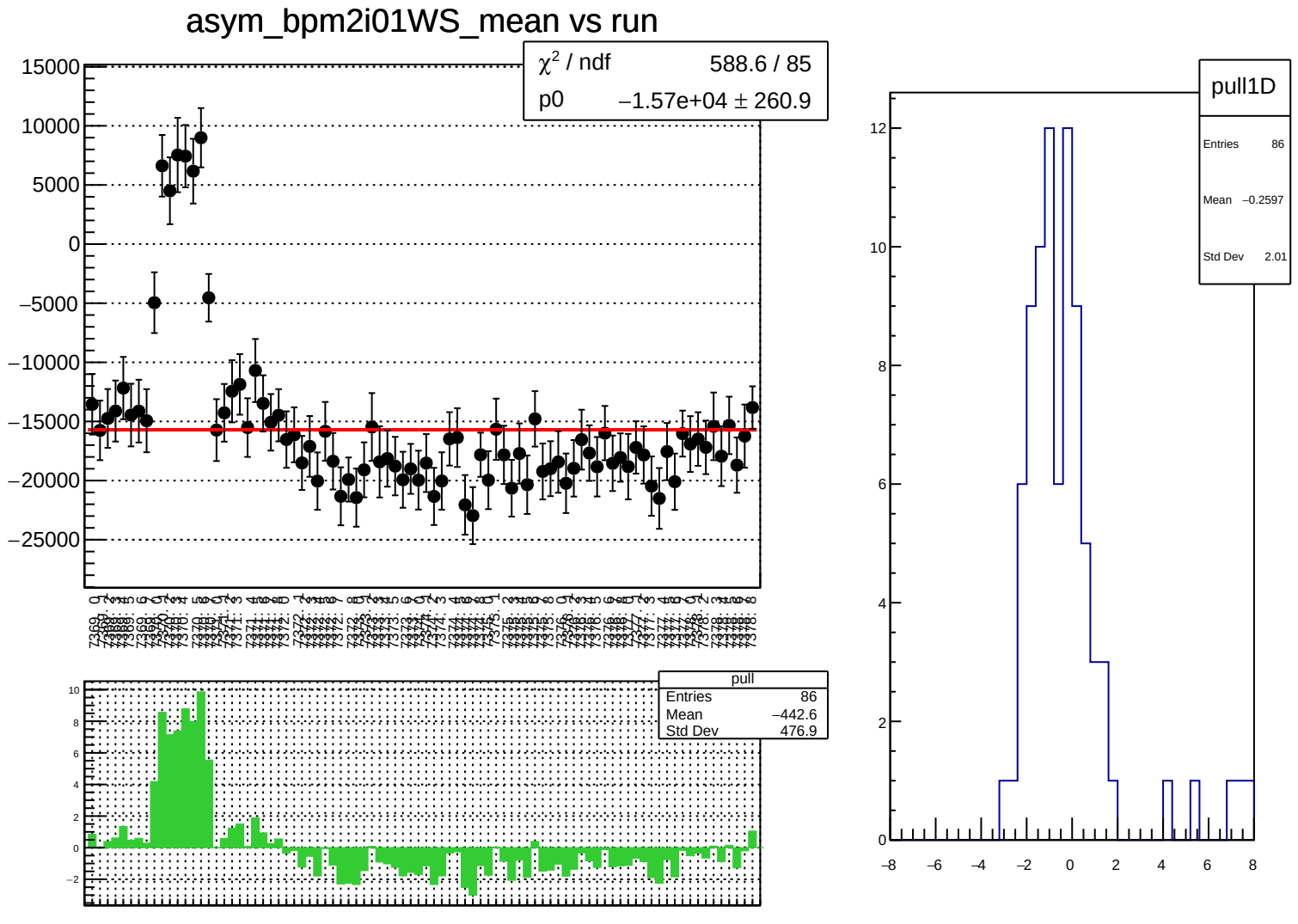

pull1D
Entries 86
Mean −0.00951
Std Dev 0.8014

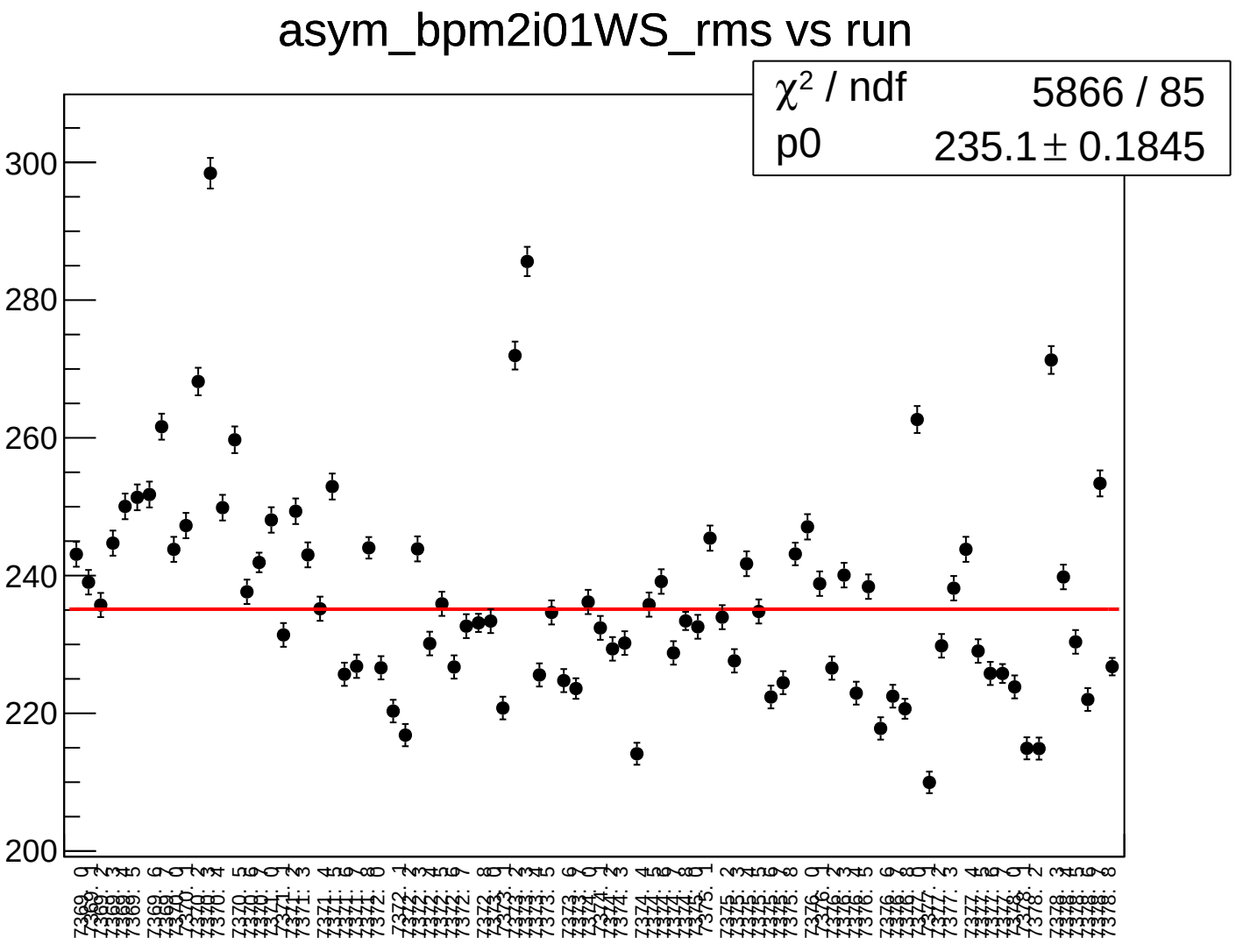

asym_bpm0i07WS_rms vs run
χ² / ndf 4905 / 85
p0 220.4 ± 0.1729
270
260
250
240
230
220
210
200

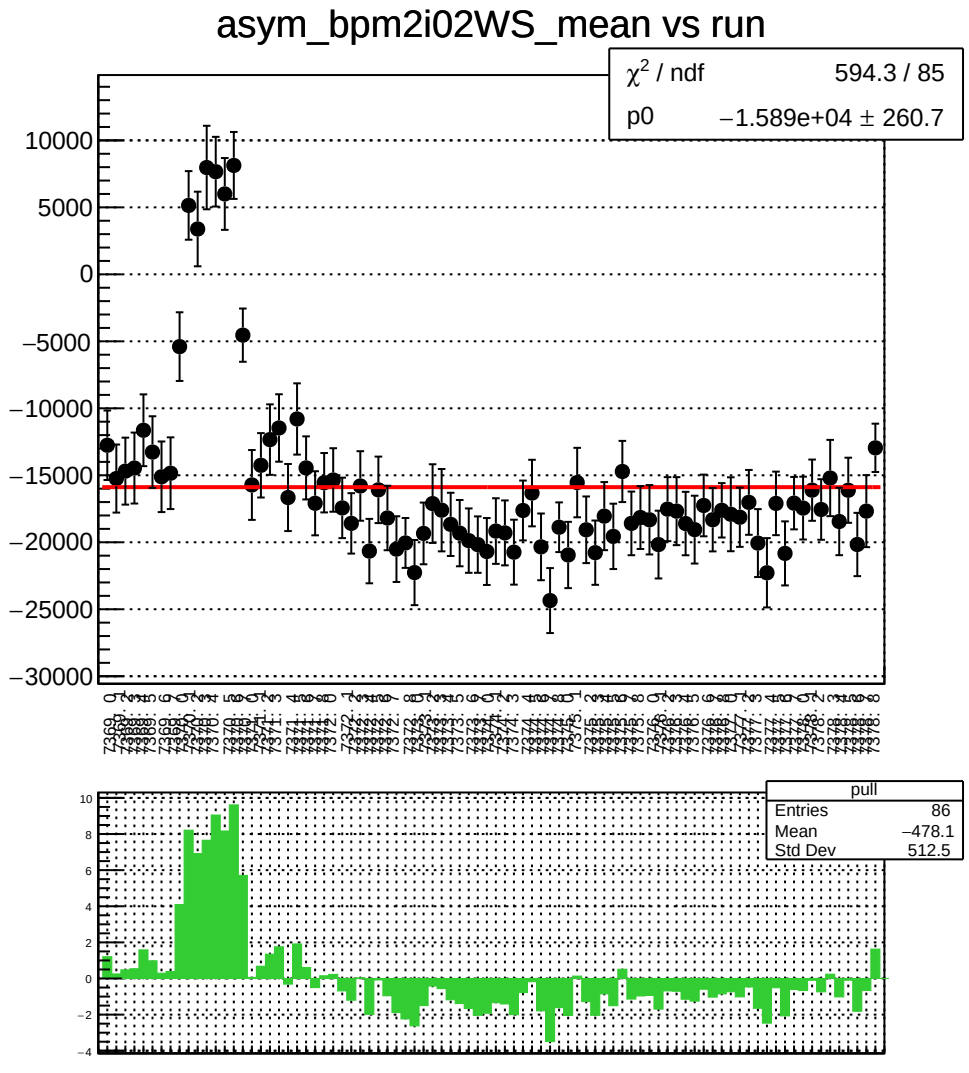

asym_bpm1i02WS_mean vs run
χ² / ndf 554.8 / 85
p0 −1.359e+04 ± 243.6
pull
Entries 86
Mean −531.8
Std Dev 566

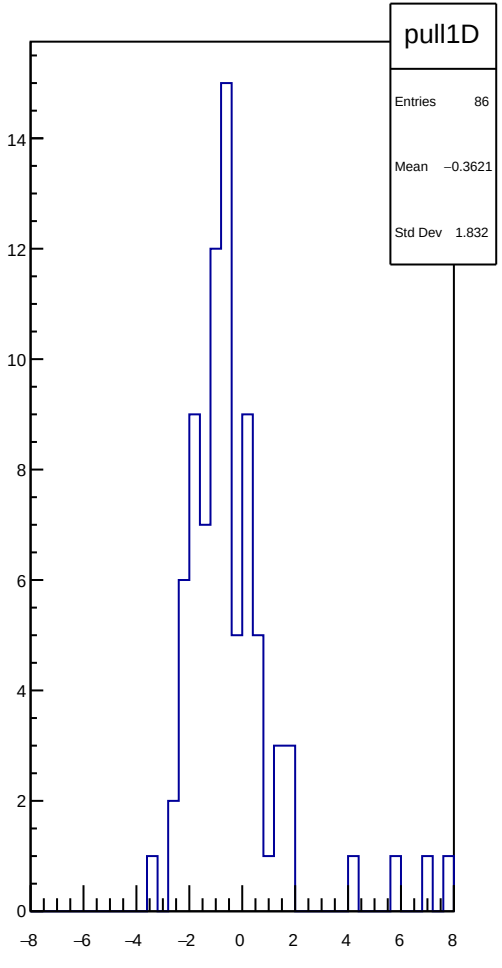

pull1D
Entries 86
Mean −0.1661
Std Dev 2.143

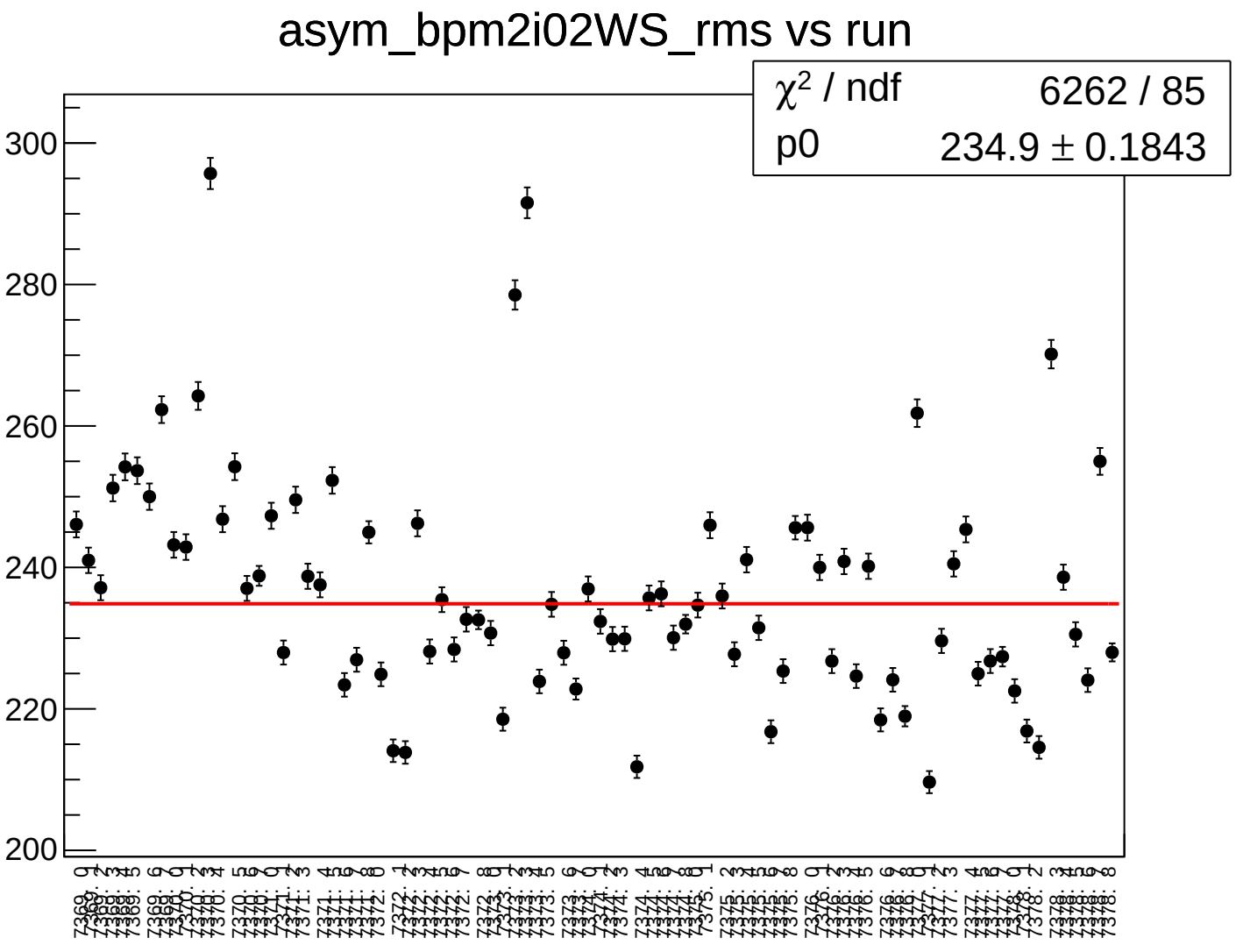

asym_bpm1i02WS_rms vs run
χ² / ndf 6839 / 85
p0 219.4 ± 0.1722
270
260
250
240
230
220
210
200
190
180

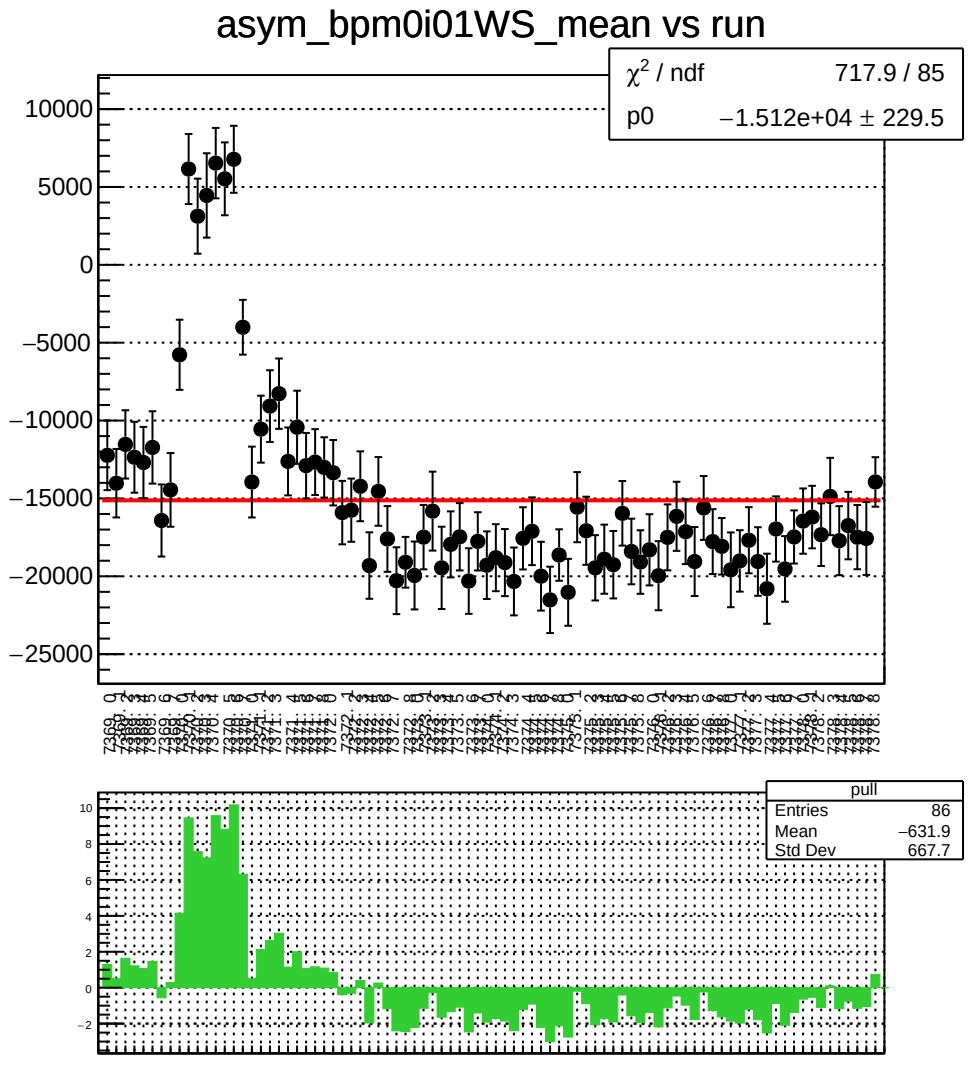

asym_bpm2i01WS_mean vs run
χ² / ndf 588.6 / 85
p0 −1.57e+04 ± 260.9
pull
Entries 86
Mean −442.6
Std Dev 476.9
pull1D
Entries 86
Mean −0.2597
Std Dev 2.01

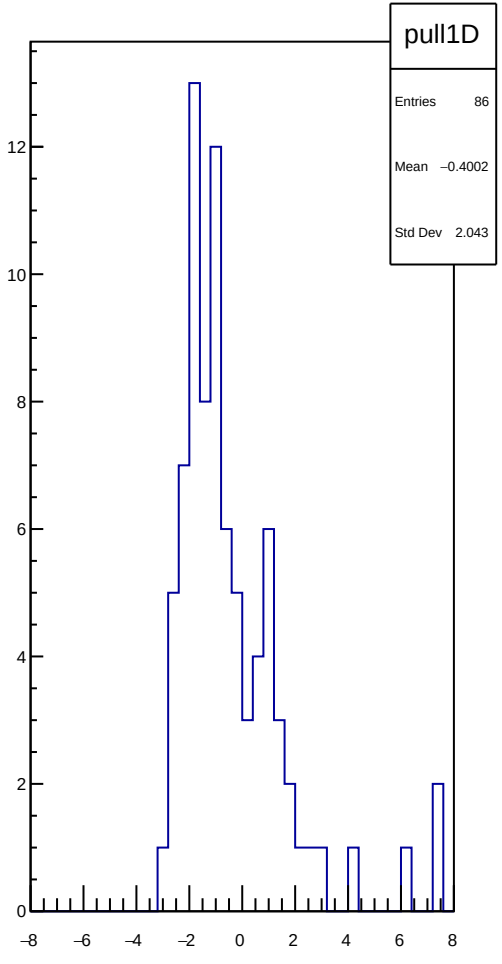

asym_bpm2i01WS_rms vs run
χ² / ndf 5866 / 85
p0 235.1 ± 0.1845
300
280
260
240
220
200

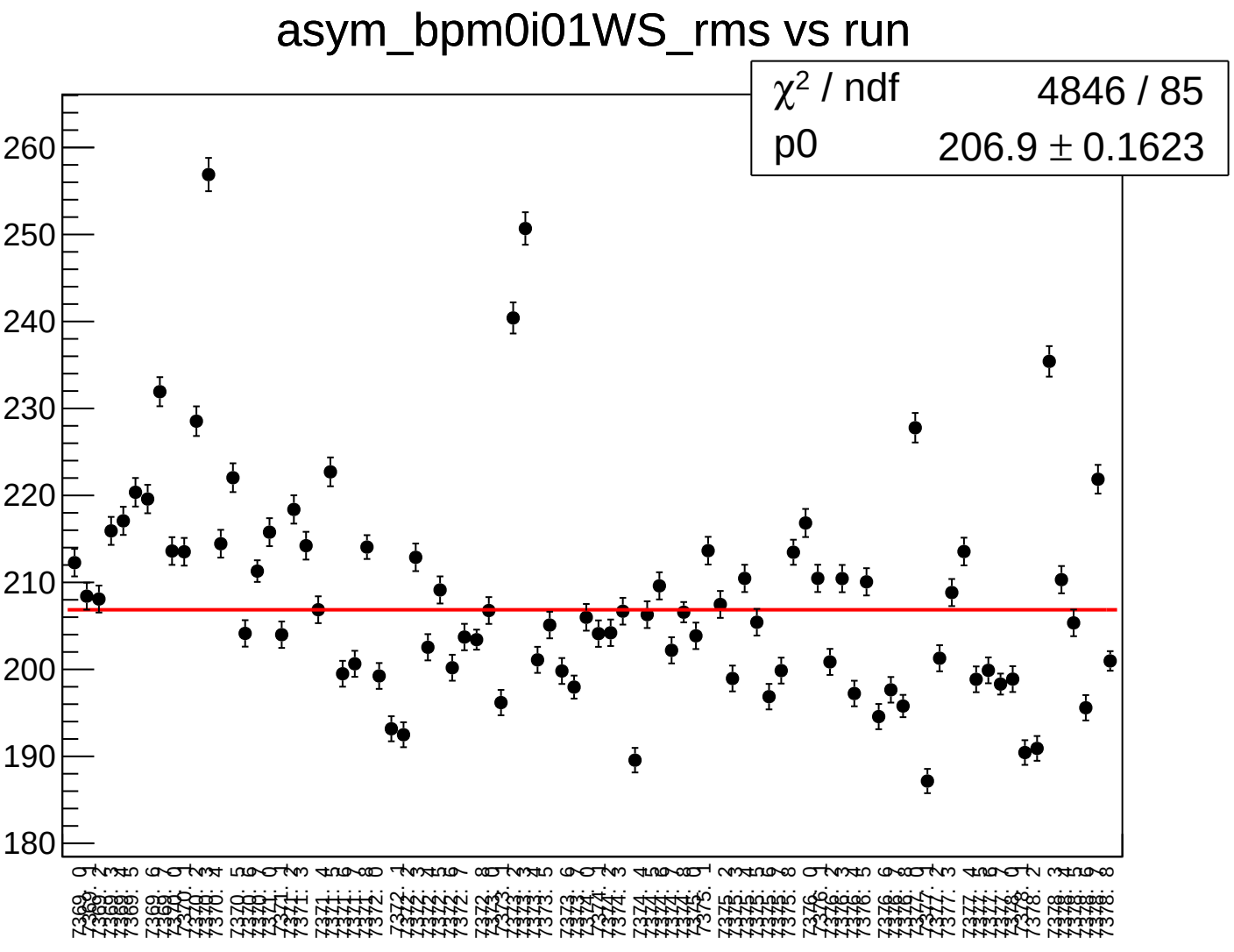

asym_bpm2i02WS_mean vs run
χ² / ndf 594.3 / 85
p0 −1.589e+04 ± 260.7
pull
Entries 86
Mean −478.1
Std Dev 512.5

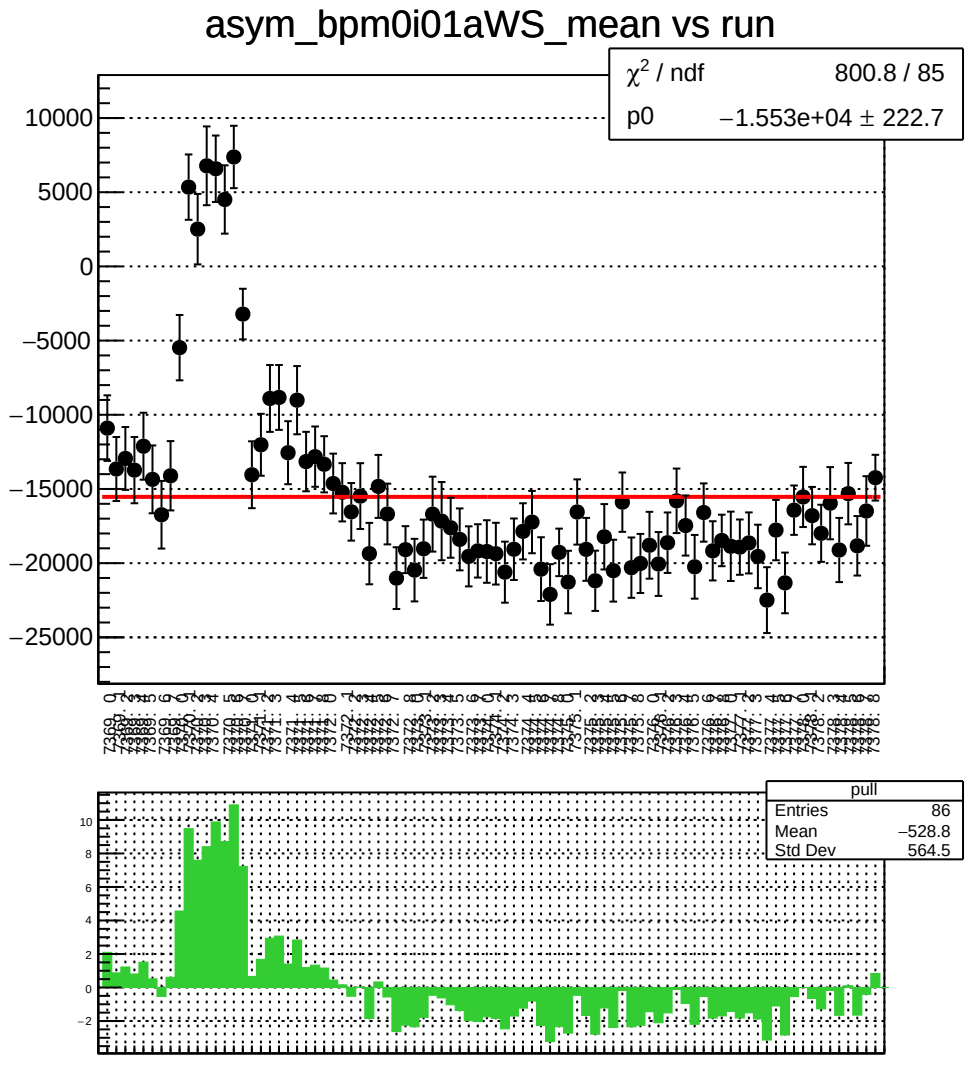

pull1D
Entries 86
Mean −0.3621
Std Dev 1.832

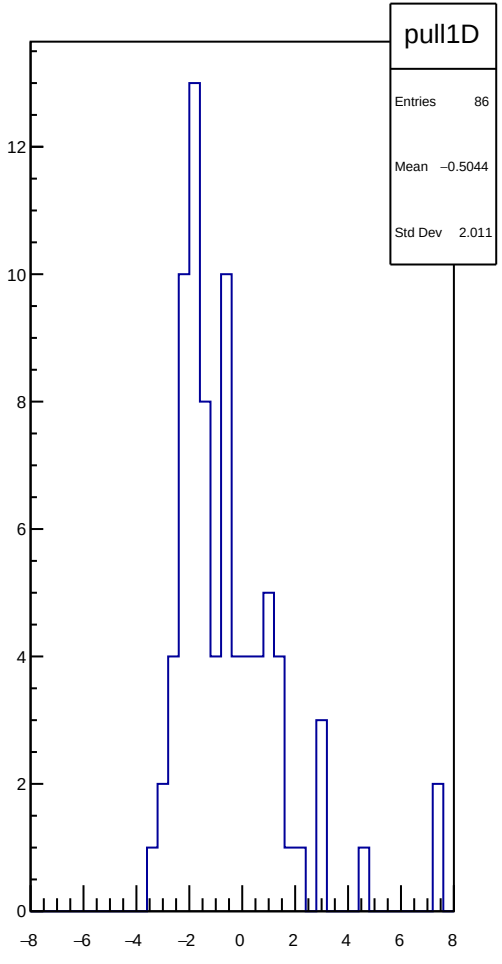

asym_bpm2i02WS_rms vs run
χ² / ndf 6262 / 85
p0 234.9 ± 0.1843
300
280
260
240
220
200

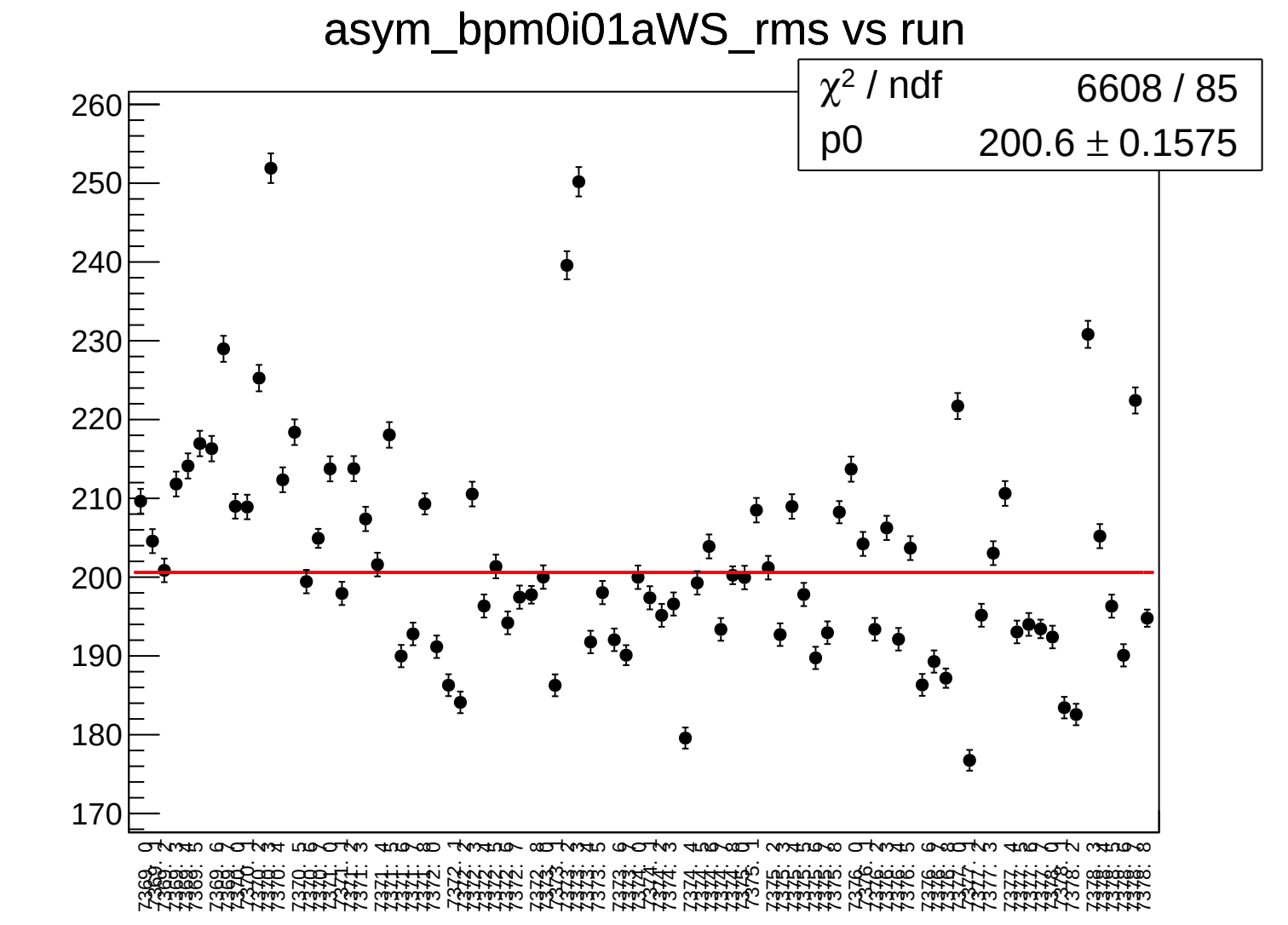

asym_bpm0i01WS_mean vs run
χ² / ndf 717.9 / 85
p0 −1.512e+04 ± 229.5
pull
Entries 86
Mean −631.9
Std Dev 667.7

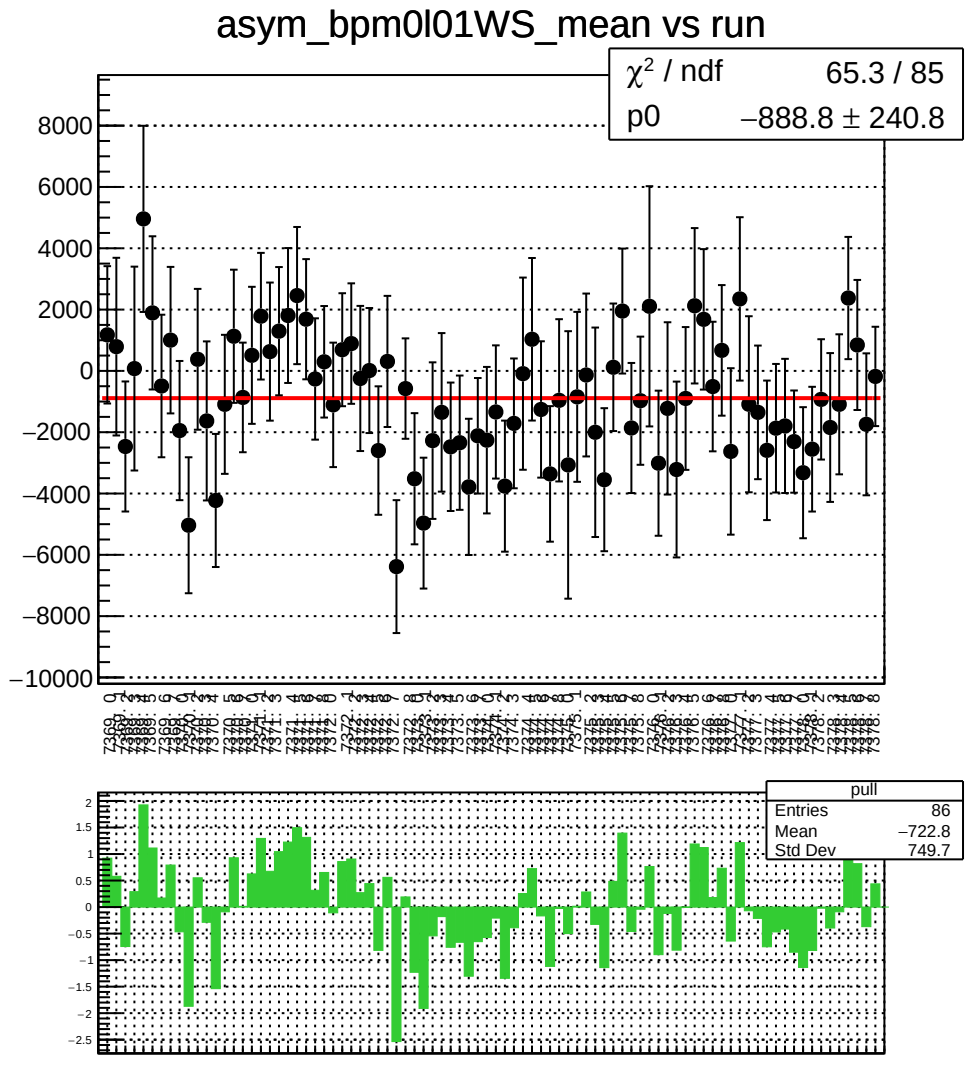

pull1D
Entries 86
Mean −0.4002
Std Dev 2.043

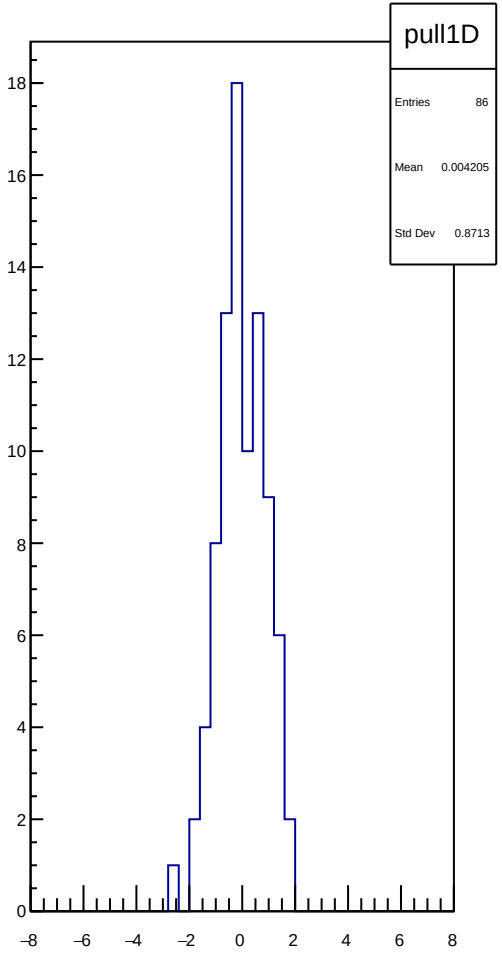

asym_bpm0i01WS_rms vs run
χ² / ndf 4846 / 85
p0 206.9 ± 0.1623
260
250
240
230
220
210
200
190
180

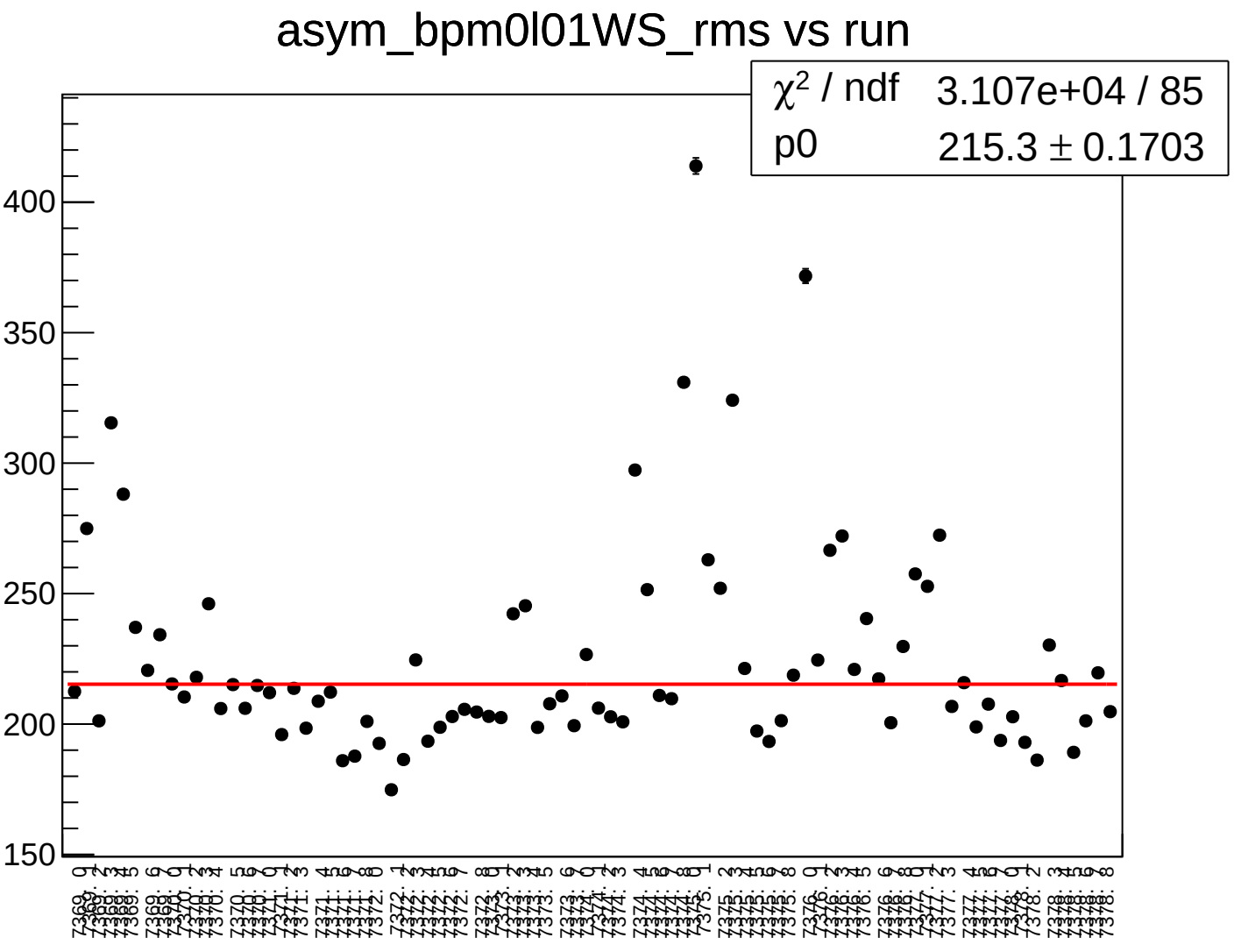

asym_bpm0i01aWS_mean vs run
χ² / ndf 800.8 / 85
p0 −1.553e+04 ± 222.7
pull
Entries 86
Mean −528.8
Std Dev 564.5

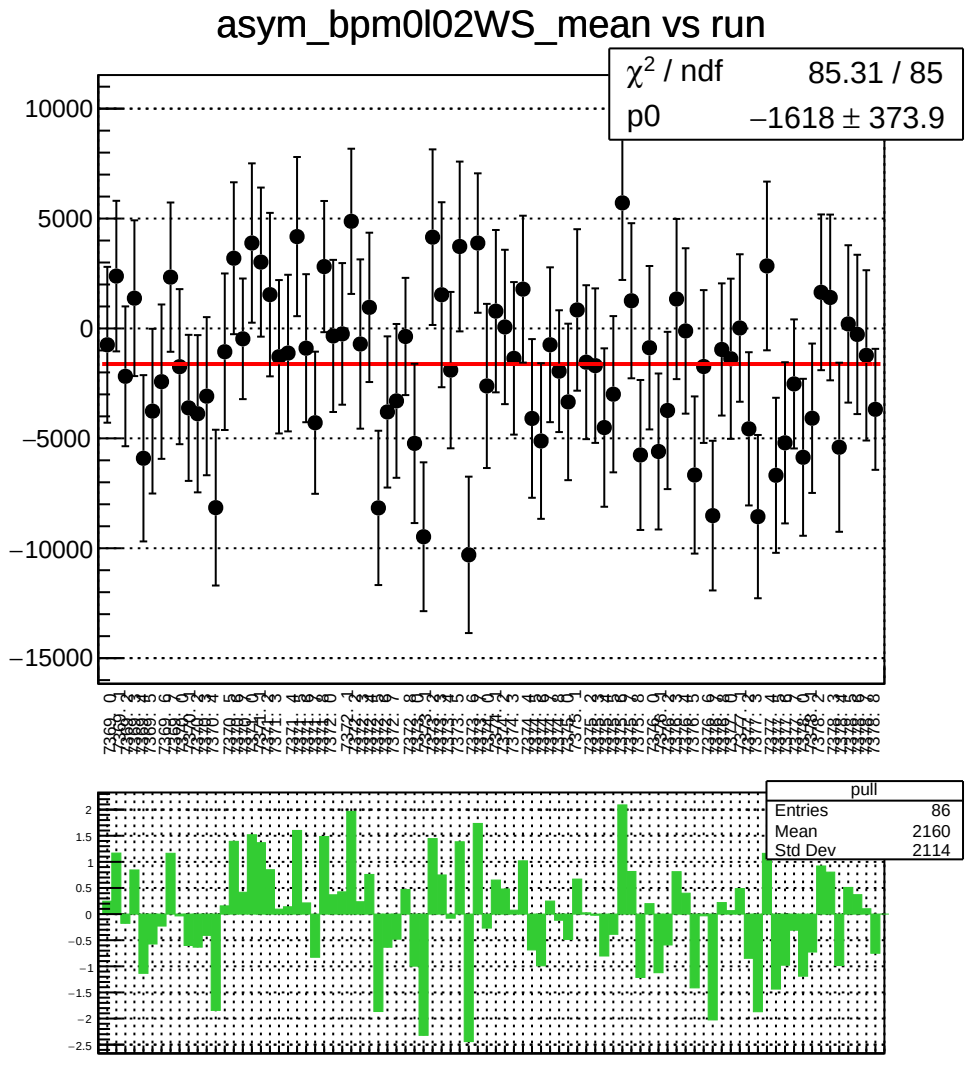

pull1D
Entries 86
Mean −0.5044
Std Dev 2.011

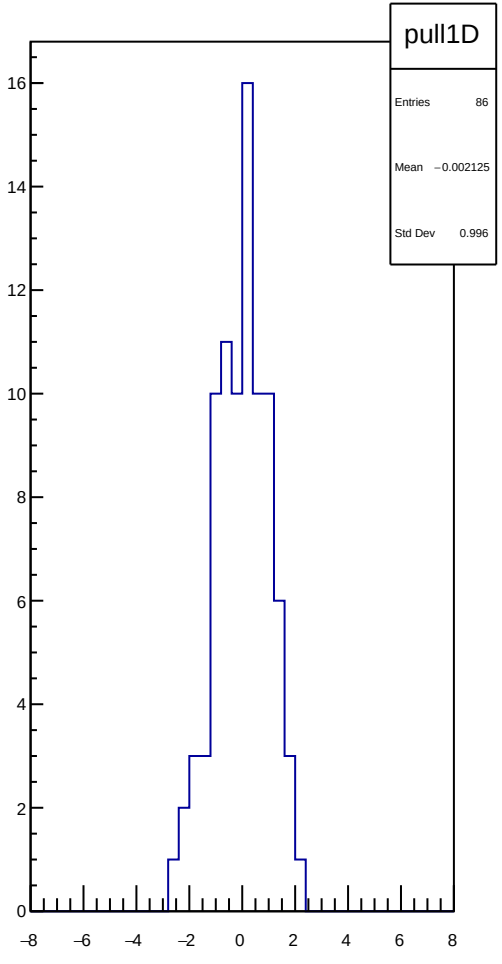

asym_bpm0i01aWS_rms vs run
χ² / ndf 6608 / 85
p0 200.6 ± 0.1575
260
250
240
230
220
210
200
190
180
170

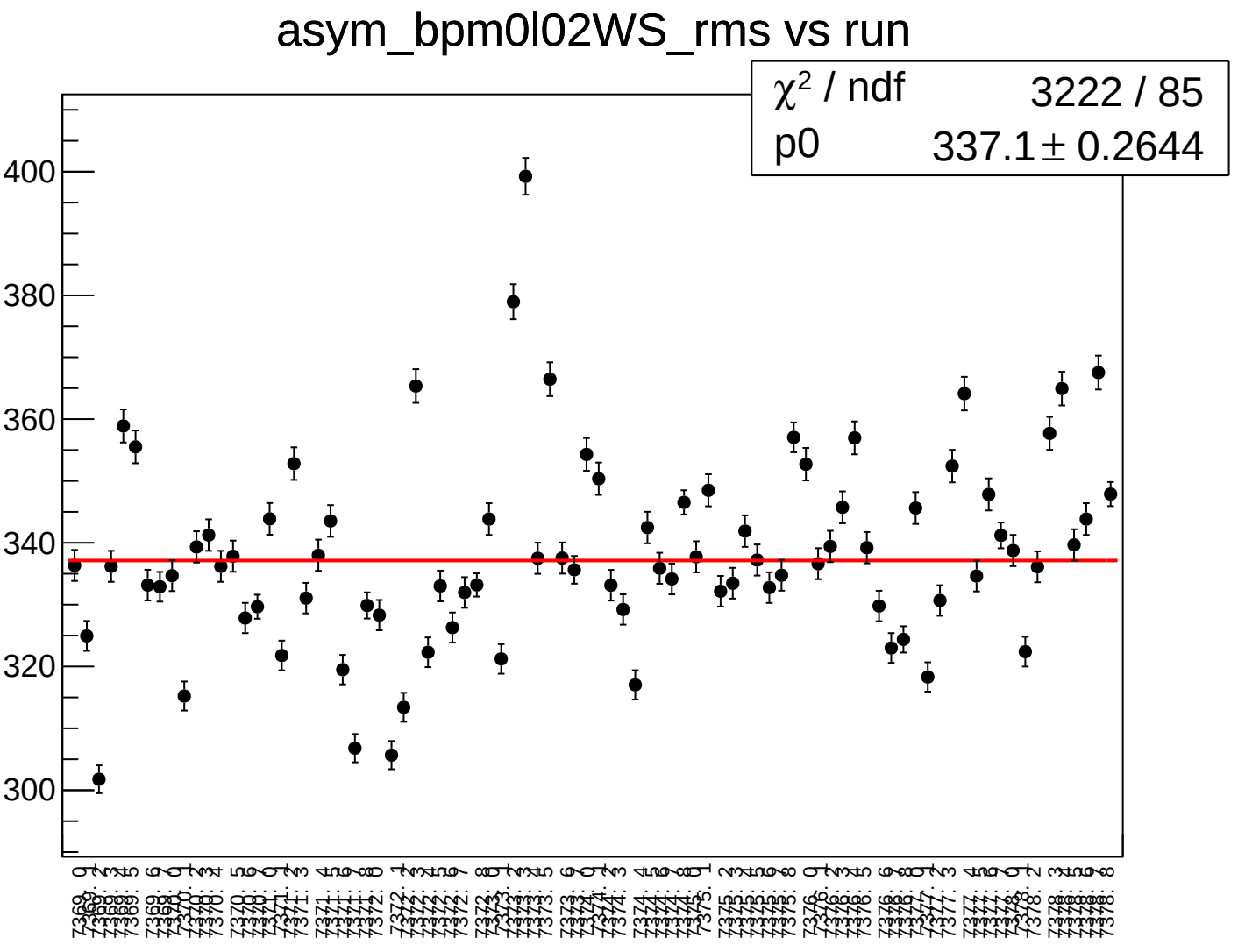

asym_bpm0l01WS_mean vs run
χ² / ndf 65.3 / 85
p0 −888.8 ± 240.8
pull
Entries 86
Mean −722.8
Std Dev 749.7

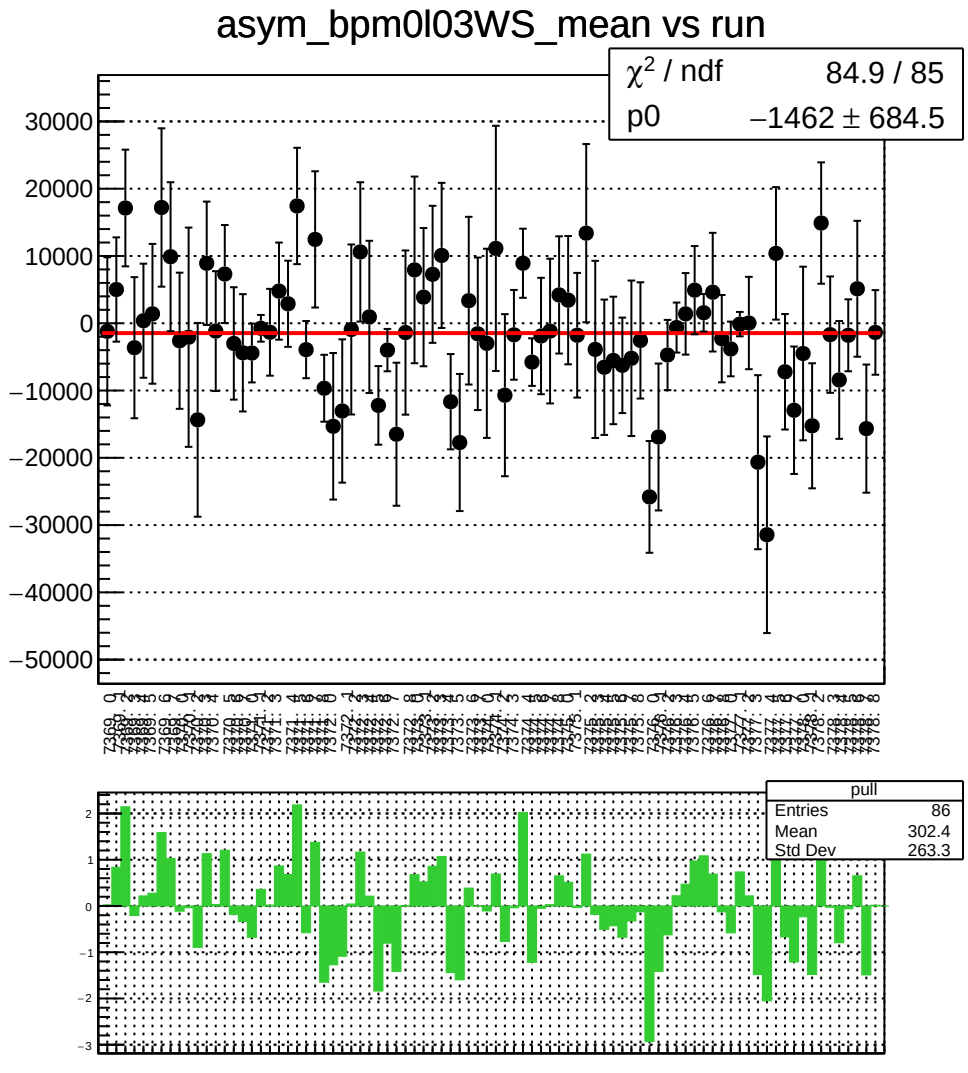

pull1D
Entries 86
Mean 0.004205
Std Dev 0.8713

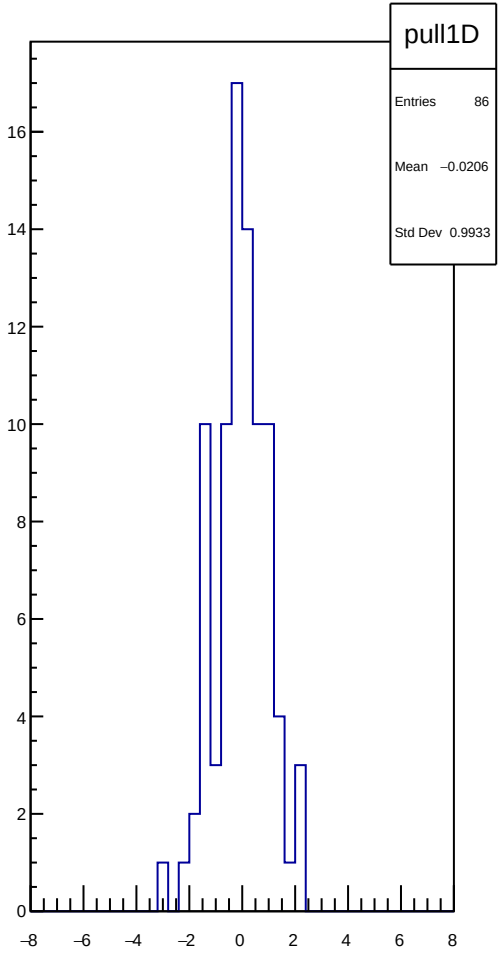

asym_bpm0l01WS_rms vs run
χ^2 / ndf 3.107e+04 / 85
p0 215.3 ± 0.1703
400
350
300
250
200
150

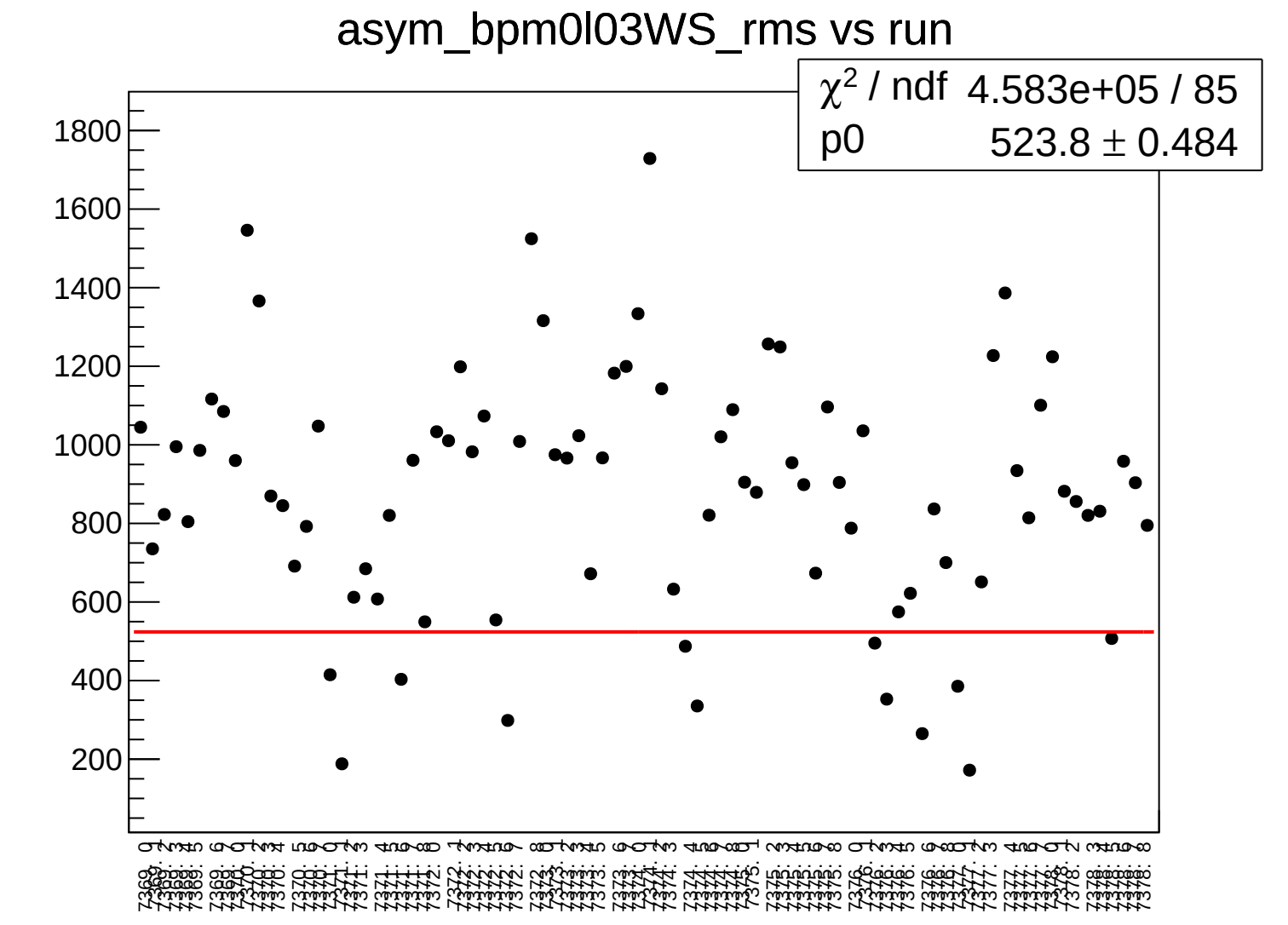

asym_bpm0l02WS_mean vs run
χ² / ndf 85.31 / 85
p0 −1618 ± 373.9
pull
Entries 86
Mean 2160
Std Dev 2114

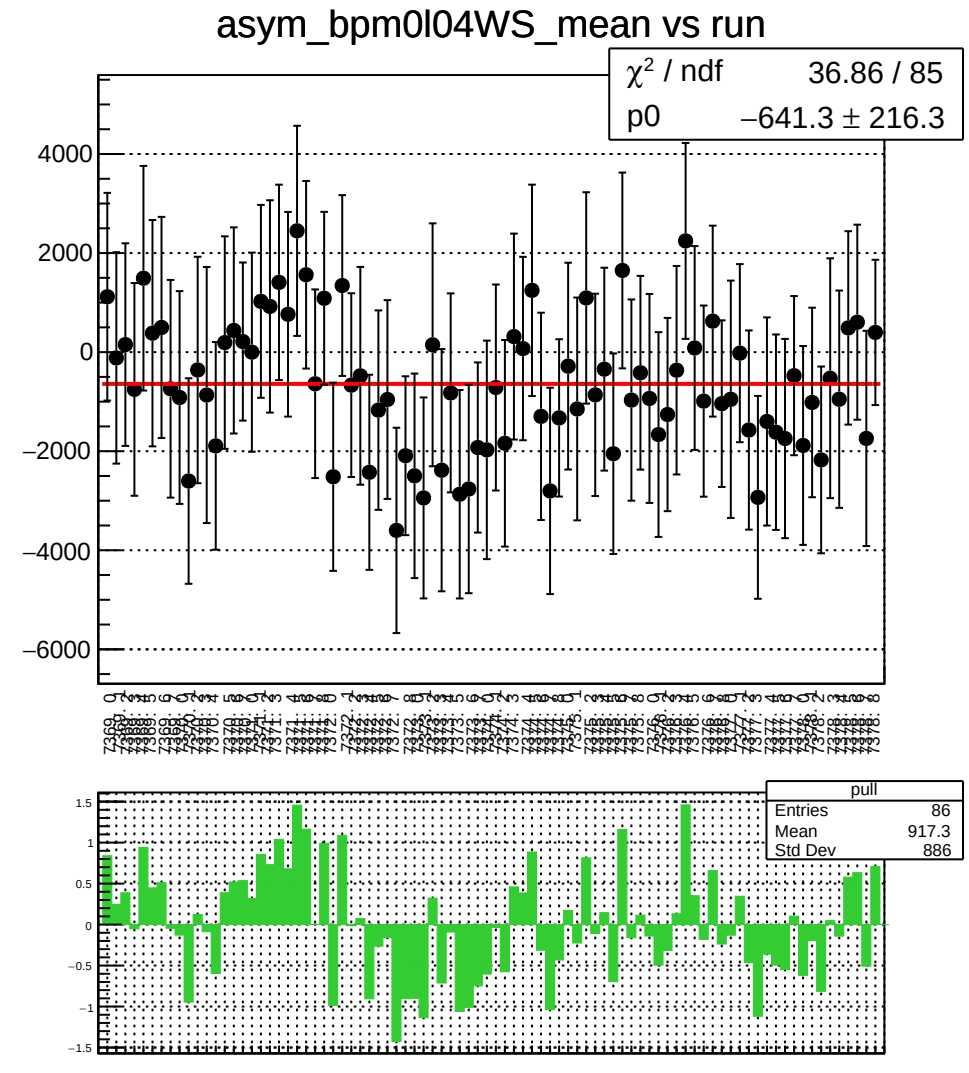

pull1D
Entries 86
Mean −0.002125
Std Dev 0.996

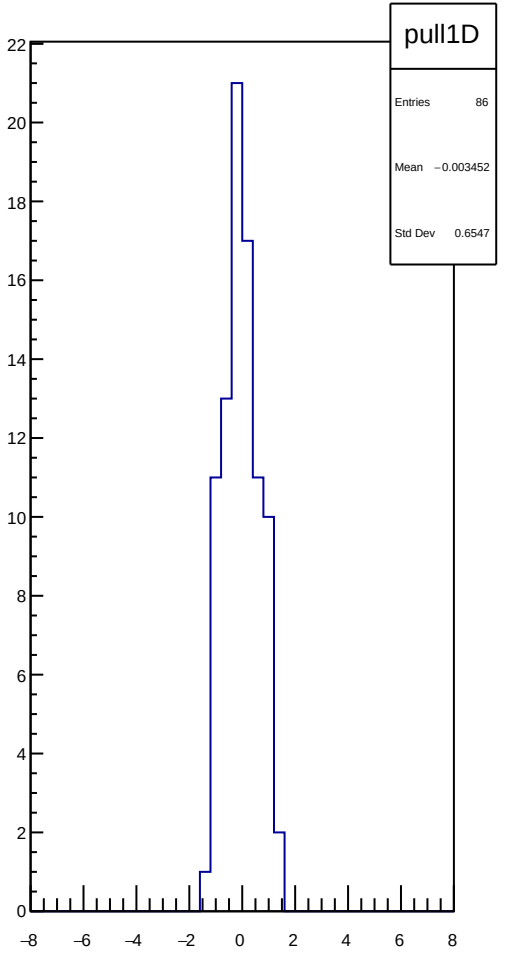

asym_bpm0l02WS_rms vs run
χ² / ndf 3222 / 85
p0 337.1 ± 0.2644
400
380
360
340
320
300

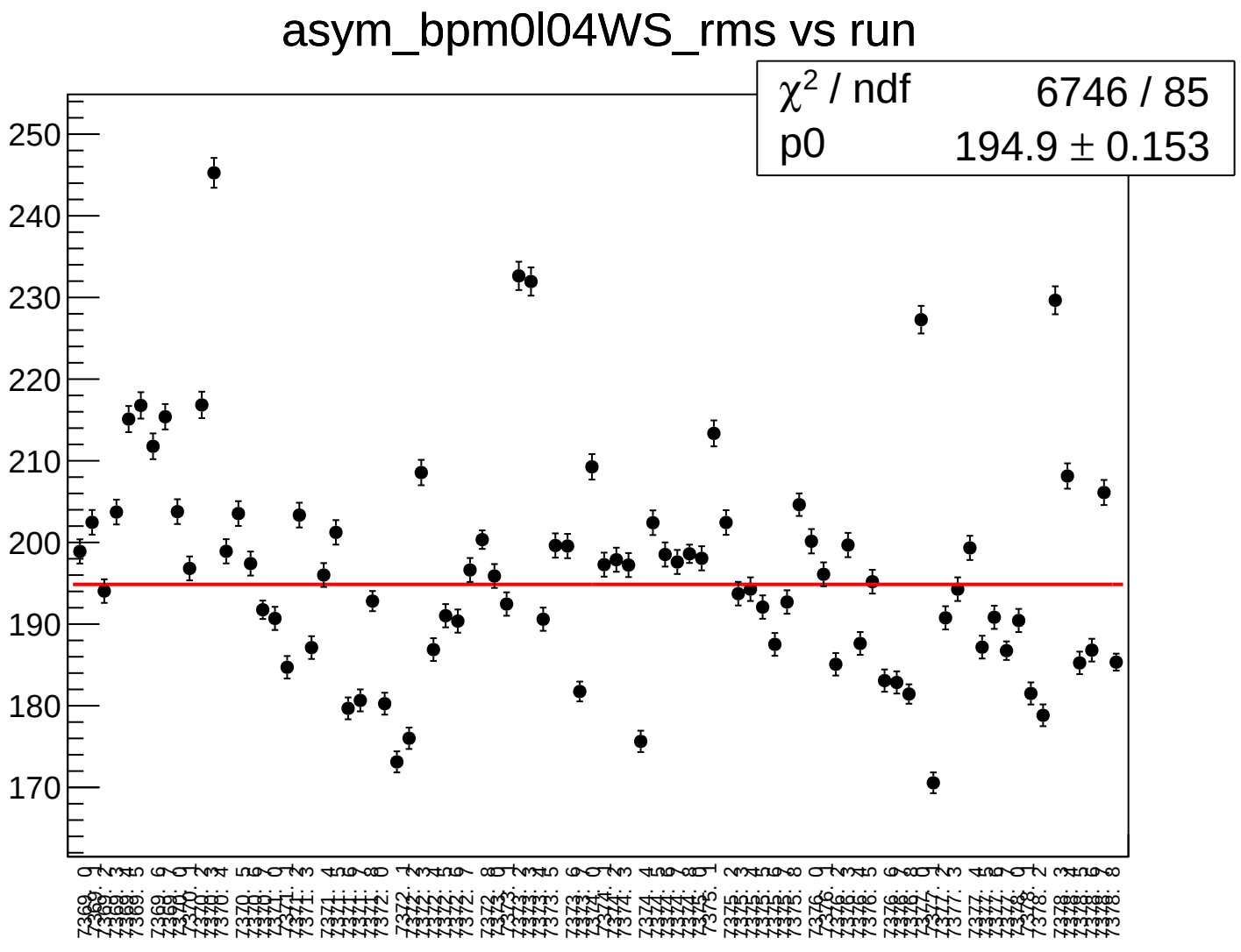

asym_bpm0l03WS_mean vs run
χ^2 / ndf 84.9 / 85
p0 −1462 ± 684.5
pull
Entries 86
Mean 302.4
Std Dev 263.3

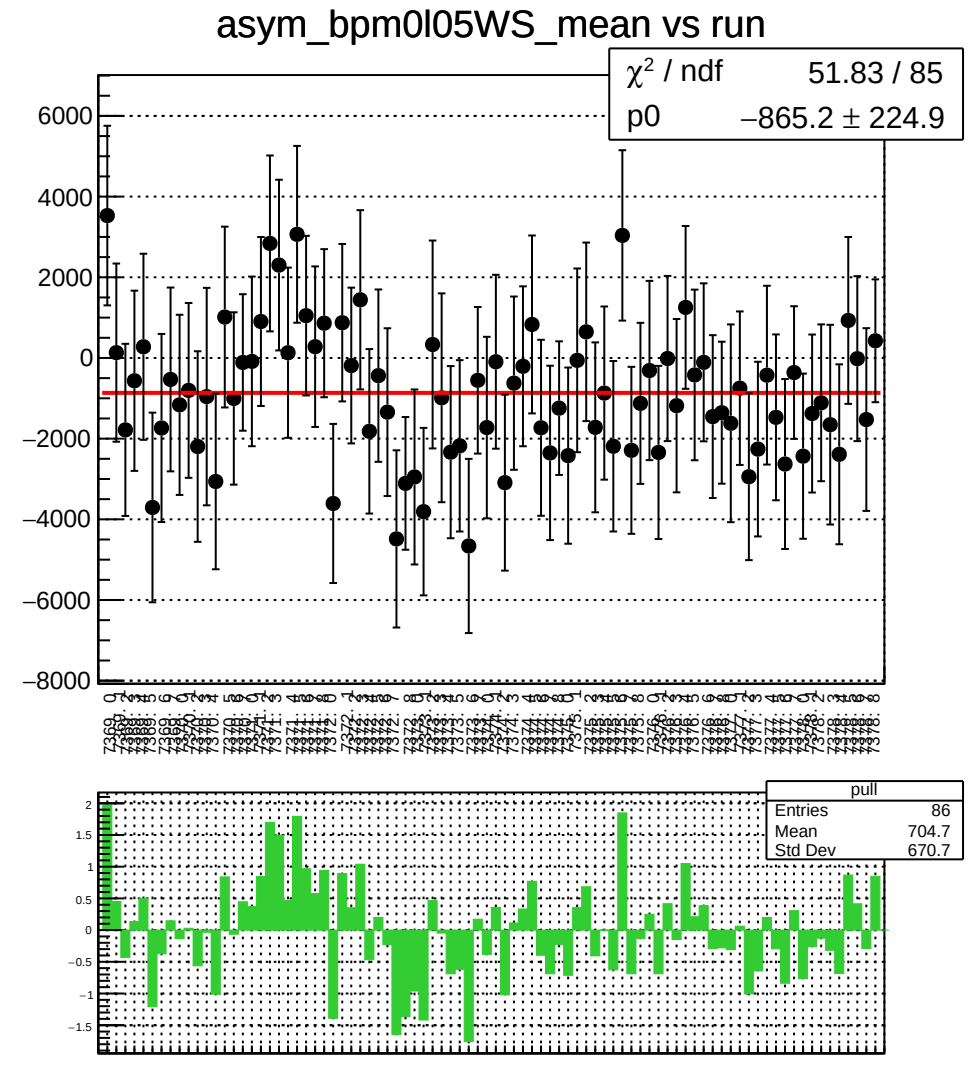

pull1D
Entries 86
Mean −0.0206
Std Dev 0.9933

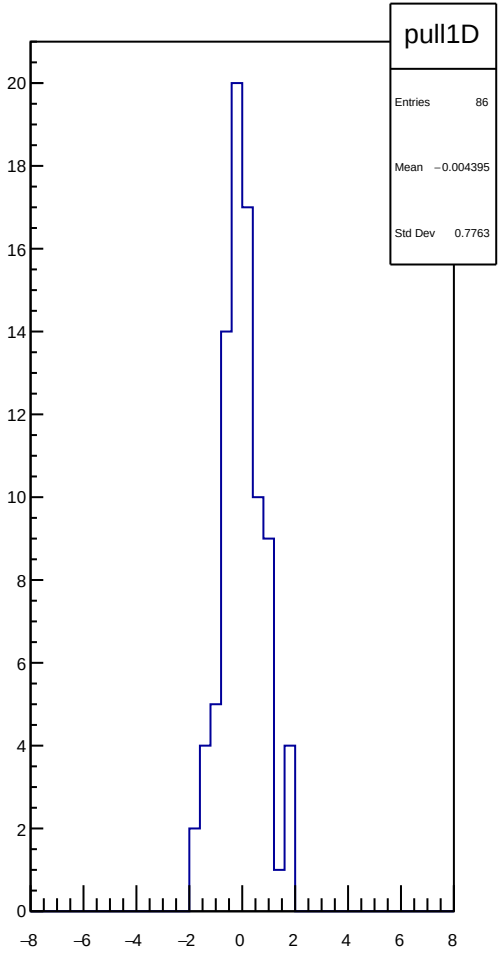

asym_bpm0l03WS_rms vs run
χ^2 / ndf 4.583e+05 / 85
p0 523.8 ± 0.484
1800
1600
1400
1200
1000
800
600
400
200

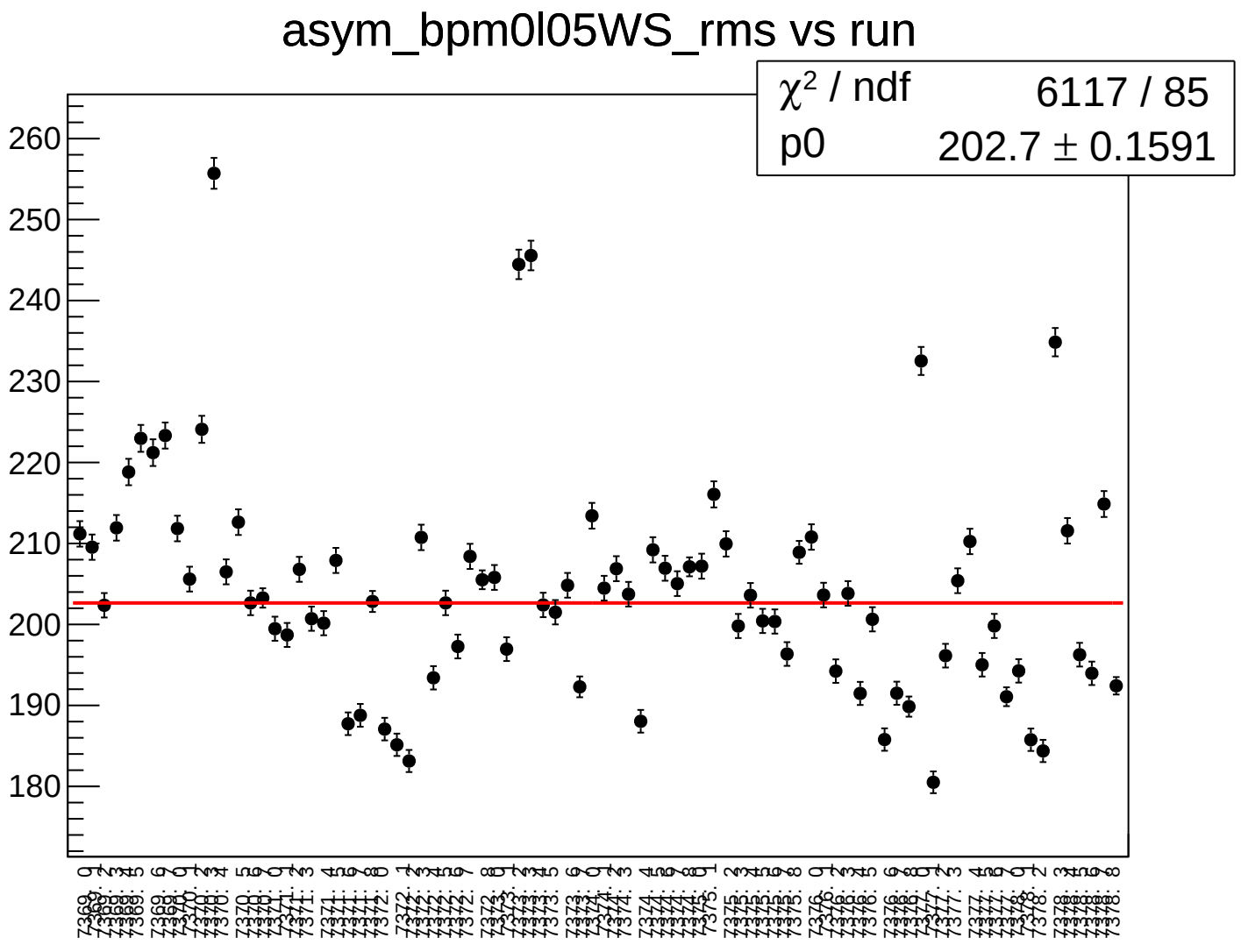

asym_bpm0l04WS_mean vs run
χ² / ndf 36.86 / 85
p0 −641.3 ± 216.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 917.3
Std Dev 886
1.5
1
0.5
0
−0.5
−1
−1.5

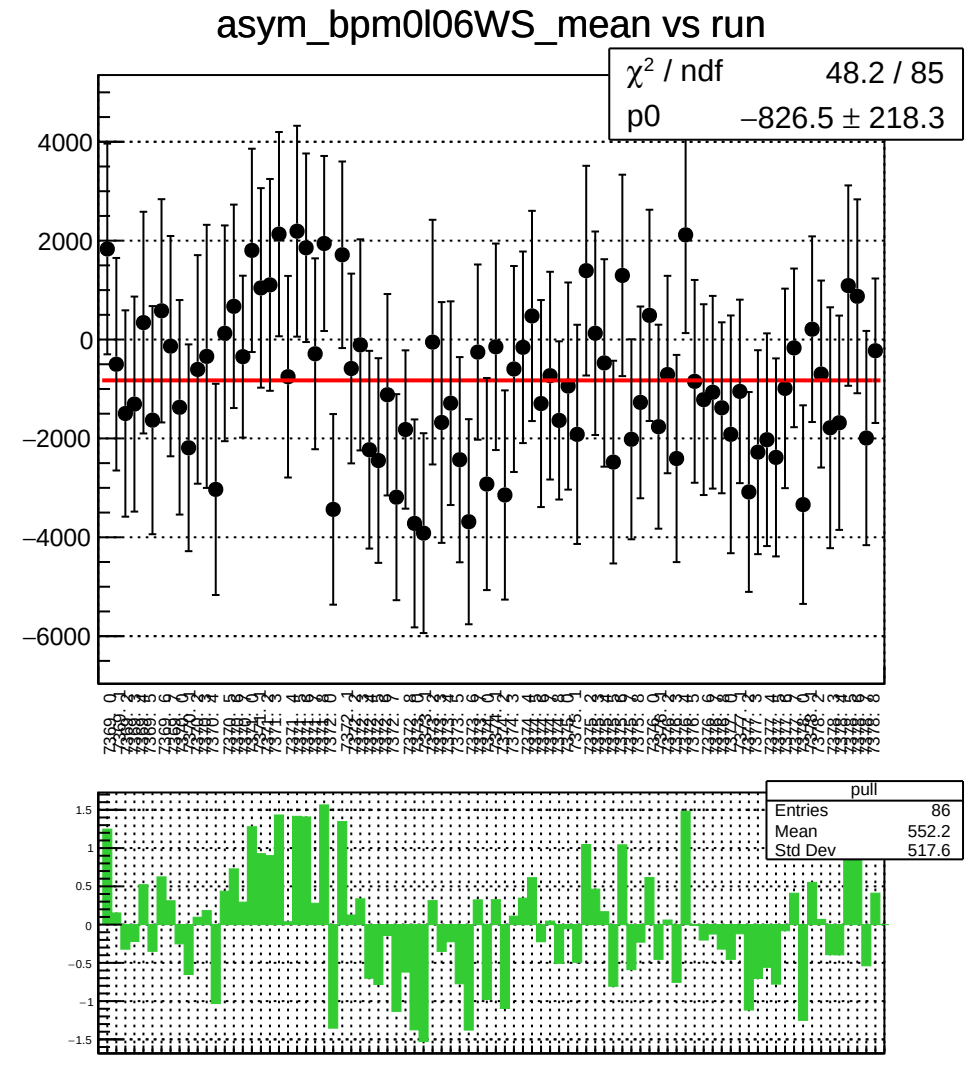

pull1D
Entries 86
Mean −0.003452
Std Dev 0.6547
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

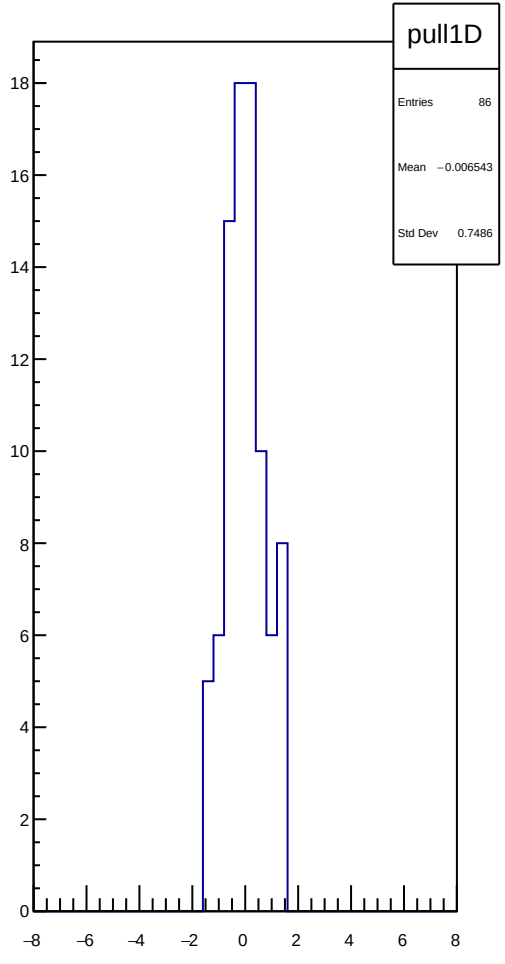

asym_bpm0l04WS_rms vs run
χ² / ndf 6746 / 85
p0 194.9 ± 0.153
250
240
230
220
210
200
190
180
170

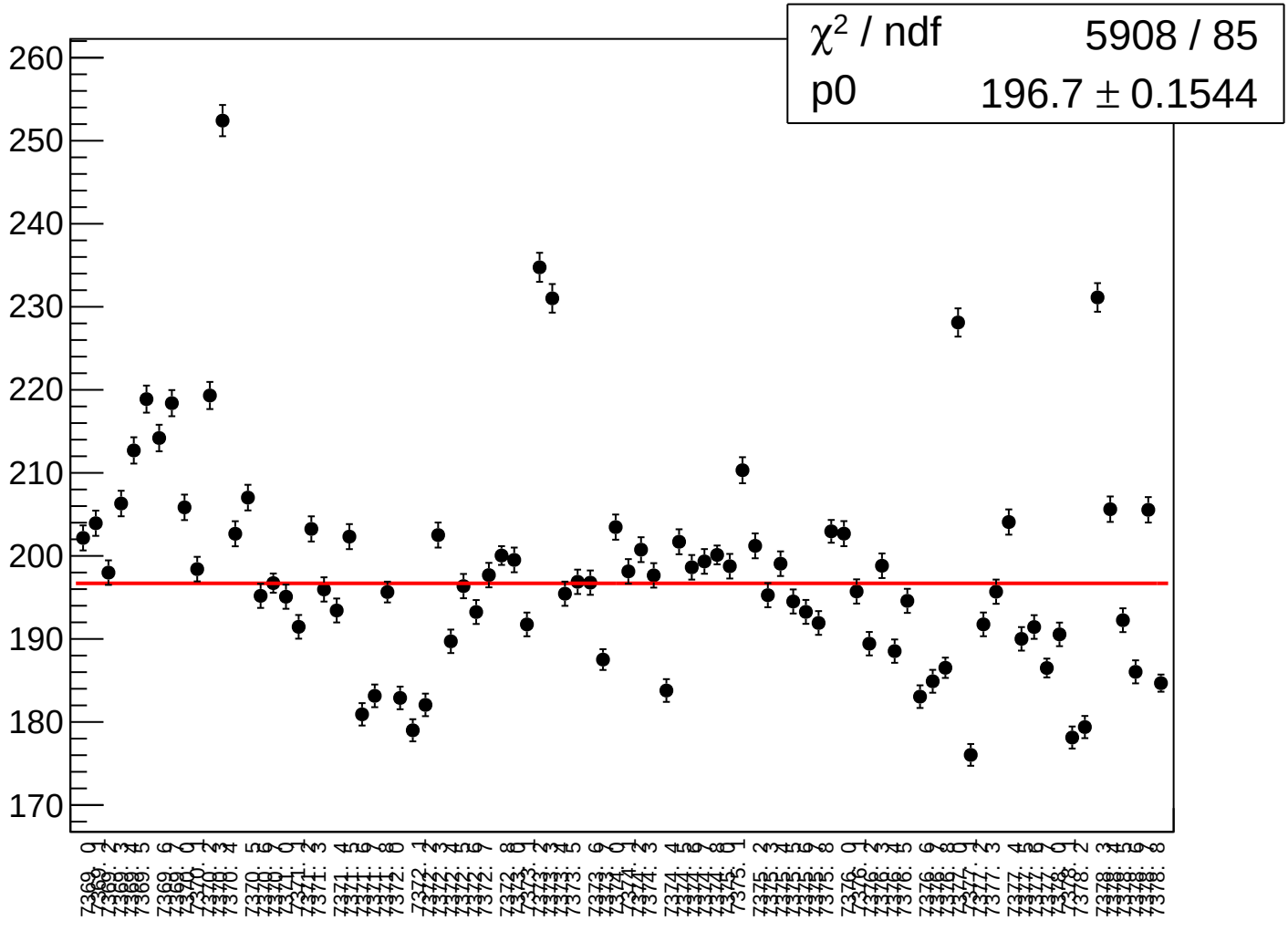

asym_bpm0l05WS_mean vs run
χ² / ndf 51.83 / 85
p0 −865.2 ± 224.9
pull
Entries 86
Mean 704.7
Std Dev 670.7

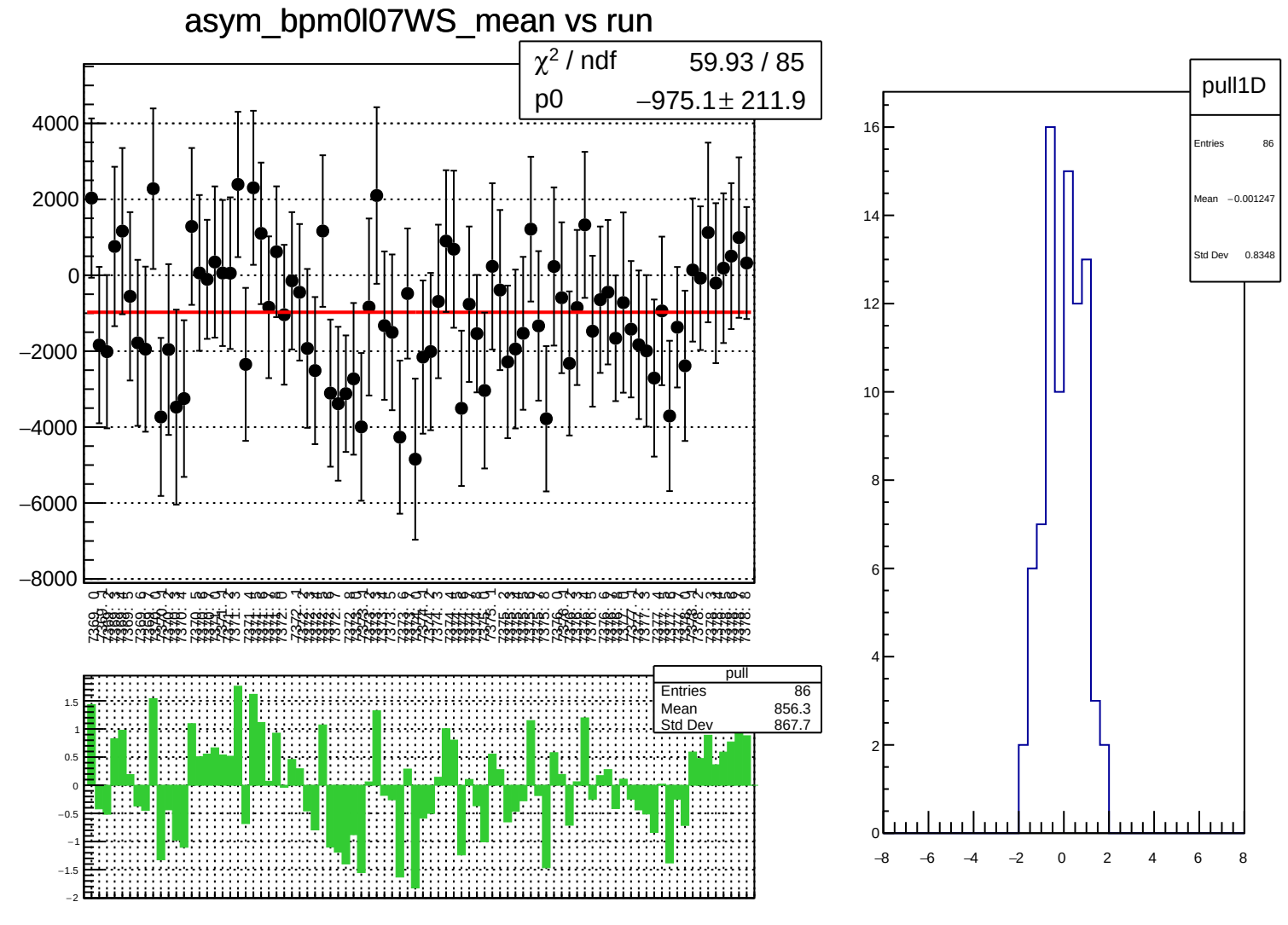

pull1D
Entries 86
Mean −0.004395
Std Dev 0.7763

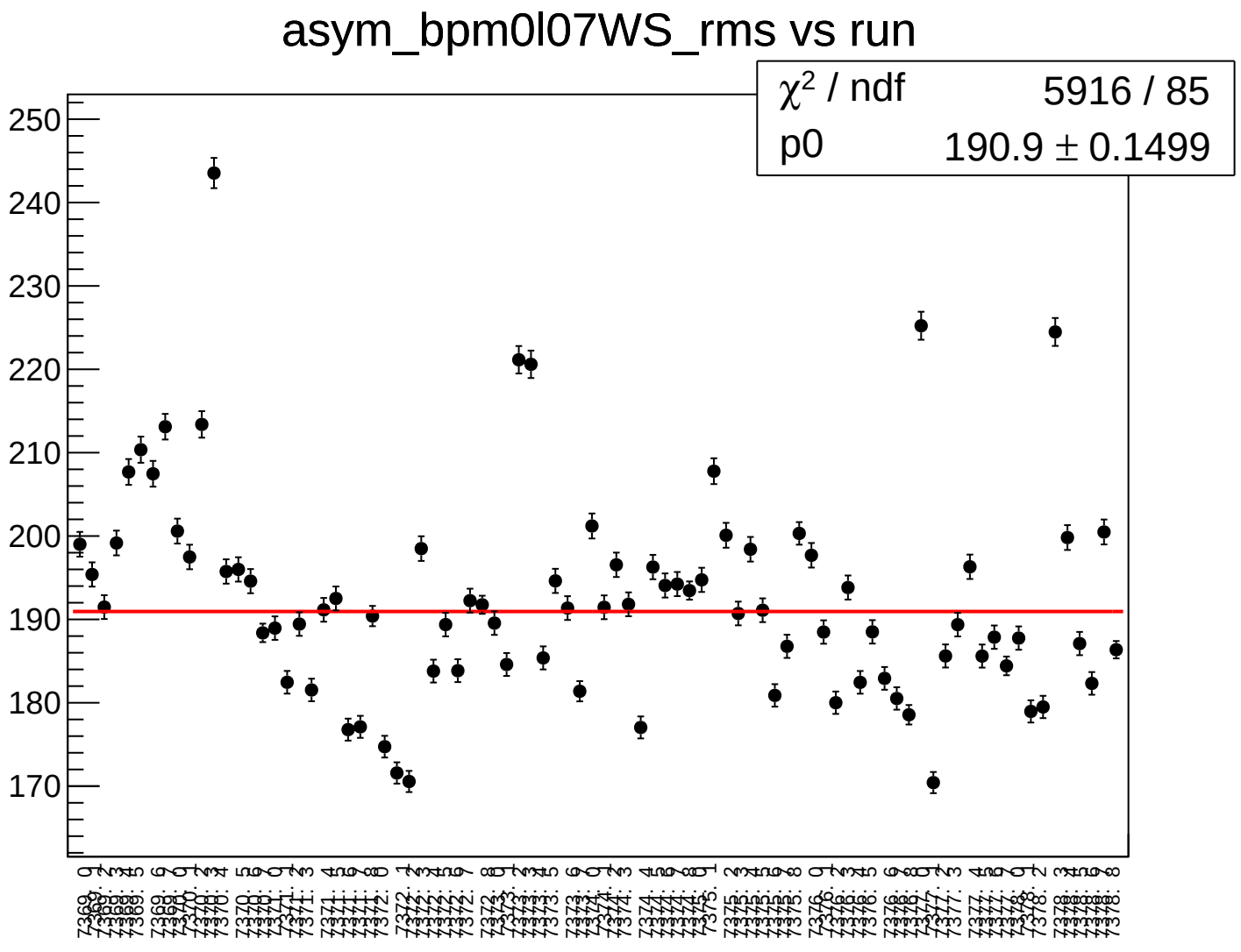

asym_bpm0l05WS_rms vs run
χ² / ndf 6117 / 85
p0 202.7 ± 0.1591
260
250
240
230
220
210
200
190
180

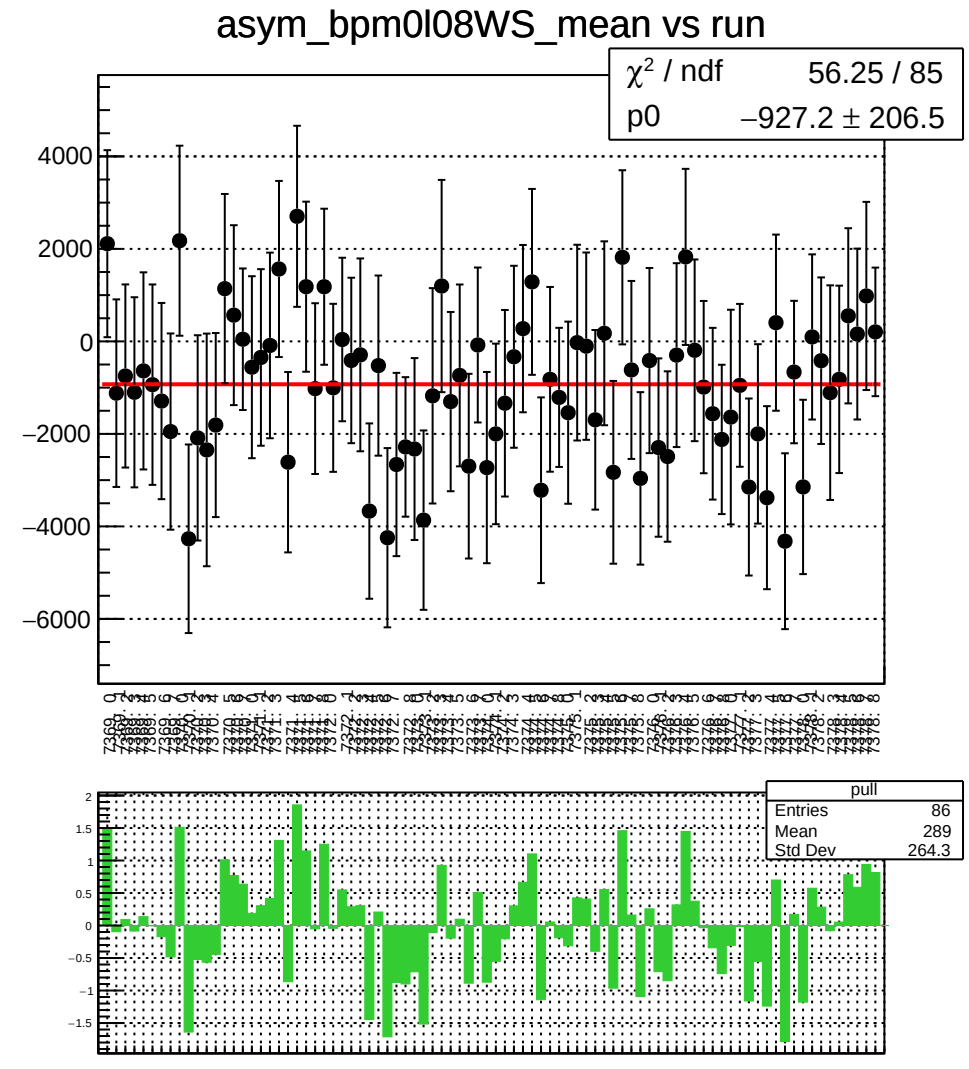

asym_bpm0l06WS_mean vs run
χ² / ndf 48.2 / 85
p0 −826.5 ± 218.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 552.2
Std Dev 517.6
1.5
1
0.5
0
−0.5
−1
−1.5

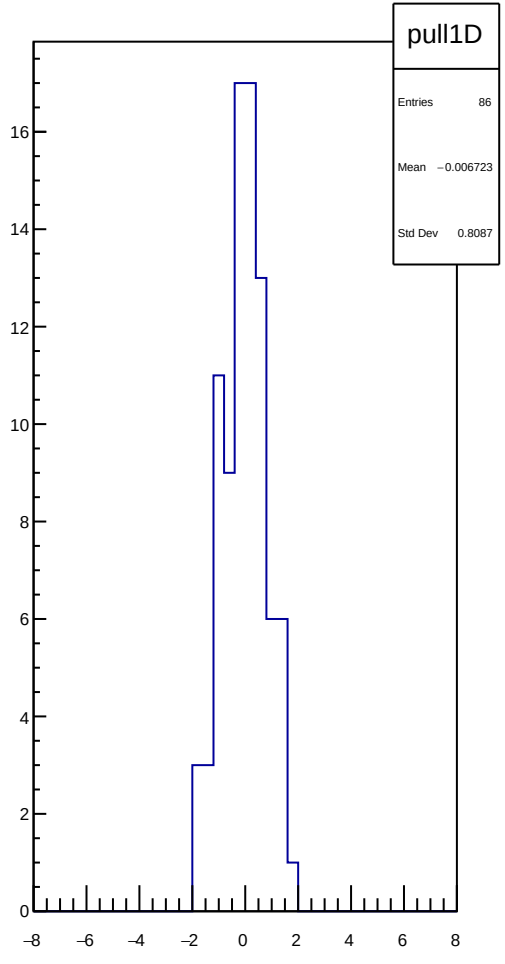

pull1D
Entries 86
Mean −0.006543
Std Dev 0.7486
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

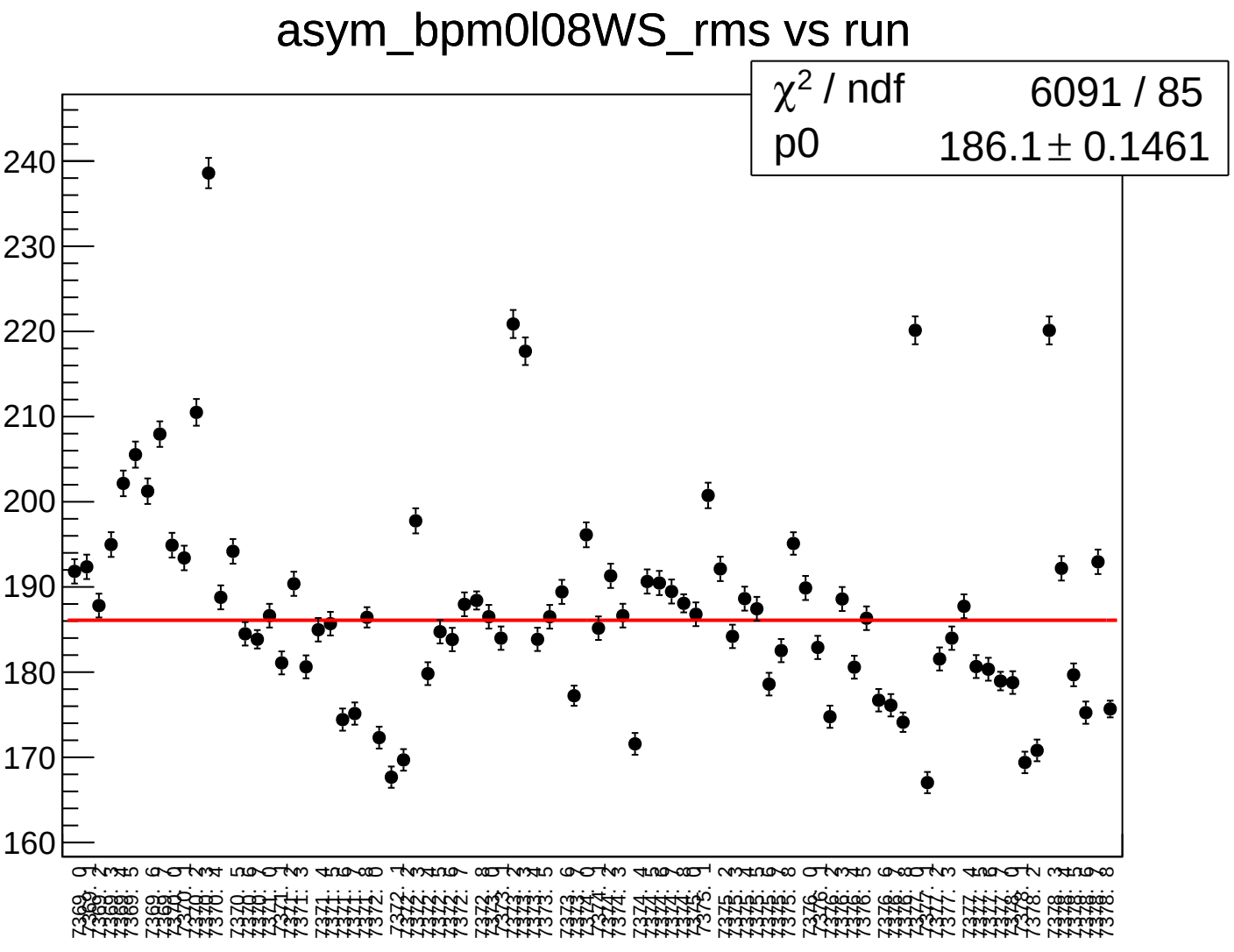

asym_bpm0l06WS_rms vs run
χ² / ndf 5908 / 85
p0 196.7 ± 0.1544
260
250
240
230
220
210
200
190
180
170

