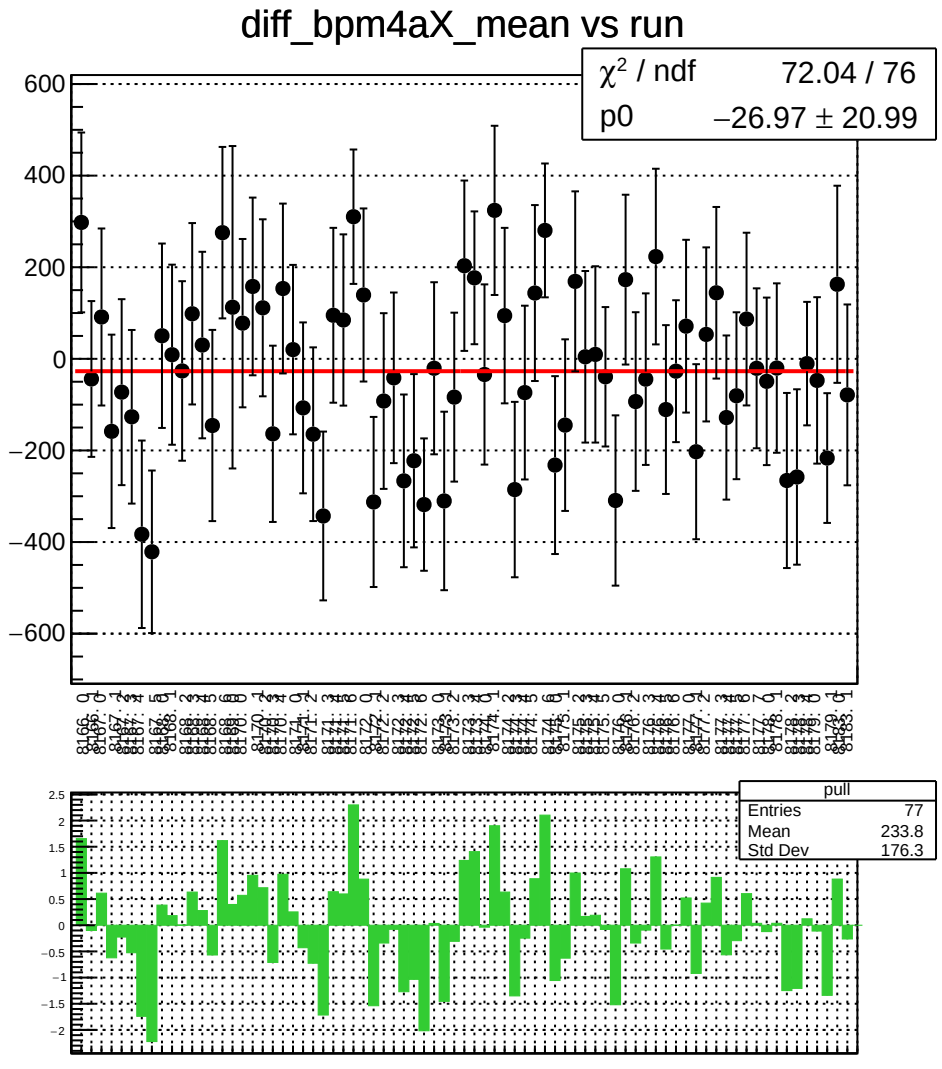
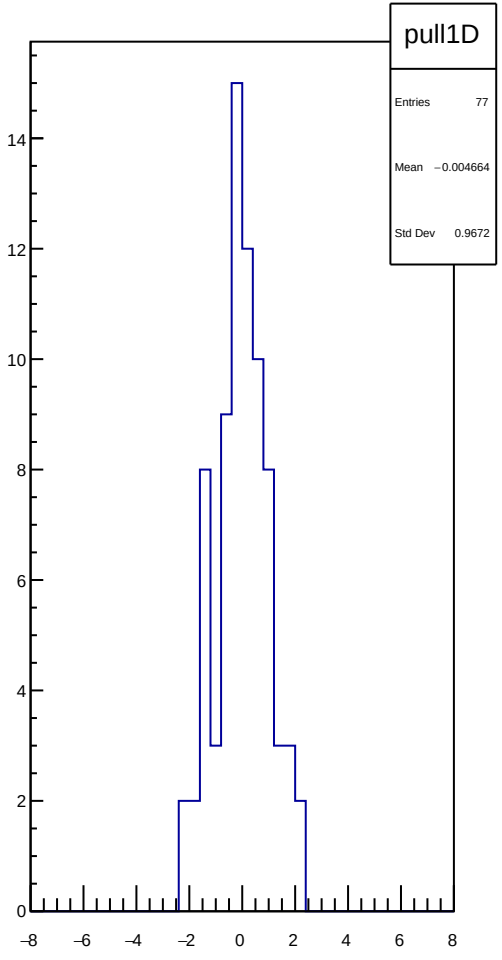
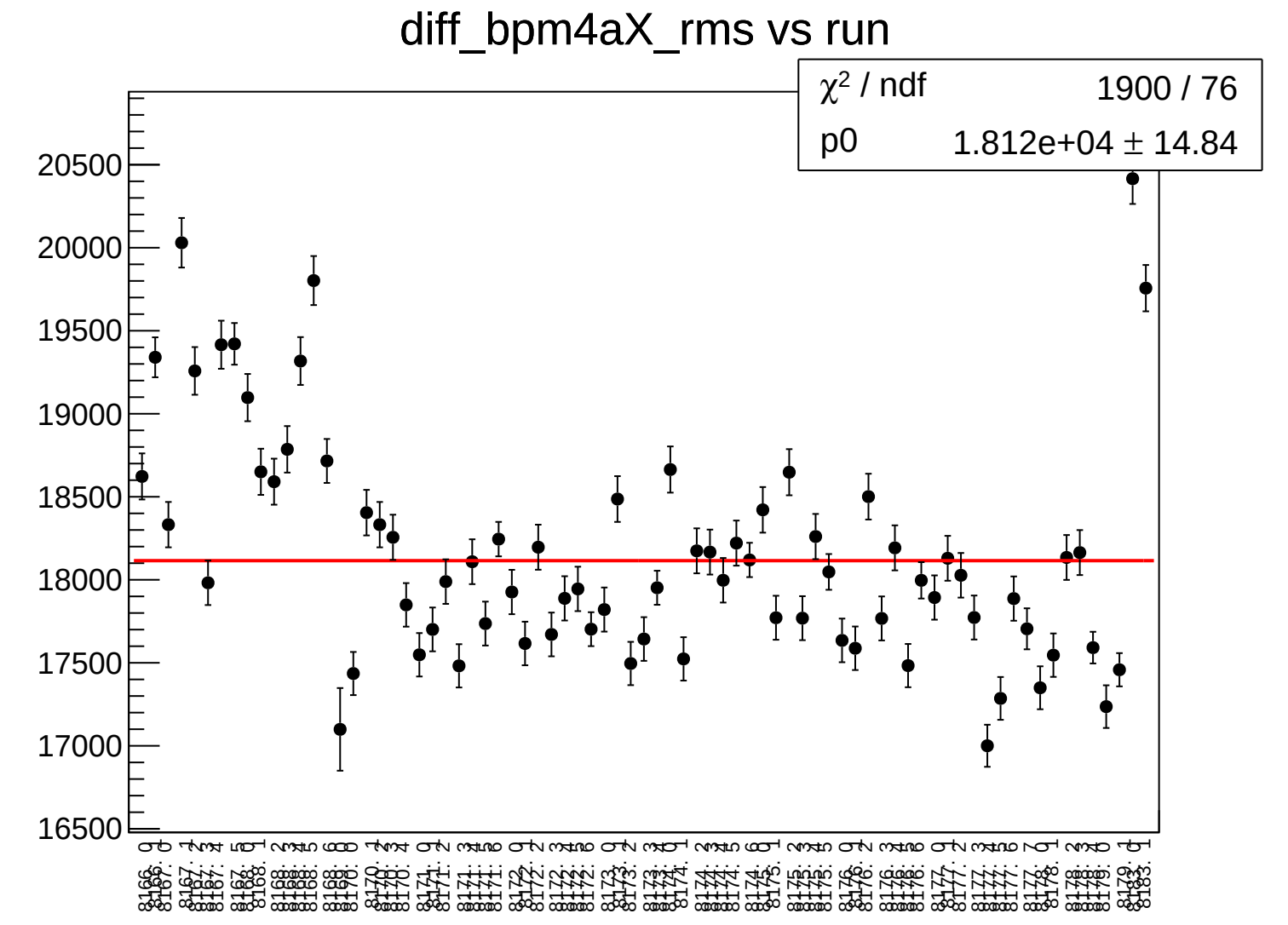
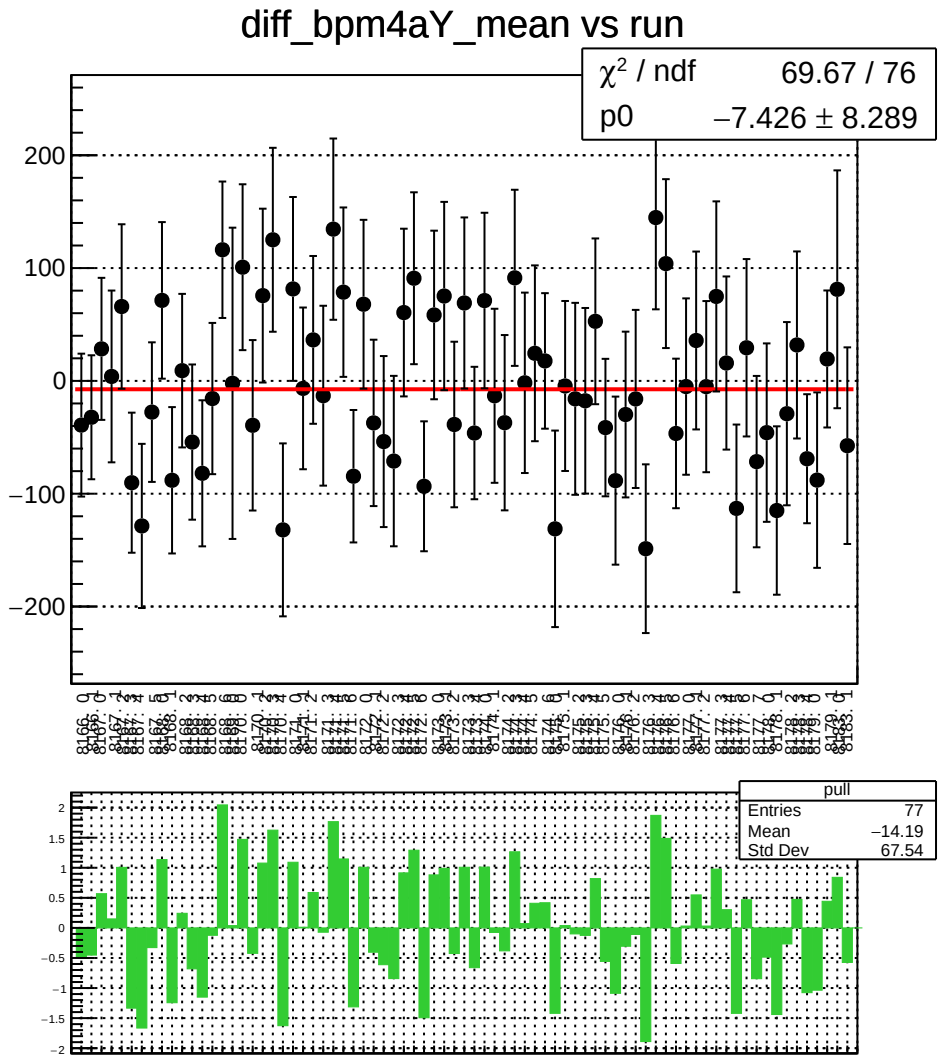
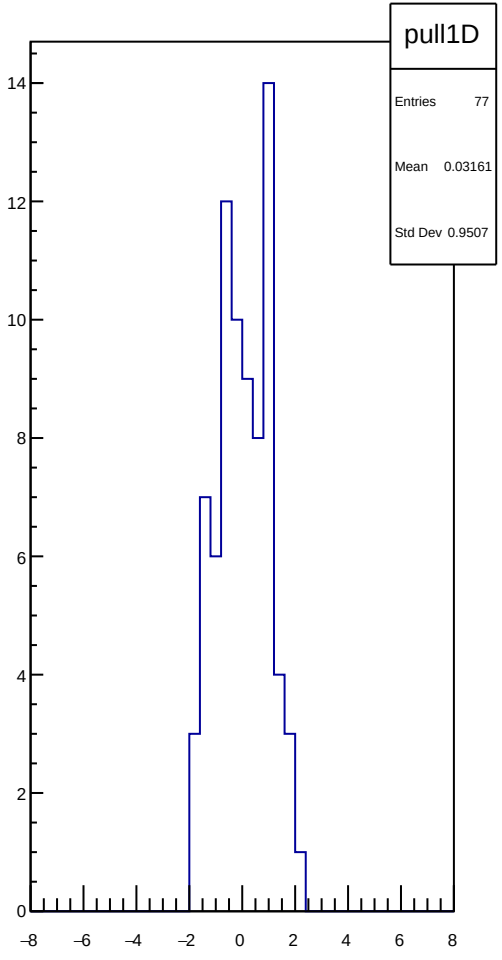
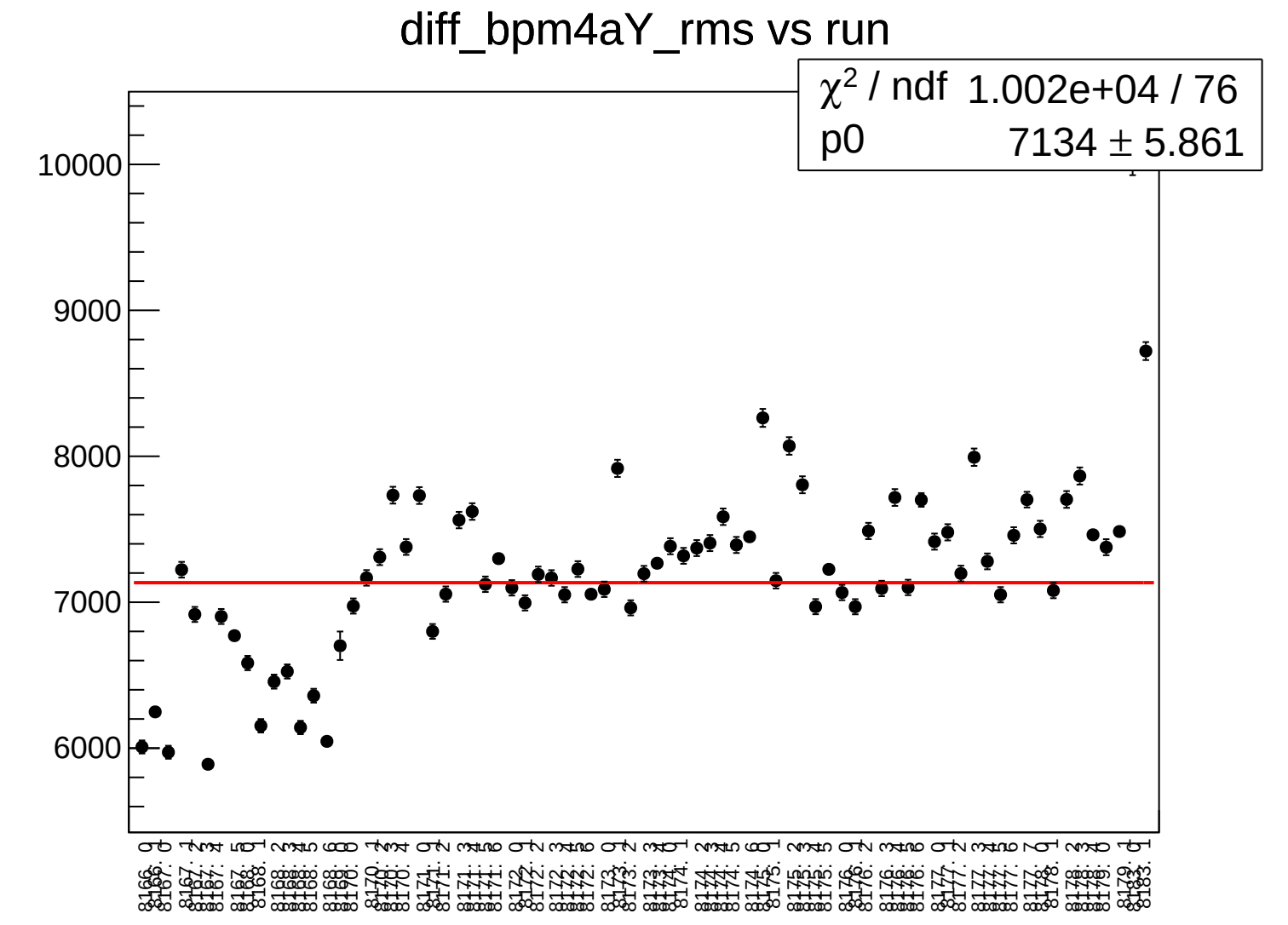

diff_bpm4aX_mean vs run
χ² / ndf 72.04 / 76
p0 −26.97 ± 20.99
pull
Entries 77
Mean 233.8
Std Dev 176.3

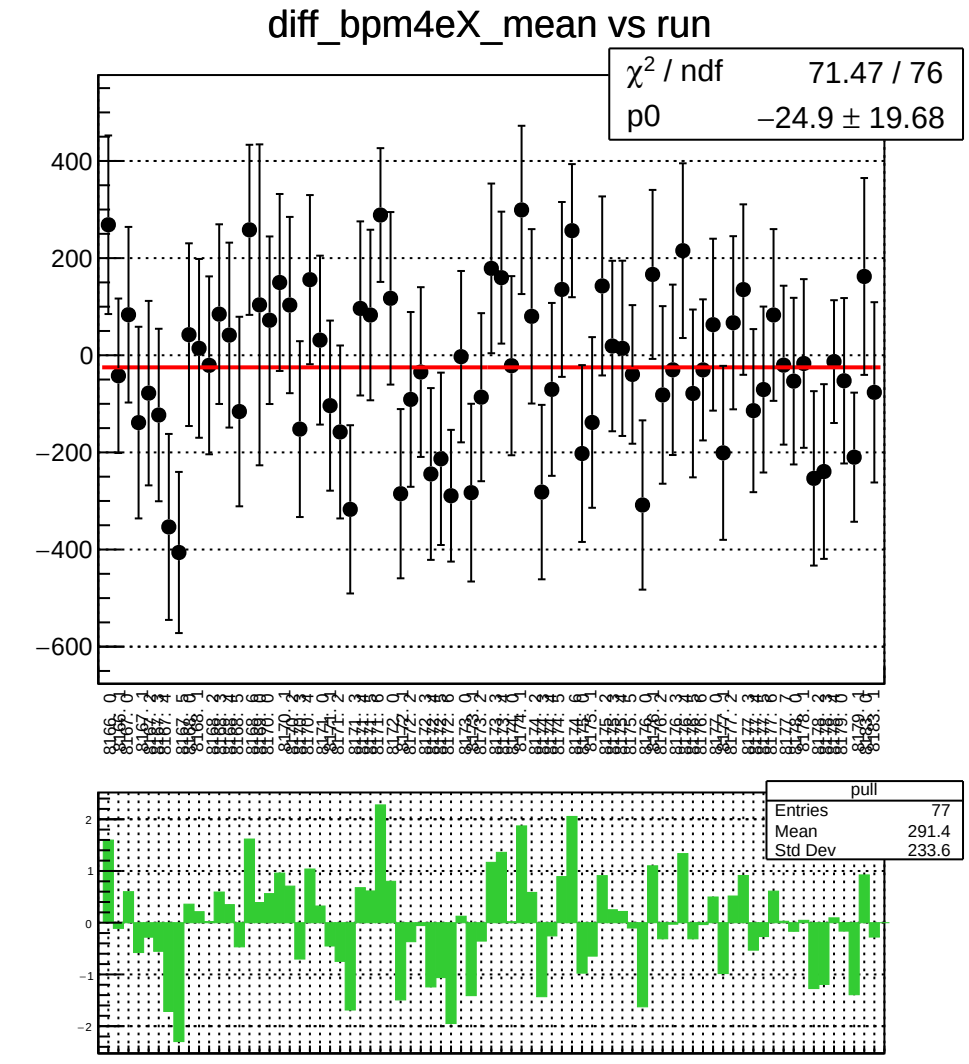

pull1D
Entries 77
Mean −0.004664
Std Dev 0.9672

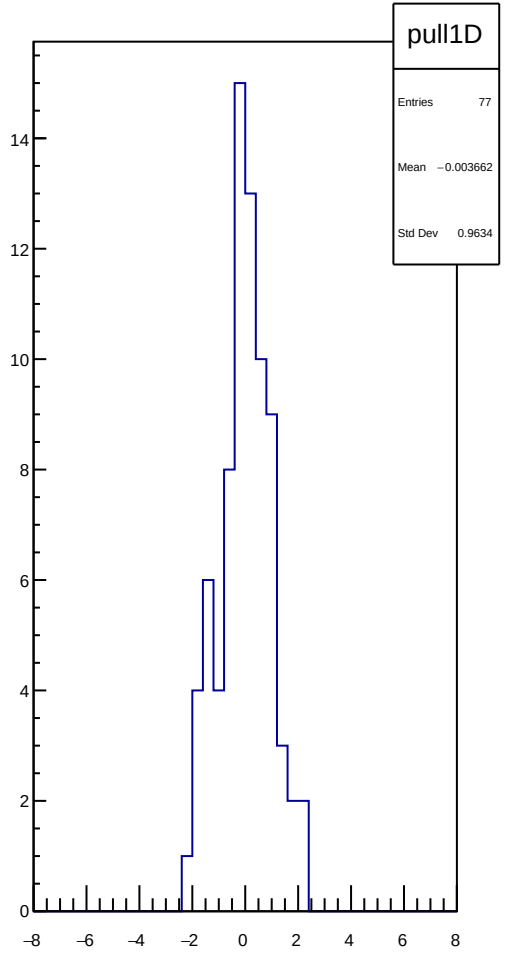

diff_bpm4aX_rms vs run
χ² / ndf 1900 / 76
p0 1.812e+04 ± 14.84
20500
20000
19500
19000
18500
18000
17500
17000
16500

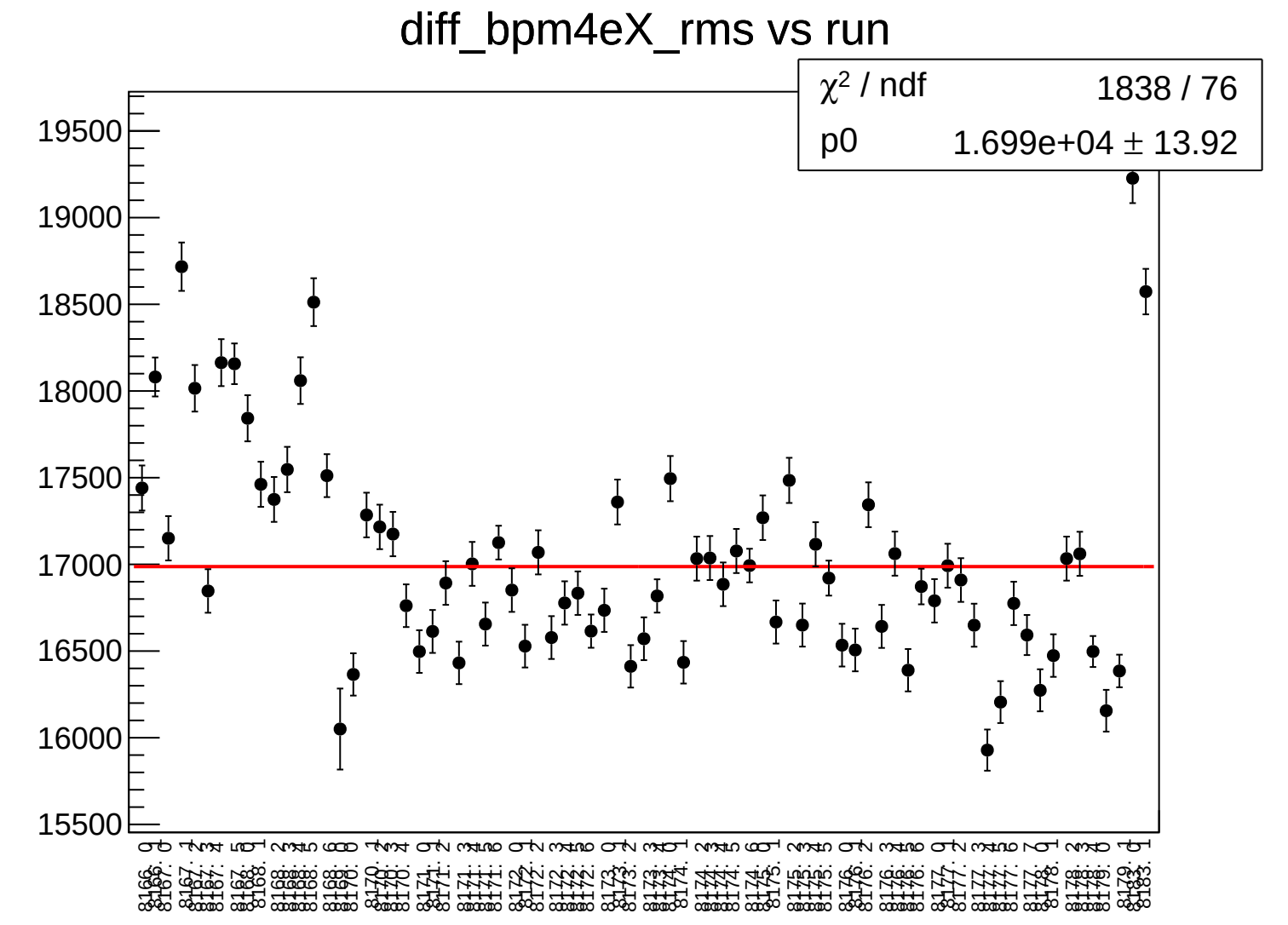

diff_bpm4aY_mean vs run
χ² / ndf 69.67 / 76
p0 −7.426 ± 8.289
200
100
0
−100
−200
pull
Entries 77
Mean −14.19
Std Dev 67.54
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

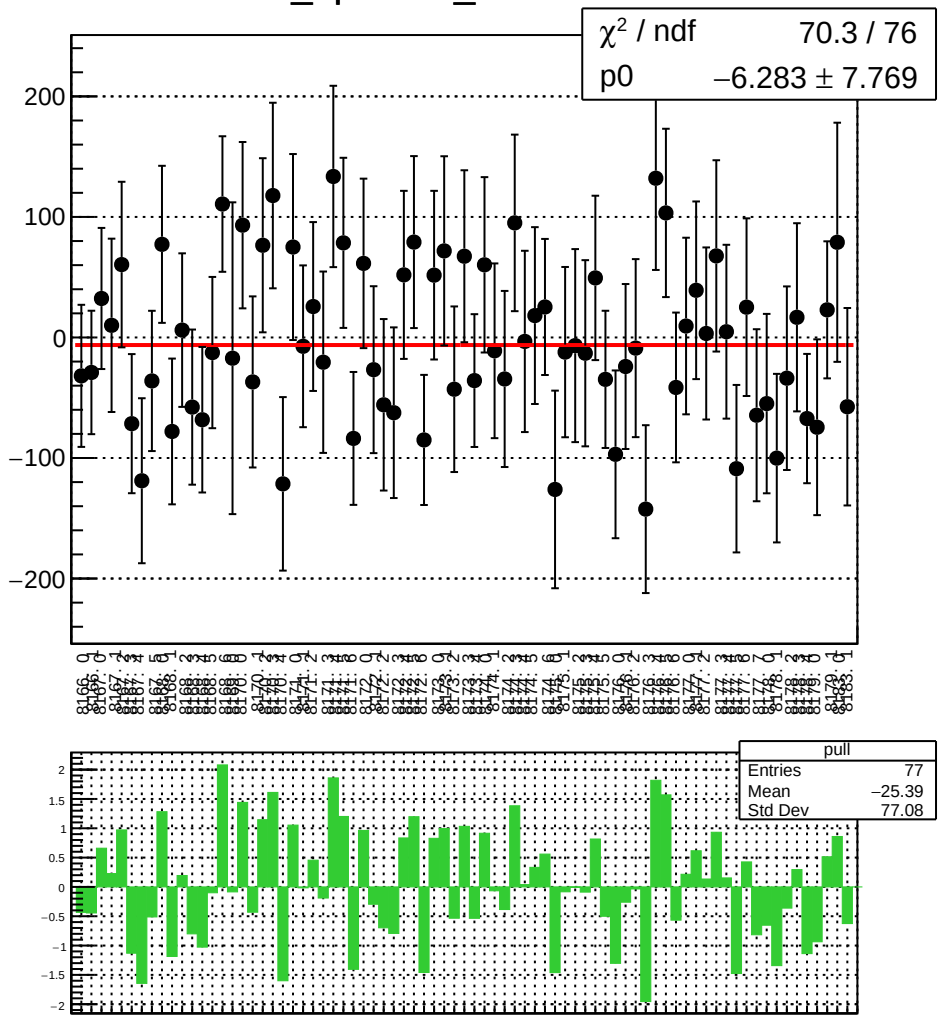

pull1D
Entries 77
Mean 0.03161
Std Dev 0.9507
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

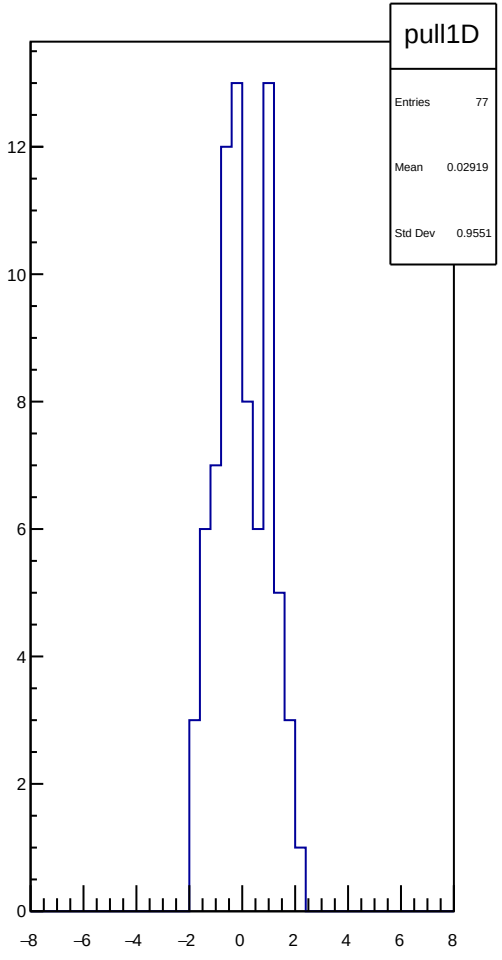

diff_bpm4aY_rms vs run
χ^2 / ndf 1.002e+04 / 76
p0 7134 ± 5.861
10000
9000
8000
7000
6000

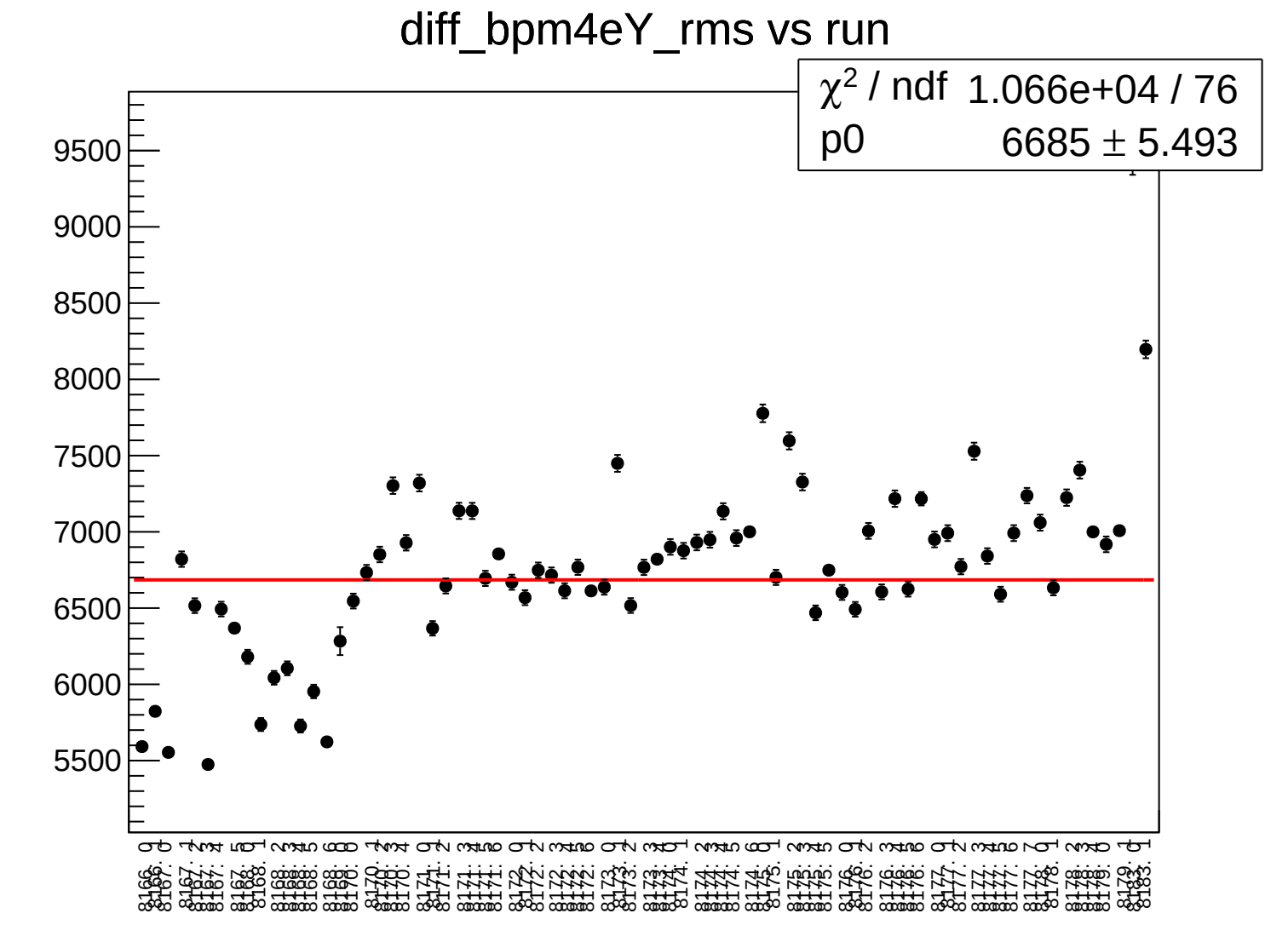

diff_bpm4eX_mean vs run
χ² / ndf 71.47 / 76
p0 −24.9 ± 19.68
400
200
0
−200
−400
−600
pull
Entries 77
Mean 291.4
Std Dev 233.6
2
1
0
−1
−2

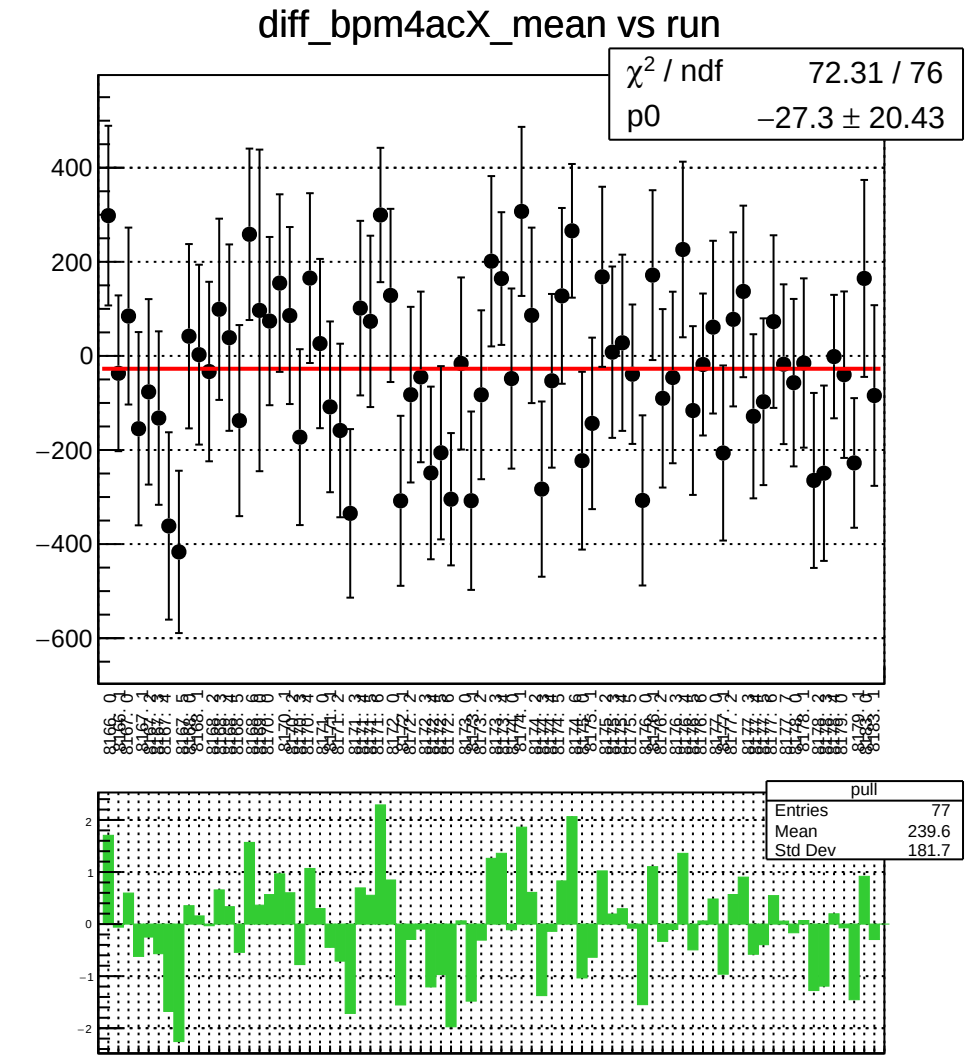

pull1D
Entries 77
Mean −0.003662
Std Dev 0.9634
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

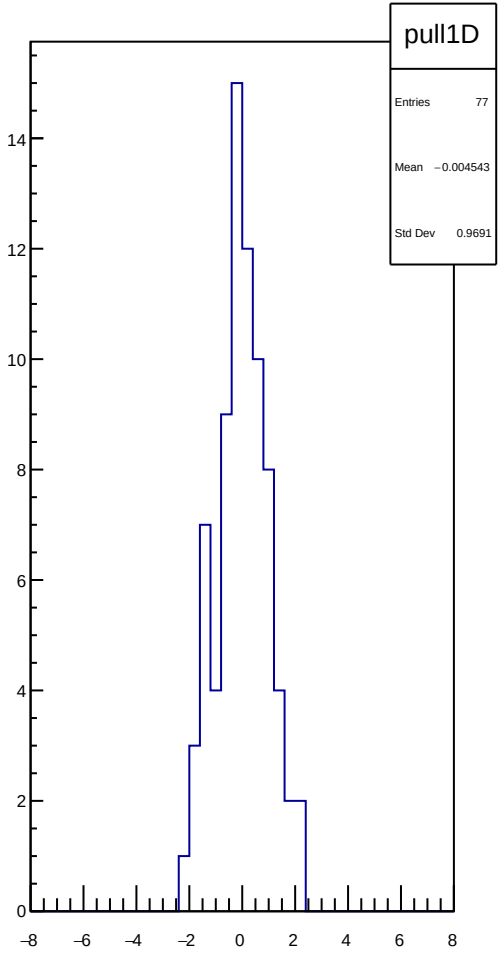

diff_bpm4eX_rms vs run
χ² / ndf 1838 / 76
p0 1.699e+04 ± 13.92
19500
19000
18500
18000
17500
17000
16500
16000
15500

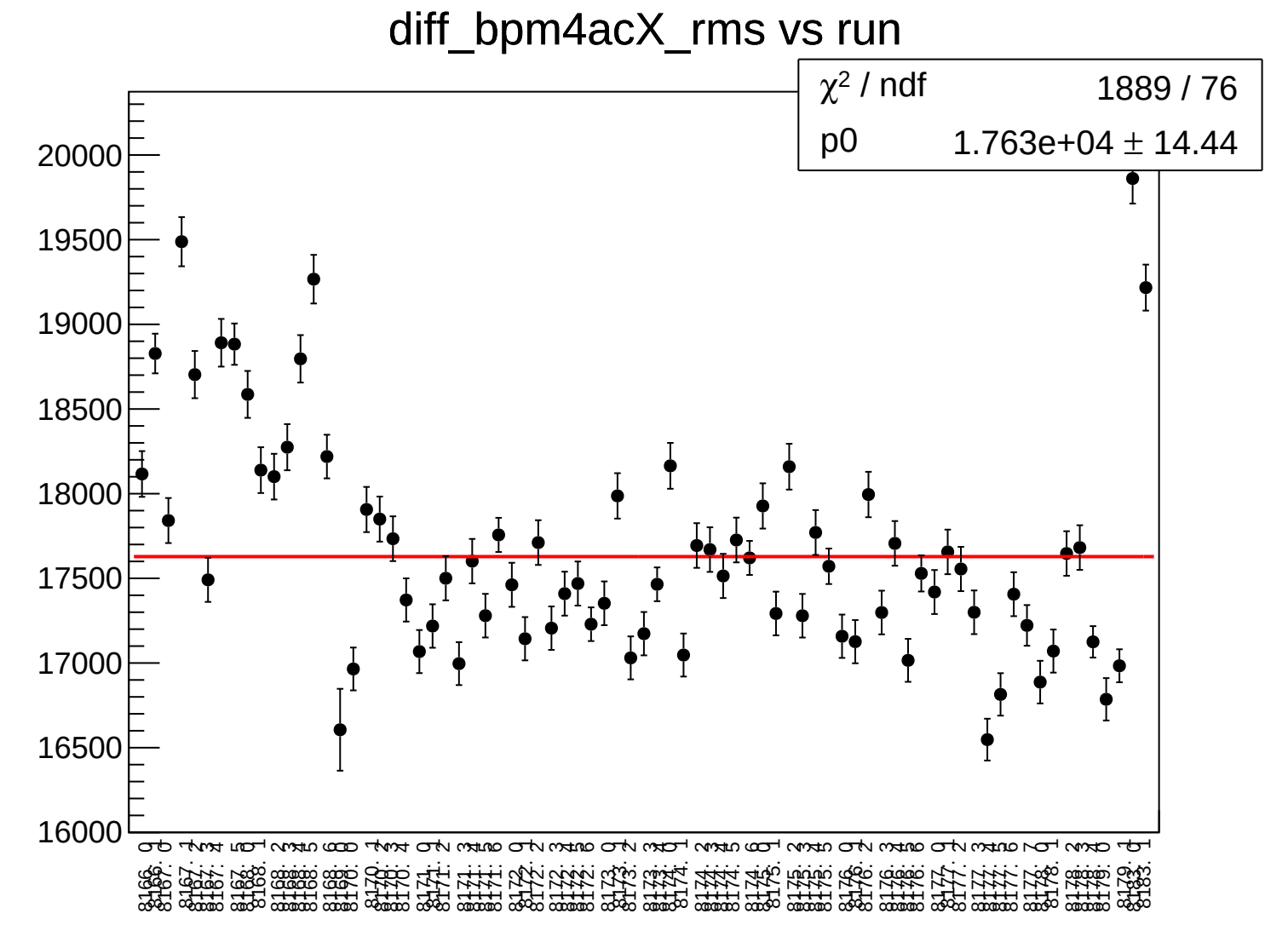

diff_bpm4eY_mean vs run
χ² / ndf 70.3 / 76
p0 −6.283 ± 7.769
200
100
0
−100
−200
pull
Entries 77
Mean −25.39
Std Dev 77.08
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

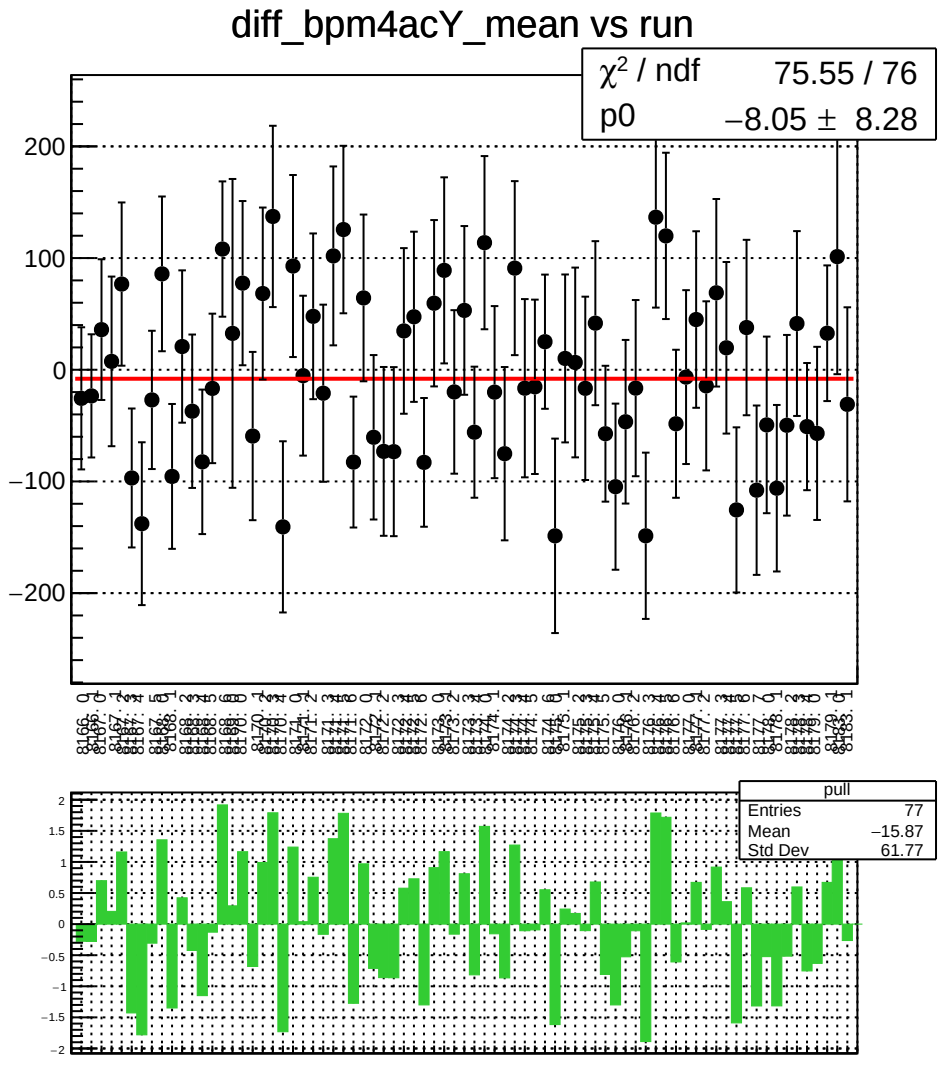

pull1D
Entries 77
Mean 0.02919
Std Dev 0.9551
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

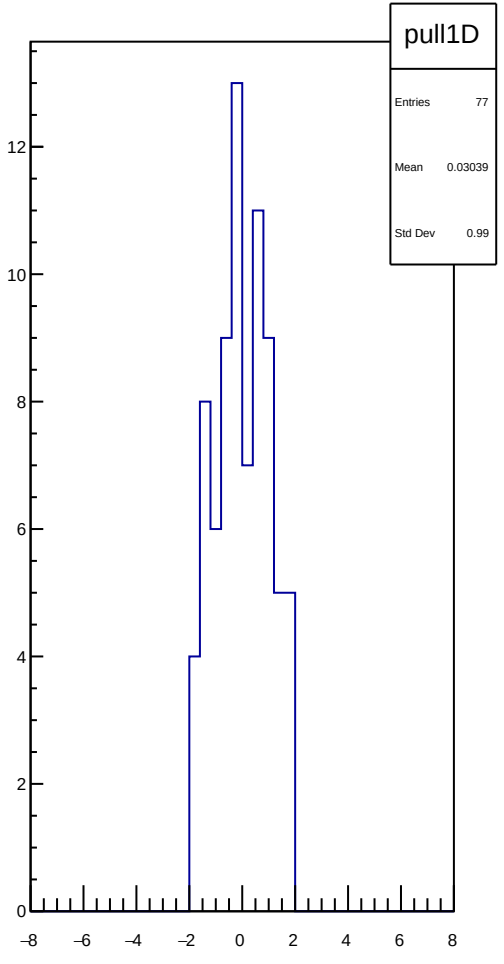

diff_bpm4eY_rms vs run
χ^2 / ndf 1.066e+04 / 76
p0 6685 ± 5.493
9500
9000
8500
8000
7500
7000
6500
6000
5500

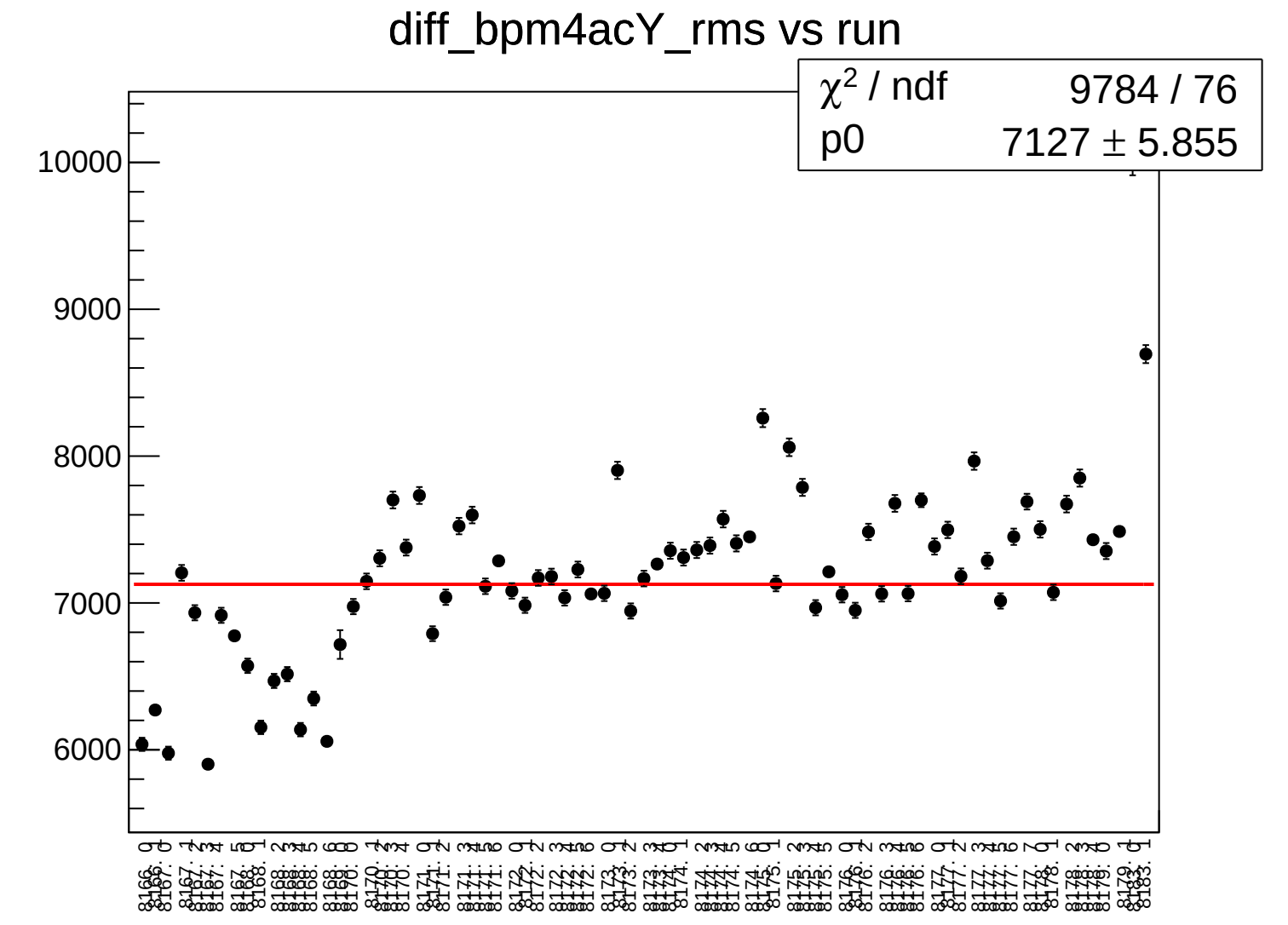

diff_bpm4acX_mean vs run
χ^2 / ndf 72.31 / 76
p0 −27.3 ± 20.43
400
200
0
−200
−400
−600
pull
Entries 77
Mean 239.6
Std Dev 181.7
2
1
0
−1
−2

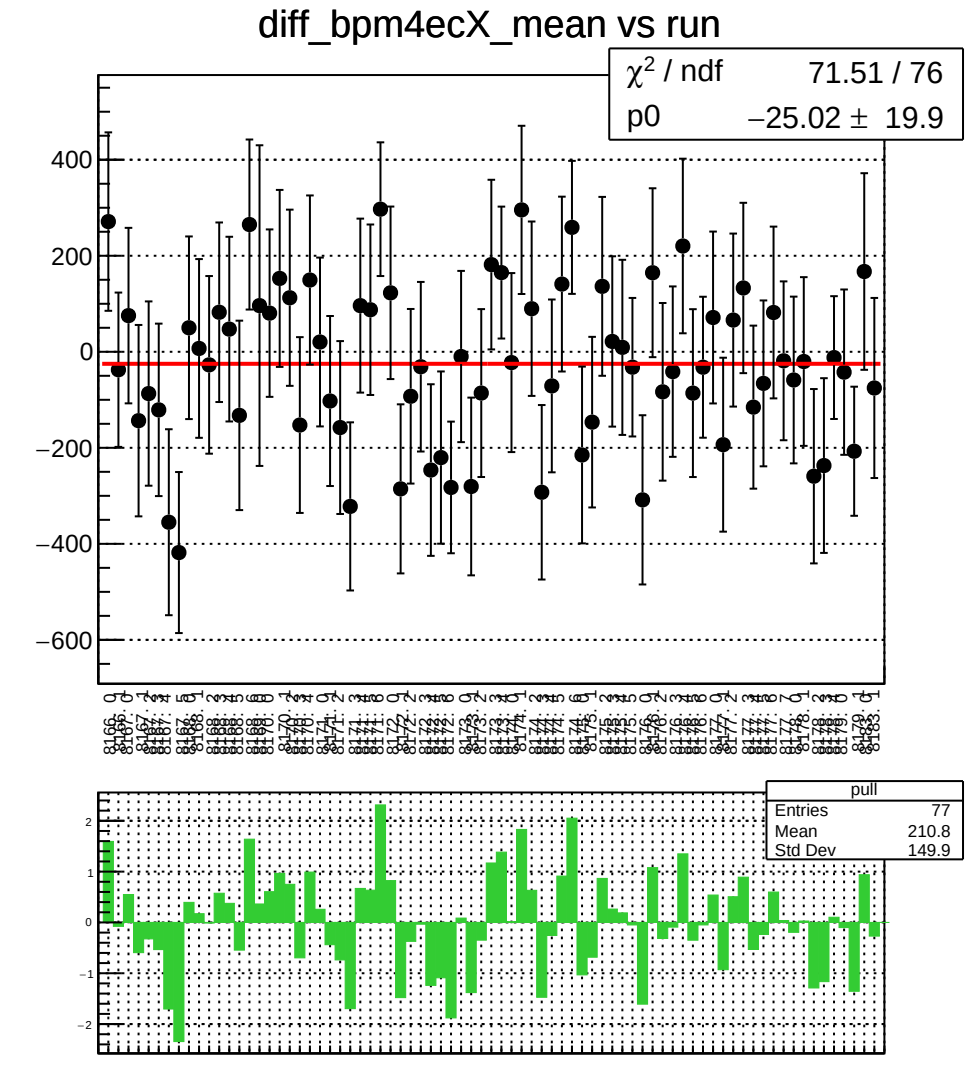

pull1D
Entries 77
Mean −0.004543
Std Dev 0.9691
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

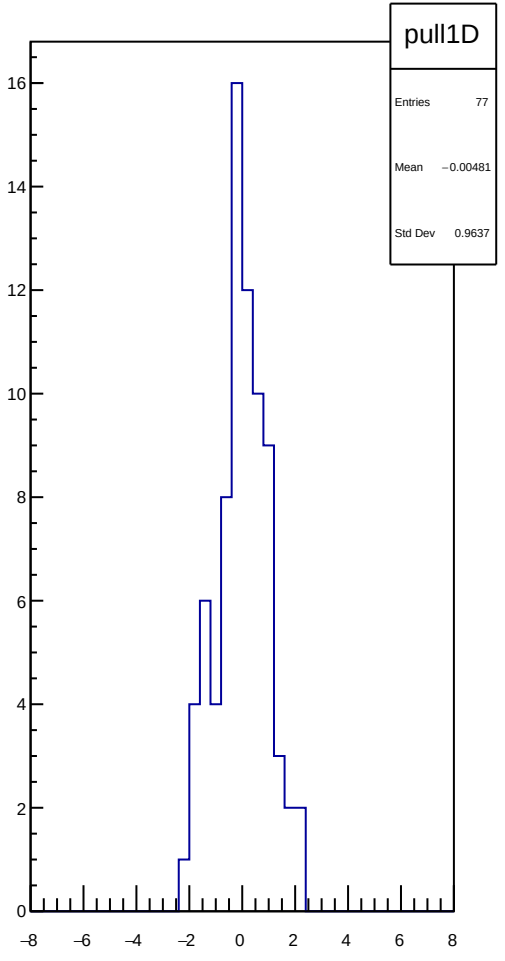

diff_bpm4acX_rms vs run
χ² / ndf 1889 / 76
p0 1.763e+04 ± 14.44
20000
19500
19000
18500
18000
17500
17000
16500
16000

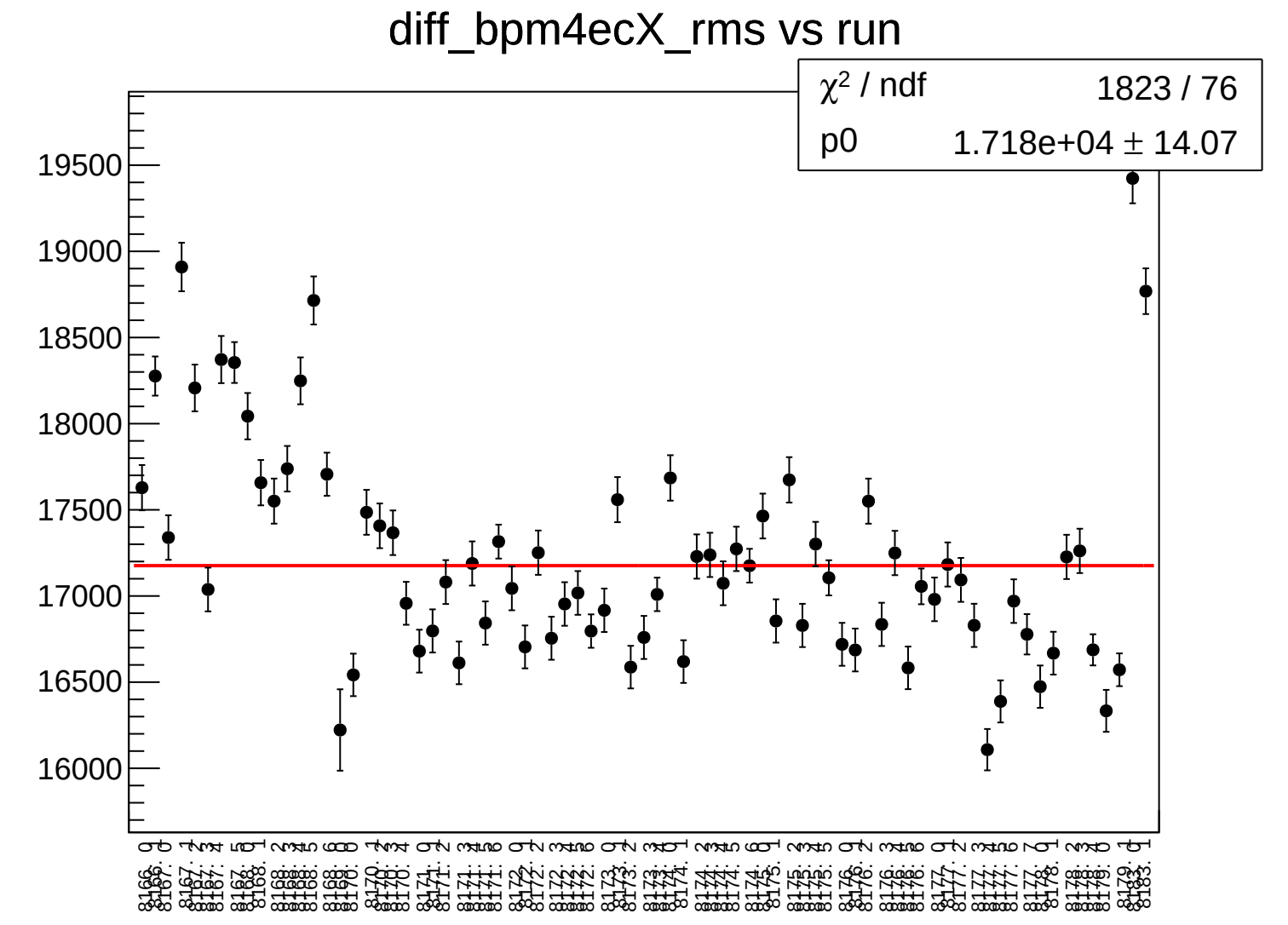

diff_bpm4acY_mean vs run
χ² / ndf 75.55 / 76
p0 −8.05 ± 8.28
200
100
0
−100
−200
pull
Entries 77
Mean −15.87
Std Dev 61.77
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

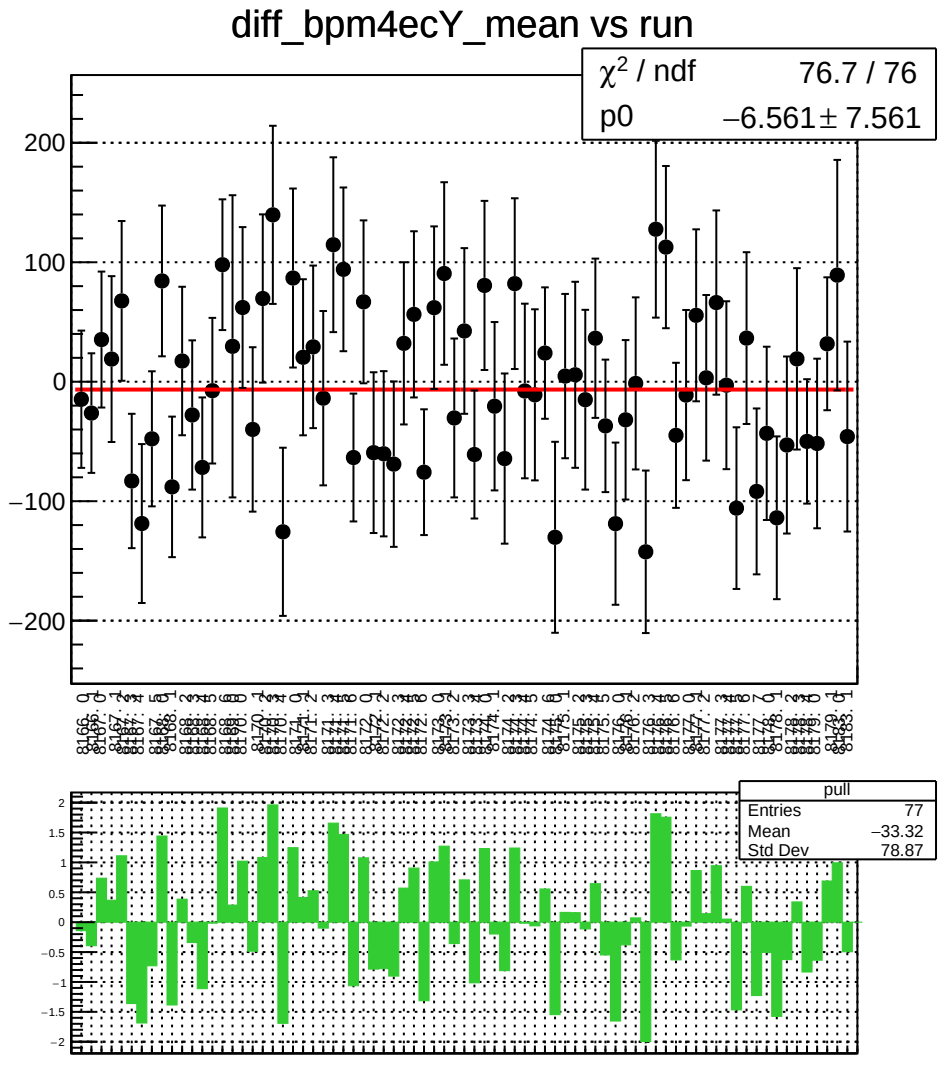

pull1D
Entries 77
Mean 0.03039
Std Dev 0.99
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

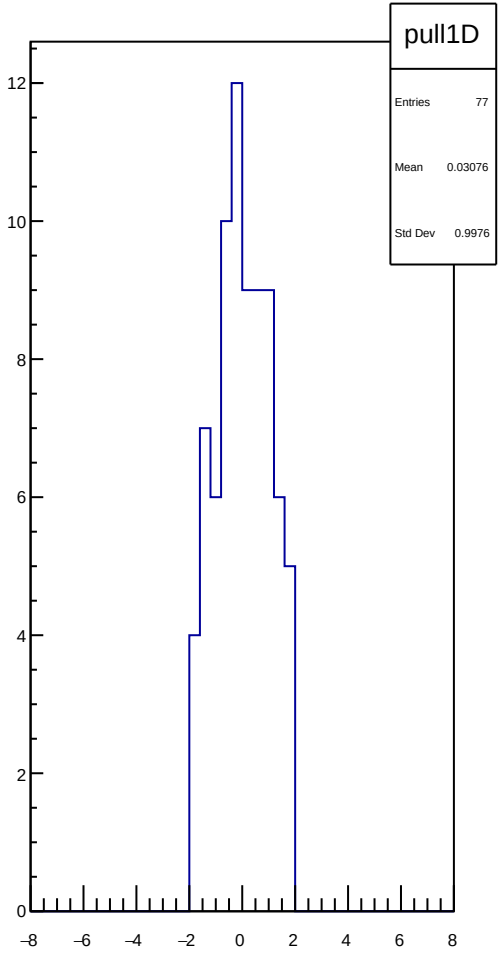

diff_bpm4acY_rms vs run
χ^2 / ndf 9784 / 76
p0 7127 ± 5.855
10000
9000
8000
7000
6000

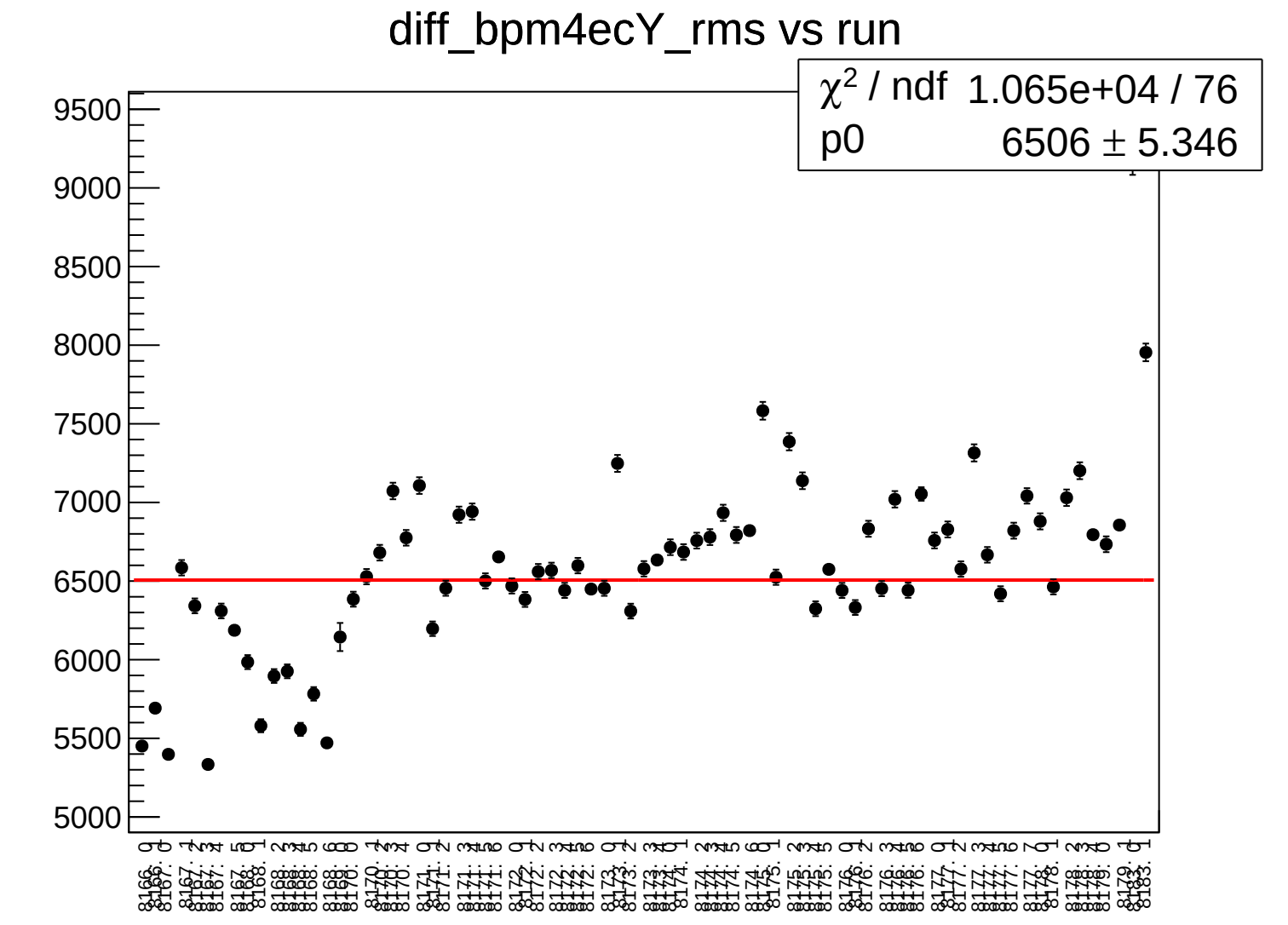

diff_bpm4ecX_mean vs run
χ² / ndf 71.51 / 76
p0 −25.02 ± 19.9
400
200
0
−200
−400
−600
pull
Entries 77
Mean 210.8
Std Dev 149.9
2
1
0
−1
−2

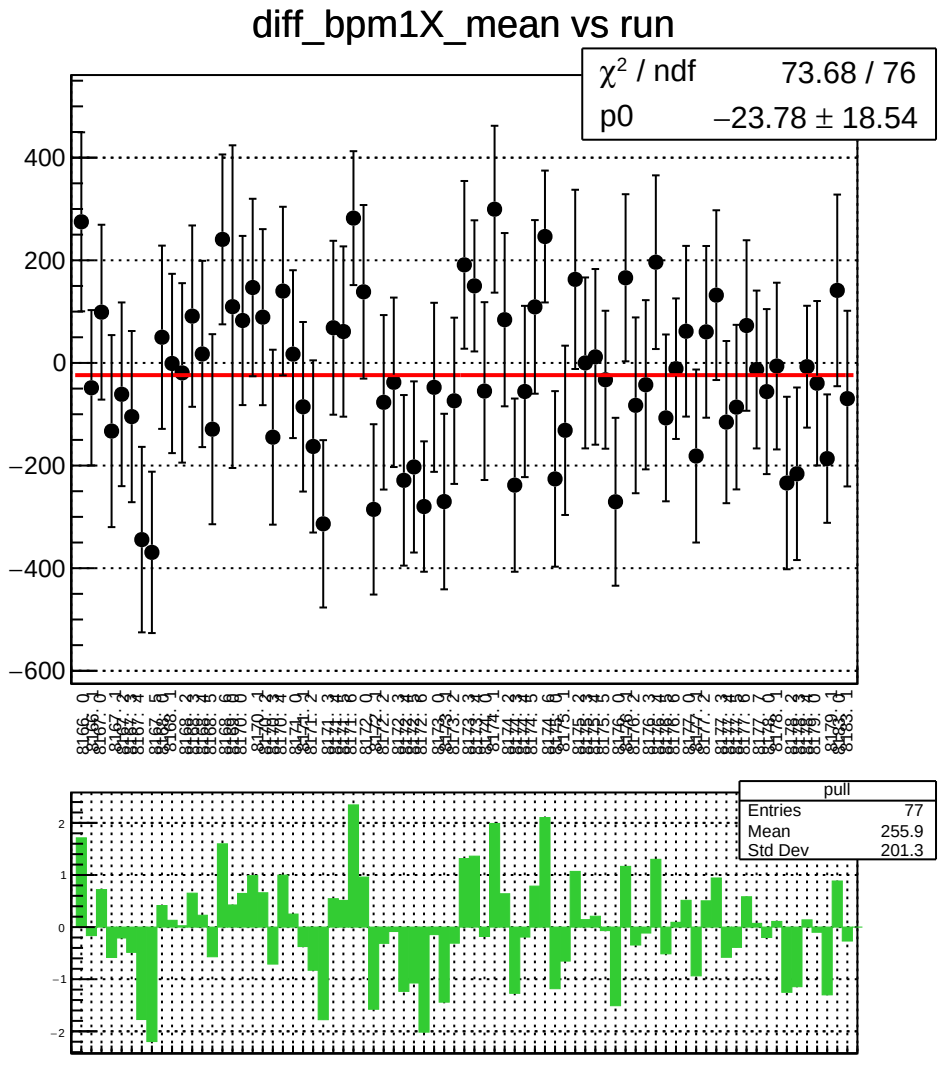

pull1D
Entries 77
Mean −0.00481
Std Dev 0.9637
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

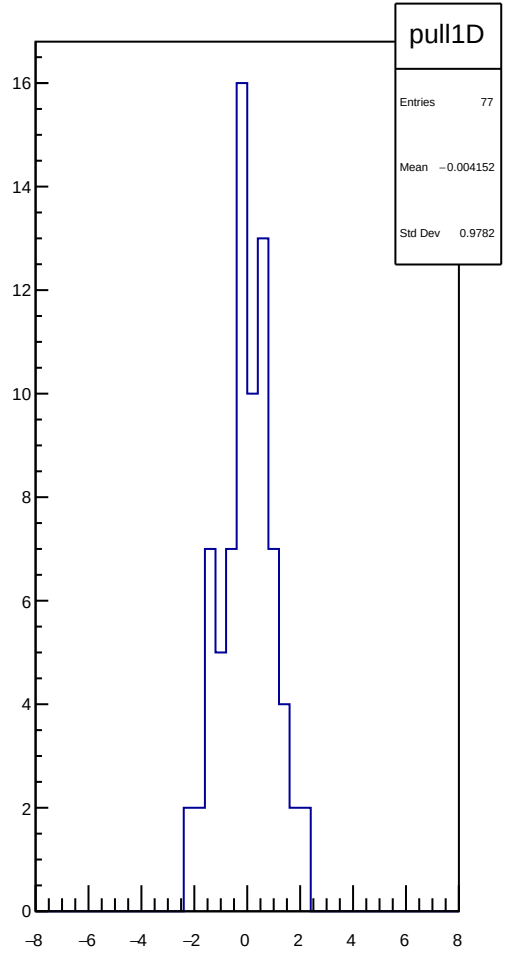

diff_bpm4ecX_rms vs run
χ² / ndf 1823 / 76
p0 1.718e+04 ± 14.07
19500
19000
18500
18000
17500
17000
16500
16000

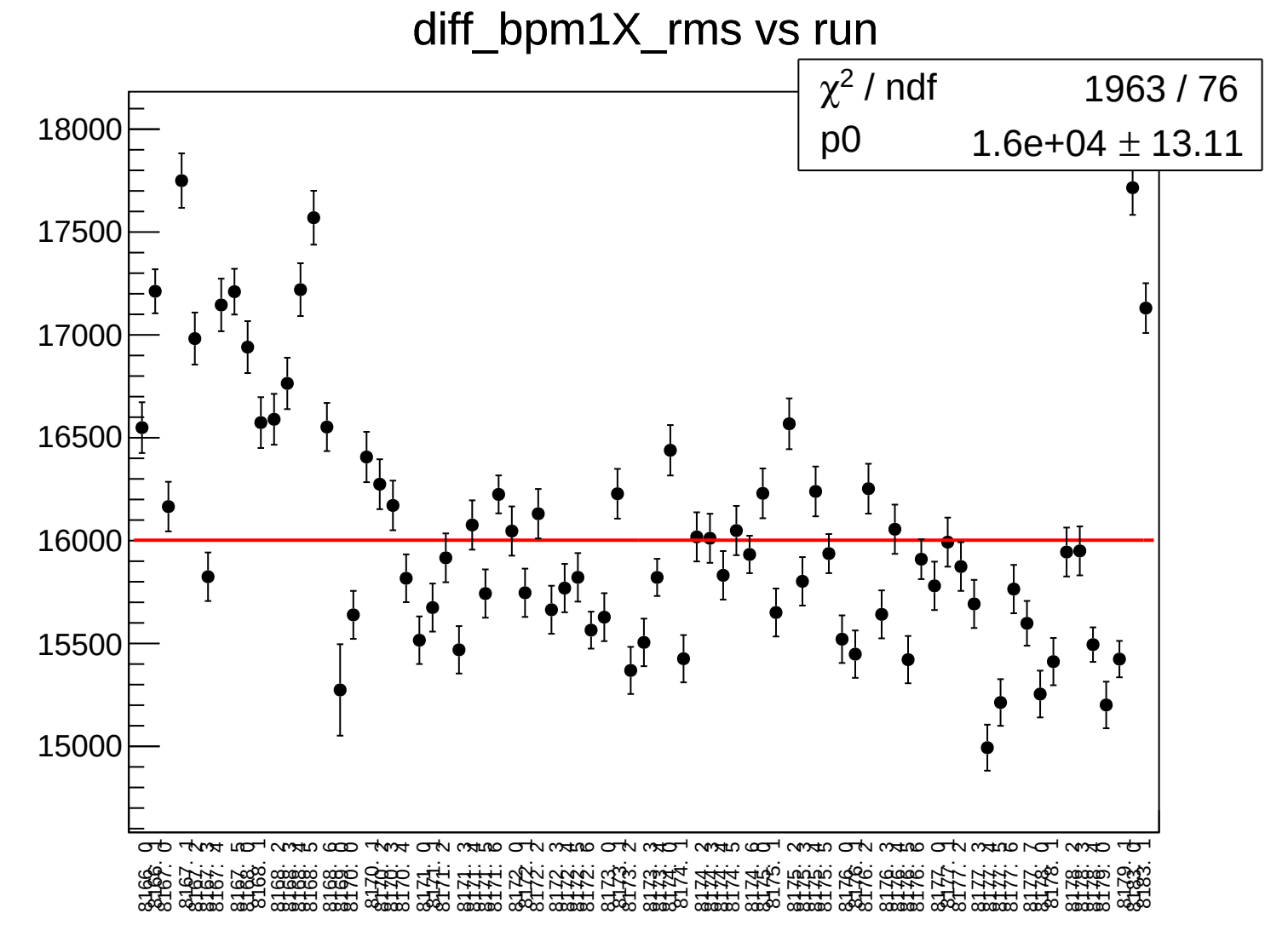

diff_bpm4ecY_mean vs run
χ² / ndf 76.7 / 76
p0 −6.561 ± 7.561
pull
Entries 77
Mean −33.32
Std Dev 78.87

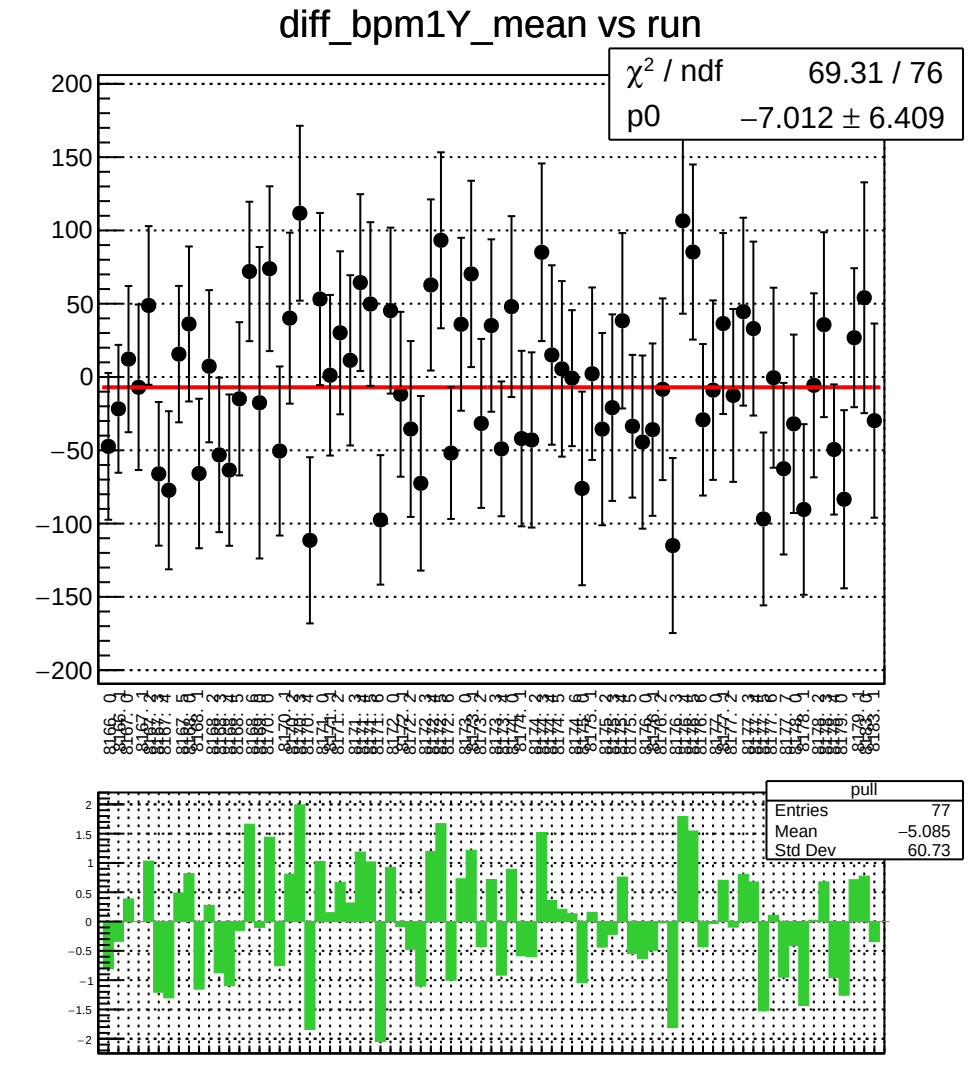

pull1D
Entries 77
Mean 0.03076
Std Dev 0.9976

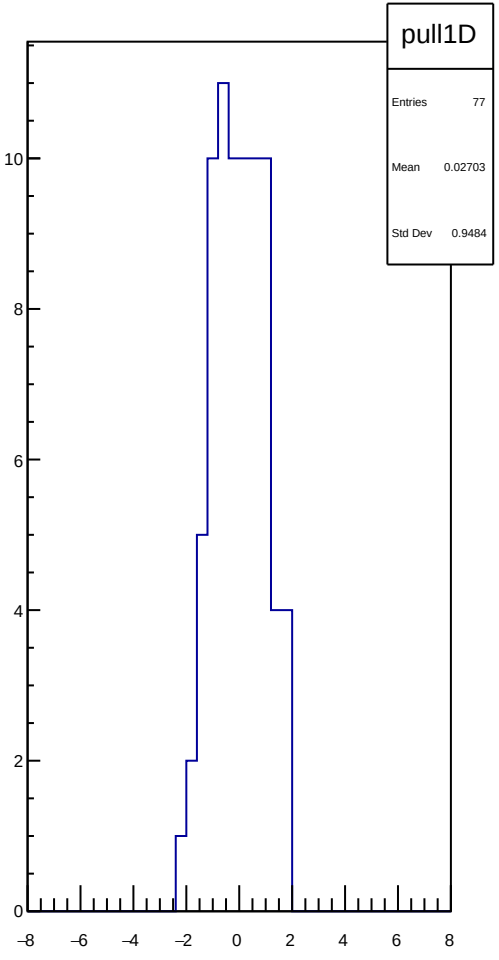

diff_bpm4ecY_rms vs run
χ^2 / ndf 1.065e+04 / 76
p0 6506 ± 5.346
9500
9000
8500
8000
7500
7000
6500
6000
5500
5000

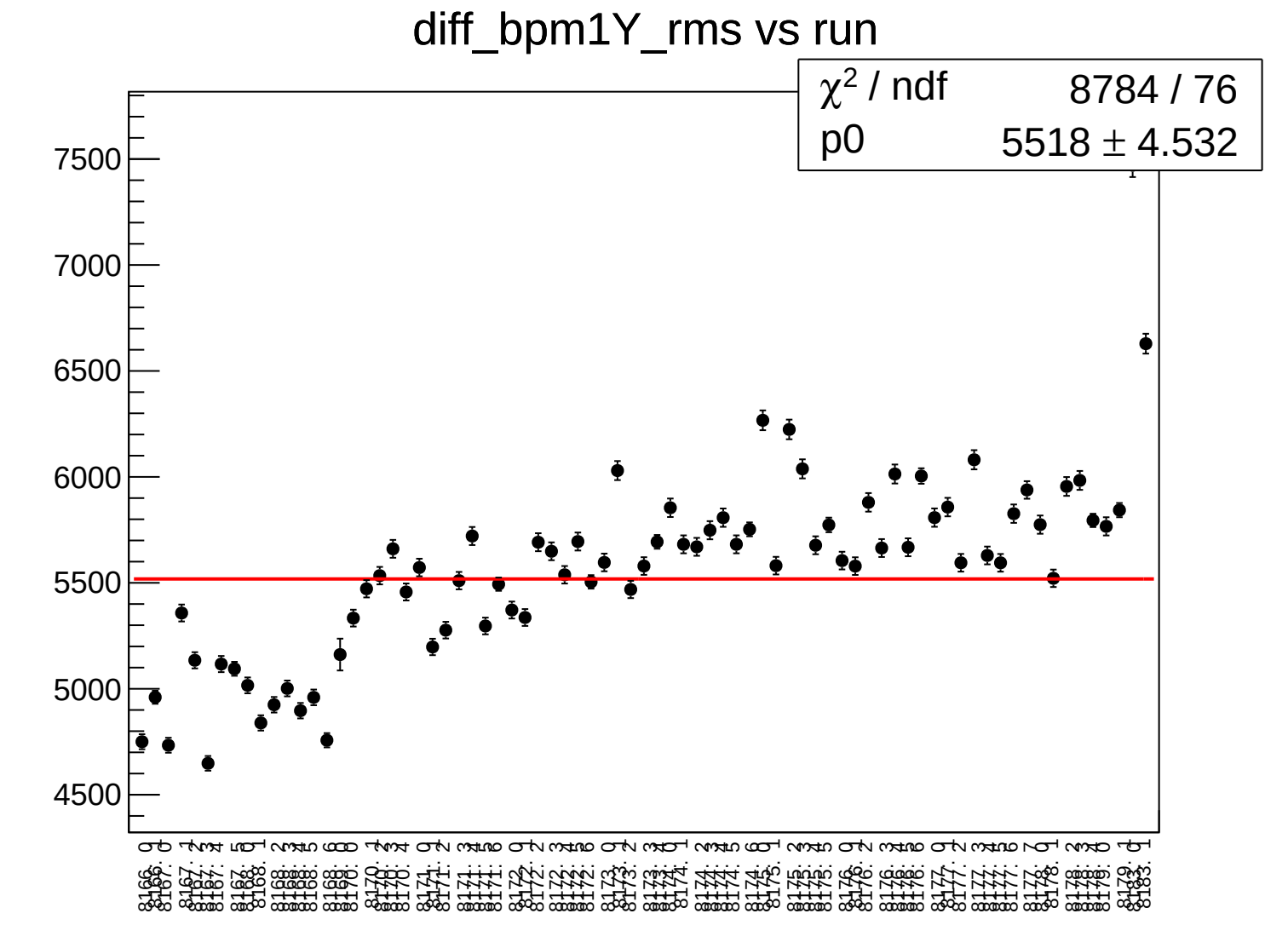

diff_bpm1X_mean vs run
χ² / ndf 73.68 / 76
p0 −23.78 ± 18.54
400
200
0
−200
−400
−600
pull
Entries 77
Mean 255.9
Std Dev 201.3
2
1
0
−1
−2

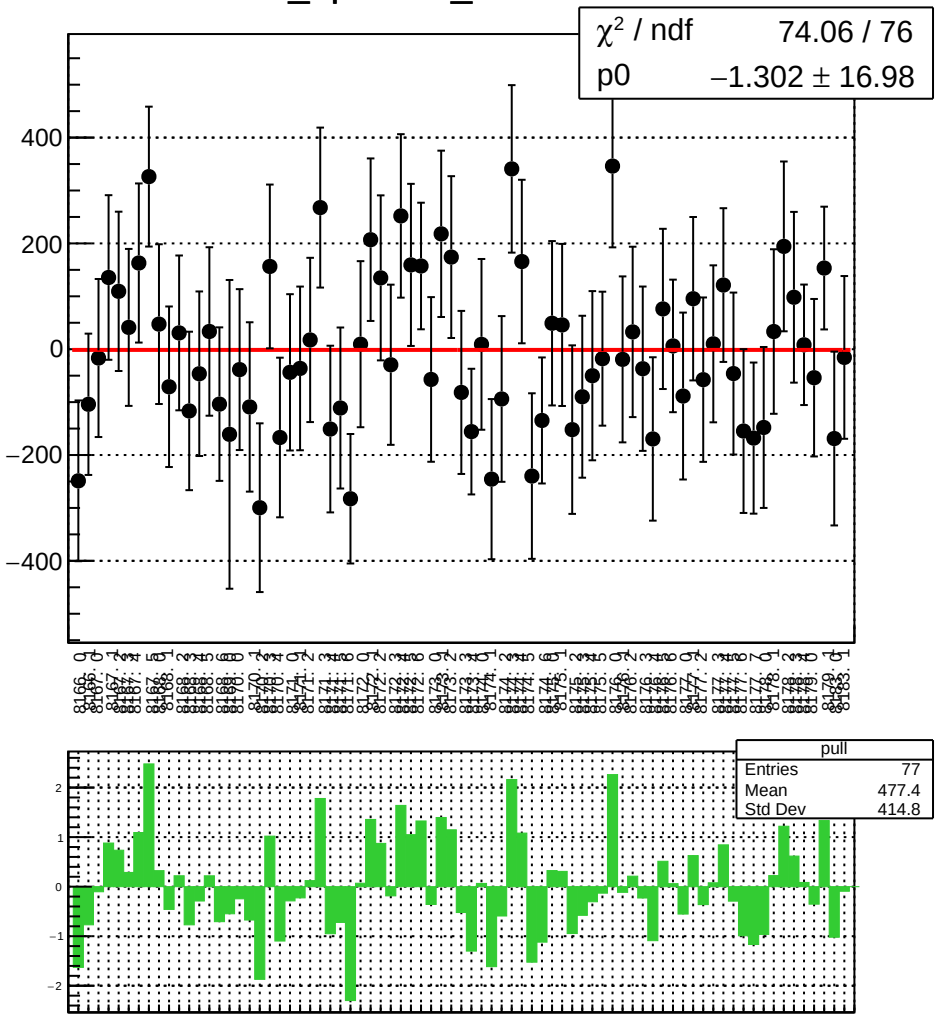

pull1D
Entries 77
Mean −0.004152
Std Dev 0.9782
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

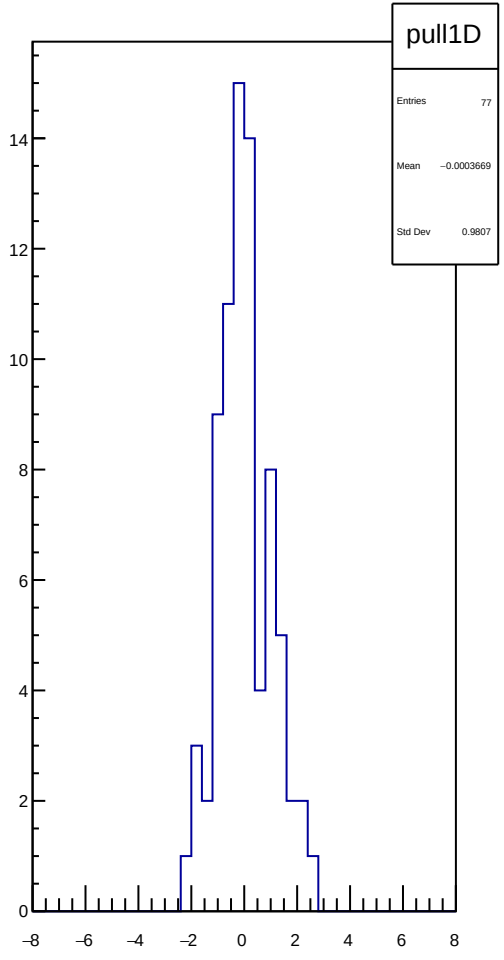

diff_bpm1X_rms vs run
χ² / ndf 1963 / 76
p0 1.6e+04 ± 13.11
18000
17500
17000
16500
16000
15500
15000

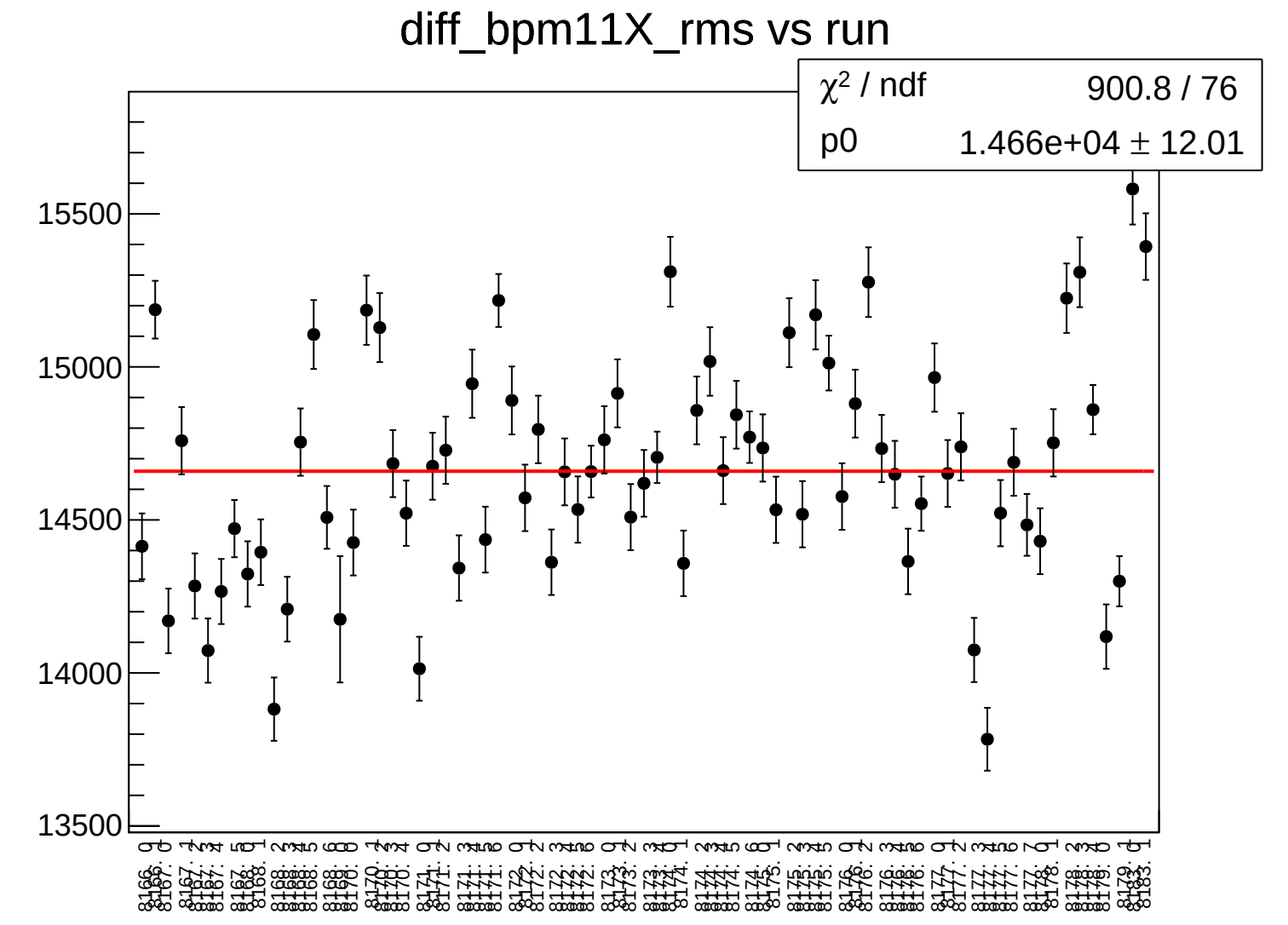

diff_bpm1Y_mean vs run
χ² / ndf 69.31 / 76
p0 −7.012 ± 6.409
pull
Entries 77
Mean −5.085
Std Dev 60.73

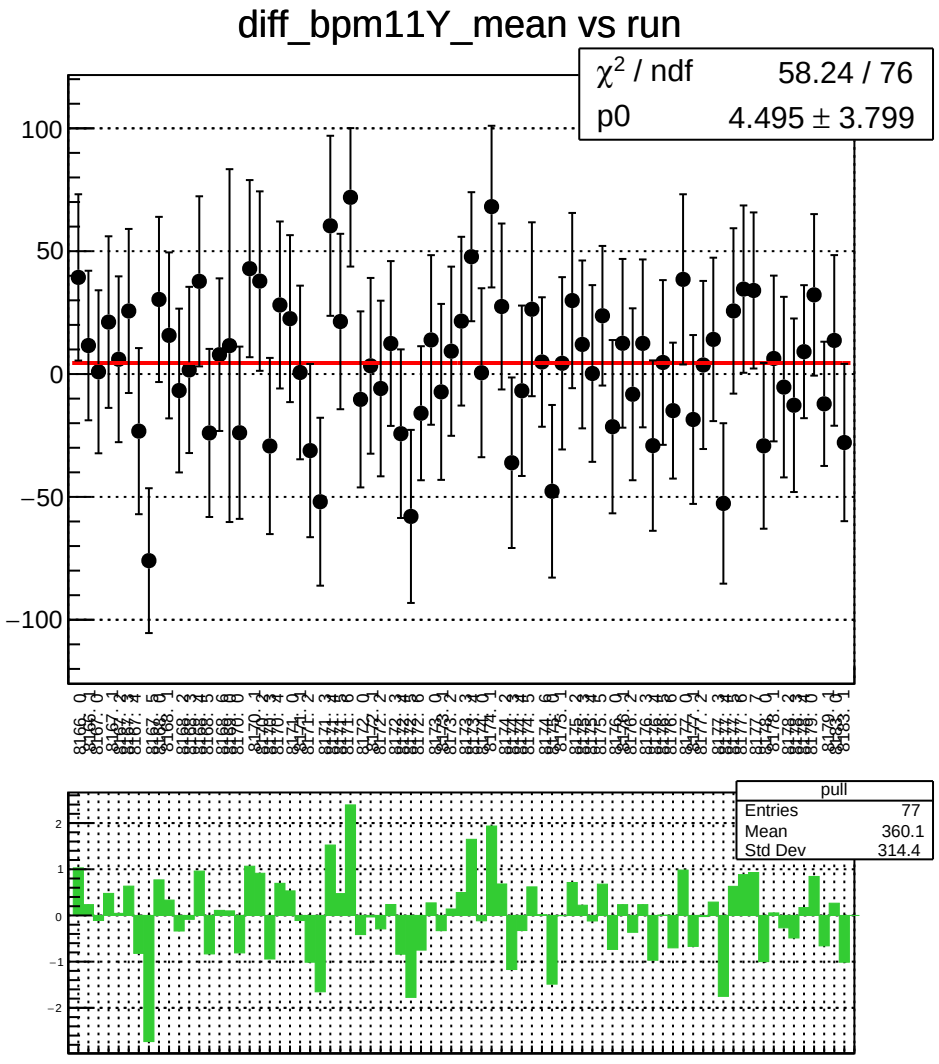

pull1D
Entries 77
Mean 0.02703
Std Dev 0.9484

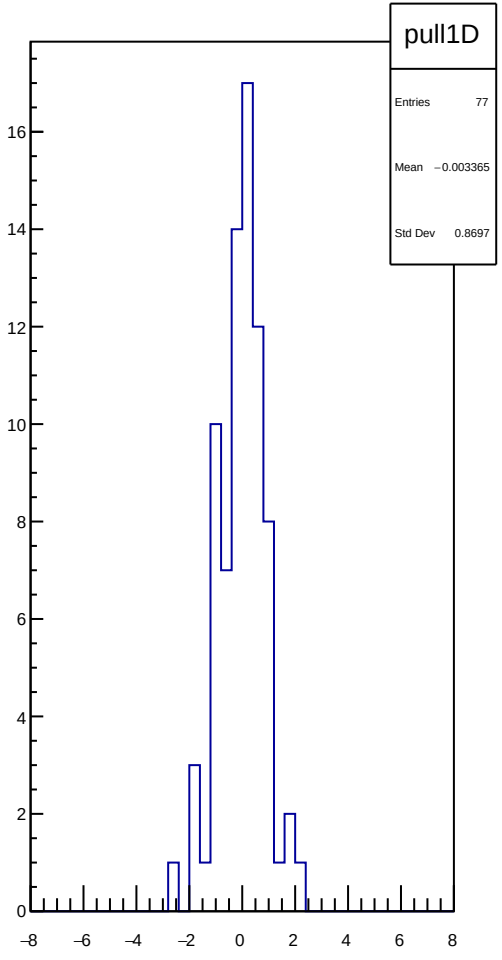

diff_bpm1Y_rms vs run
χ² / ndf 8784 / 76
p0 5518 ± 4.532
7500
7000
6500
6000
5500
5000
4500

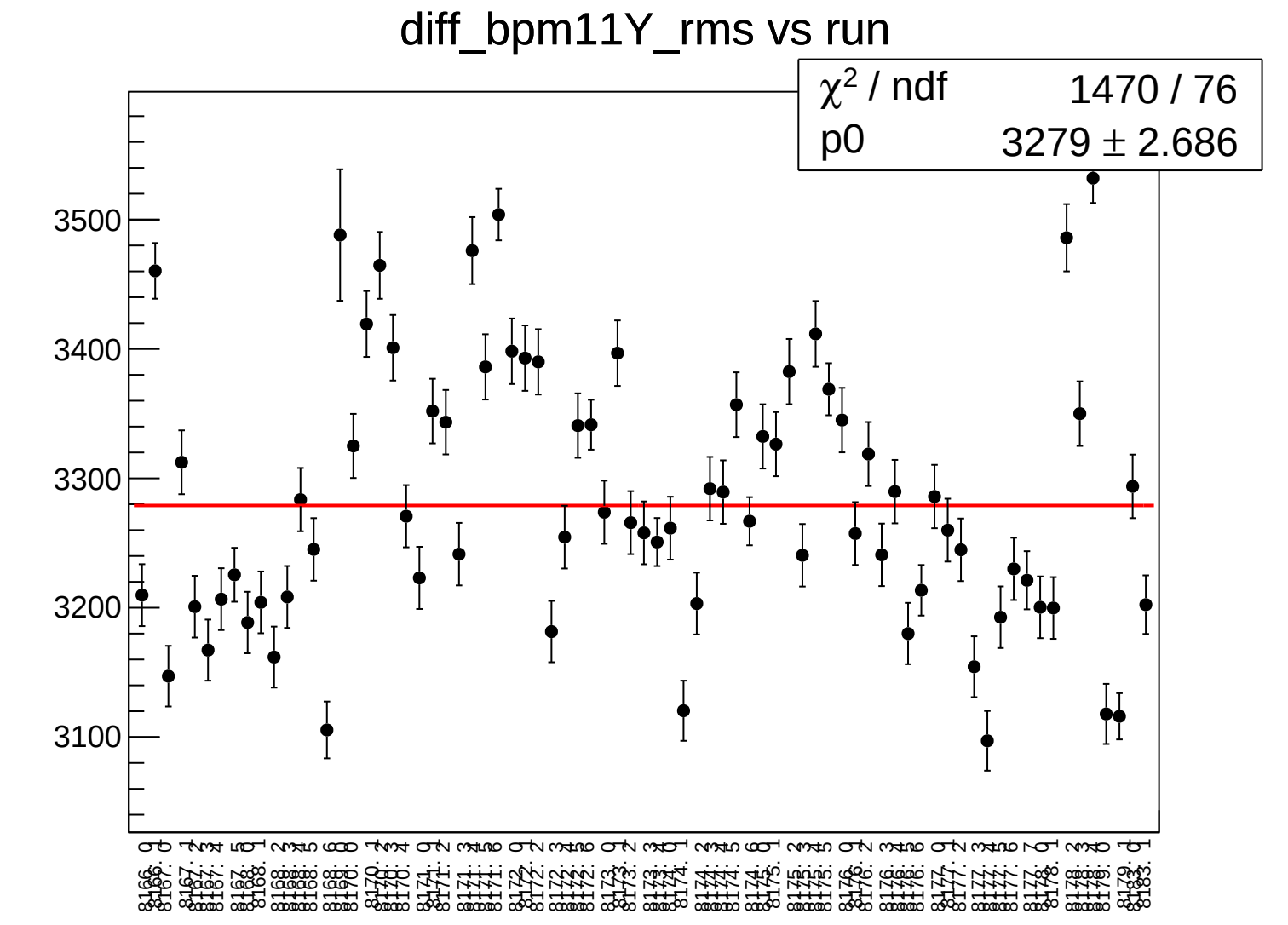

diff_bpm11X_mean vs run
χ² / ndf 74.06 / 76
p0 −1.302 ± 16.98
400
200
0
−200
−400
pull
Entries 77
Mean 477.4
Std Dev 414.8
2
1
0
−1
−2

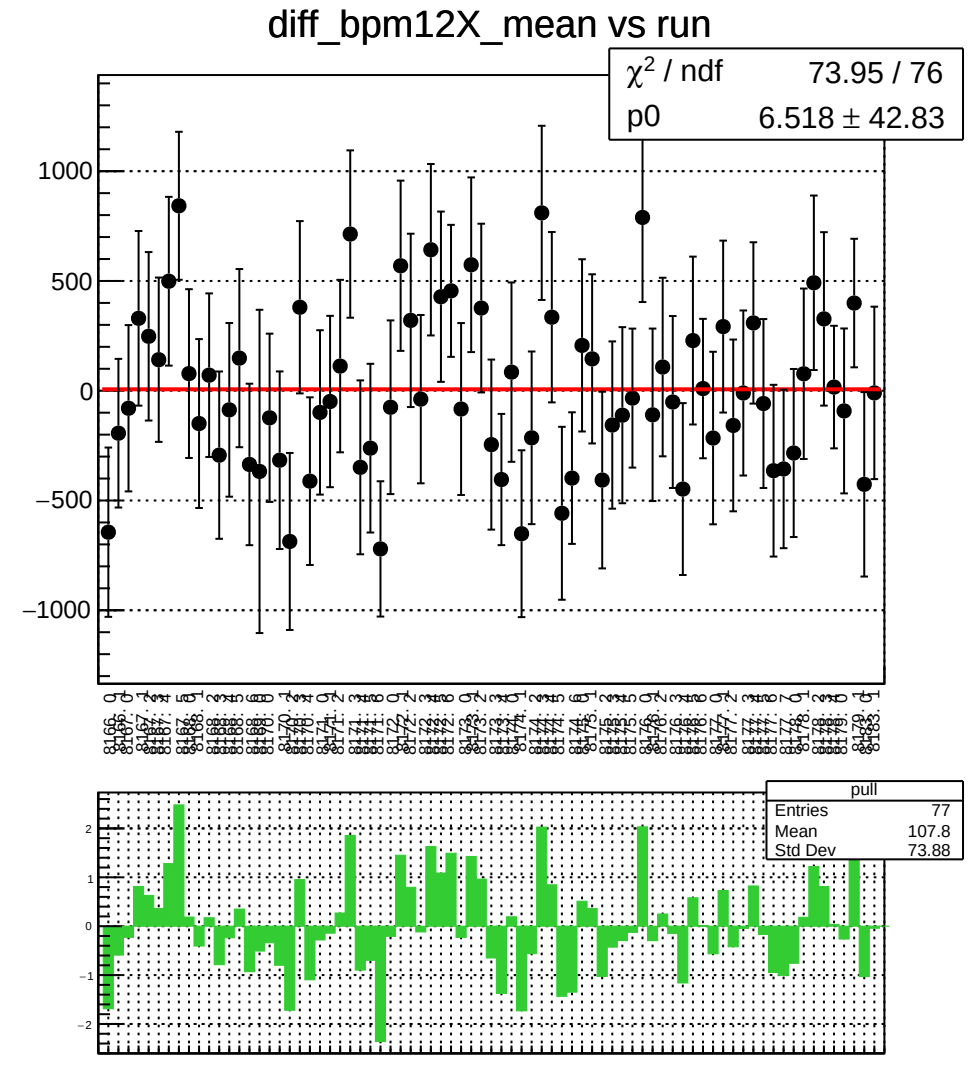

pull1D
Entries 77
Mean −0.0003669
Std Dev 0.9807
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

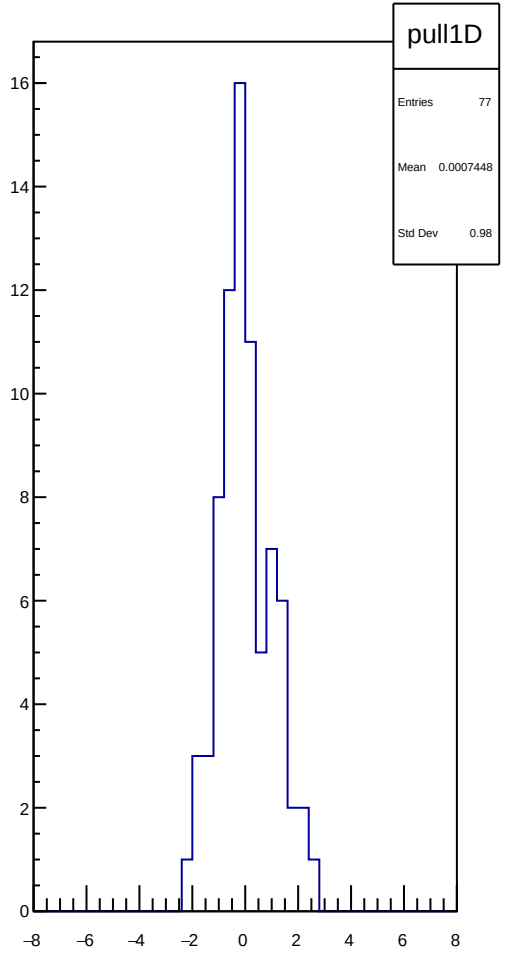

diff_bpm11X_rms vs run
χ² / ndf 900.8 / 76
p0 1.466e+04 ± 12.01
15500
15000
14500
14000
13500

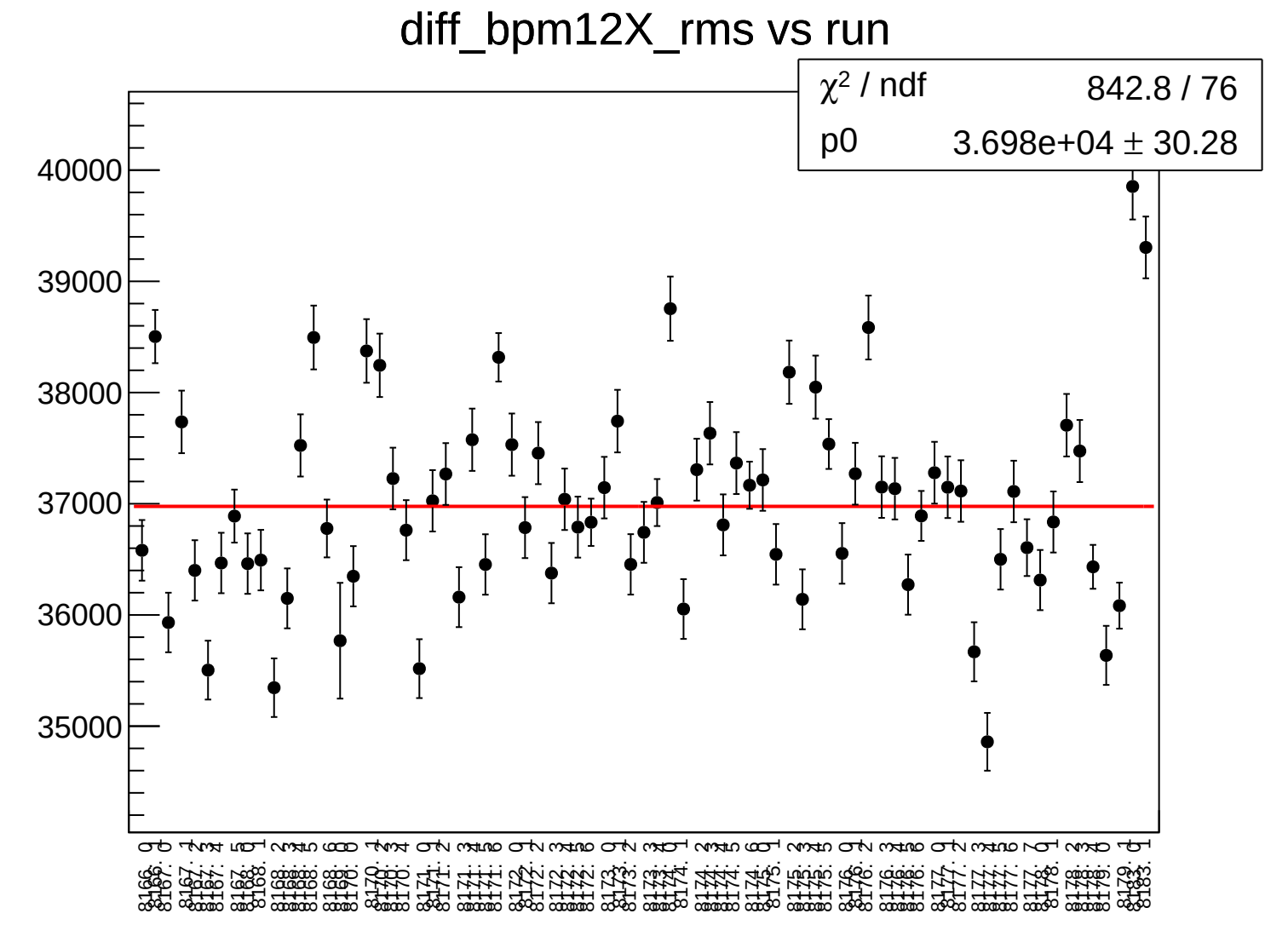

diff_bpm11Y_mean vs run
χ^2 / ndf 58.24 / 76
p0 4.495 ± 3.799
pull
Entries 77
Mean 360.1
Std Dev 314.4

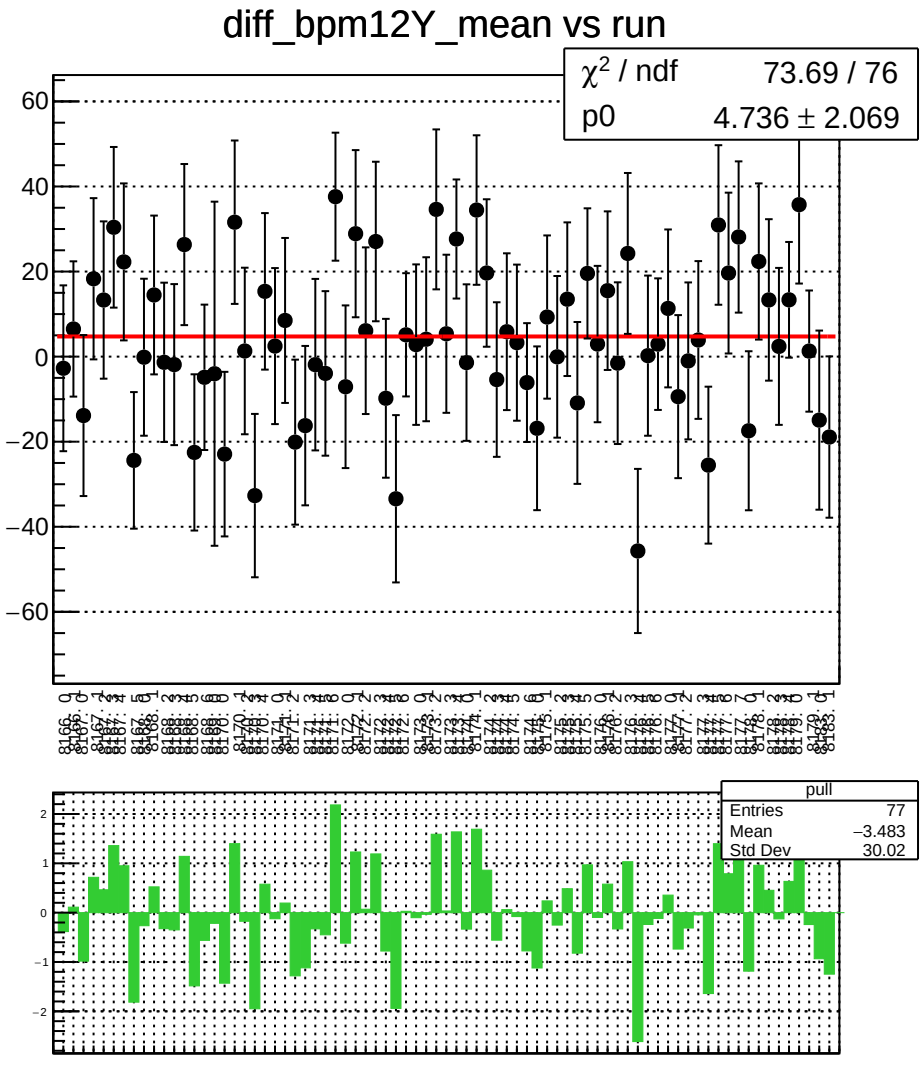

pull1D
Entries 77
Mean −0.003365
Std Dev 0.8697

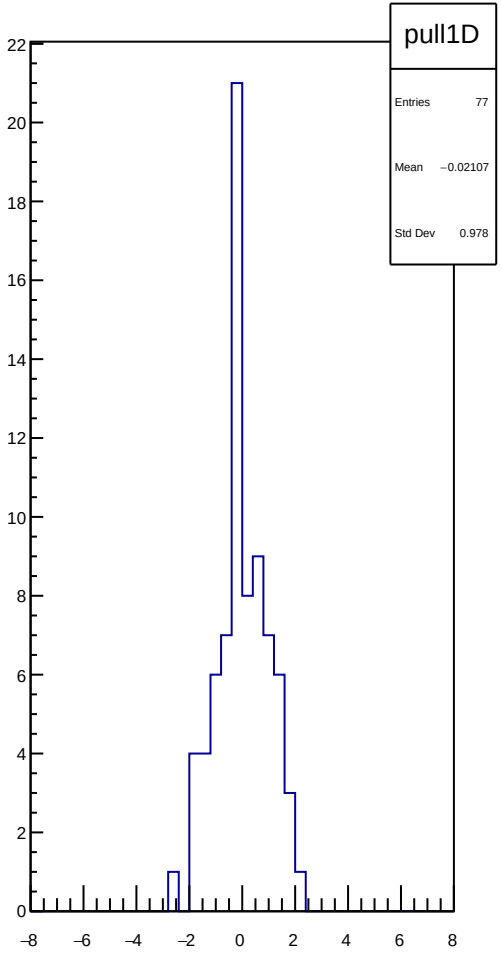

diff_bpm11Y_rms vs run
χ^2 / ndf 1470 / 76
p0 3279 ± 2.686
3500
3400
3300
3200
3100

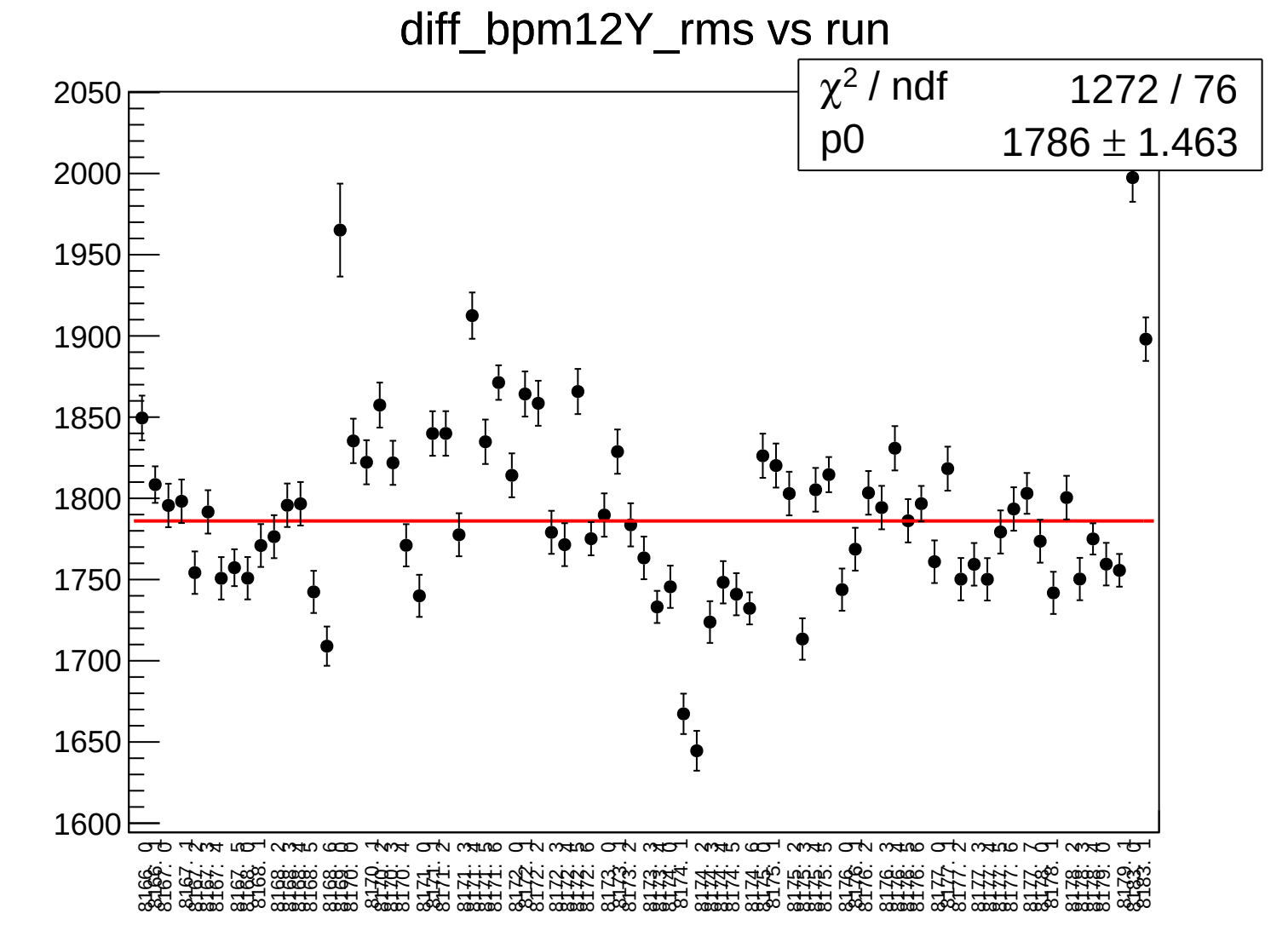

diff_bpm12X_mean vs run
χ^2 / ndf 73.95 / 76
p0 6.518 ± 42.83
1000
500
0
−500
−1000
pull
Entries 77
Mean 107.8
Std Dev 73.88
2
1
0
−1
−2

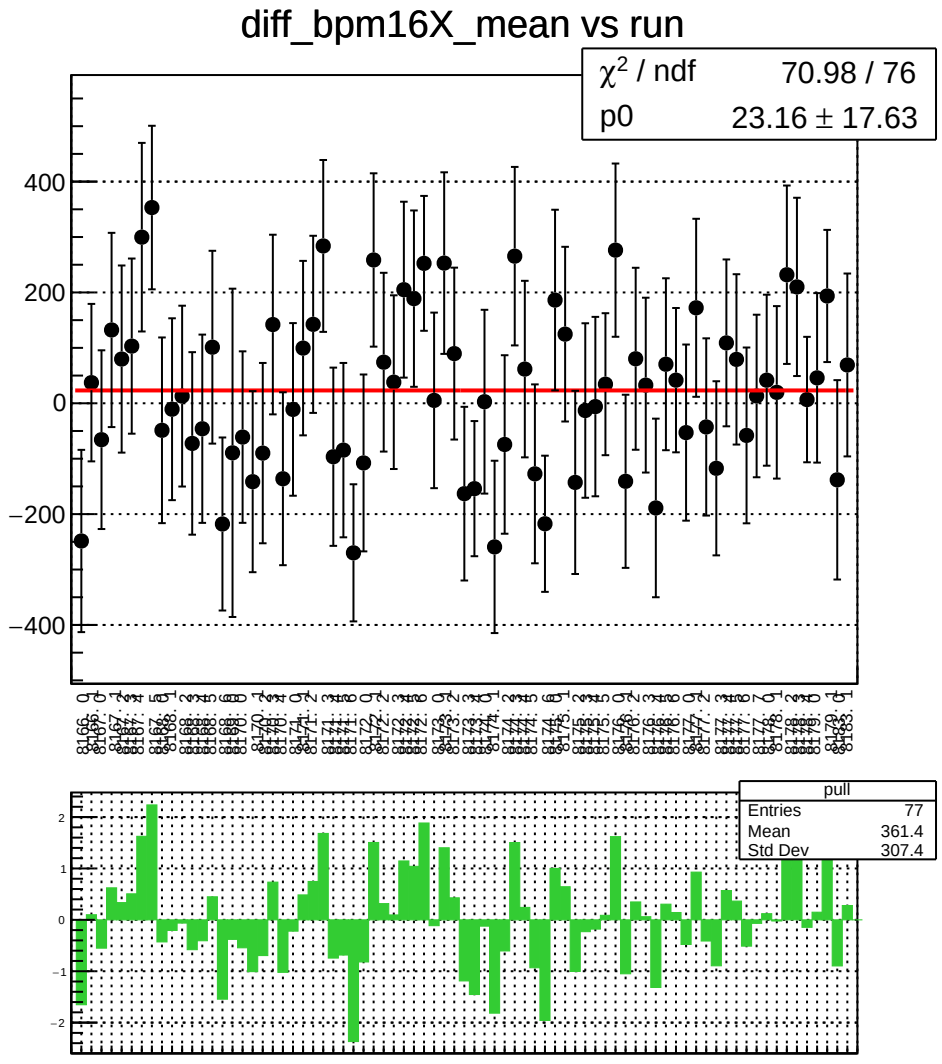

pull1D
Entries 77
Mean 0.0007448
Std Dev 0.98
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

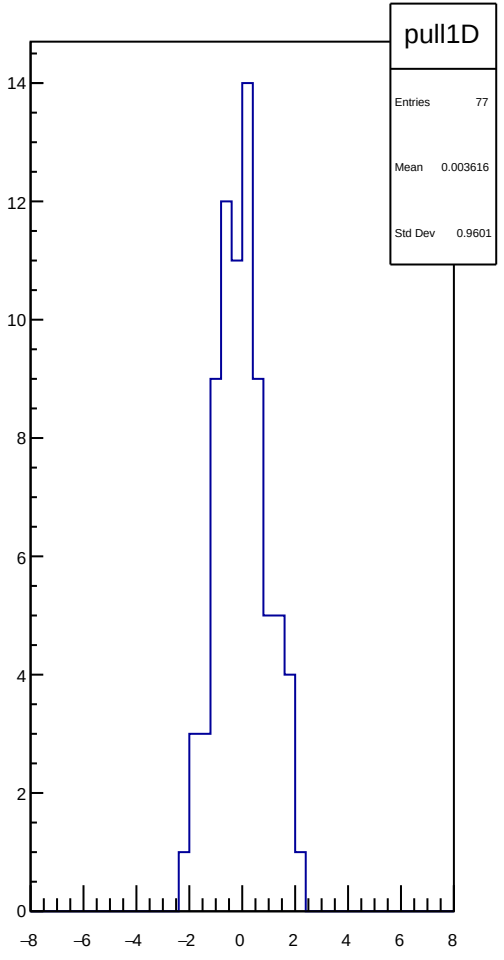

diff_bpm12X_rms vs run
χ² / ndf 842.8 / 76
p0 3.698e+04 ± 30.28
40000
39000
38000
37000
36000
35000

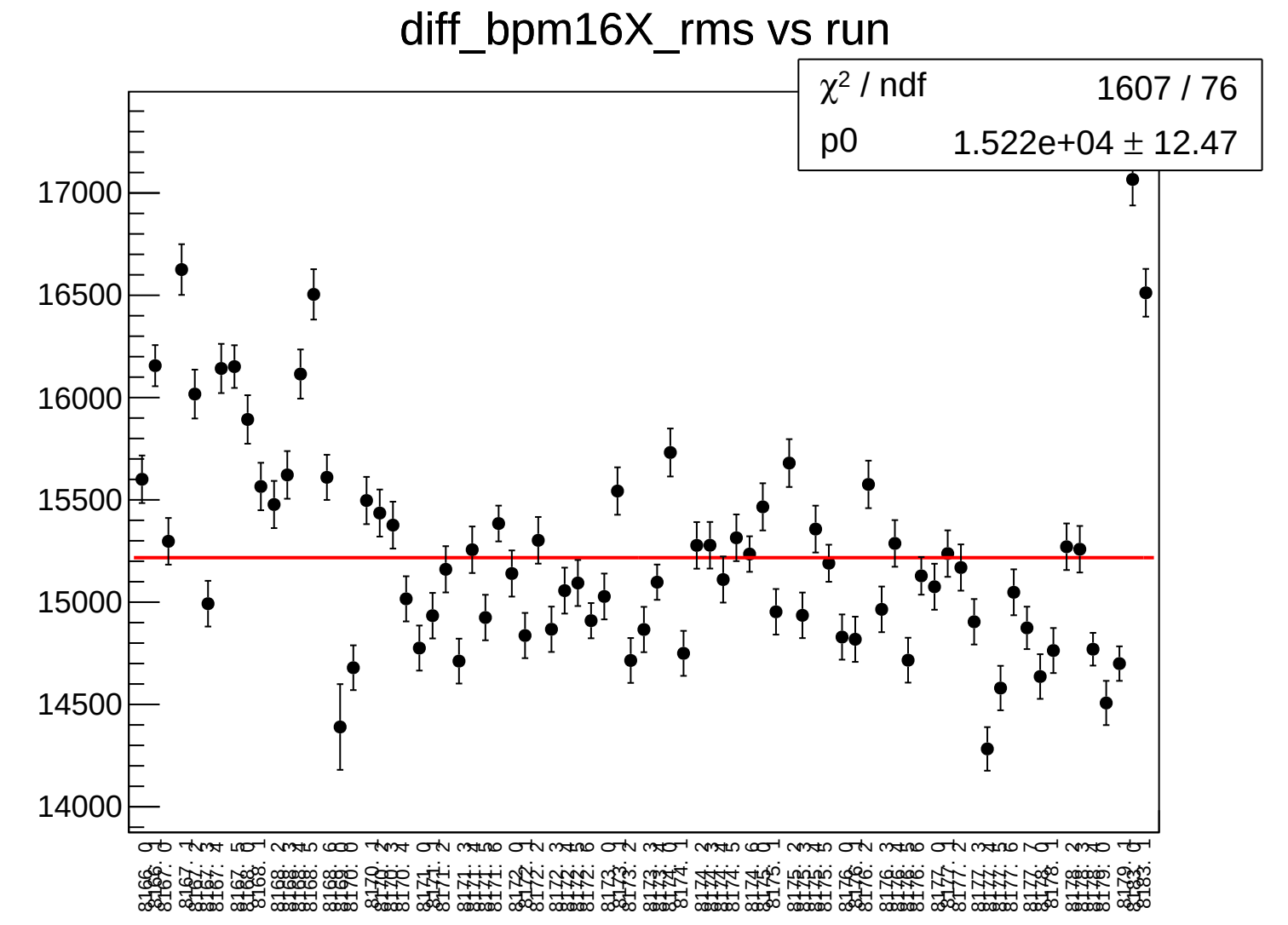

diff_bpm12Y_mean vs run
χ² / ndf 73.69 / 76
p0 4.736 ± 2.069
pull
Entries 77
Mean −3.483
Std Dev 30.02

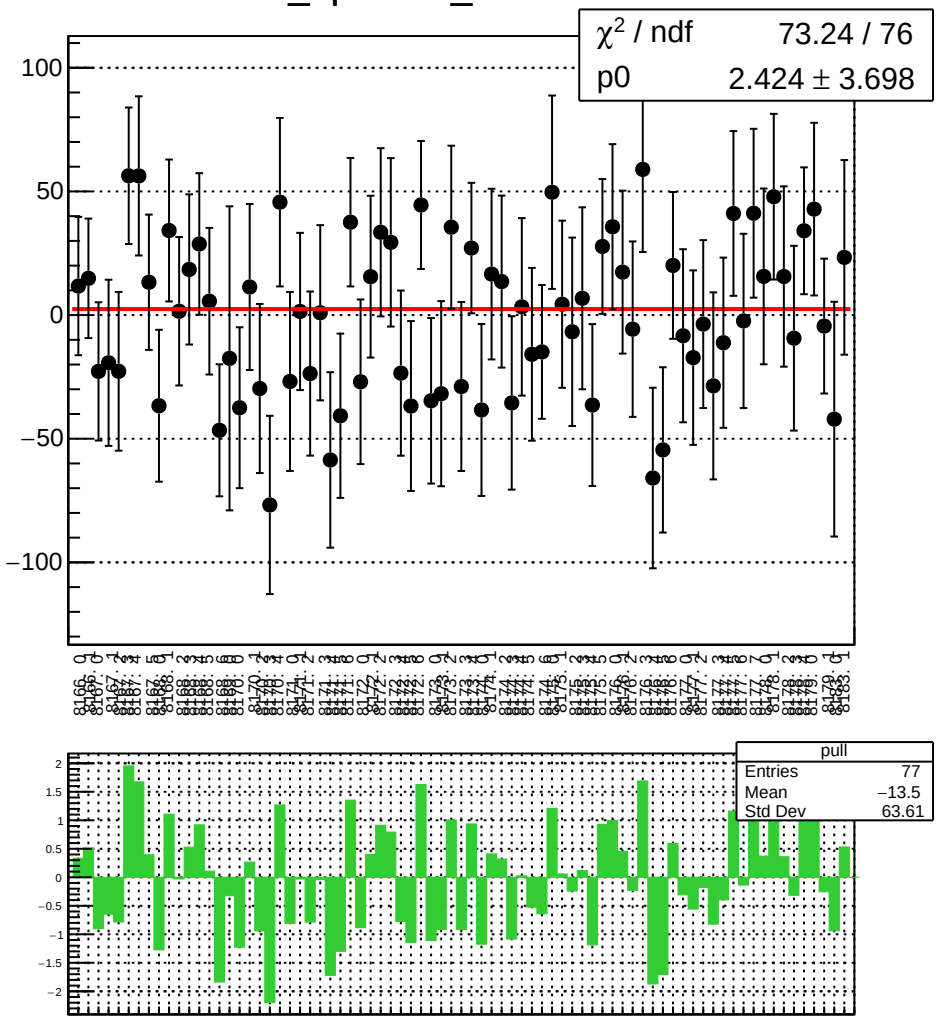

pull1D
Entries 77
Mean −0.02107
Std Dev 0.978

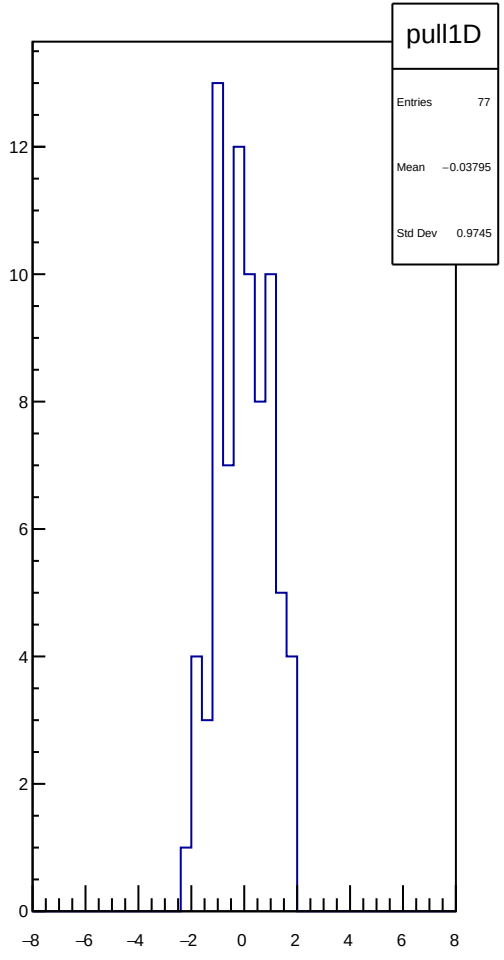

diff_bpm12Y_rms vs run
χ² / ndf 1272 / 76
p0 1786 ± 1.463
2050
2000
1950
1900
1850
1800
1750
1700
1650
1600

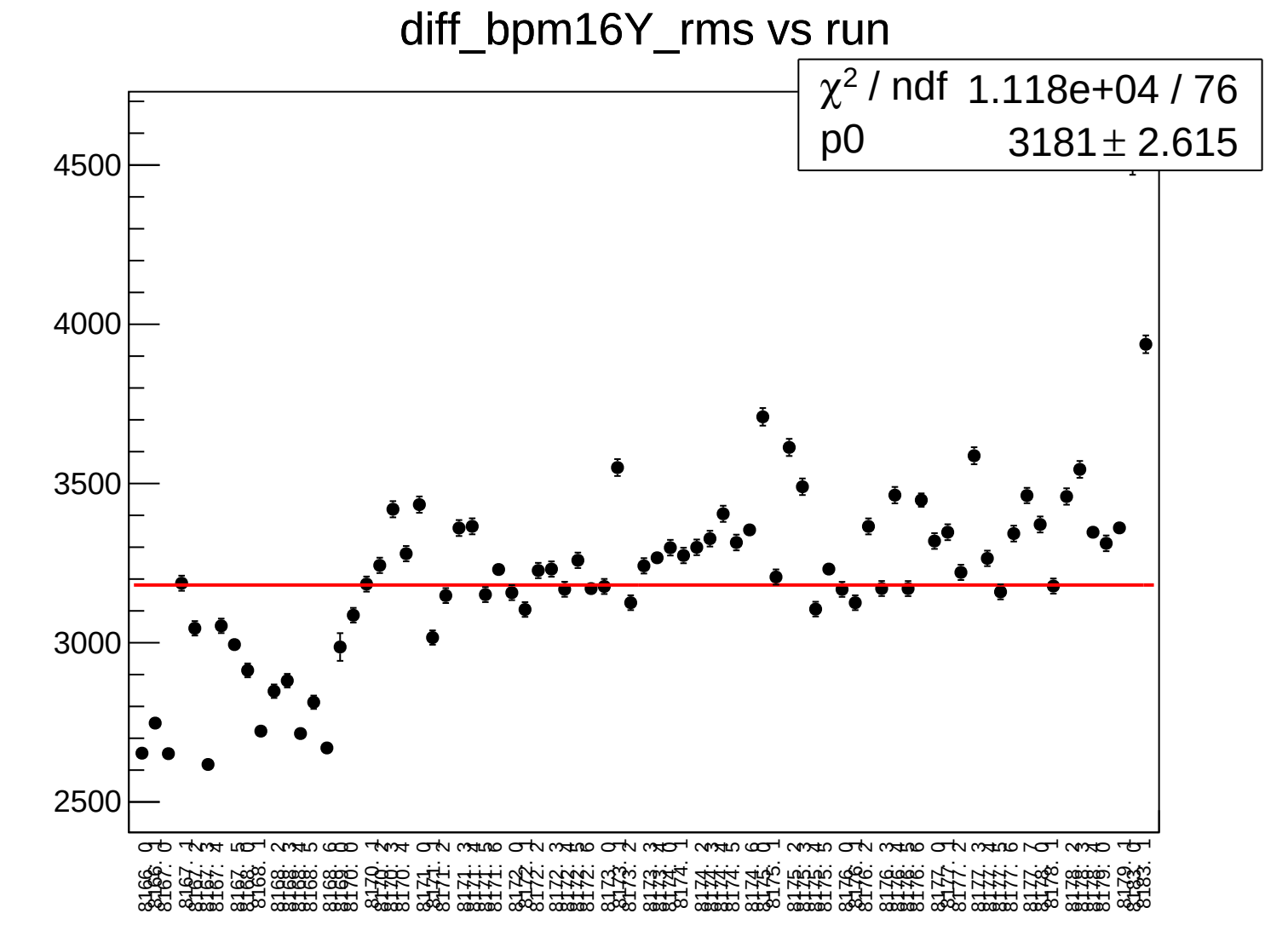

diff_bpm16X_mean vs run
χ^2 / ndf 70.98 / 76
p0 23.16 ± 17.63
pull
Entries 77
Mean 361.4
Std Dev 307.4

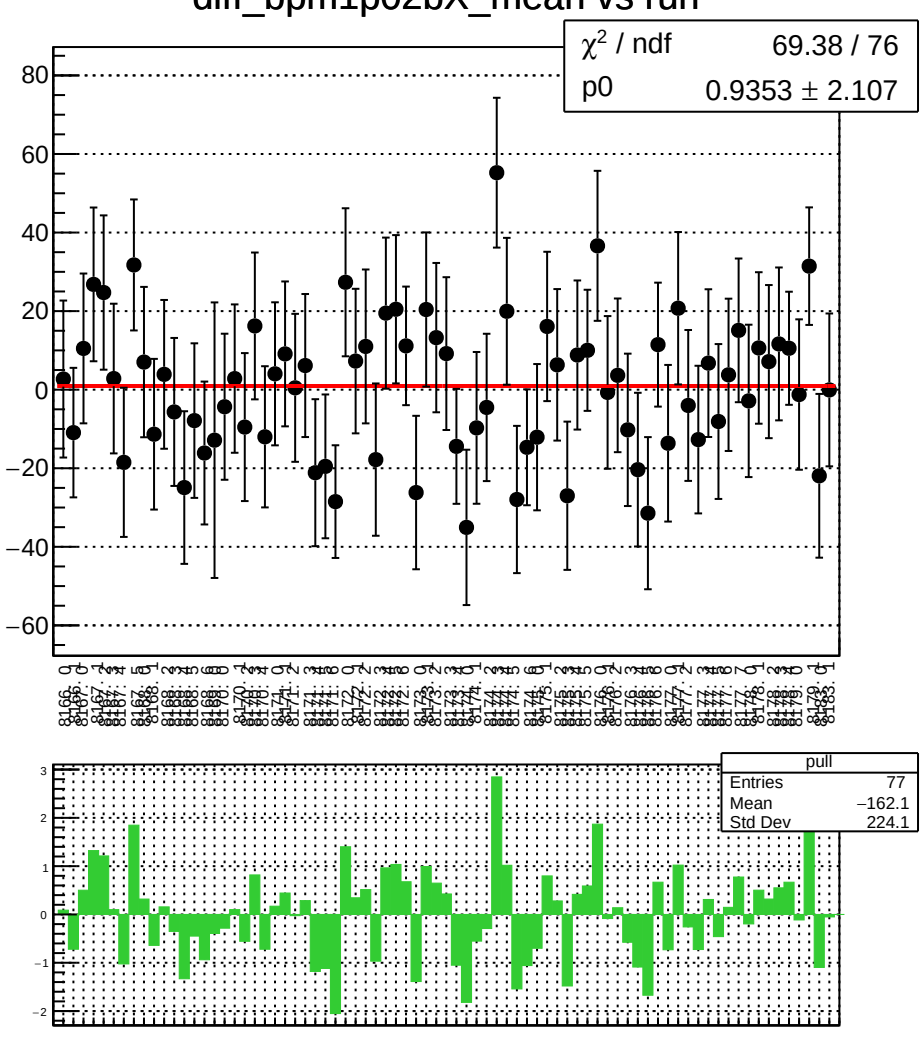

pull1D
Entries 77
Mean 0.003616
Std Dev 0.9601

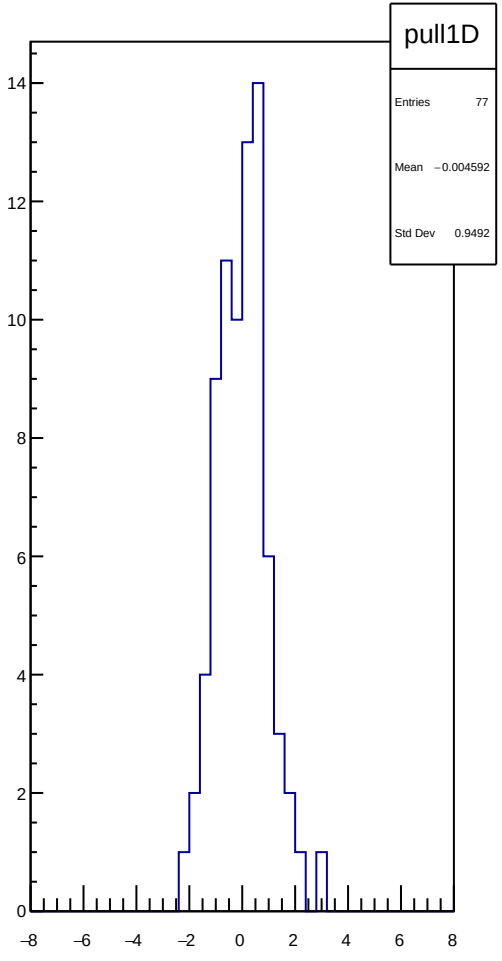

diff_bpm16X_rms vs run
χ² / ndf 1607 / 76
p0 1.522e+04 ± 12.47
17000
16500
16000
15500
15000
14500
14000

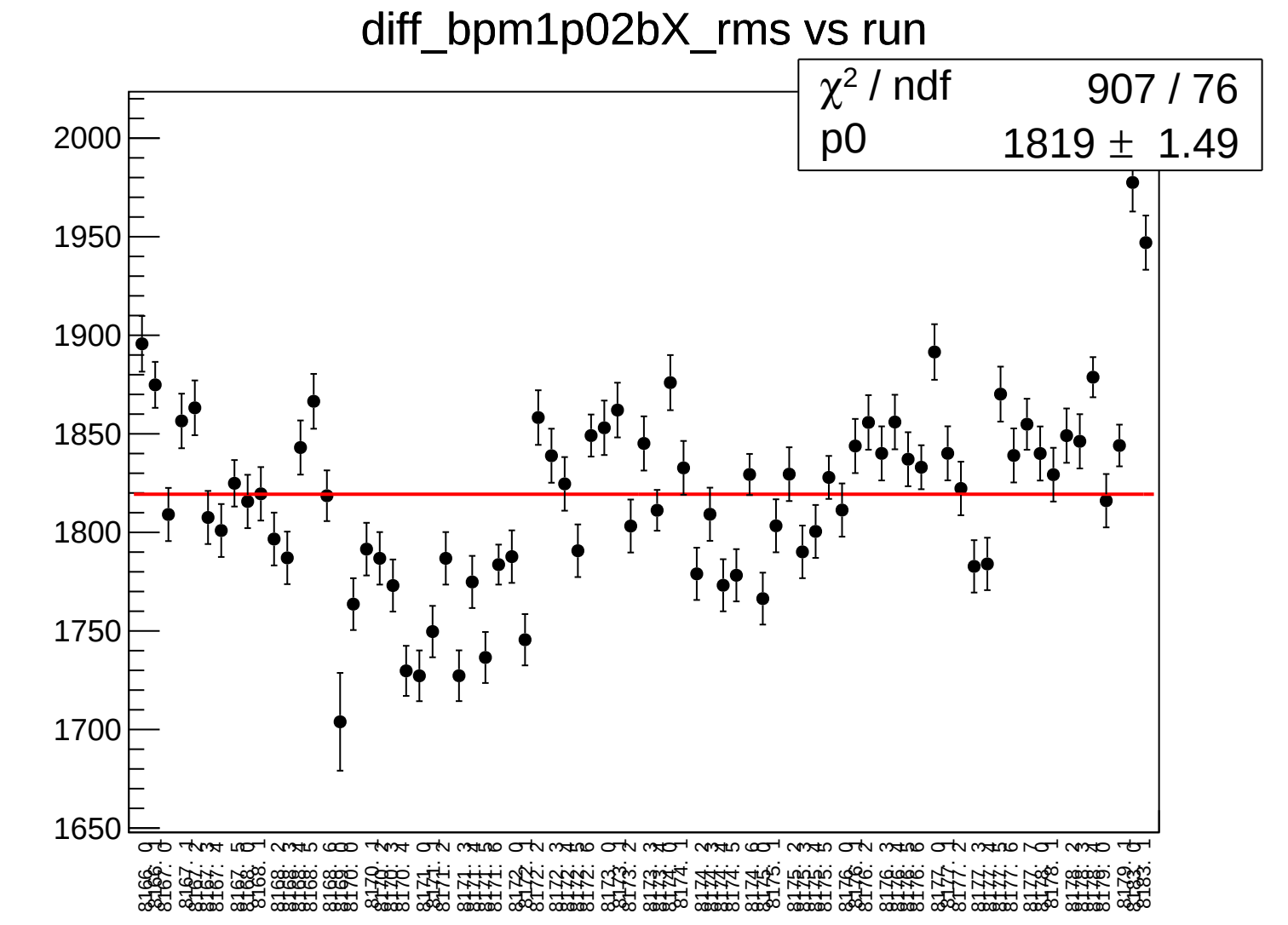

diff_bpm16Y_mean vs run
χ² / ndf 73.24 / 76
p0 2.424 ± 3.698
100
50
0
−50
−100
pull
Entries 77
Mean −13.5
Std Dev 63.61
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

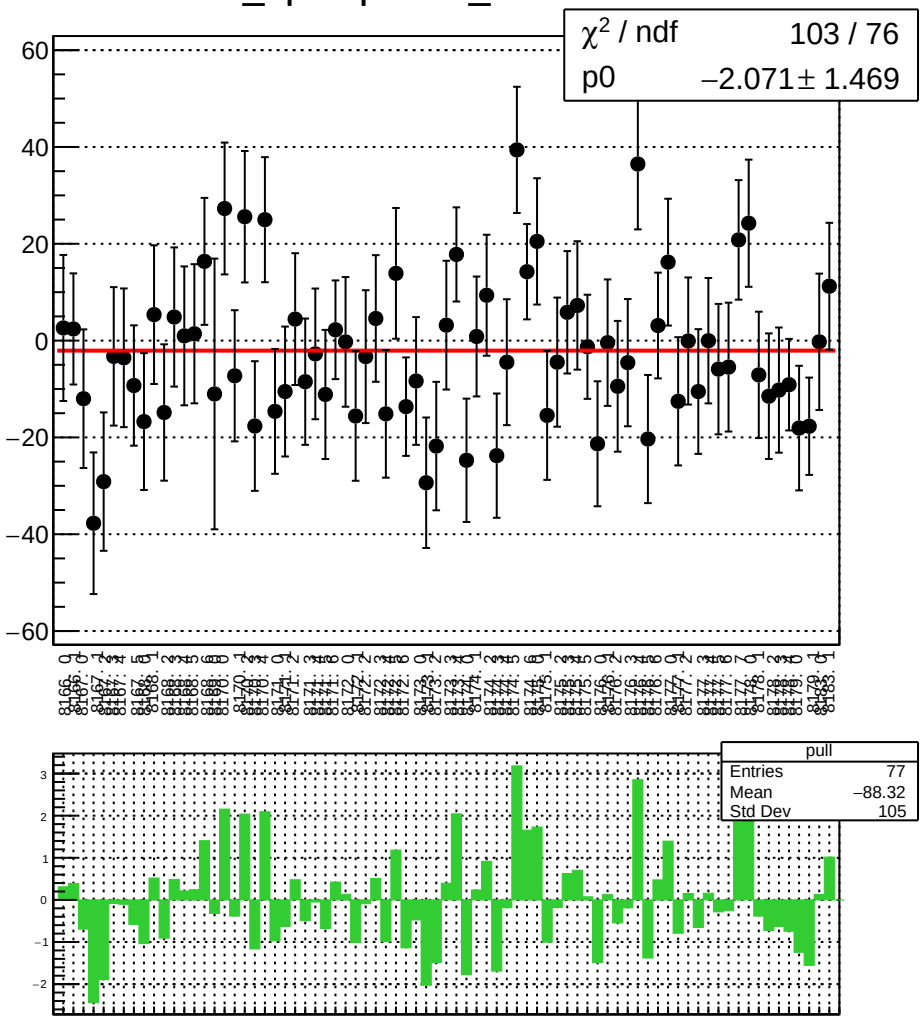

pull1D
Entries 77
Mean −0.03795
Std Dev 0.9745
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

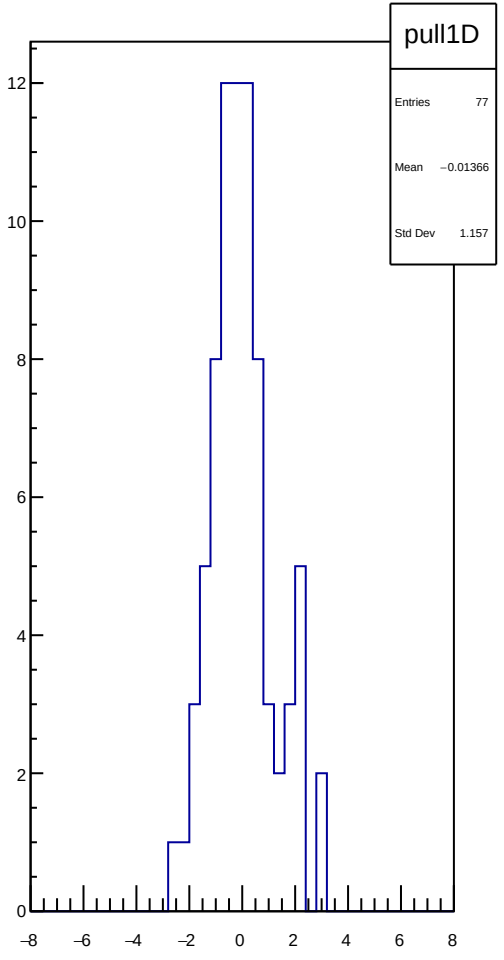

diff_bpm16Y_rms vs run
χ² / ndf 1.118e+04 / 76
p0 3181 ± 2.615
4500
4000
3500
3000
2500

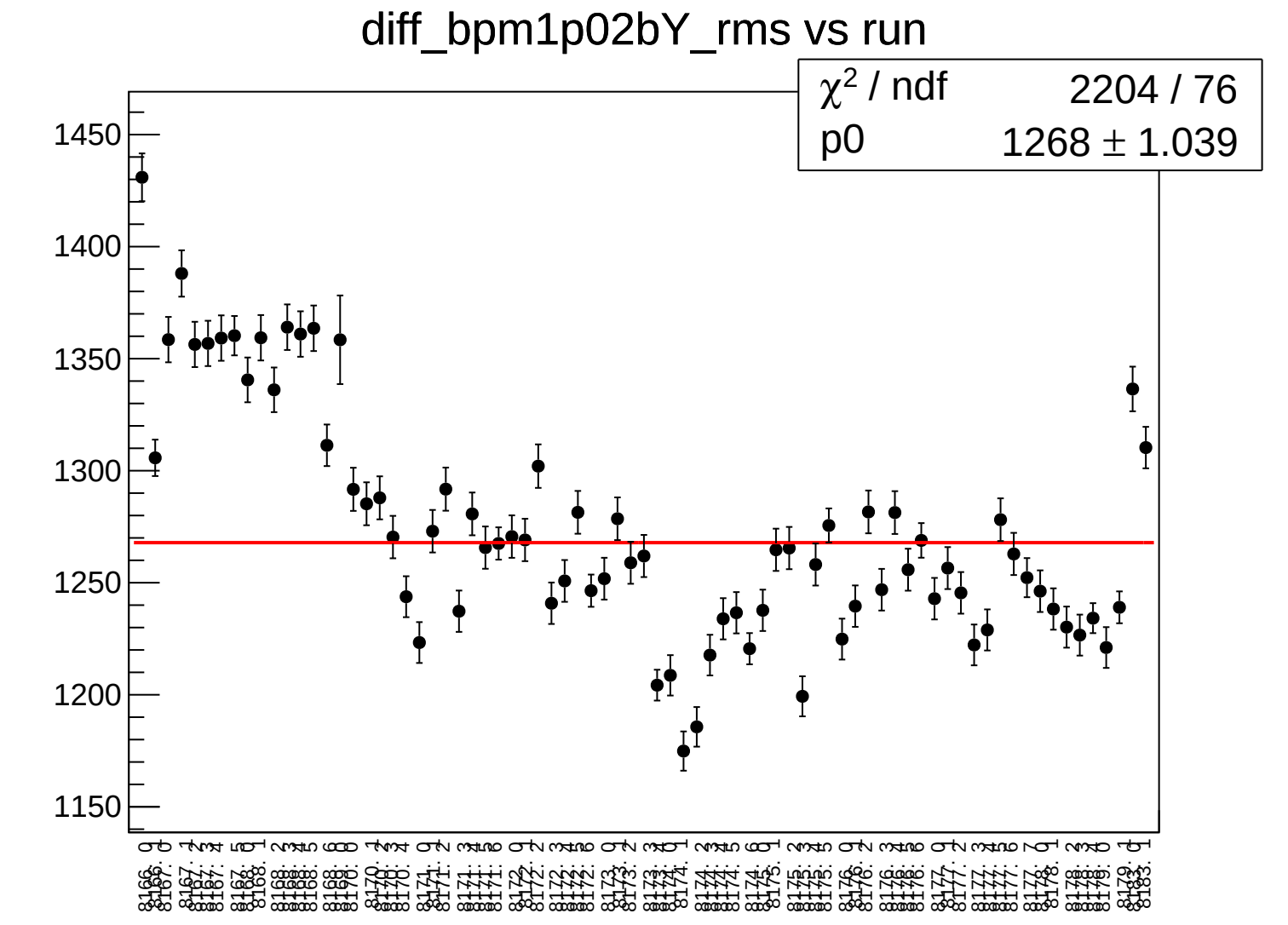

diff_bpm1p02bX_mean vs run
χ² / ndf 69.38 / 76
p0 0.9353 ± 2.107
pull
Entries 77
Mean −162.1
Std Dev 224.1

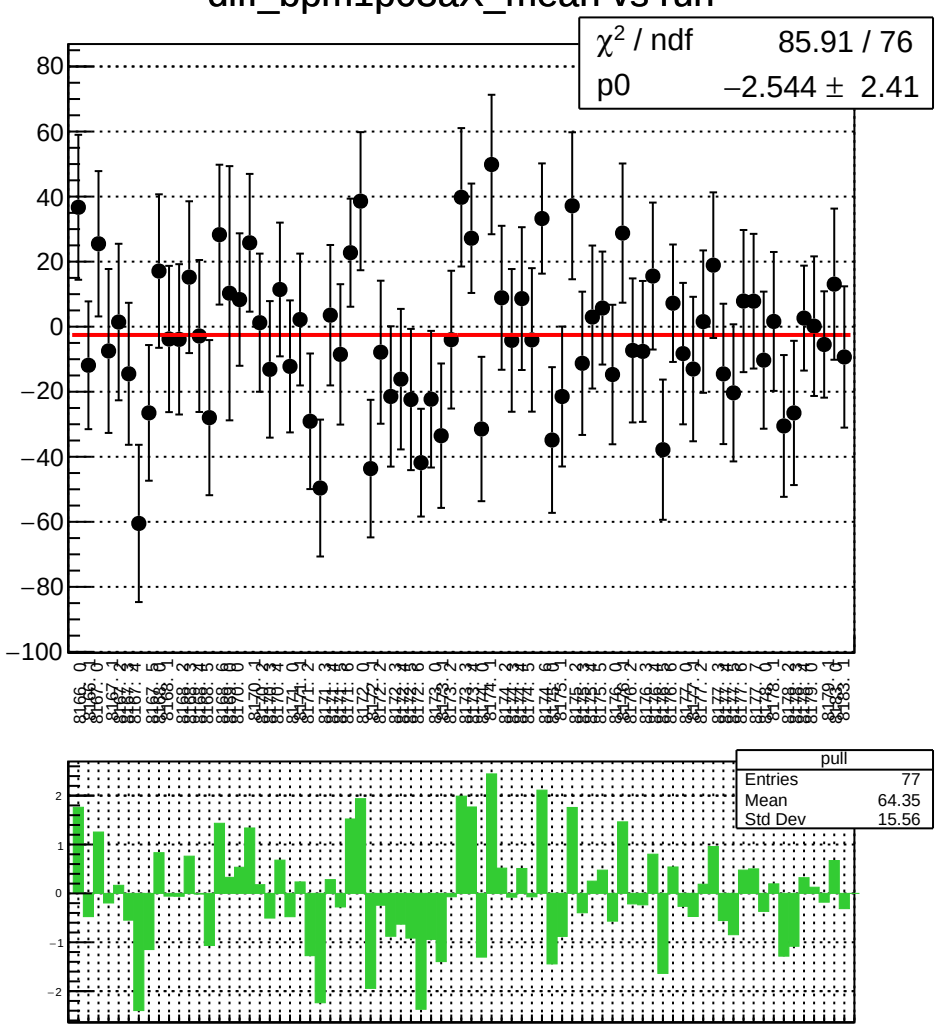

pull1D
Entries 77
Mean −0.004592
Std Dev 0.9492

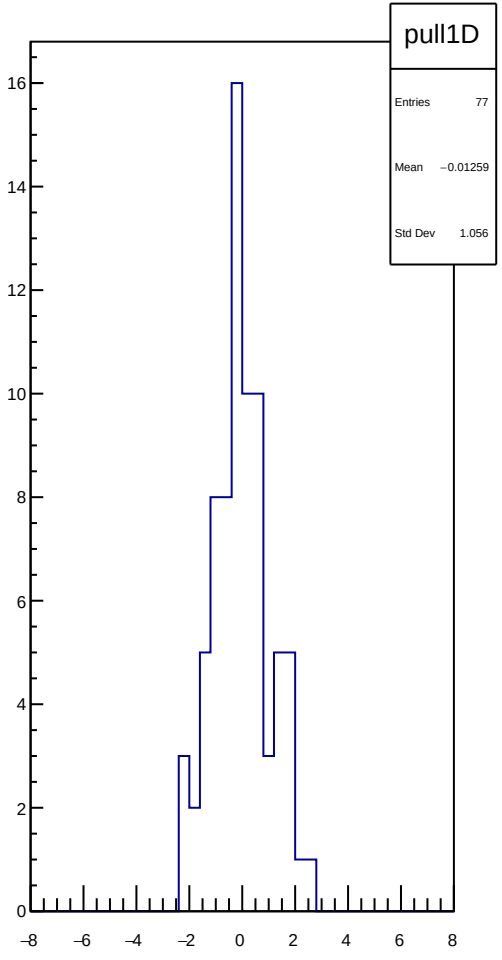

diff_bpm1p02bX_rms vs run
χ² / ndf 907 / 76
p0 1819 ± 1.49
2000
1950
1900
1850
1800
1750
1700
1650

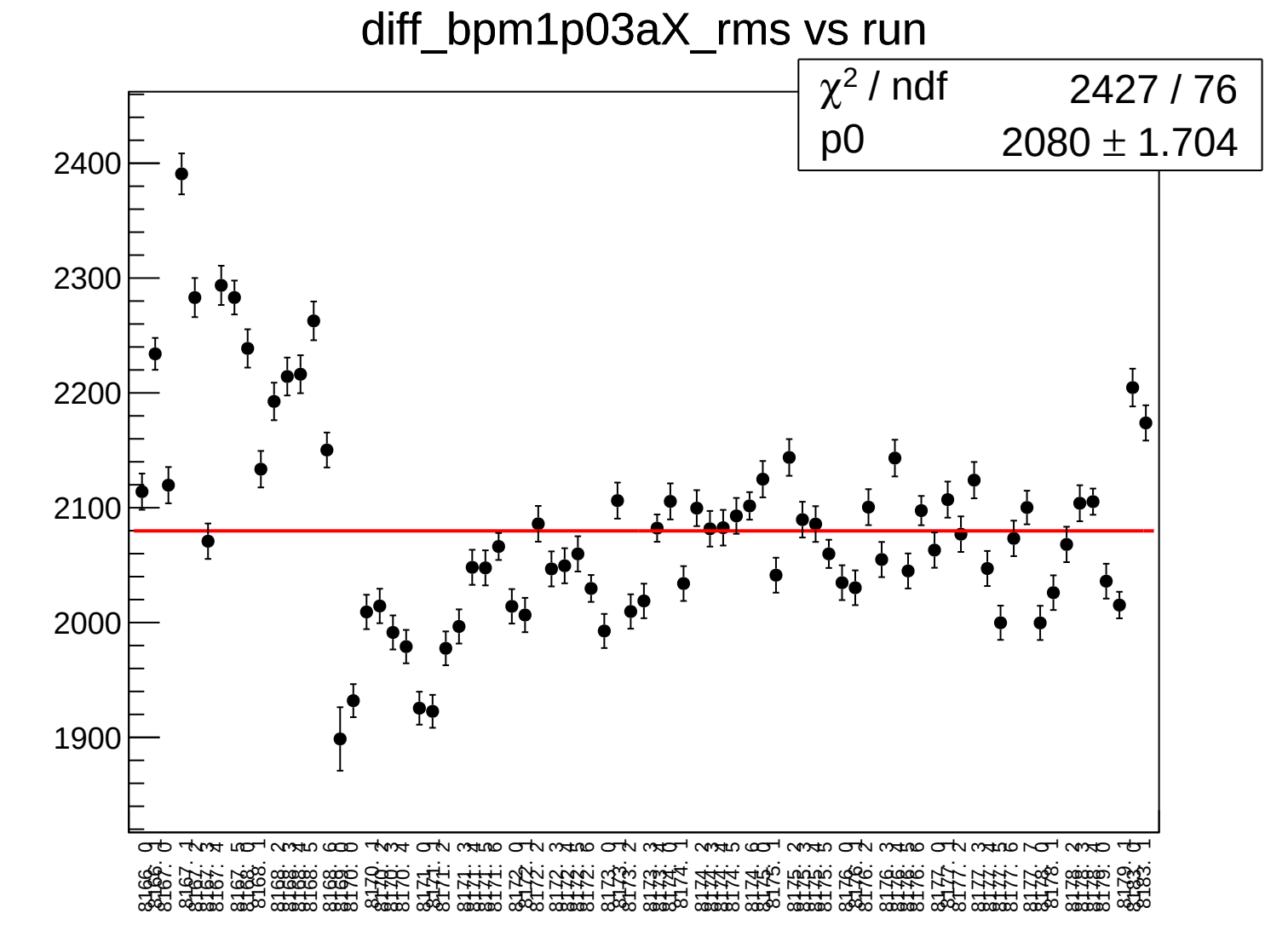

diff_bpm1p02bY_mean vs run
χ² / ndf 103 / 76
p0 −2.071 ± 1.469
pull
Entries 77
Mean −88.32
Std Dev 105

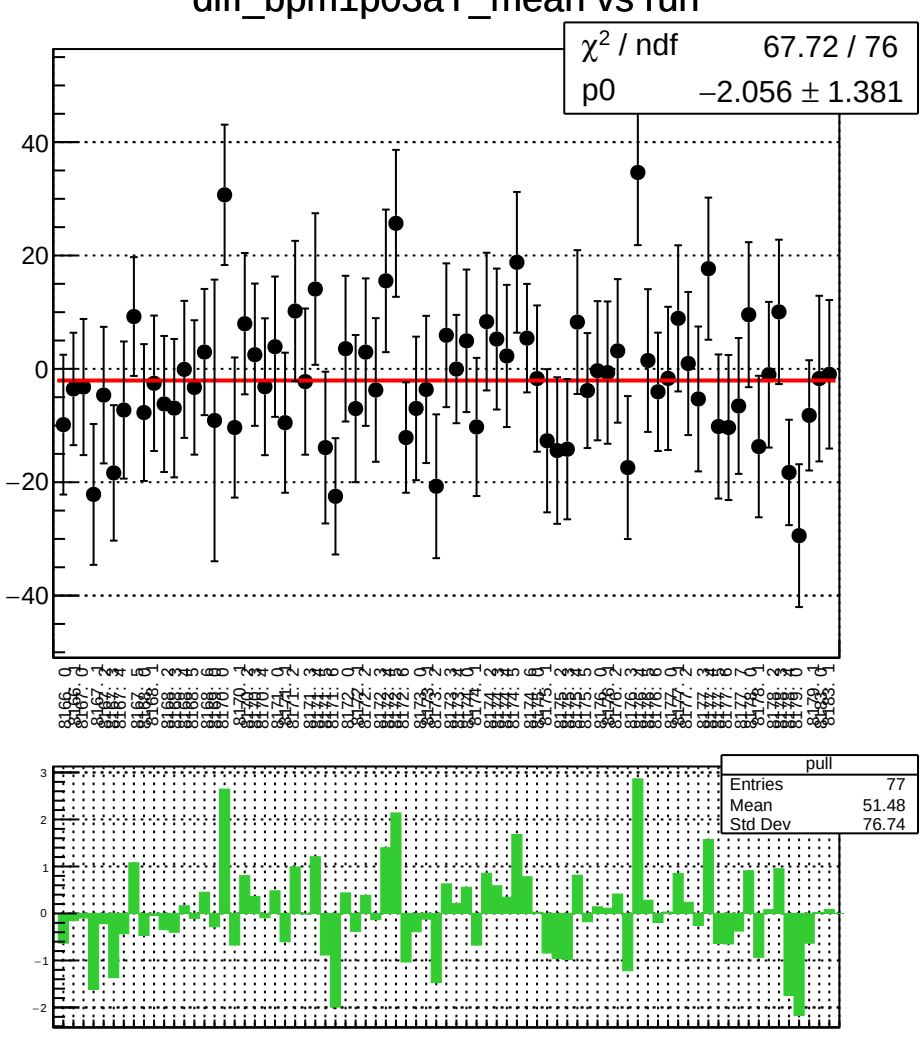

pull1D
Entries 77
Mean −0.01366
Std Dev 1.157

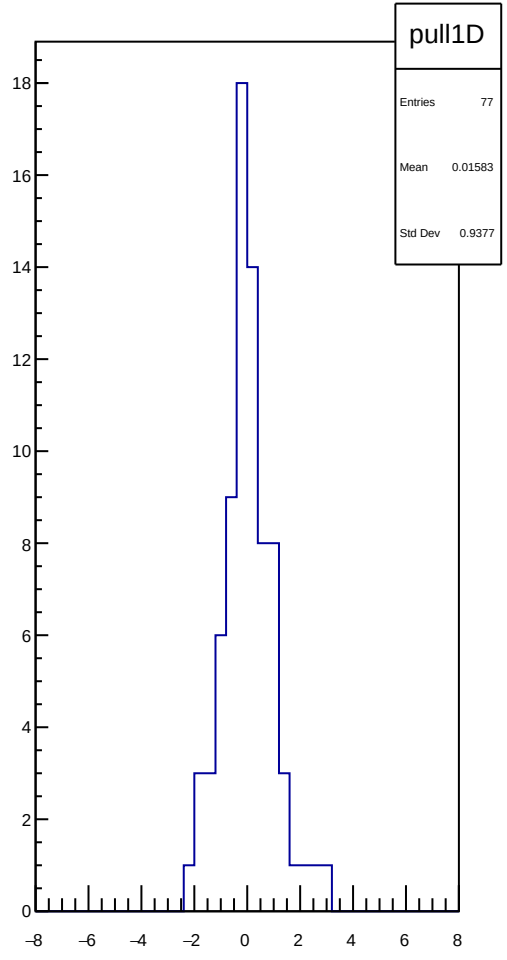

diff_bpm1p02bY_rms vs run
χ² / ndf 2204 / 76
p0 1268 ± 1.039
1450
1400
1350
1300
1250
1200
1150

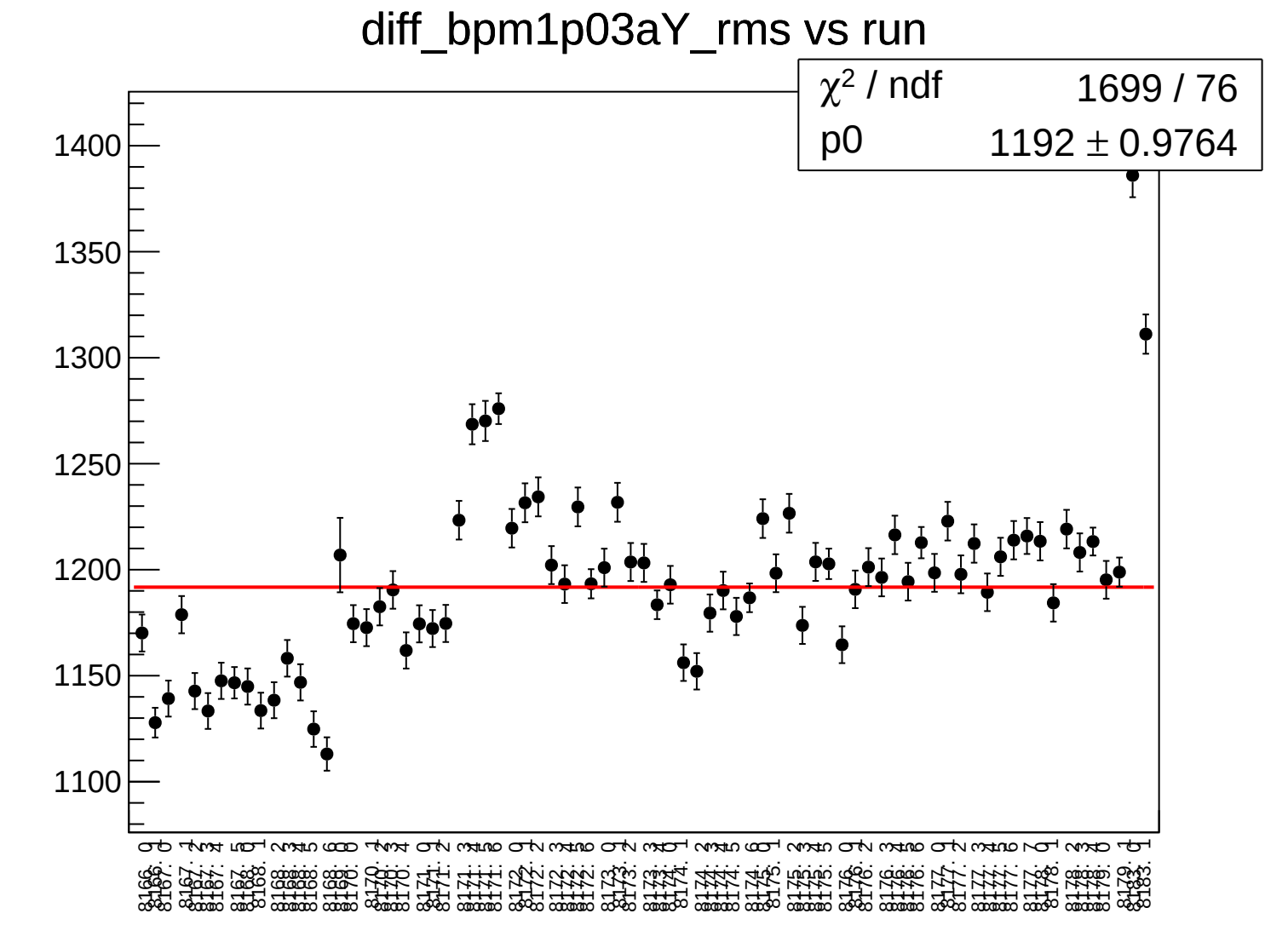

diff_bpm1p03aX_mean vs run
χ² / ndf 85.91 / 76
p0 −2.544 ± 2.41
pull
Entries 77
Mean 64.35
Std Dev 15.56

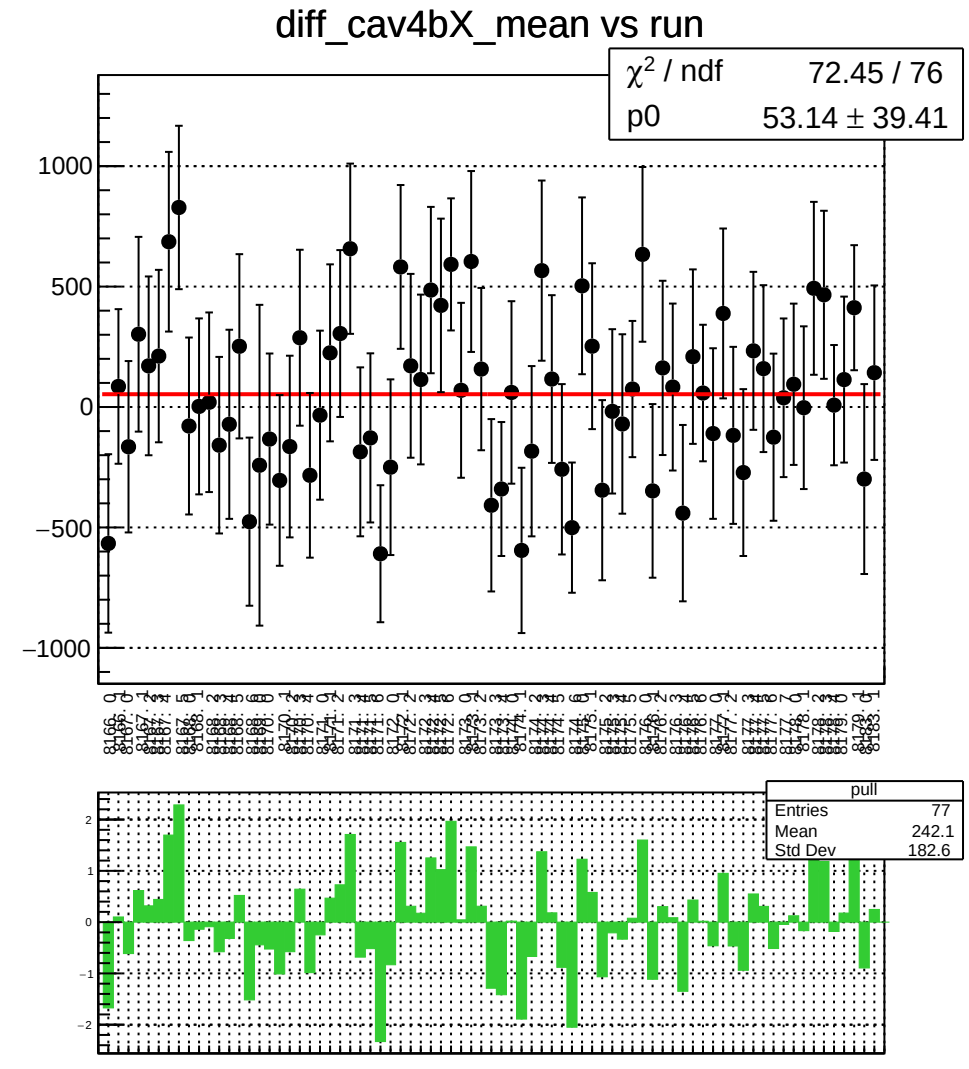

pull1D
Entries 77
Mean −0.01259
Std Dev 1.056

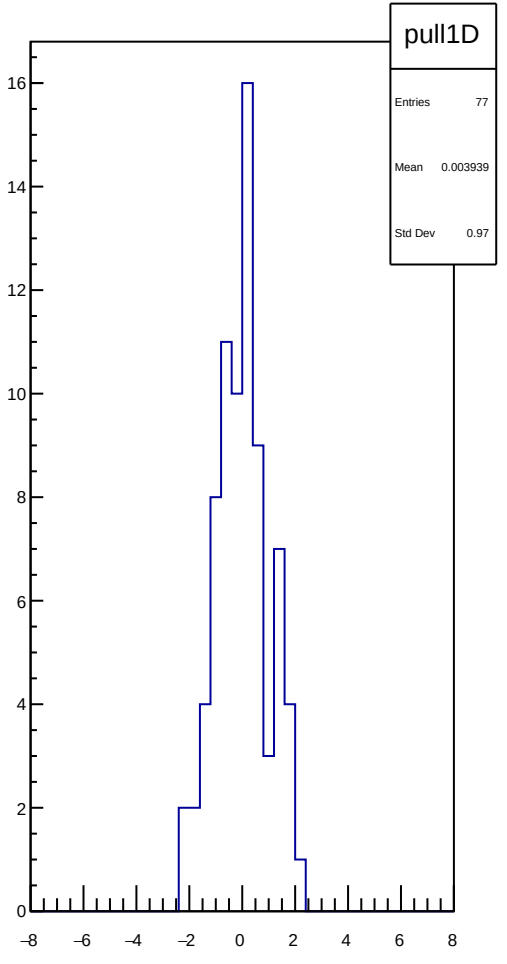

diff_bpm1p03aX_rms vs run
χ² / ndf 2427 / 76
p0 2080 ± 1.704
2400
2300
2200
2100
2000
1900

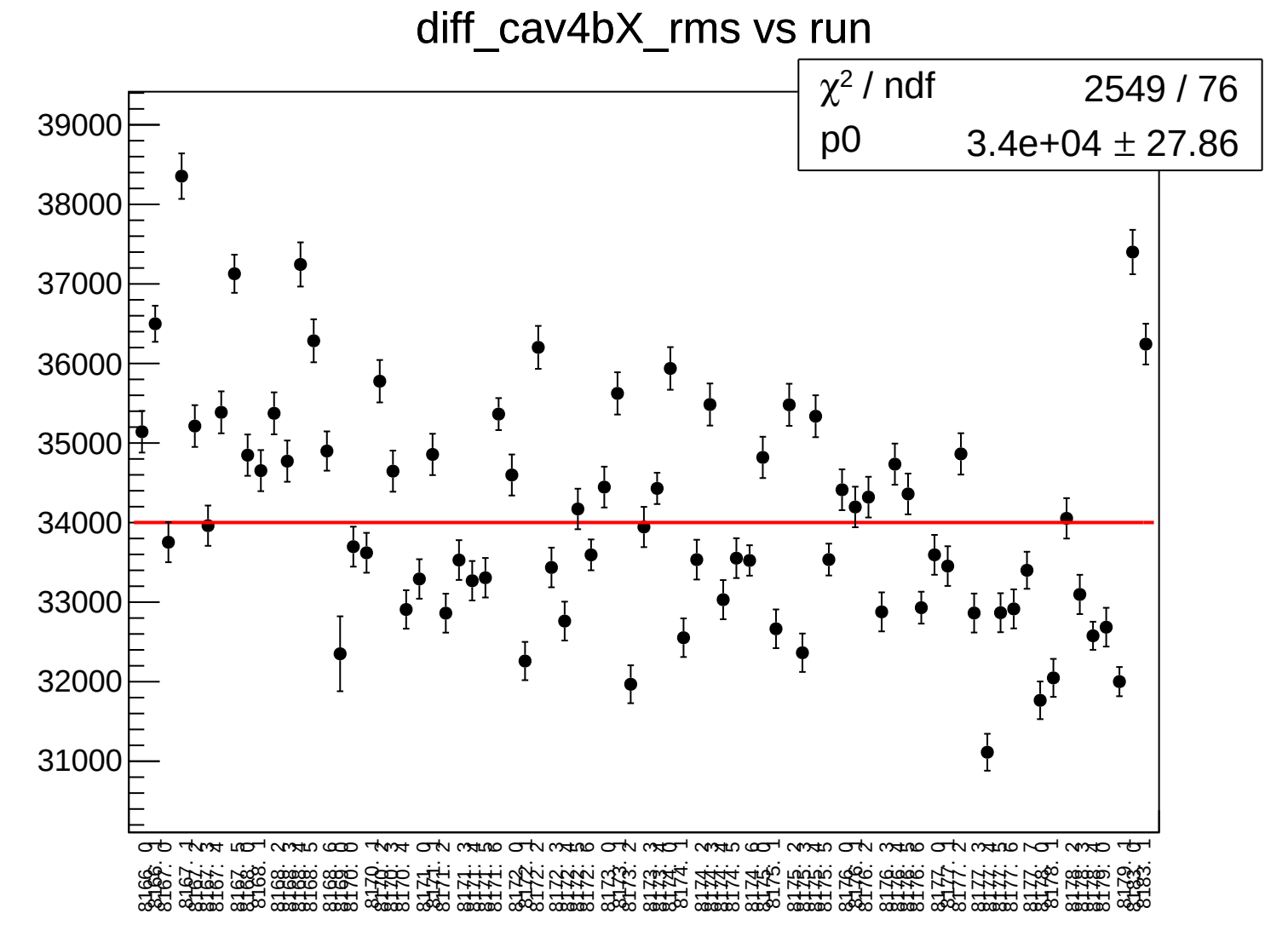

diff_bpm1p03aY_mean vs run
χ² / ndf 67.72 / 76
p0 −2.056 ± 1.381
pull
Entries 77
Mean 51.48
Std Dev 76.74

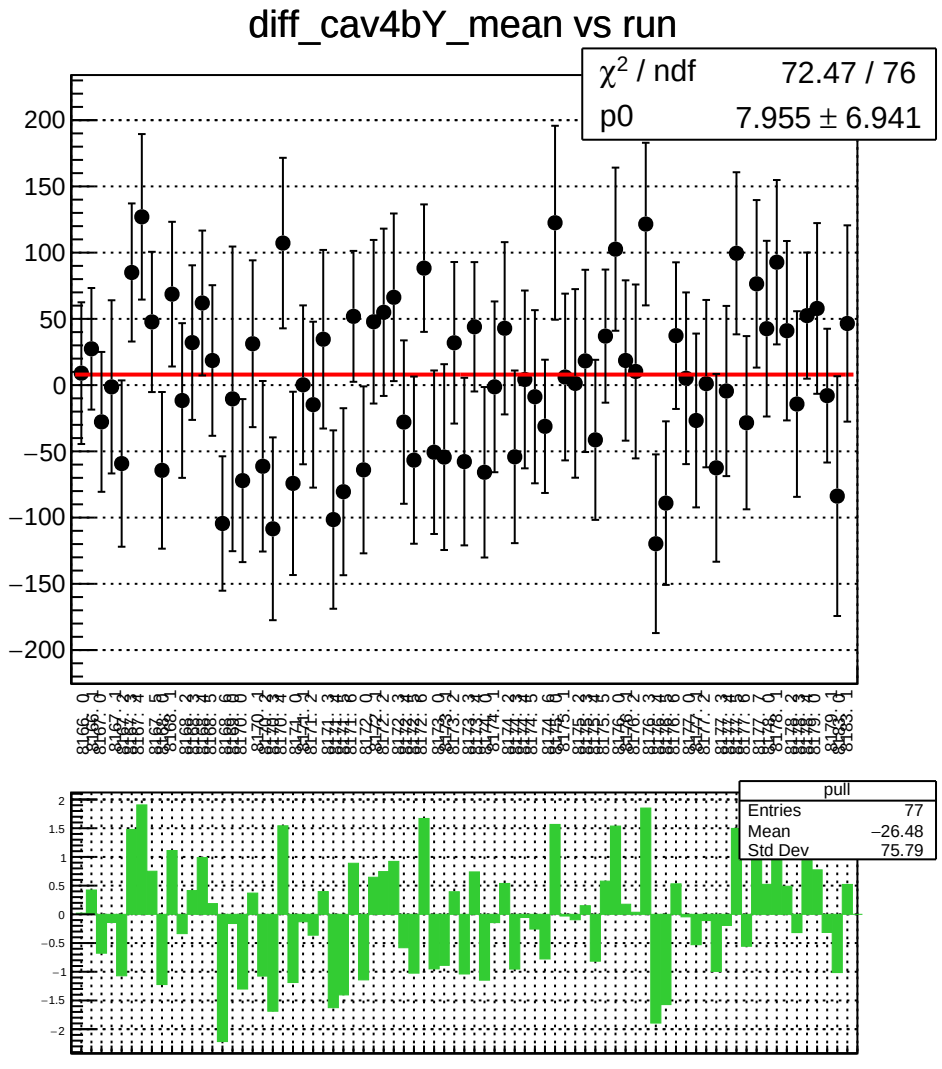

pull1D
Entries 77
Mean 0.01583
Std Dev 0.9377

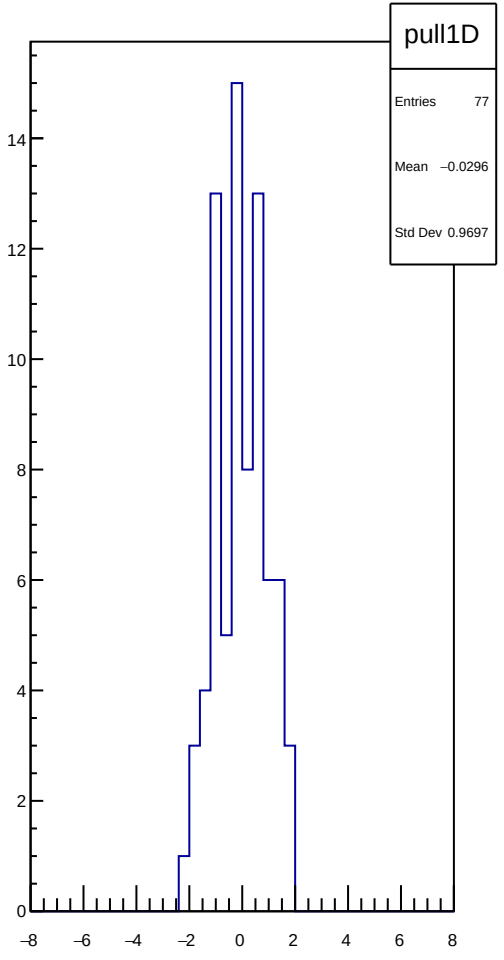

diff_bpm1p03aY_rms vs run
χ² / ndf 1699 / 76
p0 1192 ± 0.9764
1400
1350
1300
1250
1200
1150
1100

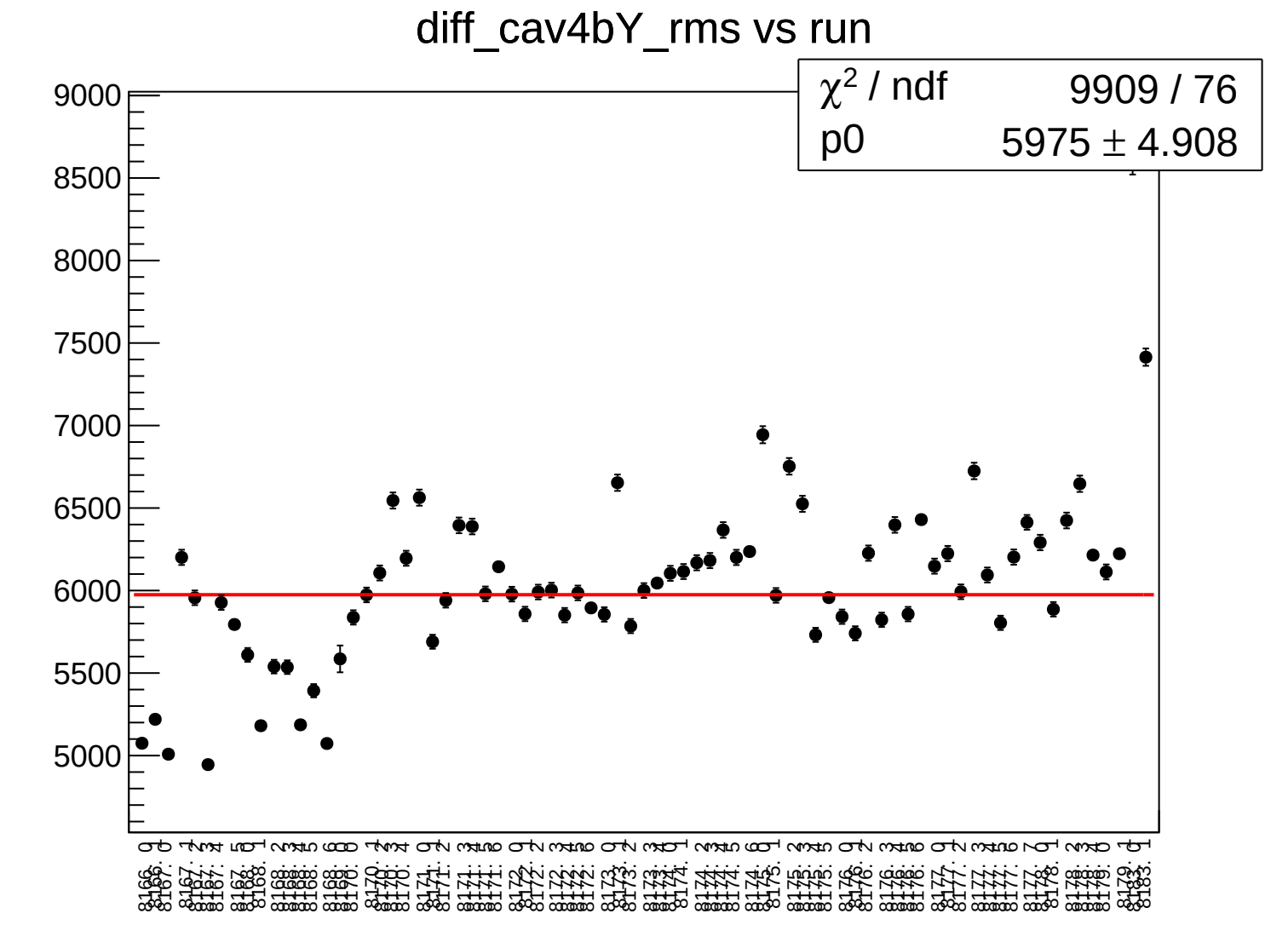

diff_cav4bX_mean vs run
χ² / ndf 72.45 / 76
p0 53.14 ± 39.41
1000
500
0
−500
−1000
pull
Entries 77
Mean 242.1
Std Dev 182.6
2
1
0
−1
−2

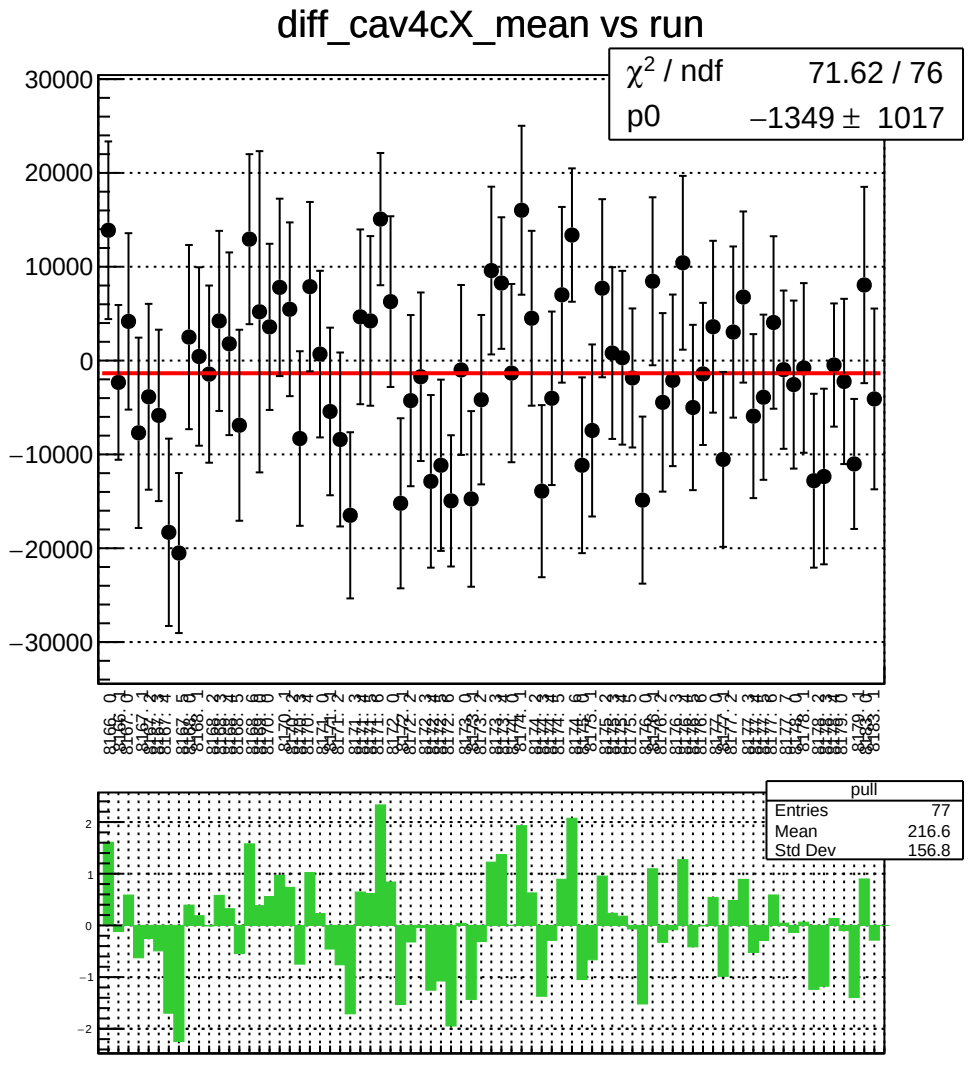

pull1D
Entries 77
Mean 0.003939
Std Dev 0.97
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

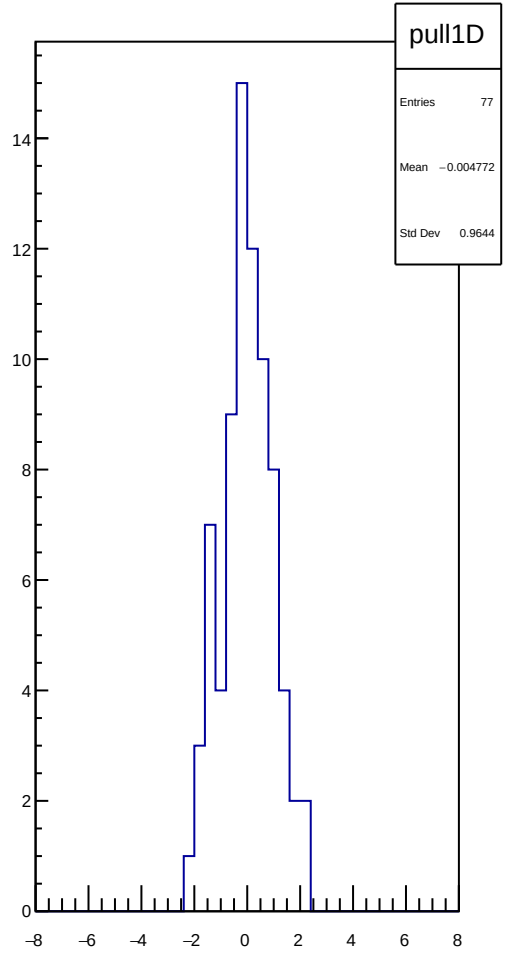

diff_cav4bX_rms vs run
χ² / ndf 2549 / 76
p0 3.4e+04 ± 27.86
39000
38000
37000
36000
35000
34000
33000
32000
31000

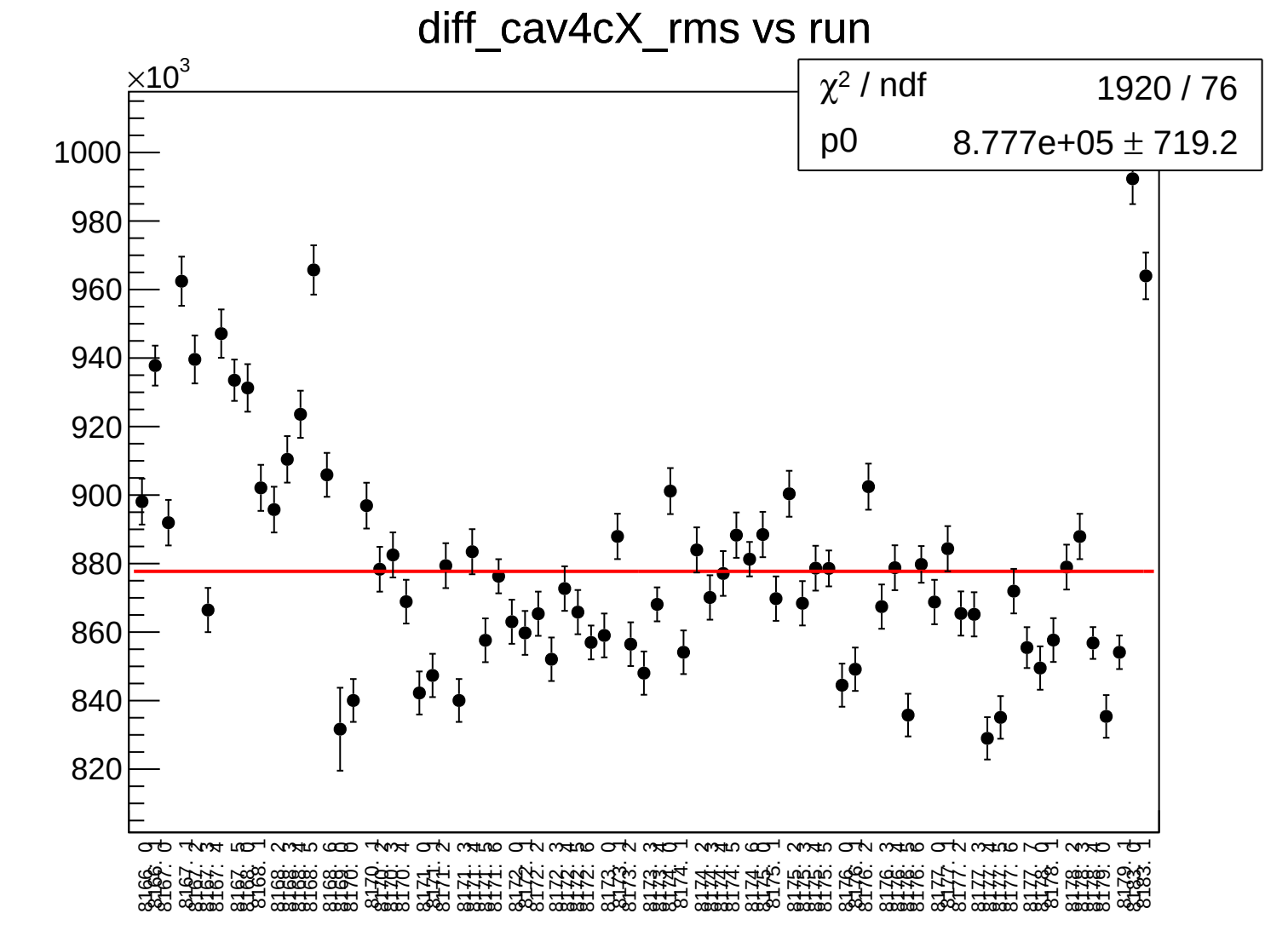

diff_cav4bY_mean vs run
χ² / ndf 72.47 / 76
p0 7.955 ± 6.941
pull
Entries 77
Mean −26.48
Std Dev 75.79

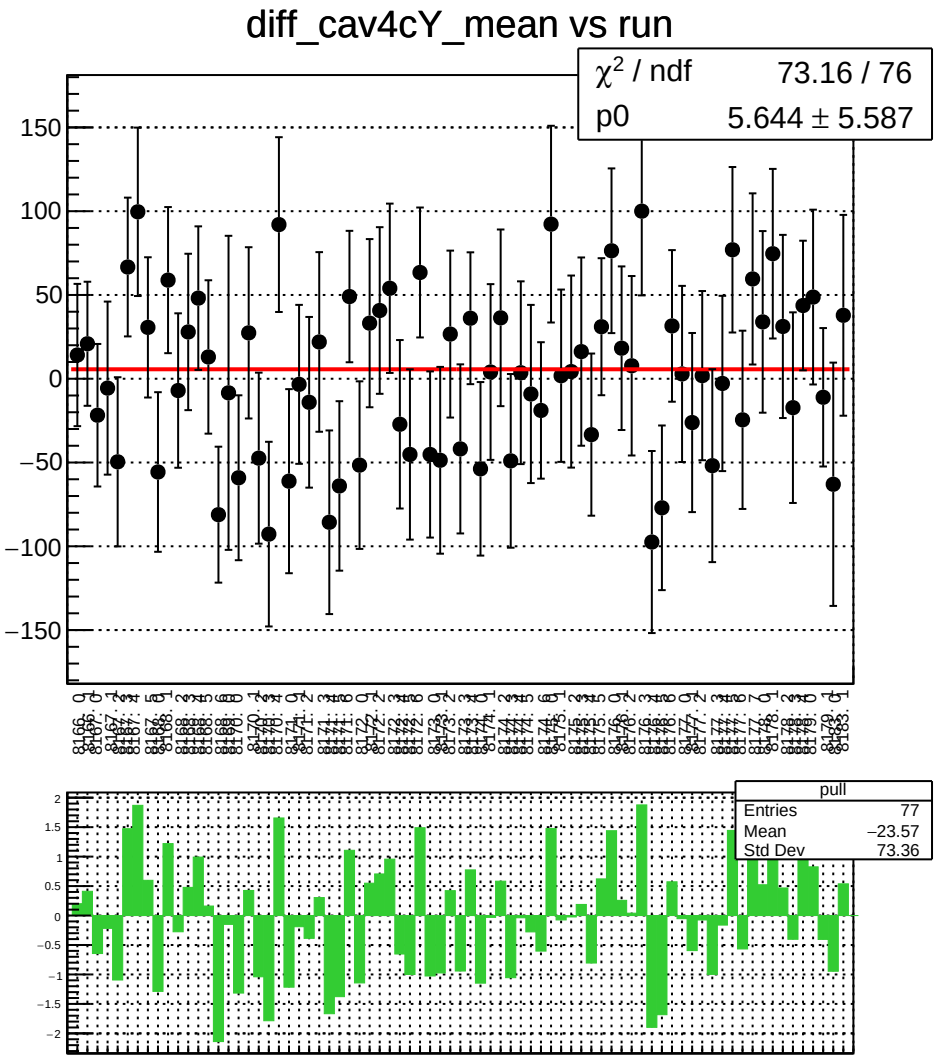

pull1D
Entries 77
Mean −0.0296
Std Dev 0.9697

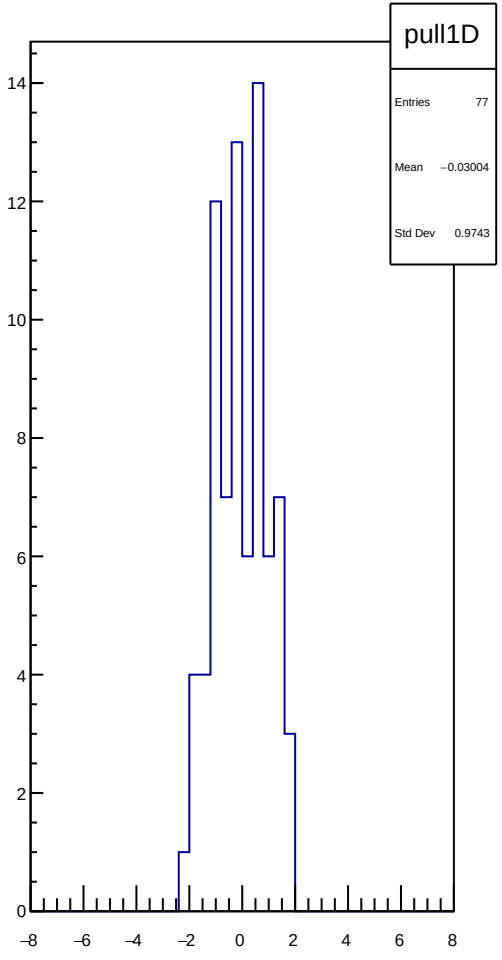

diff_cav4bY_rms vs run
χ² / ndf 9909 / 76
p0 5975 ± 4.908
9000
8500
8000
7500
7000
6500
6000
5500
5000

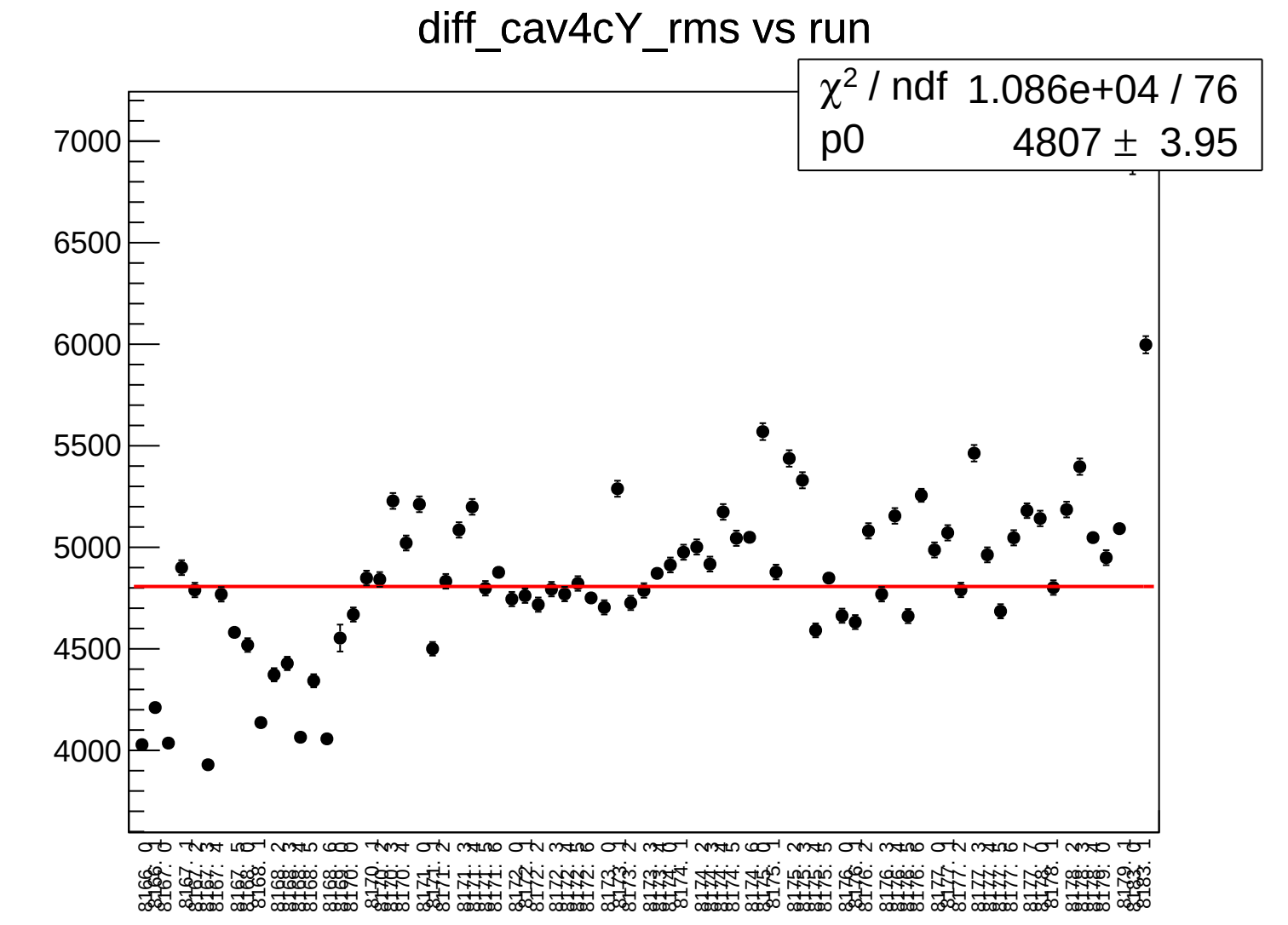

diff_cav4cX_mean vs run
χ² / ndf 71.62 / 76
p0 −1349 ± 1017
pull
Entries 77
Mean 216.6
Std Dev 156.8

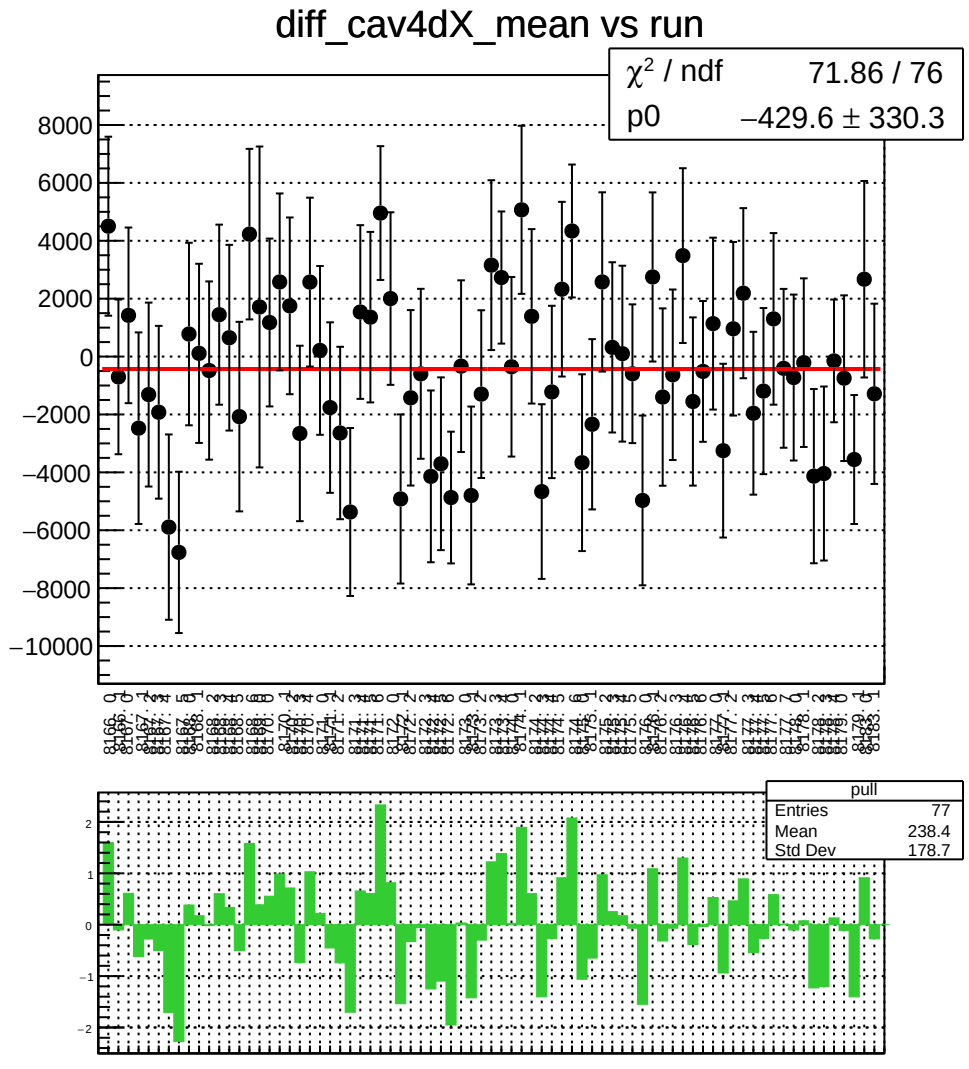

pull1D
Entries 77
Mean −0.004772
Std Dev 0.9644

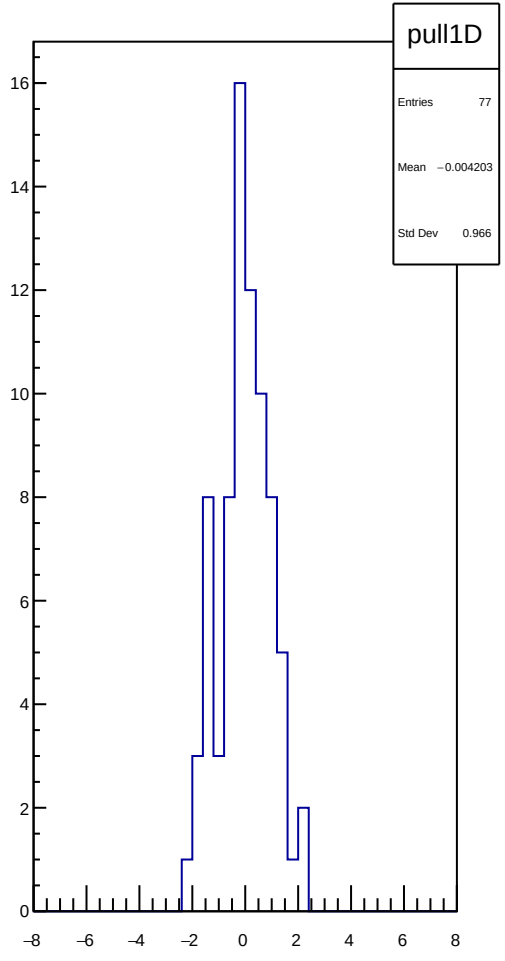

diff_cav4cX_rms vs run
×10^3
χ² / ndf 1920 / 76
p0 8.777e+05 ± 719.2
1000
980
960
940
920
900
880
860
840
820

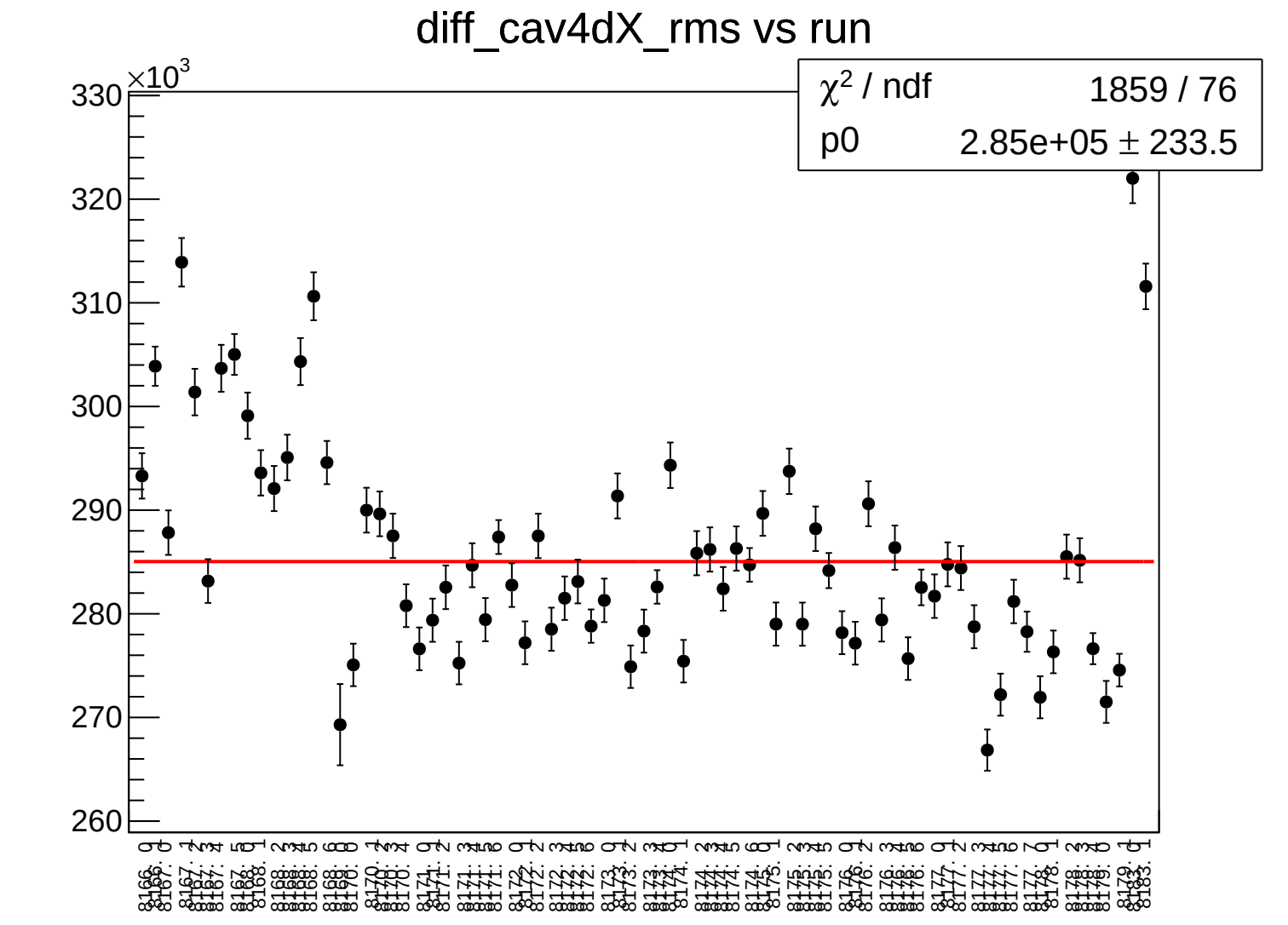

diff_cav4cY_mean vs run
χ^2 / ndf 73.16 / 76
p0 5.644 ± 5.587
150
100
50
0
−50
−100
−150
pull
Entries 77
Mean −23.57
Std Dev 73.36
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

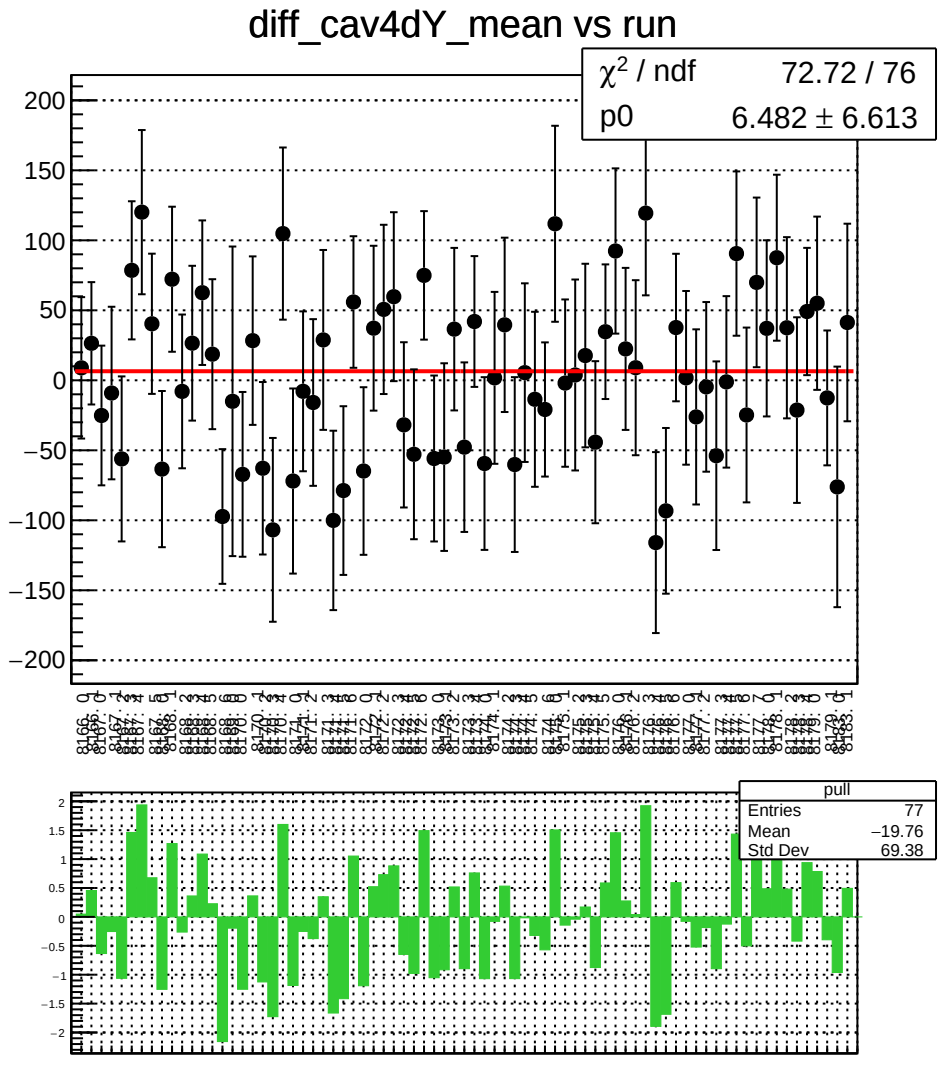

pull1D
Entries 77
Mean −0.03004
Std Dev 0.9743
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

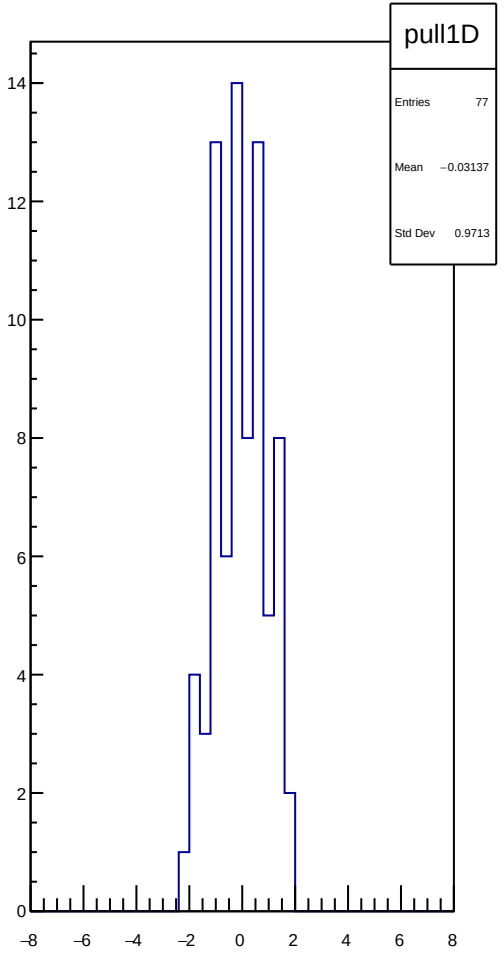

diff_cav4cY_rms vs run
χ² / ndf 1.086e+04 / 76
p0 4807 ± 3.95
7000
6500
6000
5500
5000
4500
4000

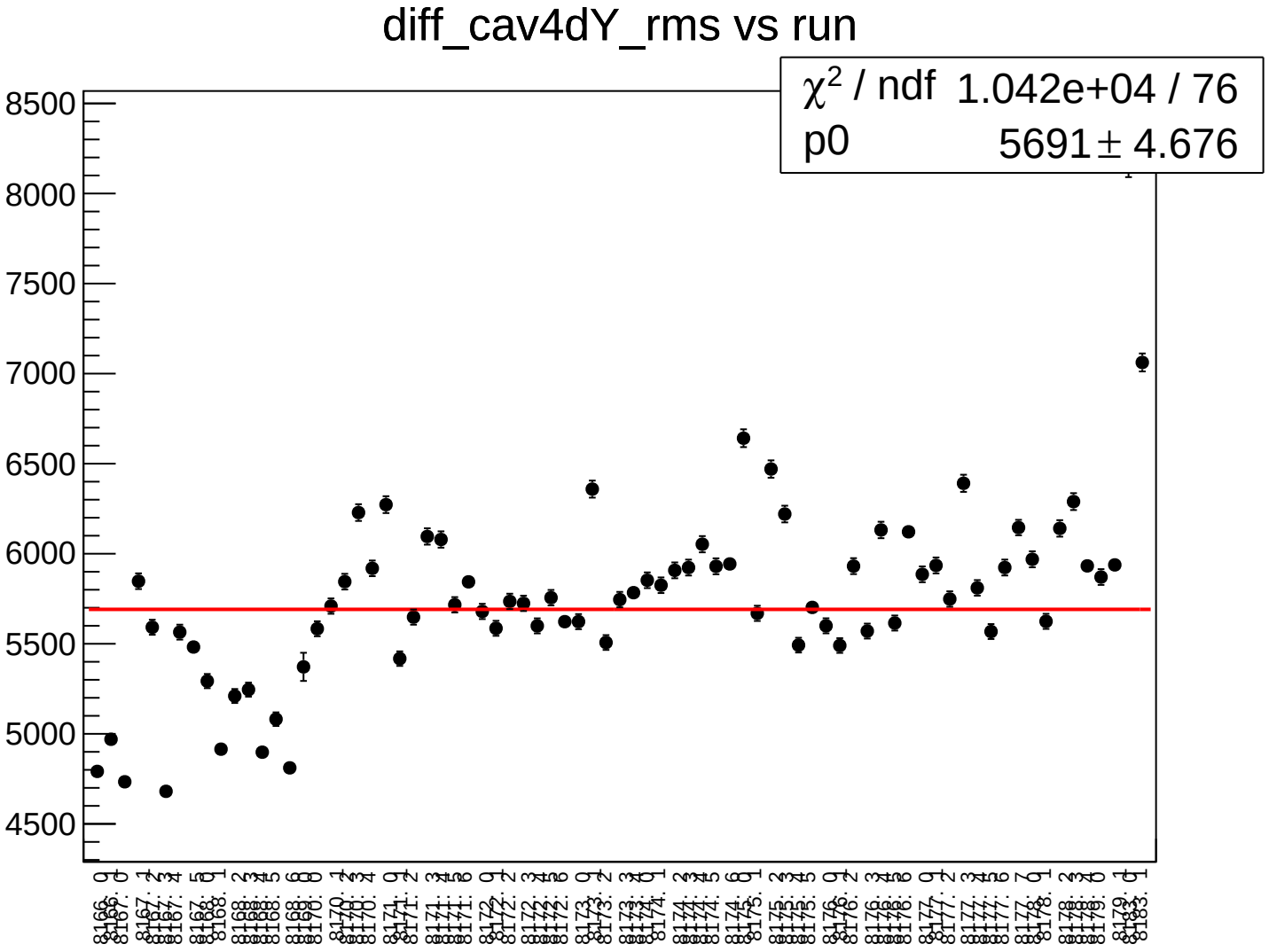

diff_cav4dX_mean vs run
χ^2 / ndf 71.86 / 76
p0 −429.6 ± 330.3
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
pull
Entries 77
Mean 238.4
Std Dev 178.7
2
1
0
−1
−2

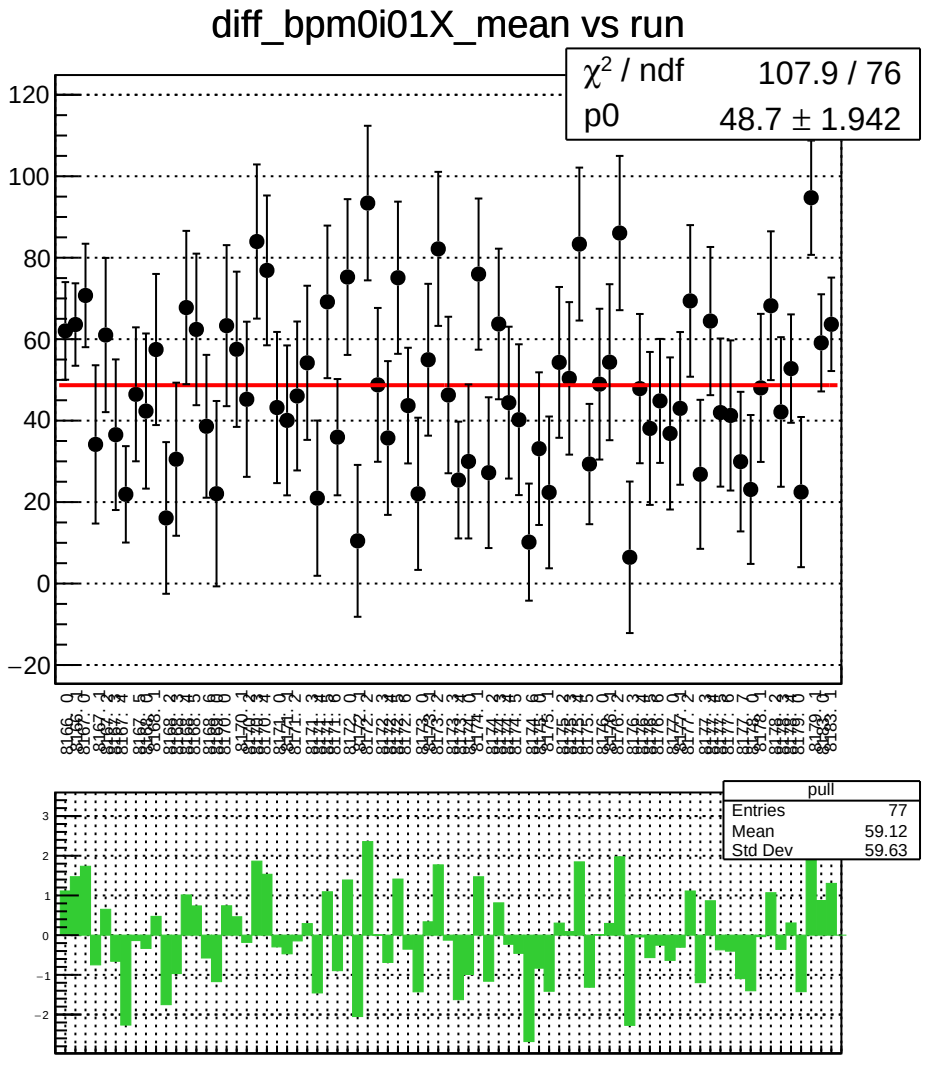

pull1D
Entries 77
Mean −0.004203
Std Dev 0.966
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

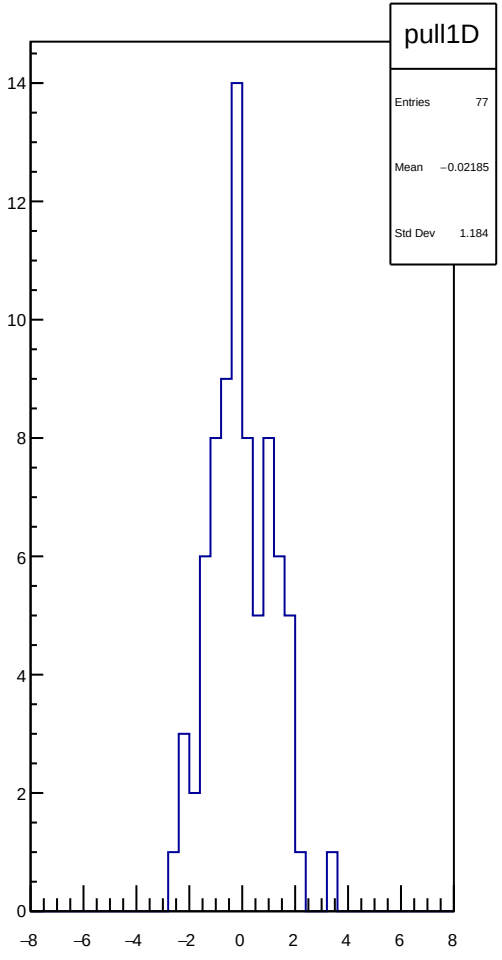

diff_cav4dX_rms vs run
χ^2 / ndf 1859 / 76
p0 2.85e+05 ± 233.5
×10^3
330
320
310
300
290
280
270
260

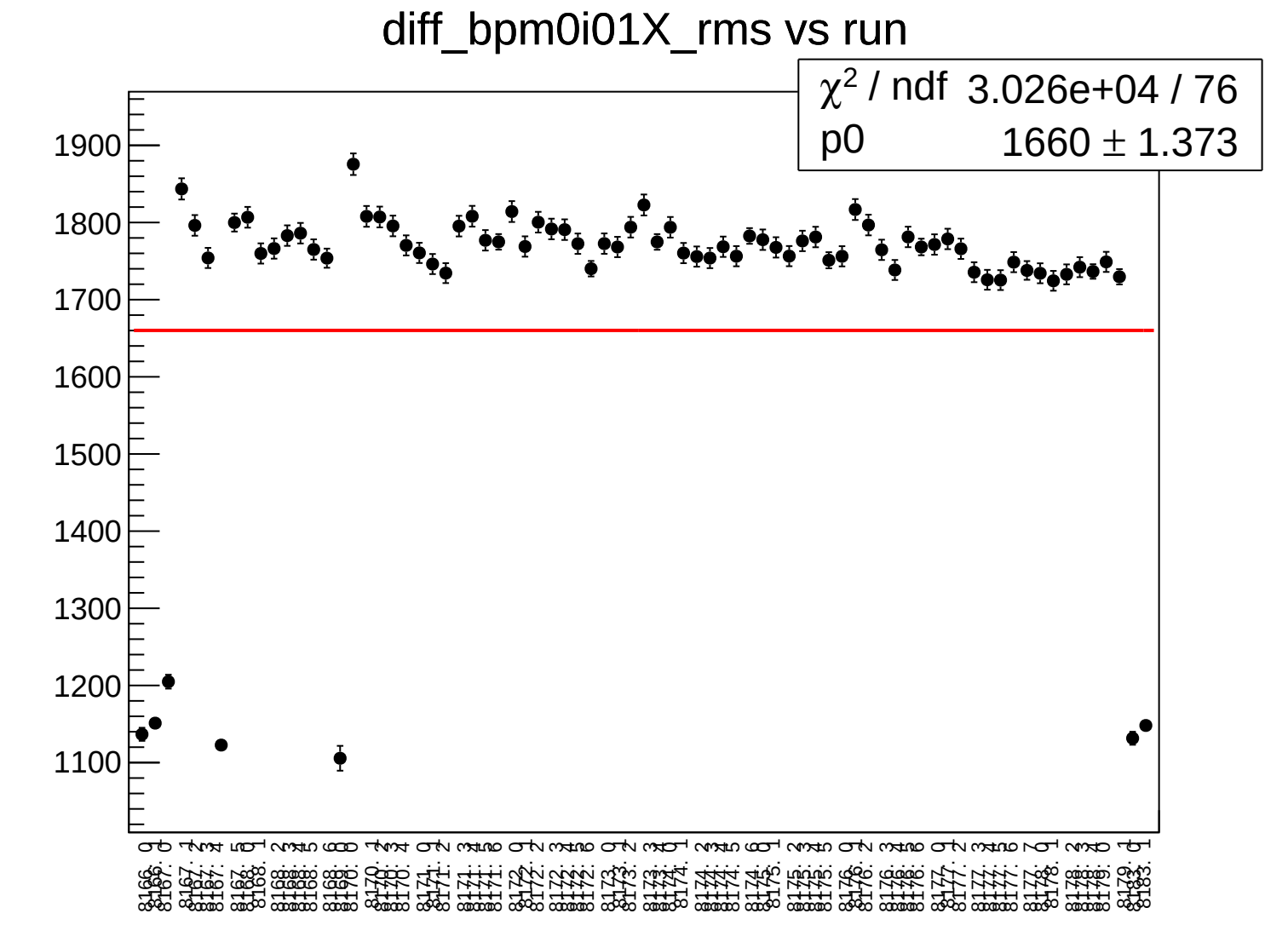

diff_cav4dY_mean vs run
χ^2 / ndf 72.72 / 76
p0 6.482 ± 6.613
pull
Entries 77
Mean −19.76
Std Dev 69.38

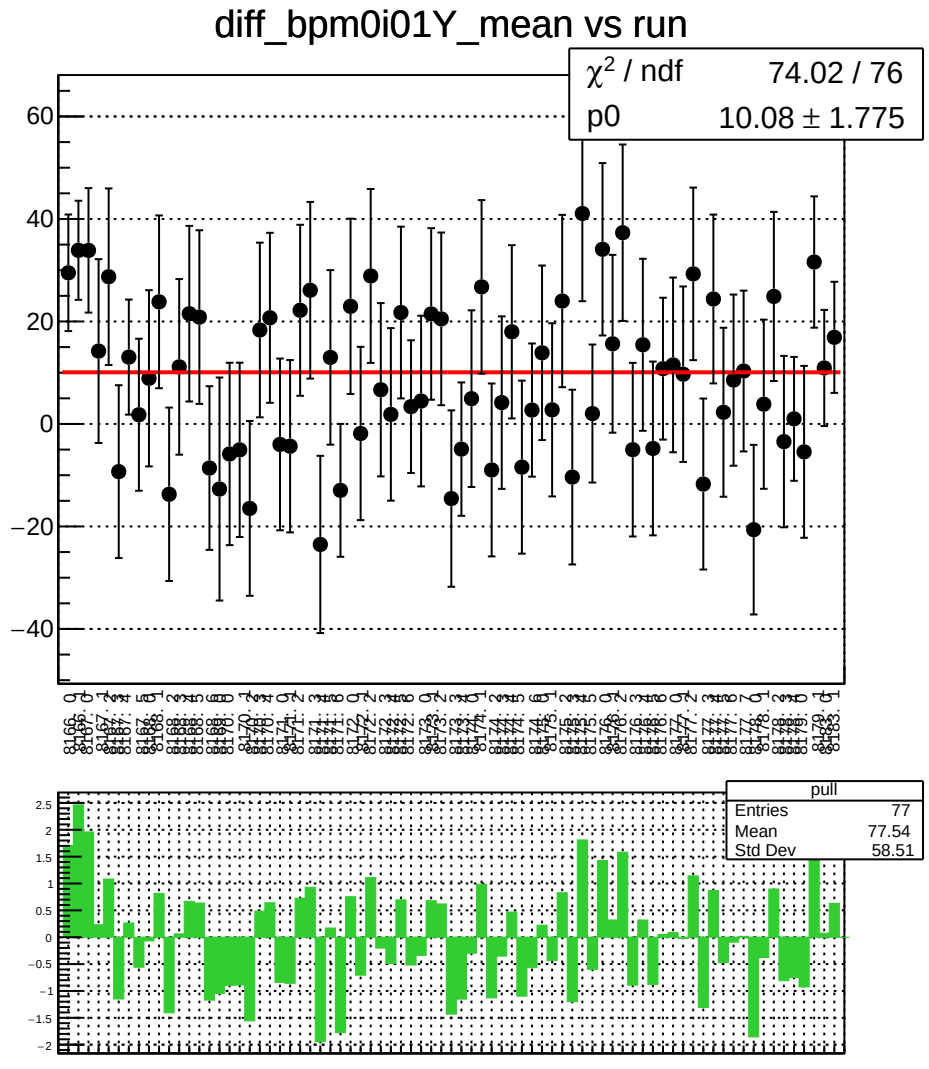

pull1D
Entries 77
Mean −0.03137
Std Dev 0.9713

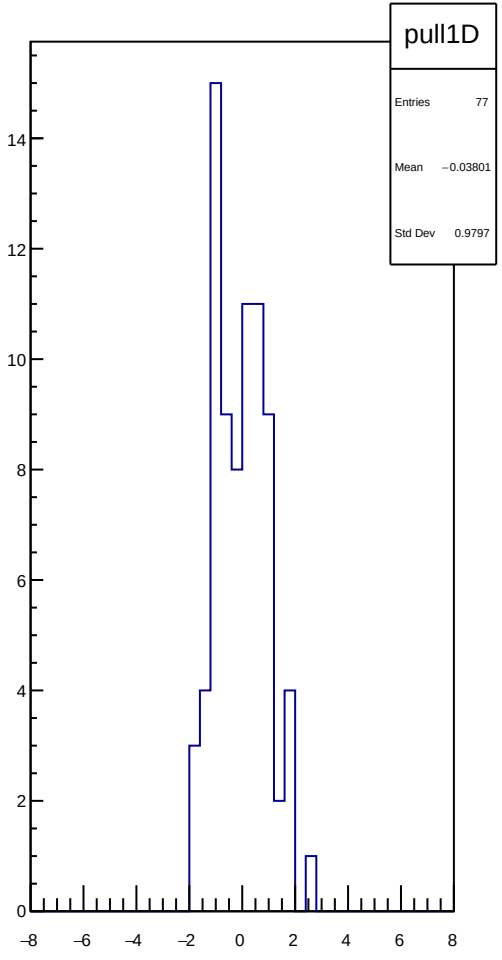

diff_cav4dY_rms vs run
χ² / ndf 1.042e+04 / 76
p0 5691 ± 4.676
8500
8000
7500
7000
6500
6000
5500
5000
4500

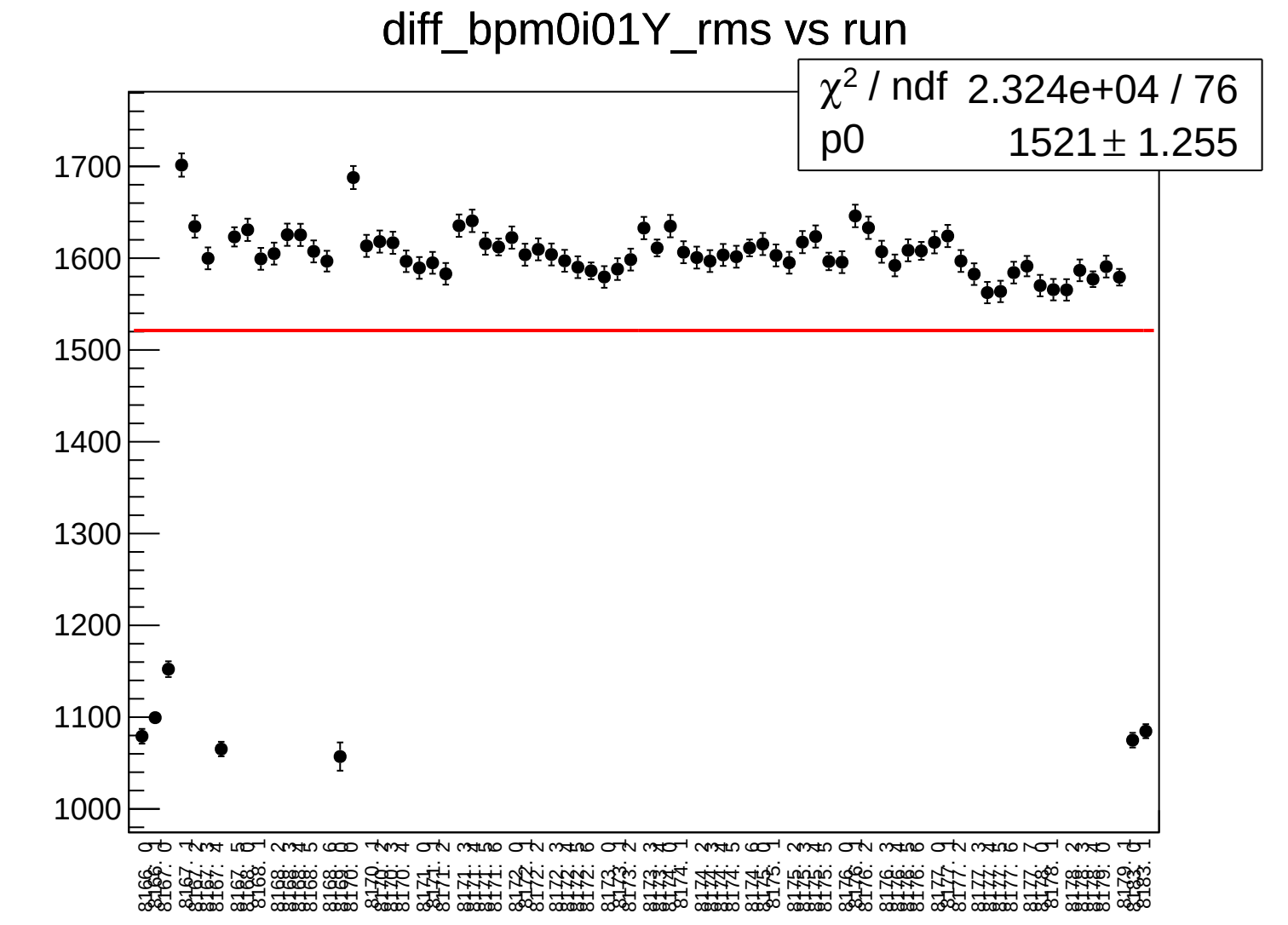

diff_bpm0i01X_mean vs run
χ² / ndf 107.9 / 76
p0 48.7 ± 1.942
pull
Entries 77
Mean 59.12
Std Dev 59.63

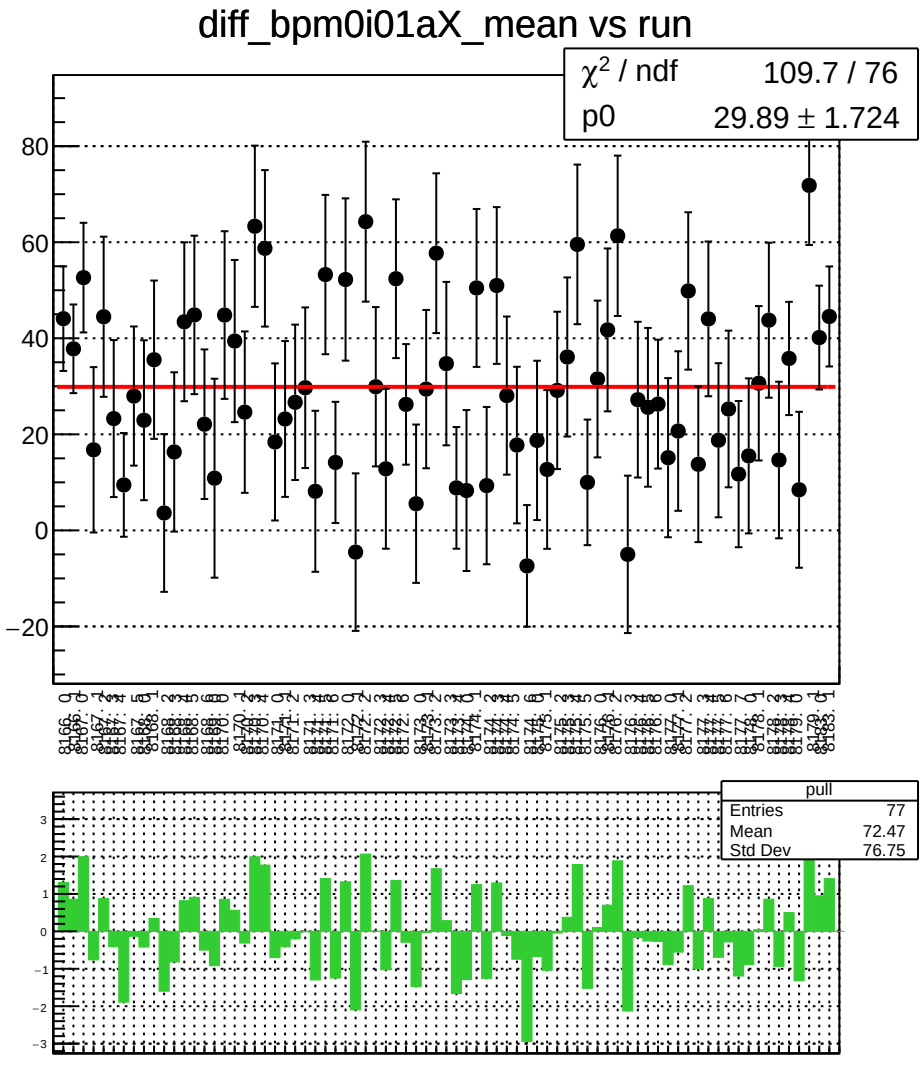

pull1D
Entries 77
Mean −0.02185
Std Dev 1.184

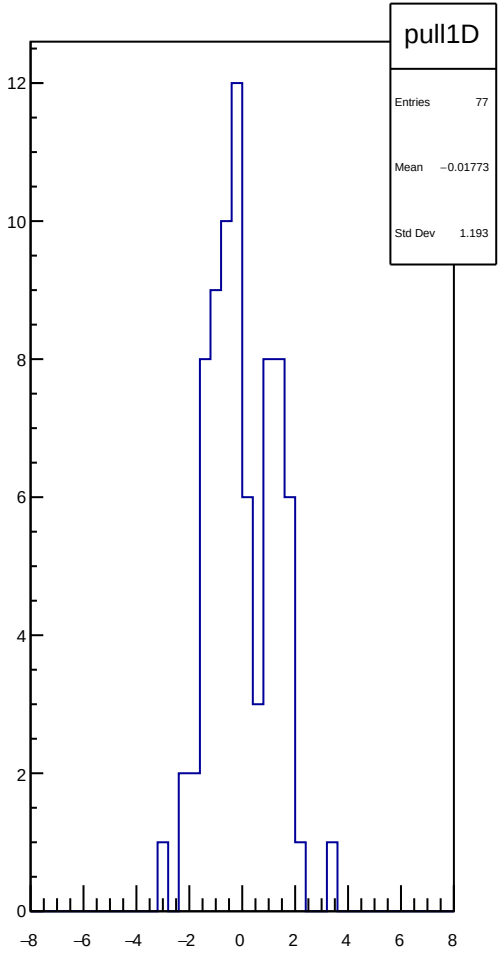

diff_bpm0i01X_rms vs run
χ² / ndf 3.026e+04 / 76
p0 1660 ± 1.373
1900
1800
1700
1600
1500
1400
1300
1200
1100

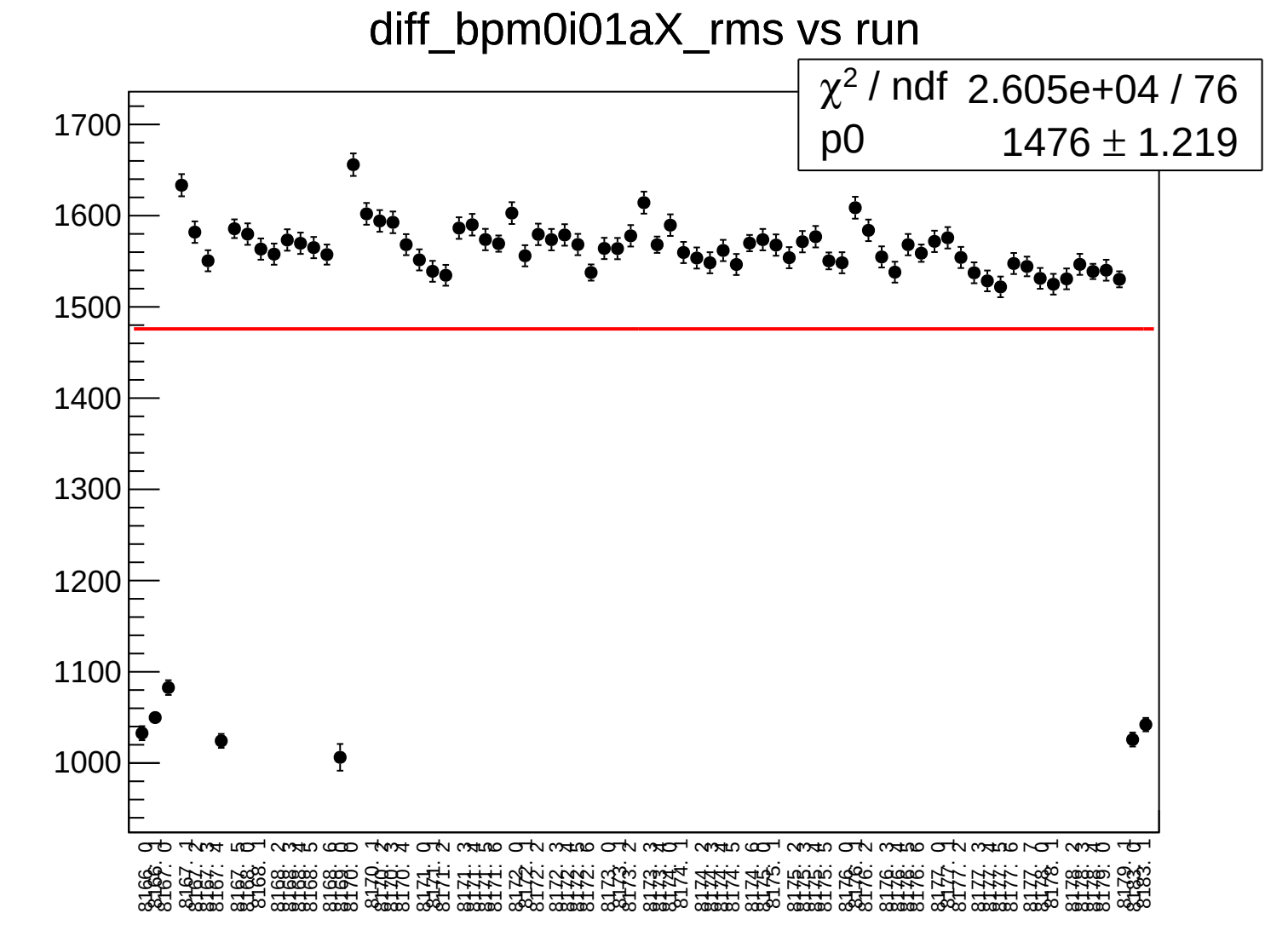

diff_bpm0i01Y_mean vs run
χ² / ndf 74.02 / 76
p0 10.08 ± 1.775
pull
Entries 77
Mean 77.54
Std Dev 58.51

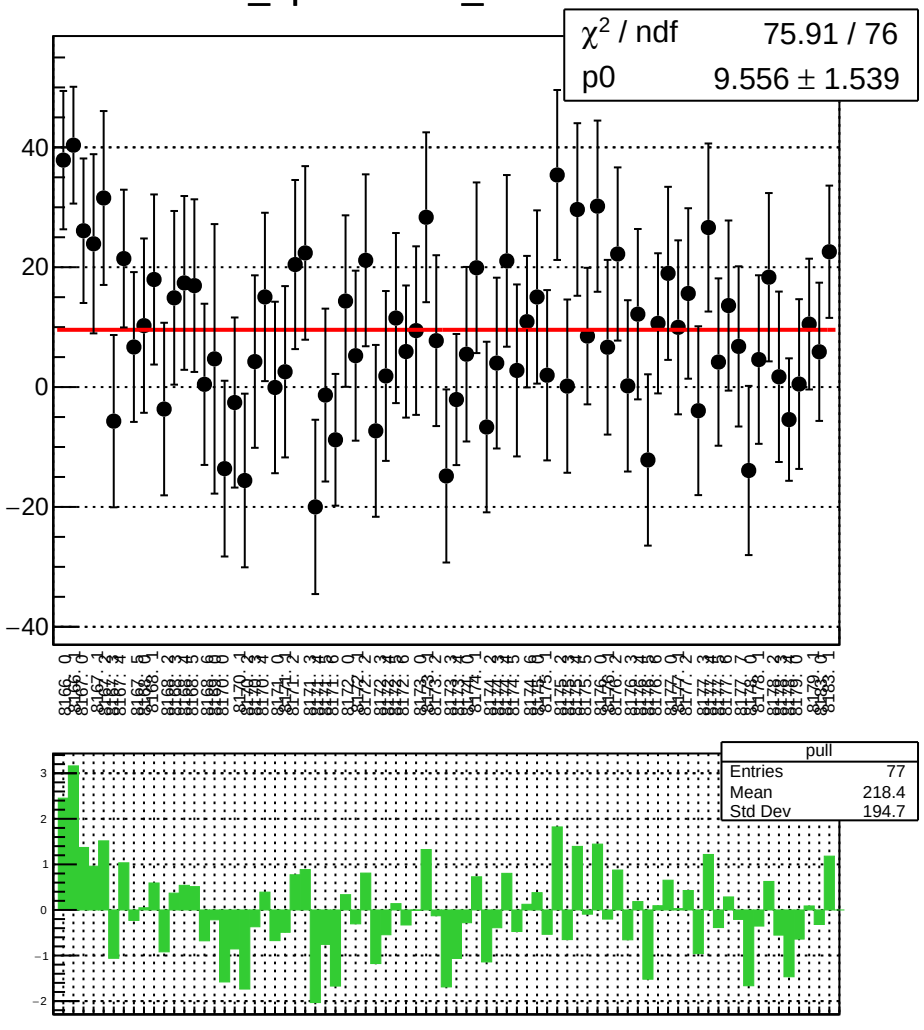

pull1D
Entries 77
Mean −0.03801
Std Dev 0.9797

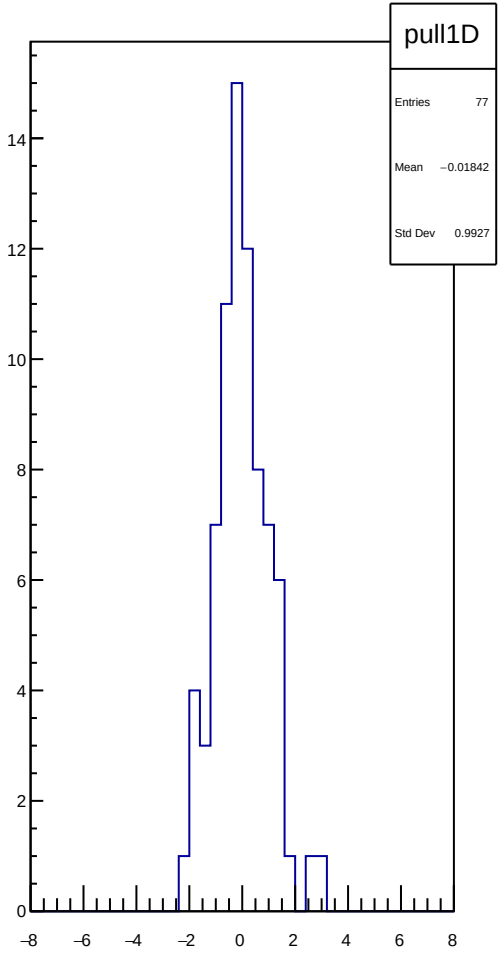

diff_bpm0i01Y_rms vs run
χ² / ndf 2.324e+04 / 76
p0 1521 ± 1.255
1700
1600
1500
1400
1300
1200
1100
1000

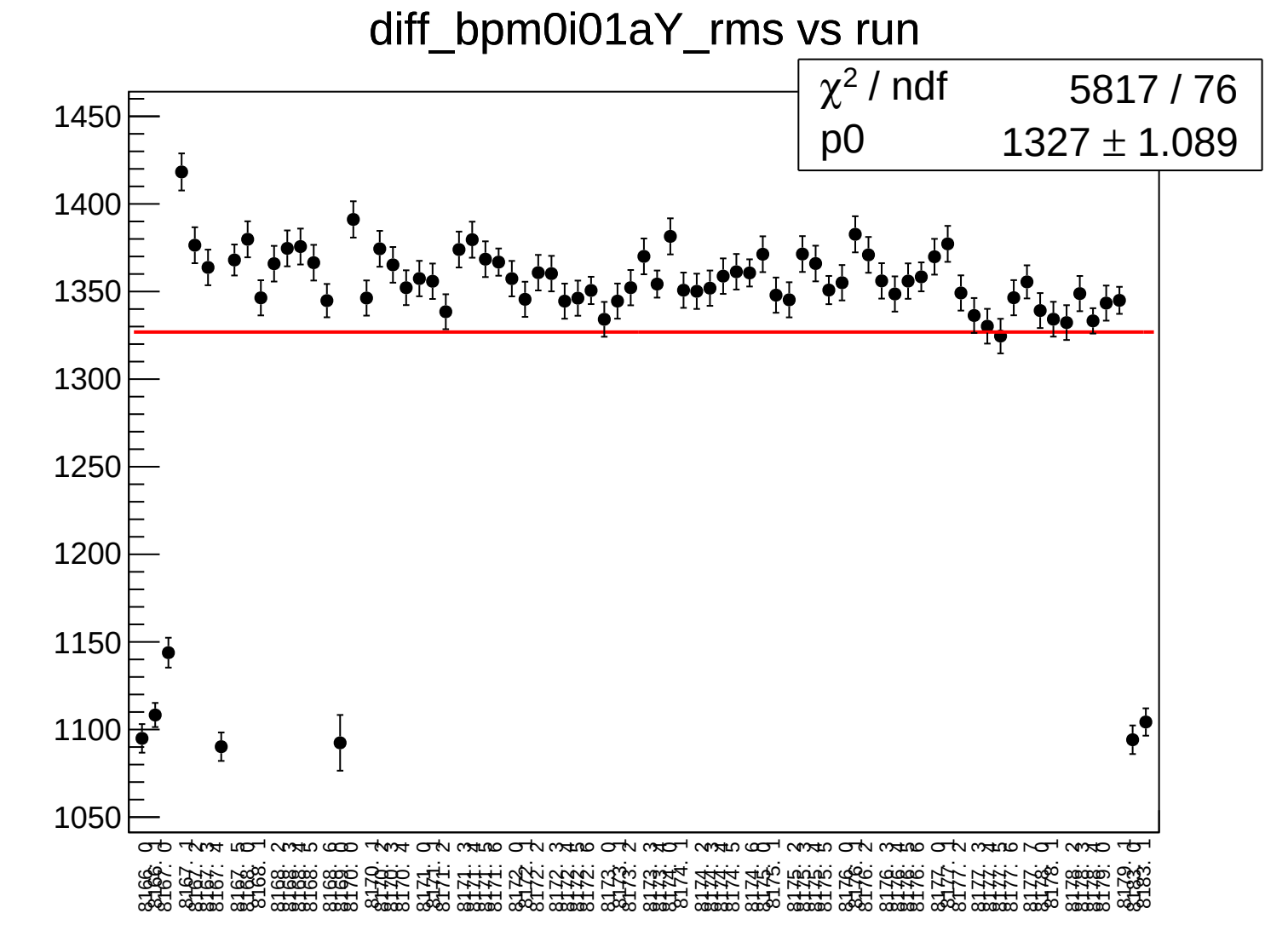

diff_bpm0i01aX_mean vs run
χ² / ndf 109.7 / 76
p0 29.89 ± 1.724
pull
Entries 77
Mean 72.47
Std Dev 76.75

