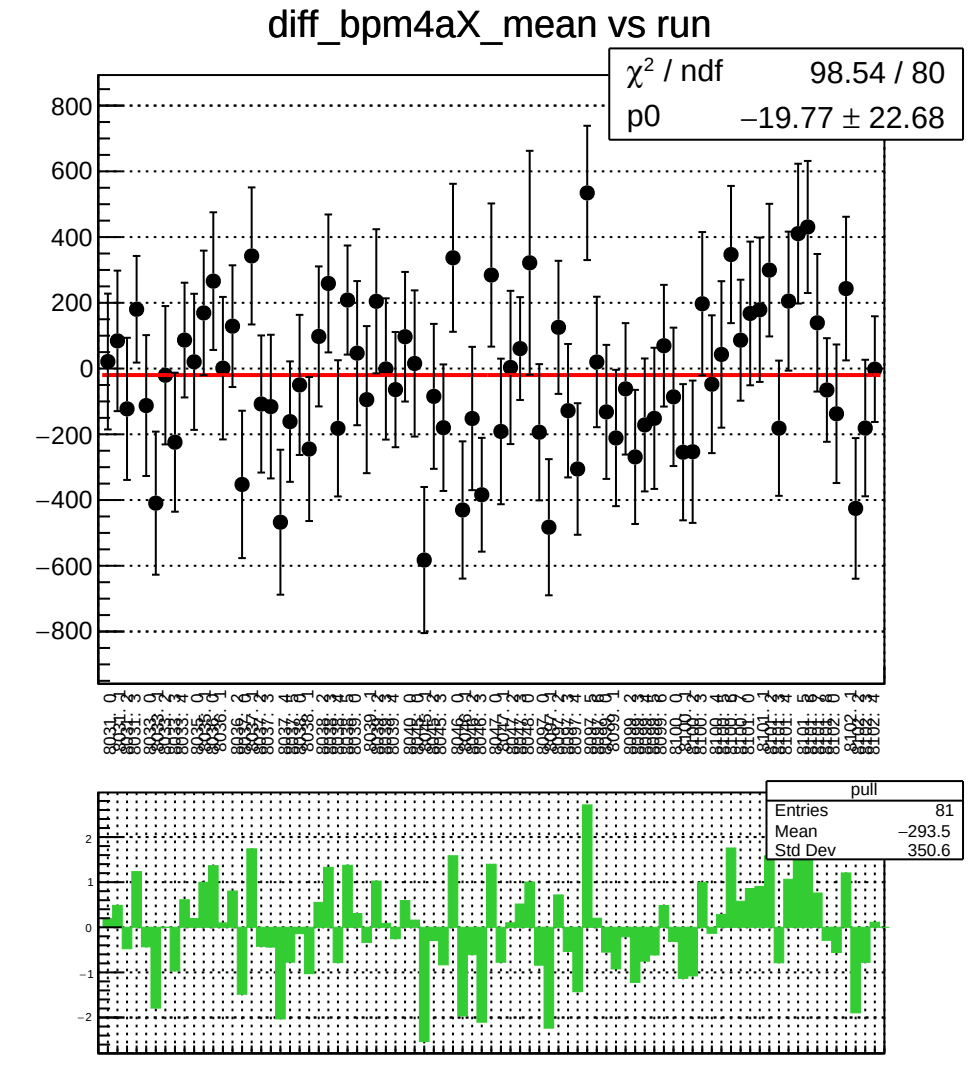
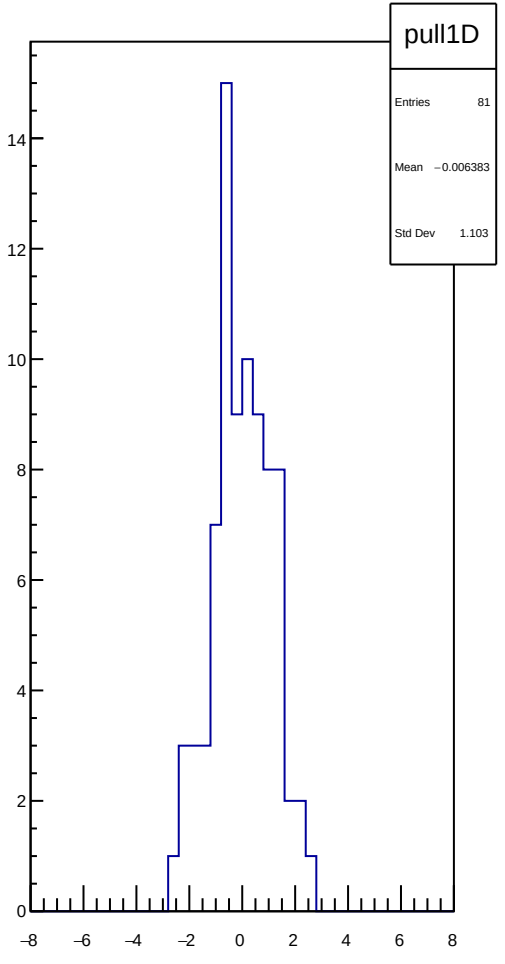
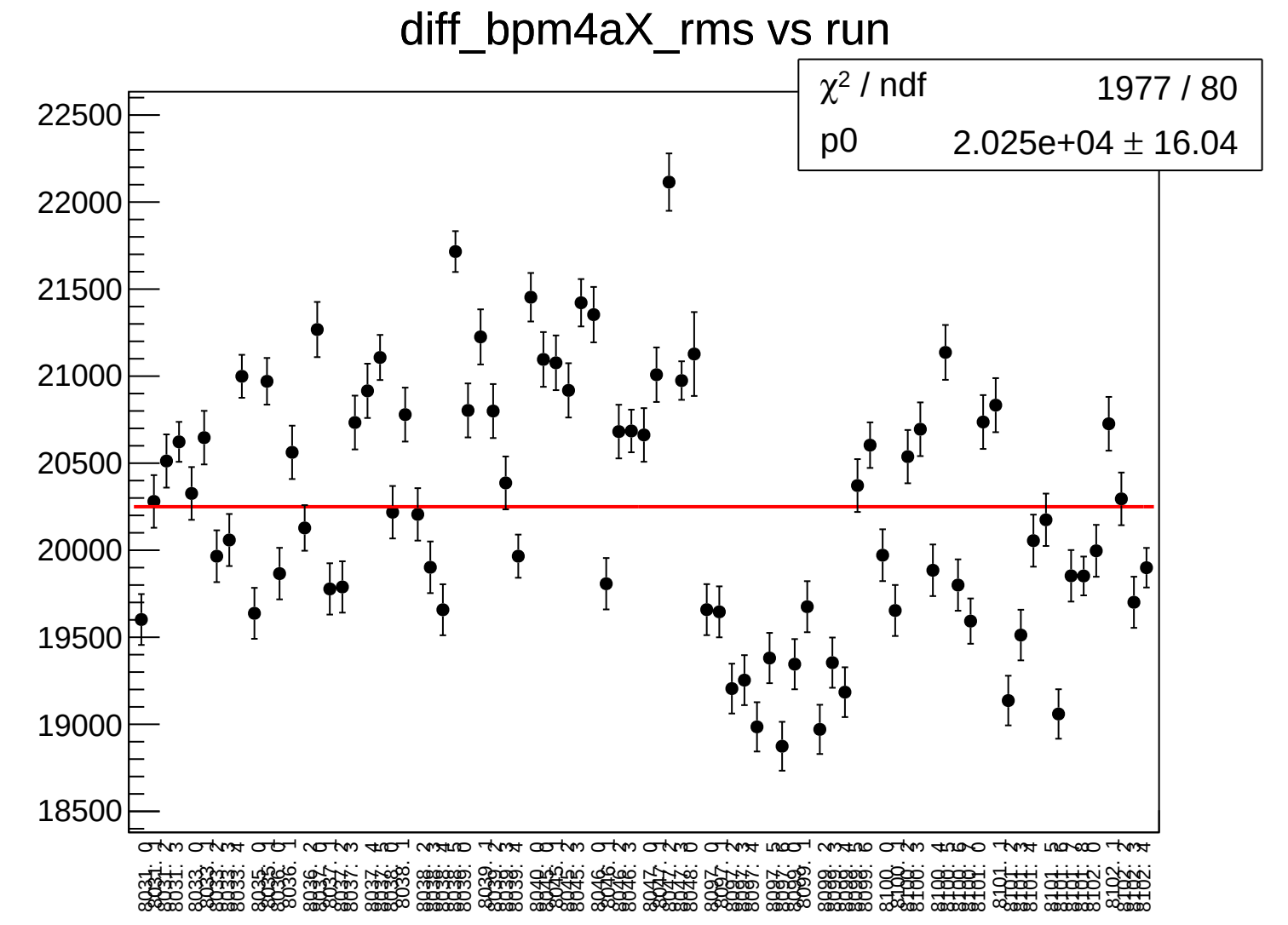
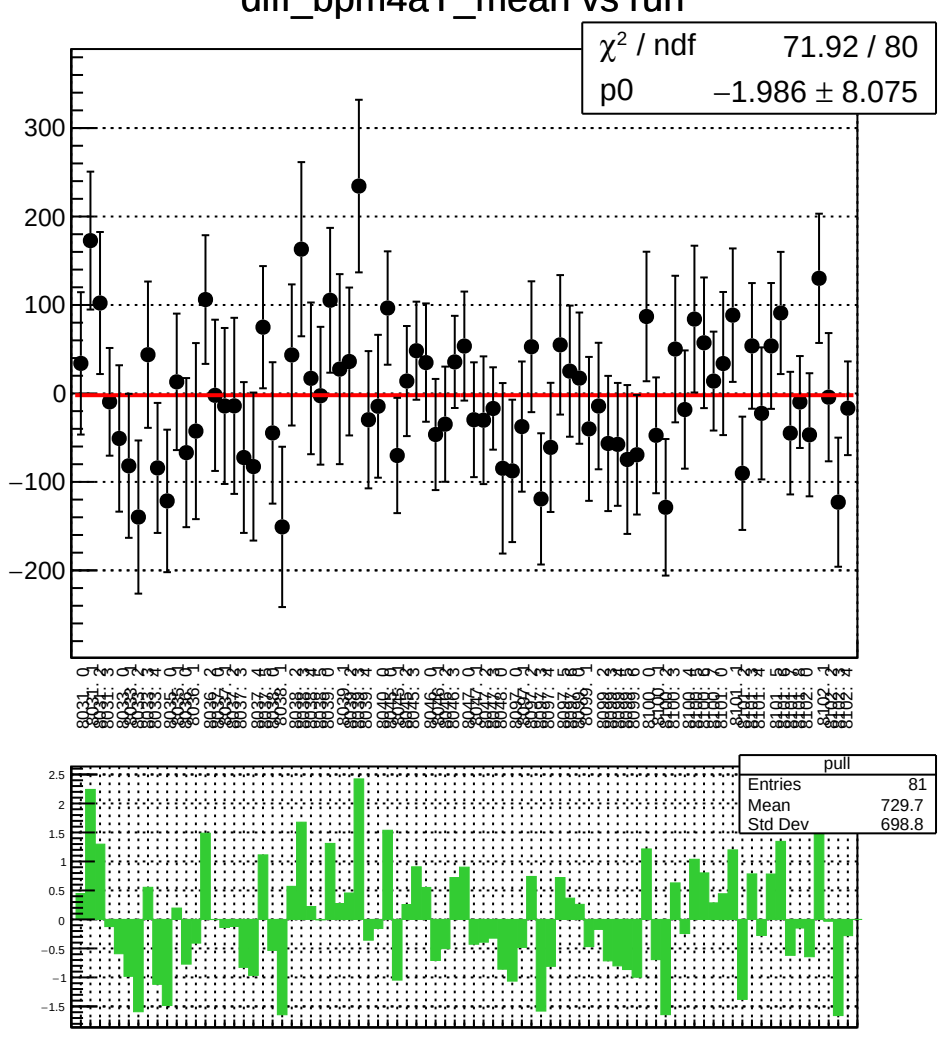
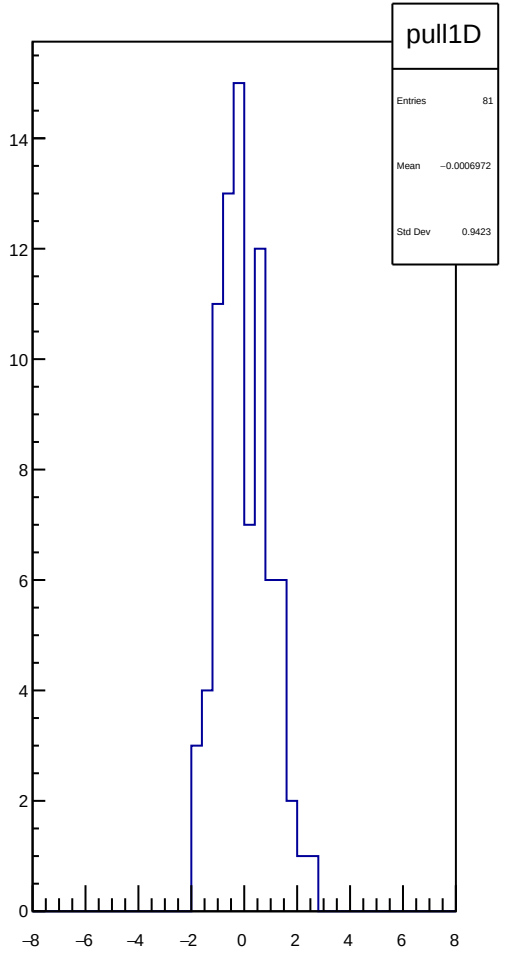
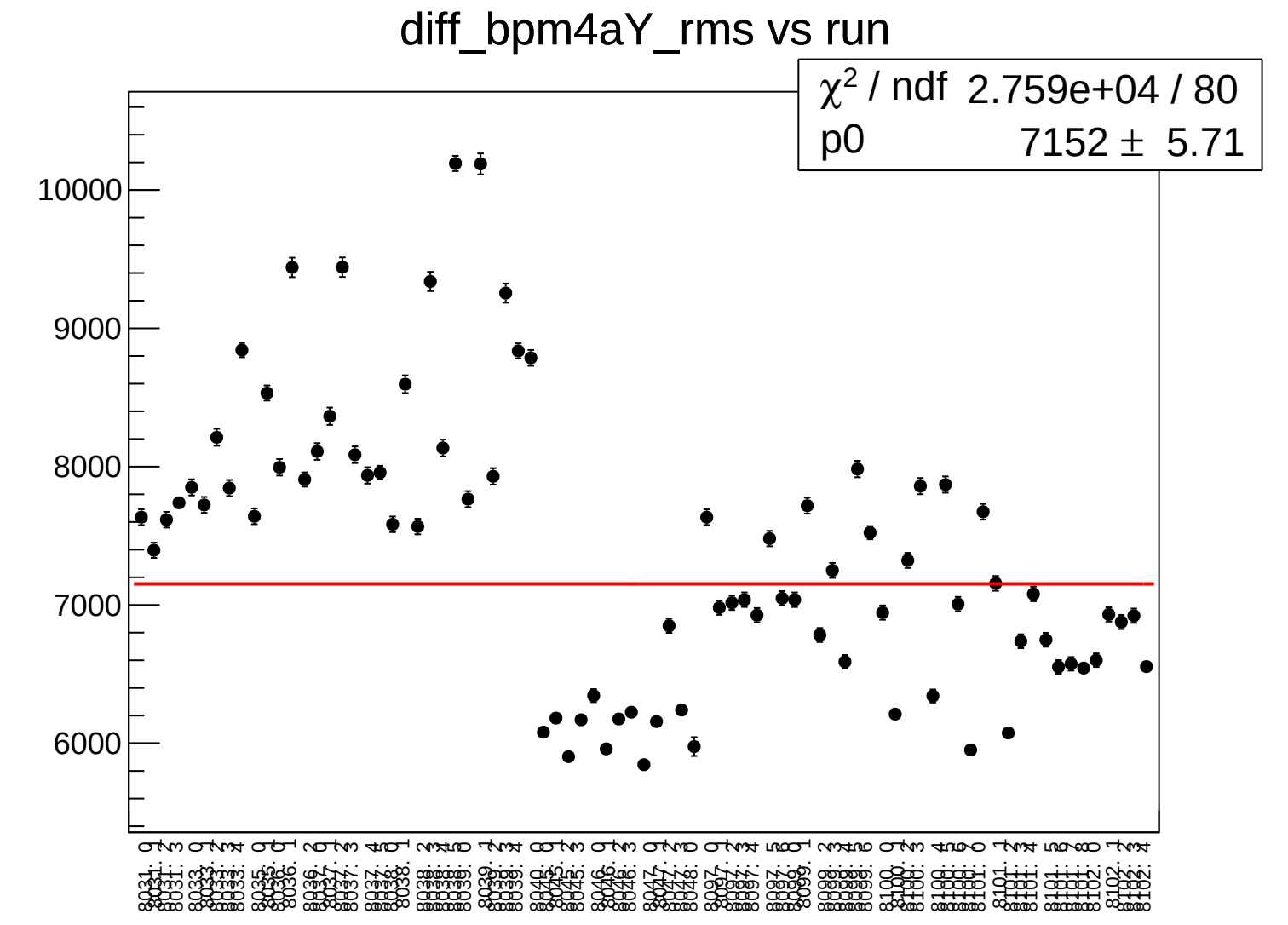

diff_bpm4aX_mean vs run
χ² / ndf 98.54 / 80
p0 −19.77 ± 22.68
pull
Entries 81
Mean −293.5
Std Dev 350.6

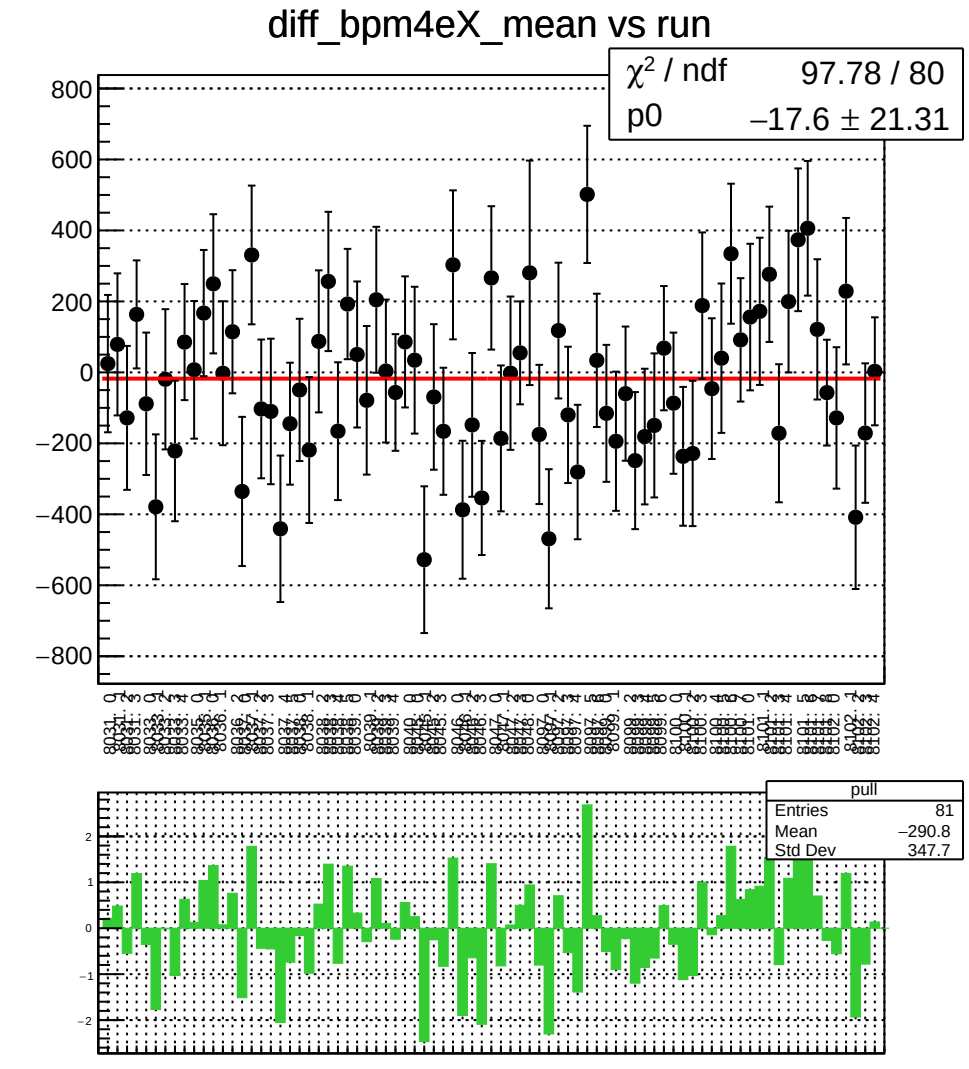

pull1D
Entries 81
Mean −0.006383
Std Dev 1.103

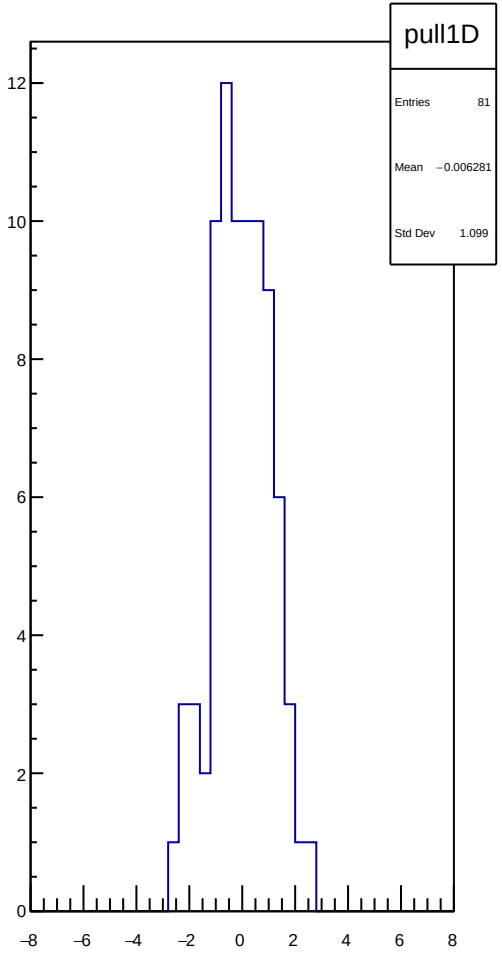

diff_bpm4aX_rms vs run
χ² / ndf 1977 / 80
p0 2.025e+04 ± 16.04
22500
22000
21500
21000
20500
20000
19500
19000
18500

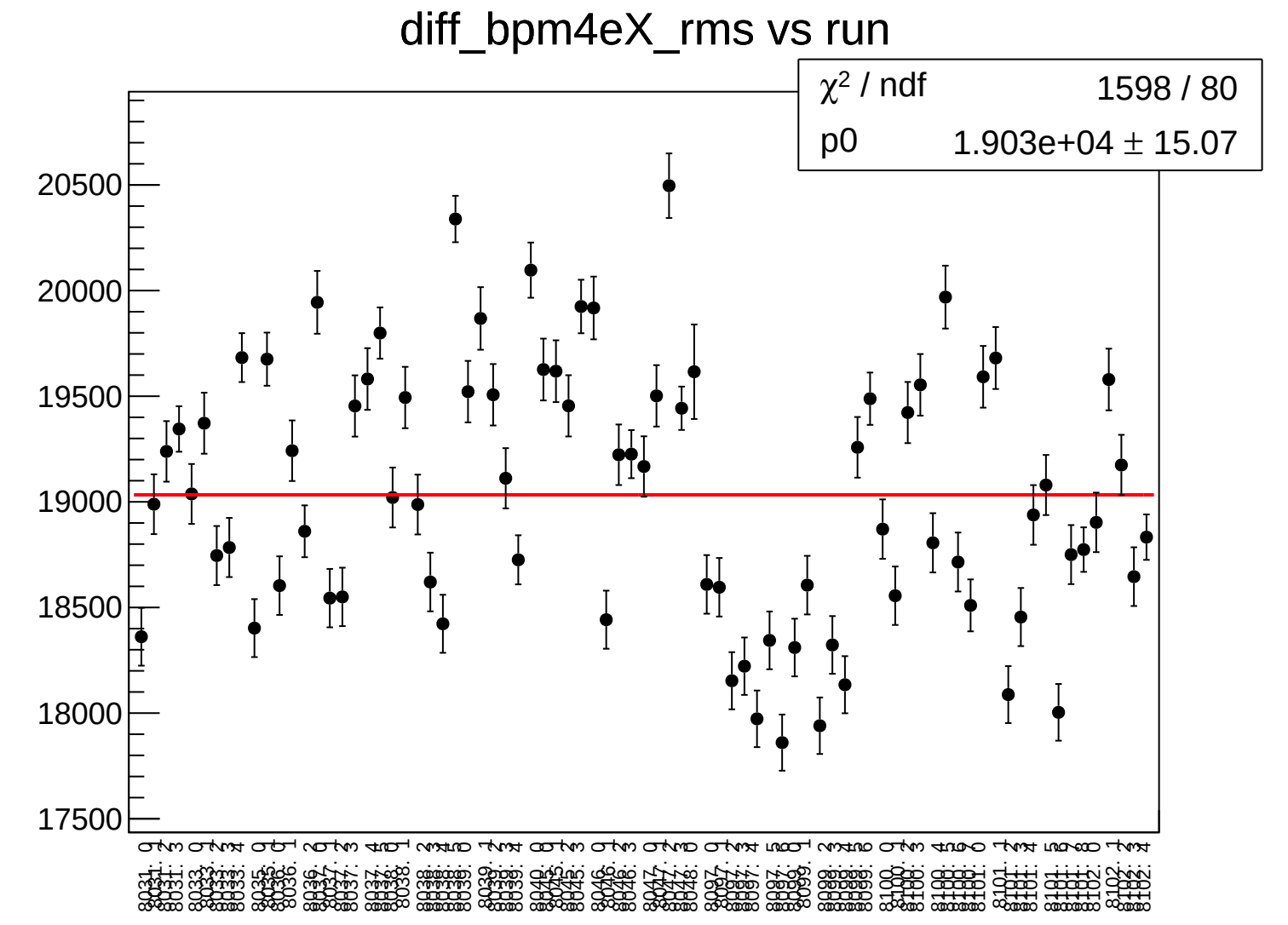

diff_bpm4aY_mean vs run
χ² / ndf 71.92 / 80
p0 −1.986 ± 8.075
300
200
100
0
−100
−200
pull
Entries 81
Mean 729.7
Std Dev 698.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

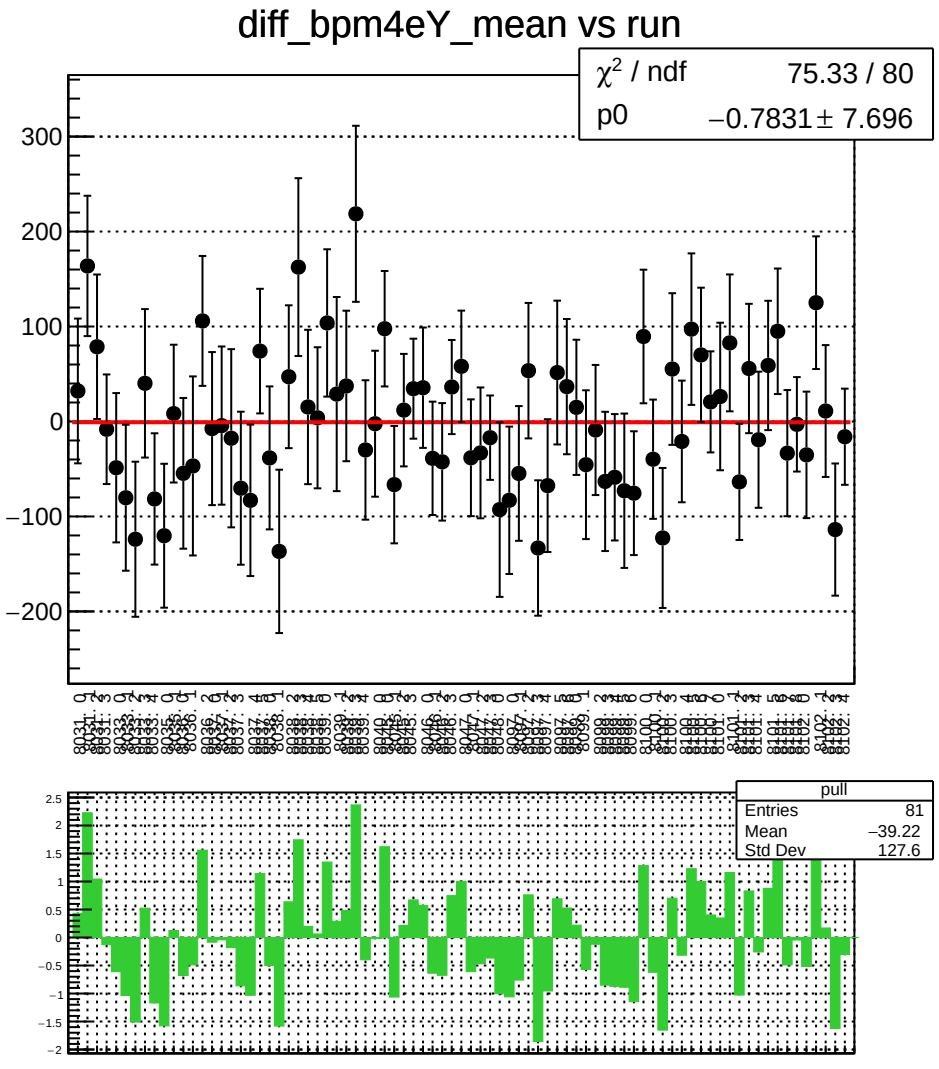

pull1D
Entries 81
Mean −0.0006972
Std Dev 0.9423
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

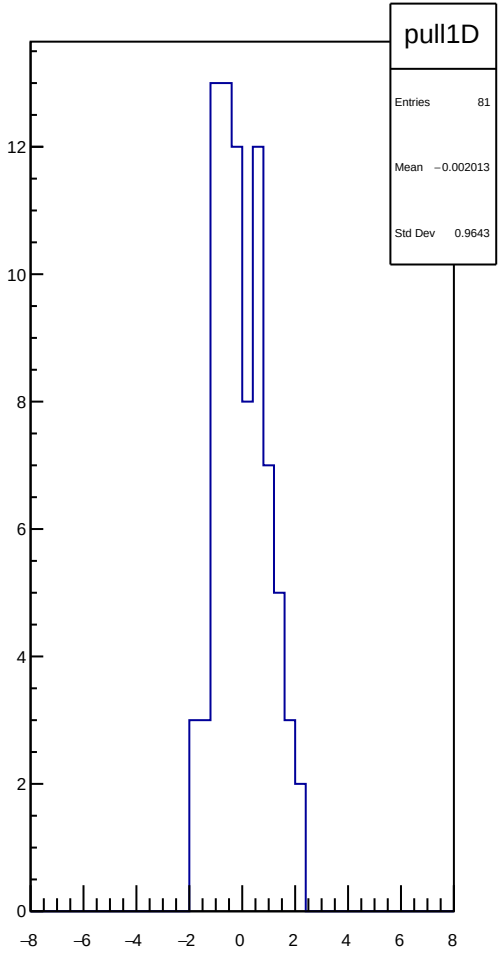

diff_bpm4aY_rms vs run
χ² / ndf 2.759e+04 / 80
p0 7152 ± 5.71
10000
9000
8000
7000
6000

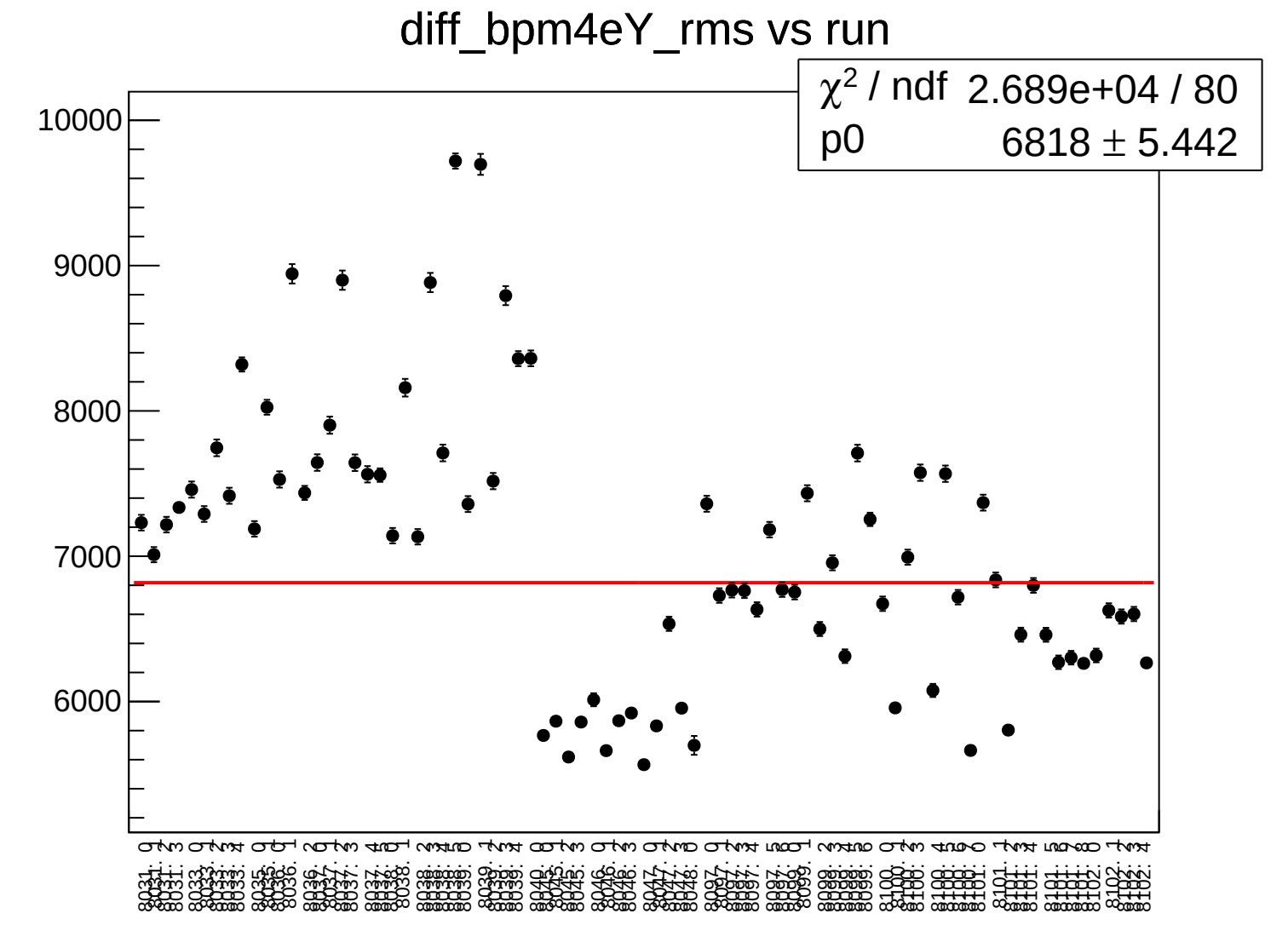

diff_bpm4eX_mean vs run
χ² / ndf 97.78 / 80
p0 −17.6 ± 21.31
pull
Entries 81
Mean −290.8
Std Dev 347.7

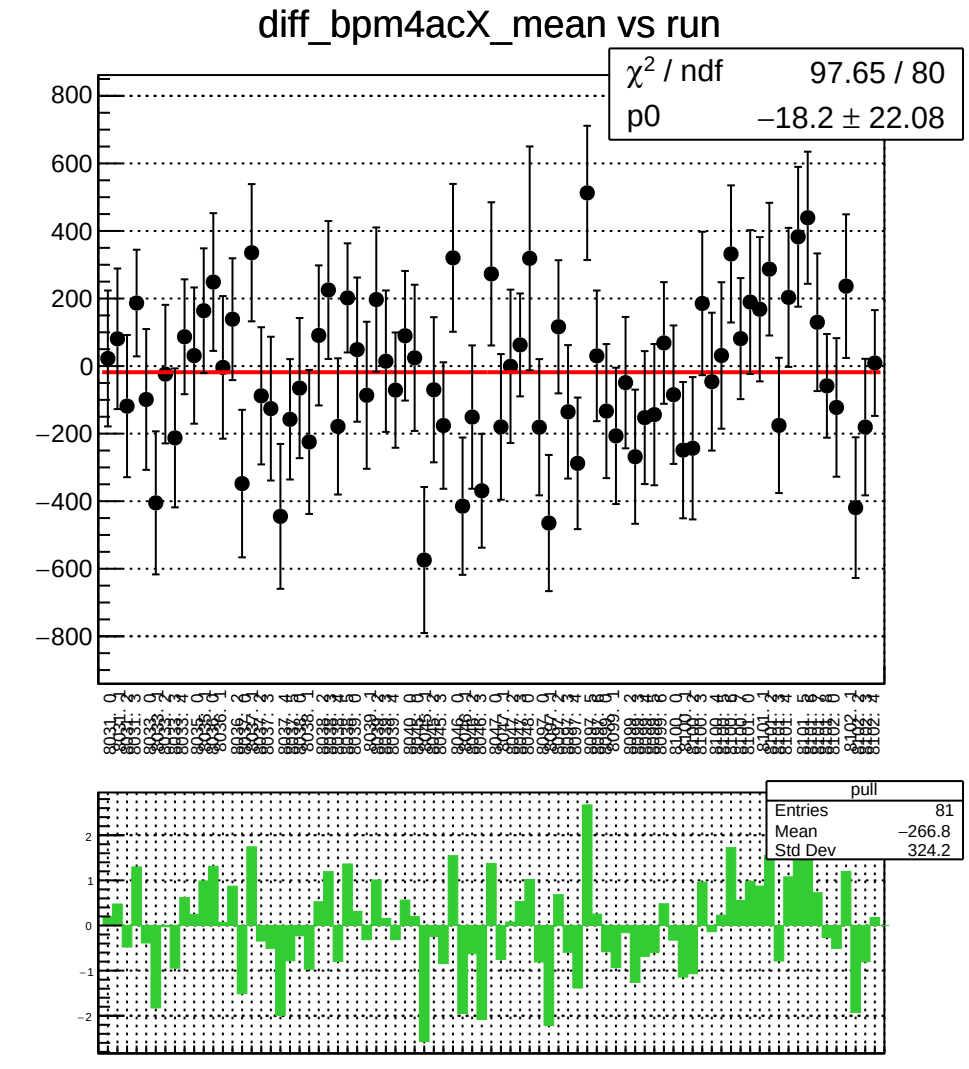

pull1D
Entries 81
Mean −0.006281
Std Dev 1.099

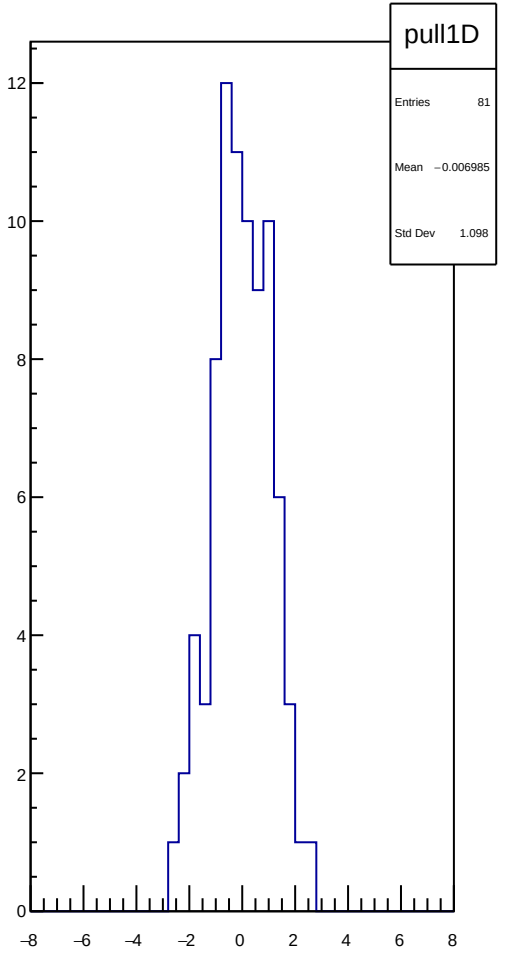

diff_bpm4eX_rms vs run
χ² / ndf 1598 / 80
p0 1.903e+04 ± 15.07
20500
20000
19500
19000
18500
18000
17500

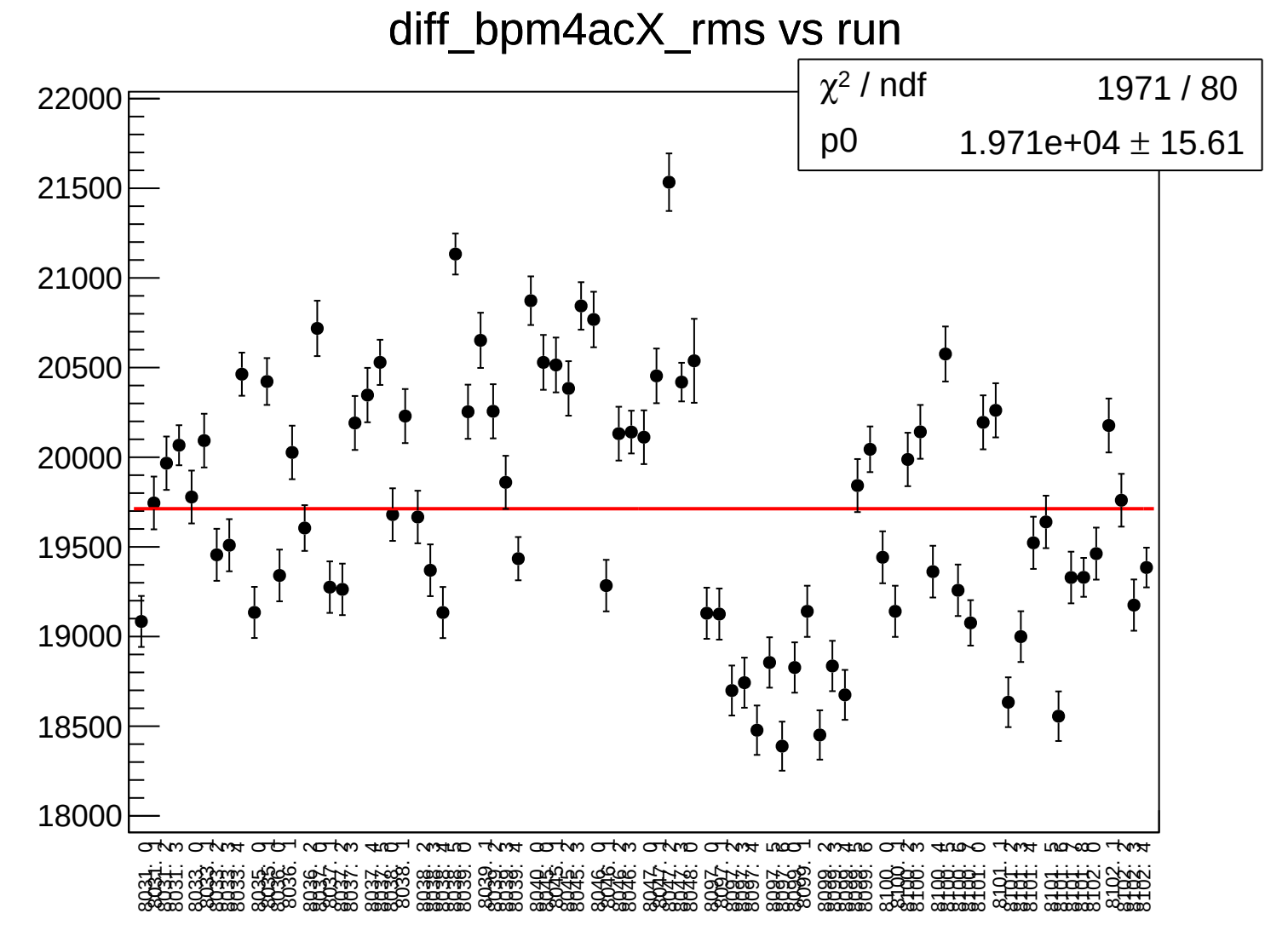

diff_bpm4eY_mean vs run
χ² / ndf 75.33 / 80
p0 −0.7831 ± 7.696
pull
Entries 81
Mean −39.22
Std Dev 127.6

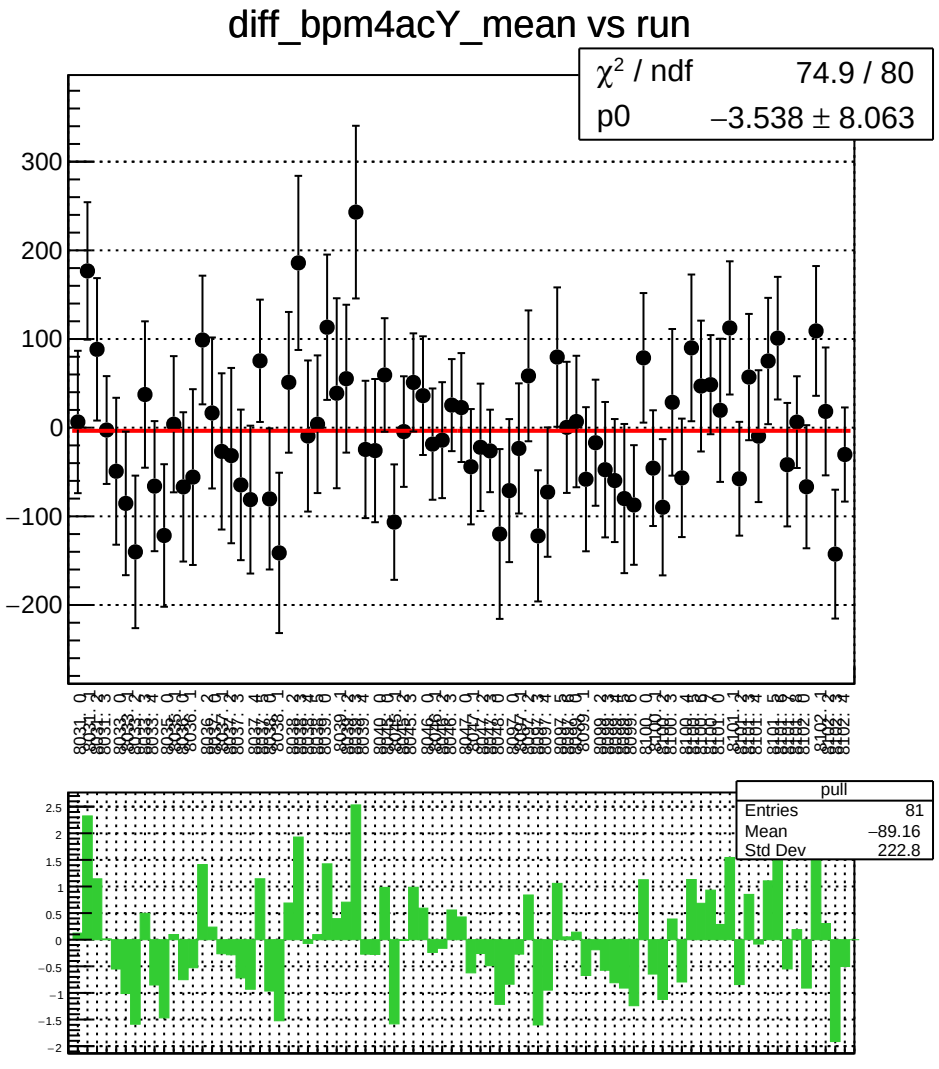

pull1D
Entries 81
Mean −0.002013
Std Dev 0.9643

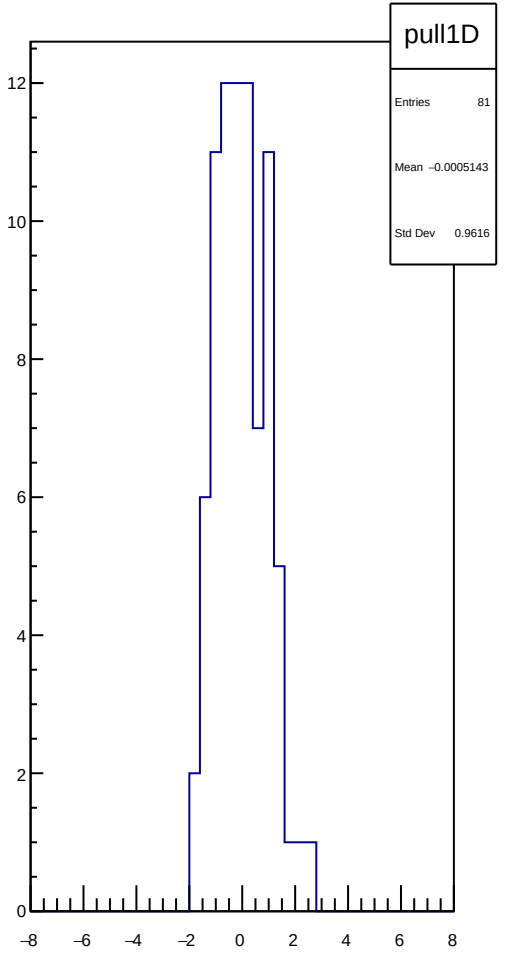

diff_bpm4eY_rms vs run
χ^2 / ndf 2.689e+04 / 80
p0 6818 ± 5.442
10000
9000
8000
7000
6000

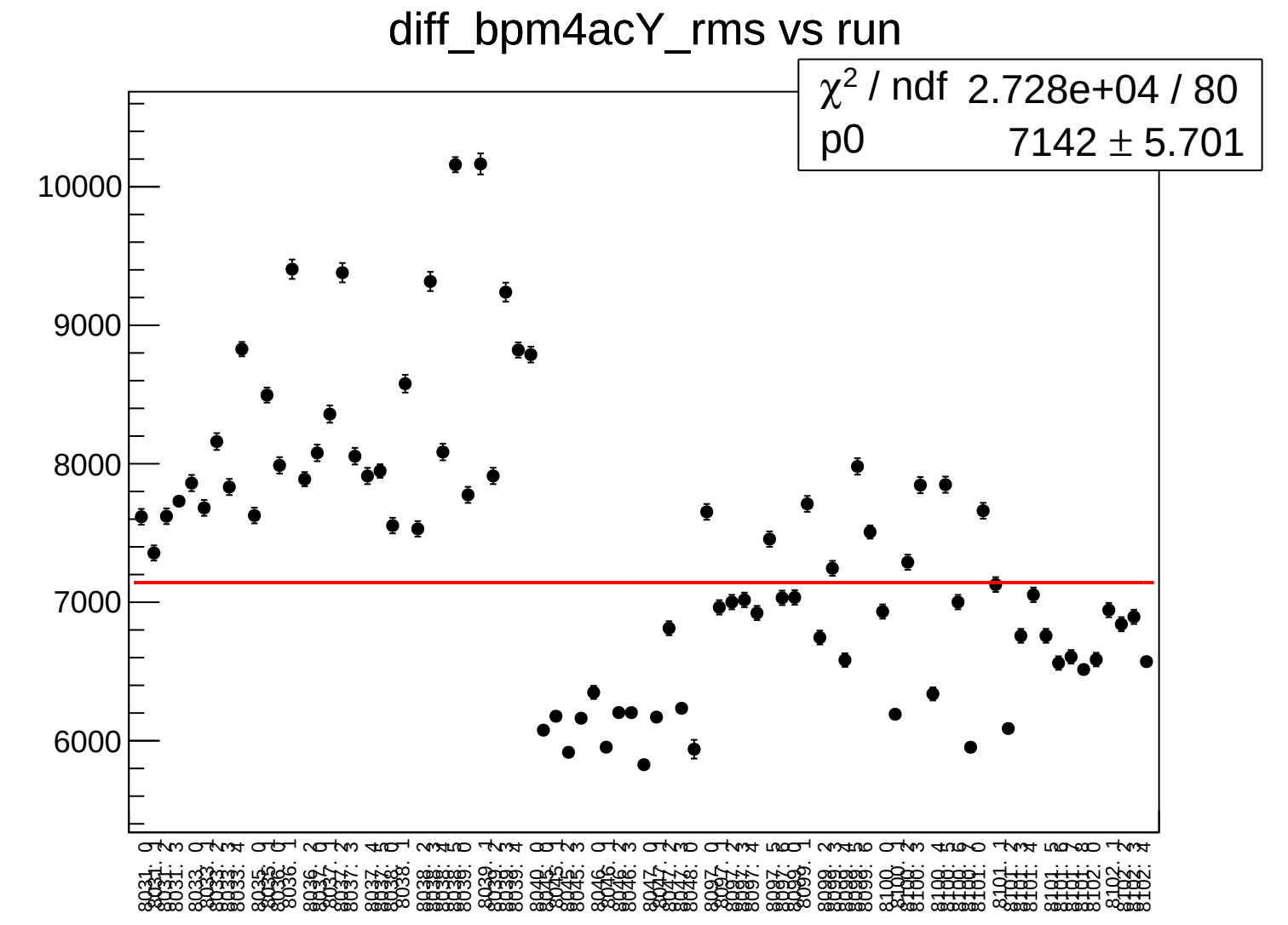

diff_bpm4acX_mean vs run
χ² / ndf 97.65 / 80
p0 −18.2 ± 22.08
pull
Entries 81
Mean −266.8
Std Dev 324.2

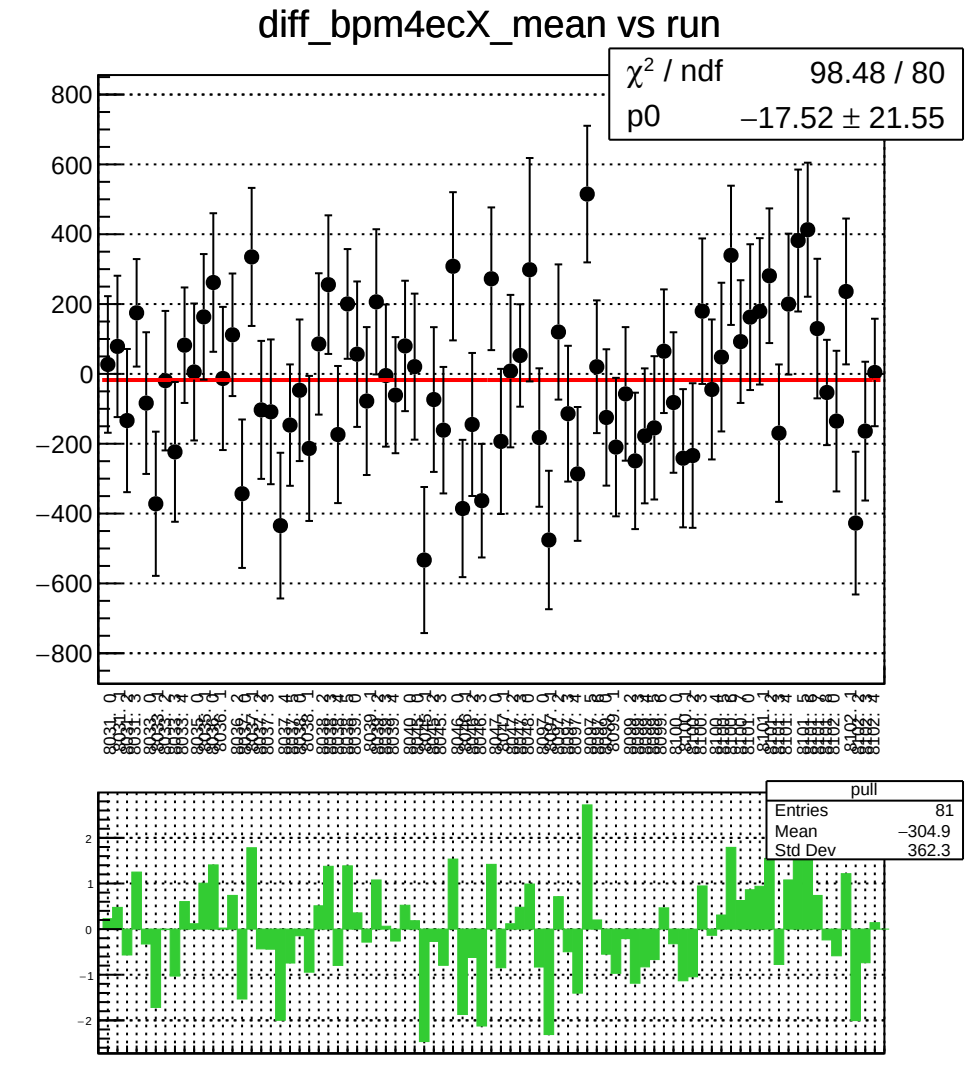

pull1D
Entries 81
Mean −0.006985
Std Dev 1.098

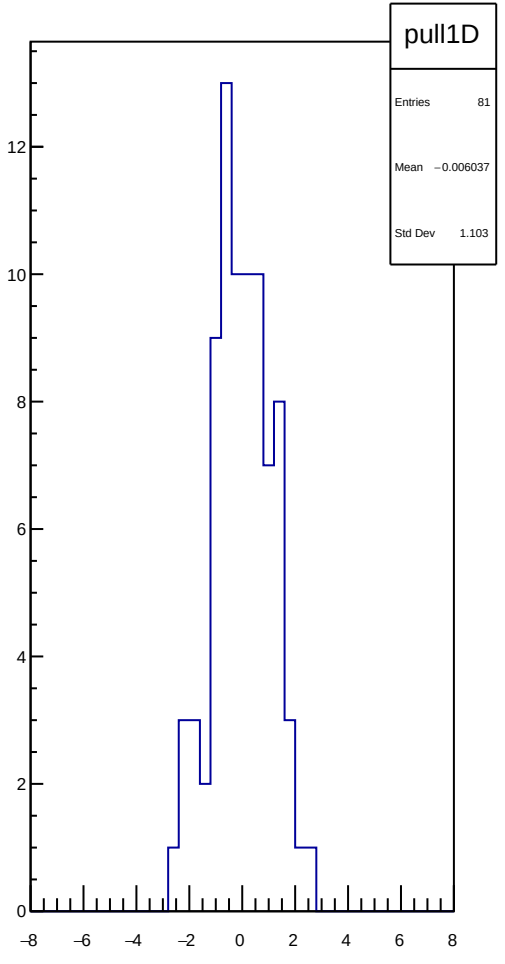

diff_bpm4acX_rms vs run
χ² / ndf 1971 / 80
p0 1.971e+04 ± 15.61
22000
21500
21000
20500
20000
19500
19000
18500
18000

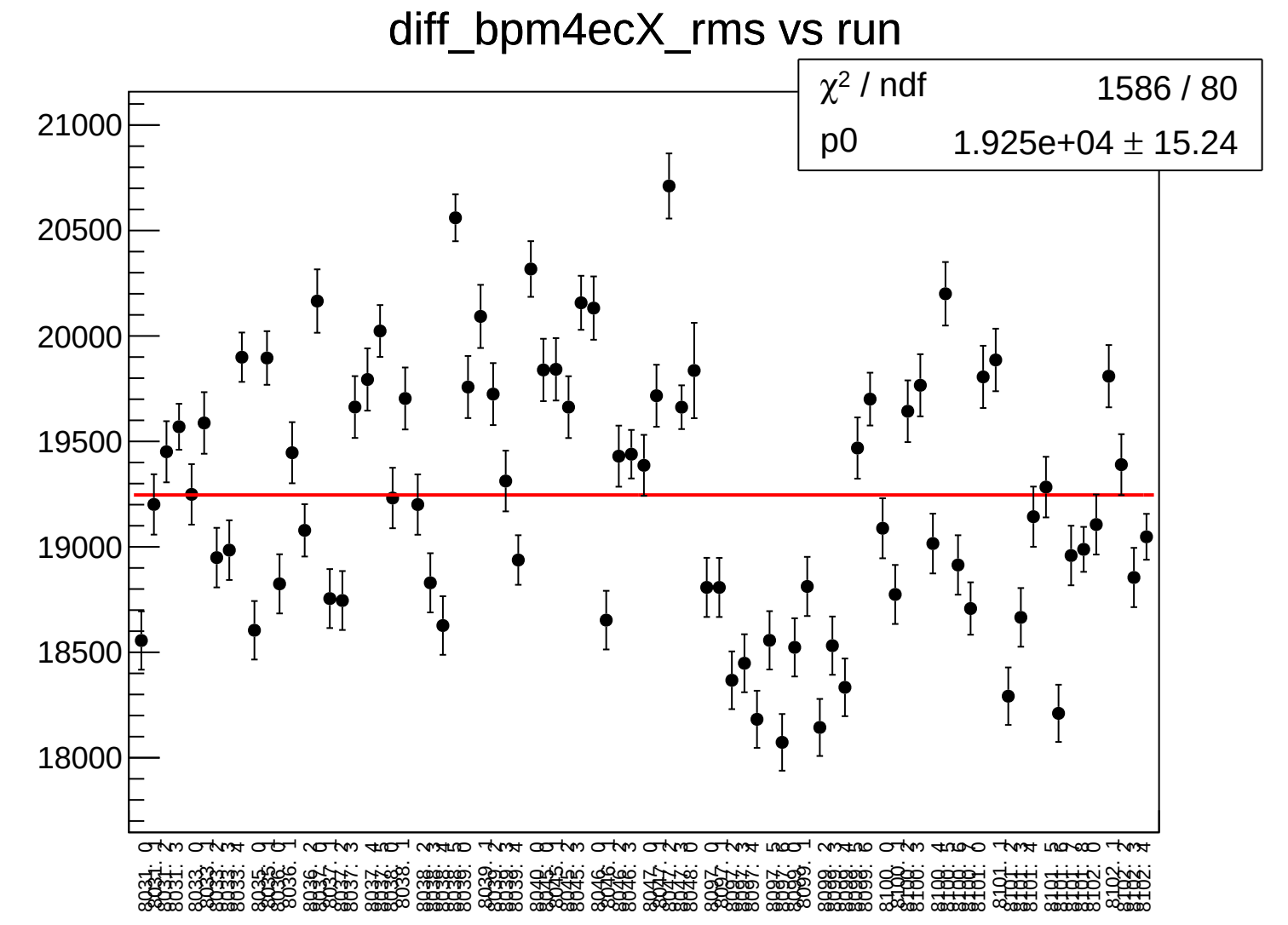

diff_bpm4acY_mean vs run
χ² / ndf 74.9 / 80
p0 −3.538 ± 8.063
300
200
100
0
−100
−200
pull
Entries 81
Mean −89.16
Std Dev 222.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

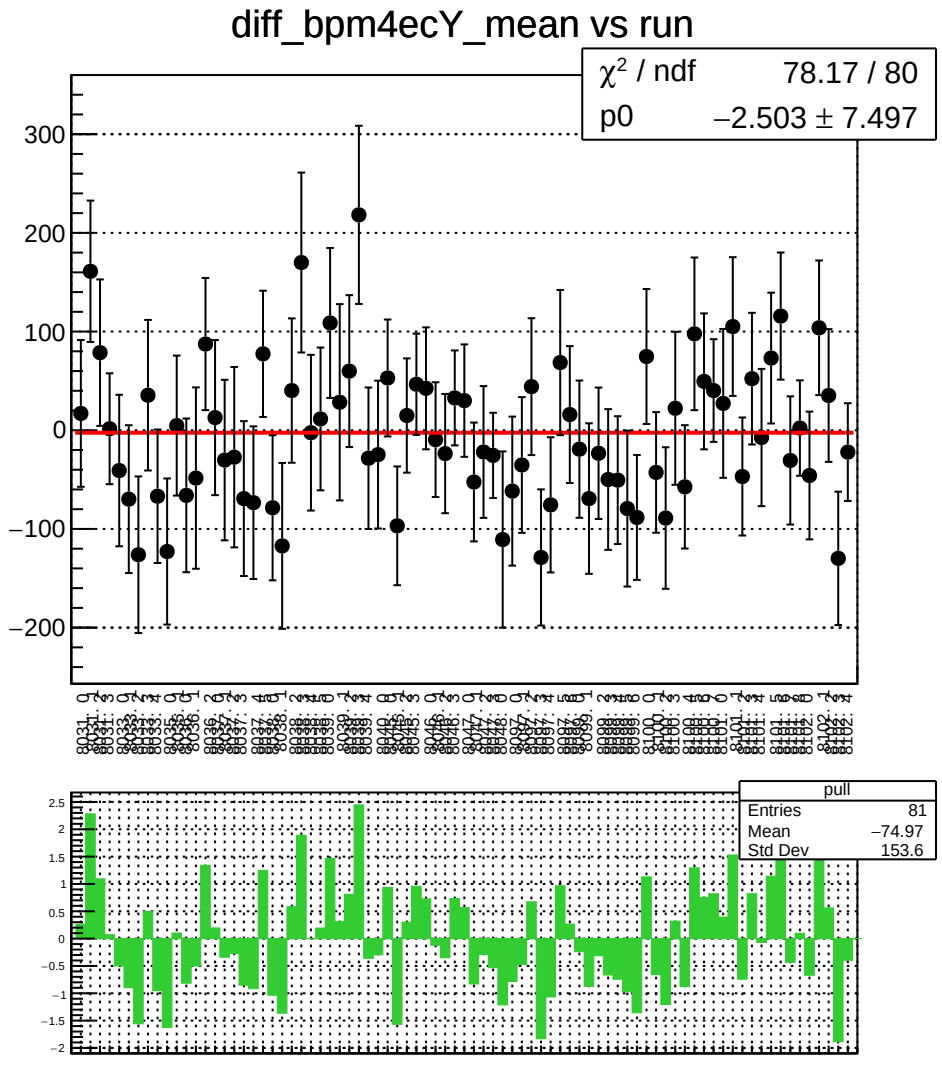

pull1D
Entries 81
Mean −0.0005143
Std Dev 0.9616
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

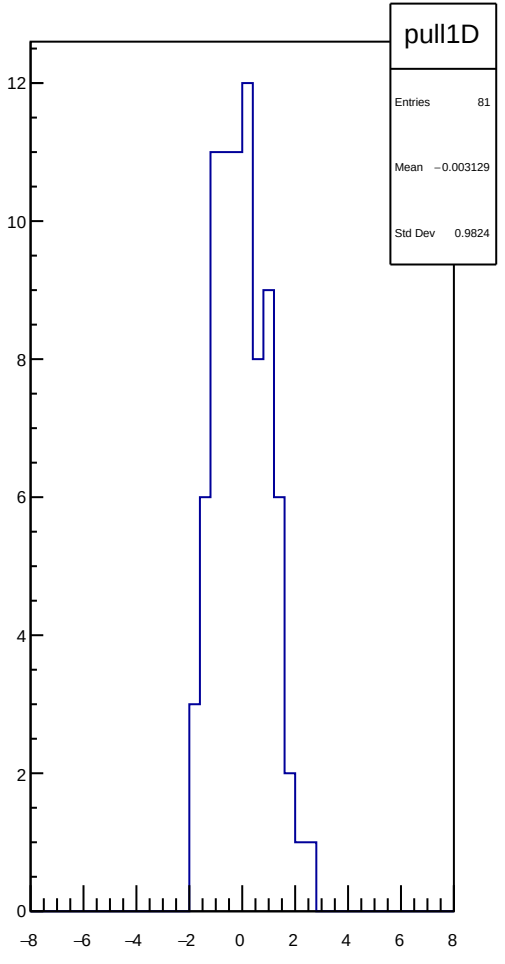

diff_bpm4acY_rms vs run
χ² / ndf 2.728e+04 / 80
p0 7142 ± 5.701
10000
9000
8000
7000
6000

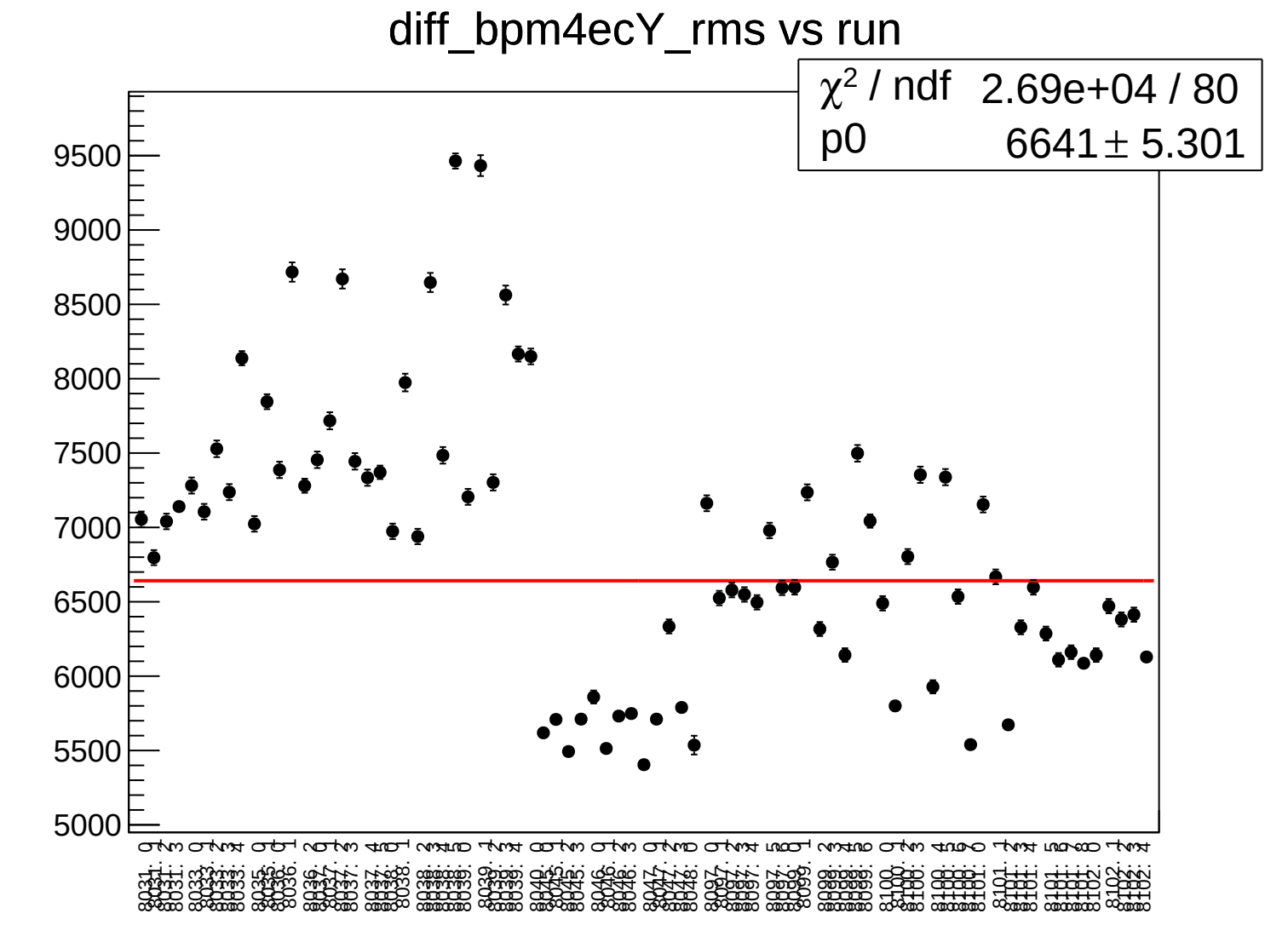

diff_bpm4ecX_mean vs run
χ² / ndf 98.48 / 80
p0 −17.52 ± 21.55
pull
Entries 81
Mean −304.9
Std Dev 362.3