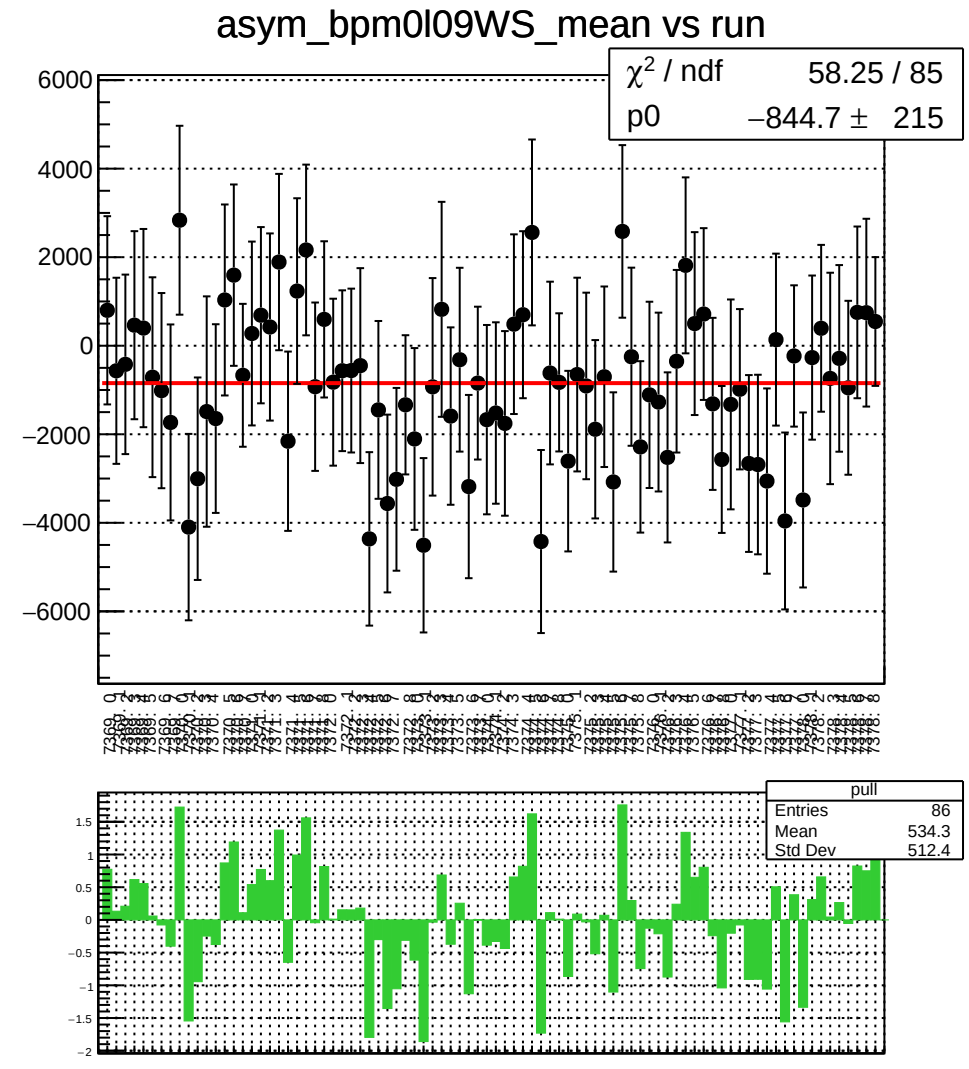

asym_bpm0l07WS_mean vs run
χ^2 / ndf 59.93 / 85
p0 −975.1± 211.9
pull
Entries 86
Mean 856.3
Std Dev 867.7
pull1D
Entries 86
Mean −0.001247
Std Dev 0.8348

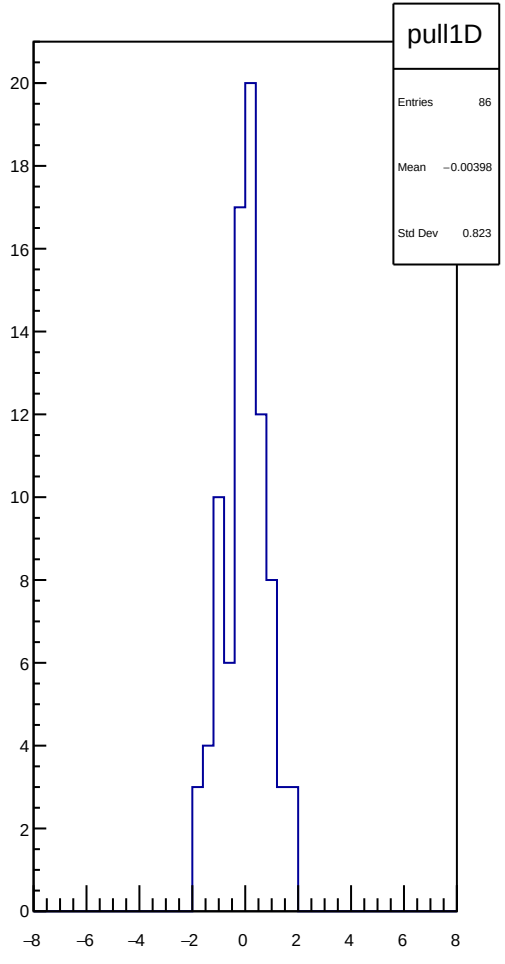

asym_bpm0l07WS_rms vs run
χ² / ndf 5916 / 85
p0 190.9 ± 0.1499
250
240
230
220
210
200
190
180
170

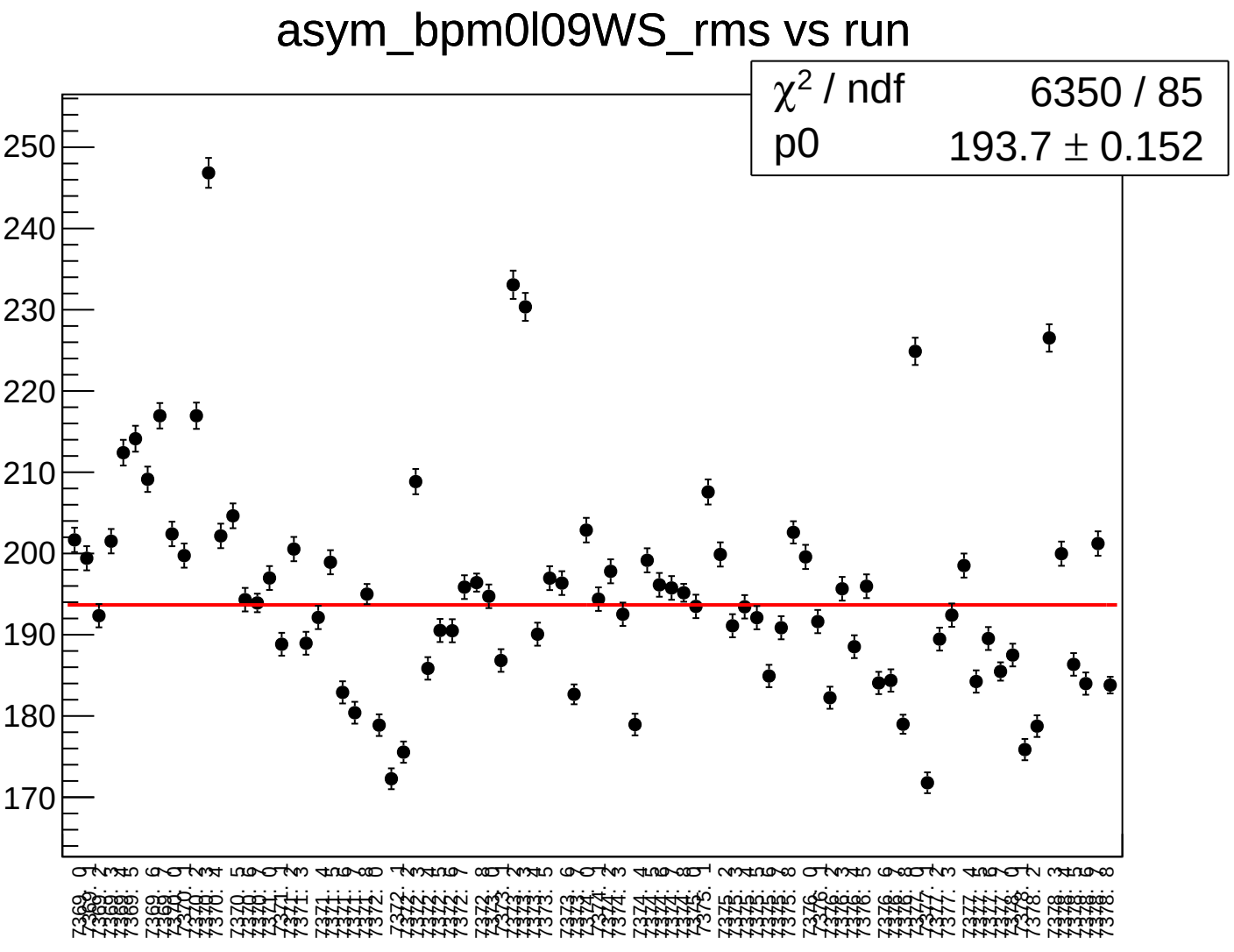

asym_bpm0l08WS_mean vs run
χ² / ndf 56.25 / 85
p0 −927.2 ± 206.5
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 289
Std Dev 264.3
2
1.5
1
0.5
0
−0.5
−1
−1.5

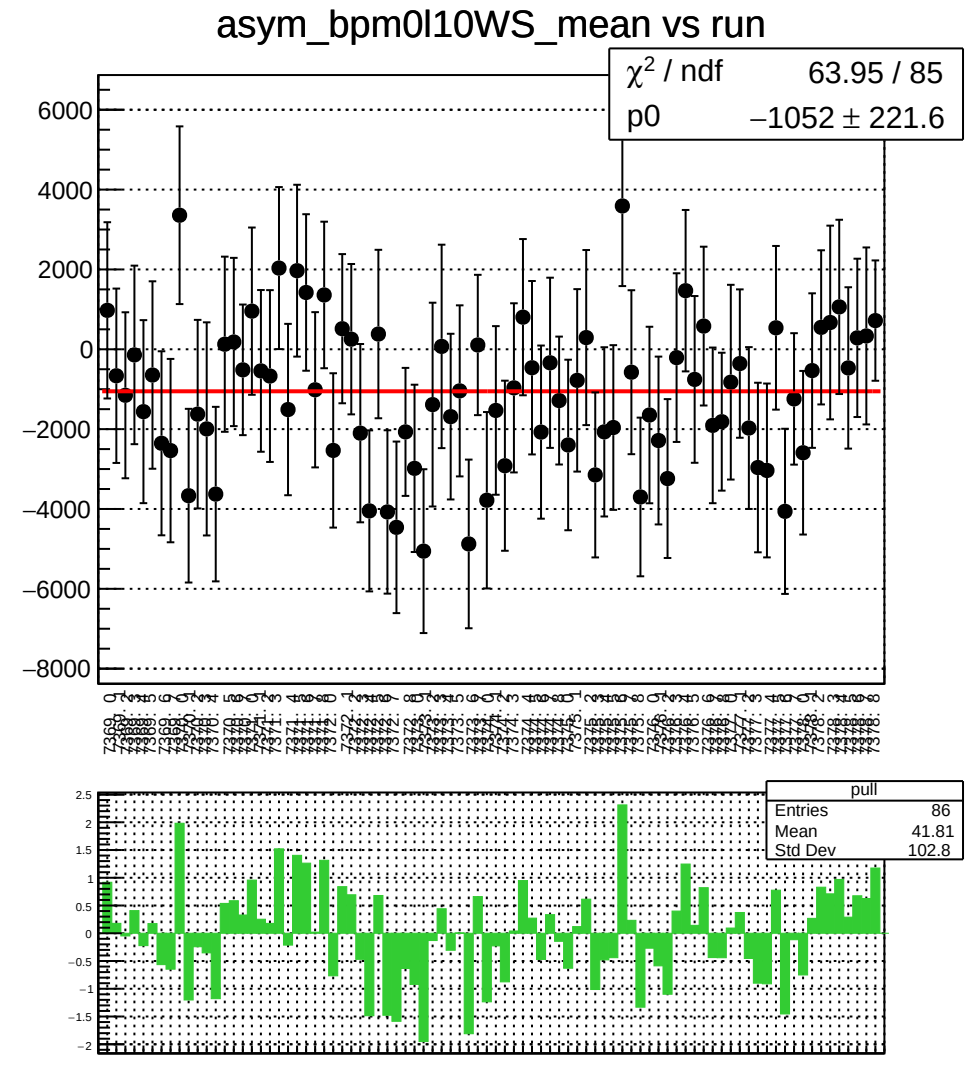

pull1D
Entries 86
Mean −0.006723
Std Dev 0.8087
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

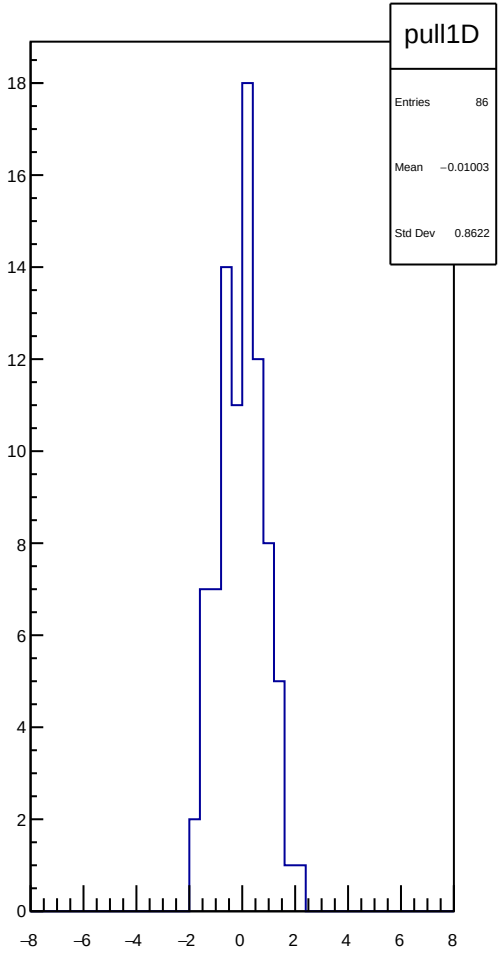

asym_bpm0l08WS_rms vs run
χ² / ndf 6091 / 85
p0 186.1 ± 0.1461
240
230
220
210
200
190
180
170
160

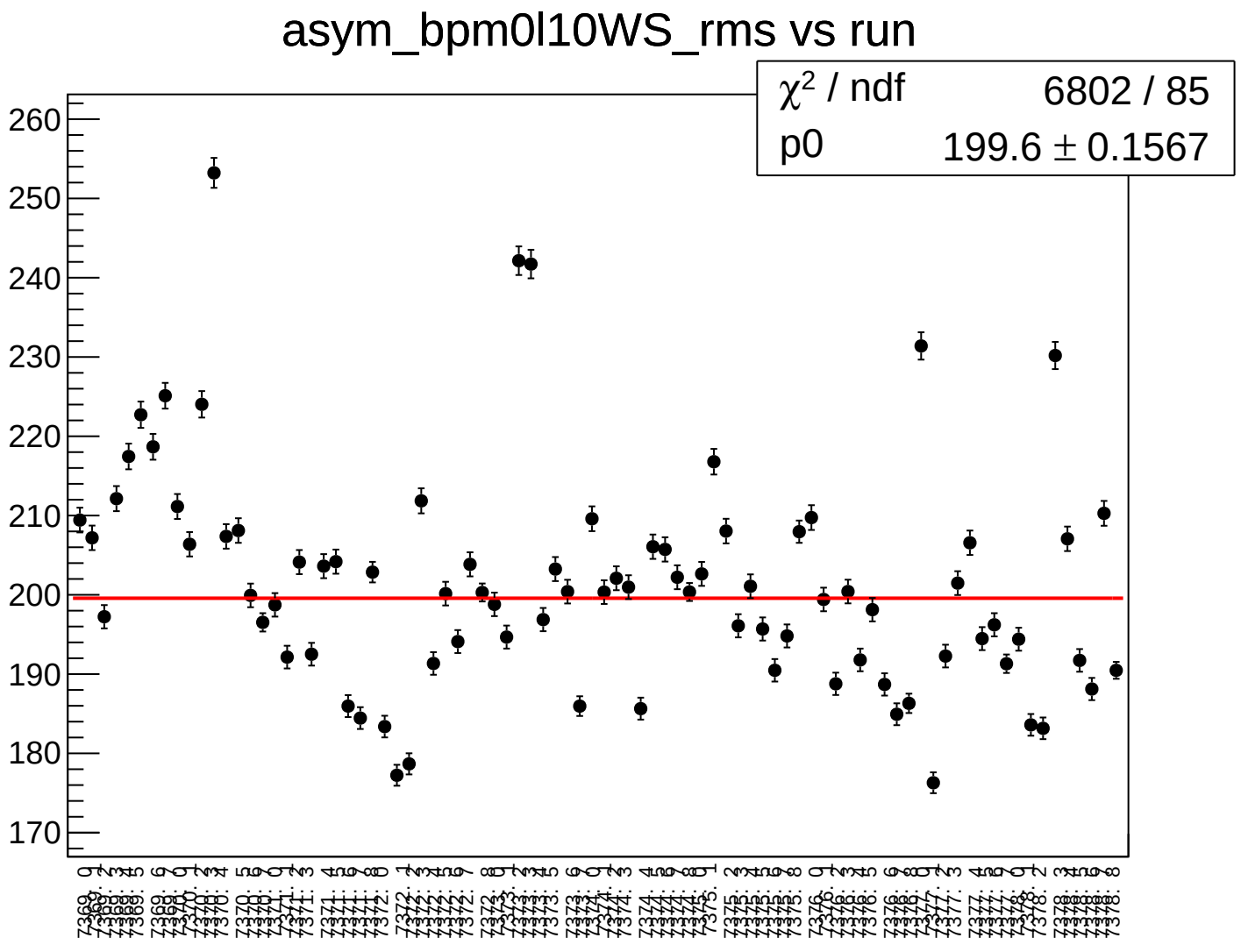

asym_bpm0l09WS_mean vs run
χ² / ndf 58.25 / 85
p0 −844.7 ± 215
pull
Entries 86
Mean 534.3
Std Dev 512.4

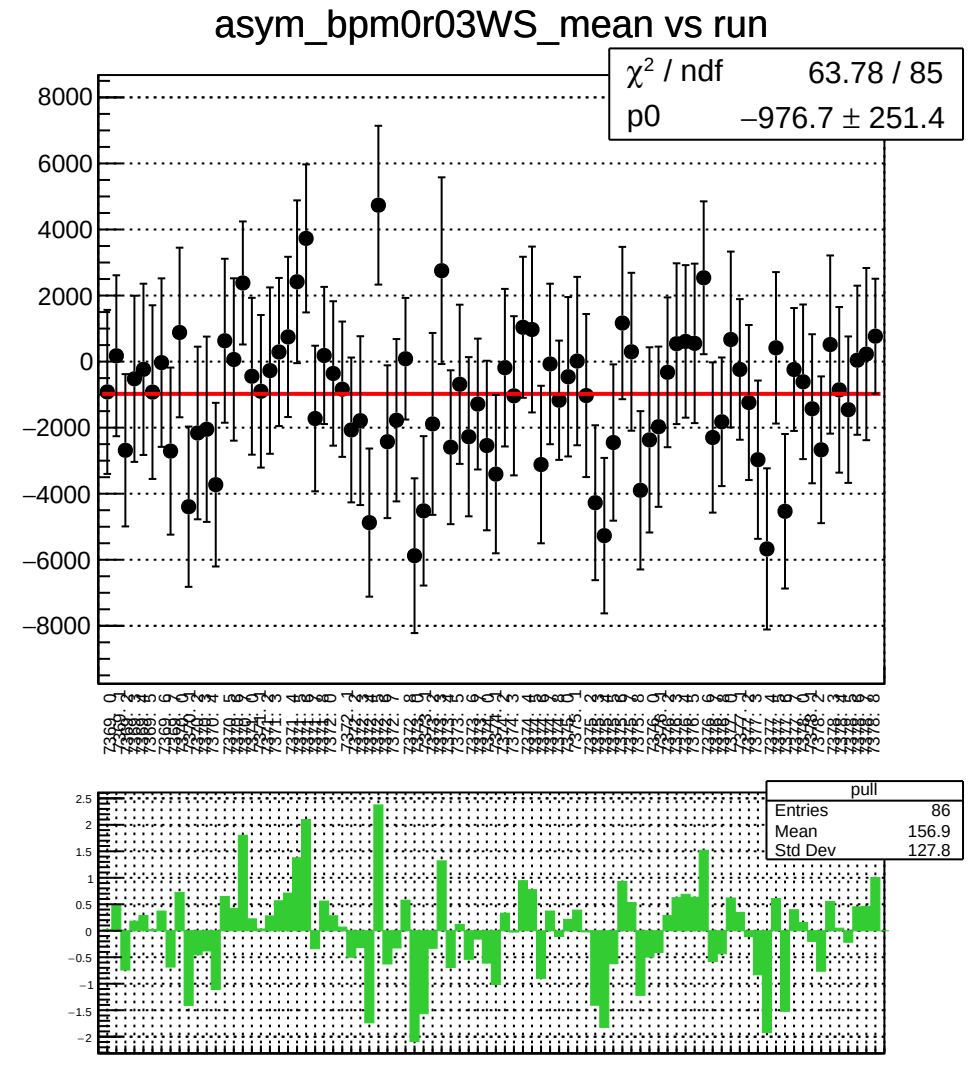

pull1D
Entries 86
Mean −0.00398
Std Dev 0.823

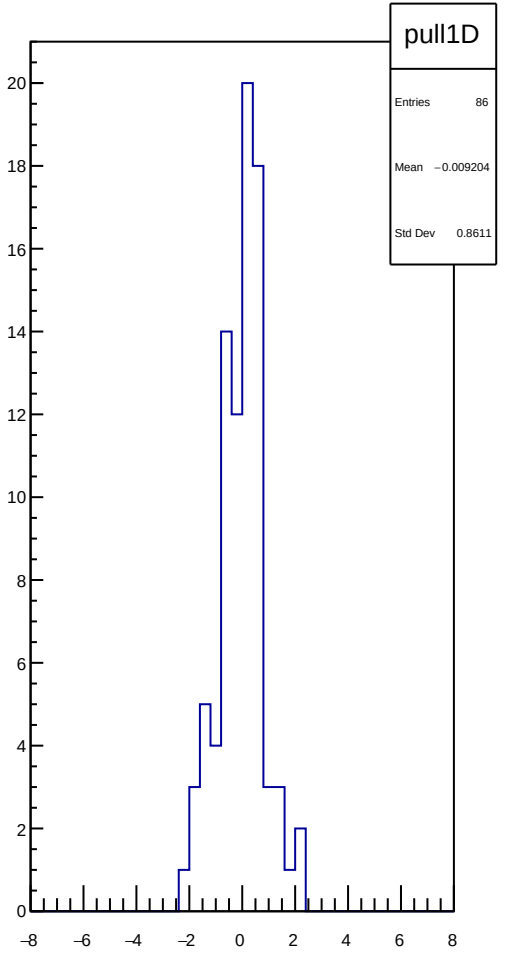

asym_bpm0l09WS_rms vs run
χ² / ndf 6350 / 85
p0 193.7 ± 0.152
250
240
230
220
210
200
190
180
170

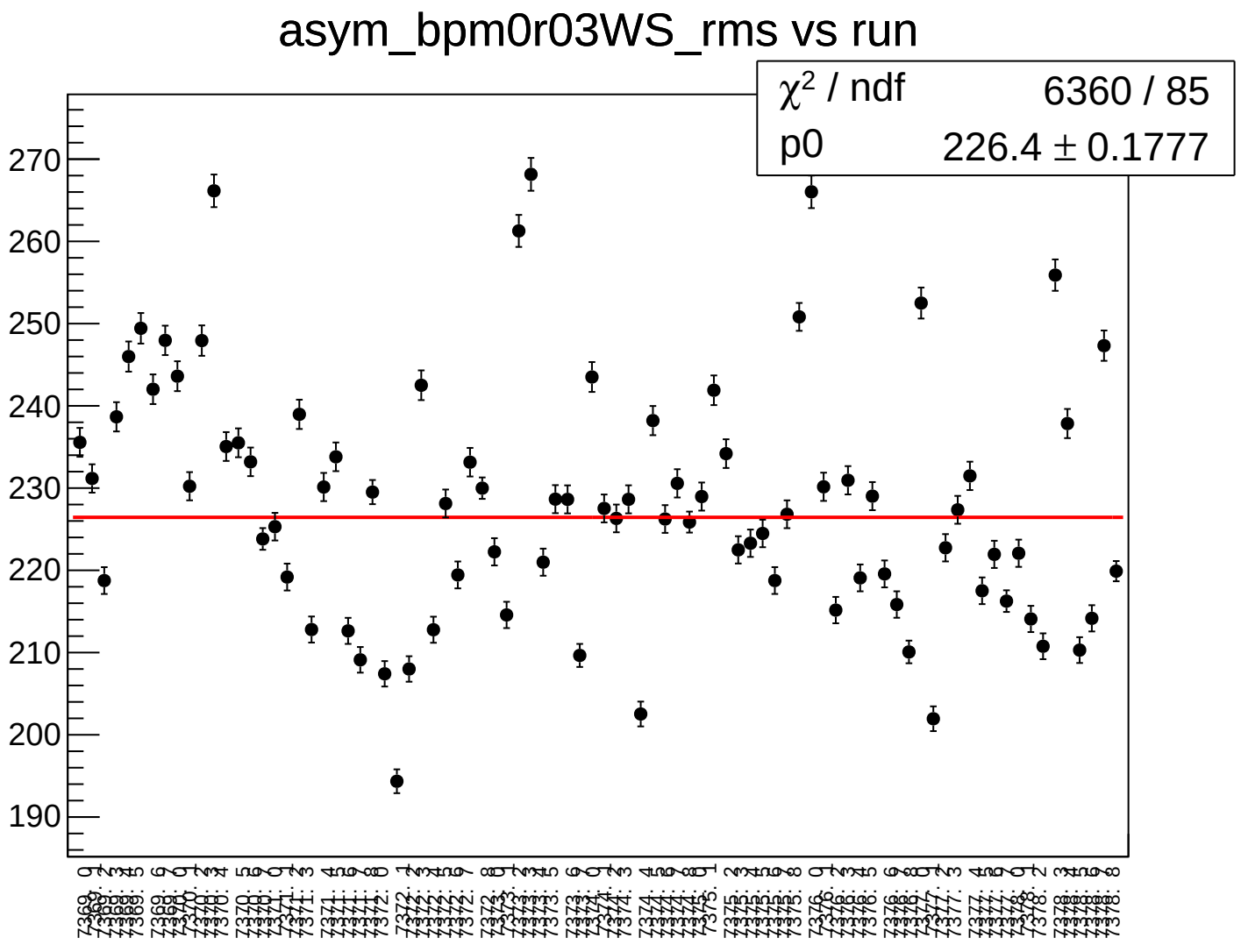

asym_bpm0l10WS_mean vs run
χ² / ndf 63.95 / 85
p0 −1052 ± 221.6
pull
Entries 86
Mean 41.81
Std Dev 102.8

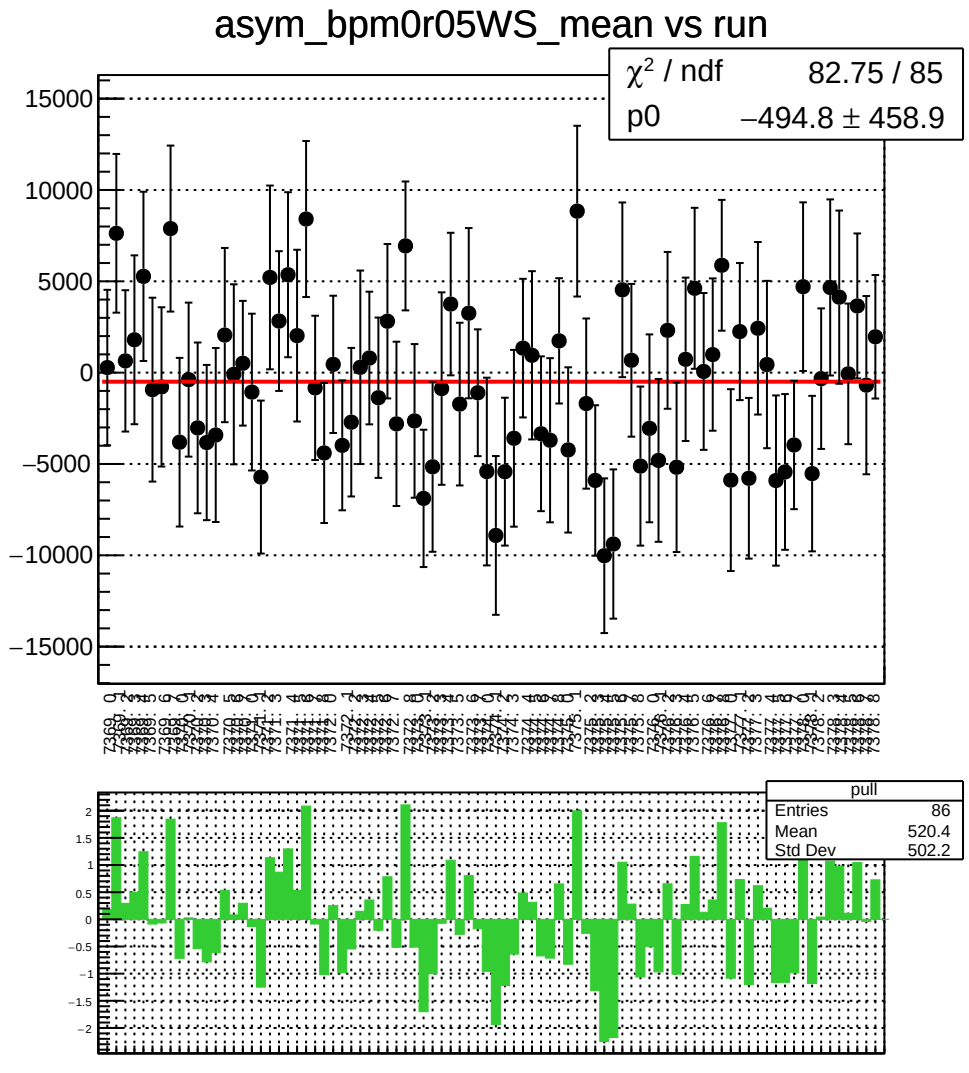

pull1D
Entries 86
Mean −0.01003
Std Dev 0.8622

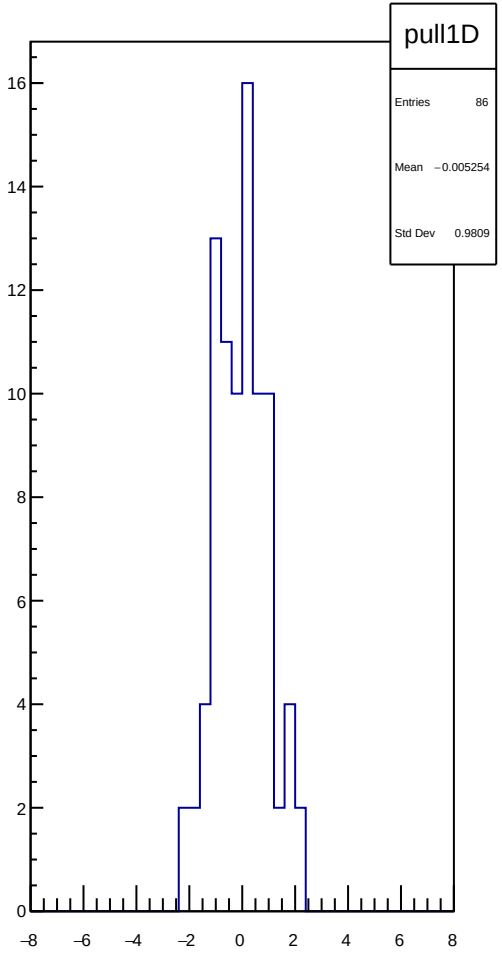

asym_bpm0l10WS_rms vs run
χ² / ndf 6802 / 85
p0 199.6 ± 0.1567
260
250
240
230
220
210
200
190
180
170

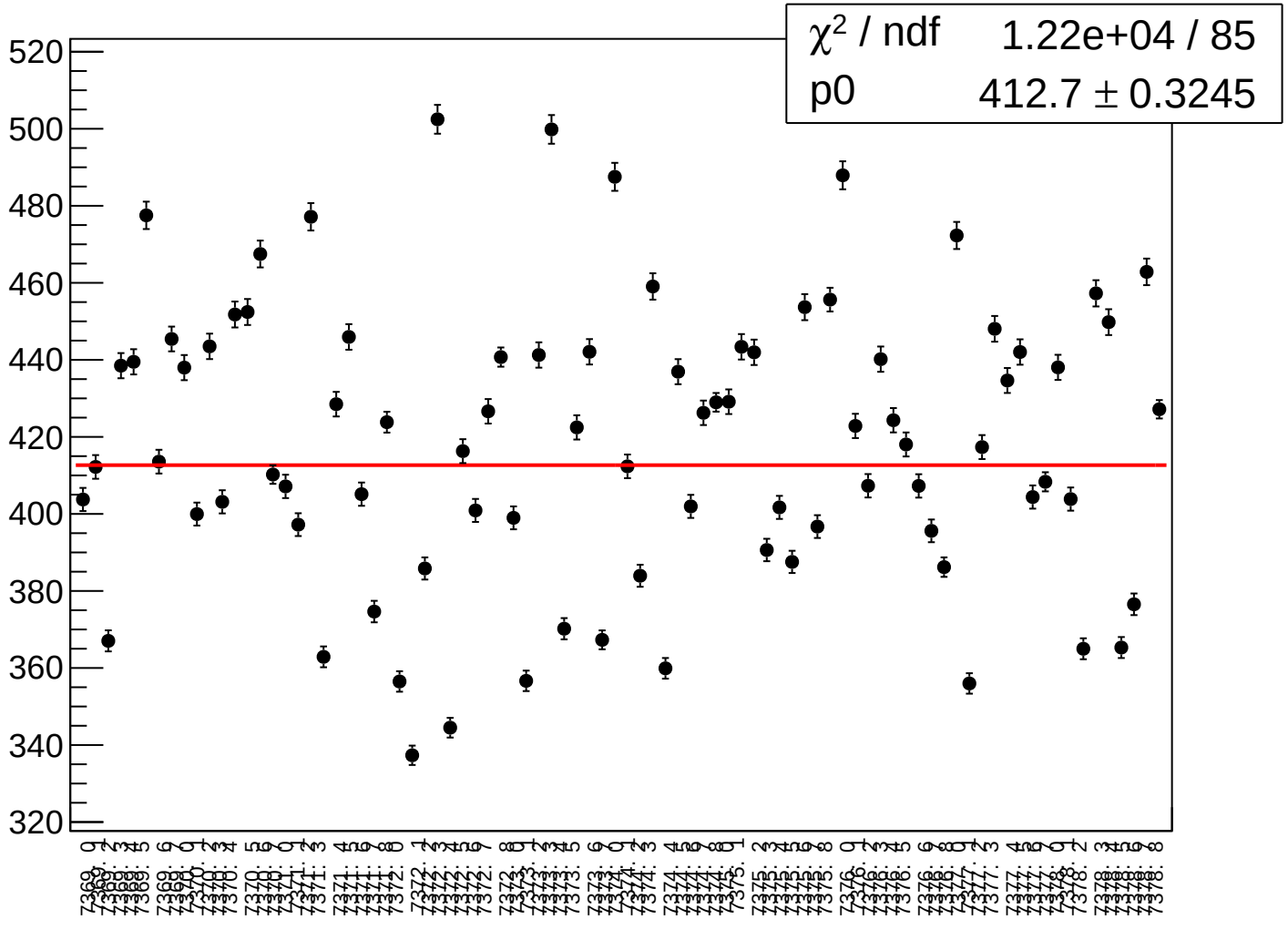

asym_bpm0r03WS_mean vs run
χ² / ndf 63.78 / 85
p0 −976.7 ± 251.4
pull
Entries 86
Mean 156.9
Std Dev 127.8

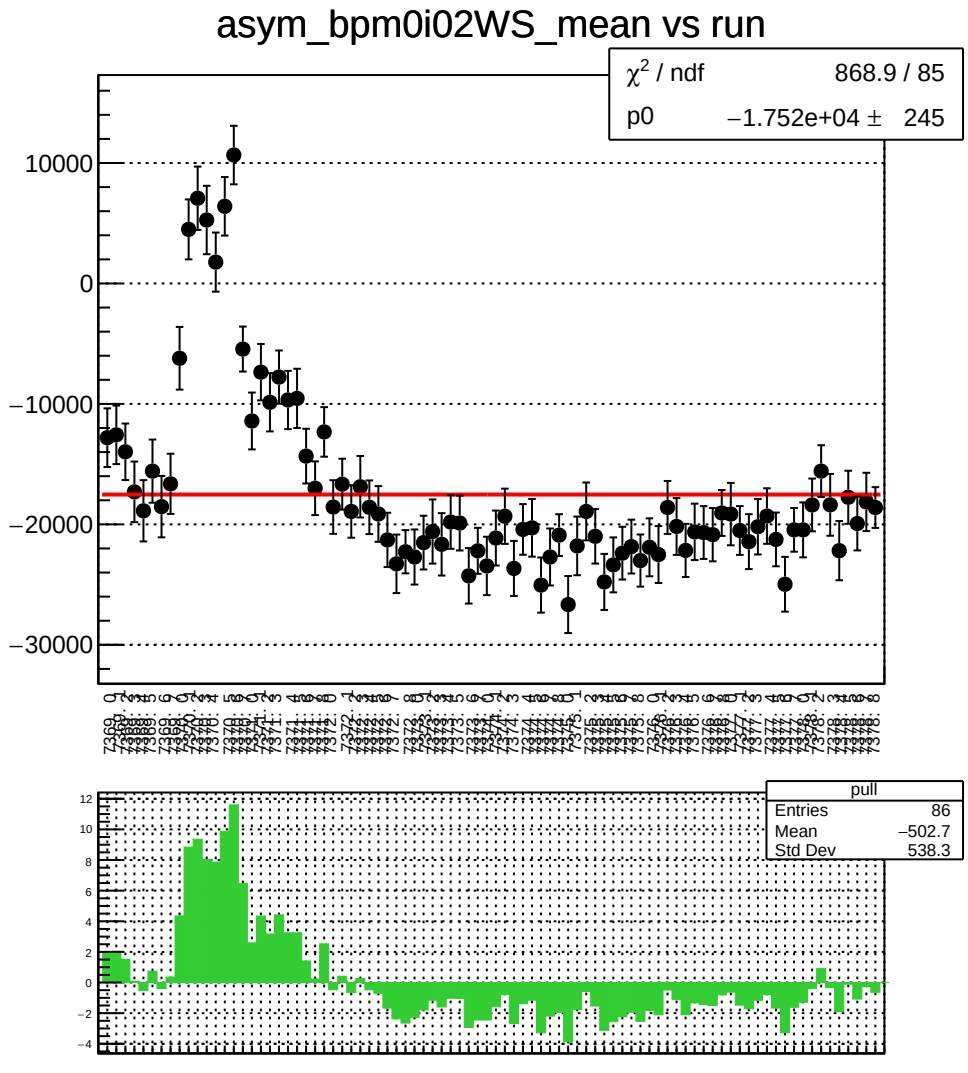

pull1D
Entries 86
Mean −0.009204
Std Dev 0.8611

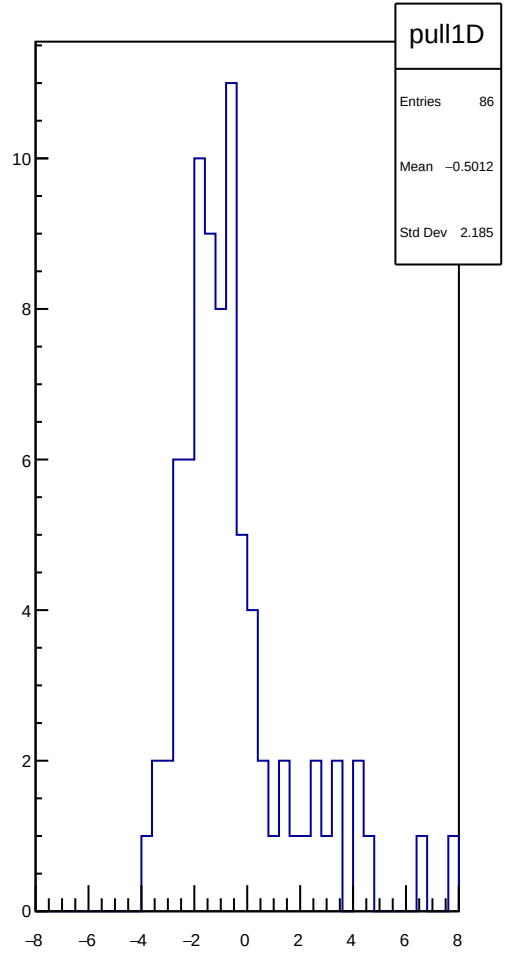

asym_bpm0r03WS_rms vs run
χ^2 / ndf 6360 / 85
p0 226.4 ± 0.1777
270
260
250
240
230
220
210
200
190

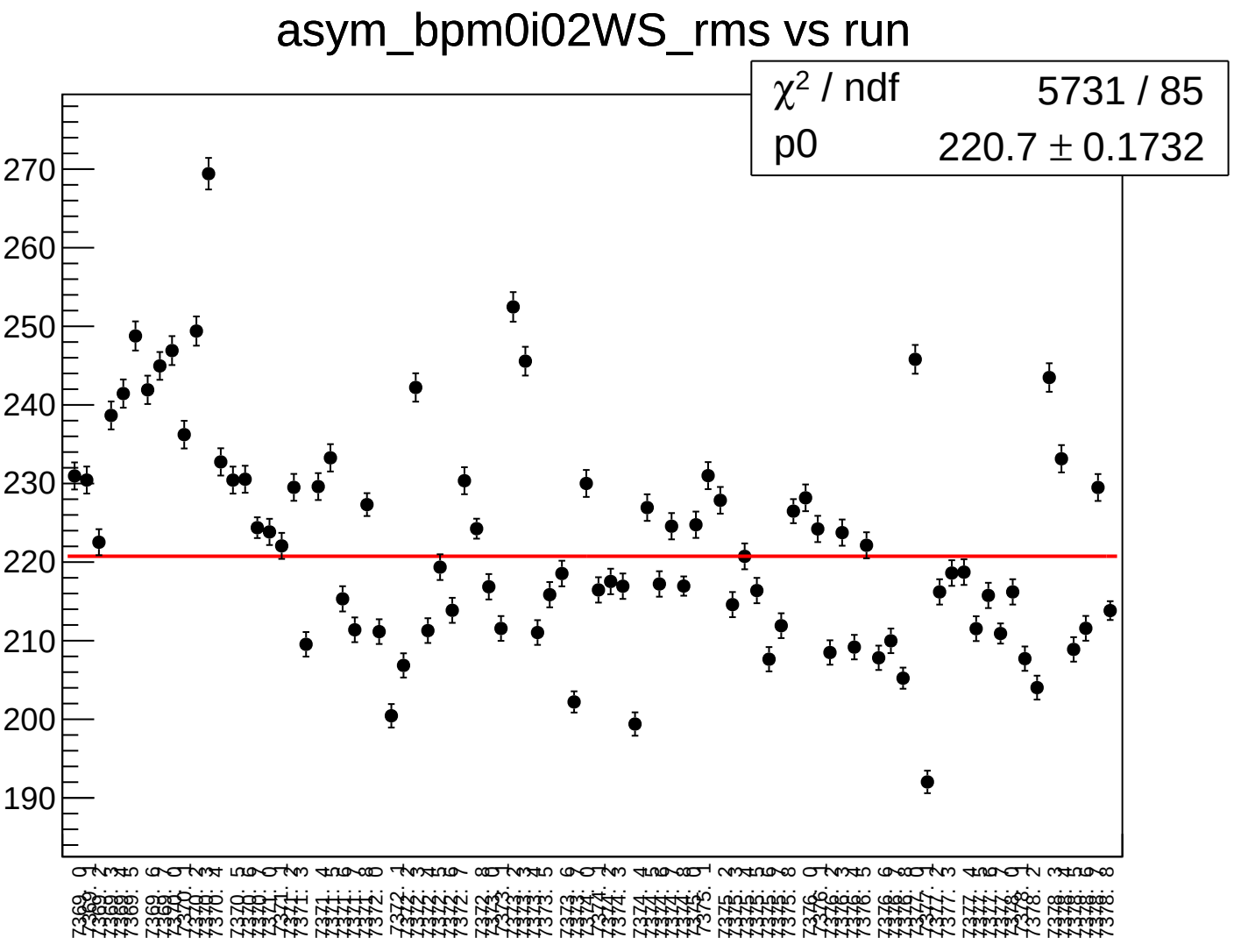

asym_bpm0r05WS_mean vs run
χ² / ndf 82.75 / 85
p0 −494.8 ± 458.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 86
Mean 520.4
Std Dev 502.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

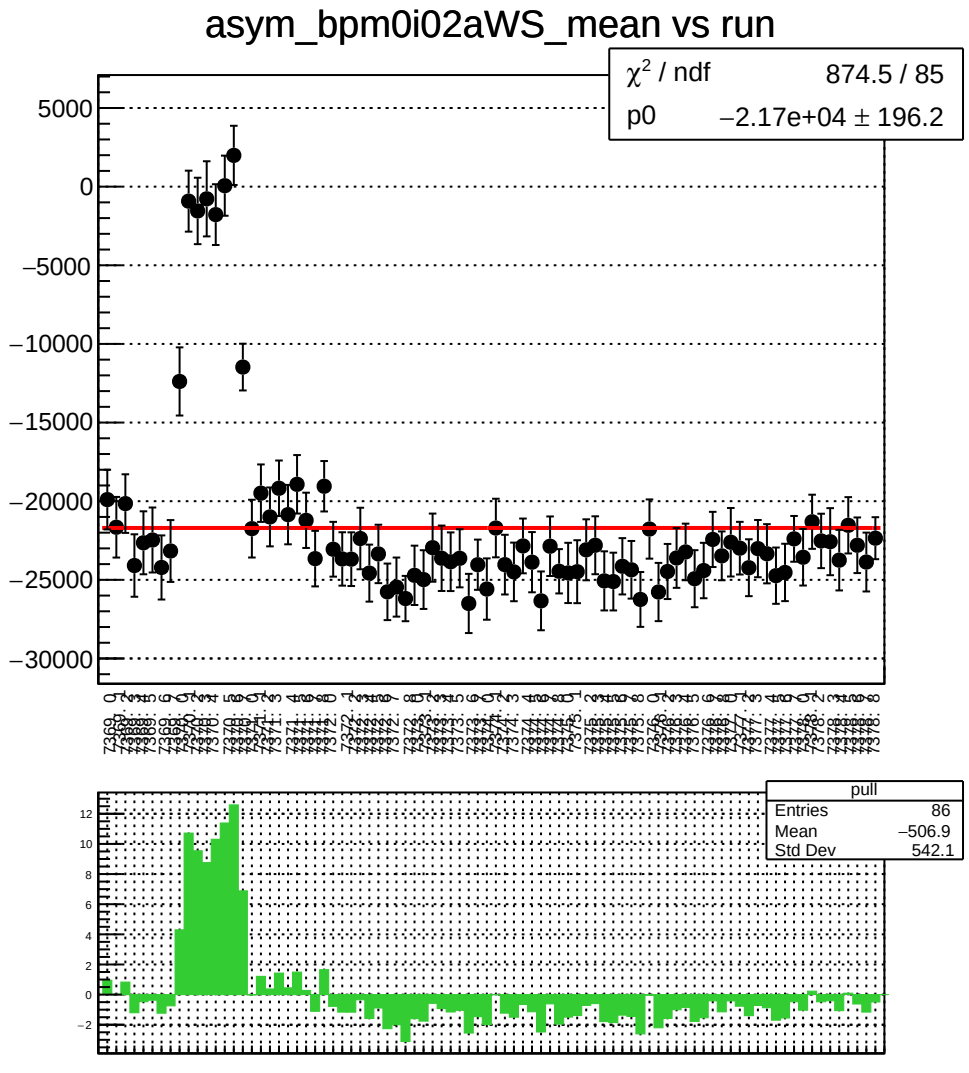

pull1D
Entries 86
Mean −0.005254
Std Dev 0.9809
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

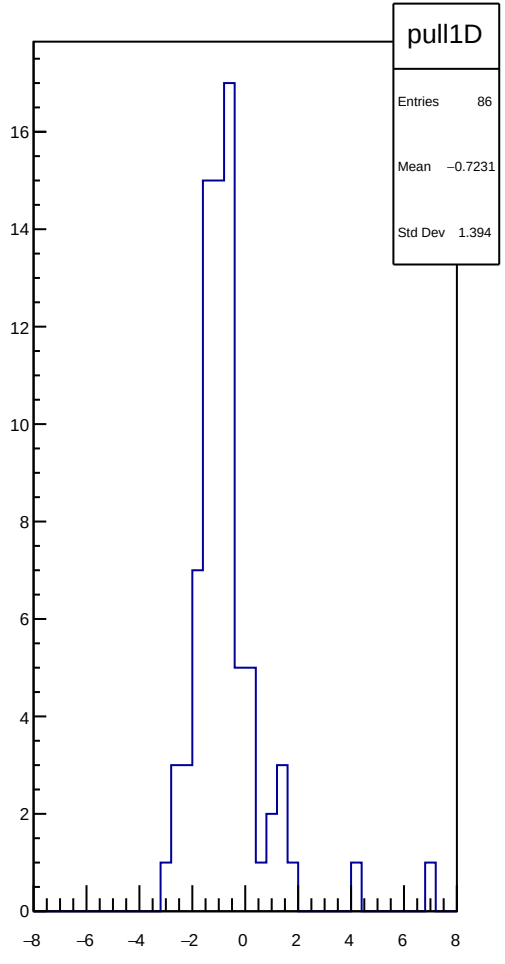

asym_bpm0r05WS_rms vs run
χ² / ndf 1.22e+04 / 85
p0 412.7 ± 0.3245
520
500
480
460
440
420
400
380
360
340
320

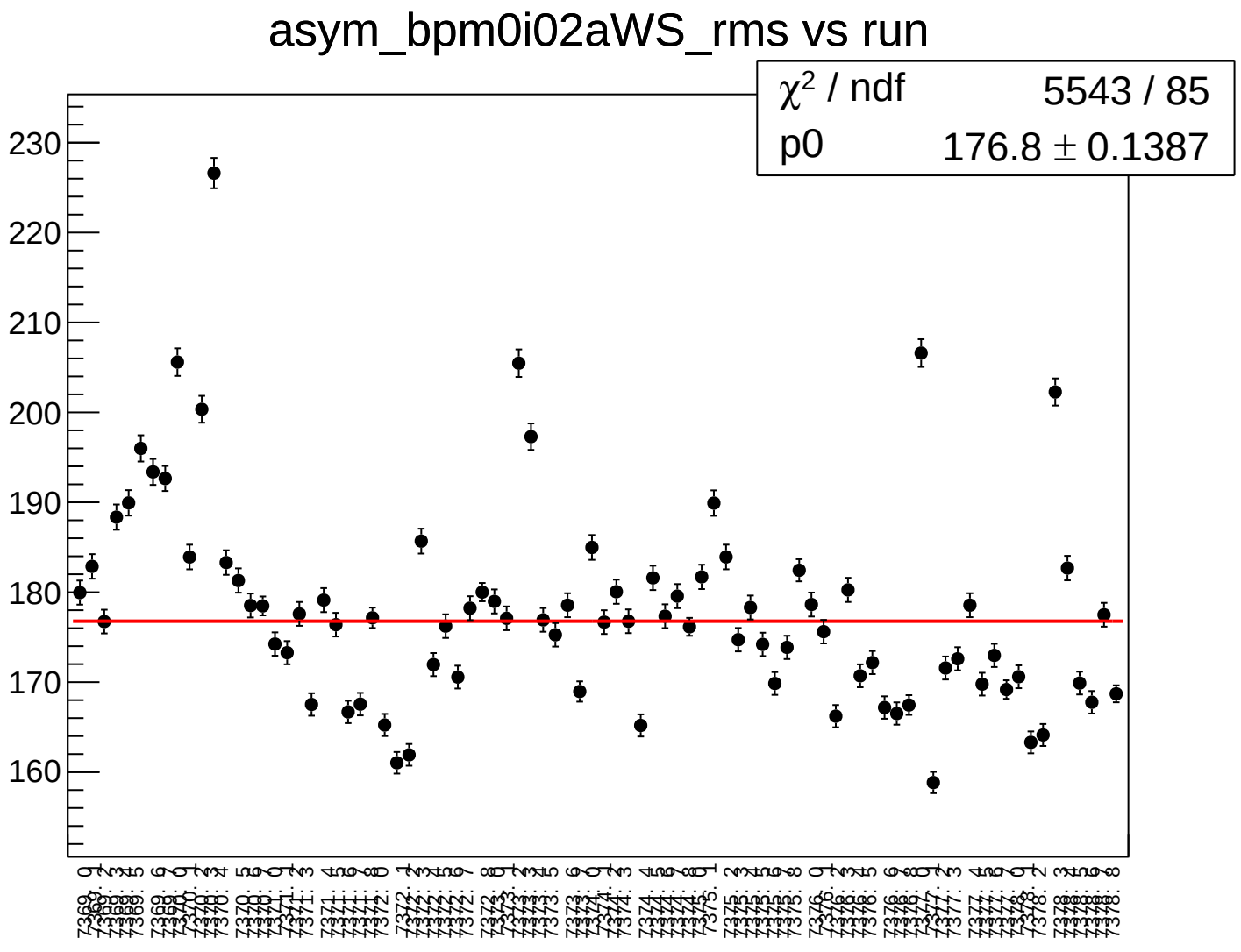

asym_bpm0i02WS_mean vs run
χ² / ndf 868.9 / 85
p0 −1.752e+04 ± 245
10000
0
−10000
−20000
−30000
pull
Entries 86
Mean −502.7
Std Dev 538.3
12
10
8
6
4
2
0
−2
−4

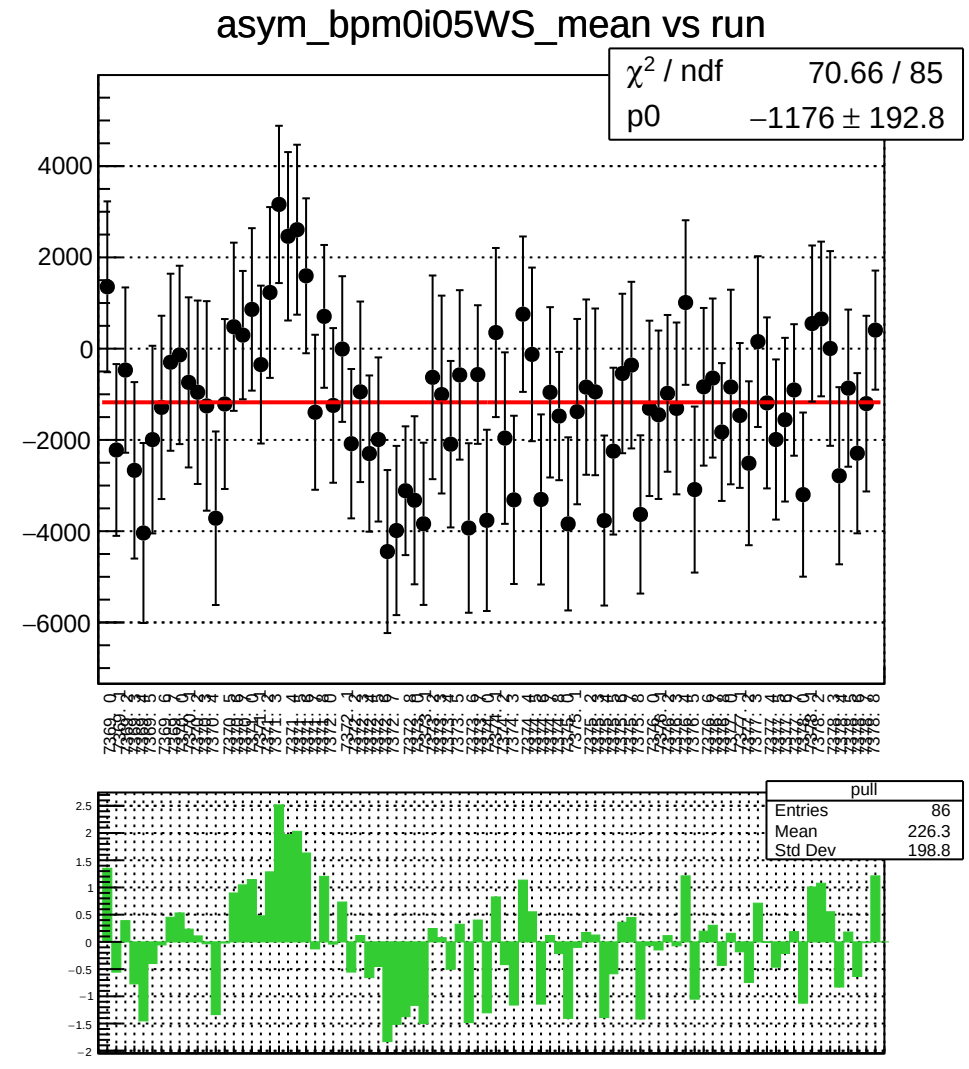

pull1D
Entries 86
Mean −0.5012
Std Dev 2.185
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

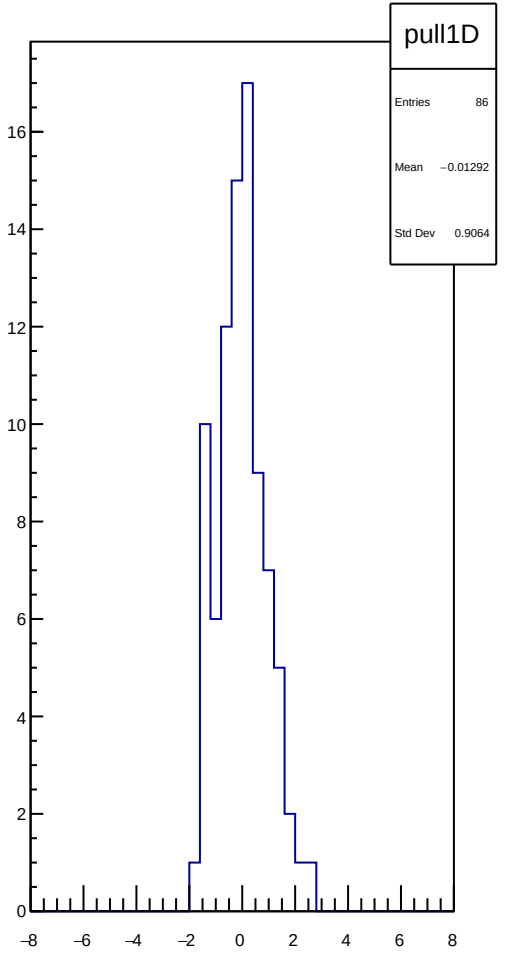

asym_bpm0i02WS_rms vs run
χ^2 / ndf 5731 / 85
p0 220.7 ± 0.1732
270
260
250
240
230
220
210
200
190

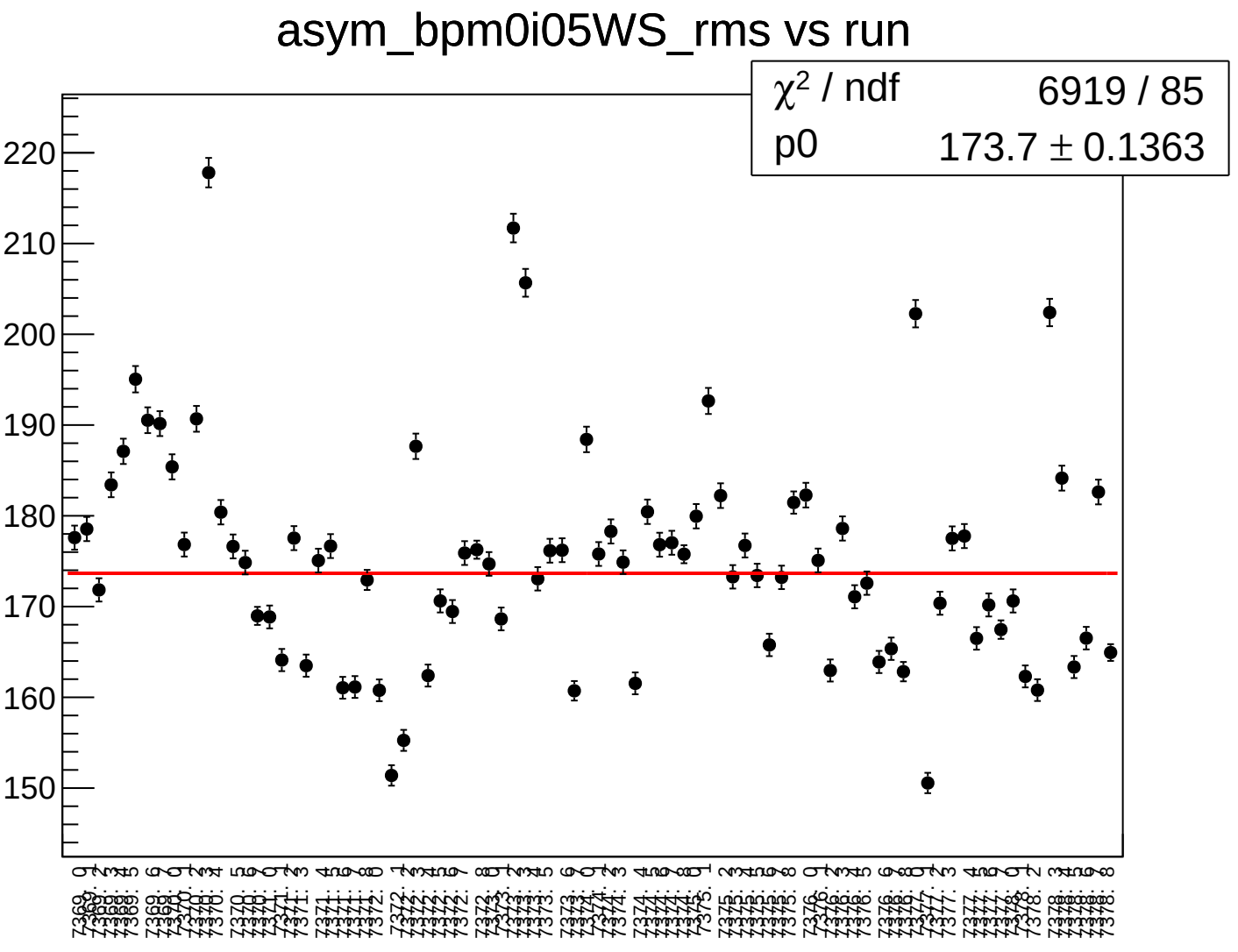

asym_bpm0i02aWS_mean vs run
χ² / ndf 874.5 / 85
p0 −2.17e+04 ± 196.2
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 86
Mean −506.9
Std Dev 542.1
12
10
8
6
4
2
0
−2

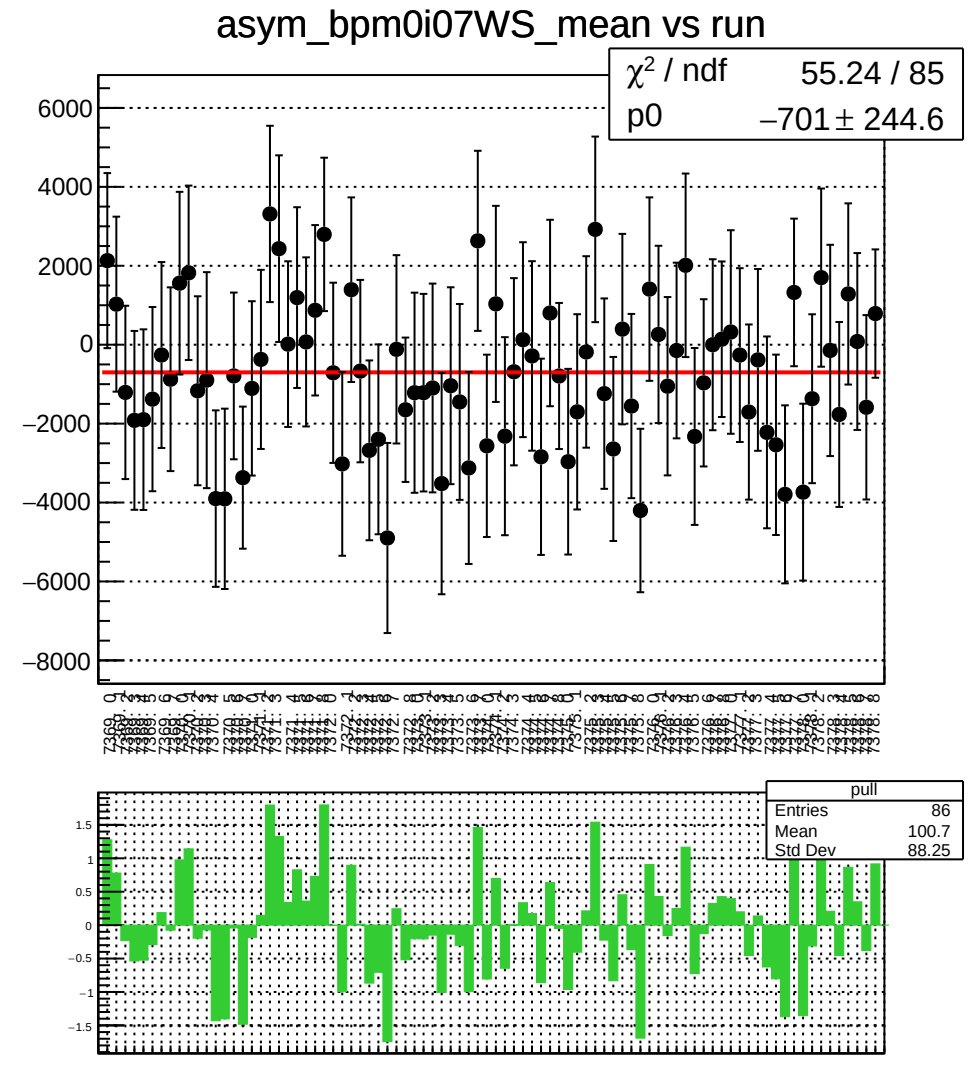

pull1D
Entries 86
Mean −0.7231
Std Dev 1.394
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

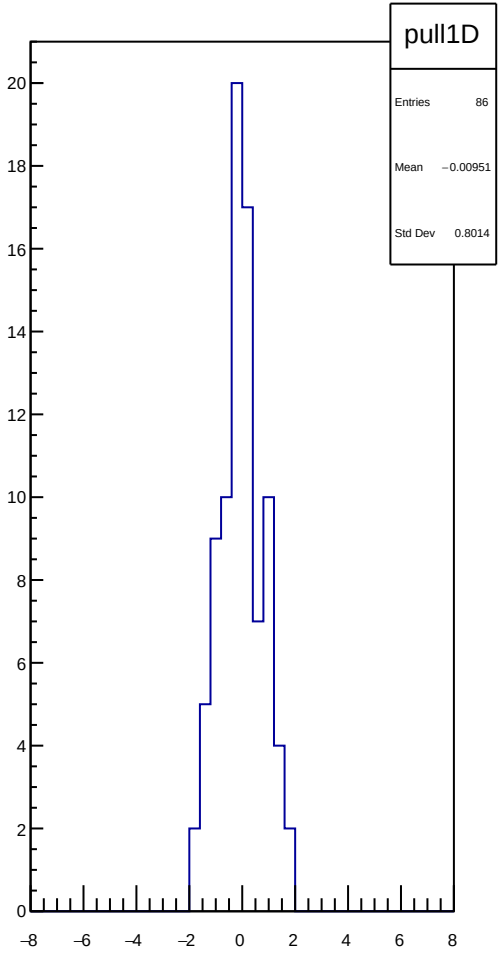

asym_bpm0i02aWS_rms vs run
χ² / ndf 5543 / 85
p0 176.8 ± 0.1387
230
220
210
200
190
180
170
160

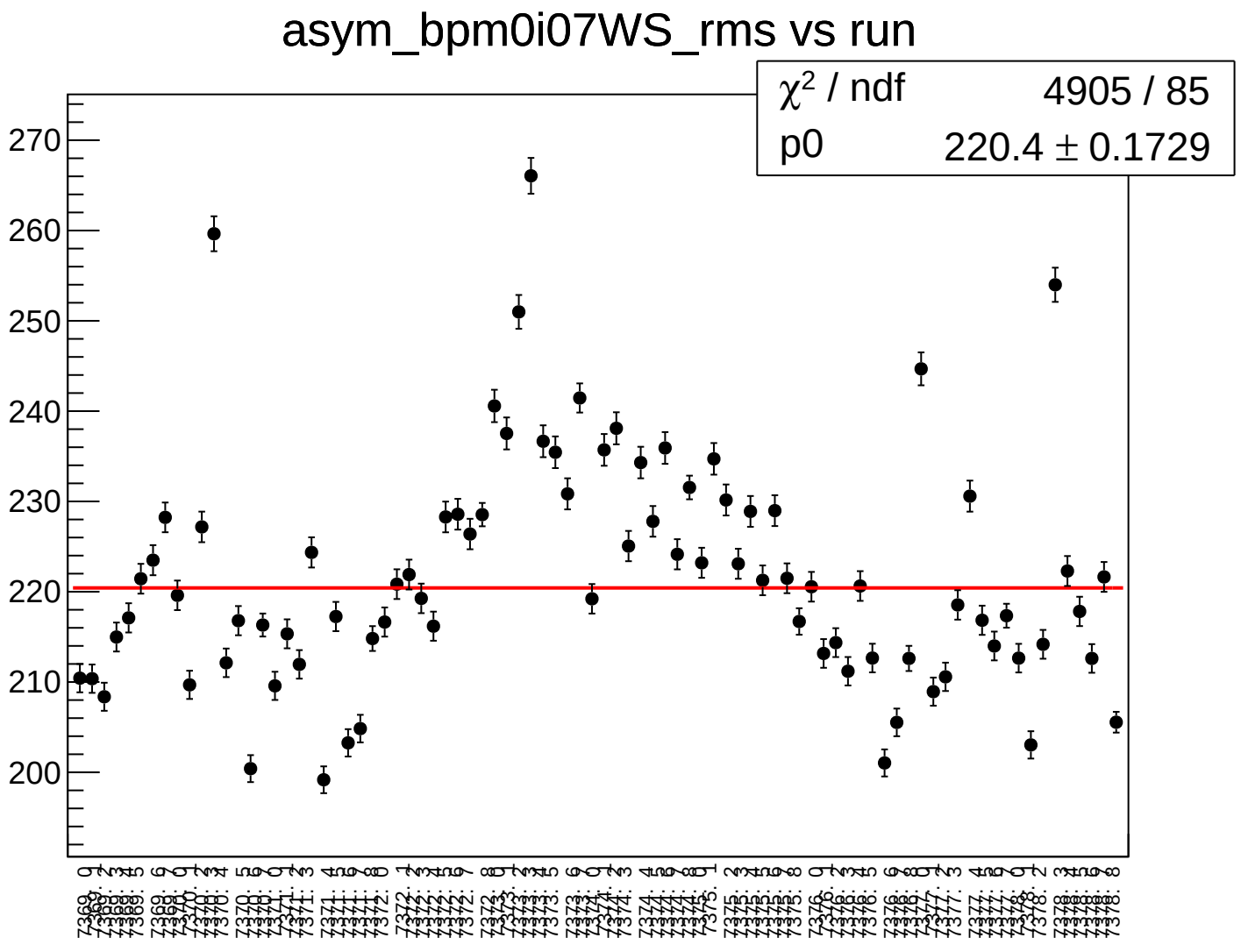

asym_bpm0i05WS_mean vs run
χ^2 / ndf 70.66 / 85
p0 −1176 ± 192.8
4000
2000
0
−2000
−4000
−6000
pull
Entries 86
Mean 226.3
Std Dev 198.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

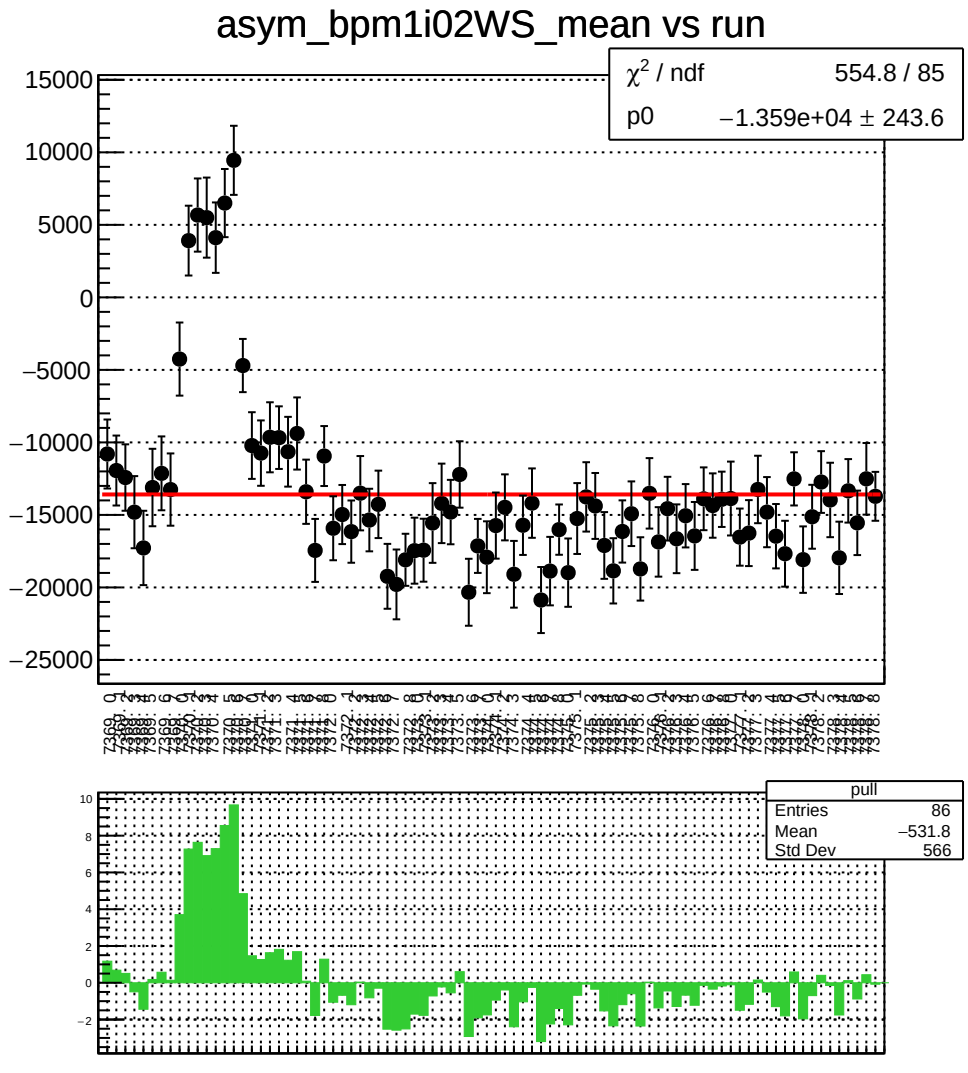

pull1D
Entries 86
Mean −0.01292
Std Dev 0.9064
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

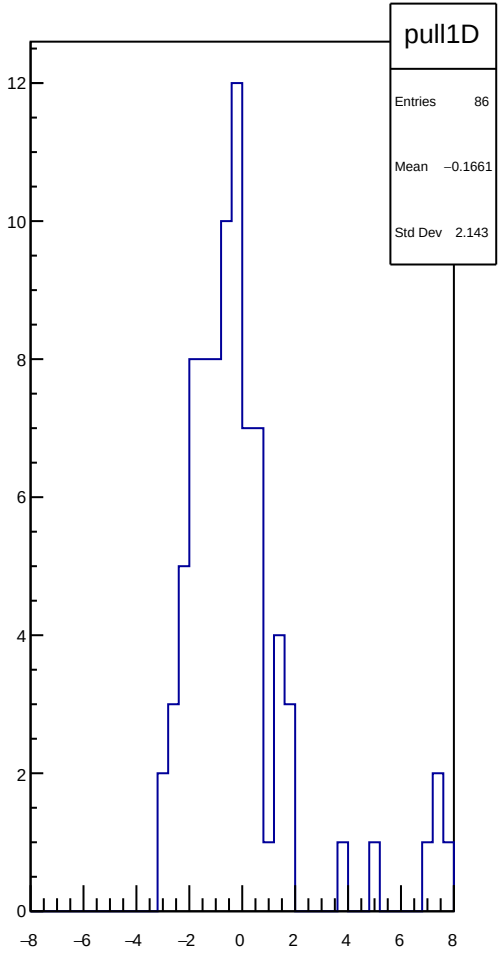

asym_bpm0i05WS_rms vs run
χ² / ndf 6919 / 85
p0 173.7 ± 0.1363
220
210
200
190
180
170
160
150

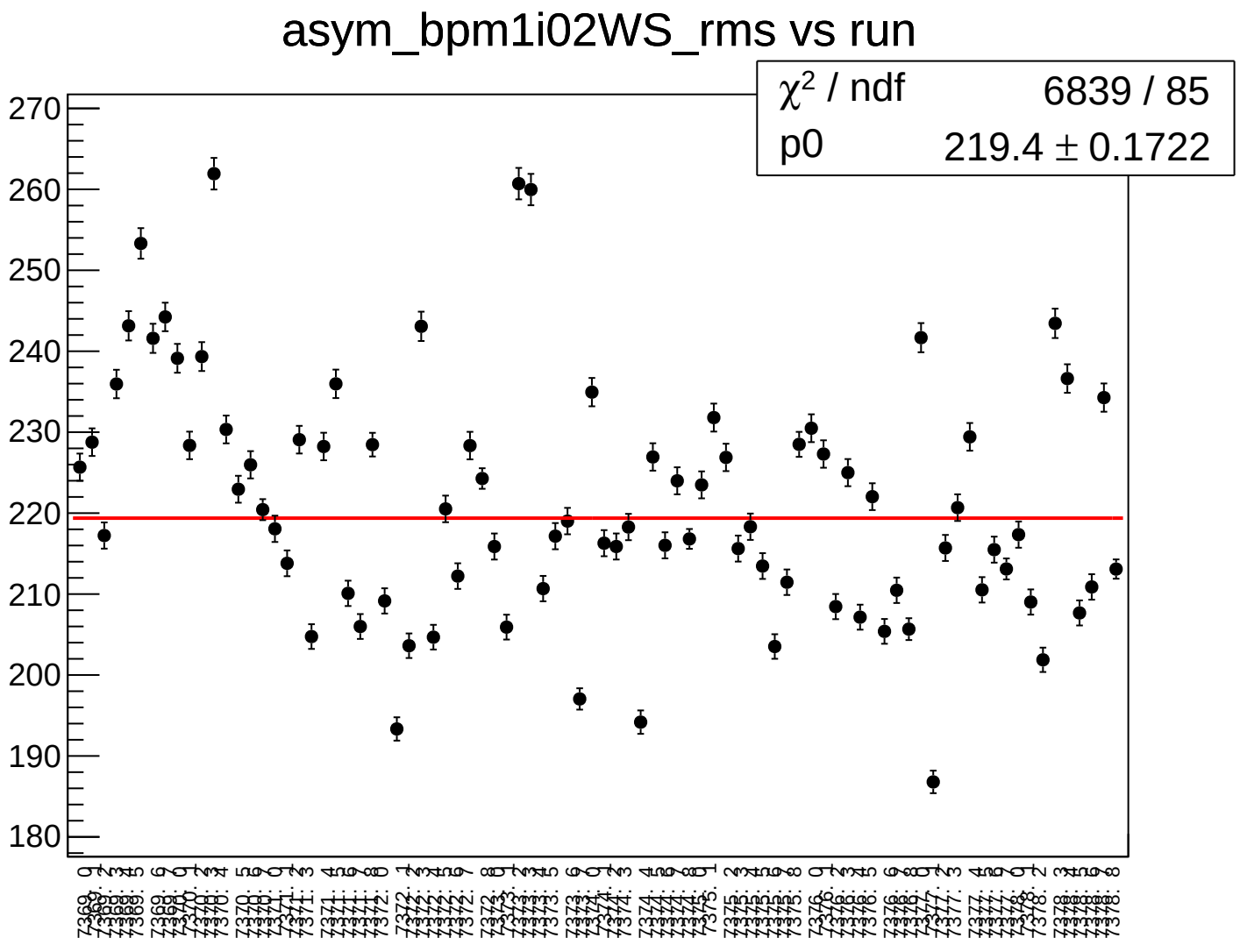

asym_bpm0i07WS_mean vs run
χ² / ndf 55.24 / 85
p0 −701 ± 244.6
pull
Entries 86
Mean 100.7
Std Dev 88.25

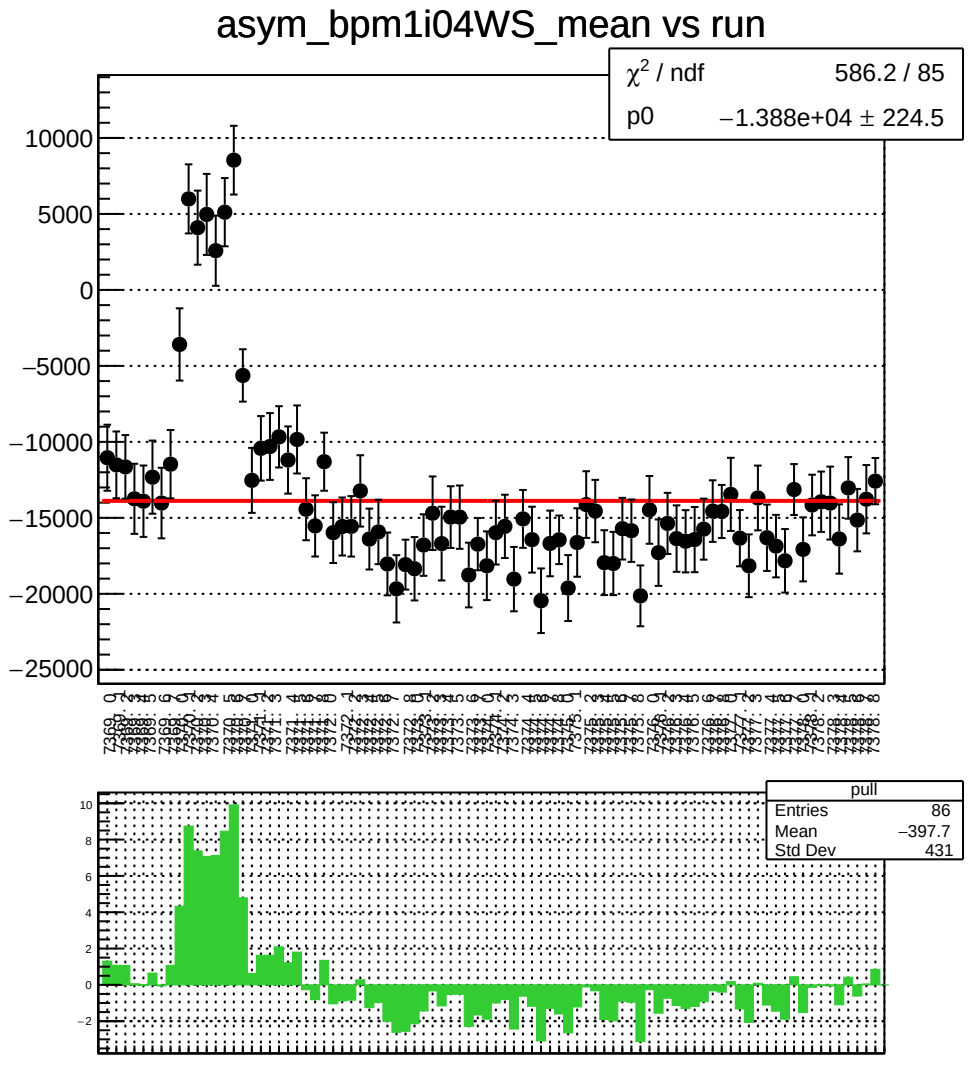

pull1D
Entries 86
Mean −0.00951
Std Dev 0.8014

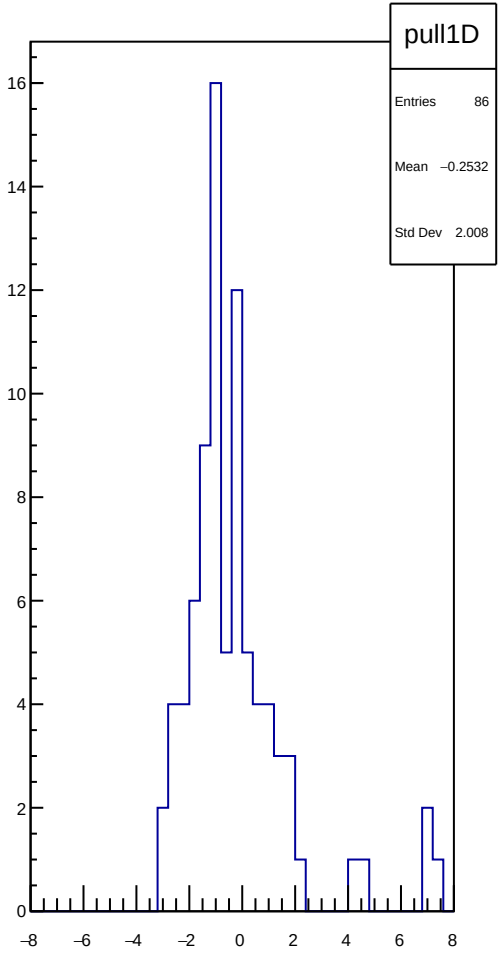

asym_bpm0i07WS_rms vs run
χ² / ndf 4905 / 85
p0 220.4 ± 0.1729
270
260
250
240
230
220
210
200

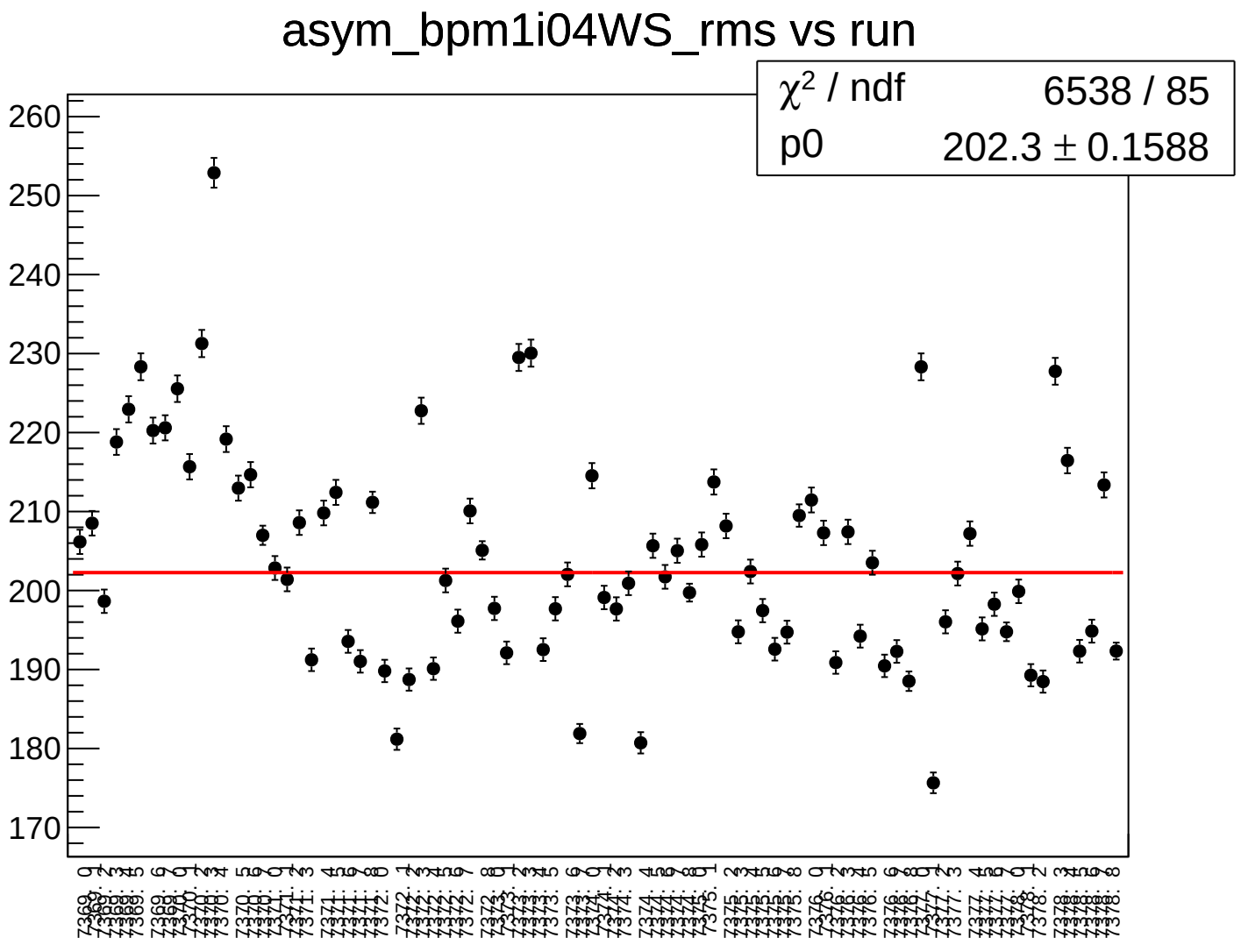

asym_bpm1i02WS_mean vs run
χ² / ndf 554.8 / 85
p0 −1.359e+04 ± 243.6
pull
Entries 86
Mean −531.8
Std Dev 566

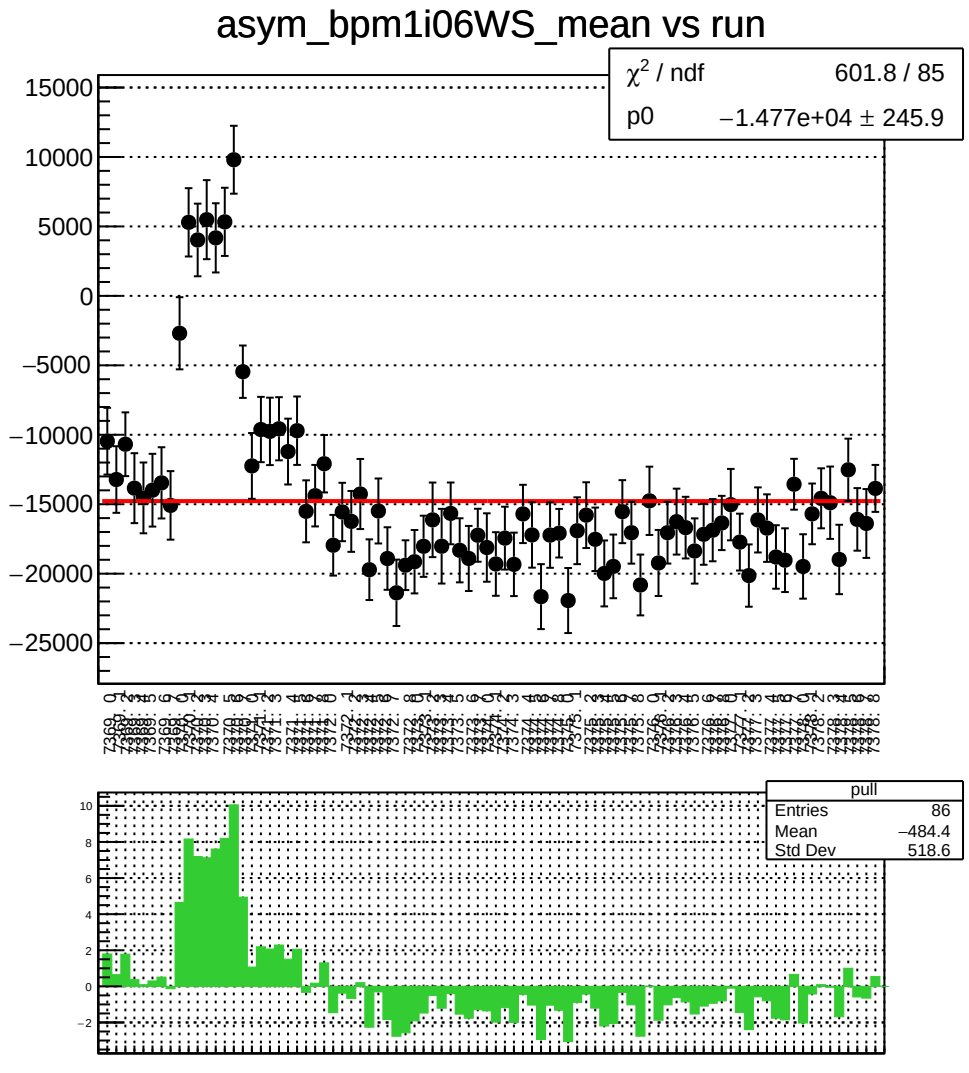

pull1D
Entries 86
Mean −0.1661
Std Dev 2.143

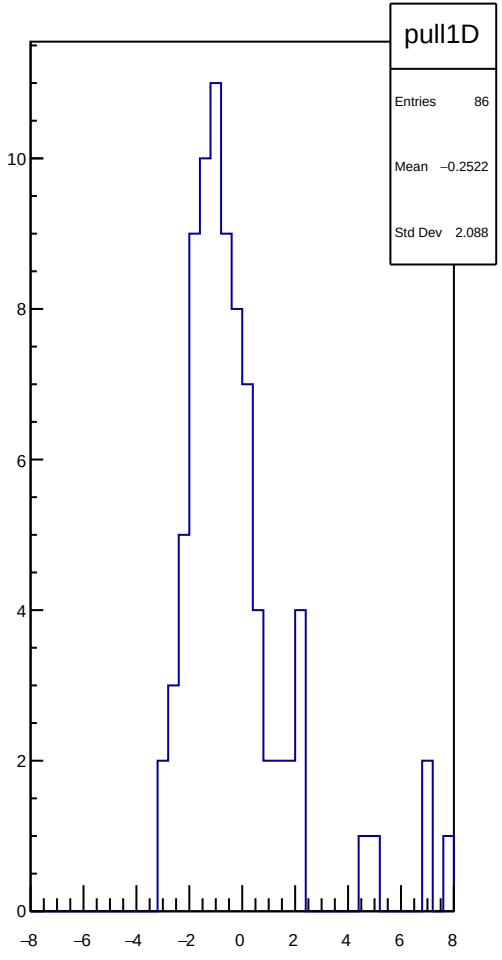

asym_bpm1i02WS_rms vs run
χ² / ndf 6839 / 85
p0 219.4 ± 0.1722
270
260
250
240
230
220
210
200
190
180

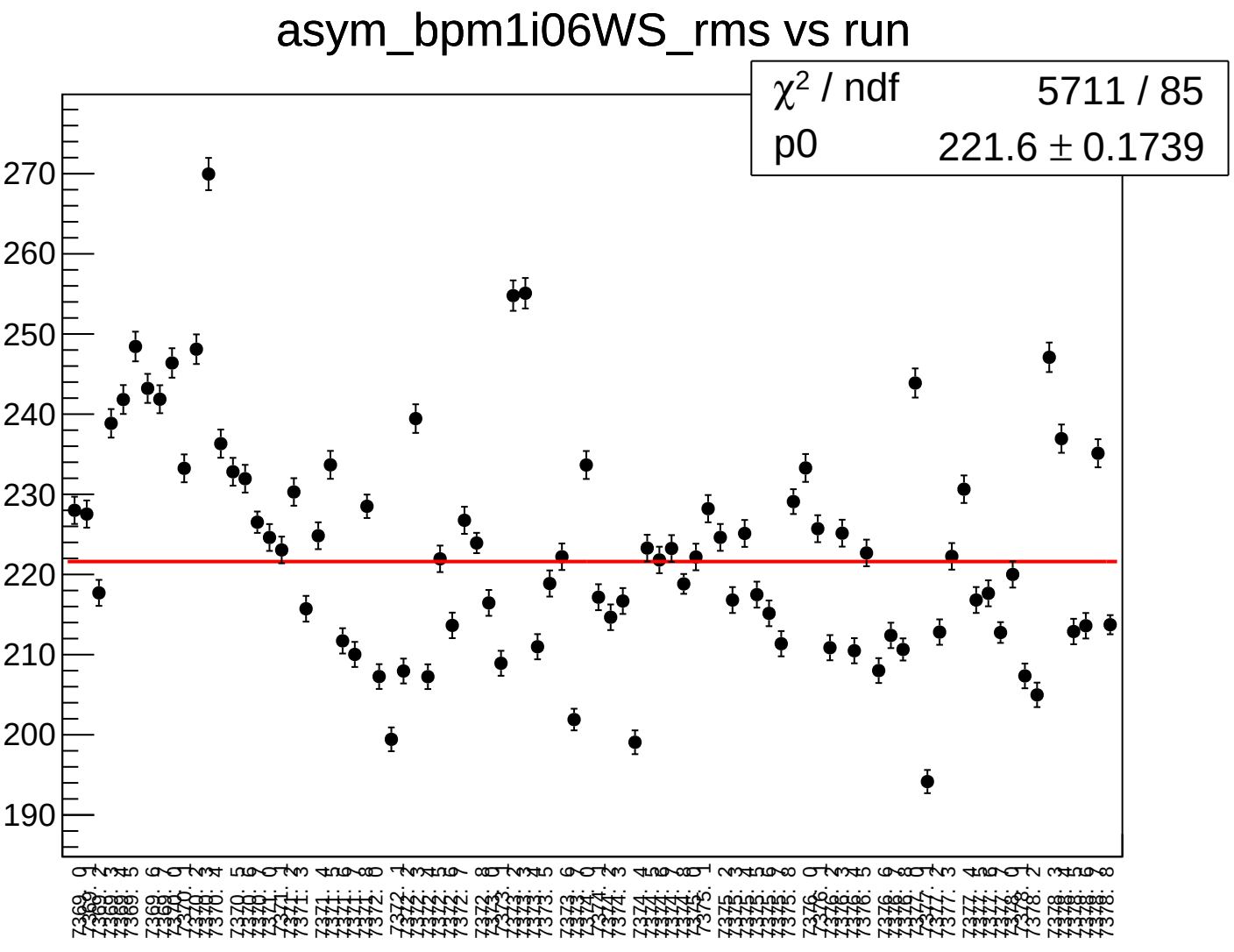

asym_bpm1i04WS_mean vs run
χ² / ndf 586.2 / 85
p0 −1.388e+04 ± 224.5
pull
Entries 86
Mean −397.7
Std Dev 431

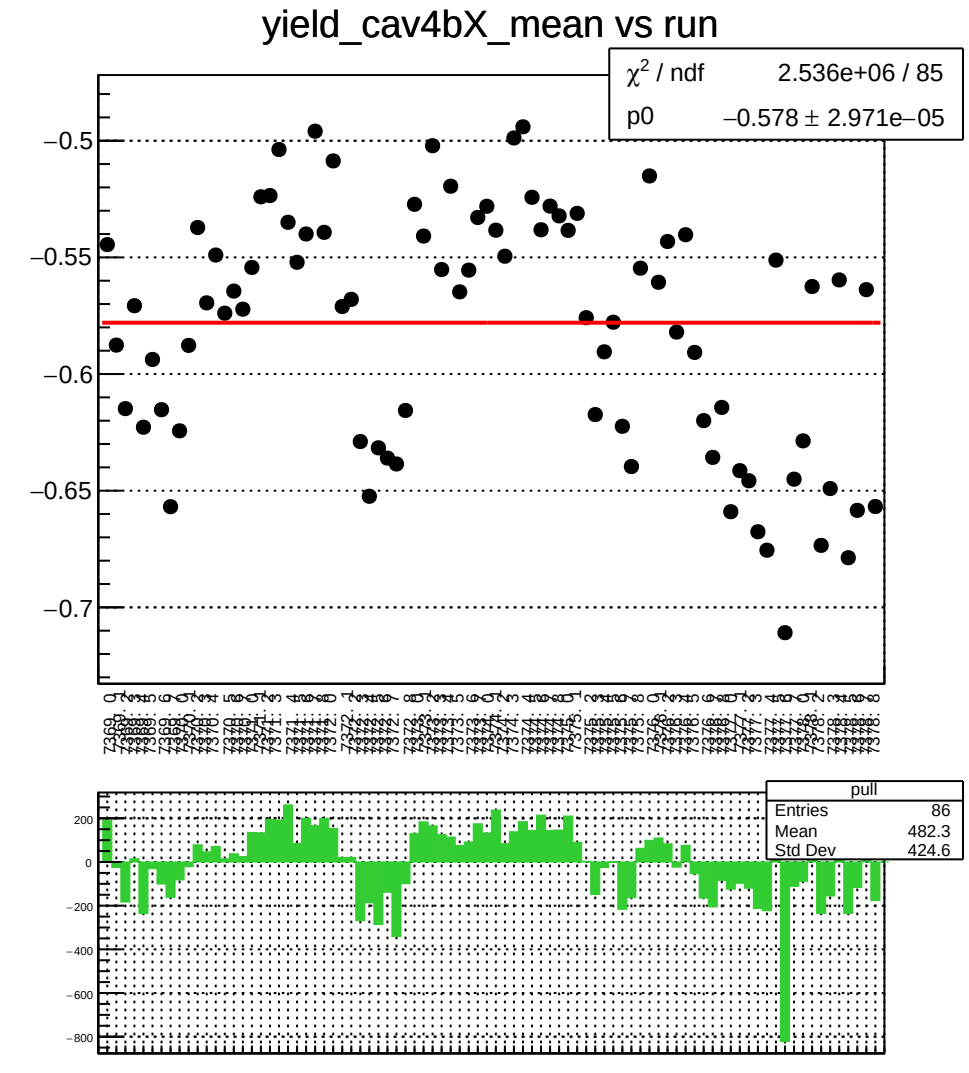

pull1D
Entries 86
Mean −0.2532
Std Dev 2.008

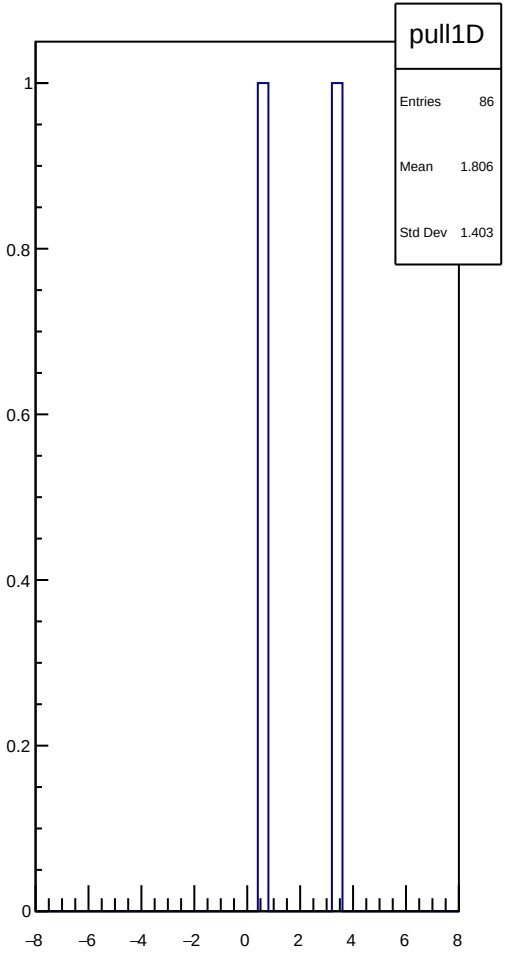

asym_bpm1i04WS_rms vs run
χ² / ndf 6538 / 85
p0 202.3 ± 0.1588
260
250
240
230
220
210
200
190
180
170

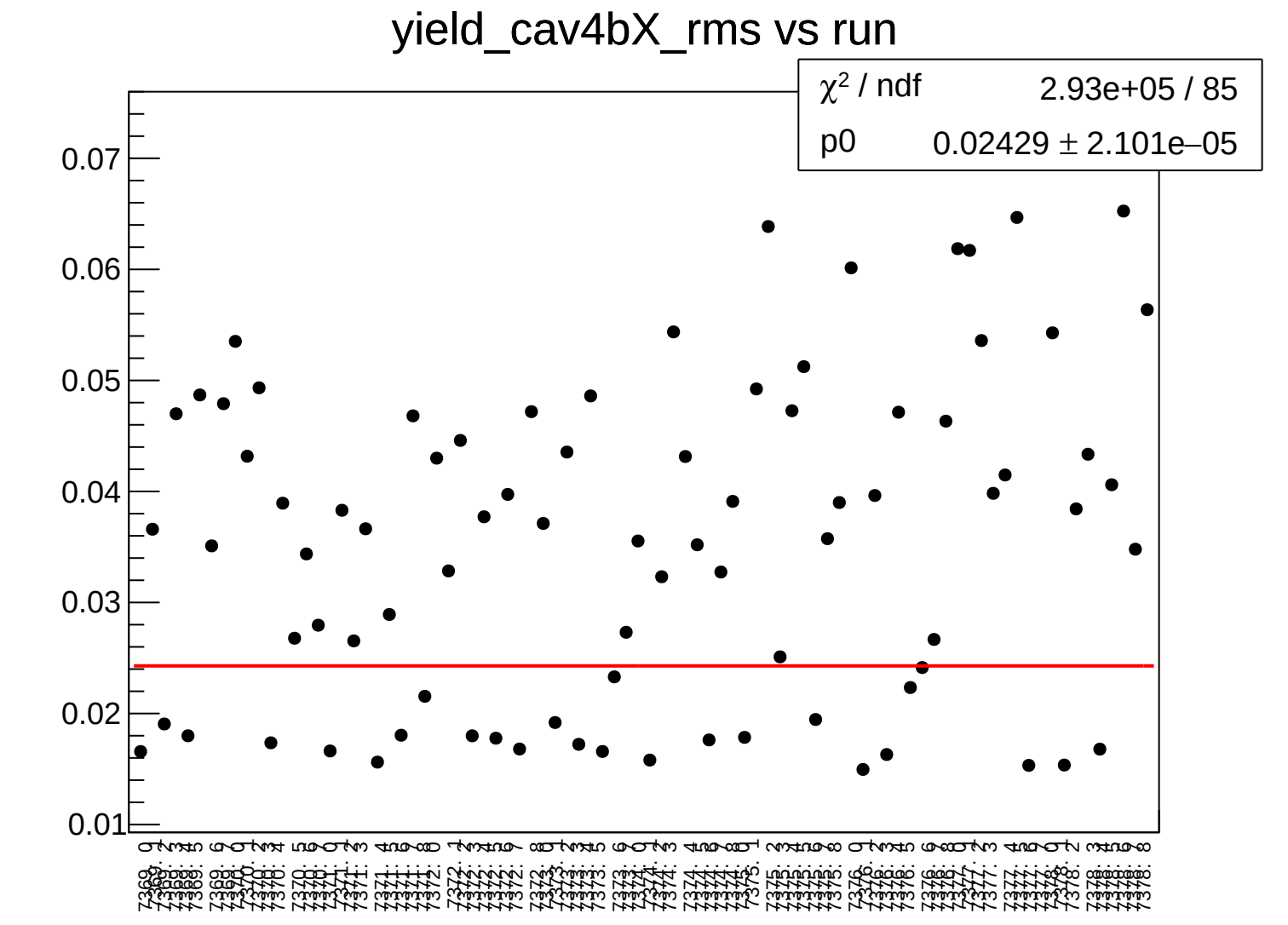

asym_bpm1i06WS_mean vs run
χ² / ndf 601.8 / 85
p0 −1.477e+04 ± 245.9
pull
Entries 86
Mean −484.4
Std Dev 518.6