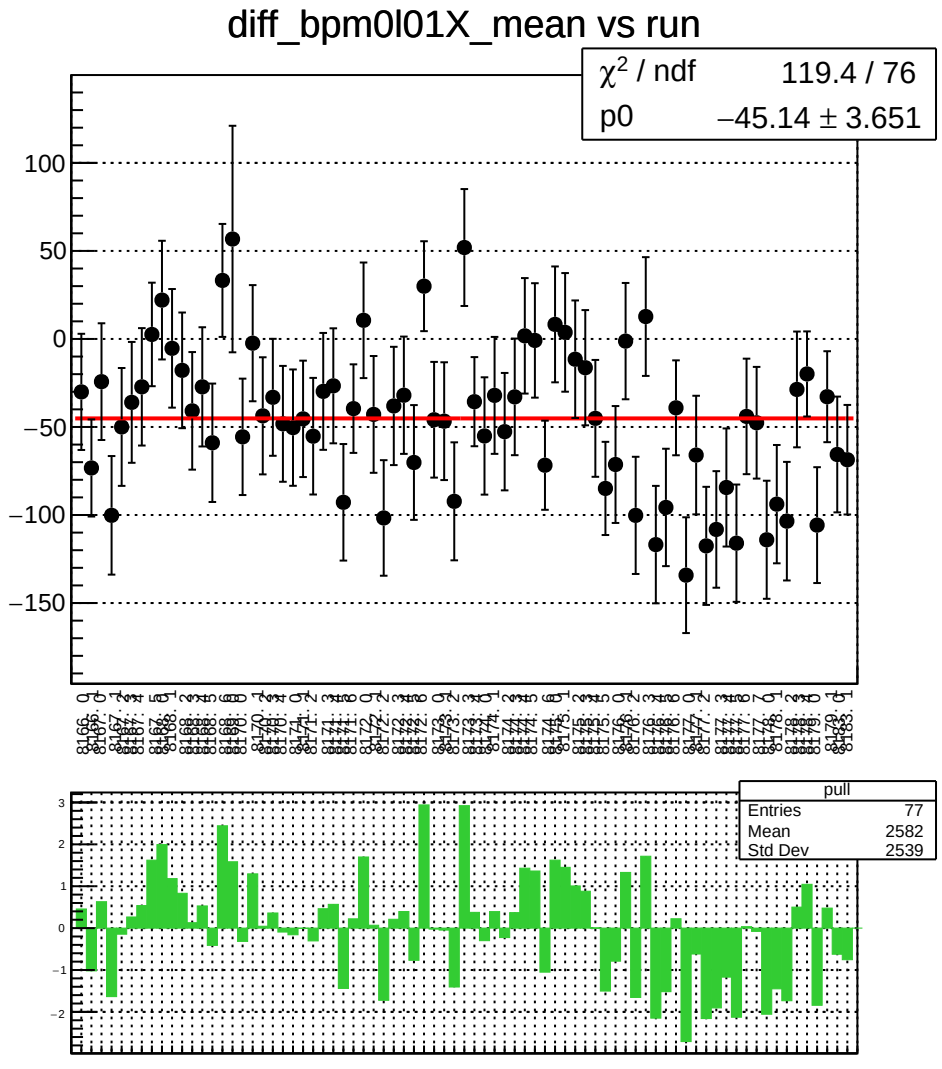

pull1D
Entries 77
Mean −0.01773
Std Dev 1.193

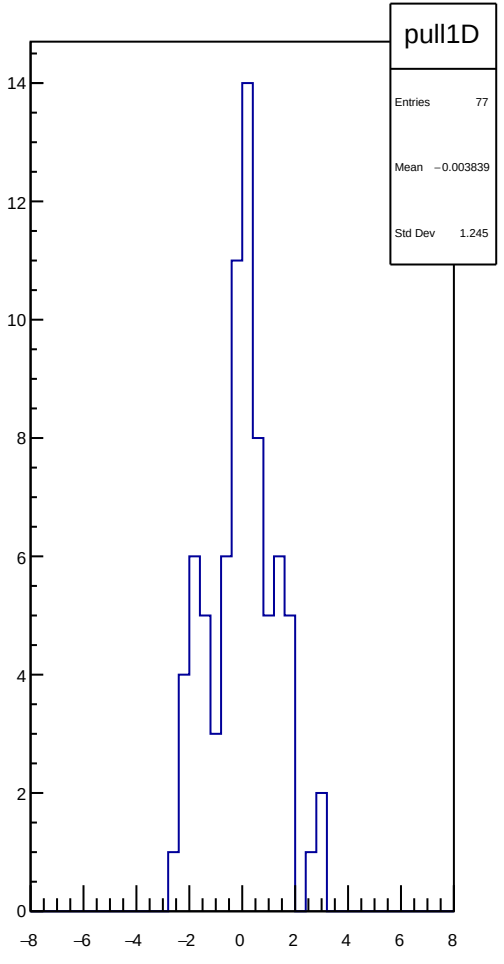

diff_bpm0i01aX_rms vs run
χ² / ndf 2.605e+04 / 76
p0 1476 ± 1.219
1700
1600
1500
1400
1300
1200
1100
1000

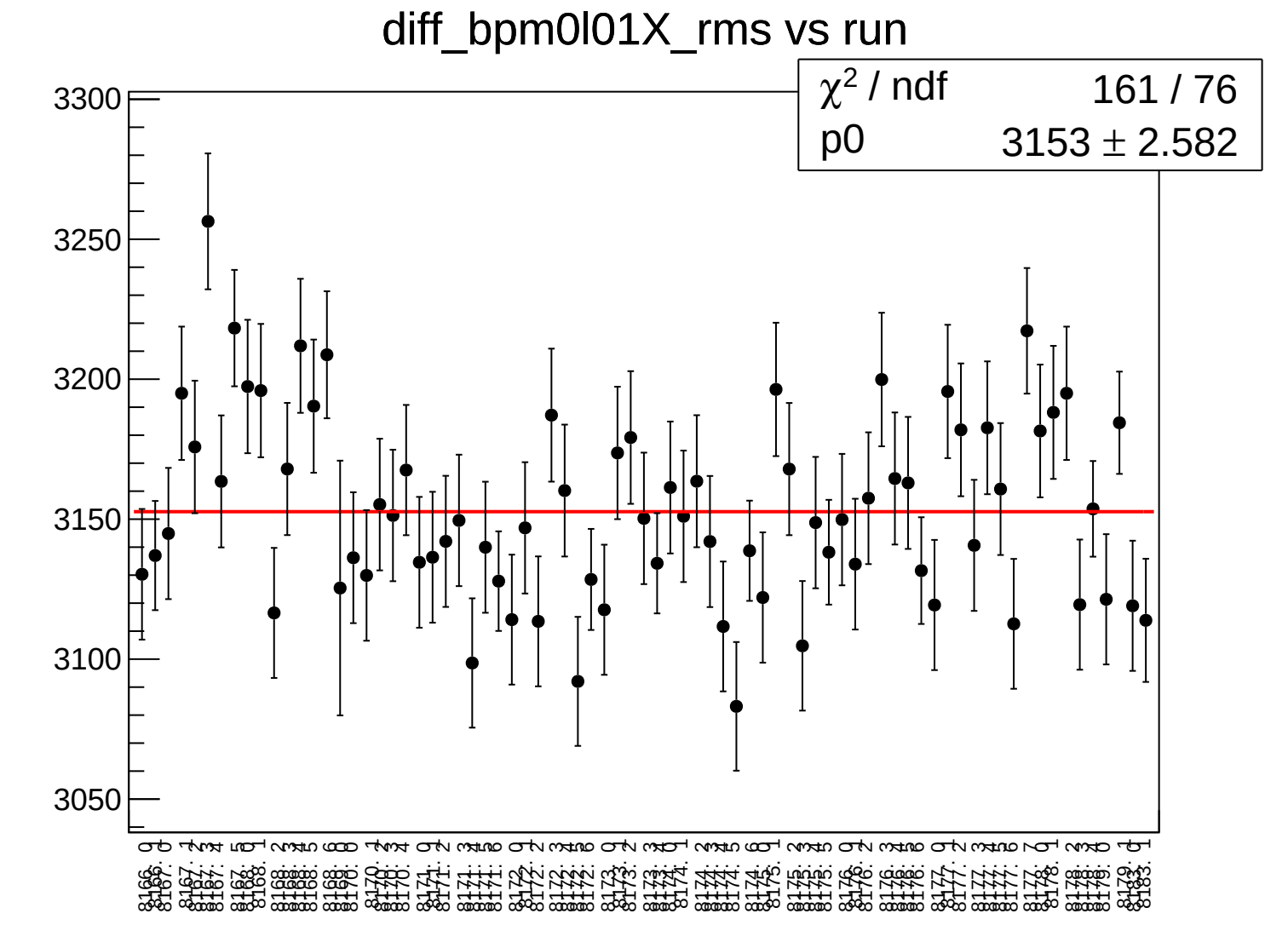

diff_bpm0i01aY_mean vs run
χ² / ndf 75.91 / 76
p0 9.556 ± 1.539
pull
Entries 77
Mean 218.4
Std Dev 194.7

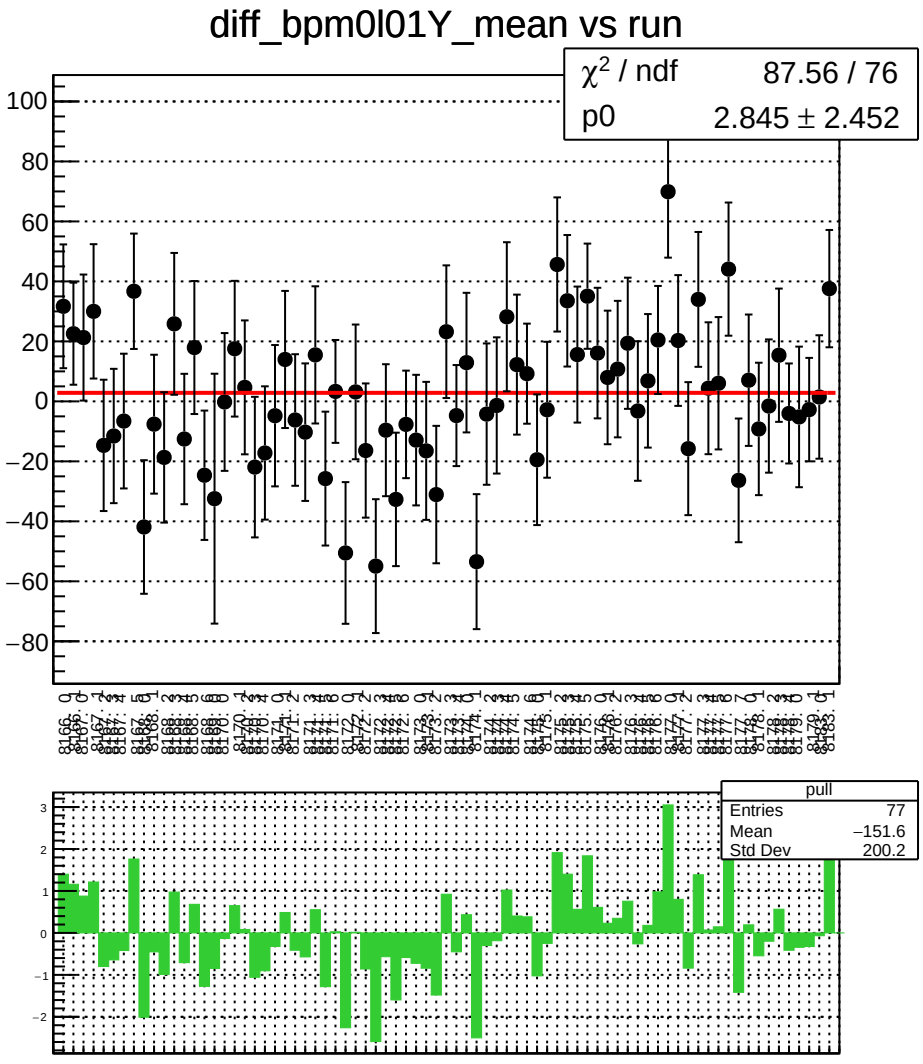

pull1D
Entries 77
Mean −0.01842
Std Dev 0.9927

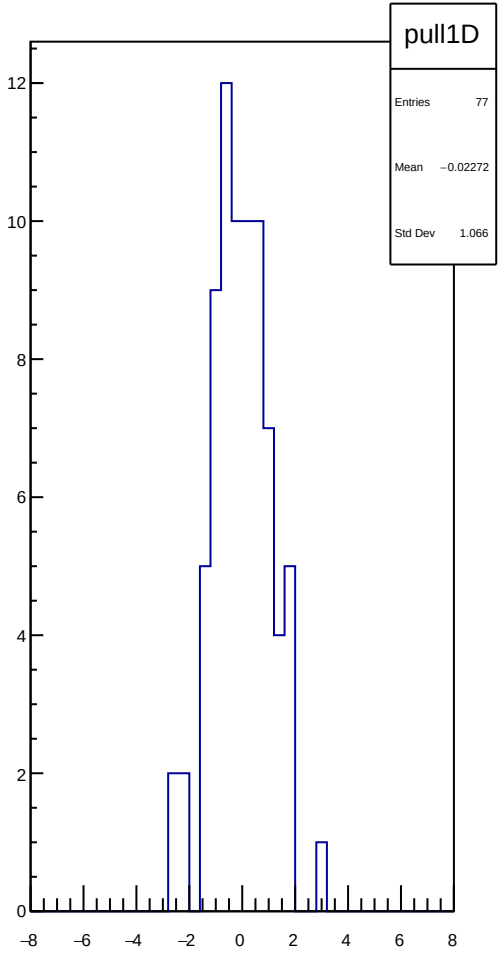

diff_bpm0i01aY_rms vs run
χ² / ndf 5817 / 76
p0 1327 ± 1.089
1450
1400
1350
1300
1250
1200
1150
1100
1050

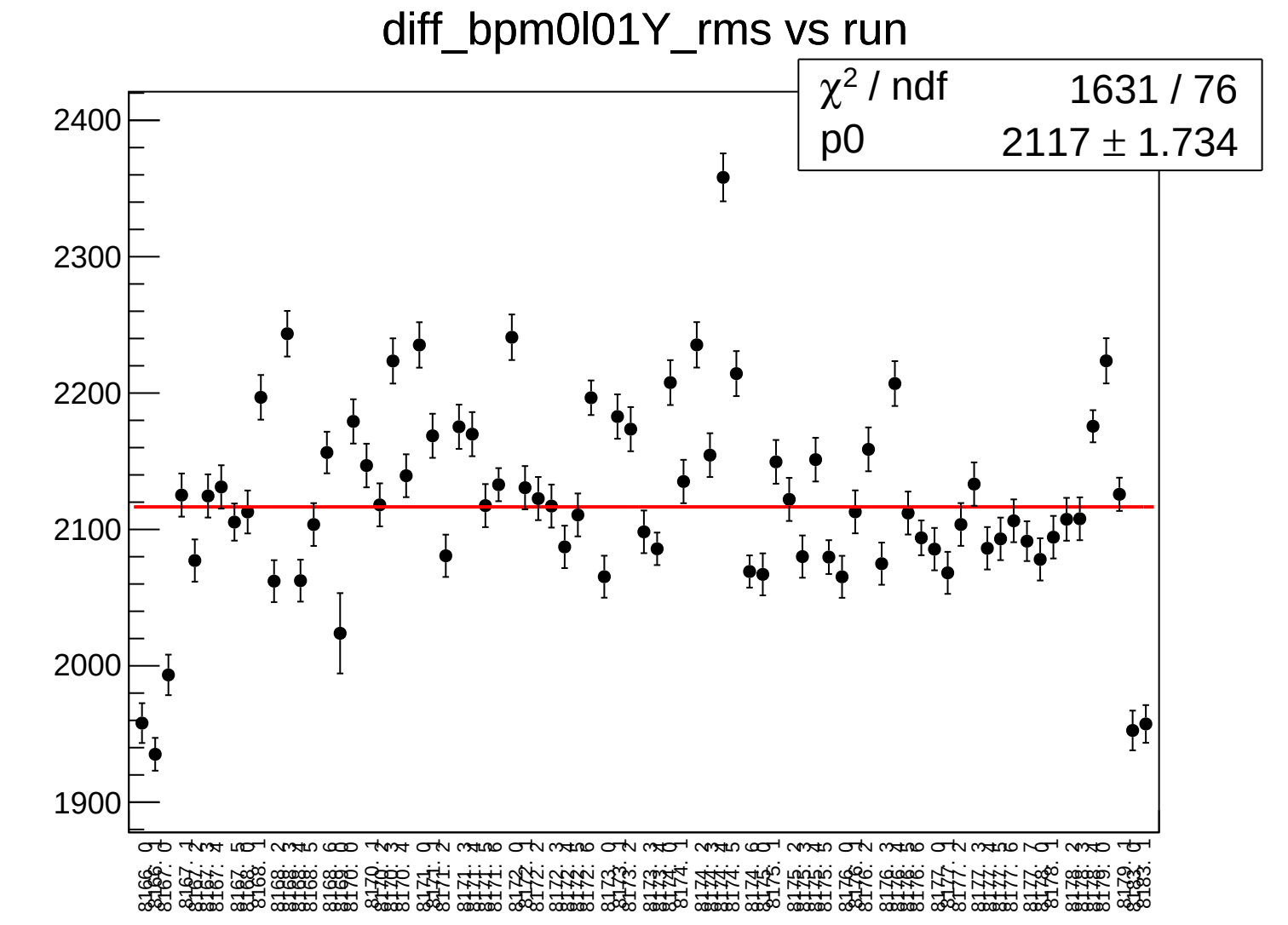

diff_bpm0l01X_mean vs run
χ² / ndf 119.4 / 76
p0 −45.14 ± 3.651
pull
Entries 77
Mean 2582
Std Dev 2539

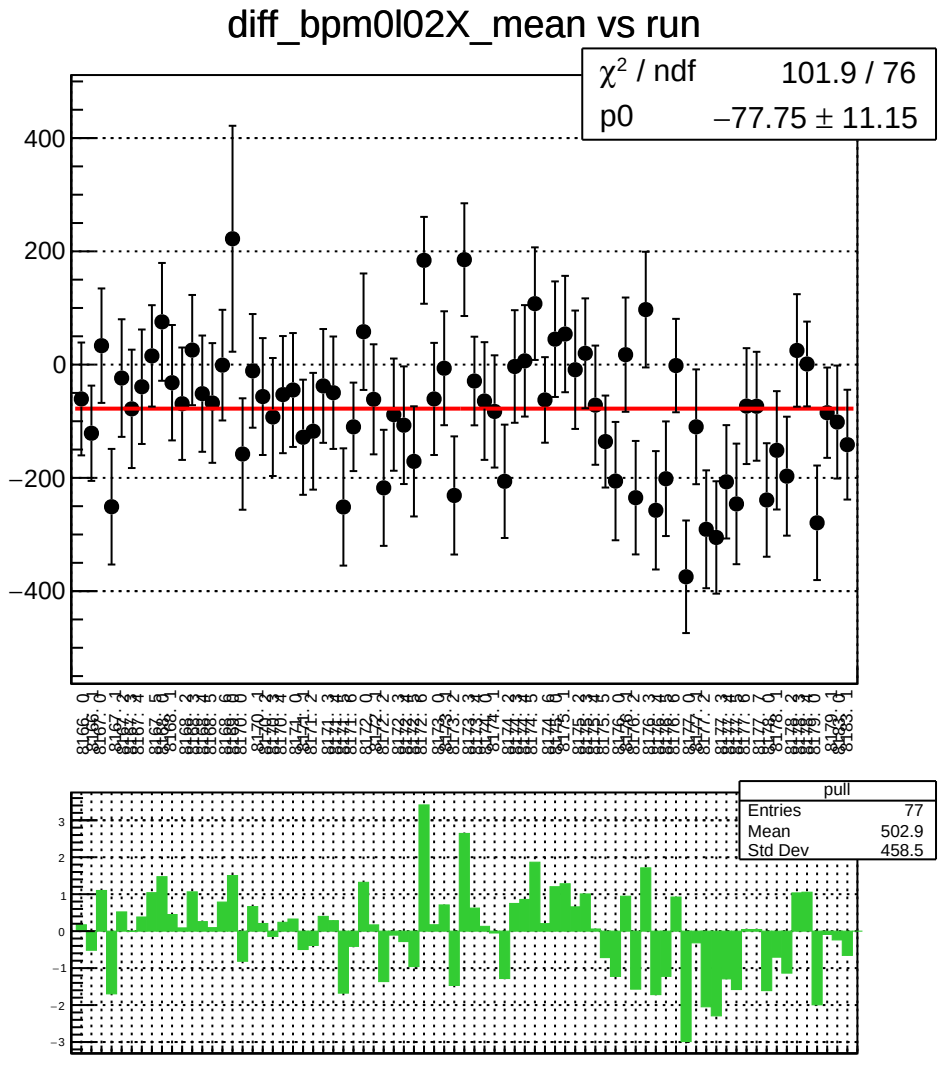

pull1D
Entries 77
Mean −0.003839
Std Dev 1.245

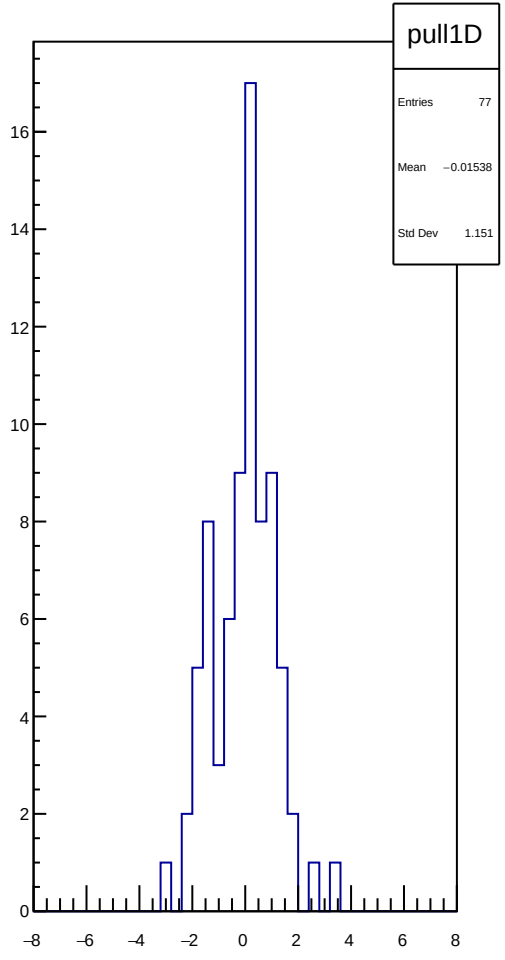

diff_bpm0l01X_rms vs run
χ² / ndf 161 / 76
p0 3153 ± 2.582
3300
3250
3200
3150
3100
3050

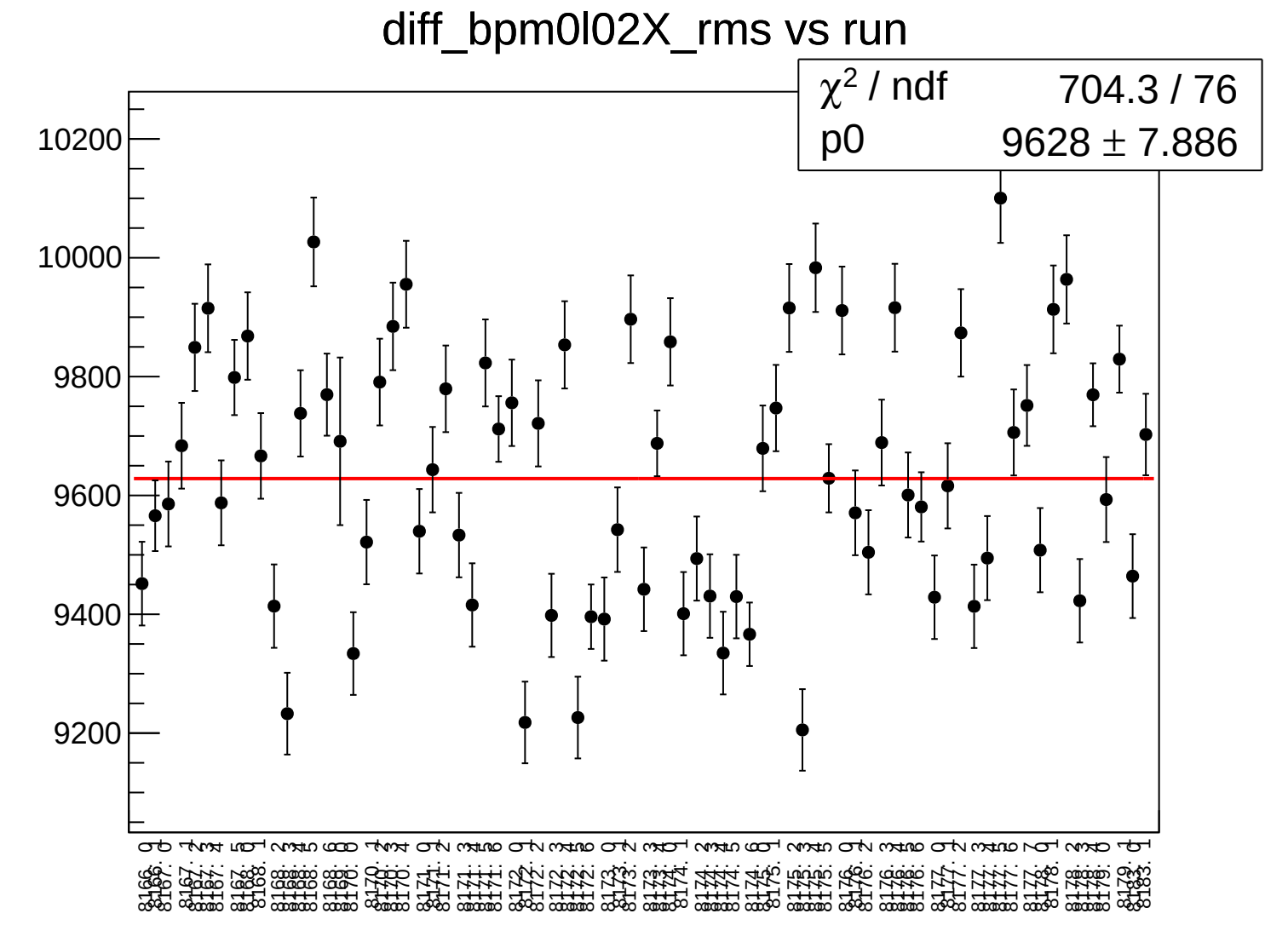

diff_bpm0l01Y_mean vs run
χ² / ndf 87.56 / 76
p0 2.845 ± 2.452
pull
Entries 77
Mean −151.6
Std Dev 200.2

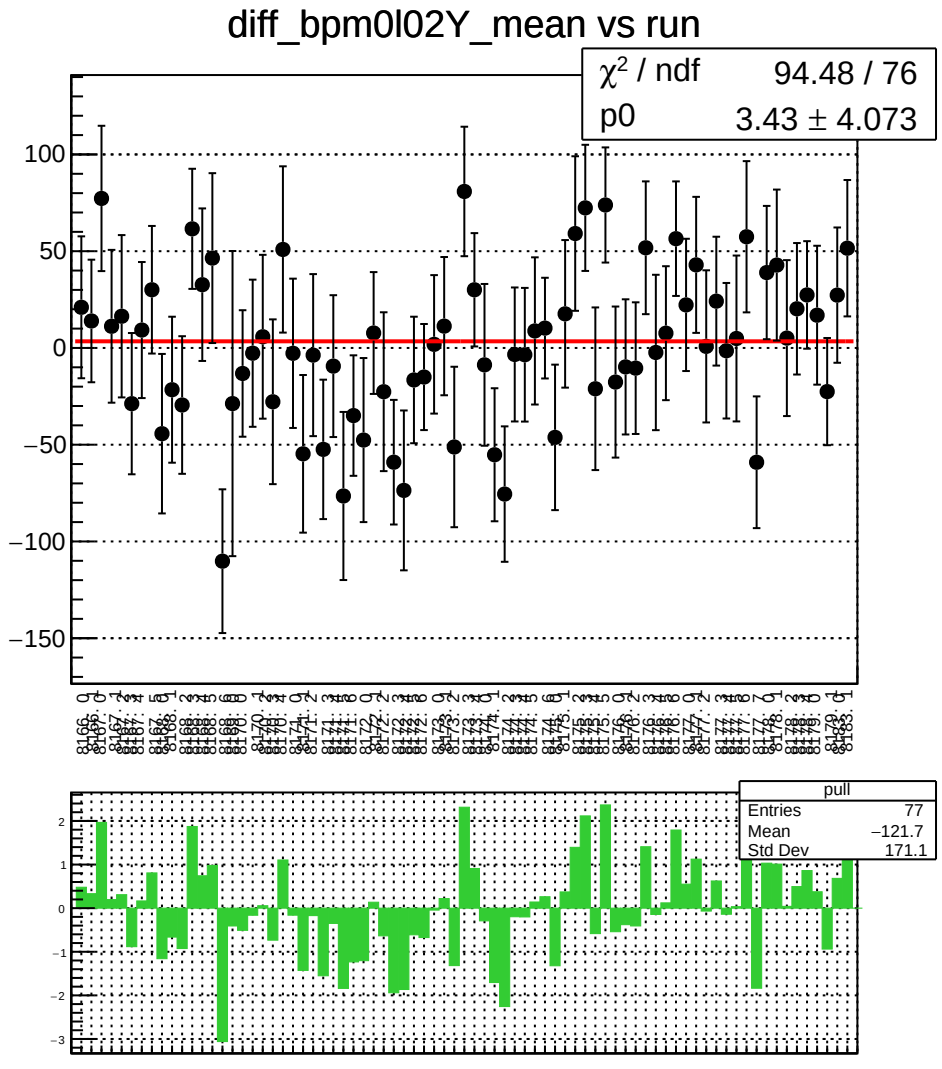

pull1D
Entries 77
Mean −0.02272
Std Dev 1.066

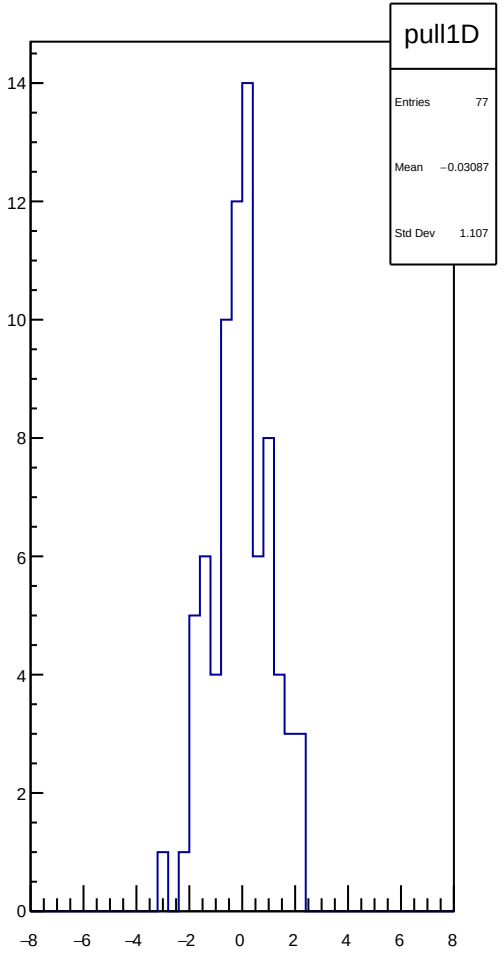

diff_bpm0l01Y_rms vs run
χ² / ndf 1631 / 76
p0 2117 ± 1.734
2400
2300
2200
2100
2000
1900

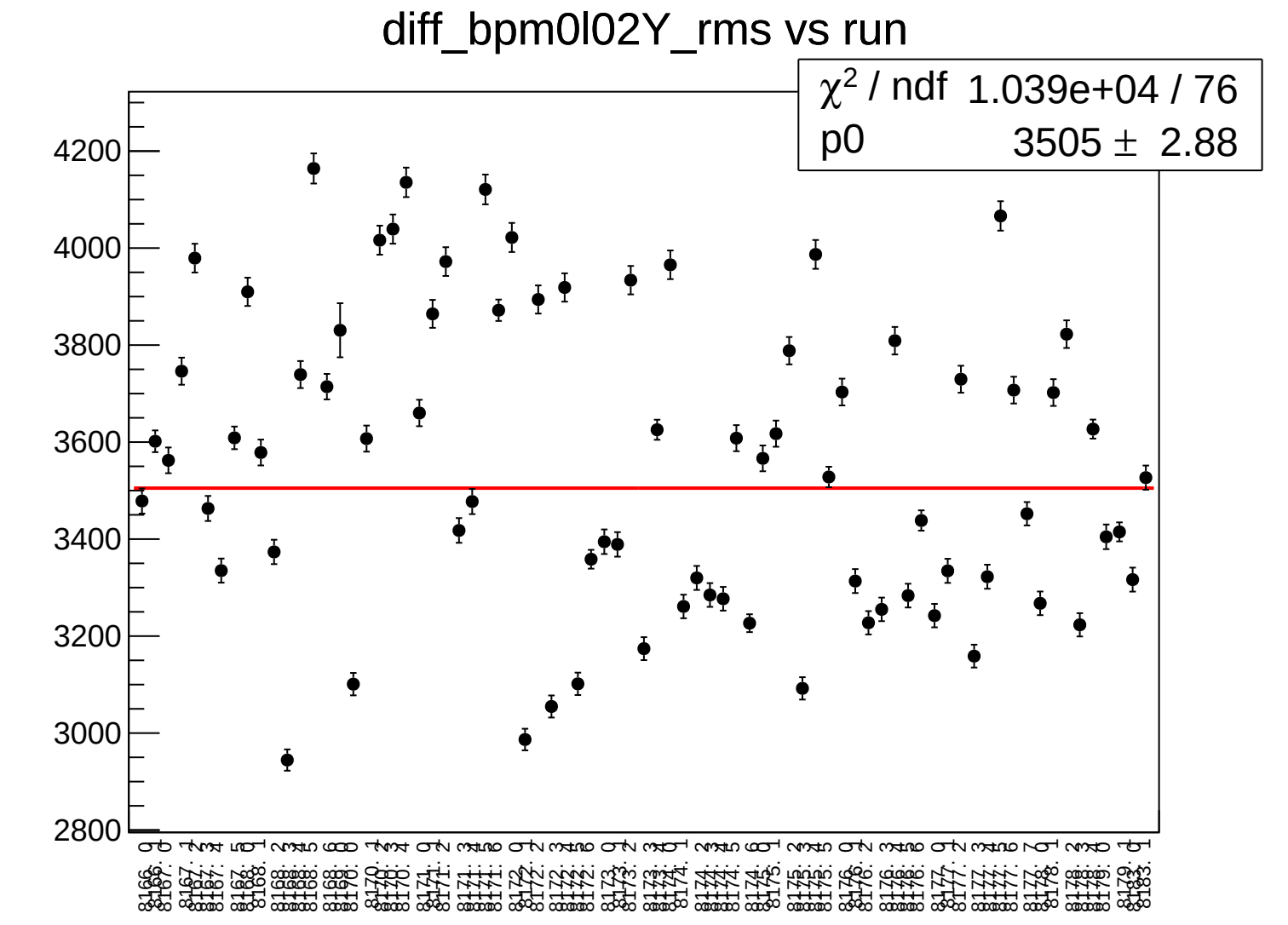

diff_bpm0l02X_mean vs run
χ² / ndf 101.9 / 76
p0 −77.75 ± 11.15
pull
Entries 77
Mean 502.9
Std Dev 458.5

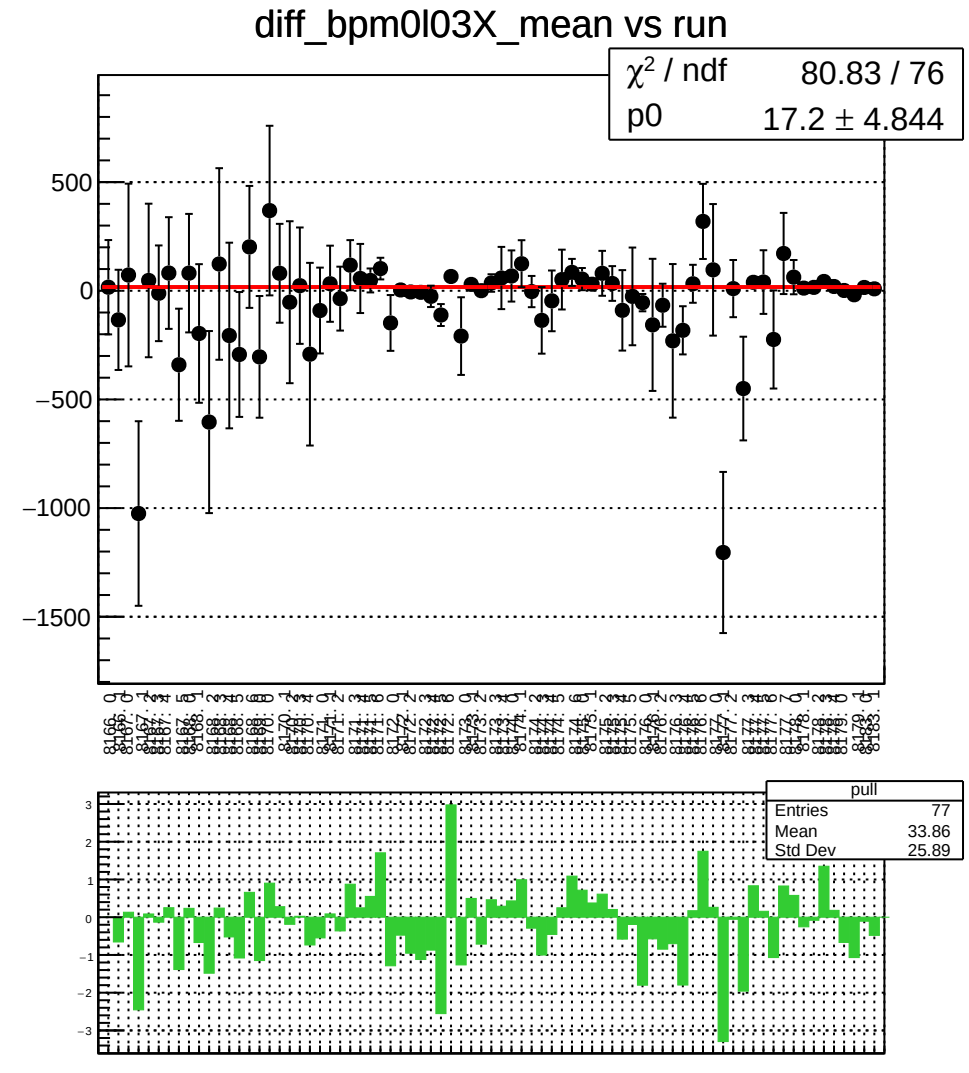

pull1D
Entries 77
Mean −0.01538
Std Dev 1.151

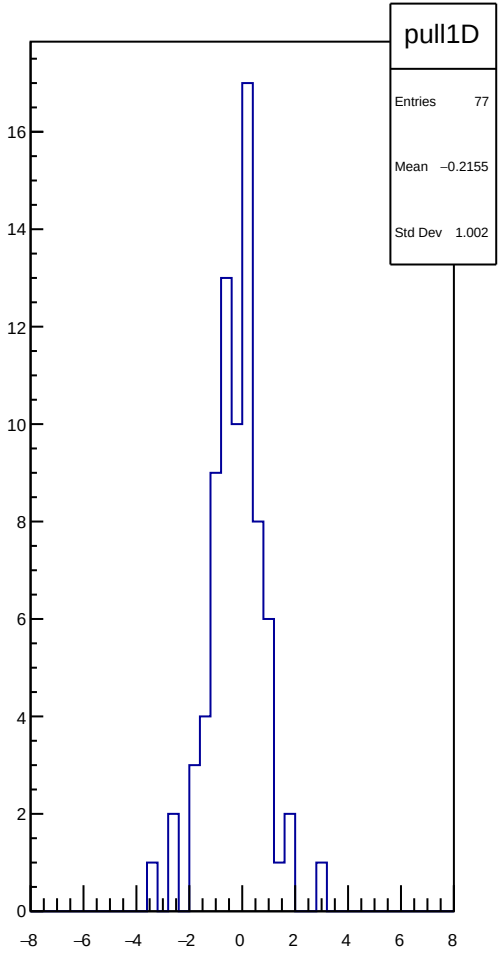

diff_bpm0l02X_rms vs run
χ² / ndf 704.3 / 76
p0 9628 ± 7.886
10200
10000
9800
9600
9400
9200

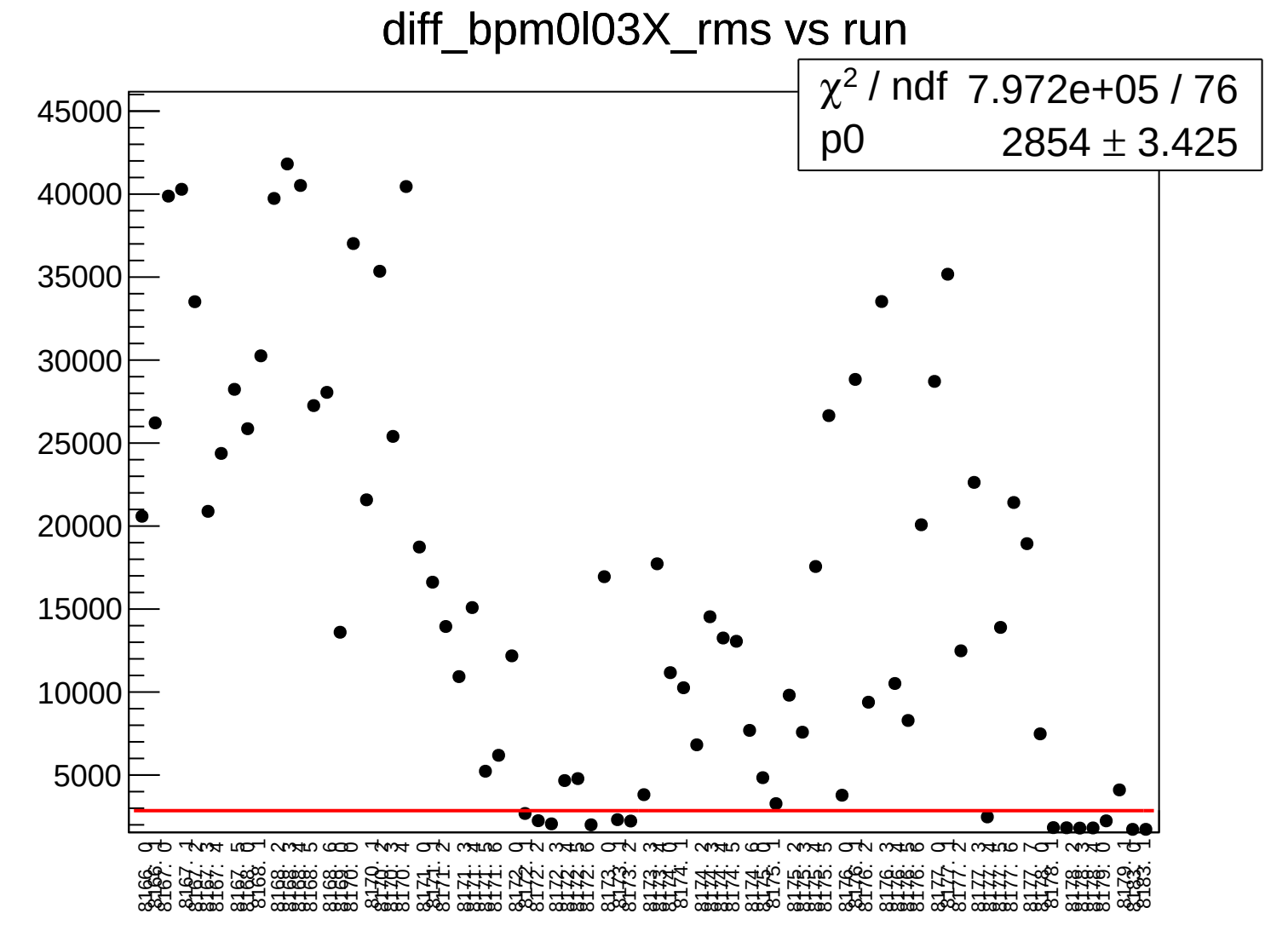

diff_bpm0l02Y_mean vs run
χ² / ndf 94.48 / 76
p0 3.43 ± 4.073
pull
Entries 77
Mean −121.7
Std Dev 171.1

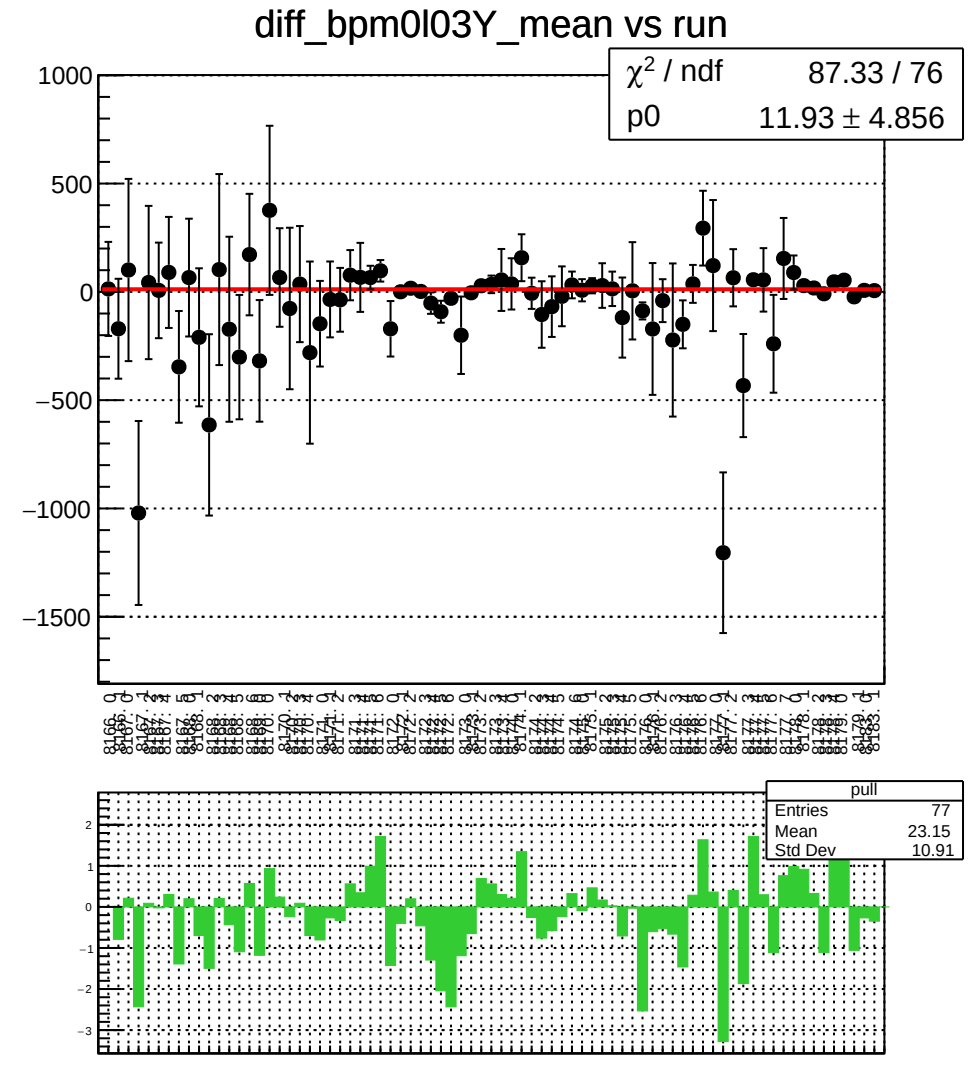

pull1D
Entries 77
Mean −0.03087
Std Dev 1.107

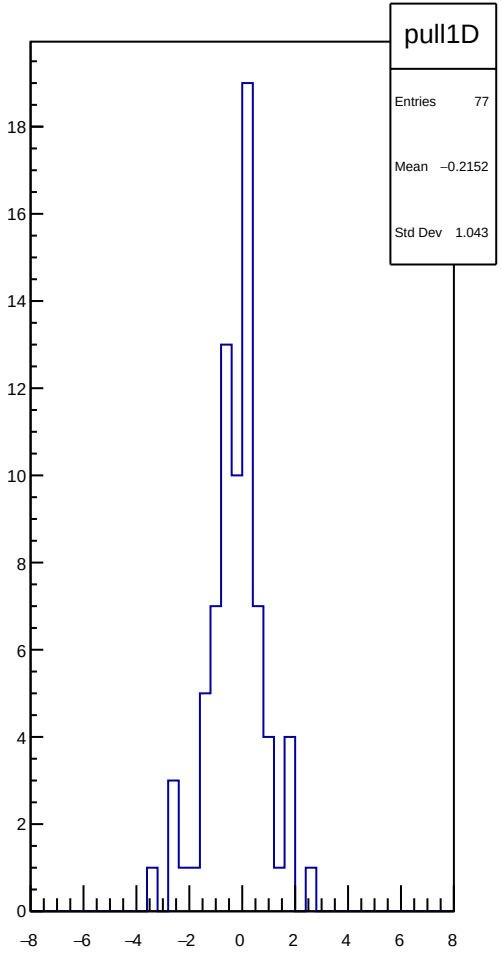

diff_bpm0l02Y_rms vs run
χ² / ndf 1.039e+04 / 76
p0 3505 ± 2.88
4200
4000
3800
3600
3400
3200
3000
2800


diff_bpm0l03X_mean vs run
χ² / ndf 80.83 / 76
p0 17.2 ± 4.844
500
0
−500
−1000
−1500
pull
Entries 77
Mean 33.86
Std Dev 25.89
3
2
1
0
−1
−2
−3

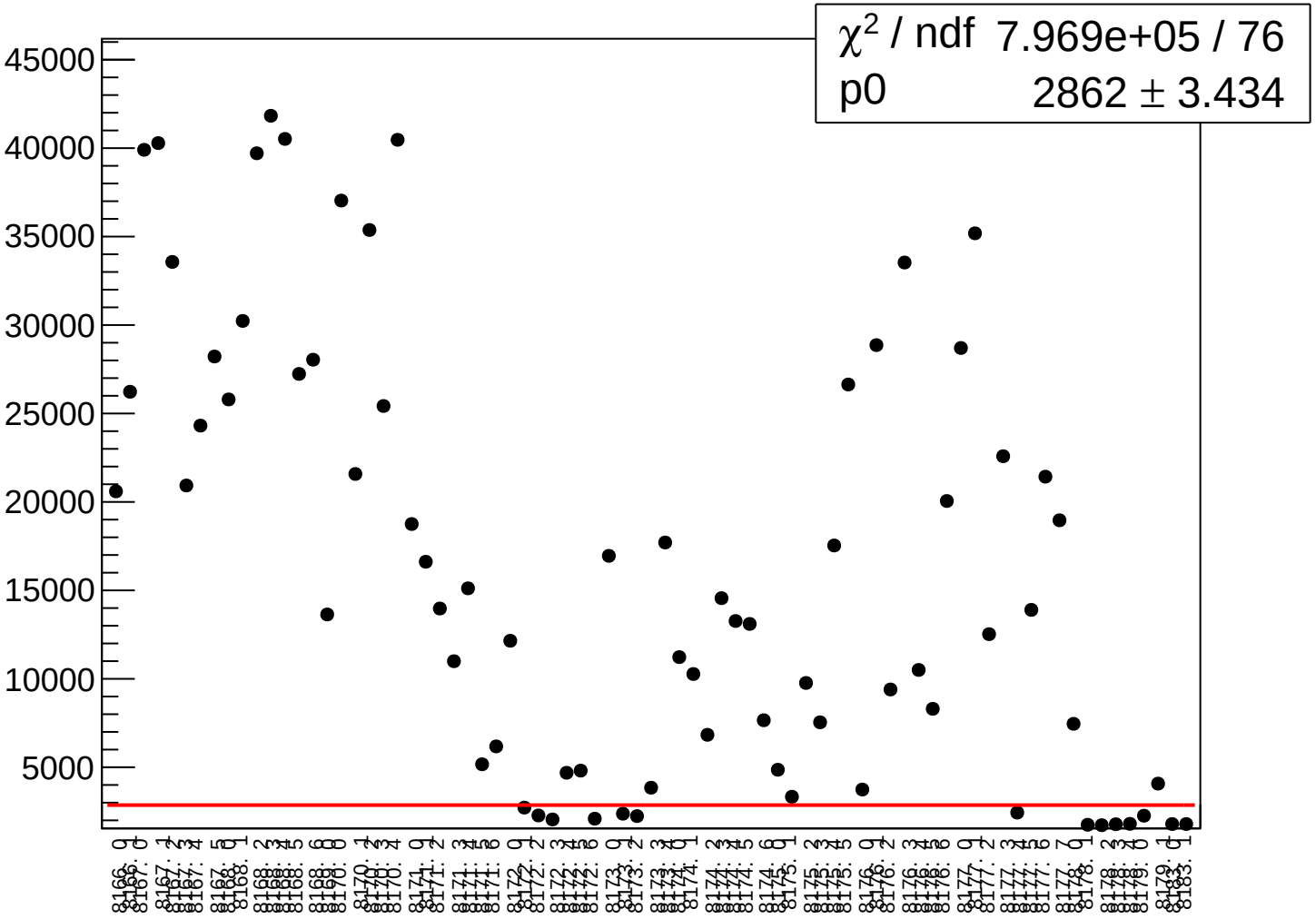

pull1D
Entries 77
Mean −0.2155
Std Dev 1.002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

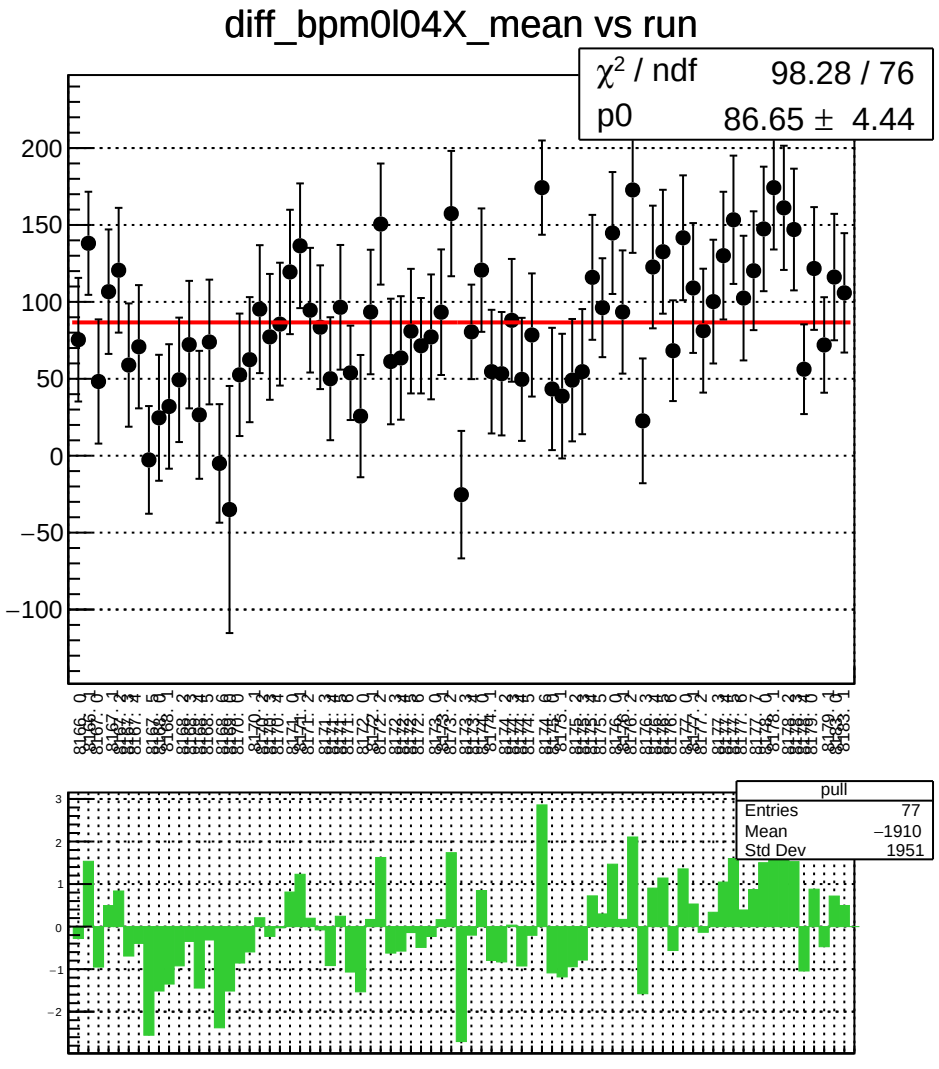

diff_bpm0l03X_rms vs run
χ² / ndf 7.972e+05 / 76
p0 2854 ± 3.425
45000
40000
35000
30000
25000
20000
15000
10000
5000

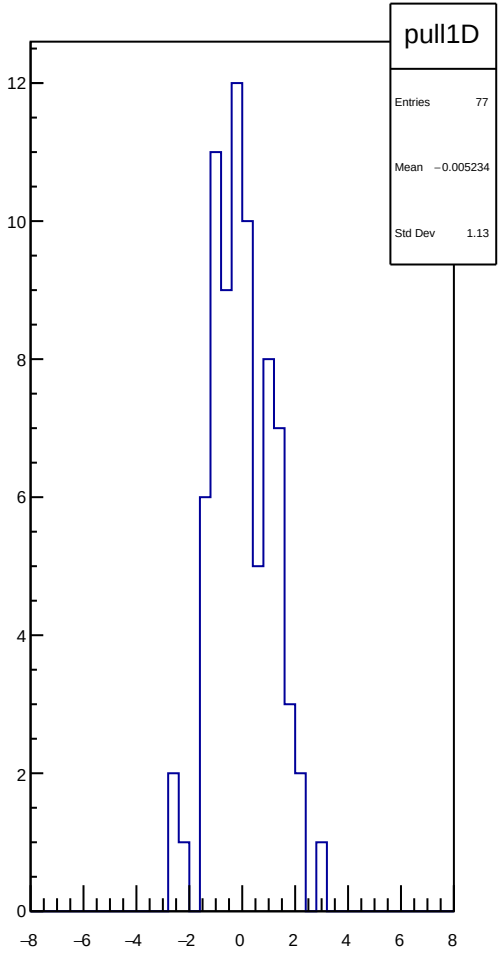

diff_bpm0l03Y_mean vs run
χ^2 / ndf 87.33 / 76
p0 11.93 ± 4.856
pull
Entries 77
Mean 23.15
Std Dev 10.91

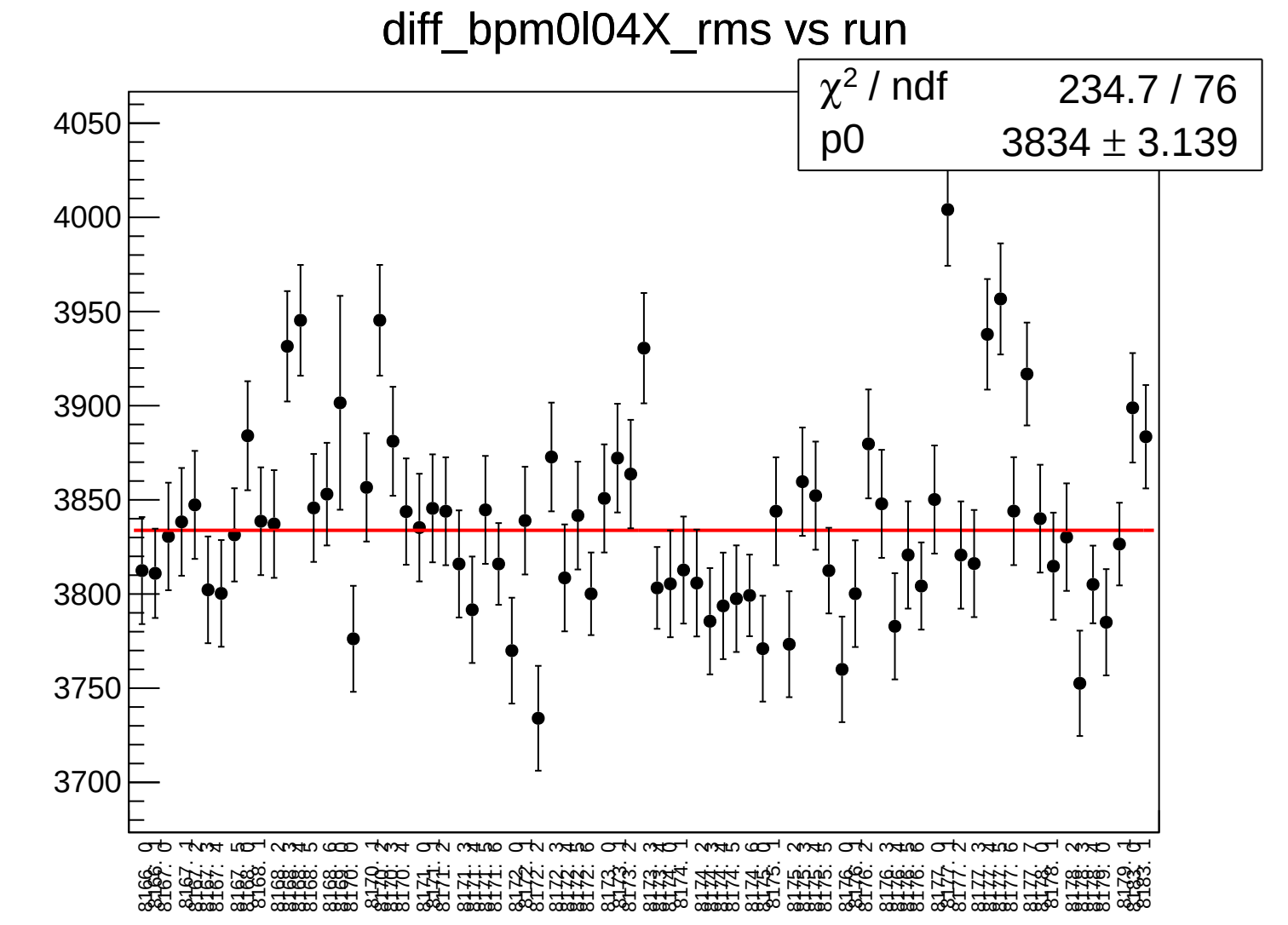

pull1D
Entries 77
Mean −0.2152
Std Dev 1.043

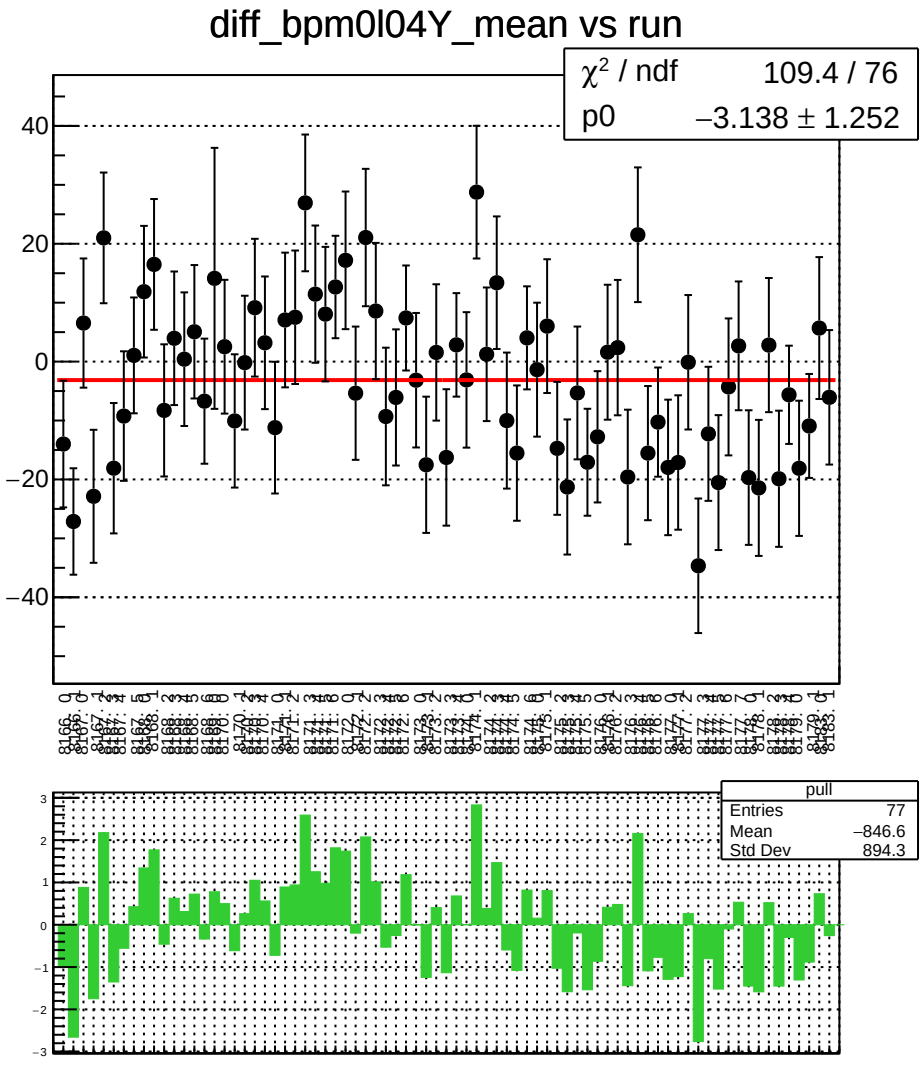
diff_bpm0l03Y_rms vs run

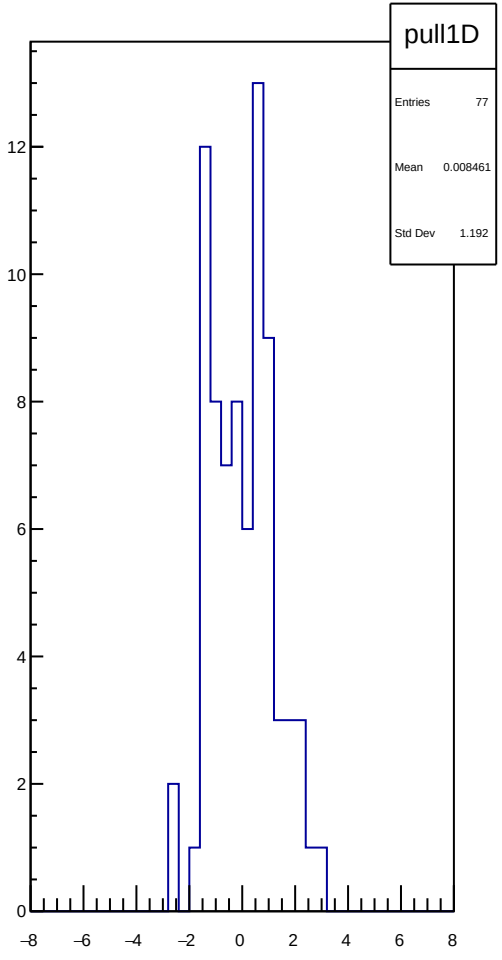


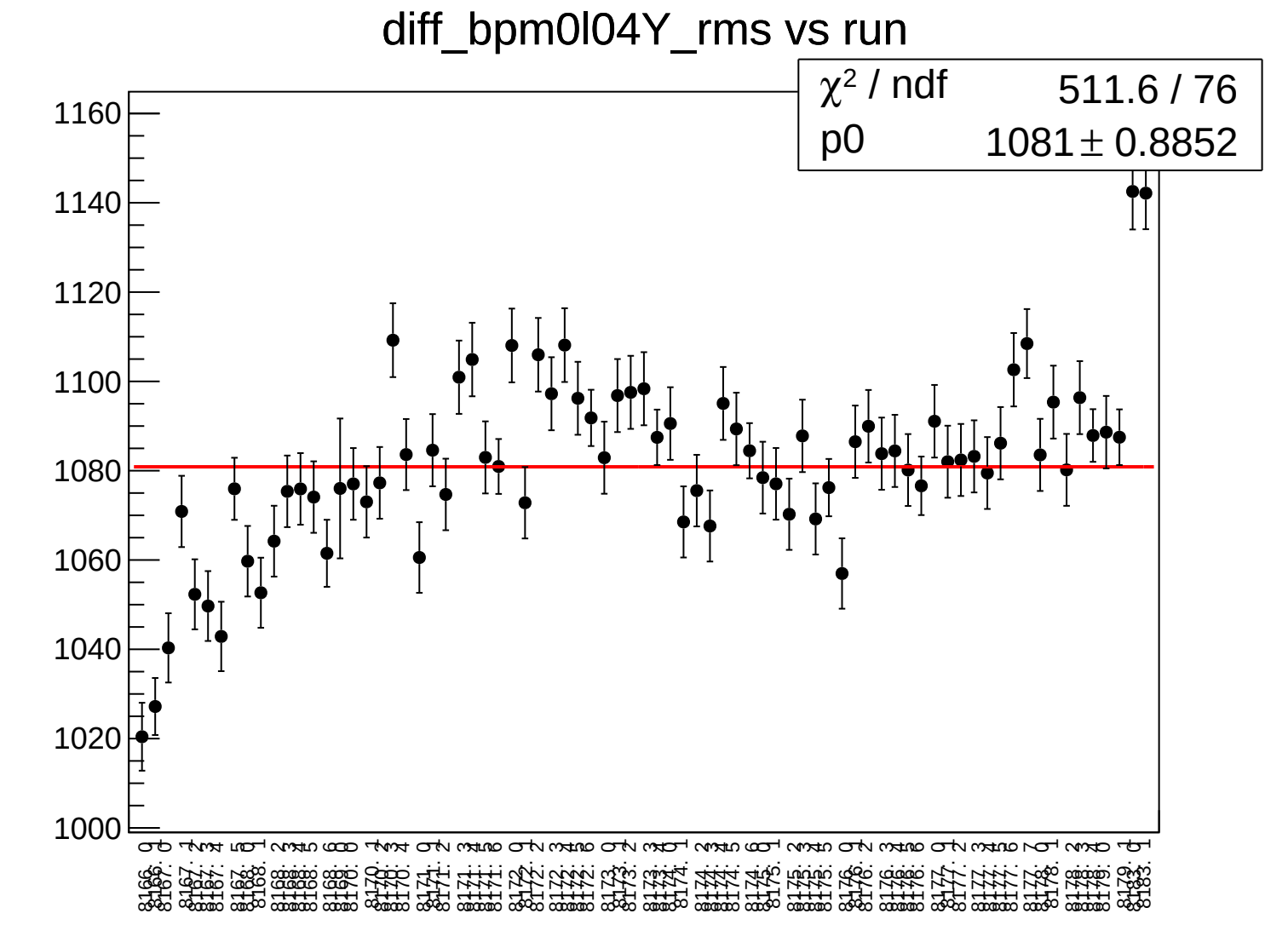

diff_bpm0l04X_mean vs run
χ² / ndf 98.28 / 76
p0 86.65 ± 4.44
pull
Entries 77
Mean −1910
Std Dev 1951

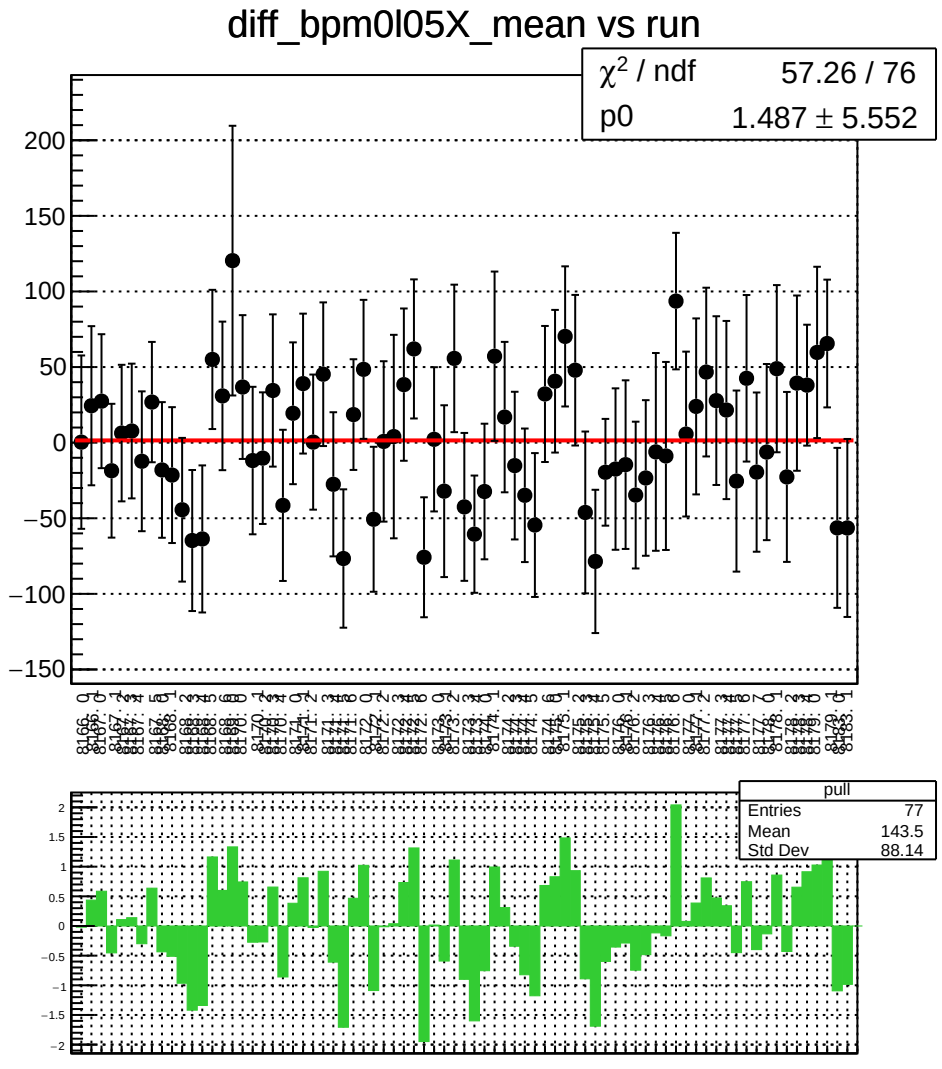

pull1D
Entries 77
Mean −0.005234
Std Dev 1.13

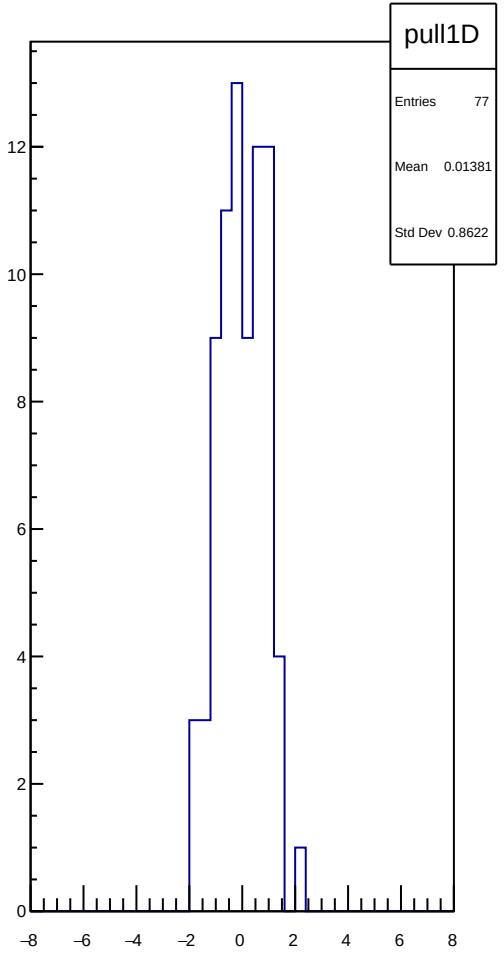

diff_bpm0l04X_rms vs run
χ² / ndf 234.7 / 76
p0 3834 ± 3.139
4050
4000
3950
3900
3850
3800
3750
3700

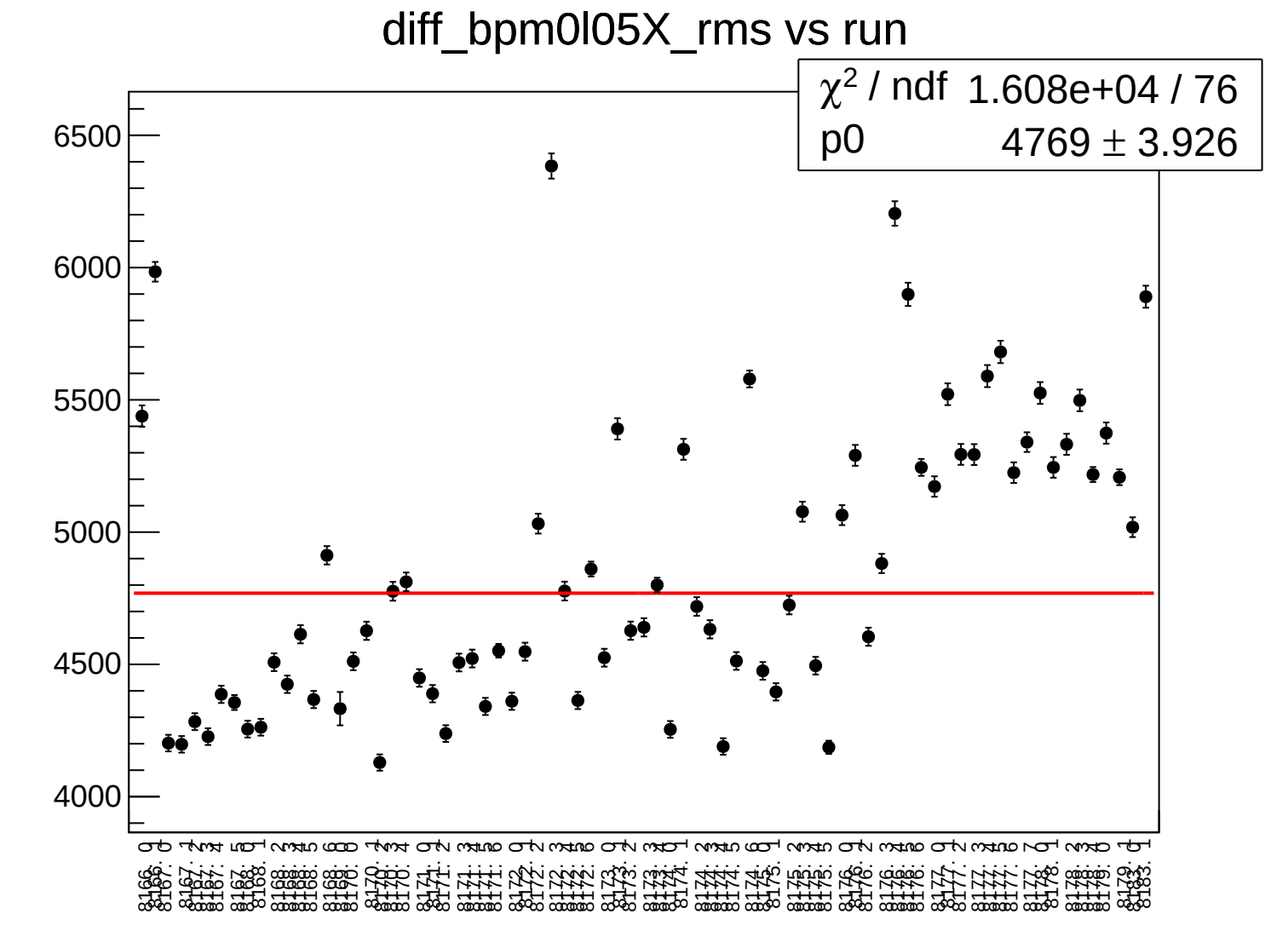

diff_bpm0l04Y_mean vs run
χ² / ndf 109.4 / 76
p0 −3.138 ± 1.252
pull
Entries 77
Mean −846.6
Std Dev 894.3

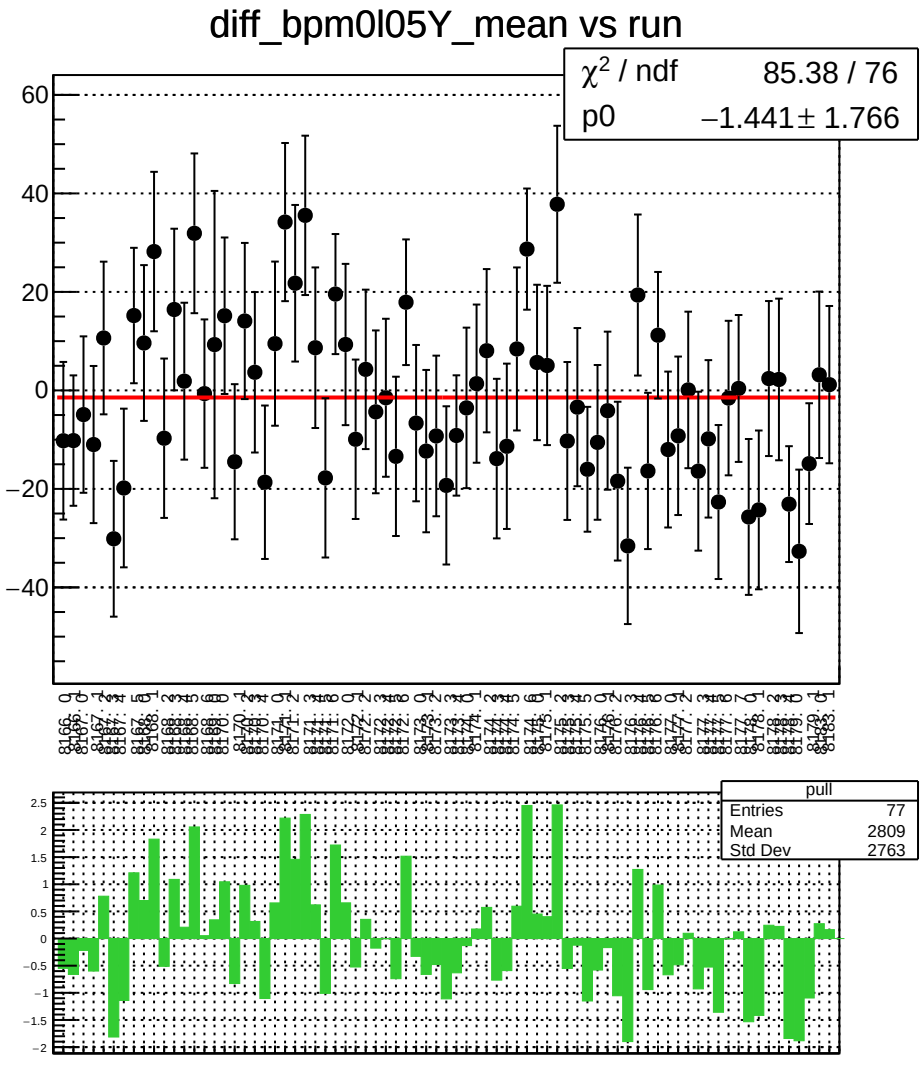

pull1D
Entries 77
Mean 0.008461
Std Dev 1.192

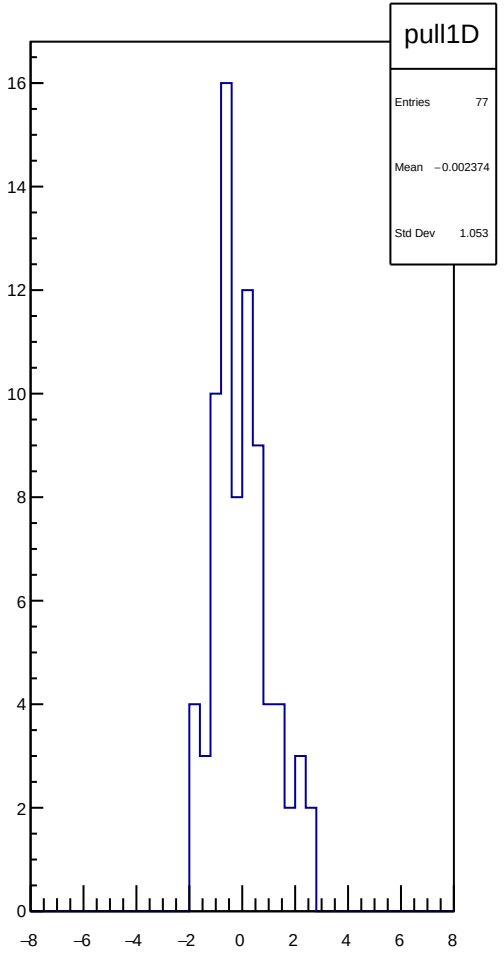

diff_bpm0l04Y_rms vs run
χ² / ndf 511.6 / 76
p0 1081 ± 0.8852
1160
1140
1120
1100
1080
1060
1040
1020
1000

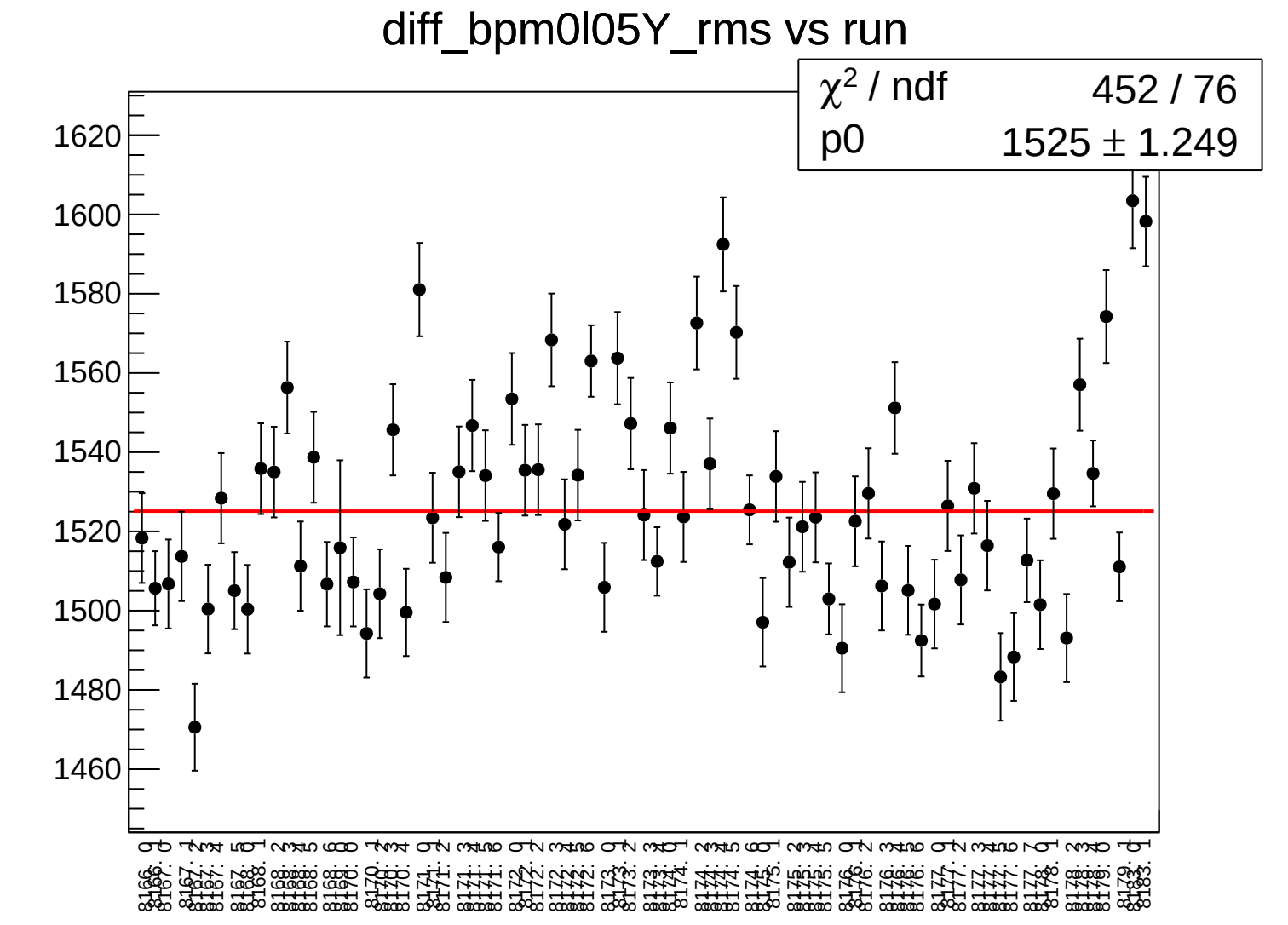

diff_bpm0l05X_mean vs run
χ² / ndf 57.26 / 76
p0 1.487 ± 5.552
pull
Entries 77
Mean 143.5
Std Dev 88.14

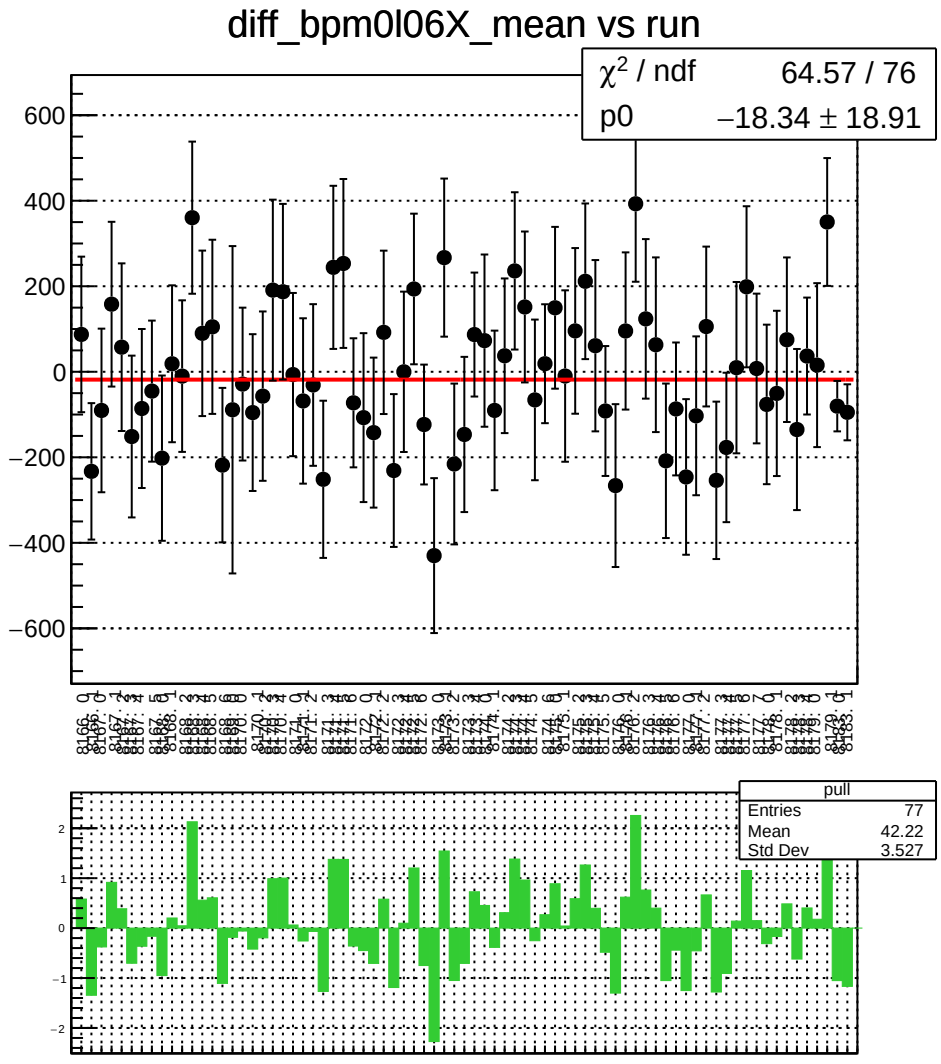

pull1D
Entries 77
Mean 0.01381
Std Dev 0.8622

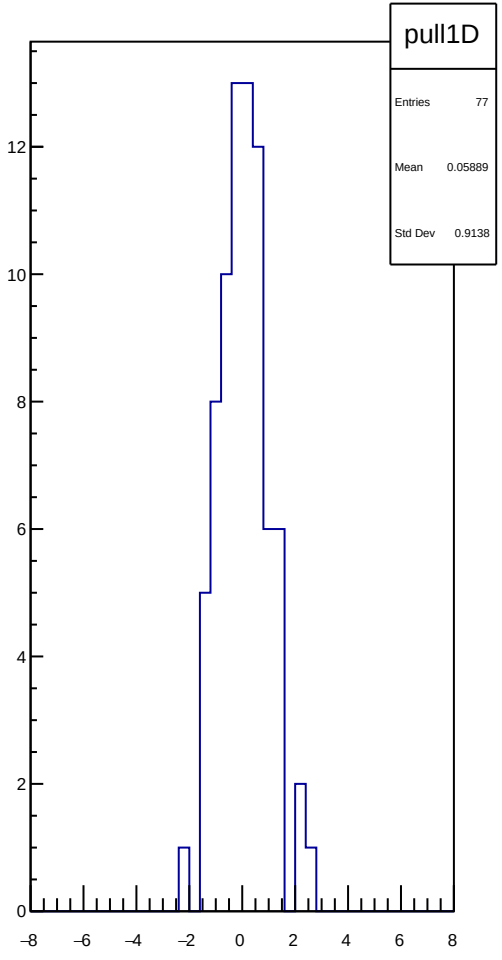

diff_bpm0l05X_rms vs run
χ² / ndf 1.608e+04 / 76
p0 4769 ± 3.926
6500
6000
5500
5000
4500
4000

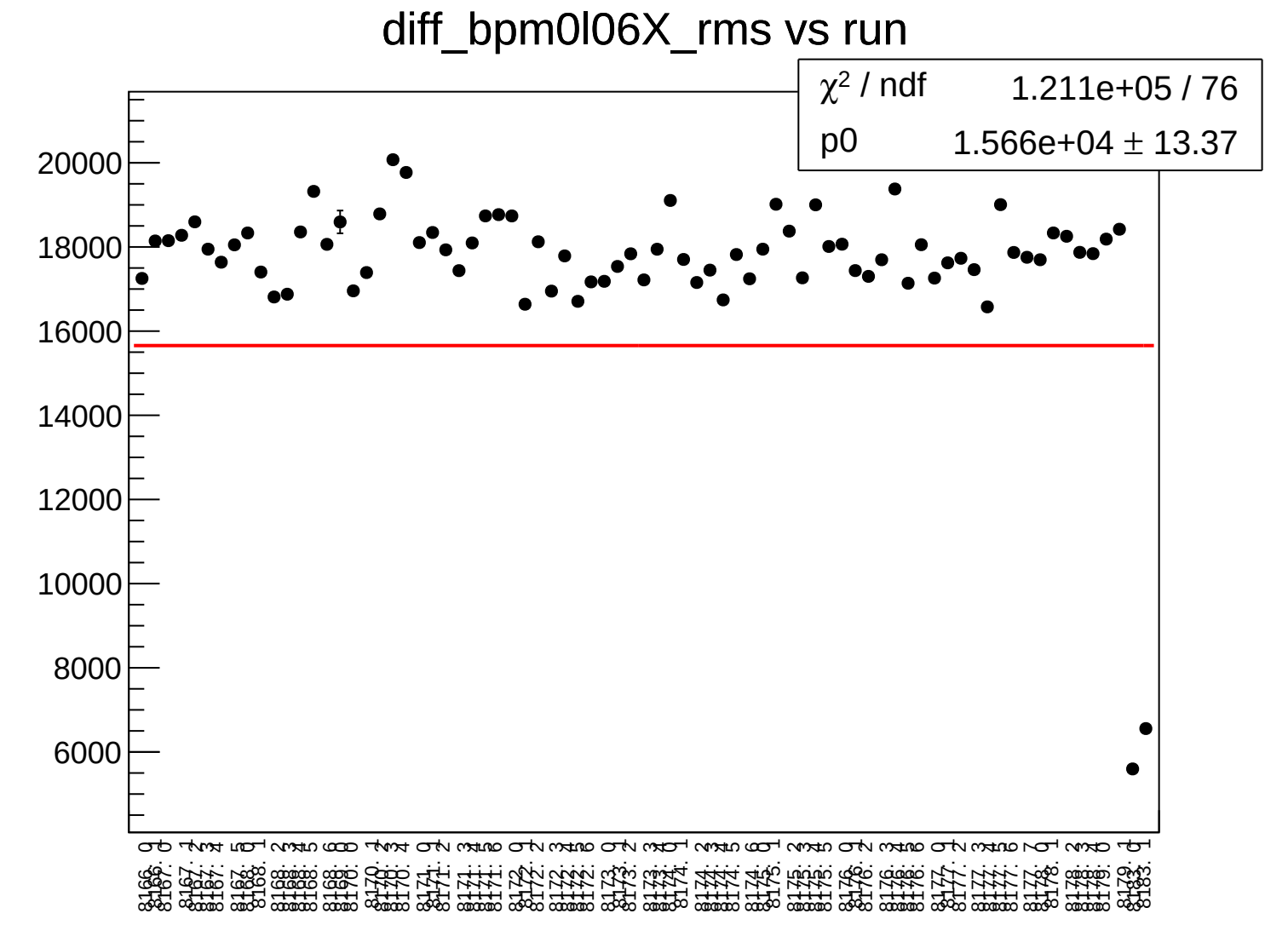

diff_bpm0l05Y_mean vs run
χ^2 / ndf 85.38 / 76
p0 −1.441± 1.766
pull
Entries 77
Mean 2809
Std Dev 2763

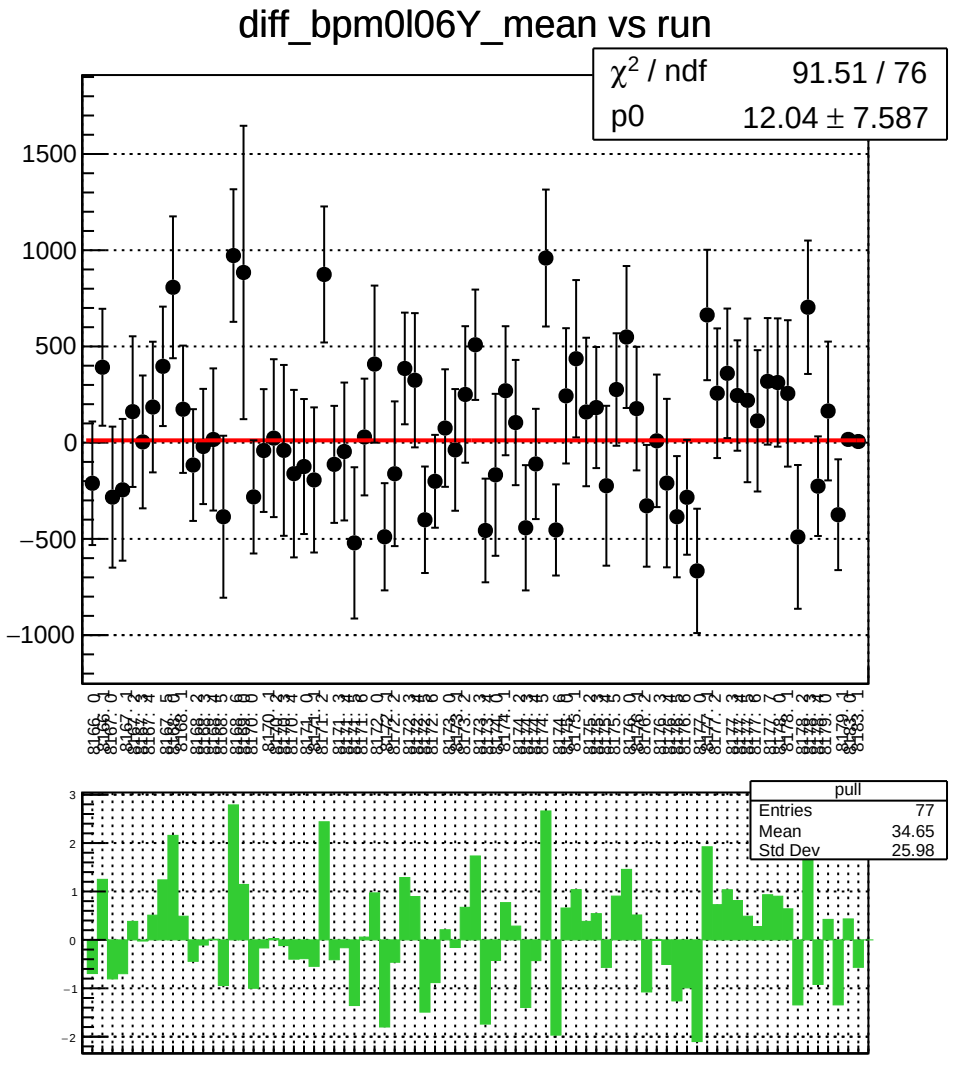

pull1D
Entries 77
Mean −0.002374
Std Dev 1.053

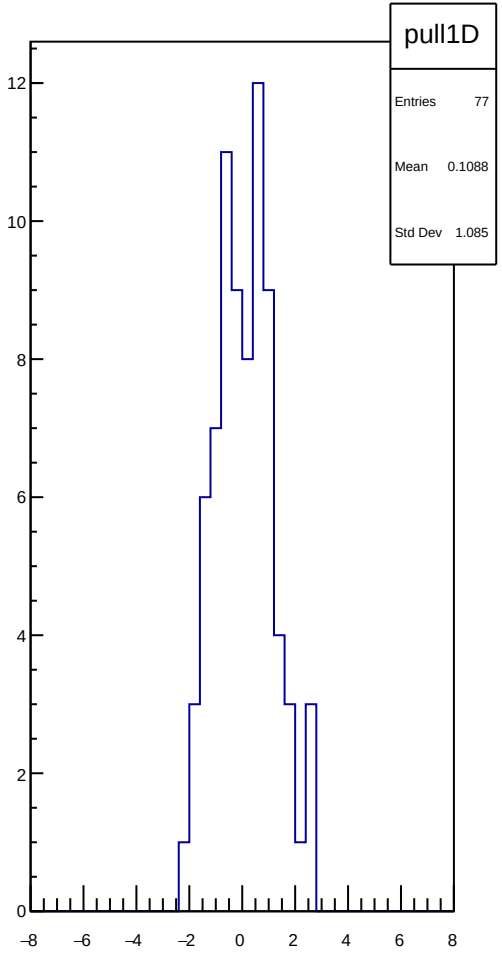

diff_bpm0l05Y_rms vs run
χ² / ndf 452 / 76
p0 1525 ± 1.249
1620
1600
1580
1560
1540
1520
1500
1480
1460

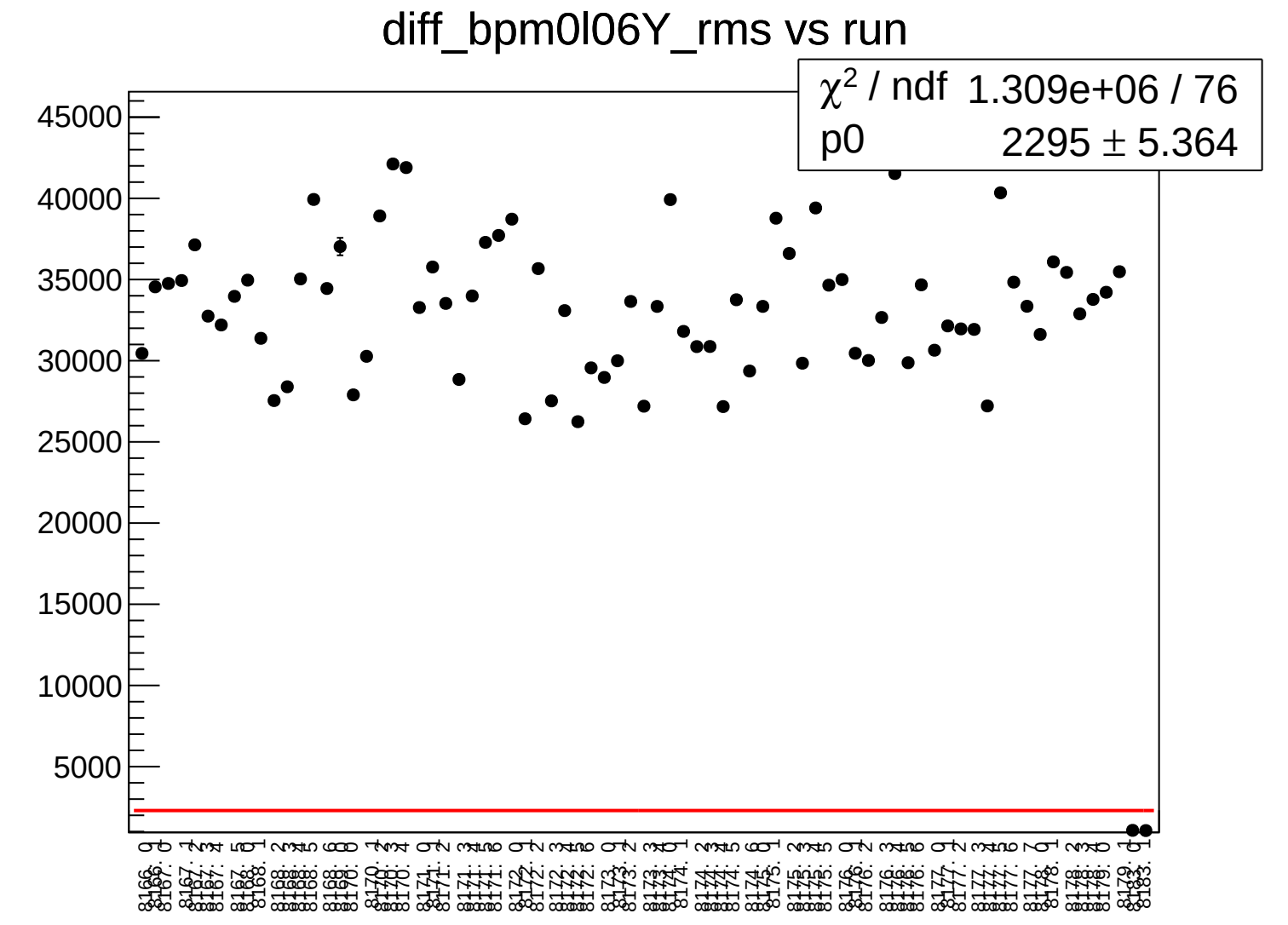

diff_bpm0l06X_mean vs run
χ^2 / ndf 64.57 / 76
p0 −18.34 ± 18.91
pull
Entries 77
Mean 42.22
Std Dev 3.527

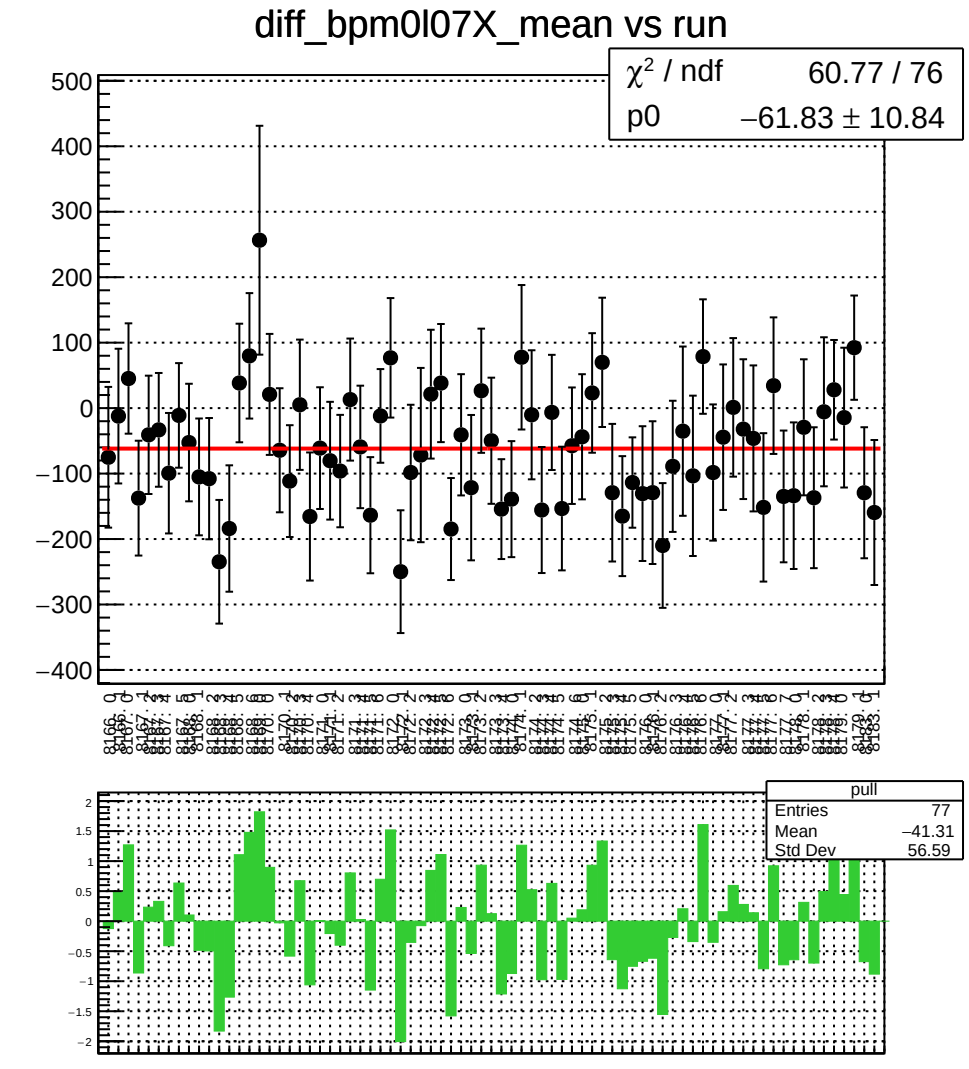

pull1D
Entries 77
Mean 0.05889
Std Dev 0.9138

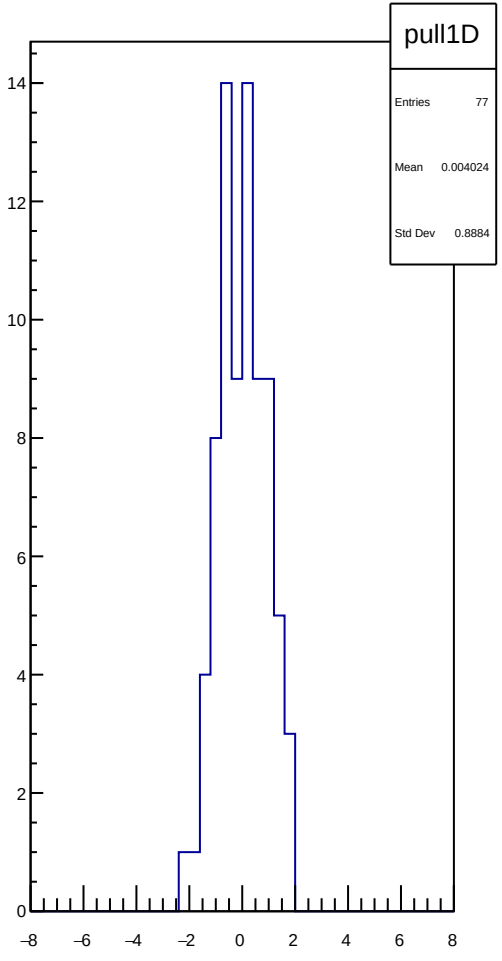

diff_bpm0l06X_rms vs run
χ² / ndf 1.211e+05 / 76
p0 1.566e+04 ± 13.37
20000
18000
16000
14000
12000
10000
8000
6000

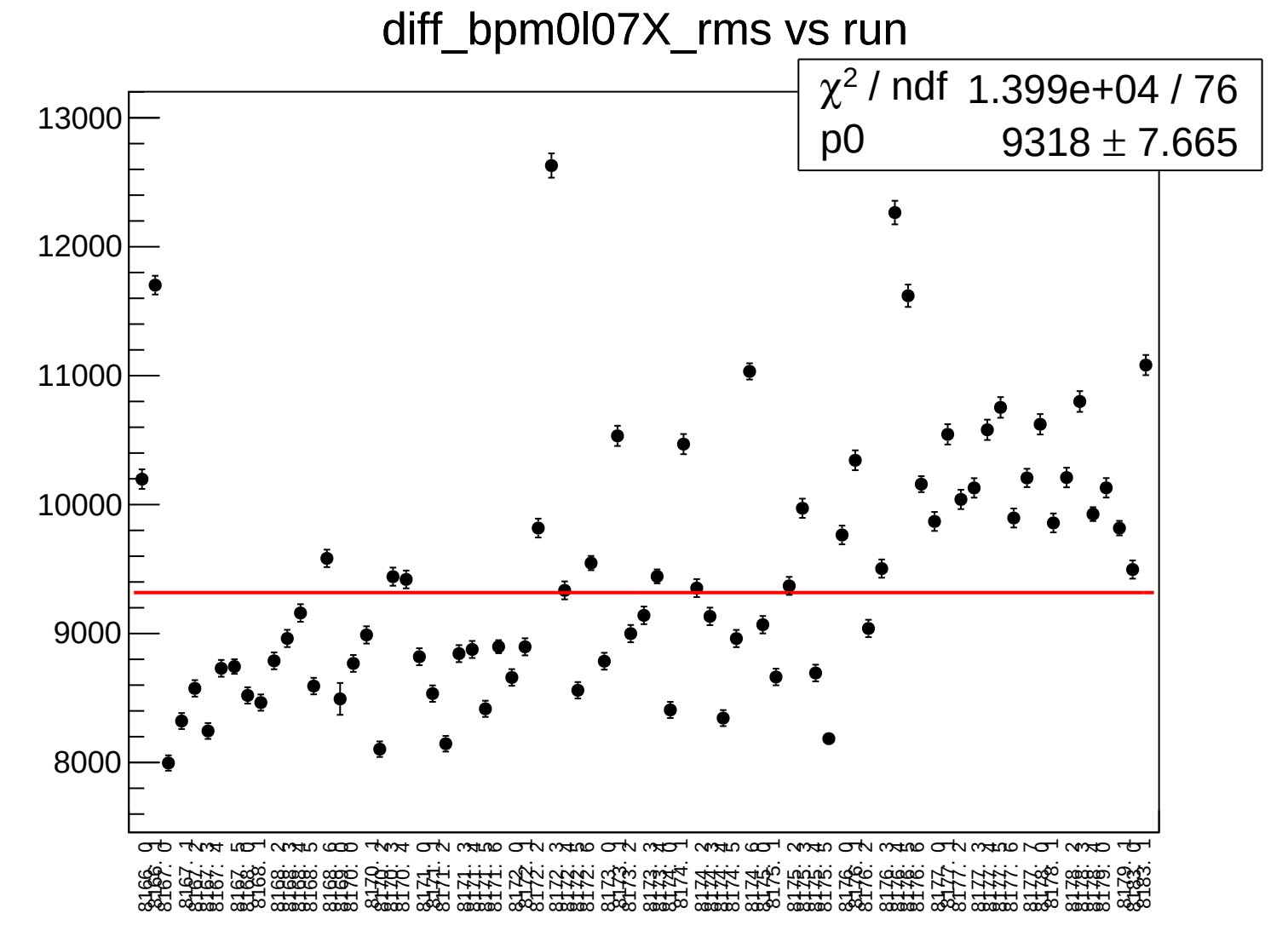

diff_bpm0l06Y_mean vs run
χ² / ndf 91.51 / 76
p0 12.04 ± 7.587
pull
Entries 77
Mean 34.65
Std Dev 25.98

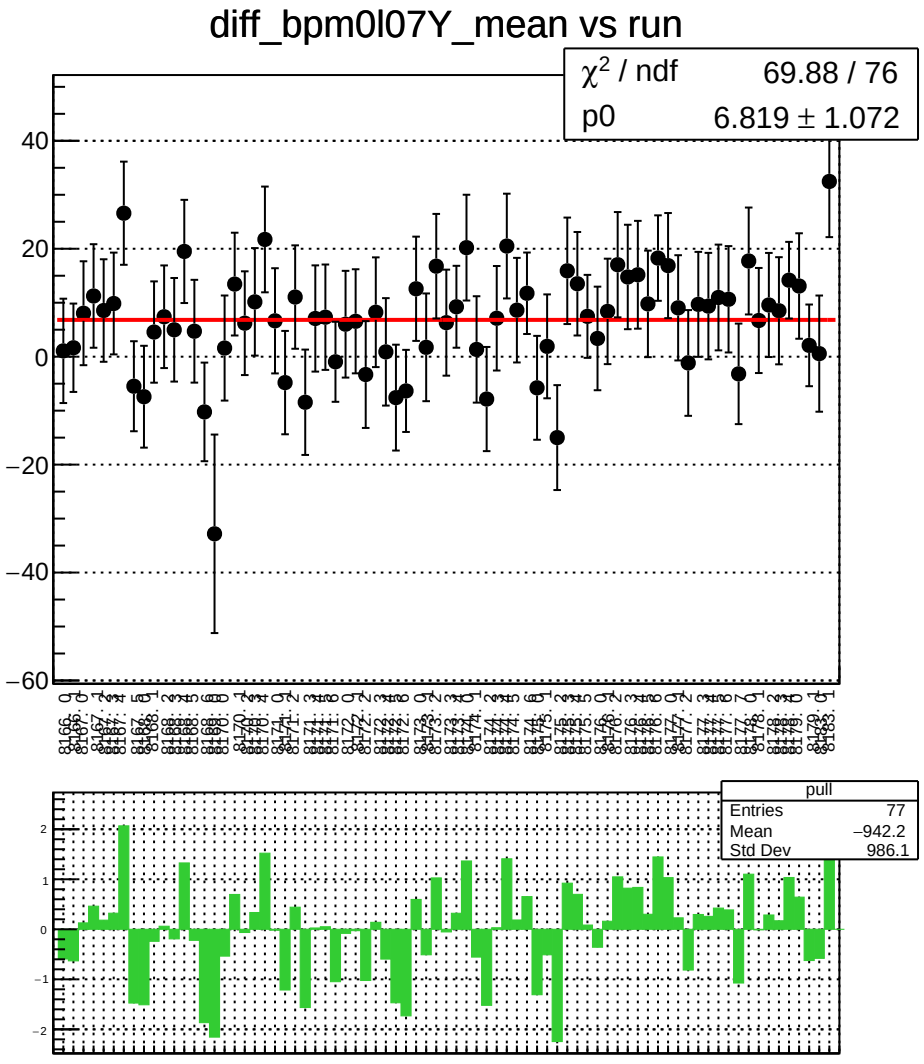

pull1D
Entries 77
Mean 0.1088
Std Dev 1.085

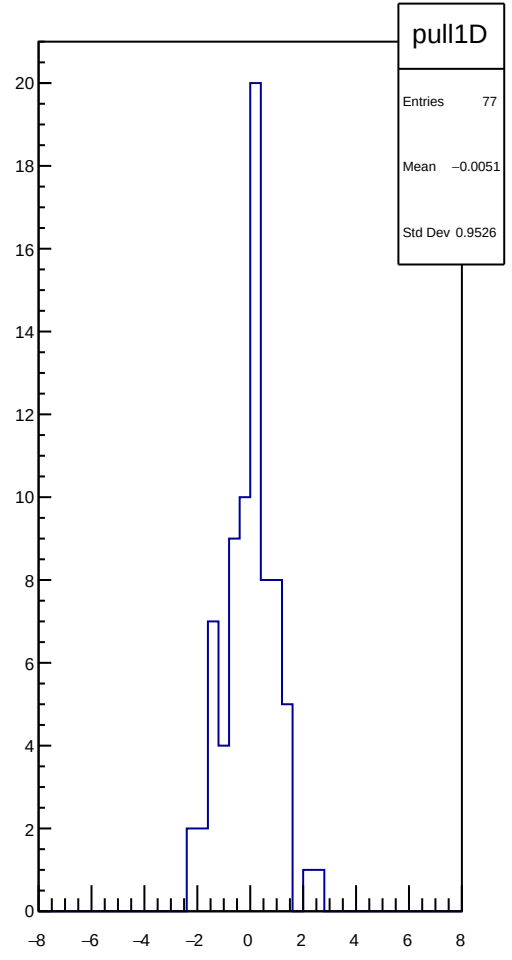

diff_bpm0l06Y_rms vs run
χ^2 / ndf 1.309e+06 / 76
p0 2295 ± 5.364
45000
40000
35000
30000
25000
20000
15000
10000
5000

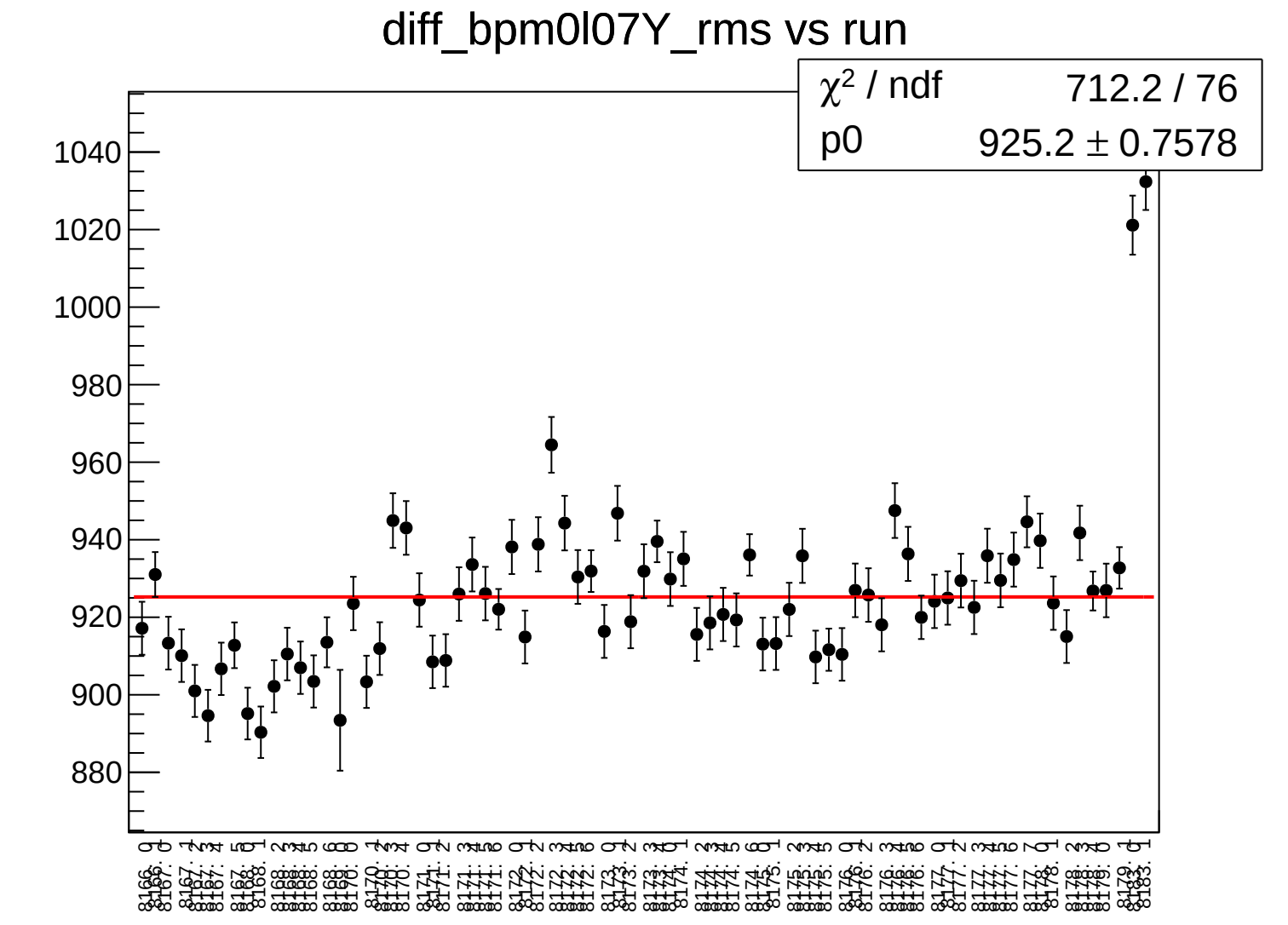

diff_bpm0l07X_mean vs run
χ² / ndf 60.77 / 76
p0 −61.83 ± 10.84
pull
Entries 77
Mean −41.31
Std Dev 56.59

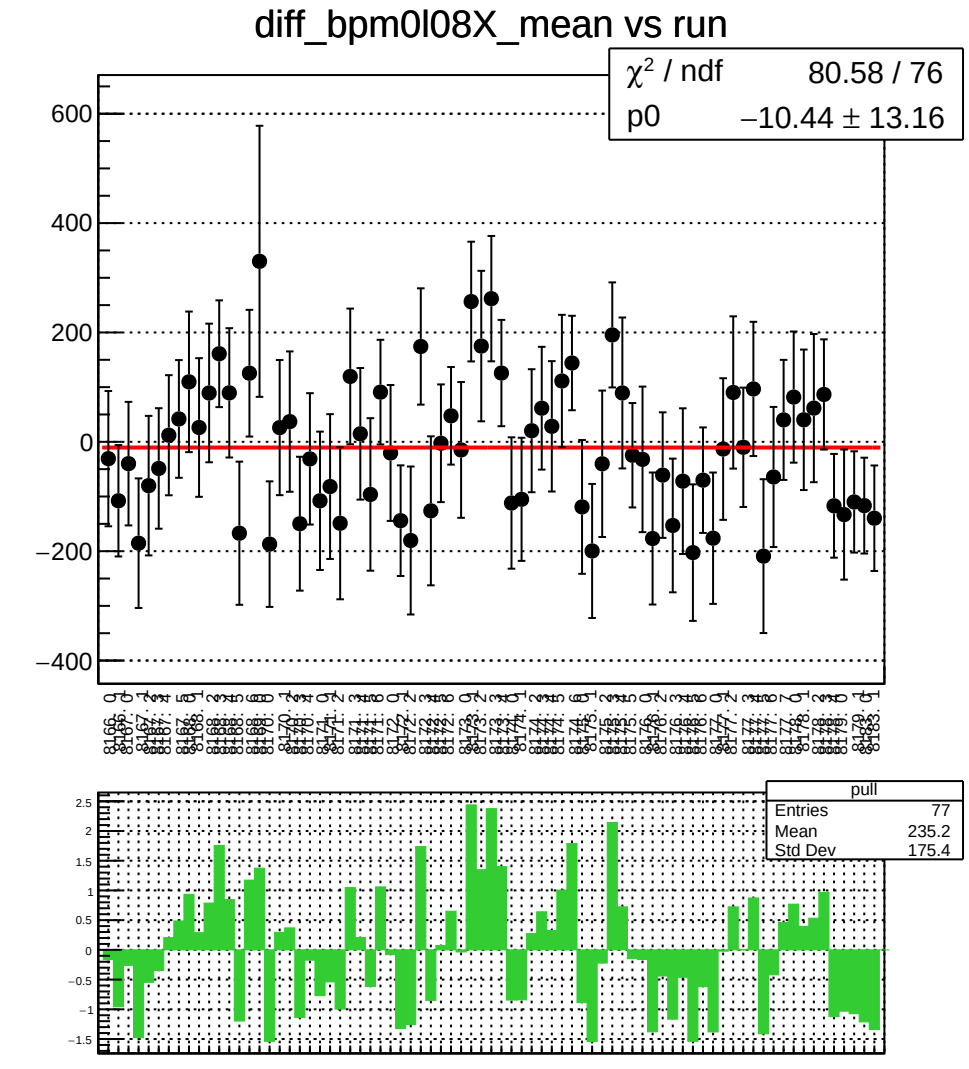

pull1D
Entries 77
Mean 0.004024
Std Dev 0.8884

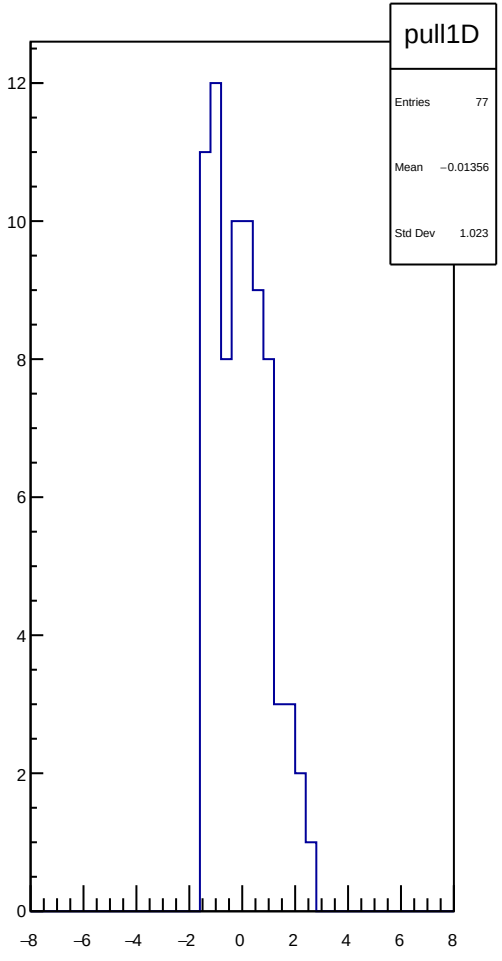

diff_bpm0l07X_rms vs run
χ² / ndf 1.399e+04 / 76
p0 9318 ± 7.665
13000
12000
11000
10000
9000
8000

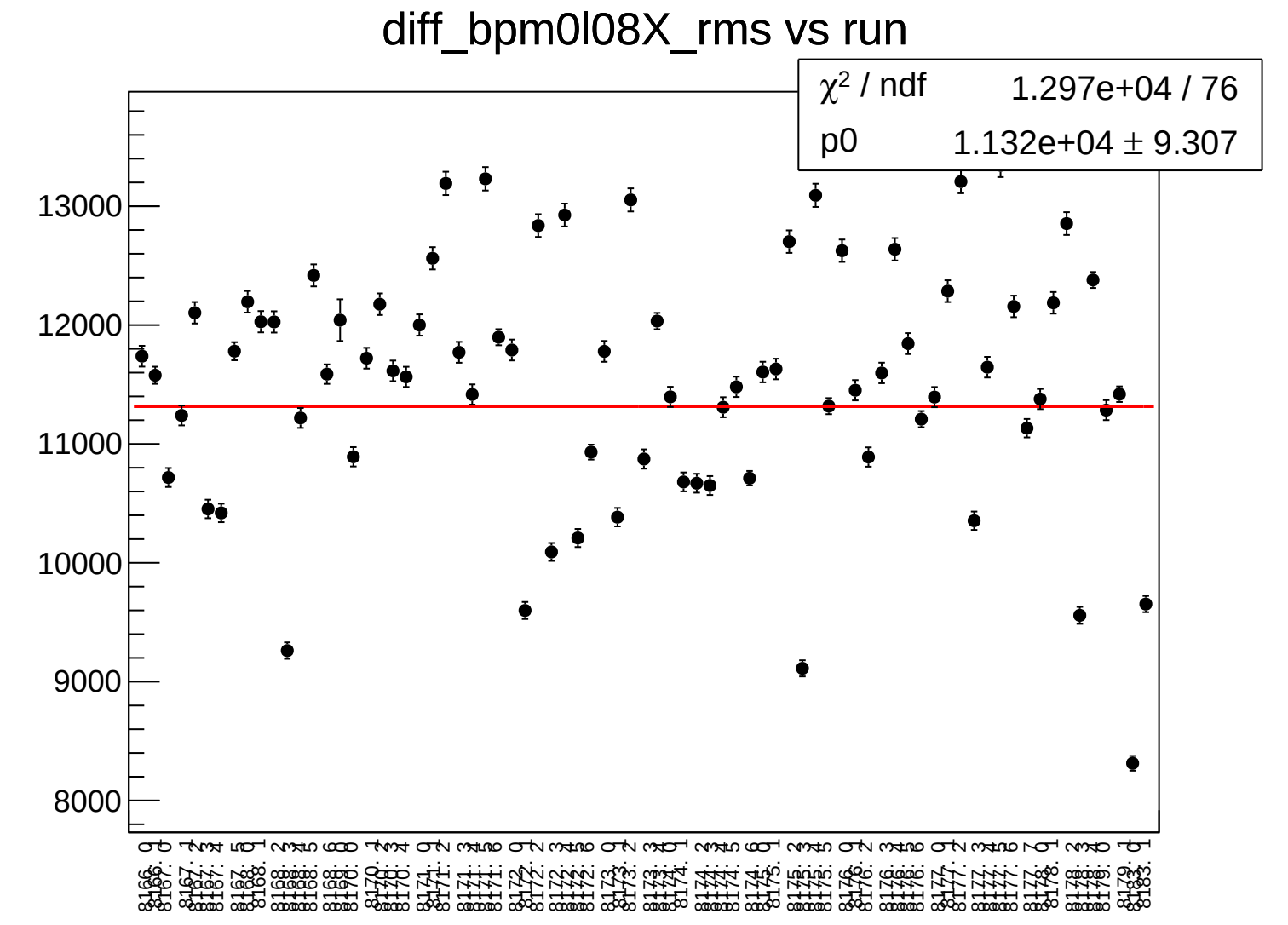

diff_bpm0l07Y_mean vs run
χ² / ndf 69.88 / 76
p0 6.819 ± 1.072
pull
Entries 77
Mean −942.2
Std Dev 986.1

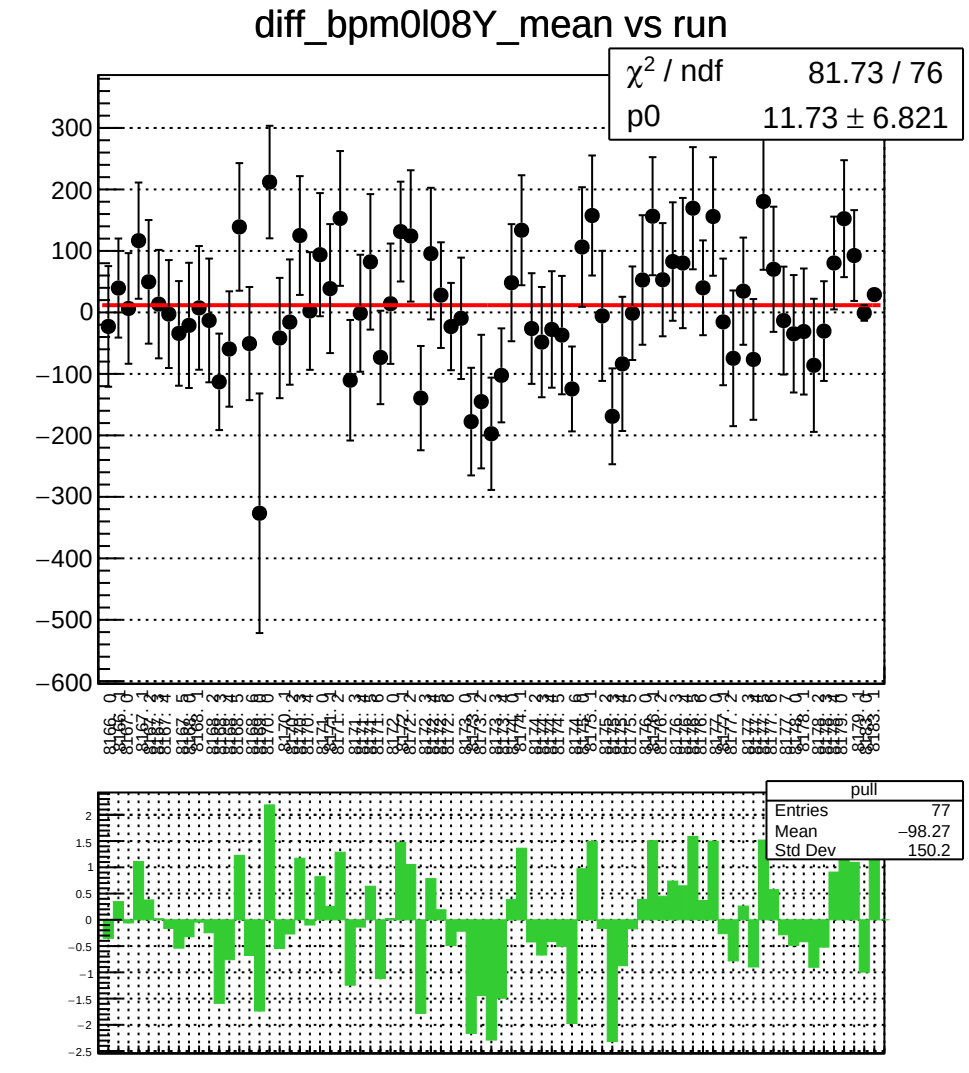

pull1D
Entries 77
Mean −0.0051
Std Dev 0.9526

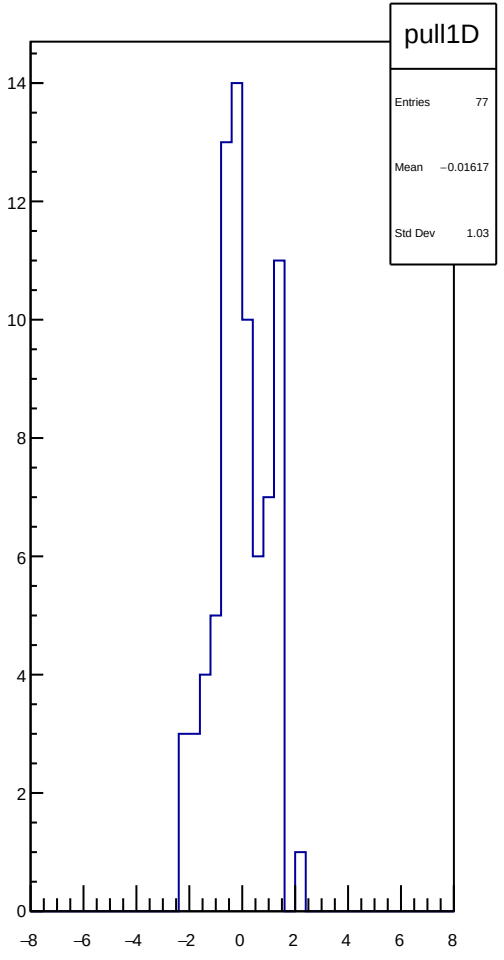

diff_bpm0l07Y_rms vs run
χ² / ndf 712.2 / 76
p0 925.2 ± 0.7578
1040
1020
1000
980
960
940
920
900
880

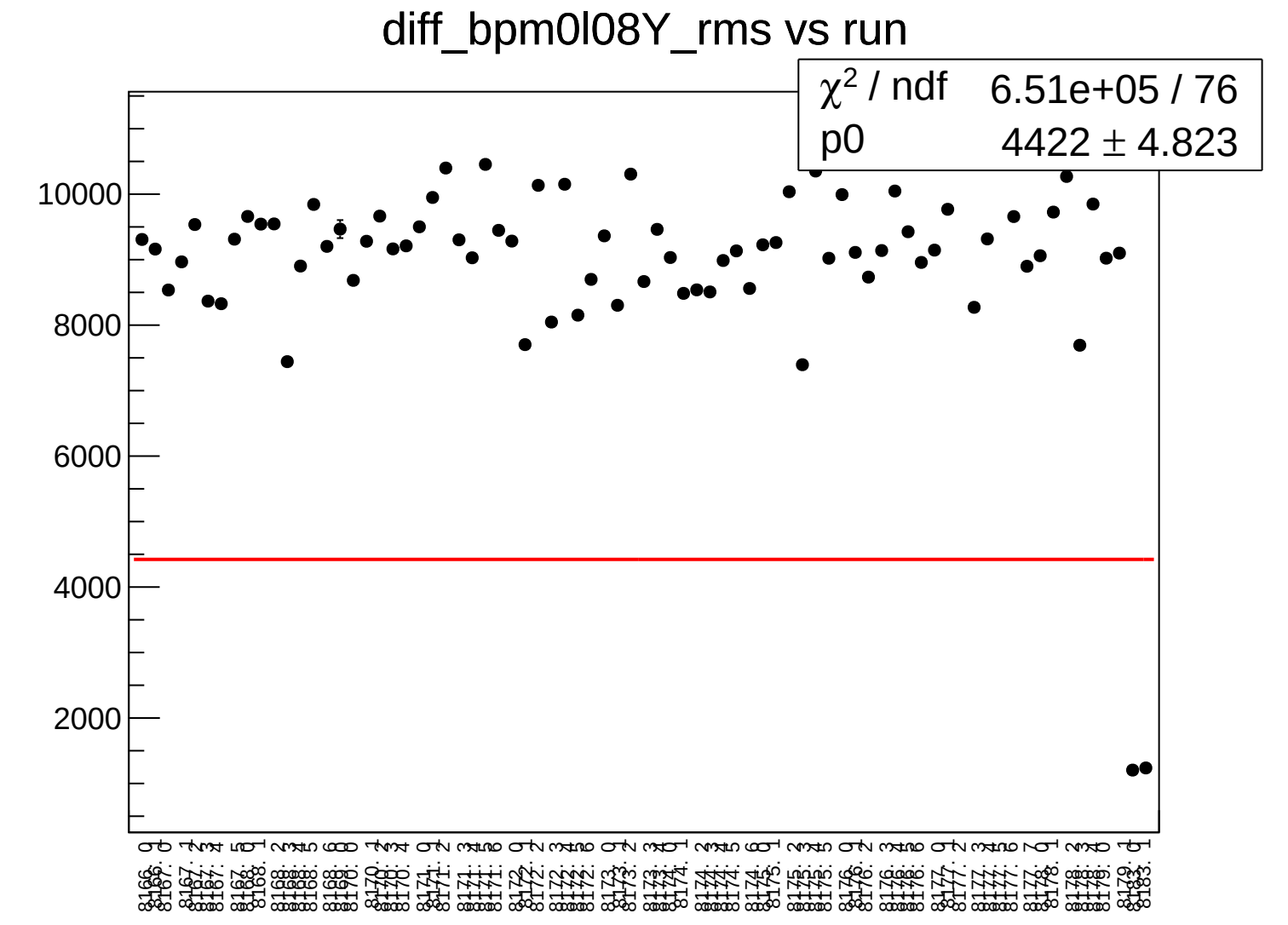

diff_bpm0l08X_mean vs run
χ² / ndf 80.58 / 76
p0 −10.44 ± 13.16
pull
Entries 77
Mean 235.2
Std Dev 175.4

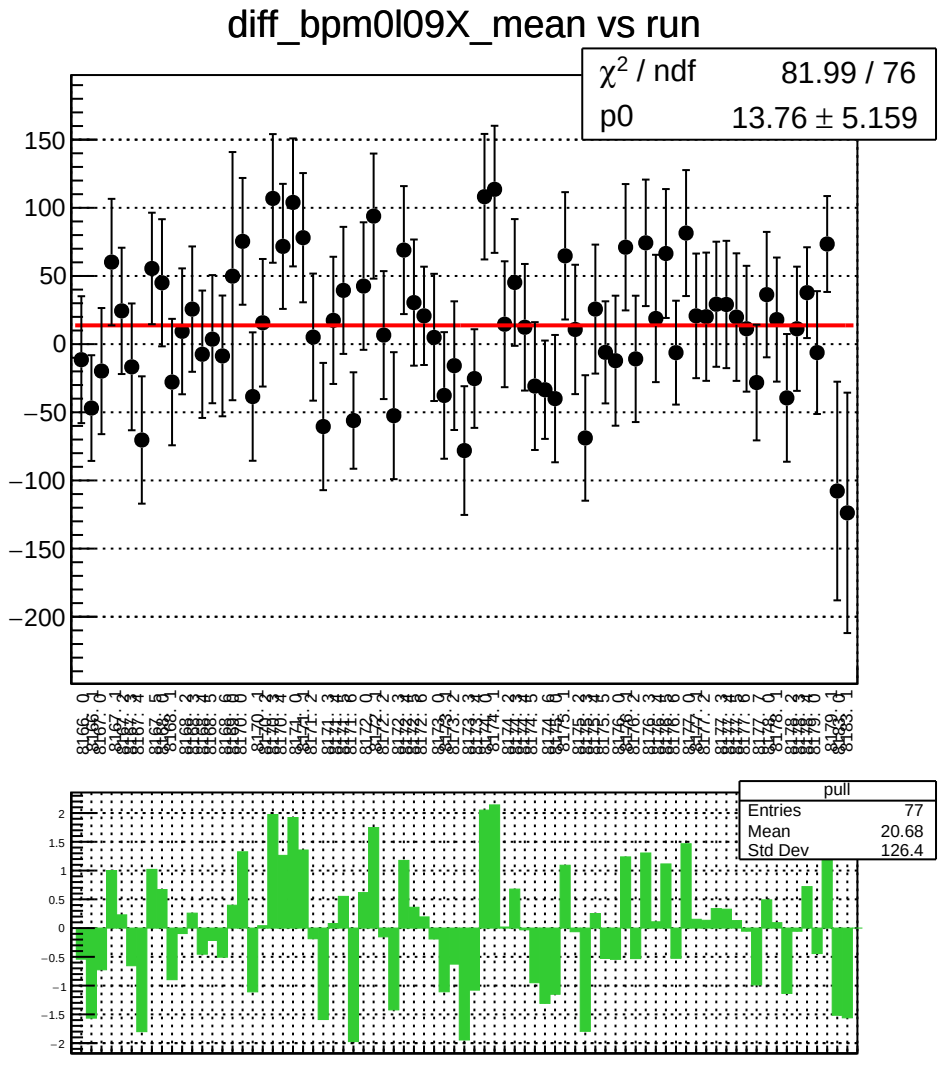

pull1D
Entries 77
Mean −0.01356
Std Dev 1.023

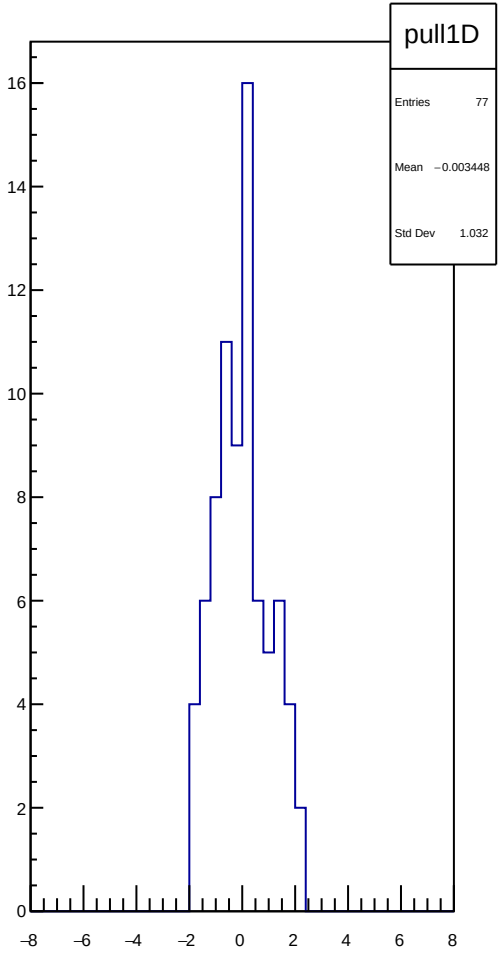

diff_bpm0l08X_rms vs run
χ² / ndf 1.297e+04 / 76
p0 1.132e+04 ± 9.307
13000
12000
11000
10000
9000
8000

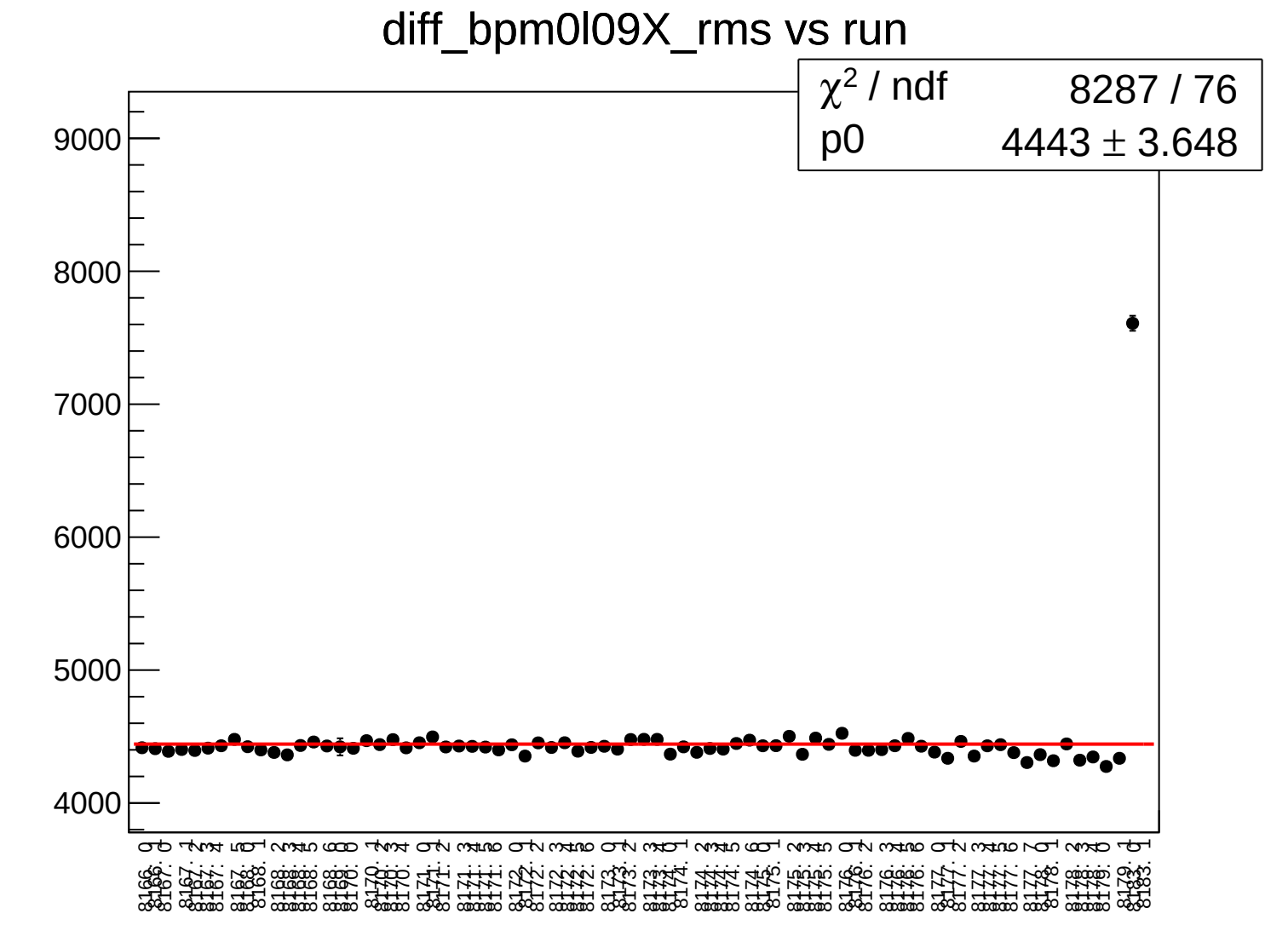

diff_bpm0l08Y_mean vs run
χ² / ndf 81.73 / 76
p0 11.73 ± 6.821
pull
Entries 77
Mean −98.27
Std Dev 150.2

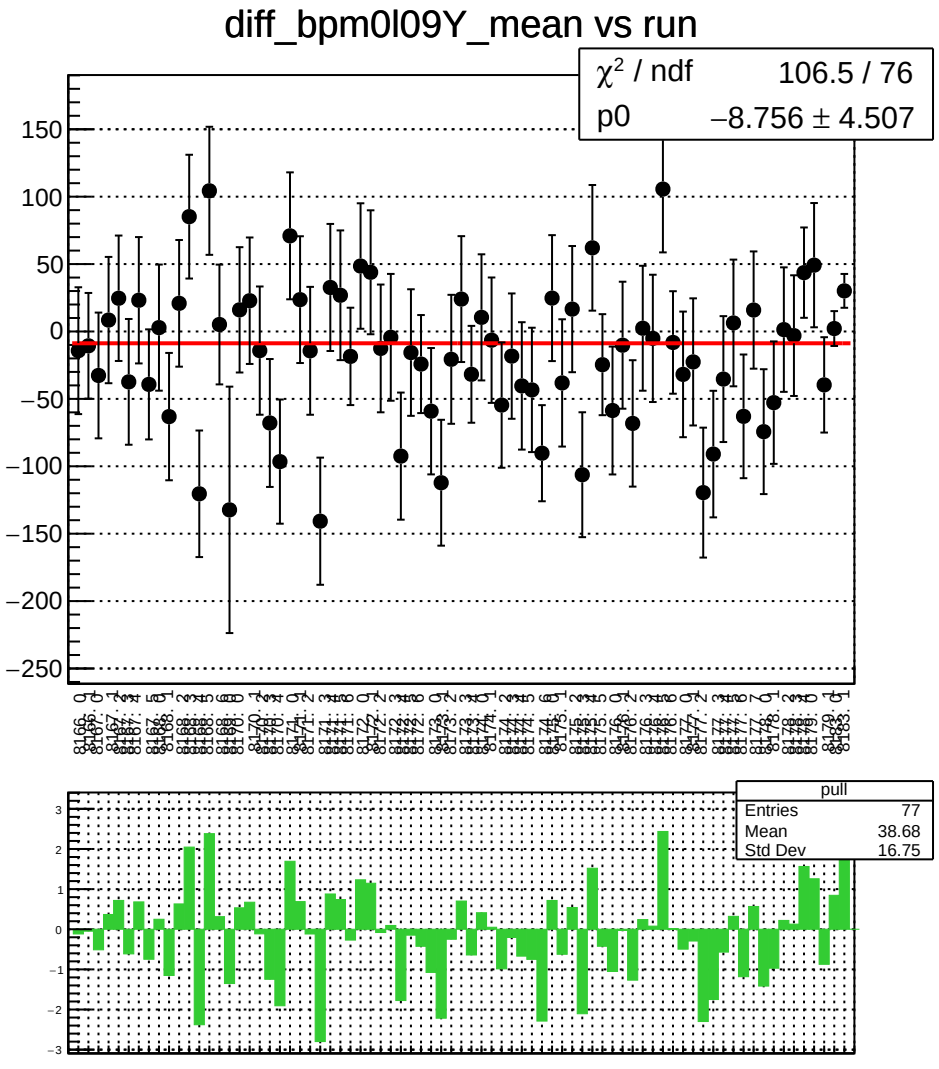

pull1D
Entries 77
Mean −0.01617
Std Dev 1.03

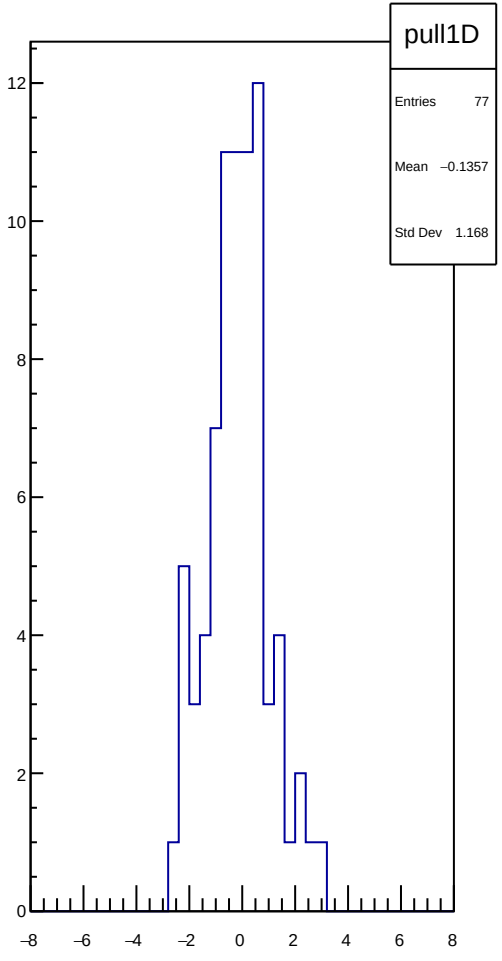

diff_bpm0l08Y_rms vs run
χ² / ndf 6.51e+05 / 76
p0 4422 ± 4.823
10000
8000
6000
4000
2000

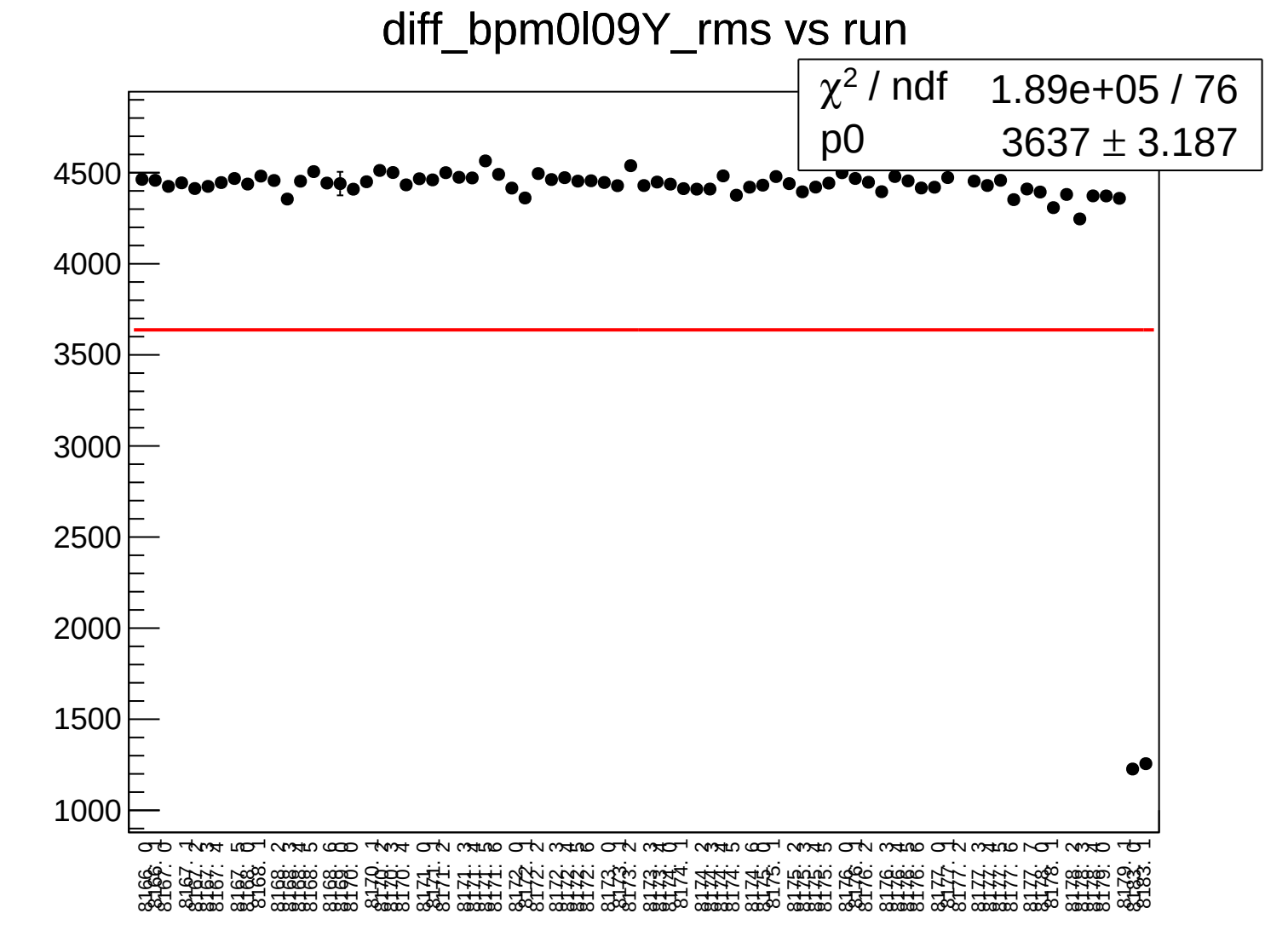

diff_bpm0l09X_mean vs run
χ^2 / ndf 81.99 / 76
p0 13.76 ± 5.159
pull
Entries 77
Mean 20.68
Std Dev 126.4

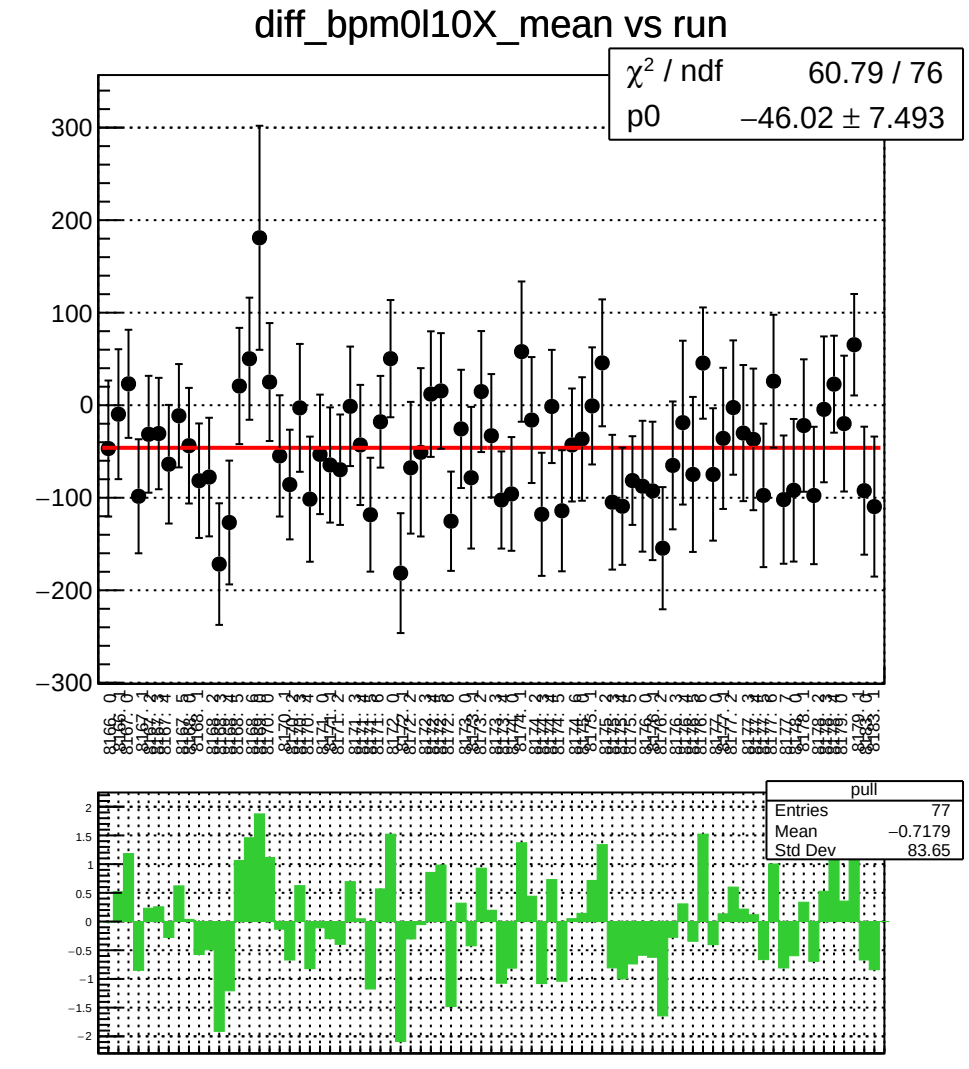

pull1D
Entries 77
Mean −0.003448
Std Dev 1.032

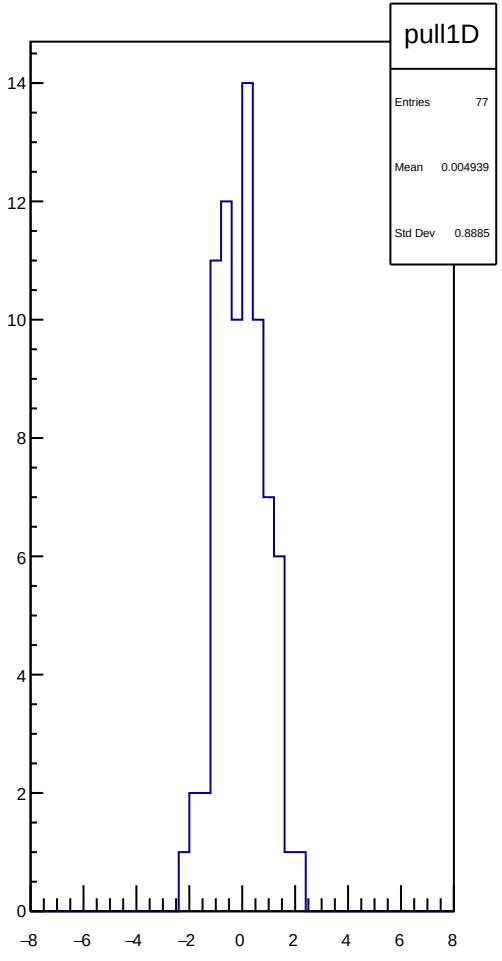

diff_bpm0l09X_rms vs run
χ² / ndf 8287 / 76
p0 4443 ± 3.648
9000
8000
7000
6000
5000
4000

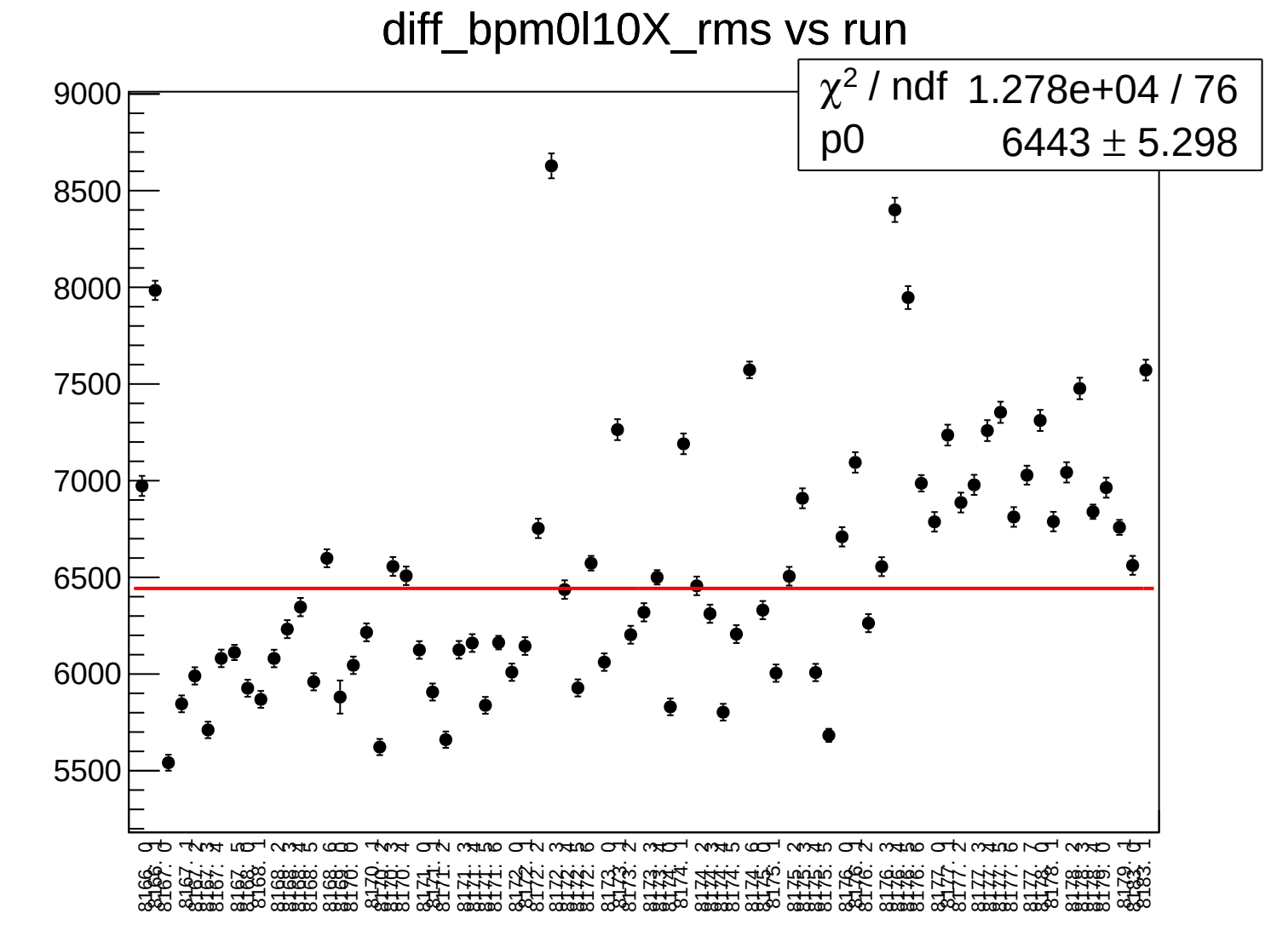

diff_bpm0l09Y_mean vs run
χ^2 / ndf 106.5 / 76
p0 −8.756 ± 4.507
pull
Entries 77
Mean 38.68
Std Dev 16.75

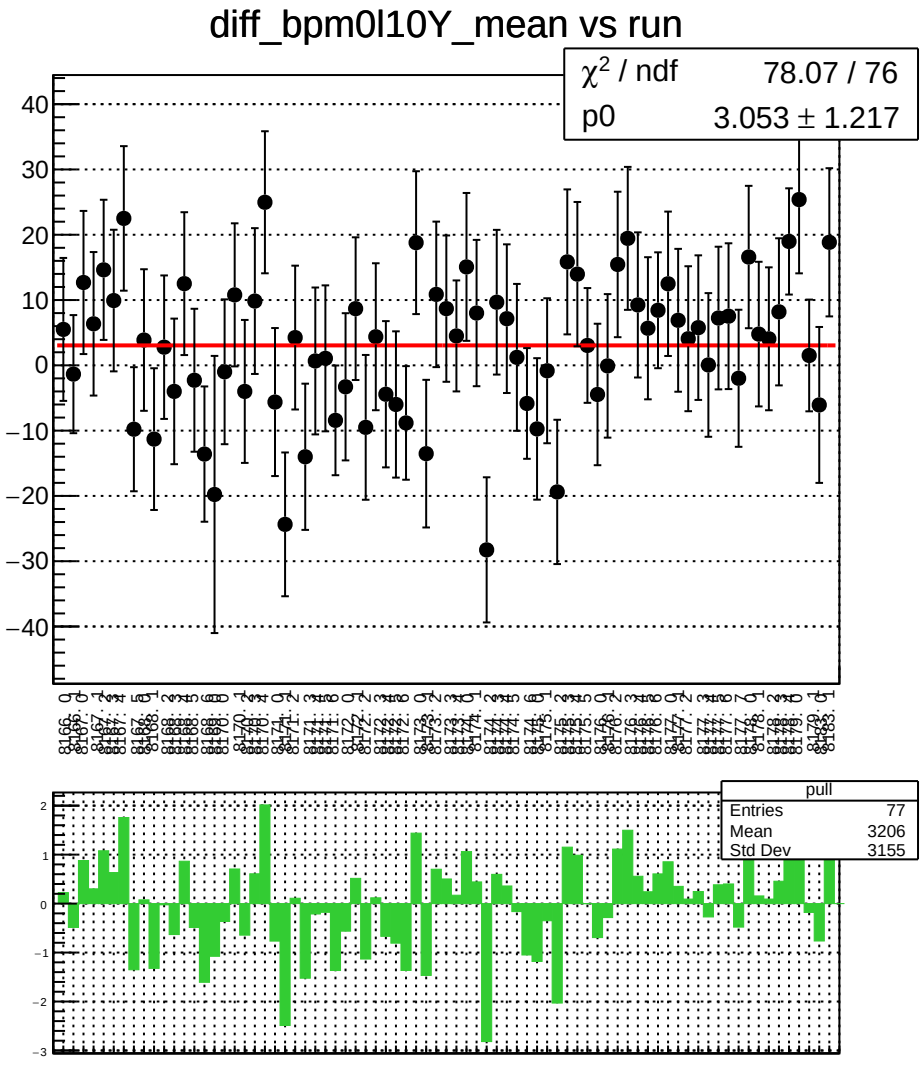

pull1D
Entries 77
Mean −0.1357
Std Dev 1.168

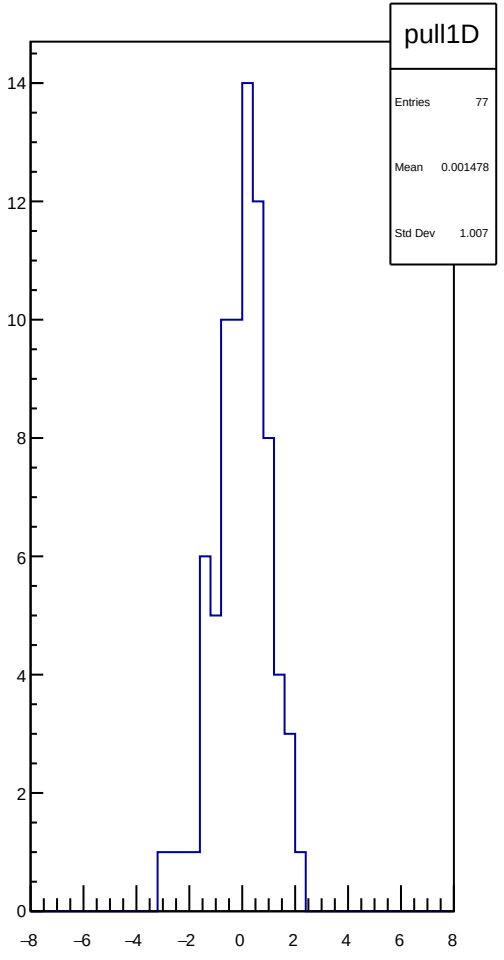

diff_bpm0l09Y_rms vs run
χ² / ndf 1.89e+05 / 76
p0 3637 ± 3.187
4500
4000
3500
3000
2500
2000
1500
1000

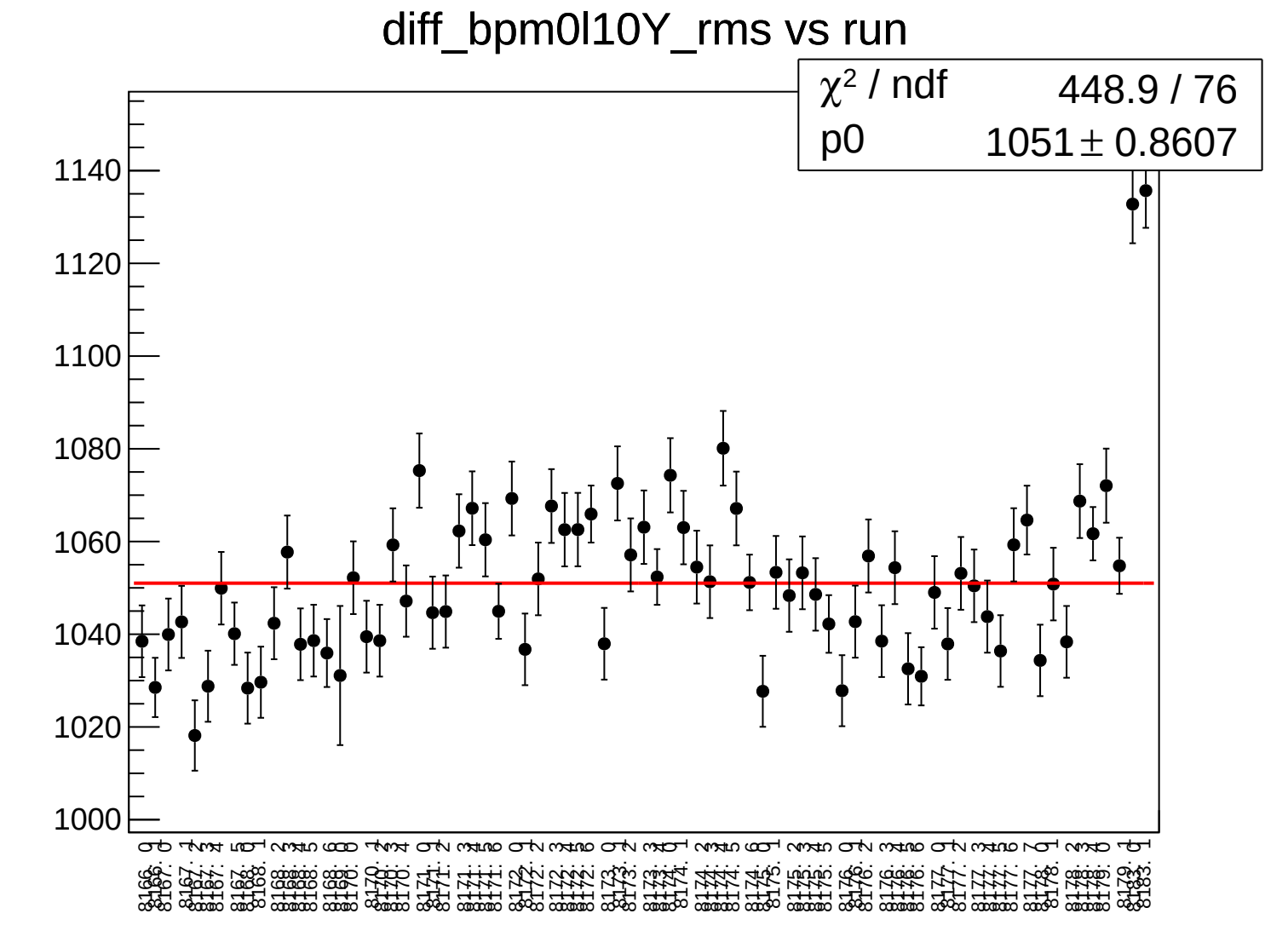

diff_bpm0l10X_mean vs run
χ² / ndf 60.79 / 76
p0 −46.02 ± 7.493
pull
Entries 77
Mean −0.7179
Std Dev 83.65

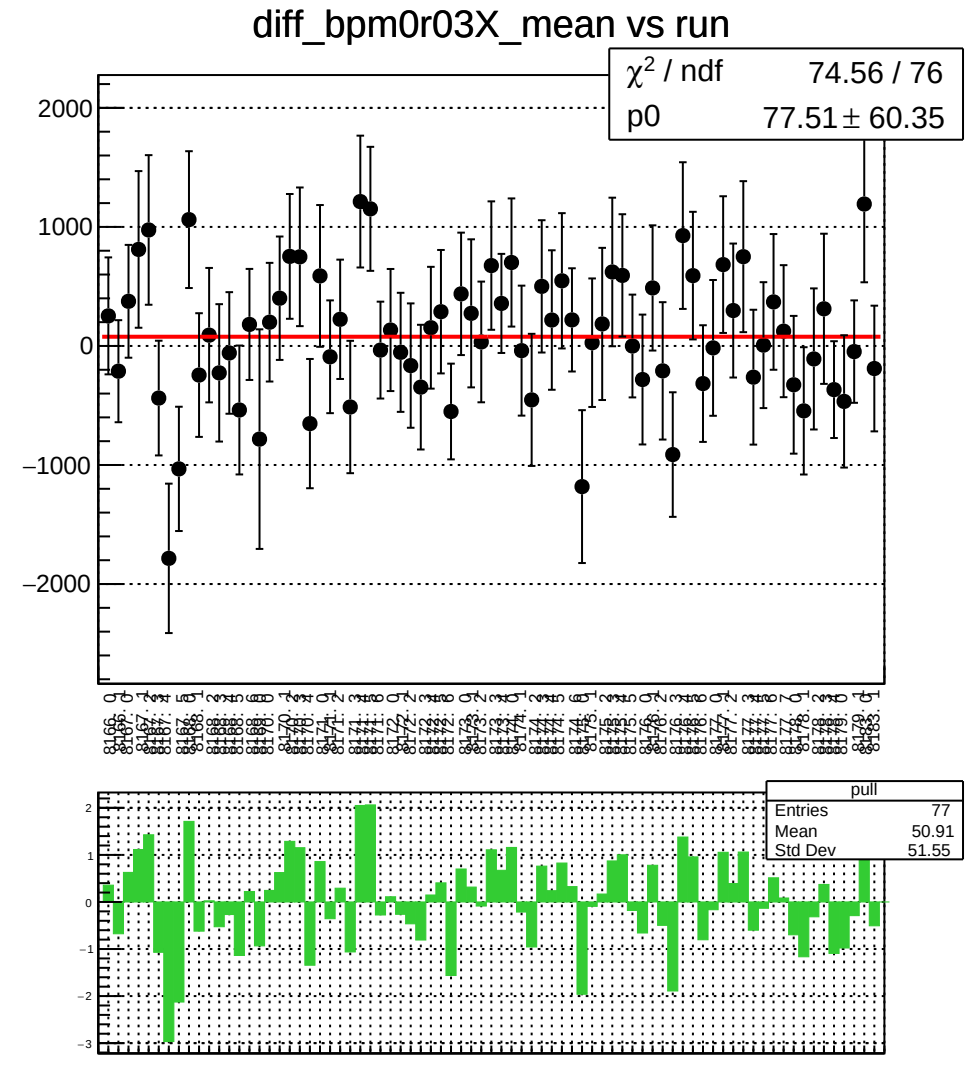

pull1D
Entries 77
Mean 0.004939
Std Dev 0.8885

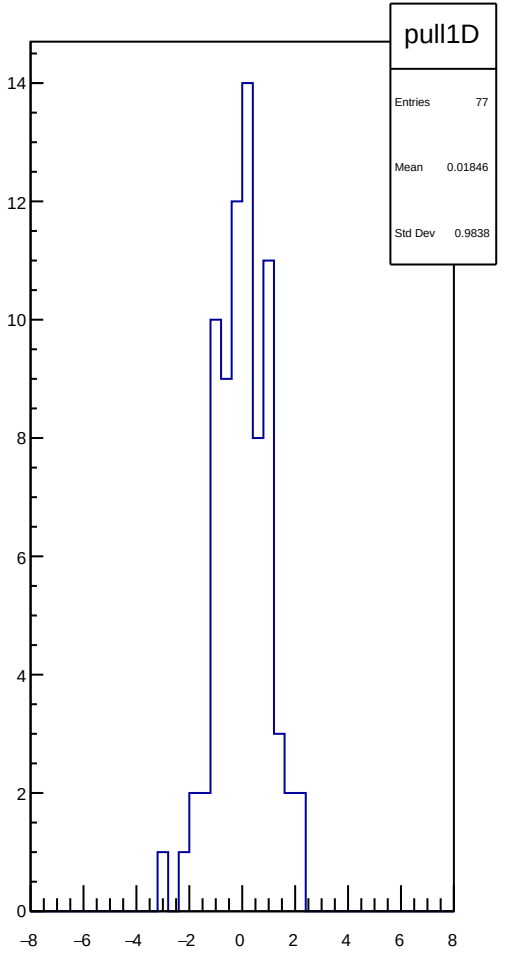

diff_bpm0l10X_rms vs run
χ^2 / ndf 1.278e+04 / 76
p0 6443 ± 5.298
9000
8500
8000
7500
7000
6500
6000
5500


diff_bpm0l10Y_mean vs run
χ² / ndf 78.07 / 76
p0 3.053 ± 1.217
pull
Entries 77
Mean 3206
Std Dev 3155

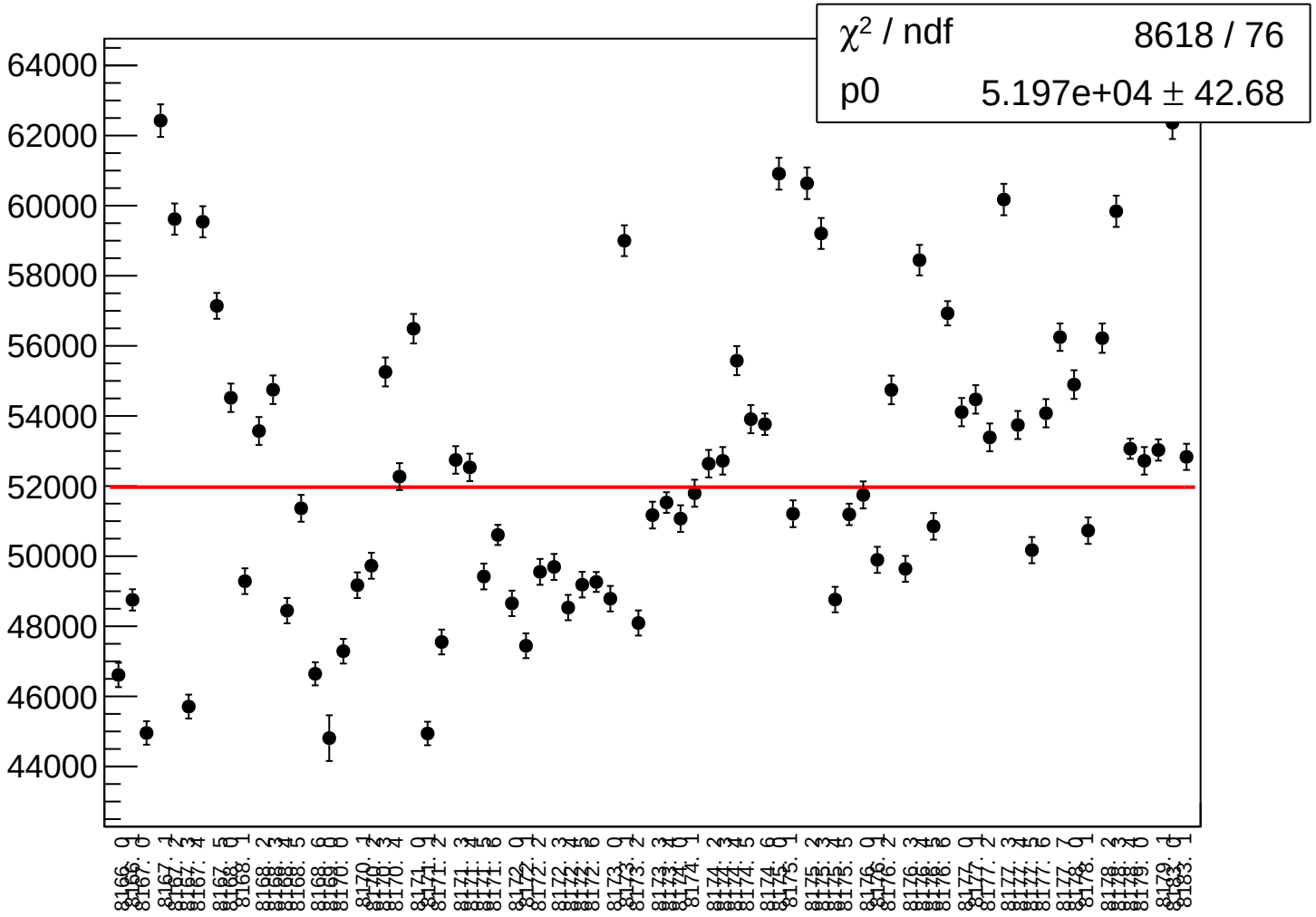

pull1D
Entries 77
Mean 0.001478
Std Dev 1.007

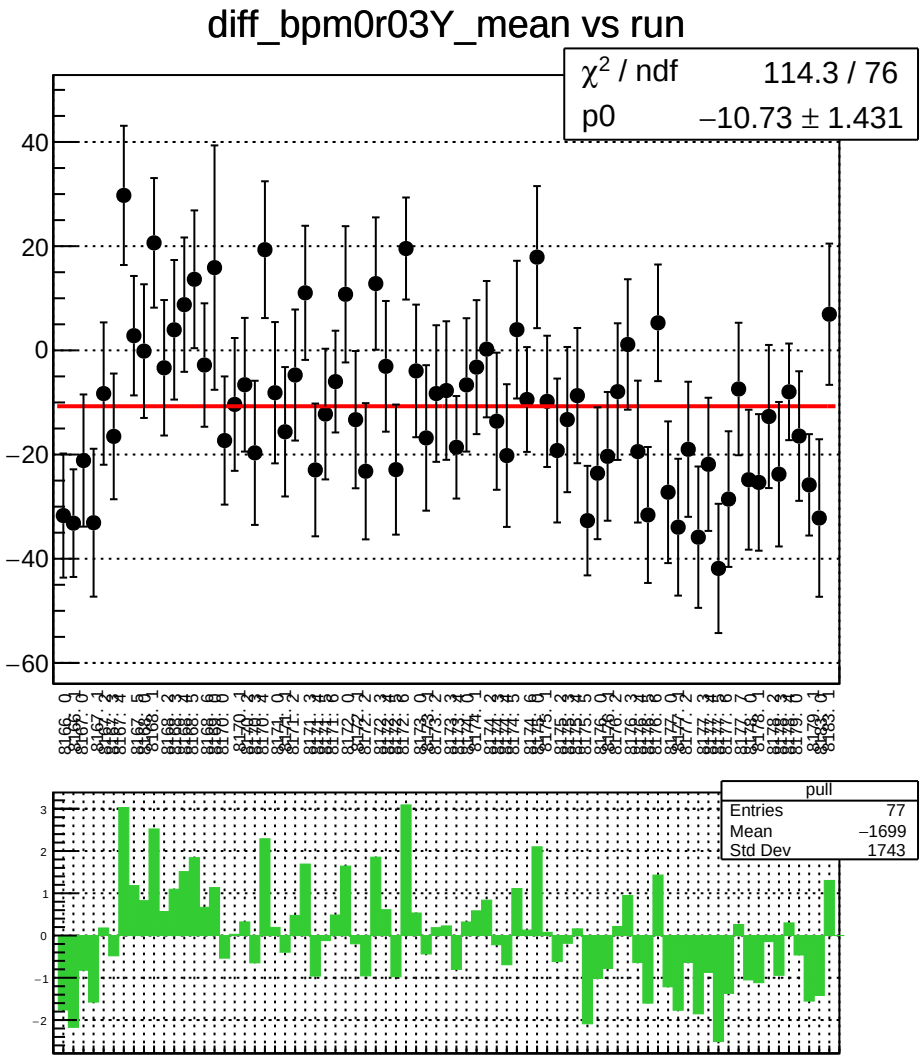

diff_bpm0l10Y_rms vs run
χ² / ndf 448.9 / 76
p0 1051 ± 0.8607
1140
1120
1100
1080
1060
1040
1020
1000

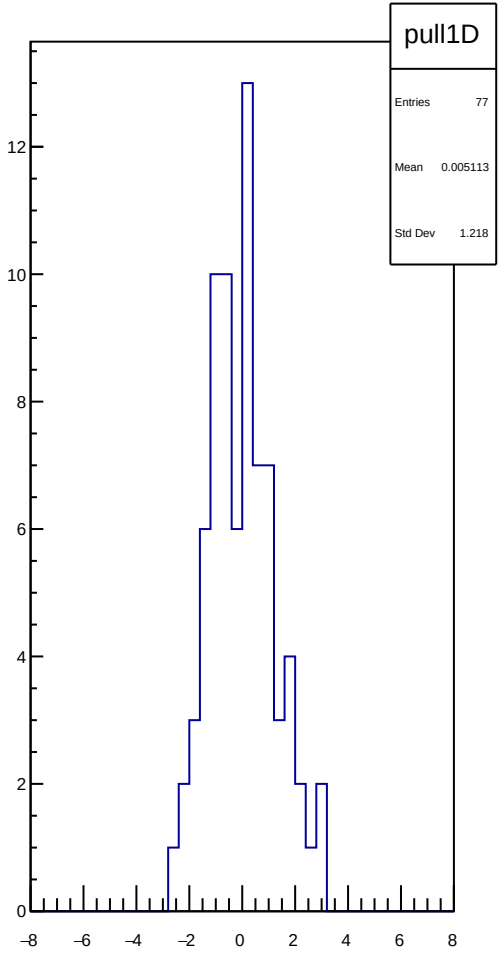

diff_bpm0r03X_mean vs run
χ² / ndf 74.56 / 76
p0 77.51 ± 60.35
2000
1000
0
−1000
−2000
pull
Entries 77
Mean 50.91
Std Dev 51.55
2
1
0
−1
−2
−3

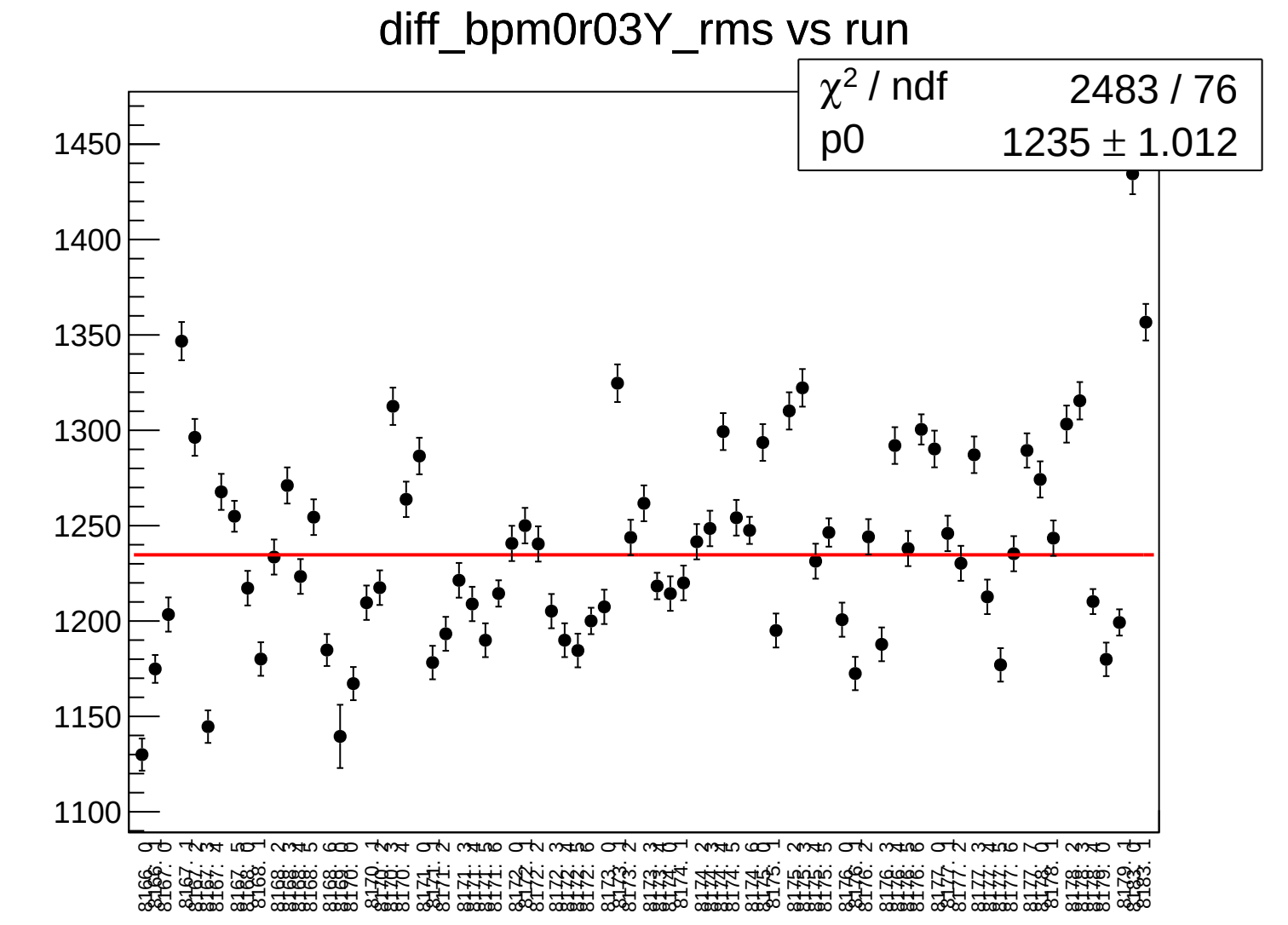

pull1D
Entries 77
Mean 0.01846
Std Dev 0.9838
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

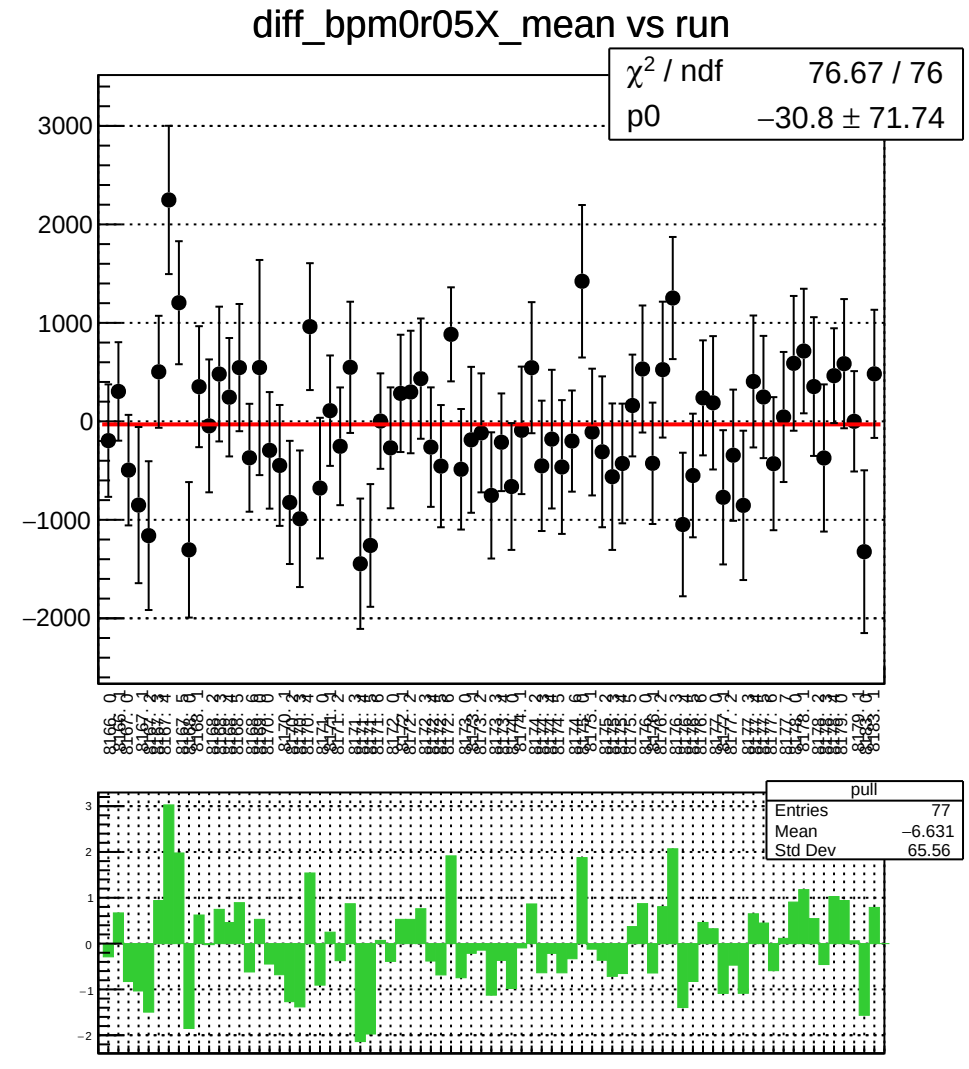
diff_bpm0r03X_rms vs run

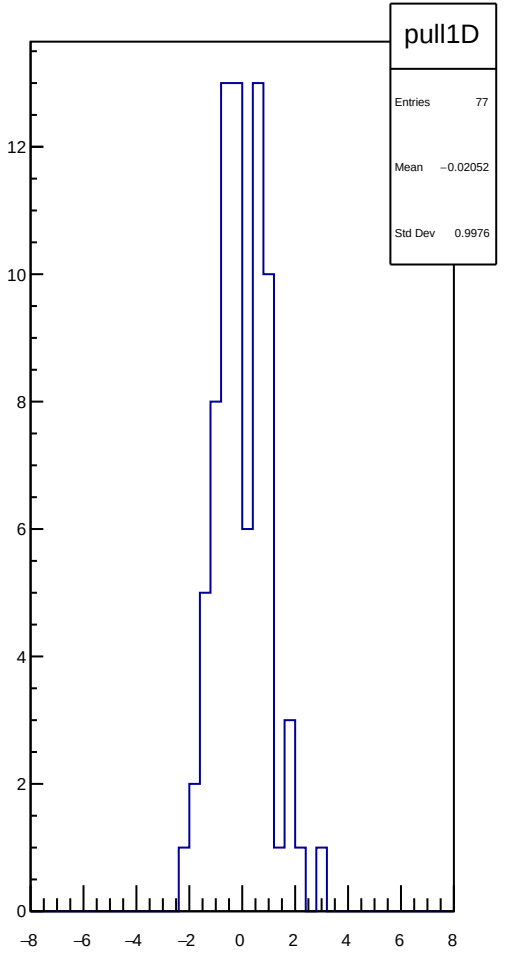



diff_bpm0r03Y_mean vs run
χ² / ndf 114.3 / 76
p0 −10.73 ± 1.431
pull
Entries 77
Mean −1699
Std Dev 1743

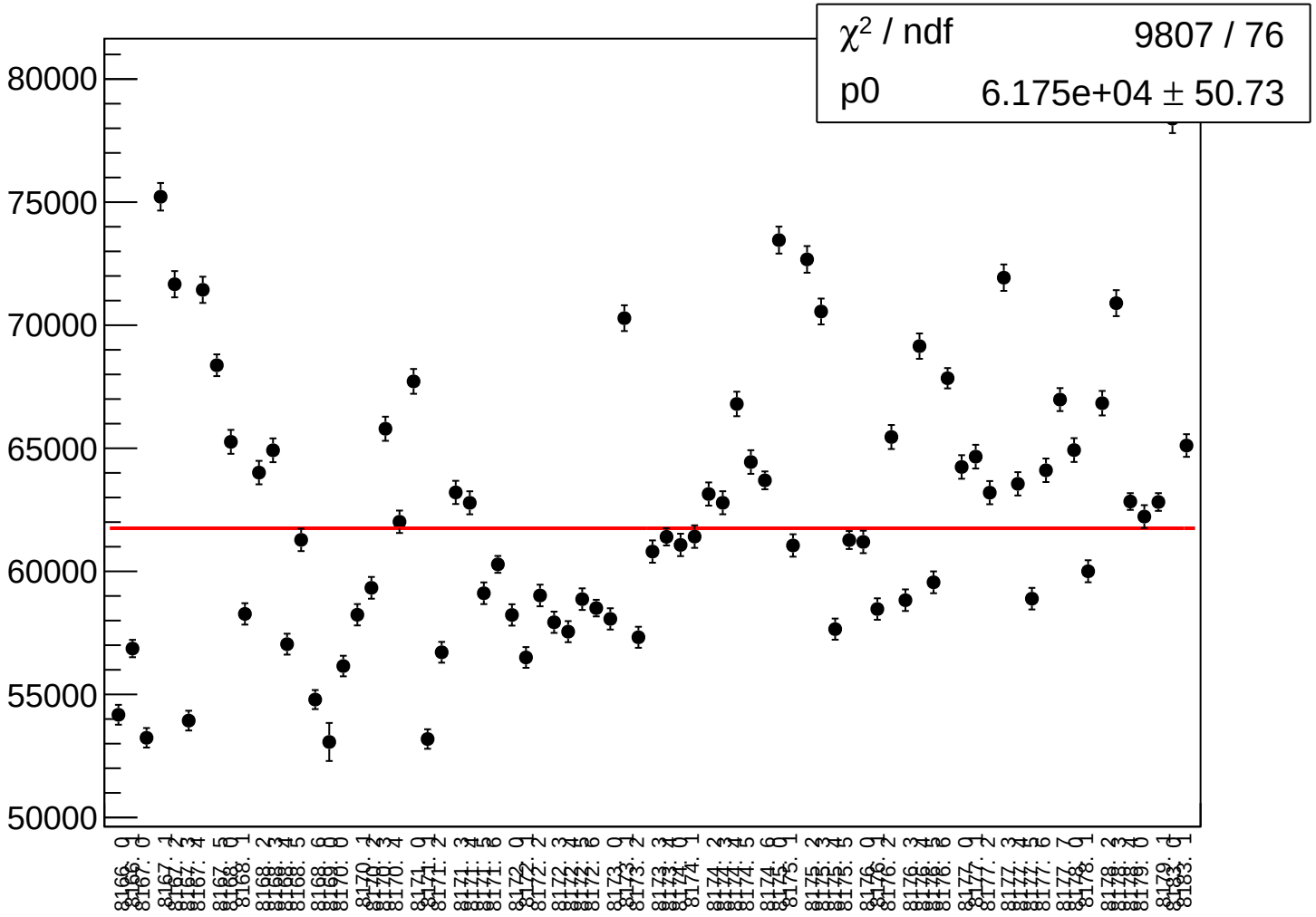

pull1D
Entries 77
Mean 0.005113
Std Dev 1.218

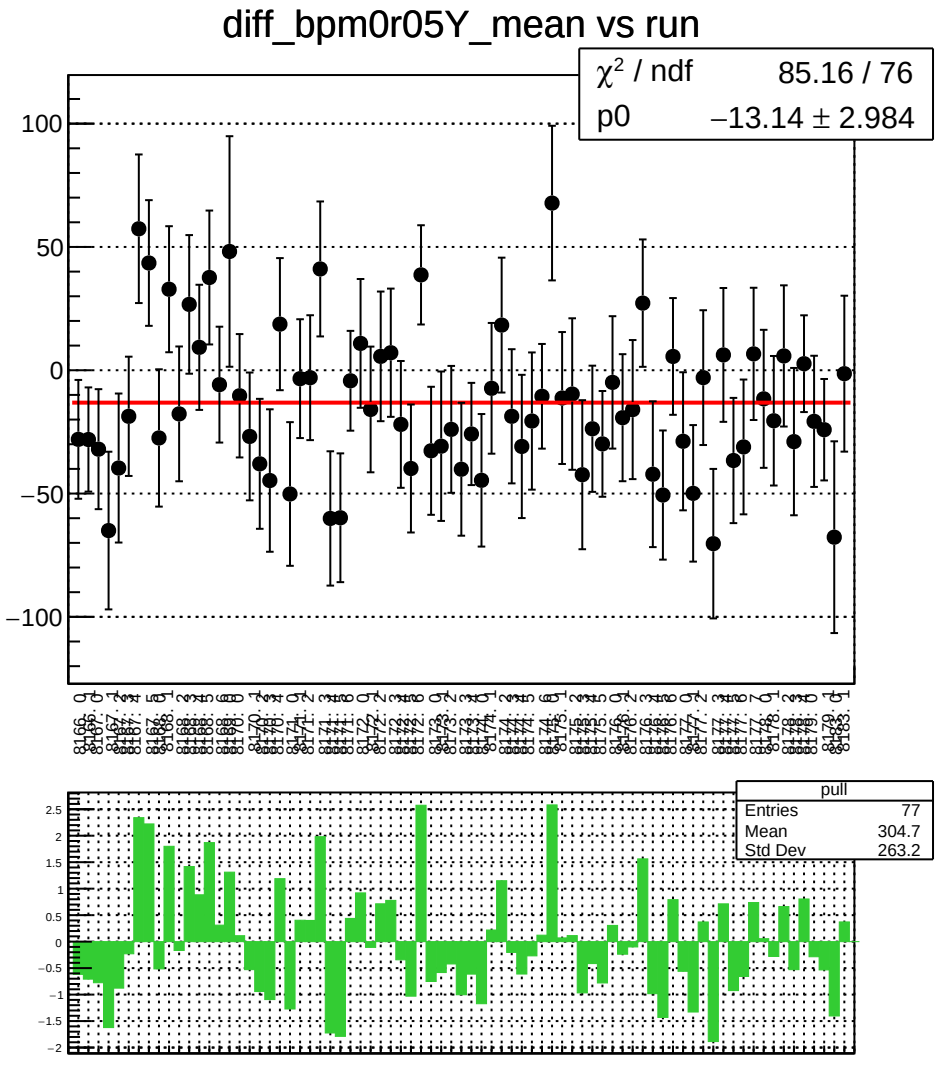

diff_bpm0r03Y_rms vs run
χ² / ndf 2483 / 76
p0 1235 ± 1.012
1450
1400
1350
1300
1250
1200
1150
1100

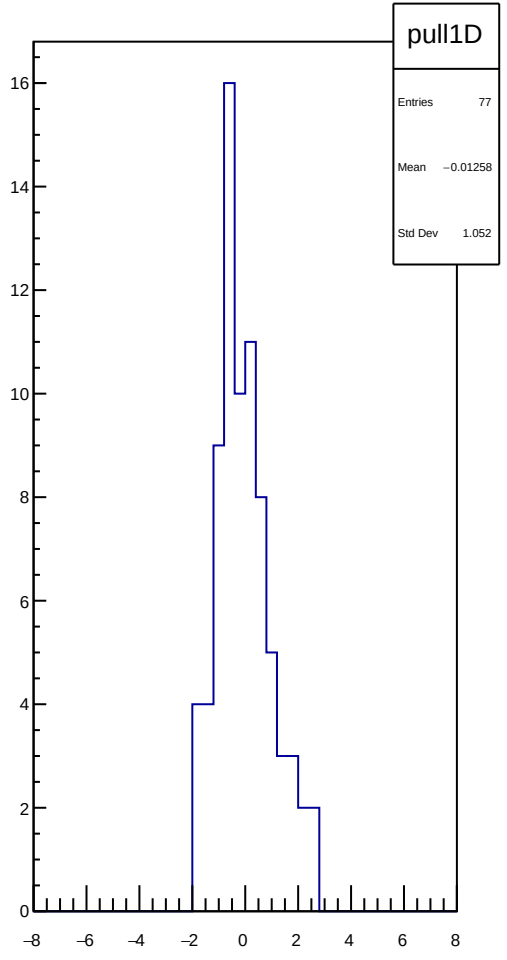

diff_bpm0r05X_mean vs run
χ² / ndf 76.67 / 76
p0 −30.8 ± 71.74
3000
2000
1000
0
−1000
−2000
pull
Entries 77
Mean −6.631
Std Dev 65.56
3
2
1
0
−1
−2

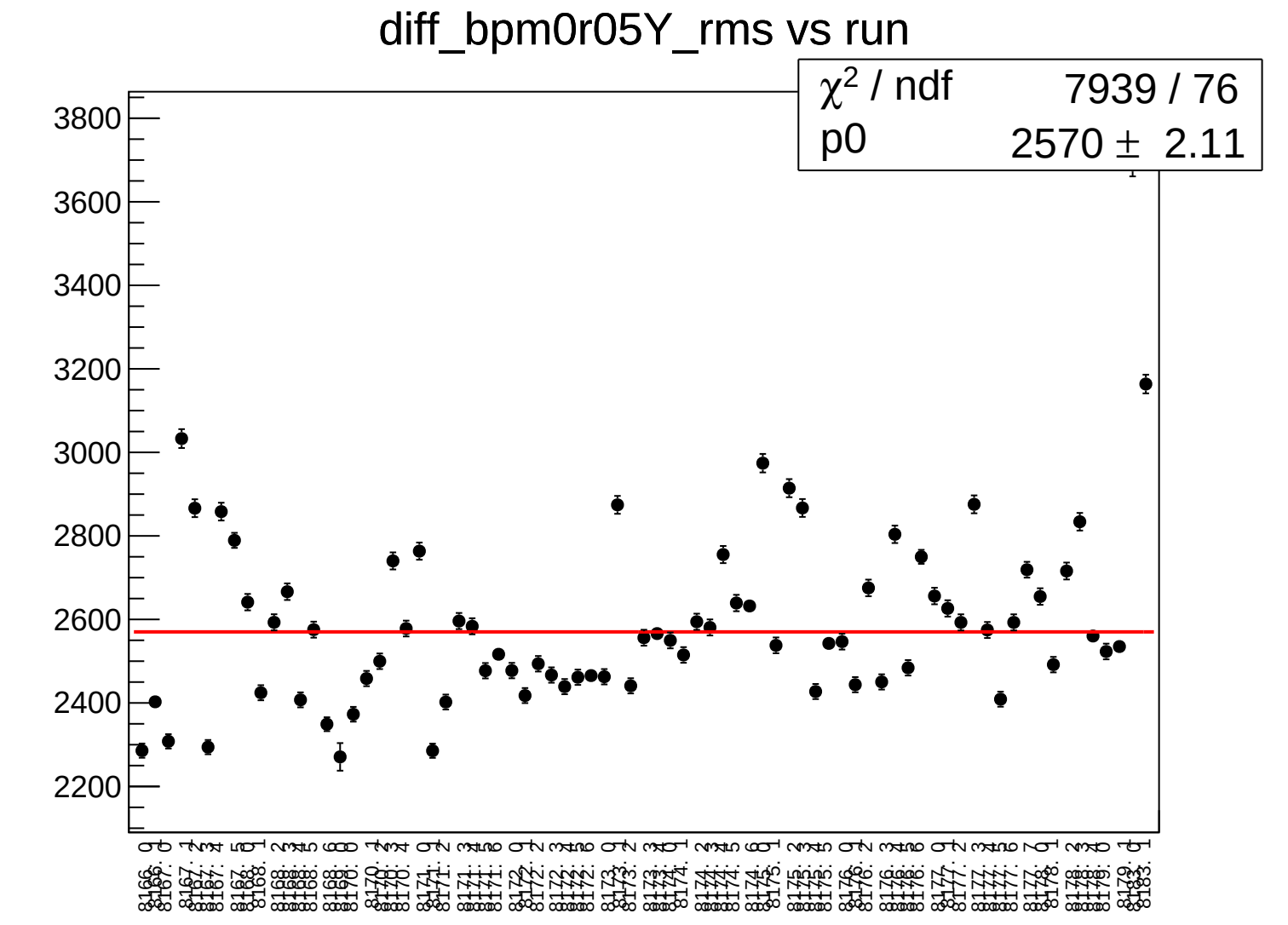

pull1D
Entries 77
Mean −0.02052
Std Dev 0.9976
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

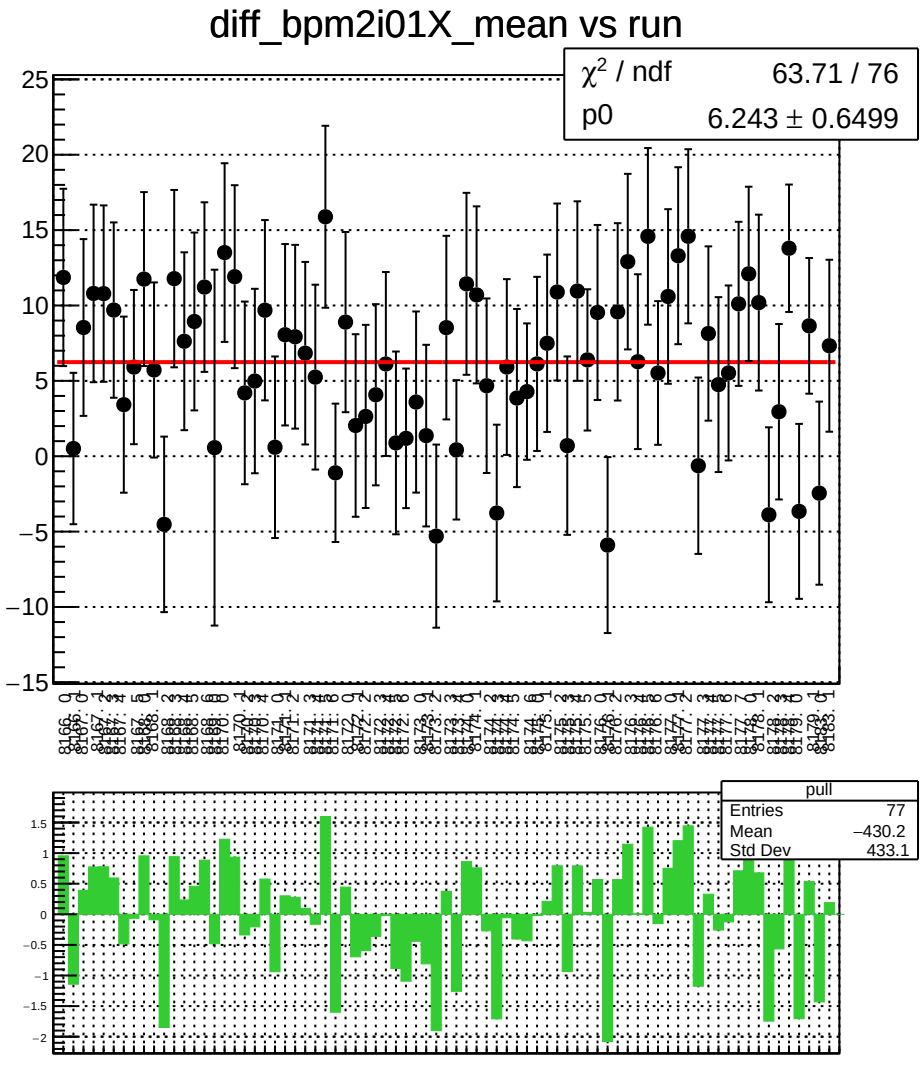
diff_bpm0r05X_rms vs run

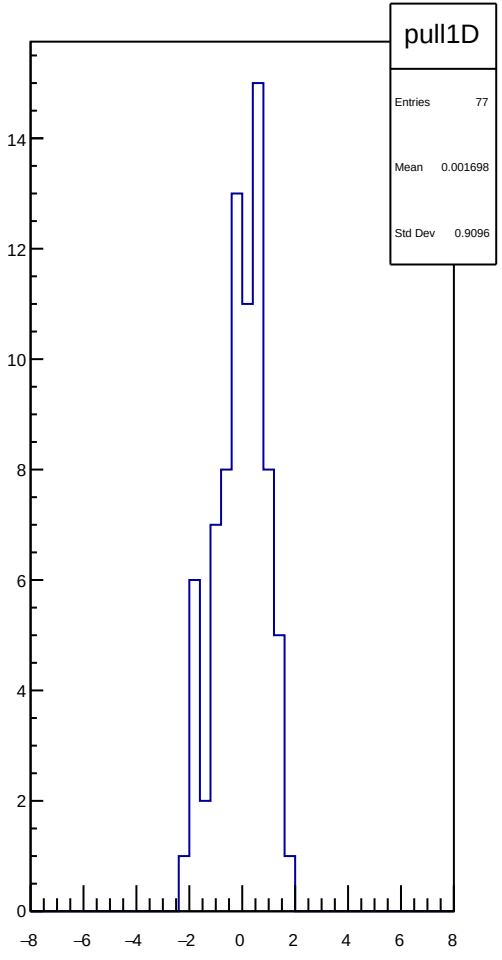


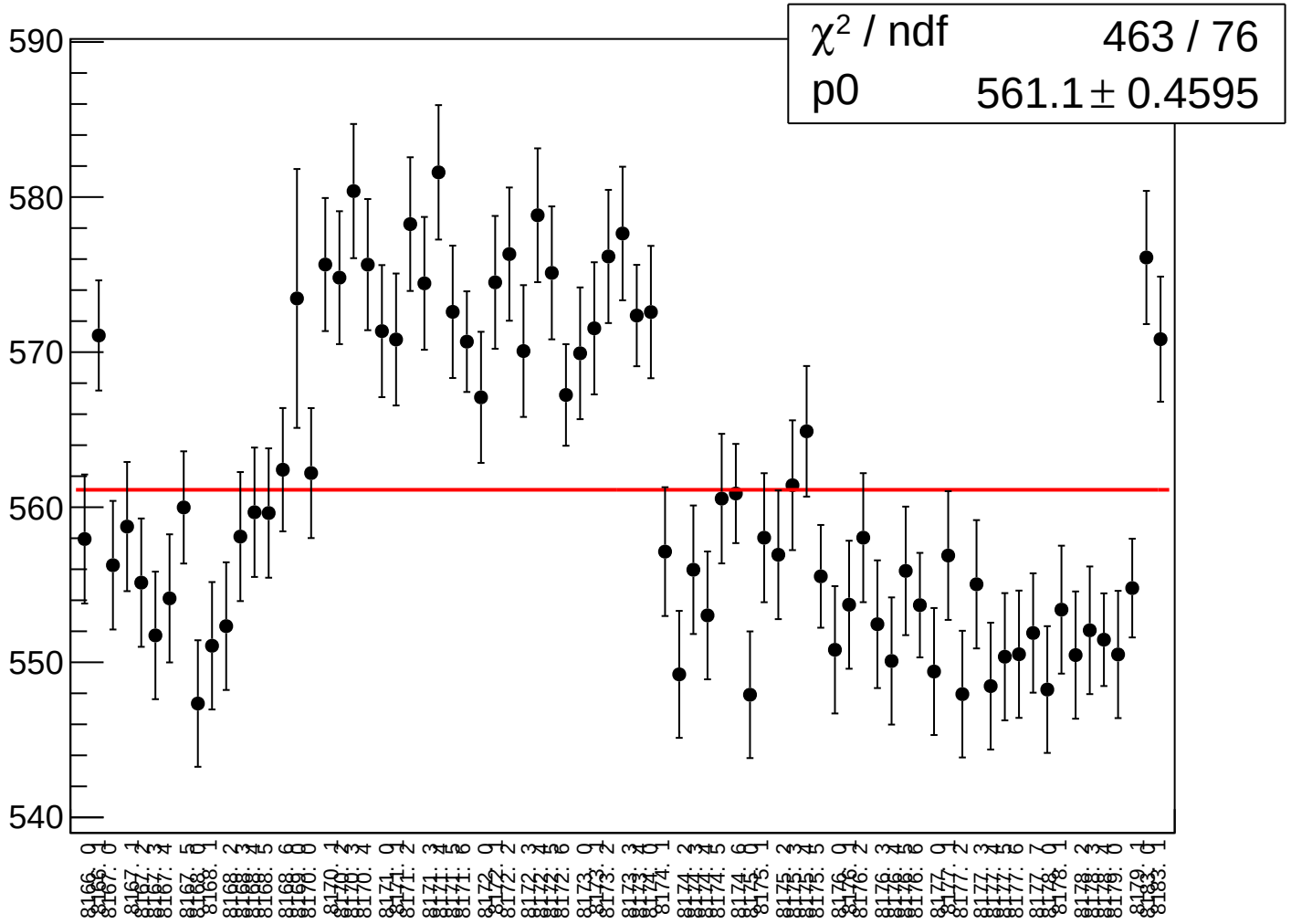

diff_bpm0r05Y_mean vs run
χ² / ndf 85.16 / 76
p0 −13.14 ± 2.984
100
50
0
−50
−100
pull
Entries 77
Mean 304.7
Std Dev 263.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

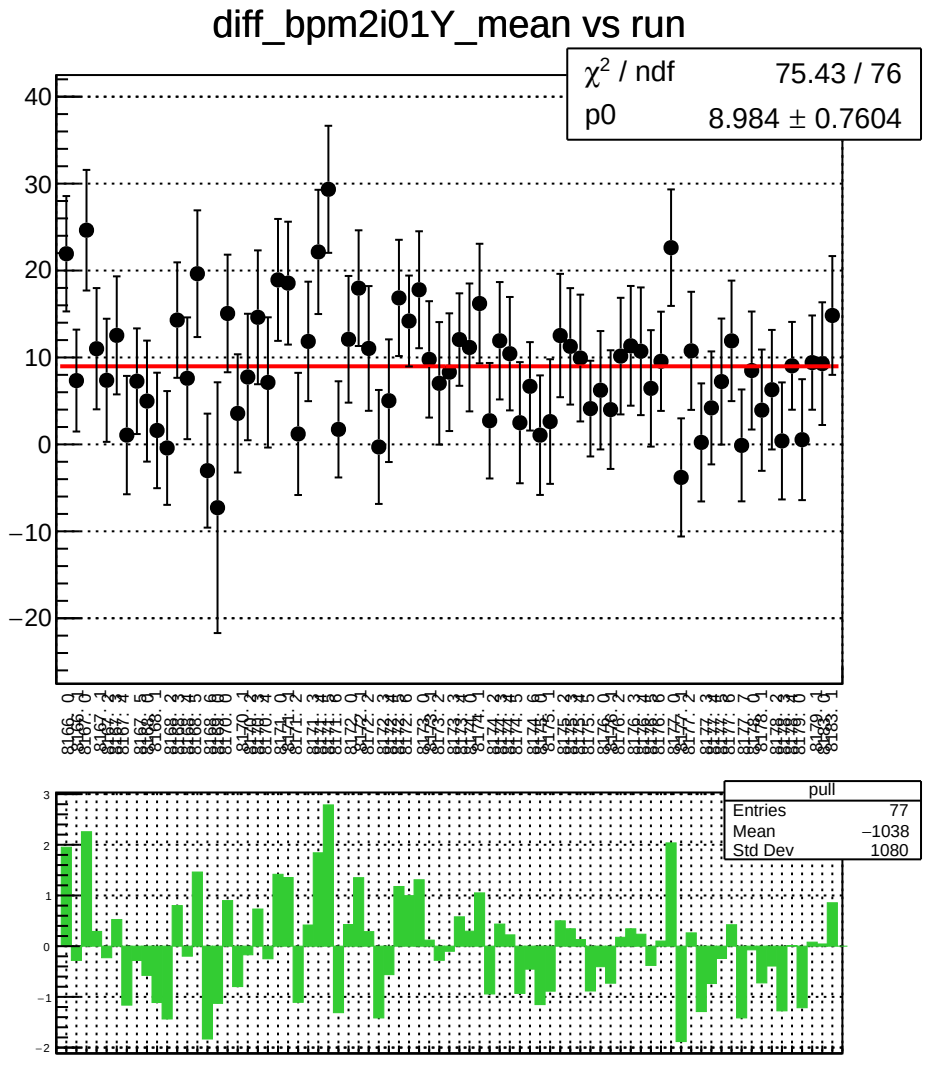

pull1D
Entries 77
Mean −0.01258
Std Dev 1.052
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

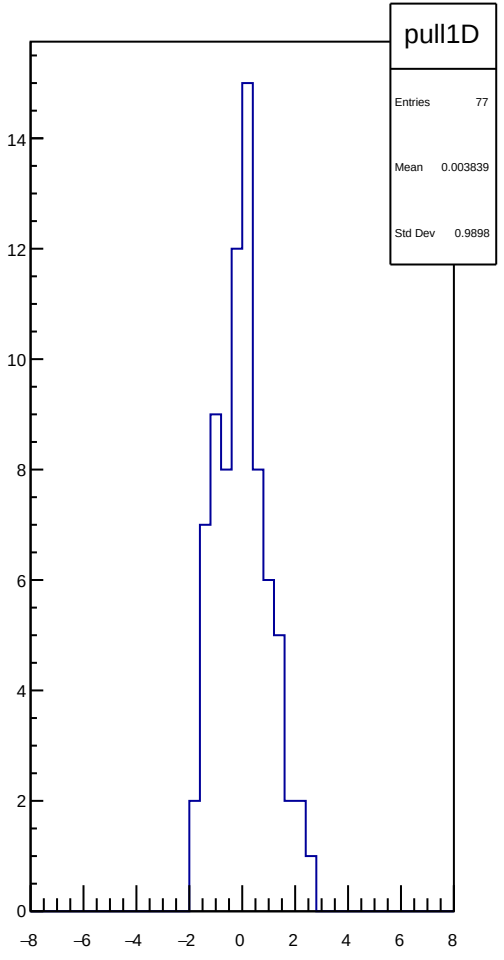

diff_bpm0r05Y_rms vs run
χ² / ndf 7939 / 76
p0 2570 ± 2.11
3800
3600
3400
3200
3000
2800
2600
2400
2200

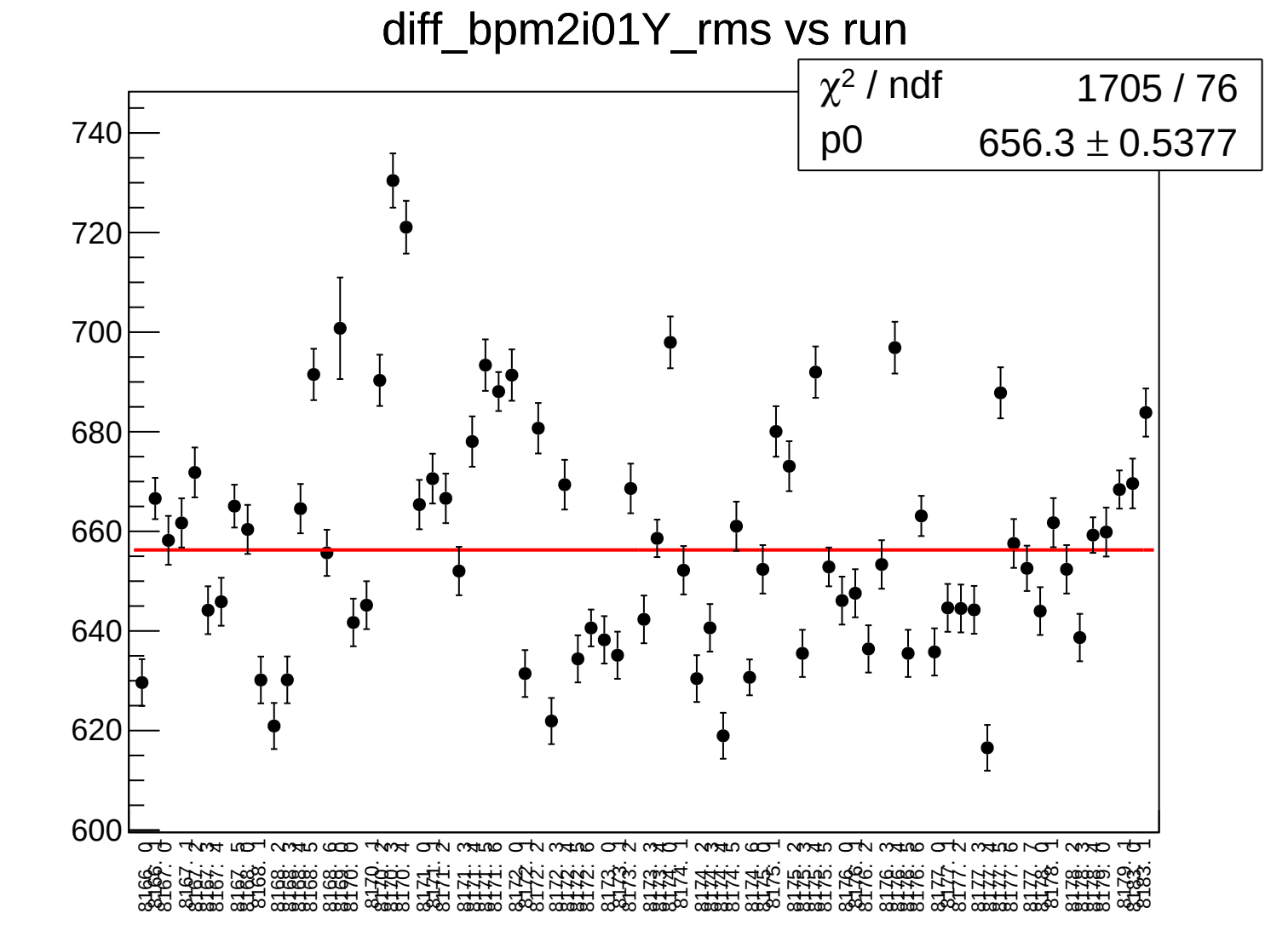

diff_bpm2i01X_mean vs run
χ² / ndf 63.71 / 76
p0 6.243 ± 0.6499
pull
Entries 77
Mean −430.2
Std Dev 433.1

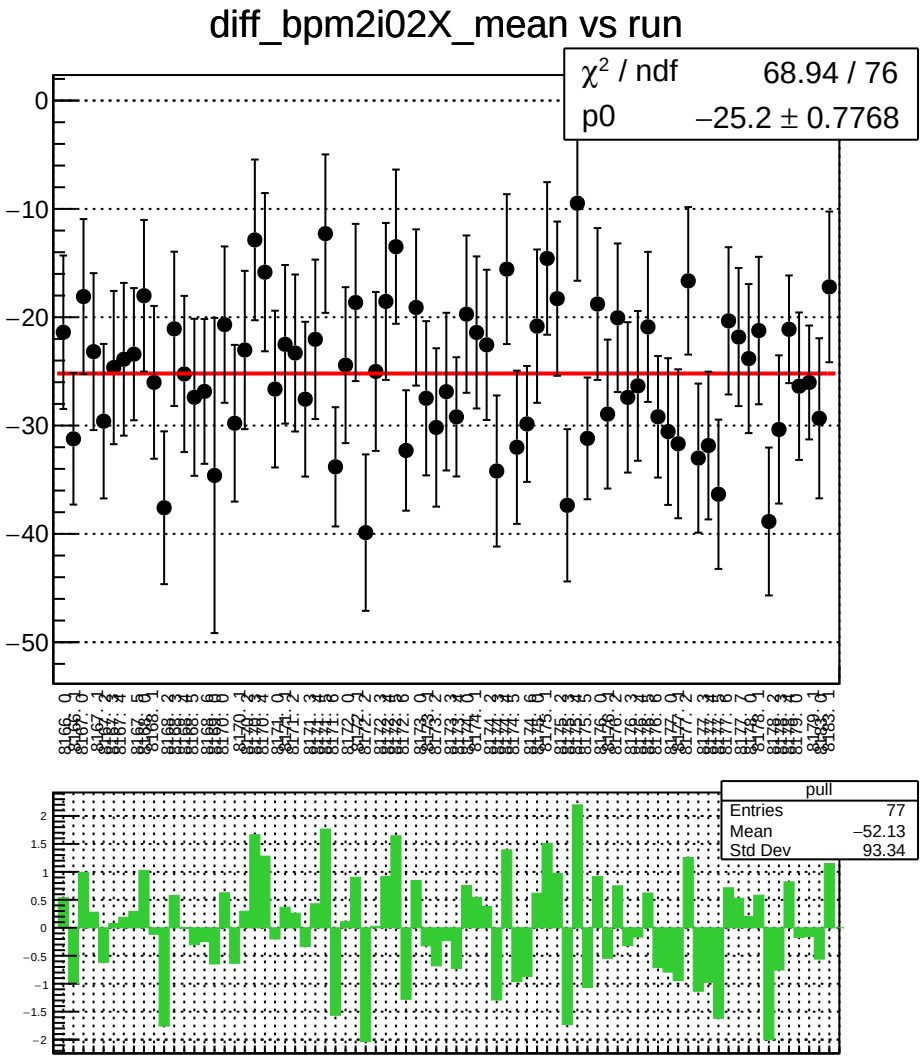

pull1D
Entries 77
Mean 0.001698
Std Dev 0.9096

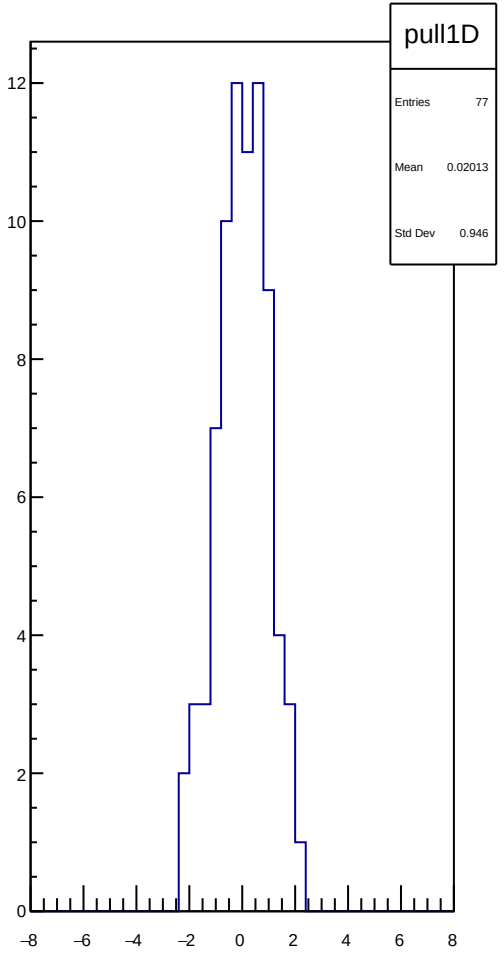

diff_bpm2i01X_rms vs run
χ² / ndf 463 / 76
p0 561.1 ± 0.4595
590
580
570
560
550
540

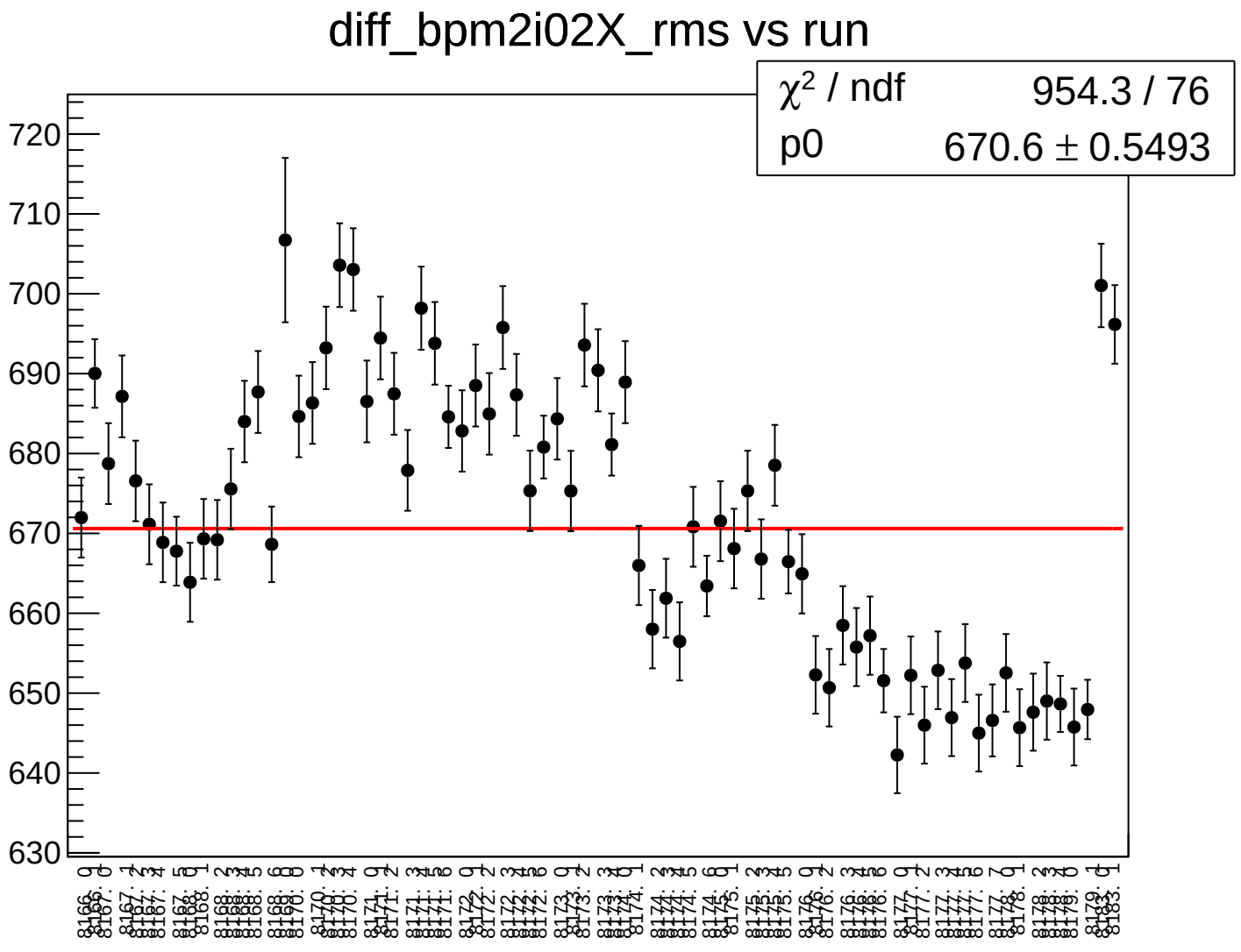

diff_bpm2i01Y_mean vs run
χ² / ndf 75.43 / 76
p0 8.984 ± 0.7604
pull
Entries 77
Mean −1038
Std Dev 1080

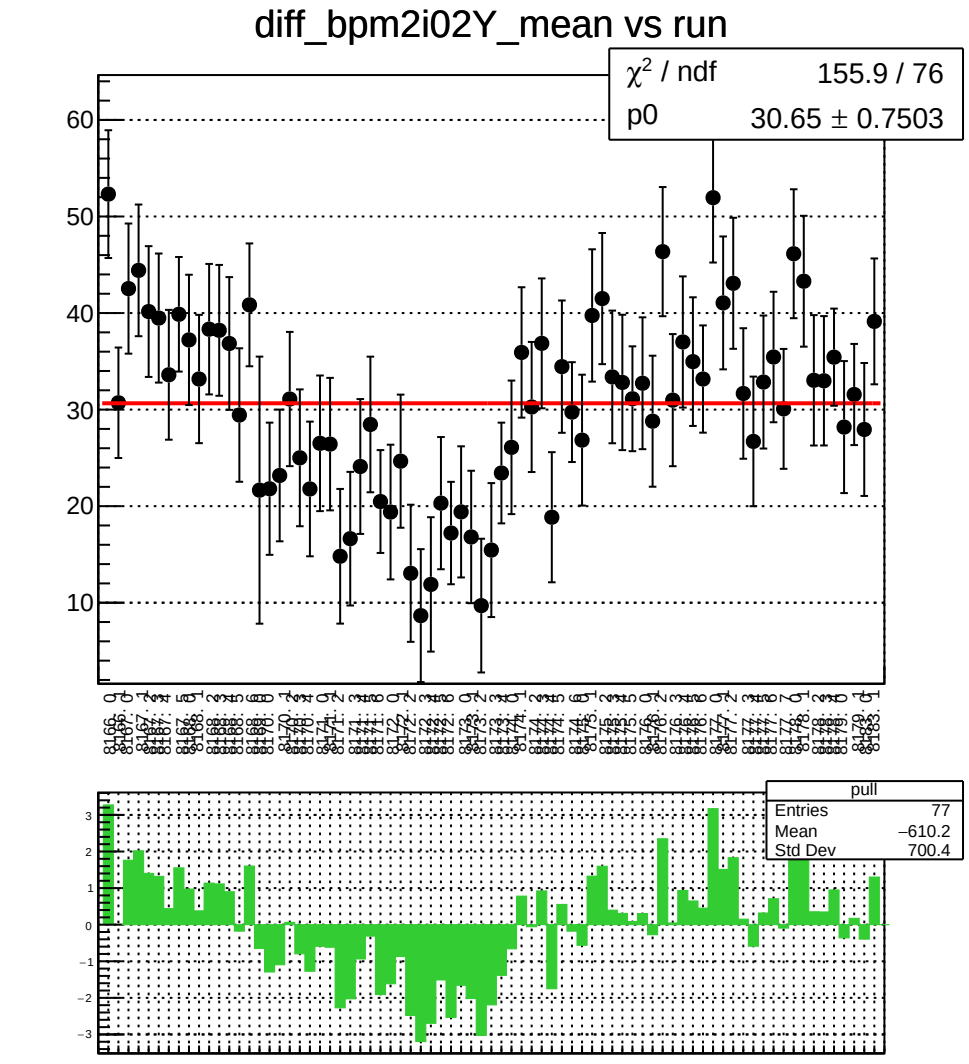

pull1D
Entries 77
Mean 0.003839
Std Dev 0.9898

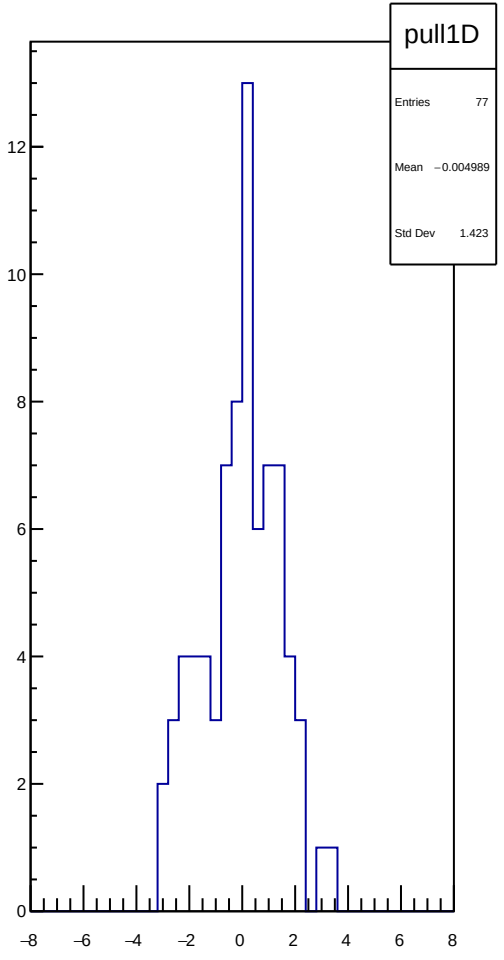

diff_bpm2i01Y_rms vs run
χ² / ndf 1705 / 76
p0 656.3 ± 0.5377
740
720
700
680
660
640
620
600

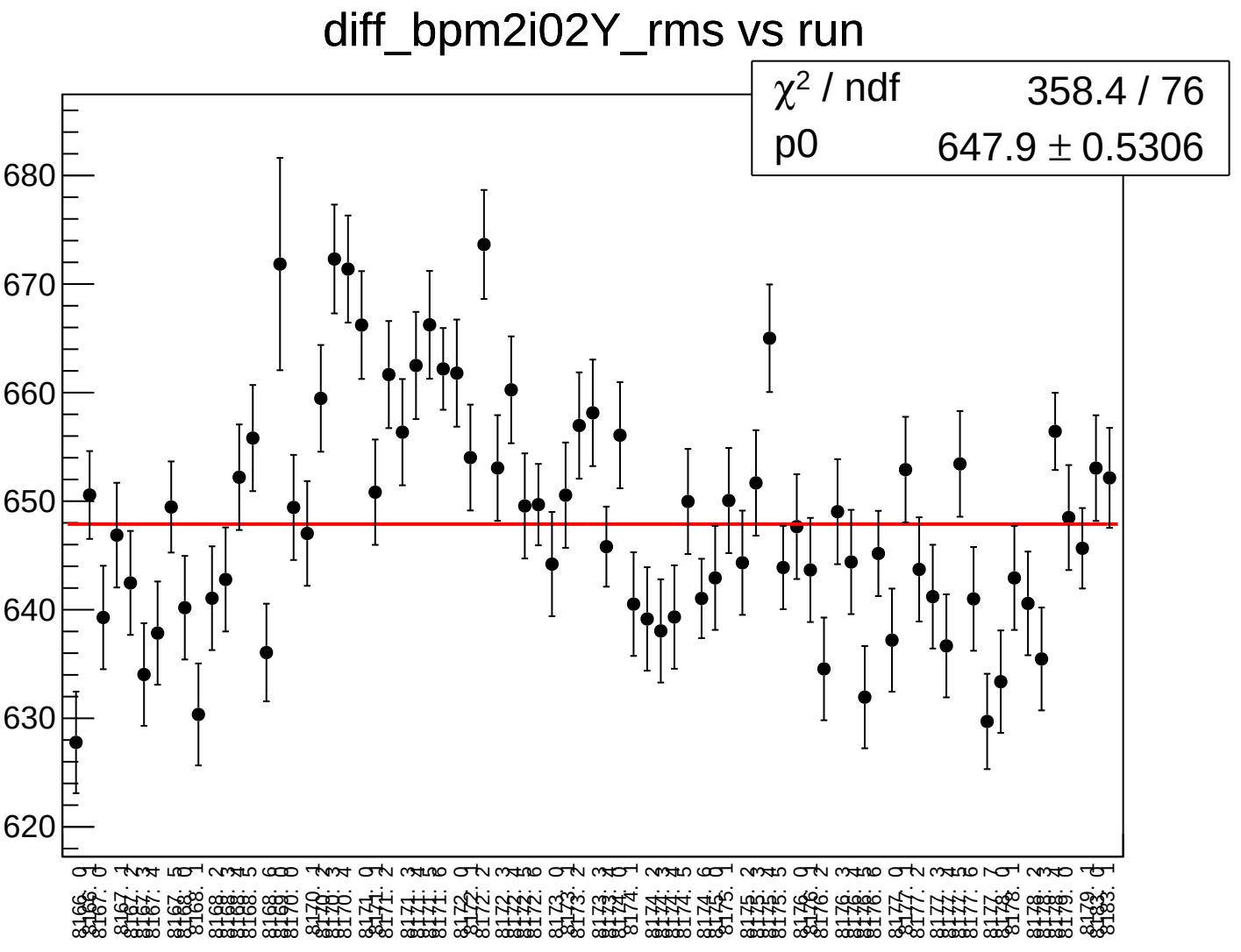

diff_bpm2i02X_mean vs run
χ² / ndf 68.94 / 76
p0 −25.2 ± 0.7768
pull
Entries 77
Mean −52.13
Std Dev 93.34

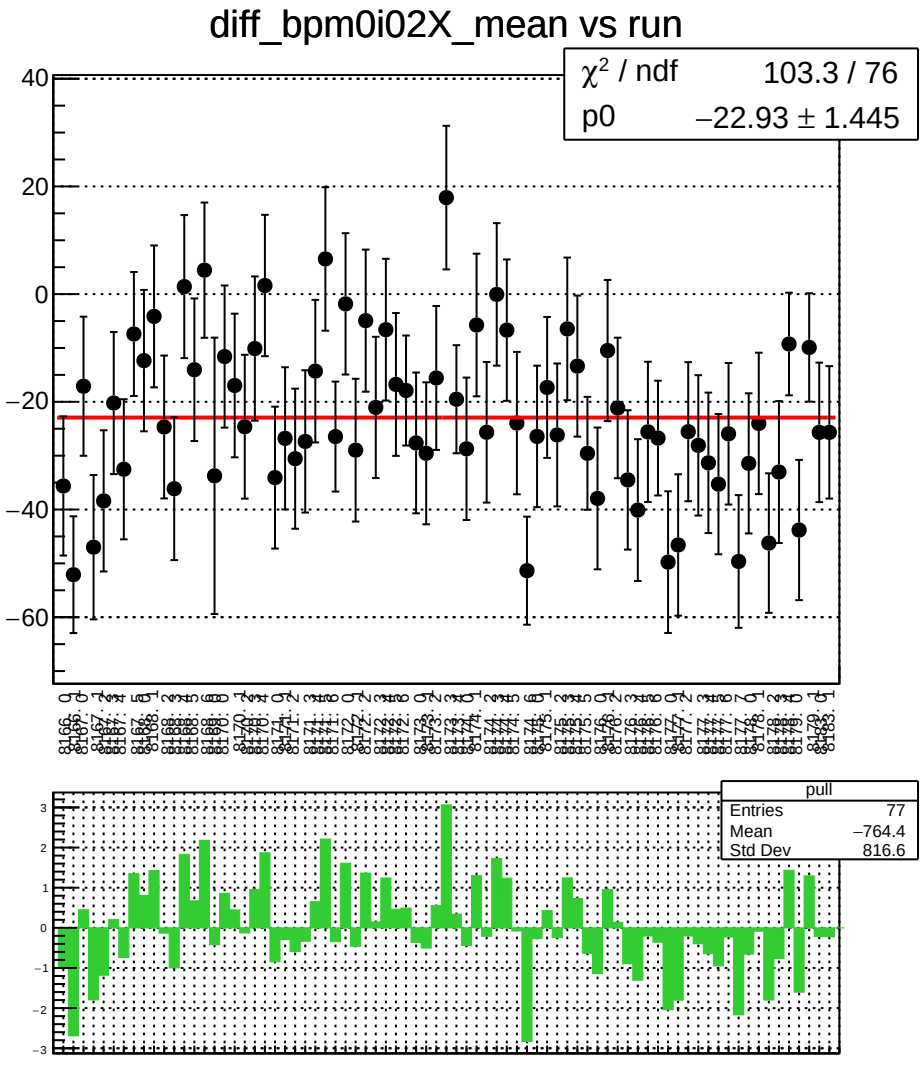

pull1D
Entries 77
Mean 0.02013
Std Dev 0.946

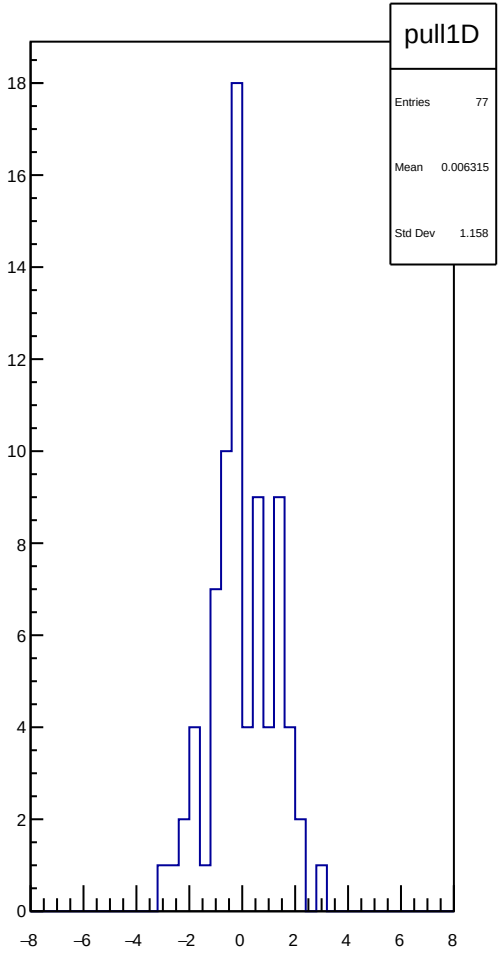

diff_bpm2i02X_rms vs run
χ² / ndf 954.3 / 76
p0 670.6 ± 0.5493
720
710
700
690
680
670
660
650
640
630

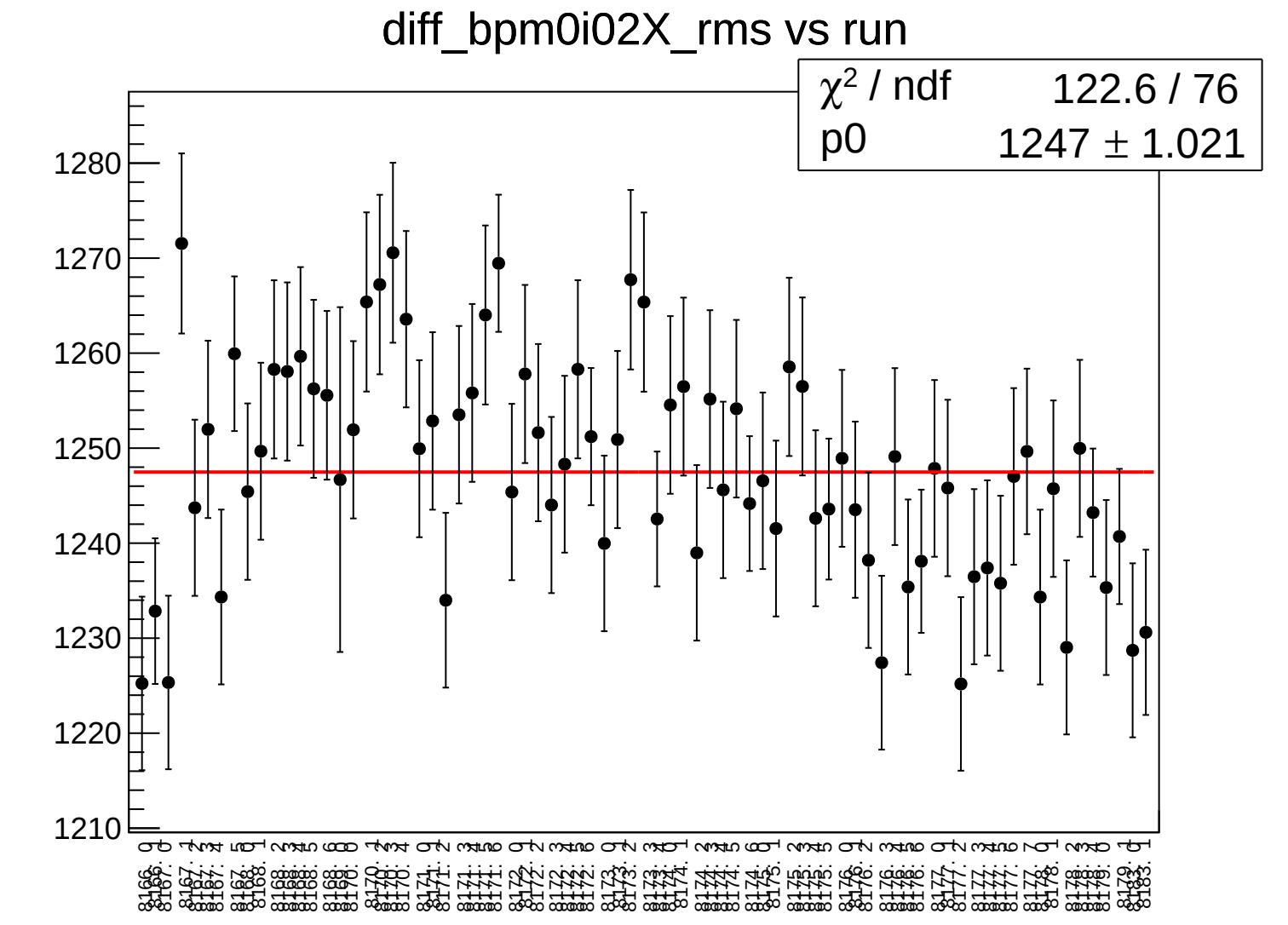

diff_bpm2i02Y_mean vs run
χ² / ndf 155.9 / 76
p0 30.65 ± 0.7503
pull
Entries 77
Mean −610.2
Std Dev 700.4

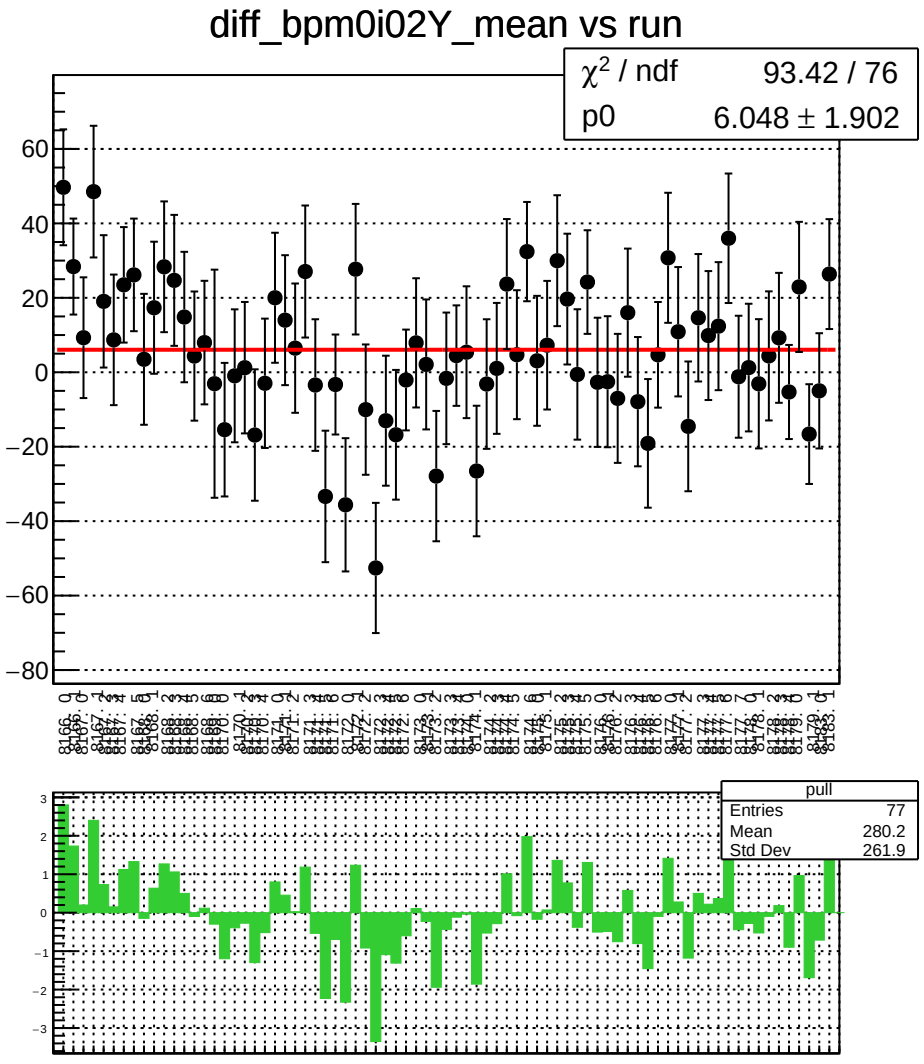

pull1D
Entries 77
Mean −0.004989
Std Dev 1.423

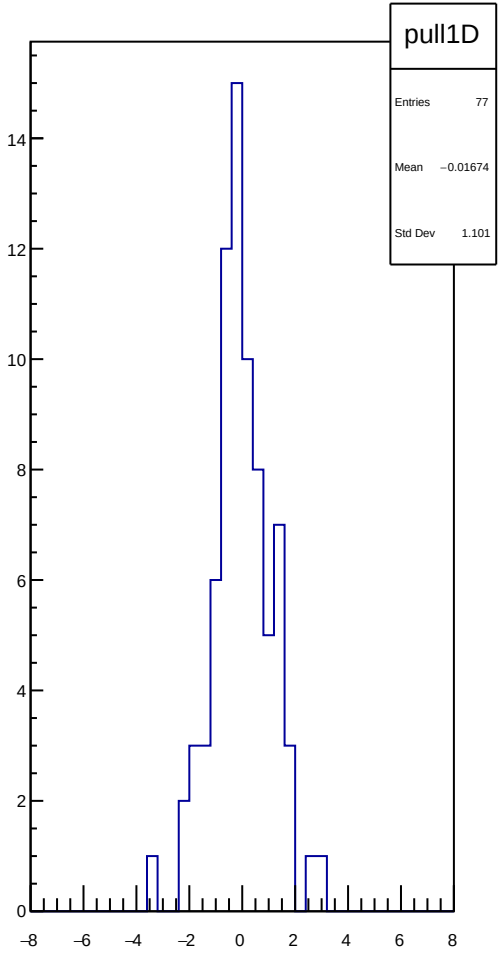

diff_bpm2i02Y_rms vs run
χ² / ndf 358.4 / 76
p0 647.9 ± 0.5306
680
670
660
650
640
630
620