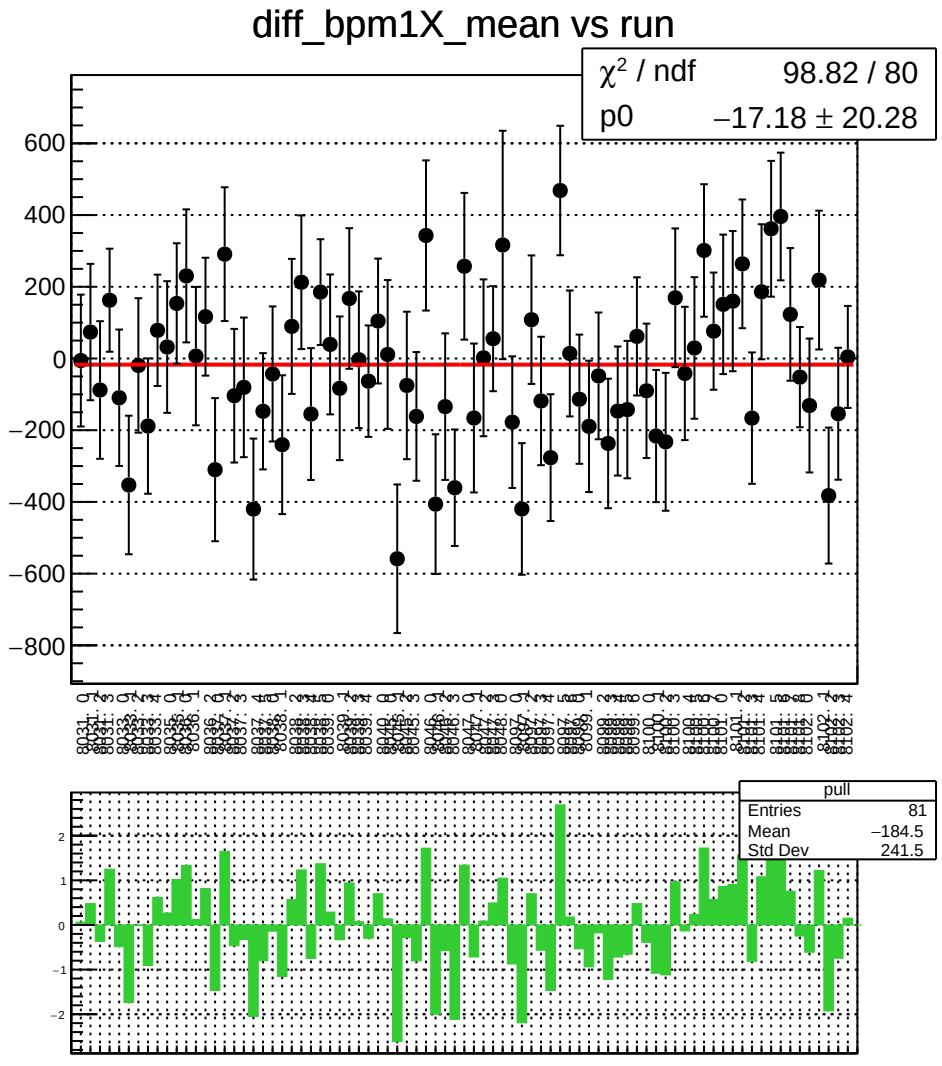

pull1D
Entries 81
Mean −0.006037
Std Dev 1.103

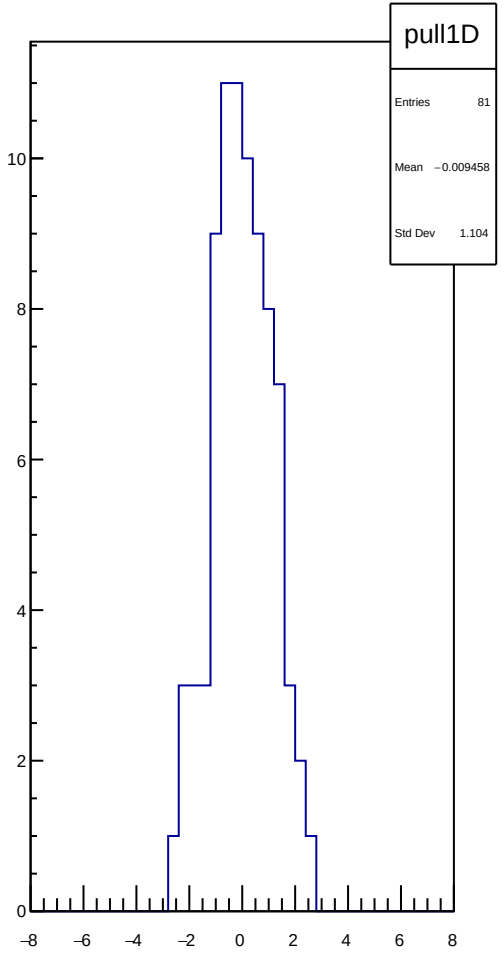

diff_bpm4ecX_rms vs run
χ² / ndf 1586 / 80
p0 1.925e+04 ± 15.24
21000
20500
20000
19500
19000
18500
18000

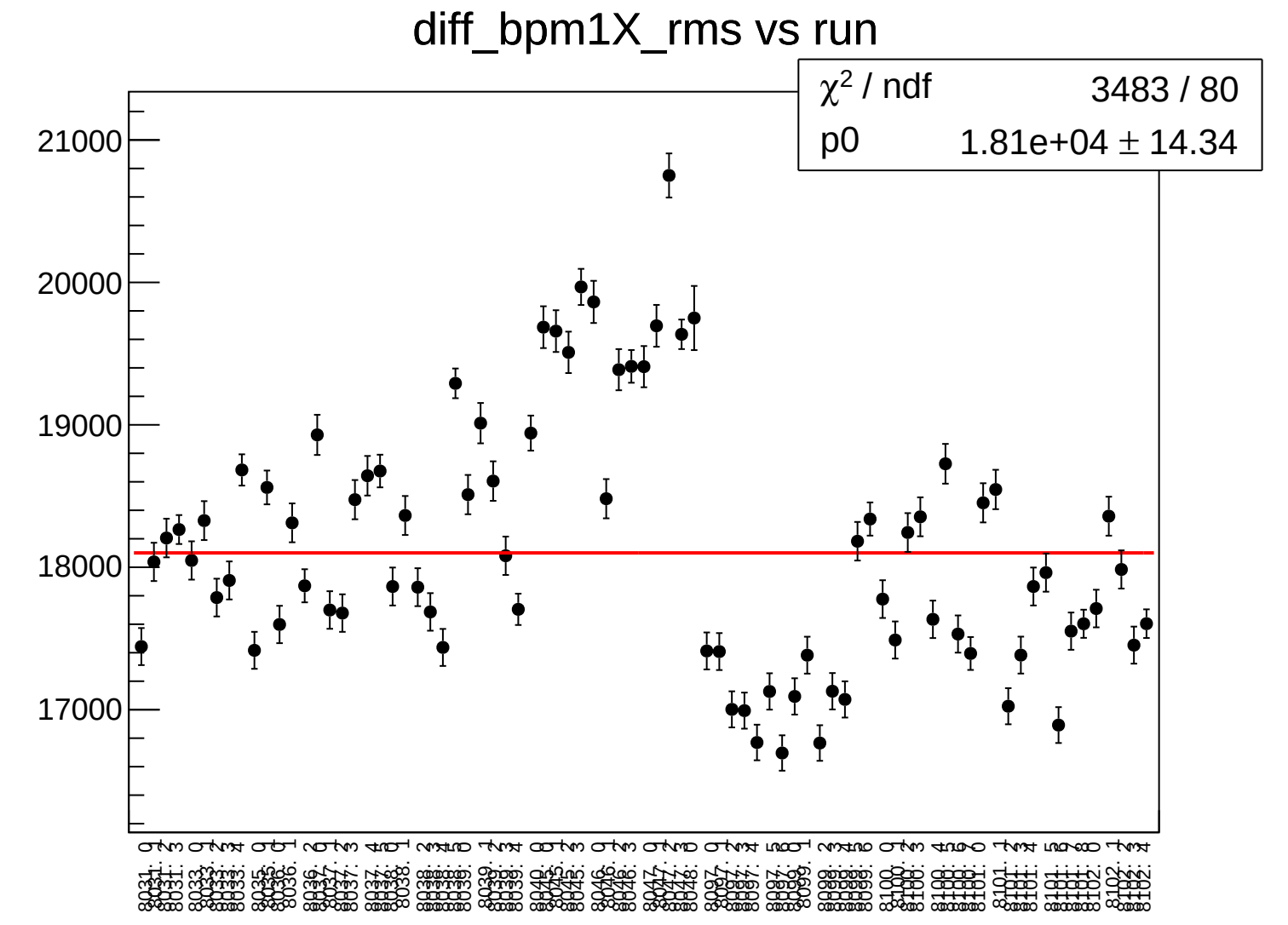

diff_bpm4ecY_mean vs run
χ² / ndf 78.17 / 80
p0 −2.503 ± 7.497
300
200
100
0
−100
−200
pull
Entries 81
Mean −74.97
Std Dev 153.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

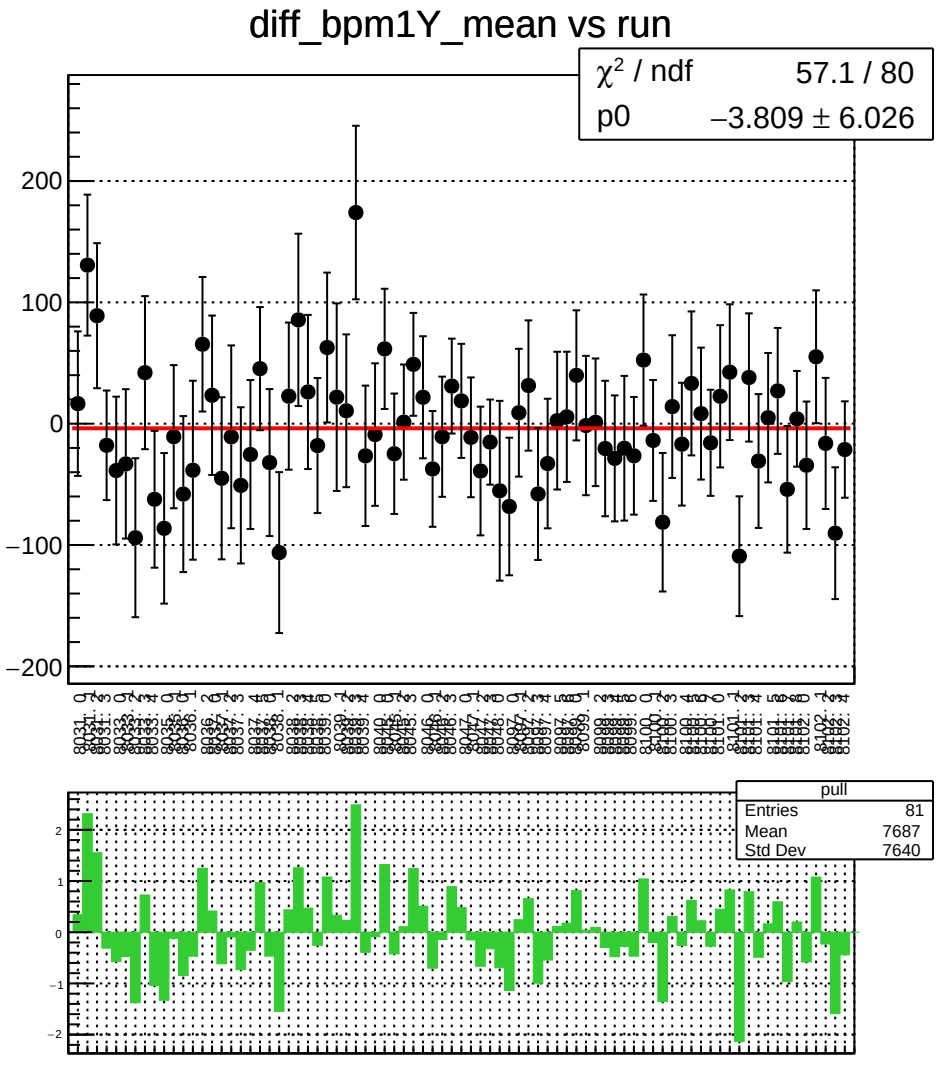

pull1D
Entries 81
Mean −0.003129
Std Dev 0.9824
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

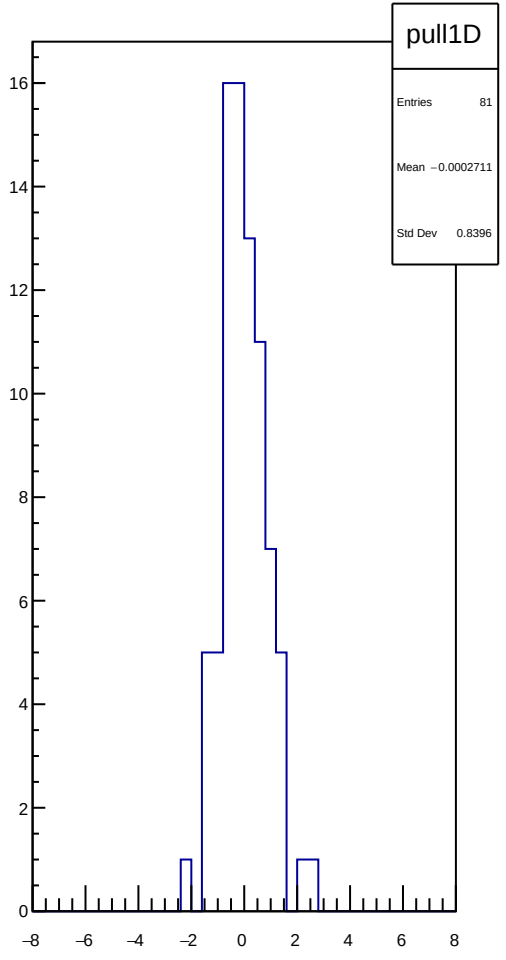

diff_bpm4ecY_rms vs run
χ² / ndf 2.69e+04 / 80
p0 6641 ± 5.301
9500
9000
8500
8000
7500
7000
6500
6000
5500
5000

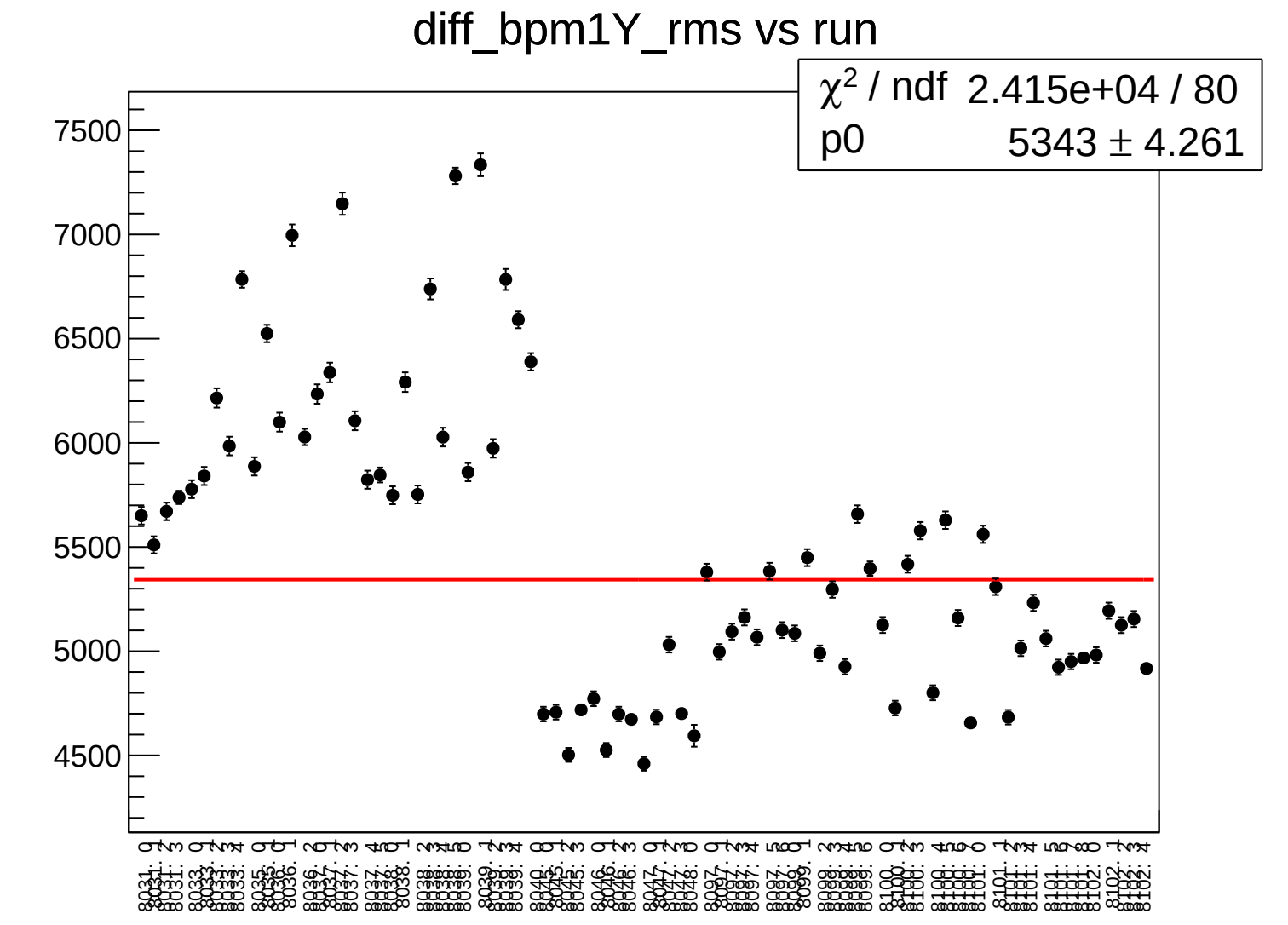

diff_bpm1X_mean vs run
χ² / ndf 98.82 / 80
p0 −17.18 ± 20.28
pull
Entries 81
Mean −184.5
Std Dev 241.5

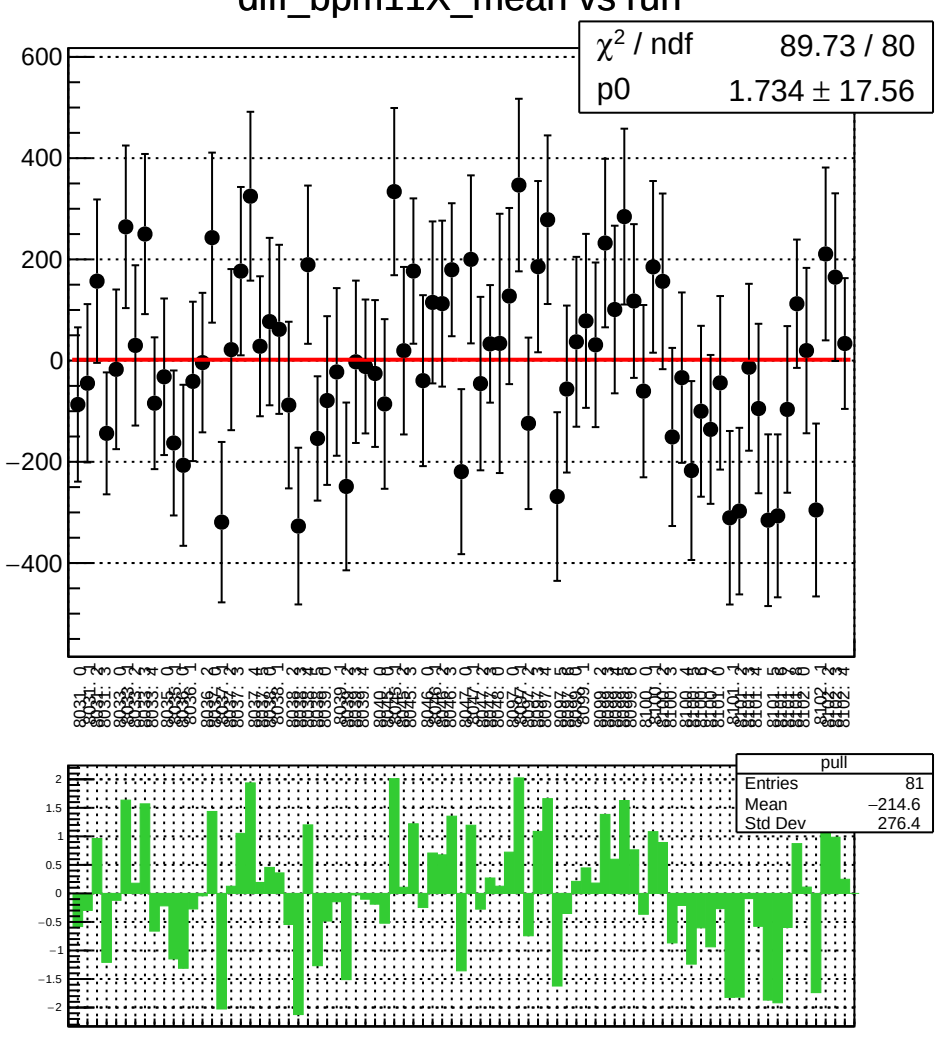

pull1D
Entries 81
Mean −0.009458
Std Dev 1.104

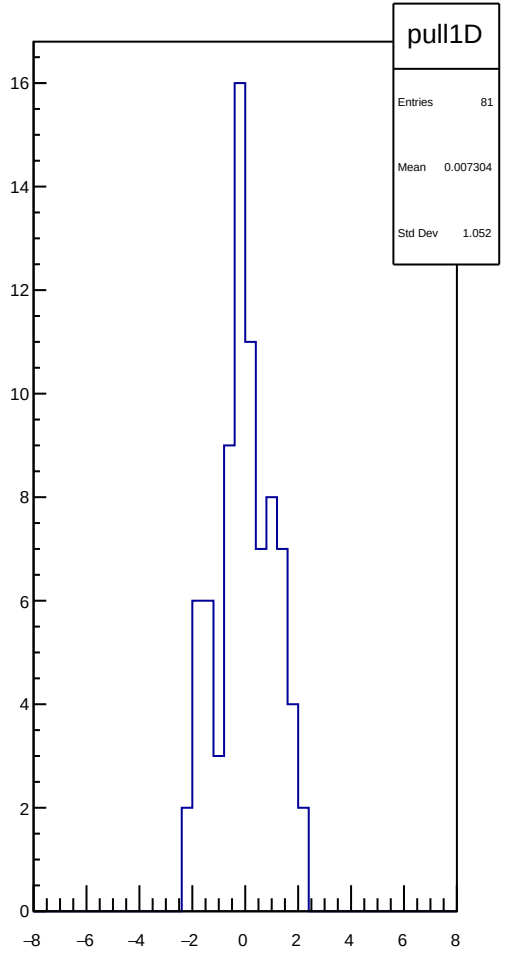

diff_bpm1X_rms vs run
χ² / ndf 3483 / 80
p0 1.81e+04 ± 14.34
21000
20000
19000
18000
17000

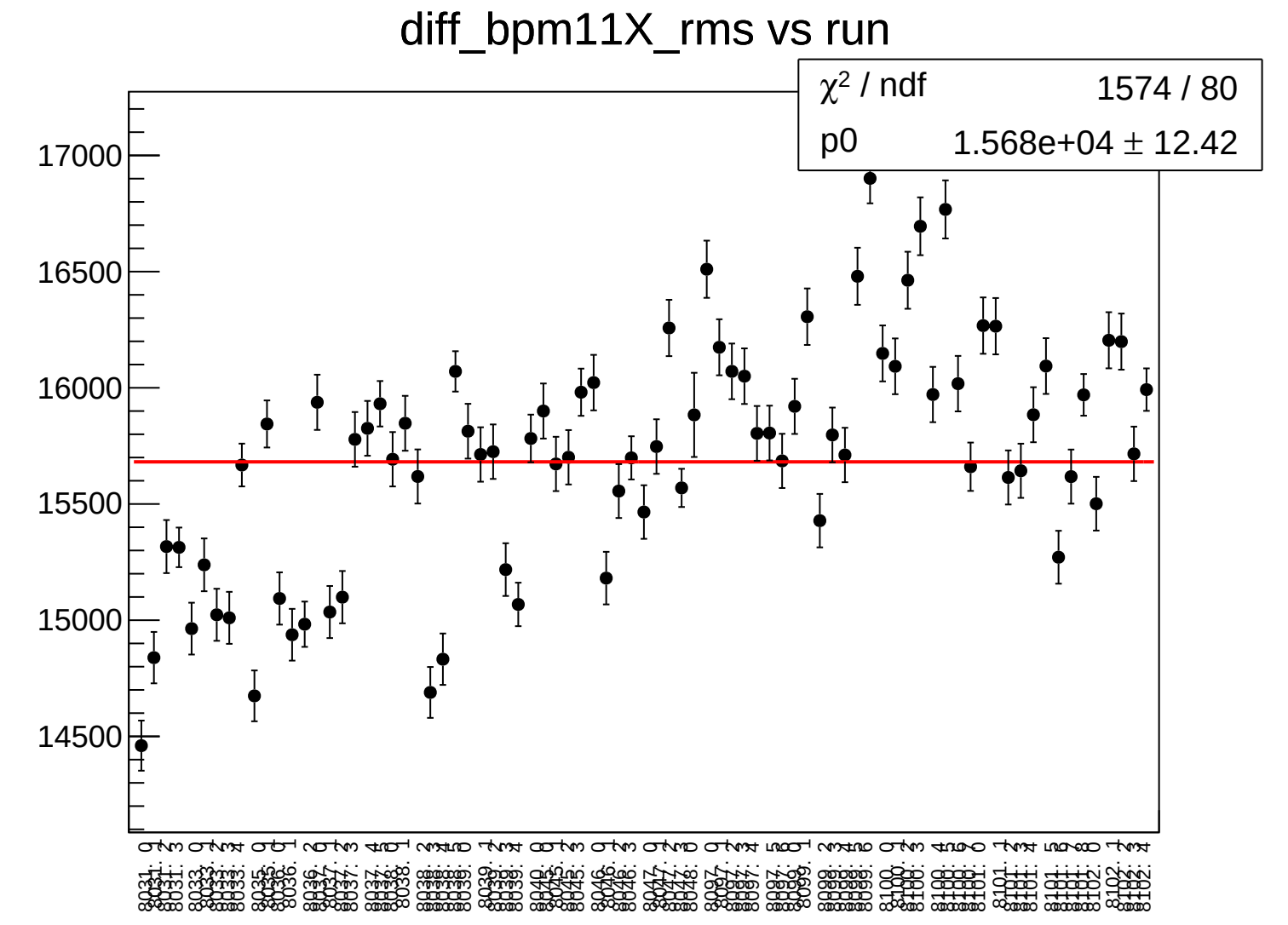

diff_bpm1Y_mean vs run
χ² / ndf 57.1 / 80
p0 −3.809 ± 6.026
200
100
0
−100
−200
pull
Entries 81
Mean 7687
Std Dev 7640
2
1
0
−1
−2

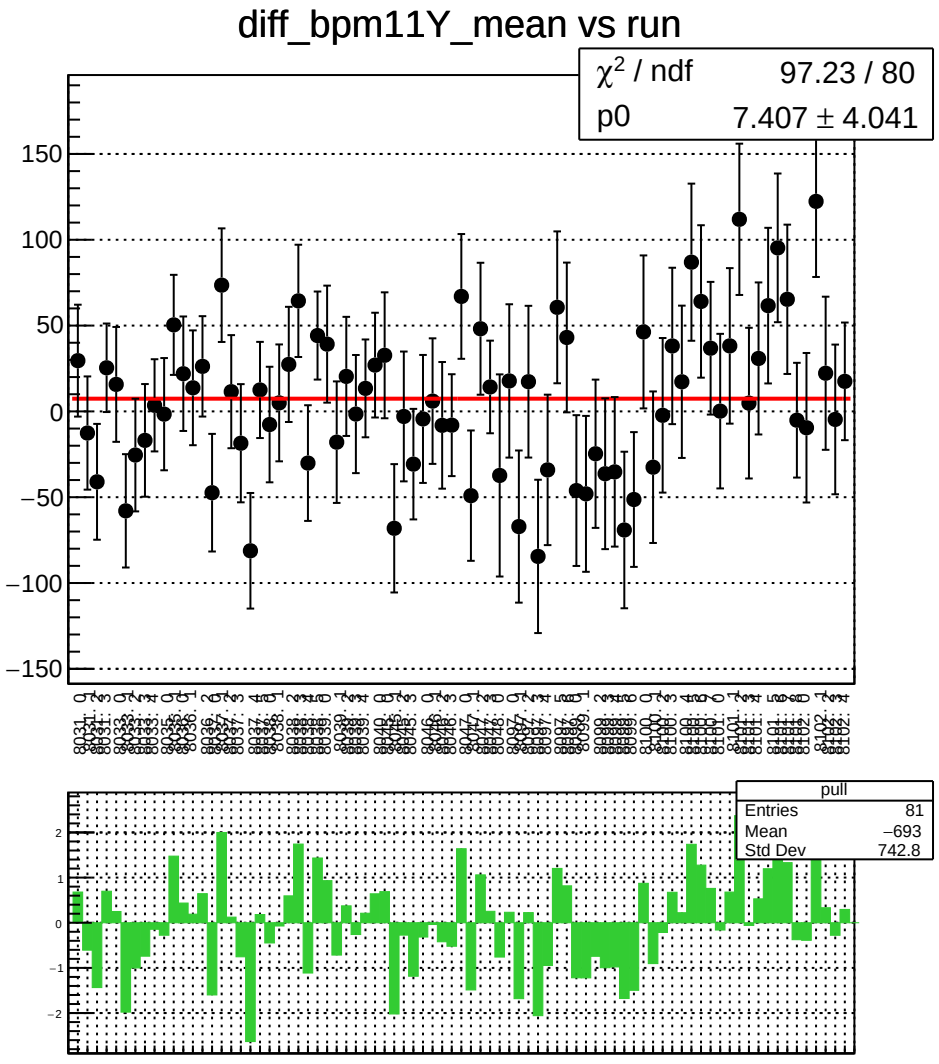

pull1D
Entries 81
Mean −0.0002711
Std Dev 0.8396
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

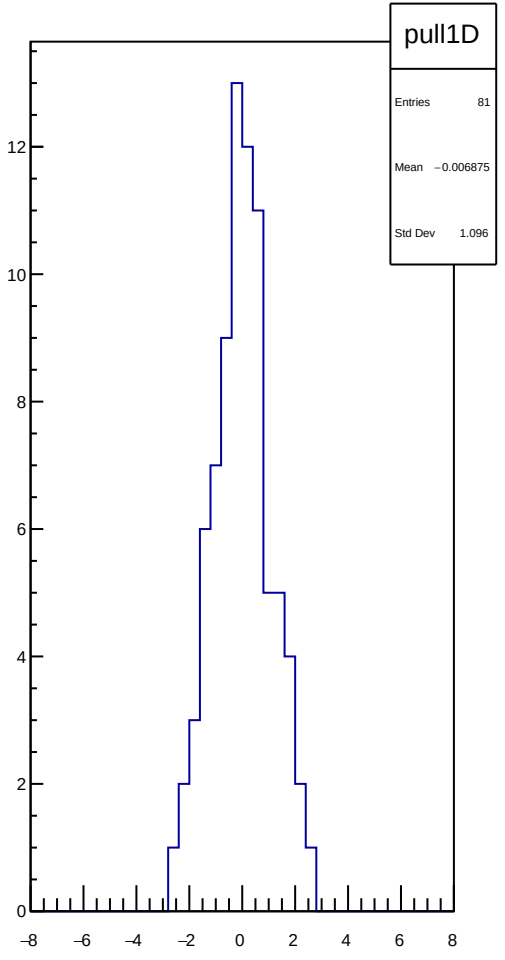

diff_bpm1Y_rms vs run
χ² / ndf 2.415e+04 / 80
p0 5343 ± 4.261
7500
7000
6500
6000
5500
5000
4500

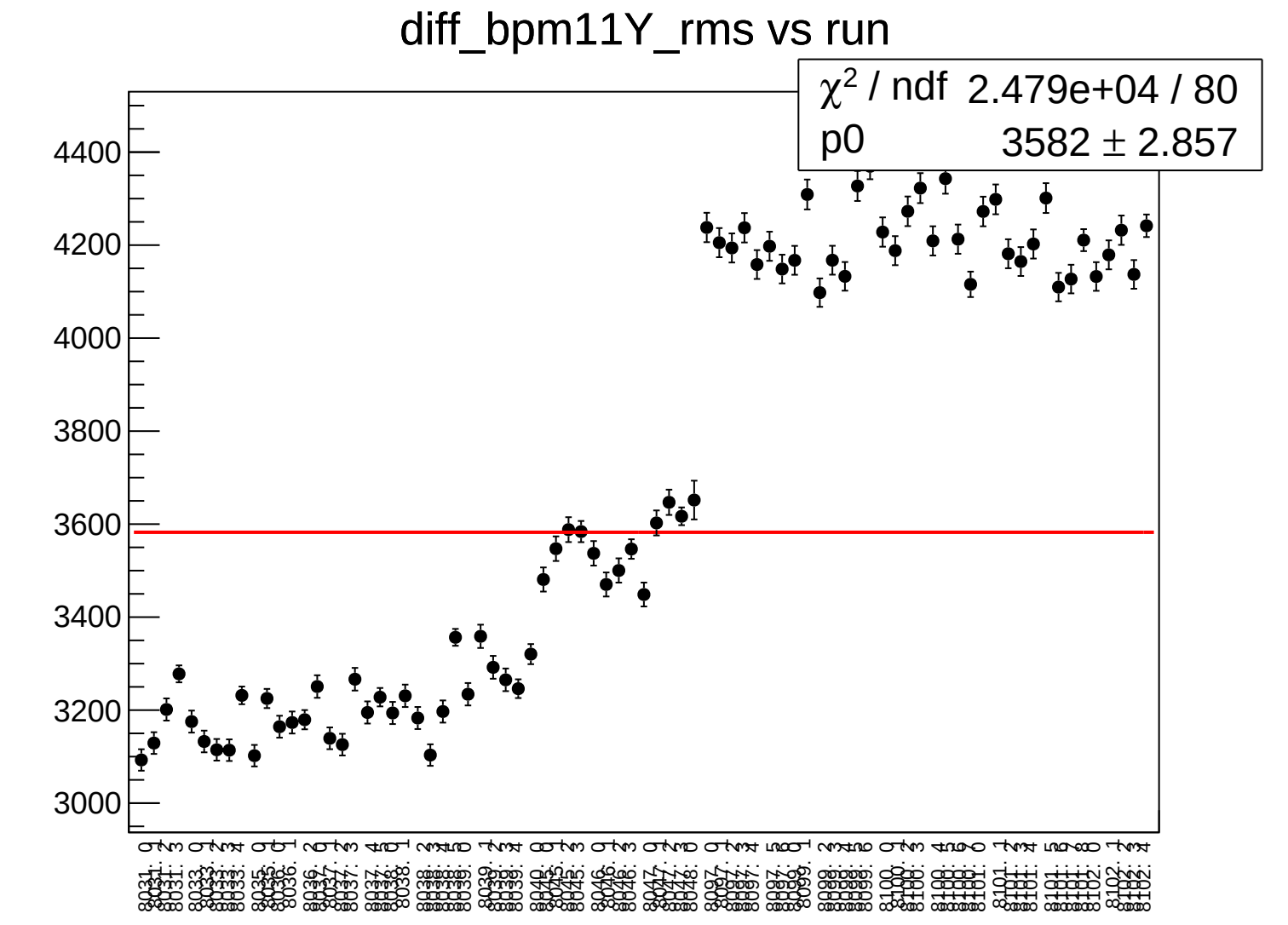

diff_bpm11X_mean vs run
χ^2 / ndf 89.73 / 80
p0 1.734 ± 17.56
pull
Entries 81
Mean −214.6
Std Dev 276.4

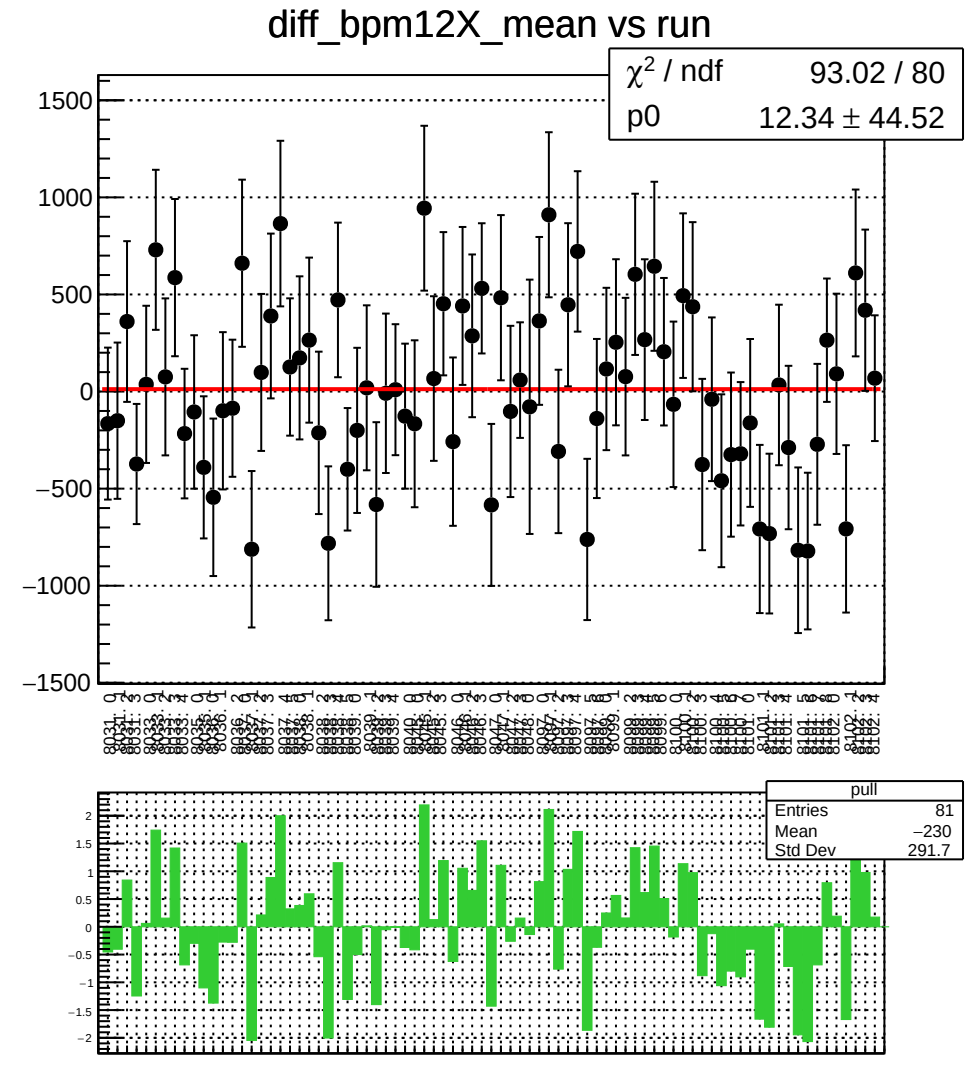

pull1D
Entries 81
Mean 0.007304
Std Dev 1.052

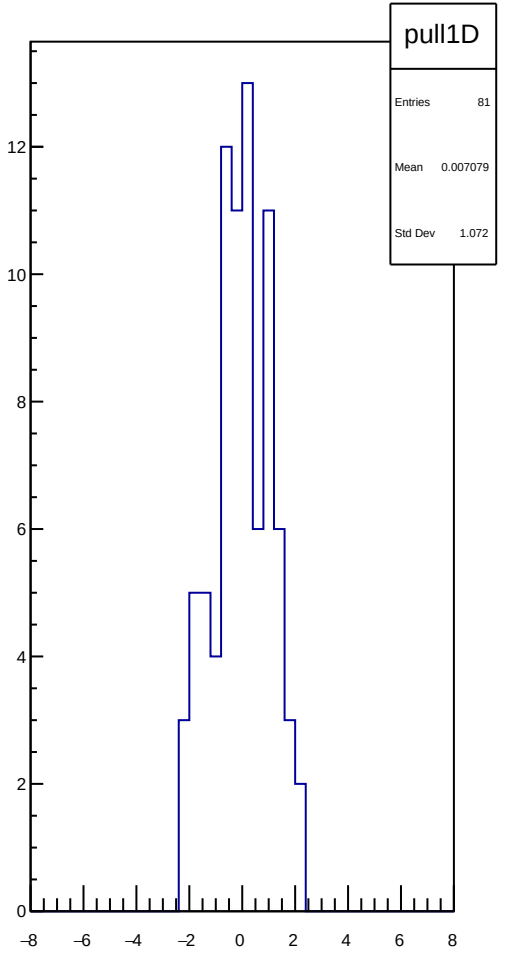

diff_bpm11X_rms vs run
χ² / ndf 1574 / 80
p0 1.568e+04 ± 12.42
17000
16500
16000
15500
15000
14500

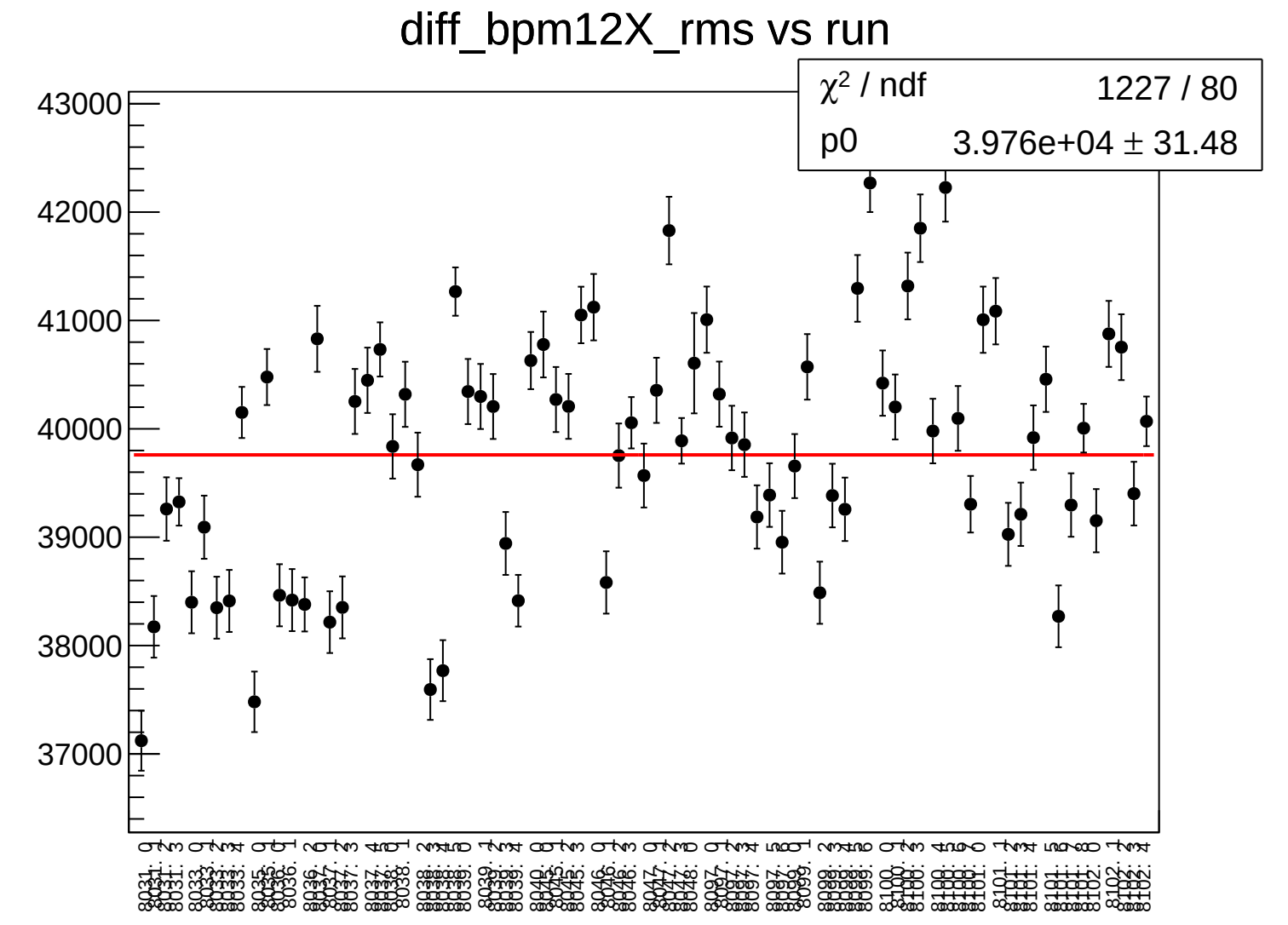

diff_bpm11Y_mean vs run
χ² / ndf 97.23 / 80
p0 7.407 ± 4.041
150
100
50
0
−50
−100
−150
pull
Entries 81
Mean −693
Std Dev 742.8
2
1
0
−1
−2

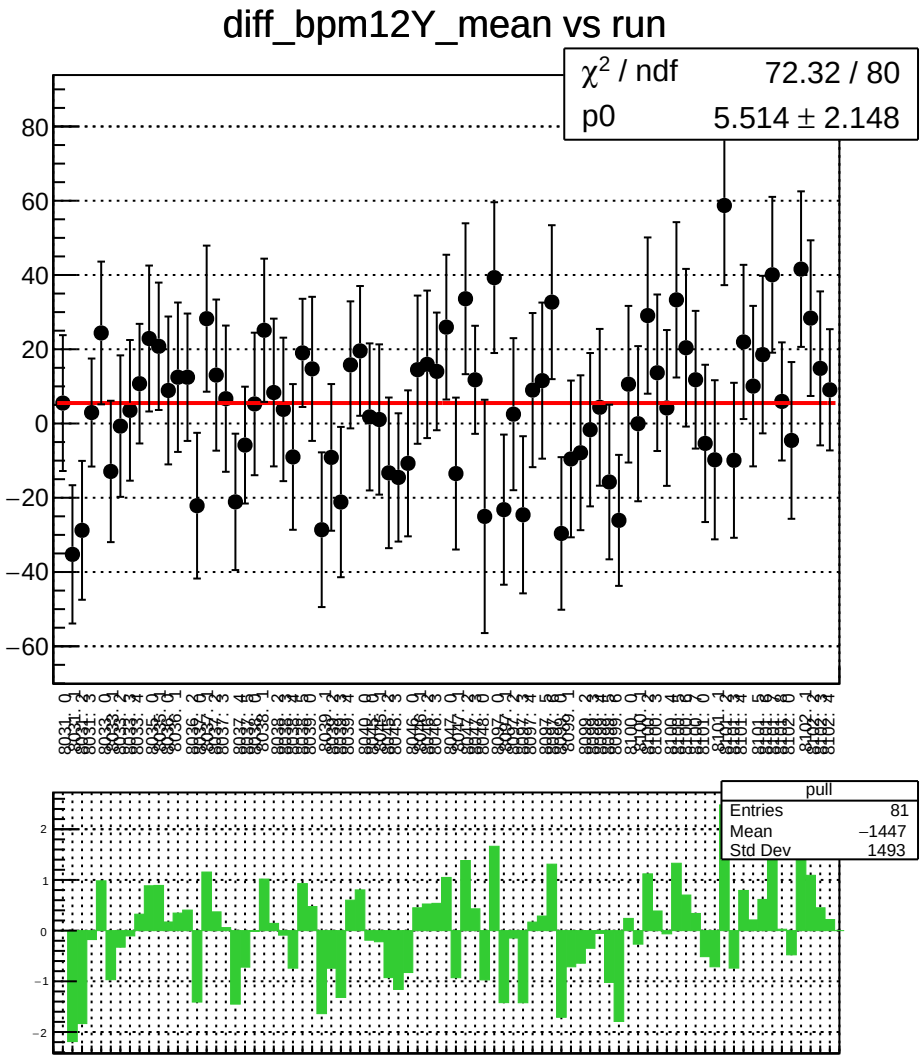

pull1D
Entries 81
Mean −0.006875
Std Dev 1.096
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

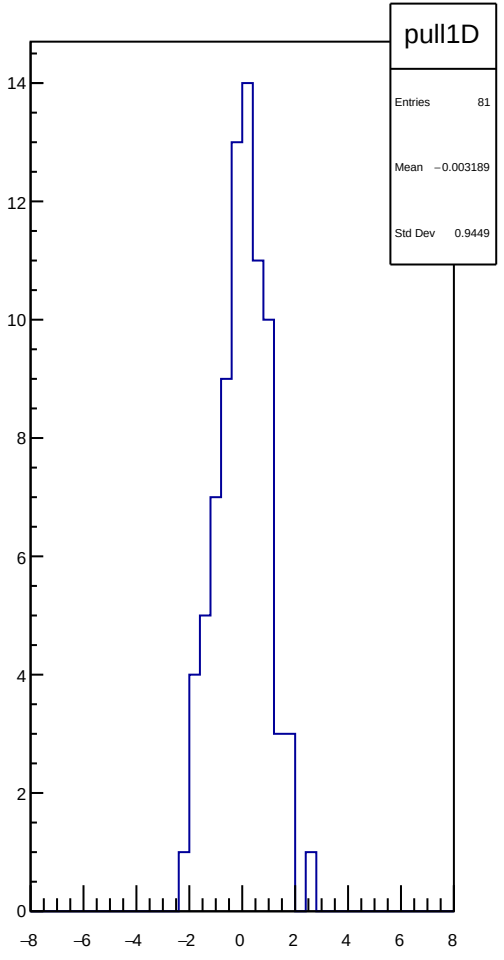

diff_bpm11Y_rms vs run
χ² / ndf 2.479e+04 / 80
p0 3582 ± 2.857
4400
4200
4000
3800
3600
3400
3200
3000

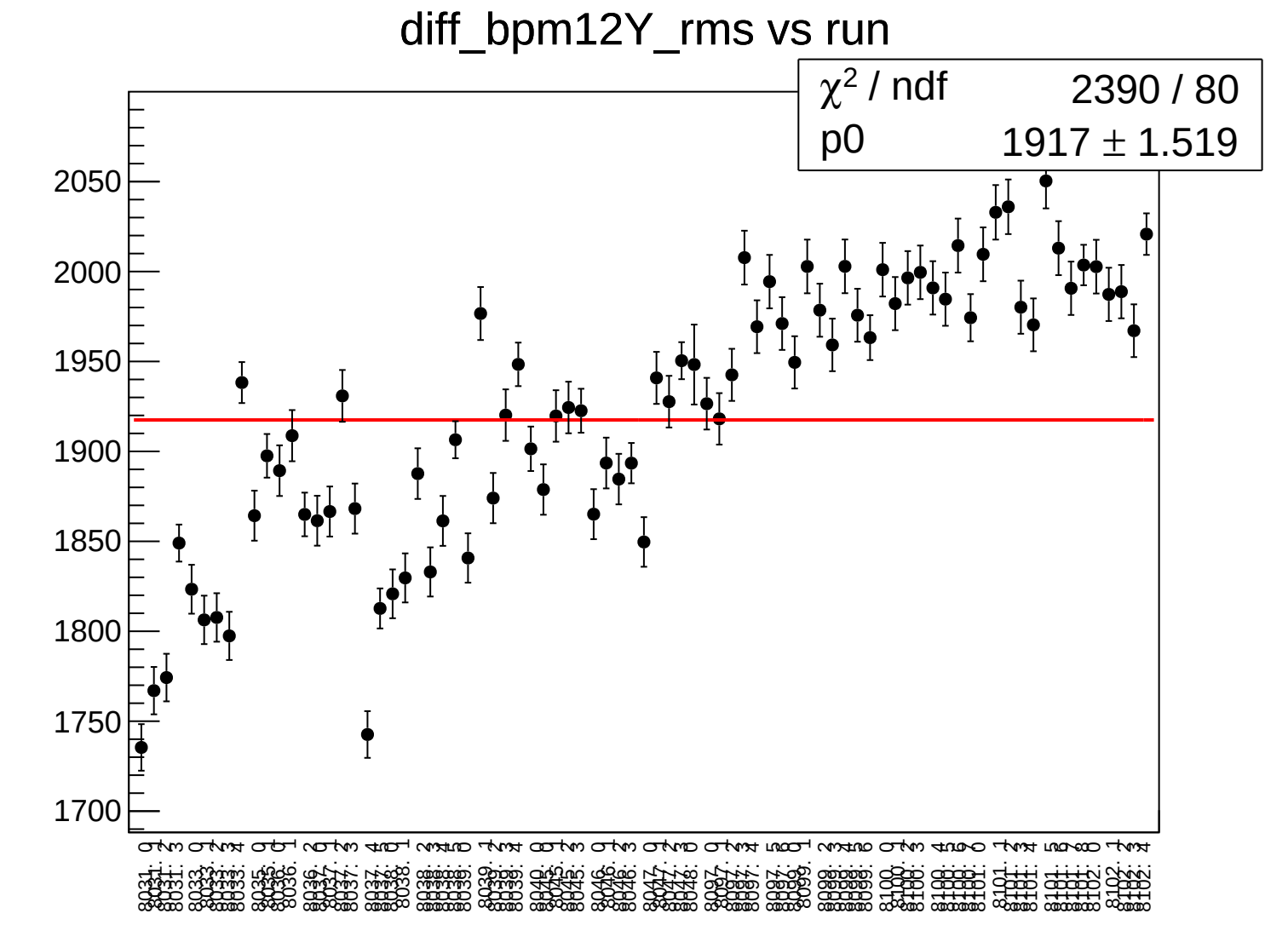

diff_bpm12X_mean vs run
χ² / ndf 93.02 / 80
p0 12.34 ± 44.52
pull
Entries 81
Mean −230
Std Dev 291.7

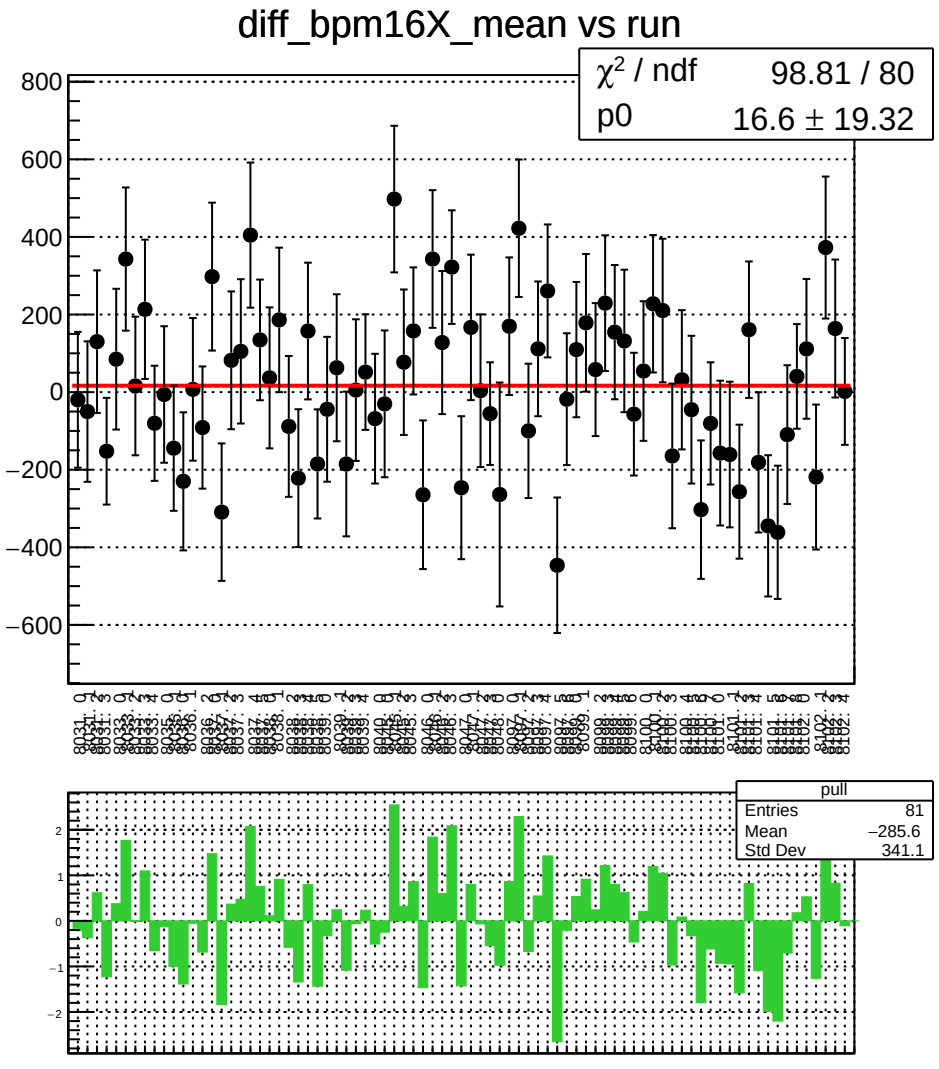

pull1D
Entries 81
Mean 0.007079
Std Dev 1.072

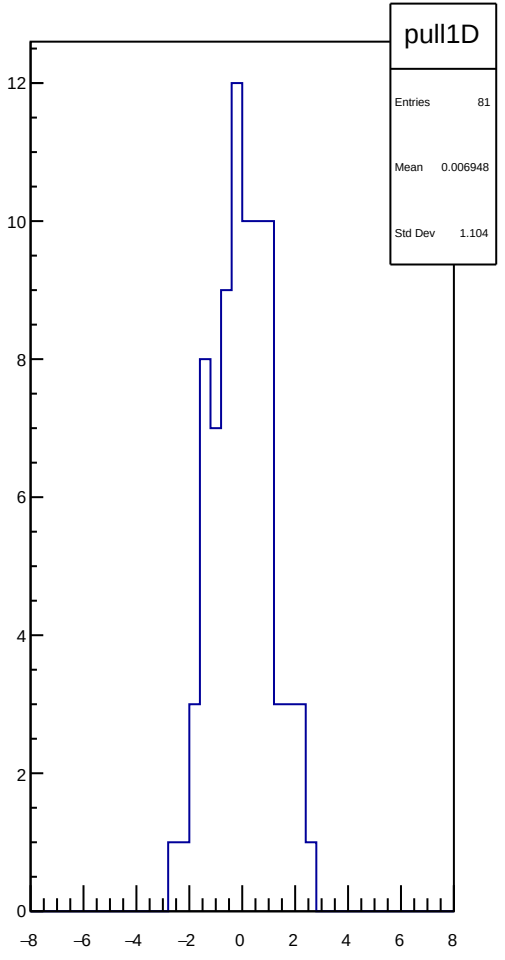

diff_bpm12X_rms vs run
χ² / ndf 1227 / 80
p0 3.976e+04 ± 31.48
43000
42000
41000
40000
39000
38000
37000

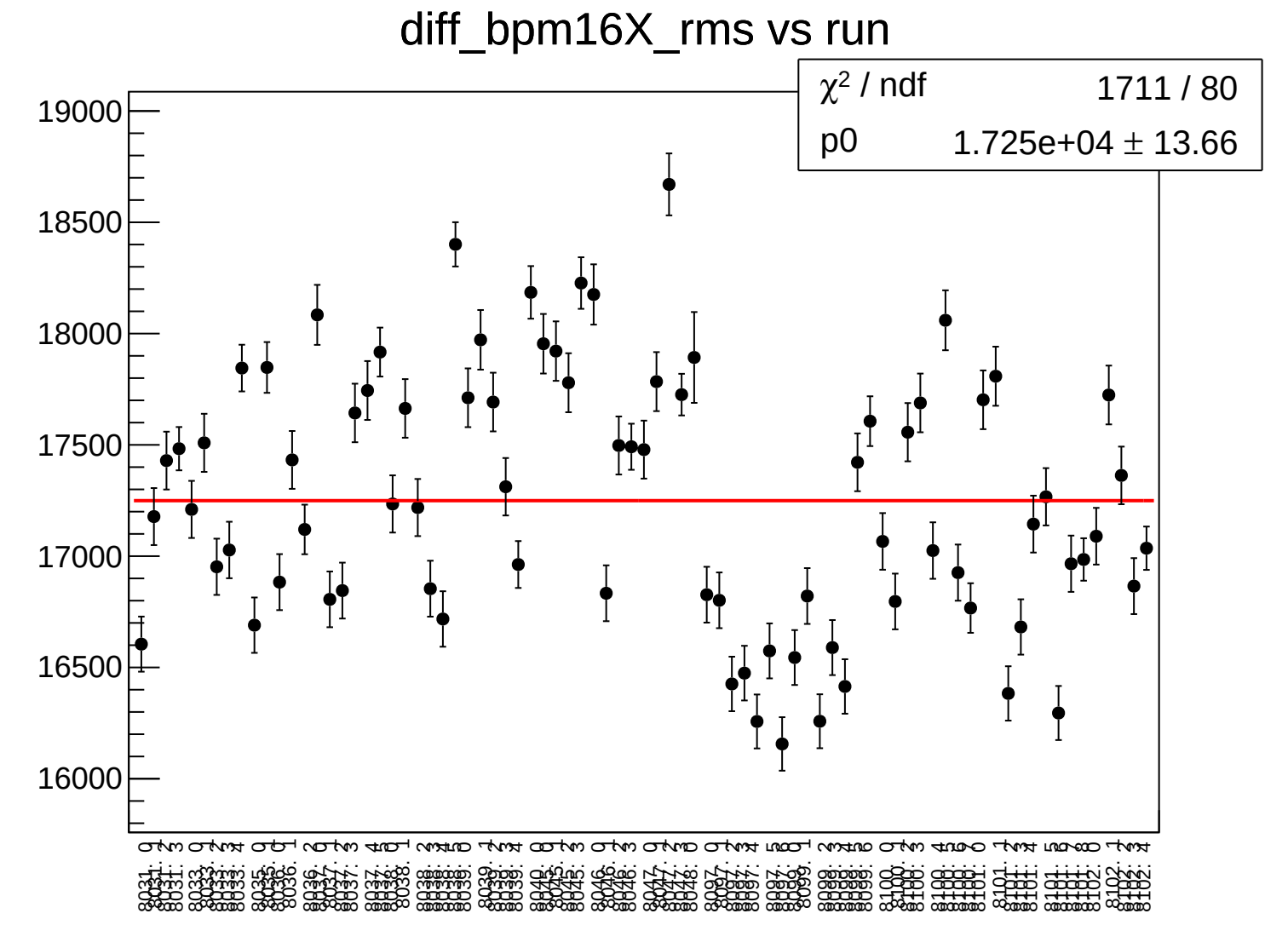

diff_bpm12Y_mean vs run
χ² / ndf 72.32 / 80
p0 5.514 ± 2.148
pull
Entries 81
Mean −1447
Std Dev 1493

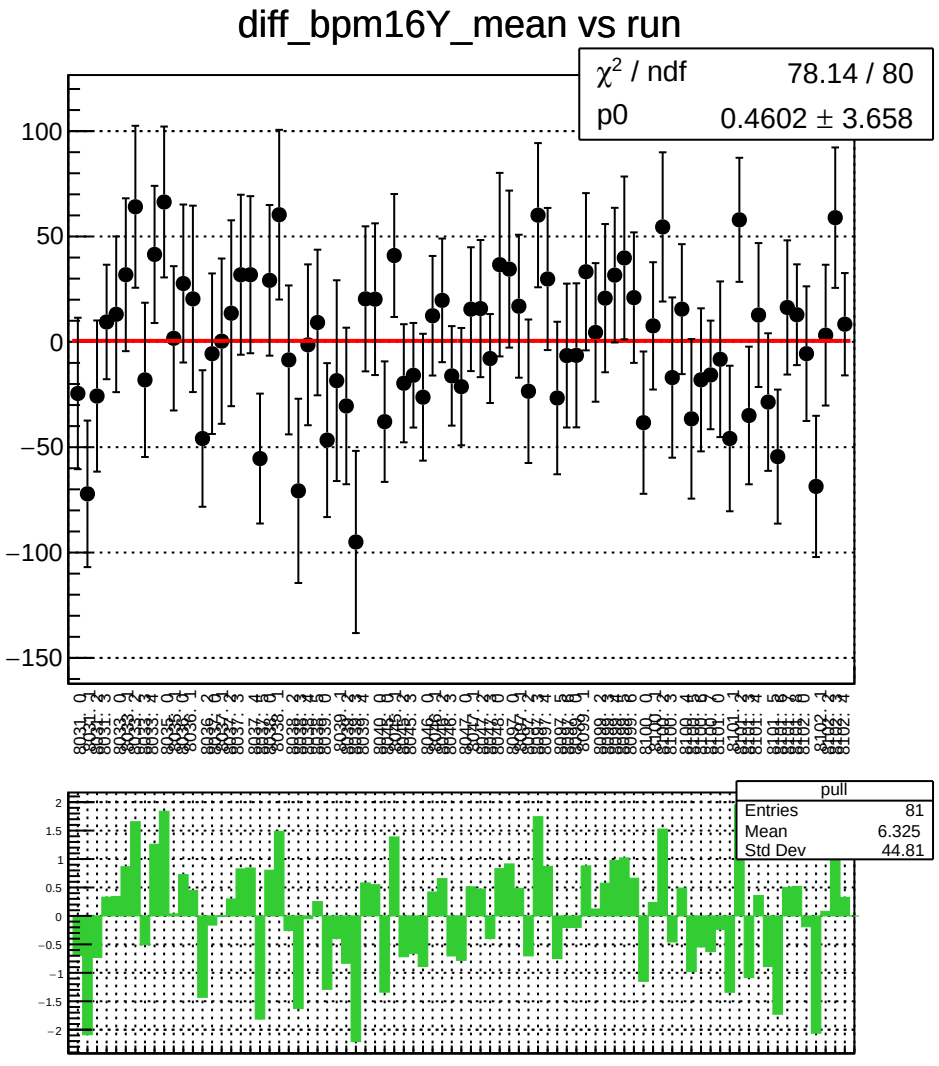

pull1D
Entries 81
Mean −0.003189
Std Dev 0.9449

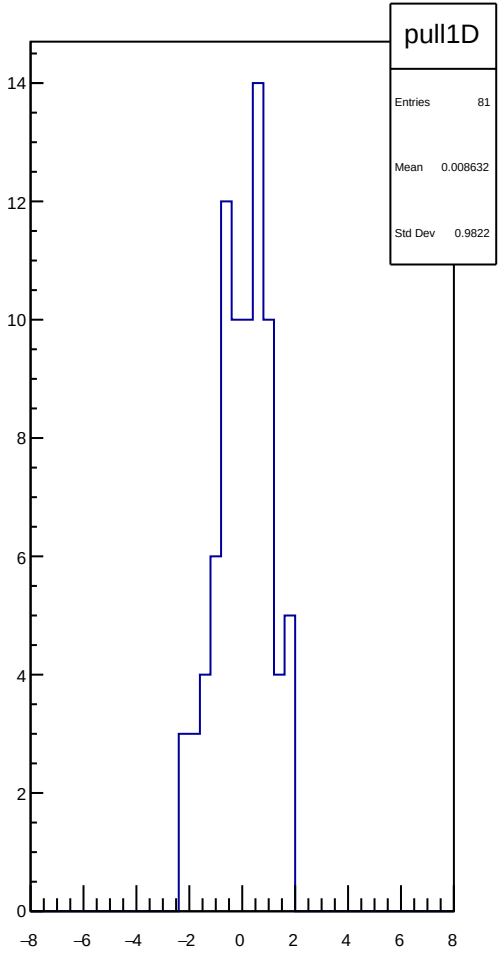

diff_bpm12Y_rms vs run
χ² / ndf 2390 / 80
p0 1917 ± 1.519
2050
2000
1950
1900
1850
1800
1750
1700

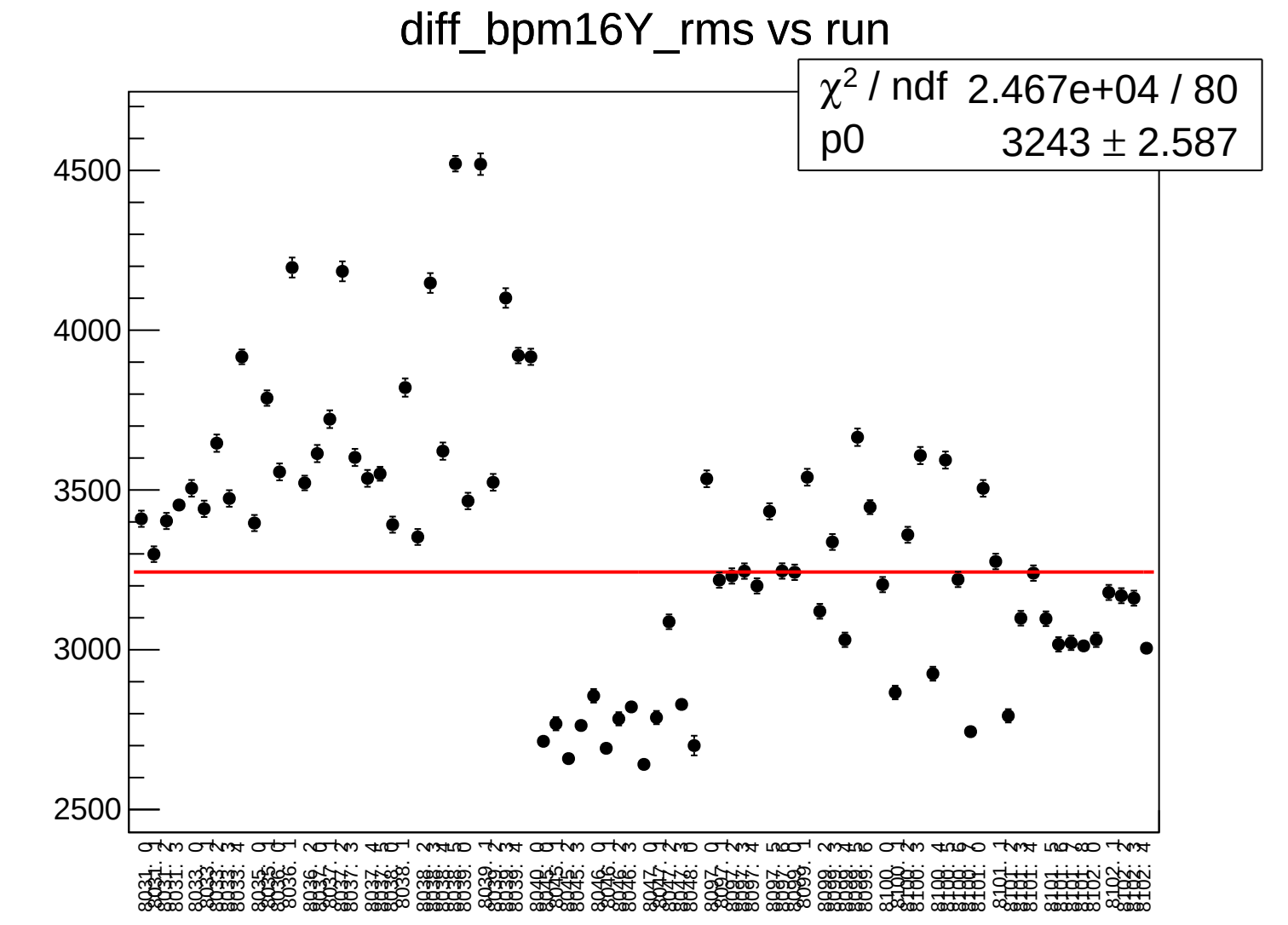

diff_bpm16X_mean vs run
χ^2 / ndf 98.81 / 80
p0 16.6 ± 19.32
pull
Entries 81
Mean −285.6
Std Dev 341.1

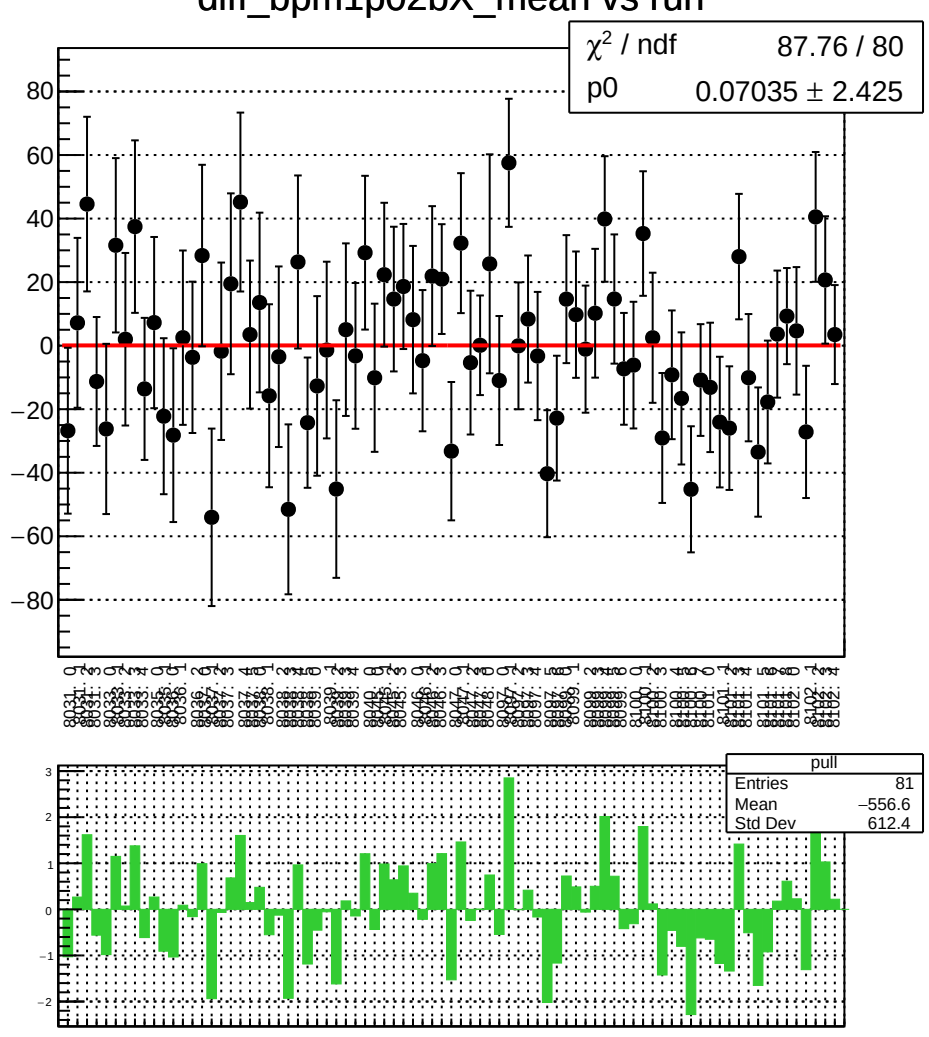

pull1D
Entries 81
Mean 0.006948
Std Dev 1.104

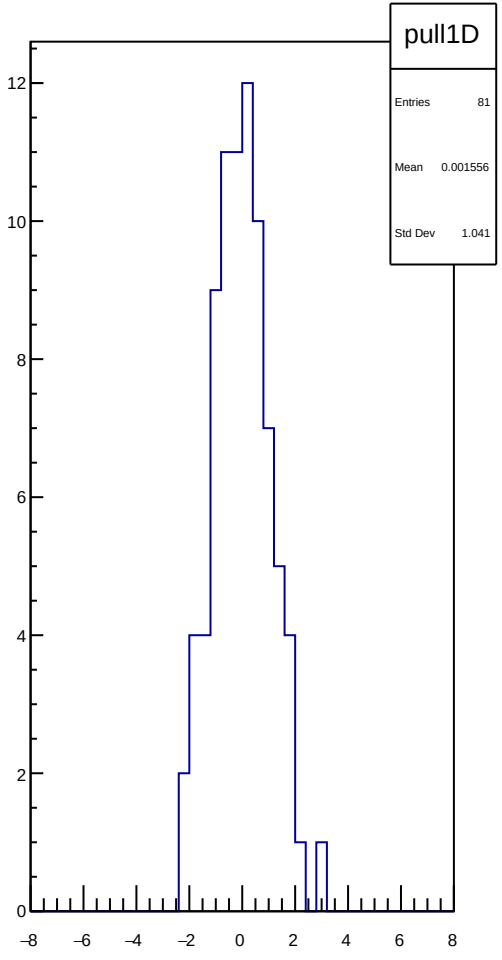

diff_bpm16X_rms vs run
χ² / ndf 1711 / 80
p0 1.725e+04 ± 13.66
19000
18500
18000
17500
17000
16500
16000