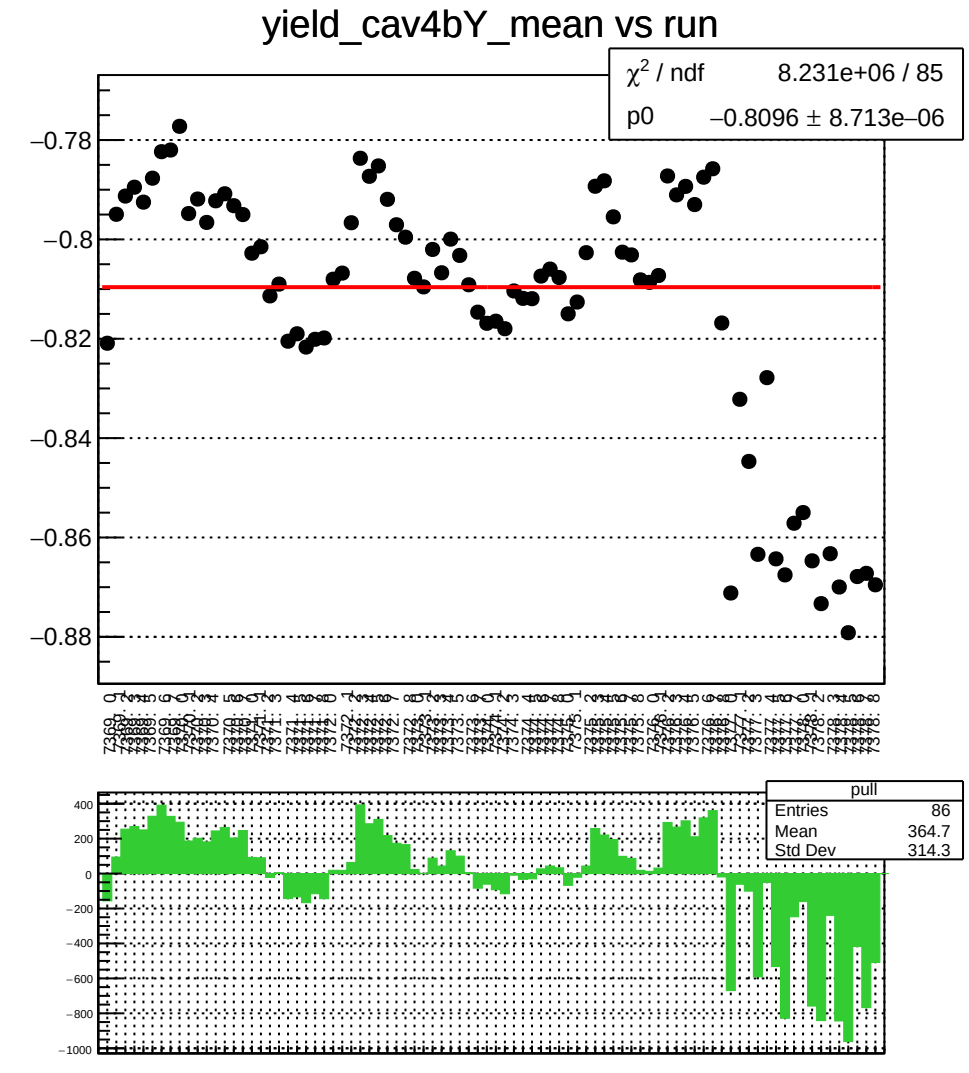

pull1D
Entries 86
Mean −0.2522
Std Dev 2.088

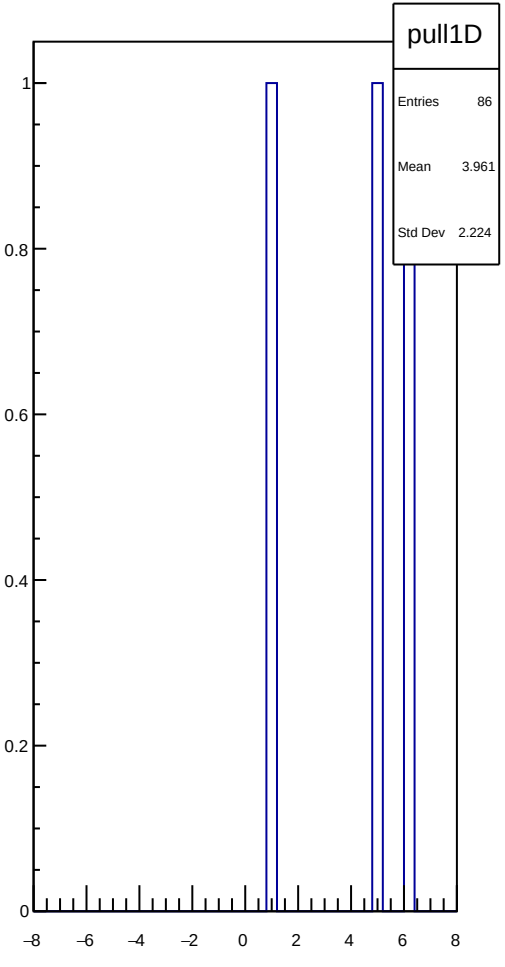

asym_bpm1i06WS_rms vs run
χ² / ndf 5711 / 85
p0 221.6 ± 0.1739
270
260
250
240
230
220
210
200
190

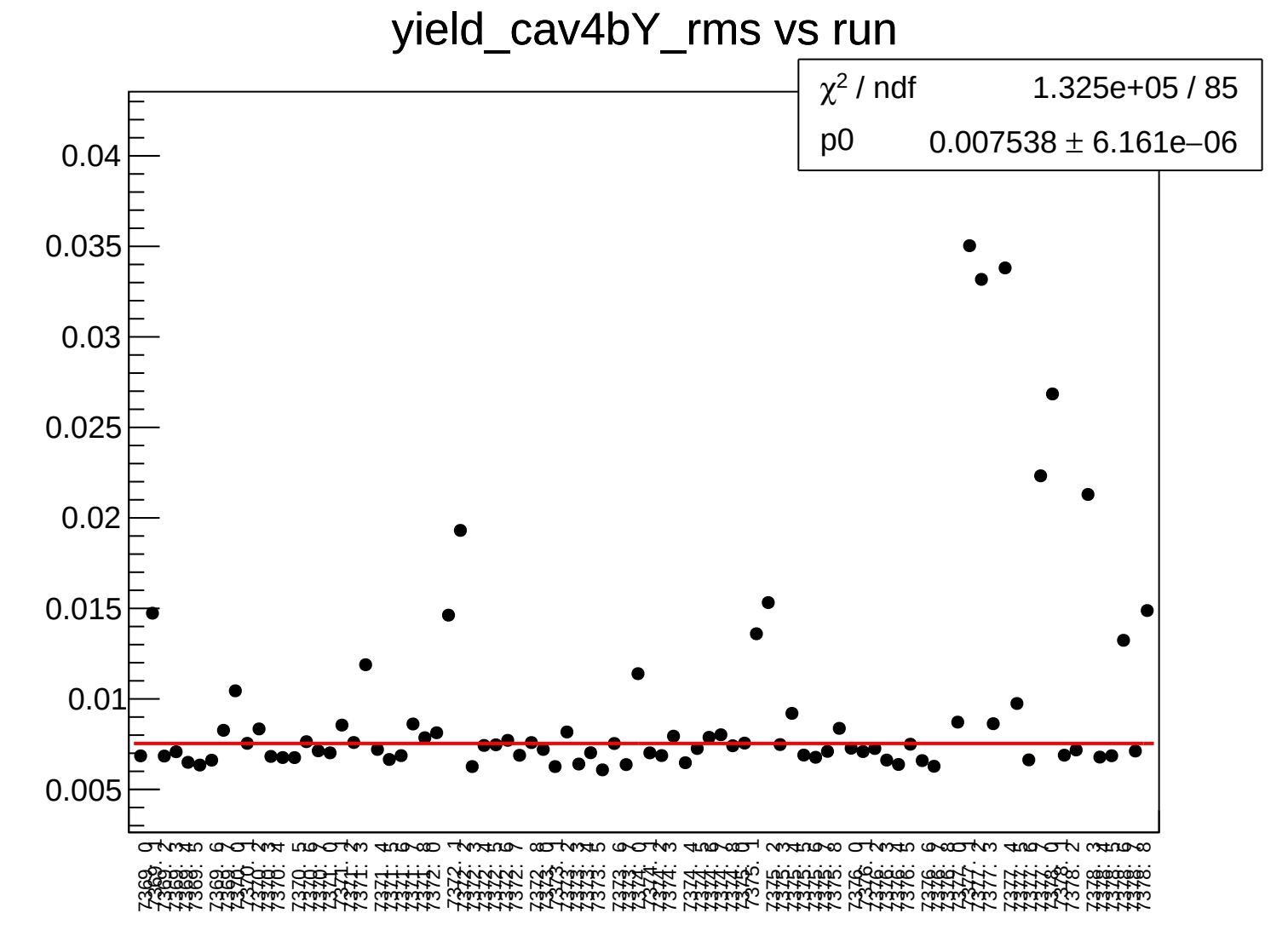

yield_cav4bX_mean vs run
χ² / ndf 2.536e+06 / 85
p0 −0.578 ± 2.971e−05
−0.5
−0.55
−0.6
−0.65
−0.7
pull
Entries 86
Mean 482.3
Std Dev 424.6
200
0
−200
−400
−600
−800

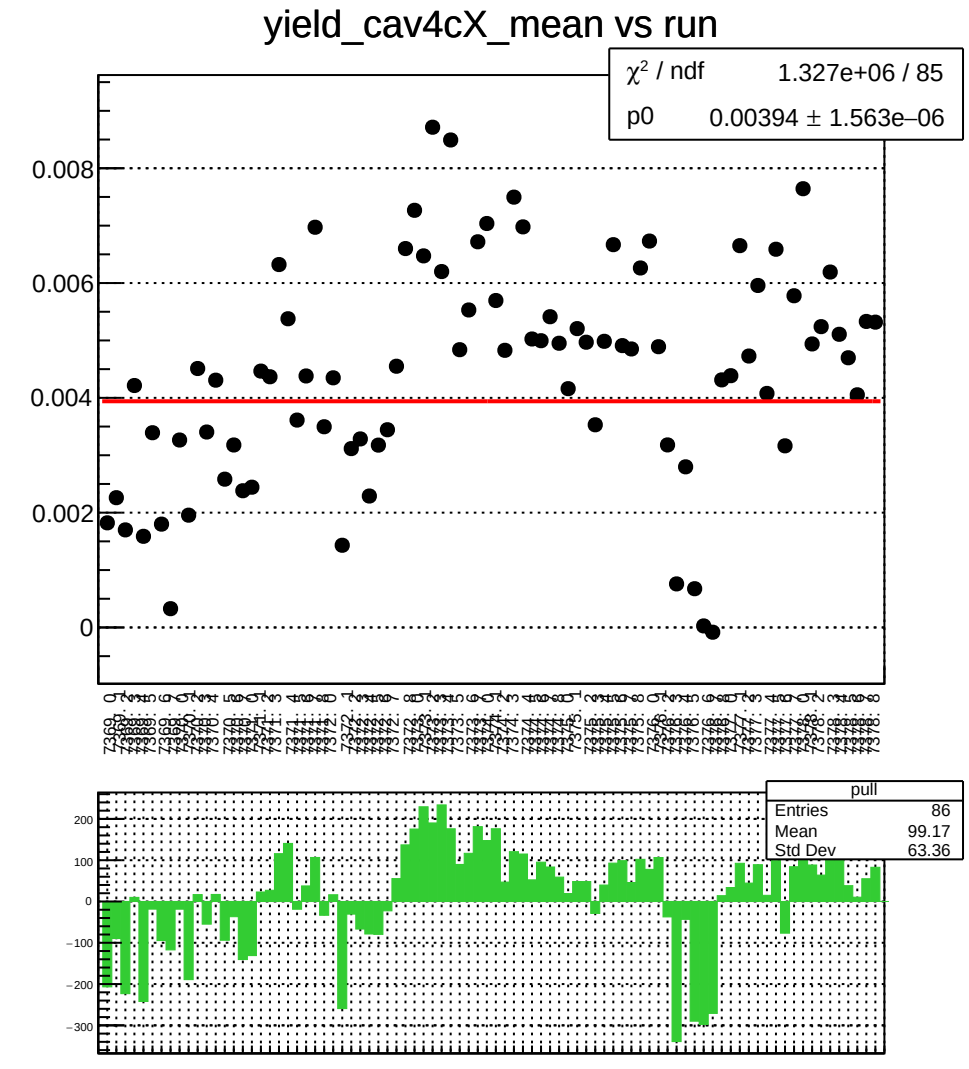

pull1D
Entries 86
Mean 1.806
Std Dev 1.403
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

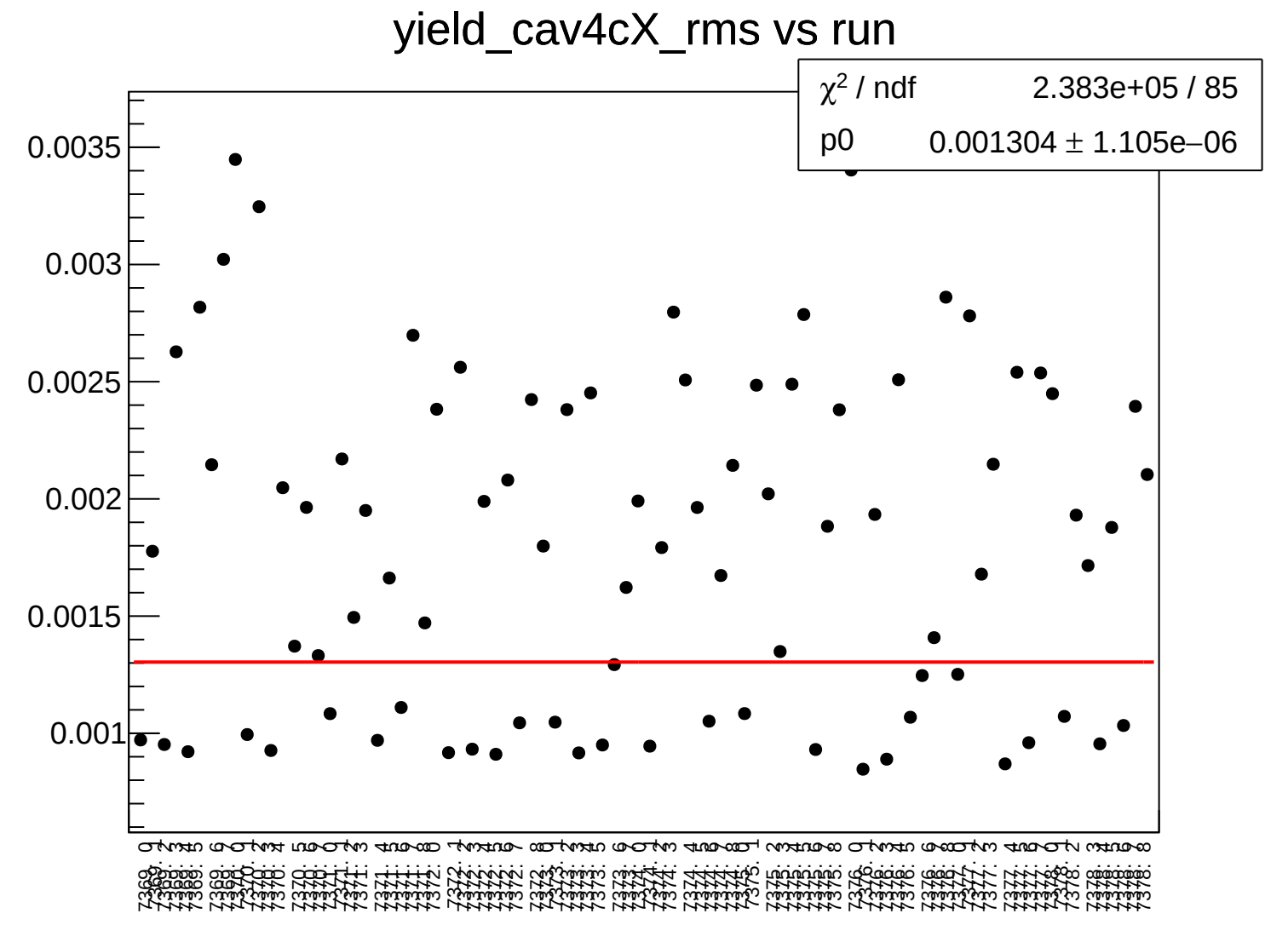

yield_cav4bX_rms vs run
χ² / ndf 2.93e+05 / 85
p0 0.02429 ± 2.101e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

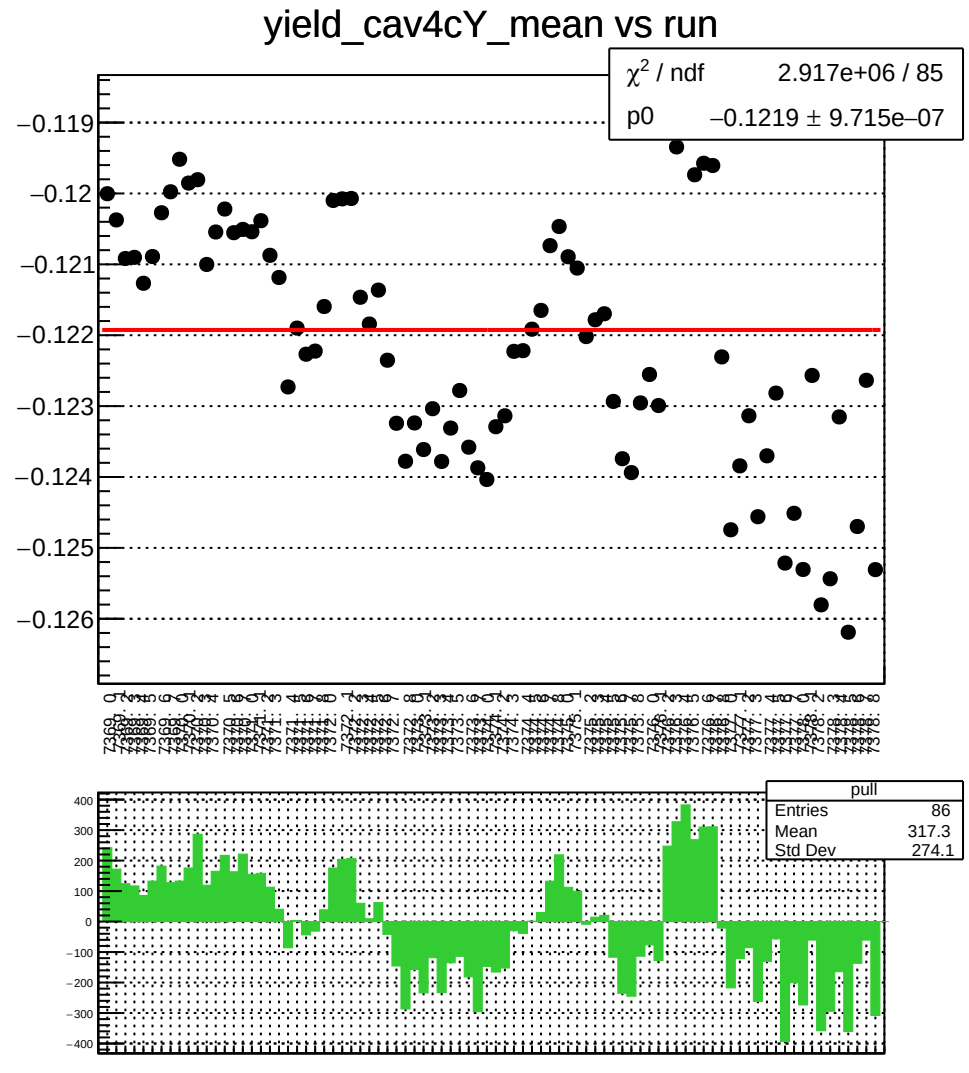

yield_cav4bY_mean vs run
χ² / ndf 8.231e+06 / 85
p0 −0.8096 ± 8.713e−06
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
pull
Entries 86
Mean 364.7
Std Dev 314.3
400
200
0
−200
−400
−600
−800
−1000

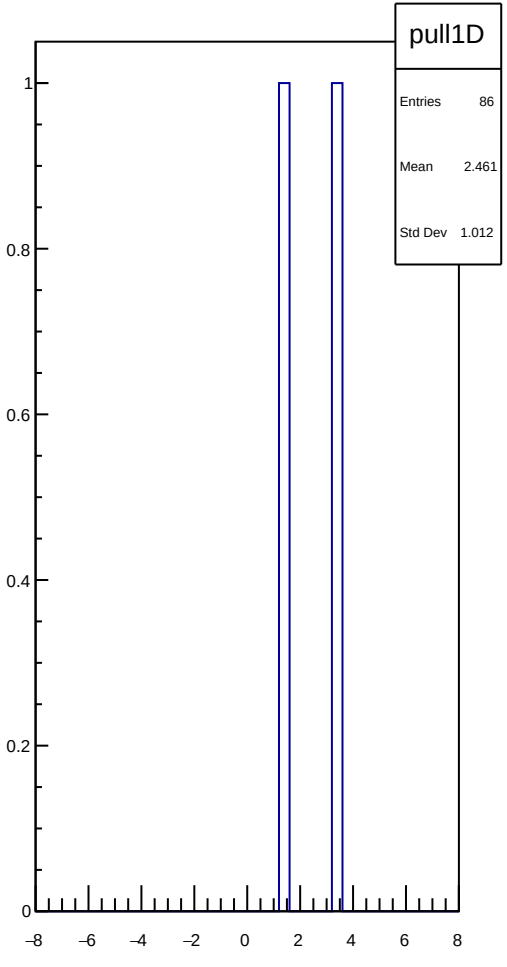

pull1D
Entries 86
Mean 3.961
Std Dev 2.224
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

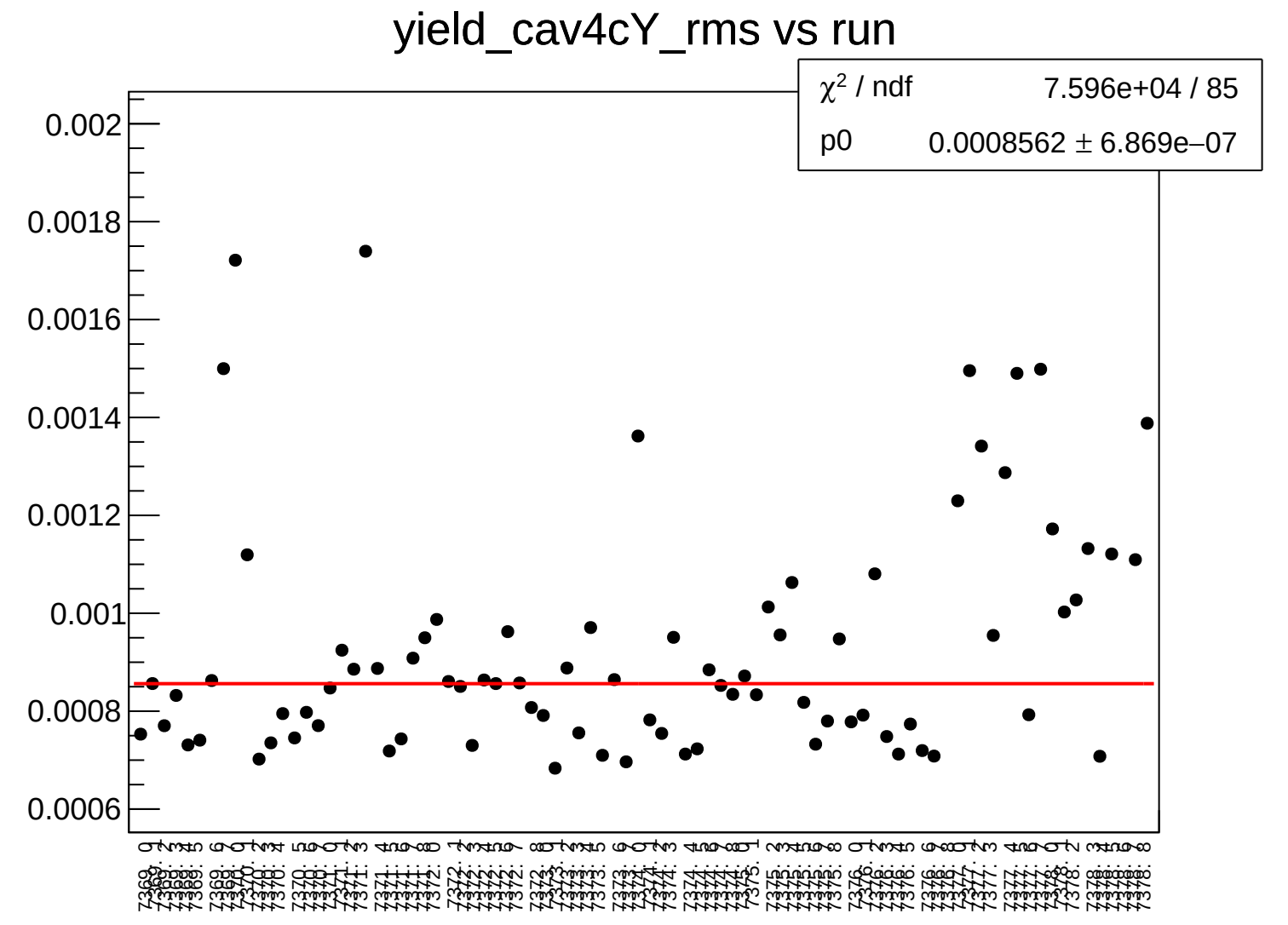

yield_cav4bY_rms vs run
χ² / ndf 1.325e+05 / 85
p0 0.007538 ± 6.161e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

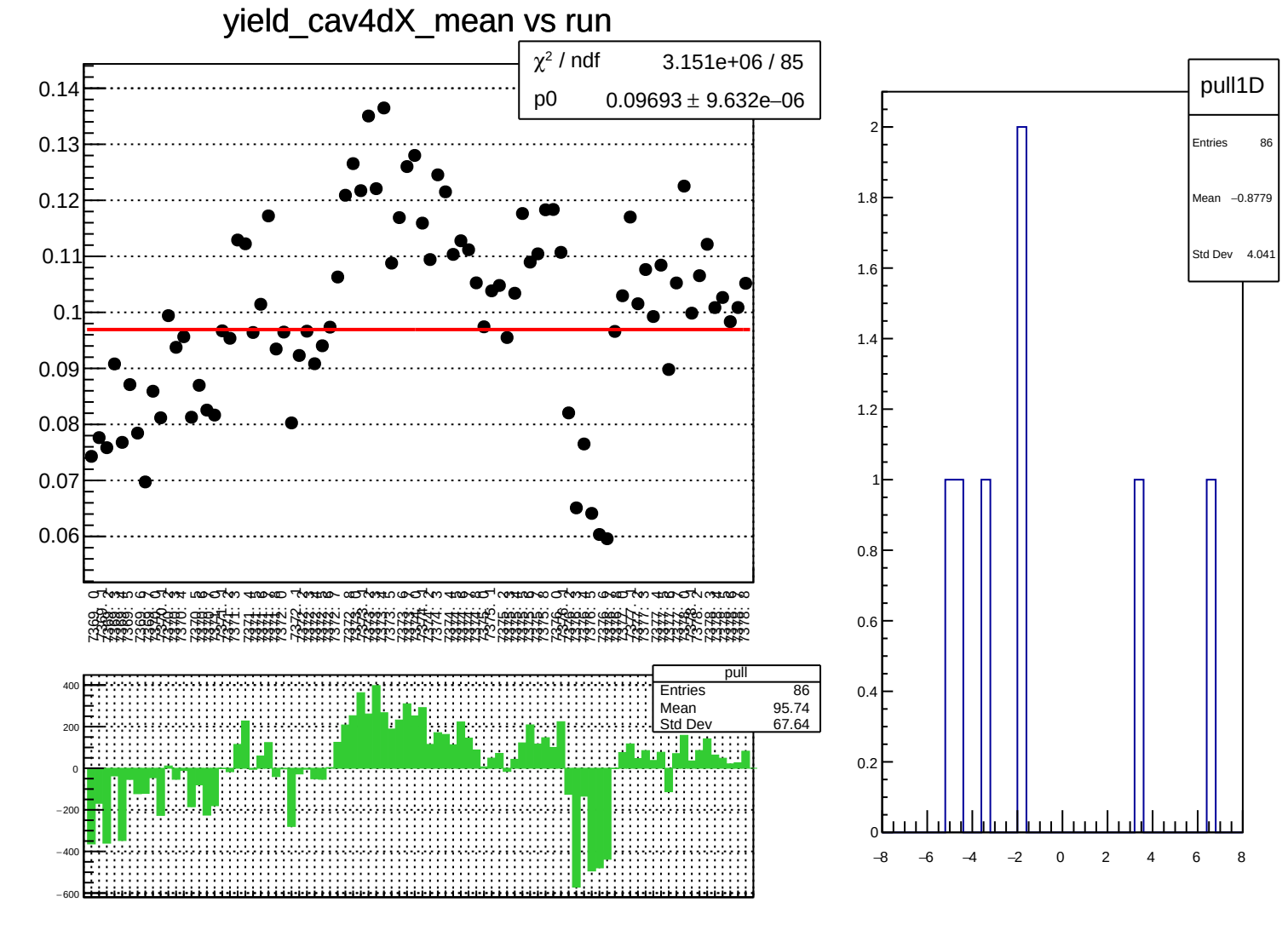

yield_cav4cX_mean vs run
χ² / ndf 1.327e+06 / 85
p0 0.00394 ± 1.563e−06
0.008
0.006
0.004
0.002
0
pull
Entries 86
Mean 99.17
Std Dev 63.36
200
100
0
−100
−200
−300
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

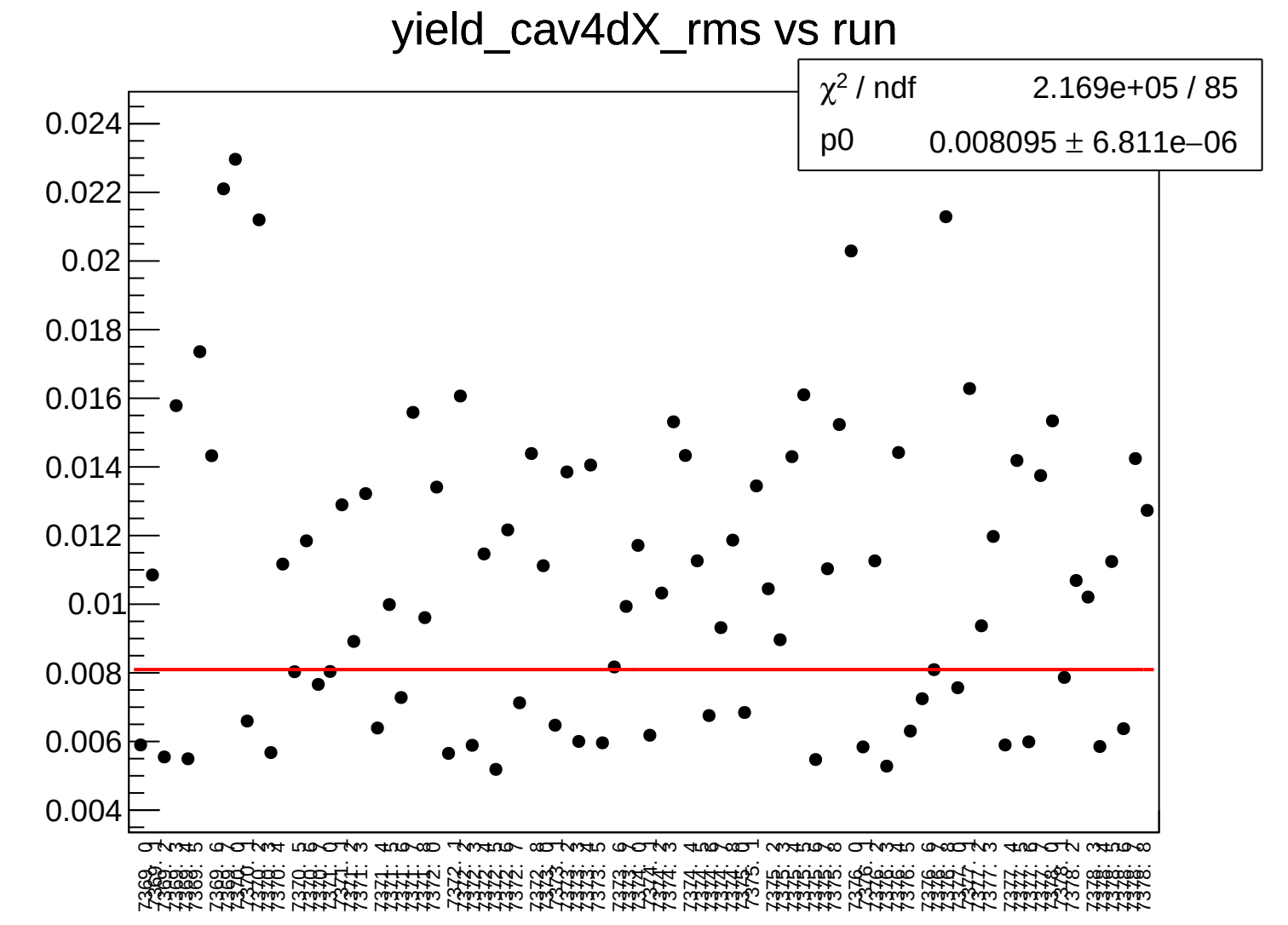

yield_cav4cX_rms vs run
χ² / ndf 2.383e+05 / 85
p0 0.001304 ± 1.105e−06
0.0035
0.003
0.0025
0.002
0.0015
0.001

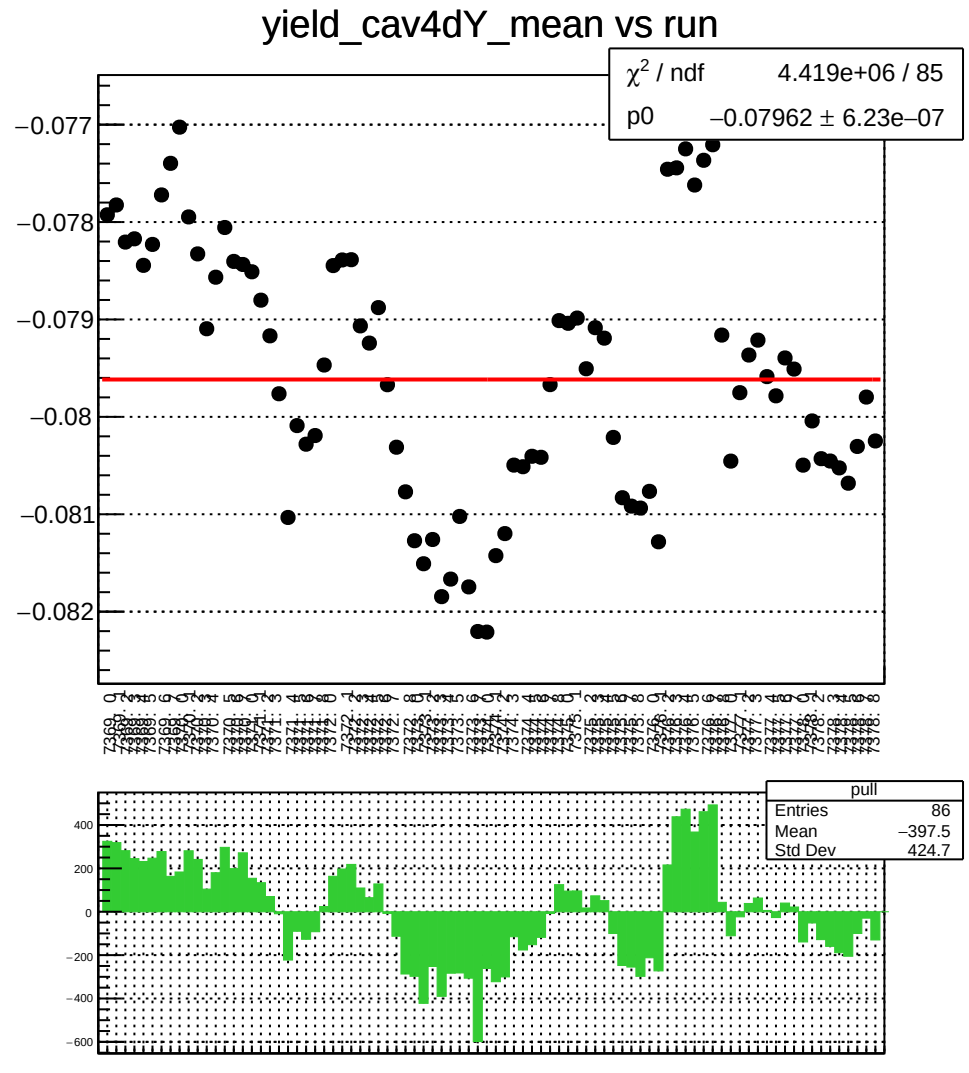

yield_cav4cY_mean vs run
χ² / ndf 2.917e+06 / 85
p0 −0.1219 ± 9.715e−07
−0.119
−0.12
−0.121
−0.122
−0.123
−0.124
−0.125
−0.126
pull
Entries 86
Mean 317.3
Std Dev 274.1
400
300
200
100
0
−100
−200
−300
−400

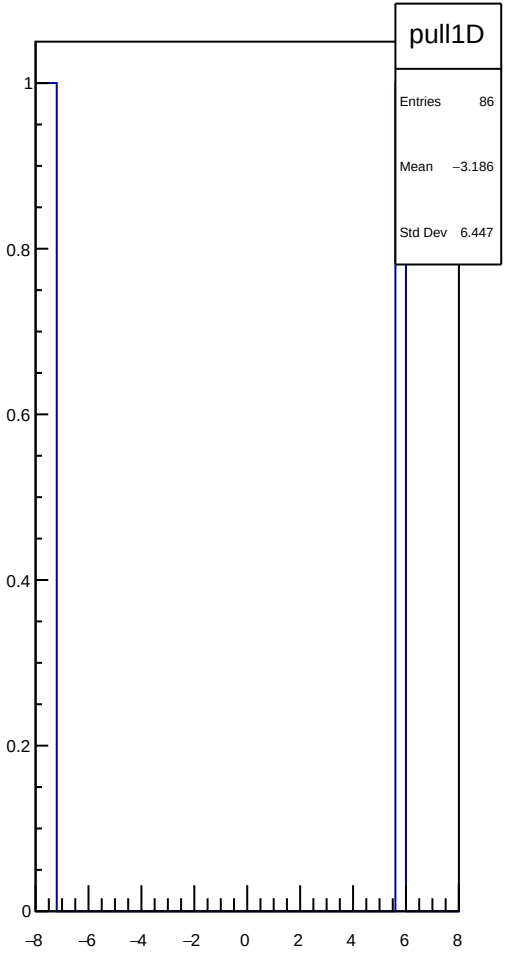

pull1D
Entries 86
Mean 2.461
Std Dev 1.012
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

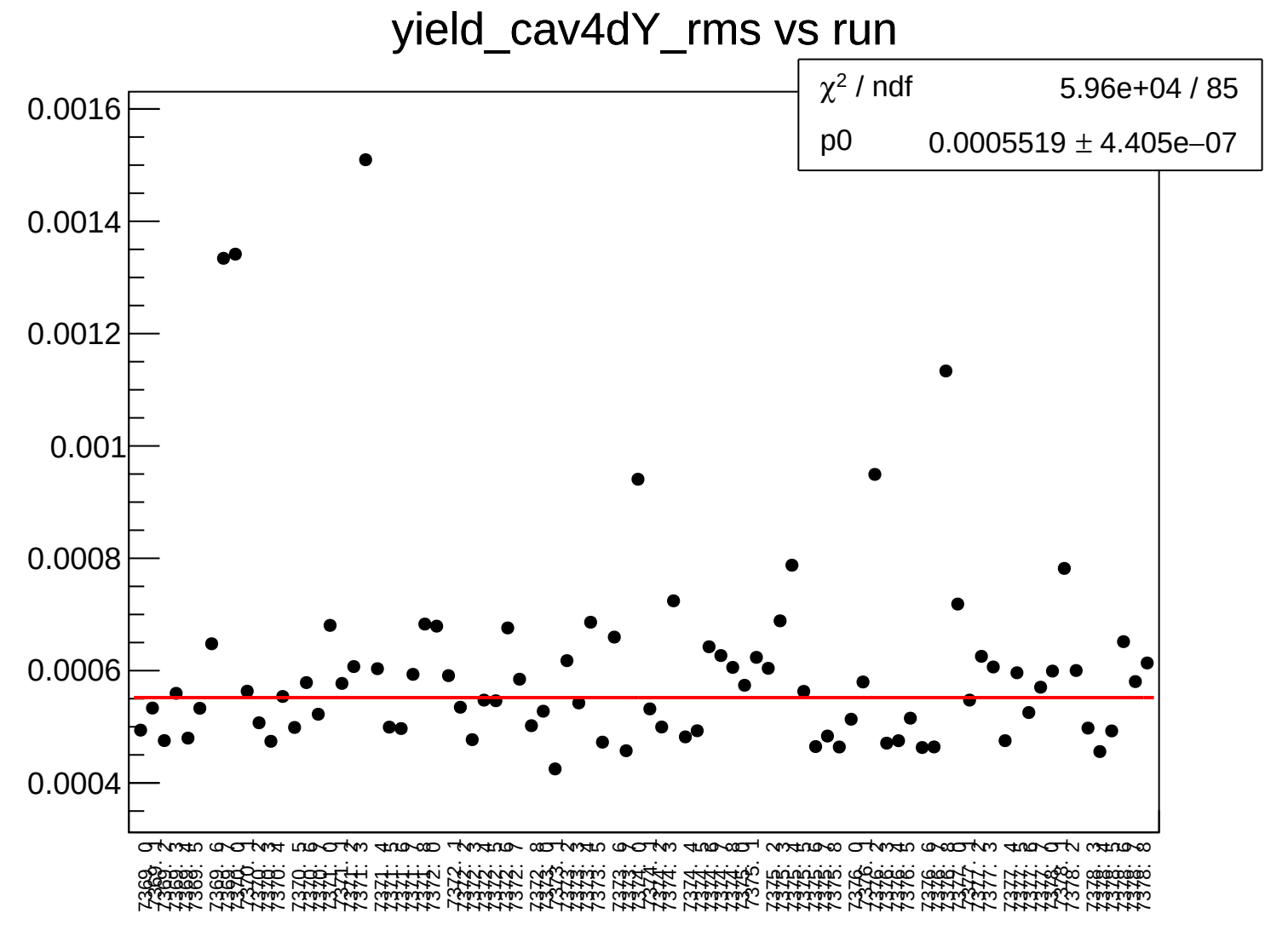

yield_cav4cY_rms vs run
χ² / ndf 7.596e+04 / 85
p0 0.0008562 ± 6.869e−07
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006

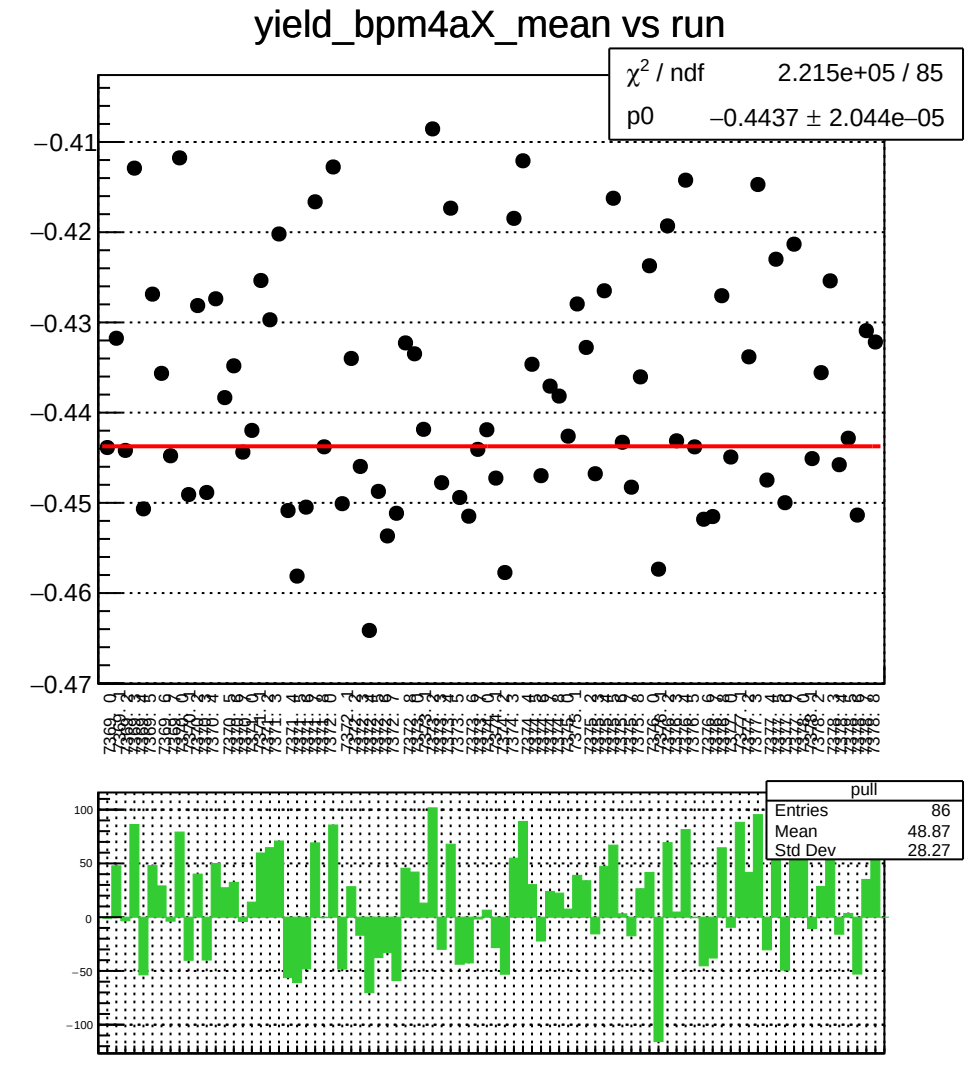

yield_cav4dX_mean vs run
χ² / ndf 3.151e+06 / 85
p0 0.09693 ± 9.632e−06
pull
Entries 86
Mean 95.74
Std Dev 67.64
pull1D
Entries 86
Mean −0.8779
Std Dev 4.041

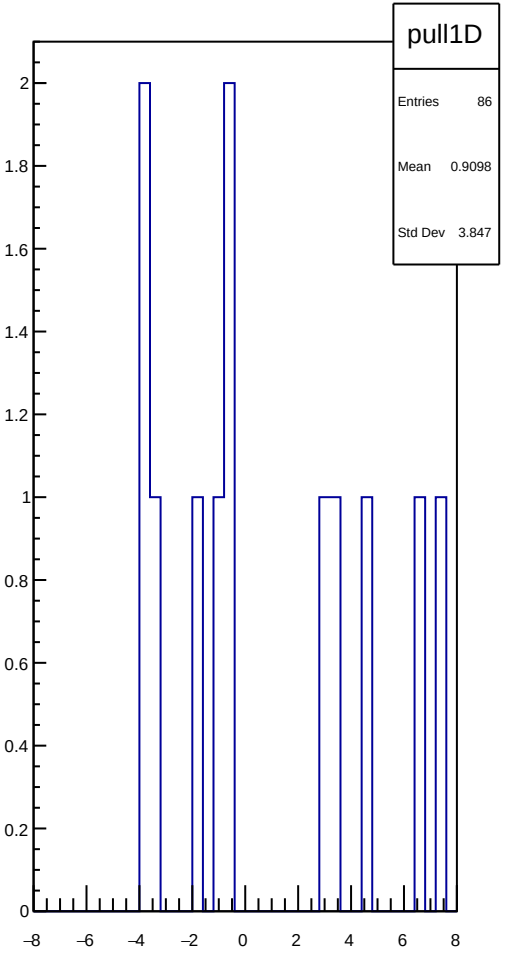

yield_cav4dX_rms vs run
χ^2 / ndf 2.169e+05 / 85
p0 0.008095 ± 6.811e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

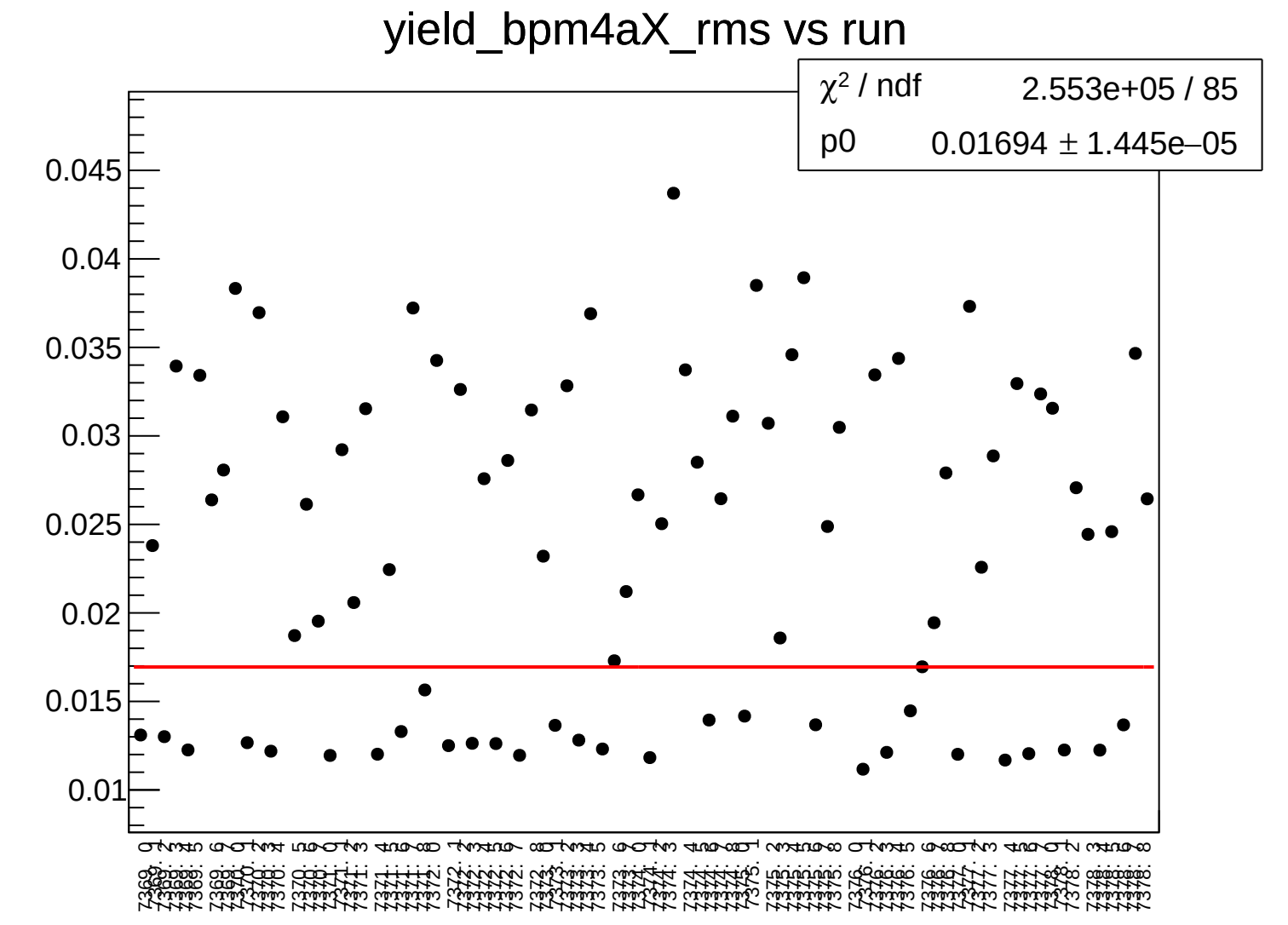

yield_cav4dY_mean vs run
χ² / ndf 4.419e+06 / 85
p0 −0.07962 ± 6.23e−07
−0.077
−0.078
−0.079
−0.08
−0.081
−0.082
pull
Entries 86
Mean −397.5
Std Dev 424.7
400
200
0
−200
−400
−600

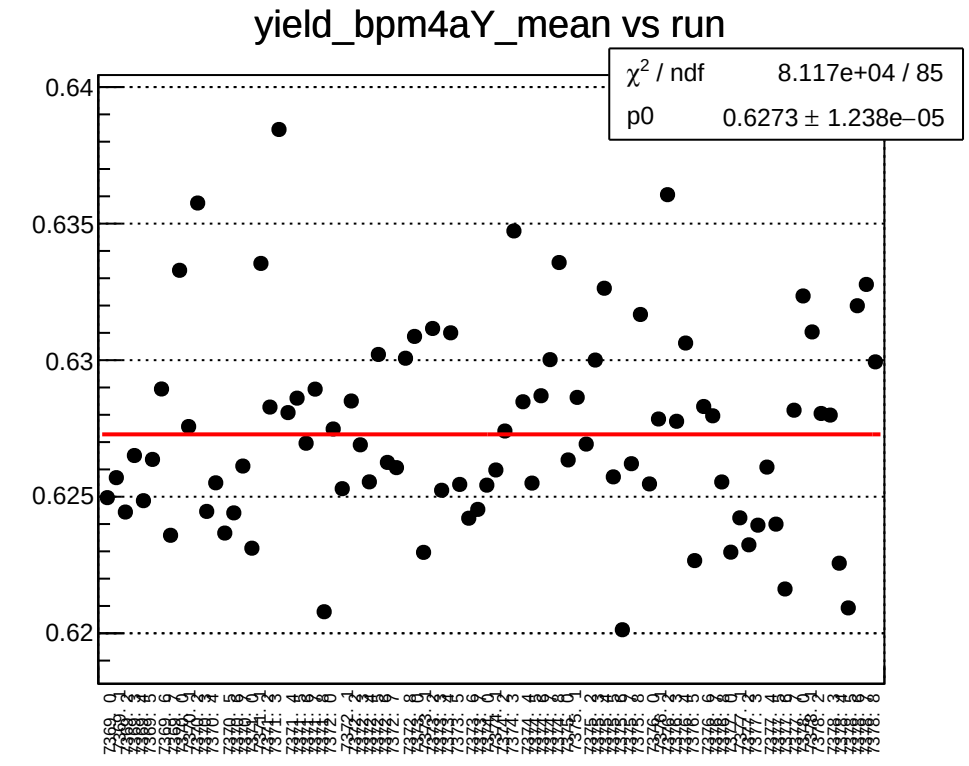

pull1D
Entries 86
Mean −3.186
Std Dev 6.447
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

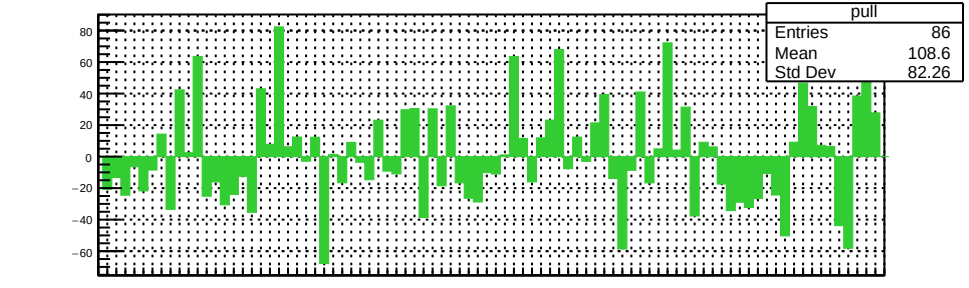

yield_cav4dY_rms vs run
χ² / ndf 5.96e+04 / 85
p0 0.0005519 ± 4.405e−07
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

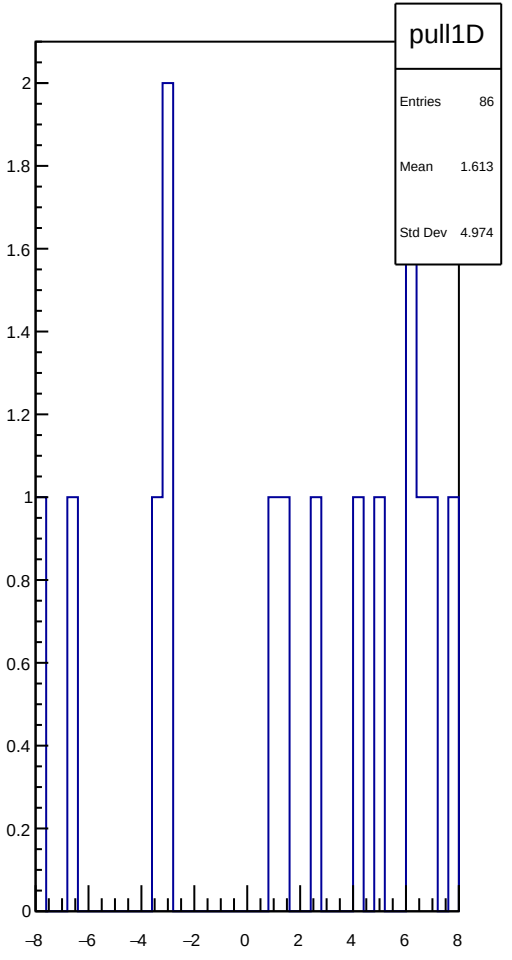

yield_bpm4aX_mean vs run
χ² / ndf 2.215e+05 / 85
p0 −0.4437 ± 2.044e−05
−0.41
−0.42
−0.43
−0.44
−0.45
−0.46
−0.47
pull
Entries 86
Mean 48.87
Std Dev 28.27
100
50
0
−50
−100

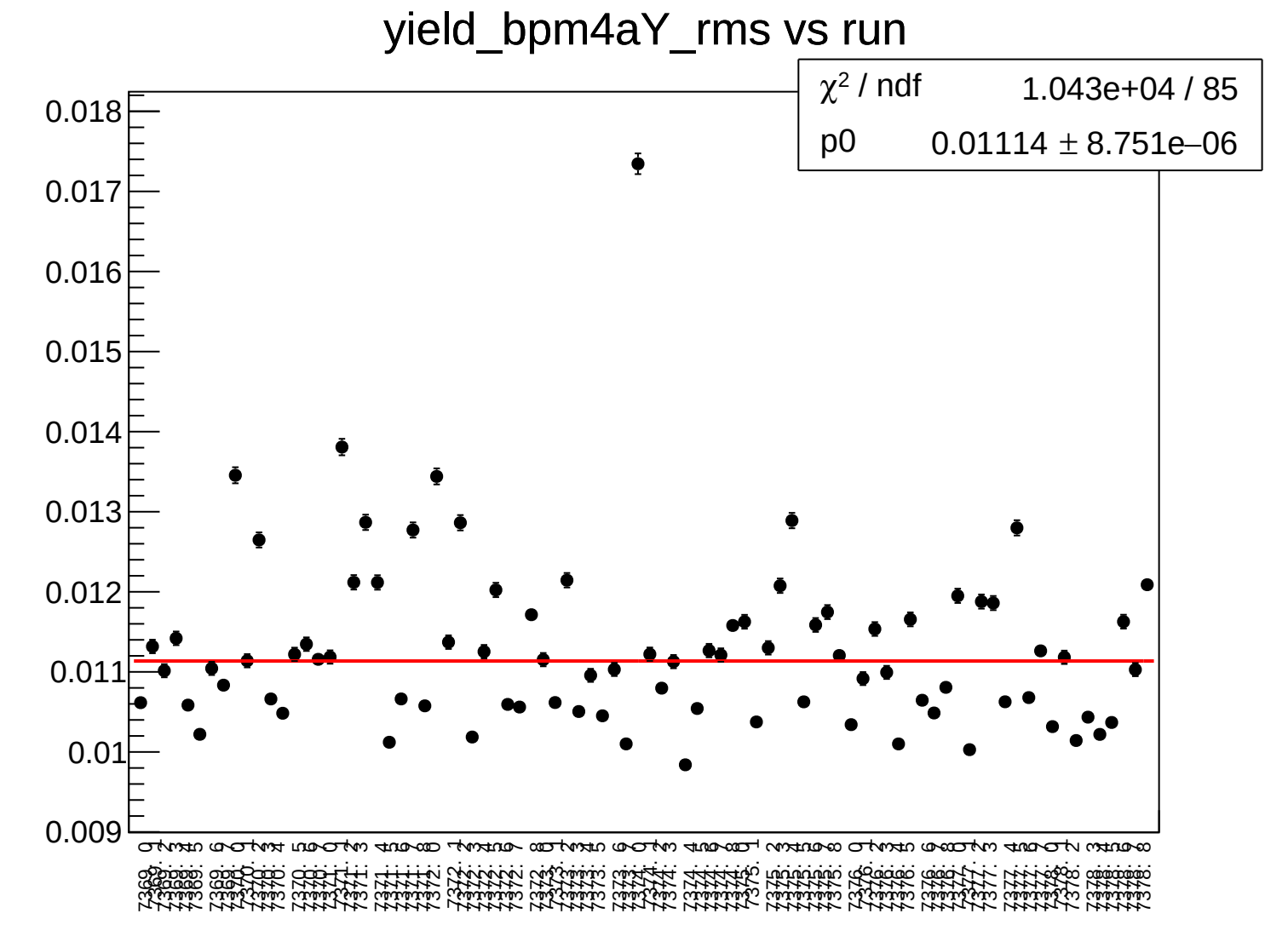

pull1D
Entries 86
Mean 0.9098
Std Dev 3.847
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

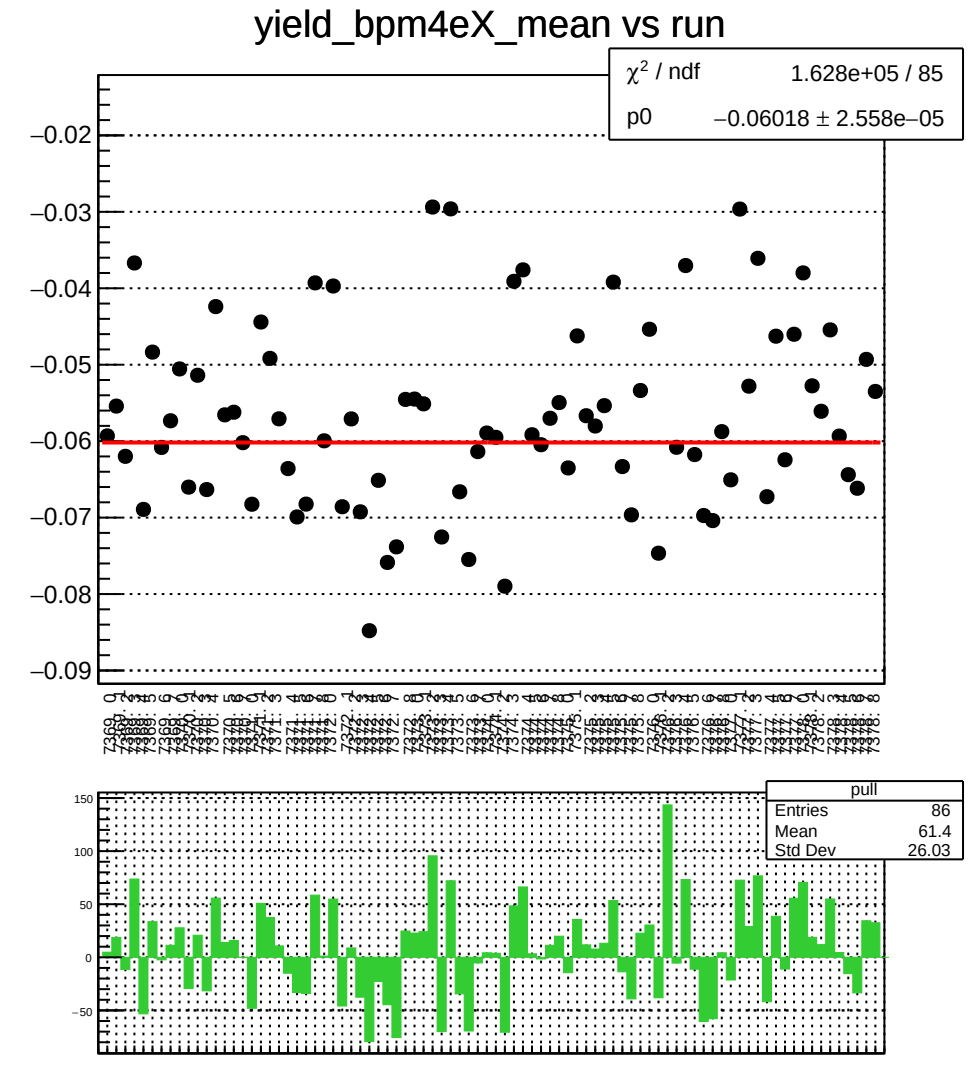

yield_bpm4aX_rms vs run
χ² / ndf 2.553e+05 / 85
p0 0.01694 ± 1.445e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

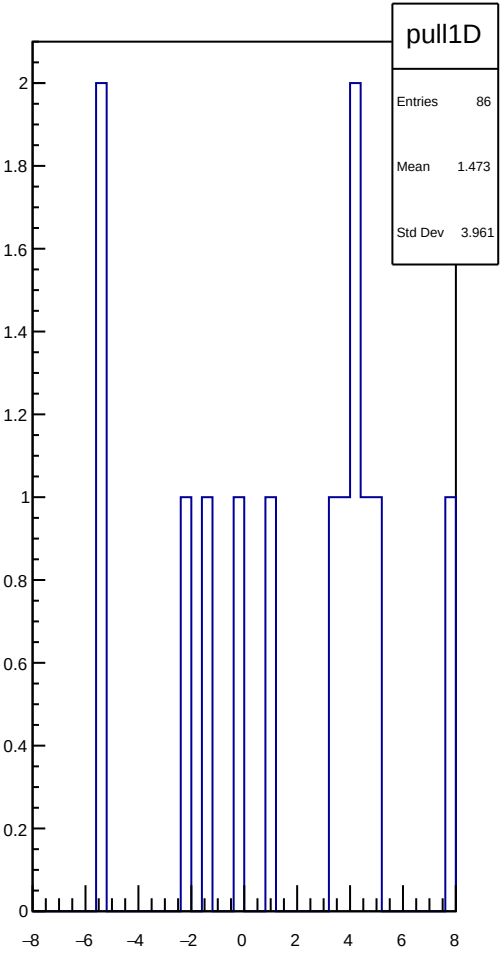

yield_bpm4aY_mean vs run
χ² / ndf 8.117e+04 / 85
p0 0.6273 ± 1.238e−05
0.64
0.635
0.63
0.625
0.62

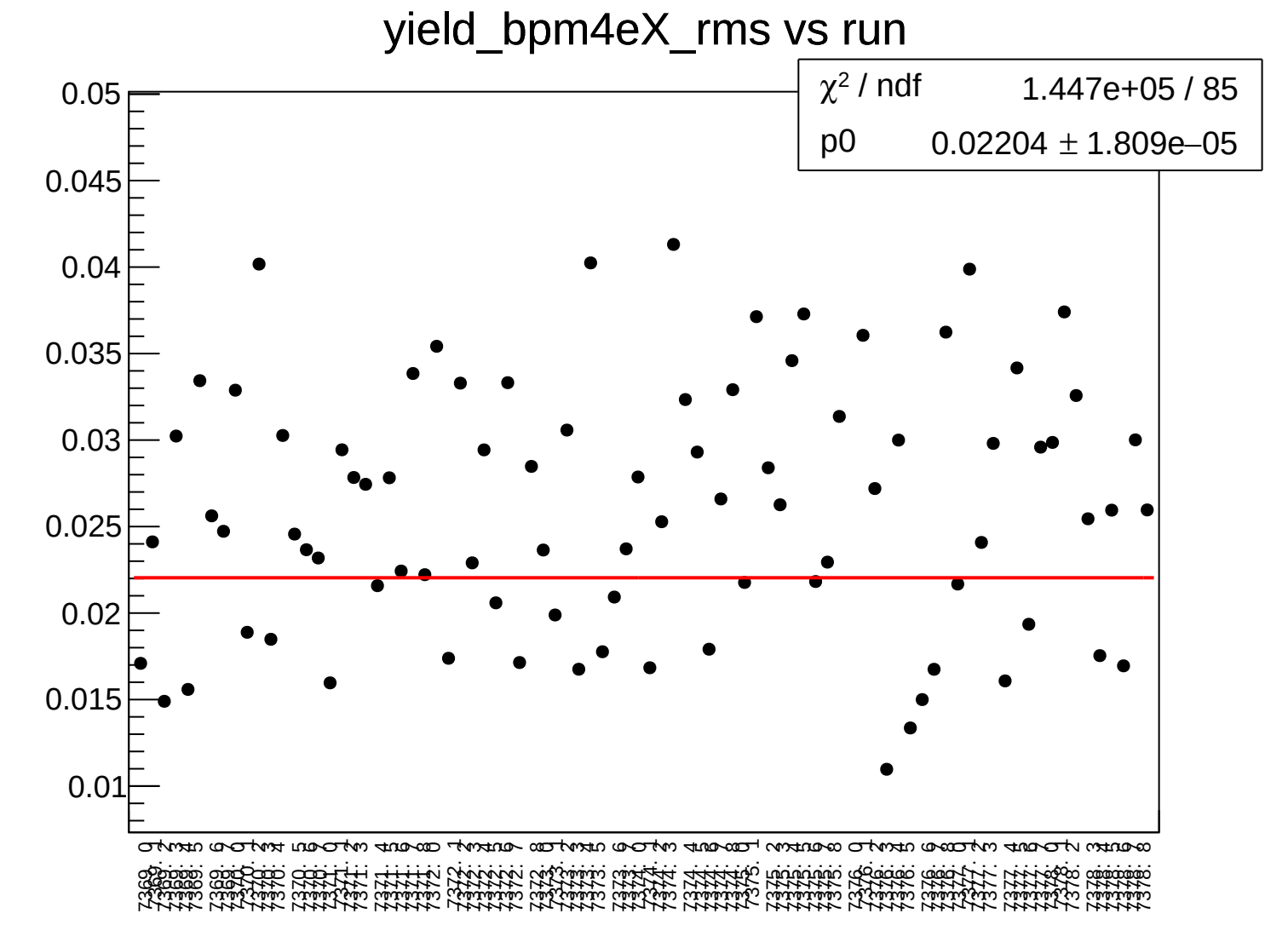

pull
Entries 86
Mean 108.6
Std Dev 82.26
80
60
40
20
0
−20
−40
−60

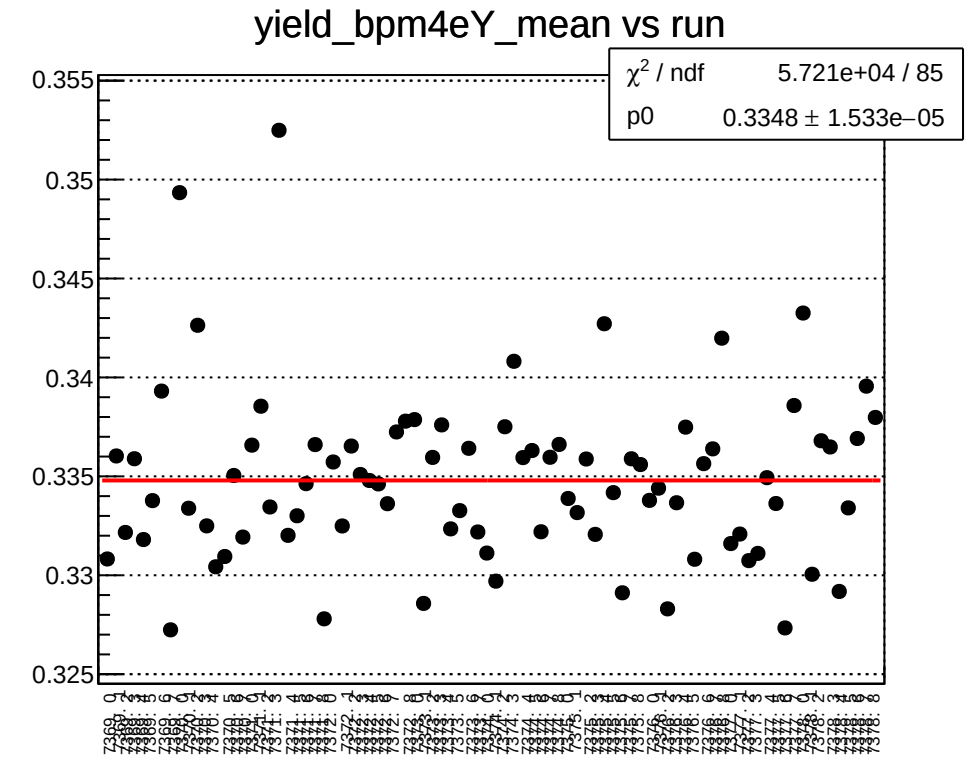

pull1D
Entries 86
Mean 1.613
Std Dev 4.974
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

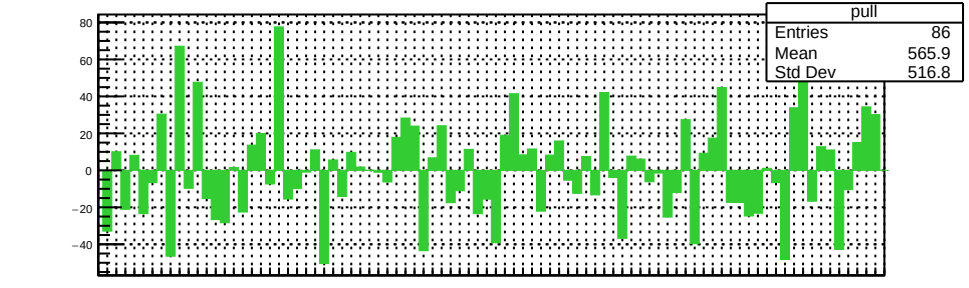

yield_bpm4aY_rms vs run
χ² / ndf 1.043e+04 / 85
p0 0.01114 ± 8.751e–06
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

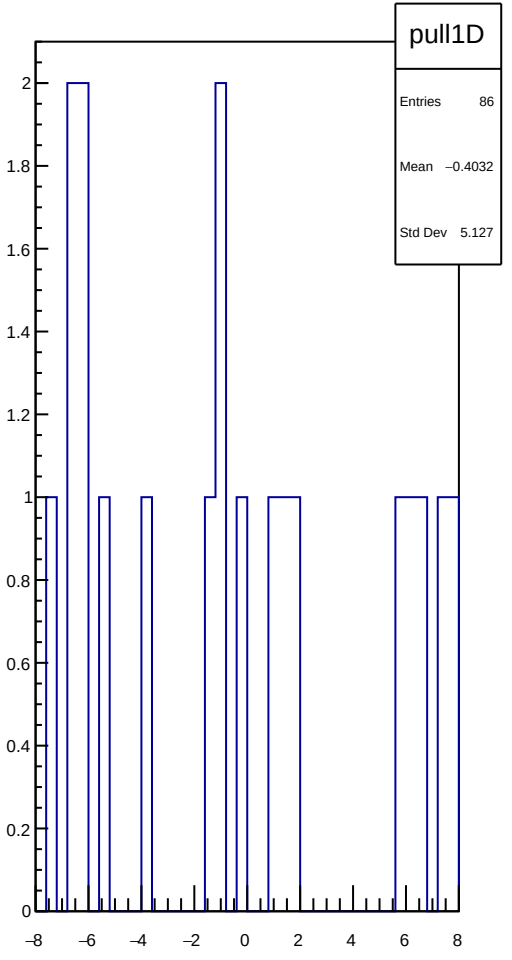

yield_bpm4eX_mean vs run
χ² / ndf 1.628e+05 / 85
p0 −0.06018 ± 2.558e−05
pull
Entries 86
Mean 61.4
Std Dev 26.03

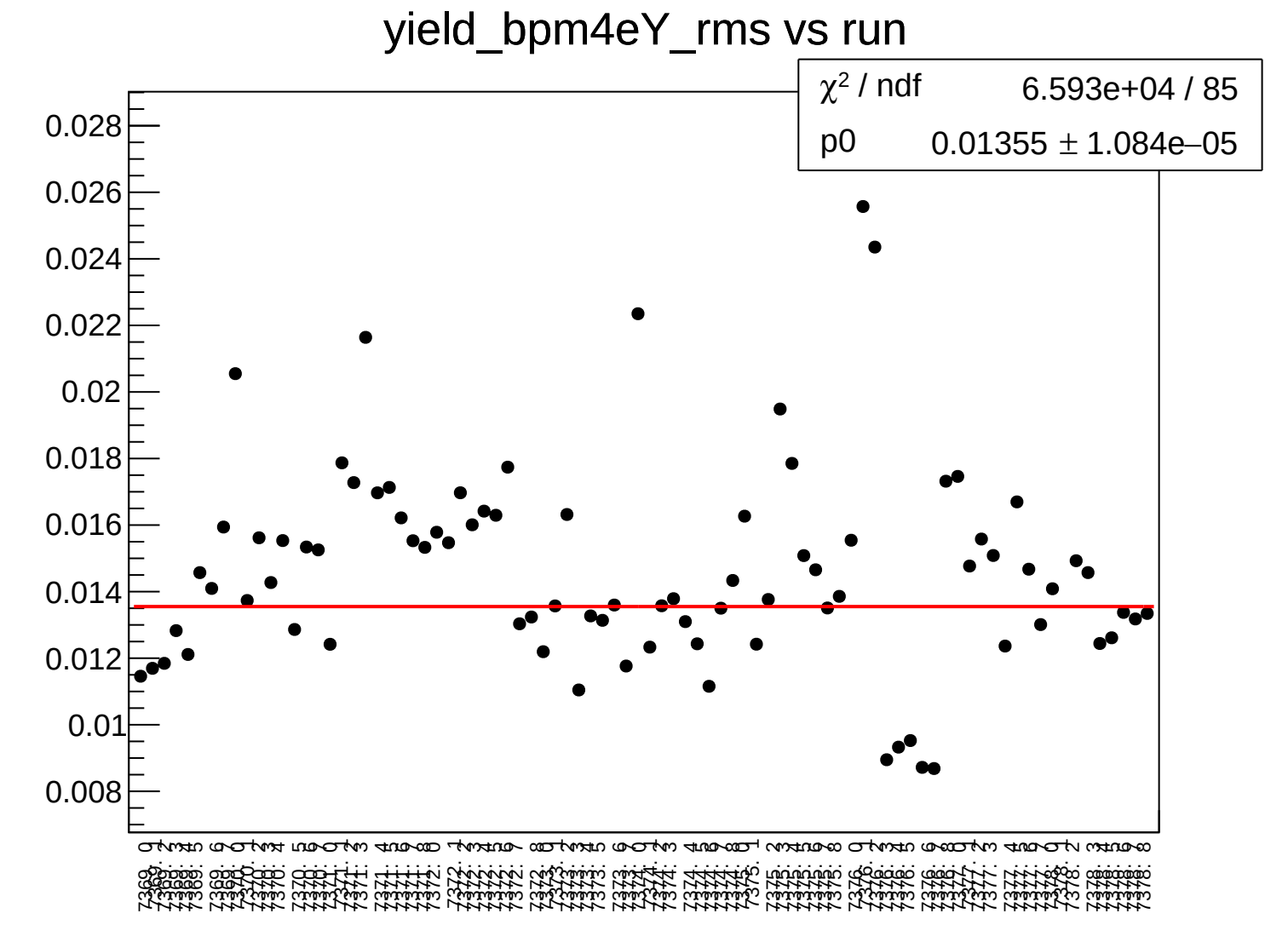

pull1D
Entries 86
Mean 1.473
Std Dev 3.961

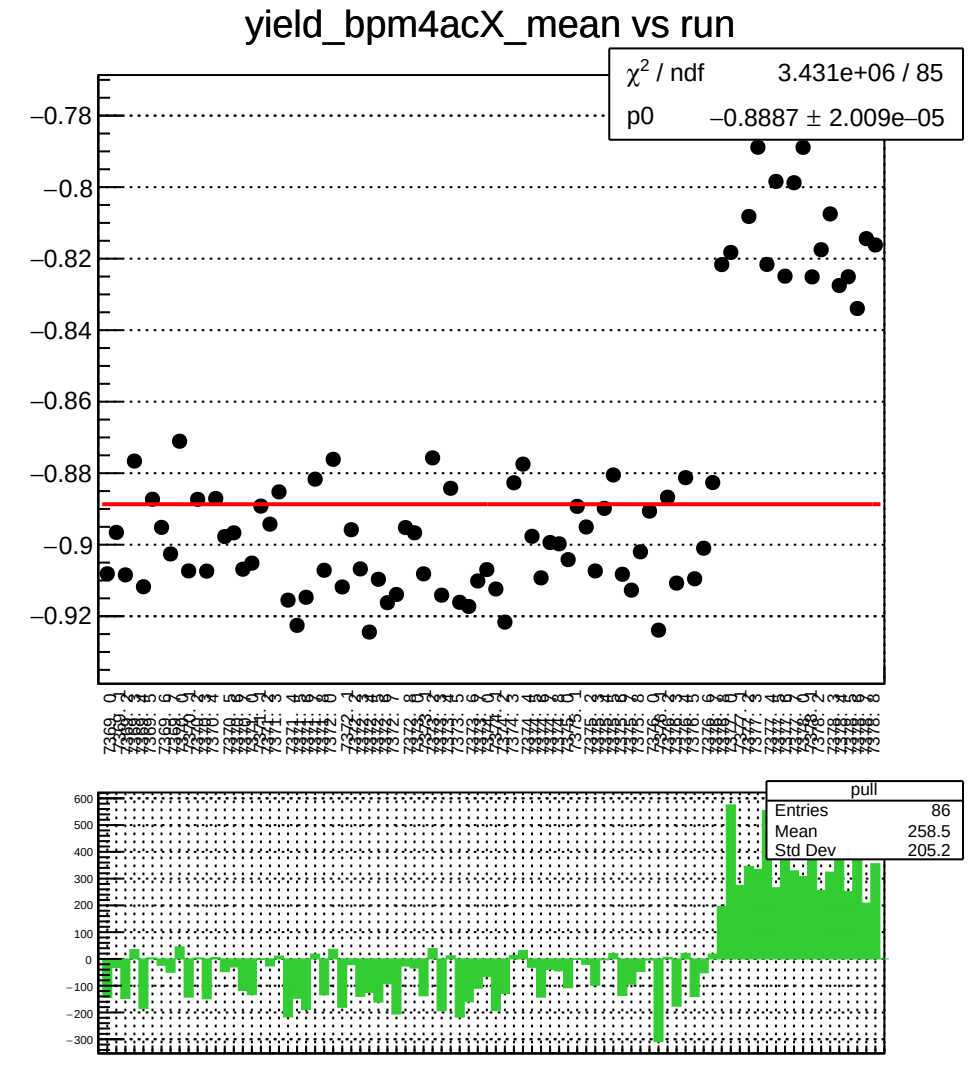

yield_bpm4eX_rms vs run
χ² / ndf 1.447e+05 / 85
p0 0.02204 ± 1.809e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

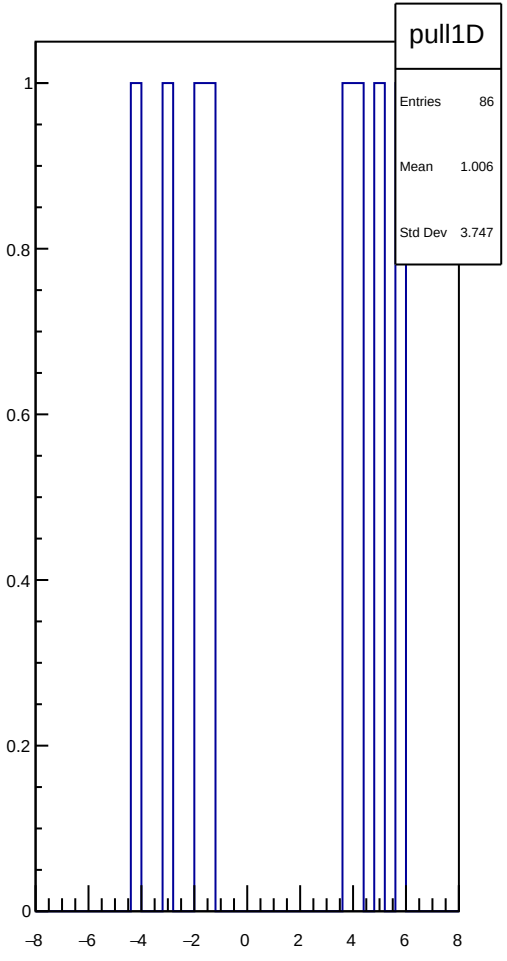

yield_bpm4eY_mean vs run
χ² / ndf 5.721e+04 / 85
p0 0.3348 ± 1.533e−05
0.355
0.35
0.345
0.34
0.335
0.33
0.325

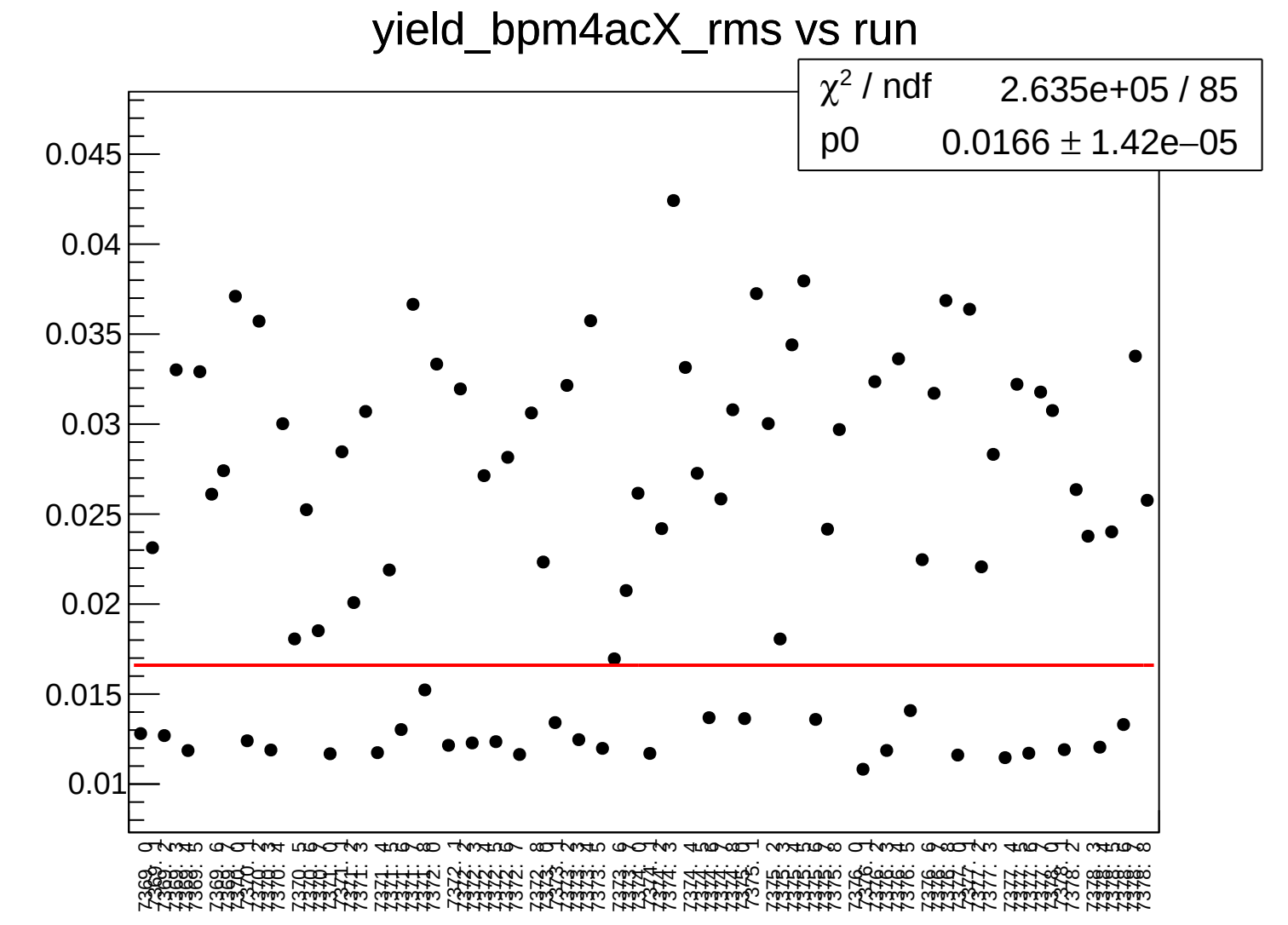

pull
Entries 86
Mean 565.9
Std Dev 516.8
80
60
40
20
0
−20
−40

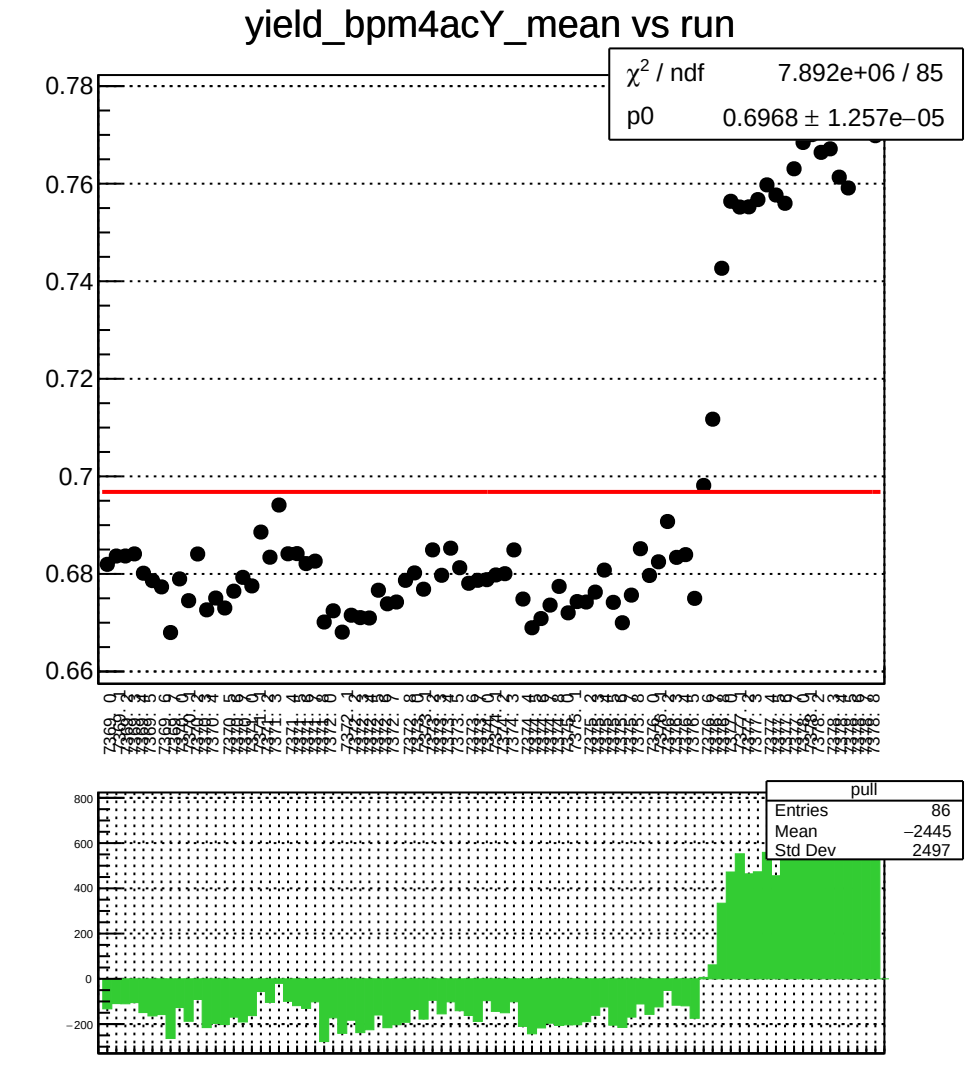

pull1D
Entries 86
Mean −0.4032
Std Dev 5.127
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

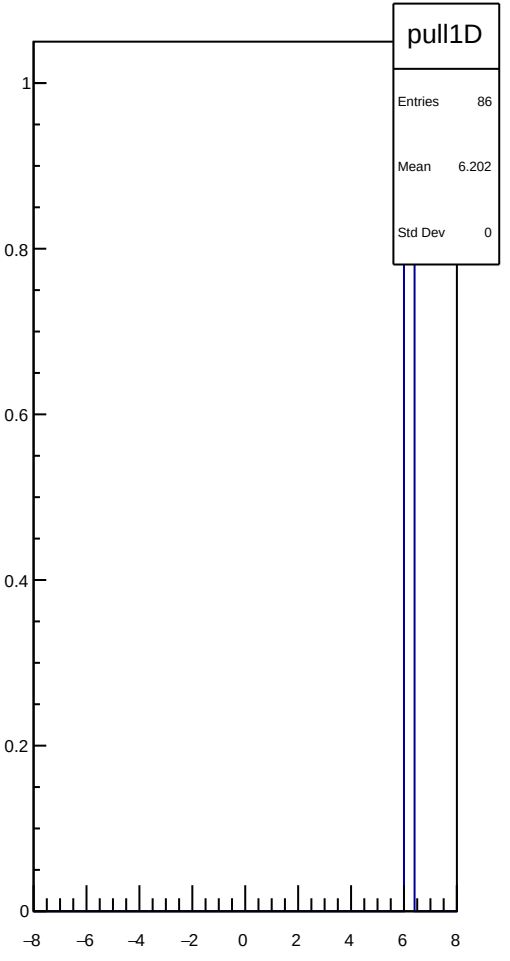

yield_bpm4eY_rms vs run
χ² / ndf 6.593e+04 / 85
p0 0.01355 ± 1.084e−05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

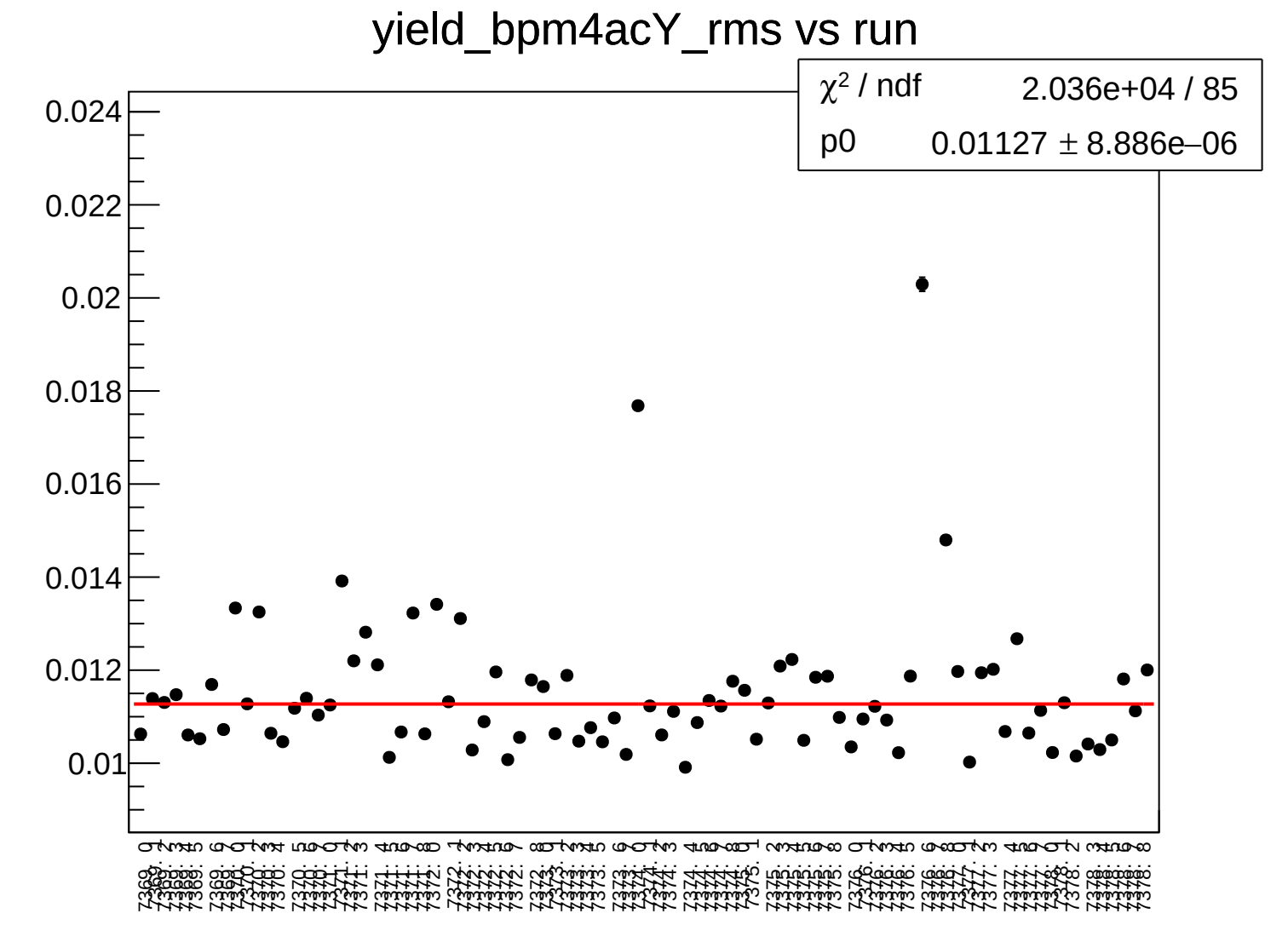

yield_bpm4acX_mean vs run
χ² / ndf 3.431e+06 / 85
p0 −0.8887 ± 2.009e−05
pull
Entries 86
Mean 258.5
Std Dev 205.2

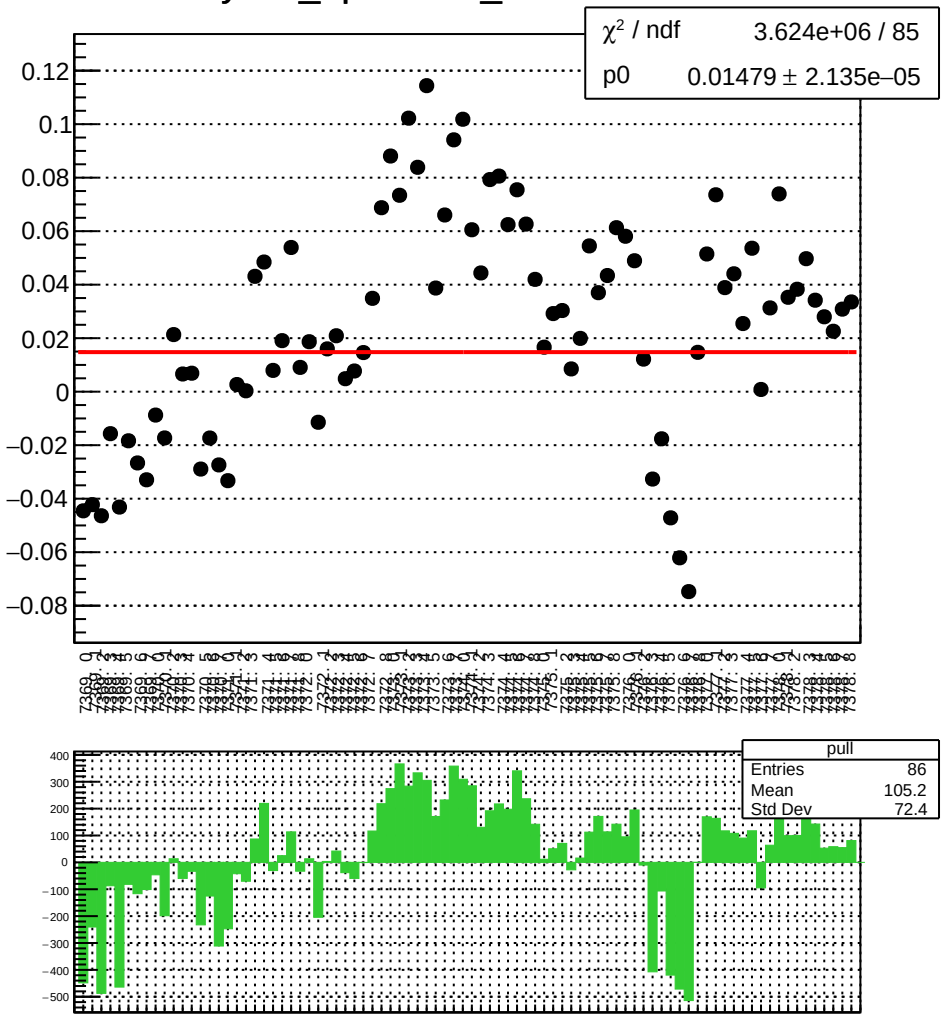

pull1D
Entries 86
Mean 1.006
Std Dev 3.747

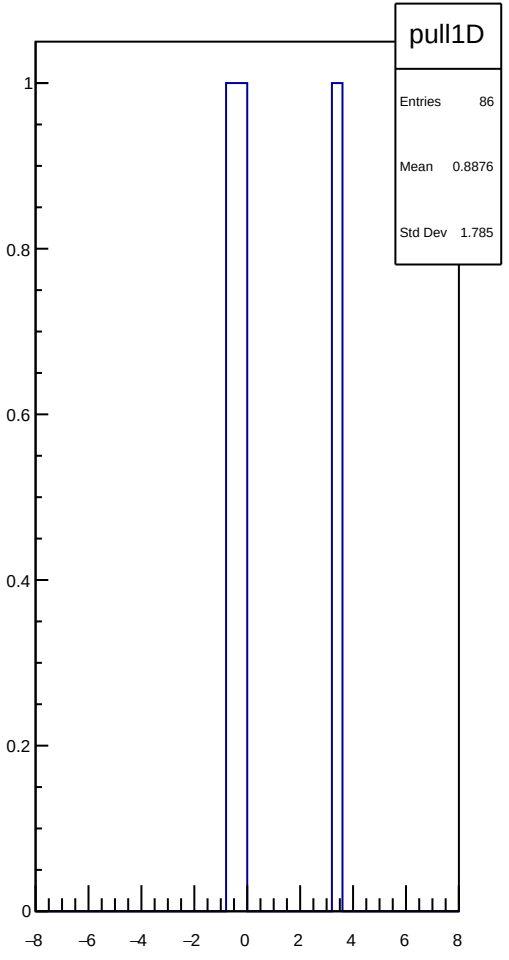

yield_bpm4acX_rms vs run
χ^2 / ndf 2.635e+05 / 85
p0 0.0166 ± 1.42e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

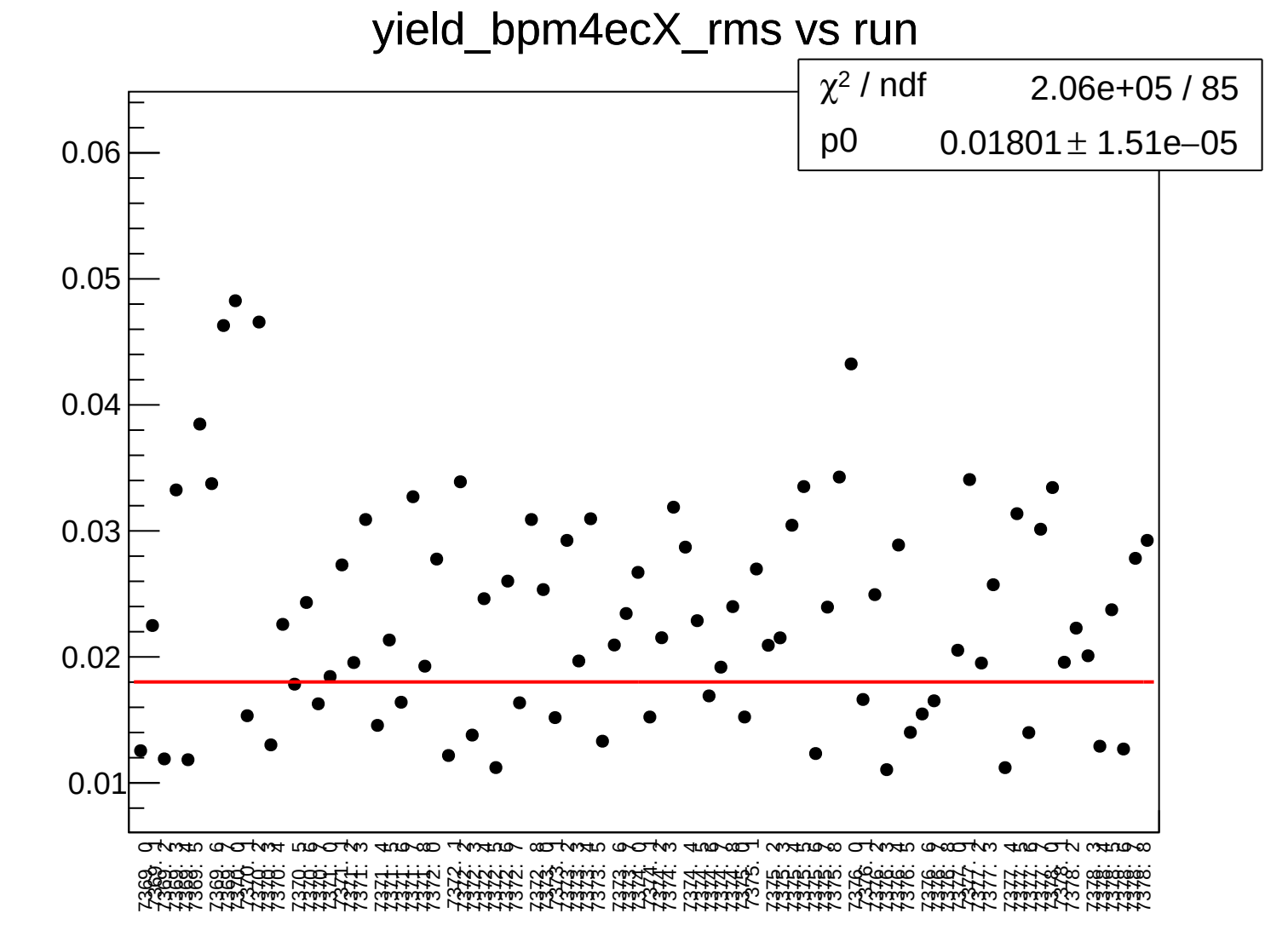

yield_bpm4acY_mean vs run
χ² / ndf 7.892e+06 / 85
p0 0.6968 ± 1.257e−05
0.78
0.76
0.74
0.72
0.7
0.68
0.66
pull
Entries 86
Mean −2445
Std Dev 2497
800
600
400
200
0
−200