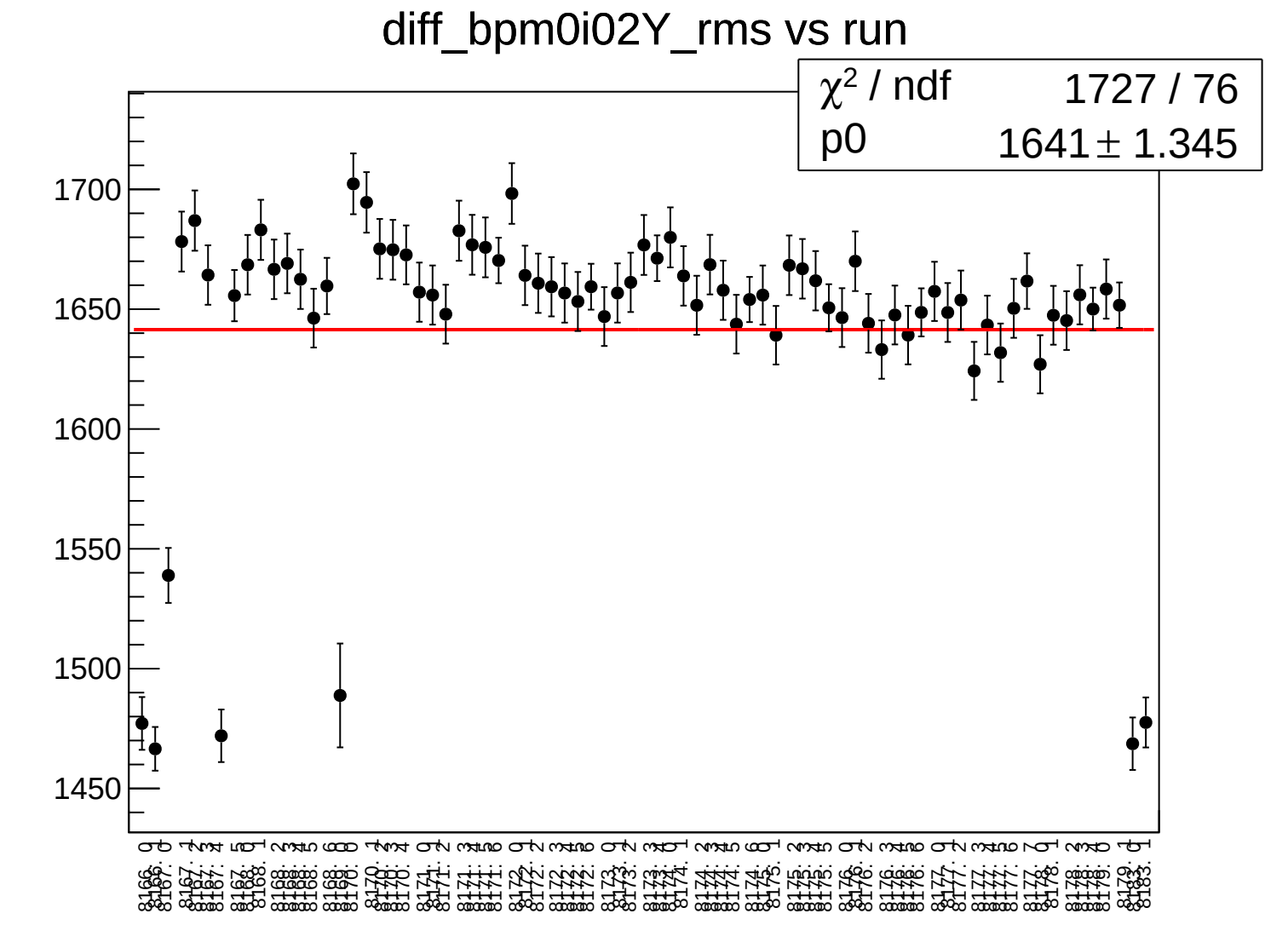

diff_bpm0i02X_mean vs run
χ² / ndf 103.3 / 76
p0 −22.93 ± 1.445
pull
Entries 77
Mean −764.4
Std Dev 816.6

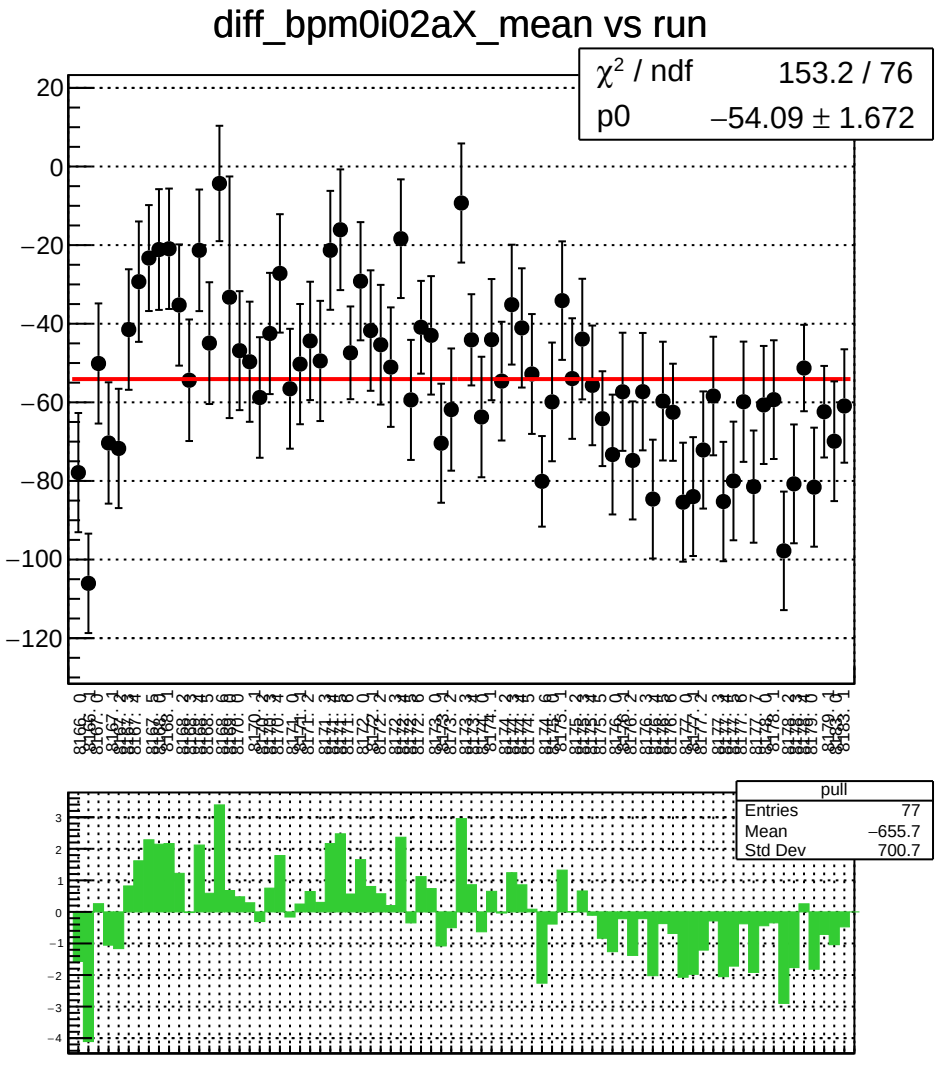

pull1D
Entries 77
Mean 0.006315
Std Dev 1.158

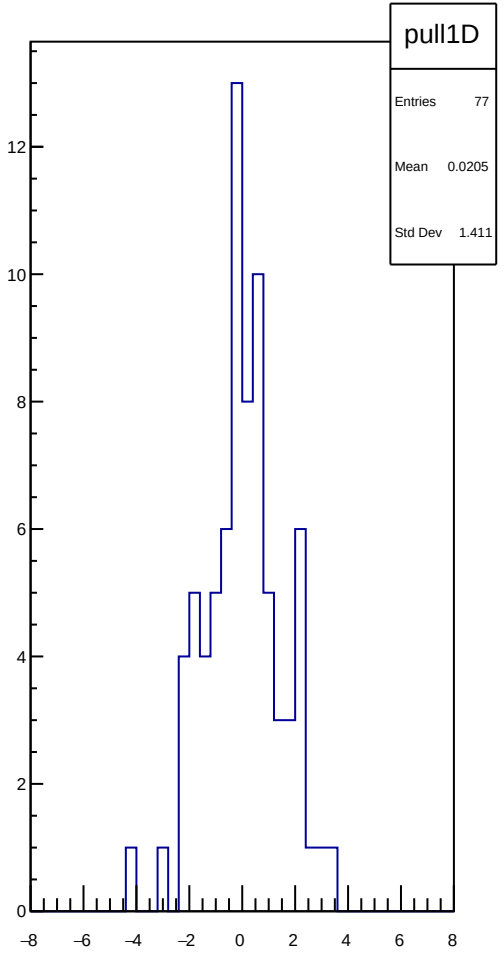

diff_bpm0i02X_rms vs run
χ² / ndf 122.6 / 76
p0 1247 ± 1.021
1280
1270
1260
1250
1240
1230
1220
1210

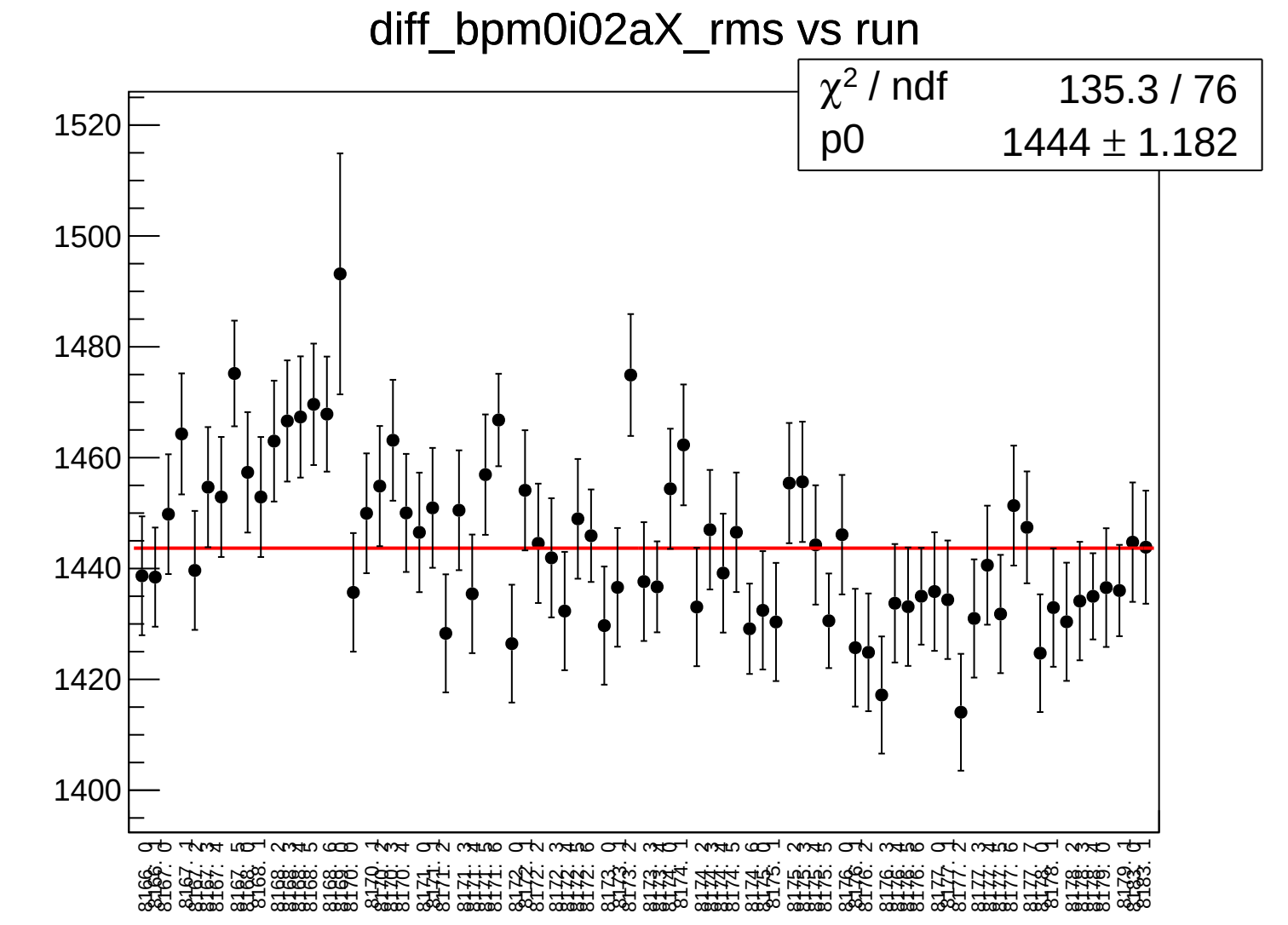

diff_bpm0i02Y_mean vs run
χ^2 / ndf 93.42 / 76
p0 6.048 ± 1.902
pull
Entries 77
Mean 280.2
Std Dev 261.9

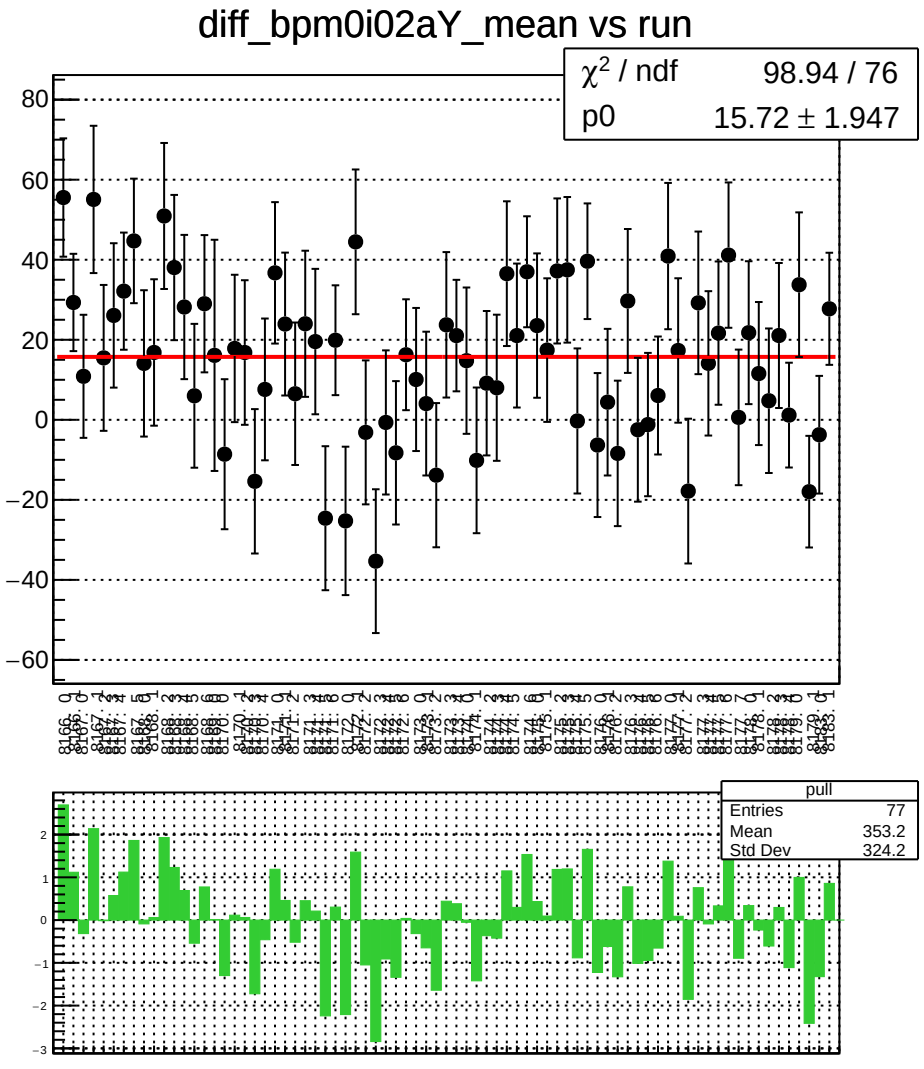

pull1D
Entries 77
Mean −0.01674
Std Dev 1.101

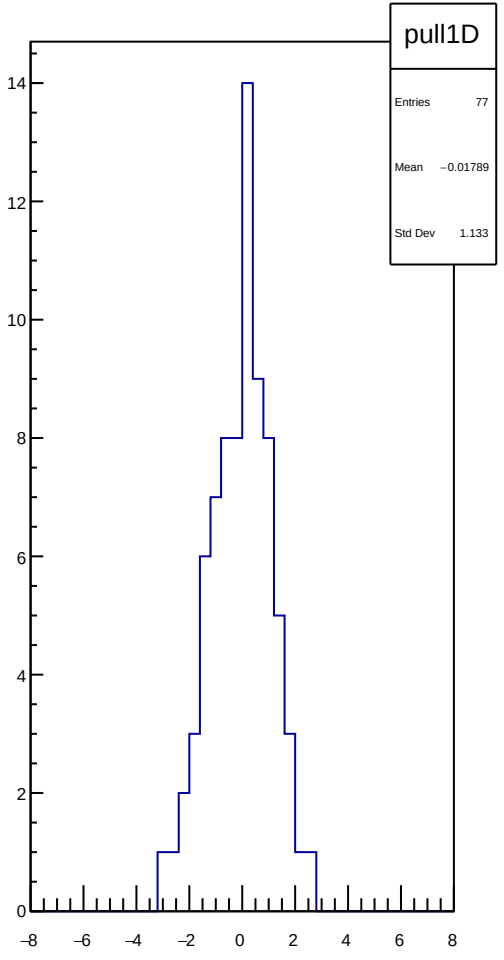

diff_bpm0i02Y_rms vs run
χ² / ndf 1727 / 76
p0 1641 ± 1.345
1700
1650
1600
1550
1500
1450

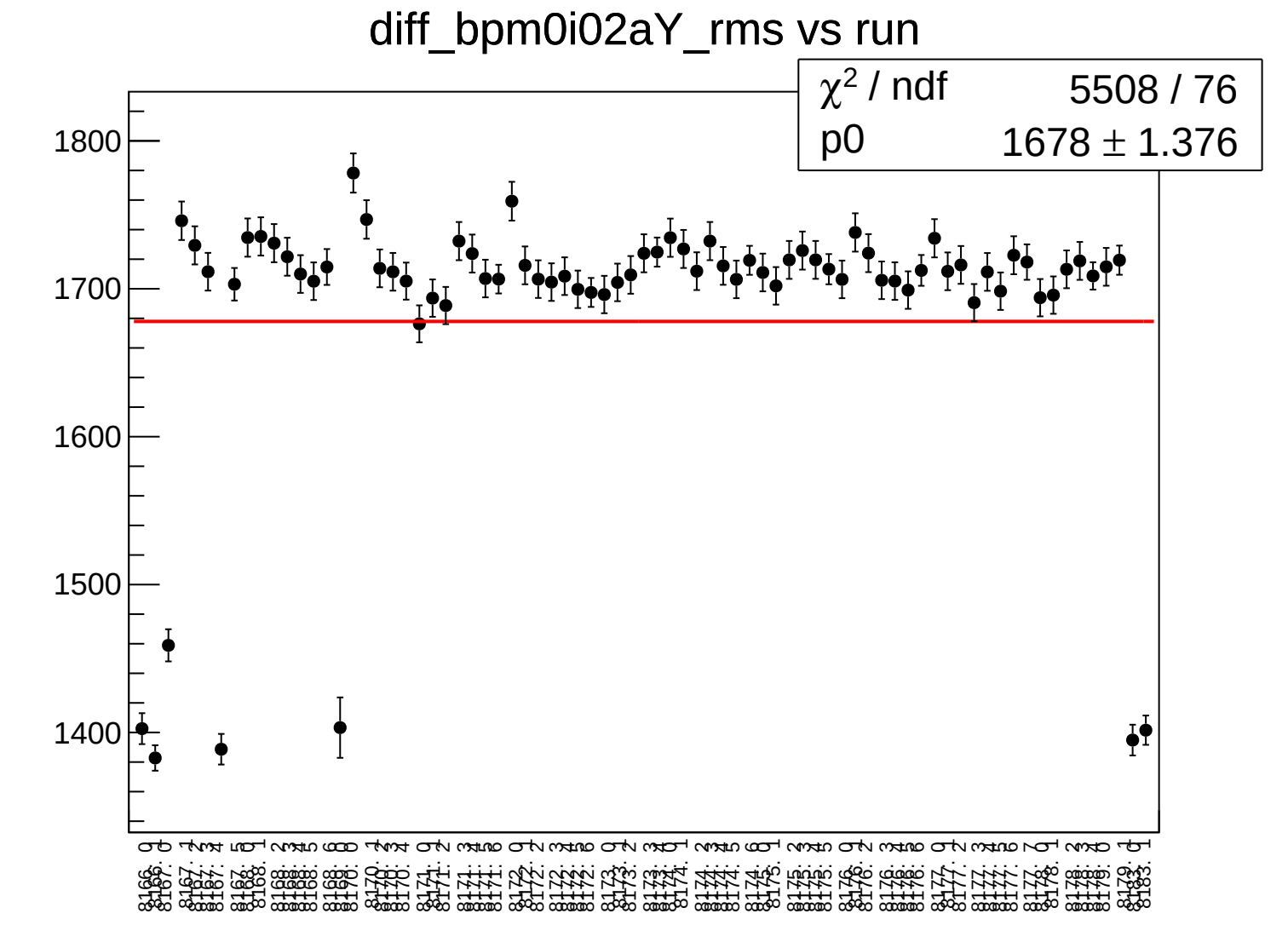

diff_bpm0i02aX_mean vs run
χ² / ndf 153.2 / 76
p0 −54.09 ± 1.672
pull
Entries 77
Mean −655.7
Std Dev 700.7

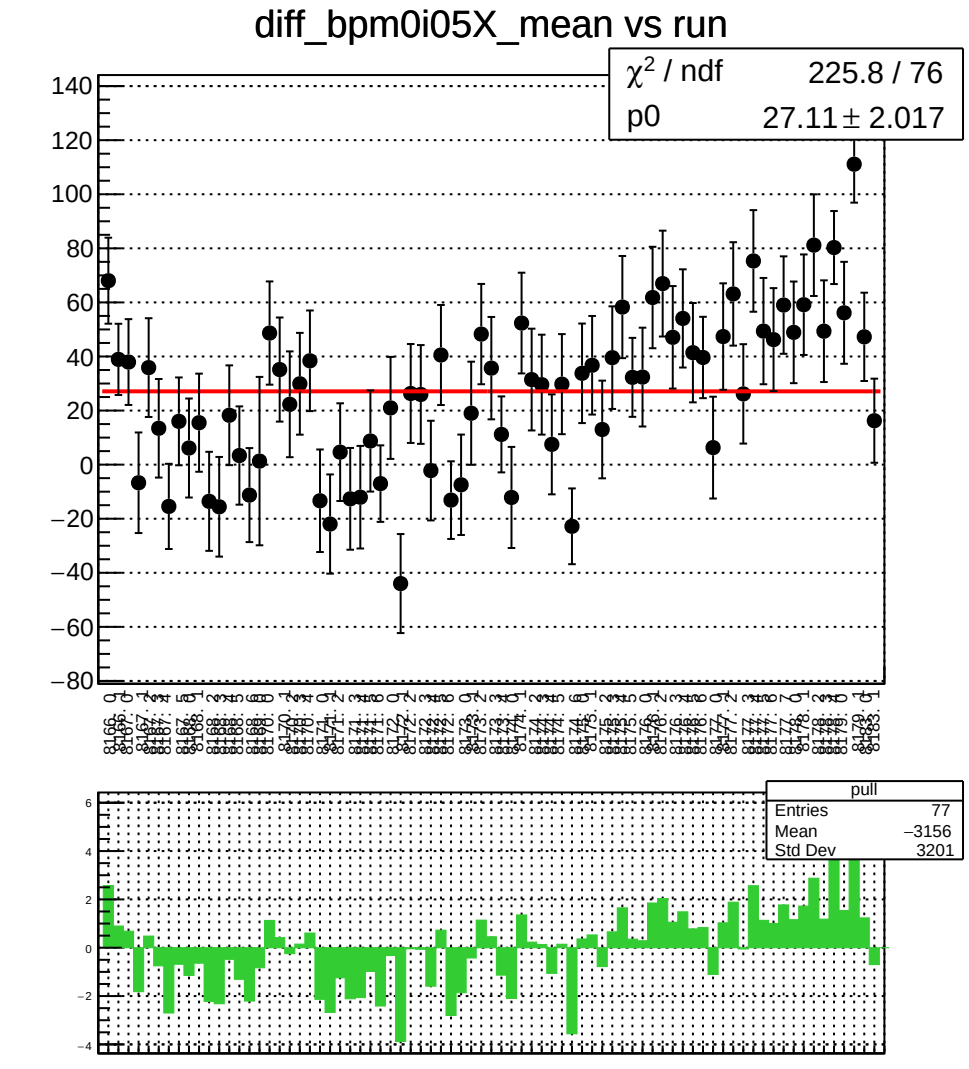

pull1D
Entries 77
Mean 0.0205
Std Dev 1.411

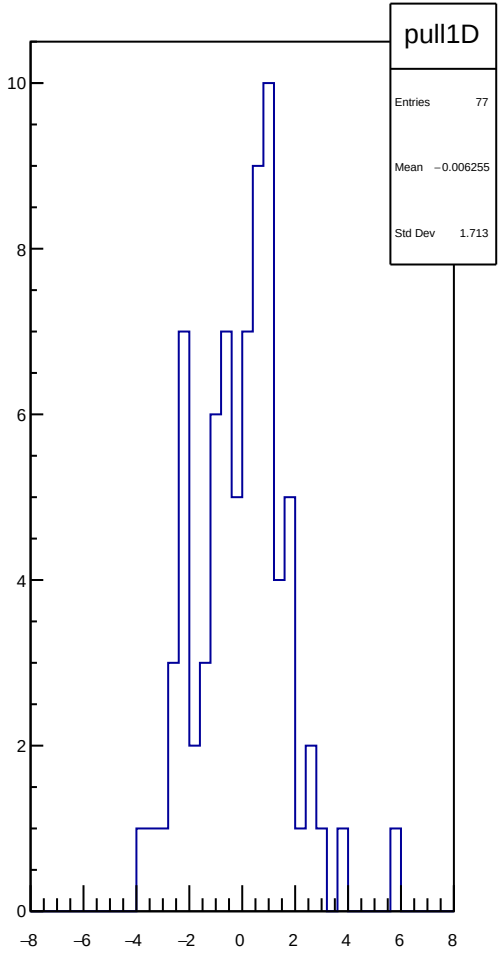

diff_bpm0i02aX_rms vs run
χ² / ndf 135.3 / 76
p0 1444 ± 1.182
1520
1500
1480
1460
1440
1420
1400

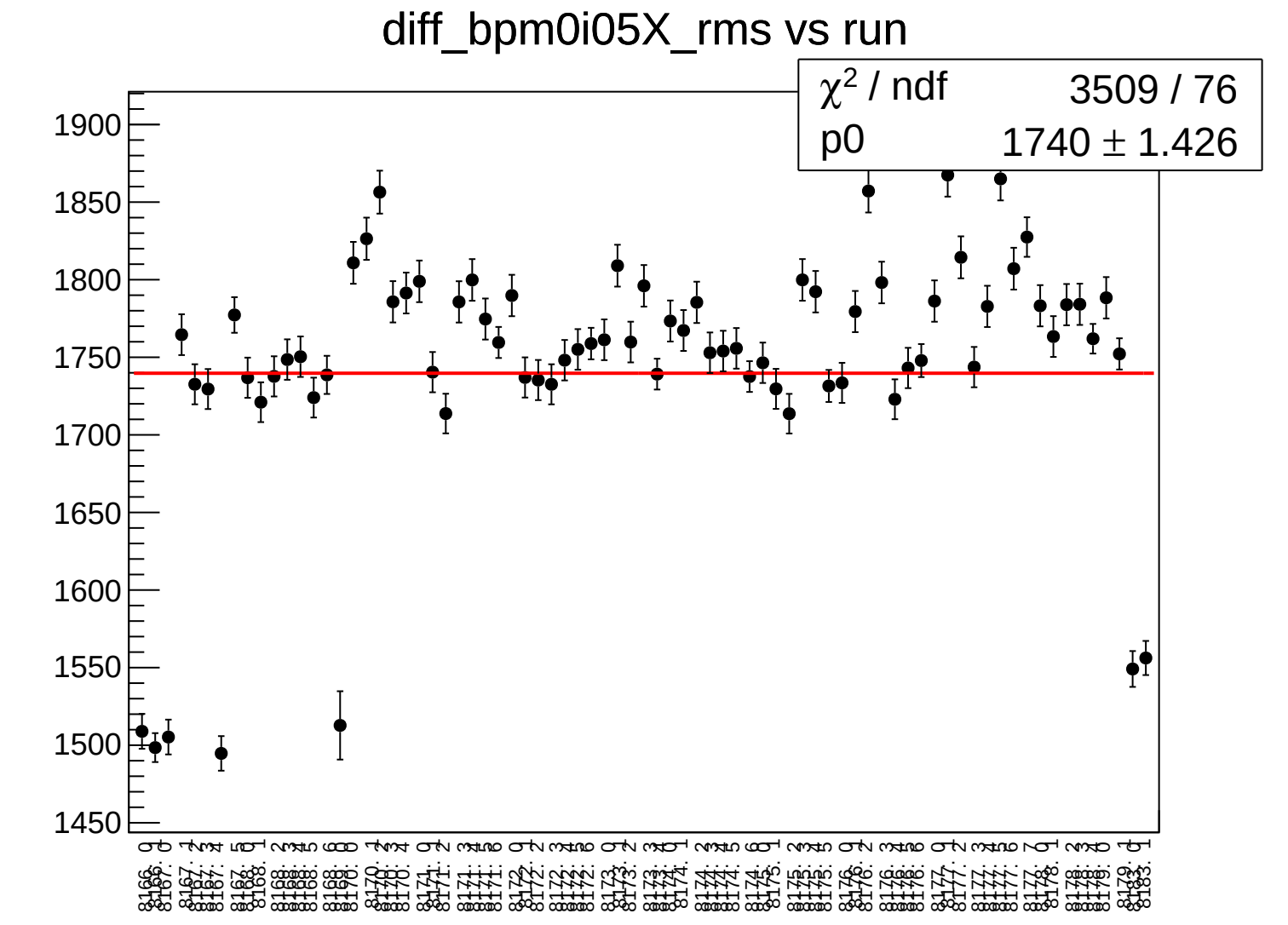

diff_bpm0i02aY_mean vs run
χ² / ndf 98.94 / 76
p0 15.72 ± 1.947
pull
Entries 77
Mean 353.2
Std Dev 324.2

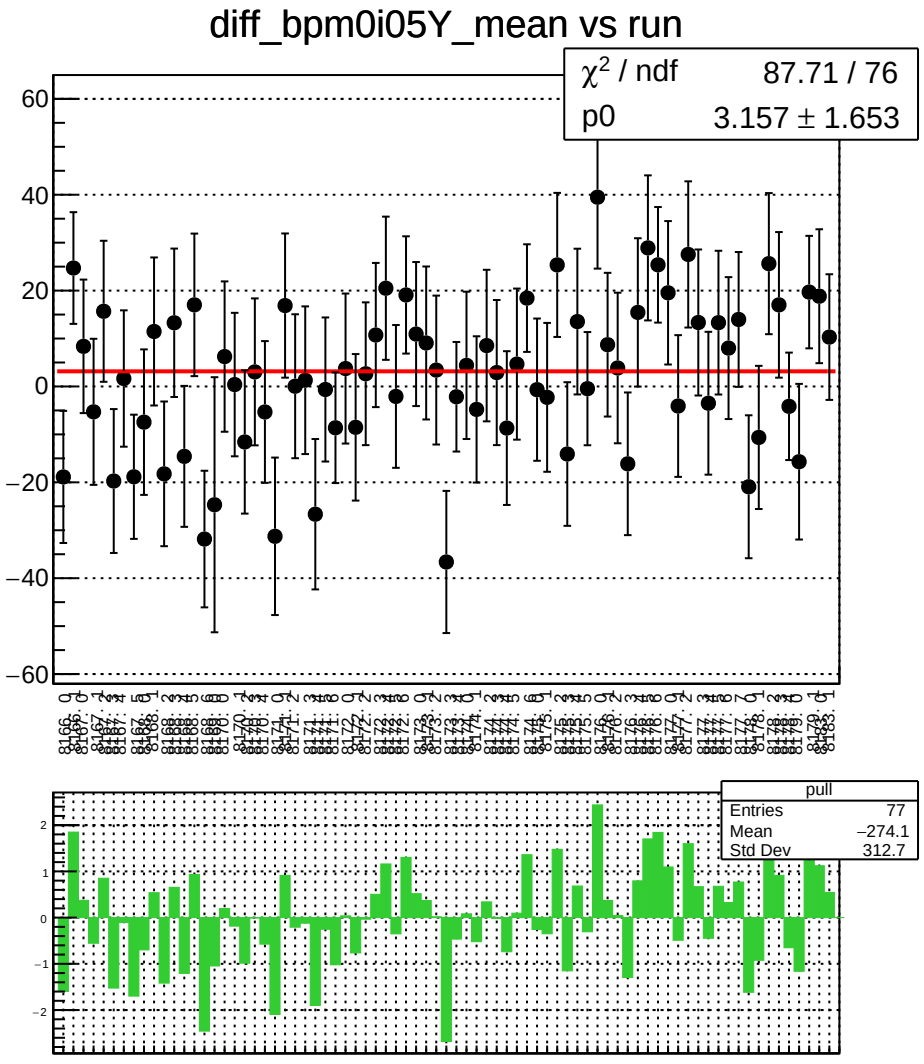

pull1D
Entries 77
Mean −0.01789
Std Dev 1.133

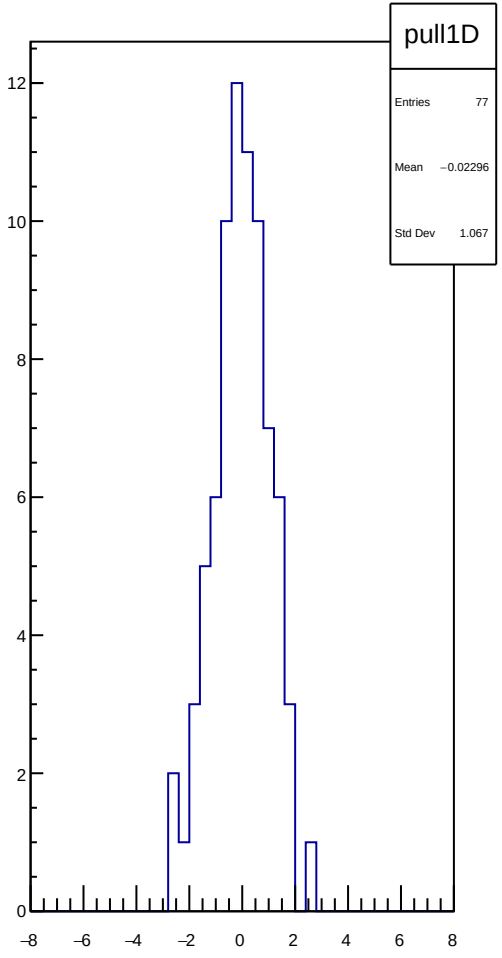

diff_bpm0i02aY_rms vs run
χ² / ndf 5508 / 76
p0 1678 ± 1.376
1800
1700
1600
1500
1400

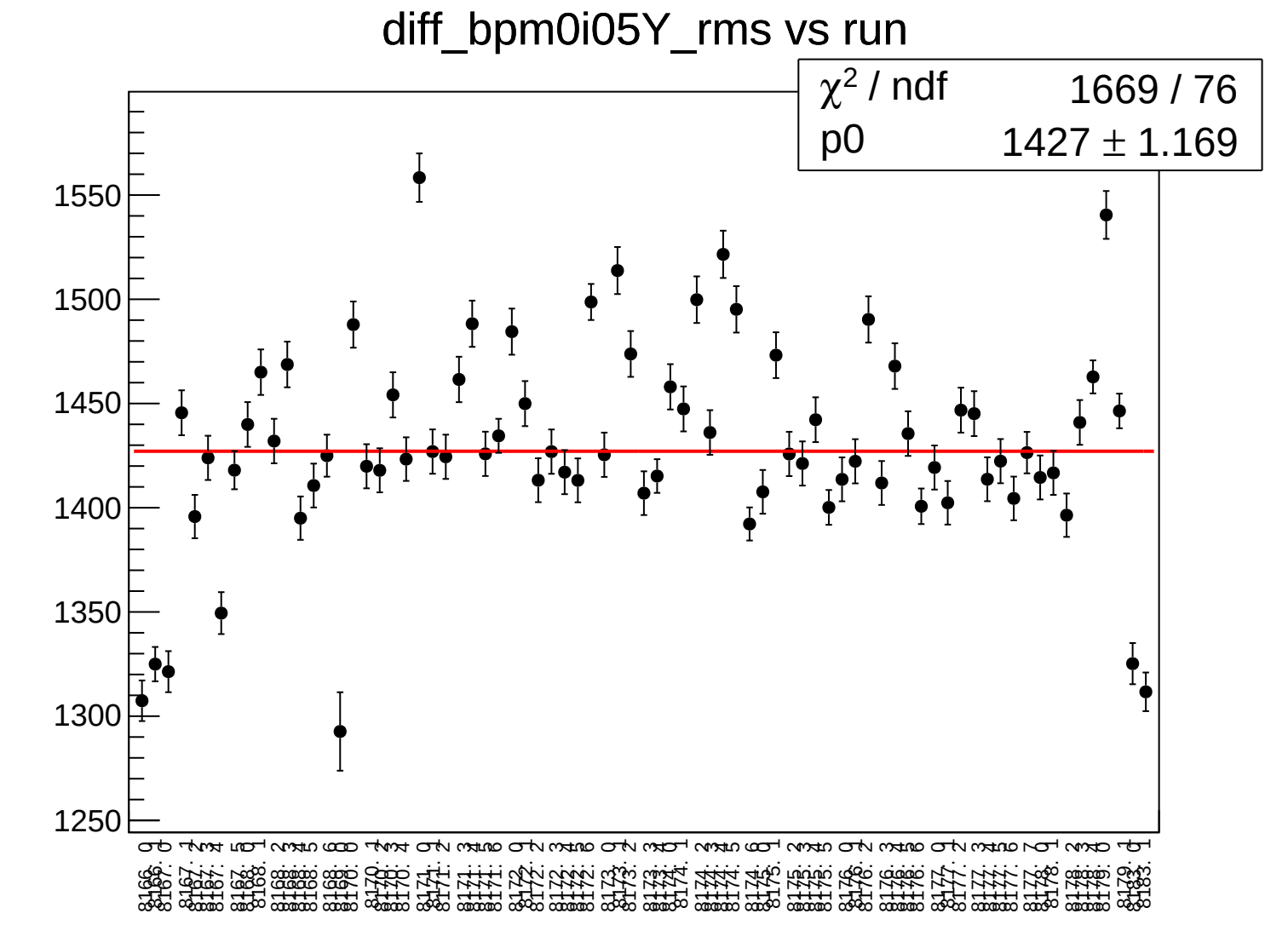

diff_bpm0i05X_mean vs run
χ² / ndf 225.8 / 76
p0 27.11 ± 2.017
pull
Entries 77
Mean −3156
Std Dev 3201

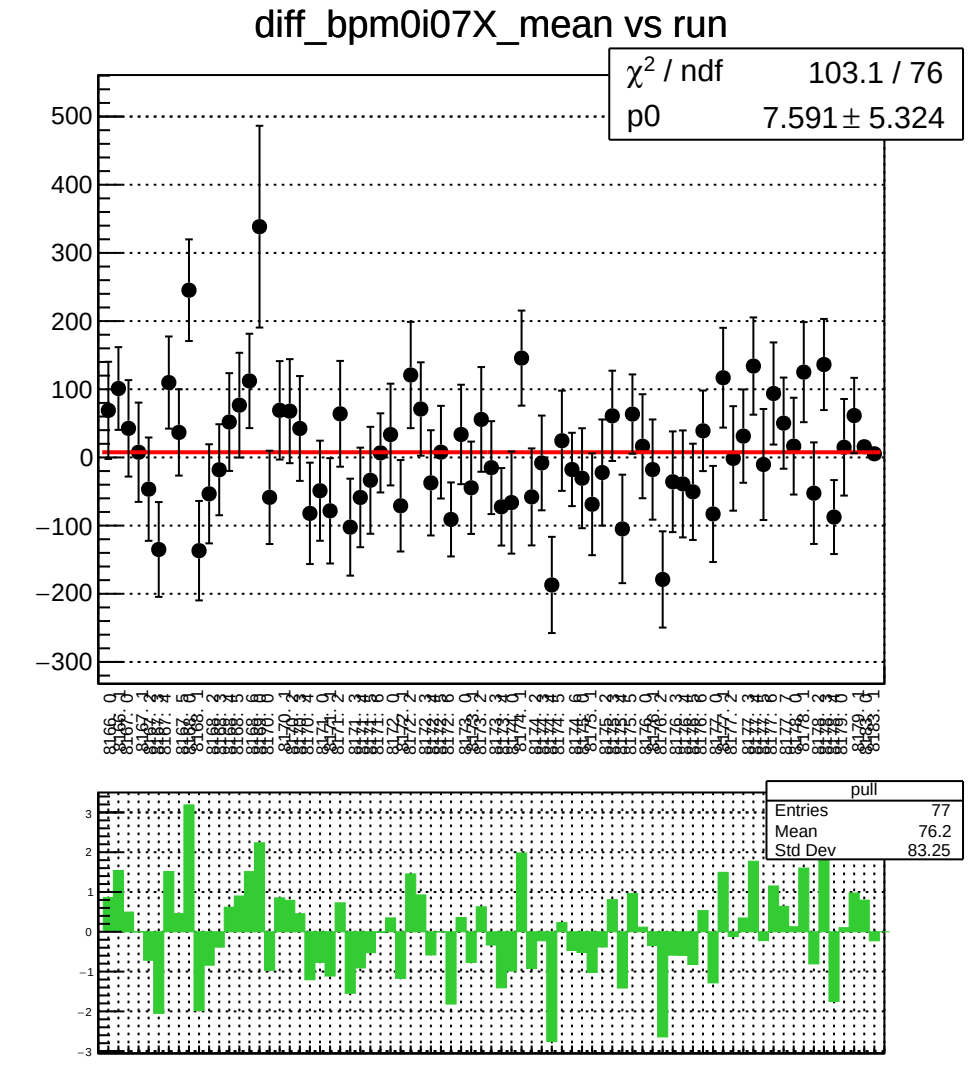

pull1D
Entries 77
Mean −0.006255
Std Dev 1.713

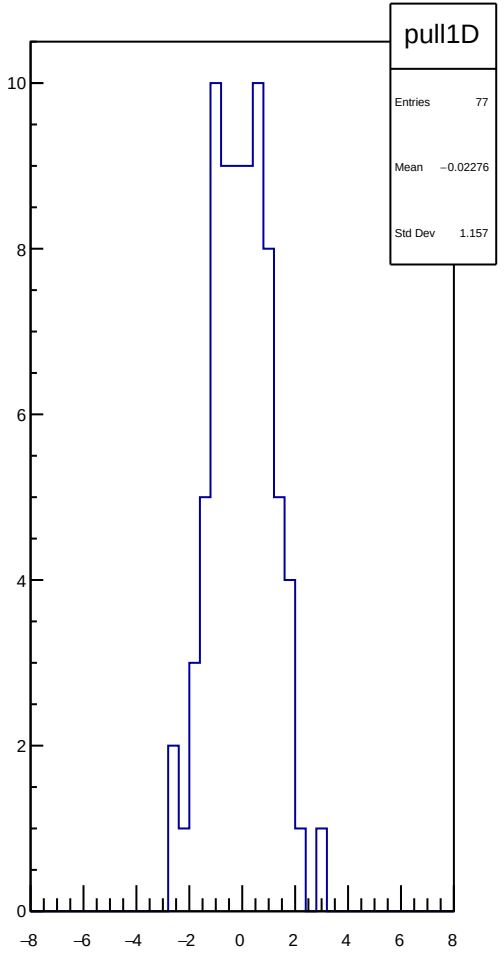

diff_bpm0i05X_rms vs run
χ² / ndf 3509 / 76
p0 1740 ± 1.426
1900
1850
1800
1750
1700
1650
1600
1550
1500
1450

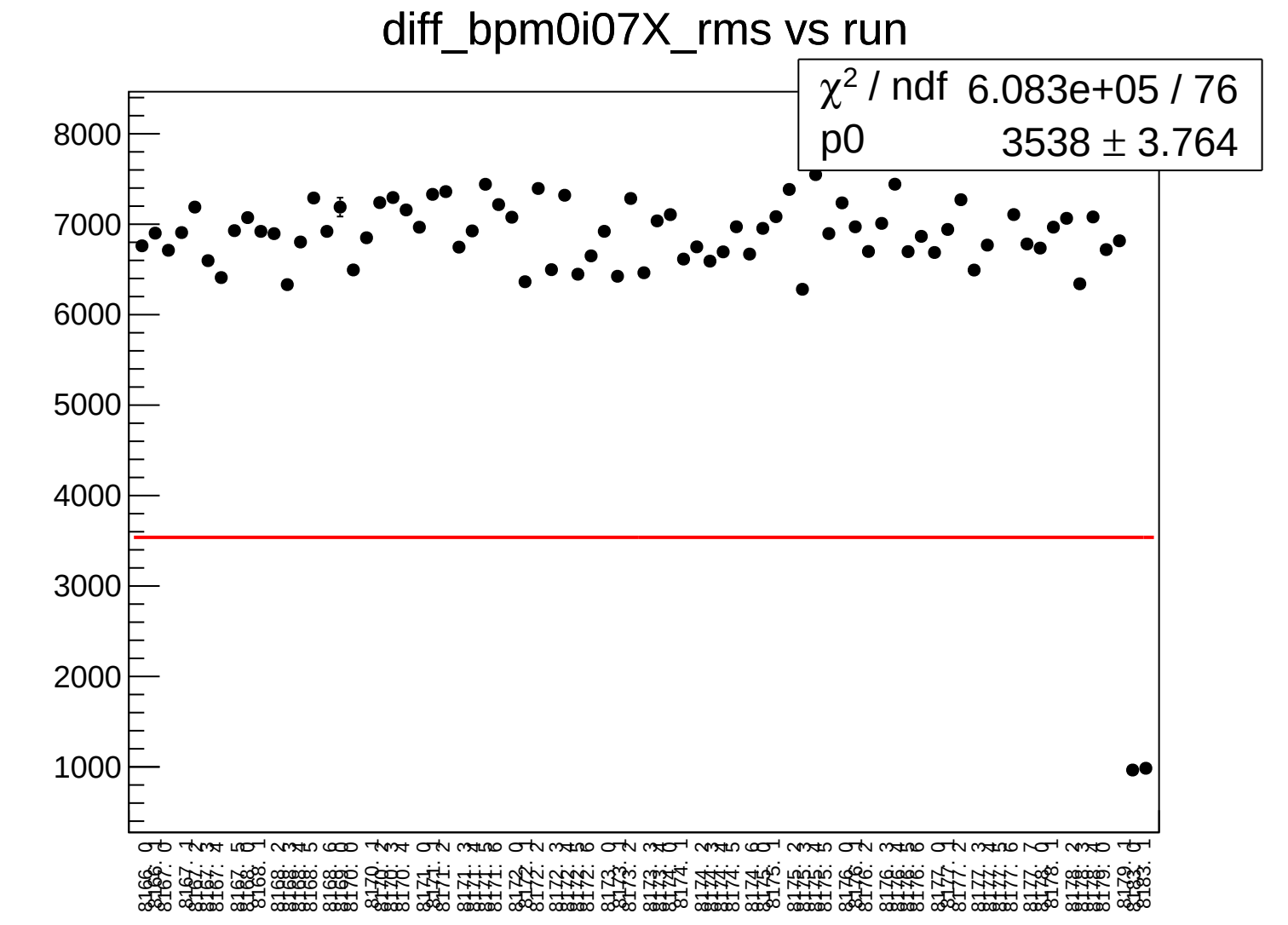

diff_bpm0i05Y_mean vs run
χ² / ndf 87.71 / 76
p0 3.157 ± 1.653
pull
Entries 77
Mean −274.1
Std Dev 312.7

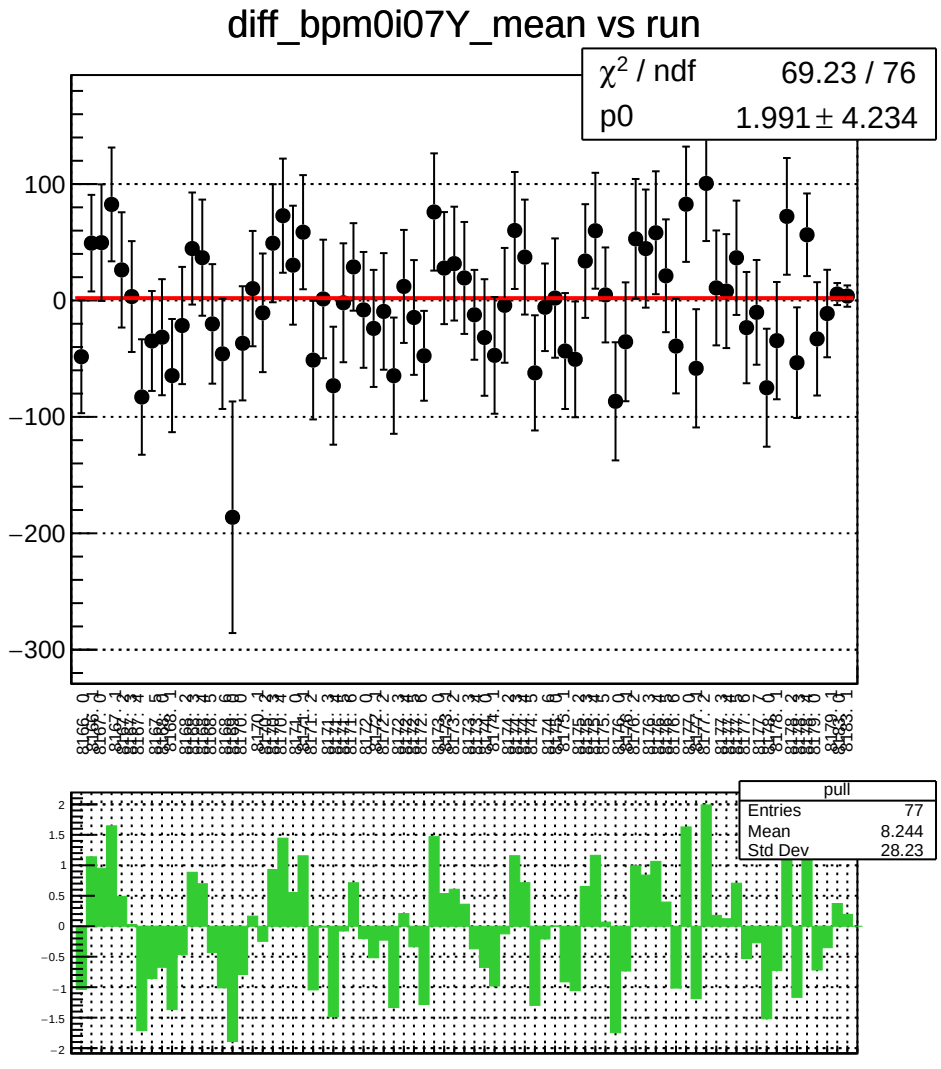

pull1D
Entries 77
Mean −0.02296
Std Dev 1.067

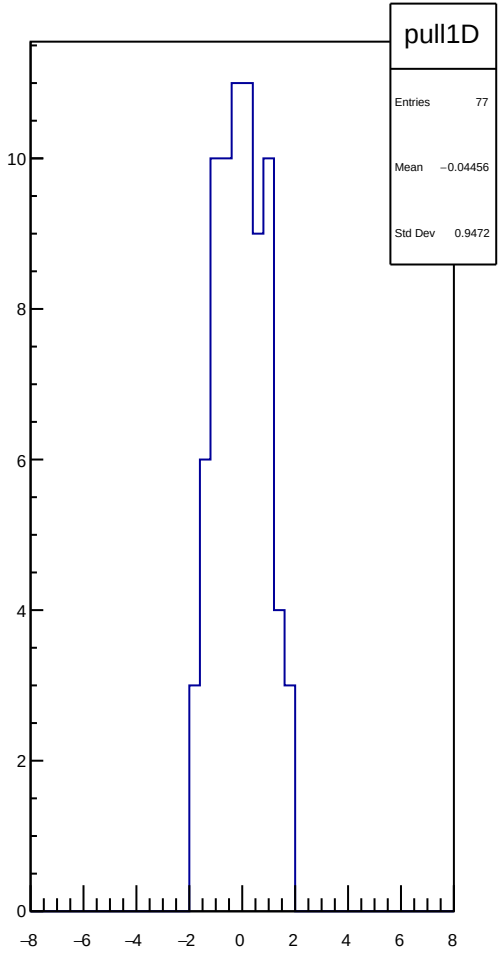

diff_bpm0i05Y_rms vs run
χ² / ndf 1669 / 76
p0 1427 ± 1.169
1550
1500
1450
1400
1350
1300
1250

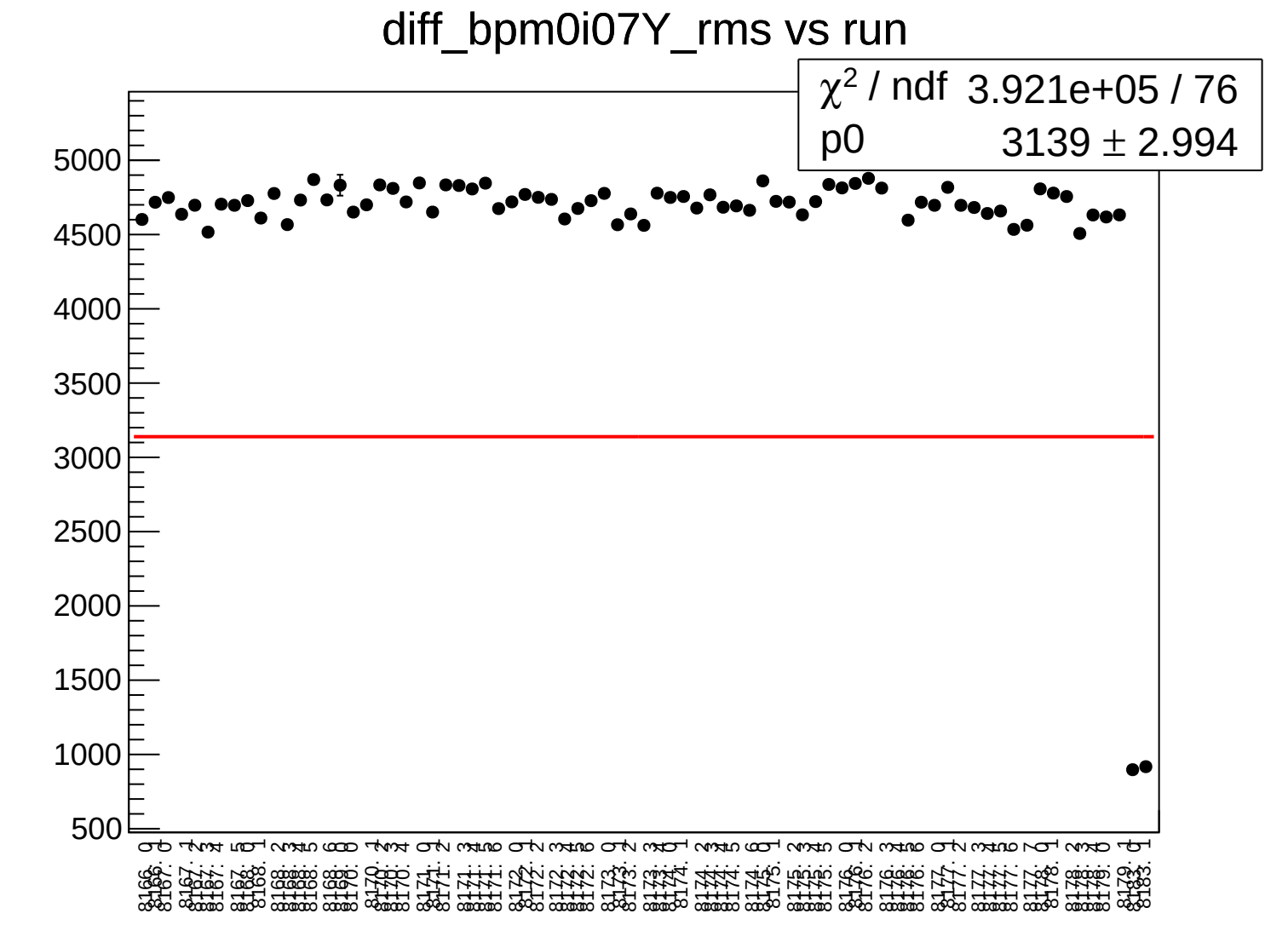

diff_bpm0i07X_mean vs run
χ² / ndf 103.1 / 76
p0 7.591 ± 5.324
pull
Entries 77
Mean 76.2
Std Dev 83.25

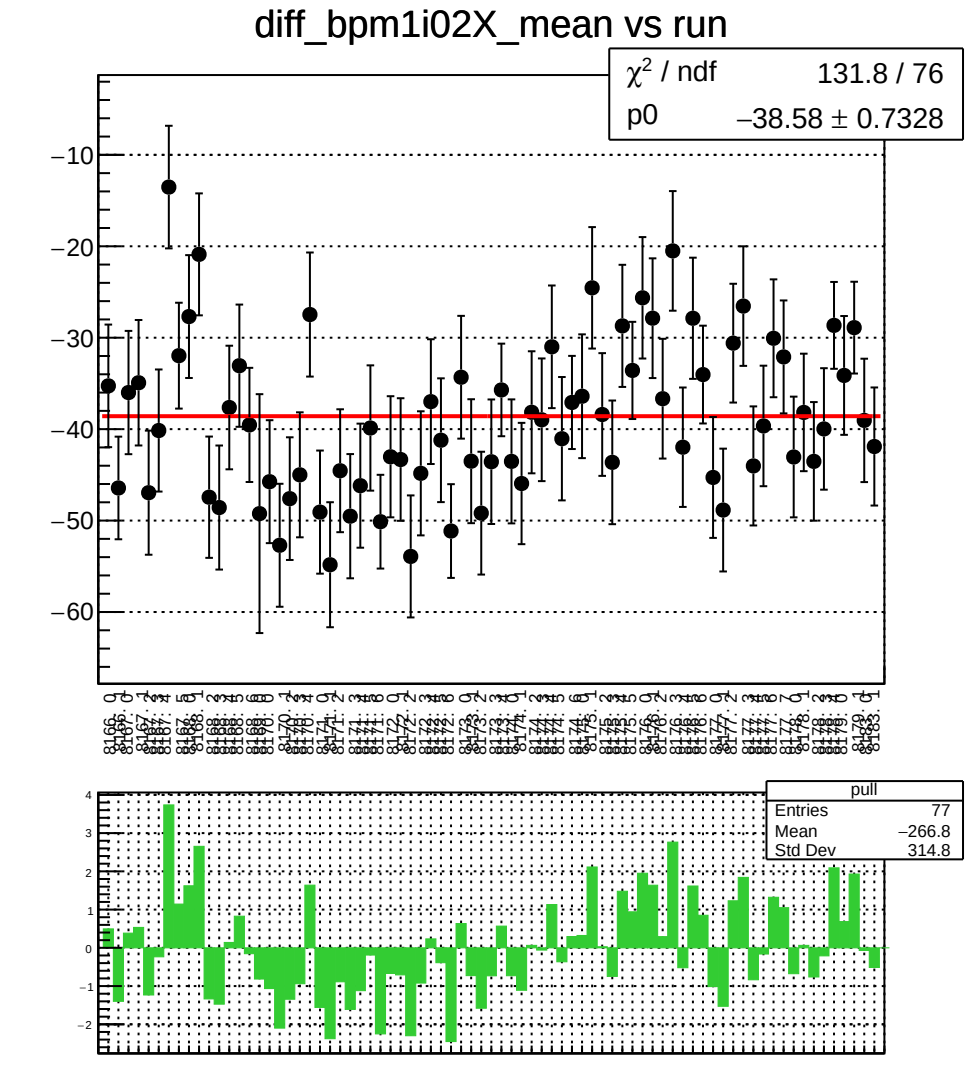

pull1D
Entries 77
Mean −0.02276
Std Dev 1.157

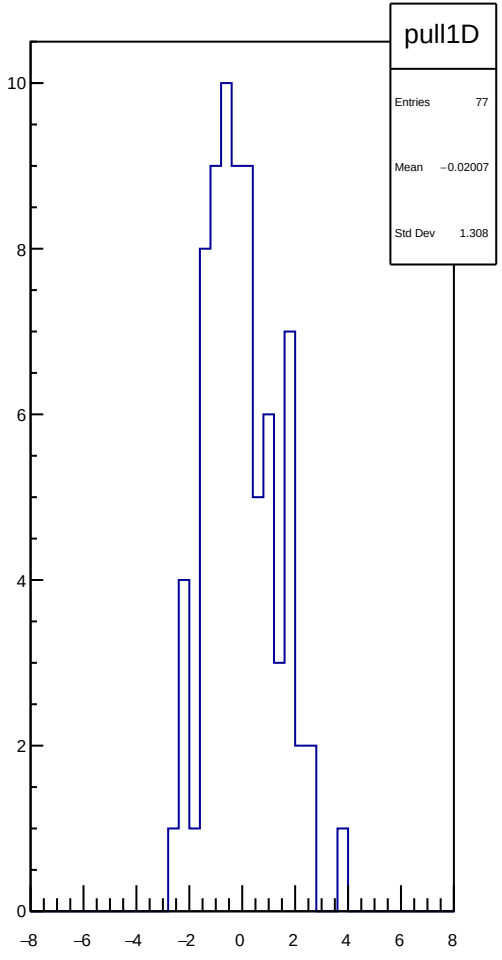

diff_bpm0i07X_rms vs run
χ^2 / ndf 6.083e+05 / 76
p0 3538 ± 3.764
8000
7000
6000
5000
4000
3000
2000
1000

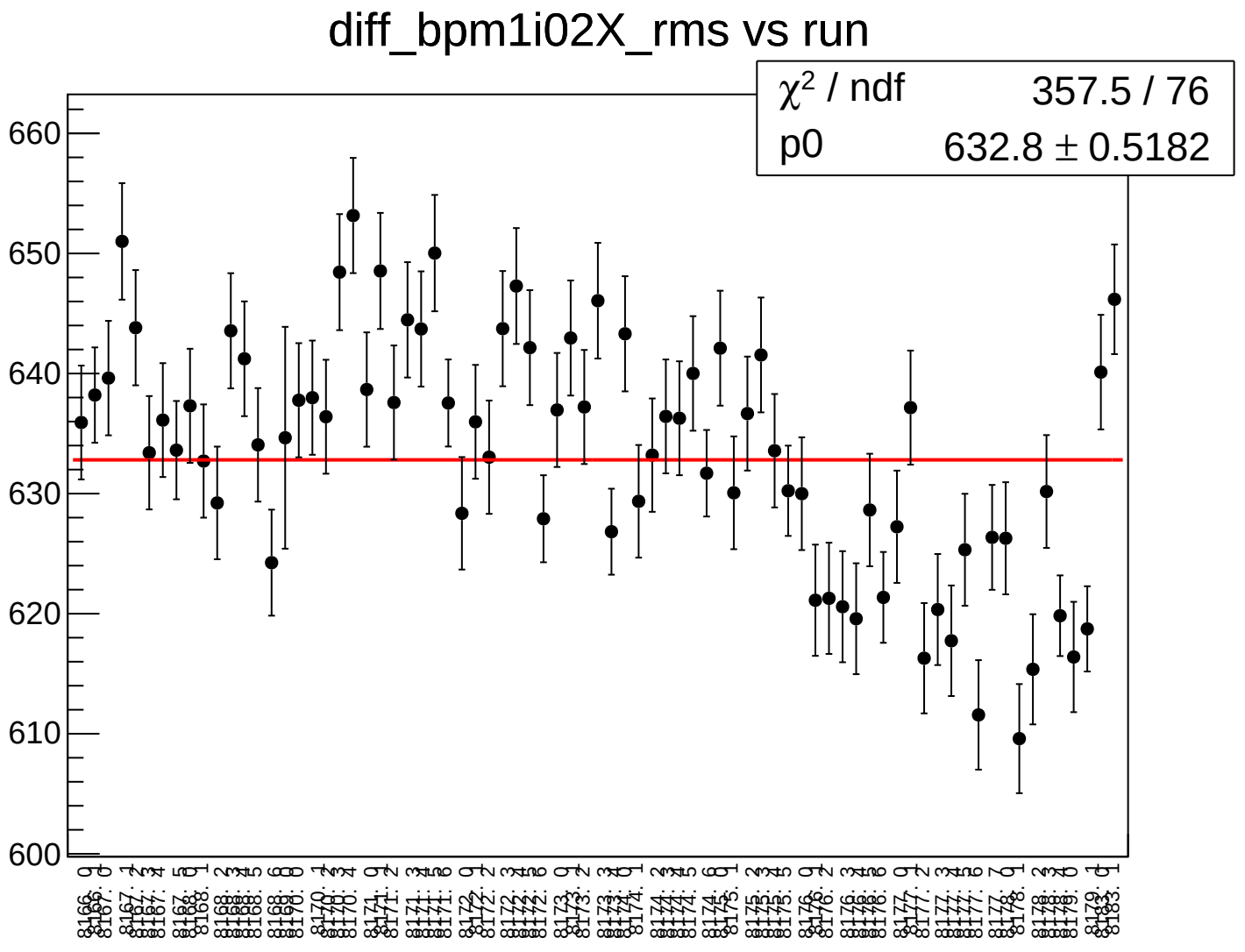

diff_bpm0i07Y_mean vs run
χ² / ndf 69.23 / 76
p0 1.991 ± 4.234
pull
Entries 77
Mean 8.244
Std Dev 28.23

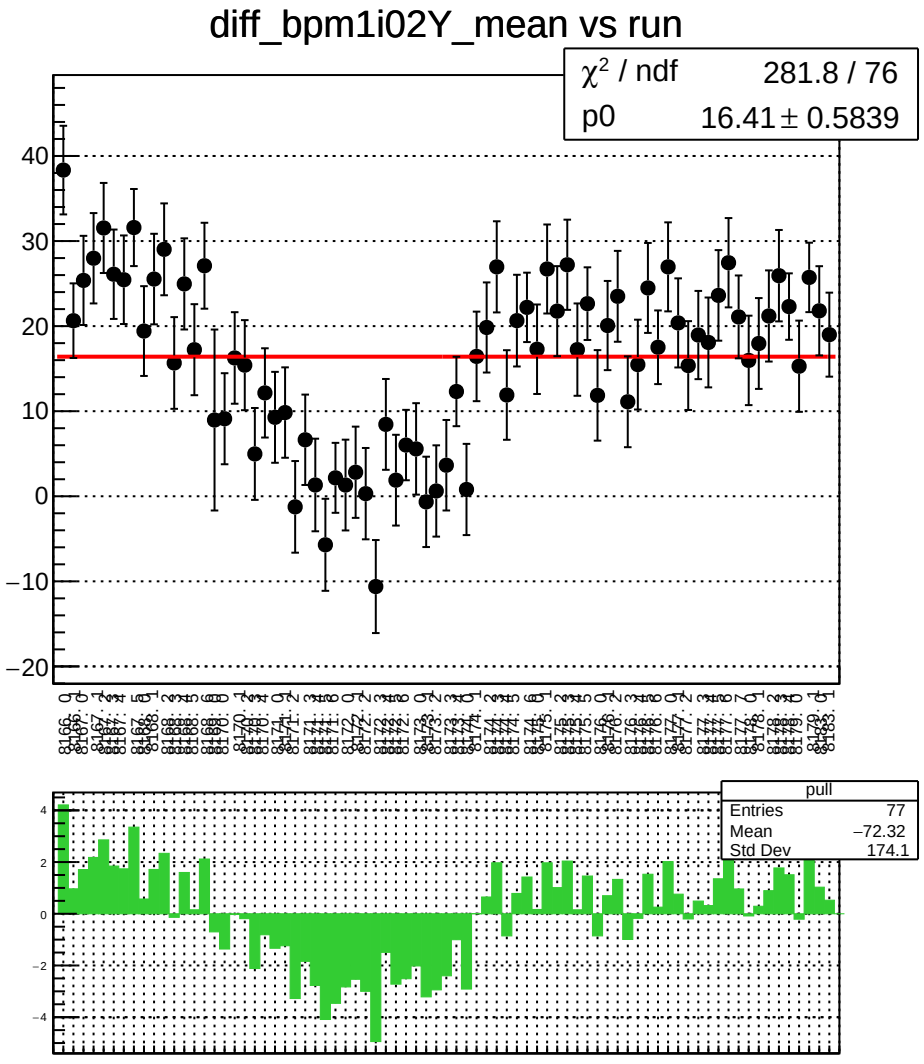

pull1D
Entries 77
Mean −0.04456
Std Dev 0.9472

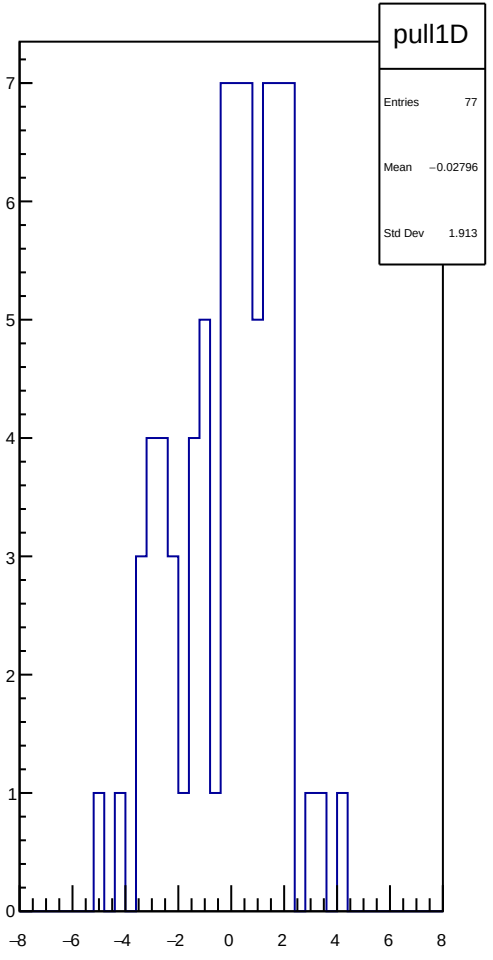

diff_bpm0i07Y_rms vs run
χ² / ndf 3.921e+05 / 76
p0 3139 ± 2.994
5000
4500
4000
3500
3000
2500
2000
1500
1000
500

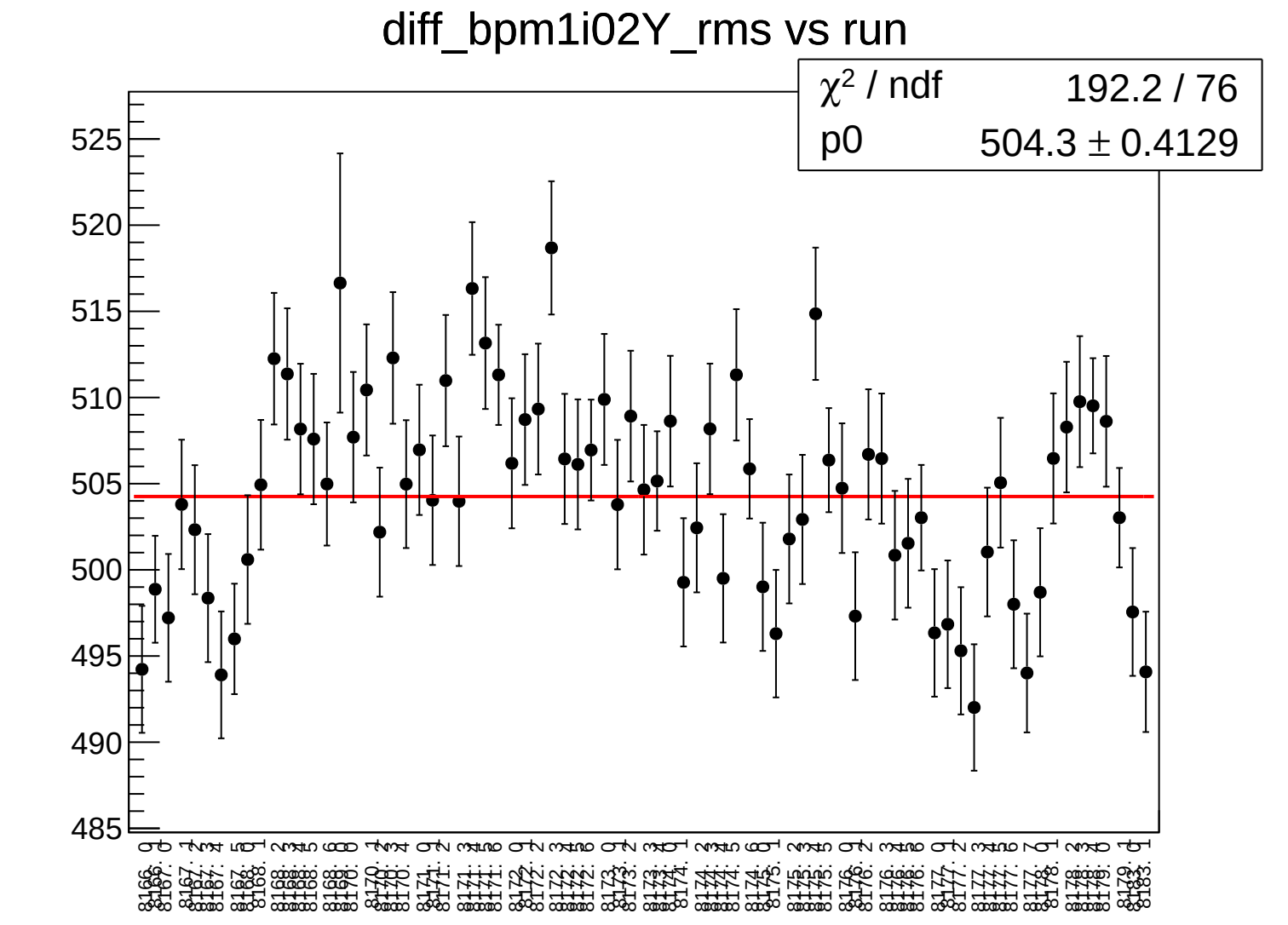

diff_bpm1i02X_mean vs run
χ^2 / ndf 131.8 / 76
p0 −38.58 ± 0.7328
pull
Entries 77
Mean −266.8
Std Dev 314.8

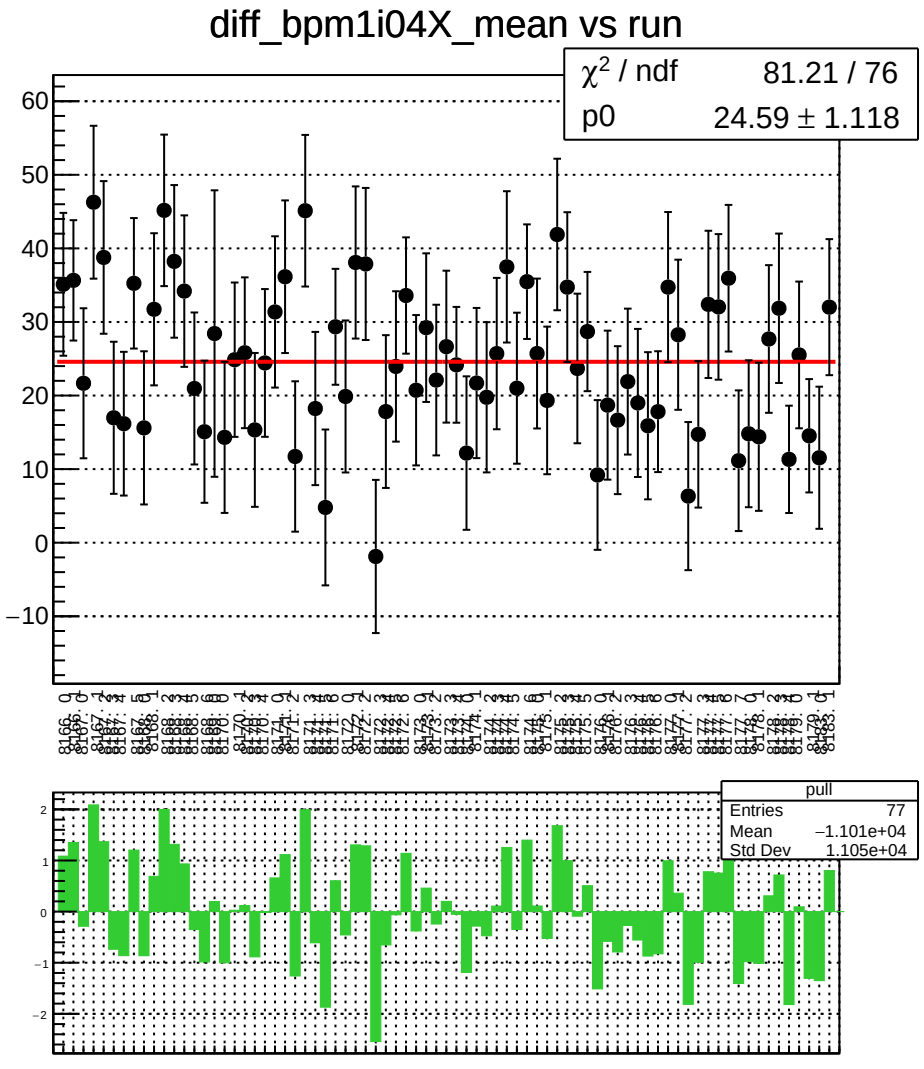

pull1D
Entries 77
Mean −0.02007
Std Dev 1.308

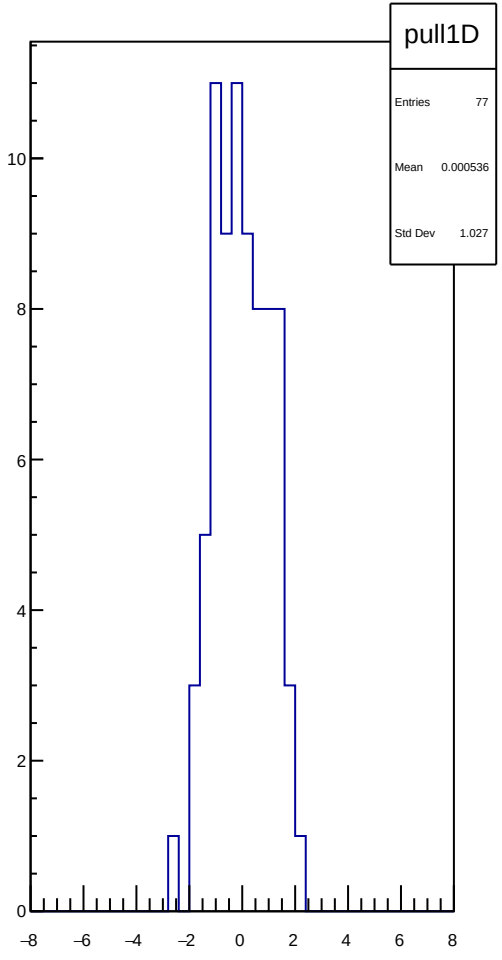

diff_bpm1i02X_rms vs run
χ² / ndf 357.5 / 76
p0 632.8 ± 0.5182
660
650
640
630
620
610
600

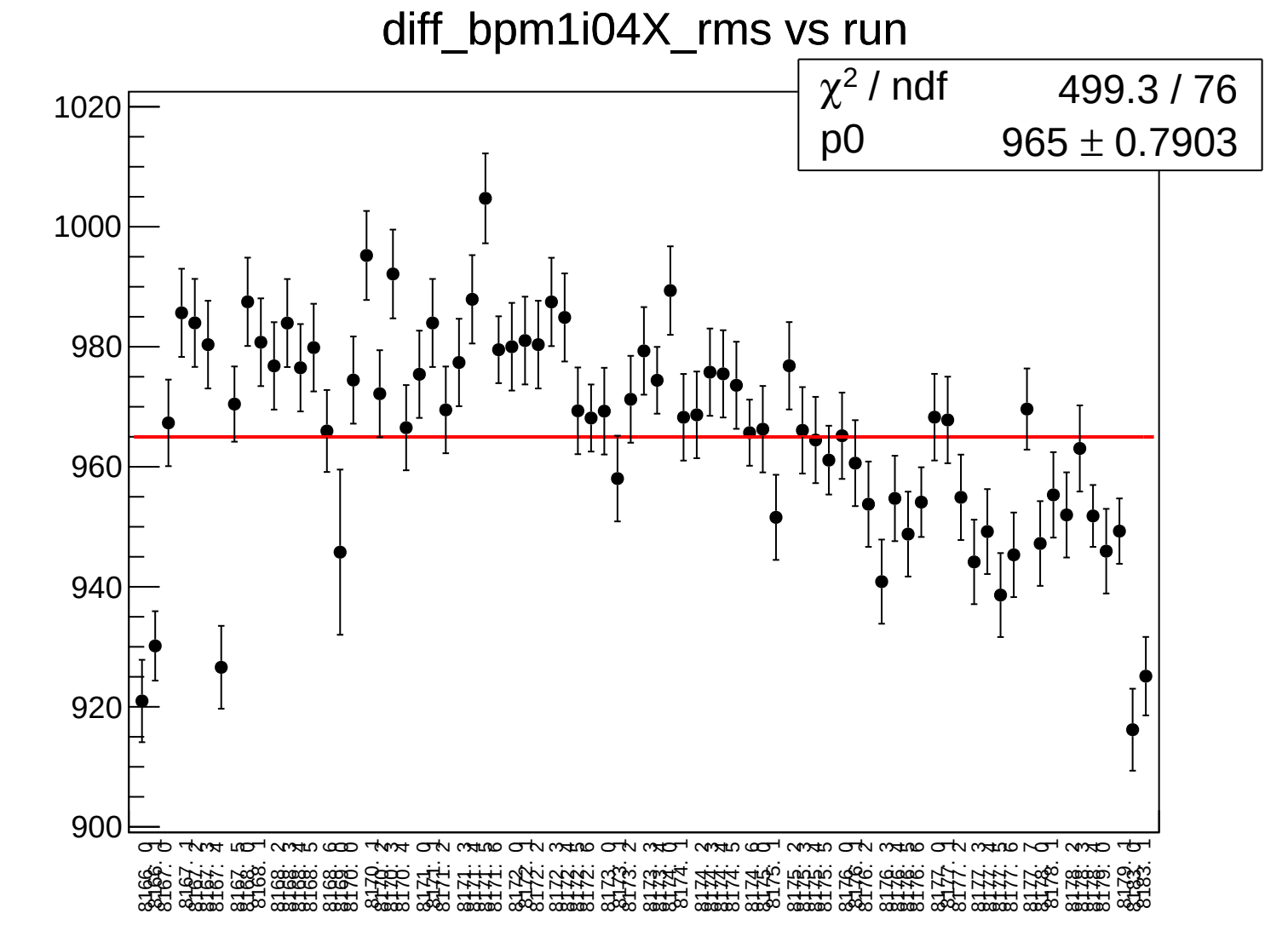

diff_bpm1i02Y_mean vs run
χ^2 / ndf 281.8 / 76
p0 16.41 ± 0.5839
pull
Entries 77
Mean −72.32
Std Dev 174.1

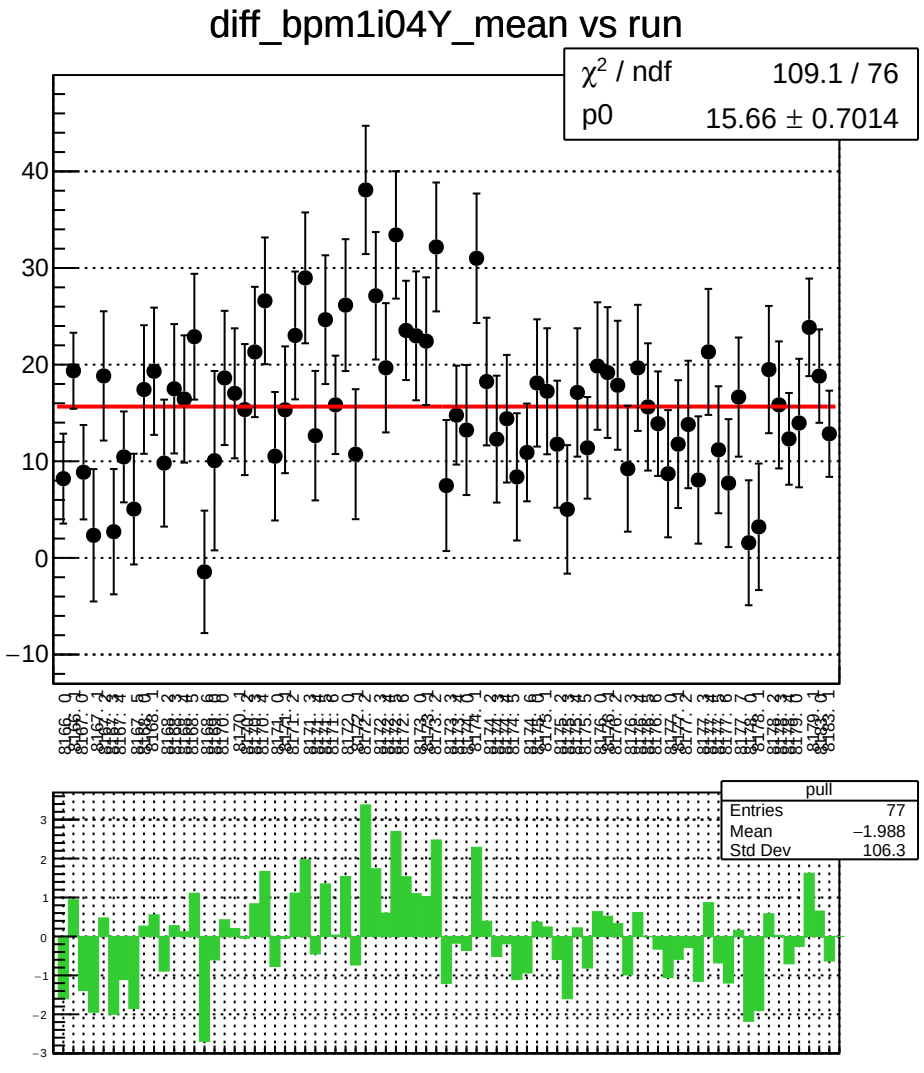

pull1D
Entries 77
Mean −0.02796
Std Dev 1.913

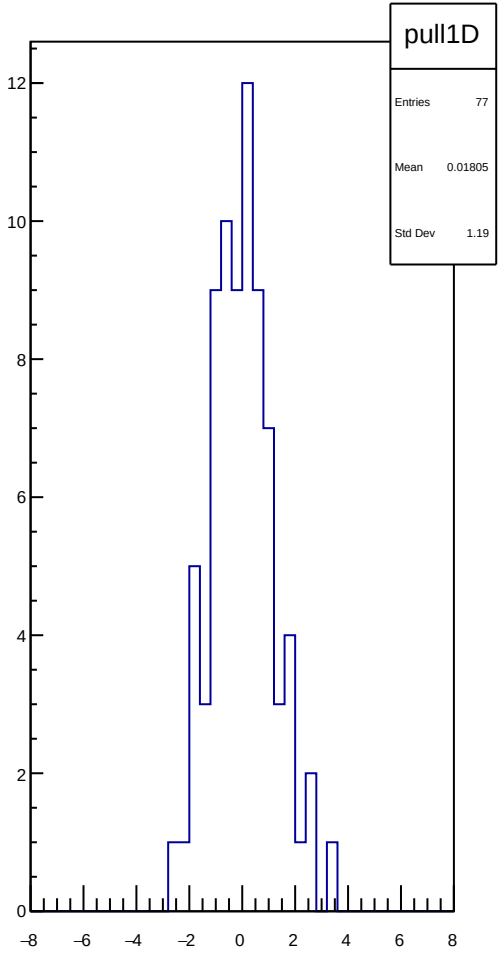

diff_bpm1i02Y_rms vs run
χ² / ndf 192.2 / 76
p0 504.3 ± 0.4129
525
520
515
510
505
500
495
490
485

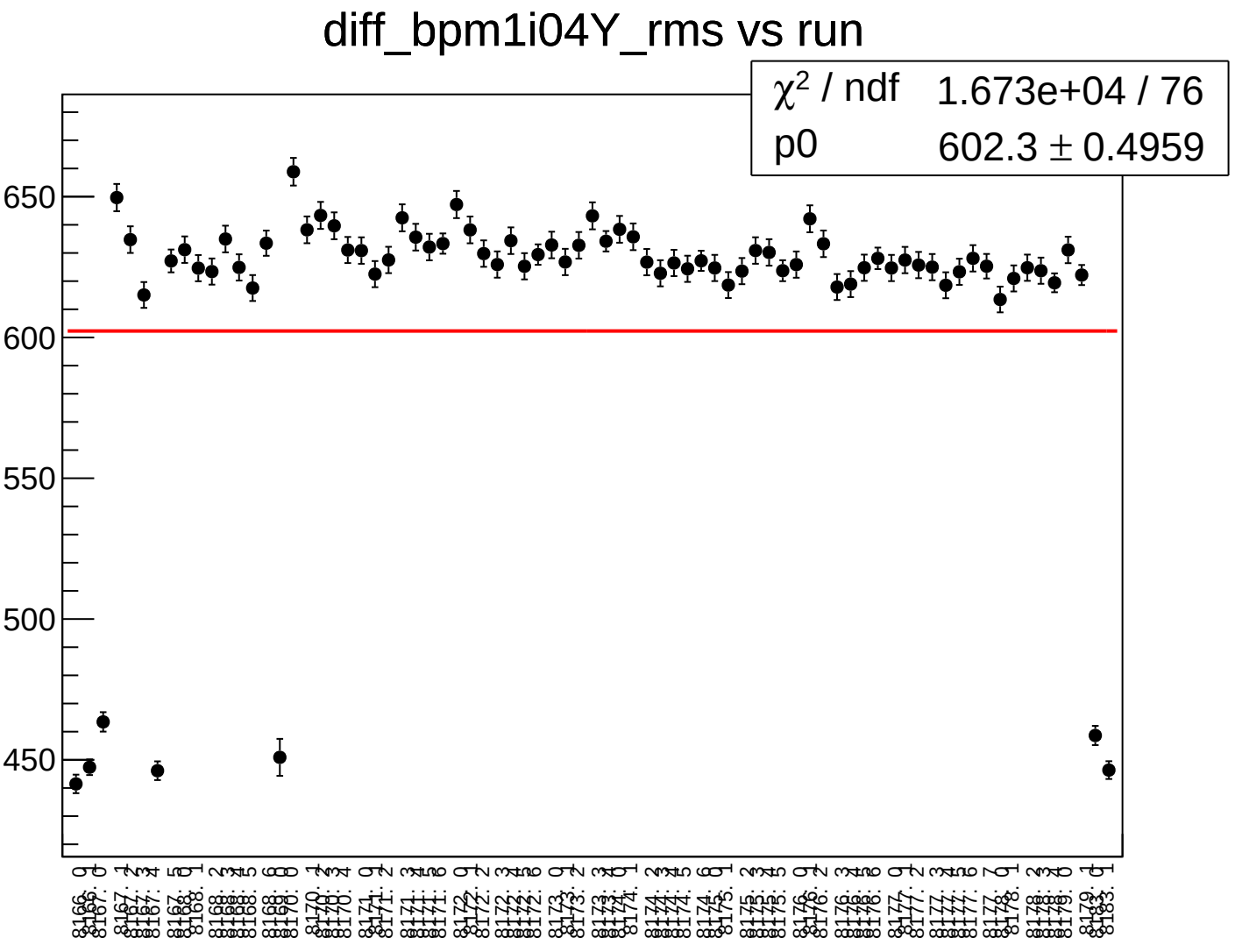

diff_bpm1i04X_mean vs run
χ² / ndf 81.21 / 76
p0 24.59 ± 1.118
pull
Entries 77
Mean −1.101e+04
Std Dev 1.105e+04

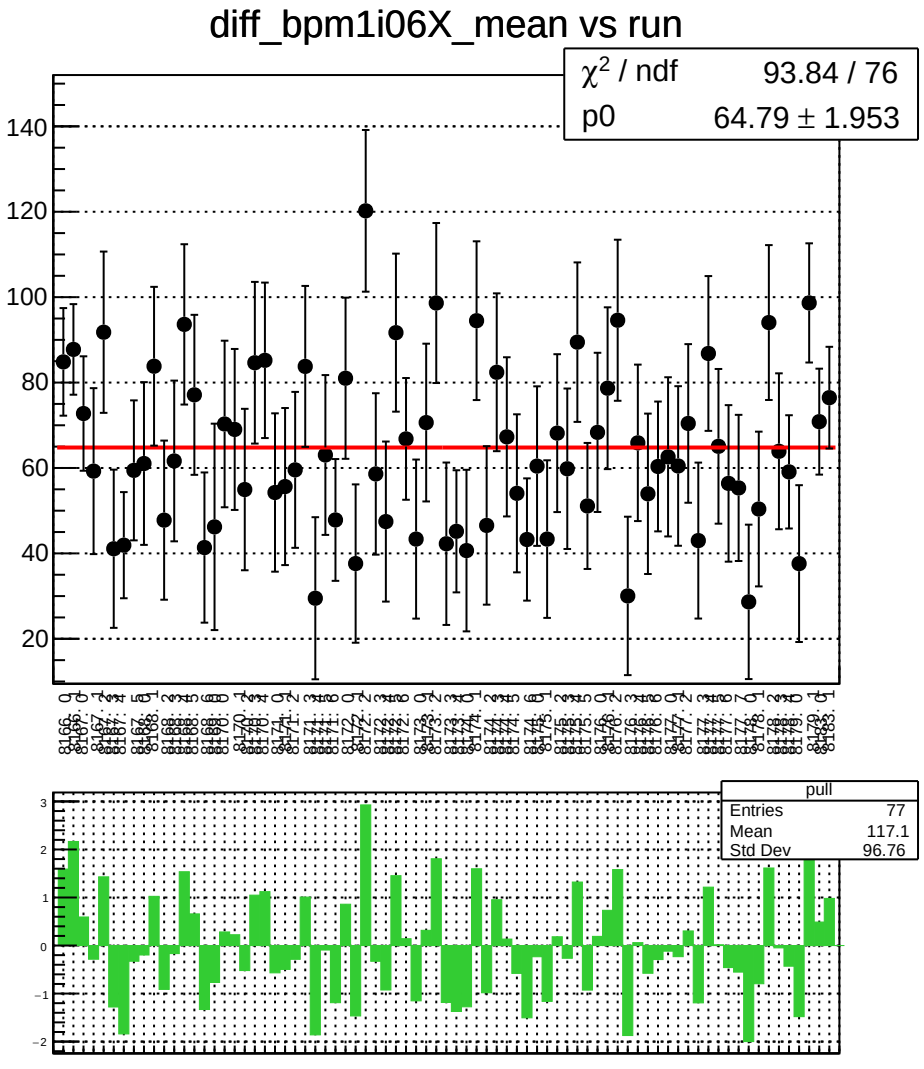

pull1D
Entries 77
Mean 0.000536
Std Dev 1.027

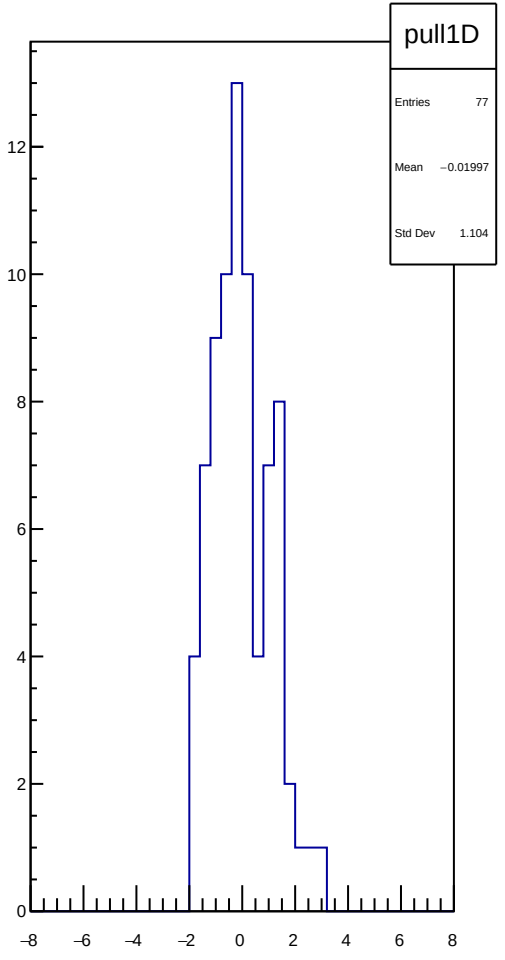

diff_bpm1i04X_rms vs run
χ^2 / ndf 499.3 / 76
p0 965 ± 0.7903
1020
1000
980
960
940
920
900

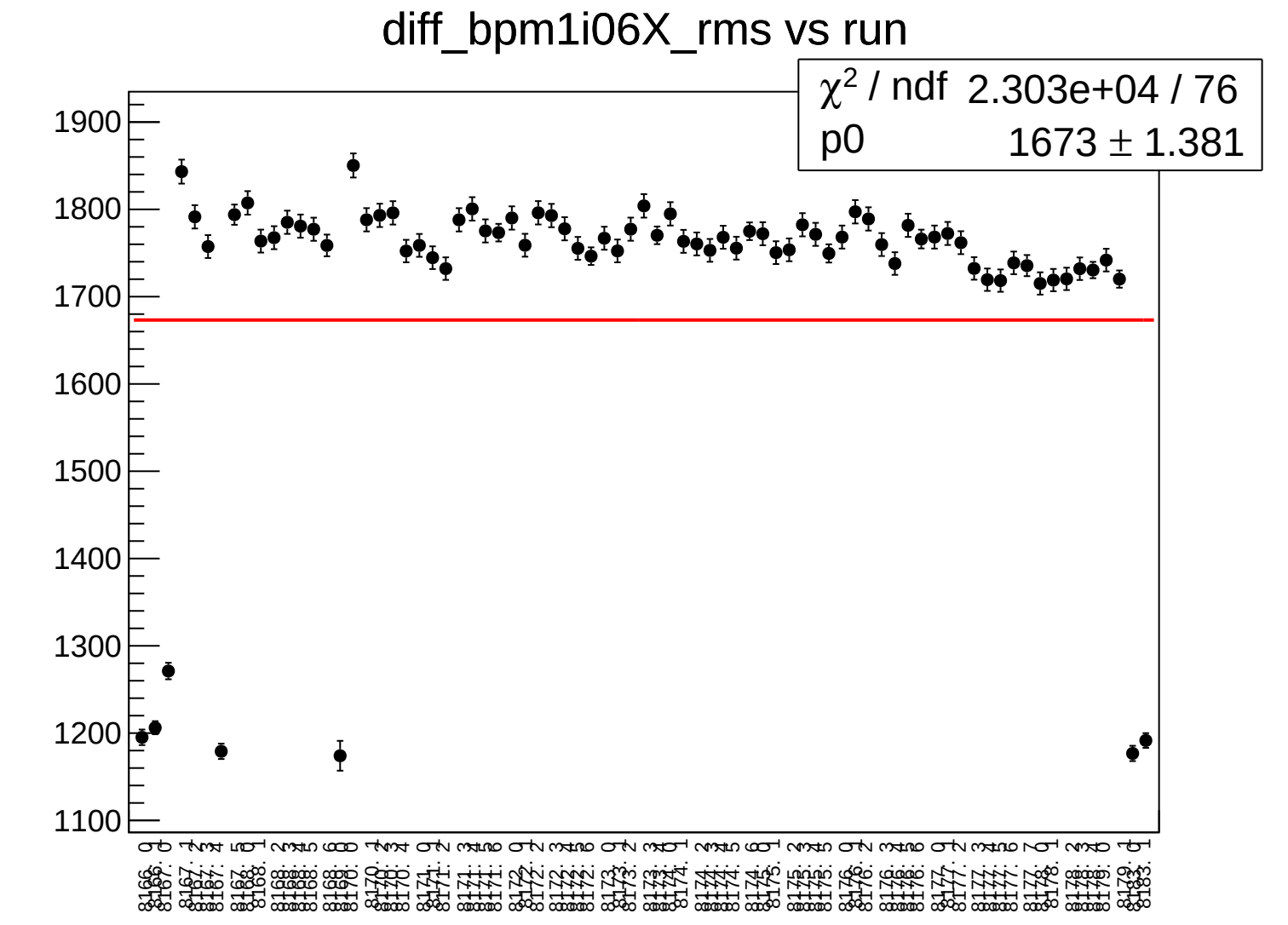

diff_bpm1i04Y_mean vs run
χ² / ndf 109.1 / 76
p0 15.66 ± 0.7014
pull
Entries 77
Mean −1.988
Std Dev 106.3

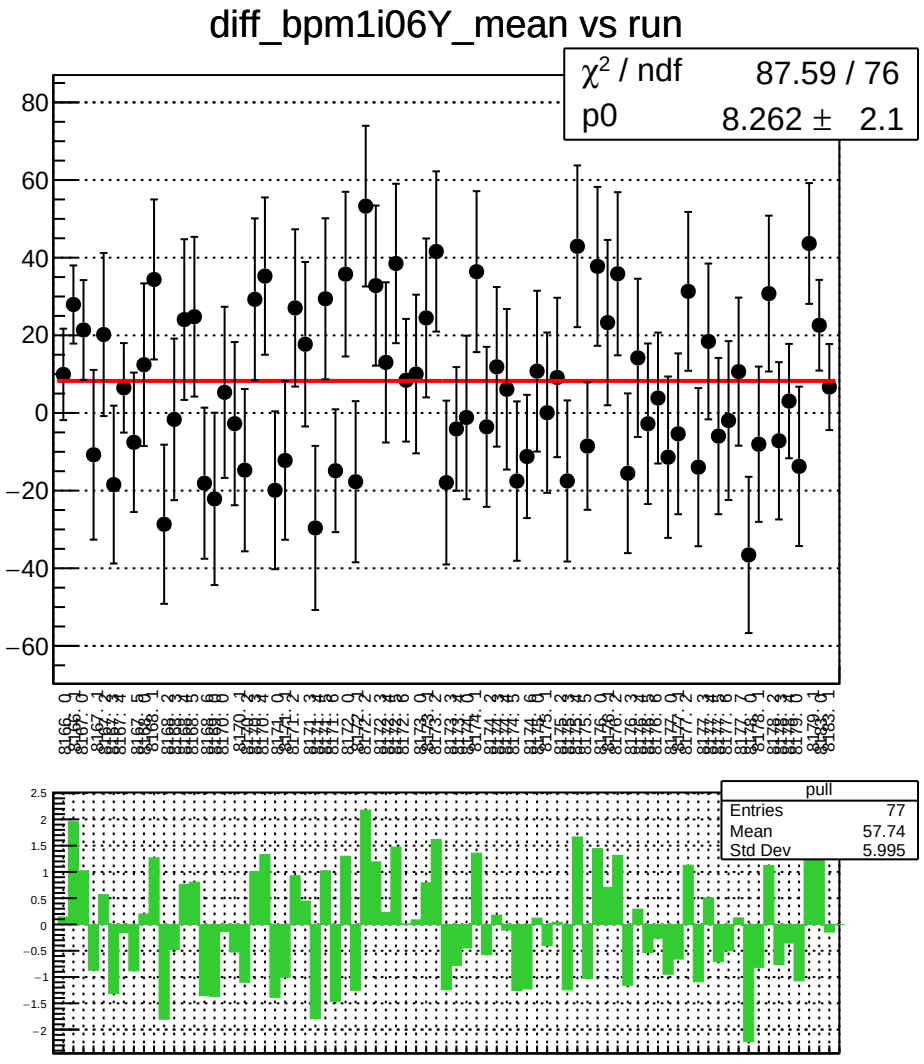

pull1D
Entries 77
Mean 0.01805
Std Dev 1.19

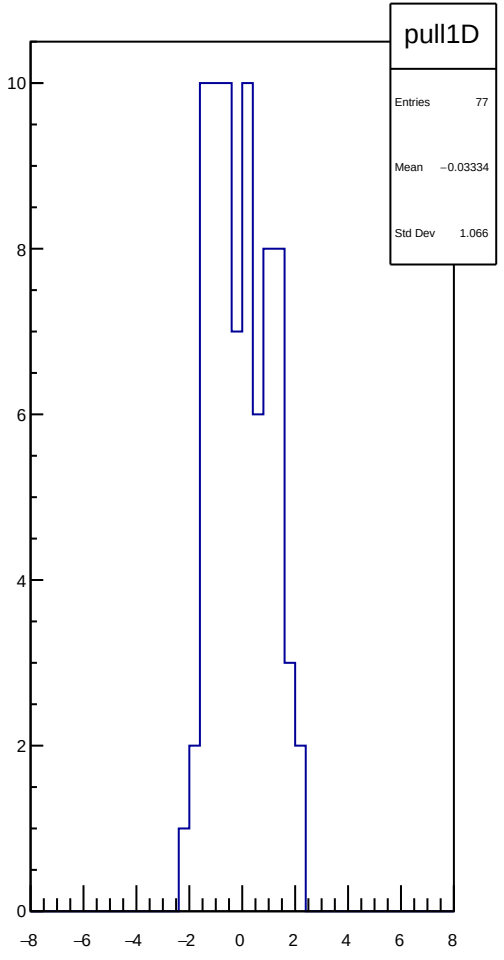

diff_bpm1i04Y_rms vs run
χ² / ndf 1.673e+04 / 76
p0 602.3 ± 0.4959
650
600
550
500
450

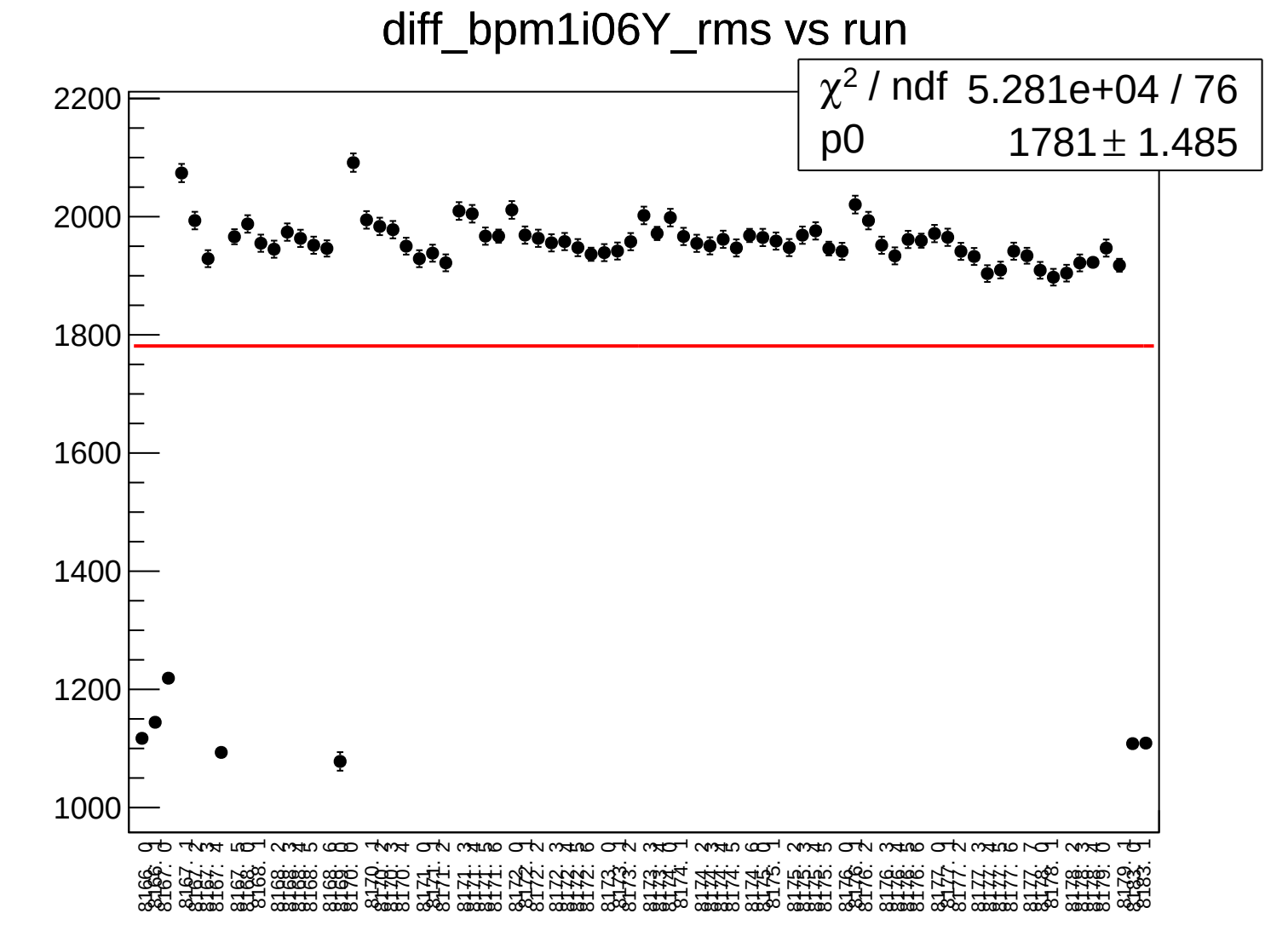

diff_bpm1i06X_mean vs run
χ^2 / ndf 93.84 / 76
p0 64.79 ± 1.953
pull
Entries 77
Mean 117.1
Std Dev 96.76

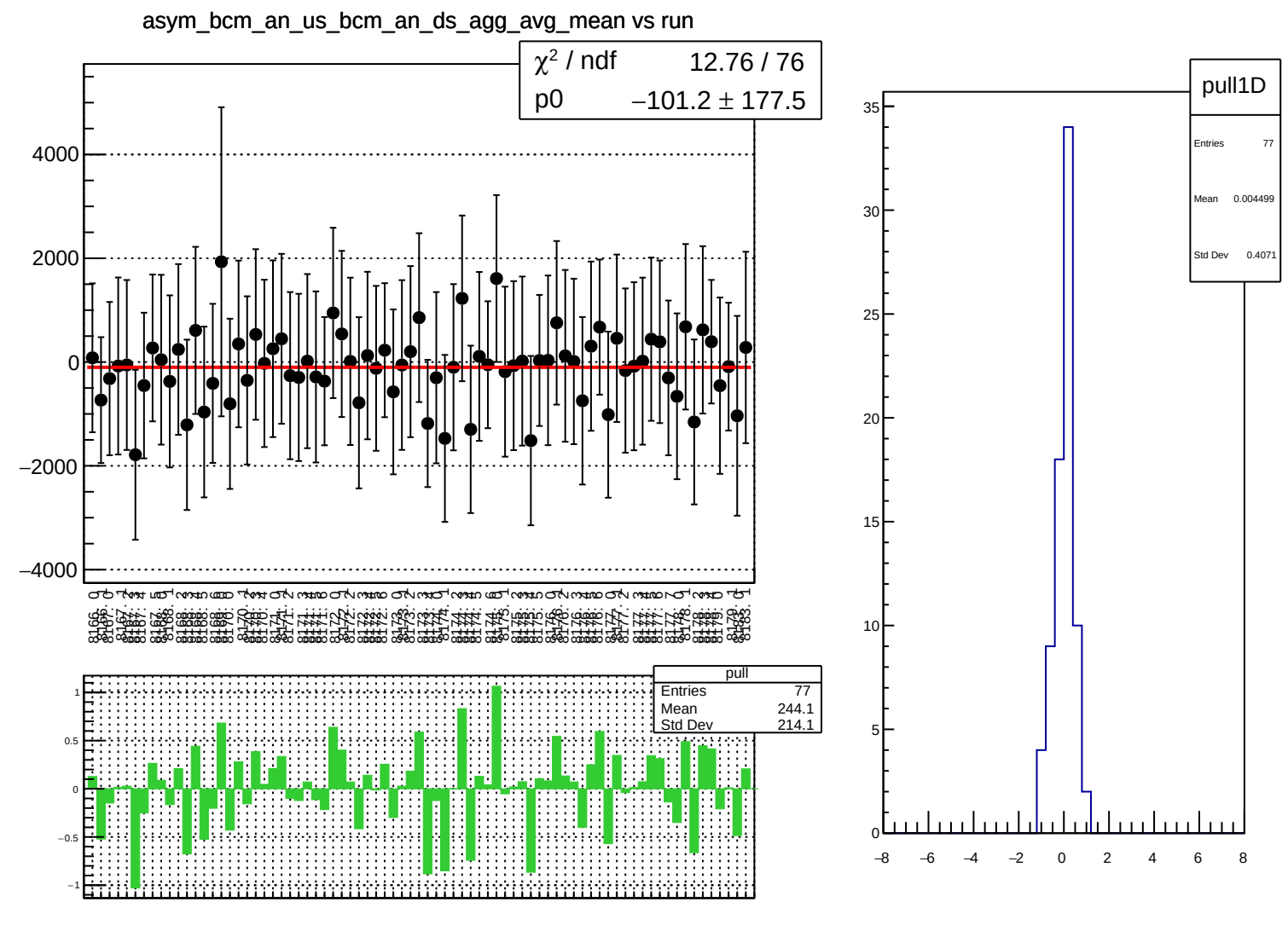

pull1D
Entries 77
Mean −0.01997
Std Dev 1.104

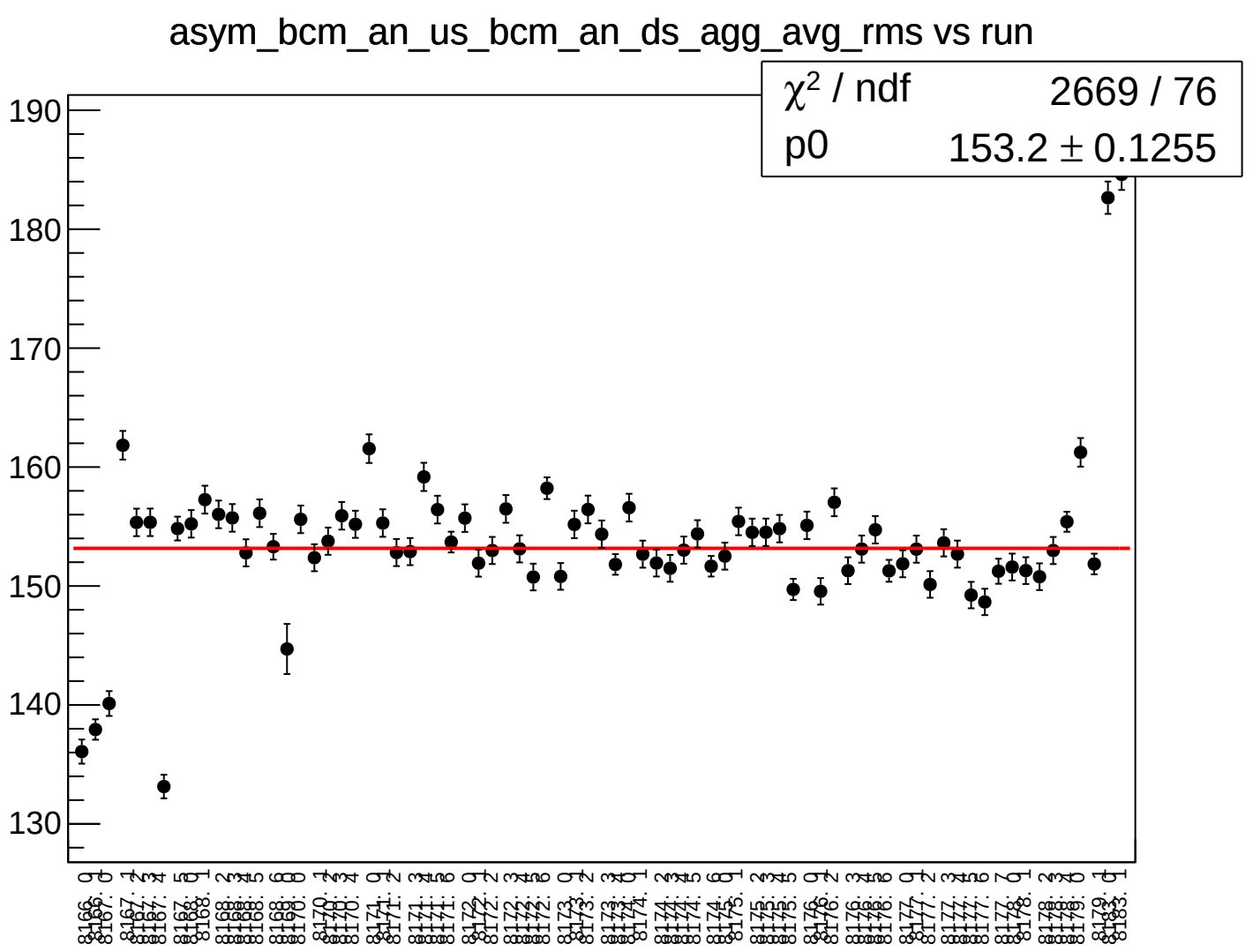

diff_bpm1i06X_rms vs run
χ^2 / ndf 2.303e+04 / 76
p0 1673 ± 1.381
1900
1800
1700
1600
1500
1400
1300
1200
1100

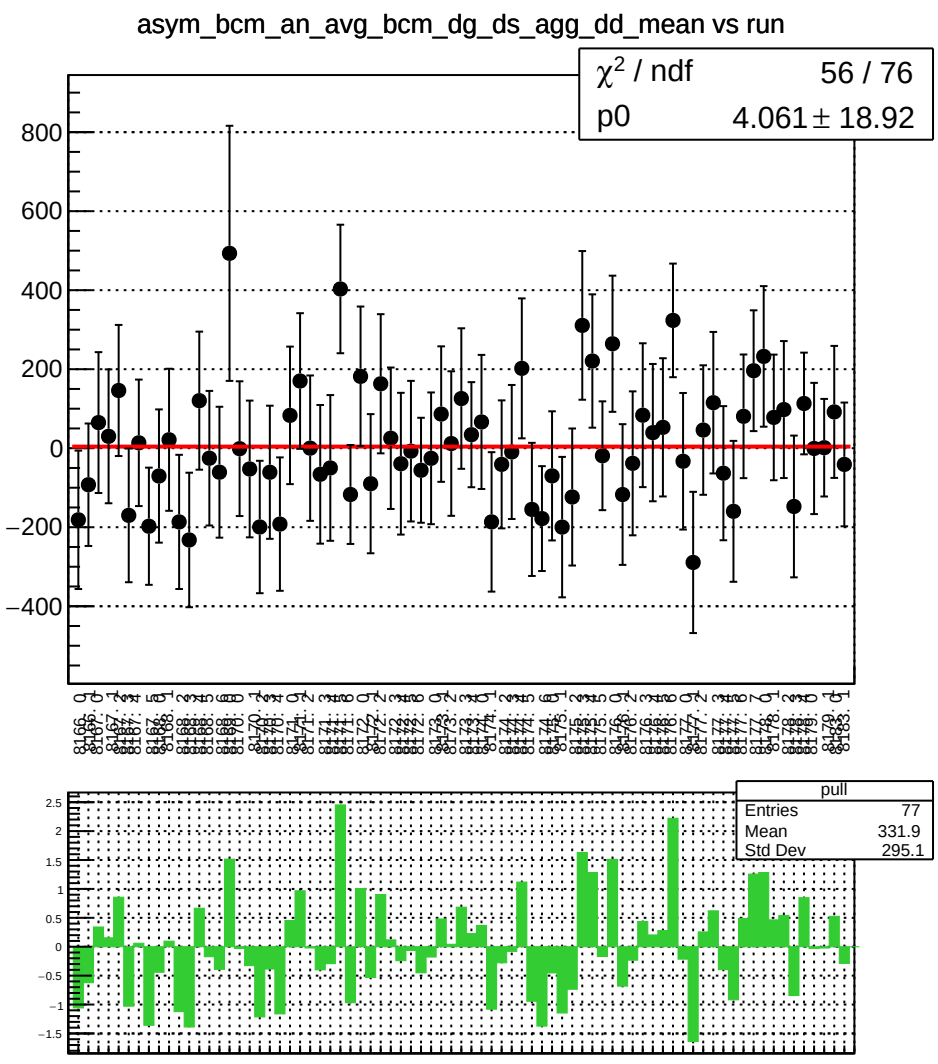

diff_bpm1i06Y_mean vs run
χ² / ndf 87.59 / 76
p0 8.262 ± 2.1
pull
Entries 77
Mean 57.74
Std Dev 5.995

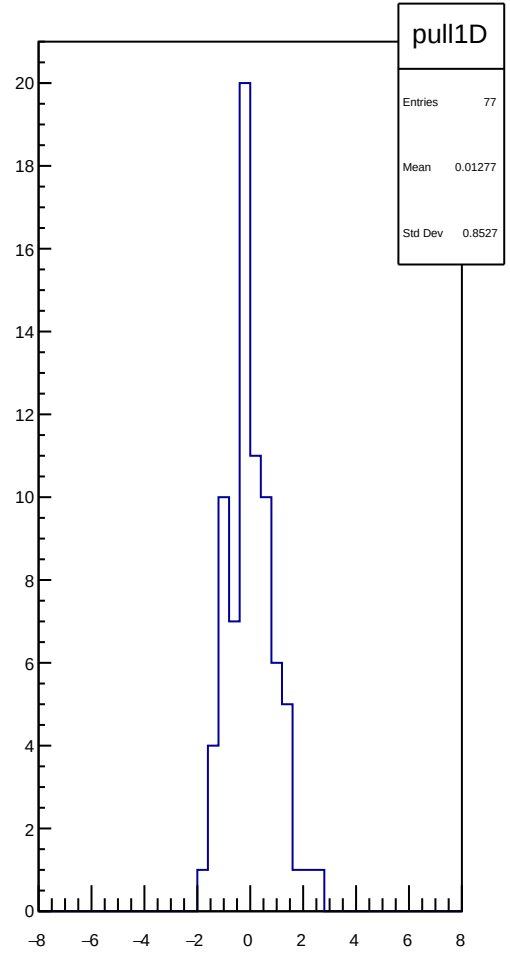

pull1D
Entries 77
Mean −0.03334
Std Dev 1.066

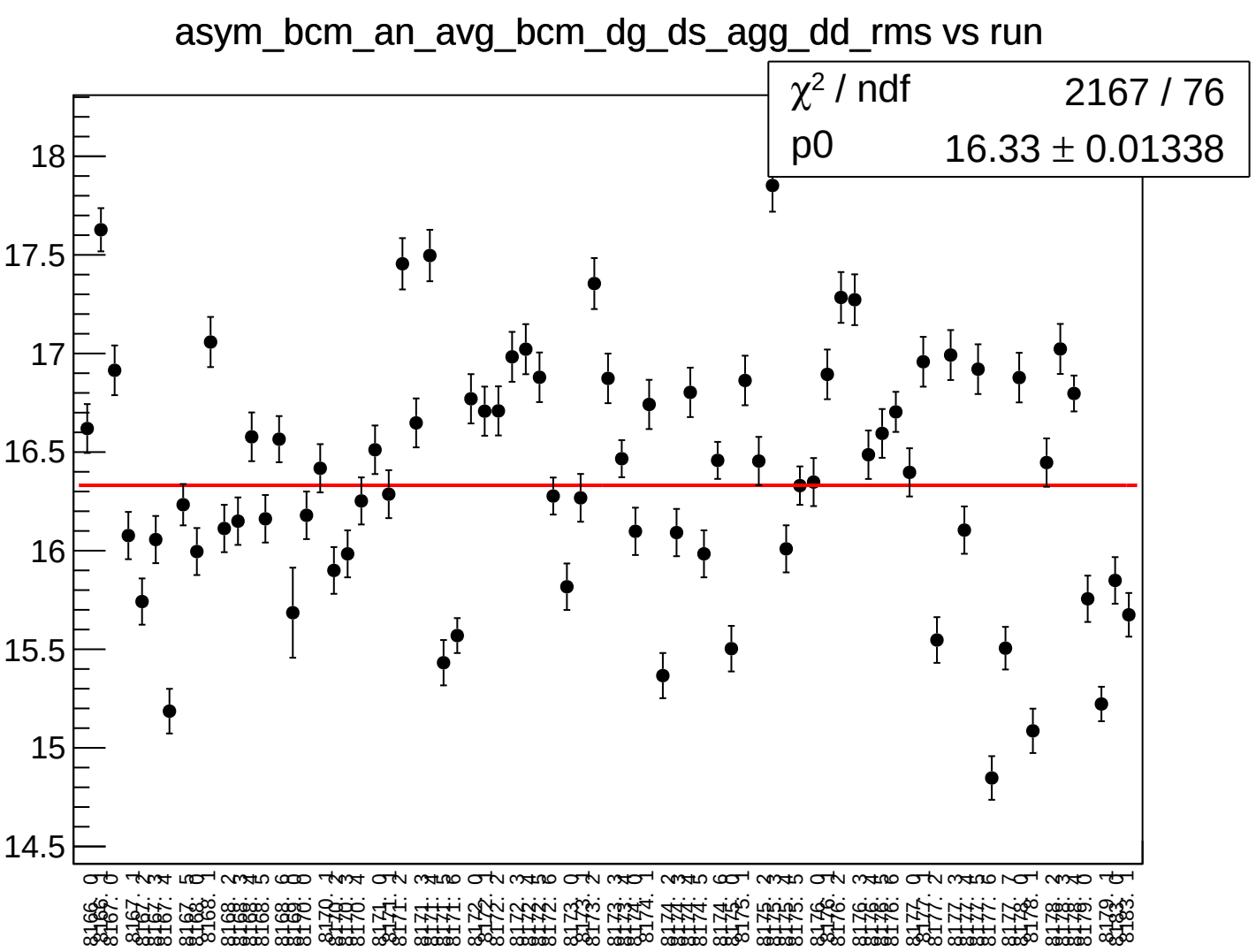

diff_bpm1i06Y_rms vs run
χ^2 / ndf 5.281e+04 / 76
p0 1781 ± 1.485
2200
2000
1800
1600
1400
1200
1000

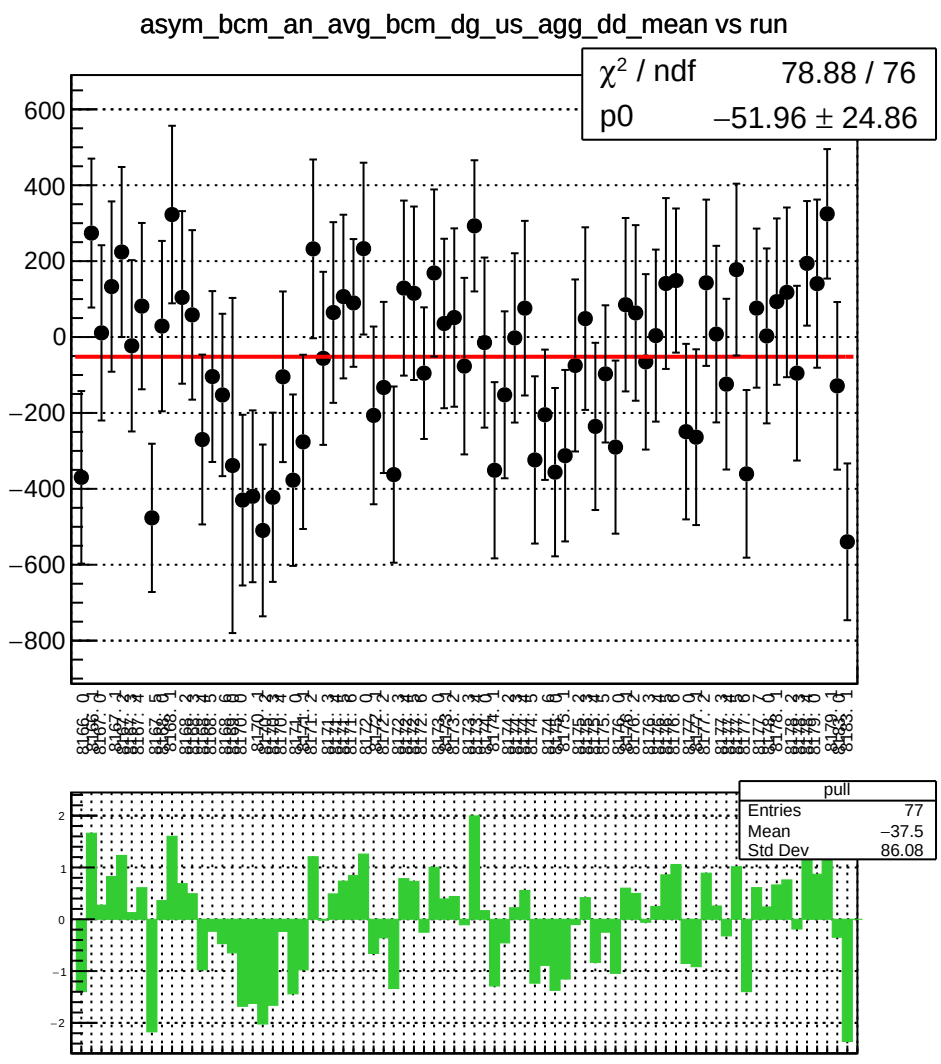

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 12.76 / 76
p0 −101.2 ± 177.5
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 244.1
Std Dev 214.1
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.004499
Std Dev 0.4071
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

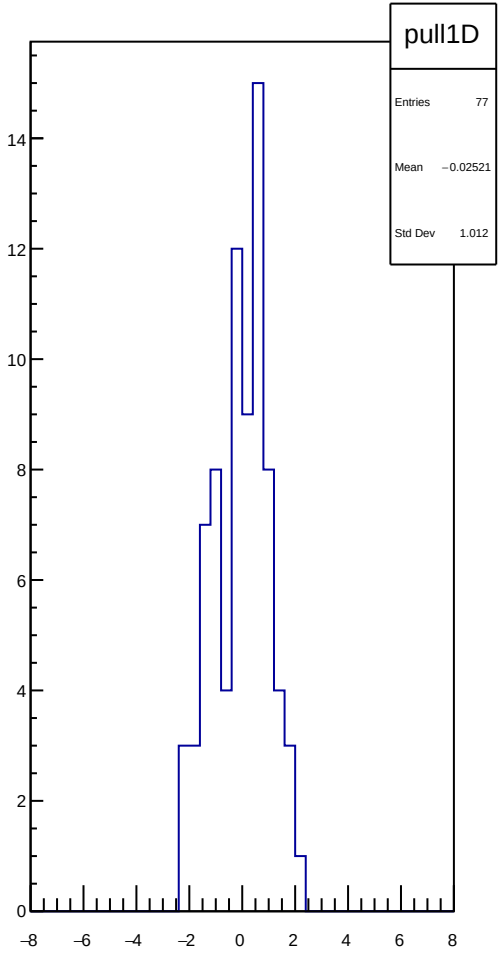

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2669 / 76
p0 153.2 ± 0.1255
190
180
170
160
150
140
130

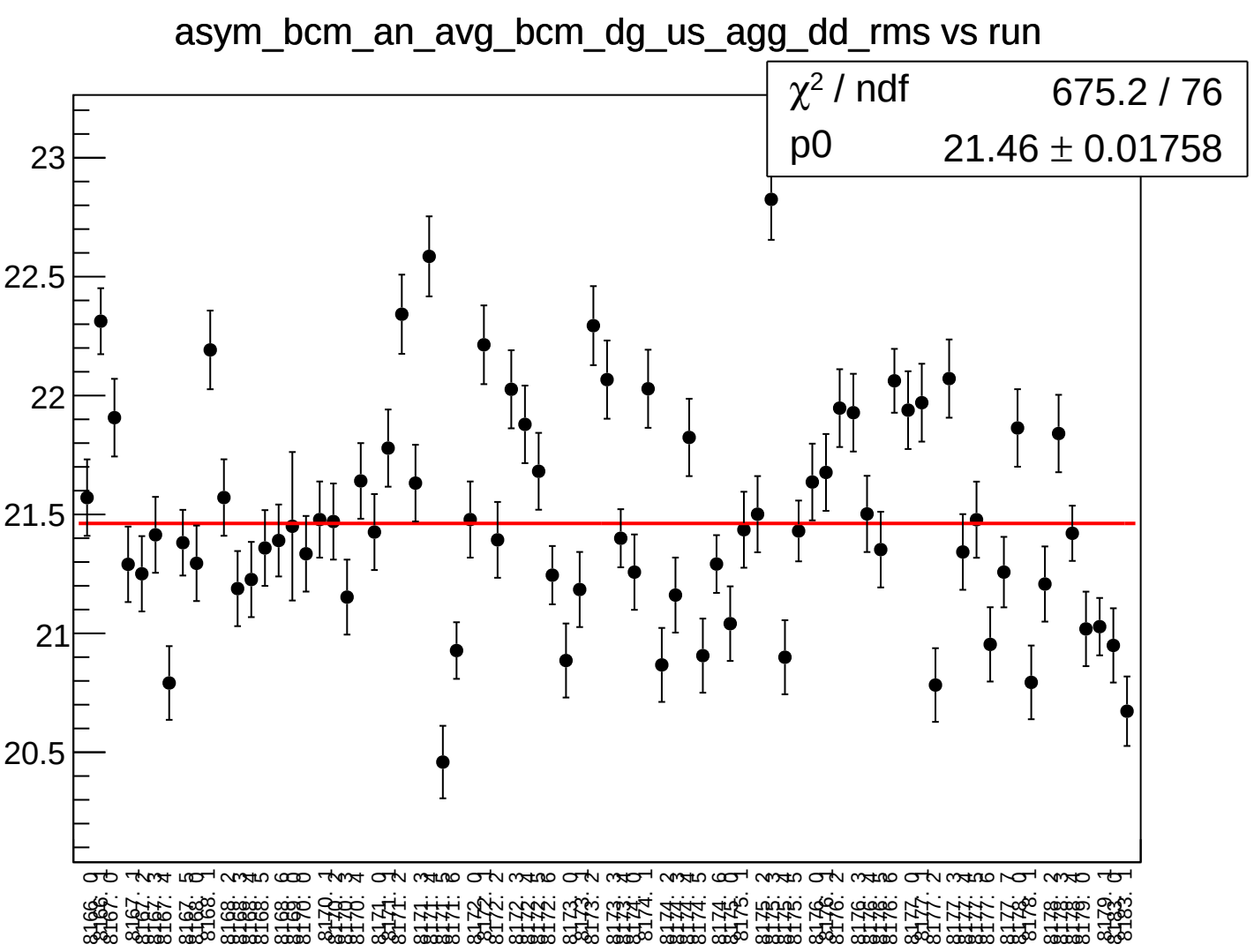

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 56 / 76
p0 4.061 ± 18.92
800
600
400
200
0
−200
−400
pull
Entries 77
Mean 331.9
Std Dev 295.1
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

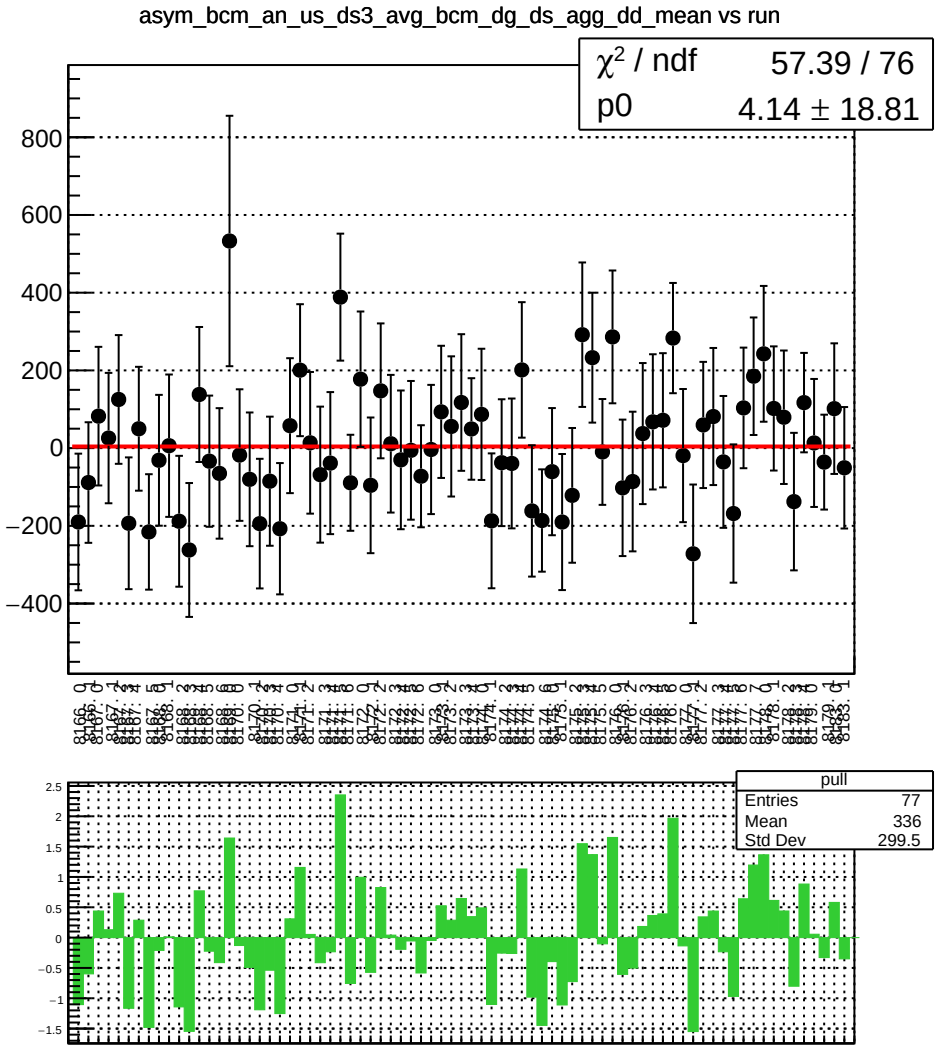

pull1D
Entries 77
Mean 0.01277
Std Dev 0.8527
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

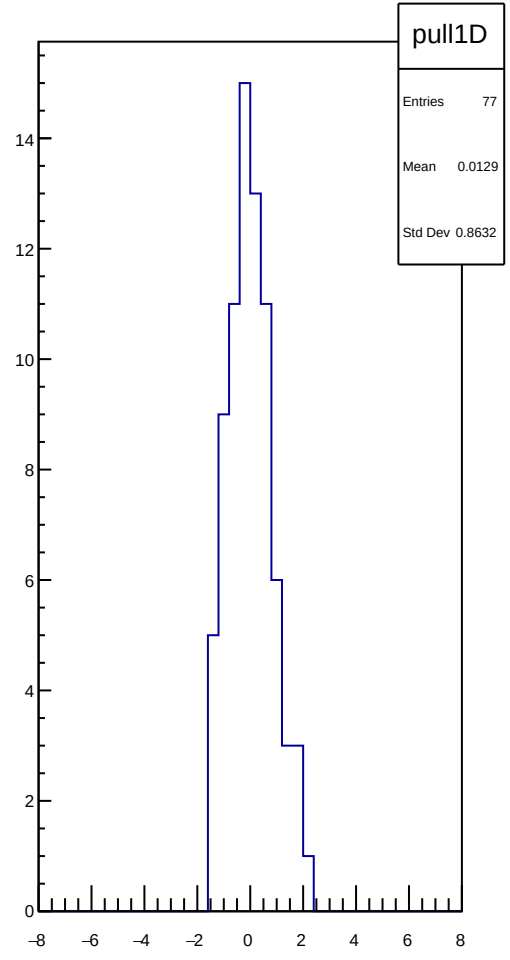

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2167 / 76
p0 16.33 ± 0.01338
18
17.5
17
16.5
16
15.5
15
14.5

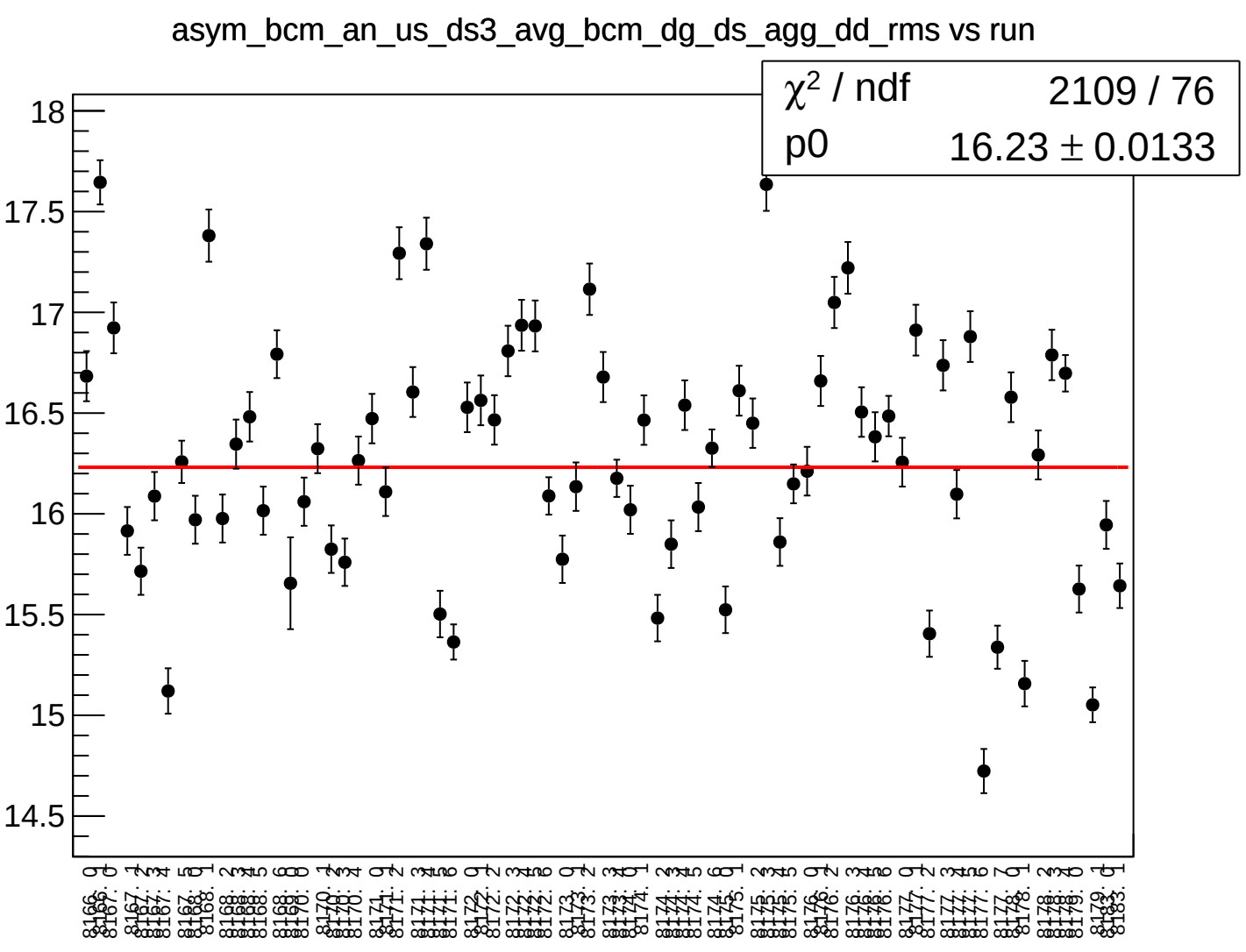

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 78.88 / 76
p0 −51.96 ± 24.86
pull
Entries 77
Mean −37.5
Std Dev 86.08

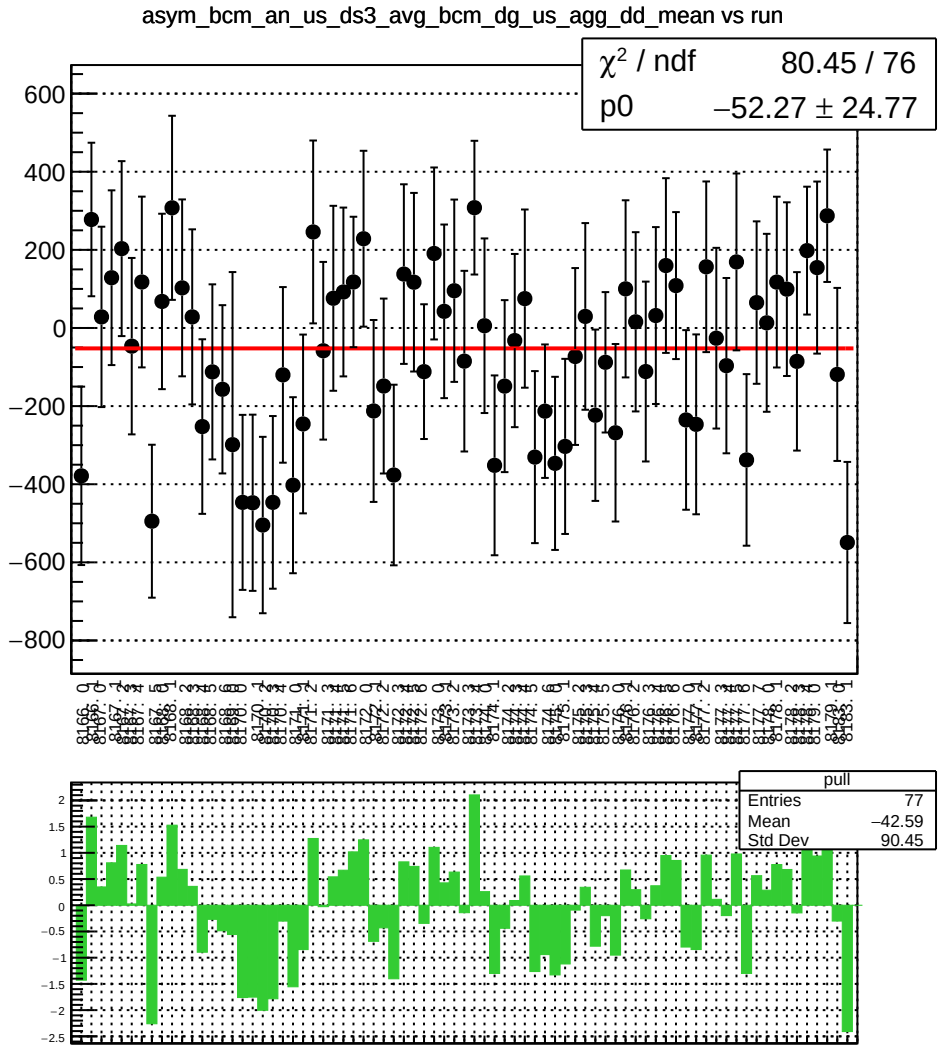

pull1D
Entries 77
Mean −0.02521
Std Dev 1.012

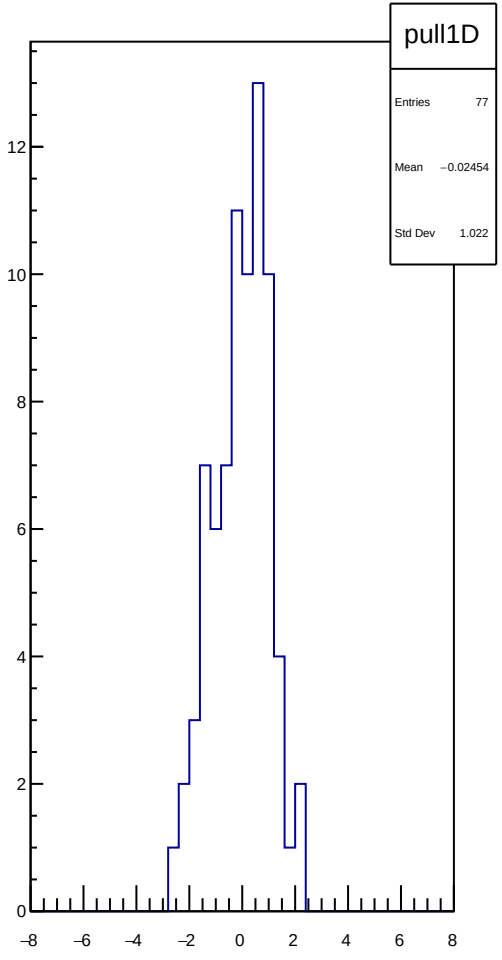

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 675.2 / 76
p0 21.46 ± 0.01758
23
22.5
22
21.5
21
20.5

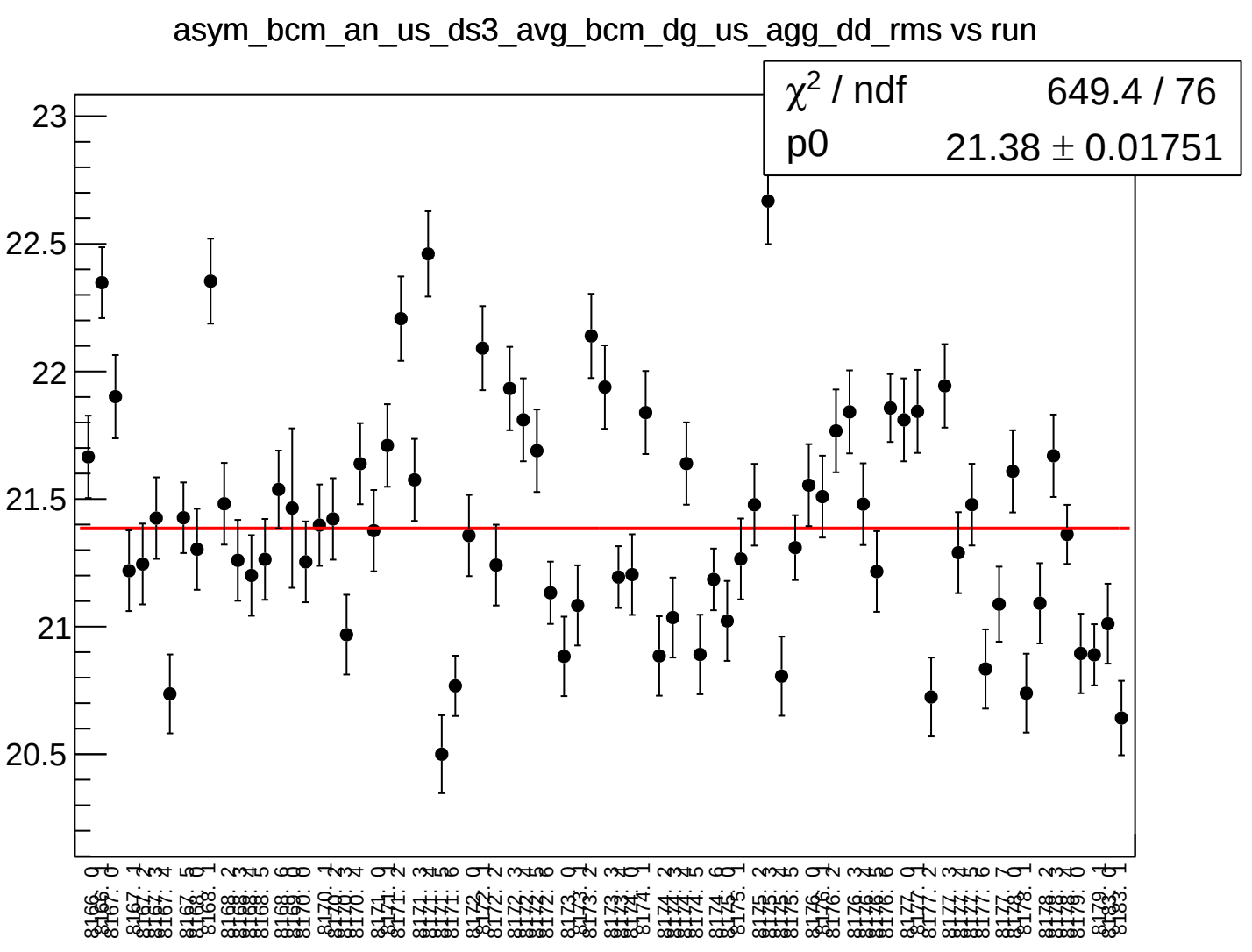

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 57.39 / 76
p0 4.14 ± 18.81
pull
Entries 77
Mean 336
Std Dev 299.5

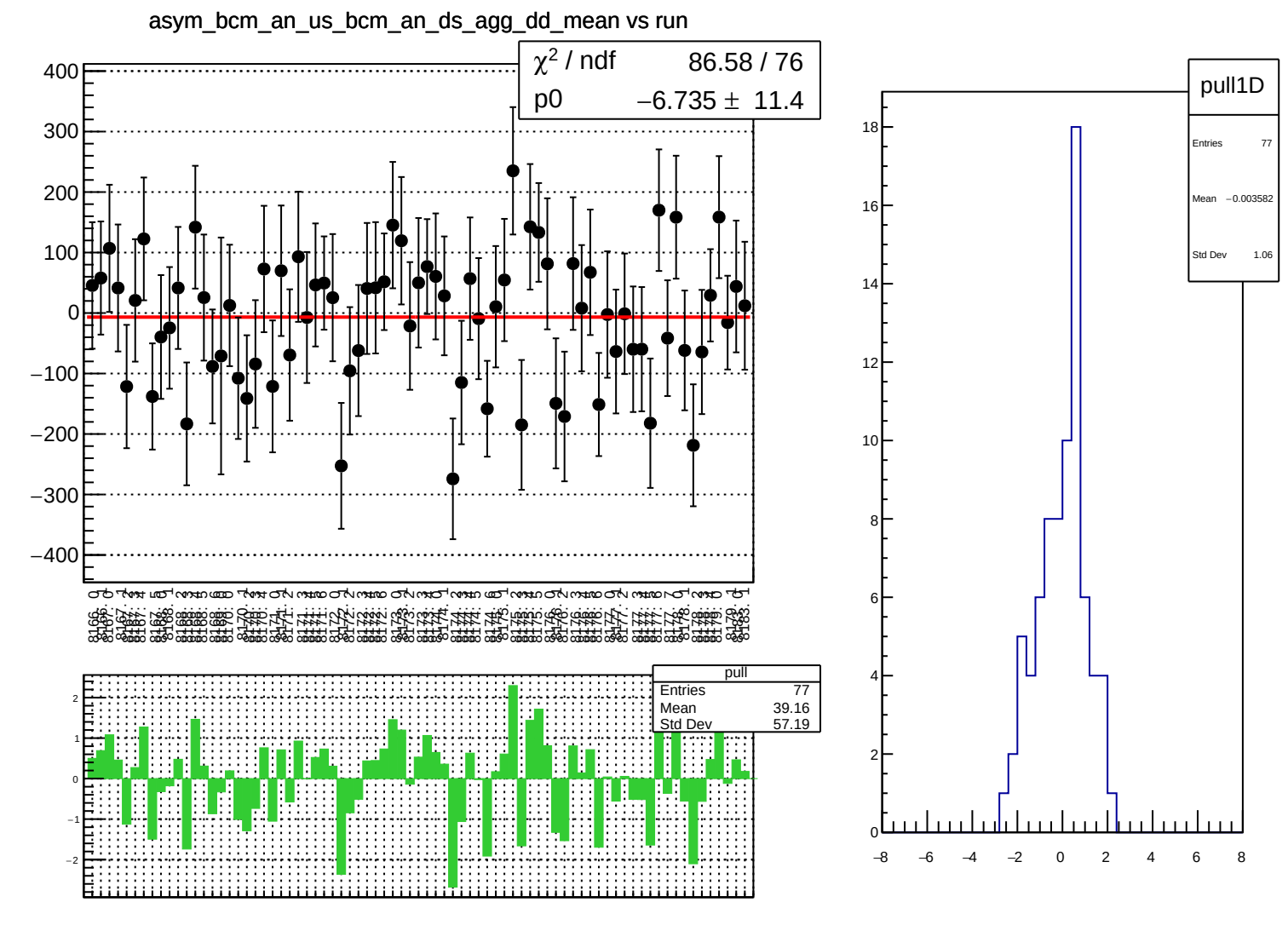

pull1D
Entries 77
Mean 0.0129
Std Dev 0.8632

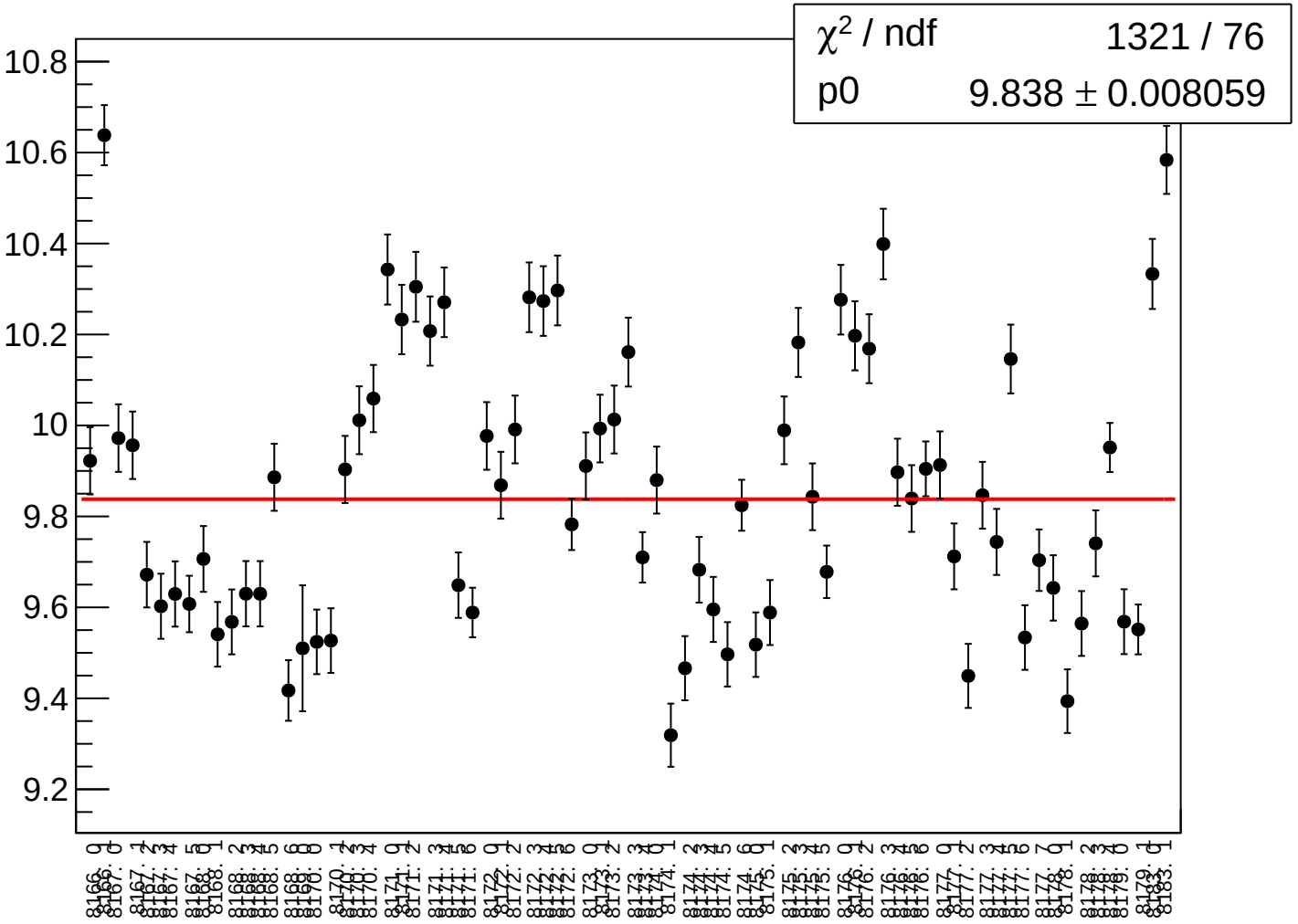

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2109 / 76
p0 16.23 ± 0.0133
18
17.5
17
16.5
16
15.5
15
14.5

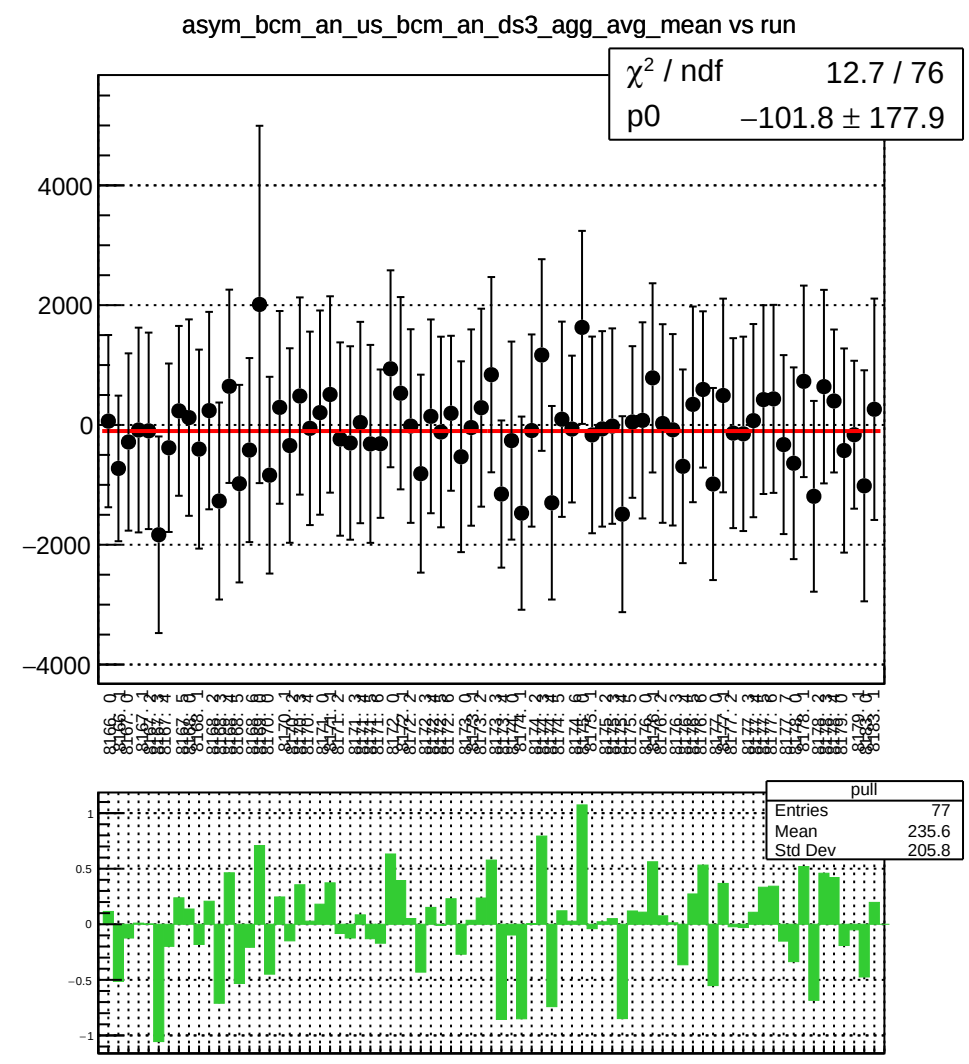

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 80.45 / 76
p0 −52.27 ± 24.77
pull
Entries 77
Mean −42.59
Std Dev 90.45

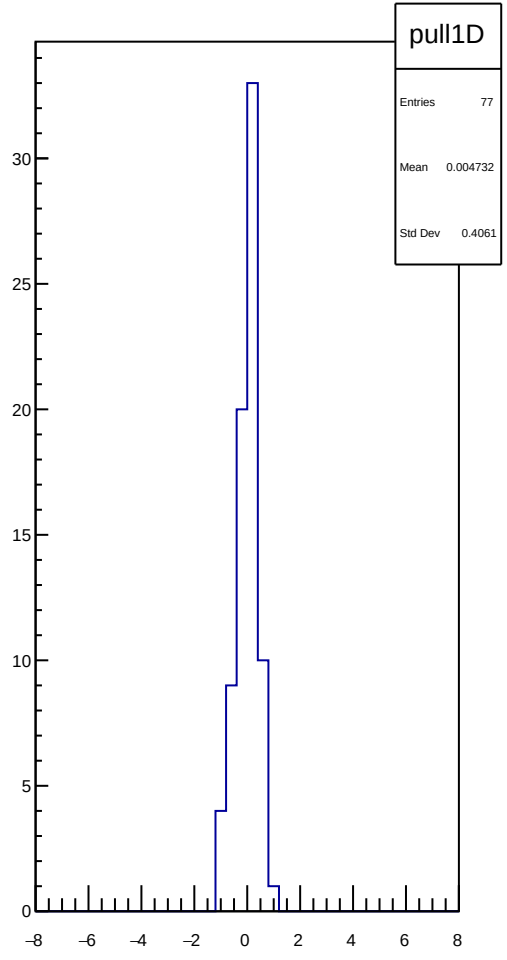

pull1D
Entries 77
Mean −0.02454
Std Dev 1.022

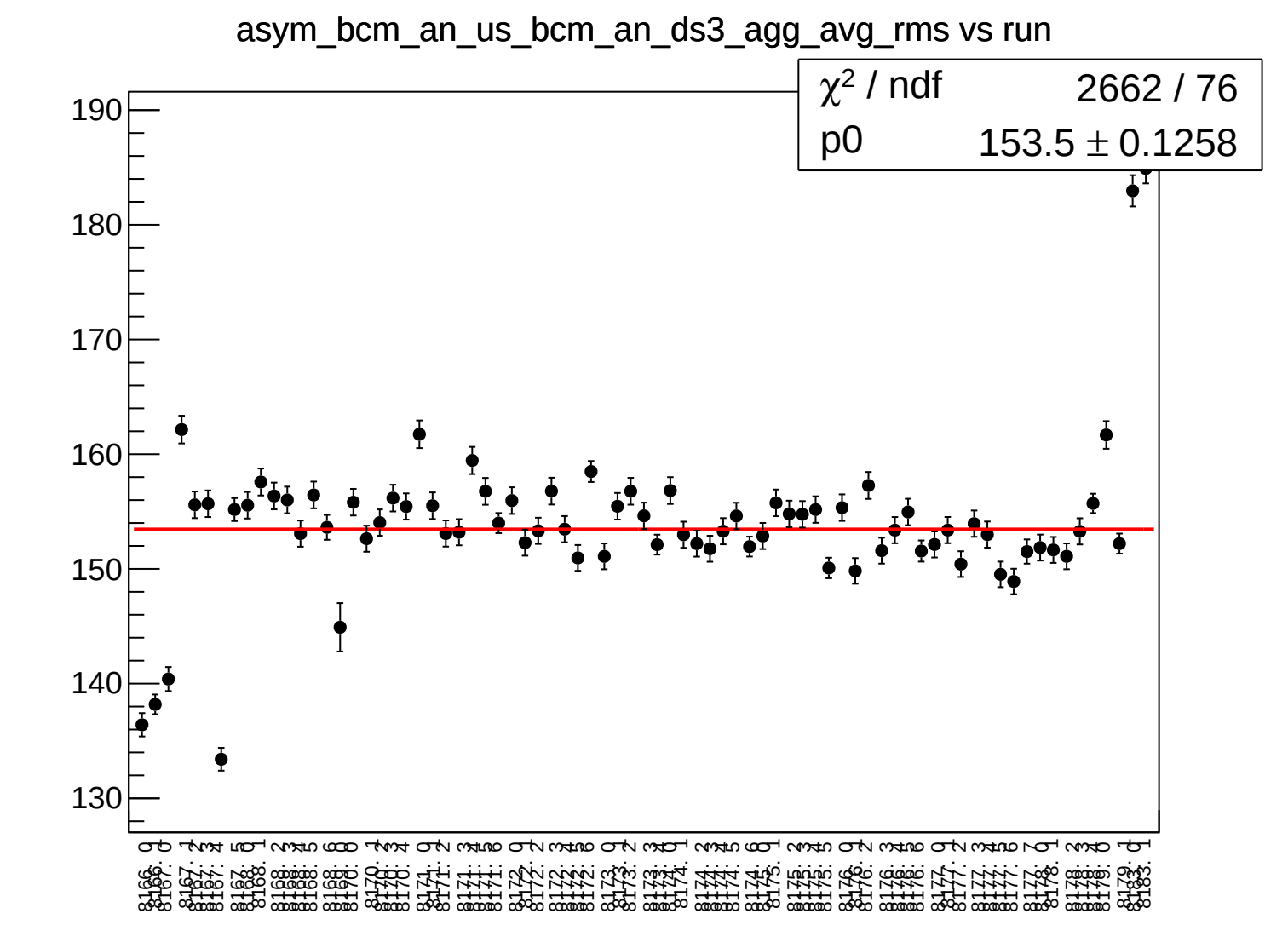

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 649.4 / 76
p0 21.38 ± 0.01751
23
22.5
22
21.5
21
20.5

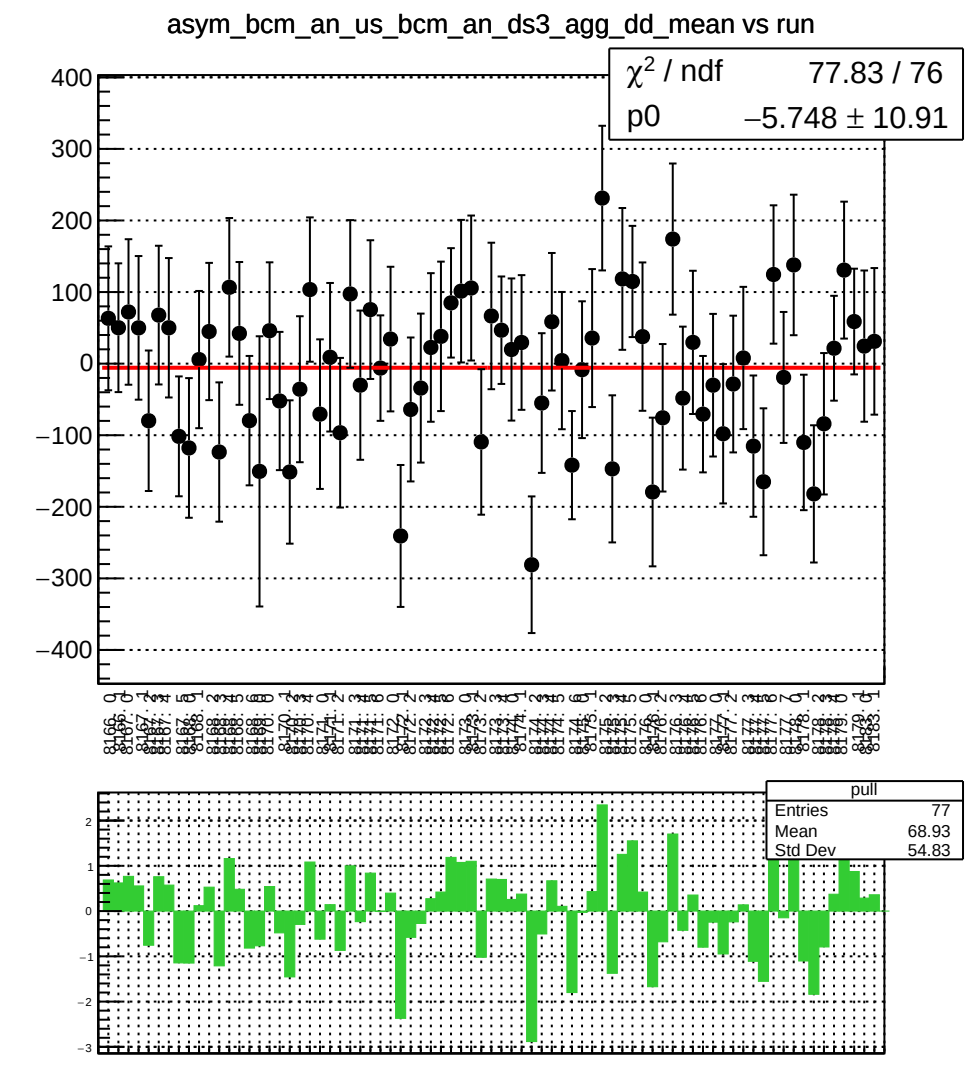

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 86.58 / 76
p0 −6.735 ± 11.4
pull
Entries 77
Mean 39.16
Std Dev 57.19
pull1D
Entries 77
Mean −0.003582
Std Dev 1.06

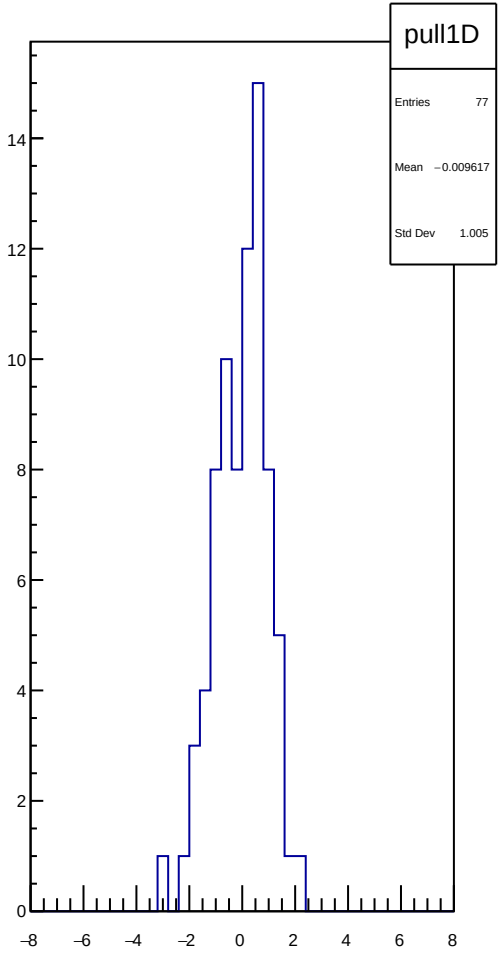

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1321 / 76
p0 9.838 ± 0.008059
10.8
10.6
10.4
10.2
10
9.8
9.6
9.4
9.2

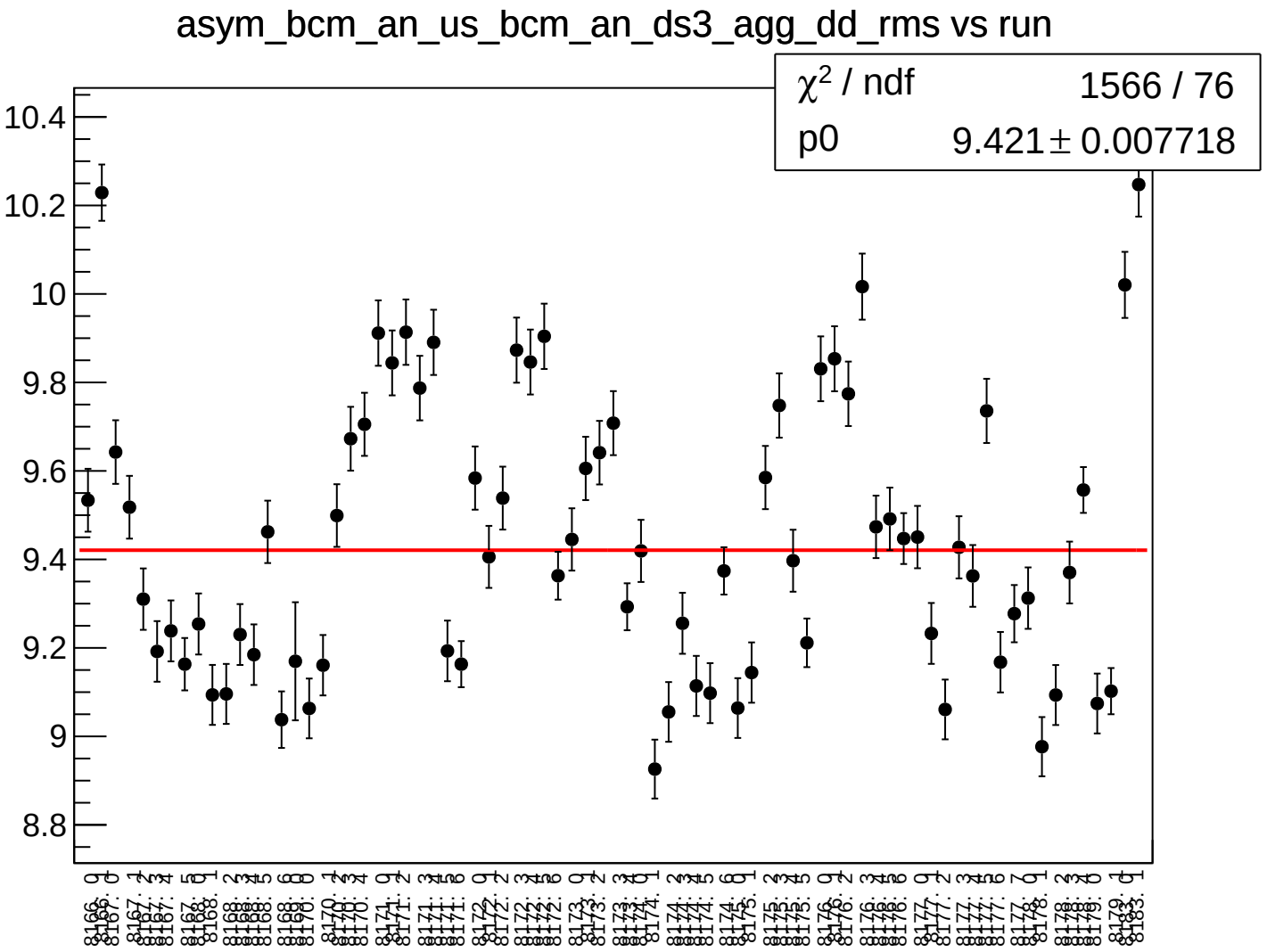

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 12.7 / 76
p0 −101.8 ± 177.9
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 235.6
Std Dev 205.8
1
0.5
0
−0.5
−1

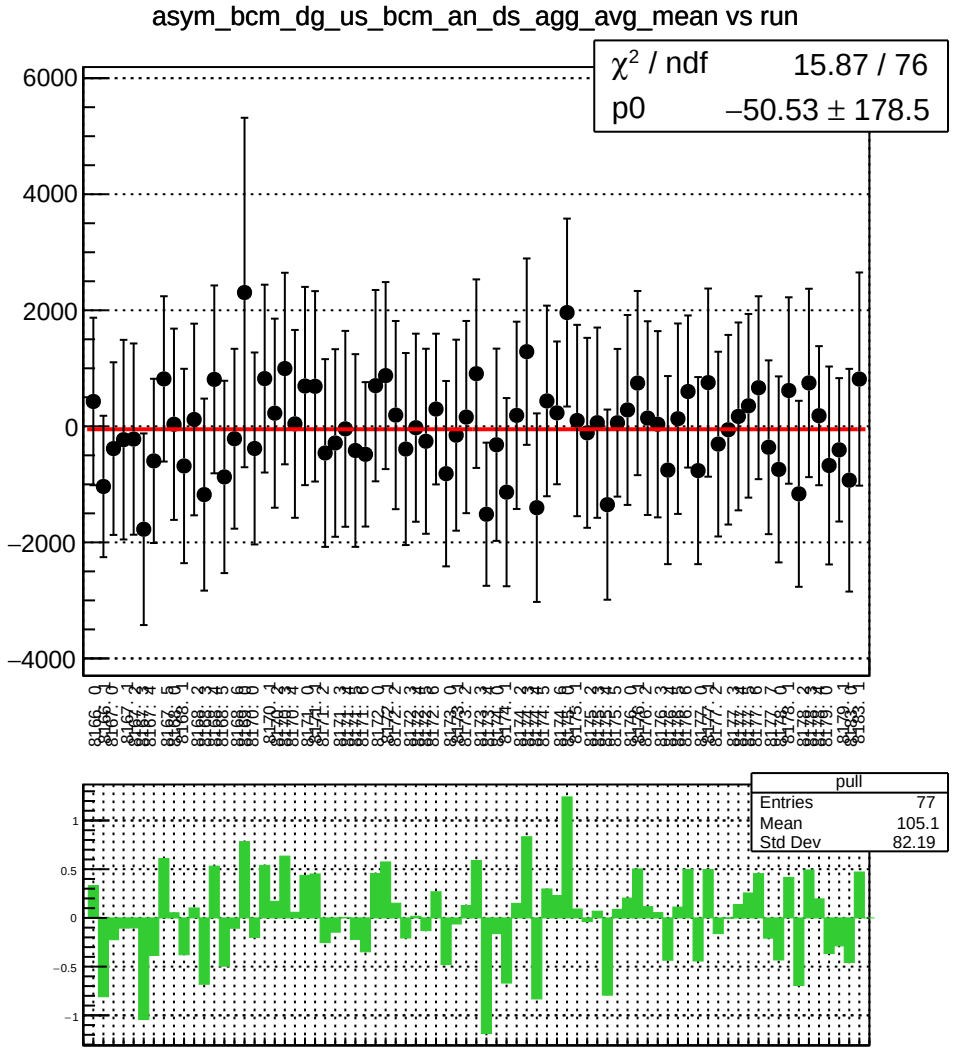

pull1D
Entries 77
Mean 0.004732
Std Dev 0.4061
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

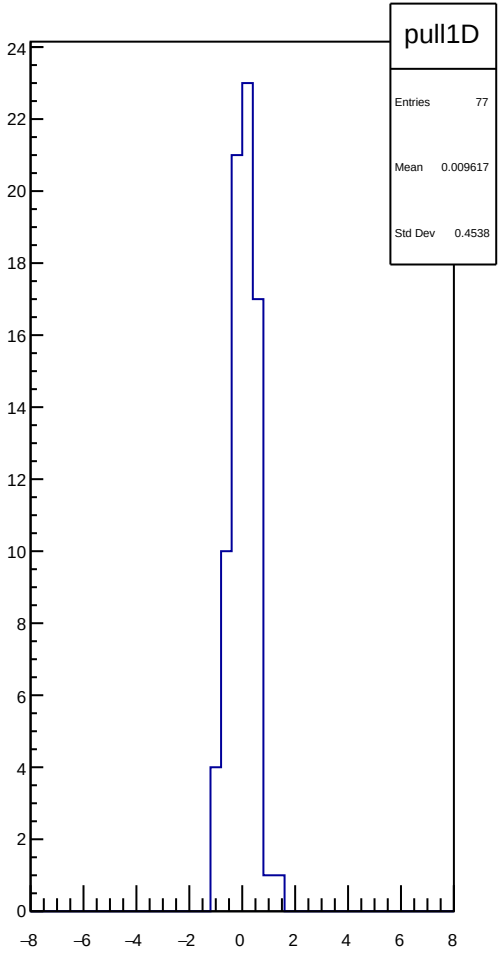

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2662 / 76
p0 153.5 ± 0.1258
190
180
170
160
150
140
130

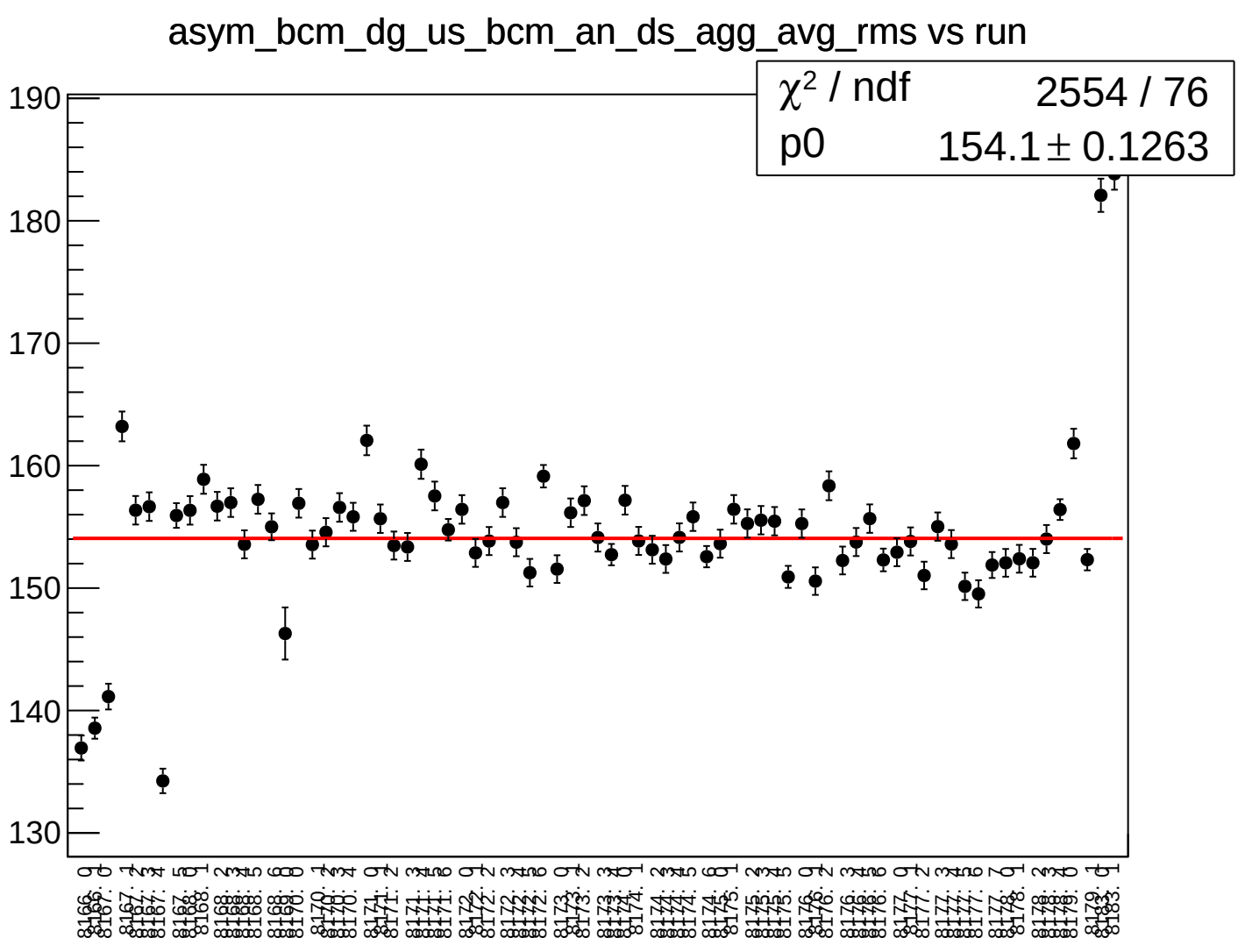

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 77.83 / 76
p0 −5.748 ± 10.91
pull
Entries 77
Mean 68.93
Std Dev 54.83

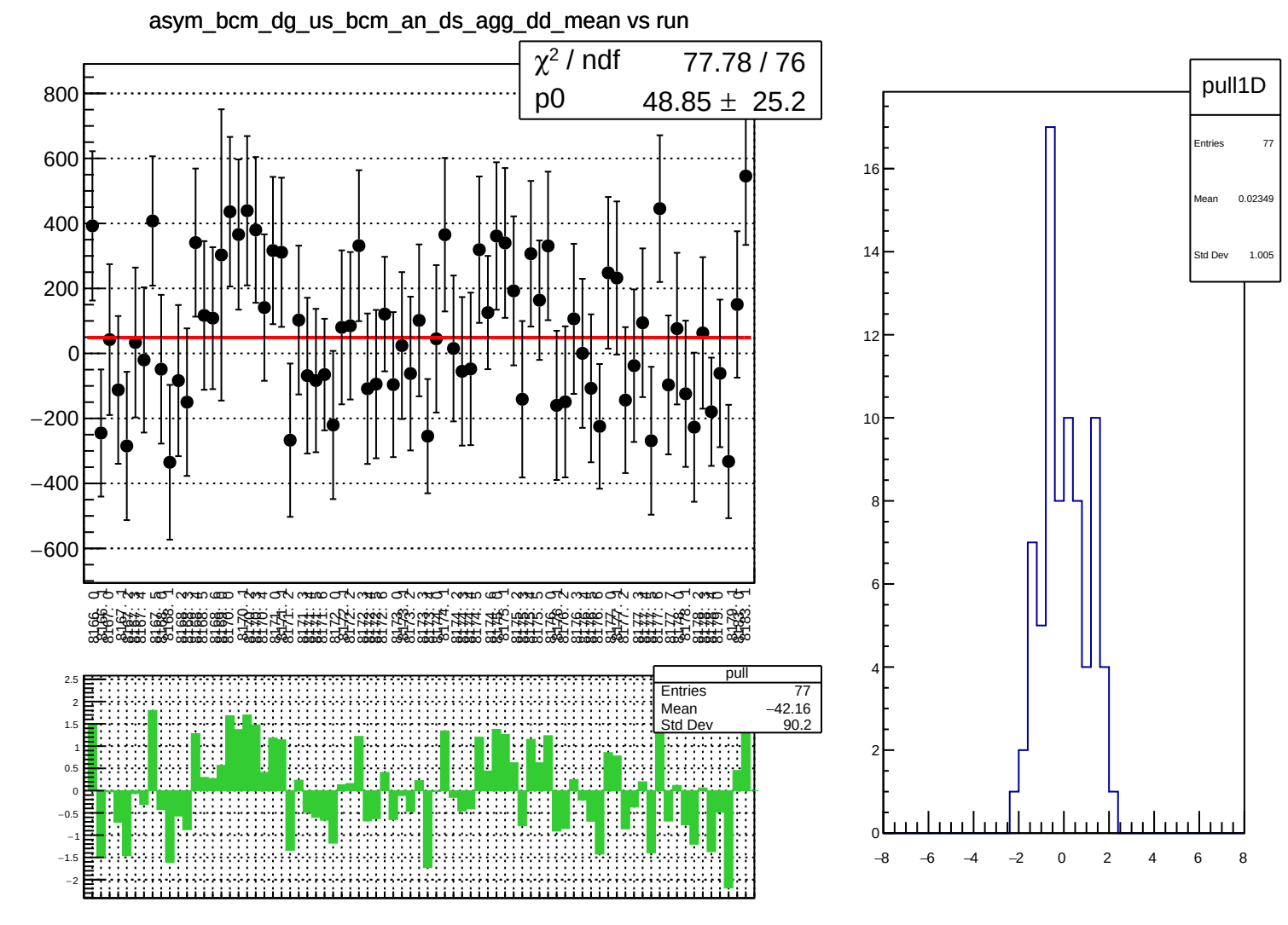

pull1D
Entries 77
Mean −0.009617
Std Dev 1.005

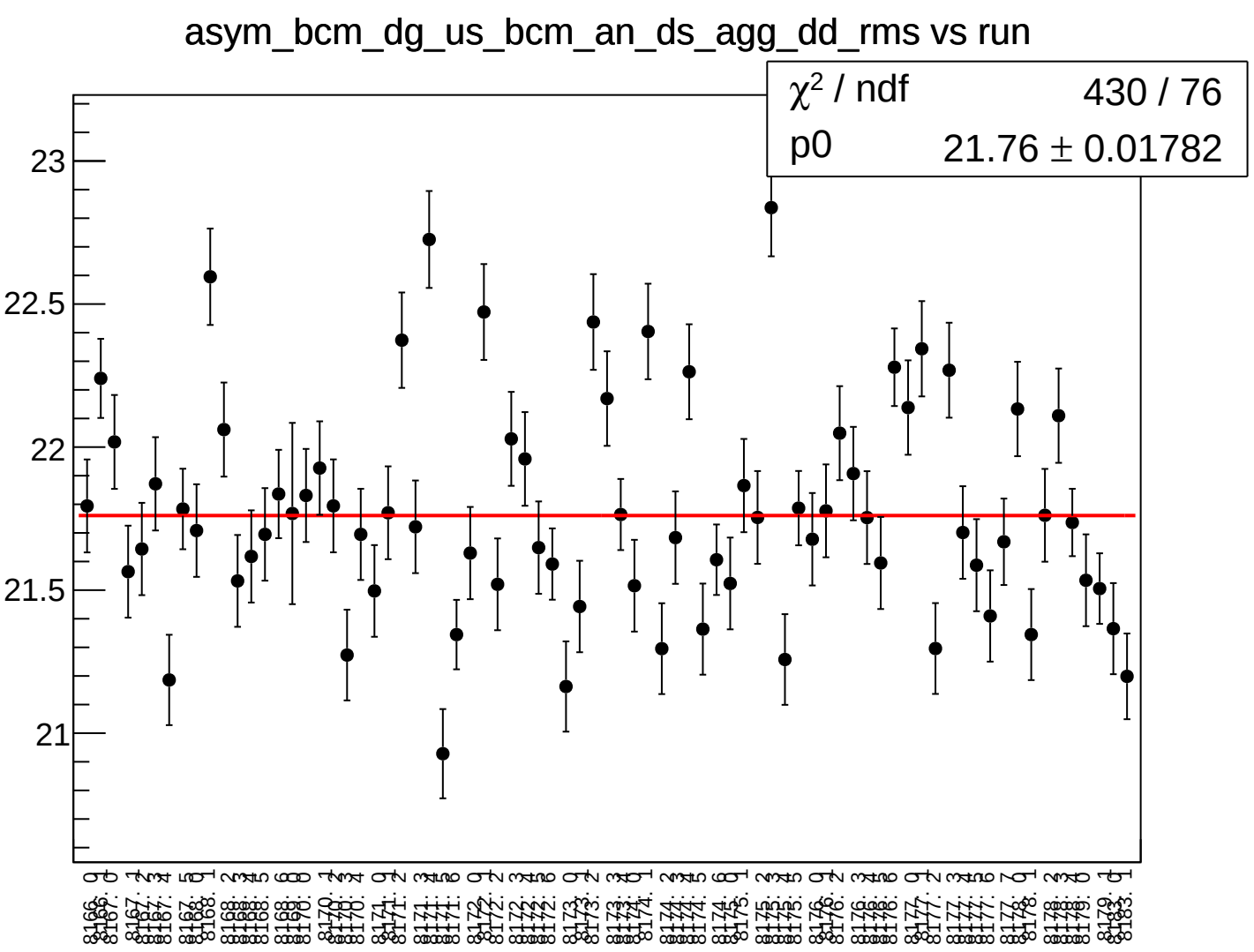

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ^2 / ndf 1566 / 76
p0 9.421 ± 0.007718
10.4
10.2
10
9.8
9.6
9.4
9.2
9
8.8

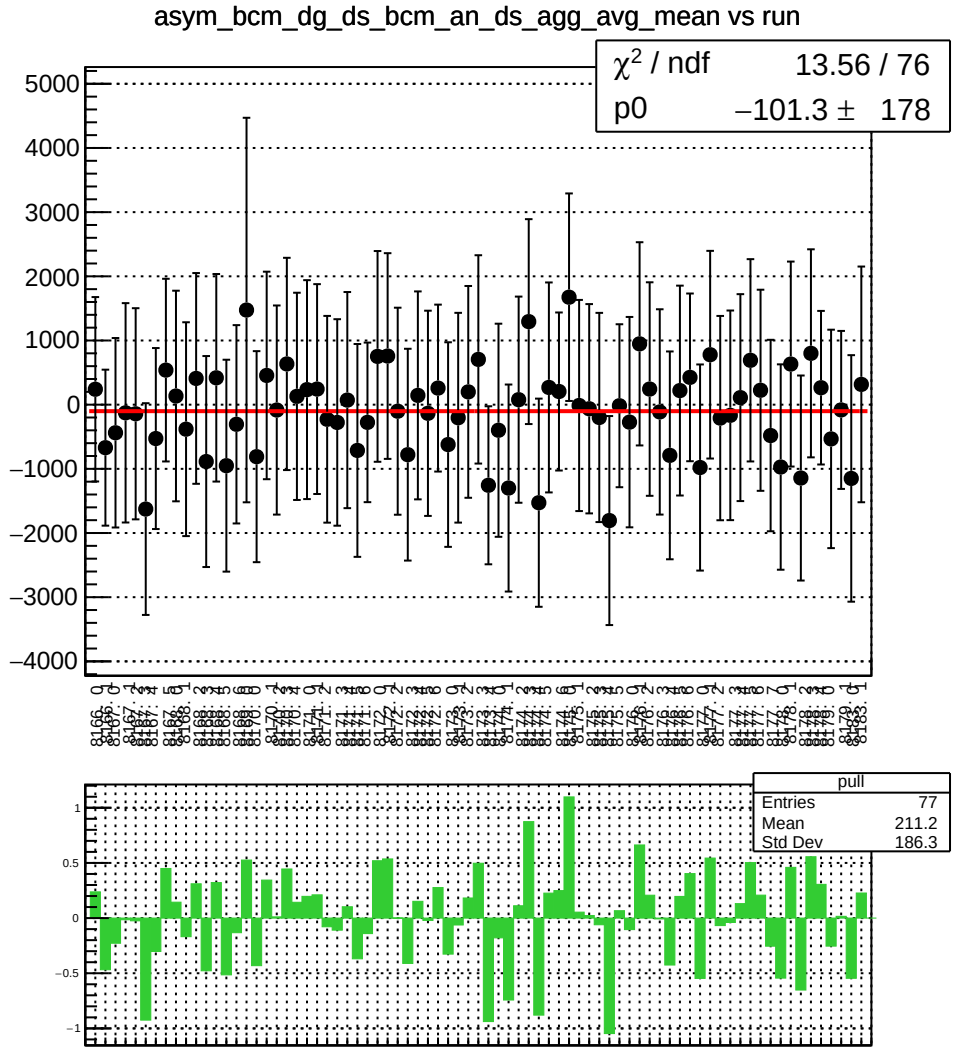

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.87 / 76
p0 −50.53 ± 178.5
pull
Entries 77
Mean 105.1
Std Dev 82.19

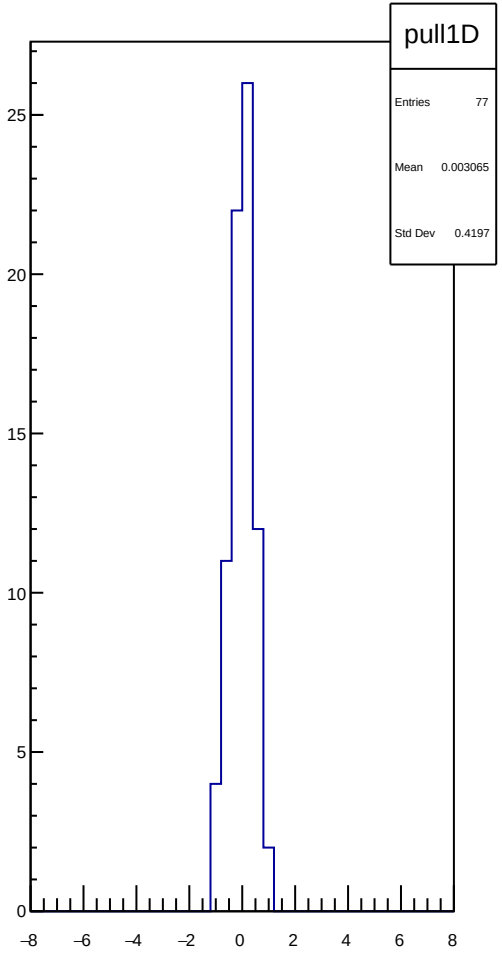

pull1D
Entries 77
Mean 0.009617
Std Dev 0.4538

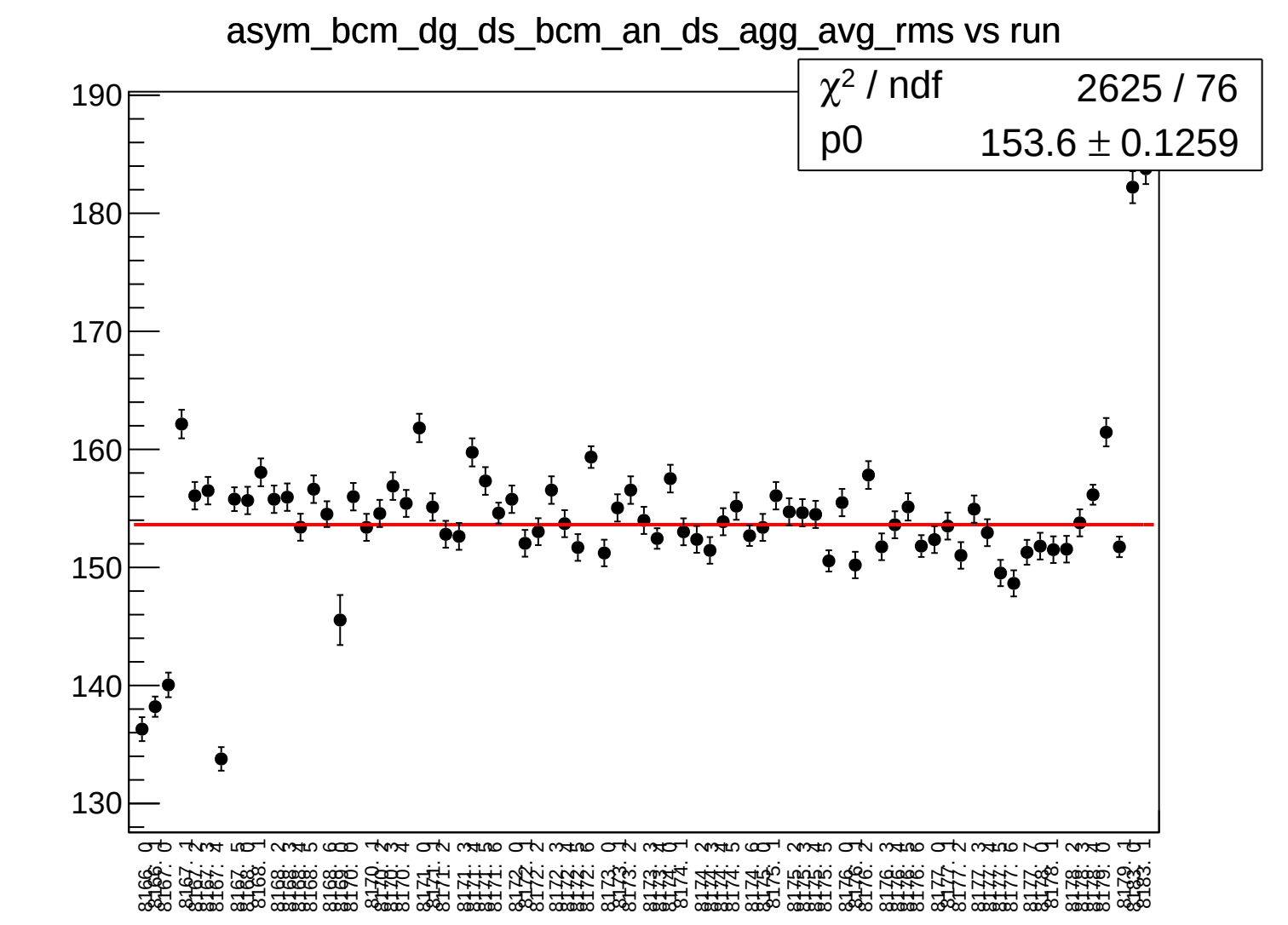

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2554 / 76
p0 154.1 ± 0.1263
190
180
170
160
150
140
130

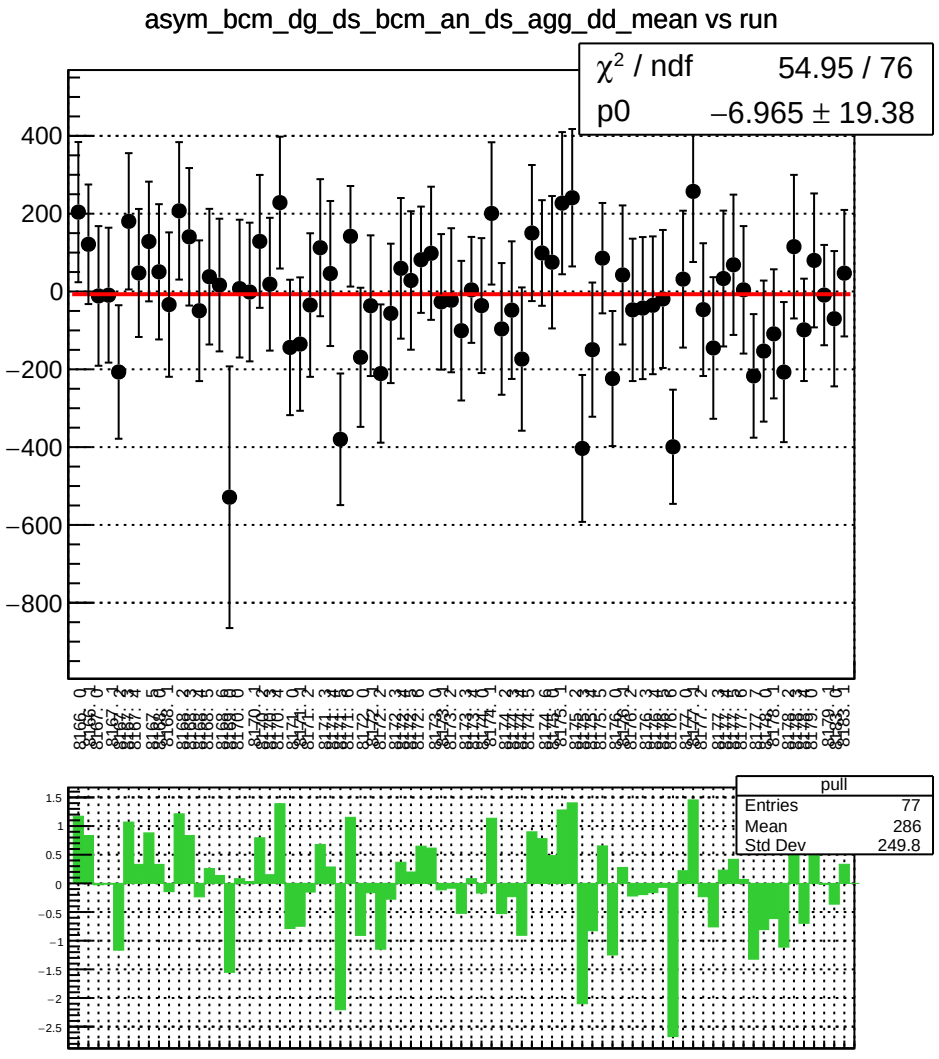

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 77.78 / 76
p0 48.85 ± 25.2
pull
Entries 77
Mean −42.16
Std Dev 90.2
pull1D
Entries 77
Mean 0.02349
Std Dev 1.005

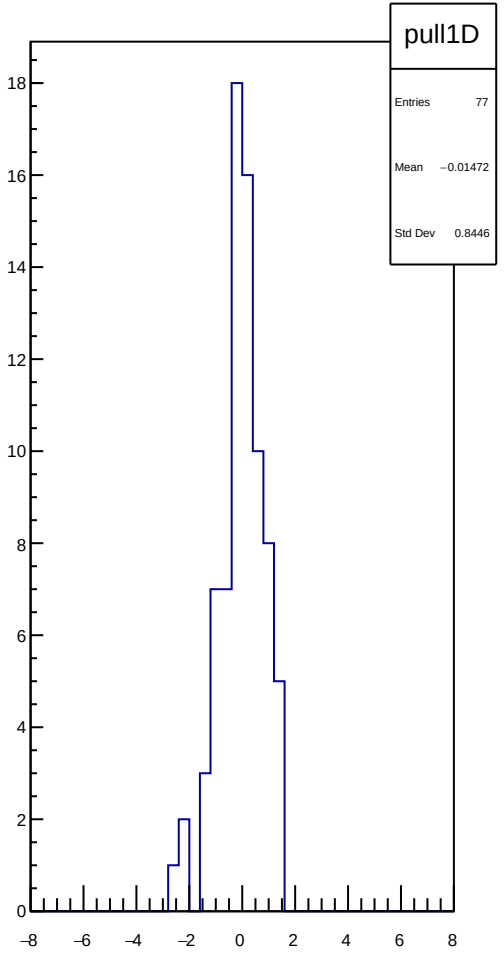

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 430 / 76
p0 21.76 ± 0.01782
23
22.5
22
21.5
21

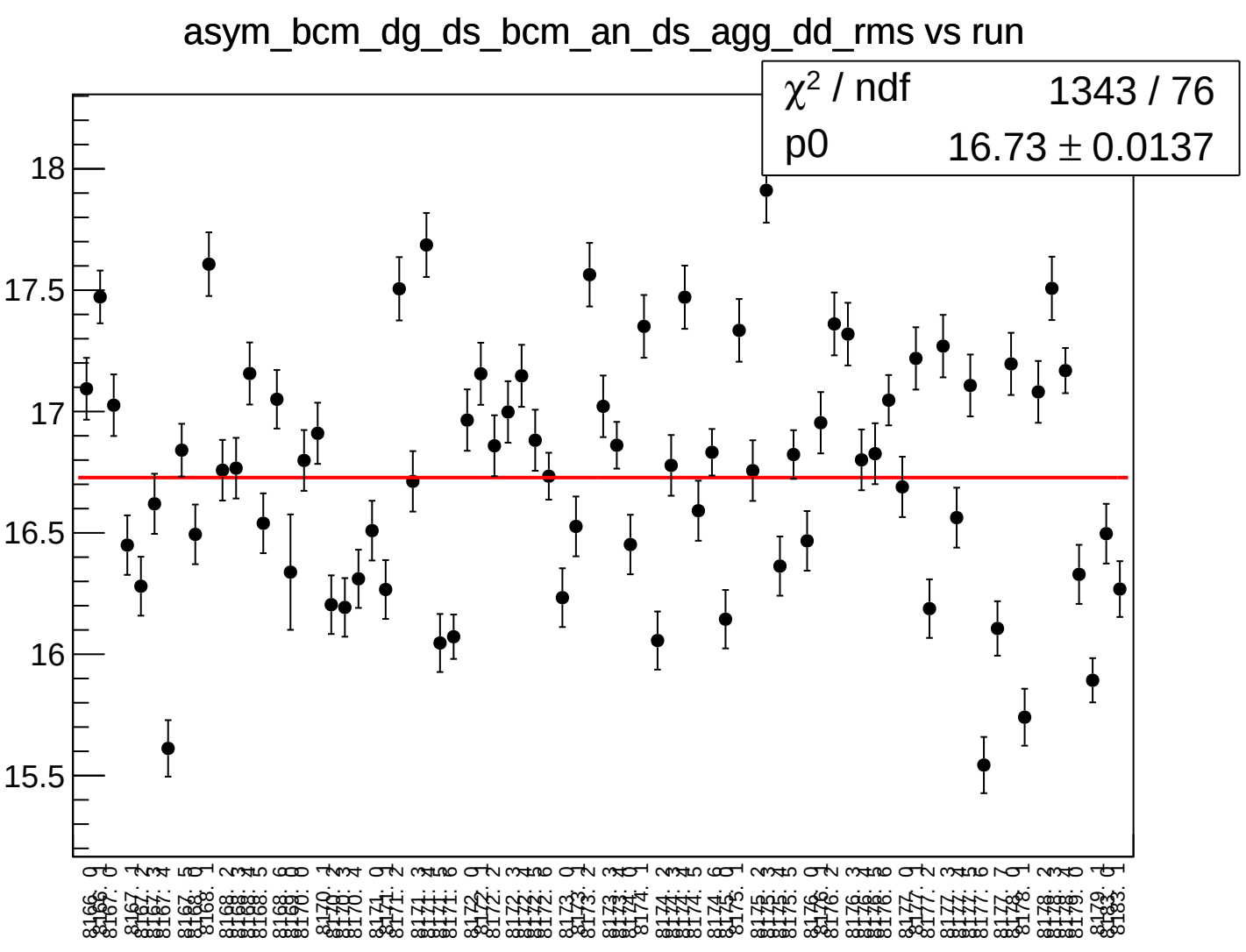

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 13.56 / 76
p0 −101.3 ± 178
pull
Entries 77
Mean 211.2
Std Dev 186.3

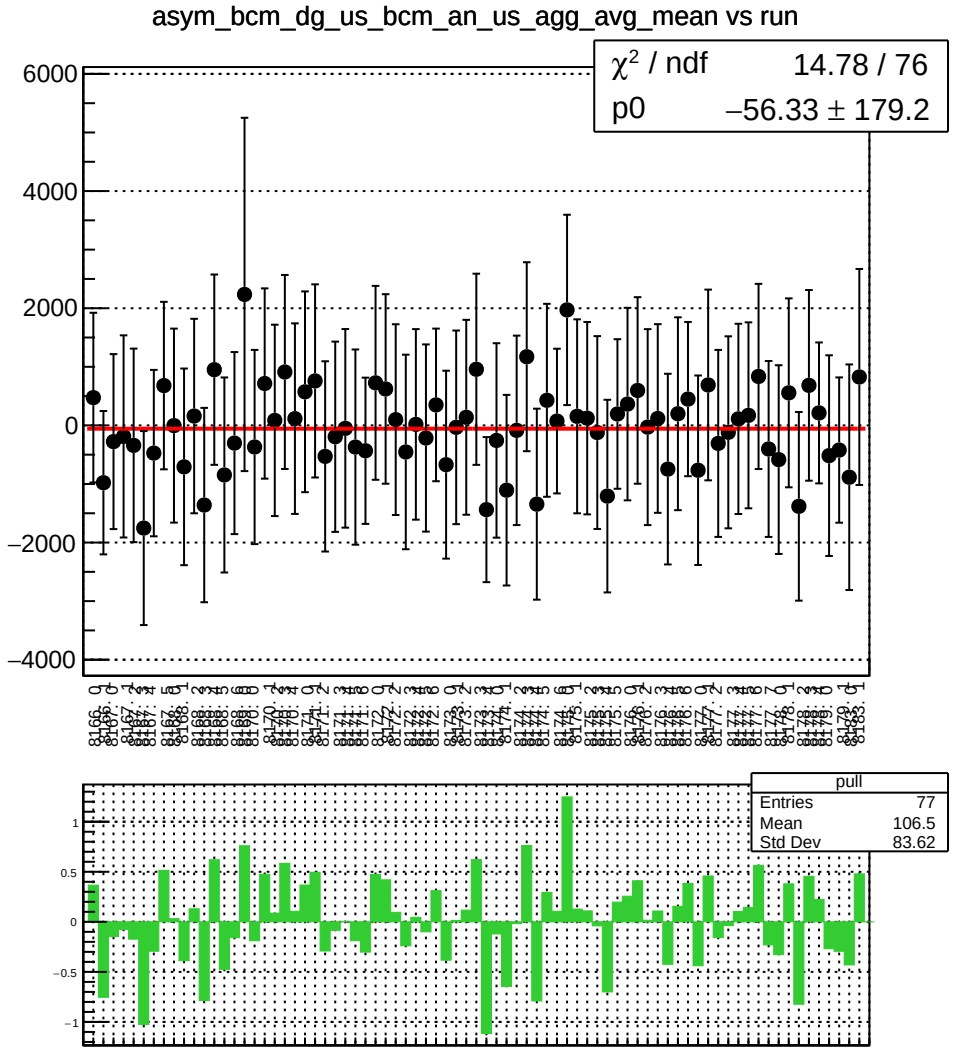

pull1D
Entries 77
Mean 0.003065
Std Dev 0.4197

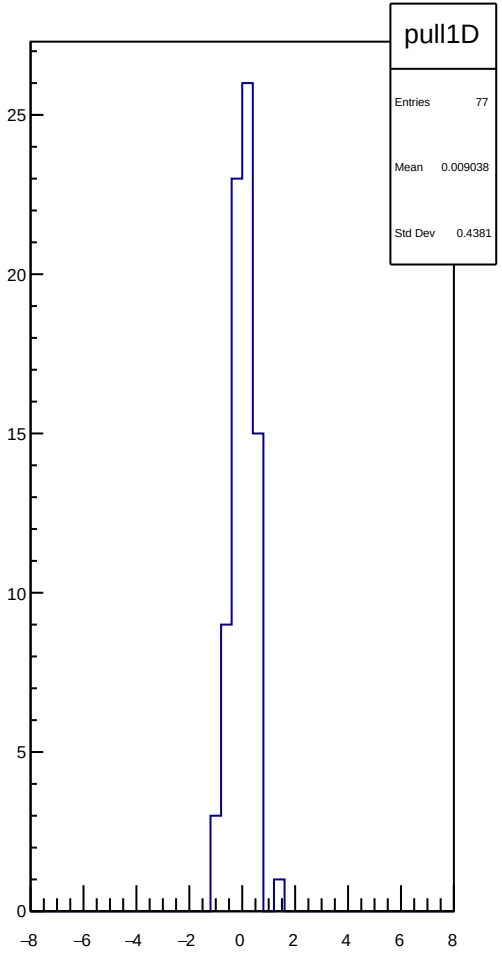

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2625 / 76
p0 153.6 ± 0.1259
190
180
170
160
150
140
130

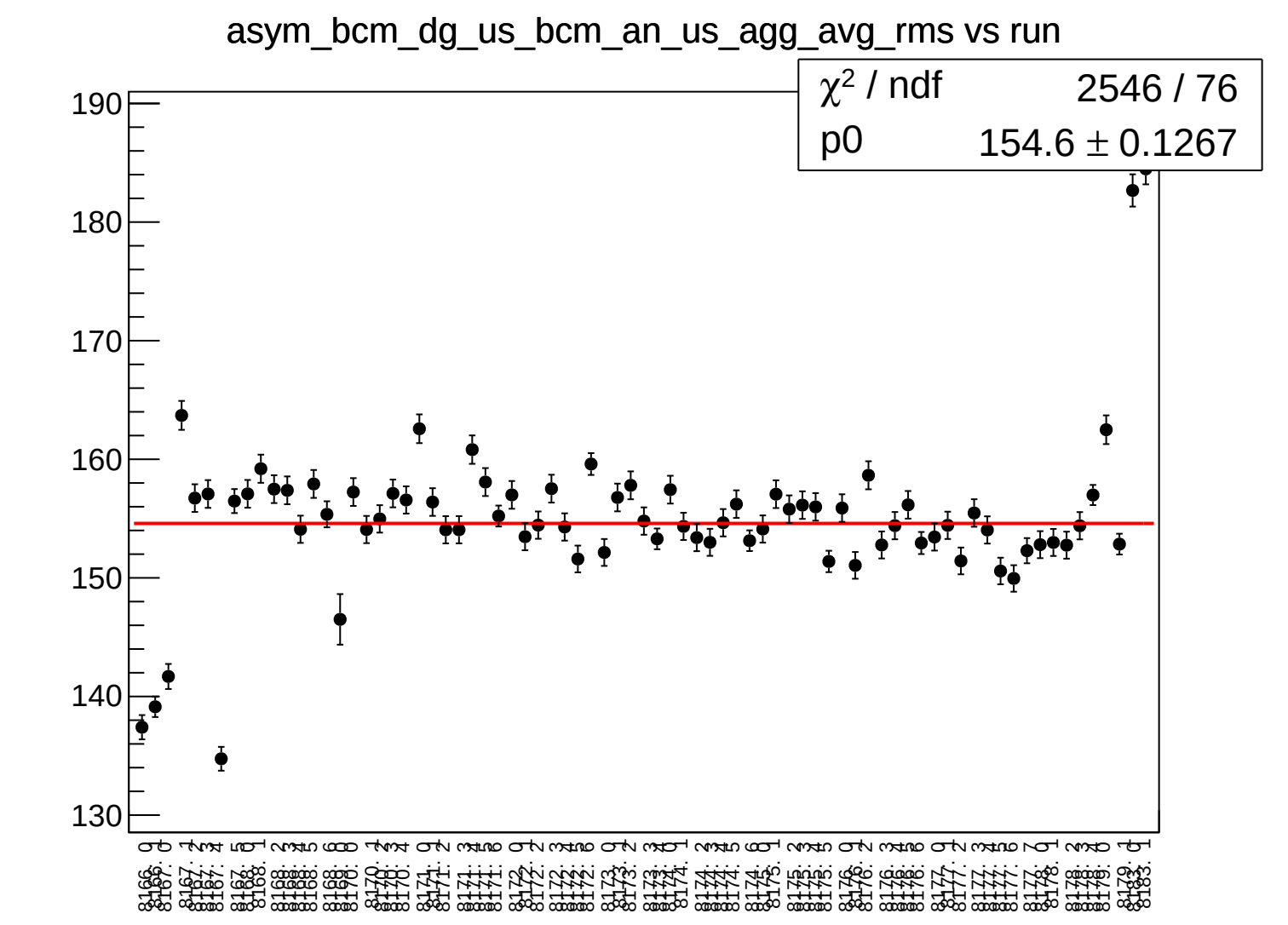

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 54.95 / 76
p0 −6.965 ± 19.38
pull
Entries 77
Mean 286
Std Dev 249.8

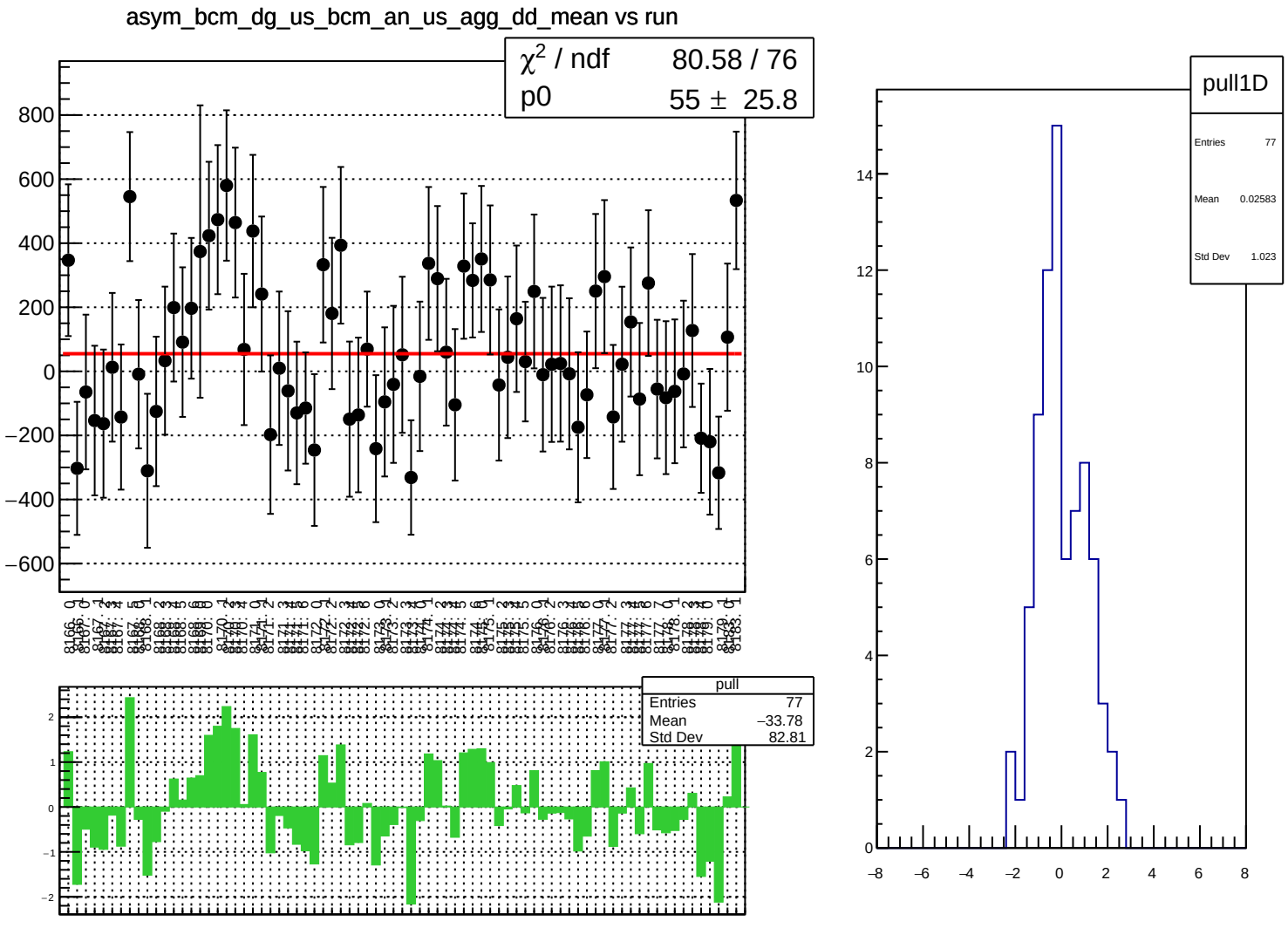

pull1D
Entries 77
Mean −0.01472
Std Dev 0.8446

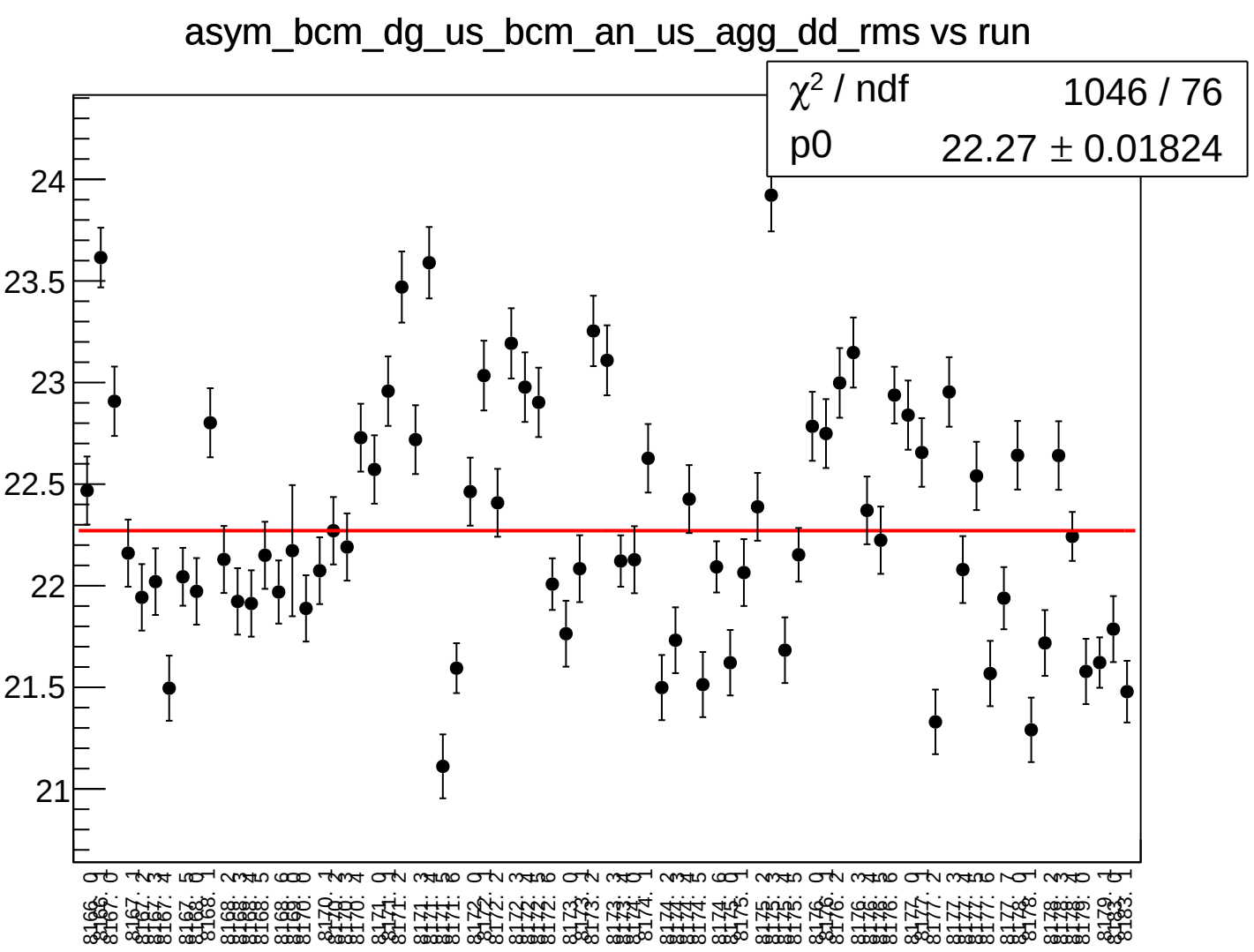

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1343 / 76
p0 16.73 ± 0.0137
18
17.5
17
16.5
16
15.5

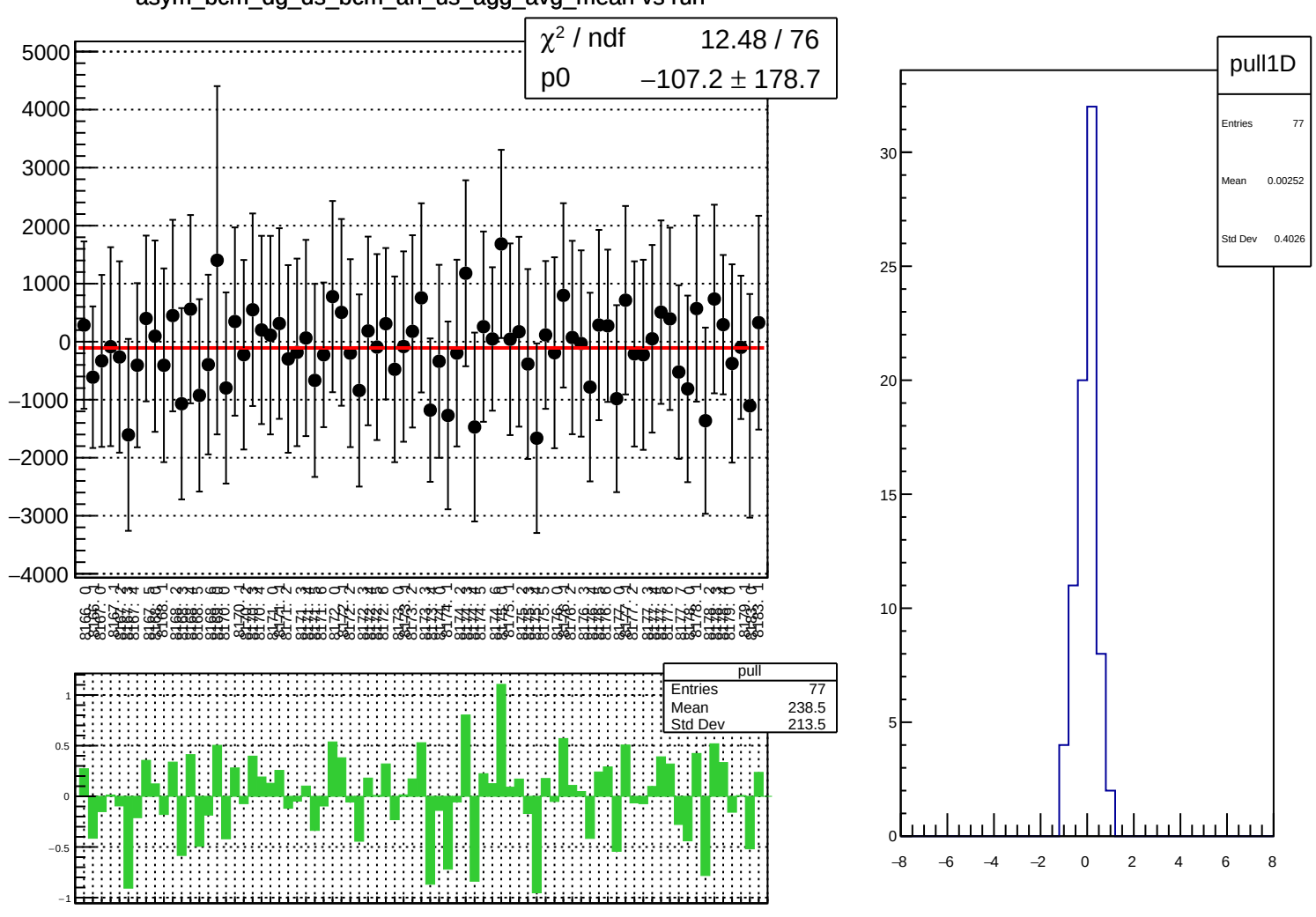

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.78 / 76
p0 −56.33 ± 179.2
pull
Entries 77
Mean 106.5
Std Dev 83.62

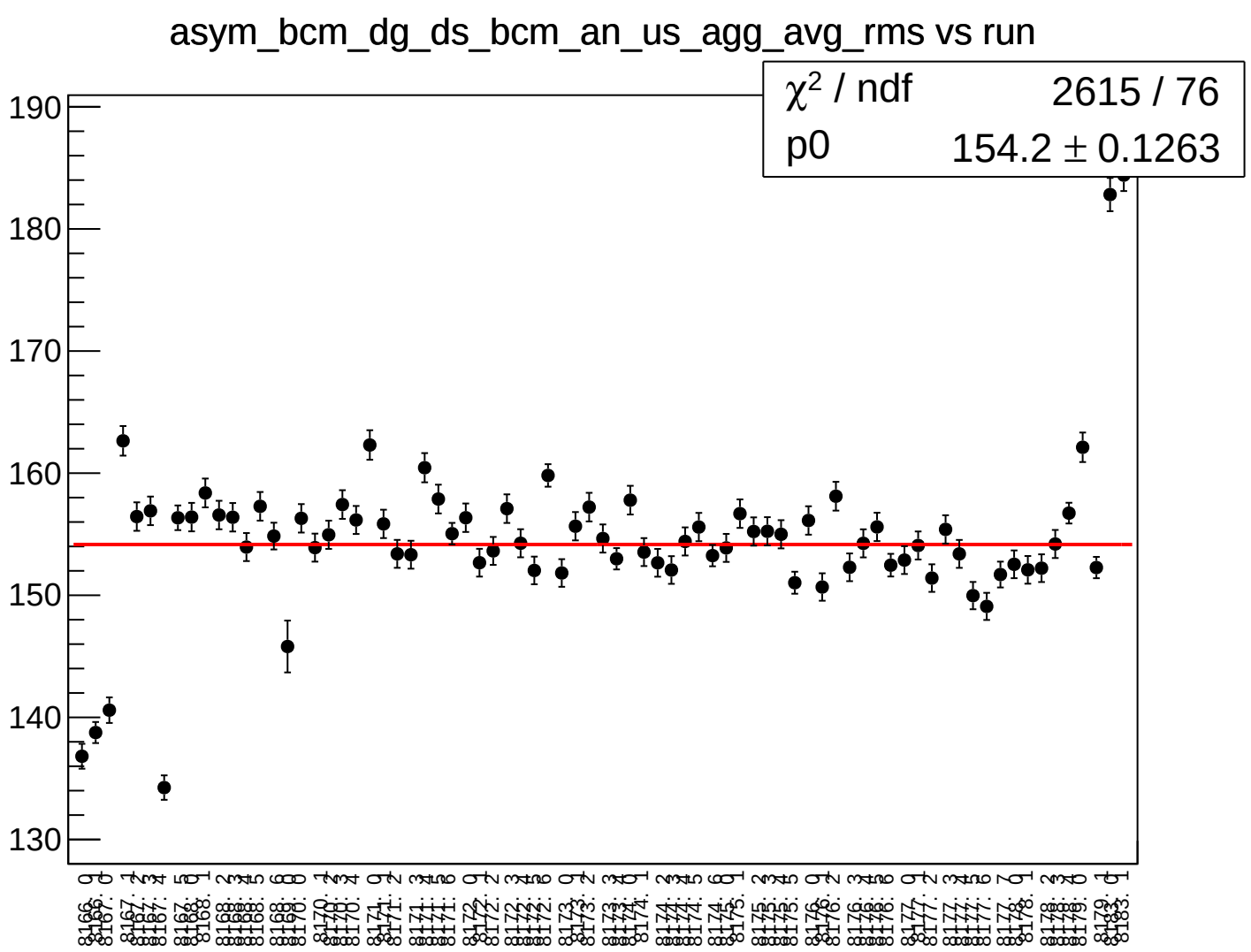

pull1D
Entries 77
Mean 0.009038
Std Dev 0.4381

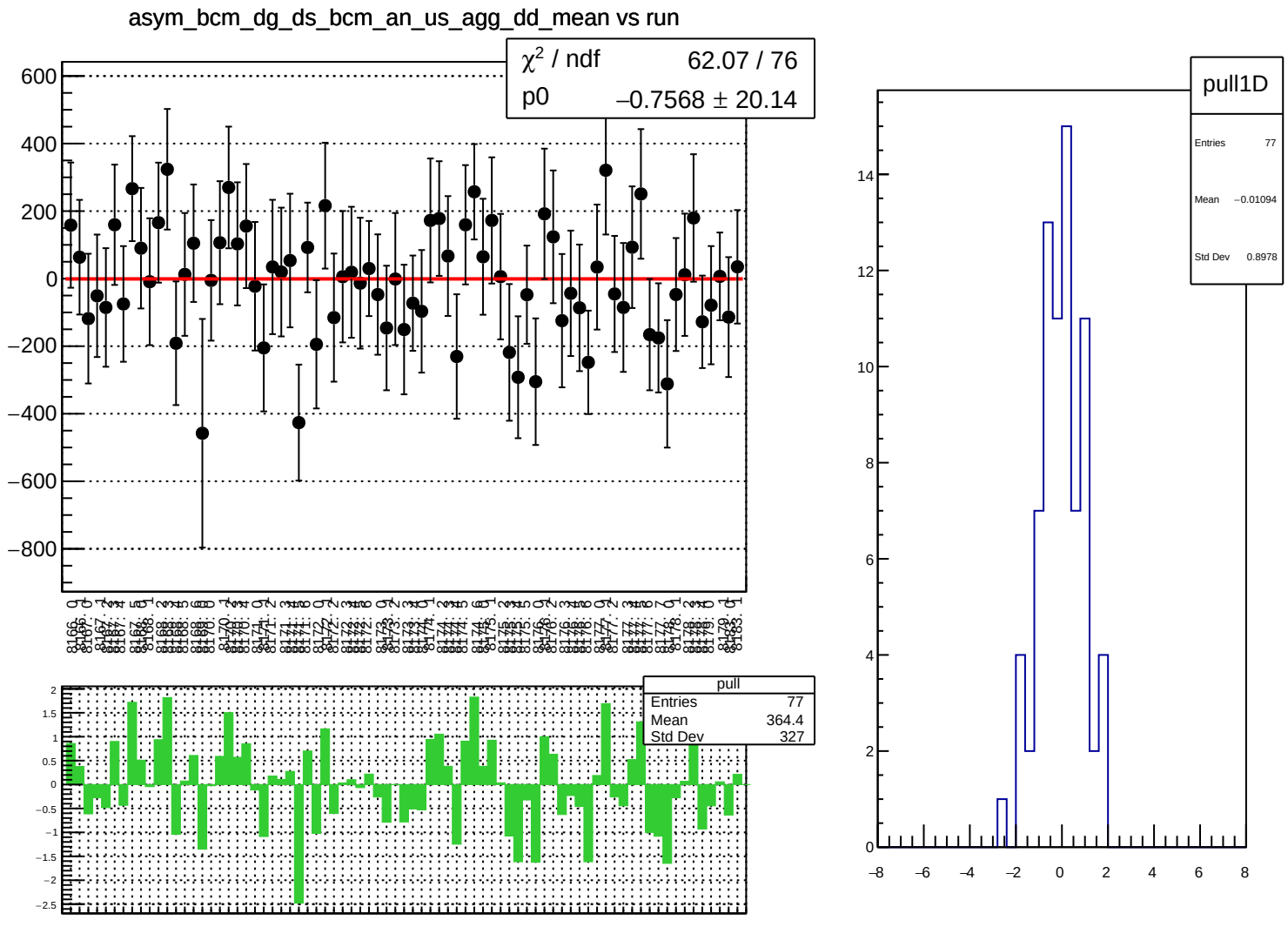

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2546 / 76
p0 154.6 ± 0.1267
190
180
170
160
150
140
130

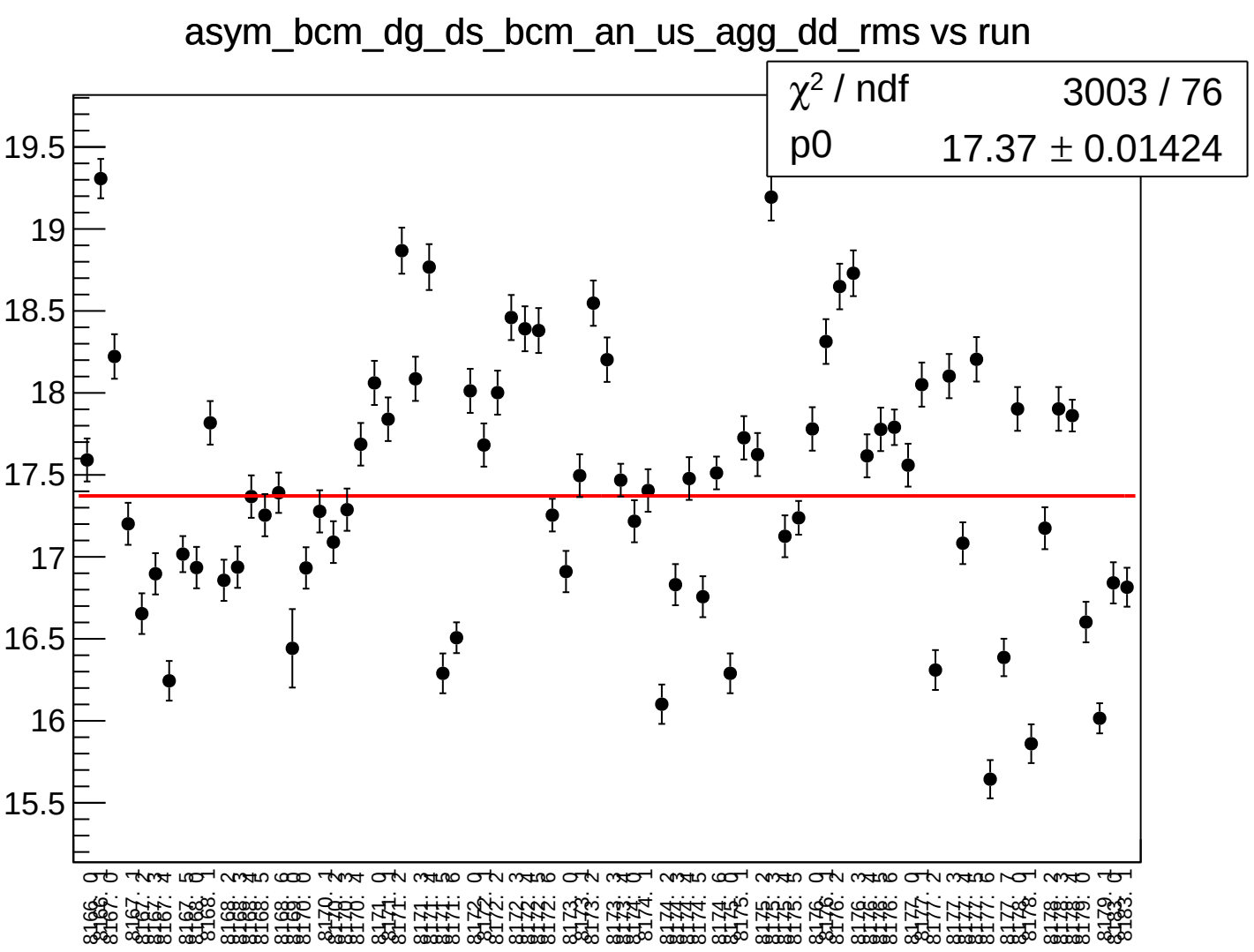

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 80.58 / 76
p0 55 ± 25.8
pull
Entries 77
Mean −33.78
Std Dev 82.81
pull1D
Entries 77
Mean 0.02583
Std Dev 1.023

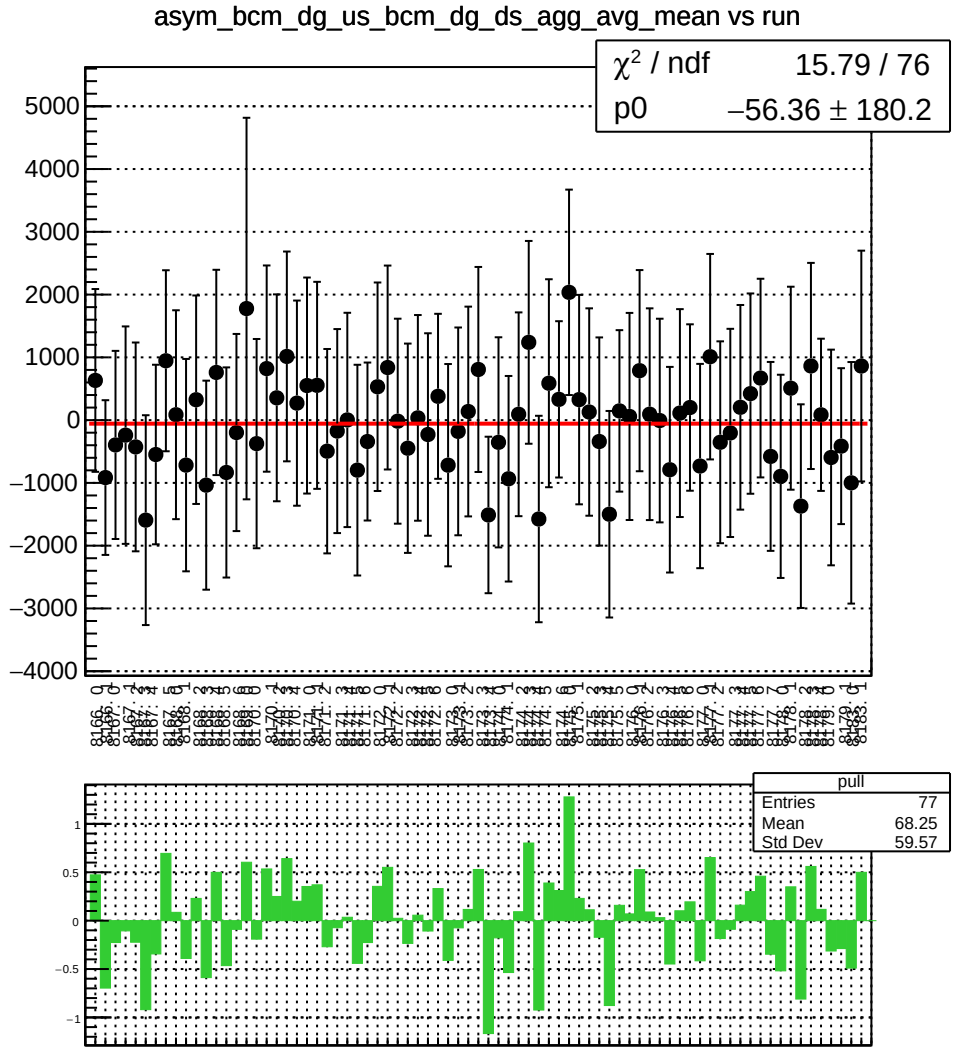

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1046 / 76
p0 22.27 ± 0.01824
24
23.5
23
22.5
22
21.5
21

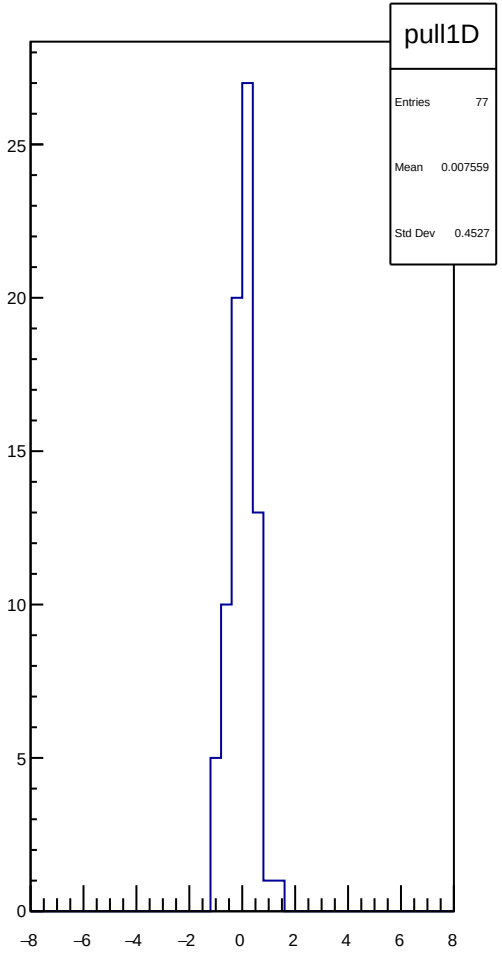

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 12.48 / 76
p0 −107.2 ± 178.7
pull
Entries 77
Mean 238.5
Std Dev 213.5
pull1D
Entries 77
Mean 0.00252
Std Dev 0.4026

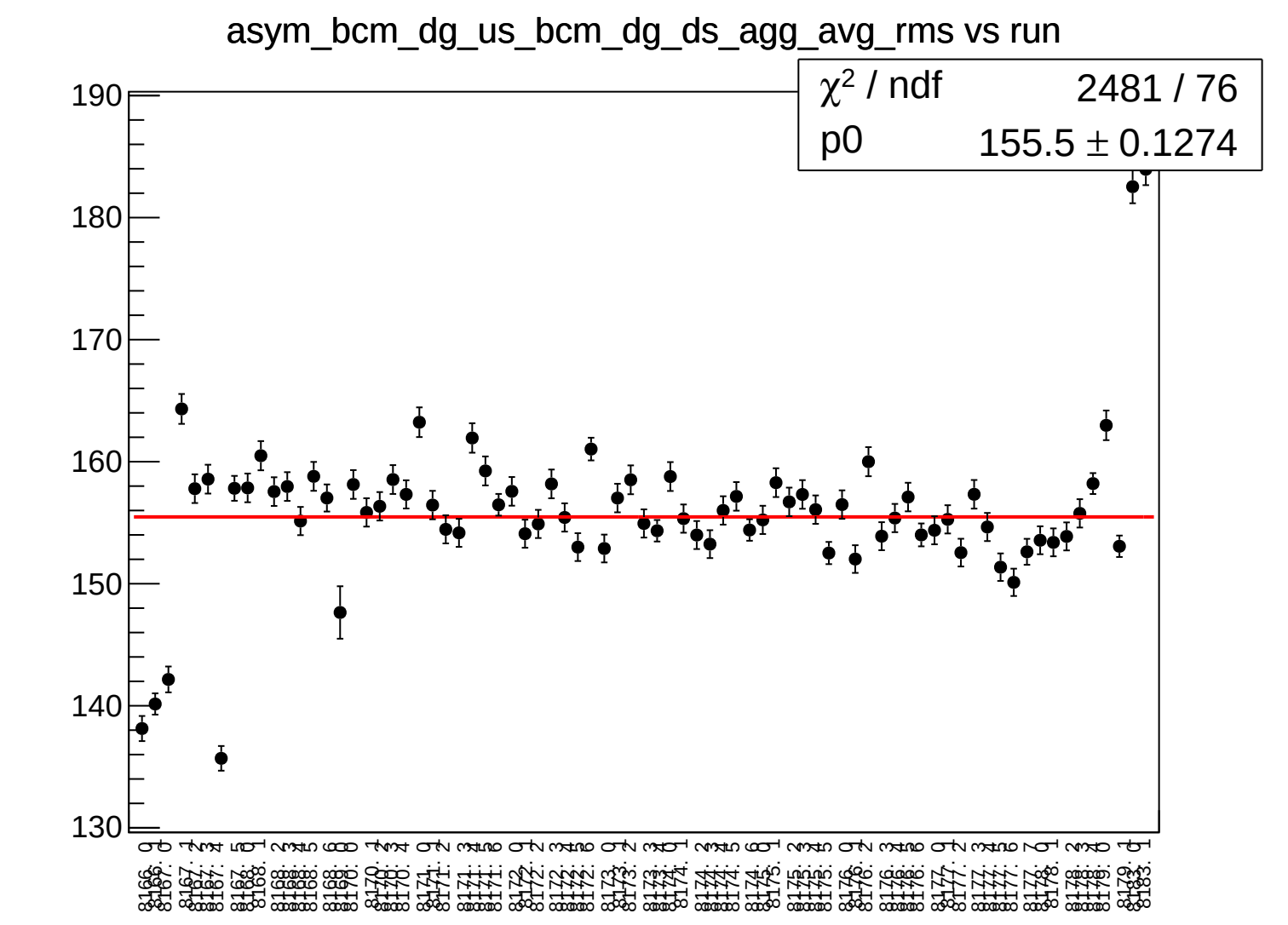

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2615 / 76
p0 154.2 ± 0.1263
190
180
170
160
150
140
130

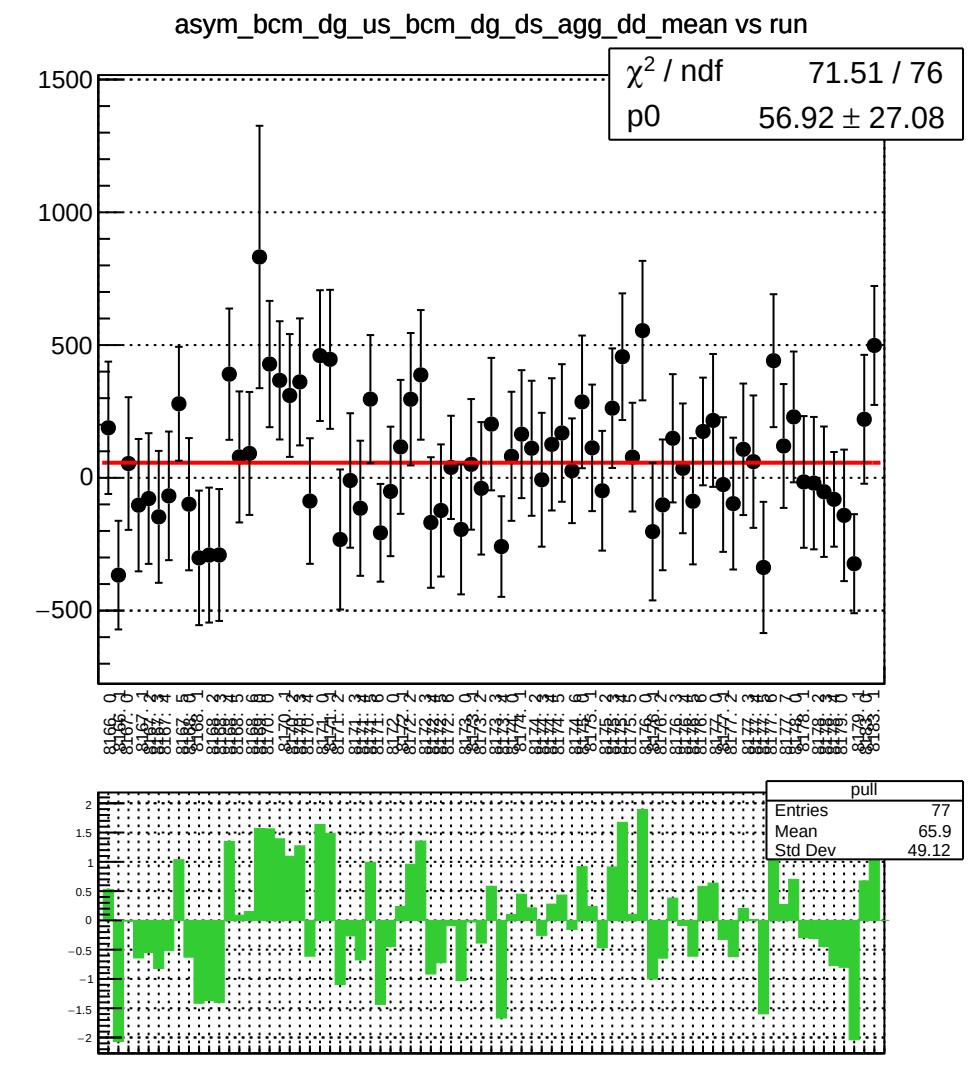

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 62.07 / 76
p0 −0.7568 ± 20.14
pull
Entries 77
Mean 364.4
Std Dev 327
pull1D
Entries 77
Mean −0.01094
Std Dev 0.8978

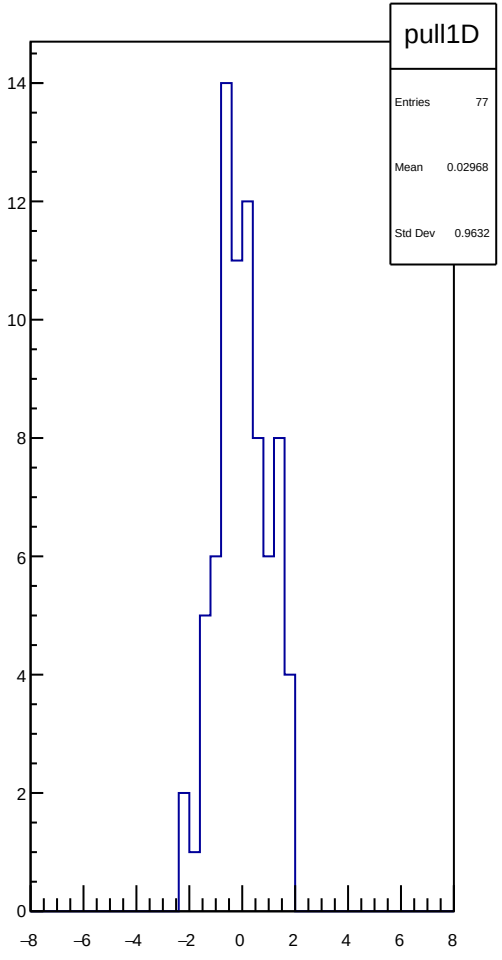

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3003 / 76
p0 17.37 ± 0.01424
19.5
19
18.5
18
17.5
17
16.5
16
15.5

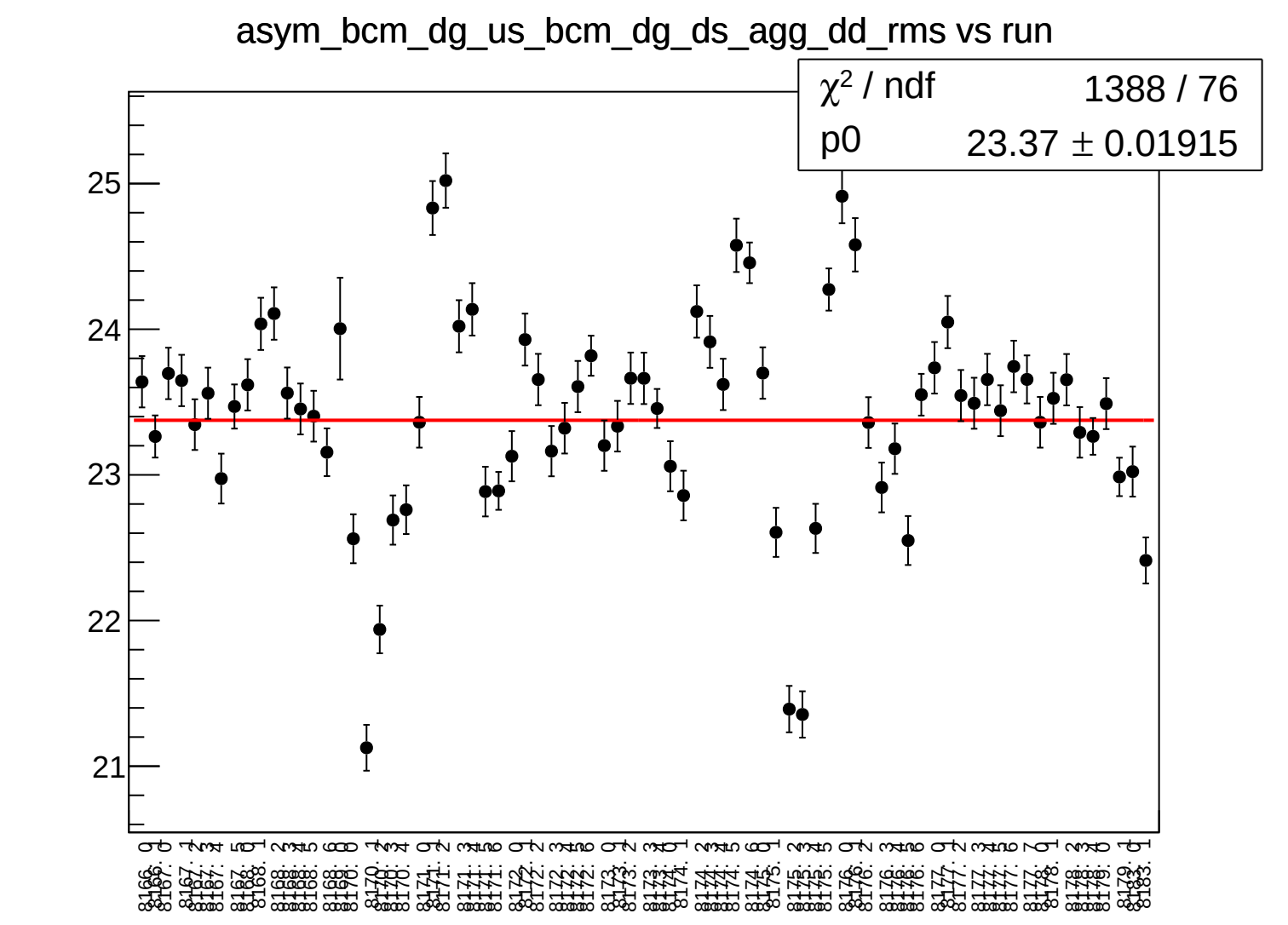

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.79 / 76
p0 −56.36 ± 180.2
pull
Entries 77
Mean 68.25
Std Dev 59.57