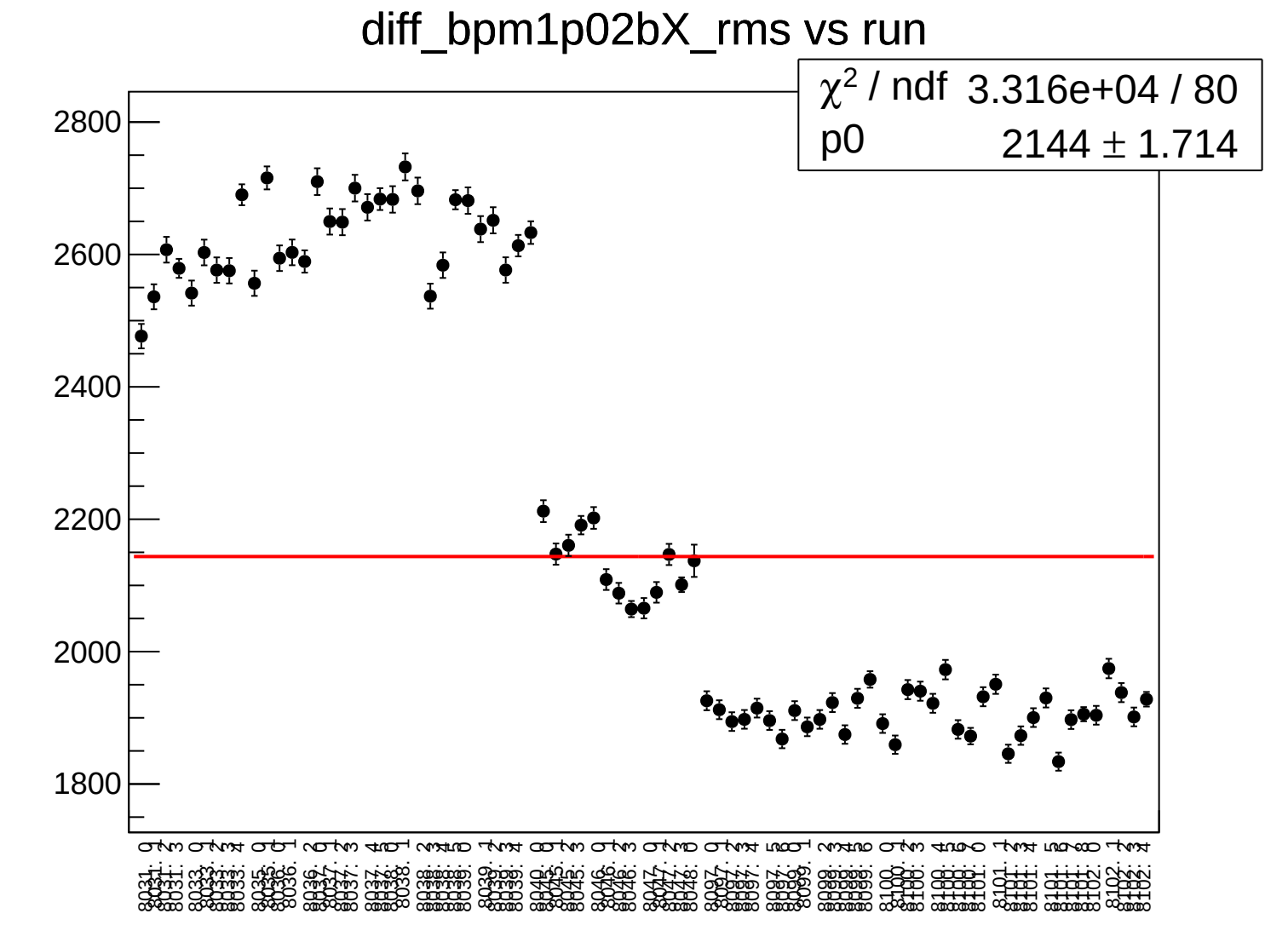

diff_bpm16Y_mean vs run
χ² / ndf 78.14 / 80
p0 0.4602 ± 3.658
pull
Entries 81
Mean 6.325
Std Dev 44.81

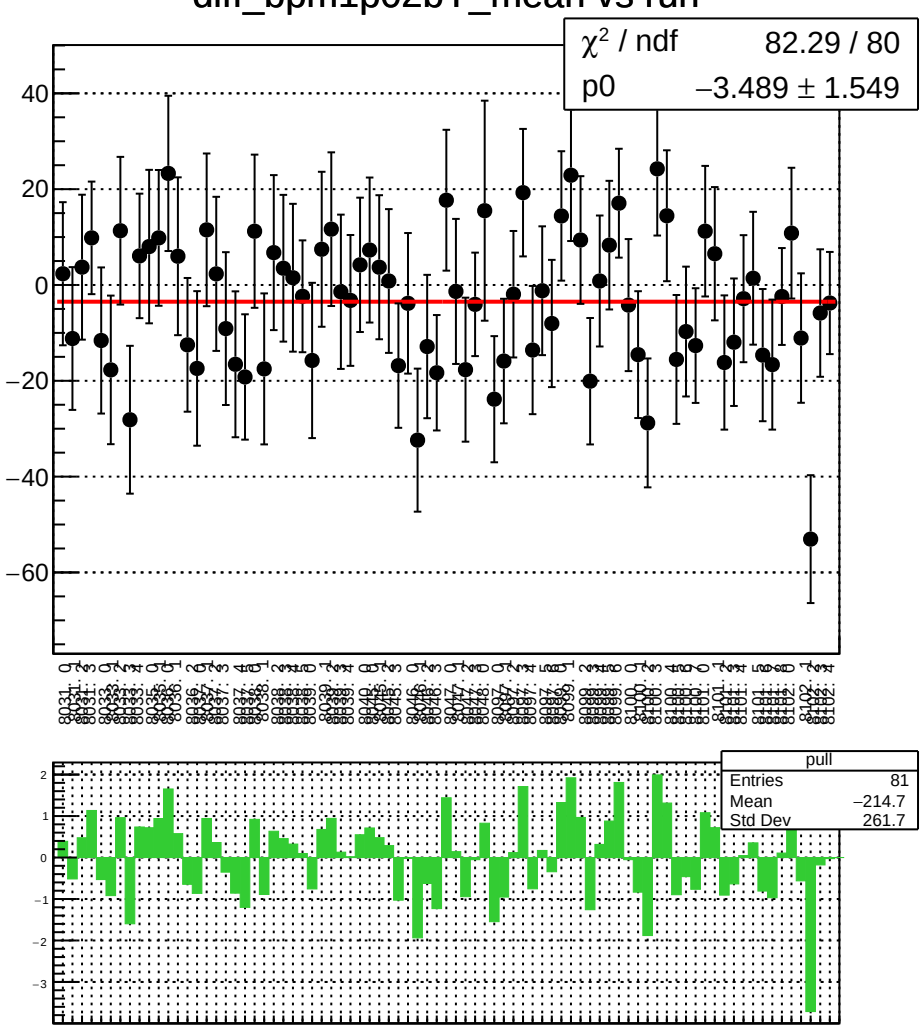

pull1D
Entries 81
Mean 0.008632
Std Dev 0.9822

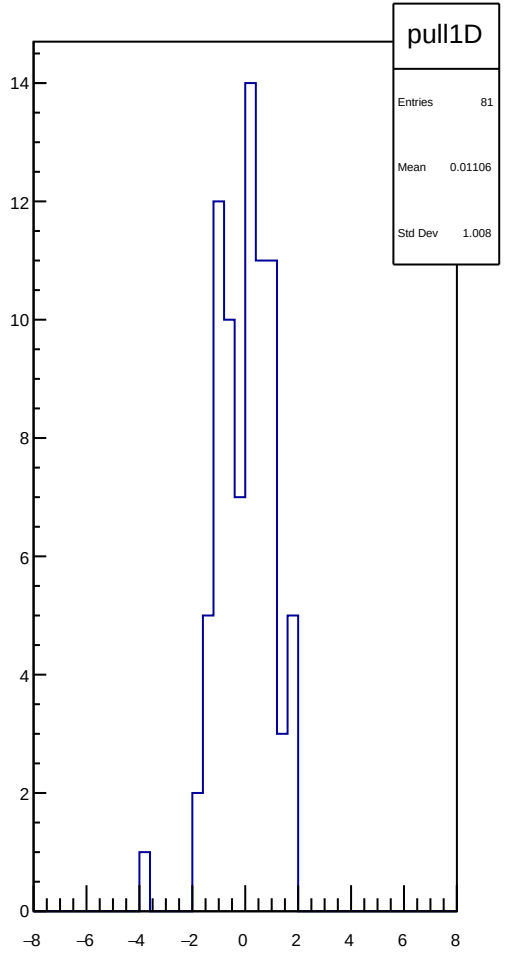

diff_bpm16Y_rms vs run
χ² / ndf 2.467e+04 / 80
p0 3243 ± 2.587
4500
4000
3500
3000
2500

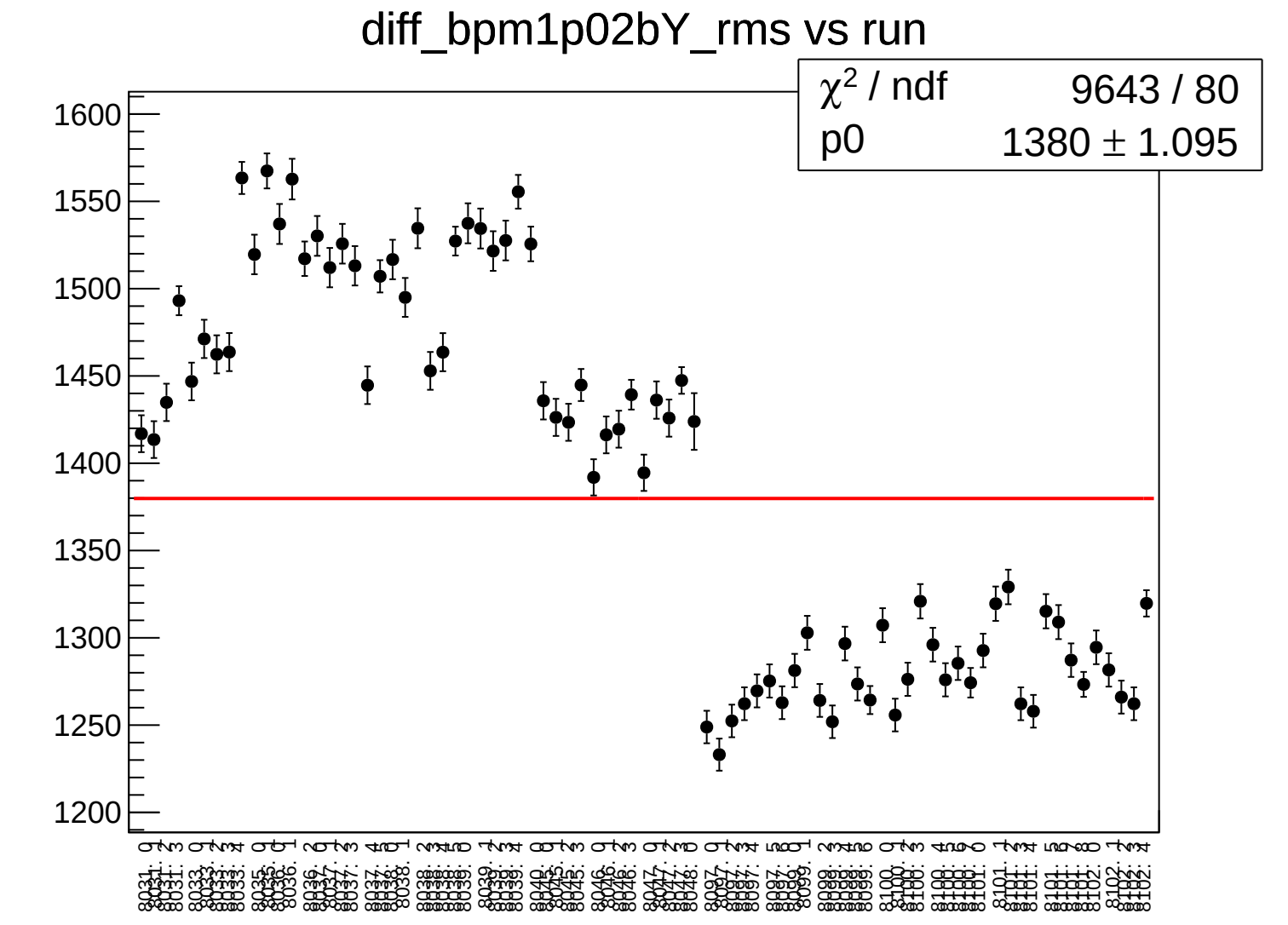

diff_bpm1p02bX_mean vs run
χ² / ndf 87.76 / 80
p0 0.07035 ± 2.425
pull
Entries 81
Mean −556.6
Std Dev 612.4

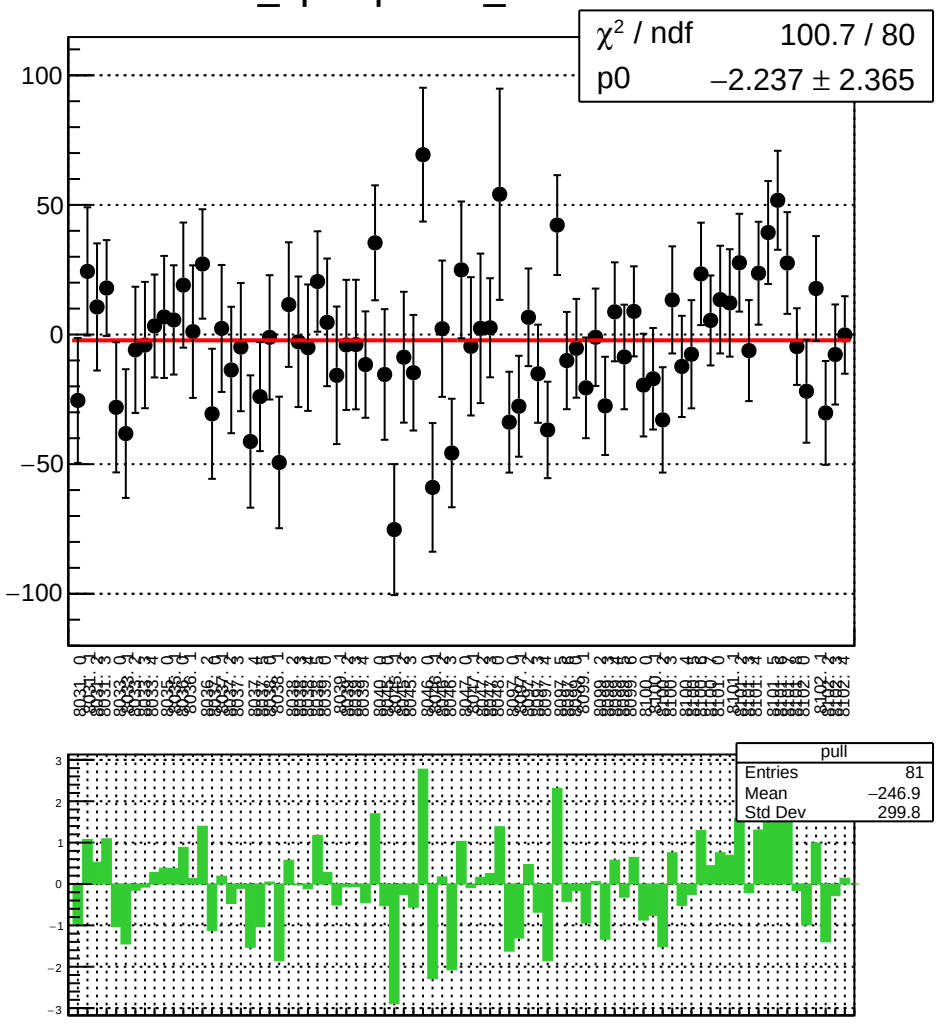

pull1D
Entries 81
Mean 0.001556
Std Dev 1.041

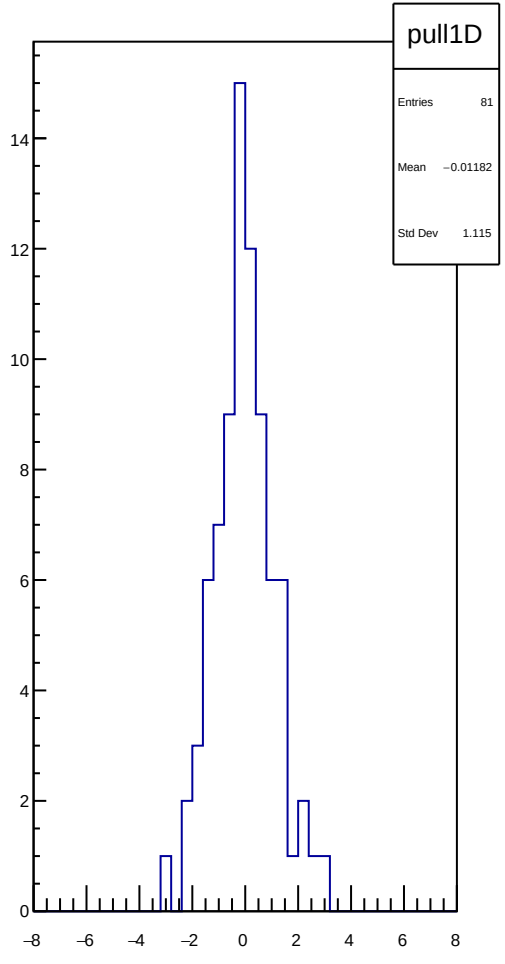

diff_bpm1p02bX_rms vs run
χ² / ndf 3.316e+04 / 80
p0 2144 ± 1.714
2800
2600
2400
2200
2000
1800

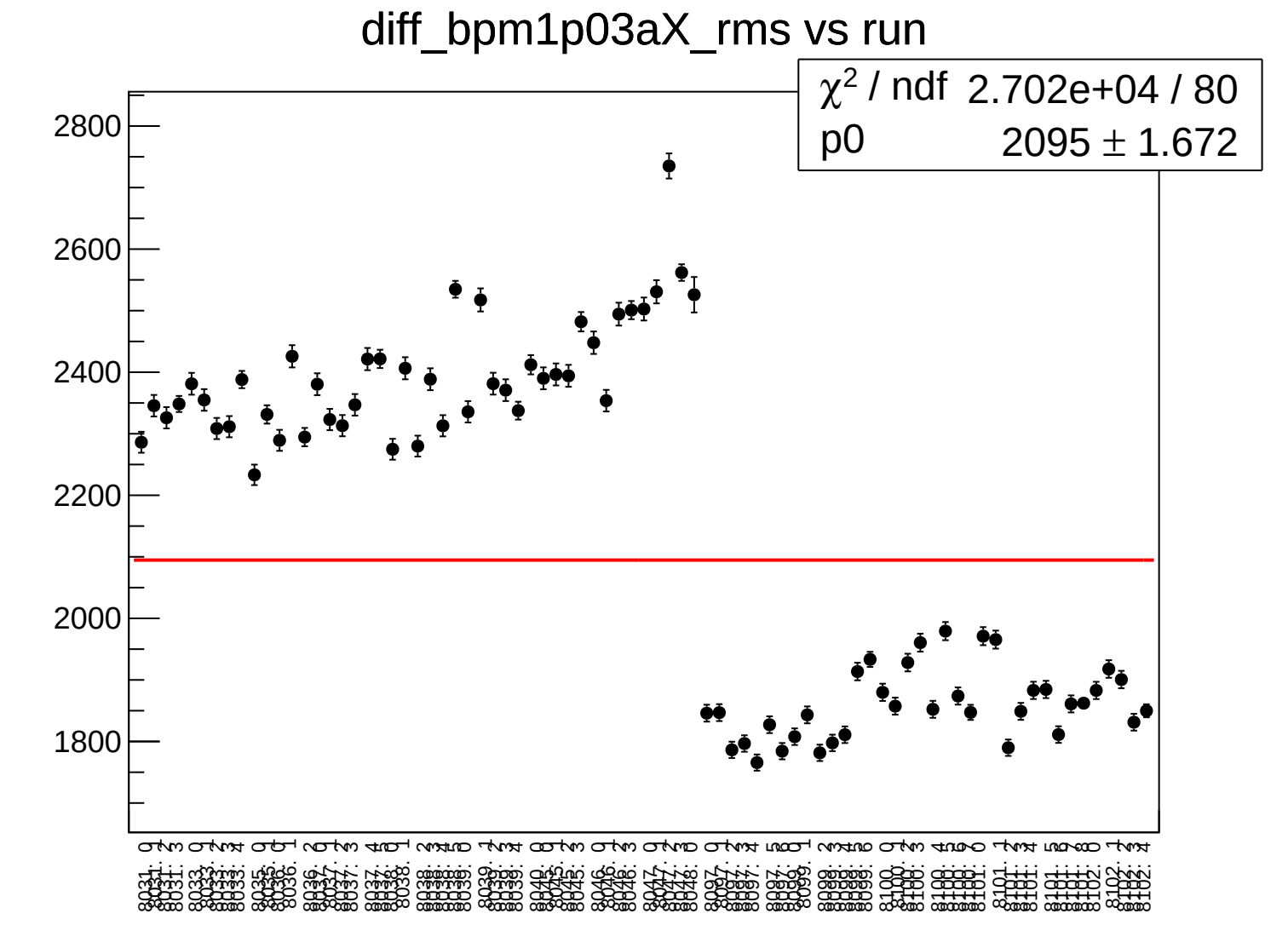

diff_bpm1p02bY_mean vs run
χ² / ndf 82.29 / 80
p0 −3.489 ± 1.549
40
20
0
−20
−40
−60
pull
Entries 81
Mean −214.7
Std Dev 261.7
2
1
0
−1
−2
−3

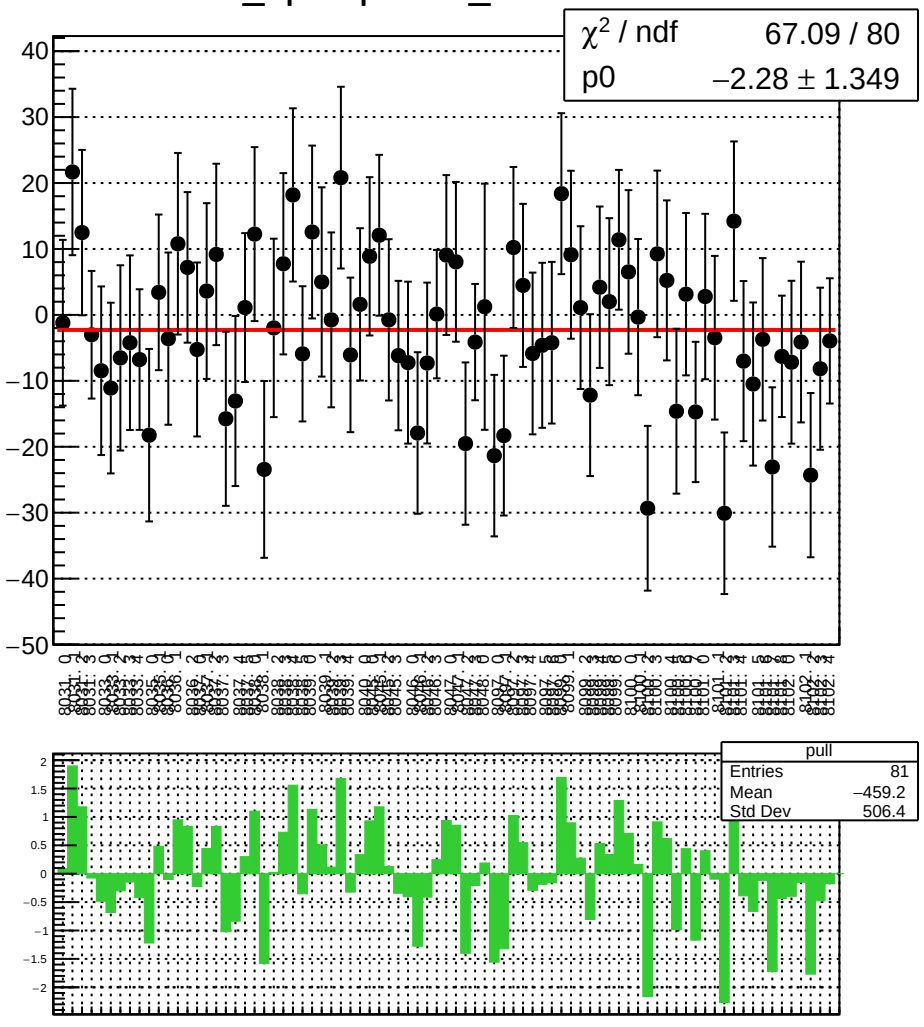

pull1D
Entries 81
Mean 0.01106
Std Dev 1.008
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

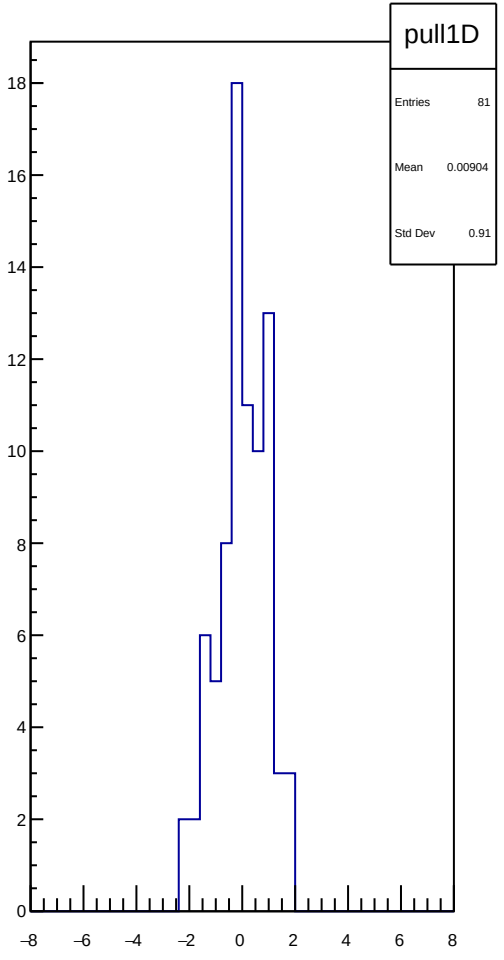

diff_bpm1p02bY_rms vs run
χ^2 / ndf 9643 / 80
p0 1380 ± 1.095
1600
1550
1500
1450
1400
1350
1300
1250
1200

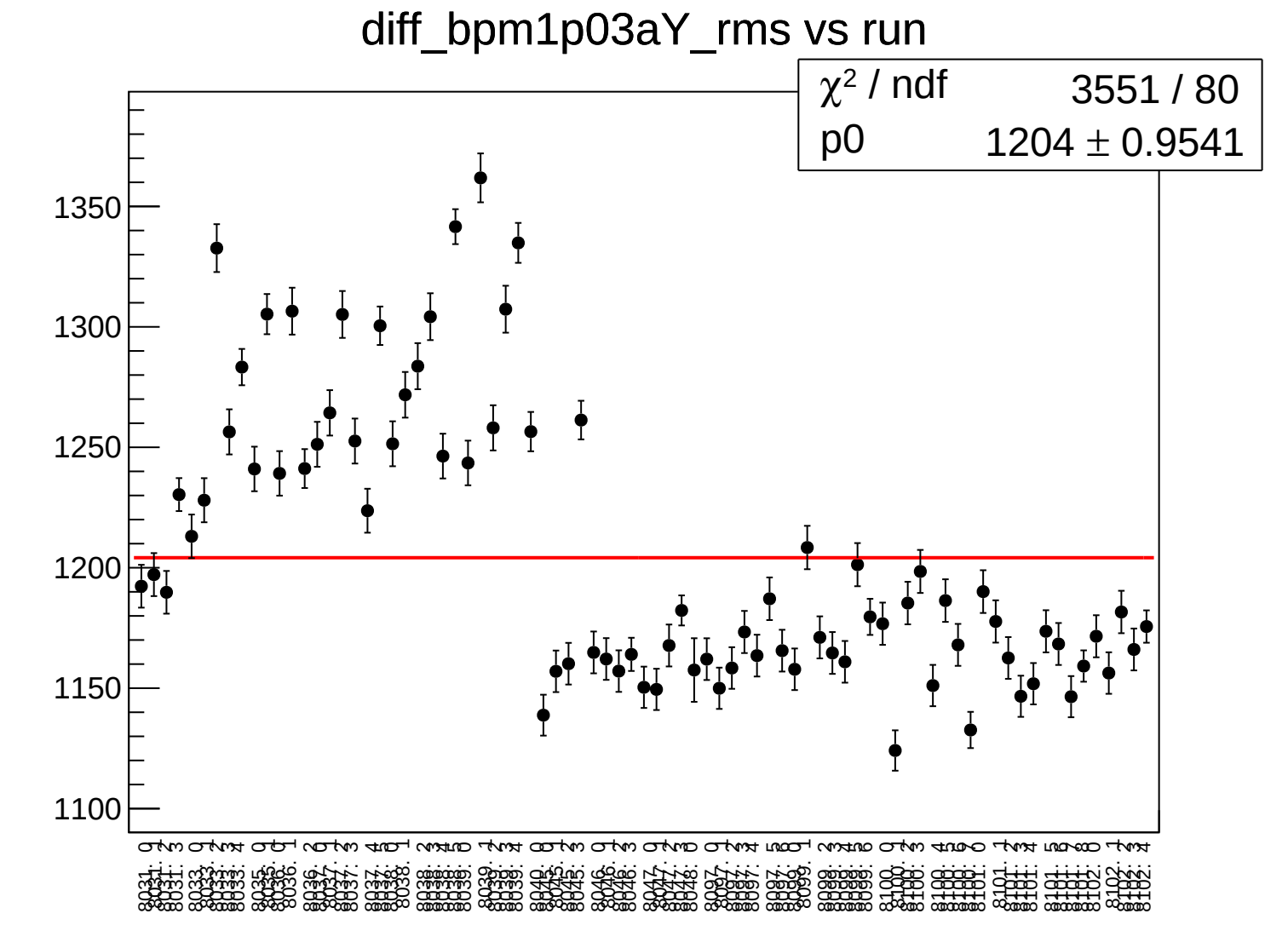

diff_bpm1p03aX_mean vs run
χ² / ndf 100.7 / 80
p0 −2.237 ± 2.365
100
50
0
−50
−100
pull
Entries 81
Mean −246.9
Std Dev 299.8
3
2
1
0
−1
−2
−3

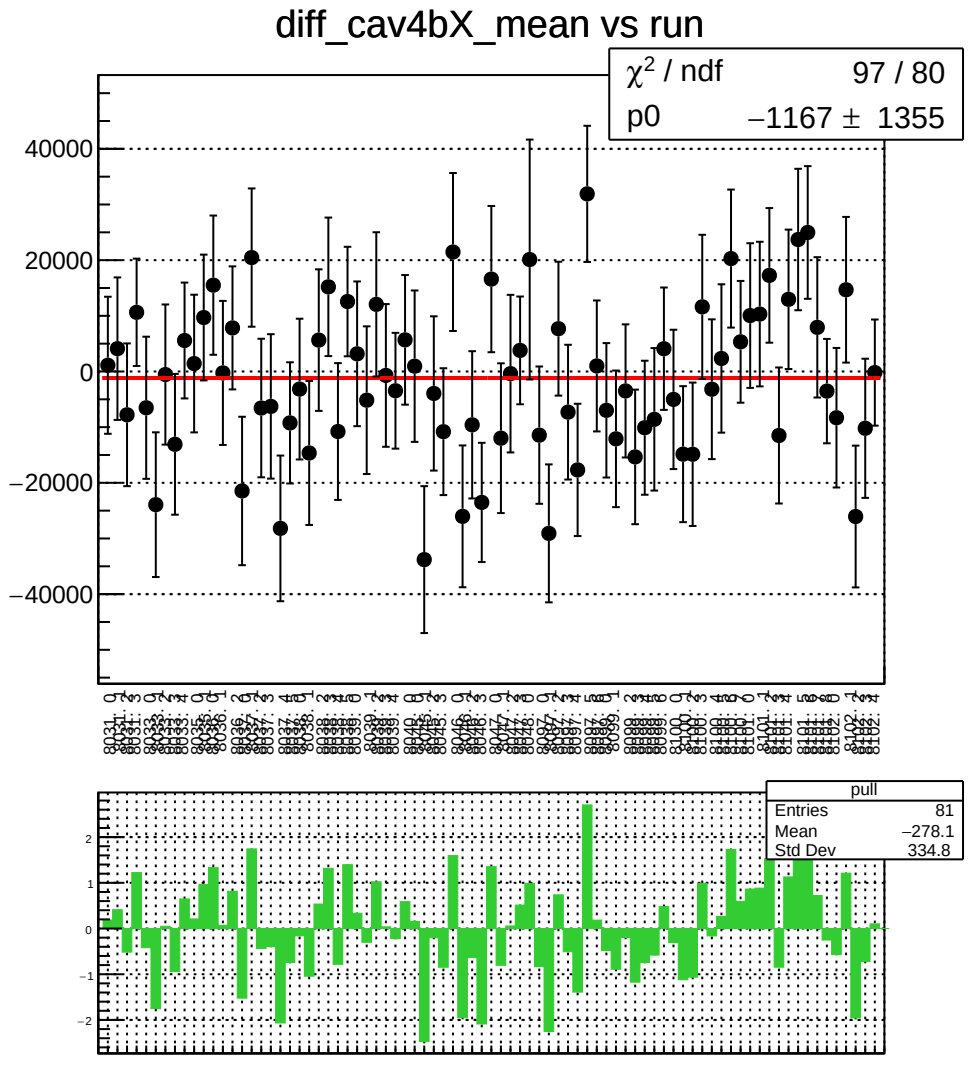

pull1D
Entries 81
Mean −0.01182
Std Dev 1.115
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

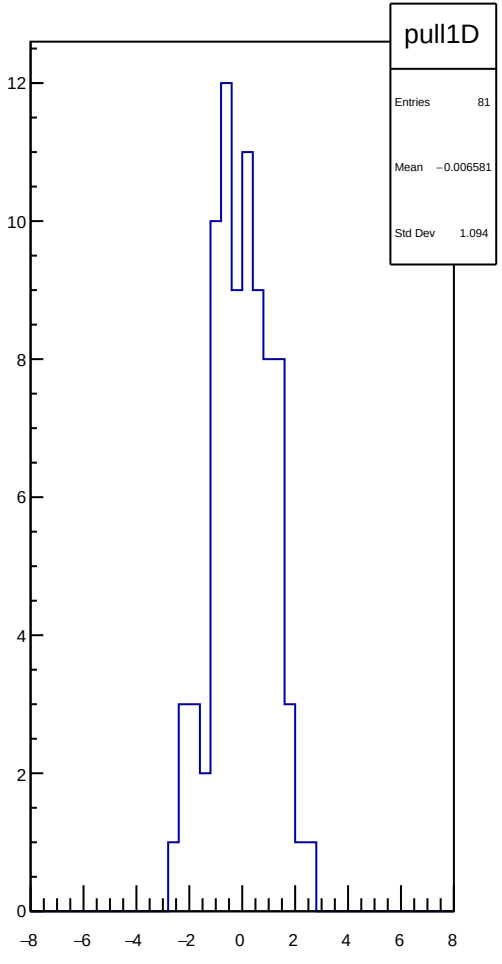

diff_bpm1p03aX_rms vs run
χ² / ndf 2.702e+04 / 80
p0 2095 ± 1.672
2800
2600
2400
2200
2000
1800

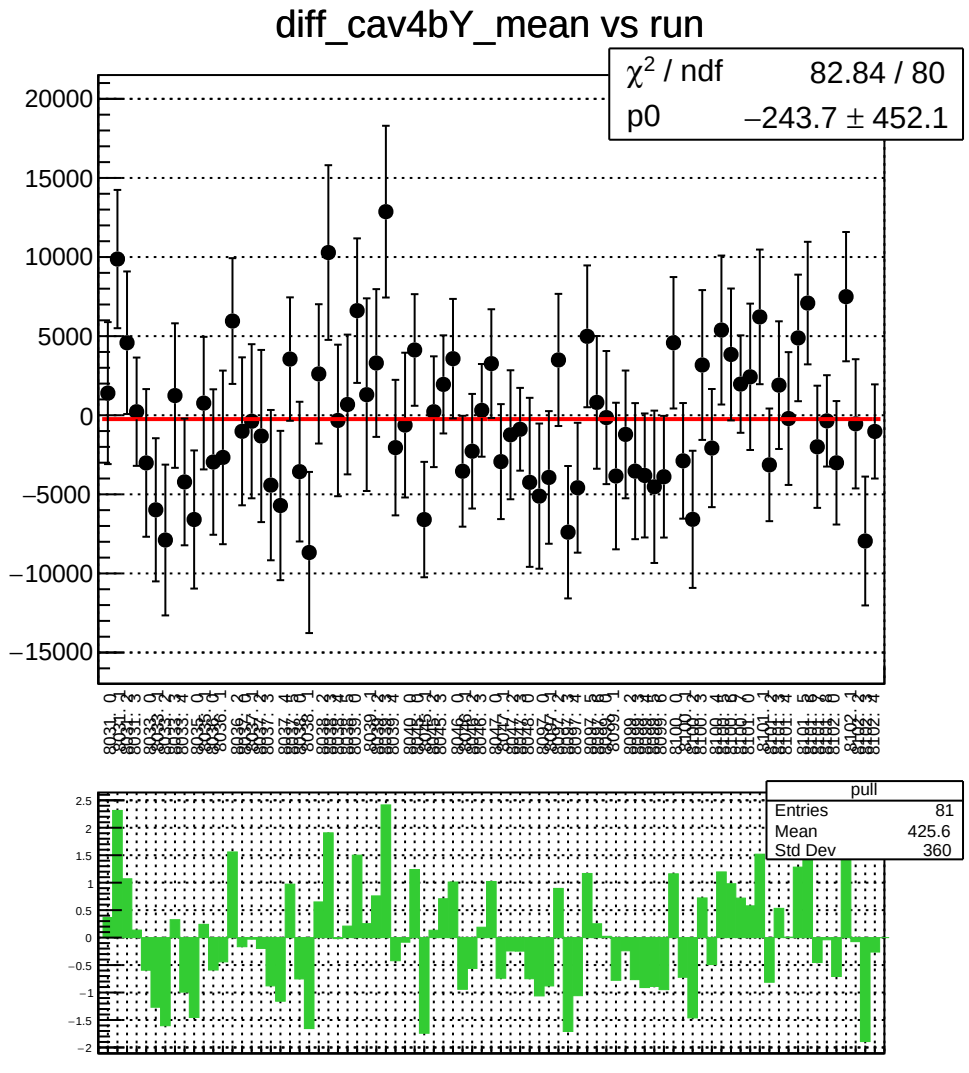

diff_bpm1p03aY_mean vs run
χ² / ndf 67.09 / 80
p0 −2.28 ± 1.349
pull
Entries 81
Mean −459.2
Std Dev 506.4

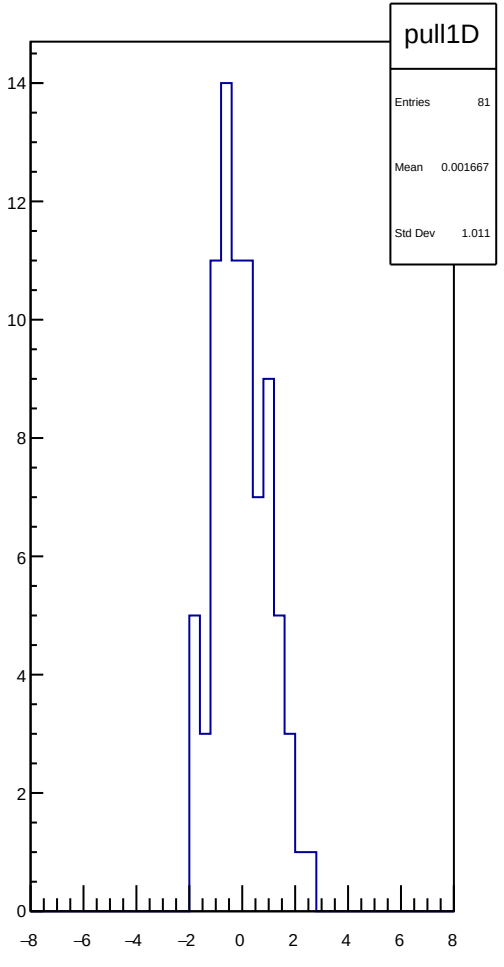

pull1D
Entries 81
Mean 0.00904
Std Dev 0.91

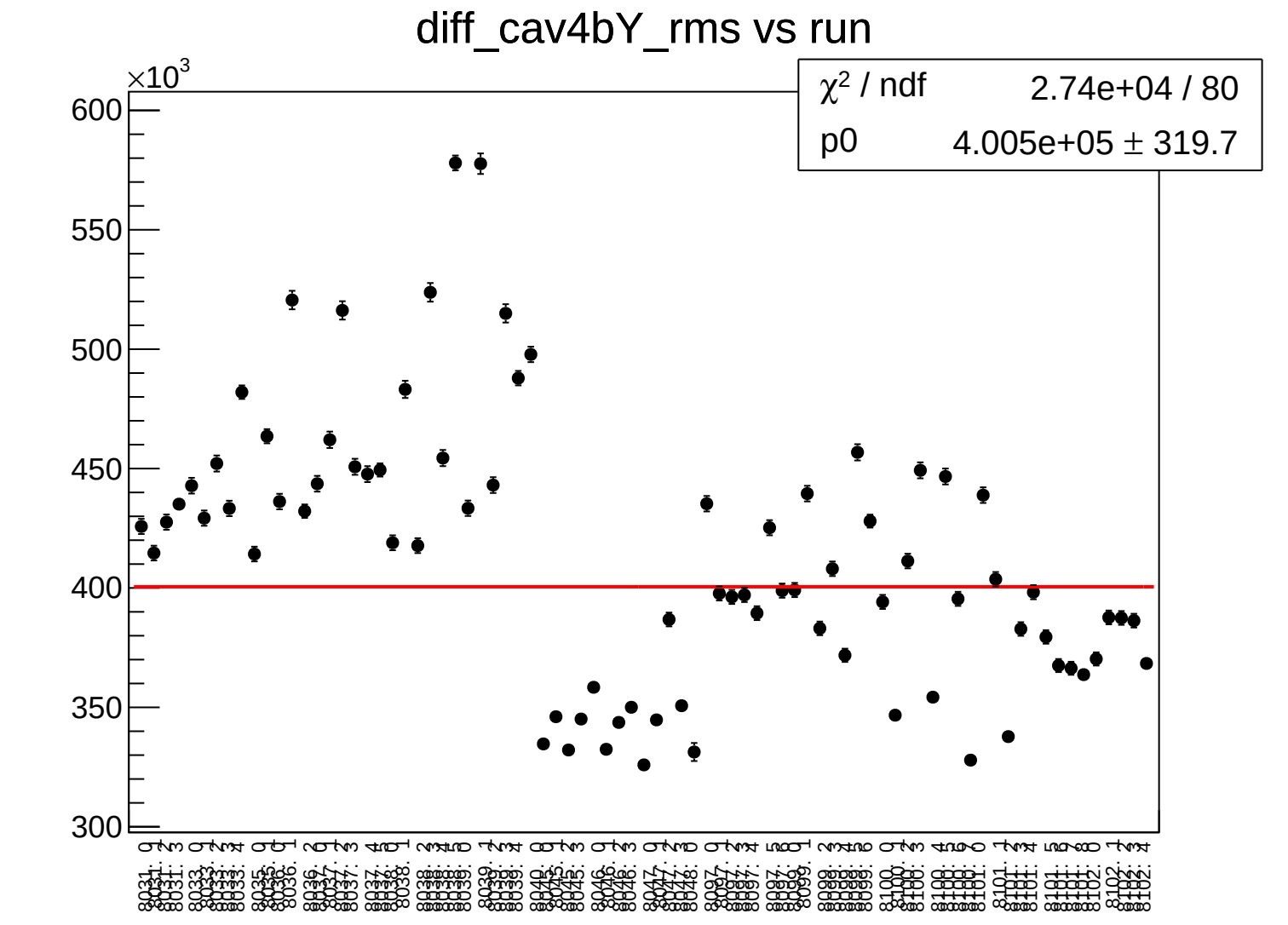

diff_bpm1p03aY_rms vs run
χ² / ndf 3551 / 80
p0 1204 ± 0.9541
1350
1300
1250
1200
1150
1100

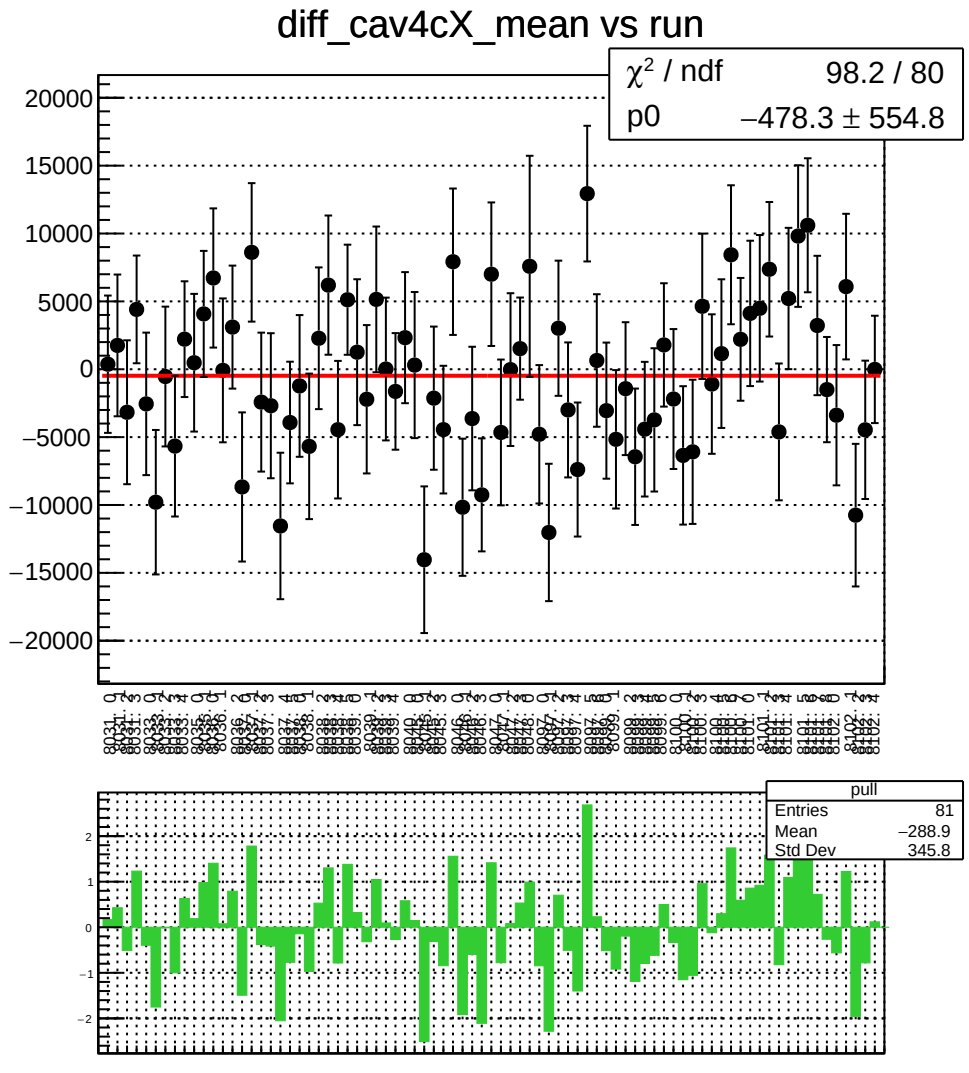

diff_cav4bX_mean vs run
χ² / ndf 97 / 80
p0 −1167 ± 1355
40000
20000
0
−20000
−40000
pull
Entries 81
Mean −278.1
Std Dev 334.8
2
1
0
−1
−2

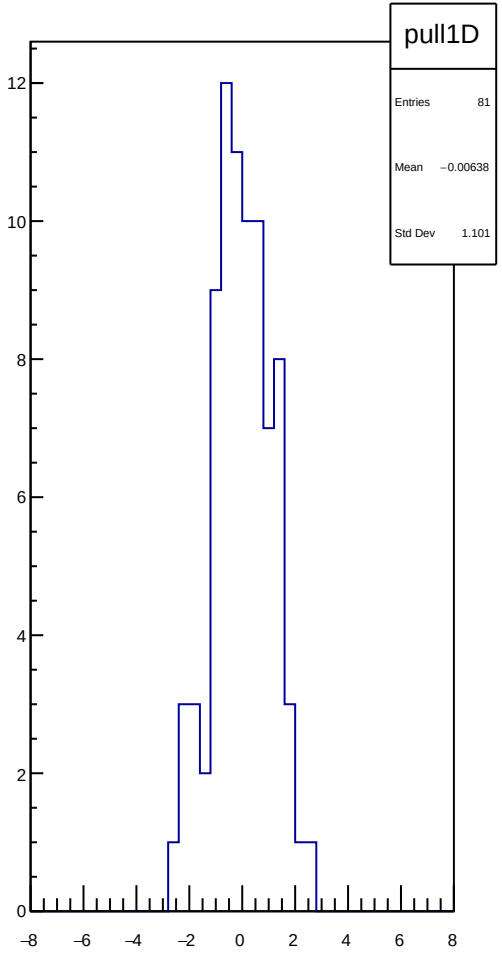

pull1D
Entries 81
Mean −0.006581
Std Dev 1.094
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

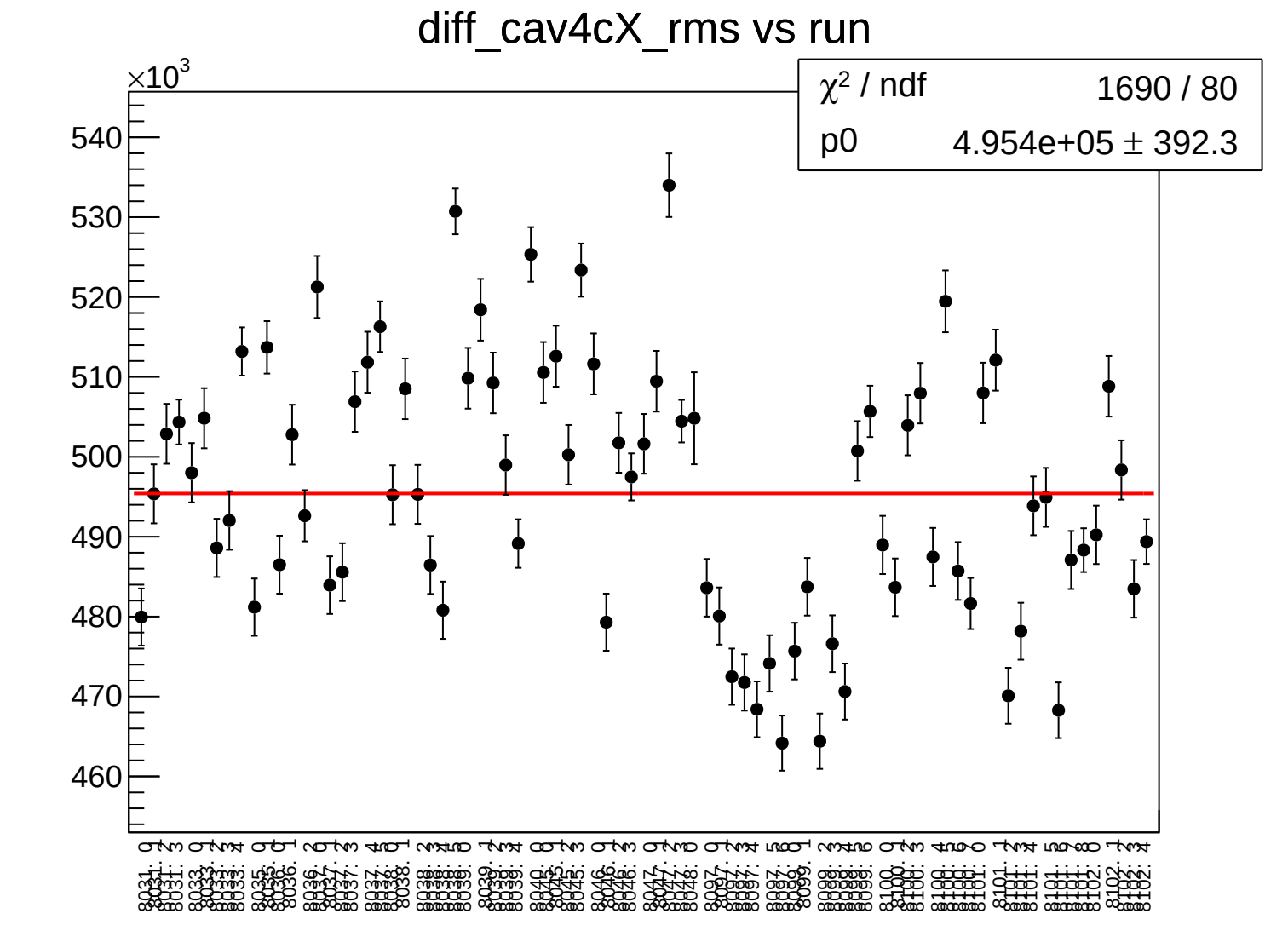

diff_cav4bY_mean vs run
χ² / ndf 82.84 / 80
p0 −243.7 ± 452.1
pull
Entries 81
Mean 425.6
Std Dev 360

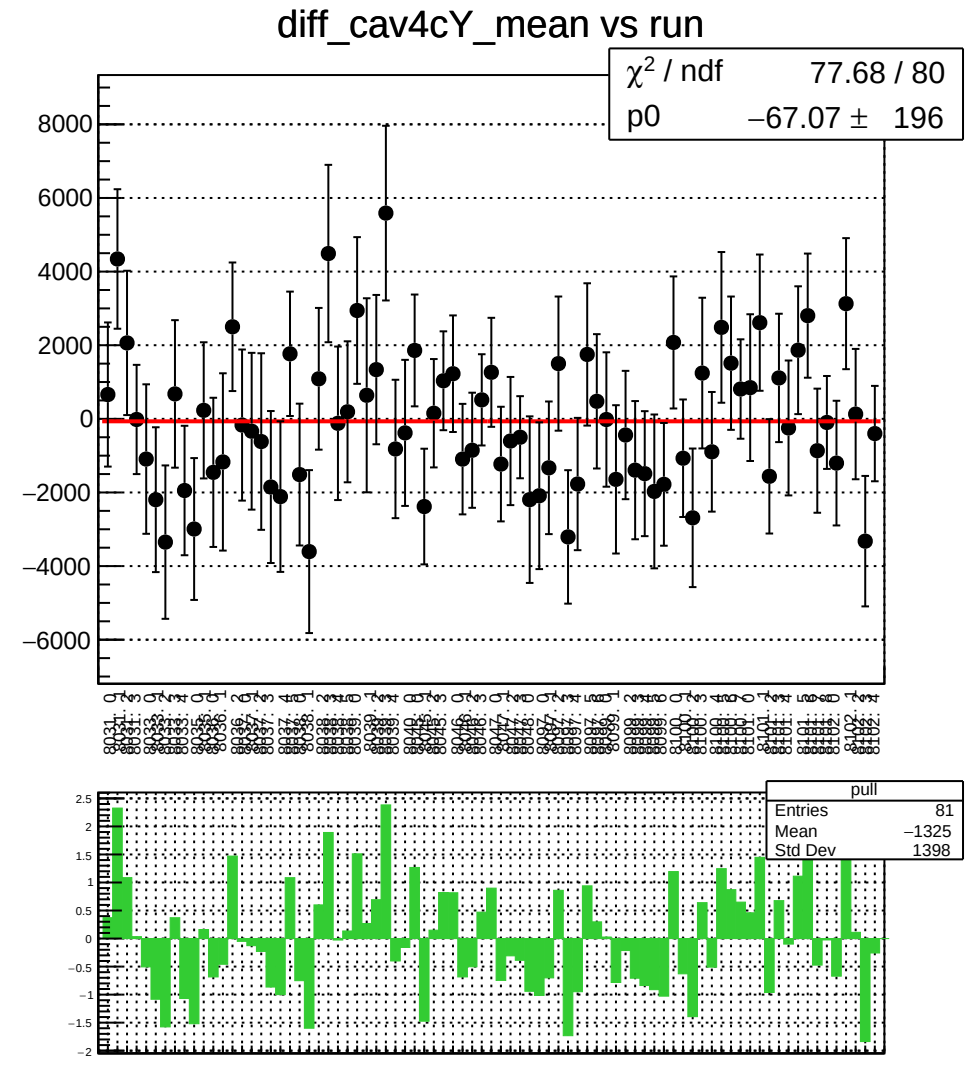

pull1D
Entries 81
Mean 0.001667
Std Dev 1.011

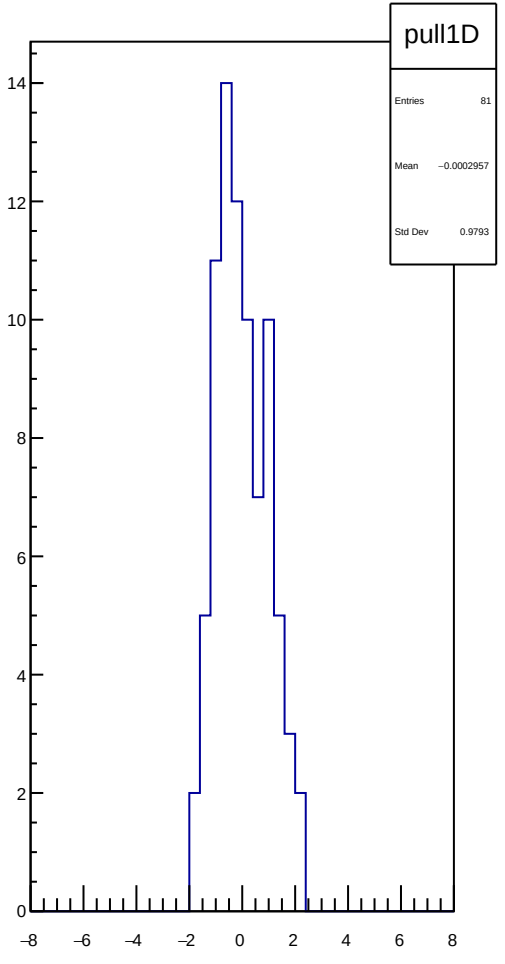

diff_cav4bY_rms vs run
×10^3
600
550
500
450
400
350
300
χ² / ndf 2.74e+04 / 80
p0 4.005e+05 ± 319.7

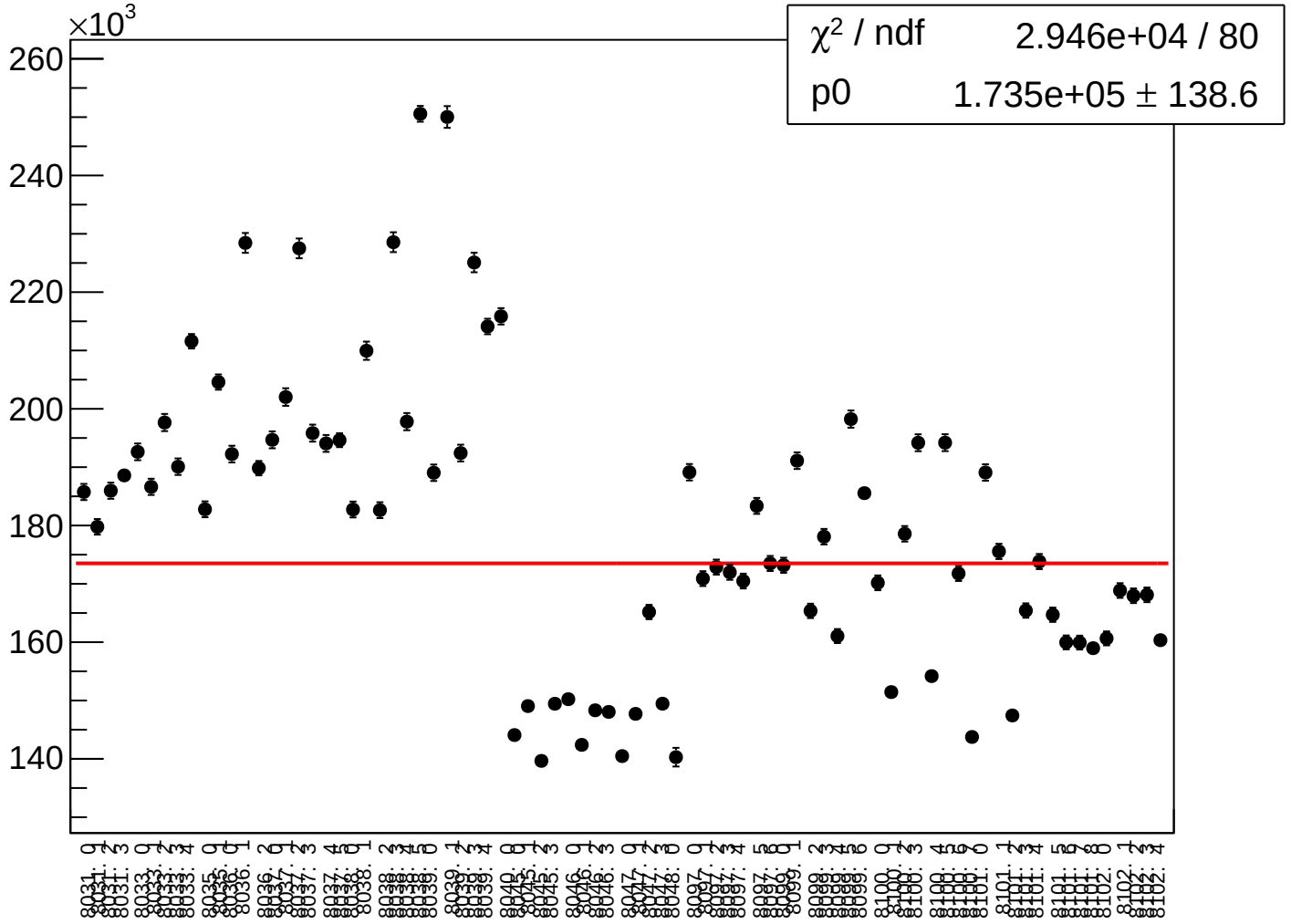

diff_cav4cX_mean vs run
χ² / ndf 98.2 / 80
p0 −478.3 ± 554.8
pull
Entries 81
Mean −288.9
Std Dev 345.8

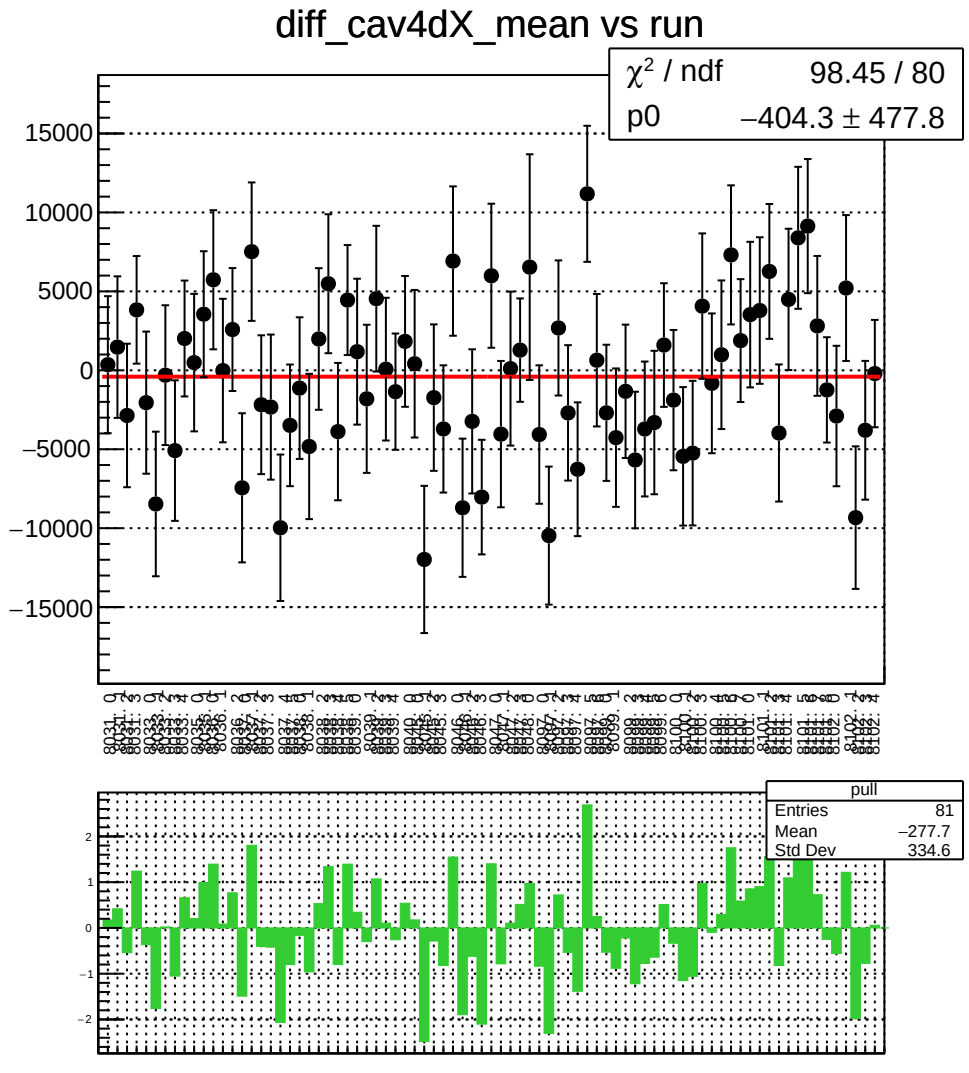

pull1D
Entries 81
Mean −0.00638
Std Dev 1.101

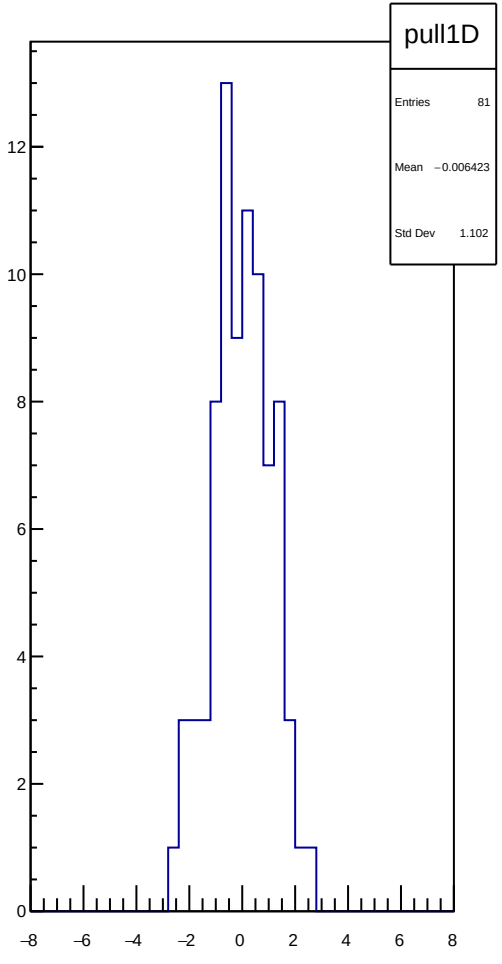

diff_cav4cX_rms vs run
×10^3
540
530
520
510
500
490
480
470
460
χ² / ndf 1690 / 80
p0 4.954e+05 ± 392.3

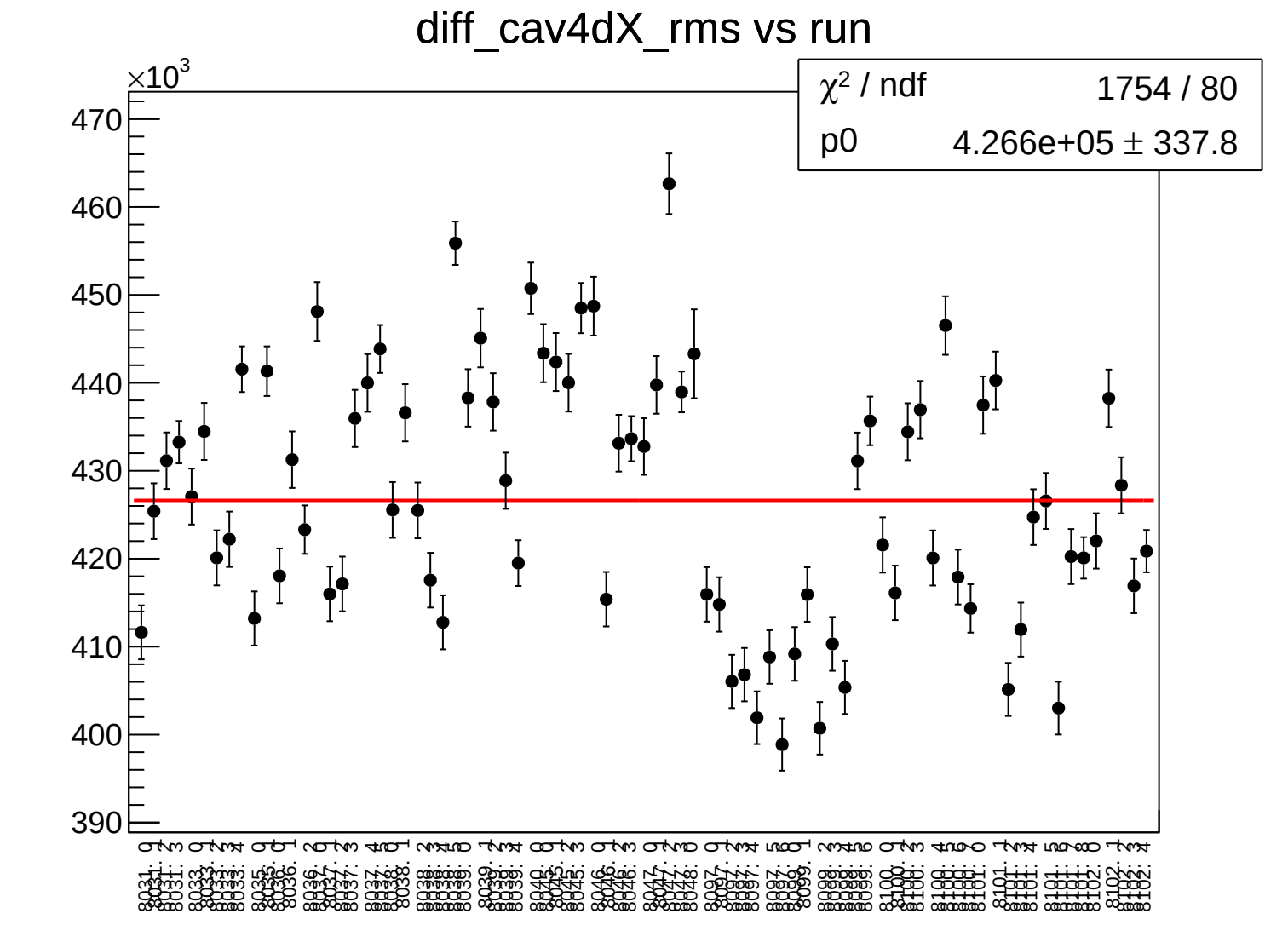

diff_cav4cY_mean vs run
χ² / ndf 77.68 / 80
p0 −67.07 ± 196
pull
Entries 81
Mean −1325
Std Dev 1398