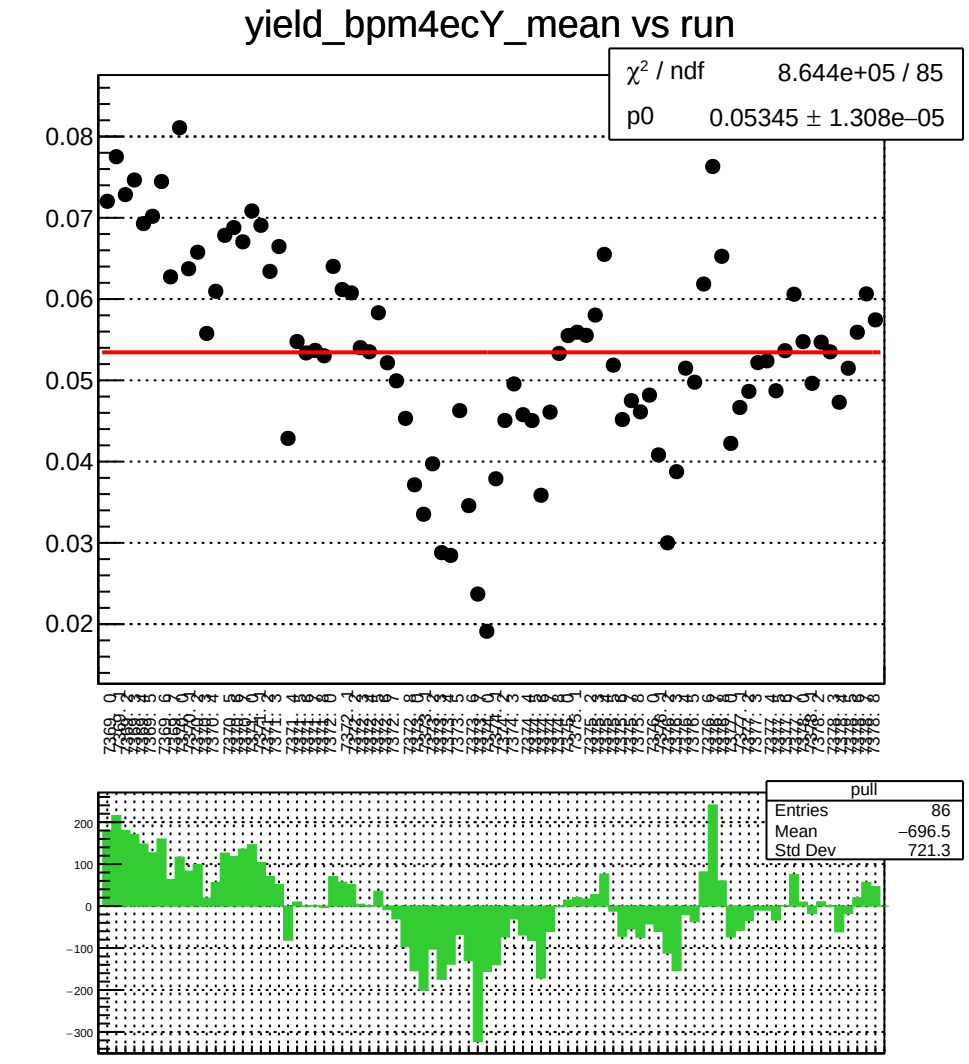

pull1D
Entries 86
Mean 6.202
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

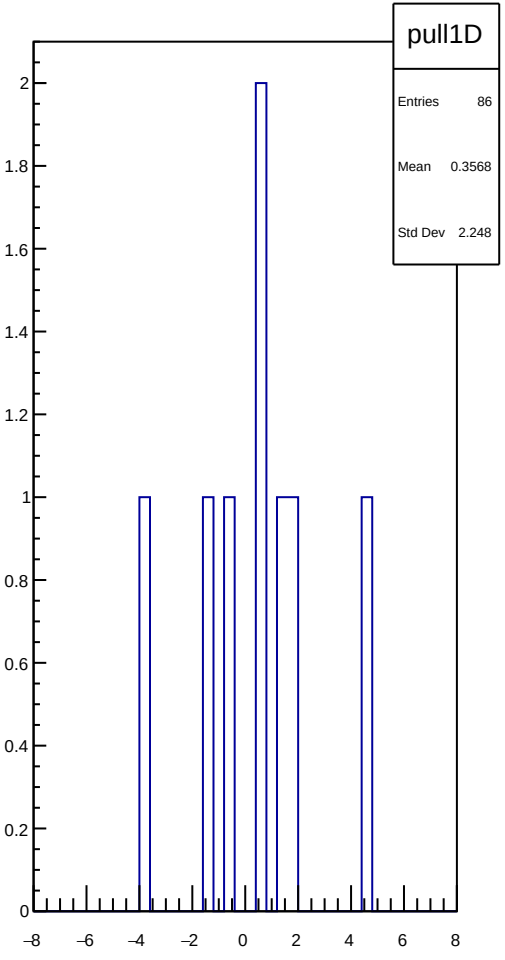

yield_bpm4acY_rms vs run
χ² / ndf 2.036e+04 / 85
p0 0.01127 ± 8.886e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

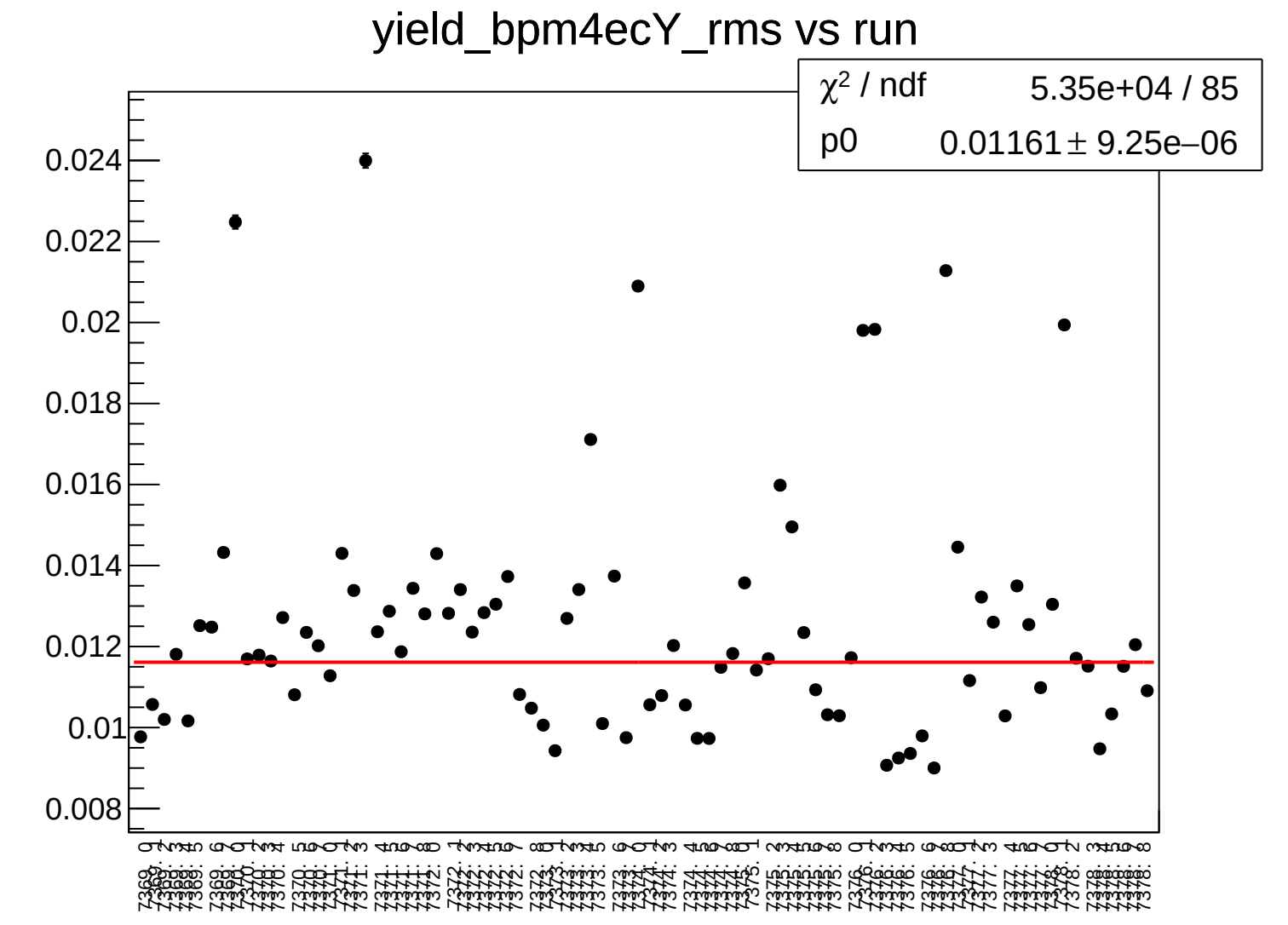

yield_bpm4ecX_mean vs run
χ² / ndf 3.624e+06 / 85
p0 0.01479 ± 2.135e–05
pull
Entries 86
Mean 105.2
Std Dev 72.4

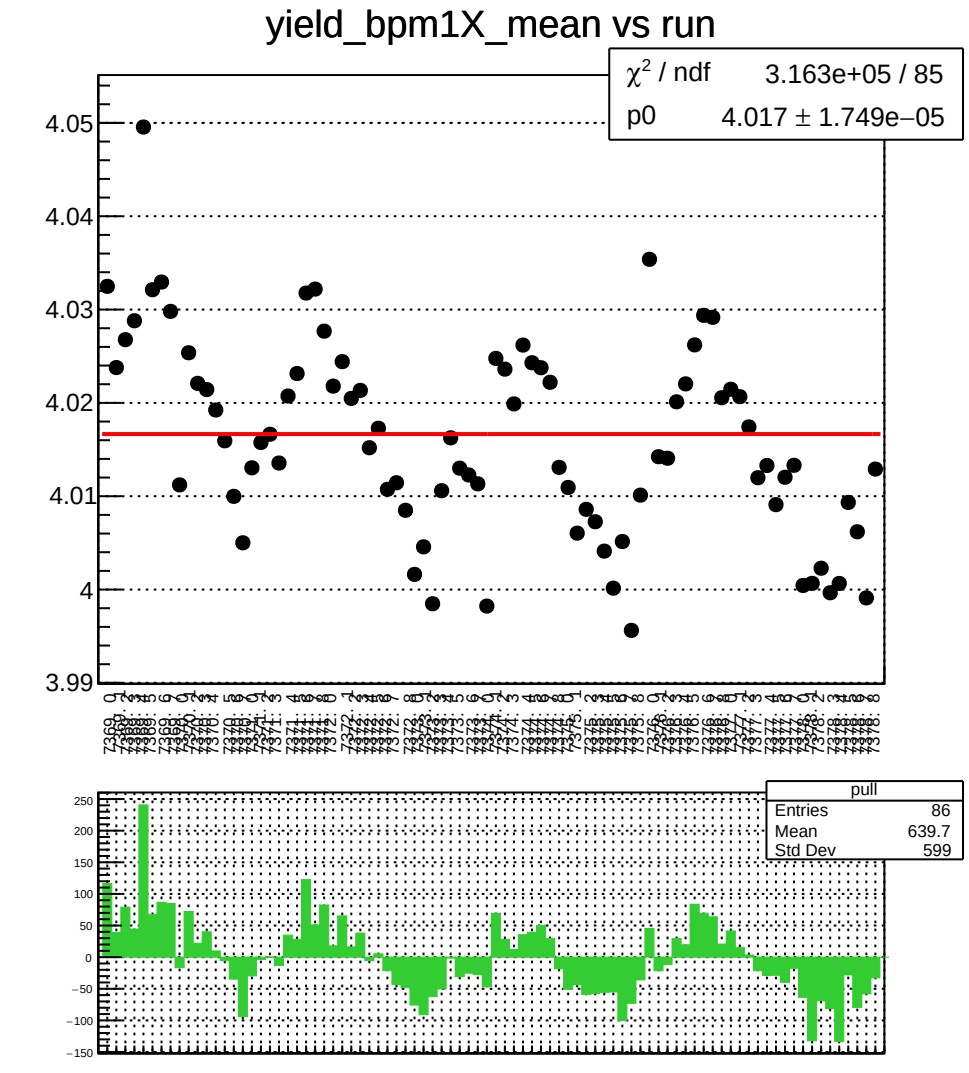

pull1D
Entries 86
Mean 0.8876
Std Dev 1.785

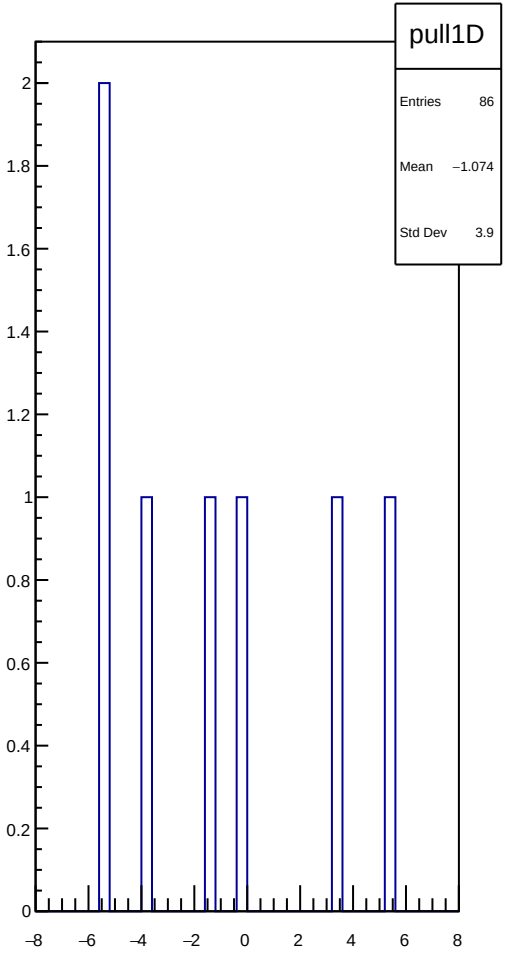

yield_bpm4ecX_rms vs run
χ² / ndf 2.06e+05 / 85
p0 0.01801 ± 1.51e−05
0.06
0.05
0.04
0.03
0.02
0.01

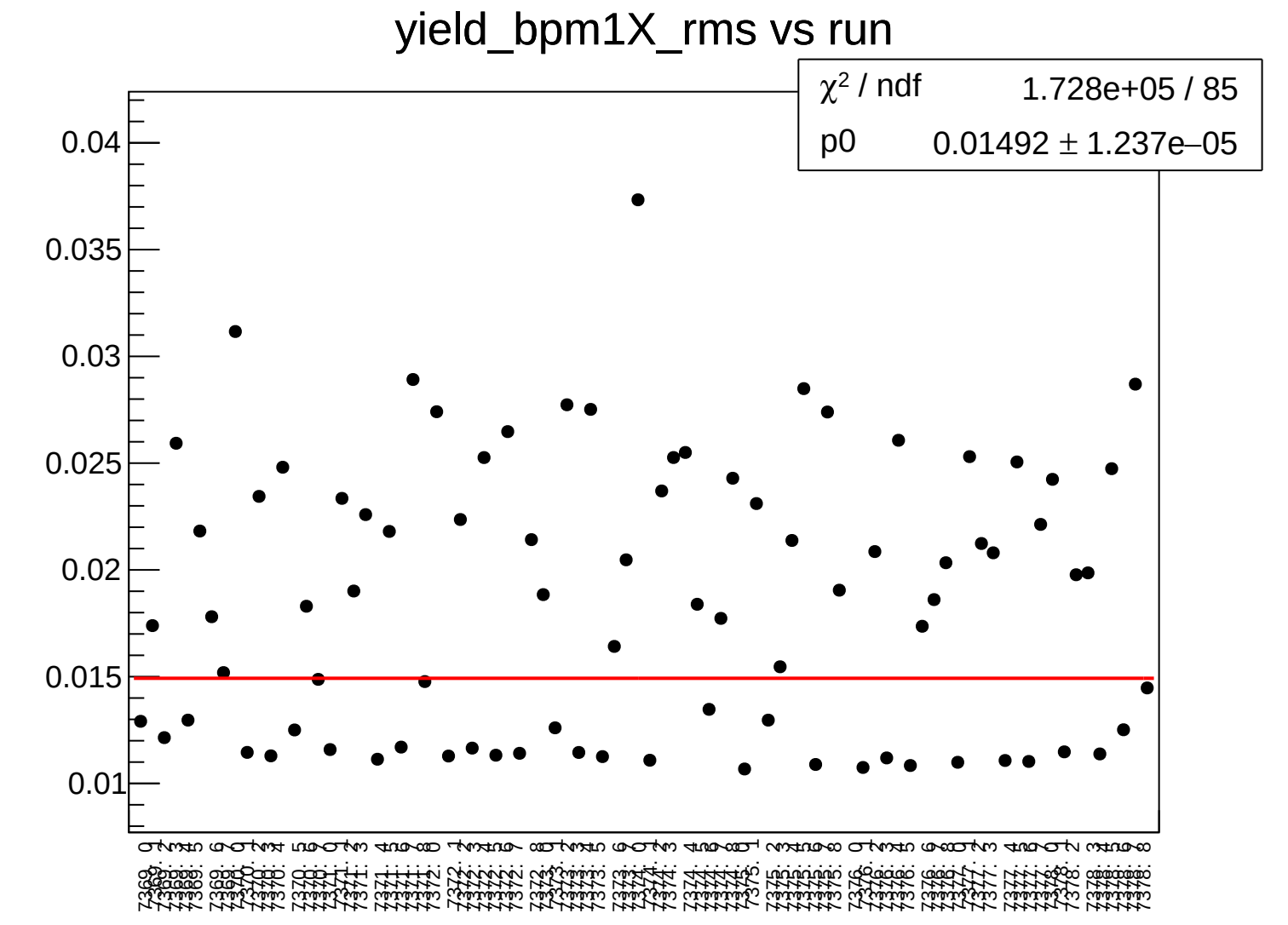

yield_bpm4ecY_mean vs run
χ² / ndf 8.644e+05 / 85
p0 0.05345 ± 1.308e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
pull
Entries 86
Mean −696.5
Std Dev 721.3
200
100
0
−100
−200
−300

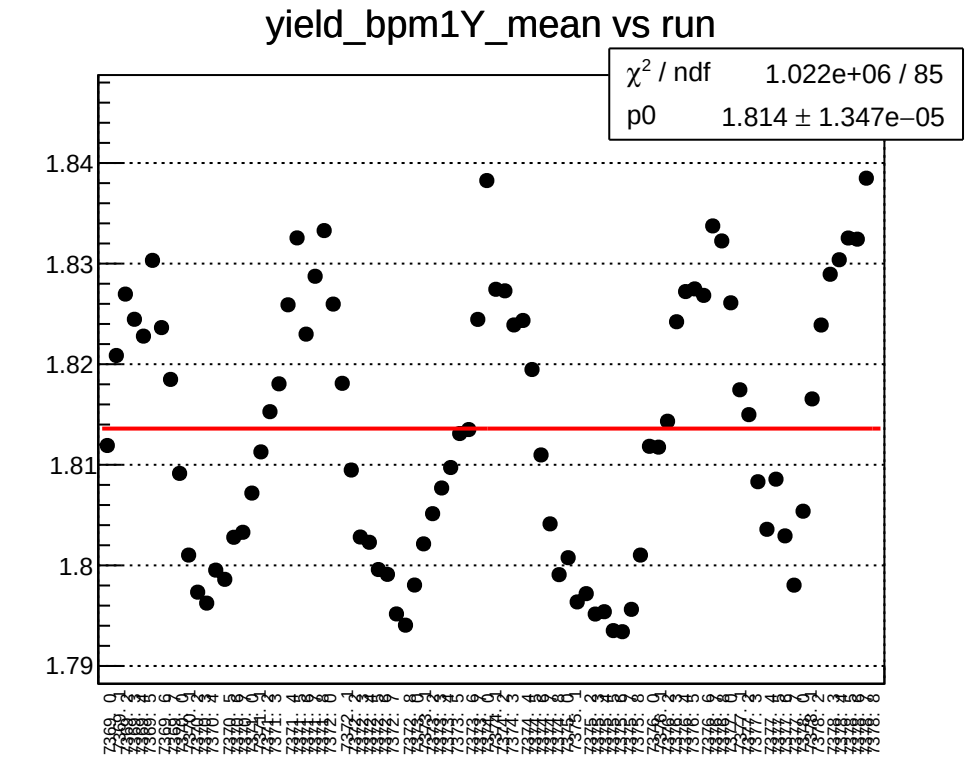

pull1D
Entries 86
Mean 0.3568
Std Dev 2.248
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

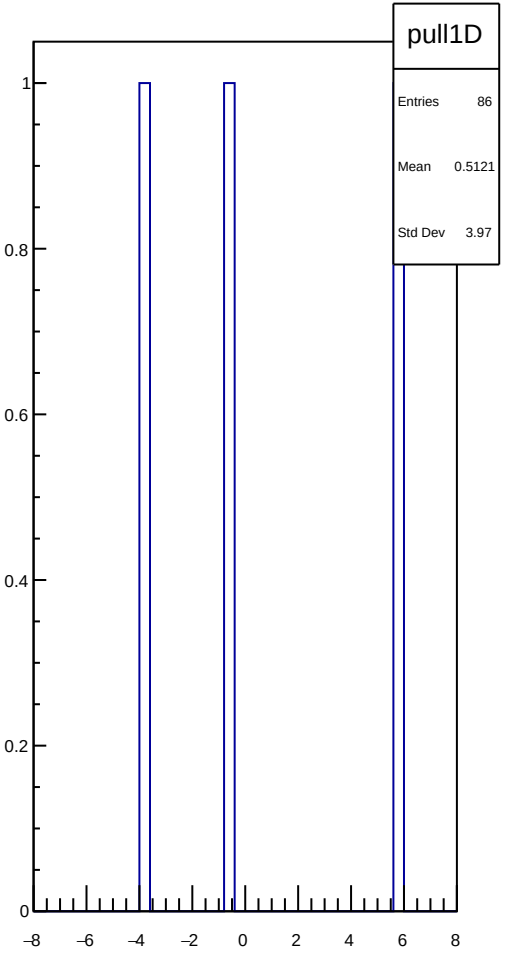

yield_bpm4ecY_rms vs run
χ² / ndf 5.35e+04 / 85
p0 0.01161 ± 9.25e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

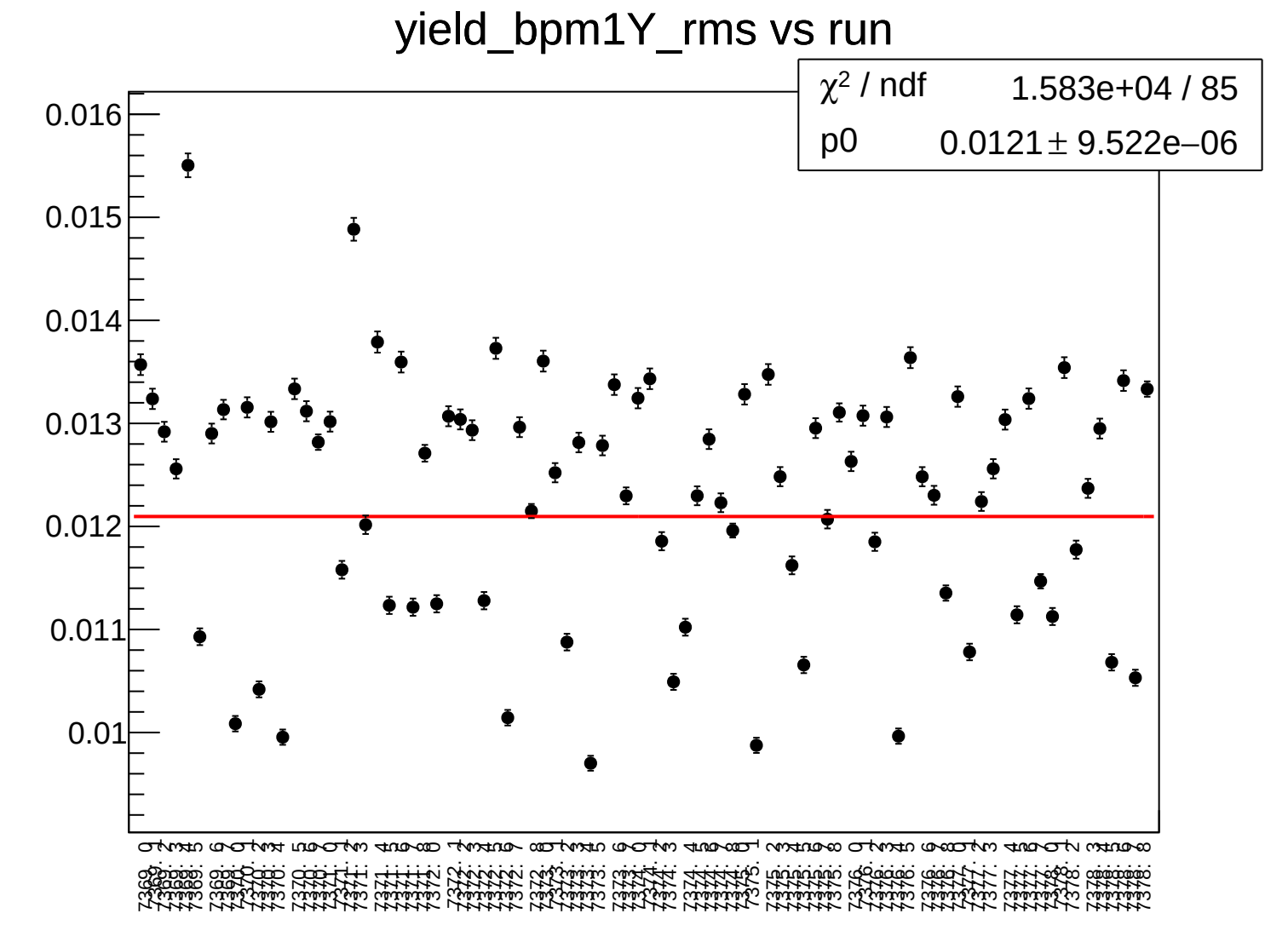

yield_bpm1X_mean vs run
χ² / ndf 3.163e+05 / 85
p0 4.017 ± 1.749e−05
4.05
4.04
4.03
4.02
4.01
4
3.99
pull
Entries 86
Mean 639.7
Std Dev 599
250
200
150
100
50
0
−50
−100
−150

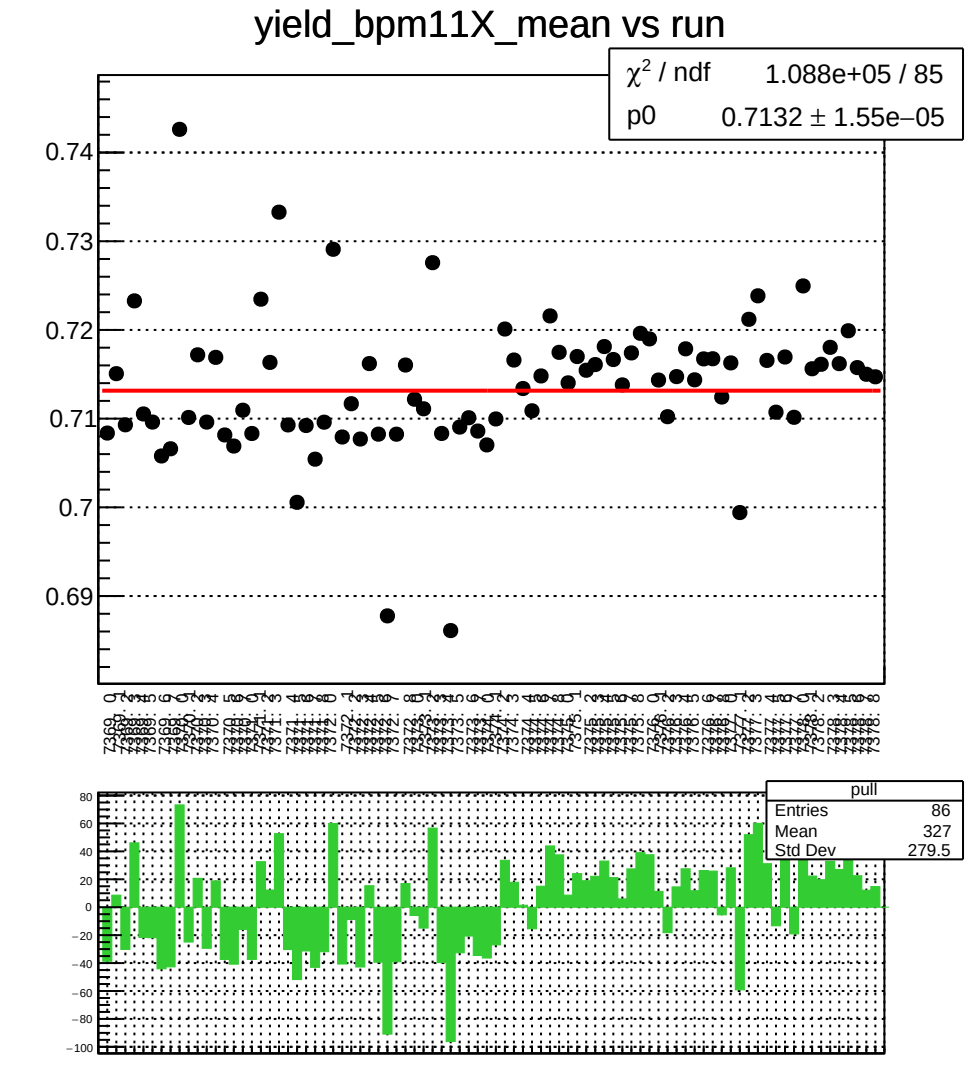

pull1D
Entries 86
Mean −1.074
Std Dev 3.9
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

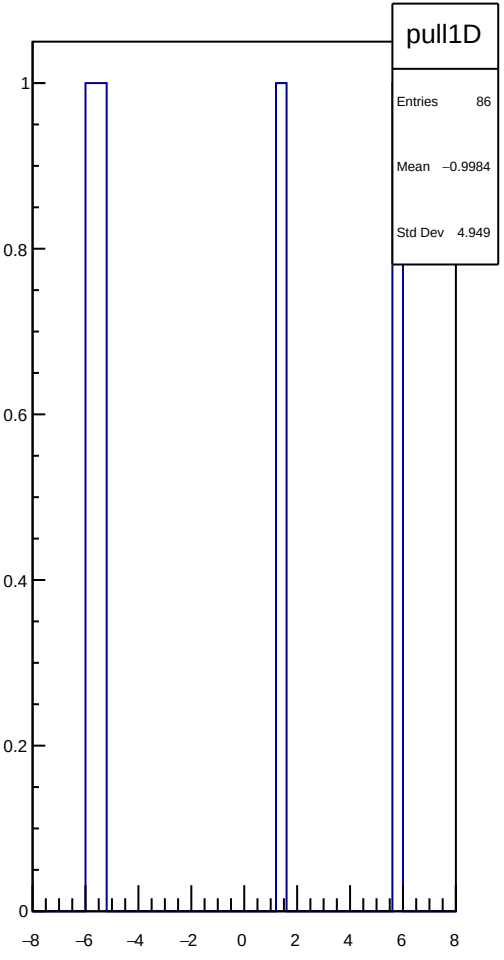

yield_bpm1X_rms vs run
χ² / ndf 1.728e+05 / 85
p0 0.01492 ± 1.237e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

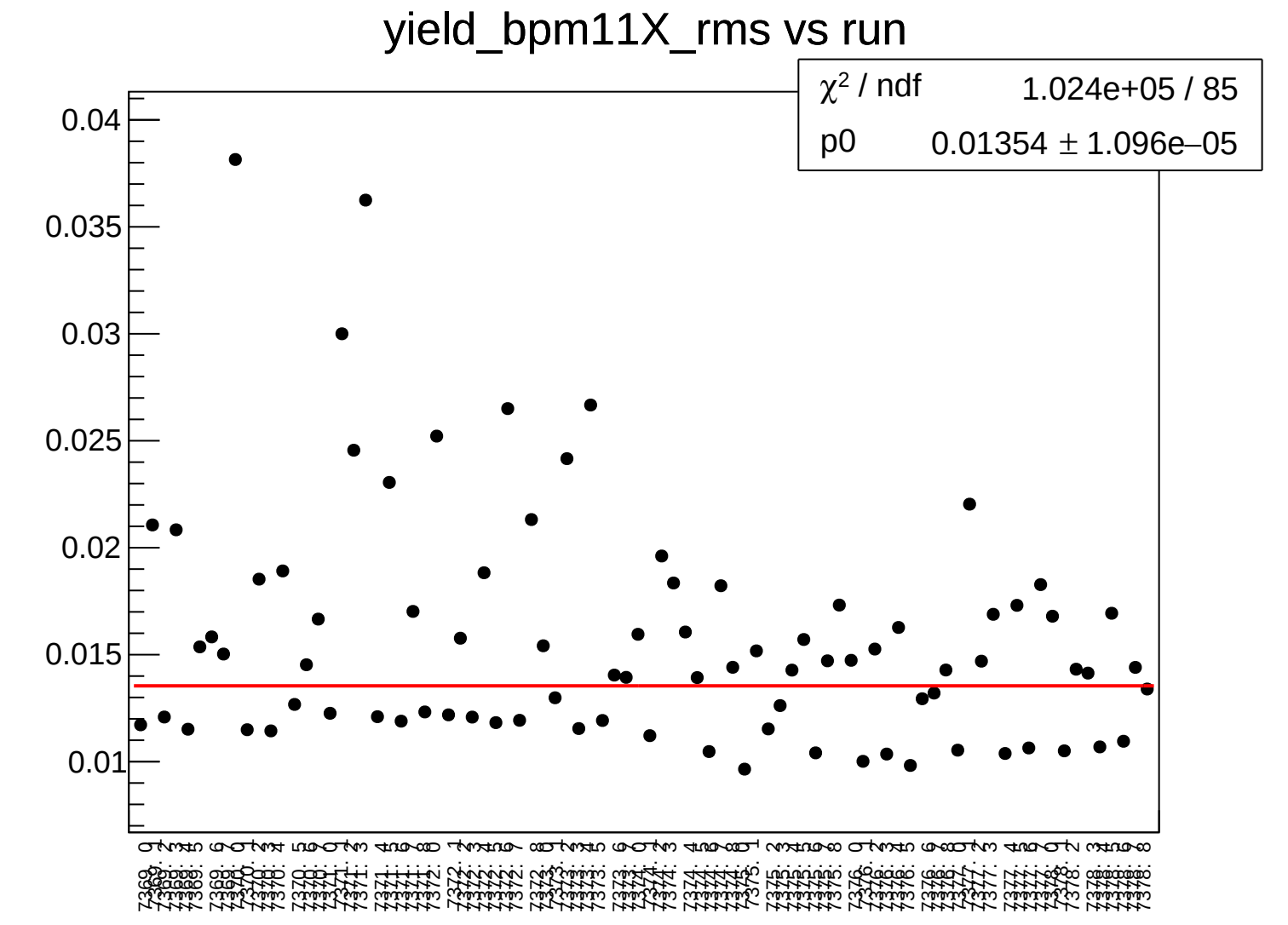

yield_bpm1Y_mean vs run
χ² / ndf 1.022e+06 / 85
p0 1.814 ± 1.347e−05
1.84
1.83
1.82
1.81
1.8
1.79
pull
Entries 86
Mean 474.5
Std Dev 406.8
300
200
100
0
−100
−200

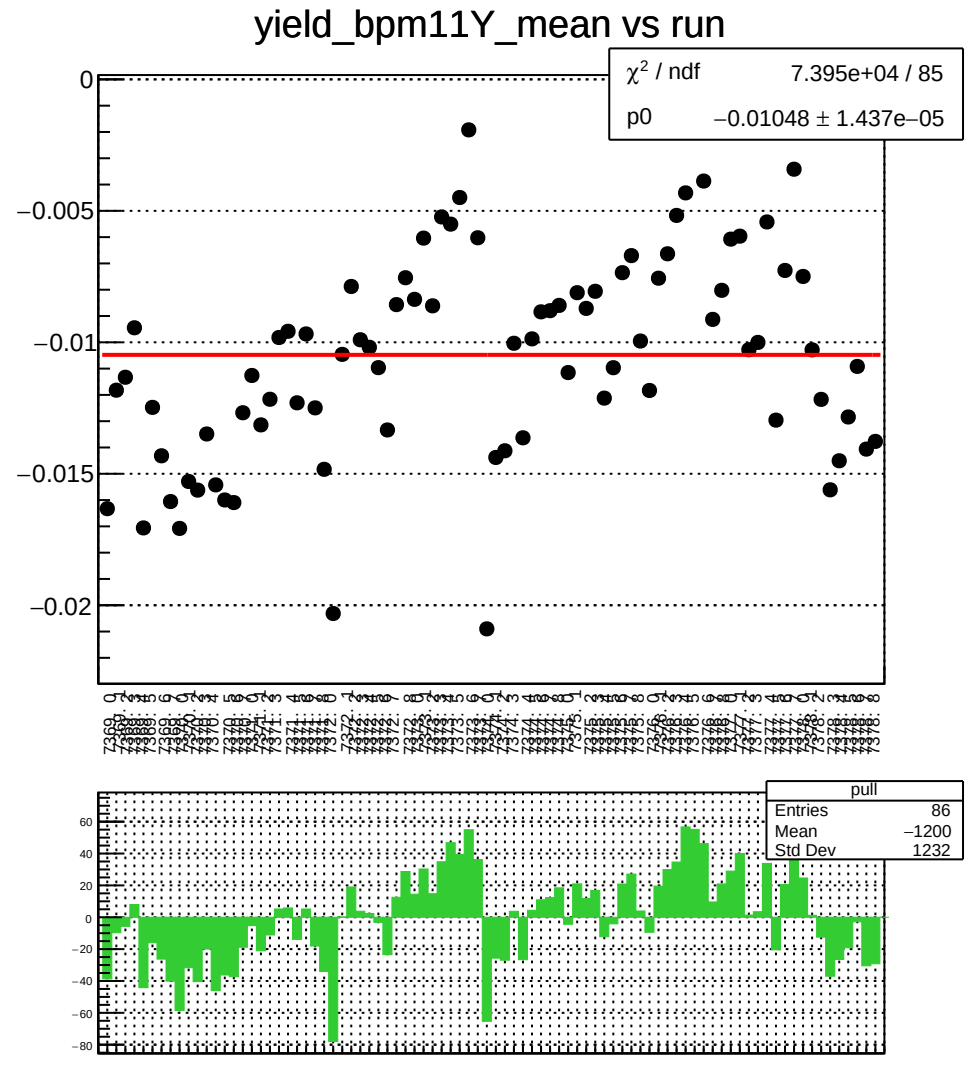

pull1D
Entries 86
Mean 0.5121
Std Dev 3.97
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

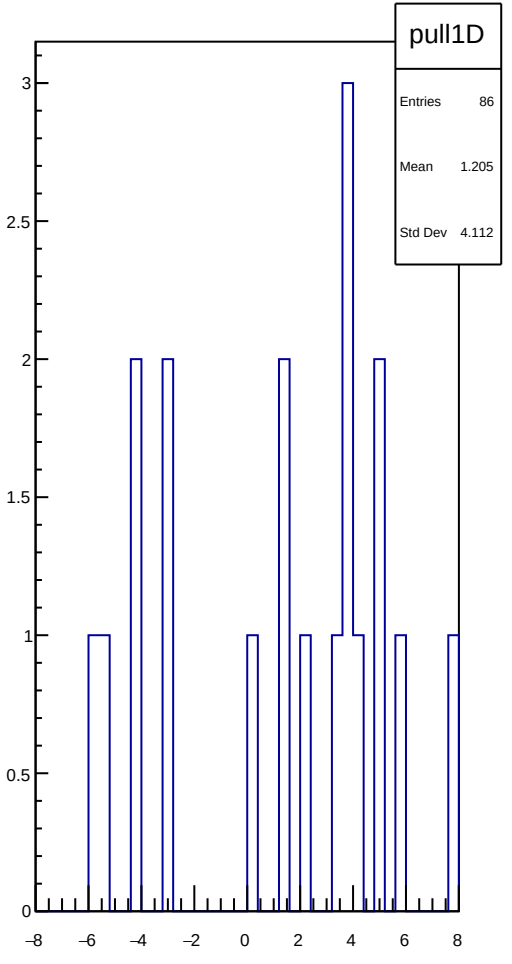

yield_bpm1Y_rms vs run
χ² / ndf 1.583e+04 / 85
p0 0.0121 ± 9.522e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01

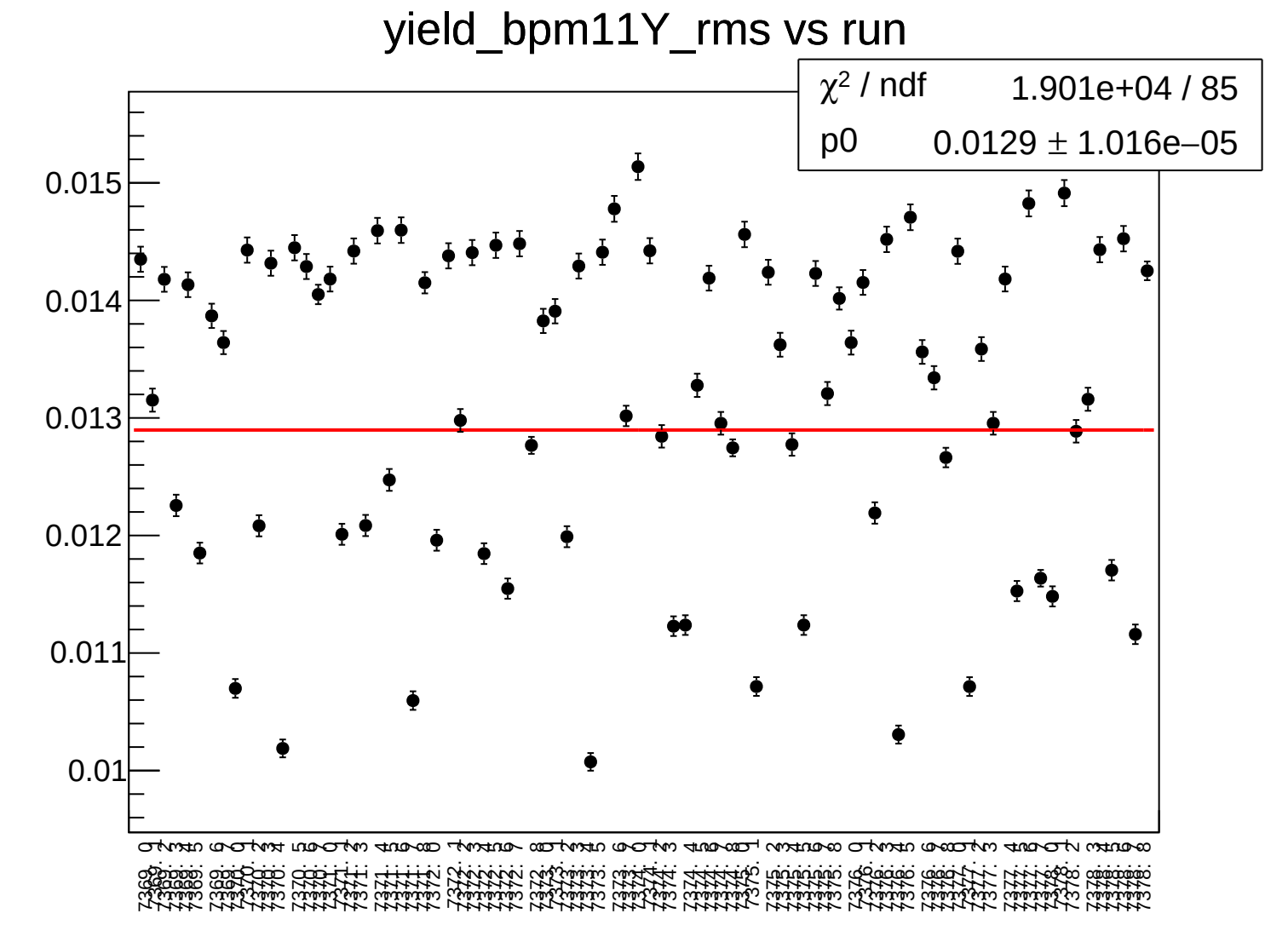

yield_bpm11X_mean vs run
χ² / ndf 1.088e+05 / 85
p0 0.7132 ± 1.55e−05
0.74
0.73
0.72
0.71
0.7
0.69
pull
Entries 86
Mean 327
Std Dev 279.5
80
60
40
20
0
−20
−40
−60
−80
−100

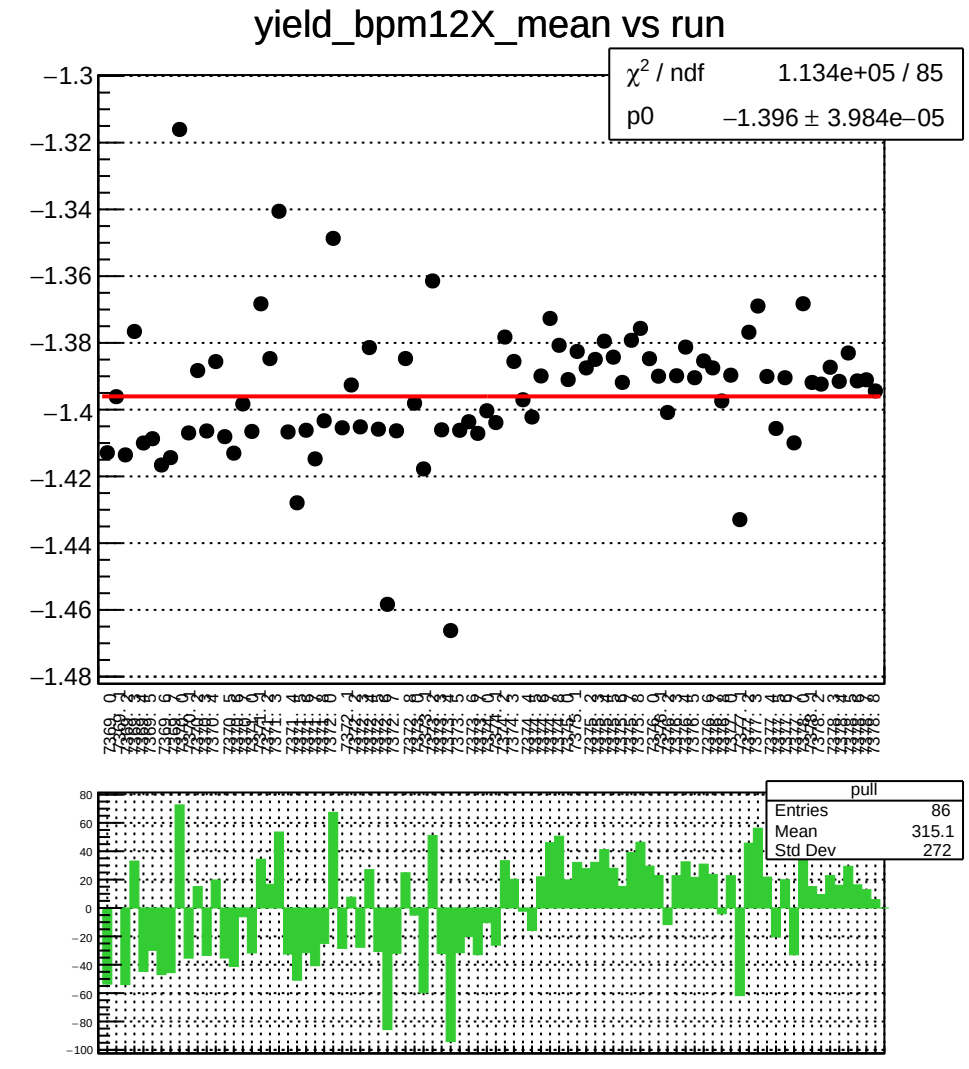

pull1D
Entries 86
Mean −0.9984
Std Dev 4.949
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

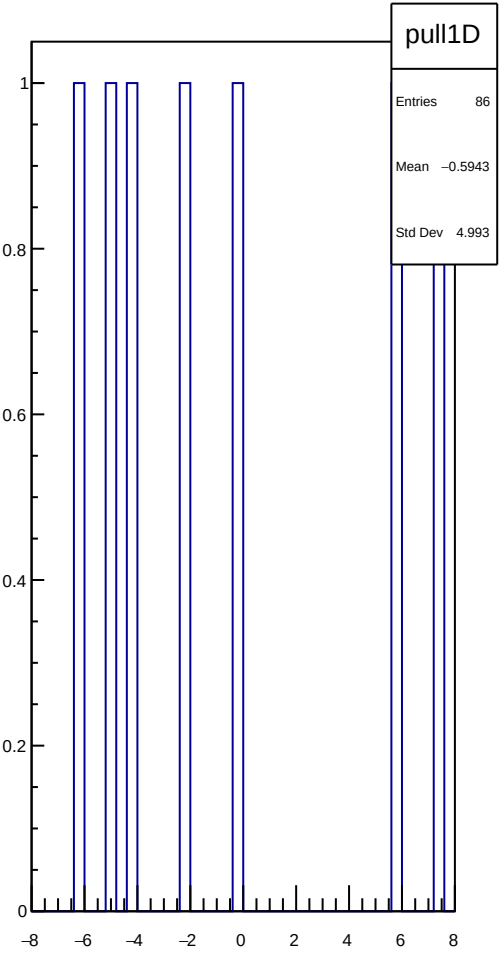

yield_bpm11X_rms vs run
χ² / ndf 1.024e+05 / 85
p0 0.01354 ± 1.096e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

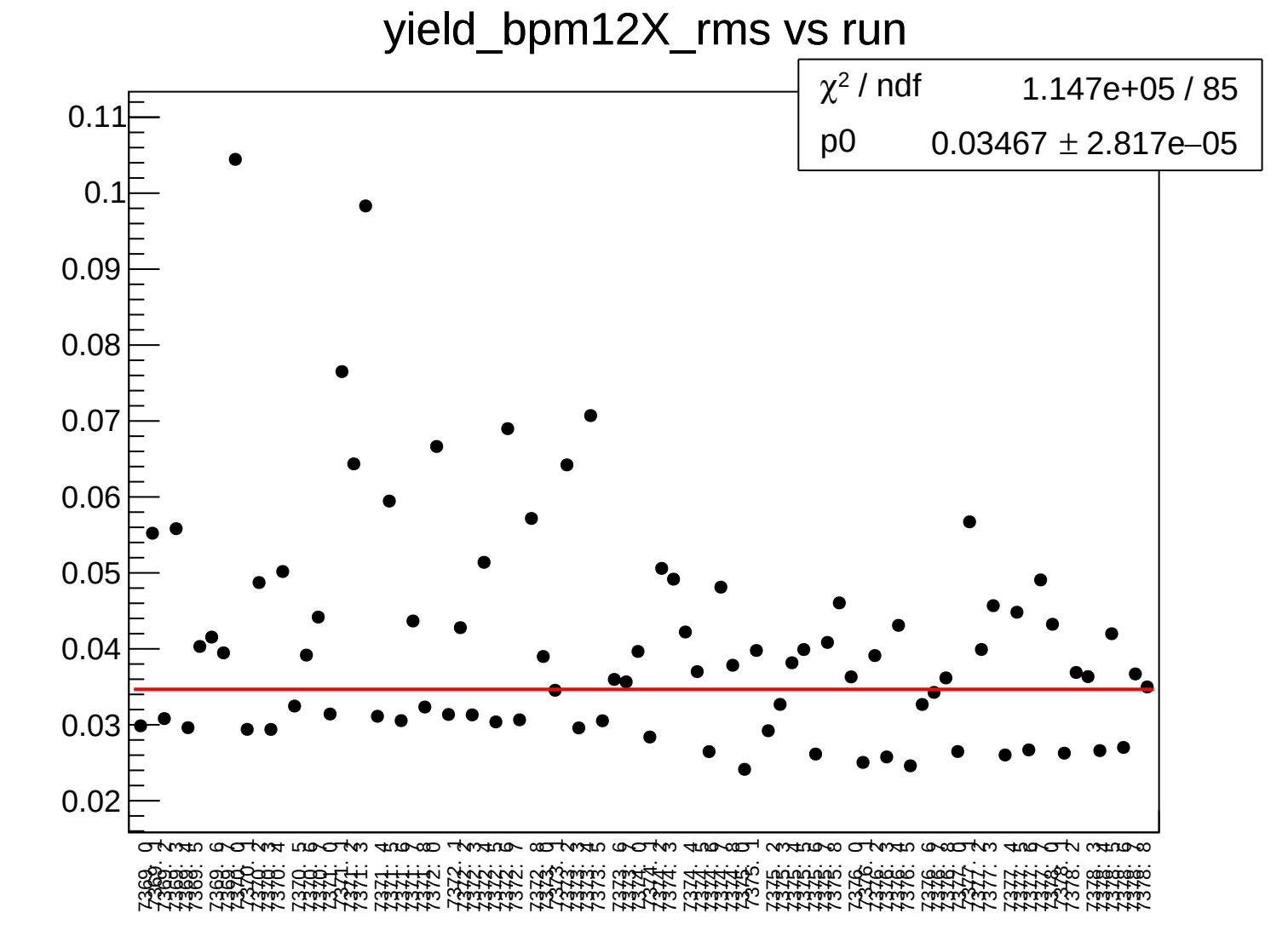

yield_bpm11Y_mean vs run
χ² / ndf 7.395e+04 / 85
p0 −0.01048 ± 1.437e−05
0
−0.005
−0.01
−0.015
−0.02
pull
Entries 86
Mean −1200
Std Dev 1232
60
40
20
0
−20
−40
−60
−80

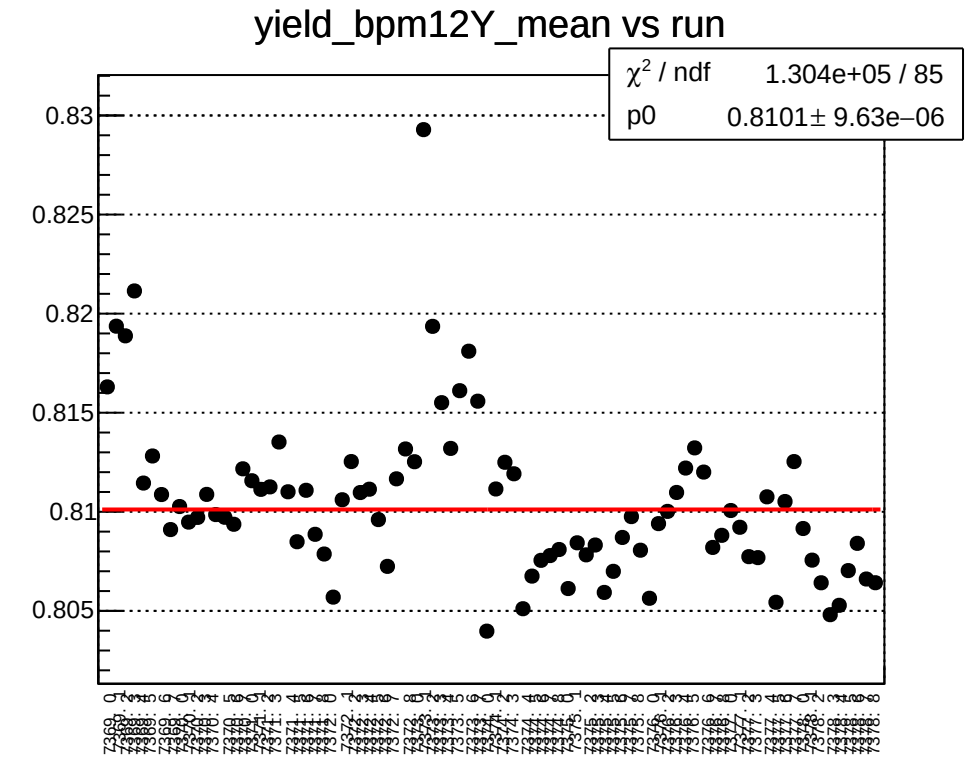

pull1D
Entries 86
Mean 1.205
Std Dev 4.112
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

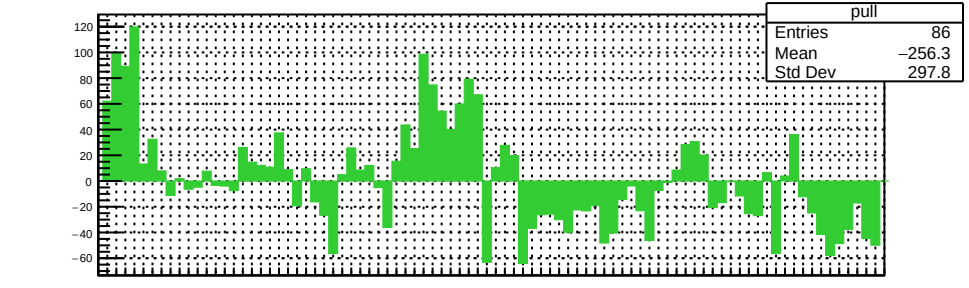

yield_bpm11Y_rms vs run
χ² / ndf 1.901e+04 / 85
p0 0.0129 ± 1.016e−05
0.015
0.014
0.013
0.012
0.011
0.01

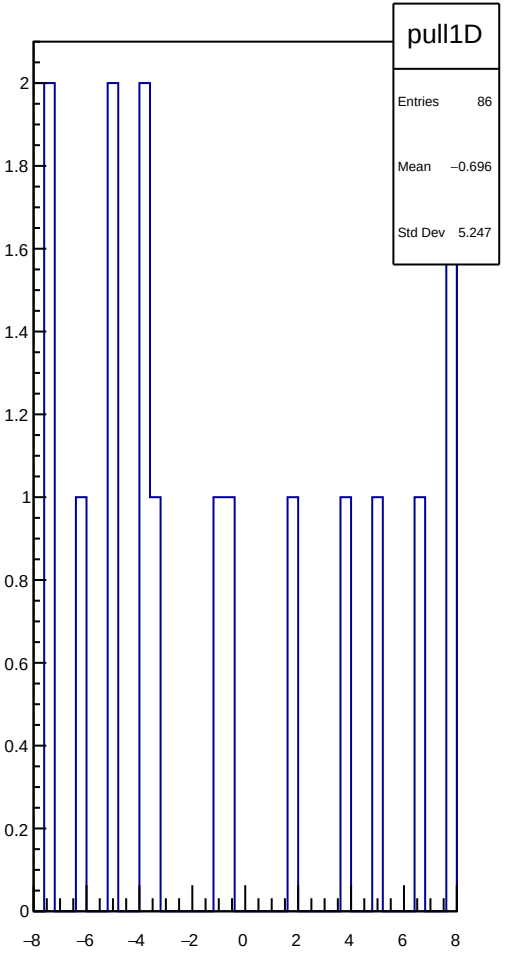

yield_bpm12X_mean vs run
χ² / ndf 1.134e+05 / 85
p0 −1.396 ± 3.984e−05
pull
Entries 86
Mean 315.1
Std Dev 272

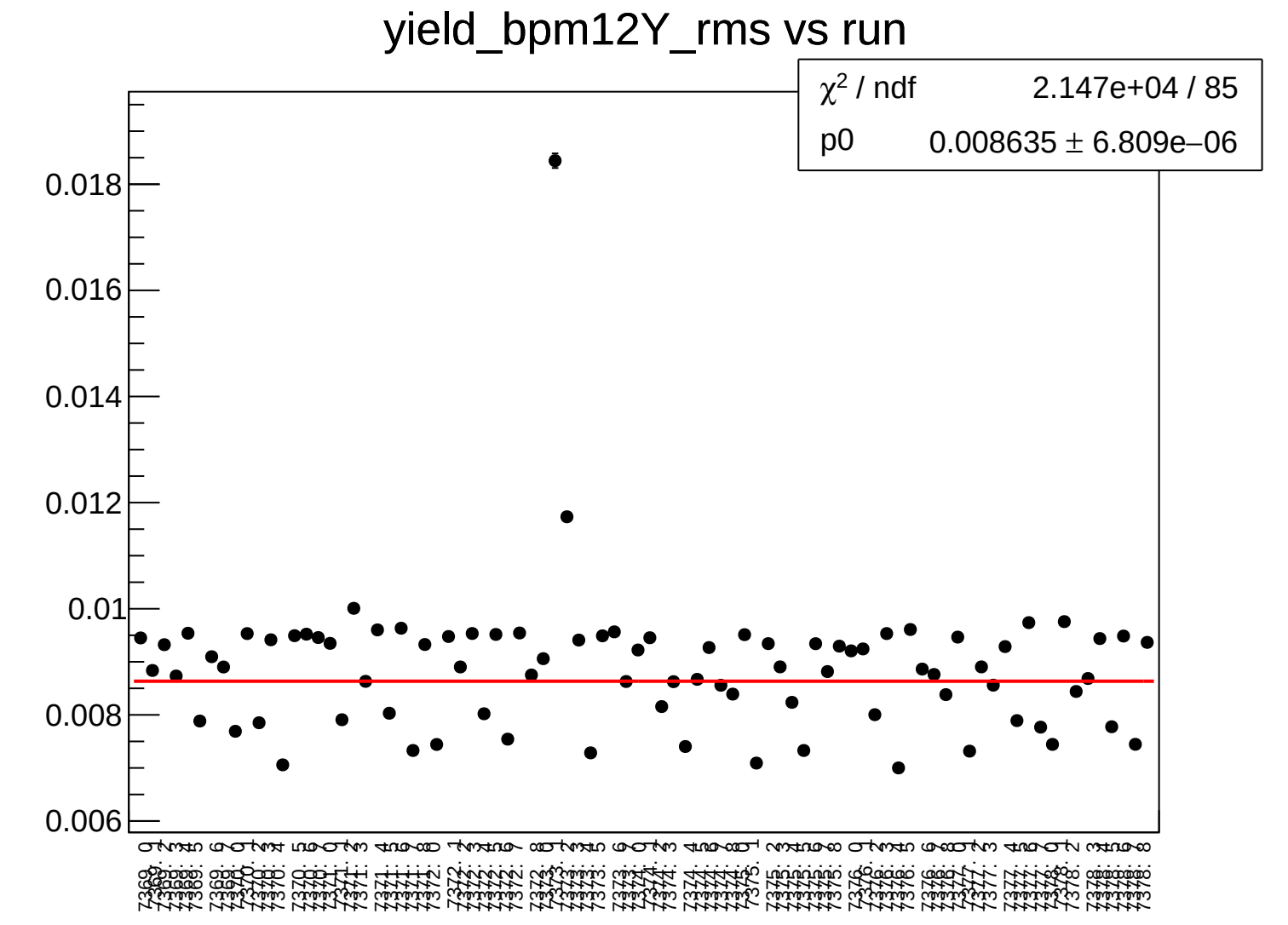

pull1D
Entries 86
Mean −0.5943
Std Dev 4.993

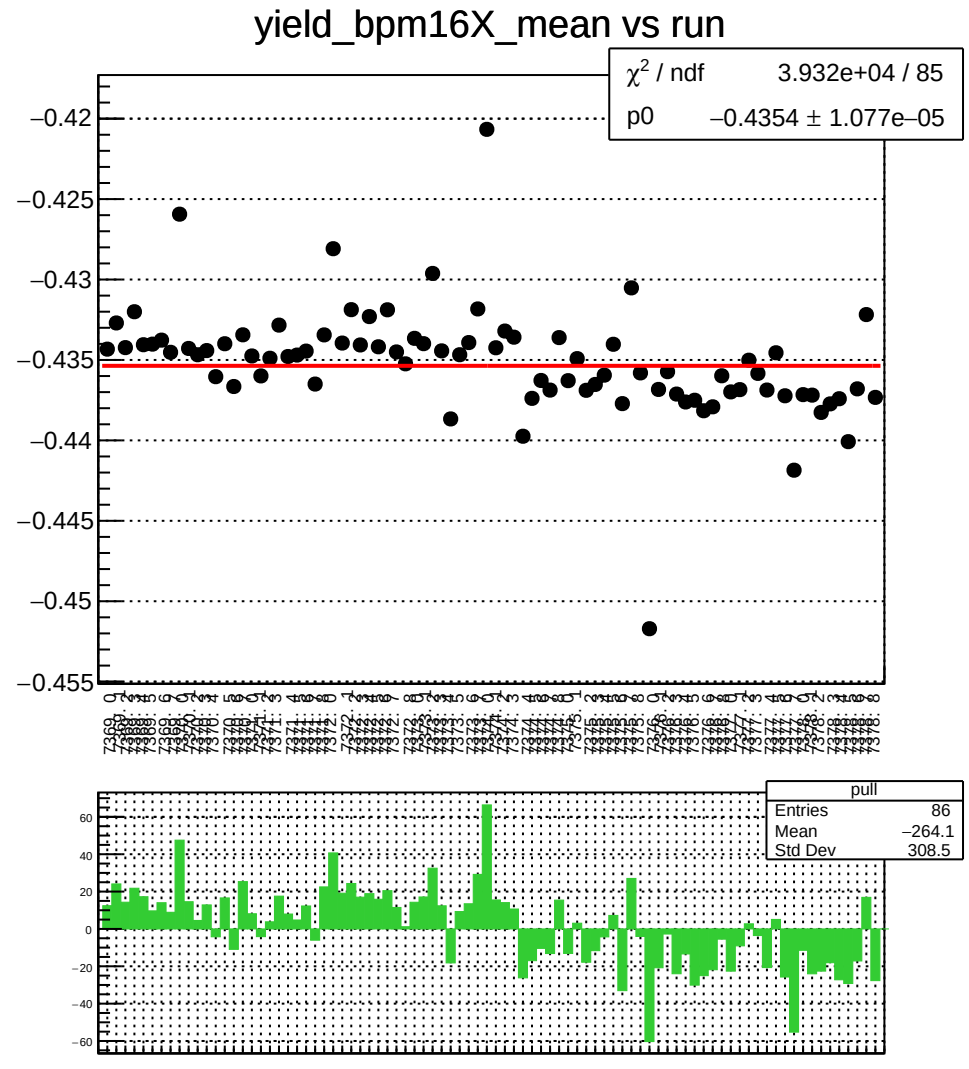

yield_bpm12X_rms vs run
χ² / ndf 1.147e+05 / 85
p0 0.03467 ± 2.817e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

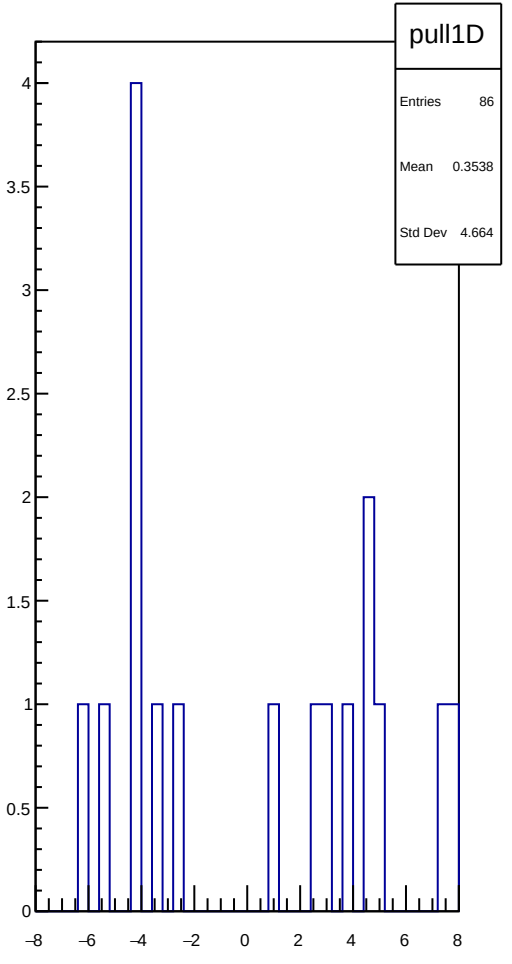

yield_bpm12Y_mean vs run
χ² / ndf 1.304e+05 / 85
p0 0.8101± 9.63e−06
0.83
0.825
0.82
0.815
0.81
0.805

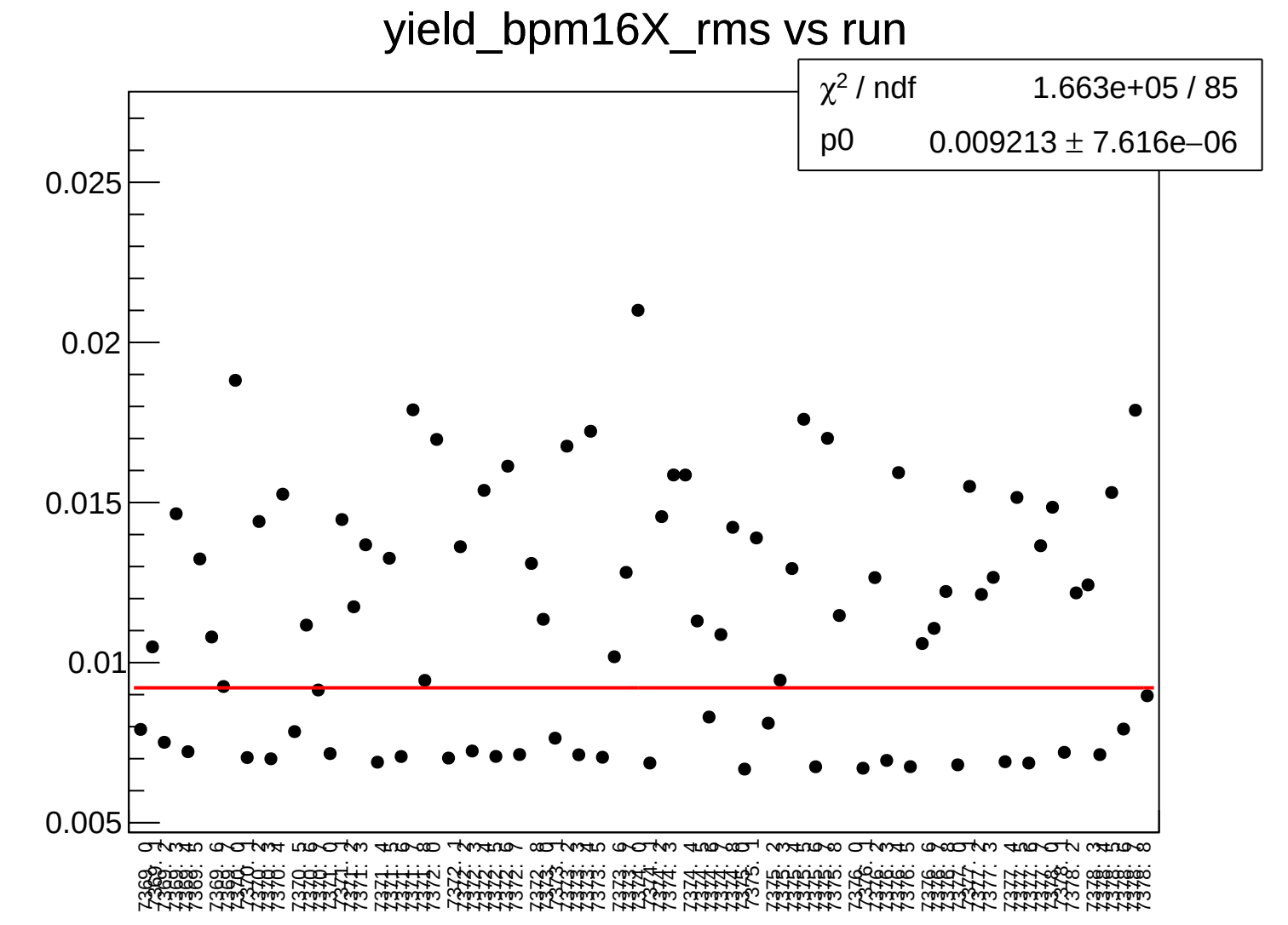

pull
Entries 86
Mean −256.3
Std Dev 297.8
120
100
80
60
40
20
0
−20
−40
−60

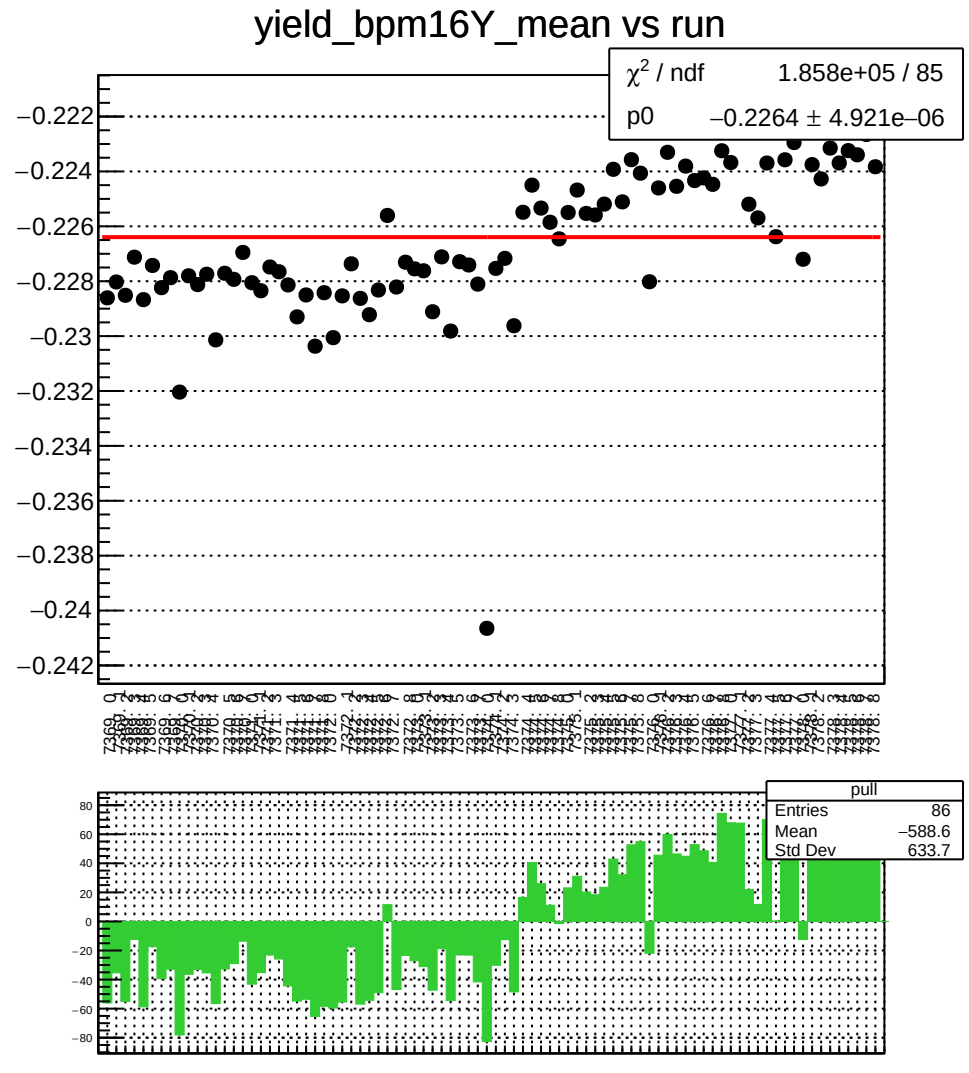

pull1D
Entries 86
Mean −0.696
Std Dev 5.247
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

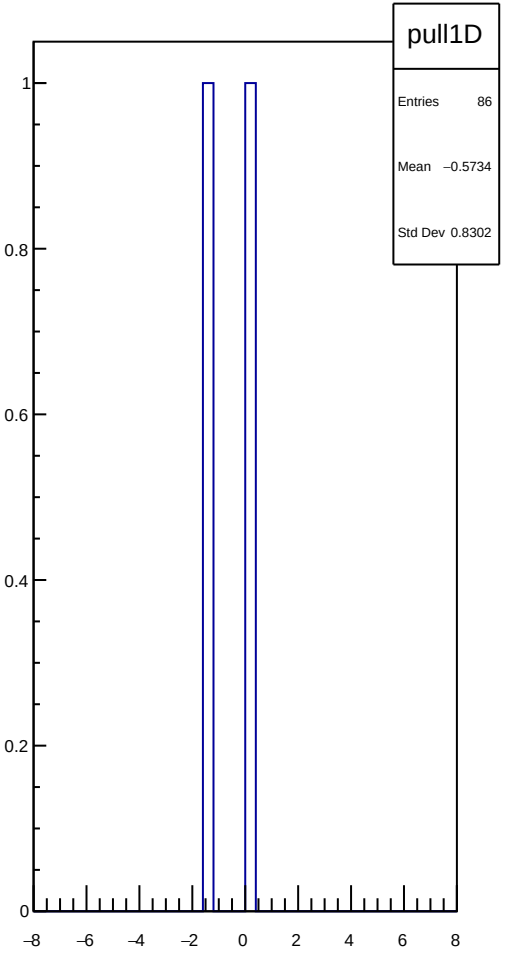

yield_bpm12Y_rms vs run
χ² / ndf 2.147e+04 / 85
p0 0.008635 ± 6.809e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

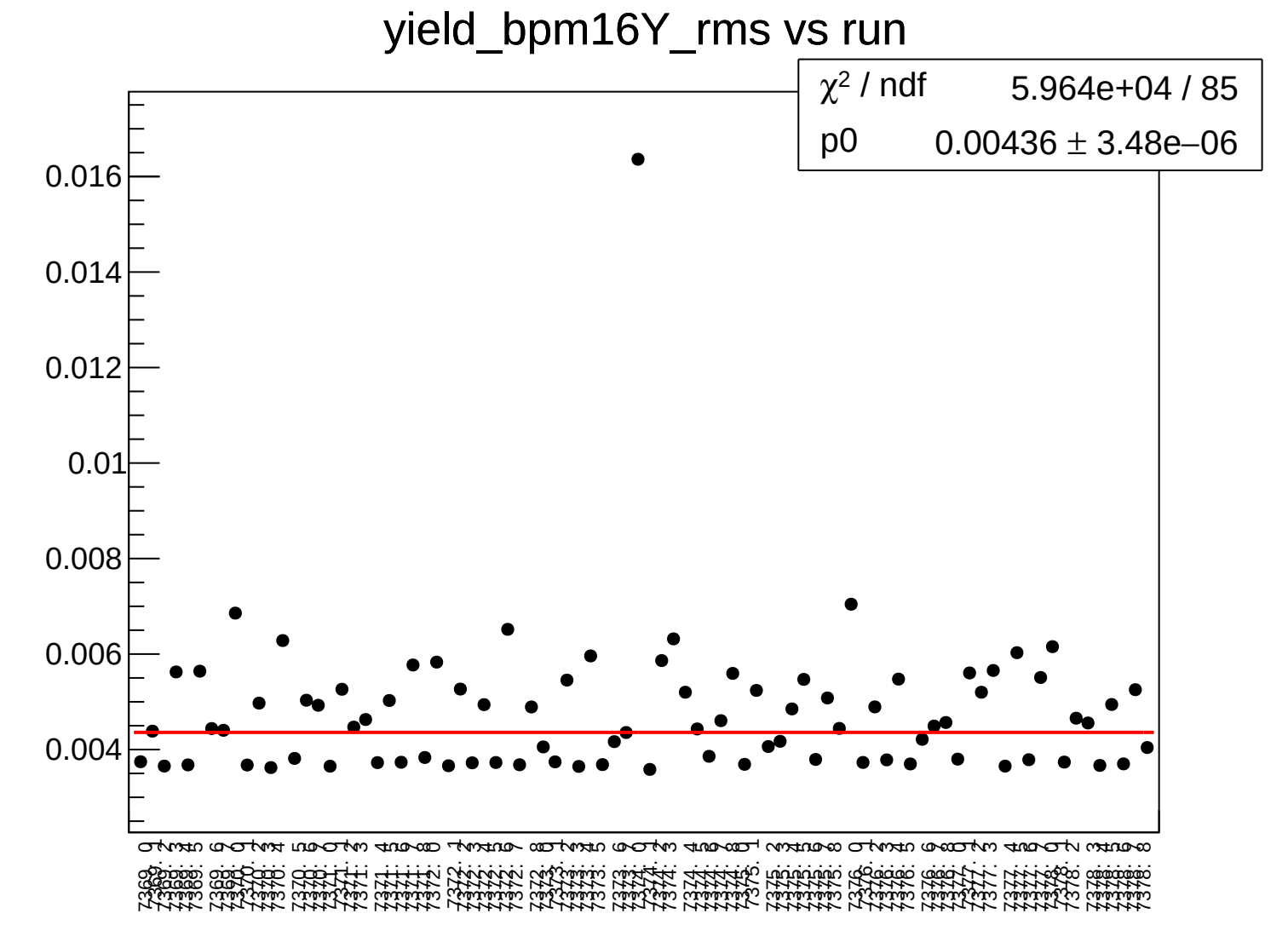

yield_bpm16X_mean vs run
χ² / ndf 3.932e+04 / 85
p0 −0.4354 ± 1.077e−05
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
−0.45
−0.455
pull
Entries 86
Mean −264.1
Std Dev 308.5
60
40
20
0
−20
−40
−60

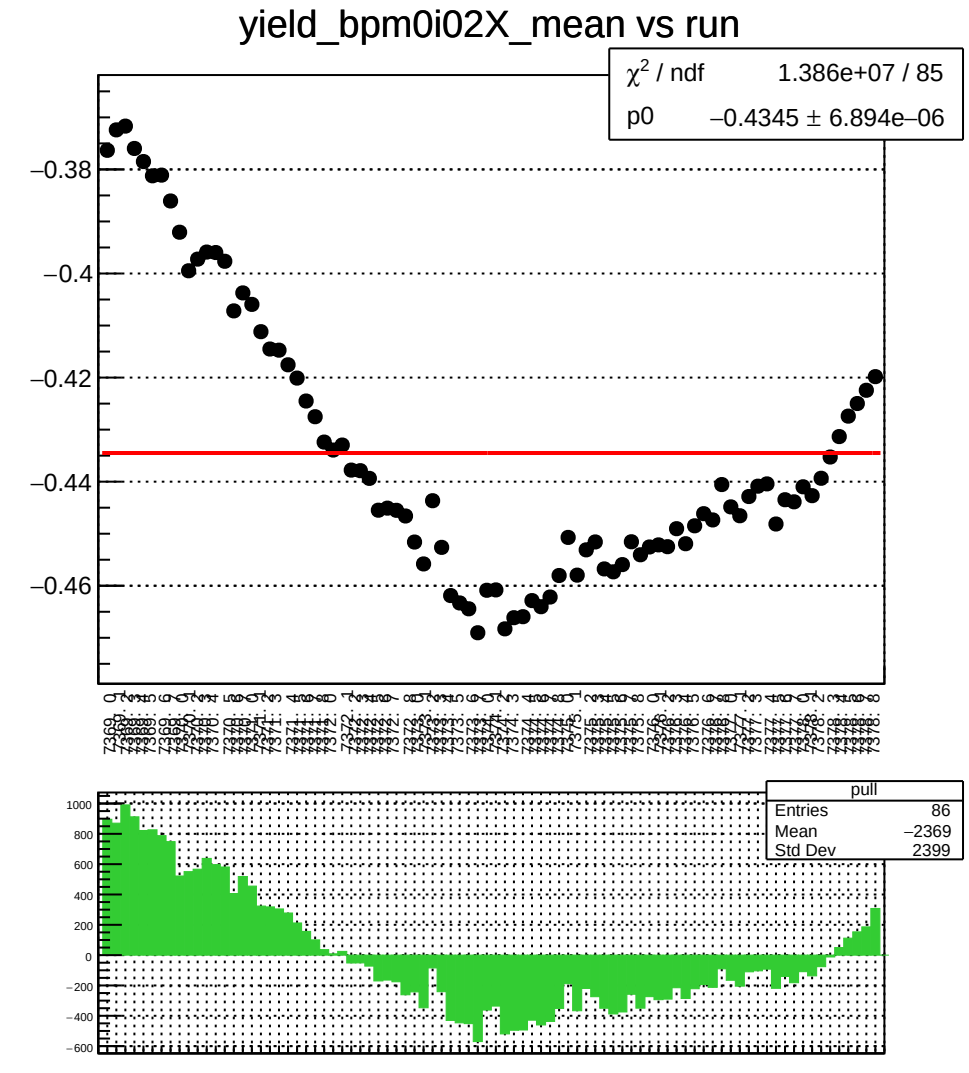

pull1D
Entries 86
Mean 0.3538
Std Dev 4.664
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

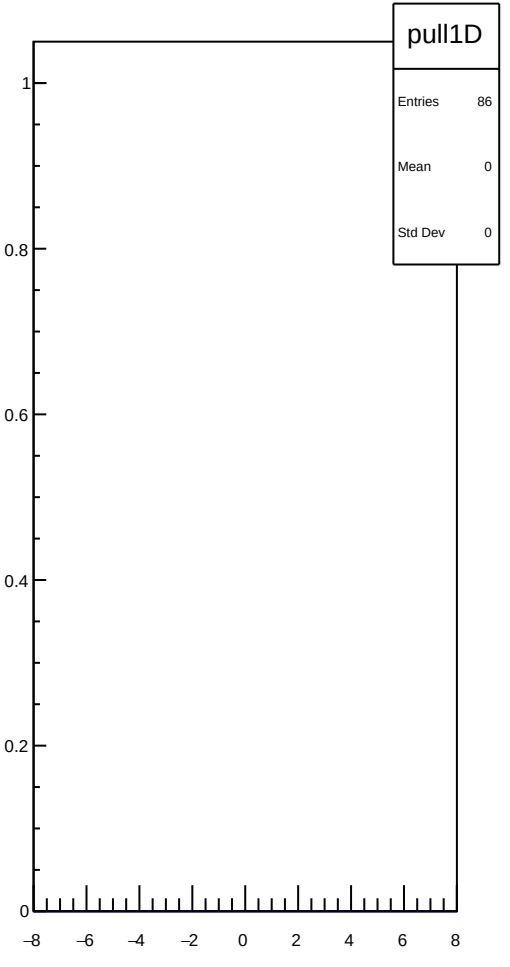

yield_bpm16X_rms vs run
χ² / ndf 1.663e+05 / 85
p0 0.009213 ± 7.616e−06
0.025
0.02
0.015
0.01
0.005

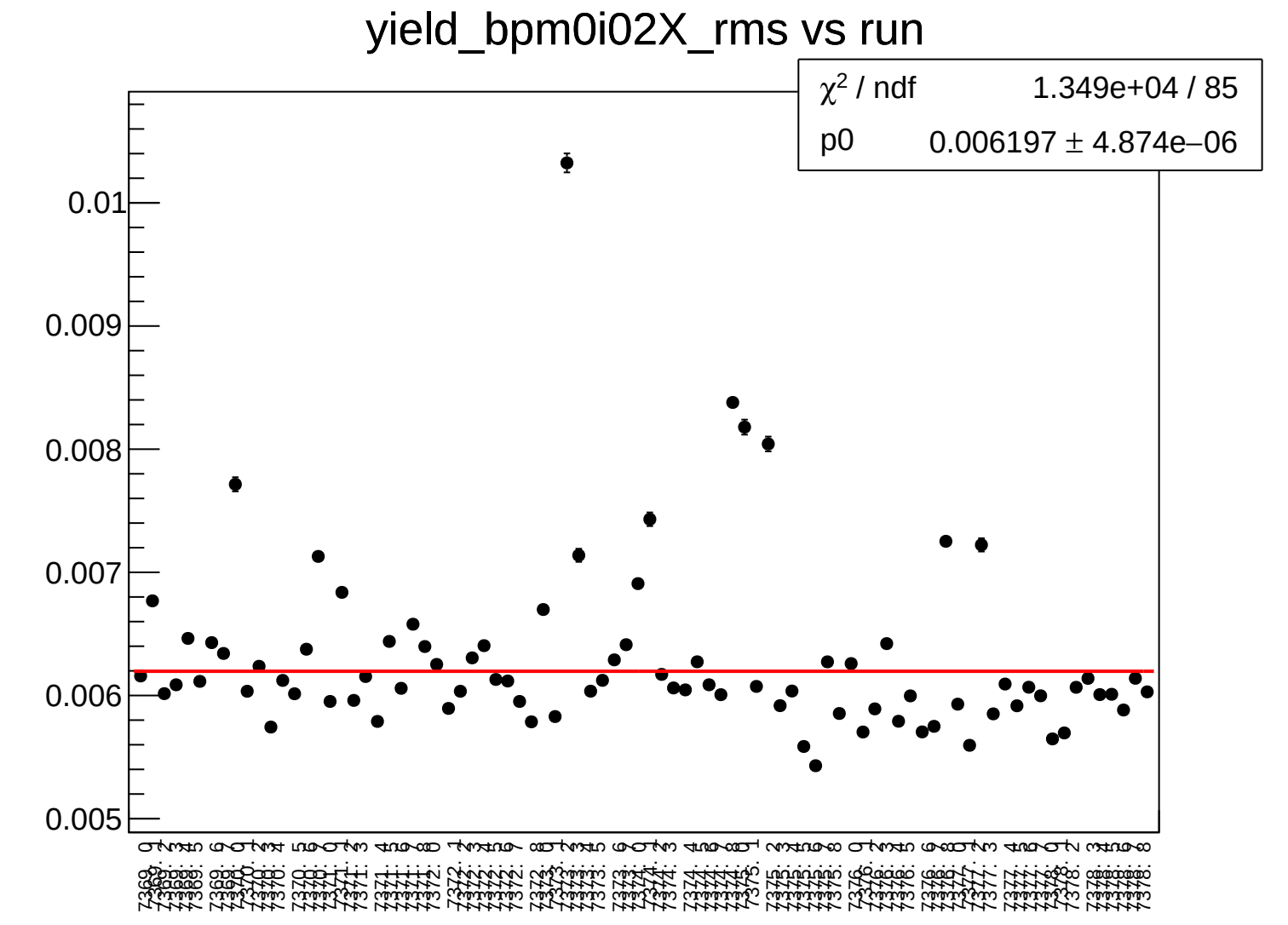

yield_bpm16Y_mean vs run
χ² / ndf 1.858e+05 / 85
p0 −0.2264 ± 4.921e−06
−0.222
−0.224
−0.226
−0.228
−0.23
−0.232
−0.234
−0.236
−0.238
−0.24
−0.242
pull
Entries 86
Mean −588.6
Std Dev 633.7
80
60
40
20
0
−20
−40
−60
−80

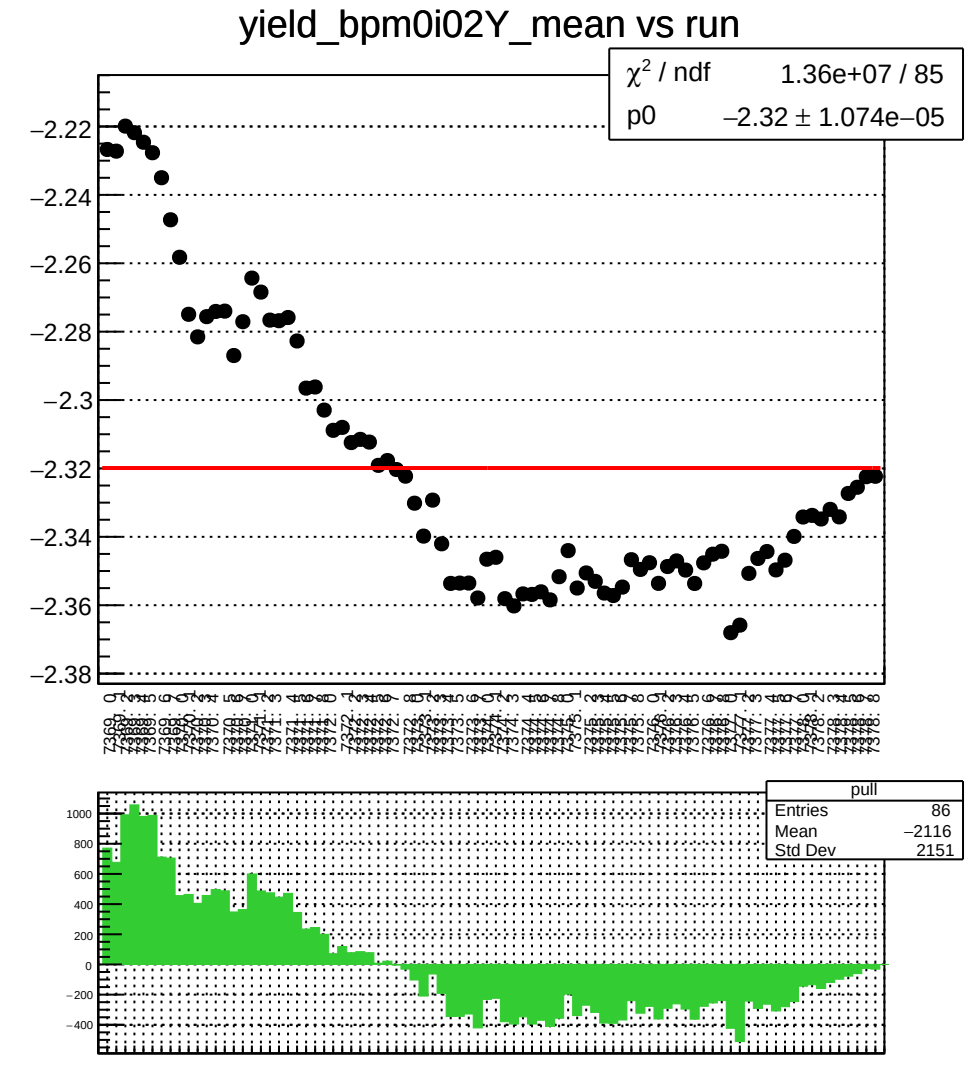

pull1D
Entries 86
Mean −0.5734
Std Dev 0.8302
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

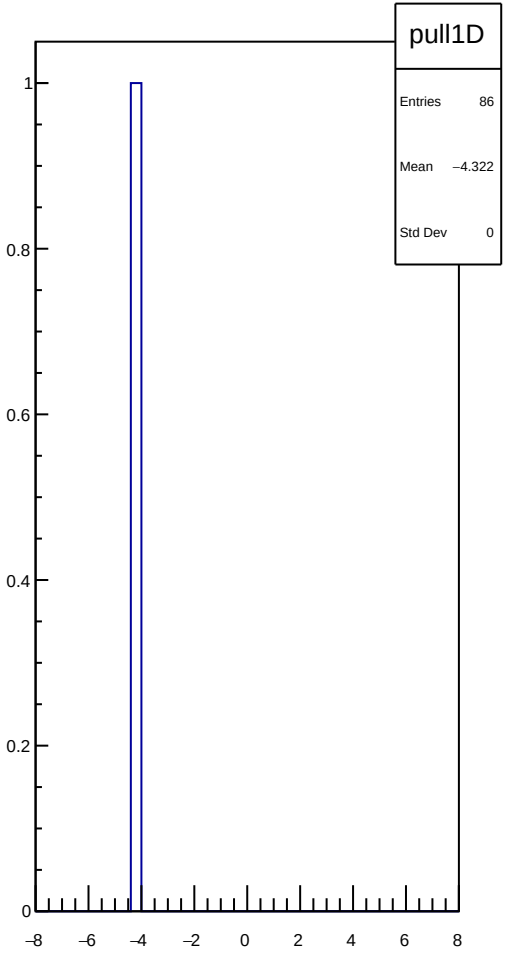

yield_bpm16Y_rms vs run
χ² / ndf 5.964e+04 / 85
p0 0.00436 ± 3.48e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004

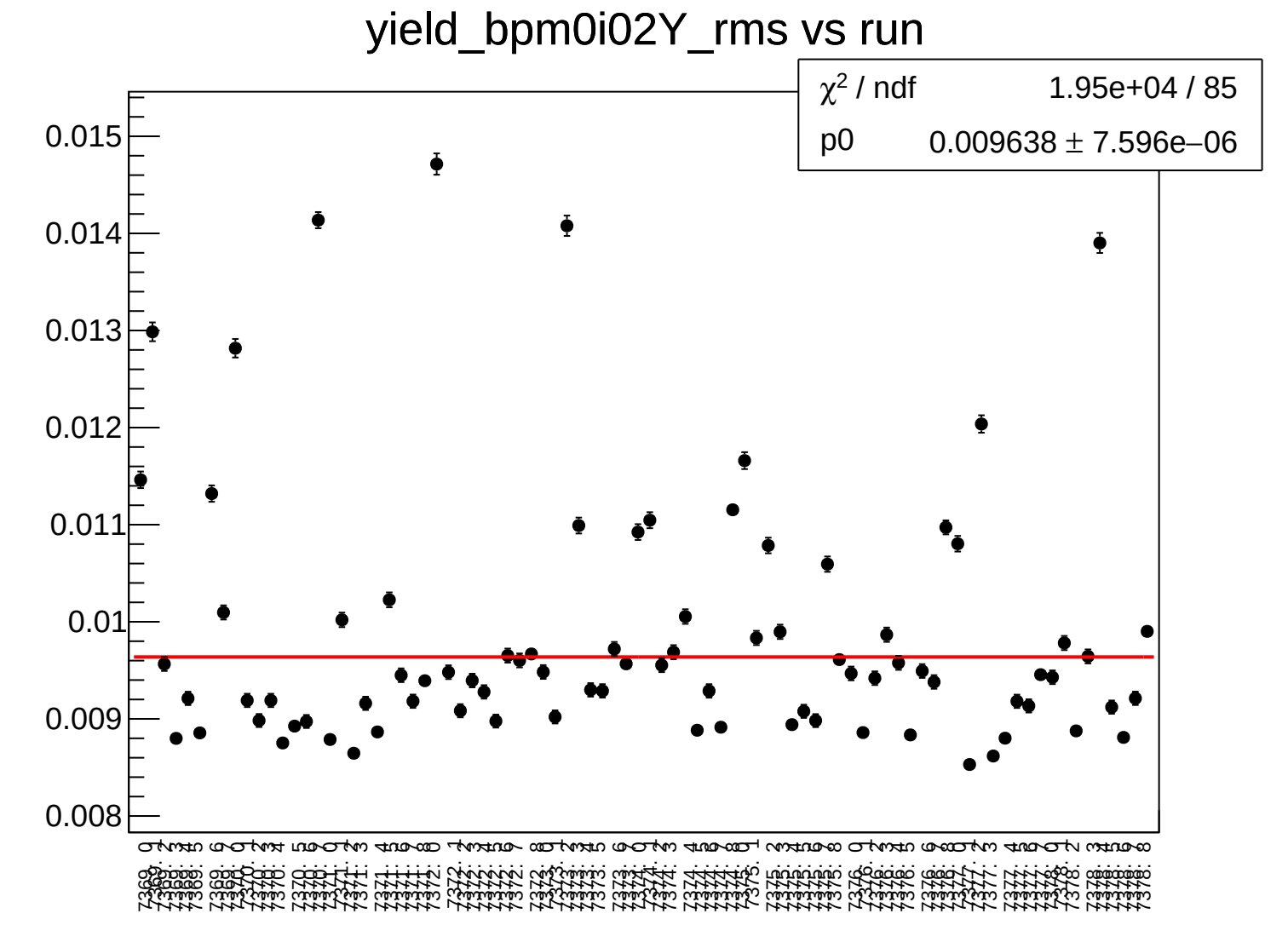

yield_bpm0i02X_mean vs run
χ² / ndf 1.386e+07 / 85
p0 −0.4345 ± 6.894e−06
−0.38
−0.4
−0.42
−0.44
−0.46
pull
Entries 86
Mean −2369
Std Dev 2399
1000
800
600
400
200
0
−200
−400
−600

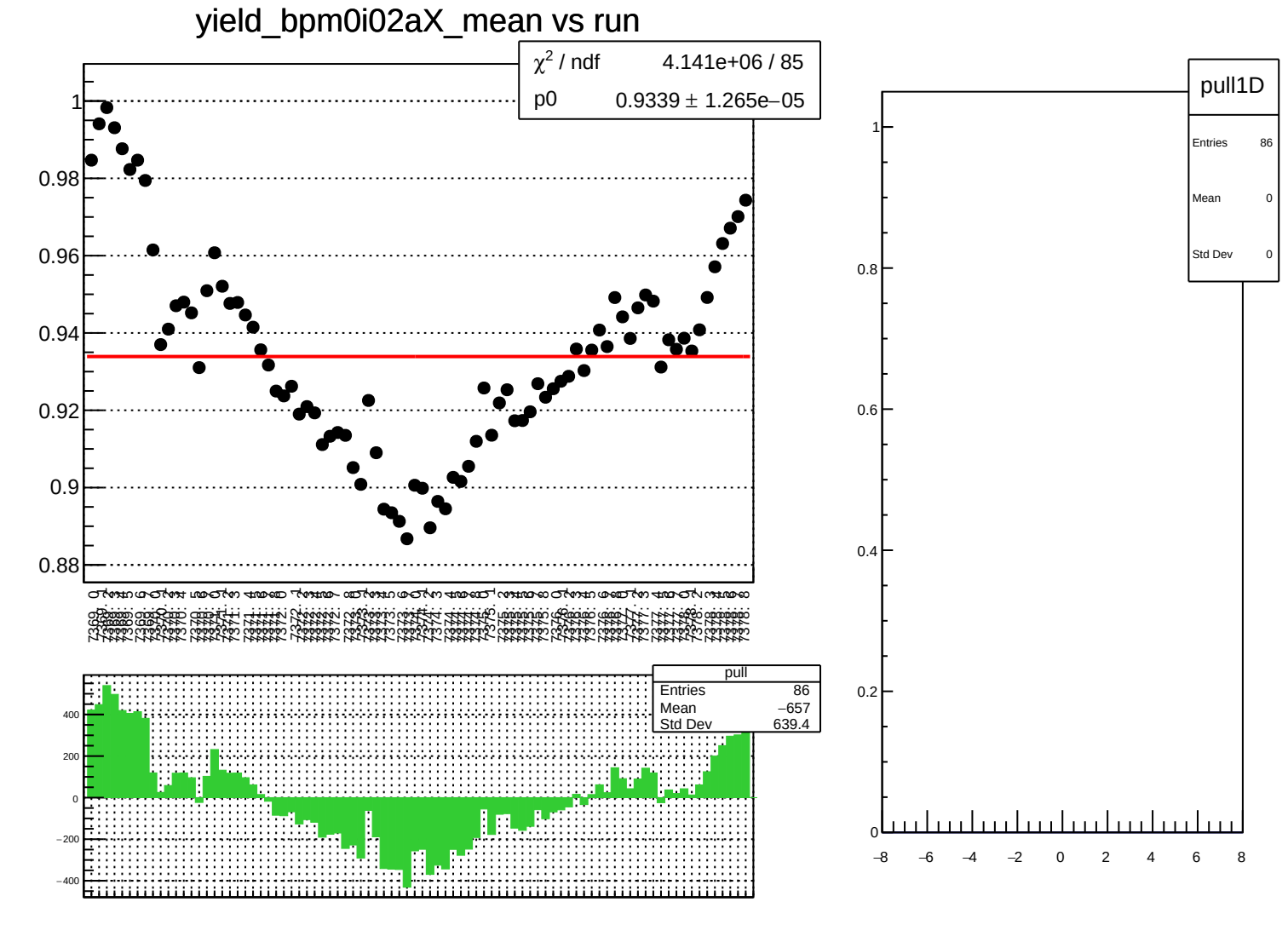

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

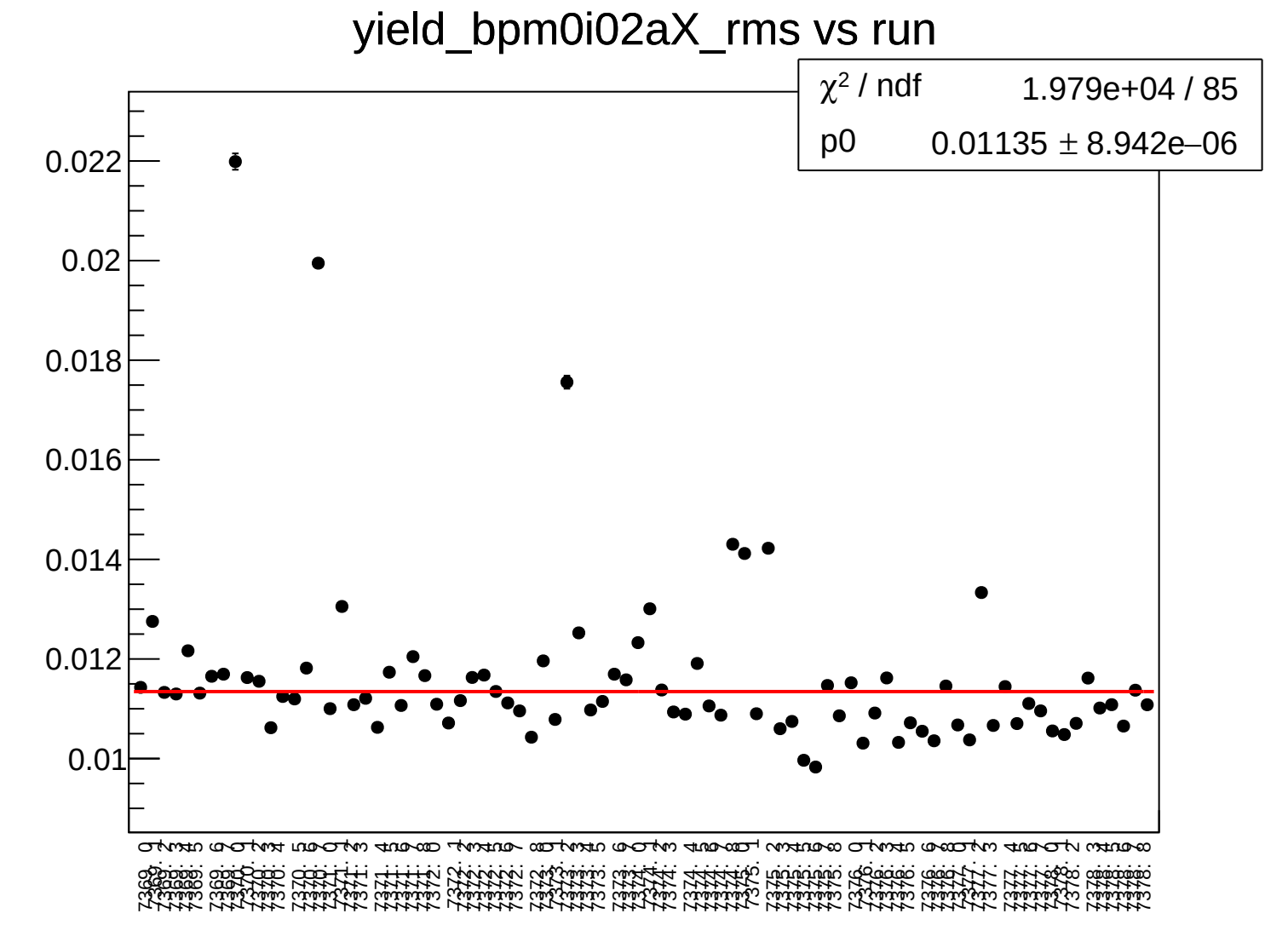

yield_bpm0i02X_rms vs run
χ^2 / ndf 1.349e+04 / 85
p0 0.006197 ± 4.874e−06
0.01
0.009
0.008
0.007
0.006
0.005