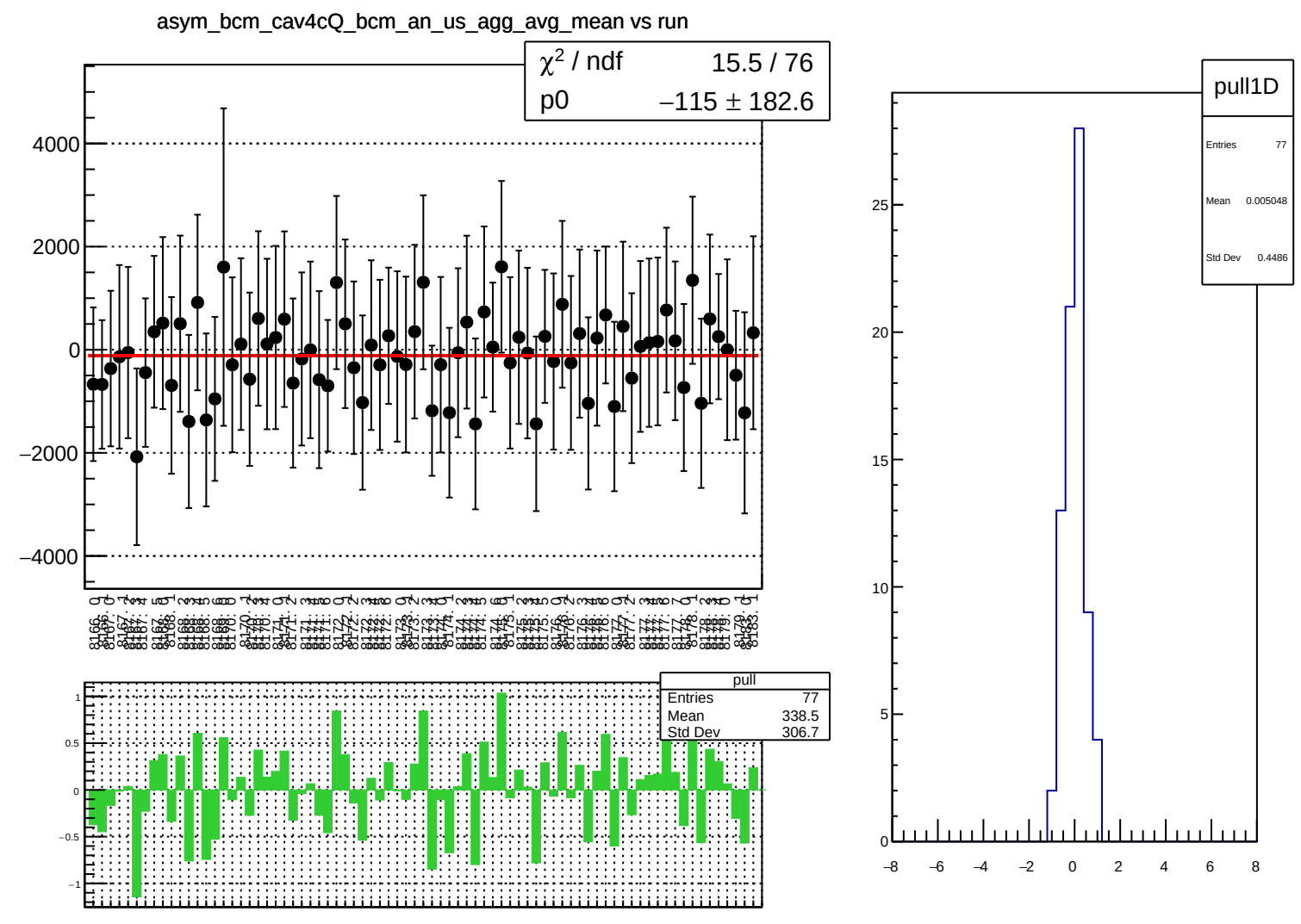

pull1D
Entries 77
Mean 0.007559
Std Dev 0.4527

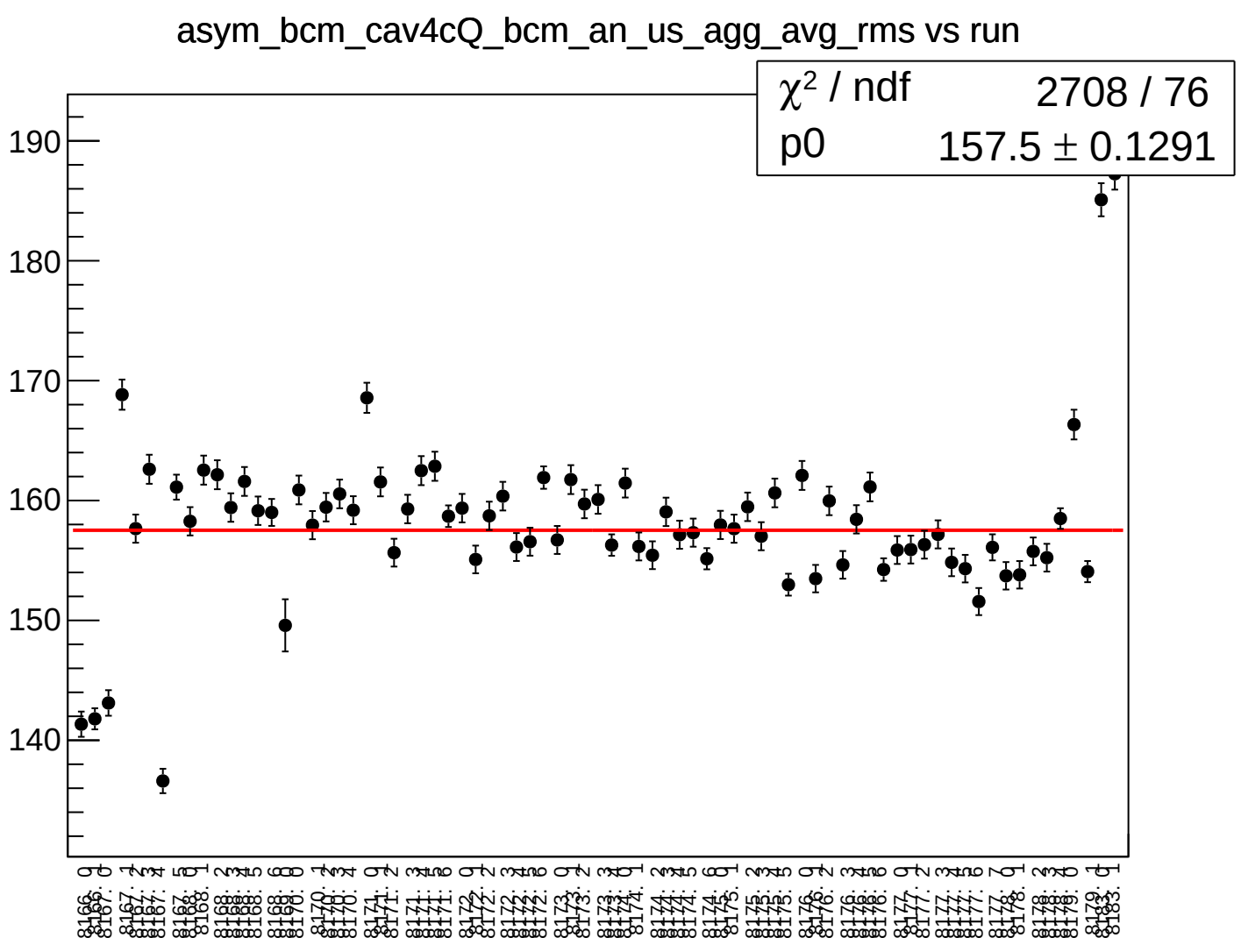

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2481 / 76
p0 155.5 ± 0.1274
190
180
170
160
150
140
130

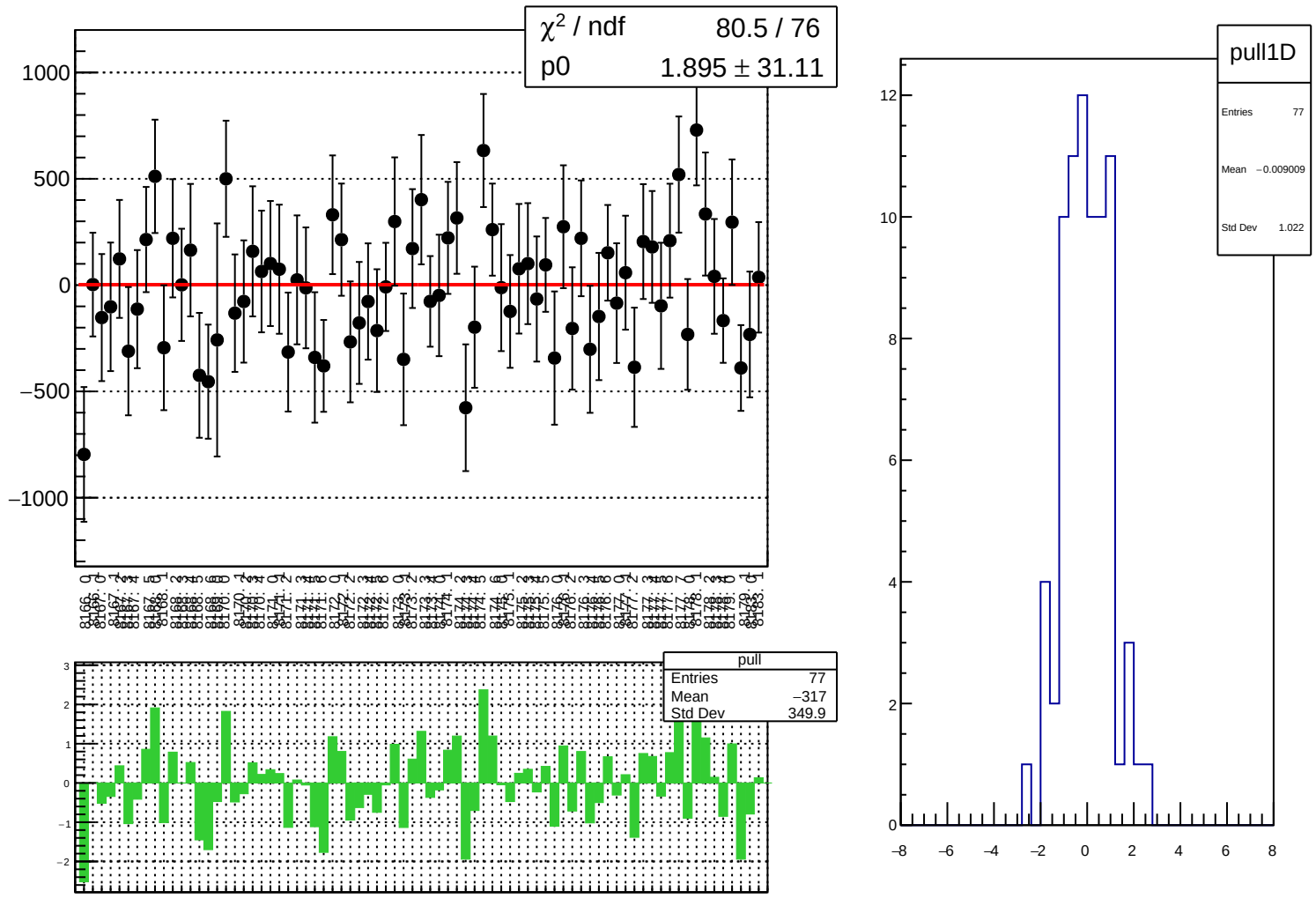

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 71.51 / 76
p0 56.92 ± 27.08
pull
Entries 77
Mean 65.9
Std Dev 49.12

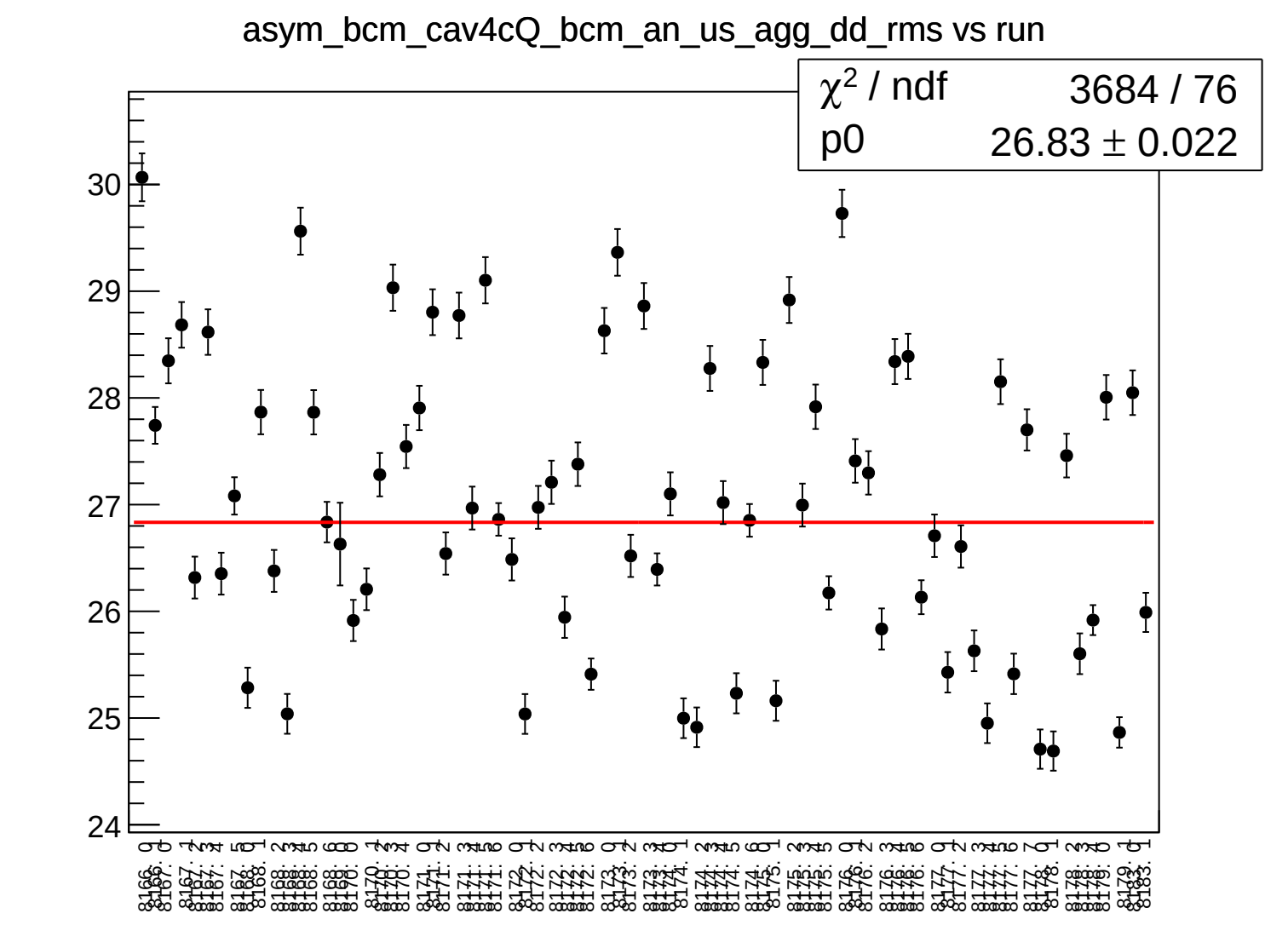

pull1D
Entries 77
Mean 0.02968
Std Dev 0.9632

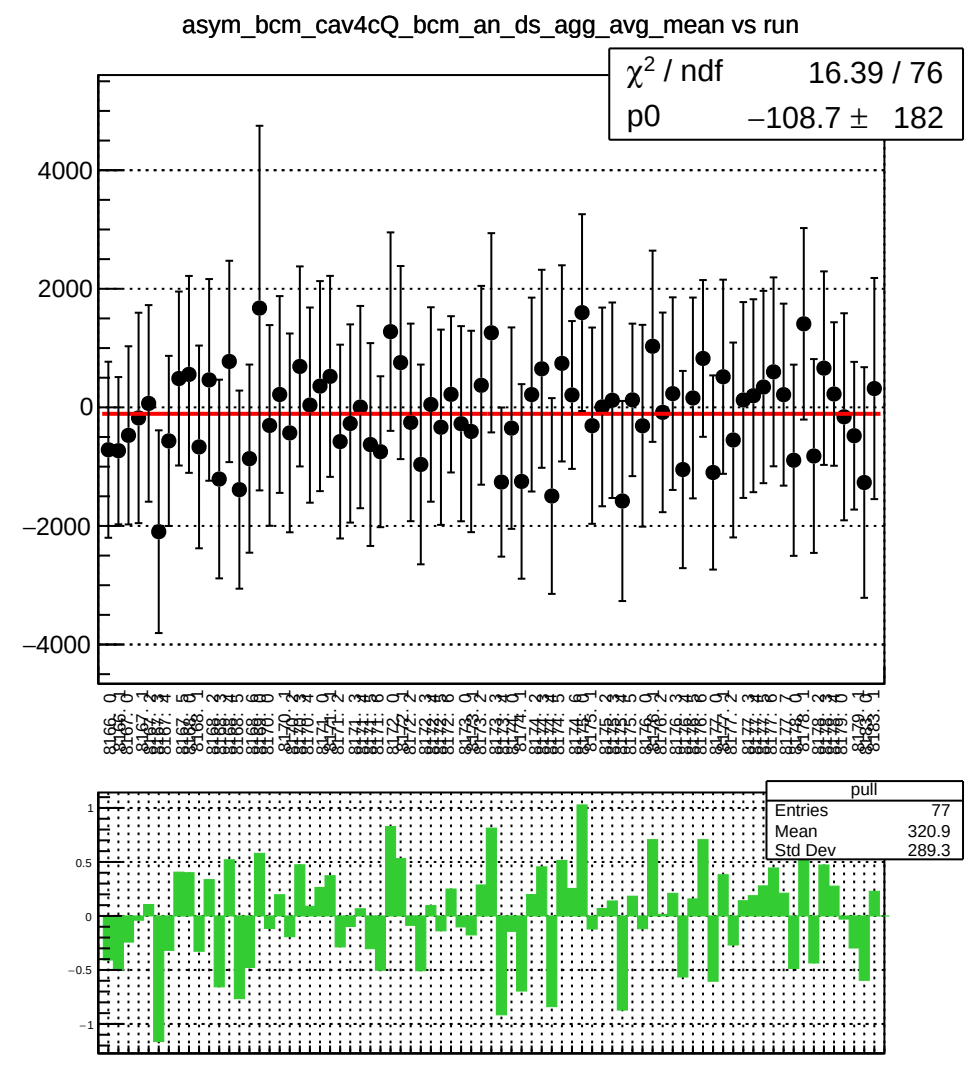

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1388 / 76
p0 23.37 ± 0.01915
25
24
23
22
21

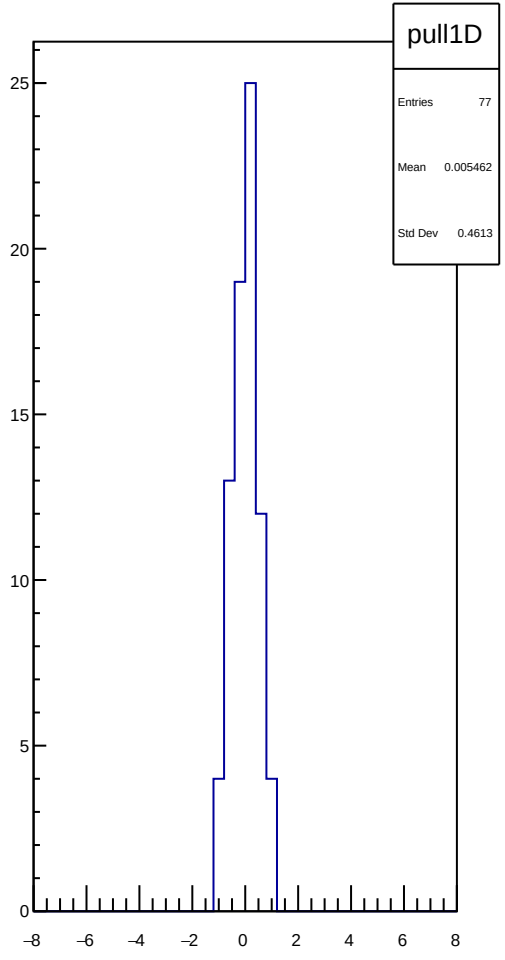

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.5 / 76
p0 −115 ± 182.6
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 338.5
Std Dev 306.7
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.005048
Std Dev 0.4486
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

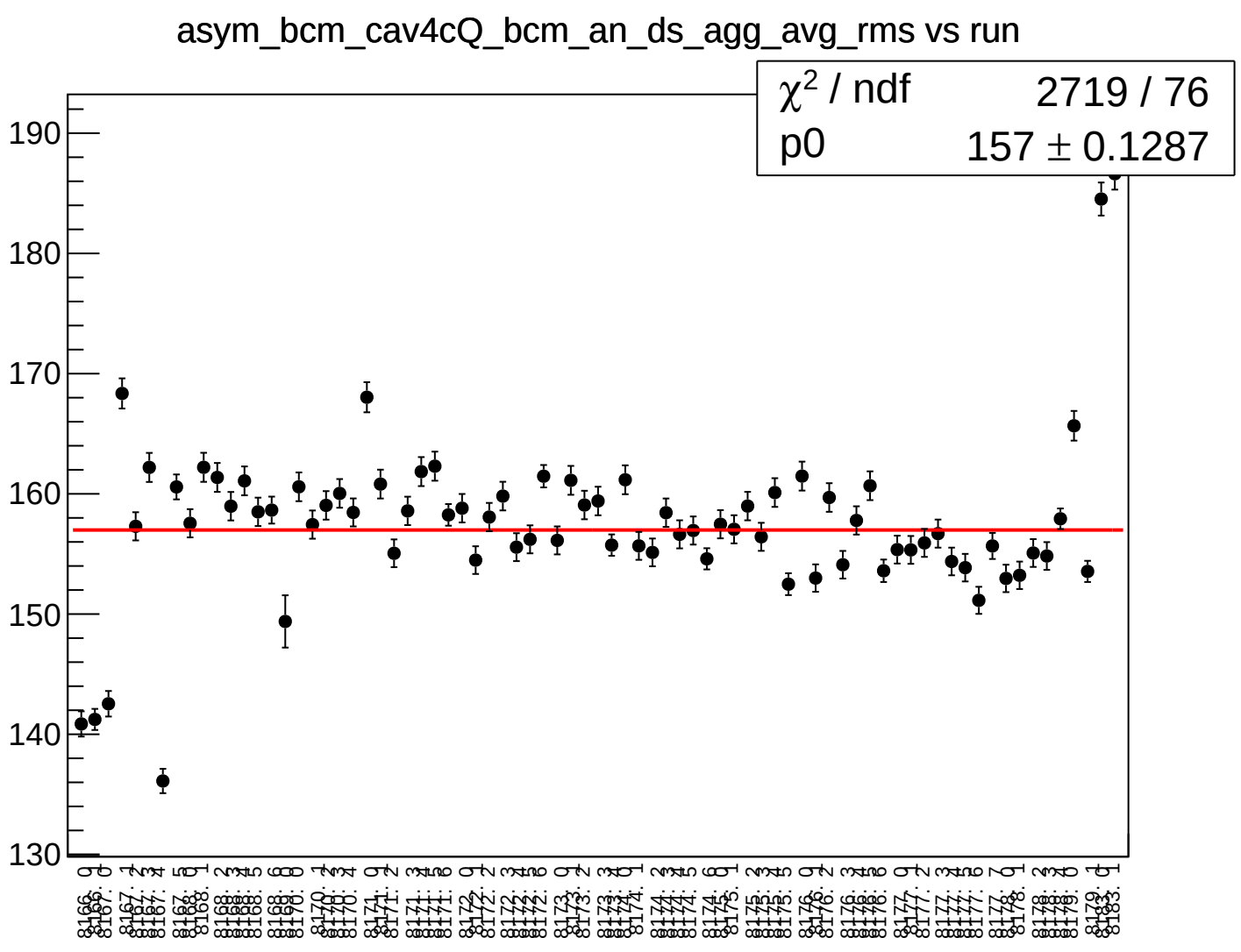

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2708 / 76
p0 157.5 ± 0.1291
190
180
170
160
150
140

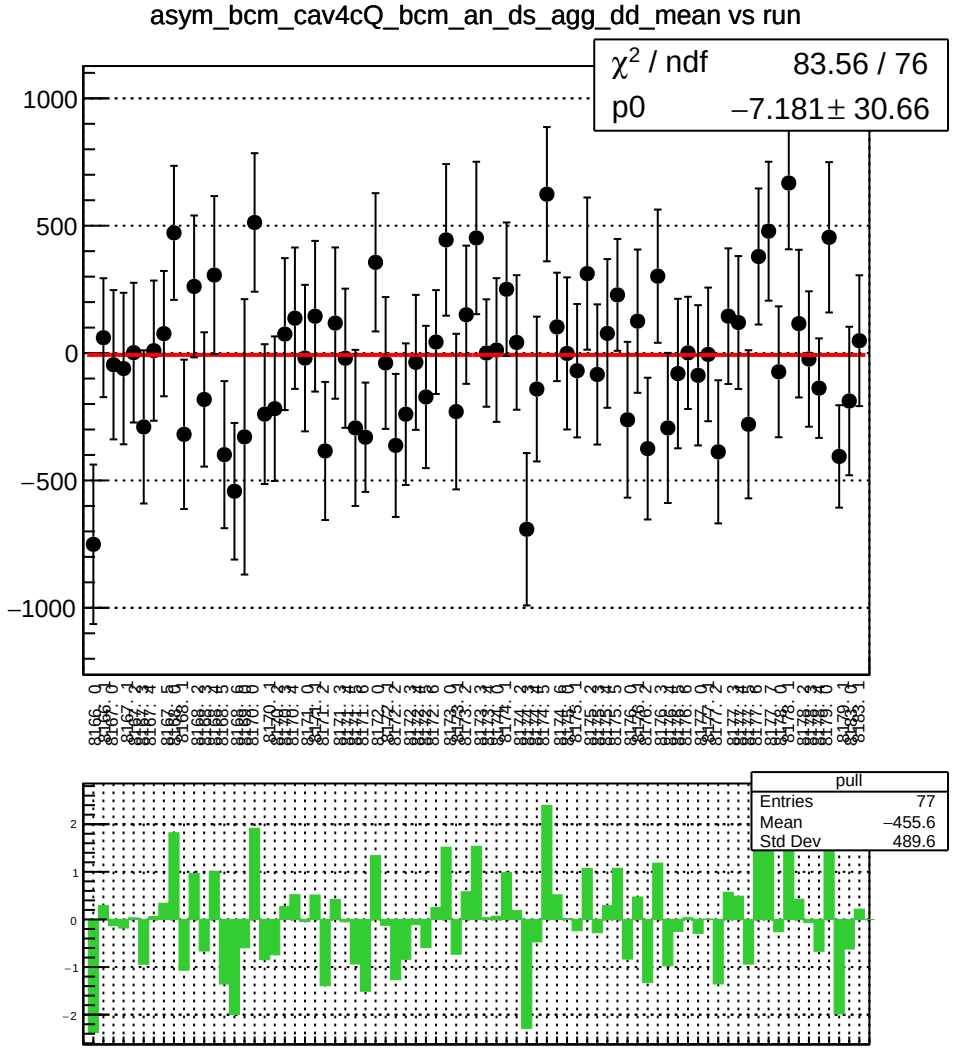

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 80.5 / 76
p0 1.895 ± 31.11
1000
500
0
−500
−1000
pull
Entries 77
Mean −317
Std Dev 349.9
3
2
1
0
−1
−2
pull1D
Entries 77
Mean −0.009009
Std Dev 1.022
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

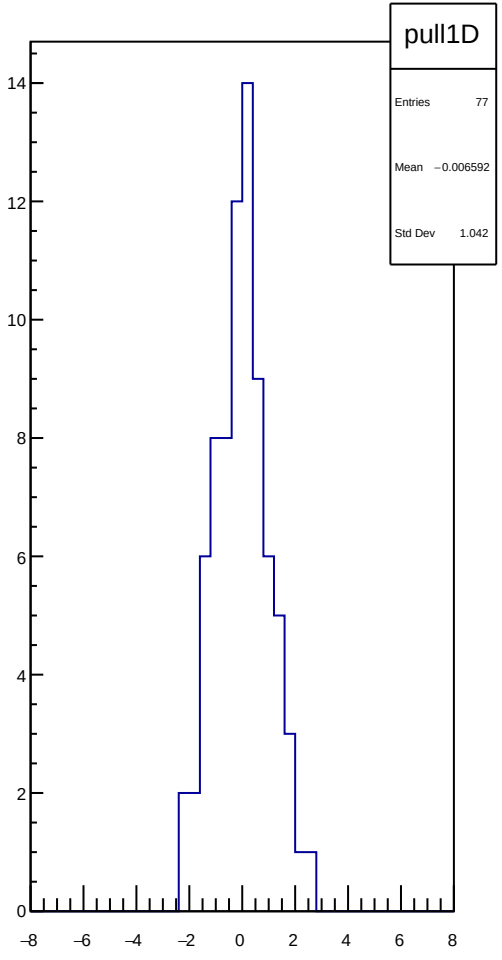

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3684 / 76
p0 26.83 ± 0.022
30
29
28
27
26
25
24

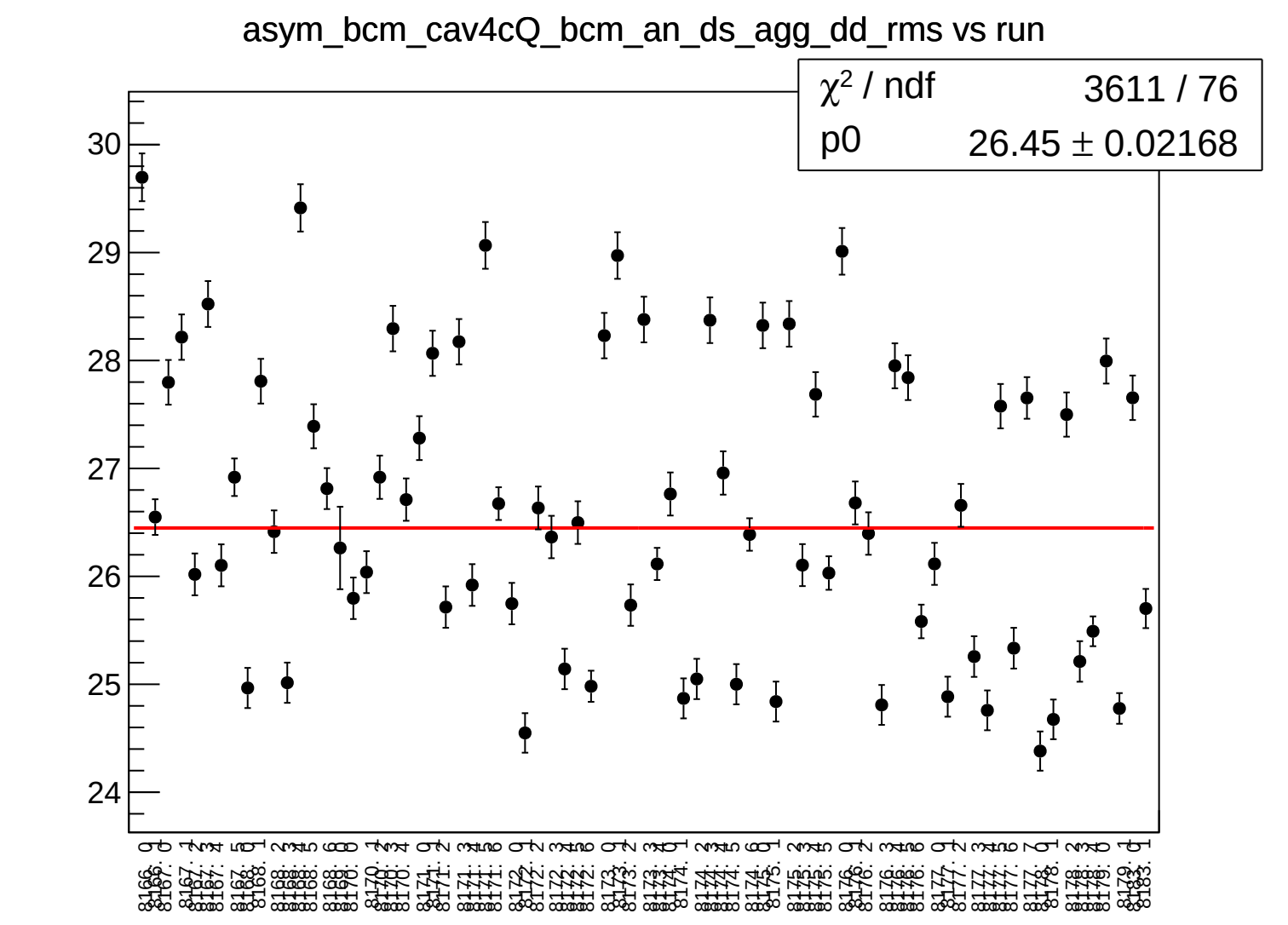

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.39 / 76
p0 −108.7 ± 182
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 320.9
Std Dev 289.3
1
0.5
0
−0.5
−1

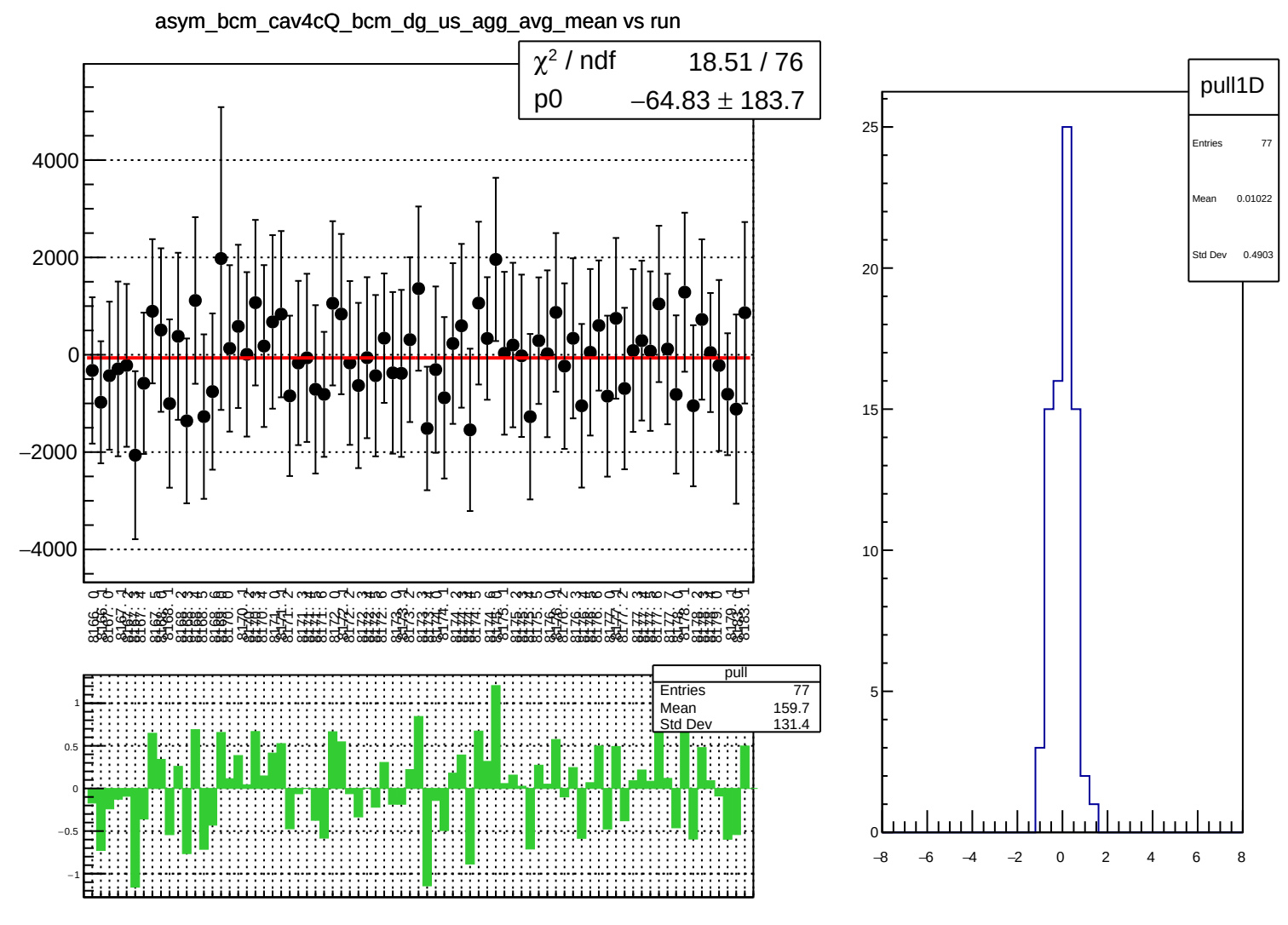

pull1D
Entries 77
Mean 0.005462
Std Dev 0.4613
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

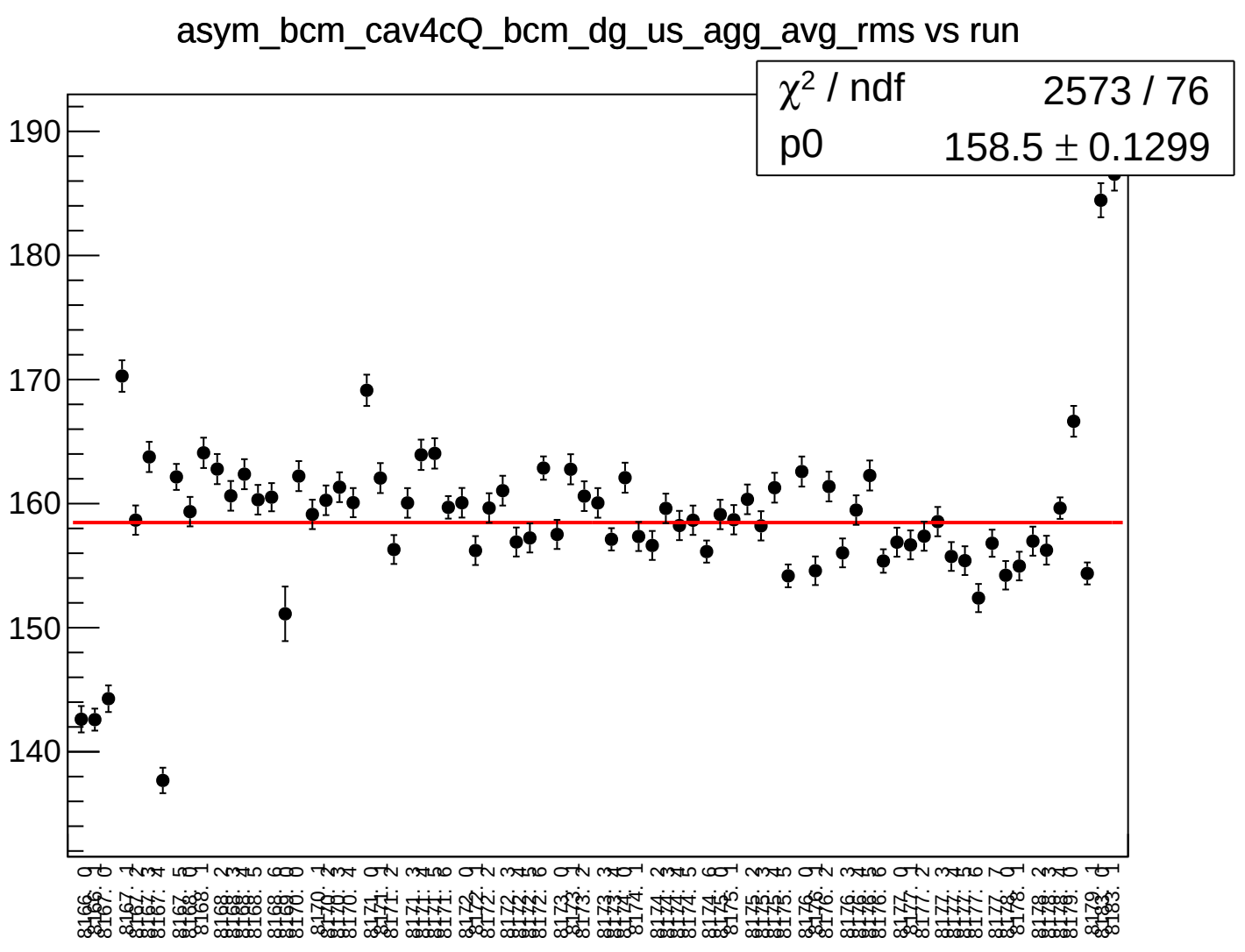

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2719 / 76
p0 157 ± 0.1287
190
180
170
160
150
140
130

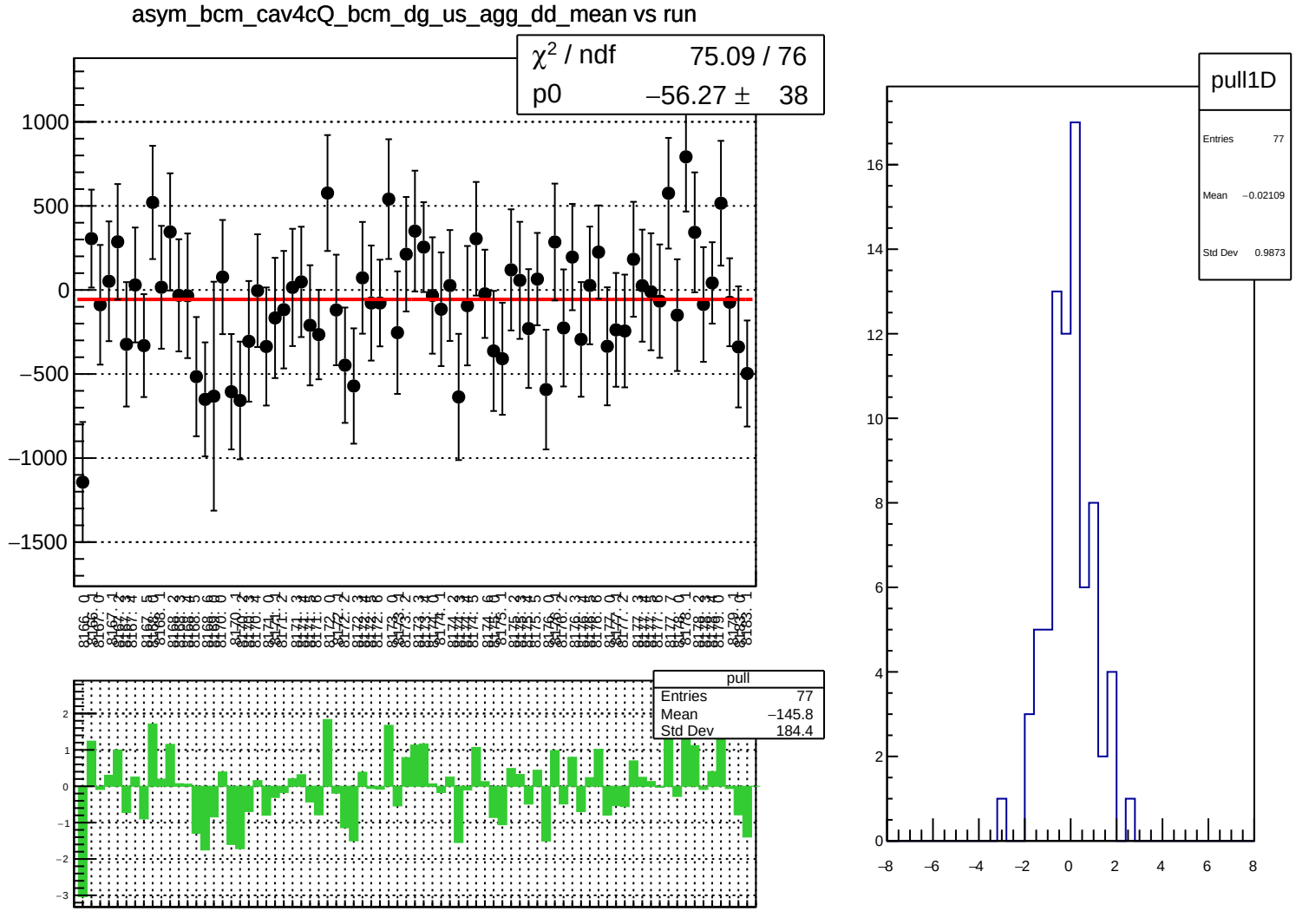

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 83.56 / 76
p0 −7.181 ± 30.66
1000
500
0
−500
−1000
pull
Entries 77
Mean −455.6
Std Dev 489.6
2
1
0
−1
−2

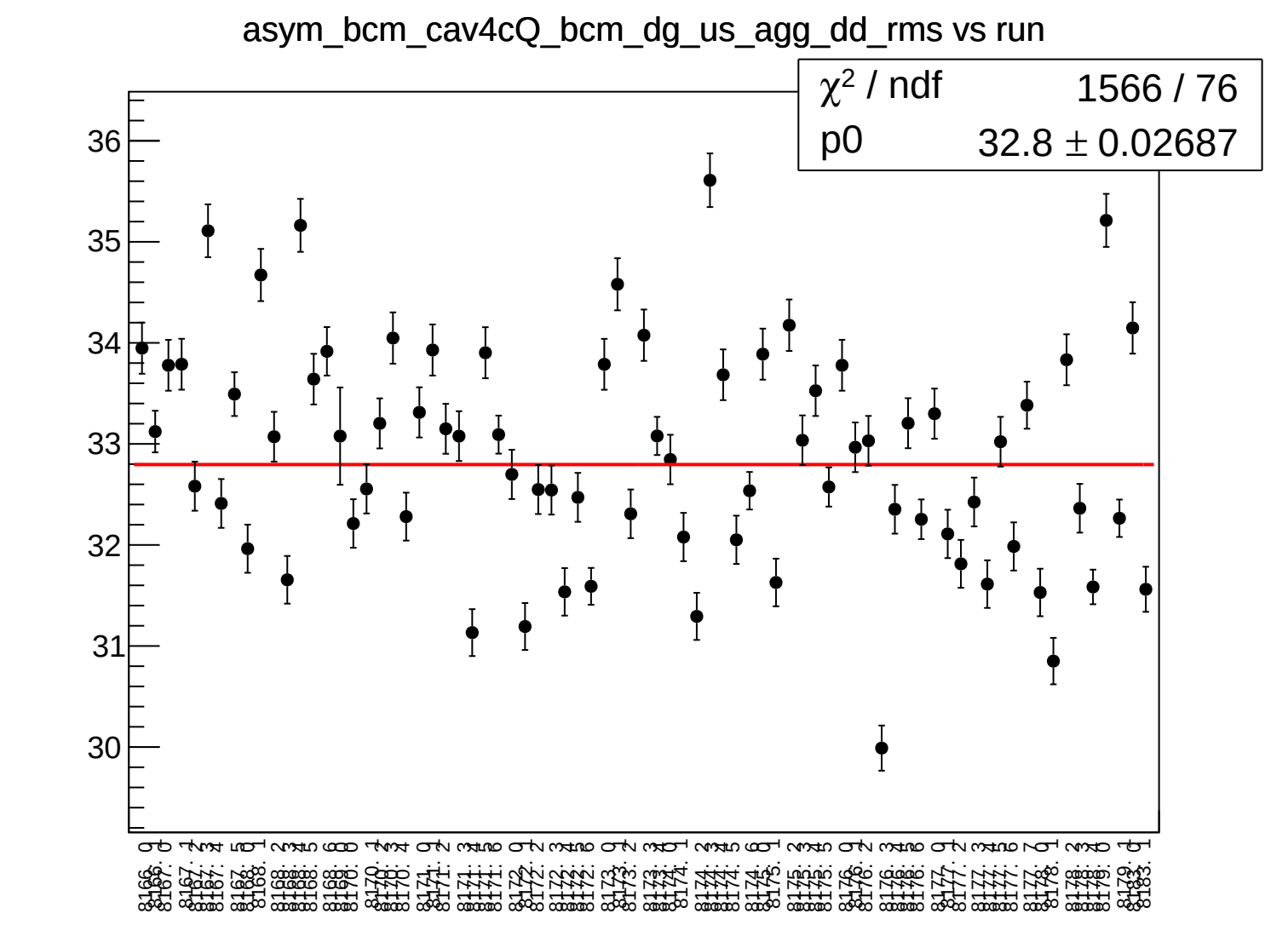

pull1D
Entries 77
Mean −0.006592
Std Dev 1.042
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

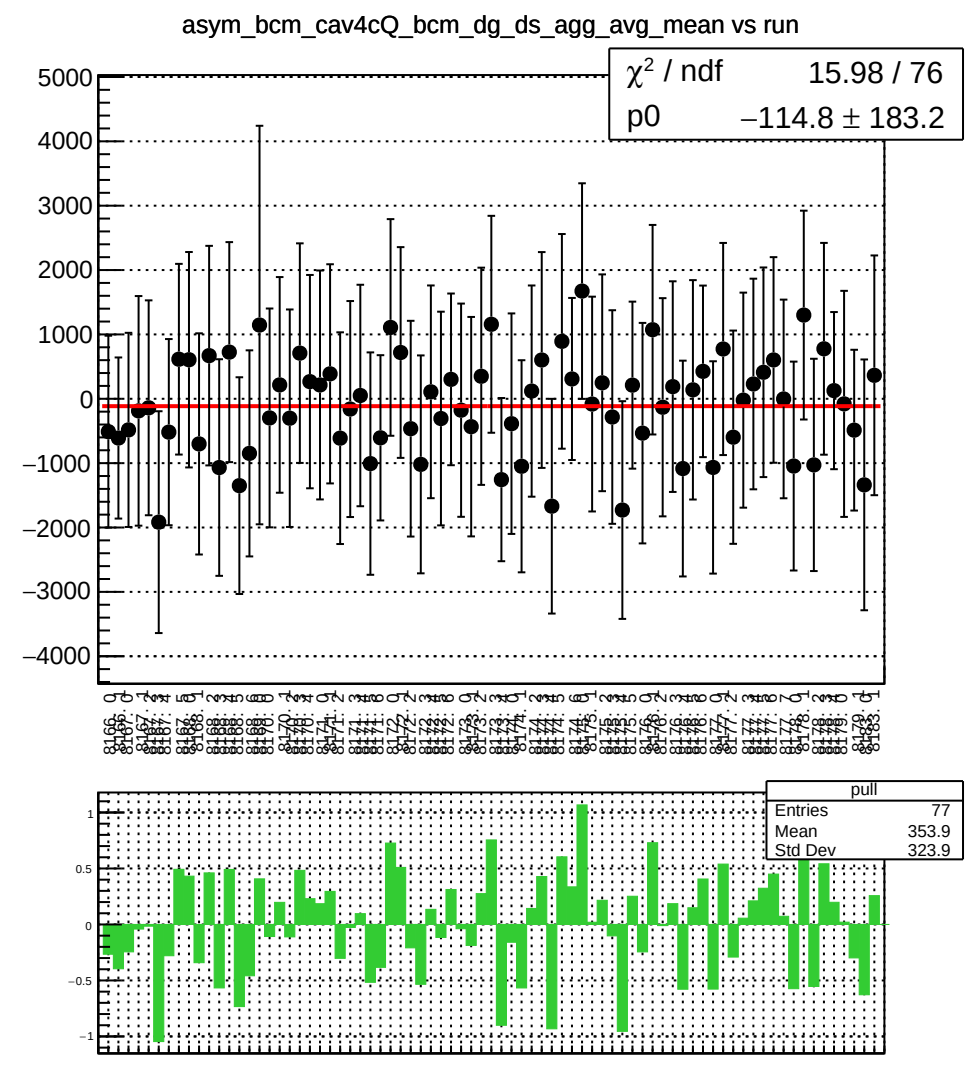

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3611 / 76
p0 26.45 ± 0.02168
30
29
28
27
26
25
24

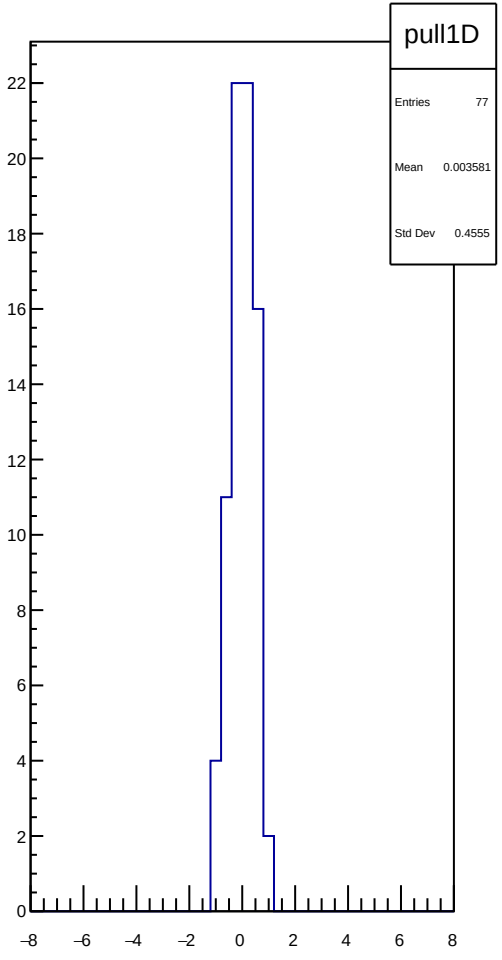

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 18.51 / 76
p0 −64.83 ± 183.7
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 159.7
Std Dev 131.4
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.01022
Std Dev 0.4903
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

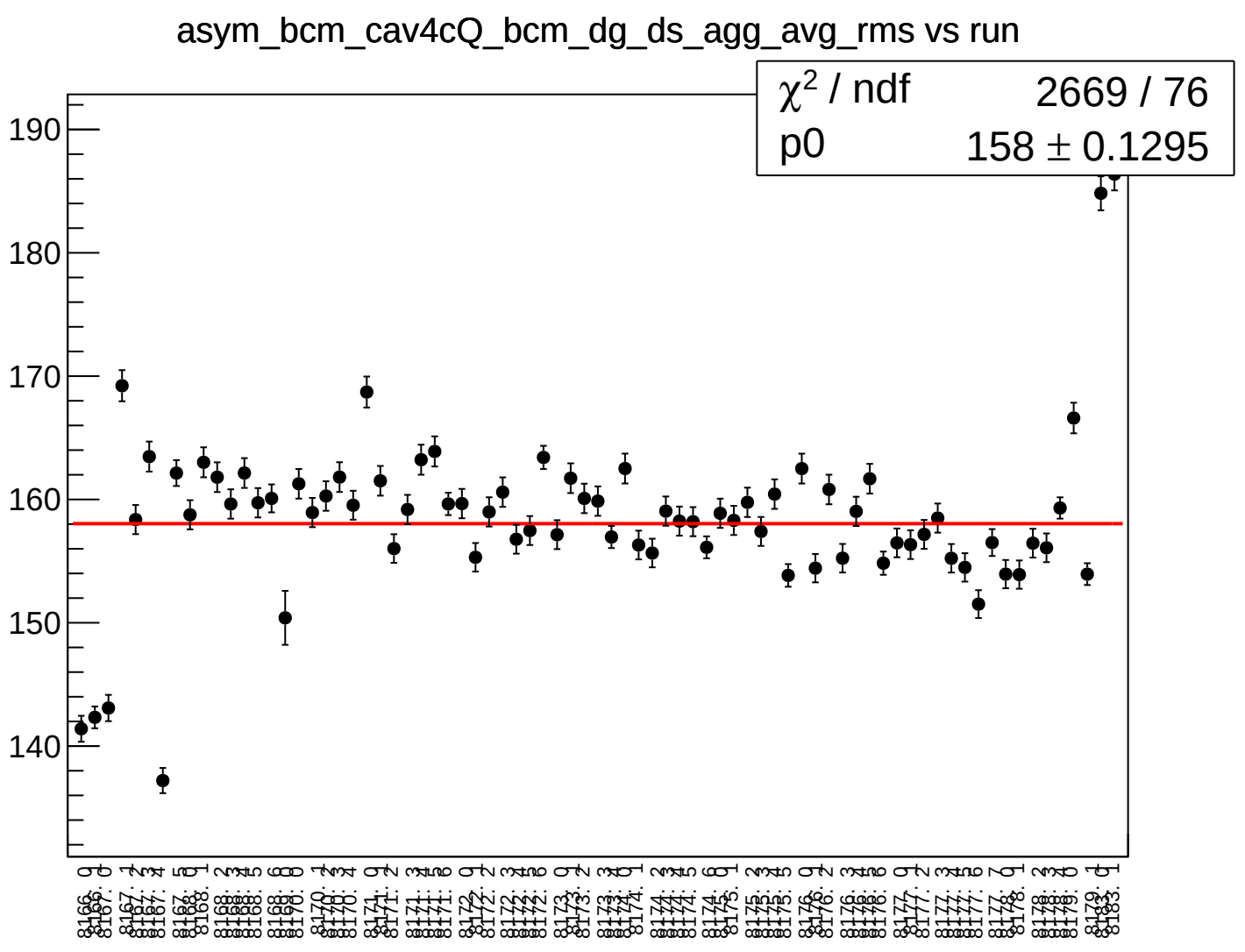

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2573 / 76
p0 158.5 ± 0.1299
190
180
170
160
150
140

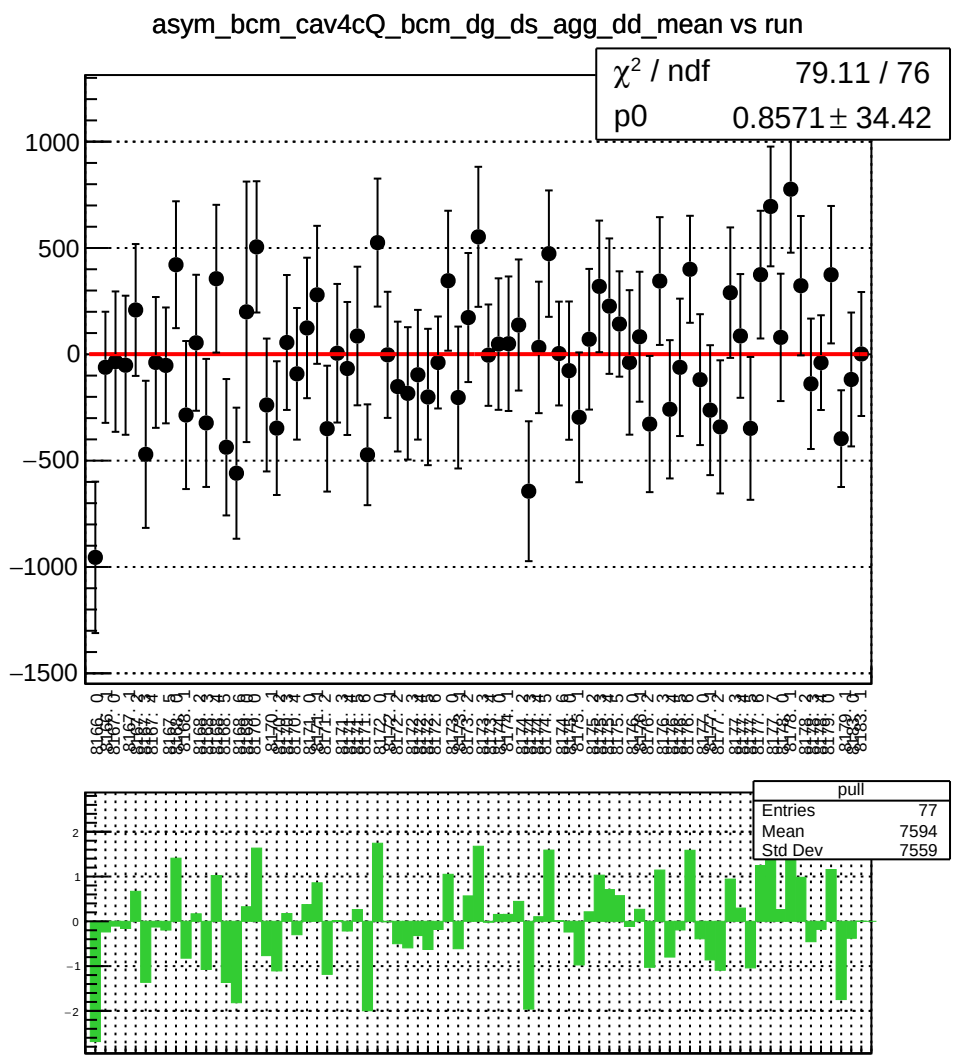

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 75.09 / 76
p0 −56.27 ± 38
pull
Entries 77
Mean −145.8
Std Dev 184.4
pull1D
Entries 77
Mean −0.02109
Std Dev 0.9873

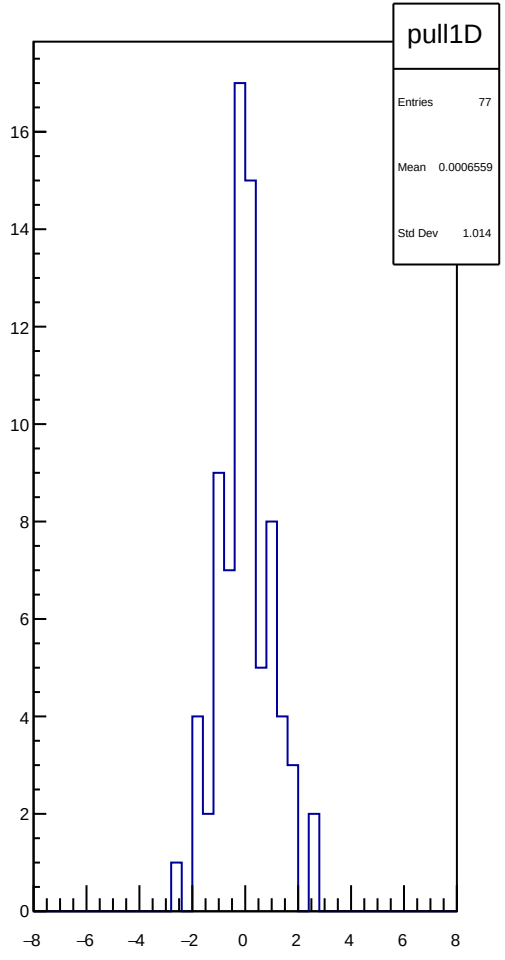

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1566 / 76
p0 32.8 ± 0.02687
36
35
34
33
32
31
30

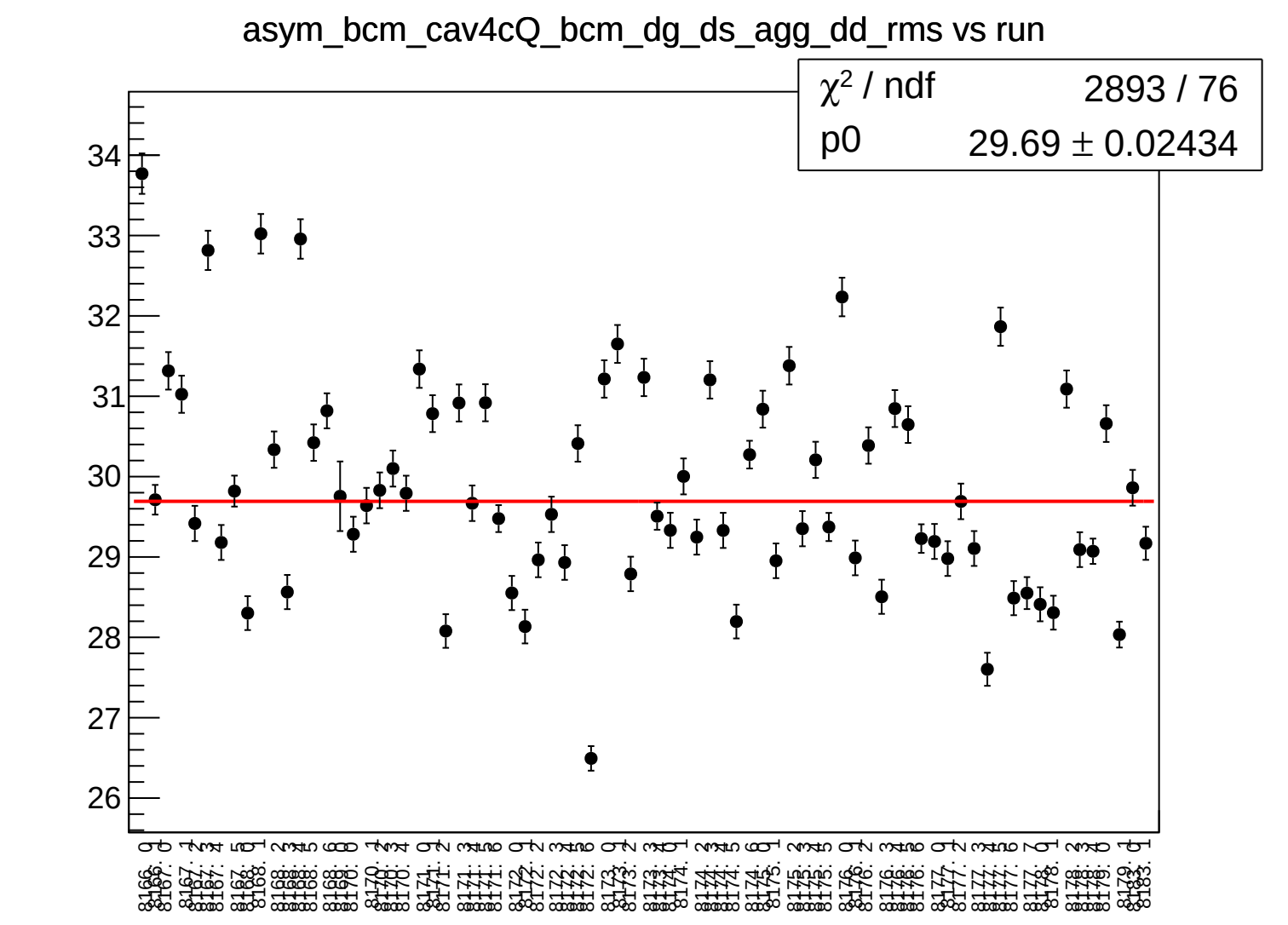

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.98 / 76
p0 −114.8 ± 183.2
pull
Entries 77
Mean 353.9
Std Dev 323.9

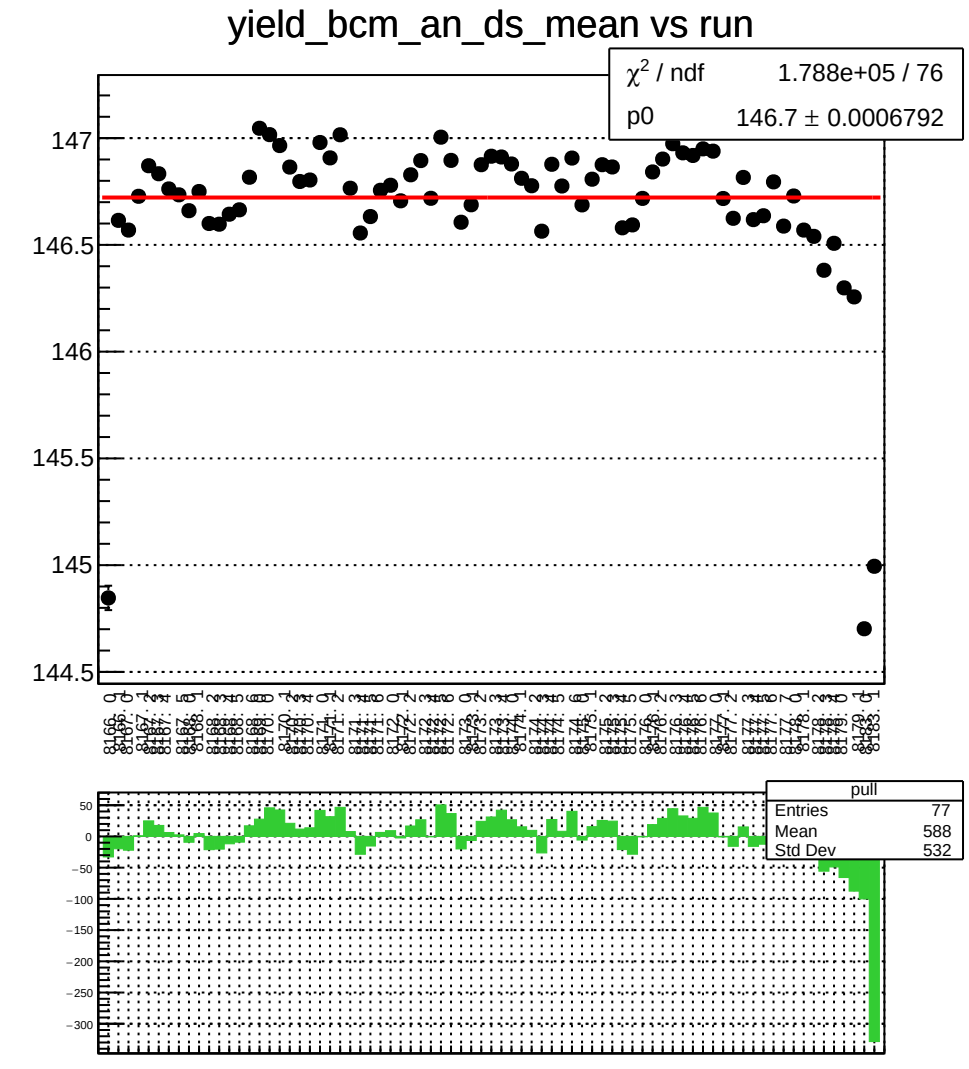

pull1D
Entries 77
Mean 0.003581
Std Dev 0.4555

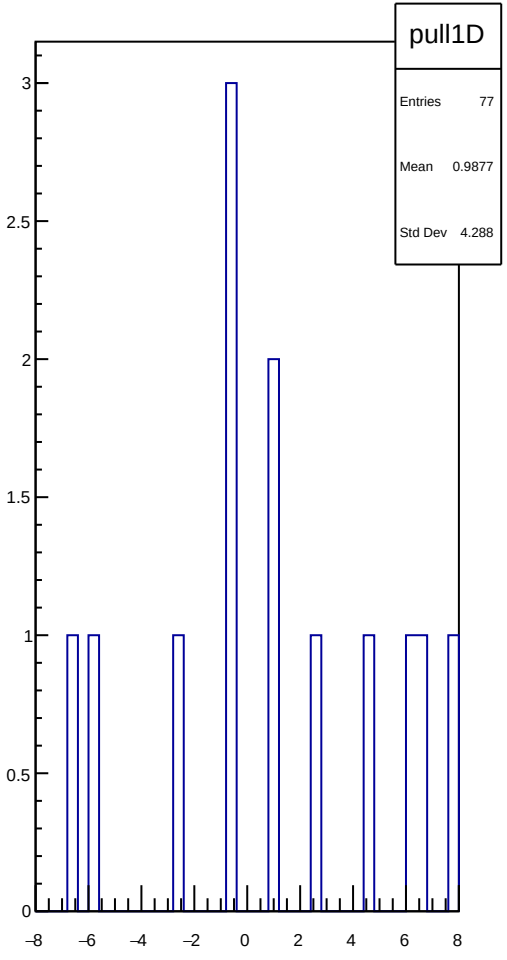

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2669 / 76
p0 158 ± 0.1295
190
180
170
160
150
140

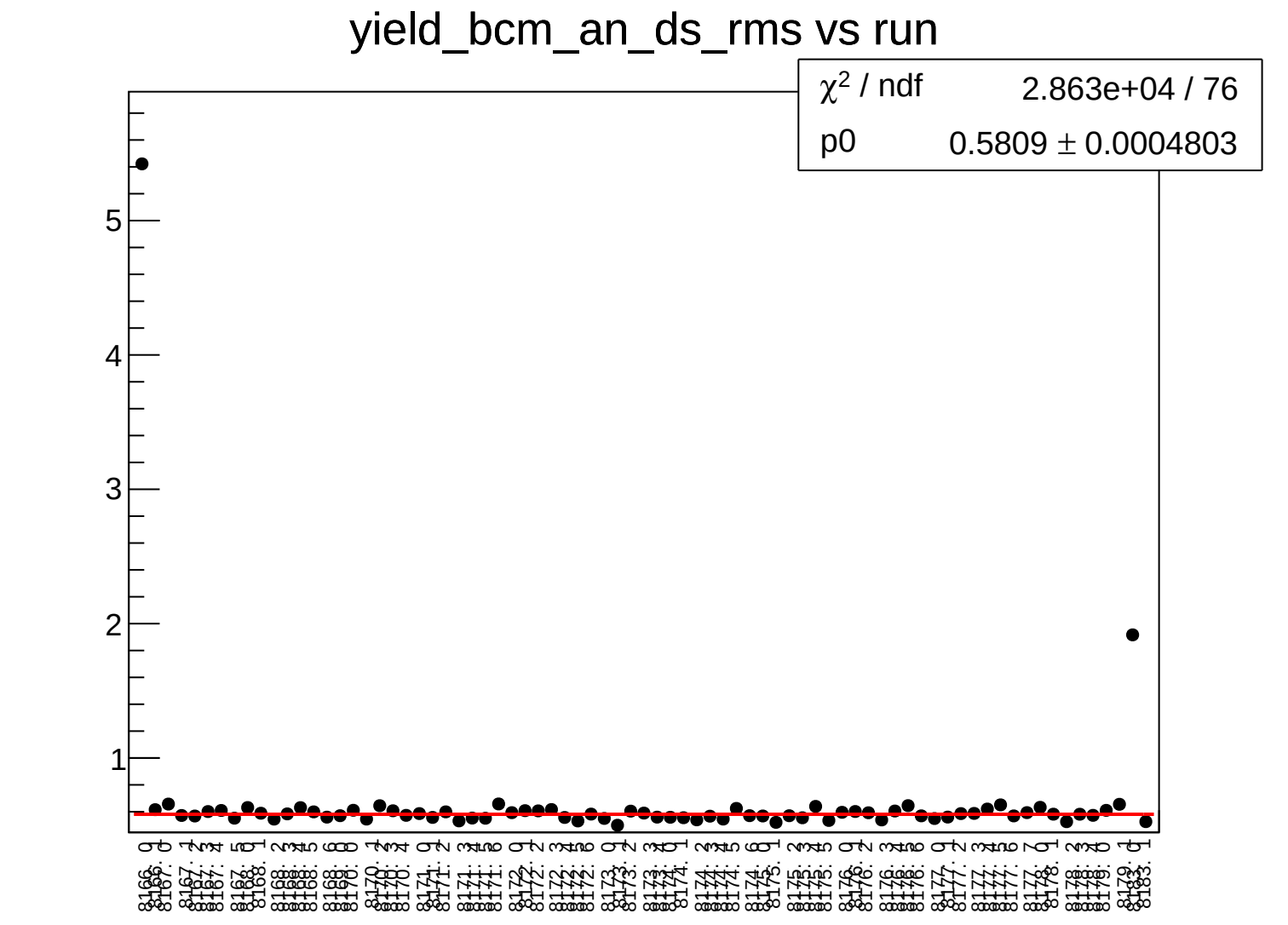

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 79.11 / 76
p0 0.8571 ± 34.42
1000
500
0
−500
−1000
−1500
pull
Entries 77
Mean 7594
Std Dev 7559
2
1
0
−1
−2

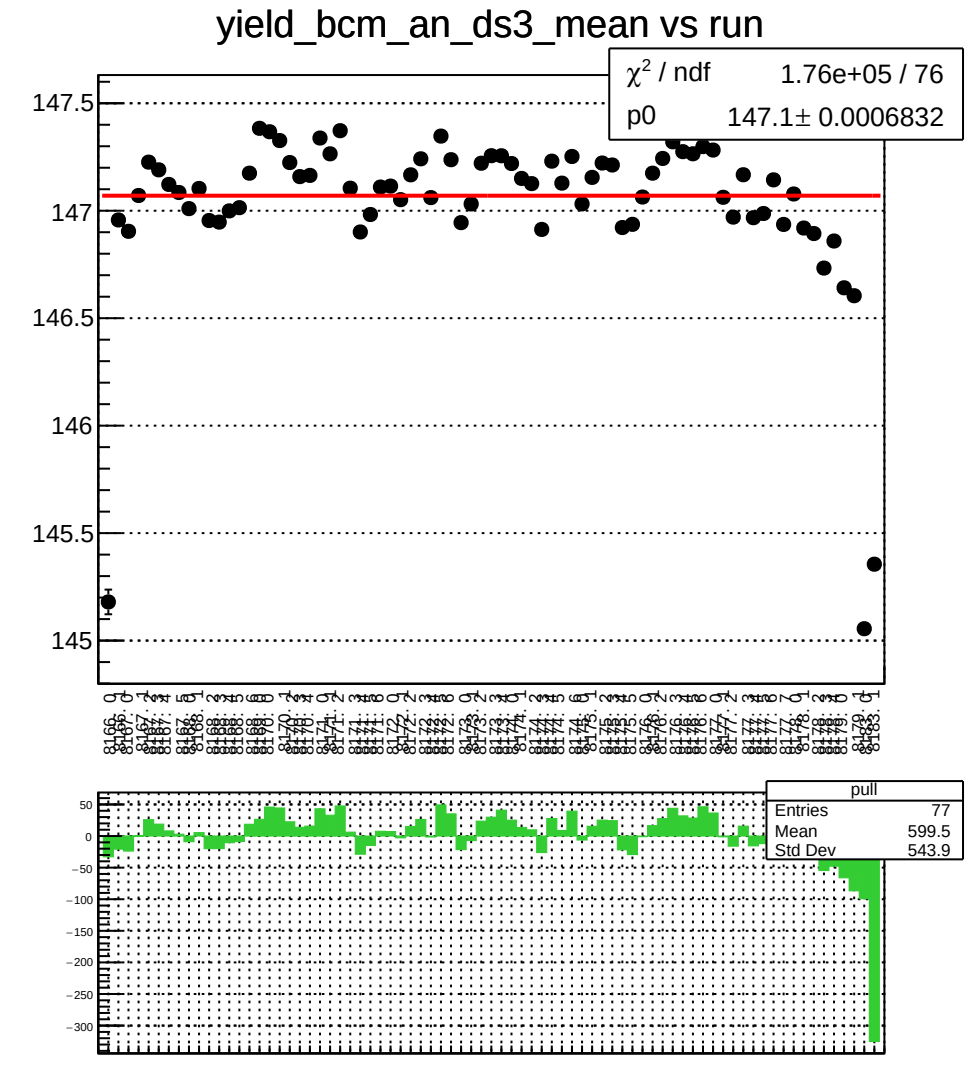

pull1D
Entries 77
Mean 0.0006559
Std Dev 1.014
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

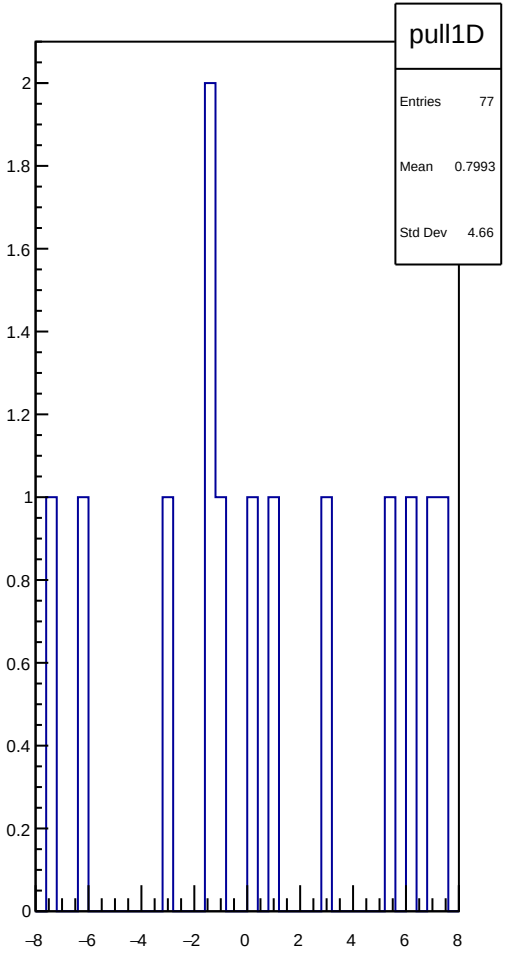

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2893 / 76
p0 29.69 ± 0.02434
34
33
32
31
30
29
28
27
26

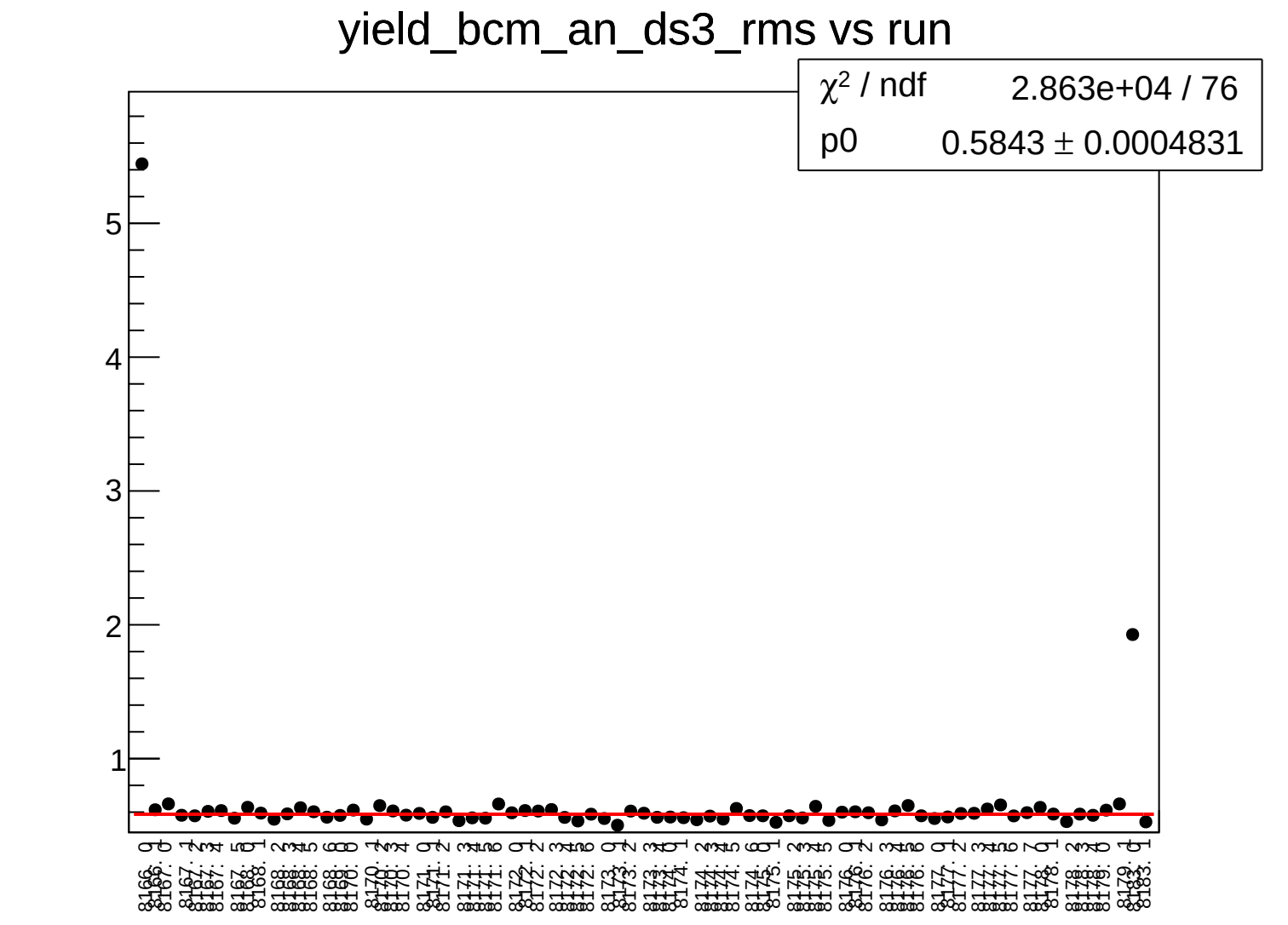

yield_bcm_an_ds_mean vs run
χ² / ndf 1.788e+05 / 76
p0 146.7 ± 0.0006792
147
146.5
146
145.5
145
144.5
pull
Entries 77
Mean 588
Std Dev 532
50
0
−50
−100
−150
−200
−250
−300

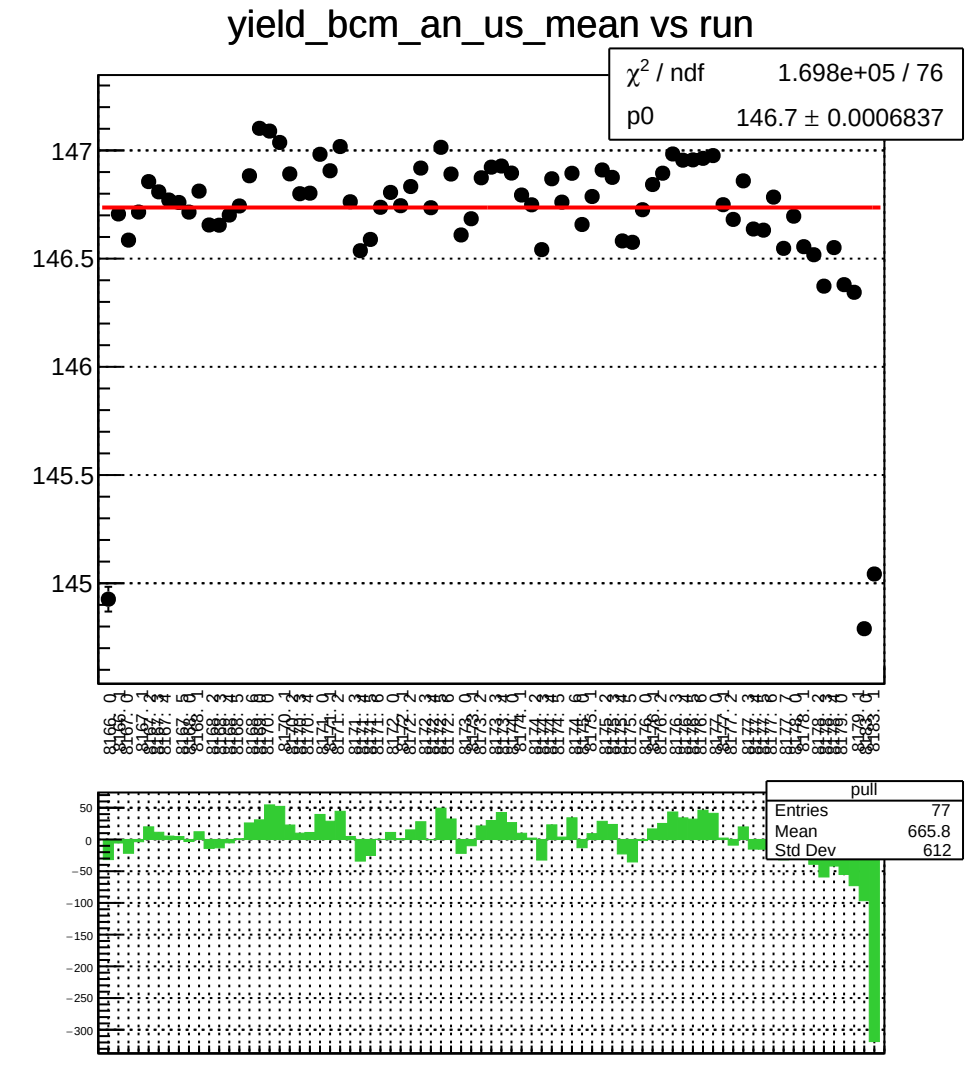

pull1D
Entries 77
Mean 0.9877
Std Dev 4.288
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

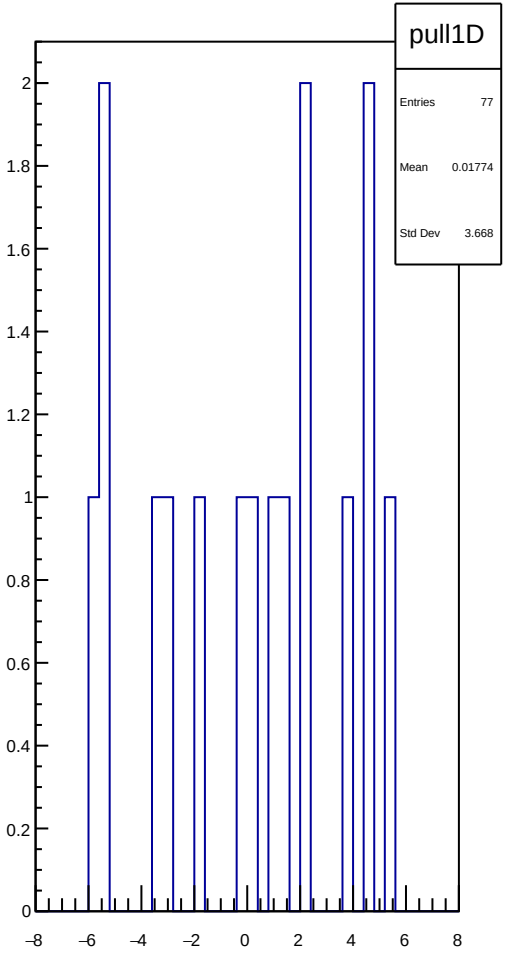

yield_bcm_an_ds_rms vs run
χ^2 / ndf 2.863e+04 / 76
p0 0.5809 ± 0.0004803
5
4
3
2
1

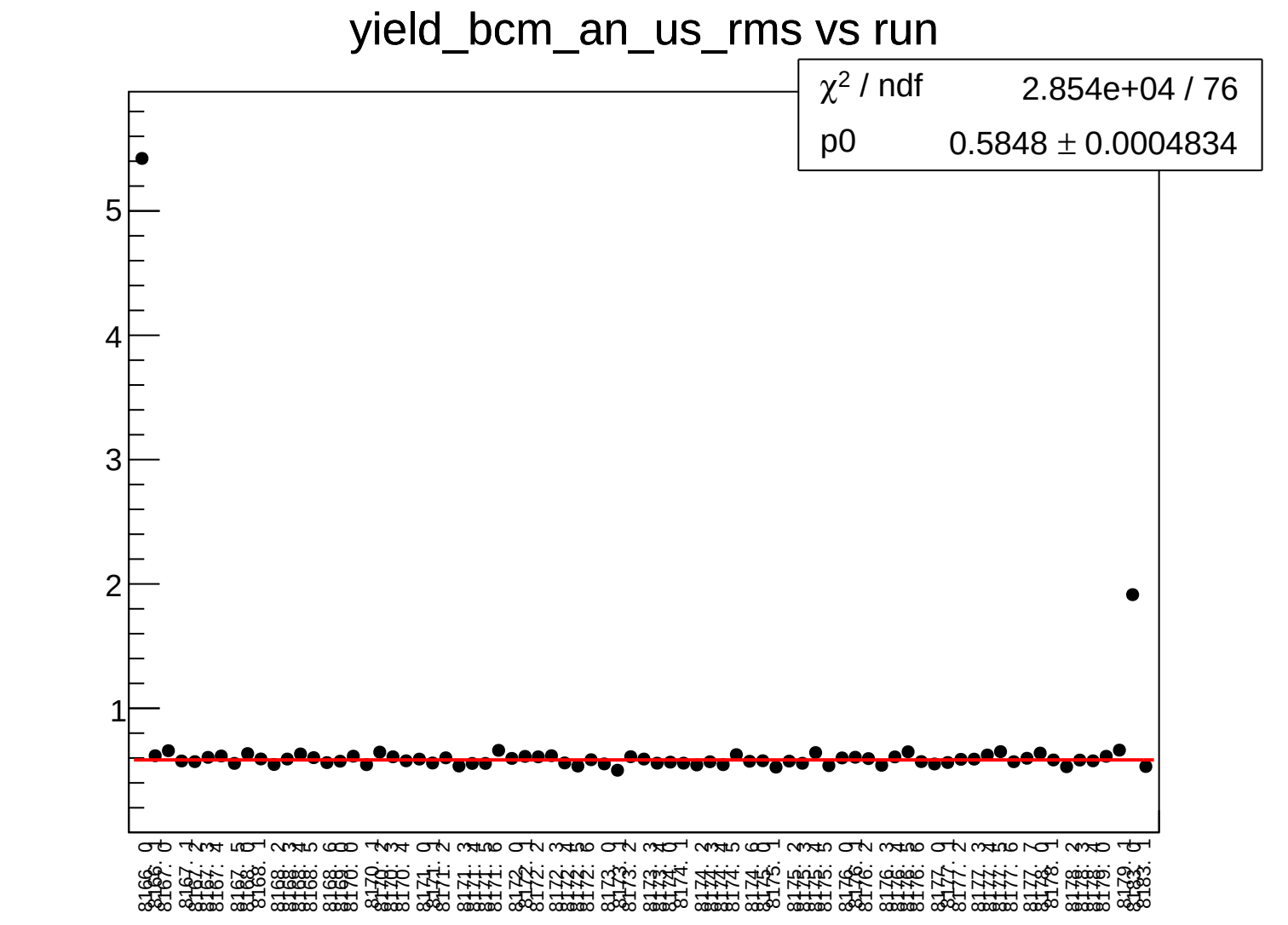

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.76e+05 / 76
p0 147.1± 0.0006832
147.5
147
146.5
146
145.5
145
pull
Entries 77
Mean 599.5
Std Dev 543.9
50
0
−50
−100
−150
−200
−250
−300

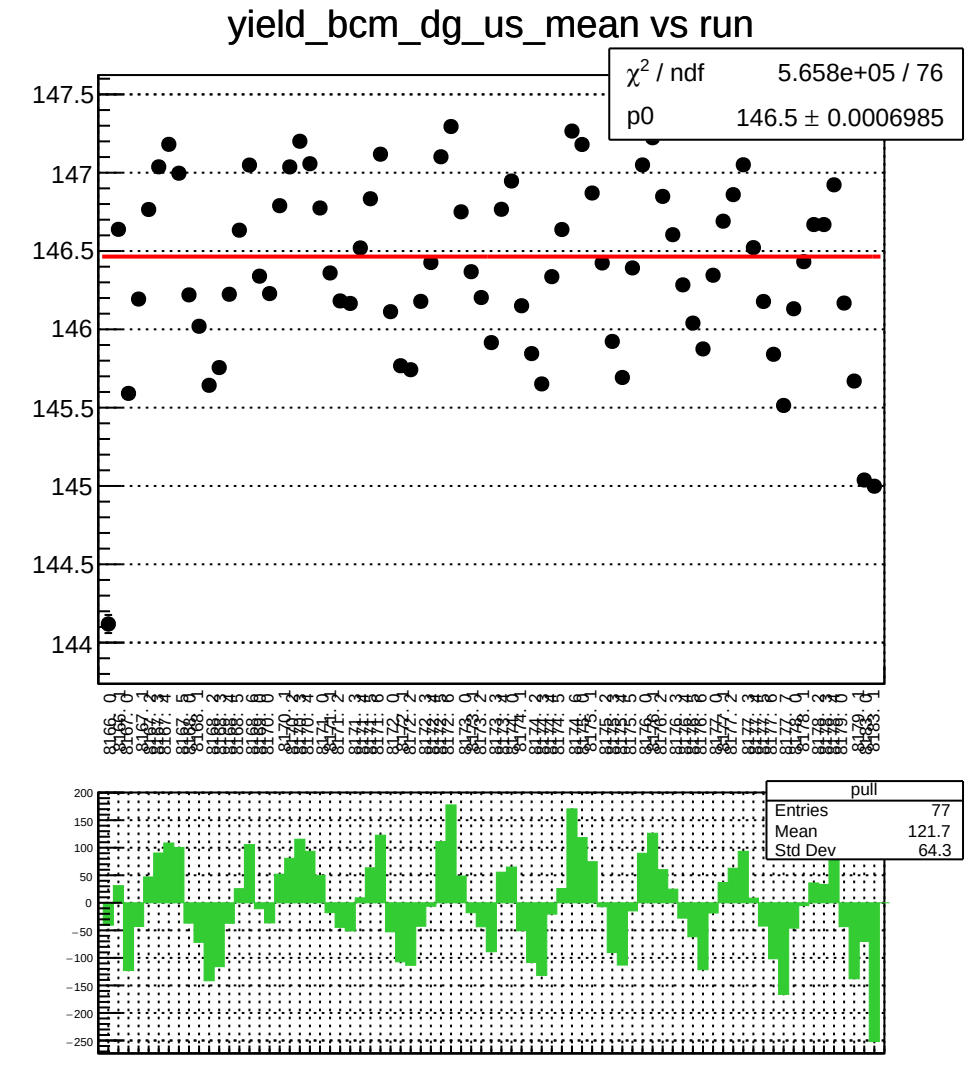

pull1D
Entries 77
Mean 0.7993
Std Dev 4.66
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

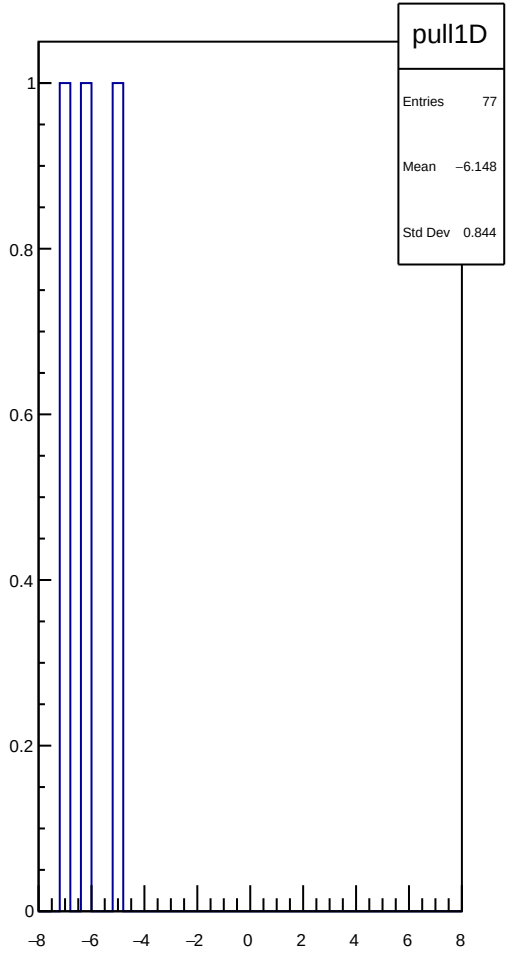

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 2.863e+04 / 76
p0 0.5843 ± 0.0004831
5
4
3
2
1

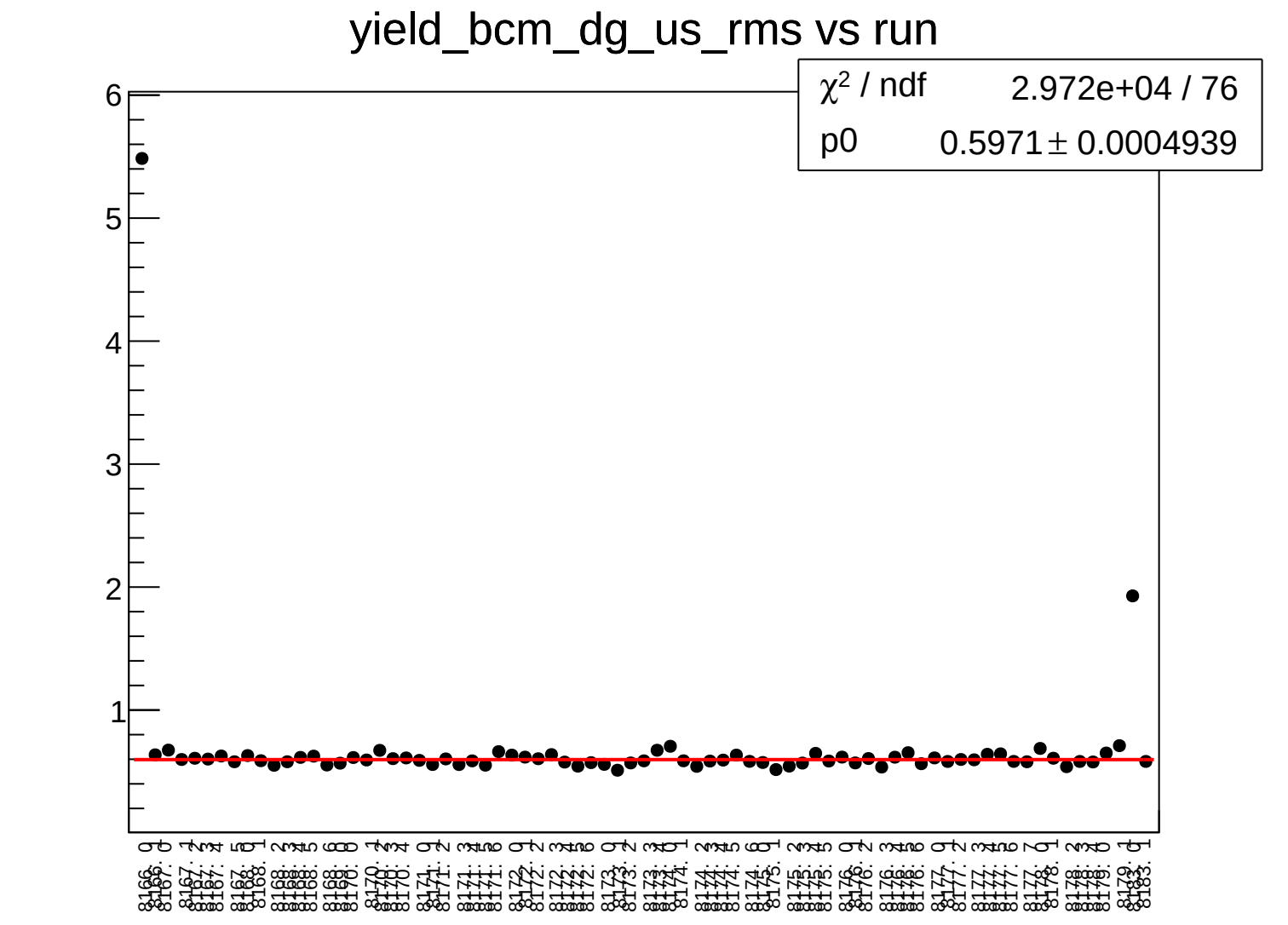

yield_bcm_an_us_mean vs run
χ² / ndf 1.698e+05 / 76
p0 146.7 ± 0.0006837
147
146.5
146
145.5
145
pull
Entries 77
Mean 665.8
Std Dev 612
50
0
−50
−100
−150
−200
−250
−300

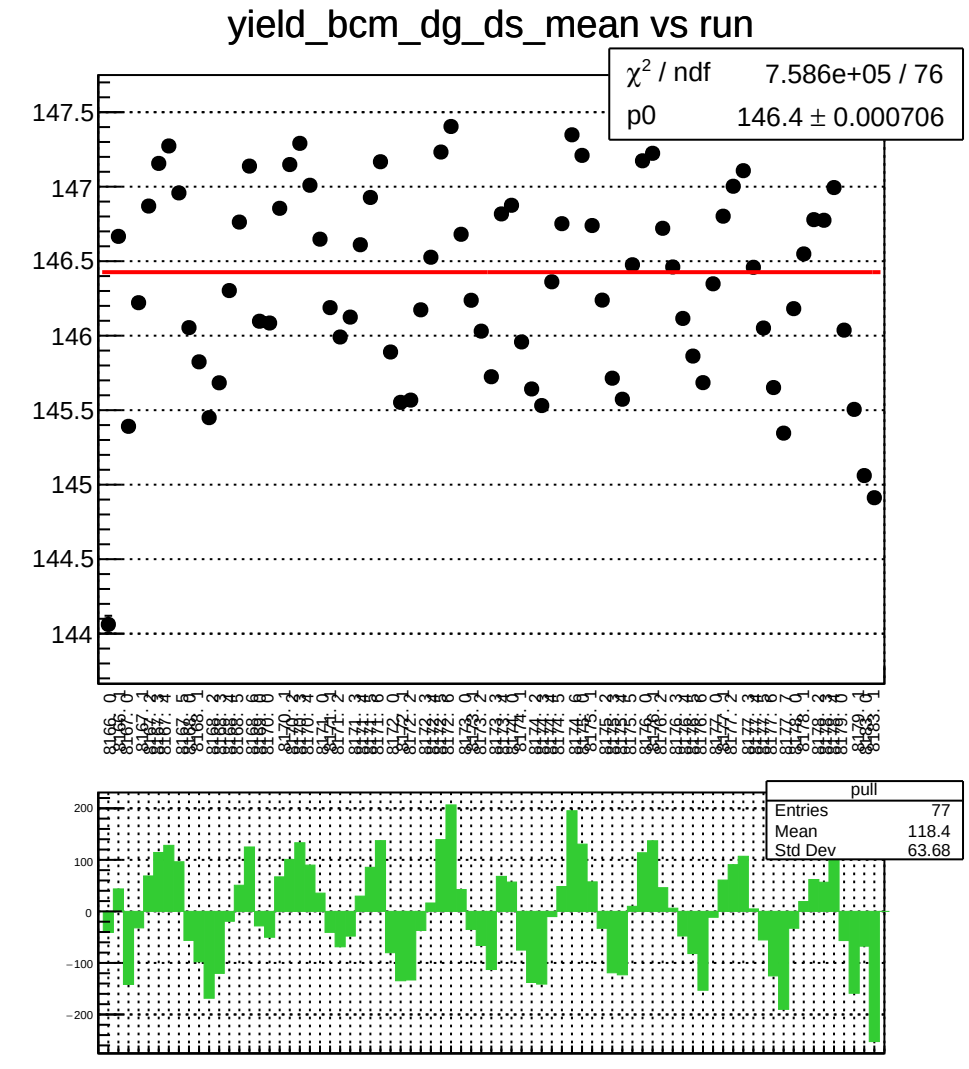

pull1D
Entries 77
Mean 0.01774
Std Dev 3.668
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

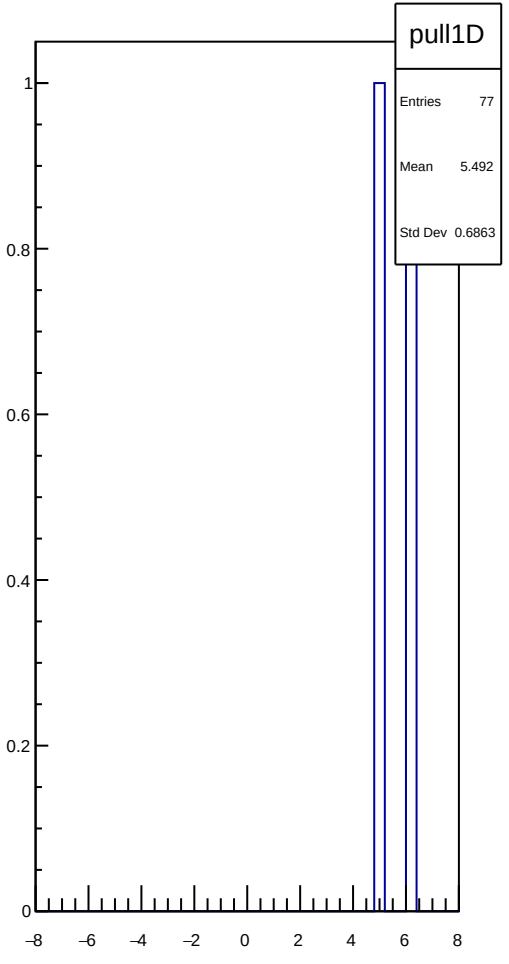

yield_bcm_an_us_rms vs run
χ² / ndf 2.854e+04 / 76
p0 0.5848 ± 0.0004834
5
4
3
2
1

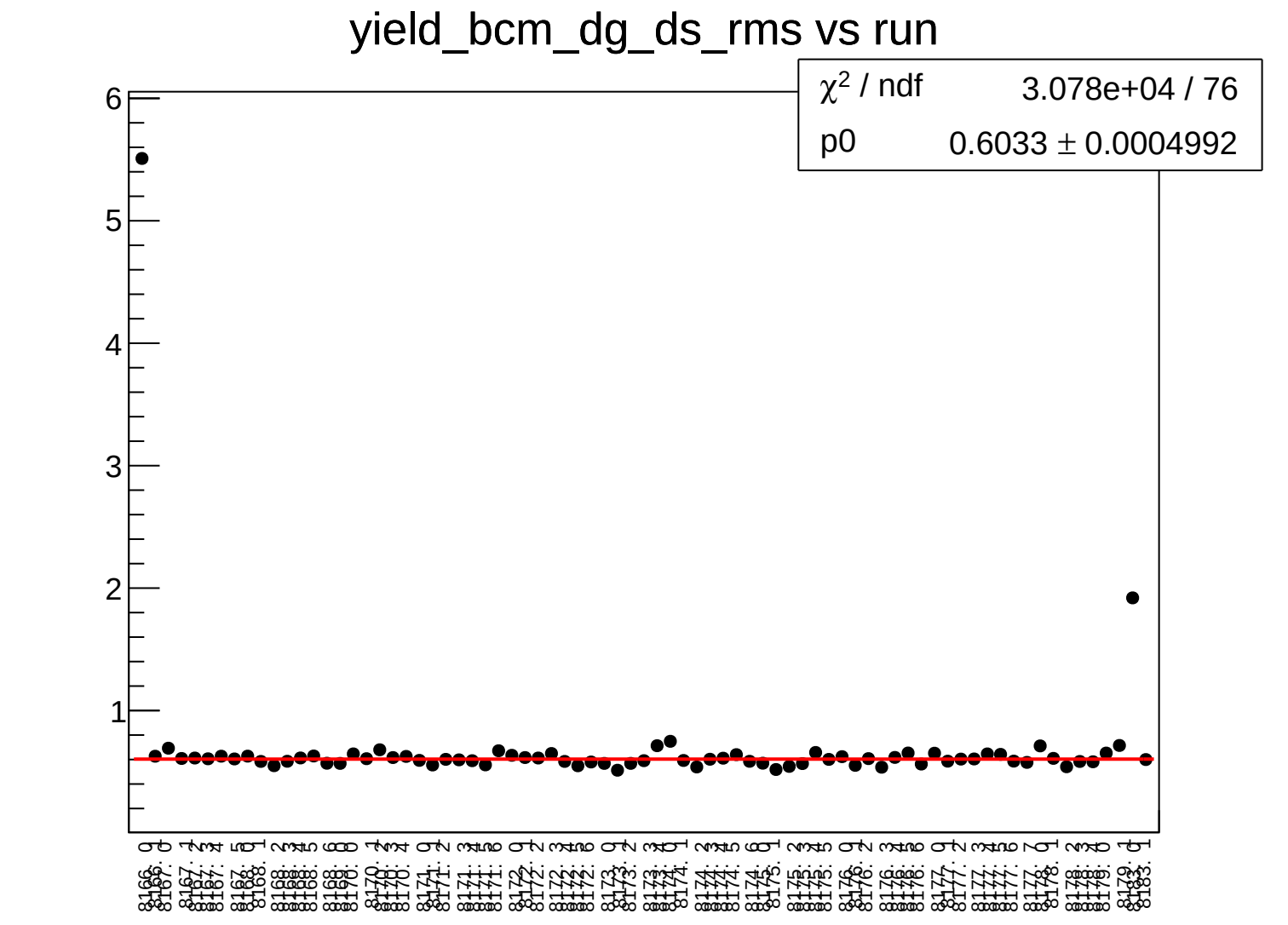

yield_bcm_dg_us_mean vs run
χ² / ndf 5.658e+05 / 76
p0 146.5 ± 0.0006985
147.5
147
146.5
146
145.5
145
144.5
144
pull
Entries 77
Mean 121.7
Std Dev 64.3
200
150
100
50
0
−50
−100
−150
−200
−250

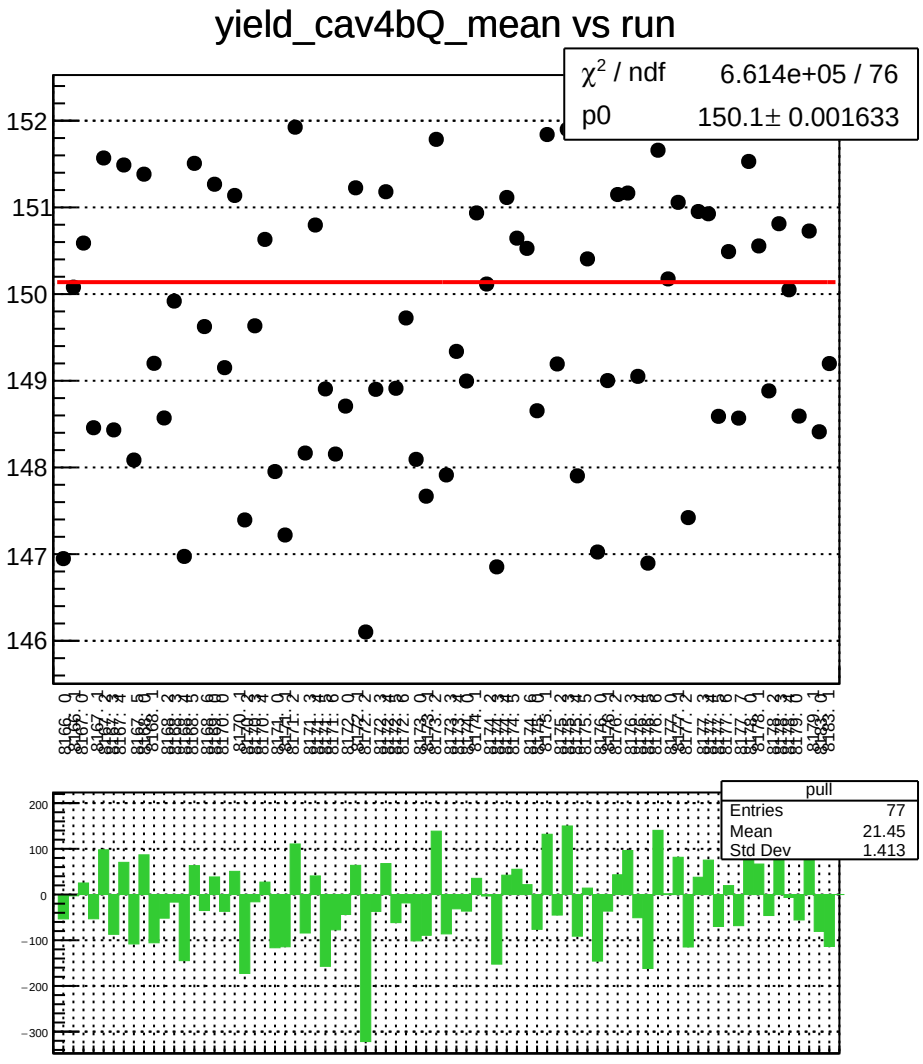

pull1D
Entries 77
Mean −6.148
Std Dev 0.844
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

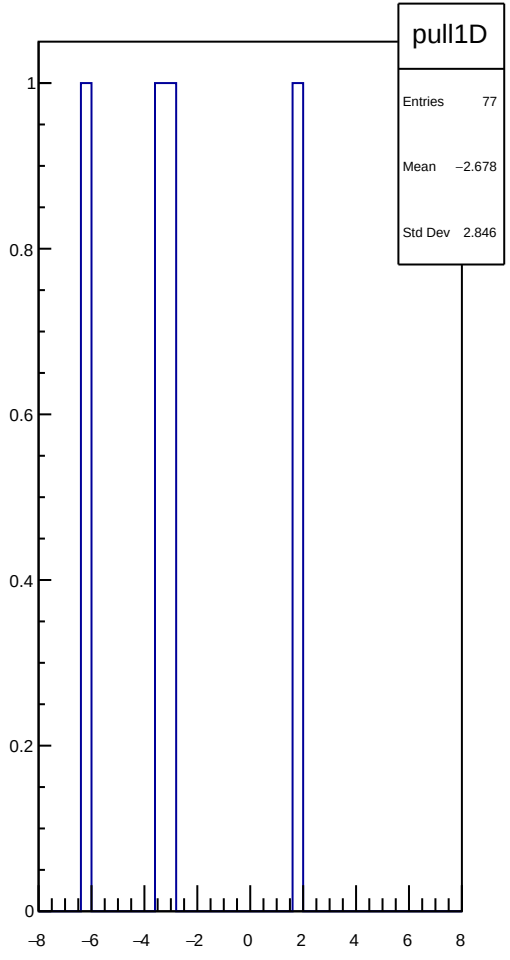

yield_bcm_dg_us_rms vs run
χ² / ndf 2.972e+04 / 76
p0 0.5971 ± 0.0004939
6
5
4
3
2
1

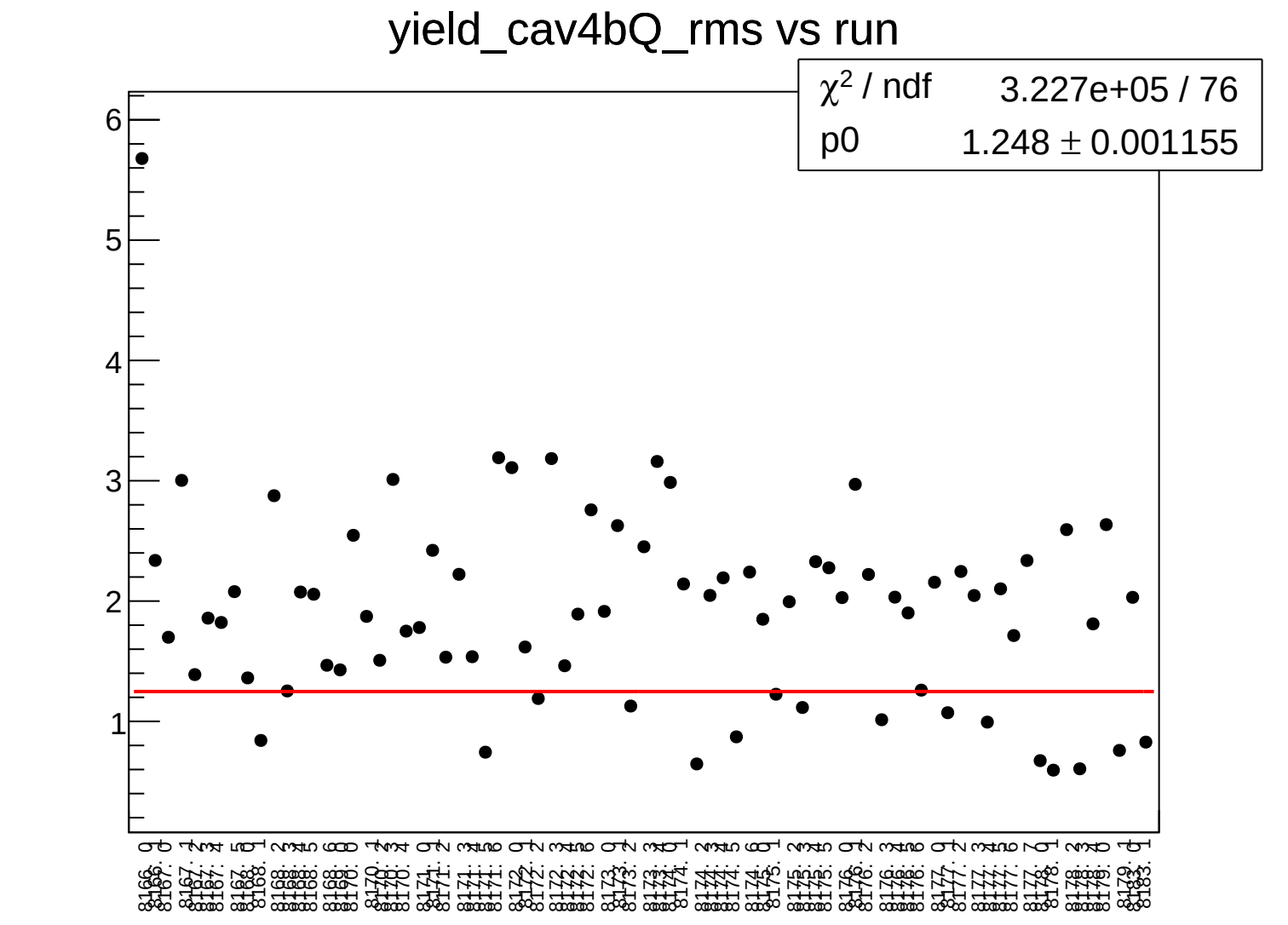

yield_bcm_dg_ds_mean vs run
χ² / ndf 7.586e+05 / 76
p0 146.4 ± 0.000706
147.5
147
146.5
146
145.5
145
144.5
144
pull
Entries 77
Mean 118.4
Std Dev 63.68
200
100
0
−100
−200

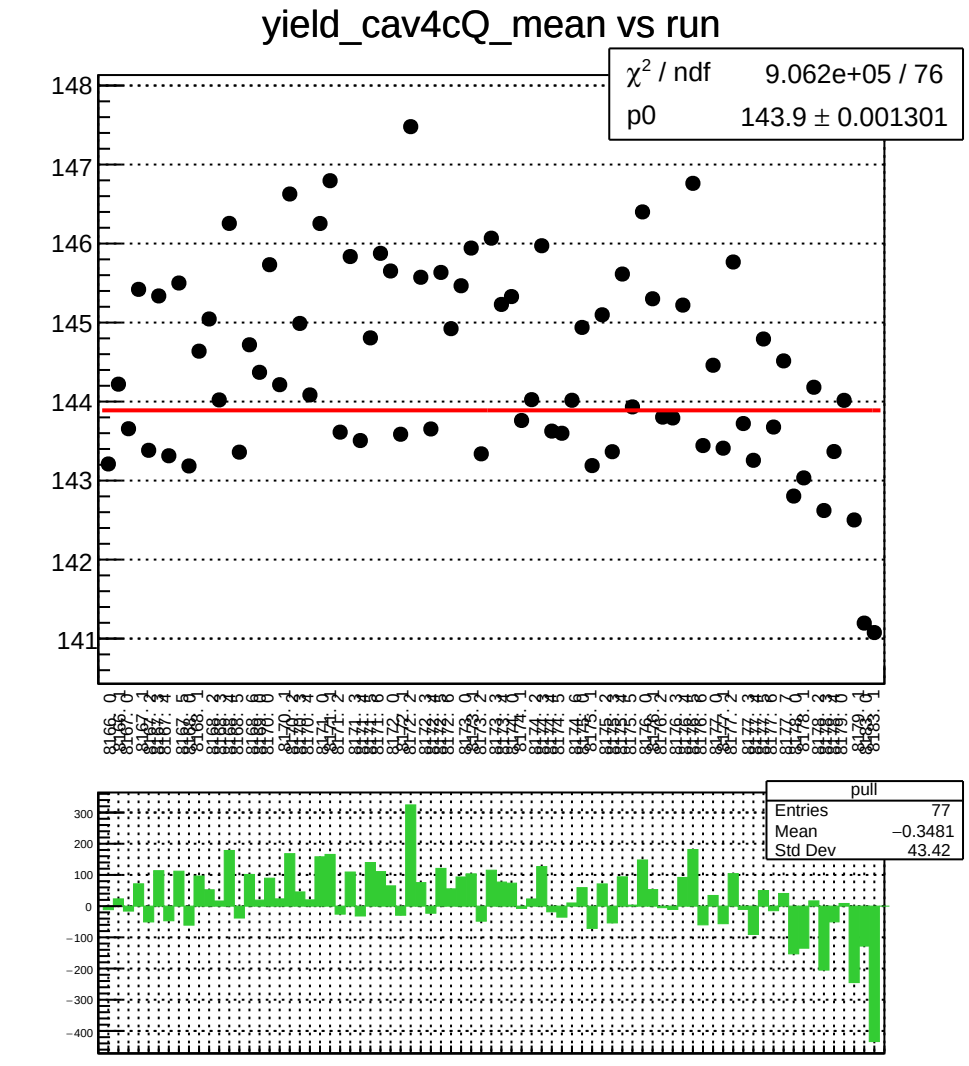

pull1D
Entries 77
Mean 5.492
Std Dev 0.6863
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

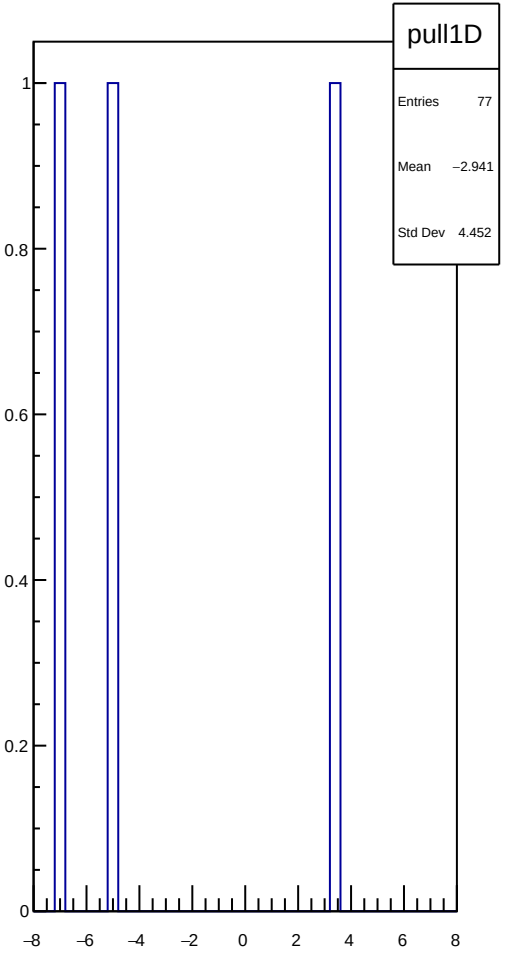

yield_bcm_dg_ds_rms vs run
χ² / ndf 3.078e+04 / 76
p0 0.6033 ± 0.0004992
6
5
4
3
2
1

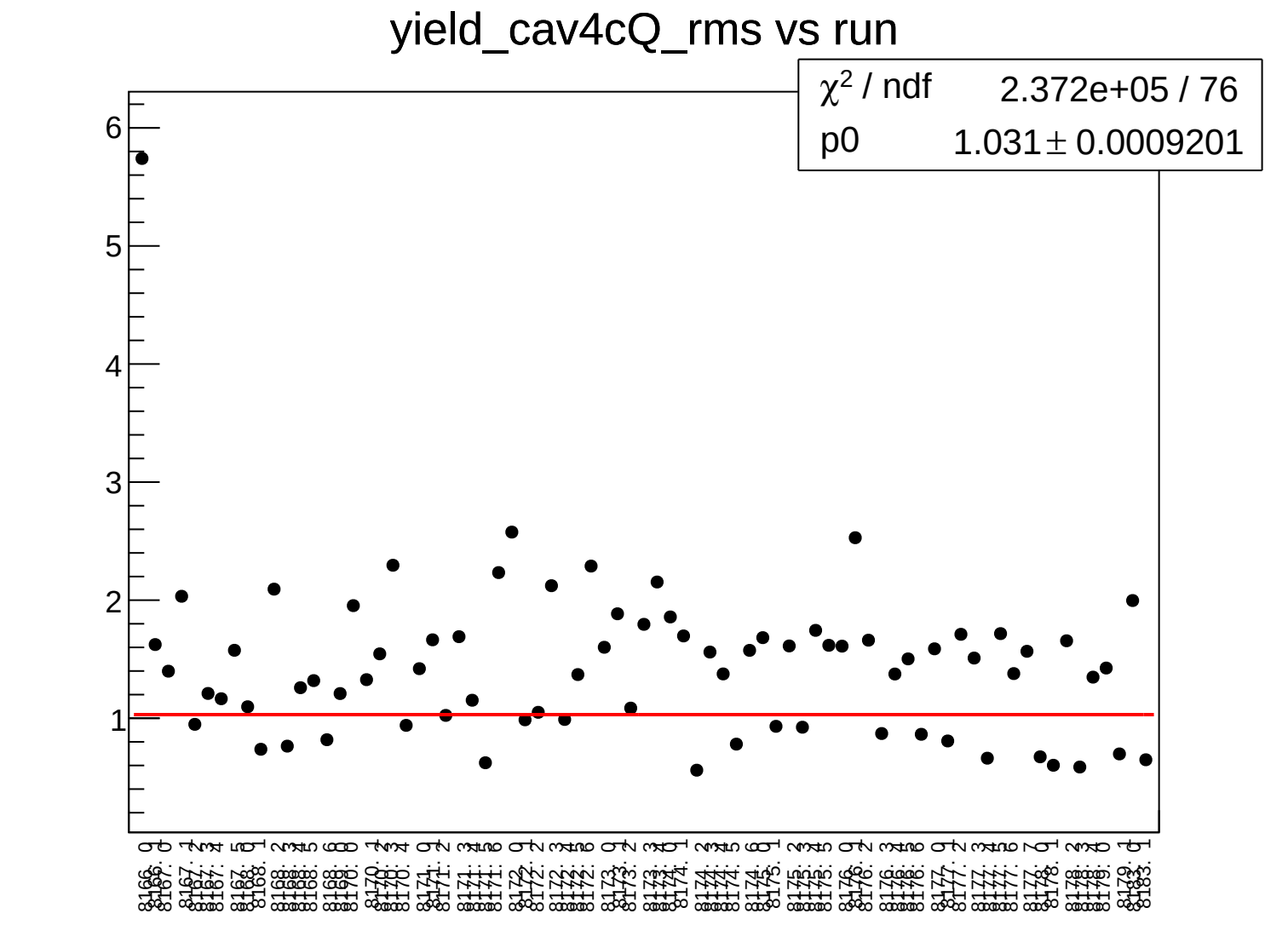

yield_cav4bQ_mean vs run
χ² / ndf 6.614e+05 / 76
p0 150.1± 0.001633
152
151
150
149
148
147
146
pull
Entries 77
Mean 21.45
Std Dev 1.413
200
100
0
−100
−200
−300

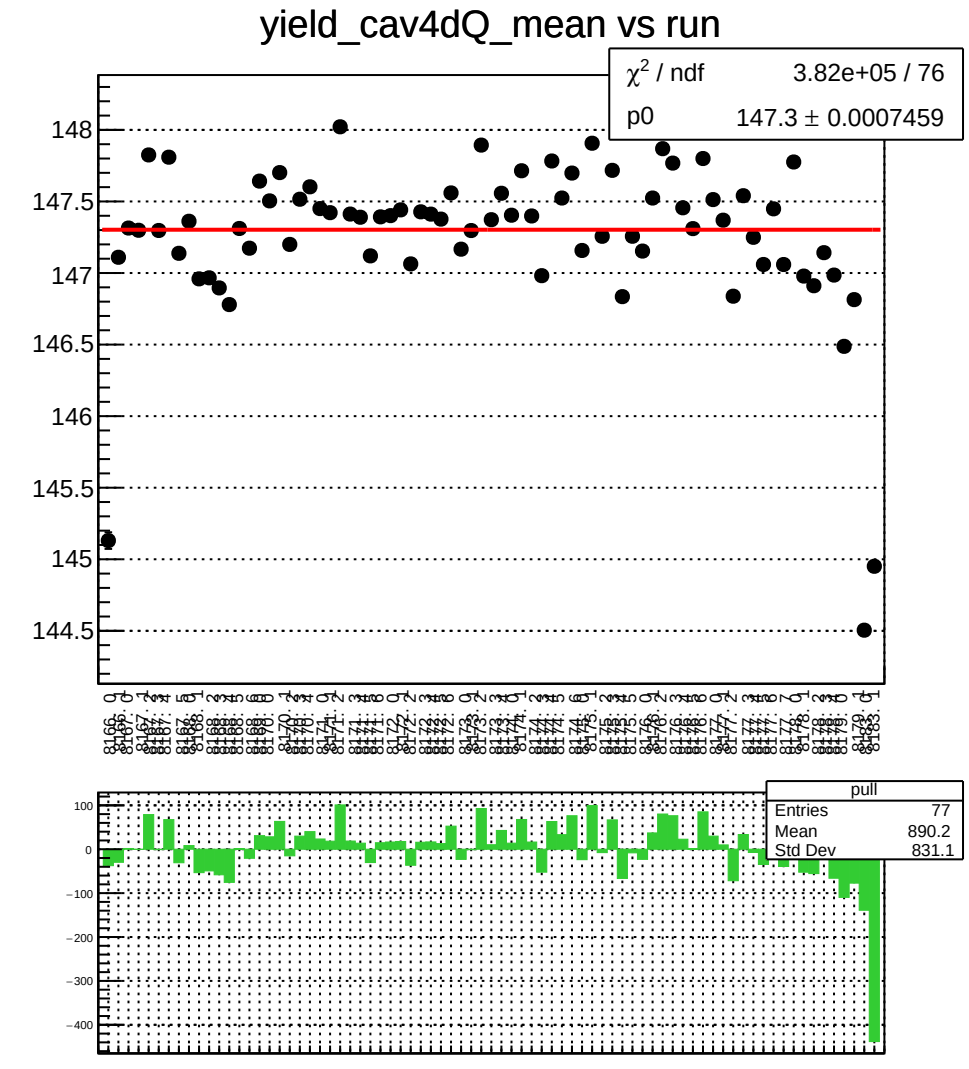

pull1D
Entries 77
Mean −2.678
Std Dev 2.846
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

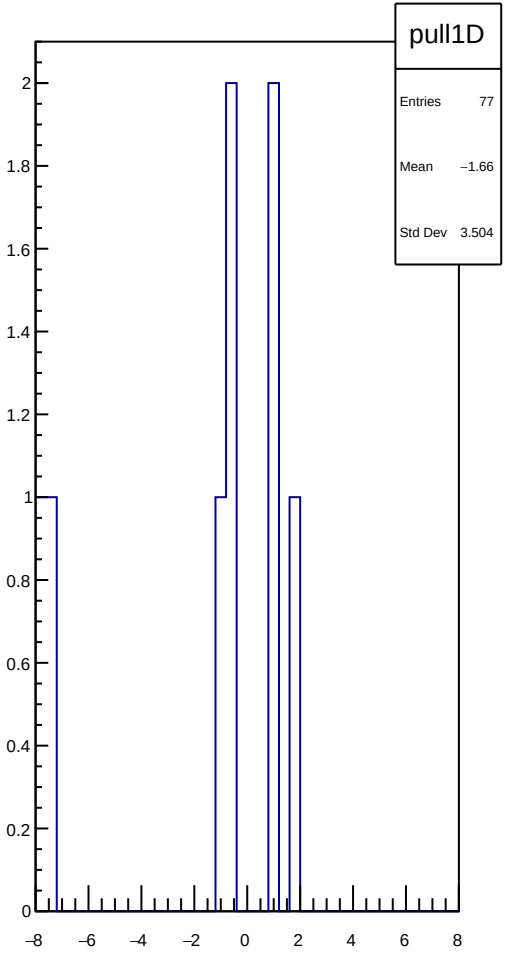

yield_cav4bQ_rms vs run
χ^2 / ndf 3.227e+05 / 76
p0 1.248 ± 0.001155
6
5
4
3
2
1

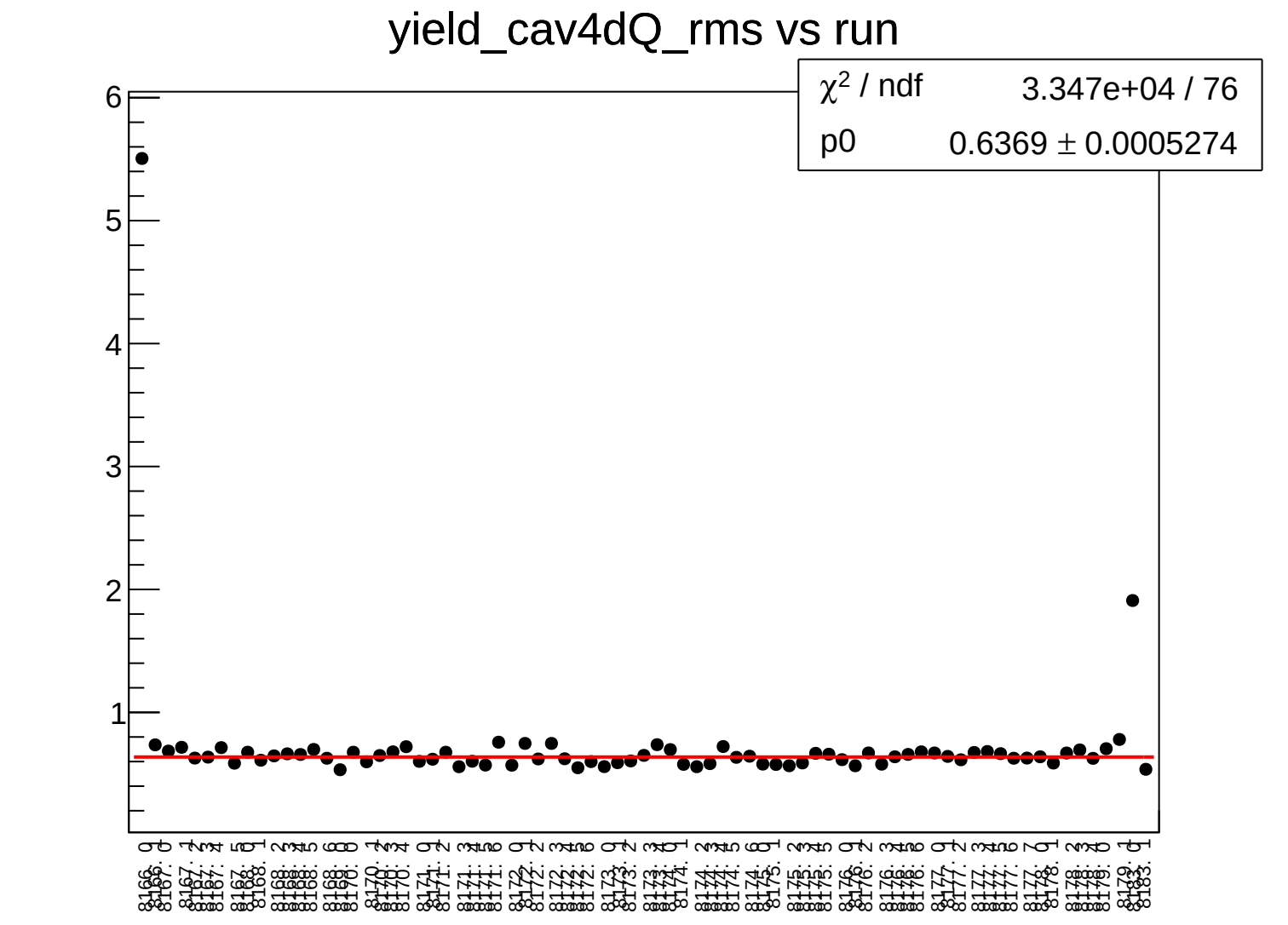

yield_cav4cQ_mean vs run
χ² / ndf 9.062e+05 / 76
p0 143.9 ± 0.001301
148
147
146
145
144
143
142
141
pull
Entries 77
Mean −0.3481
Std Dev 43.42
300
200
100
0
−100
−200
−300
−400

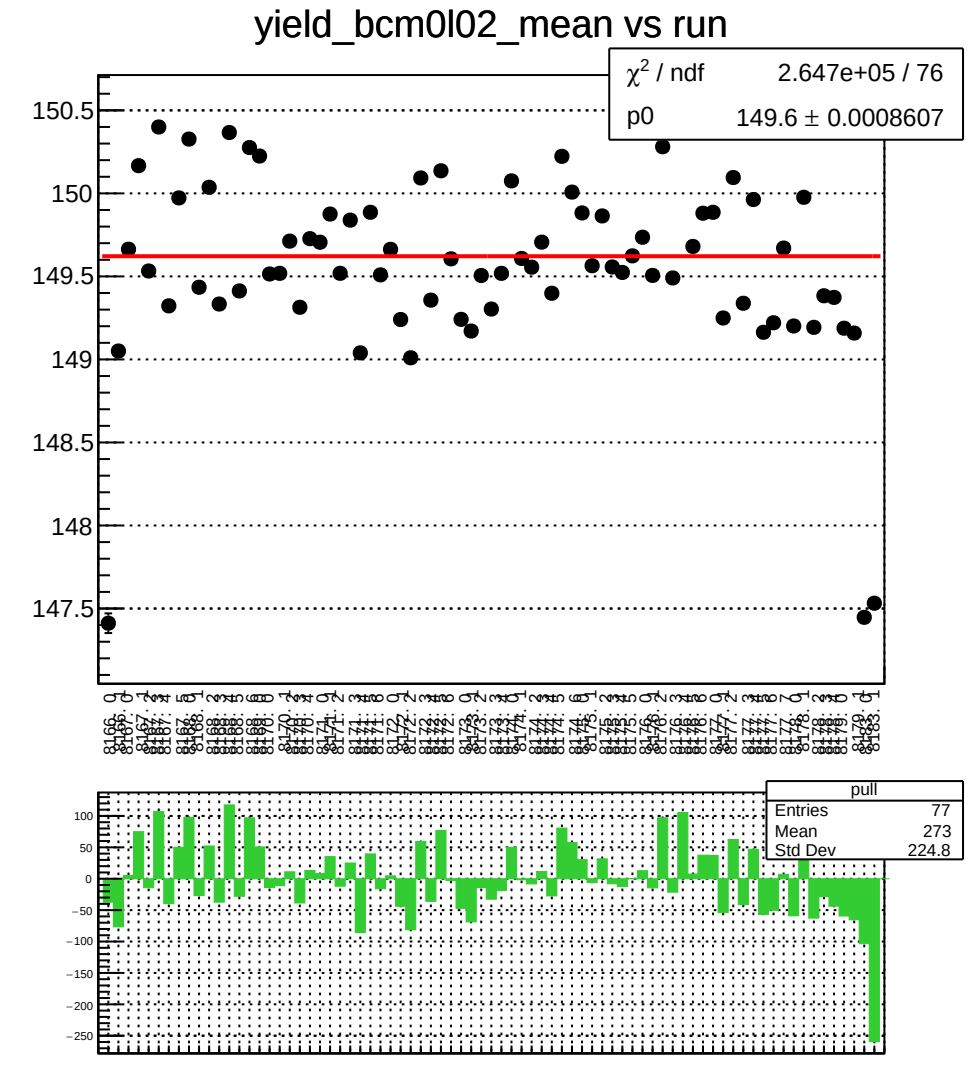

pull1D
Entries 77
Mean −2.941
Std Dev 4.452
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

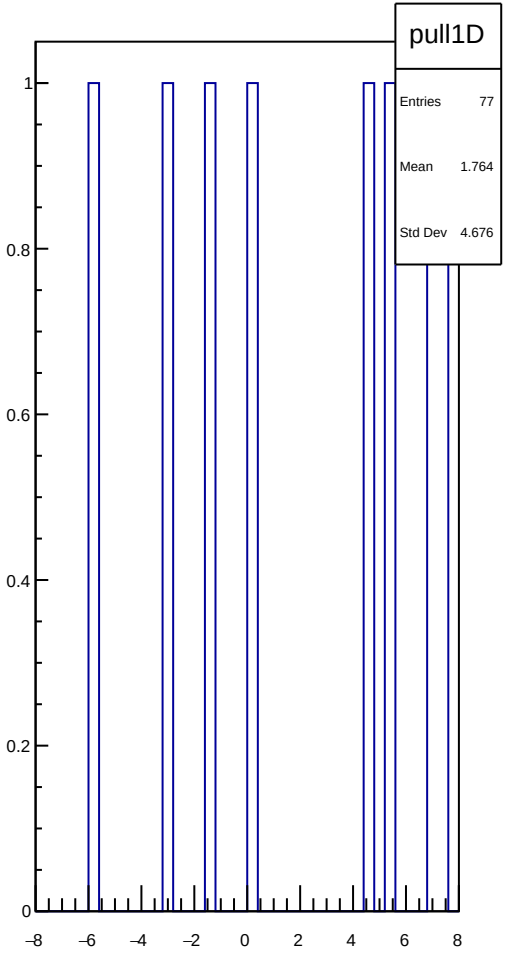

yield_cav4cQ_rms vs run
χ^2 / ndf 2.372e+05 / 76
p0 1.031 ± 0.0009201
6
5
4
3
2
1


yield_cav4dQ_mean vs run
χ² / ndf 3.82e+05 / 76
p0 147.3 ± 0.0007459
148
147.5
147
146.5
146
145.5
145
144.5
pull
Entries 77
Mean 890.2
Std Dev 831.1
100
0
−100
−200
−300
−400

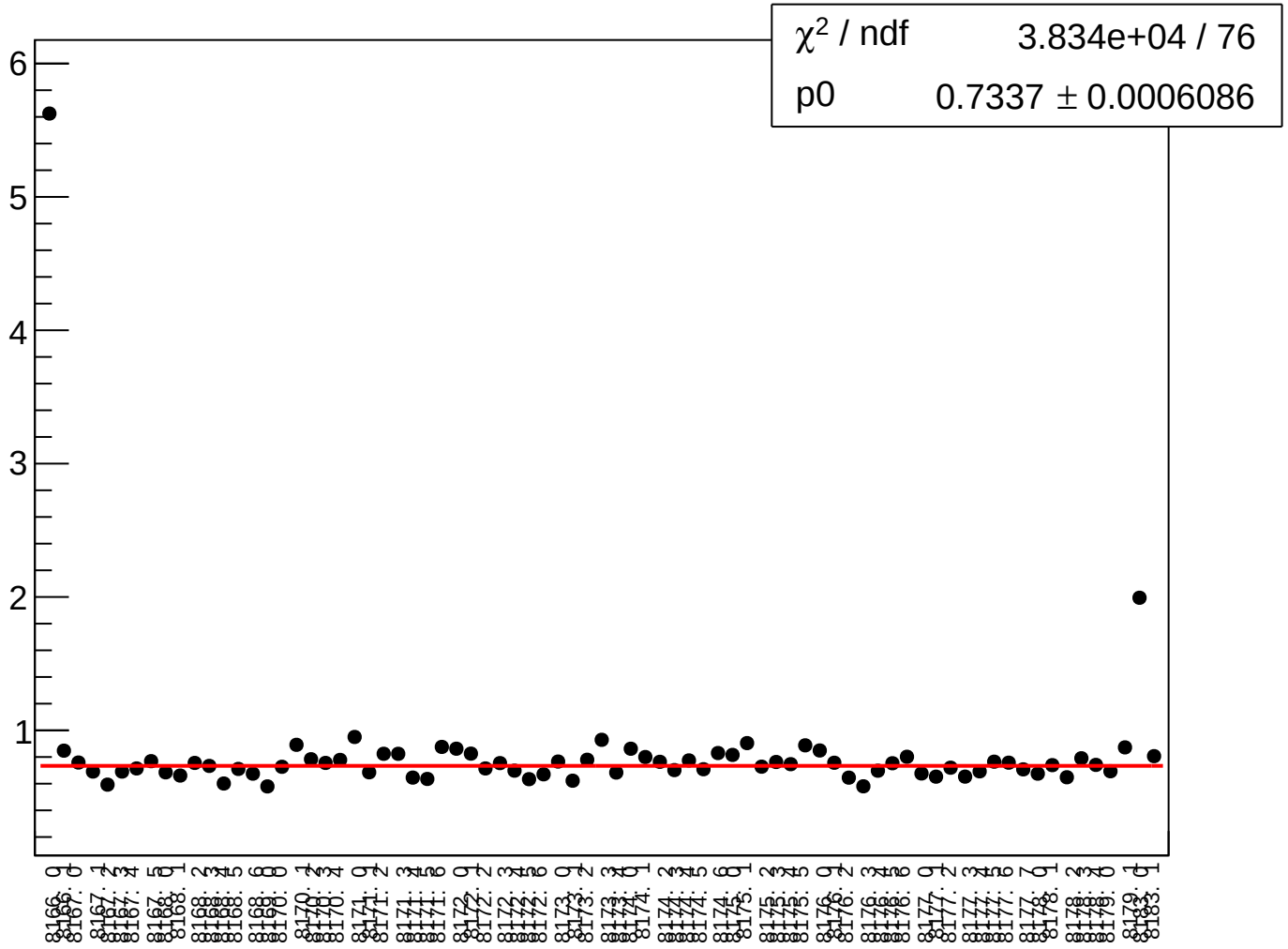

pull1D
Entries 77
Mean −1.66
Std Dev 3.504
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

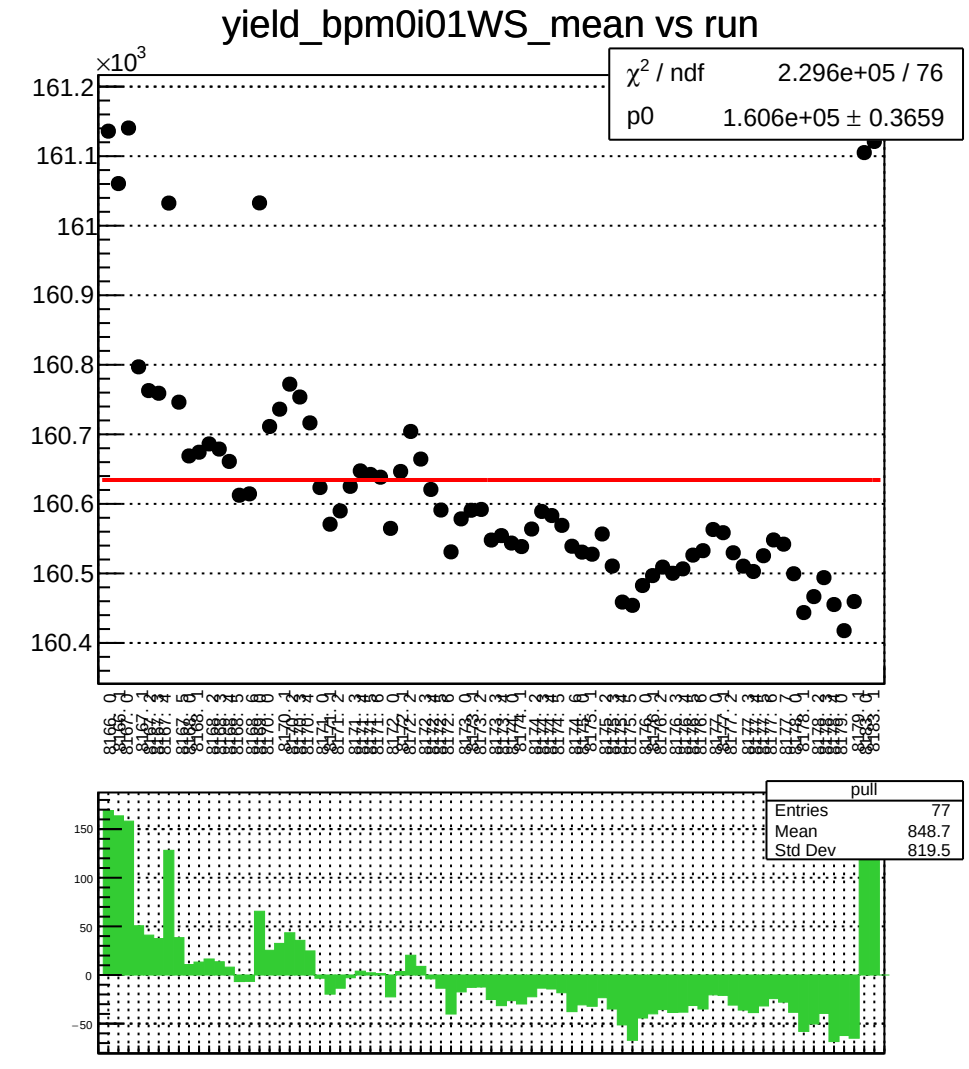

yield_cav4dQ_rms vs run
χ² / ndf 3.347e+04 / 76
p0 0.6369 ± 0.0005274
6
5
4
3
2
1

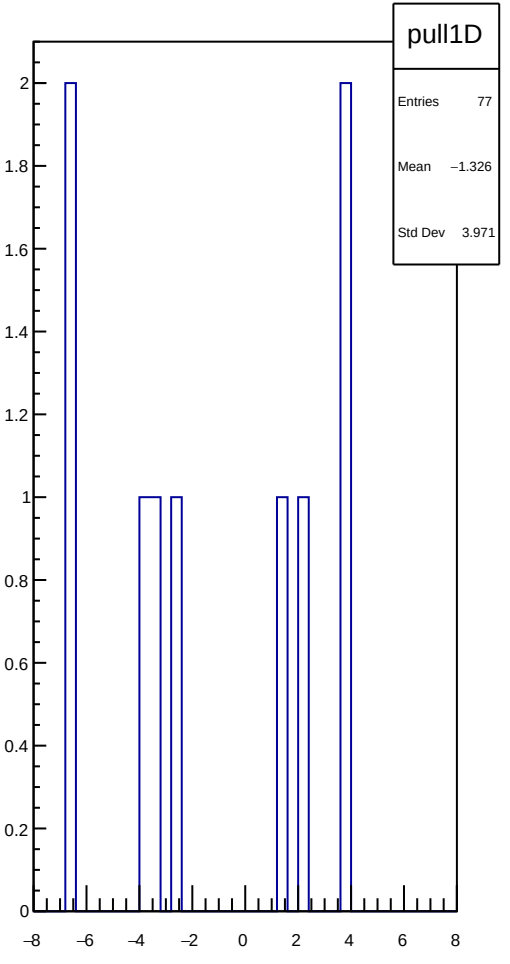

yield_bcm0l02_mean vs run
χ² / ndf 2.647e+05 / 76
p0 149.6 ± 0.0008607
150.5
150
149.5
149
148.5
148
147.5
pull
Entries 77
Mean 273
Std Dev 224.8
100
50
0
−50
−100
−150
−200
−250

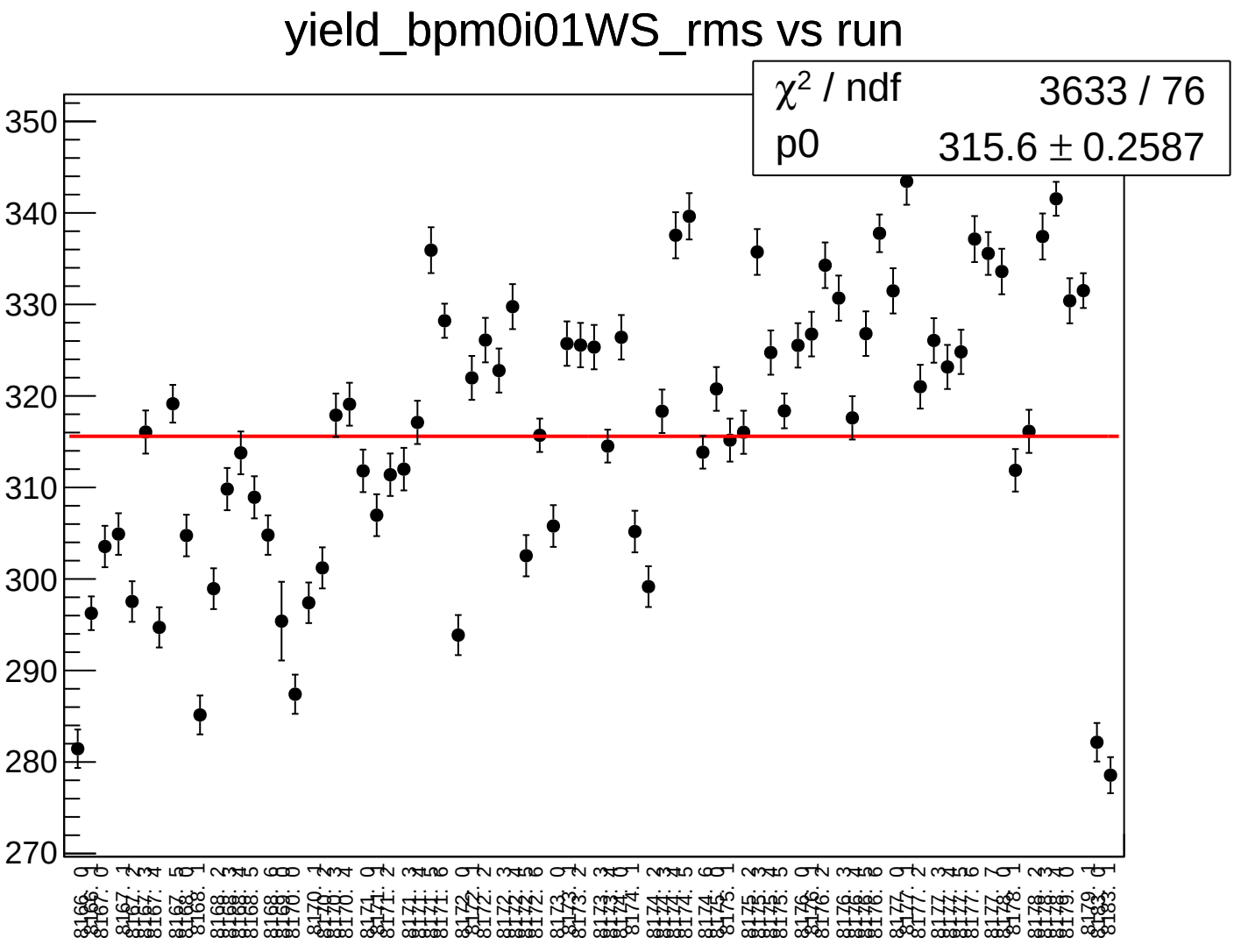

pull1D
Entries 77
Mean 1.764
Std Dev 4.676
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

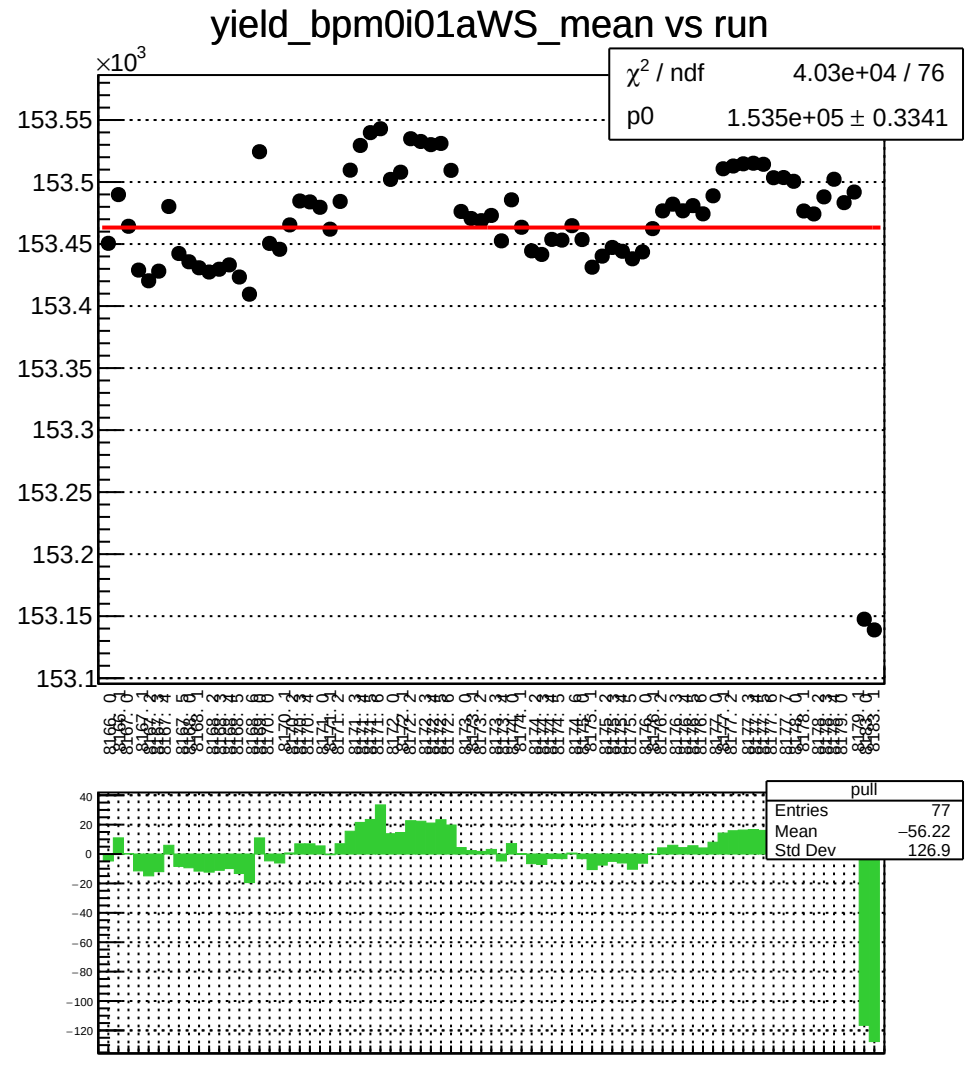
yield_bcm0l02_rms vs run

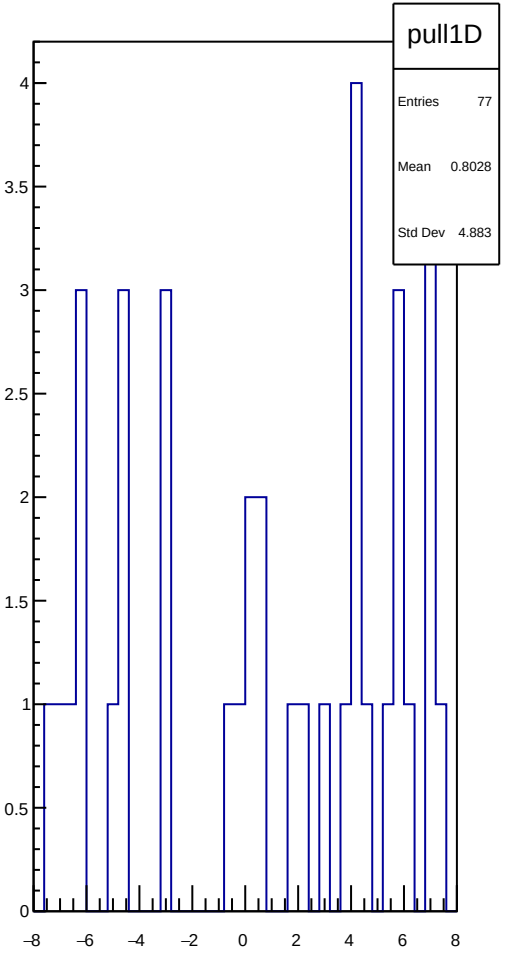


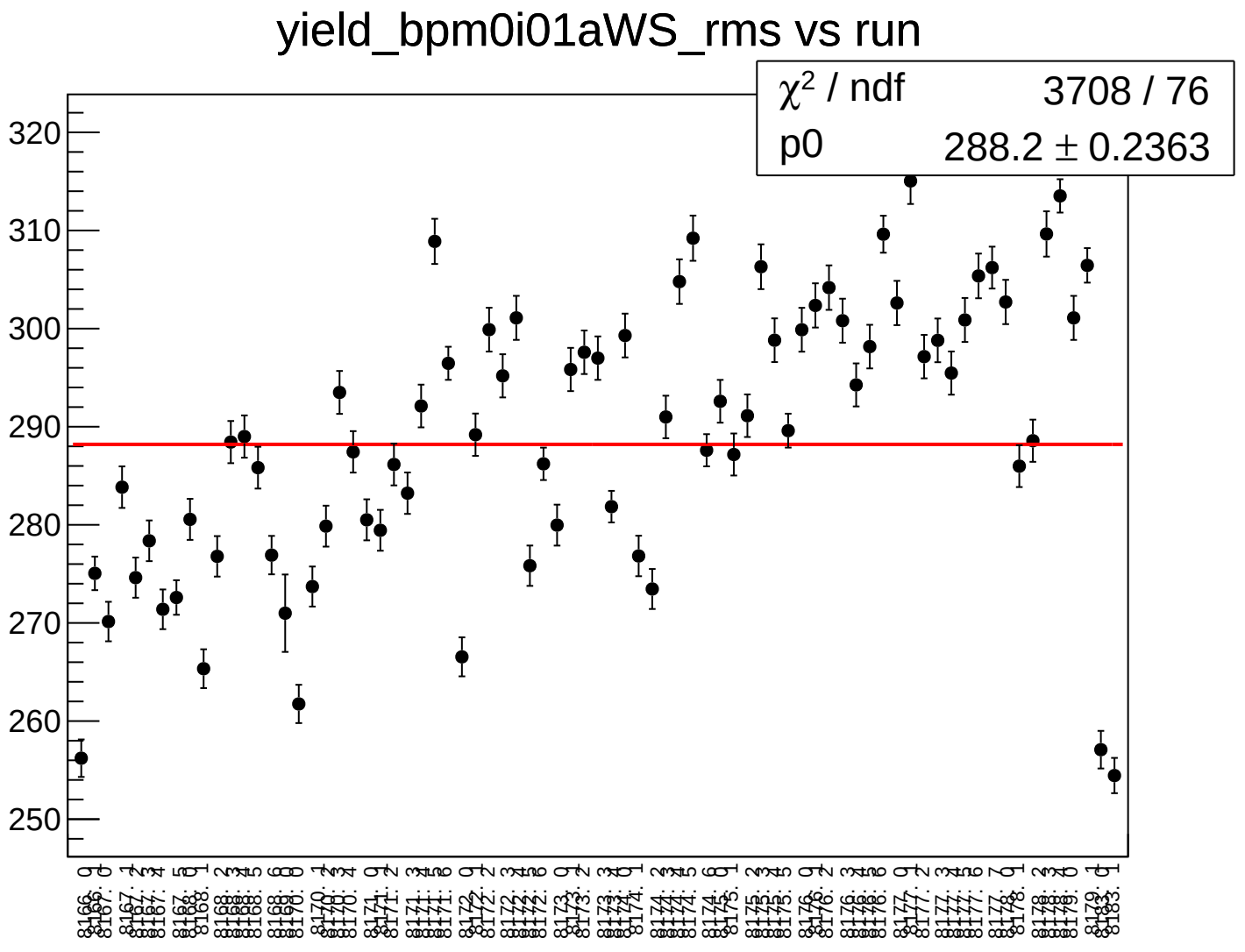

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 2.296e+05 / 76
p0 1.606e+05 ± 0.3659
161.2
161.1
161
160.9
160.8
160.7
160.6
160.5
160.4
pull
Entries 77
Mean 848.7
Std Dev 819.5
150
100
50
0
−50

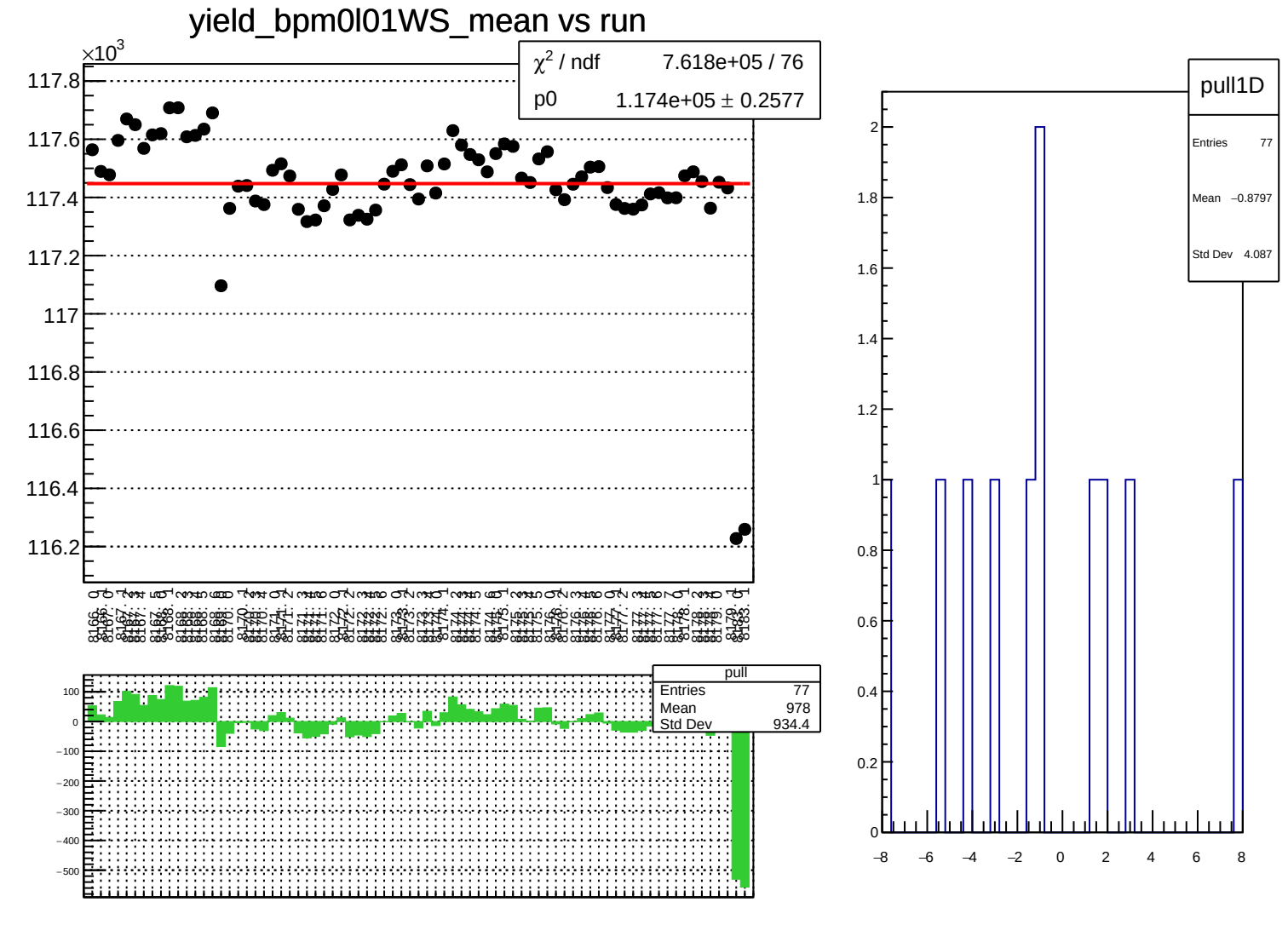

pull1D
Entries 77
Mean −1.326
Std Dev 3.971
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

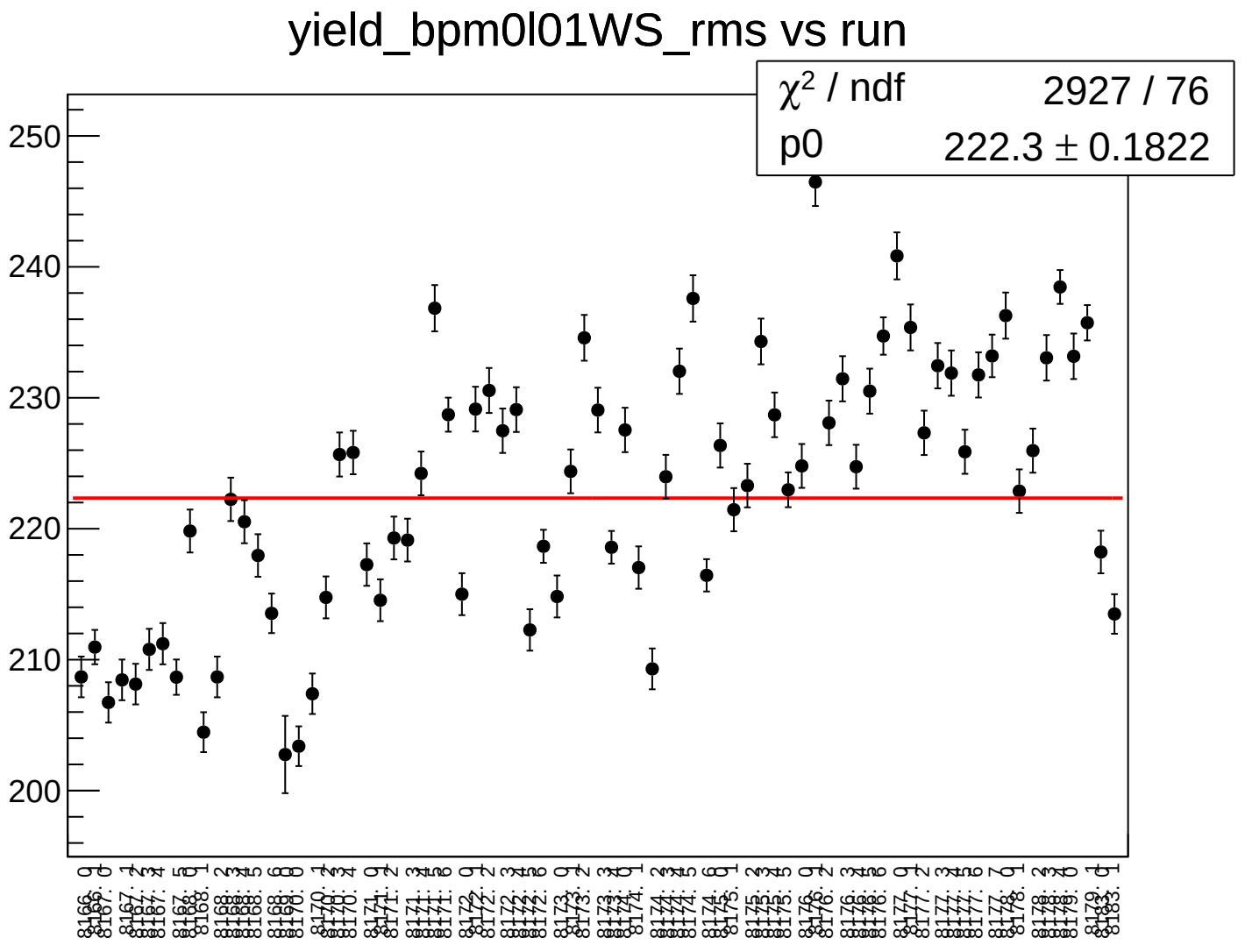

yield_bpm0i01WS_rms vs run
χ² / ndf 3633 / 76
p0 315.6 ± 0.2587
350
340
330
320
310
300
290
280
270

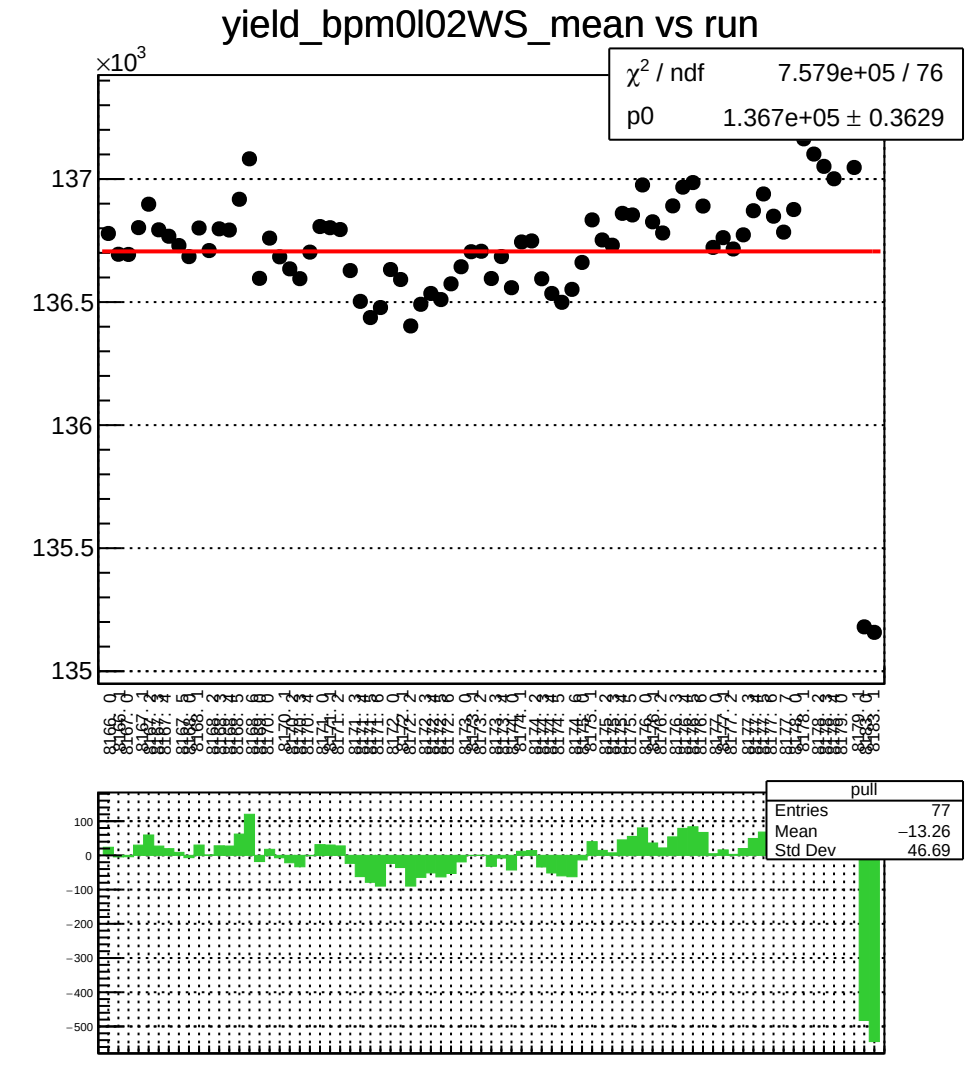

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 4.03e+04 / 76
p0 1.535e+05 ± 0.3341
153.55
153.5
153.45
153.4
153.35
153.3
153.25
153.2
153.15
153.1
pull
Entries 77
Mean −56.22
Std Dev 126.9
40
20
0
−20
−40
−60
−80
−100
−120

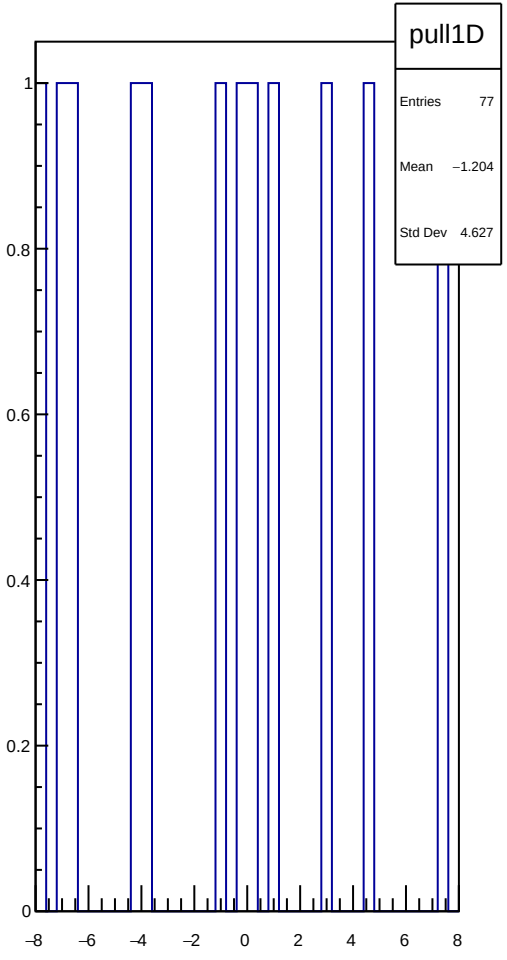

pull1D
Entries 77
Mean 0.8028
Std Dev 4.883
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

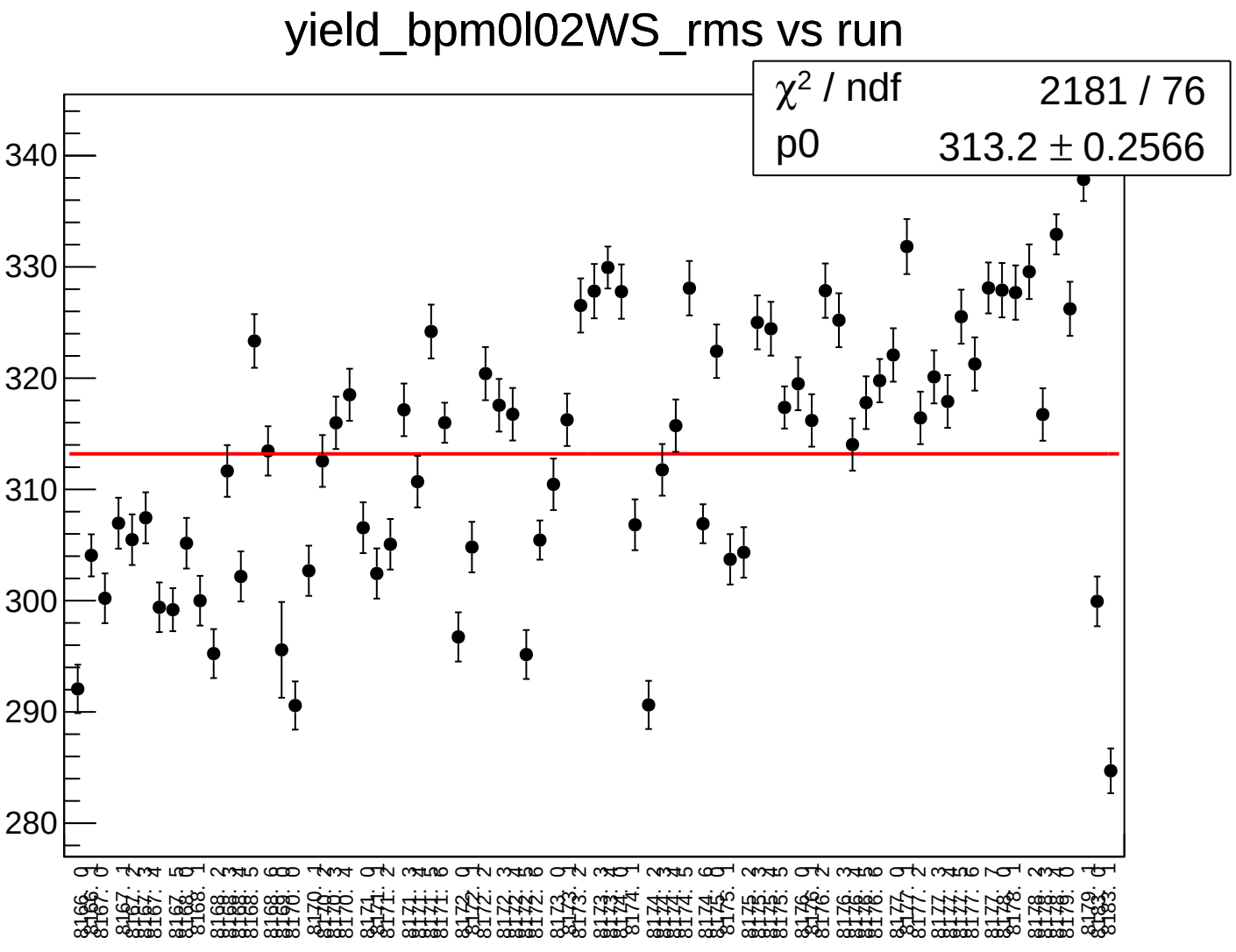

yield_bpm0i01aWS_rms vs run
χ² / ndf 3708 / 76
p0 288.2 ± 0.2363
320
310
300
290
280
270
260
250

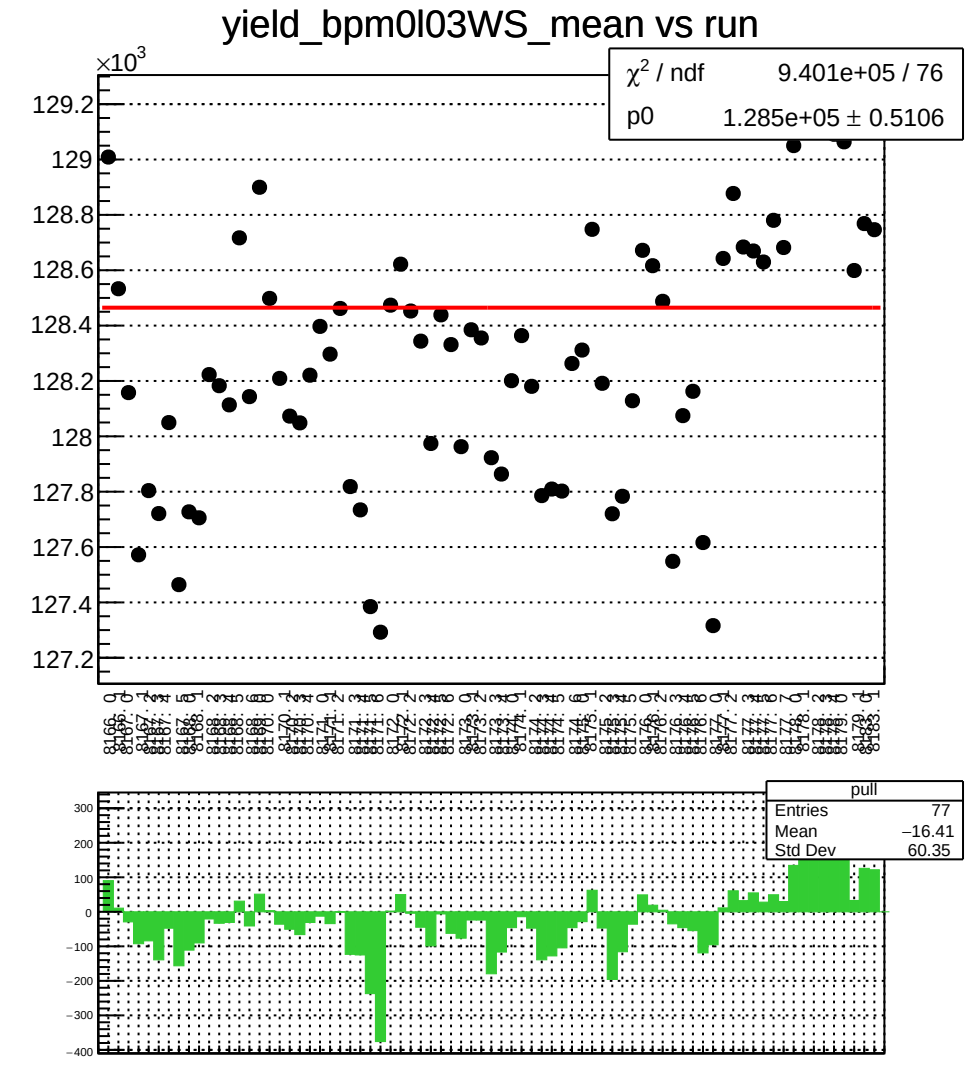

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 7.618e+05 / 76
p0 1.174e+05 ± 0.2577
117.8
117.6
117.4
117.2
117
116.8
116.6
116.4
116.2
pull
Entries 77
Mean 978
Std Dev 934.4
100
0
−100
−200
−300
−400
−500
pull1D
Entries 77
Mean −0.8797
Std Dev 4.087
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

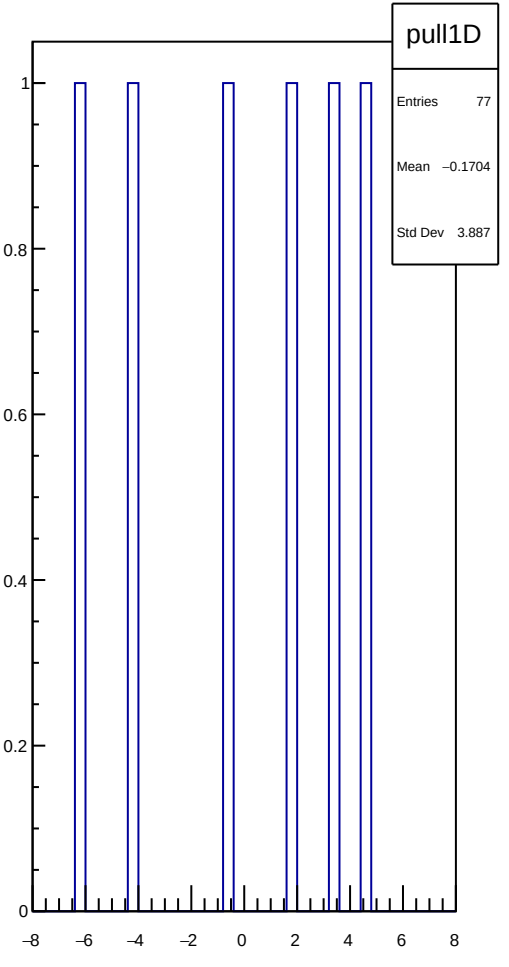

yield_bpm0l01WS_rms vs run
χ² / ndf 2927 / 76
p0 222.3 ± 0.1822
250
240
230
220
210
200

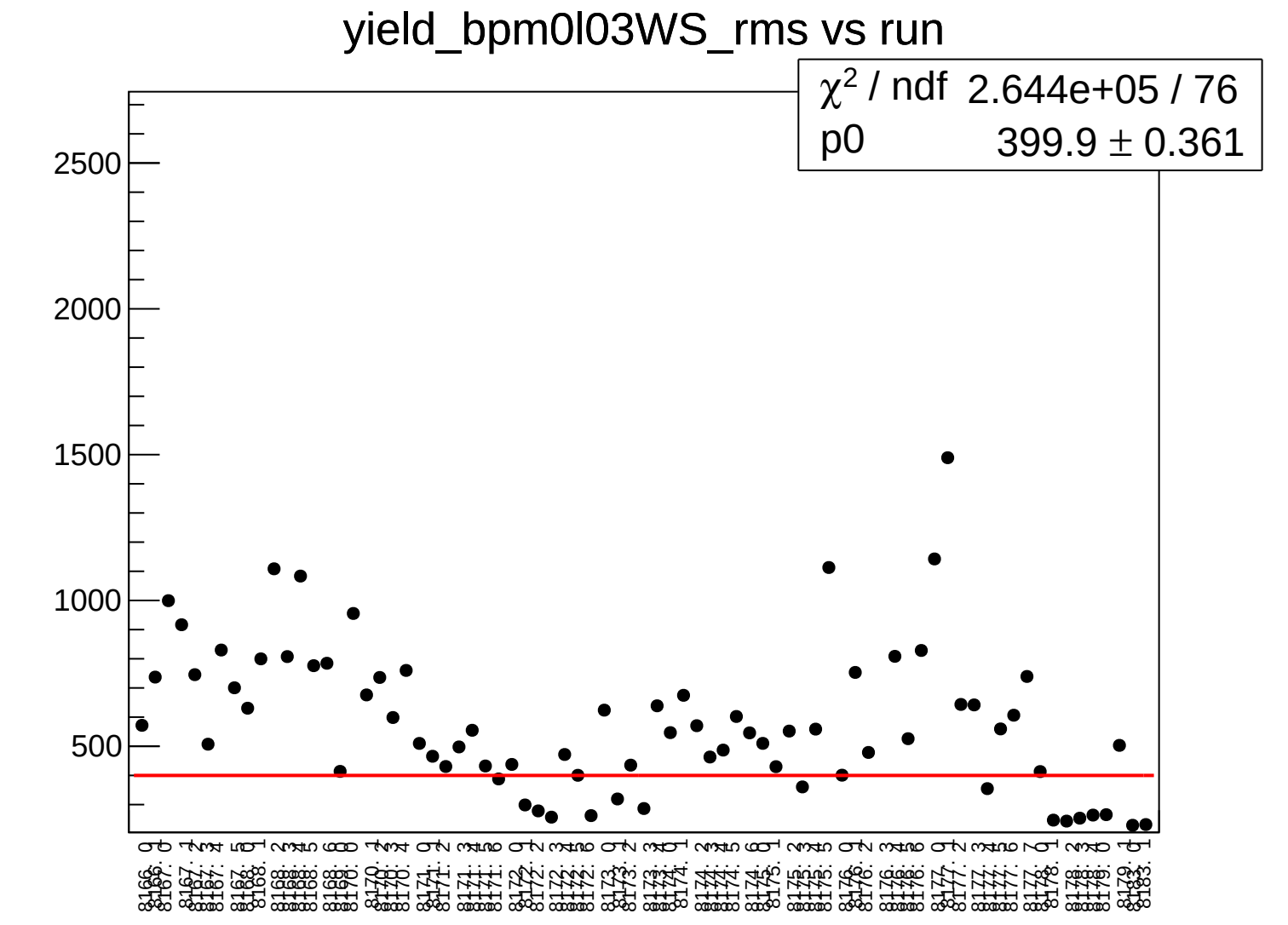

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 7.579e+05 / 76
p0 1.367e+05 ± 0.3629
137
136.5
136
135.5
135
pull
Entries 77
Mean −13.26
Std Dev 46.69
100
0
−100
−200
−300
−400
−500

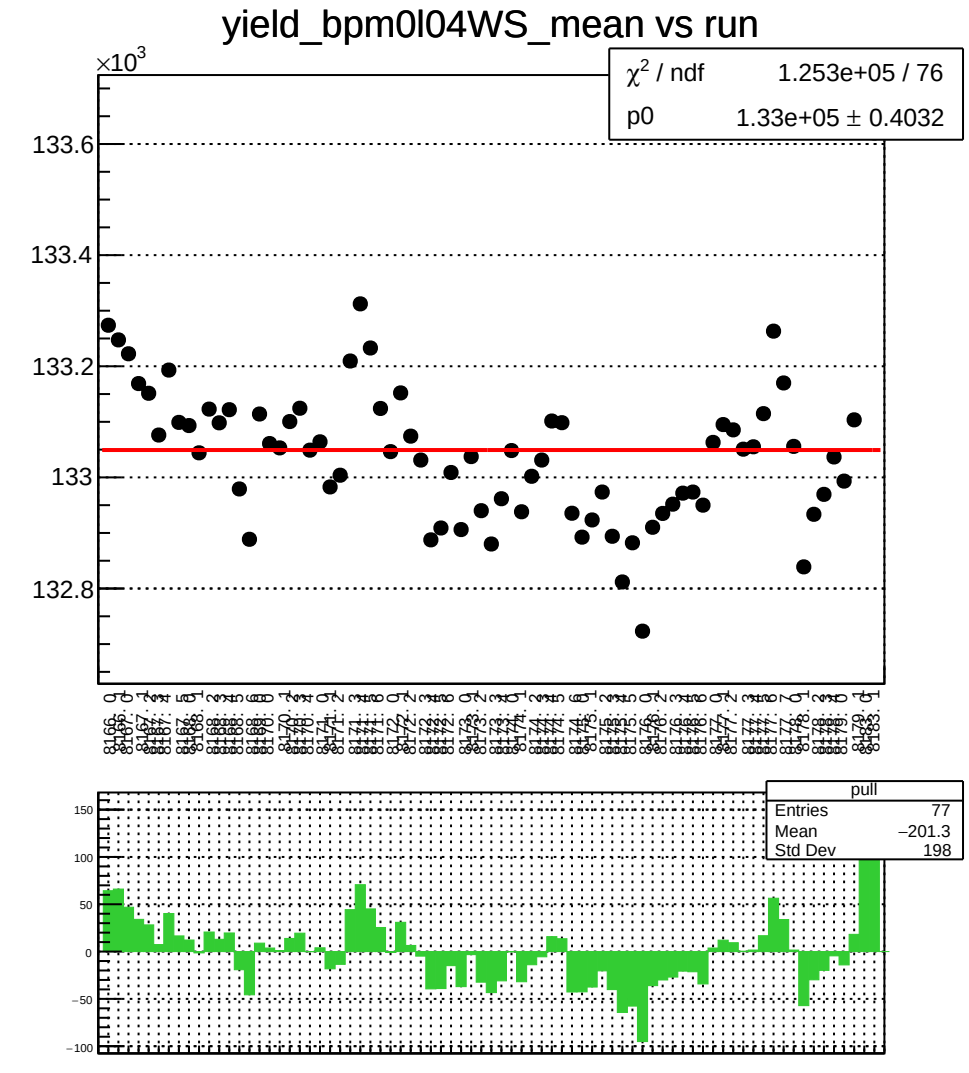

pull1D
Entries 77
Mean −1.204
Std Dev 4.627
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

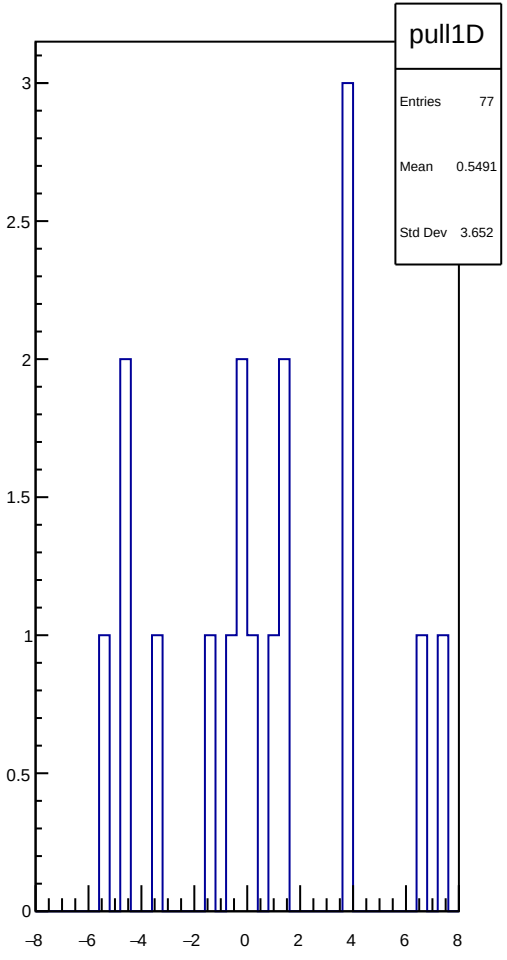

yield_bpm0l02WS_rms vs run
χ² / ndf 2181 / 76
p0 313.2 ± 0.2566
340
330
320
310
300
290
280

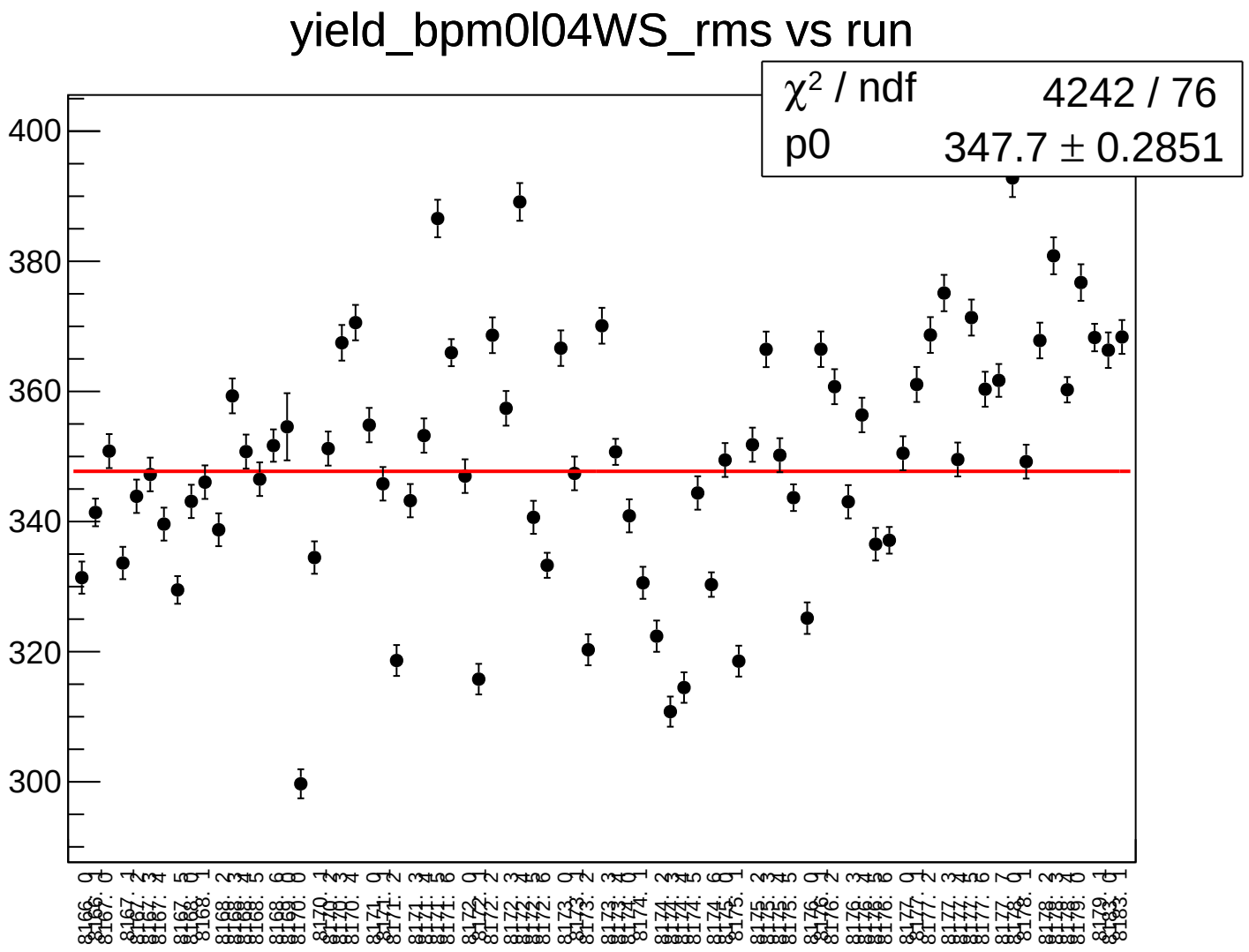

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 9.401e+05 / 76
p0 1.285e+05 ± 0.5106
129.2
129
128.8
128.6
128.4
128.2
128
127.8
127.6
127.4
127.2
pull
Entries 77
Mean −16.41
Std Dev 60.35
300
200
100
0
−100
−200
−300
−400

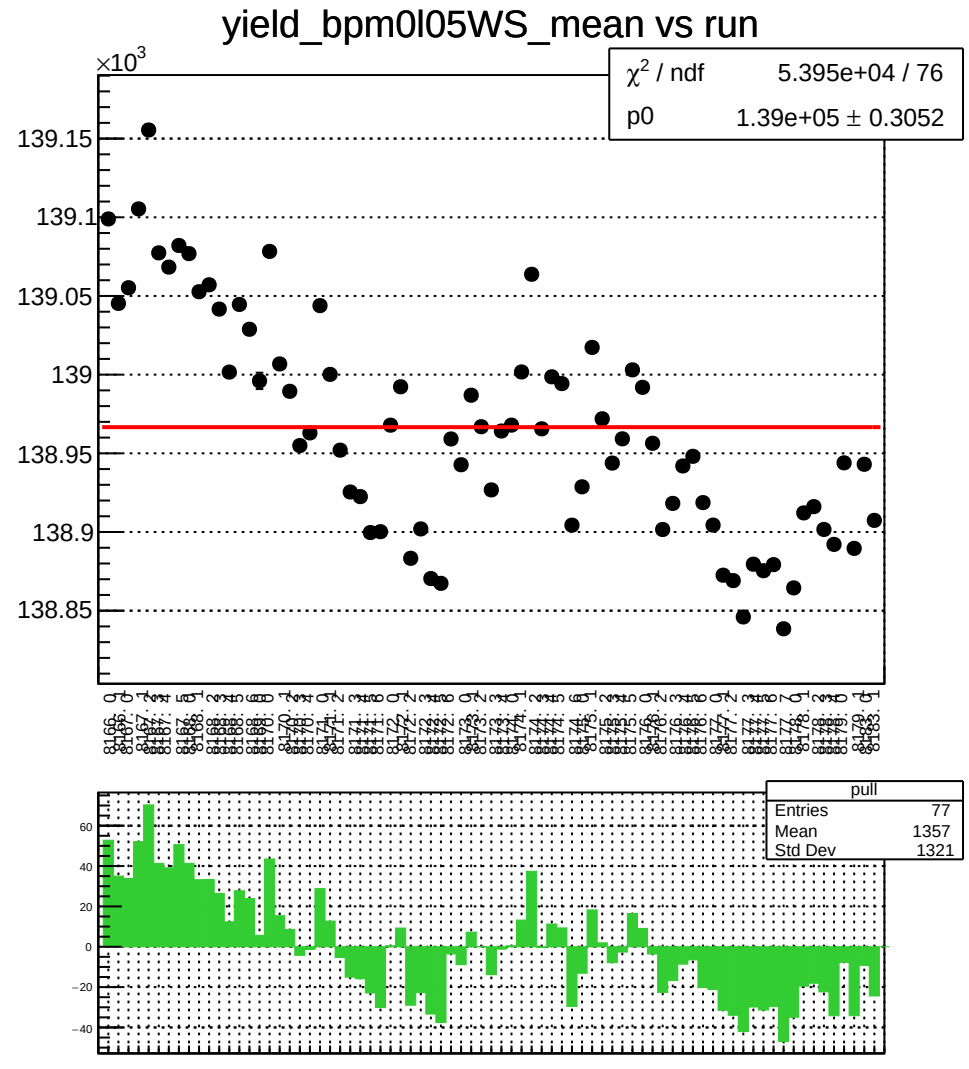

pull1D
Entries 77
Mean −0.1704
Std Dev 3.887
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

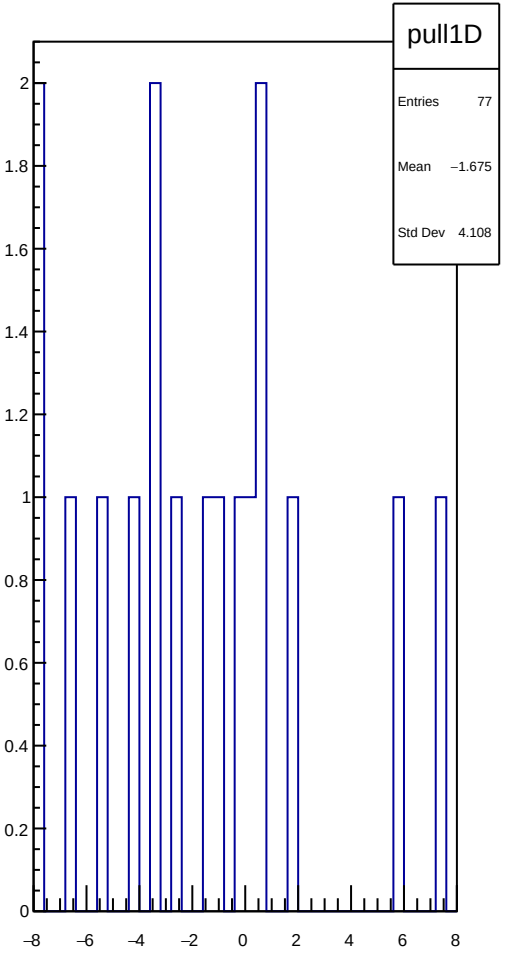

yield_bpm0l03WS_rms vs run
χ² / ndf 2.644e+05 / 76
p0 399.9 ± 0.361
2500
2000
1500
1000
500

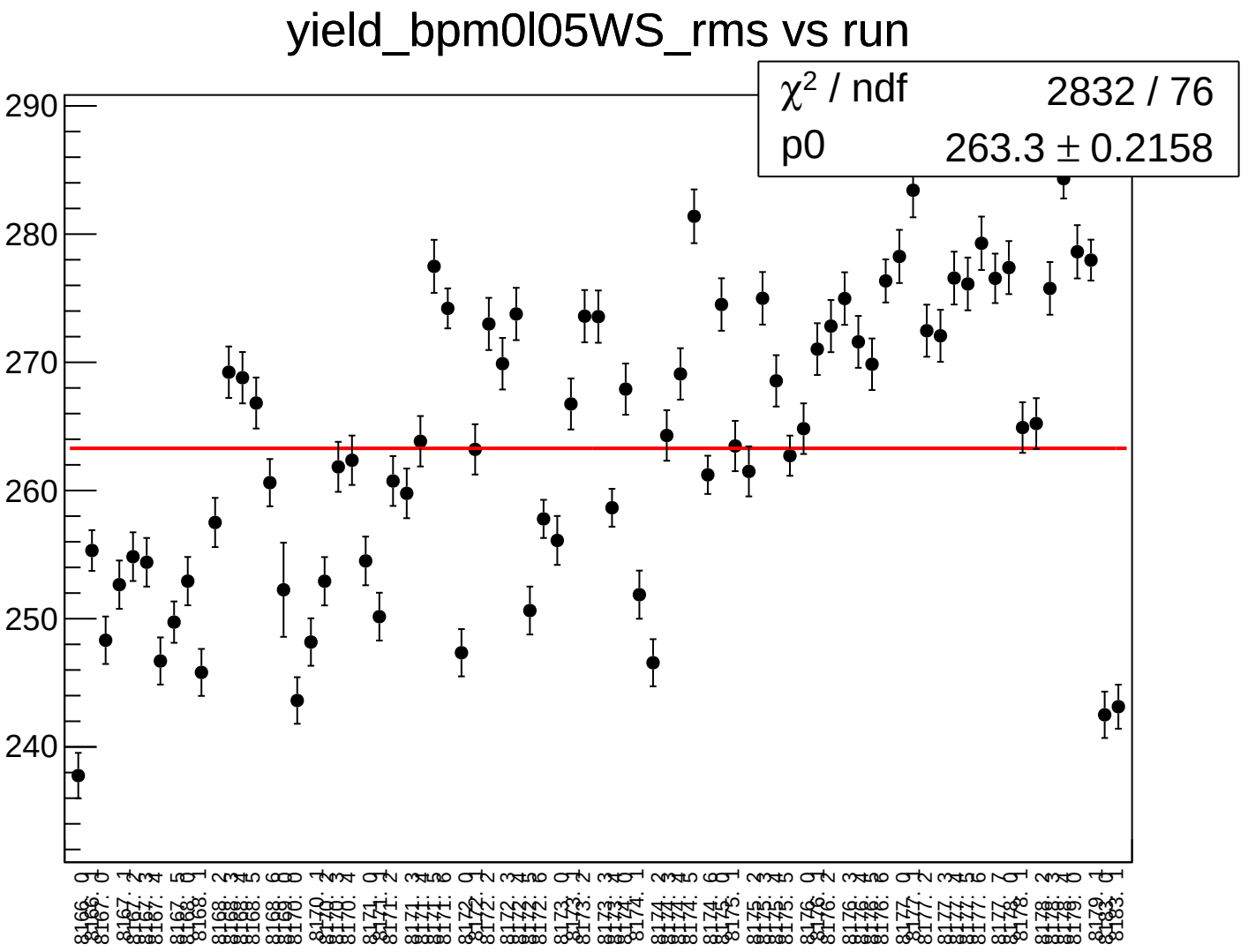

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 1.253e+05 / 76
p0 1.33e+05 ± 0.4032
133.6
133.4
133.2
133
132.8
pull
Entries 77
Mean −201.3
Std Dev 198
150
100
50
0
−50
−100

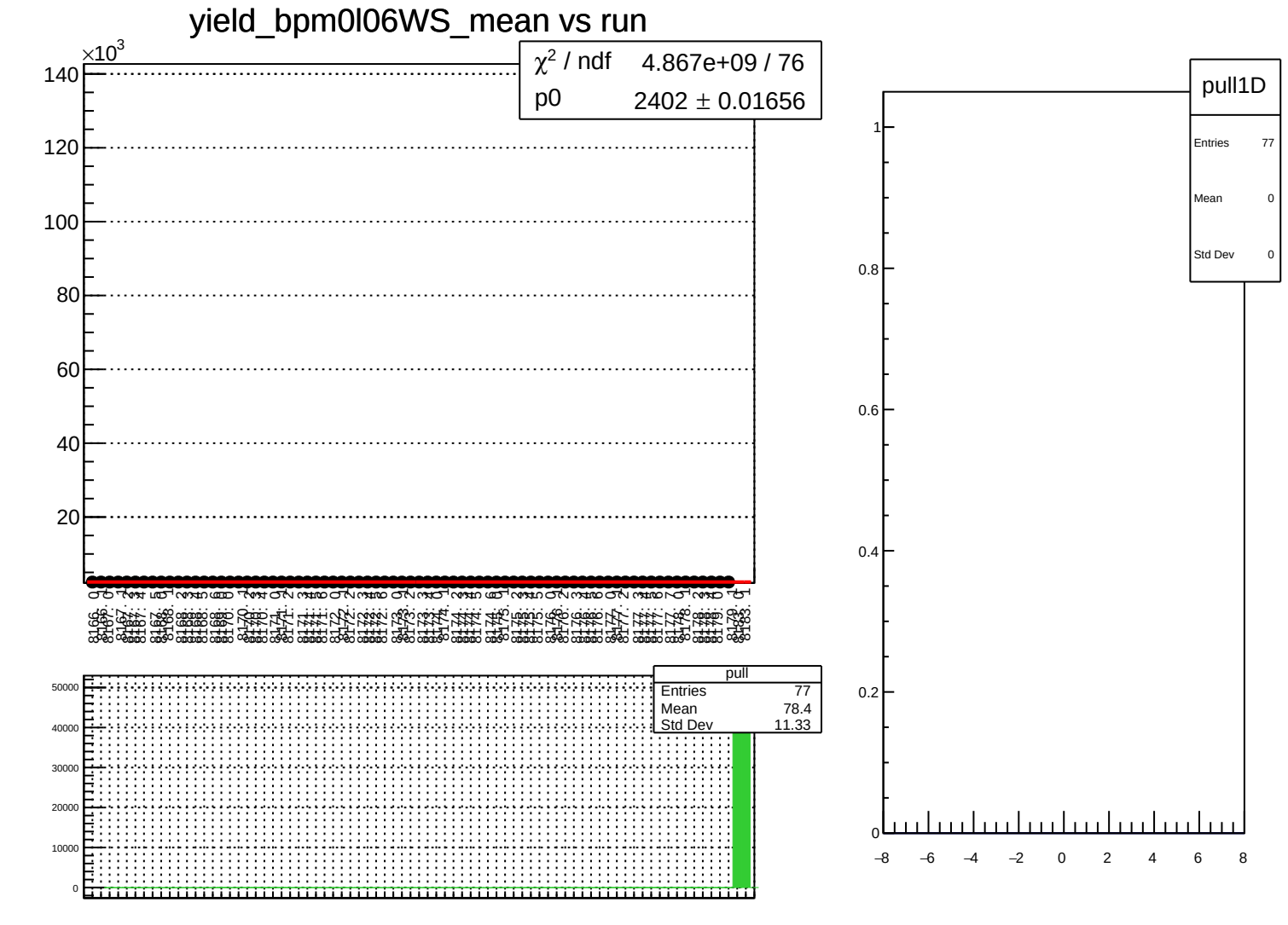

pull1D
Entries 77
Mean 0.5491
Std Dev 3.652
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

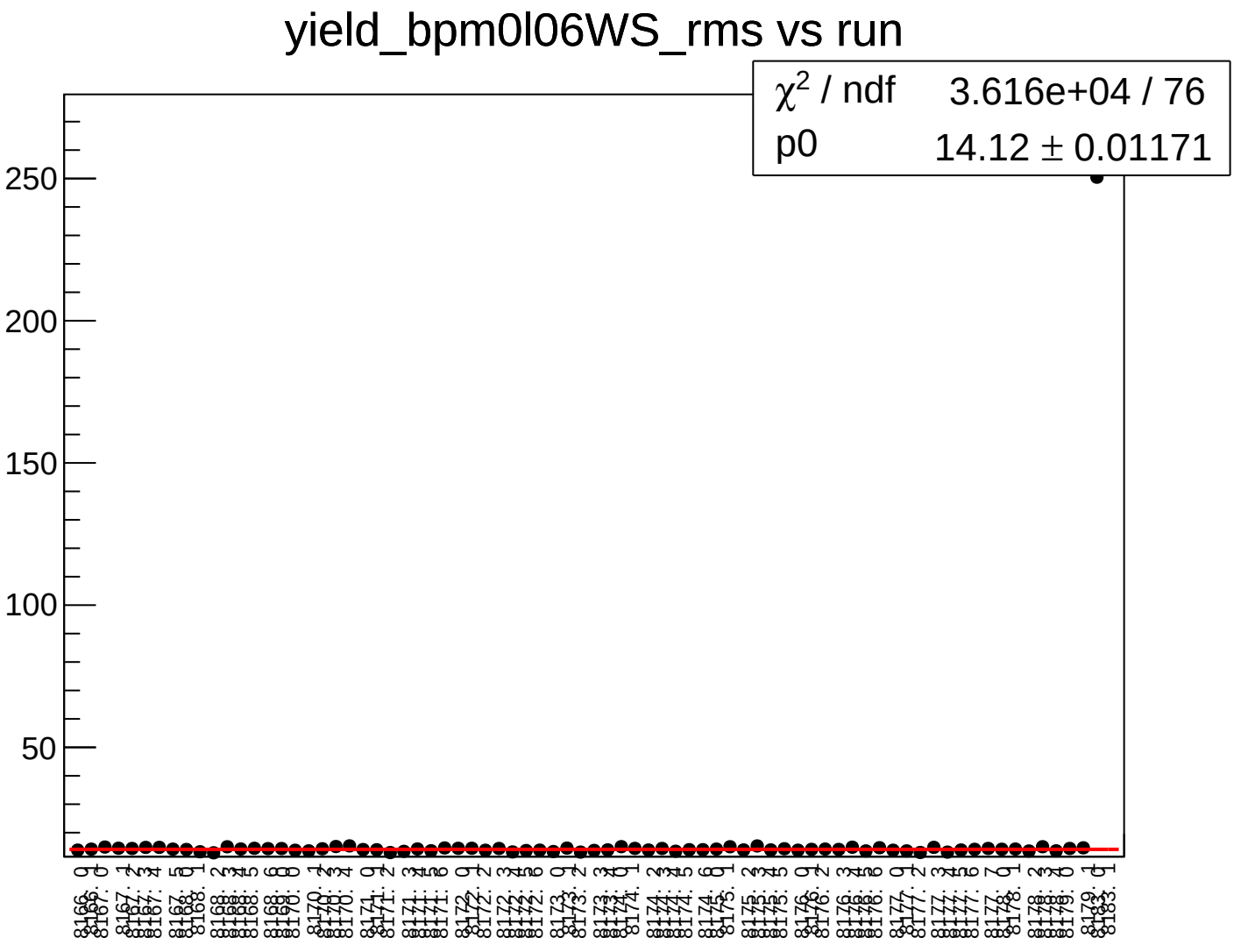

yield_bpm0l04WS_rms vs run
χ² / ndf 4242 / 76
p0 347.7 ± 0.2851
400
380
360
340
320
300

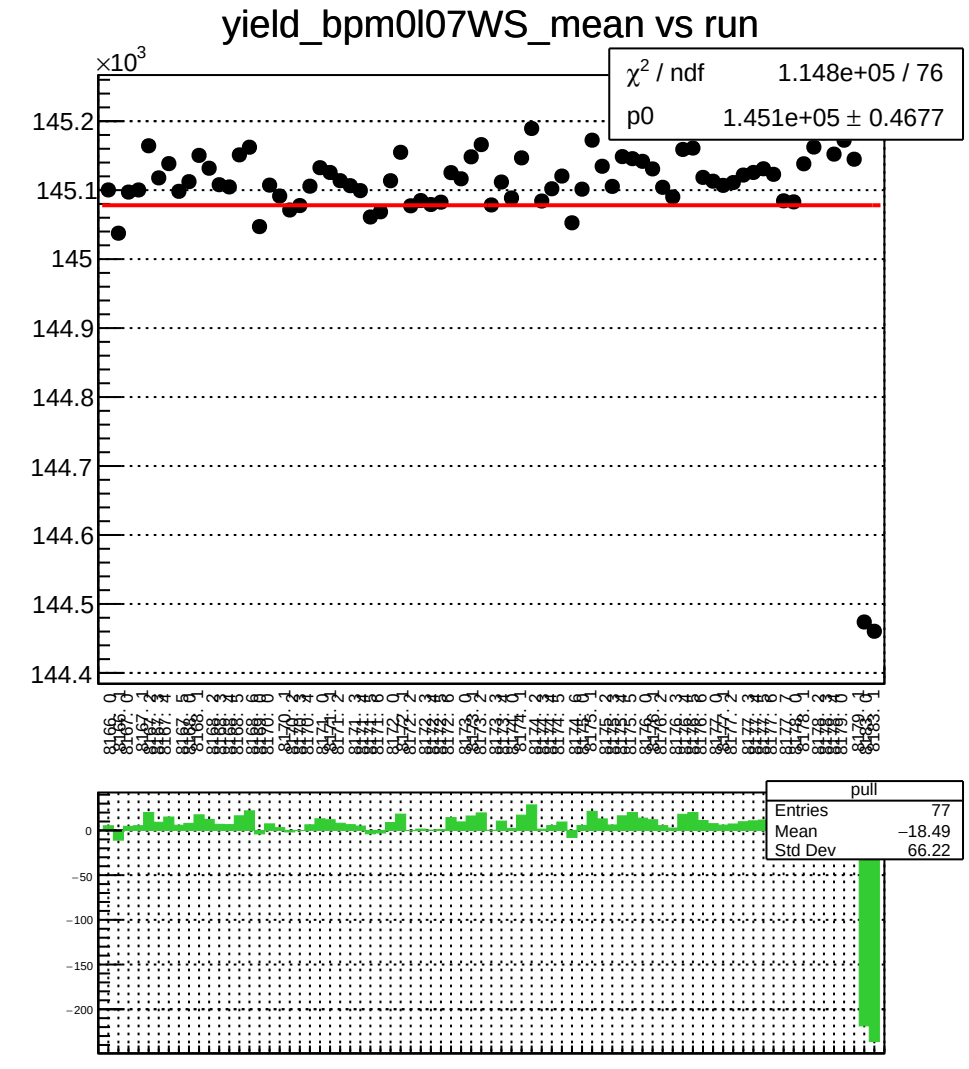

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 5.395e+04 / 76
p0 1.39e+05 ± 0.3052
139.15
139.1
139.05
139
138.95
138.9
138.85
pull
Entries 77
Mean 1357
Std Dev 1321
60
40
20
0
−20
−40

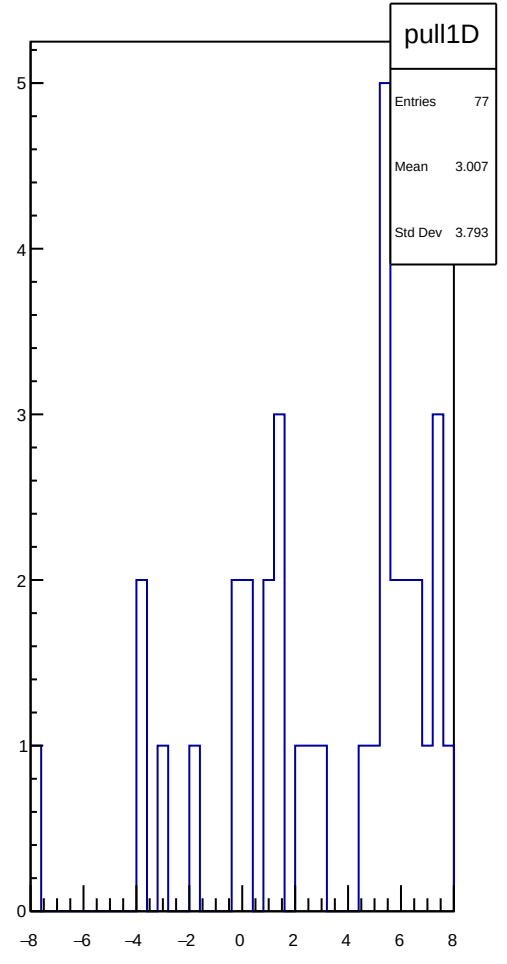

pull1D
Entries 77
Mean −1.675
Std Dev 4.108
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

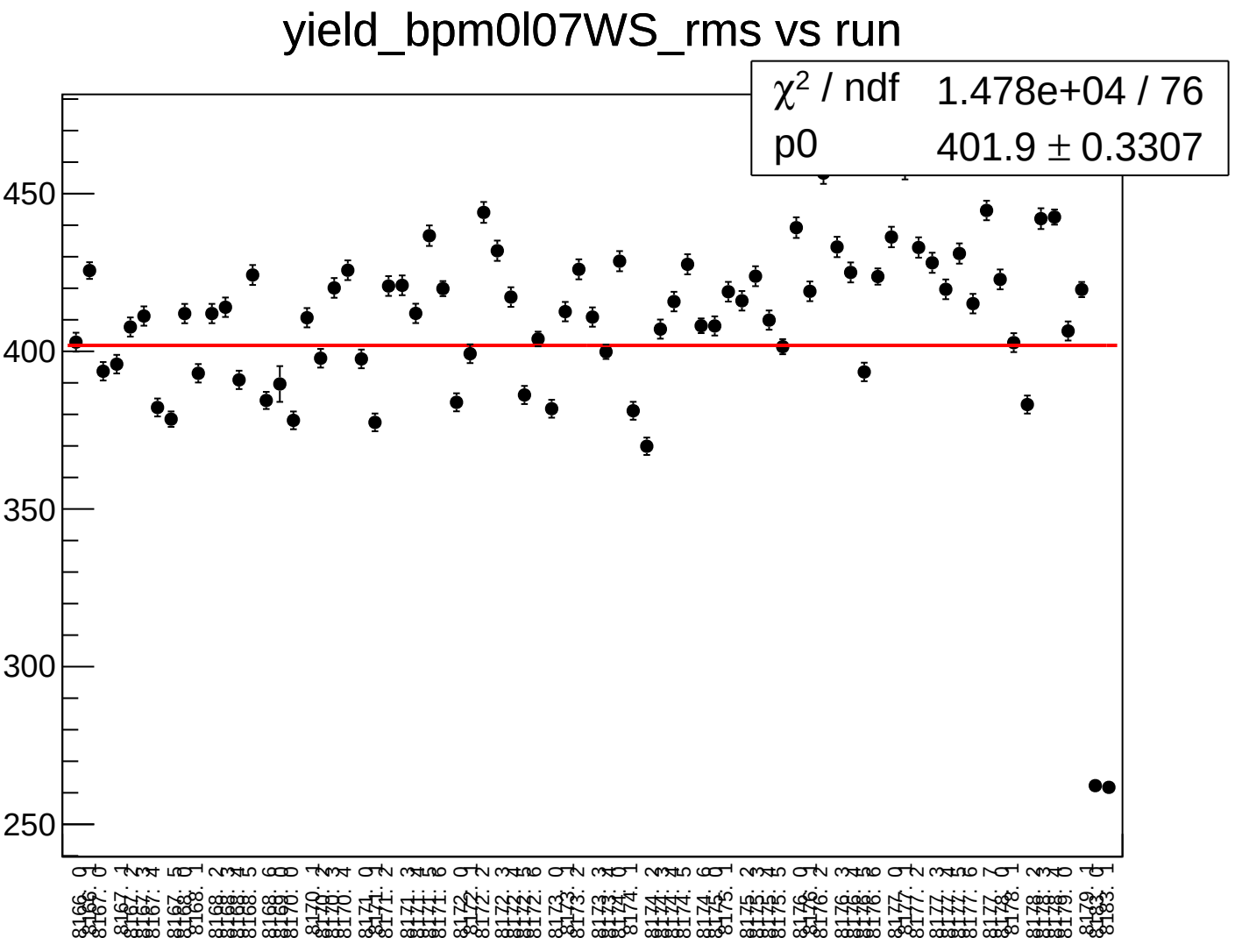

yield_bpm0l05WS_rms vs run
χ² / ndf 2832 / 76
p0 263.3 ± 0.2158
290
280
270
260
250
240

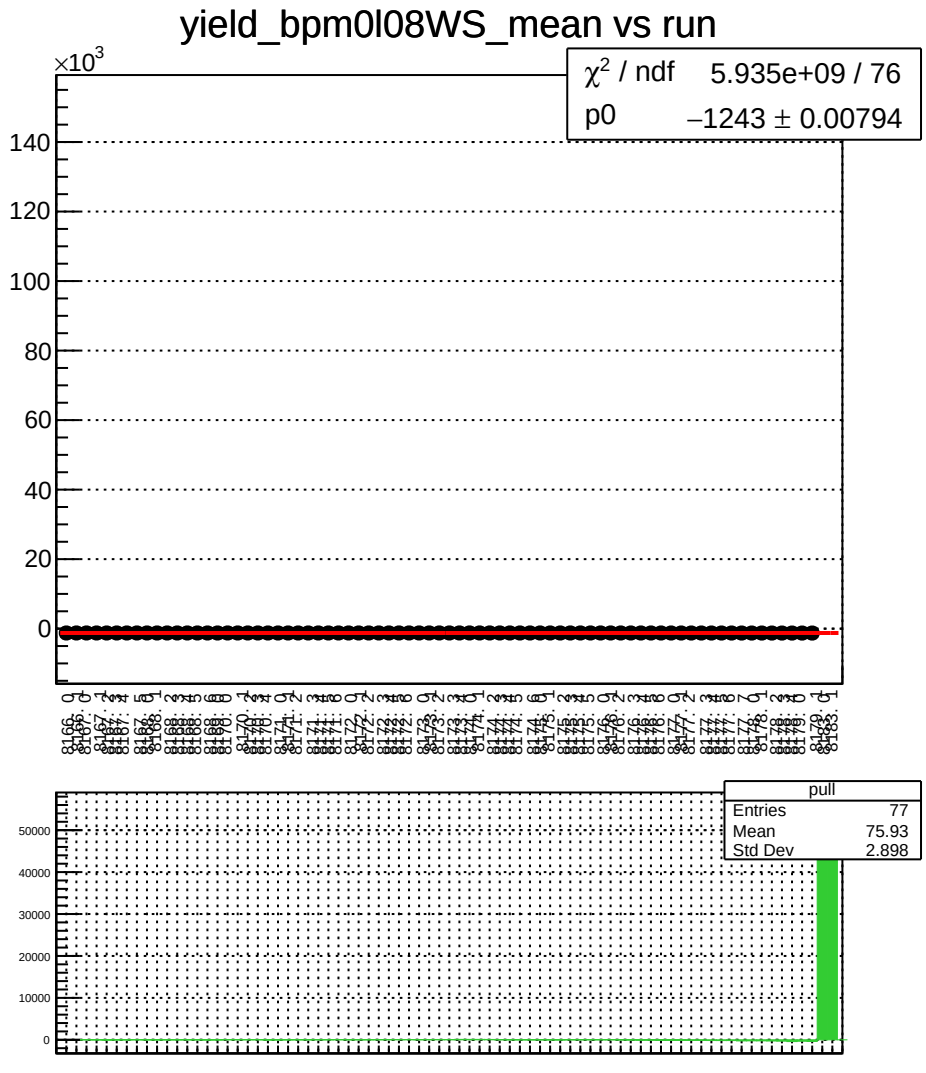

yield_bpm0l06WS_mean vs run
×10^3
χ^2 / ndf 4.867e+09 / 76
p0 2402 ± 0.01656
140
120
100
80
60
40
20
pull
Entries 77
Mean 78.4
Std Dev 11.33
50000
40000
30000
20000
10000
0
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

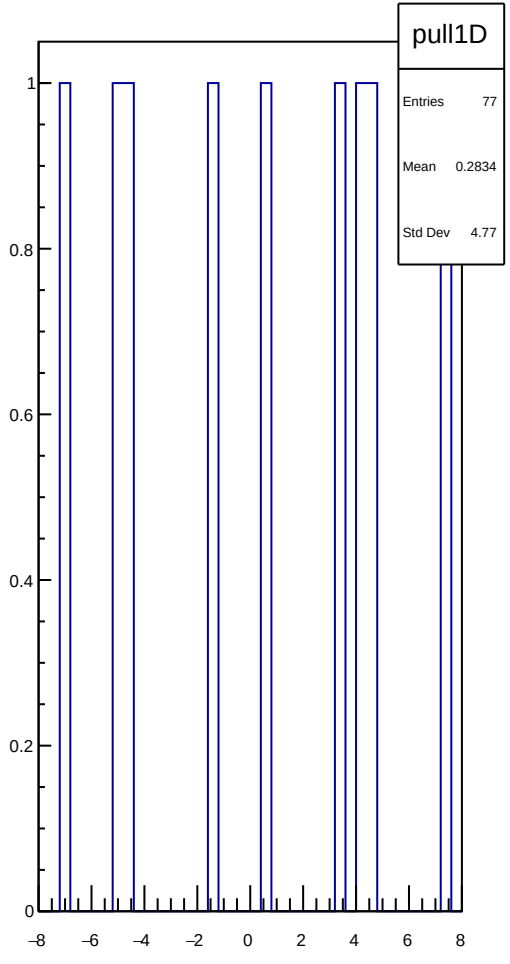

yield_bpm0l06WS_rms vs run
χ² / ndf 3.616e+04 / 76
p0 14.12 ± 0.01171
250
200
150
100
50

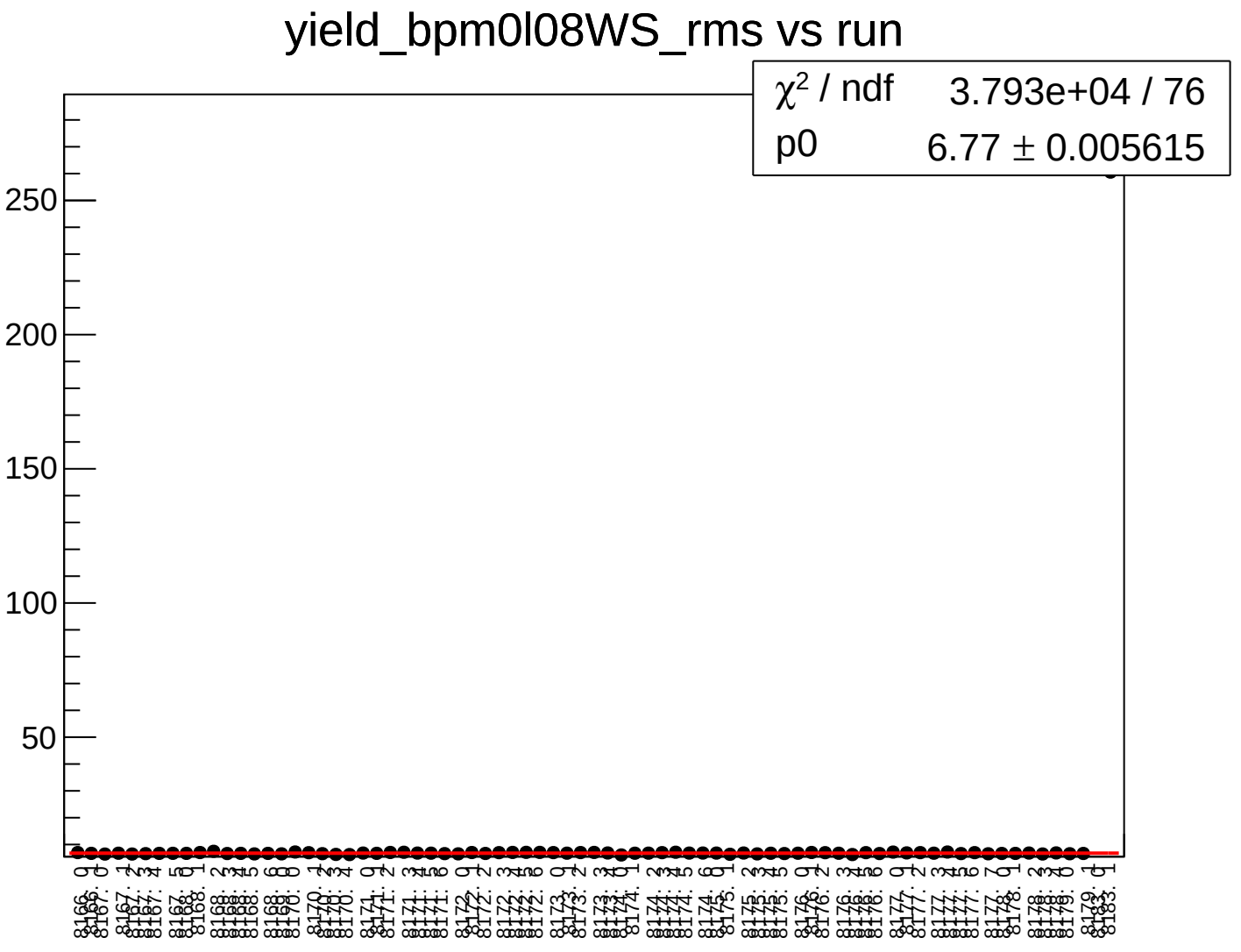

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.148e+05 / 76
p0 1.451e+05 ± 0.4677
145.2
145.1
145
144.9
144.8
144.7
144.6
144.5
144.4
pull
Entries 77
Mean −18.49
Std Dev 66.22
0
−50
−100
−150
−200

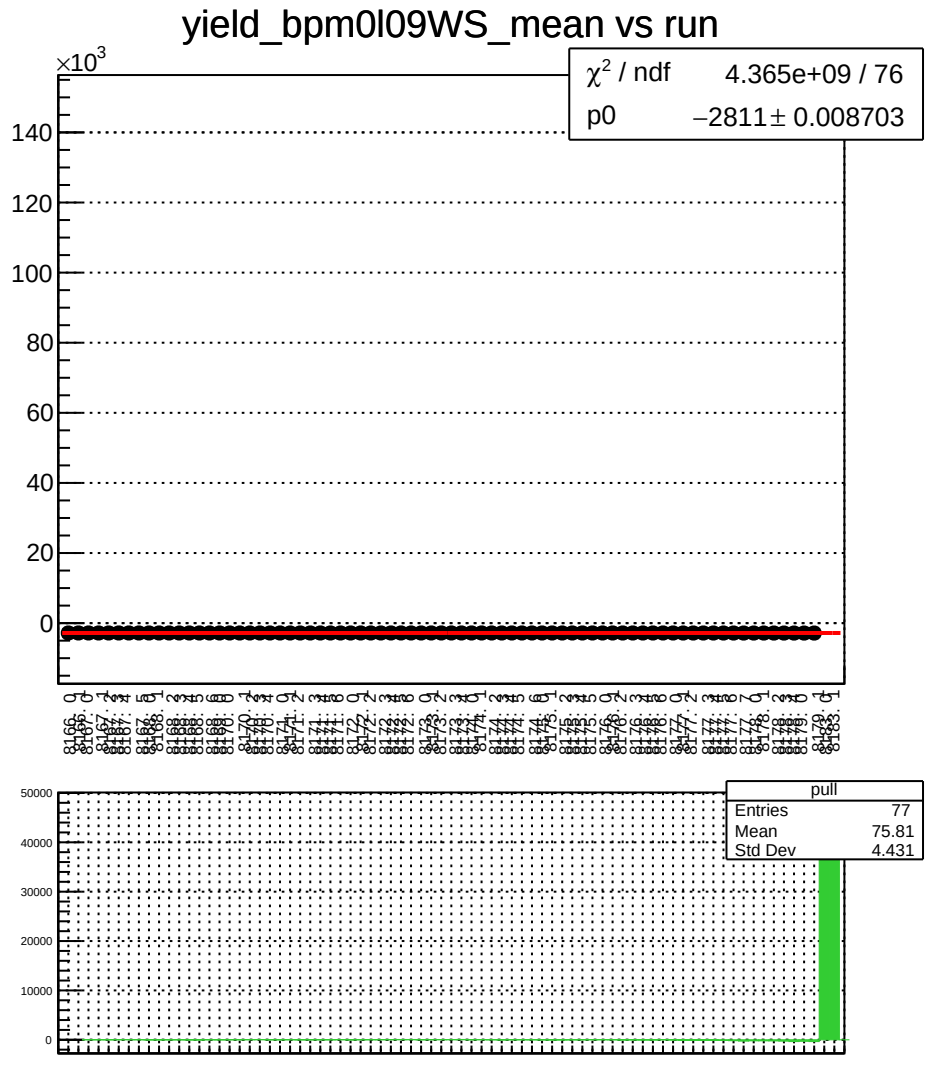

pull1D
Entries 77
Mean 3.007
Std Dev 3.793
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

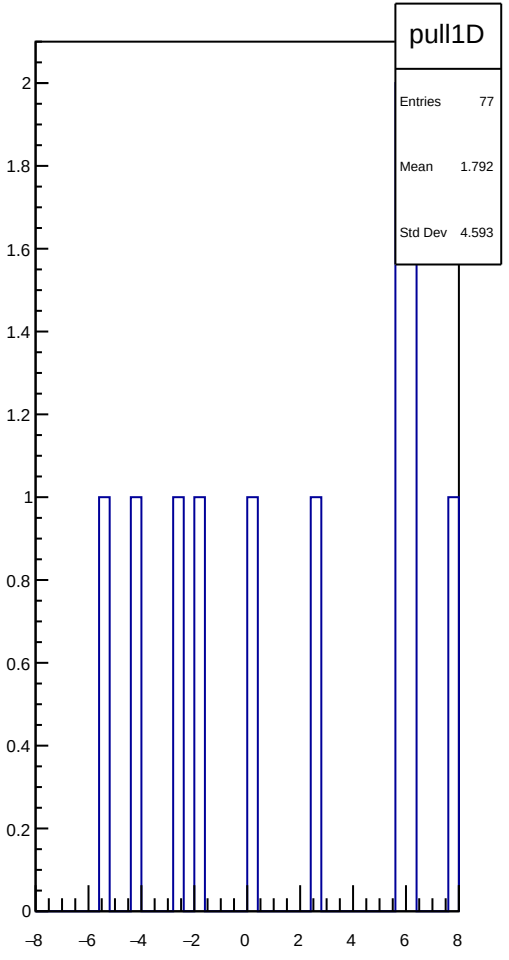

yield_bpm0l07WS_rms vs run
χ² / ndf 1.478e+04 / 76
p0 401.9 ± 0.3307
450
400
350
300
250

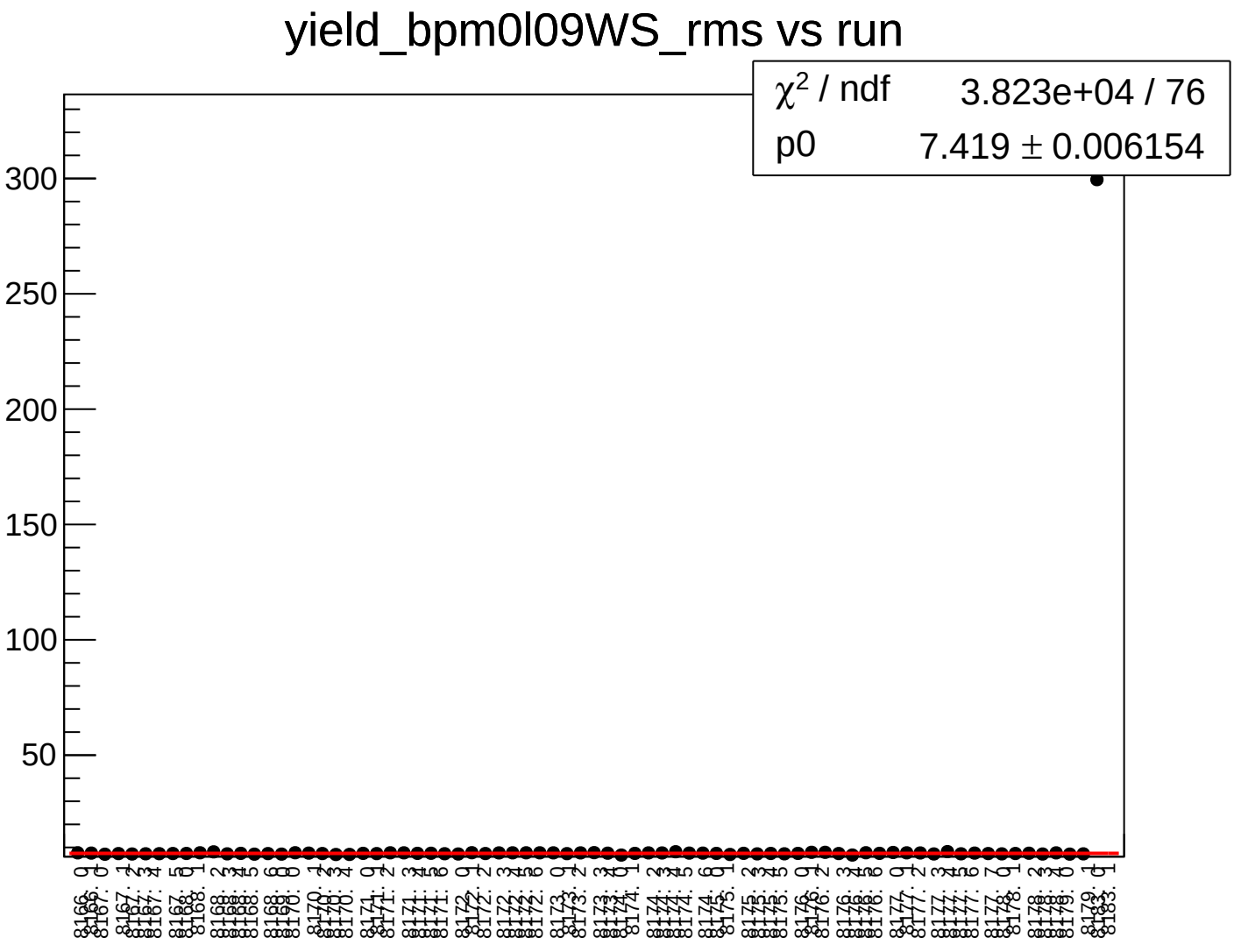

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 5.935e+09 / 76
p0 −1243 ± 0.00794
140
120
100
80
60
40
20
0
pull
Entries 77
Mean 75.93
Std Dev 2.898
50000
40000
30000
20000
10000
0

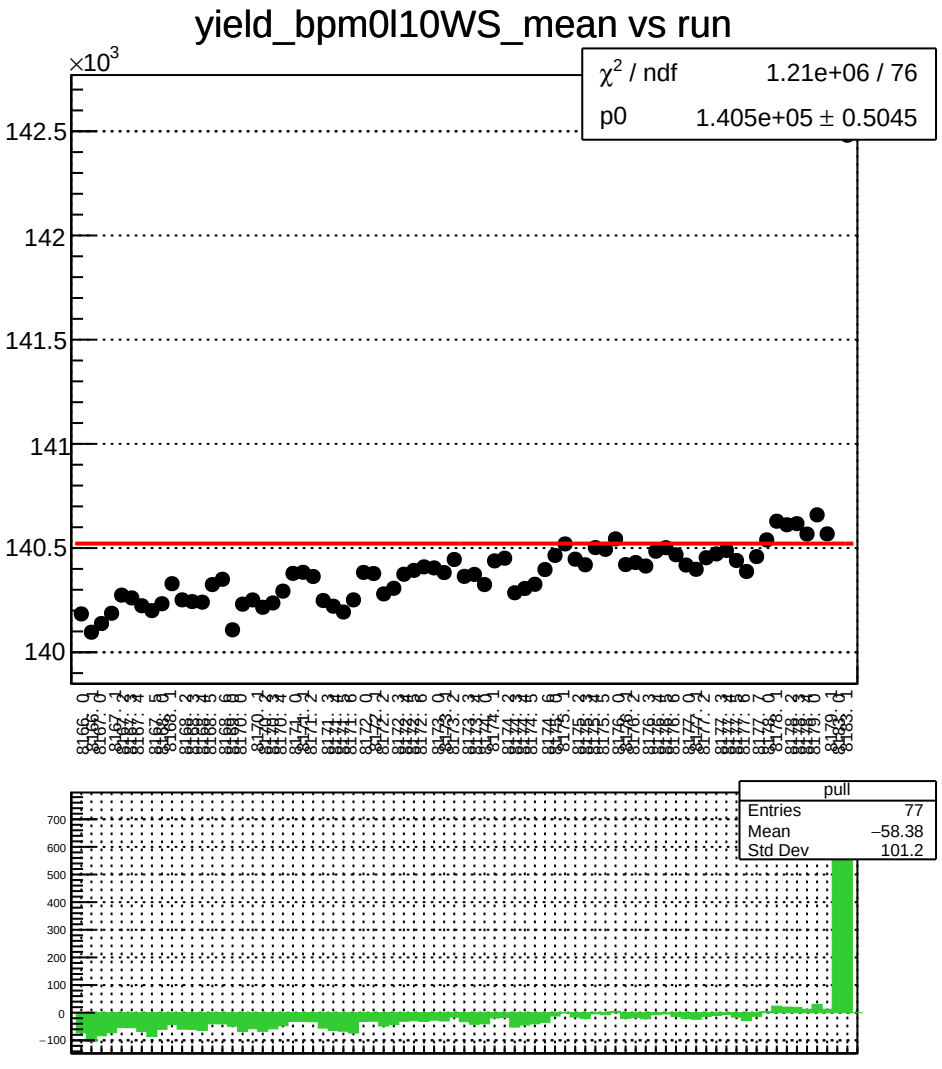

pull1D
Entries 77
Mean 0.2834
Std Dev 4.77
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

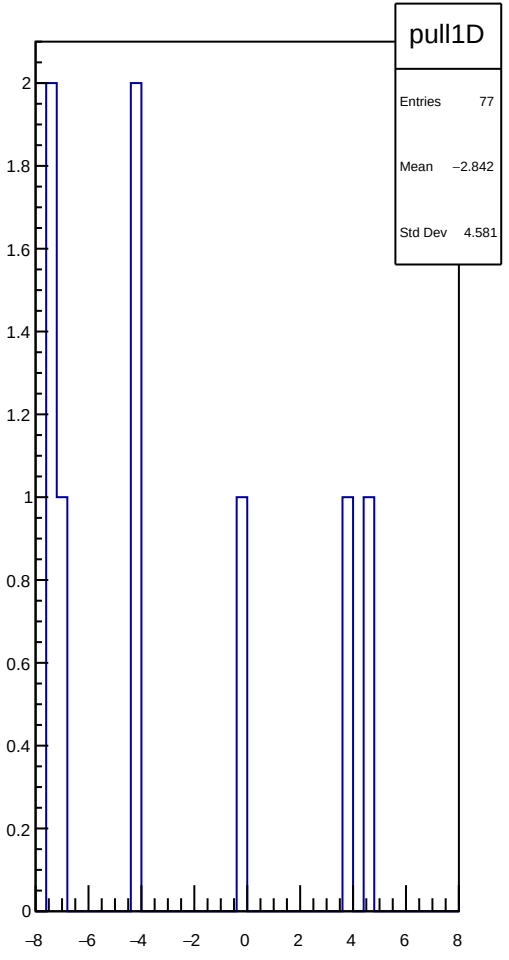

yield_bpm0l08WS_rms vs run
χ² / ndf 3.793e+04 / 76
p0 6.77 ± 0.005615
250
200
150
100
50

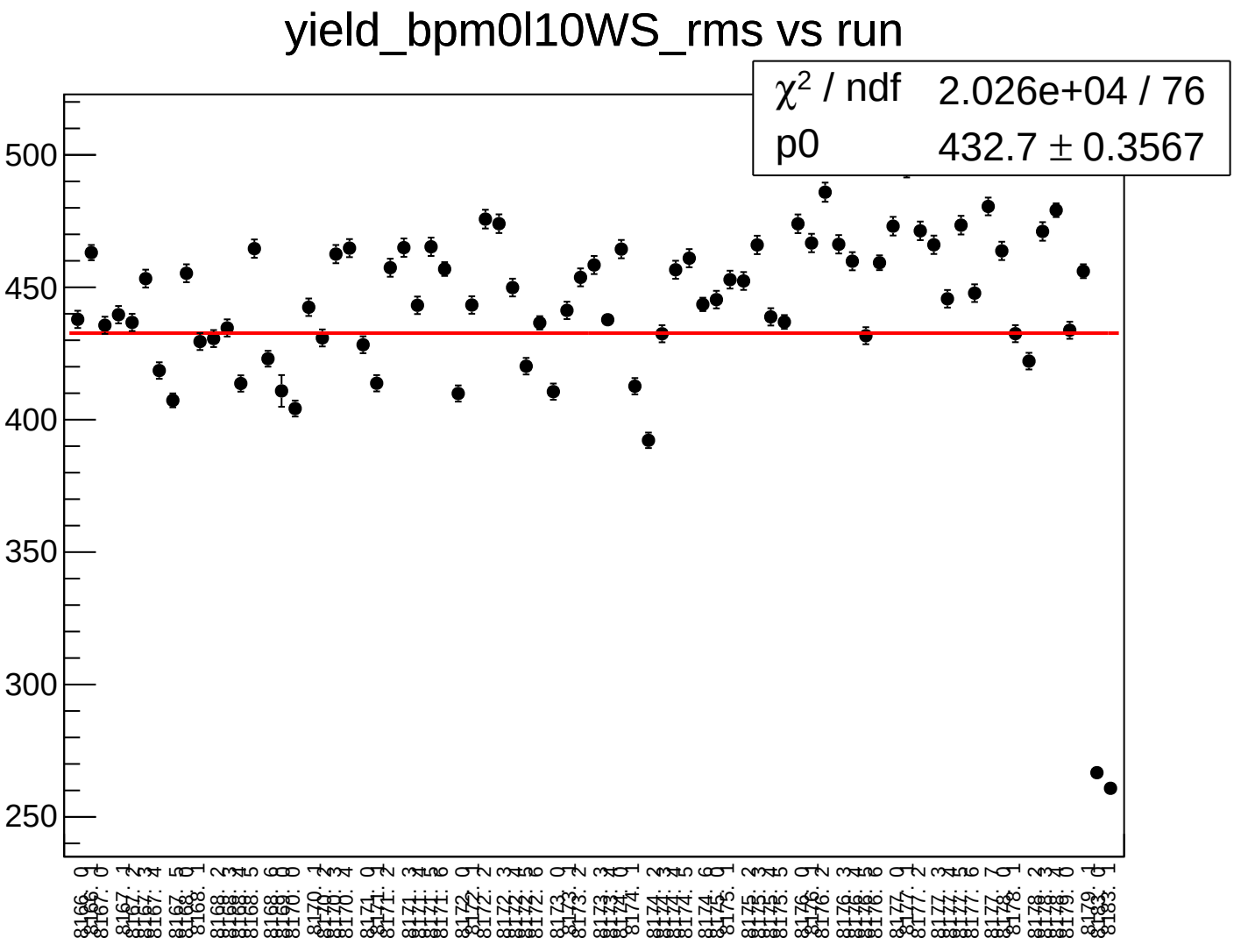

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 4.365e+09 / 76
p0 −2811 ± 0.008703
140
120
100
80
60
40
20
0
pull
Entries 77
Mean 75.81
Std Dev 4.431
50000
40000
30000
20000
10000
0

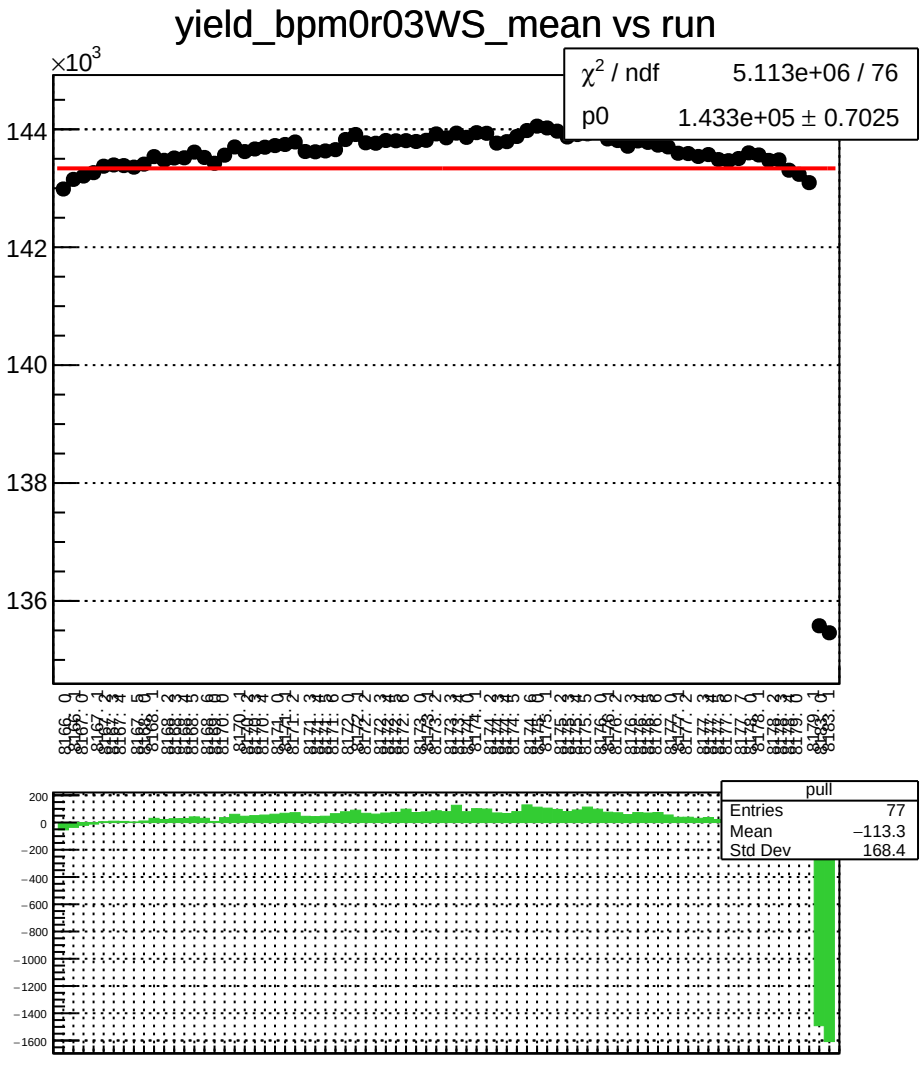

pull1D
Entries 77
Mean 1.792
Std Dev 4.593
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

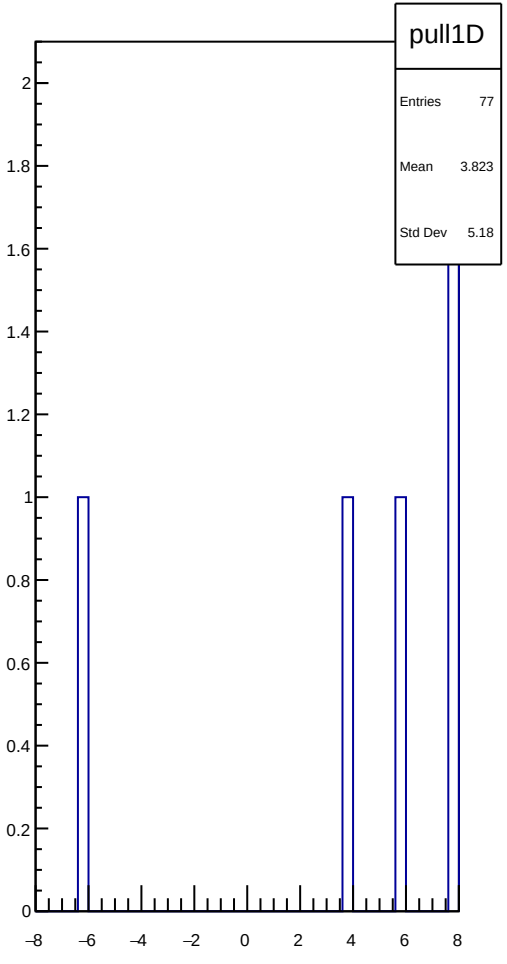

yield_bpm0l09WS_rms vs run
χ^2 / ndf 3.823e+04 / 76
p0 7.419 ± 0.006154
300
250
200
150
100
50

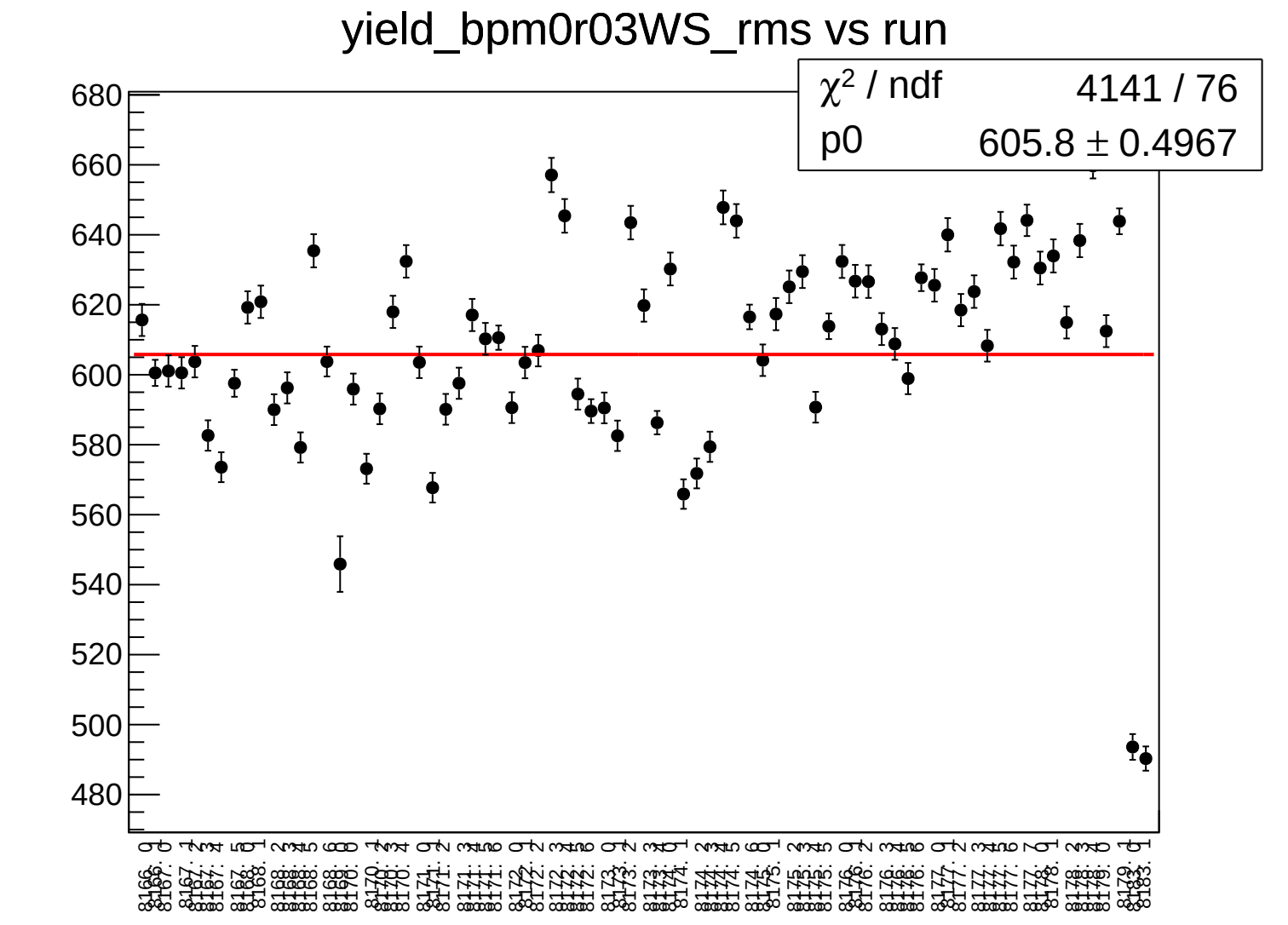

yield_bpm0l10WS_mean vs run
×10^3
χ^2 / ndf 1.21e+06 / 76
p0 1.405e+05 ± 0.5045
142.5
142
141.5
141
140.5
140
pull
Entries 77
Mean −58.38
Std Dev 101.2
700
600
500
400
300
200
100
0
−100

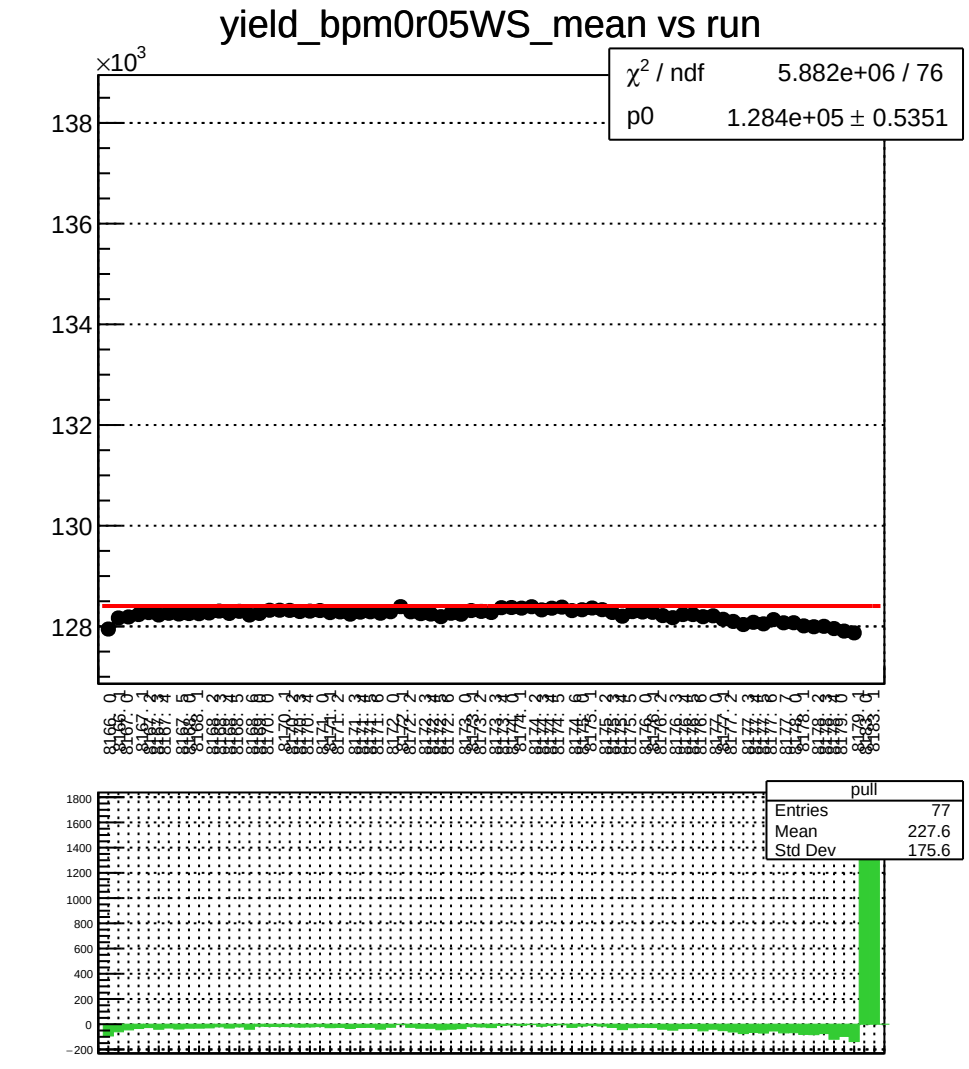

pull1D
Entries 77
Mean −2.842
Std Dev 4.581
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

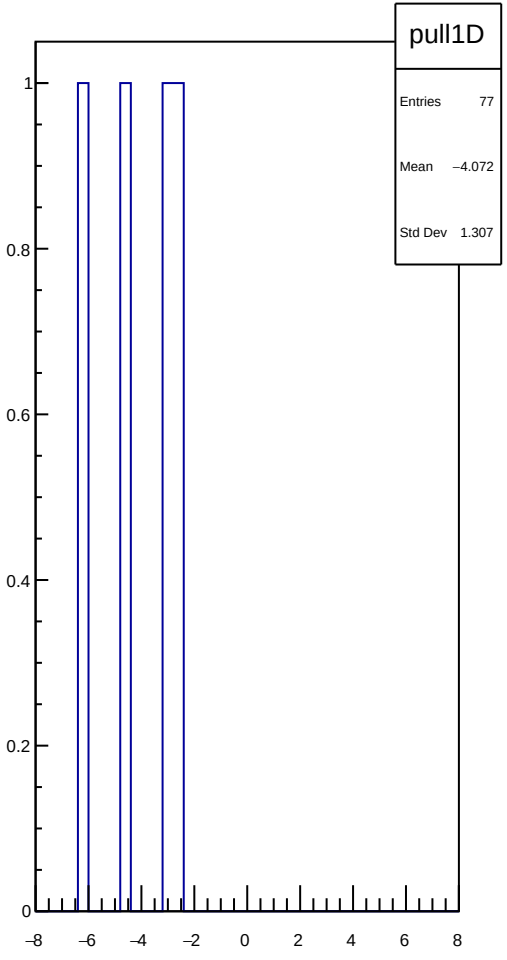

yield_bpm0l10WS_rms vs run
χ² / ndf 2.026e+04 / 76
p0 432.7 ± 0.3567
500
450
400
350
300
250