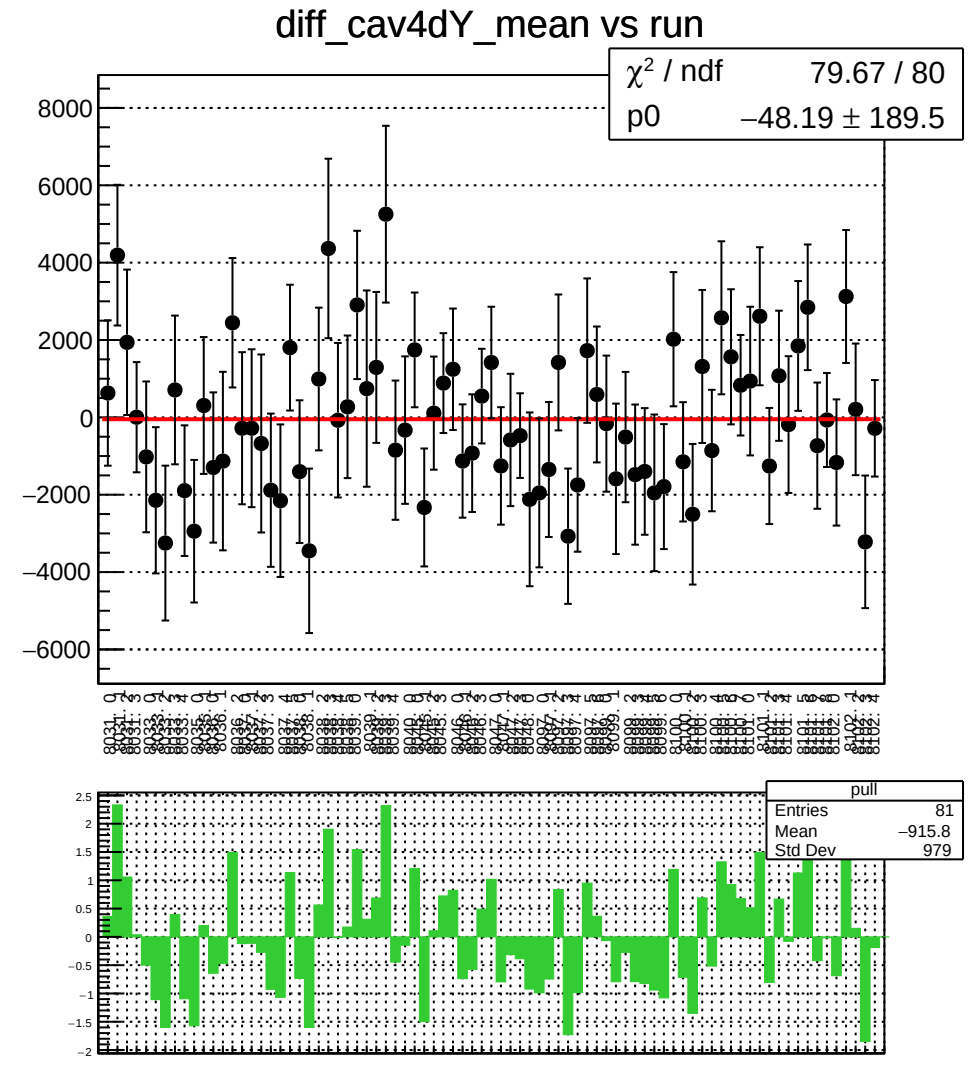

pull1D
Entries 81
Mean −0.0002957
Std Dev 0.9793

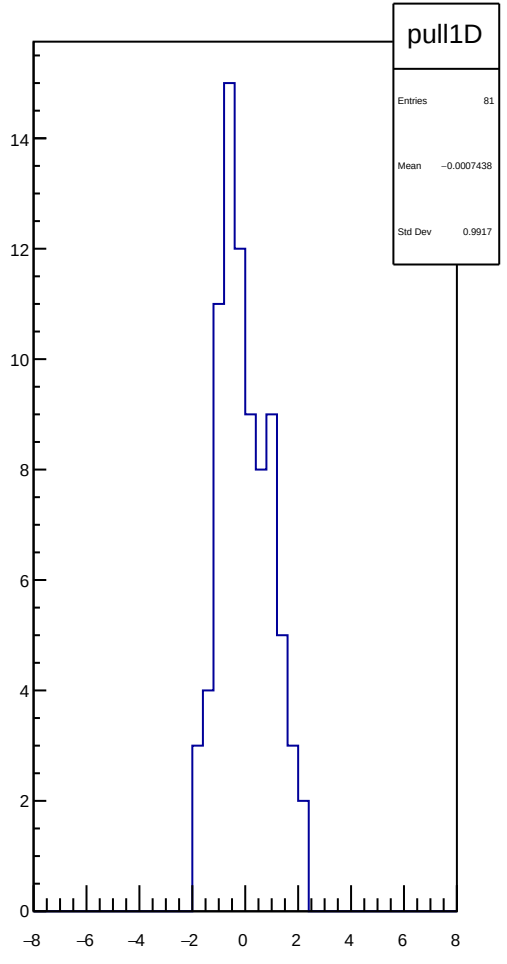

diff_cav4cY_rms vs run
×10^3
260
240
220
200
180
160
140
χ² / ndf 2.946e+04 / 80
p0 1.735e+05 ± 138.6

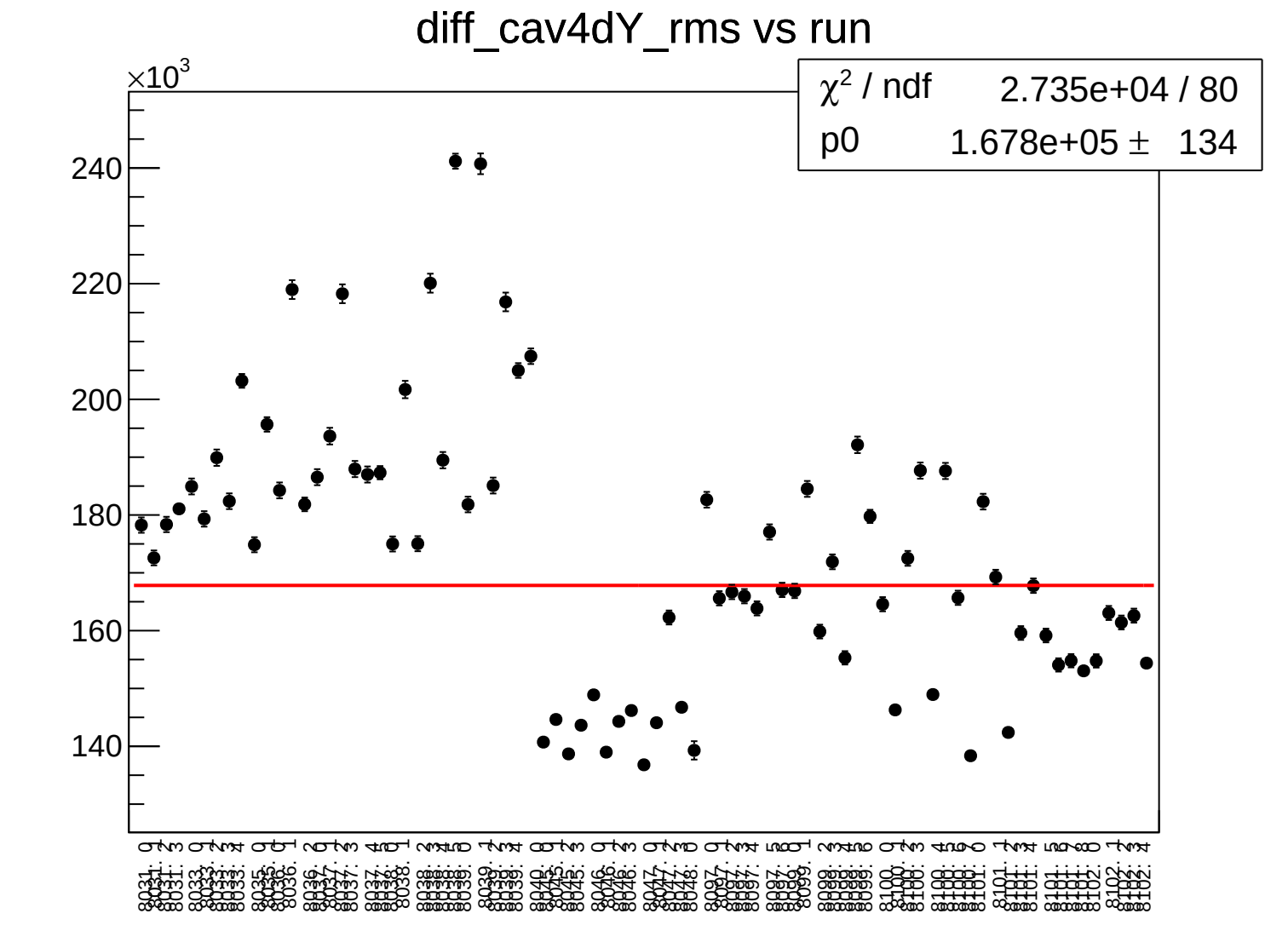

diff_cav4dX_mean vs run
χ² / ndf 98.45 / 80
p0 −404.3 ± 477.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 81
Mean −277.7
Std Dev 334.6
2
1
0
−1
−2

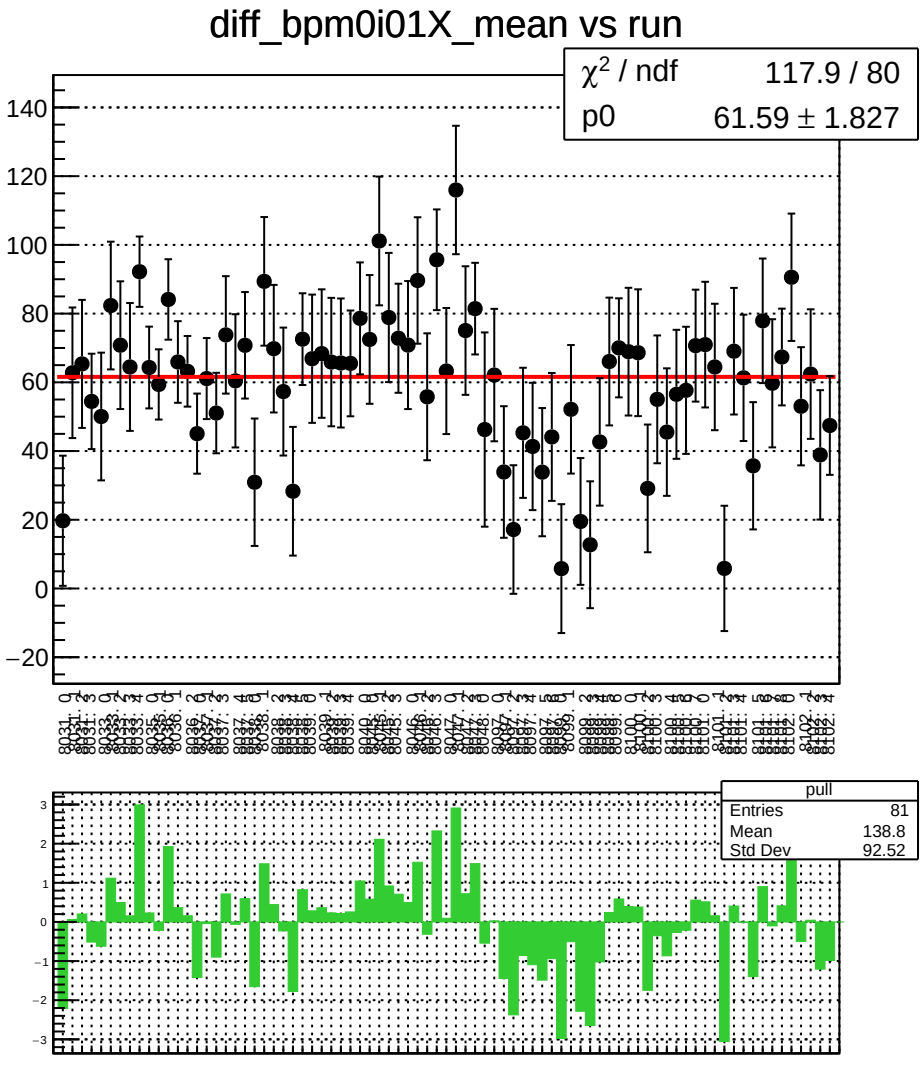

pull1D
Entries 81
Mean −0.006423
Std Dev 1.102
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

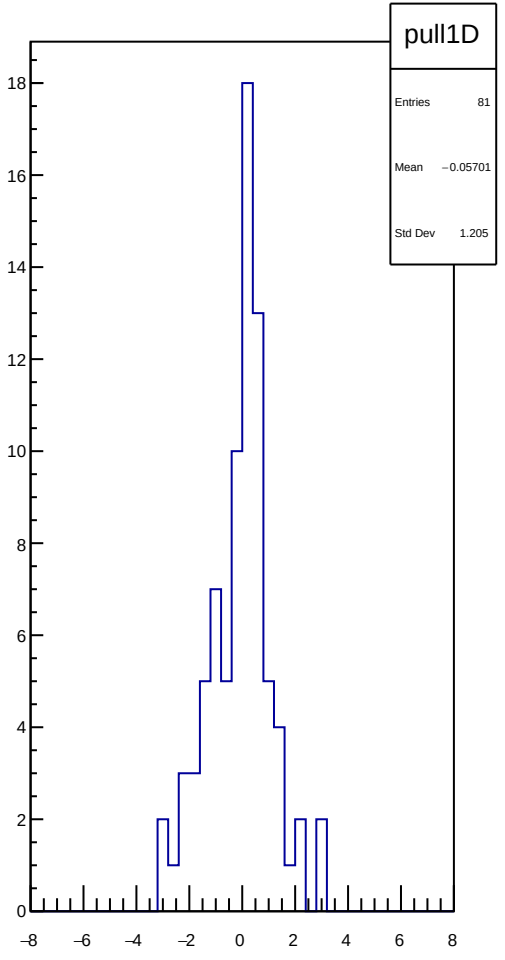

diff_cav4dX_rms vs run
×10^3
470
460
450
440
430
420
410
400
390
χ² / ndf 1754 / 80
p0 4.266e+05 ± 337.8

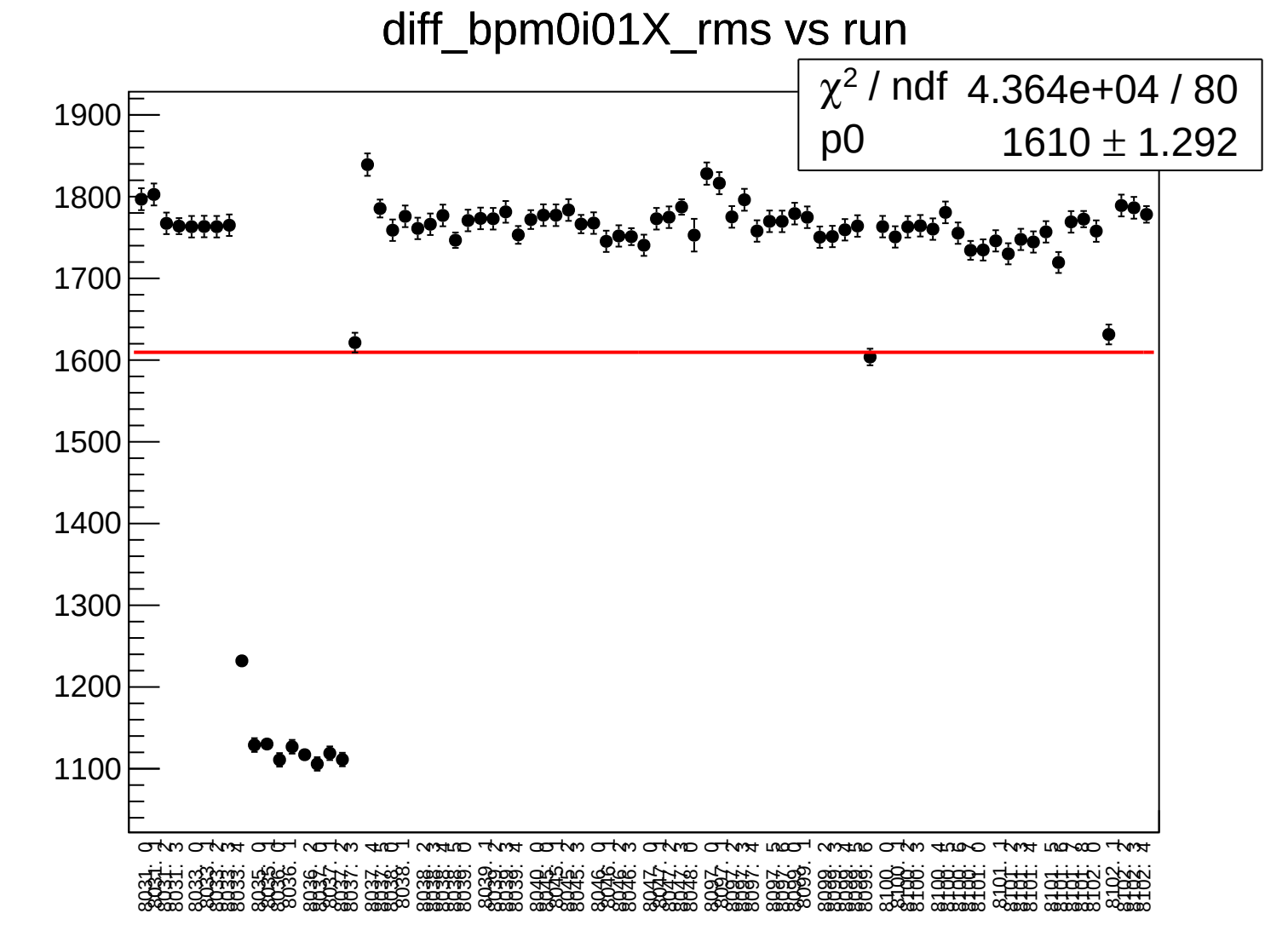

diff_cav4dY_mean vs run
χ² / ndf 79.67 / 80
p0 −48.19 ± 189.5
pull
Entries 81
Mean −915.8
Std Dev 979

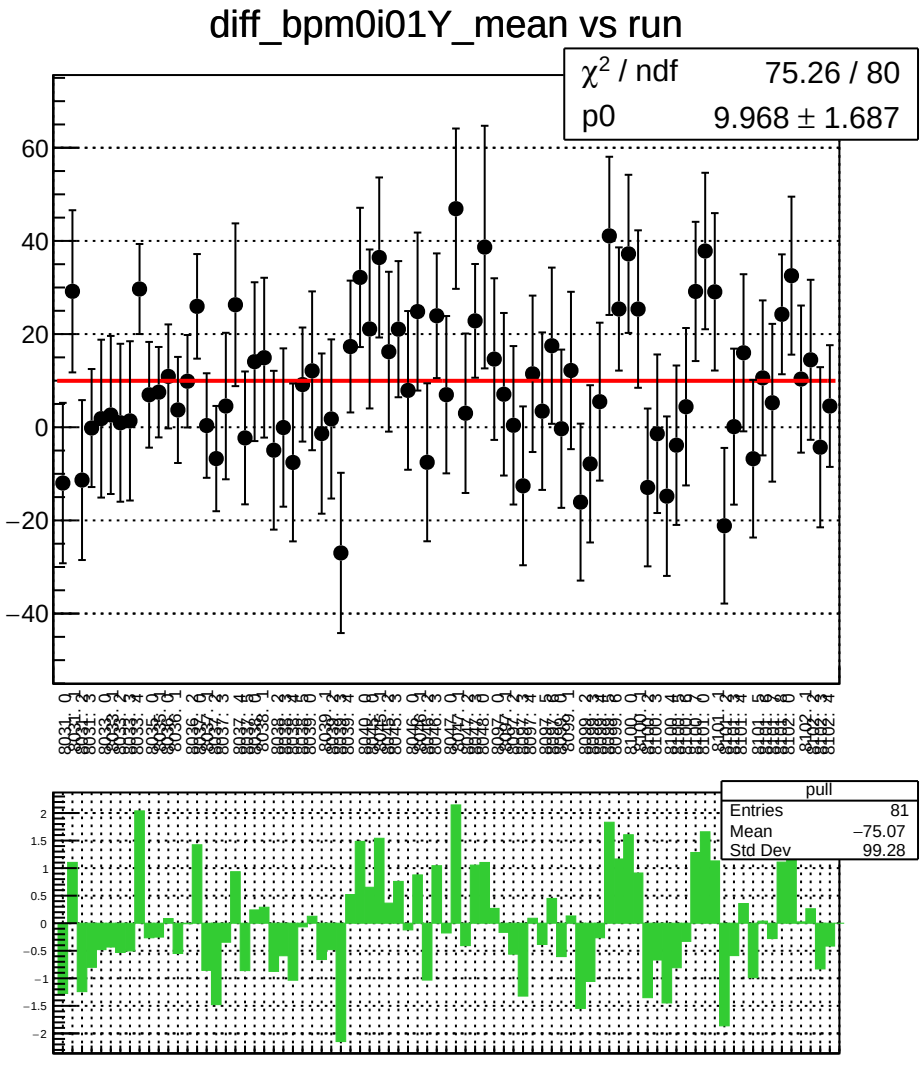

pull1D
Entries 81
Mean −0.0007438
Std Dev 0.9917

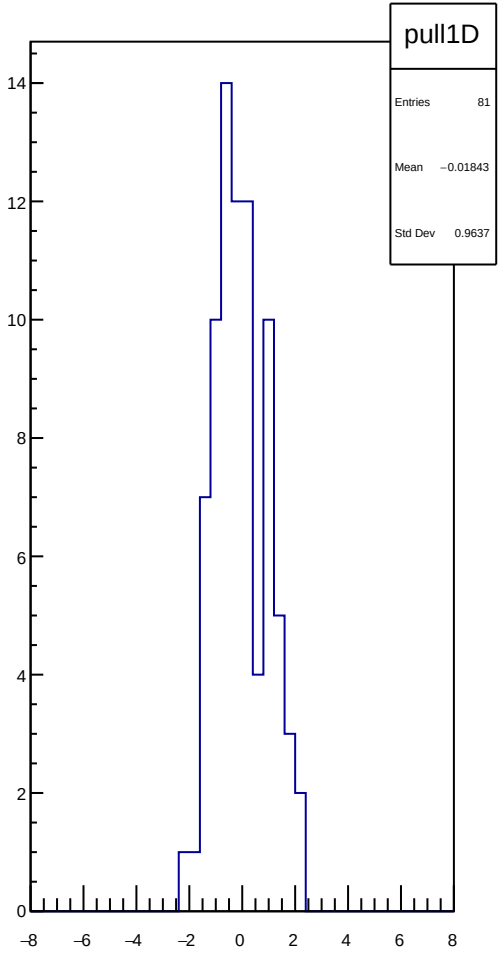

diff_cav4dY_rms vs run
×10^3
240
220
200
180
160
140
χ² / ndf 2.735e+04 / 80
p0 1.678e+05 ± 134

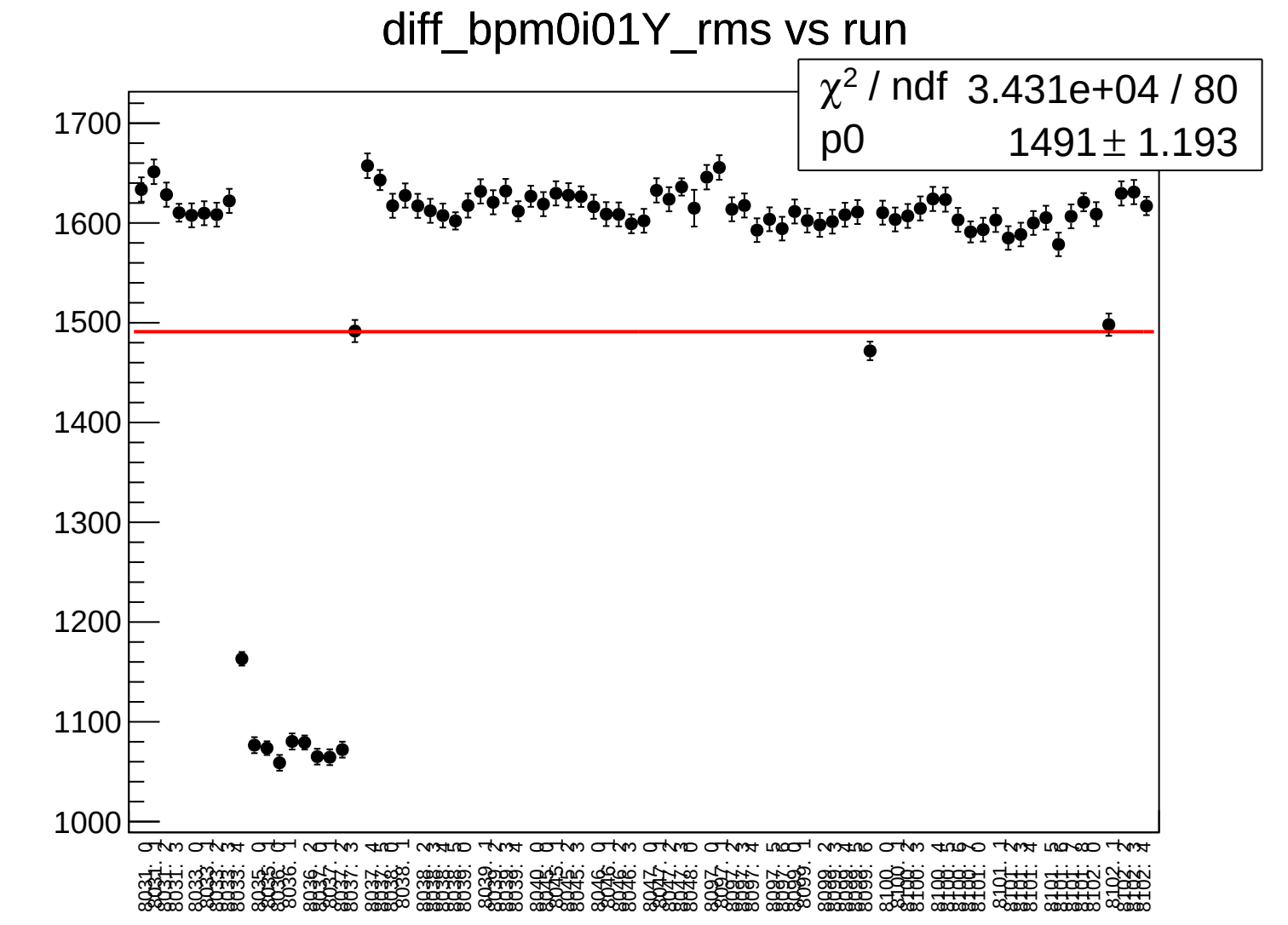

diff_bpm0i01X_mean vs run
χ^2 / ndf 117.9 / 80
p0 61.59 ± 1.827
pull
Entries 81
Mean 138.8
Std Dev 92.52

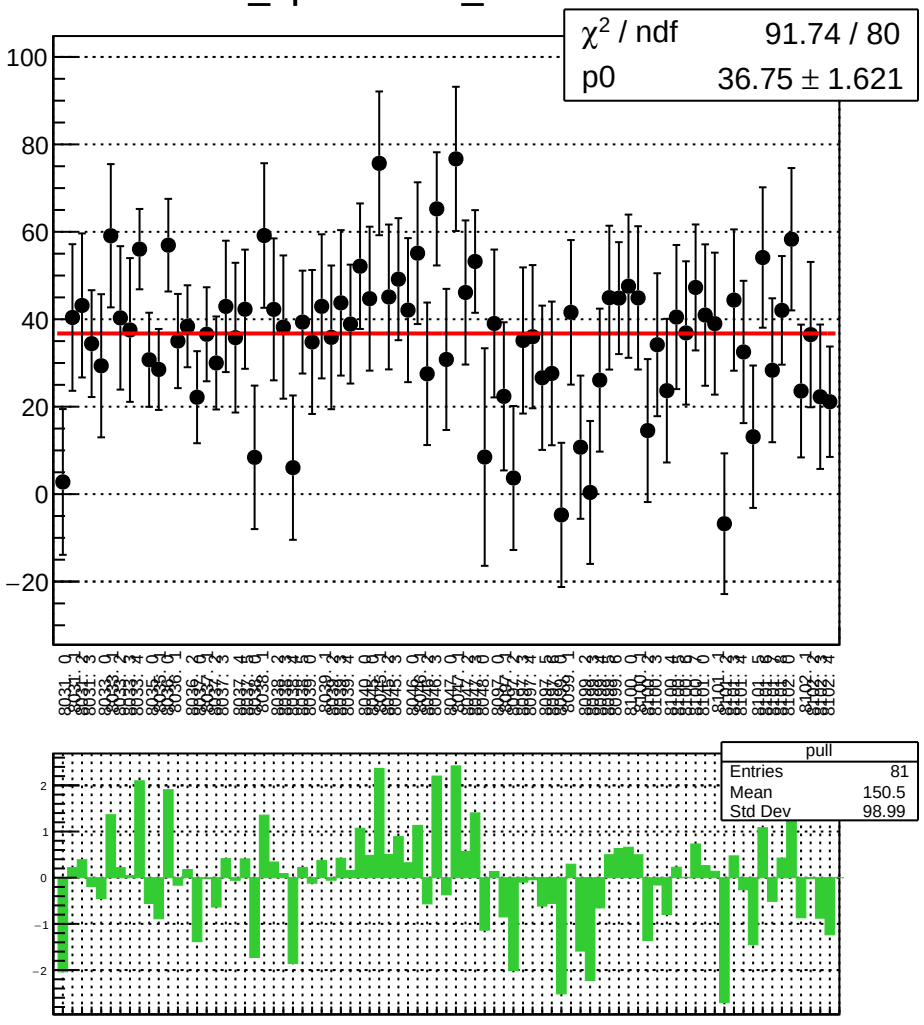

pull1D
Entries 81
Mean −0.05701
Std Dev 1.205

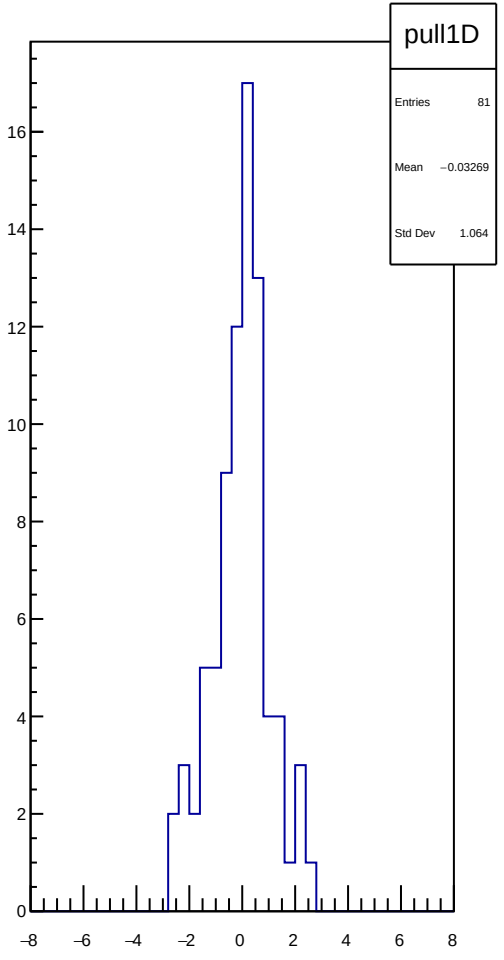

diff_bpm0i01X_rms vs run
χ² / ndf 4.364e+04 / 80
p0 1610 ± 1.292
1900
1800
1700
1600
1500
1400
1300
1200
1100

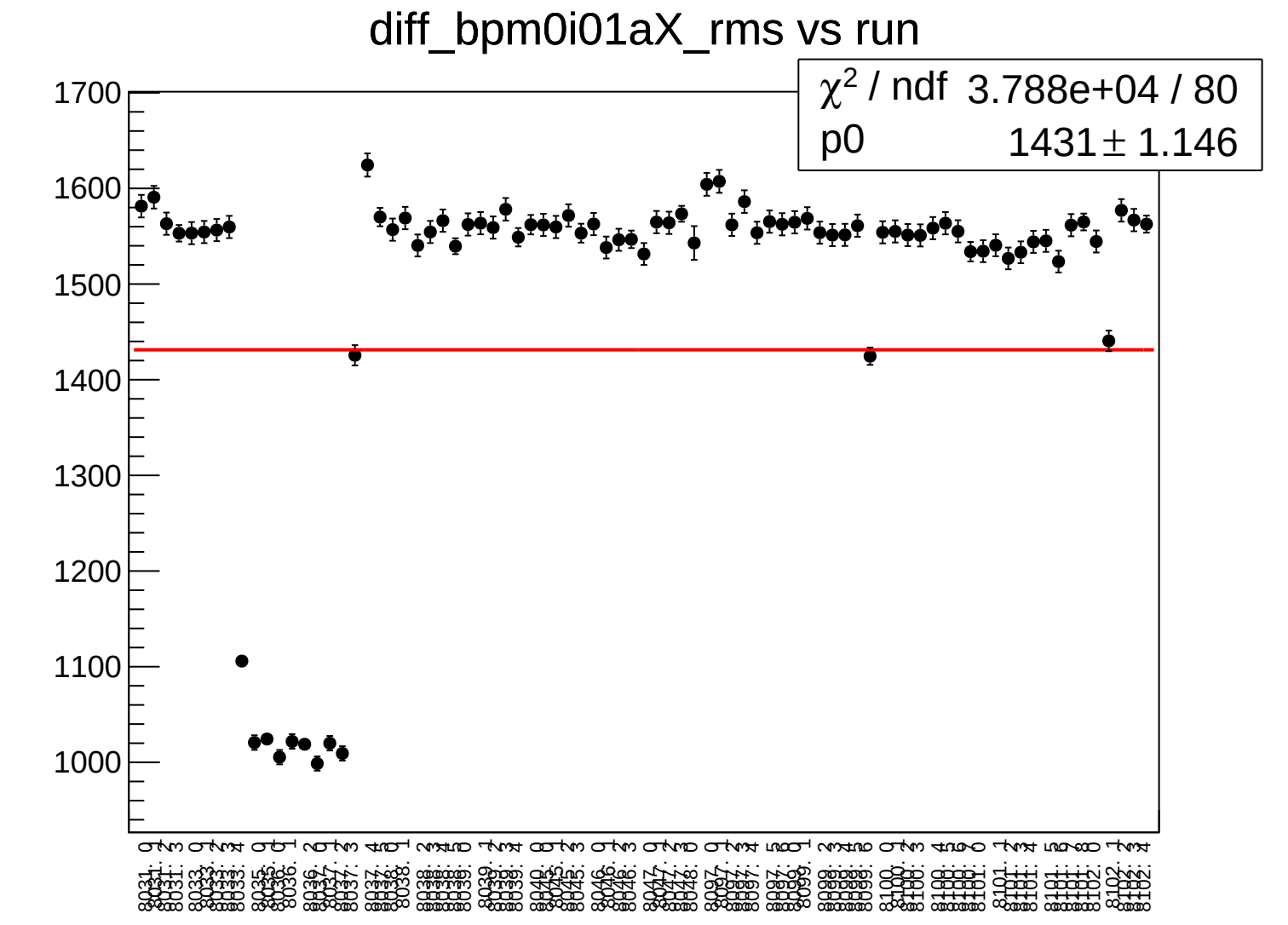

diff_bpm0i01Y_mean vs run
χ² / ndf 75.26 / 80
p0 9.968 ± 1.687
pull
Entries 81
Mean −75.07
Std Dev 99.28

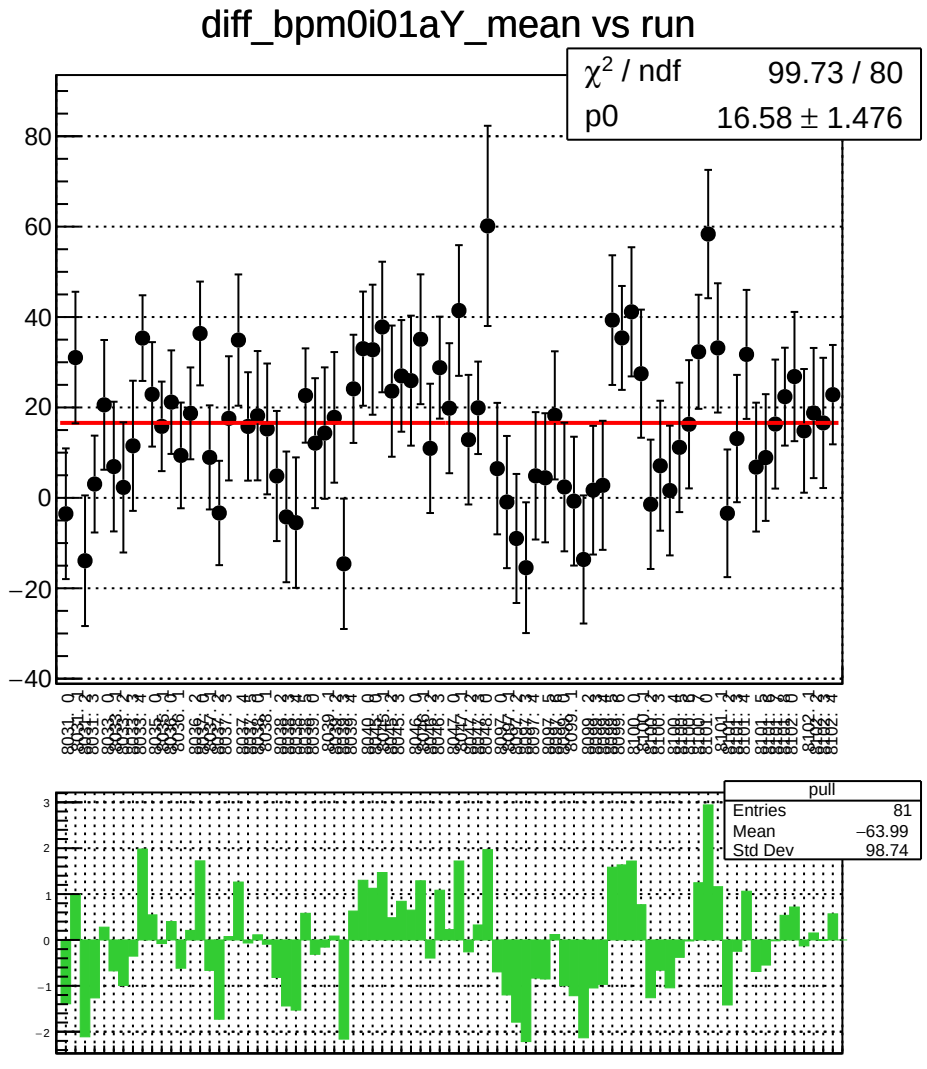

pull1D
Entries 81
Mean −0.01843
Std Dev 0.9637

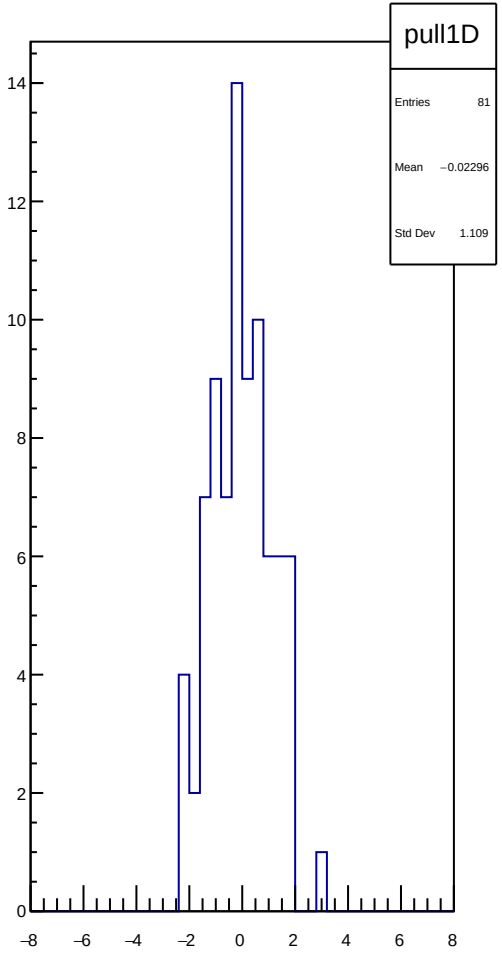

diff_bpm0i01Y_rms vs run
χ² / ndf 3.431e+04 / 80
p0 1491 ± 1.193
1700
1600
1500
1400
1300
1200
1100
1000

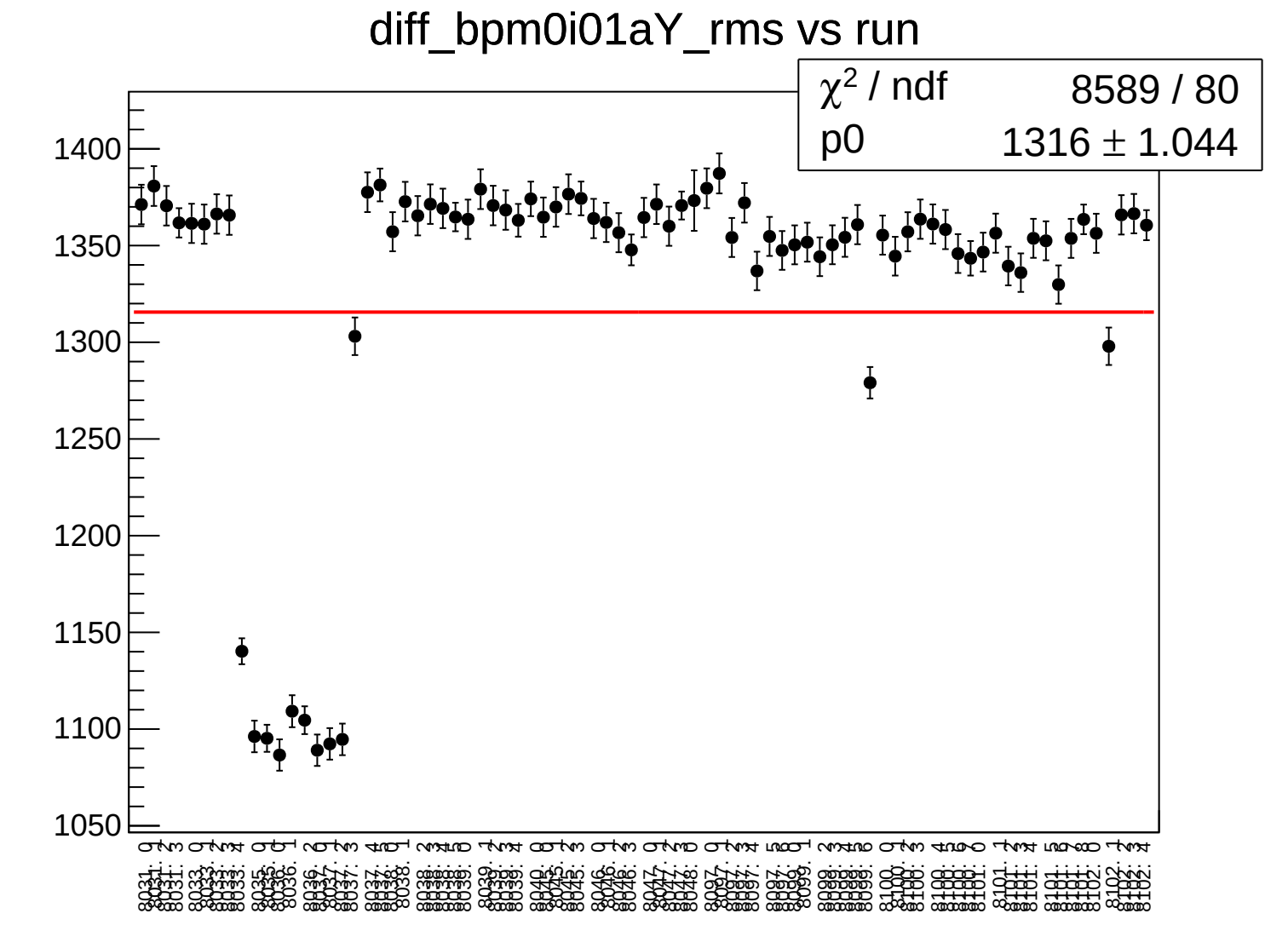

diff_bpm0i01aX_mean vs run
χ^2 / ndf 91.74 / 80
p0 36.75 ± 1.621
pull
Entries 81
Mean 150.5
Std Dev 98.99

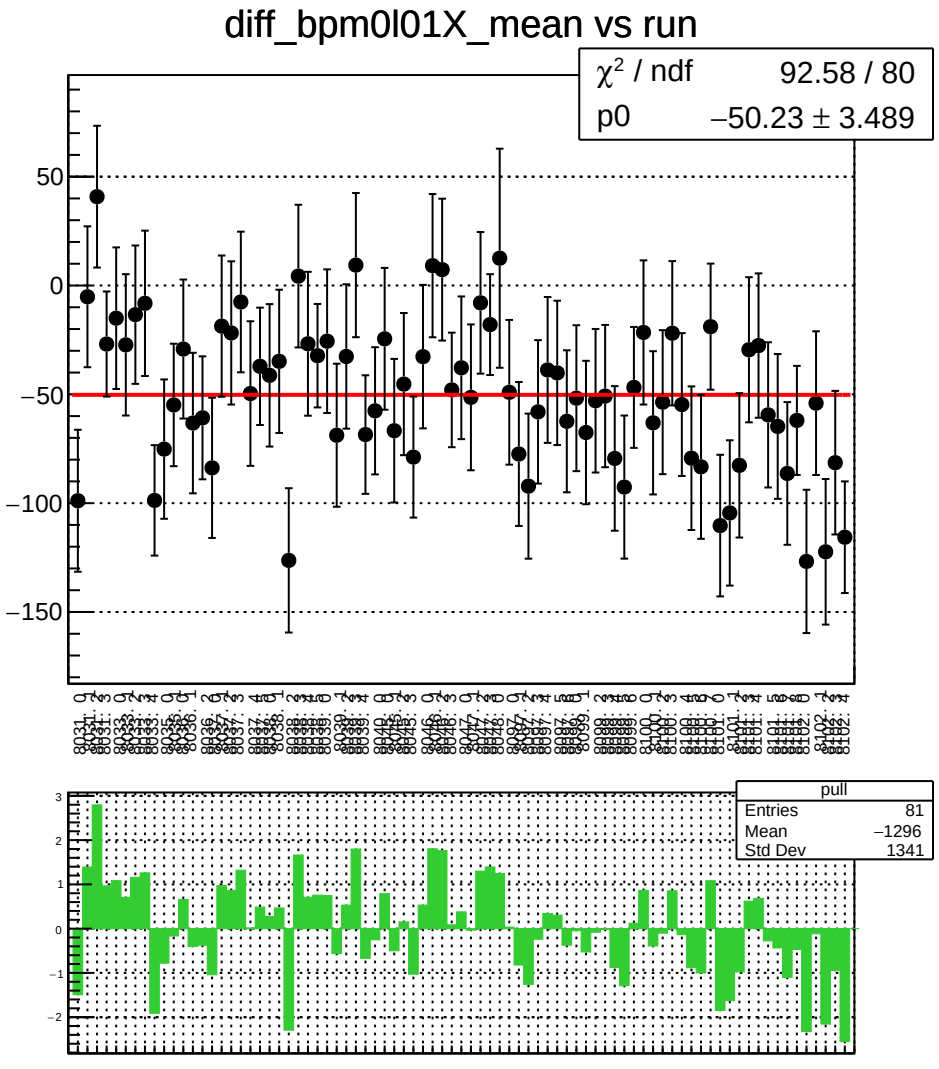

pull1D
Entries 81
Mean −0.03269
Std Dev 1.064

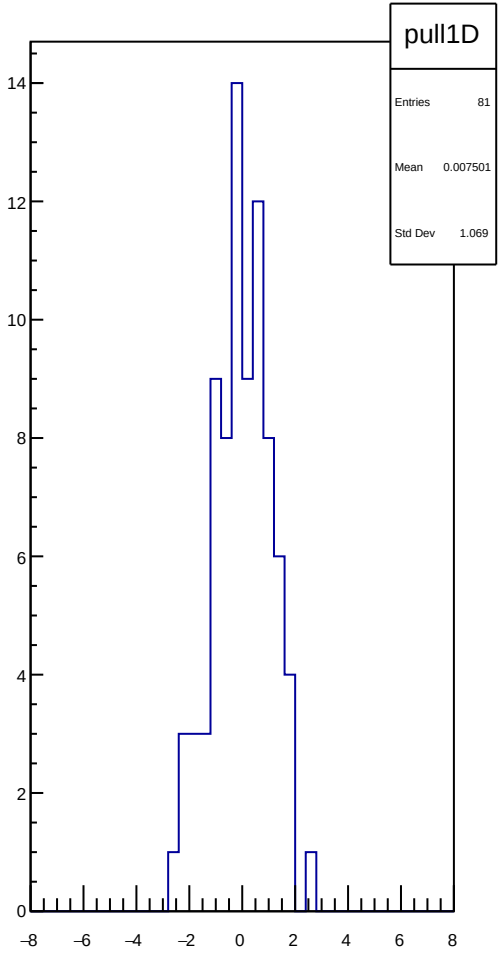

diff_bpm0i01aX_rms vs run
χ² / ndf 3.788e+04 / 80
p0 1431 ± 1.146
1700
1600
1500
1400
1300
1200
1100
1000

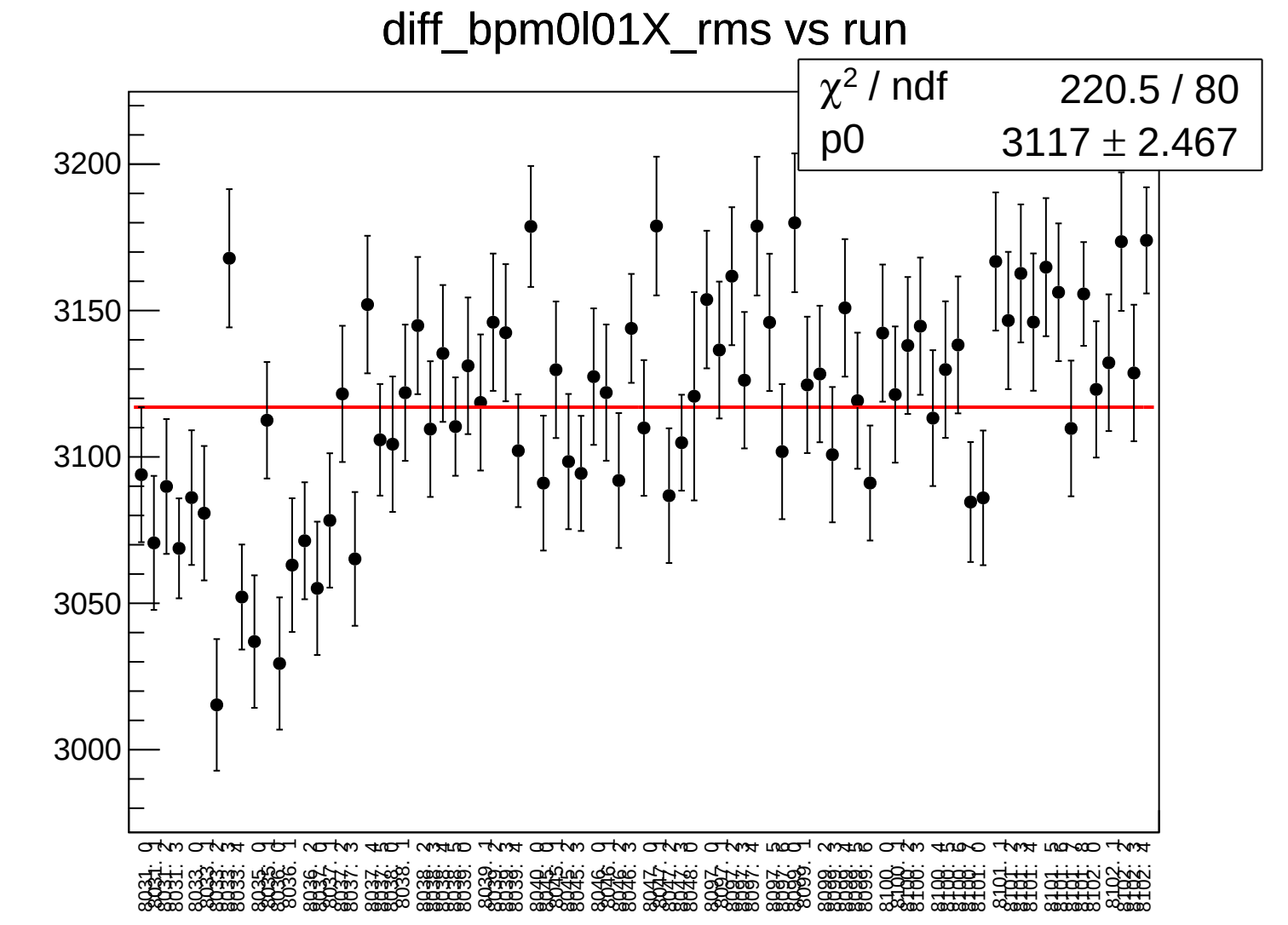

diff_bpm0i01aY_mean vs run
χ² / ndf 99.73 / 80
p0 16.58 ± 1.476
pull
Entries 81
Mean −63.99
Std Dev 98.74

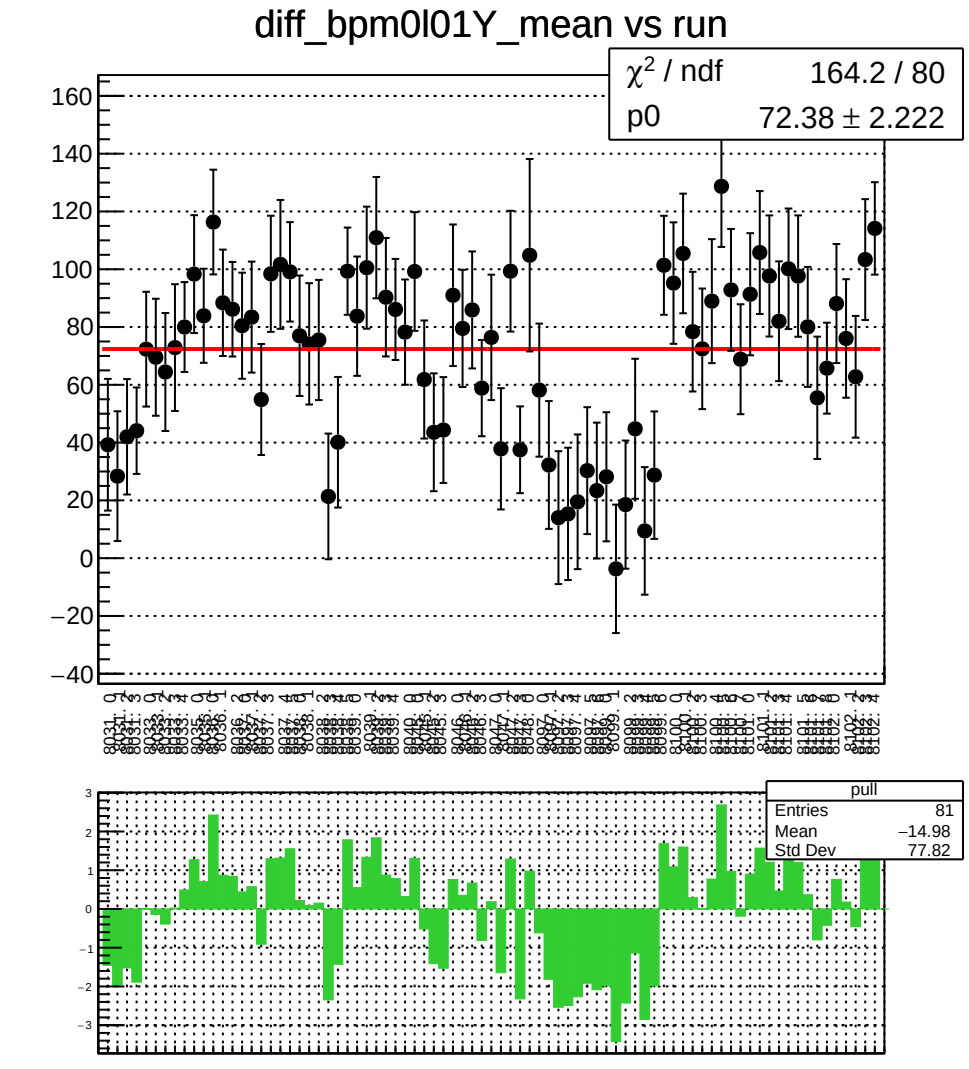

pull1D
Entries 81
Mean −0.02296
Std Dev 1.109

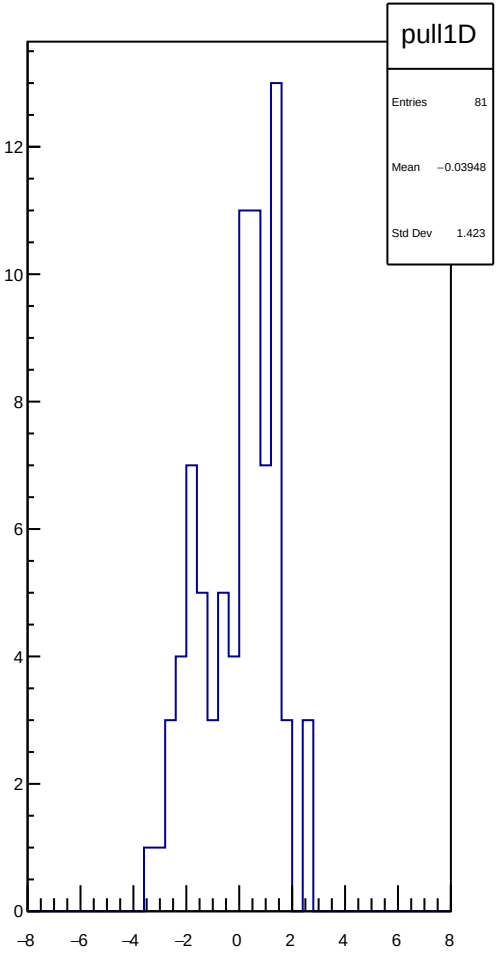

diff_bpm0i01aY_rms vs run
χ² / ndf 8589 / 80
p0 1316 ± 1.044
1400
1350
1300
1250
1200
1150
1100
1050

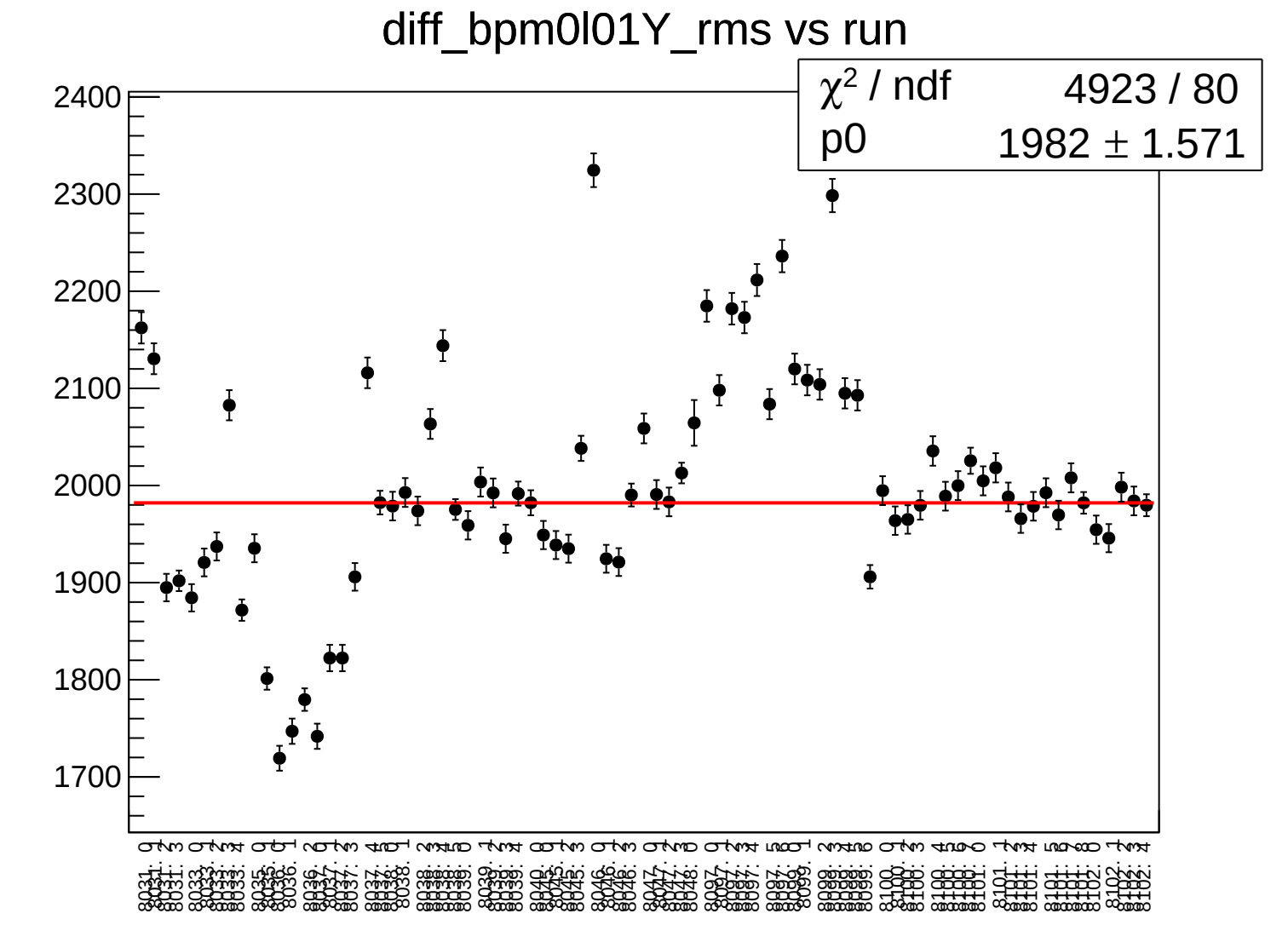

diff_bpm0l01X_mean vs run
χ² / ndf 92.58 / 80
p0 −50.23 ± 3.489
pull
Entries 81
Mean −1296
Std Dev 1341

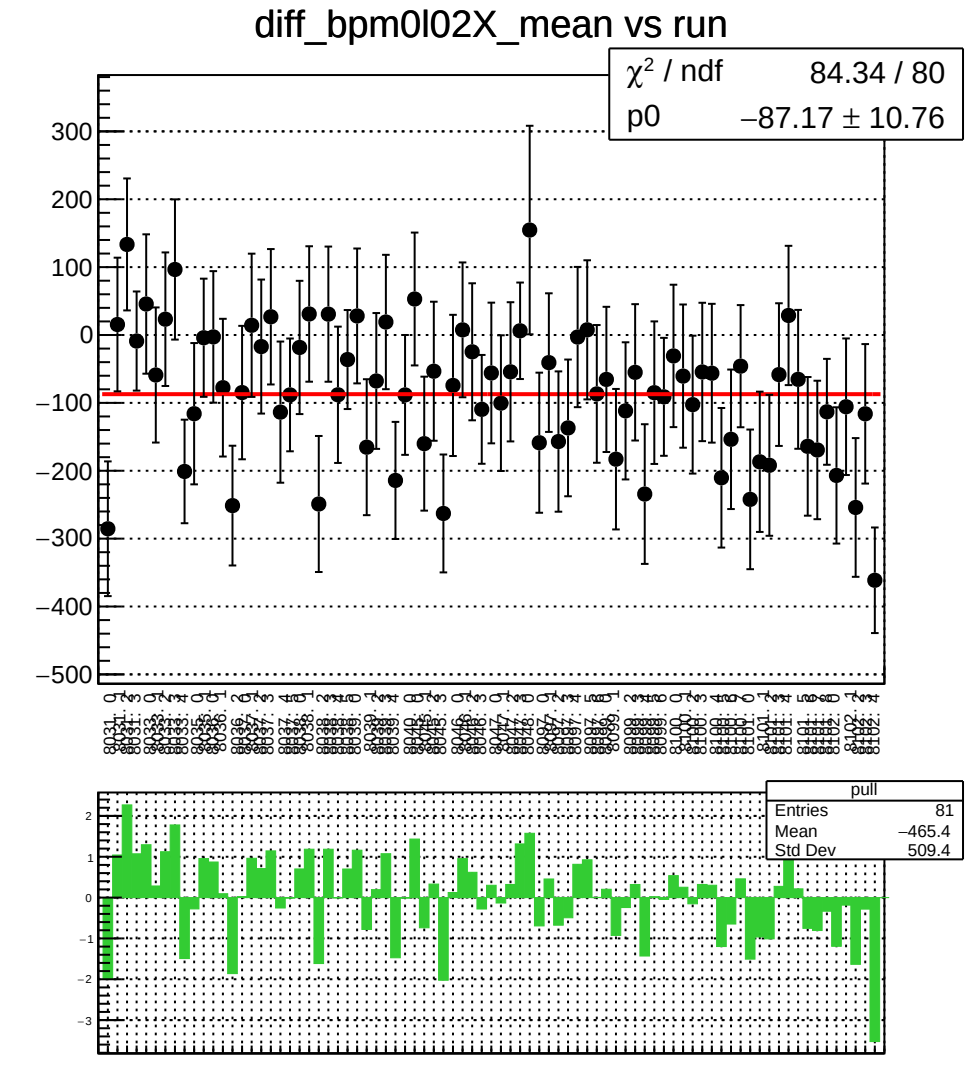

pull1D
Entries 81
Mean 0.007501
Std Dev 1.069

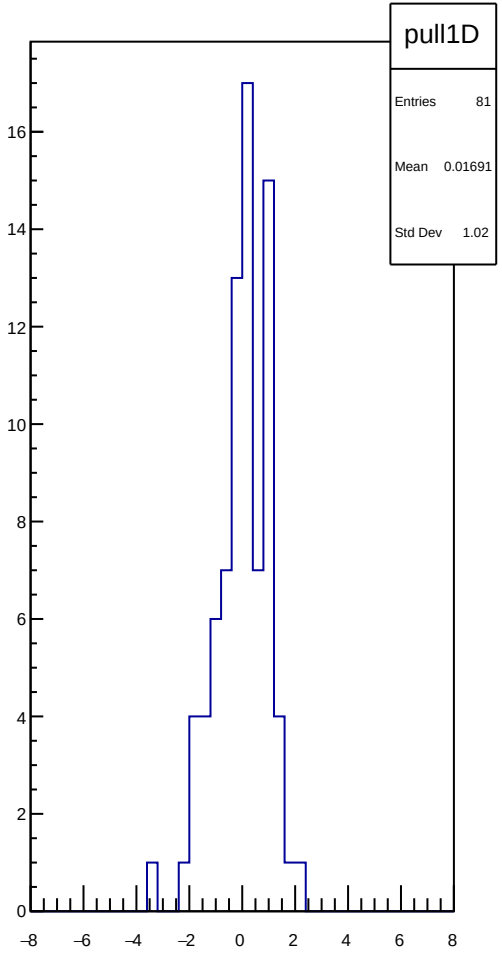

diff_bpm0l01X_rms vs run
χ² / ndf 220.5 / 80
p0 3117 ± 2.467
3200
3150
3100
3050
3000

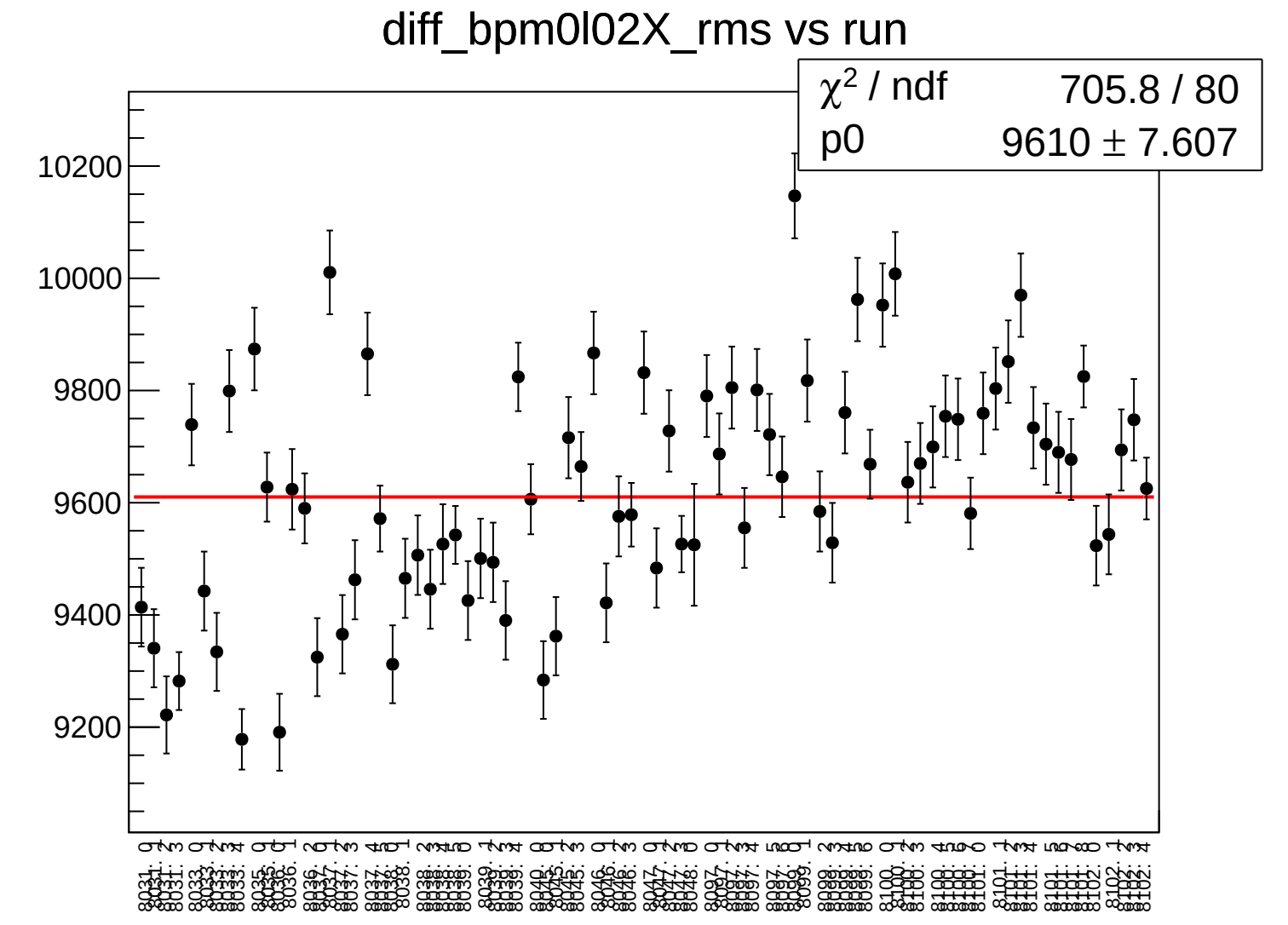

diff_bpm0l01Y_mean vs run
χ² / ndf 164.2 / 80
p0 72.38 ± 2.222
pull
Entries 81
Mean −14.98
Std Dev 77.82