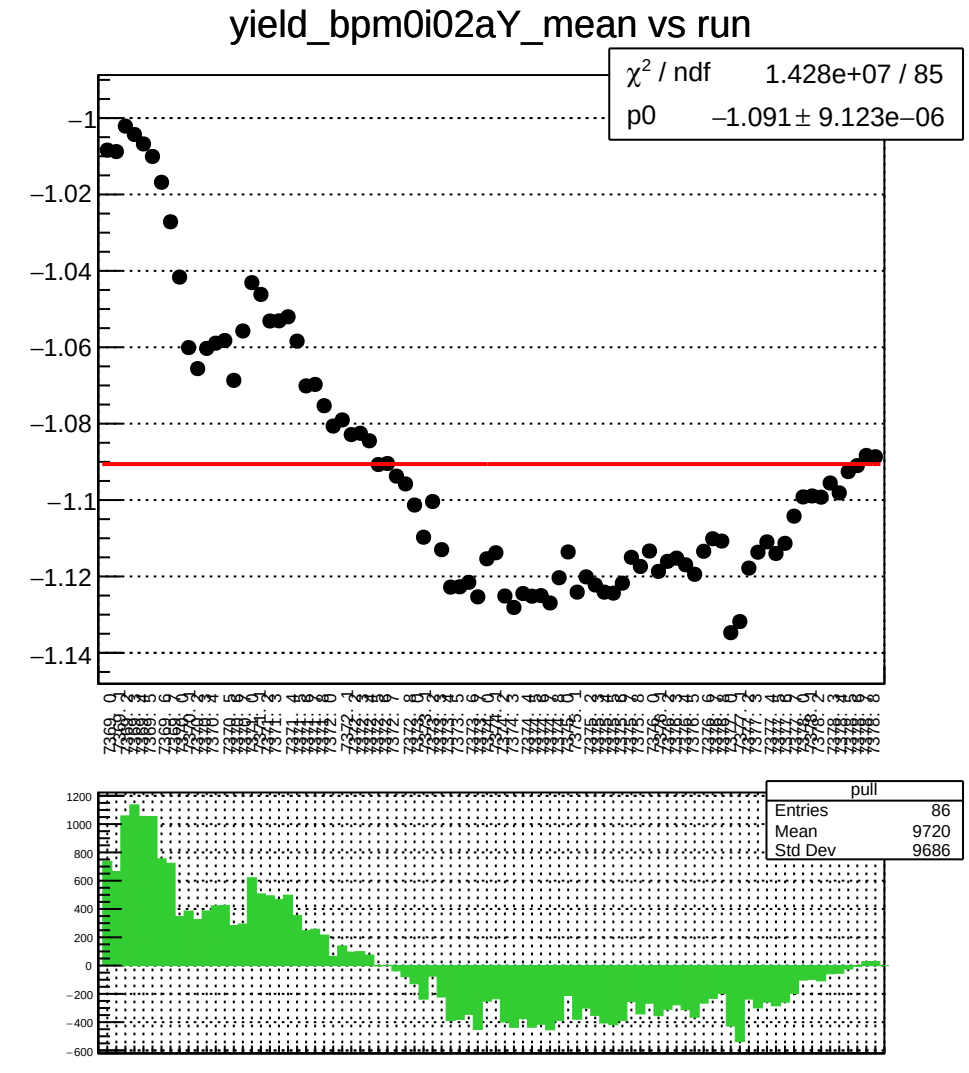

yield_bpm0i02Y_mean vs run
χ² / ndf 1.36e+07 / 85
p0 −2.32 ± 1.074e−05
−2.22
−2.24
−2.26
−2.28
−2.3
−2.32
−2.34
−2.36
−2.38
pull
Entries 86
Mean −2116
Std Dev 2151
1000
800
600
400
200
0
−200
−400

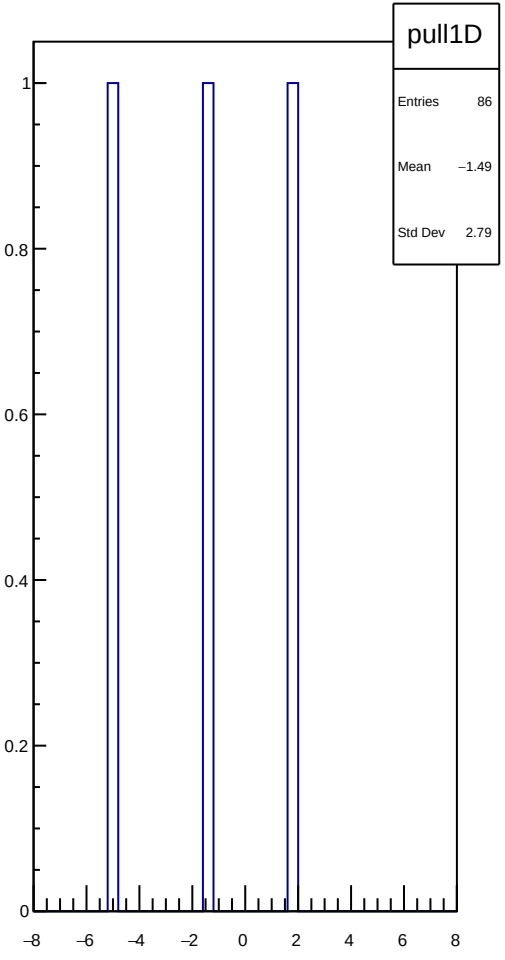

pull1D
Entries 86
Mean −4.322
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

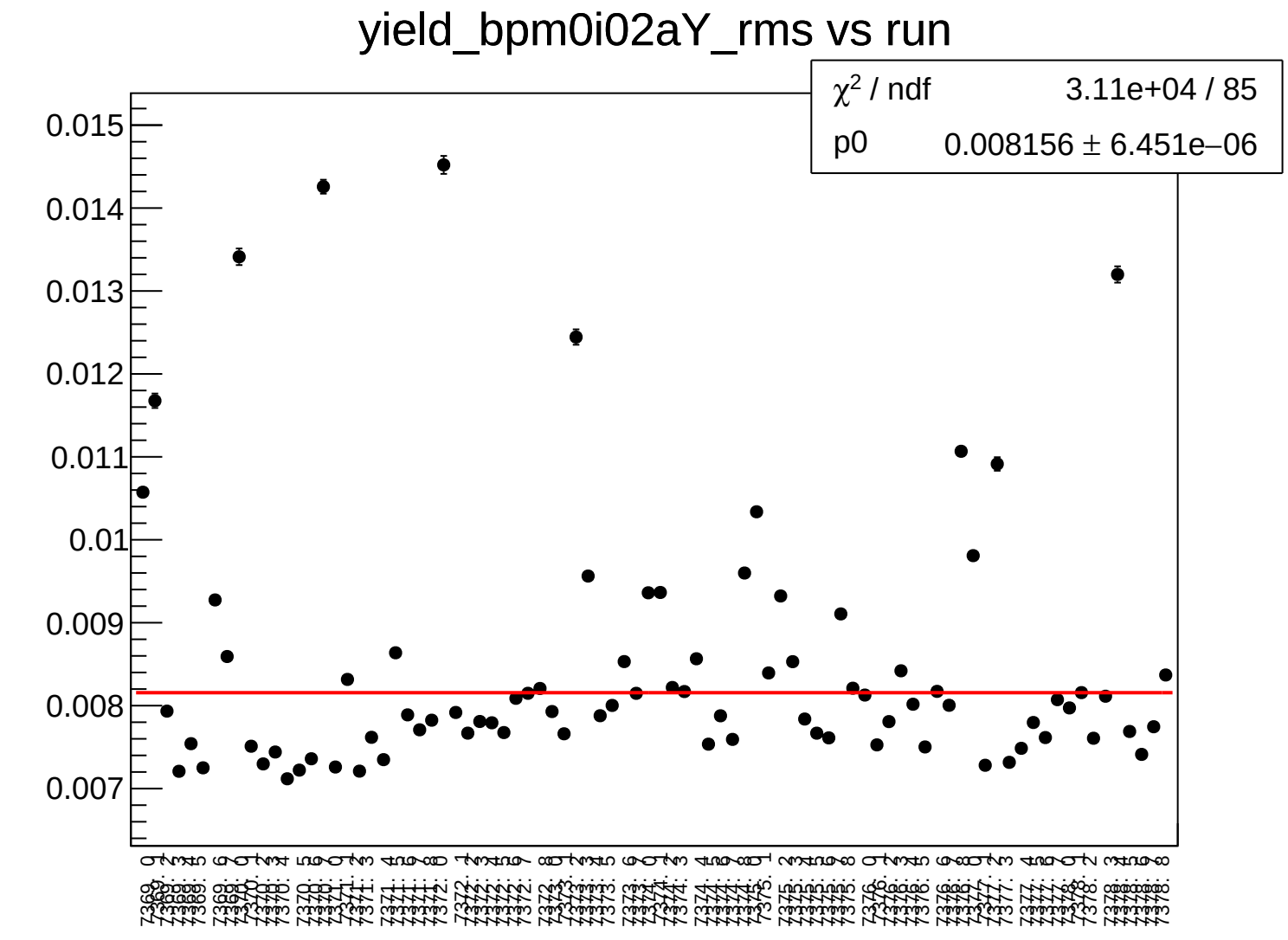

yield_bpm0i02Y_rms vs run
χ² / ndf 1.95e+04 / 85
p0 0.009638 ± 7.596e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

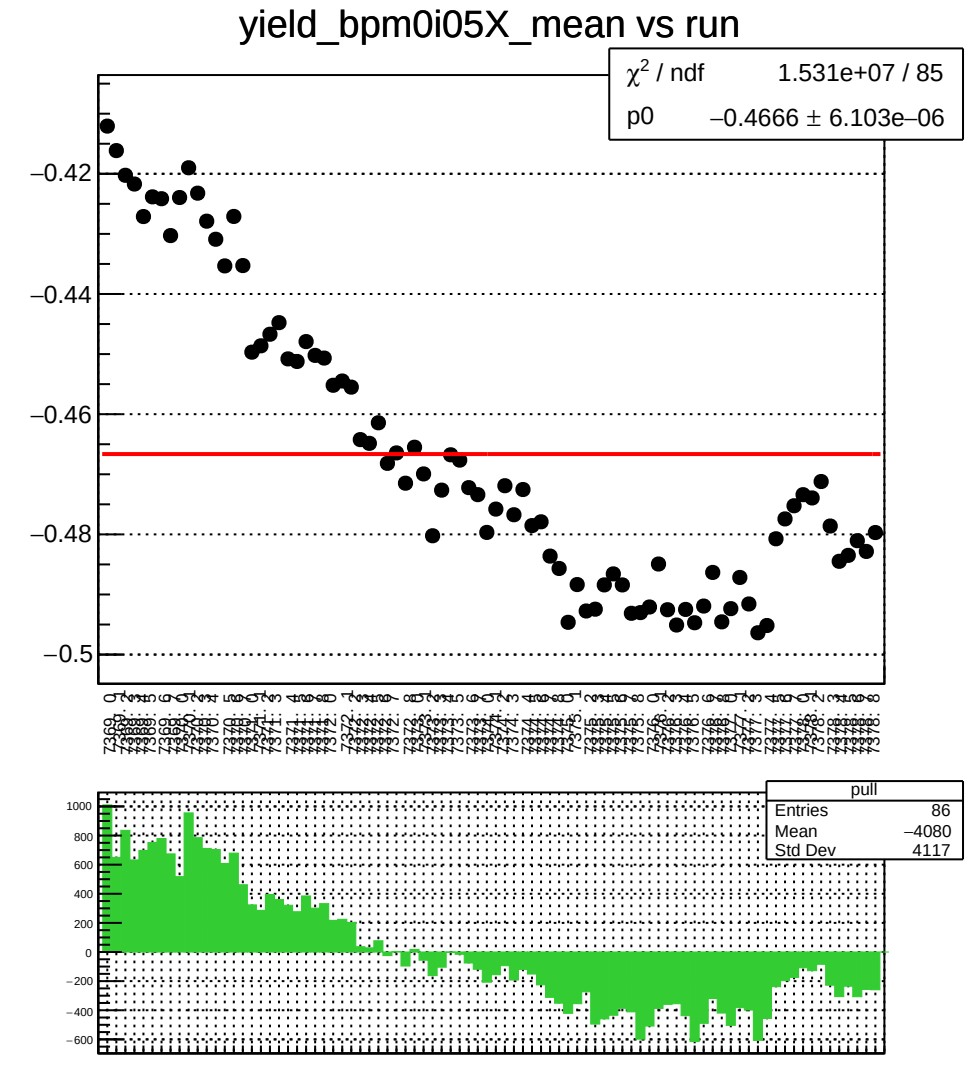

yield_bpm0i02aX_mean vs run
χ² / ndf 4.141e+06 / 85
p0 0.9339 ± 1.265e−05
pull
Entries 86
Mean −657
Std Dev 639.4
pull1D
Entries 86
Mean 0
Std Dev 0

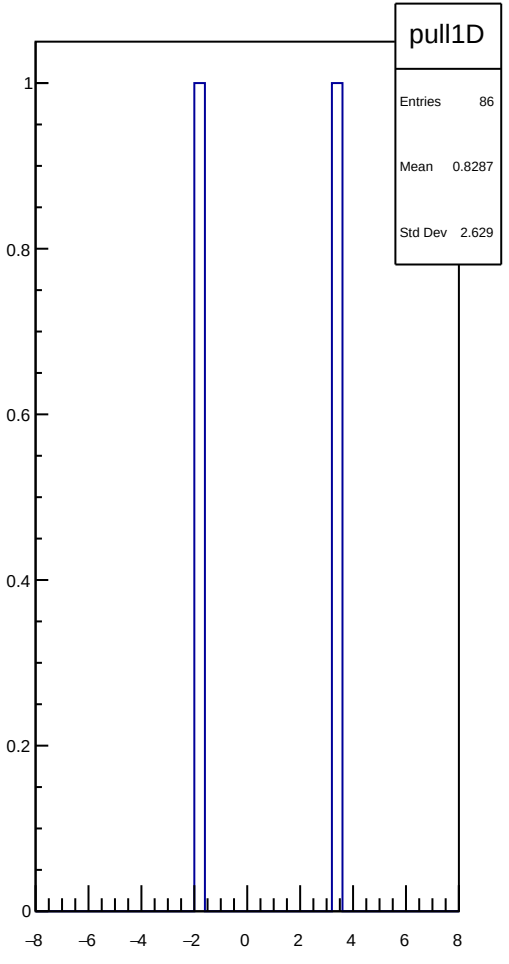

yield_bpm0i02aX_rms vs run
χ² / ndf 1.979e+04 / 85
p0 0.01135 ± 8.942e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

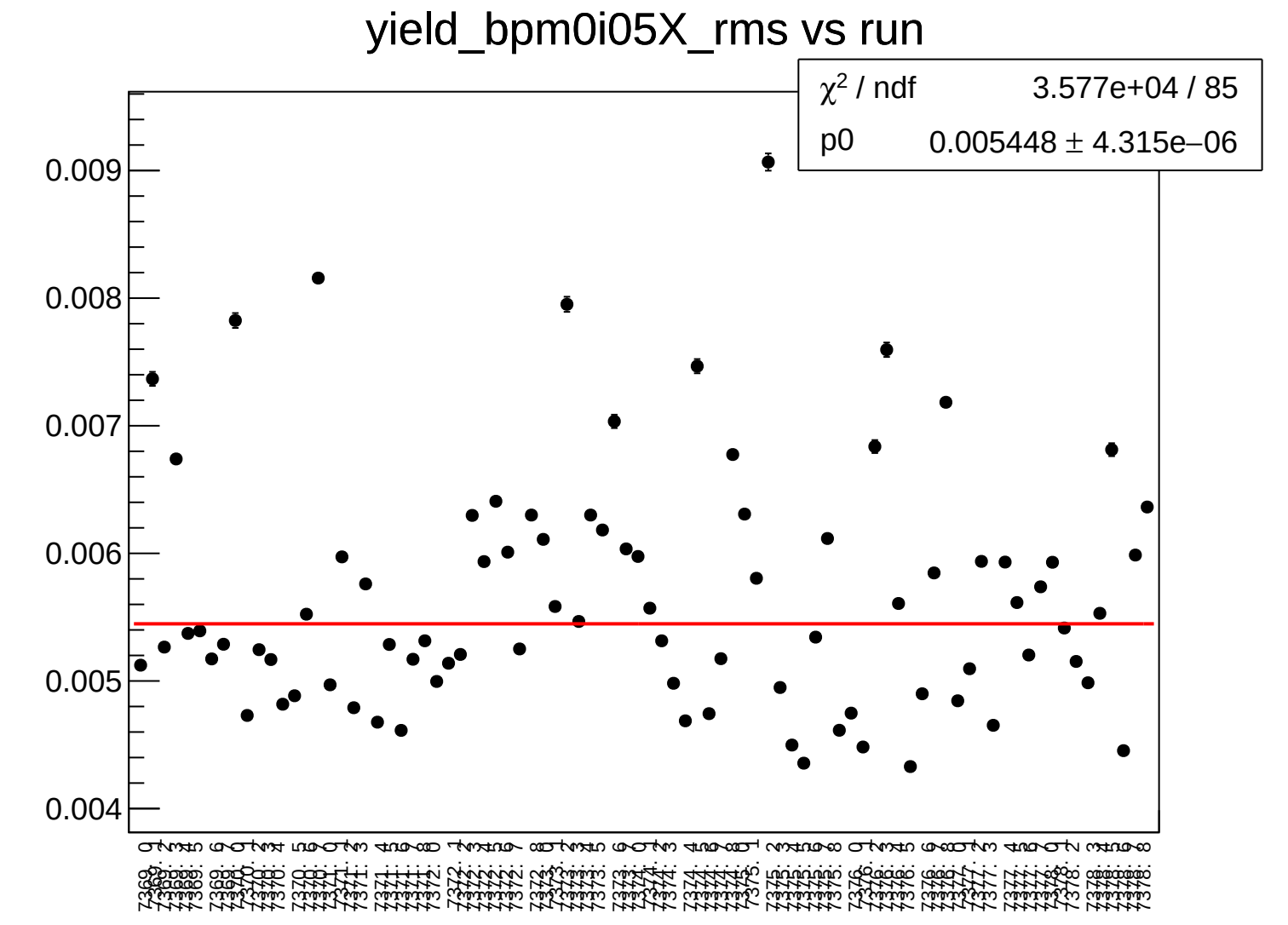

yield_bpm0i02aY_mean vs run
χ² / ndf 1.428e+07 / 85
p0 −1.091 ± 9.123e−06
pull
Entries 86
Mean 9720
Std Dev 9686

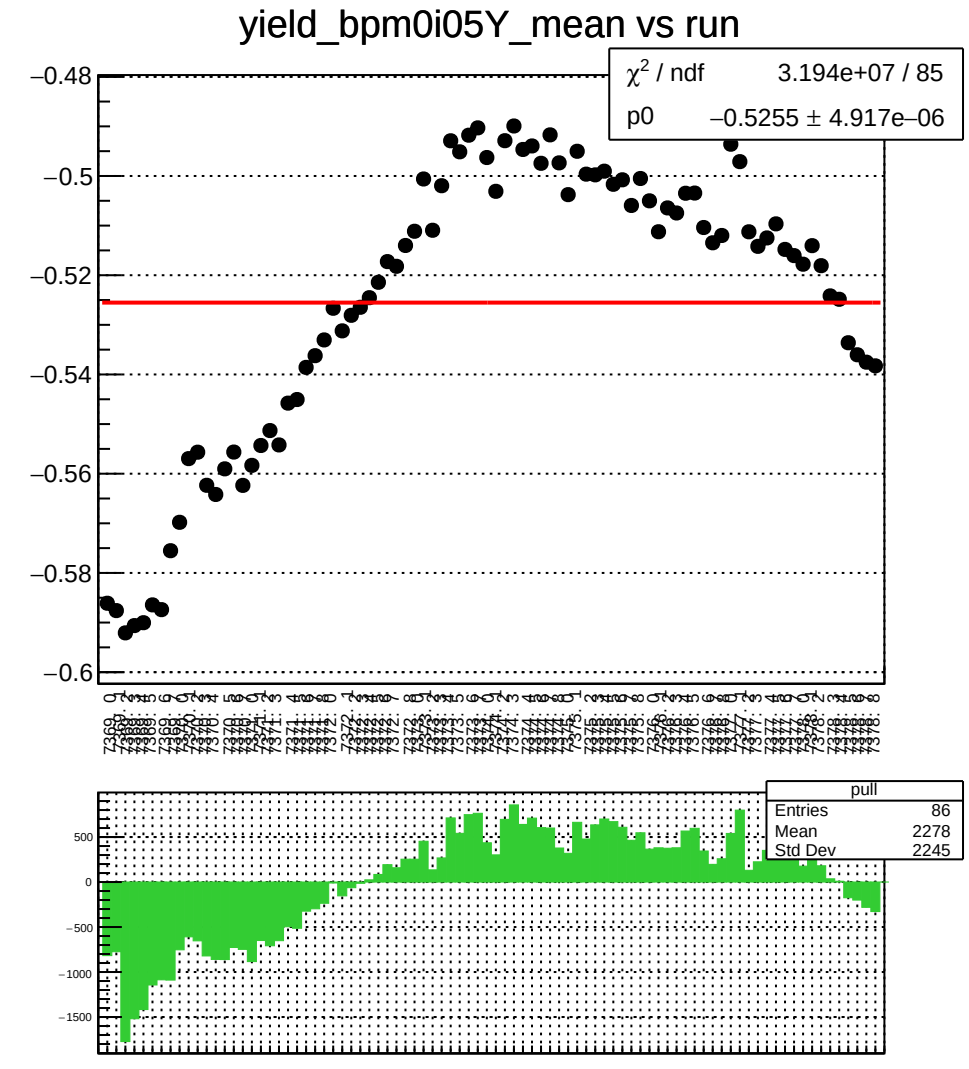

pull1D
Entries 86
Mean −1.49
Std Dev 2.79

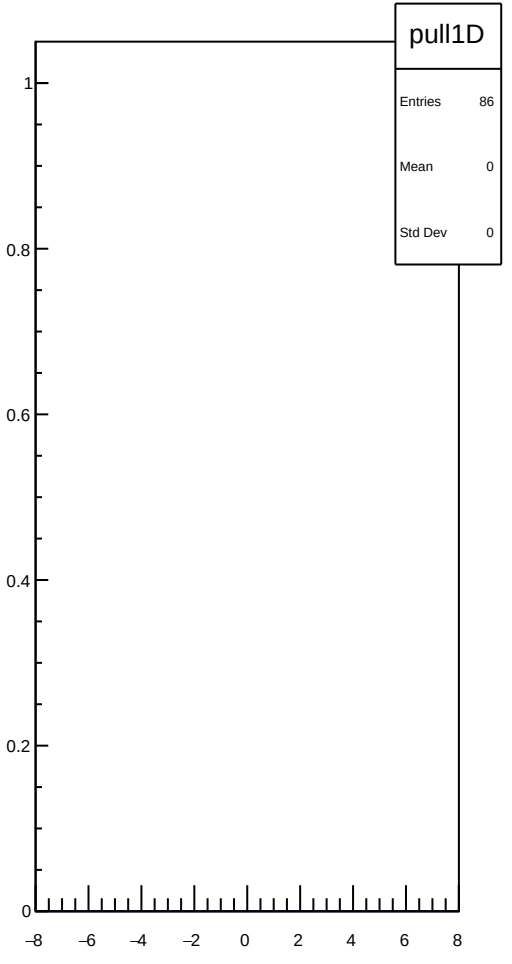

yield_bpm0i02aY_rms vs run
χ² / ndf 3.11e+04 / 85
p0 0.008156 ± 6.451e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

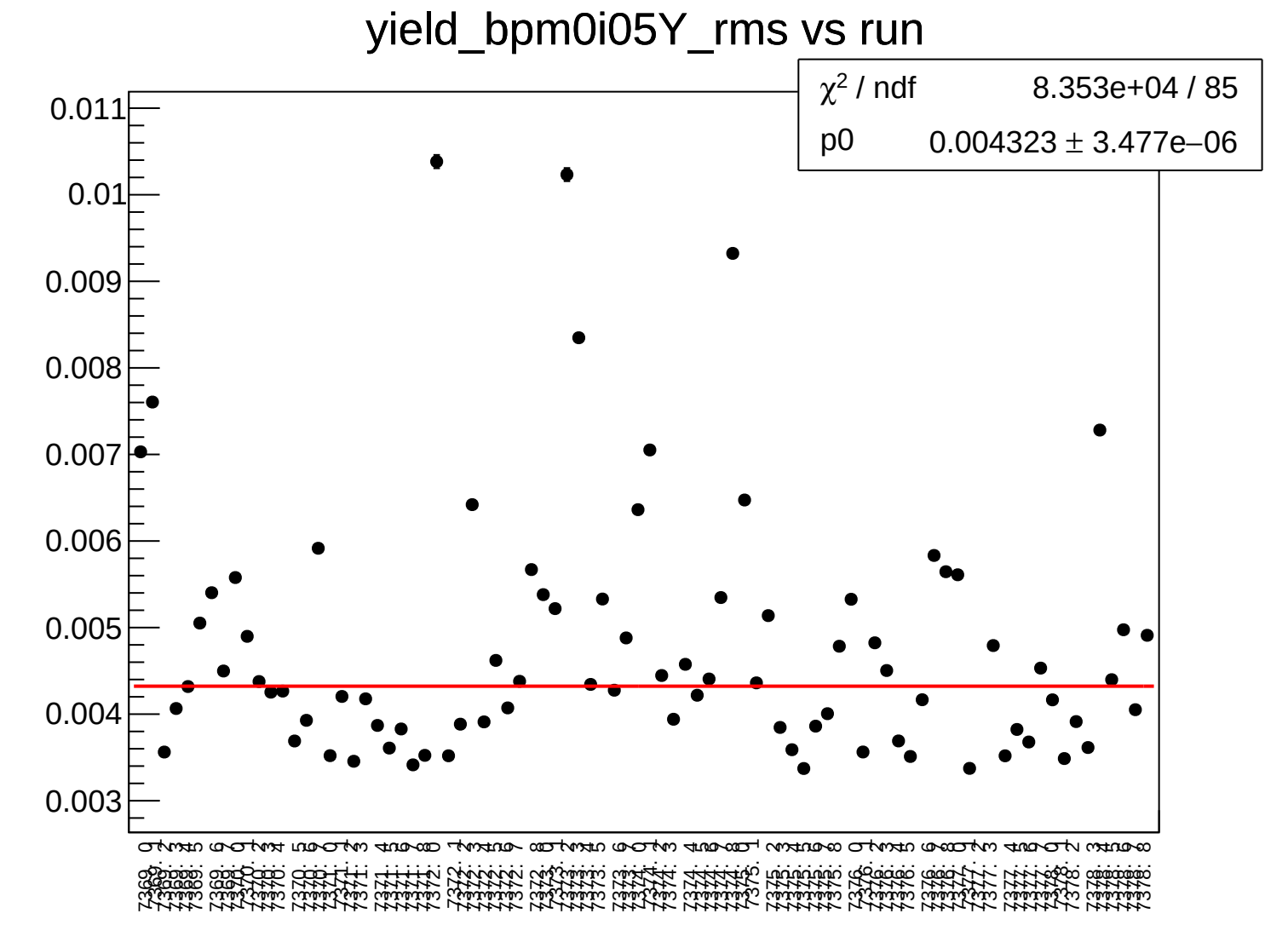

yield_bpm0i05X_mean vs run
χ² / ndf 1.531e+07 / 85
p0 −0.4666 ± 6.103e−06
−0.42
−0.44
−0.46
−0.48
−0.5
pull
Entries 86
Mean −4080
Std Dev 4117
1000
800
600
400
200
0
−200
−400
−600

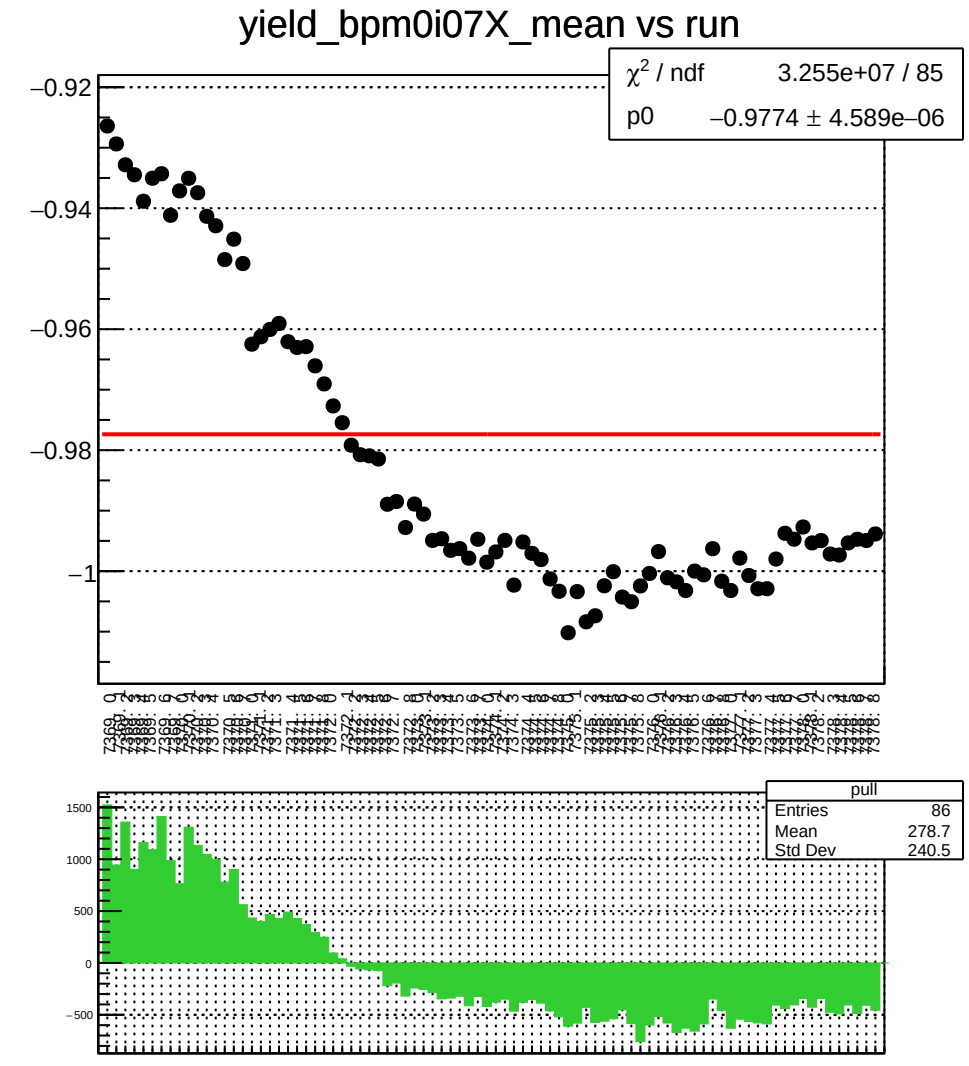

pull1D
Entries 86
Mean 0.8287
Std Dev 2.629
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

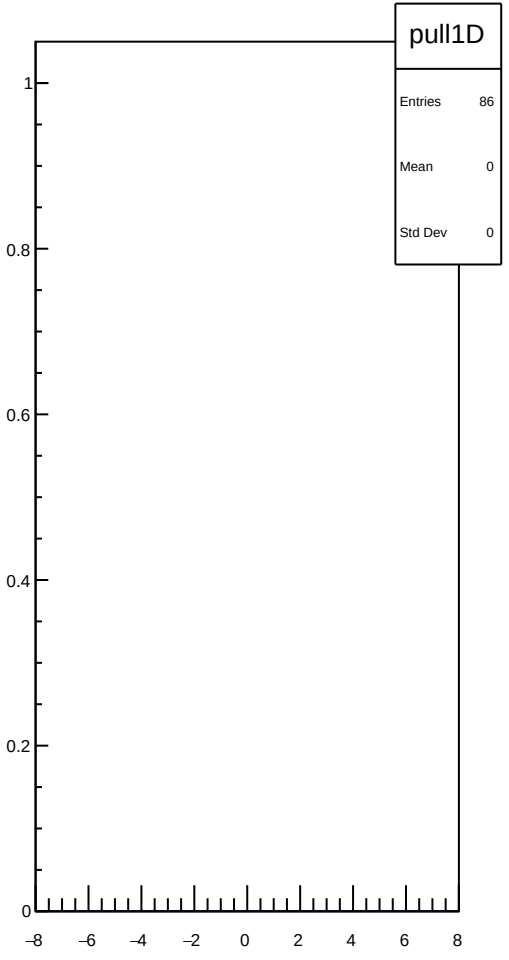

yield_bpm0i05X_rms vs run
χ² / ndf 3.577e+04 / 85
p0 0.005448 ± 4.315e−06
0.009
0.008
0.007
0.006
0.005
0.004

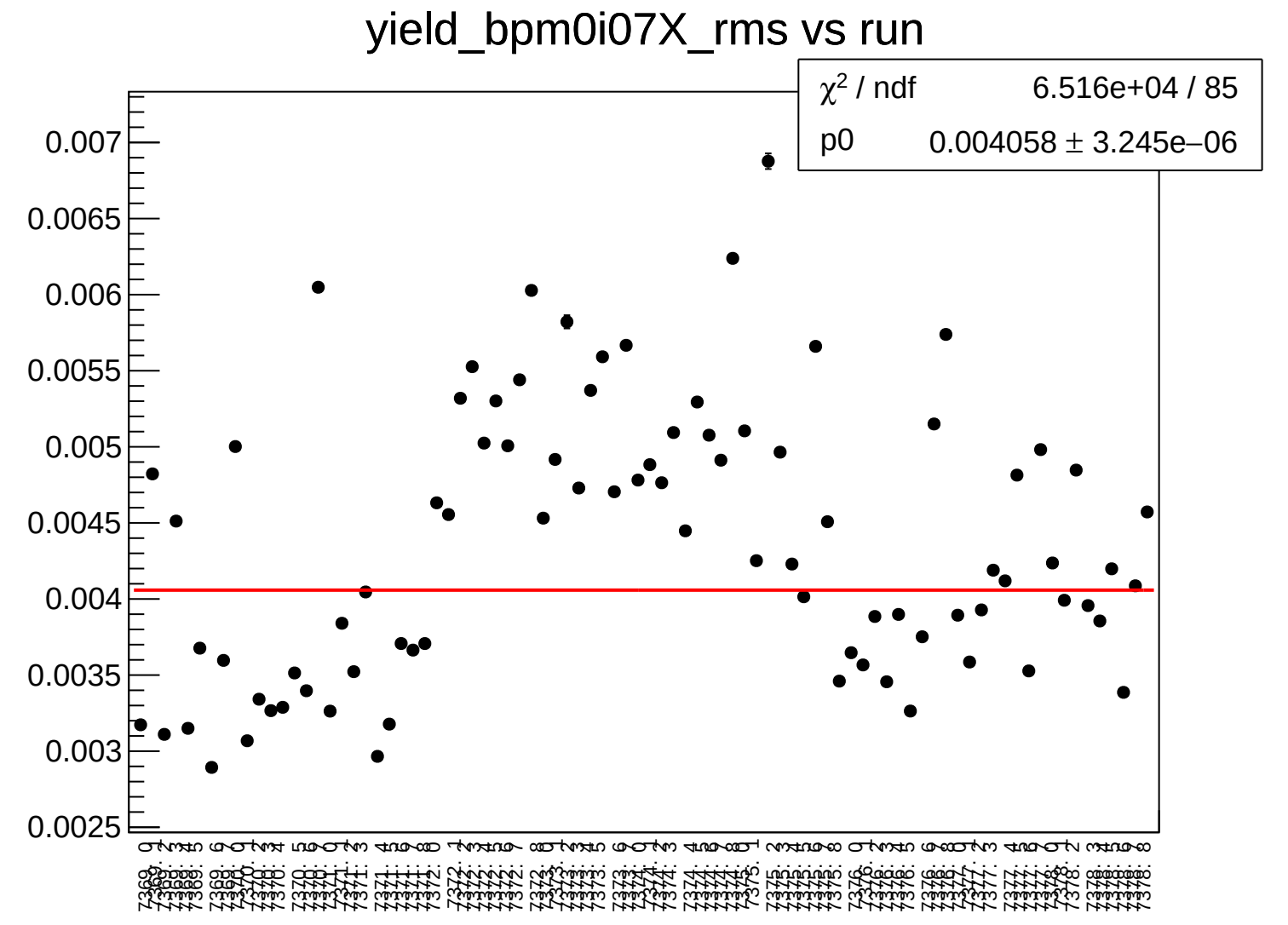

yield_bpm0i05Y_mean vs run
χ² / ndf 3.194e+07 / 85
p0 −0.5255 ± 4.917e−06
−0.48
−0.5
−0.52
−0.54
−0.56
−0.58
−0.6
pull
Entries 86
Mean 2278
Std Dev 2245
500
0
−500
−1000
−1500

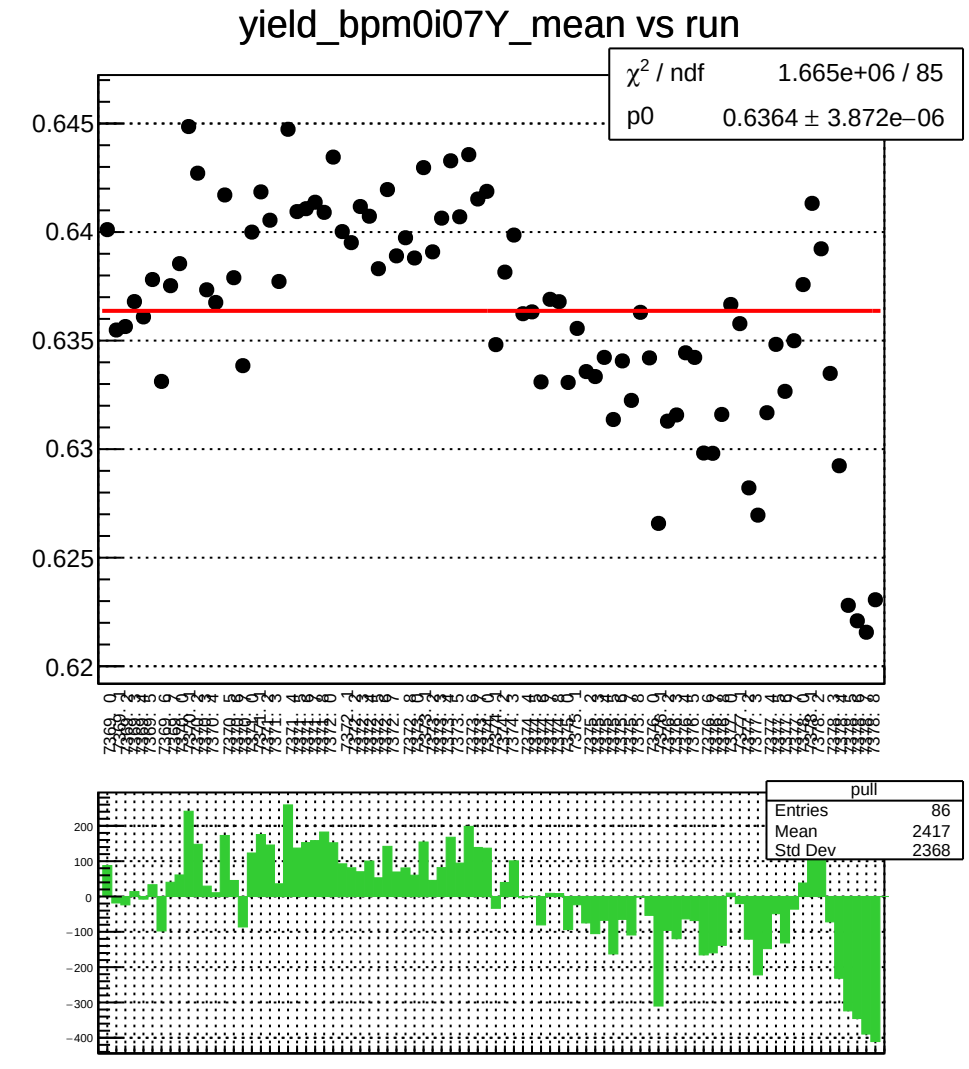

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

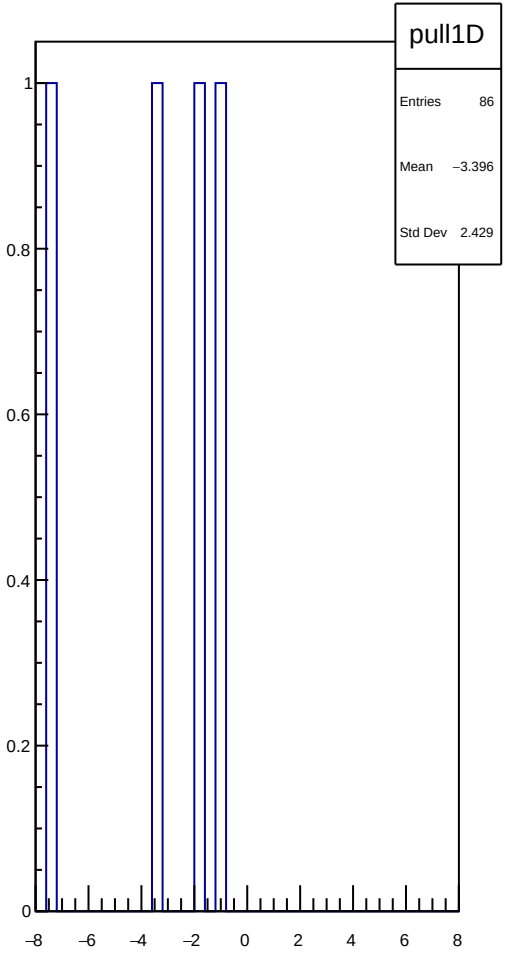

yield_bpm0i05Y_rms vs run
χ² / ndf 8.353e+04 / 85
p0 0.004323 ± 3.477e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

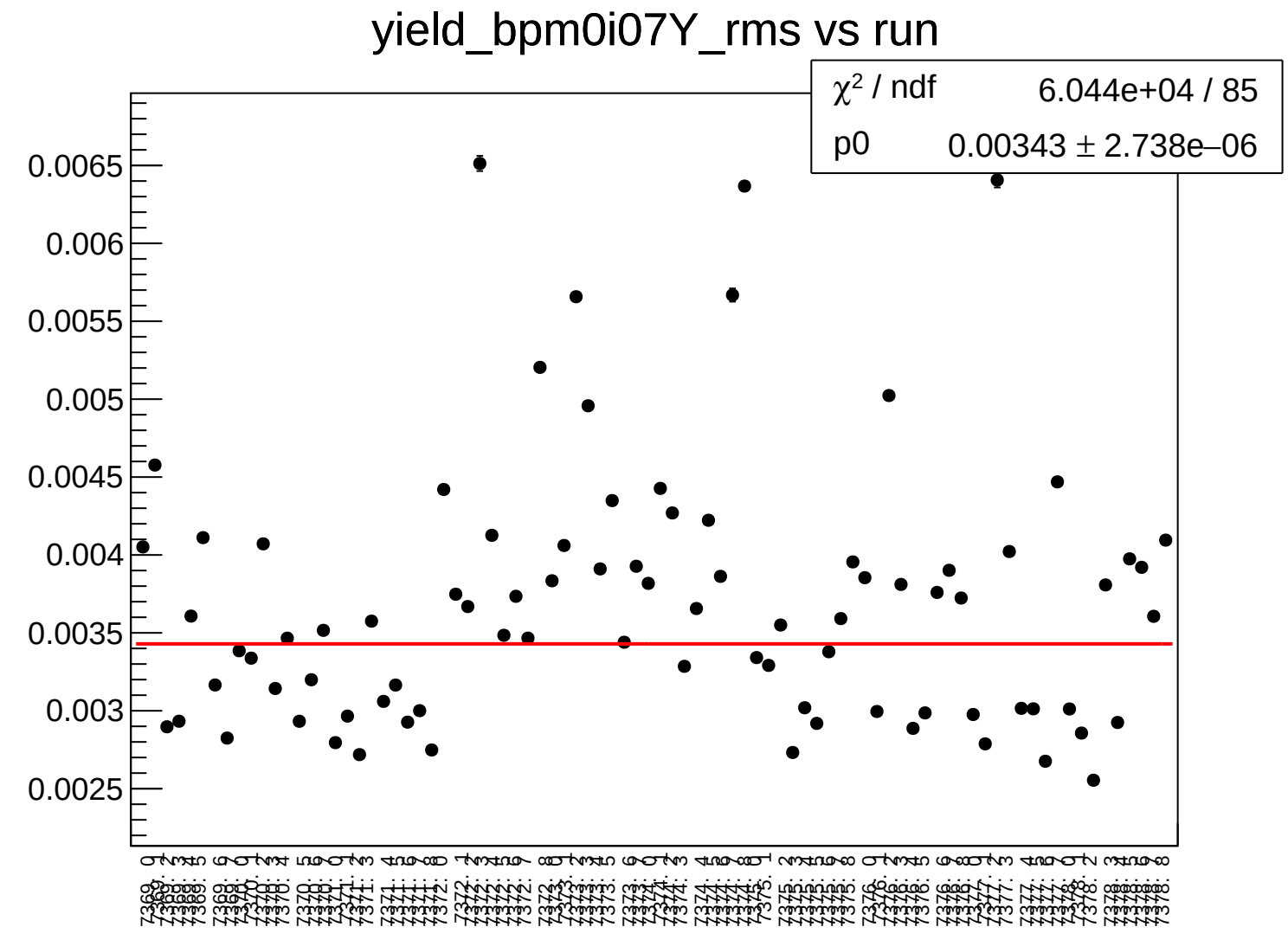

yield_bpm0i07X_mean vs run
χ² / ndf 3.255e+07 / 85
p0 −0.9774 ± 4.589e−06
−0.92
−0.94
−0.96
−0.98
−1
pull
Entries 86
Mean 278.7
Std Dev 240.5
1500
1000
500
0
−500

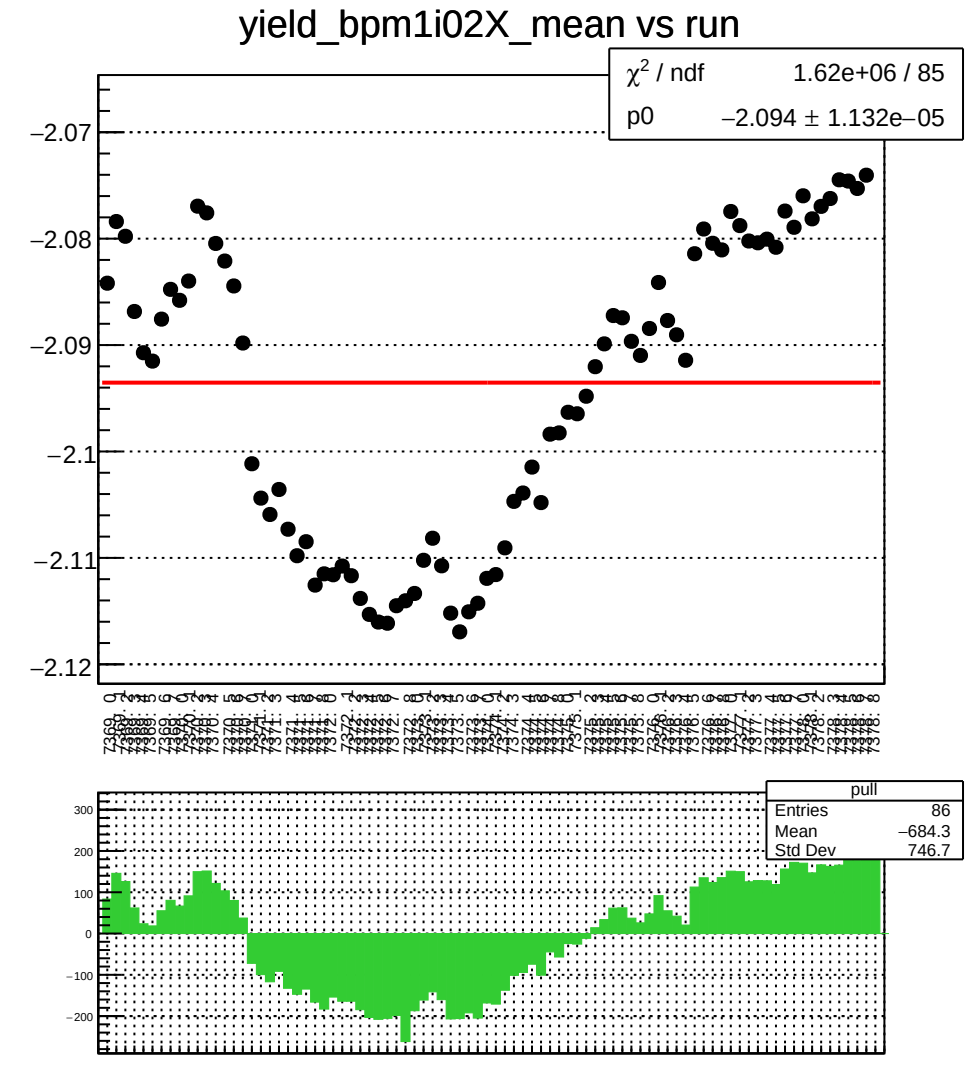

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

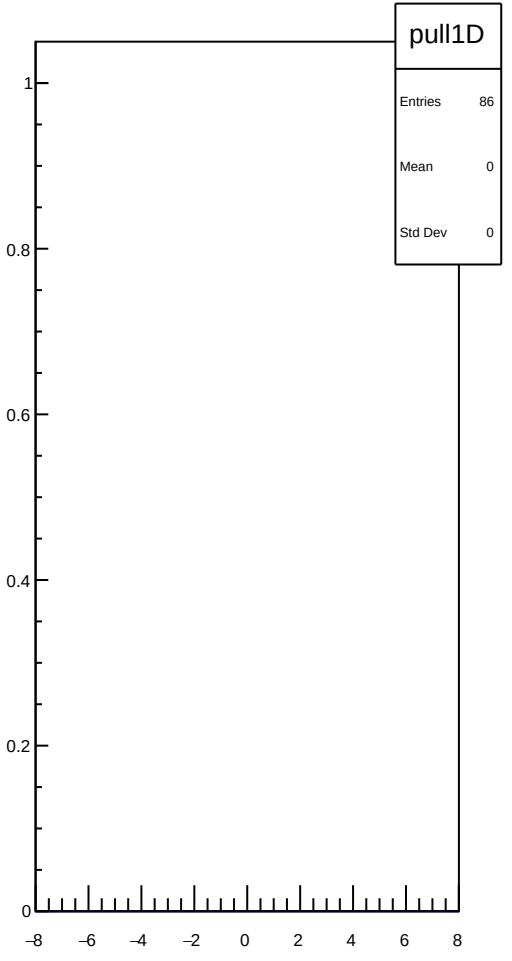

yield_bpm0i07X_rms vs run
χ² / ndf 6.516e+04 / 85
p0 0.004058 ± 3.245e−06
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025

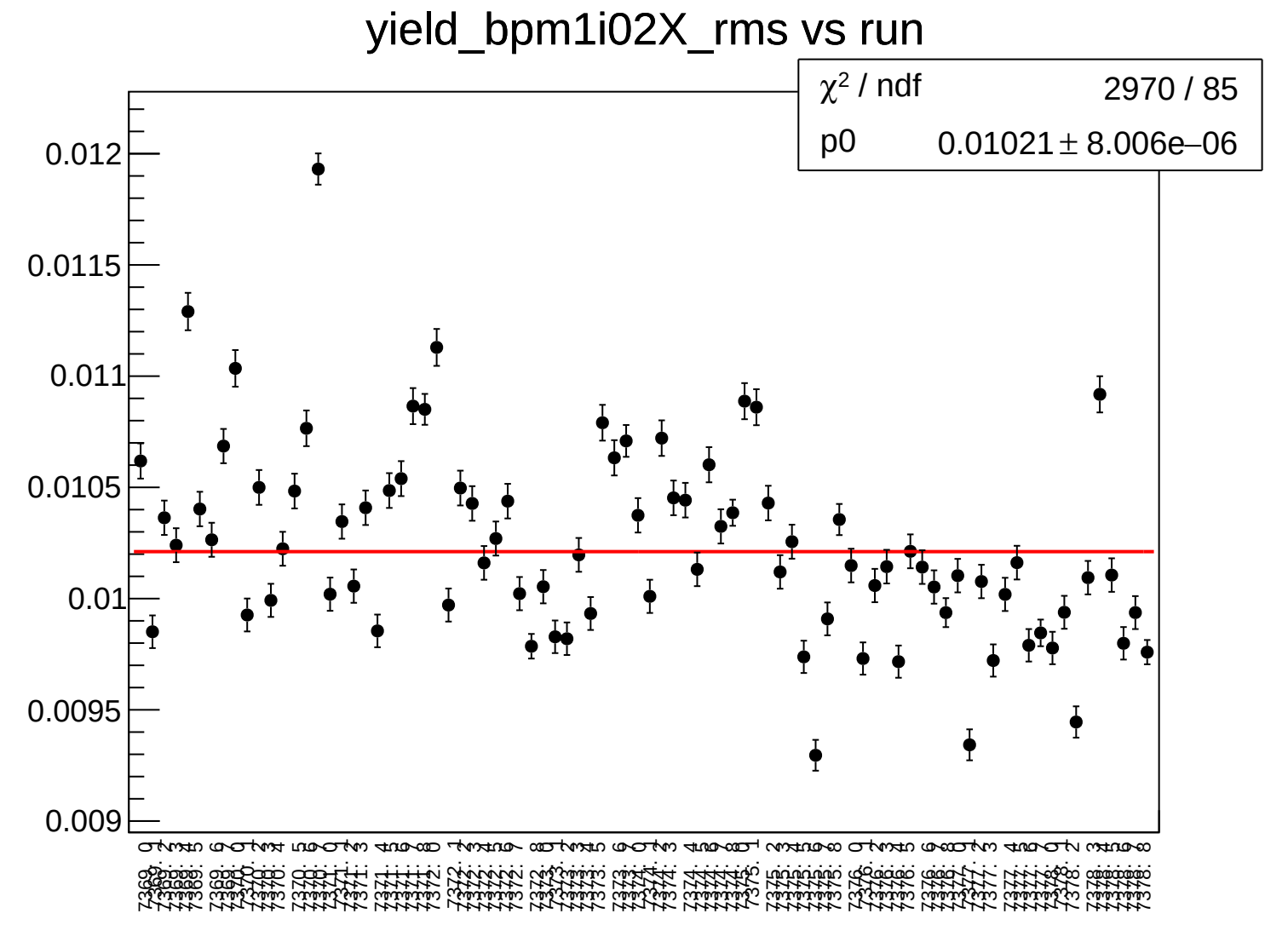

yield_bpm0i07Y_mean vs run
χ² / ndf 1.665e+06 / 85
p0 0.6364 ± 3.872e−06
0.645
0.64
0.635
0.63
0.625
0.62
pull
Entries 86
Mean 2417
Std Dev 2368
200
100
0
−100
−200
−300
−400

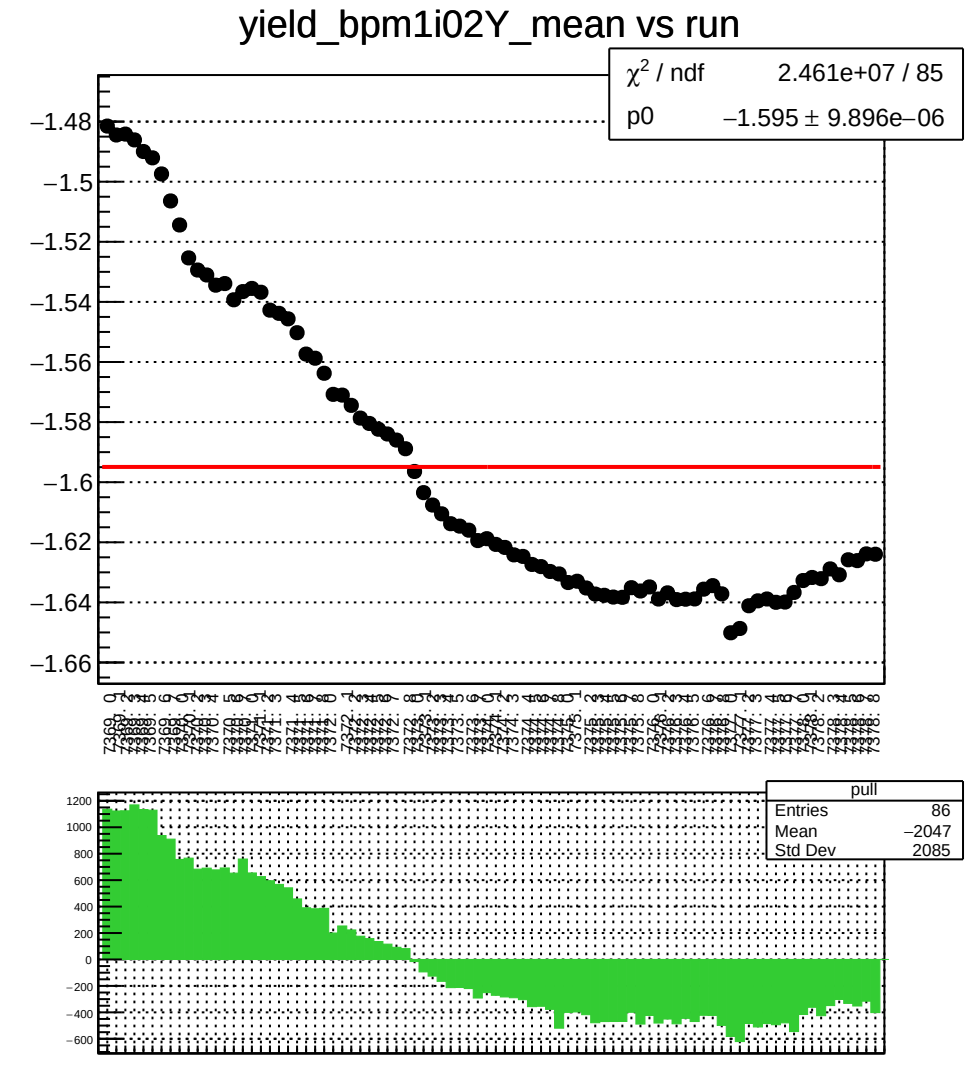

pull1D
Entries 86
Mean −3.396
Std Dev 2.429
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

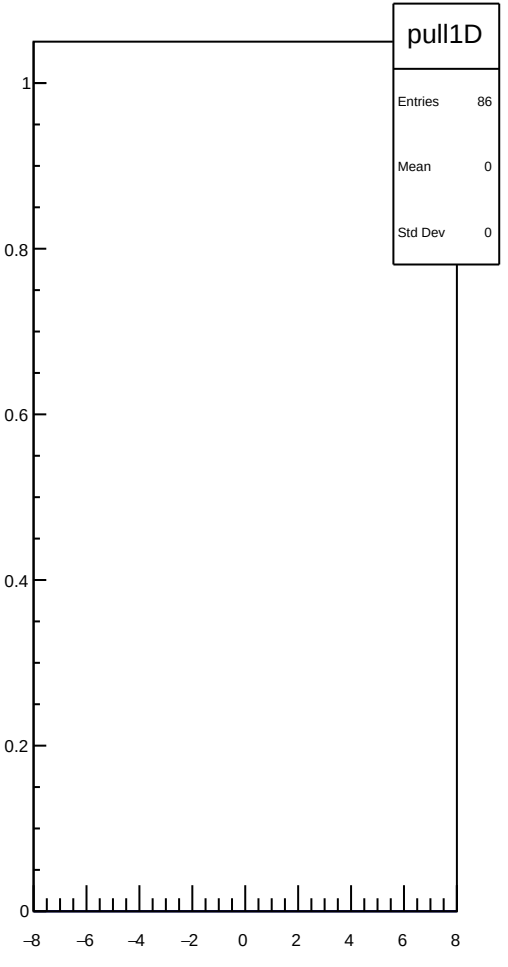

yield_bpm0i07Y_rms vs run
χ² / ndf 6.044e+04 / 85
p0 0.00343 ± 2.738e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025

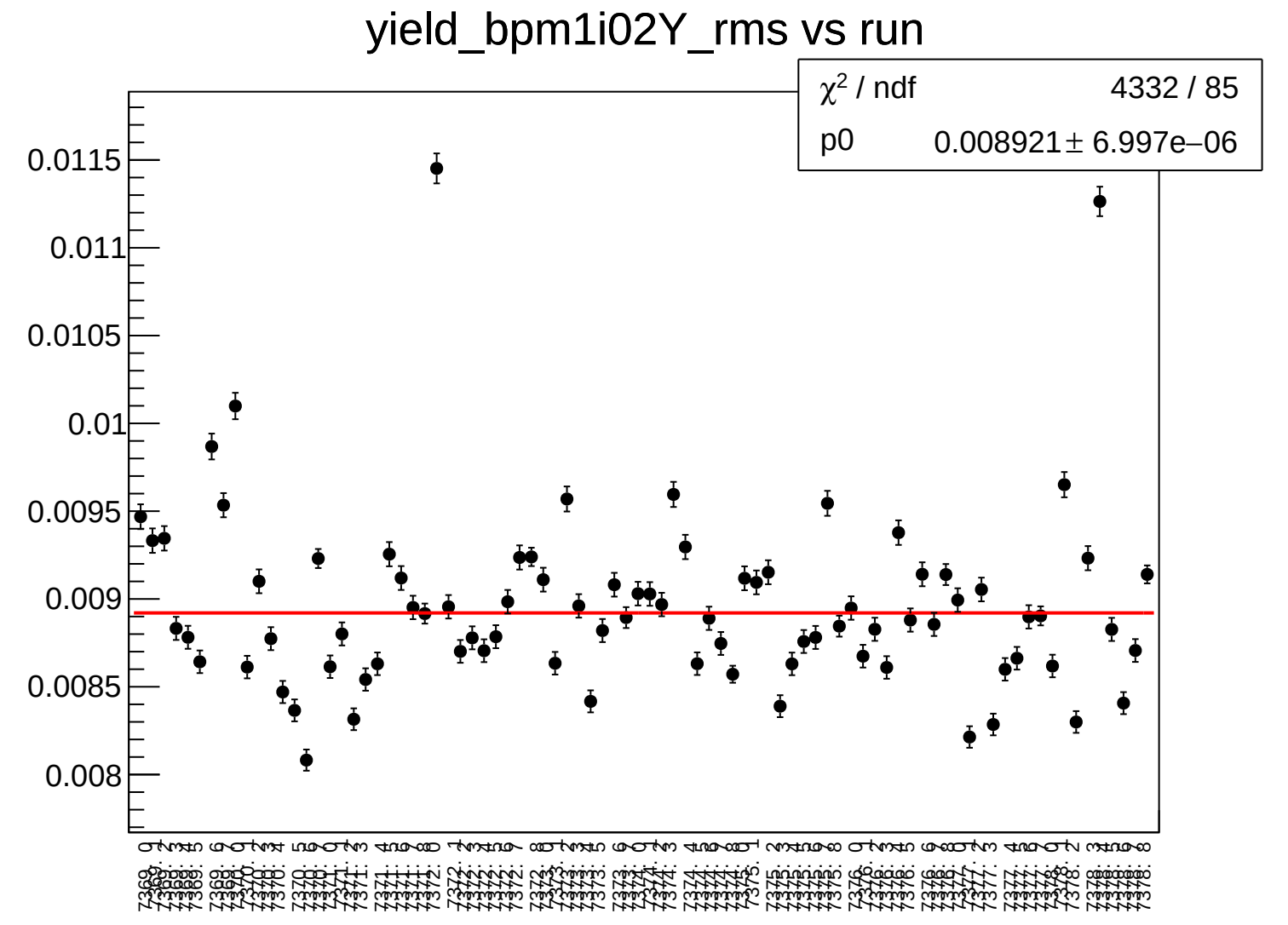

yield_bpm1i02X_mean vs run
χ² / ndf 1.62e+06 / 85
p0 −2.094 ± 1.132e−05
−2.07
−2.08
−2.09
−2.1
−2.11
−2.12
pull
Entries 86
Mean −684.3
Std Dev 746.7
300
200
100
0
−100
−200

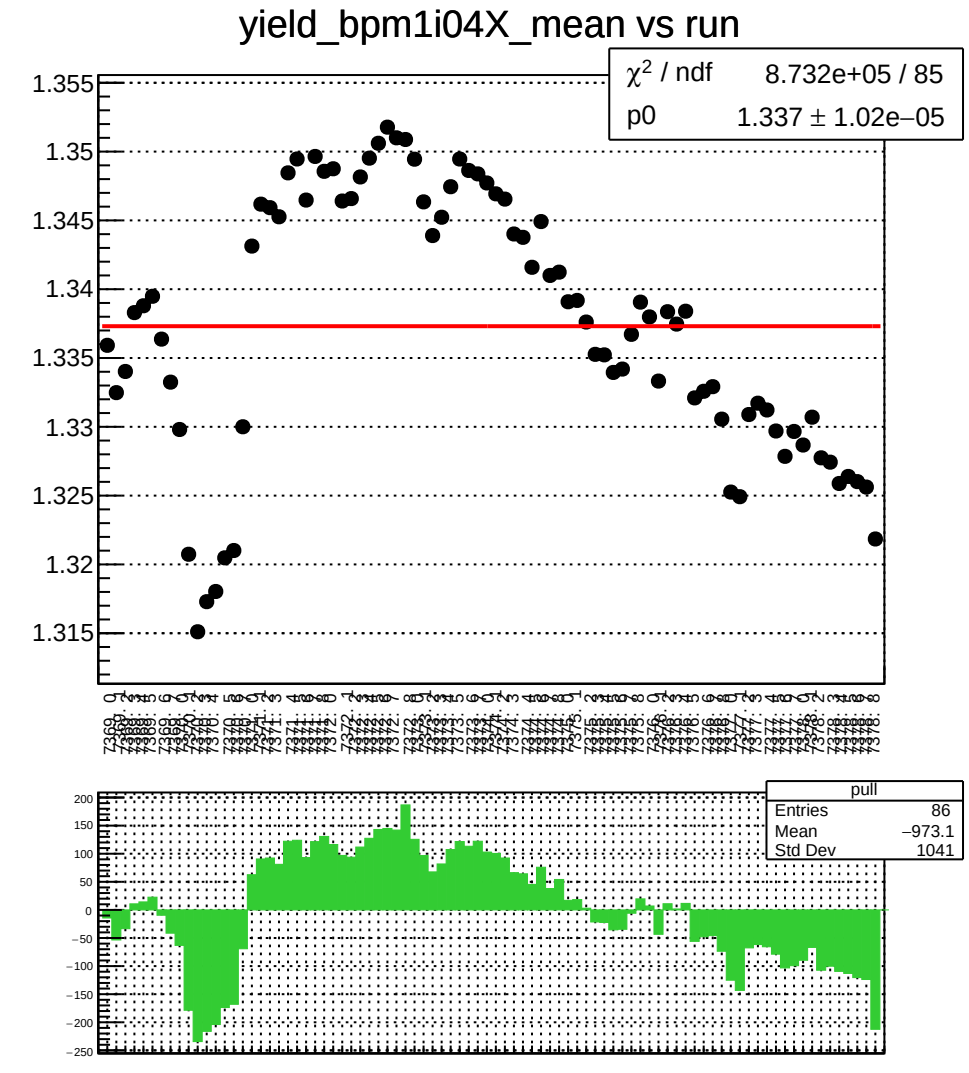

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

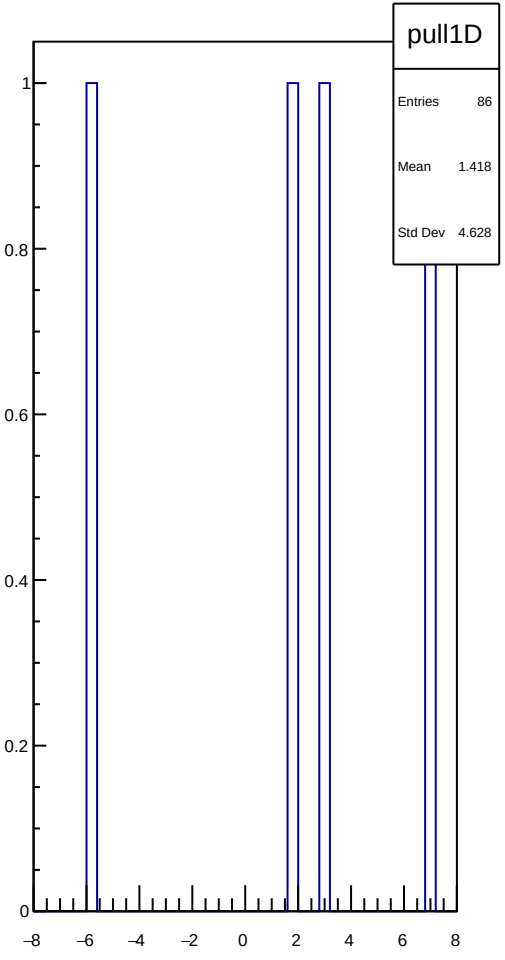

yield_bpm1i02X_rms vs run
χ² / ndf 2970 / 85
p0 0.01021 ± 8.006e–06
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009

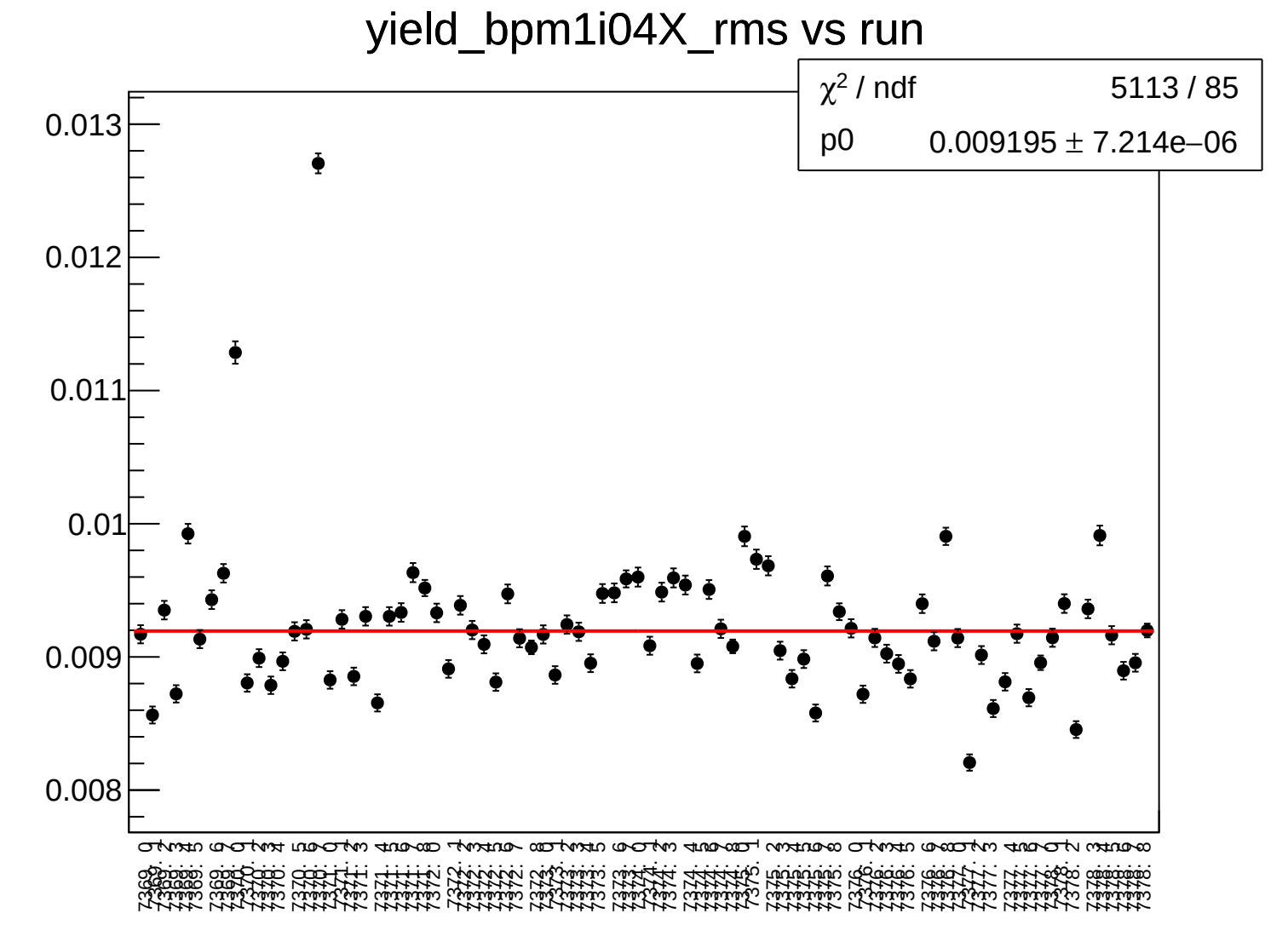

yield_bpm1i02Y_mean vs run
χ² / ndf 2.461e+07 / 85
p0 −1.595 ± 9.896e−06
−1.48
−1.5
−1.52
−1.54
−1.56
−1.58
−1.6
−1.62
−1.64
−1.66
pull
Entries 86
Mean −2047
Std Dev 2085
1200
1000
800
600
400
200
0
−200
−400
−600

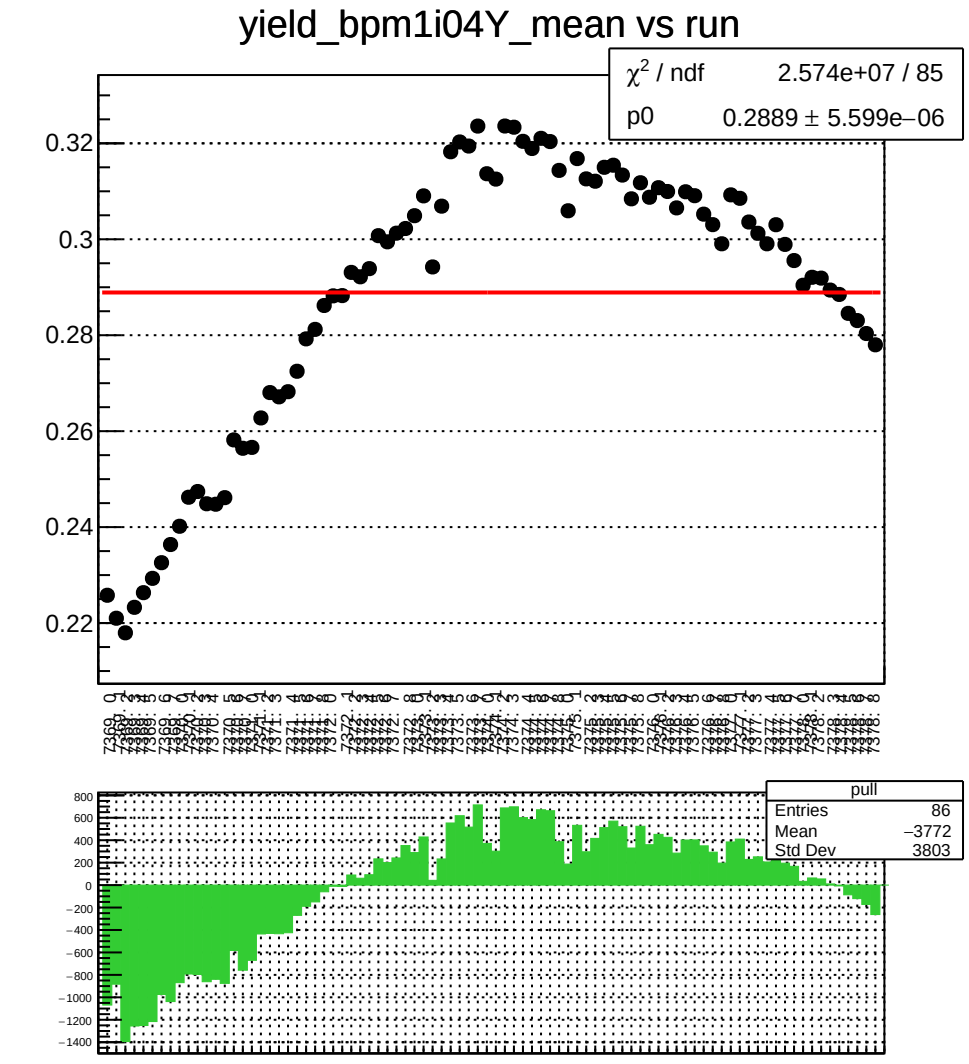

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

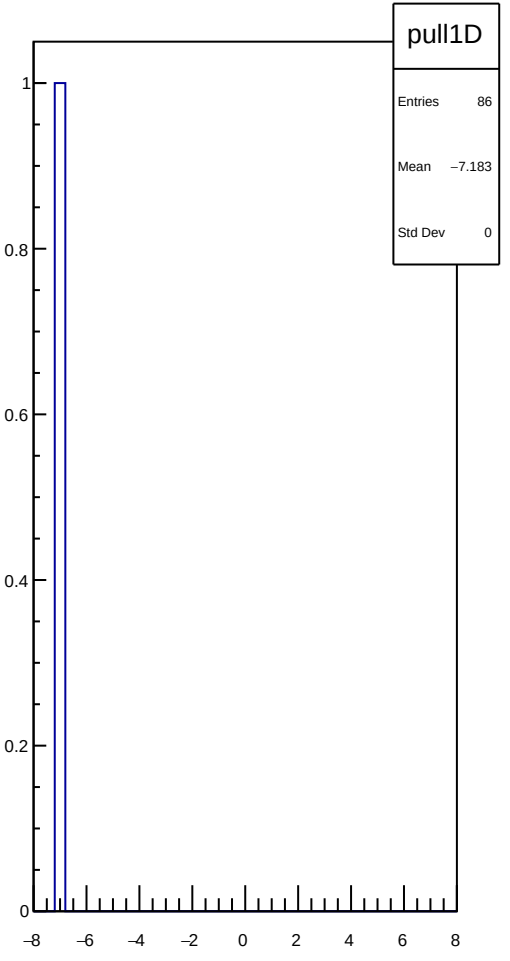

yield_bpm1i02Y_rms vs run
χ² / ndf 4332 / 85
p0 0.008921 ± 6.997e−06
0.0115
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008

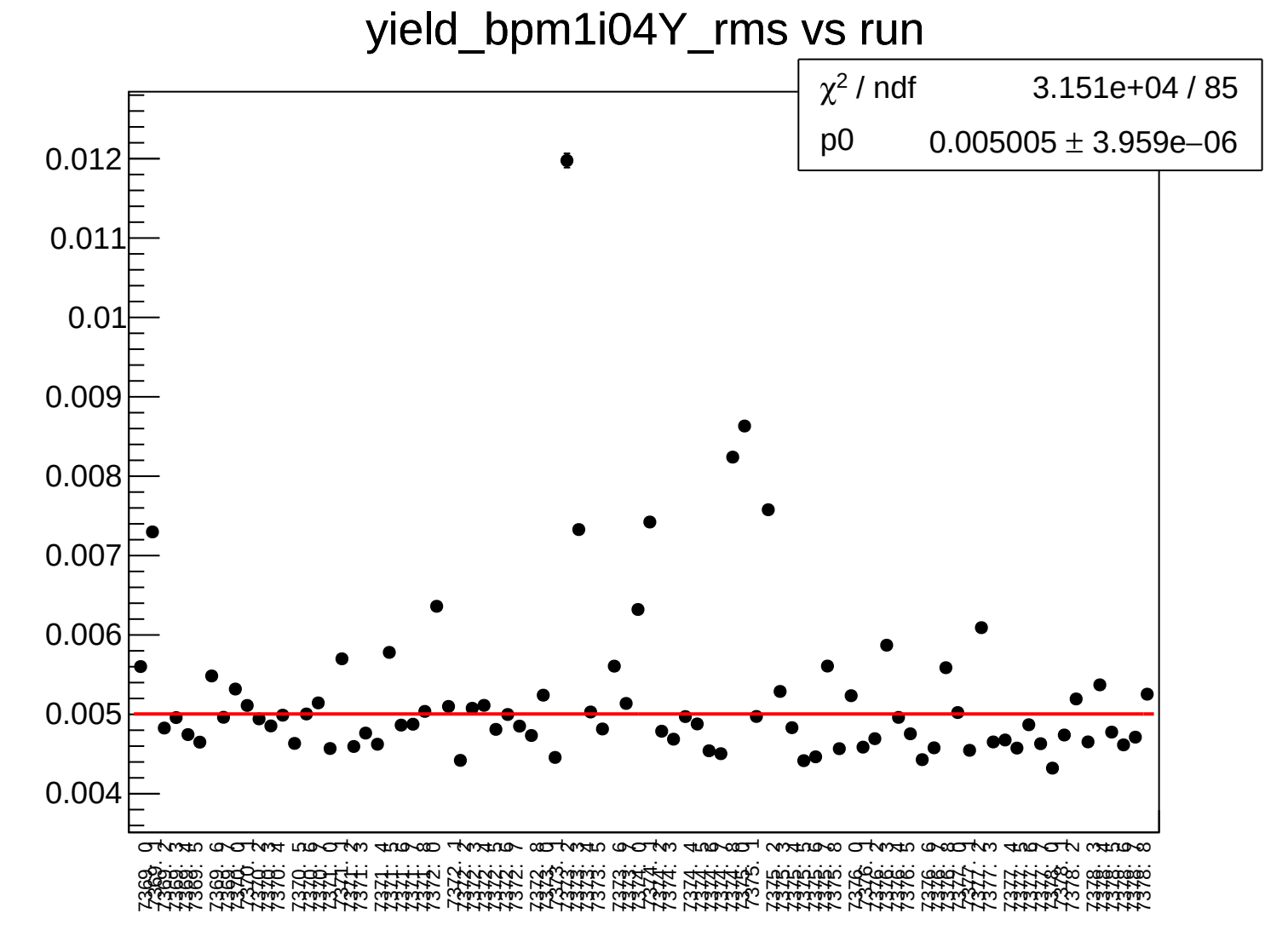

yield_bpm1i04X_mean vs run
χ² / ndf 8.732e+05 / 85
p0 1.337 ± 1.02e−05
1.355
1.35
1.345
1.34
1.335
1.33
1.325
1.32
1.315
pull
Entries 86
Mean −973.1
Std Dev 1041
200
150
100
50
0
−50
−100
−150
−200
−250

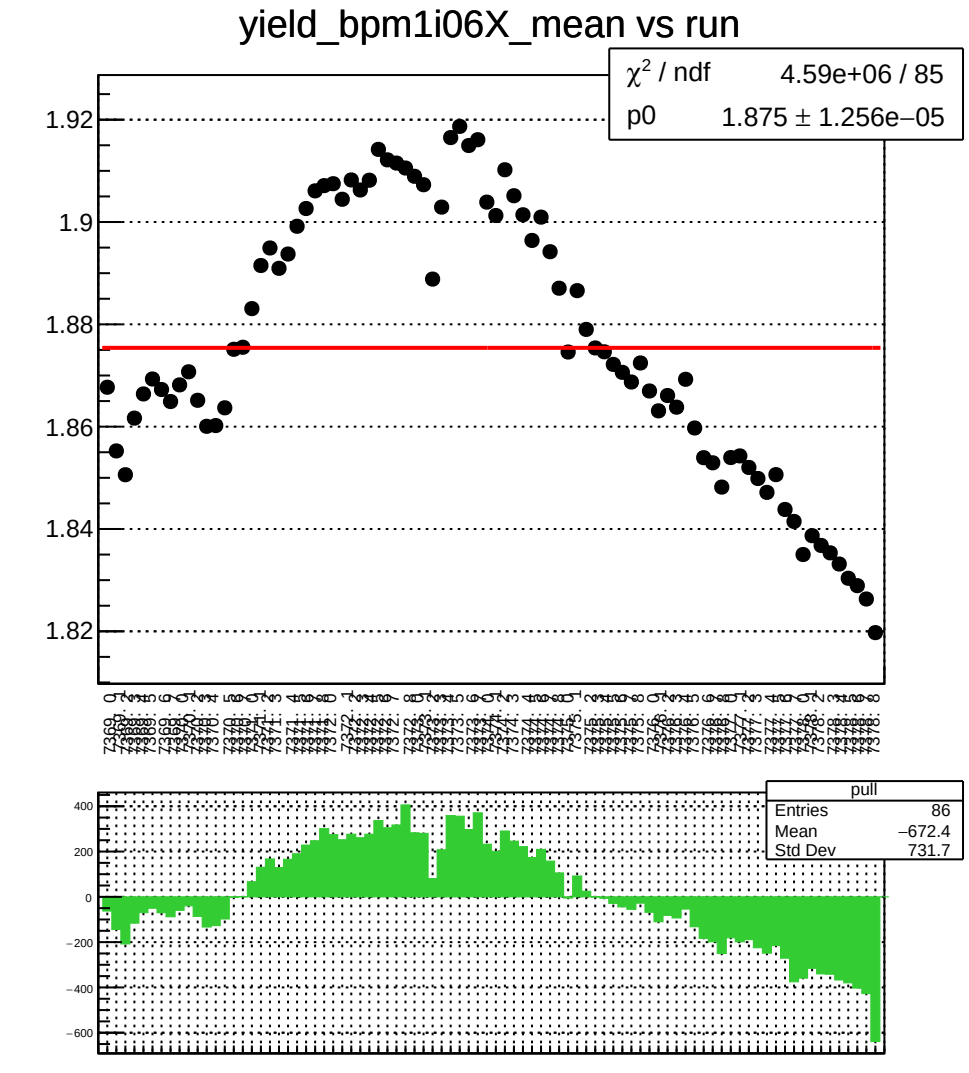

pull1D
Entries 86
Mean 1.418
Std Dev 4.628
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

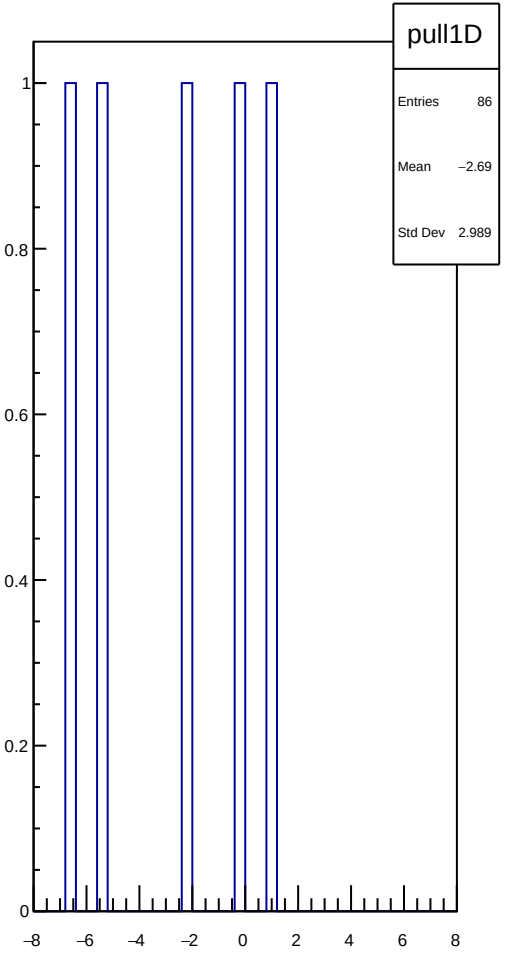

yield_bpm1i04X_rms vs run
χ² / ndf 5113 / 85
p0 0.009195 ± 7.214e−06
0.013
0.012
0.011
0.01
0.009
0.008

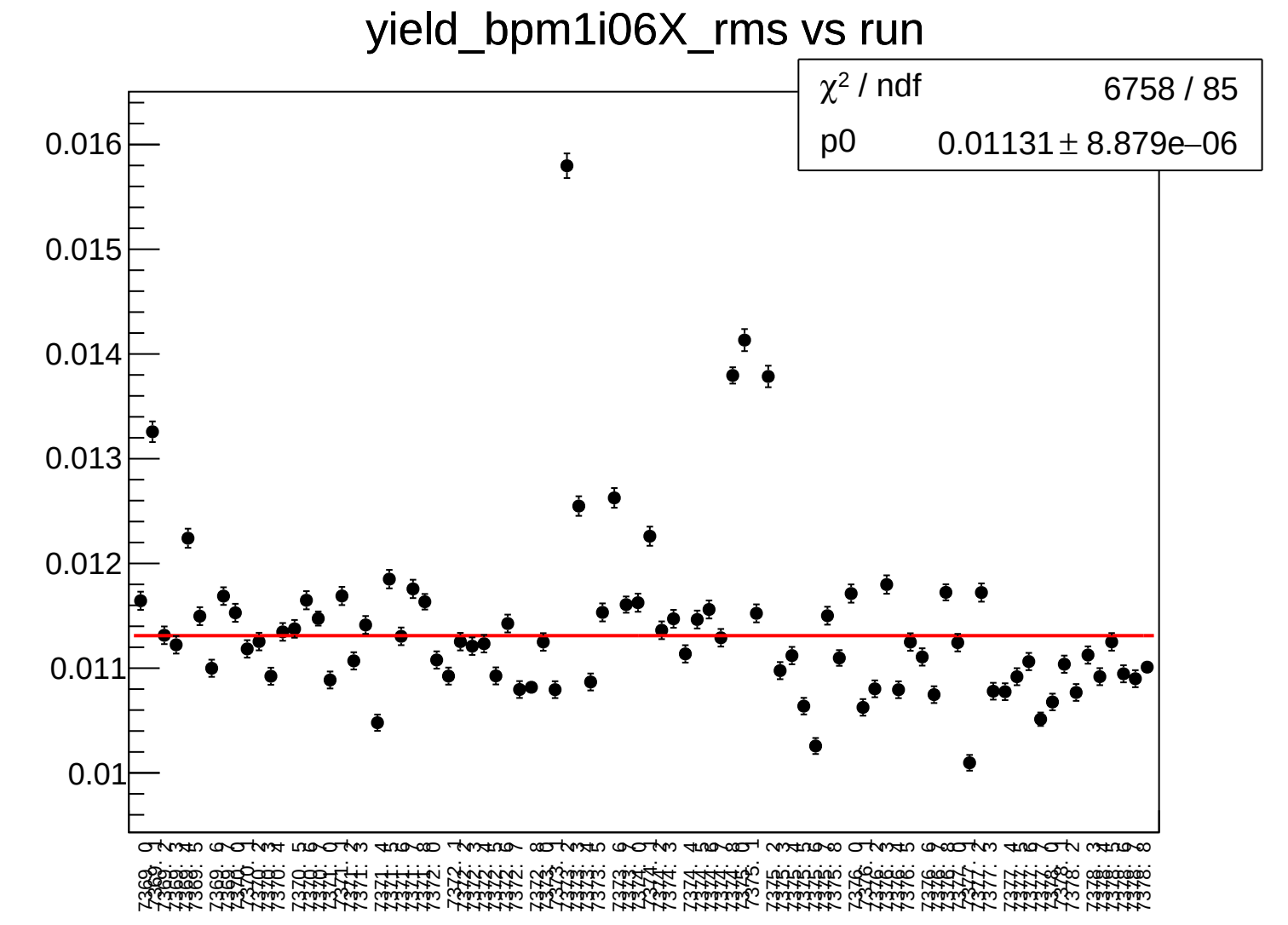

yield_bpm1i04Y_mean vs run
χ² / ndf 2.574e+07 / 85
p0 0.2889 ± 5.599e−06
0.32
0.3
0.28
0.26
0.24
0.22
pull
Entries 86
Mean −3772
Std Dev 3803
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

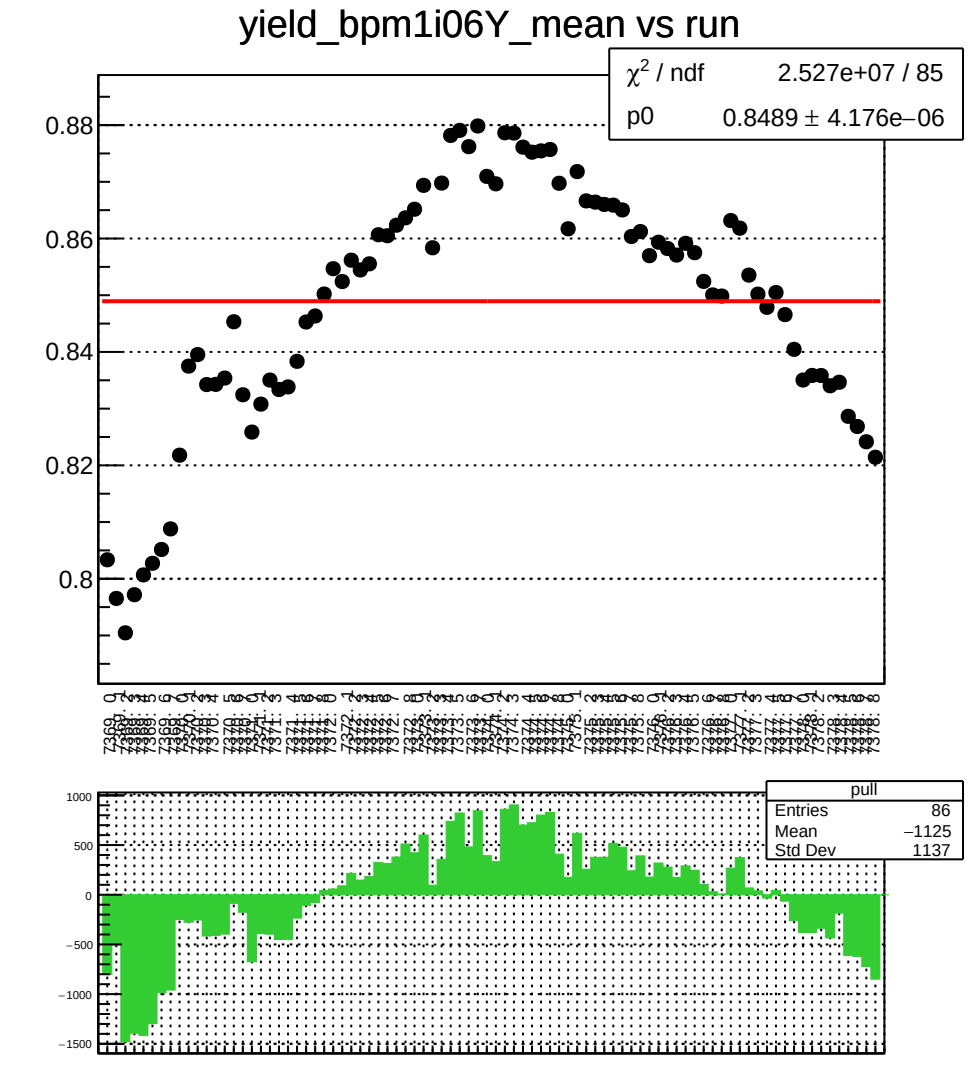

pull1D
Entries 86
Mean −7.183
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

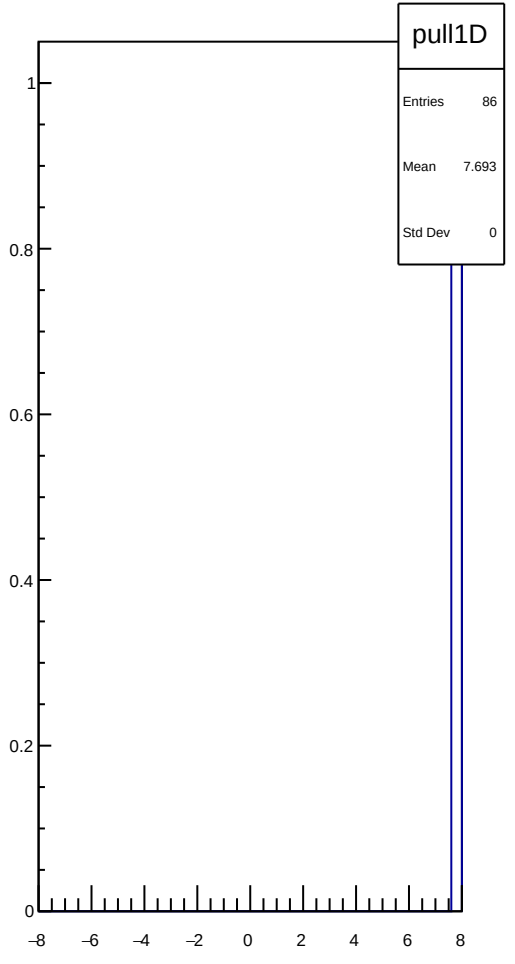

yield_bpm1i04Y_rms vs run
χ² / ndf 3.151e+04 / 85
p0 0.005005 ± 3.959e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

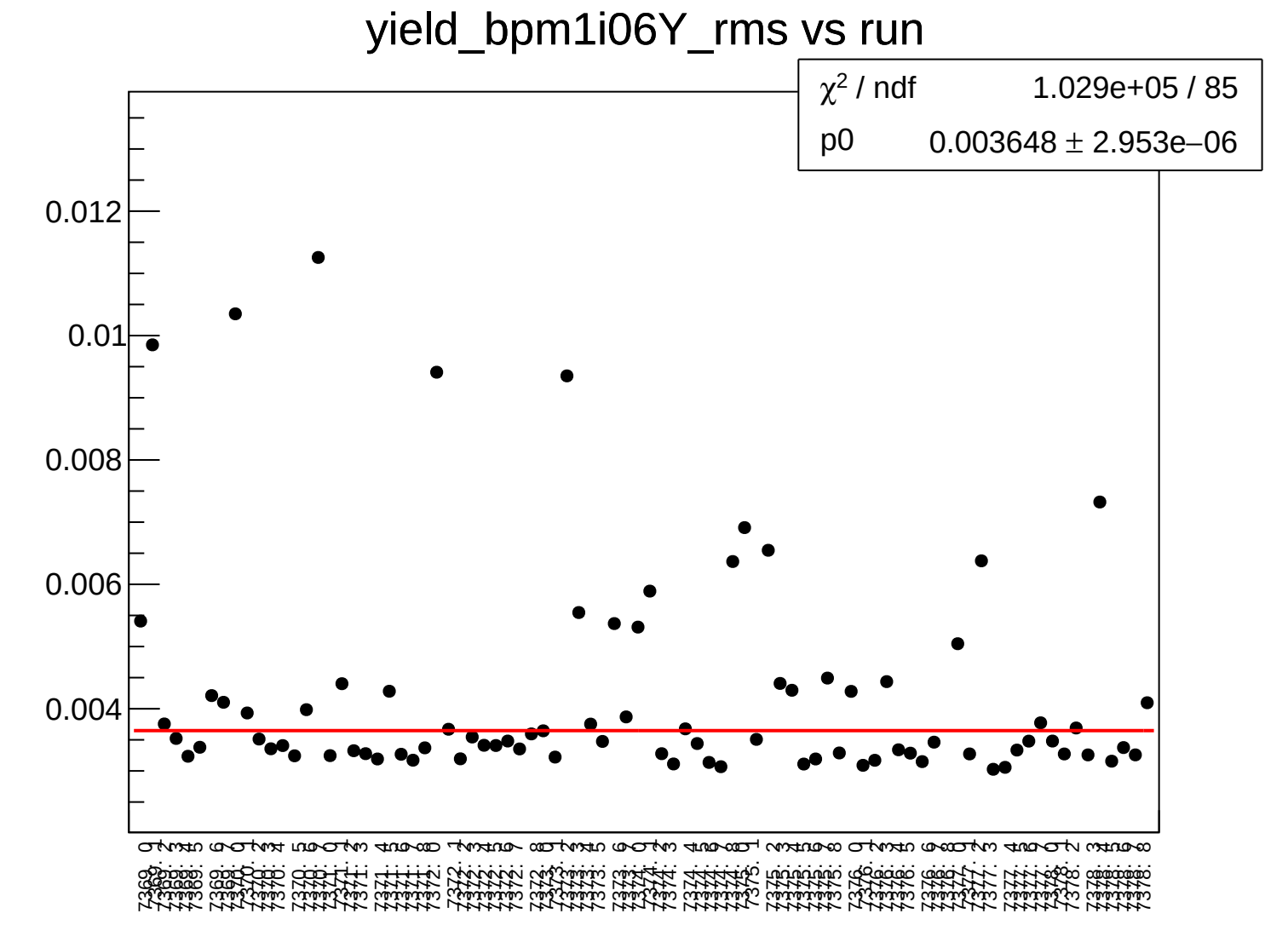

yield_bpm1i06X_mean vs run
χ² / ndf 4.59e+06 / 85
p0 1.875 ± 1.256e−05
1.92
1.9
1.88
1.86
1.84
1.82
pull
Entries 86
Mean −672.4
Std Dev 731.7
400
200
0
−200
−400
−600

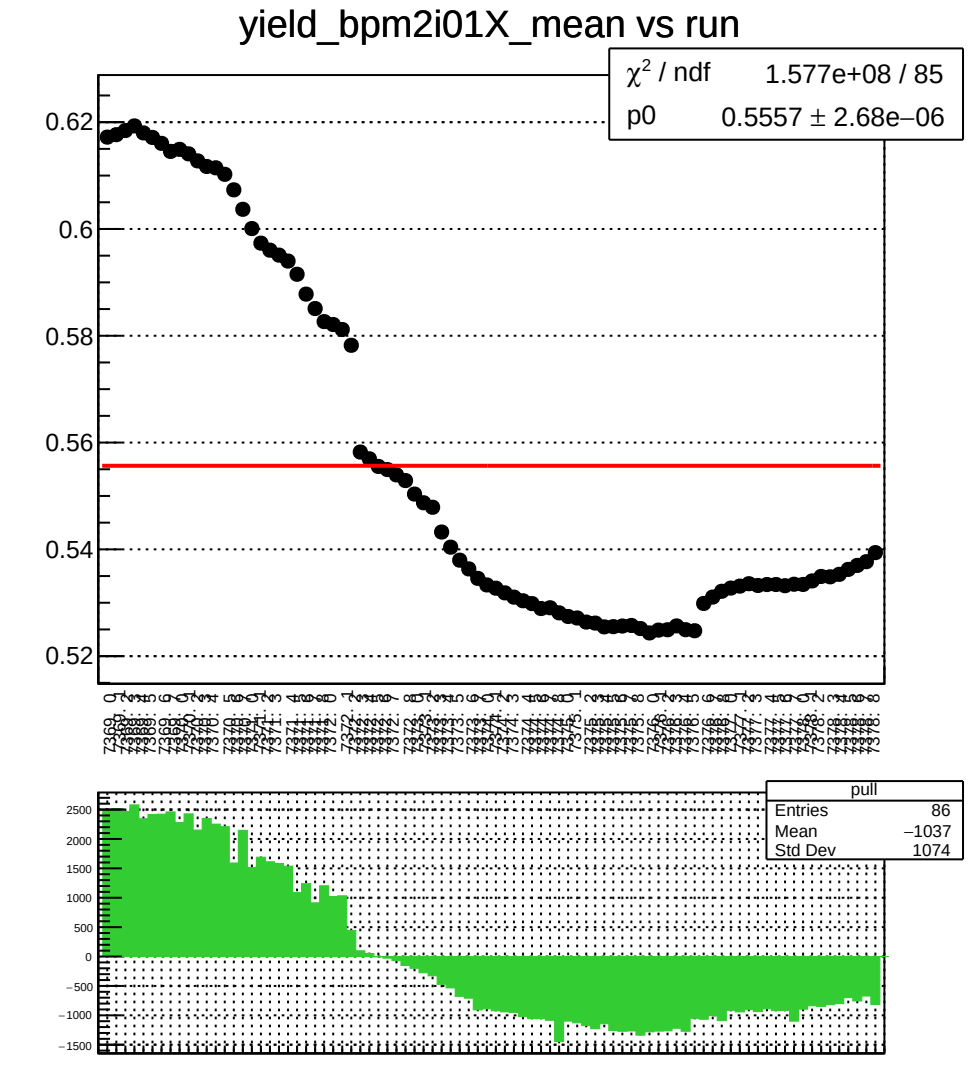

pull1D
Entries 86
Mean −2.69
Std Dev 2.989
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

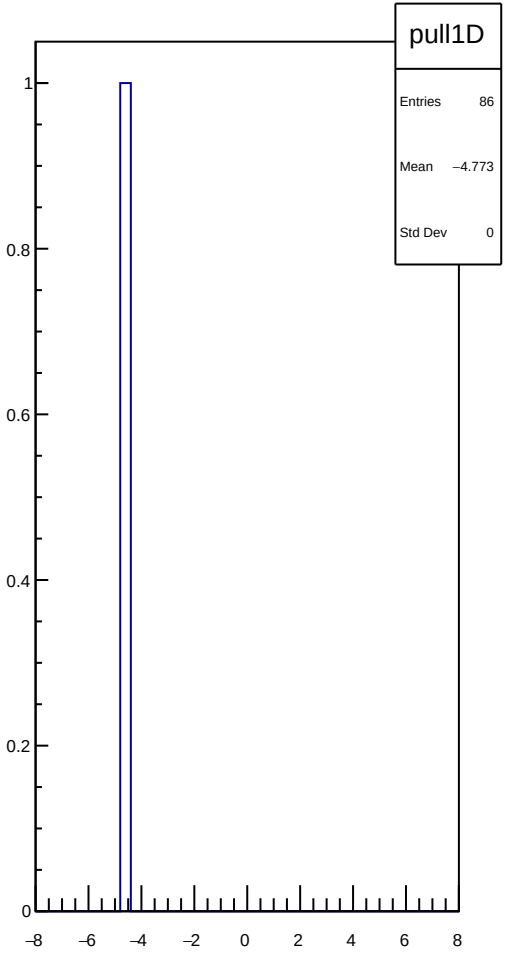

yield_bpm1i06X_rms vs run
χ² / ndf 6758 / 85
p0 0.01131 ± 8.879e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01