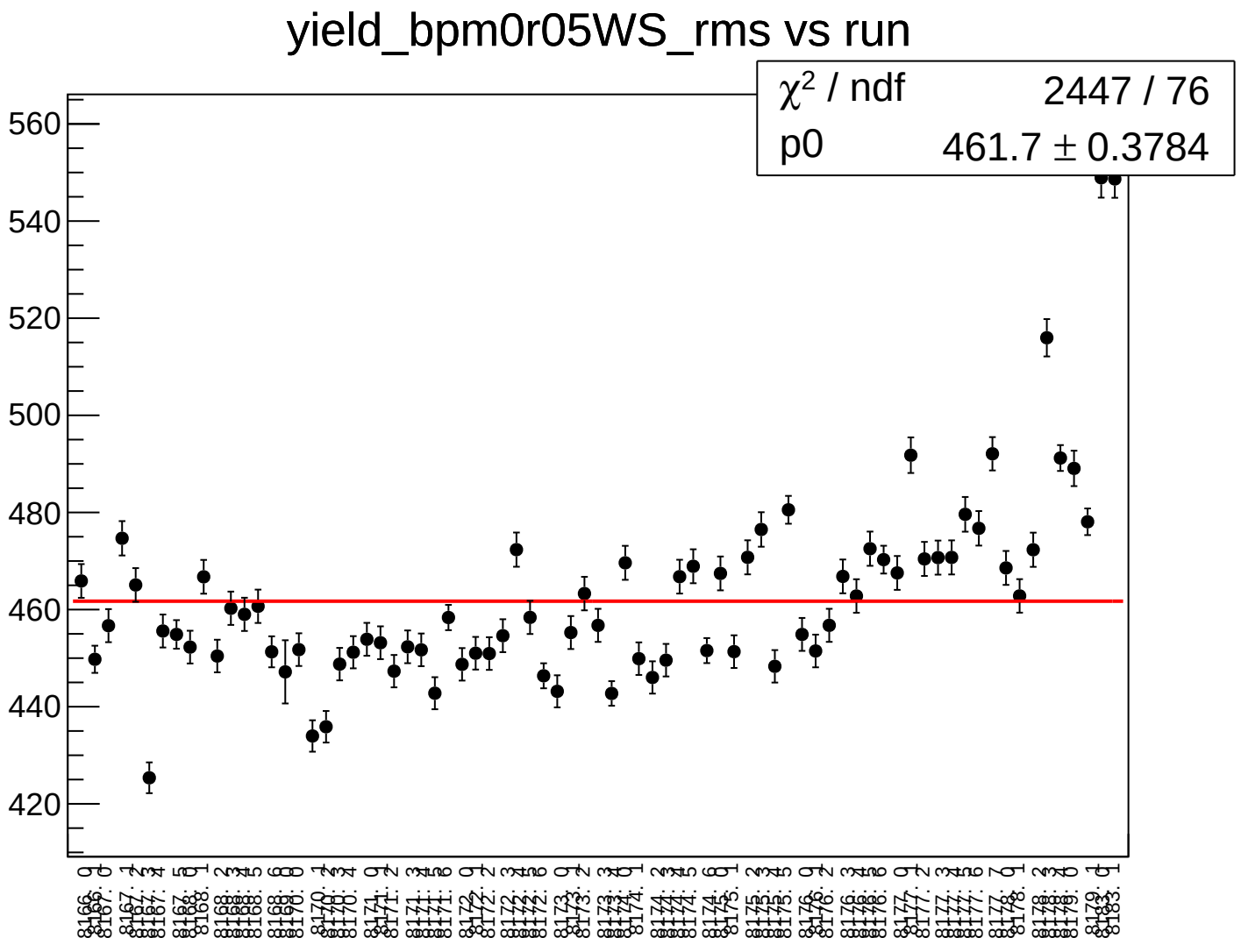

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 5.113e+06 / 76
p0 1.433e+05 ± 0.7025
144
142
140
138
136
pull
Entries 77
Mean −113.3
Std Dev 168.4
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

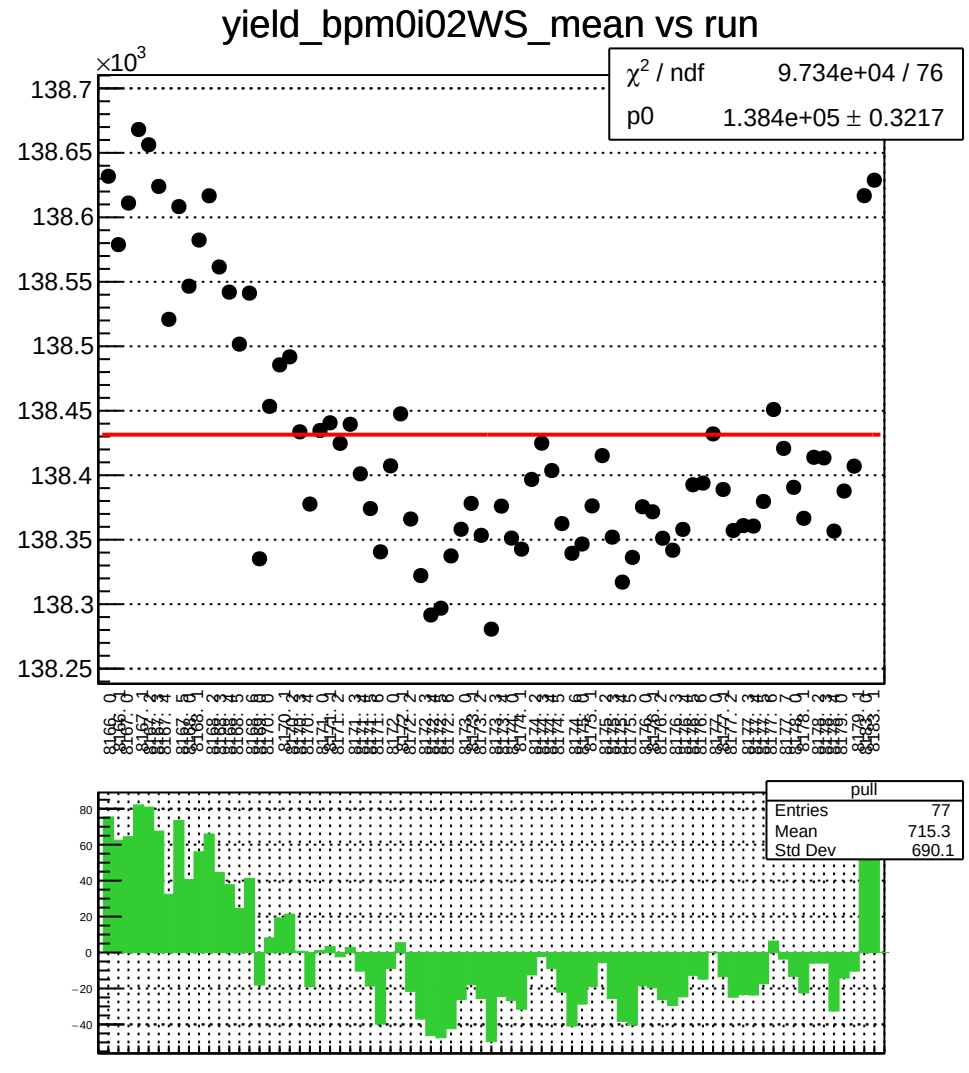

pull1D
Entries 77
Mean 3.823
Std Dev 5.18
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

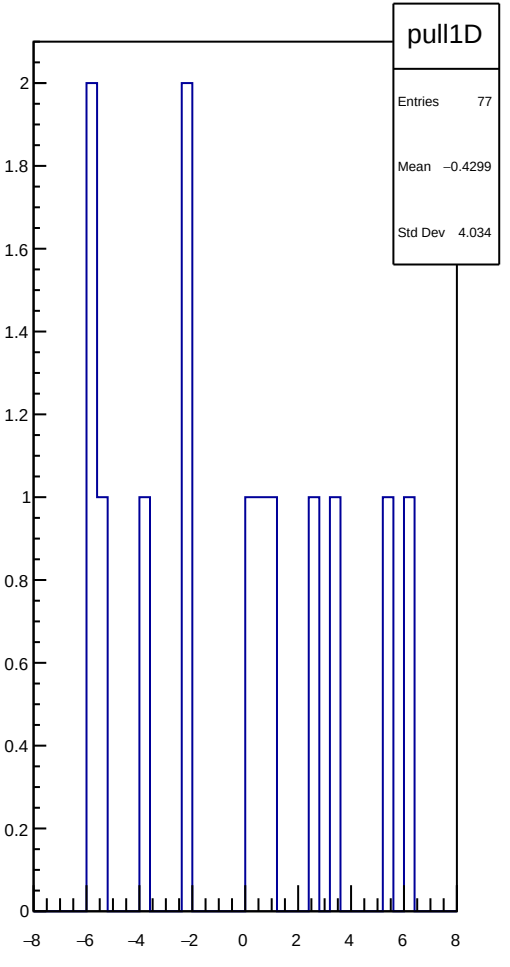

yield_bpm0r03WS_rms vs run
χ² / ndf 4141 / 76
p0 605.8 ± 0.4967
680
660
640
620
600
580
560
540
520
500
480

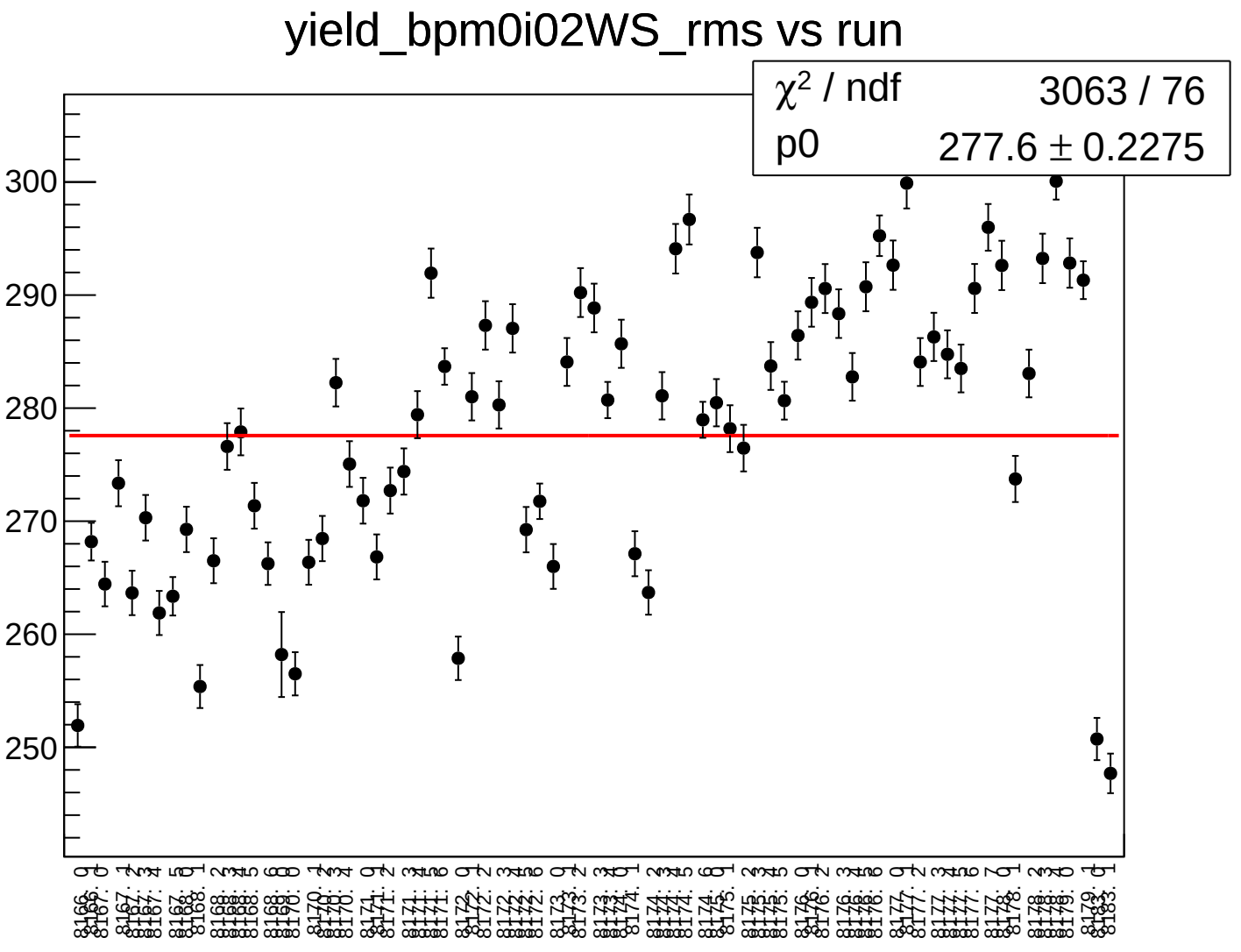

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 5.882e+06 / 76
p0 1.284e+05 ± 0.5351
138
136
134
132
130
128
pull
Entries 77
Mean 227.6
Std Dev 175.6
1800
1600
1400
1200
1000
800
600
400
200
0
−200

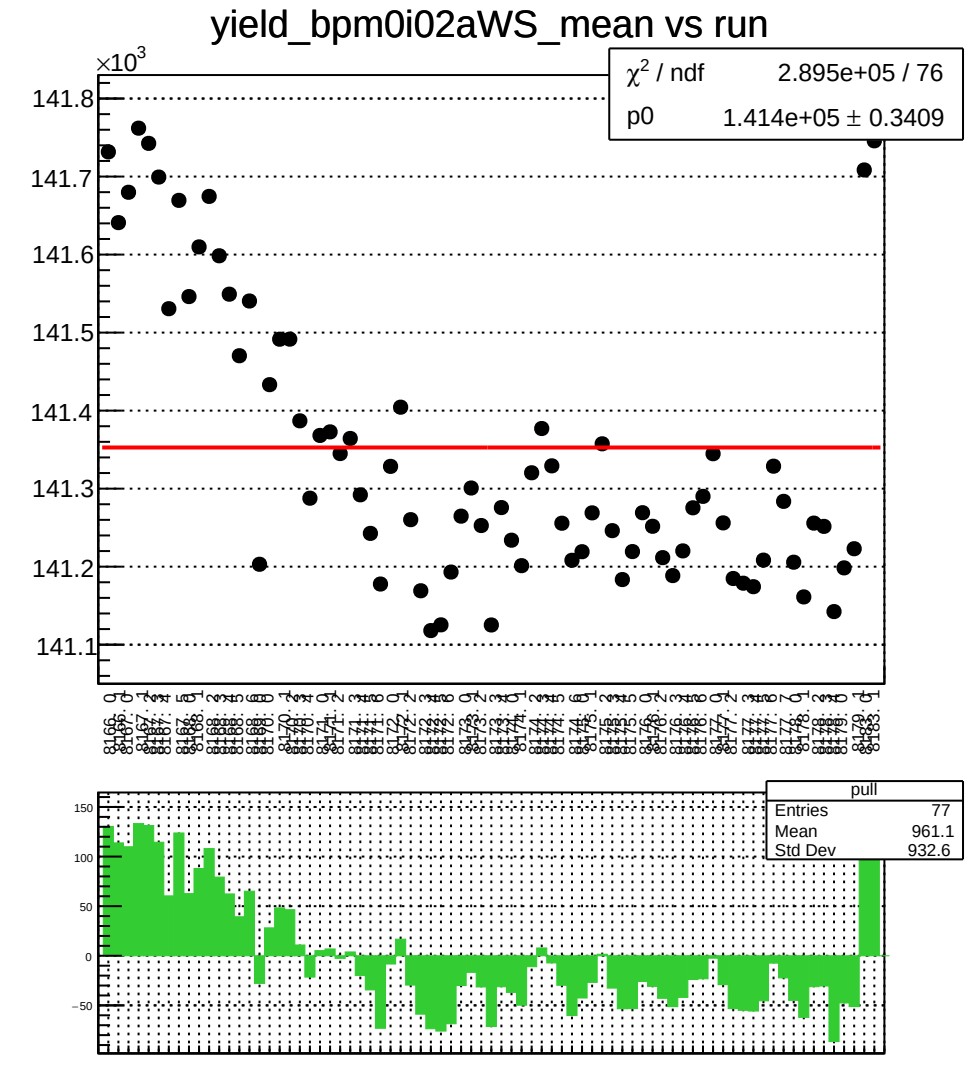

pull1D
Entries 77
Mean −4.072
Std Dev 1.307
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

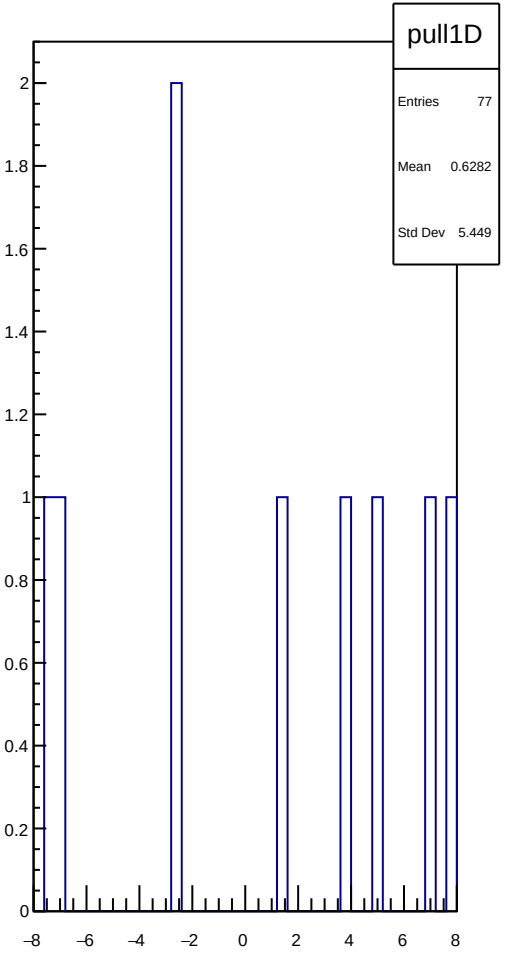

yield_bpm0r05WS_rms vs run
χ² / ndf 2447 / 76
p0 461.7 ± 0.3784
560
540
520
500
480
460
440
420

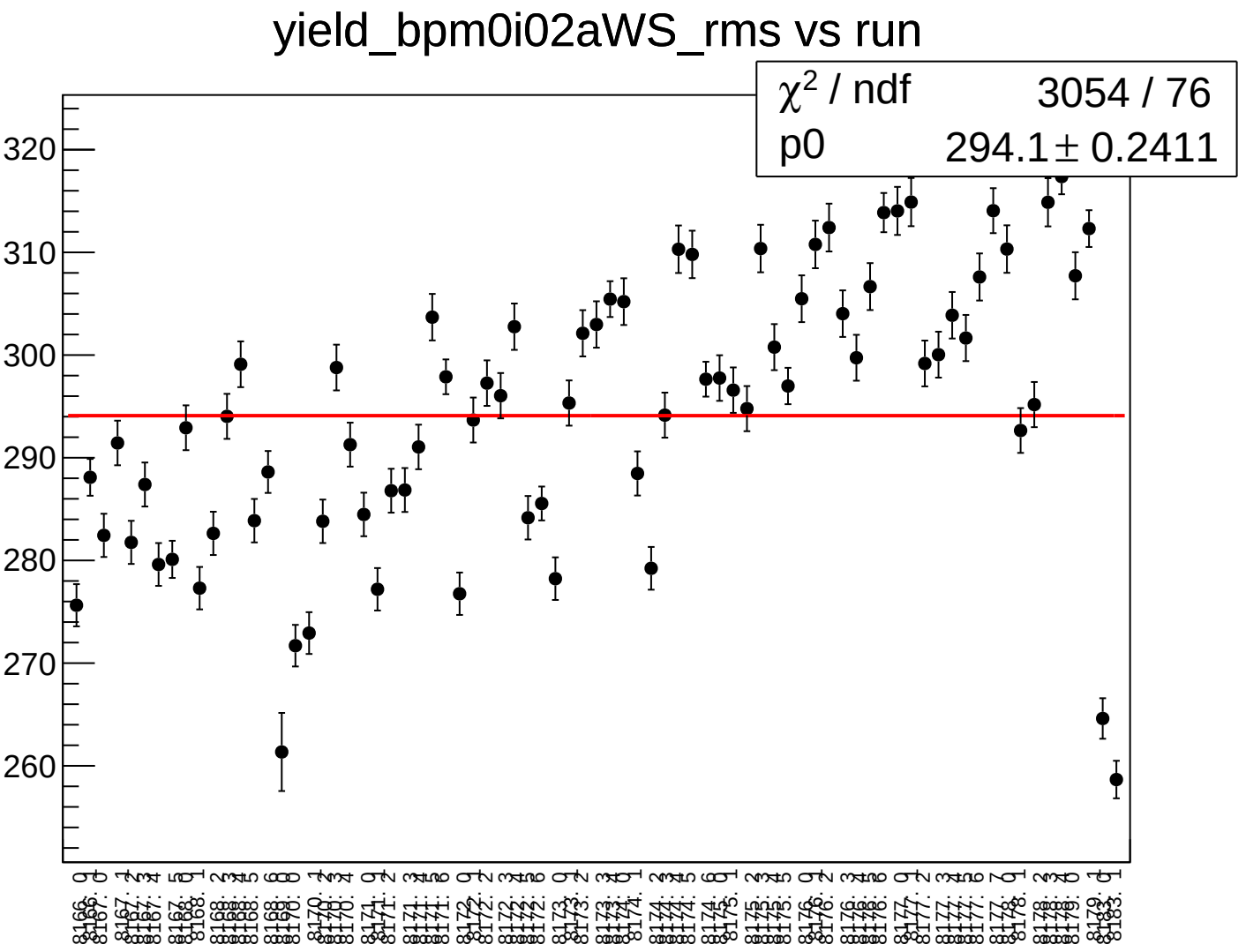

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 9.734e+04 / 76
p0 1.384e+05 ± 0.3217
138.7
138.65
138.6
138.55
138.5
138.45
138.4
138.35
138.3
138.25
pull
Entries 77
Mean 715.3
Std Dev 690.1
80
60
40
20
0
−20
−40

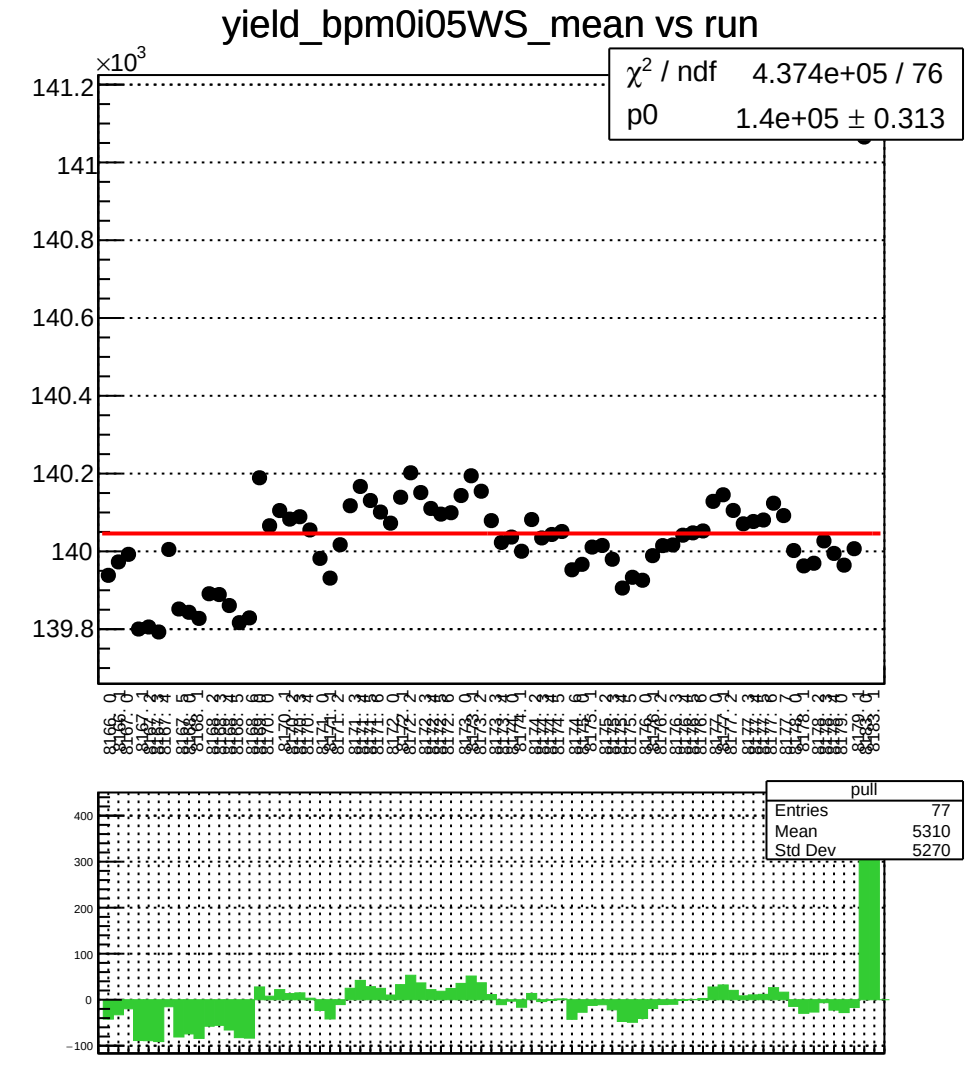

pull1D
Entries 77
Mean −0.4299
Std Dev 4.034
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

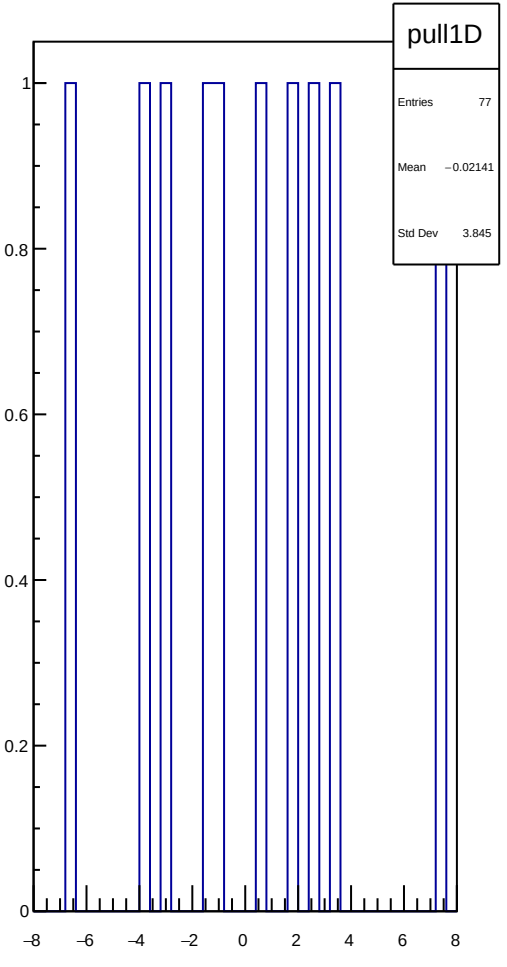

yield_bpm0i02WS_rms vs run
χ² / ndf 3063 / 76
p0 277.6 ± 0.2275
300
290
280
270
260
250

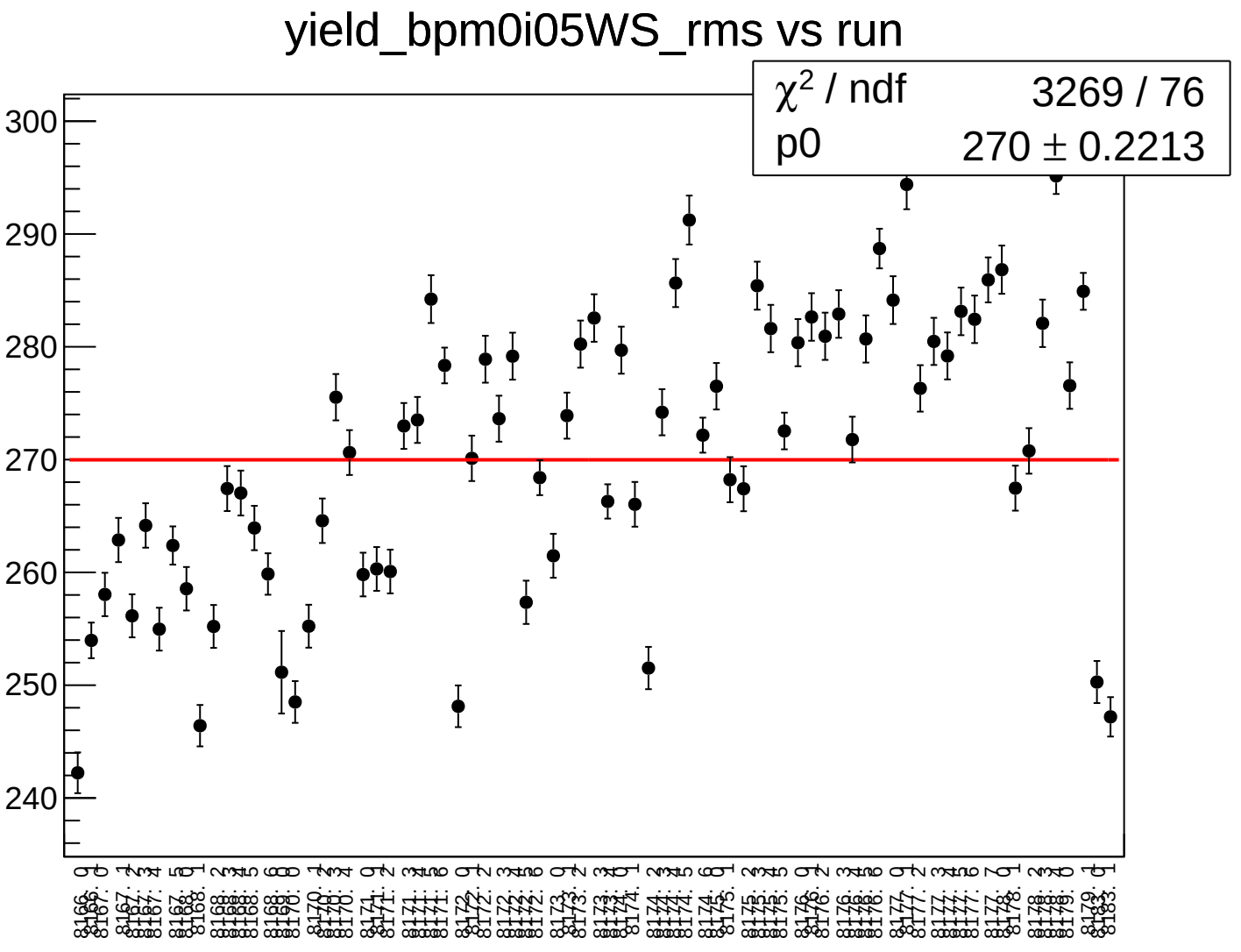

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 2.895e+05 / 76
p0 1.414e+05 ± 0.3409
141.8
141.7
141.6
141.5
141.4
141.3
141.2
141.1
pull
Entries 77
Mean 961.1
Std Dev 932.6
150
100
50
0
−50

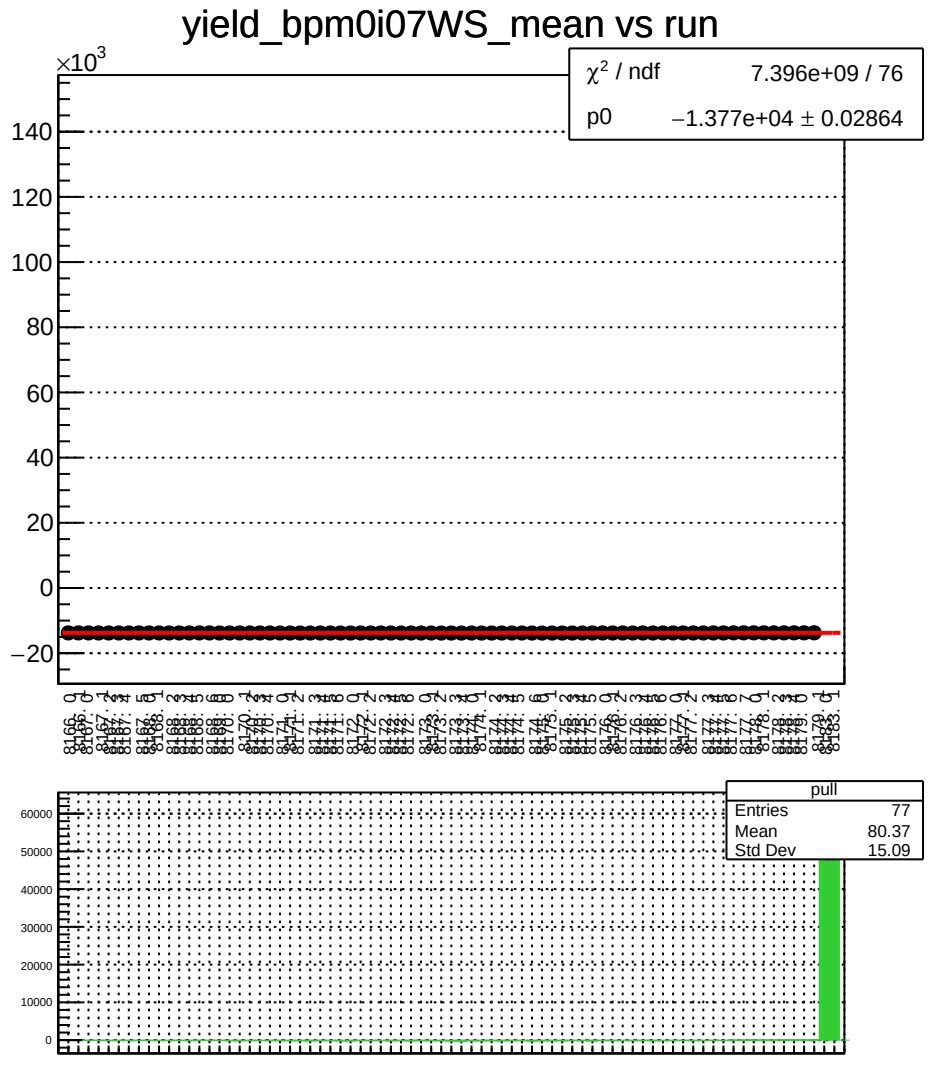

pull1D
Entries 77
Mean 0.6282
Std Dev 5.449
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

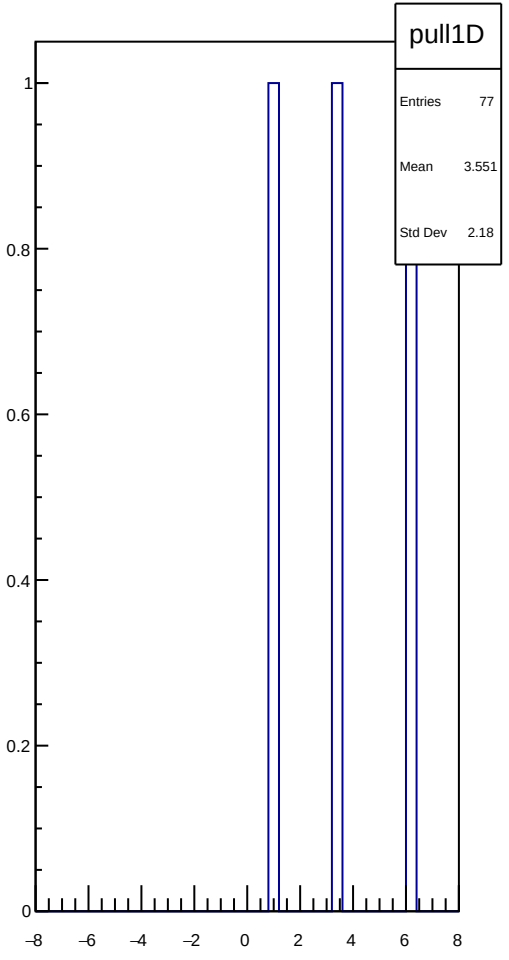

yield_bpm0i02aWS_rms vs run
χ² / ndf 3054 / 76
p0 294.1 ± 0.2411
320
310
300
290
280
270
260

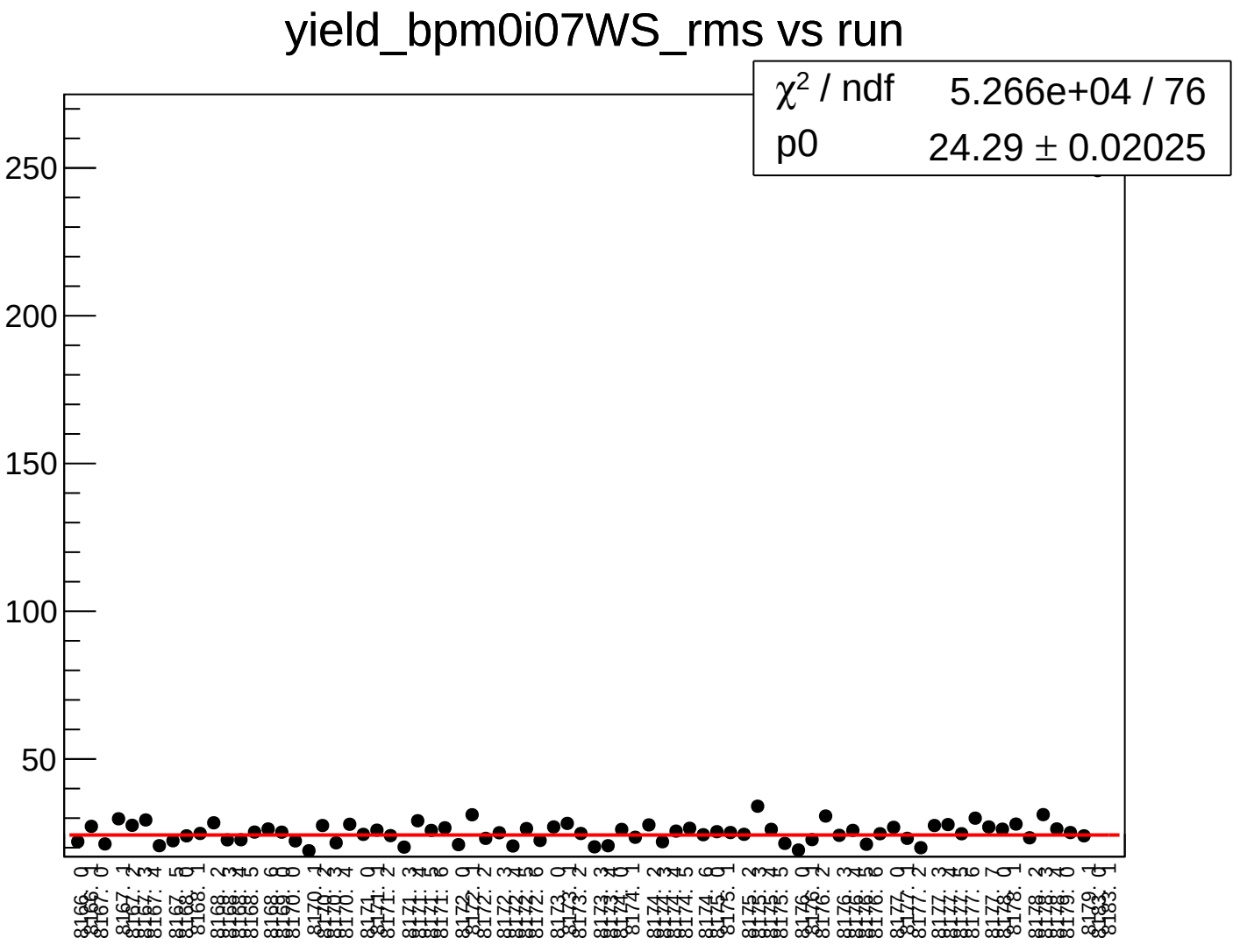

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 4.374e+05 / 76
p0 1.4e+05 ± 0.313
141.2
141
140.8
140.6
140.4
140.2
140
139.8
pull
Entries 77
Mean 5310
Std Dev 5270
400
300
200
100
0
−100

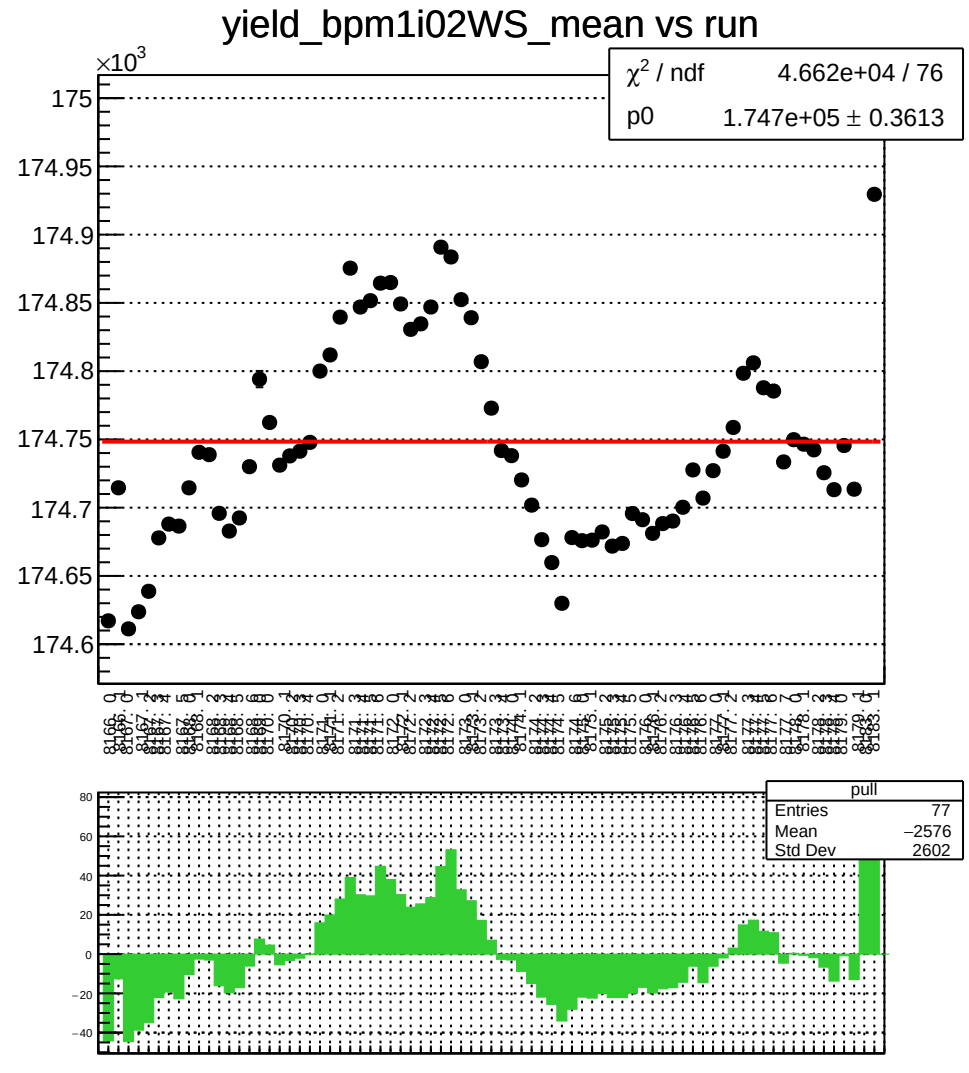

pull1D
Entries 77
Mean −0.02141
Std Dev 3.845
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

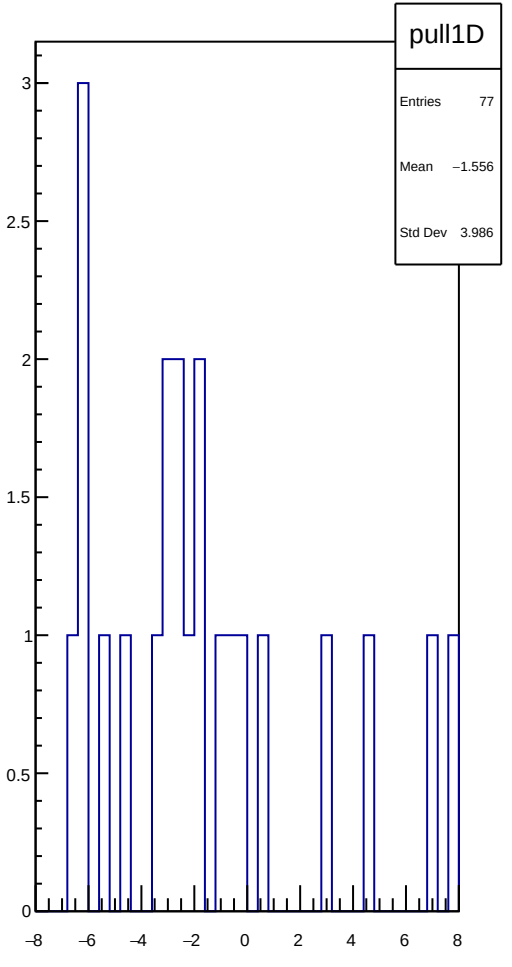

yield_bpm0i05WS_rms vs run
χ² / ndf 3269 / 76
p0 270 ± 0.2213
300
290
280
270
260
250
240

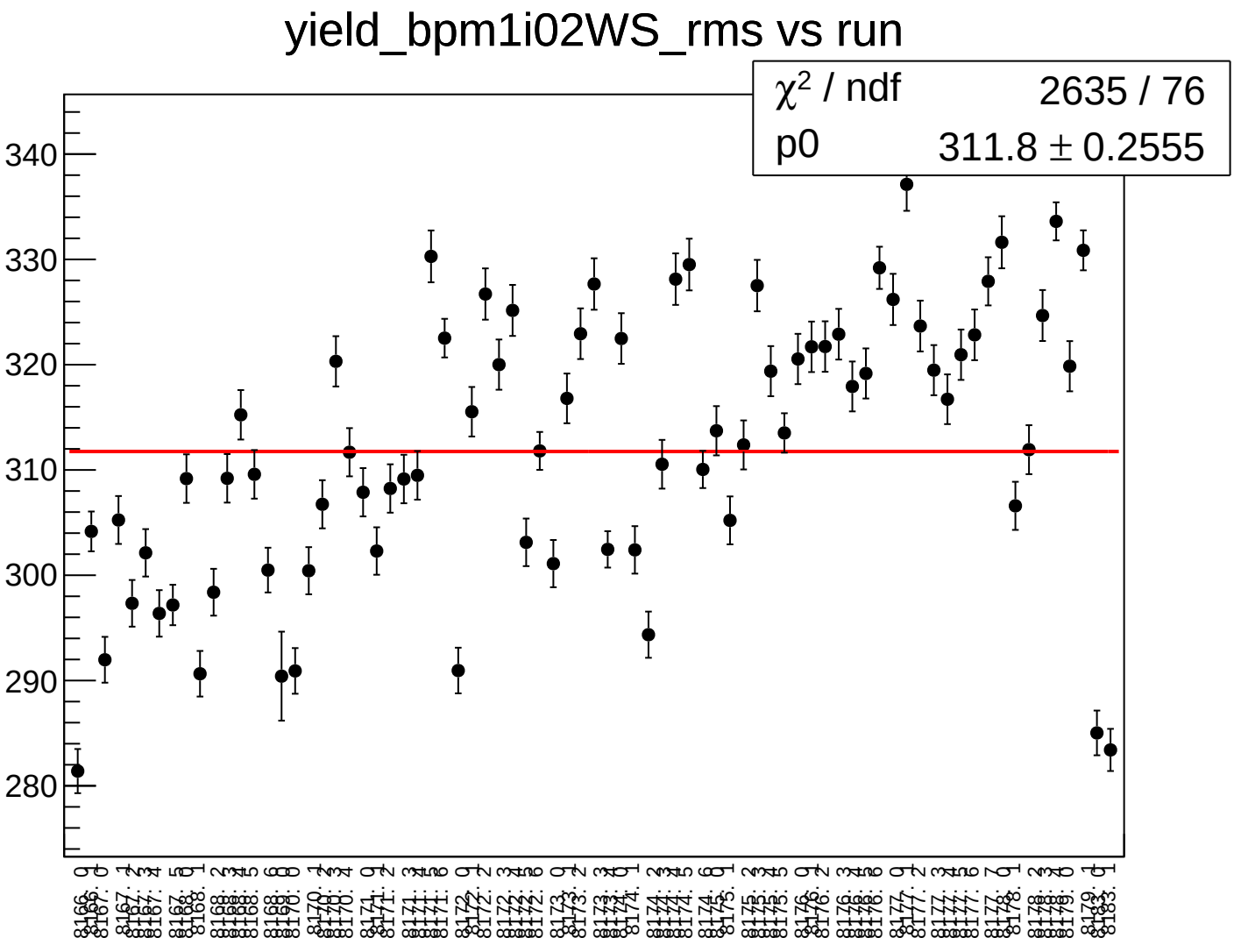

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 7.396e+09 / 76
p0 −1.377e+04 ± 0.02864
140
120
100
80
60
40
20
0
−20
pull
Entries 77
Mean 80.37
Std Dev 15.09
60000
50000
40000
30000
20000
10000
0

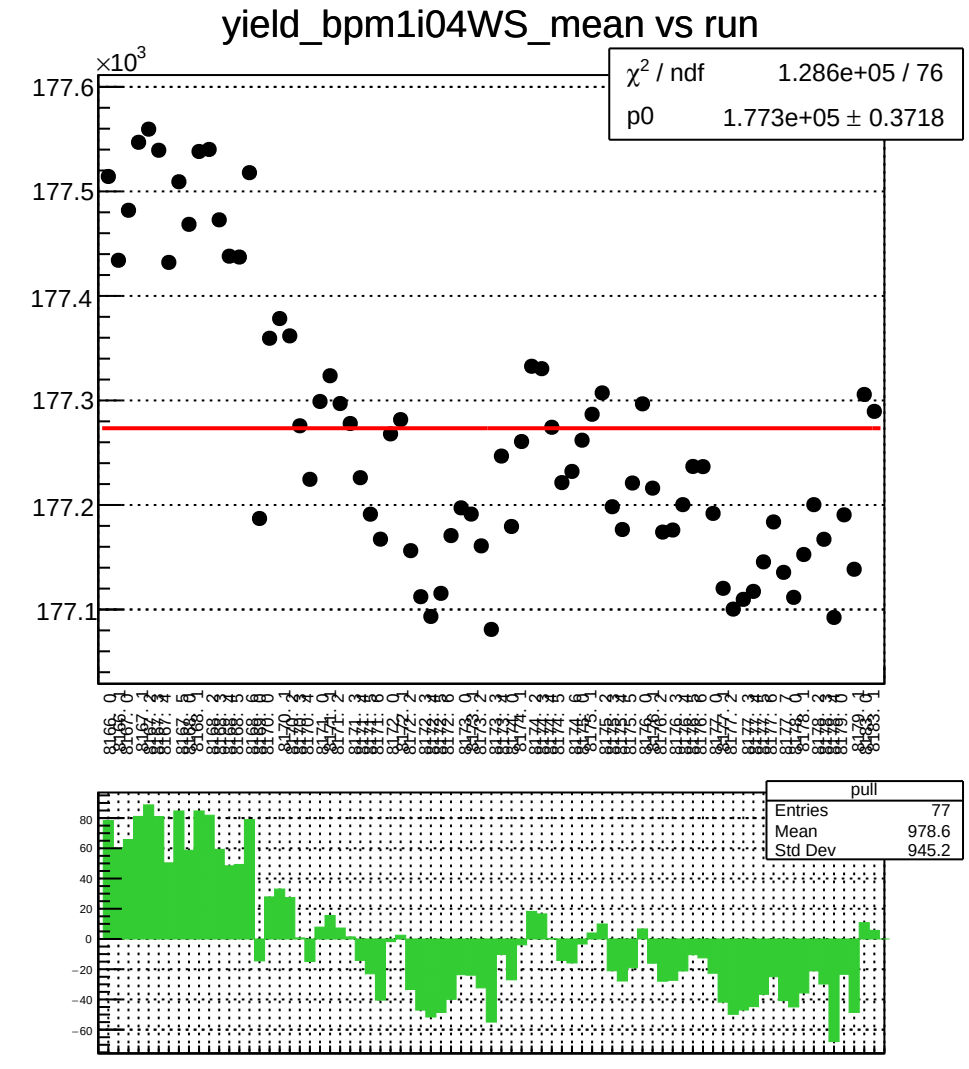

pull1D
Entries 77
Mean 3.551
Std Dev 2.18
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

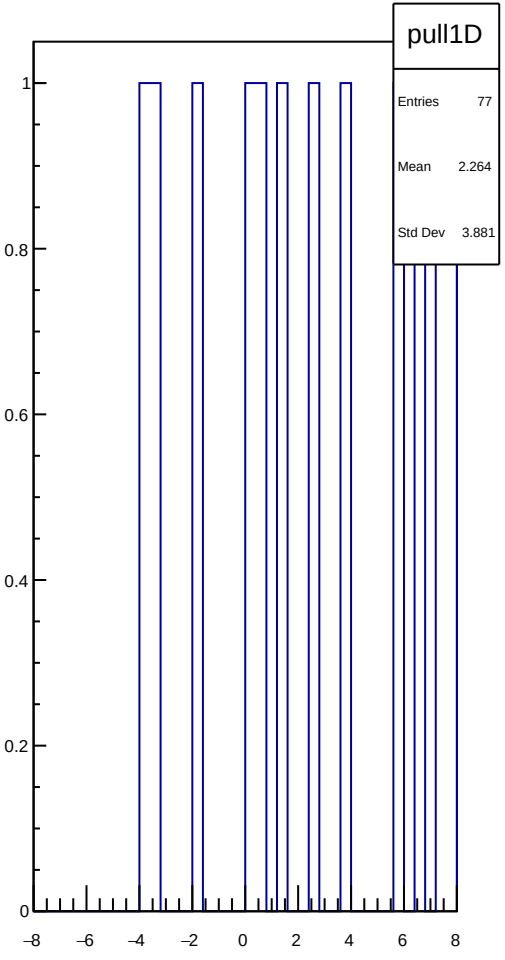

yield_bpm0i07WS_rms vs run
χ² / ndf 5.266e+04 / 76
p0 24.29 ± 0.02025
250
200
150
100
50

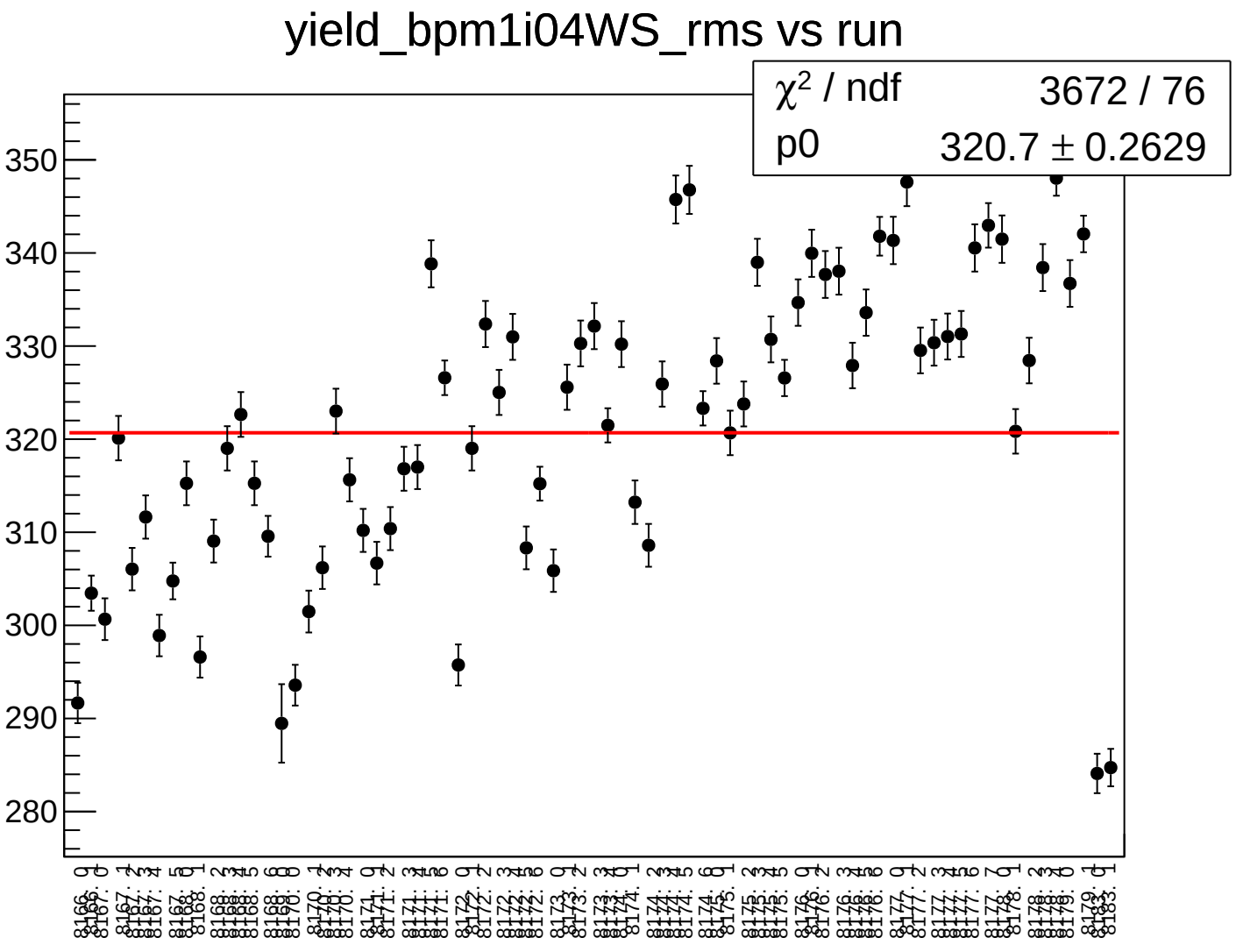

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 4.662e+04 / 76
p0 1.747e+05 ± 0.3613
175
174.95
174.9
174.85
174.8
174.75
174.7
174.65
174.6
pull
Entries 77
Mean −2576
Std Dev 2602
80
60
40
20
0
−20
−40

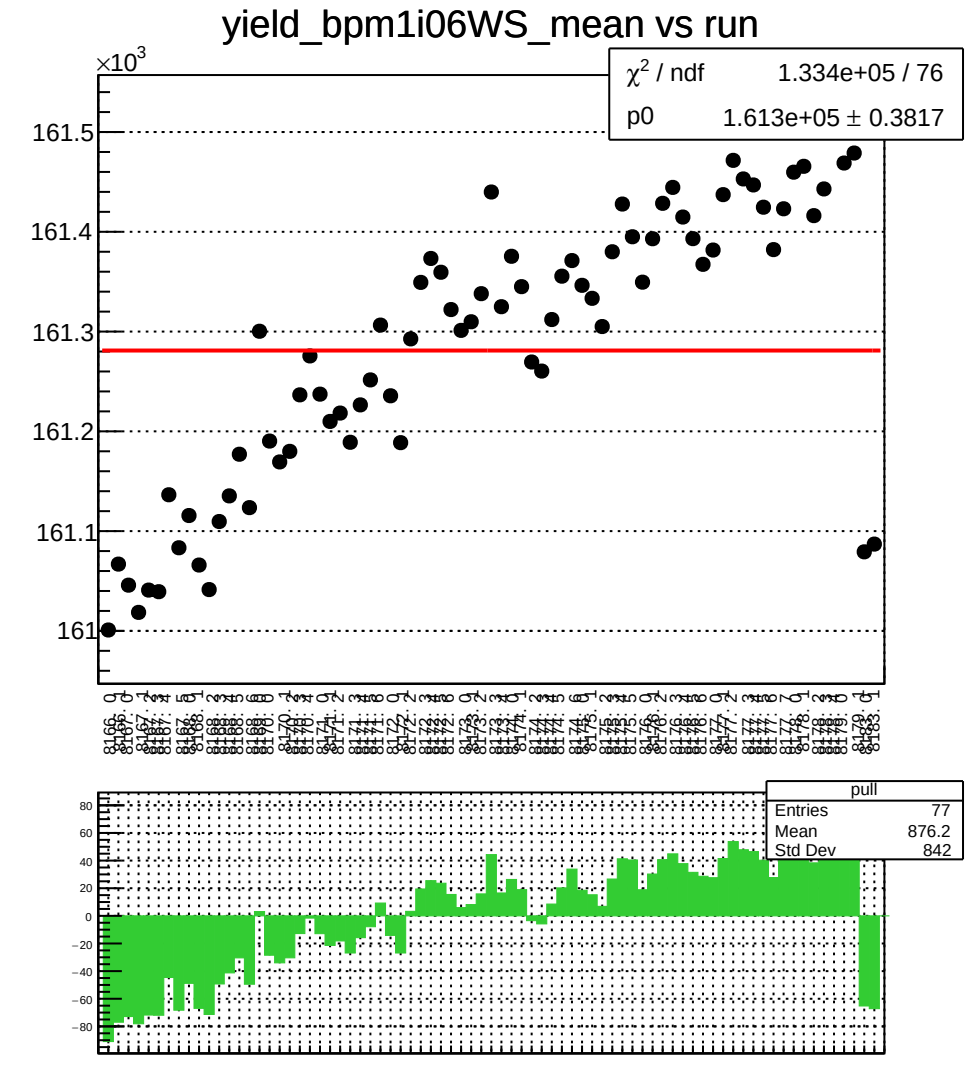

pull1D
Entries 77
Mean −1.556
Std Dev 3.986
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

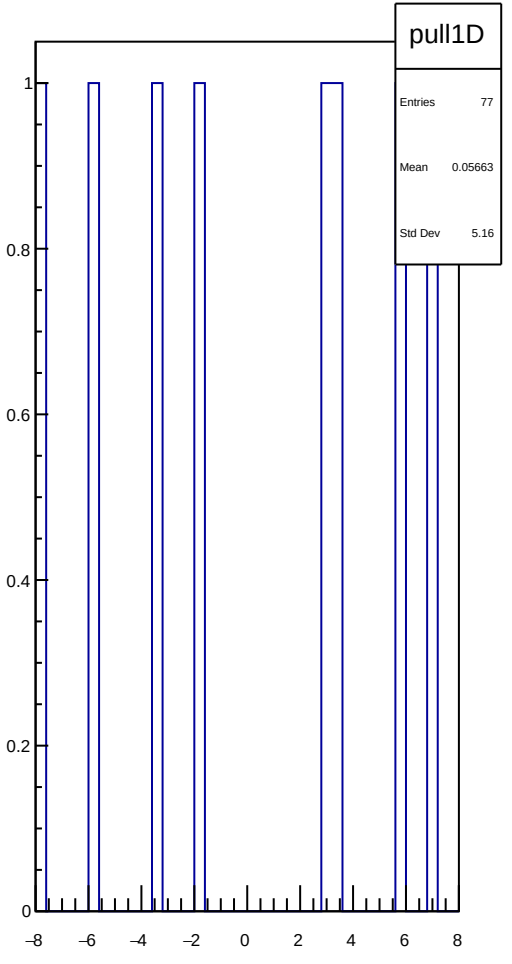

yield_bpm1i02WS_rms vs run
χ² / ndf 2635 / 76
p0 311.8 ± 0.2555
340
330
320
310
300
290
280

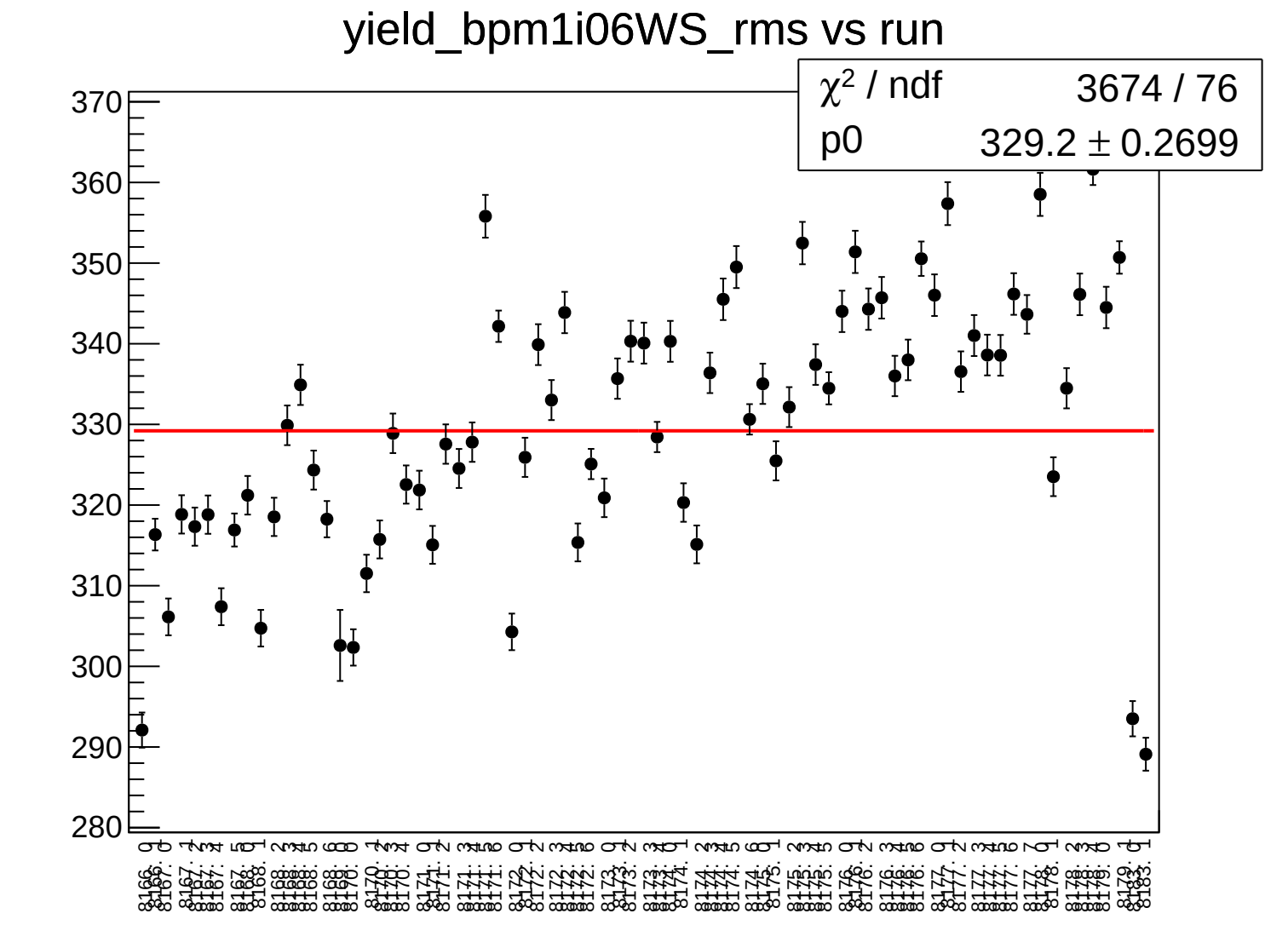

yield_bpm1i04WS_mean vs run
×10^3
177.6
177.5
177.4
177.3
177.2
177.1
χ² / ndf 1.286e+05 / 76
p0 1.773e+05 ± 0.3718
pull
Entries 77
Mean 978.6
Std Dev 945.2
80
60
40
20
0
−20
−40
−60

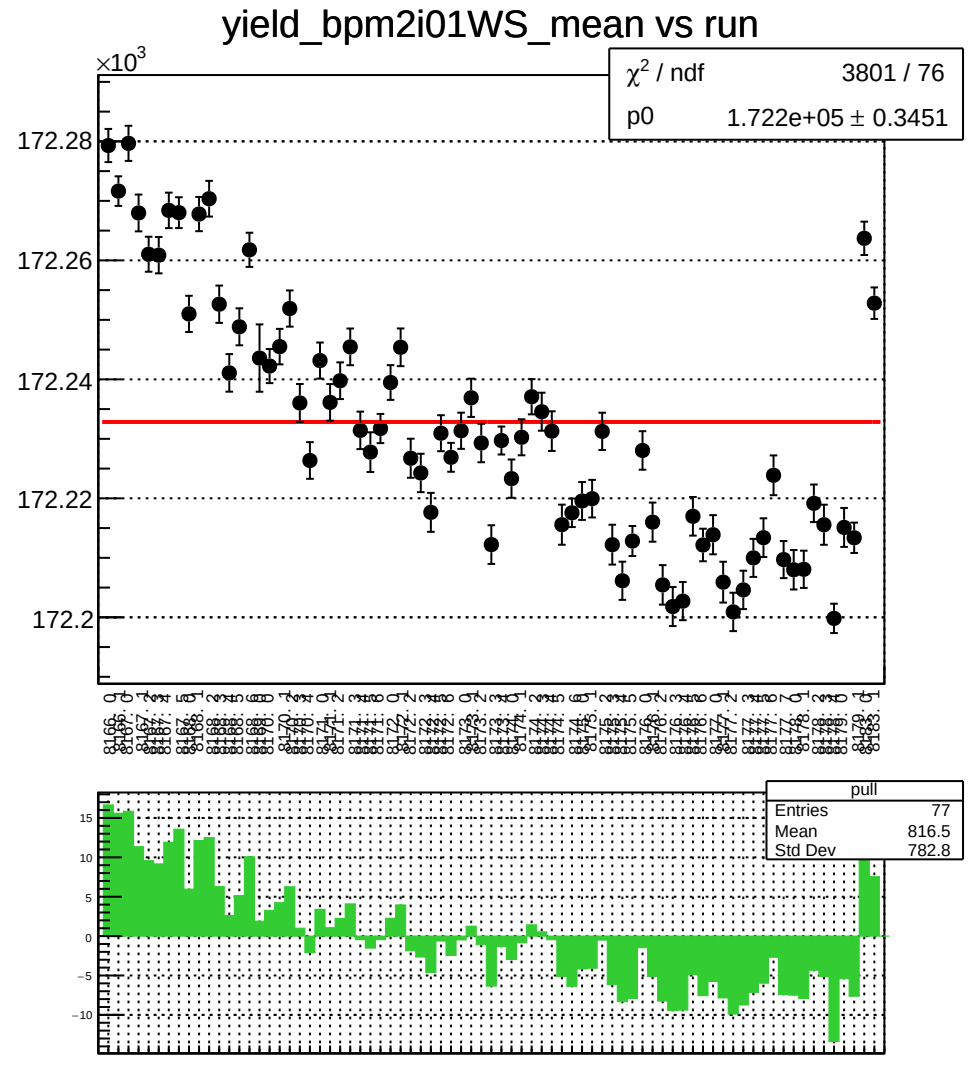

pull1D
Entries 77
Mean 2.264
Std Dev 3.881
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

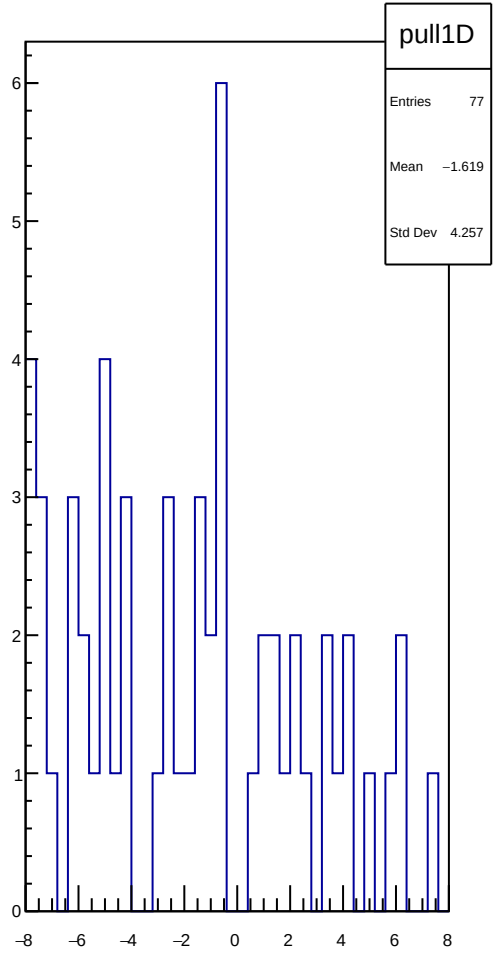

yield_bpm1i04WS_rms vs run
χ² / ndf 3672 / 76
p0 320.7 ± 0.2629
350
340
330
320
310
300
290
280

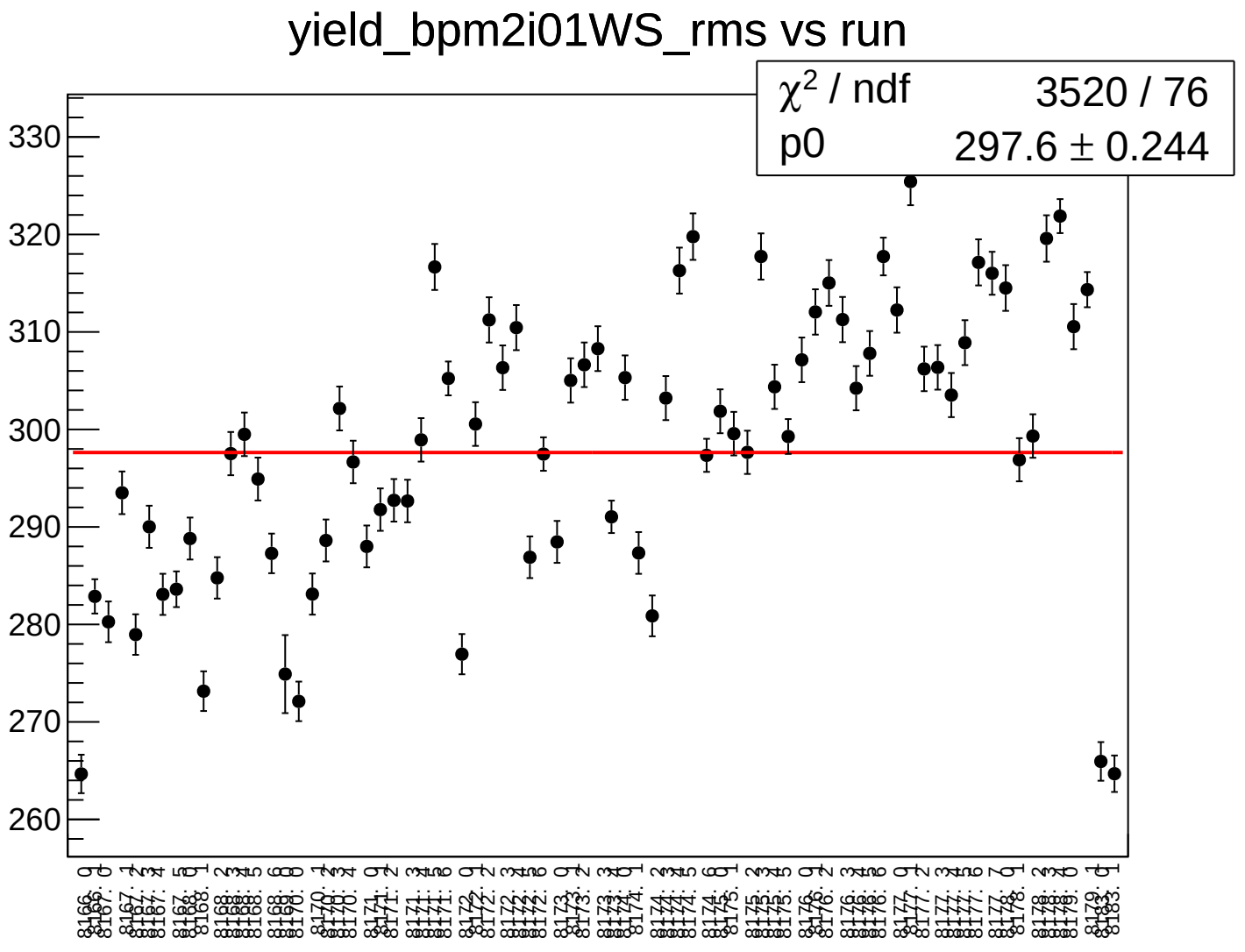

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 1.334e+05 / 76
p0 1.613e+05 ± 0.3817
161.5
161.4
161.3
161.2
161.1
161
pull
Entries 77
Mean 876.2
Std Dev 842
80
60
40
20
0
−20
−40
−60
−80

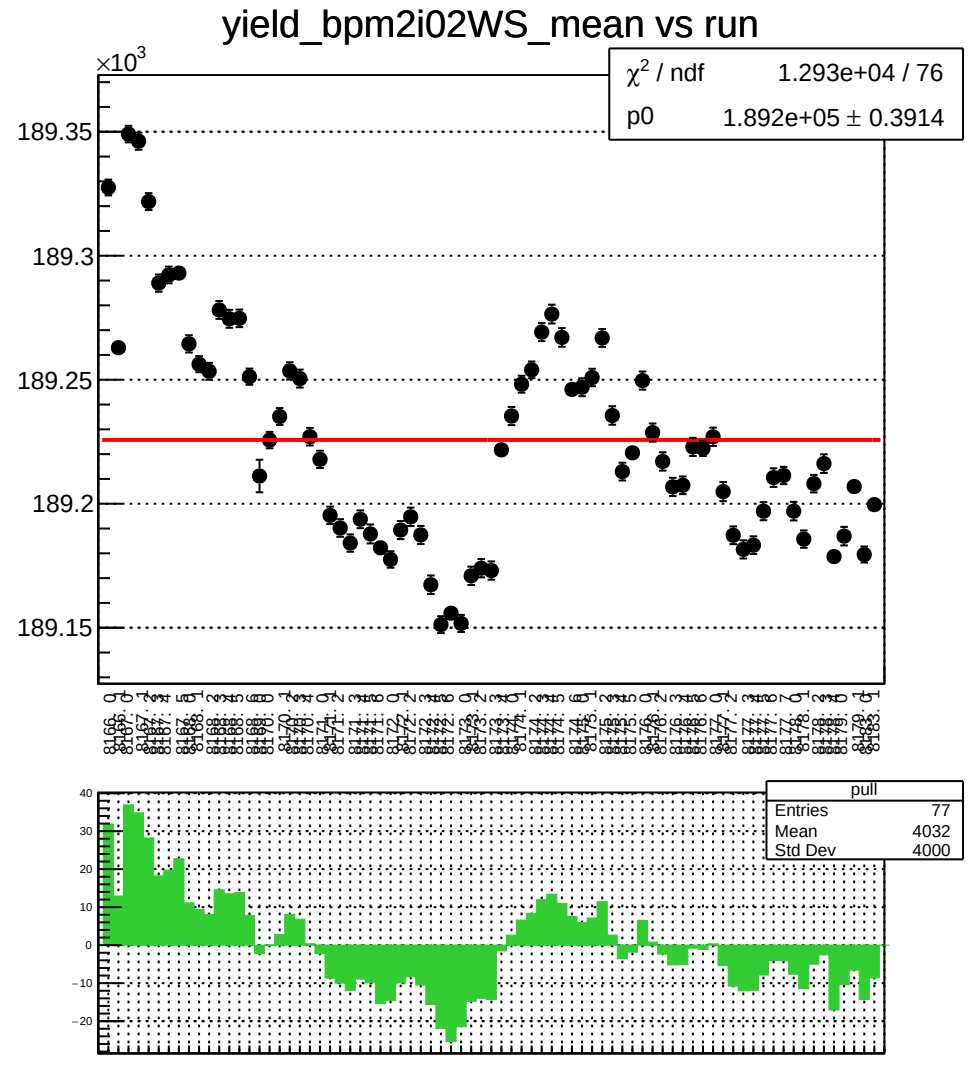

pull1D
Entries 77
Mean 0.05663
Std Dev 5.16
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

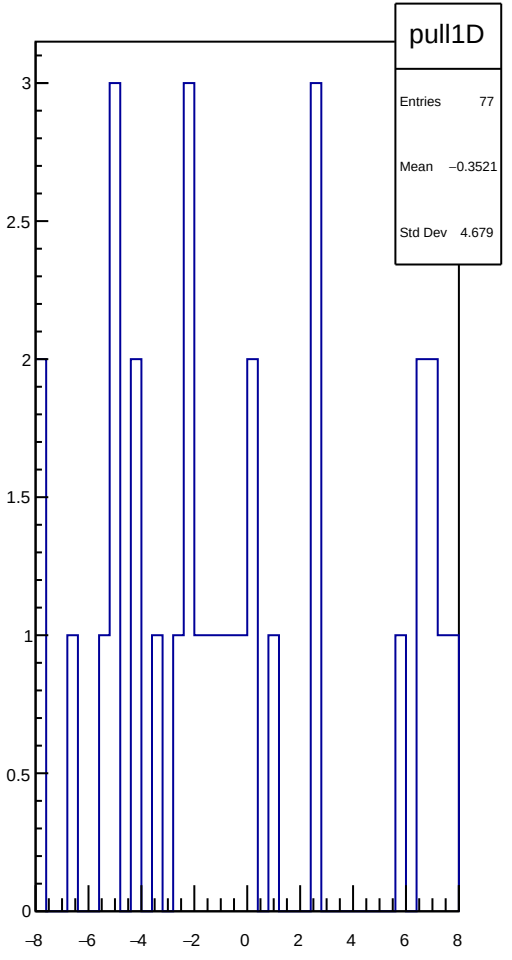

yield_bpm1i06WS_rms vs run
χ² / ndf 3674 / 76
p0 329.2 ± 0.2699
370
360
350
340
330
320
310
300
290
280

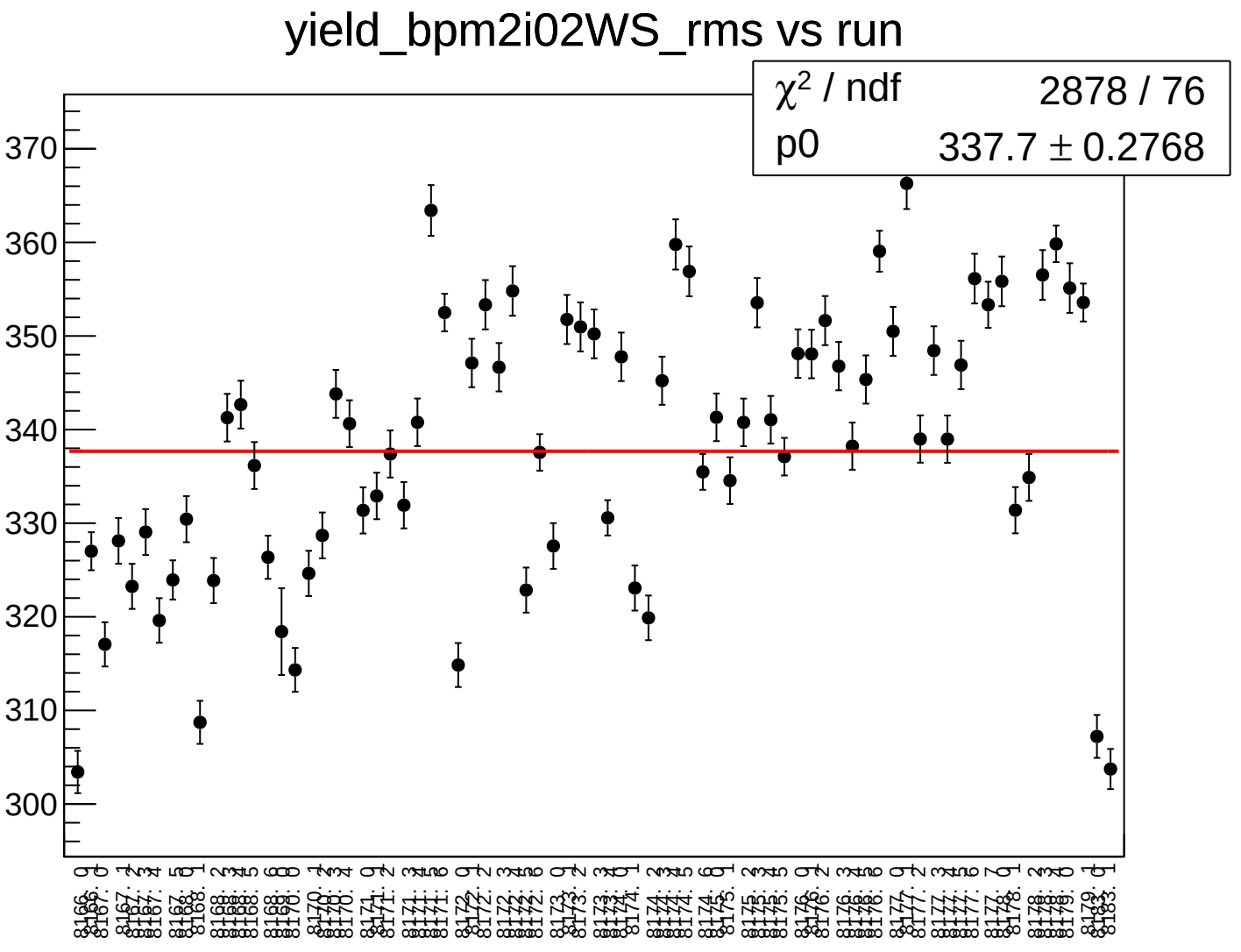

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 3801 / 76
p0 1.722e+05 ± 0.3451
172.28
172.26
172.24
172.22
172.2
pull
Entries 77
Mean 816.5
Std Dev 782.8
15
10
5
0
−5
−10

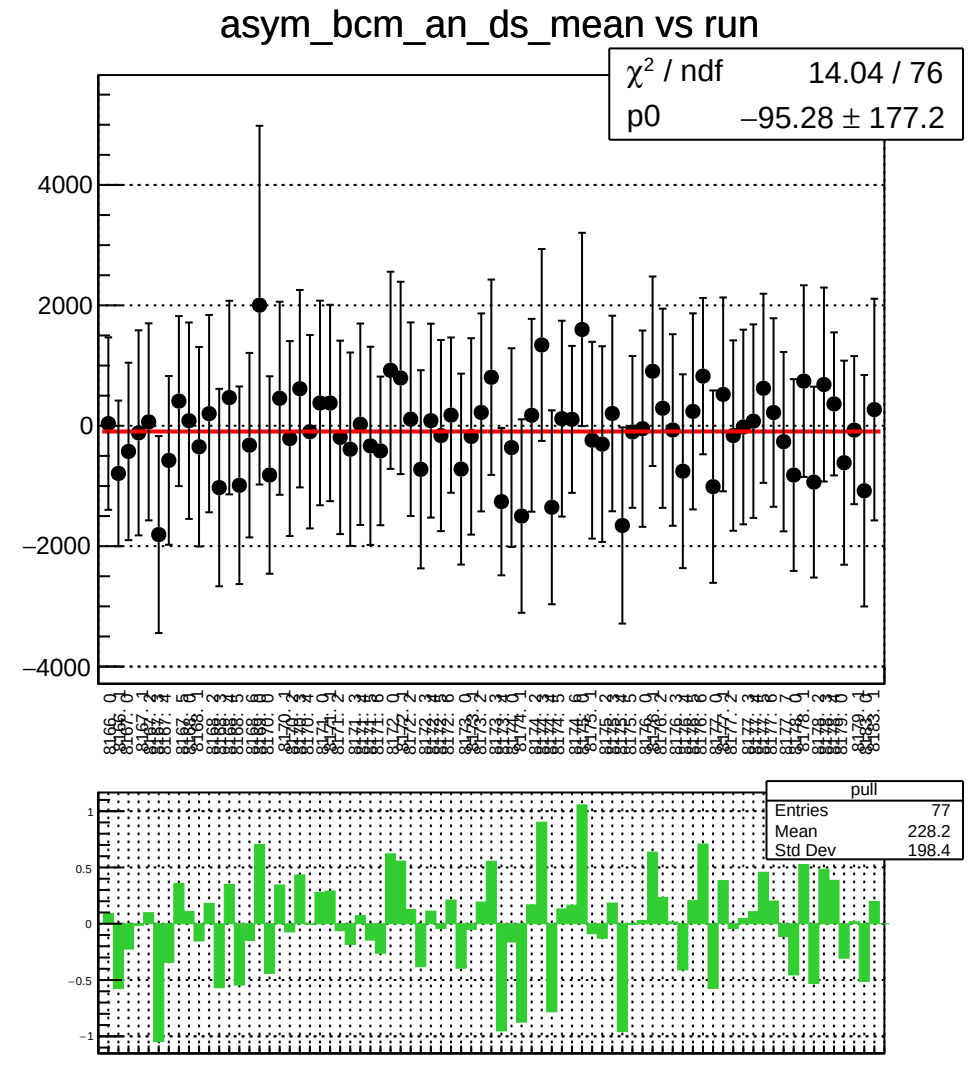

pull1D
Entries 77
Mean −1.619
Std Dev 4.257
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

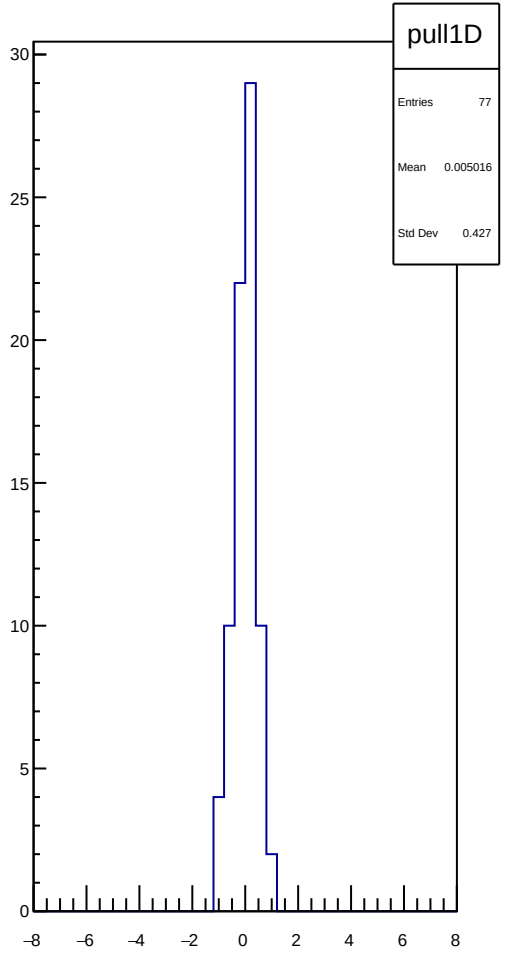

yield_bpm2i01WS_rms vs run
χ² / ndf 3520 / 76
p0 297.6 ± 0.244
330
320
310
300
290
280
270
260

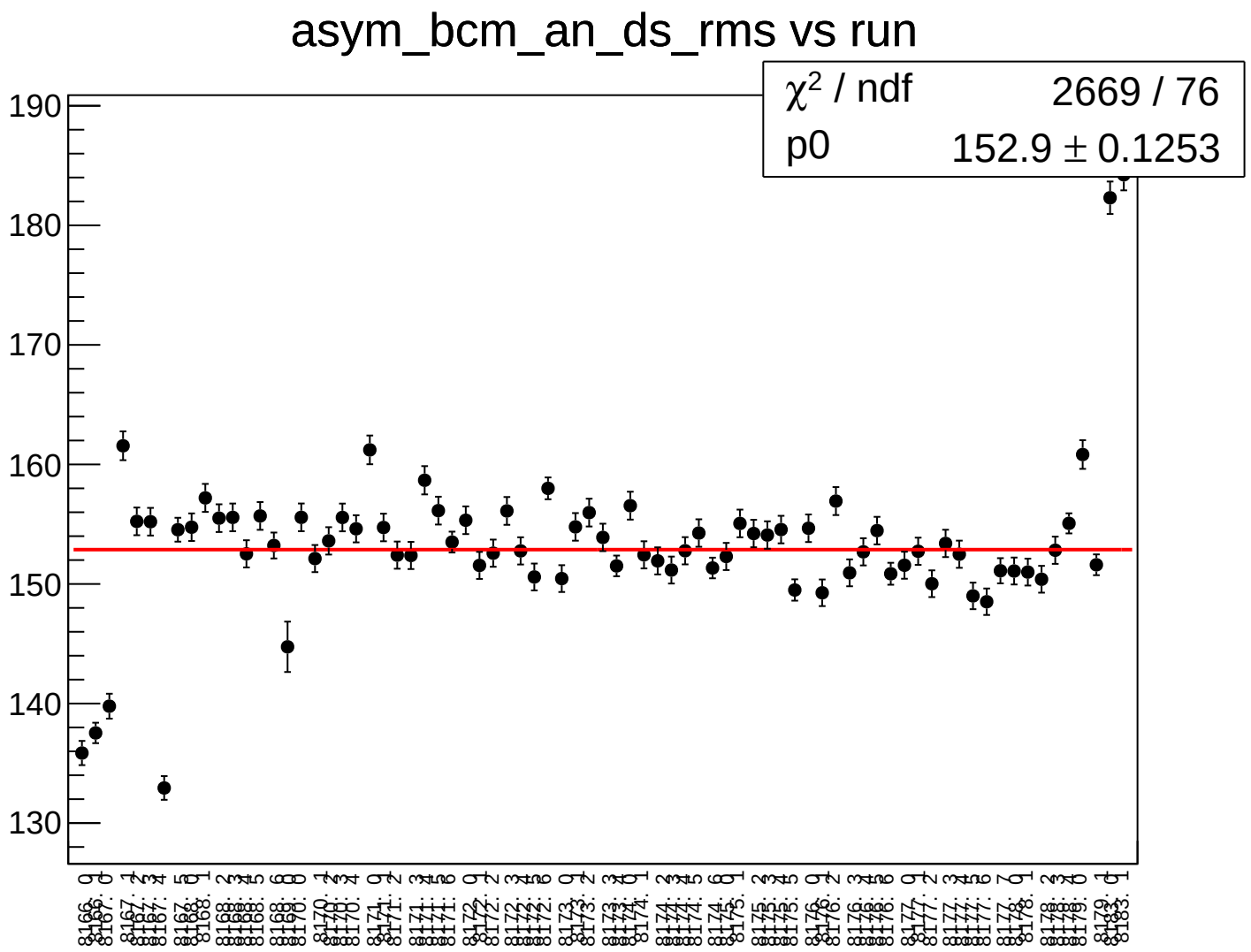

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 1.293e+04 / 76
p0 1.892e+05 ± 0.3914
189.35
189.3
189.25
189.2
189.15
pull
Entries 77
Mean 4032
Std Dev 4000
40
30
20
10
0
−10
−20

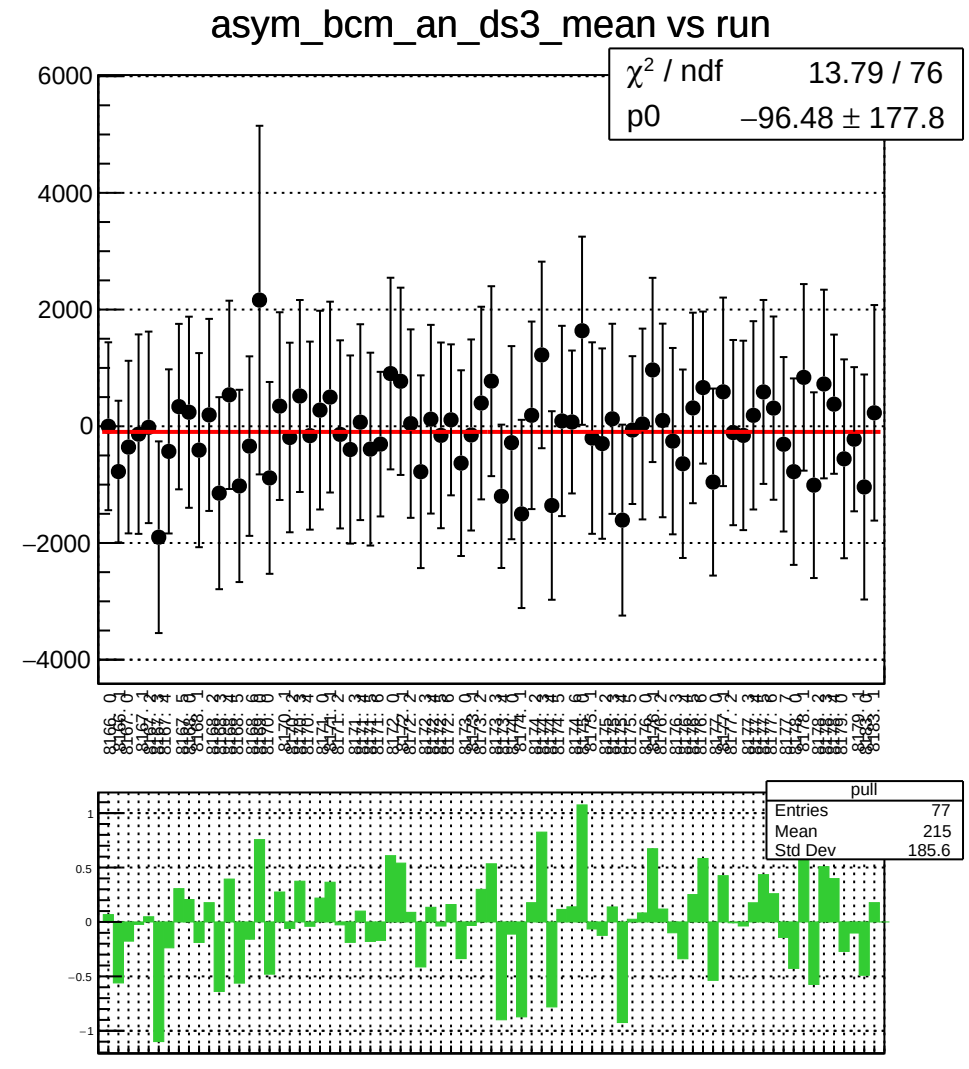

pull1D
Entries 77
Mean −0.3521
Std Dev 4.679
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

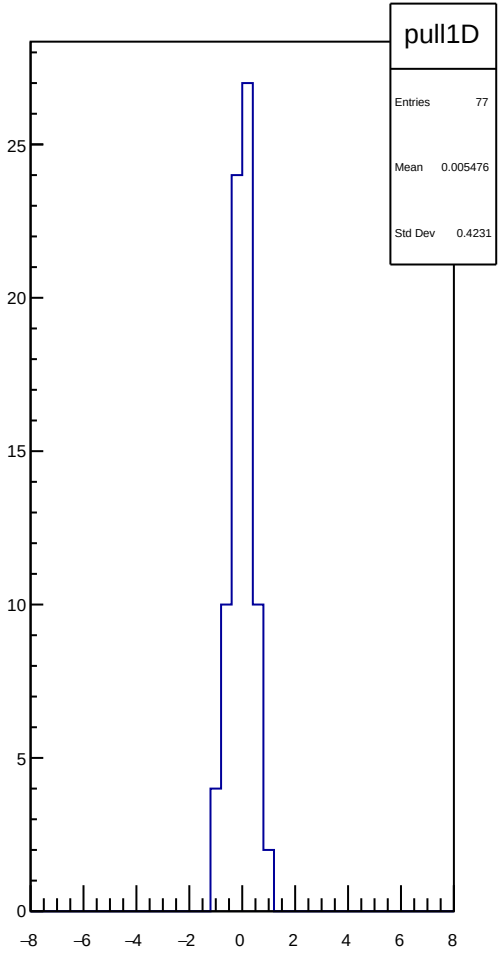

yield_bpm2i02WS_rms vs run
χ² / ndf 2878 / 76
p0 337.7 ± 0.2768
370
360
350
340
330
320
310
300

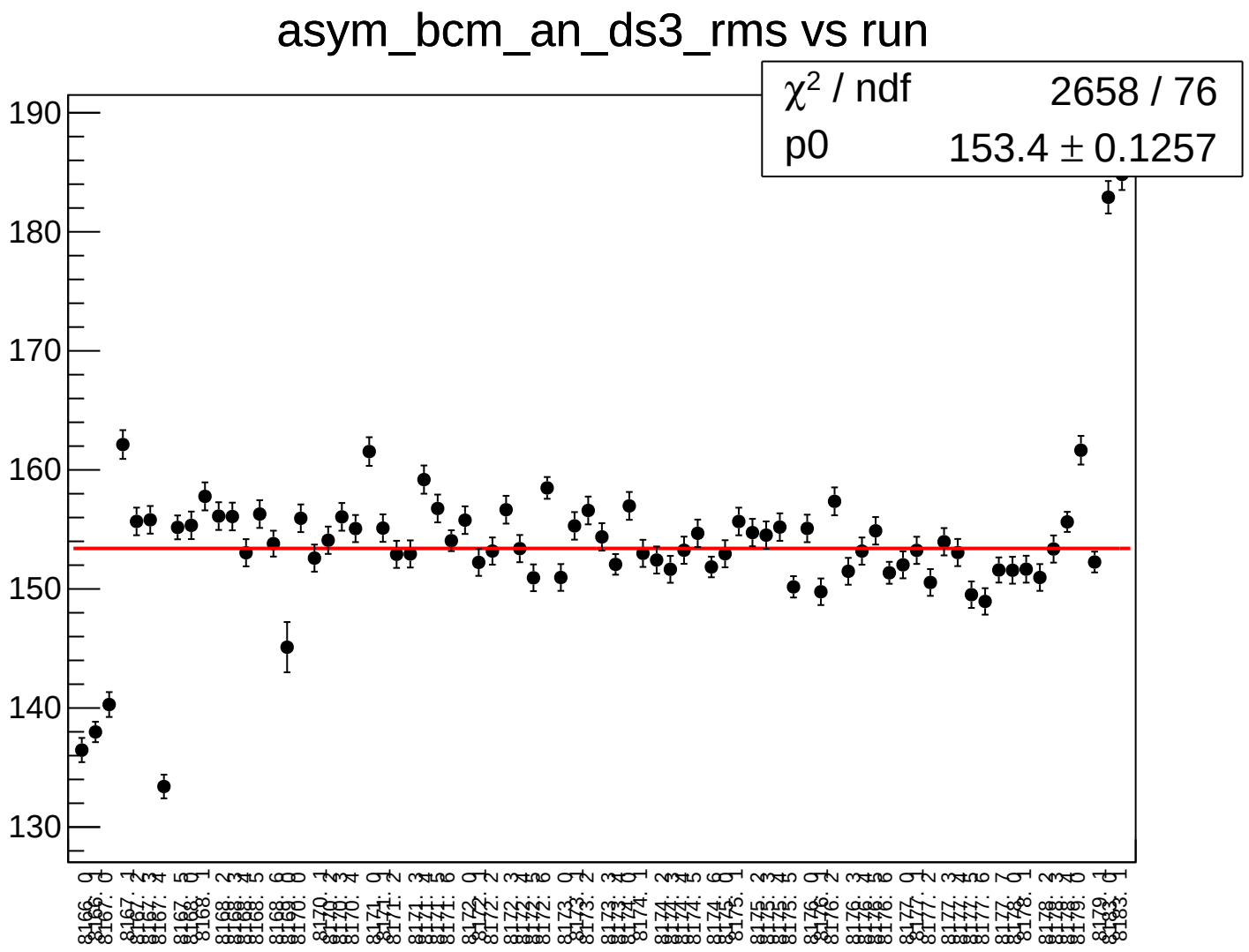

asym_bcm_an_ds_mean vs run
χ² / ndf 14.04 / 76
p0 −95.28 ± 177.2
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 228.2
Std Dev 198.4
1
0.5
0
−0.5
−1

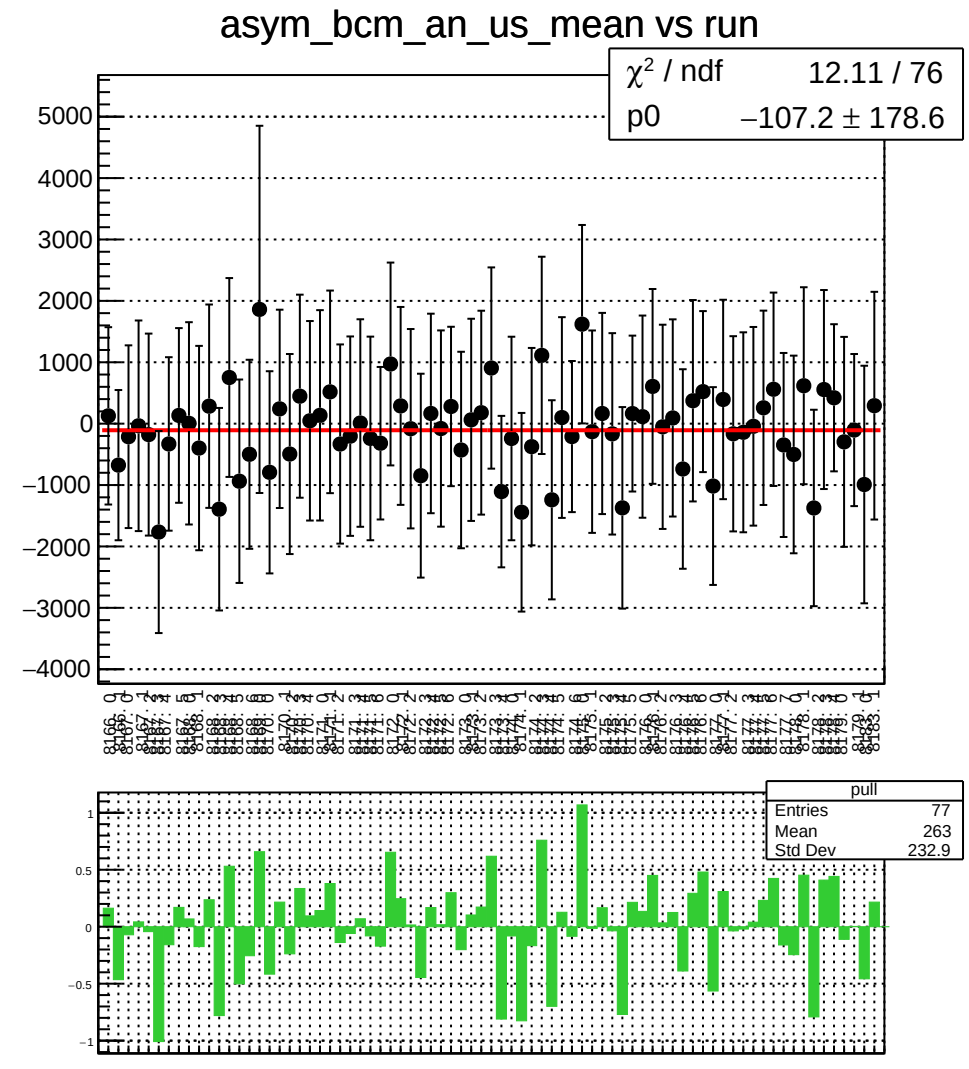

pull1D
Entries 77
Mean 0.005016
Std Dev 0.427
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

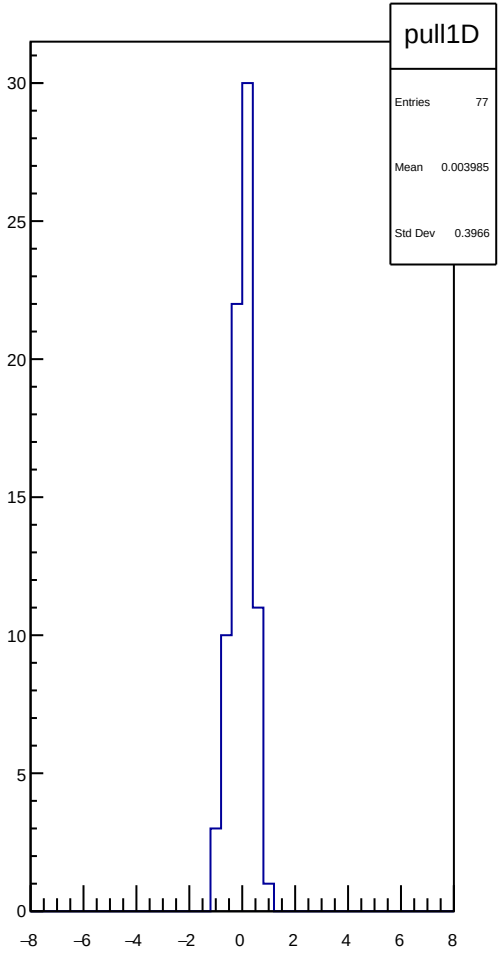

asym_bcm_an_ds_rms vs run
χ² / ndf 2669 / 76
p0 152.9 ± 0.1253
190
180
170
160
150
140
130

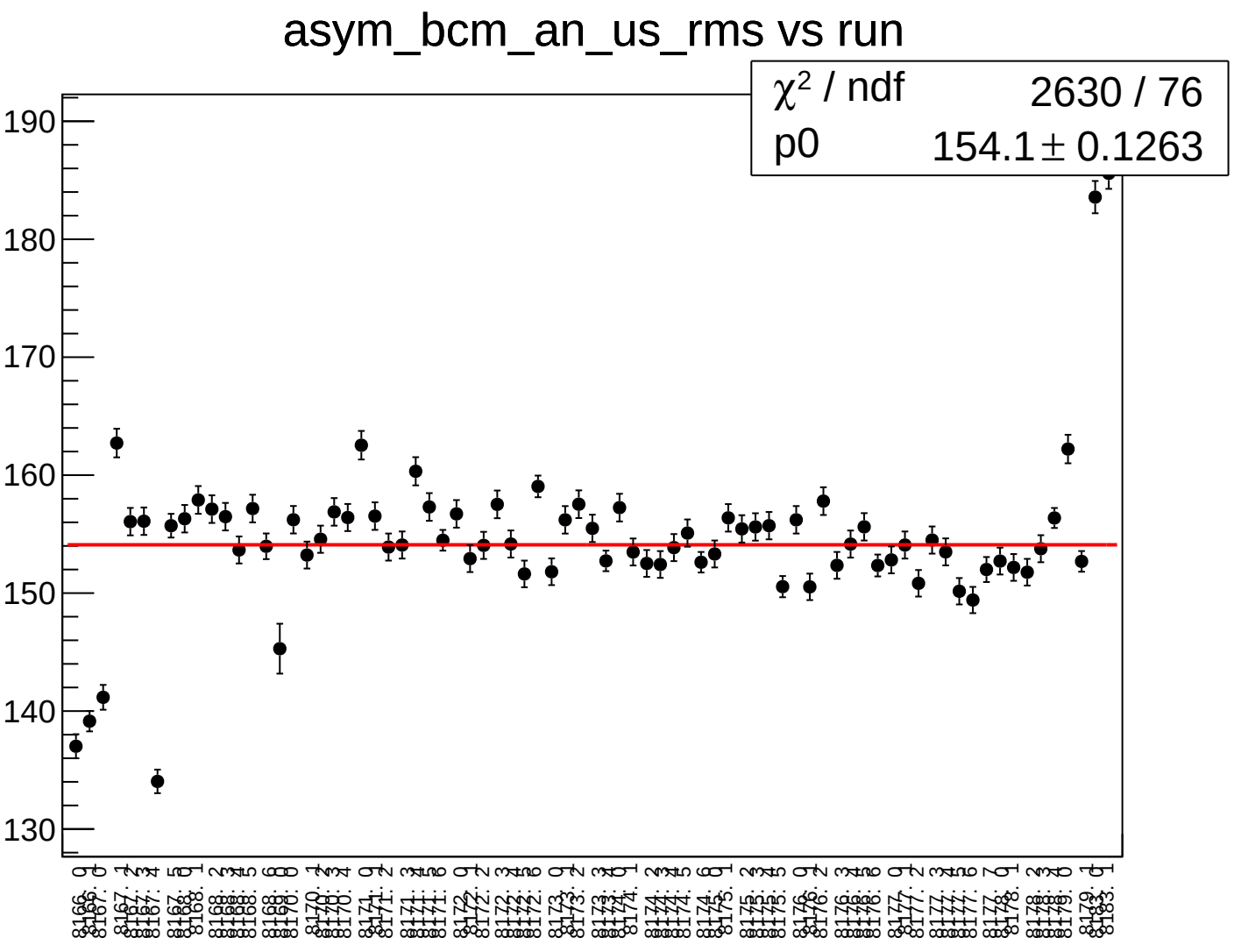

asym_bcm_an_ds3_mean vs run
χ² / ndf 13.79 / 76
p0 −96.48 ± 177.8
6000
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 215
Std Dev 185.6
1
0.5
0
−0.5
−1

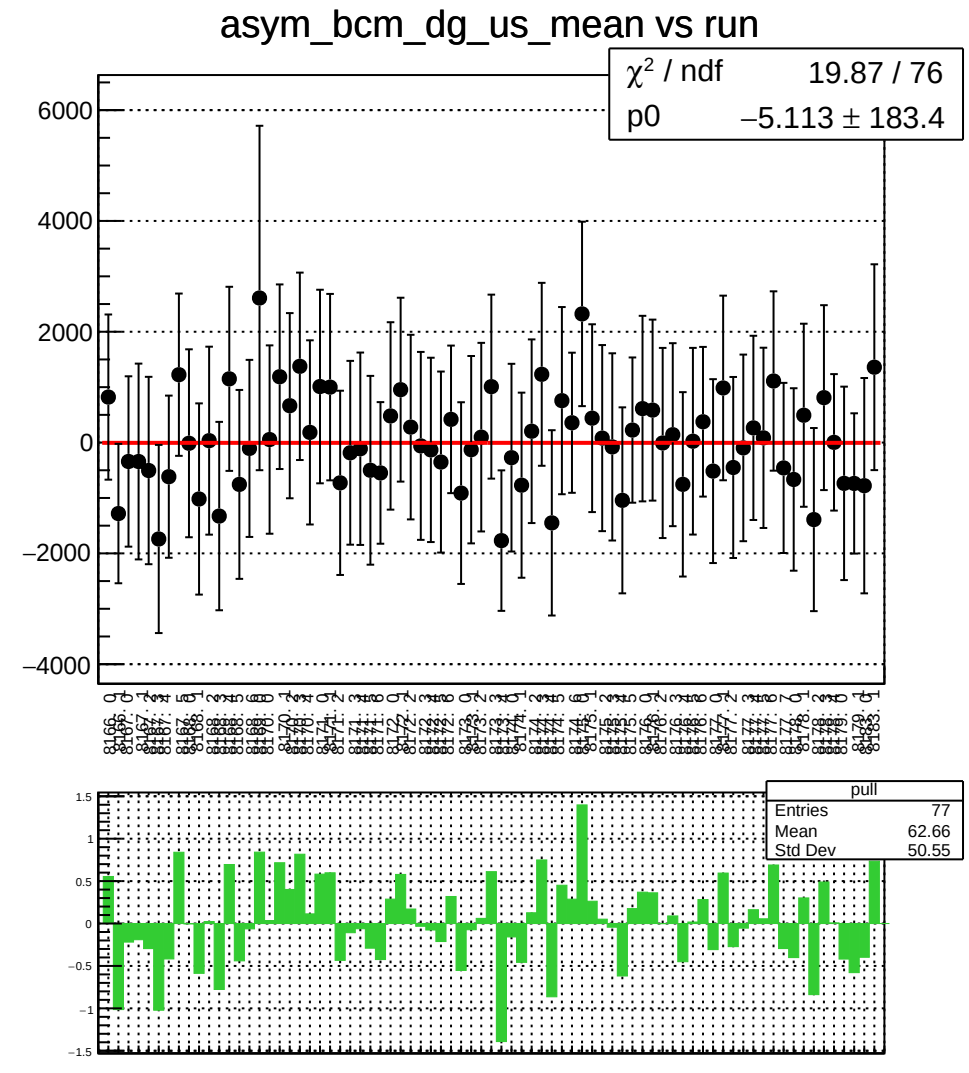

pull1D
Entries 77
Mean 0.005476
Std Dev 0.4231
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

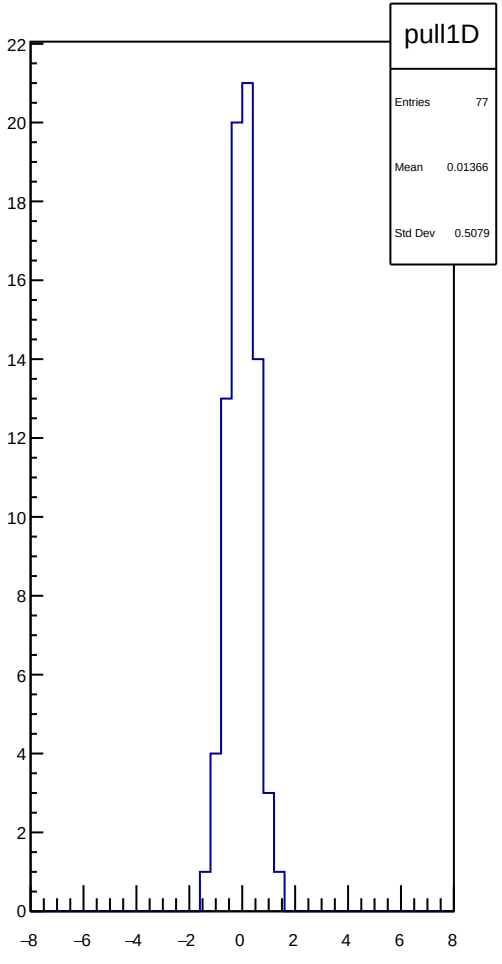

asym_bcm_an_ds3_rms vs run
χ² / ndf 2658 / 76
p0 153.4 ± 0.1257
190
180
170
160
150
140
130

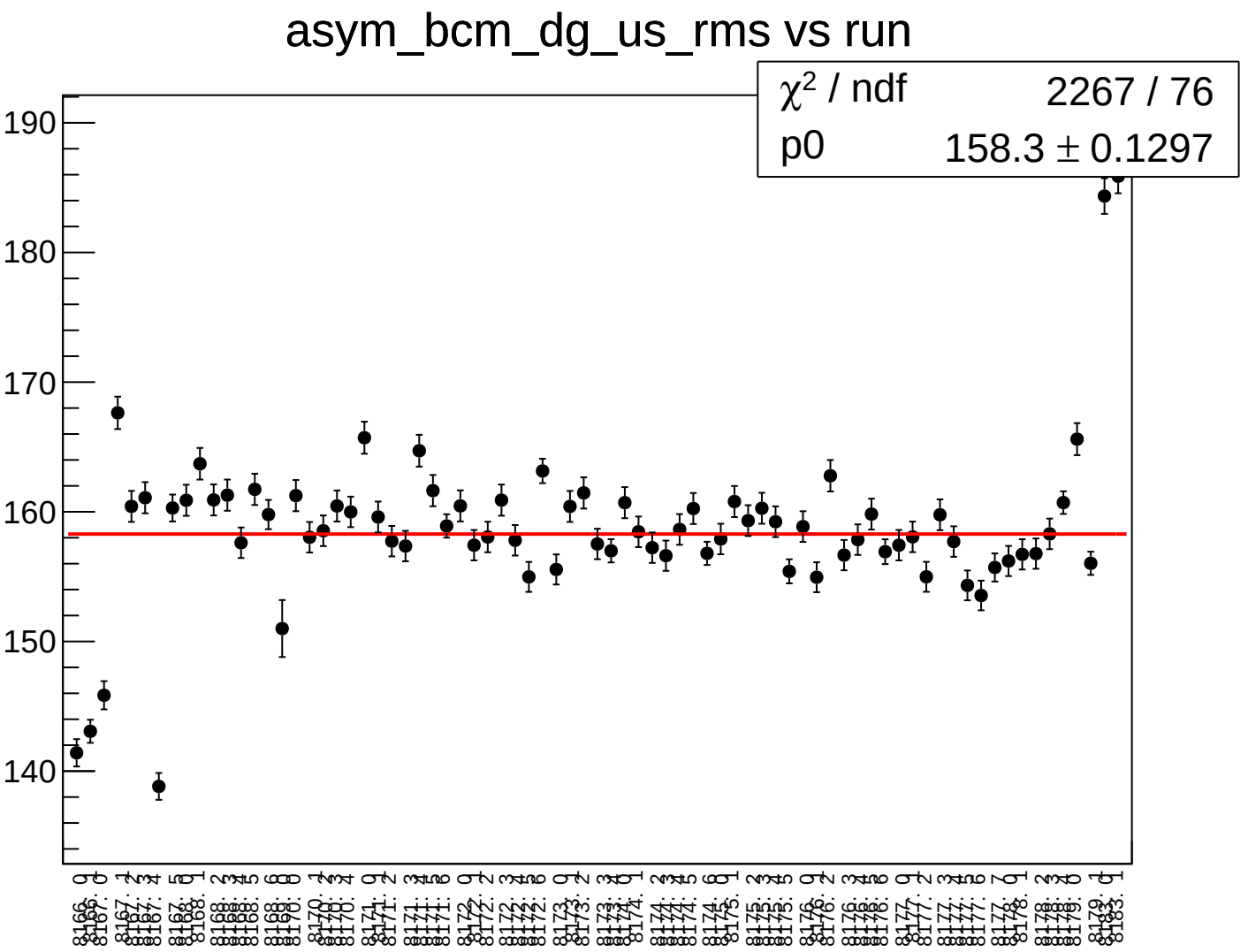

asym_bcm_an_us_mean vs run
χ² / ndf 12.11 / 76
p0 −107.2 ± 178.6
pull
Entries 77
Mean 263
Std Dev 232.9

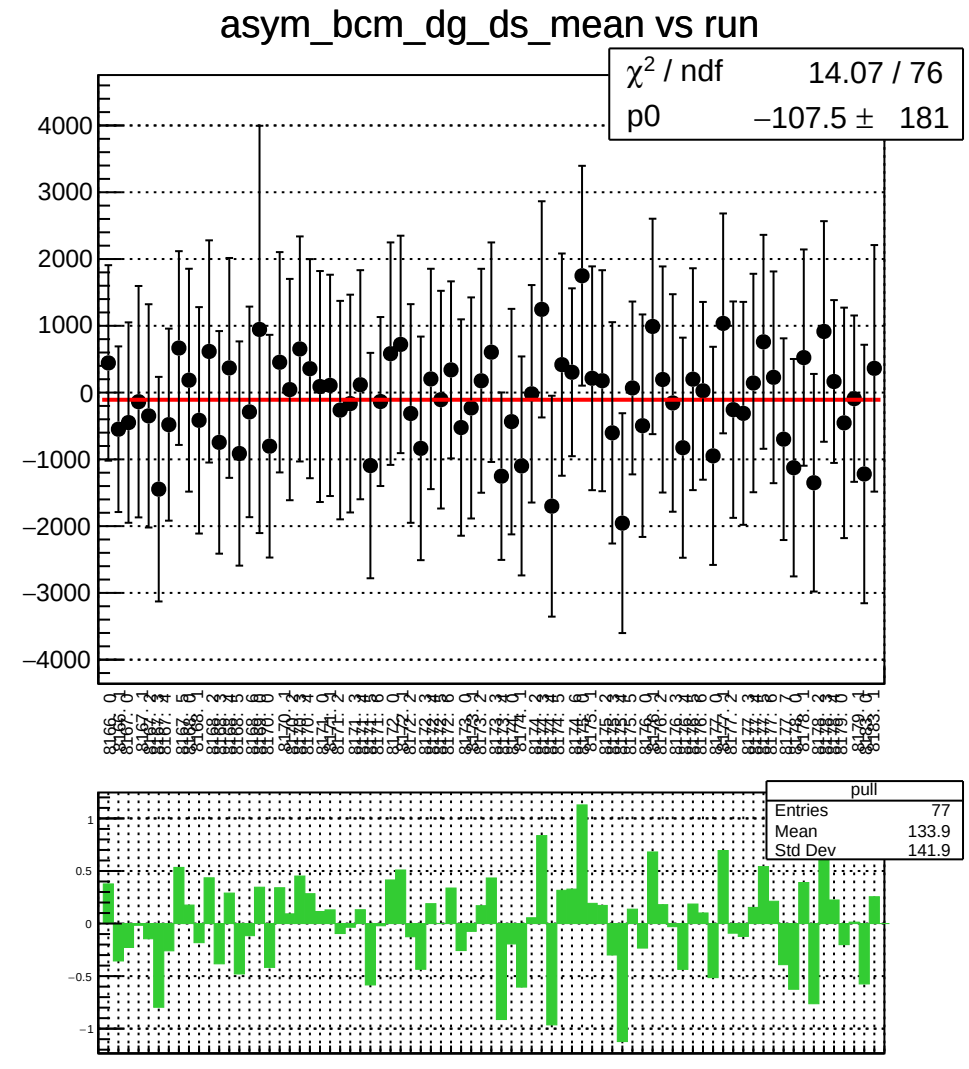

pull1D
Entries 77
Mean 0.003985
Std Dev 0.3966

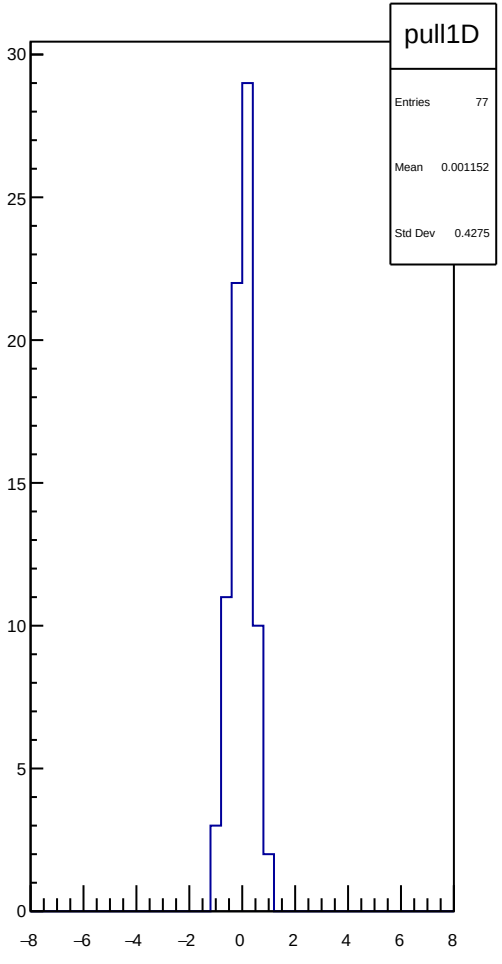

asym_bcm_an_us_rms vs run
χ² / ndf 2630 / 76
p0 154.1 ± 0.1263
190
180
170
160
150
140
130

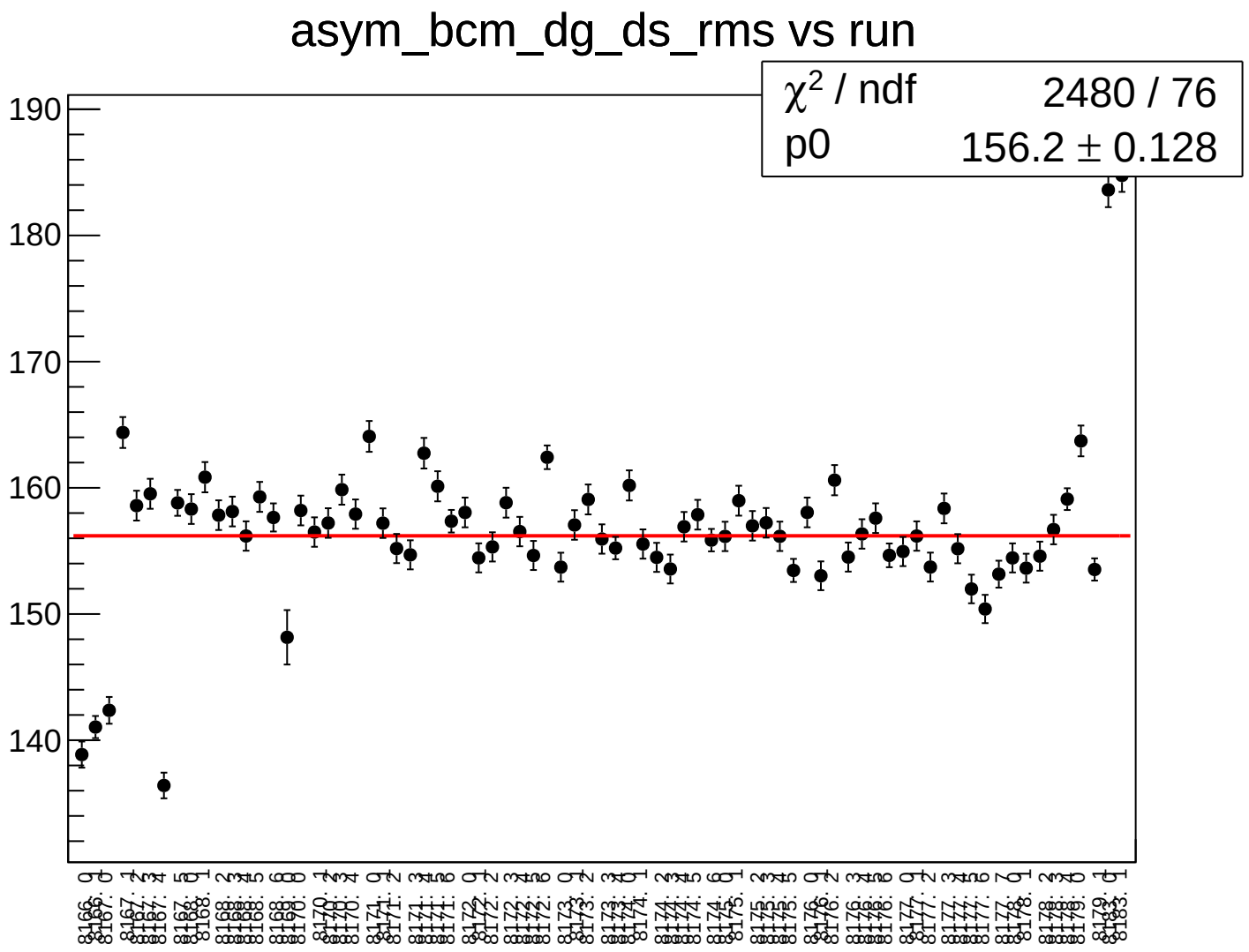

asym_bcm_dg_us_mean vs run
χ² / ndf 19.87 / 76
p0 −5.113 ± 183.4
pull
Entries 77
Mean 62.66
Std Dev 50.55

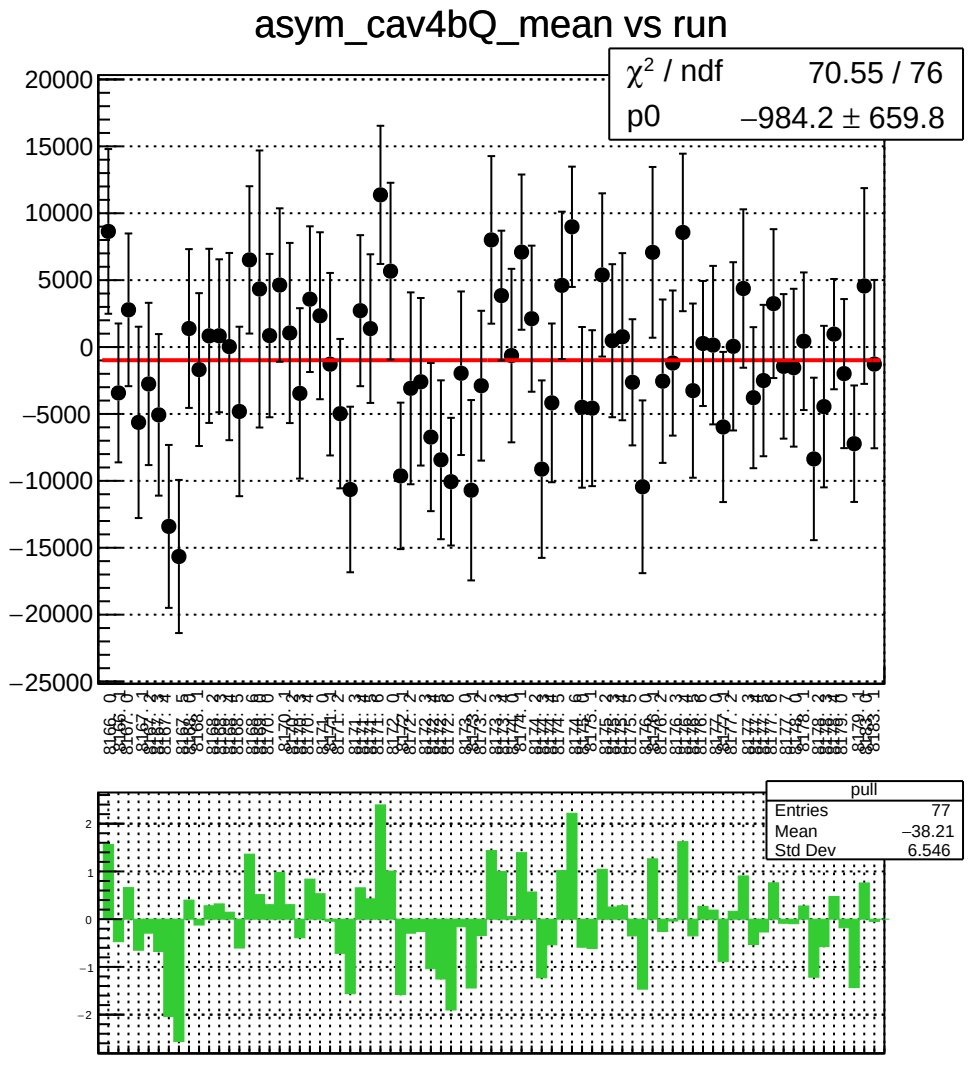

pull1D
Entries 77
Mean 0.01366
Std Dev 0.5079

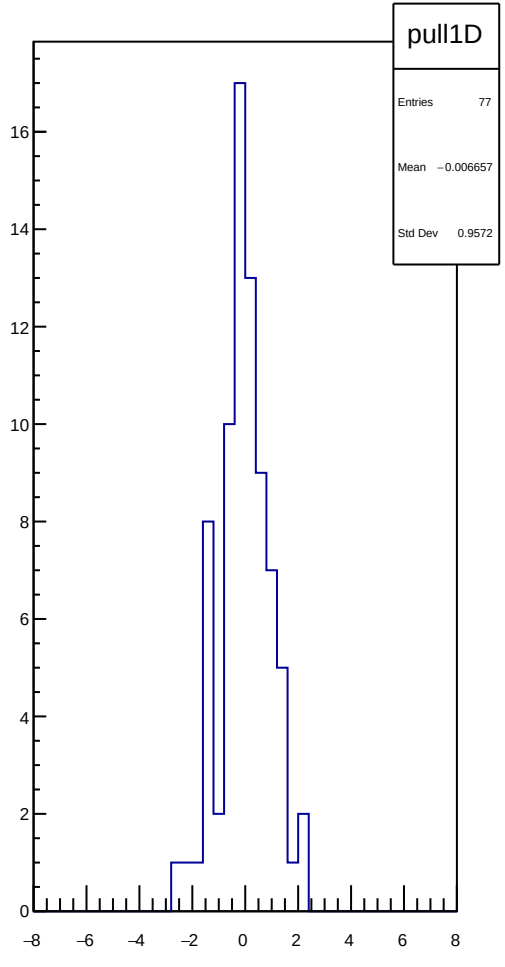

asym_bcm_dg_us_rms vs run
χ² / ndf 2267 / 76
p0 158.3 ± 0.1297
190
180
170
160
150
140

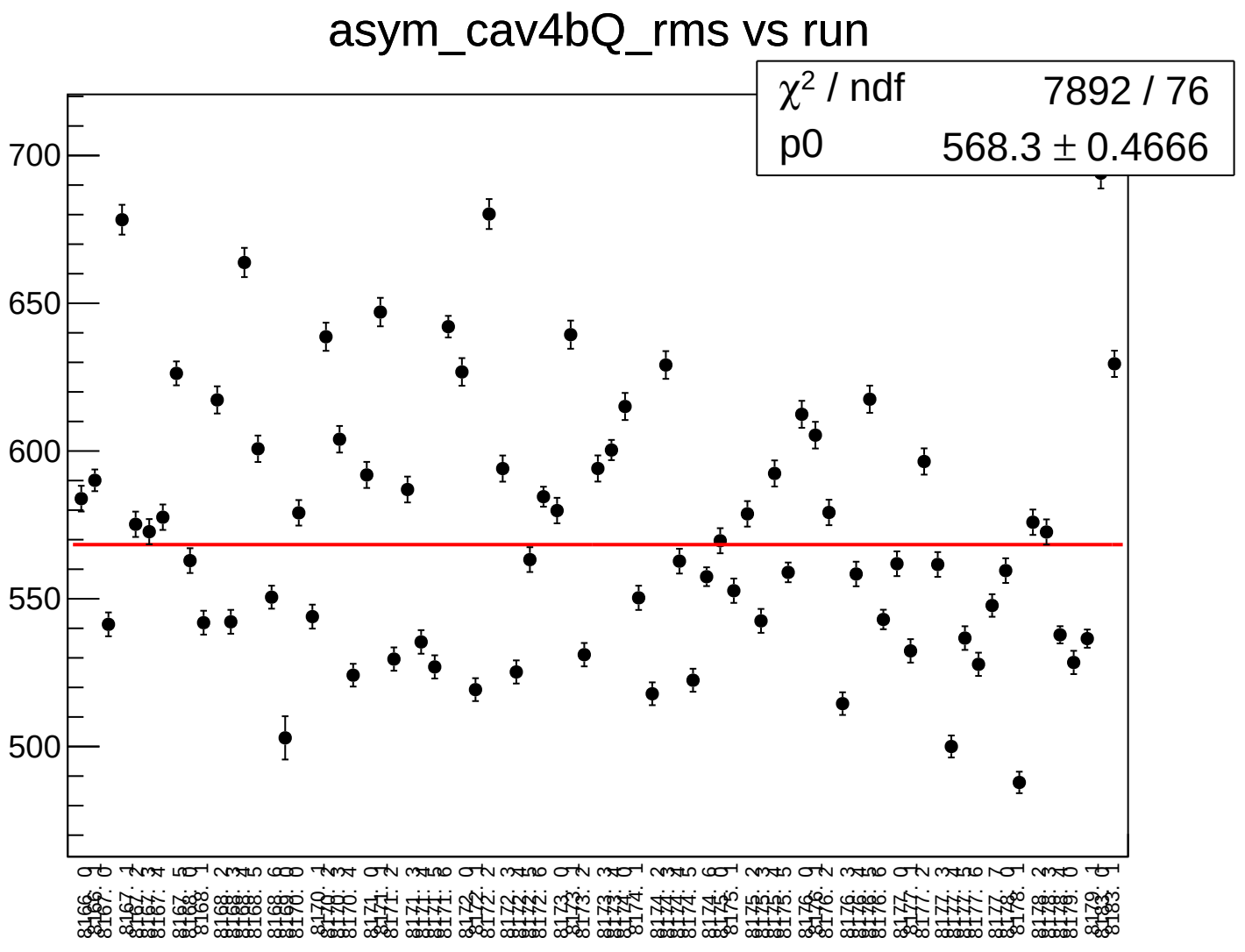

asym_bcm_dg_ds_mean vs run
χ² / ndf 14.07 / 76
p0 −107.5 ± 181
pull
Entries 77
Mean 133.9
Std Dev 141.9

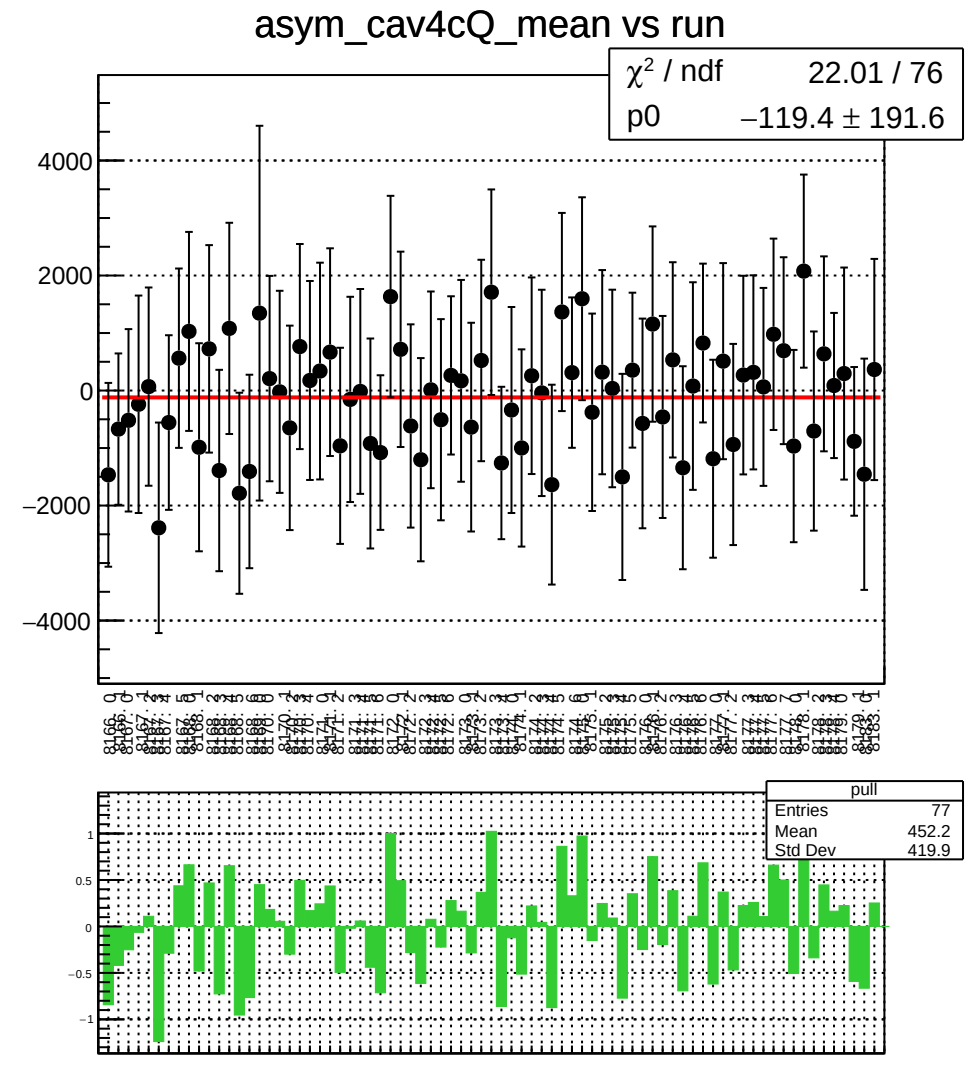

pull1D
Entries 77
Mean 0.001152
Std Dev 0.4275

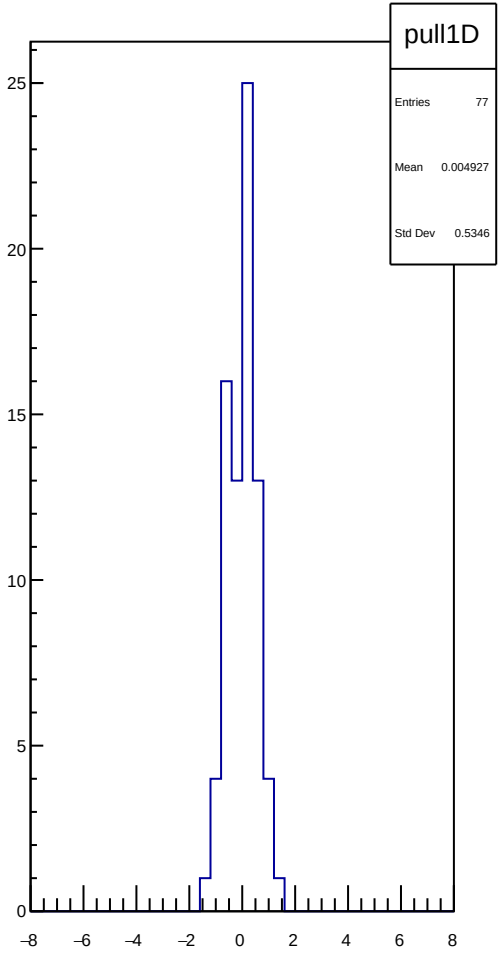

asym_bcm_dg_ds_rms vs run
χ² / ndf 2480 / 76
p0 156.2 ± 0.128
190
180
170
160
150
140

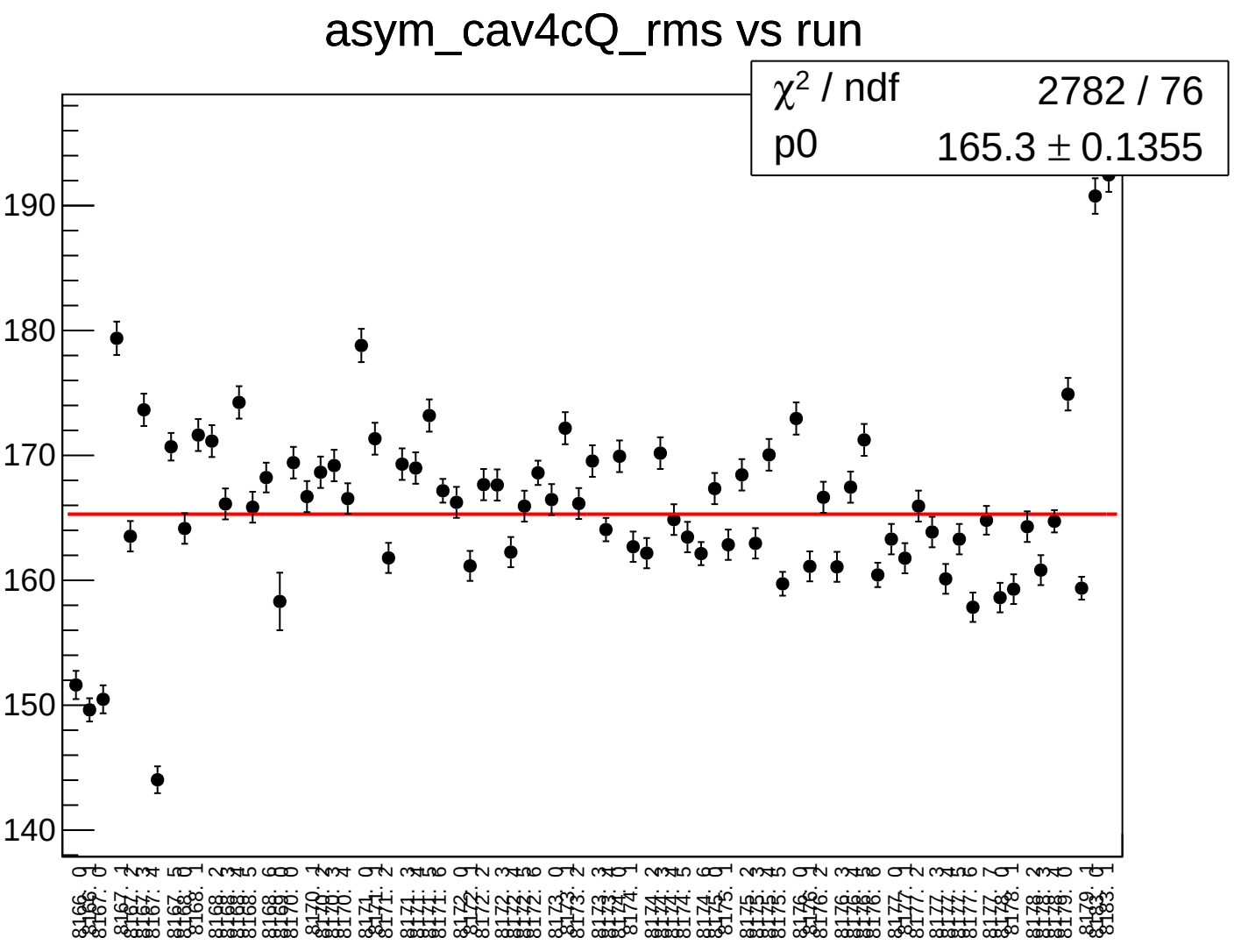

asym_cav4bQ_mean vs run
χ² / ndf 70.55 / 76
p0 −984.2 ± 659.8
pull
Entries 77
Mean −38.21
Std Dev 6.546

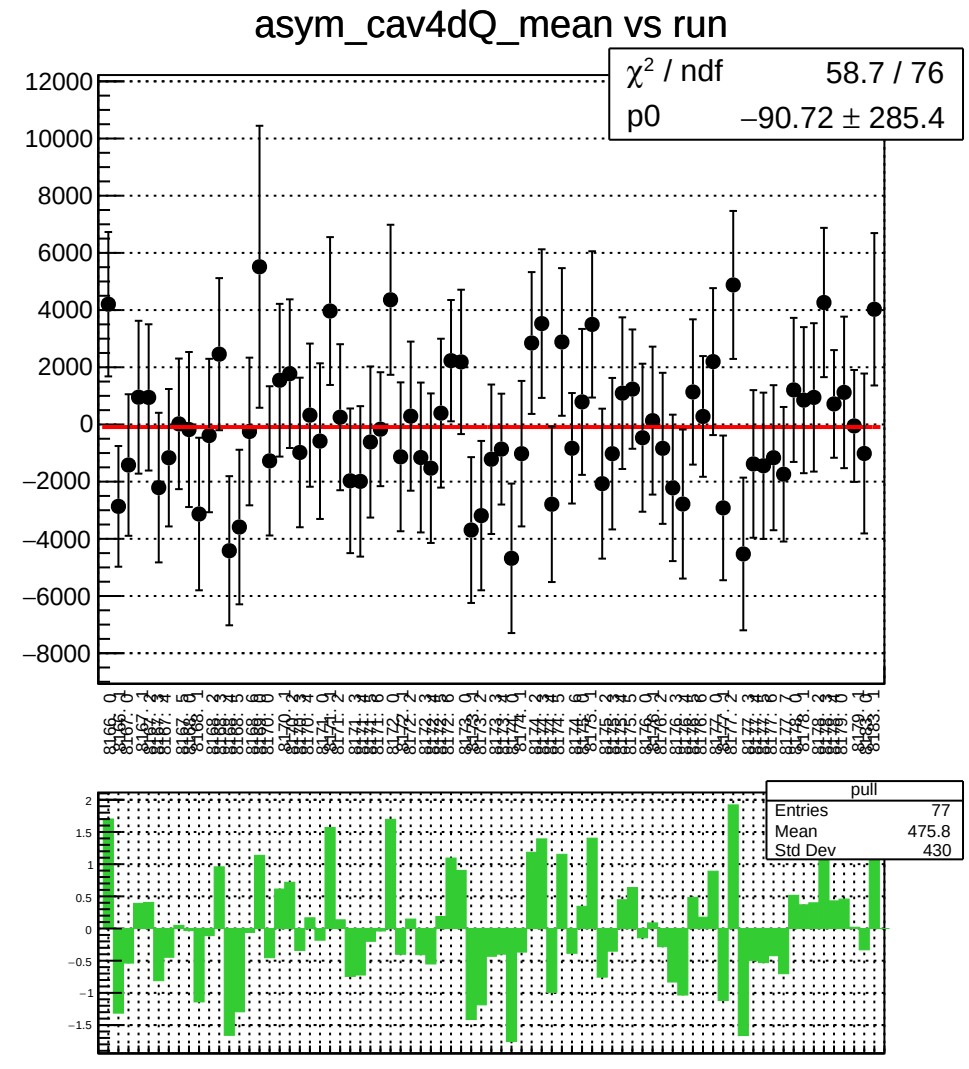

pull1D
Entries 77
Mean −0.006657
Std Dev 0.9572

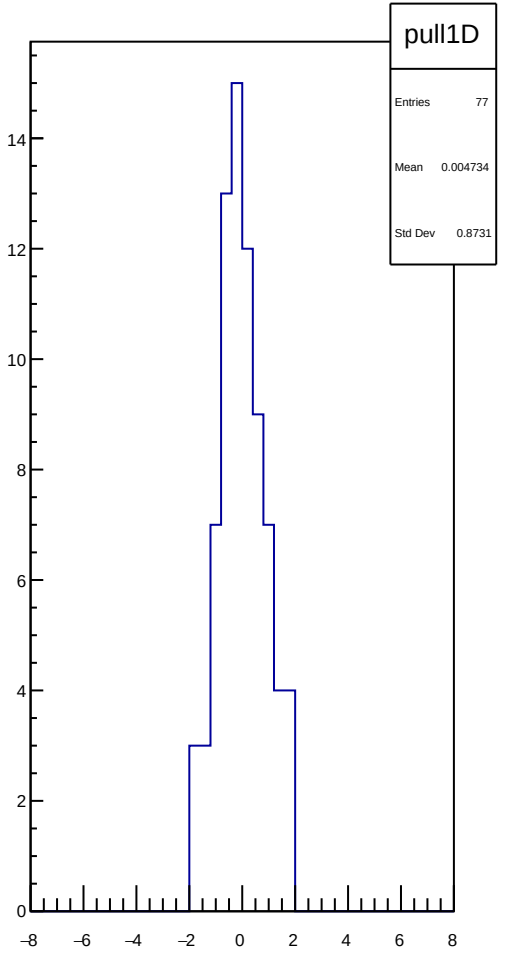

asym_cav4bQ_rms vs run
χ² / ndf 7892 / 76
p0 568.3 ± 0.4666
700
650
600
550
500

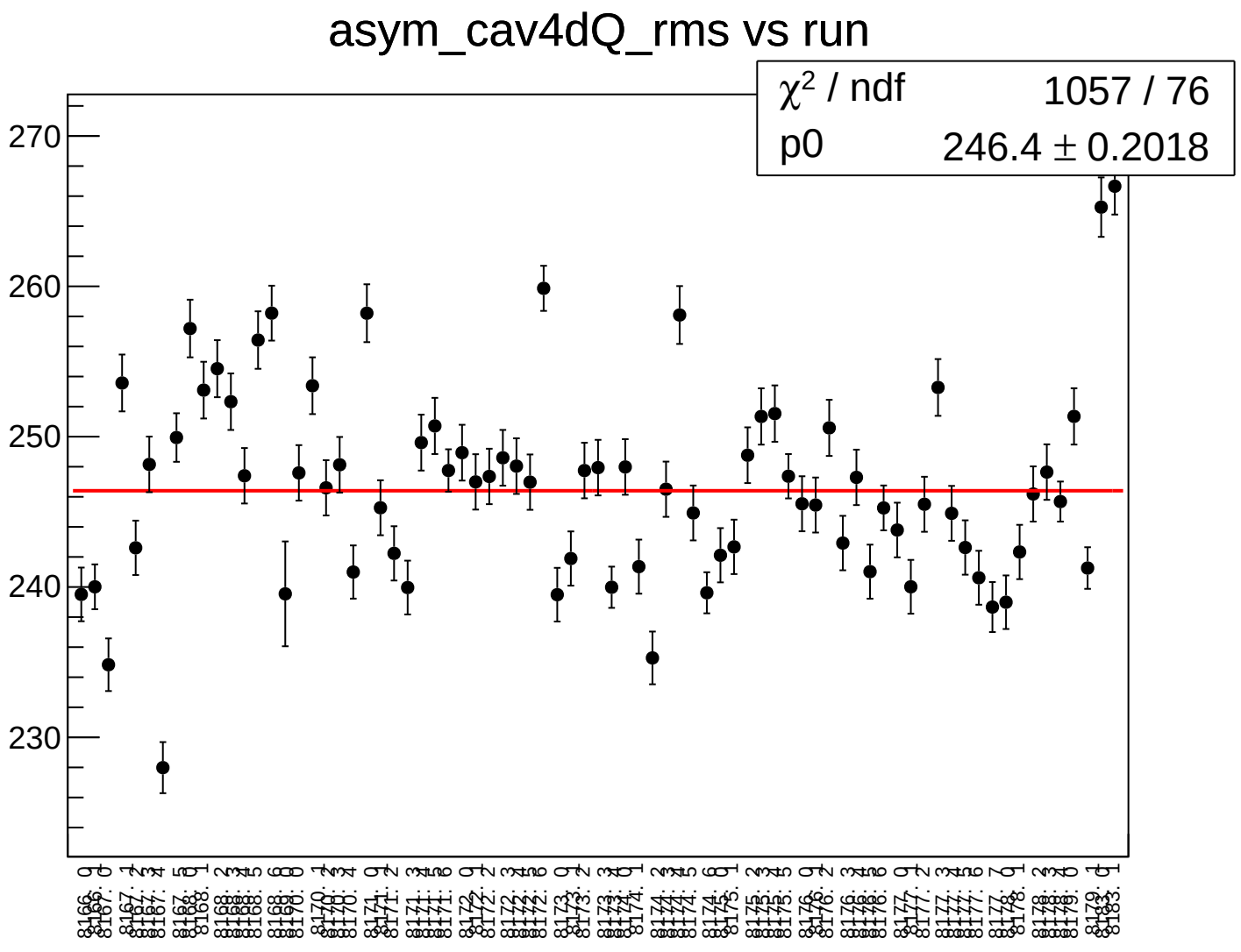

asym_cav4cQ_mean vs run
χ² / ndf 22.01 / 76
p0 −119.4 ± 191.6
4000
2000
0
−2000
−4000
pull
Entries 77
Mean 452.2
Std Dev 419.9
1
0.5
0
−0.5
−1

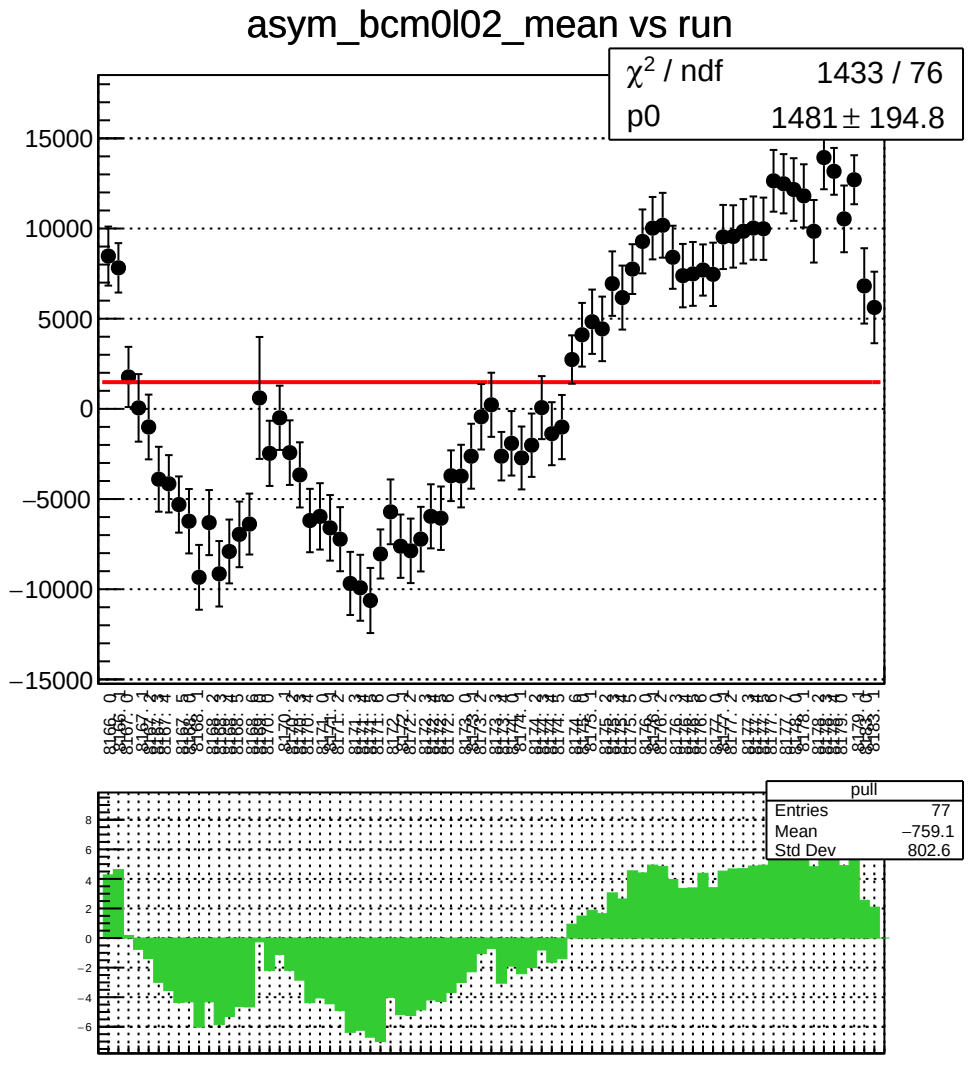

pull1D
Entries 77
Mean 0.004927
Std Dev 0.5346
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

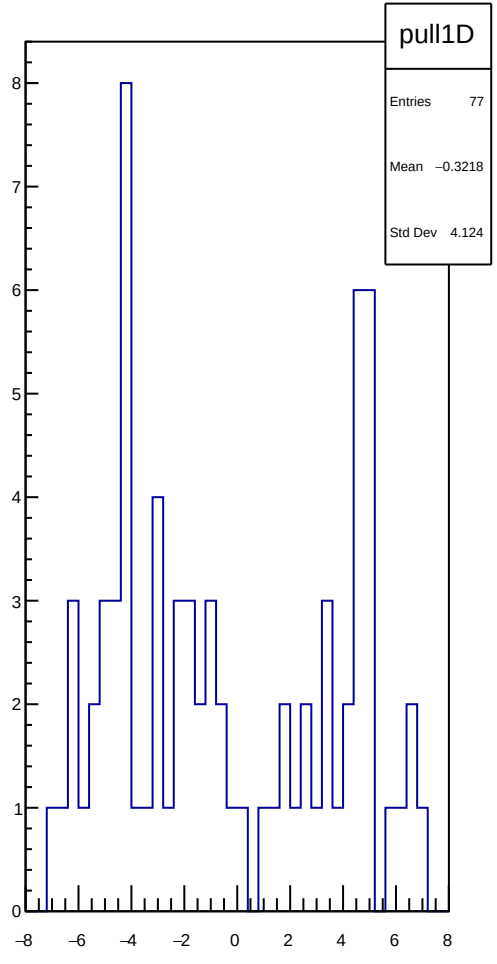

asym_cav4cQ_rms vs run
χ² / ndf 2782 / 76
p0 165.3 ± 0.1355
190
180
170
160
150
140

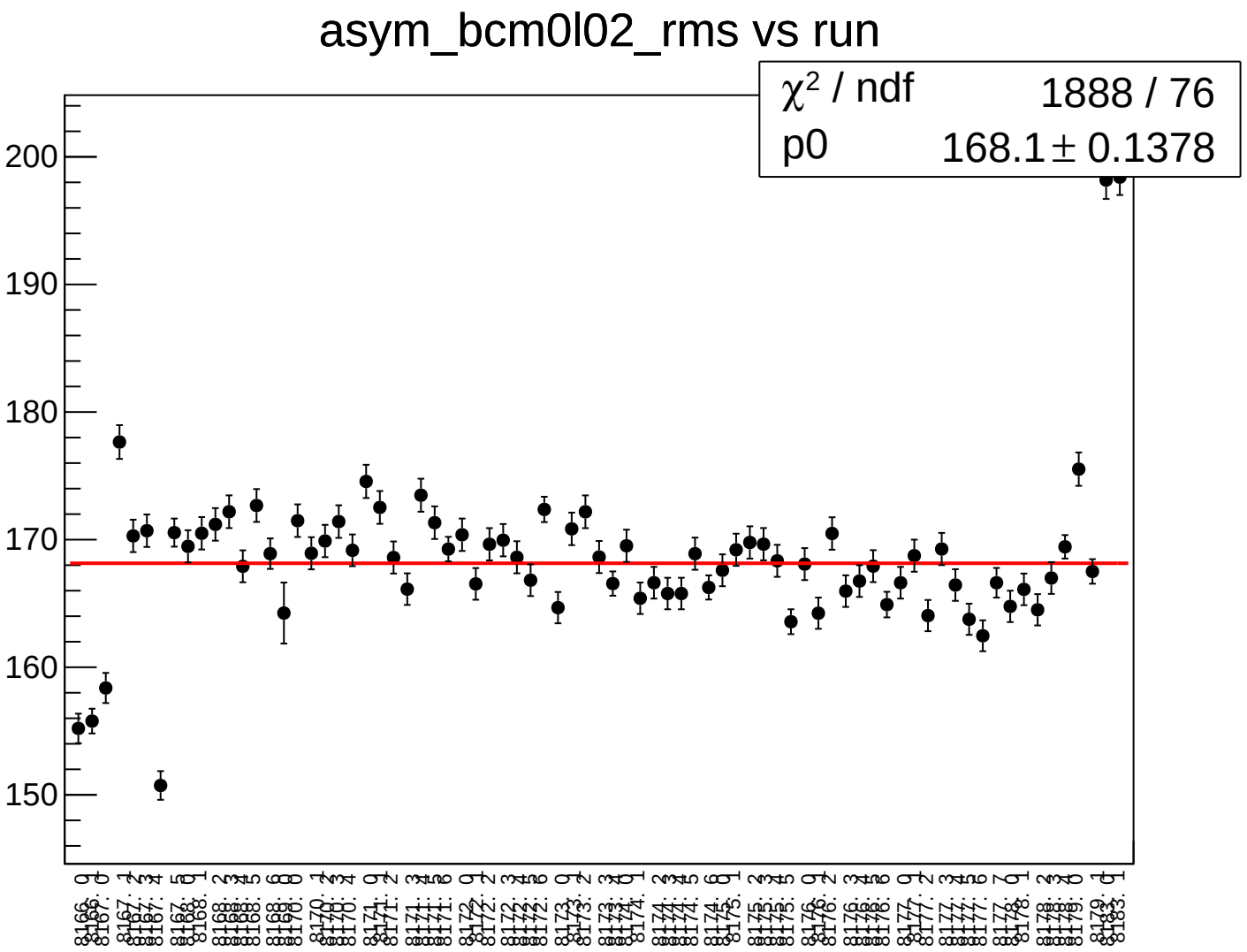

asym_cav4dQ_mean vs run
χ² / ndf 58.7 / 76
p0 −90.72 ± 285.4
pull
Entries 77
Mean 475.8
Std Dev 430

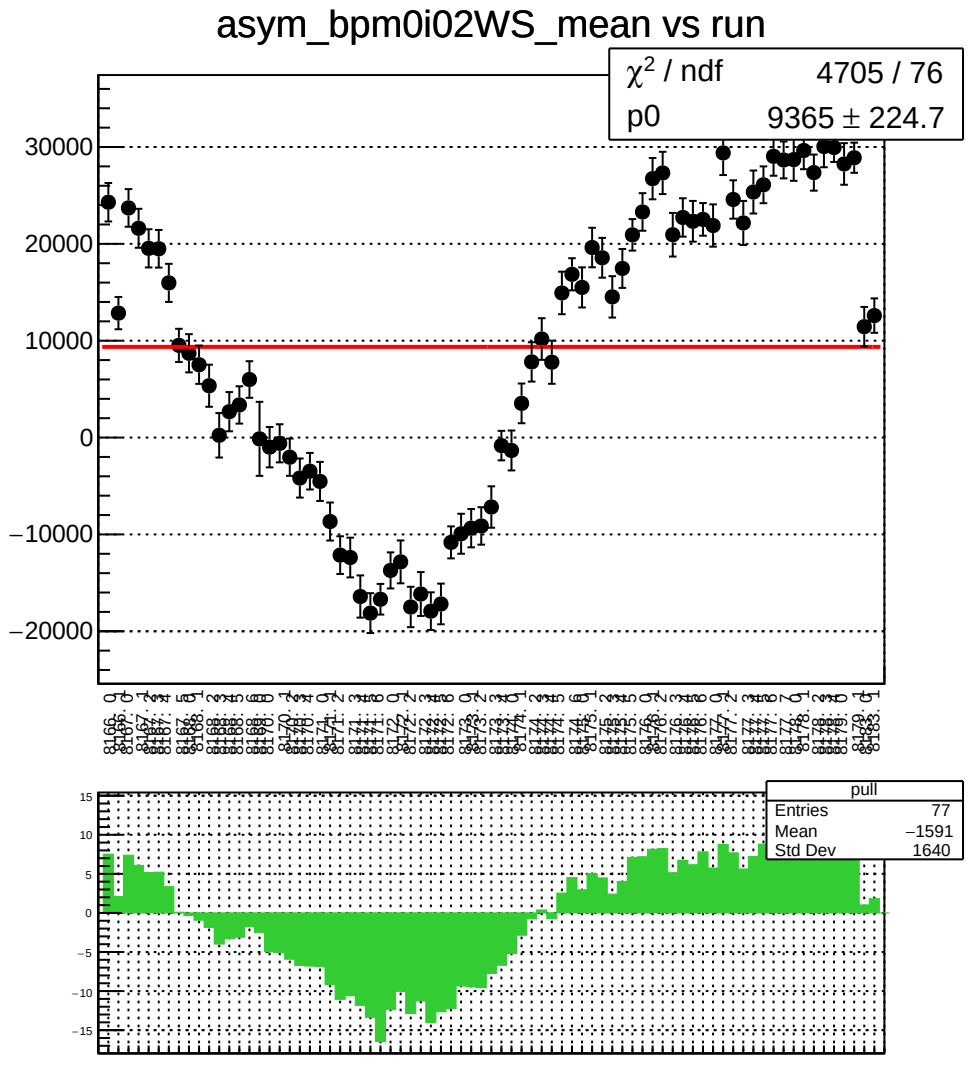

pull1D
Entries 77
Mean 0.004734
Std Dev 0.8731

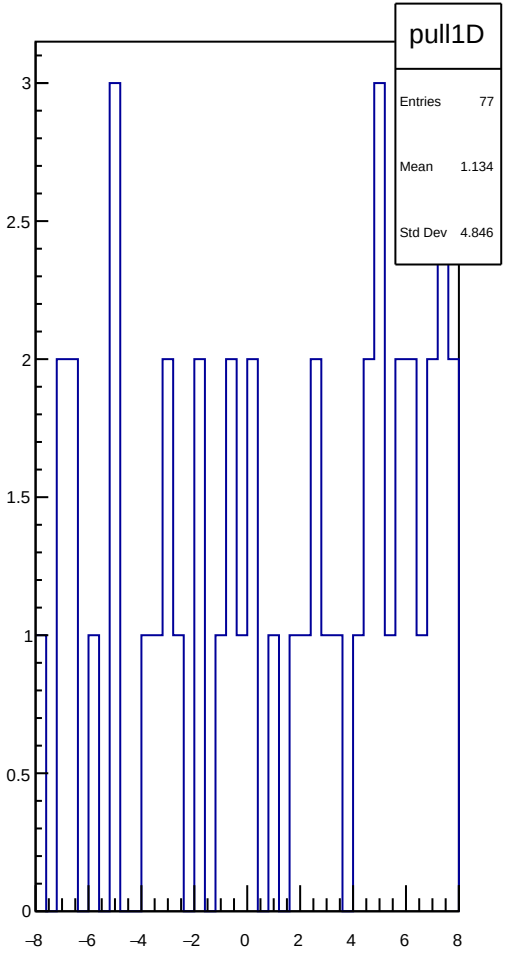

asym_cav4dQ_rms vs run
χ² / ndf 1057 / 76
p0 246.4 ± 0.2018
270
260
250
240
230

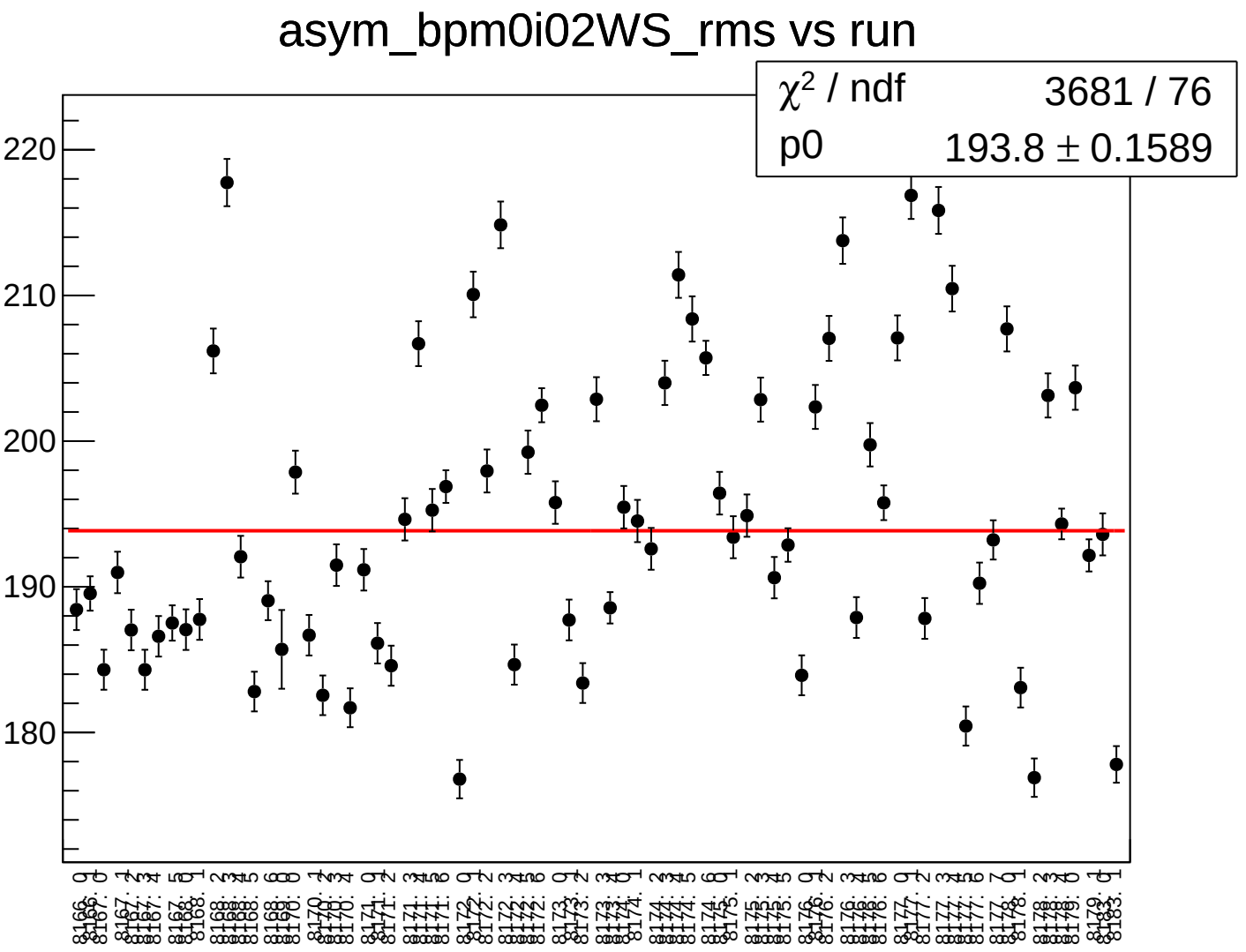

asym_bcm0l02_mean vs run
χ² / ndf 1433 / 76
p0 1481 ± 194.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 77
Mean −759.1
Std Dev 802.6

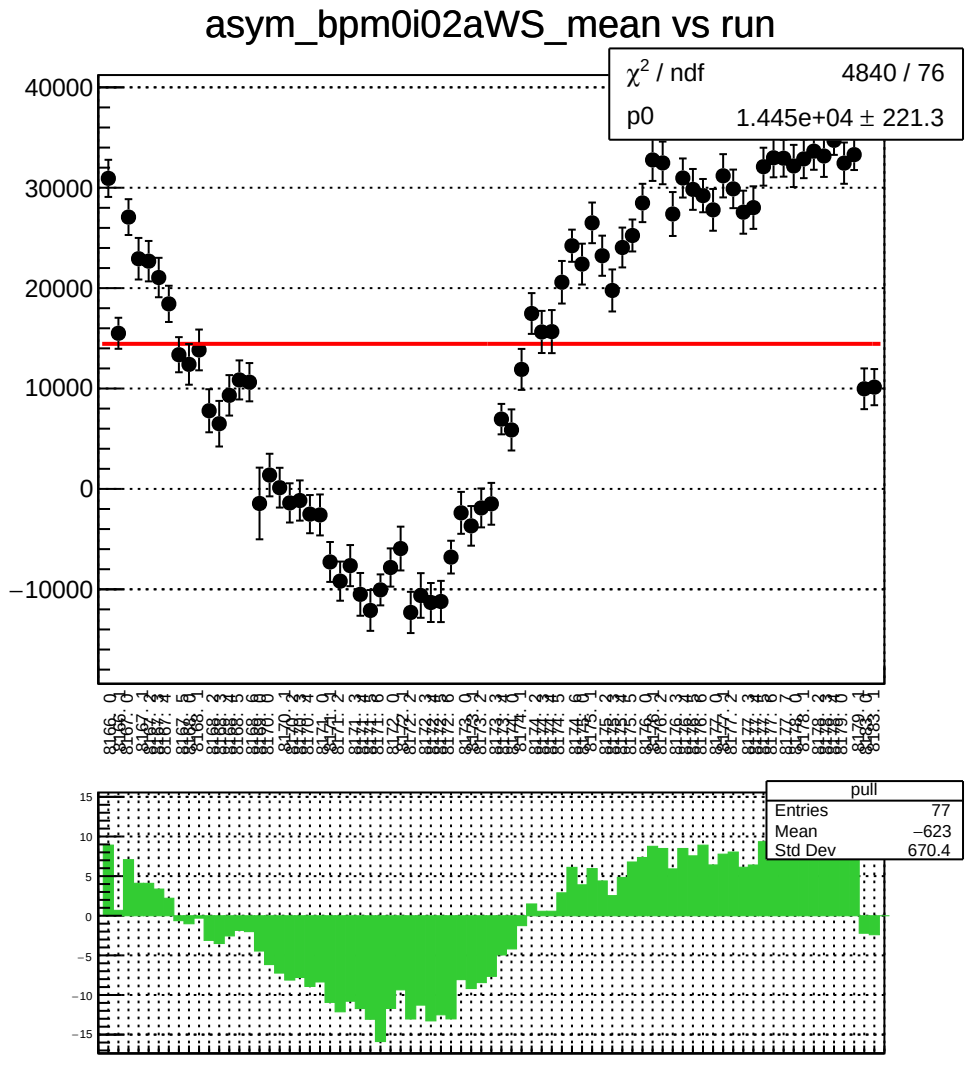

pull1D
Entries 77
Mean −0.3218
Std Dev 4.124

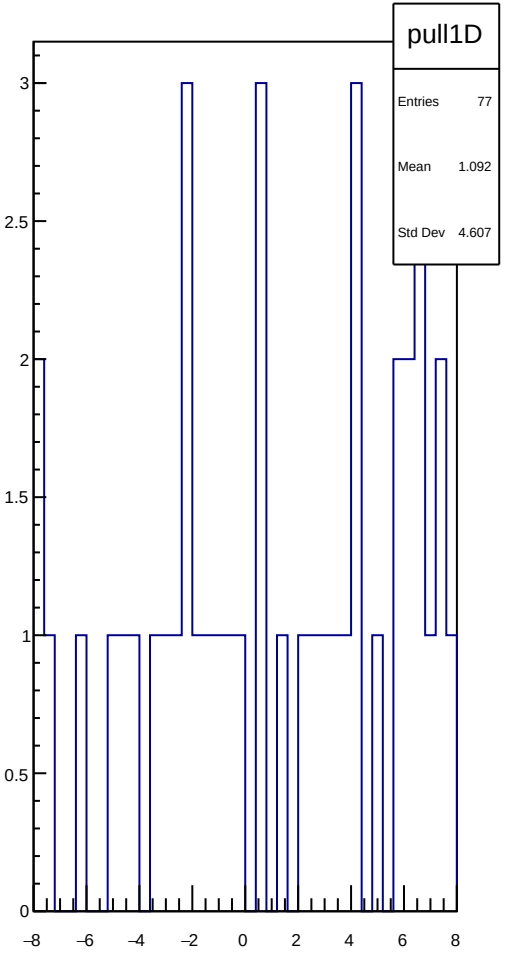

asym_bcm0l02_rms vs run
χ² / ndf 1888 / 76
p0 168.1 ± 0.1378
200
190
180
170
160
150

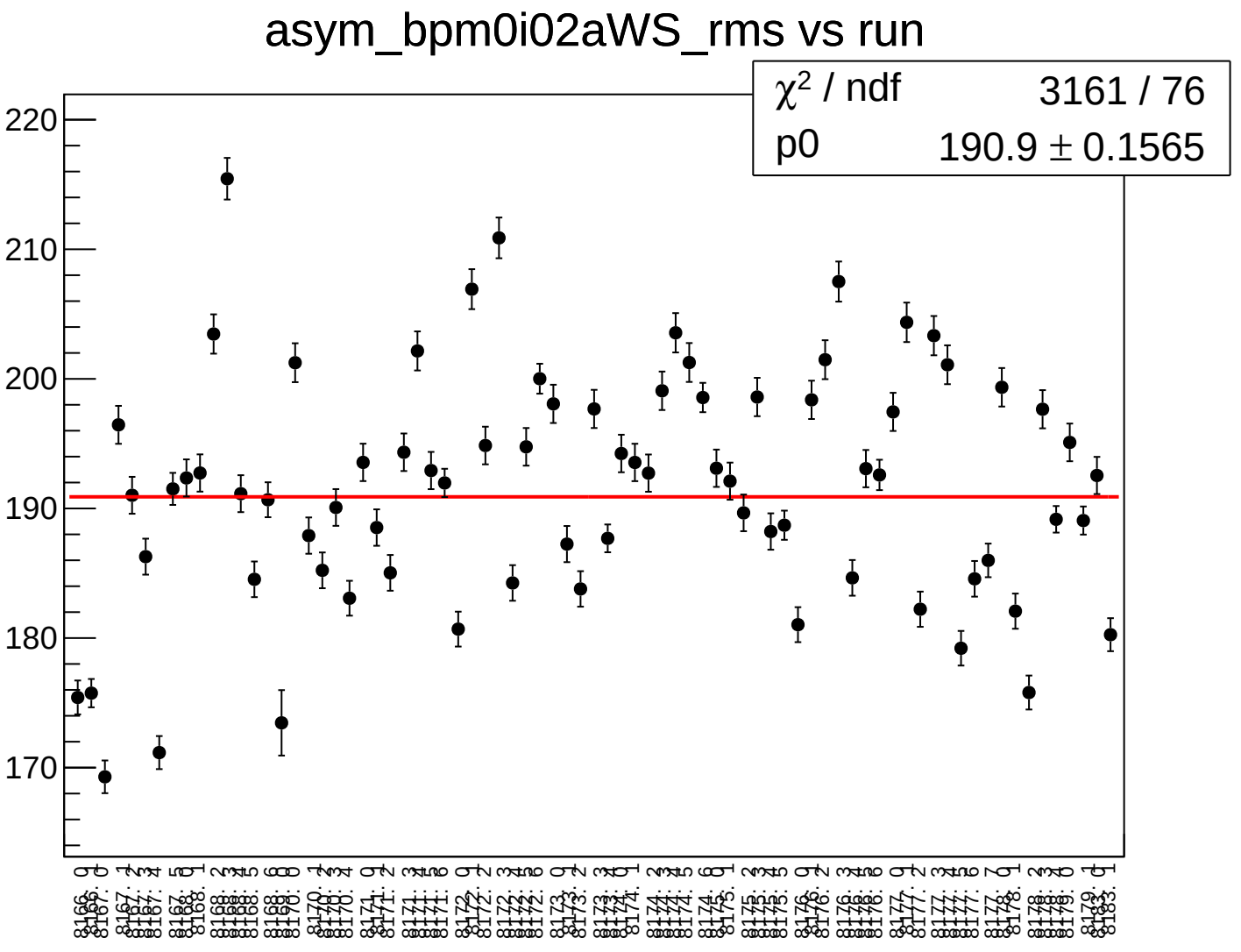

asym_bpm0i02WS_mean vs run
χ² / ndf 4705 / 76
p0 9365 ± 224.7
30000
20000
10000
0
−10000
−20000
pull
Entries 77
Mean −1591
Std Dev 1640
15
10
5
0
−5
−10
−15

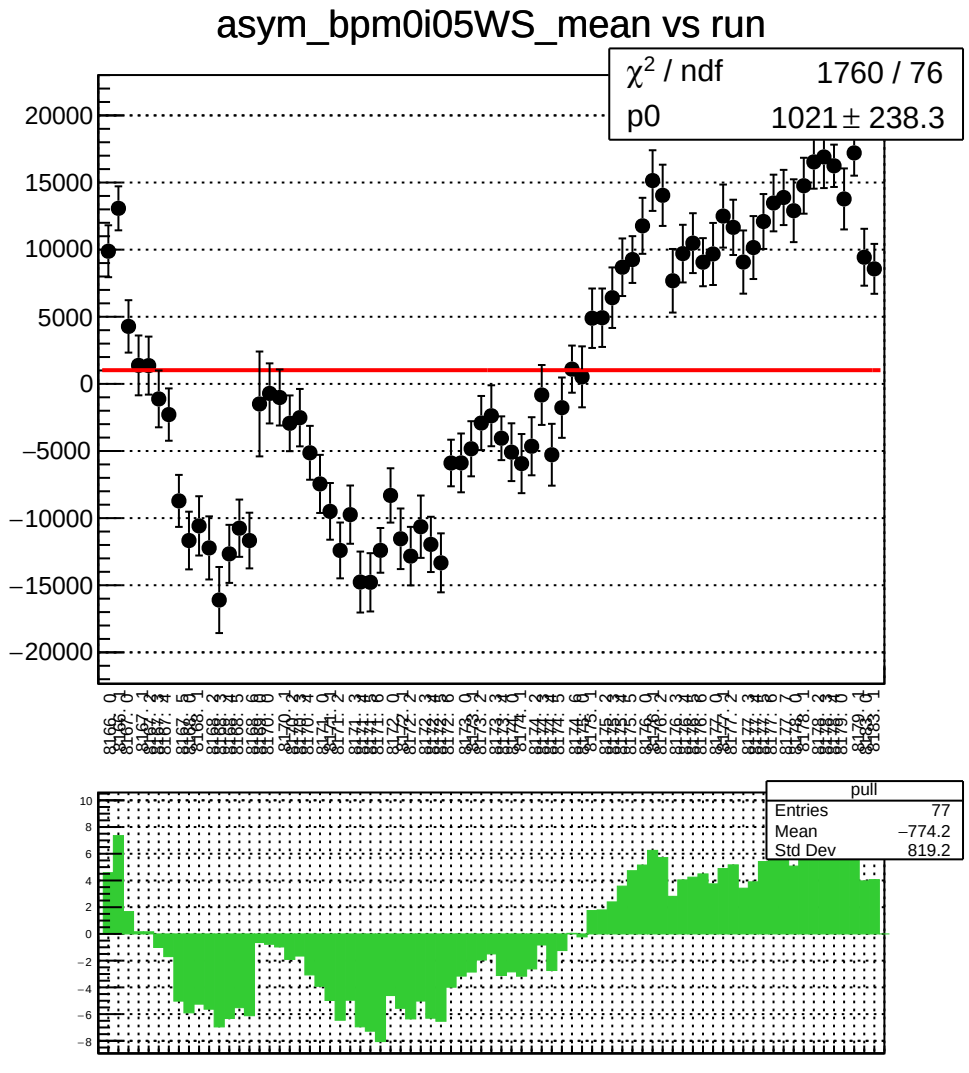

pull1D
Entries 77
Mean 1.134
Std Dev 4.846
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

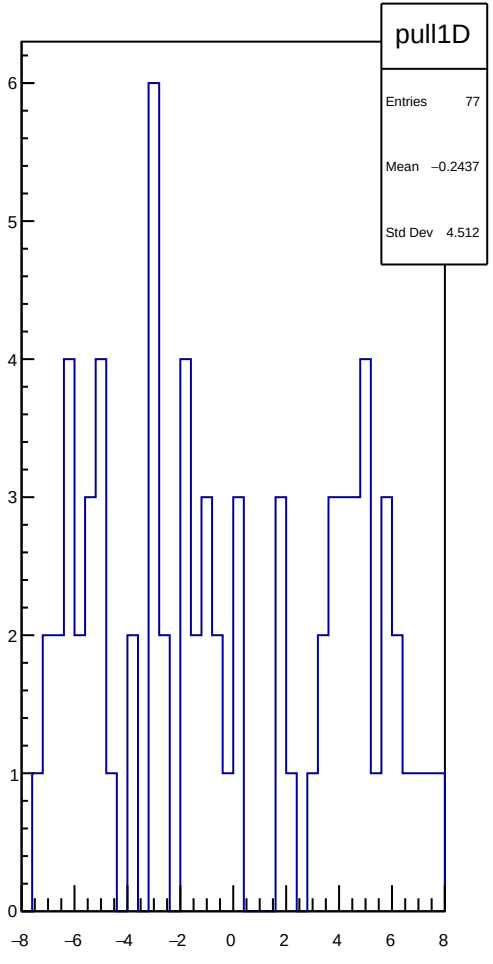

asym_bpm0i02WS_rms vs run
χ² / ndf 3681 / 76
p0 193.8 ± 0.1589
220
210
200
190
180

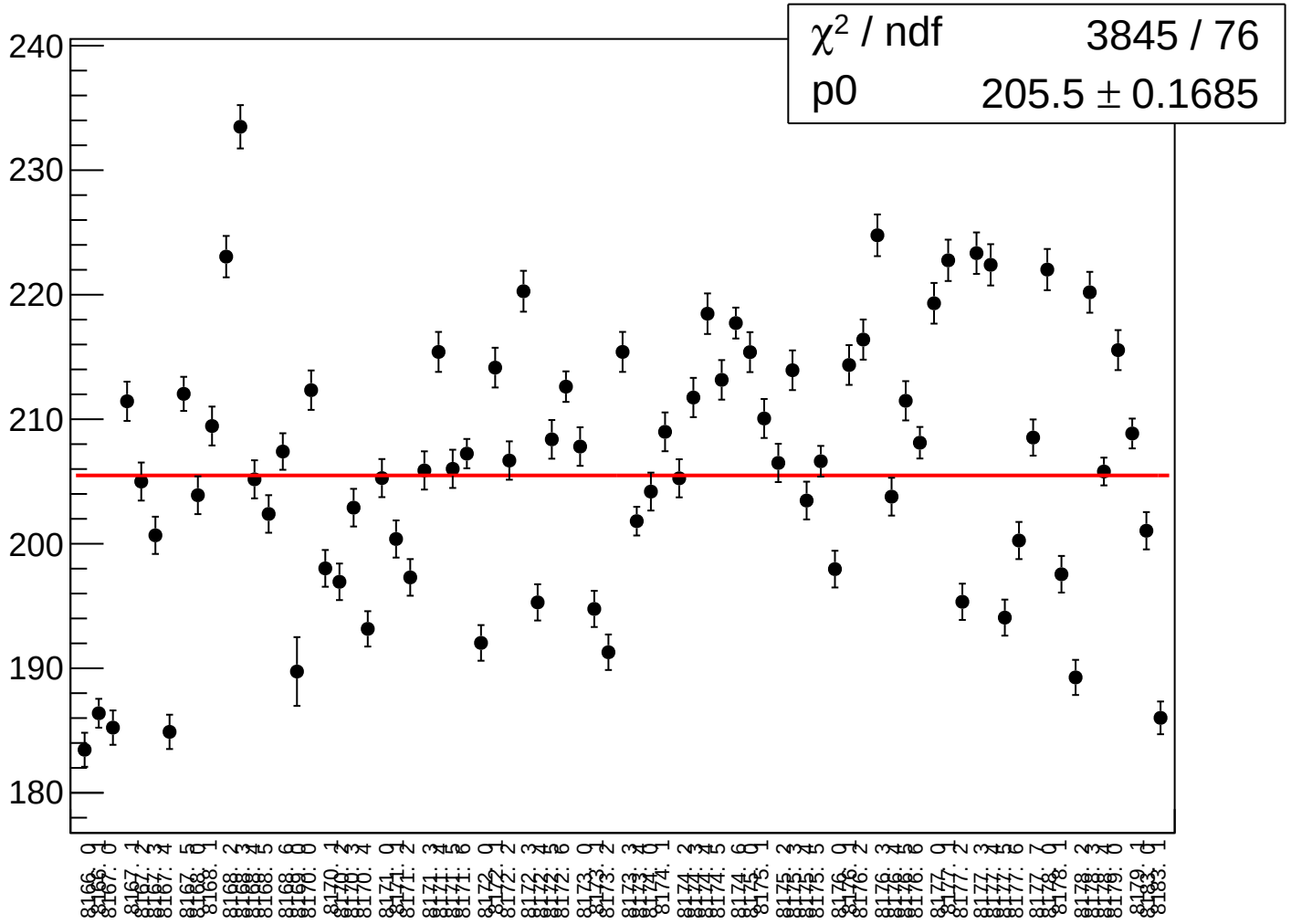

asym_bpm0i02aWS_mean vs run
χ² / ndf 4840 / 76
p0 1.445e+04 ± 221.3
40000
30000
20000
10000
0
−10000
pull
Entries 77
Mean −623
Std Dev 670.4
15
10
5
0
−5
−10
−15

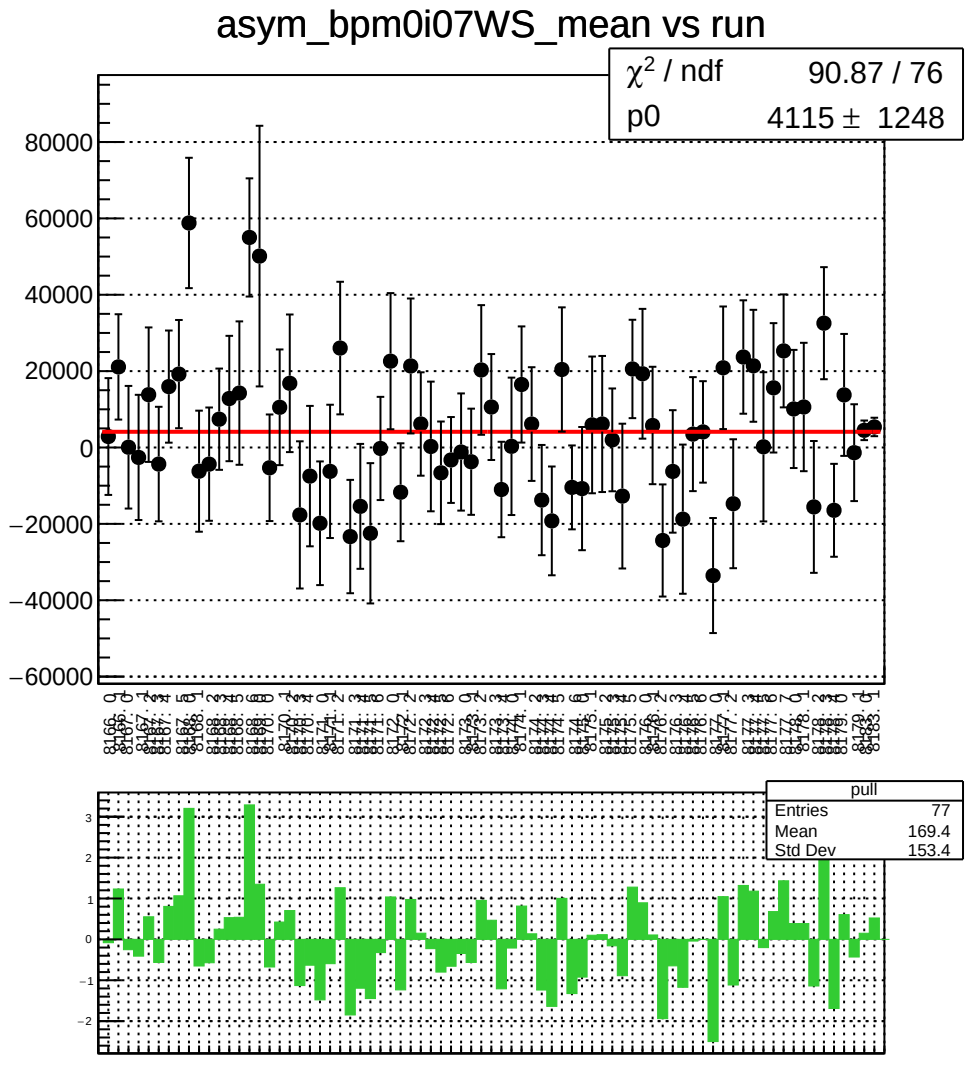

pull1D
Entries 77
Mean 1.092
Std Dev 4.607
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

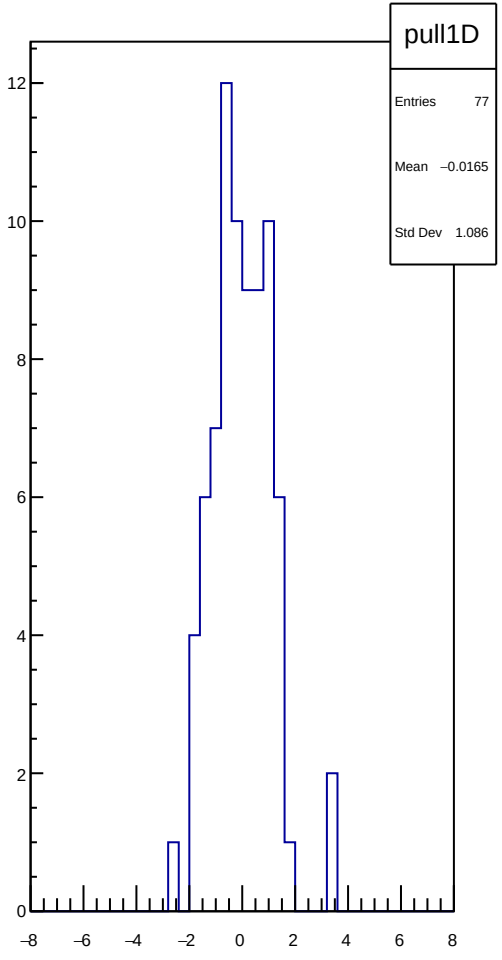

asym_bpm0i02aWS_rms vs run
χ² / ndf 3161 / 76
p0 190.9 ± 0.1565
220
210
200
190
180
170

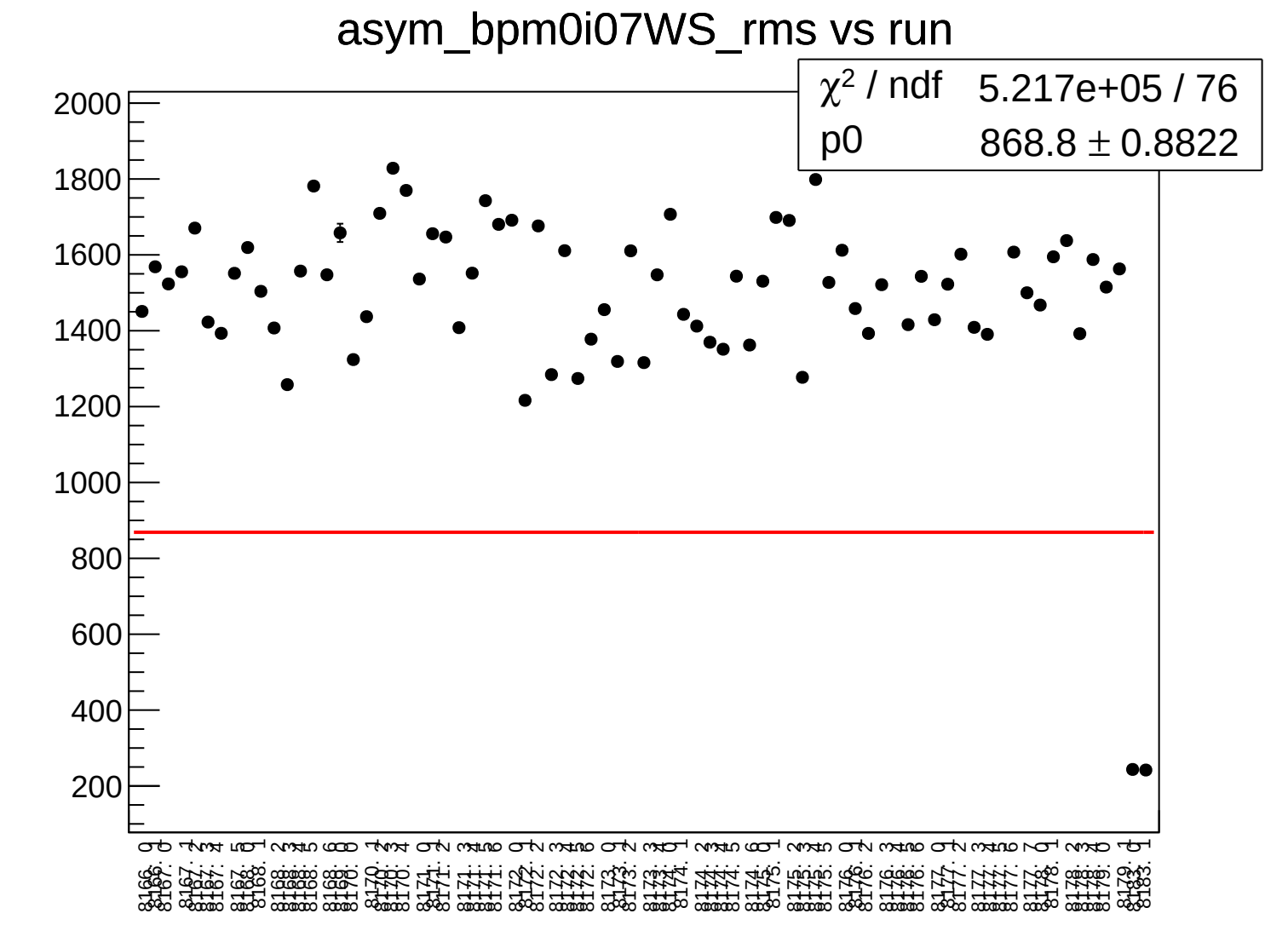

asym_bpm0i05WS_mean vs run
χ² / ndf 1760 / 76
p0 1021 ± 238.3
pull
Entries 77
Mean −774.2
Std Dev 819.2

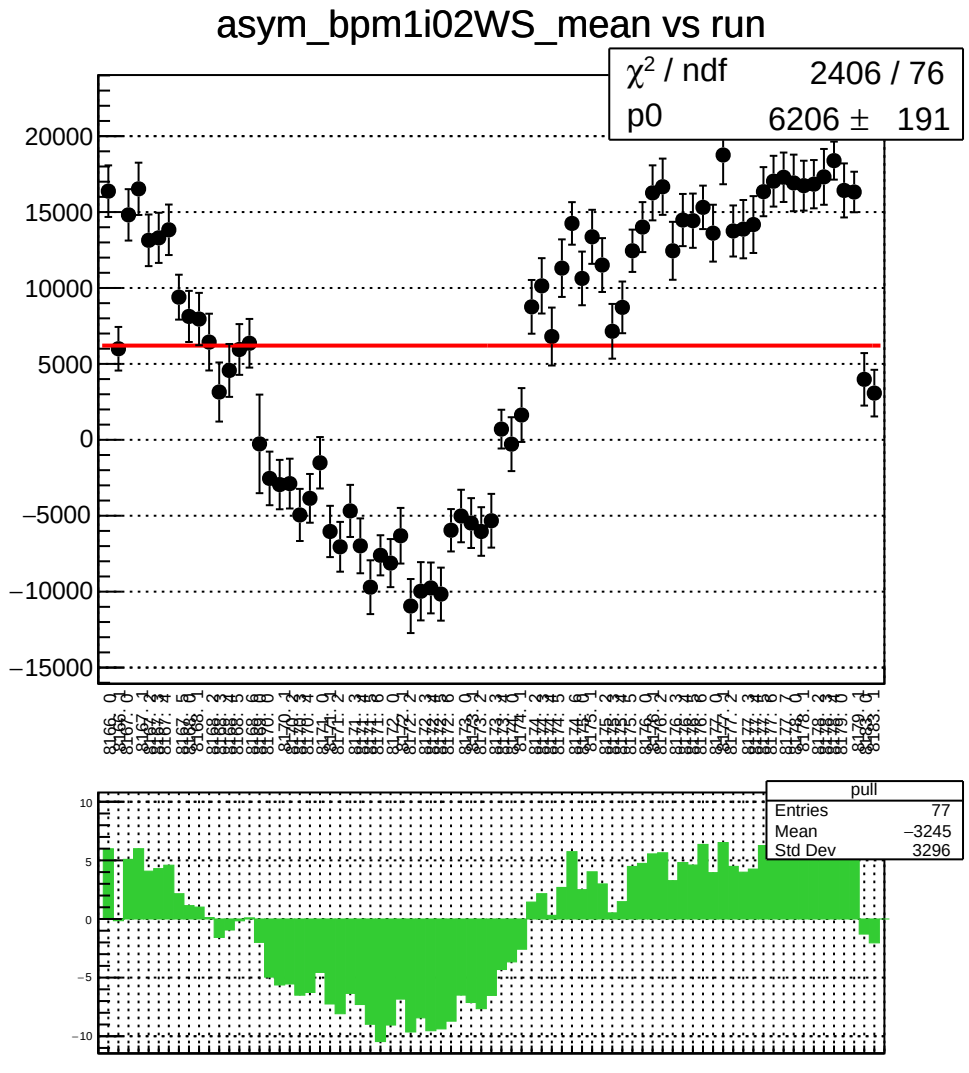

pull1D
Entries 77
Mean −0.2437
Std Dev 4.512

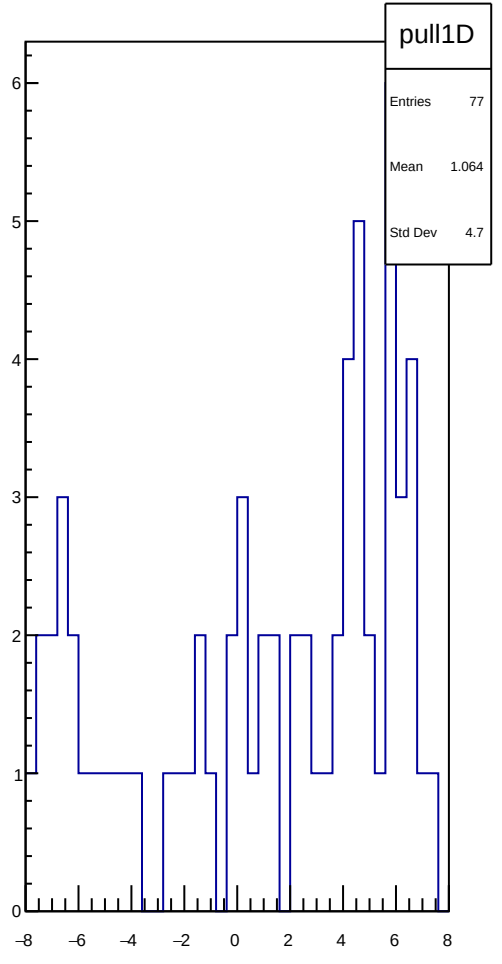

asym_bpm0i05WS_rms vs run
χ² / ndf 3845 / 76
p0 205.5 ± 0.1685
240
230
220
210
200
190
180

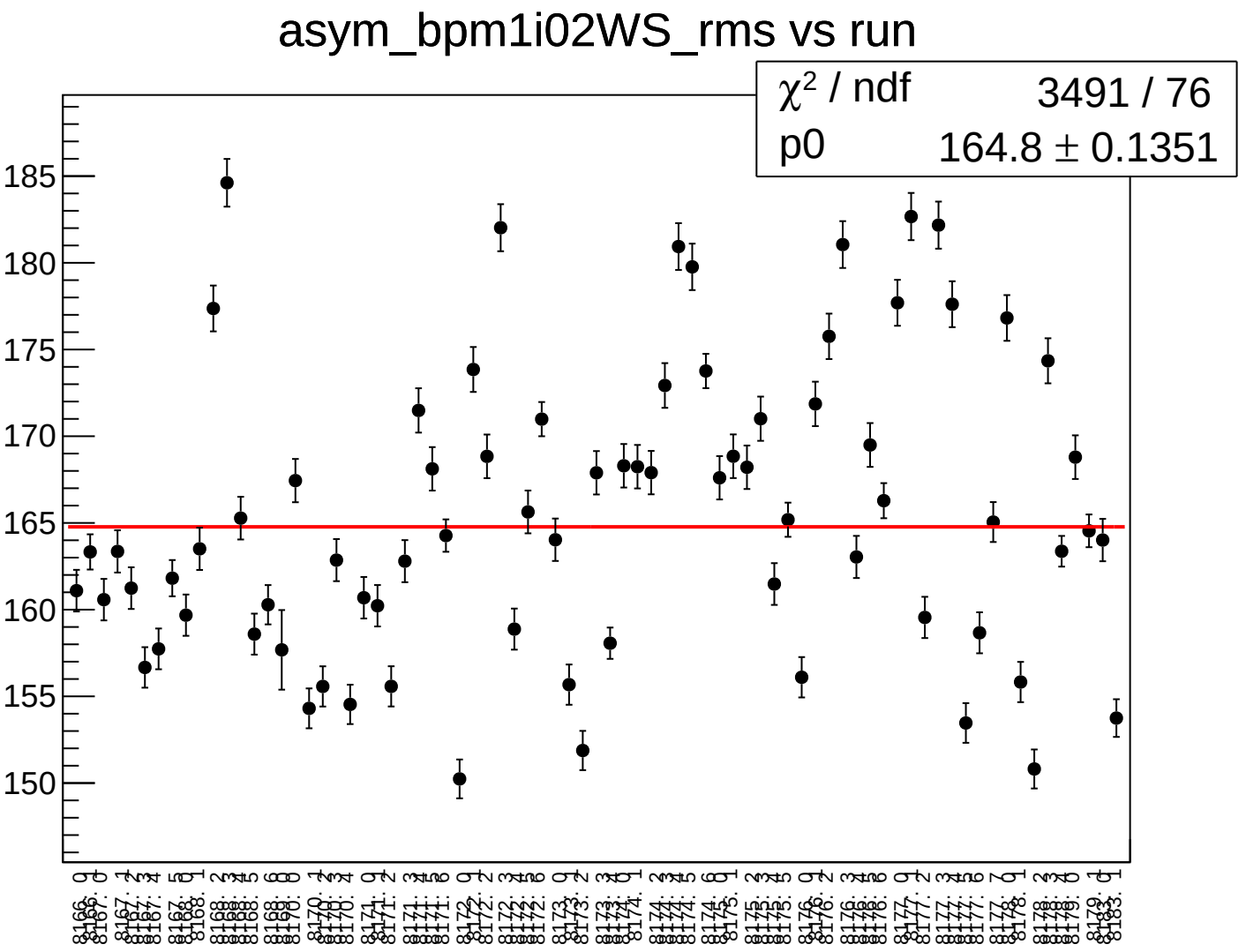

asym_bpm0i07WS_mean vs run
χ² / ndf 90.87 / 76
p0 4115 ± 1248
pull
Entries 77
Mean 169.4
Std Dev 153.4

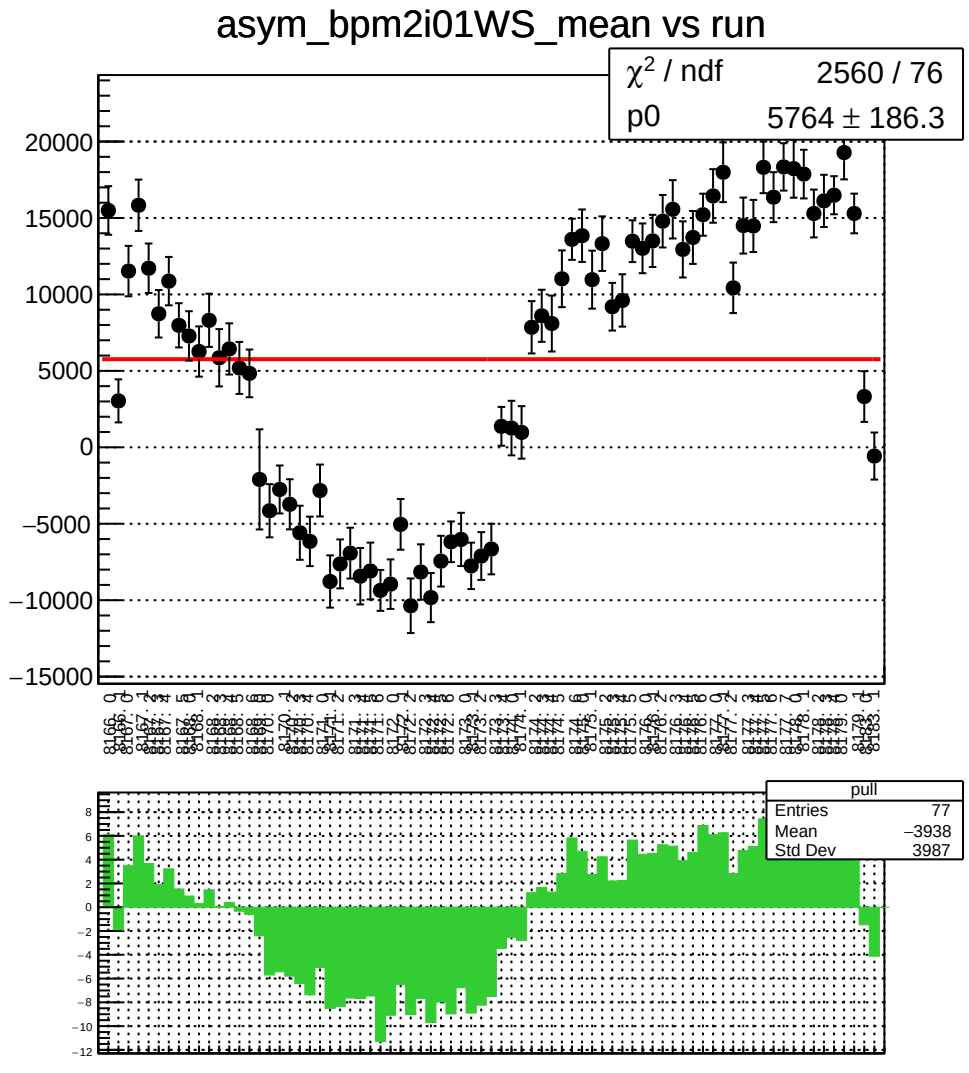

pull1D
Entries 77
Mean −0.0165
Std Dev 1.086

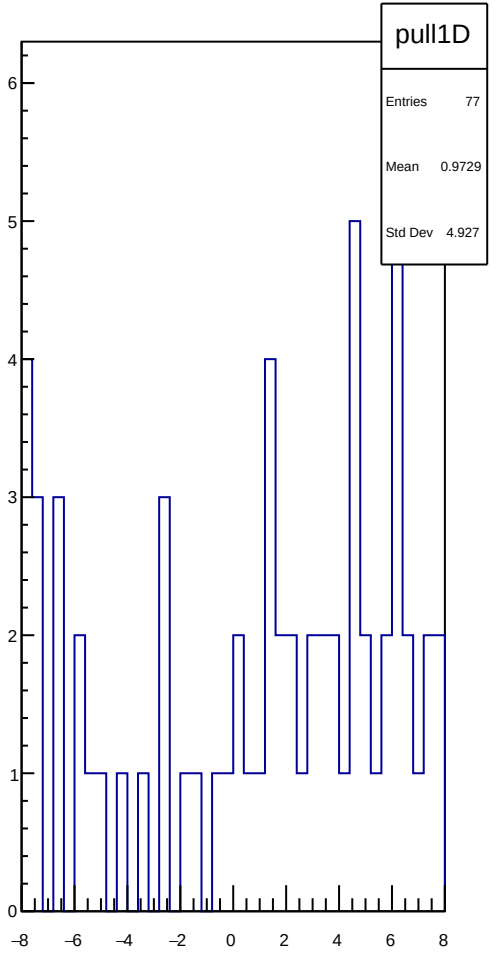

asym_bpm0i07WS_rms vs run
χ^2 / ndf 5.217e+05 / 76
p0 868.8 ± 0.8822
2000
1800
1600
1400
1200
1000
800
600
400
200

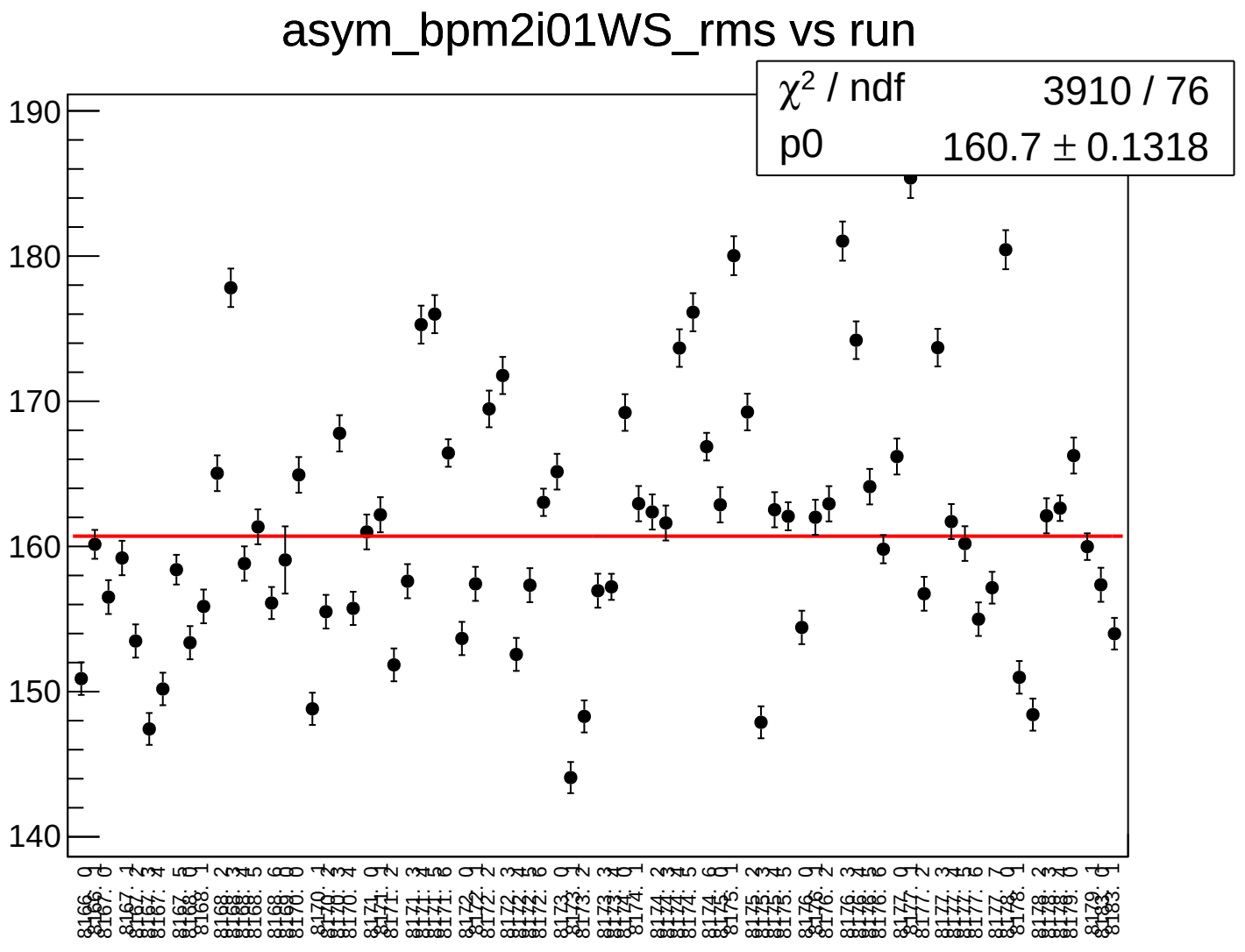

asym_bpm1i02WS_mean vs run
χ² / ndf 2406 / 76
p0 6206 ± 191
pull
Entries 77
Mean −3245
Std Dev 3296

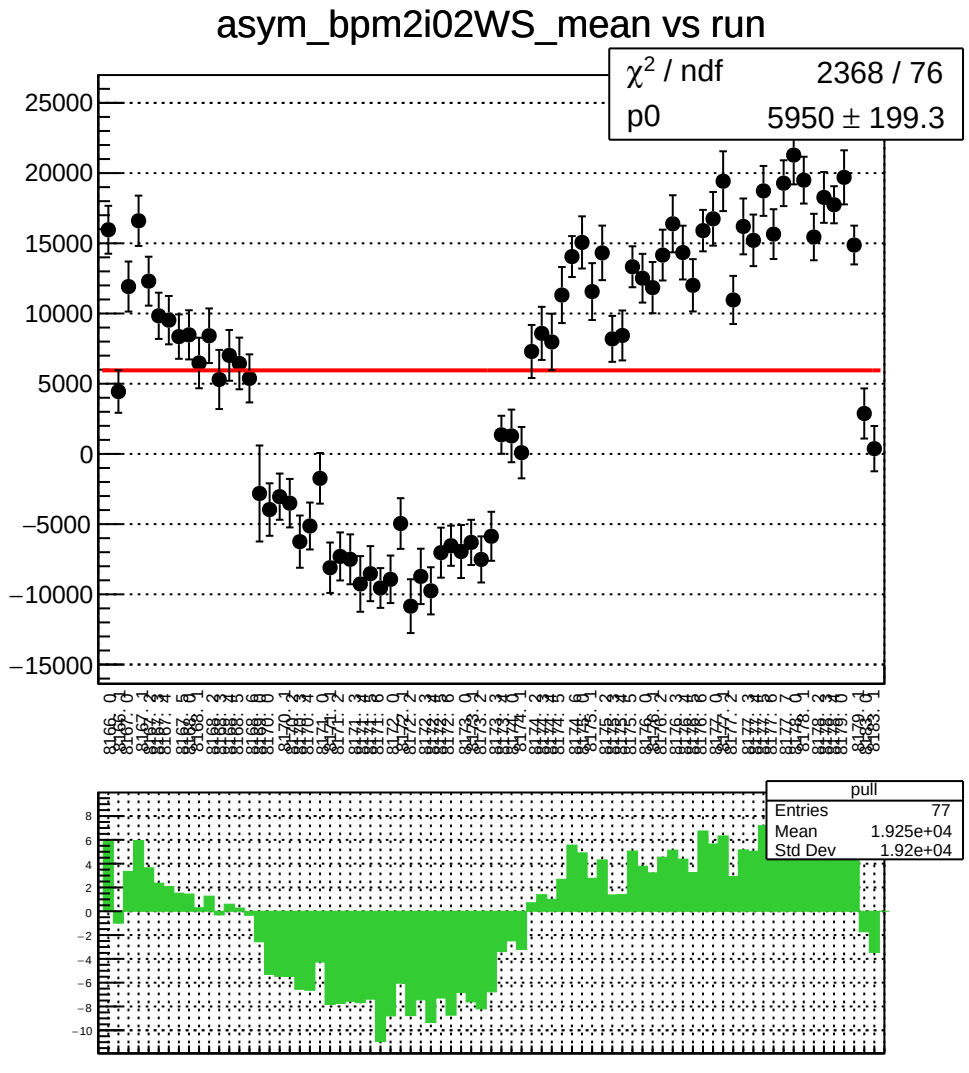

pull1D
Entries 77
Mean 1.064
Std Dev 4.7

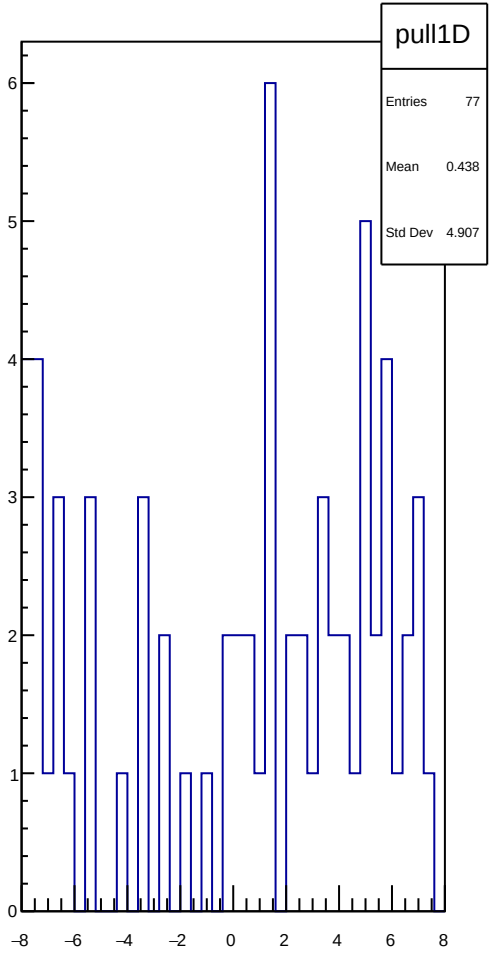

asym_bpm1i02WS_rms vs run
χ² / ndf 3491 / 76
p0 164.8 ± 0.1351
185
180
175
170
165
160
155
150

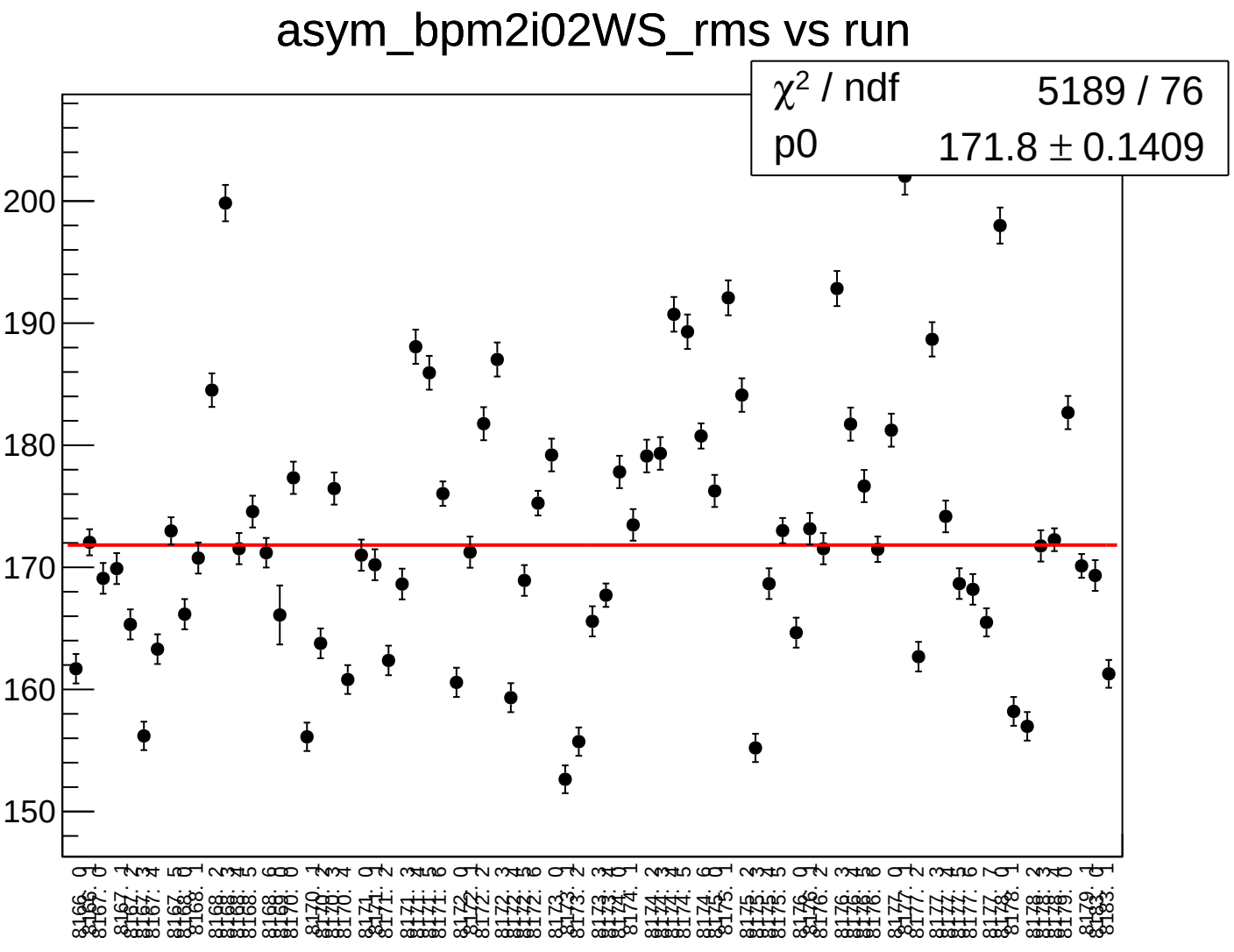

asym_bpm2i01WS_mean vs run
χ² / ndf 2560 / 76
p0 5764 ± 186.3
pull
Entries 77
Mean −3938
Std Dev 3987

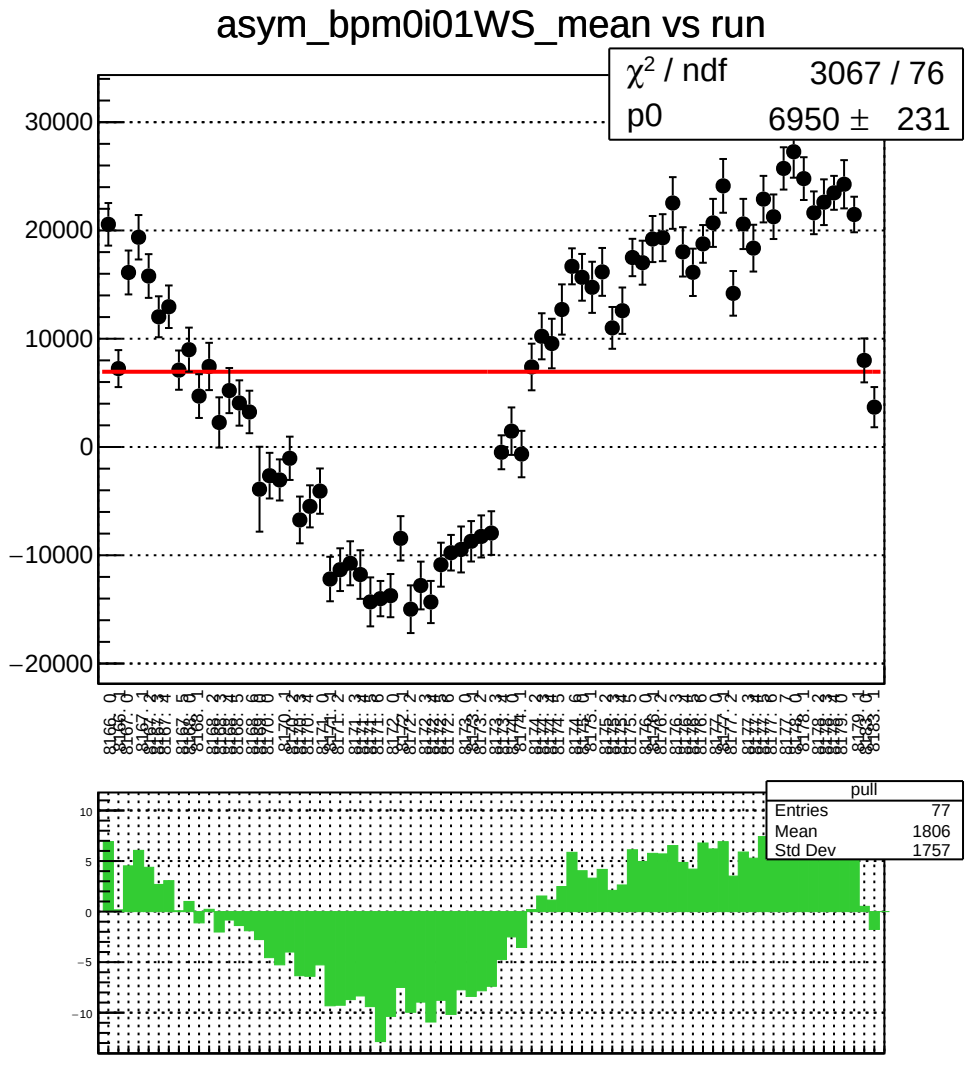

pull1D
Entries 77
Mean 0.9729
Std Dev 4.927

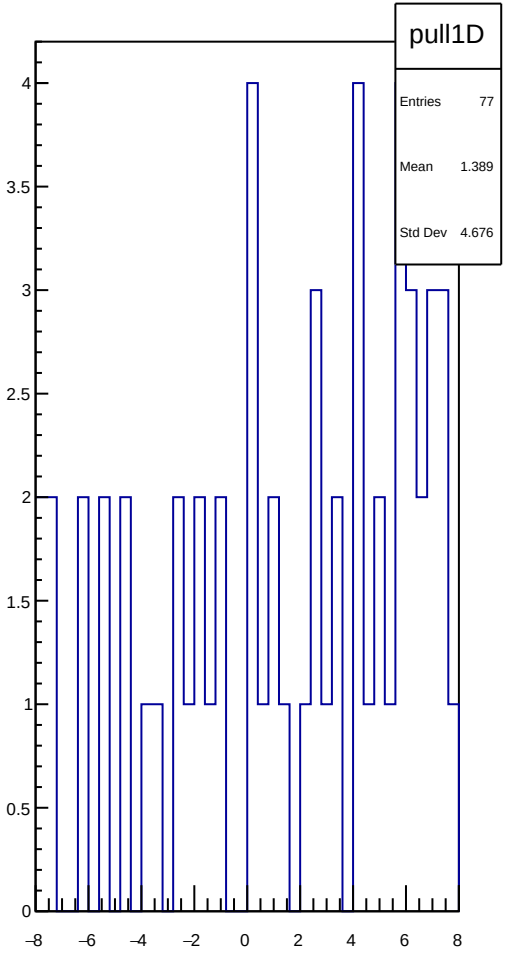

asym_bpm2i01WS_rms vs run
χ² / ndf 3910 / 76
p0 160.7 ± 0.1318
190
180
170
160
150
140

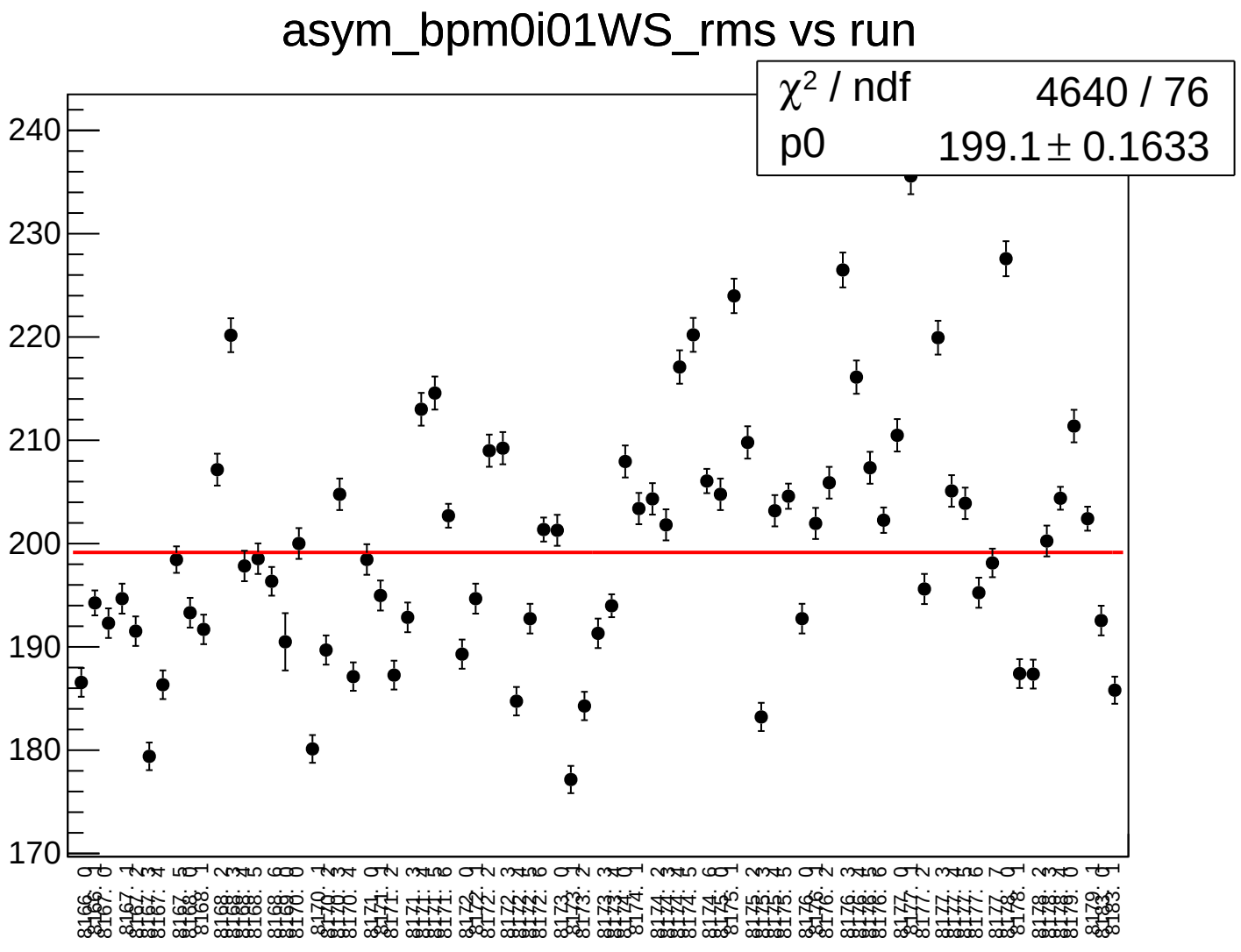

asym_bpm2i02WS_mean vs run
χ² / ndf 2368 / 76
p0 5950 ± 199.3
pull
Entries 77
Mean 1.925e+04
Std Dev 1.92e+04

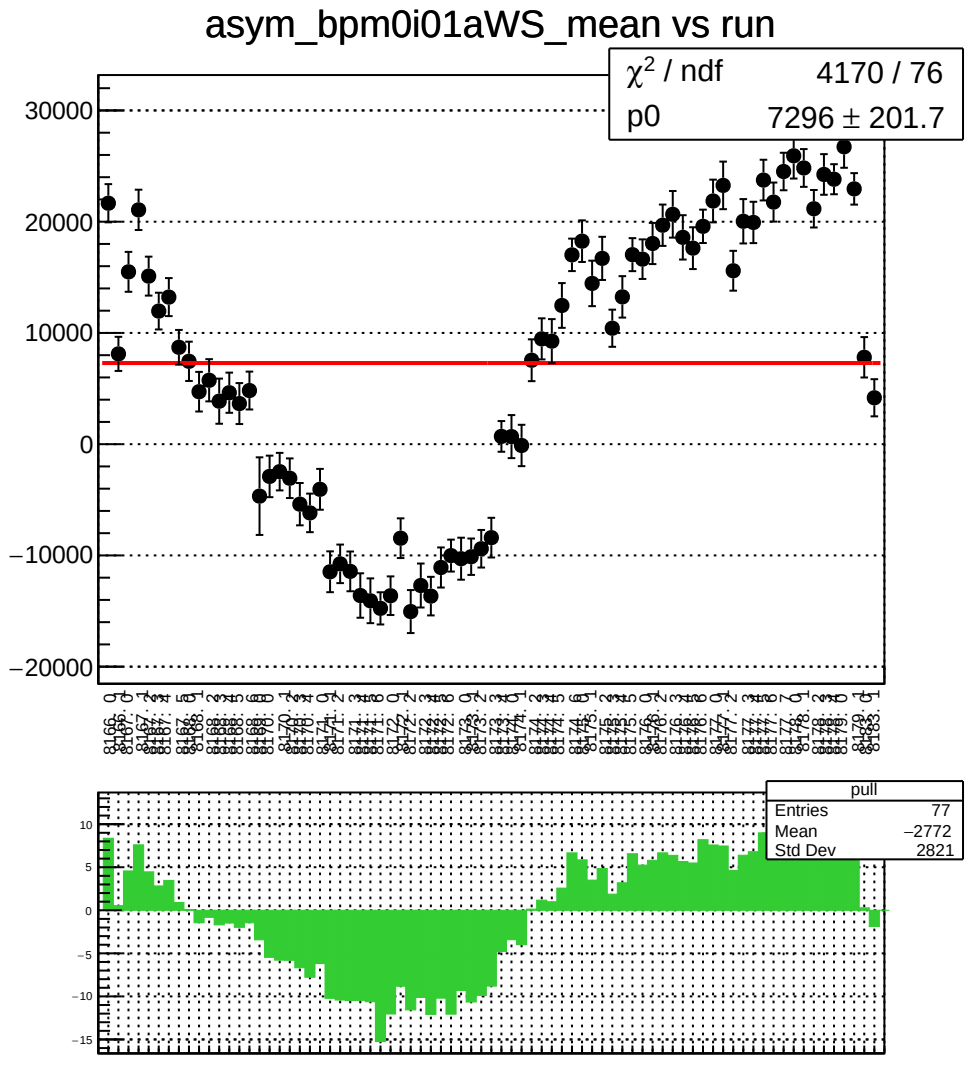

pull1D
Entries 77
Mean 0.438
Std Dev 4.907

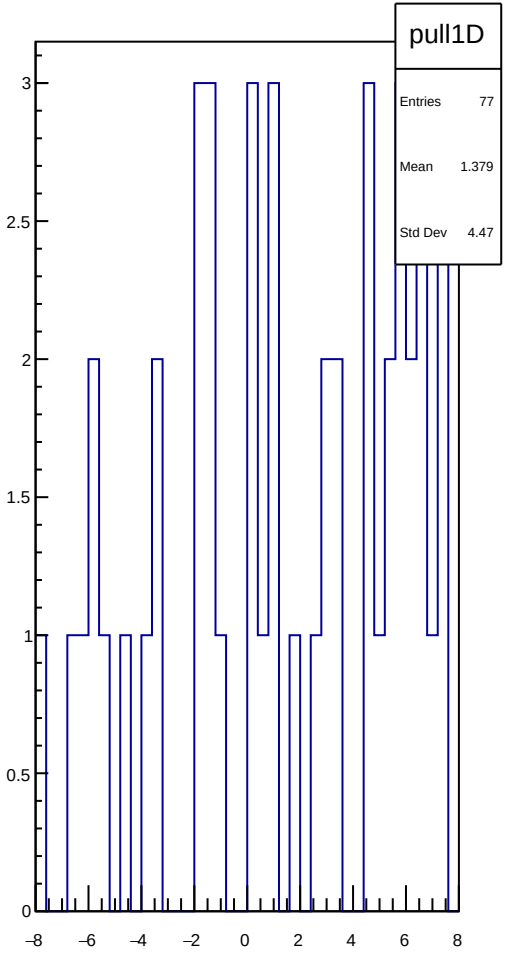

asym_bpm2i02WS_rms vs run
χ² / ndf 5189 / 76
p0 171.8 ± 0.1409
200
190
180
170
160
150

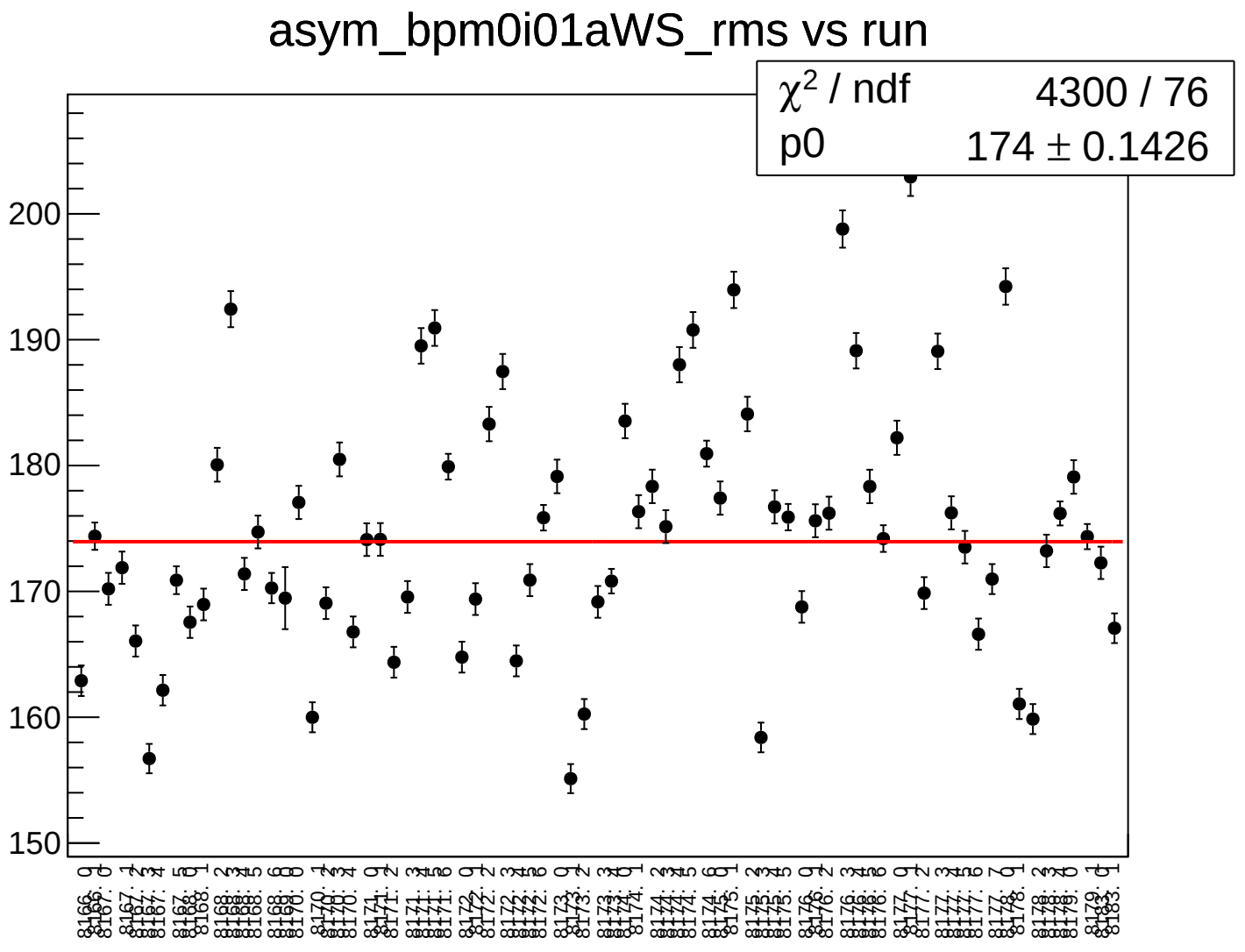

asym_bpm0i01WS_mean vs run
χ² / ndf 3067 / 76
p0 6950 ± 231
30000
20000
10000
0
−10000
−20000
pull
Entries 77
Mean 1806
Std Dev 1757
10
5
0
−5
−10

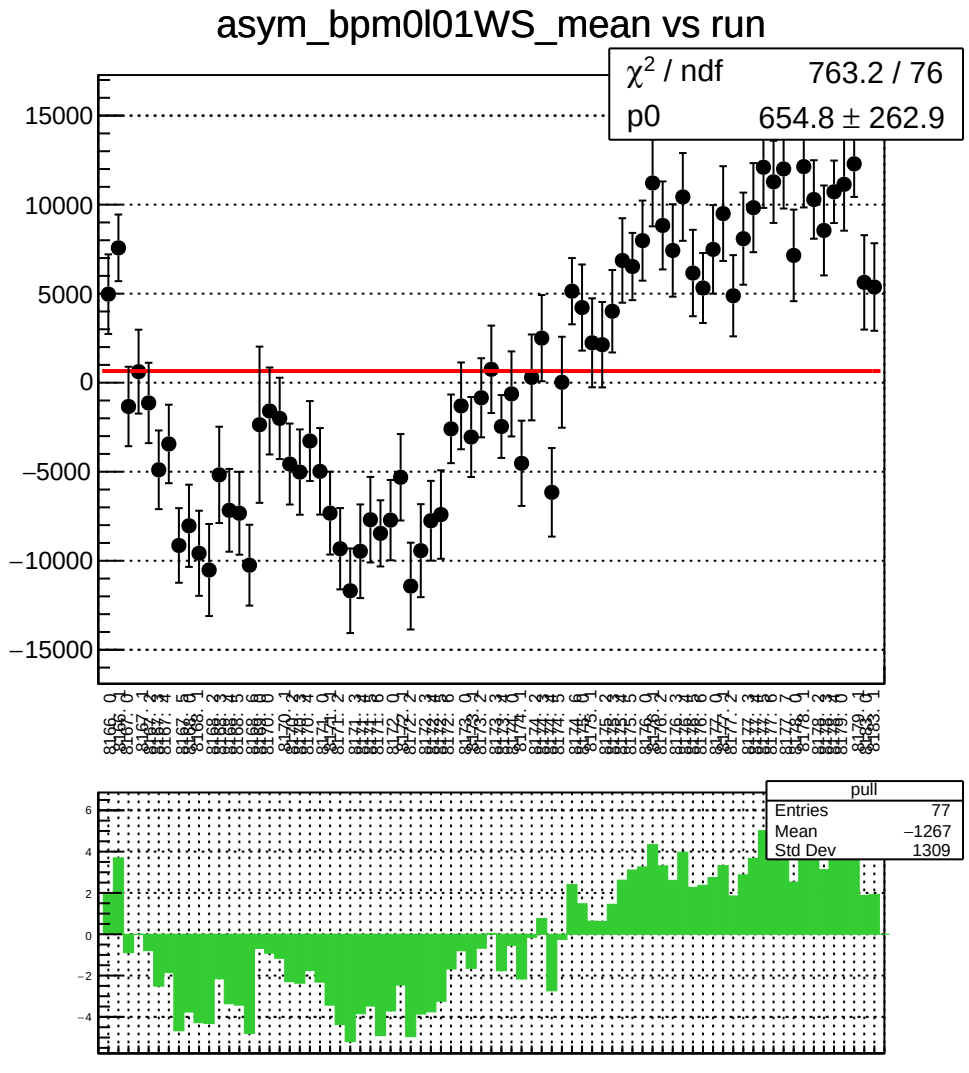

pull1D
Entries 77
Mean 1.389
Std Dev 4.676
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

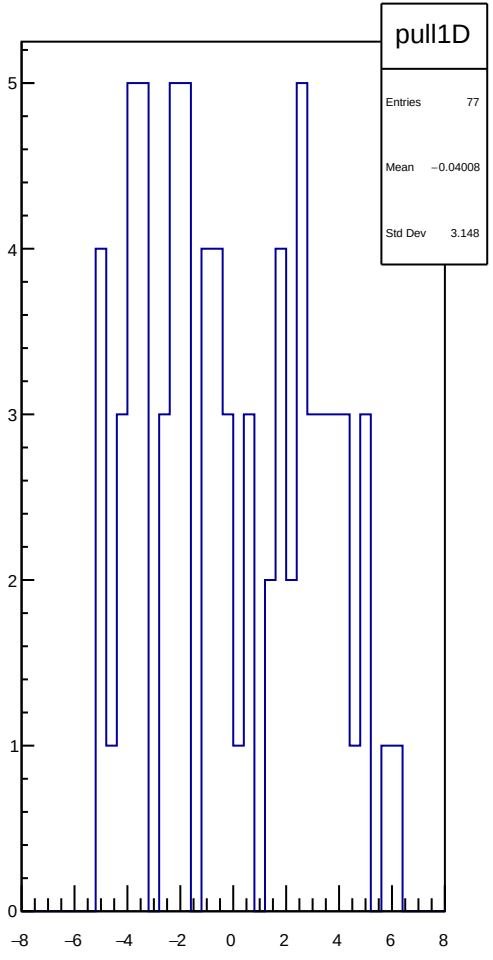

asym_bpm0i01WS_rms vs run
χ² / ndf 4640 / 76
p0 199.1 ± 0.1633
240
230
220
210
200
190
180
170

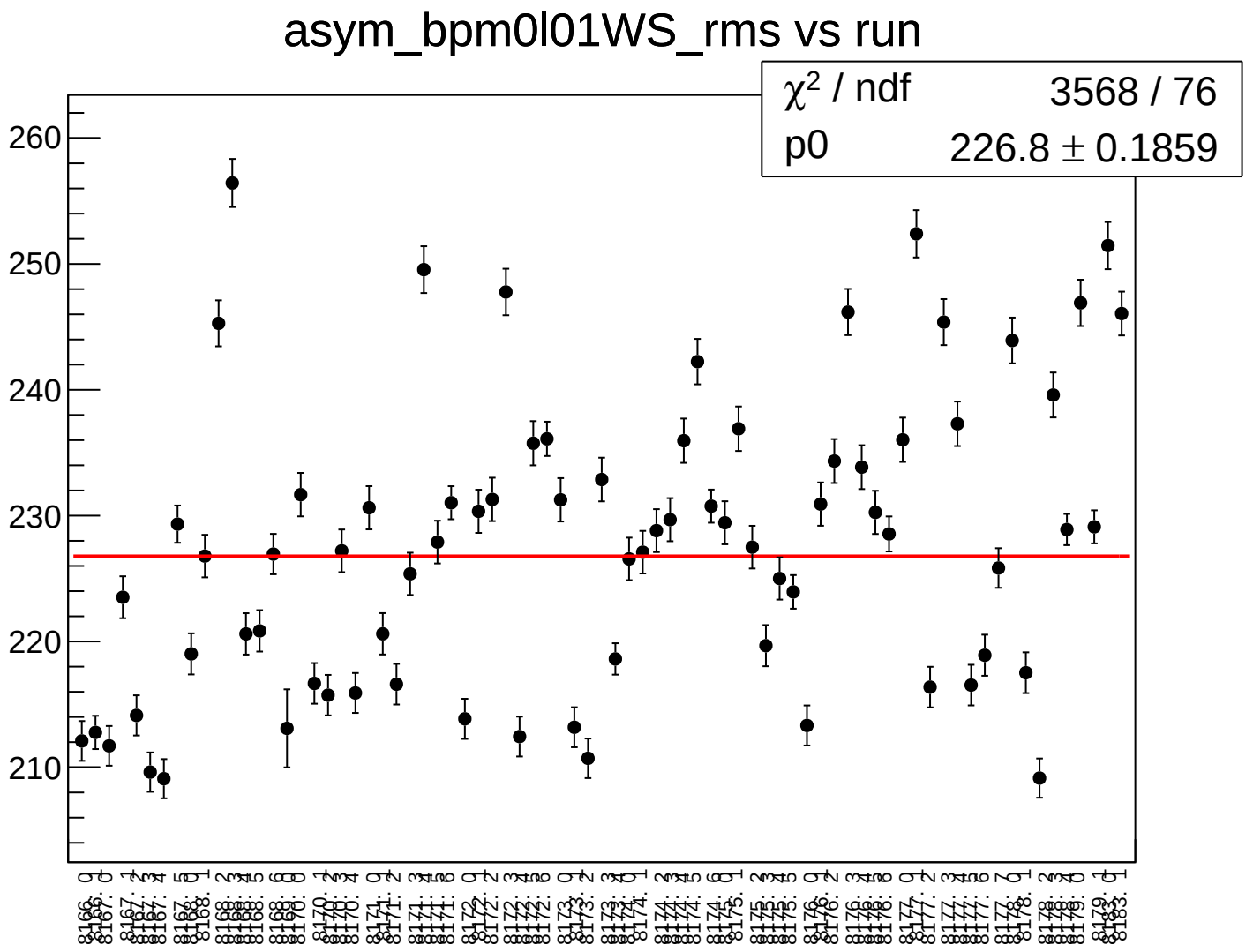

asym_bpm0i01aWS_mean vs run
χ² / ndf 4170 / 76
p0 7296 ± 201.7
pull
Entries 77
Mean −2772
Std Dev 2821

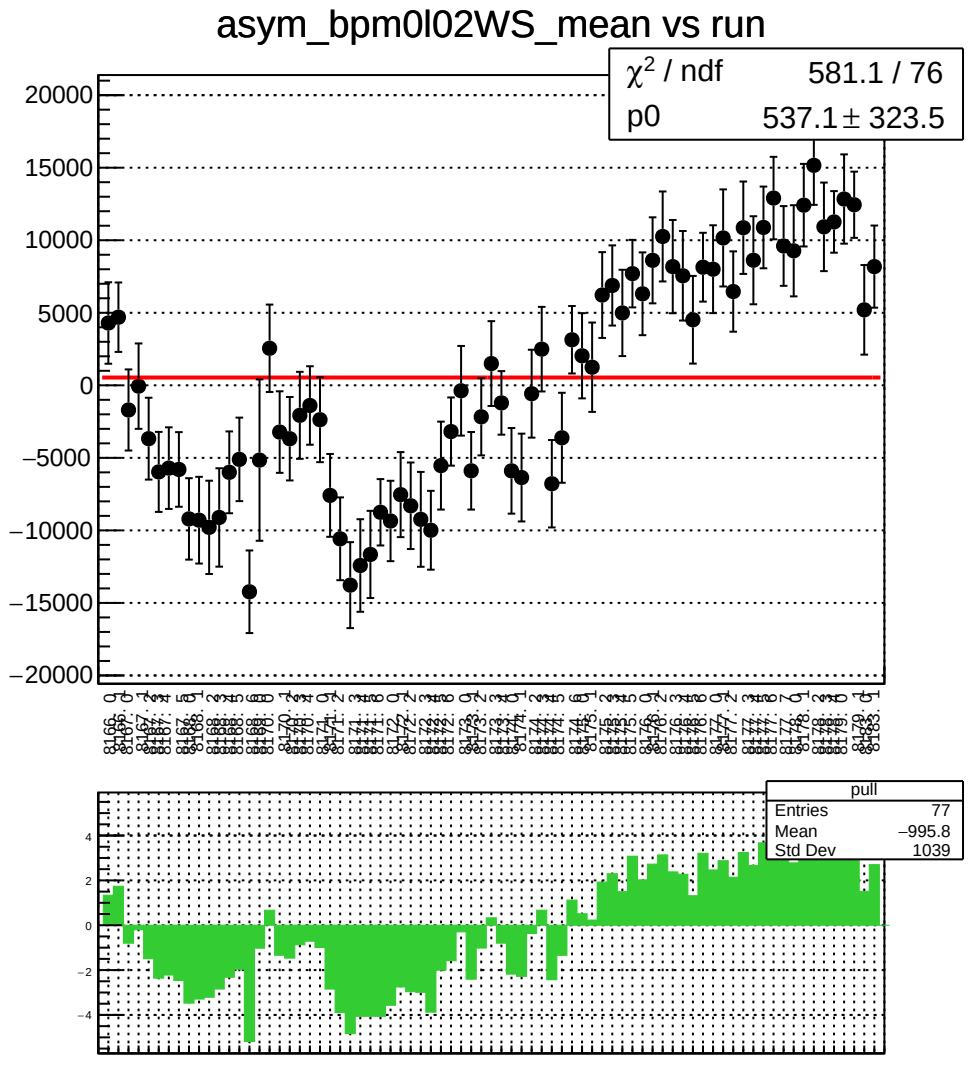

pull1D
Entries 77
Mean 1.379
Std Dev 4.47

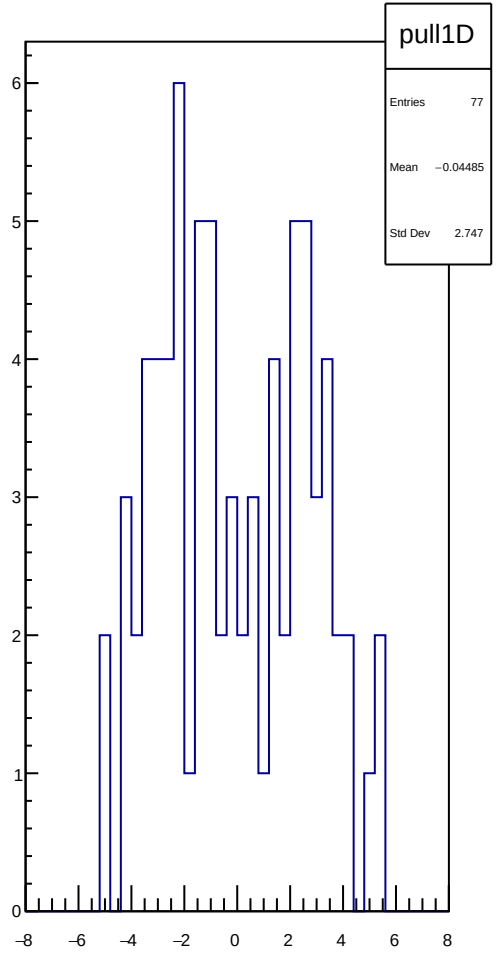

asym_bpm0i01aWS_rms vs run
χ² / ndf 4300 / 76
p0 174 ± 0.1426
200
190
180
170
160
150

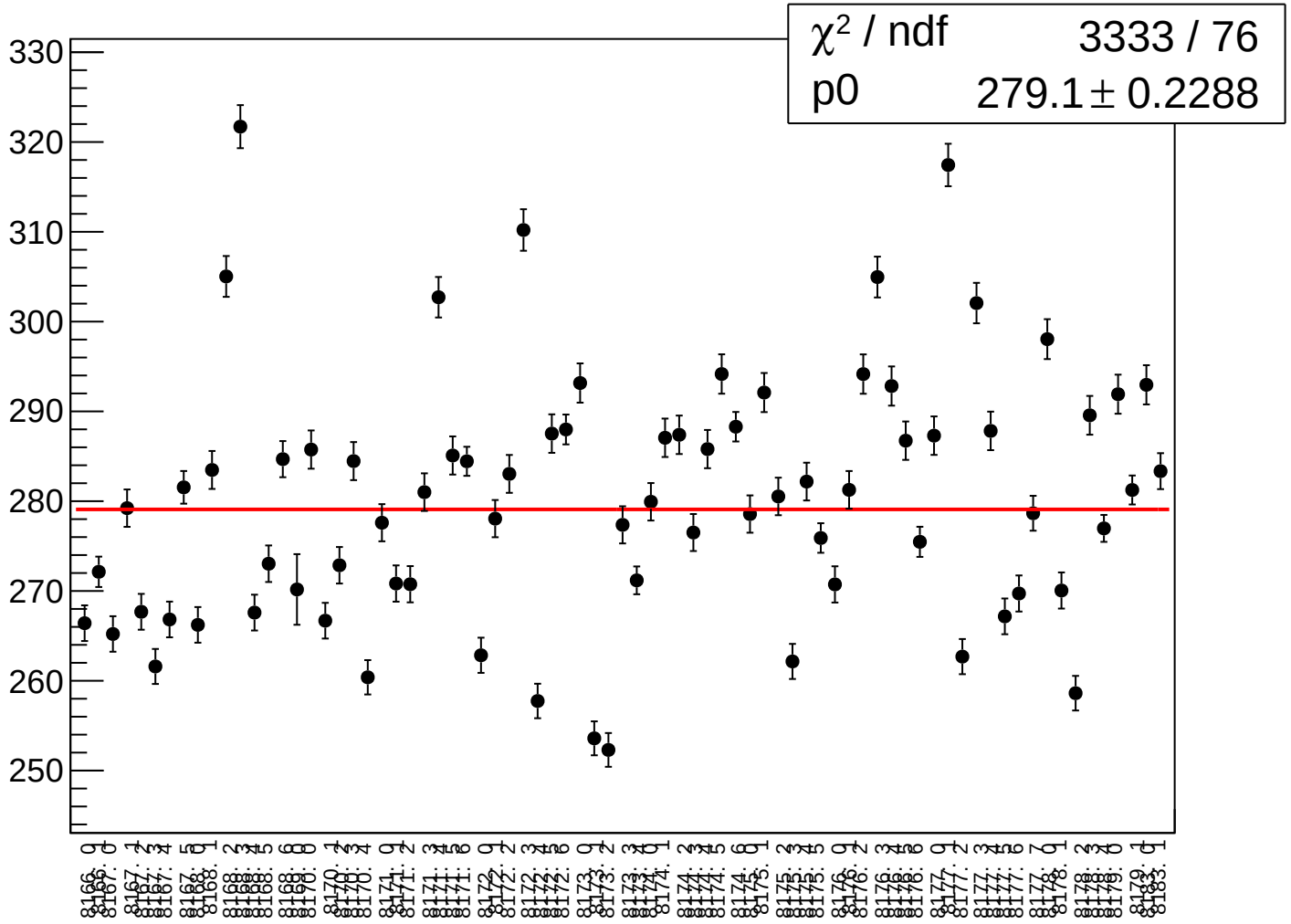

asym_bpm0l01WS_mean vs run
χ² / ndf 763.2 / 76
p0 654.8 ± 262.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 77
Mean −1267
Std Dev 1309
6
4
2
0
−2
−4