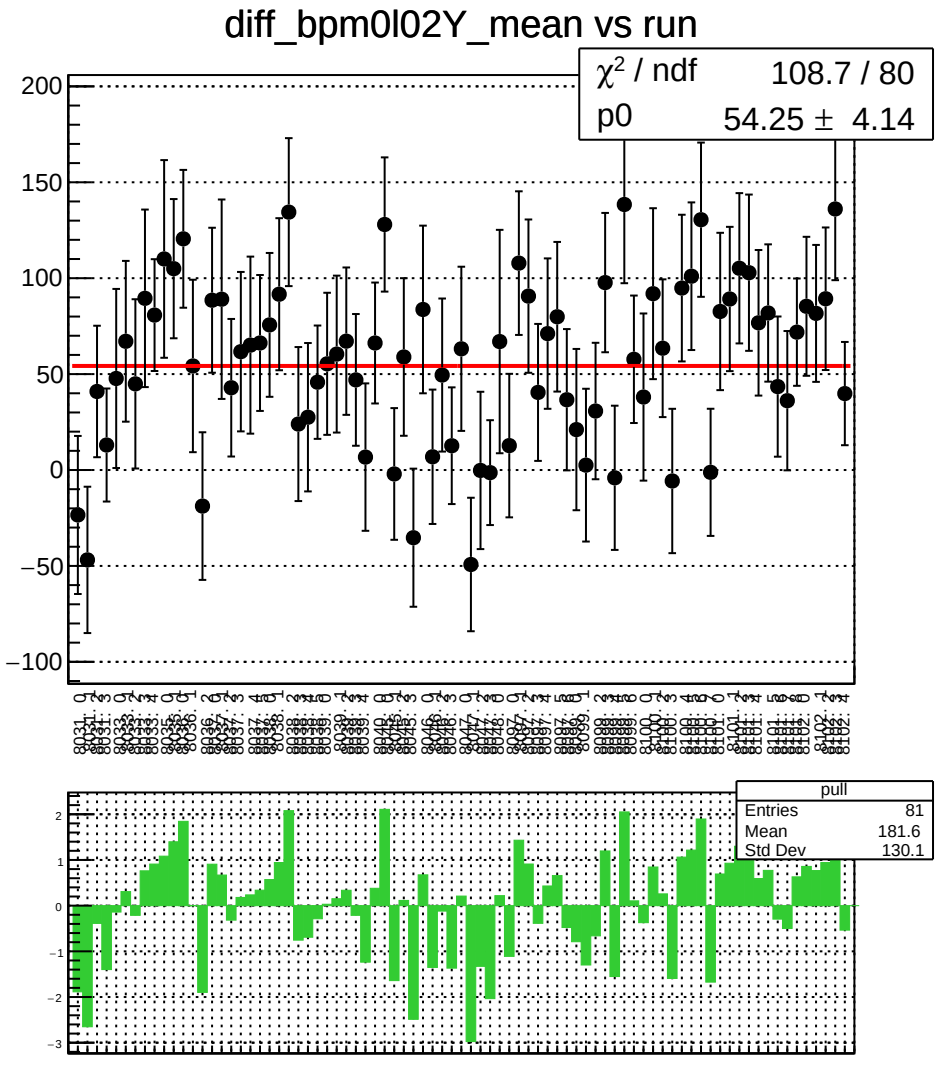

pull1D
Entries 81
Mean −0.03948
Std Dev 1.423

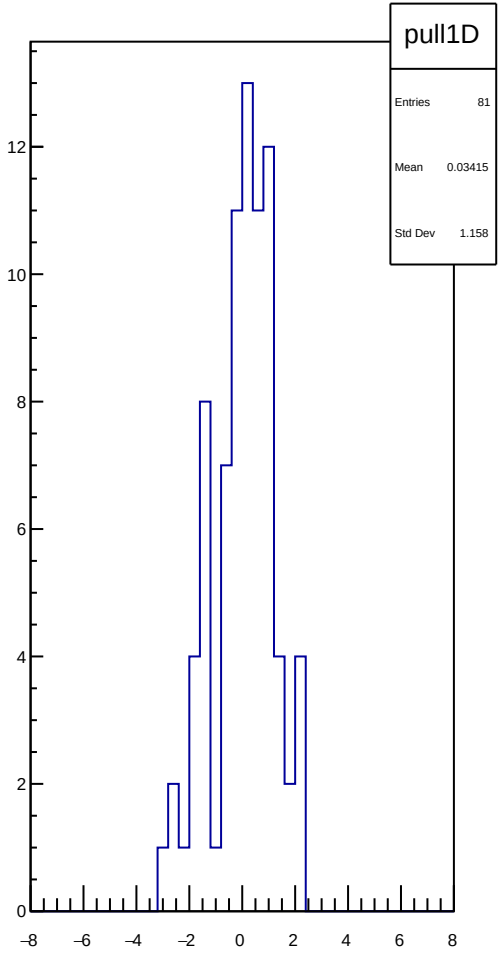

diff_bpm0l01Y_rms vs run
χ² / ndf 4923 / 80
p0 1982 ± 1.571
2400
2300
2200
2100
2000
1900
1800
1700

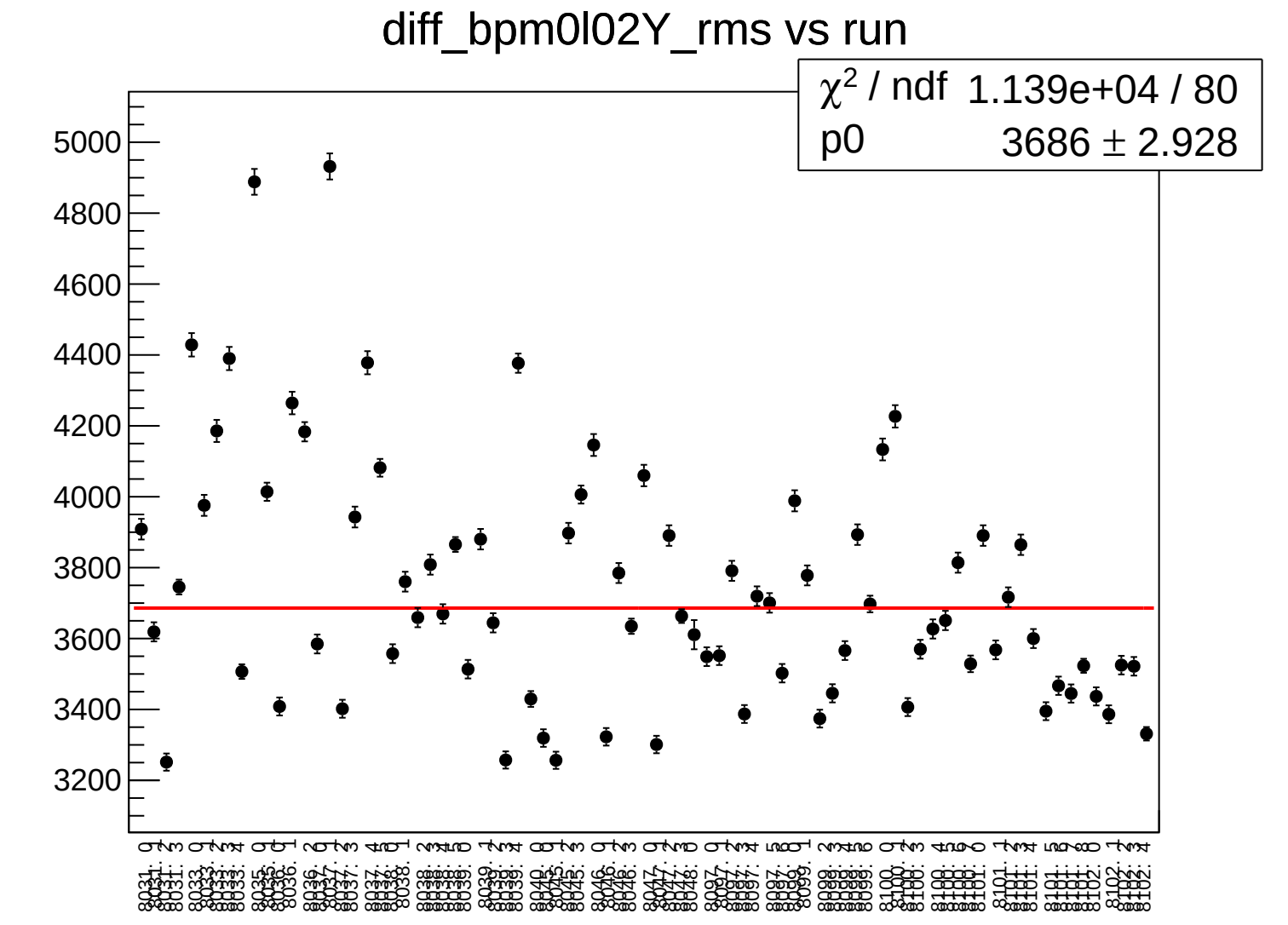

diff_bpm0l02X_mean vs run
χ² / ndf 84.34 / 80
p0 −87.17 ± 10.76
pull
Entries 81
Mean −465.4
Std Dev 509.4

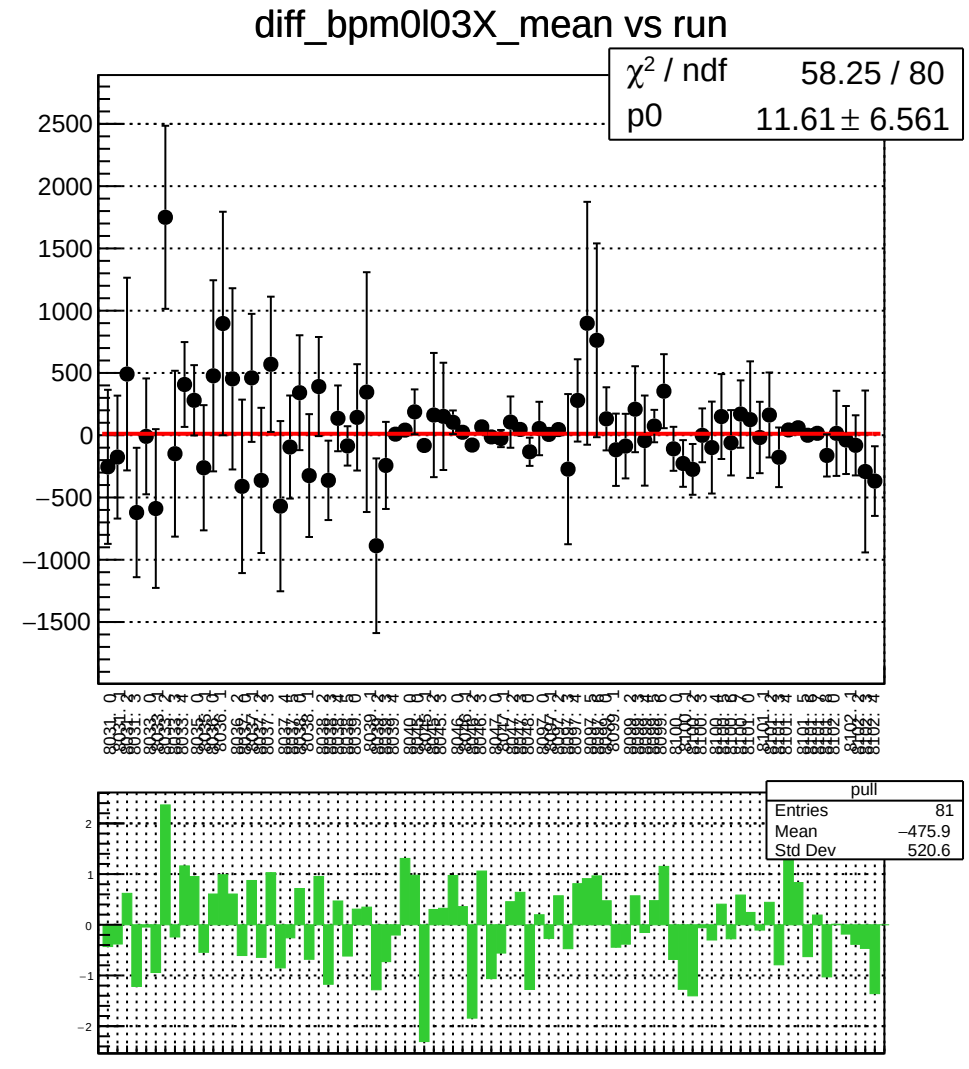

pull1D
Entries 81
Mean 0.01691
Std Dev 1.02

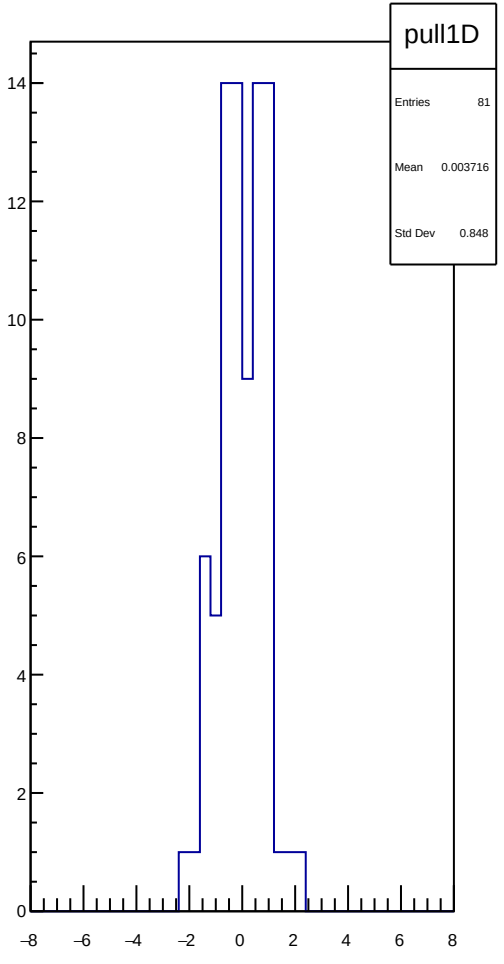

diff_bpm0l02X_rms vs run
χ² / ndf 705.8 / 80
p0 9610 ± 7.607
10200
10000
9800
9600
9400
9200

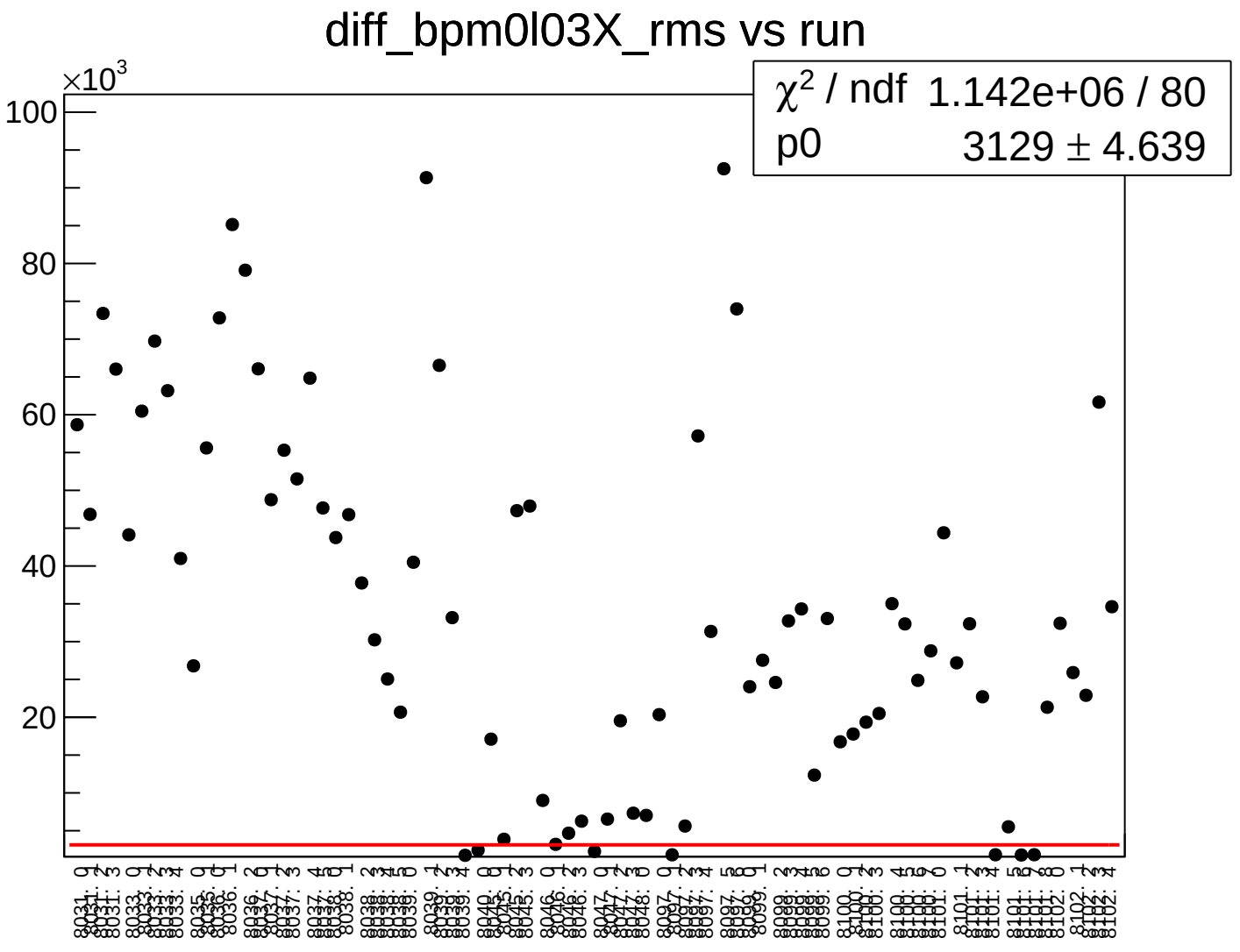

diff_bpm0l02Y_mean vs run
χ² / ndf 108.7 / 80
p0 54.25 ± 4.14
pull
Entries 81
Mean 181.6
Std Dev 130.1

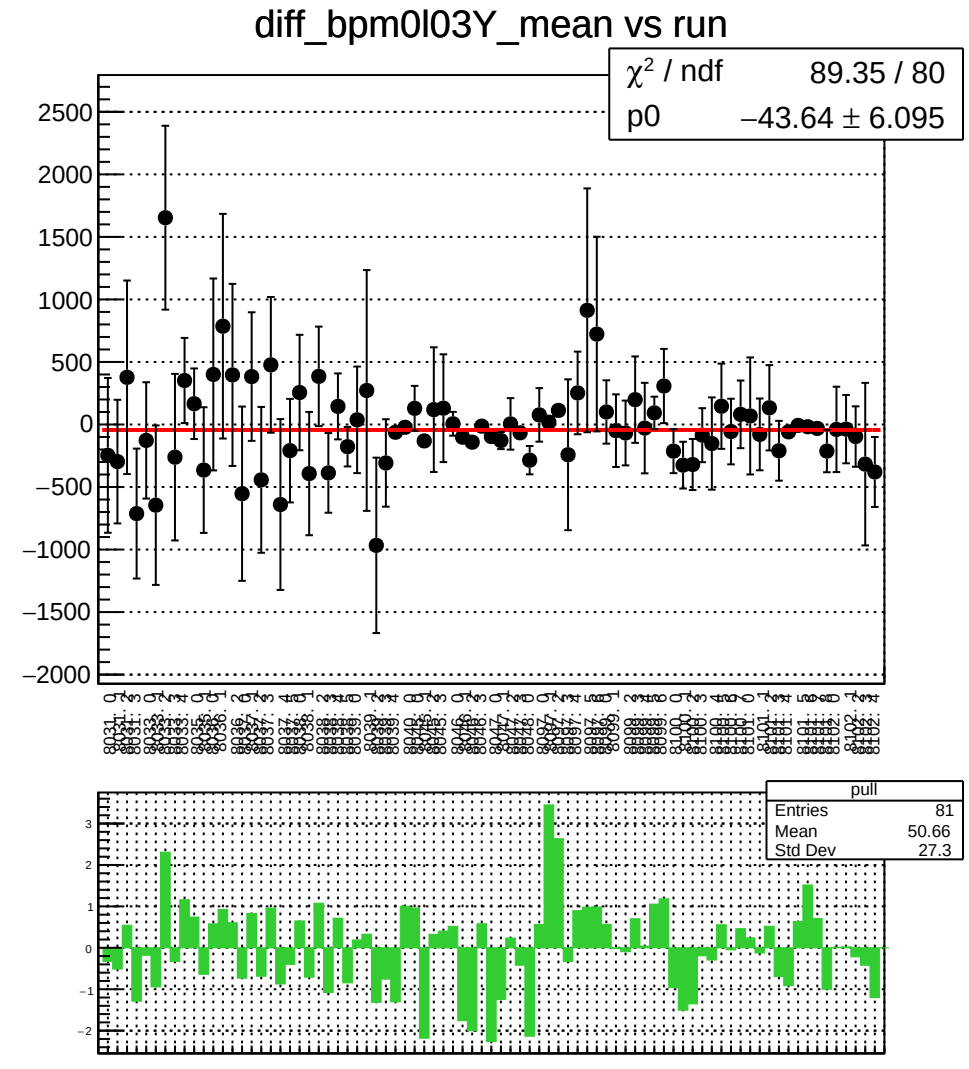

pull1D
Entries 81
Mean 0.03415
Std Dev 1.158

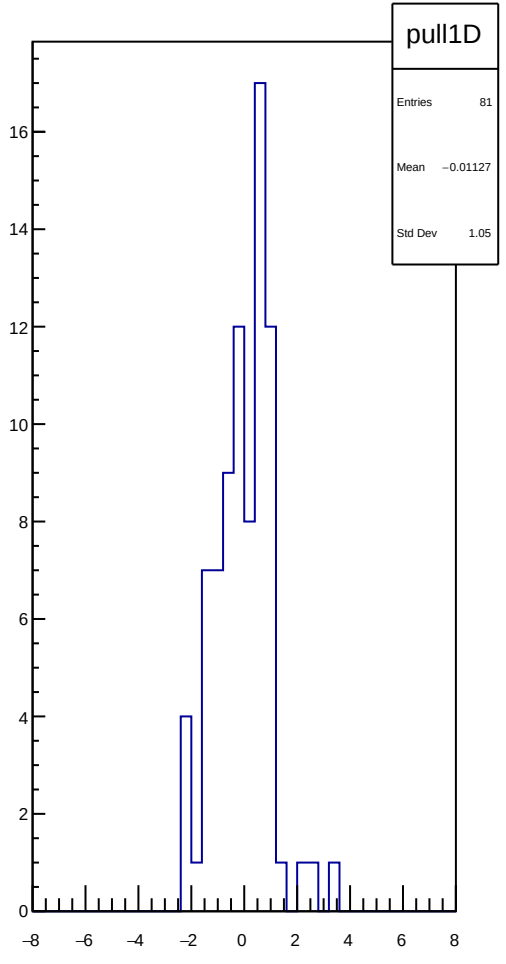

diff_bpm0l02Y_rms vs run
χ² / ndf 1.139e+04 / 80
p0 3686 ± 2.928
5000
4800
4600
4400
4200
4000
3800
3600
3400
3200

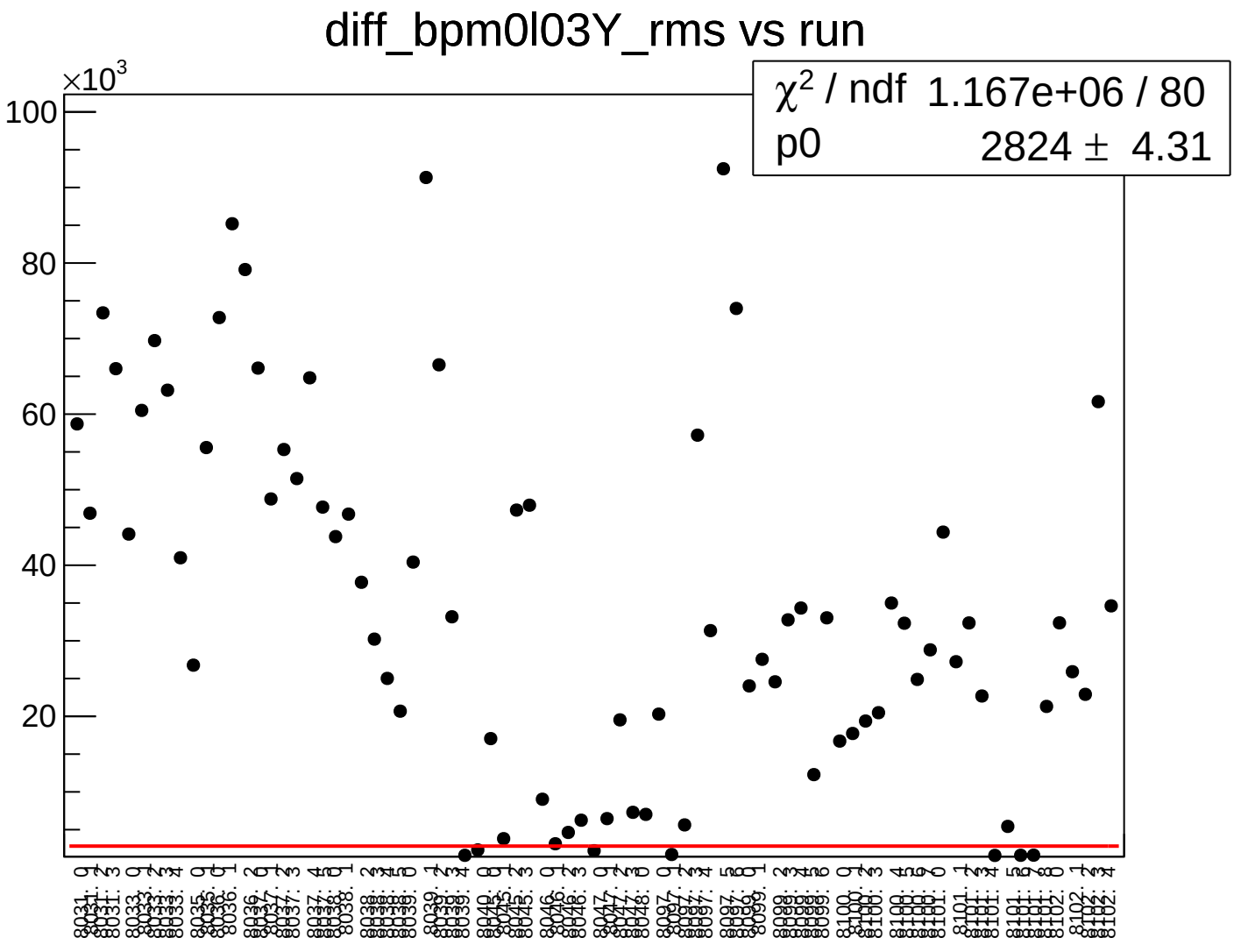

diff_bpm0l03X_mean vs run
χ^2 / ndf 58.25 / 80
p0 11.61 ± 6.561
pull
Entries 81
Mean −475.9
Std Dev 520.6

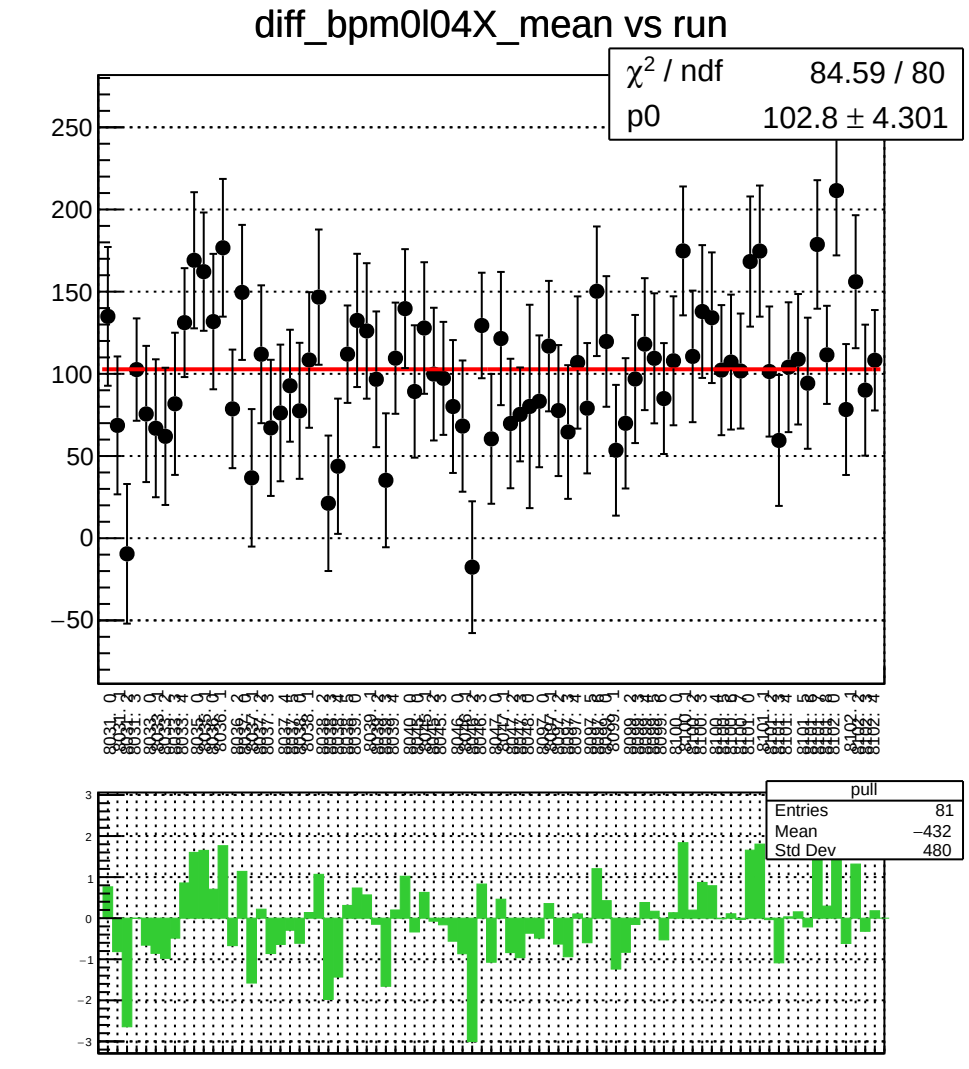

pull1D
Entries 81
Mean 0.003716
Std Dev 0.848

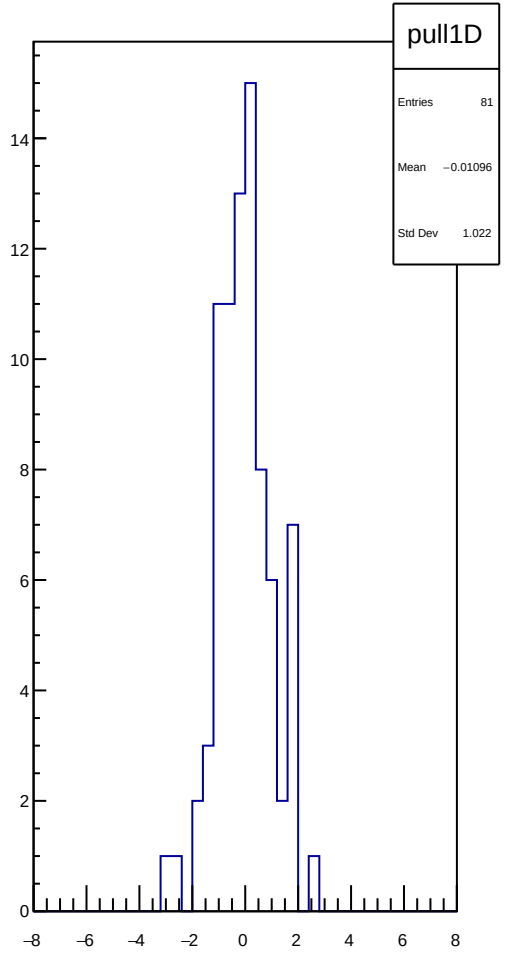

diff_bpm0l03X_rms vs run
×10^3
100
80
60
40
20
χ² / ndf 1.142e+06 / 80
p0 3129 ± 4.639

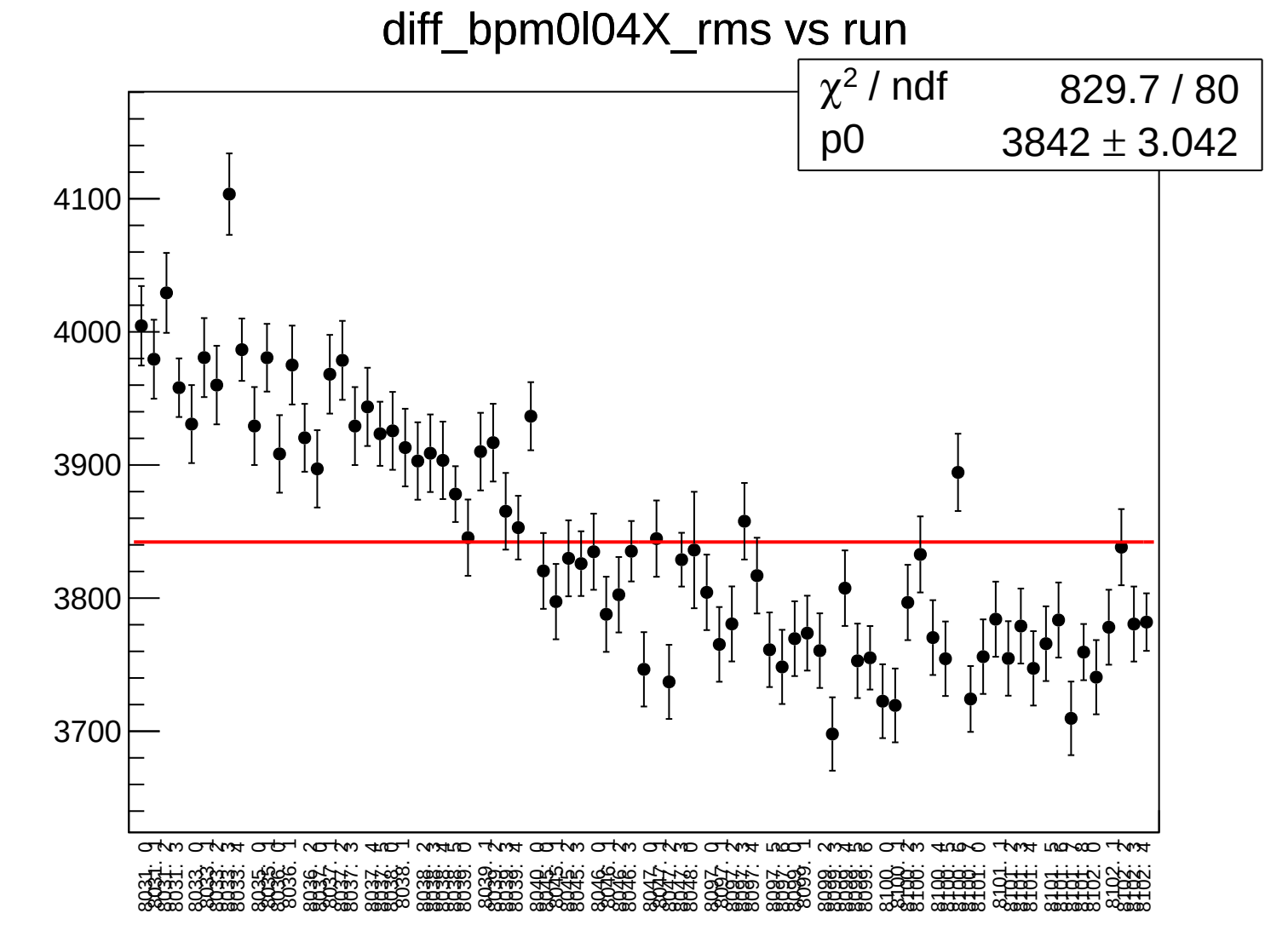

diff_bpm0l03Y_mean vs run
χ² / ndf 89.35 / 80
p0 −43.64 ± 6.095
pull
Entries 81
Mean 50.66
Std Dev 27.3

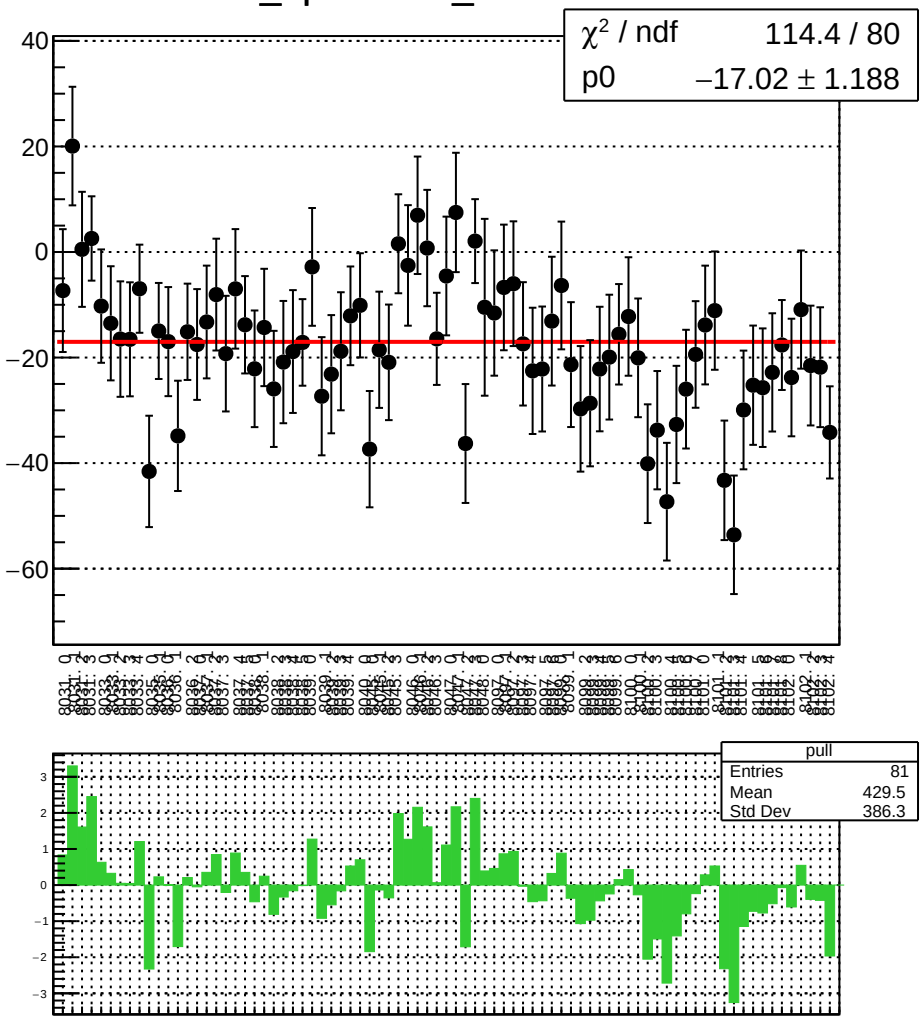

pull1D
Entries 81
Mean −0.01127
Std Dev 1.05

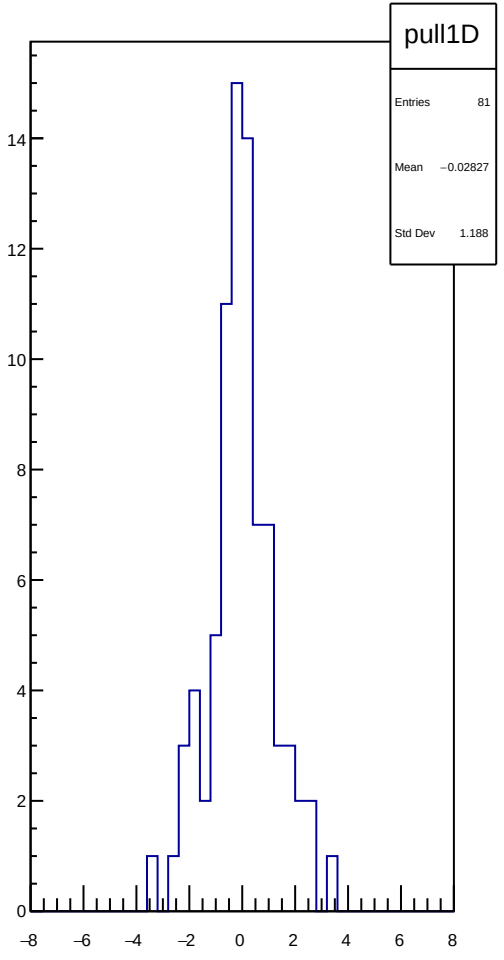

diff_bpm0l03Y_rms vs run
×10^3
100
80
60
40
20
χ² / ndf 1.167e+06 / 80
p0 2824 ± 4.31

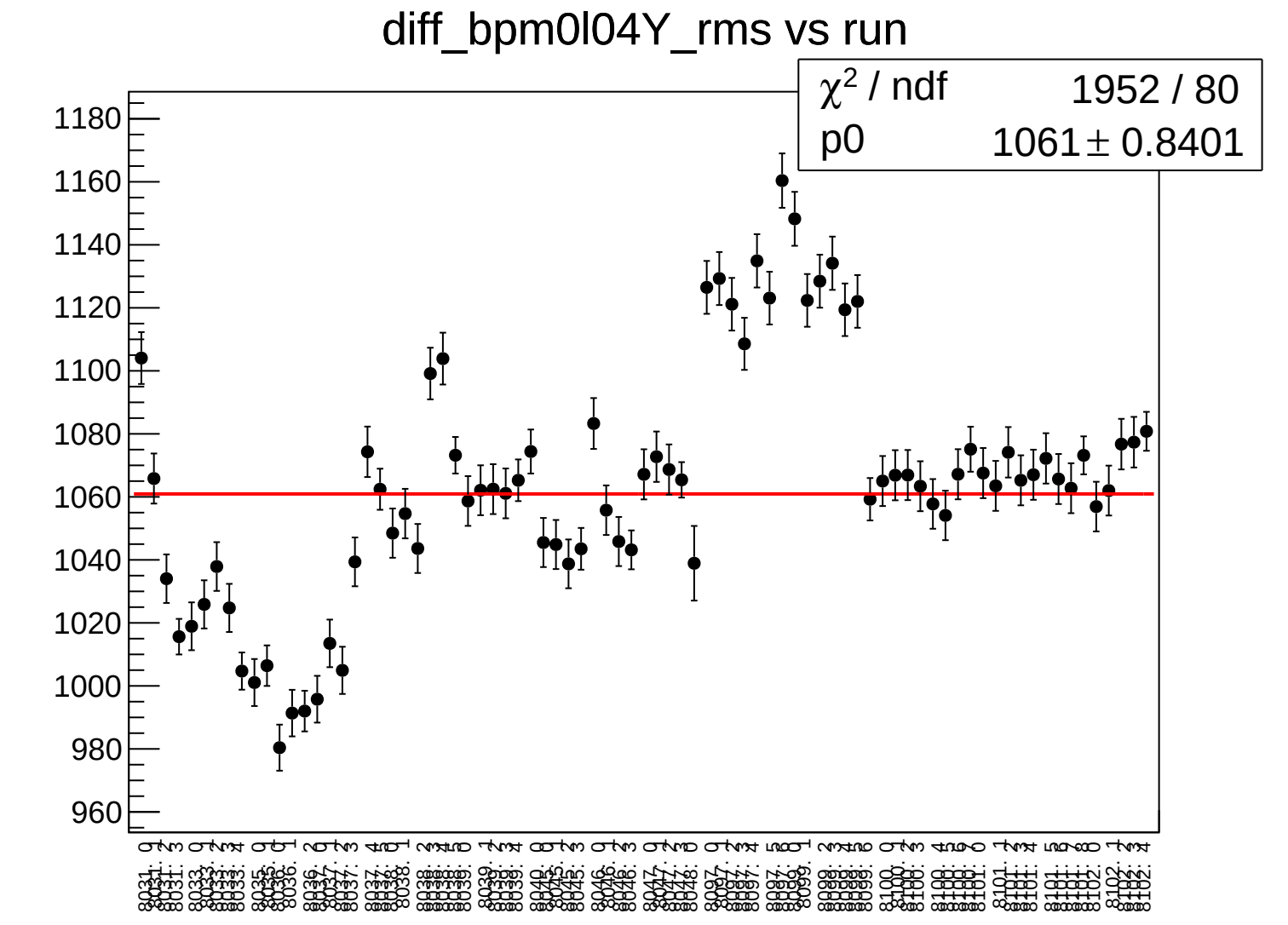

diff_bpm0l04X_mean vs run
χ² / ndf 84.59 / 80
p0 102.8 ± 4.301
pull
Entries 81
Mean −432
Std Dev 480

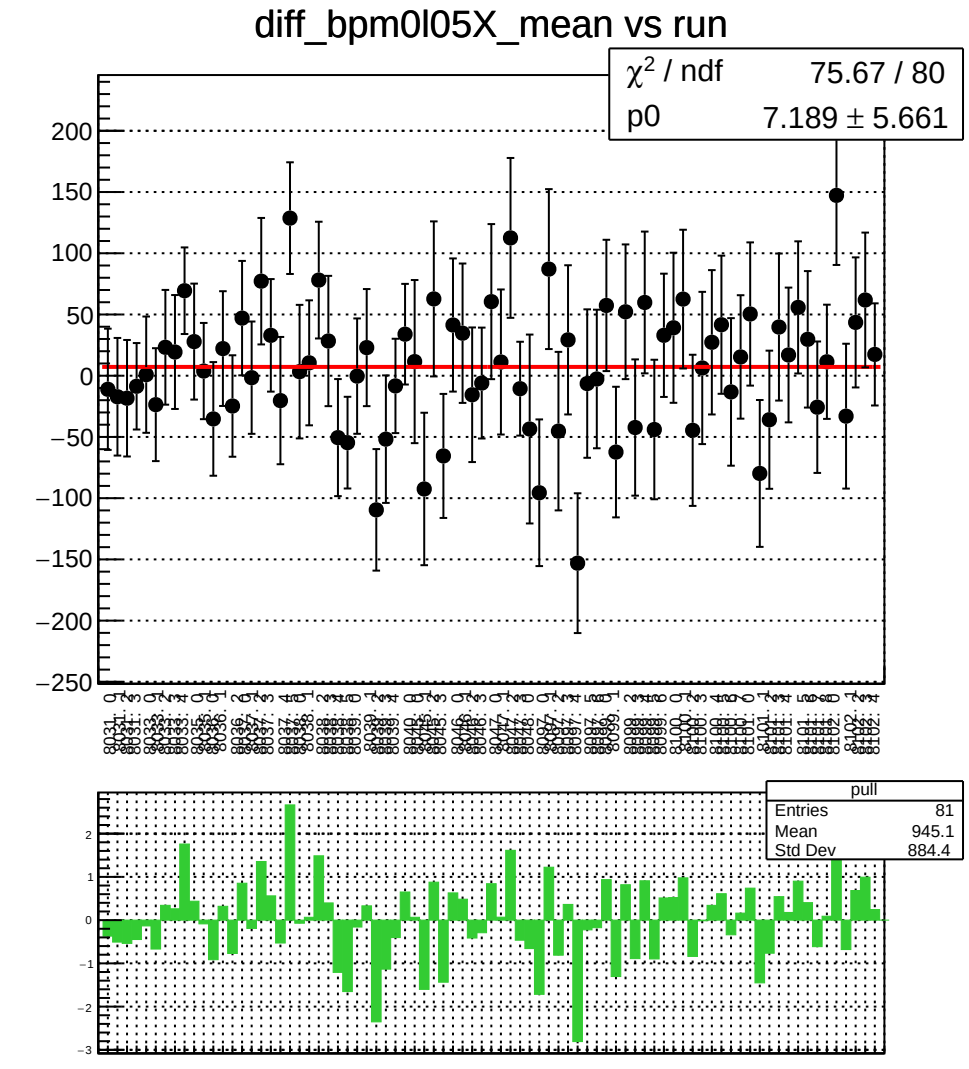

pull1D
Entries 81
Mean −0.01096
Std Dev 1.022

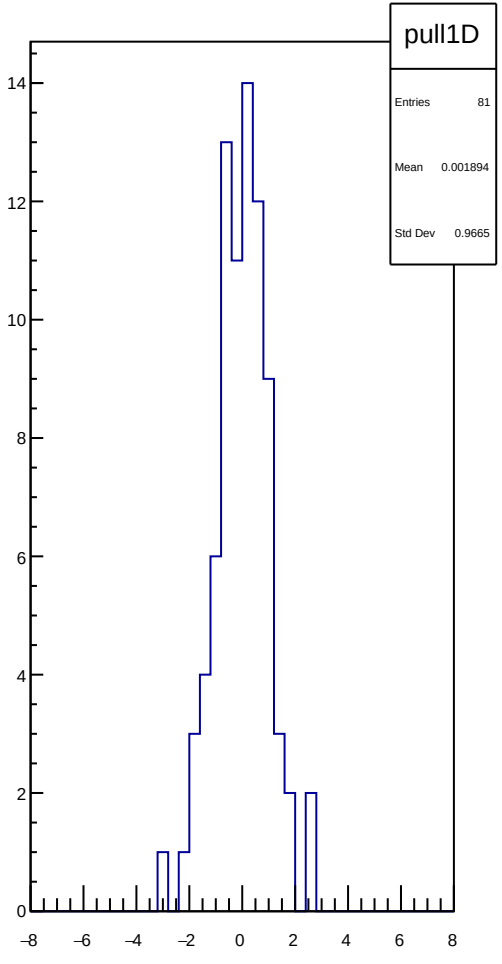

diff_bpm0l04X_rms vs run
χ² / ndf 829.7 / 80
p0 3842 ± 3.042
4100
4000
3900
3800
3700

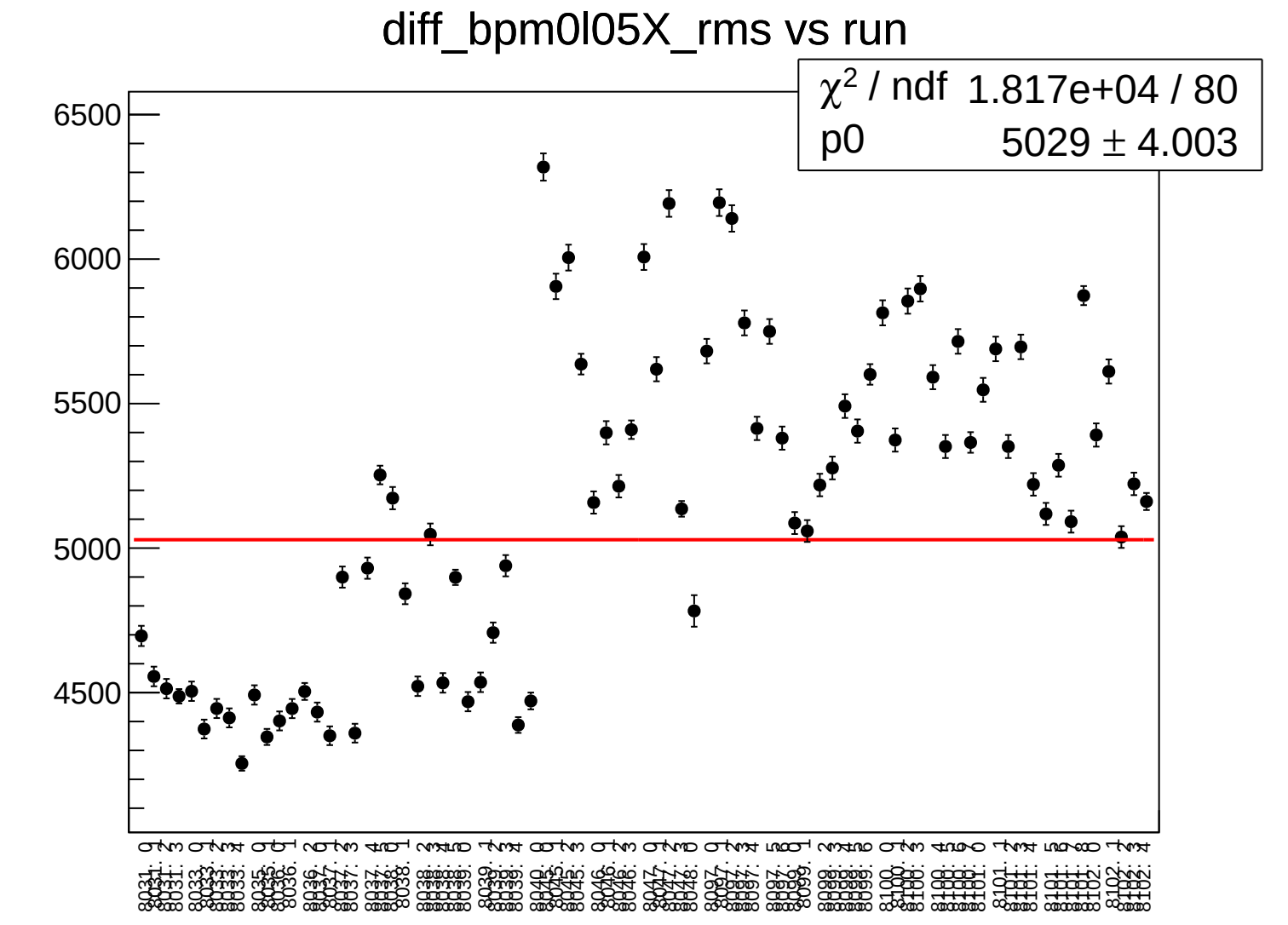

diff_bpm0l04Y_mean vs run
χ² / ndf 114.4 / 80
p0 −17.02 ± 1.188
pull
Entries 81
Mean 429.5
Std Dev 386.3

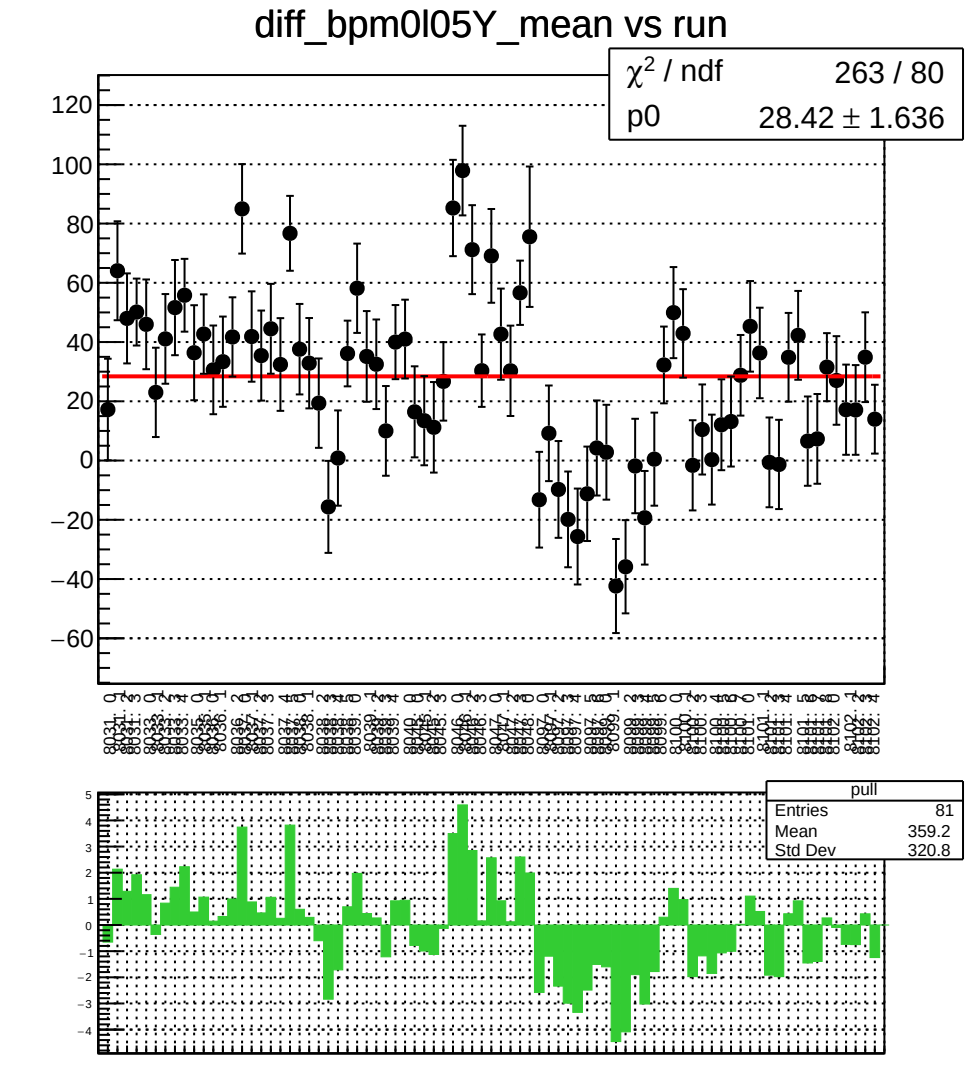

pull1D
Entries 81
Mean −0.02827
Std Dev 1.188

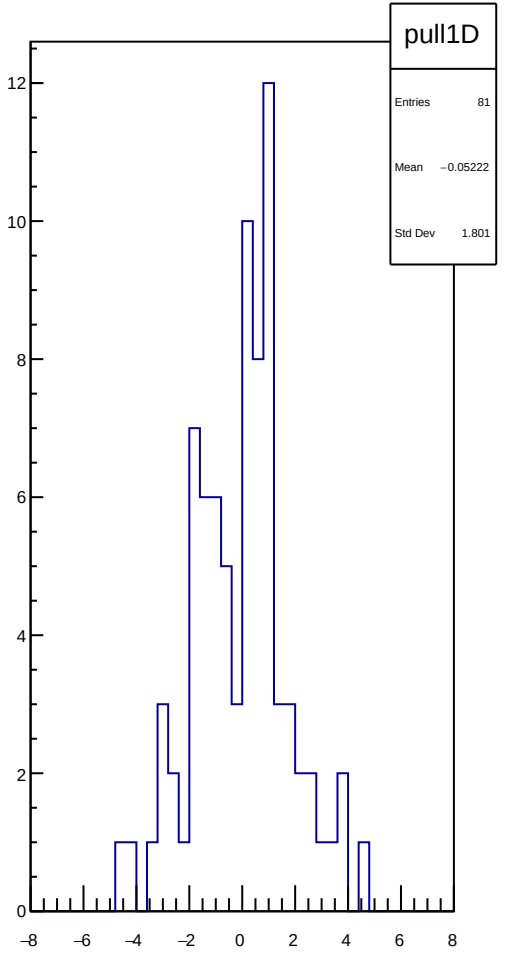

diff_bpm0l04Y_rms vs run
χ² / ndf 1952 / 80
p0 1061 ± 0.8401
1180
1160
1140
1120
1100
1080
1060
1040
1020
1000
980
960

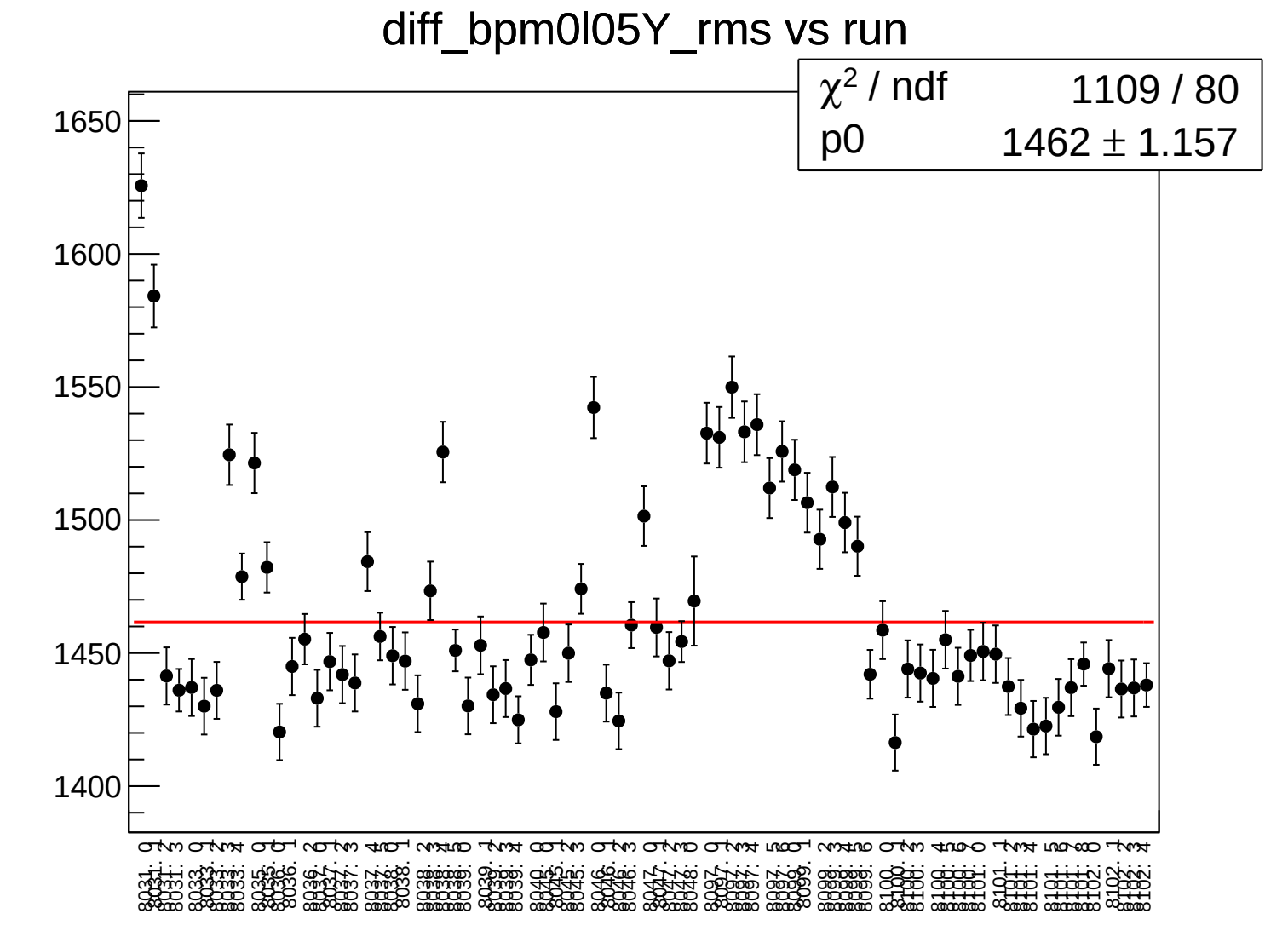

diff_bpm0l05X_mean vs run
χ² / ndf 75.67 / 80
p0 7.189 ± 5.661
pull
Entries 81
Mean 945.1
Std Dev 884.4

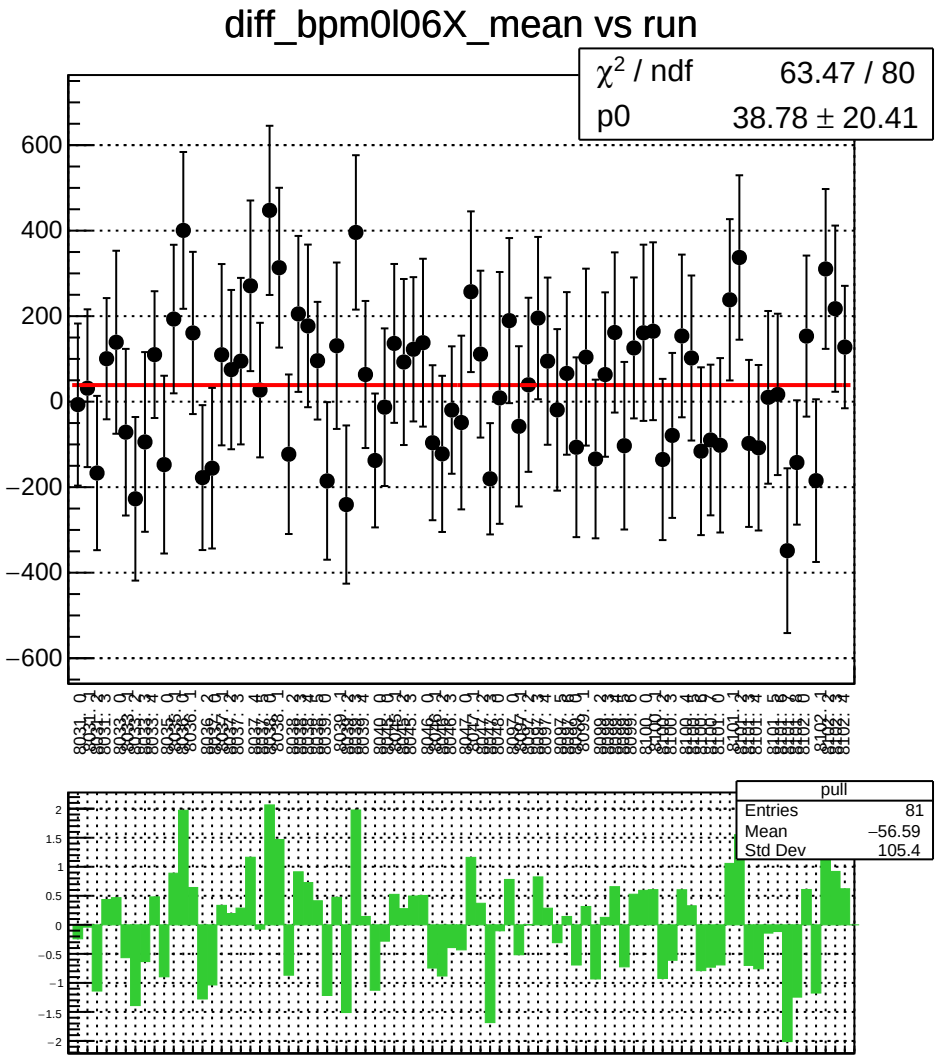

pull1D
Entries 81
Mean 0.001894
Std Dev 0.9665

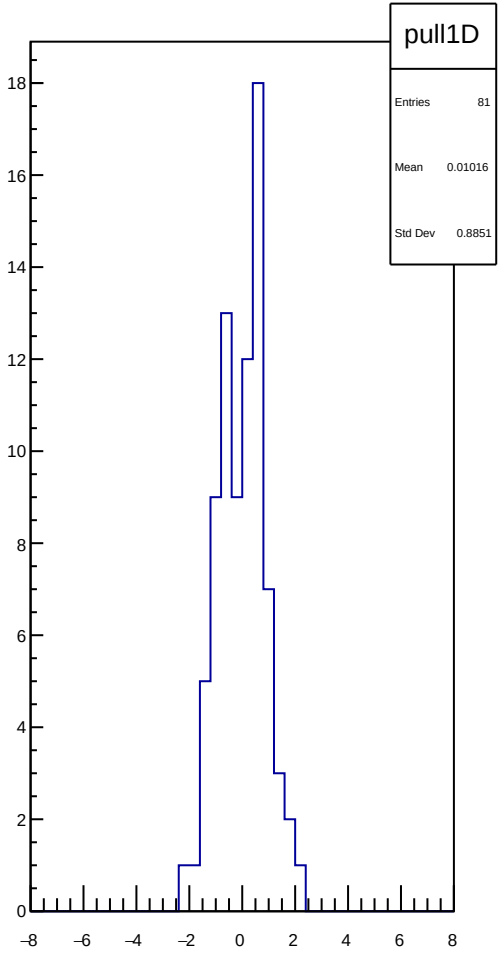

diff_bpm0l05X_rms vs run
χ² / ndf 1.817e+04 / 80
p0 5029 ± 4.003
6500
6000
5500
5000
4500

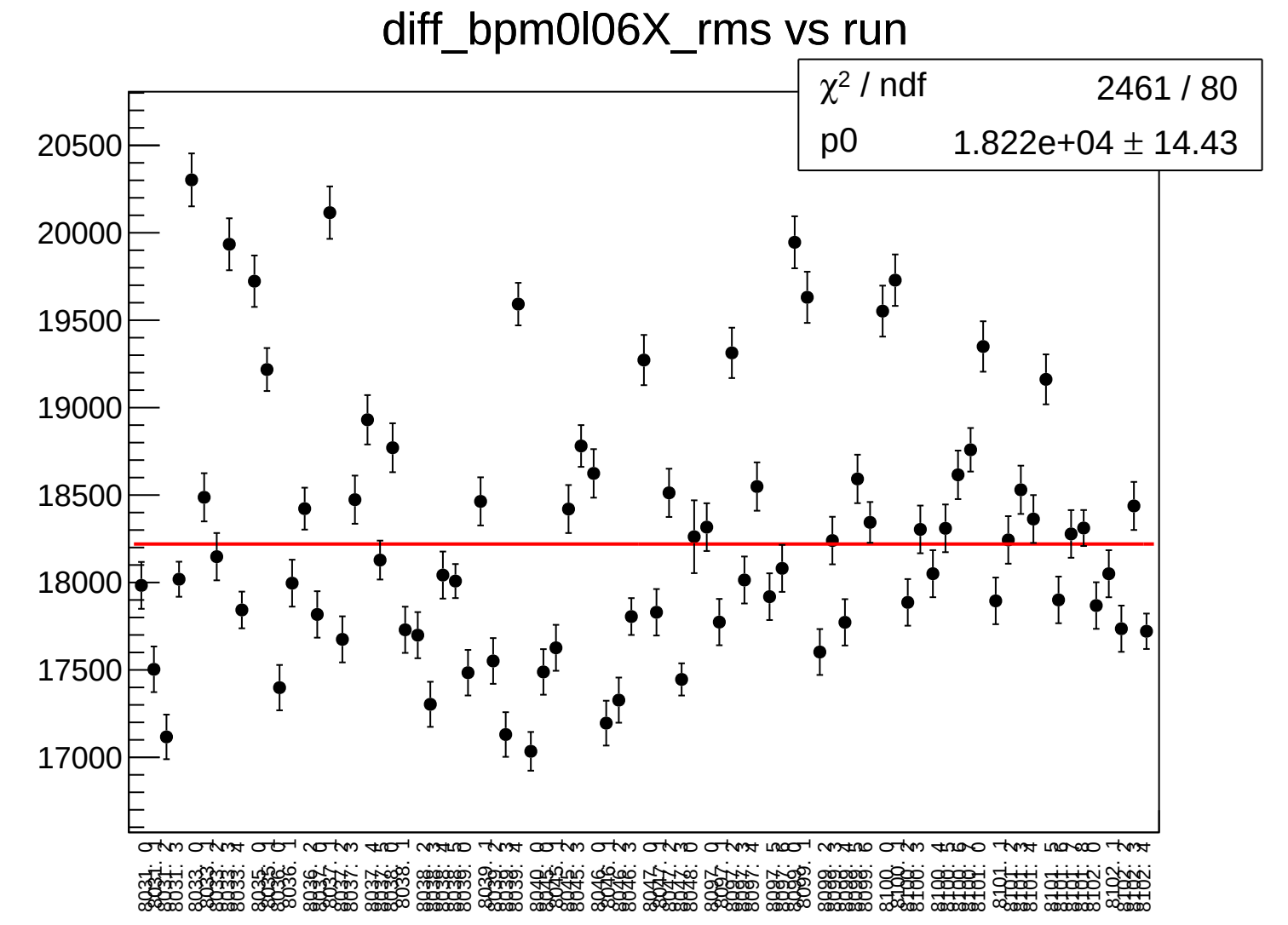

diff_bpm0l05Y_mean vs run
χ² / ndf 263 / 80
p0 28.42 ± 1.636
pull
Entries 81
Mean 359.2
Std Dev 320.8

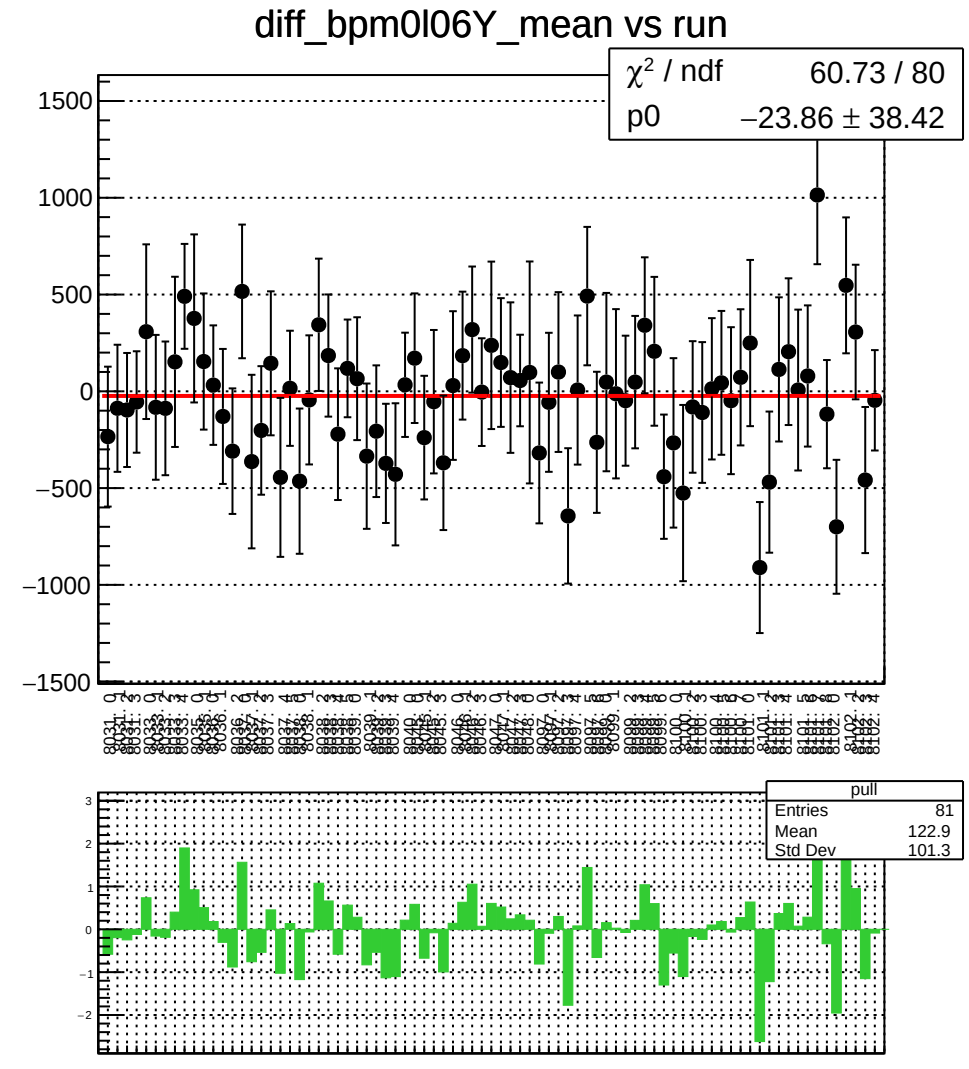

pull1D
Entries 81
Mean −0.05222
Std Dev 1.801

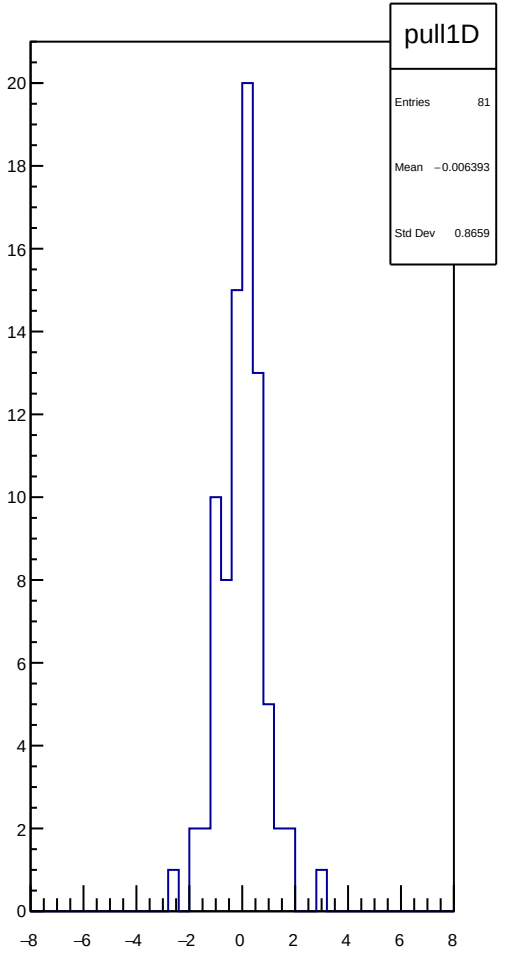

diff_bpm0l05Y_rms vs run
χ² / ndf 1109 / 80
p0 1462 ± 1.157
1650
1600
1550
1500
1450
1400