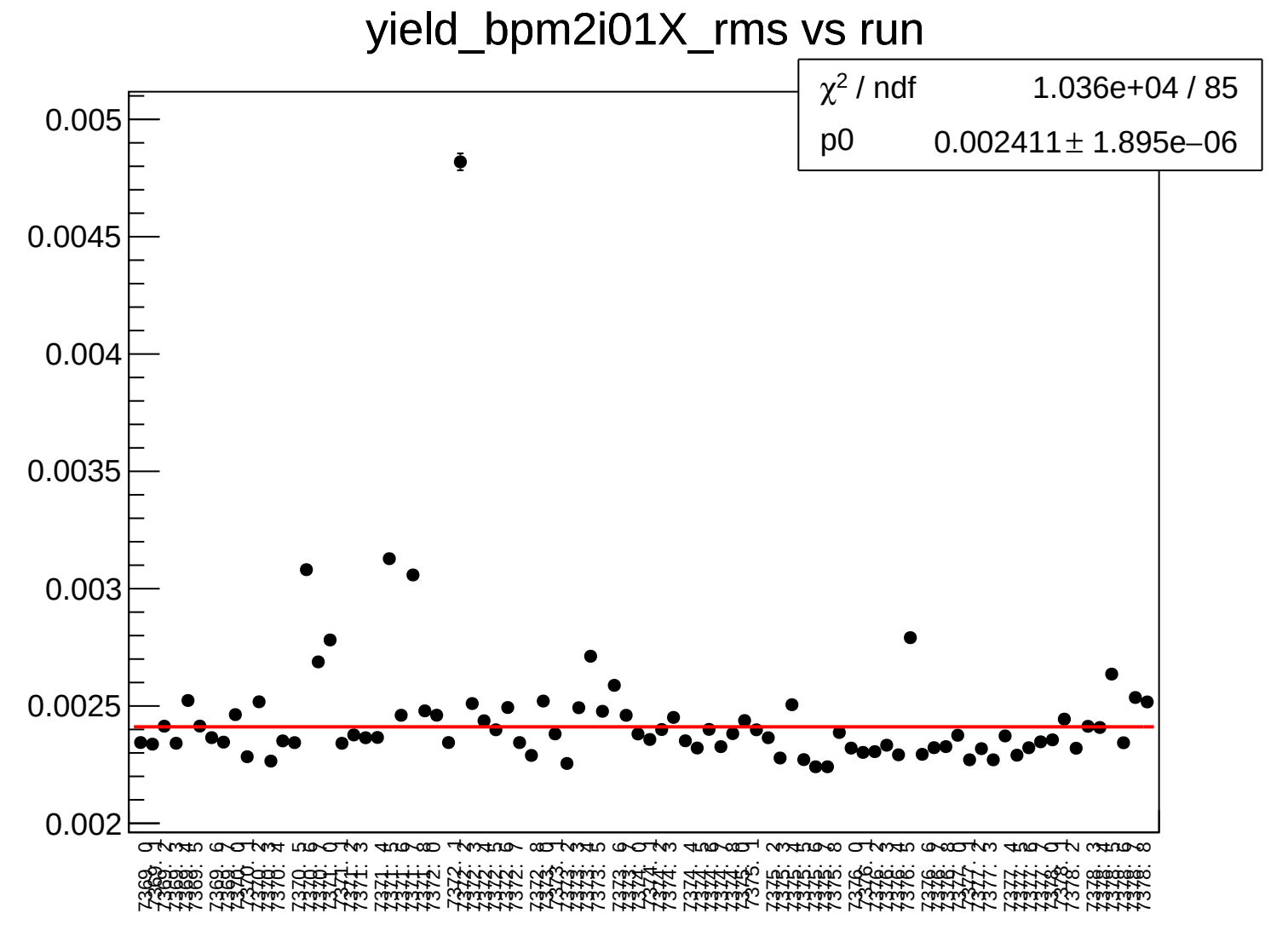

yield_bpm1i06Y_mean vs run
χ² / ndf 2.527e+07 / 85
p0 0.8489 ± 4.176e−06
0.88
0.86
0.84
0.82
0.8
pull
Entries 86
Mean −1125
Std Dev 1137
1000
500
0
−500
−1000
−1500

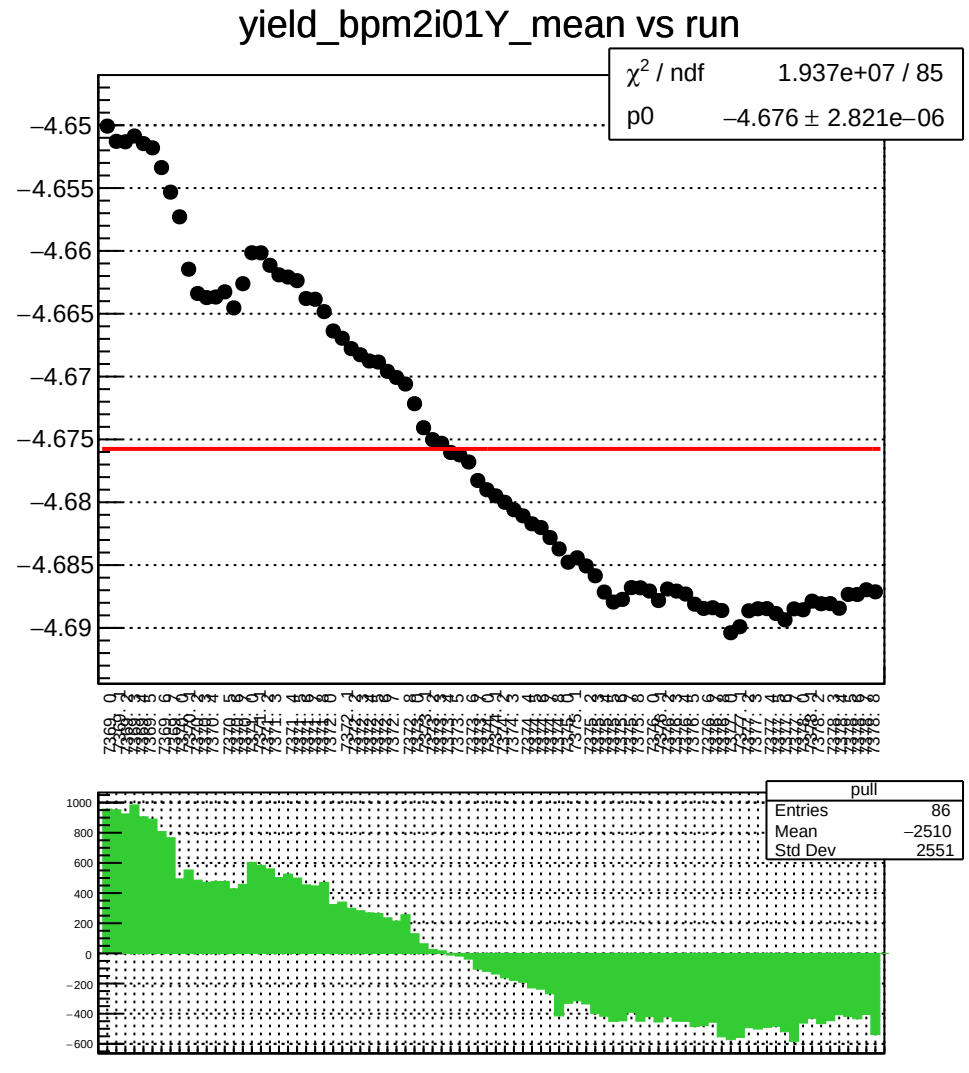

pull1D
Entries 86
Mean 7.693
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

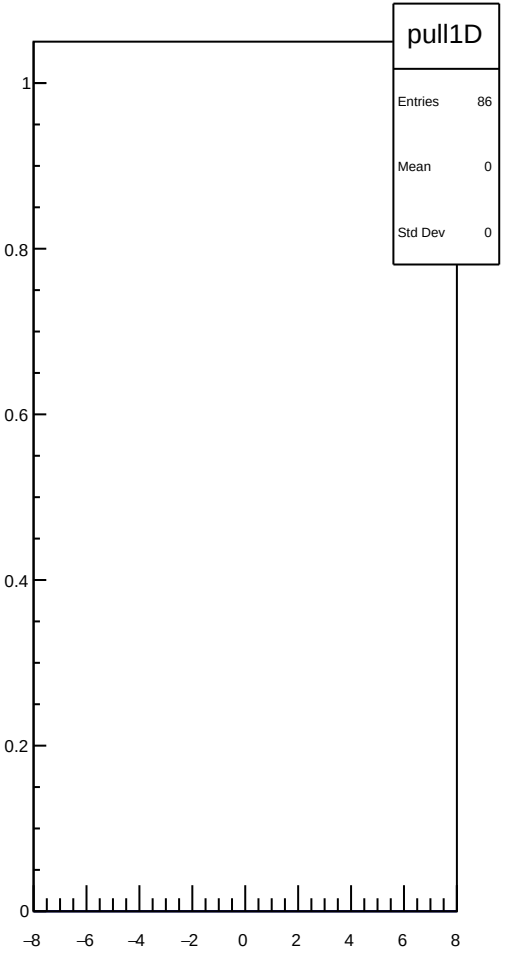

yield_bpm1i06Y_rms vs run
χ² / ndf 1.029e+05 / 85
p0 0.003648 ± 2.953e−06
0.012
0.01
0.008
0.006
0.004

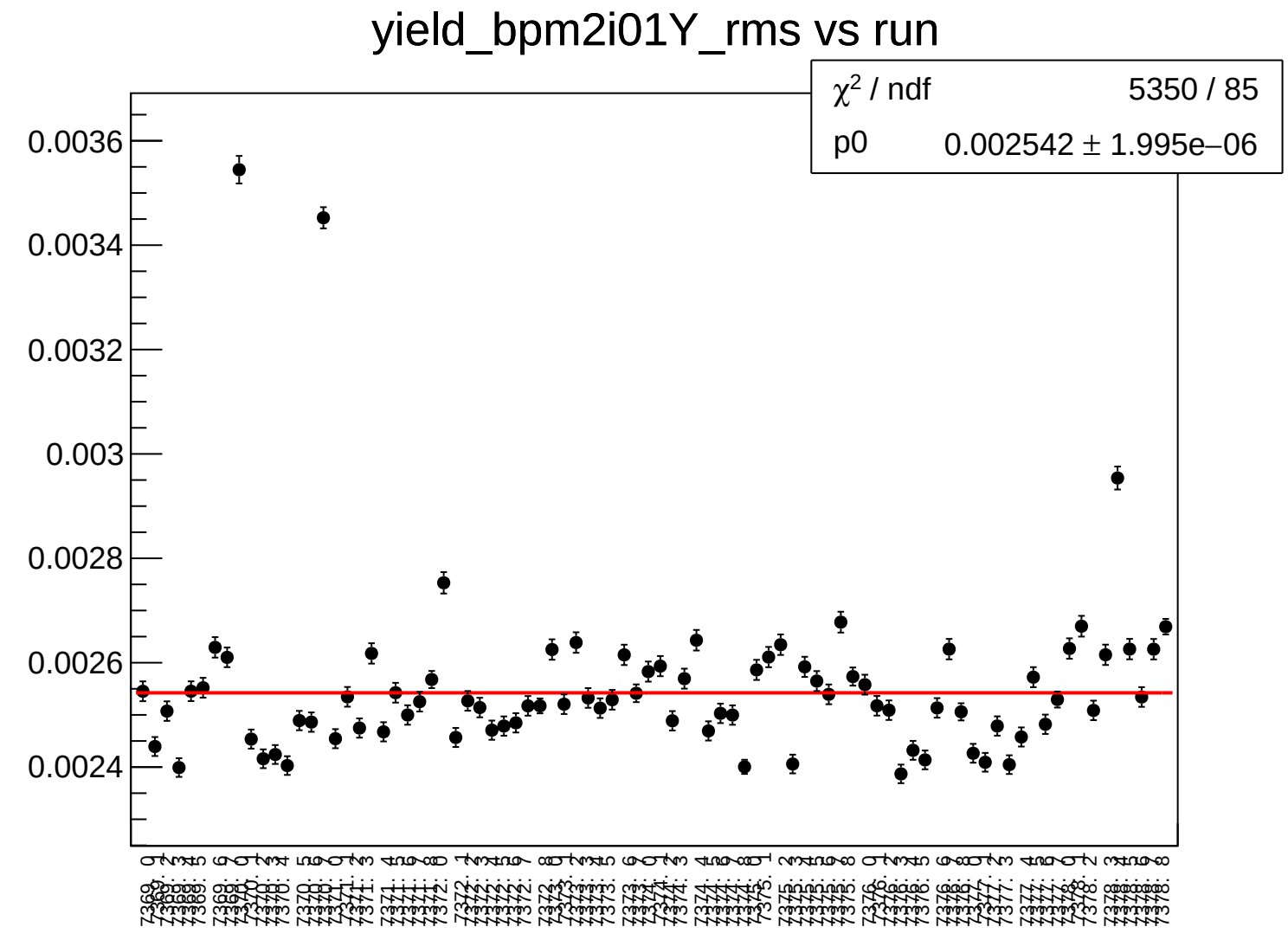

yield_bpm2i01X_mean vs run
χ² / ndf 1.577e+08 / 85
p0 0.5557 ± 2.68e−06
0.62
0.6
0.58
0.56
0.54
0.52
pull
Entries 86
Mean −1037
Std Dev 1074
2500
2000
1500
1000
500
0
−500
−1000
−1500

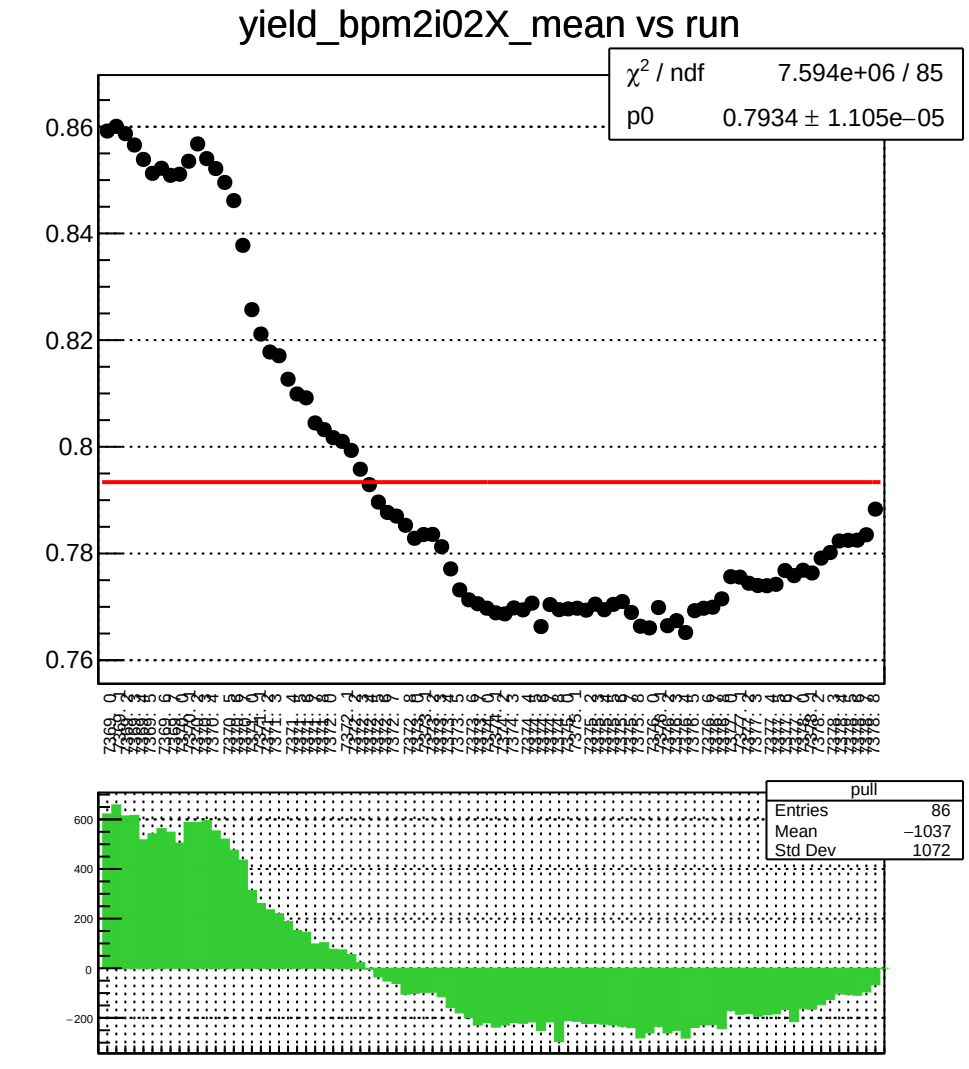

pull1D
Entries 86
Mean −4.773
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

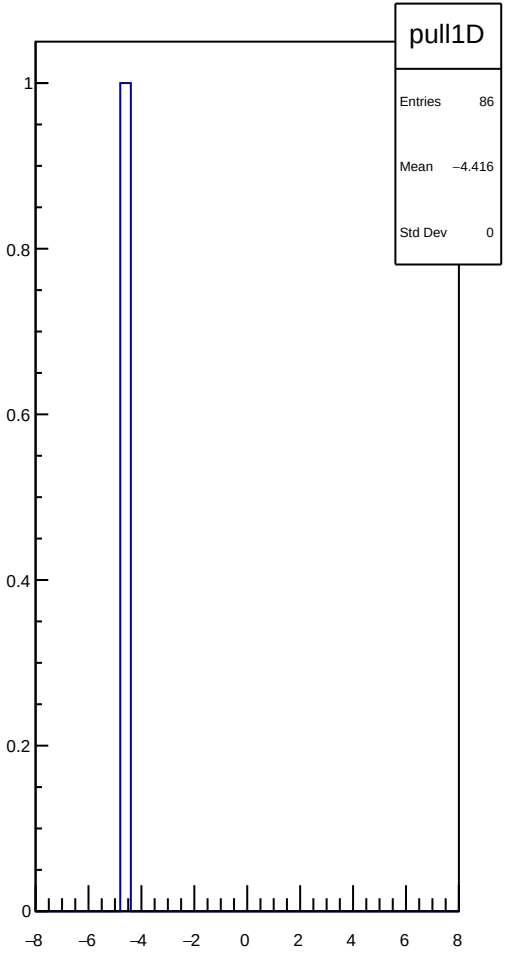

yield_bpm2i01X_rms vs run
χ^2 / ndf 1.036e+04 / 85
p0 0.002411 ± 1.895e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

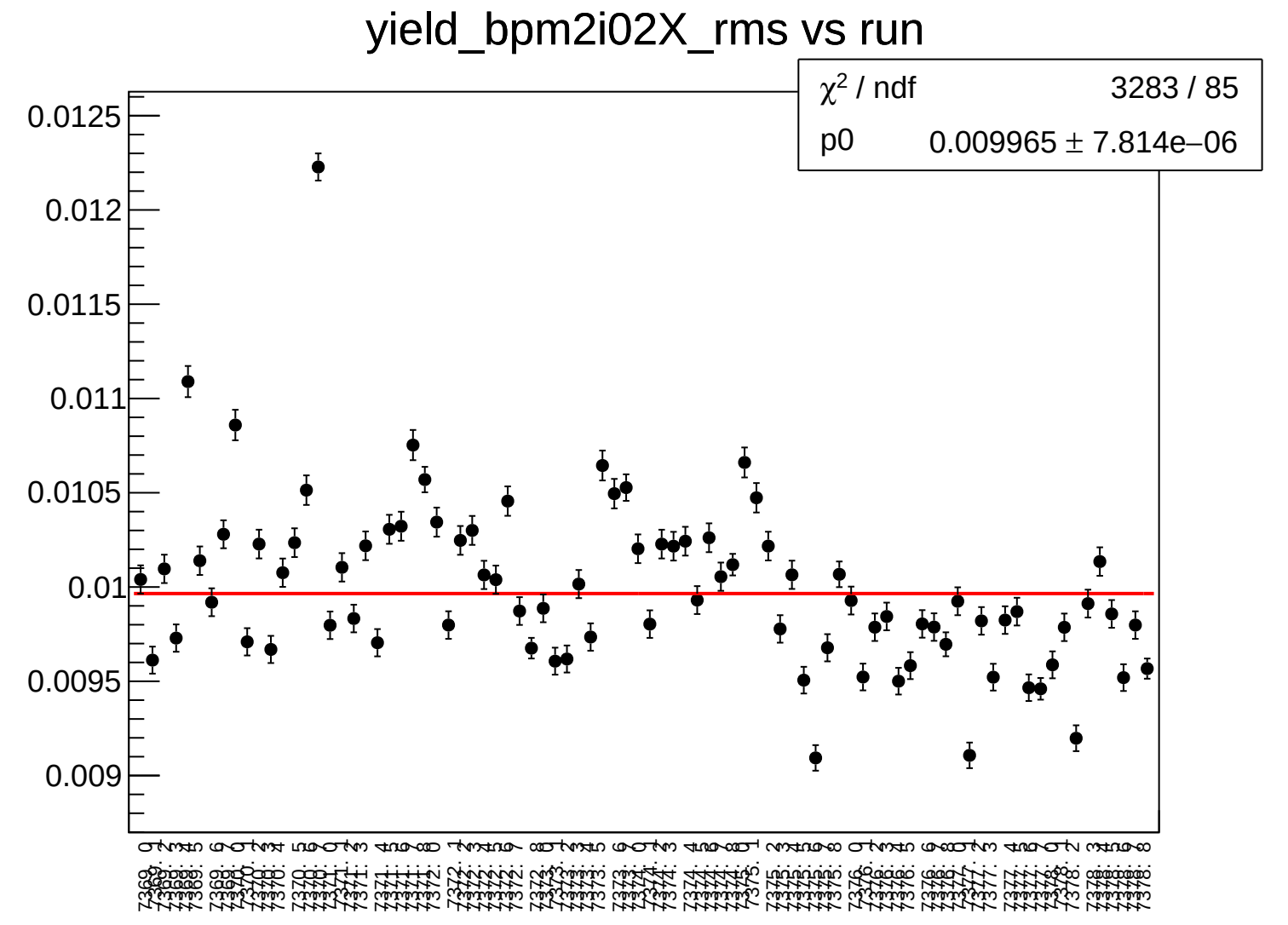

yield_bpm2i01Y_mean vs run
χ² / ndf 1.937e+07 / 85
p0 −4.676 ± 2.821e−06
−4.65
−4.655
−4.66
−4.665
−4.67
−4.675
−4.68
−4.685
−4.69
pull
Entries 86
Mean −2510
Std Dev 2551
1000
800
600
400
200
0
−200
−400
−600

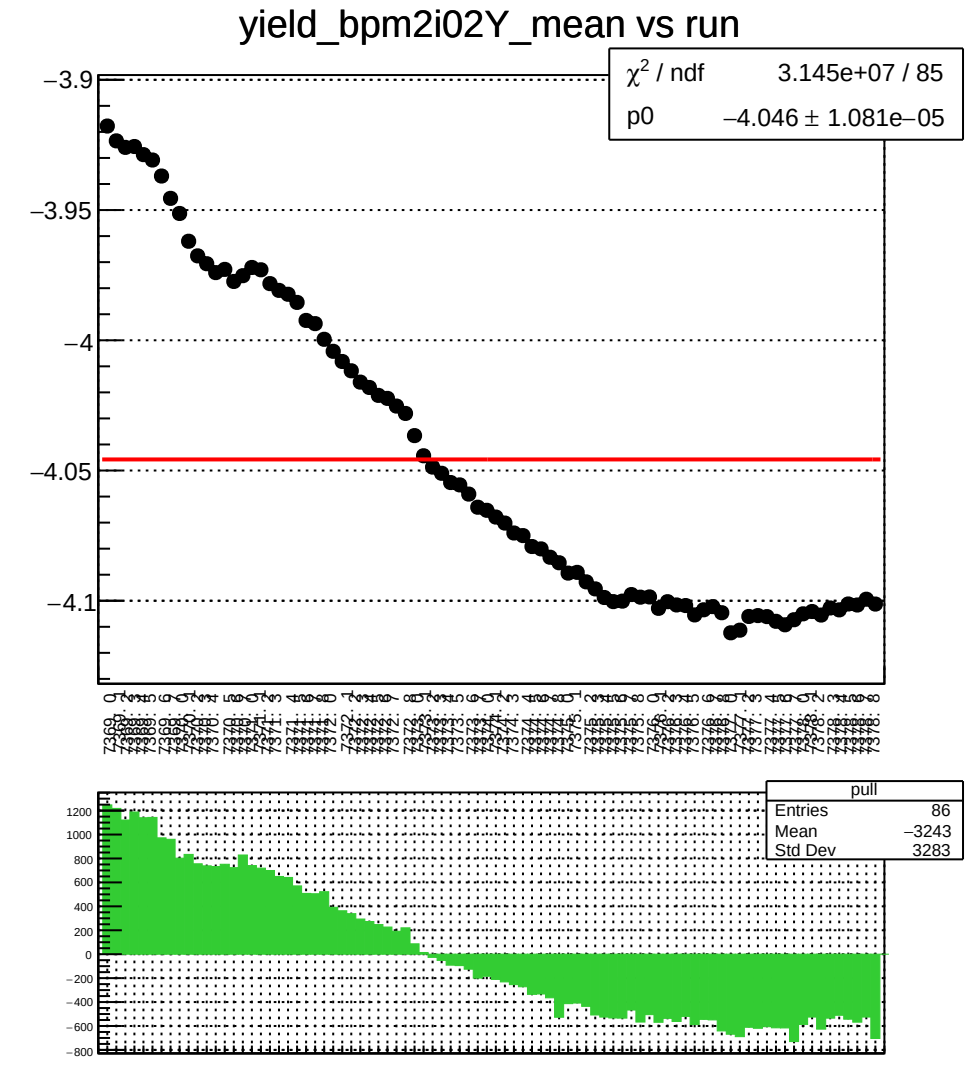

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

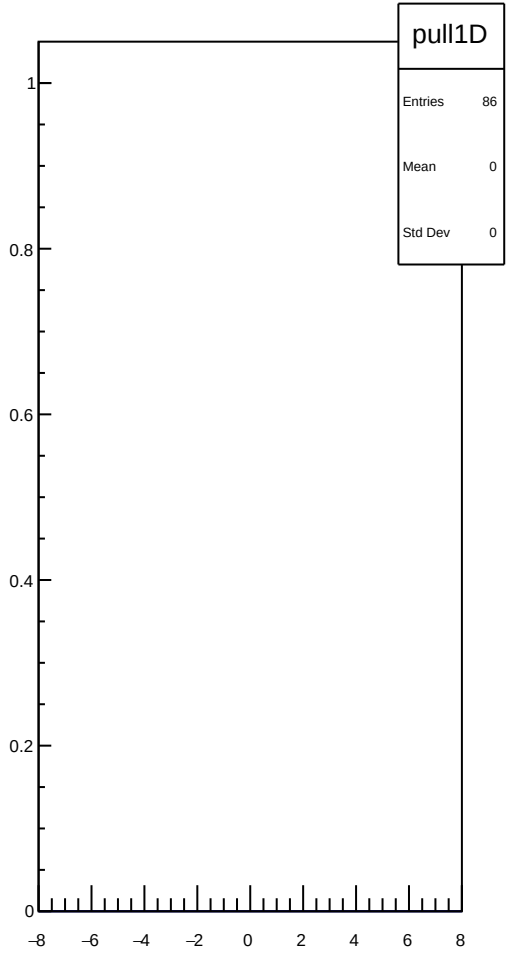

yield_bpm2i01Y_rms vs run
χ² / ndf 5350 / 85
p0 0.002542 ± 1.995e−06
0.0036
0.0034
0.0032
0.003
0.0028
0.0026
0.0024

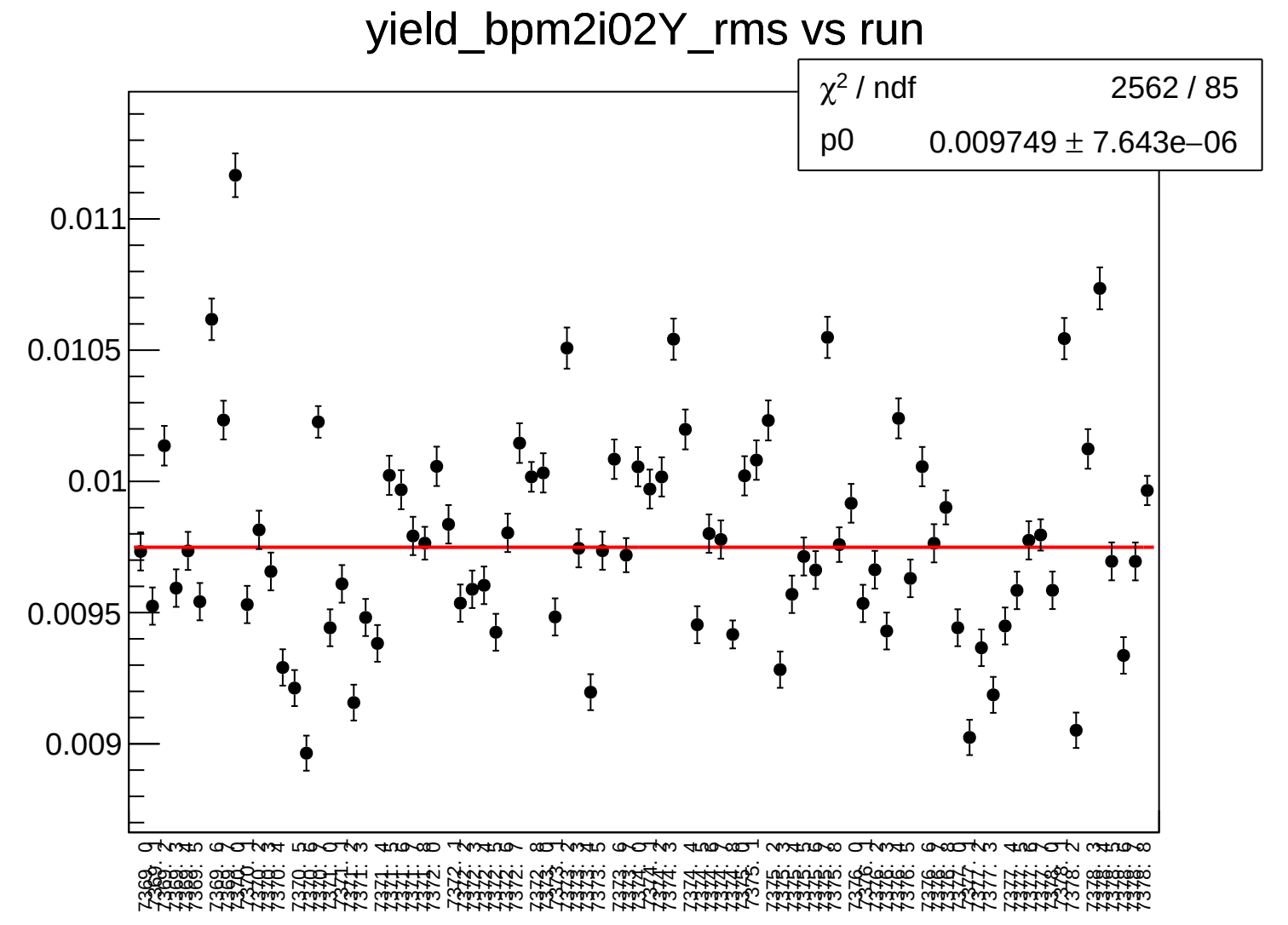

yield_bpm2i02X_mean vs run
χ² / ndf 7.594e+06 / 85
p0 0.7934 ± 1.105e−05
0.86
0.84
0.82
0.8
0.78
0.76
pull
Entries 86
Mean −1037
Std Dev 1072
600
400
200
0
−200

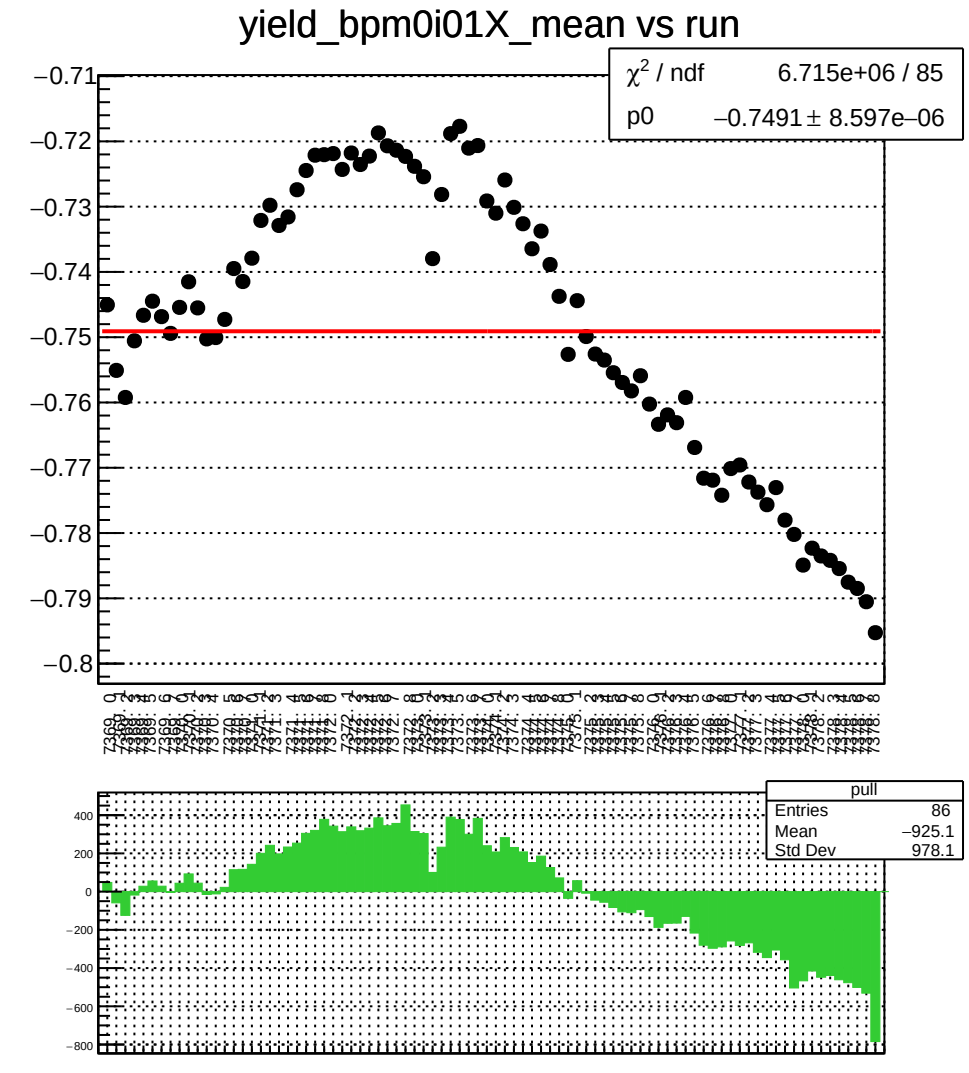

pull1D
Entries 86
Mean −4.416
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

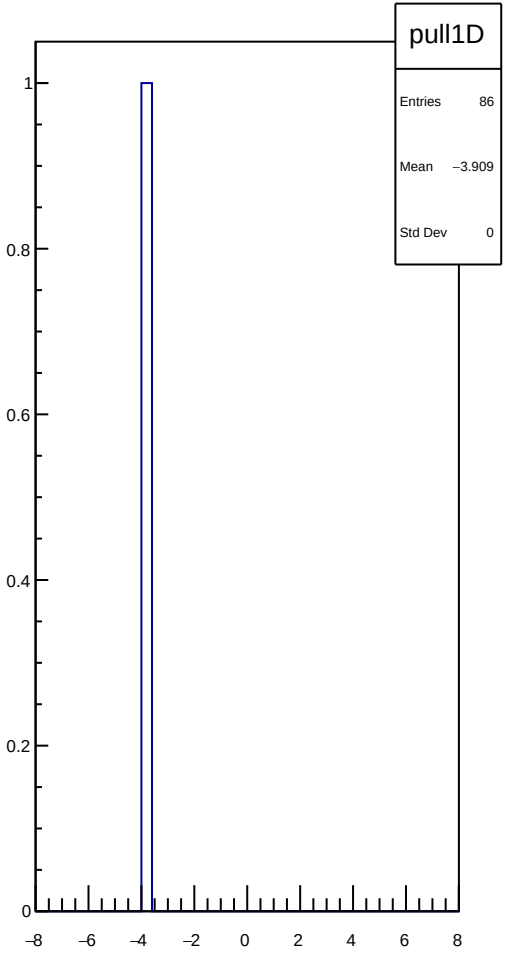

yield_bpm2i02X_rms vs run
χ² / ndf 3283 / 85
p0 0.009965 ± 7.814e−06
0.0125
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009

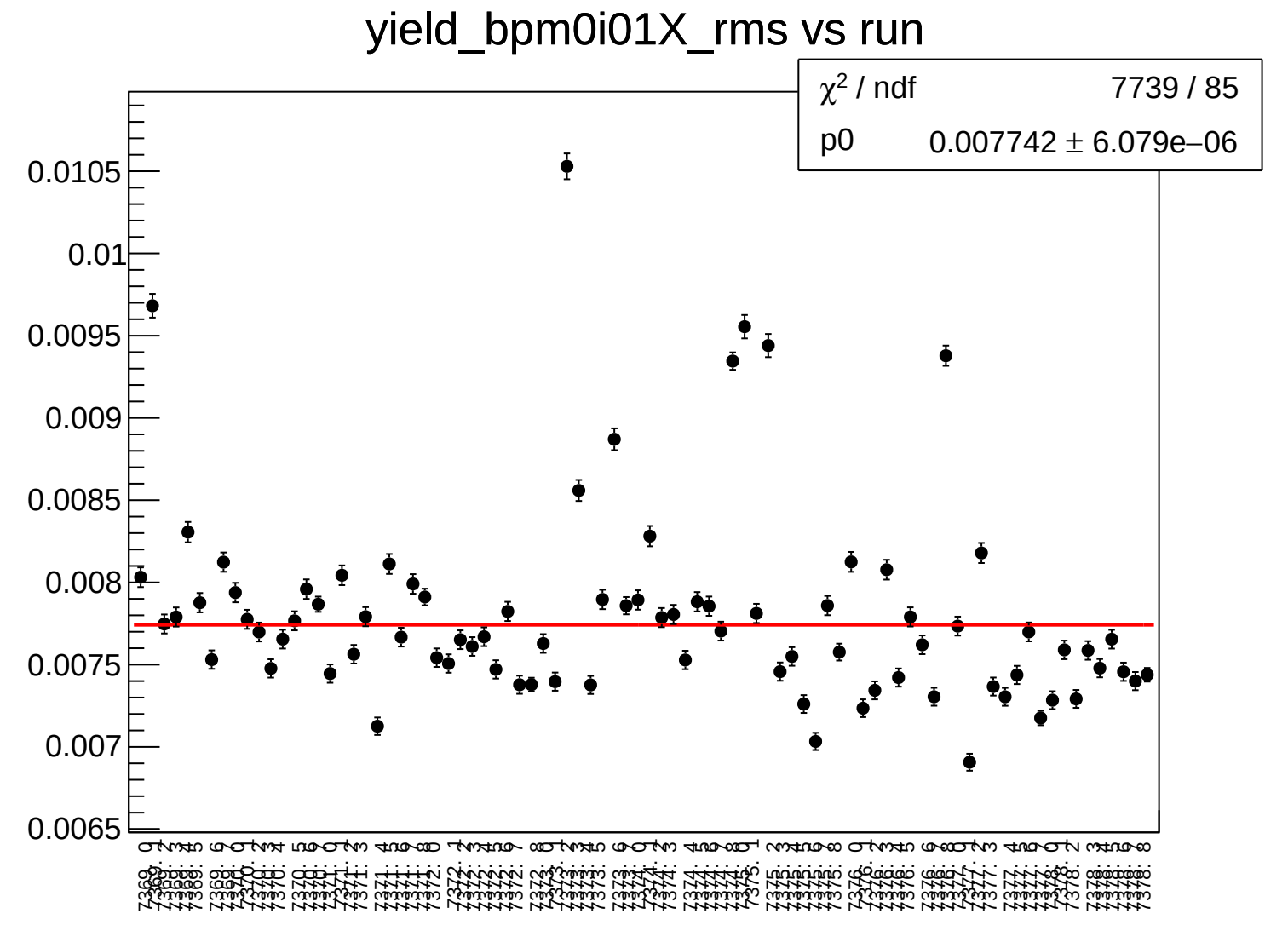

yield_bpm2i02Y_mean vs run
χ² / ndf 3.145e+07 / 85
p0 −4.046 ± 1.081e−05
−3.9
−3.95
−4
−4.05
−4.1
pull
Entries 86
Mean −3243
Std Dev 3283
1200
1000
800
600
400
200
0
−200
−400
−600
−800

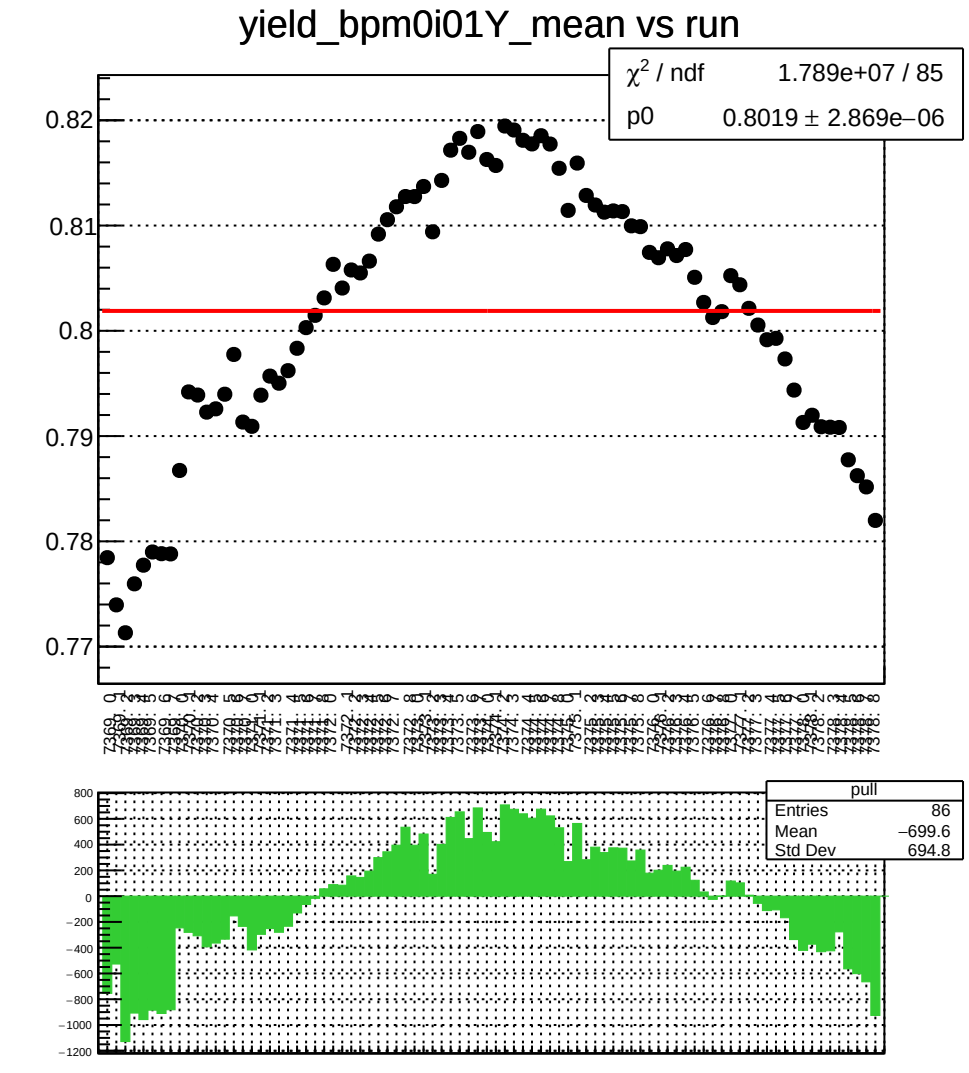

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

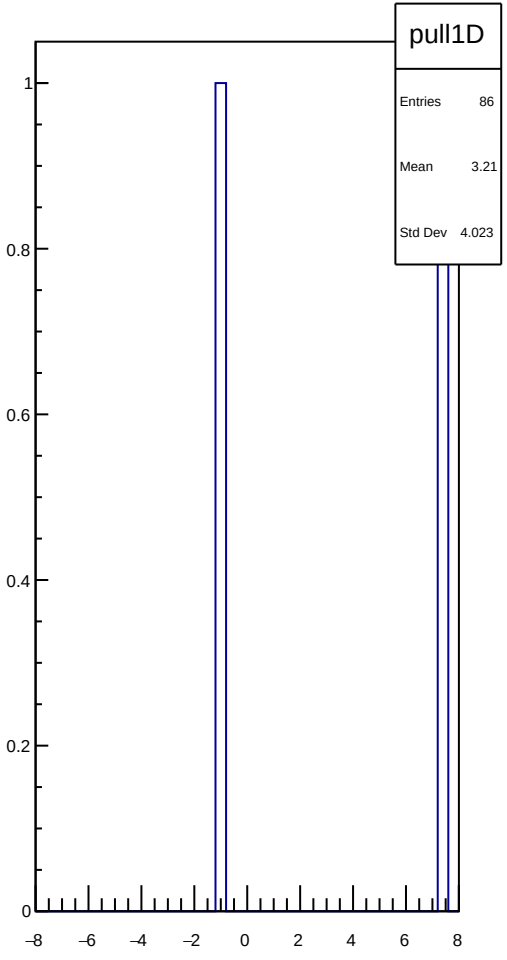

yield_bpm2i02Y_rms vs run
χ² / ndf 2562 / 85
p0 0.009749 ± 7.643e−06
0.011
0.0105
0.01
0.0095
0.009

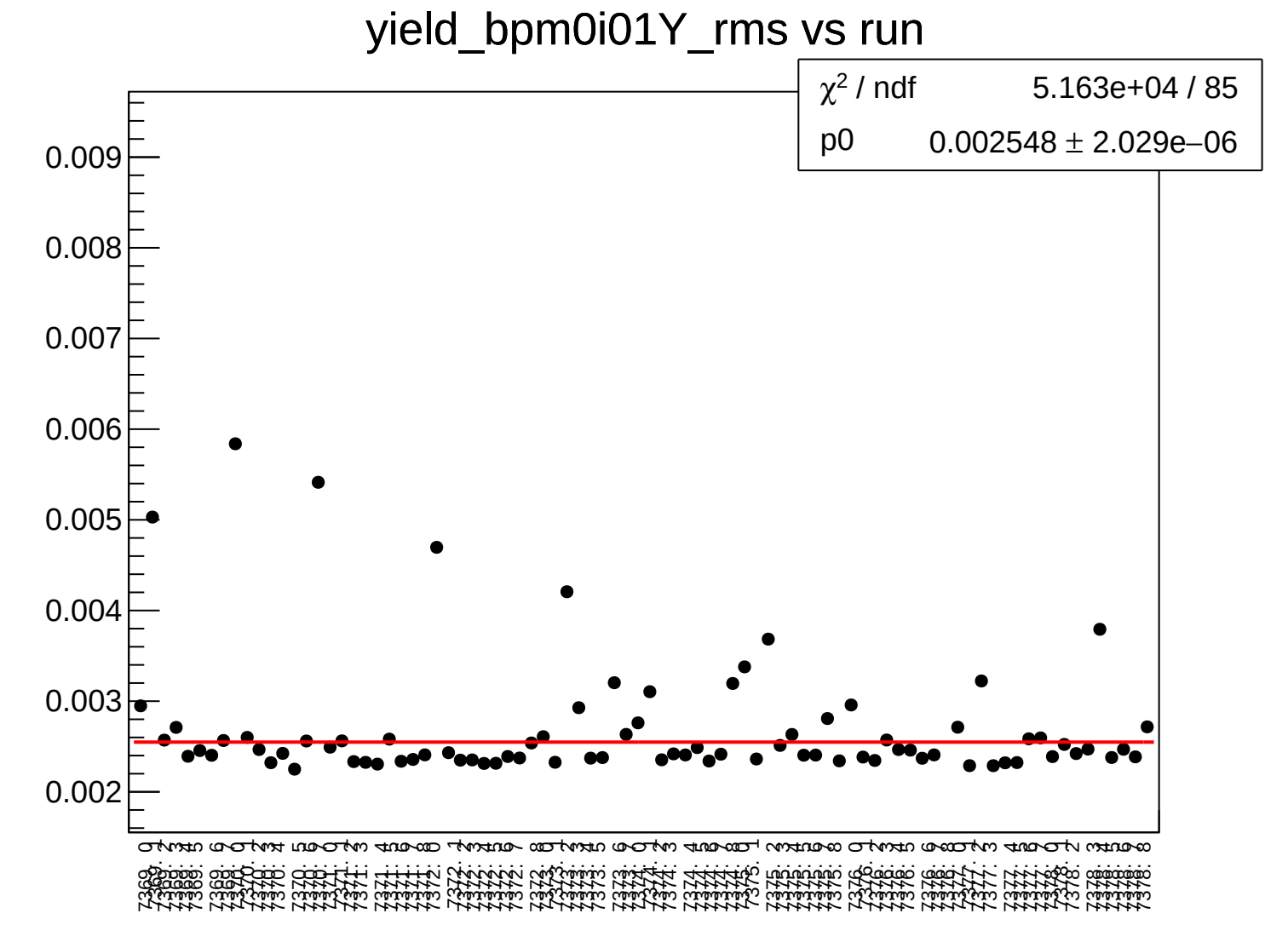

yield_bpm0i01X_mean vs run
χ² / ndf 6.715e+06 / 85
p0 −0.7491 ± 8.597e−06
pull
Entries 86
Mean −925.1
Std Dev 978.1

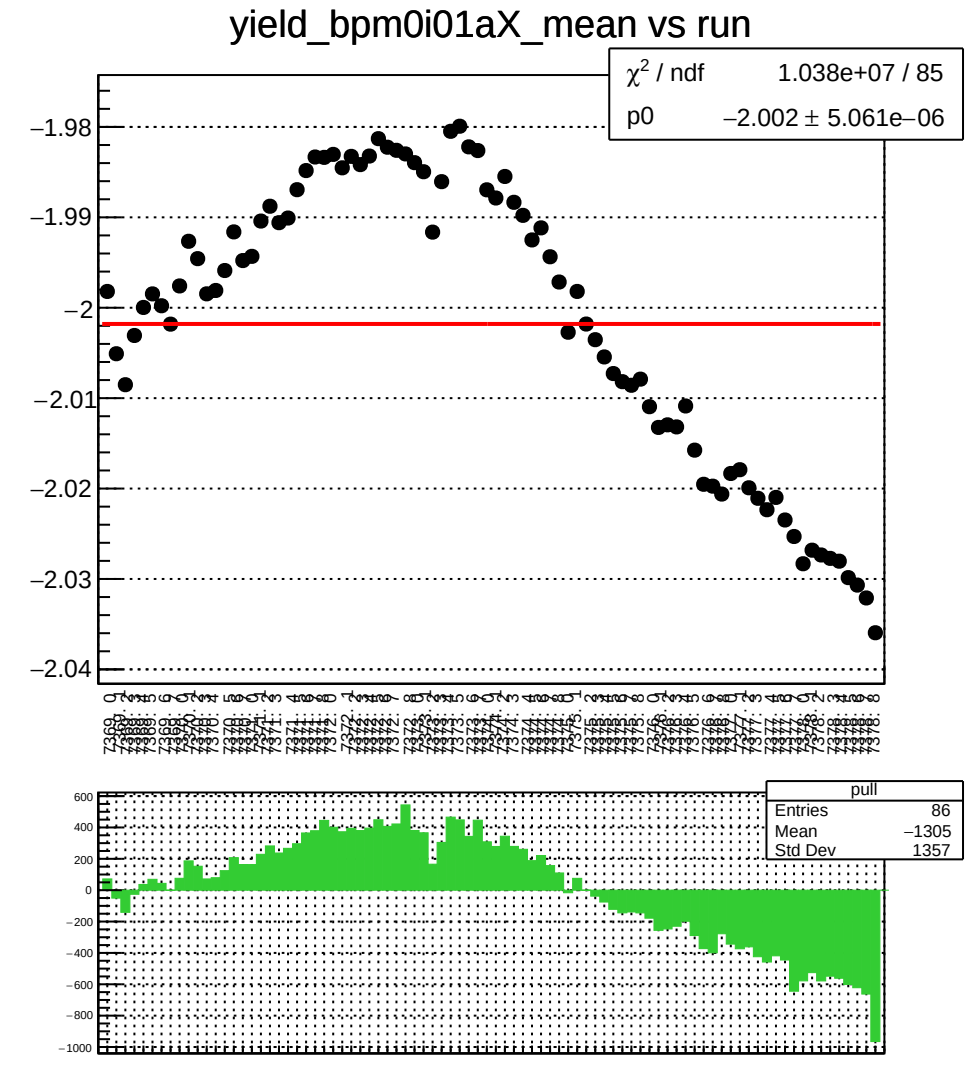

pull1D
Entries 86
Mean −3.909
Std Dev 0

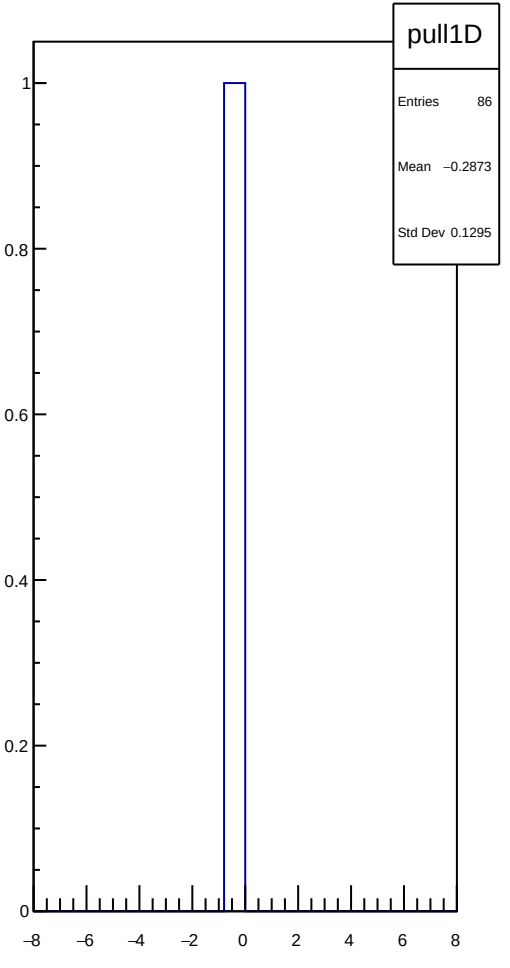

yield_bpm0i01X_rms vs run
χ² / ndf 7739 / 85
p0 0.007742 ± 6.079e−06
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065

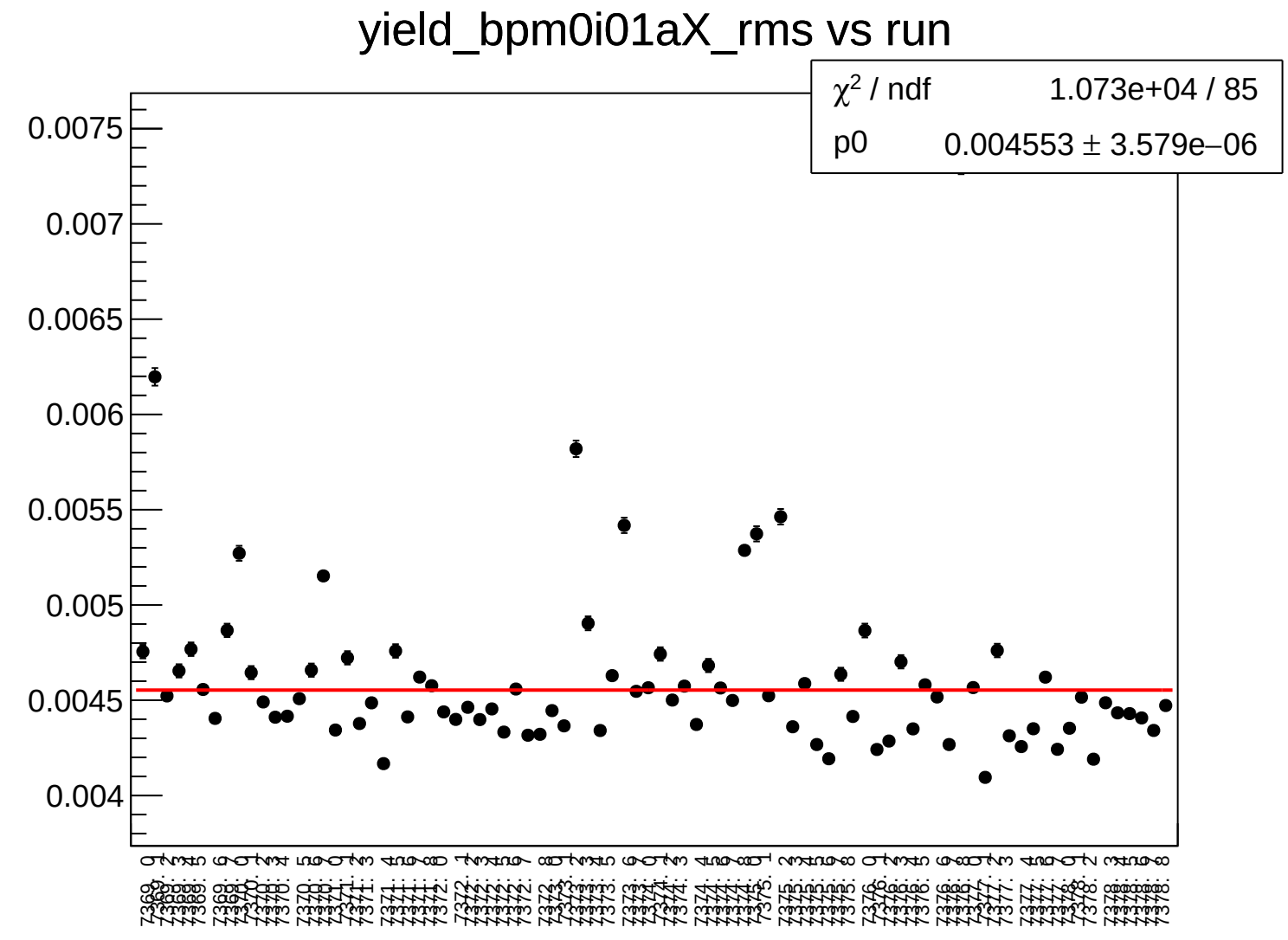

yield_bpm0i01Y_mean vs run
χ² / ndf 1.789e+07 / 85
p0 0.8019 ± 2.869e−06
0.82
0.81
0.8
0.79
0.78
0.77
pull
Entries 86
Mean −699.6
Std Dev 694.8
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

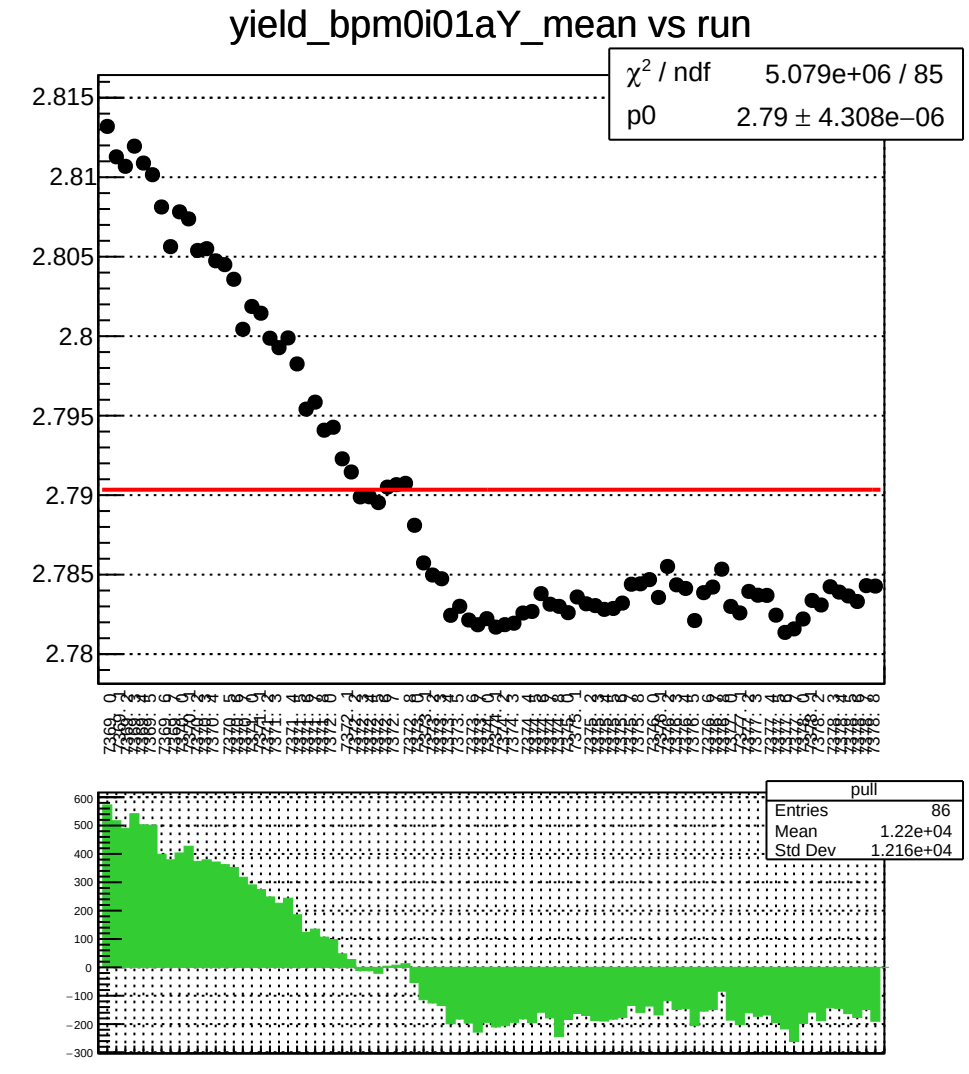

pull1D
Entries 86
Mean 3.21
Std Dev 4.023
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

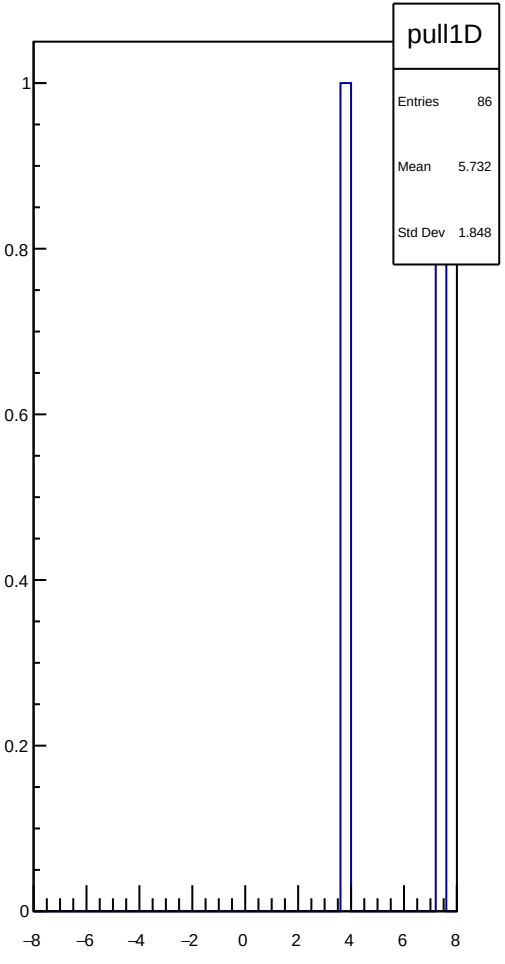

yield_bpm0i01Y_rms vs run
χ² / ndf 5.163e+04 / 85
p0 0.002548 ± 2.029e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

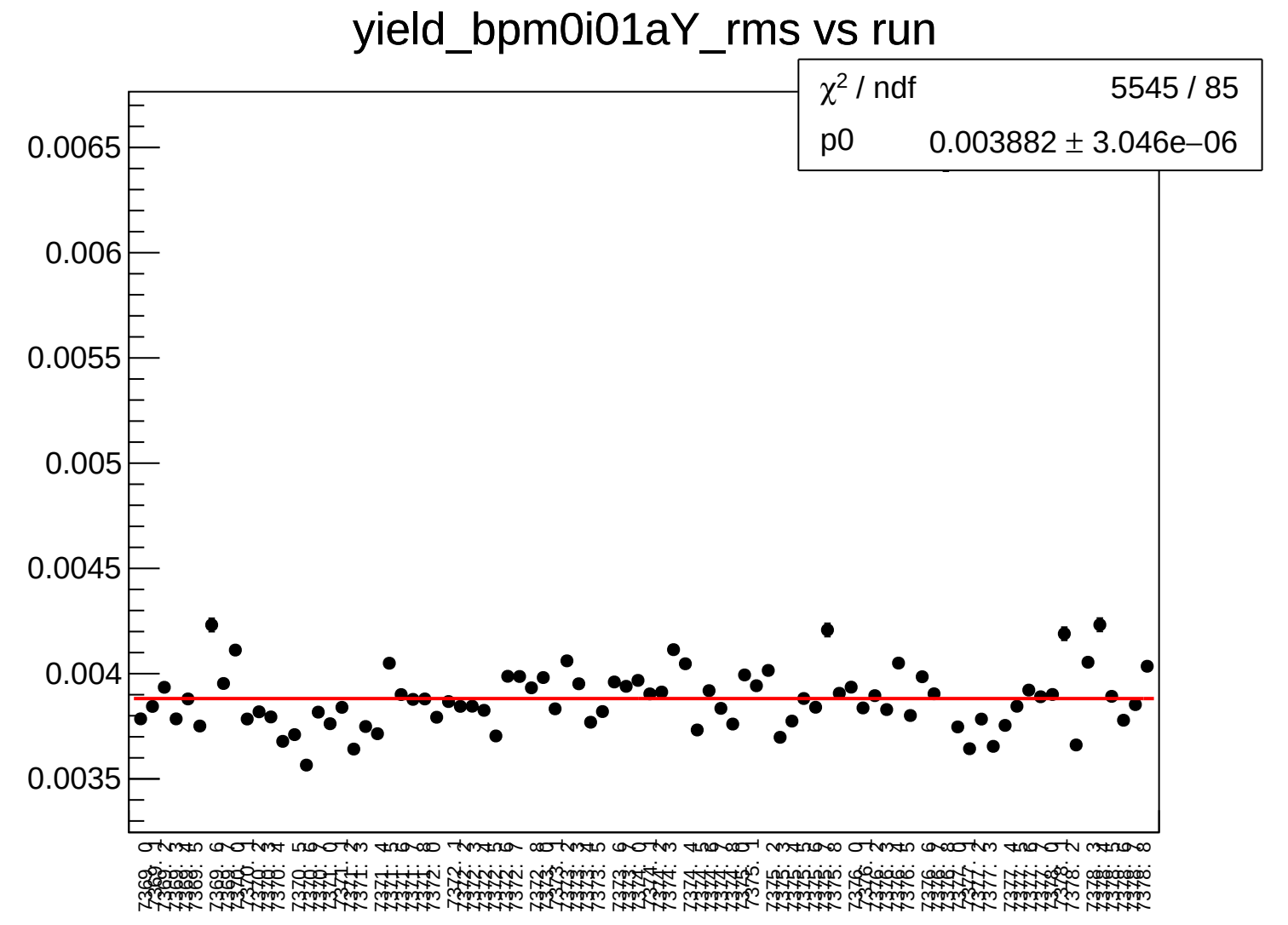

yield_bpm0i01aX_mean vs run
χ² / ndf 1.038e+07 / 85
p0 −2.002 ± 5.061e−06
−1.98
−1.99
−2
−2.01
−2.02
−2.03
−2.04
pull
Entries 86
Mean −1305
Std Dev 1357
600
400
200
0
−200
−400
−600
−800
−1000

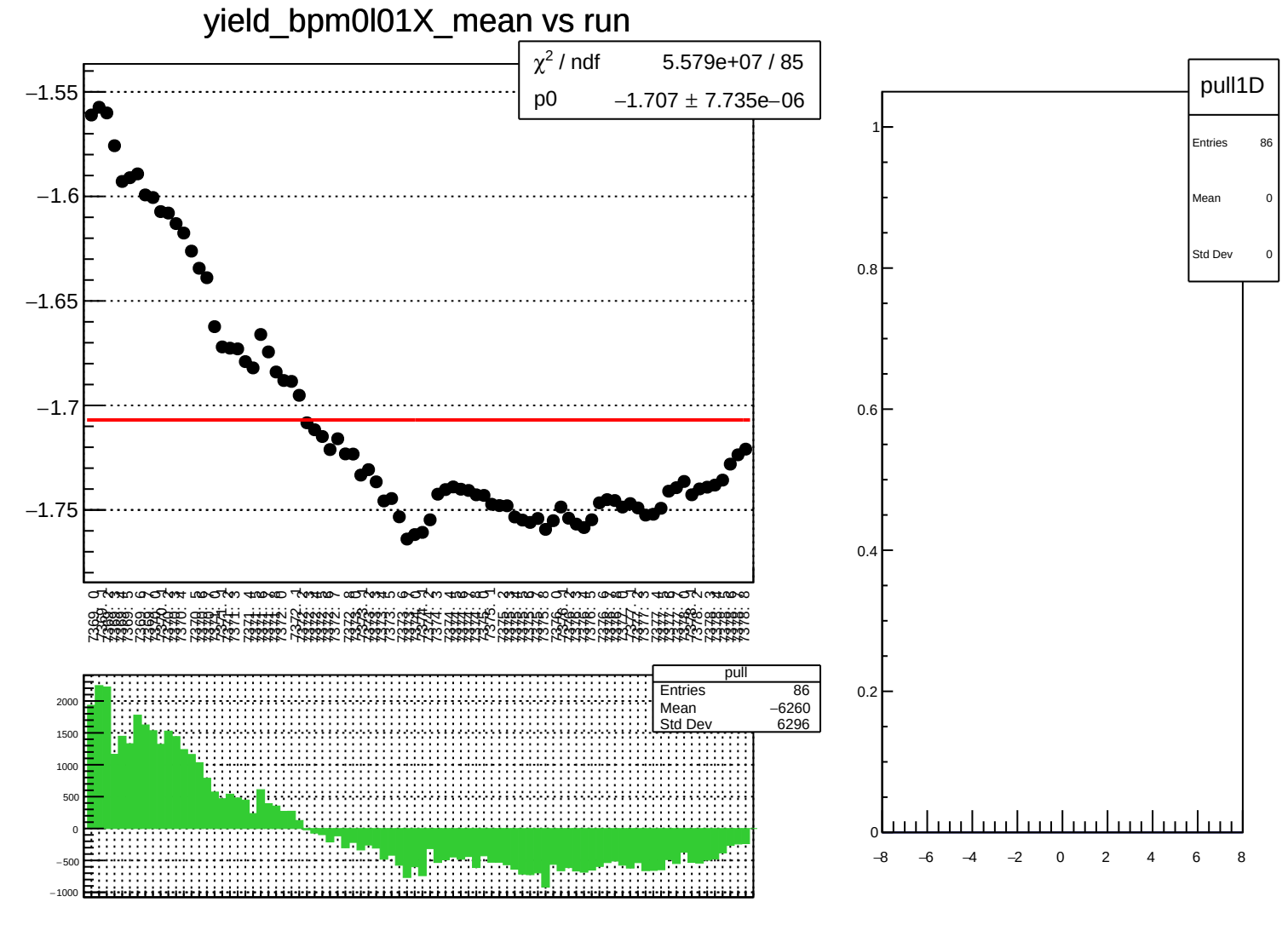

pull1D
Entries 86
Mean −0.2873
Std Dev 0.1295
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

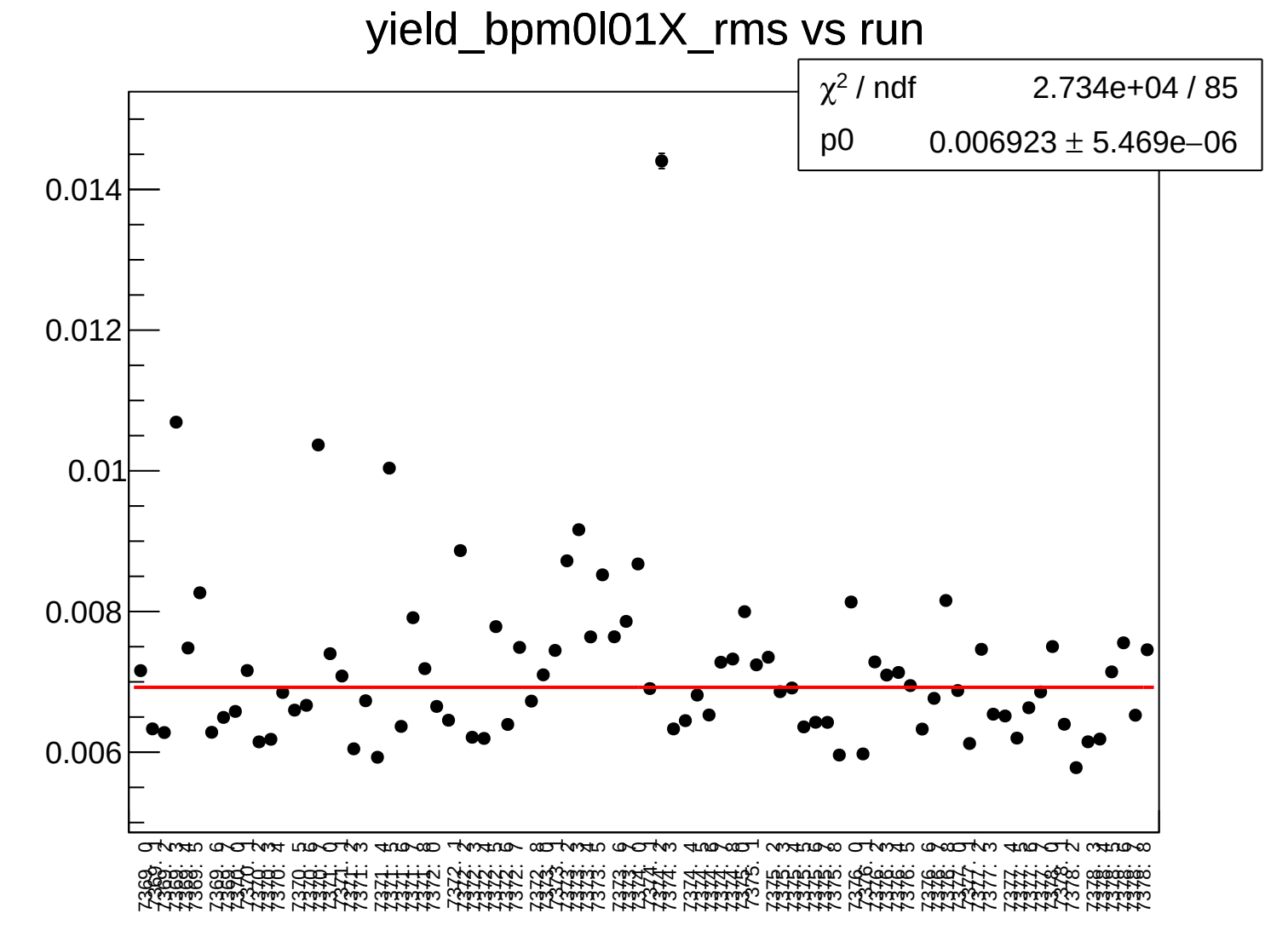

yield_bpm0i01aX_rms vs run
χ² / ndf 1.073e+04 / 85
p0 0.004553 ± 3.579e−06
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004

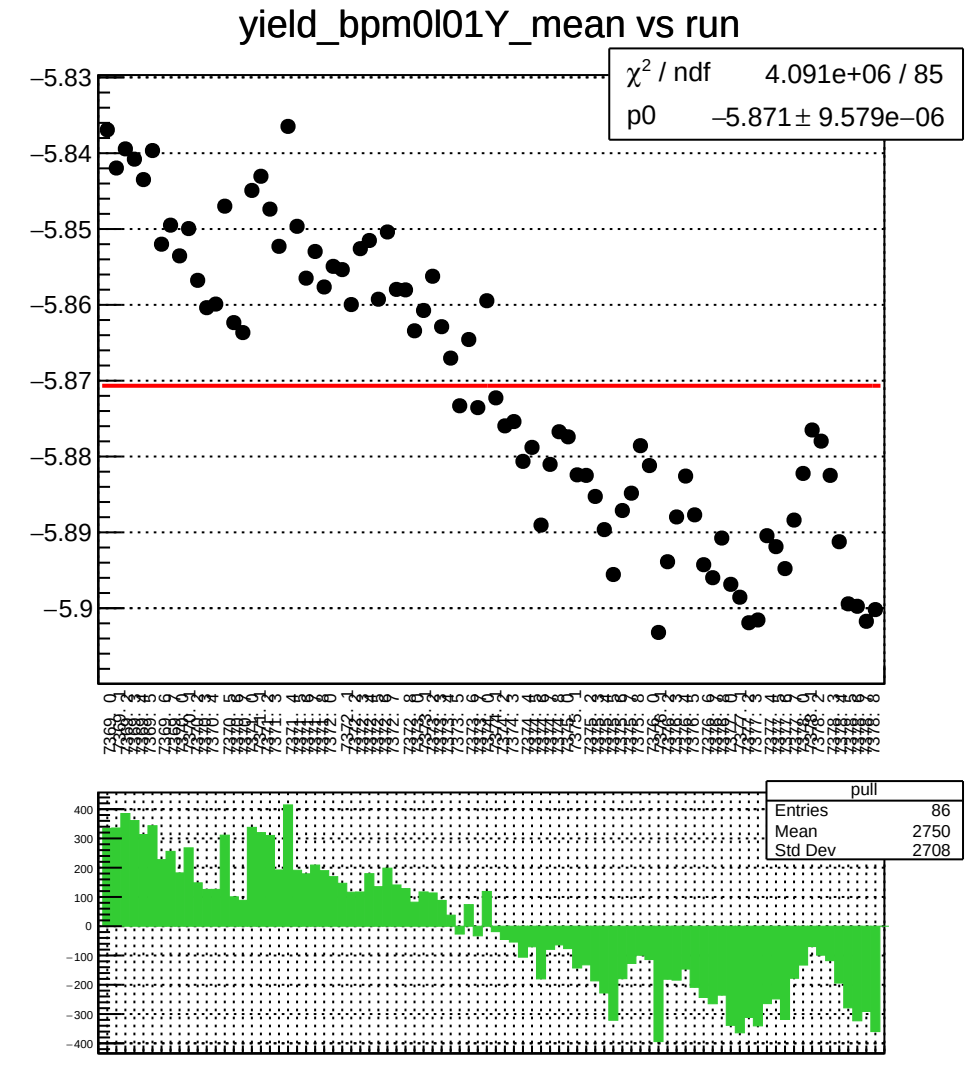

yield_bpm0i01aY_mean vs run
χ² / ndf 5.079e+06 / 85
p0 2.79 ± 4.308e−06
2.815
2.81
2.805
2.8
2.795
2.79
2.785
2.78
pull
Entries 86
Mean 1.22e+04
Std Dev 1.216e+04
600
500
400
300
200
100
0
−100
−200
−300

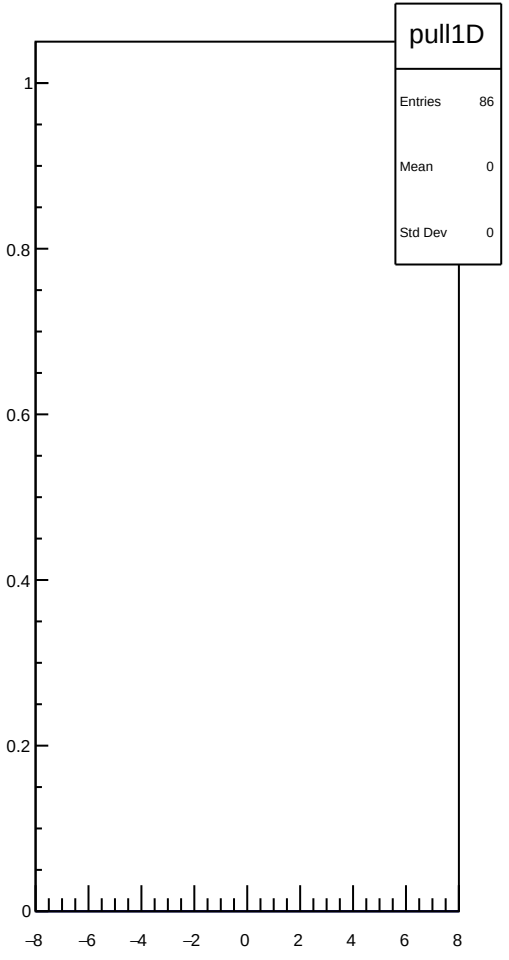

pull1D
Entries 86
Mean 5.732
Std Dev 1.848
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

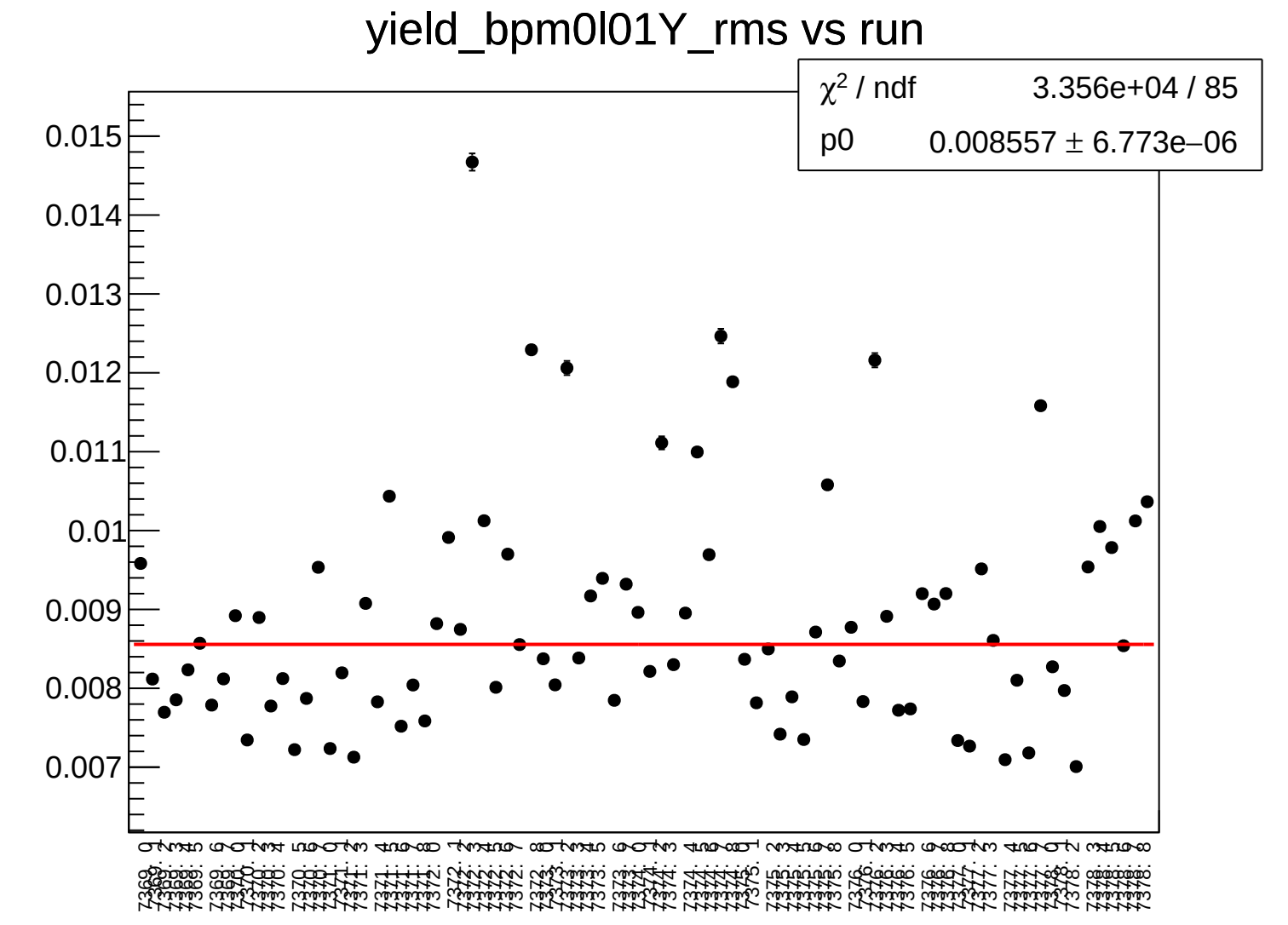

yield_bpm0i01aY_rms vs run
χ² / ndf 5545 / 85
p0 0.003882 ± 3.046e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035

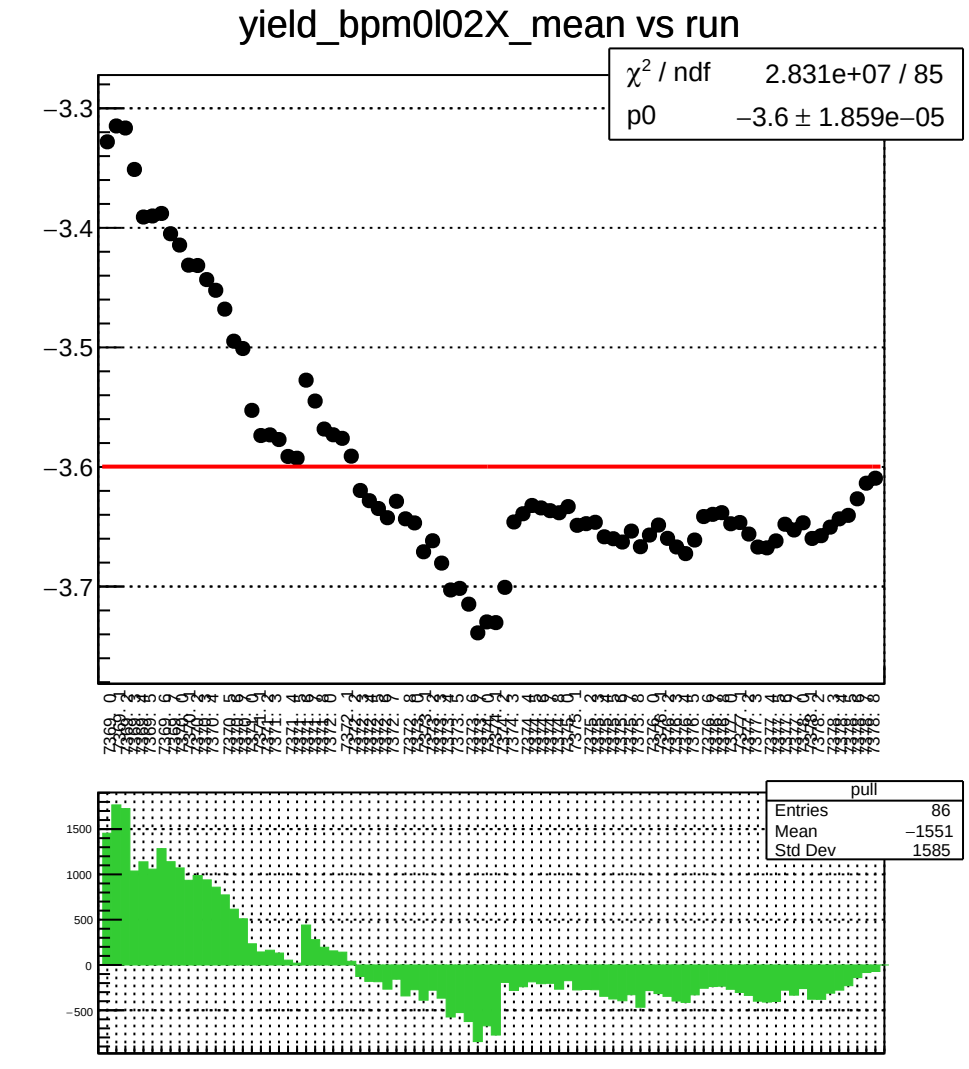

yield_bpm0l01X_mean vs run
χ² / ndf 5.579e+07 / 85
p0 −1.707 ± 7.735e−06
−1.55
−1.6
−1.65
−1.7
−1.75
pull
Entries 86
Mean −6260
Std Dev 6296
2000
1500
1000
500
0
−500
−1000
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

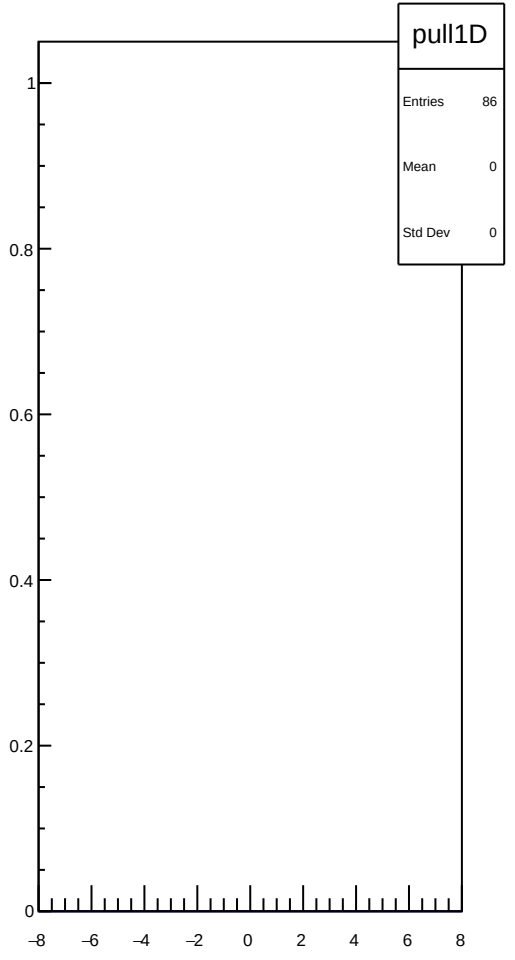

yield_bpm0l01X_rms vs run
χ^2 / ndf 2.734e+04 / 85
p0 0.006923 ± 5.469e−06
0.014
0.012
0.01
0.008
0.006

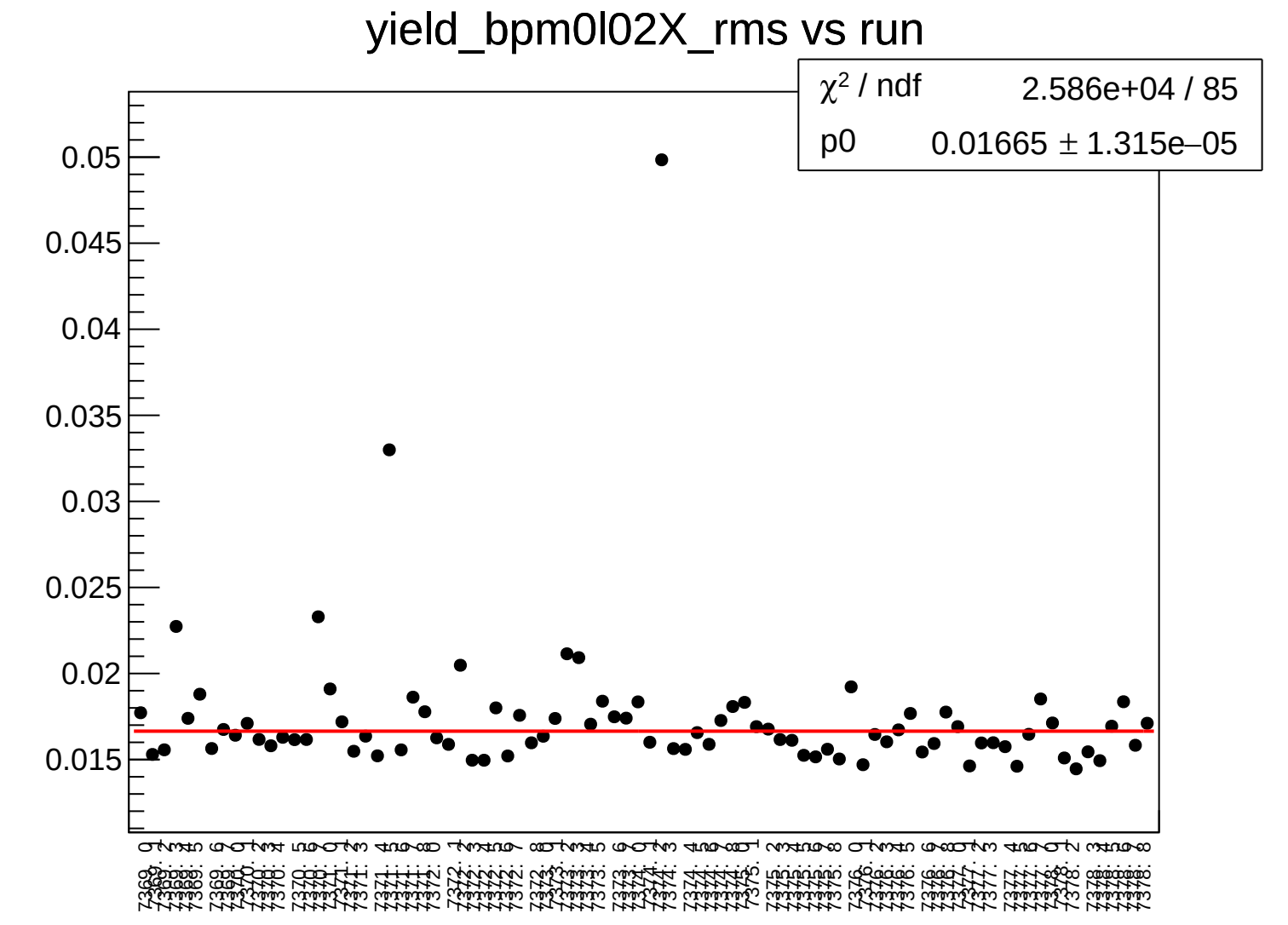

yield_bpm0l01Y_mean vs run
χ² / ndf 4.091e+06 / 85
p0 −5.871 ± 9.579e−06
−5.83
−5.84
−5.85
−5.86
−5.87
−5.88
−5.89
−5.9
pull
Entries 86
Mean 2750
Std Dev 2708
400
300
200
100
0
−100
−200
−300
−400

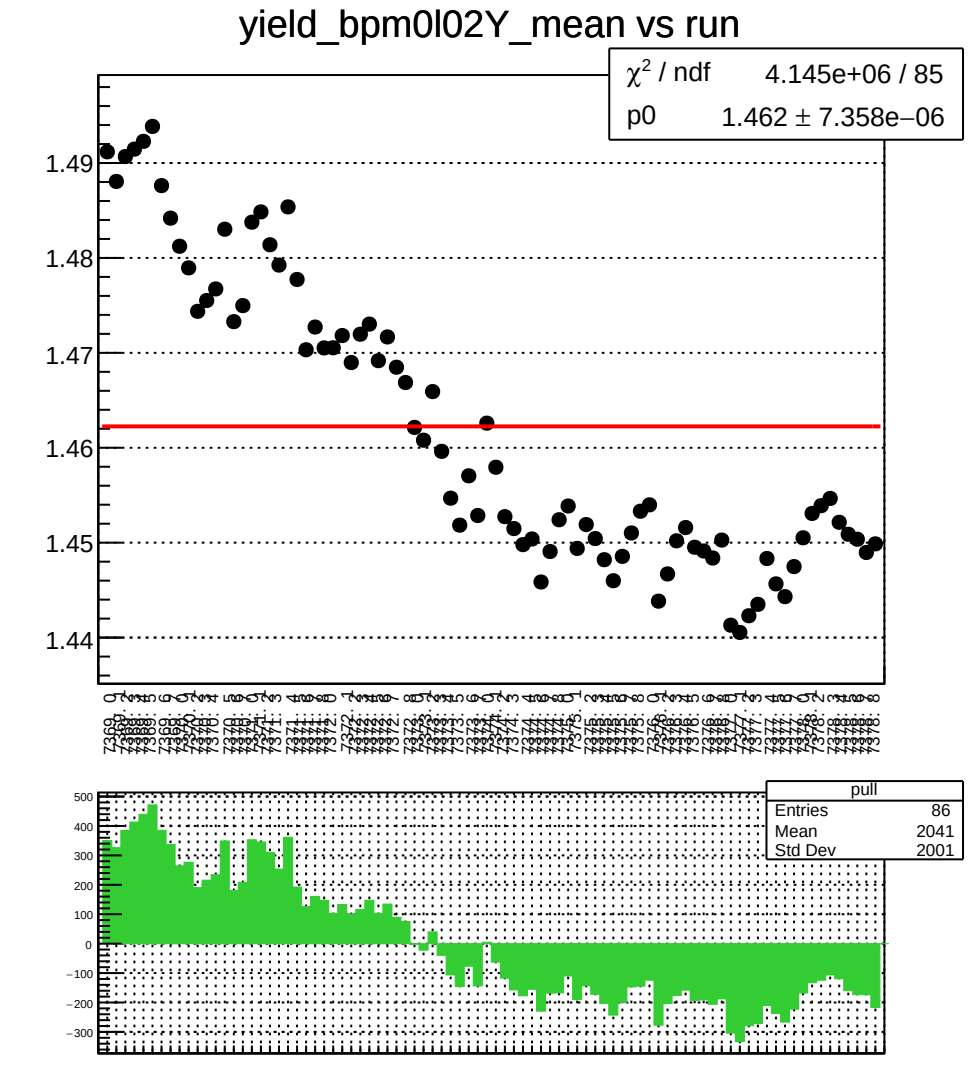

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

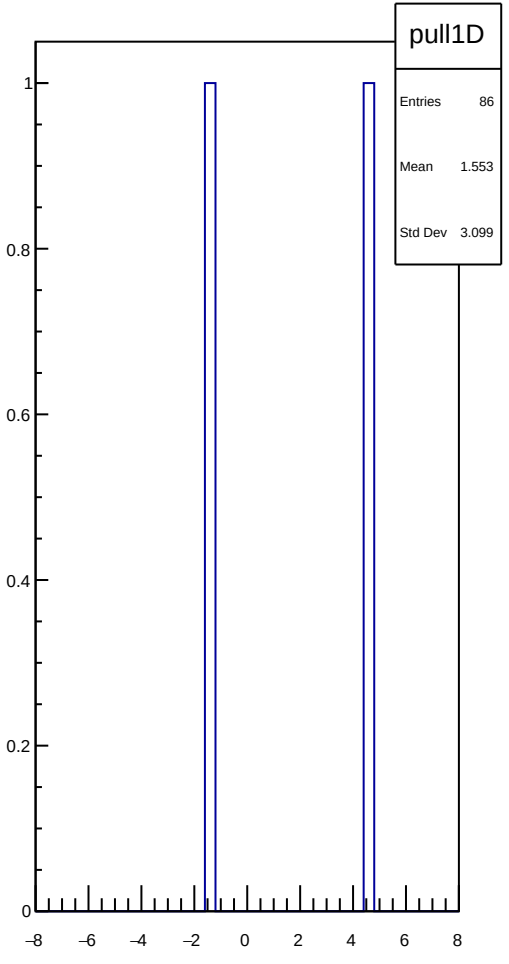

yield_bpm0l01Y_rms vs run
χ² / ndf 3.356e+04 / 85
p0 0.008557 ± 6.773e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

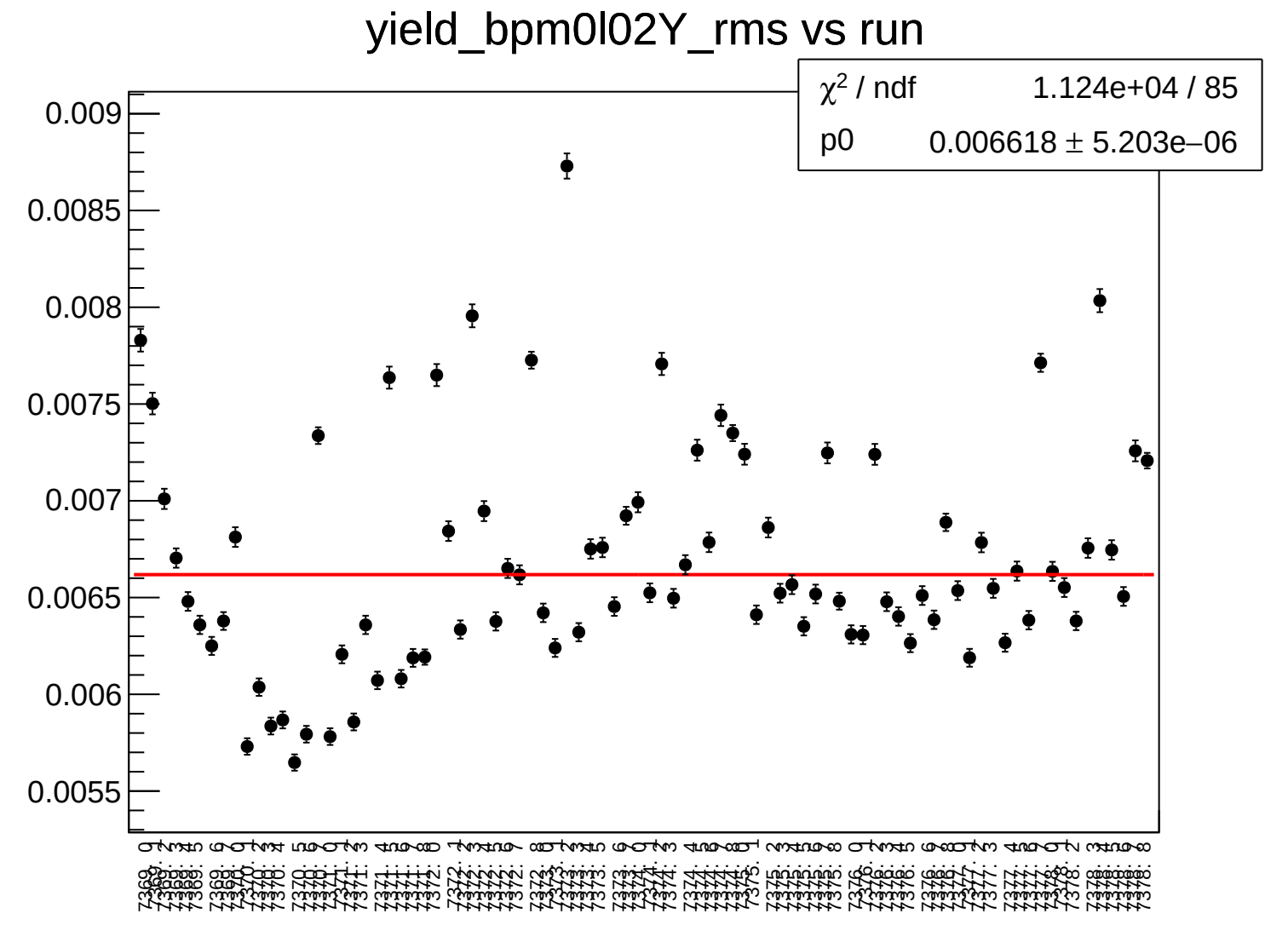

yield_bpm0l02X_mean vs run
χ² / ndf 2.831e+07 / 85
p0 −3.6 ± 1.859e−05
−3.3
−3.4
−3.5
−3.6
−3.7
pull
Entries 86
Mean −1551
Std Dev 1585
1500
1000
500
0
−500