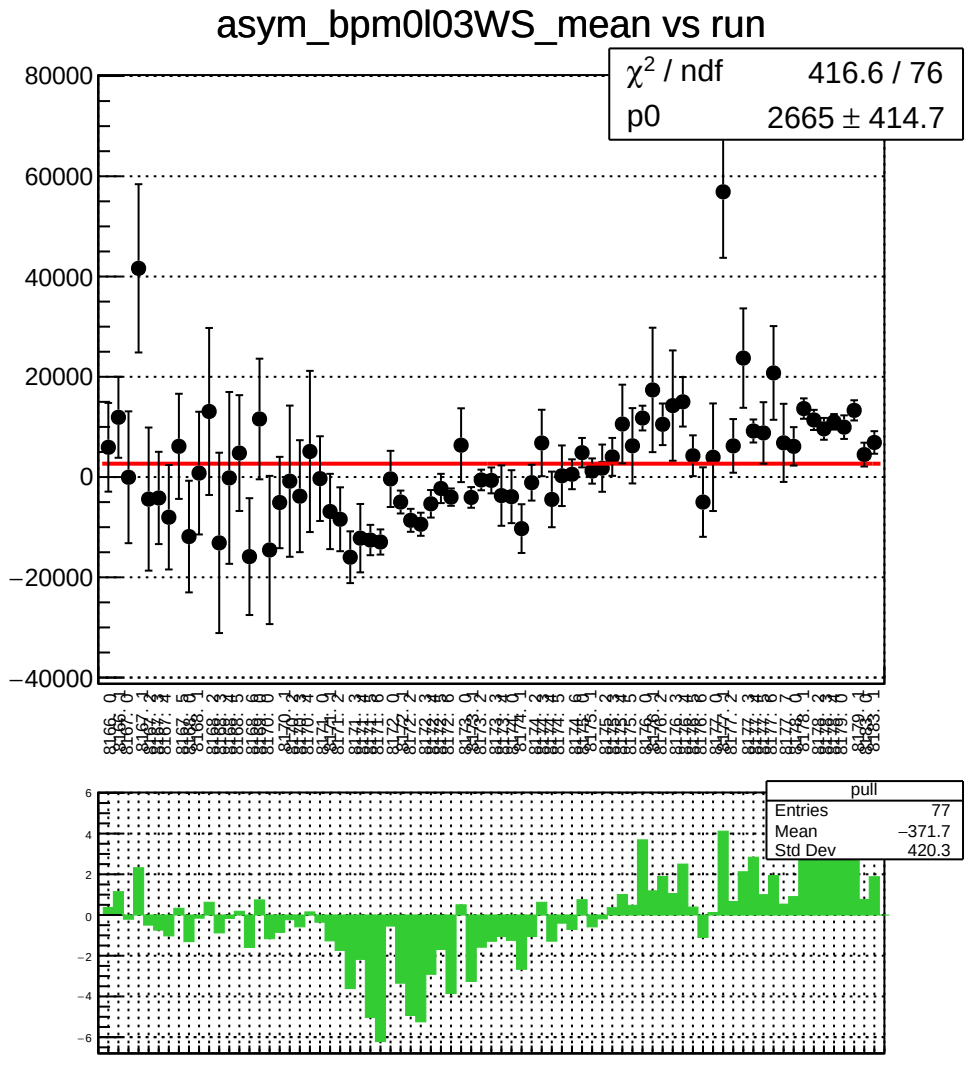

pull1D
Entries 77
Mean −0.04008
Std Dev 3.148
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

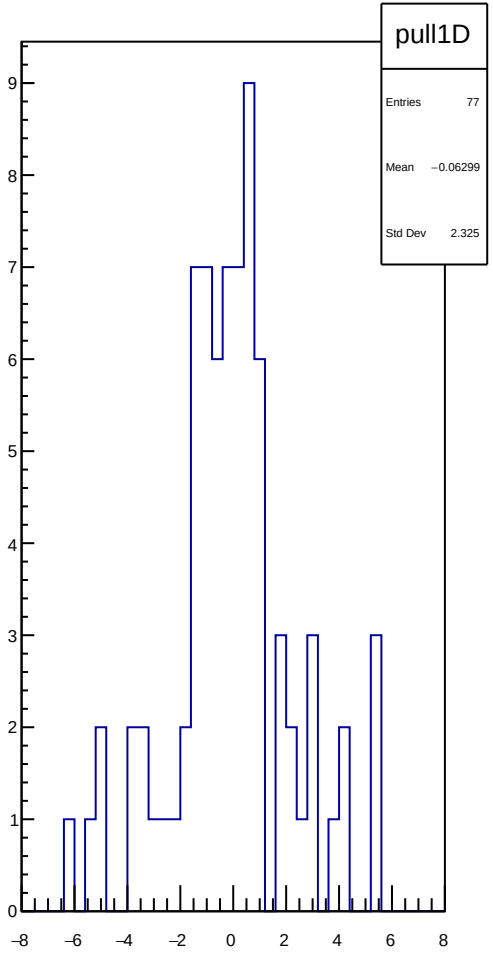

asym_bpm0l01WS_rms vs run
χ² / ndf 3568 / 76
p0 226.8 ± 0.1859
260
250
240
230
220
210

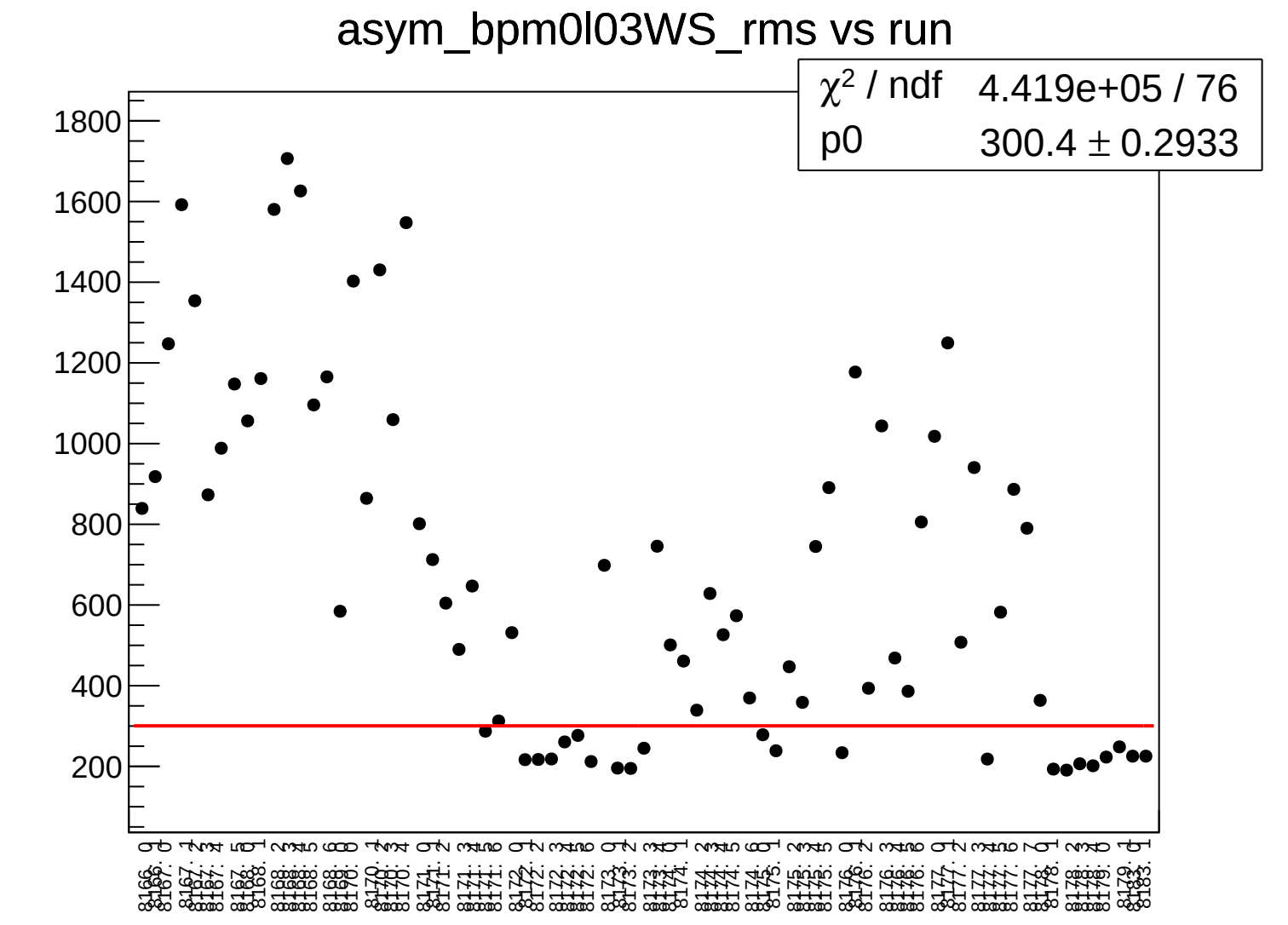

asym_bpm0l02WS_mean vs run
χ² / ndf 581.1 / 76
p0 537.1 ± 323.5
pull
Entries 77
Mean −995.8
Std Dev 1039

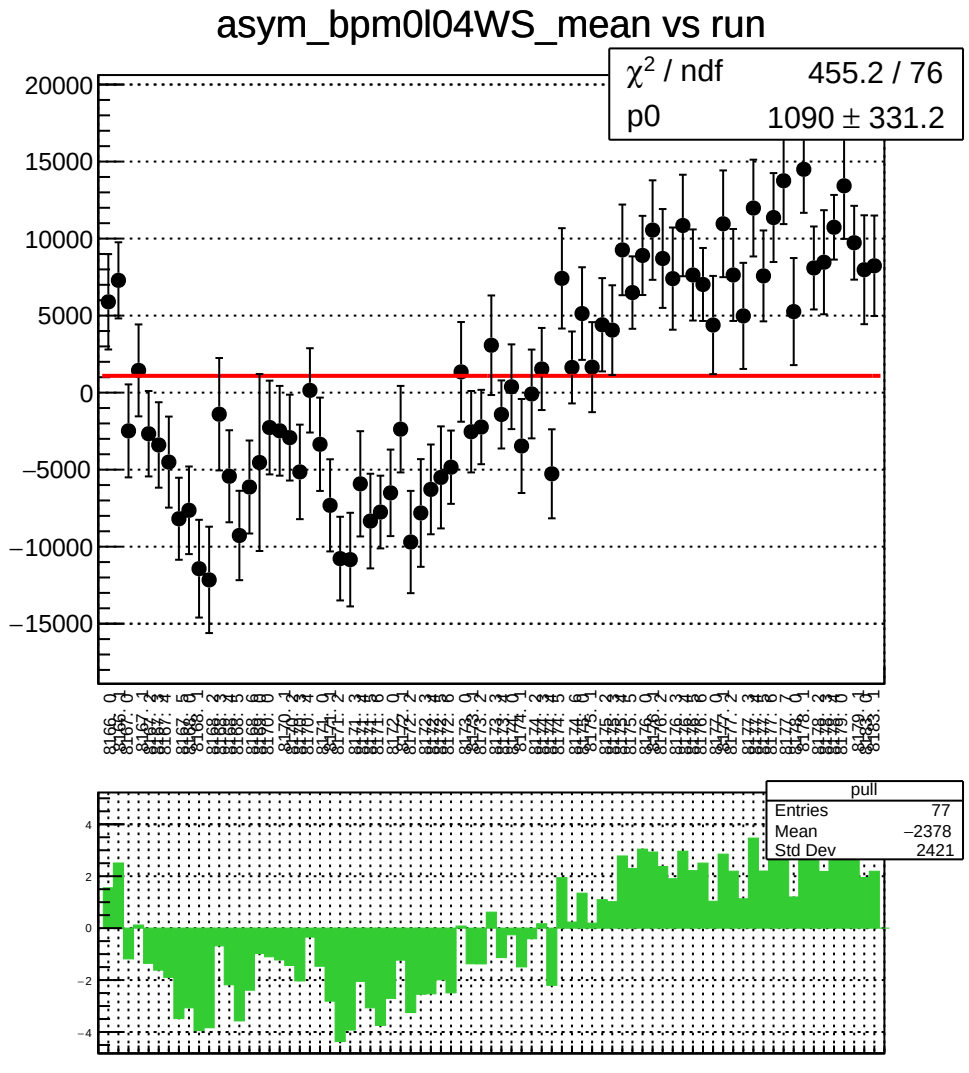

pull1D
Entries 77
Mean −0.04485
Std Dev 2.747

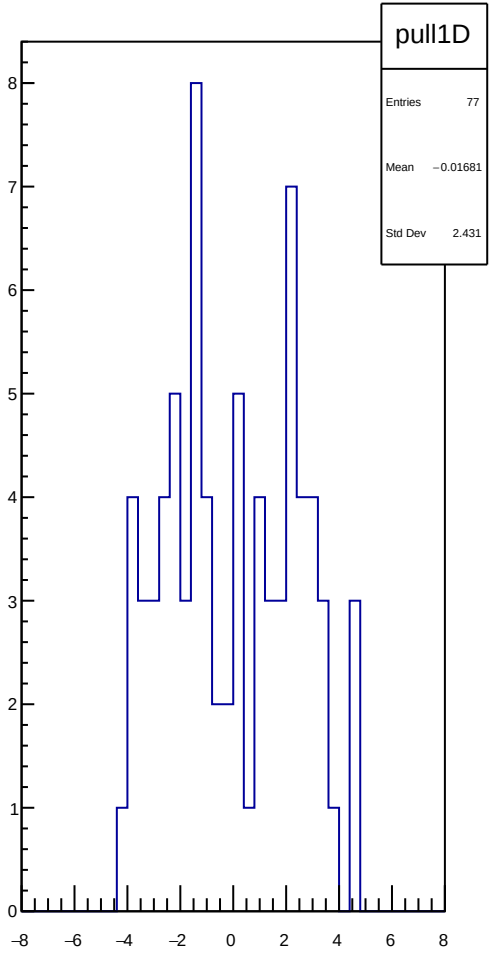

asym_bpm0l02WS_rms vs run
χ² / ndf 3333 / 76
p0 279.1 ± 0.2288
330
320
310
300
290
280
270
260
250

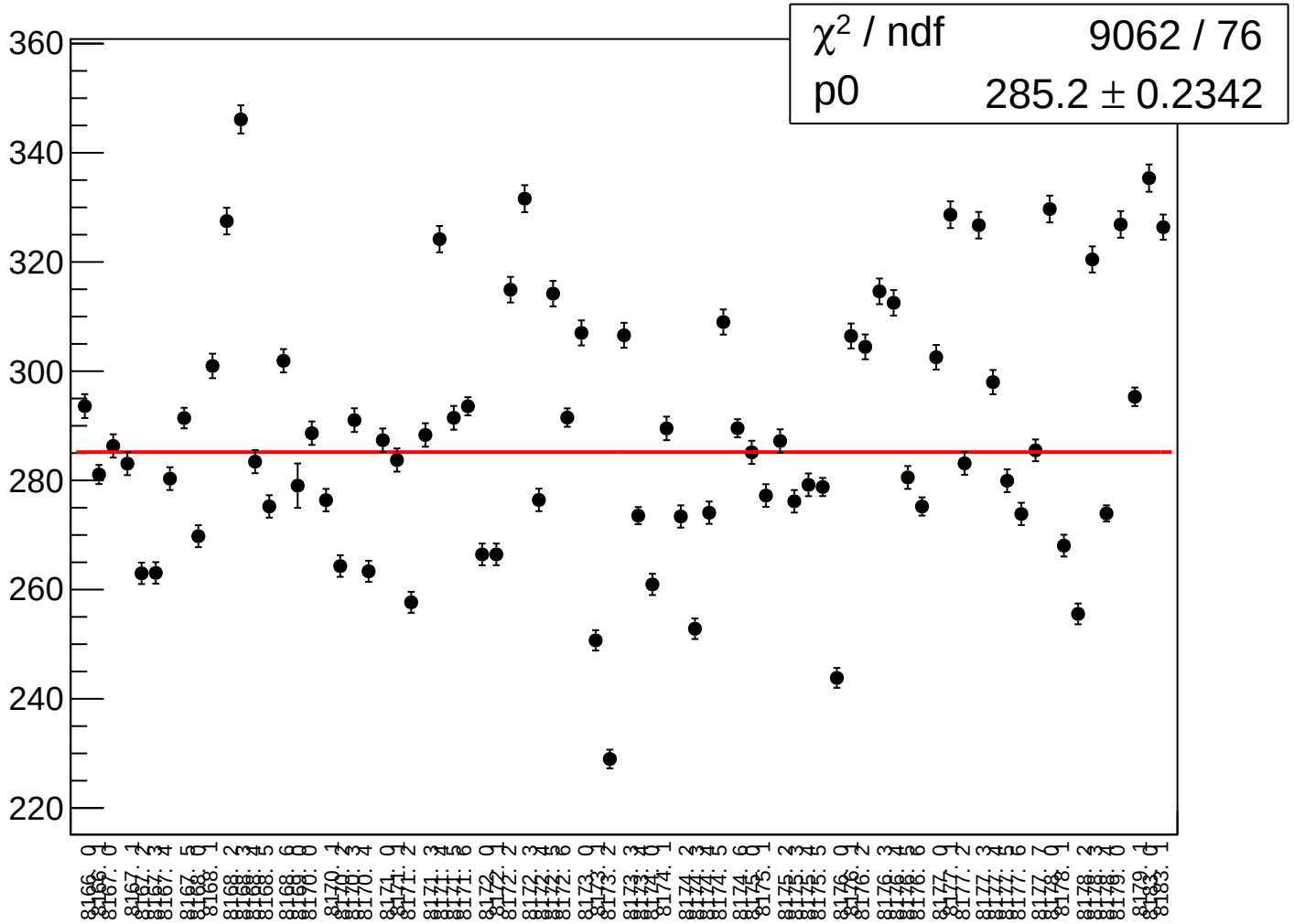

asym_bpm0l03WS_mean vs run
χ² / ndf 416.6 / 76
p0 2665 ± 414.7
pull
Entries 77
Mean −371.7
Std Dev 420.3

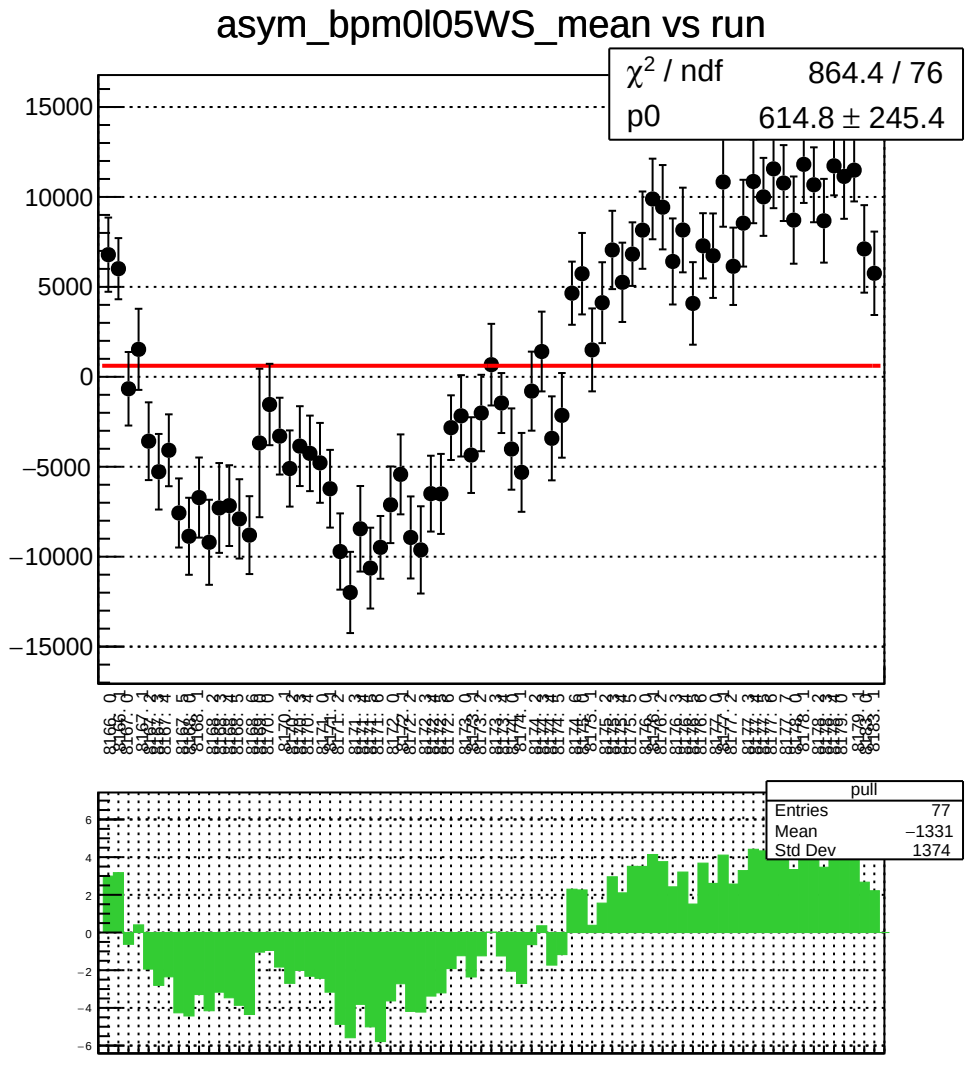

pull1D
Entries 77
Mean −0.06299
Std Dev 2.325

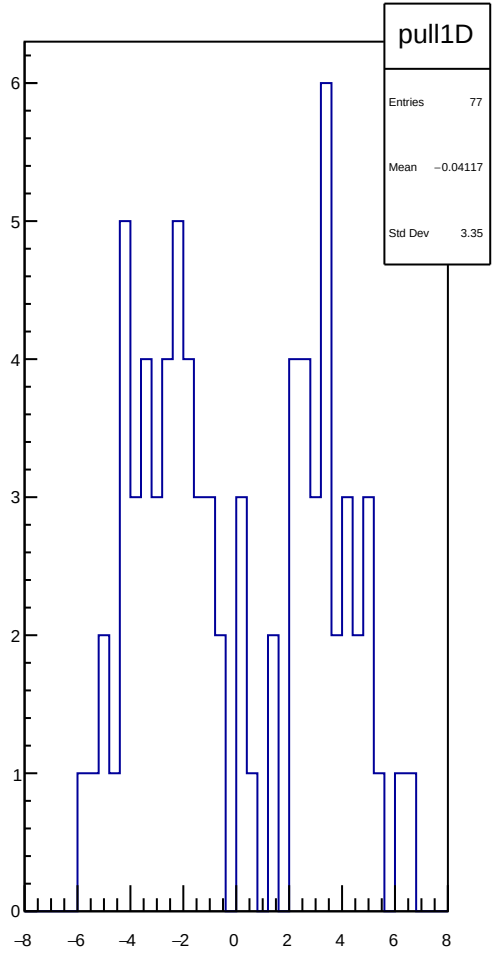

asym_bpm0l03WS_rms vs run
χ² / ndf 4.419e+05 / 76
p0 300.4 ± 0.2933
1800
1600
1400
1200
1000
800
600
400
200

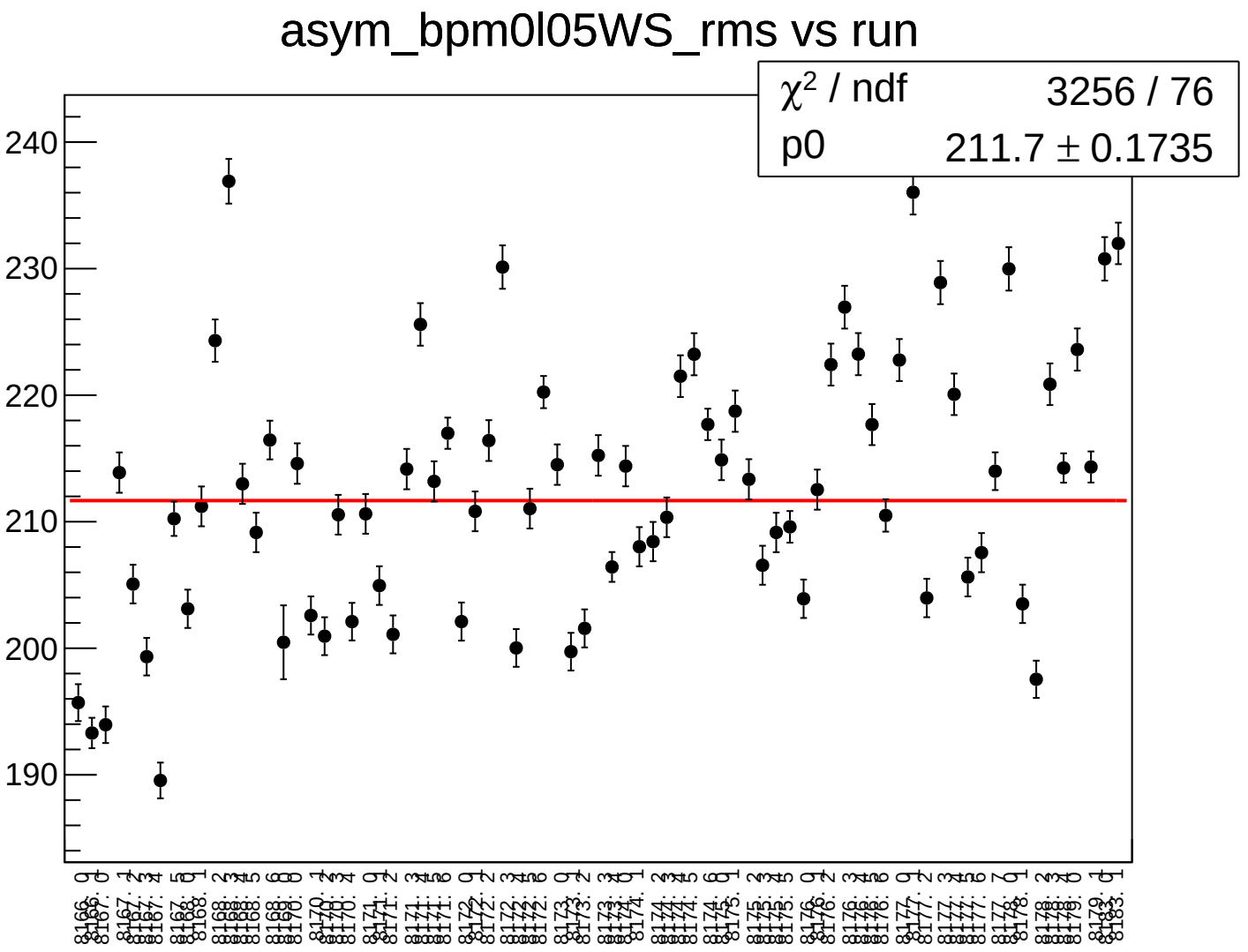

asym_bpm0l04WS_mean vs run
χ² / ndf 455.2 / 76
p0 1090 ± 331.2
pull
Entries 77
Mean −2378
Std Dev 2421

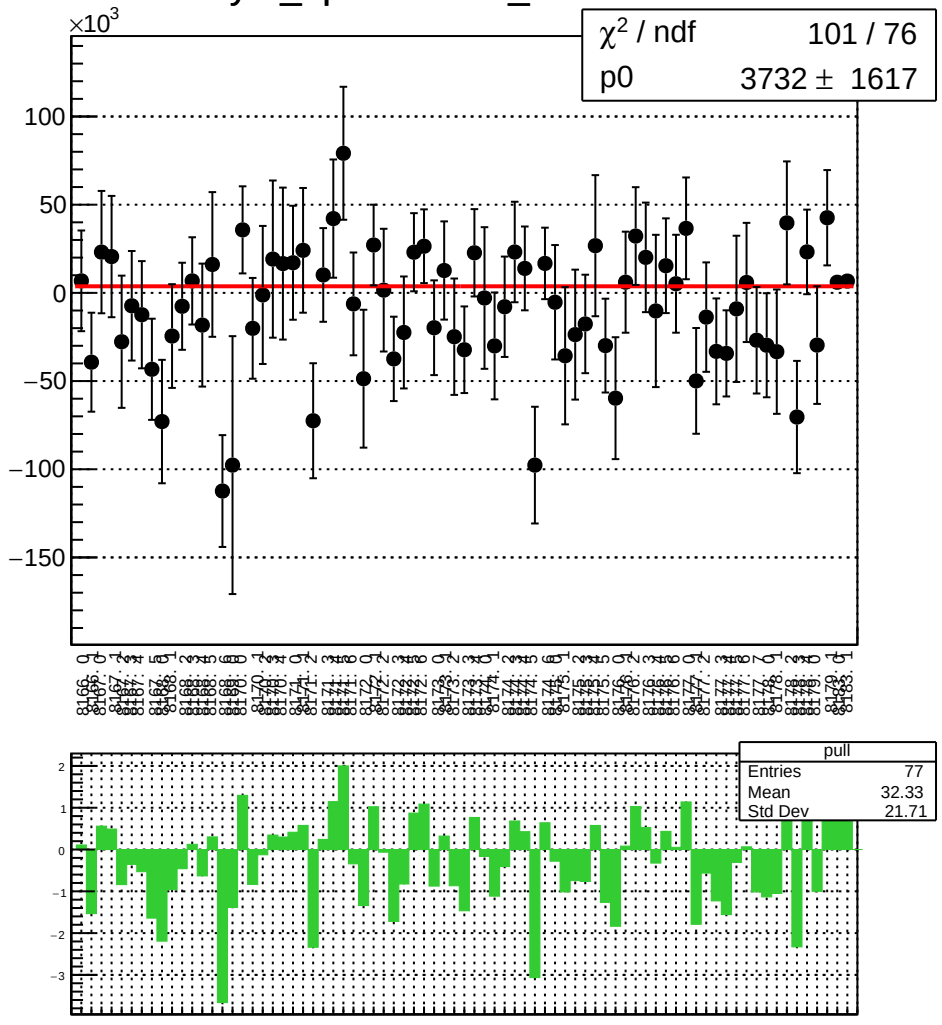

pull1D
Entries 77
Mean −0.01681
Std Dev 2.431

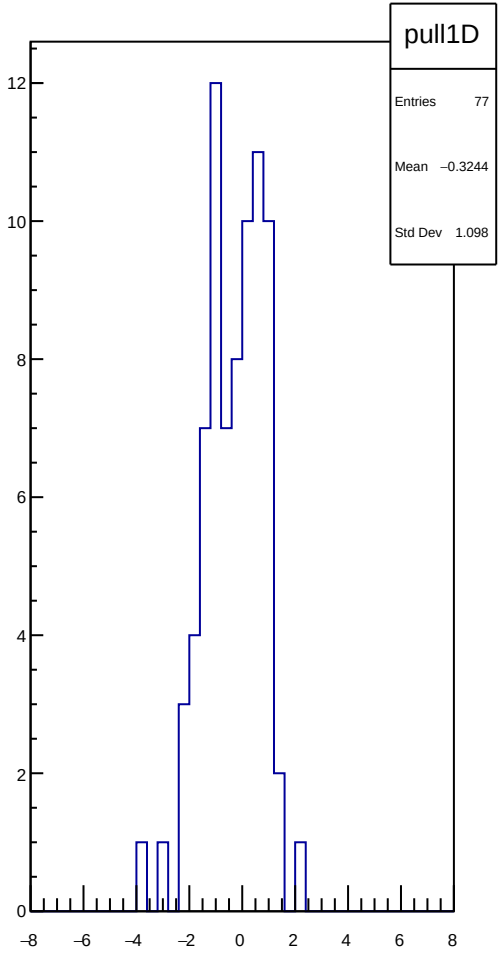

asym_bpm0l04WS_rms vs run
χ² / ndf 9062 / 76
p0 285.2 ± 0.2342
360
340
320
300
280
260
240
220

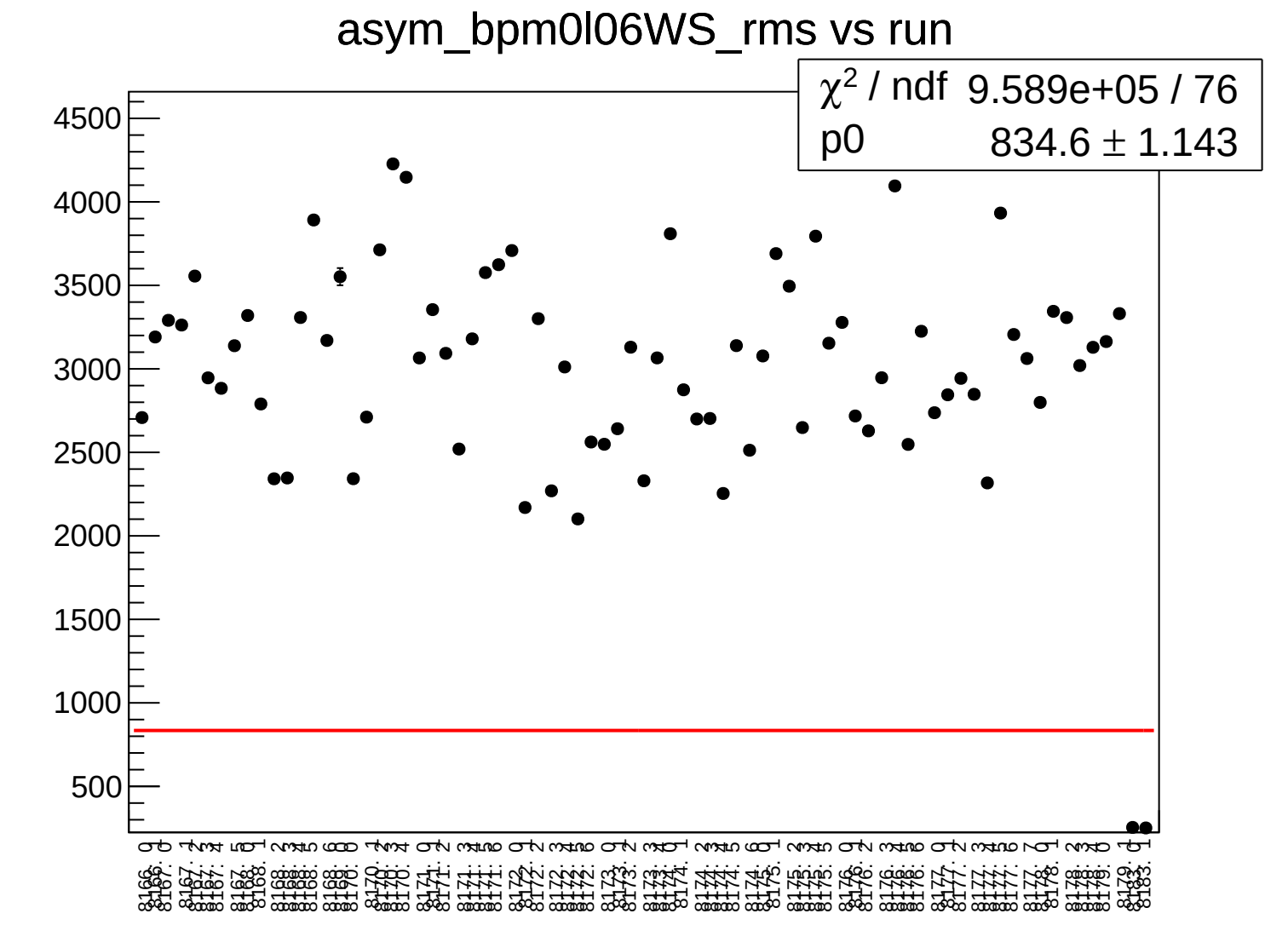

asym_bpm0l05WS_mean vs run
χ² / ndf 864.4 / 76
p0 614.8 ± 245.4
pull
Entries 77
Mean −1331
Std Dev 1374

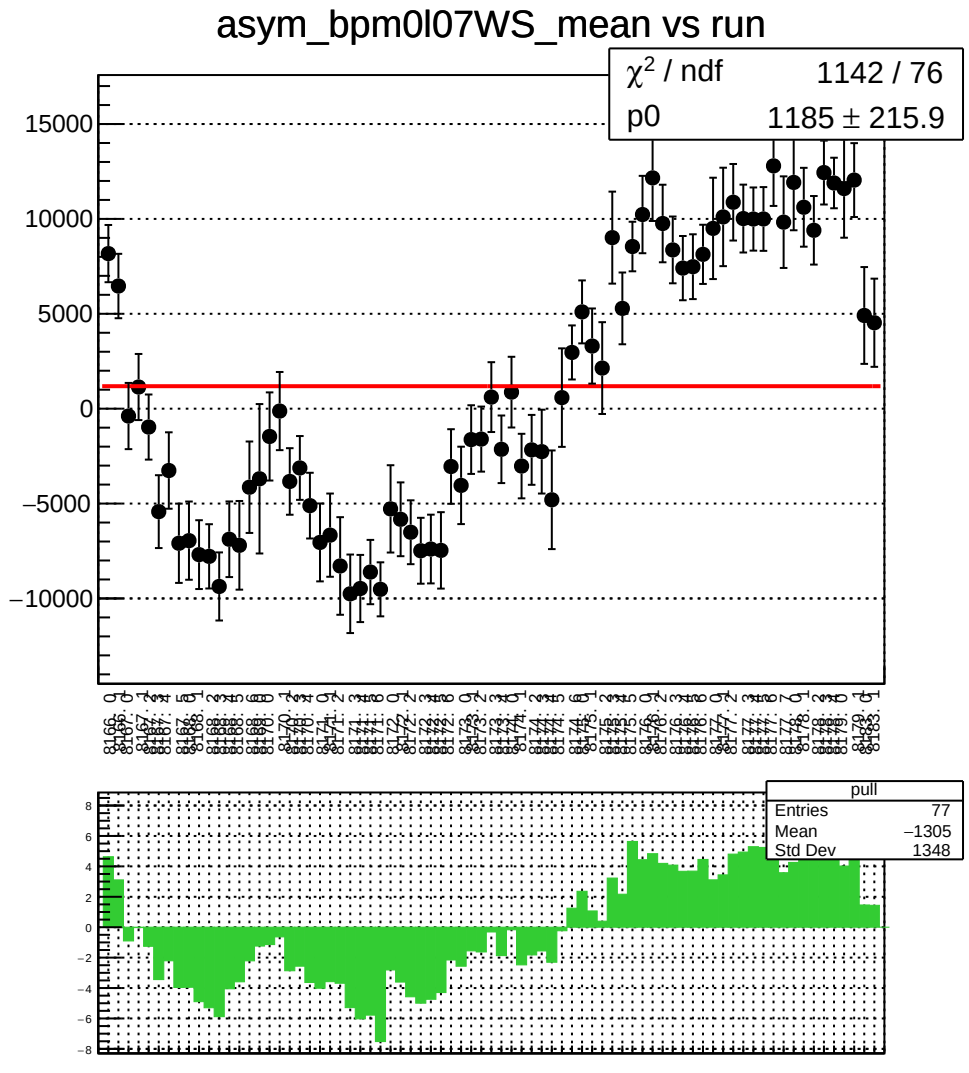

pull1D
Entries 77
Mean −0.04117
Std Dev 3.35

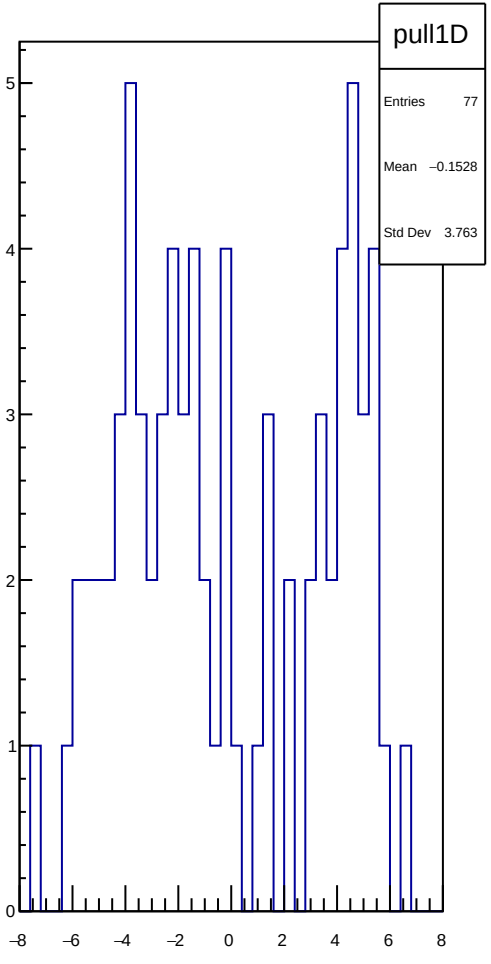

asym_bpm0l05WS_rms vs run
χ² / ndf 3256 / 76
p0 211.7 ± 0.1735
240
230
220
210
200
190

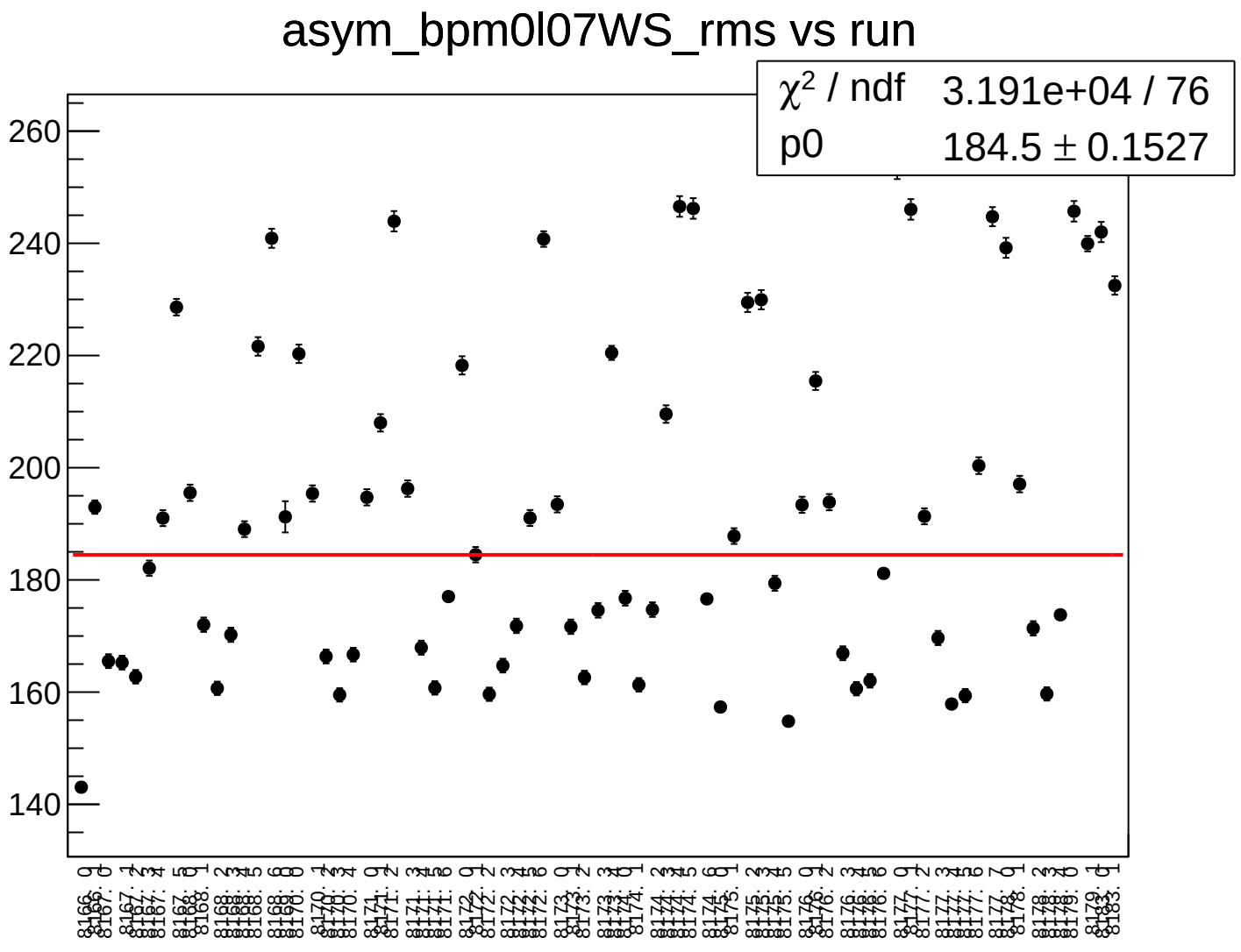

asym_bpm0l06WS_mean vs run
×10^3
χ² / ndf 101 / 76
p0 3732 ± 1617
100
50
0
−50
−100
−150
pull
Entries 77
Mean 32.33
Std Dev 21.71
2
1
0
−1
−2
−3

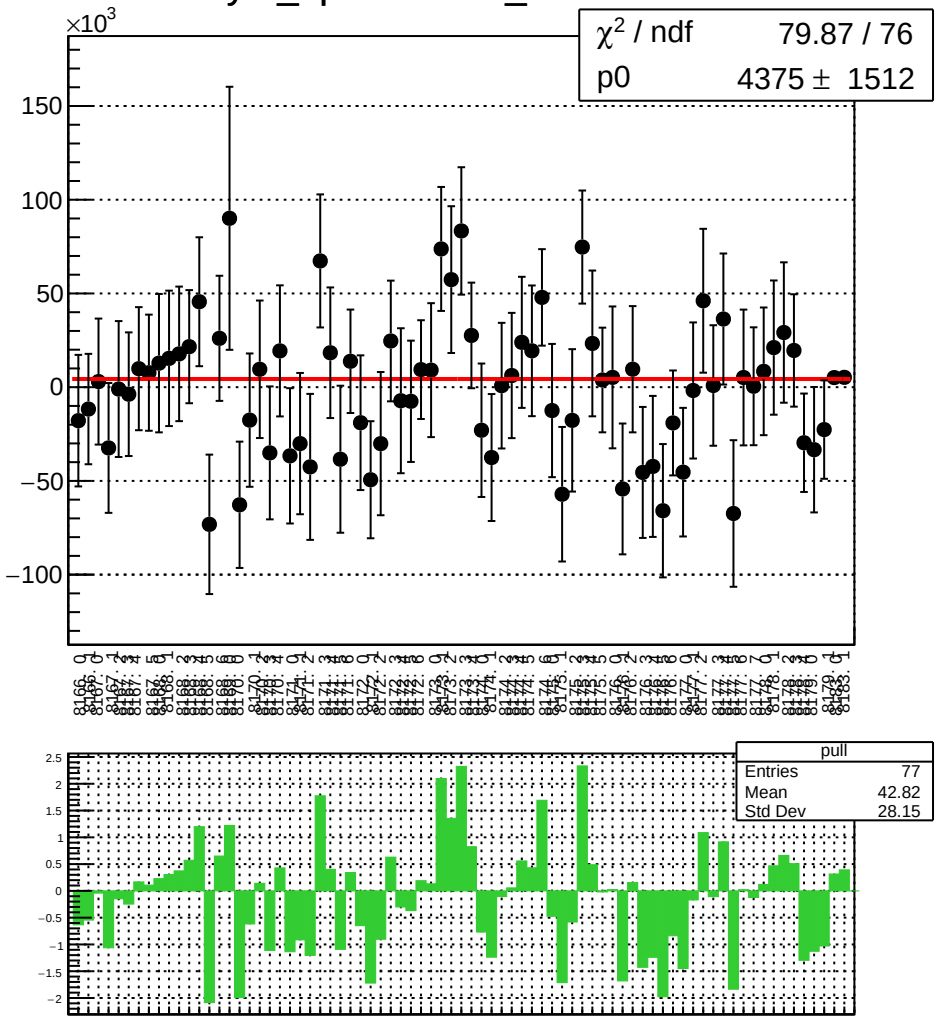

pull1D
Entries 77
Mean −0.3244
Std Dev 1.098
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

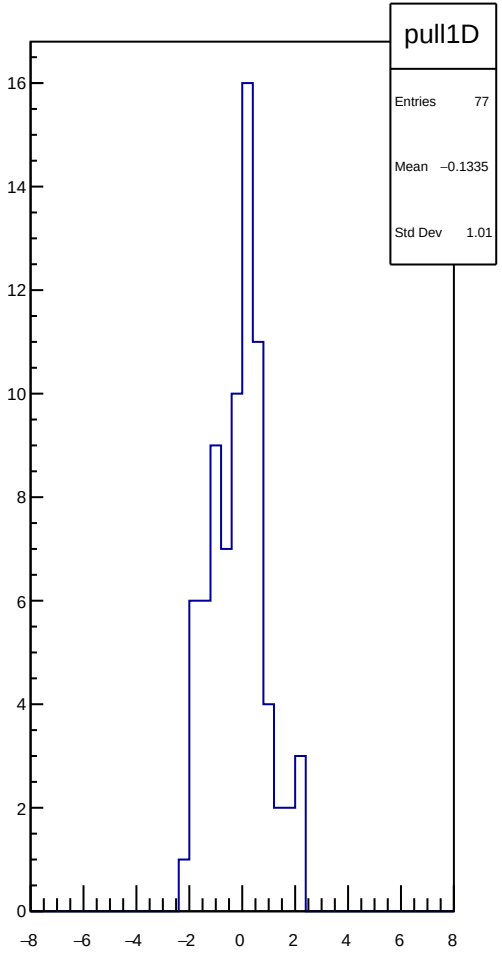

asym_bpm0l06WS_rms vs run
χ^2 / ndf 9.589e+05 / 76
p0 834.6 ± 1.143
4500
4000
3500
3000
2500
2000
1500
1000
500

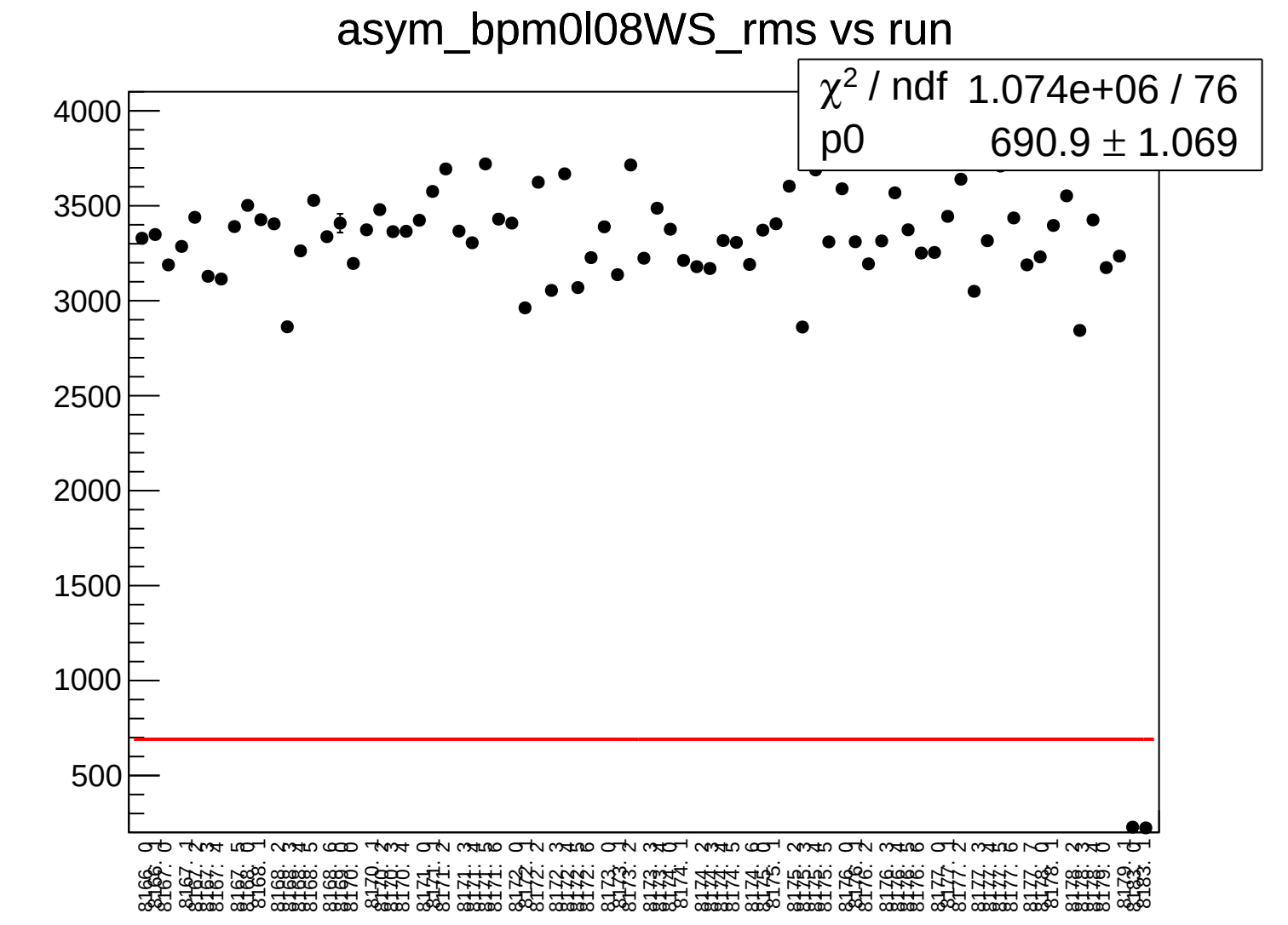

asym_bpm0l07WS_mean vs run
χ² / ndf 1142 / 76
p0 1185 ± 215.9
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean −1305
Std Dev 1348
8
6
4
2
0
−2
−4
−6
−8

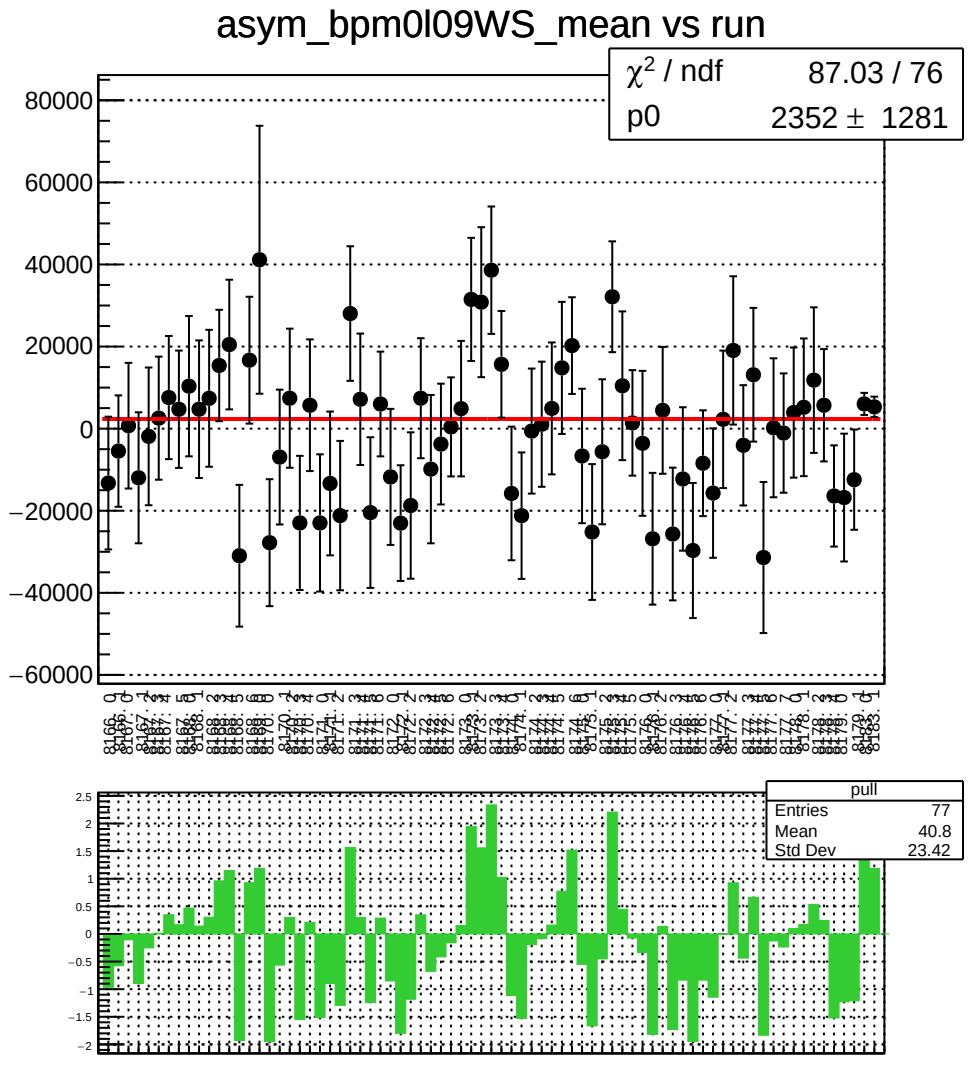

pull1D
Entries 77
Mean −0.1528
Std Dev 3.763
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

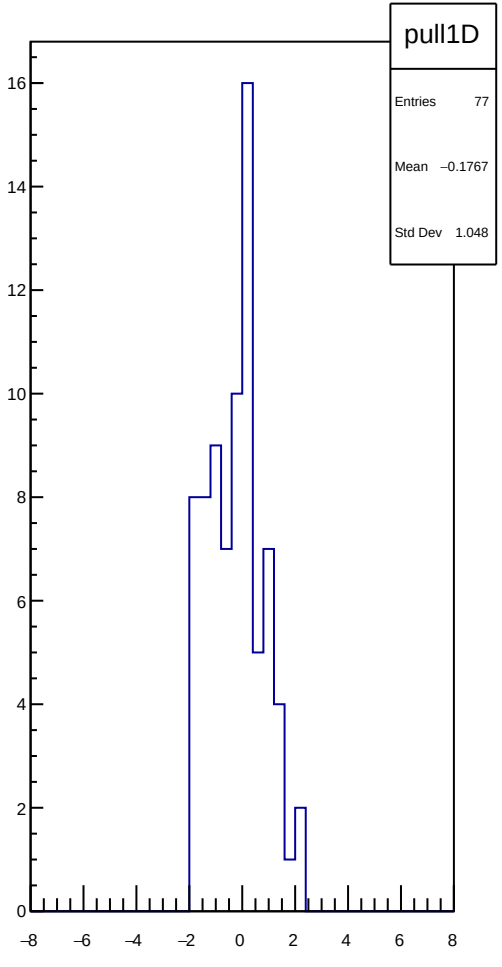

asym_bpm0l07WS_rms vs run
χ² / ndf 3.191e+04 / 76
p0 184.5 ± 0.1527
260
240
220
200
180
160
140

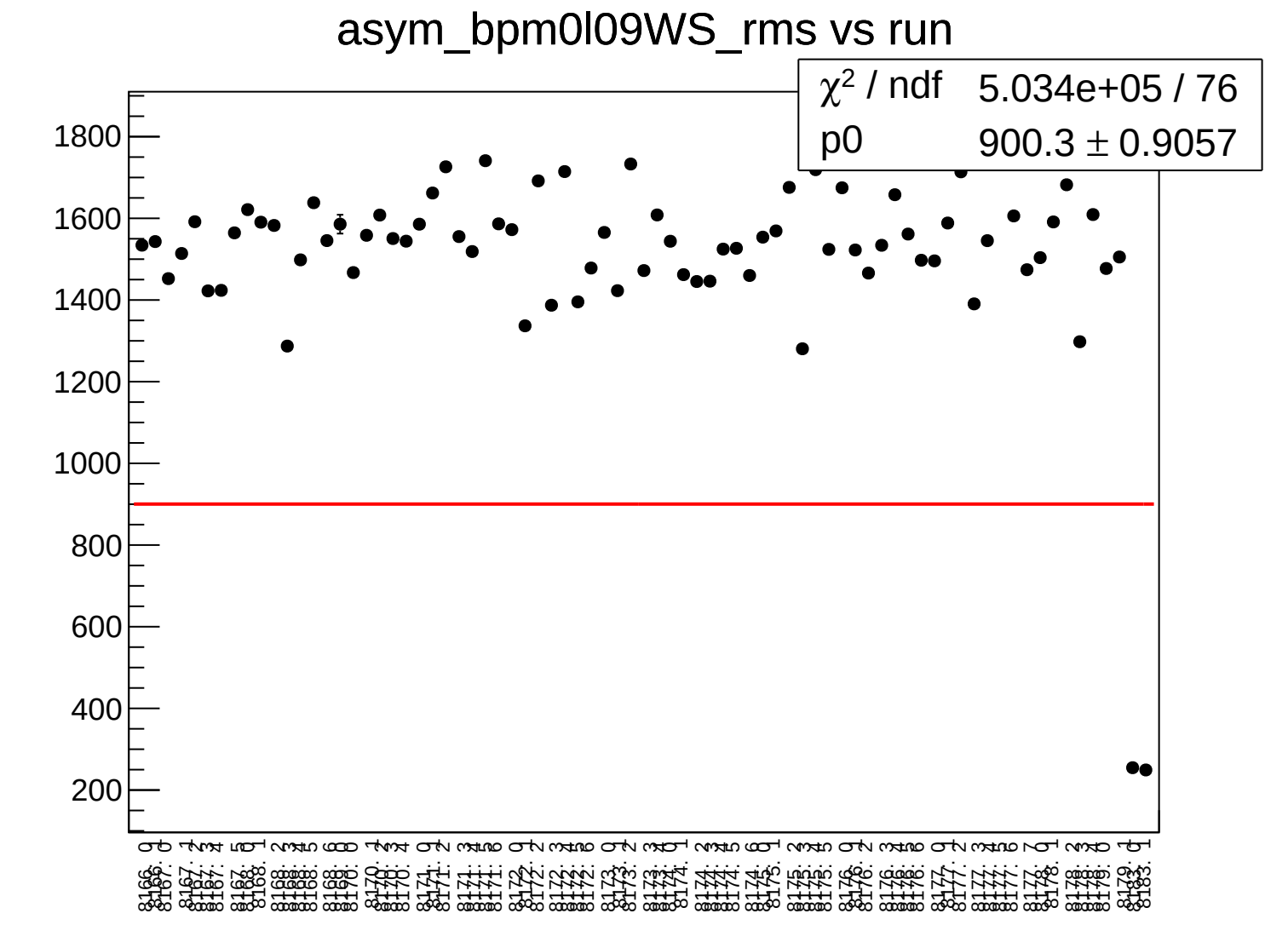

asym_bpm0l08WS_mean vs run
χ² / ndf 79.87 / 76
p0 4375 ± 1512
pull
Entries 77
Mean 42.82
Std Dev 28.15

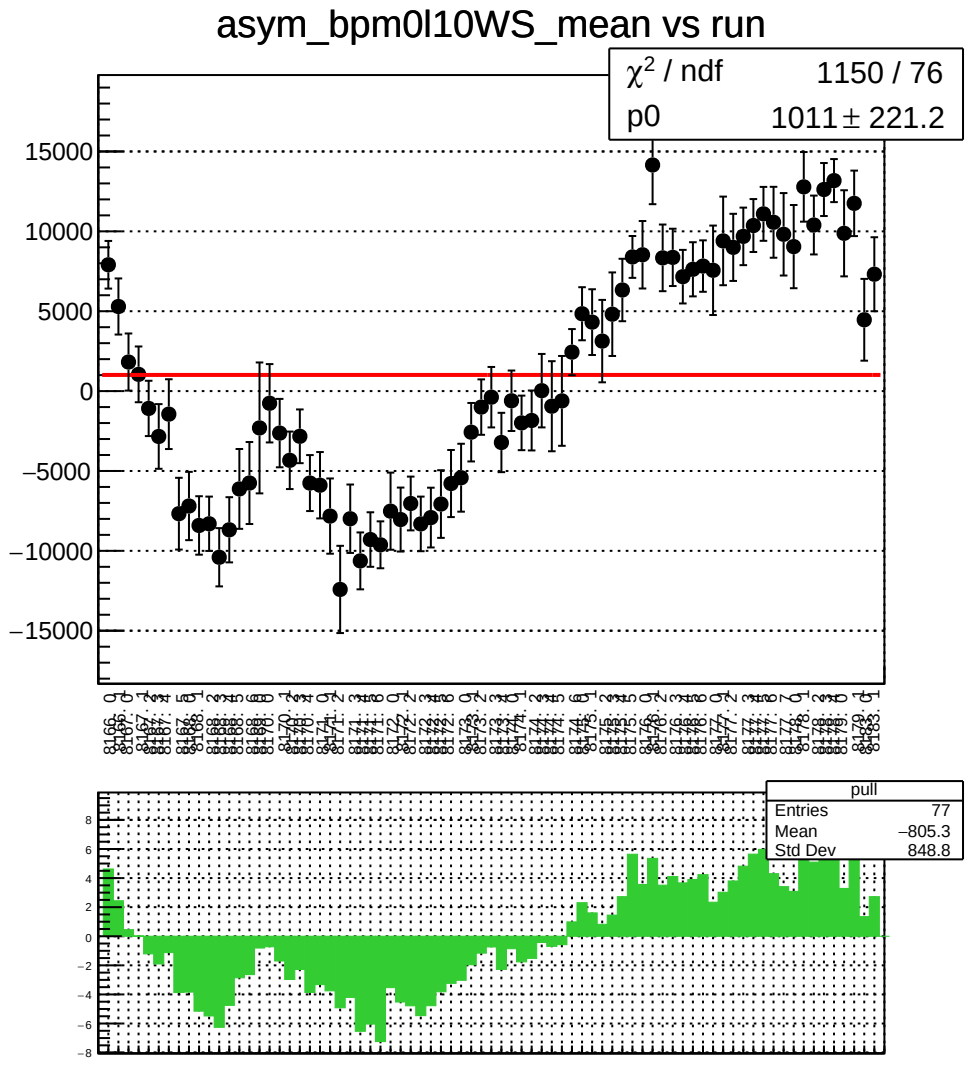

pull1D
Entries 77
Mean −0.1335
Std Dev 1.01

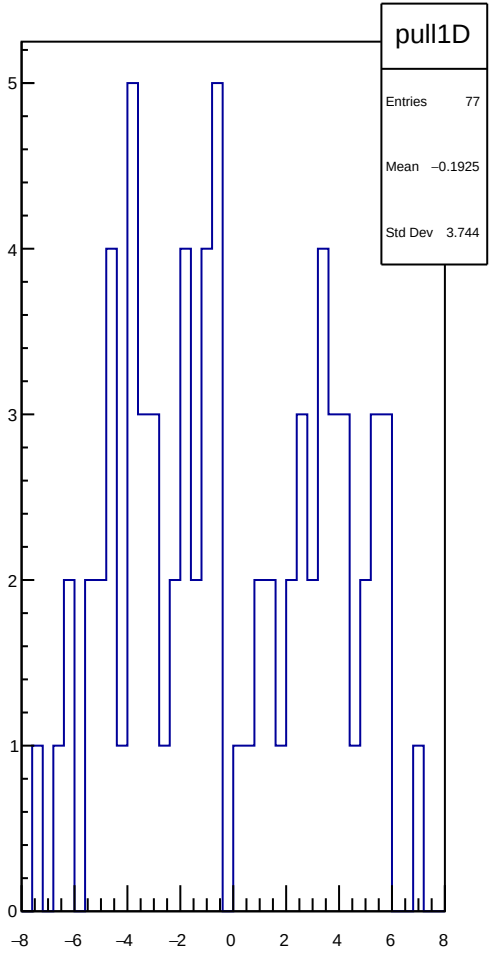

asym_bpm0l08WS_rms vs run
χ^2 / ndf 1.074e+06 / 76
p0 690.9 ± 1.069
4000
3500
3000
2500
2000
1500
1000
500

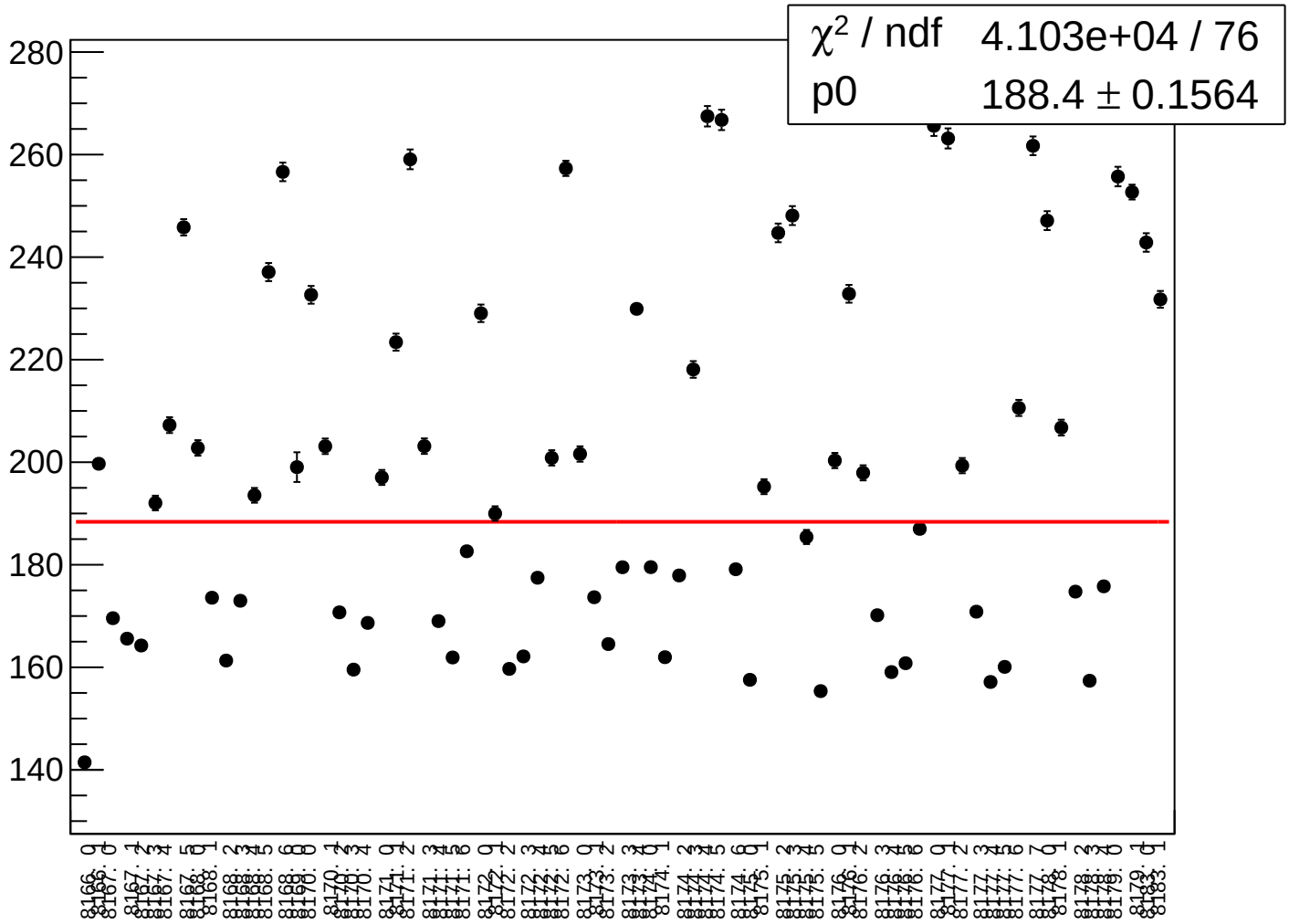

asym_bpm0l09WS_mean vs run
χ² / ndf 87.03 / 76
p0 2352 ± 1281
pull
Entries 77
Mean 40.8
Std Dev 23.42

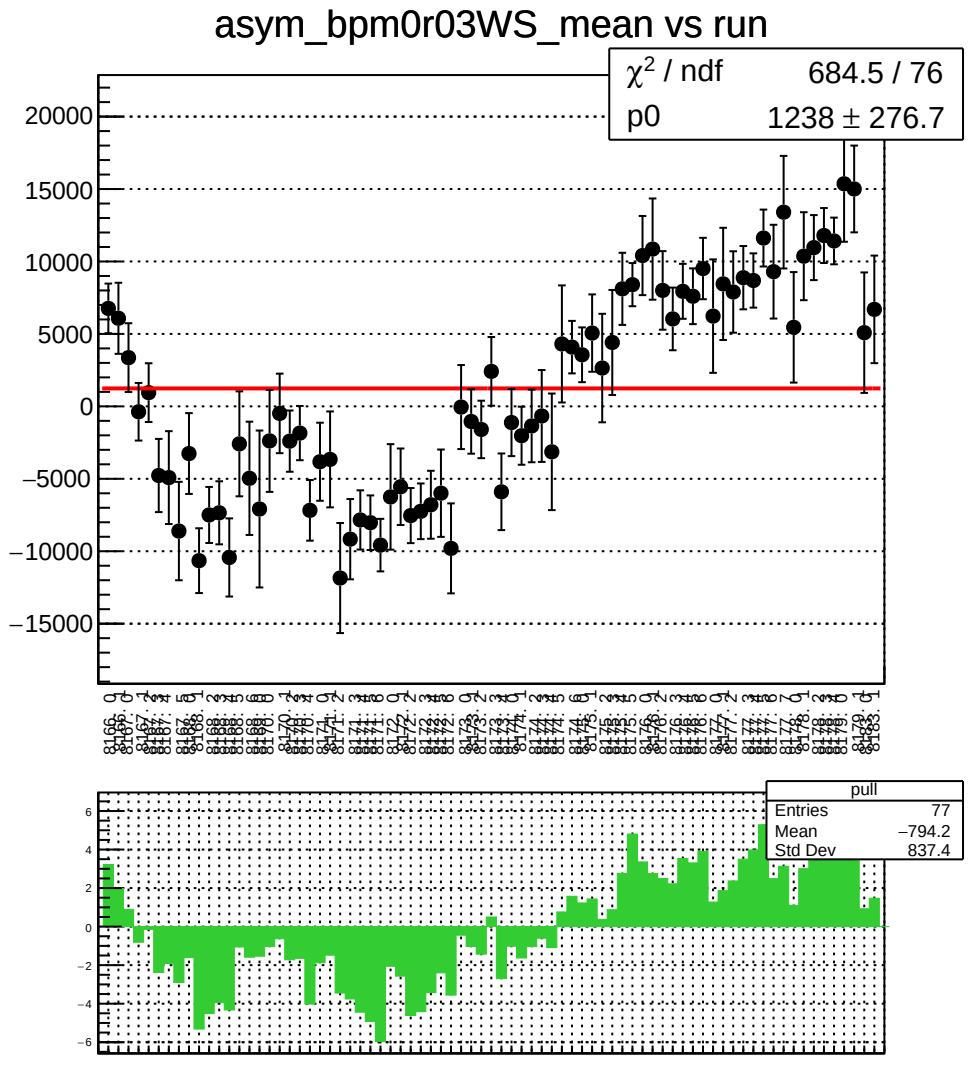

pull1D
Entries 77
Mean −0.1767
Std Dev 1.048

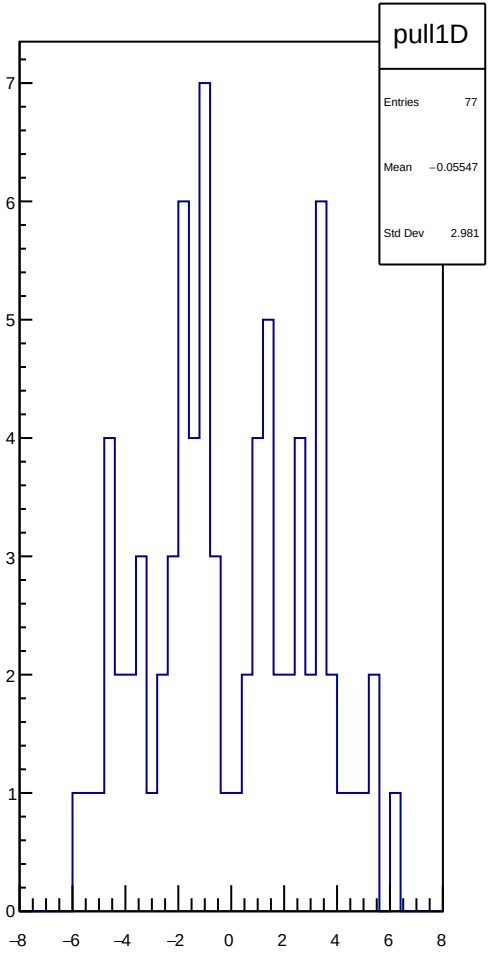

asym_bpm0l09WS_rms vs run
χ² / ndf 5.034e+05 / 76
p0 900.3 ± 0.9057
1800
1600
1400
1200
1000
800
600
400
200

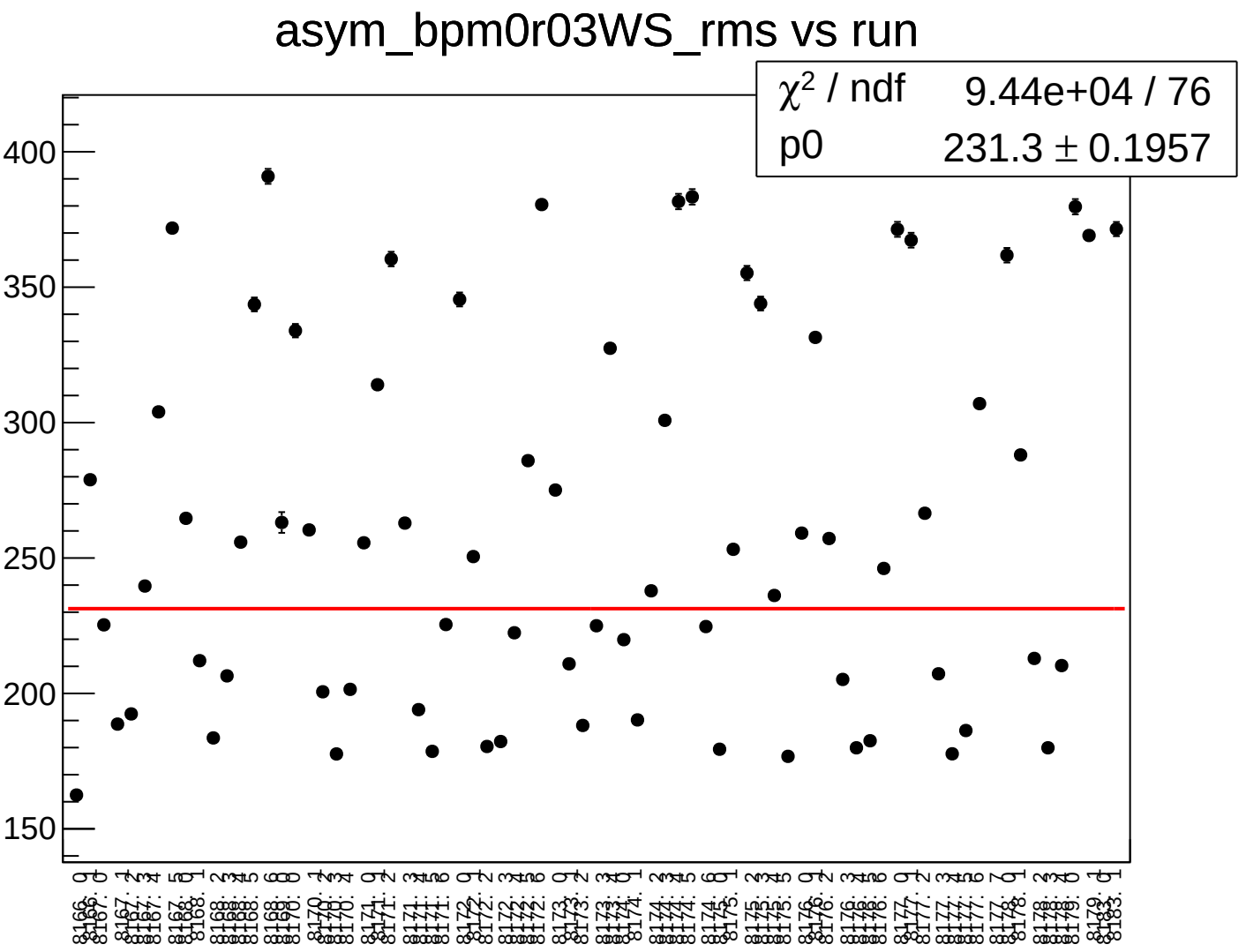

asym_bpm0l10WS_mean vs run
χ² / ndf 1150 / 76
p0 1011 ± 221.2
pull
Entries 77
Mean −805.3
Std Dev 848.8

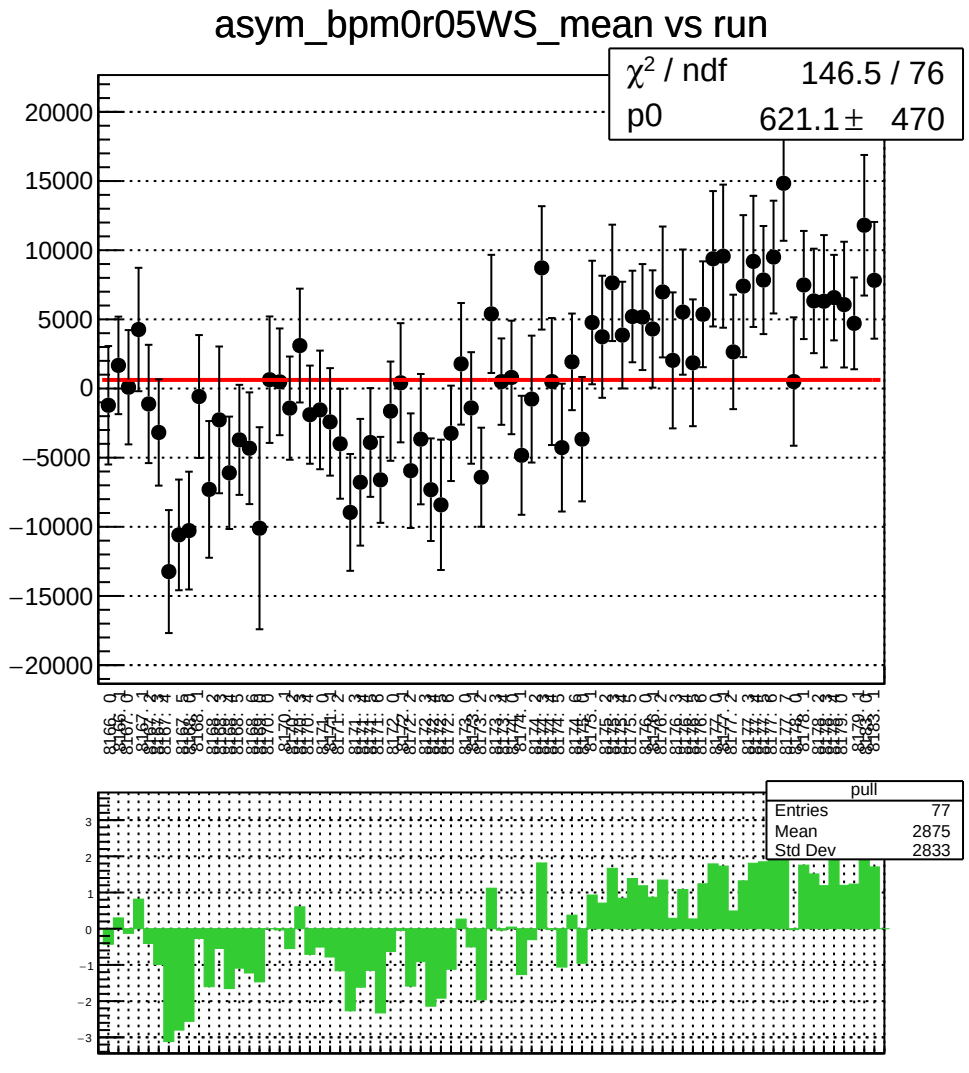

pull1D
Entries 77
Mean −0.1925
Std Dev 3.744

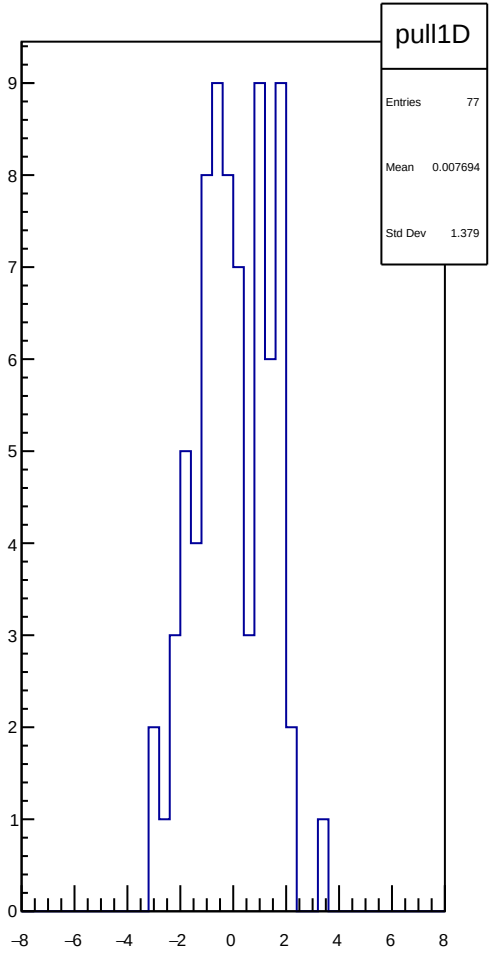

asym_bpm0l10WS_rms vs run
χ² / ndf 4.103e+04 / 76
p0 188.4 ± 0.1564
280
260
240
220
200
180
160
140

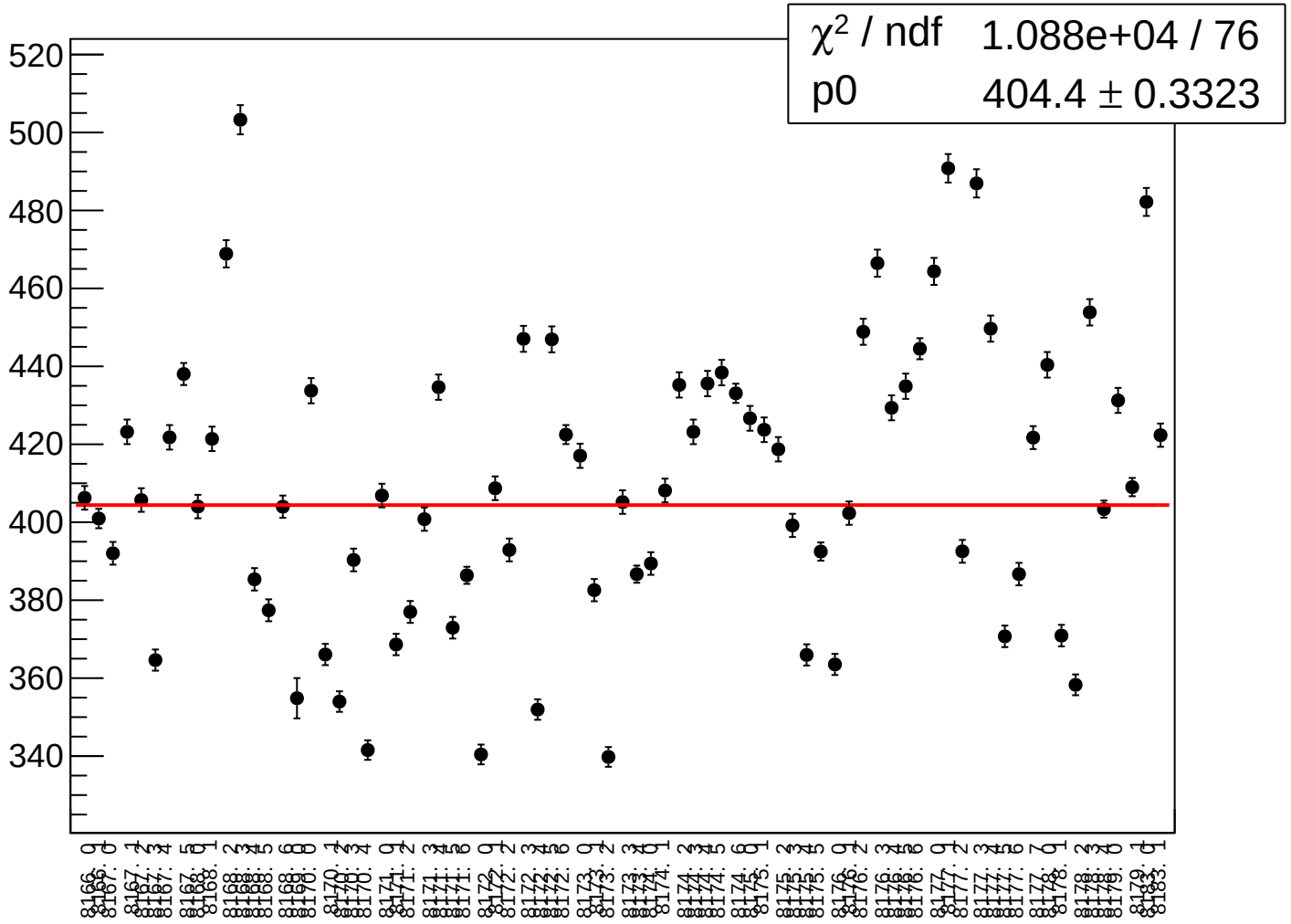

asym_bpm0r03WS_mean vs run
χ² / ndf 684.5 / 76
p0 1238 ± 276.7
pull
Entries 77
Mean −794.2
Std Dev 837.4

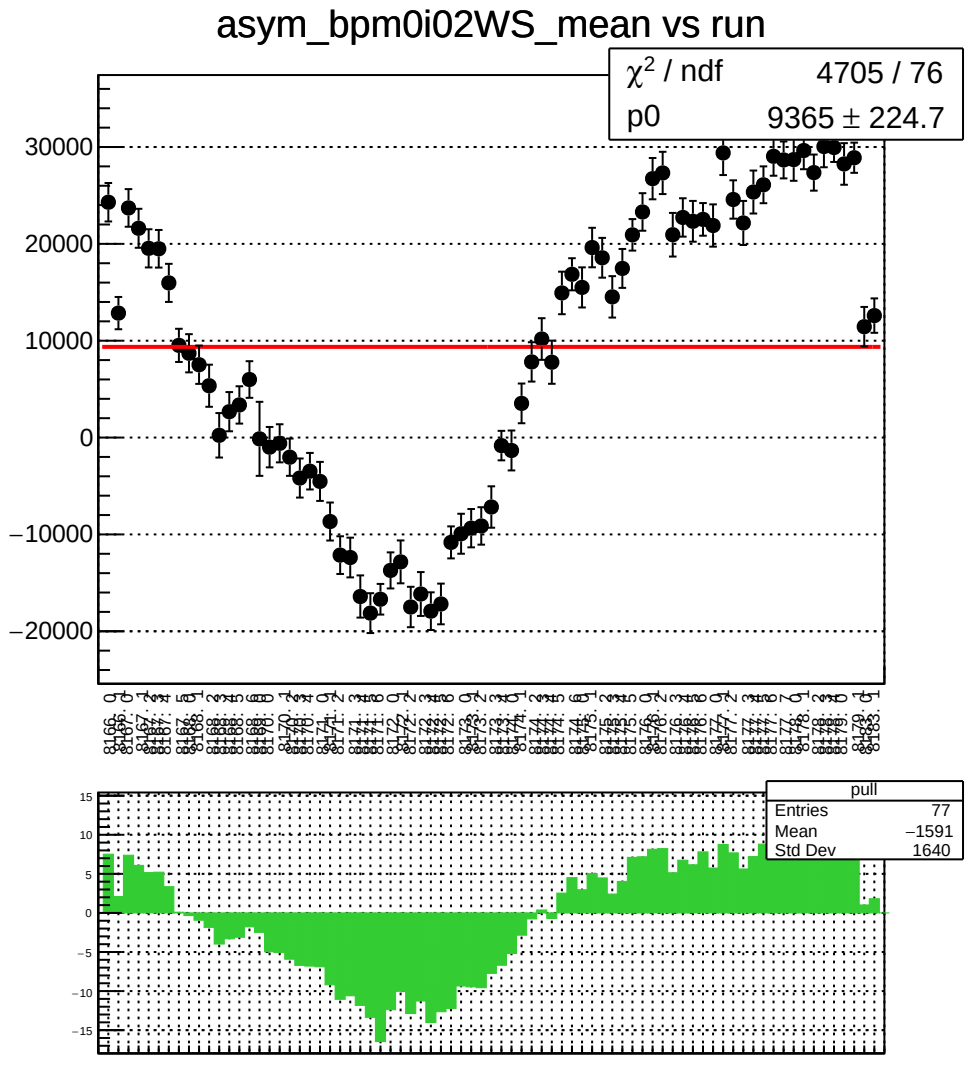

pull1D
Entries 77
Mean −0.05547
Std Dev 2.981

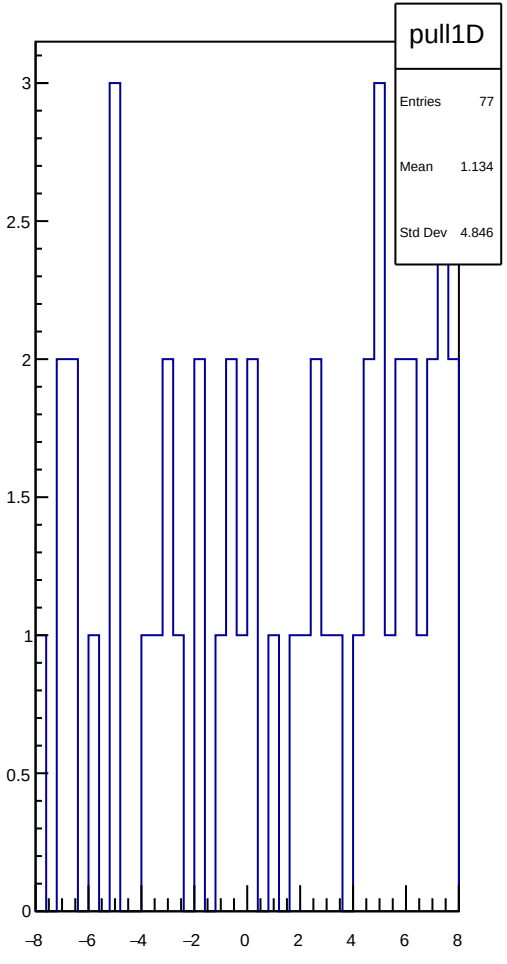

asym_bpm0r03WS_rms vs run
χ² / ndf 9.44e+04 / 76
p0 231.3 ± 0.1957
400
350
300
250
200
150

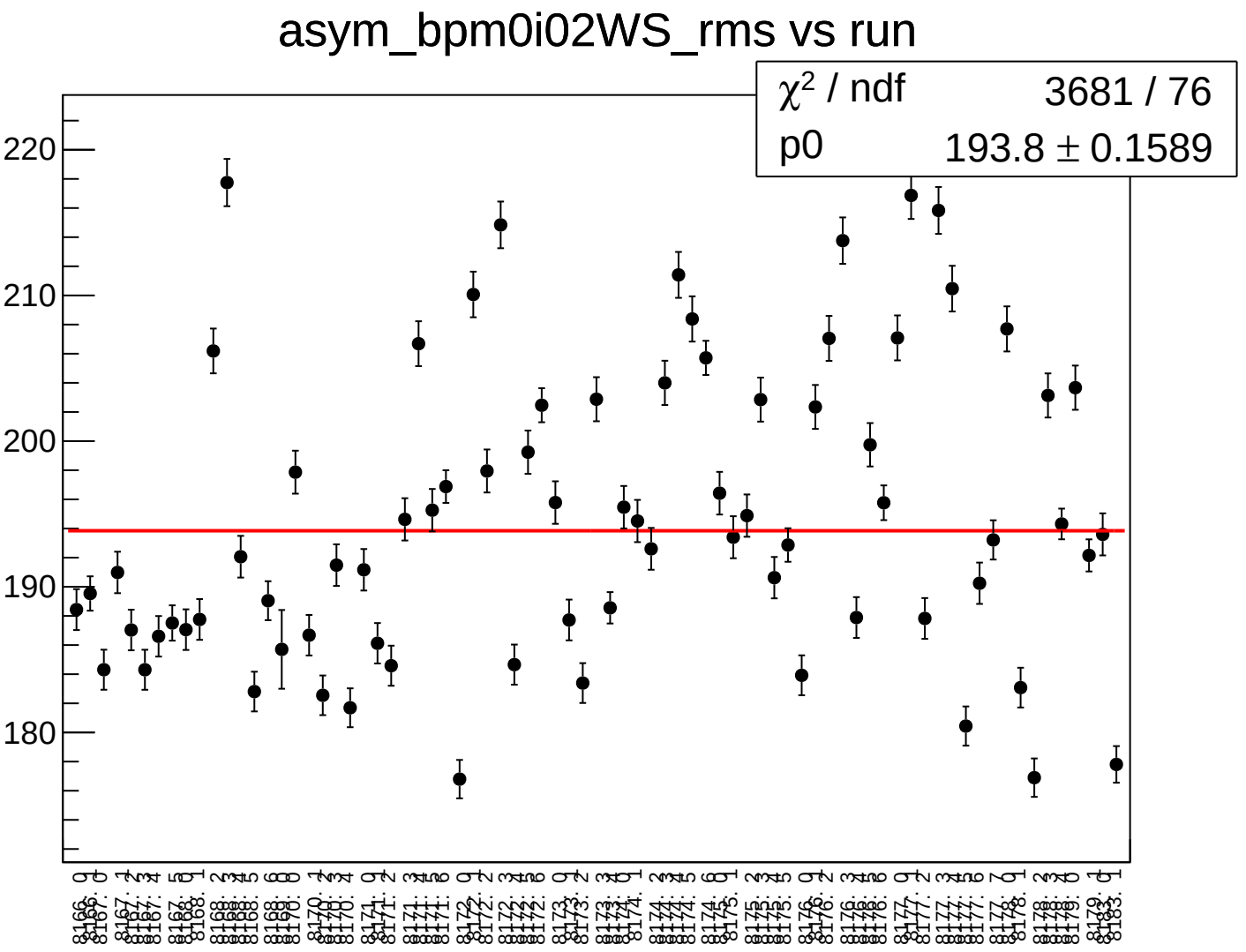

asym_bpm0r05WS_mean vs run
χ² / ndf 146.5 / 76
p0 621.1 ± 470
pull
Entries 77
Mean 2875
Std Dev 2833

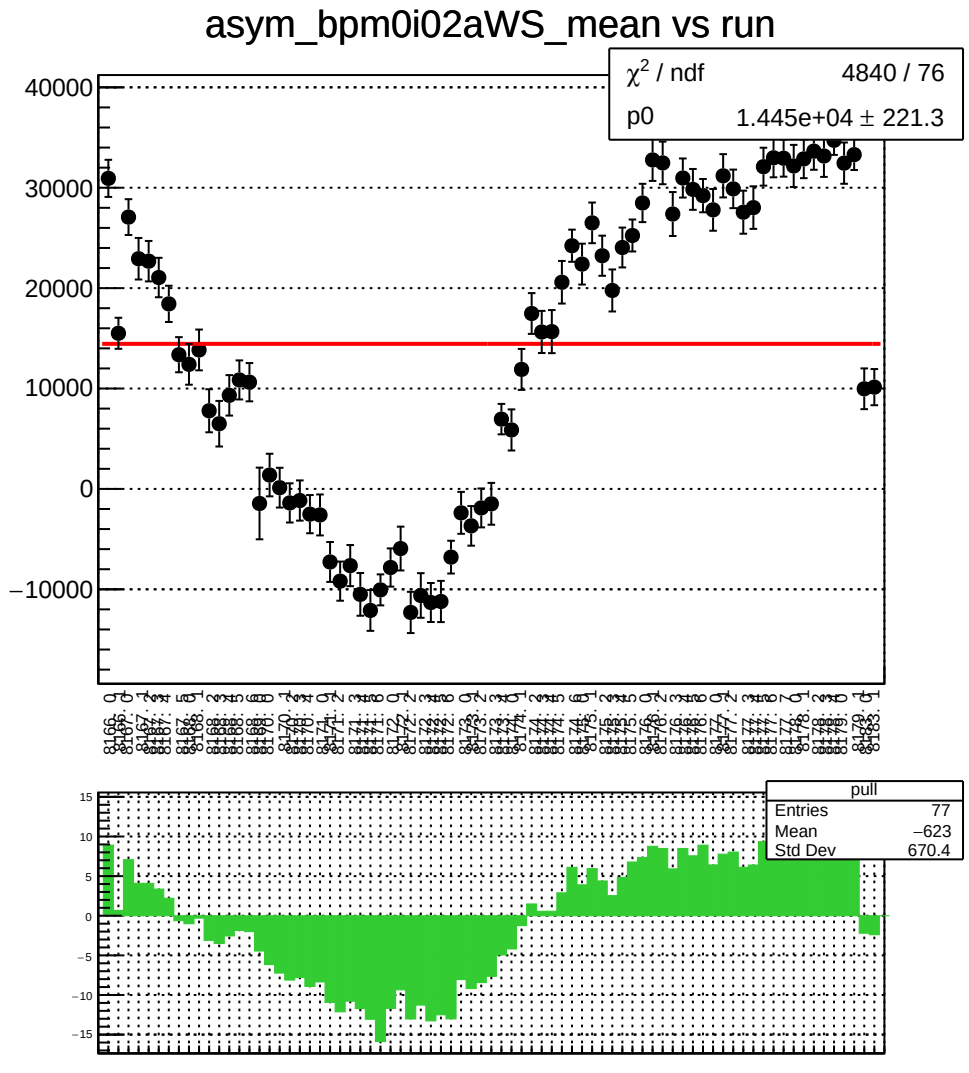

pull1D
Entries 77
Mean 0.007694
Std Dev 1.379

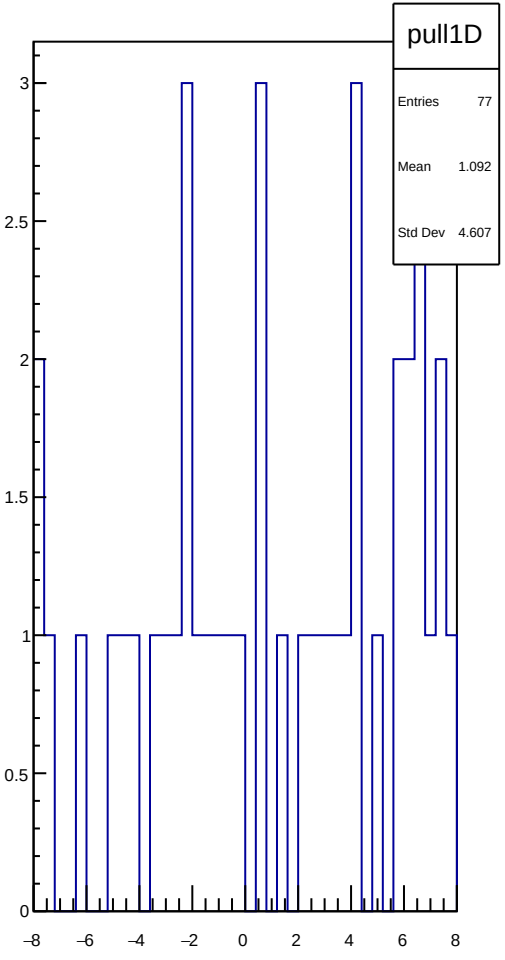

asym_bpm0r05WS_rms vs run
χ² / ndf 1.088e+04 / 76
p0 404.4 ± 0.3323
520
500
480
460
440
420
400
380
360
340

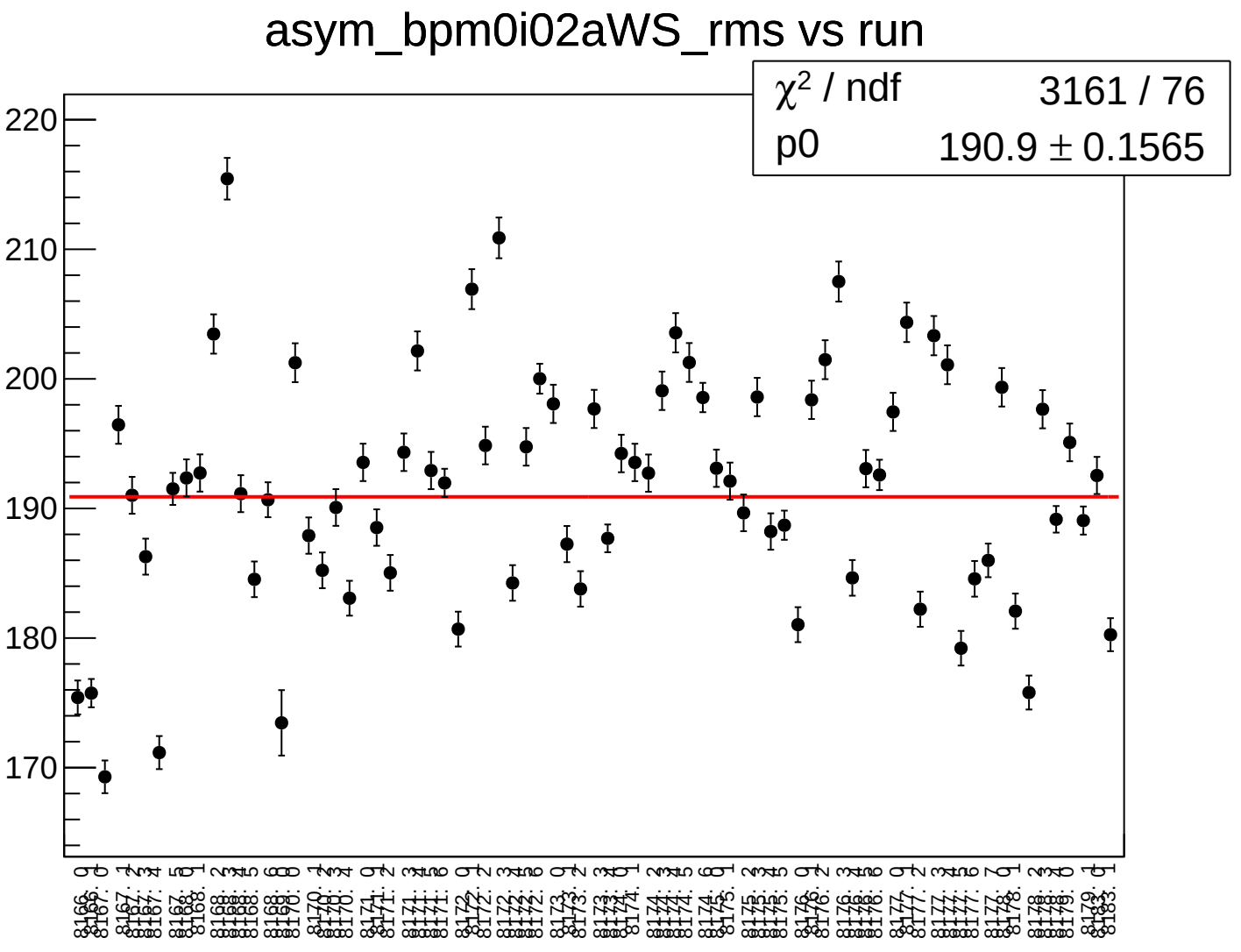

asym_bpm0i02WS_mean vs run
χ² / ndf 4705 / 76
p0 9365 ± 224.7
30000
20000
10000
0
−10000
−20000
pull
Entries 77
Mean −1591
Std Dev 1640
15
10
5
0
−5
−10
−15

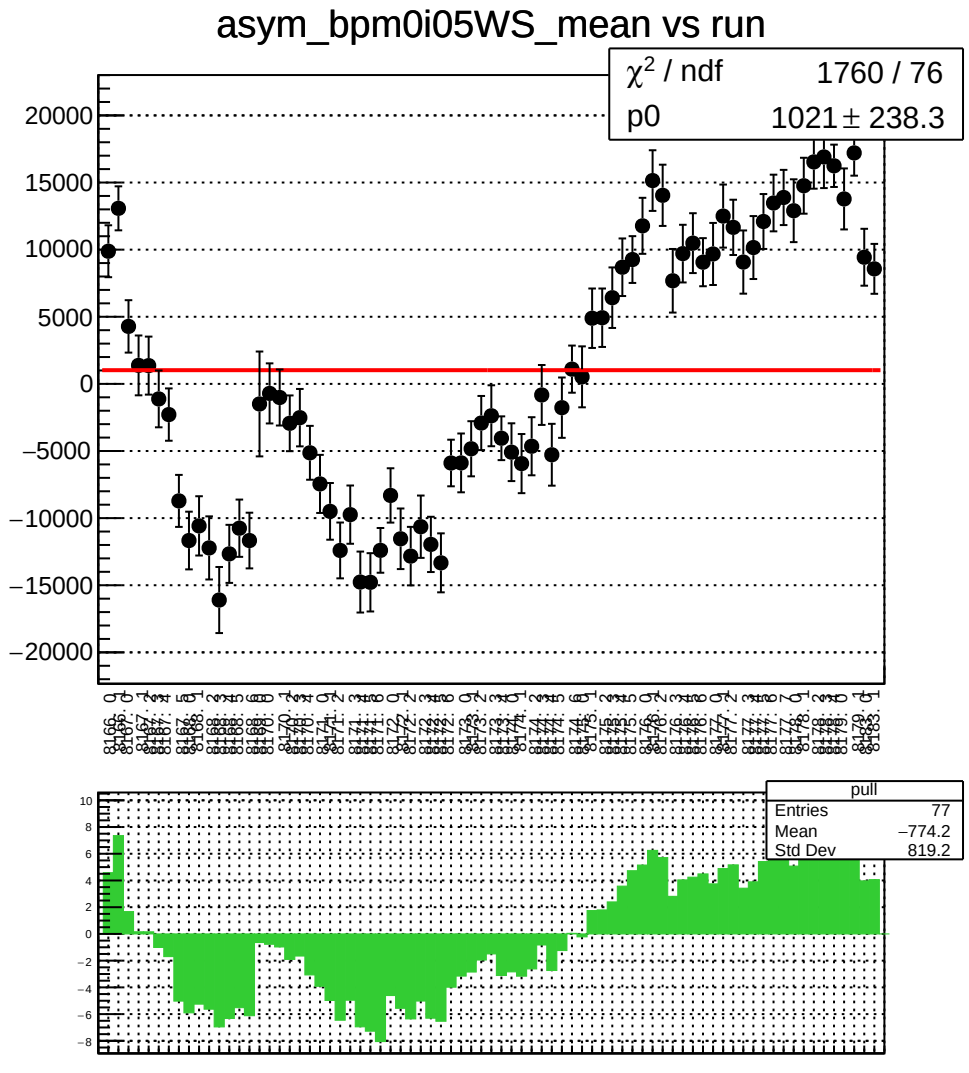

pull1D
Entries 77
Mean 1.134
Std Dev 4.846
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

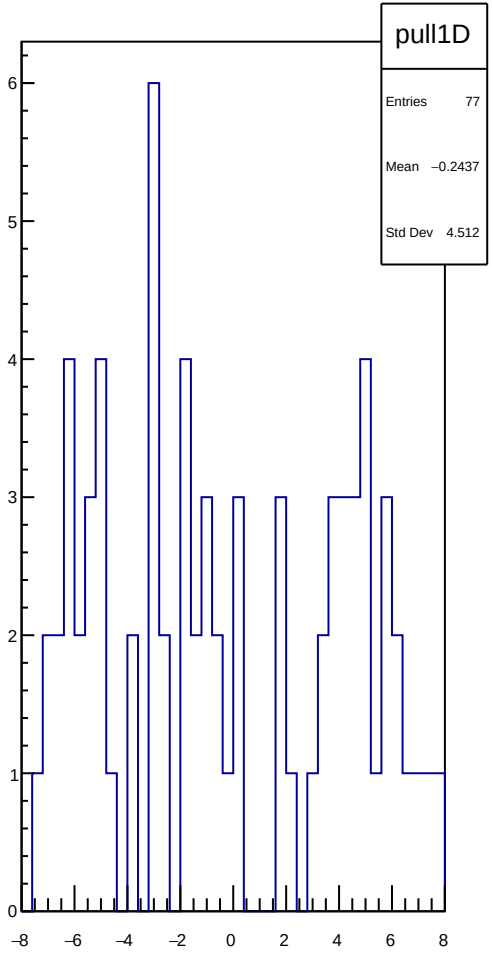

asym_bpm0i02WS_rms vs run
χ² / ndf 3681 / 76
p0 193.8 ± 0.1589
220
210
200
190
180

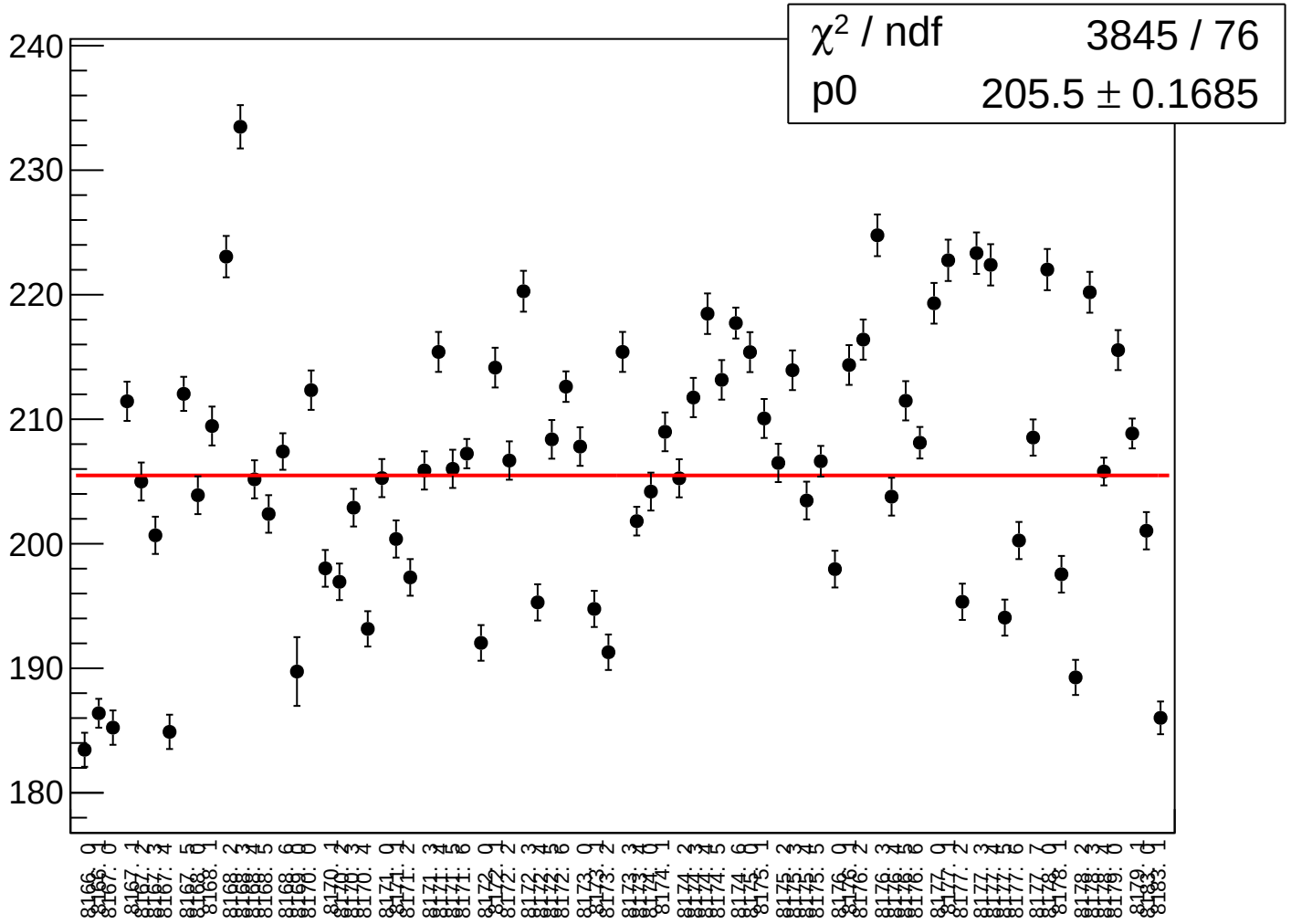

asym_bpm0i02aWS_mean vs run
χ² / ndf 4840 / 76
p0 1.445e+04 ± 221.3
40000
30000
20000
10000
0
−10000
pull
Entries 77
Mean −623
Std Dev 670.4
15
10
5
0
−5
−10
−15

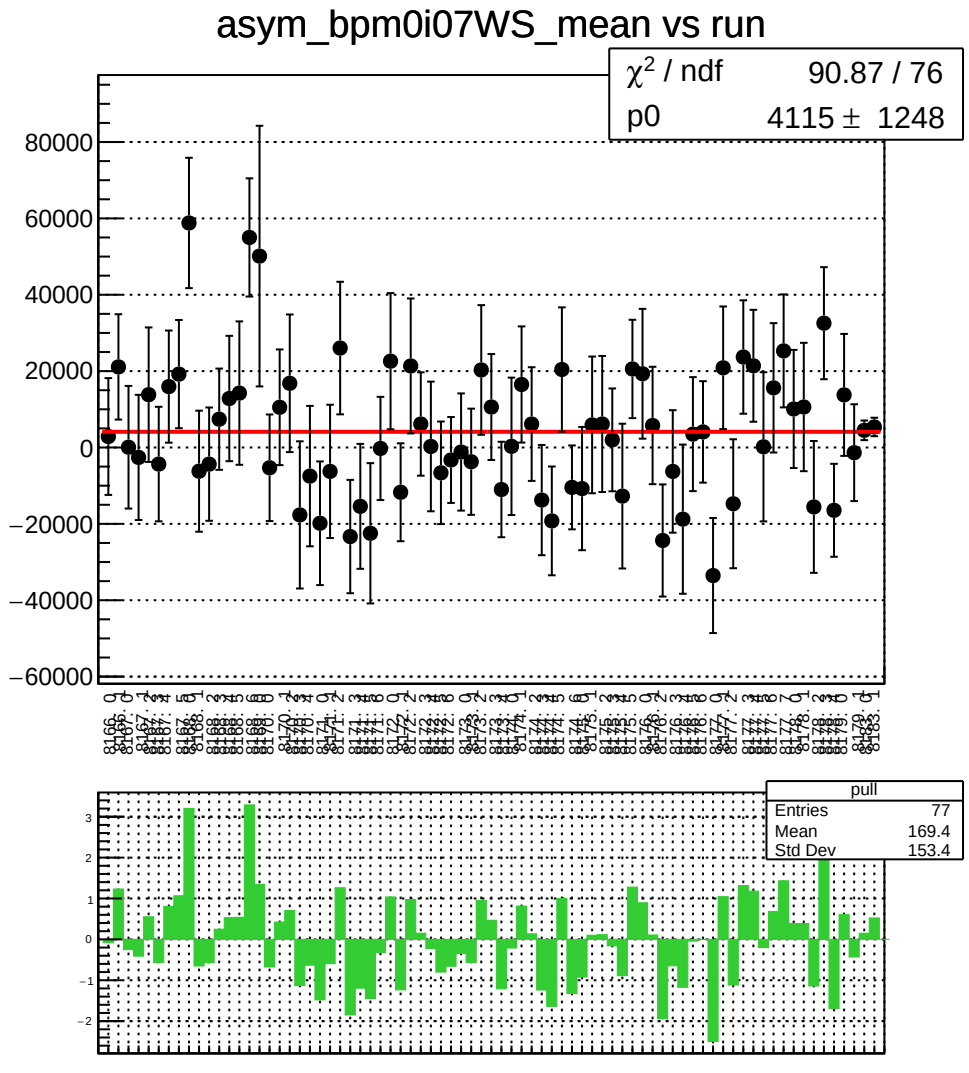

pull1D
Entries 77
Mean 1.092
Std Dev 4.607
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

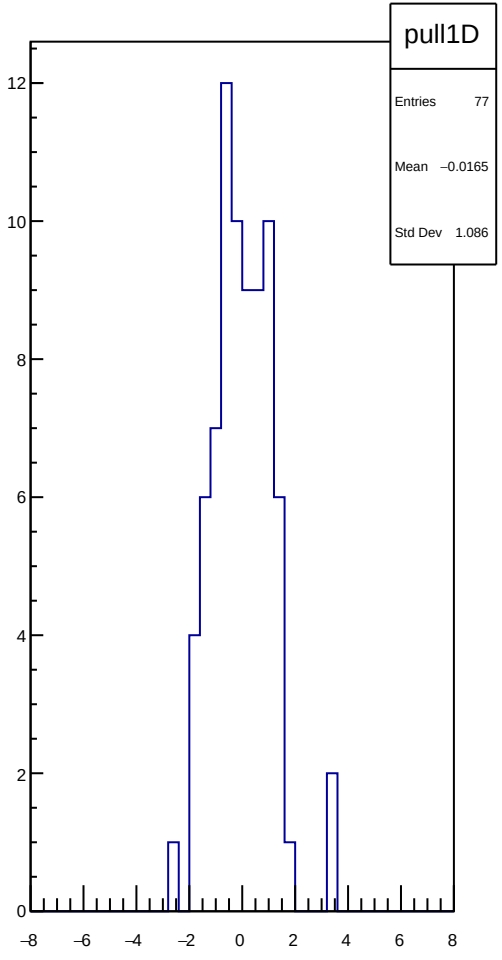

asym_bpm0i02aWS_rms vs run
χ² / ndf 3161 / 76
p0 190.9 ± 0.1565
220
210
200
190
180
170

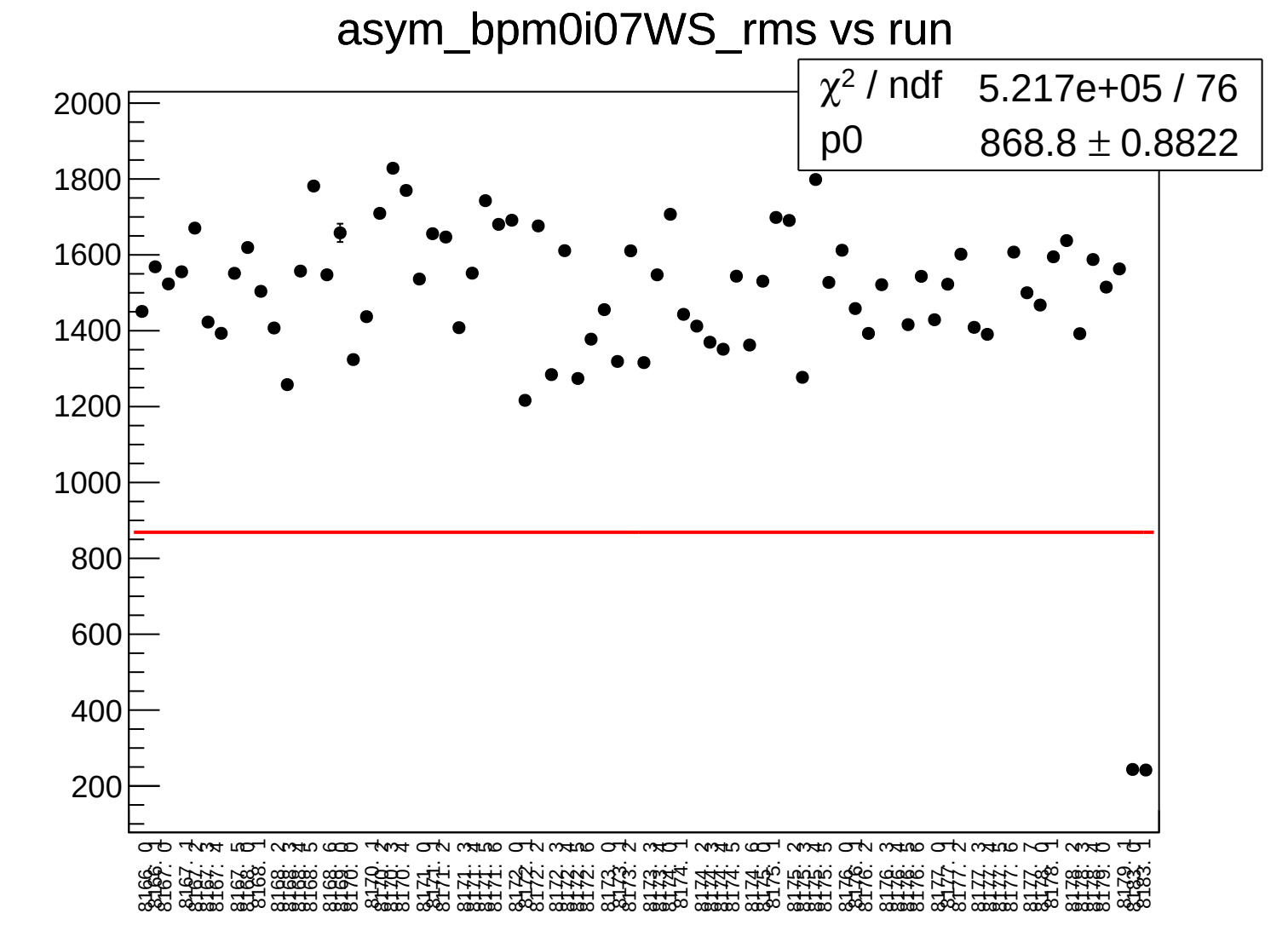

asym_bpm0i05WS_mean vs run
χ² / ndf 1760 / 76
p0 1021 ± 238.3
pull
Entries 77
Mean −774.2
Std Dev 819.2

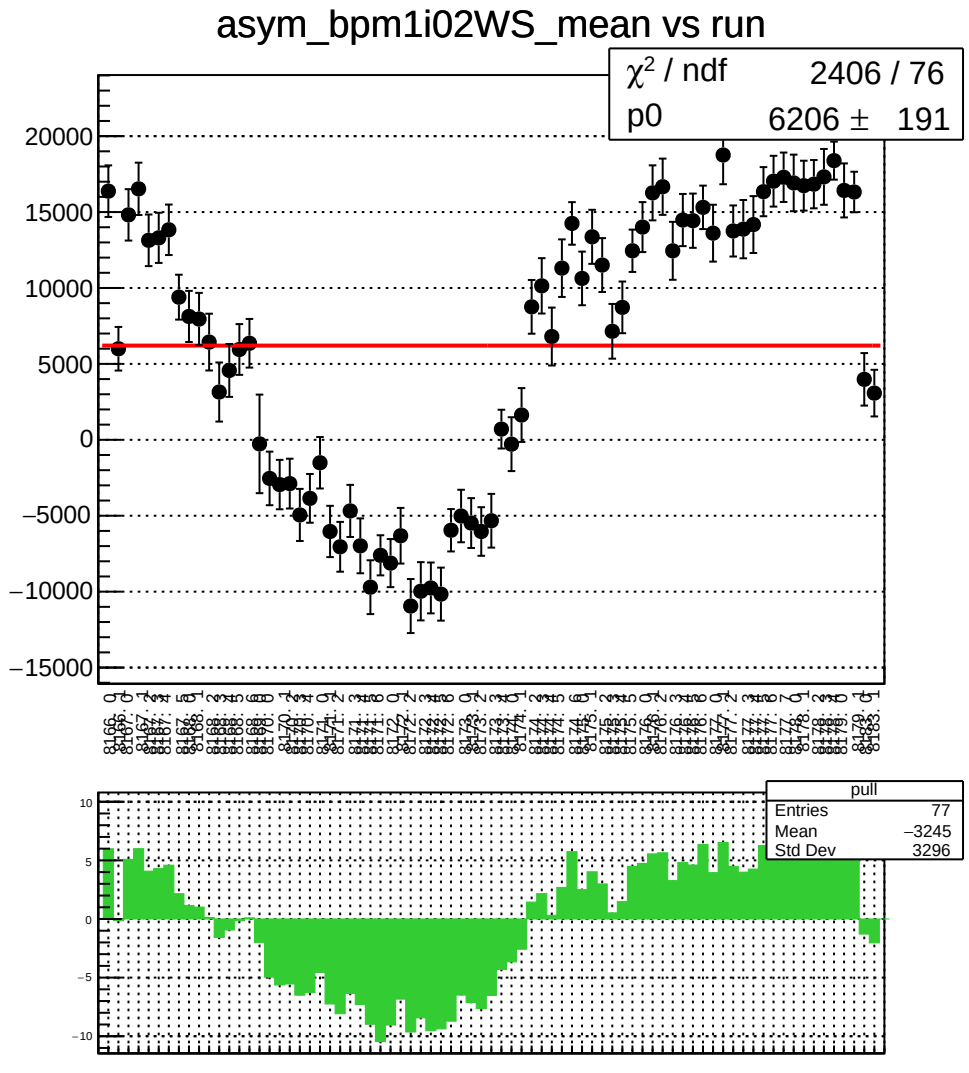

pull1D
Entries 77
Mean −0.2437
Std Dev 4.512

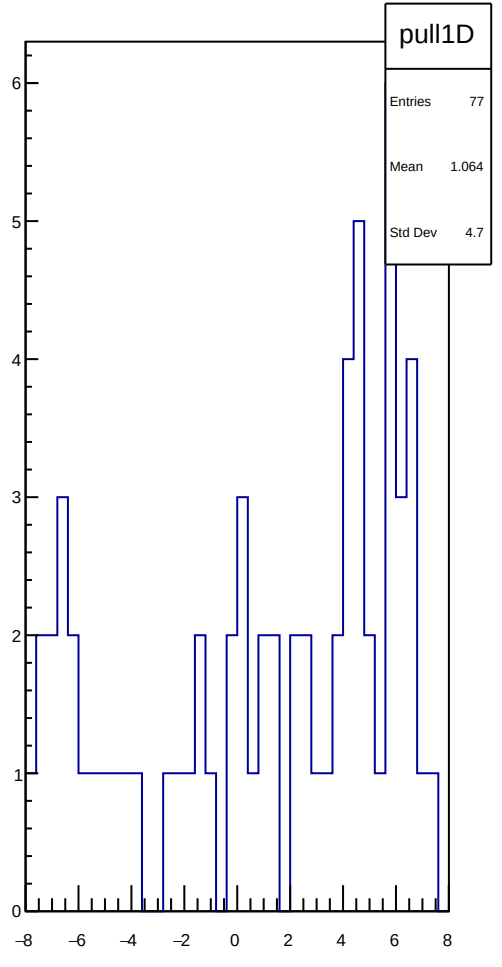

asym_bpm0i05WS_rms vs run
χ² / ndf 3845 / 76
p0 205.5 ± 0.1685
240
230
220
210
200
190
180

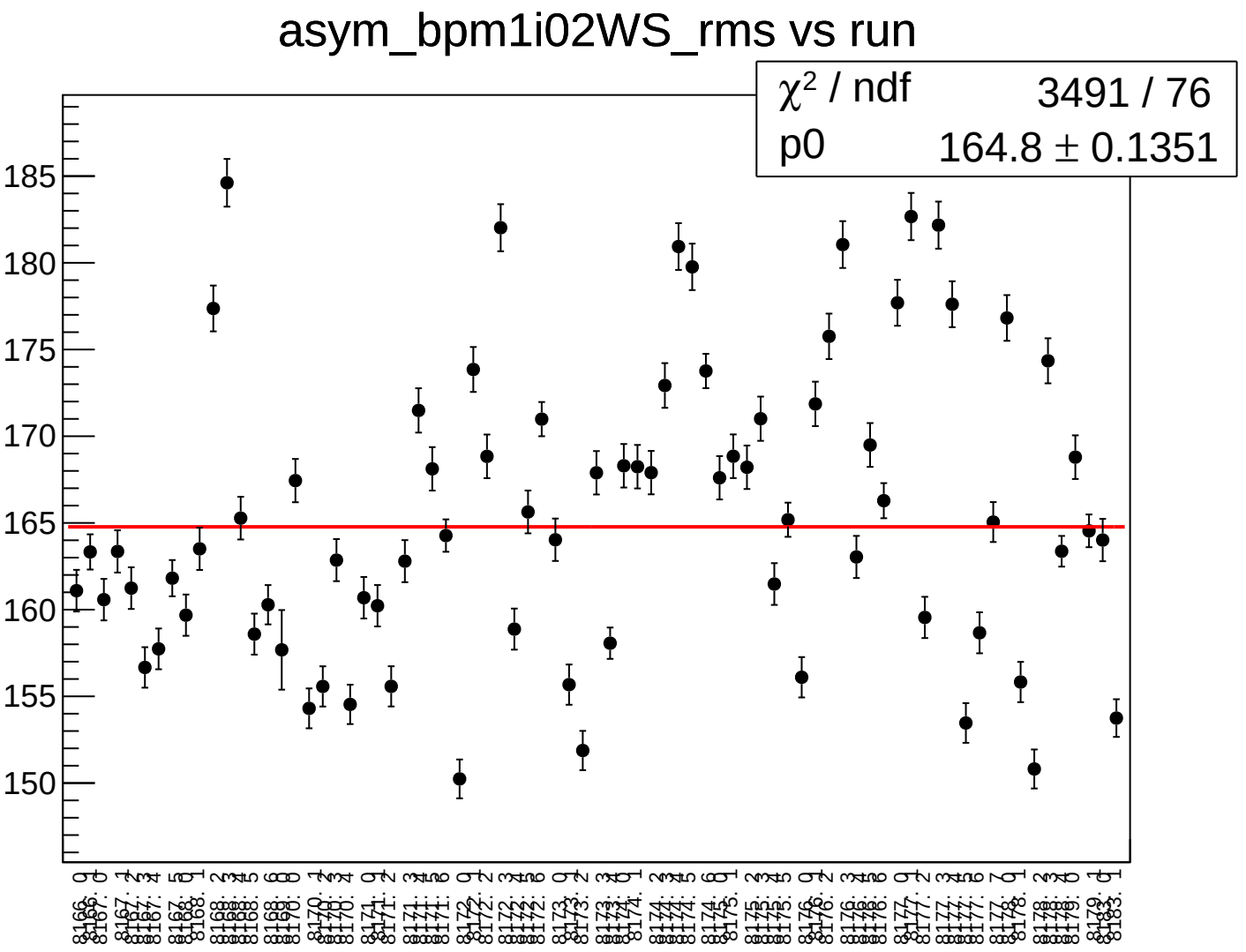

asym_bpm0i07WS_mean vs run
χ² / ndf 90.87 / 76
p0 4115 ± 1248
pull
Entries 77
Mean 169.4
Std Dev 153.4

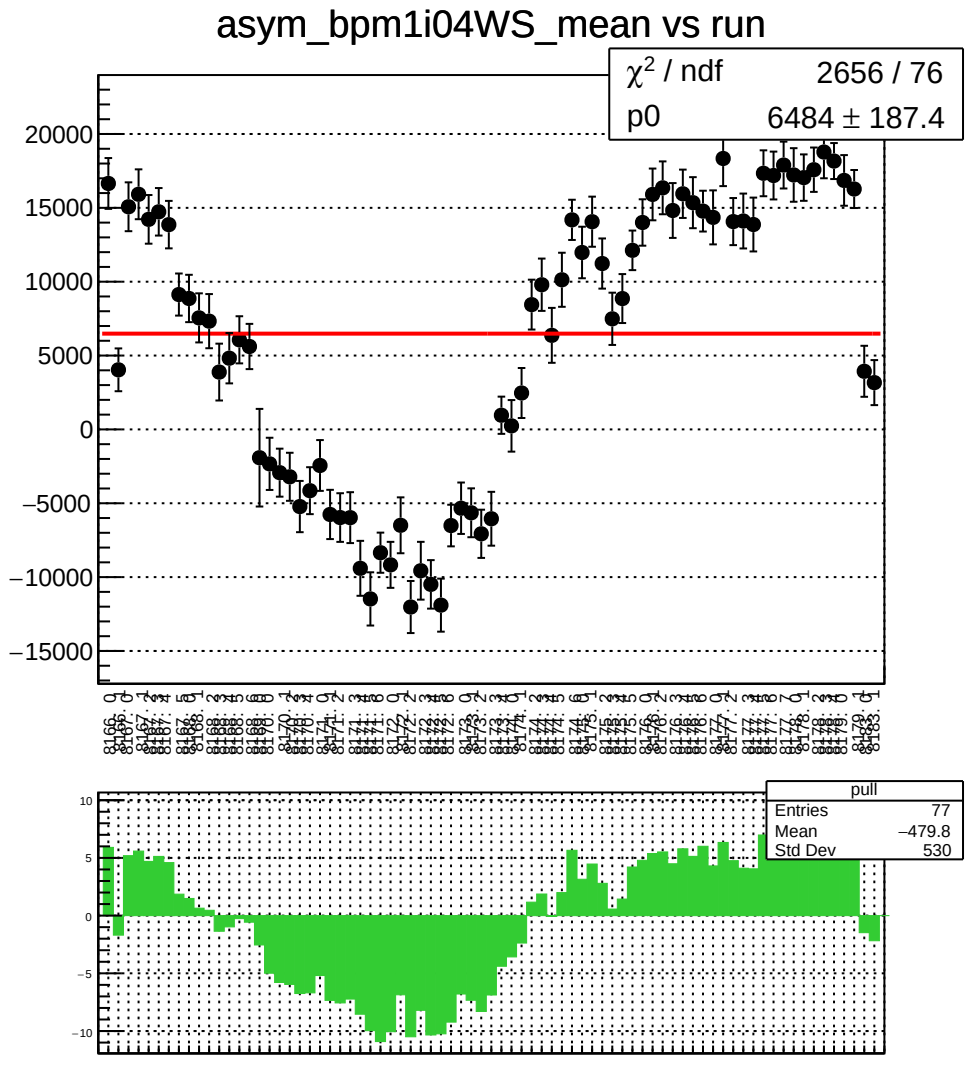

pull1D
Entries 77
Mean −0.0165
Std Dev 1.086

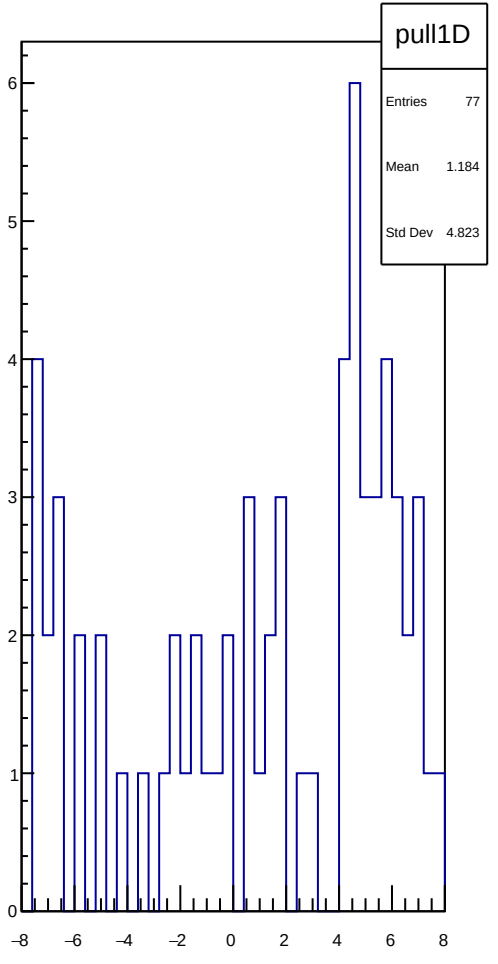

asym_bpm0i07WS_rms vs run
χ^2 / ndf 5.217e+05 / 76
p0 868.8 ± 0.8822
2000
1800
1600
1400
1200
1000
800
600
400
200

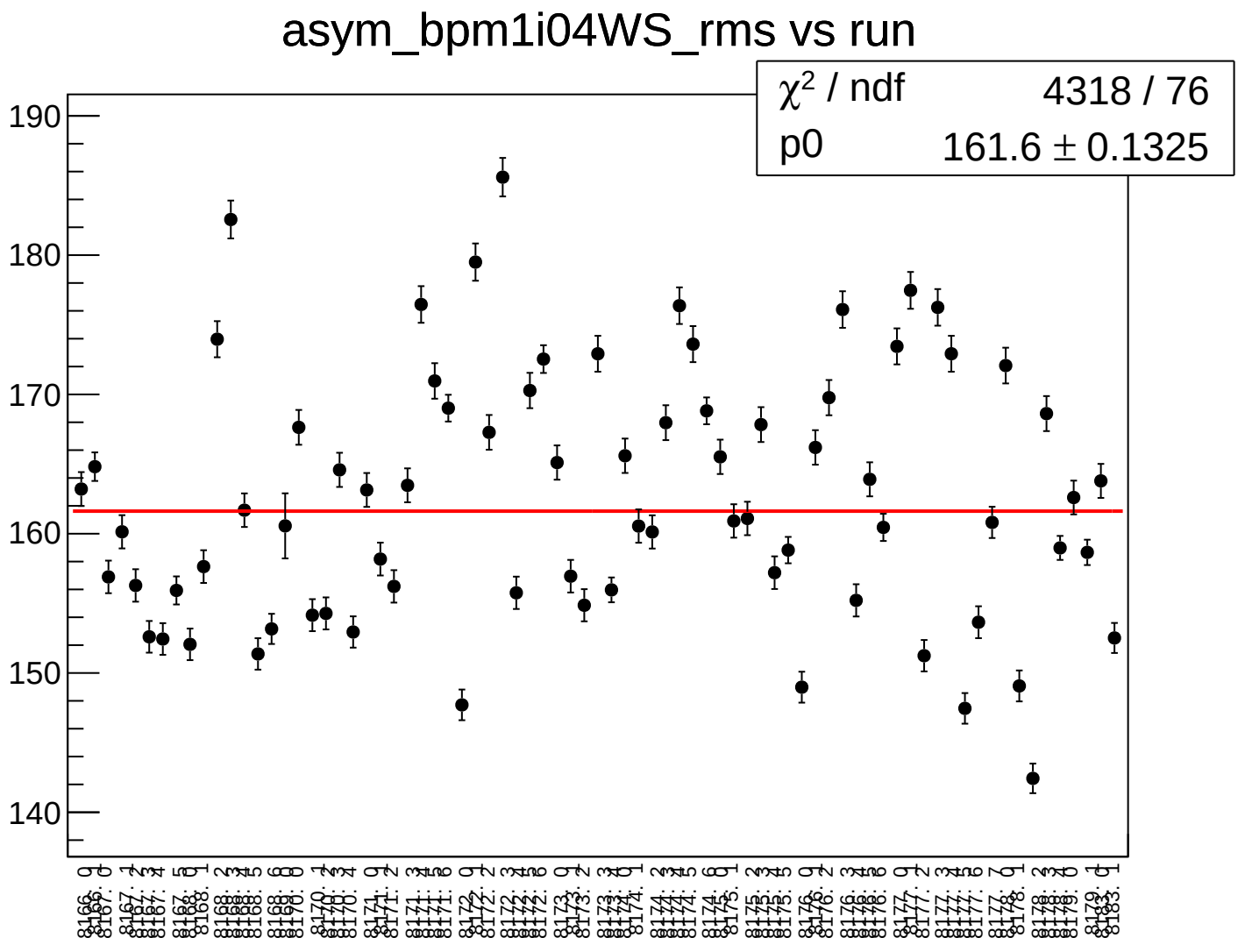

asym_bpm1i02WS_mean vs run
χ² / ndf 2406 / 76
p0 6206 ± 191
pull
Entries 77
Mean −3245
Std Dev 3296

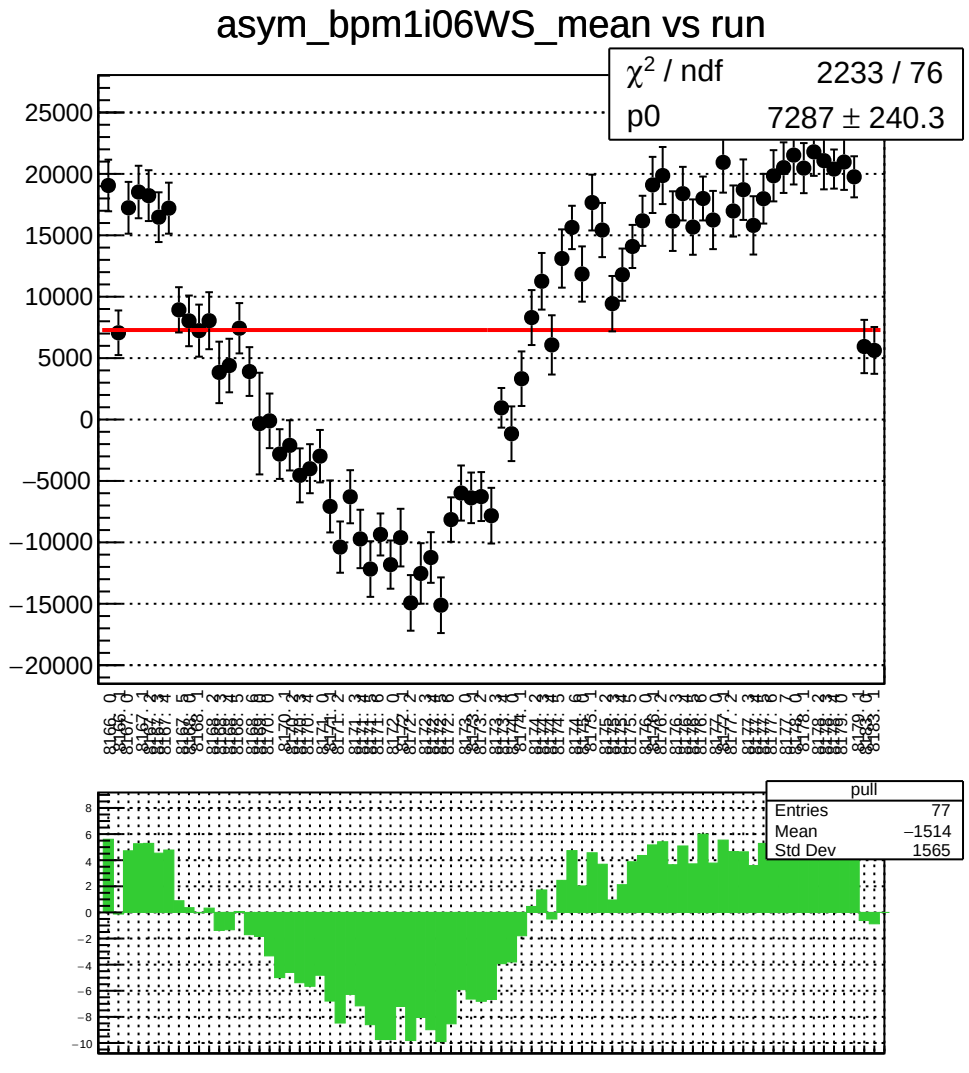

pull1D
Entries 77
Mean 1.064
Std Dev 4.7

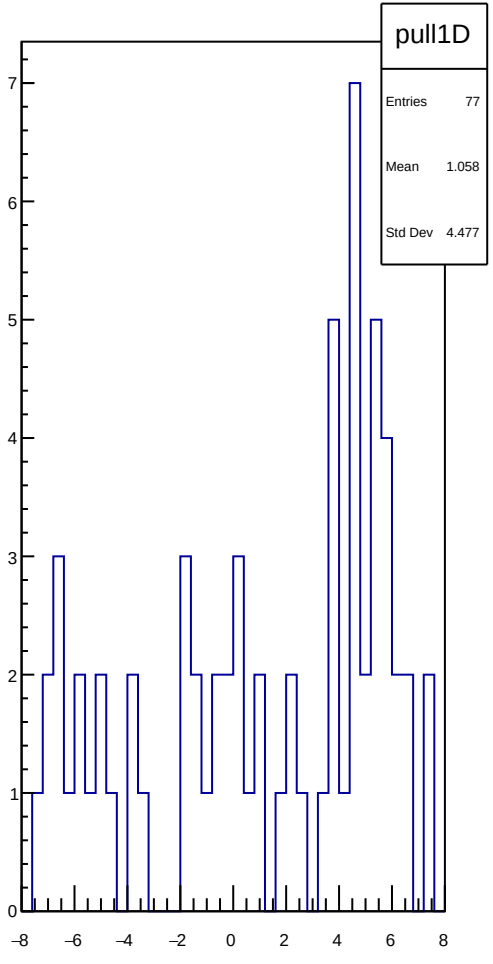

asym_bpm1i02WS_rms vs run
χ² / ndf 3491 / 76
p0 164.8 ± 0.1351
185
180
175
170
165
160
155
150

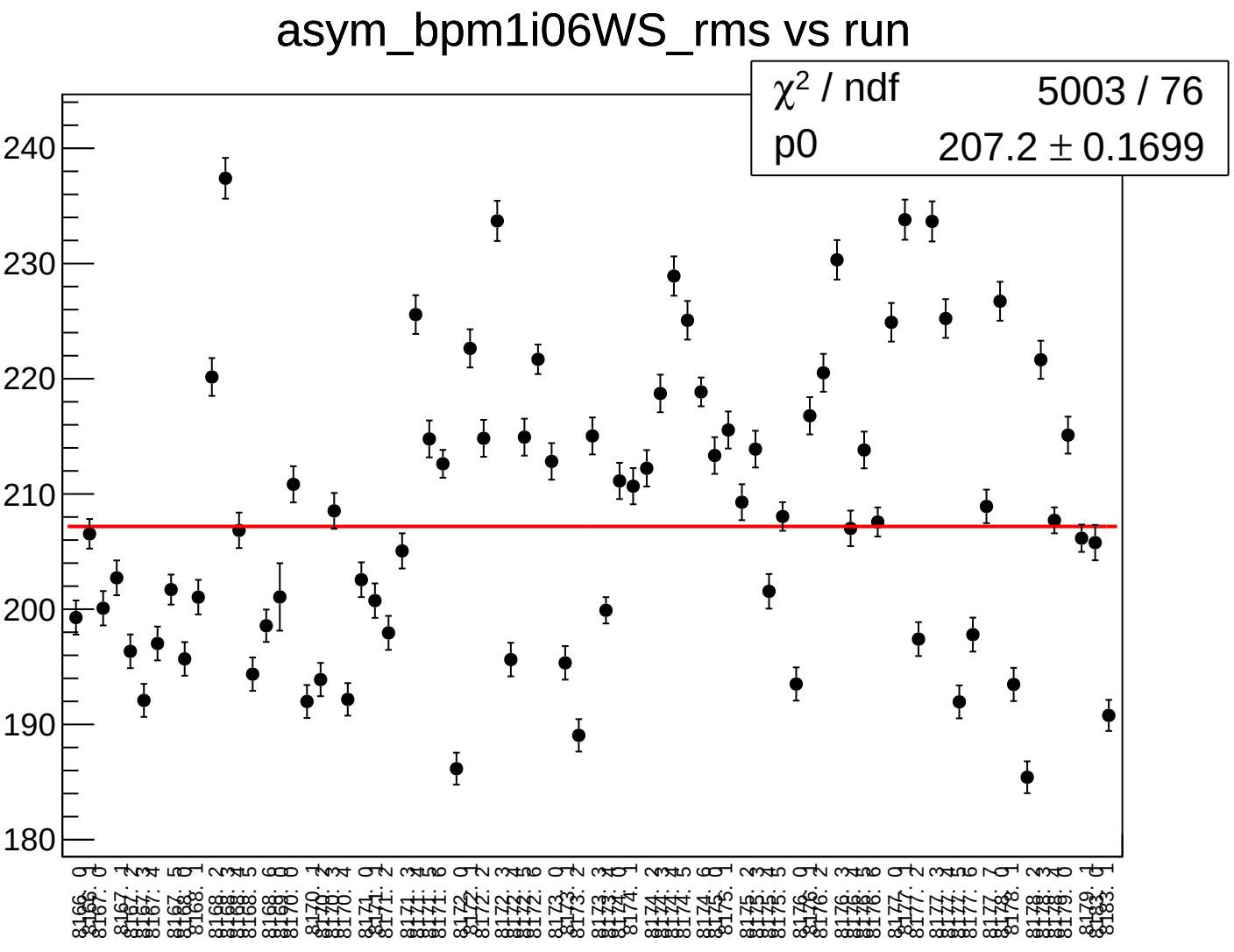

asym_bpm1i04WS_mean vs run
χ² / ndf 2656 / 76
p0 6484 ± 187.4
pull
Entries 77
Mean −479.8
Std Dev 530

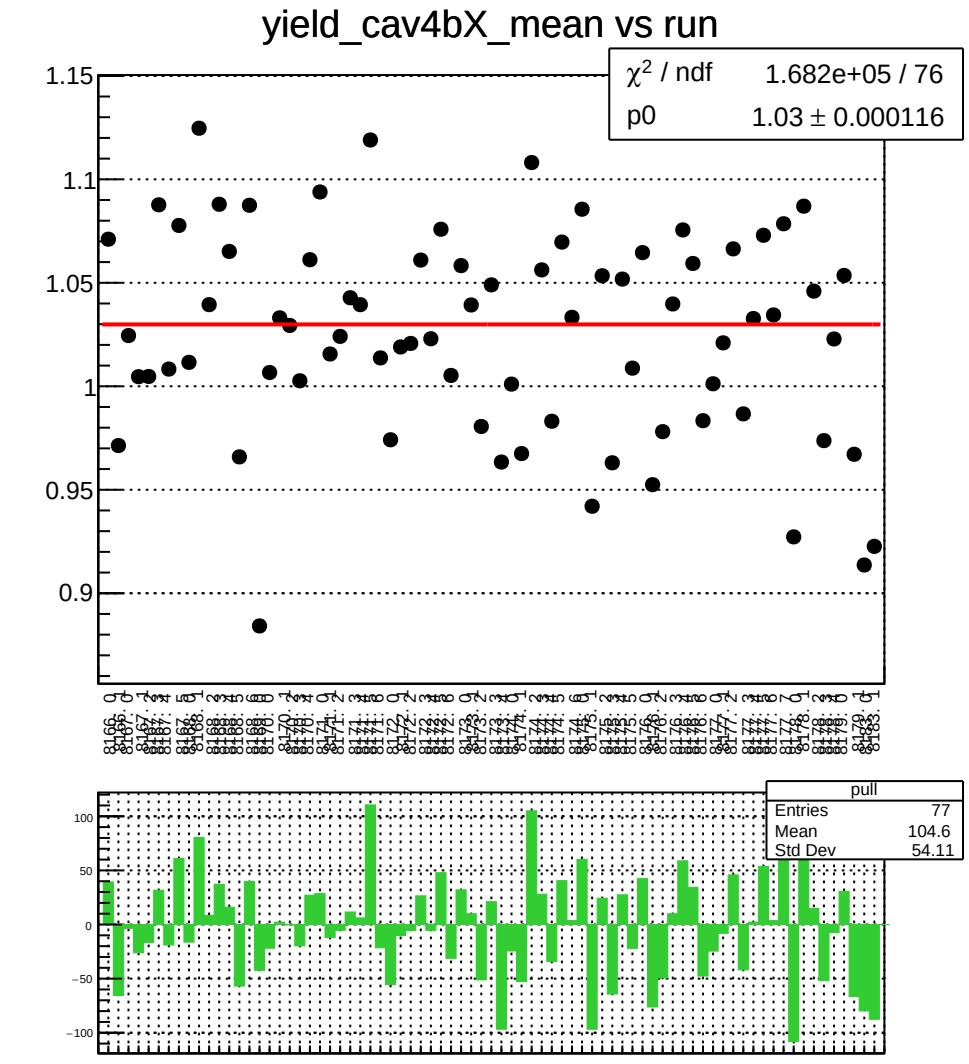

pull1D
Entries 77
Mean 1.184
Std Dev 4.823

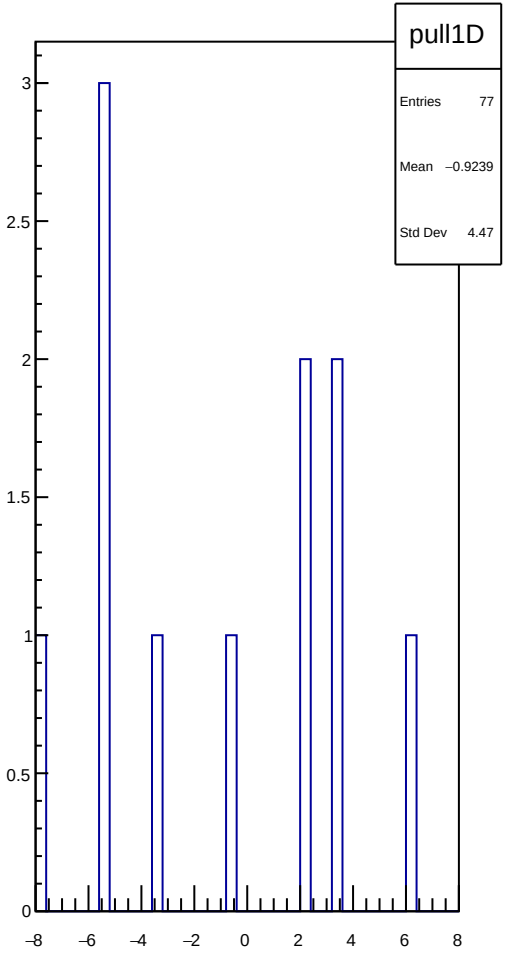

asym_bpm1i04WS_rms vs run
χ² / ndf 4318 / 76
p0 161.6 ± 0.1325
190
180
170
160
150
140

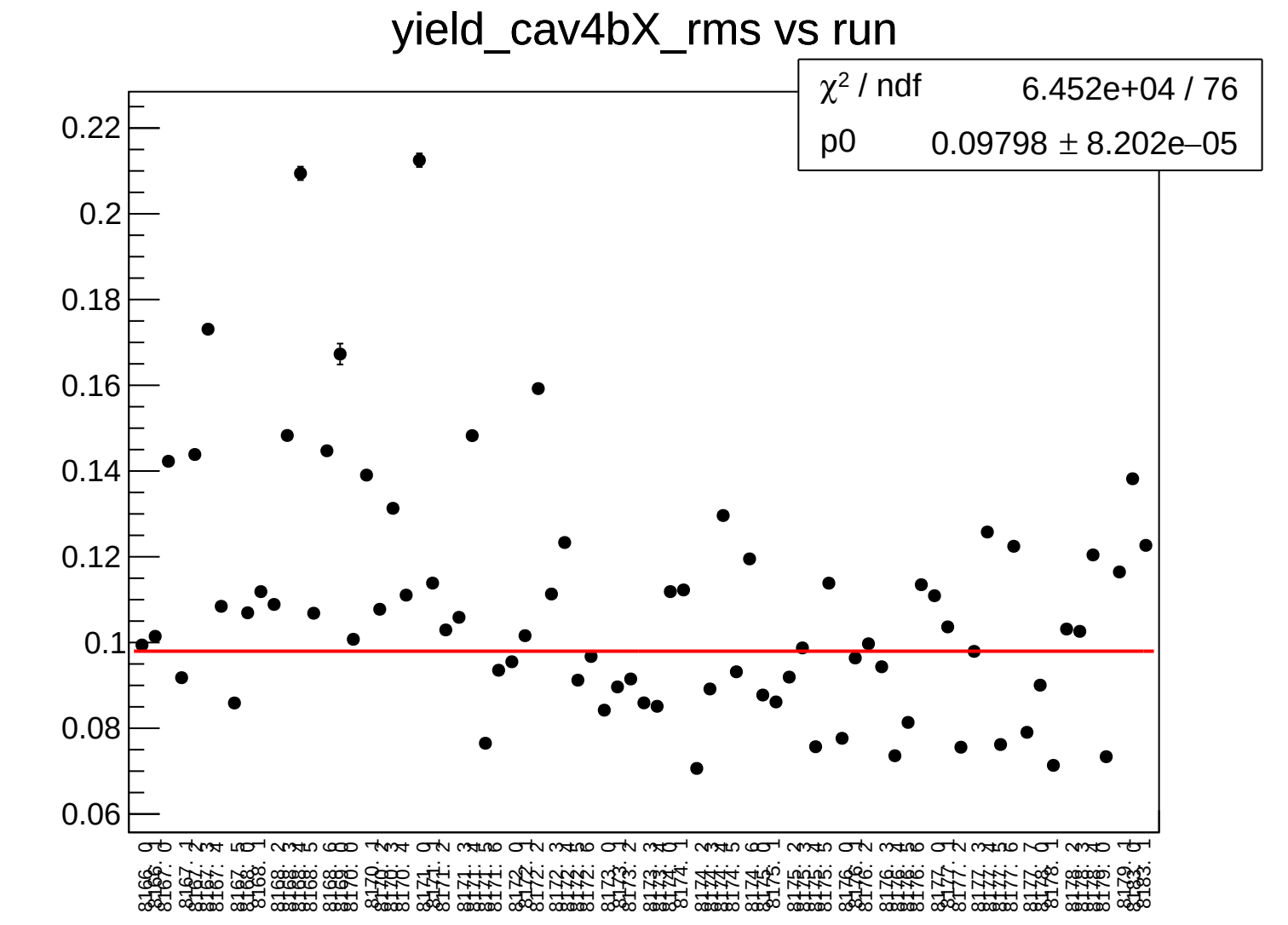

asym_bpm1i06WS_mean vs run
χ^2 / ndf 2233 / 76
p0 7287 ± 240.3
pull
Entries 77
Mean −1514
Std Dev 1565

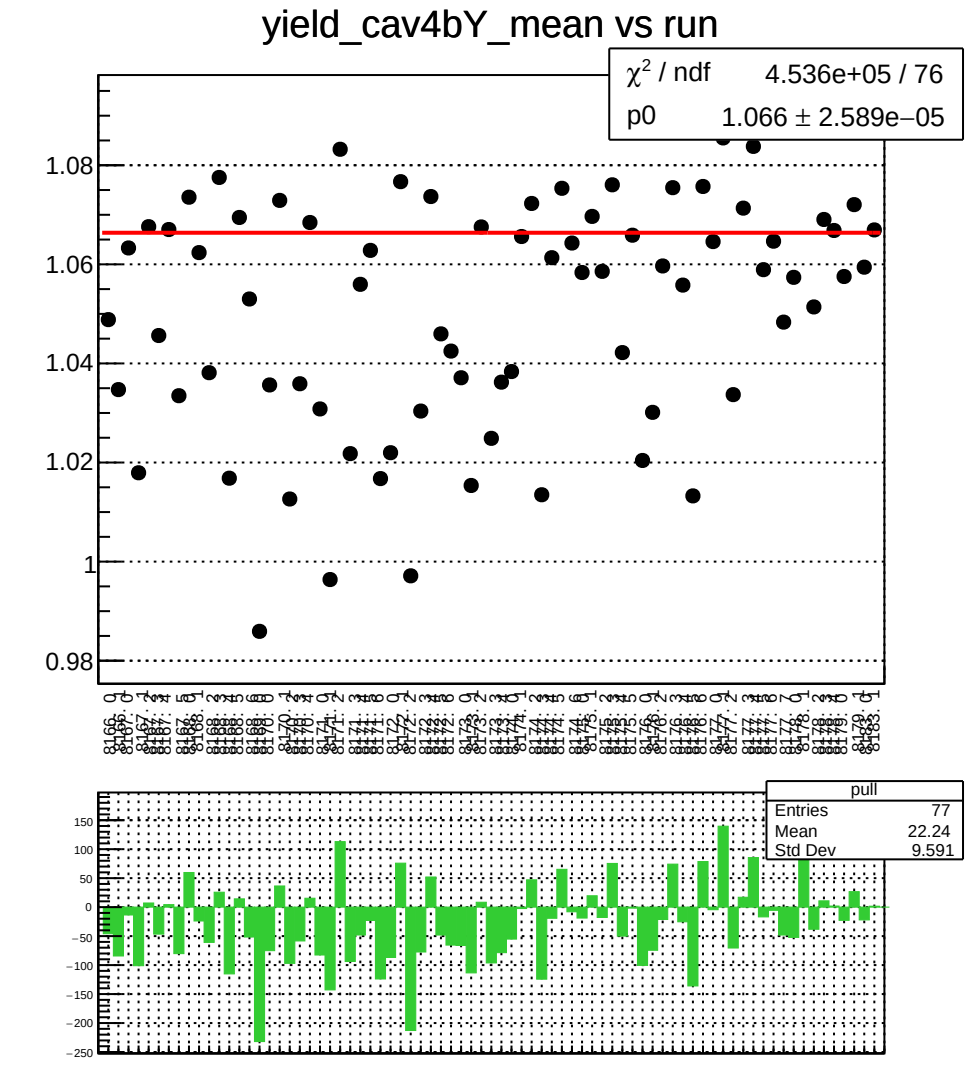

pull1D
Entries 77
Mean 1.058
Std Dev 4.477

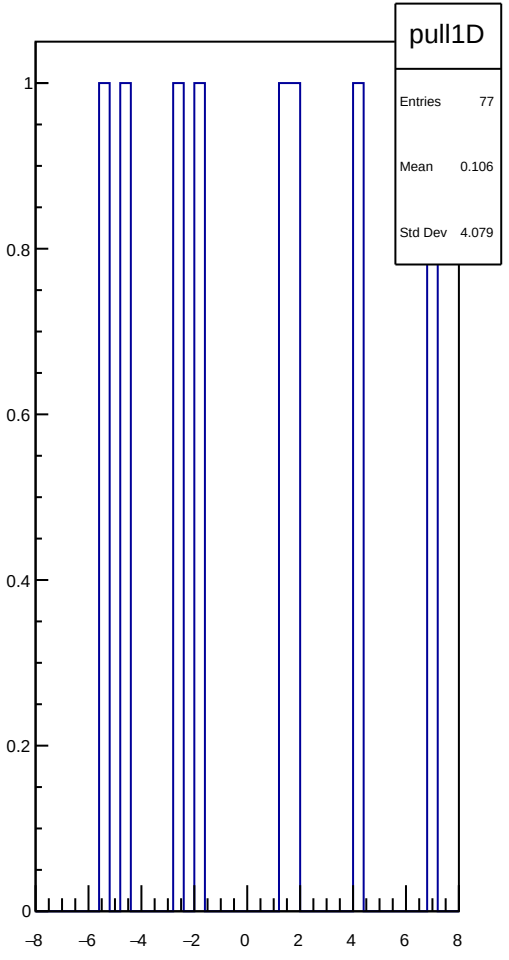

asym_bpm1i06WS_rms vs run
χ² / ndf 5003 / 76
p0 207.2 ± 0.1699
240
230
220
210
200
190
180

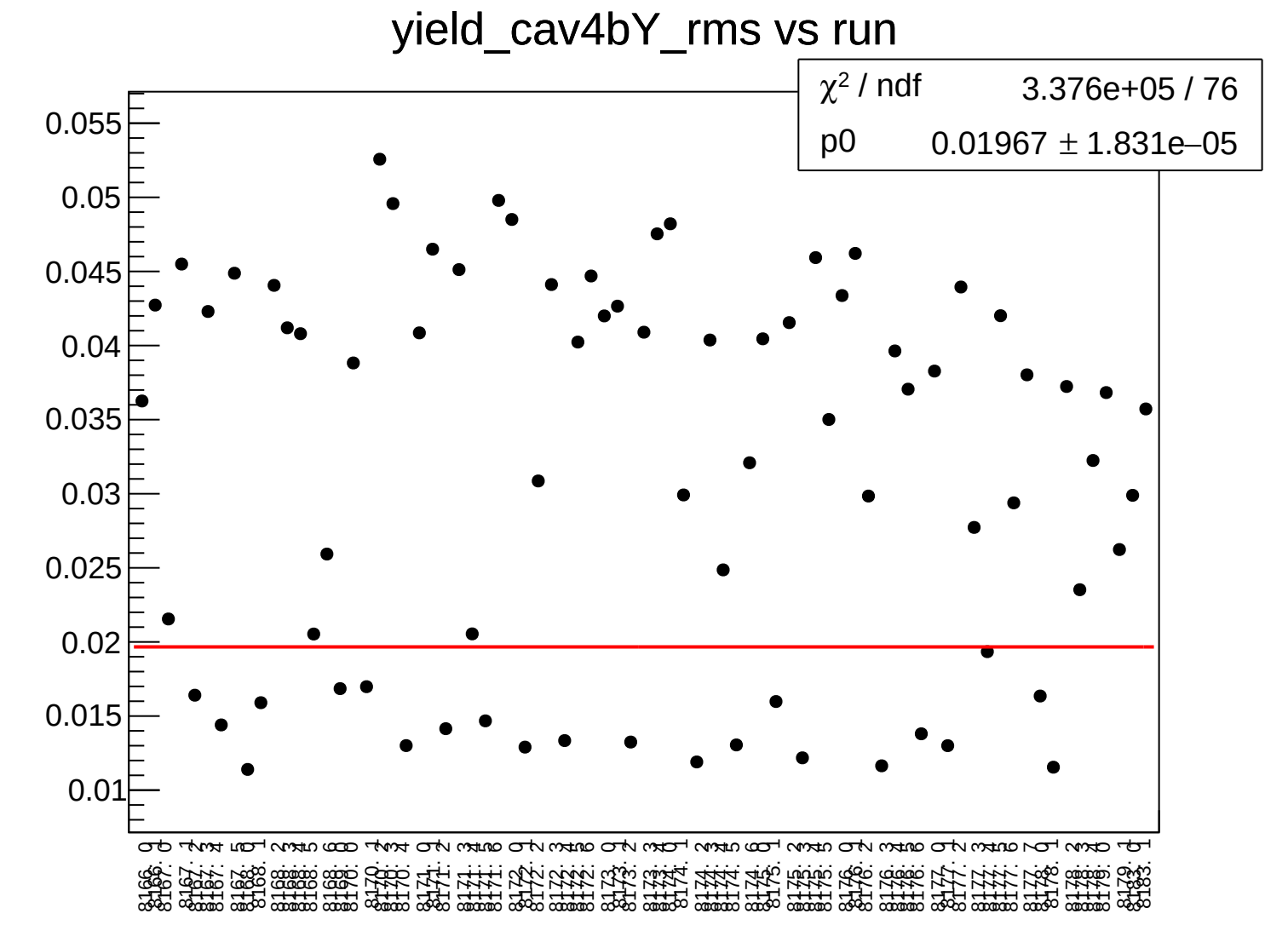

yield_cav4bX_mean vs run
χ² / ndf 1.682e+05 / 76
p0 1.03 ± 0.000116
pull
Entries 77
Mean 104.6
Std Dev 54.11

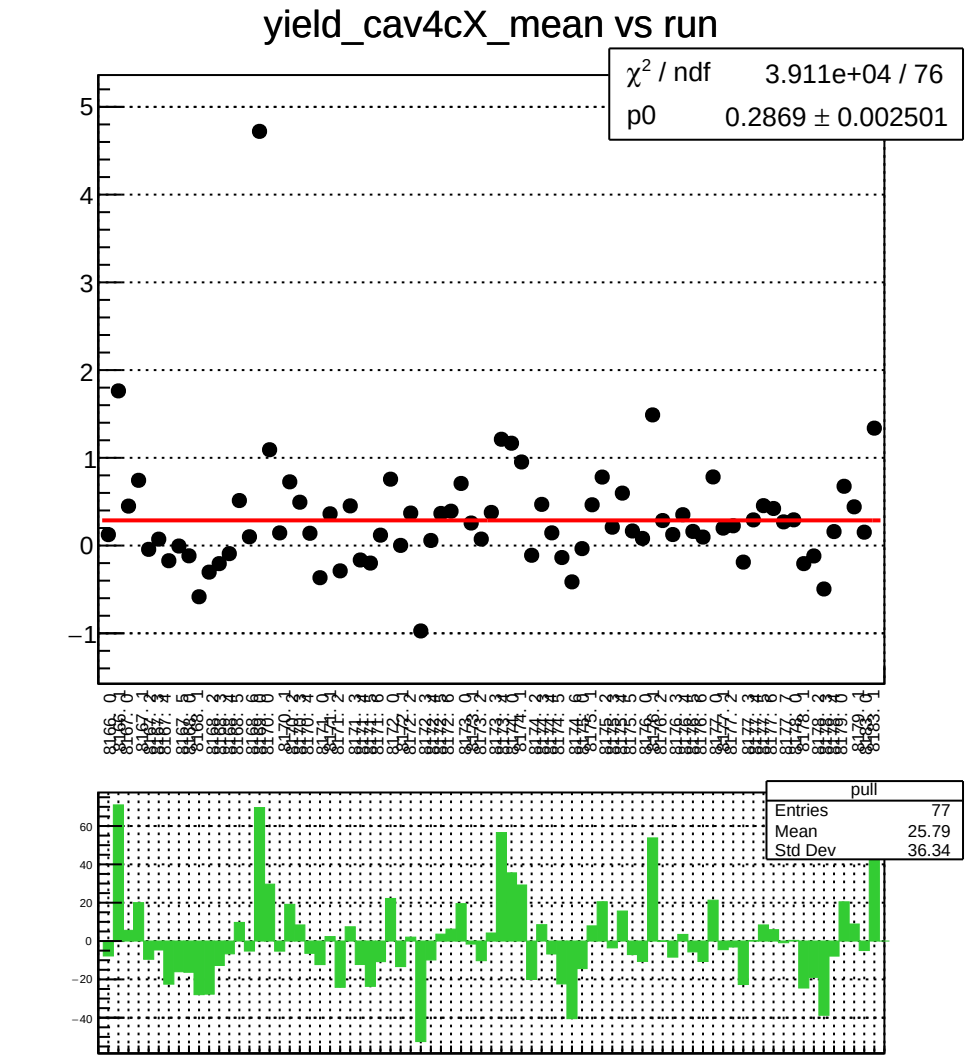

pull1D
Entries 77
Mean −0.9239
Std Dev 4.47

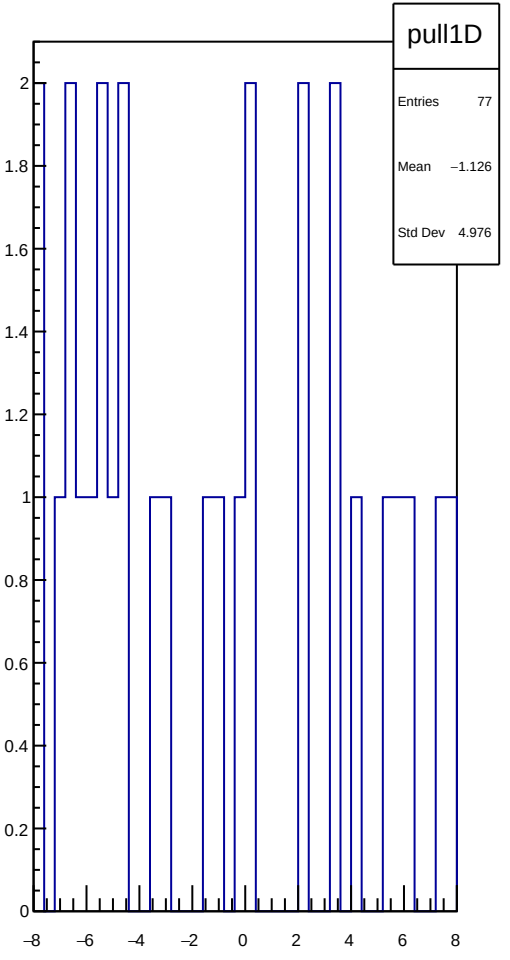

yield_cav4bX_rms vs run
χ² / ndf 6.452e+04 / 76
p0 0.09798 ± 8.202e–05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

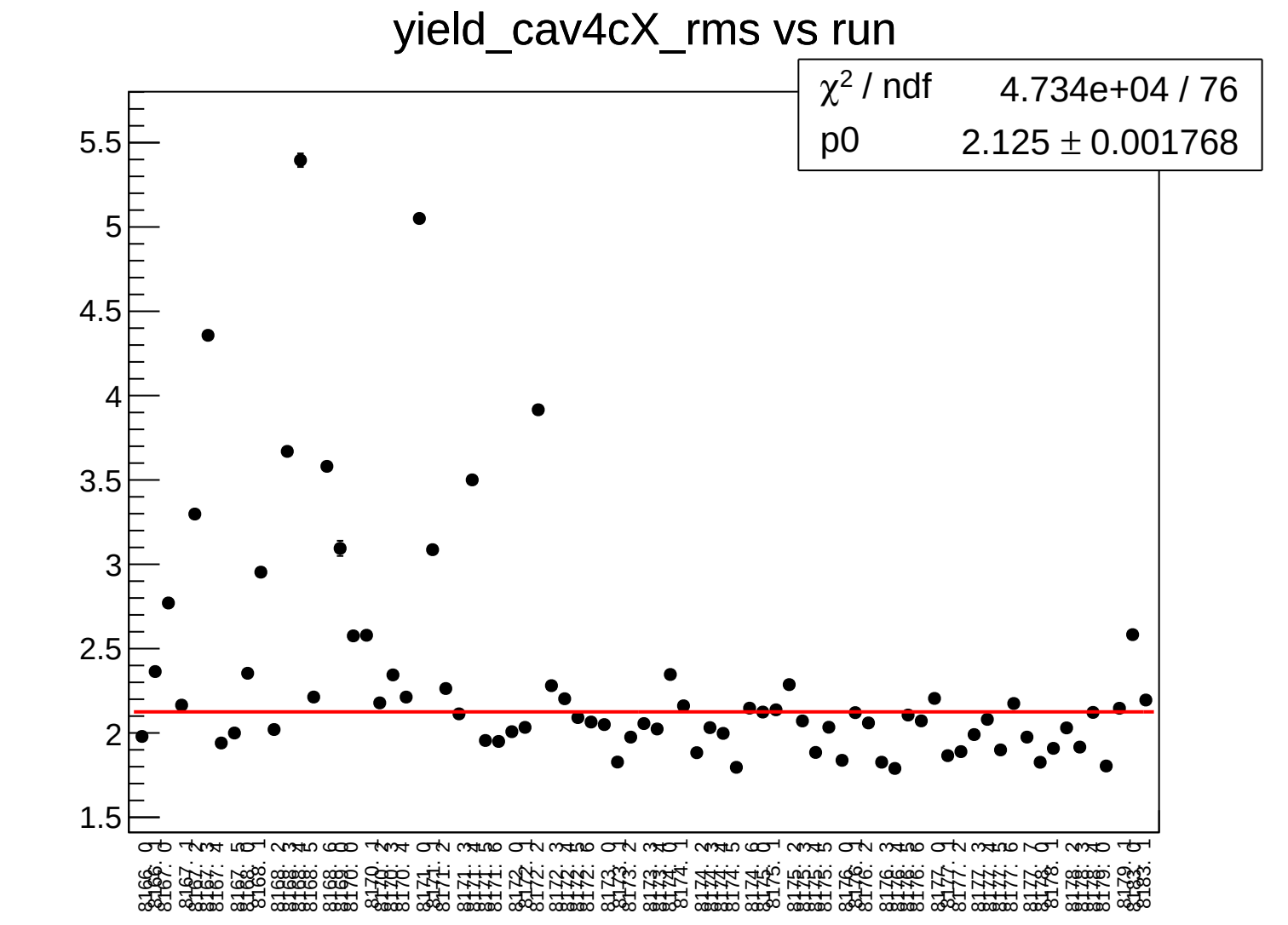

yield_cav4bY_mean vs run
χ² / ndf 4.536e+05 / 76
p0 1.066 ± 2.589e−05
1.08
1.06
1.04
1.02
1
0.98
pull
Entries 77
Mean 22.24
Std Dev 9.591
150
100
50
0
−50
−100
−150
−200
−250

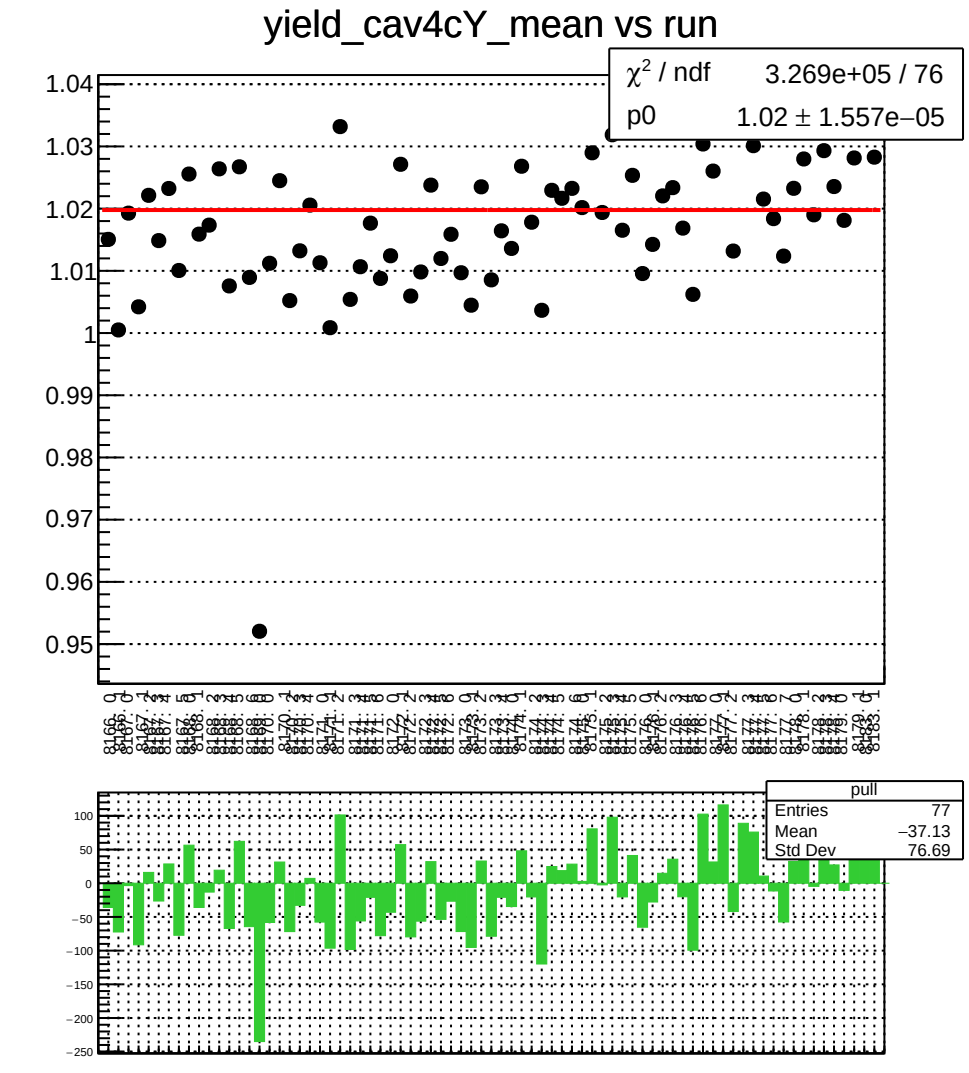

pull1D
Entries 77
Mean 0.106
Std Dev 4.079
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

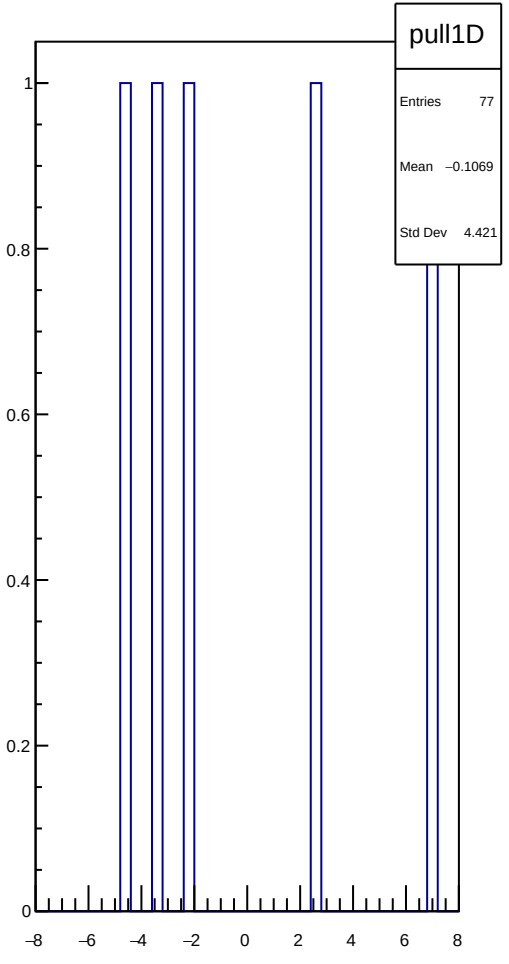

yield_cav4bY_rms vs run
χ² / ndf 3.376e+05 / 76
p0 0.01967 ± 1.831e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

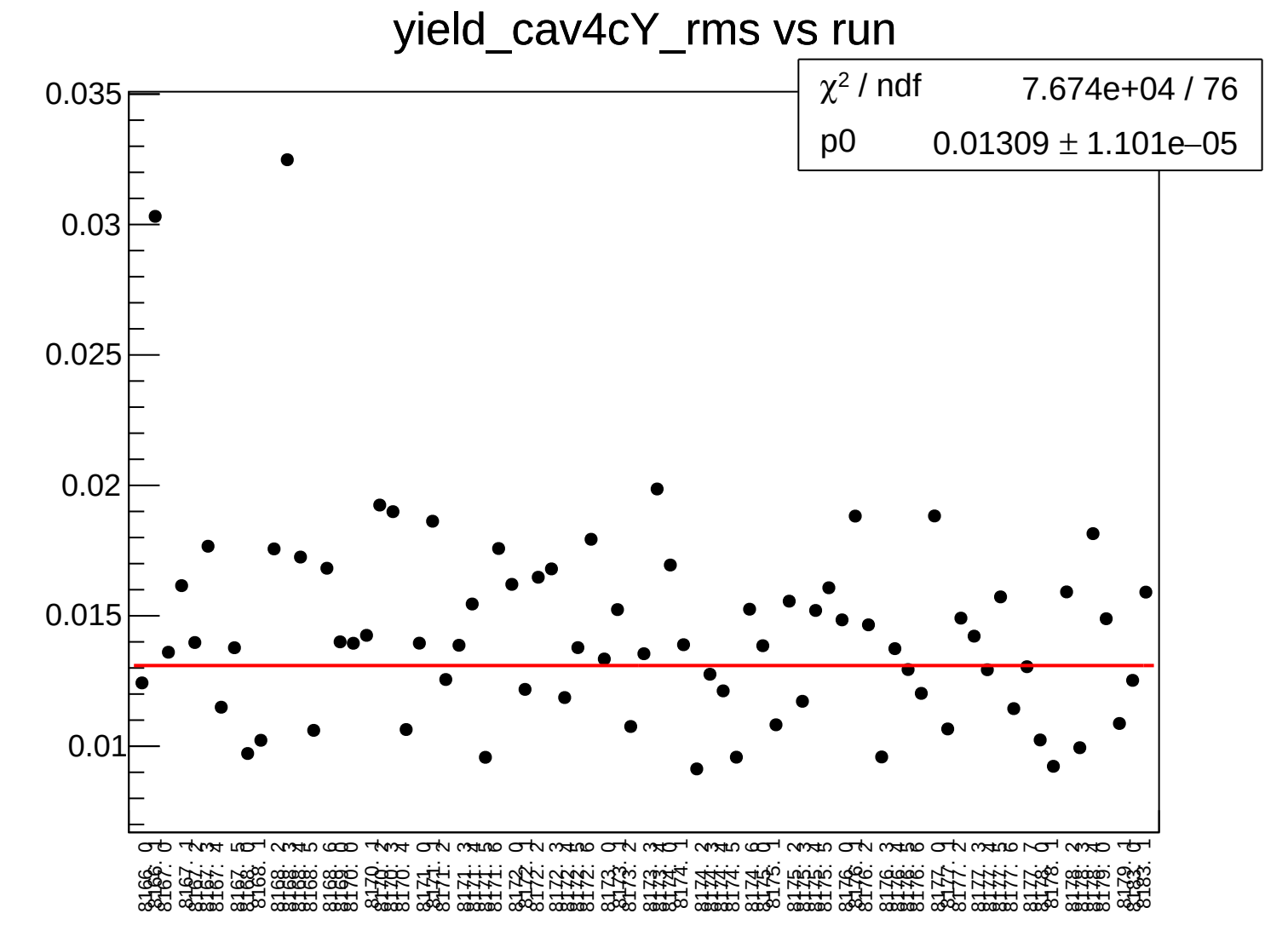

yield_cav4cX_mean vs run
χ² / ndf 3.911e+04 / 76
p0 0.2869 ± 0.002501
pull
Entries 77
Mean 25.79
Std Dev 36.34

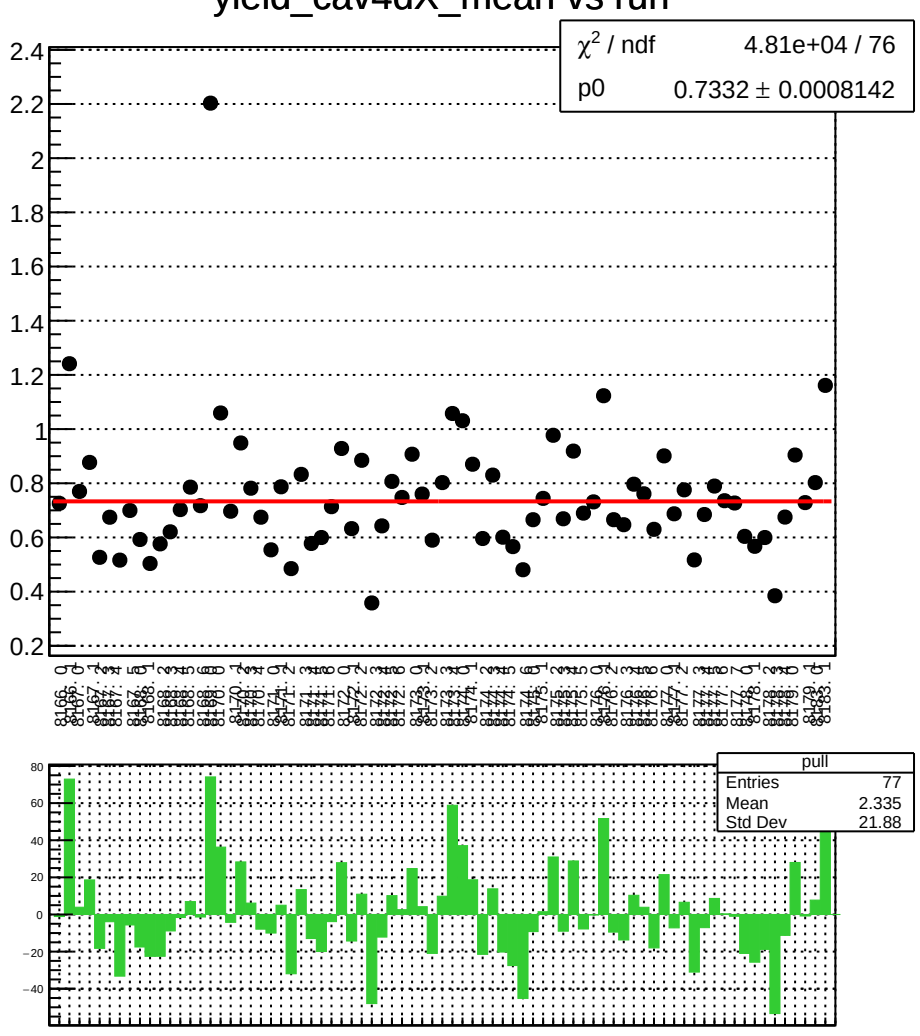

pull1D
Entries 77
Mean −1.126
Std Dev 4.976

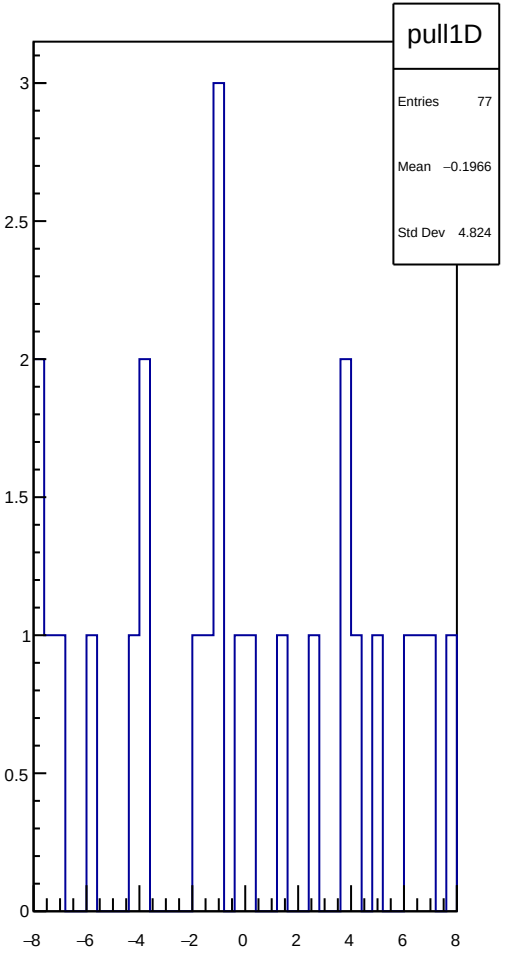

yield_cav4cX_rms vs run
χ^2 / ndf 4.734e+04 / 76
p0 2.125 ± 0.001768
5.5
5
4.5
4
3.5
3
2.5
2
1.5

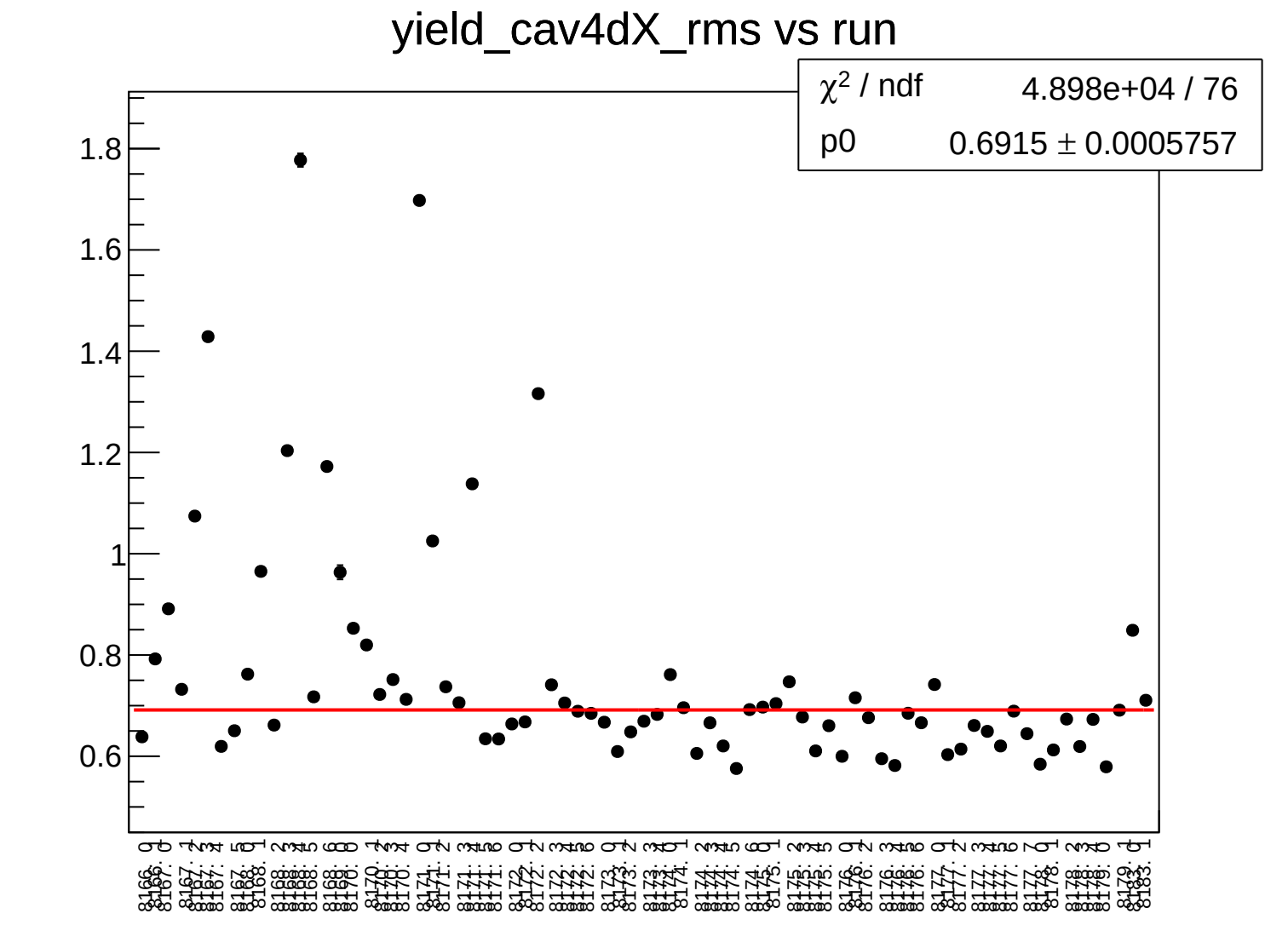

yield_cav4cY_mean vs run
χ² / ndf 3.269e+05 / 76
p0 1.02 ± 1.557e−05
1.04
1.03
1.02
1.01
1
0.99
0.98
0.97
0.96
0.95
pull
Entries 77
Mean −37.13
Std Dev 76.69
100
50
0
−50
−100
−150
−200
−250

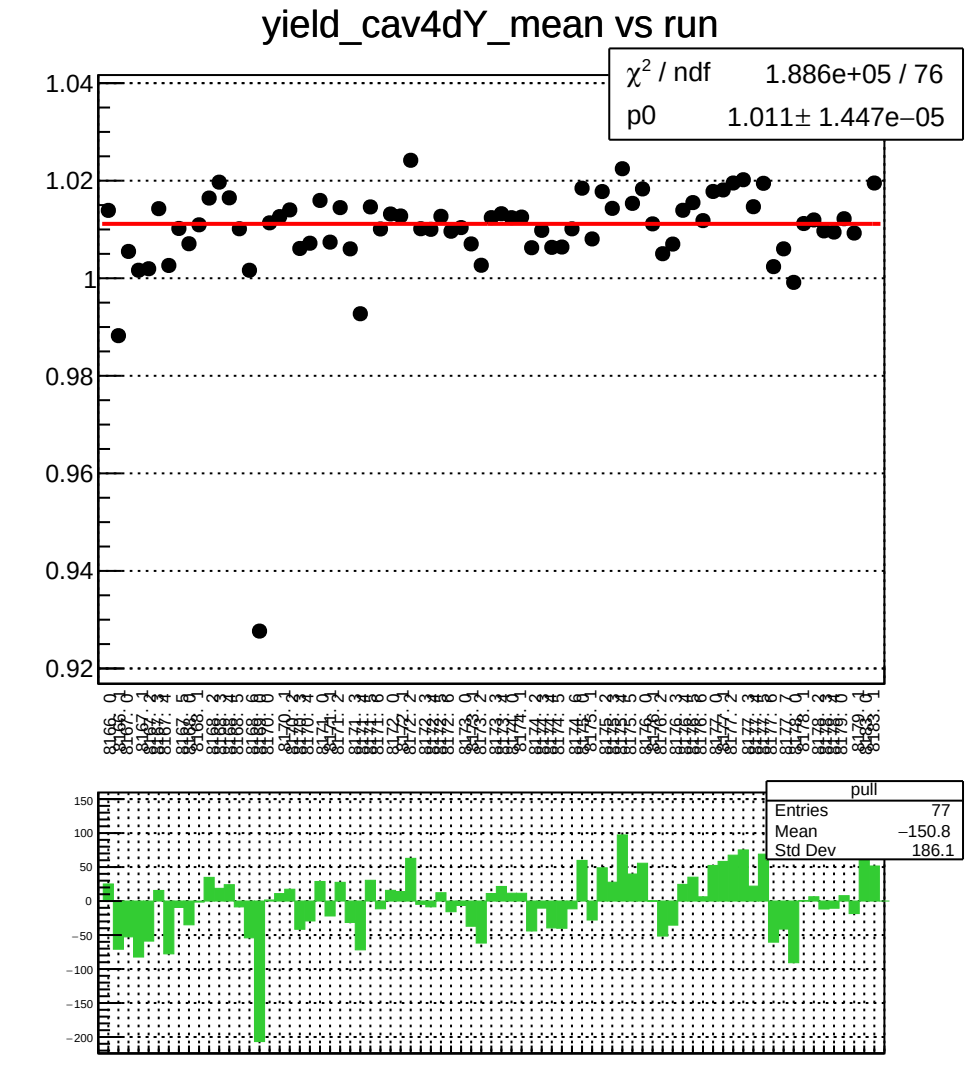

pull1D
Entries 77
Mean −0.1069
Std Dev 4.421
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

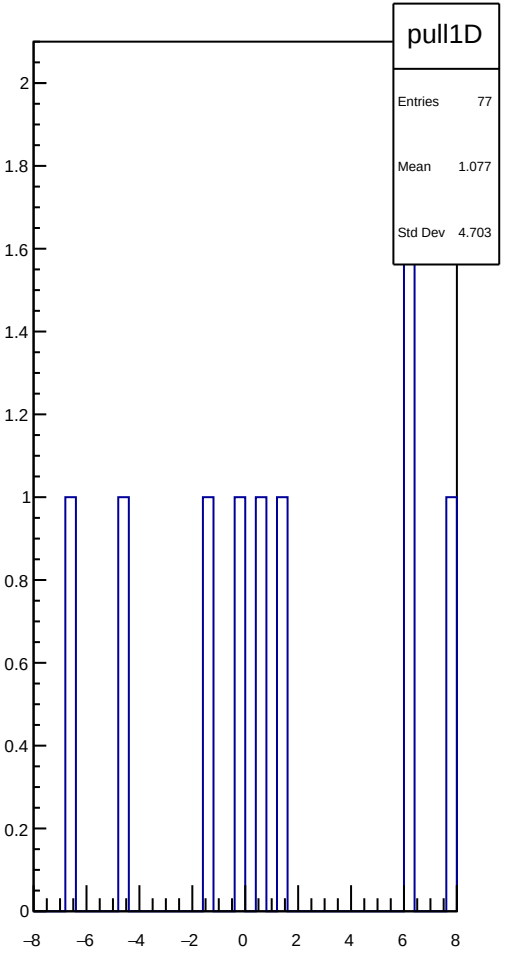

yield_cav4cY_rms vs run
χ² / ndf 7.674e+04 / 76
p0 0.01309 ± 1.101e−05
0.035
0.03
0.025
0.02
0.015
0.01

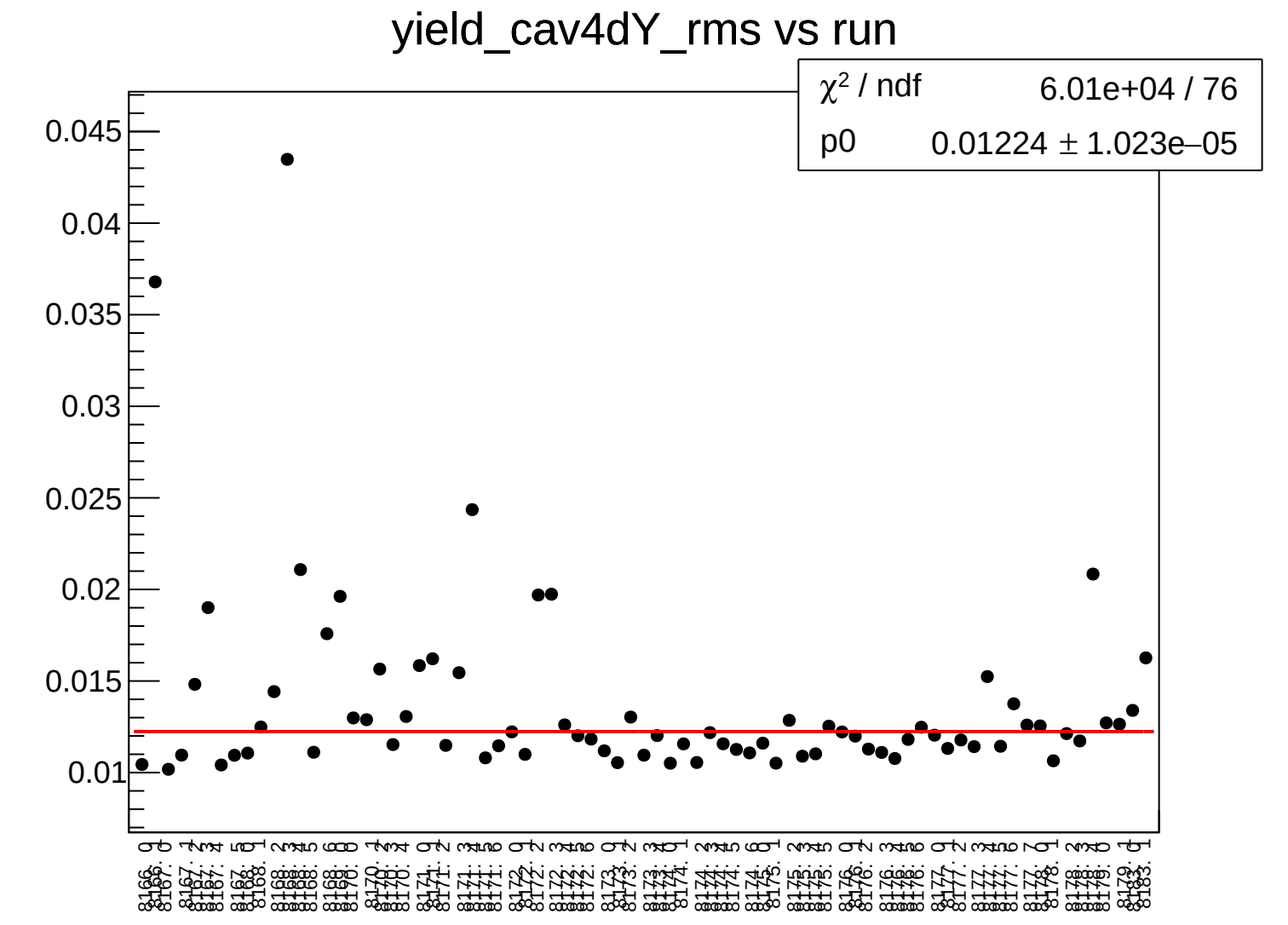

yield_cav4dX_mean vs run
χ² / ndf 4.81e+04 / 76
p0 0.7332 ± 0.0008142
pull
Entries 77
Mean 2.335
Std Dev 21.88

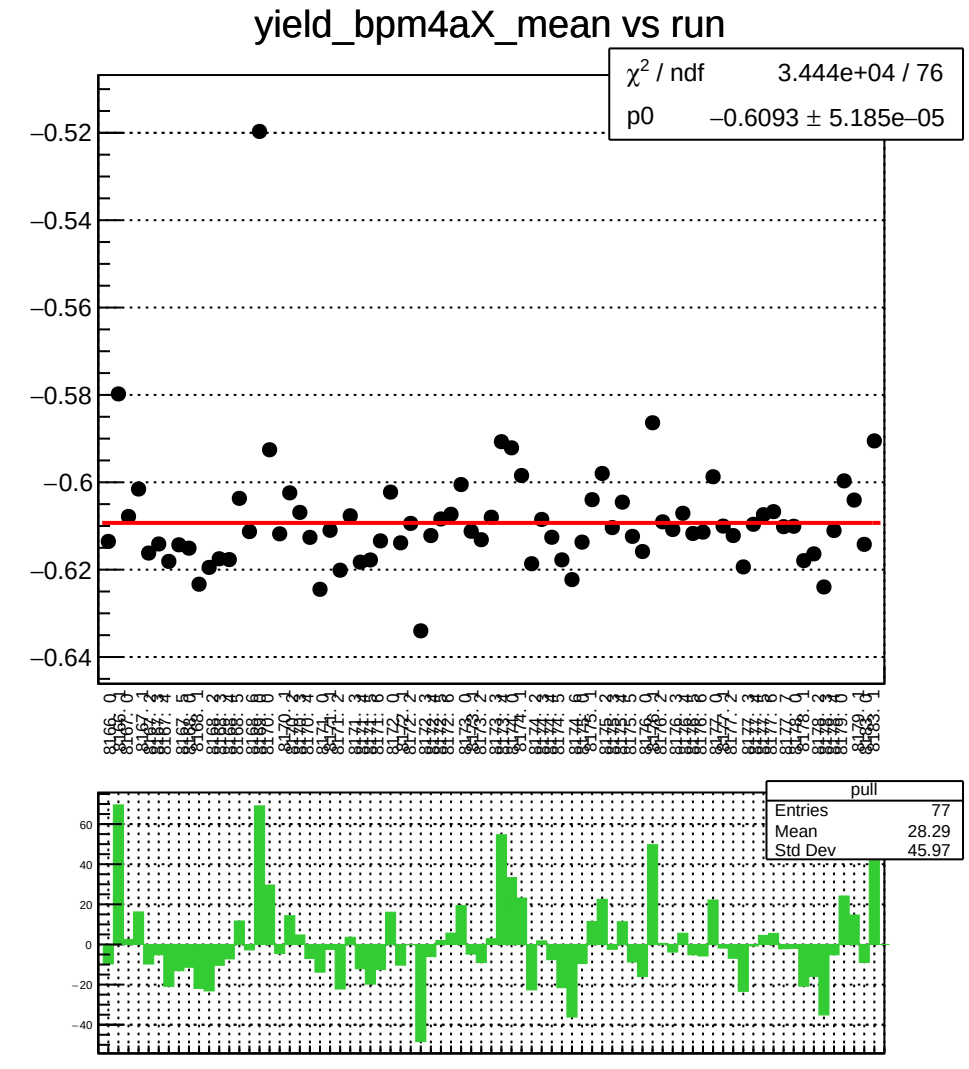

pull1D
Entries 77
Mean −0.1966
Std Dev 4.824

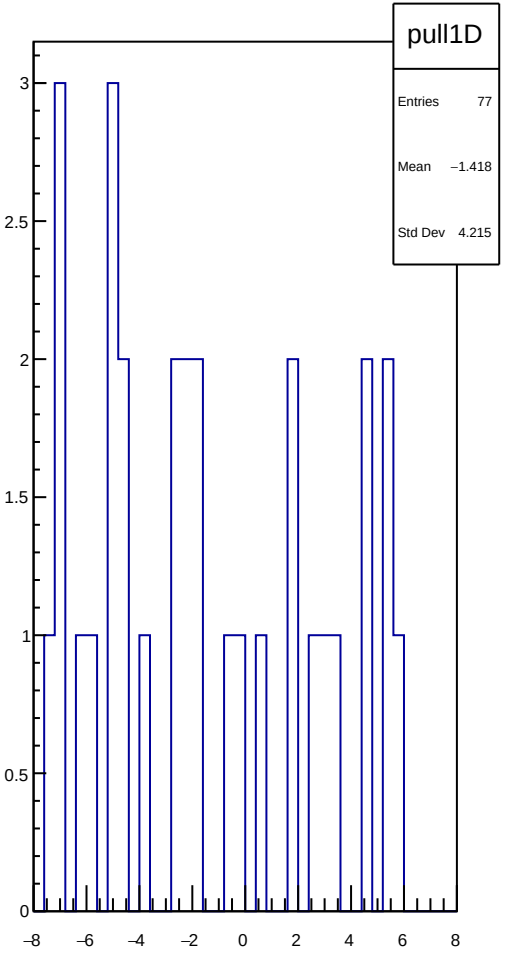

yield_cav4dX_rms vs run
χ² / ndf 4.898e+04 / 76
p0 0.6915 ± 0.0005757
1.8
1.6
1.4
1.2
1
0.8
0.6

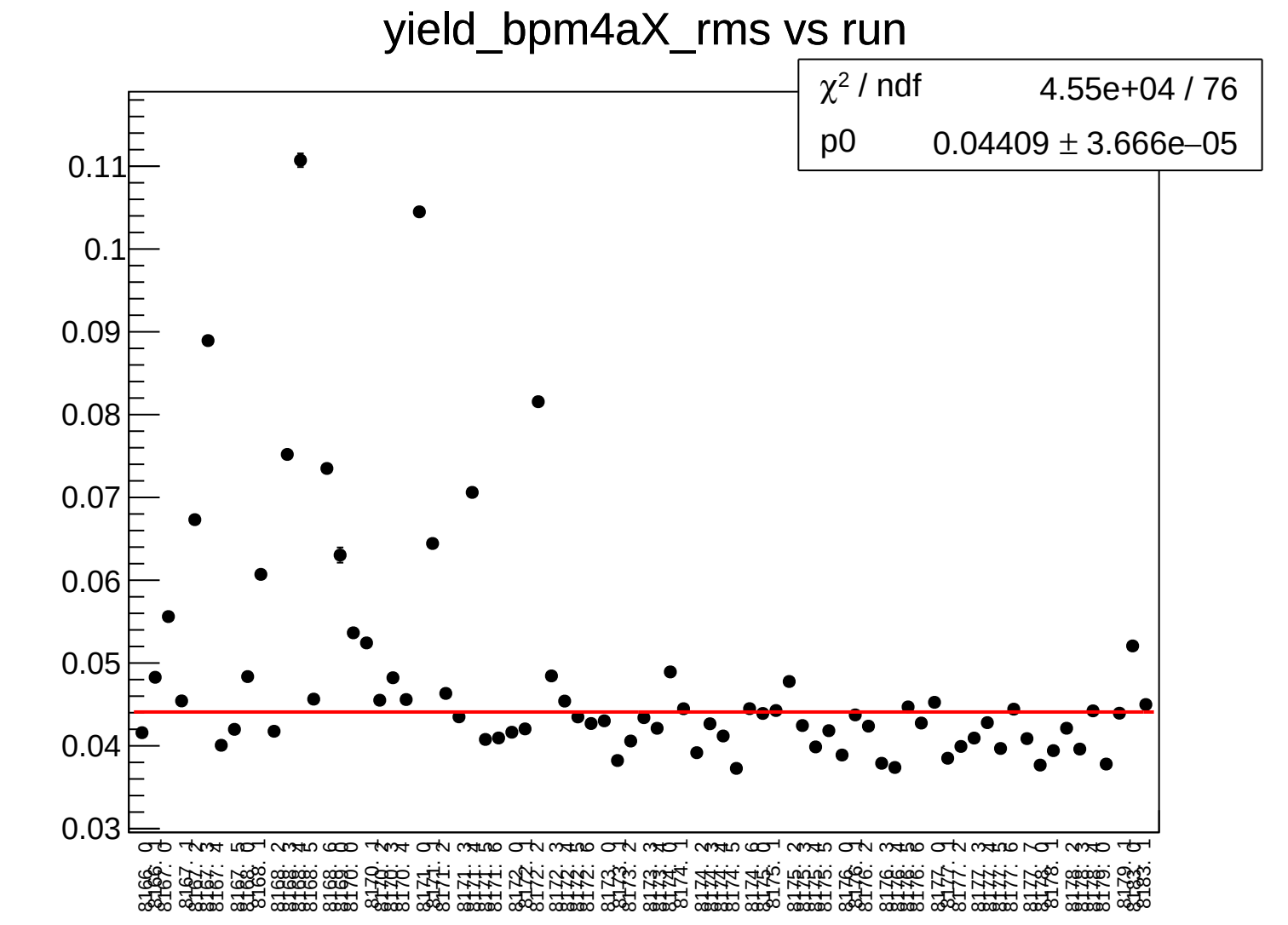

yield_cav4dY_mean vs run
χ² / ndf 1.886e+05 / 76
p0 1.011± 1.447e−05
pull
Entries 77
Mean −150.8
Std Dev 186.1

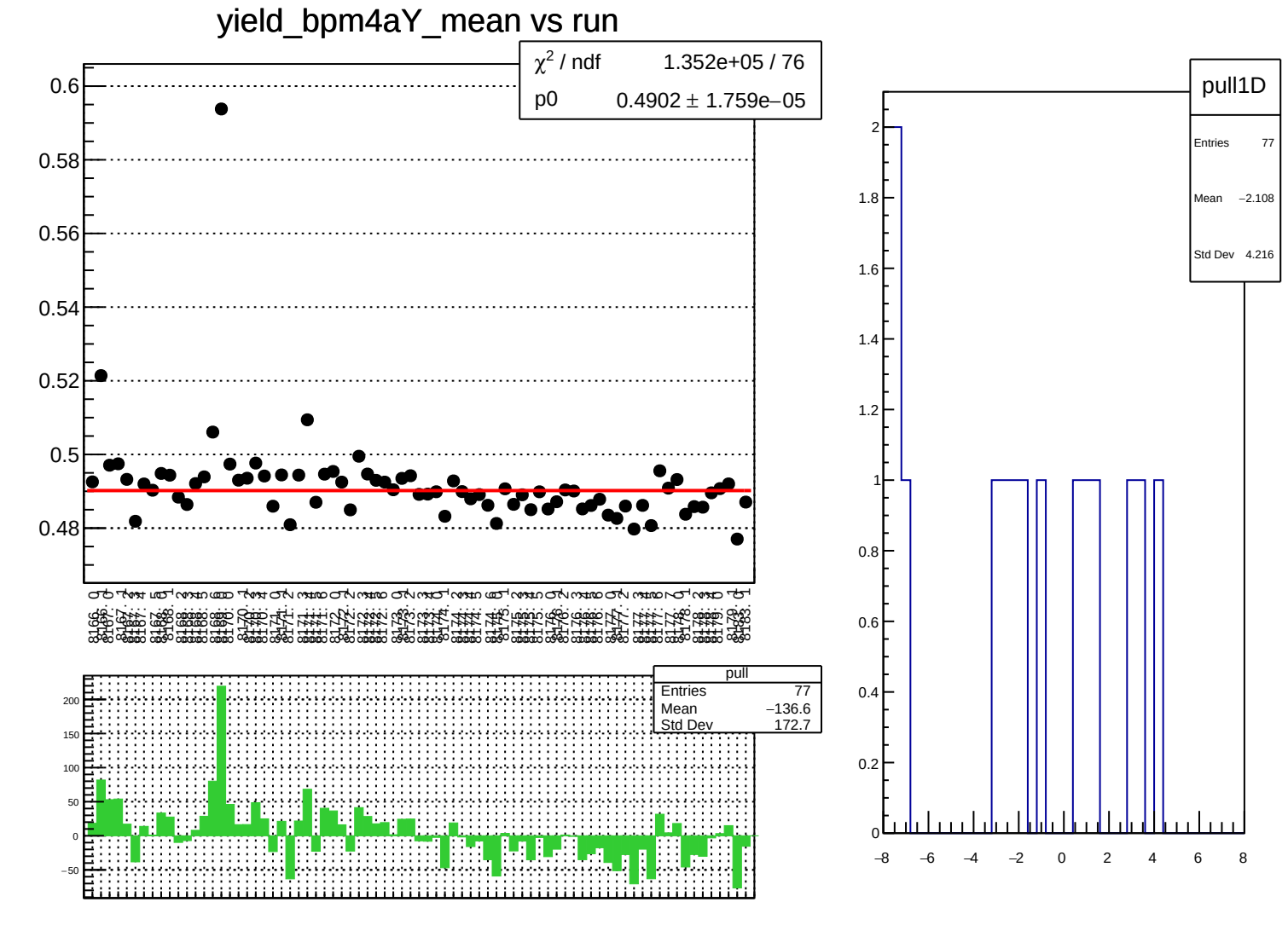

pull1D
Entries 77
Mean 1.077
Std Dev 4.703

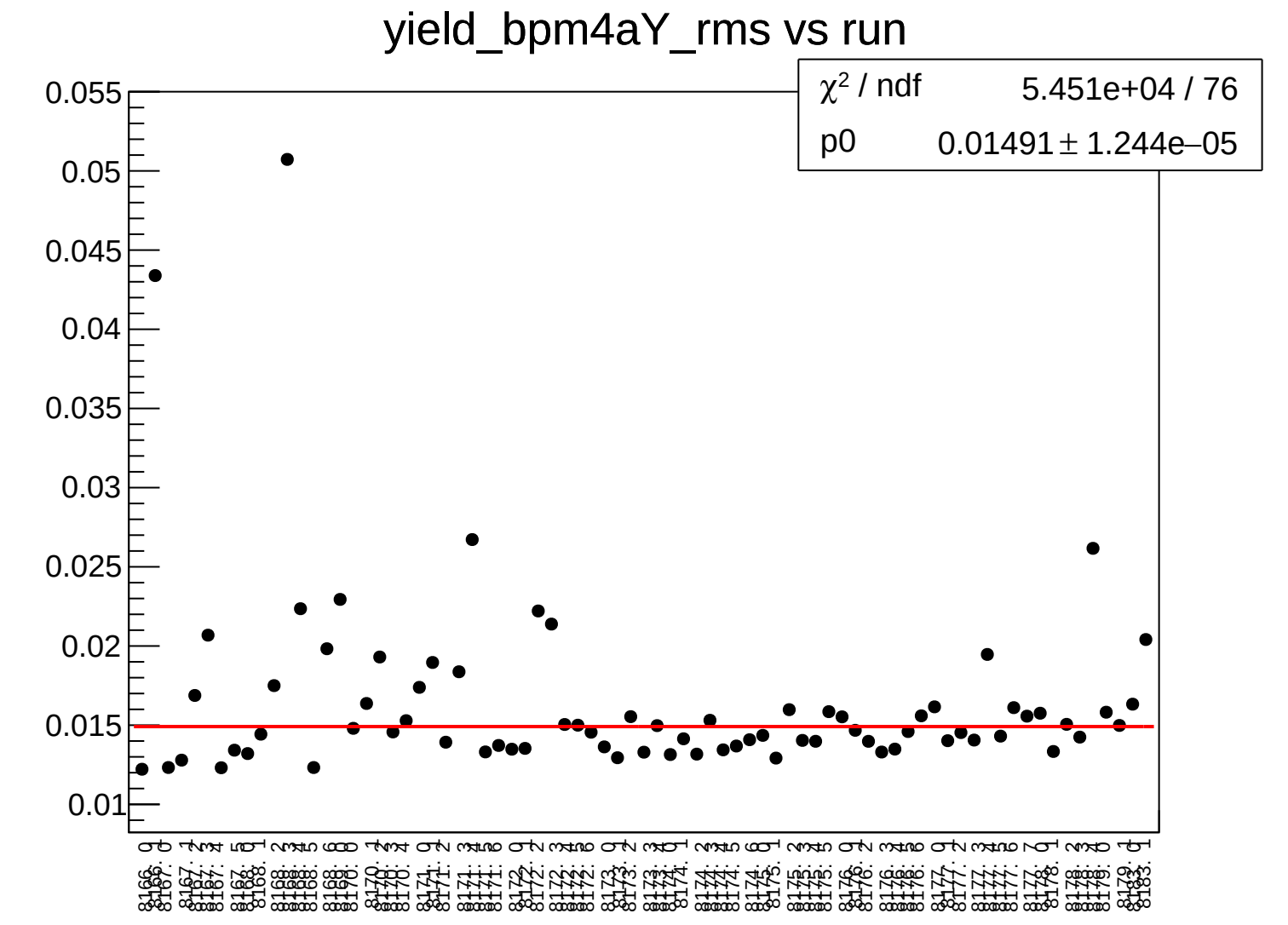

yield_cav4dY_rms vs run
χ² / ndf 6.01e+04 / 76
p0 0.01224 ± 1.023e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

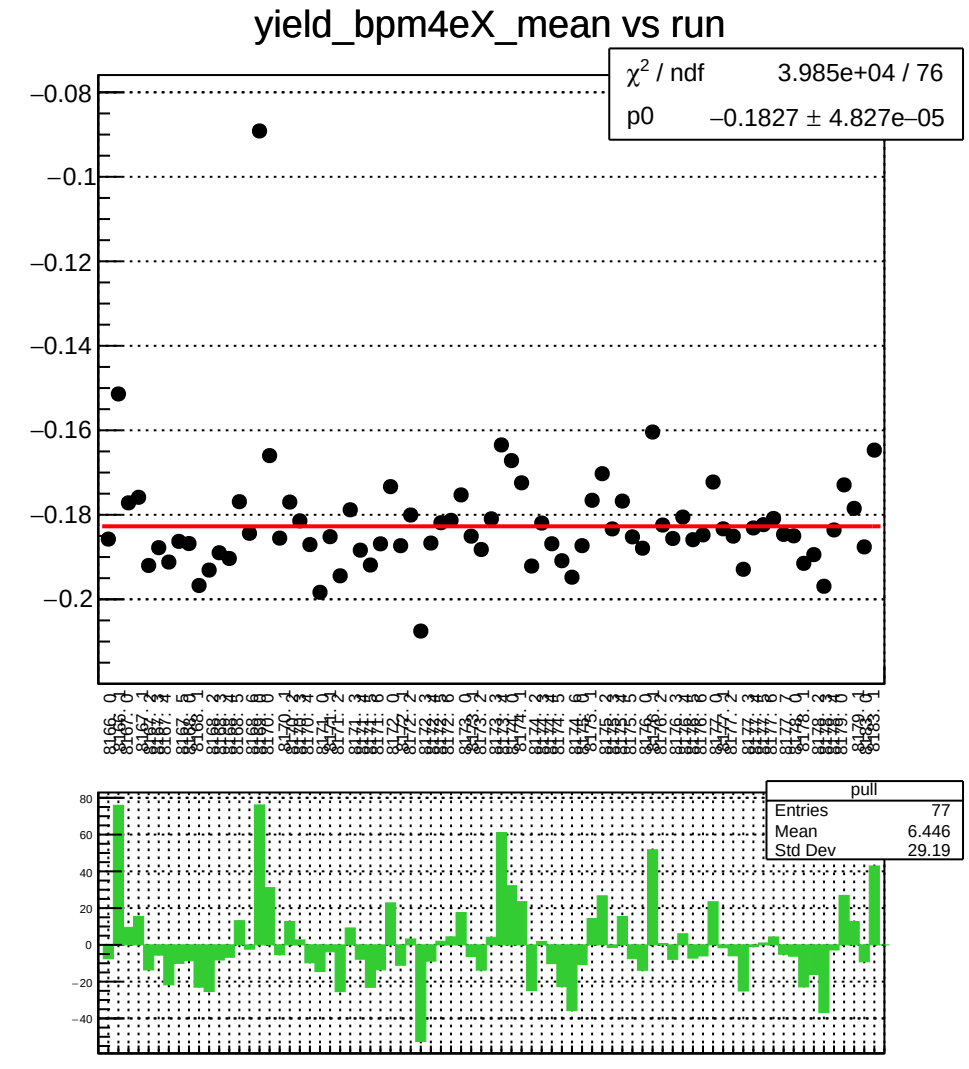

yield_bpm4aX_mean vs run
χ² / ndf 3.444e+04 / 76
p0 −0.6093 ± 5.185e−05
−0.52
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
pull
Entries 77
Mean 28.29
Std Dev 45.97
60
40
20
0
−20
−40

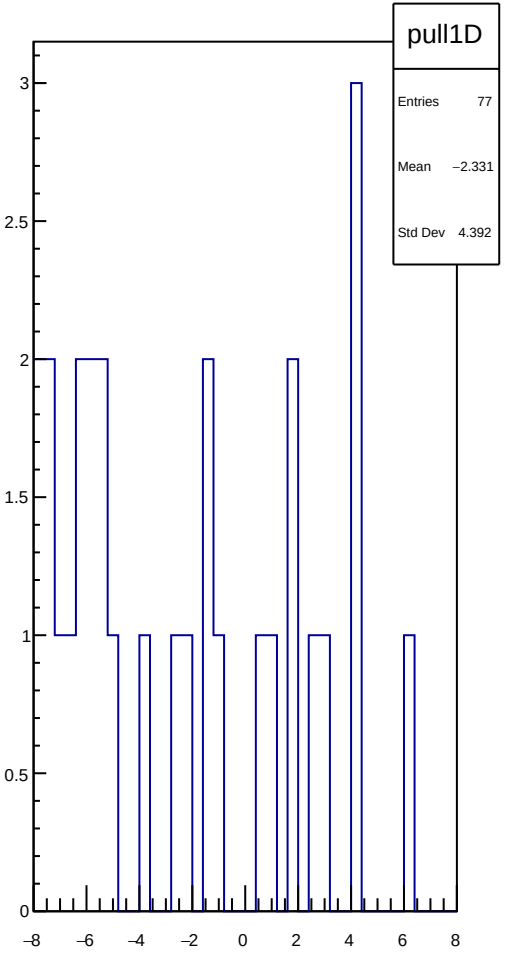

pull1D
Entries 77
Mean −1.418
Std Dev 4.215
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

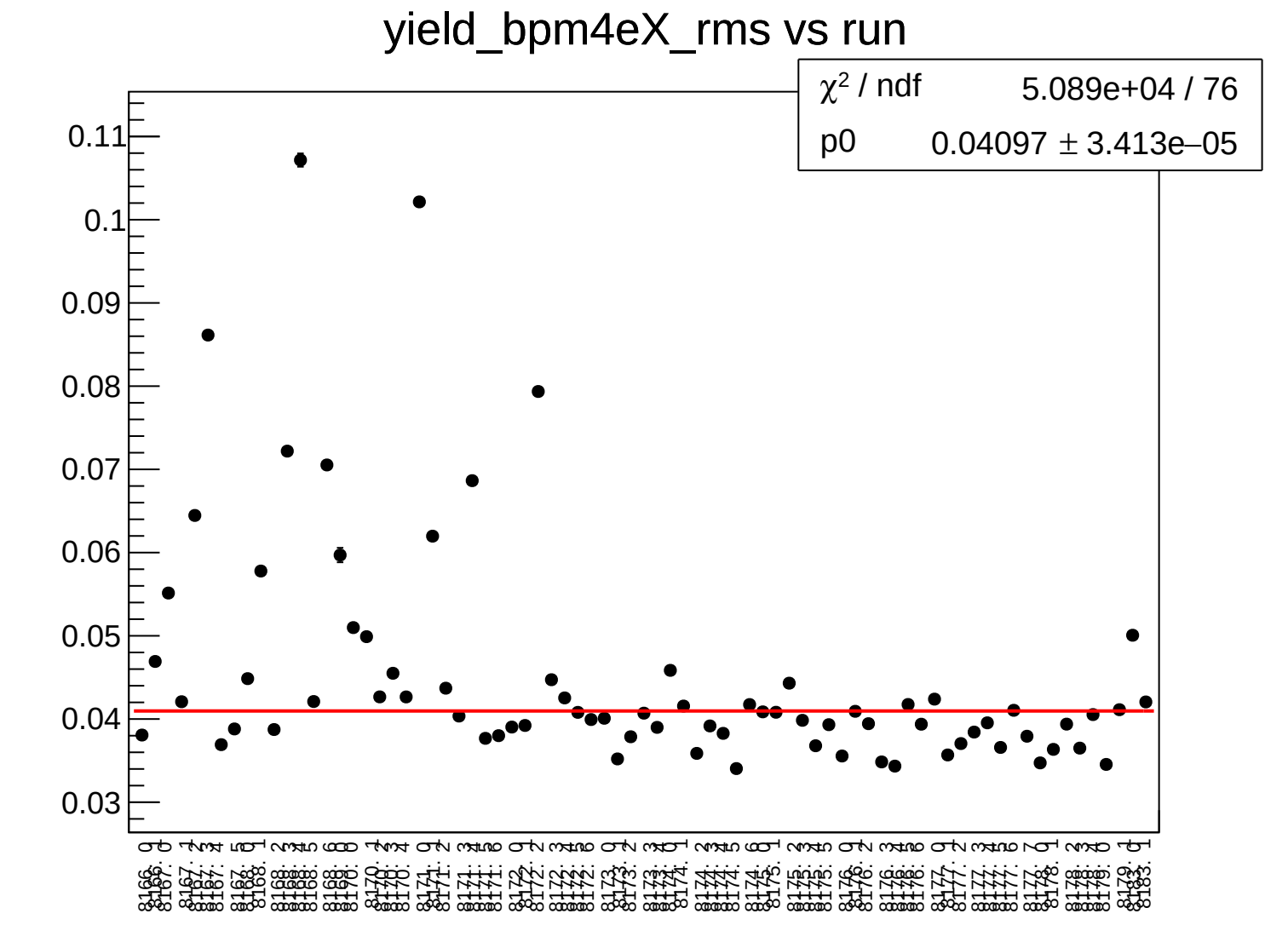

yield_bpm4aX_rms vs run
χ² / ndf 4.55e+04 / 76
p0 0.04409 ± 3.666e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

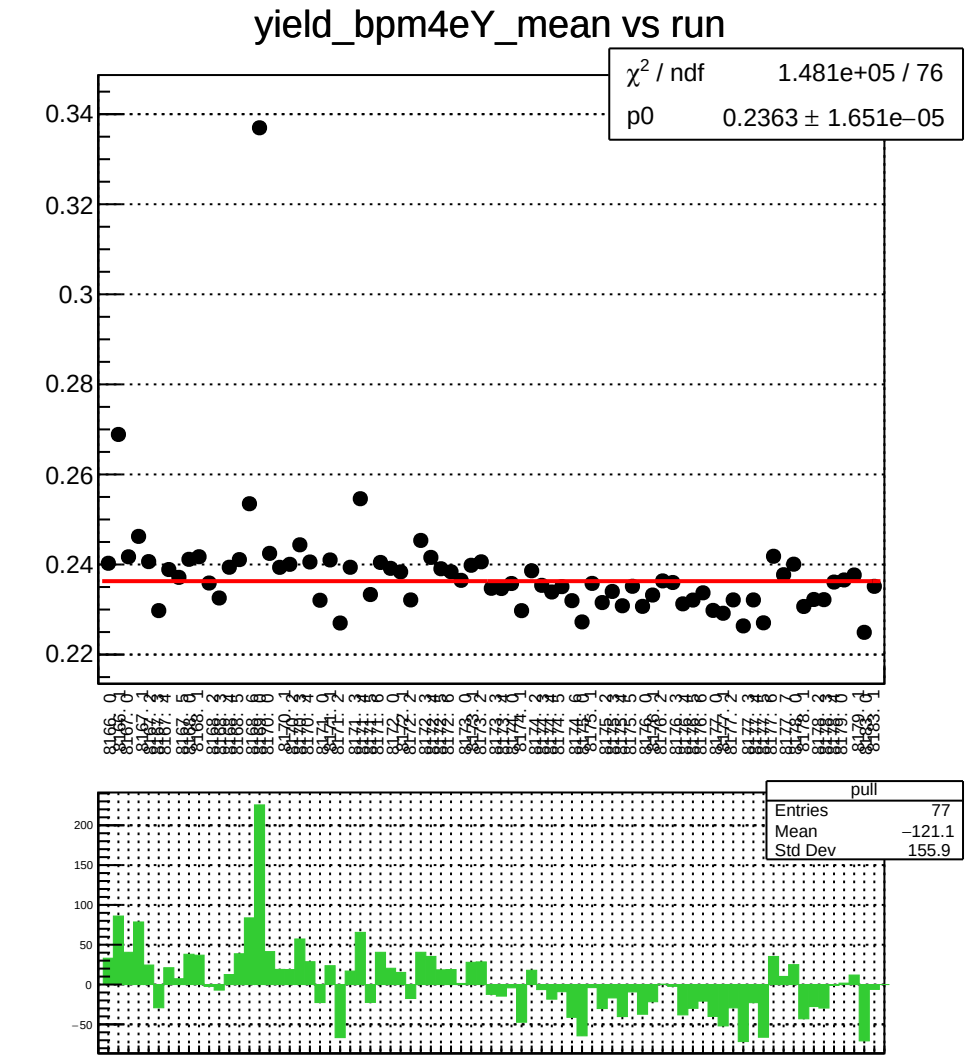

yield_bpm4aY_mean vs run
χ² / ndf 1.352e+05 / 76
p0 0.4902 ± 1.759e−05
pull
Entries 77
Mean −136.6
Std Dev 172.7
pull1D
Entries 77
Mean −2.108
Std Dev 4.216

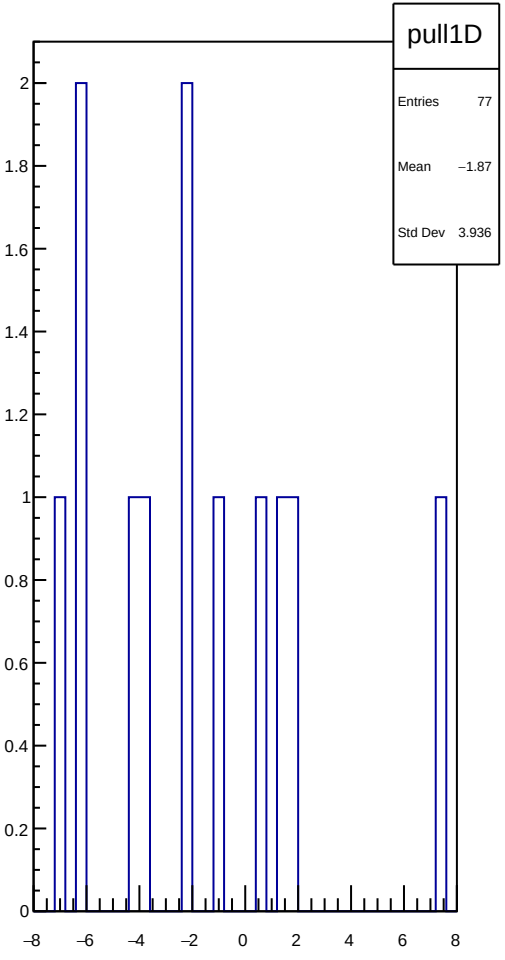

yield_bpm4aY_rms vs run
χ² / ndf 5.451e+04 / 76
p0 0.01491 ± 1.244e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

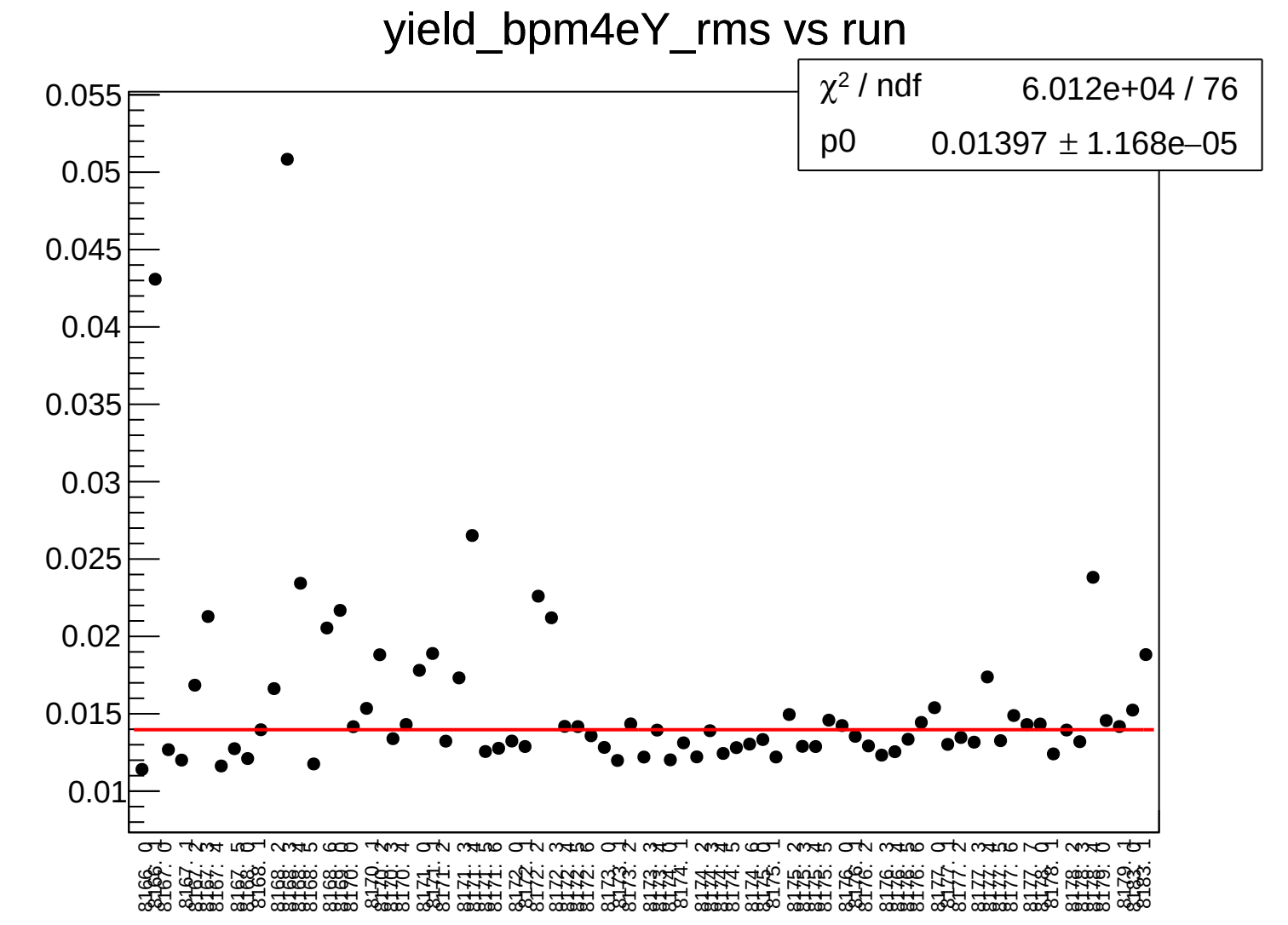

yield_bpm4eX_mean vs run
χ² / ndf 3.985e+04 / 76
p0 −0.1827 ± 4.827e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
pull
Entries 77
Mean 6.446
Std Dev 29.19
80
60
40
20
0
−20
−40

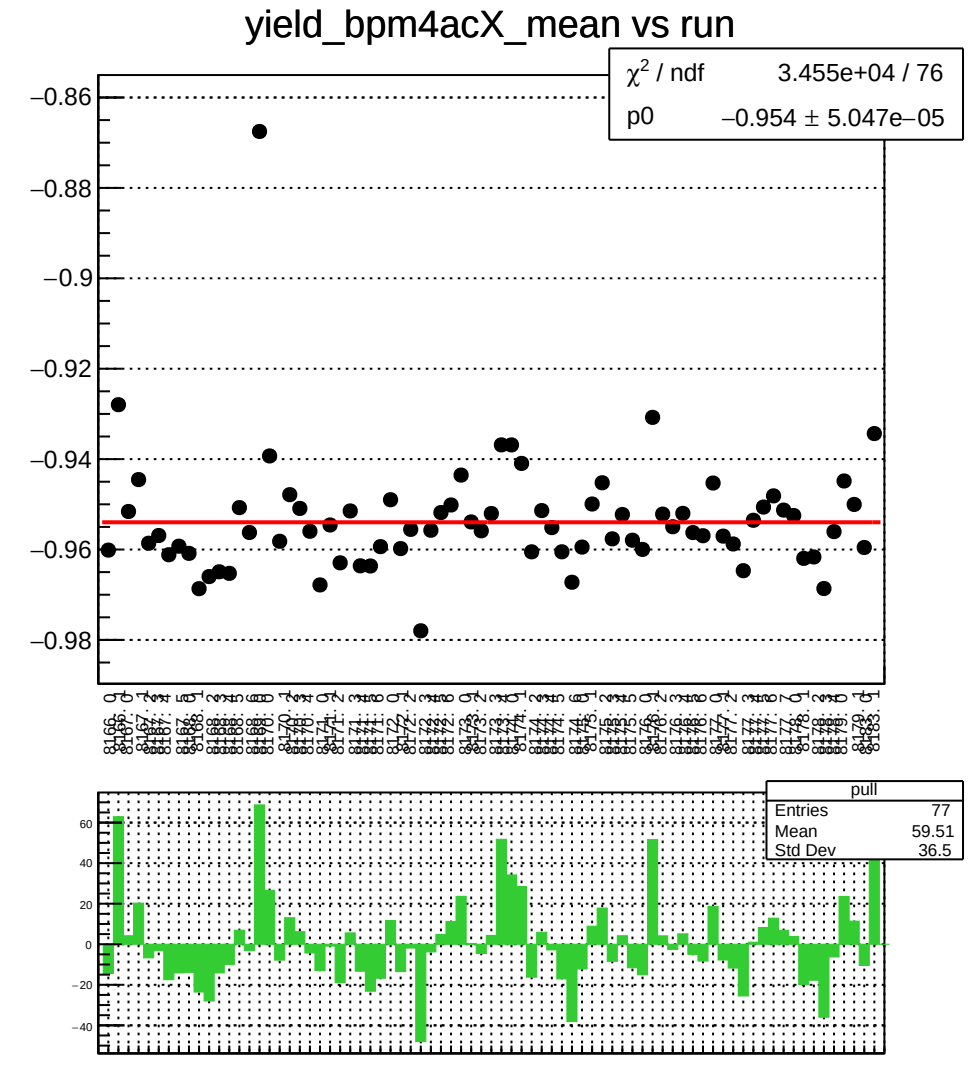

pull1D
Entries 77
Mean −2.331
Std Dev 4.392
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

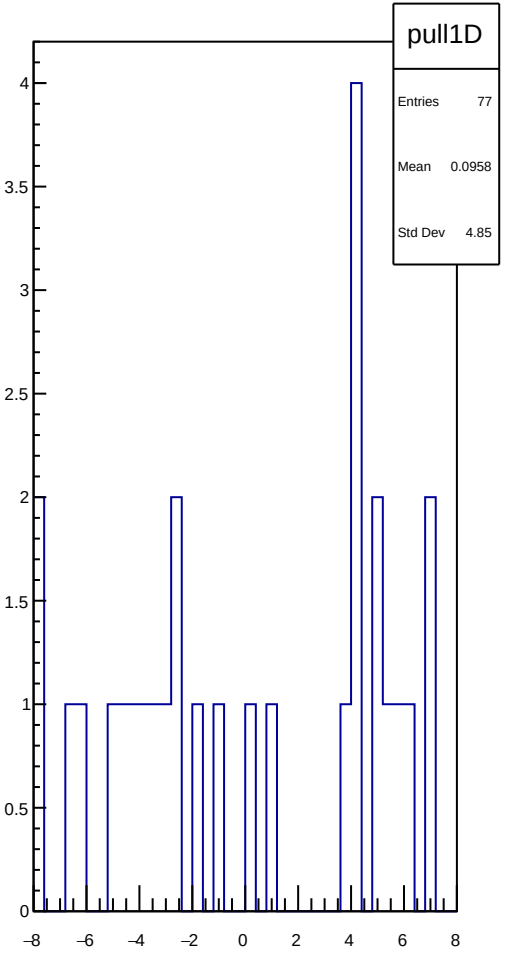

yield_bpm4eX_rms vs run
χ² / ndf 5.089e+04 / 76
p0 0.04097 ± 3.413e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

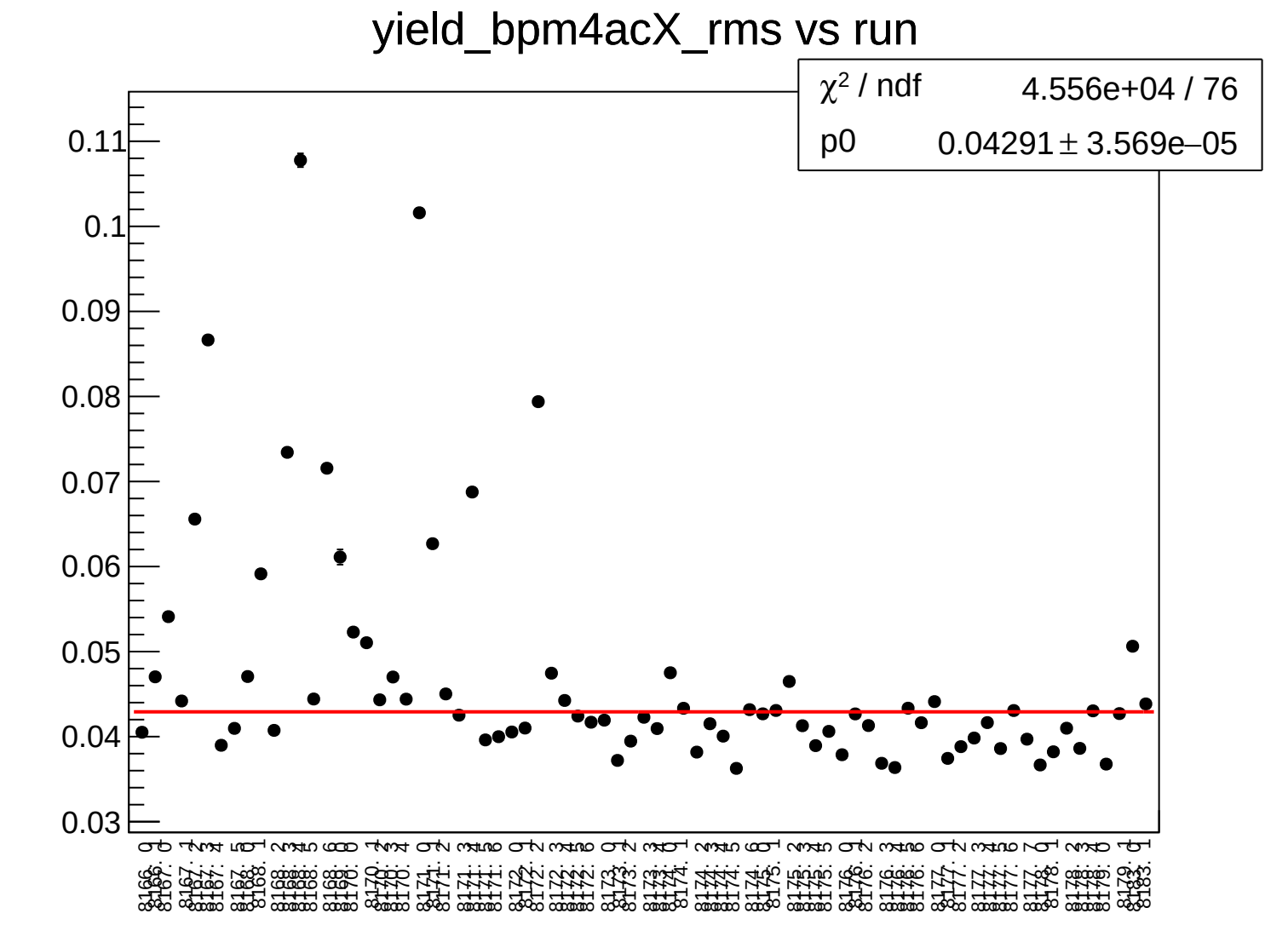

yield_bpm4eY_mean vs run
χ² / ndf 1.481e+05 / 76
p0 0.2363 ± 1.651e−05
pull
Entries 77
Mean −121.1
Std Dev 155.9

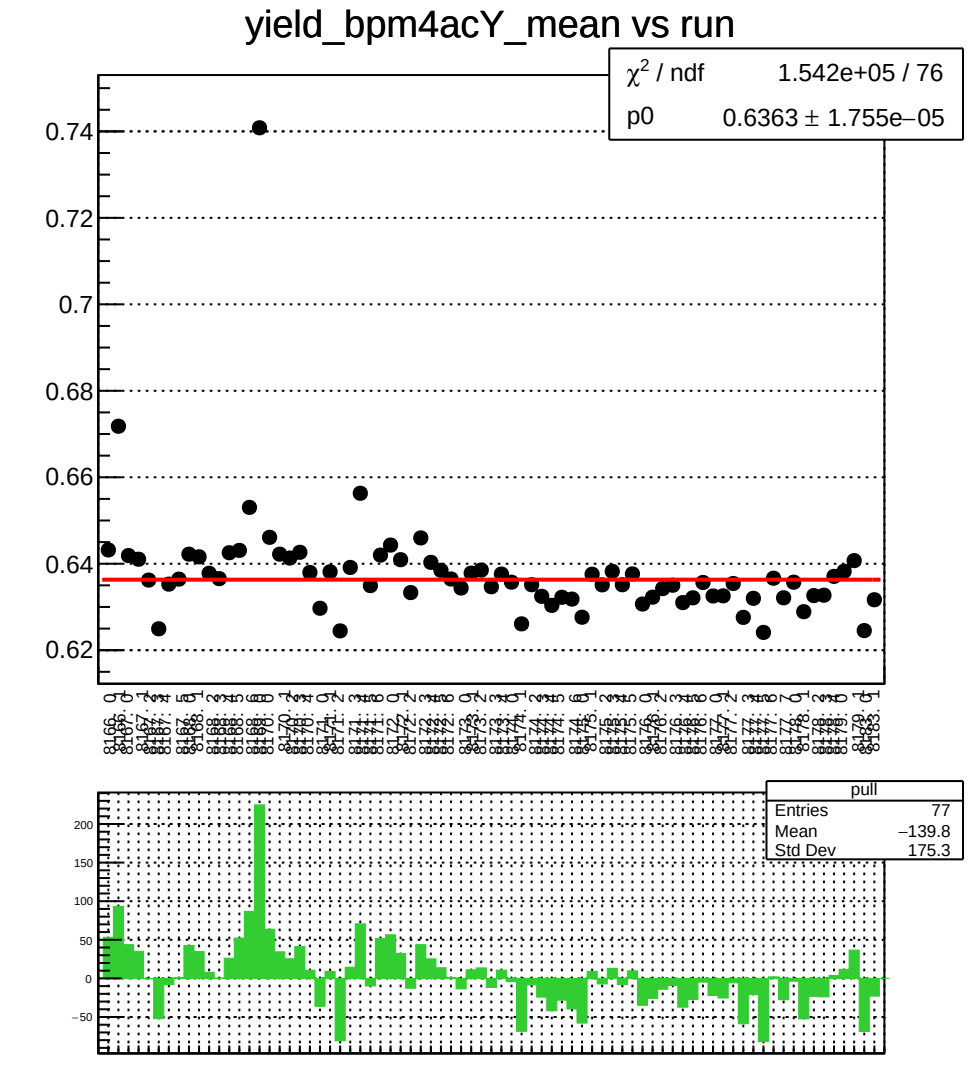

pull1D
Entries 77
Mean −1.87
Std Dev 3.936

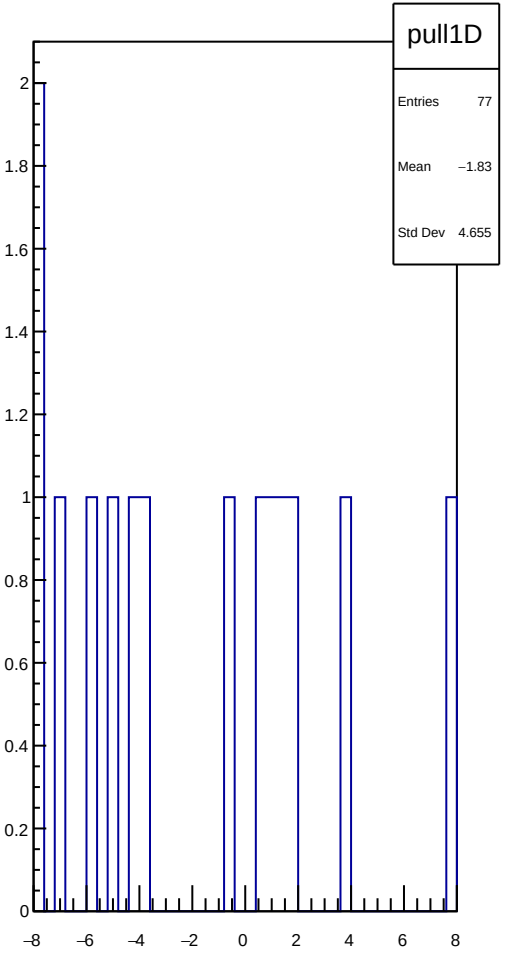

yield_bpm4eY_rms vs run
χ² / ndf 6.012e+04 / 76
p0 0.01397 ± 1.168e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

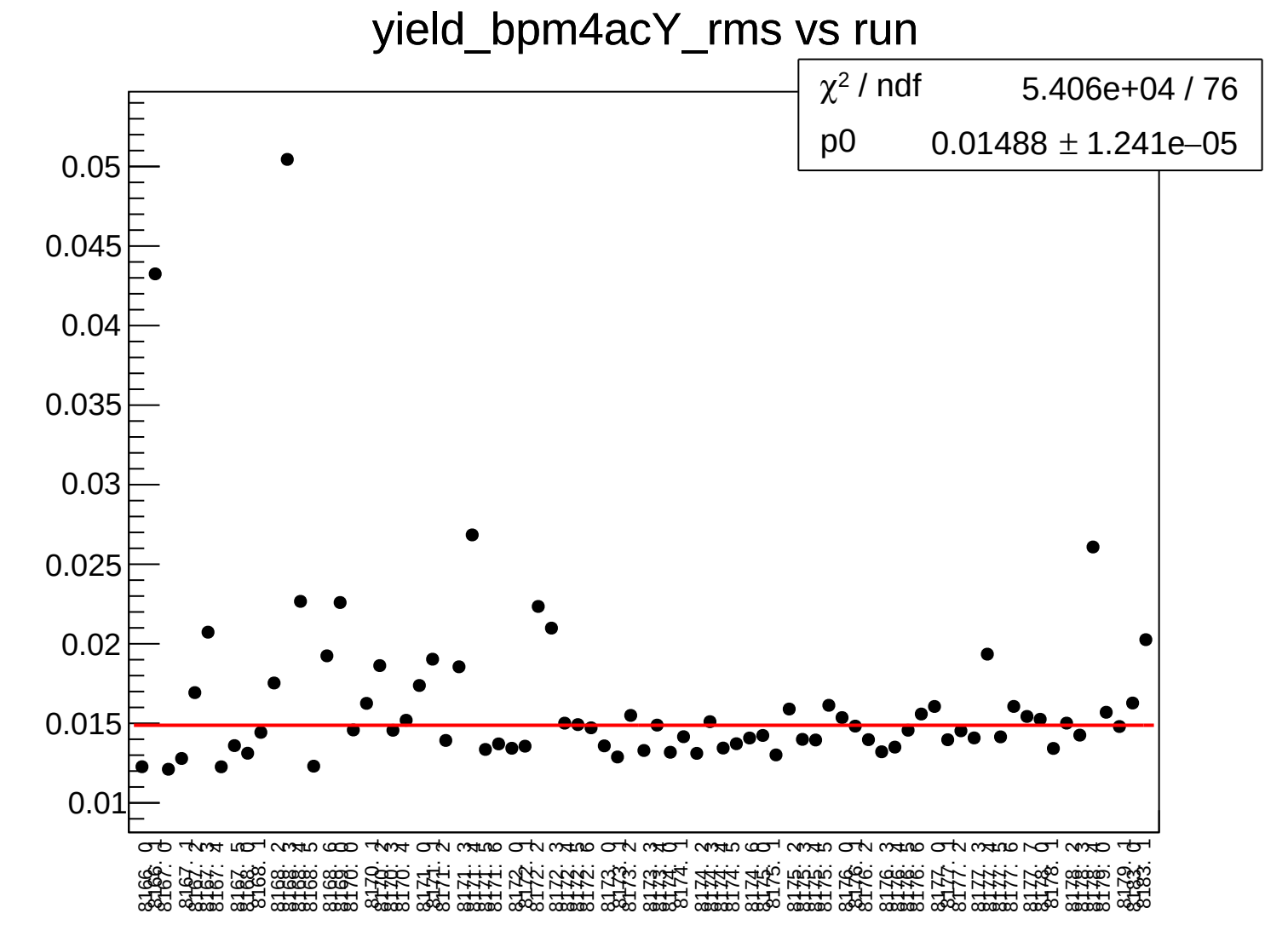

yield_bpm4acX_mean vs run
χ² / ndf 3.455e+04 / 76
p0 −0.954 ± 5.047e−05
−0.86
−0.88
−0.9
−0.92
−0.94
−0.96
−0.98
pull
Entries 77
Mean 59.51
Std Dev 36.5
60
40
20
0
−20
−40

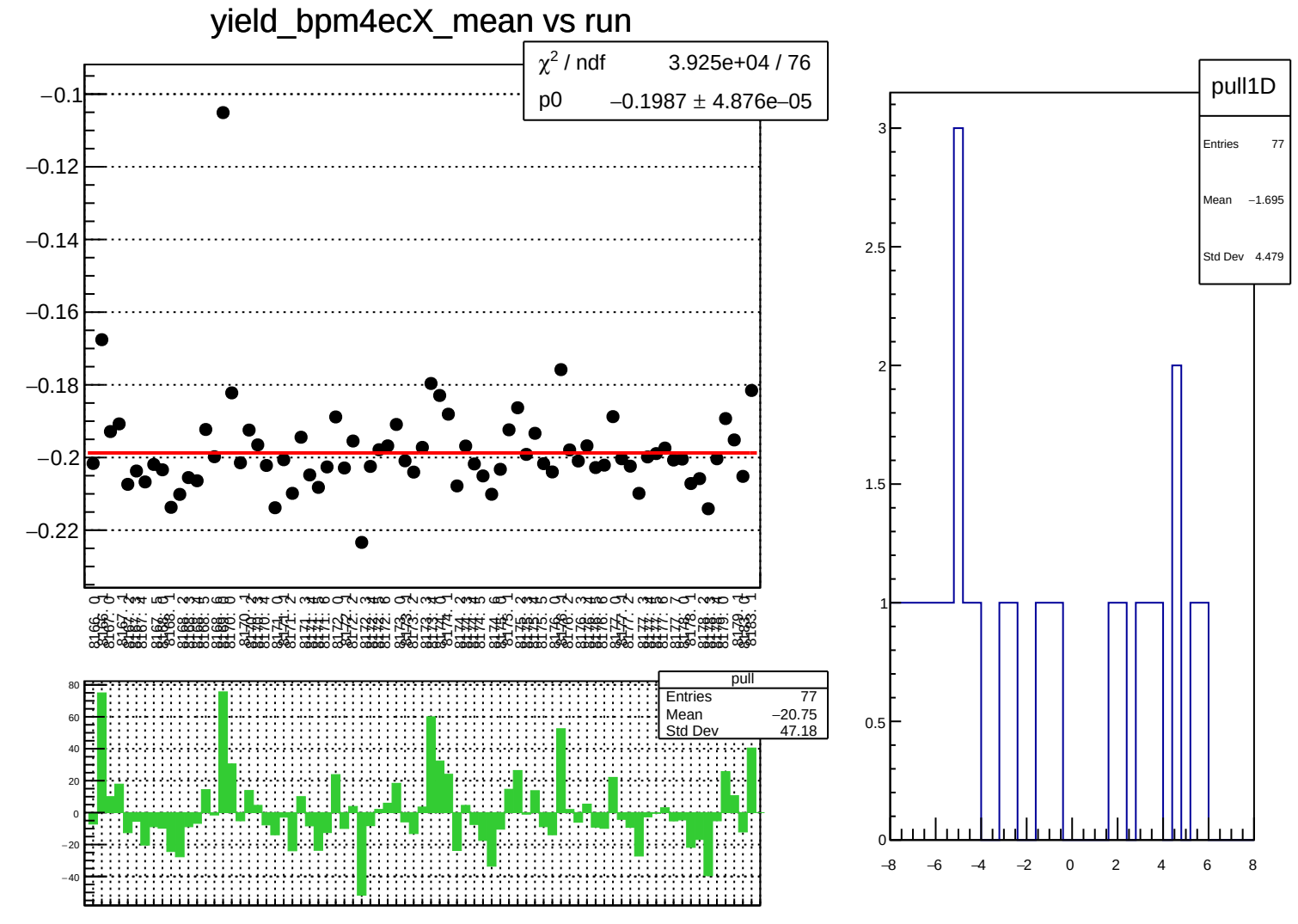

pull1D
Entries 77
Mean 0.0958
Std Dev 4.85
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

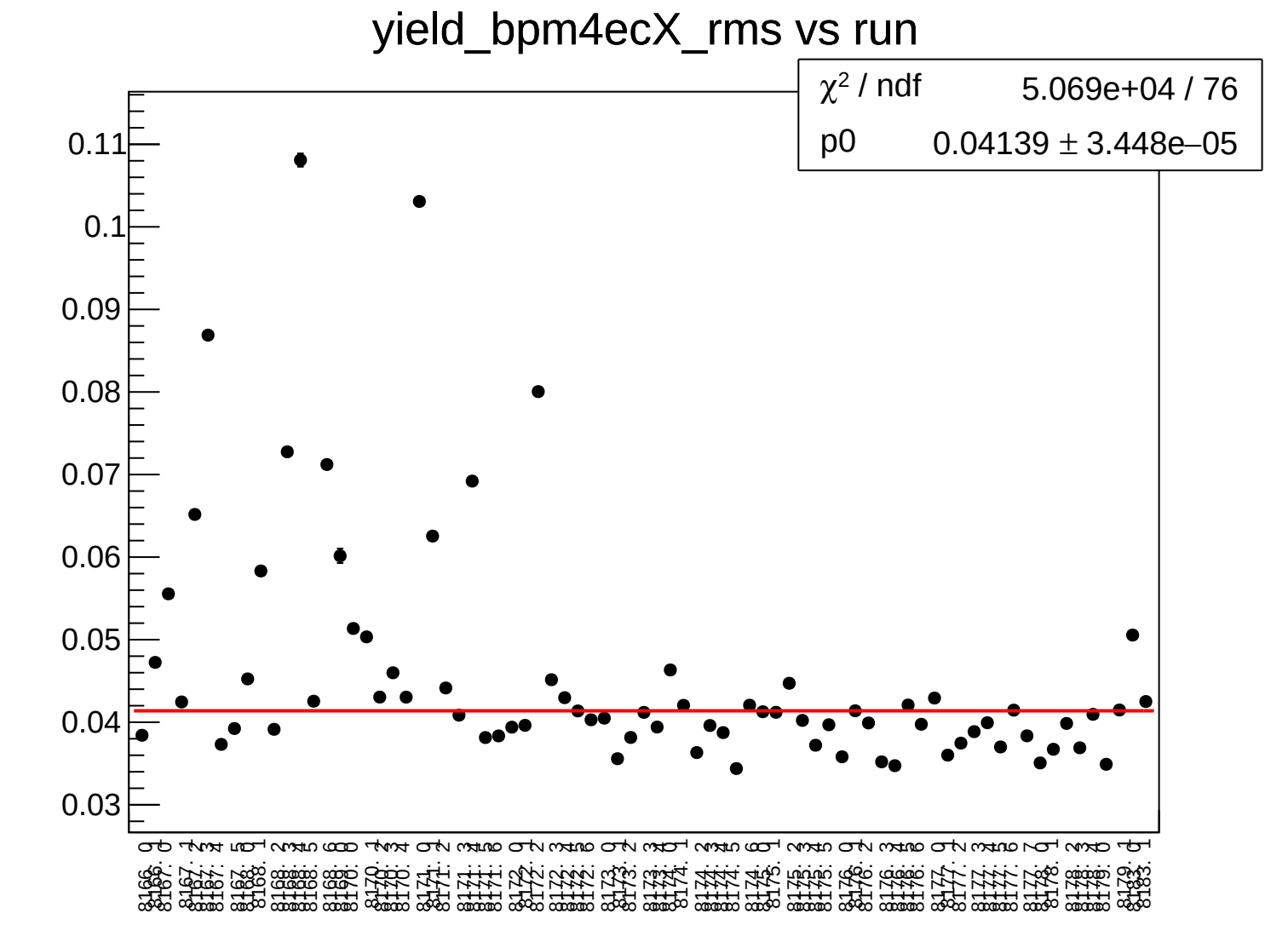

yield_bpm4acX_rms vs run
χ² / ndf 4.556e+04 / 76
p0 0.04291 ± 3.569e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