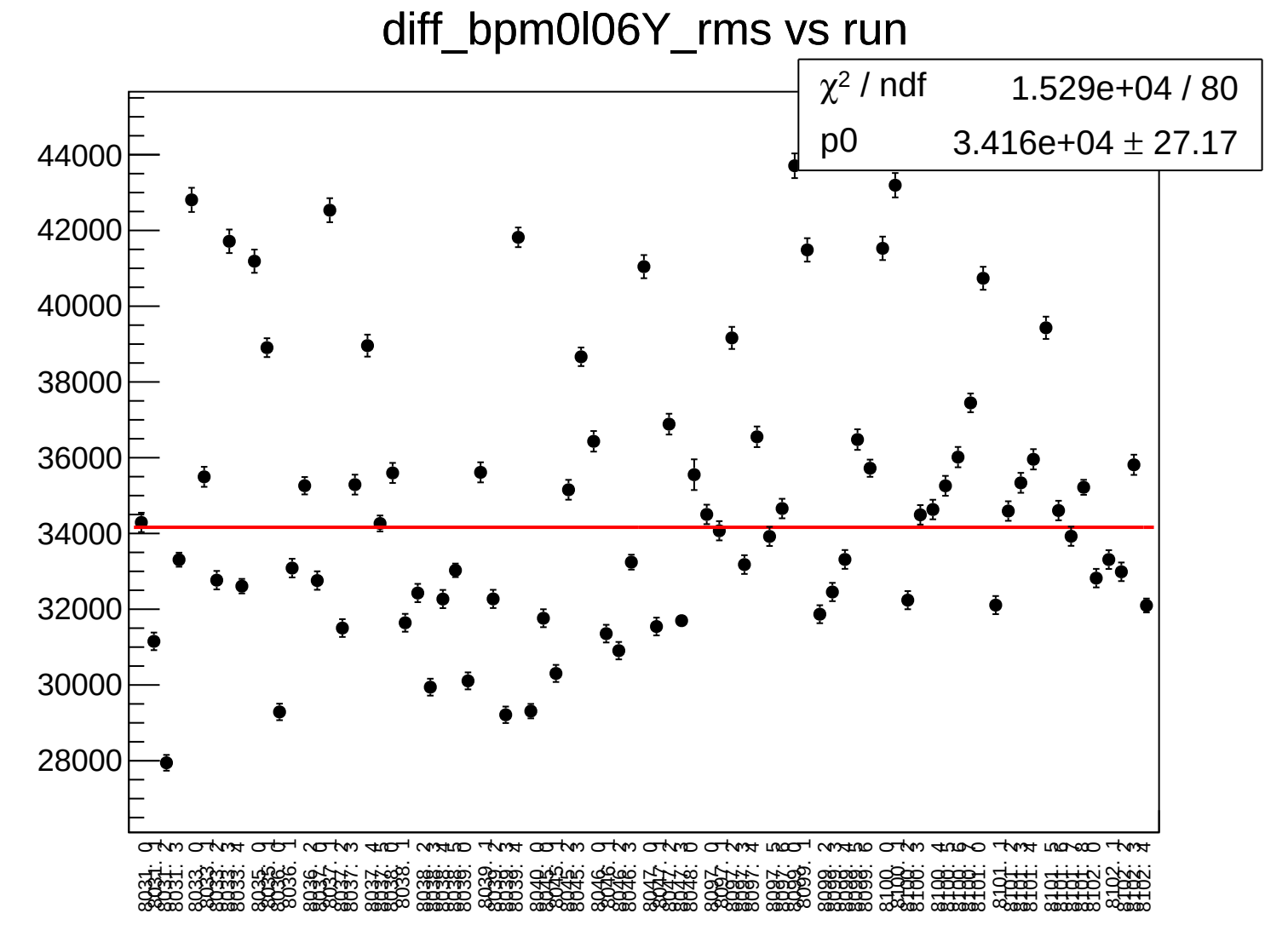

diff_bpm0l06X_mean vs run
χ^2 / ndf 63.47 / 80
p0 38.78 ± 20.41
pull
Entries 81
Mean −56.59
Std Dev 105.4

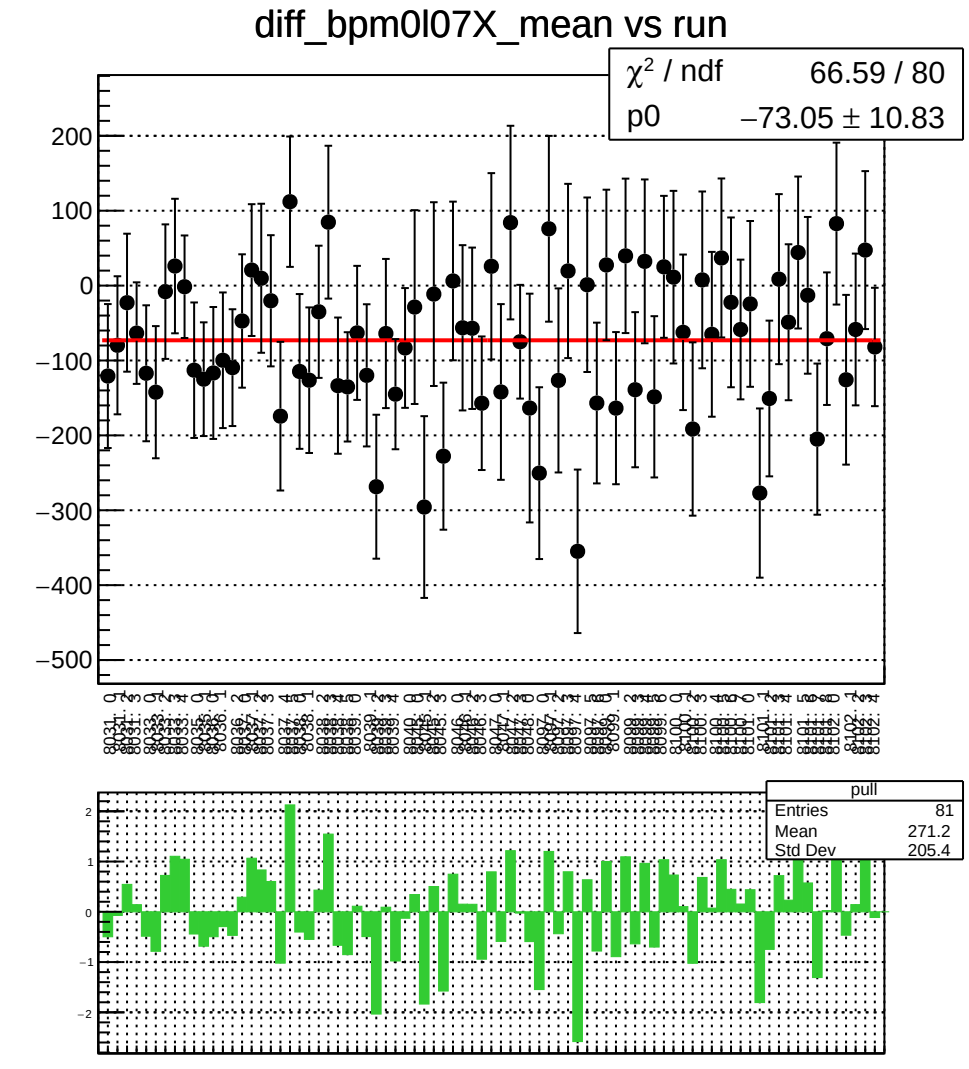

pull1D
Entries 81
Mean 0.01016
Std Dev 0.8851

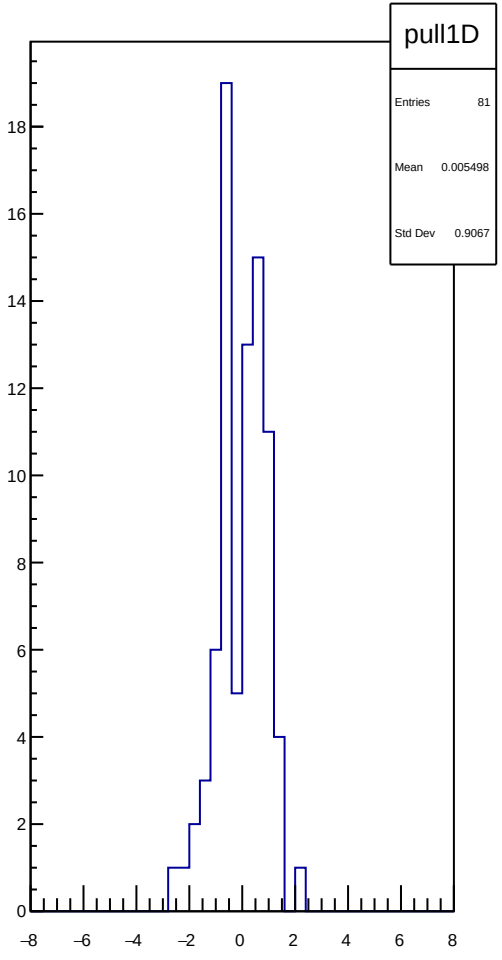

diff_bpm0l06X_rms vs run
χ² / ndf 2461 / 80
p0 1.822e+04 ± 14.43
20500
20000
19500
19000
18500
18000
17500
17000

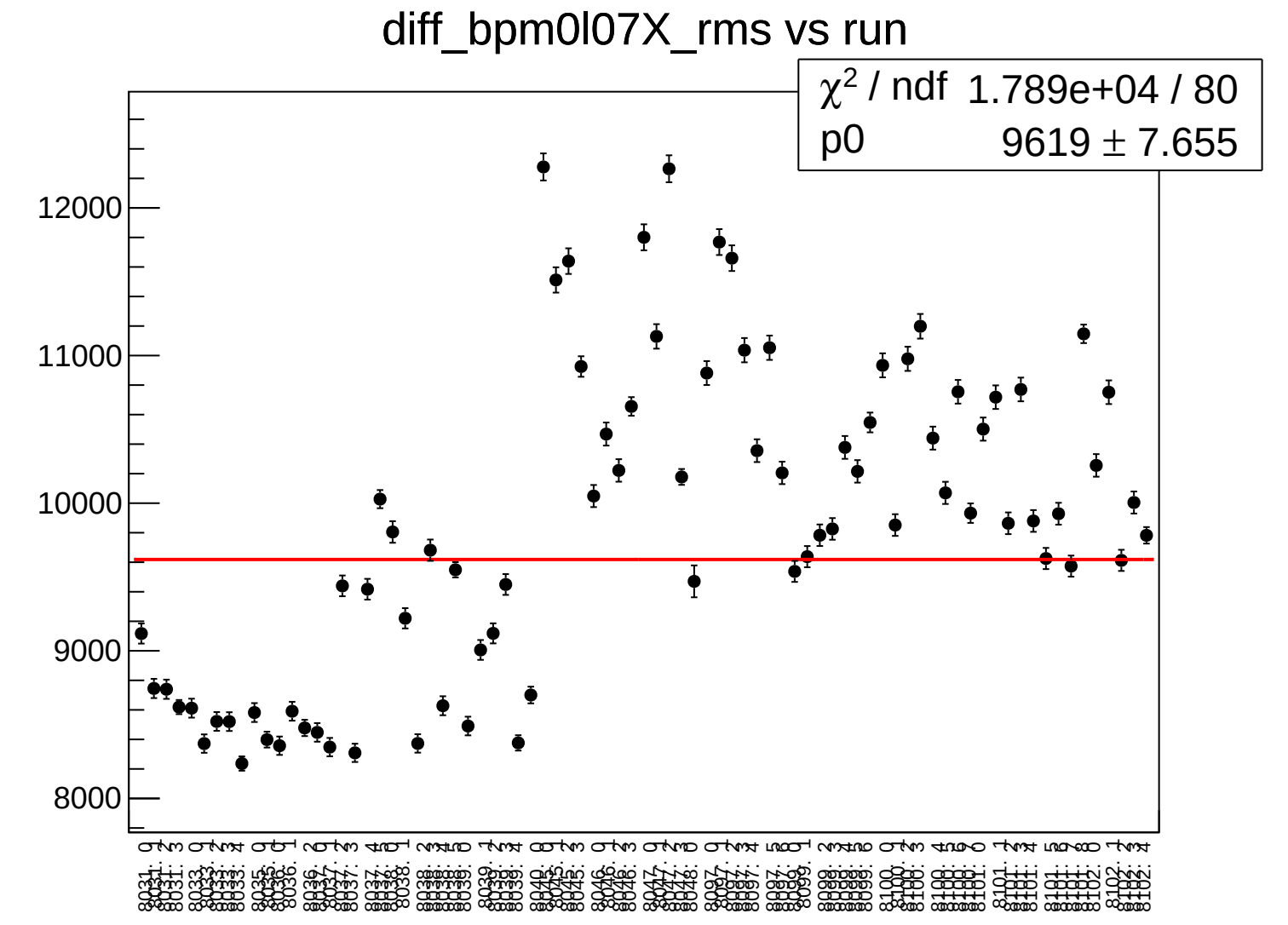

diff_bpm0l06Y_mean vs run
χ² / ndf 60.73 / 80
p0 −23.86 ± 38.42
pull
Entries 81
Mean 122.9
Std Dev 101.3

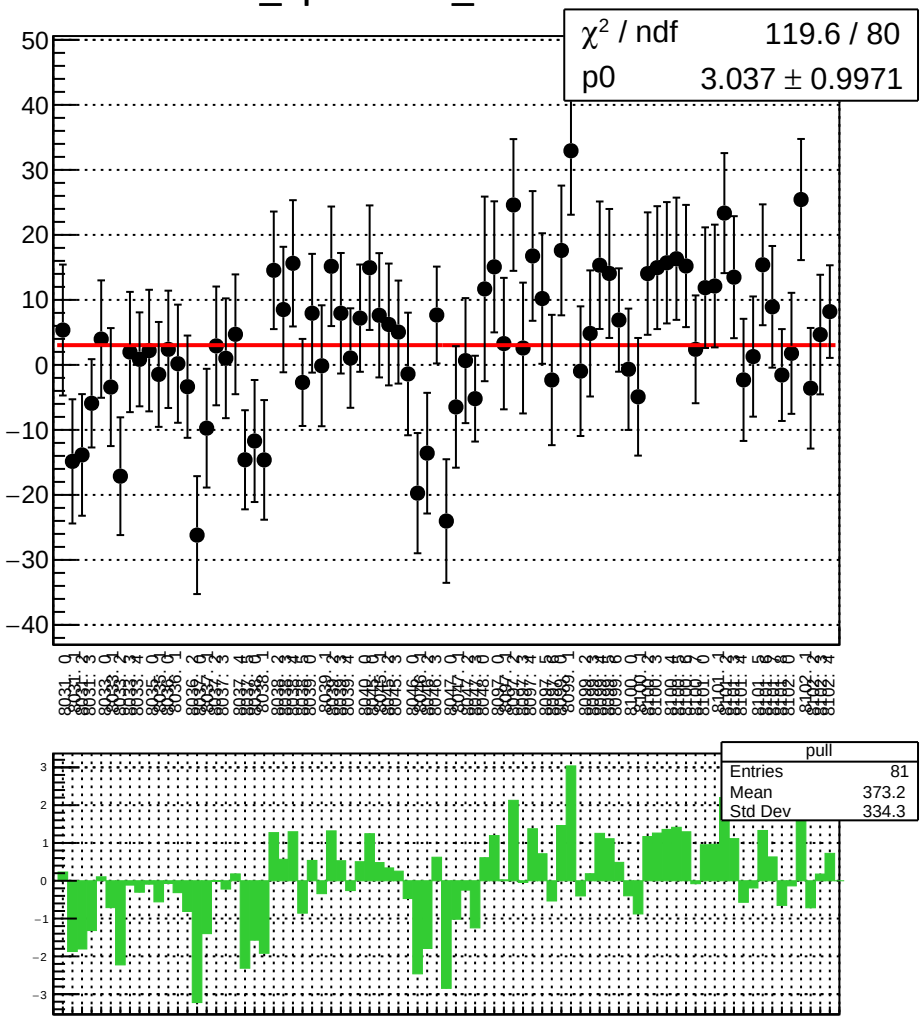

pull1D
Entries 81
Mean −0.006393
Std Dev 0.8659

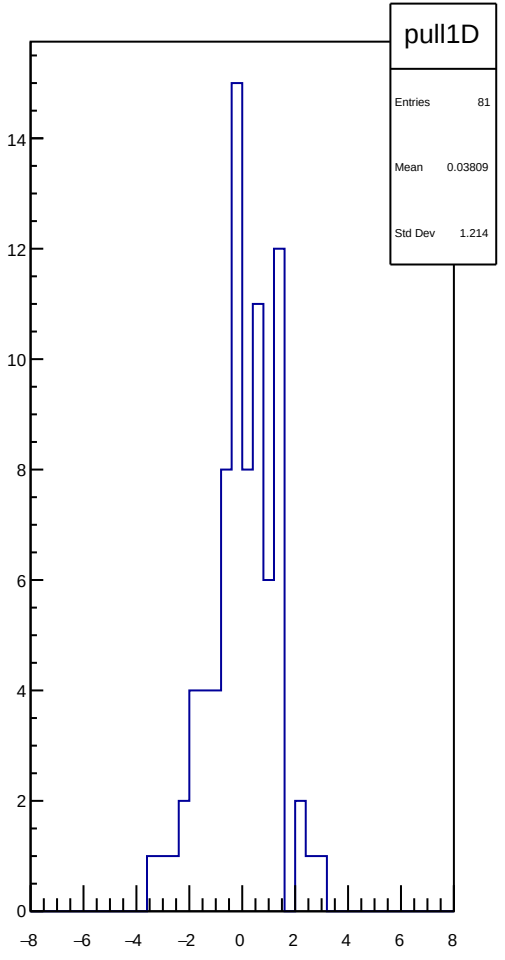

diff_bpm0l06Y_rms vs run
χ² / ndf 1.529e+04 / 80
p0 3.416e+04 ± 27.17
44000
42000
40000
38000
36000
34000
32000
30000
28000

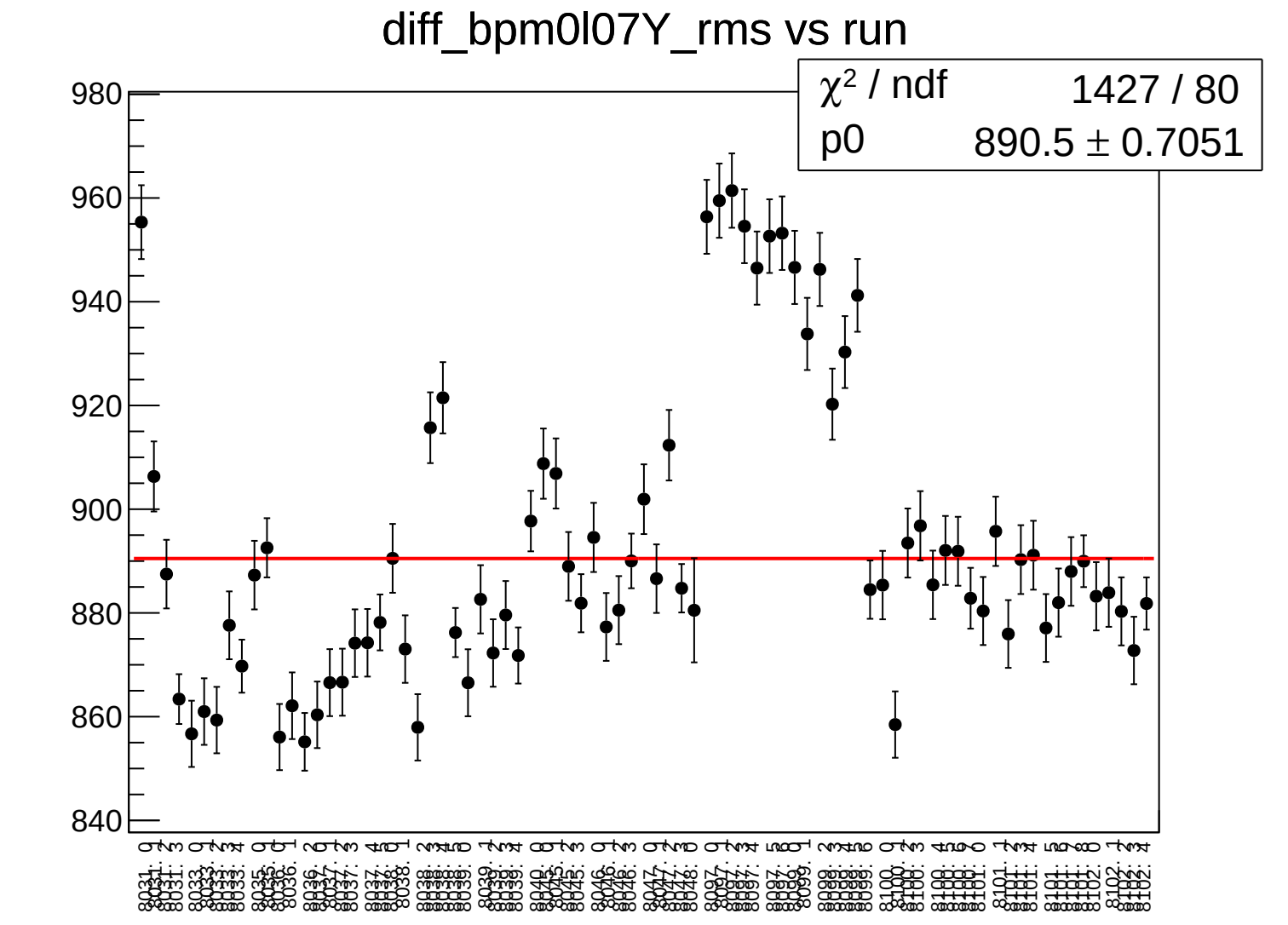

diff_bpm0l07X_mean vs run
χ² / ndf 66.59 / 80
p0 −73.05 ± 10.83
pull
Entries 81
Mean 271.2
Std Dev 205.4

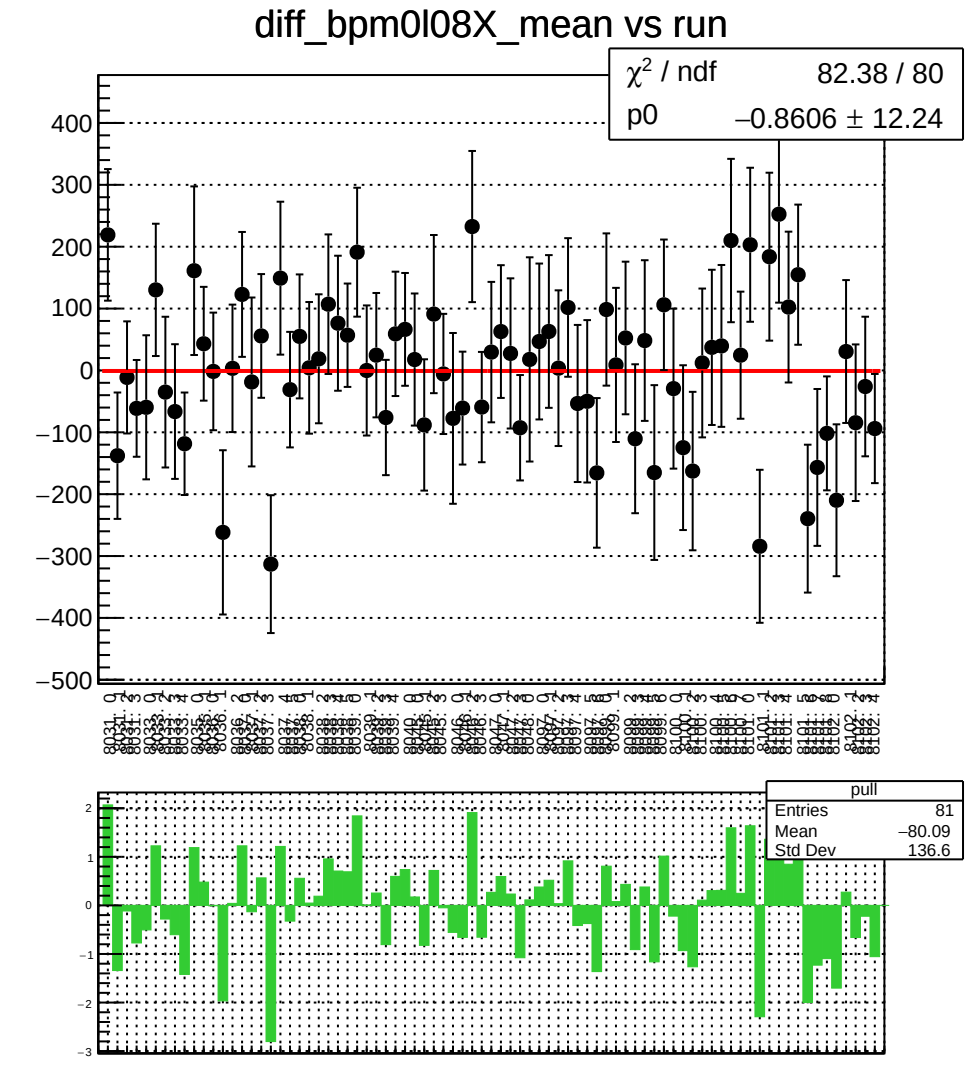

pull1D
Entries 81
Mean 0.005498
Std Dev 0.9067

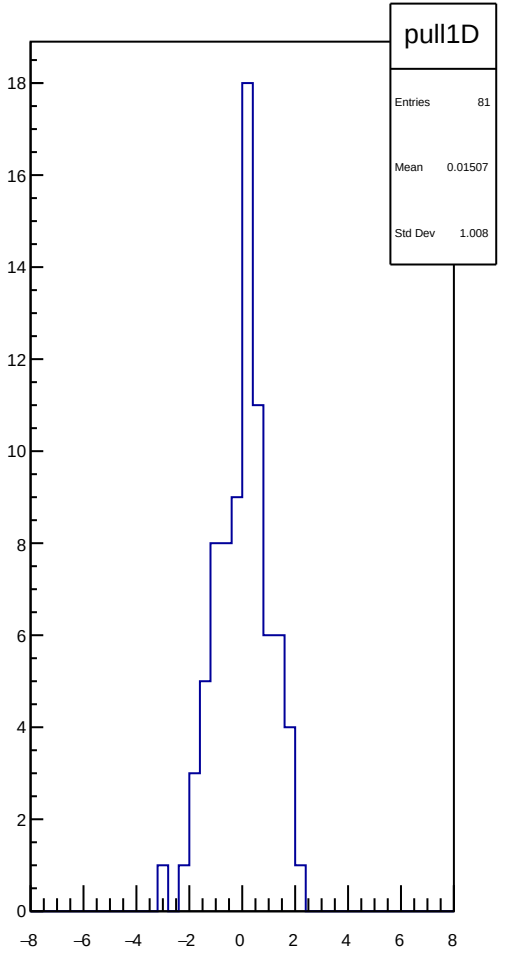

diff_bpm0l07X_rms vs run
χ² / ndf 1.789e+04 / 80
p0 9619 ± 7.655
12000
11000
10000
9000
8000

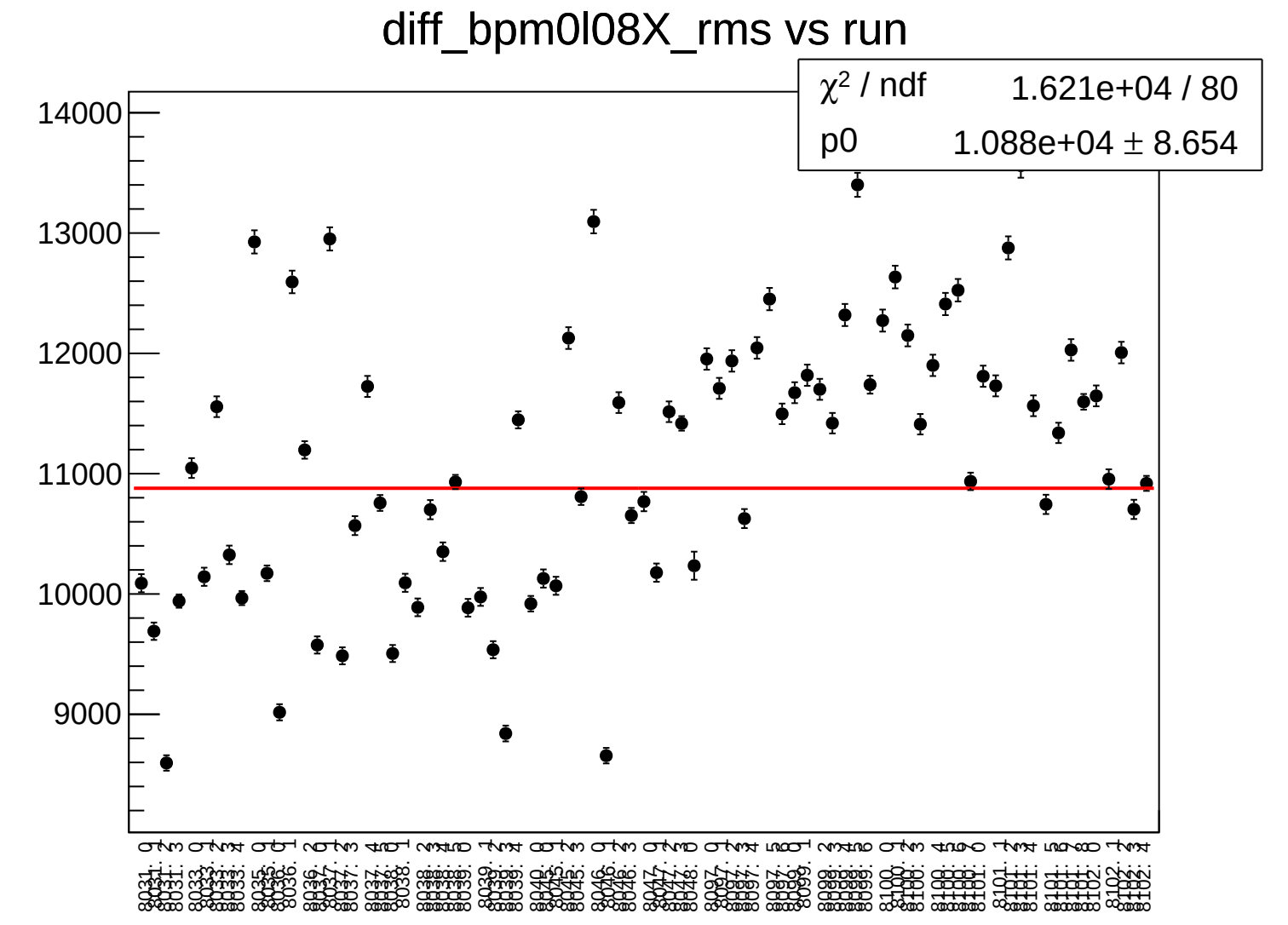

diff_bpm0l07Y_mean vs run
χ² / ndf 119.6 / 80
p0 3.037 ± 0.9971
pull
Entries 81
Mean 373.2
Std Dev 334.3

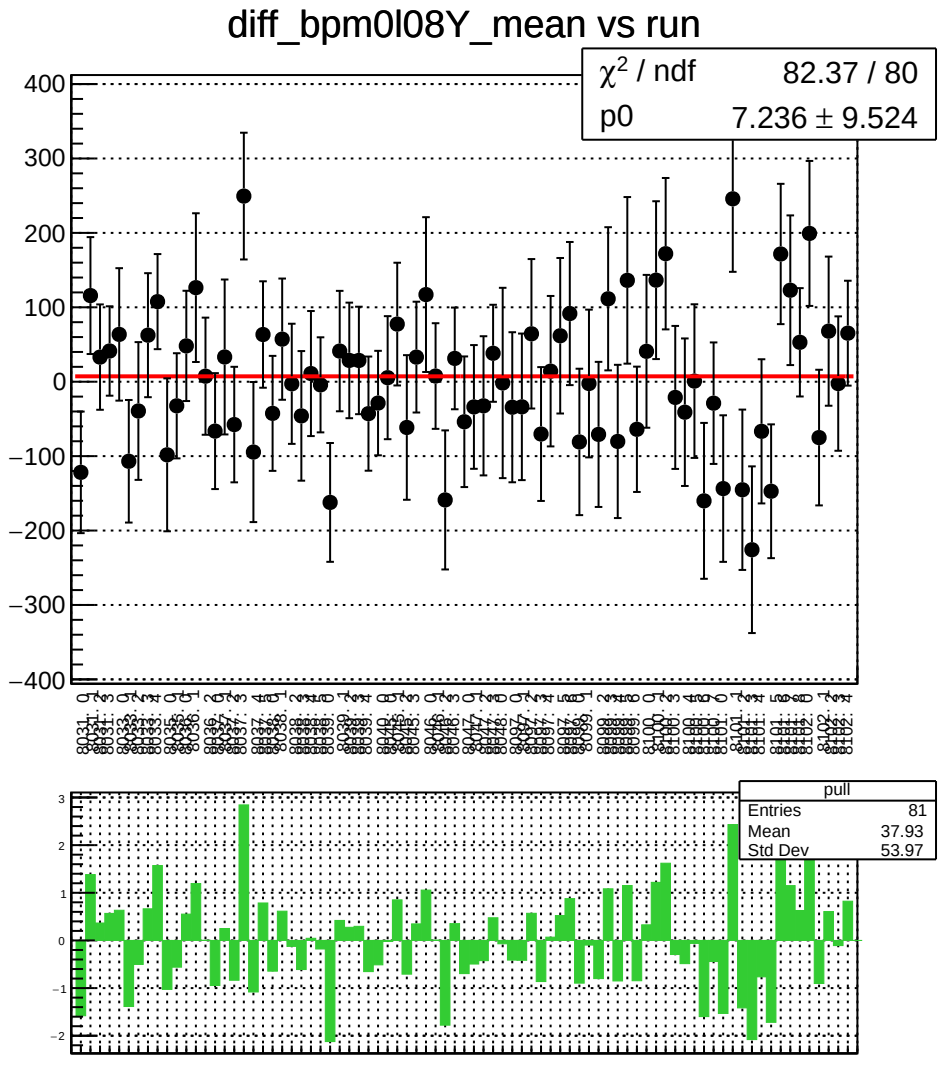

pull1D
Entries 81
Mean 0.03809
Std Dev 1.214

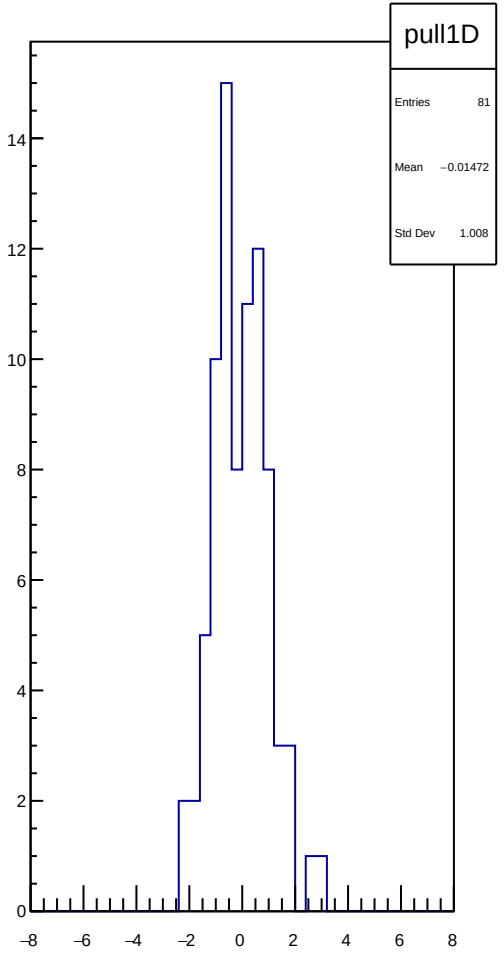

diff_bpm0l07Y_rms vs run
χ² / ndf 1427 / 80
p0 890.5 ± 0.7051
980
960
940
920
900
880
860
840

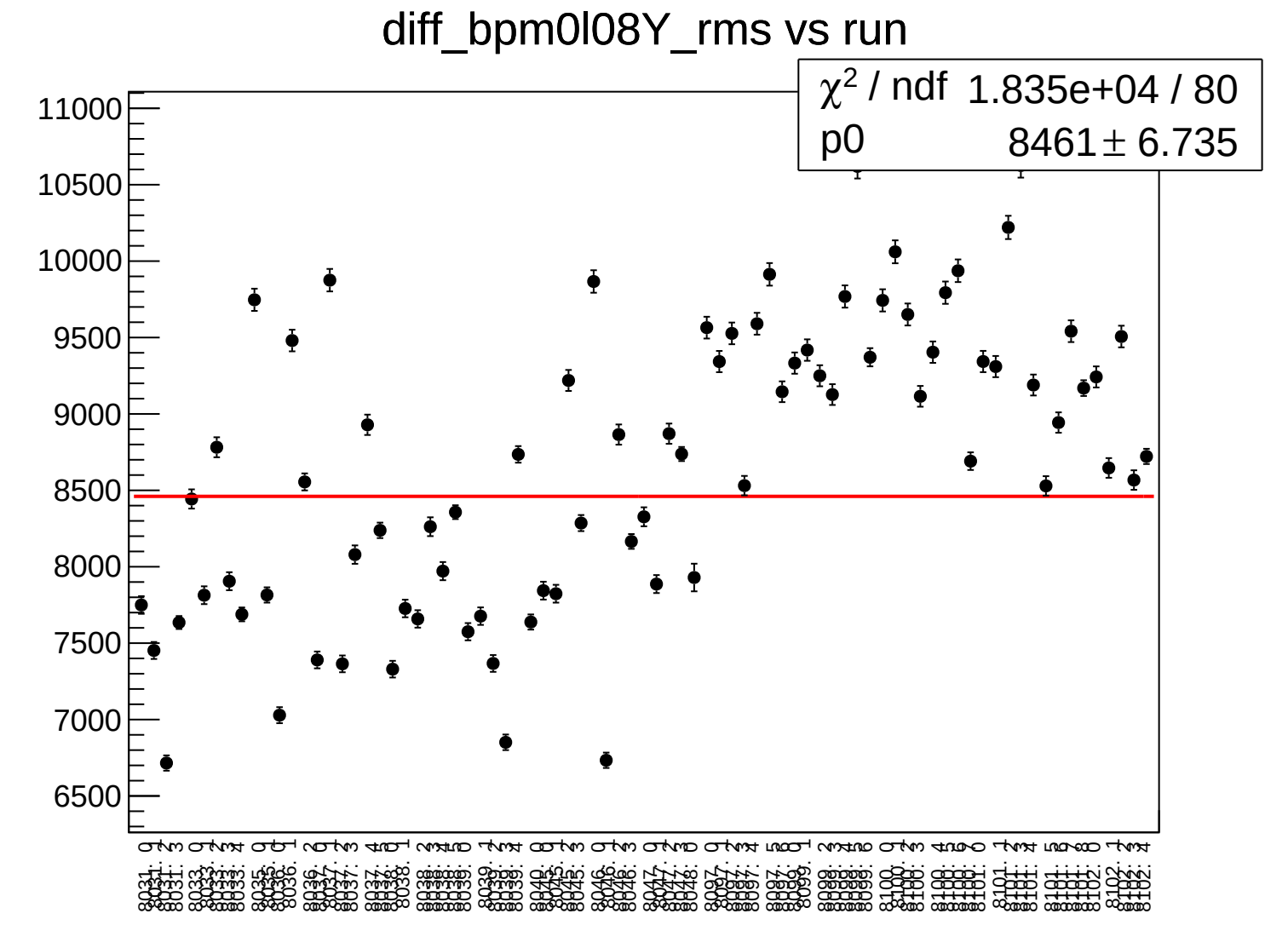

diff_bpm0l08X_mean vs run
χ² / ndf 82.38 / 80
p0 −0.8606 ± 12.24
pull
Entries 81
Mean −80.09
Std Dev 136.6

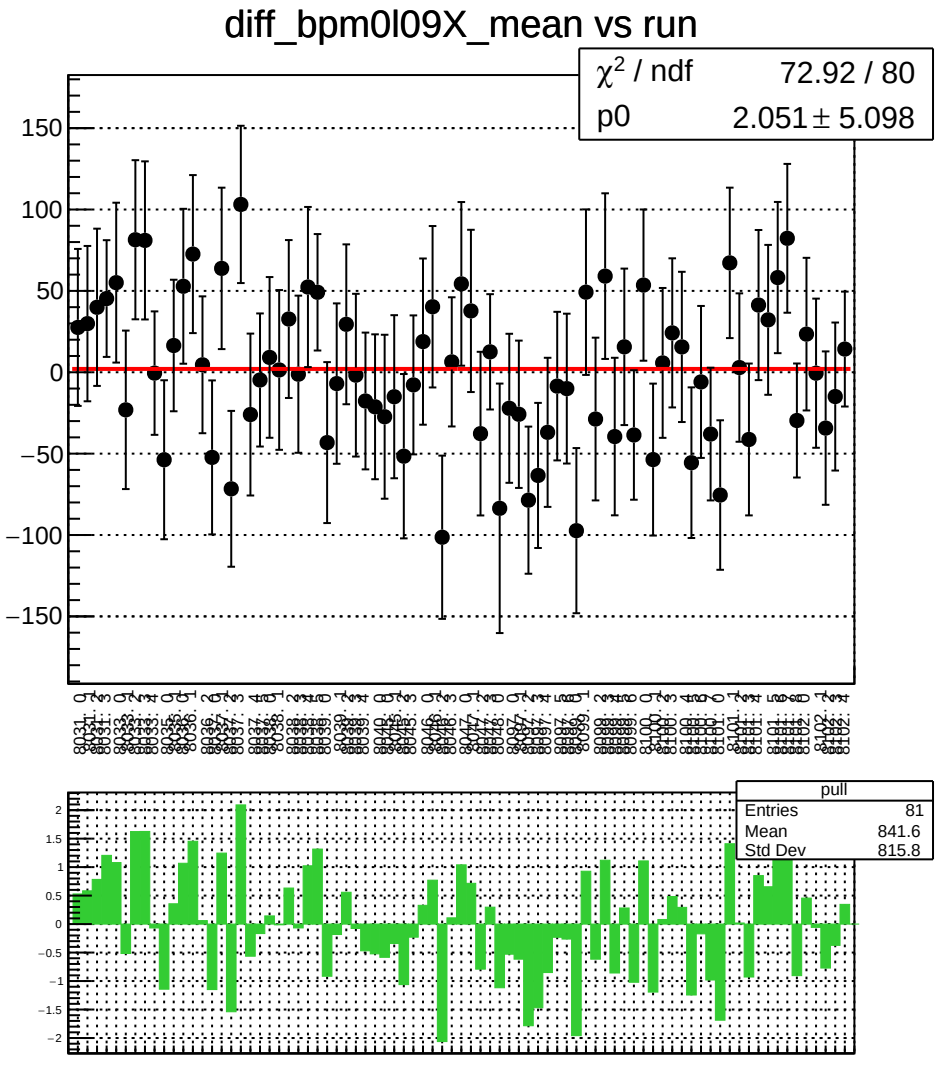

pull1D
Entries 81
Mean 0.01507
Std Dev 1.008

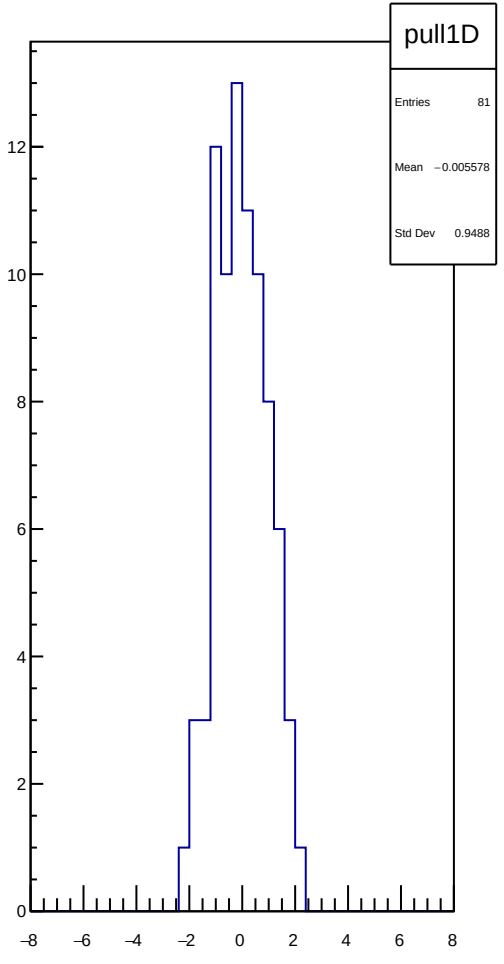

diff_bpm0l08X_rms vs run
χ² / ndf 1.621e+04 / 80
p0 1.088e+04 ± 8.654
14000
13000
12000
11000
10000
9000

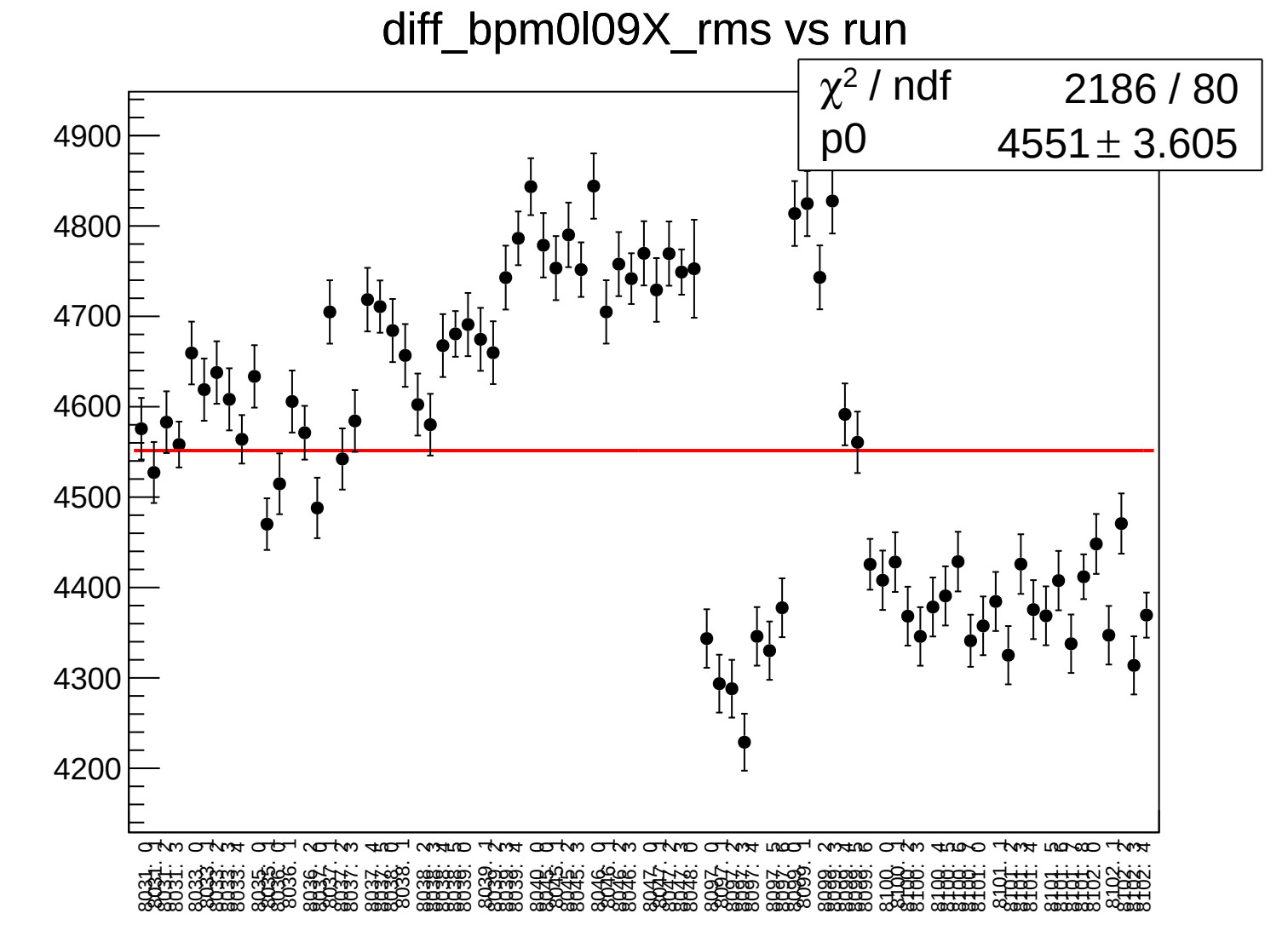

diff_bpm0l08Y_mean vs run
χ² / ndf 82.37 / 80
p0 7.236 ± 9.524
pull
Entries 81
Mean 37.93
Std Dev 53.97

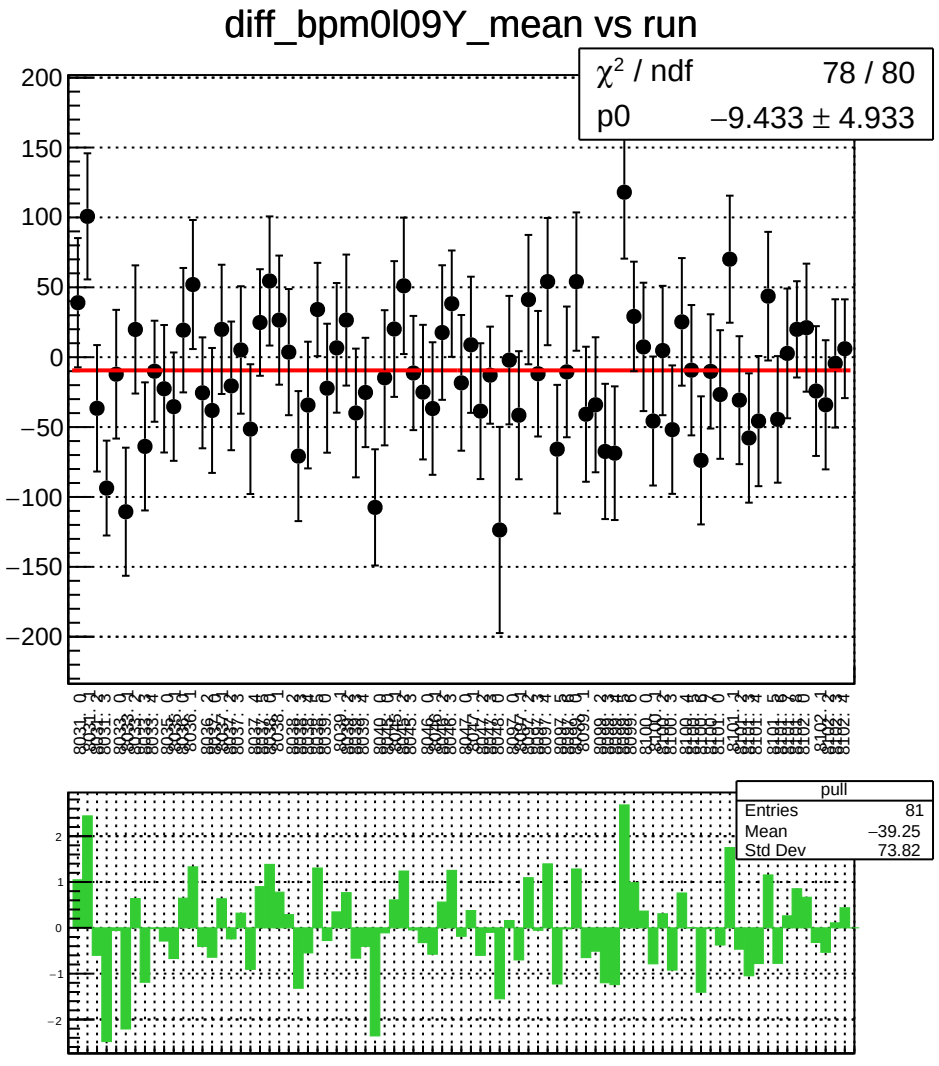

pull1D
Entries 81
Mean −0.01472
Std Dev 1.008

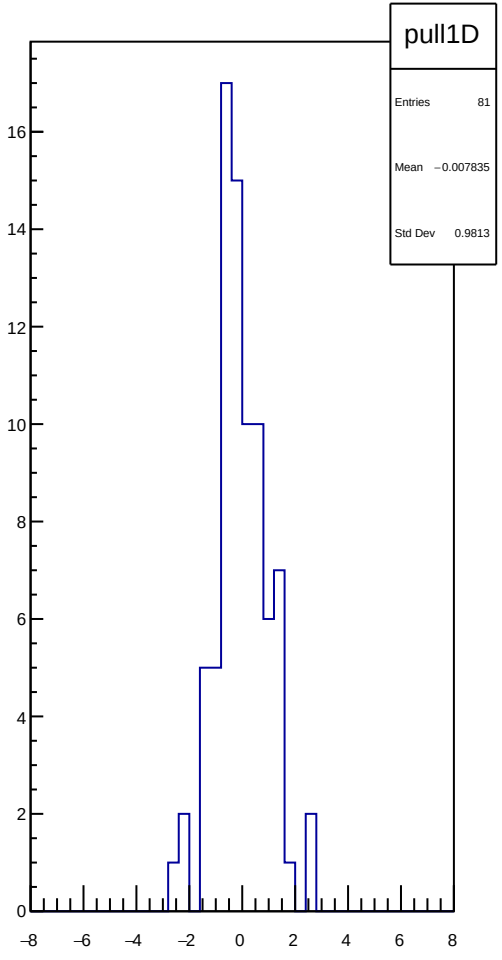

diff_bpm0l08Y_rms vs run
χ² / ndf 1.835e+04 / 80
p0 8461 ± 6.735
11000
10500
10000
9500
9000
8500
8000
7500
7000
6500

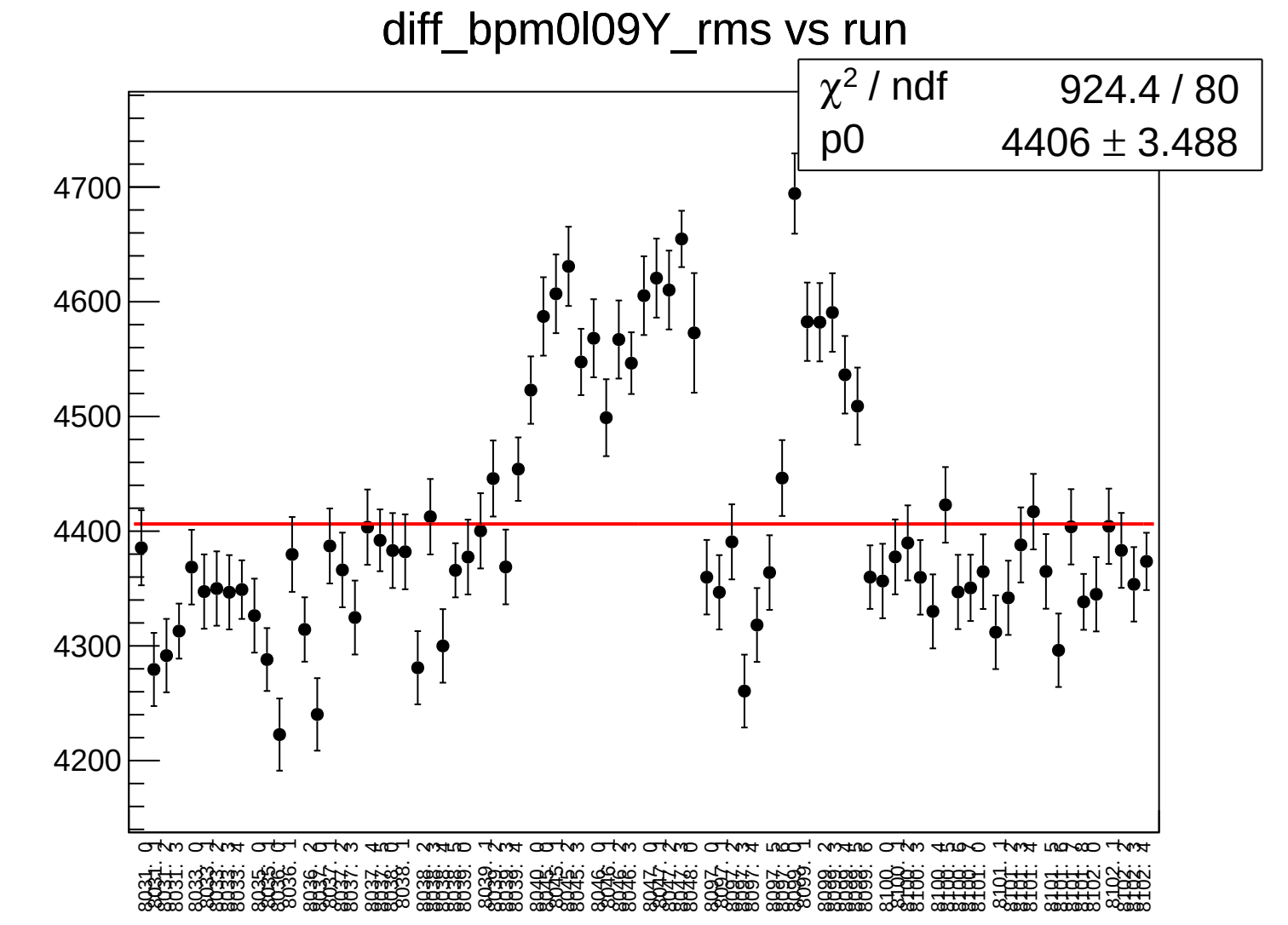

diff_bpm0l09X_mean vs run
χ^2 / ndf 72.92 / 80
p0 2.051 ± 5.098
150
100
50
0
−50
−100
−150
pull
Entries 81
Mean 841.6
Std Dev 815.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

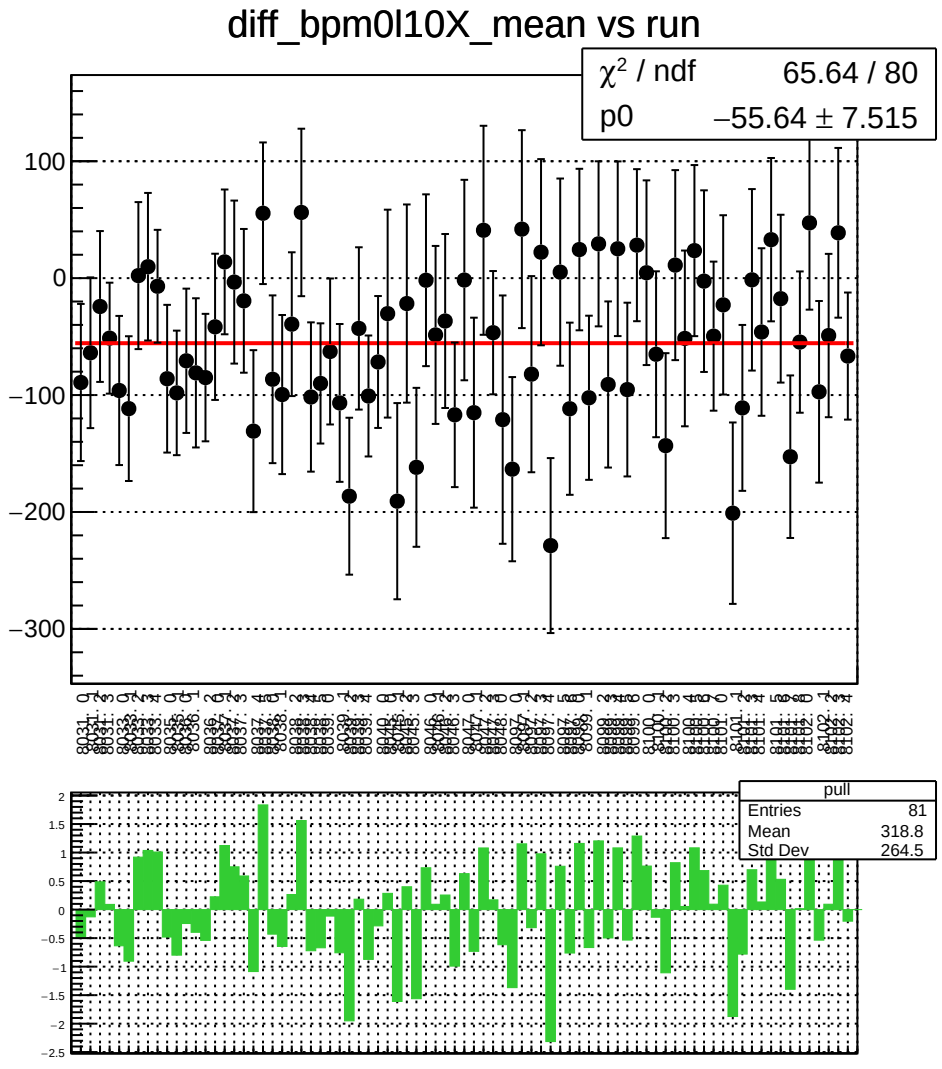

pull1D
Entries 81
Mean −0.005578
Std Dev 0.9488
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

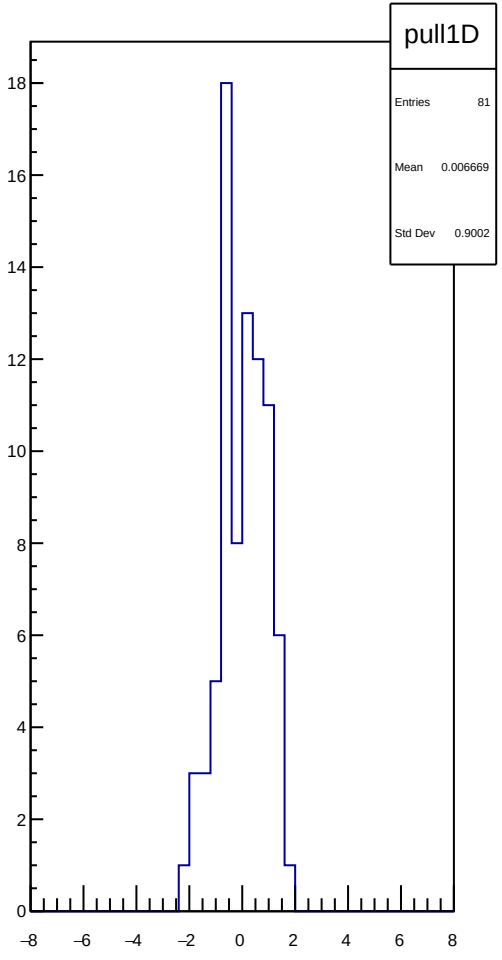

diff_bpm0l09X_rms vs run
χ² / ndf 2186 / 80
p0 4551 ± 3.605
4900
4800
4700
4600
4500
4400
4300
4200

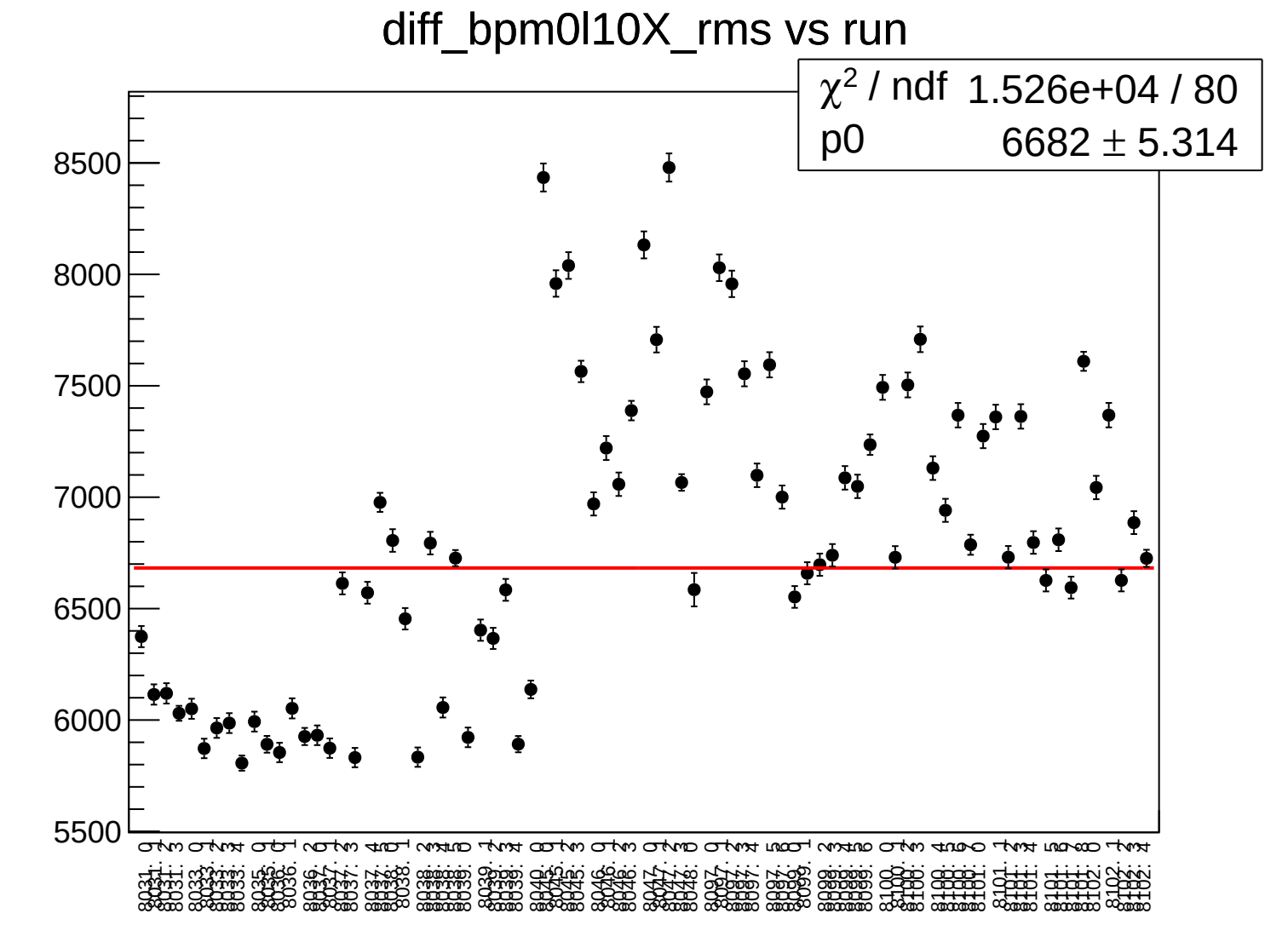

diff_bpm0l09Y_mean vs run
χ² / ndf 78 / 80
p0 −9.433 ± 4.933
pull
Entries 81
Mean −39.25
Std Dev 73.82

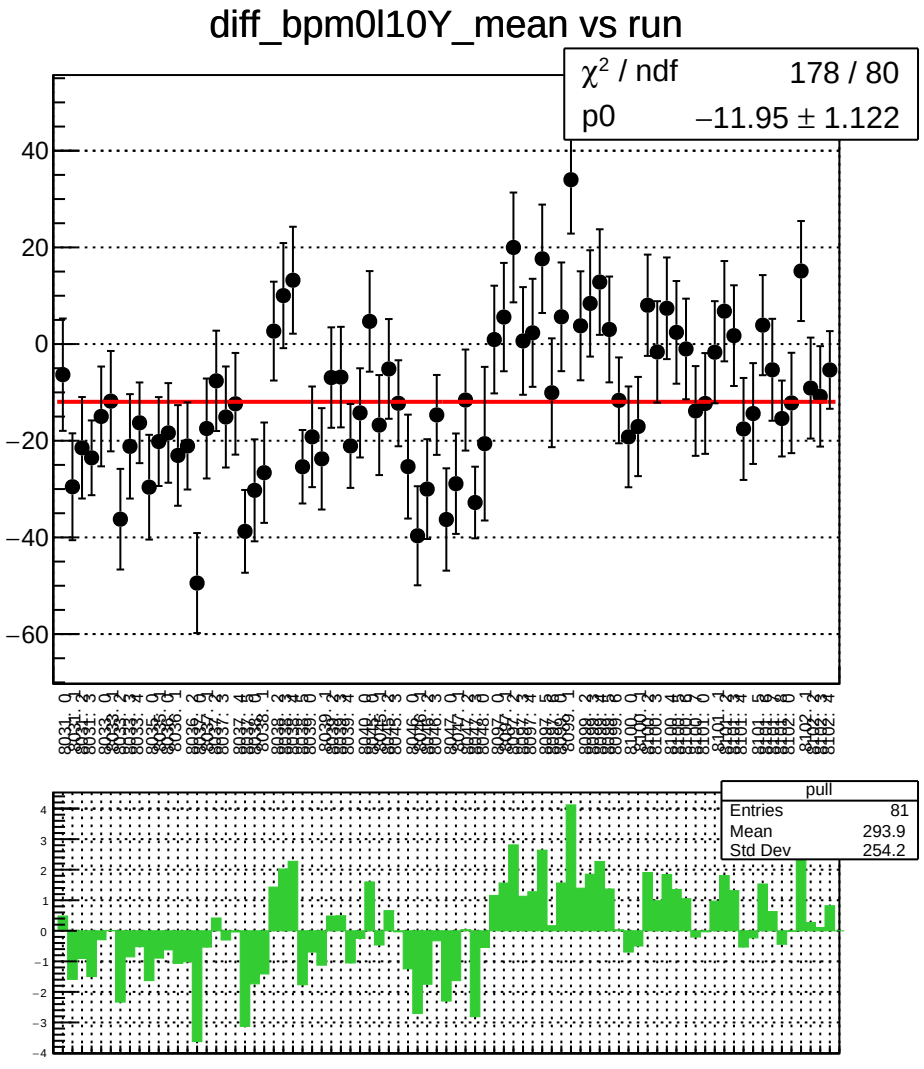

pull1D
Entries 81
Mean −0.007835
Std Dev 0.9813

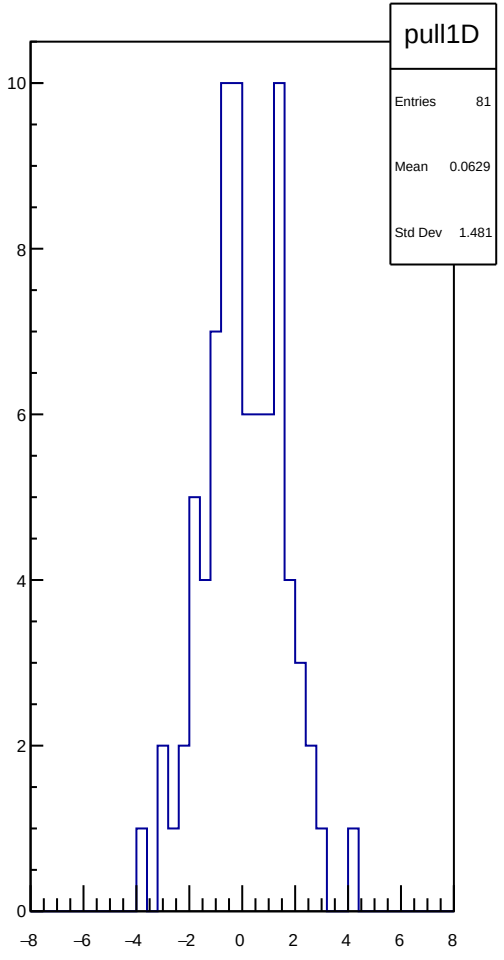

diff_bpm0l09Y_rms vs run
χ² / ndf 924.4 / 80
p0 4406 ± 3.488
4700
4600
4500
4400
4300
4200