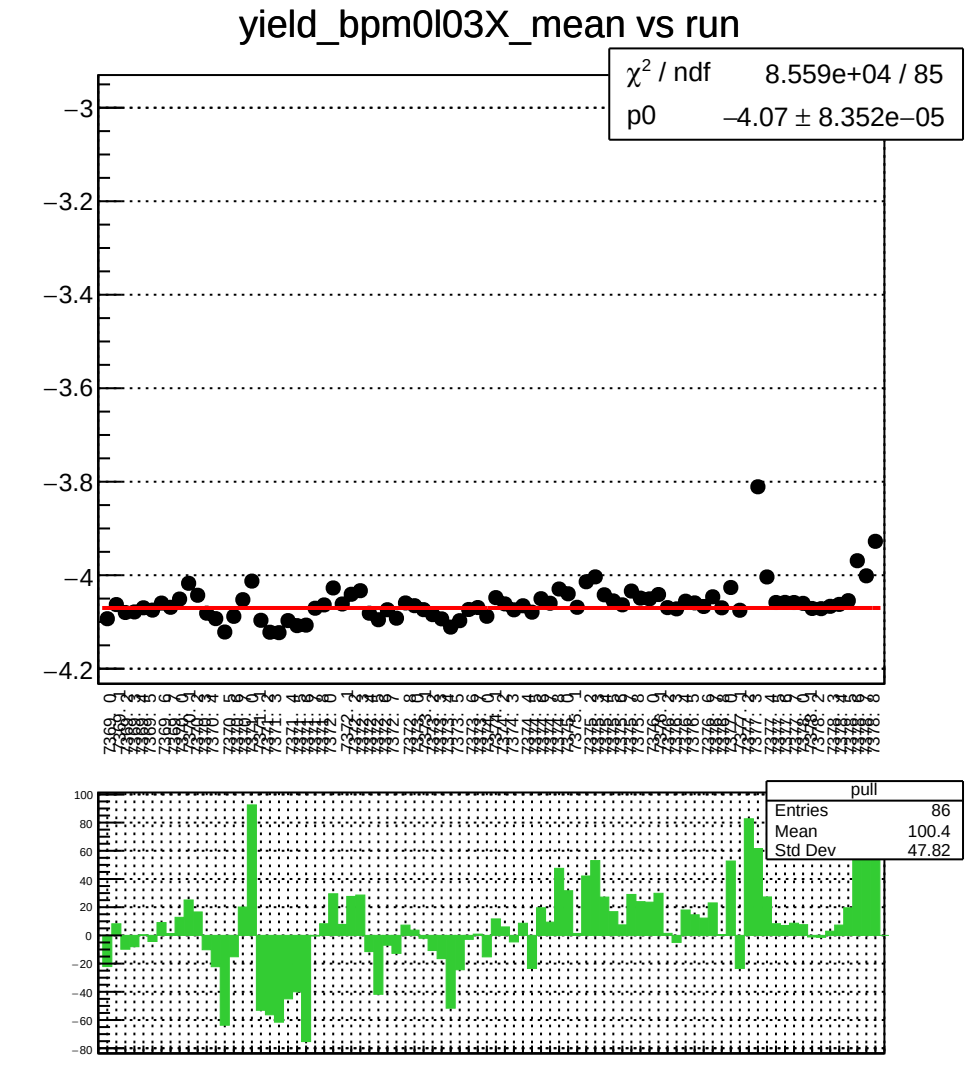

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

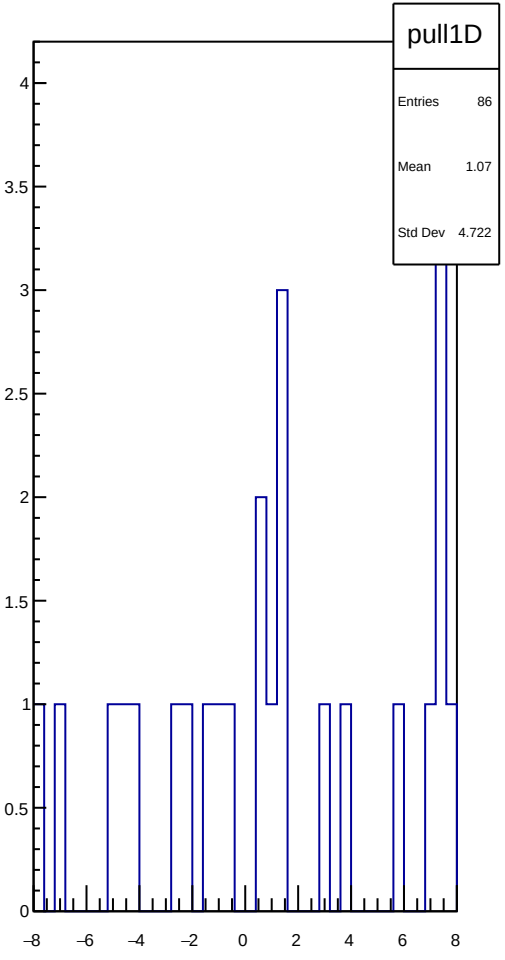

yield_bpm0l02X_rms vs run
χ² / ndf 2.586e+04 / 85
p0 0.01665 ± 1.315e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

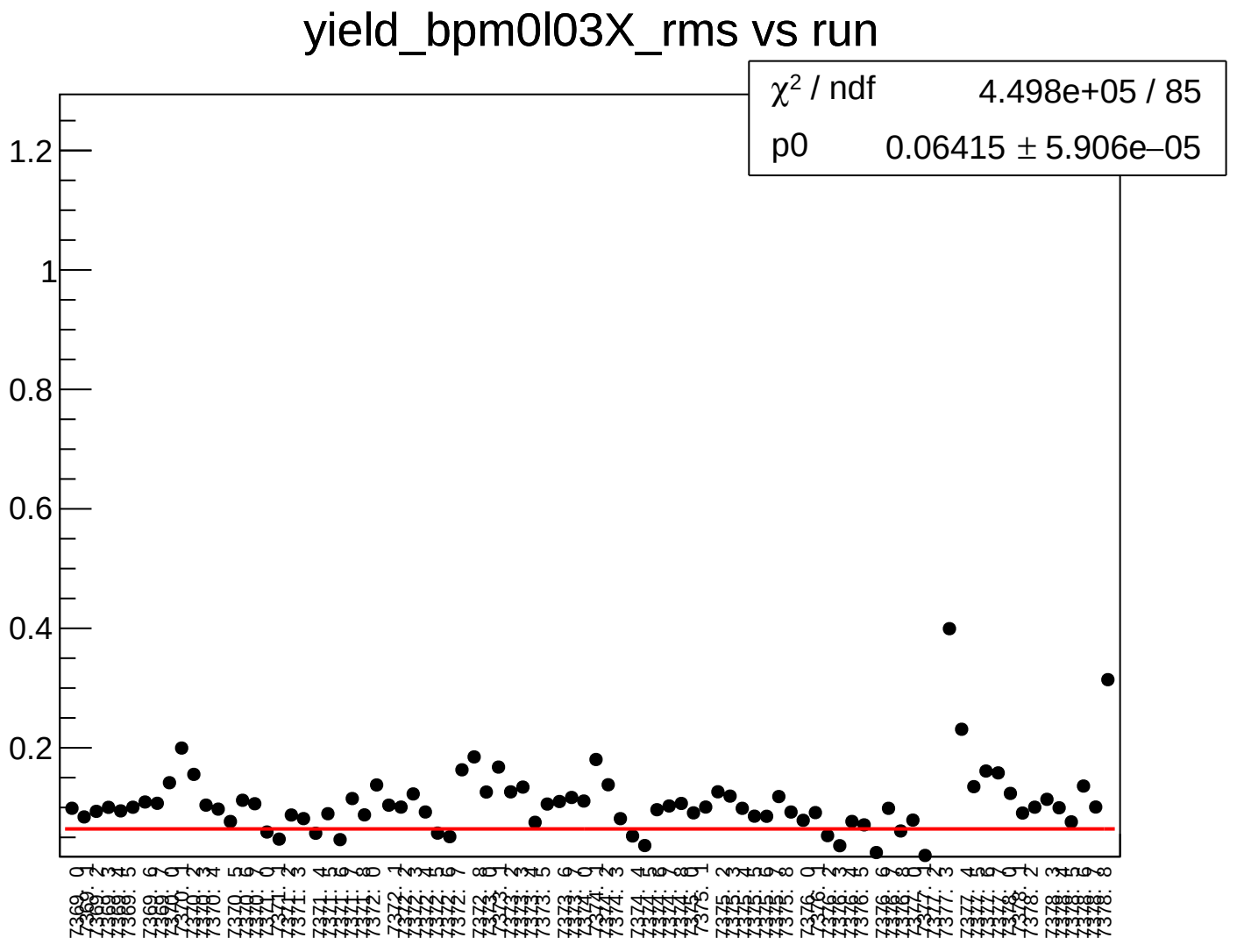

yield_bpm0l02Y_mean vs run
χ² / ndf 4.145e+06 / 85
p0 1.462 ± 7.358e−06
1.49
1.48
1.47
1.46
1.45
1.44
pull
Entries 86
Mean 2041
Std Dev 2001
500
400
300
200
100
0
−100
−200
−300

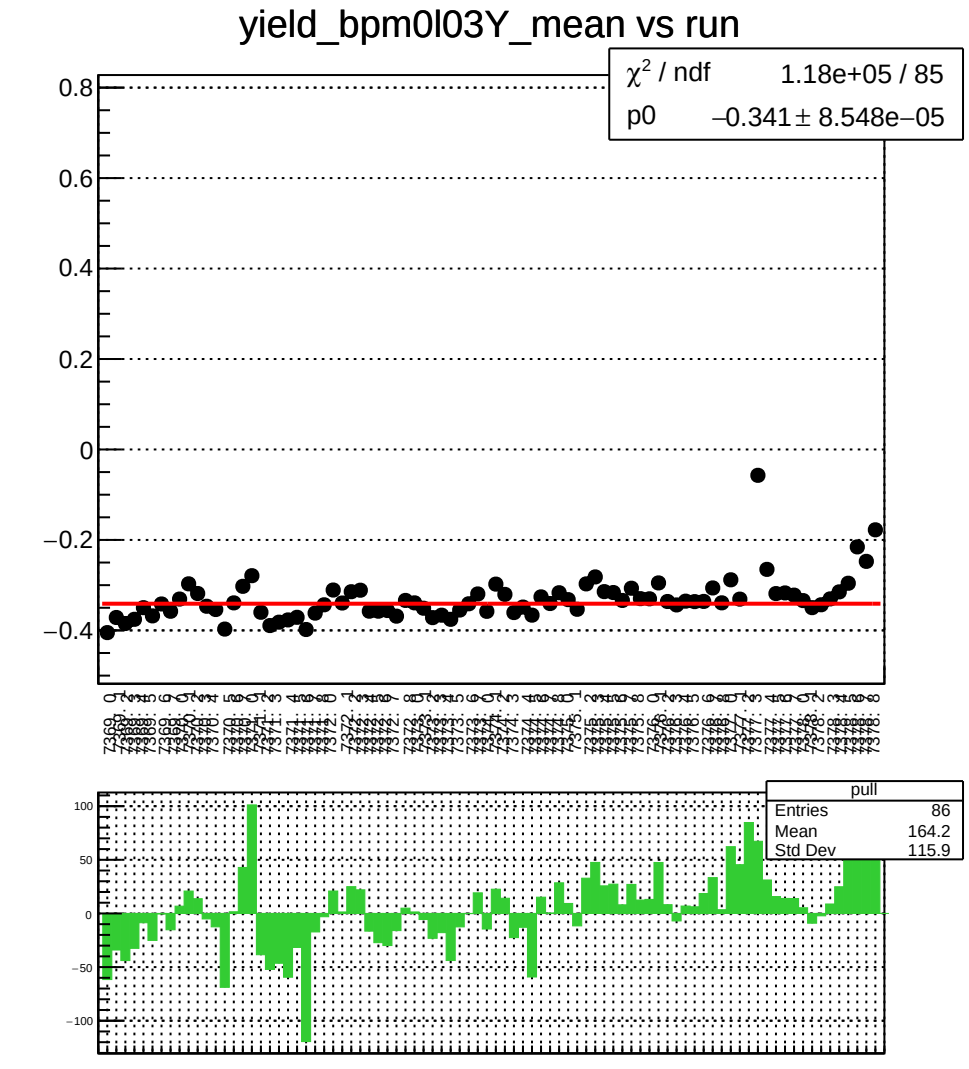

pull1D
Entries 86
Mean 1.553
Std Dev 3.099
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

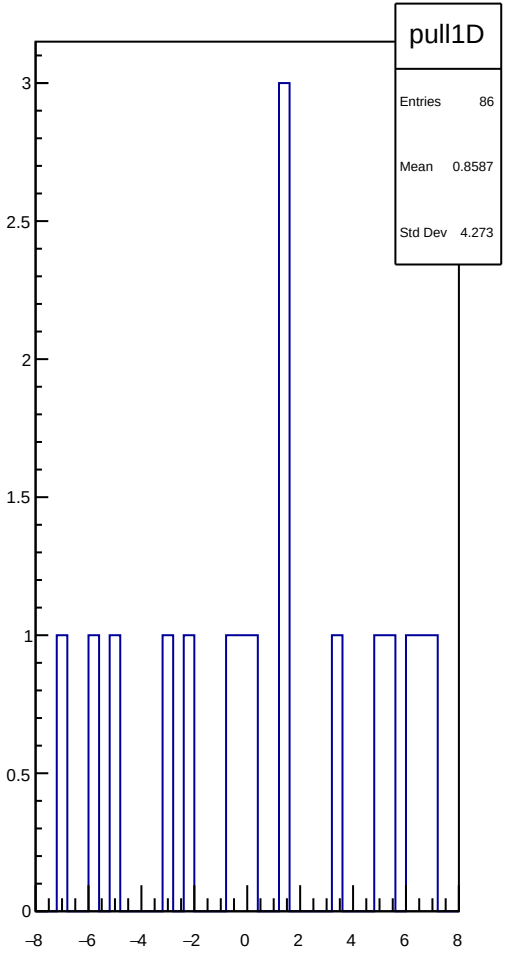

yield_bpm0l02Y_rms vs run
χ² / ndf 1.124e+04 / 85
p0 0.006618 ± 5.203e−06
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006
0.0055

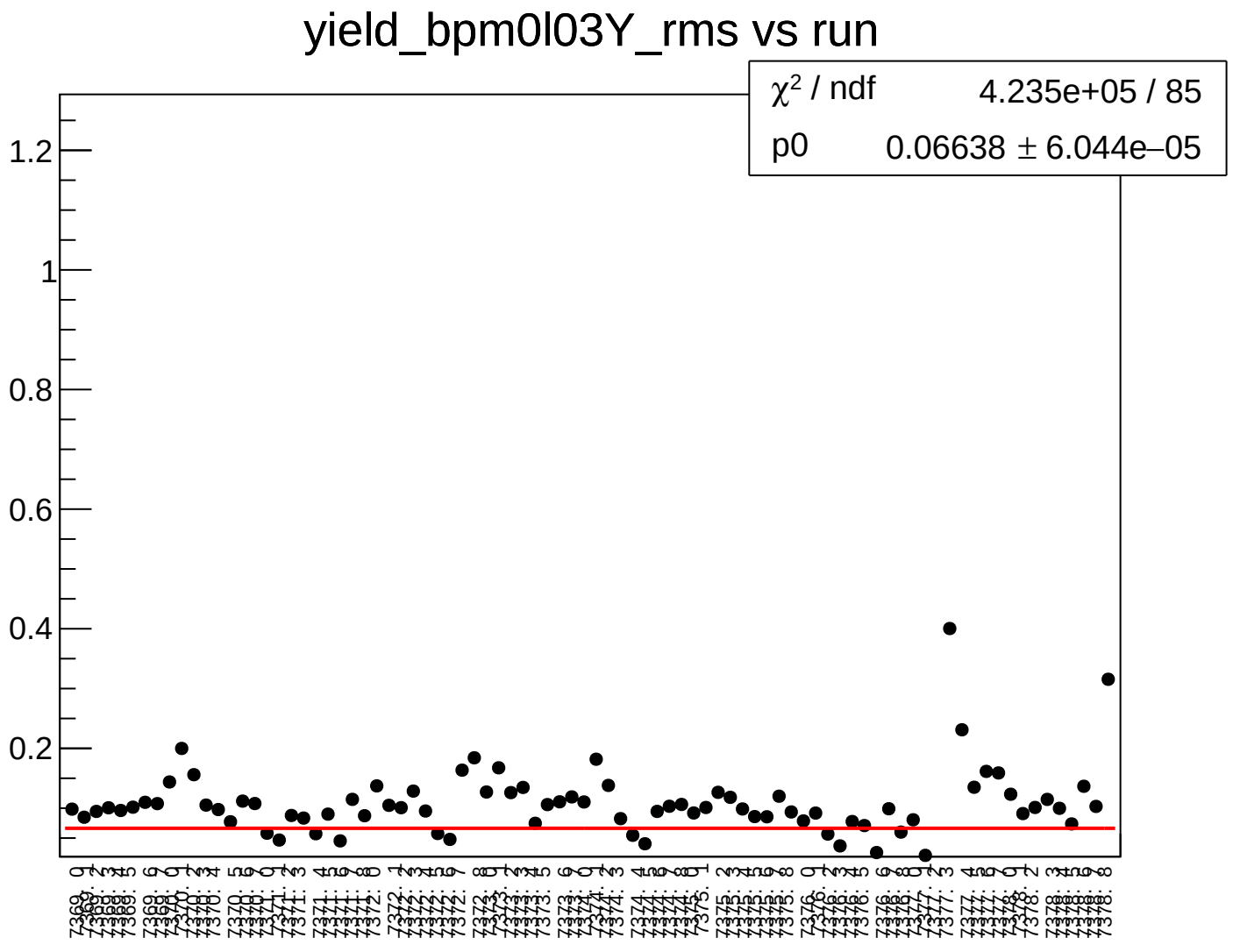

yield_bpm0l03X_mean vs run
χ² / ndf 8.559e+04 / 85
p0 −4.07 ± 8.352e−05
pull
Entries 86
Mean 100.4
Std Dev 47.82

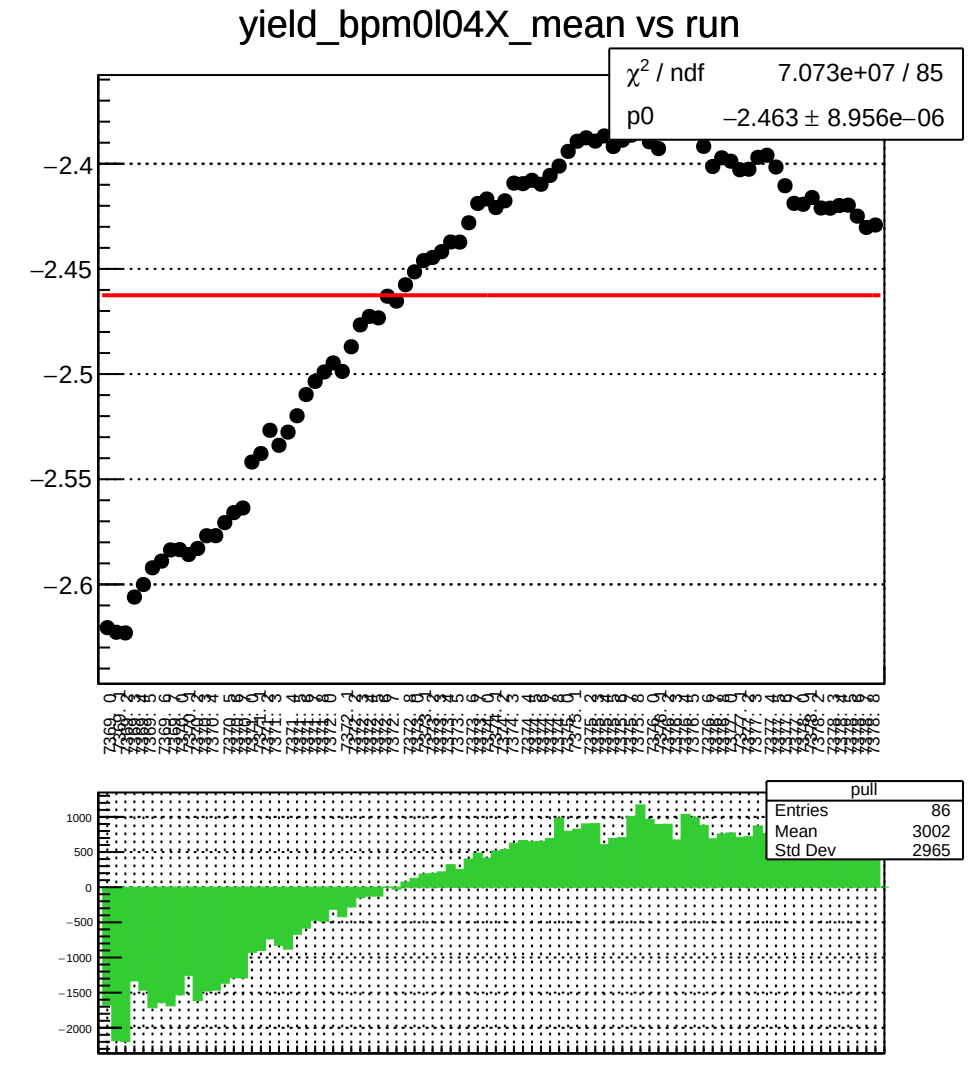

pull1D
Entries 86
Mean 1.07
Std Dev 4.722

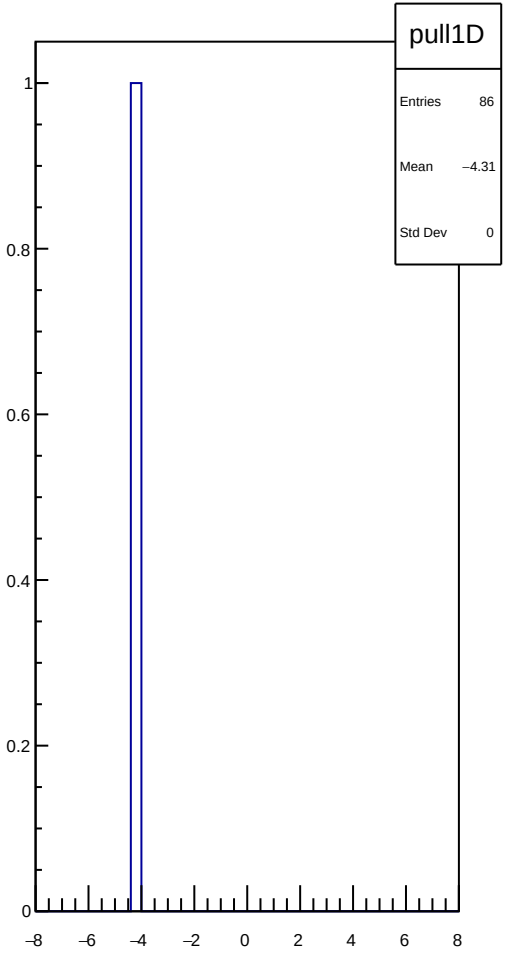

yield_bpm0l03X_rms vs run
χ² / ndf 4.498e+05 / 85
p0 0.06415 ± 5.906e−05
1.2
1
0.8
0.6
0.4
0.2

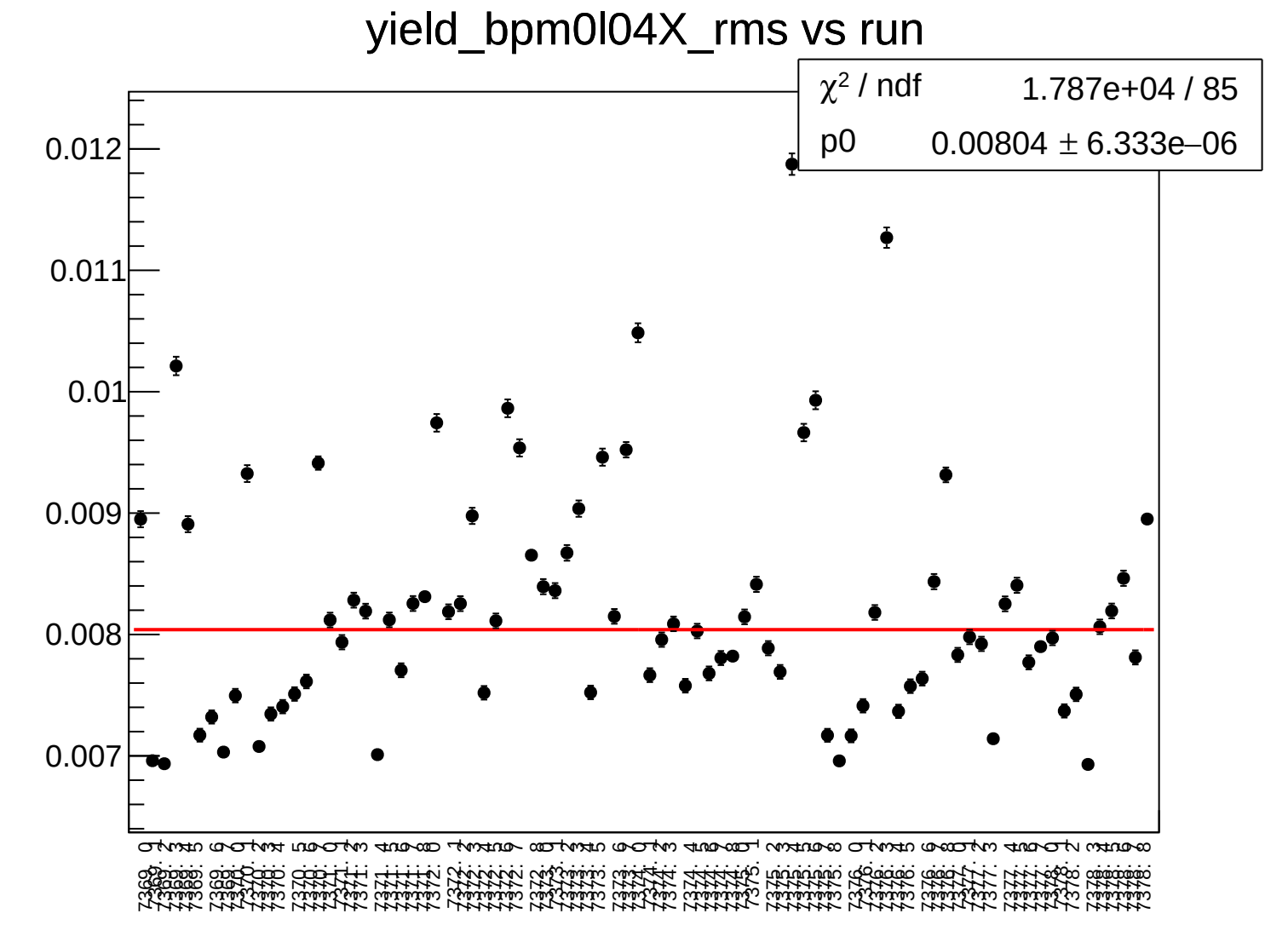

yield_bpm0l03Y_mean vs run
χ² / ndf 1.18e+05 / 85
p0 −0.341 ± 8.548e−05
pull
Entries 86
Mean 164.2
Std Dev 115.9

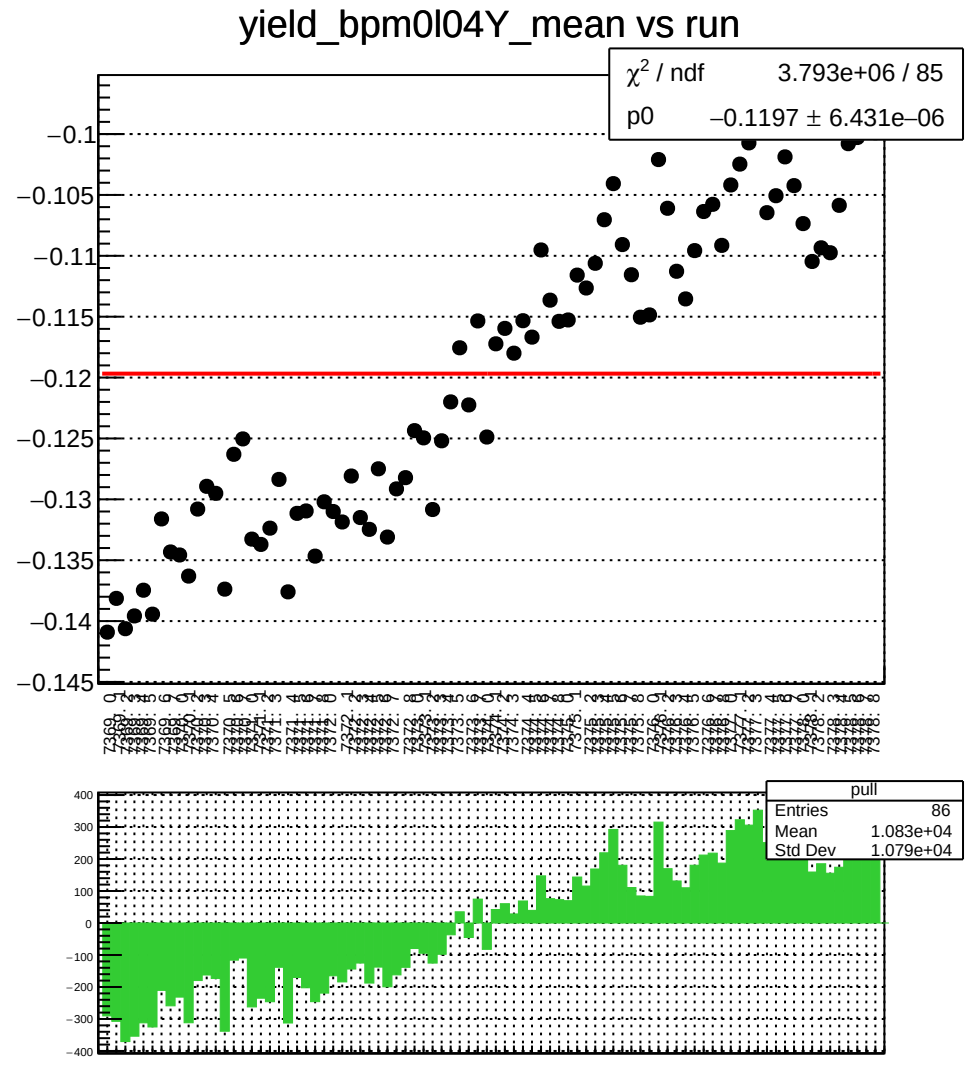

pull1D
Entries 86
Mean 0.8587
Std Dev 4.273

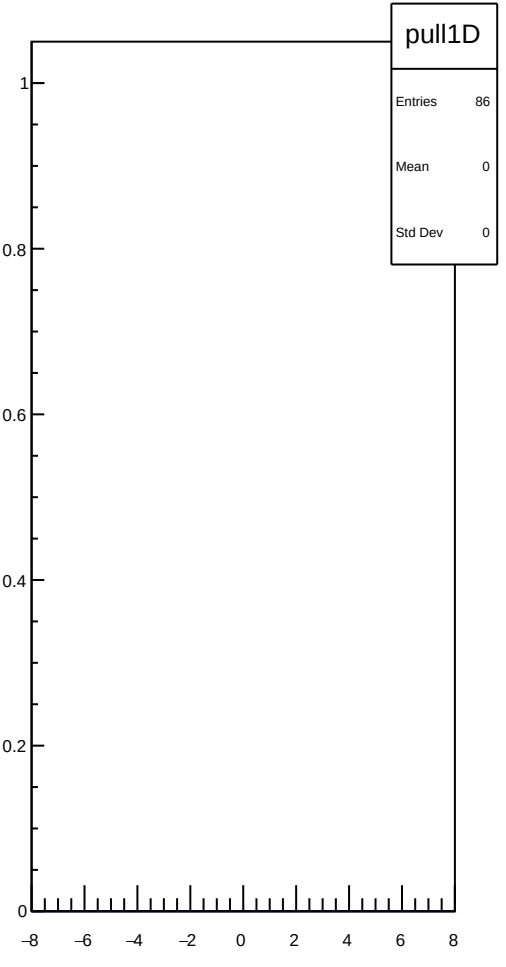

yield_bpm0l03Y_rms vs run
χ² / ndf 4.235e+05 / 85
p0 0.06638 ± 6.044e−05
1.2
1
0.8
0.6
0.4
0.2

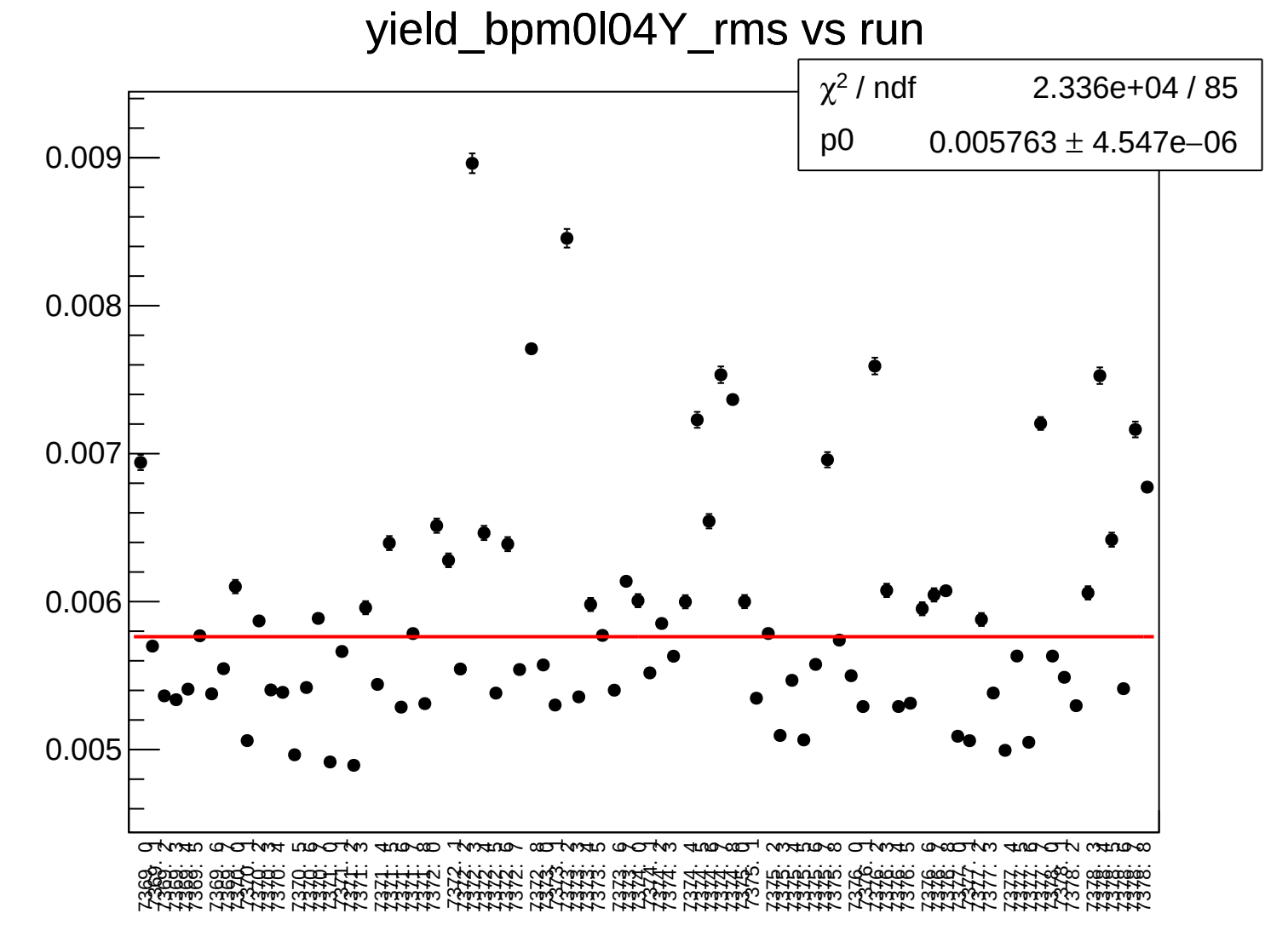

yield_bpm0l04X_mean vs run
χ² / ndf 7.073e+07 / 85
p0 −2.463 ± 8.956e−06
−2.4
−2.45
−2.5
−2.55
−2.6
pull
Entries 86
Mean 3002
Std Dev 2965
1000
500
0
−500
−1000
−1500
−2000

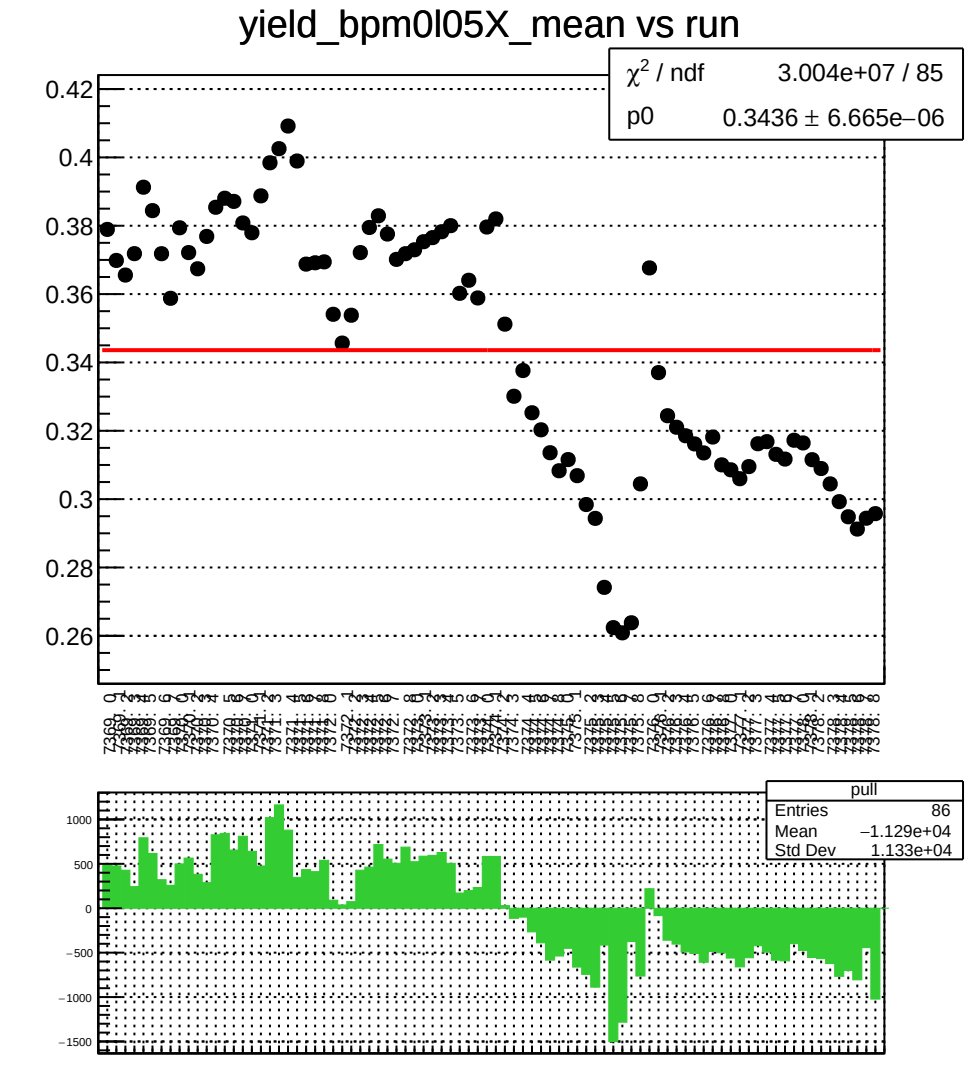

pull1D
Entries 86
Mean −4.31
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

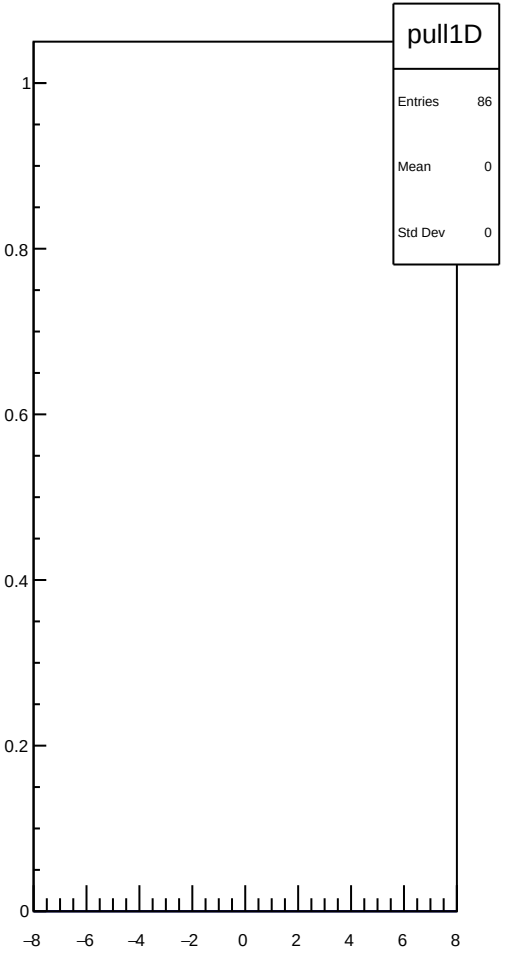

yield_bpm0l04X_rms vs run
χ² / ndf 1.787e+04 / 85
p0 0.00804 ± 6.333e–06
0.012
0.011
0.01
0.009
0.008
0.007

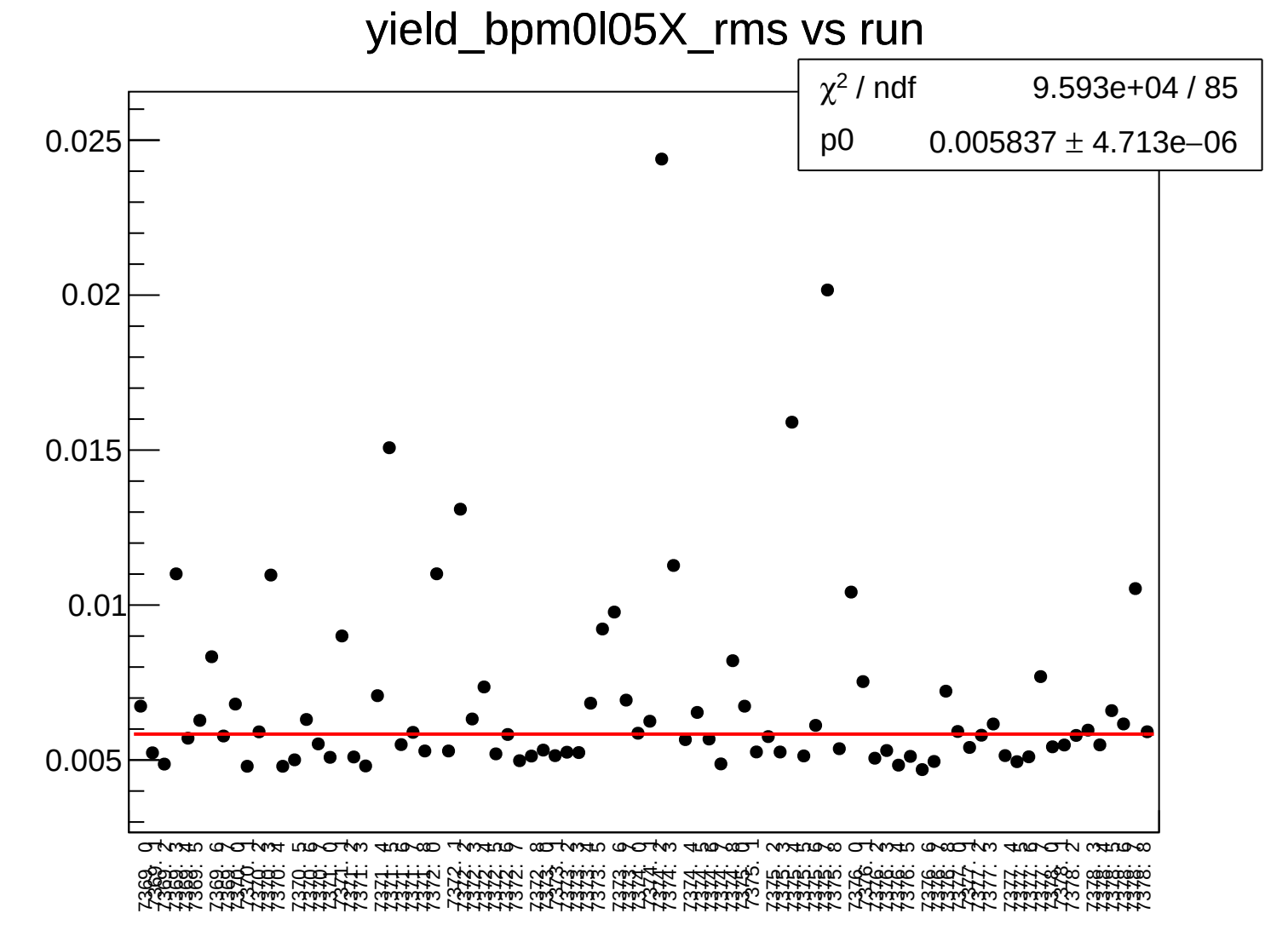

yield_bpm0l04Y_mean vs run
χ² / ndf 3.793e+06 / 85
p0 −0.1197 ± 6.431e−06
pull
Entries 86
Mean 1.083e+04
Std Dev 1.079e+04

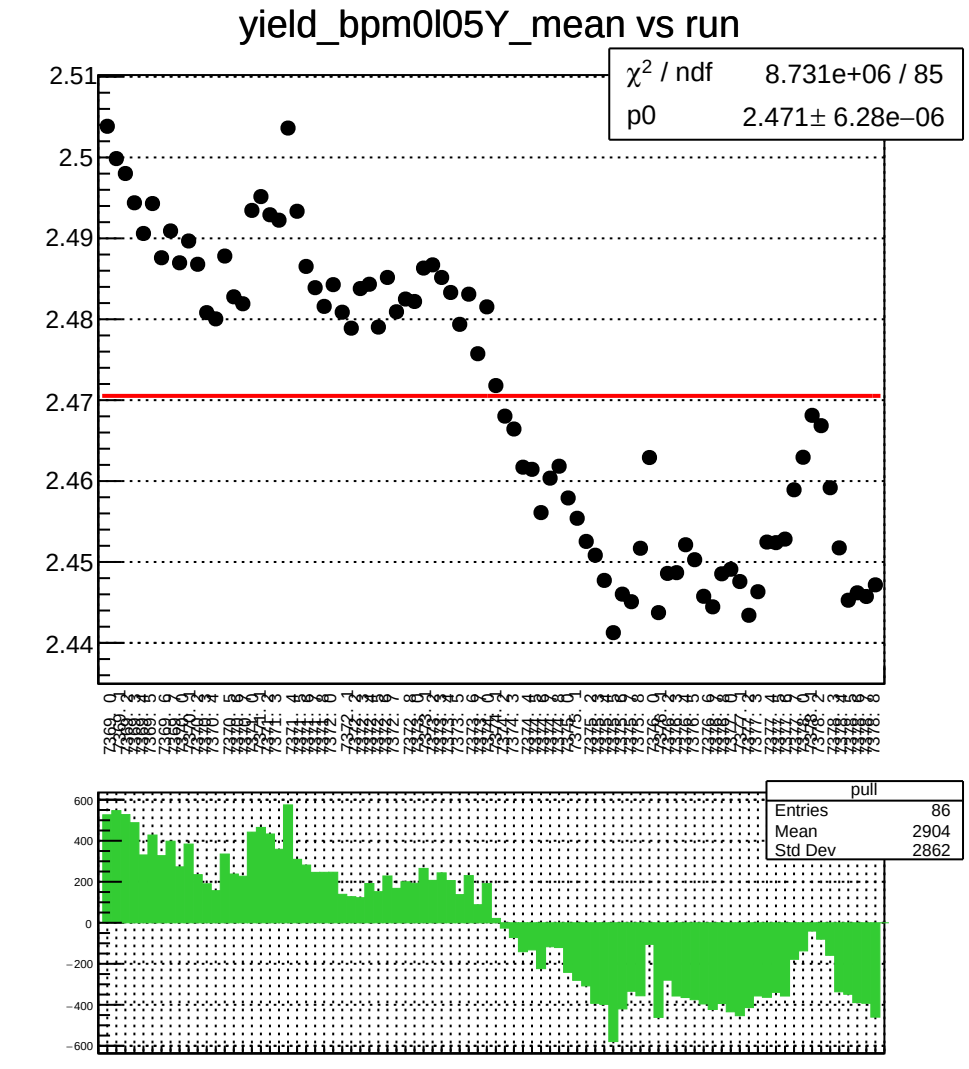

pull1D
Entries 86
Mean 0
Std Dev 0

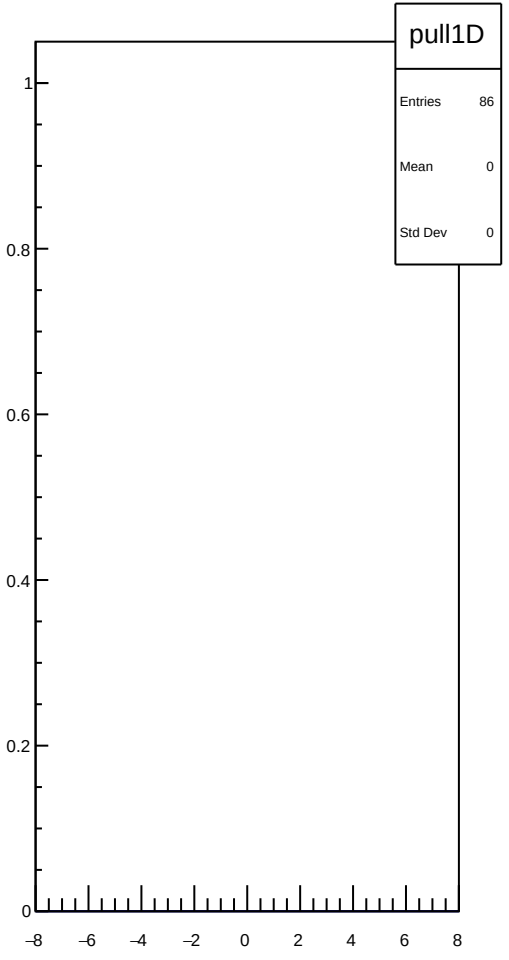

yield_bpm0l04Y_rms vs run
χ² / ndf 2.336e+04 / 85
p0 0.005763 ± 4.547e−06
0.009
0.008
0.007
0.006
0.005

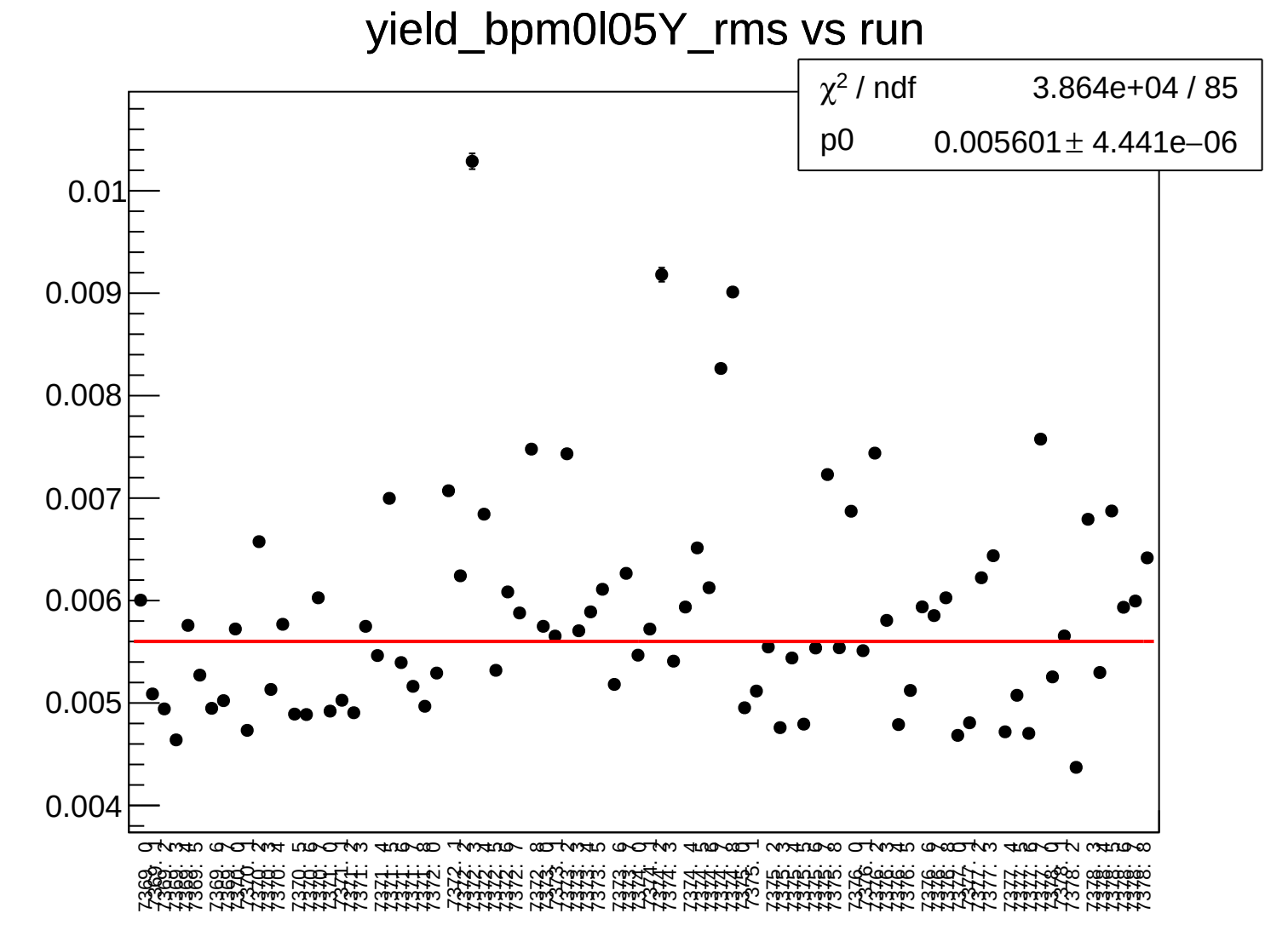

yield_bpm0l05X_mean vs run
χ² / ndf 3.004e+07 / 85
p0 0.3436 ± 6.665e−06
0.42
0.4
0.38
0.36
0.34
0.32
0.3
0.28
0.26
pull
Entries 86
Mean −1.129e+04
Std Dev 1.133e+04
1000
500
0
−500
−1000
−1500

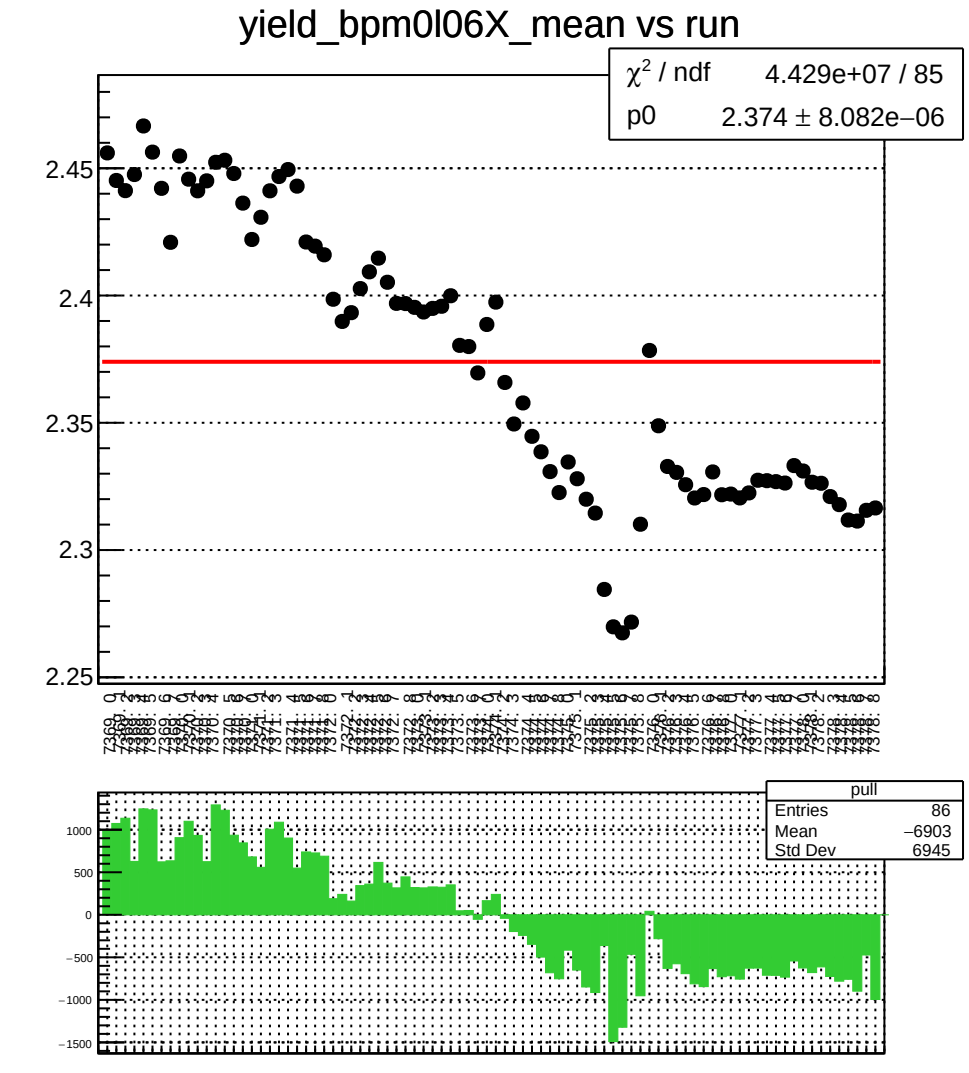

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

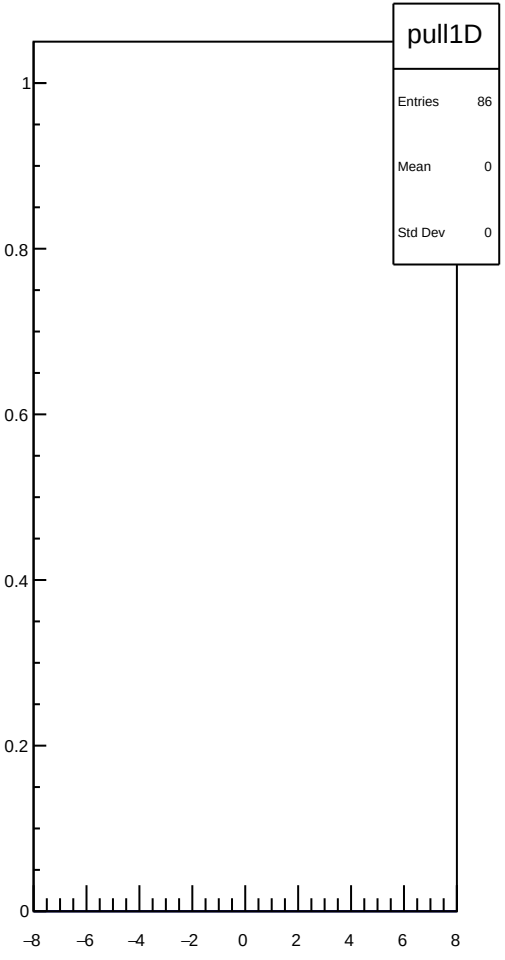

yield_bpm0l05X_rms vs run
χ² / ndf 9.593e+04 / 85
p0 0.005837 ± 4.713e−06
0.025
0.02
0.015
0.01
0.005

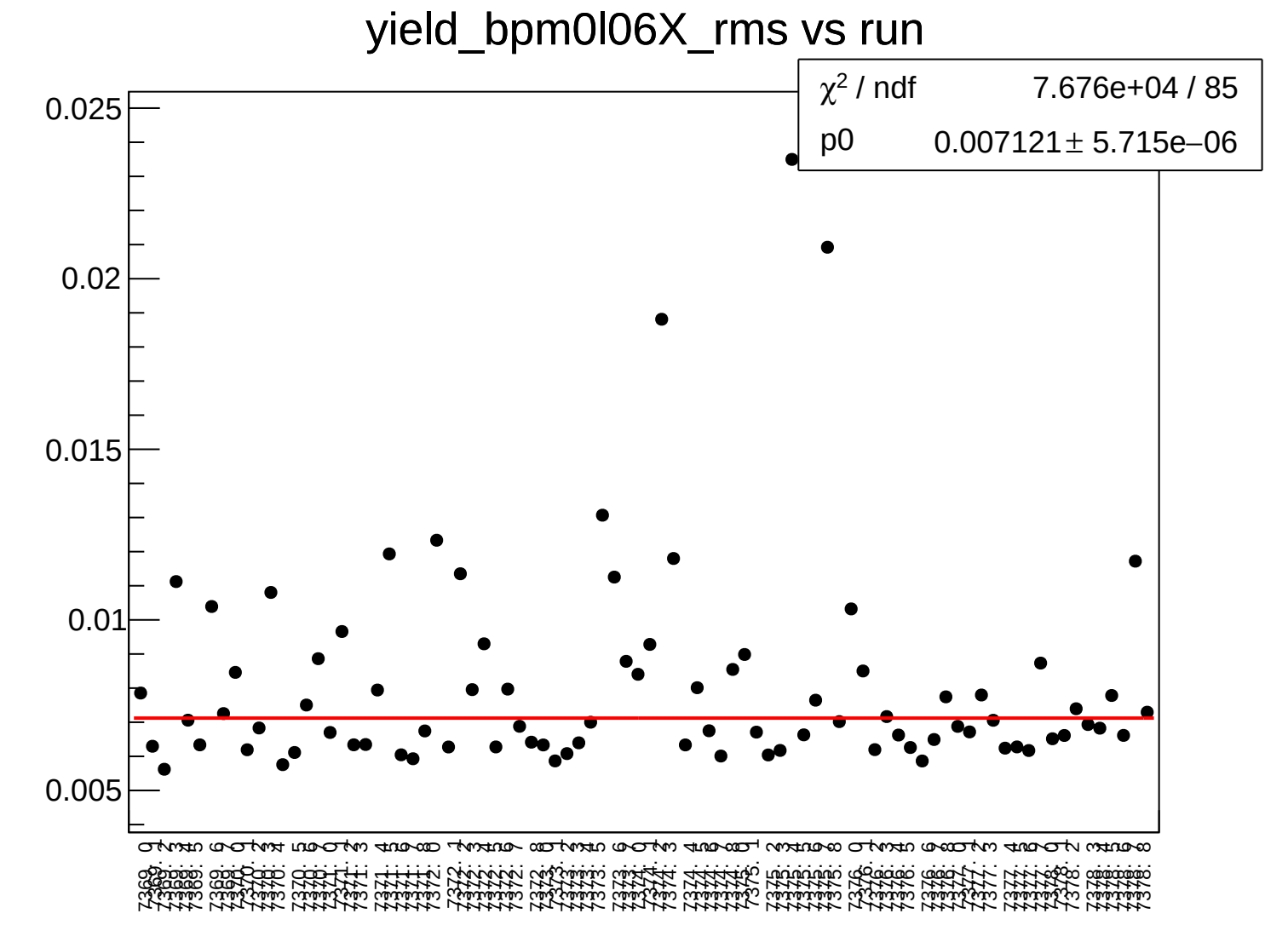

yield_bpm0l05Y_mean vs run
χ² / ndf 8.731e+06 / 85
p0 2.471± 6.28e−06
2.51
2.5
2.49
2.48
2.47
2.46
2.45
2.44
pull
Entries 86
Mean 2904
Std Dev 2862
600
400
200
0
−200
−400
−600

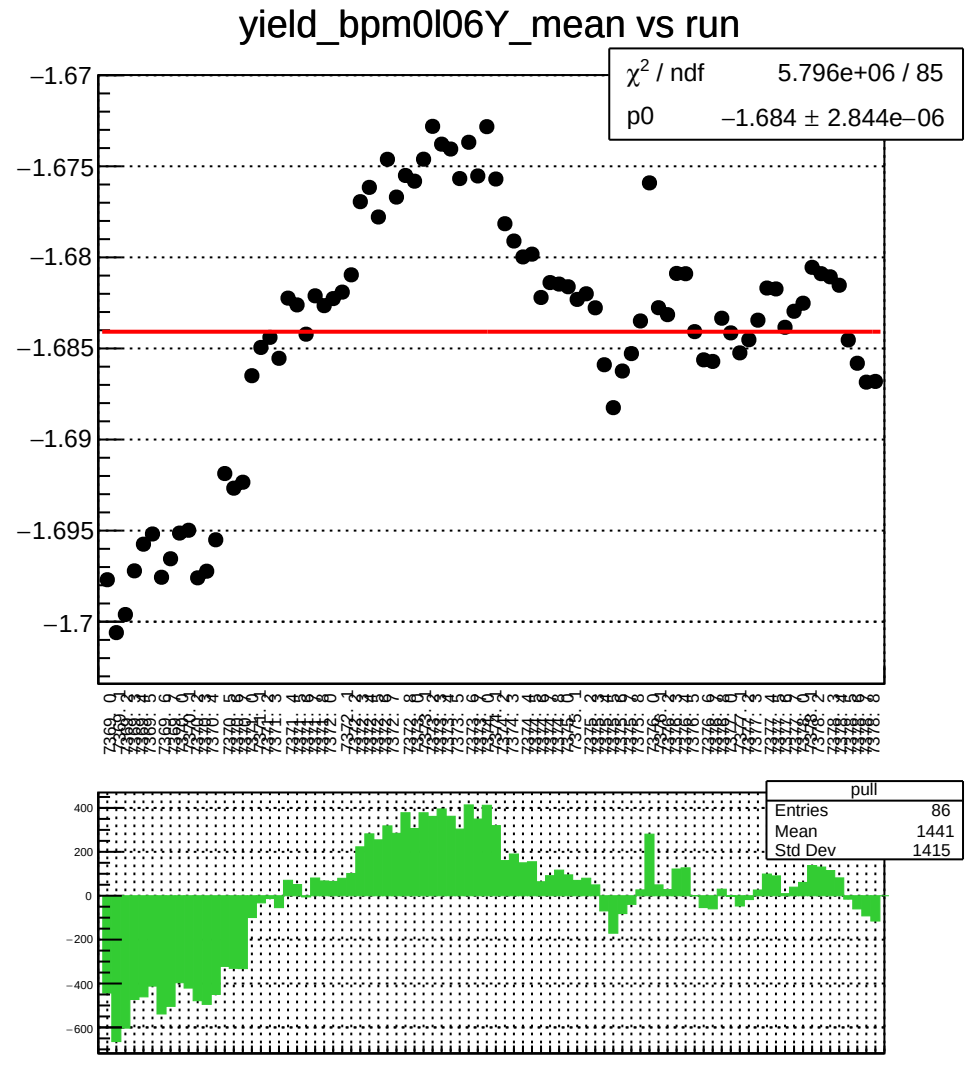

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

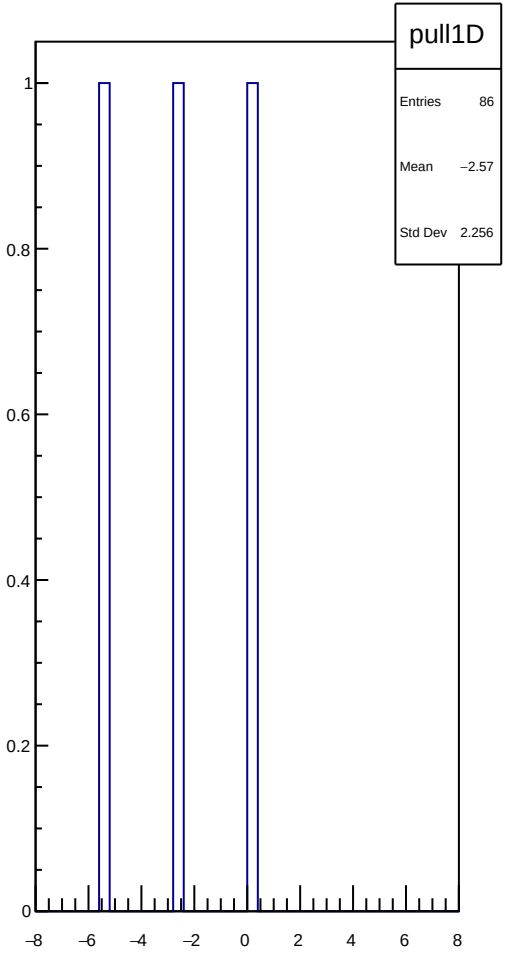

yield_bpm0l05Y_rms vs run
χ² / ndf 3.864e+04 / 85
p0 0.005601 ± 4.441e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004

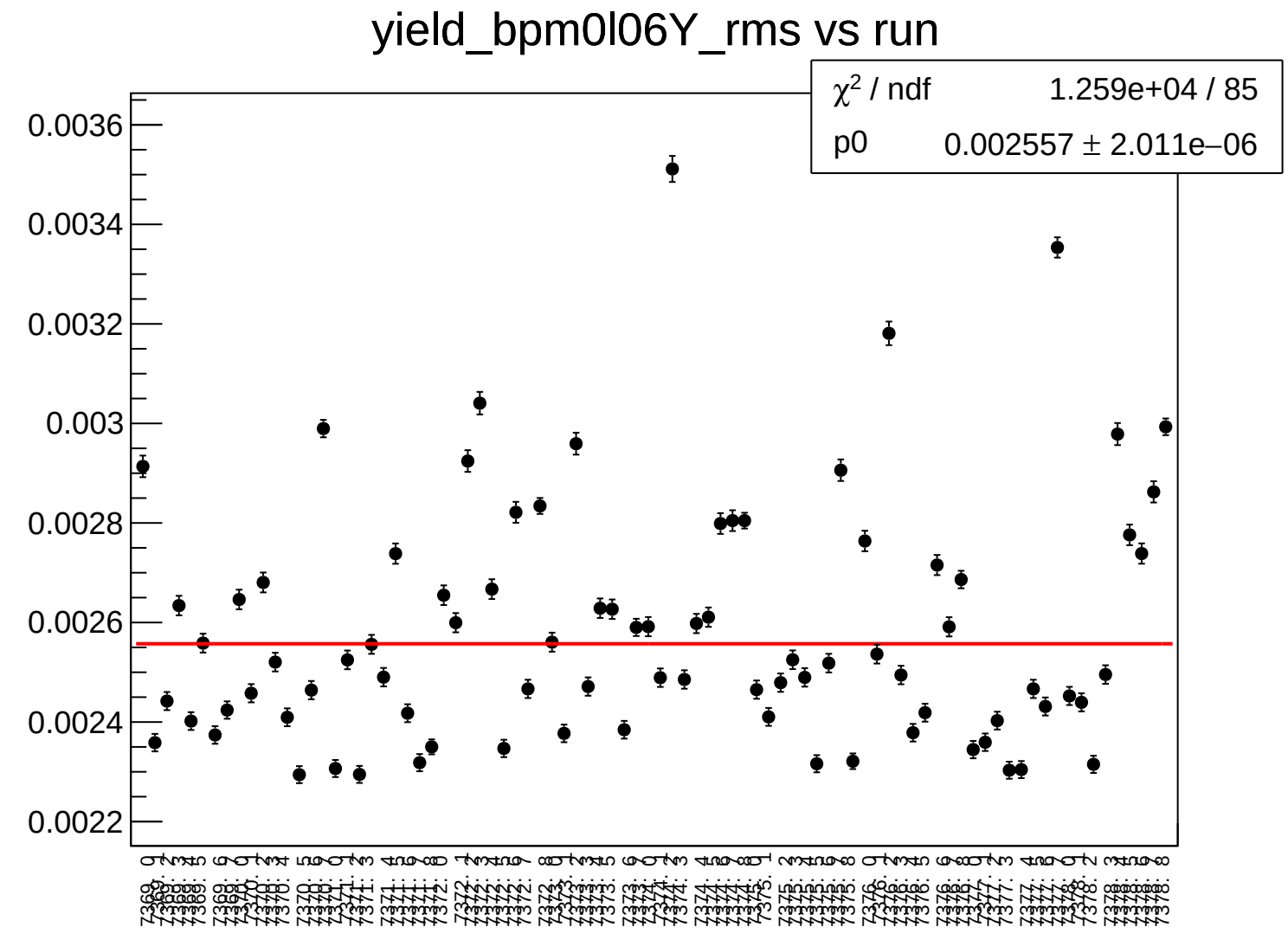

yield_bpm0l06X_mean vs run
χ² / ndf 4.429e+07 / 85
p0 2.374 ± 8.082e−06
2.45
2.4
2.35
2.3
2.25
pull
Entries 86
Mean −6903
Std Dev 6945
1000
500
0
−500
−1000
−1500

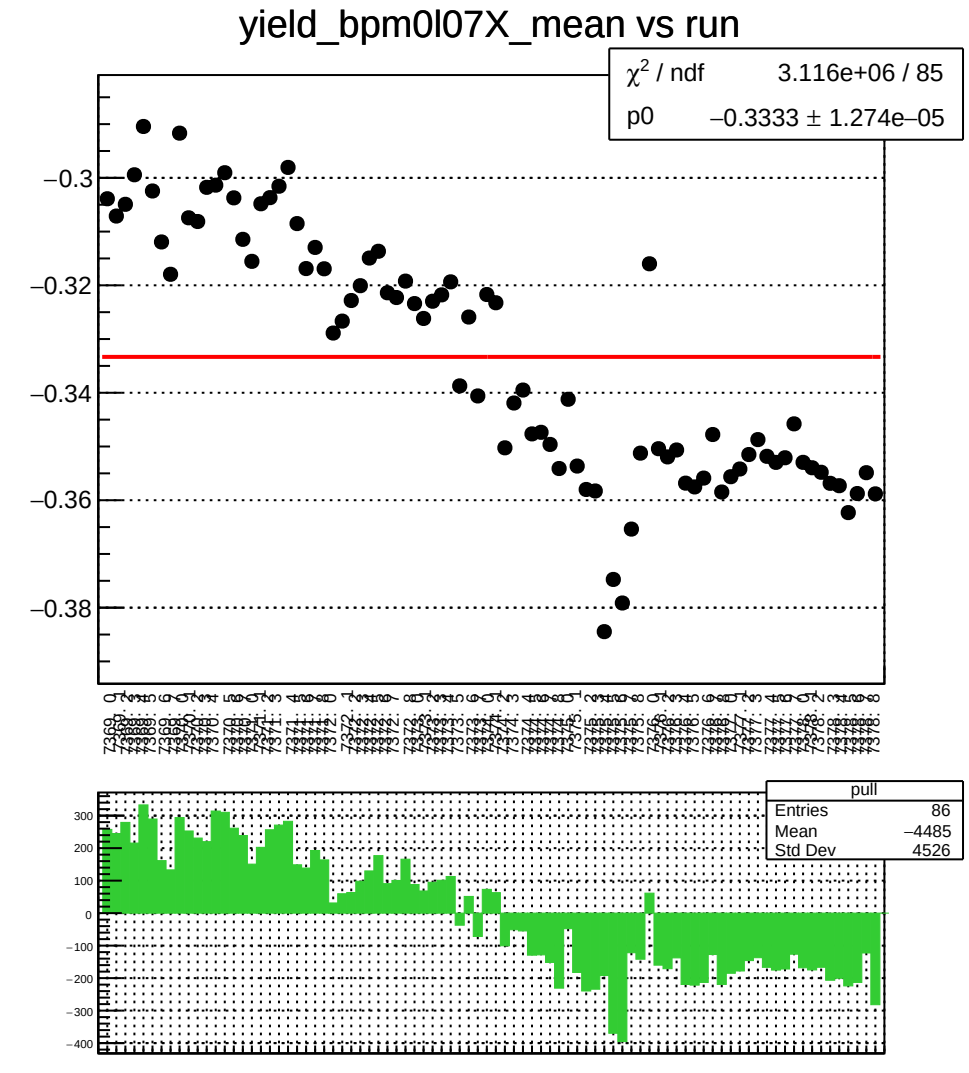

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

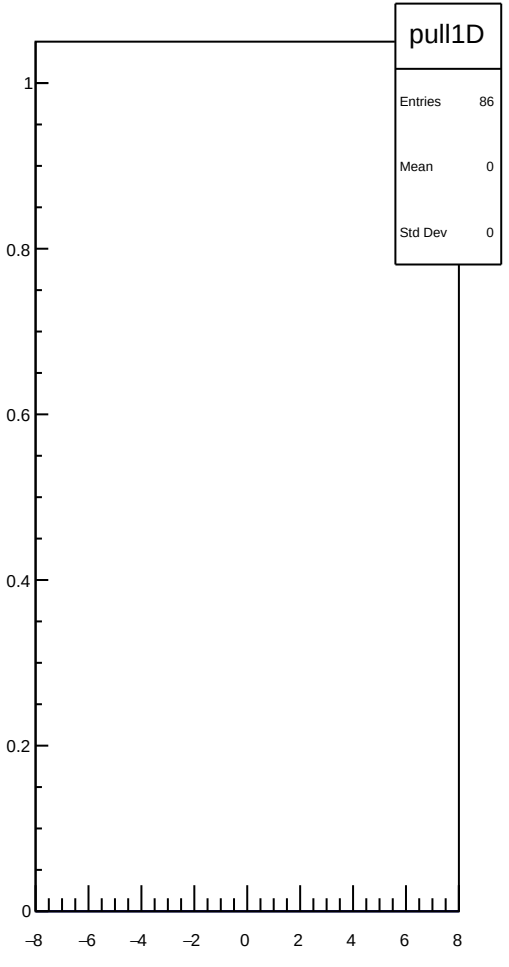

yield_bpm0l06X_rms vs run
χ² / ndf 7.676e+04 / 85
p0 0.007121 ± 5.715e−06
0.025
0.02
0.015
0.01
0.005

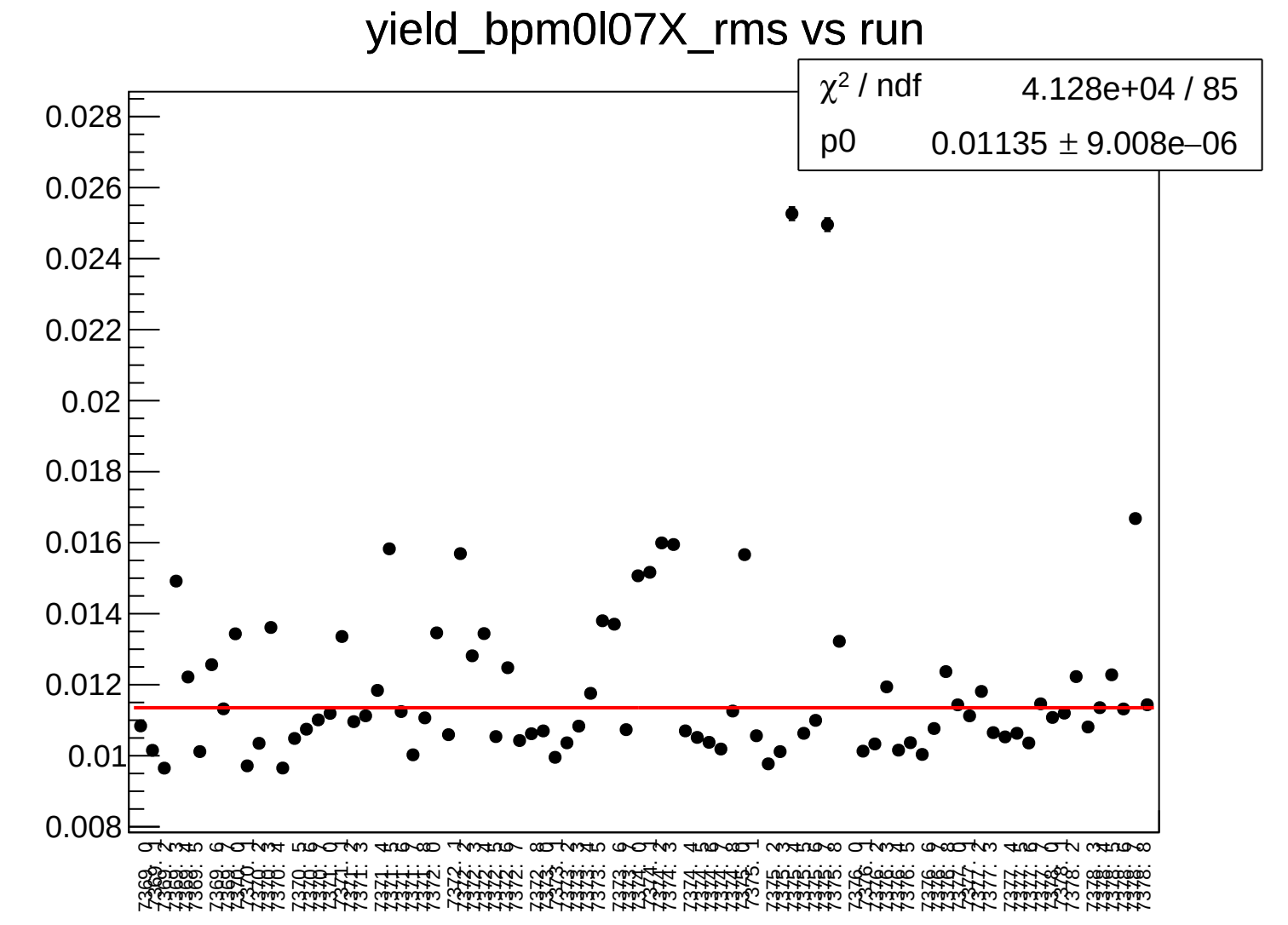

yield_bpm0l06Y_mean vs run
χ² / ndf 5.796e+06 / 85
p0 −1.684 ± 2.844e−06
−1.67
−1.675
−1.68
−1.685
−1.69
−1.695
−1.7
pull
Entries 86
Mean 1441
Std Dev 1415
400
200
0
−200
−400
−600

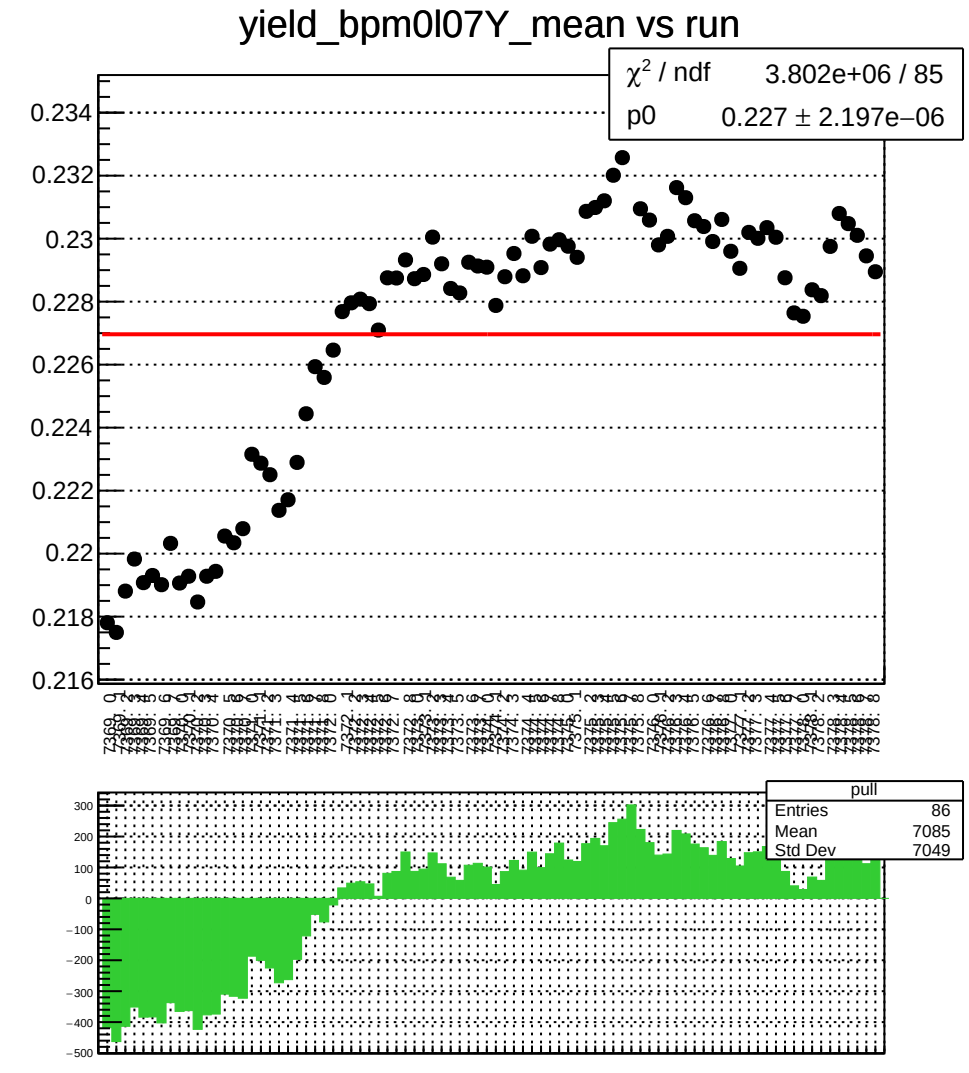

pull1D
Entries 86
Mean −2.57
Std Dev 2.256
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

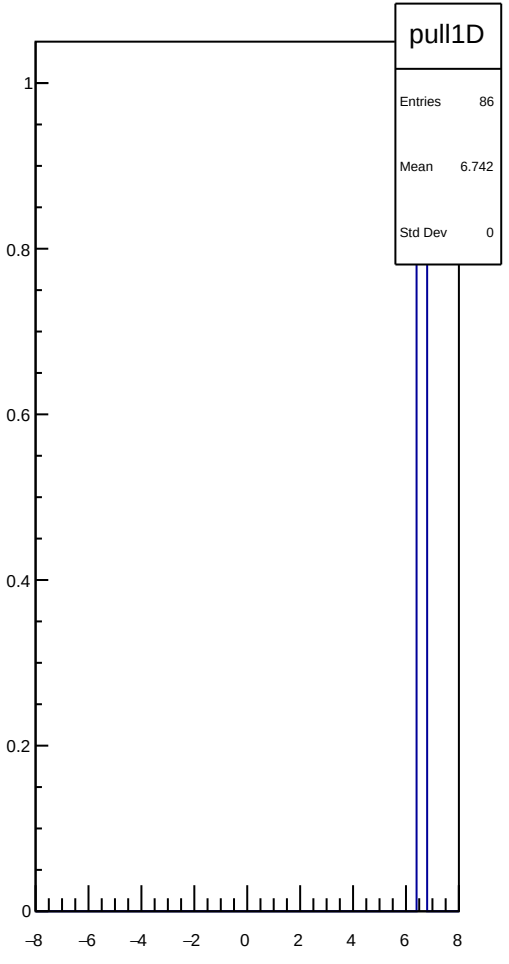

yield_bpm0l06Y_rms vs run
χ² / ndf 1.259e+04 / 85
p0 0.002557 ± 2.011e−06
0.0036
0.0034
0.0032
0.003
0.0028
0.0026
0.0024
0.0022

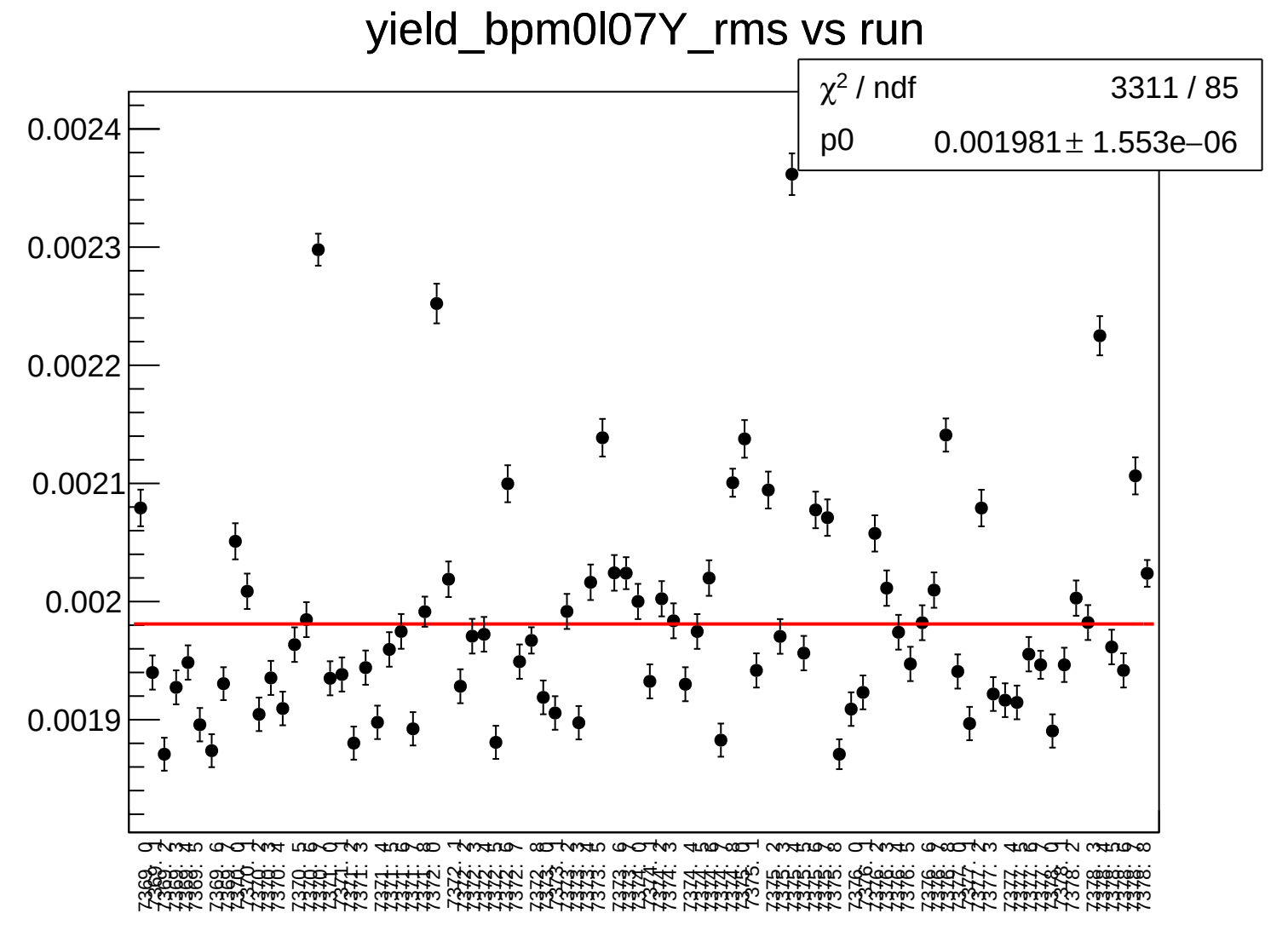

yield_bpm0l07X_mean vs run
χ² / ndf 3.116e+06 / 85
p0 −0.3333 ± 1.274e−05
−0.3
−0.32
−0.34
−0.36
−0.38
pull
Entries 86
Mean −4485
Std Dev 4526
300
200
100
0
−100
−200
−300
−400

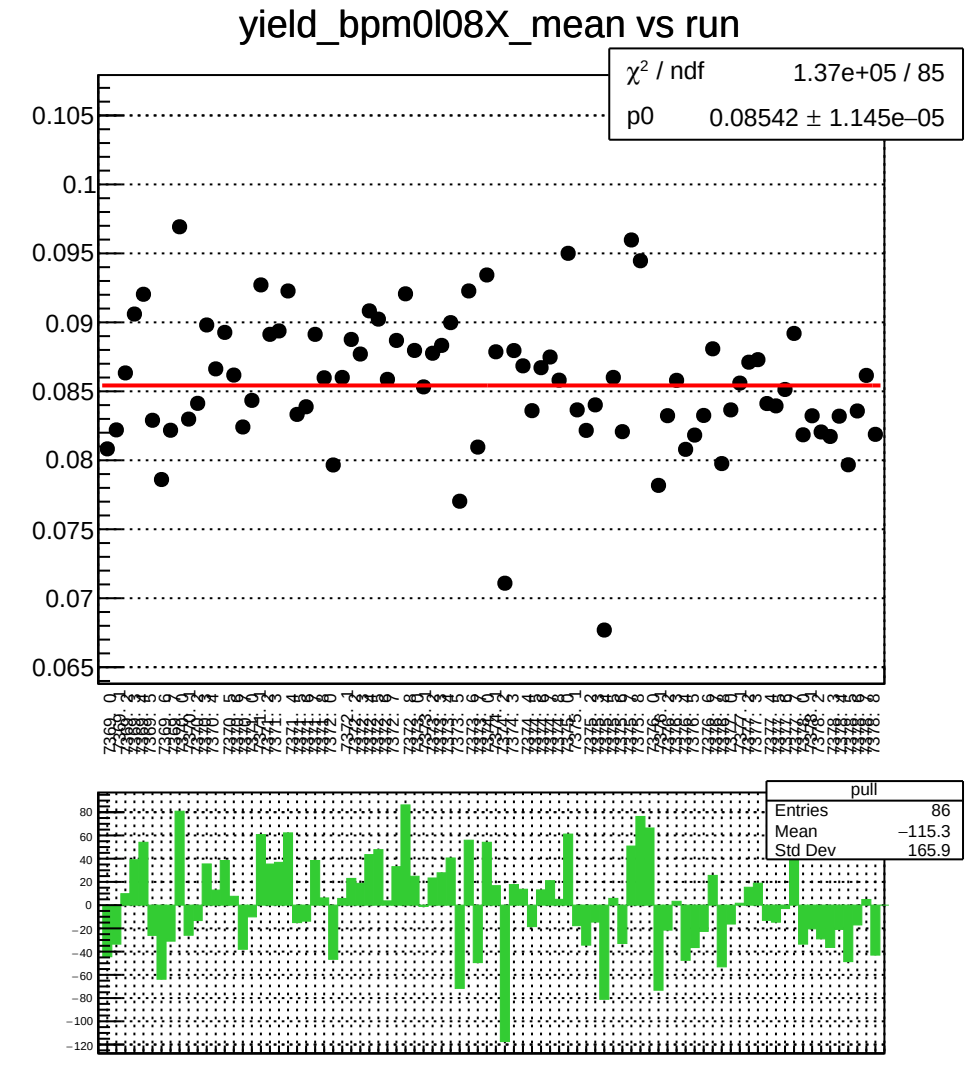

pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

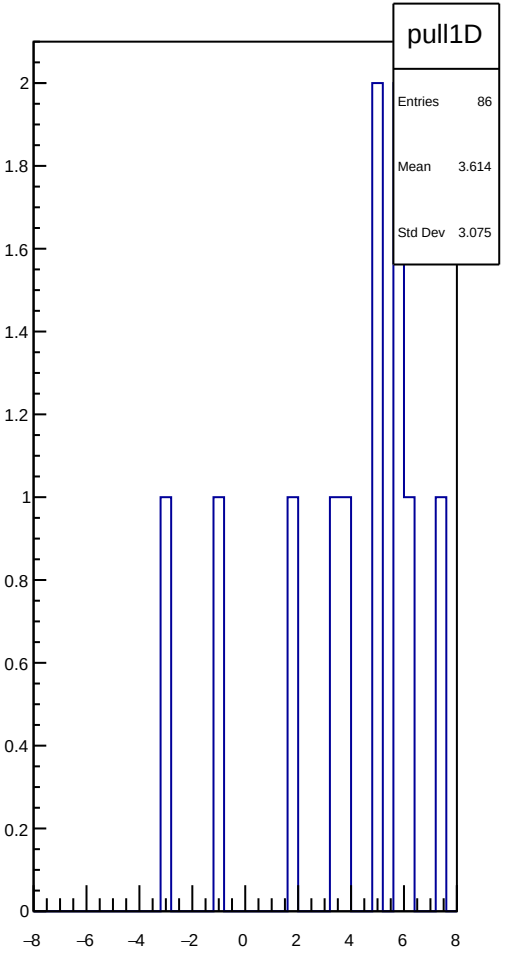

yield_bpm0l07X_rms vs run
χ² / ndf 4.128e+04 / 85
p0 0.01135 ± 9.008e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

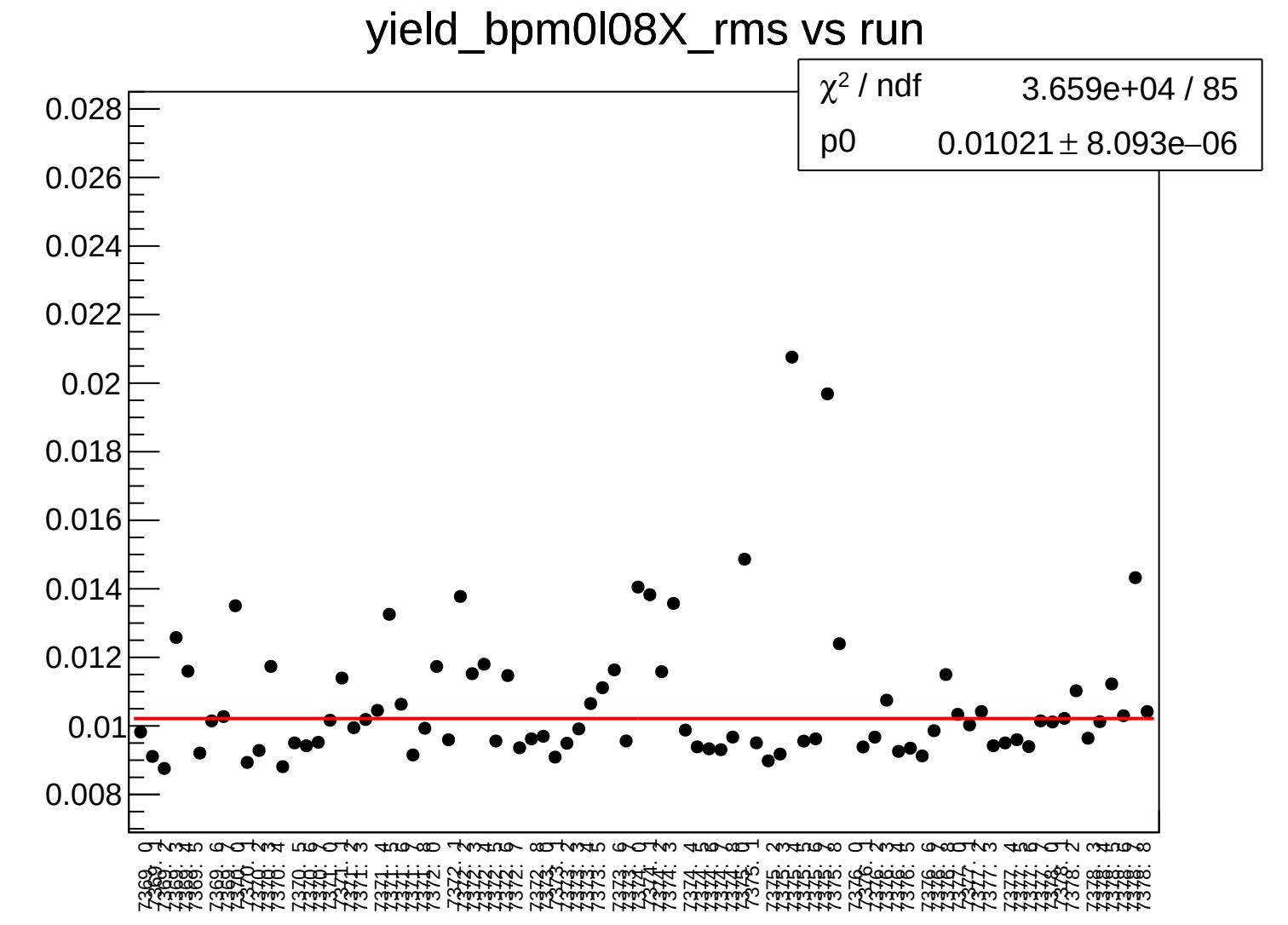

yield_bpm0l07Y_mean vs run
χ² / ndf 3.802e+06 / 85
p0 0.227 ± 2.197e−06
pull
Entries 86
Mean 7085
Std Dev 7049

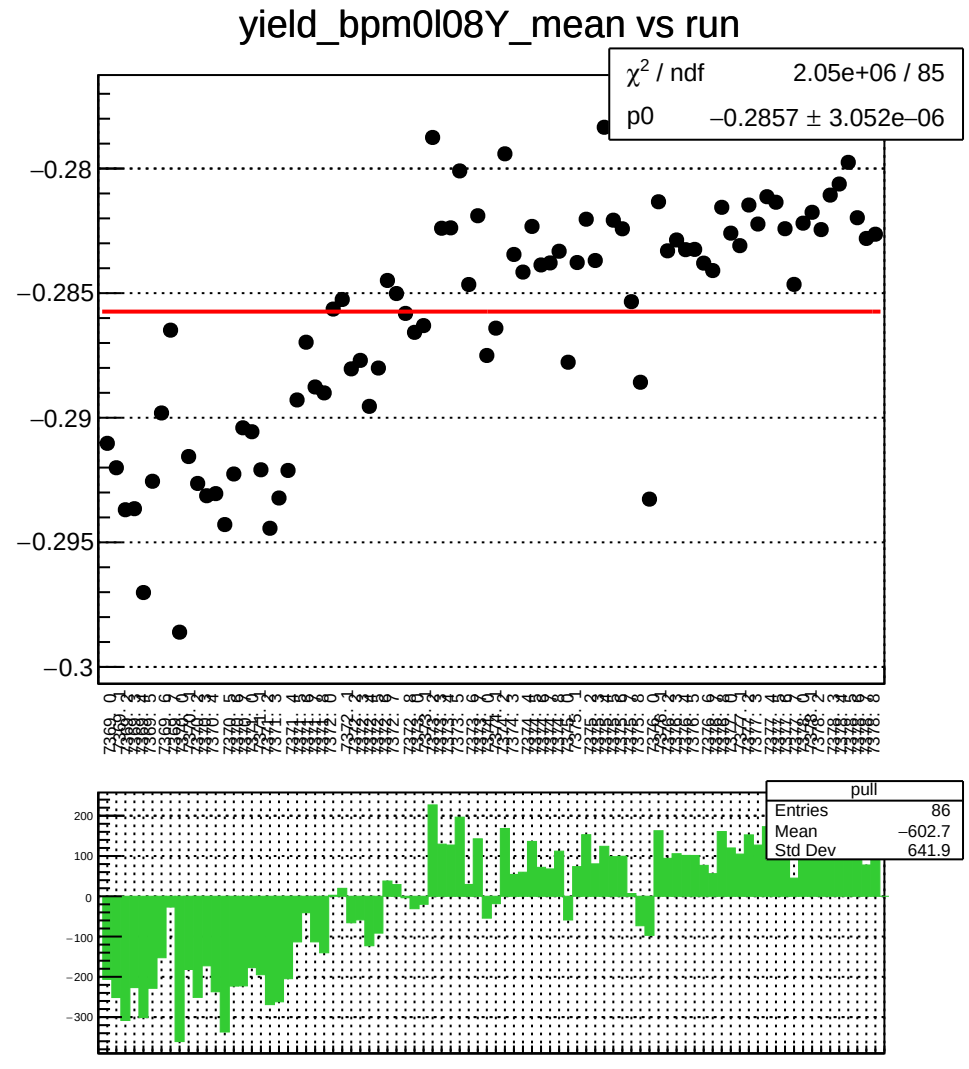

pull1D
Entries 86
Mean 6.742
Std Dev 0

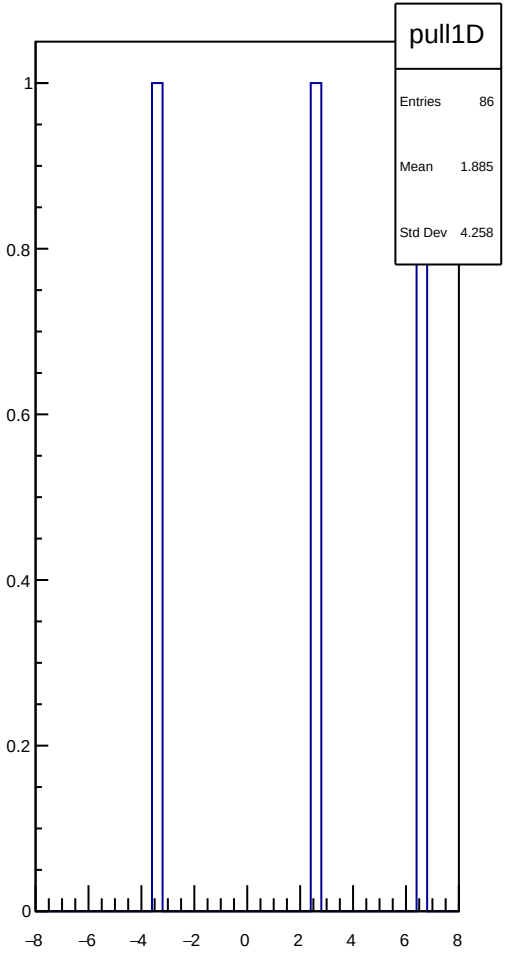

yield_bpm0l07Y_rms vs run
χ² / ndf 3311 / 85
p0 0.001981 ± 1.553e−06
0.0024
0.0023
0.0022
0.0021
0.002
0.0019

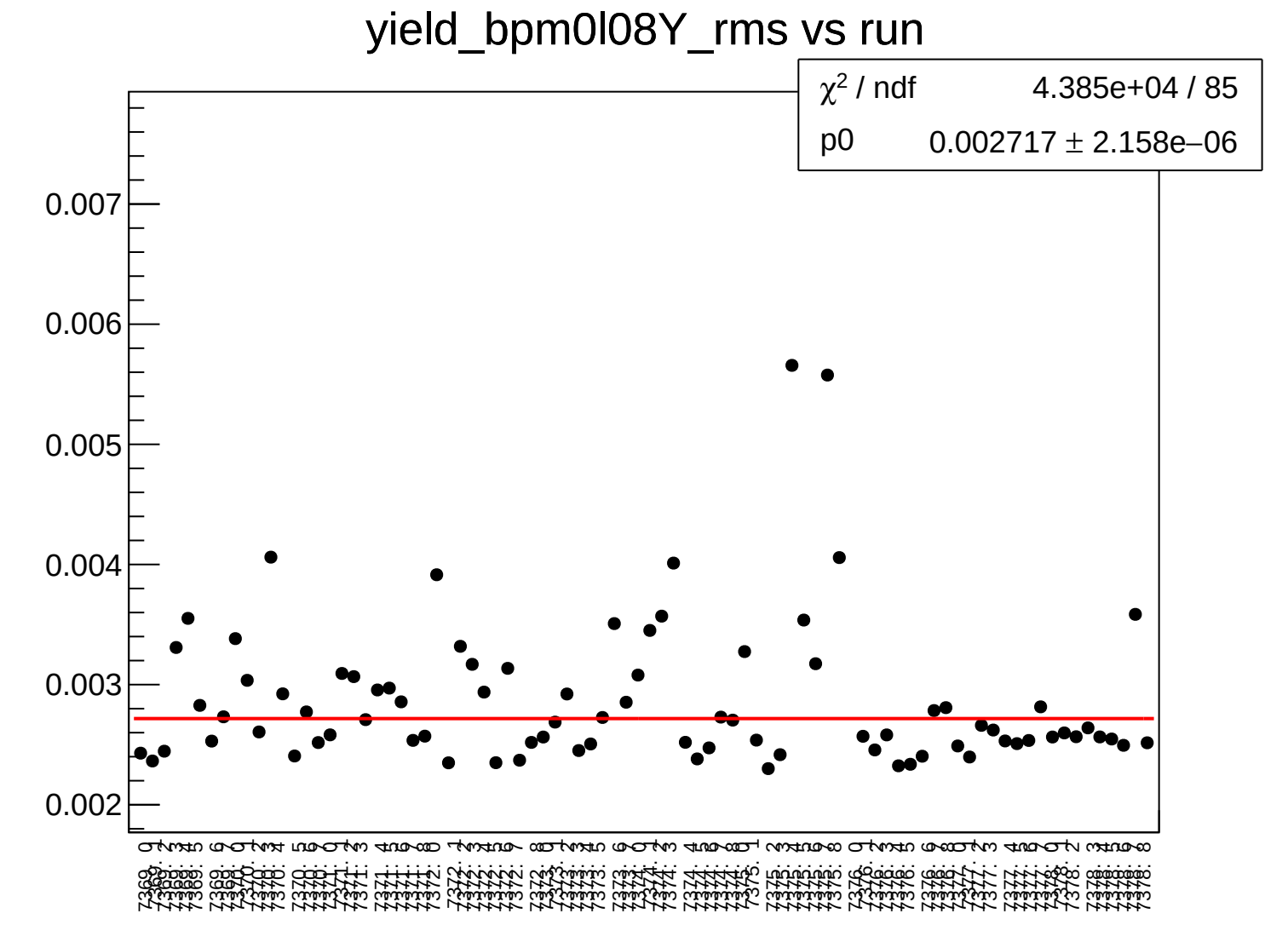

yield_bpm0l08X_mean vs run
χ² / ndf 1.37e+05 / 85
p0 0.08542 ± 1.145e−05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065
pull
Entries 86
Mean −115.3
Std Dev 165.9
80
60
40
20
0
−20
−40
−60
−80
−100
−120