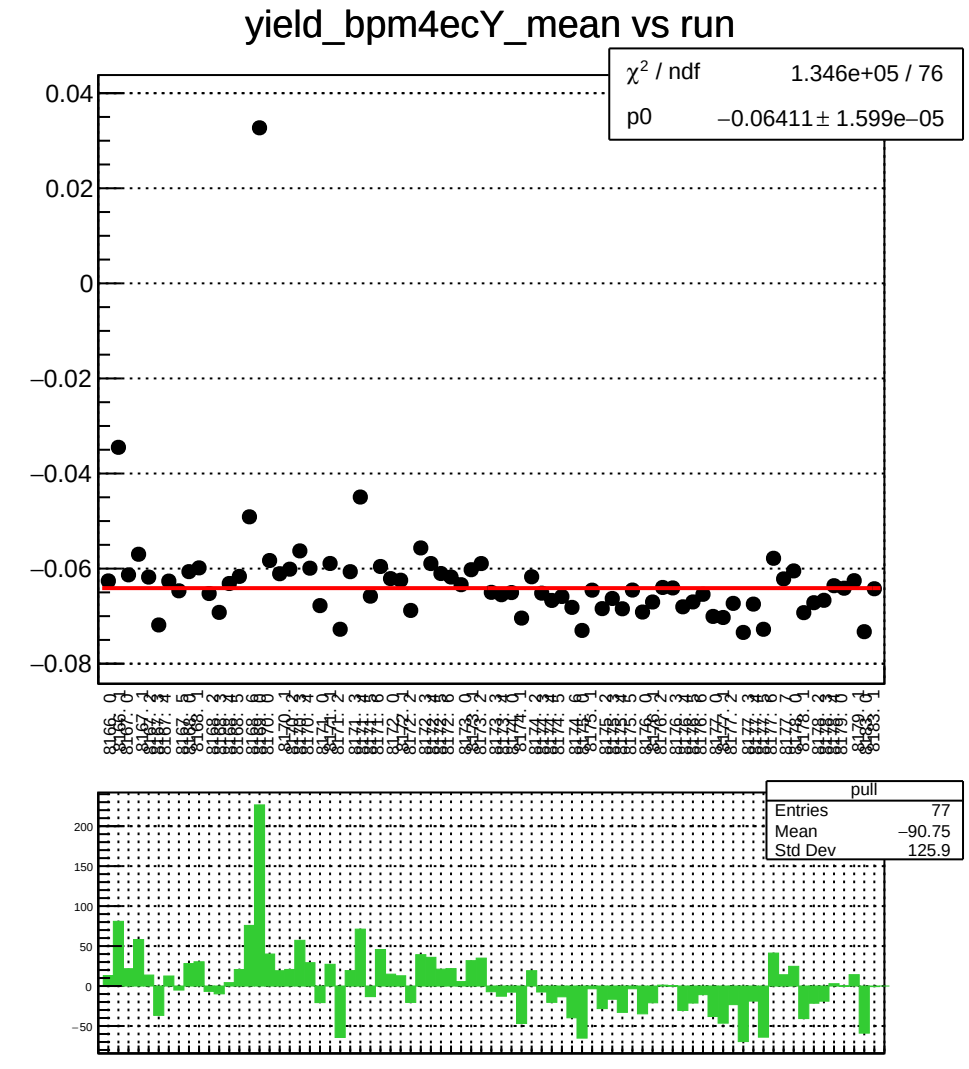

yield_bpm4acY_mean vs run
χ² / ndf 1.542e+05 / 76
p0 0.6363 ± 1.755e−05
0.74
0.72
0.7
0.68
0.66
0.64
0.62
pull
Entries 77
Mean −139.8
Std Dev 175.3
200
150
100
50
0
−50

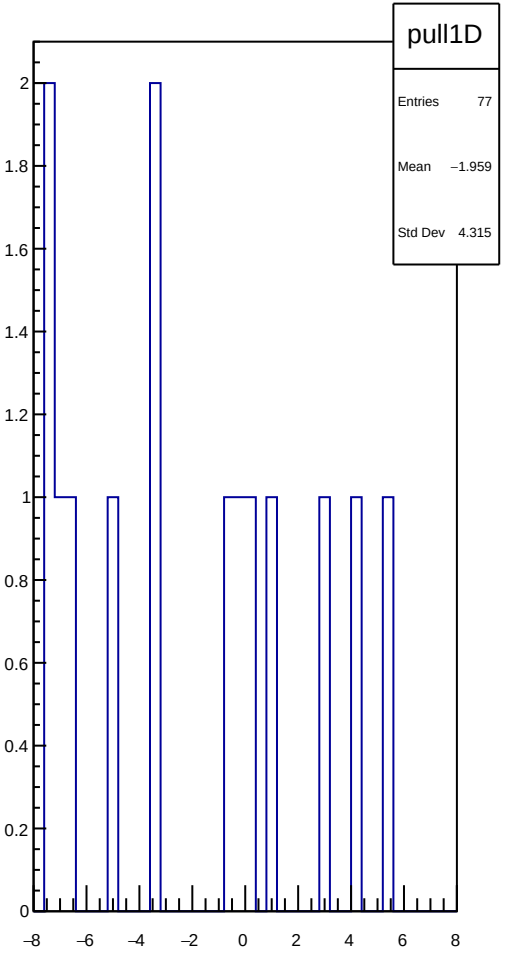

pull1D
Entries 77
Mean −1.83
Std Dev 4.655
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

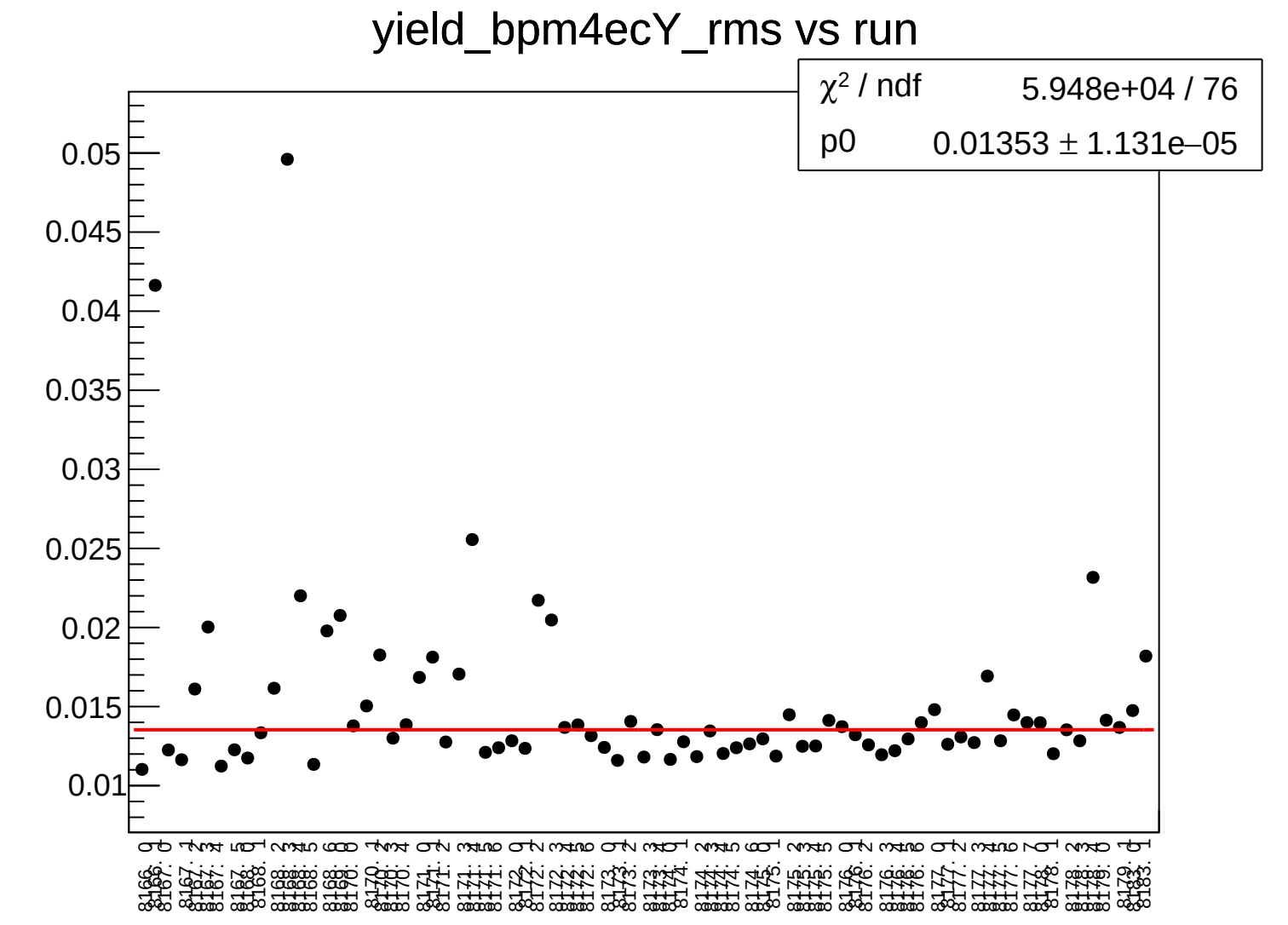

yield_bpm4acY_rms vs run
χ² / ndf 5.406e+04 / 76
p0 0.01488 ± 1.241e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

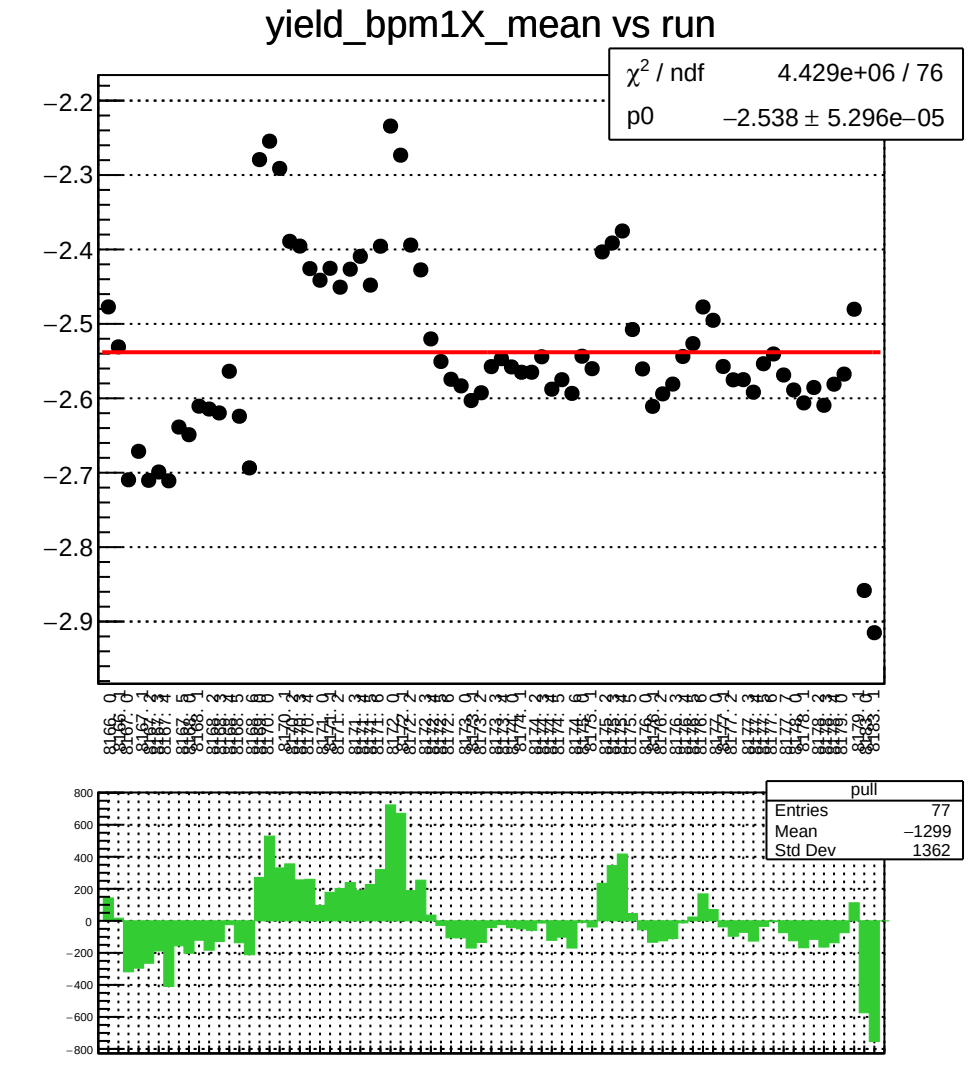

yield_bpm4ecX_mean vs run
χ² / ndf 3.925e+04 / 76
p0 −0.1987 ± 4.876e−05
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
−0.22
pull
Entries 77
Mean −20.75
Std Dev 47.18
80
60
40
20
0
−20
−40
pull1D
Entries 77
Mean −1.695
Std Dev 4.479
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

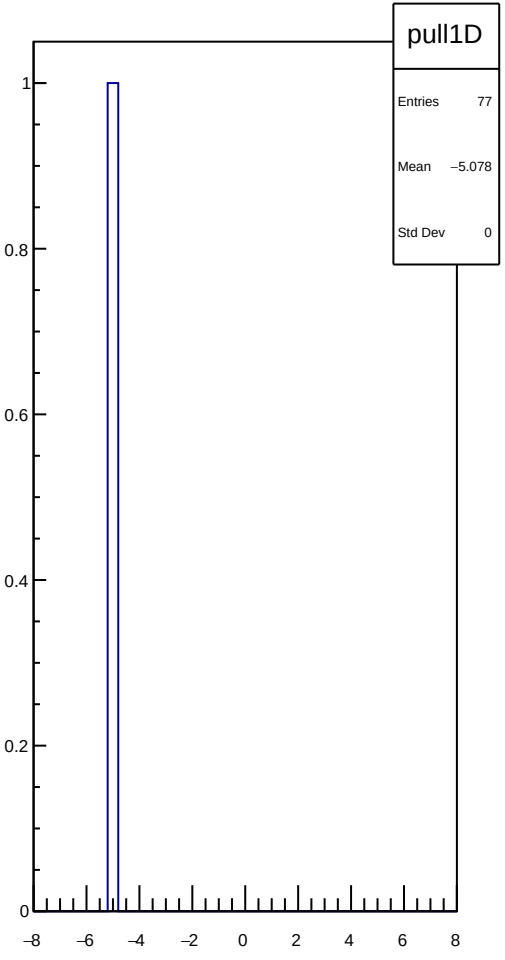

yield_bpm4ecX_rms vs run
χ² / ndf 5.069e+04 / 76
p0 0.04139 ± 3.448e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

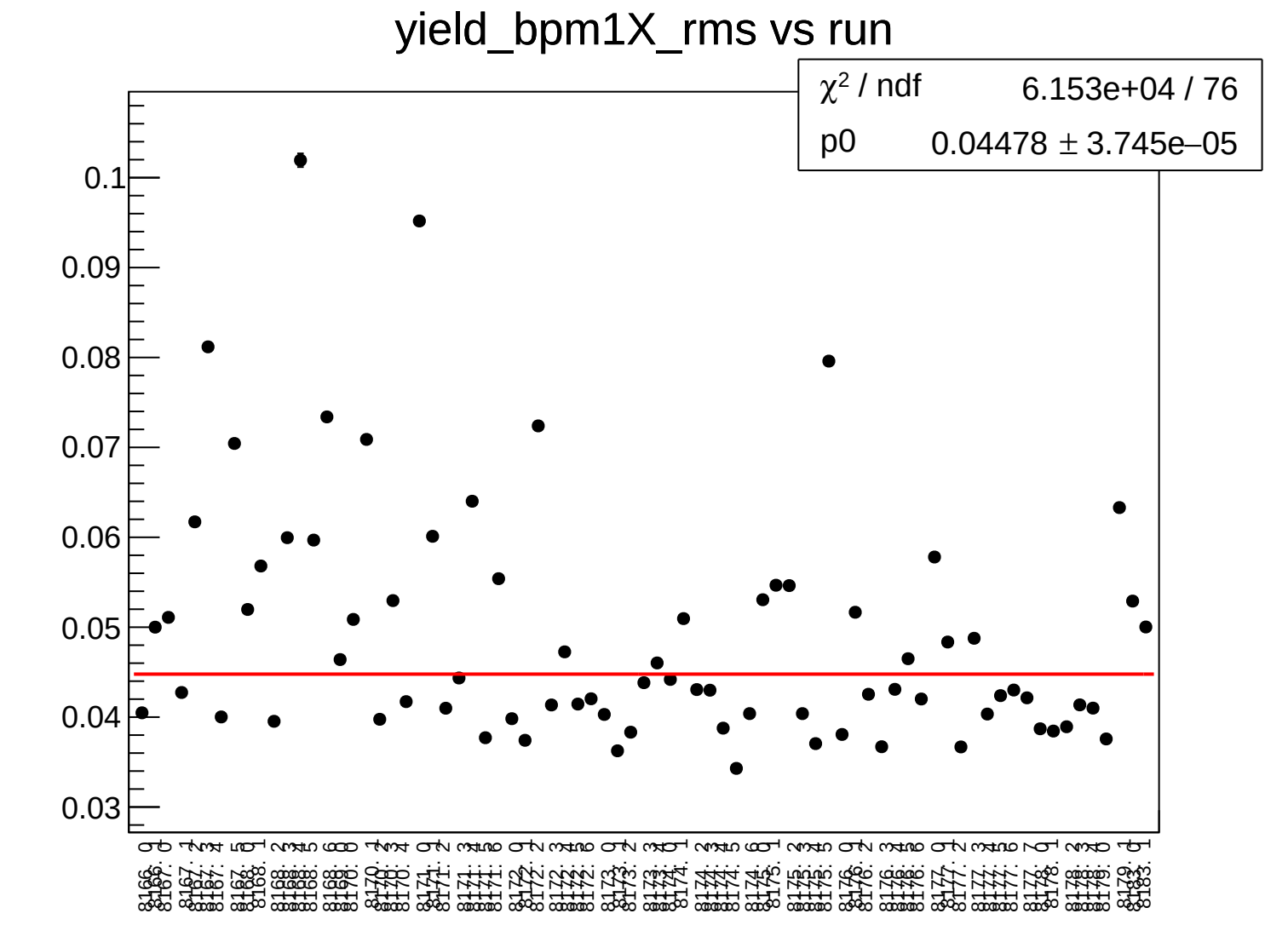

yield_bpm4ecY_mean vs run
χ² / ndf 1.346e+05 / 76
p0 −0.06411 ± 1.599e−05
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull
Entries 77
Mean −90.75
Std Dev 125.9
200
150
100
50
0
−50

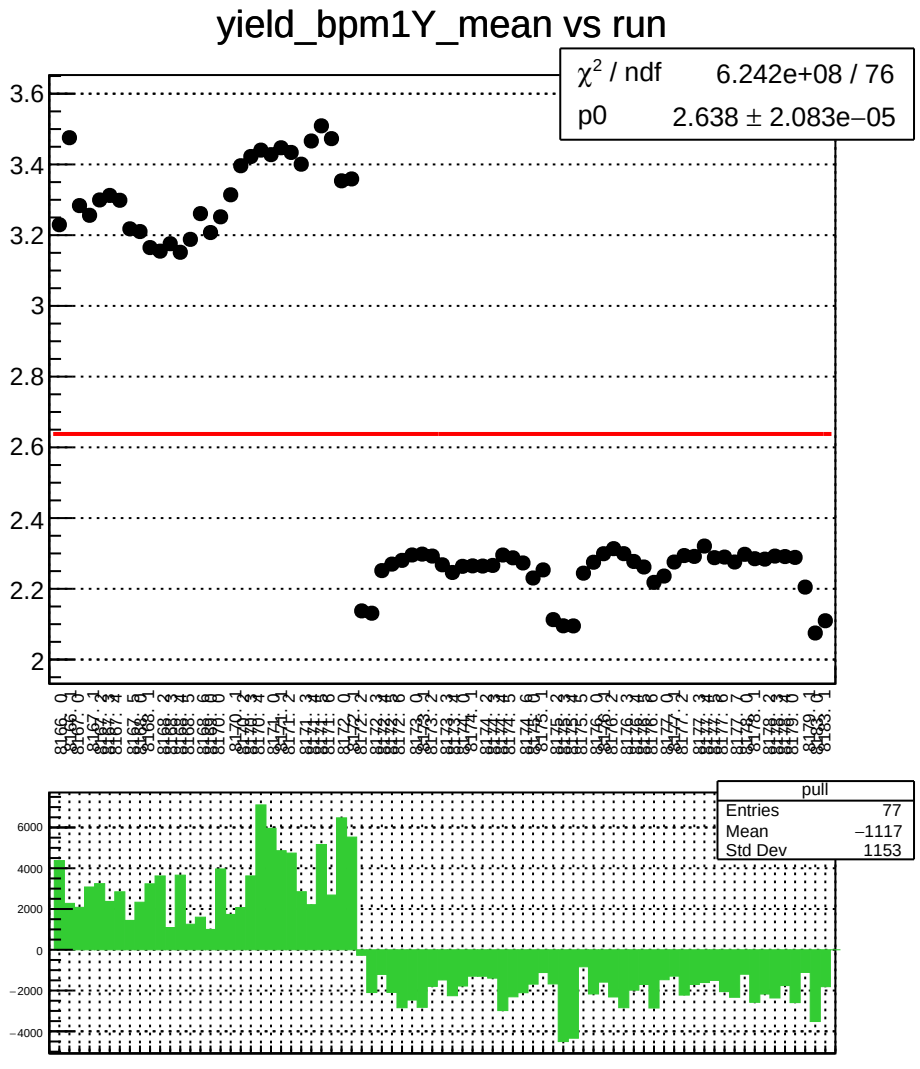

pull1D
Entries 77
Mean −1.959
Std Dev 4.315
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

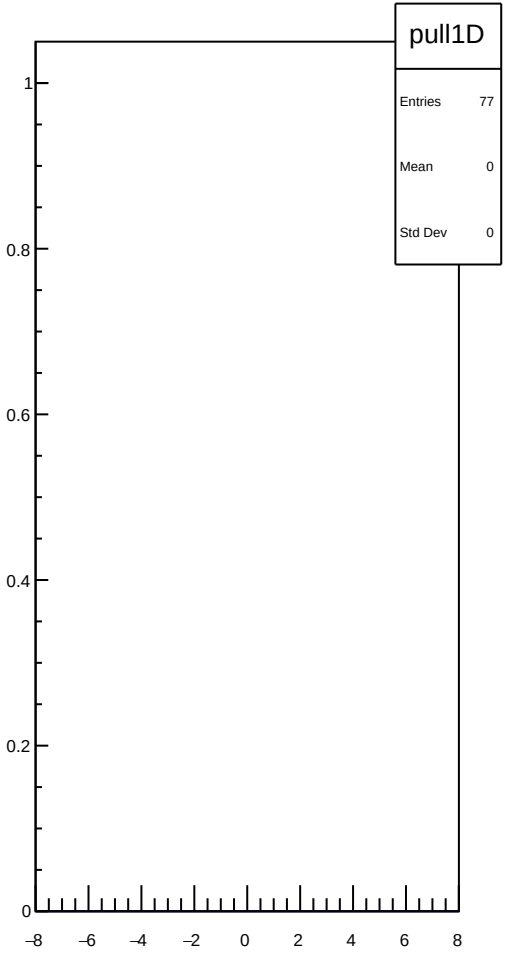

yield_bpm4ecY_rms vs run
χ² / ndf 5.948e+04 / 76
p0 0.01353 ± 1.131e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

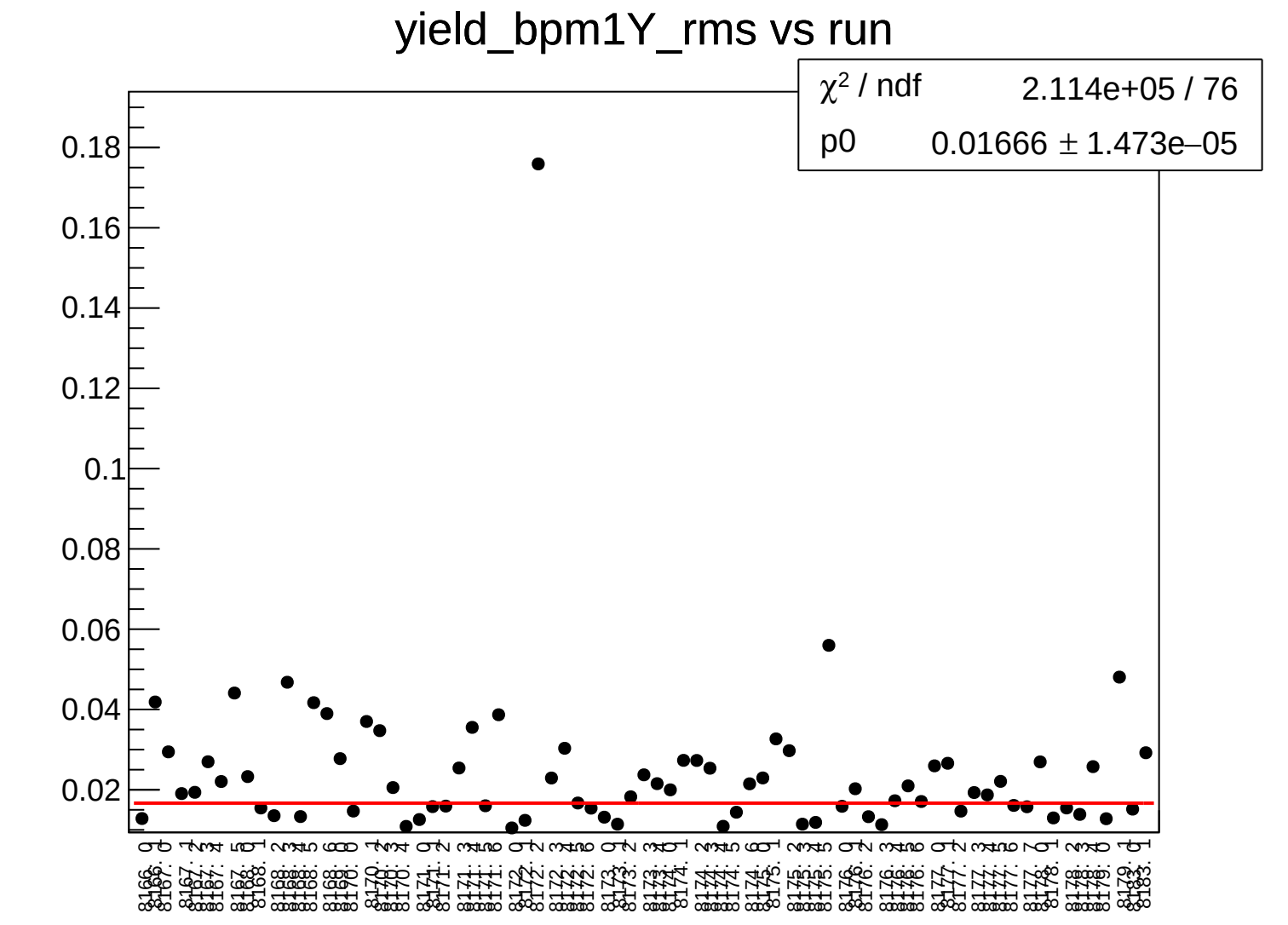

yield_bpm1X_mean vs run
χ² / ndf 4.429e+06 / 76
p0 −2.538 ± 5.296e−05
pull
Entries 77
Mean −1299
Std Dev 1362

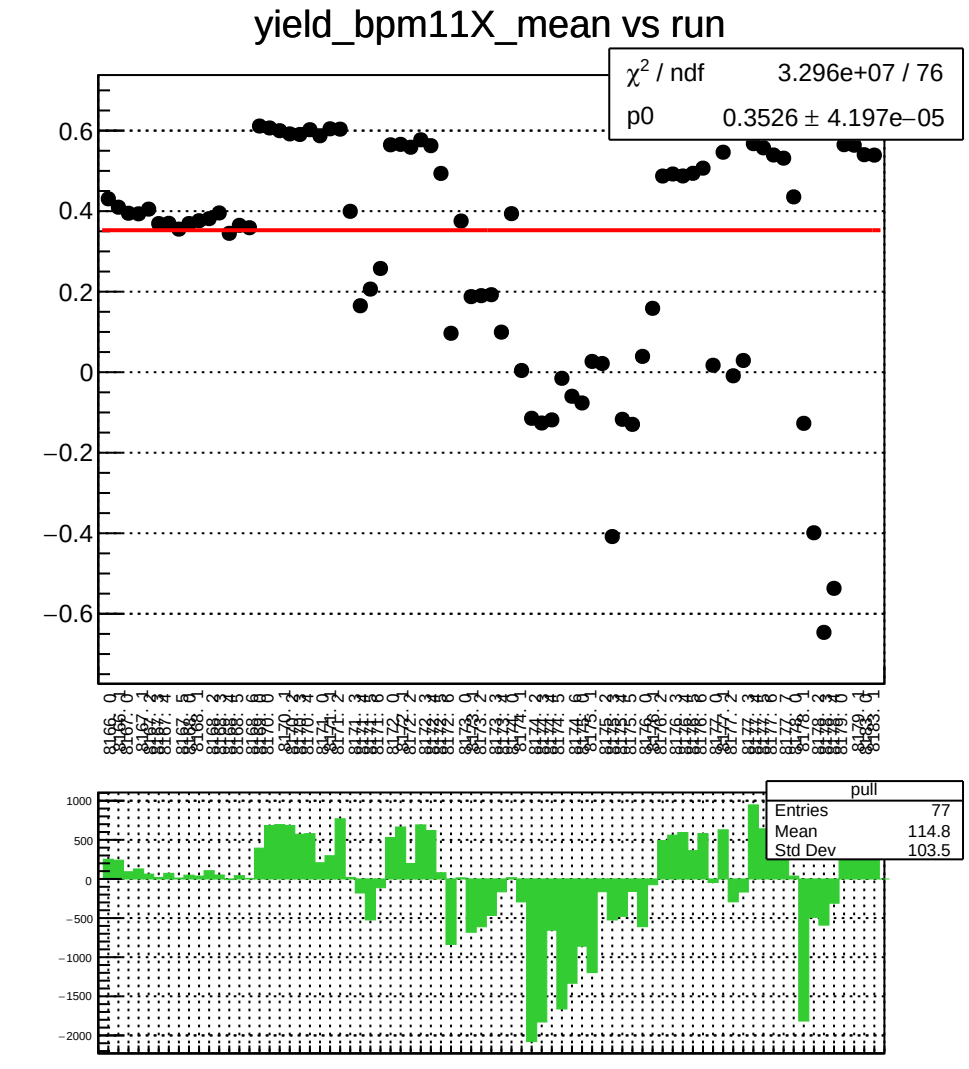

pull1D
Entries 77
Mean −5.078
Std Dev 0

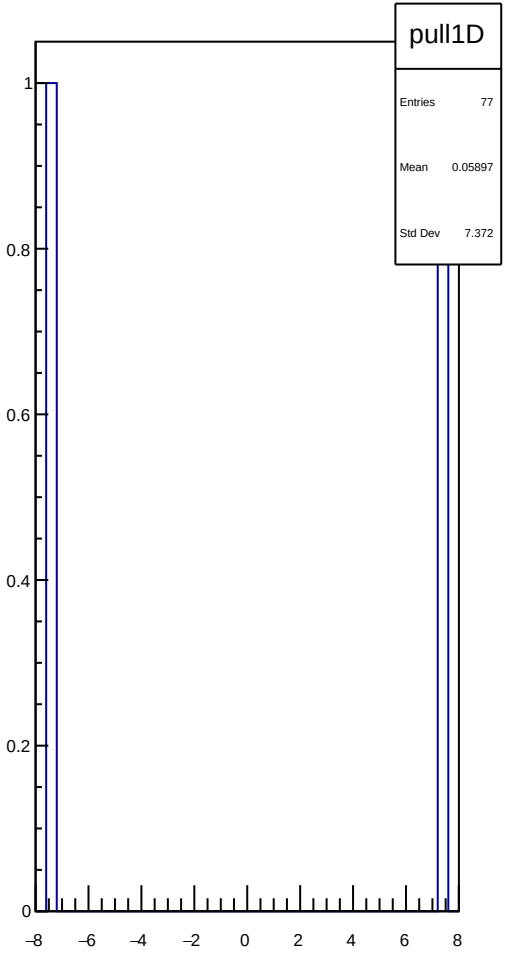

yield_bpm1X_rms vs run
χ² / ndf 6.153e+04 / 76
p0 0.04478 ± 3.745e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

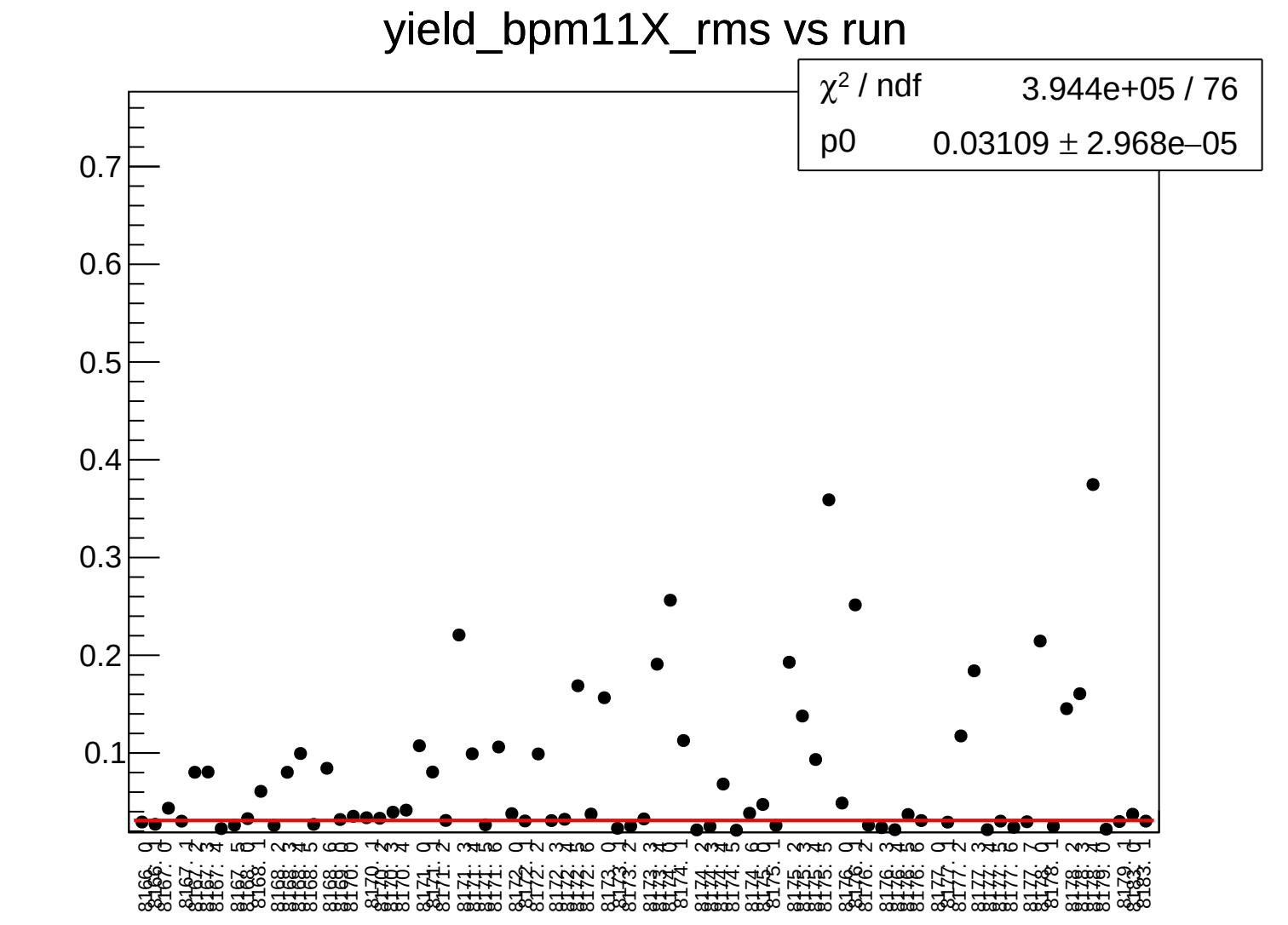

yield_bpm1Y_mean vs run
χ² / ndf 6.242e+08 / 76
p0 2.638 ± 2.083e−05
pull
Entries 77
Mean −1117
Std Dev 1153

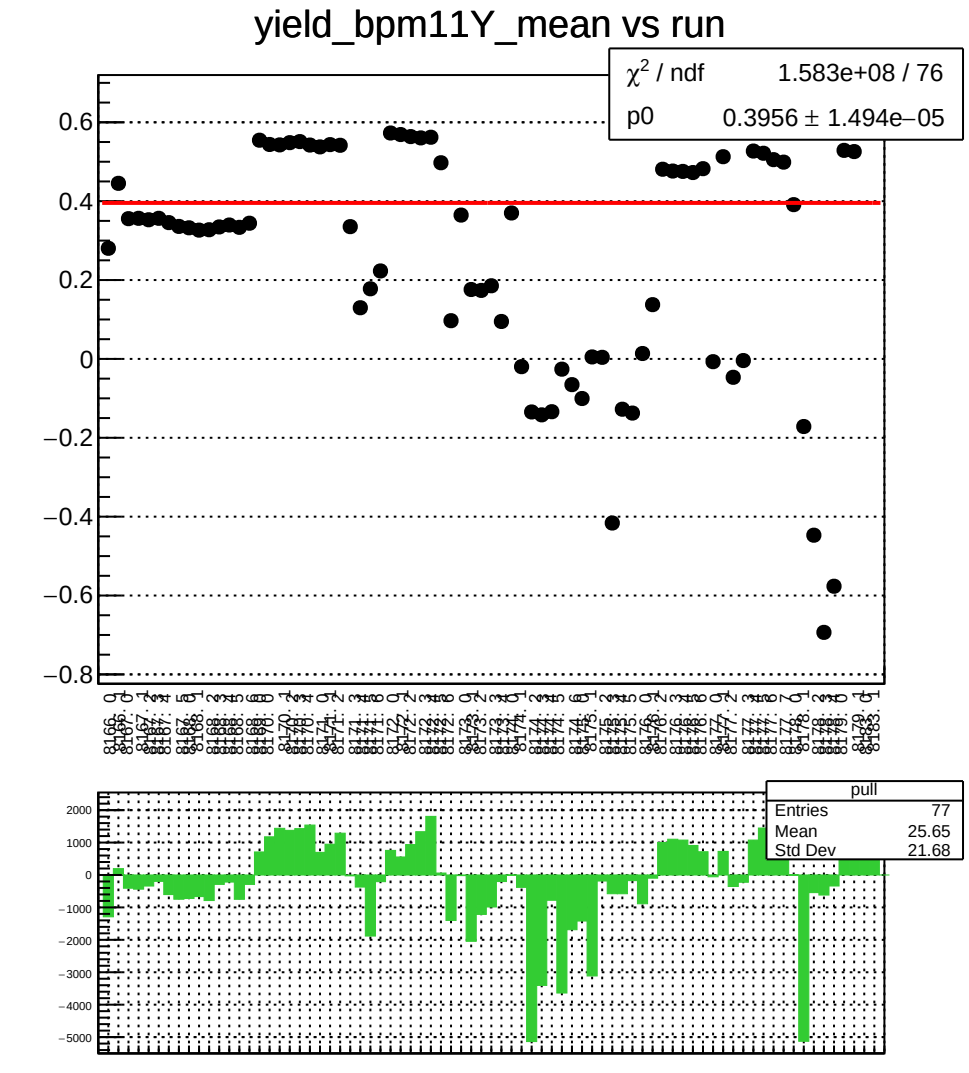

pull1D
Entries 77
Mean 0
Std Dev 0

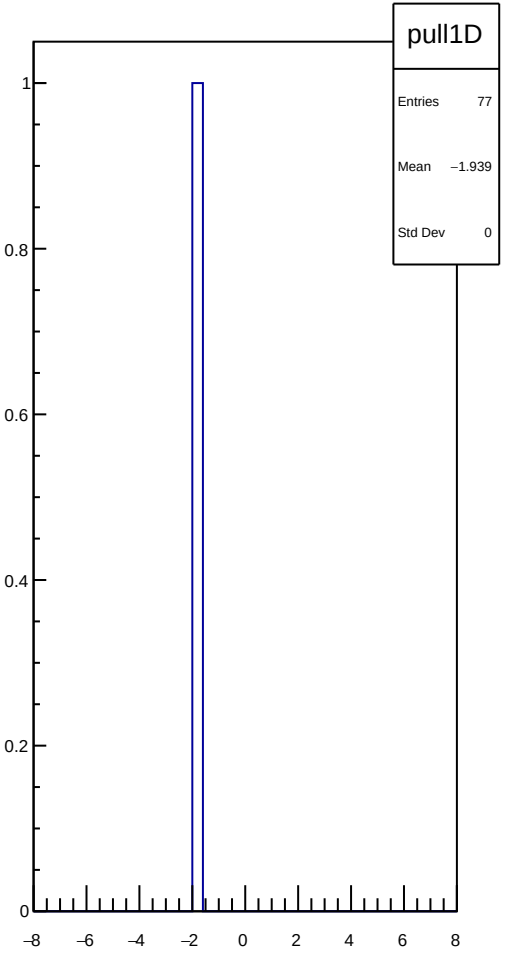

yield_bpm1Y_rms vs run
χ² / ndf 2.114e+05 / 76
p0 0.01666 ± 1.473e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

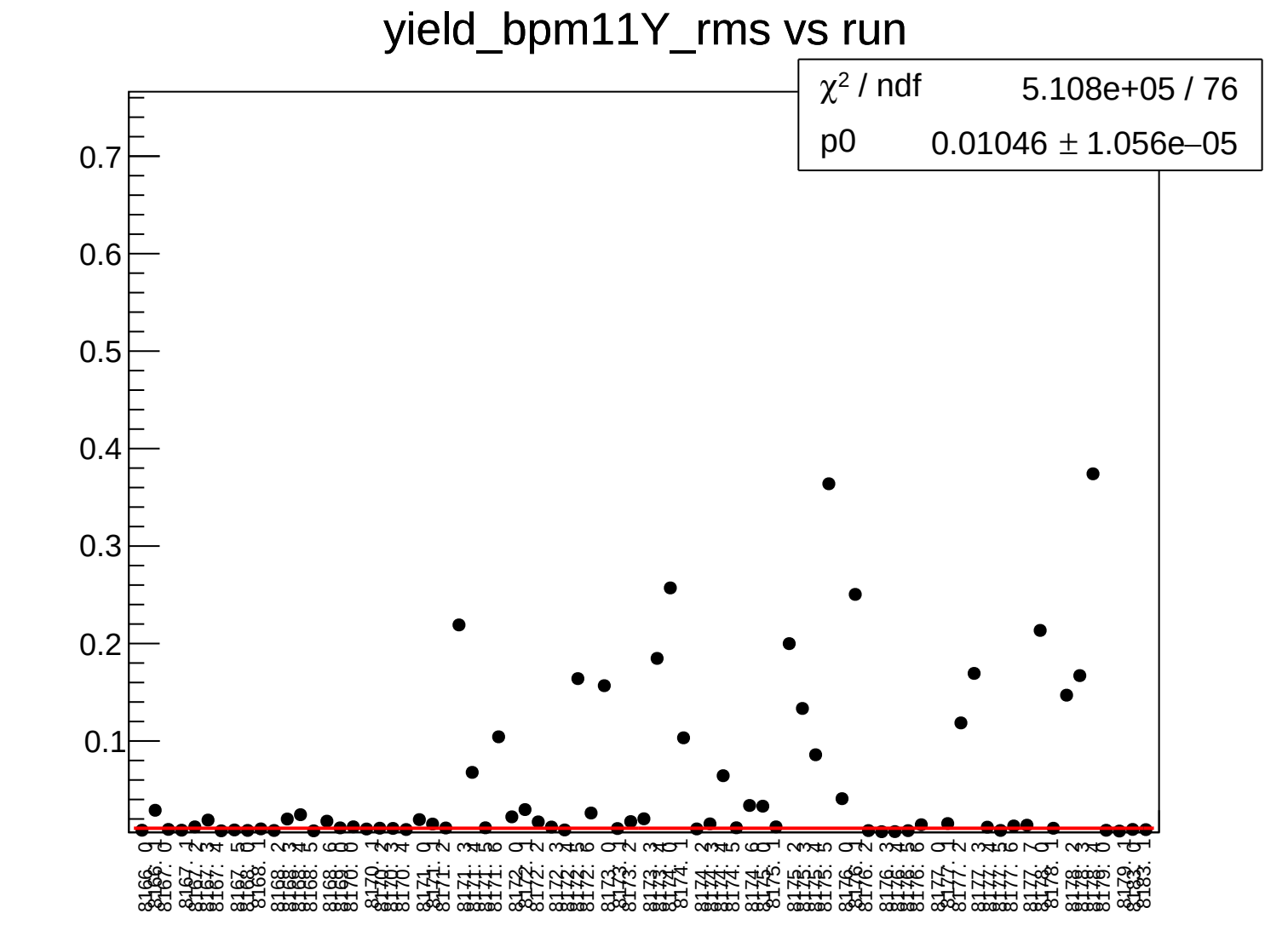

yield_bpm11X_mean vs run
χ² / ndf 3.296e+07 / 76
p0 0.3526 ± 4.197e−05
pull
Entries 77
Mean 114.8
Std Dev 103.5

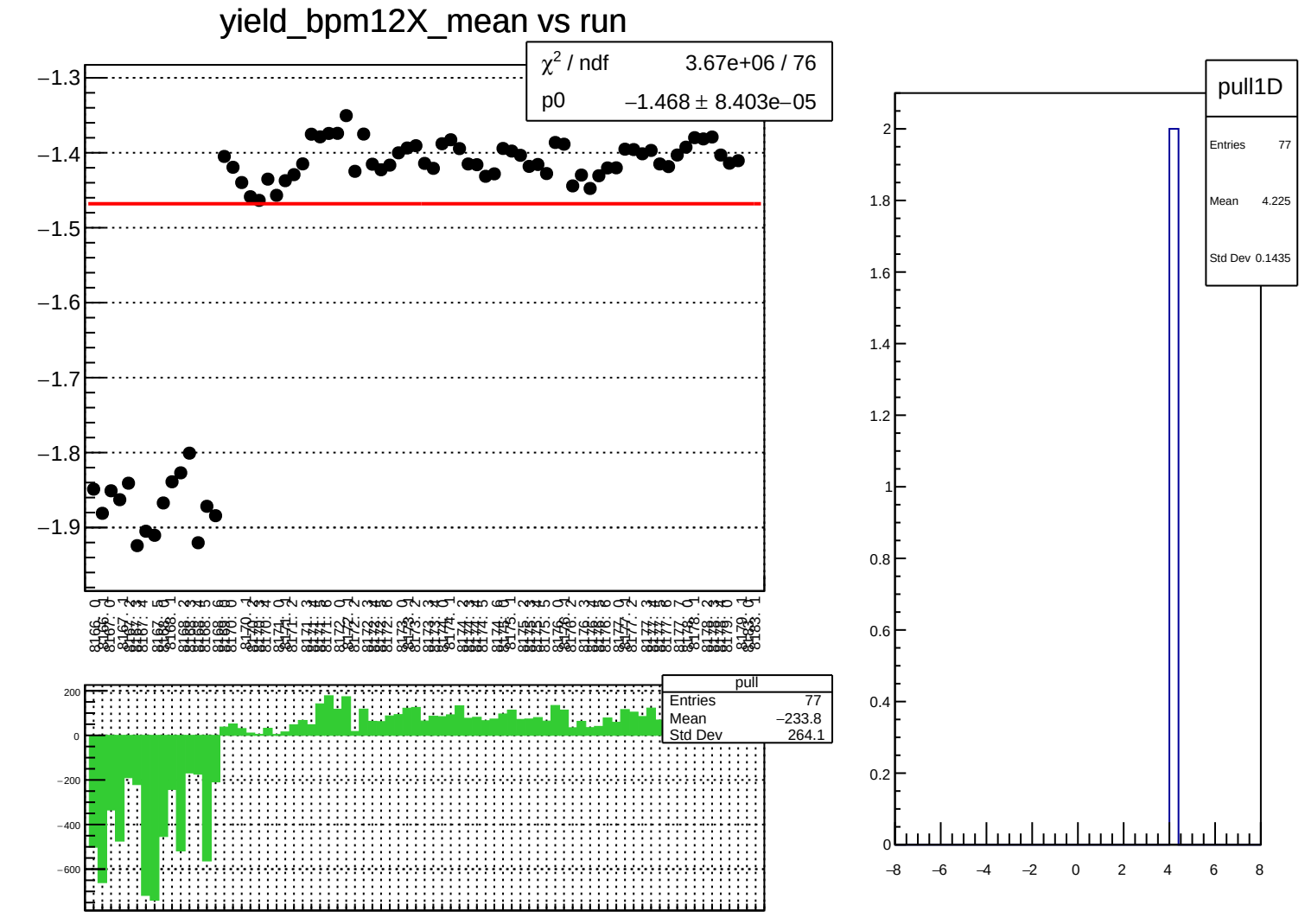

pull1D
Entries 77
Mean 0.05897
Std Dev 7.372

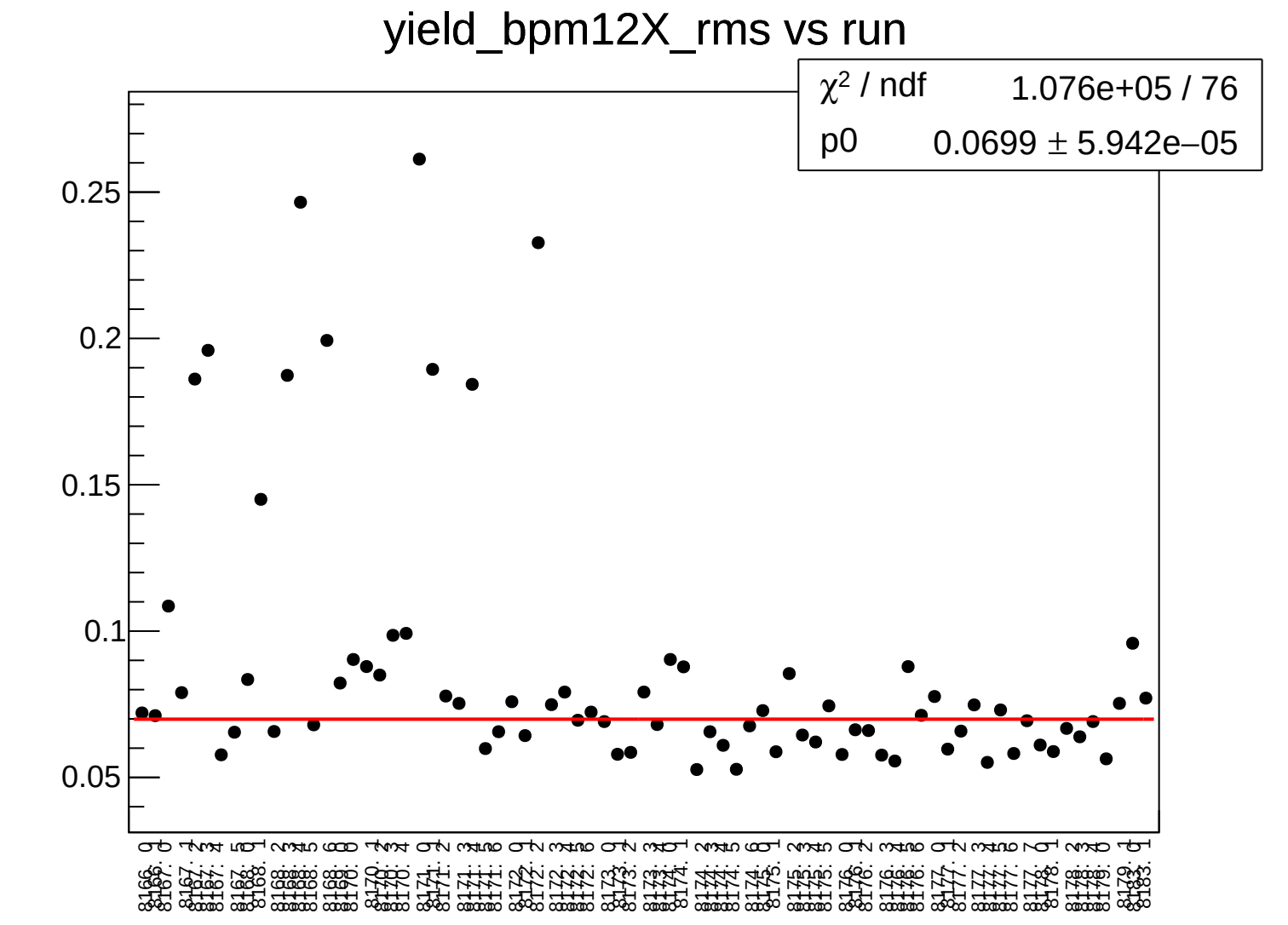

yield_bpm11X_rms vs run
χ² / ndf 3.944e+05 / 76
p0 0.03109 ± 2.968e–05
0.7
0.6
0.5
0.4
0.3
0.2
0.1

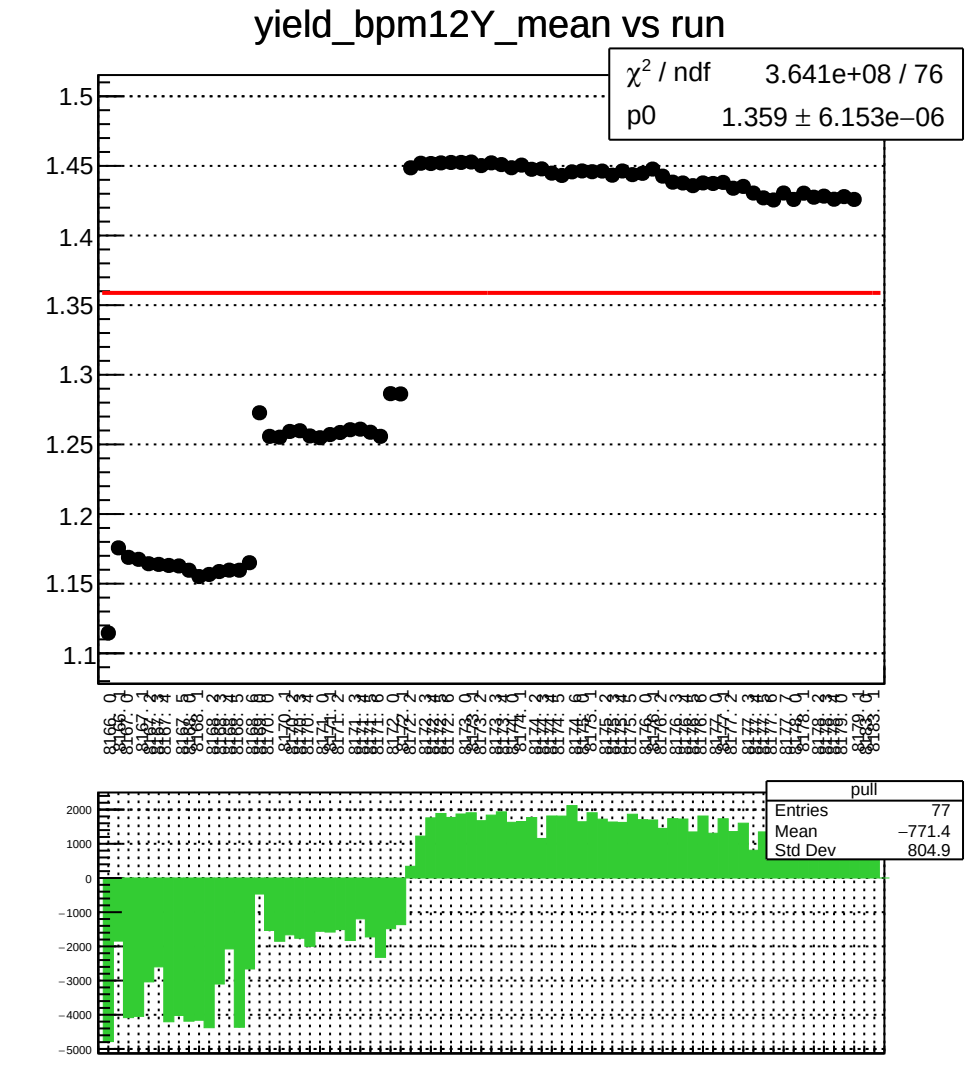

yield_bpm11Y_mean vs run
χ² / ndf 1.583e+08 / 76
p0 0.3956 ± 1.494e−05
pull
Entries 77
Mean 25.65
Std Dev 21.68

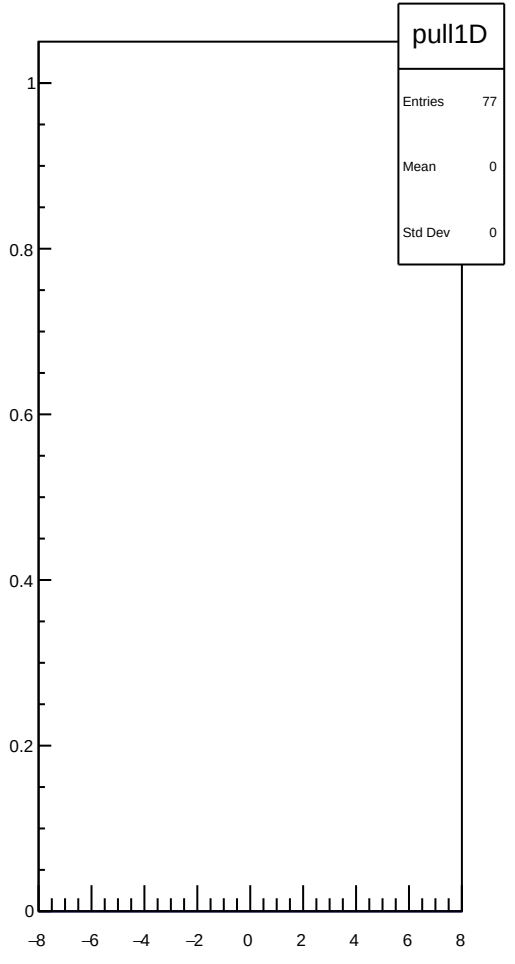

pull1D
Entries 77
Mean −1.939
Std Dev 0

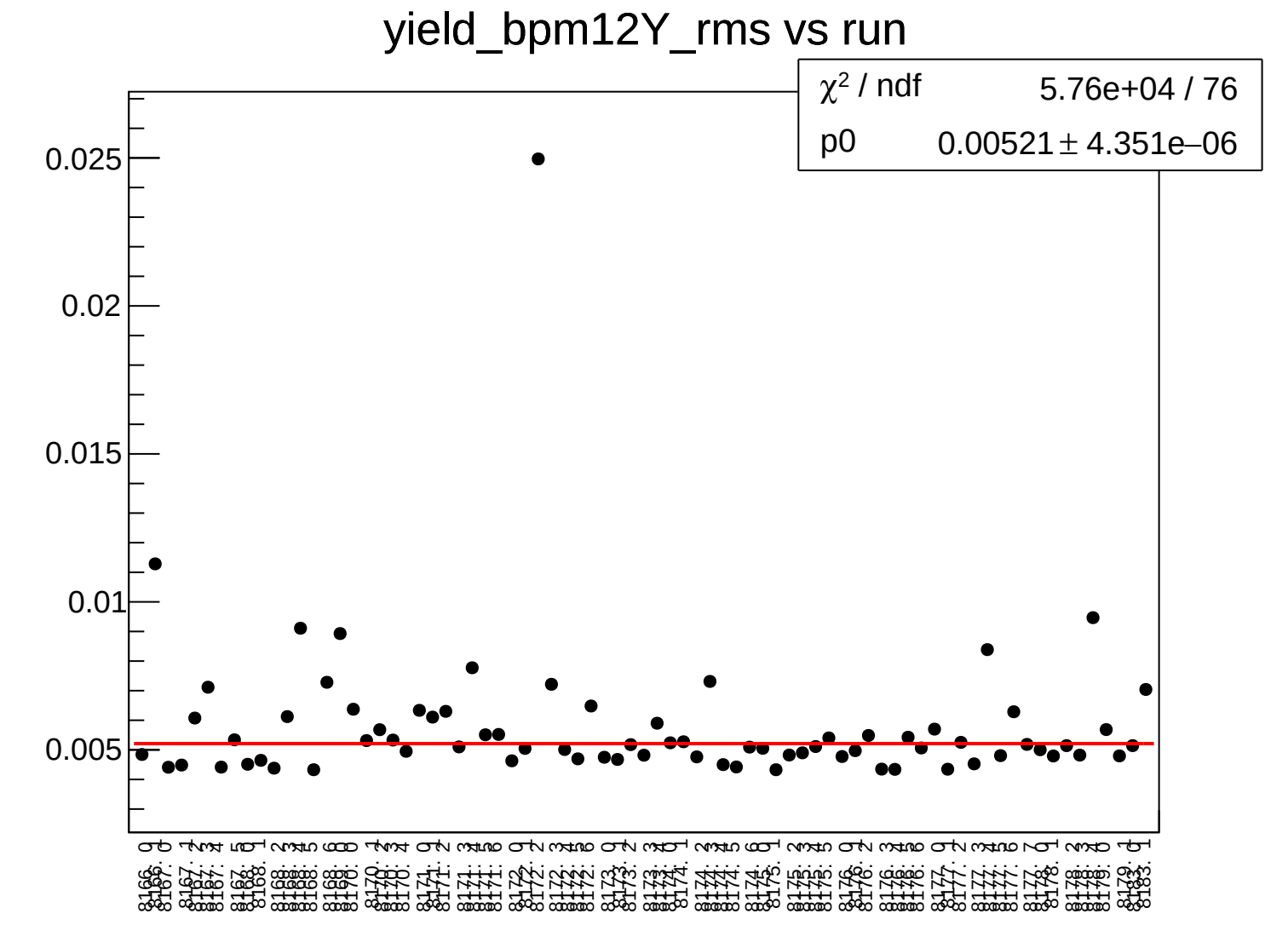

yield_bpm11Y_rms vs run
χ² / ndf 5.108e+05 / 76
p0 0.01046 ± 1.056e–05
0.7
0.6
0.5
0.4
0.3
0.2
0.1

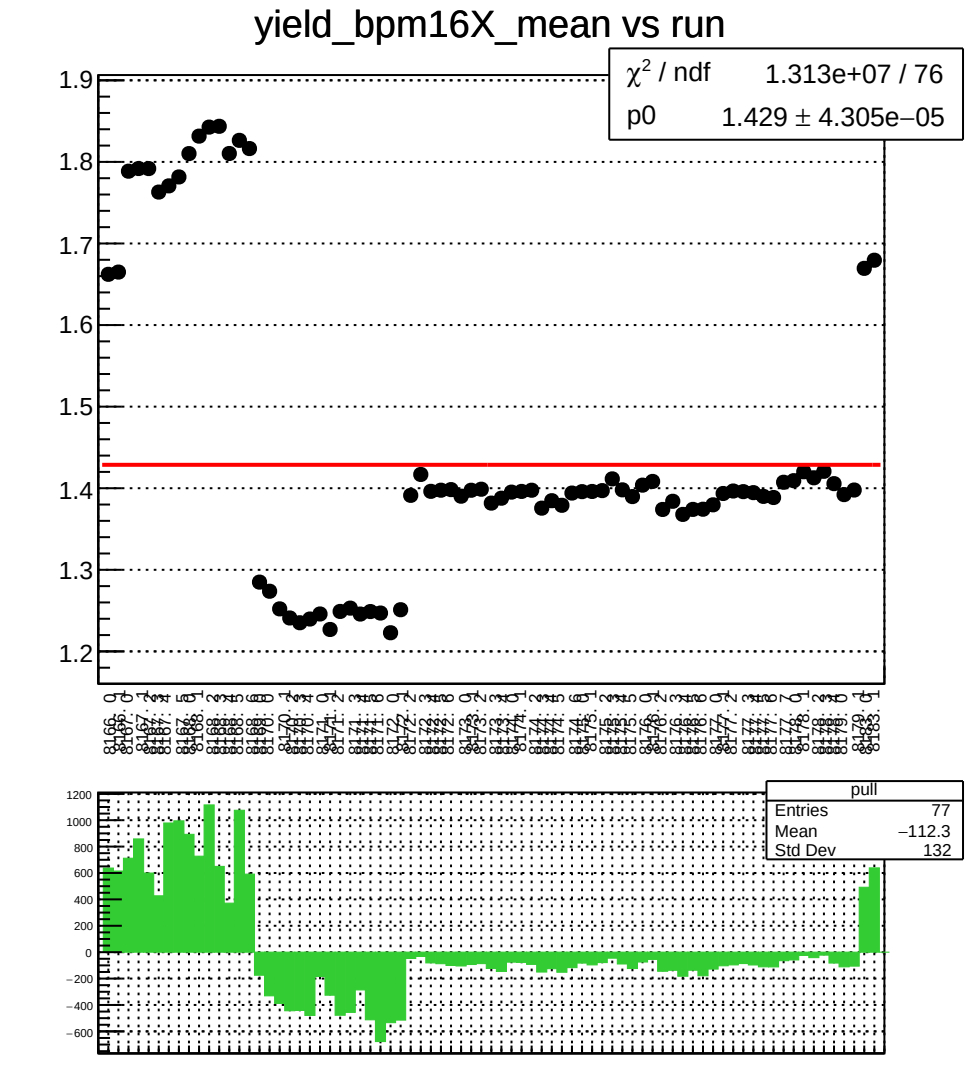

yield_bpm12X_mean vs run
χ² / ndf 3.67e+06 / 76
p0 −1.468 ± 8.403e−05
pull
Entries 77
Mean −233.8
Std Dev 264.1
pull1D
Entries 77
Mean 4.225
Std Dev 0.1435

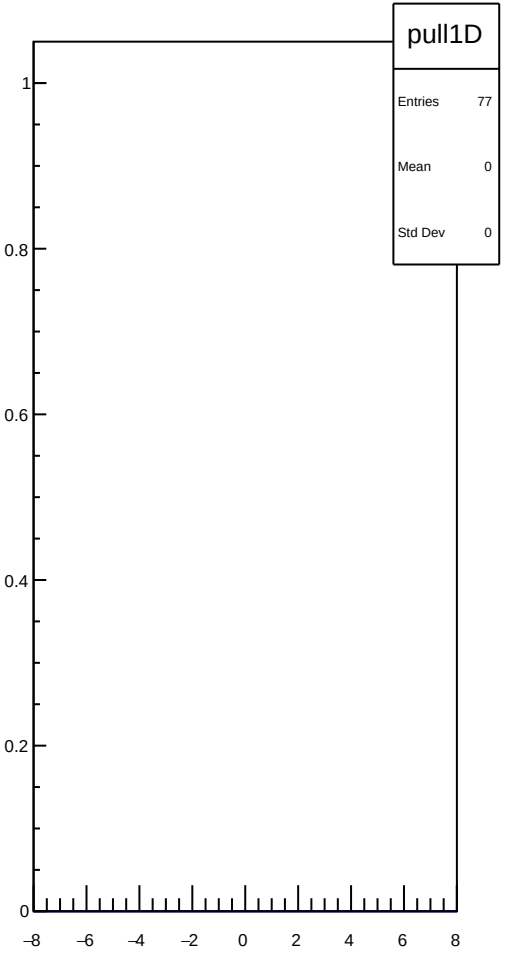

yield_bpm12X_rms vs run
χ² / ndf 1.076e+05 / 76
p0 0.0699 ± 5.942e−05
0.25
0.2
0.15
0.1
0.05

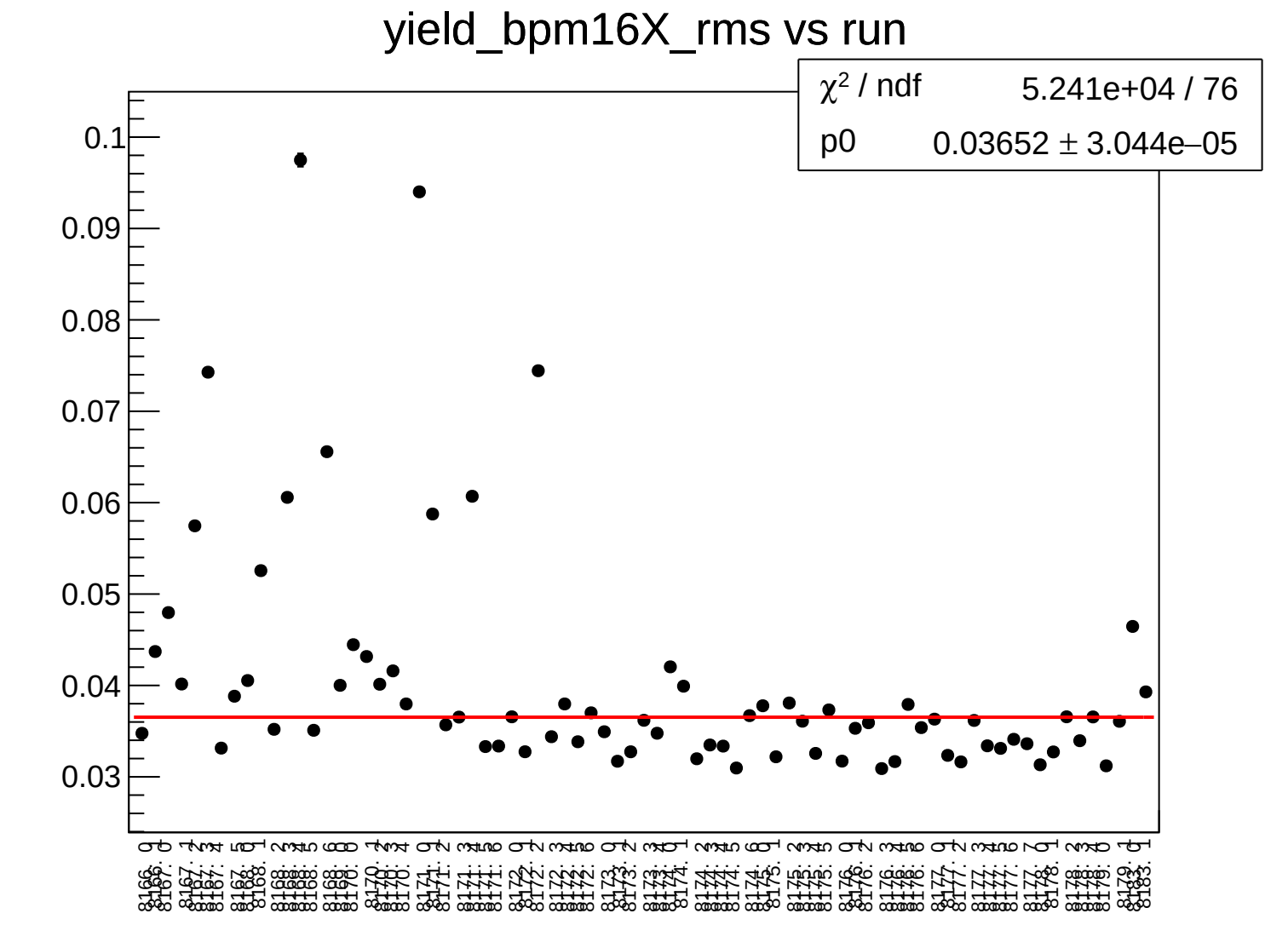

yield_bpm12Y_mean vs run
χ² / ndf 3.641e+08 / 76
p0 1.359 ± 6.153e−06
pull
Entries 77
Mean −771.4
Std Dev 804.9

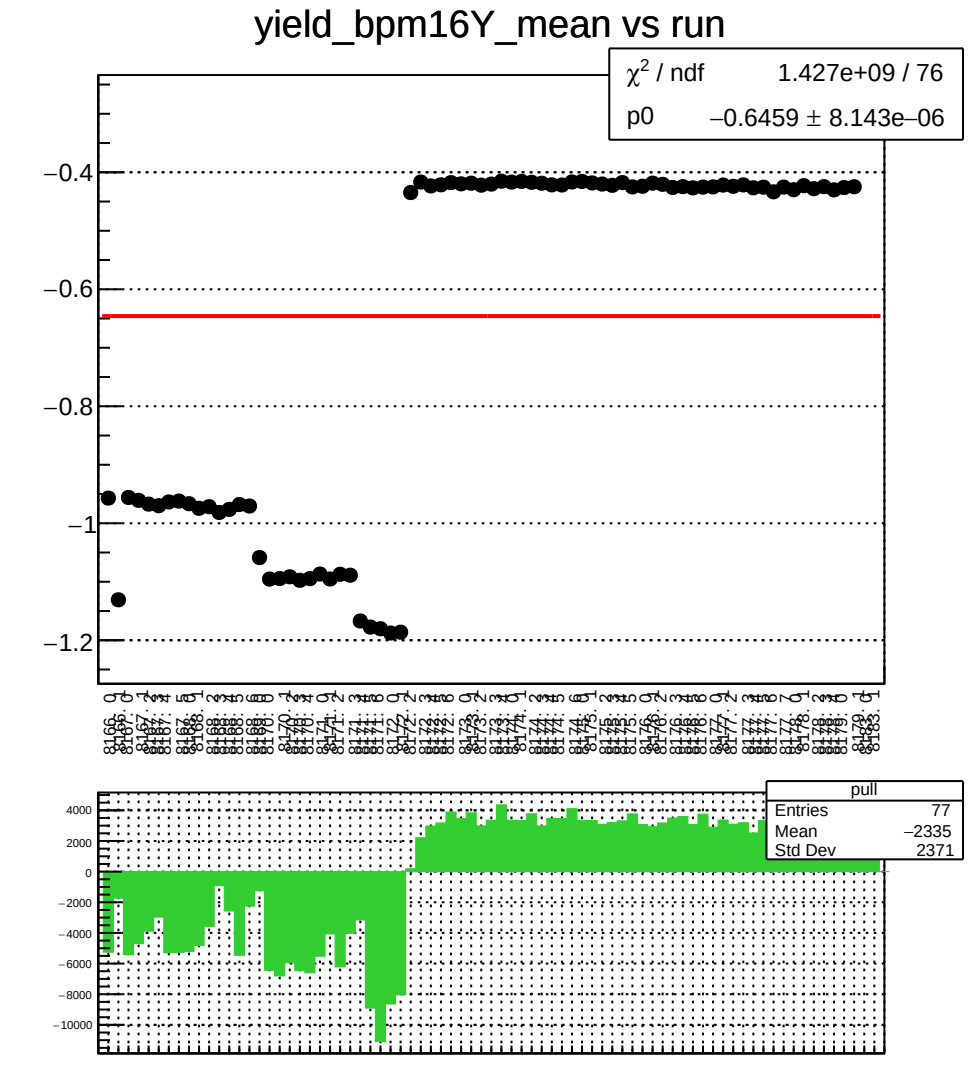

pull1D
Entries 77
Mean 0
Std Dev 0

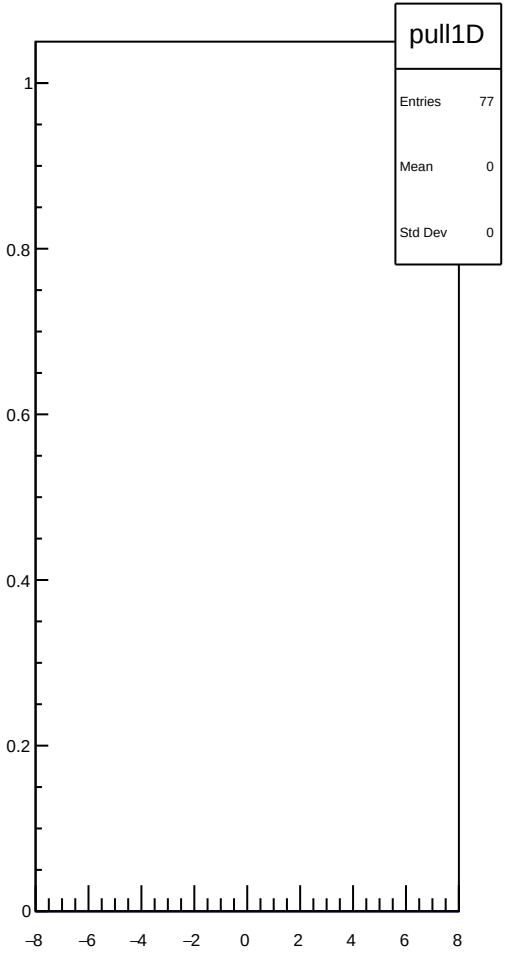

yield_bpm12Y_rms vs run
χ² / ndf 5.76e+04 / 76
p0 0.00521 ± 4.351e–06
0.025
0.02
0.015
0.01
0.005

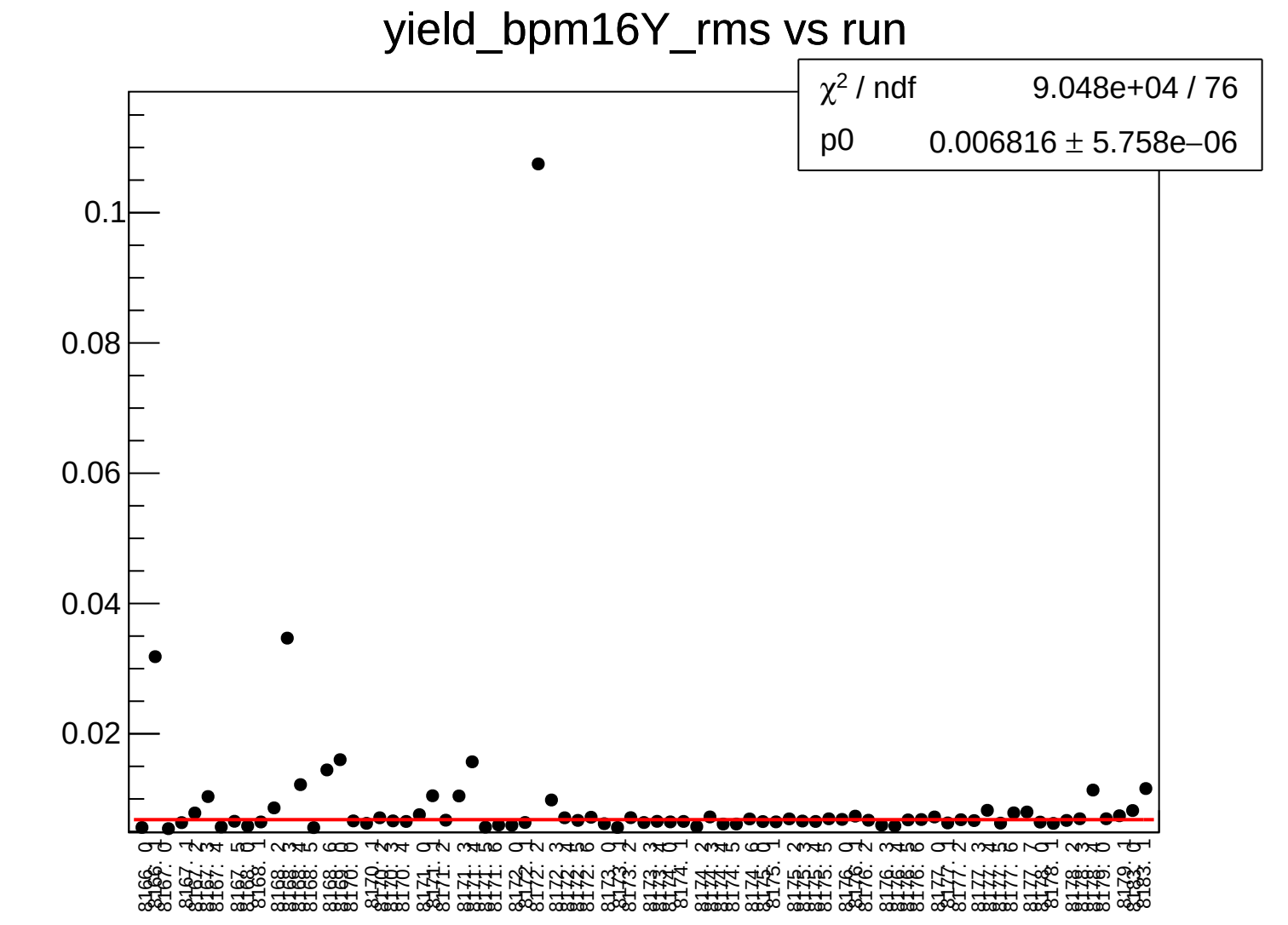

yield_bpm16X_mean vs run
χ² / ndf 1.313e+07 / 76
p0 1.429 ± 4.305e−05
pull
Entries 77
Mean −112.3
Std Dev 132

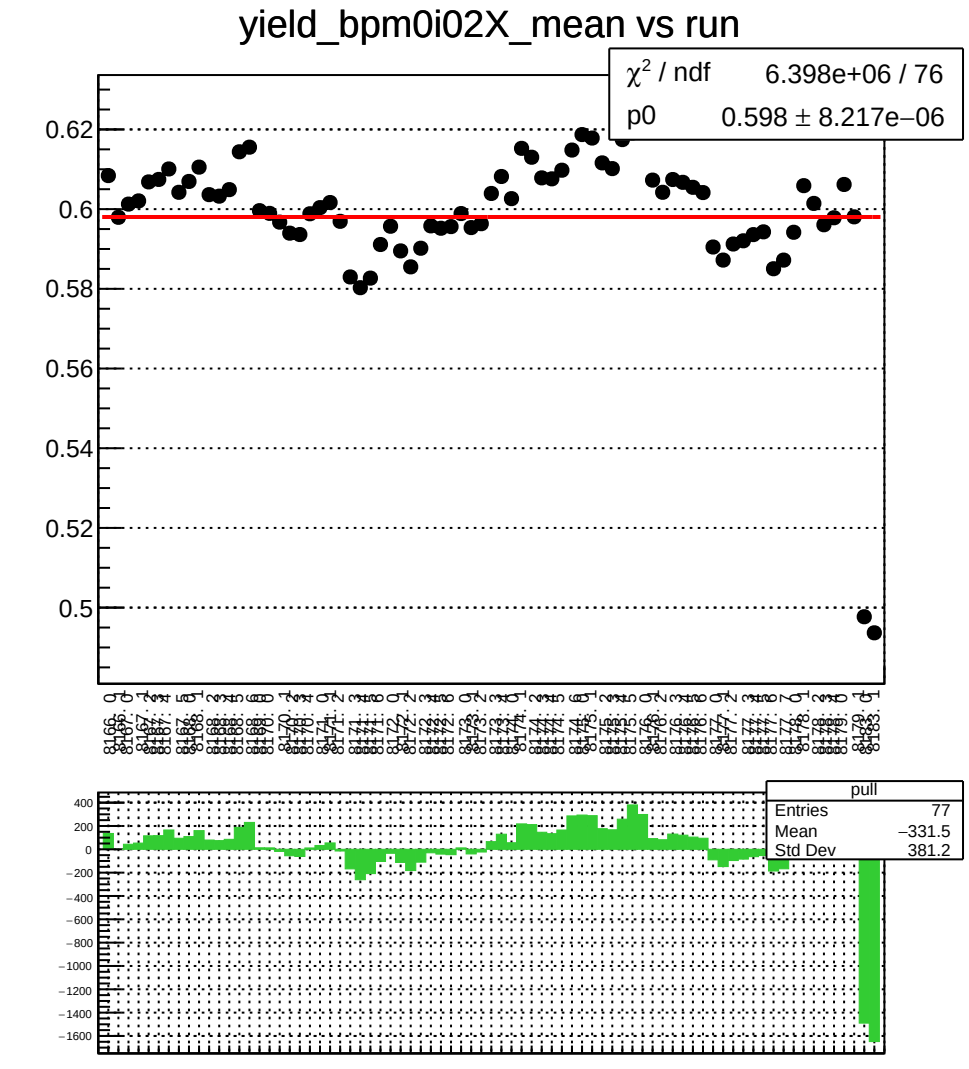

pull1D
Entries 77
Mean 0
Std Dev 0

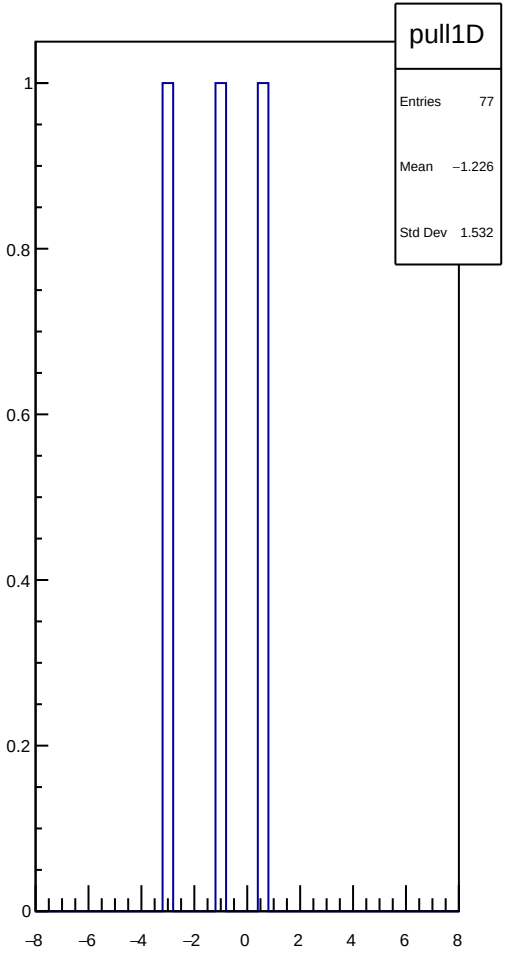

yield_bpm16X_rms vs run
χ² / ndf 5.241e+04 / 76
p0 0.03652 ± 3.044e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03

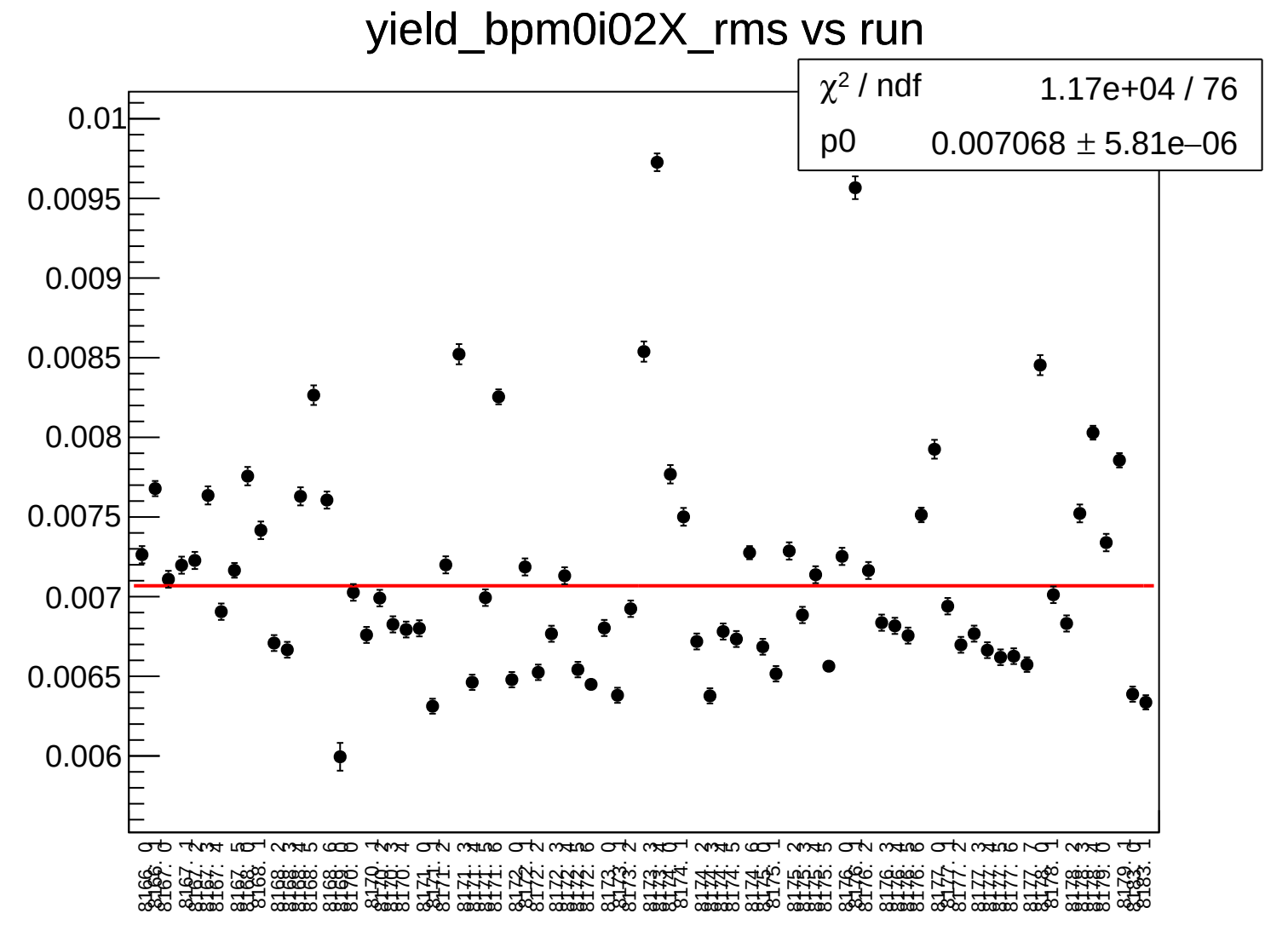

yield_bpm16Y_mean vs run
χ² / ndf 1.427e+09 / 76
p0 −0.6459 ± 8.143e−06
−0.4
−0.6
−0.8
−1
−1.2
pull
Entries 77
Mean −2335
Std Dev 2371
4000
2000
0
−2000
−4000
−6000
−8000
−10000

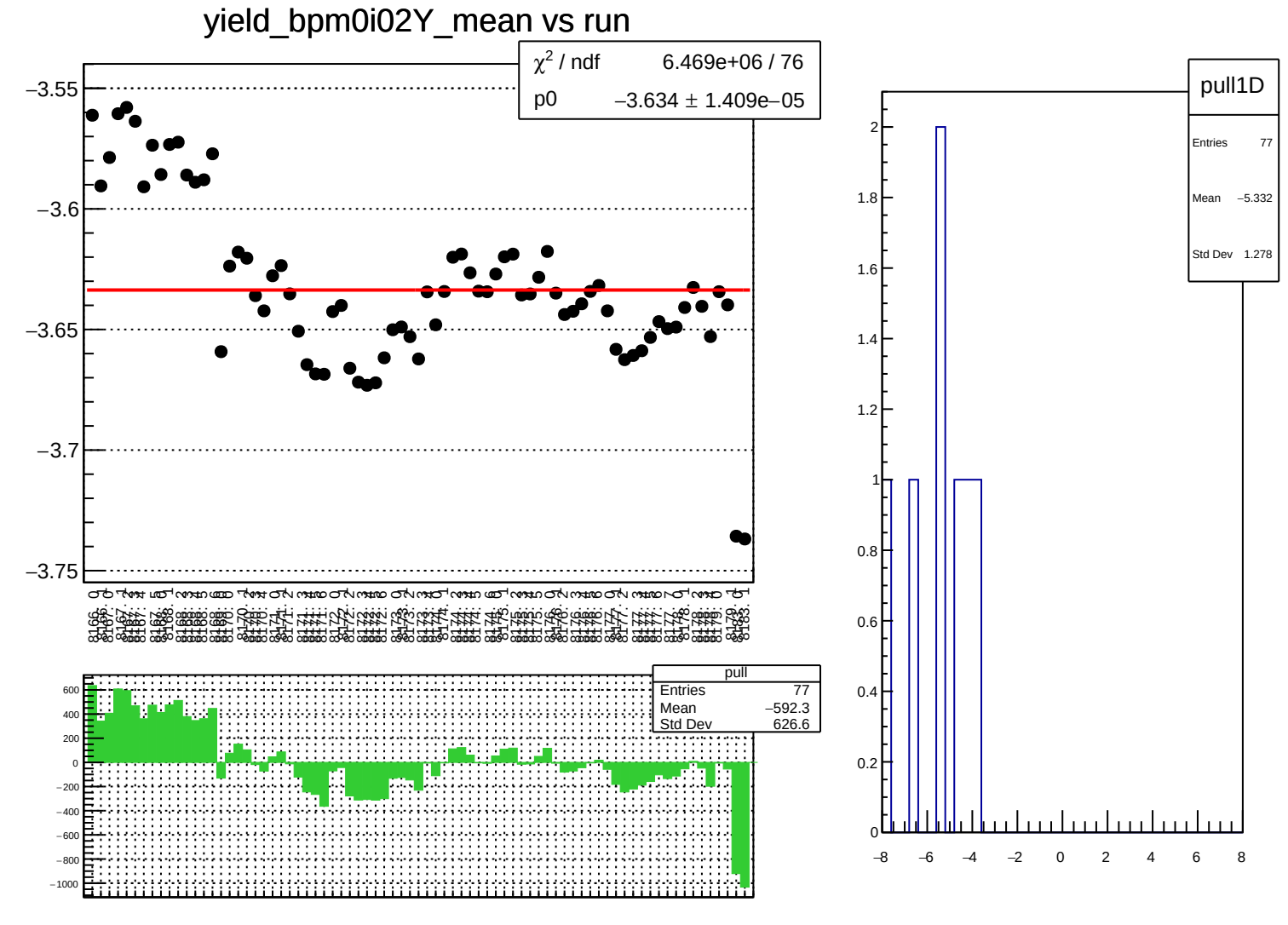

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

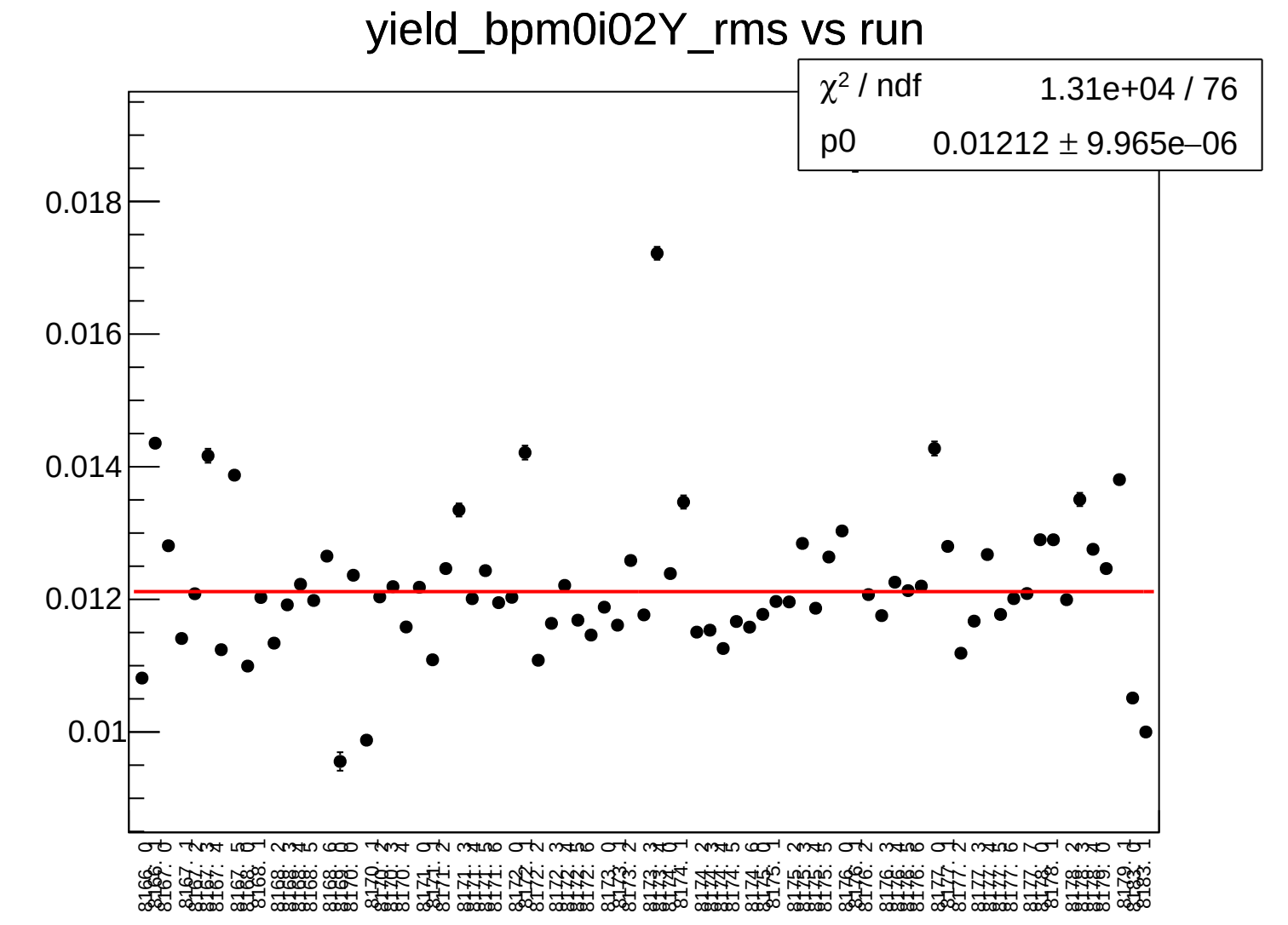

yield_bpm16Y_rms vs run
χ^2 / ndf 9.048e+04 / 76
p0 0.006816 ± 5.758e−06
0.1
0.08
0.06
0.04
0.02

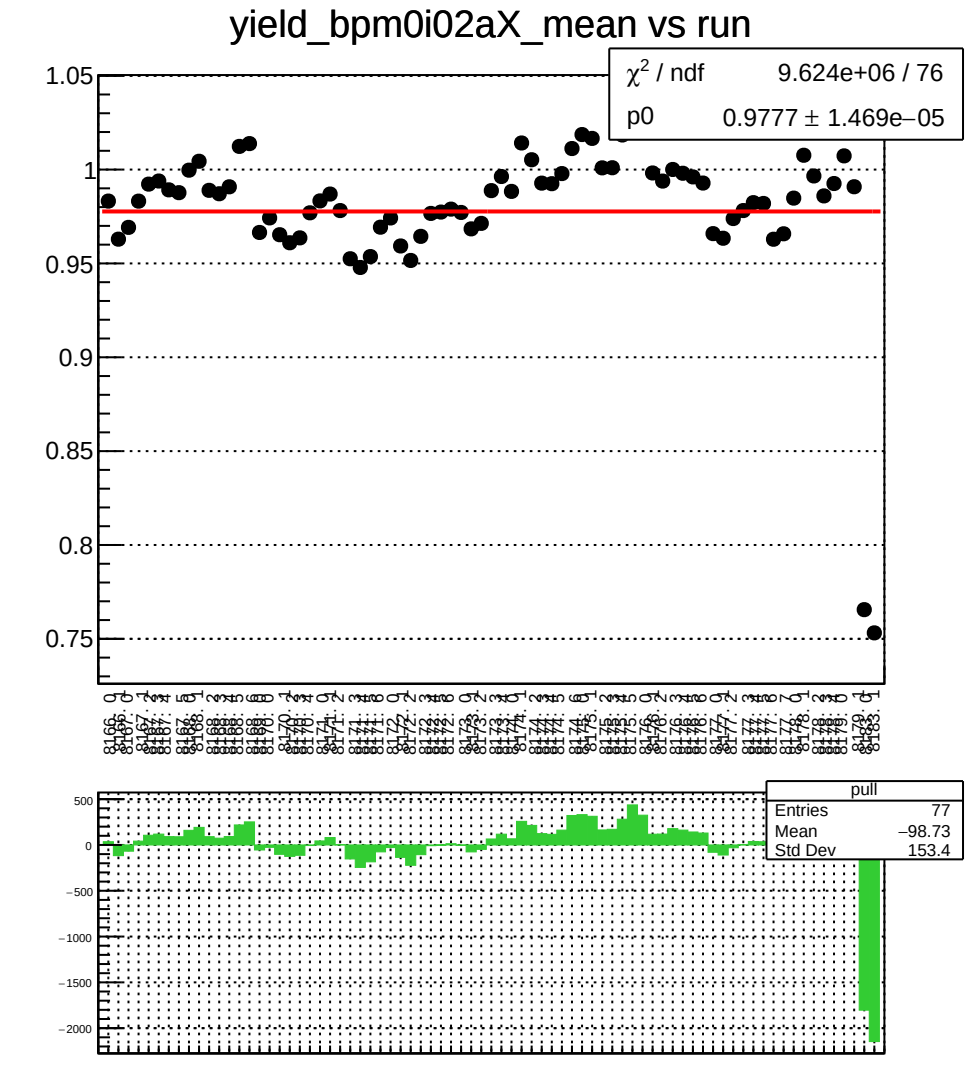

yield_bpm0i02X_mean vs run
χ² / ndf 6.398e+06 / 76
p0 0.598 ± 8.217e−06
0.62
0.6
0.58
0.56
0.54
0.52
0.5
pull
Entries 77
Mean −331.5
Std Dev 381.2
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

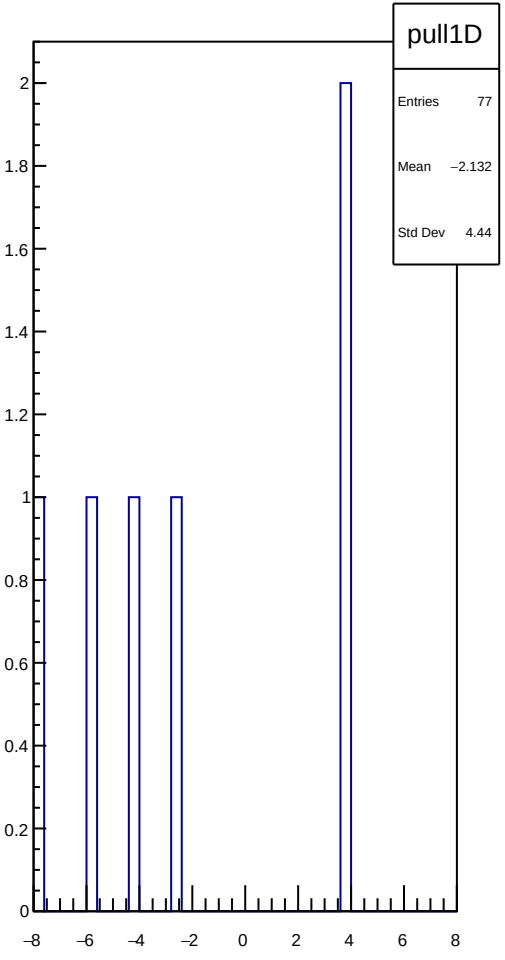

pull1D
Entries 77
Mean −1.226
Std Dev 1.532
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

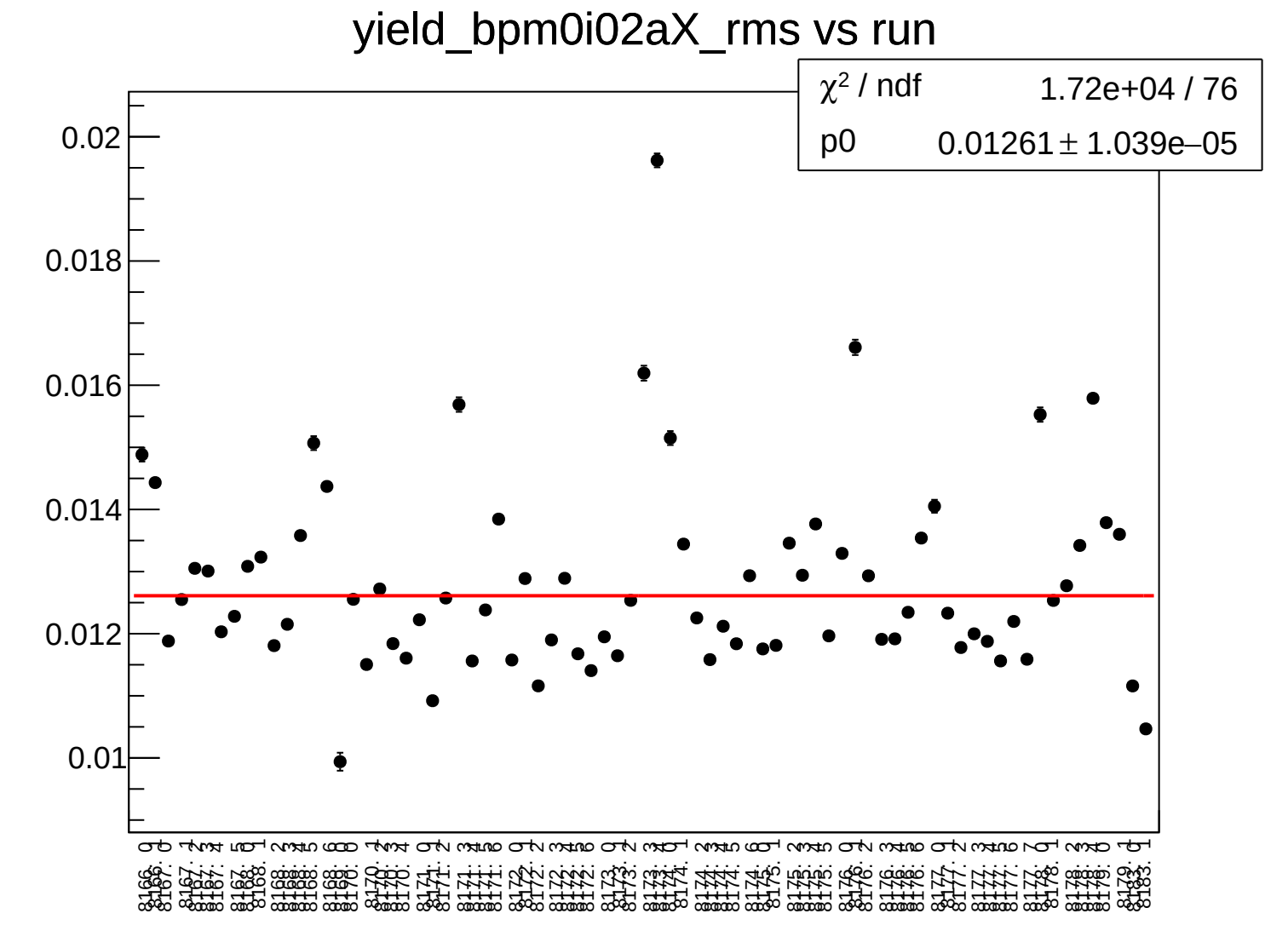

yield_bpm0i02X_rms vs run
χ² / ndf 1.17e+04 / 76
p0 0.007068 ± 5.81e–06
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006

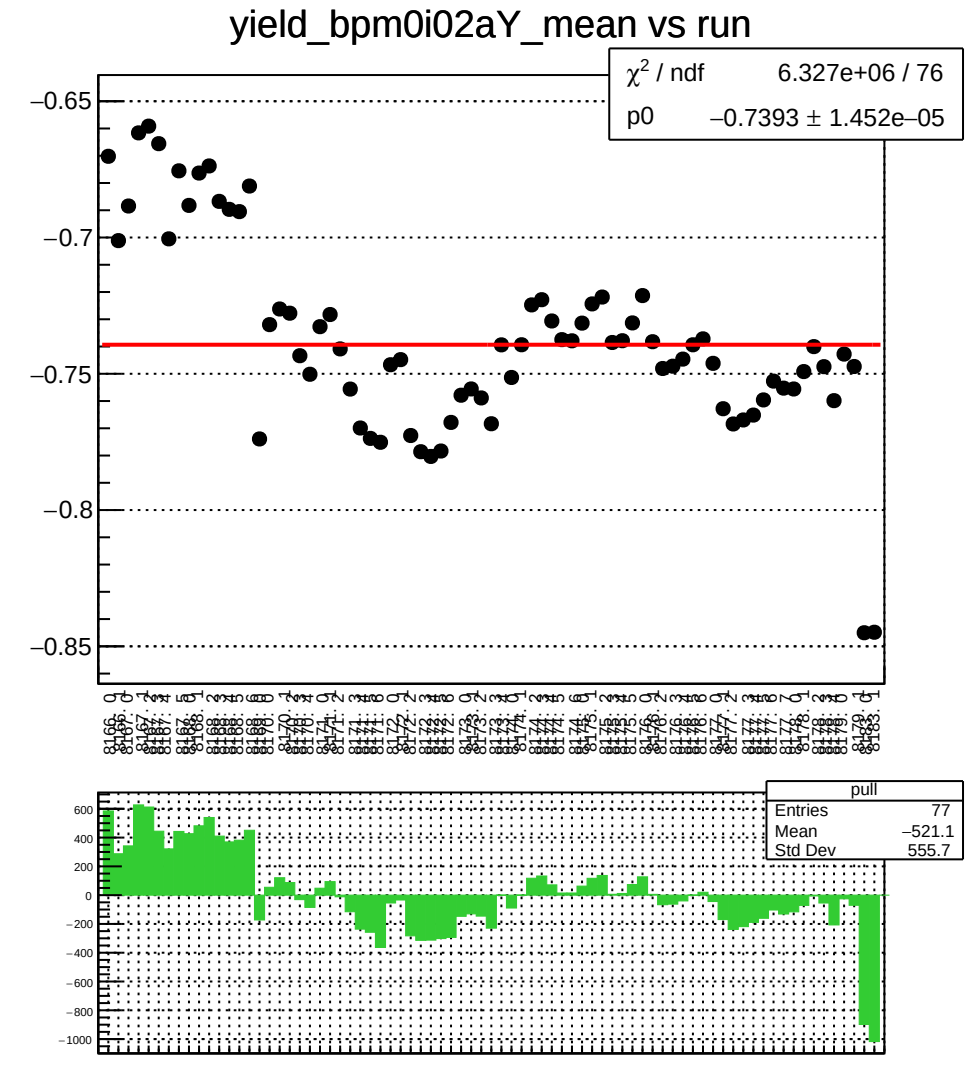

yield_bpm0i02Y_mean vs run
χ² / ndf 6.469e+06 / 76
p0 −3.634 ± 1.409e−05
−3.55
−3.6
−3.65
−3.7
−3.75
pull
Entries 77
Mean −592.3
Std Dev 626.6
600
400
200
0
−200
−400
−600
−800
−1000
pull1D
Entries 77
Mean −5.332
Std Dev 1.278
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

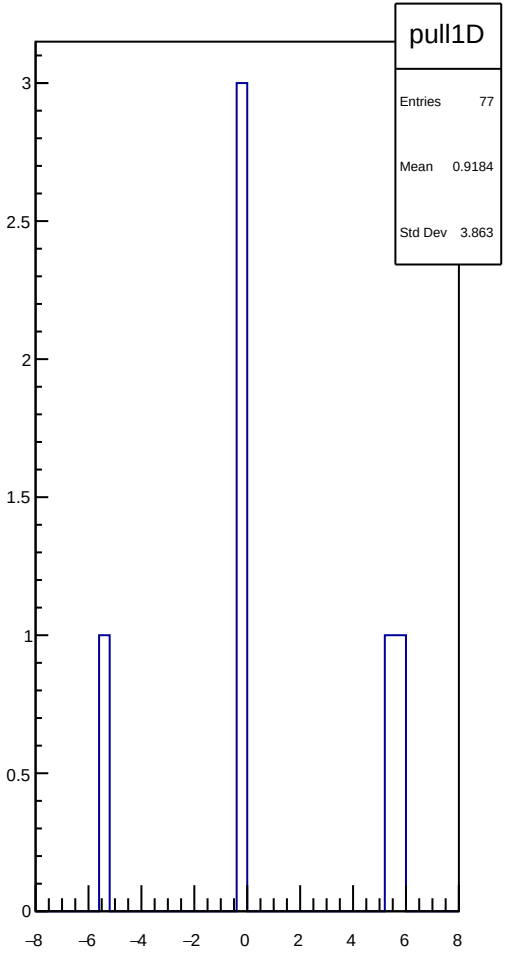

yield_bpm0i02Y_rms vs run
χ² / ndf 1.31e+04 / 76
p0 0.01212 ± 9.965e−06
0.018
0.016
0.014
0.012
0.01

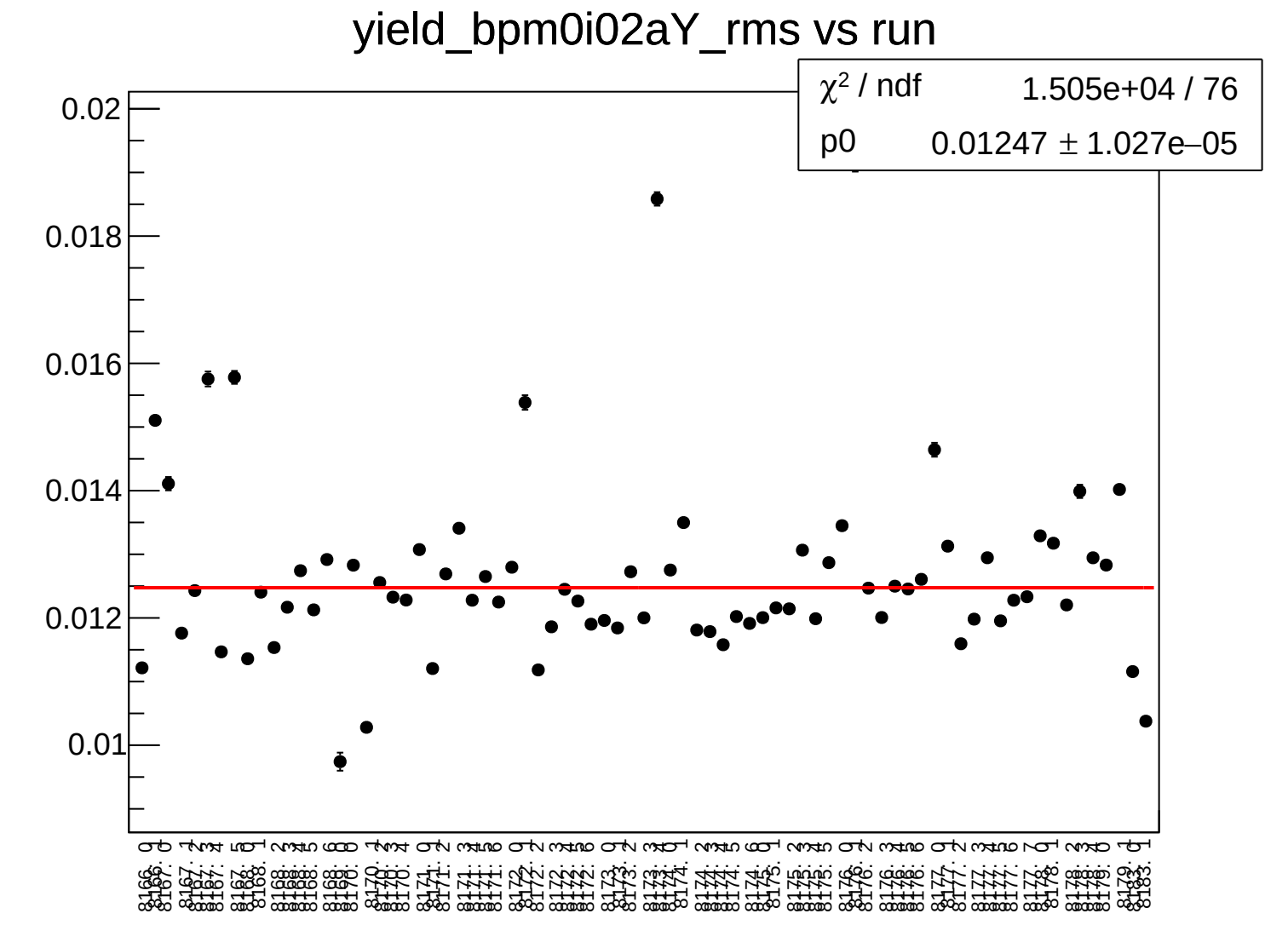

yield_bpm0i02aX_mean vs run
χ² / ndf 9.624e+06 / 76
p0 0.9777 ± 1.469e−05
pull
Entries 77
Mean −98.73
Std Dev 153.4

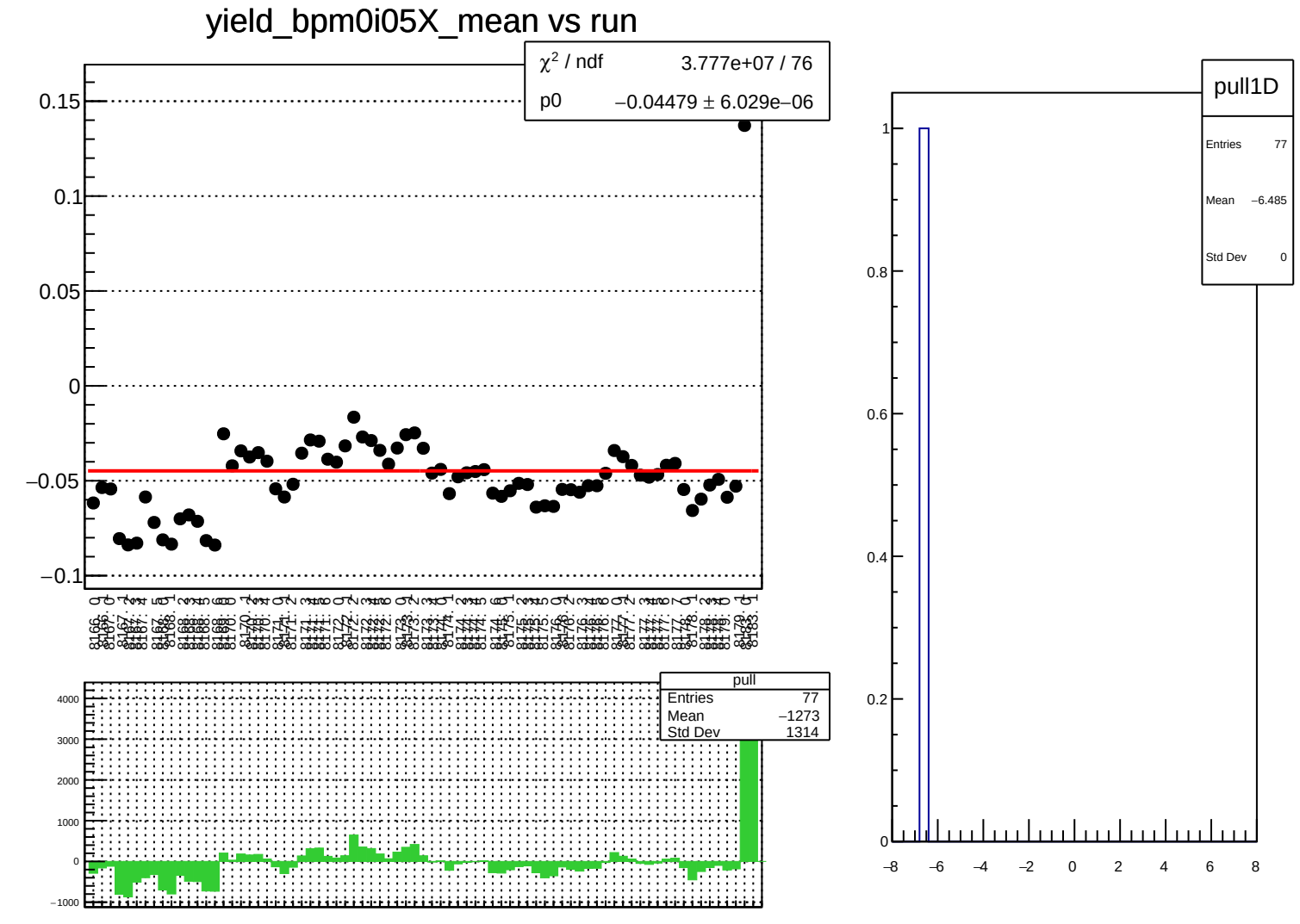

pull1D
Entries 77
Mean −2.132
Std Dev 4.44

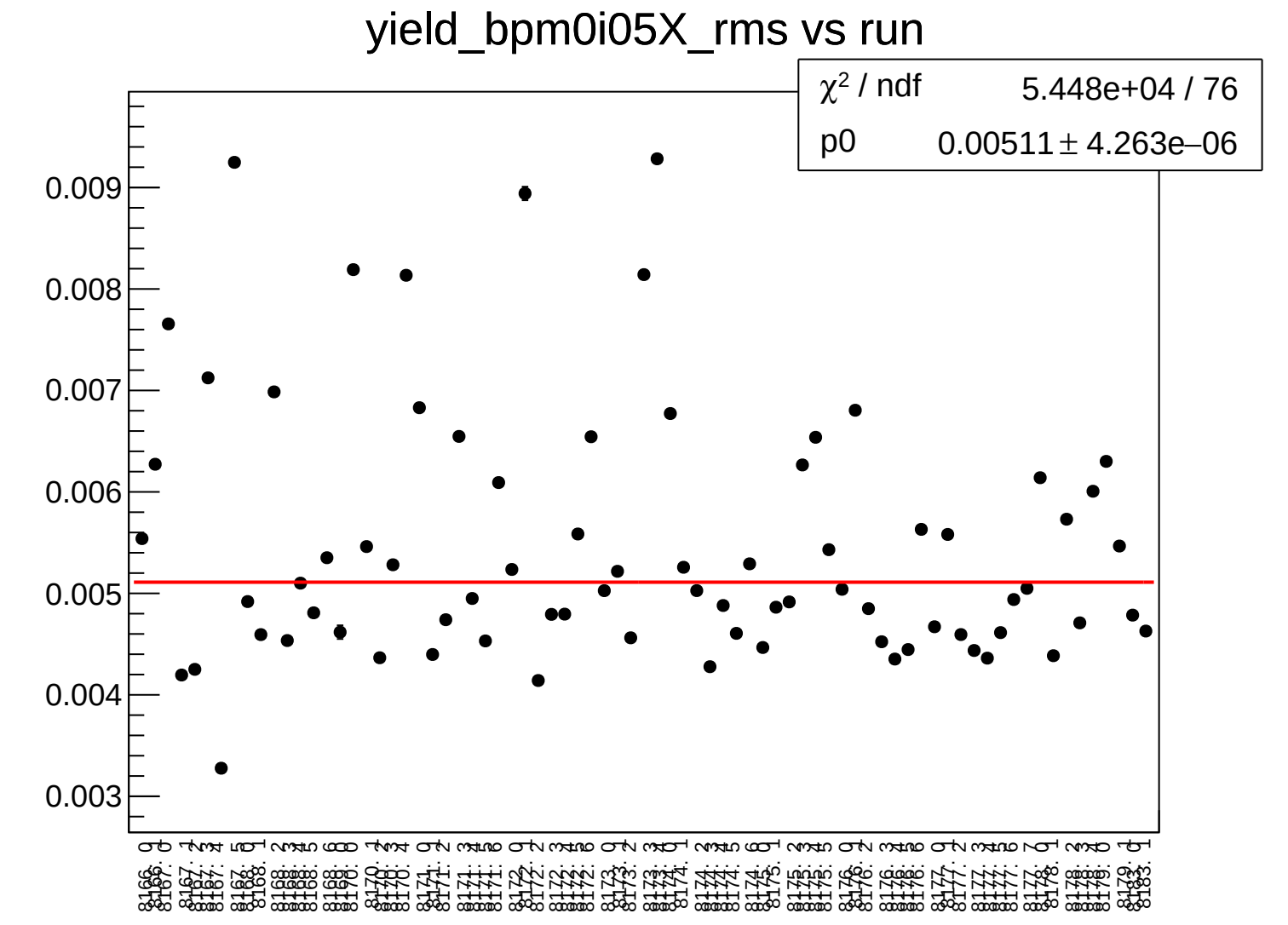

yield_bpm0i02aX_rms vs run
χ² / ndf 1.72e+04 / 76
p0 0.01261 ± 1.039e–05
0.02
0.018
0.016
0.014
0.012
0.01

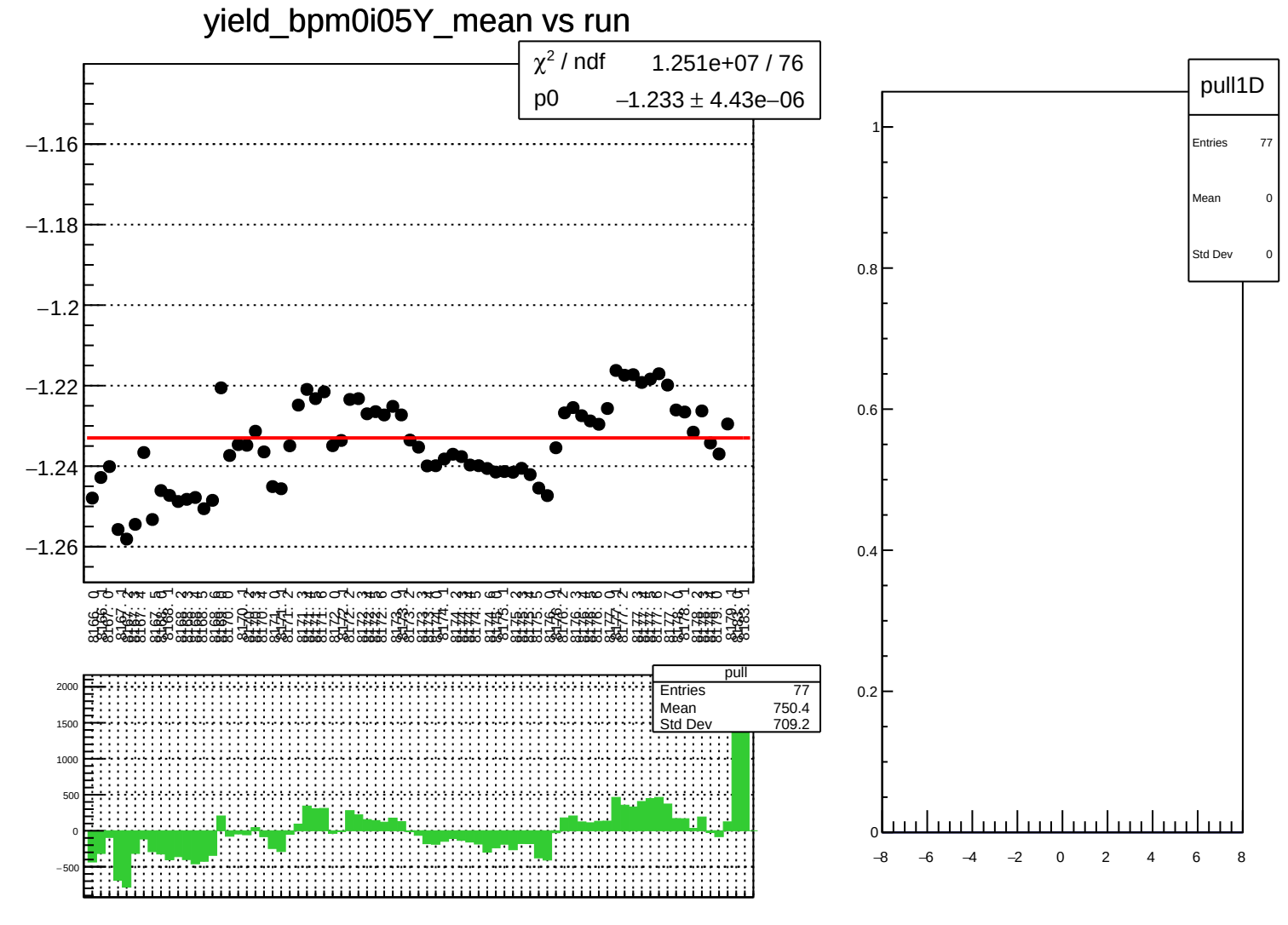

yield_bpm0i02aY_mean vs run
χ² / ndf 6.327e+06 / 76
p0 −0.7393 ± 1.452e−05
−0.65
−0.7
−0.75
−0.8
−0.85
pull
Entries 77
Mean −521.1
Std Dev 555.7
600
400
200
0
−200
−400
−600
−800
−1000

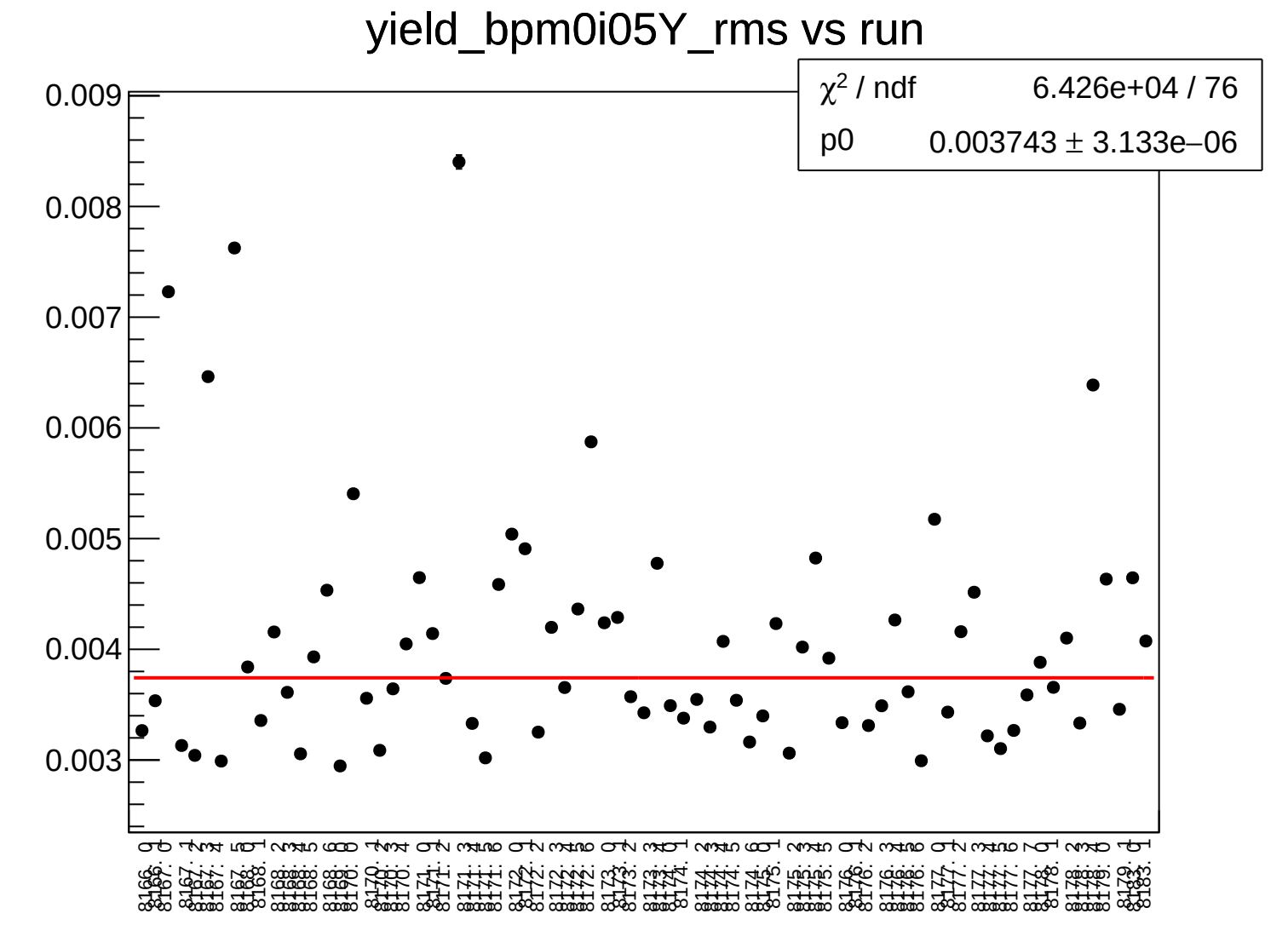

pull1D
Entries 77
Mean 0.9184
Std Dev 3.863
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

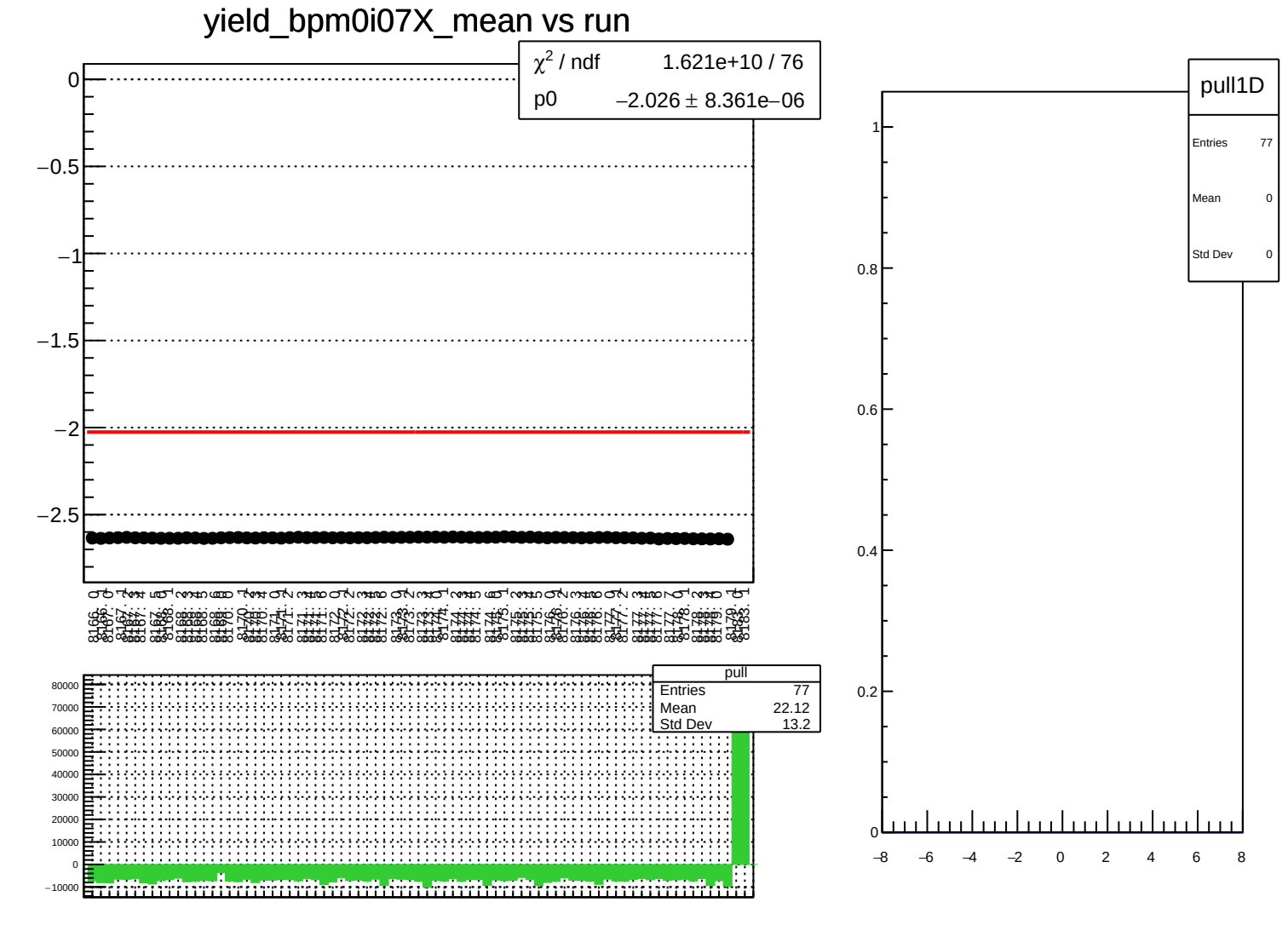

yield_bpm0i02aY_rms vs run
χ² / ndf 1.505e+04 / 76
p0 0.01247 ± 1.027e–05
0.02
0.018
0.016
0.014
0.012
0.01

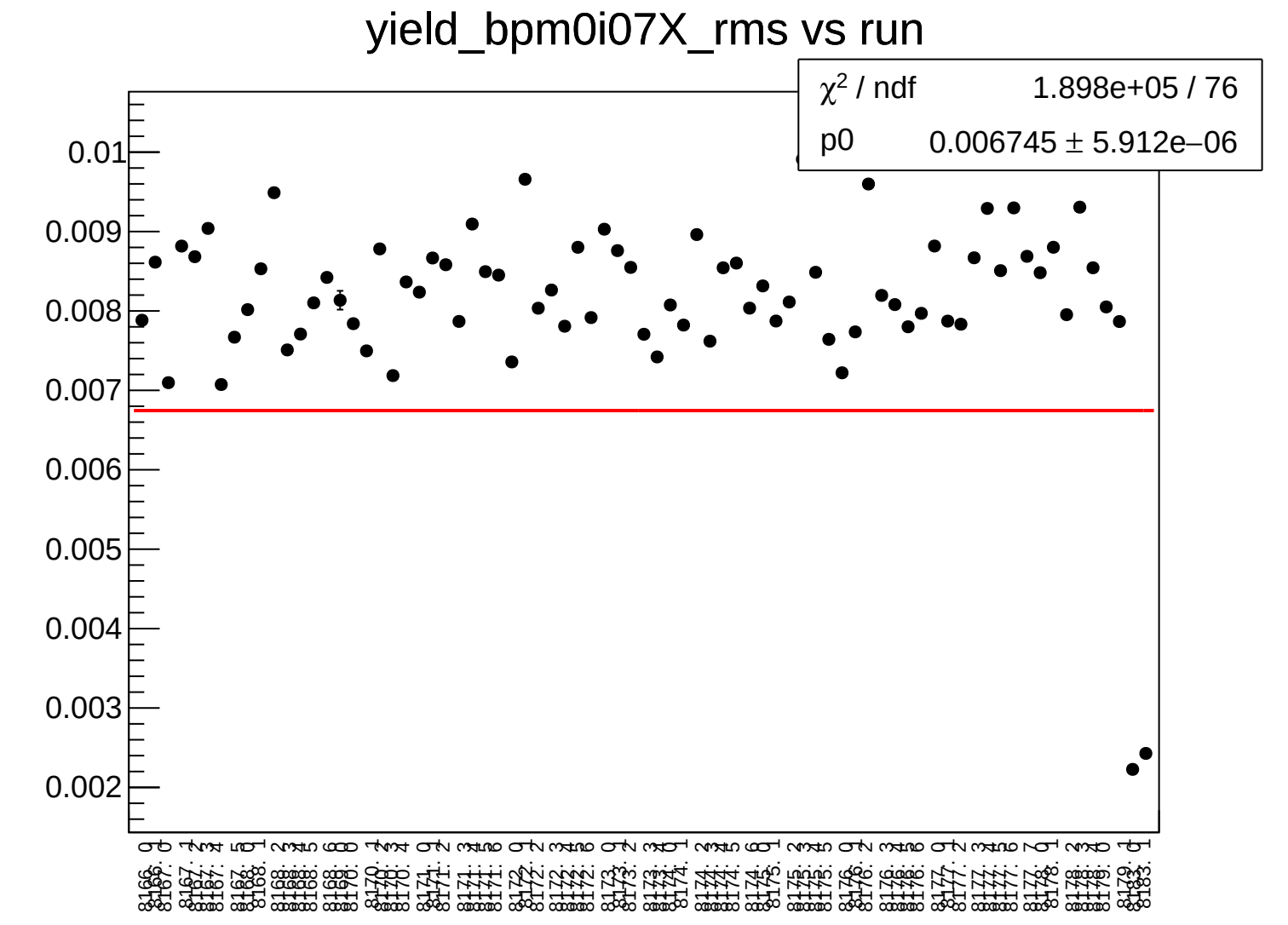

yield_bpm0i05X_mean vs run
χ² / ndf 3.777e+07 / 76
p0 −0.04479 ± 6.029e−06
0.15
0.1
0.05
0
−0.05
−0.1
pull
Entries 77
Mean −1273
Std Dev 1314
4000
3000
2000
1000
0
−1000
pull1D
Entries 77
Mean −6.485
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

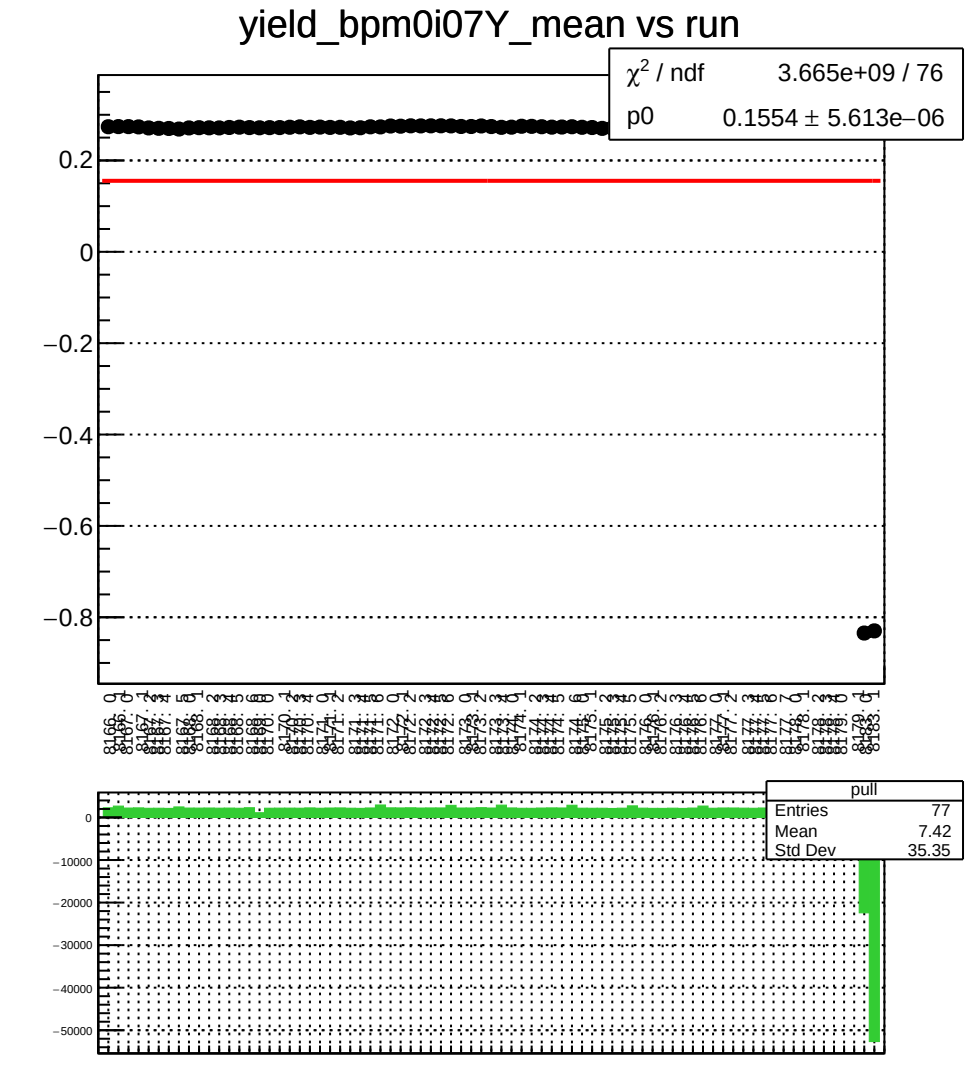

yield_bpm0i05X_rms vs run
χ² / ndf 5.448e+04 / 76
p0 0.00511 ± 4.263e–06
0.009
0.008
0.007
0.006
0.005
0.004
0.003

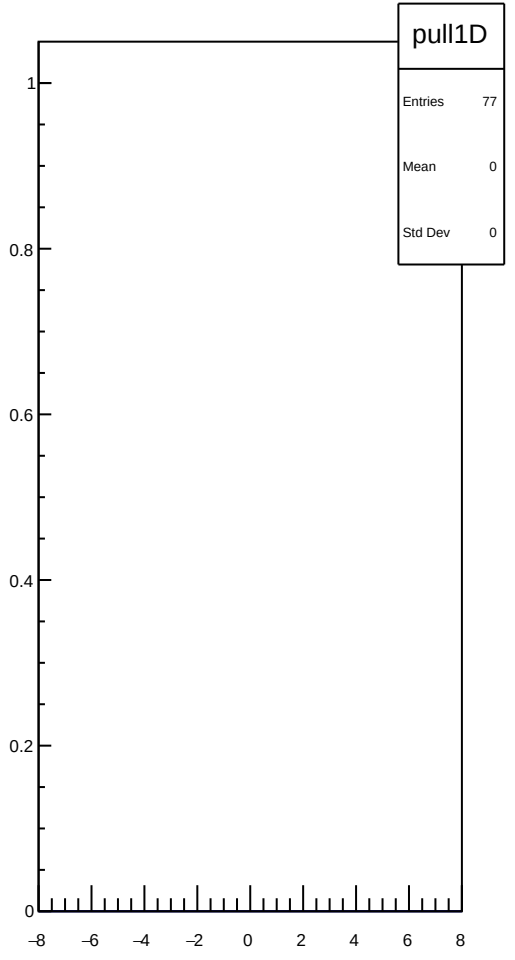

yield_bpm0i05Y_mean vs run
χ² / ndf 1.251e+07 / 76
p0 −1.233 ± 4.43e−06
−1.16
−1.18
−1.2
−1.22
−1.24
−1.26
pull
Entries 77
Mean 750.4
Std Dev 709.2
2000
1500
1000
500
0
−500
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

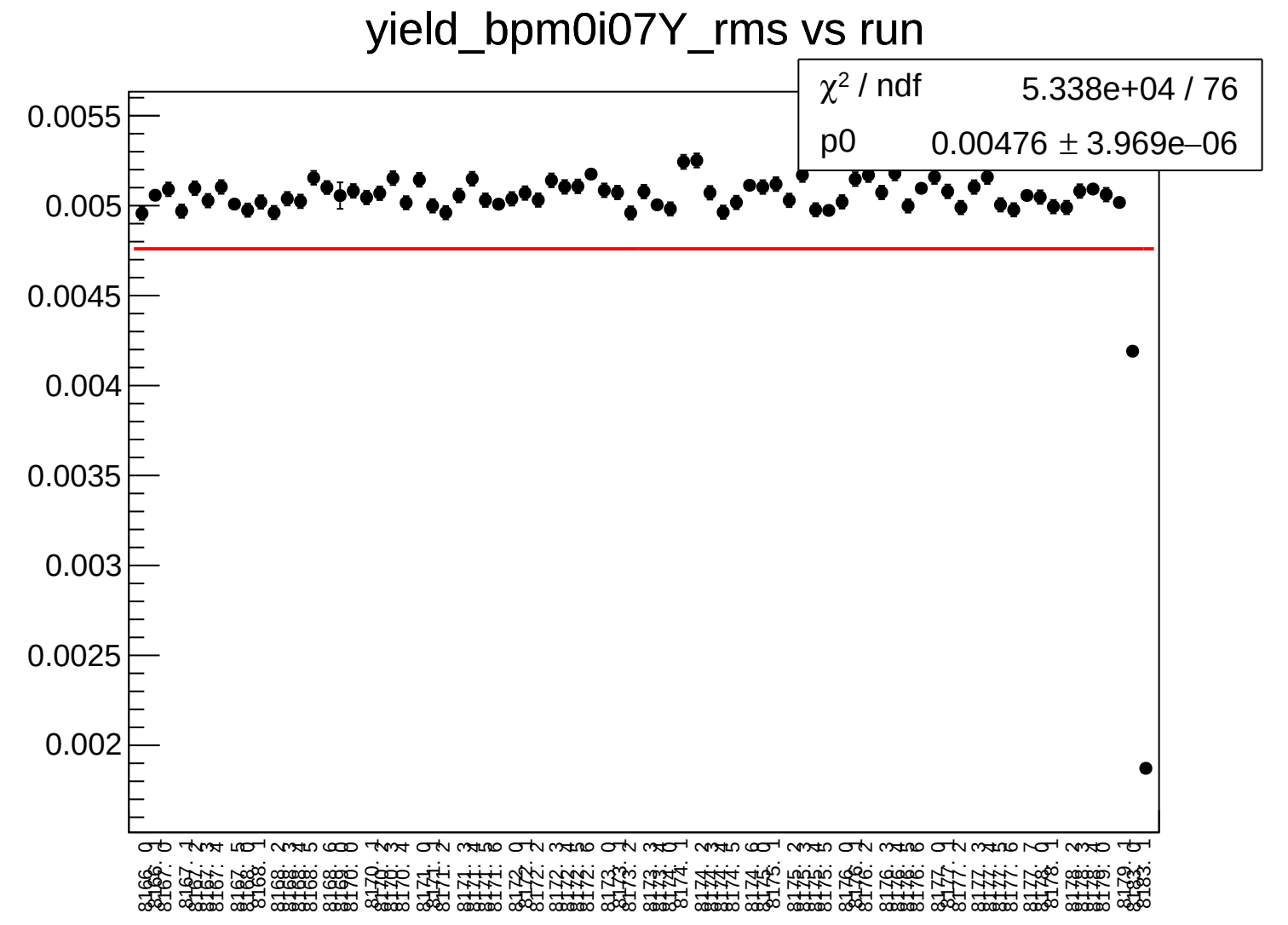

yield_bpm0i05Y_rms vs run
χ² / ndf 6.426e+04 / 76
p0 0.003743 ± 3.133e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003

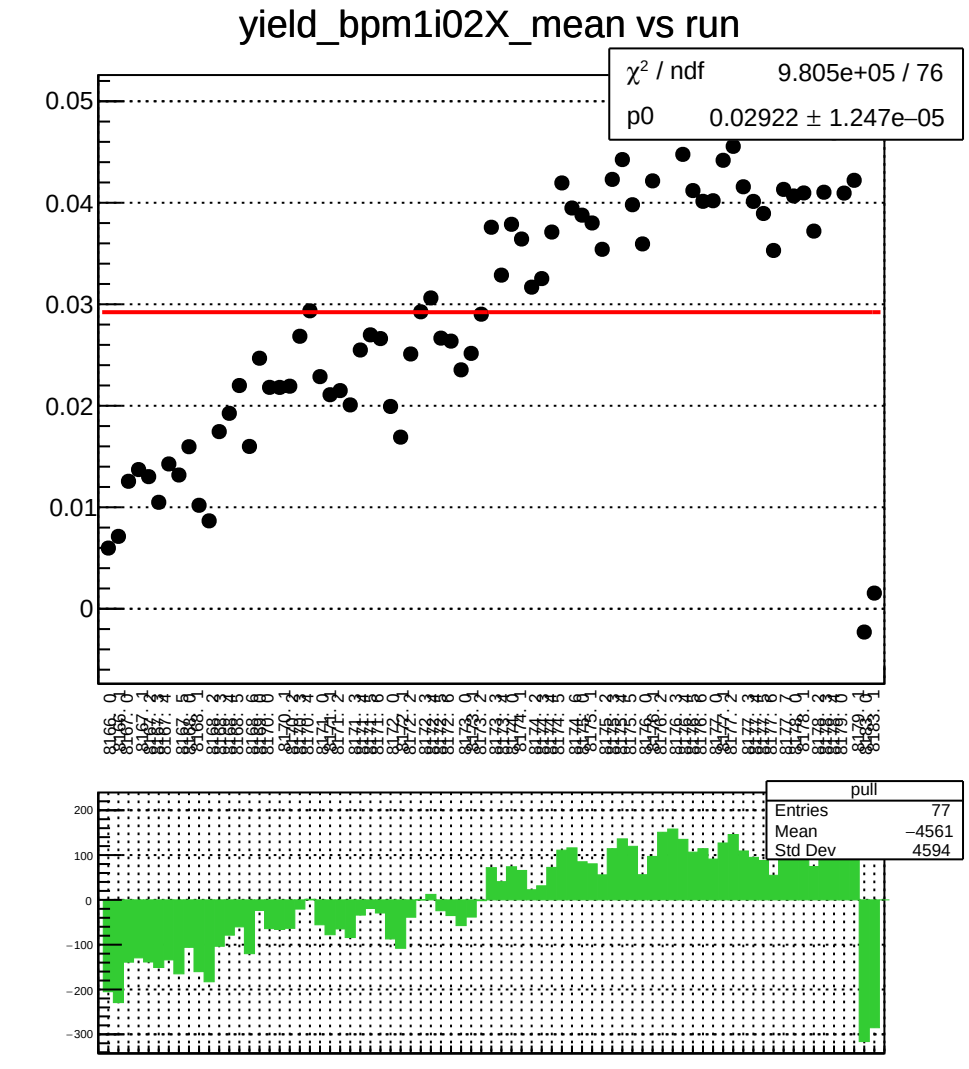

yield_bpm0i07X_mean vs run
χ² / ndf 1.621e+10 / 76
p0 −2.026 ± 8.361e−06
pull
Entries 77
Mean 22.12
Std Dev 13.2
pull1D
Entries 77
Mean 0
Std Dev 0

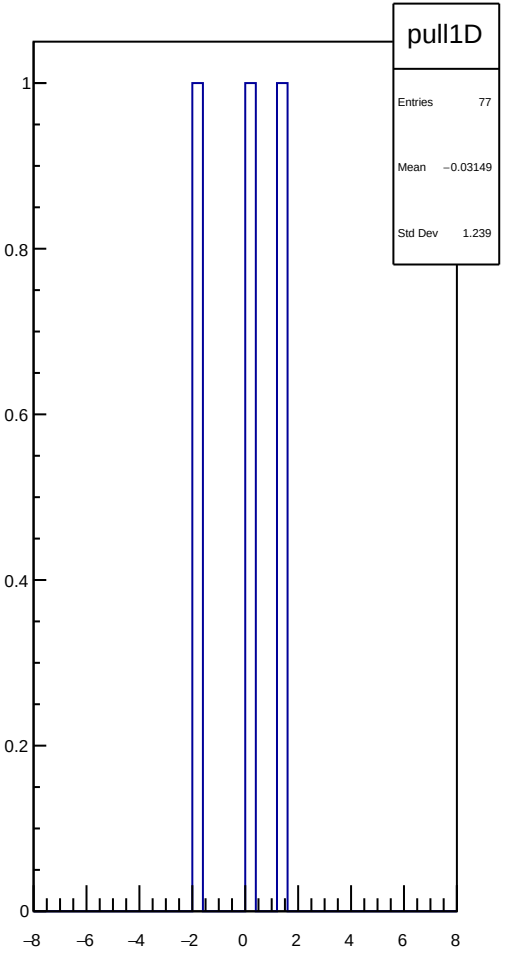

yield_bpm0i07X_rms vs run
χ² / ndf 1.898e+05 / 76
p0 0.006745 ± 5.912e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

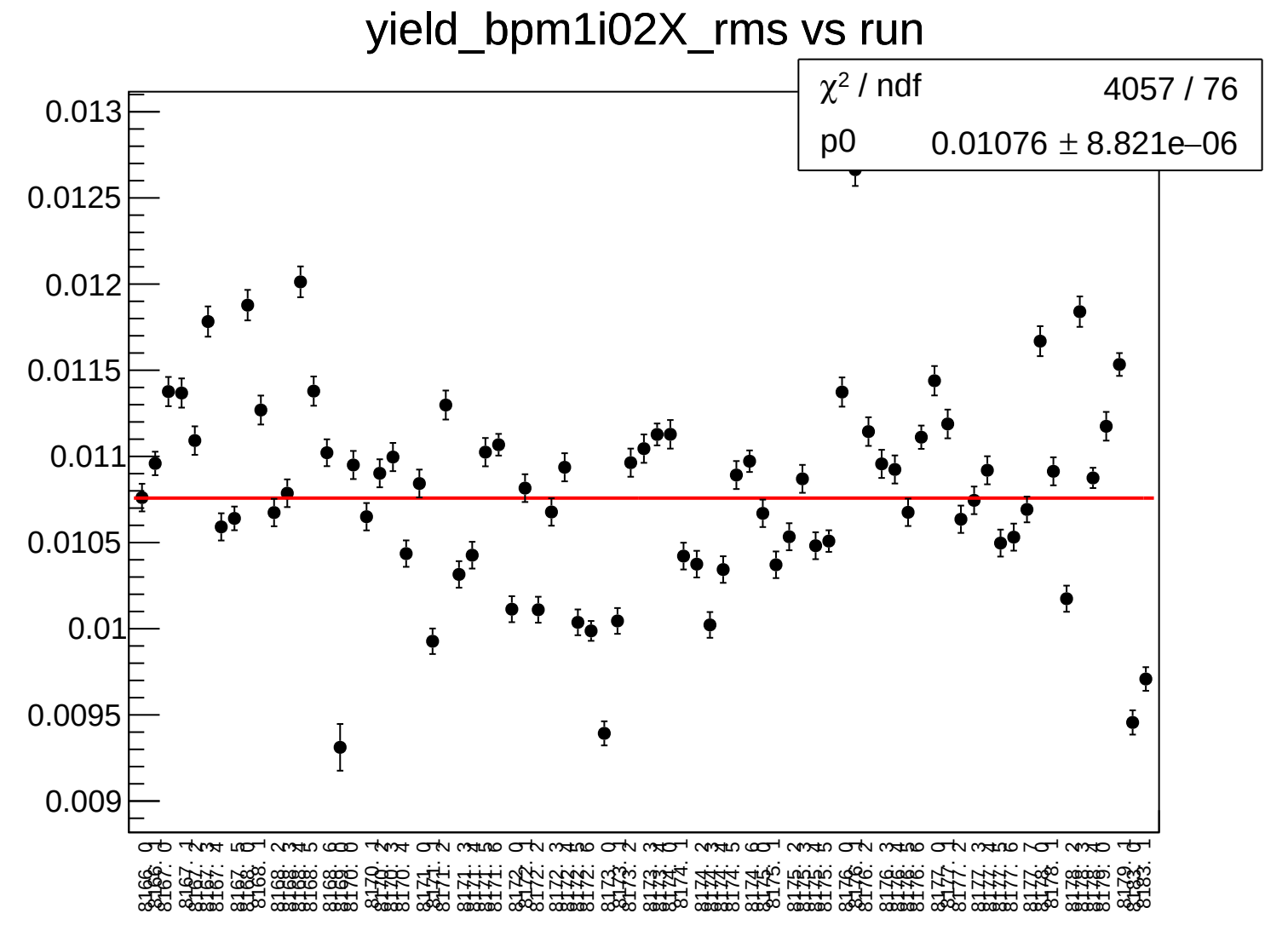

yield_bpm0i07Y_mean vs run
χ² / ndf 3.665e+09 / 76
p0 0.1554 ± 5.613e−06
0.2
0
−0.2
−0.4
−0.6
−0.8
pull
Entries 77
Mean 7.42
Std Dev 35.35
0
−10000
−20000
−30000
−40000
−50000

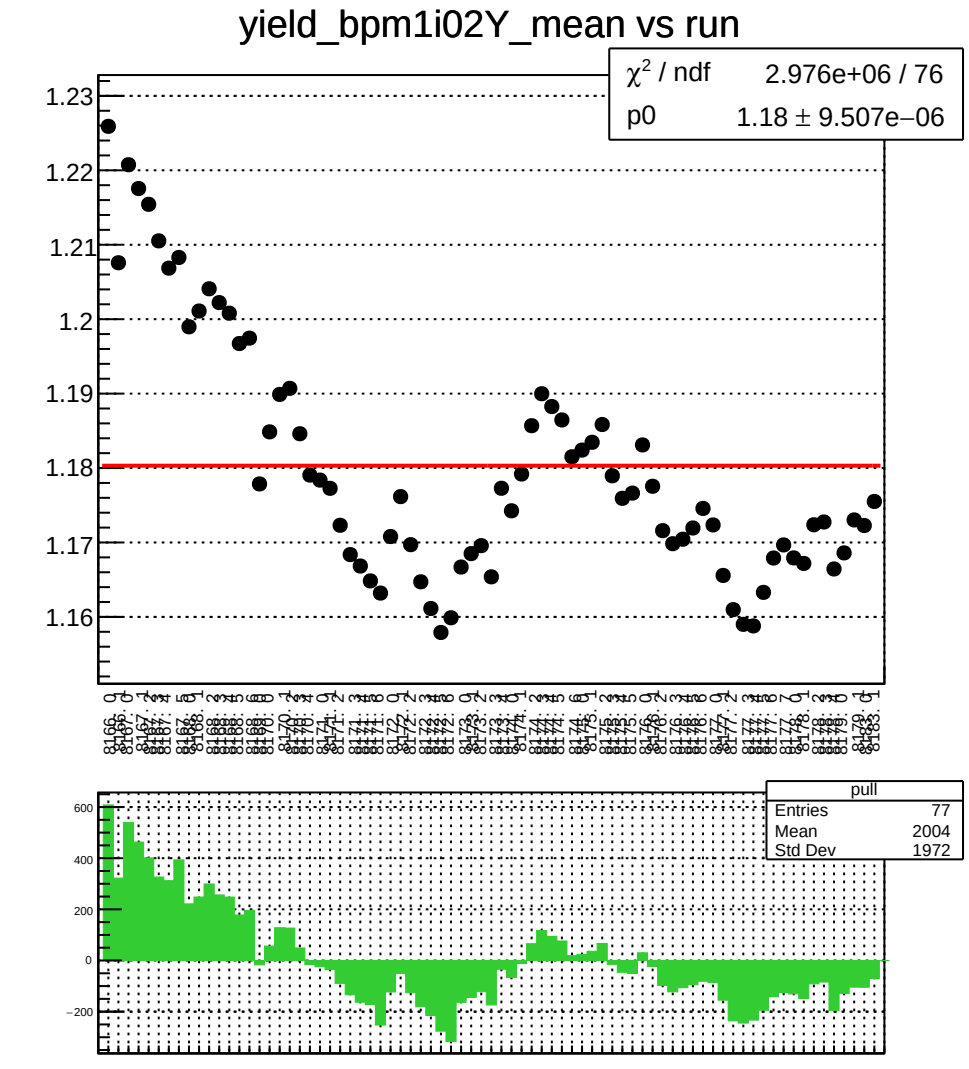

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

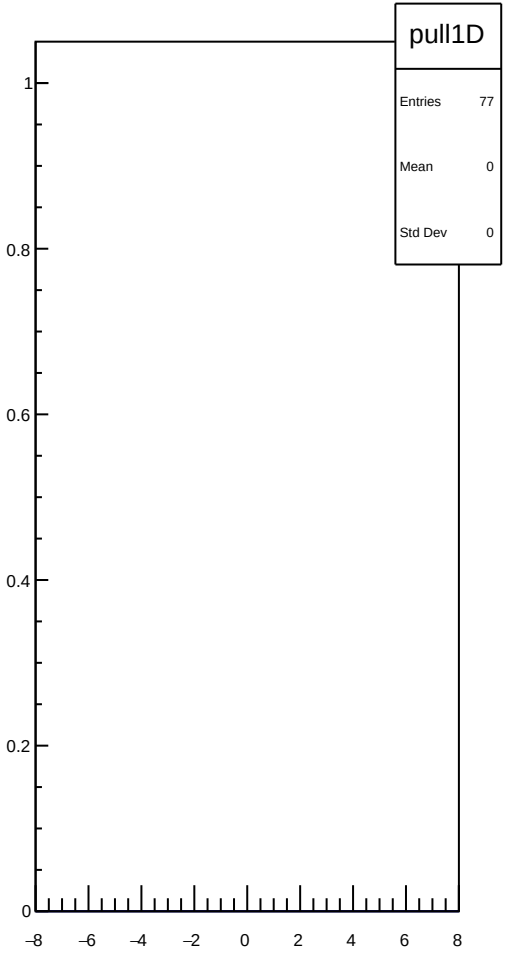

yield_bpm0i07Y_rms vs run
χ² / ndf 5.338e+04 / 76
p0 0.00476 ± 3.969e–06
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002


yield_bpm1i02X_mean vs run
χ² / ndf 9.805e+05 / 76
p0 0.02922 ± 1.247e−05
pull
Entries 77
Mean −4561
Std Dev 4594

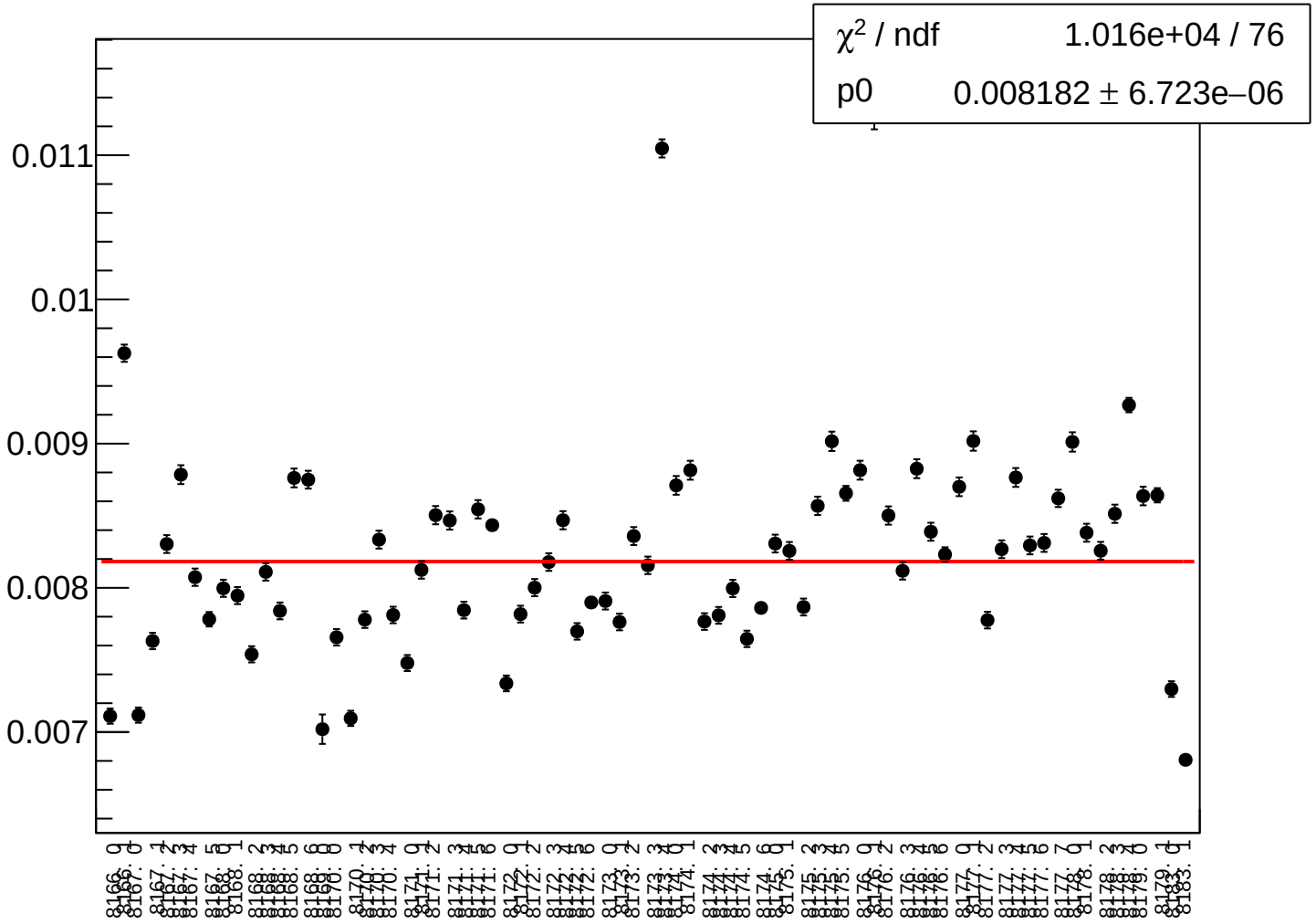

pull1D
Entries 77
Mean −0.03149
Std Dev 1.239

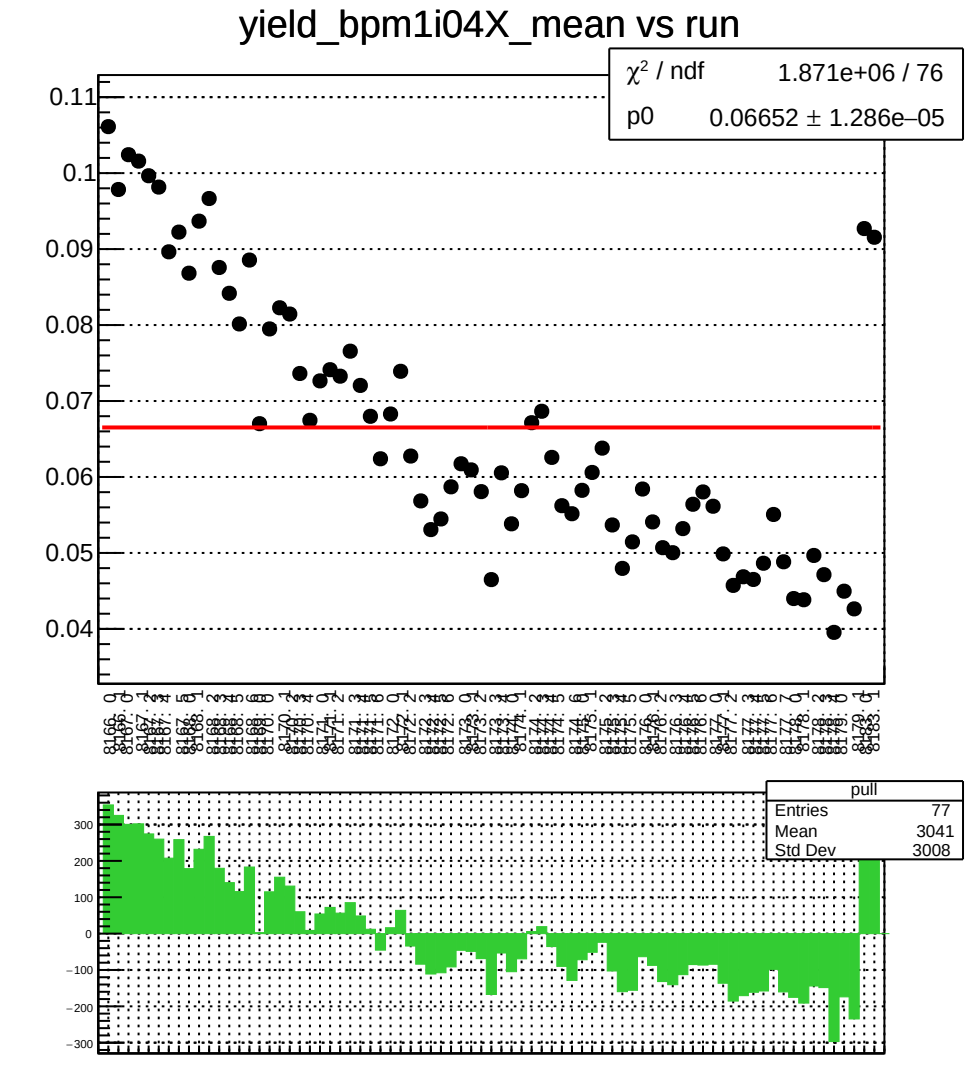

yield_bpm1i02X_rms vs run
χ² / ndf 4057 / 76
p0 0.01076 ± 8.821e–06
0.013
0.0125
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009

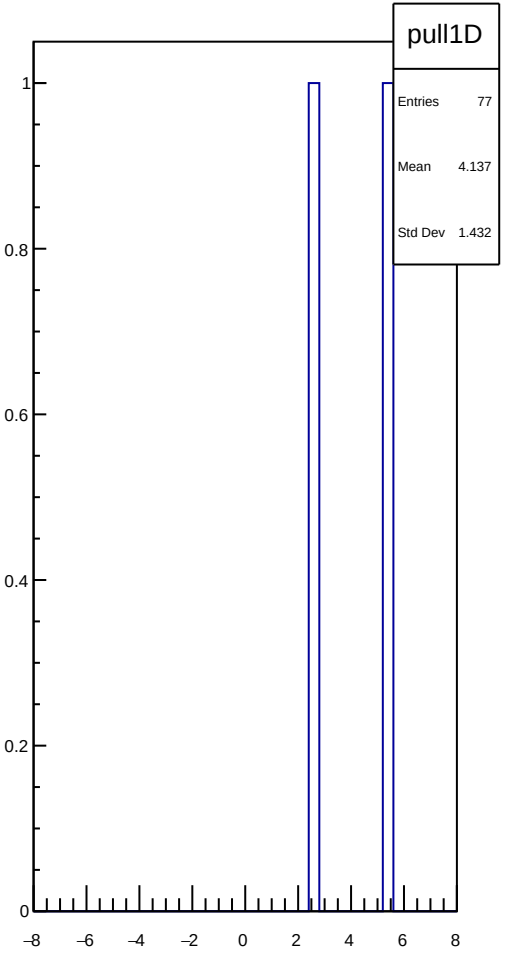

yield_bpm1i02Y_mean vs run
χ² / ndf 2.976e+06 / 76
p0 1.18 ± 9.507e−06
1.23
1.22
1.21
1.2
1.19
1.18
1.17
1.16
pull
Entries 77
Mean 2004
Std Dev 1972
600
400
200
0
−200

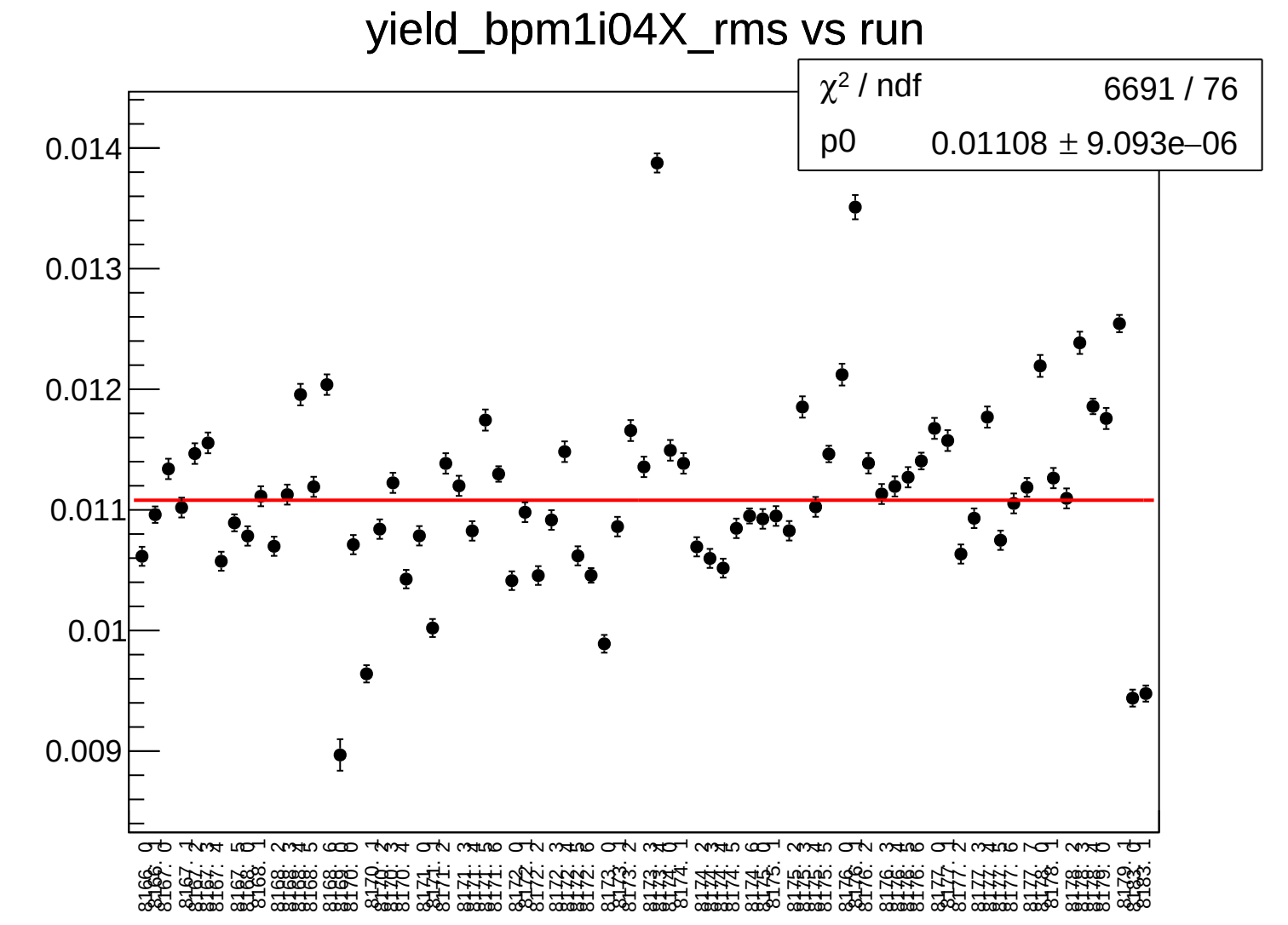

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

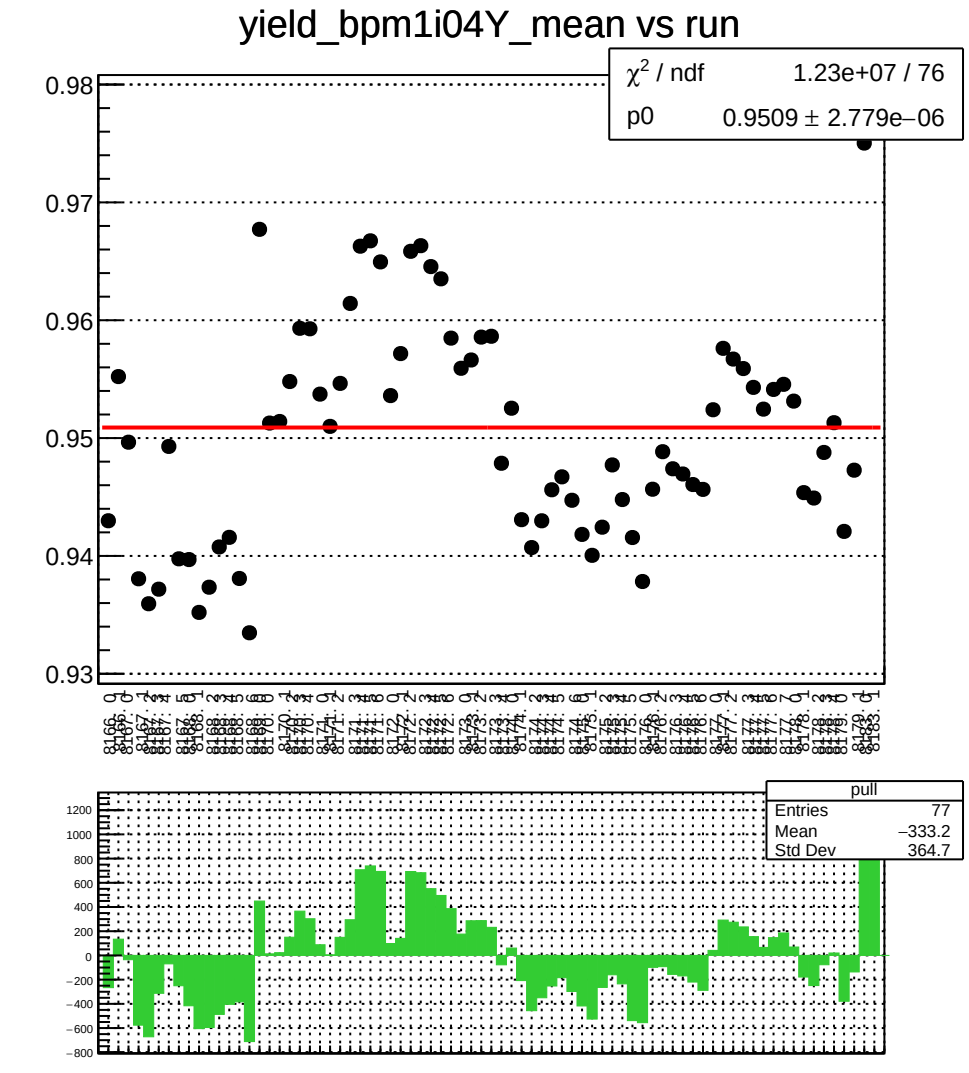
yield_bpm1i02Y_rms vs run

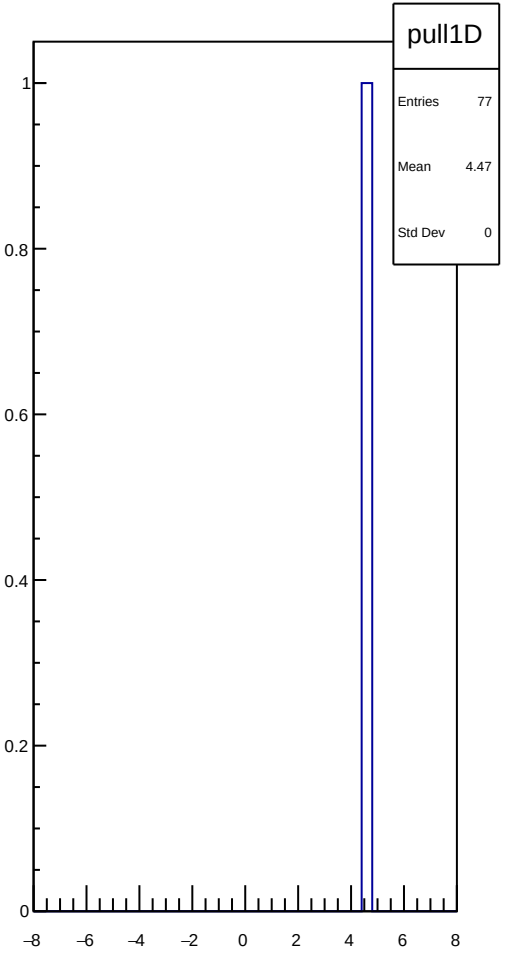


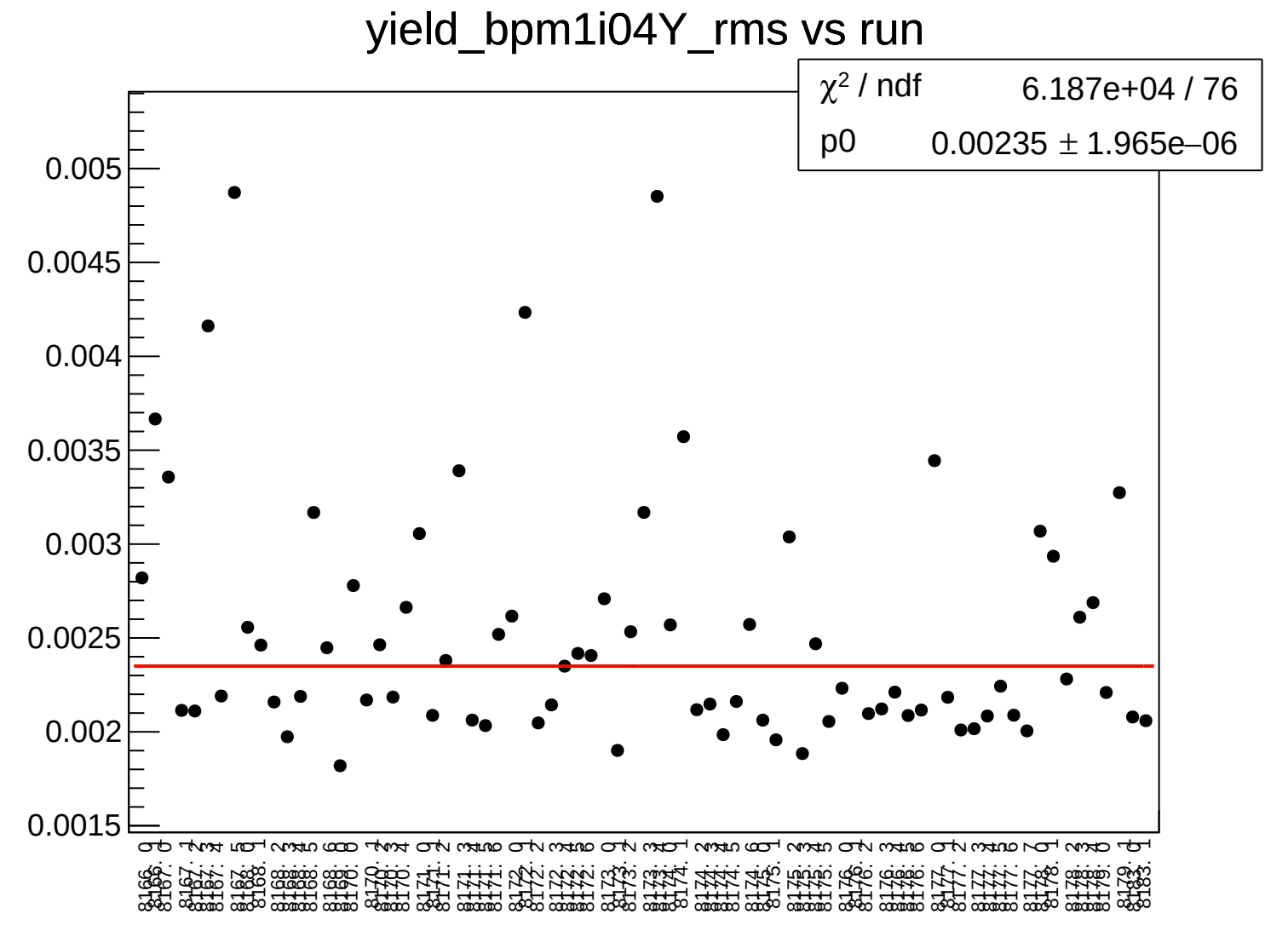

yield_bpm1i04X_mean vs run
χ² / ndf 1.871e+06 / 76
p0 0.06652 ± 1.286e−05
pull
Entries 77
Mean 3041
Std Dev 3008

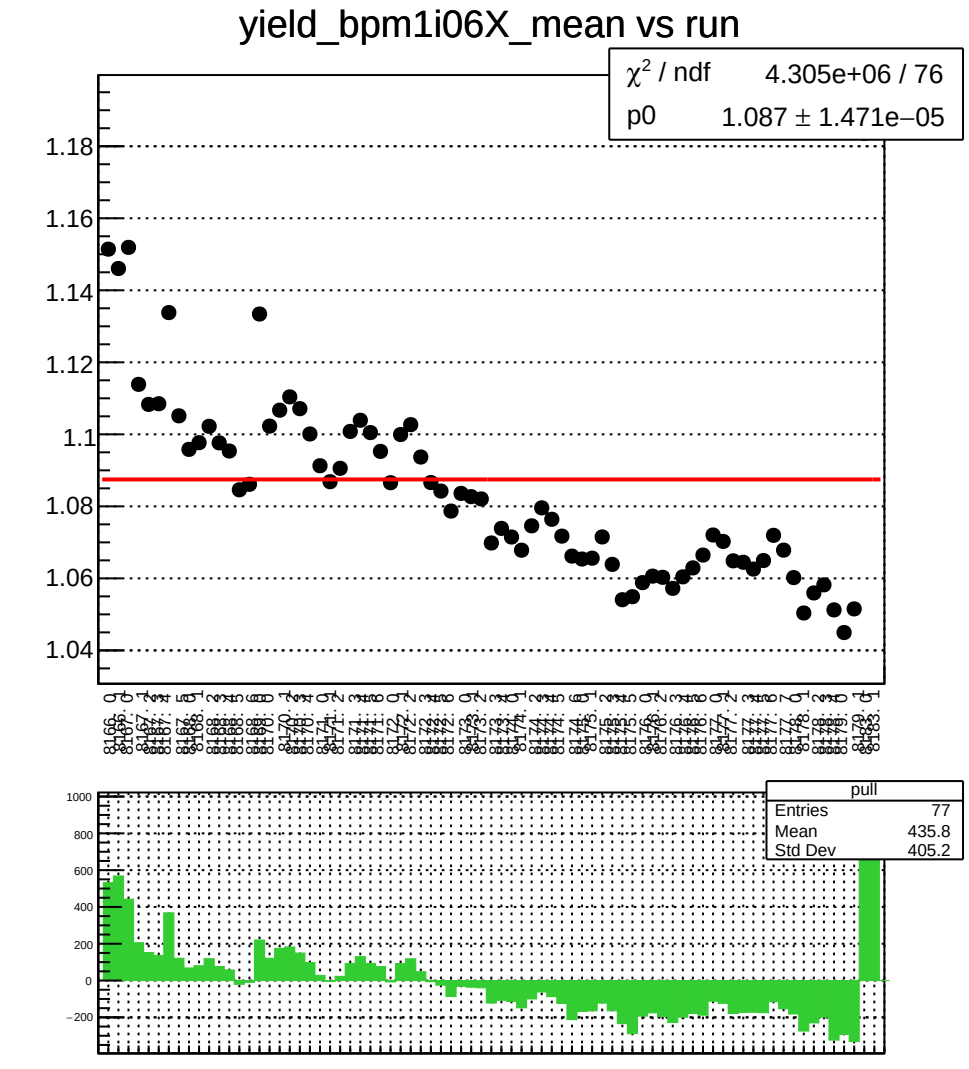

pull1D
Entries 77
Mean 4.137
Std Dev 1.432

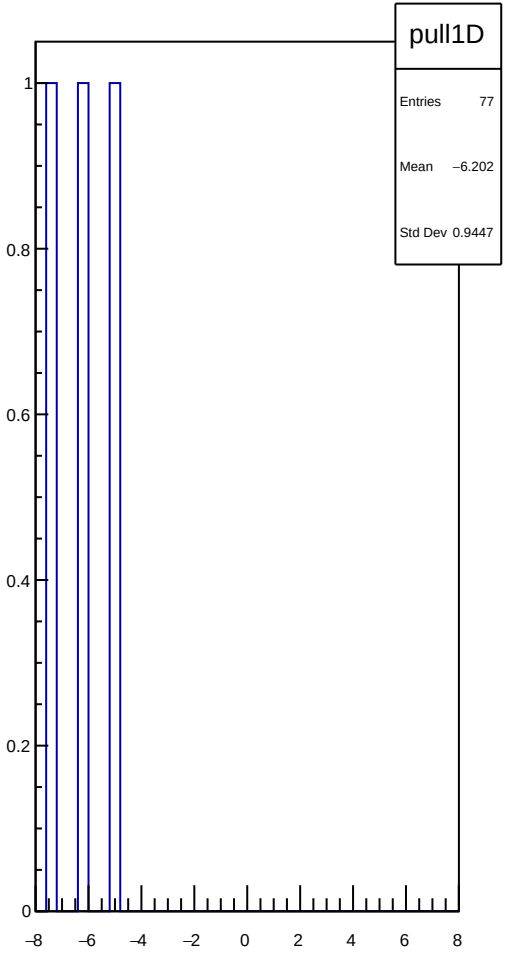

yield_bpm1i04X_rms vs run
χ² / ndf 6691 / 76
p0 0.01108 ± 9.093e–06
0.014
0.013
0.012
0.011
0.01
0.009

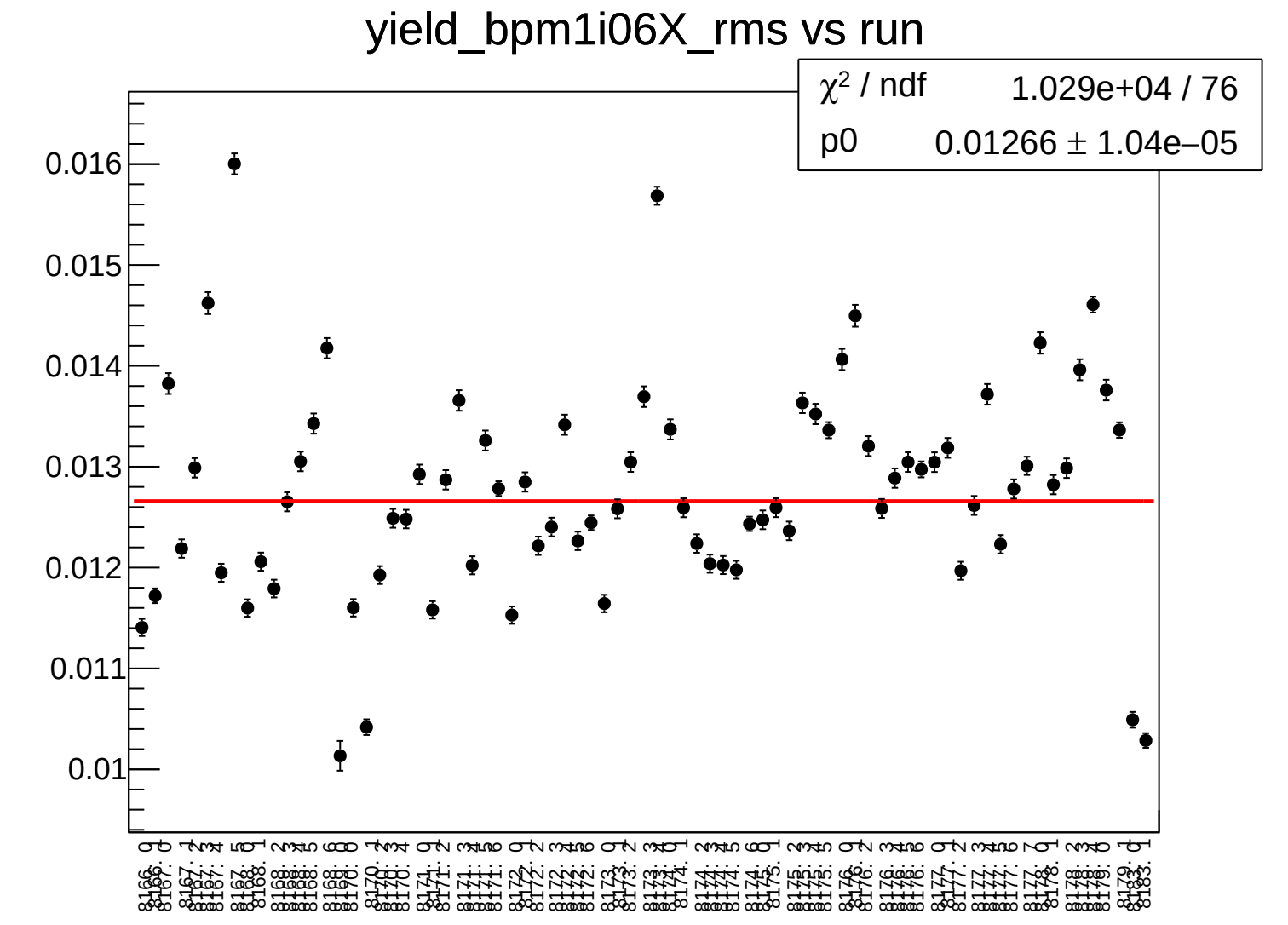

yield_bpm1i04Y_mean vs run
χ² / ndf 1.23e+07 / 76
p0 0.9509 ± 2.779e−06
0.98
0.97
0.96
0.95
0.94
0.93
pull
Entries 77
Mean −333.2
Std Dev 364.7
1200
1000
800
600
400
200
0
−200
−400
−600
−800

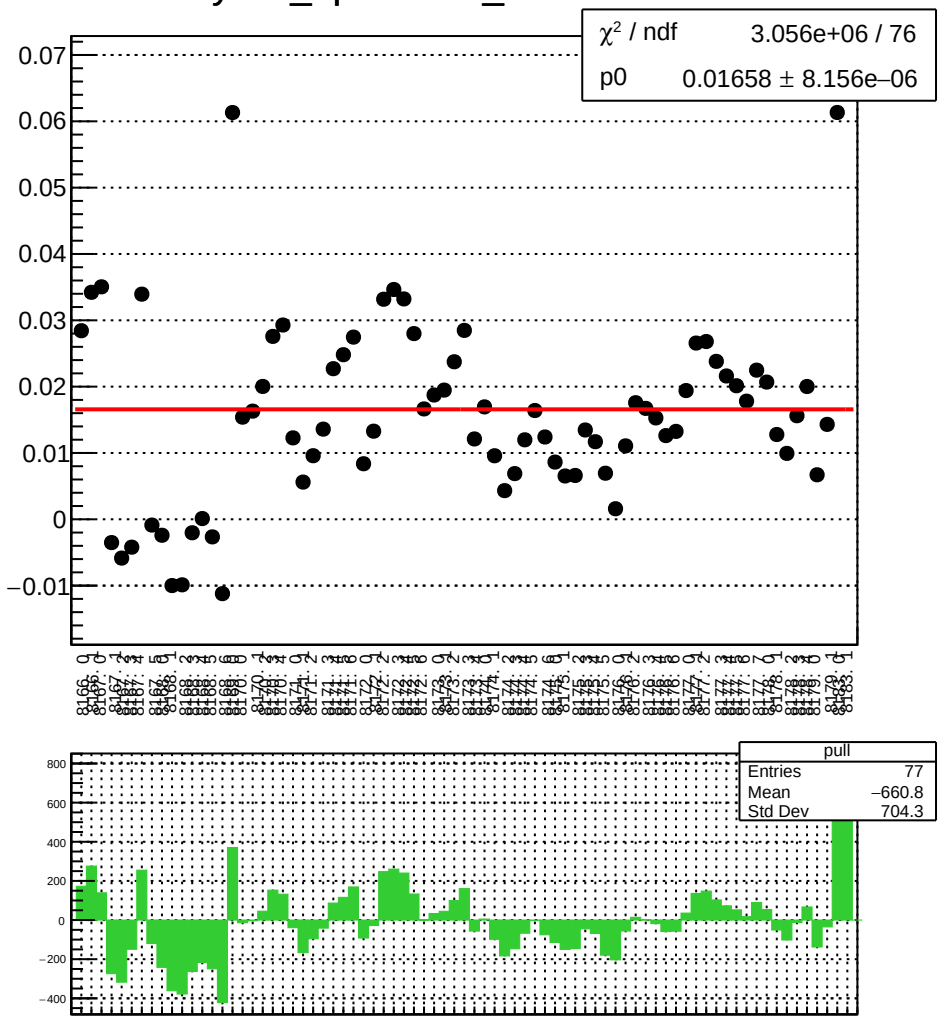

pull1D
Entries 77
Mean 4.47
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

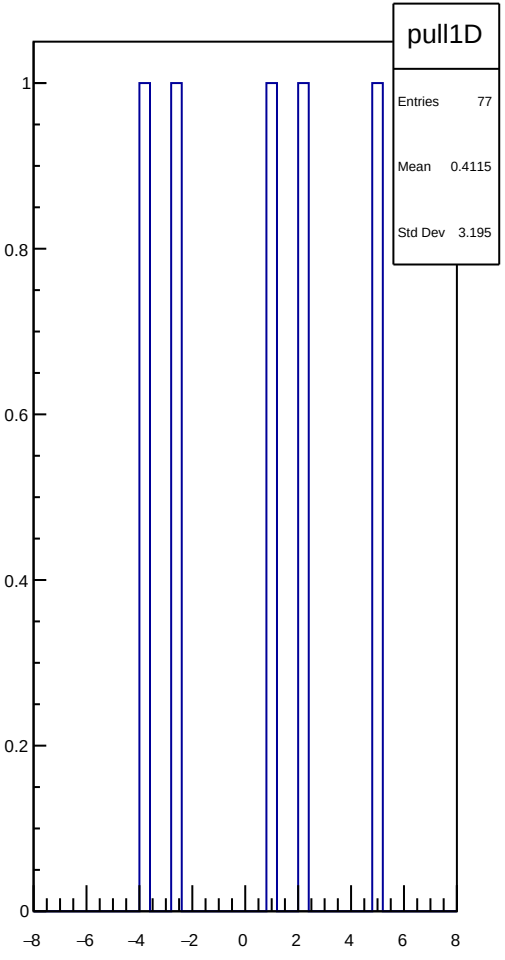

yield_bpm1i04Y_rms vs run
χ² / ndf 6.187e+04 / 76
p0 0.00235 ± 1.965e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015


yield_bpm1i06X_mean vs run
χ² / ndf 4.305e+06 / 76
p0 1.087 ± 1.471e−05
1.18
1.16
1.14
1.12
1.1
1.08
1.06
1.04
pull
Entries 77
Mean 435.8
Std Dev 405.2
1000
800
600
400
200
0
−200

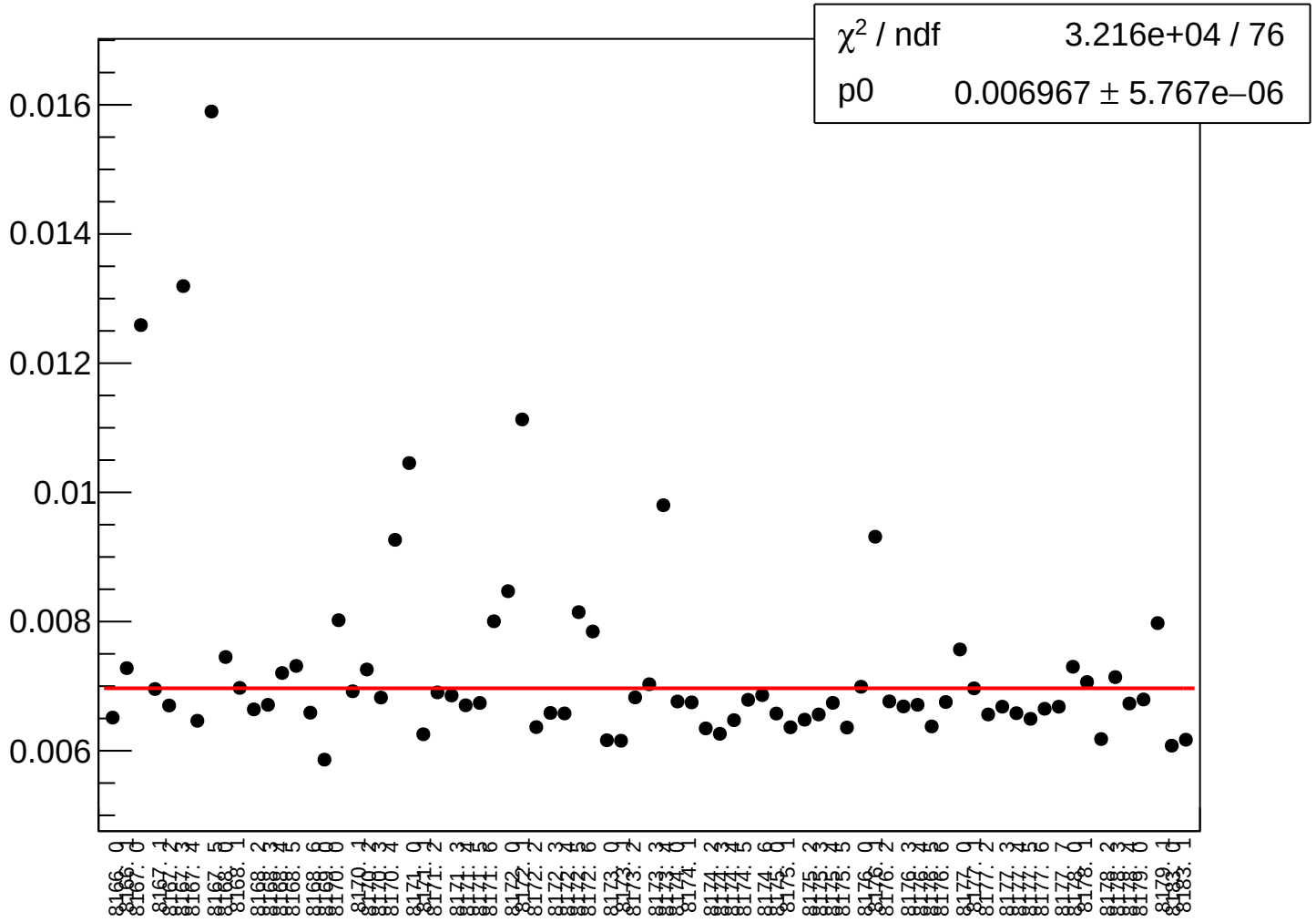

pull1D
Entries 77
Mean −6.202
Std Dev 0.9447
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

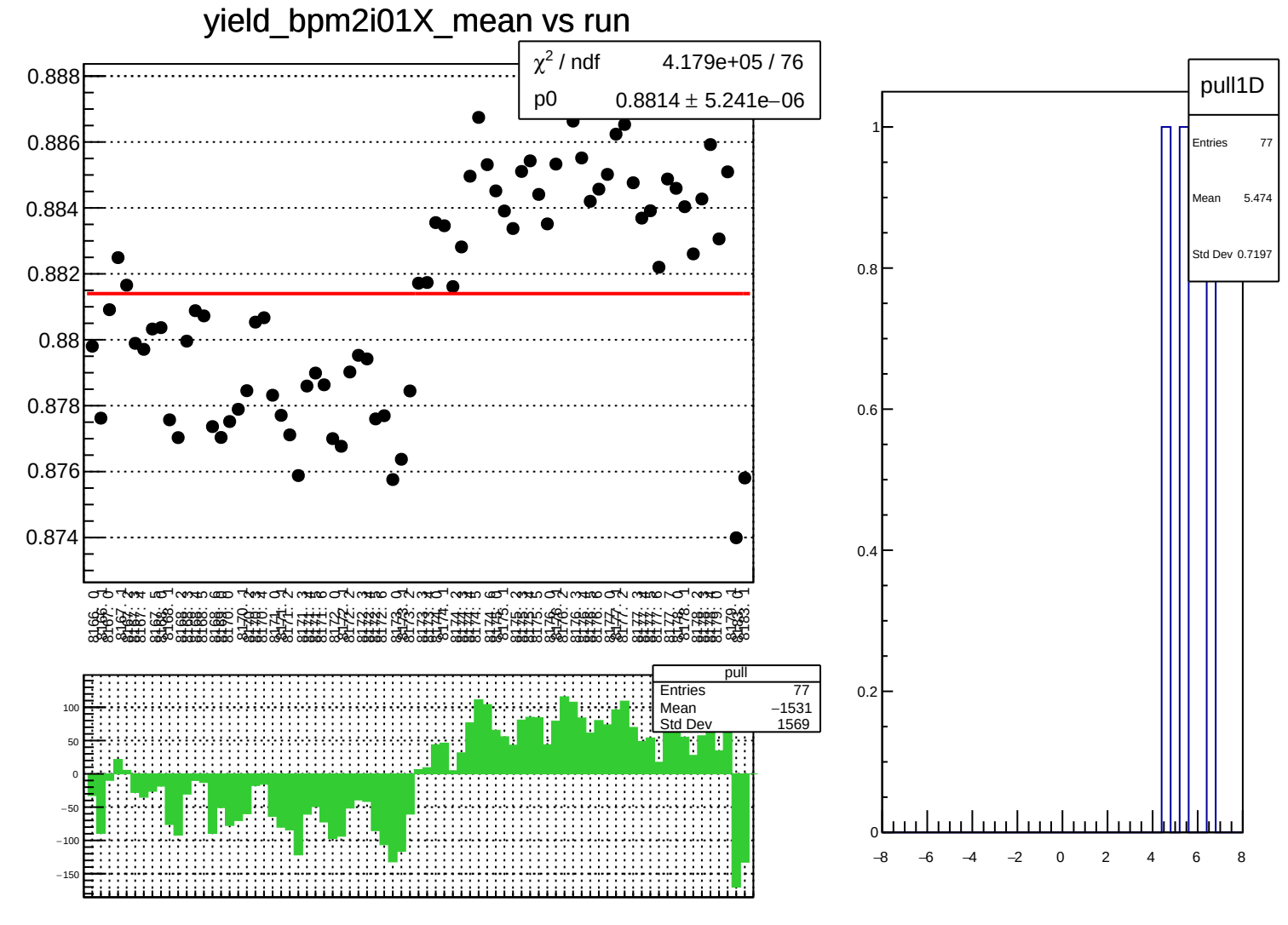

yield_bpm1i06X_rms vs run
χ² / ndf 1.029e+04 / 76
p0 0.01266 ± 1.04e−05
0.016
0.015
0.014
0.013
0.012
0.011
0.01


yield_bpm1i06Y_mean vs run
χ² / ndf 3.056e+06 / 76
p0 0.01658 ± 8.156e−06
pull
Entries 77
Mean −660.8
Std Dev 704.3

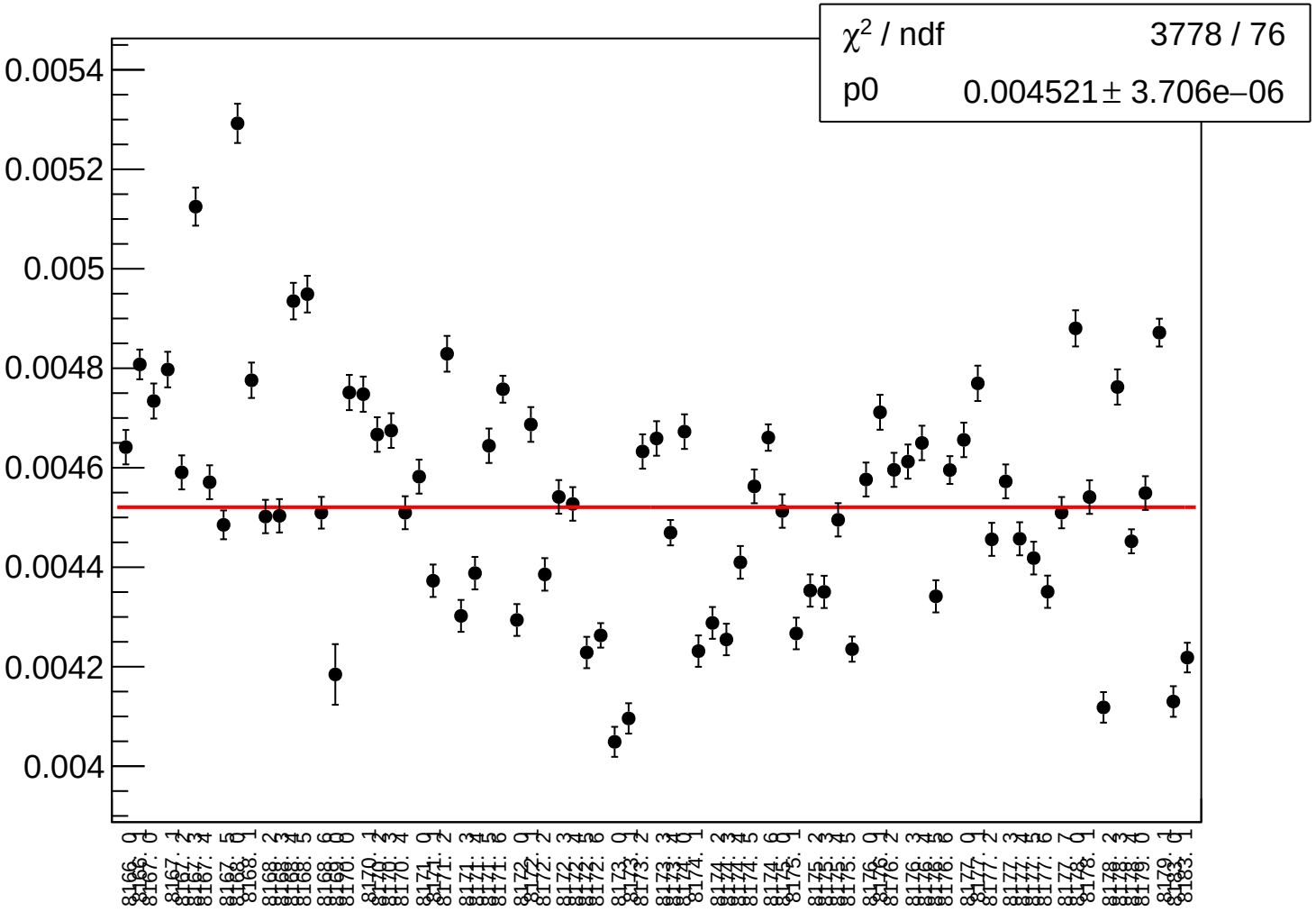

pull1D
Entries 77
Mean 0.4115
Std Dev 3.195

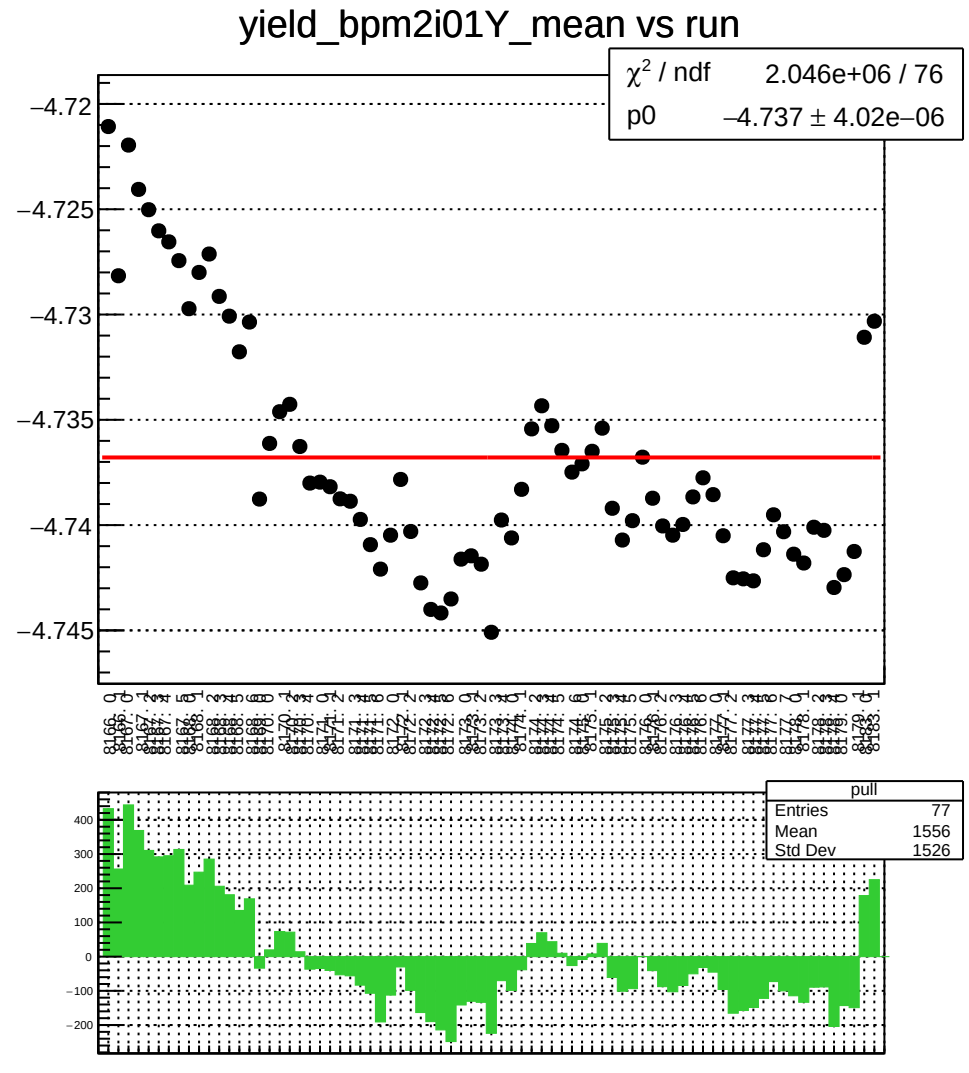
yield_bpm1i06Y_rms vs run

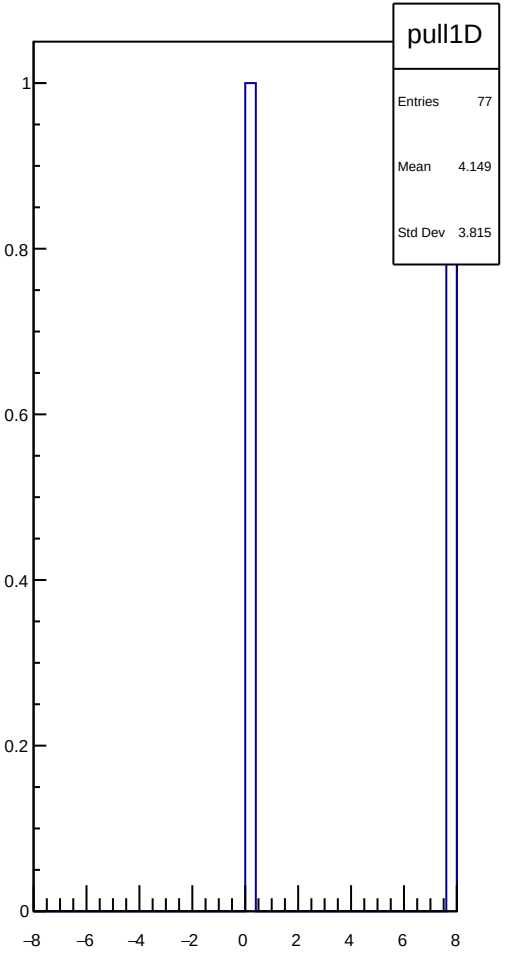


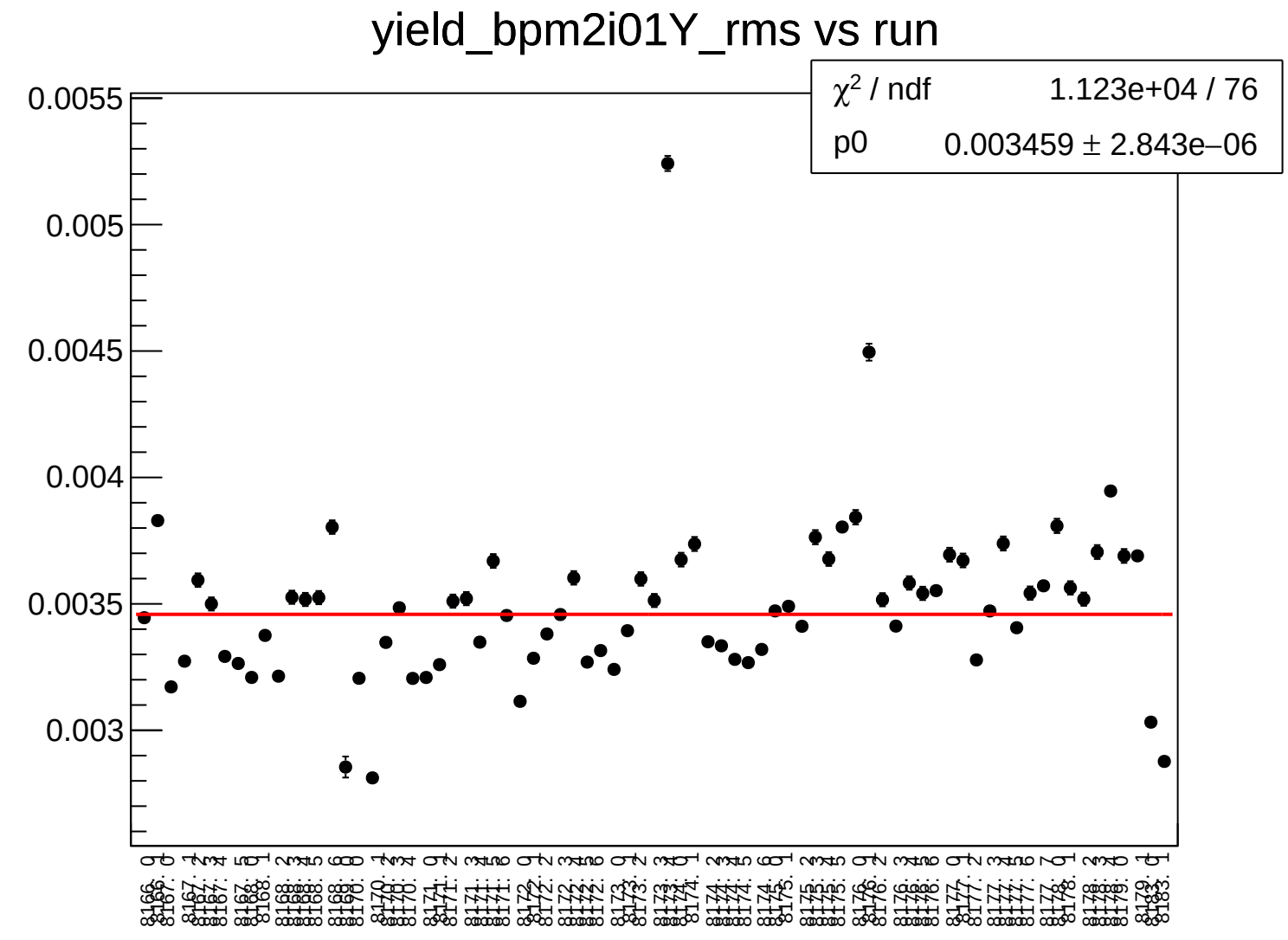

yield_bpm2i01X_mean vs run
χ² / ndf 4.179e+05 / 76
p0 0.8814 ± 5.241e−06
0.888
0.886
0.884
0.882
0.88
0.878
0.876
0.874
pull
Entries 77
Mean −1531
Std Dev 1569
100
50
0
−50
−100
−150
pull1D
Entries 77
Mean 5.474
Std Dev 0.7197
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

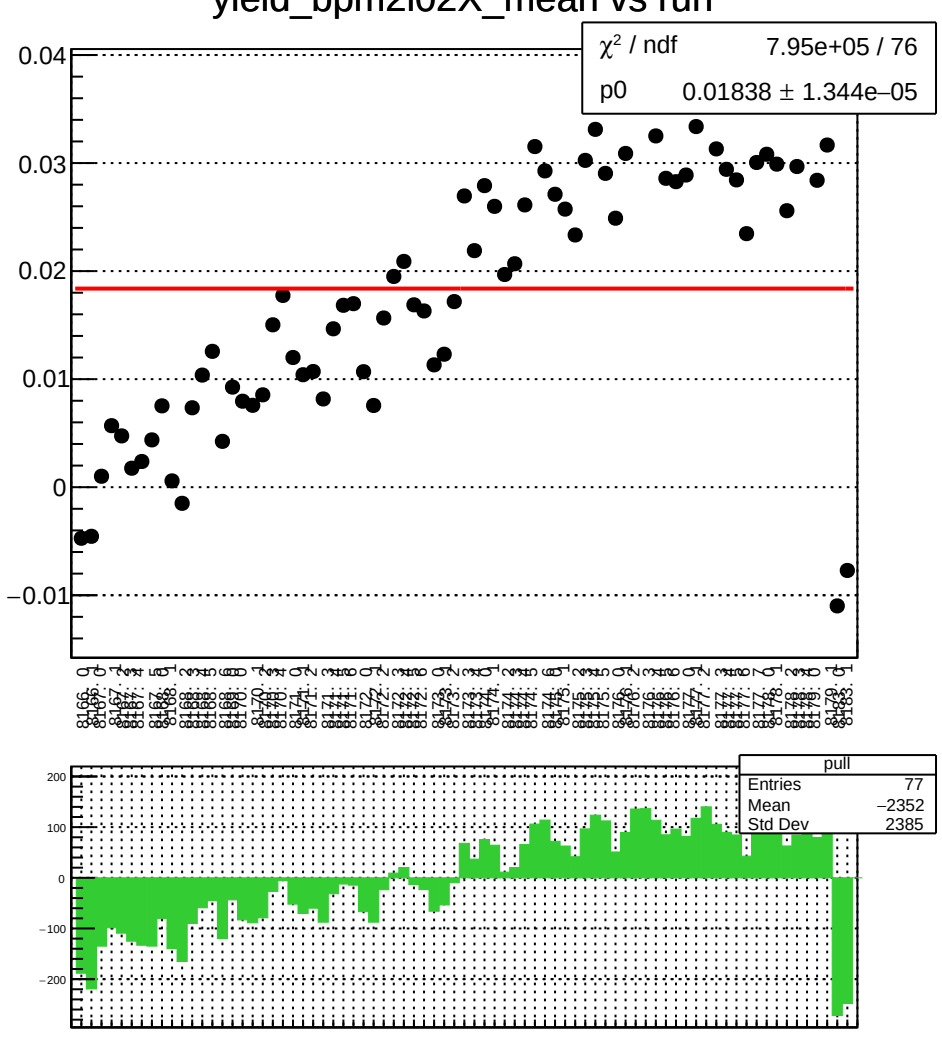
yield_bpm2i01X_rms vs run

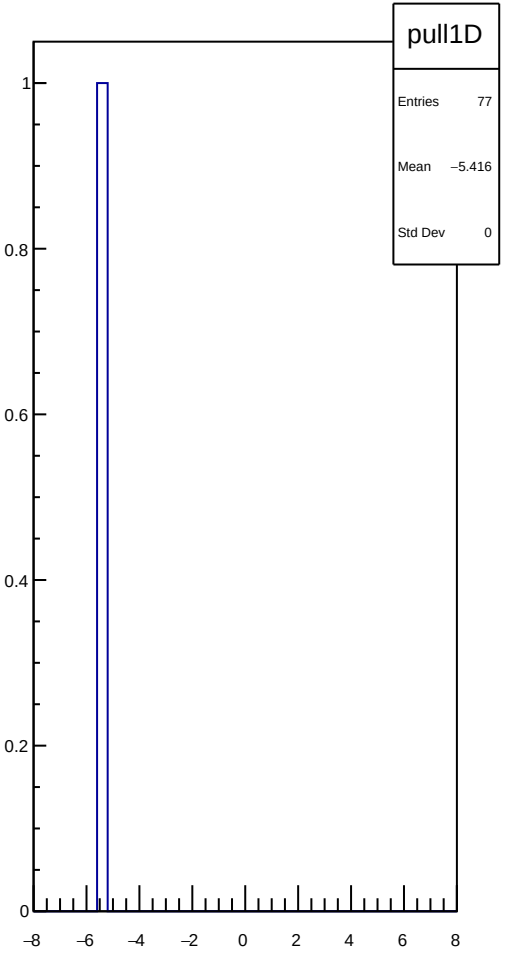


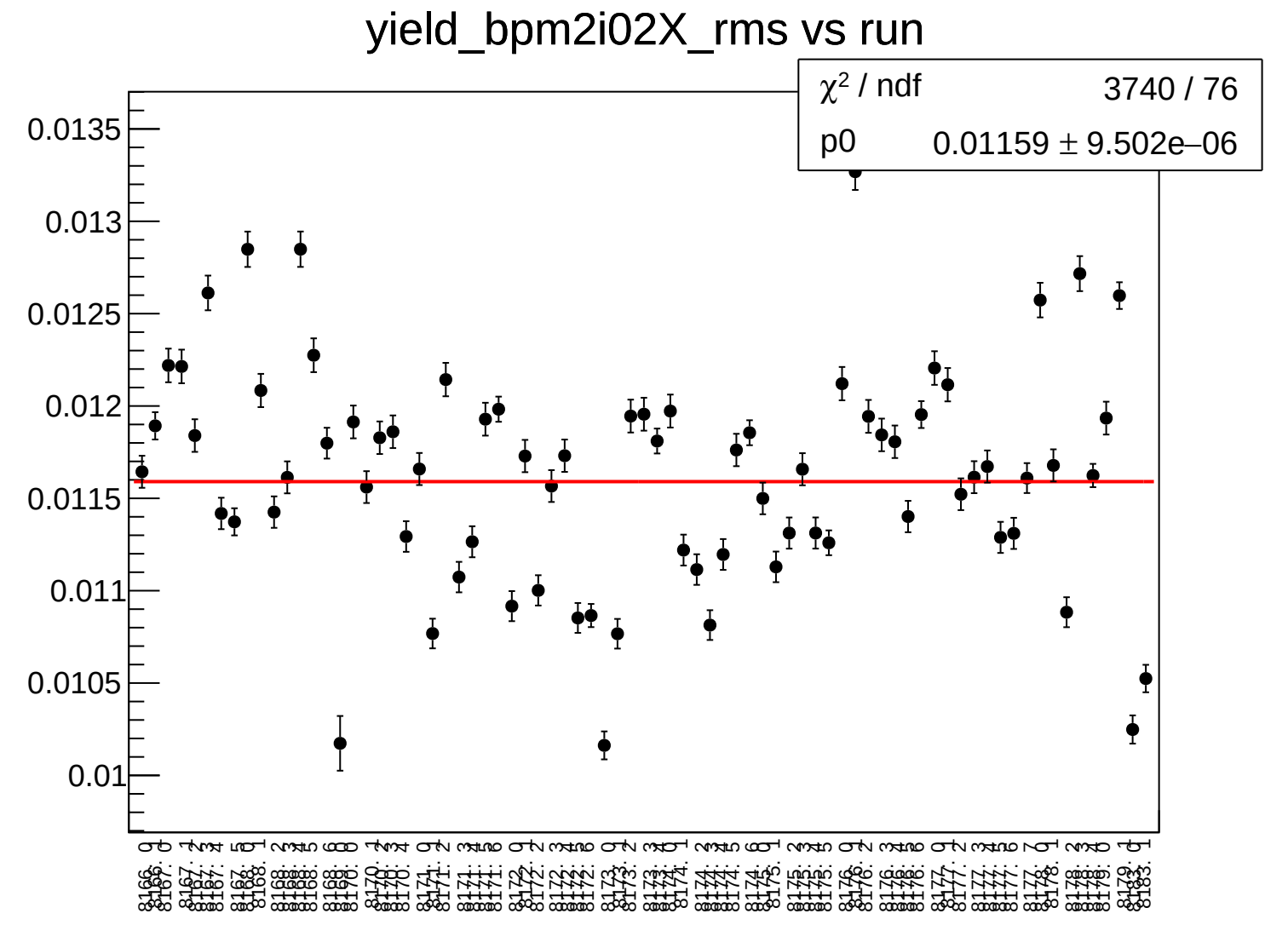

yield_bpm2i01Y_mean vs run
χ² / ndf 2.046e+06 / 76
p0 –4.737 ± 4.02e–06
–4.72
–4.725
–4.73
–4.735
–4.74
–4.745
pull
Entries 77
Mean 1556
Std Dev 1526
400
300
200
100
0
–100
–200

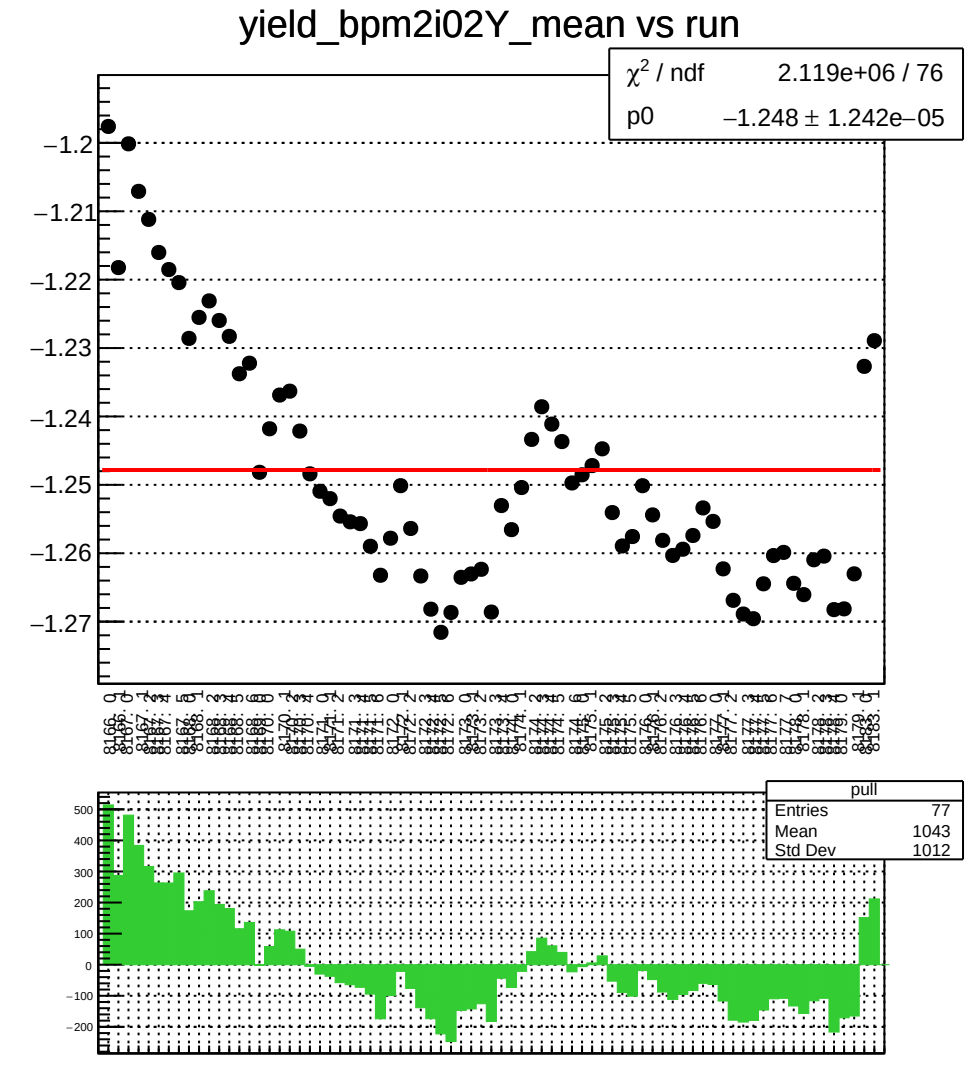

pull1D
Entries 77
Mean 4.149
Std Dev 3.815
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

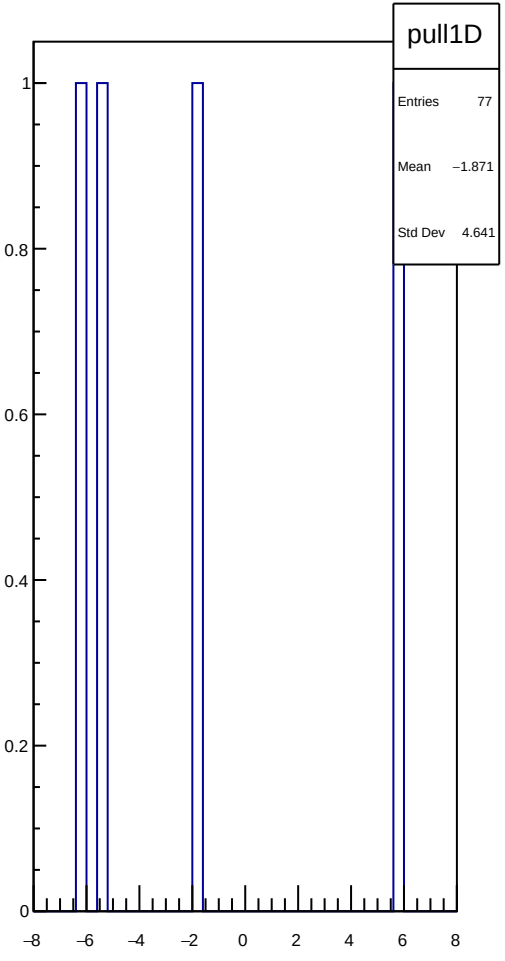

yield_bpm2i01Y_rms vs run
χ² / ndf 1.123e+04 / 76
p0 0.003459 ± 2.843e−06
0.0055
0.005
0.0045
0.004
0.0035
0.003

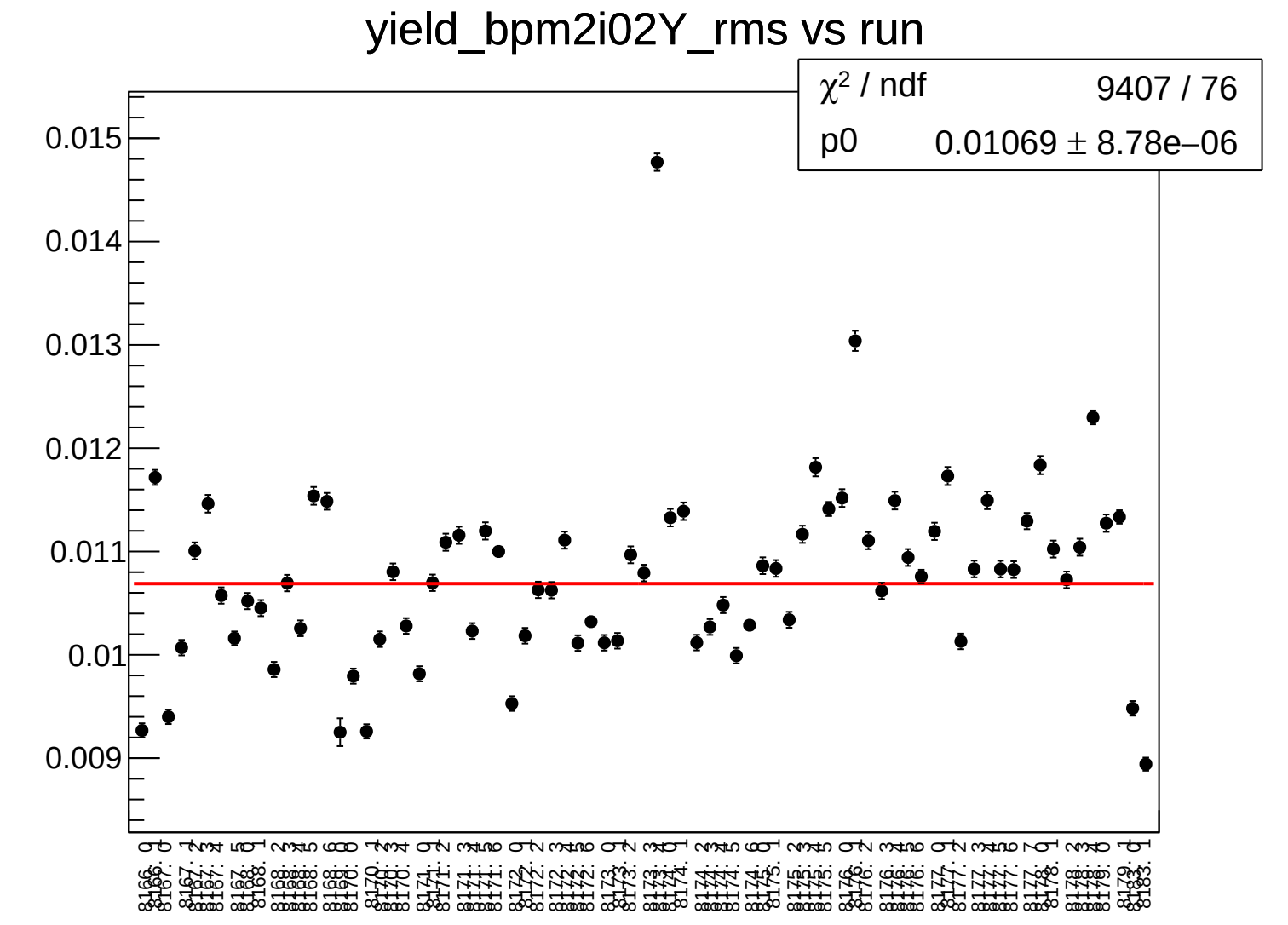

yield_bpm2i02X_mean vs run
χ² / ndf 7.95e+05 / 76
p0 0.01838 ± 1.344e−05
pull
Entries 77
Mean −2352
Std Dev 2385

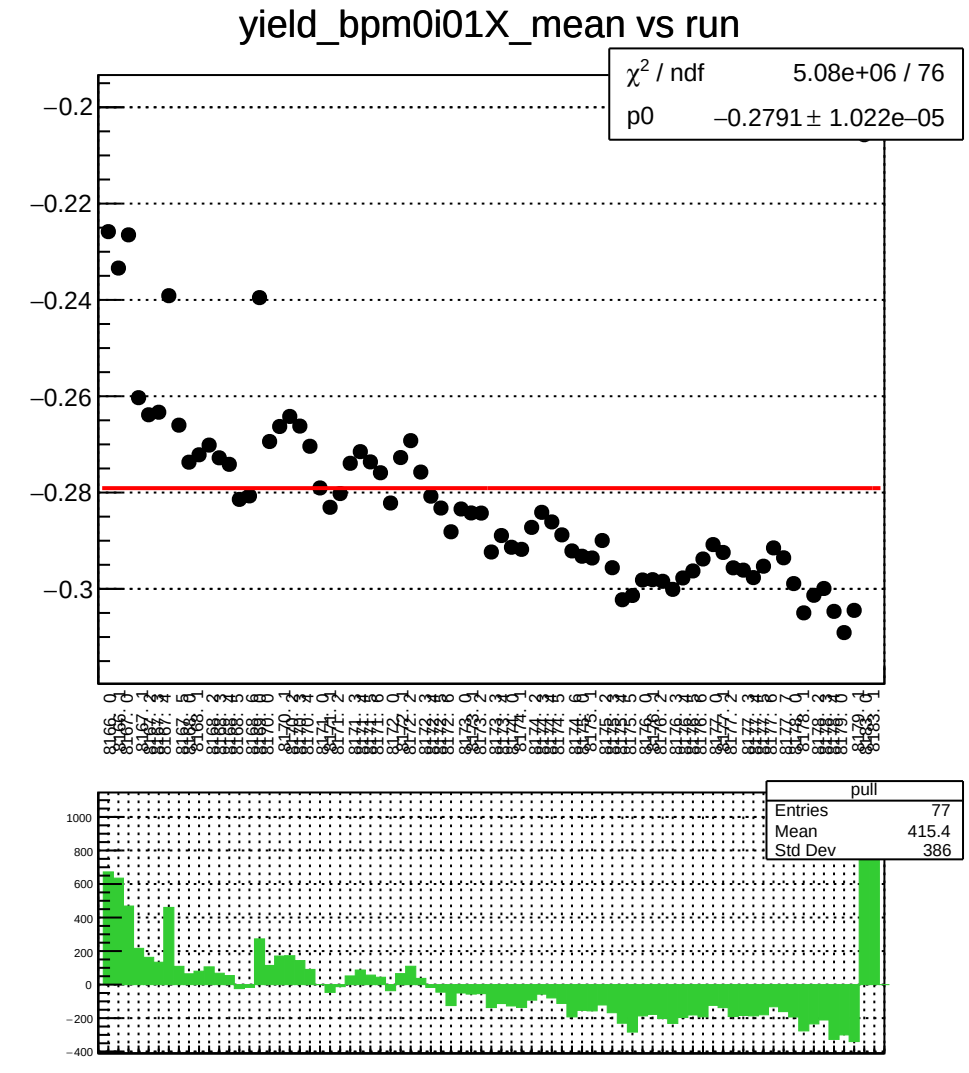

pull1D
Entries 77
Mean −5.416
Std Dev 0

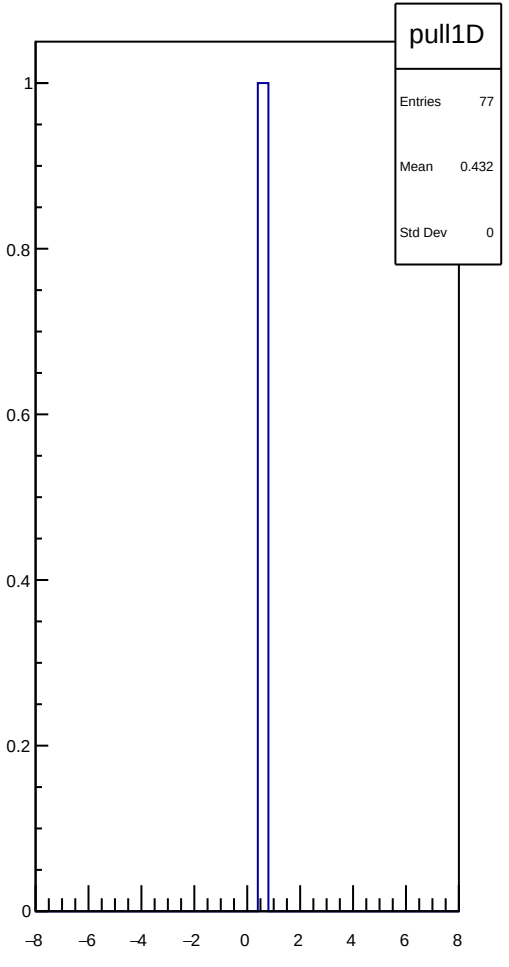

yield_bpm2i02X_rms vs run
χ² / ndf 3740 / 76
p0 0.01159 ± 9.502e–06
0.0135
0.013
0.0125
0.012
0.0115
0.011
0.0105
0.01

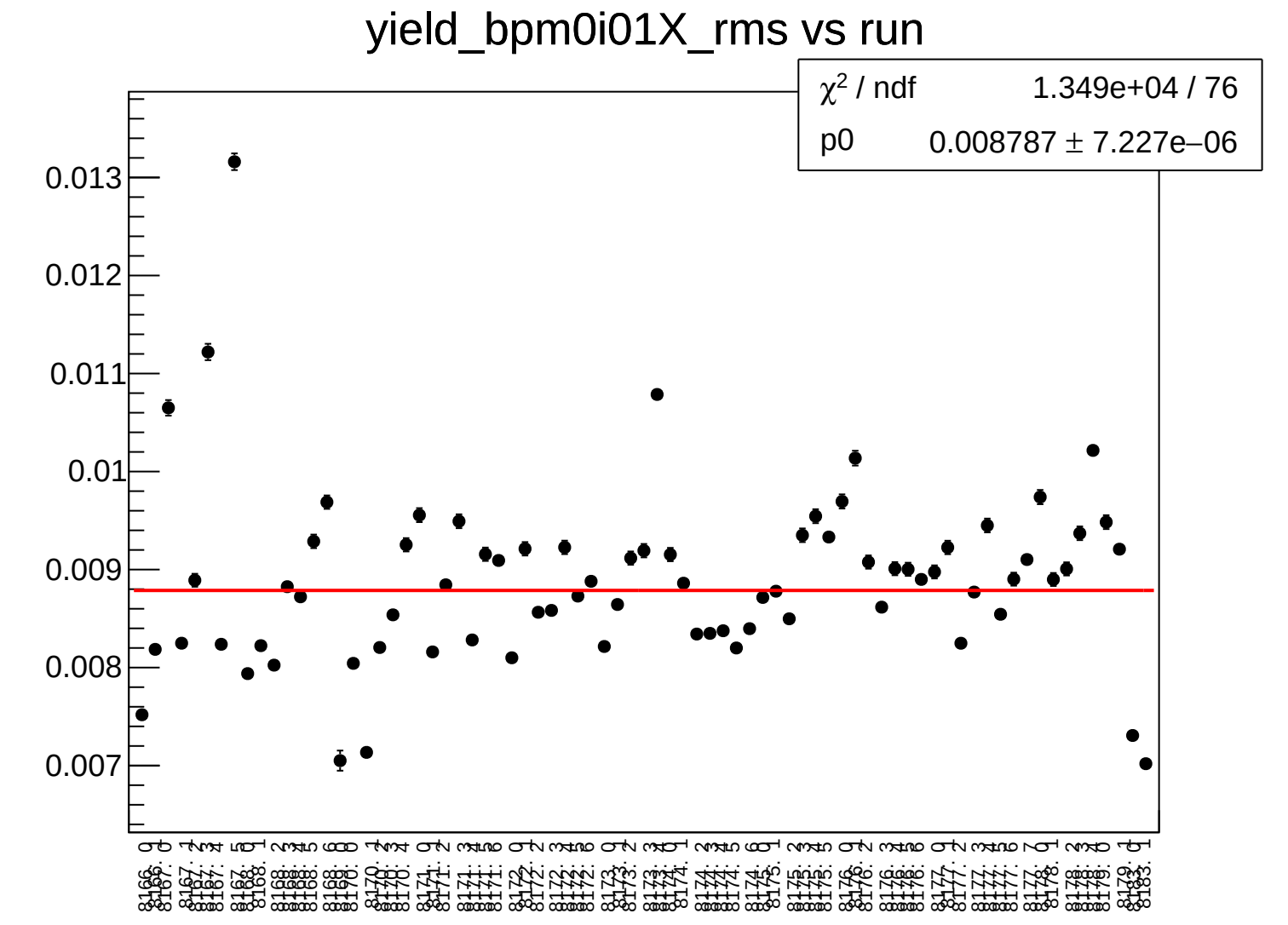

yield_bpm2i02Y_mean vs run
χ² / ndf 2.119e+06 / 76
p0 −1.248 ± 1.242e−05
−1.2
−1.21
−1.22
−1.23
−1.24
−1.25
−1.26
−1.27
pull
Entries 77
Mean 1043
Std Dev 1012
500
400
300
200
100
0
−100
−200

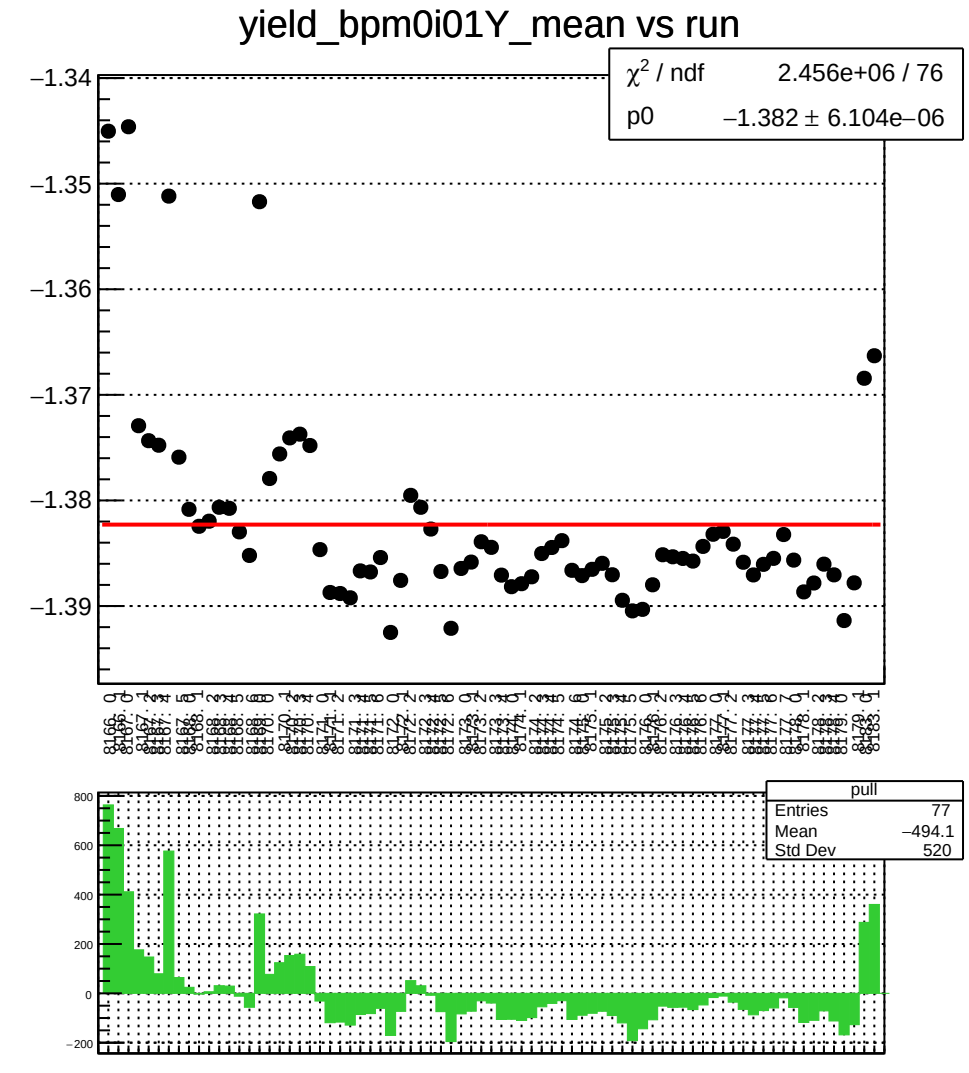

pull1D
Entries 77
Mean −1.871
Std Dev 4.641
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

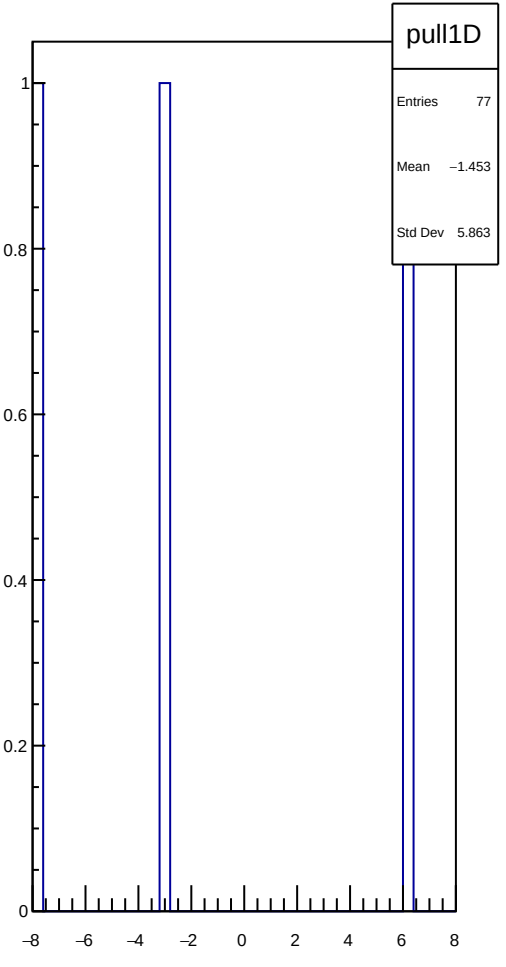

yield_bpm2i02Y_rms vs run
χ² / ndf 9407 / 76
p0 0.01069 ± 8.78e–06
0.015
0.014
0.013
0.012
0.011
0.01
0.009

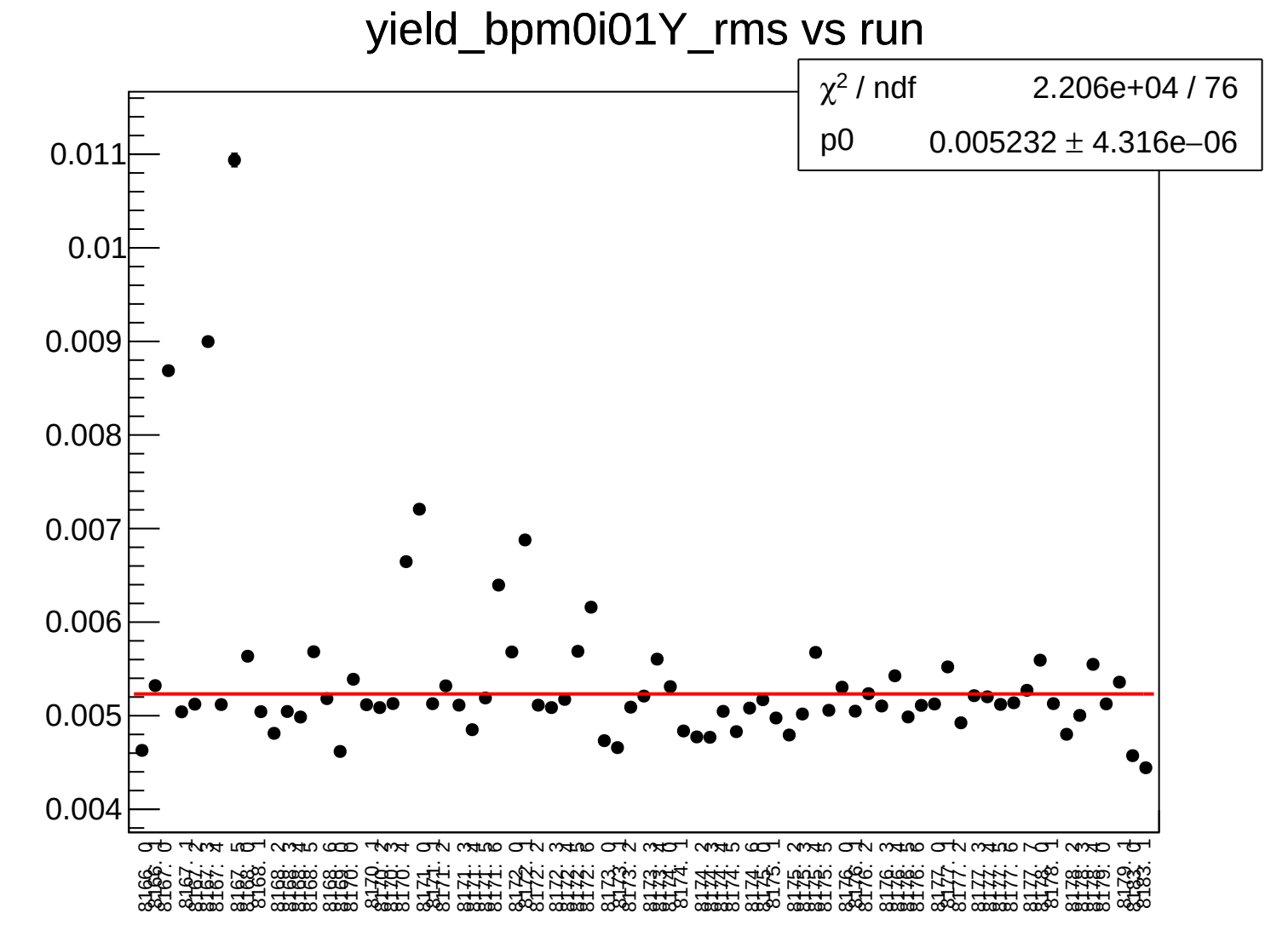

yield_bpm0i01X_mean vs run
χ² / ndf 5.08e+06 / 76
p0 −0.2791 ± 1.022e−05
−0.2
−0.22
−0.24
−0.26
−0.28
−0.3
pull
Entries 77
Mean 415.4
Std Dev 386
1000
800
600
400
200
0
−200
−400

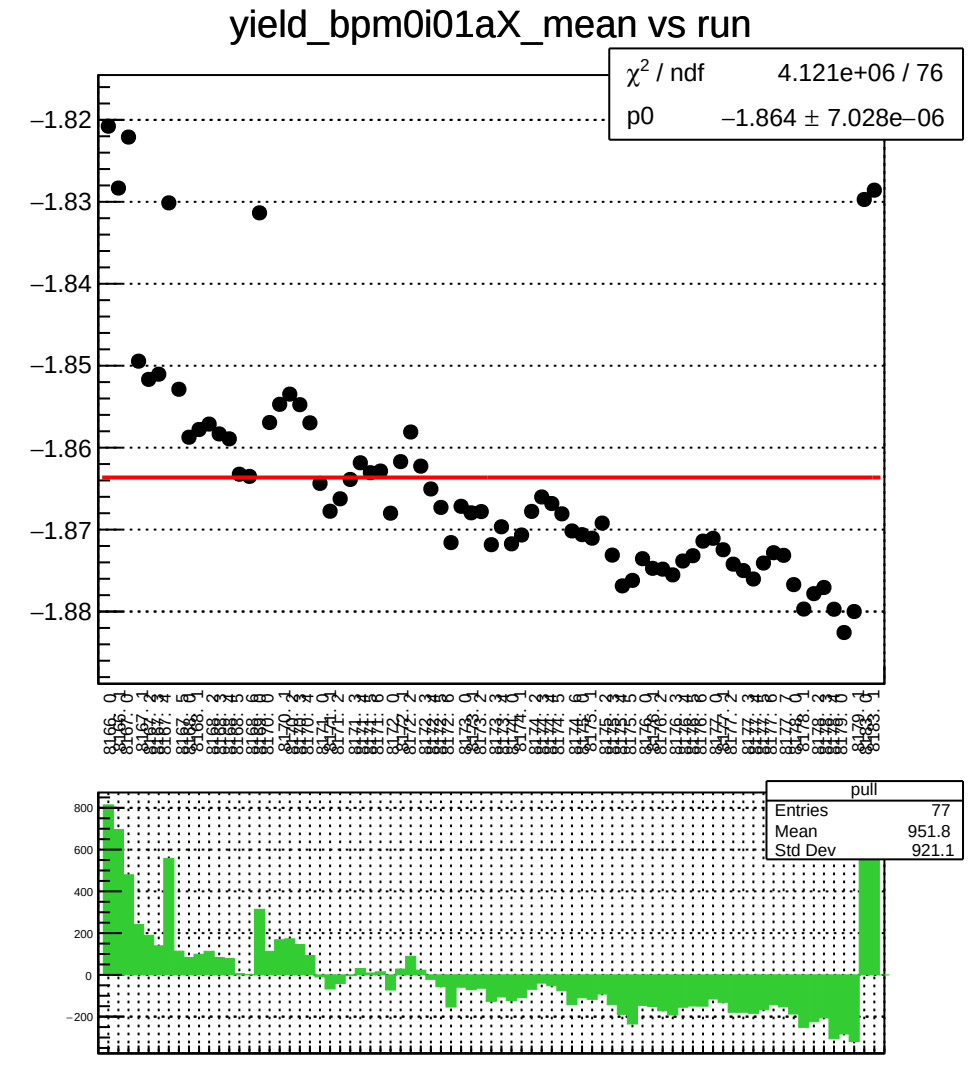

pull1D
Entries 77
Mean 0.432
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

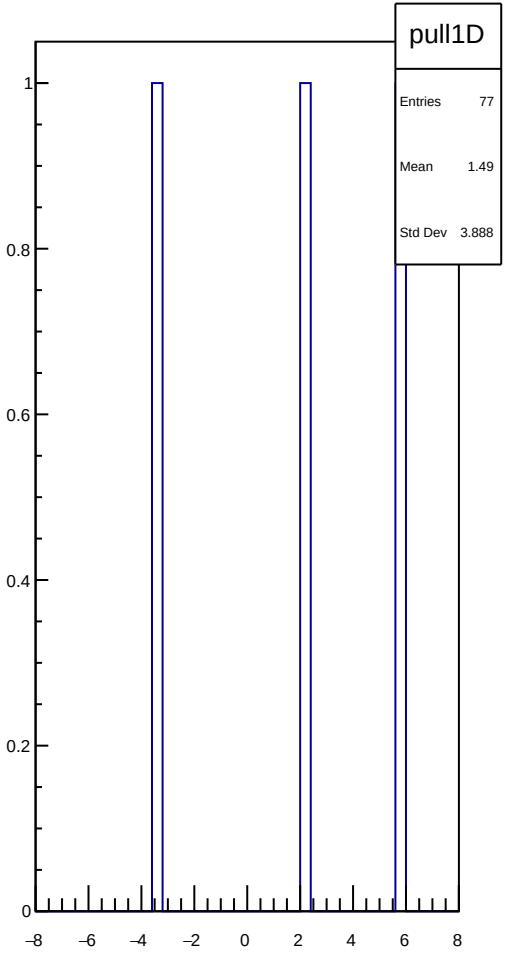

yield_bpm0i01X_rms vs run
χ² / ndf 1.349e+04 / 76
p0 0.008787 ± 7.227e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007