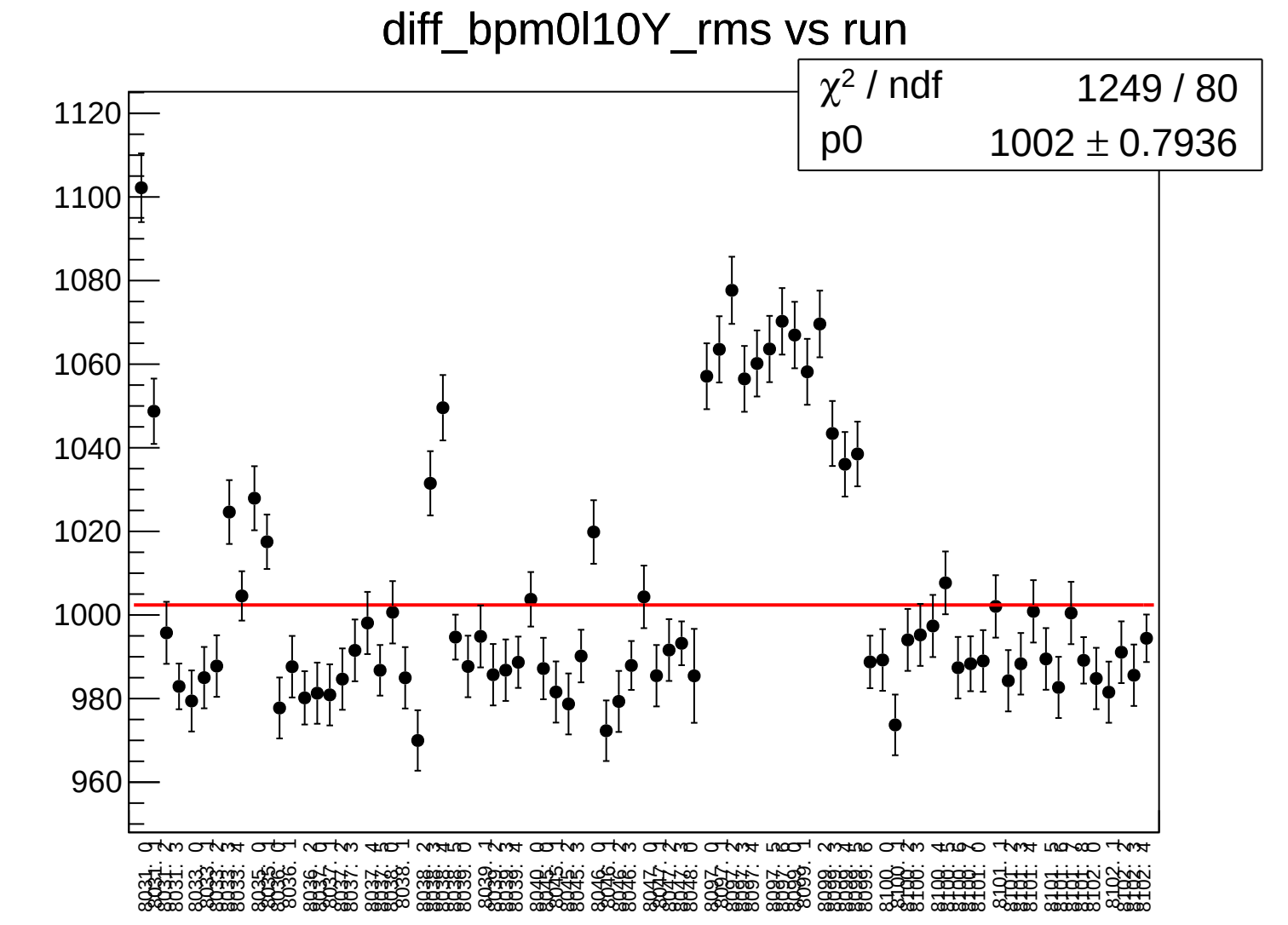

diff_bpm0l10X_mean vs run
χ² / ndf 65.64 / 80
p0 −55.64 ± 7.515
pull
Entries 81
Mean 318.8
Std Dev 264.5

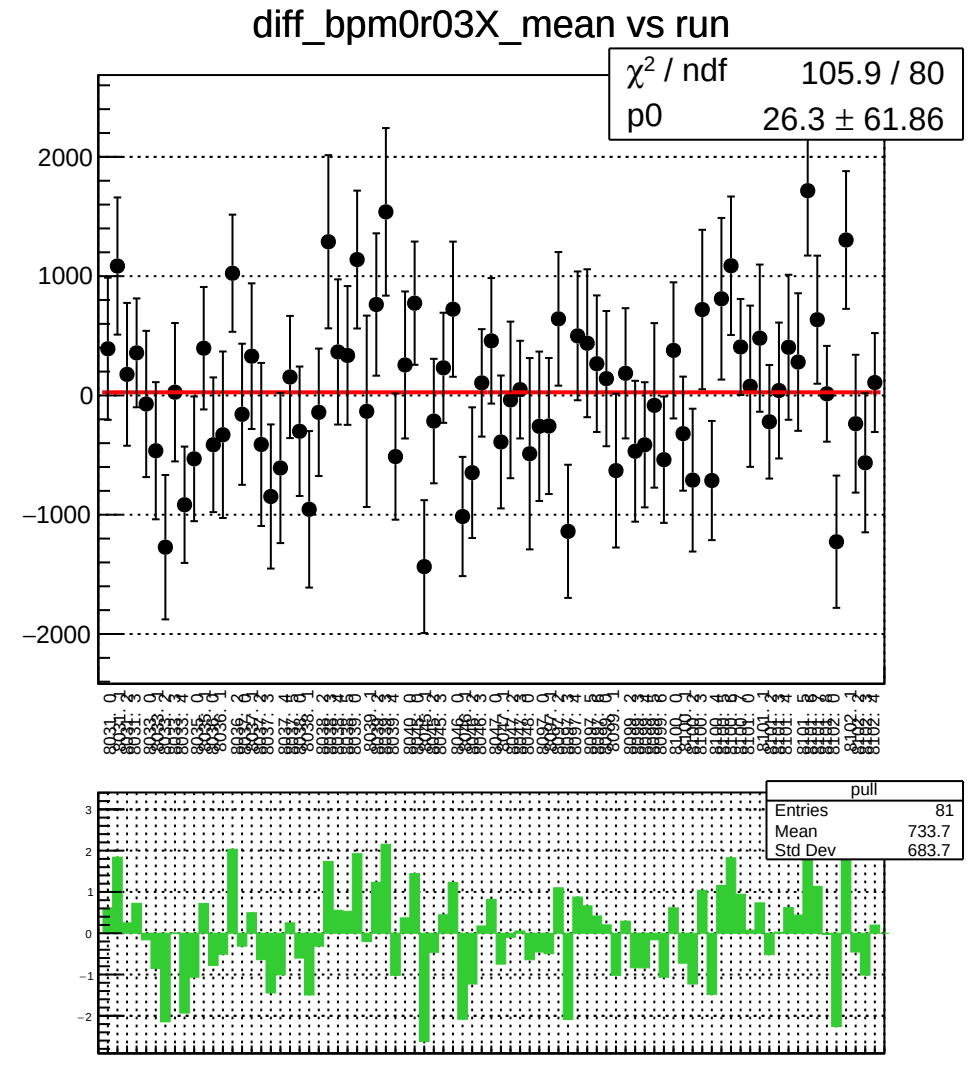

pull1D
Entries 81
Mean 0.006669
Std Dev 0.9002

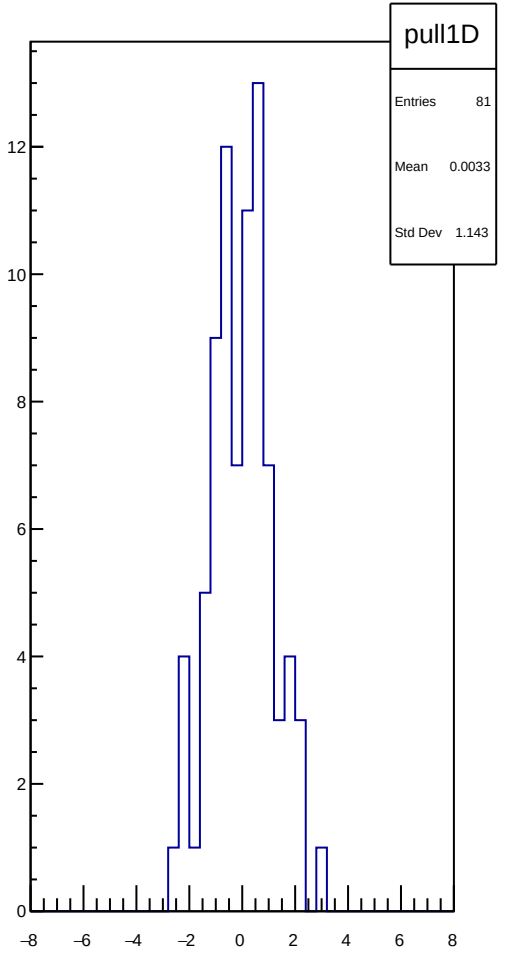

diff_bpm0l10X_rms vs run
χ² / ndf 1.526e+04 / 80
p0 6682 ± 5.314
8500
8000
7500
7000
6500
6000
5500

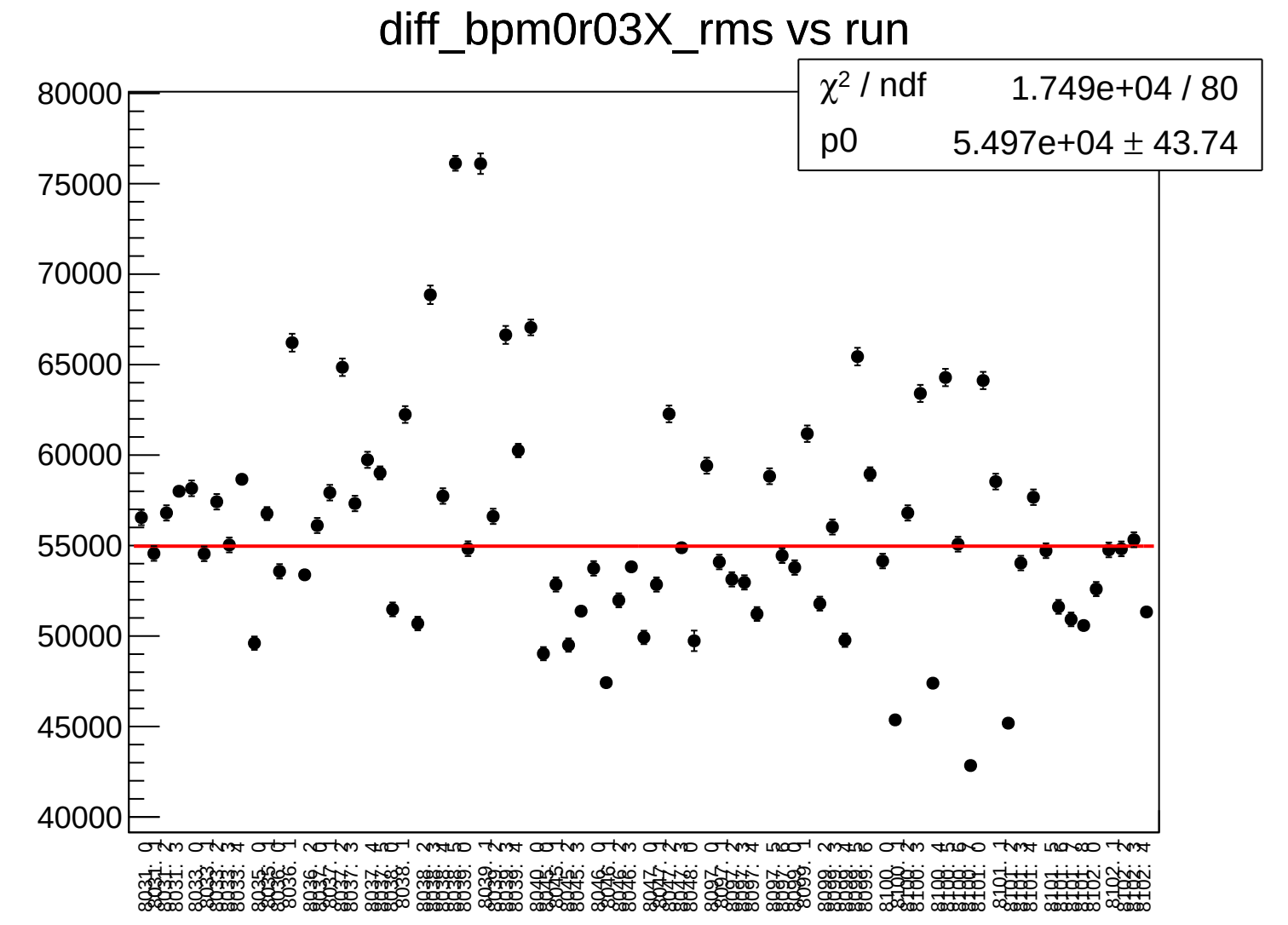

diff_bpm0l10Y_mean vs run
χ² / ndf 178 / 80
p0 −11.95 ± 1.122
pull
Entries 81
Mean 293.9
Std Dev 254.2

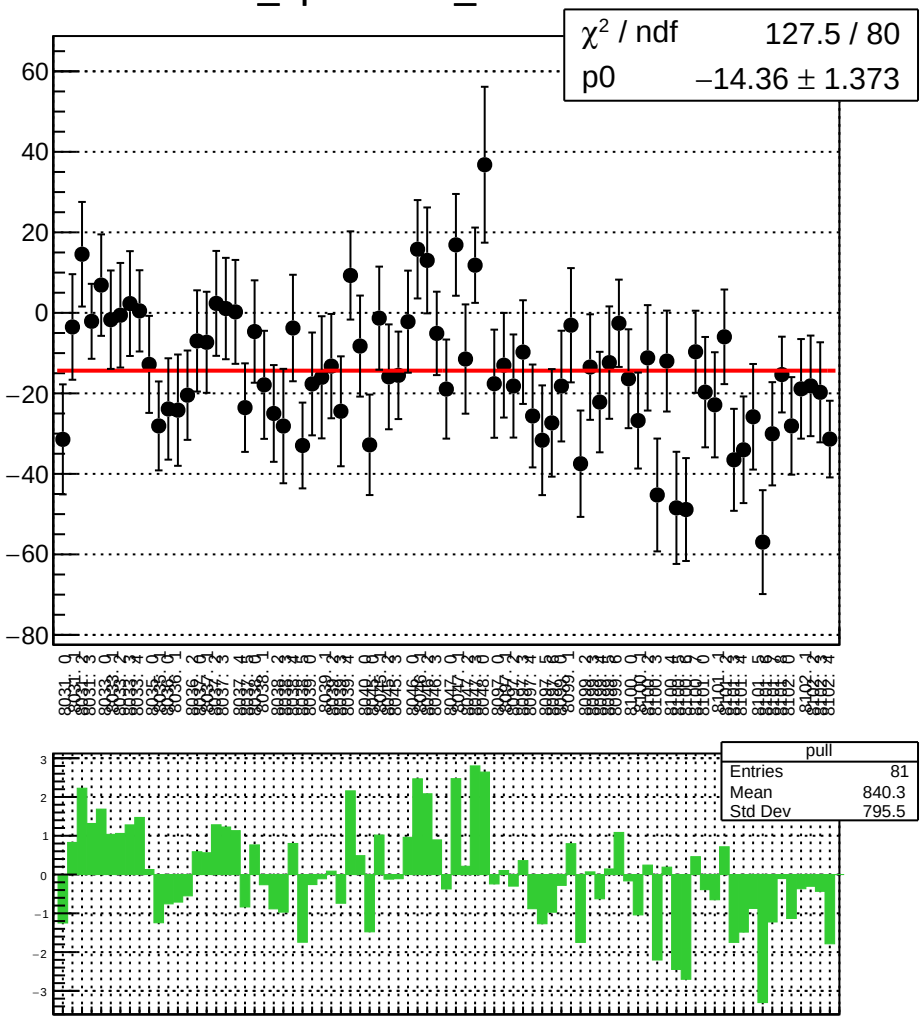

pull1D
Entries 81
Mean 0.0629
Std Dev 1.481

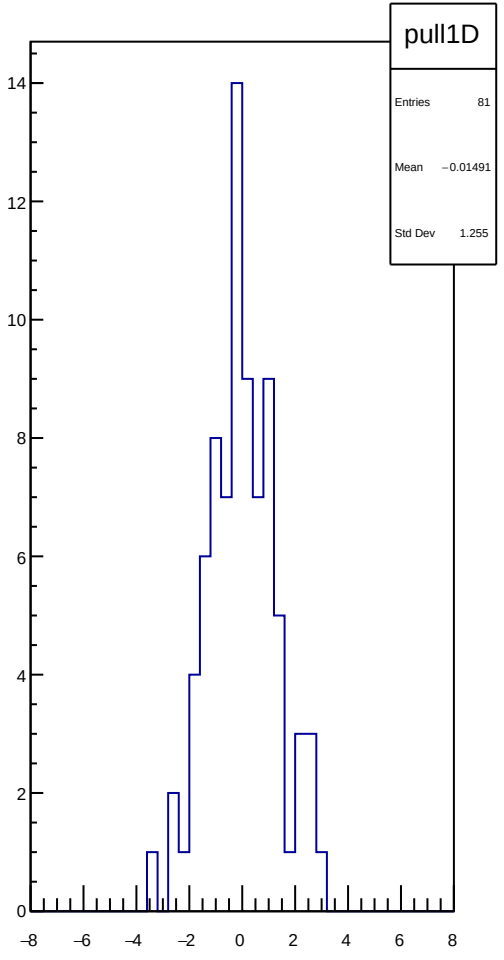

diff_bpm0l10Y_rms vs run
χ² / ndf 1249 / 80
p0 1002 ± 0.7936
1120
1100
1080
1060
1040
1020
1000
980
960

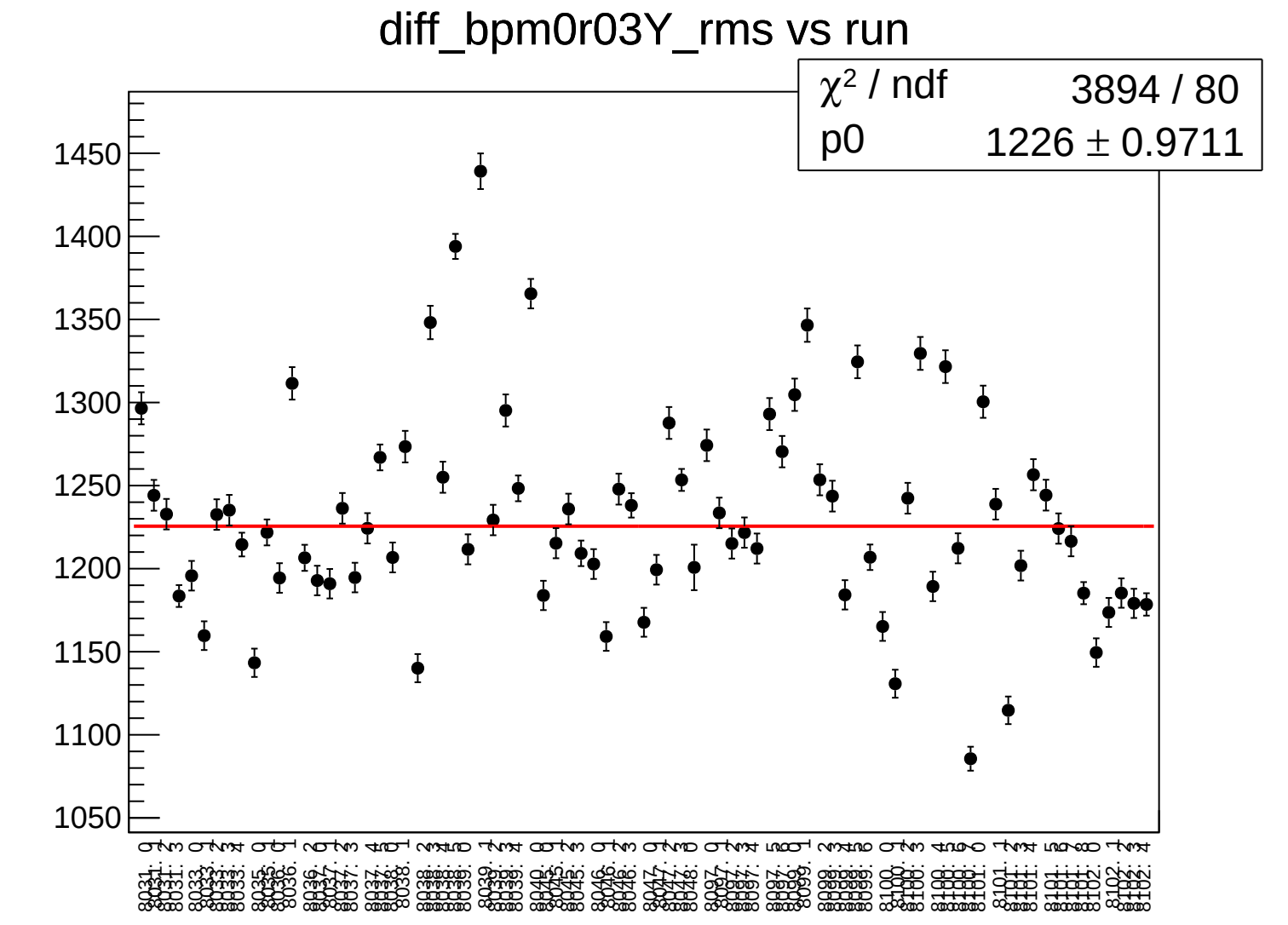

diff_bpm0r03X_mean vs run
χ² / ndf 105.9 / 80
p0 26.3 ± 61.86
2000
1000
0
−1000
−2000
pull
Entries 81
Mean 733.7
Std Dev 683.7
3
2
1
0
−1
−2

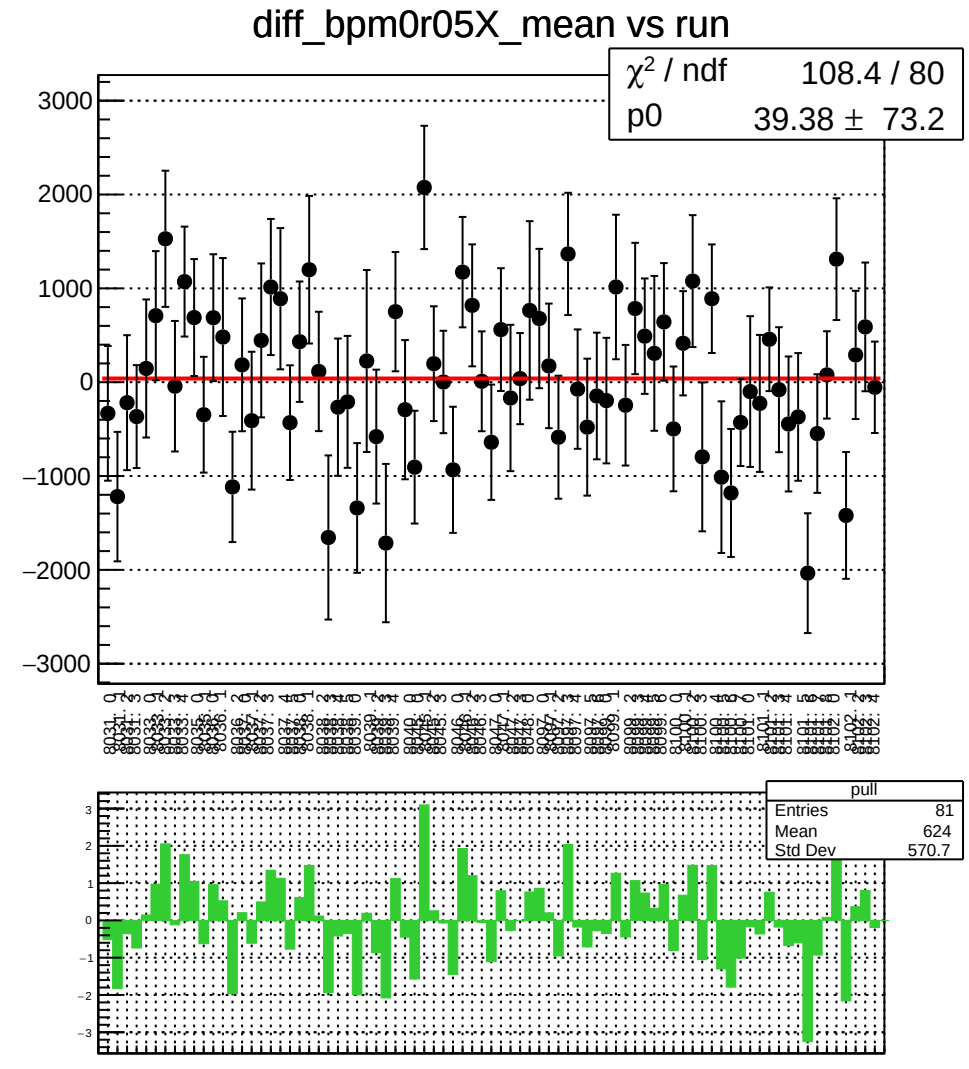

pull1D
Entries 81
Mean 0.0033
Std Dev 1.143
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

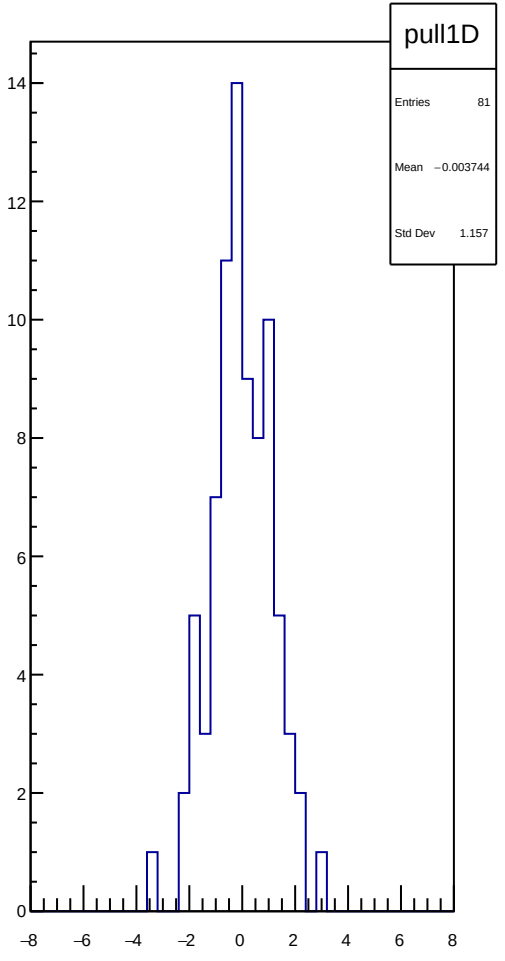

diff_bpm0r03X_rms vs run
χ² / ndf 1.749e+04 / 80
p0 5.497e+04 ± 43.74
80000
75000
70000
65000
60000
55000
50000
45000
40000

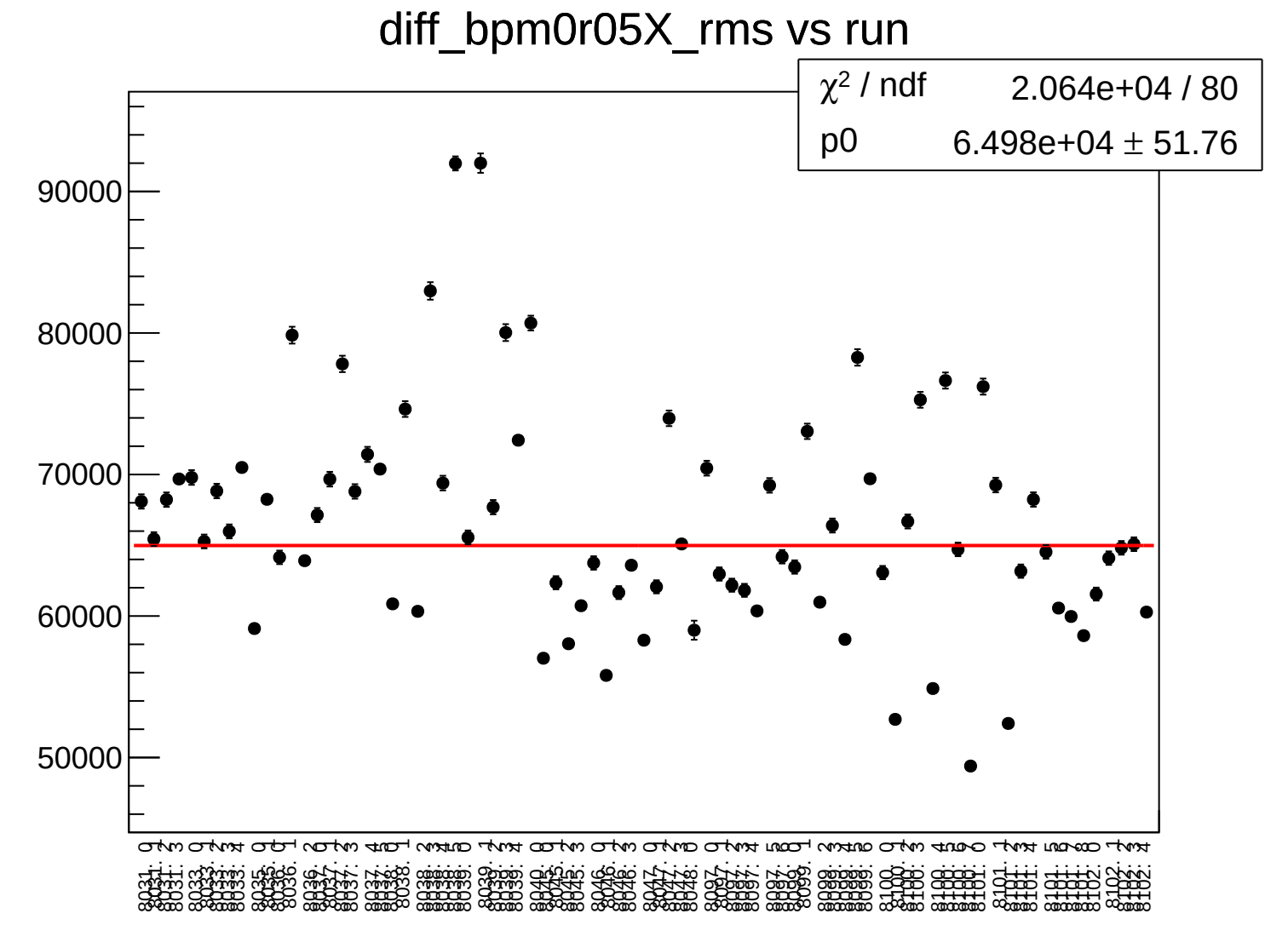

diff_bpm0r03Y_mean vs run
χ² / ndf 127.5 / 80
p0 −14.36 ± 1.373
pull
Entries 81
Mean 840.3
Std Dev 795.5

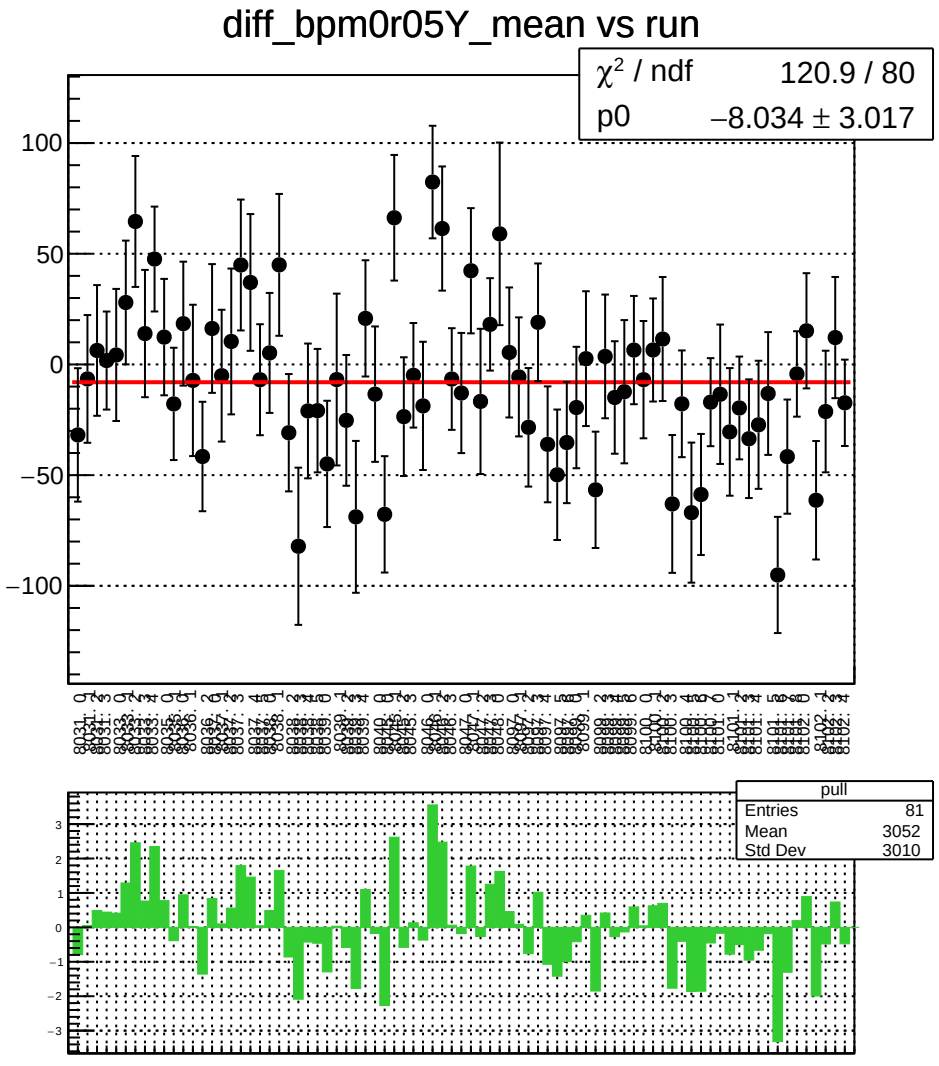

pull1D
Entries 81
Mean −0.01491
Std Dev 1.255

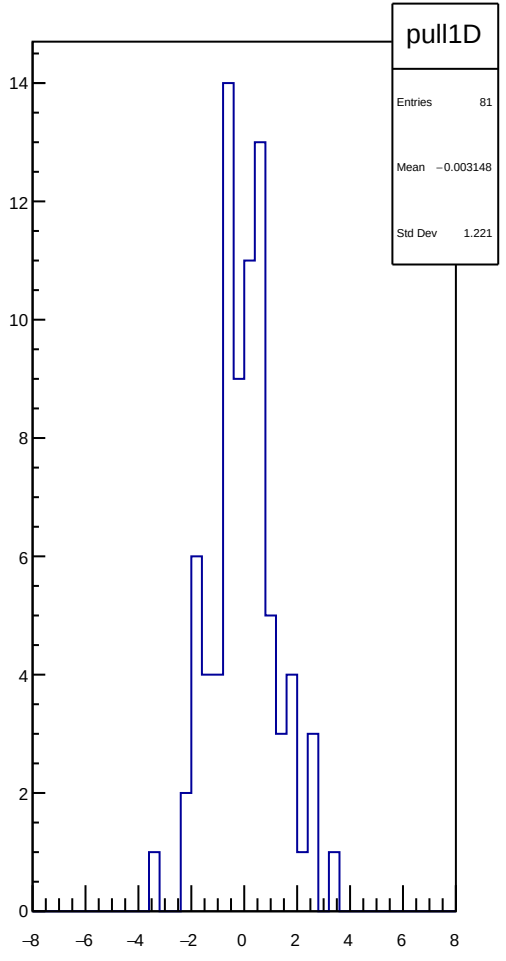

diff_bpm0r03Y_rms vs run
χ² / ndf 3894 / 80
p0 1226 ± 0.9711
1450
1400
1350
1300
1250
1200
1150
1100
1050

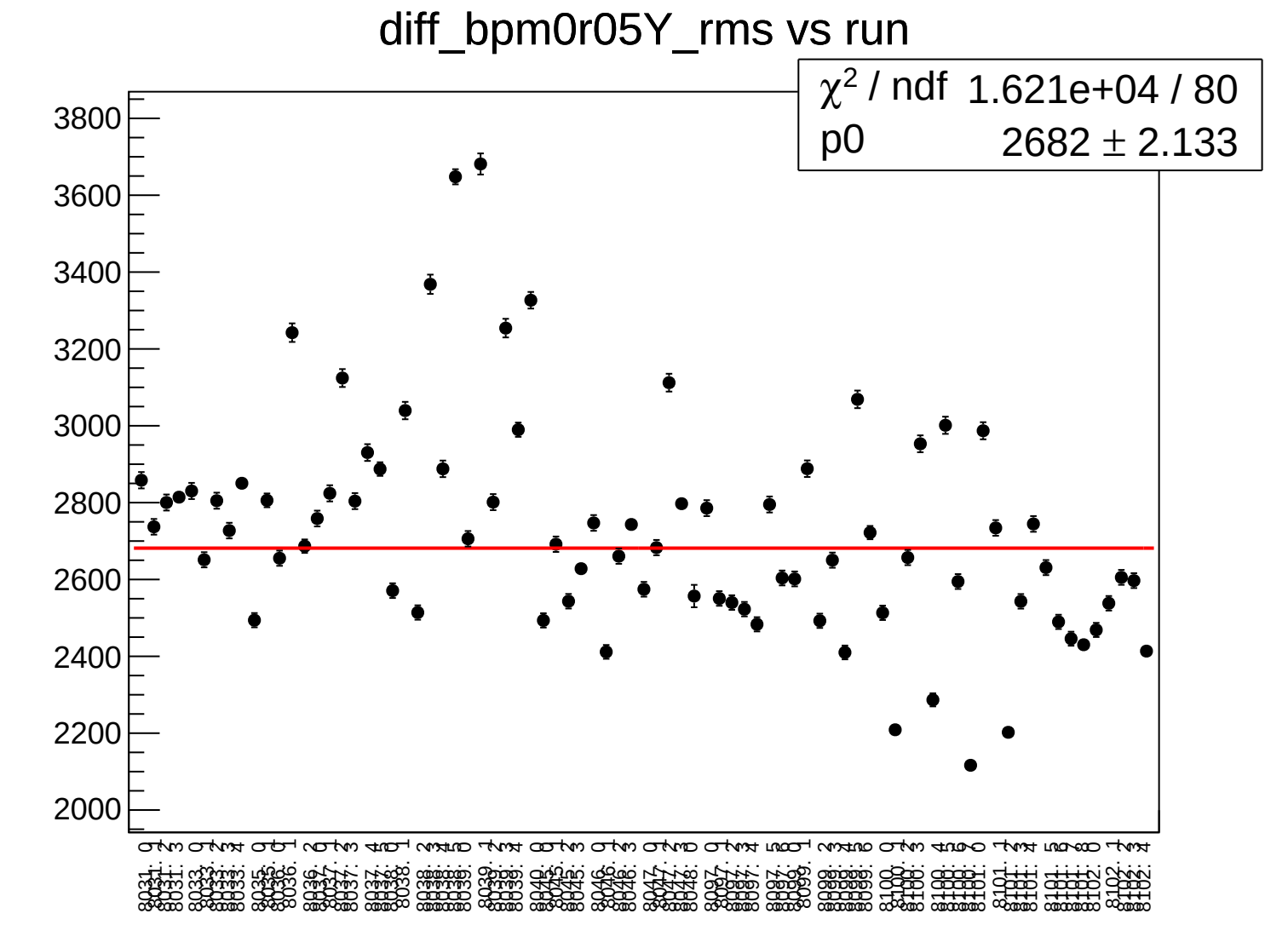

diff_bpm0r05X_mean vs run
χ² / ndf 108.4 / 80
p0 39.38 ± 73.2
pull
Entries 81
Mean 624
Std Dev 570.7

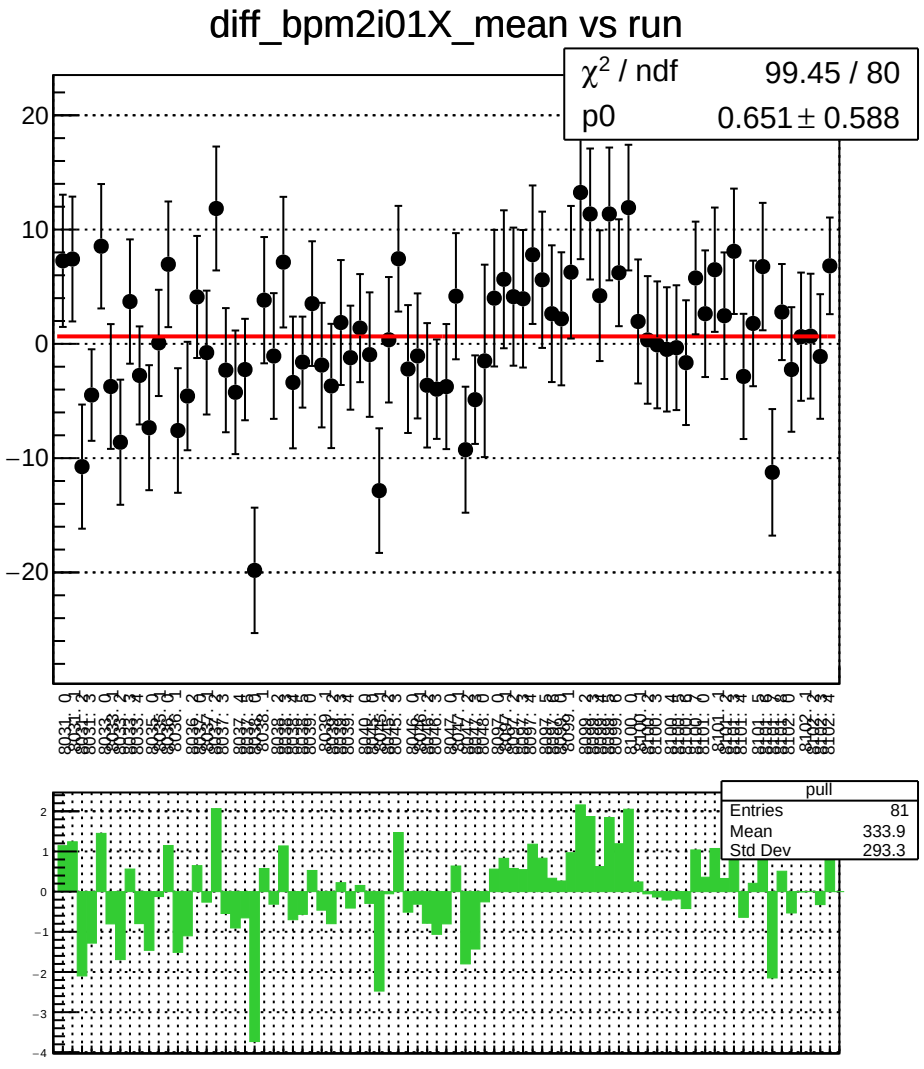

pull1D
Entries 81
Mean −0.003744
Std Dev 1.157

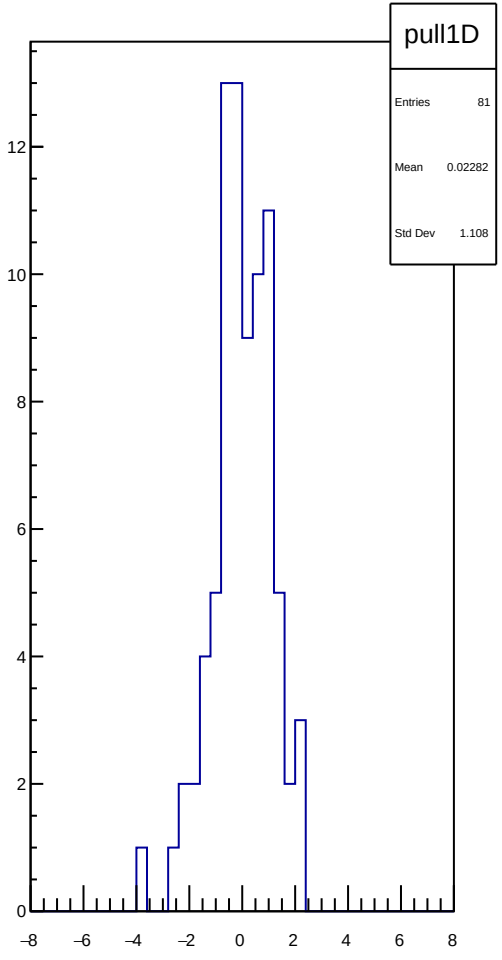

diff_bpm0r05X_rms vs run
χ² / ndf 2.064e+04 / 80
p0 6.498e+04 ± 51.76
90000
80000
70000
60000
50000

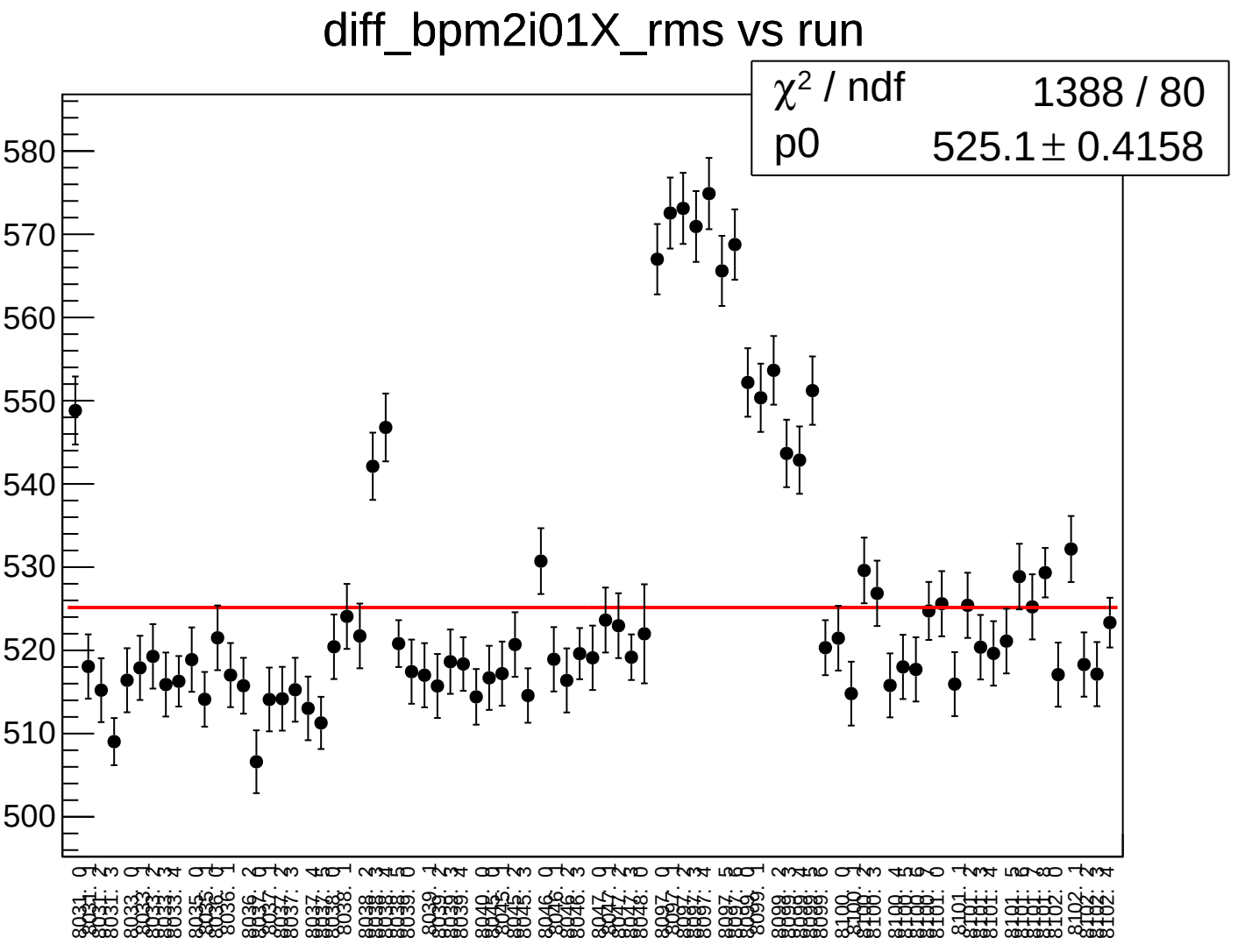

diff_bpm0r05Y_mean vs run
χ² / ndf 120.9 / 80
p0 −8.034 ± 3.017
100
50
0
−50
−100
pull
Entries 81
Mean 3052
Std Dev 3010
3
2
1
0
−1
−2
−3

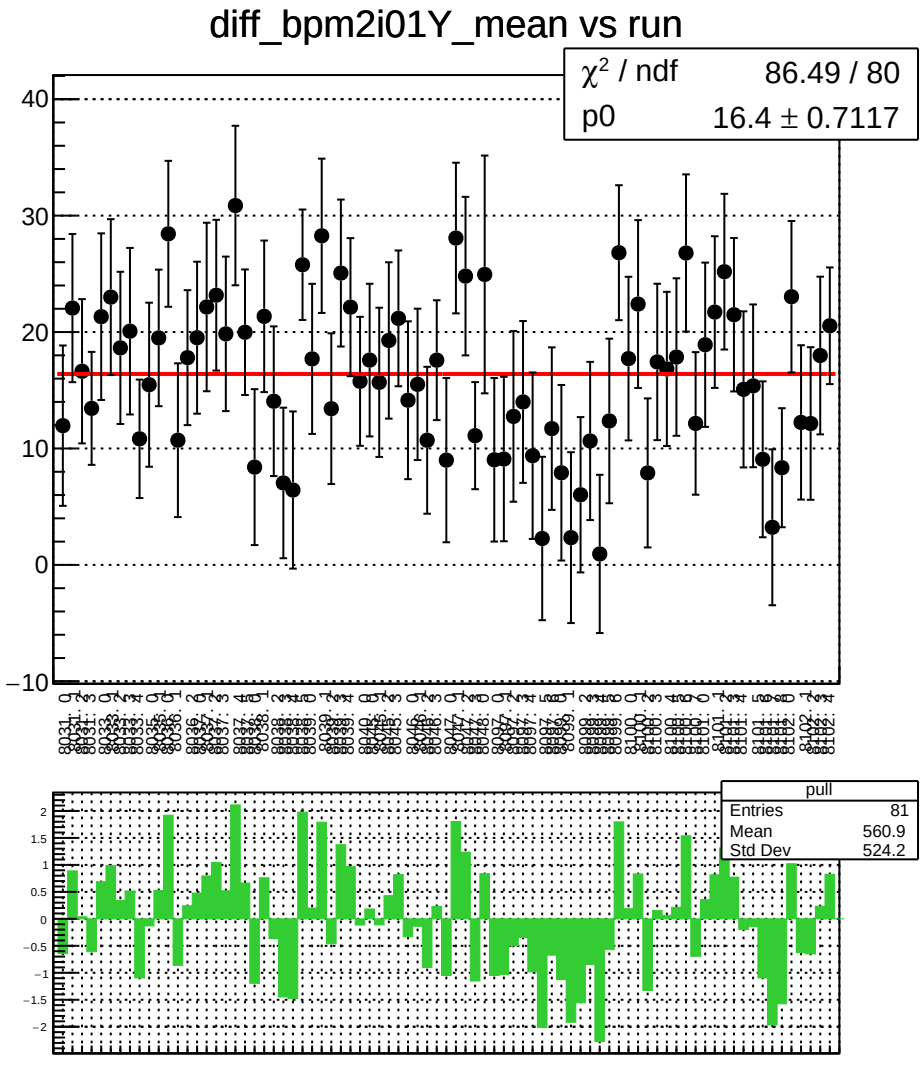

pull1D
Entries 81
Mean −0.003148
Std Dev 1.221
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

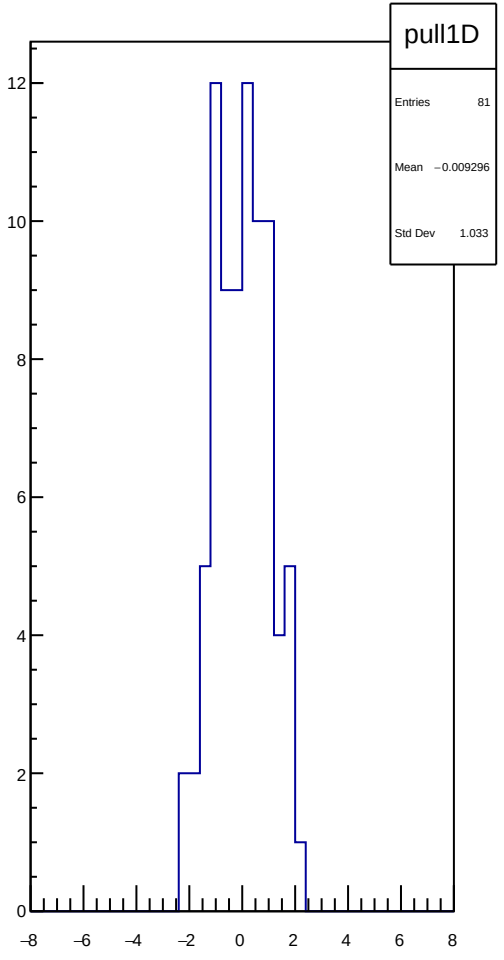

diff_bpm0r05Y_rms vs run
χ² / ndf 1.621e+04 / 80
p0 2682 ± 2.133
3800
3600
3400
3200
3000
2800
2600
2400
2200
2000

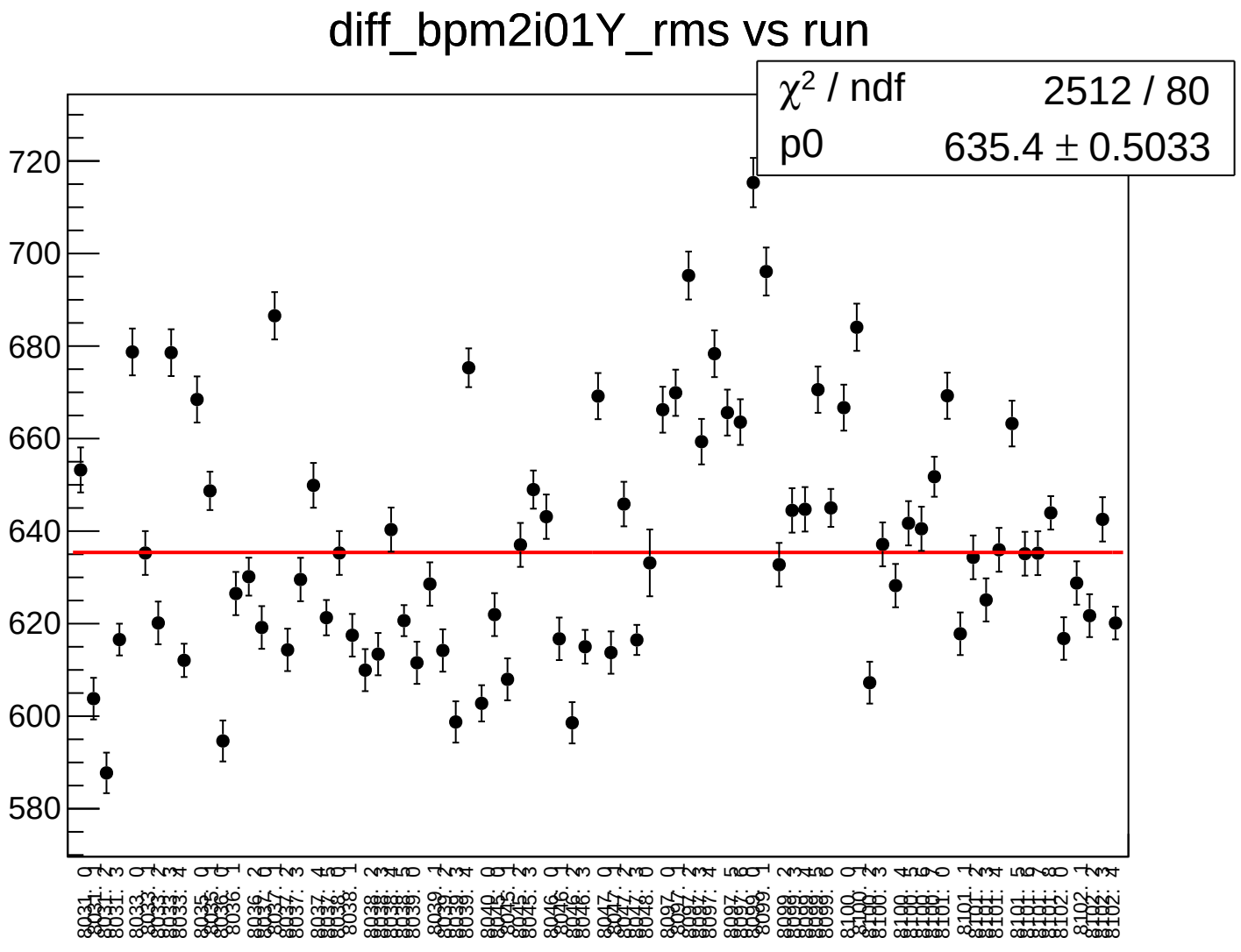

diff_bpm2i01X_mean vs run
χ² / ndf 99.45 / 80
p0 0.651 ± 0.588
pull
Entries 81
Mean 333.9
Std Dev 293.3

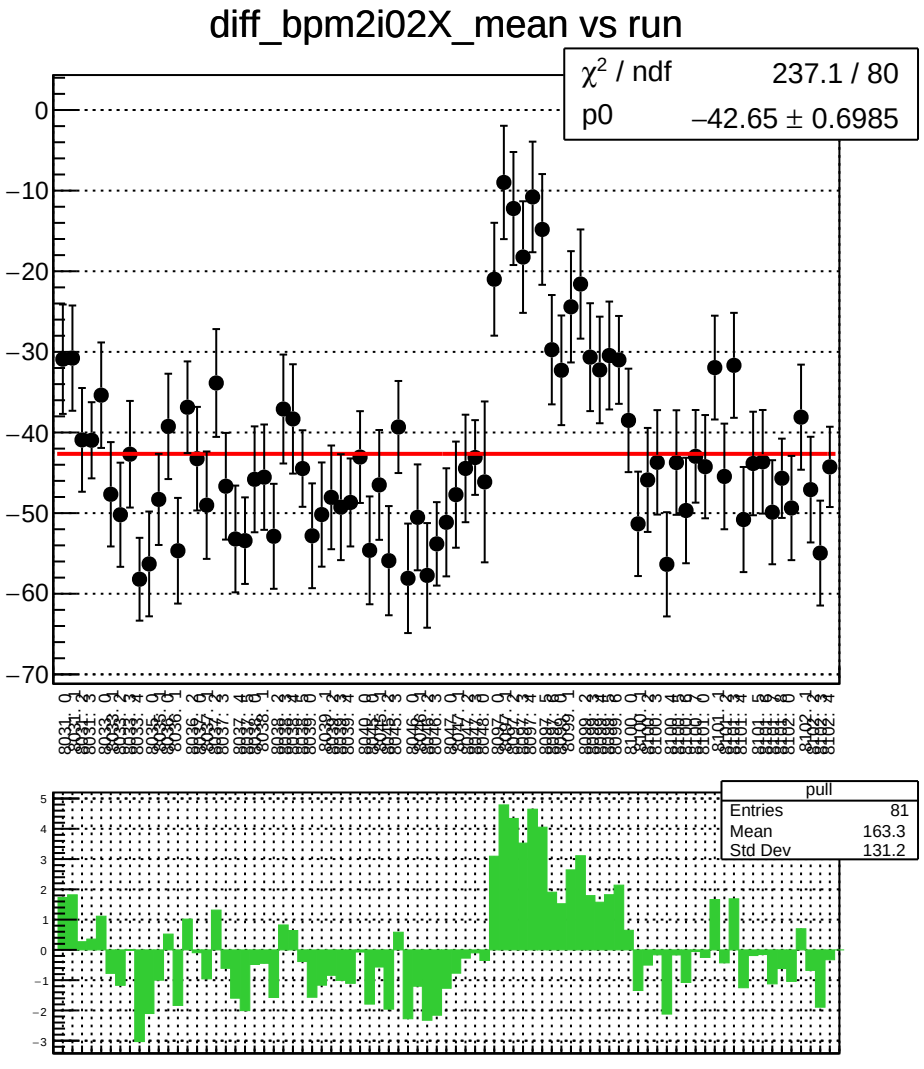

pull1D
Entries 81
Mean 0.02282
Std Dev 1.108

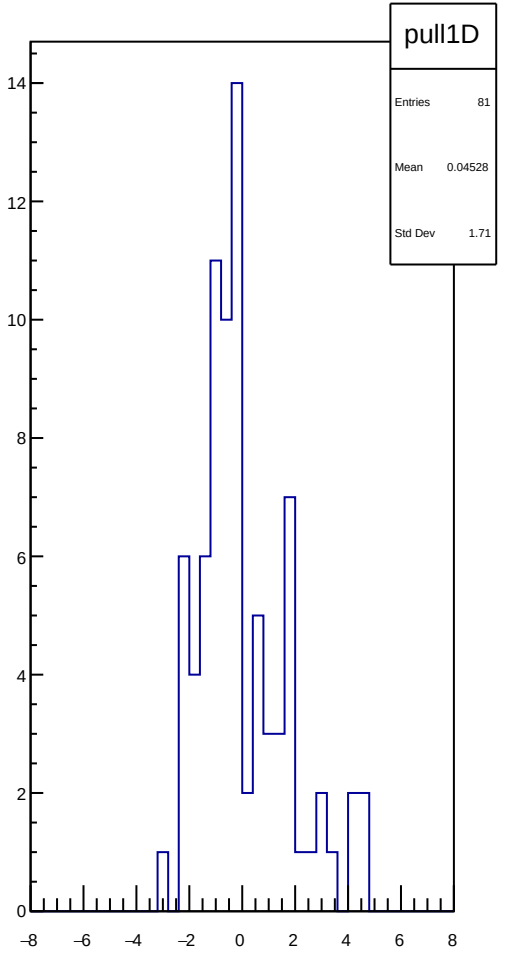

diff_bpm2i01X_rms vs run
χ² / ndf 1388 / 80
p0 525.1 ± 0.4158
580
570
560
550
540
530
520
510
500

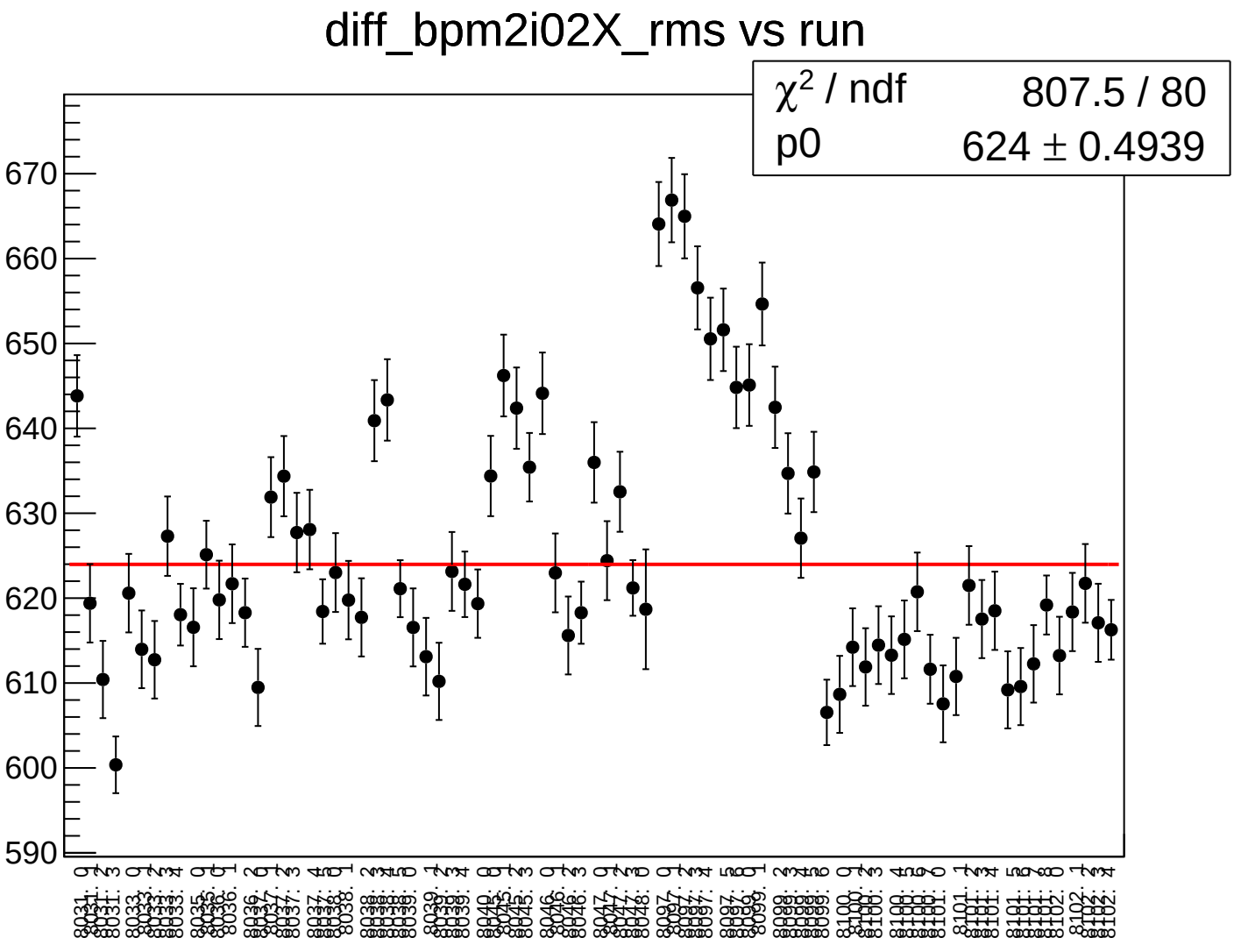

diff_bpm2i01Y_mean vs run
χ² / ndf 86.49 / 80
p0 16.4 ± 0.7117
pull
Entries 81
Mean 560.9
Std Dev 524.2

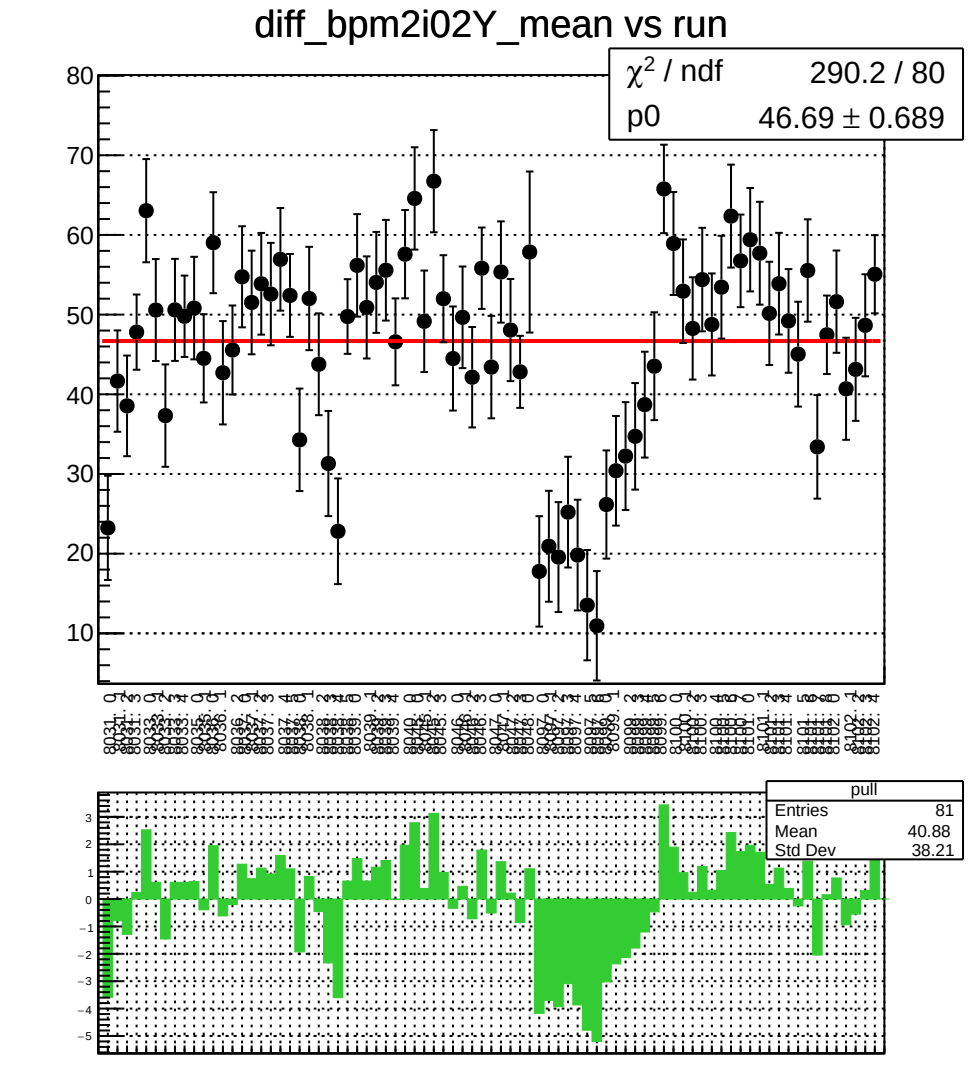

pull1D
Entries 81
Mean −0.009296
Std Dev 1.033

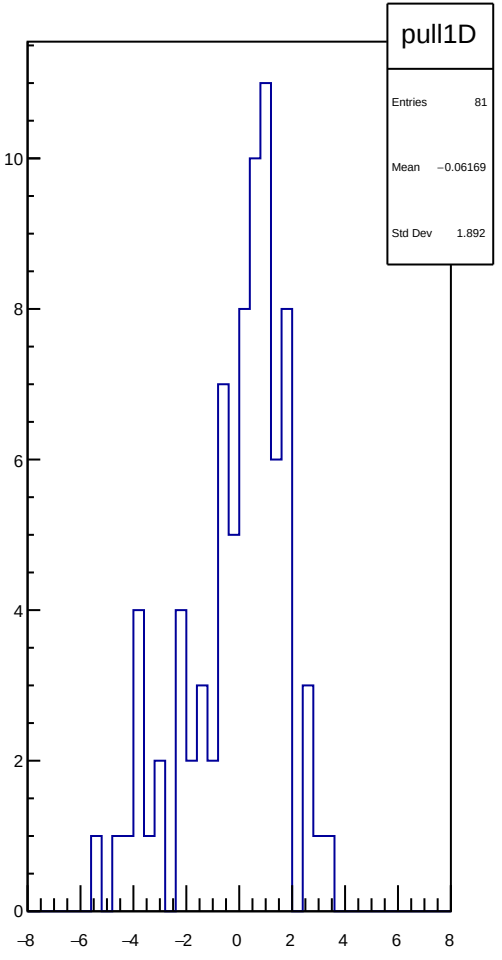

diff_bpm2i01Y_rms vs run
χ² / ndf 2512 / 80
p0 635.4 ± 0.5033
720
700
680
660
640
620
600
580

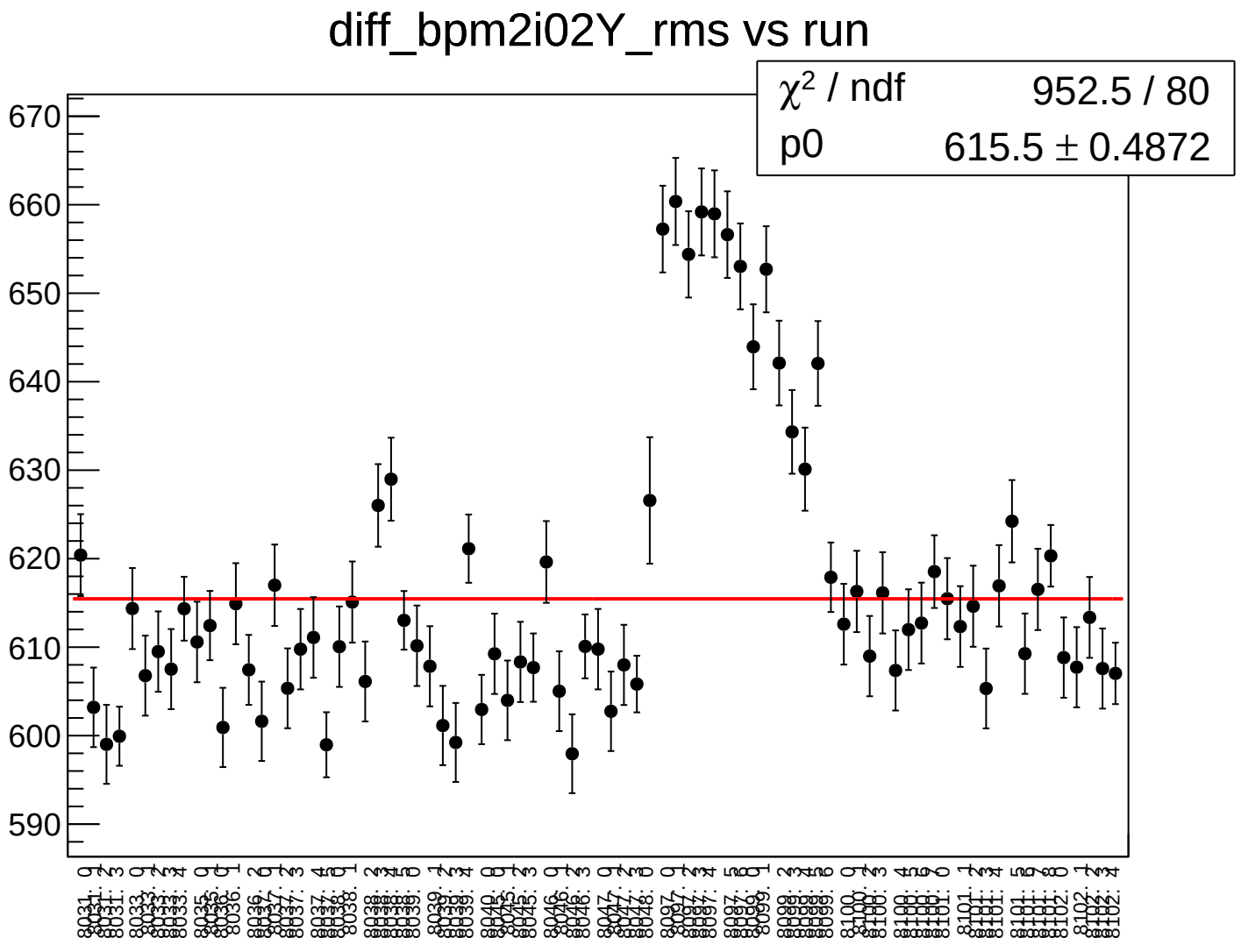

diff_bpm2i02X_mean vs run
χ² / ndf 237.1 / 80
p0 −42.65 ± 0.6985
pull
Entries 81
Mean 163.3
Std Dev 131.2