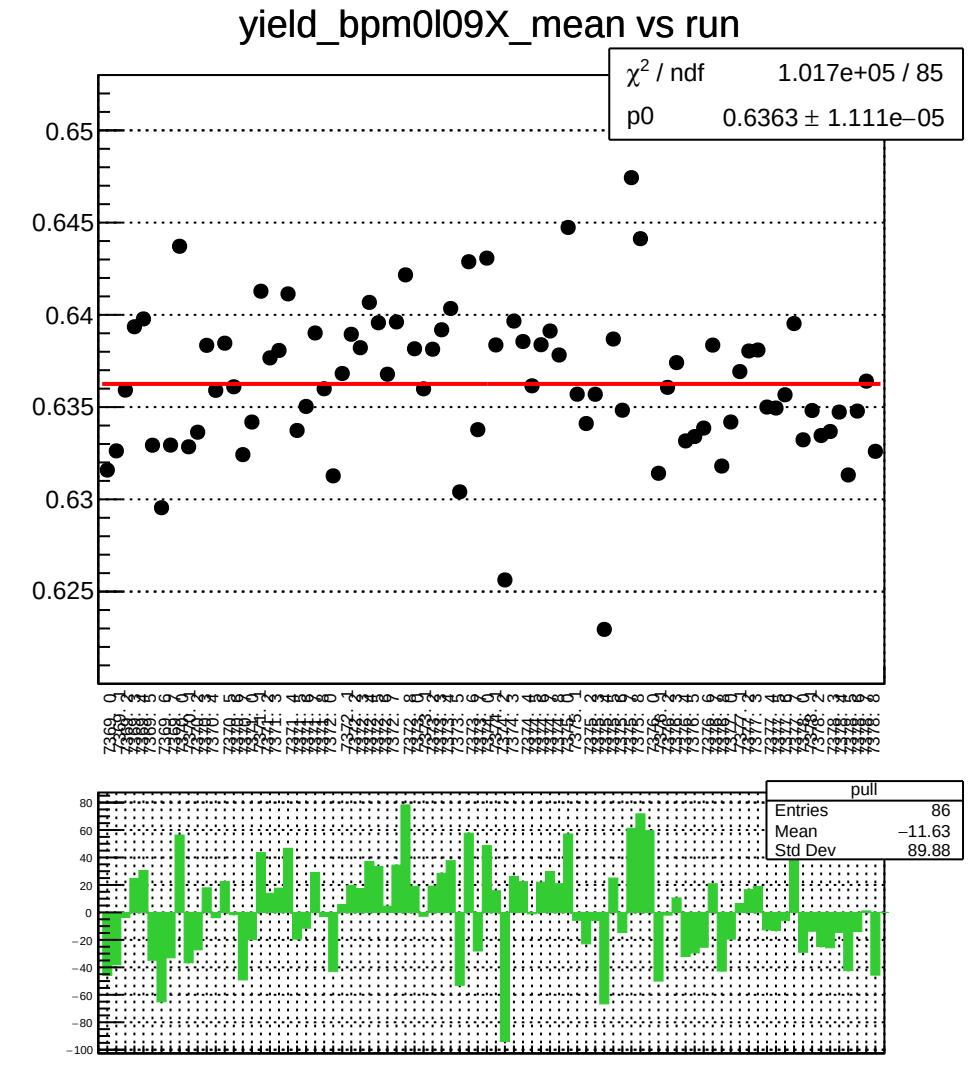

pull1D
Entries 86
Mean 3.614
Std Dev 3.075
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

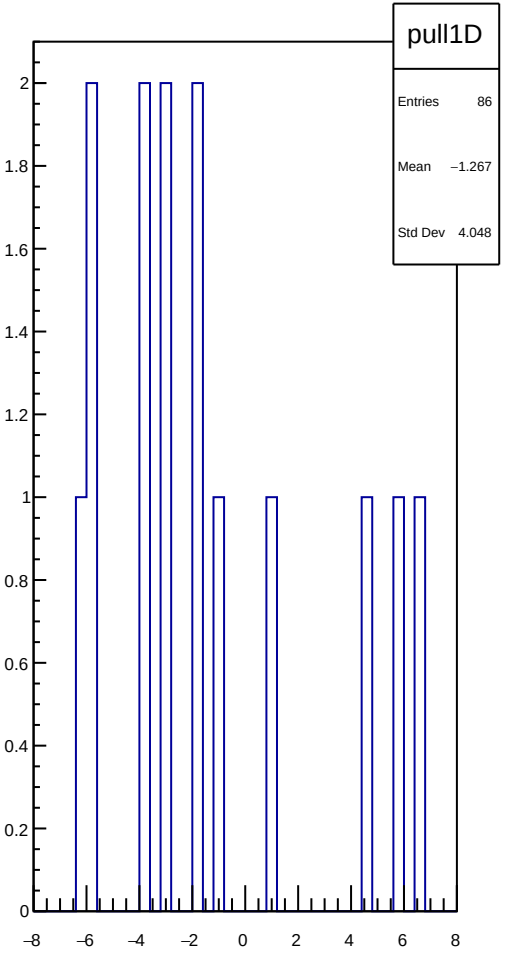

yield_bpm0l08X_rms vs run
χ² / ndf 3.659e+04 / 85
p0 0.01021 ± 8.093e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

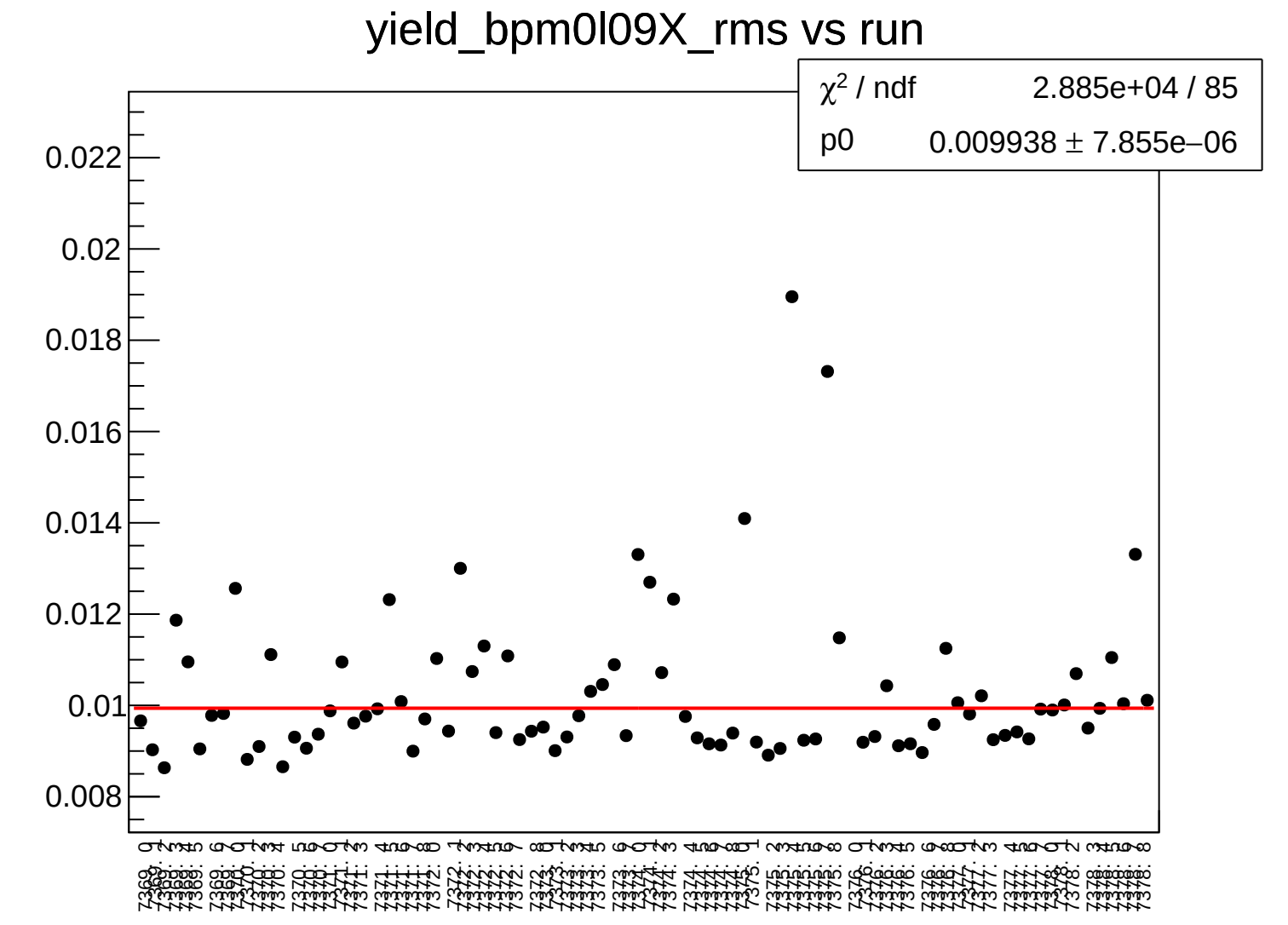

yield_bpm0l08Y_mean vs run
χ² / ndf 2.05e+06 / 85
p0 −0.2857 ± 3.052e−06
−0.28
−0.285
−0.29
−0.295
−0.3
pull
Entries 86
Mean −602.7
Std Dev 641.9
200
100
0
−100
−200
−300

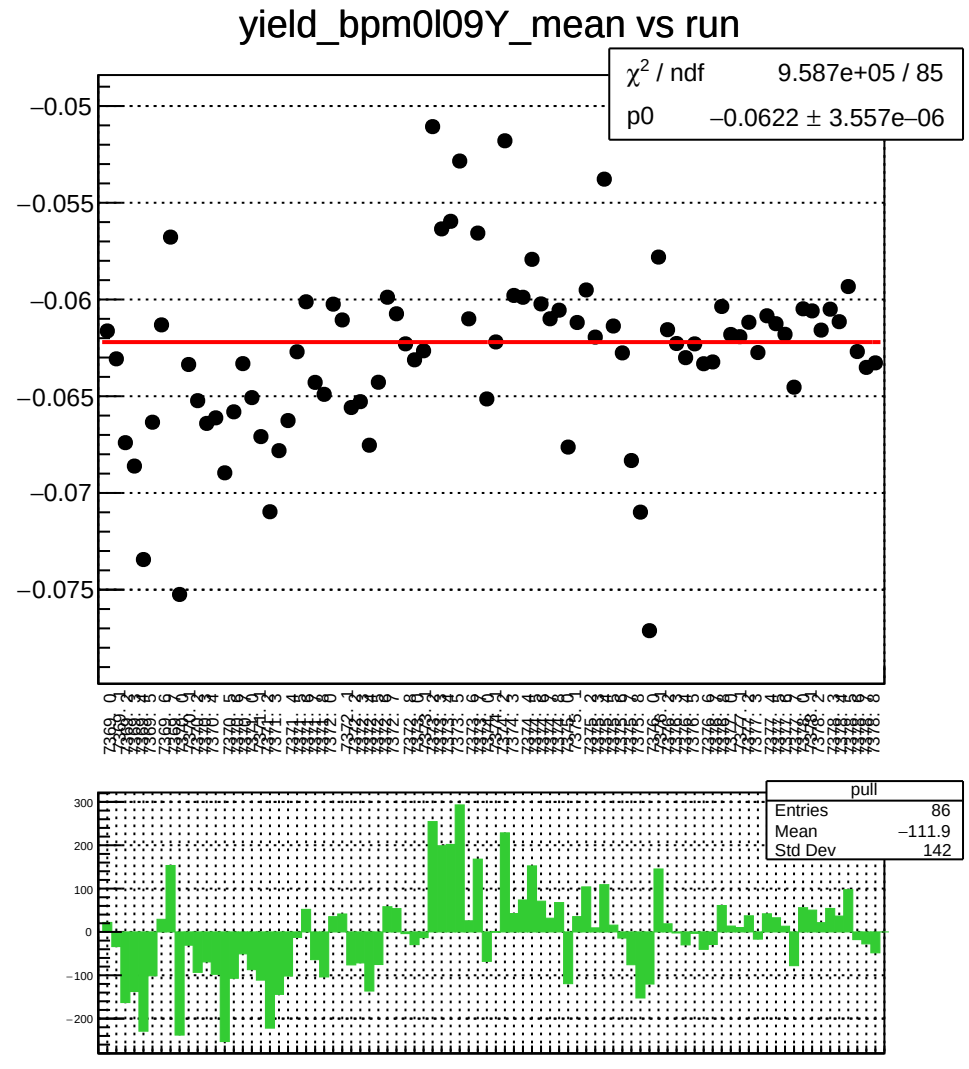

pull1D
Entries 86
Mean 1.885
Std Dev 4.258
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

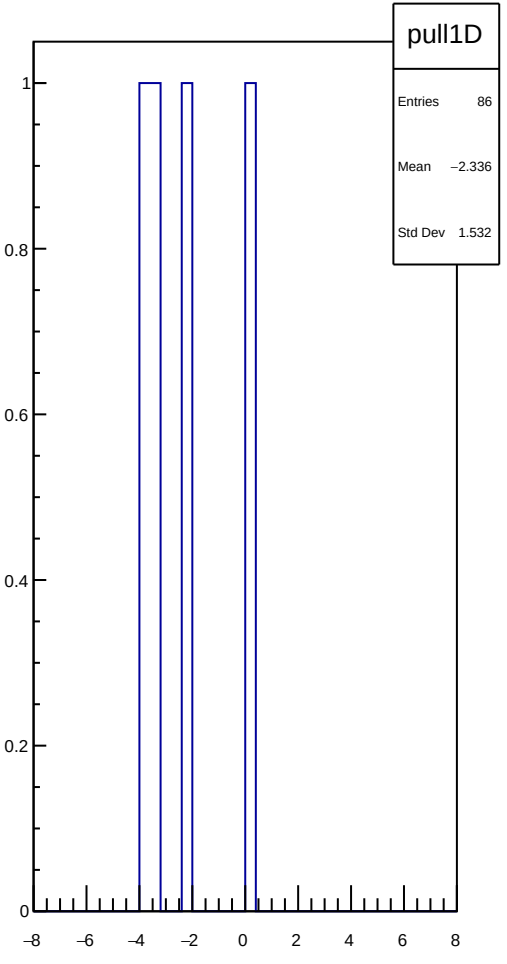

yield_bpm0l08Y_rms vs run
χ² / ndf 4.385e+04 / 85
p0 0.002717 ± 2.158e−06
0.007
0.006
0.005
0.004
0.003
0.002

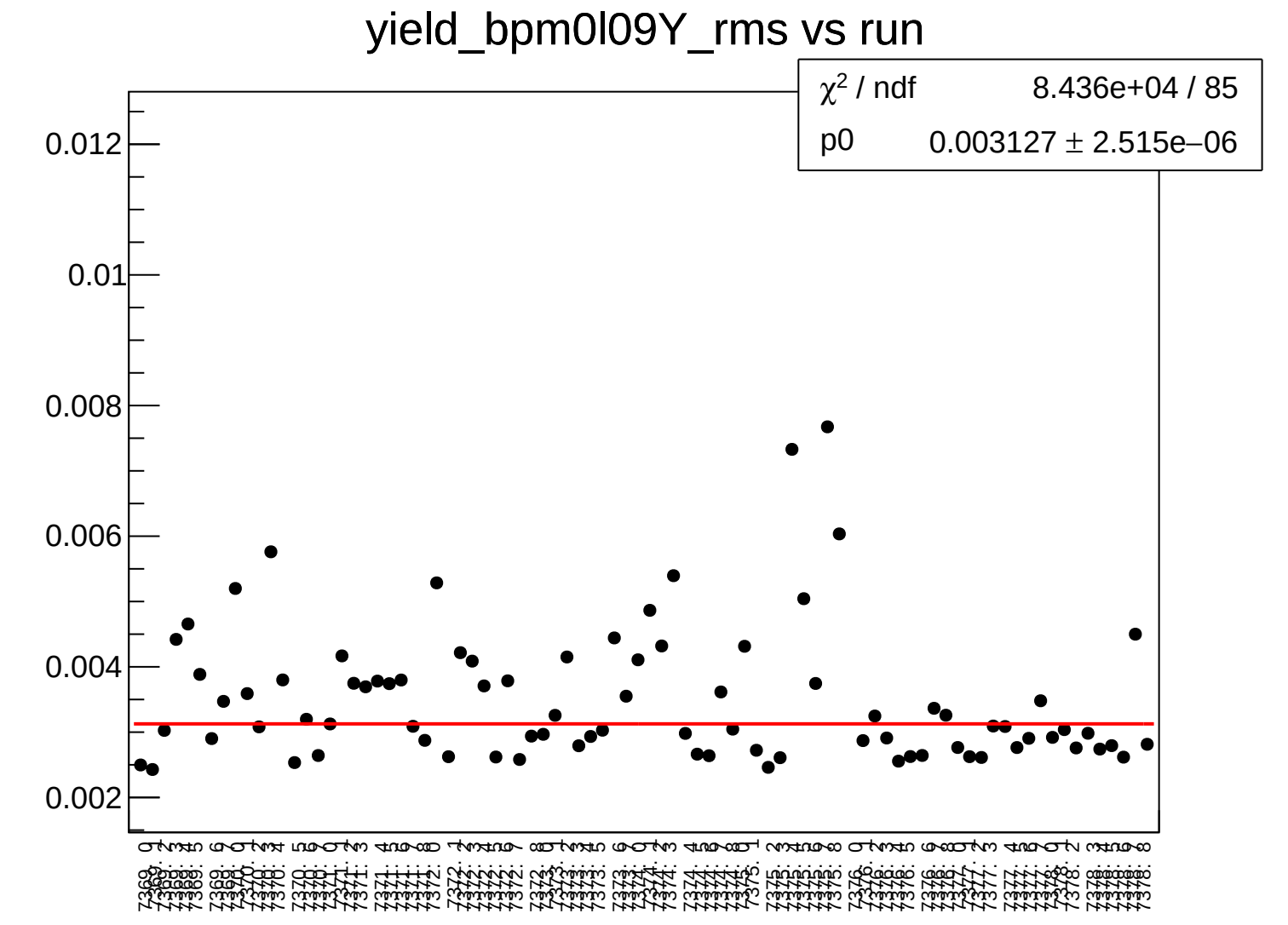

yield_bpm0l09X_mean vs run
χ² / ndf 1.017e+05 / 85
p0 0.6363 ± 1.111e−05
0.65
0.645
0.64
0.635
0.63
0.625
pull
Entries 86
Mean −11.63
Std Dev 89.88
80
60
40
20
0
−20
−40
−60
−80
−100

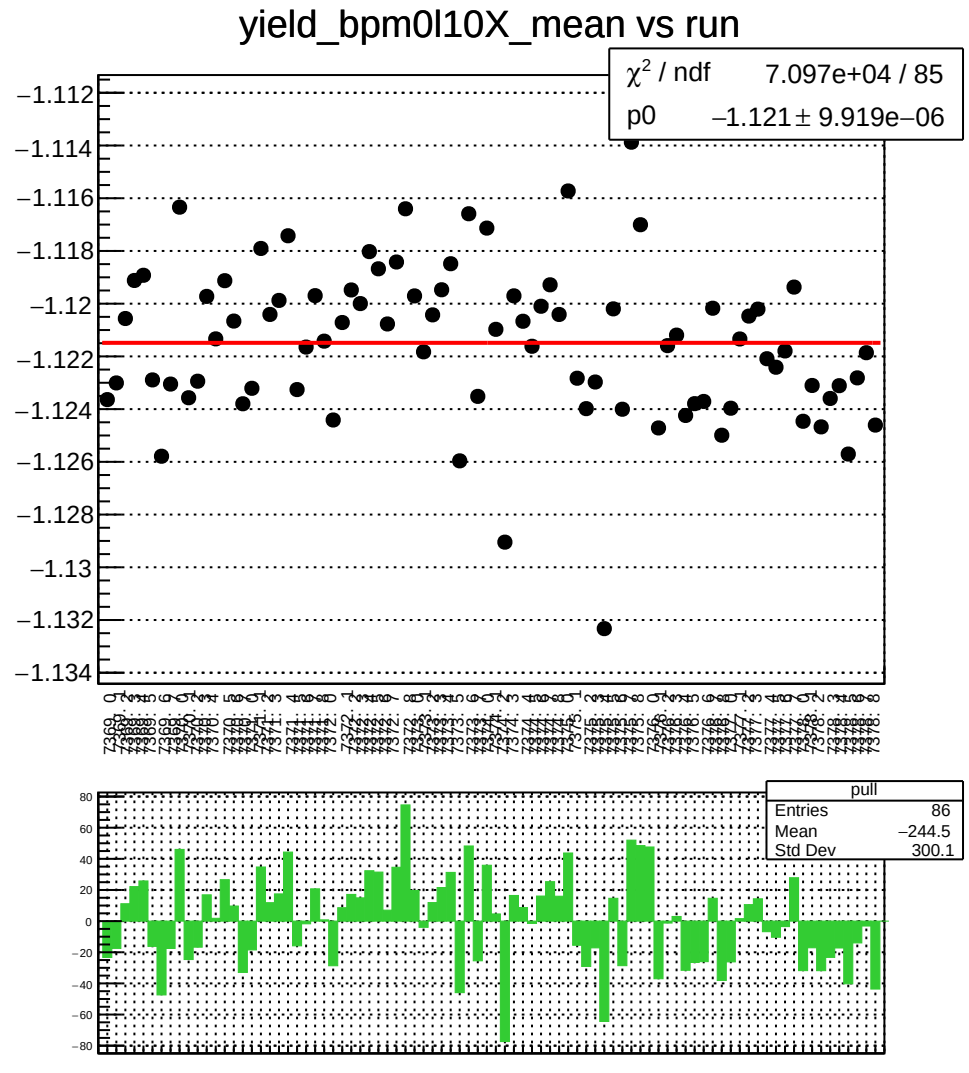

pull1D
Entries 86
Mean −1.267
Std Dev 4.048
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

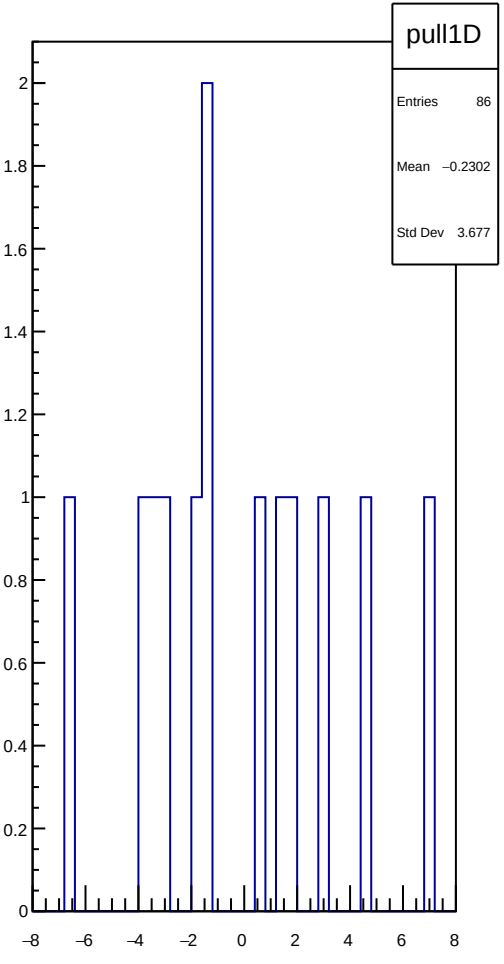

yield_bpm0l09X_rms vs run
χ² / ndf 2.885e+04 / 85
p0 0.009938 ± 7.855e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

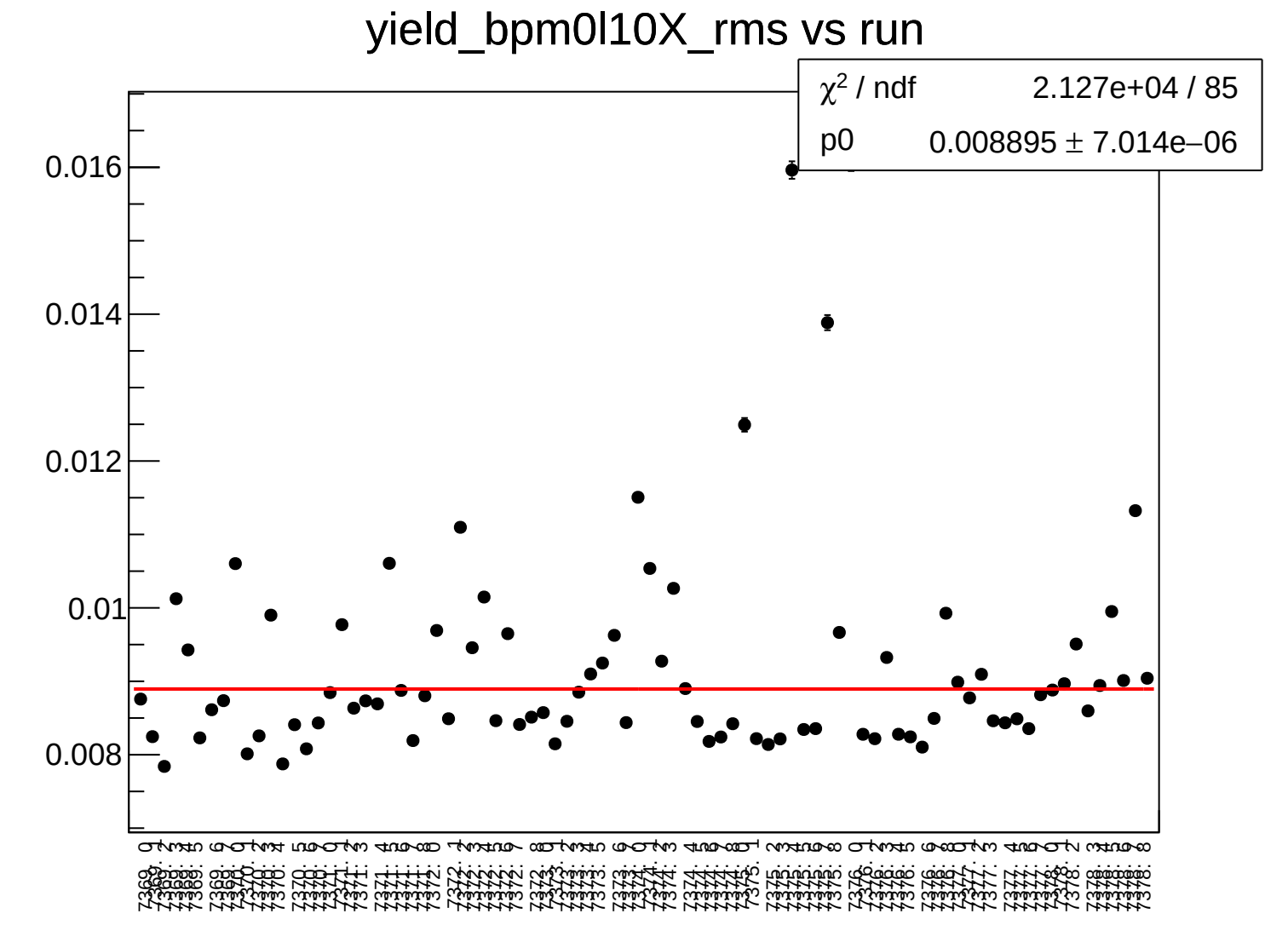

yield_bpm0l09Y_mean vs run
χ² / ndf 9.587e+05 / 85
p0 −0.0622 ± 3.557e−06
−0.05
−0.055
−0.06
−0.065
−0.07
−0.075
pull
Entries 86
Mean −111.9
Std Dev 142
300
200
100
0
−100
−200

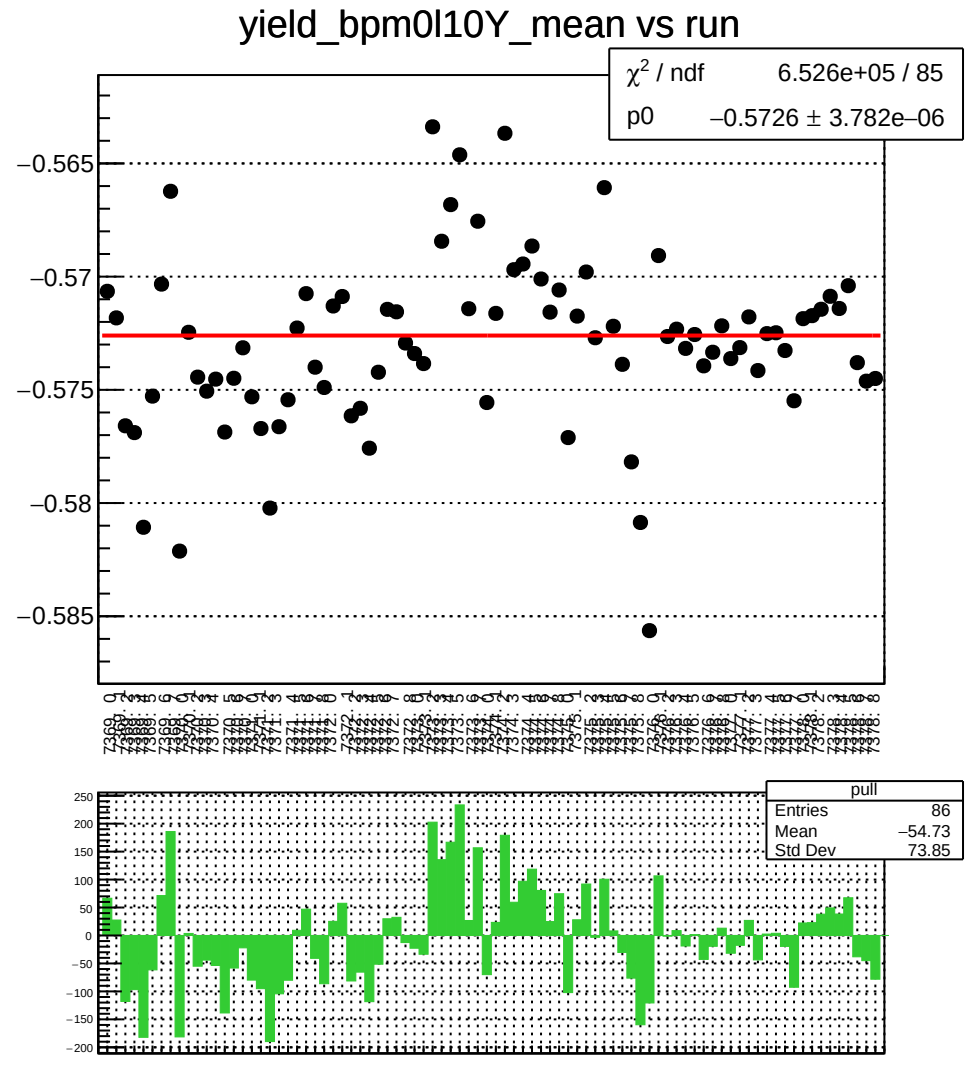

pull1D
Entries 86
Mean −2.336
Std Dev 1.532
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

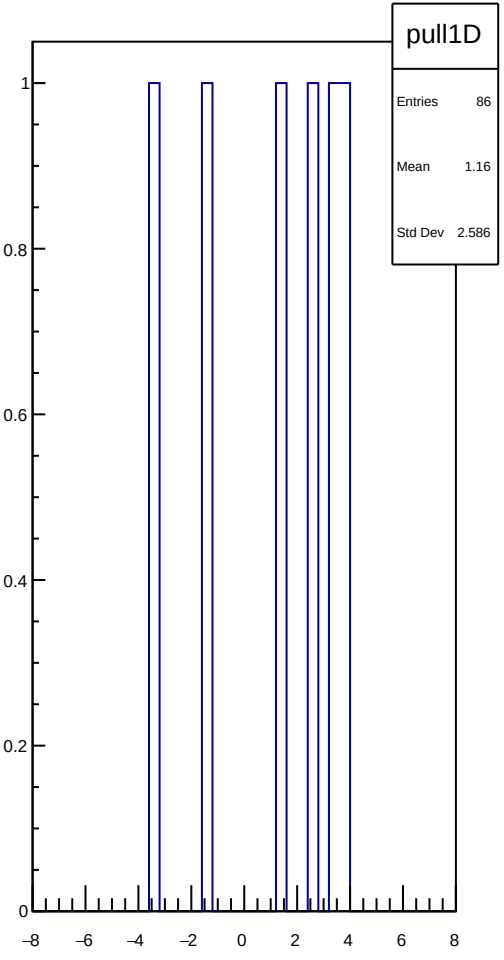

yield_bpm0l09Y_rms vs run
χ² / ndf 8.436e+04 / 85
p0 0.003127 ± 2.515e−06
0.012
0.01
0.008
0.006
0.004
0.002

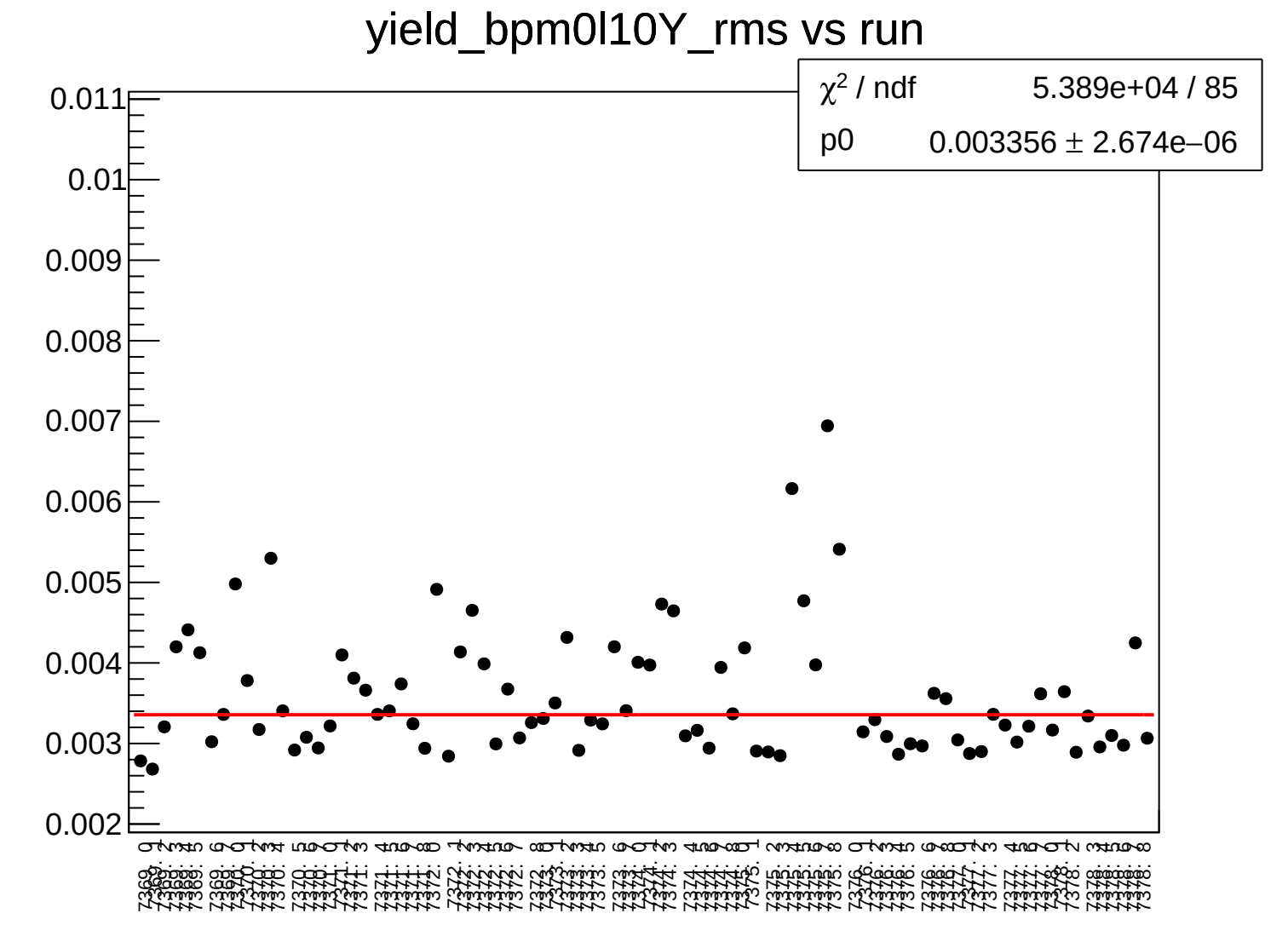

yield_bpm0l10X_mean vs run
χ² / ndf 7.097e+04 / 85
p0 −1.121 ± 9.919e−06
pull
Entries 86
Mean −244.5
Std Dev 300.1

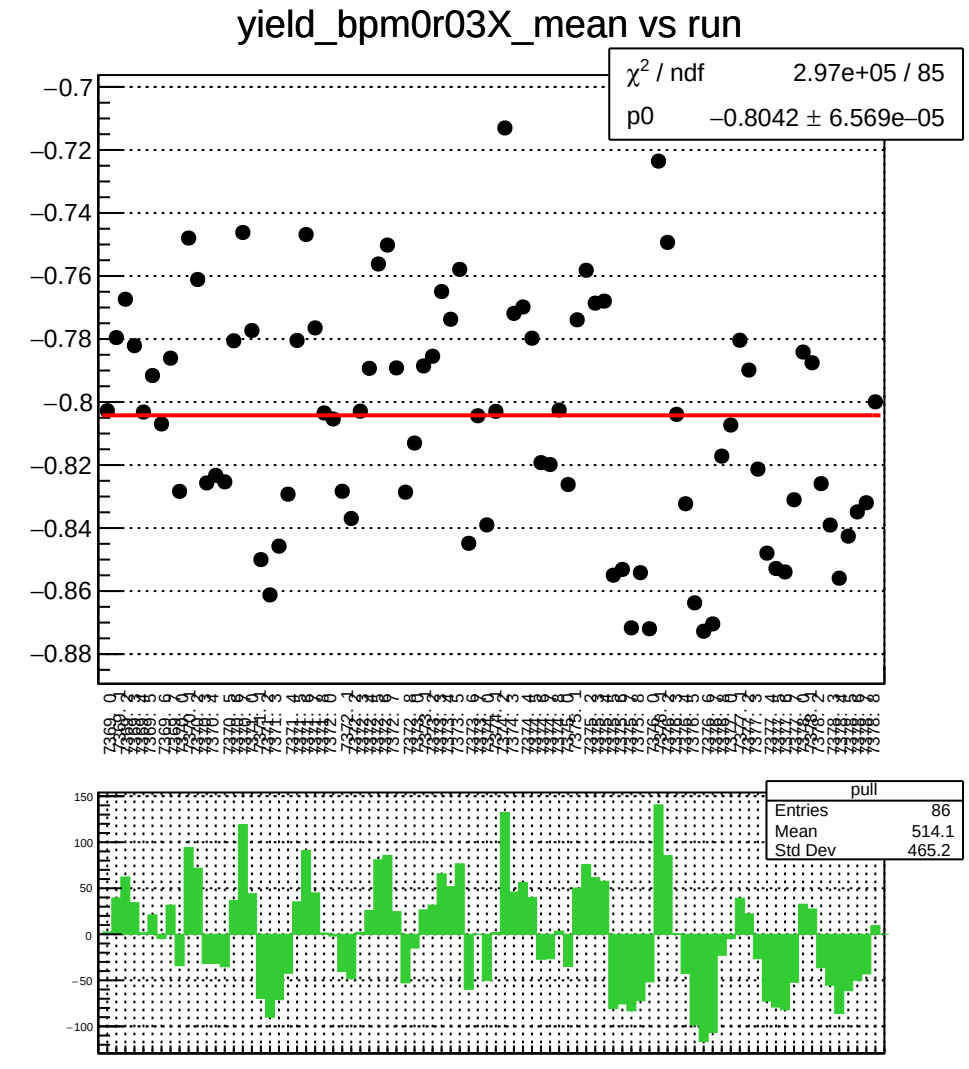

pull1D
Entries 86
Mean −0.2302
Std Dev 3.677

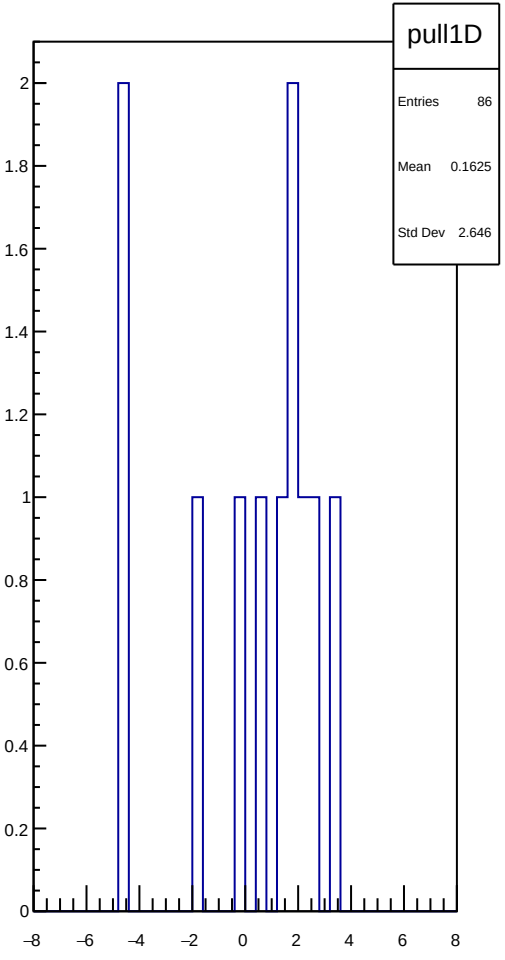

yield_bpm0l10X_rms vs run
χ² / ndf 2.127e+04 / 85
p0 0.008895 ± 7.014e−06
0.016
0.014
0.012
0.01
0.008

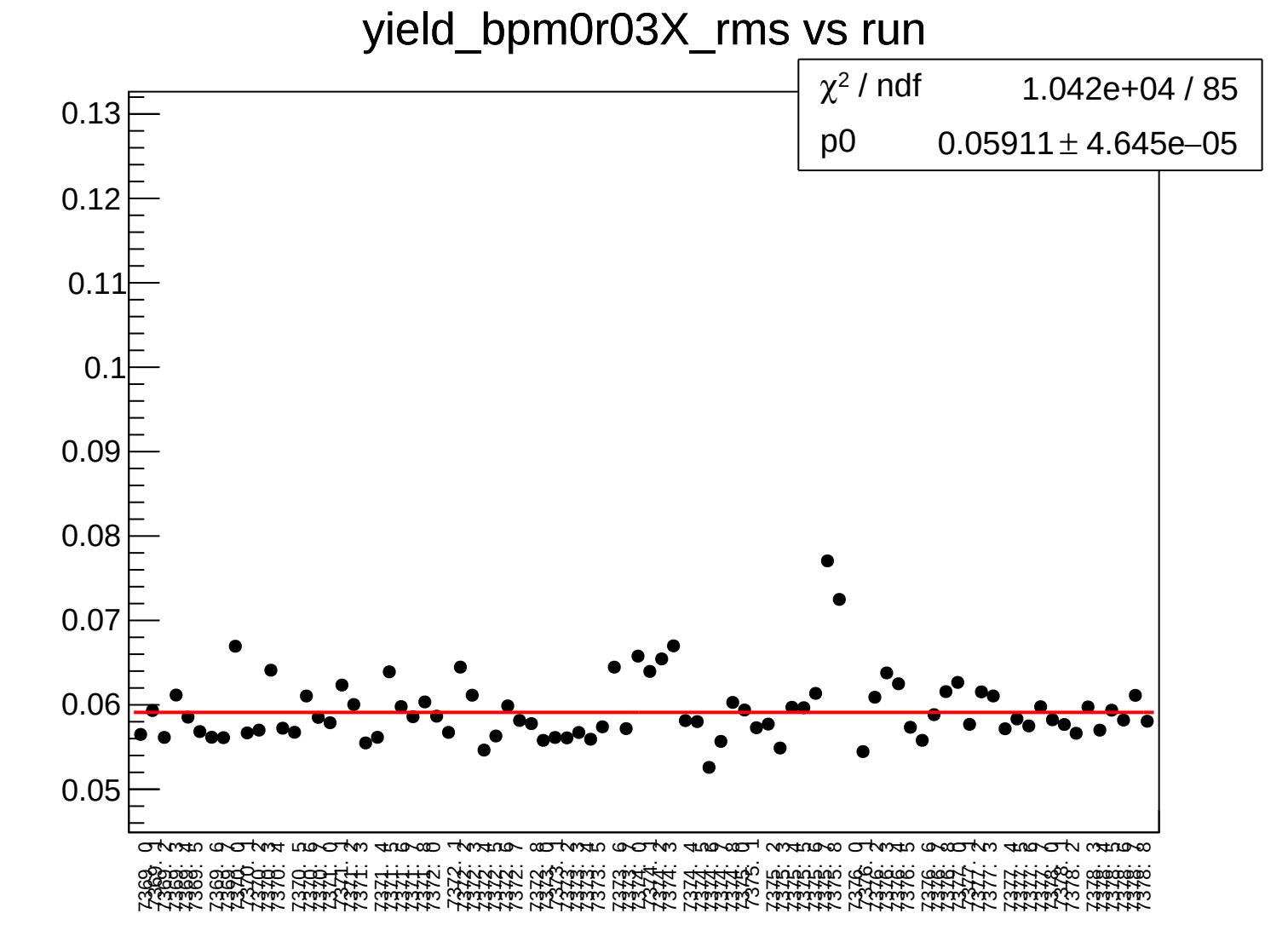

yield_bpm0l10Y_mean vs run
χ² / ndf 6.526e+05 / 85
p0 −0.5726 ± 3.782e−06
−0.565
−0.57
−0.575
−0.58
−0.585
pull
Entries 86
Mean −54.73
Std Dev 73.85
250
200
150
100
50
0
−50
−100
−150
−200

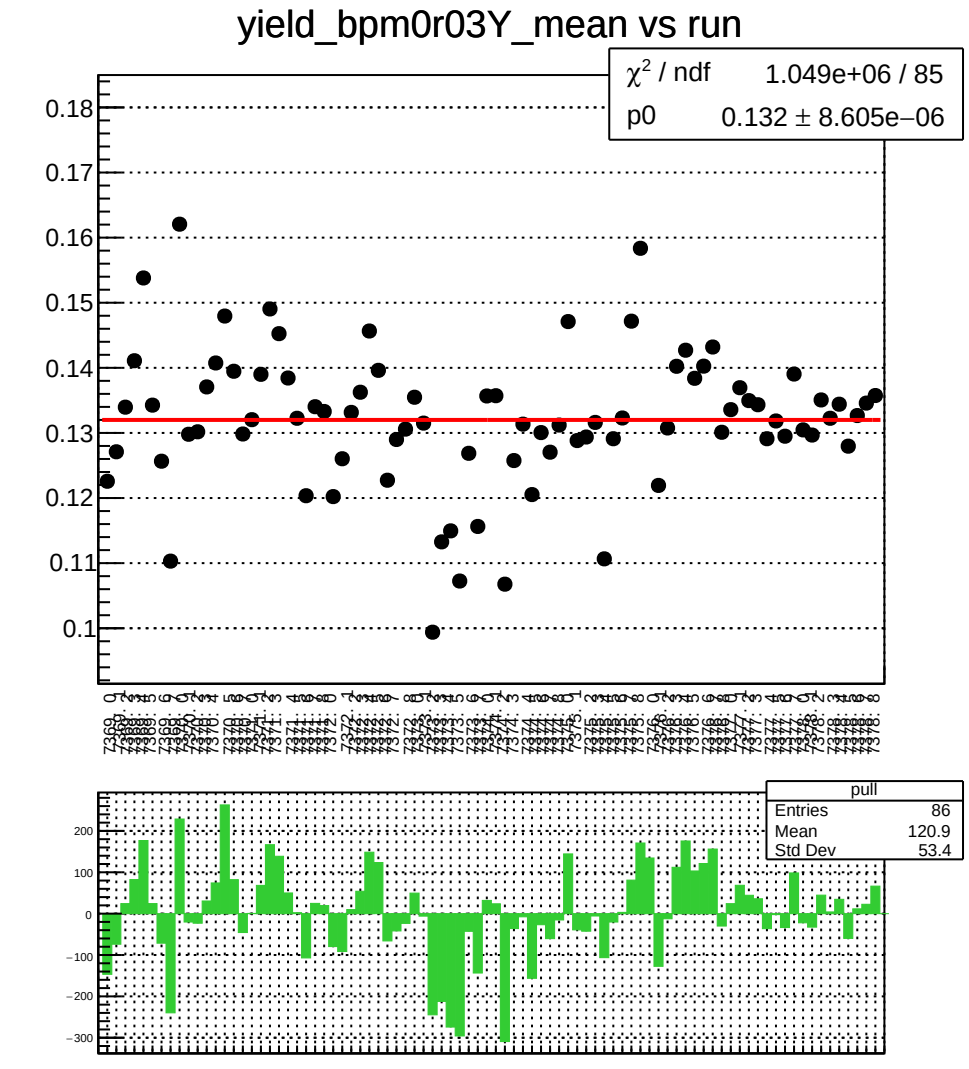

pull1D
Entries 86
Mean 1.16
Std Dev 2.586
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

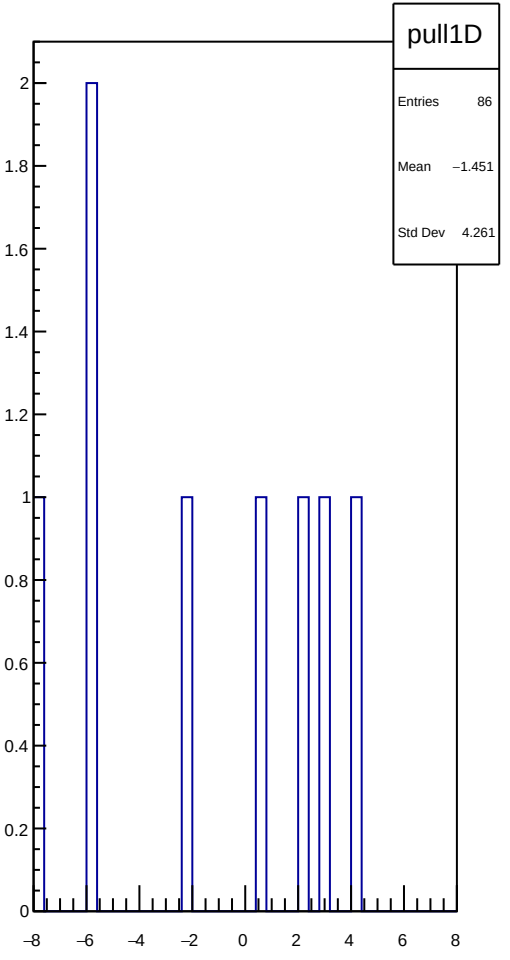

yield_bpm0l10Y_rms vs run
χ² / ndf 5.389e+04 / 85
p0 0.003356 ± 2.674e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

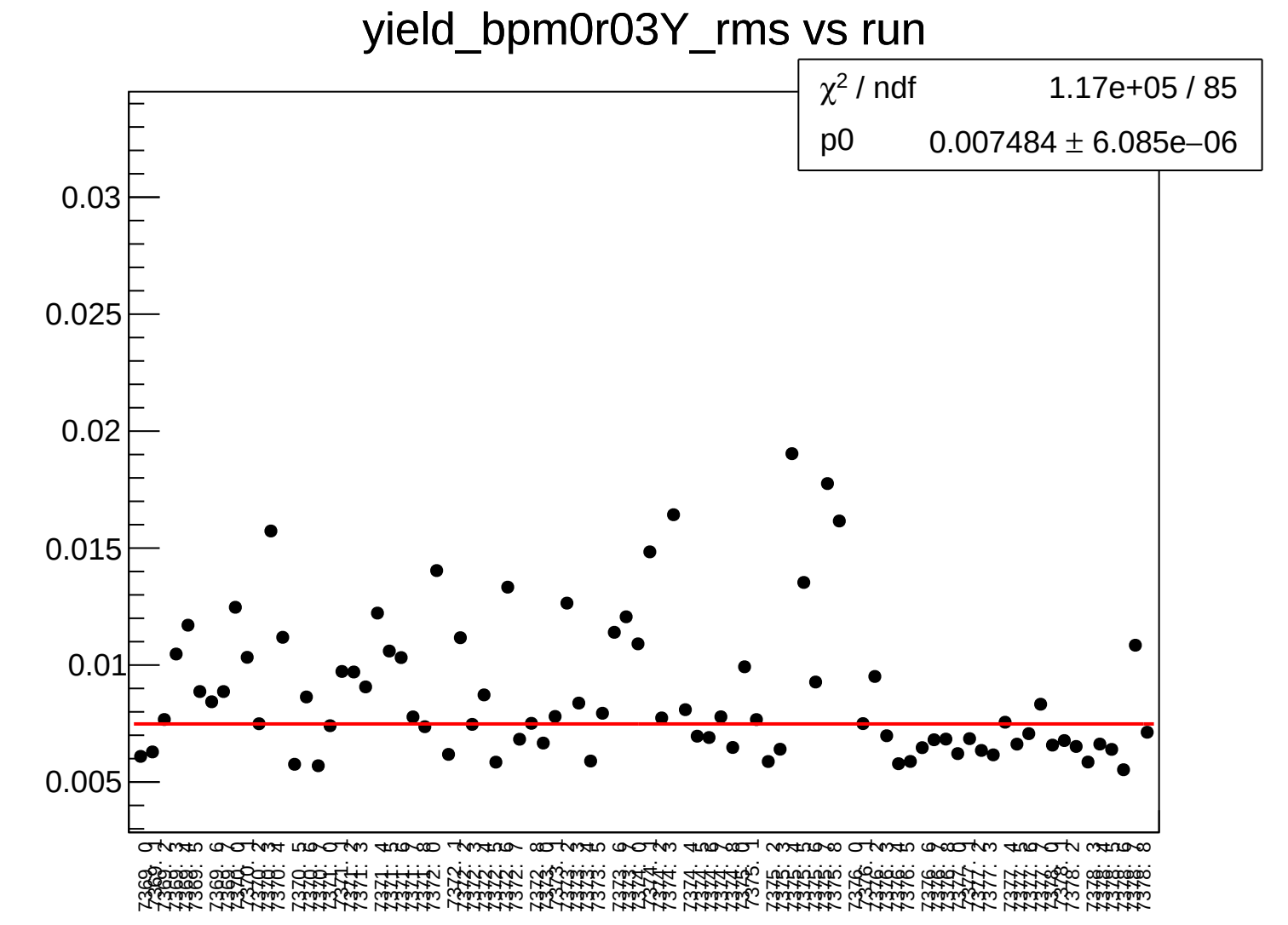

yield_bpm0r03X_mean vs run
χ² / ndf 2.97e+05 / 85
p0 −0.8042 ± 6.569e−05
pull
Entries 86
Mean 514.1
Std Dev 465.2

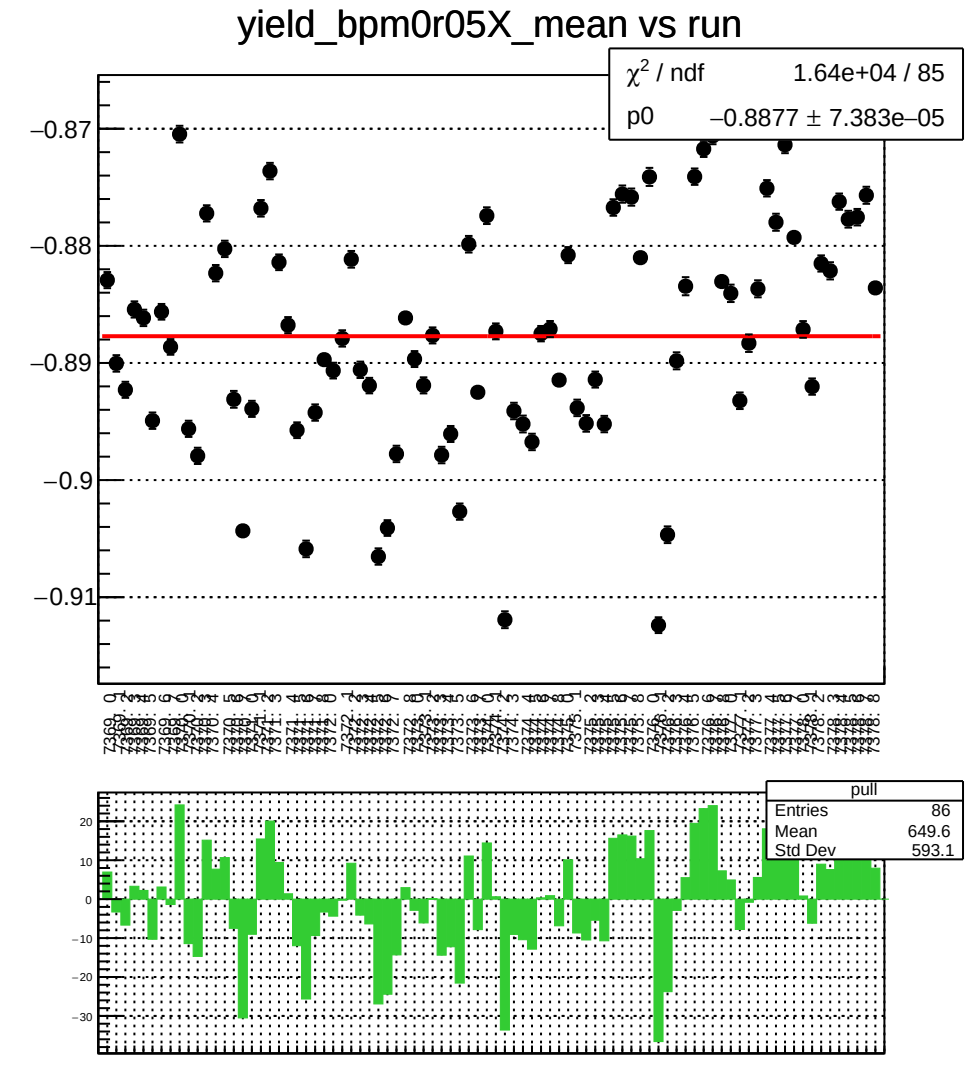

pull1D
Entries 86
Mean 0.1625
Std Dev 2.646

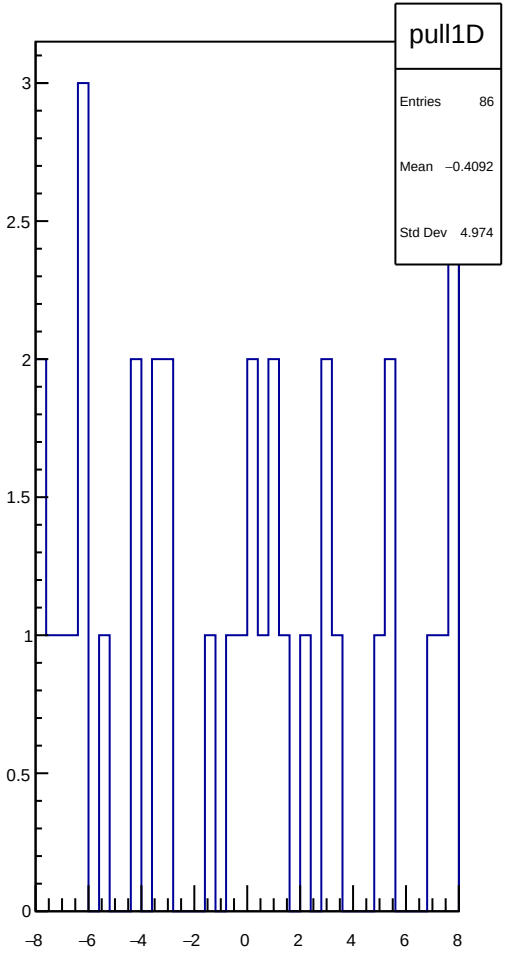

yield_bpm0r03X_rms vs run
χ² / ndf 1.042e+04 / 85
p0 0.05911 ± 4.645e–05
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05

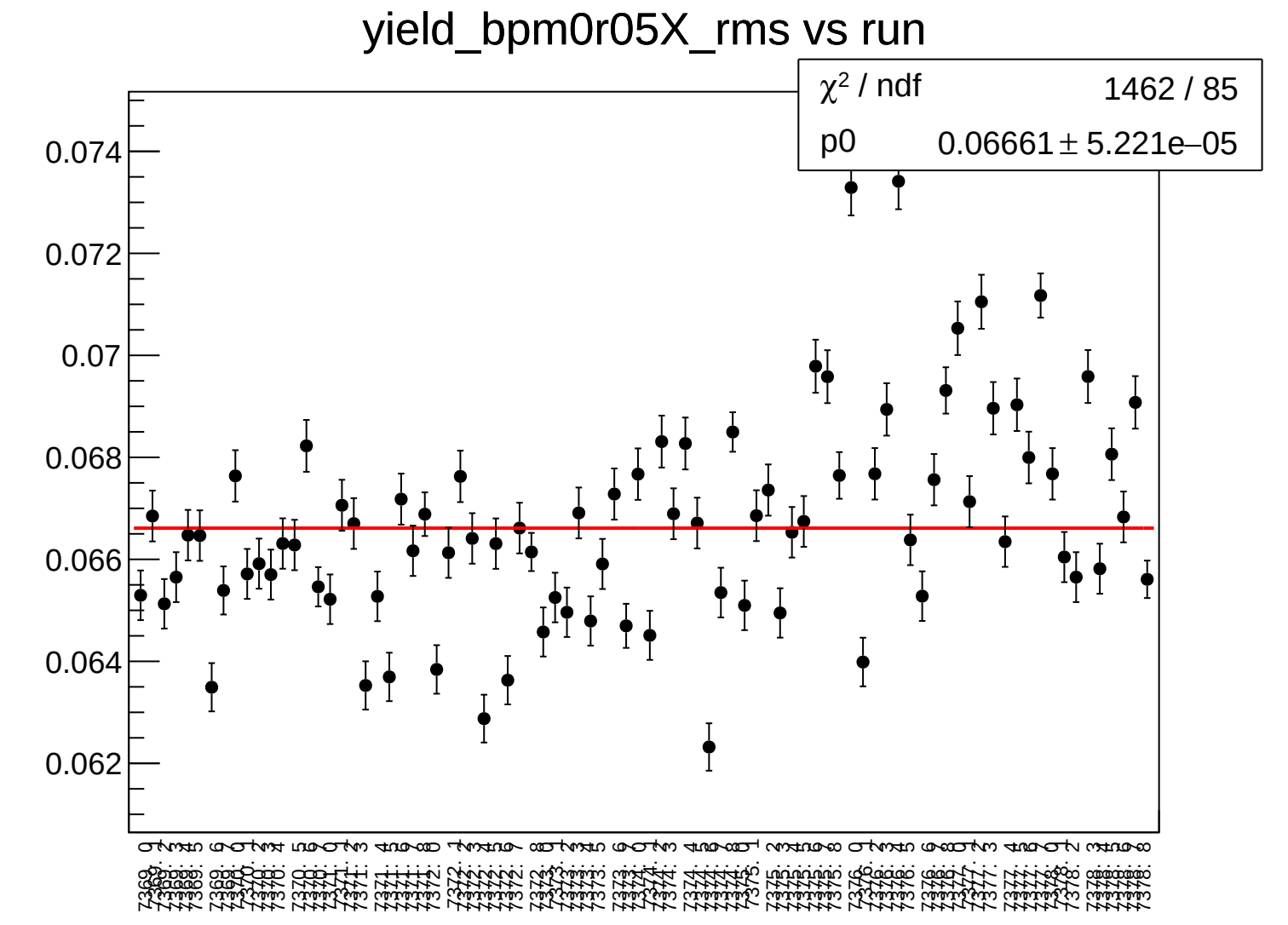

yield_bpm0r03Y_mean vs run
χ² / ndf 1.049e+06 / 85
p0 0.132 ± 8.605e−06
pull
Entries 86
Mean 120.9
Std Dev 53.4

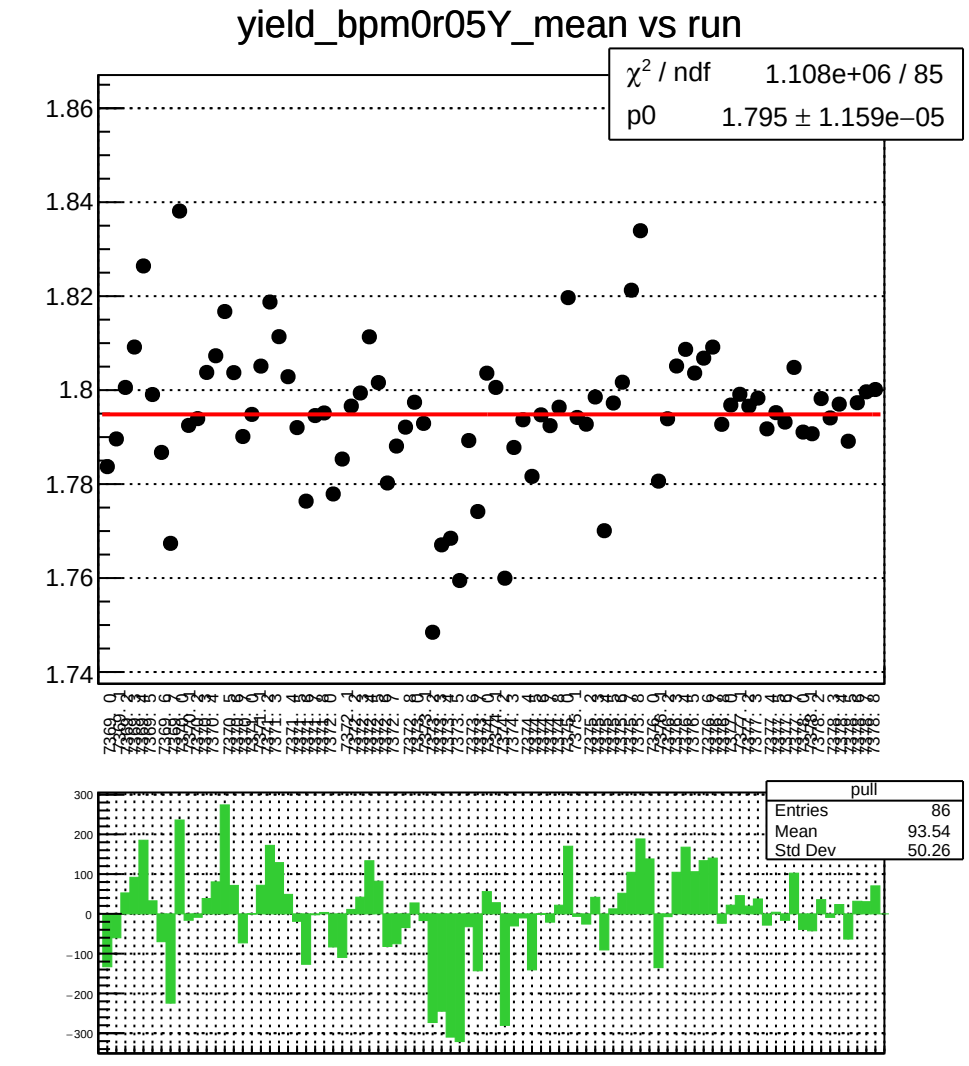

pull1D
Entries 86
Mean −1.451
Std Dev 4.261

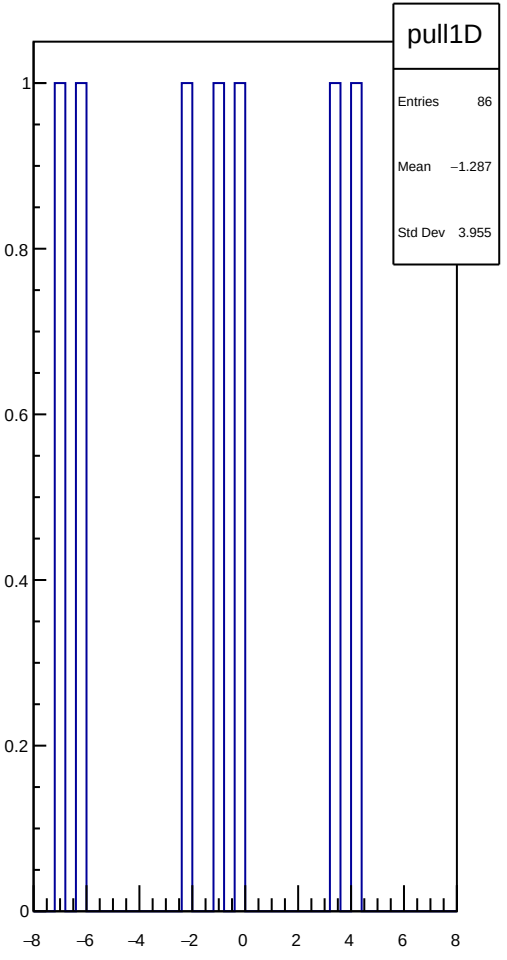

yield_bpm0r03Y_rms vs run
χ² / ndf 1.17e+05 / 85
p0 0.007484 ± 6.085e−06
0.03
0.025
0.02
0.015
0.01
0.005

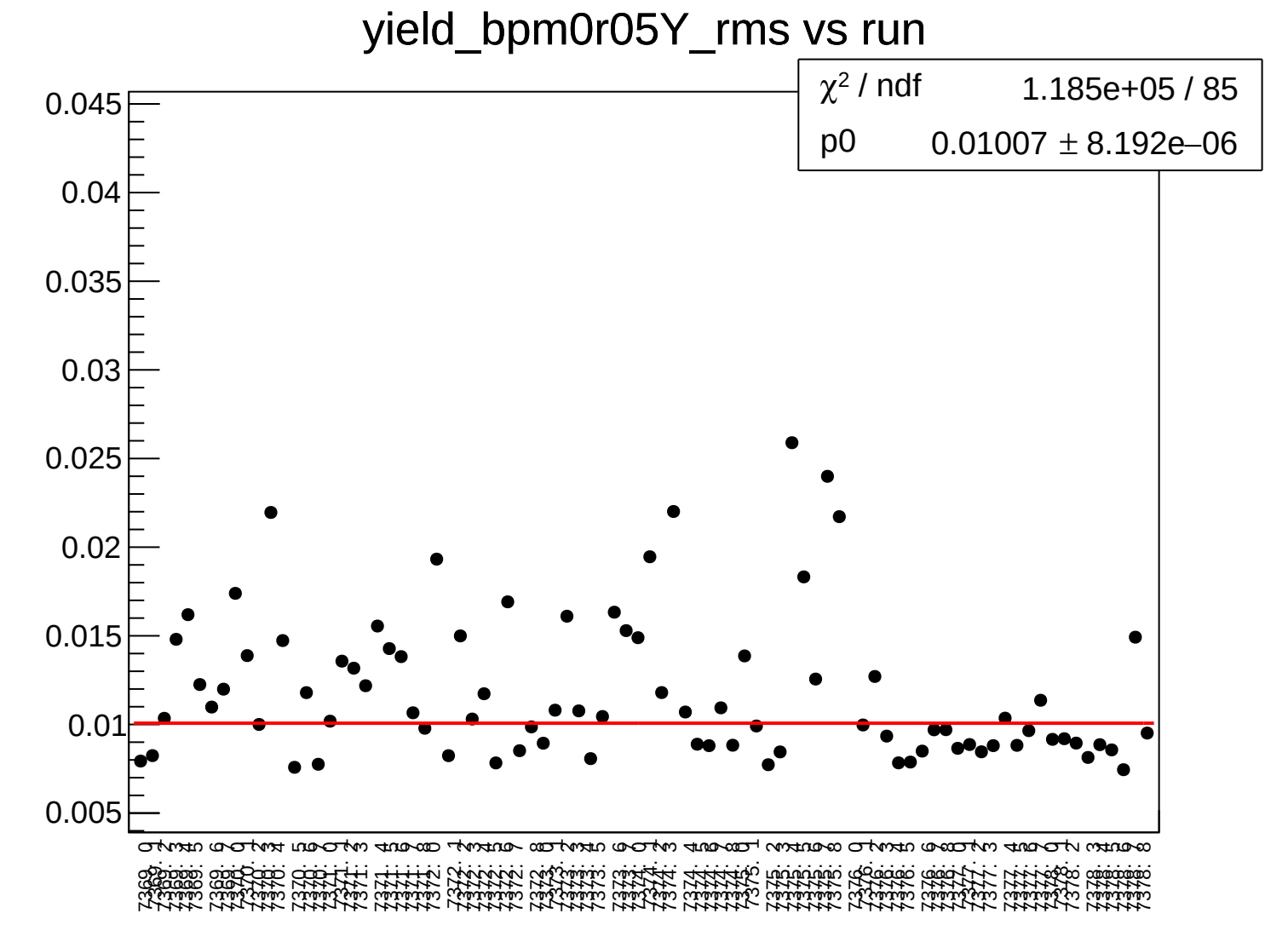

yield_bpm0r05X_mean vs run
χ² / ndf 1.64e+04 / 85
p0 −0.8877 ± 7.383e−05
−0.87
−0.88
−0.89
−0.9
−0.91
pull
Entries 86
Mean 649.6
Std Dev 593.1
20
10
0
−10
−20
−30

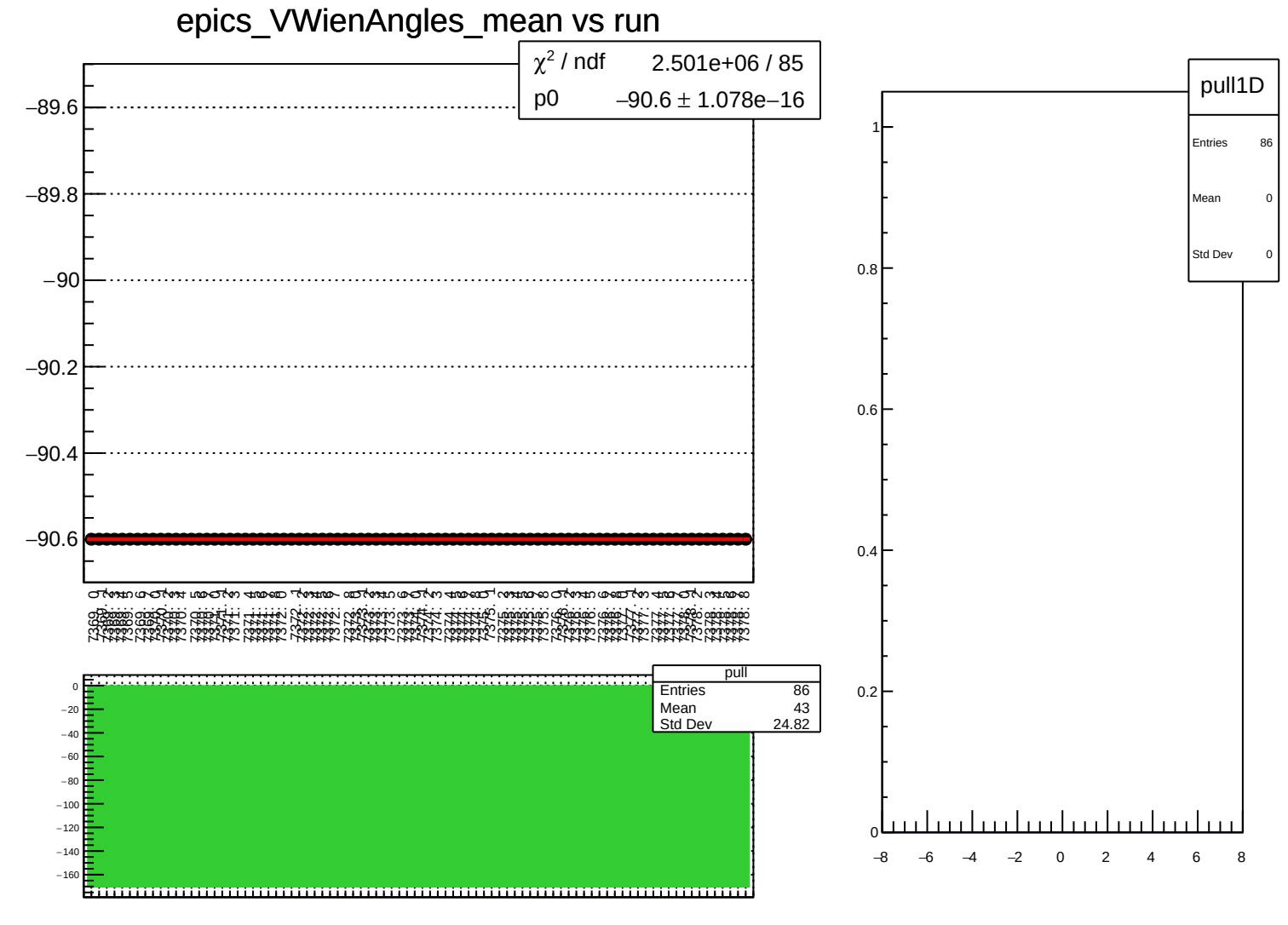

pull1D
Entries 86
Mean −0.4092
Std Dev 4.974
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

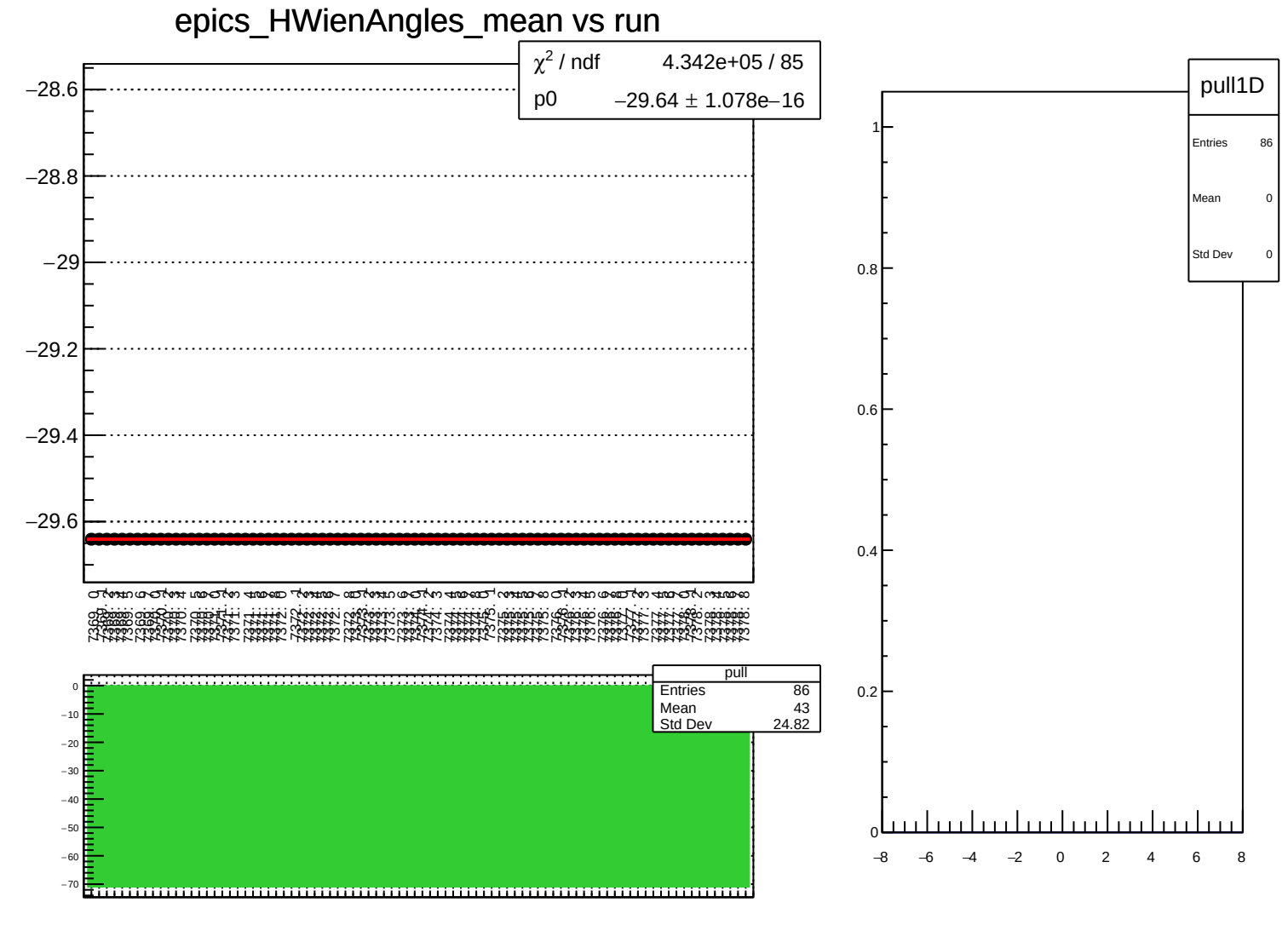

yield_bpm0r05X_rms vs run
χ² / ndf 1462 / 85
p0 0.06661 ± 5.221e–05
0.074
0.072
0.07
0.068
0.066
0.064
0.062

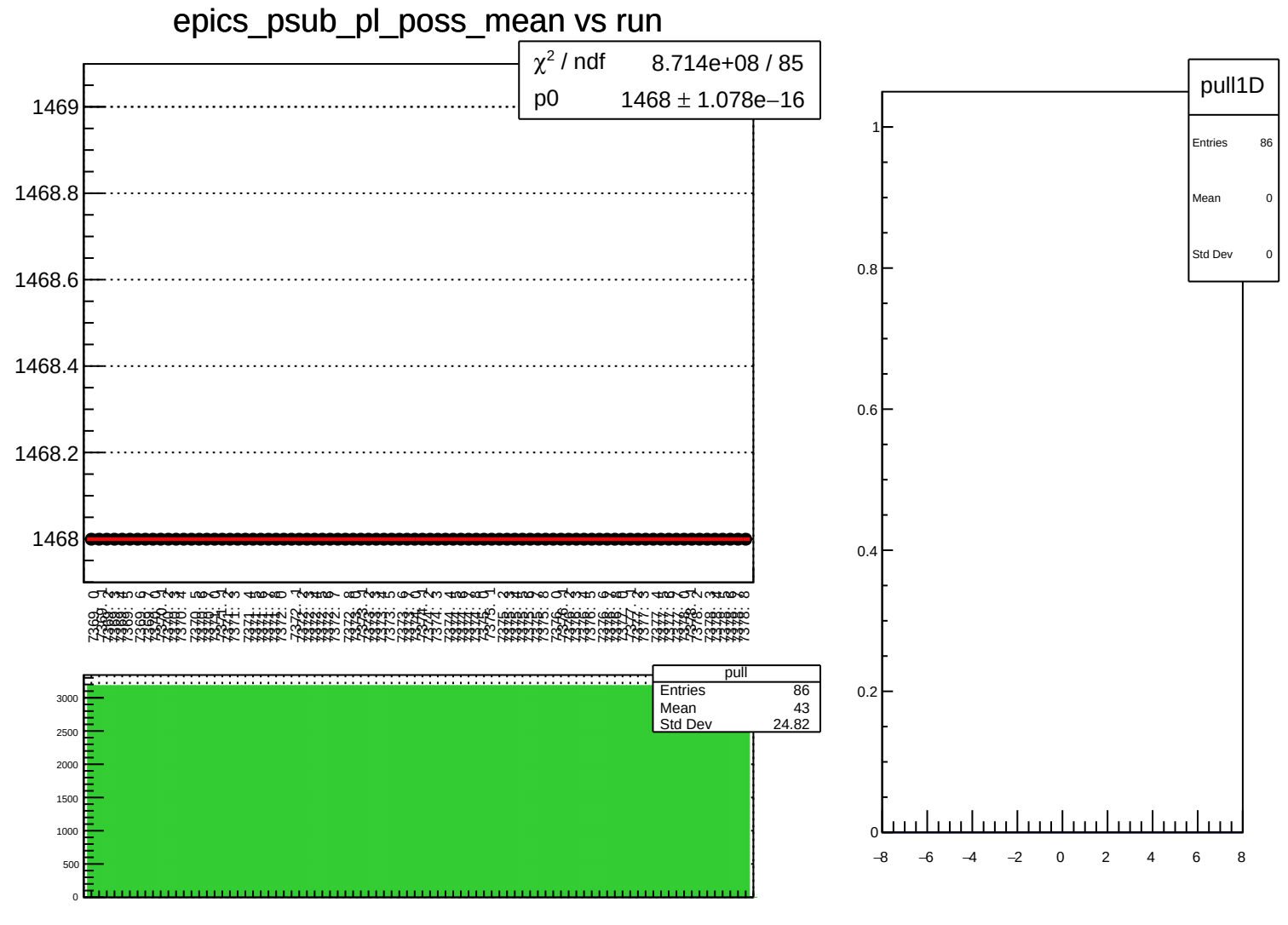

yield_bpm0r05Y_mean vs run
χ² / ndf 1.108e+06 / 85
p0 1.795 ± 1.159e−05
1.86
1.84
1.82
1.8
1.78
1.76
1.74
pull
Entries 86
Mean 93.54
Std Dev 50.26
300
200
100
0
−100
−200
−300

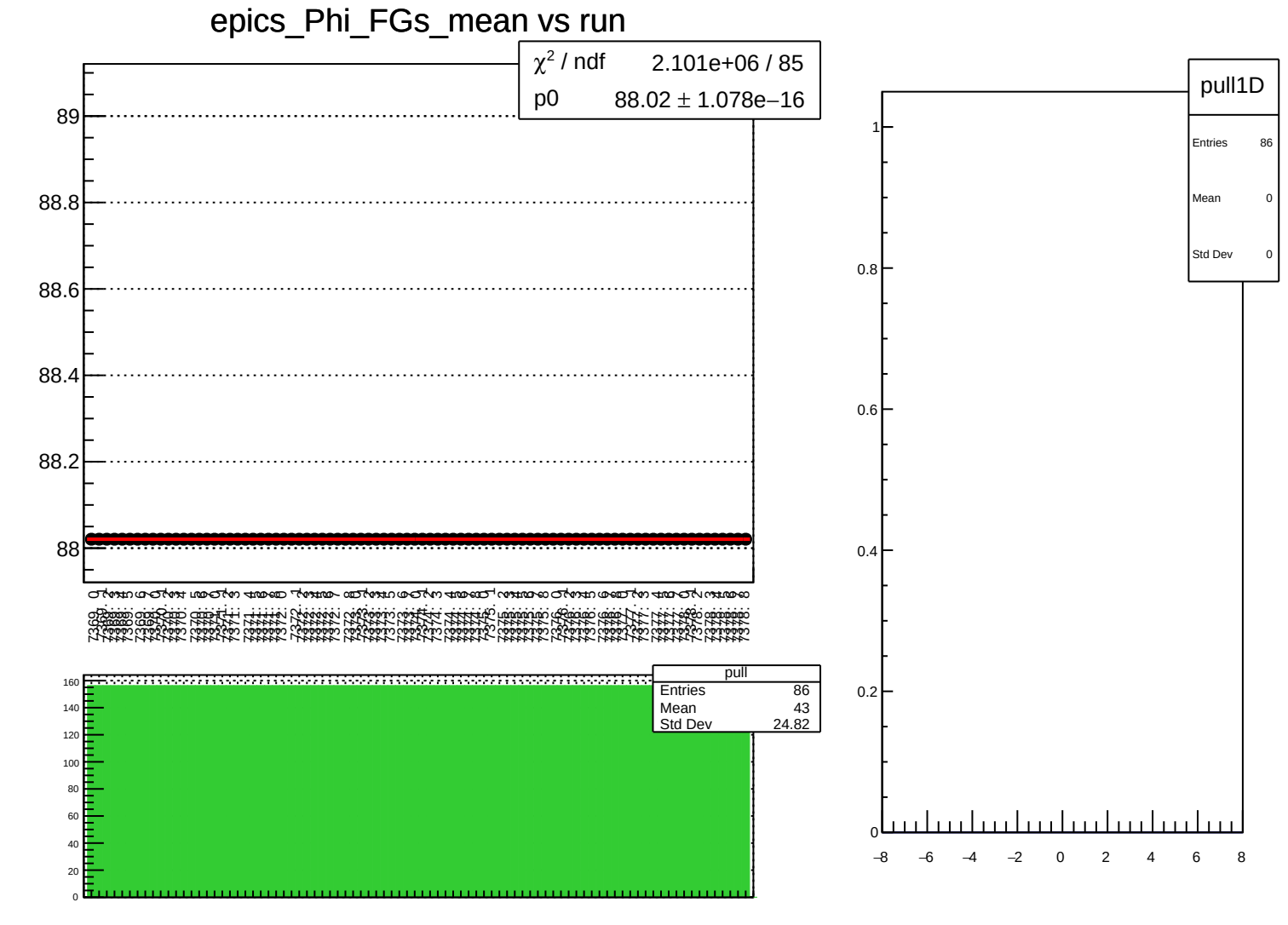

pull1D
Entries 86
Mean −1.287
Std Dev 3.955
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

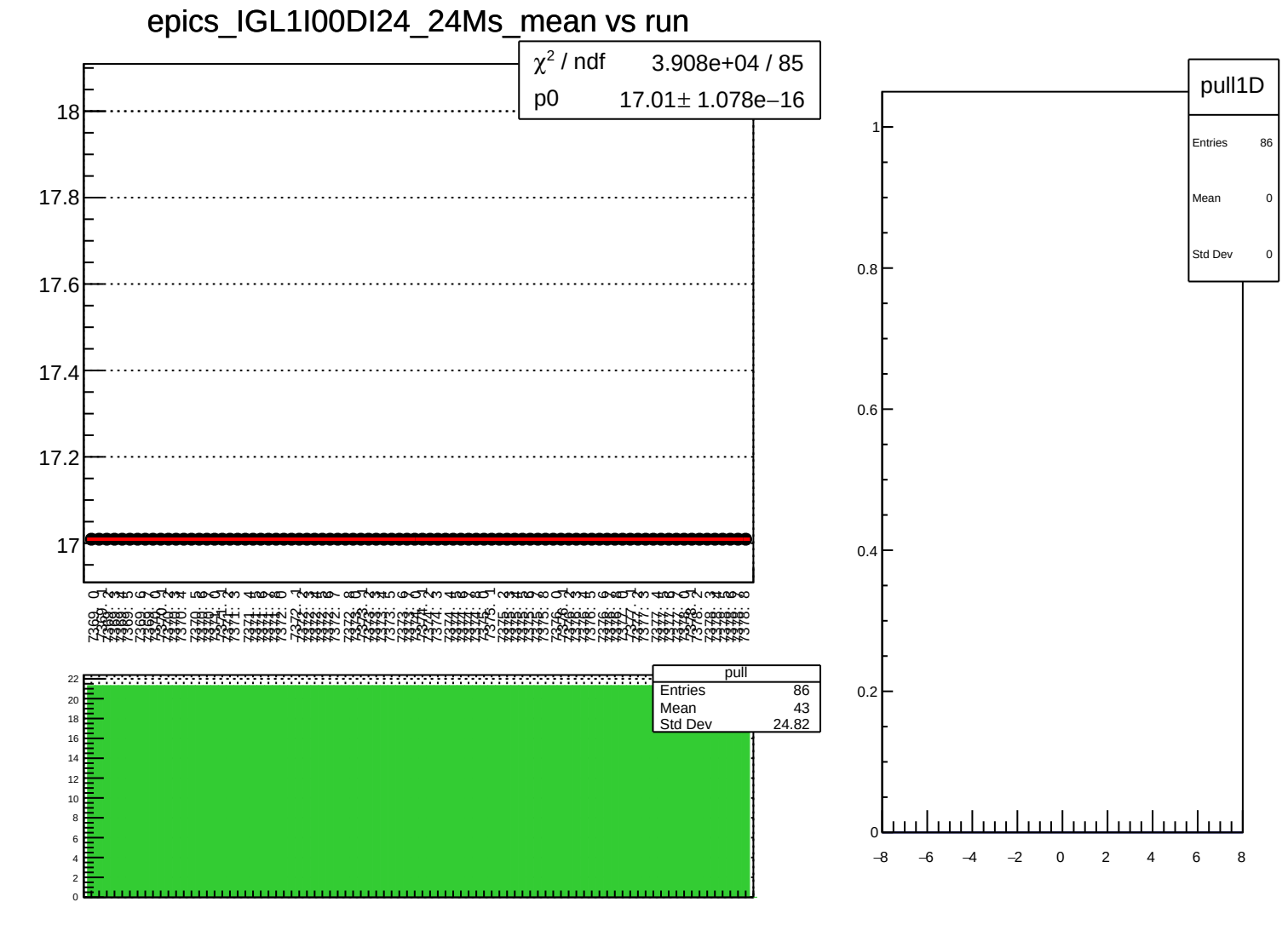

yield_bpm0r05Y_rms vs run
χ² / ndf 1.185e+05 / 85
p0 0.01007 ± 8.192e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

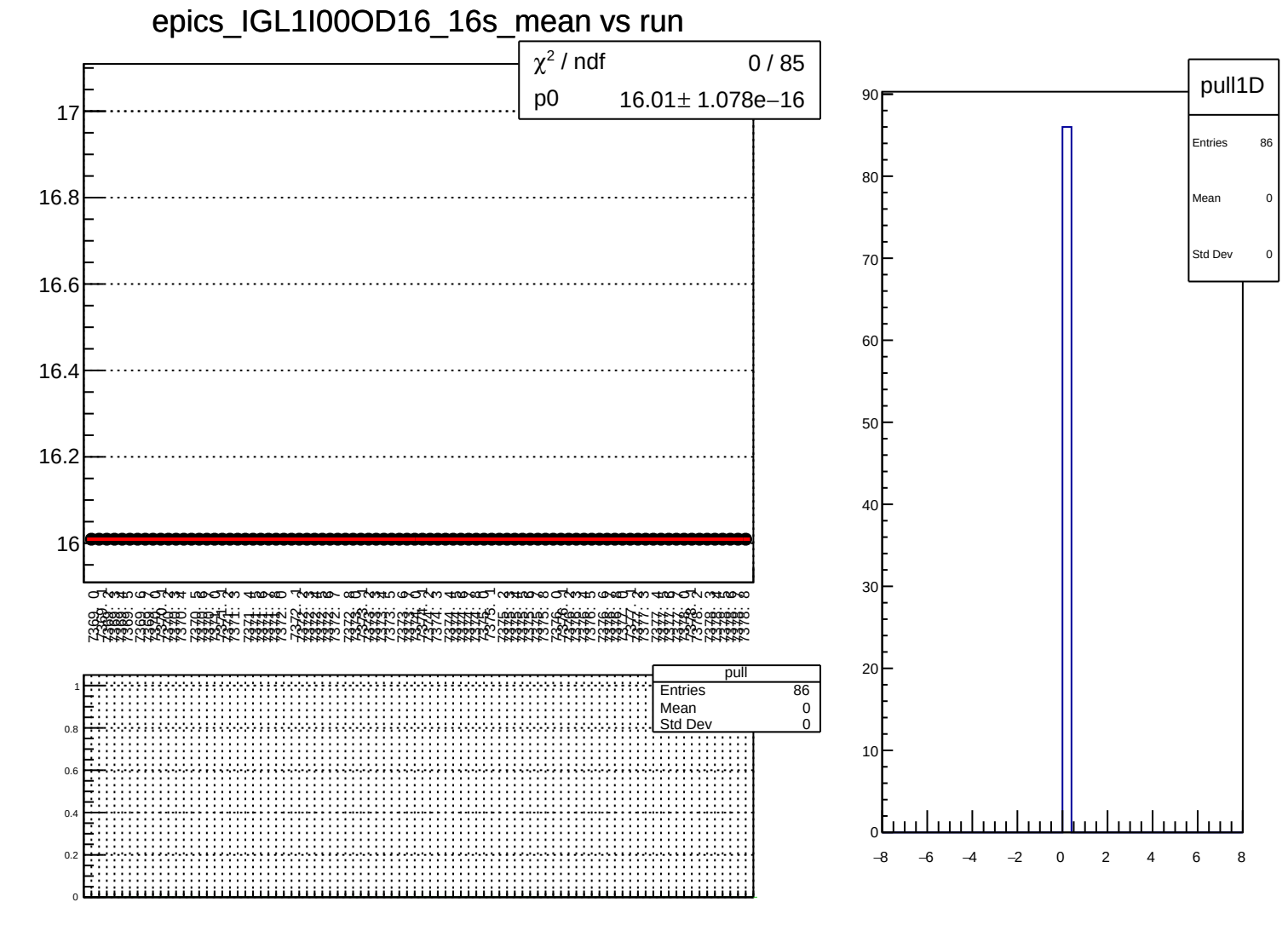

epics_VWienAngles_mean vs run
χ² / ndf 2.501e+06 / 85
p0 −90.6 ± 1.078e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 86
Mean 43
Std Dev 24.82
0
−20
−40
−60
−80
−100
−120
−140
−160
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

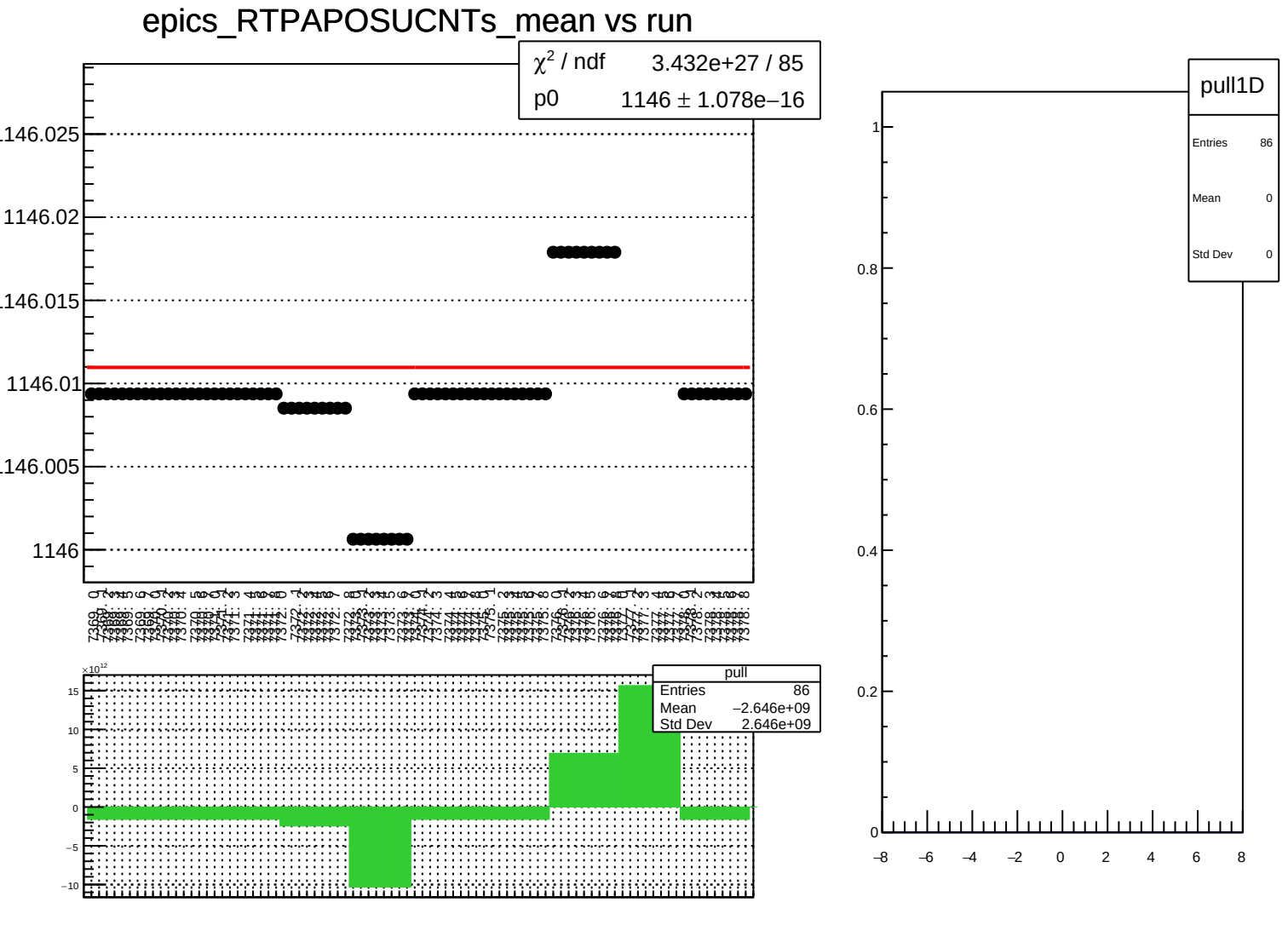

epics_HWienAngles_mean vs run
χ² / ndf 4.342e+05 / 85
p0 −29.64 ± 1.078e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 86
Mean 43
Std Dev 24.82
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

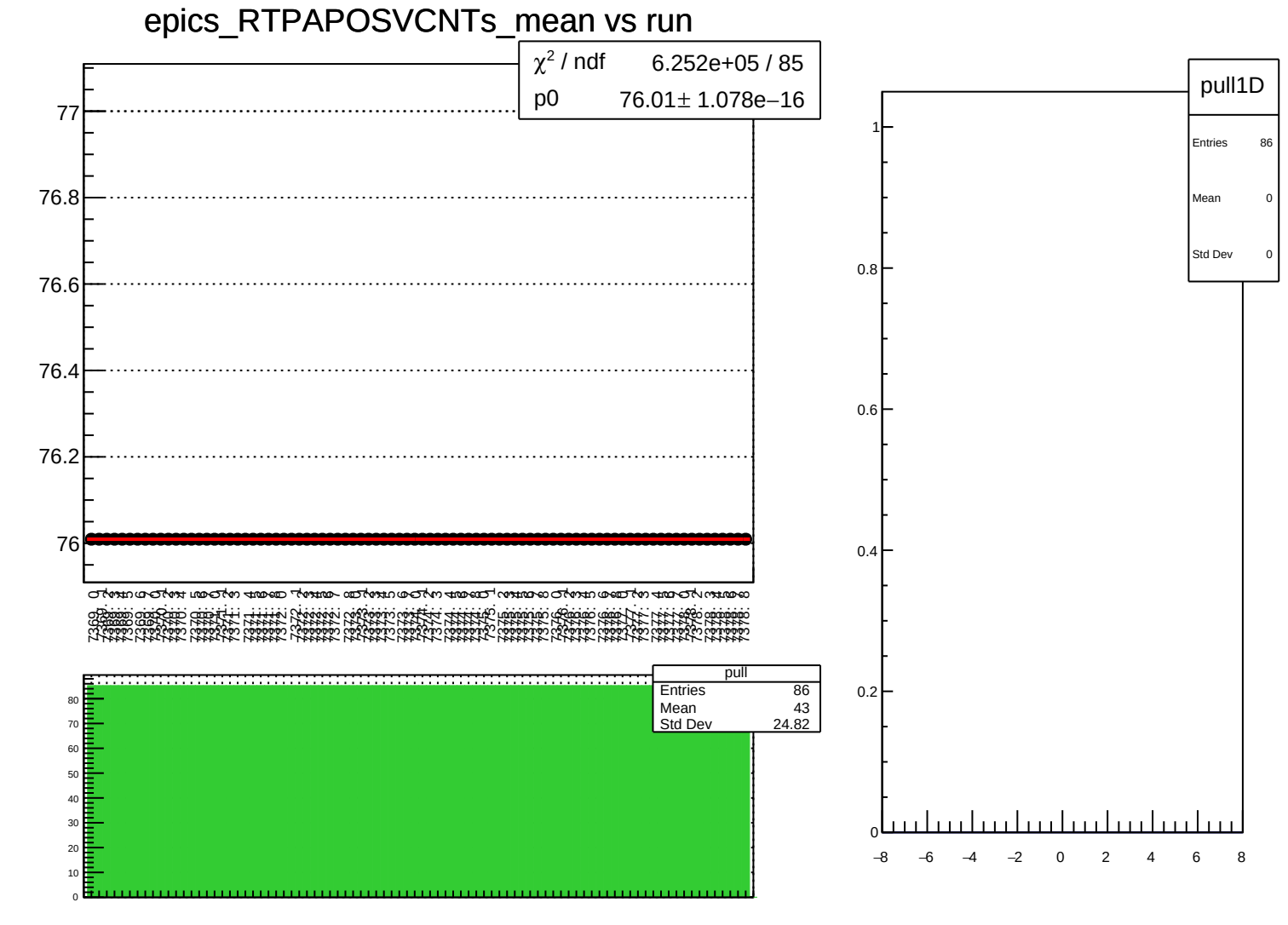

epics_psub_pl_poss_mean vs run
χ² / ndf 8.714e+08 / 85
p0 1468 ± 1.078e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 86
Mean 43
Std Dev 24.82
3000
2500
2000
1500
1000
500
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_Phi_FGs_mean vs run
χ² / ndf 2.101e+06 / 85
p0 88.02 ± 1.078e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 86
Mean 43
Std Dev 24.82
160
140
120
100
80
60
40
20
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


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


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


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 3.432e+27 / 85
p0 1146 ± 1.078e−16
1146.025
1146.02
1146.015
1146.01
1146.005
1146
pull
Entries 86
Mean −2.646e+09
Std Dev 2.646e+09
×10¹²
15
10
5
0
−5
−10
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 6.252e+05 / 85
p0 76.01± 1.078e−16
77
76.8
76.6
76.4
76.2
76
pull
Entries 86
Mean 43
Std Dev 24.82
80
70
60
50
40
30
20
10
0
pull1D
Entries 86
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8