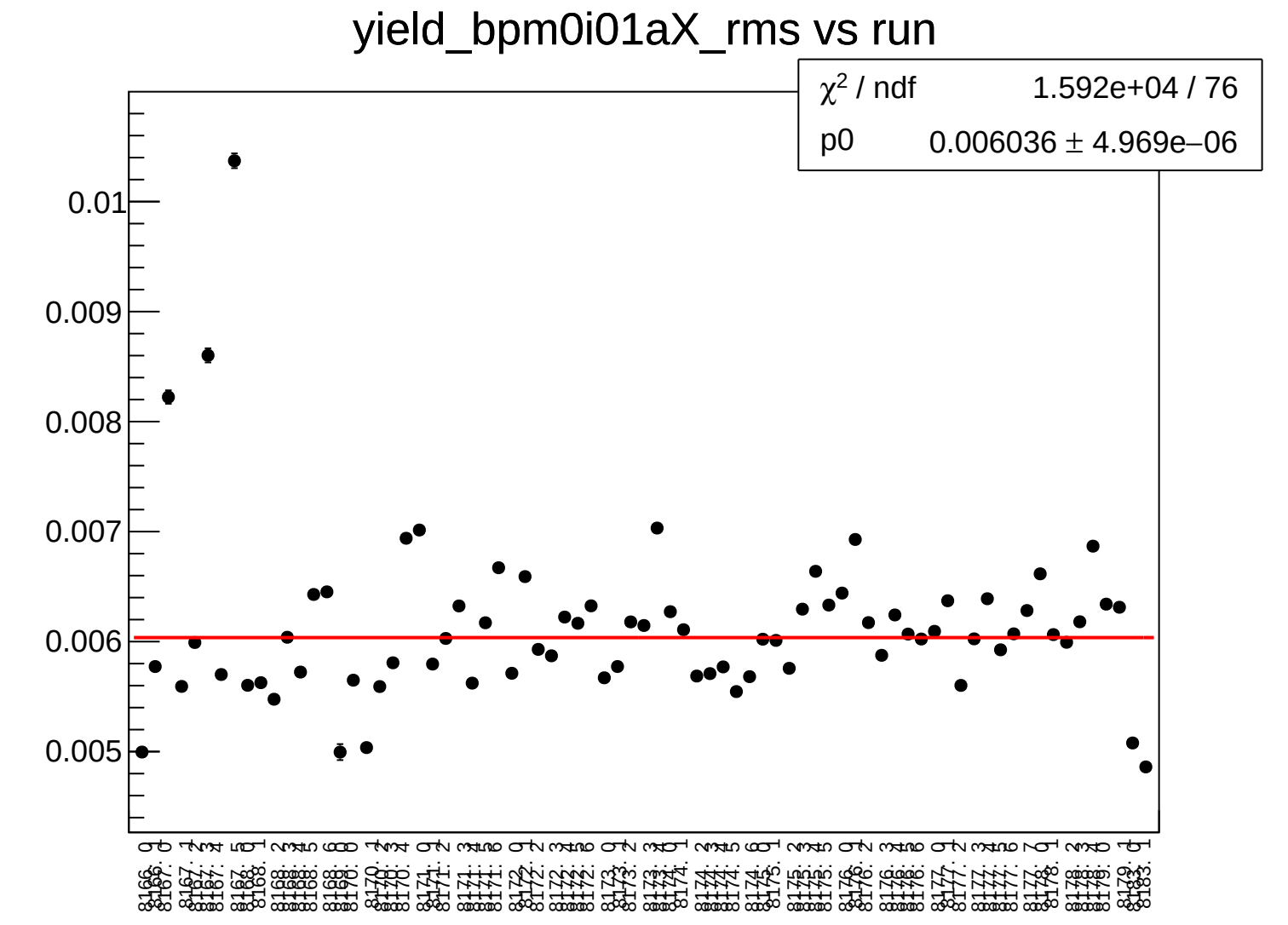

yield_bpm0i01Y_mean vs run
χ² / ndf 2.456e+06 / 76
p0 −1.382 ± 6.104e−06
−1.34
−1.35
−1.36
−1.37
−1.38
−1.39
pull
Entries 77
Mean −494.1
Std Dev 520
800
600
400
200
0
−200

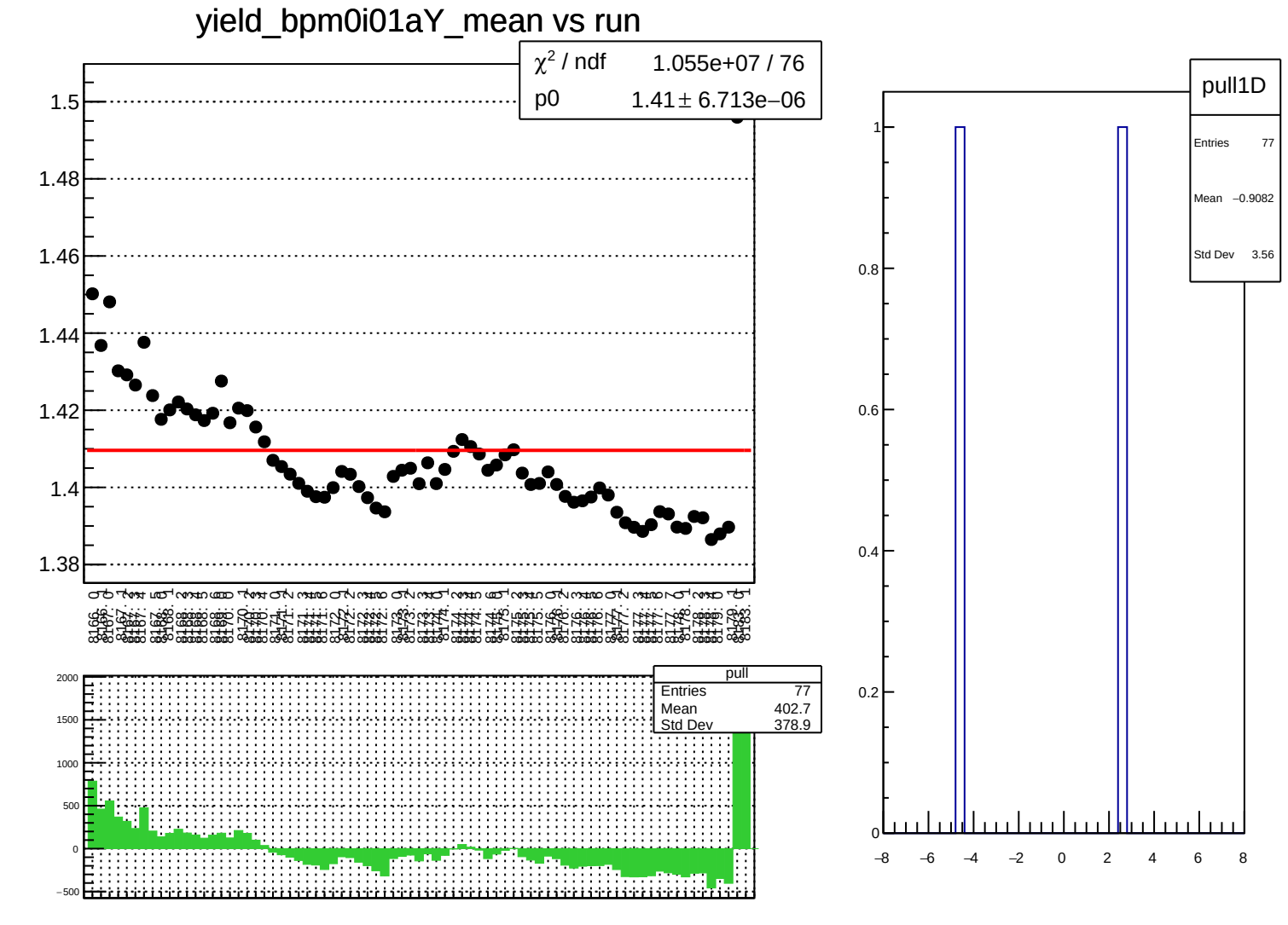

pull1D
Entries 77
Mean −1.453
Std Dev 5.863
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

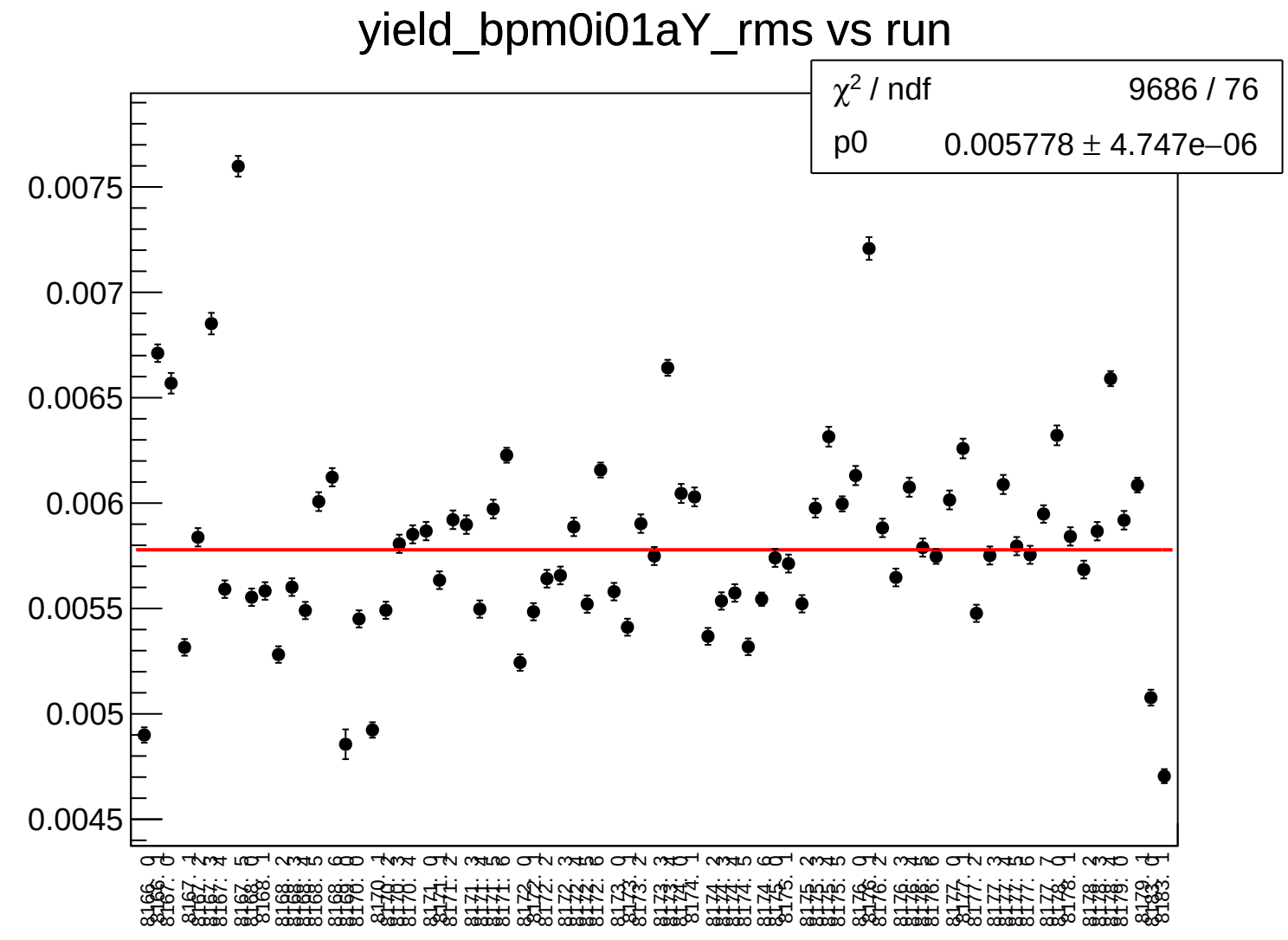

yield_bpm0i01Y_rms vs run
χ² / ndf 2.206e+04 / 76
p0 0.005232 ± 4.316e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

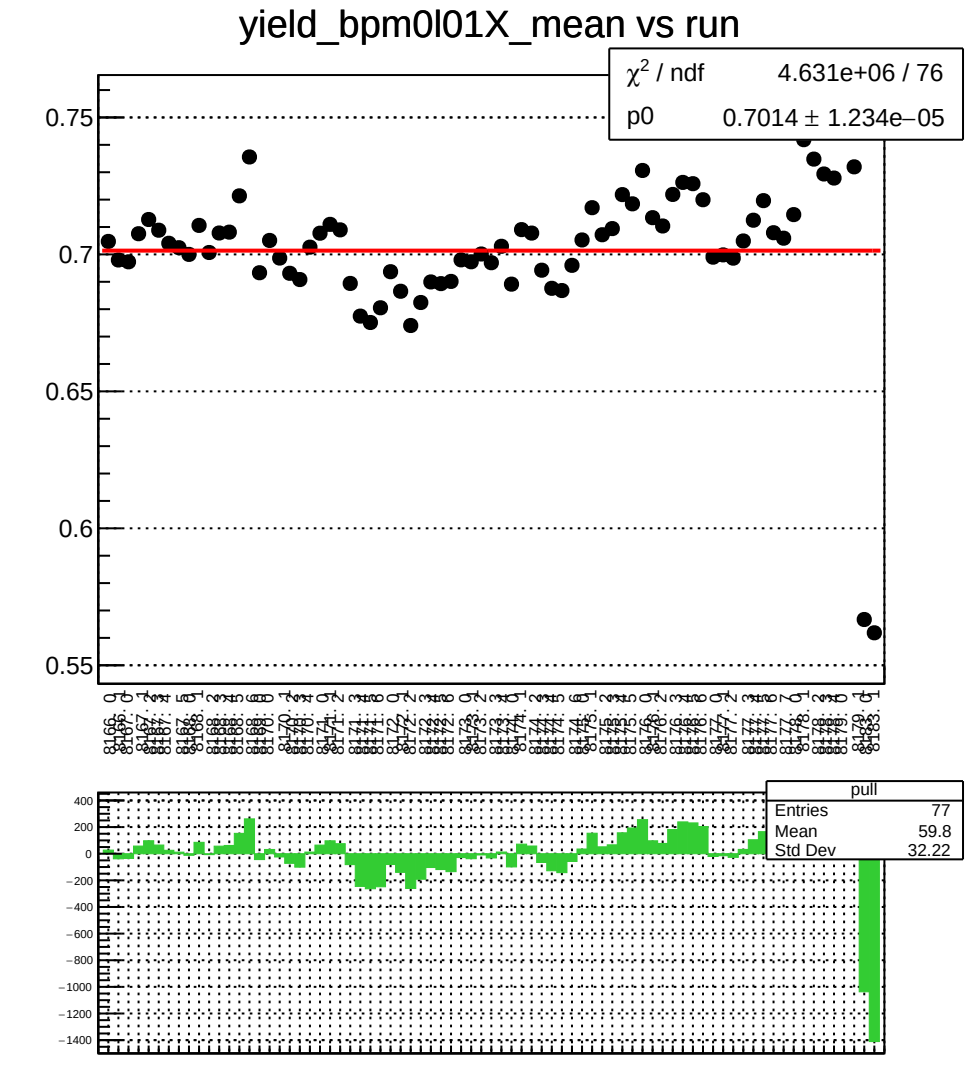

yield_bpm0i01aX_mean vs run
χ² / ndf 4.121e+06 / 76
p0 −1.864 ± 7.028e−06
−1.82
−1.83
−1.84
−1.85
−1.86
−1.87
−1.88
pull
Entries 77
Mean 951.8
Std Dev 921.1
800
600
400
200
0
−200

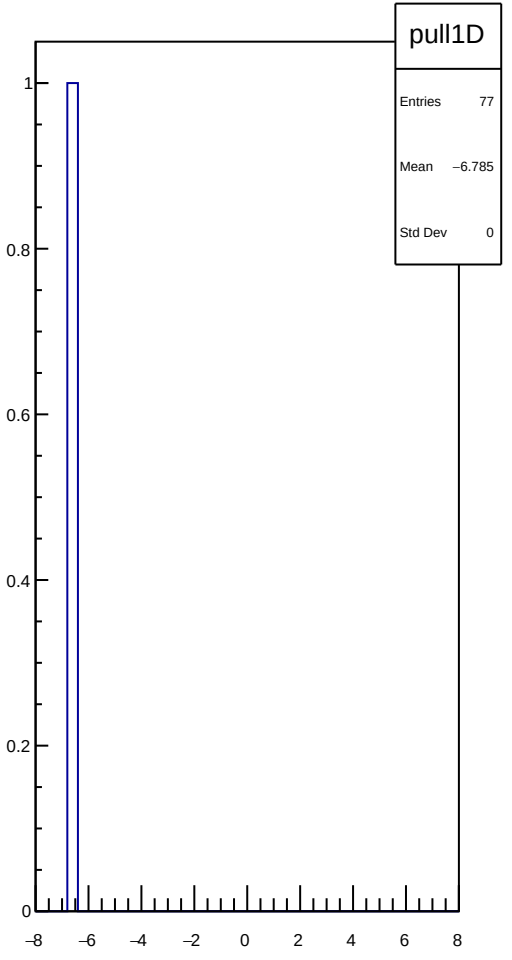

pull1D
Entries 77
Mean 1.49
Std Dev 3.888
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

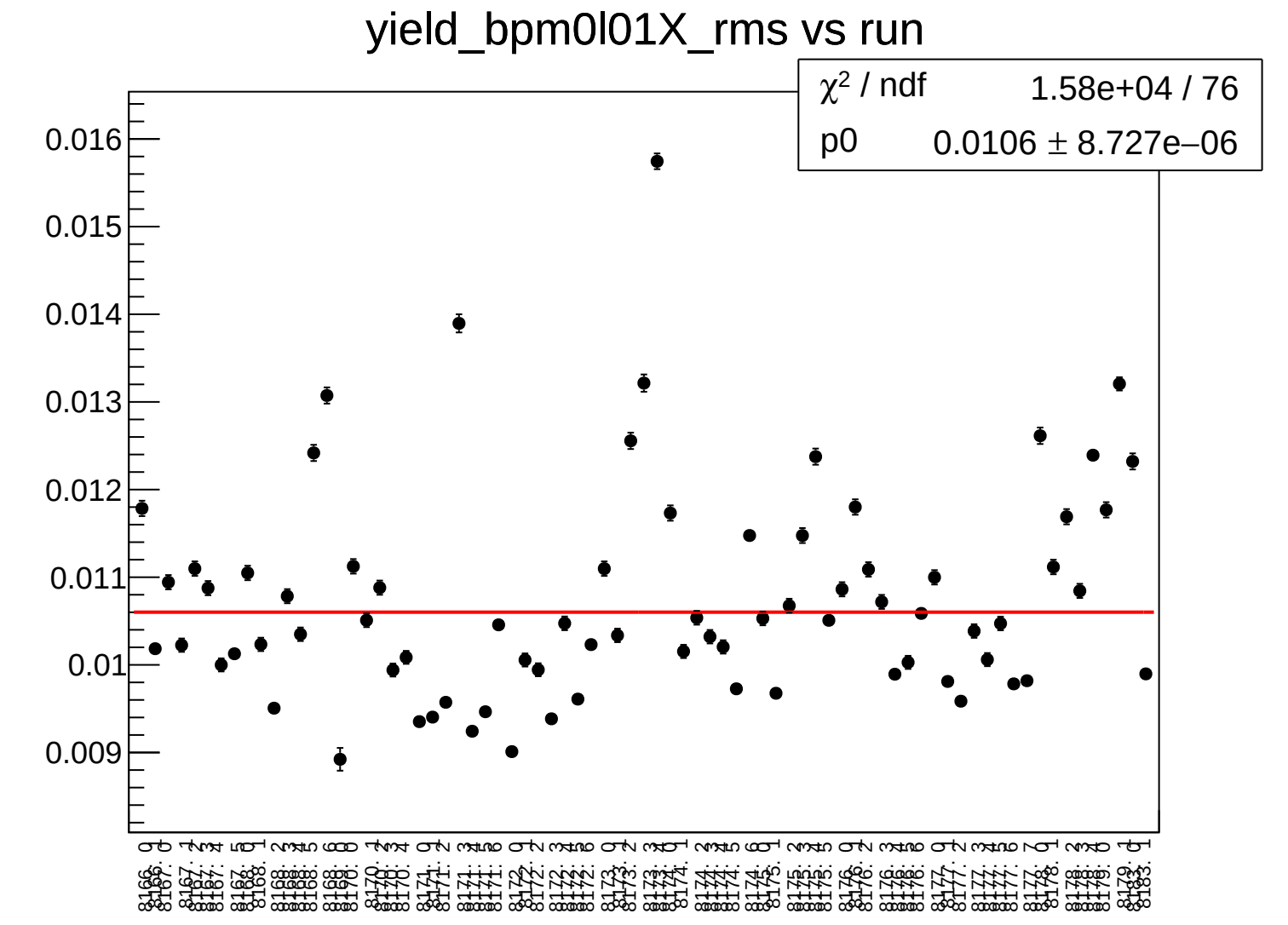

yield_bpm0i01aX_rms vs run
χ2 / ndf 1.592e+04 / 76
p0 0.006036 ± 4.969e−06
0.01
0.009
0.008
0.007
0.006
0.005

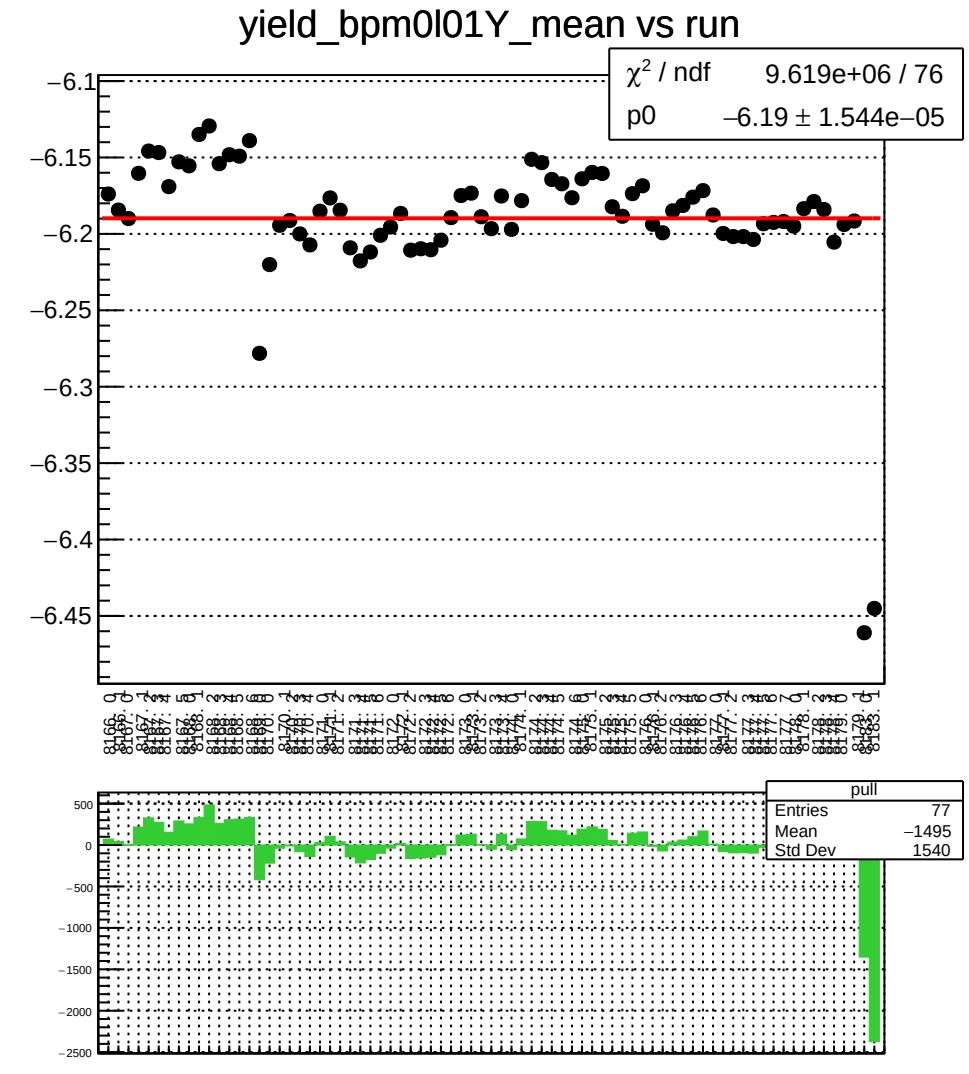

yield_bpm0i01aY_mean vs run
χ² / ndf 1.055e+07 / 76
p0 1.41 ± 6.713e−06
pull
Entries 77
Mean 402.7
Std Dev 378.9
pull1D
Entries 77
Mean −0.9082
Std Dev 3.56

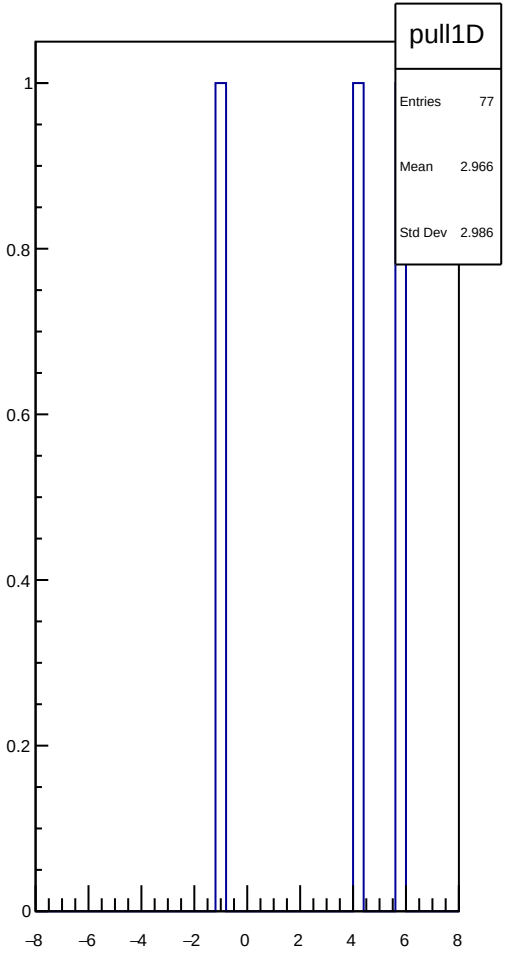

yield_bpm0i01aY_rms vs run
χ² / ndf 9686 / 76
p0 0.005778 ± 4.747e−06
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045


yield_bpm0l01X_mean vs run
χ² / ndf 4.631e+06 / 76
p0 0.7014 ± 1.234e−05
0.75
0.7
0.65
0.6
0.55
pull
Entries 77
Mean 59.8
Std Dev 32.22
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

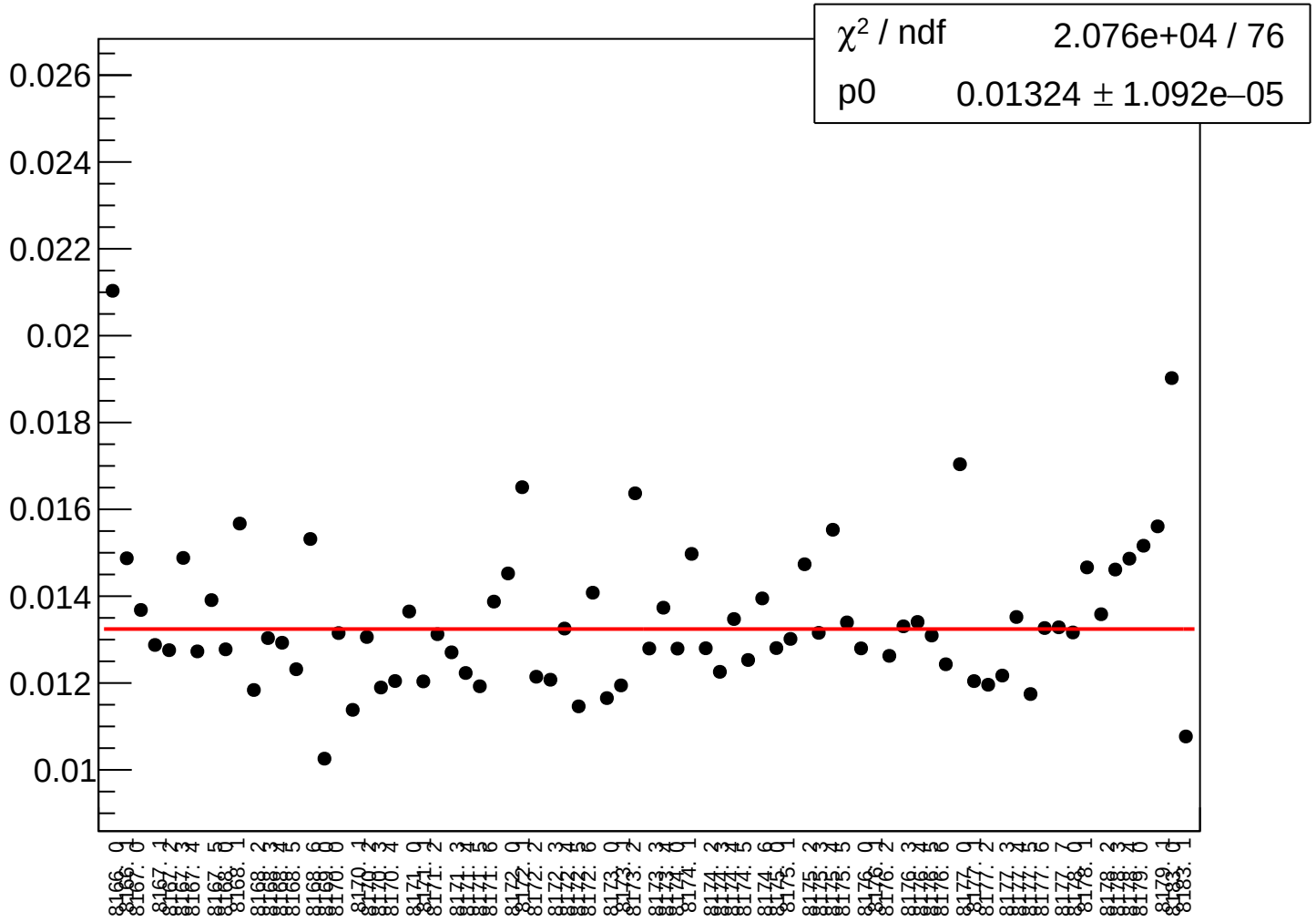

pull1D
Entries 77
Mean −6.785
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

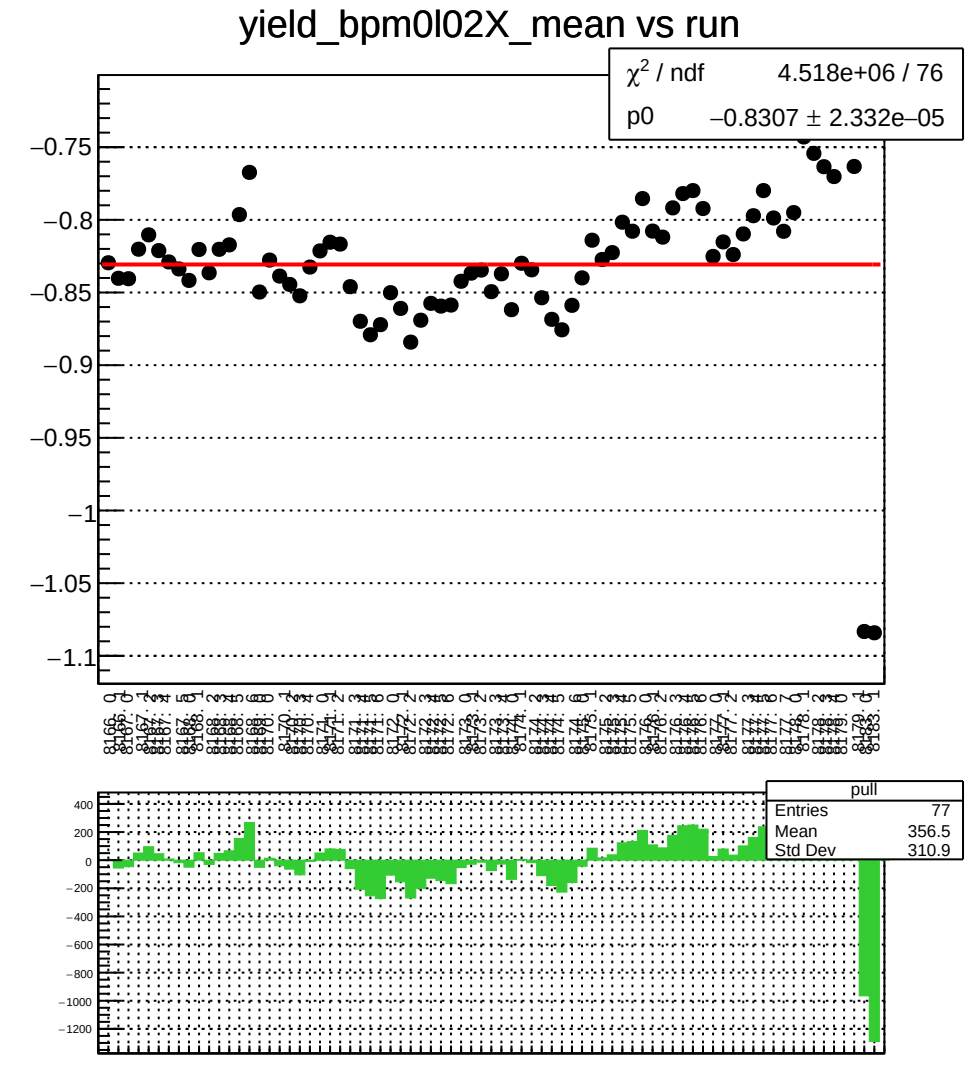

yield_bpm0l01X_rms vs run
χ² / ndf 1.58e+04 / 76
p0 0.0106 ± 8.727e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

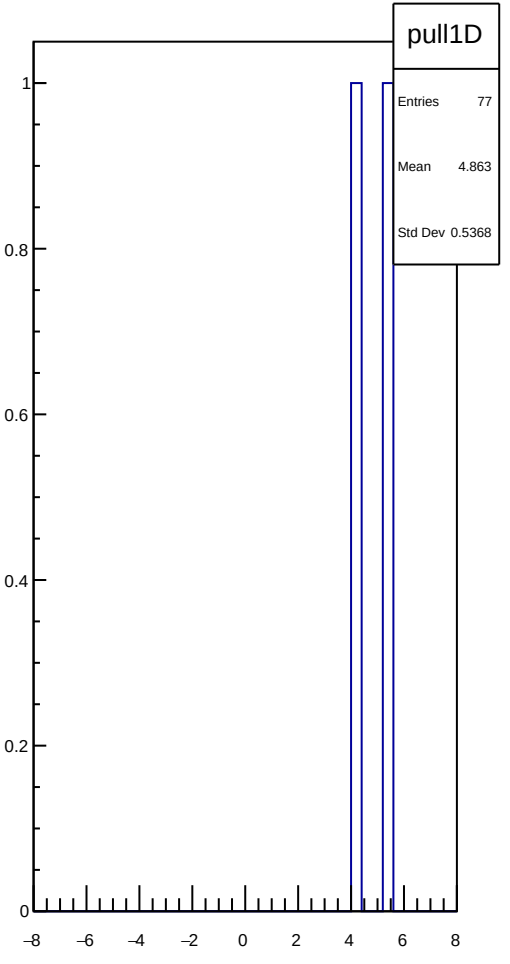

yield_bpm0l01Y_mean vs run
χ² / ndf 9.619e+06 / 76
p0 −6.19 ± 1.544e−05
pull
Entries 77
Mean −1495
Std Dev 1540

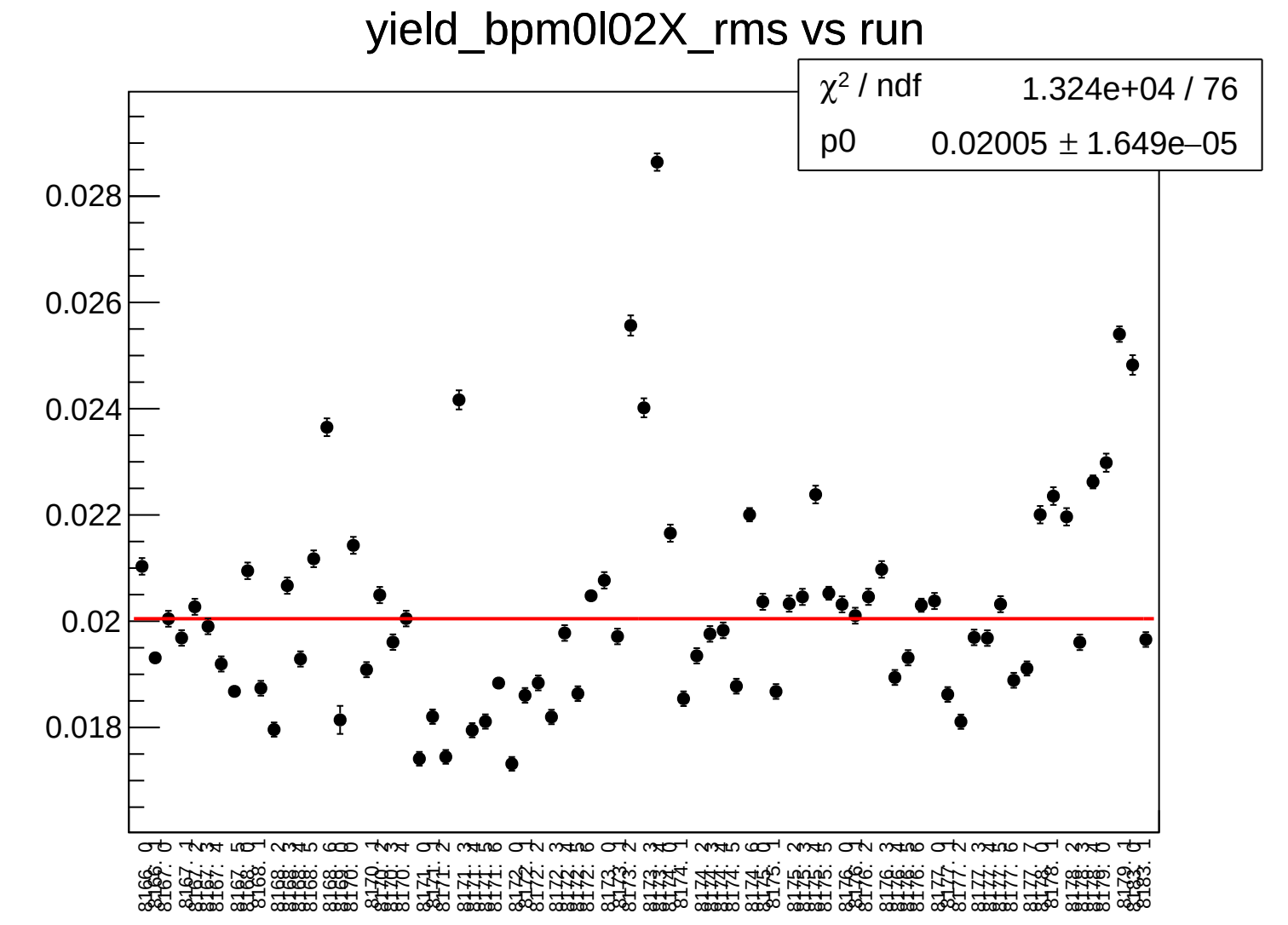

pull1D
Entries 77
Mean 2.966
Std Dev 2.986

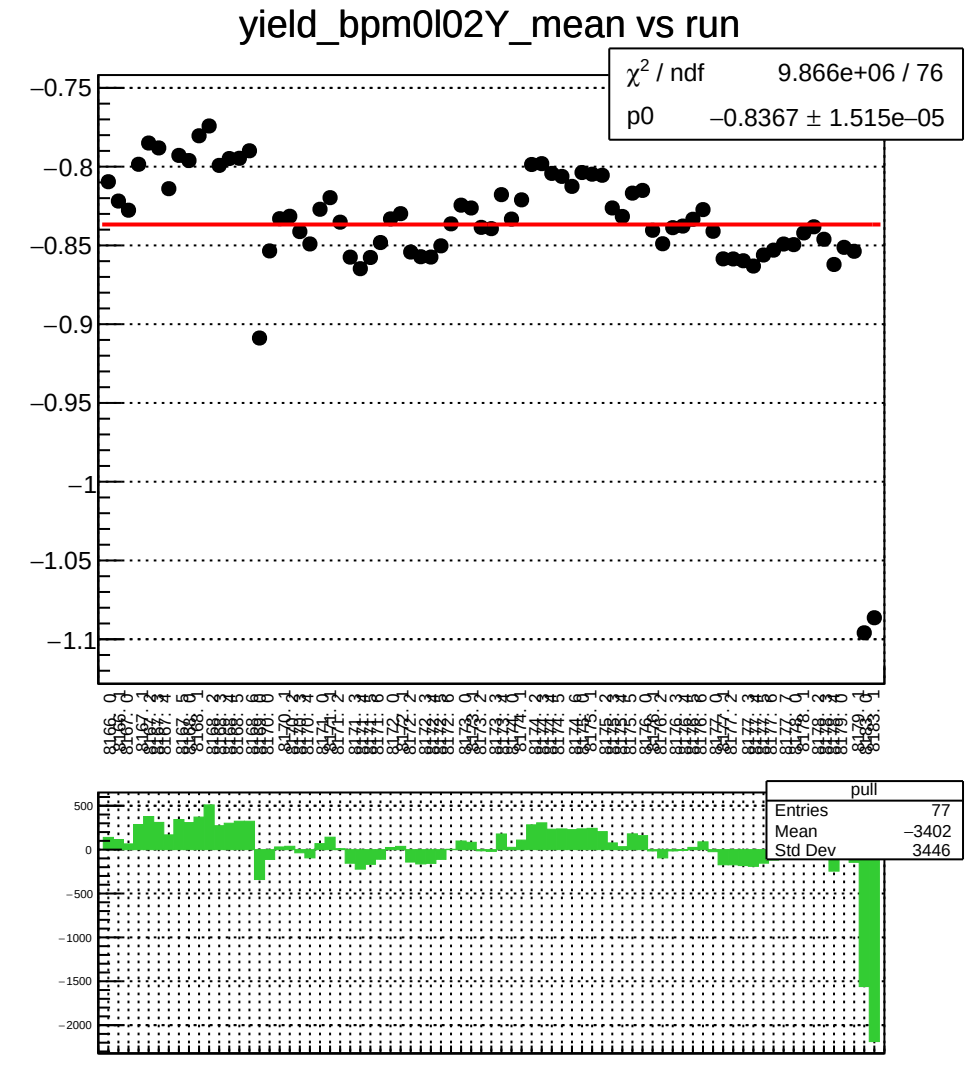
yield_bpm0l01Y_rms vs run

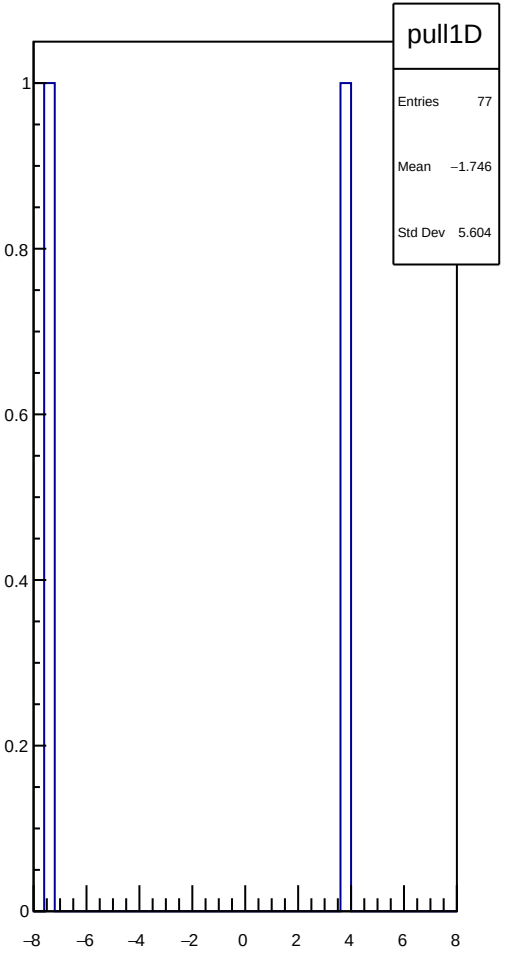


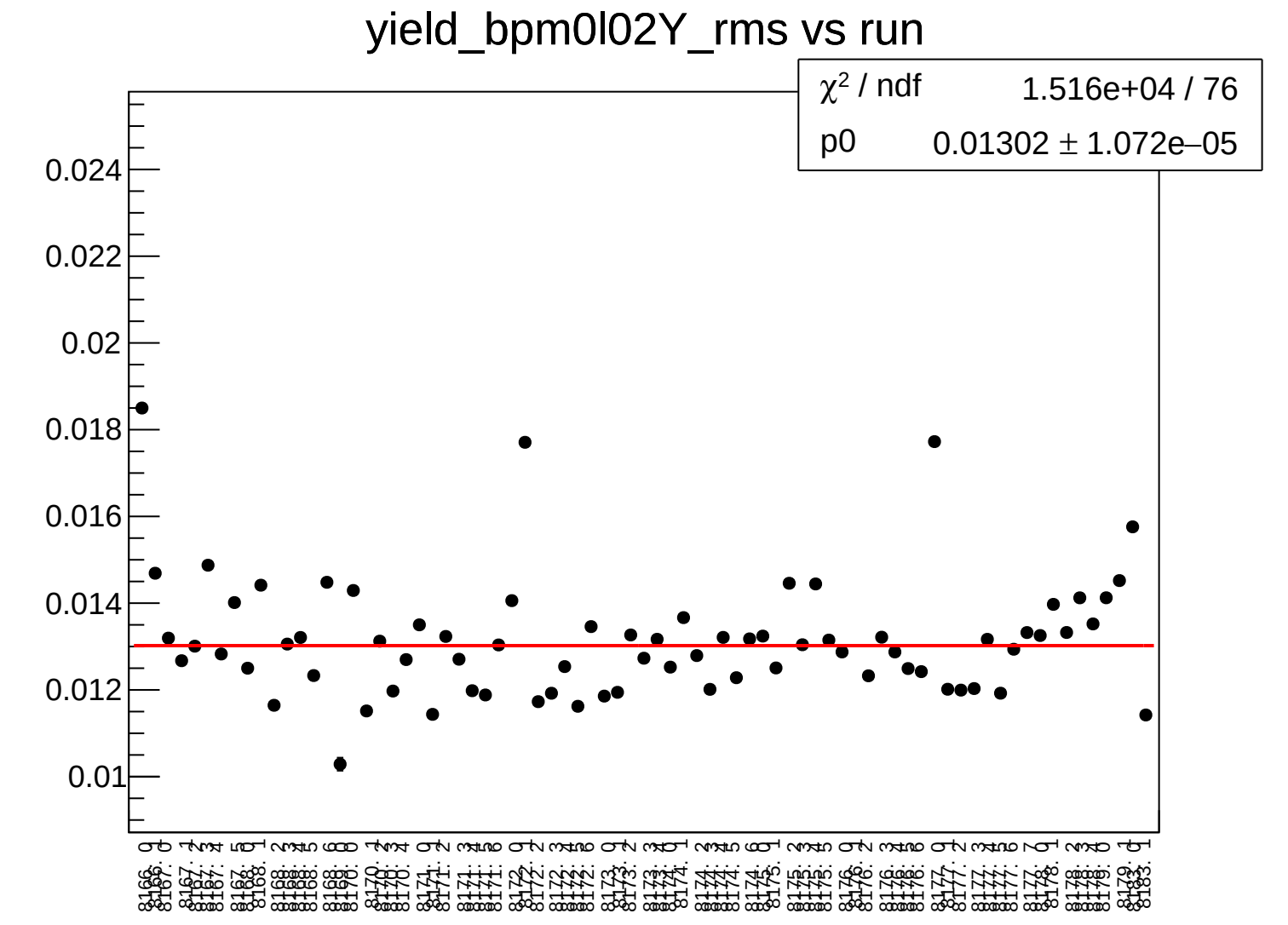

yield_bpm0l02X_mean vs run
χ² / ndf 4.518e+06 / 76
p0 −0.8307 ± 2.332e−05
−0.75
−0.8
−0.85
−0.9
−0.95
−1
−1.05
−1.1
pull
Entries 77
Mean 356.5
Std Dev 310.9
400
200
0
−200
−400
−600
−800
−1000
−1200

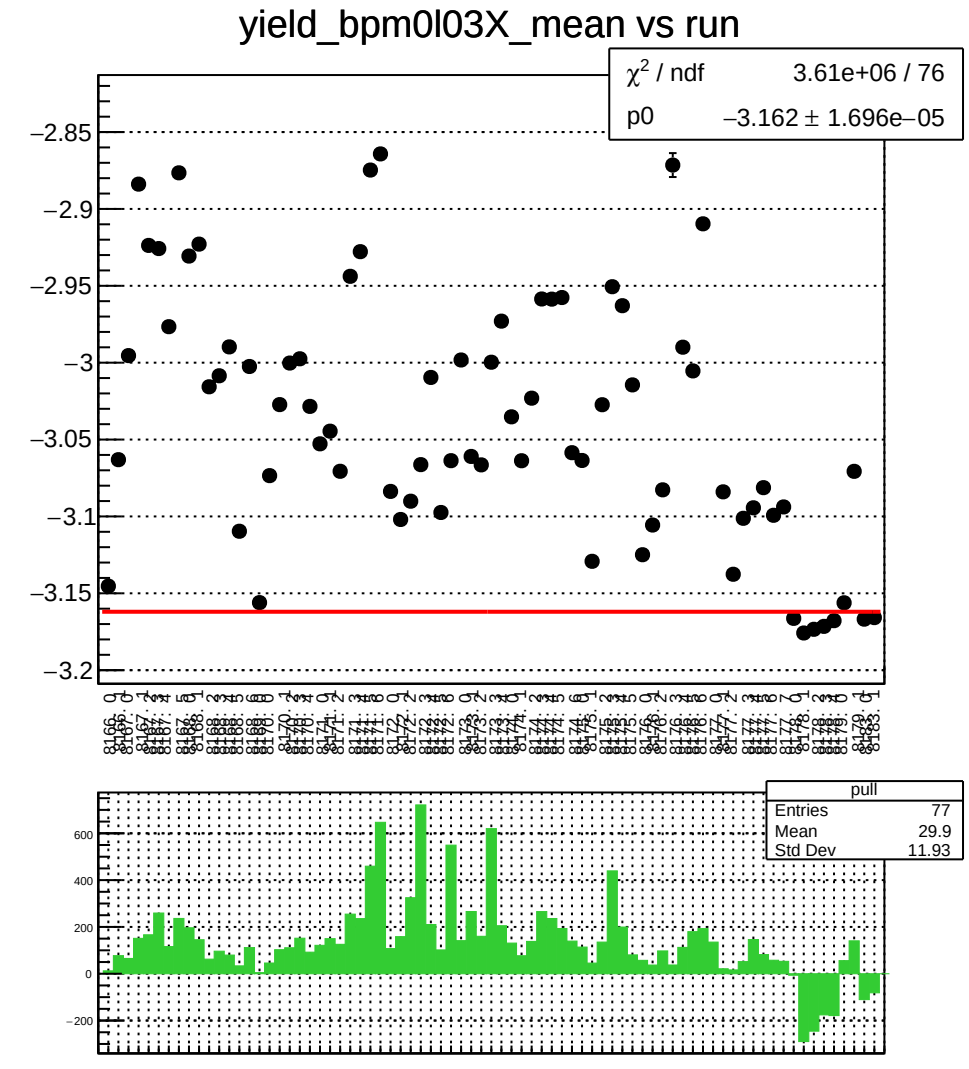

pull1D
Entries 77
Mean 4.863
Std Dev 0.5368
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

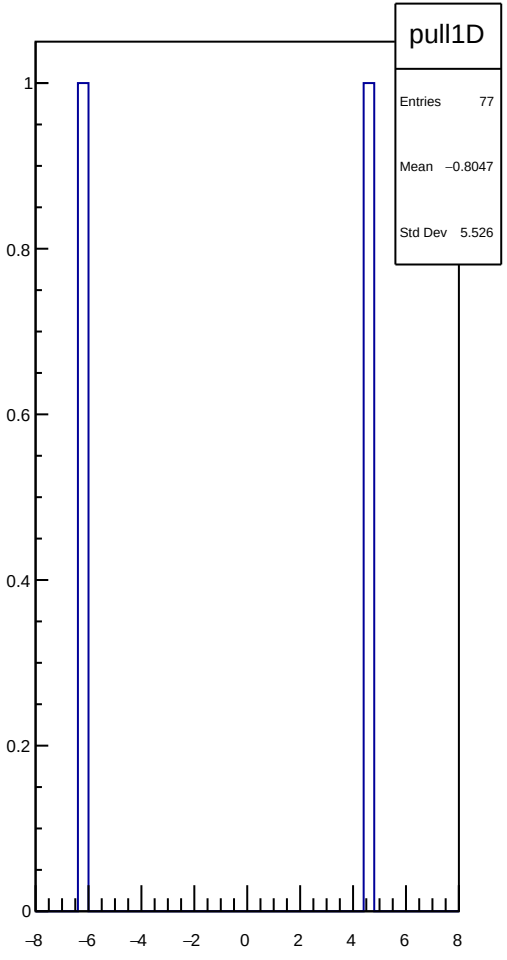

yield_bpm0l02X_rms vs run
χ² / ndf 1.324e+04 / 76
p0 0.02005 ± 1.649e–05
0.028
0.026
0.024
0.022
0.02
0.018

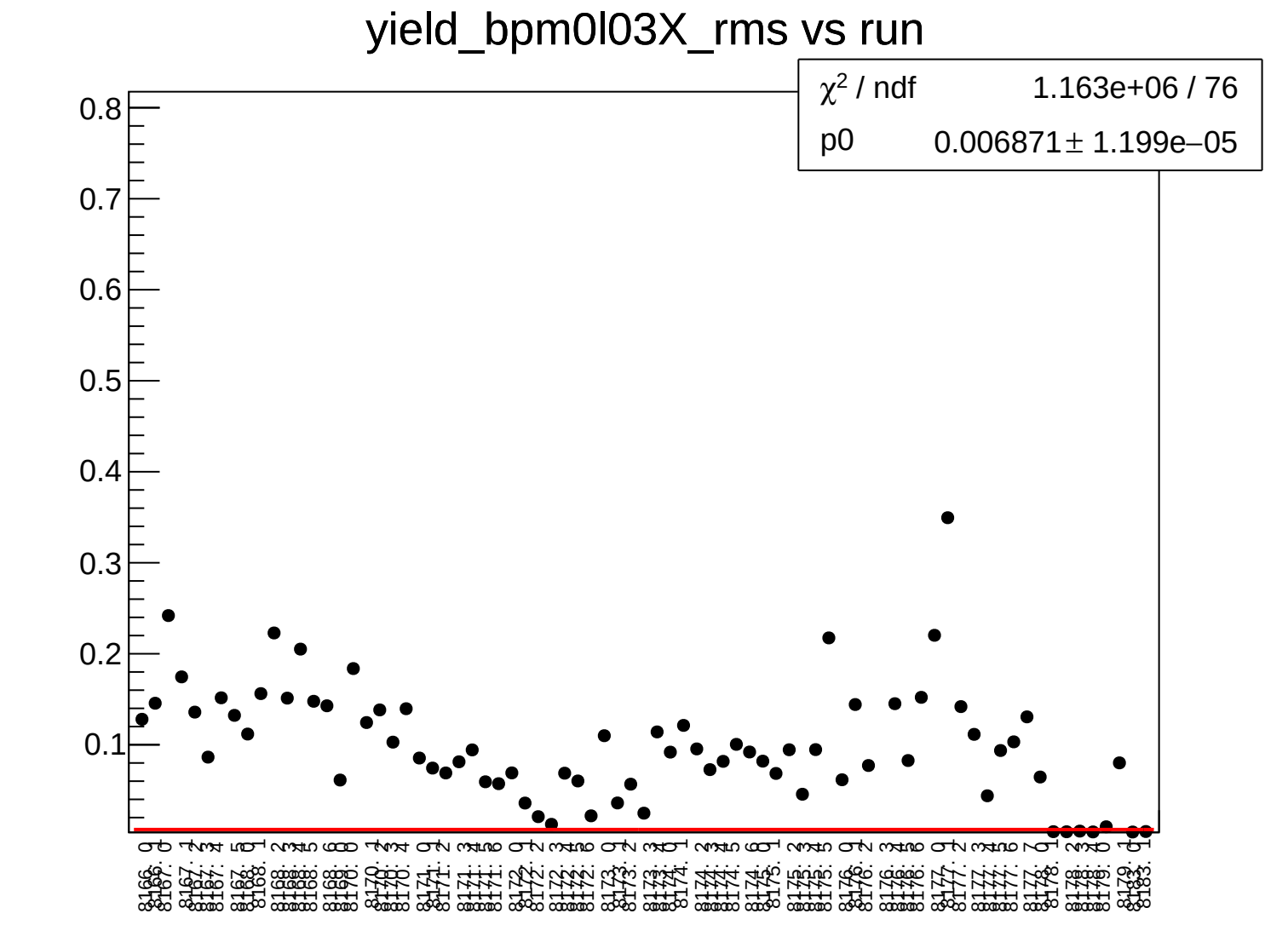

yield_bpm0l02Y_mean vs run
χ² / ndf 9.866e+06 / 76
p0 −0.8367 ± 1.515e−05
pull
Entries 77
Mean −3402
Std Dev 3446

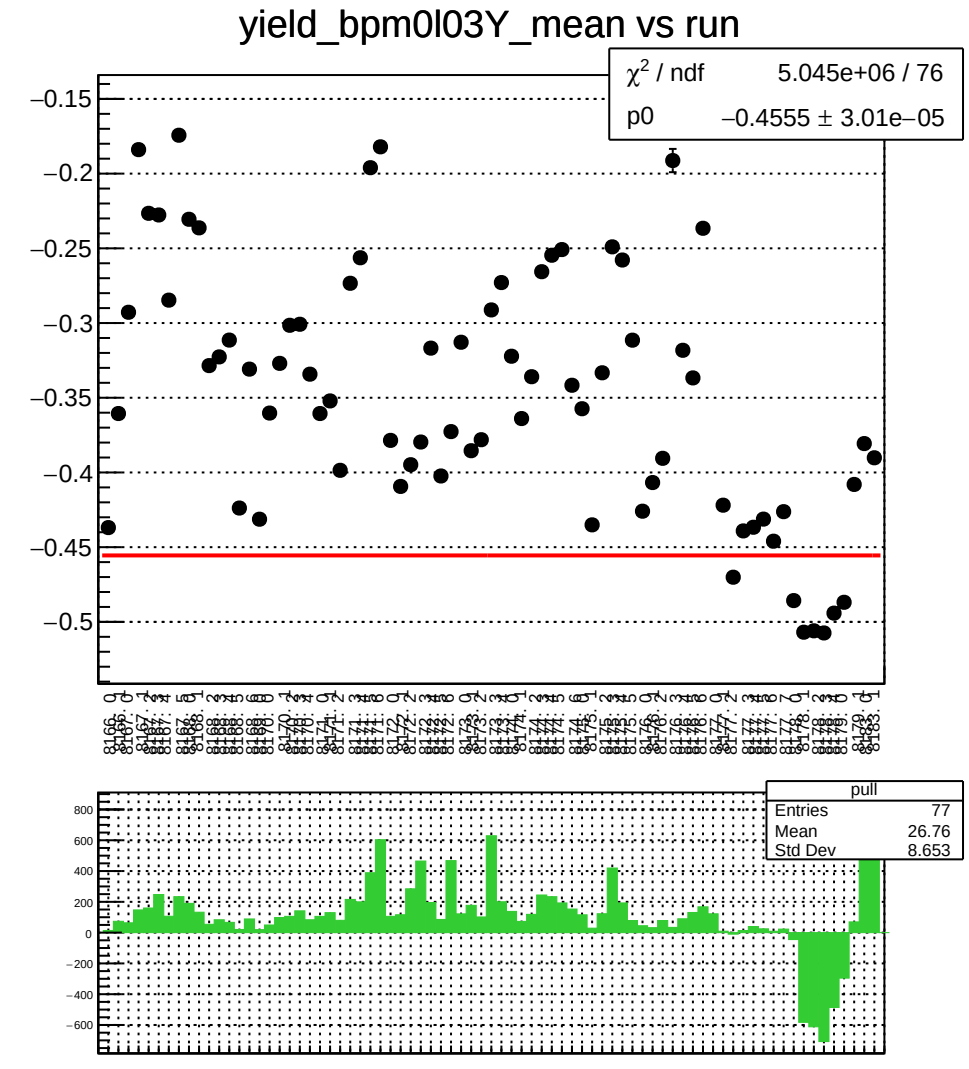

pull1D
Entries 77
Mean −1.746
Std Dev 5.604

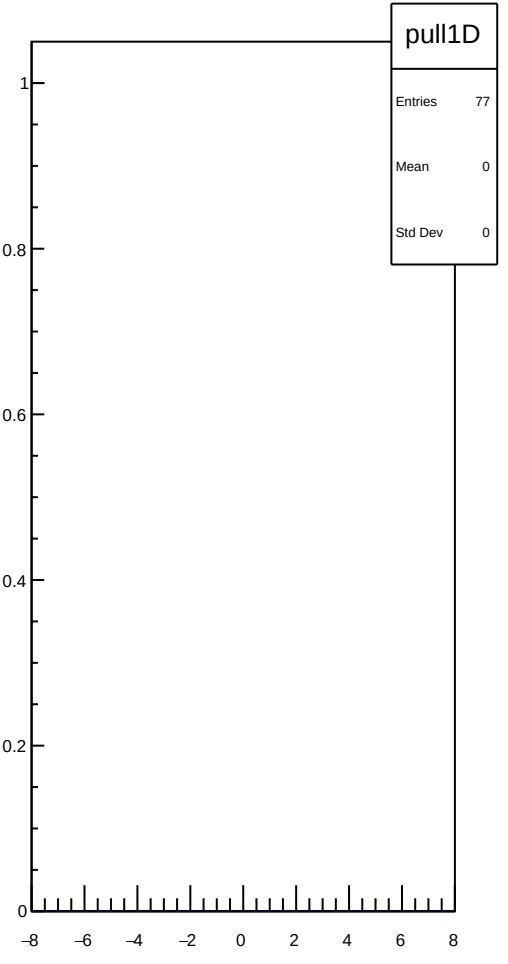

yield_bpm0l02Y_rms vs run
χ² / ndf 1.516e+04 / 76
p0 0.01302 ± 1.072e–05
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

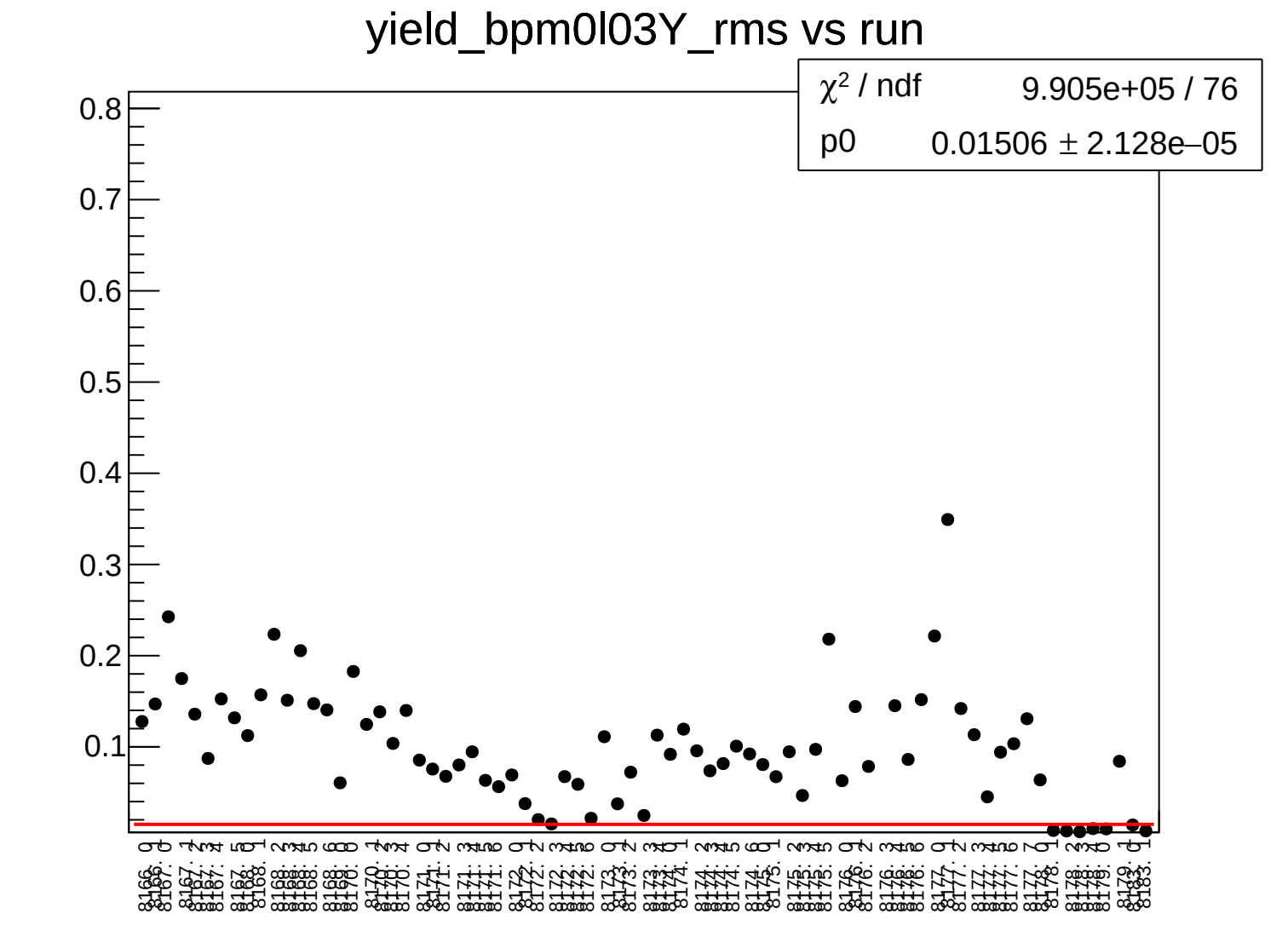

yield_bpm0l03X_mean vs run
χ² / ndf 3.61e+06 / 76
p0 −3.162 ± 1.696e−05
−2.85
−2.9
−2.95
−3
−3.05
−3.1
−3.15
−3.2
pull
Entries 77
Mean 29.9
Std Dev 11.93
600
400
200
0
−200

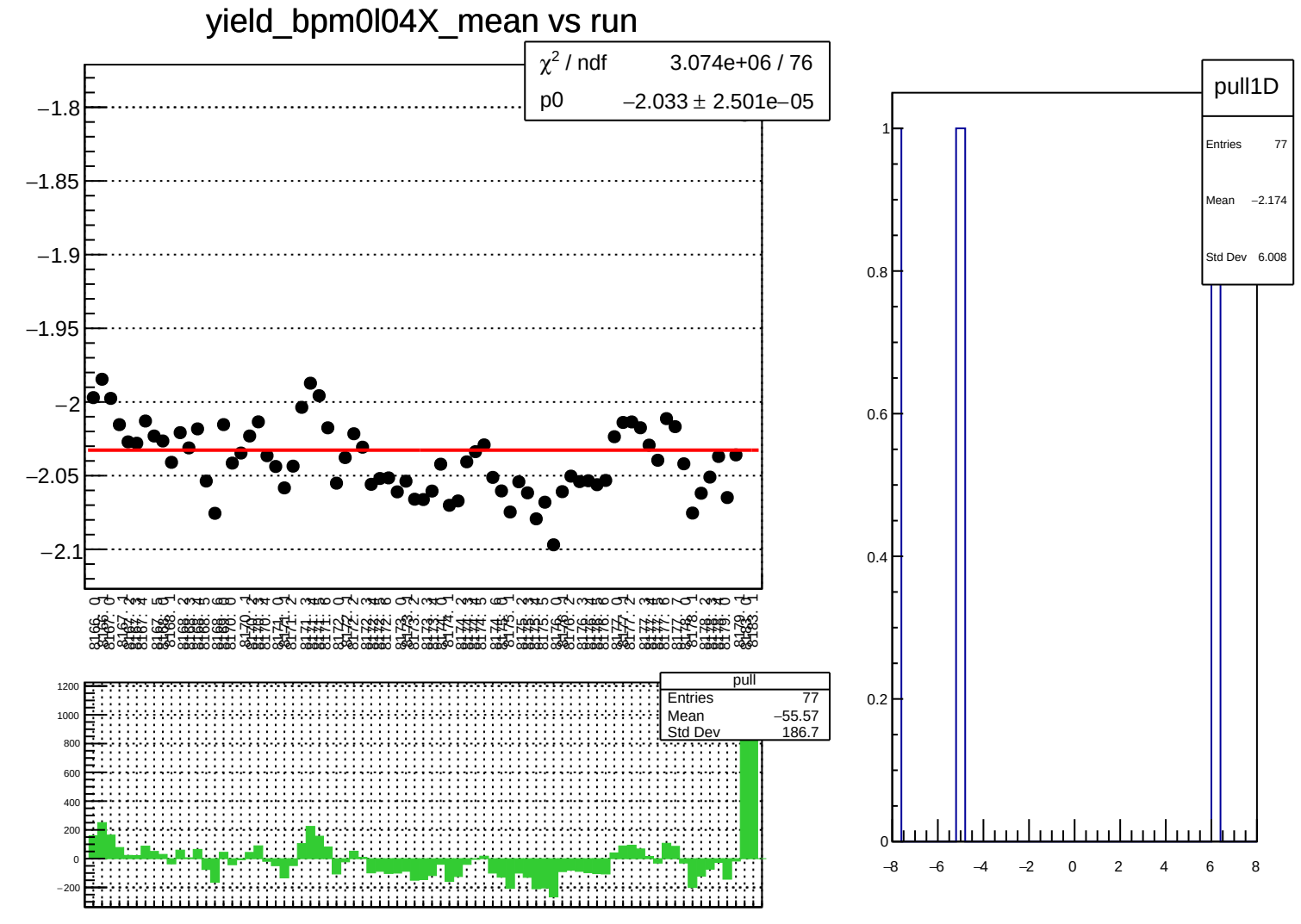

pull1D
Entries 77
Mean −0.8047
Std Dev 5.526
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

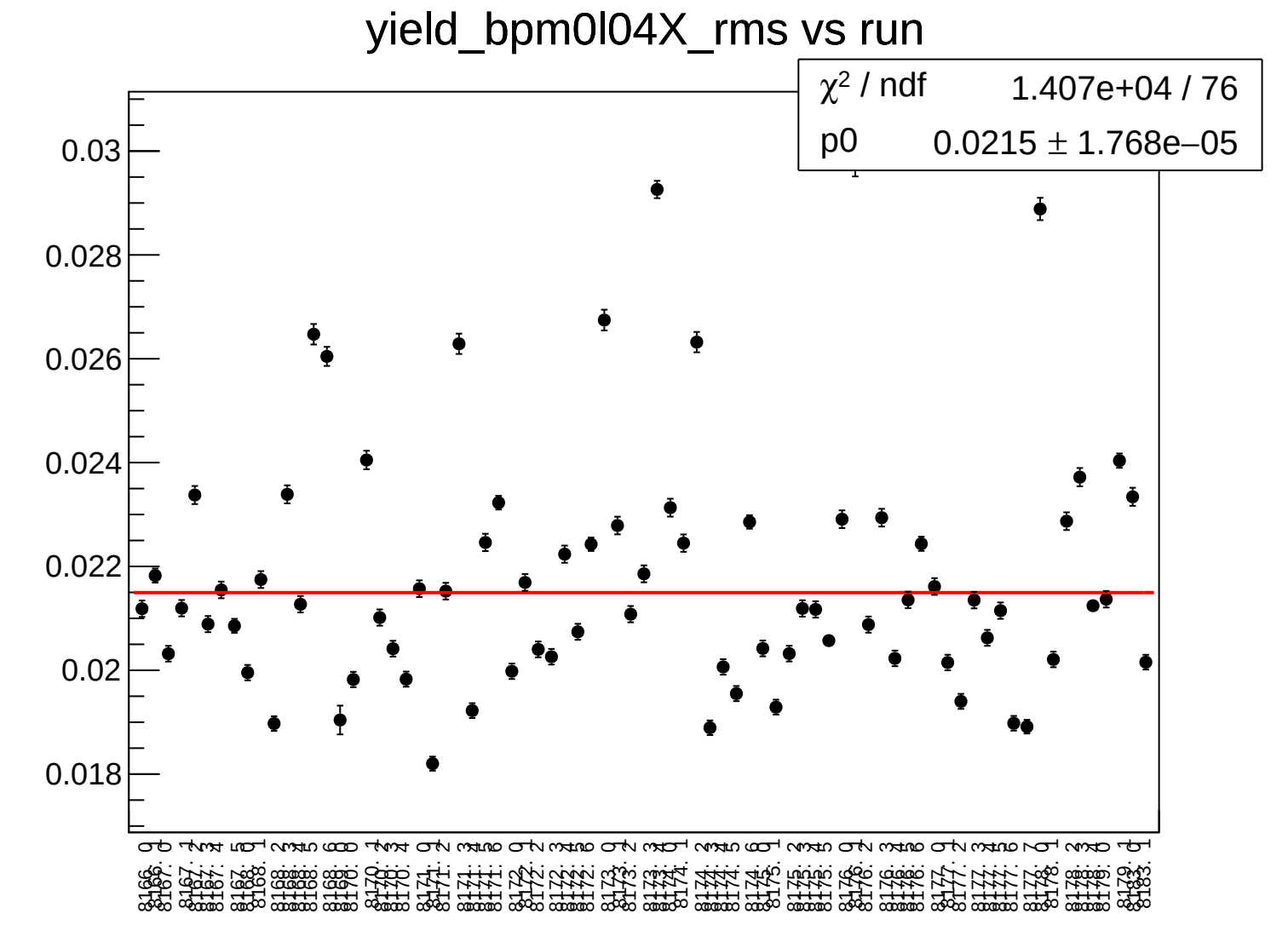

yield_bpm0l03X_rms vs run
χ² / ndf 1.163e+06 / 76
p0 0.006871 ± 1.199e−05
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

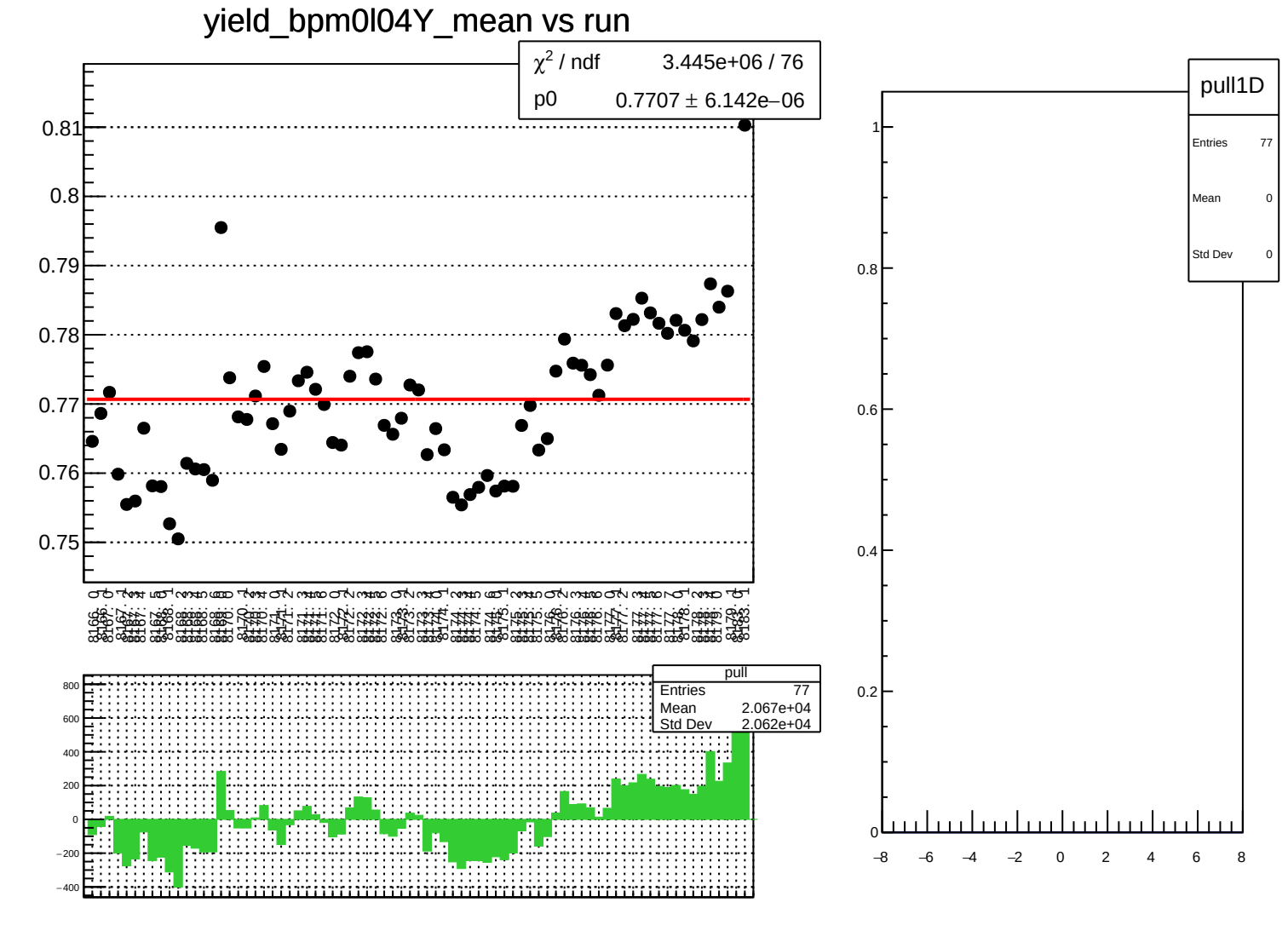

yield_bpm0l03Y_mean vs run
χ² / ndf 5.045e+06 / 76
p0 −0.4555 ± 3.01e−05
pull
Entries 77
Mean 26.76
Std Dev 8.653


pull1D
Entries 77
Mean 0
Std Dev 0

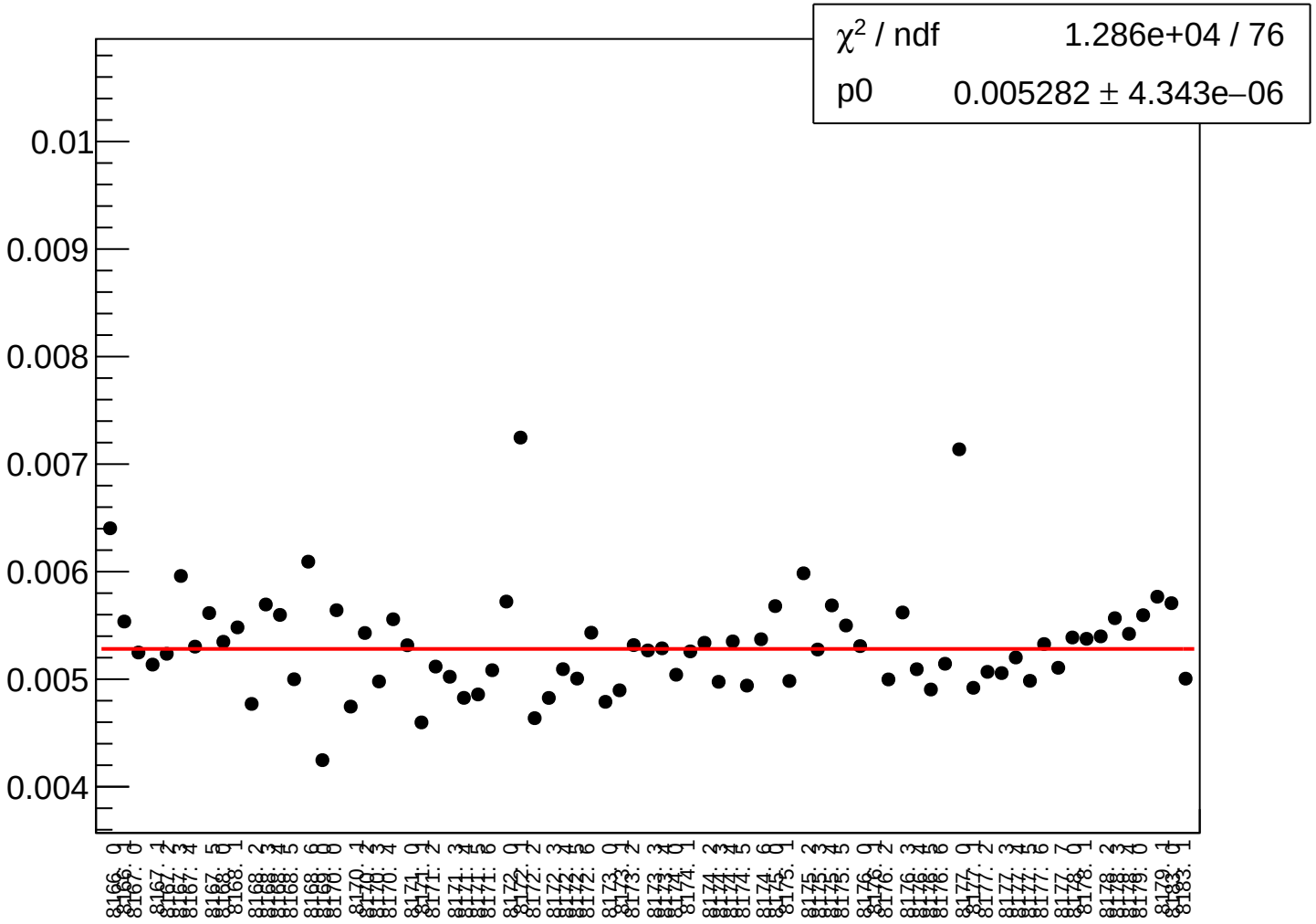

yield_bpm0l03Y_rms vs run
χ² / ndf 9.905e+05 / 76
p0 0.01506 ± 2.128e–05
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

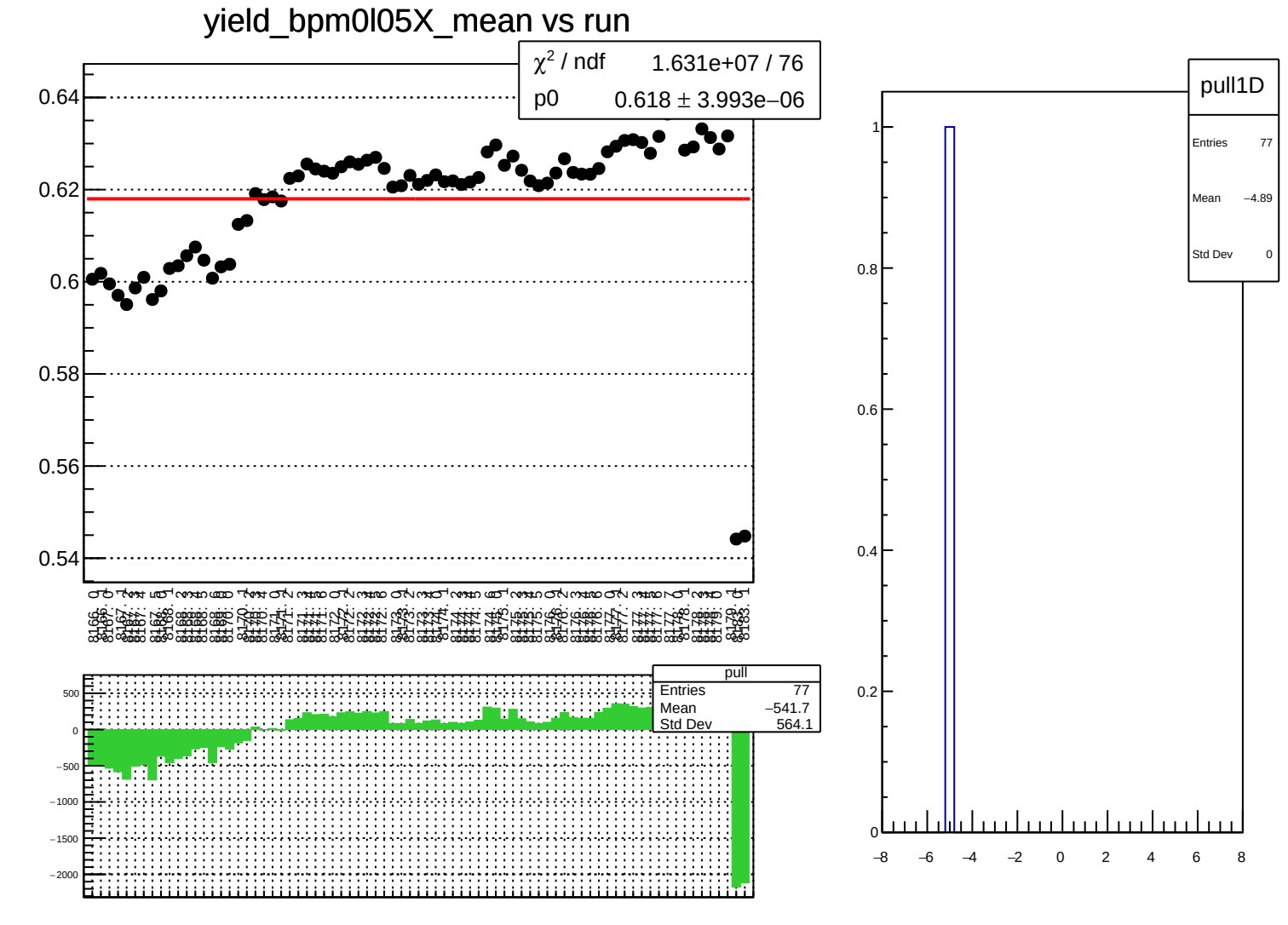

yield_bpm0l04X_mean vs run
χ² / ndf 3.074e+06 / 76
p0 −2.033 ± 2.501e−05
−1.8
−1.85
−1.9
−1.95
−2
−2.05
−2.1
pull
Entries 77
Mean −55.57
Std Dev 186.7
1200
1000
800
600
400
200
0
−200
pull1D
Entries 77
Mean −2.174
Std Dev 6.008
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

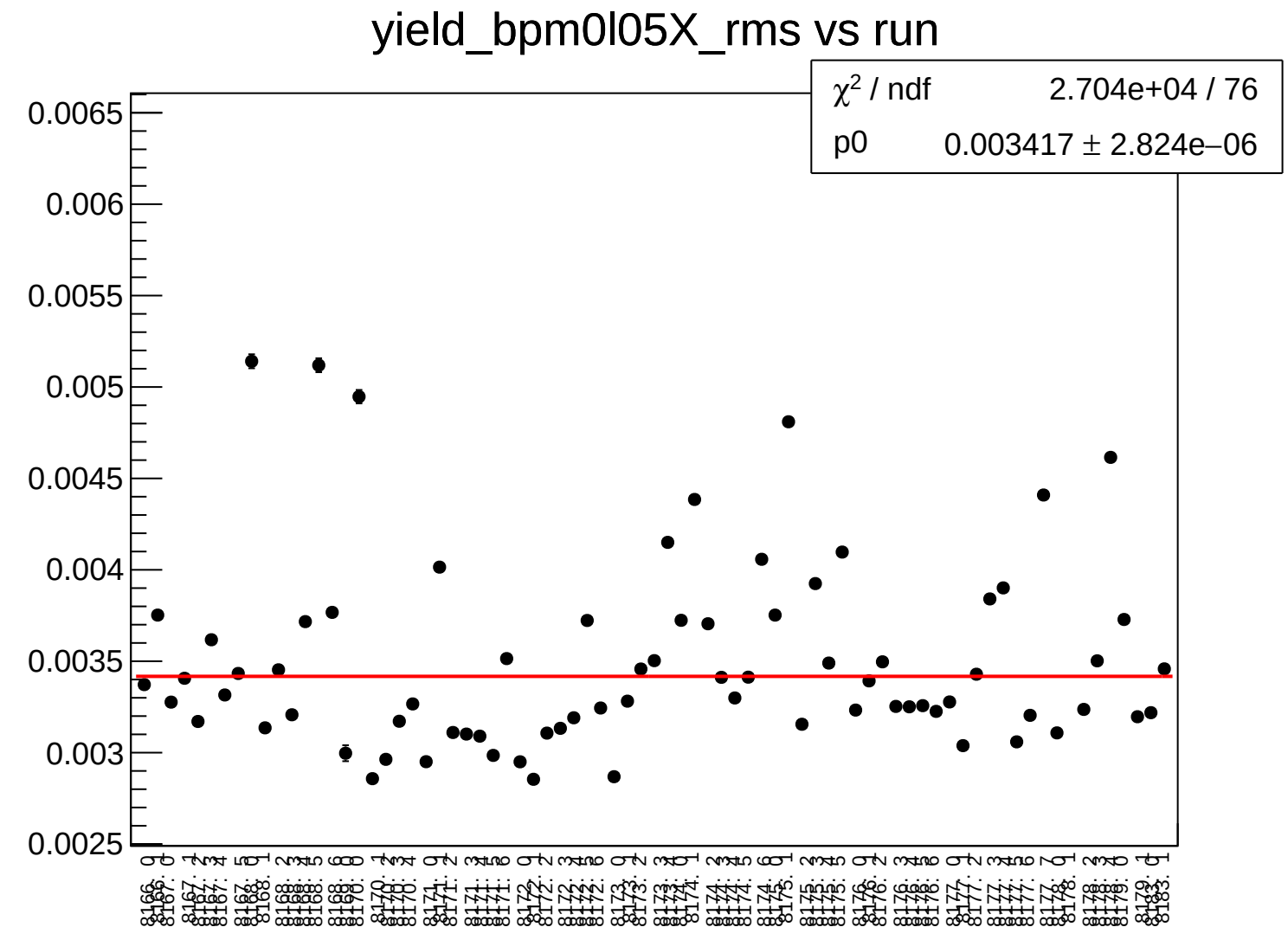

yield_bpm0l04X_rms vs run
χ² / ndf 1.407e+04 / 76
p0 0.0215 ± 1.768e−05
0.03
0.028
0.026
0.024
0.022
0.02
0.018

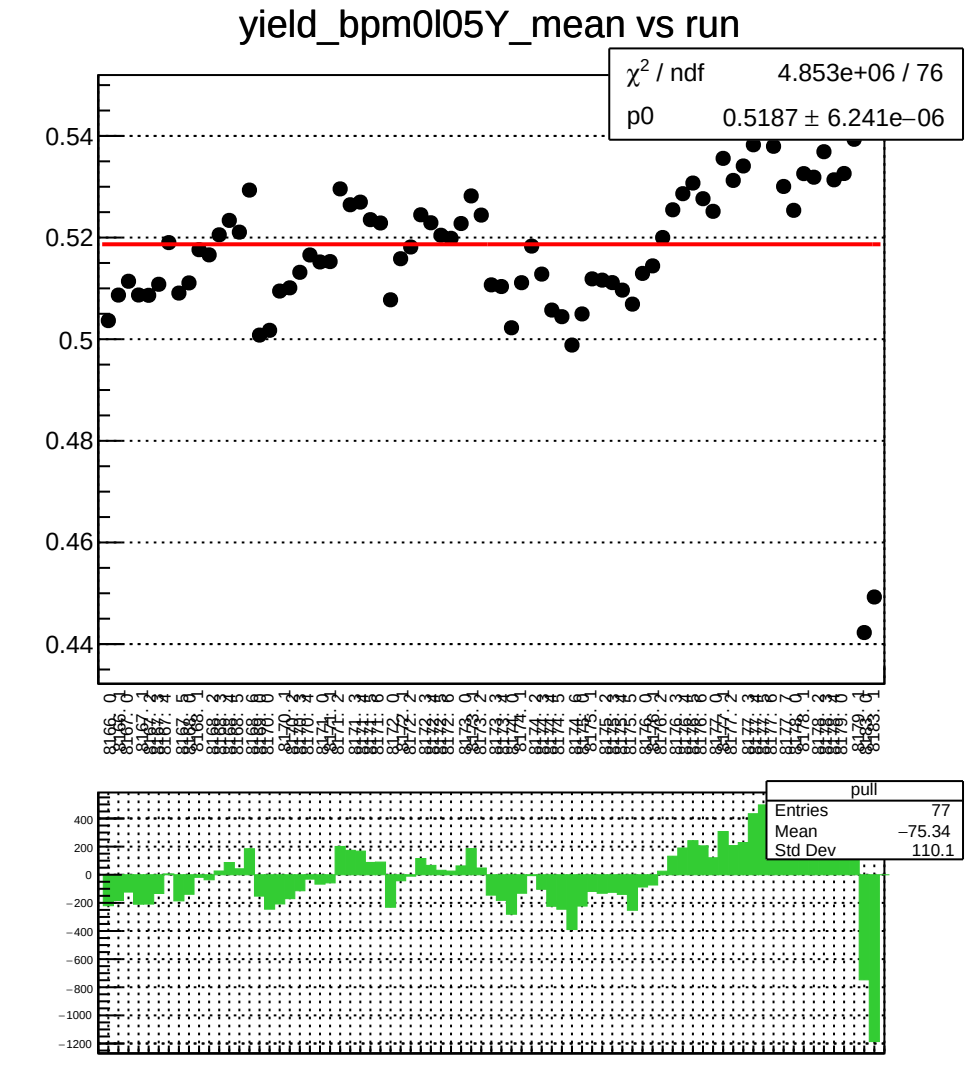

yield_bpm0l04Y_mean vs run
χ² / ndf 3.445e+06 / 76
p0 0.7707 ± 6.142e−06
0.81
0.8
0.79
0.78
0.77
0.76
0.75
pull
Entries 77
Mean 2.067e+04
Std Dev 2.062e+04
800
600
400
200
0
−200
−400
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

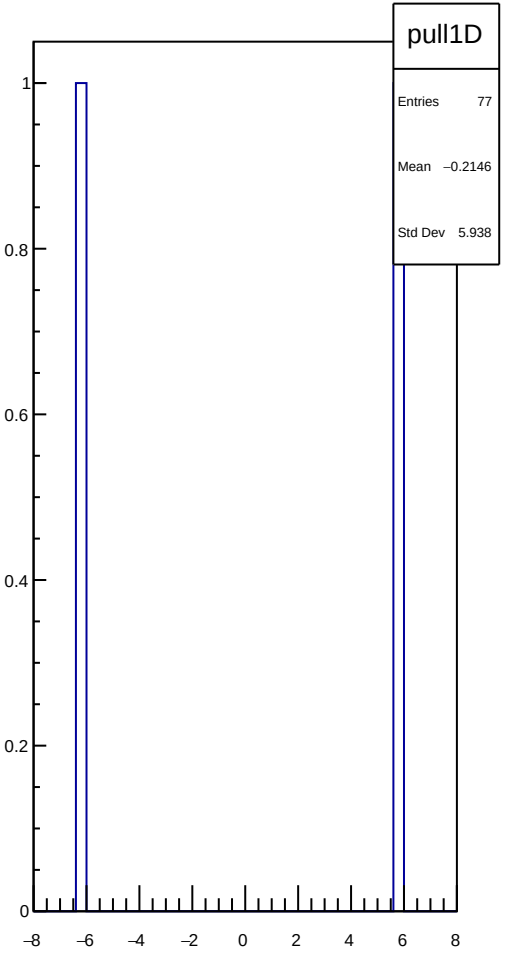
yield_bpm0l04Y_rms vs run

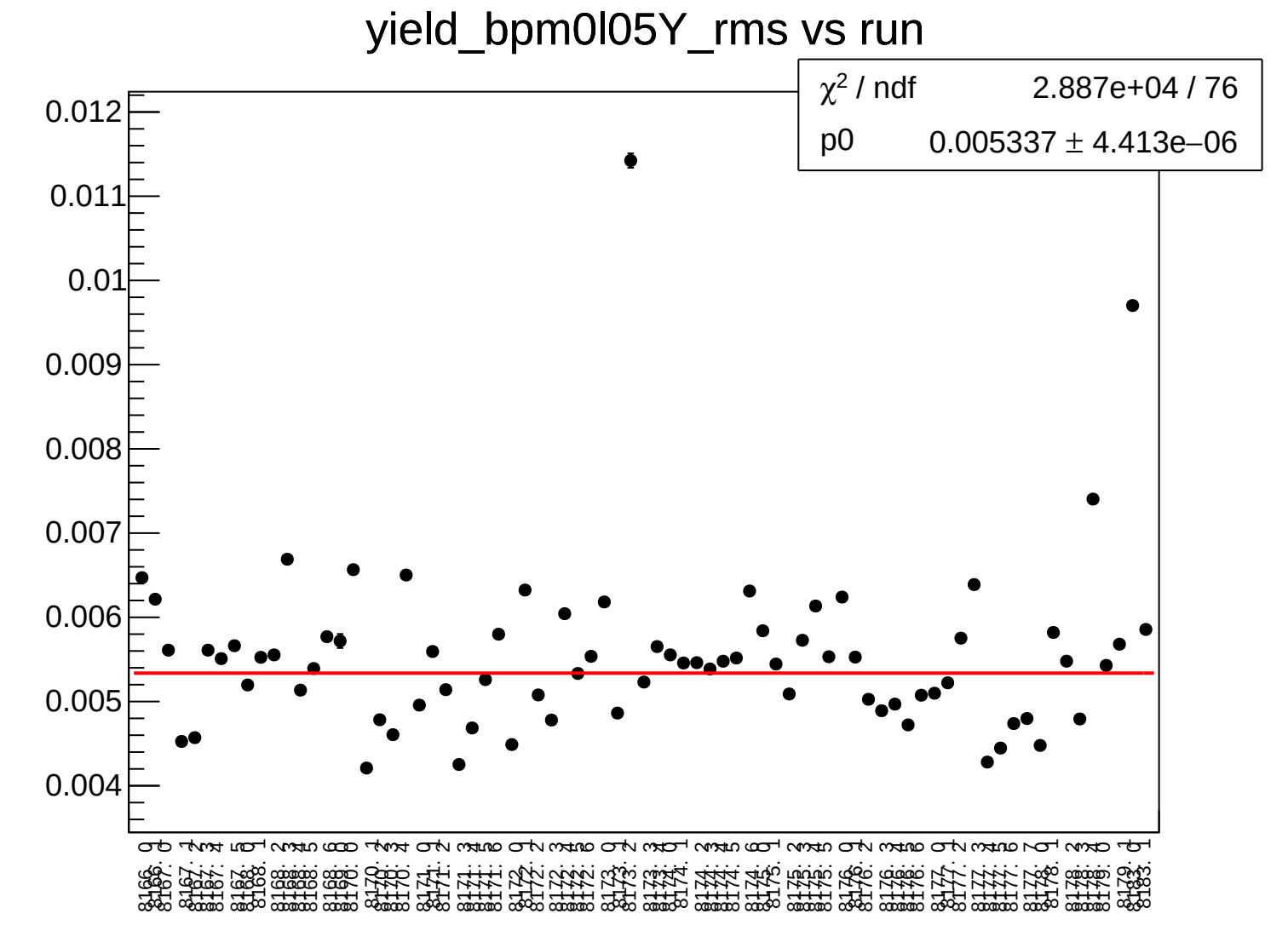


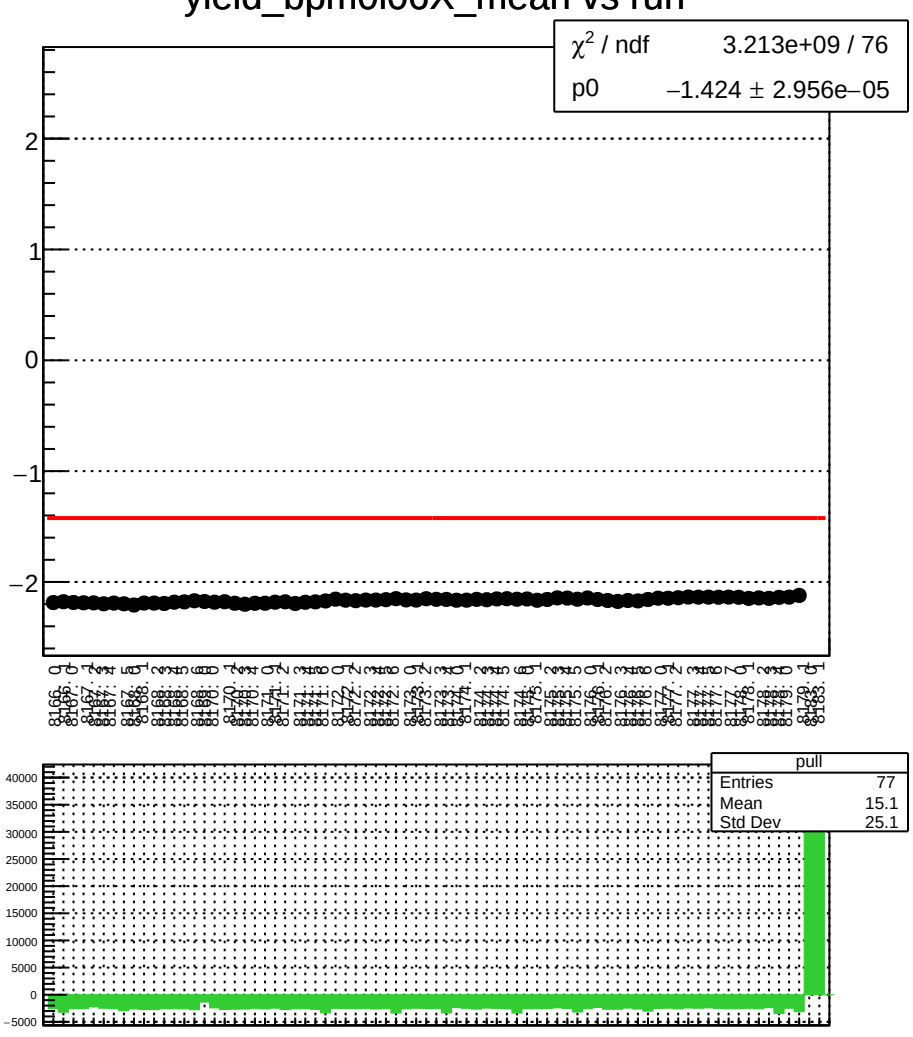

yield_bpm0l05X_mean vs run
χ² / ndf 1.631e+07 / 76
p0 0.618 ± 3.993e−06
0.64
0.62
0.6
0.58
0.56
0.54
pull
Entries 77
Mean −541.7
Std Dev 564.1
500
0
−500
−1000
−1500
−2000
pull1D
Entries 77
Mean −4.89
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

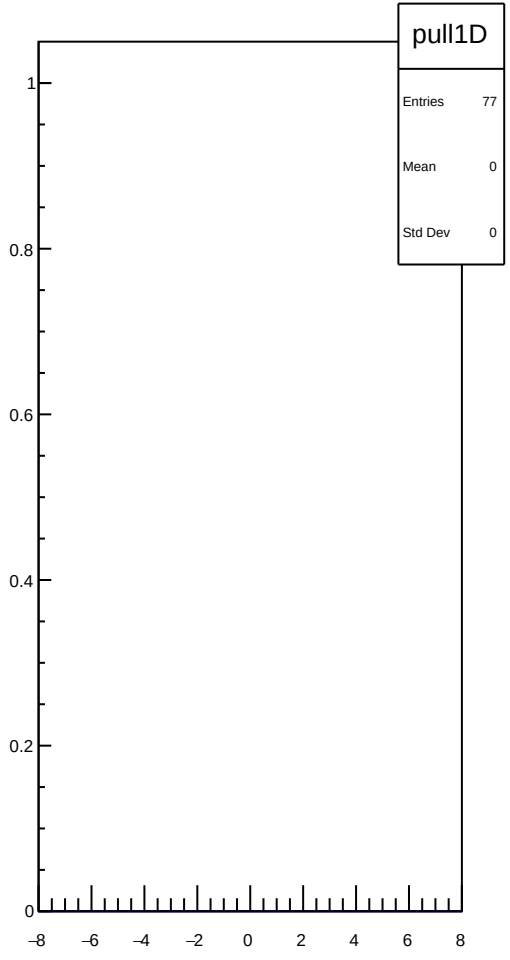

yield_bpm0l05X_rms vs run
χ² / ndf 2.704e+04 / 76
p0 0.003417 ± 2.824e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025

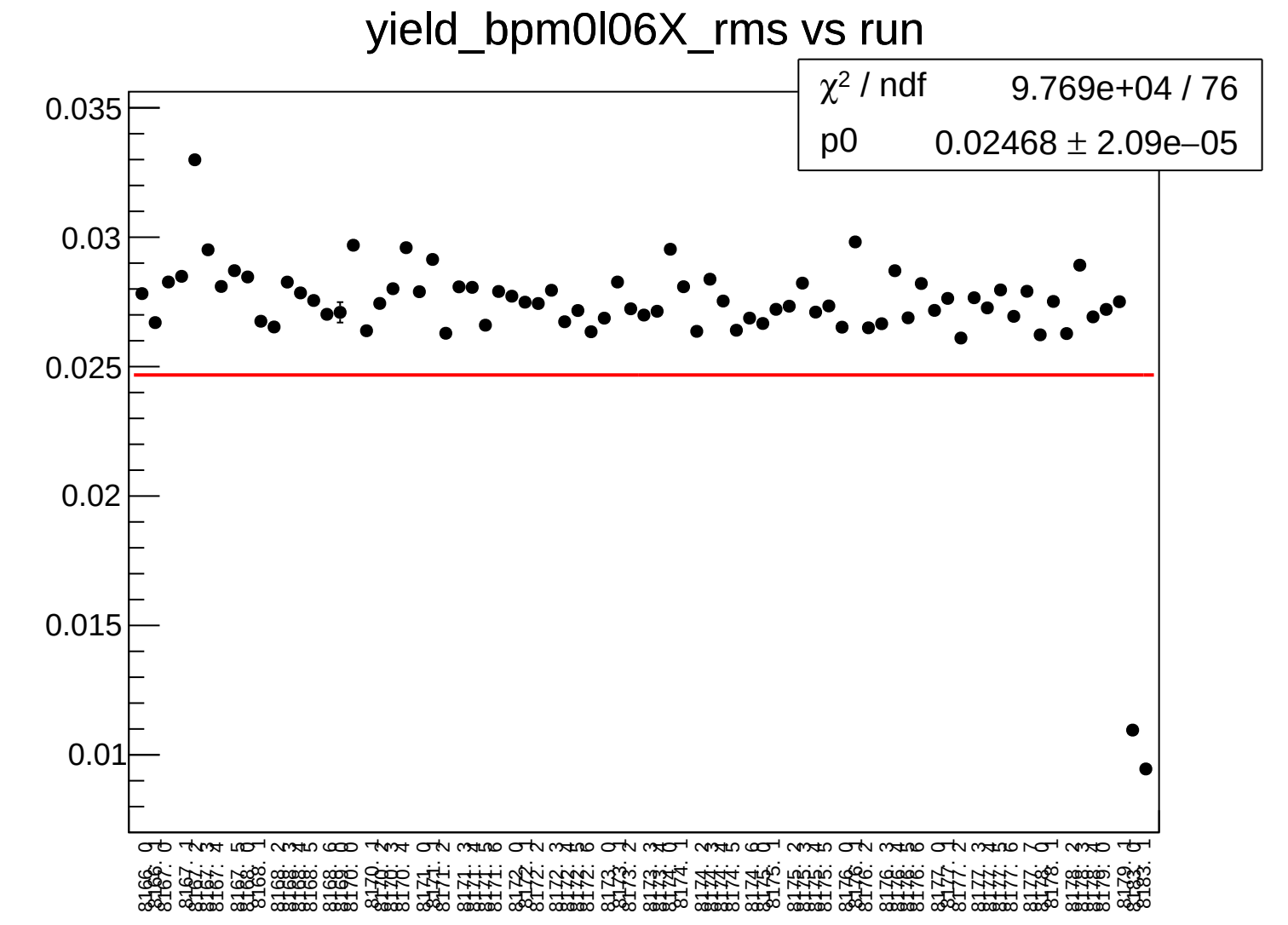

yield_bpm0l05Y_mean vs run
χ² / ndf 4.853e+06 / 76
p0 0.5187 ± 6.241e−06
0.54
0.52
0.5
0.48
0.46
0.44
pull
Entries 77
Mean −75.34
Std Dev 110.1
400
200
0
−200
−400
−600
−800
−1000
−1200

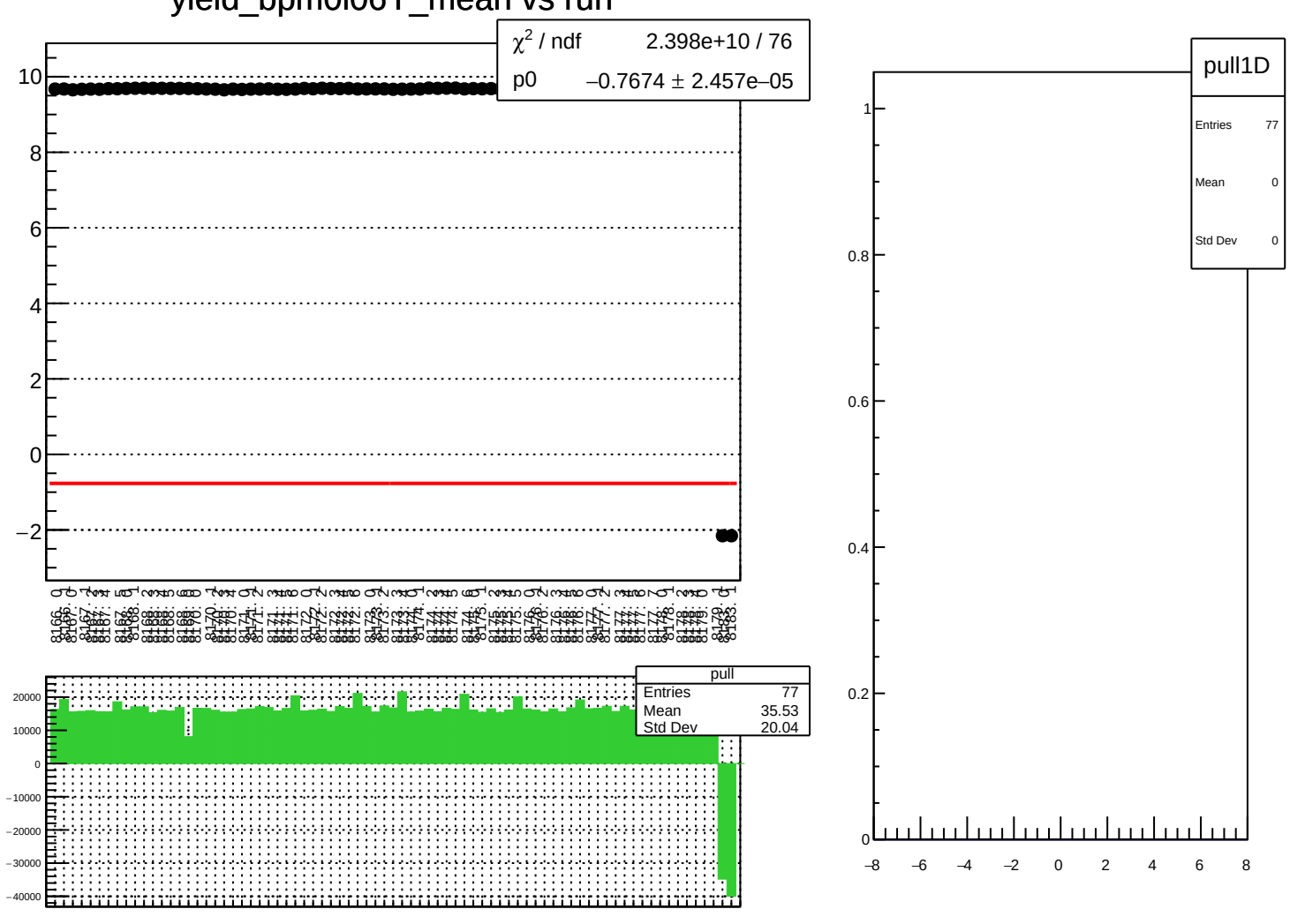

pull1D
Entries 77
Mean −0.2146
Std Dev 5.938
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

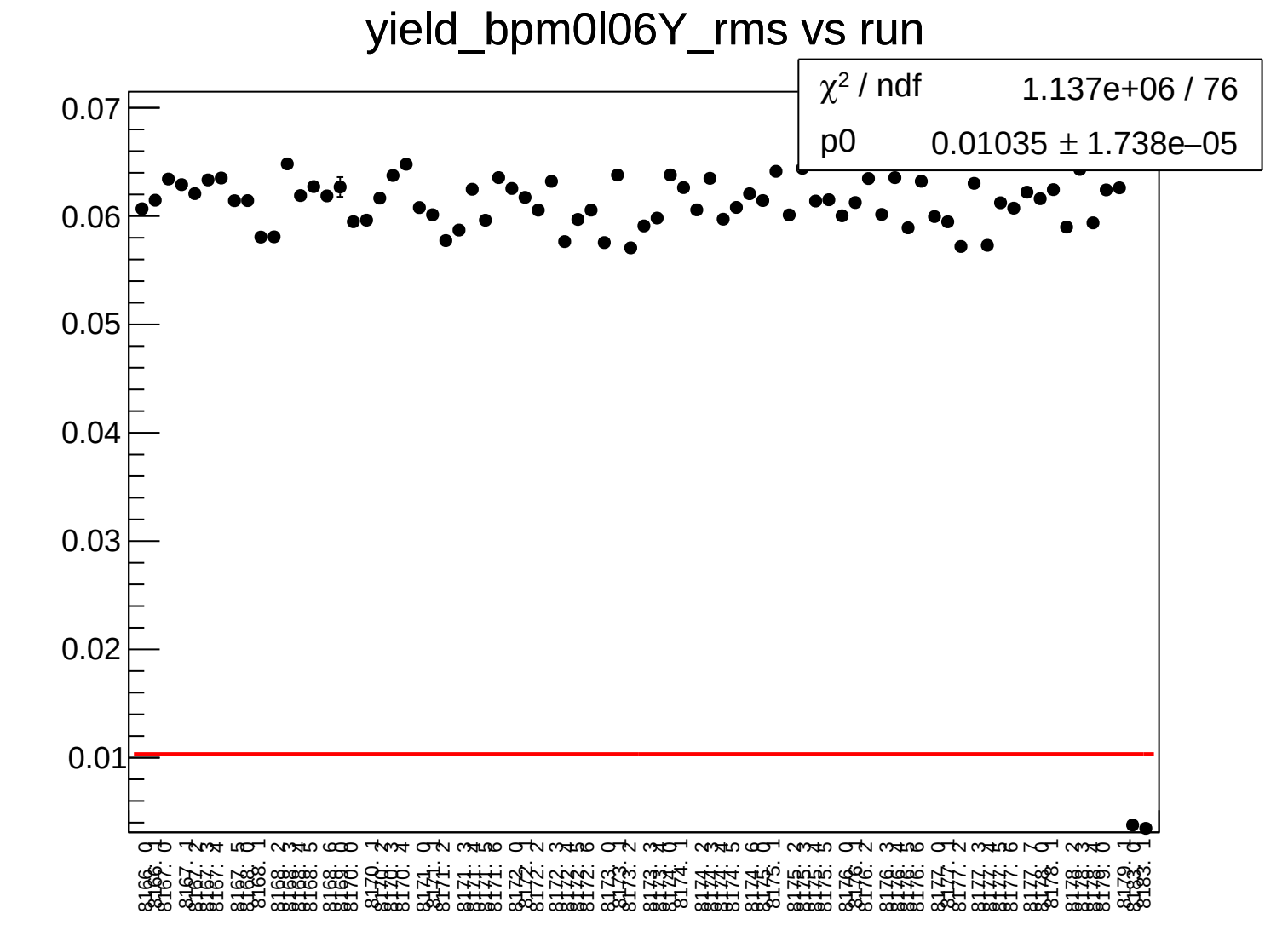

yield_bpm0l05Y_rms vs run
χ² / ndf 2.887e+04 / 76
p0 0.005337 ± 4.413e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

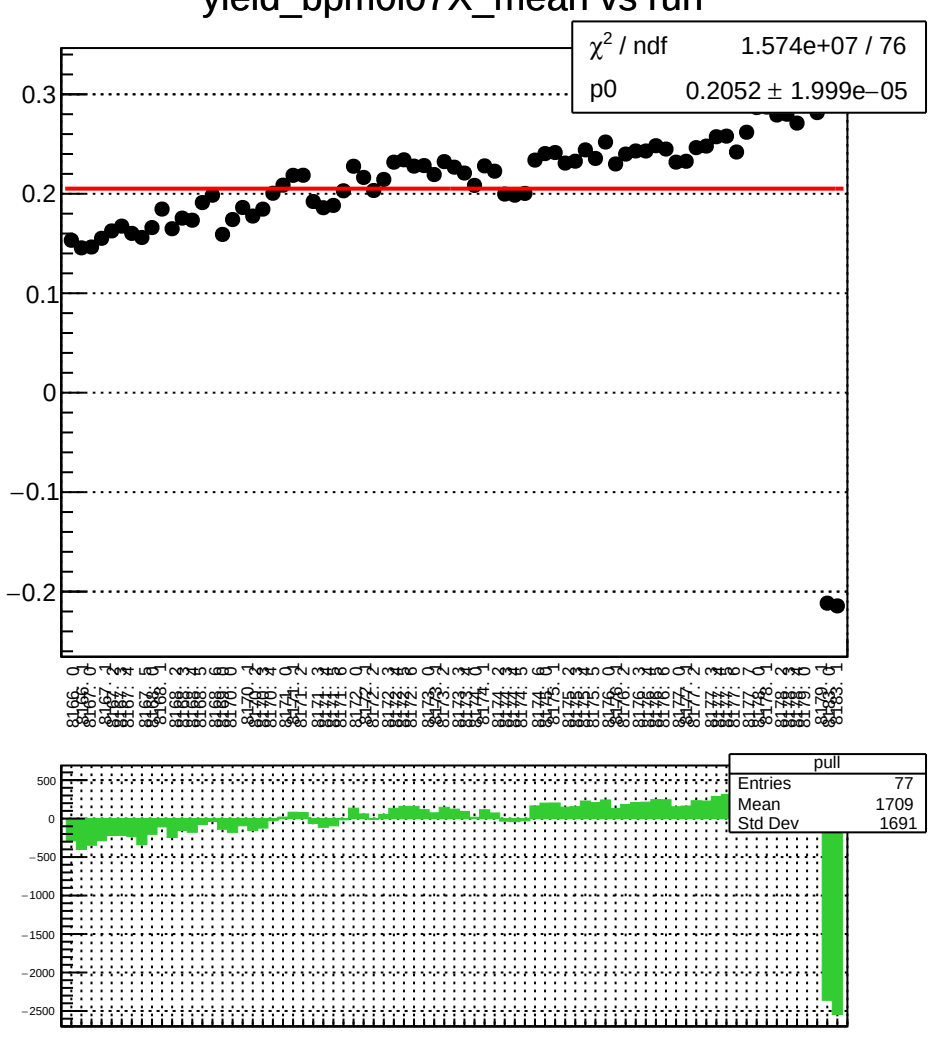

yield_bpm0l06X_mean vs run
χ² / ndf 3.213e+09 / 76
p0 −1.424 ± 2.956e−05
pull
Entries 77
Mean 15.1
Std Dev 25.1

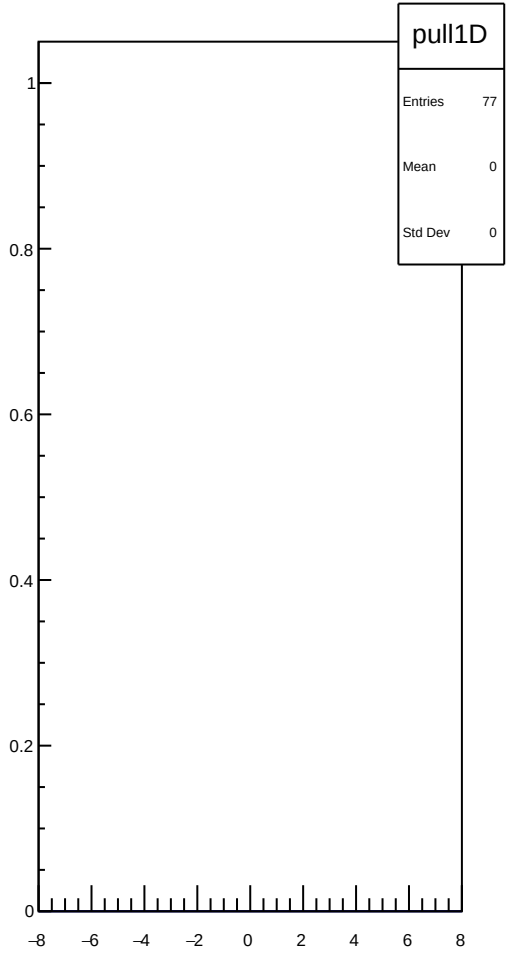

pull1D
Entries 77
Mean 0
Std Dev 0

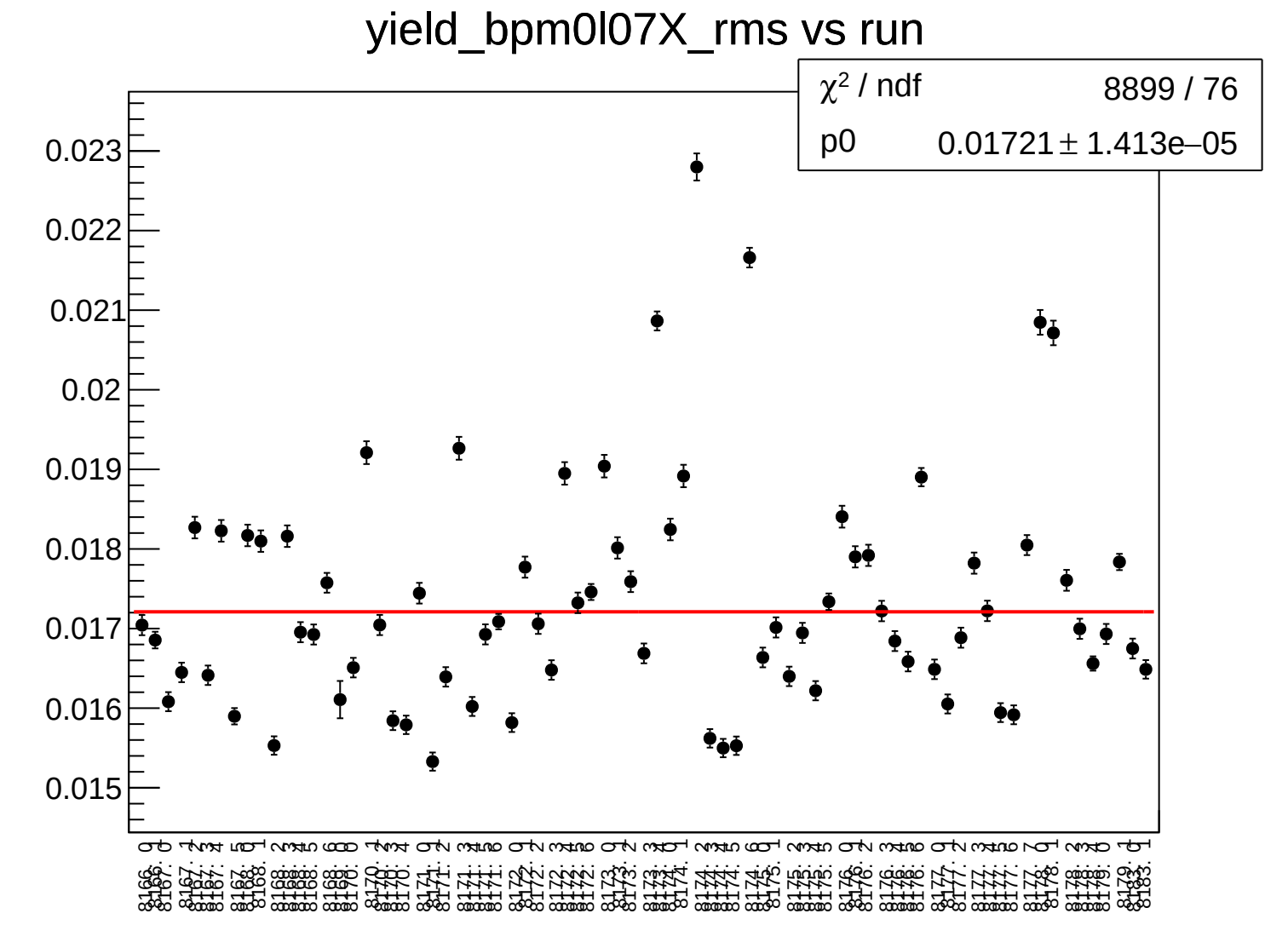

yield_bpm0l06X_rms vs run
χ² / ndf 9.769e+04 / 76
p0 0.02468 ± 2.09e−05
0.035
0.03
0.025
0.02
0.015
0.01

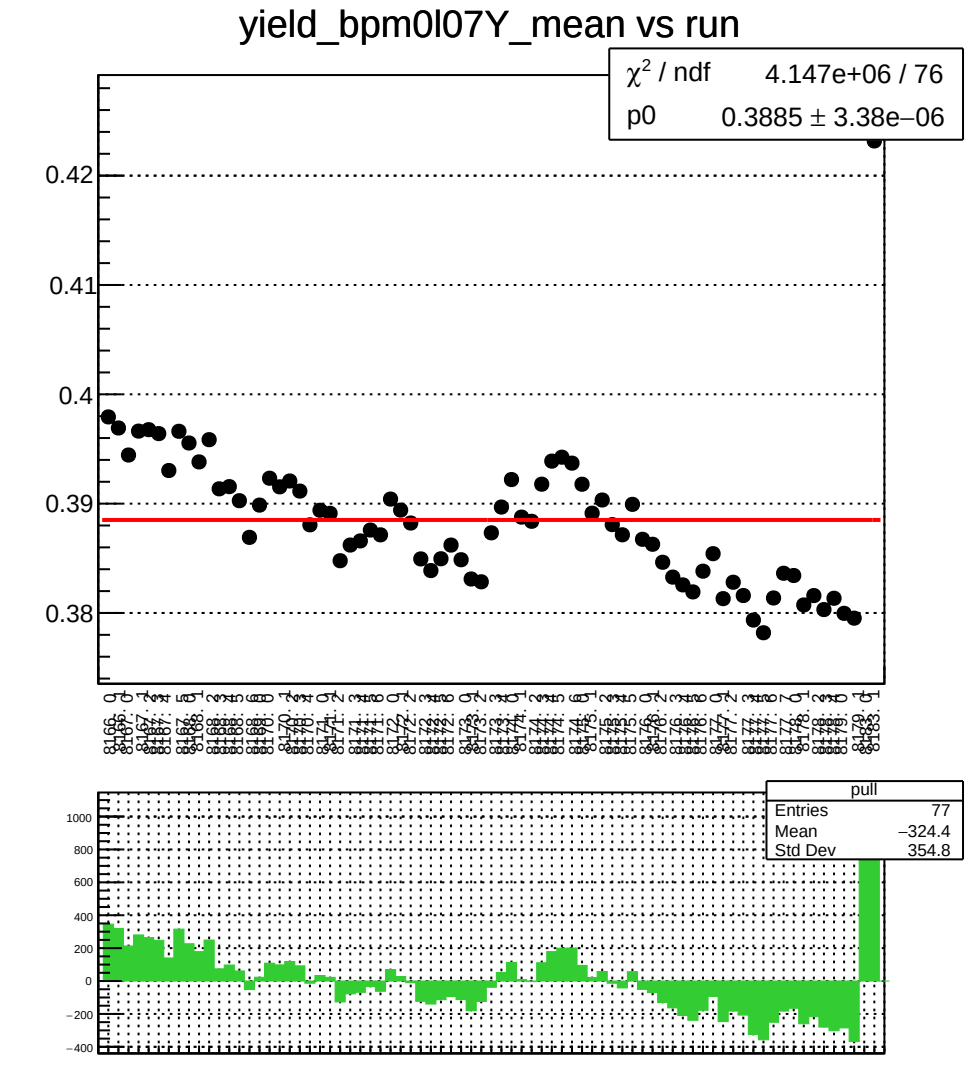

yield_bpm0l06Y_mean vs run
χ² / ndf 2.398e+10 / 76
p0 −0.7674 ± 2.457e−05
pull
Entries 77
Mean 35.53
Std Dev 20.04
pull1D
Entries 77
Mean 0
Std Dev 0

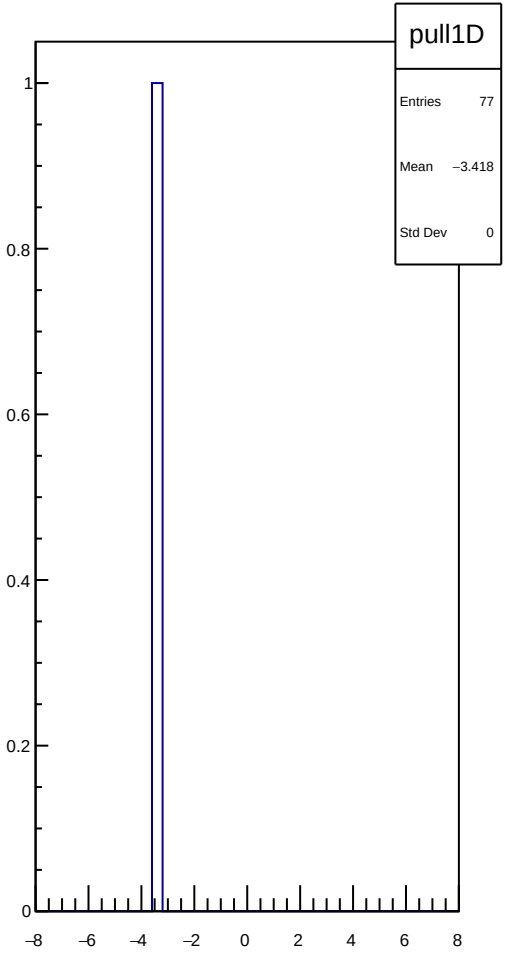

yield_bpm0l06Y_rms vs run
χ² / ndf 1.137e+06 / 76
p0 0.01035 ± 1.738e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

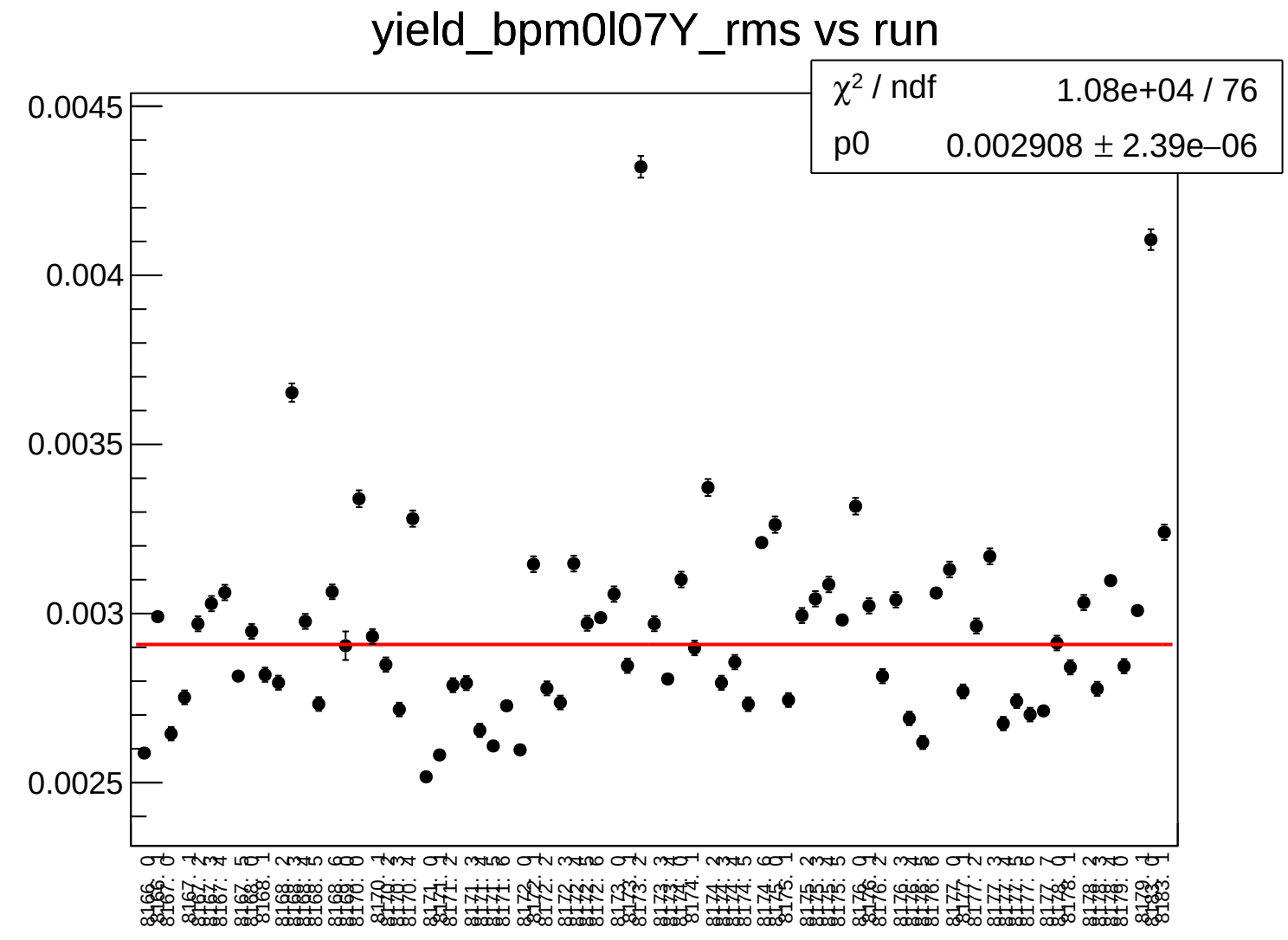

yield_bpm0l07X_mean vs run
χ² / ndf 1.574e+07 / 76
p0 0.2052 ± 1.999e−05
pull
Entries 77
Mean 1709
Std Dev 1691

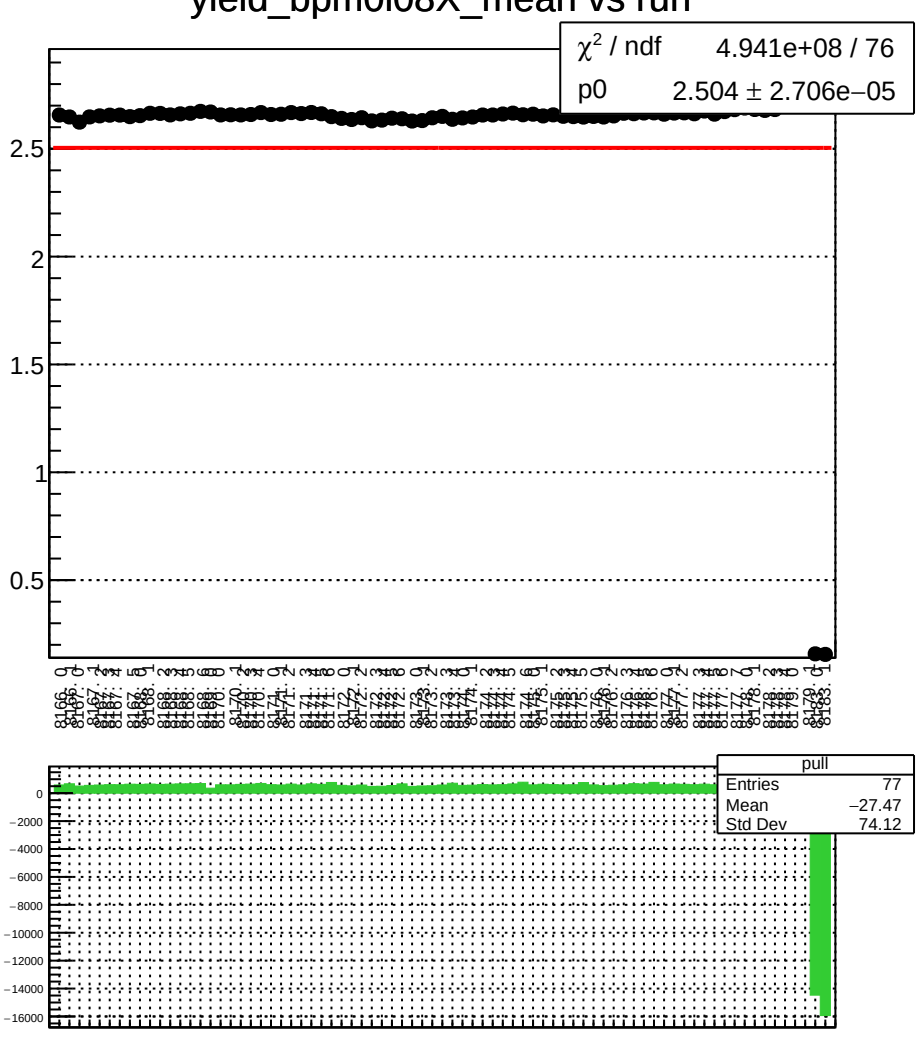

pull1D
Entries 77
Mean 0
Std Dev 0

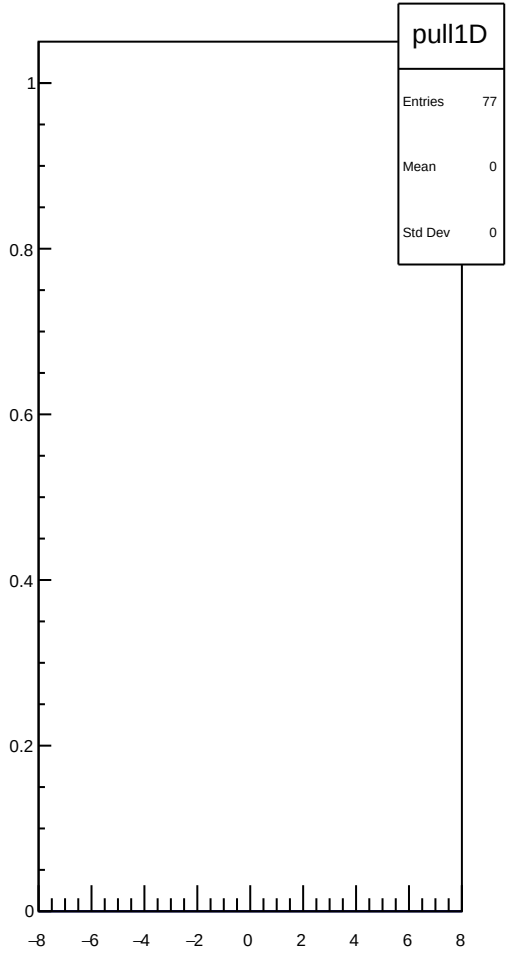

yield_bpm0l07X_rms vs run
χ² / ndf 8899 / 76
p0 0.01721 ± 1.413e–05
0.023
0.022
0.021
0.02
0.019
0.018
0.017
0.016
0.015

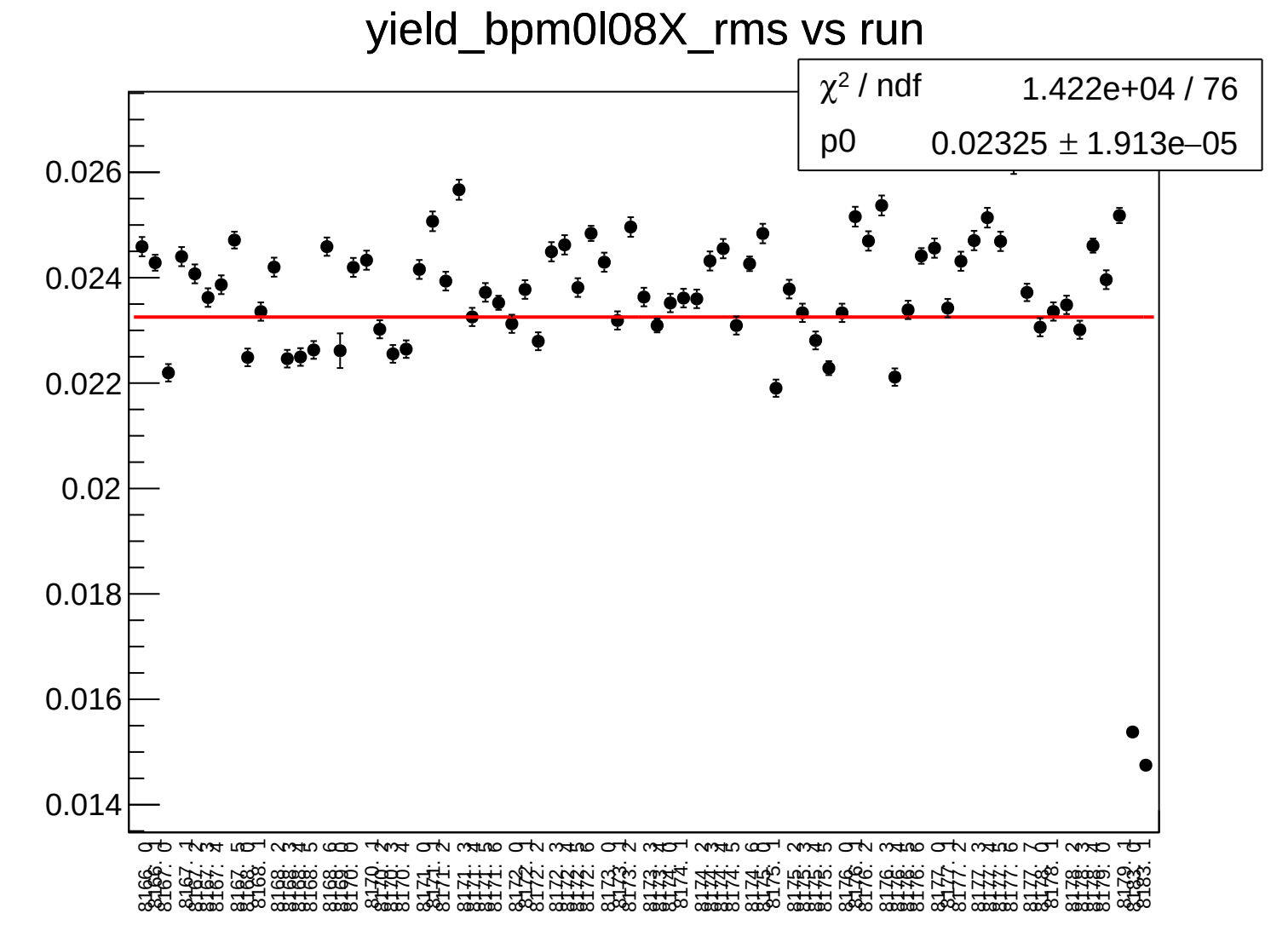

yield_bpm0l07Y_mean vs run
χ² / ndf 4.147e+06 / 76
p0 0.3885 ± 3.38e−06
0.42
0.41
0.4
0.39
0.38
pull
Entries 77
Mean −324.4
Std Dev 354.8
1000
800
600
400
200
0
−200
−400

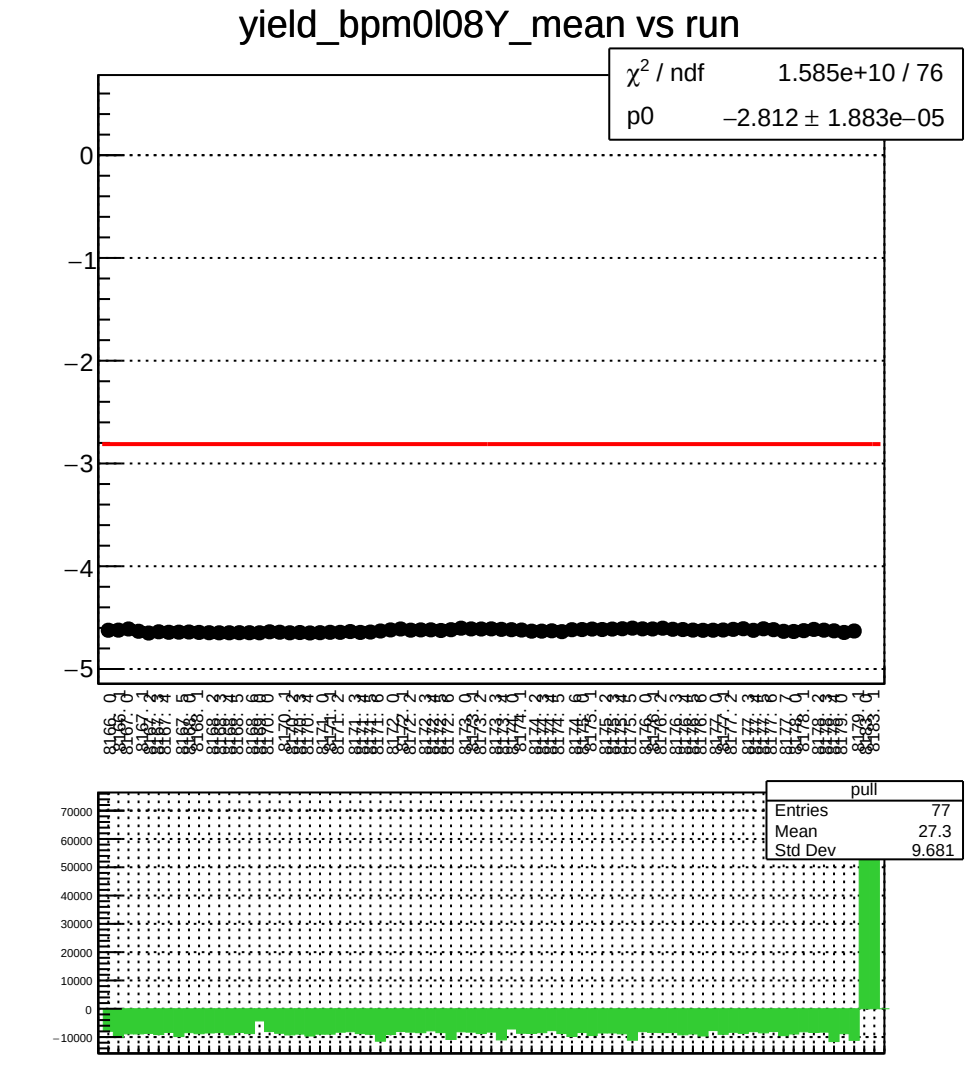

pull1D
Entries 77
Mean −3.418
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

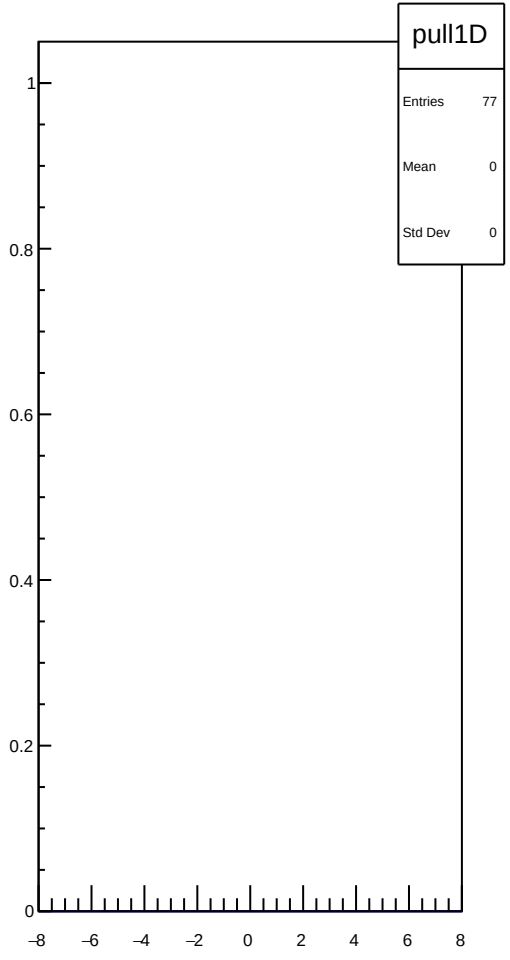

yield_bpm0l07Y_rms vs run
χ² / ndf 1.08e+04 / 76
p0 0.002908 ± 2.39e−06
0.0045
0.004
0.0035
0.003
0.0025

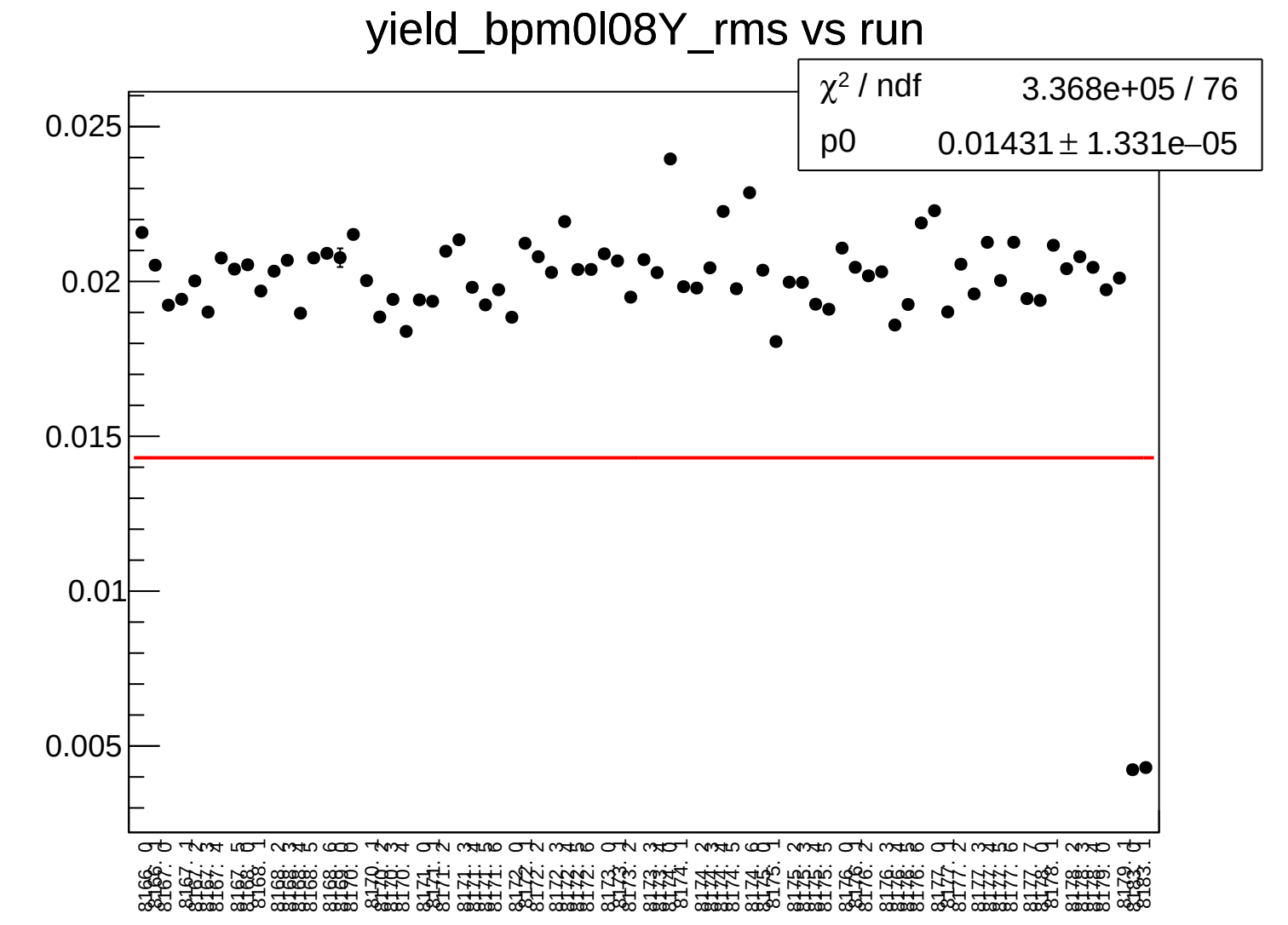

yield_bpm0l08X_mean vs run
χ² / ndf 4.941e+08 / 76
p0 2.504 ± 2.706e−05
pull
Entries 77
Mean −27.47
Std Dev 74.12

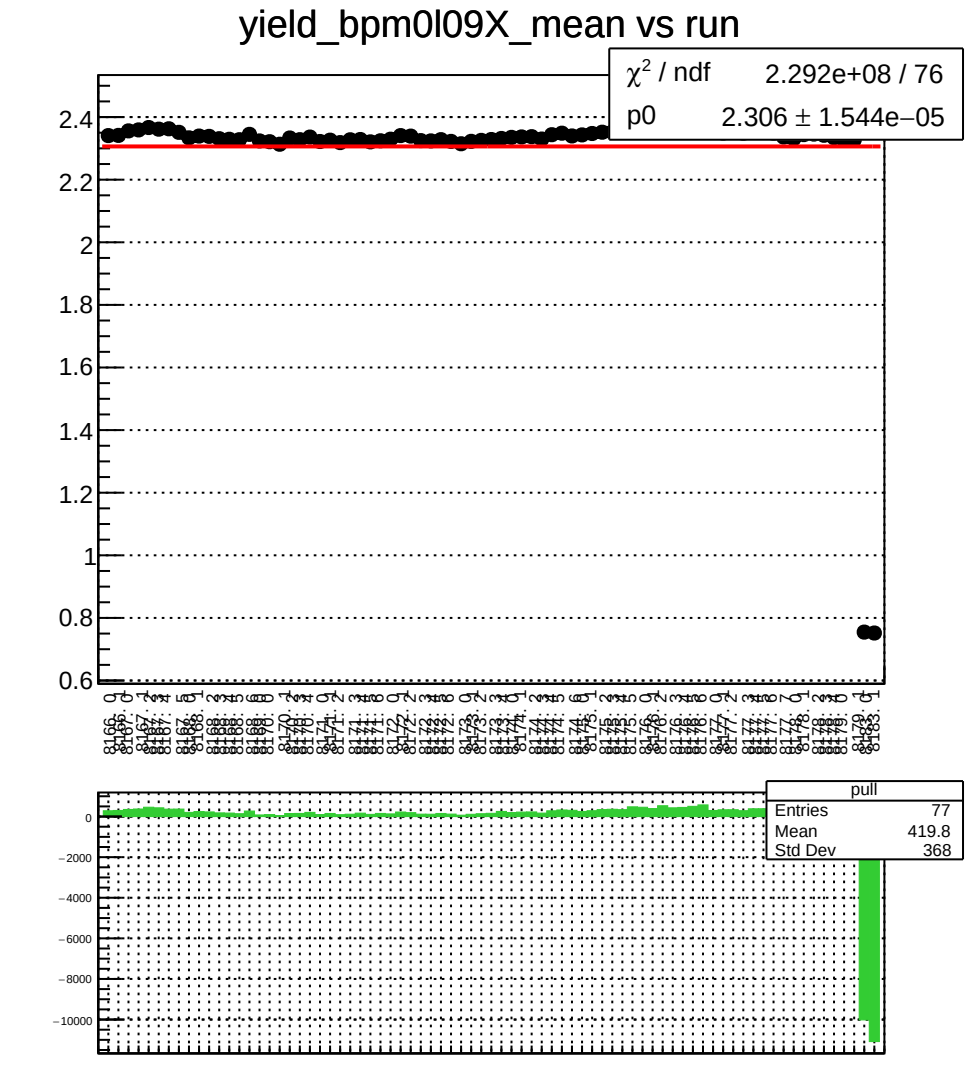

pull1D
Entries 77
Mean 0
Std Dev 0

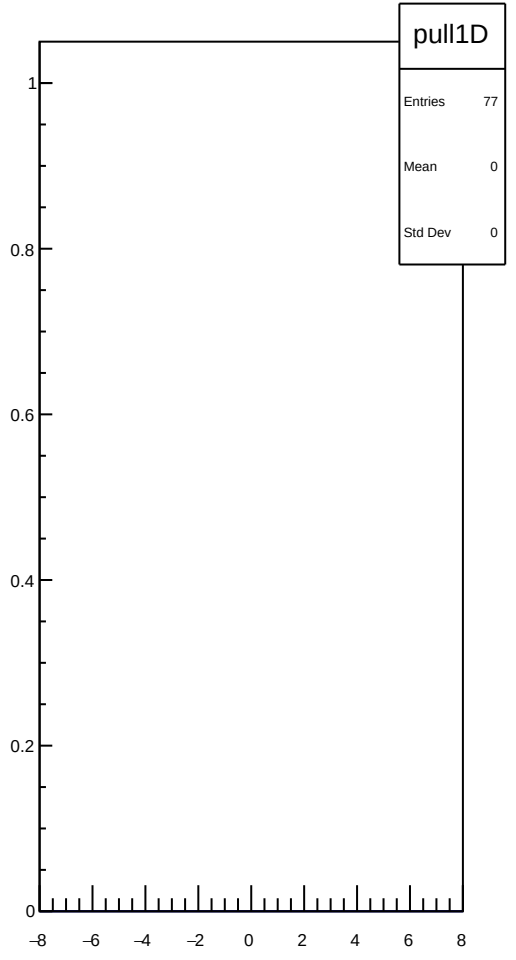

yield_bpm0l08X_rms vs run
χ² / ndf 1.422e+04 / 76
p0 0.02325 ± 1.913e−05
0.026
0.024
0.022
0.02
0.018
0.016
0.014

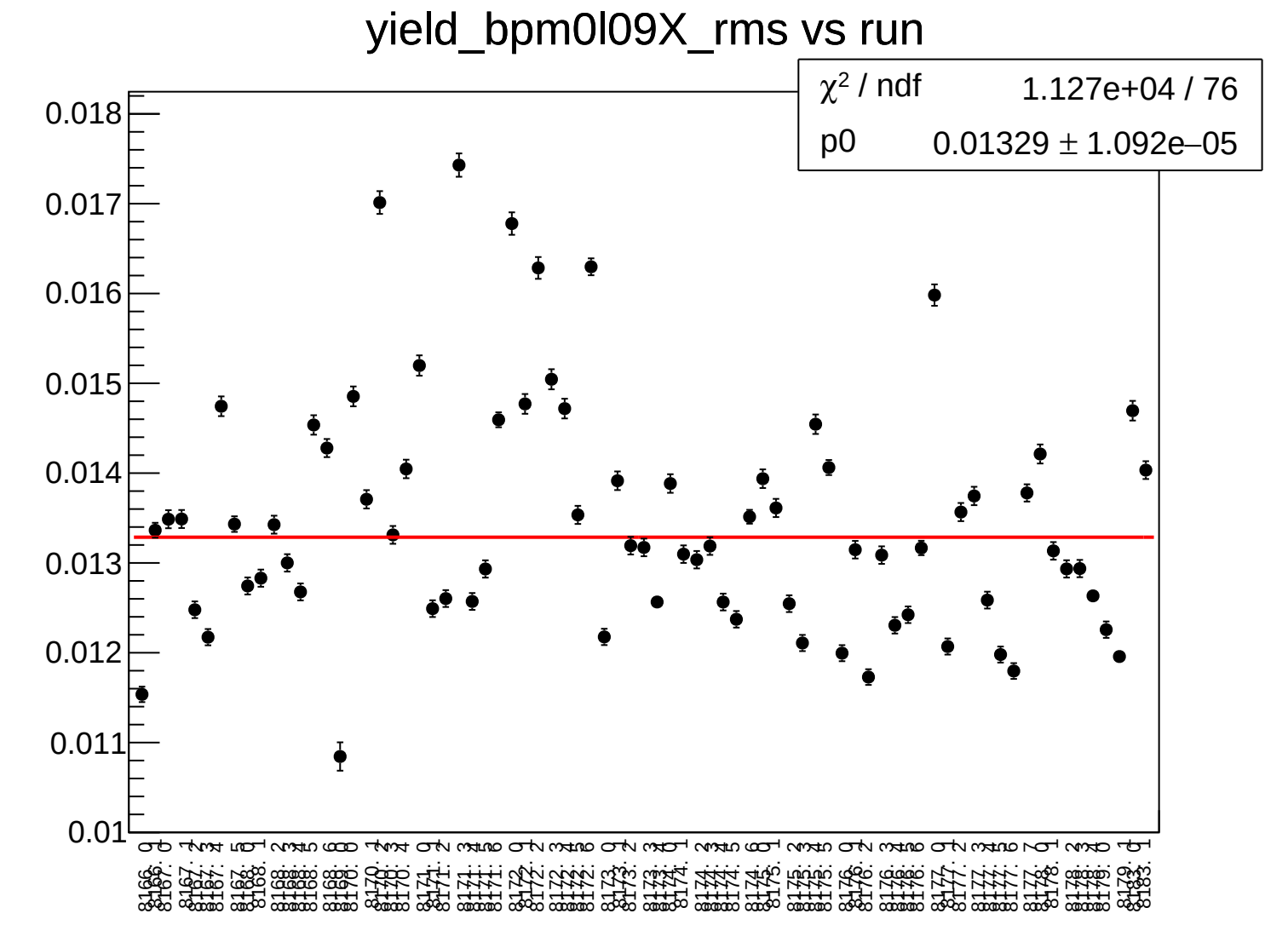

yield_bpm0l08Y_mean vs run
χ² / ndf 1.585e+10 / 76
p0 −2.812 ± 1.883e−05
pull
Entries 77
Mean 27.3
Std Dev 9.681

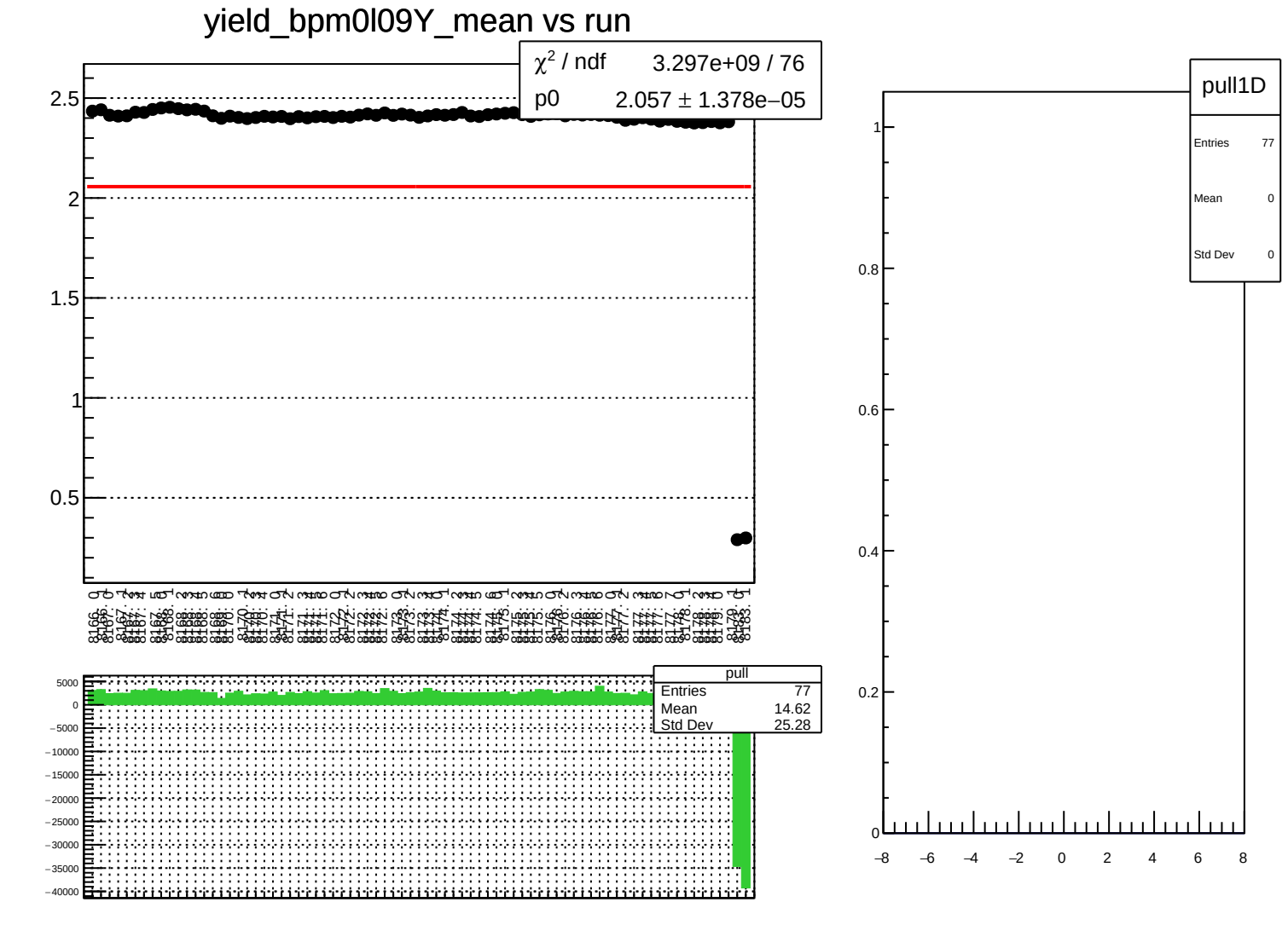

pull1D
Entries 77
Mean 0
Std Dev 0

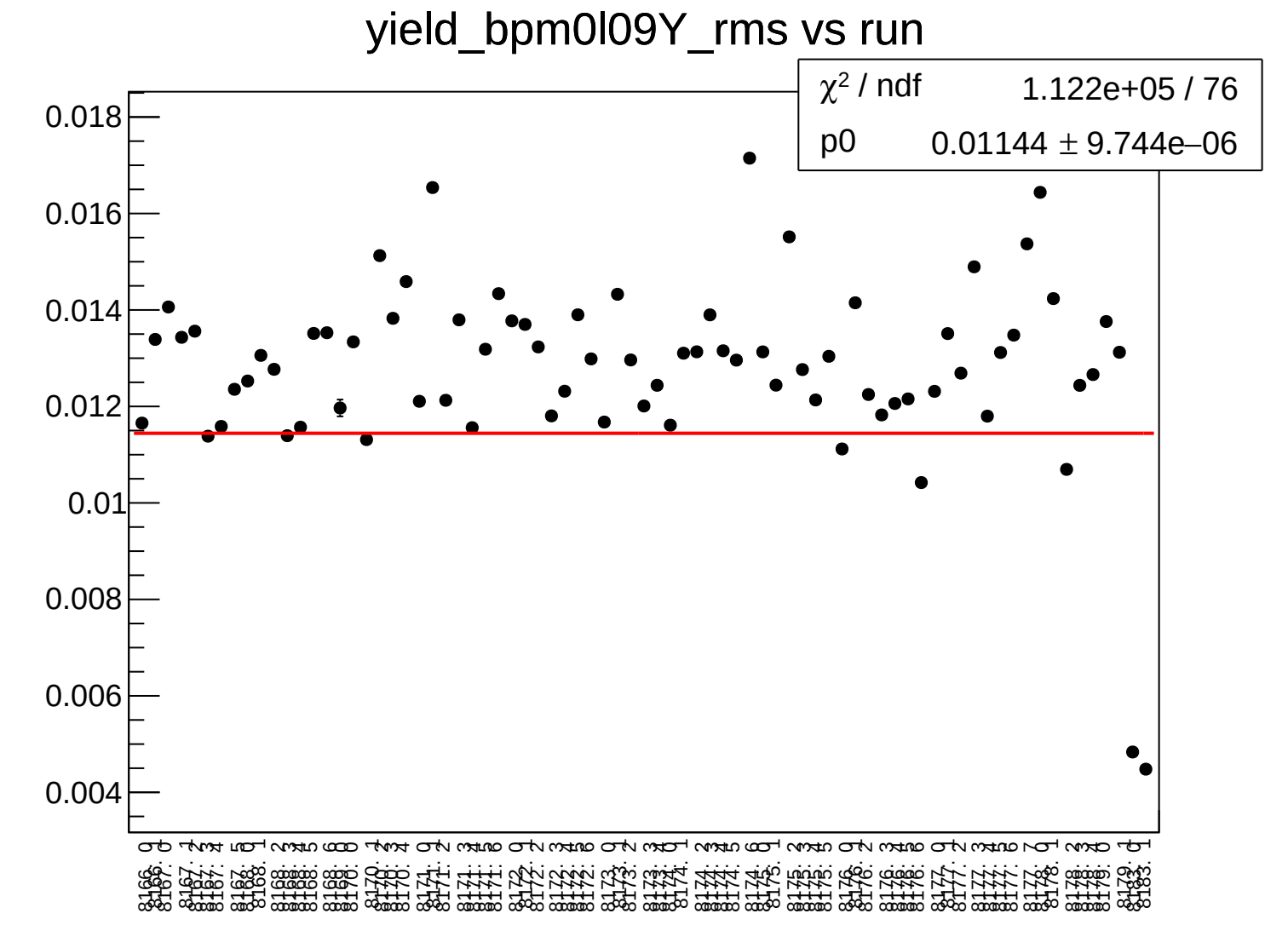

yield_bpm0l08Y_rms vs run
χ² / ndf 3.368e+05 / 76
p0 0.01431 ± 1.331e–05
0.025
0.02
0.015
0.01
0.005

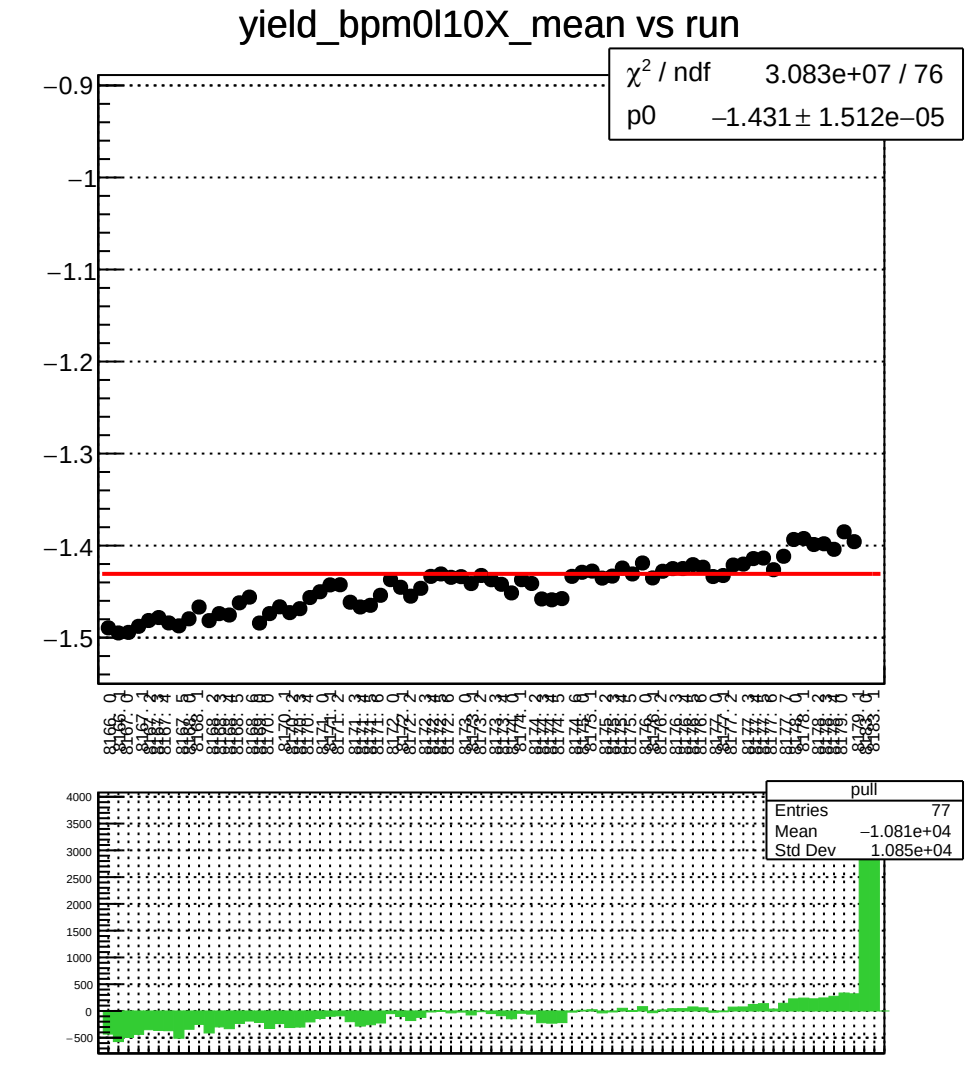

yield_bpm0l09X_mean vs run
χ² / ndf 2.292e+08 / 76
p0 2.306 ± 1.544e−05
pull
Entries 77
Mean 419.8
Std Dev 368

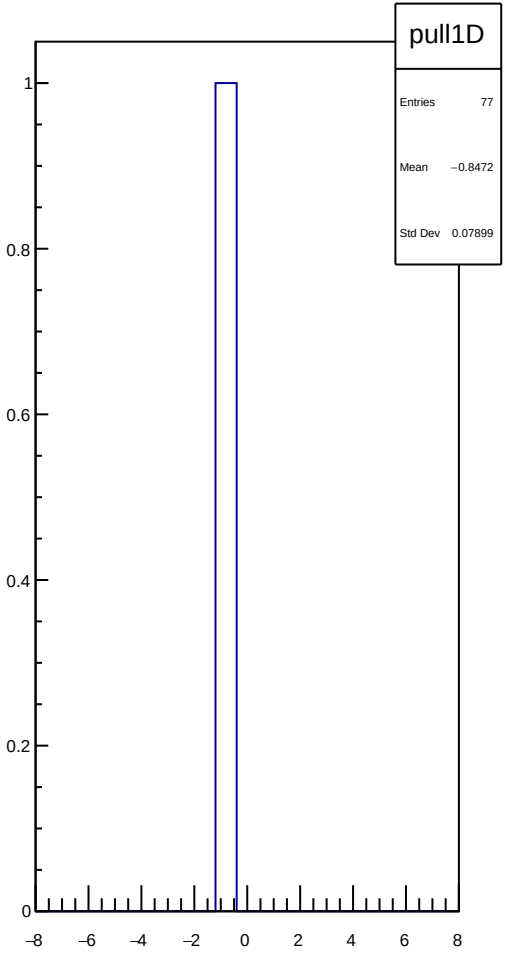

pull1D
Entries 77
Mean 0
Std Dev 0

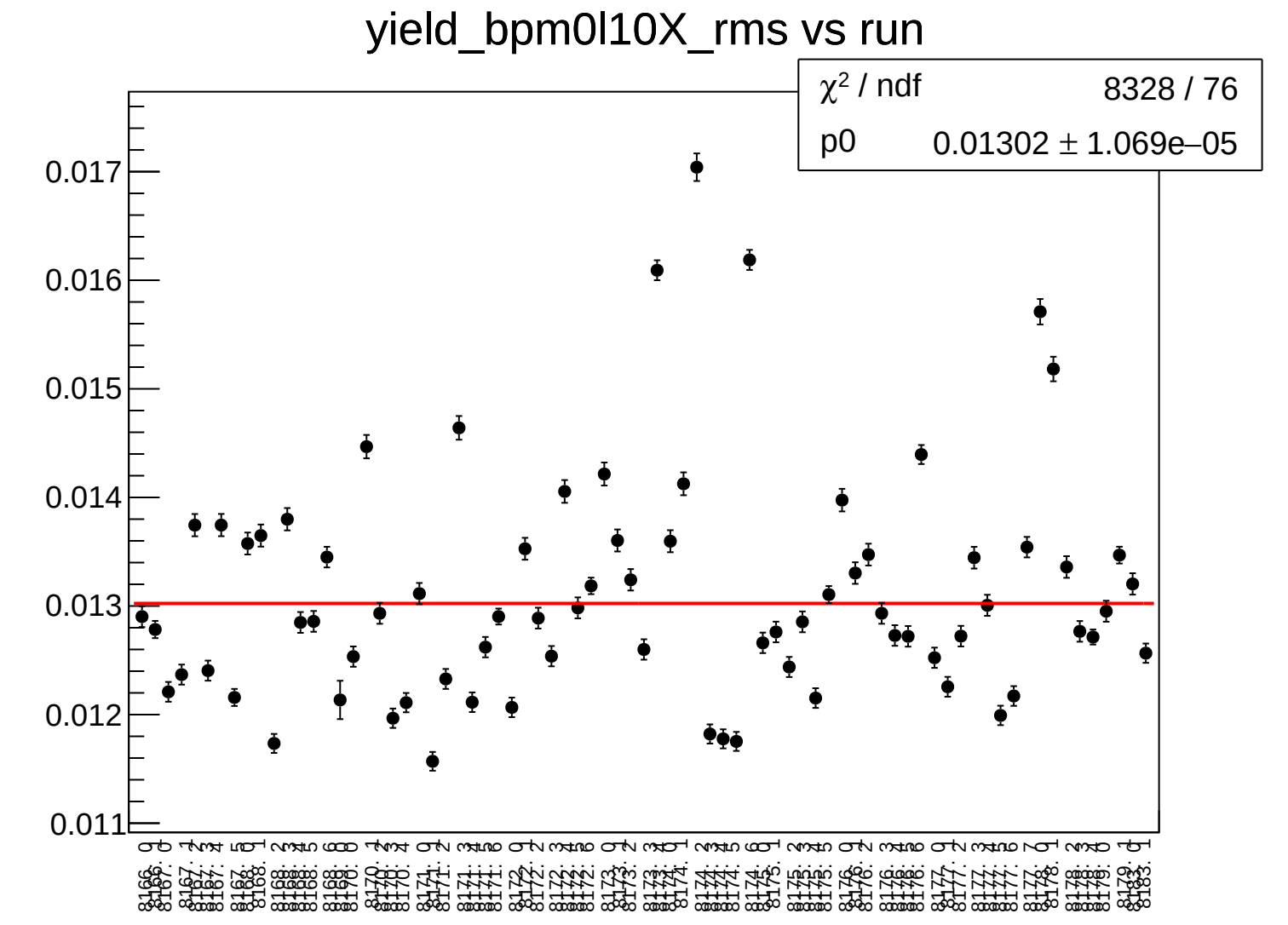

yield_bpm0l09X_rms vs run
χ² / ndf 1.127e+04 / 76
p0 0.01329 ± 1.092e–05
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01

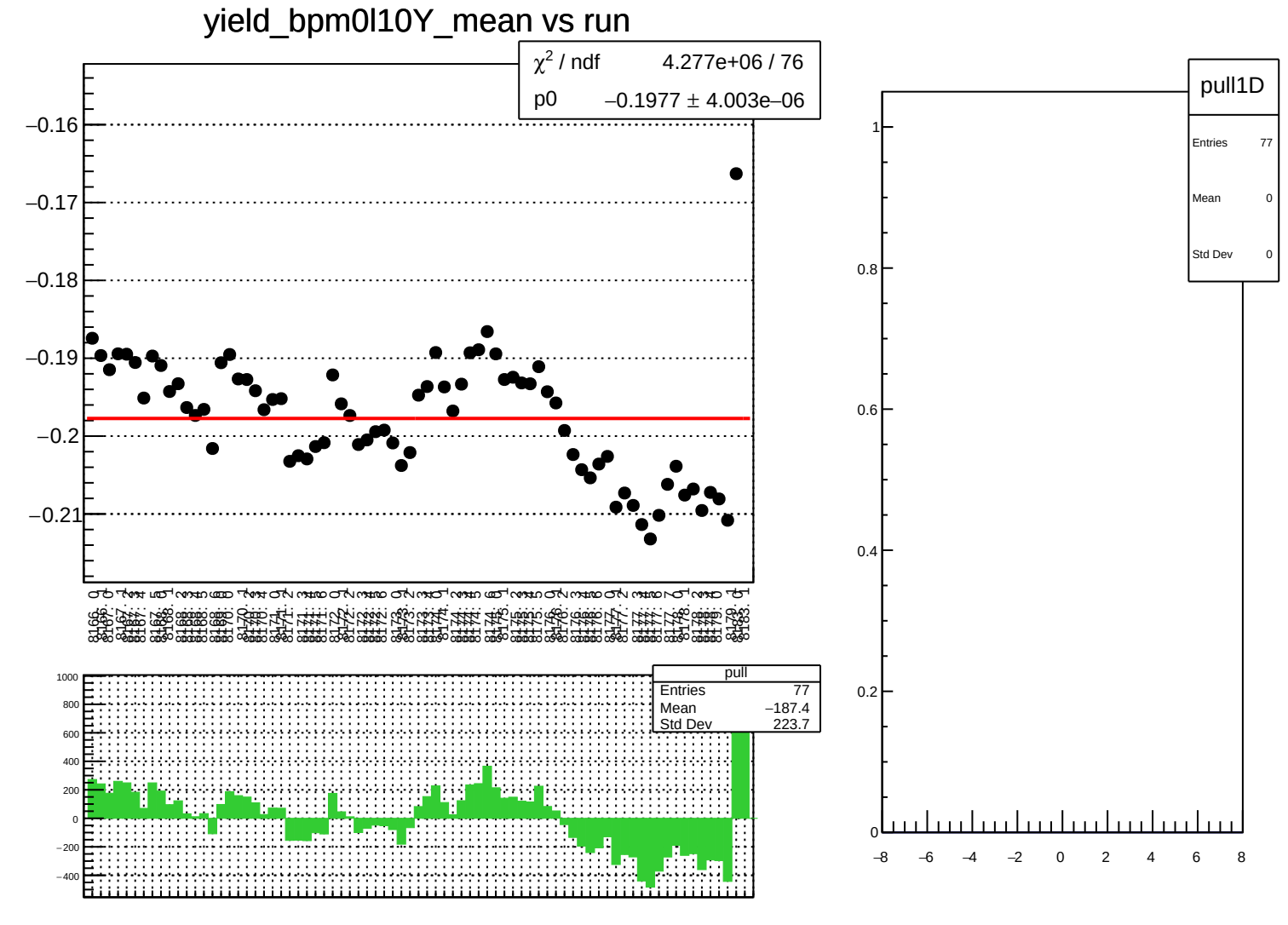

yield_bpm0l09Y_mean vs run
χ² / ndf 3.297e+09 / 76
p0 2.057 ± 1.378e−05
pull
Entries 77
Mean 14.62
Std Dev 25.28
pull1D
Entries 77
Mean 0
Std Dev 0

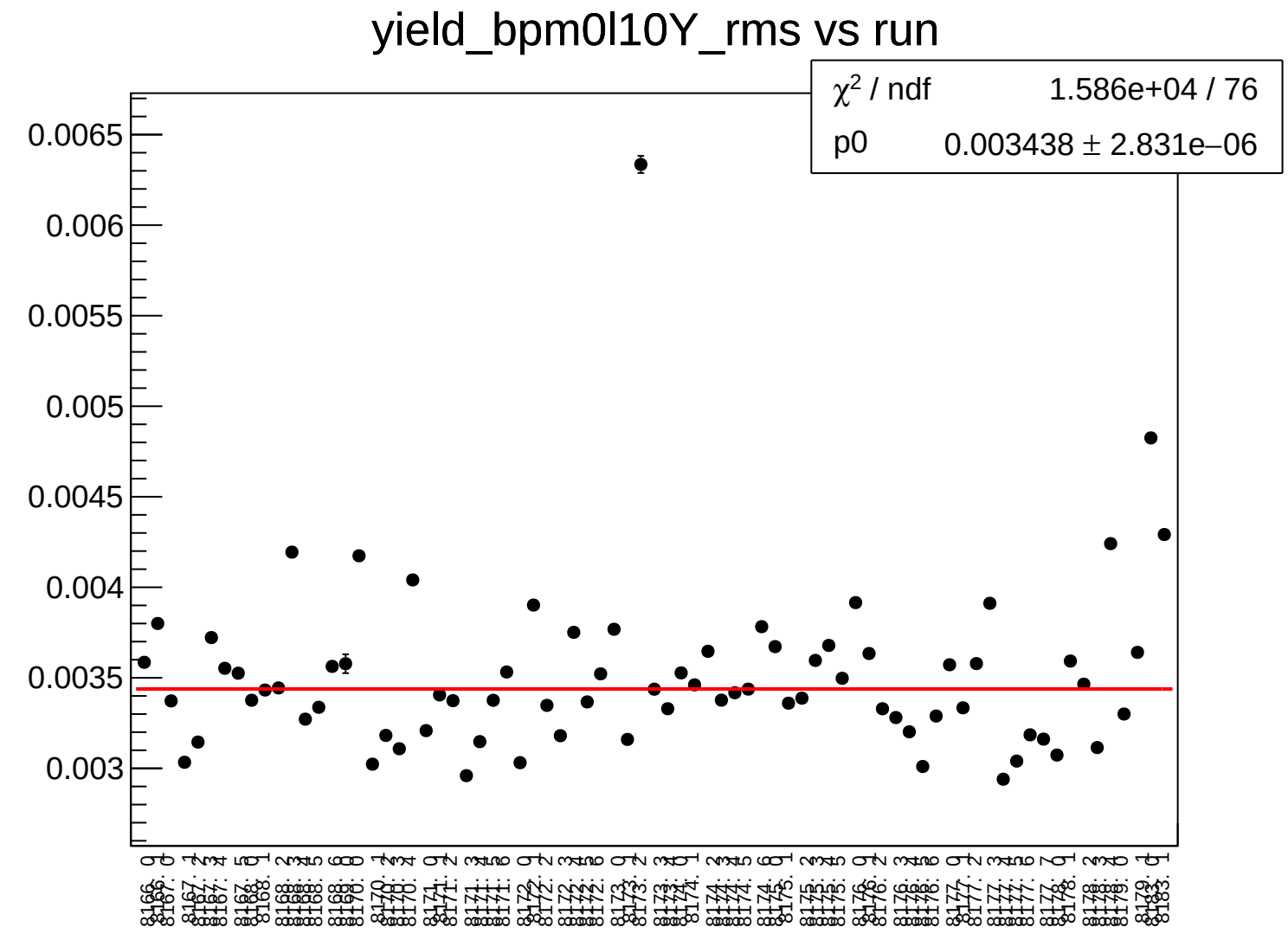

yield_bpm0l09Y_rms vs run
χ² / ndf 1.122e+05 / 76
p0 0.01144 ± 9.744e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

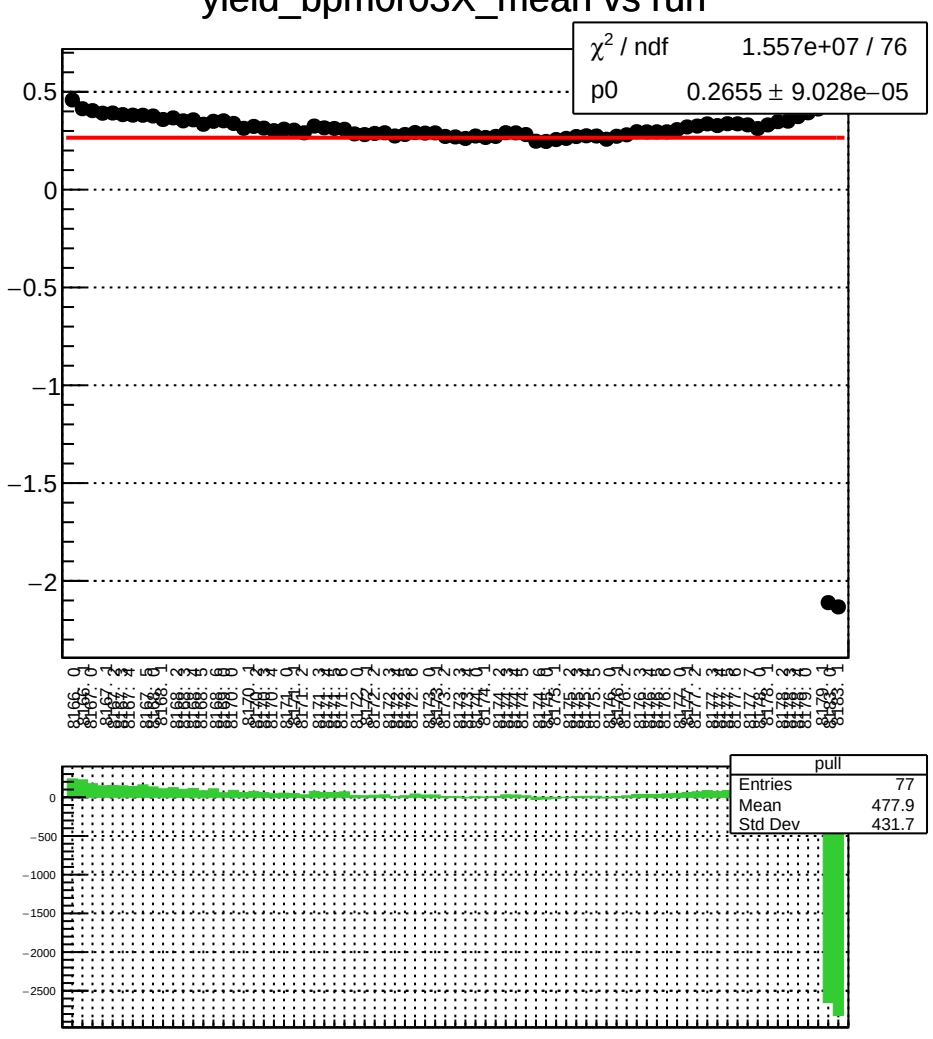

yield_bpm0l10X_mean vs run
χ² / ndf 3.083e+07 / 76
p0 −1.431 ± 1.512e−05
−0.9
−1
−1.1
−1.2
−1.3
−1.4
−1.5
pull
Entries 77
Mean −1.081e+04
Std Dev 1.085e+04
4000
3500
3000
2500
2000
1500
1000
500
0
−500

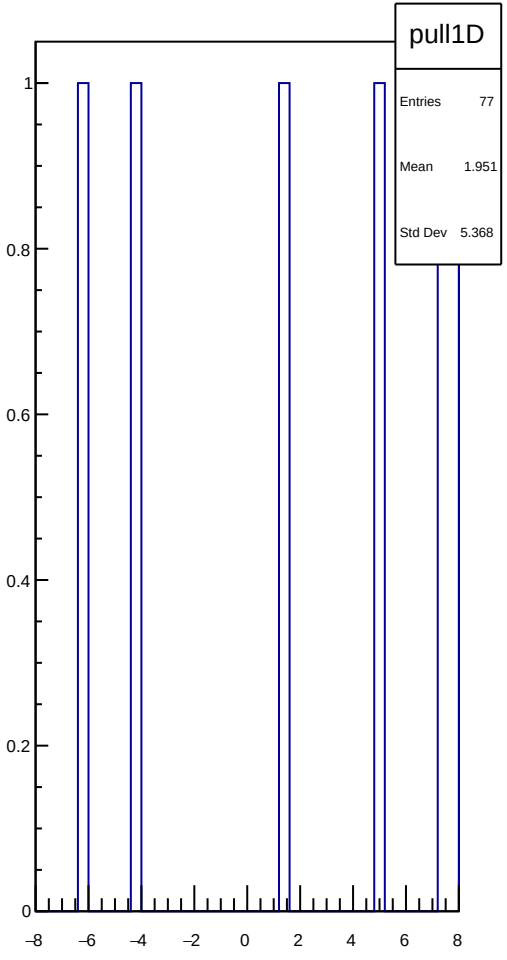

pull1D
Entries 77
Mean −0.8472
Std Dev 0.07899
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

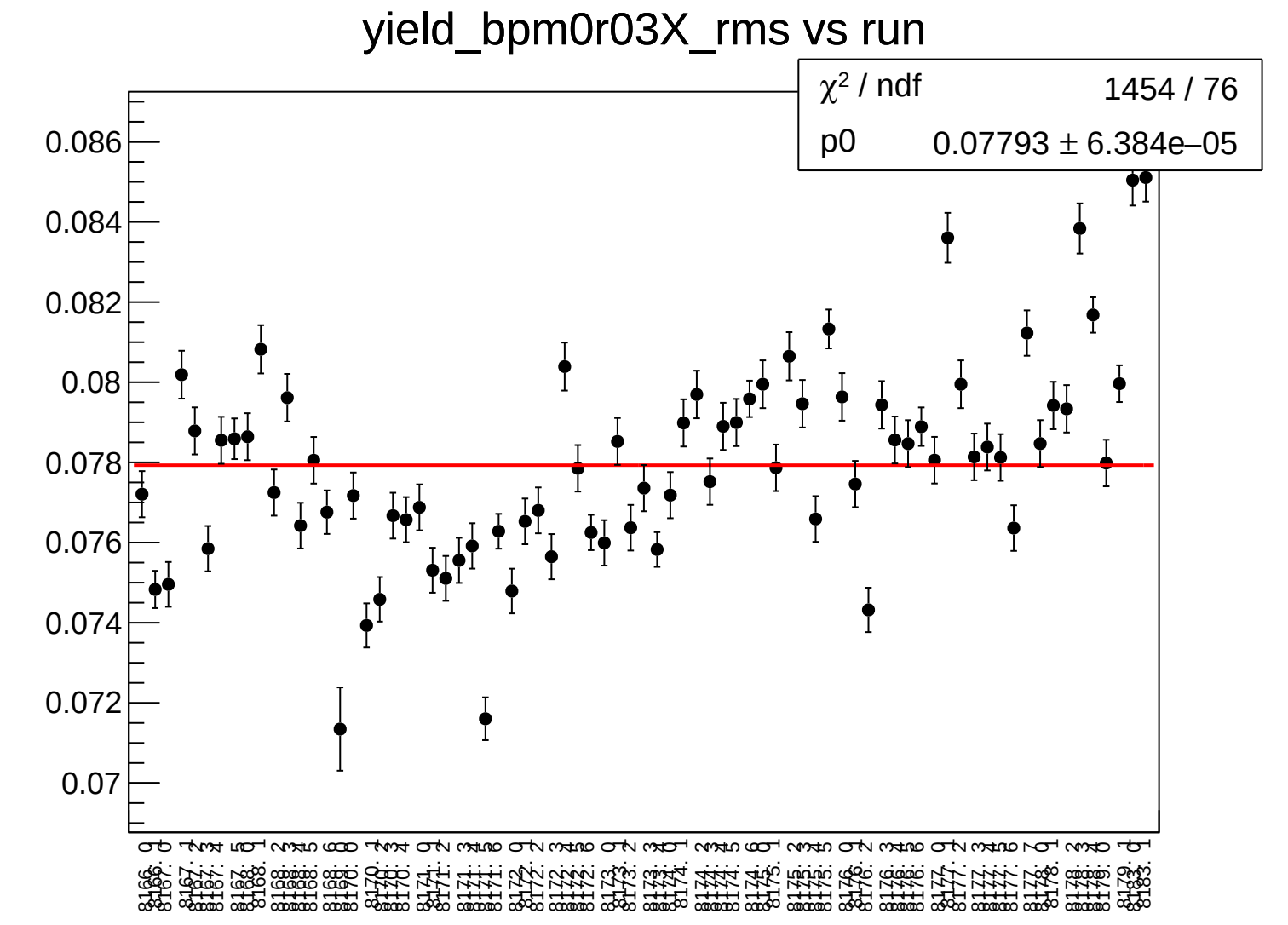

yield_bpm0l10X_rms vs run
χ² / ndf 8328 / 76
p0 0.01302 ± 1.069e–05
0.017
0.016
0.015
0.014
0.013
0.012
0.011

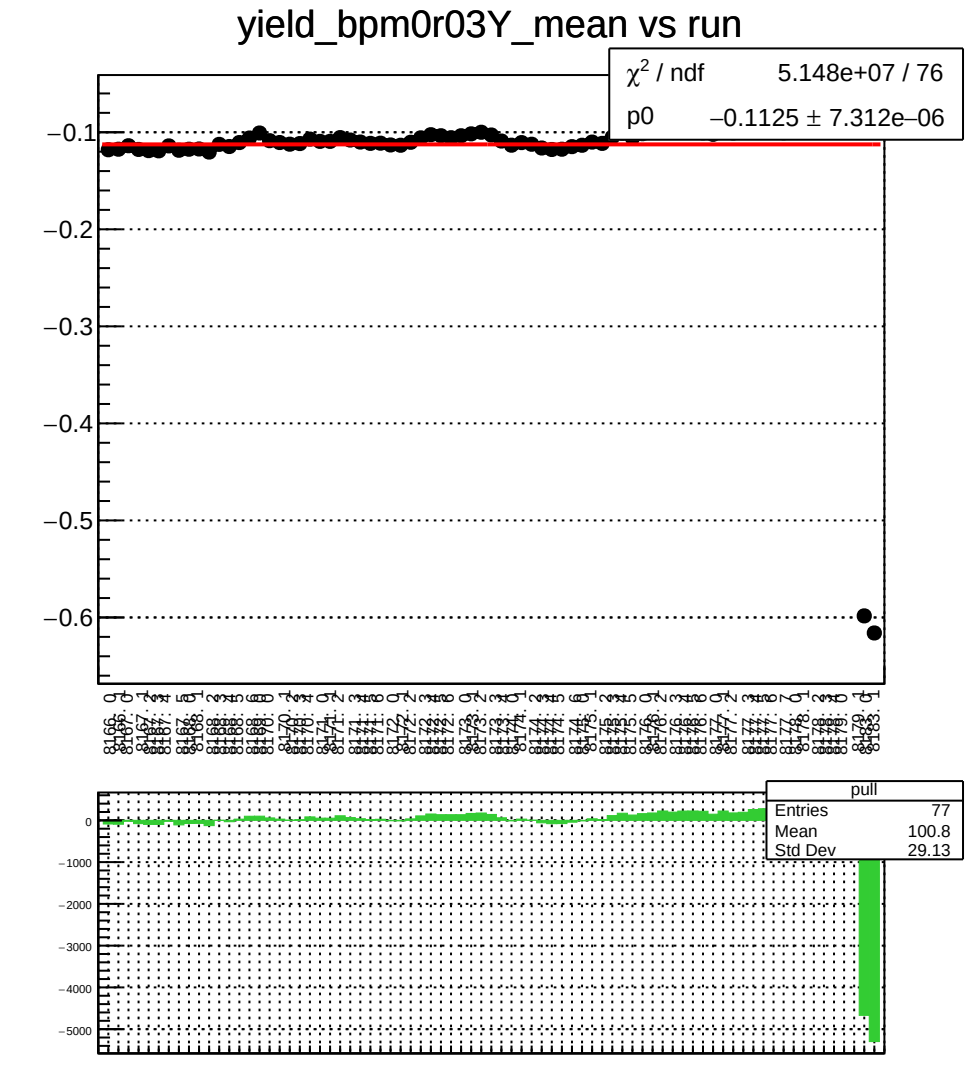

yield_bpm0l10Y_mean vs run
χ² / ndf 4.277e+06 / 76
p0 −0.1977 ± 4.003e−06
−0.16
−0.17
−0.18
−0.19
−0.2
−0.21
pull
Entries 77
Mean −187.4
Std Dev 223.7
1000
800
600
400
200
0
−200
−400
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

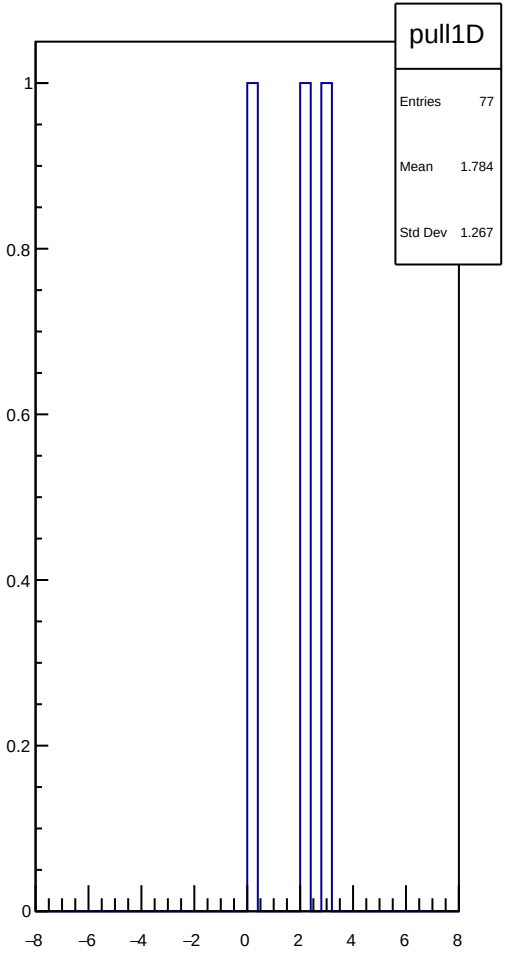

yield_bpm0l10Y_rms vs run
χ² / ndf 1.586e+04 / 76
p0 0.003438 ± 2.831e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

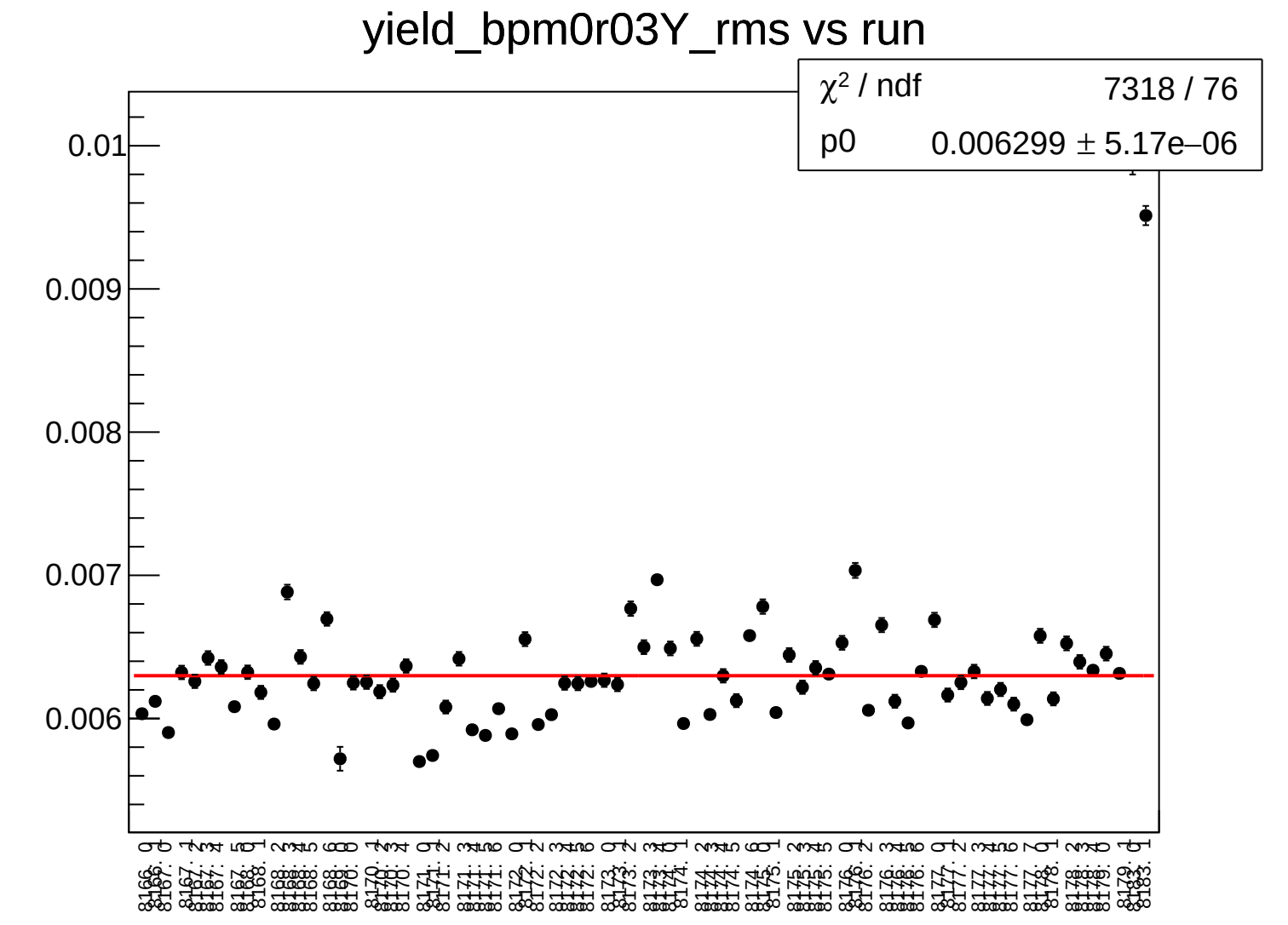

yield_bpm0r03X_mean vs run
χ² / ndf 1.557e+07 / 76
p0 0.2655 ± 9.028e−05
pull
Entries 77
Mean 477.9
Std Dev 431.7

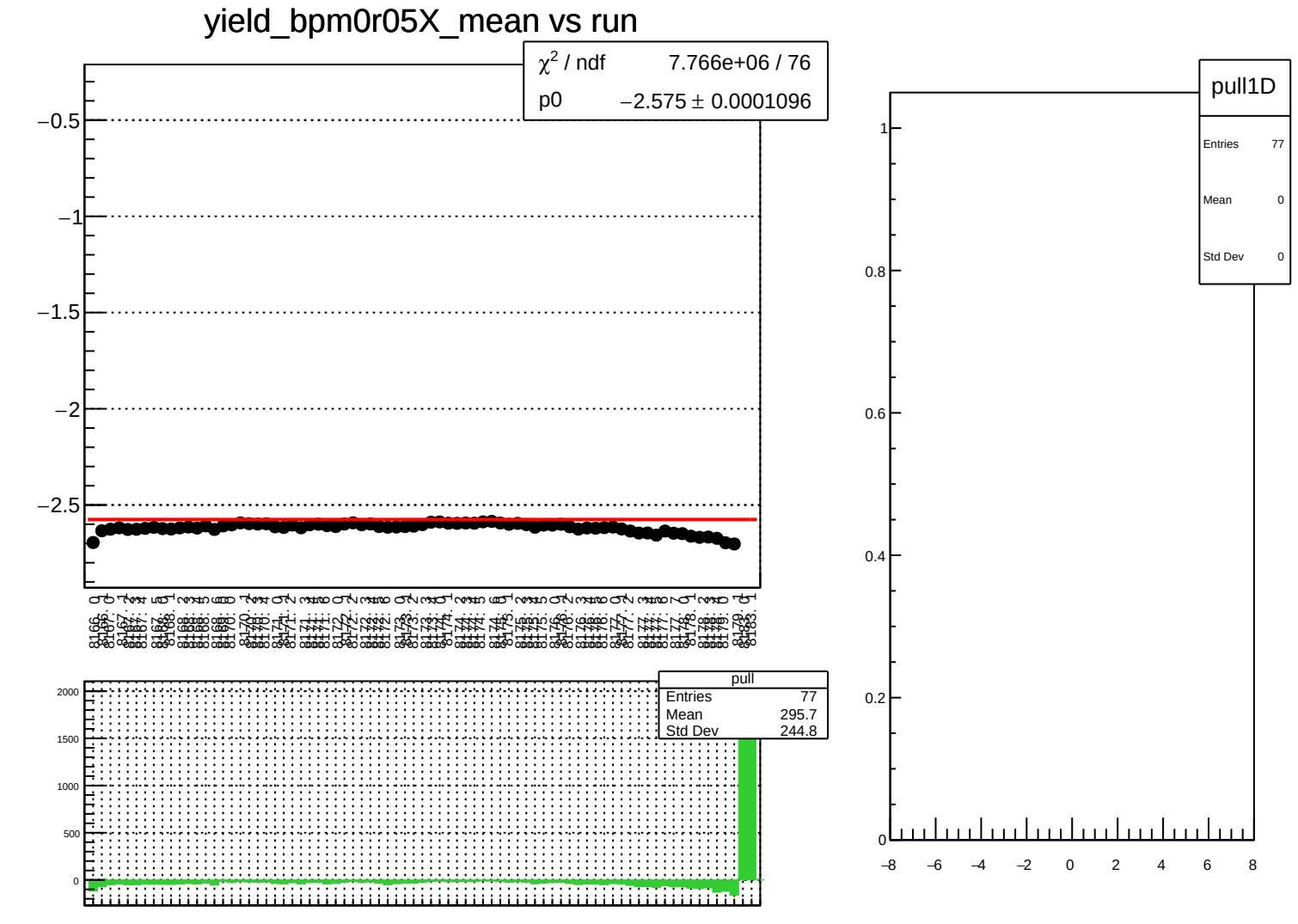

pull1D
Entries 77
Mean 1.951
Std Dev 5.368

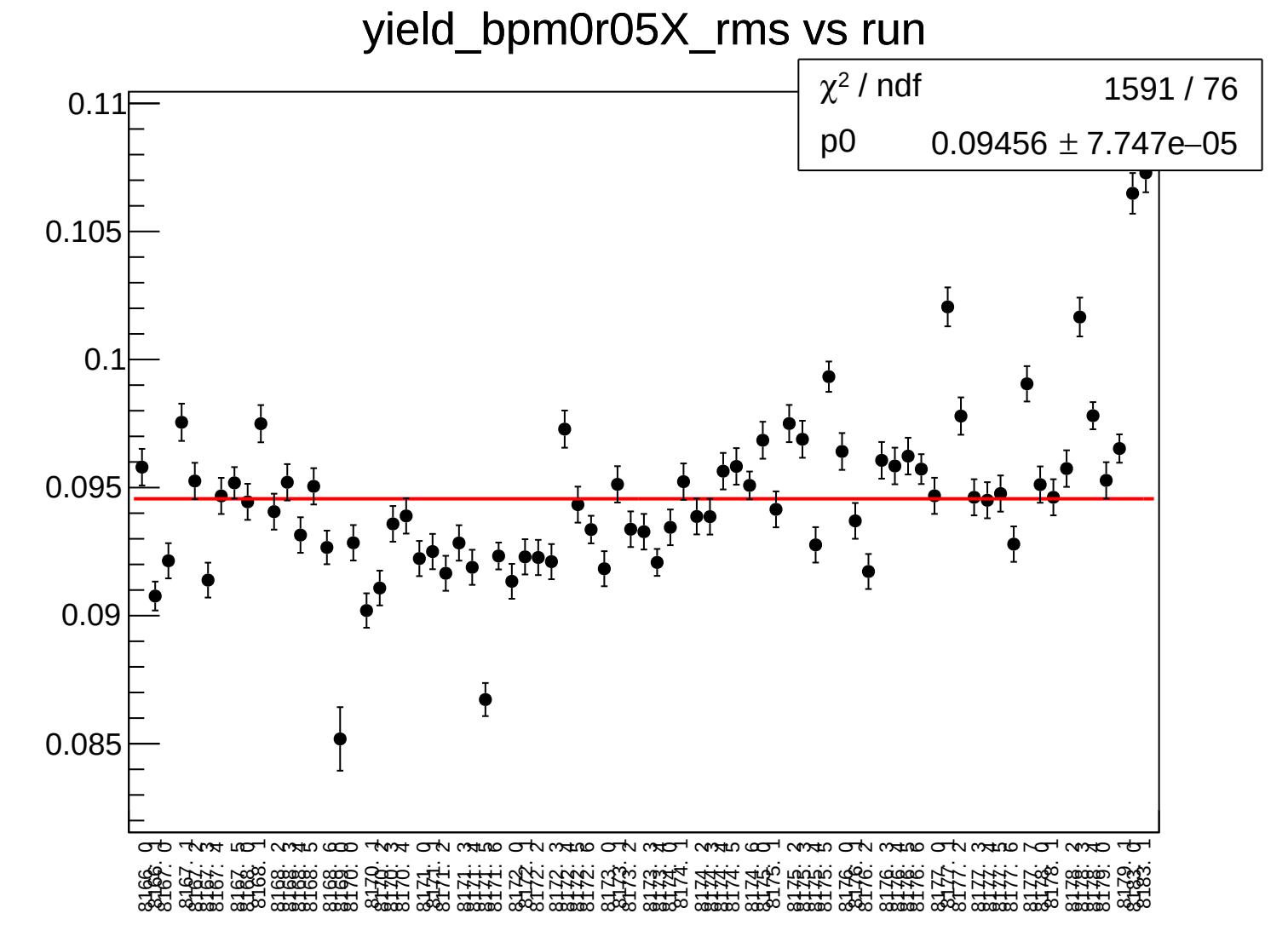

yield_bpm0r03X_rms vs run
χ² / ndf 1454 / 76
p0 0.07793 ± 6.384e–05
0.086
0.084
0.082
0.08
0.078
0.076
0.074
0.072
0.07

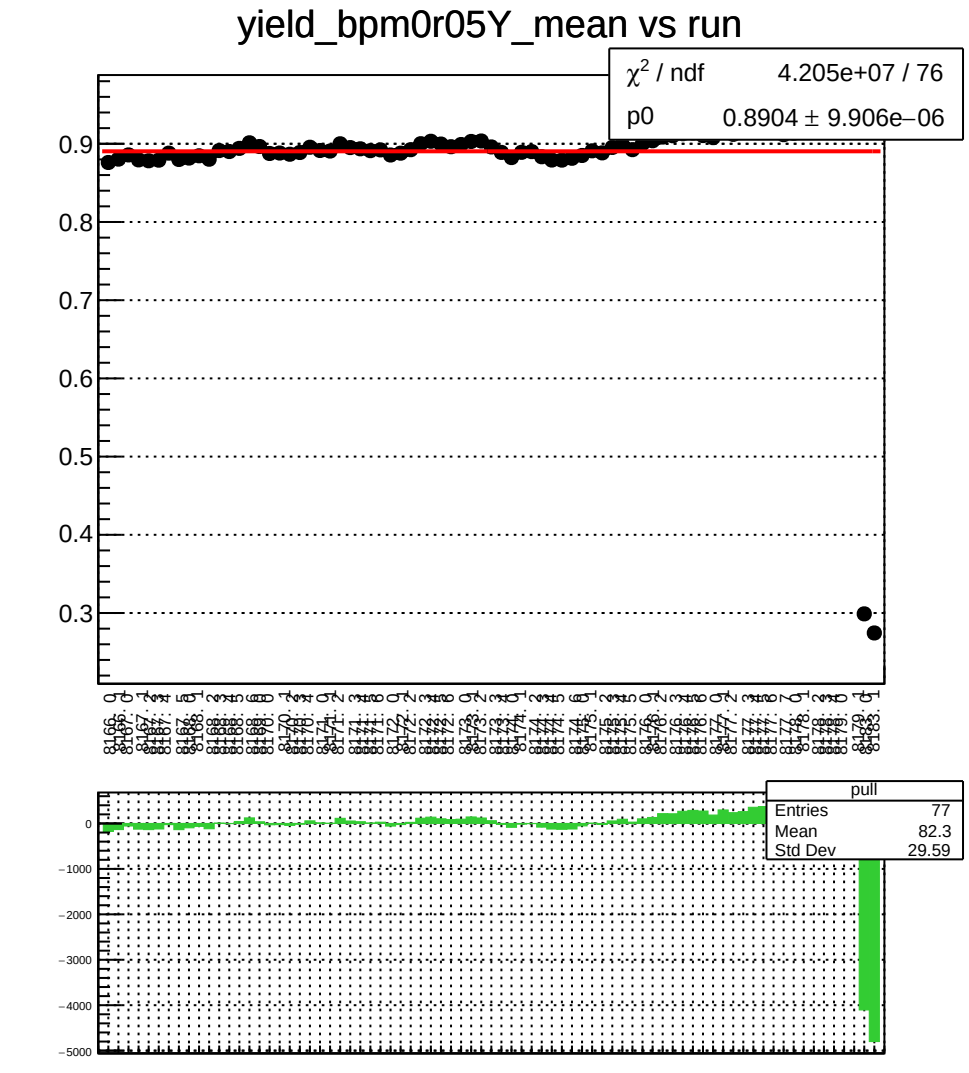

yield_bpm0r03Y_mean vs run
χ² / ndf 5.148e+07 / 76
p0 −0.1125 ± 7.312e−06
pull
Entries 77
Mean 100.8
Std Dev 29.13

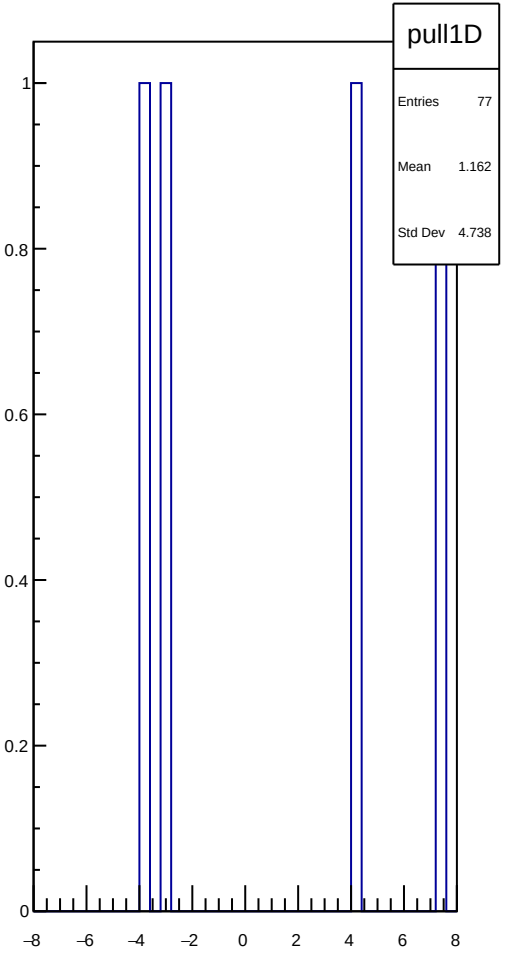

pull1D
Entries 77
Mean 1.784
Std Dev 1.267

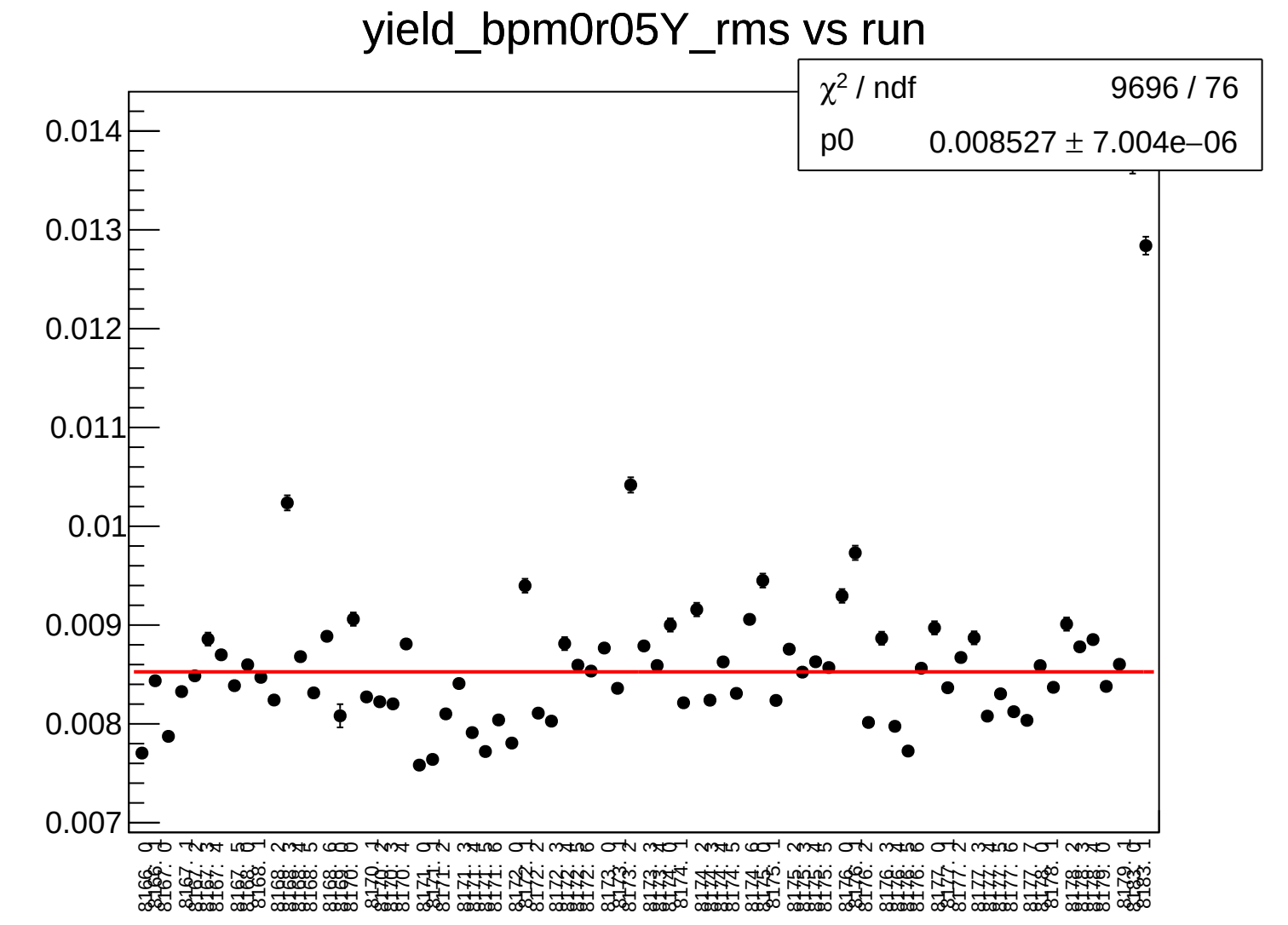

yield_bpm0r03Y_rms vs run
χ² / ndf 7318 / 76
p0 0.006299 ± 5.17e–06
0.01
0.009
0.008
0.007
0.006

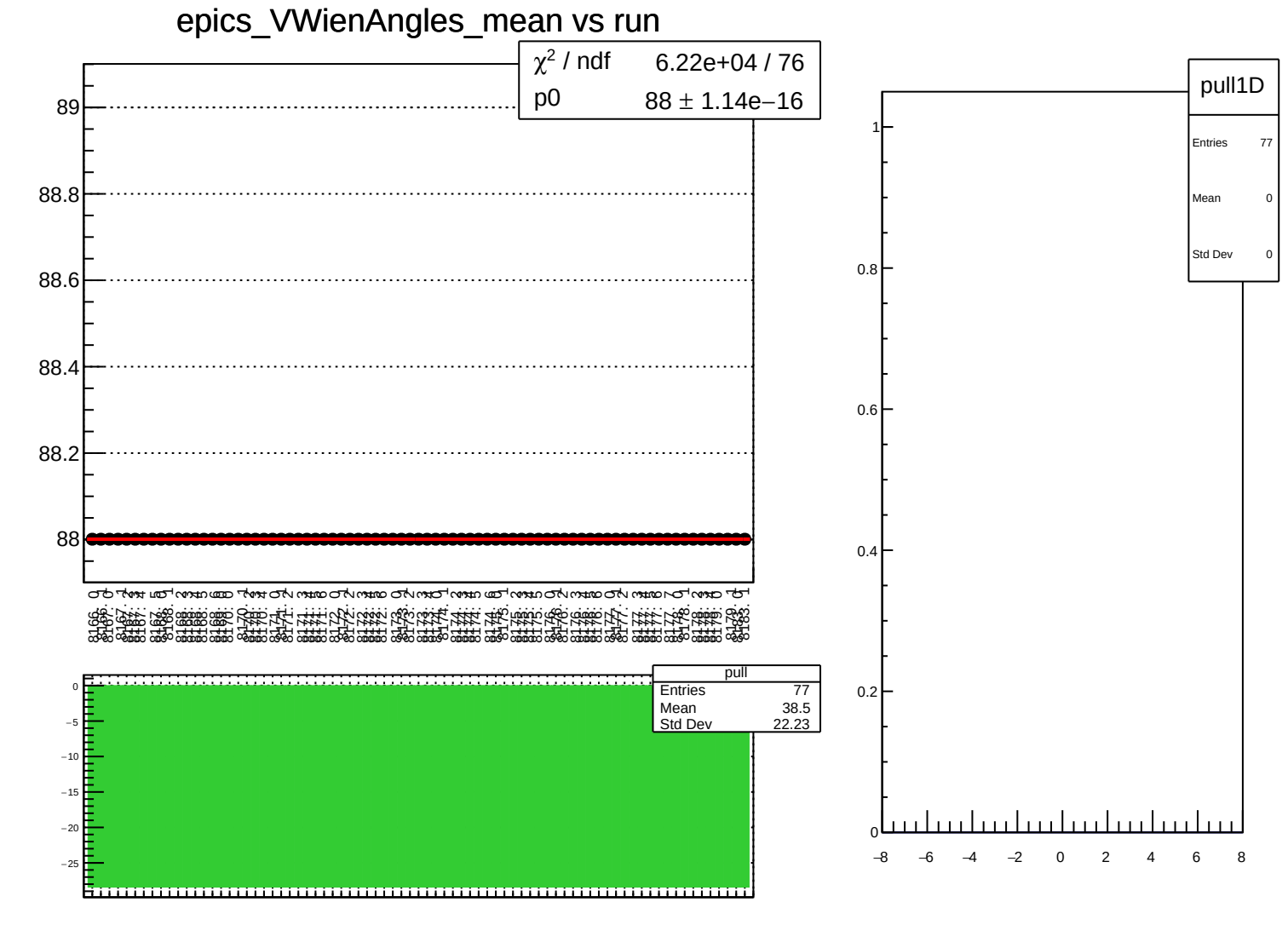

yield_bpm0r05X_mean vs run
χ² / ndf 7.766e+06 / 76
p0 −2.575 ± 0.0001096
−0.5
−1
−1.5
−2
−2.5
pull
Entries 77
Mean 295.7
Std Dev 244.8
2000
1500
1000
500
0
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

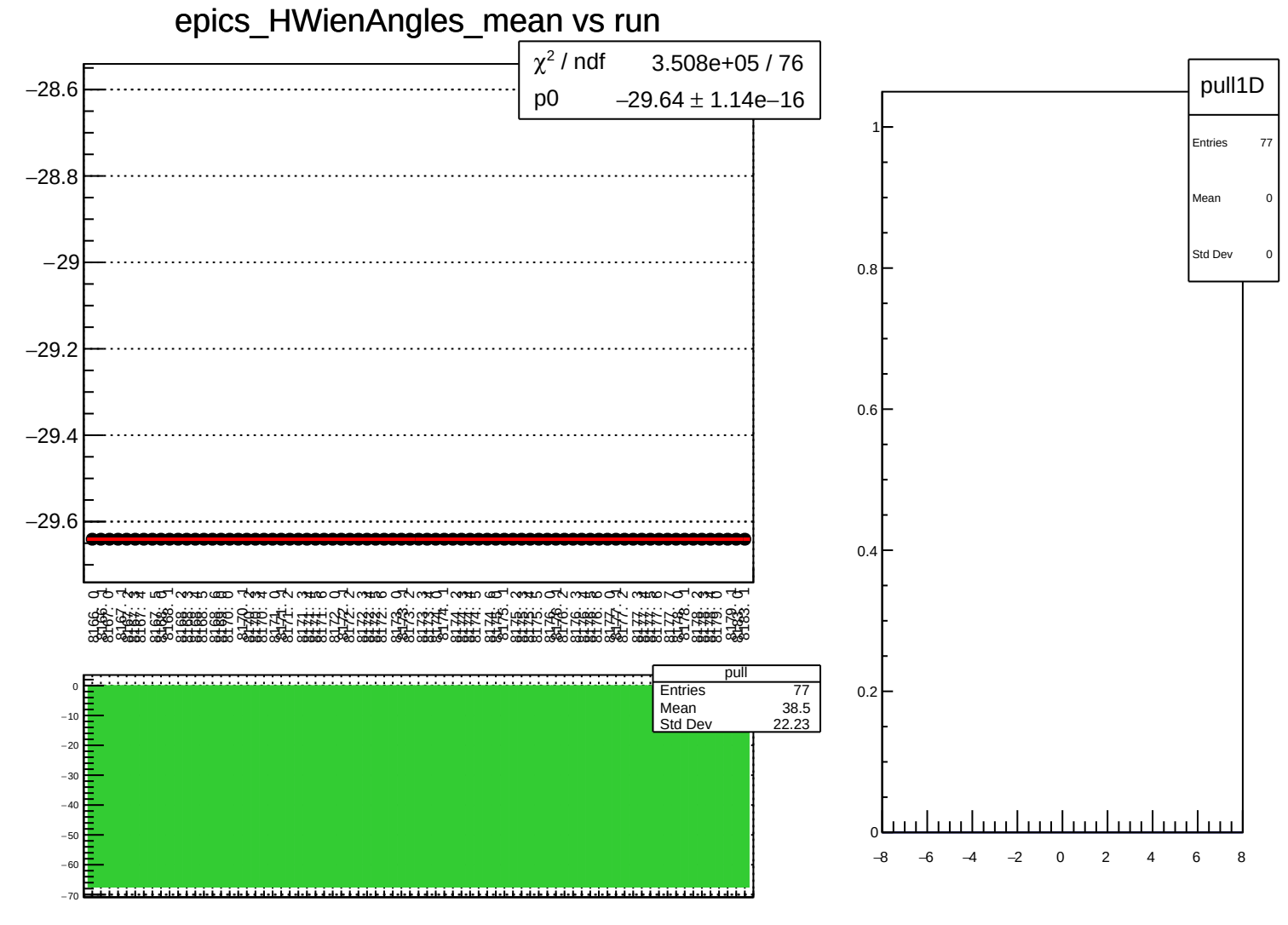

yield_bpm0r05X_rms vs run
χ² / ndf 1591 / 76
p0 0.09456 ± 7.747e–05
0.11
0.105
0.1
0.095
0.09
0.085

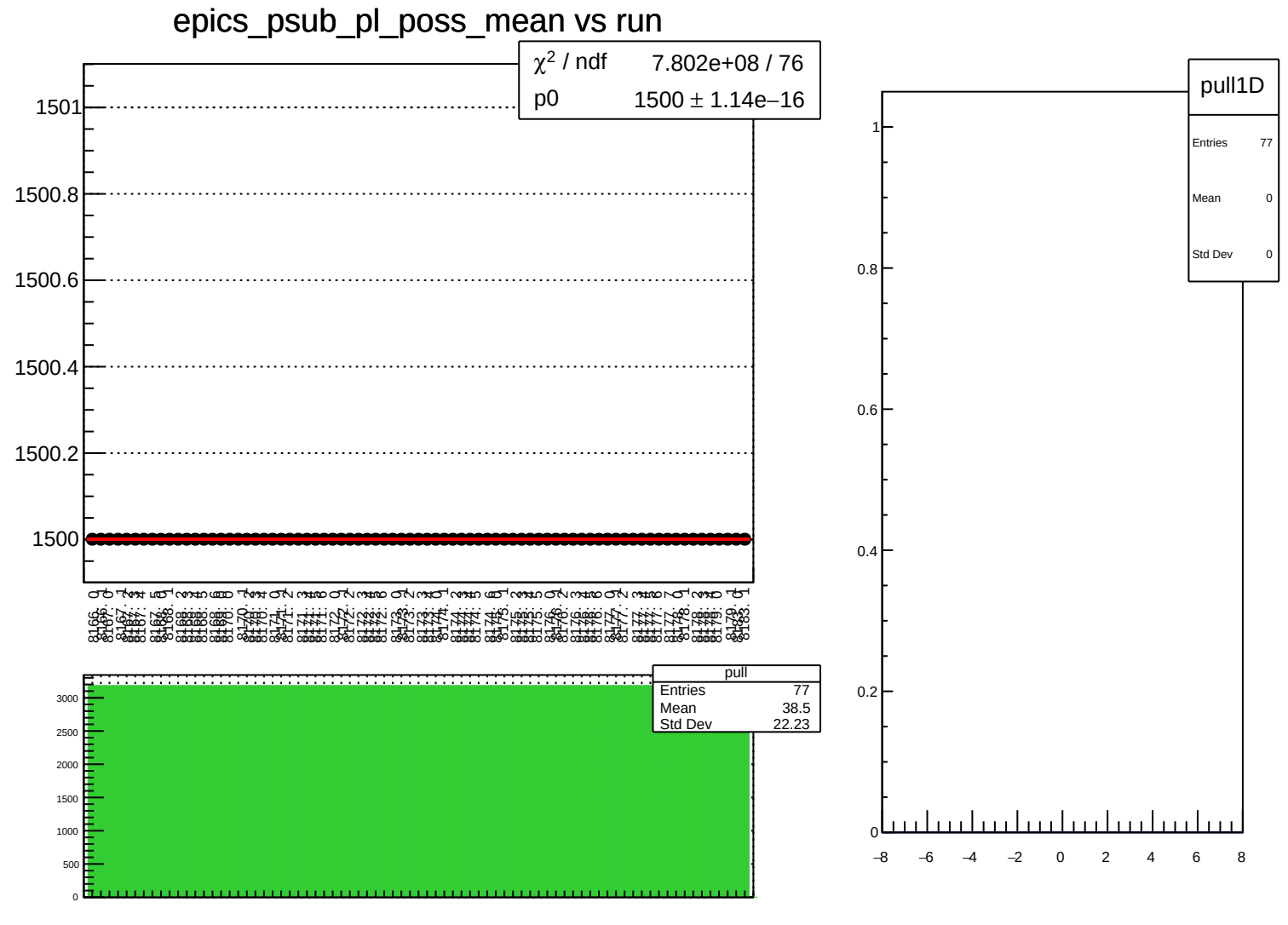

yield_bpm0r05Y_mean vs run
χ² / ndf 4.205e+07 / 76
p0 0.8904 ± 9.906e−06
pull
Entries 77
Mean 82.3
Std Dev 29.59

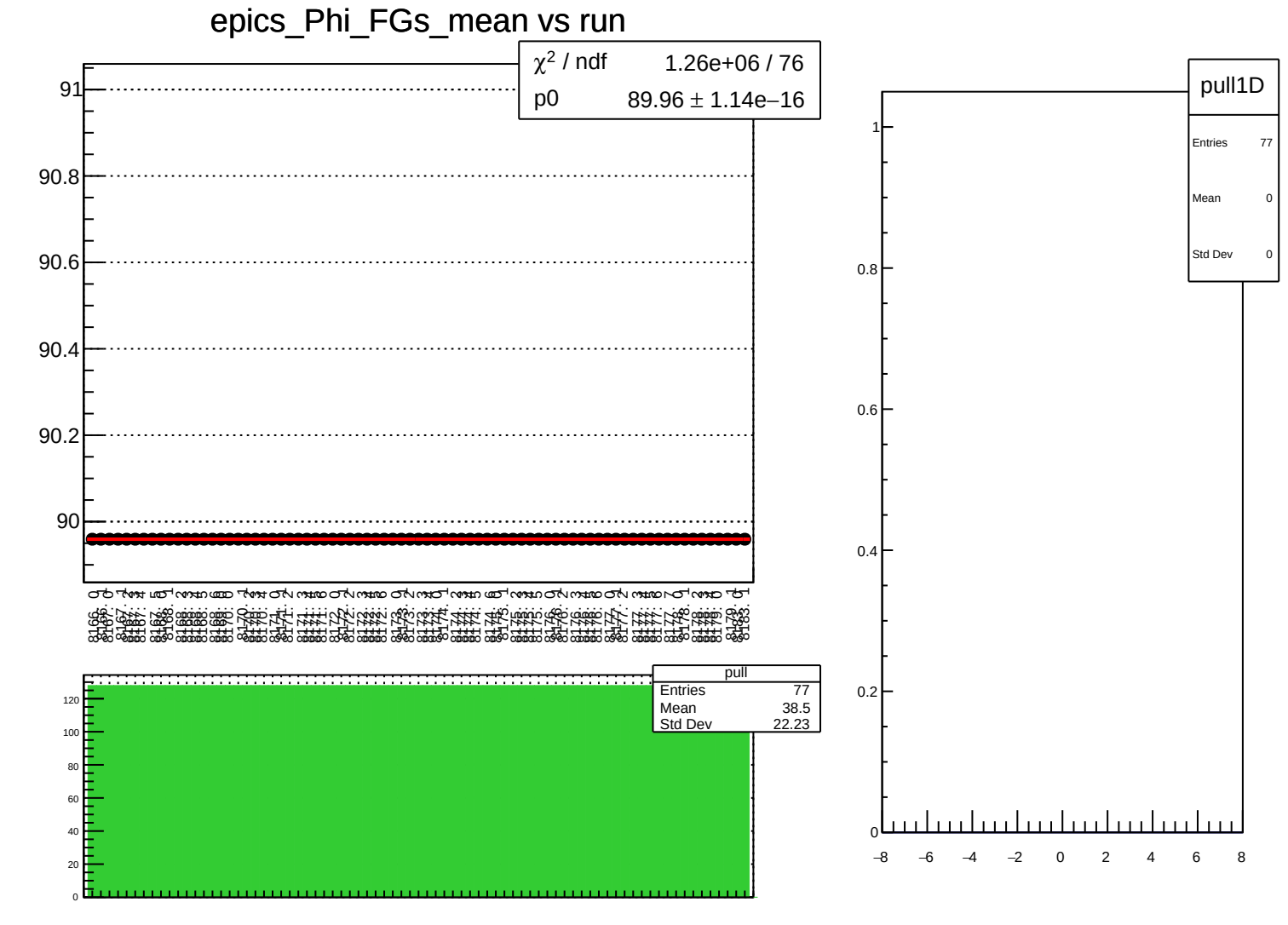

pull1D
Entries 77
Mean 1.162
Std Dev 4.738

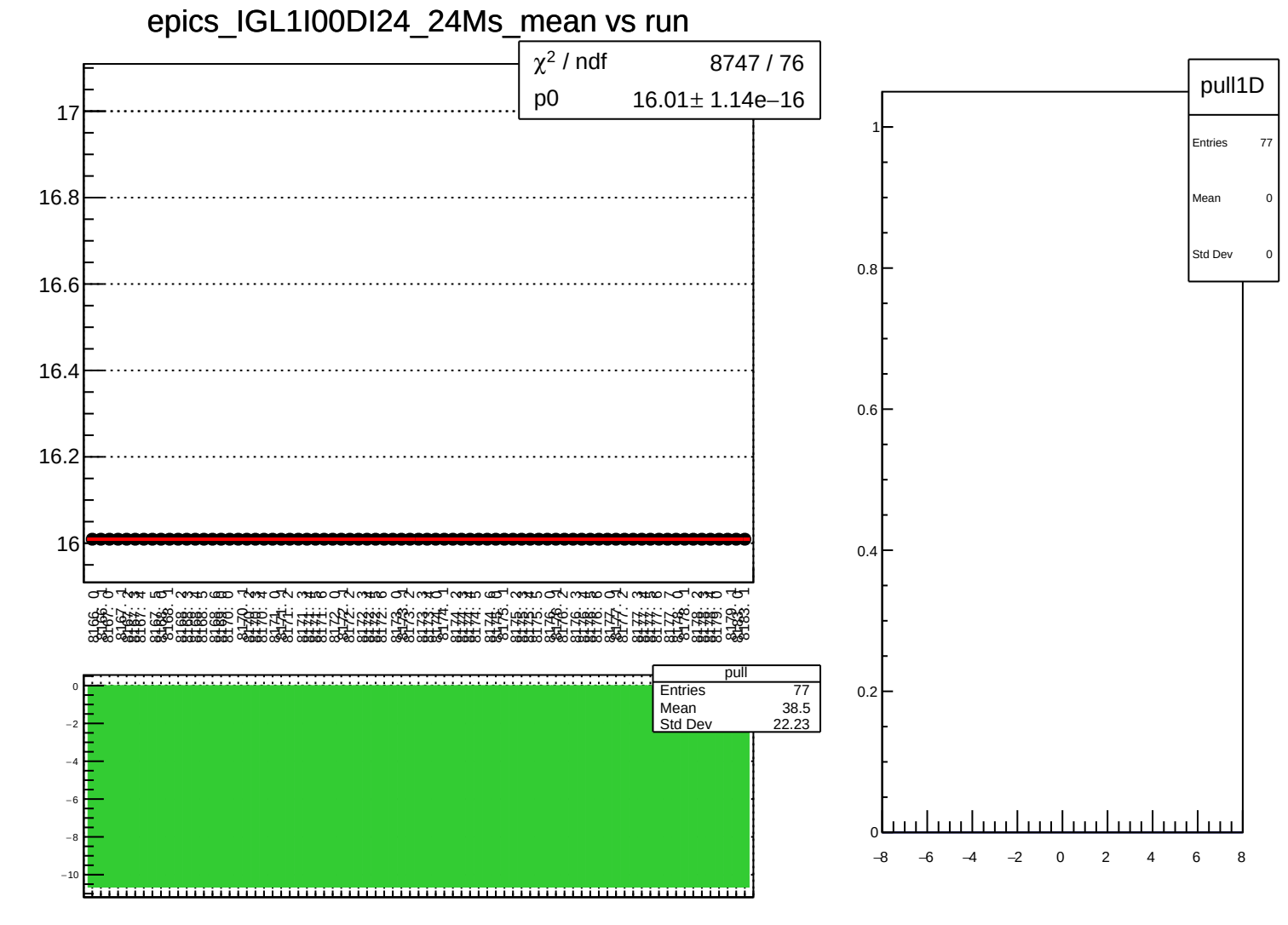

yield_bpm0r05Y_rms vs run
χ² / ndf 9696 / 76
p0 0.008527 ± 7.004e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

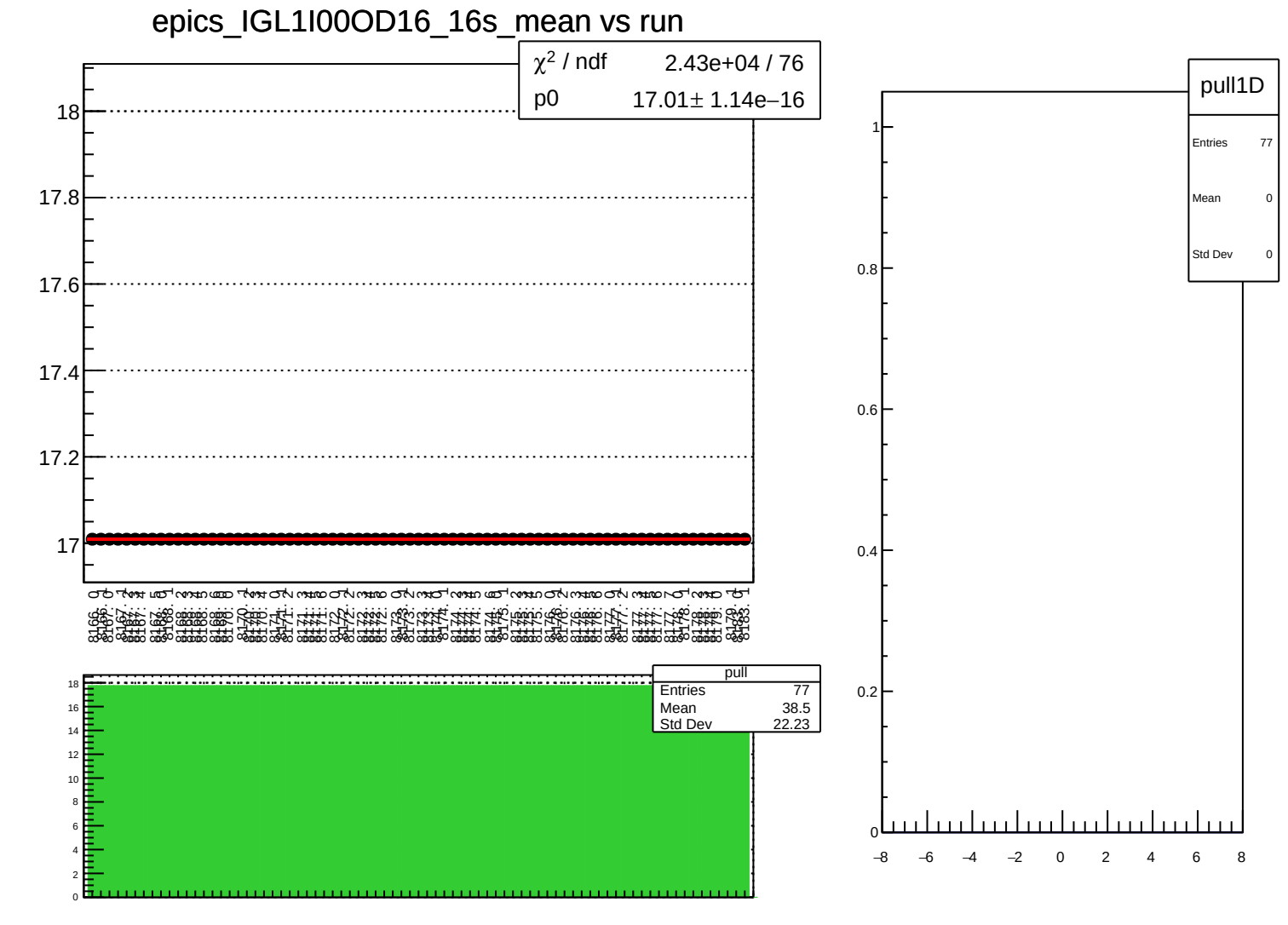

epics_VWienAngles_mean vs run
χ² / ndf 6.22e+04 / 76
p0 88 ± 1.14e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−5
−10
−15
−20
−25
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

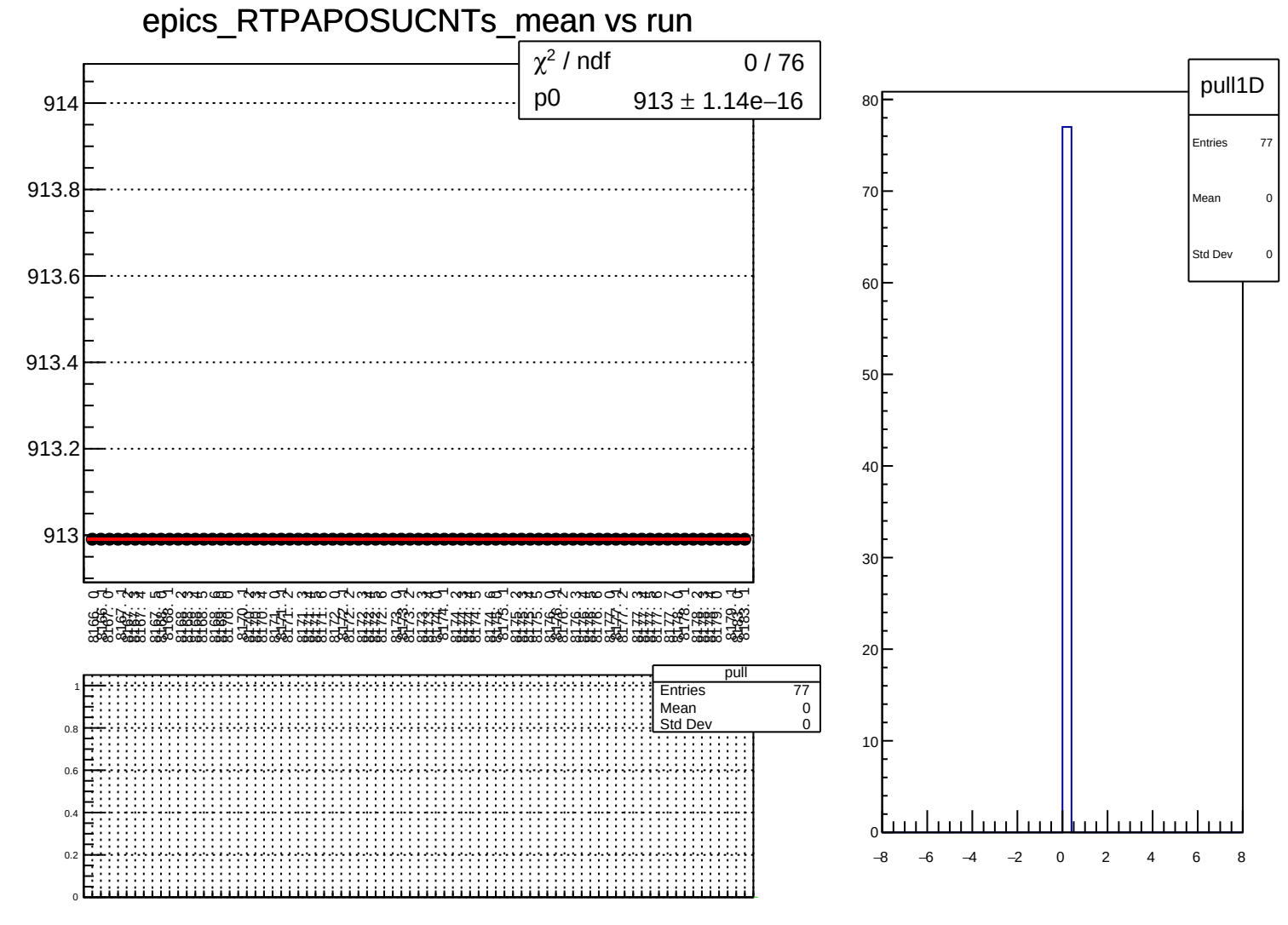

epics_HWienAngles_mean vs run
χ² / ndf 3.508e+05 / 76
p0 −29.64 ± 1.14e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

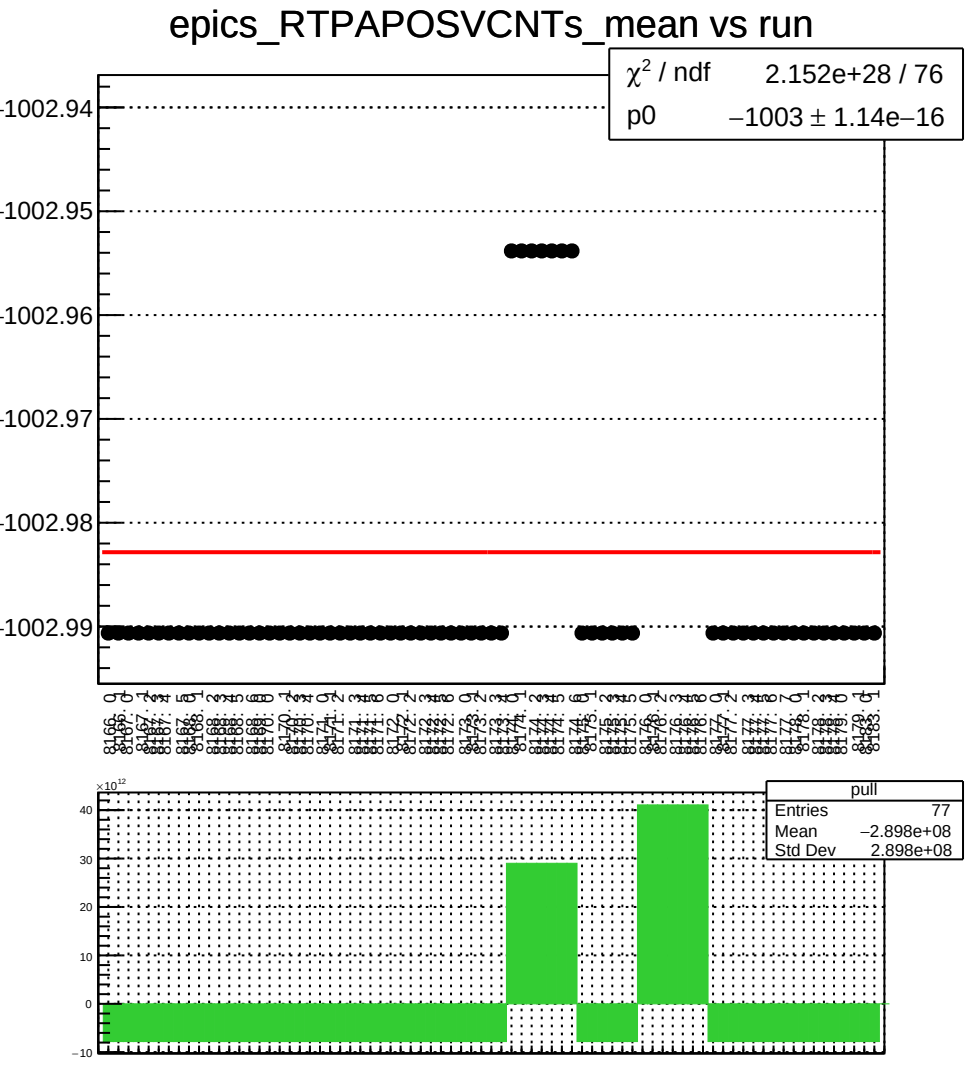

epics_psub_pl_poss_mean vs run
χ² / ndf 7.802e+08 / 76
p0 1500 ± 1.14e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 77
Mean 38.5
Std Dev 22.23
3000
2500
2000
1500
1000
500
0
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

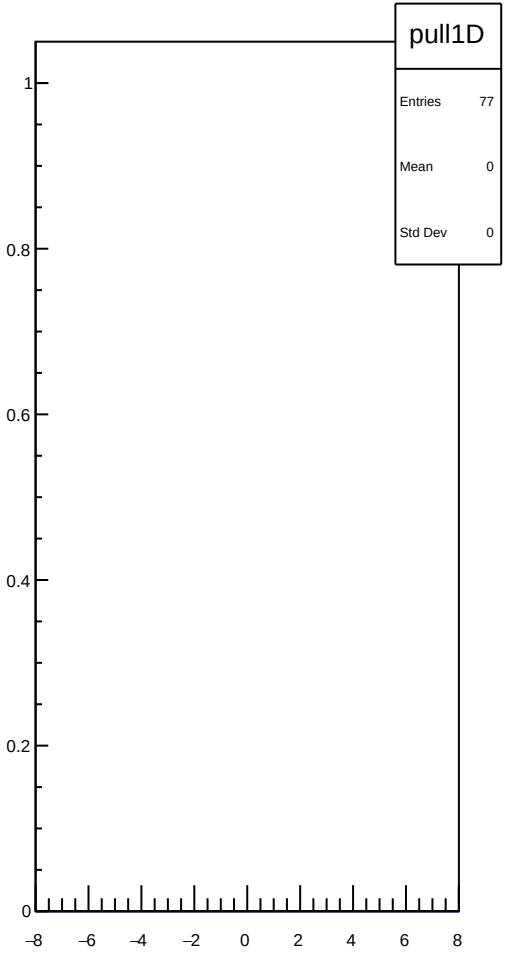

epics_Phi_FGs_mean vs run
χ² / ndf 1.26e+06 / 76
p0 89.96 ± 1.14e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 77
Mean 38.5
Std Dev 22.23
120
100
80
60
40
20
0
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

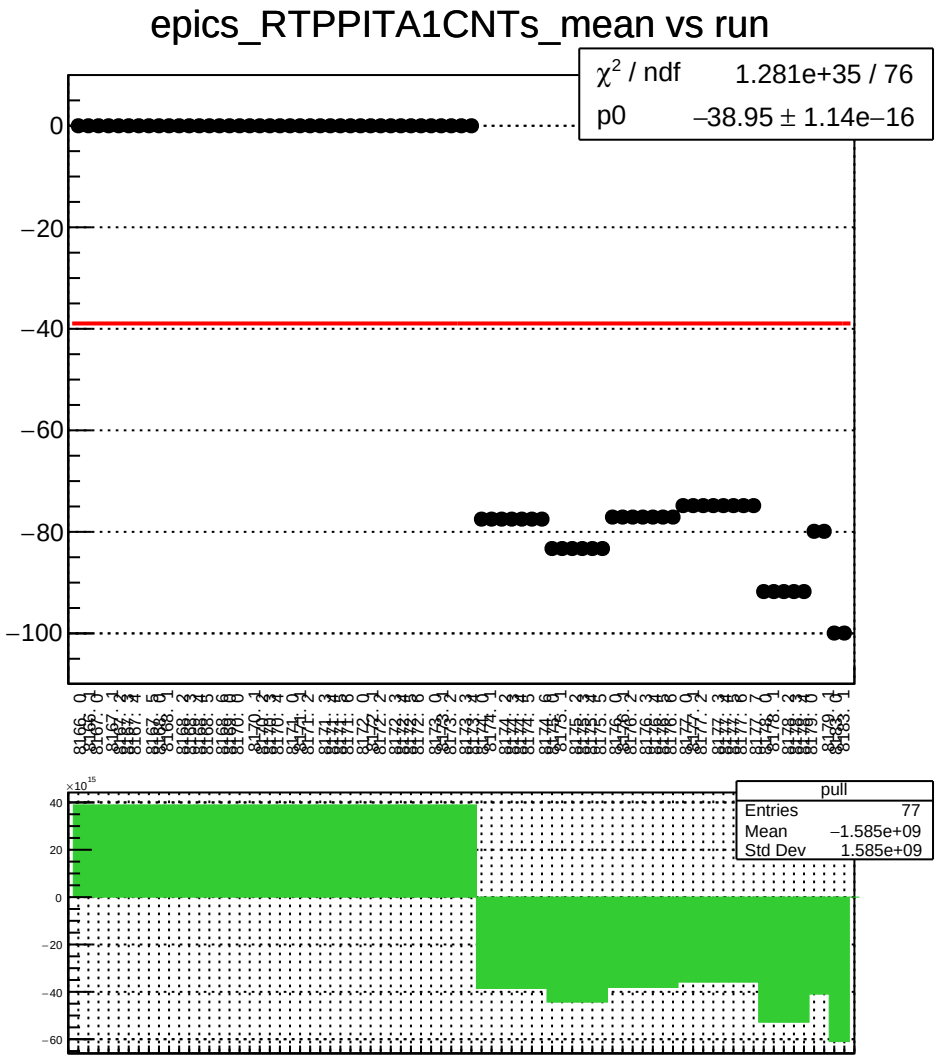

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 8747 / 76
p0 16.01± 1.14e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−2
−4
−6
−8
−10
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

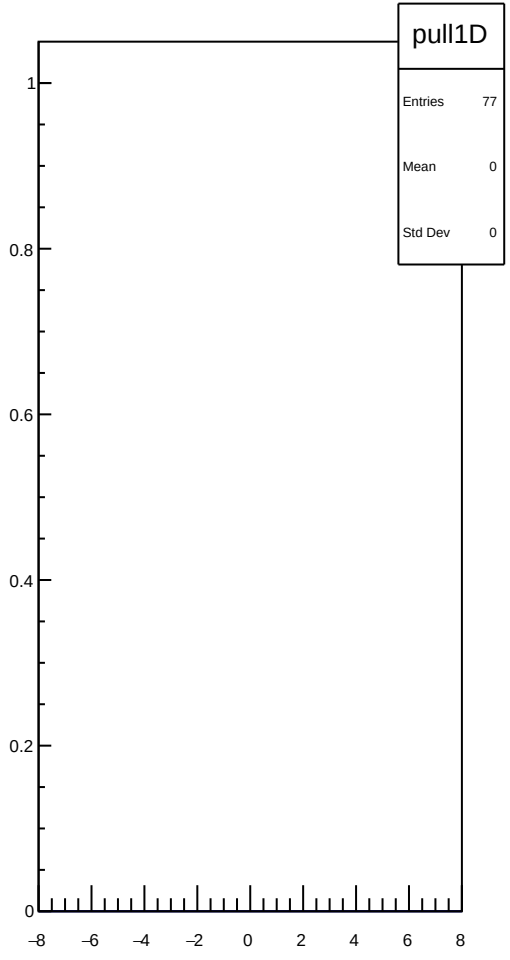

epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 2.43e+04 / 76
p0 17.01± 1.14e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 77
Mean 38.5
Std Dev 22.23
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

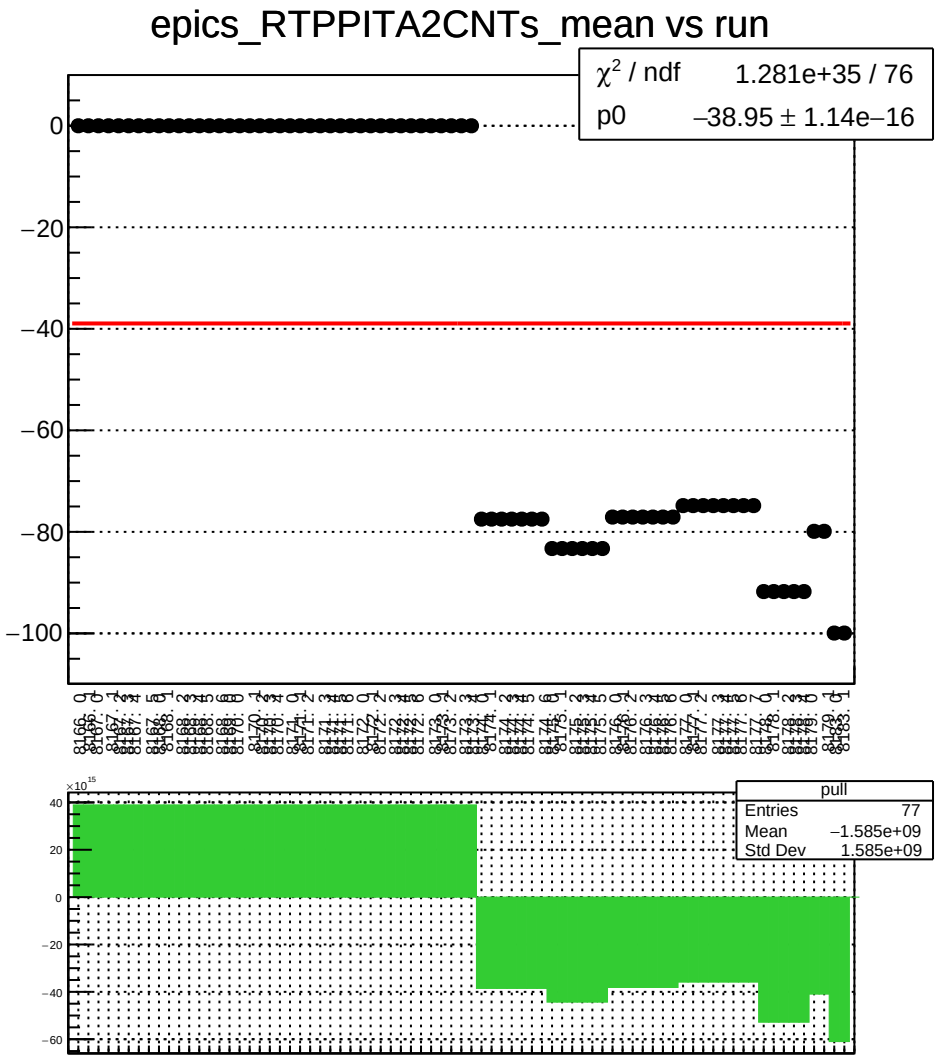

epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 0 / 76
p0 913 ± 1.14e−16
914
913.8
913.6
913.4
913.2
913
pull
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 77
Mean 0
Std Dev 0
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

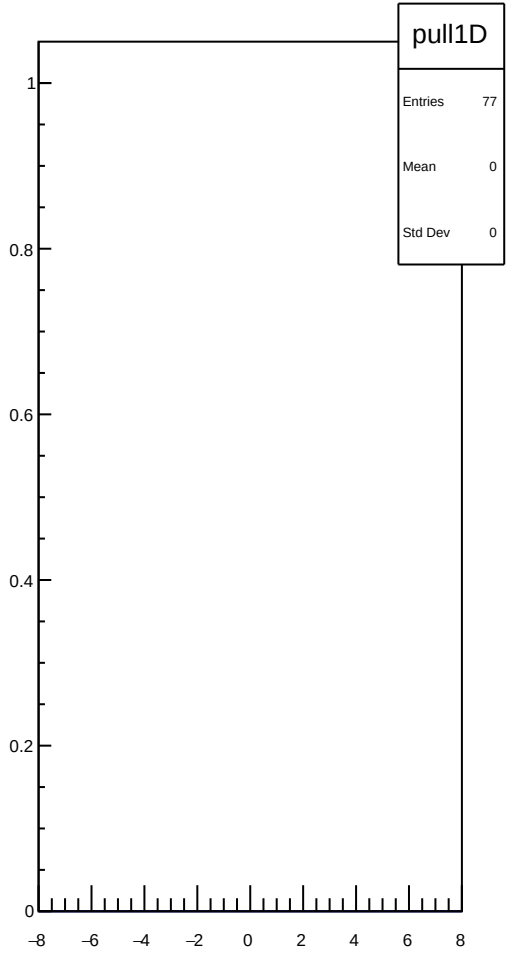

epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 2.152e+28 / 76
p0 −1003 ± 1.14e−16
−1002.94
−1002.95
−1002.96
−1002.97
−1002.98
−1002.99
pull
Entries 77
Mean −2.898e+08
Std Dev 2.898e+08
×10¹²
40
30
20
10
0
−10


pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPPITA1CNTs_mean vs run
χ² / ndf 1.281e+35 / 76
p0 –38.95 ± 1.14e–16
0
−20
−40
−60
−80
−100
pull
Entries 77
Mean –1.585e+09
Std Dev 1.585e+09
×10¹⁵
40
20
0
−20
−40
−60


pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8


epics_RTPPITA2CNTs_mean vs run
χ² / ndf 1.281e+35 / 76
p0 –38.95 ± 1.14e–16
0
−20
−40
−60
−80
−100
pull
Entries 77
Mean –1.585e+09
Std Dev 1.585e+09
×10¹⁵
40
20
0
−20
−40
−60


pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8