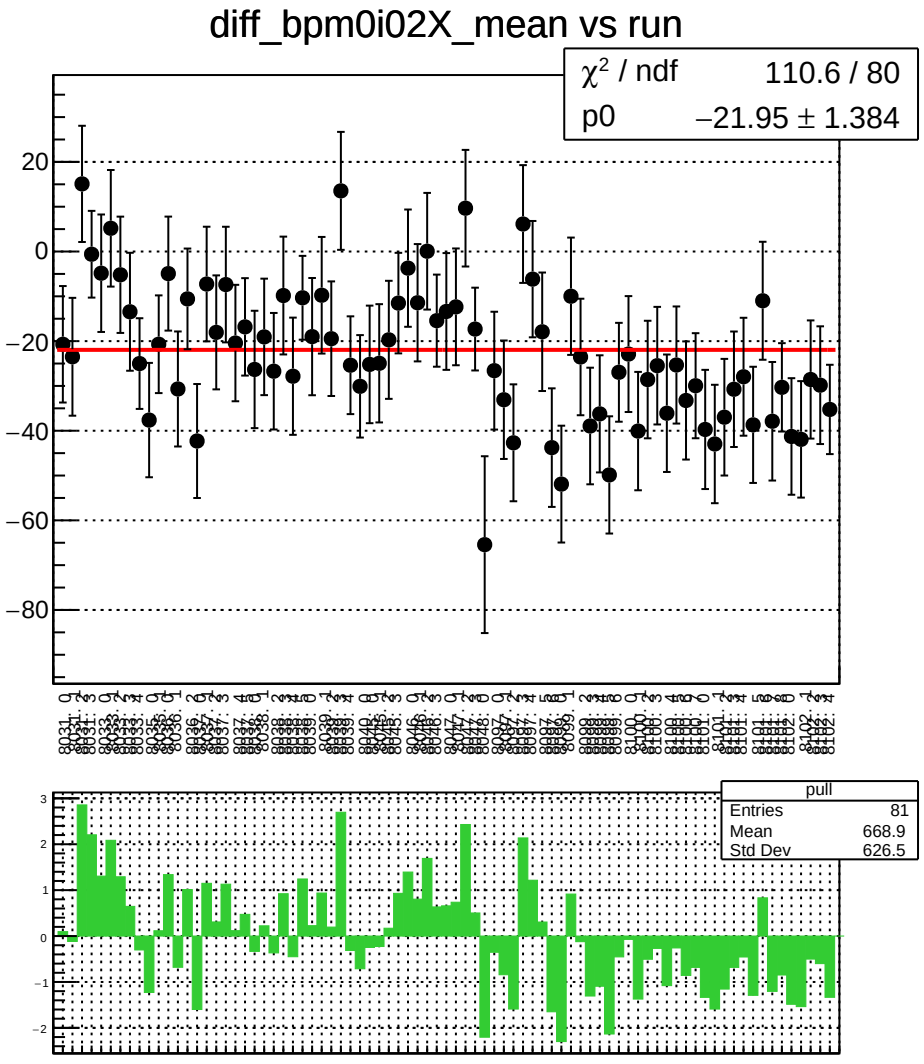

pull1D
Entries 81
Mean 0.04528
Std Dev 1.71

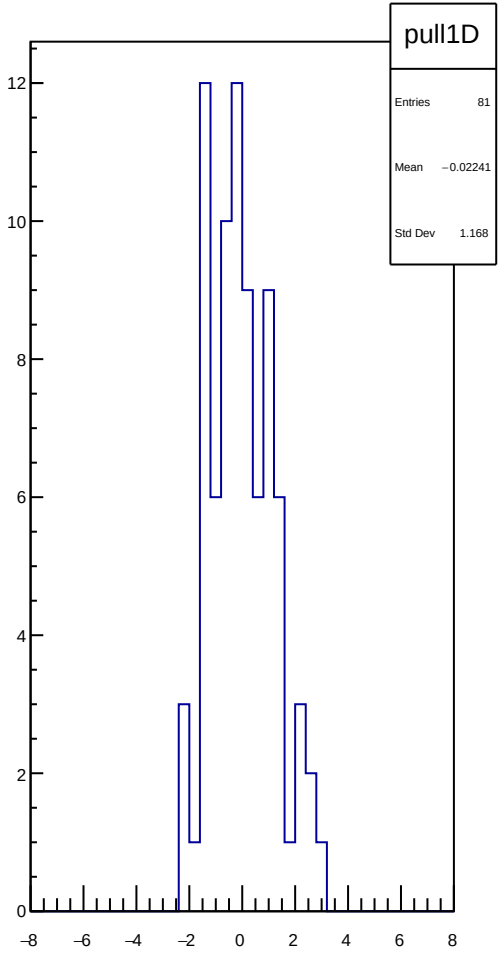

diff_bpm2i02X_rms vs run
χ² / ndf 807.5 / 80
p0 624 ± 0.4939
670
660
650
640
630
620
610
600
590

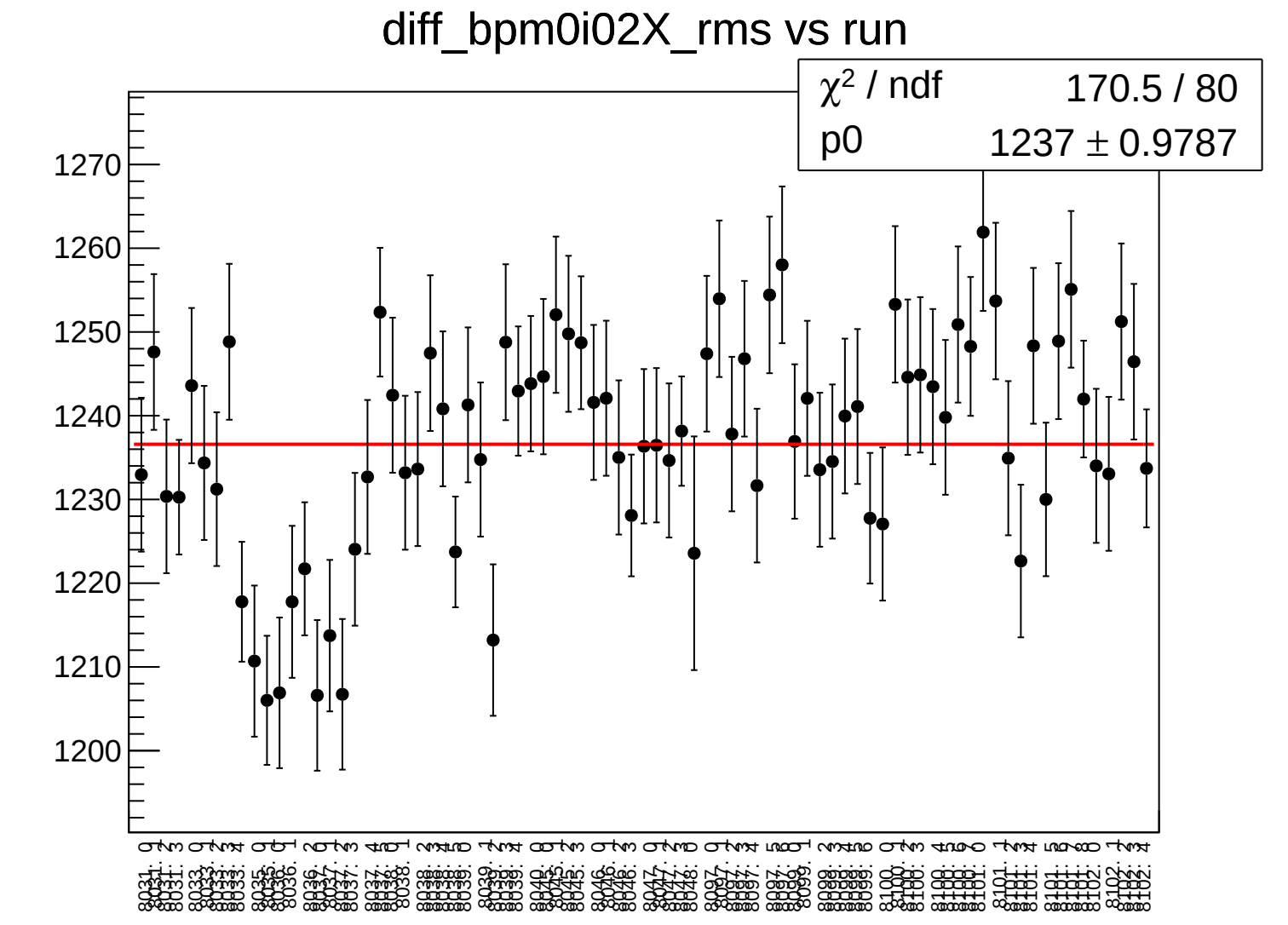

diff_bpm2i02Y_mean vs run
χ² / ndf 290.2 / 80
p0 46.69 ± 0.689
pull
Entries 81
Mean 40.88
Std Dev 38.21

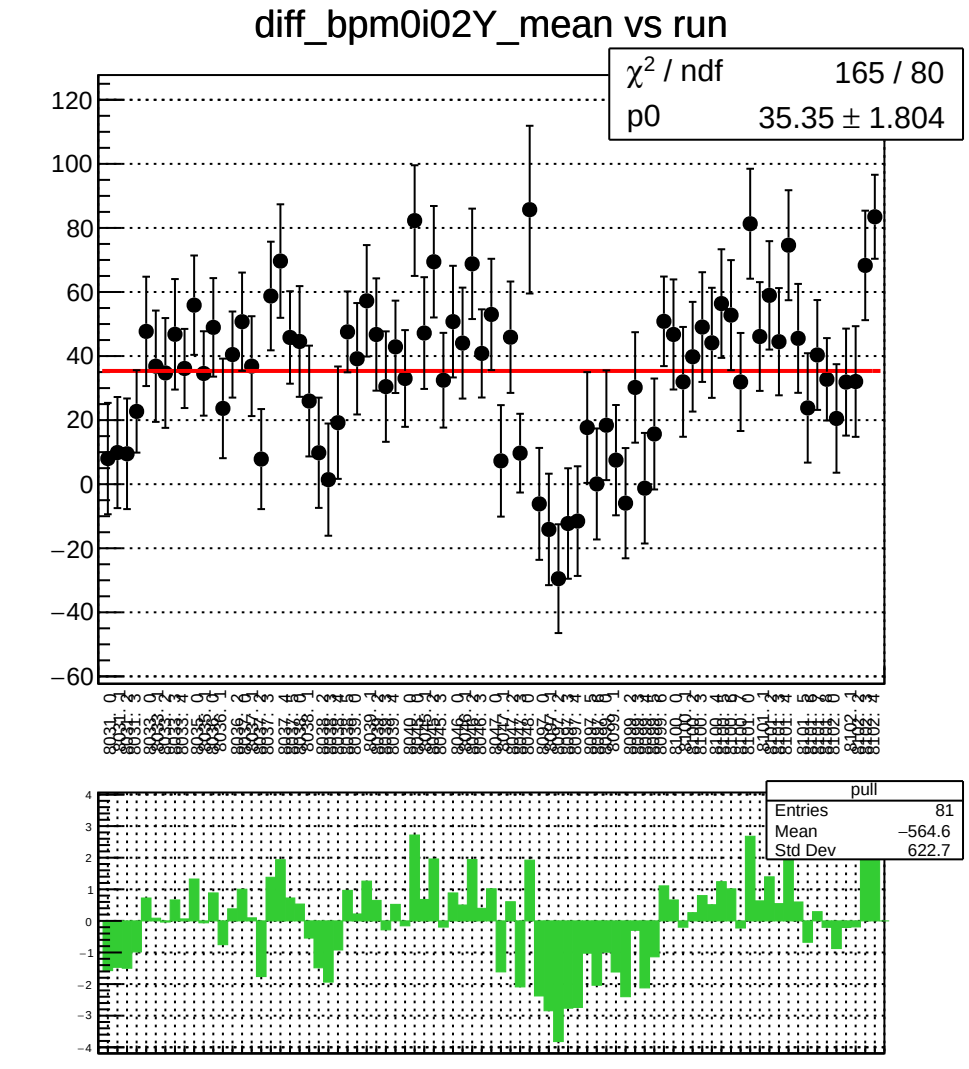

pull1D
Entries 81
Mean −0.06169
Std Dev 1.892

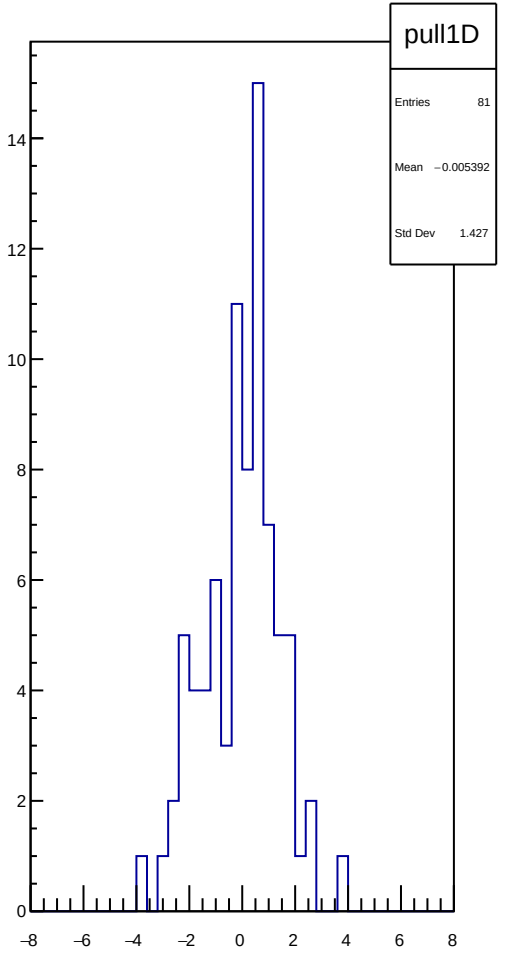

diff_bpm2i02Y_rms vs run
χ² / ndf 952.5 / 80
p0 615.5 ± 0.4872
670
660
650
640
630
620
610
600
590

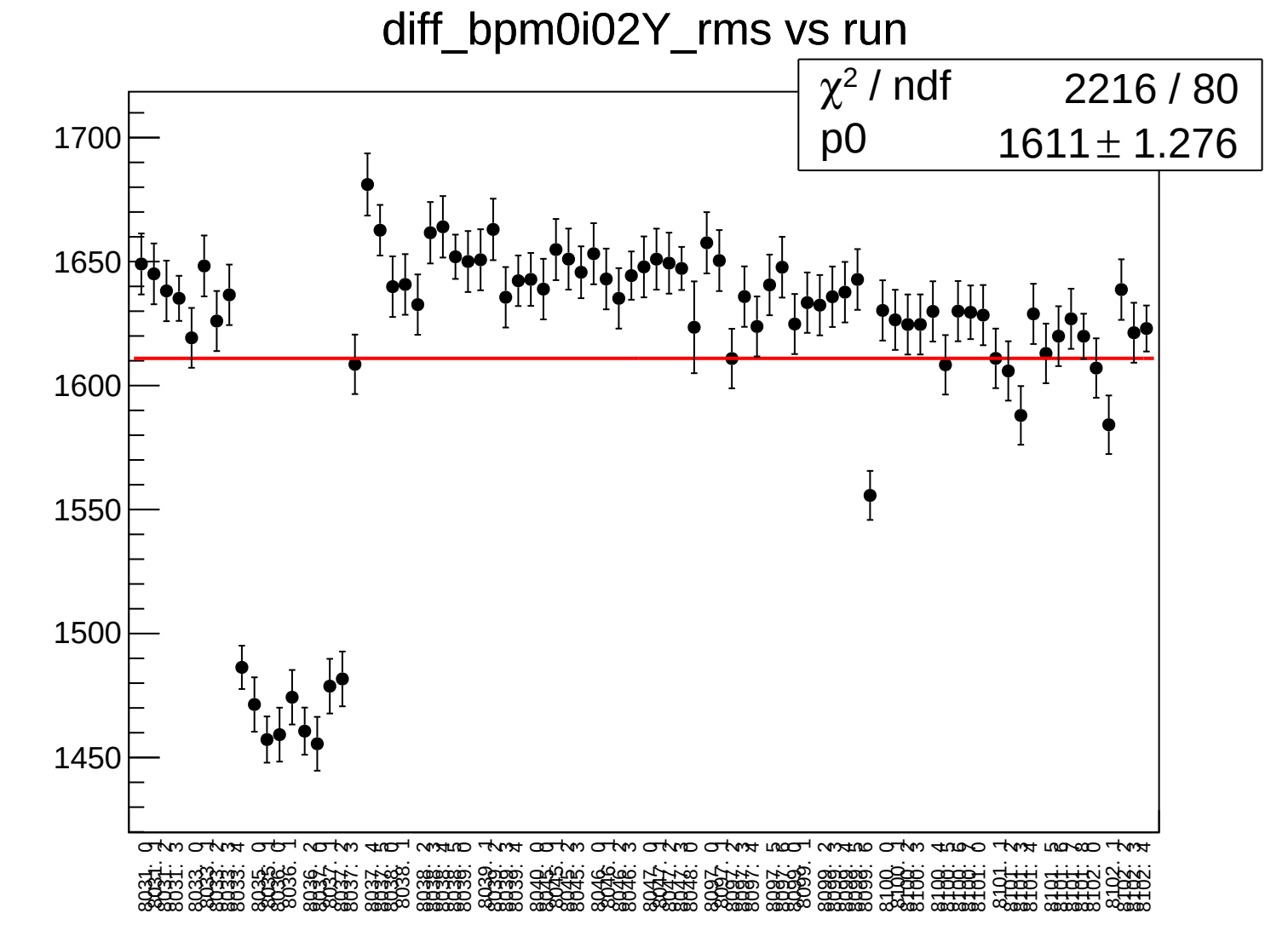

diff_bpm0i02X_mean vs run
χ² / ndf 110.6 / 80
p0 −21.95 ± 1.384
pull
Entries 81
Mean 668.9
Std Dev 626.5

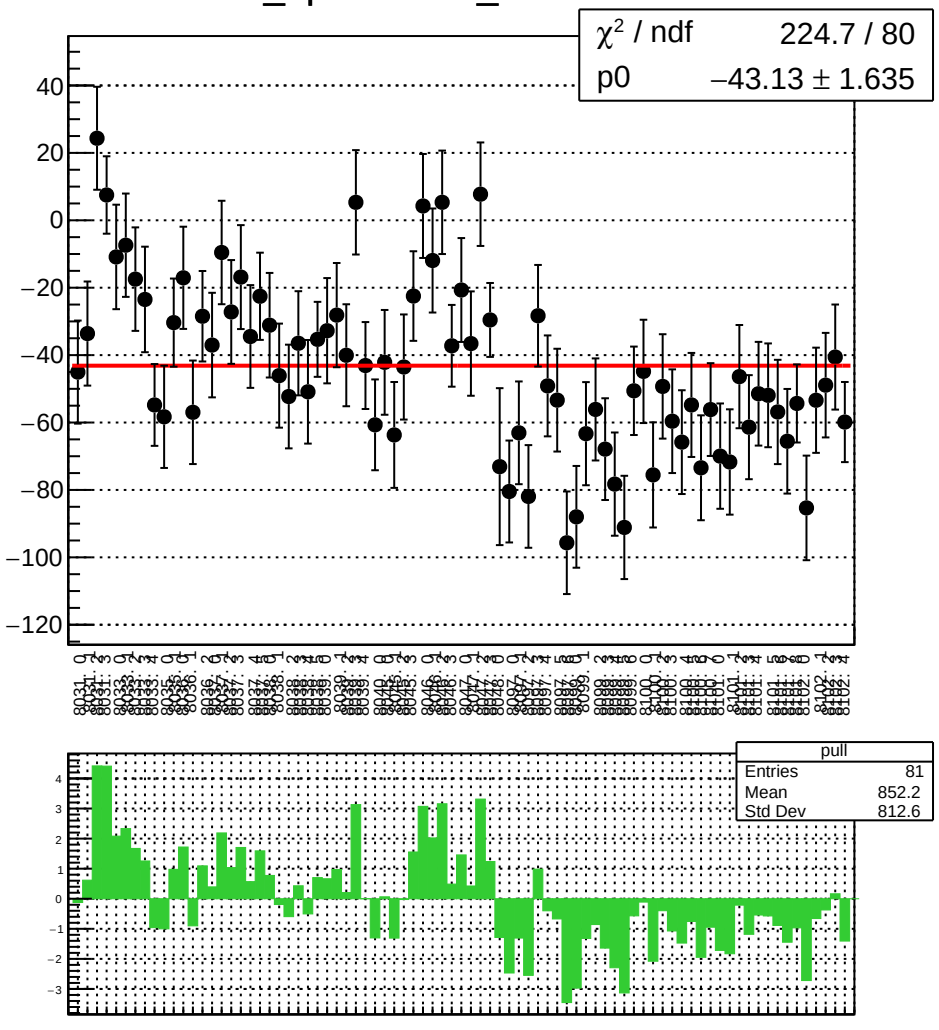

pull1D
Entries 81
Mean −0.02241
Std Dev 1.168

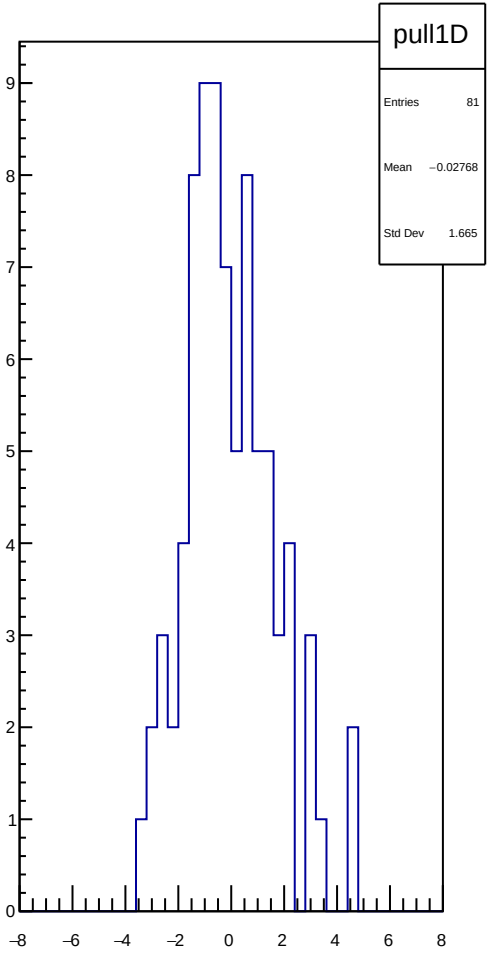

diff_bpm0i02X_rms vs run
χ² / ndf 170.5 / 80
p0 1237 ± 0.9787
1270
1260
1250
1240
1230
1220
1210
1200

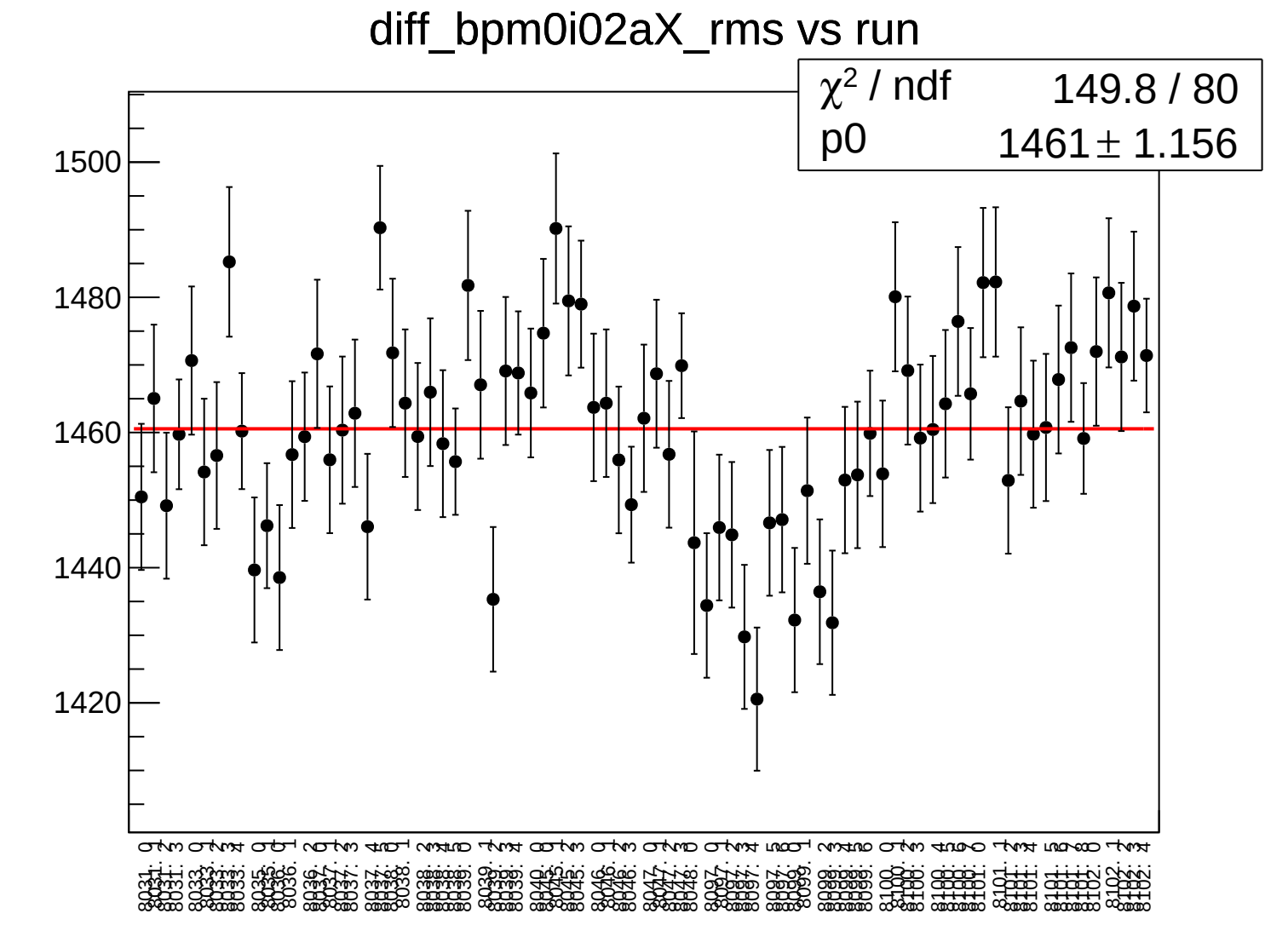

diff_bpm0i02Y_mean vs run
χ² / ndf 165 / 80
p0 35.35 ± 1.804
pull
Entries 81
Mean −564.6
Std Dev 622.7

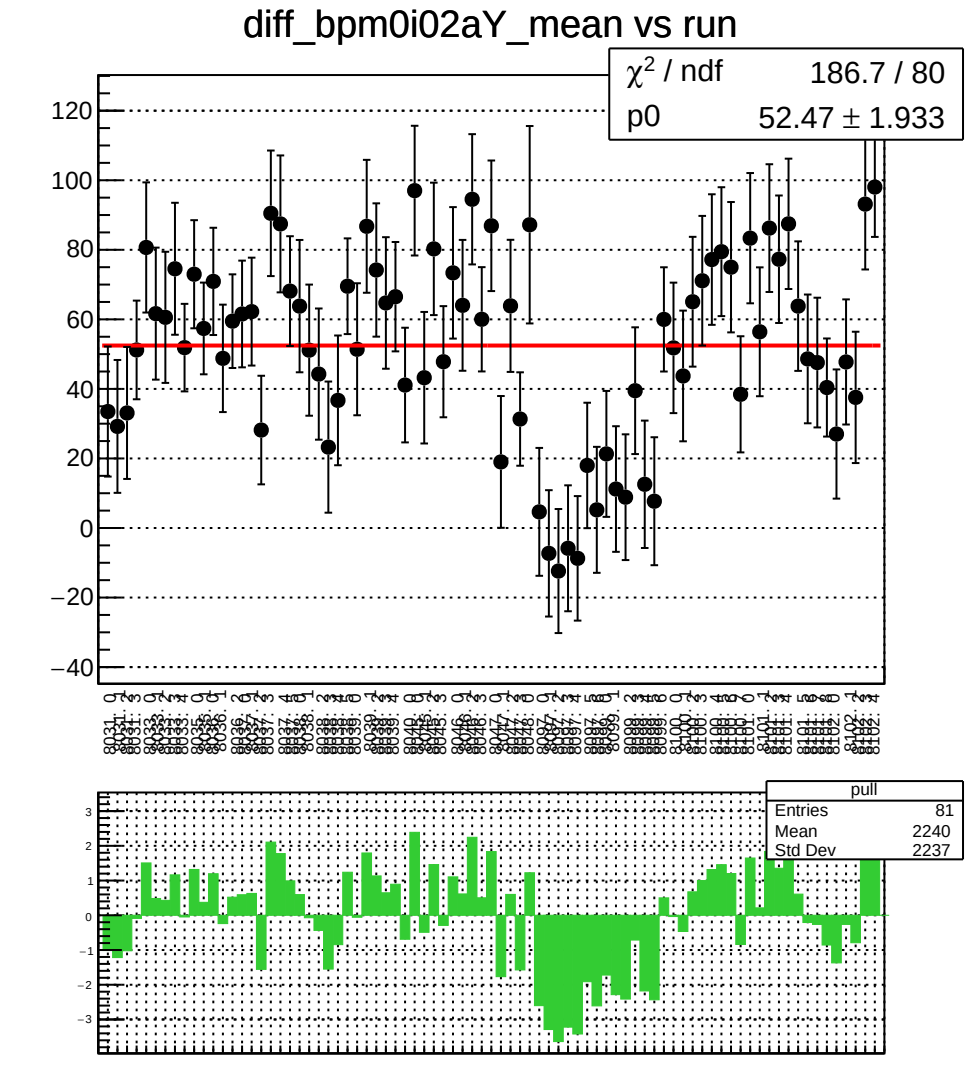

pull1D
Entries 81
Mean −0.005392
Std Dev 1.427

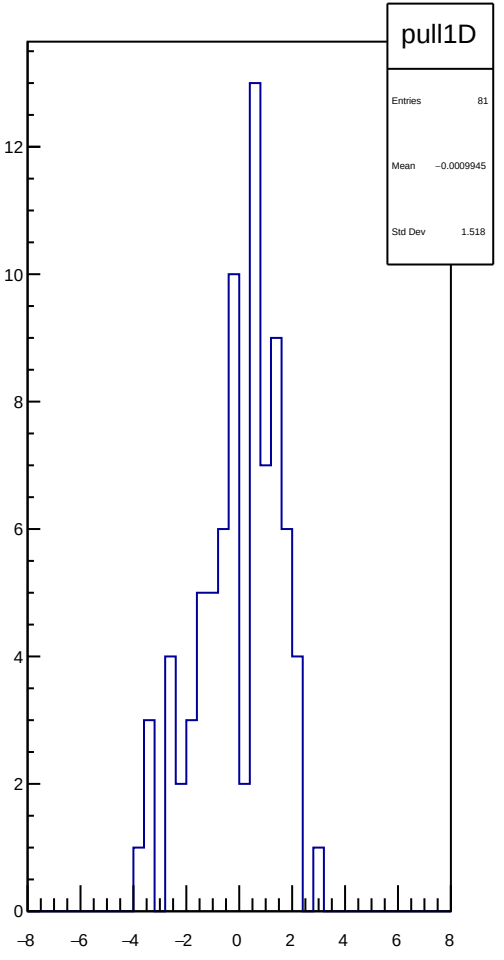

diff_bpm0i02Y_rms vs run
χ² / ndf 2216 / 80
p0 1611 ± 1.276
1700
1650
1600
1550
1500
1450

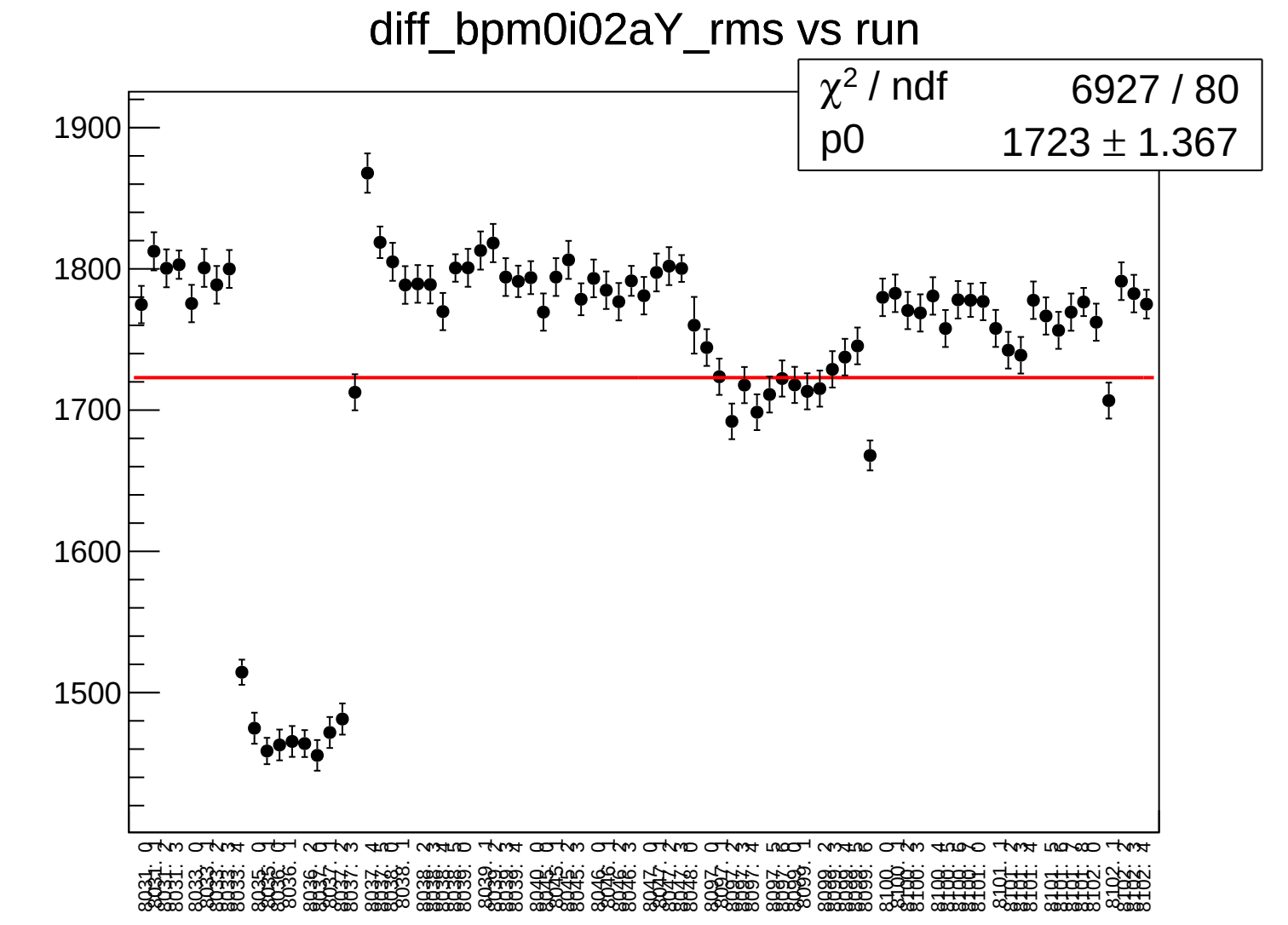

diff_bpm0i02aX_mean vs run
χ² / ndf 224.7 / 80
p0 −43.13 ± 1.635
pull
Entries 81
Mean 852.2
Std Dev 812.6

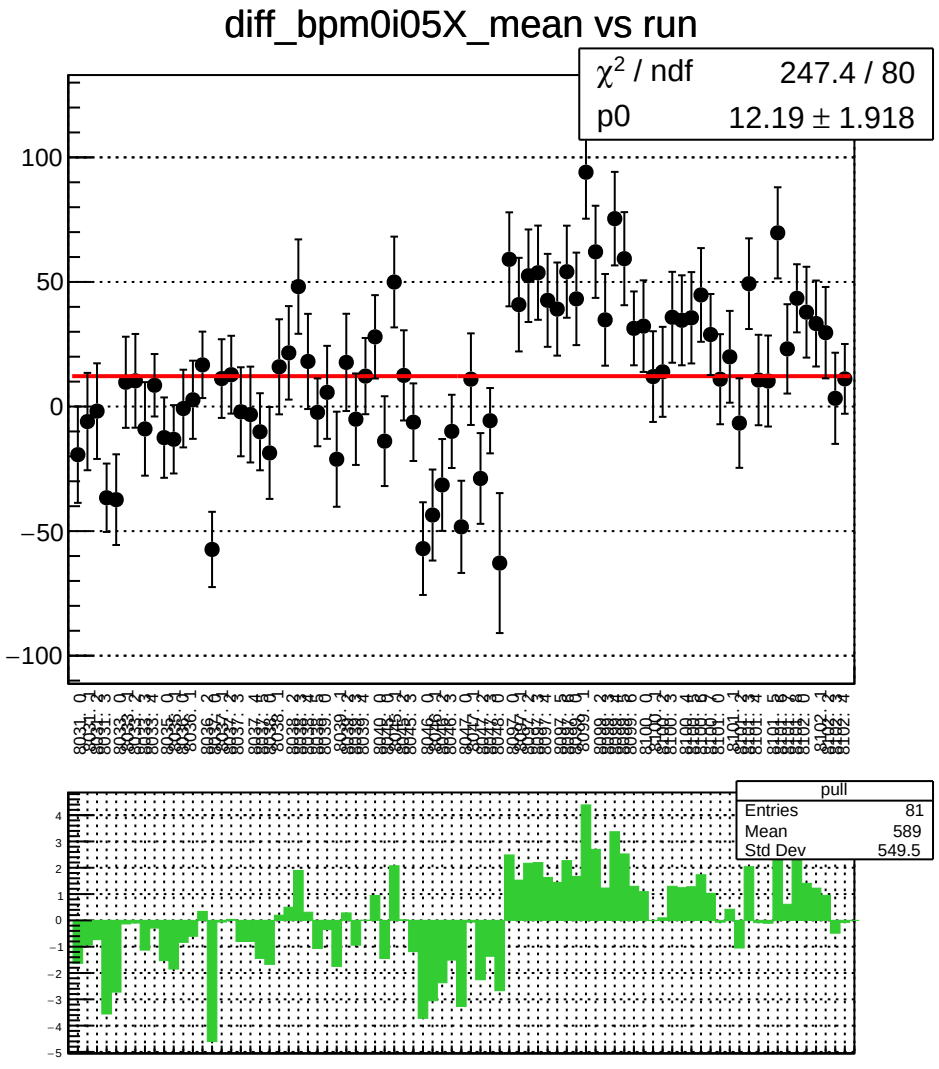

pull1D
Entries 81
Mean −0.02768
Std Dev 1.665

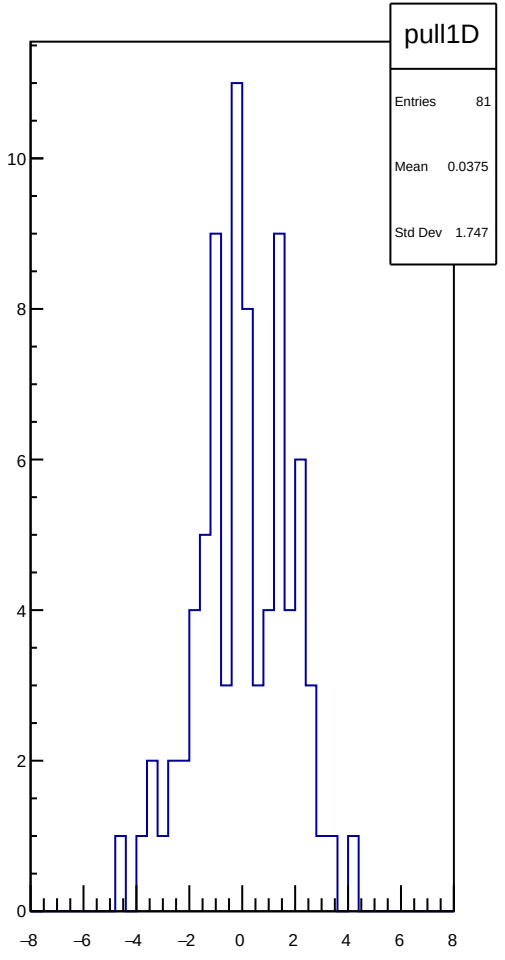

diff_bpm0i02aX_rms vs run
χ² / ndf 149.8 / 80
p0 1461 ± 1.156
1500
1480
1460
1440
1420

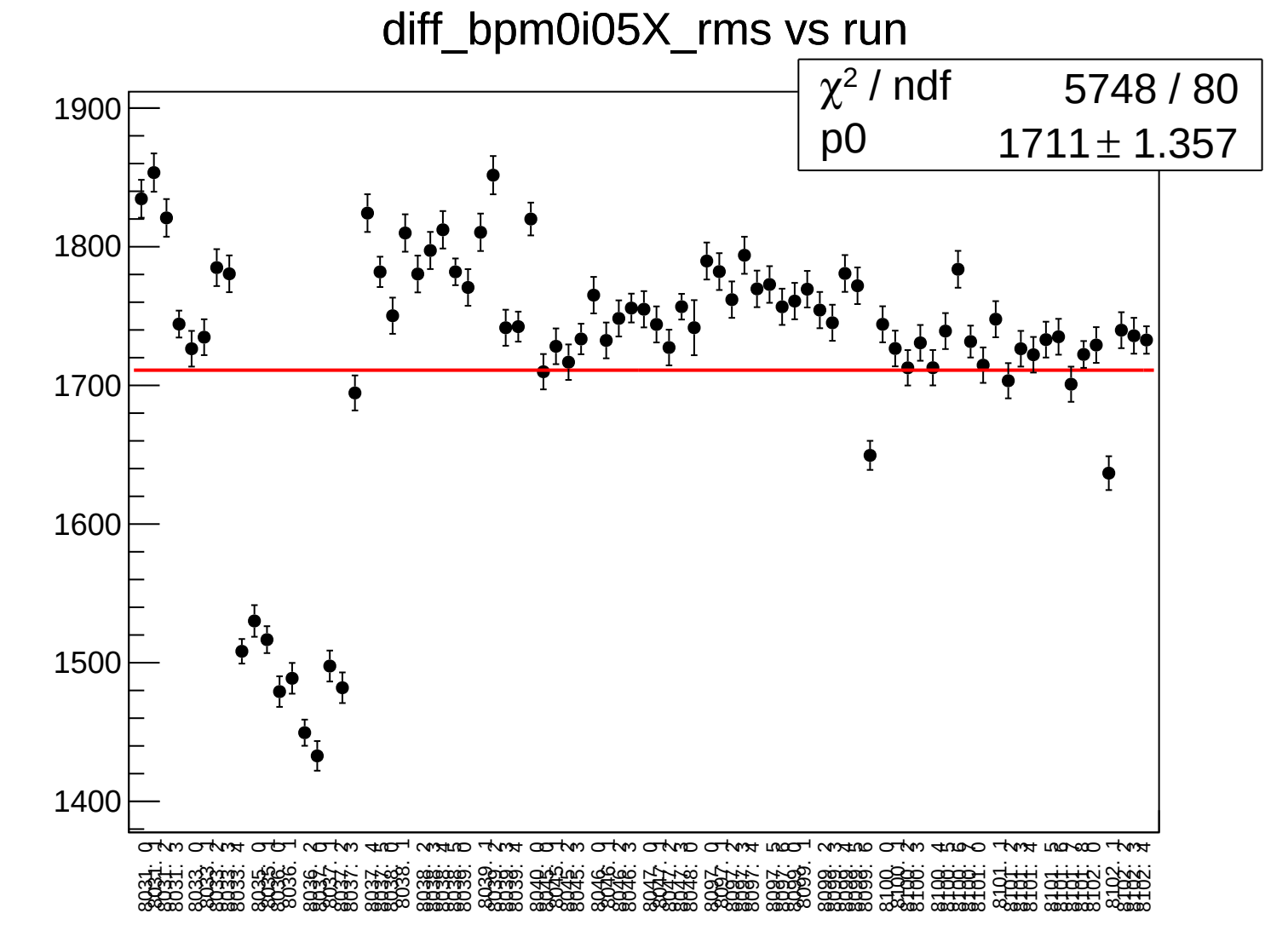

diff_bpm0i02aY_mean vs run
χ² / ndf 186.7 / 80
p0 52.47 ± 1.933
pull
Entries 81
Mean 2240
Std Dev 2237

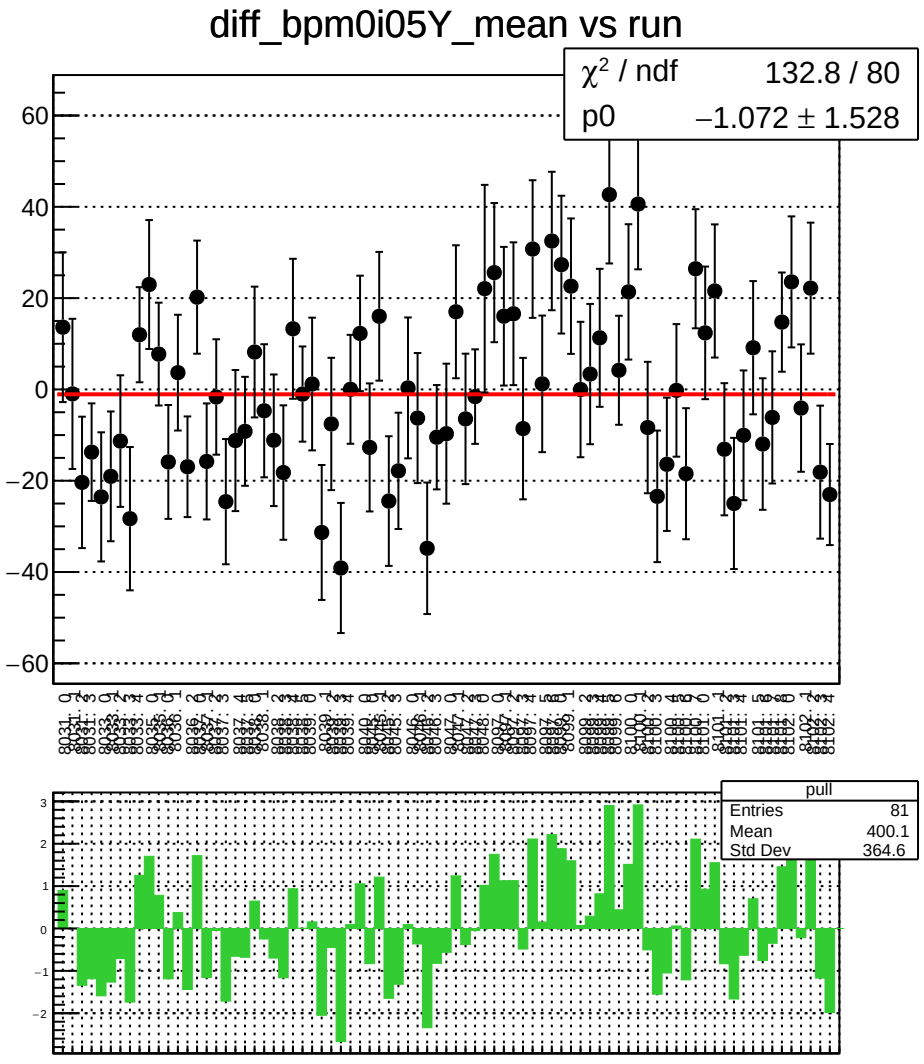

pull1D
Entries 81
Mean −0.0009945
Std Dev 1.518

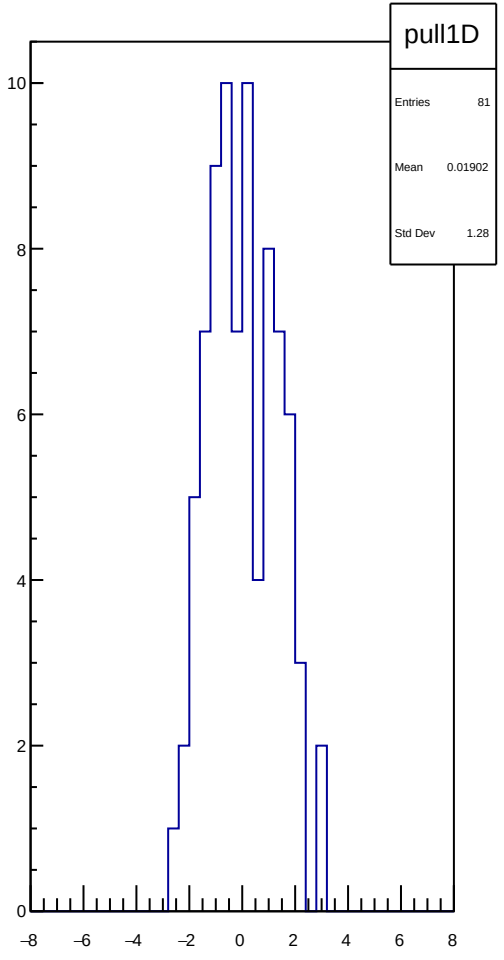

diff_bpm0i02aY_rms vs run
χ² / ndf 6927 / 80
p0 1723 ± 1.367
1900
1800
1700
1600
1500

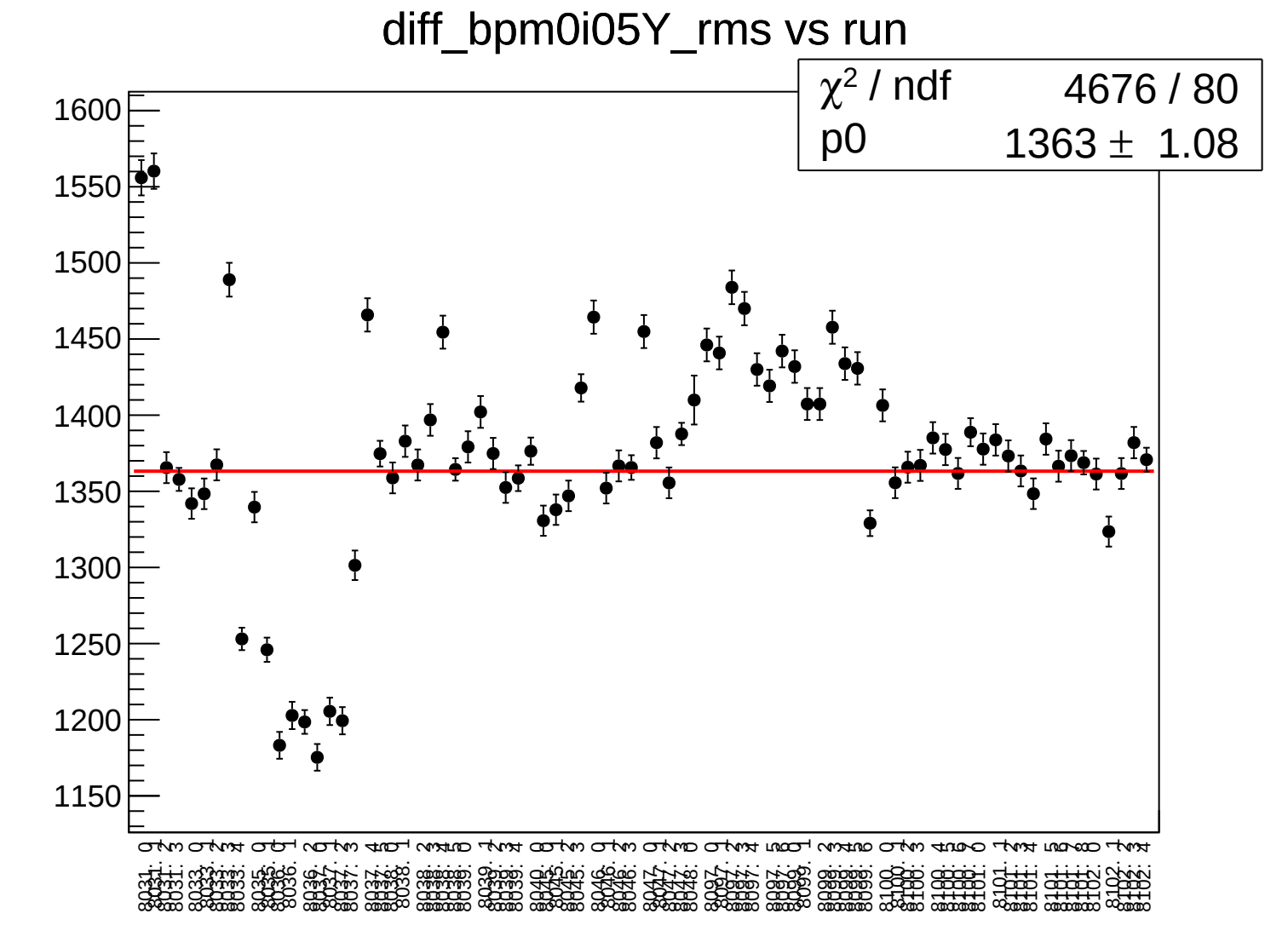

diff_bpm0i05X_mean vs run
χ² / ndf 247.4 / 80
p0 12.19 ± 1.918
pull
Entries 81
Mean 589
Std Dev 549.5

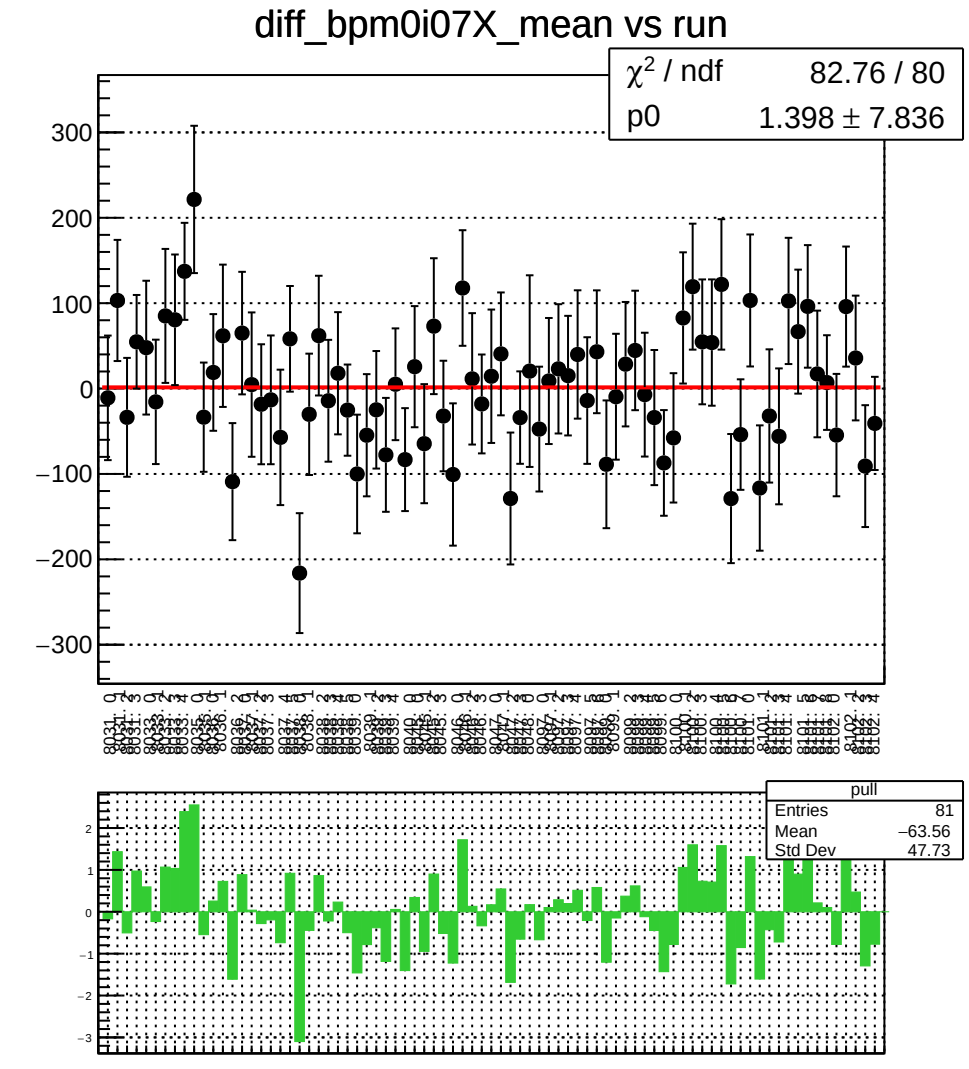

pull1D
Entries 81
Mean 0.0375
Std Dev 1.747

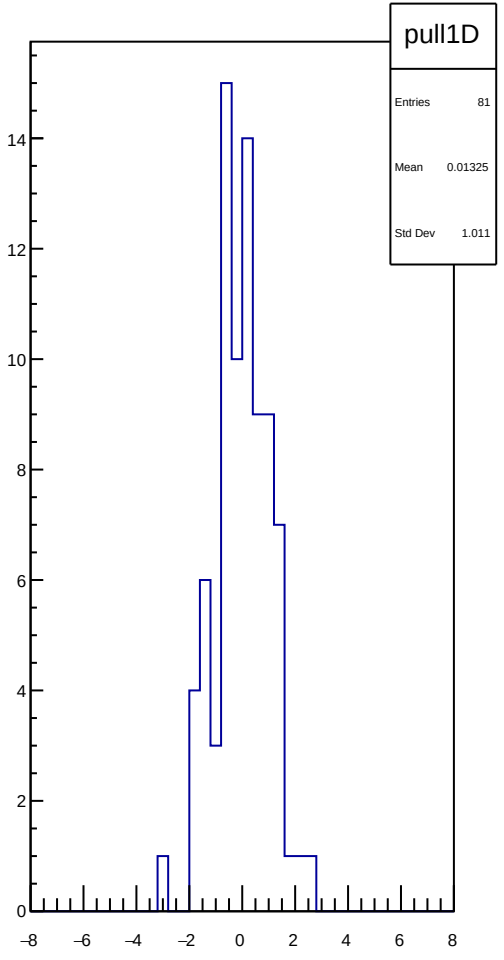

diff_bpm0i05X_rms vs run
χ² / ndf 5748 / 80
p0 1711 ± 1.357
1900
1800
1700
1600
1500
1400

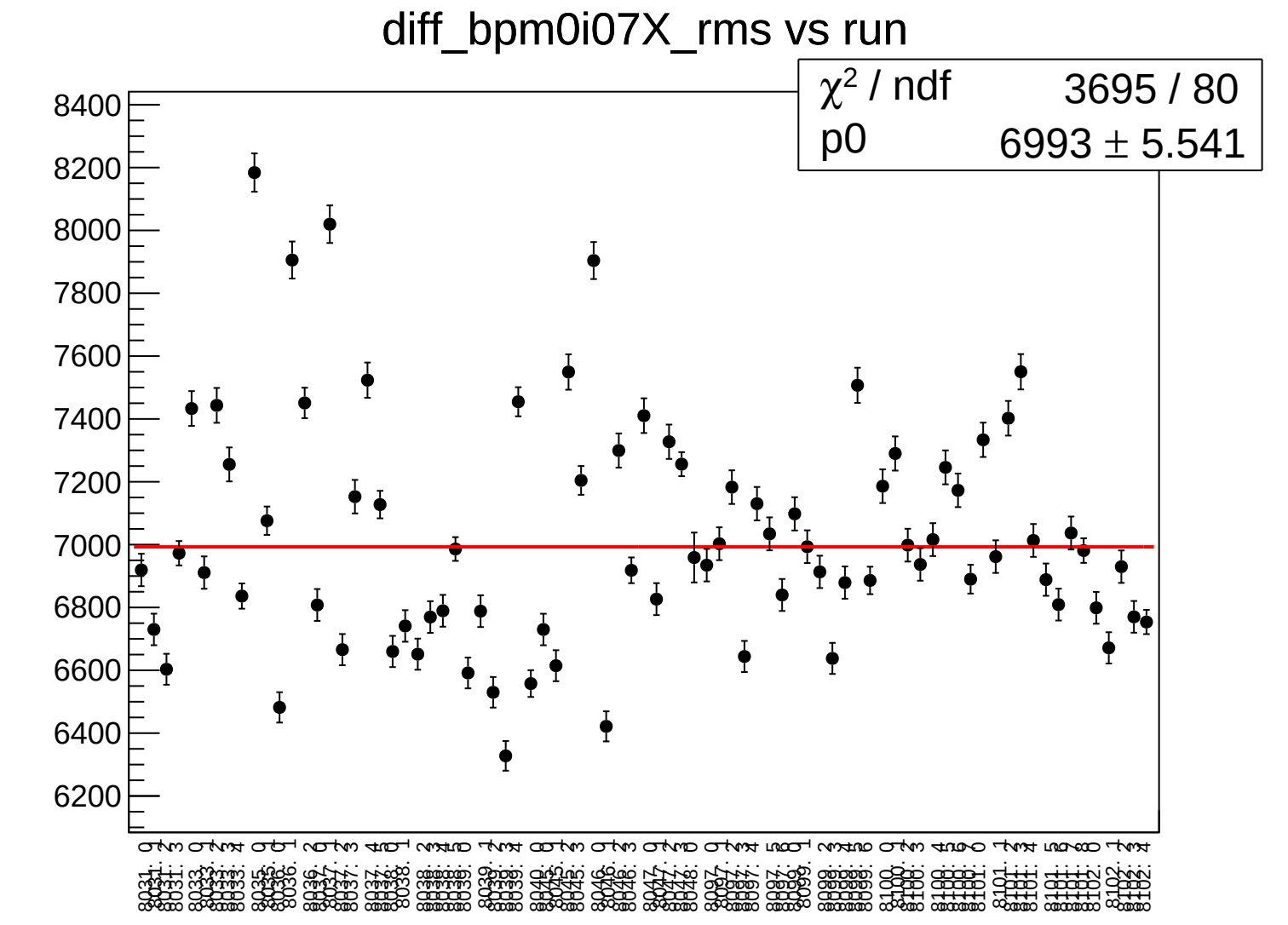

diff_bpm0i05Y_mean vs run
χ² / ndf 132.8 / 80
p0 −1.072 ± 1.528
pull
Entries 81
Mean 400.1
Std Dev 364.6

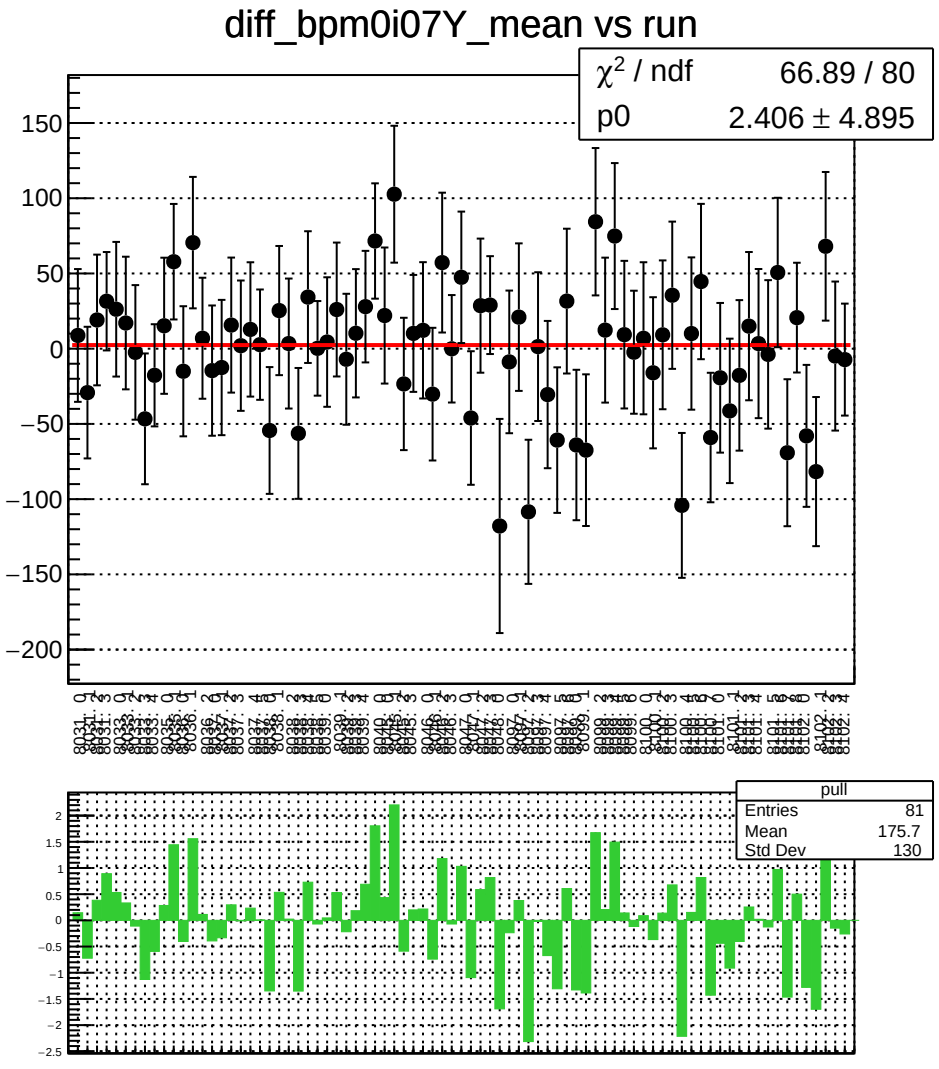

pull1D
Entries 81
Mean 0.01902
Std Dev 1.28

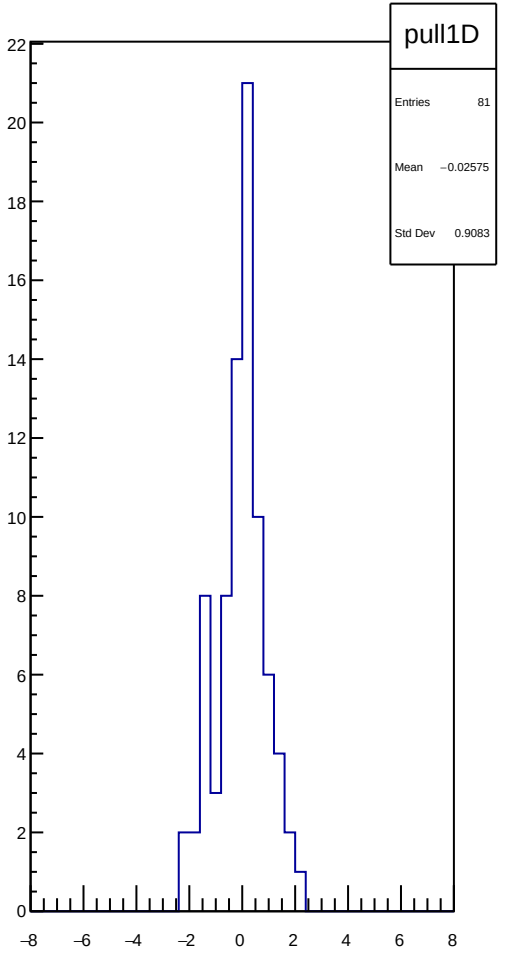

diff_bpm0i05Y_rms vs run
χ² / ndf 4676 / 80
p0 1363 ± 1.08
1600
1550
1500
1450
1400
1350
1300
1250
1200
1150

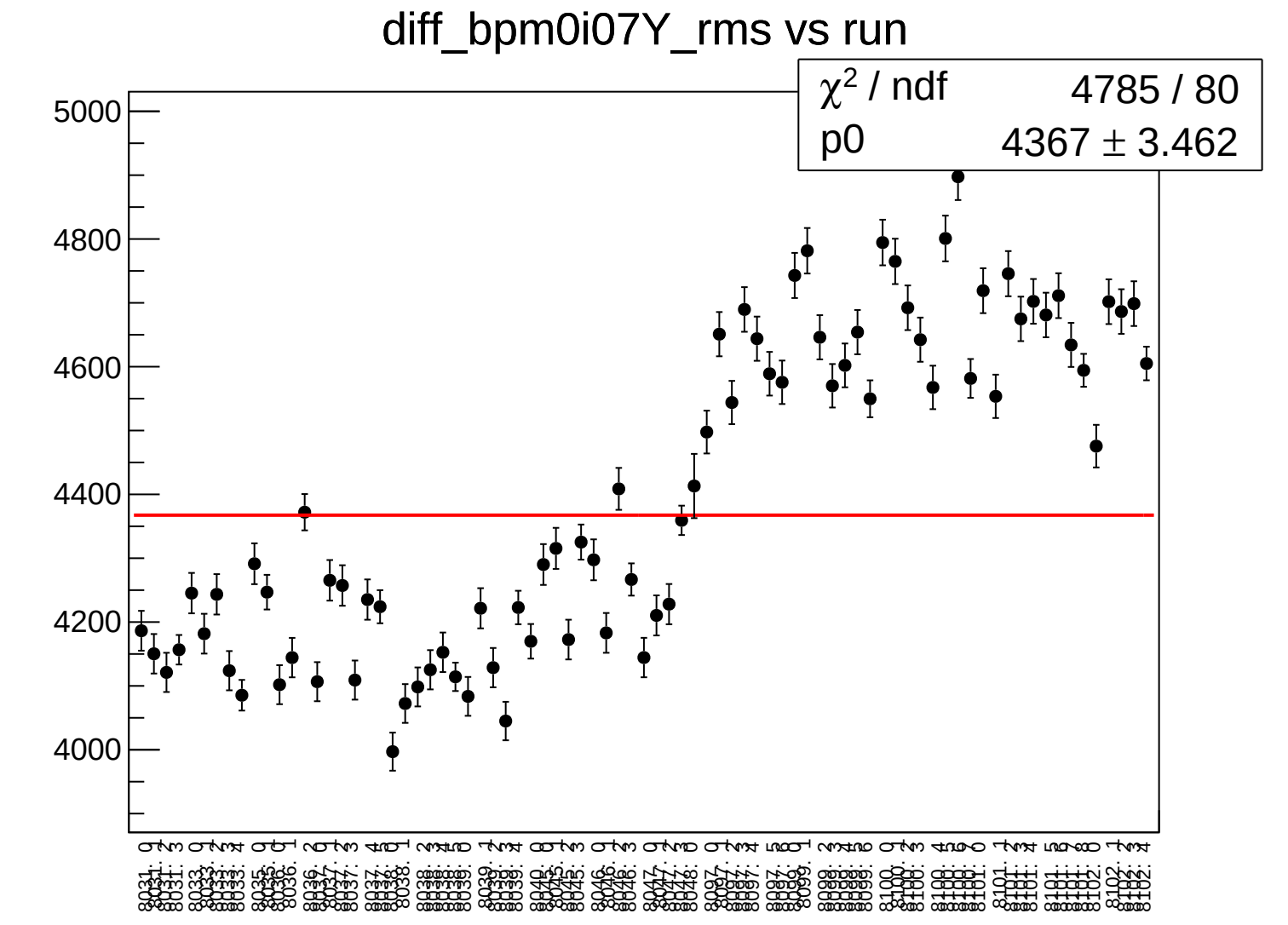

diff_bpm0i07X_mean vs run
χ^2 / ndf 82.76 / 80
p0 1.398 ± 7.836
pull
Entries 81
Mean −63.56
Std Dev 47.73

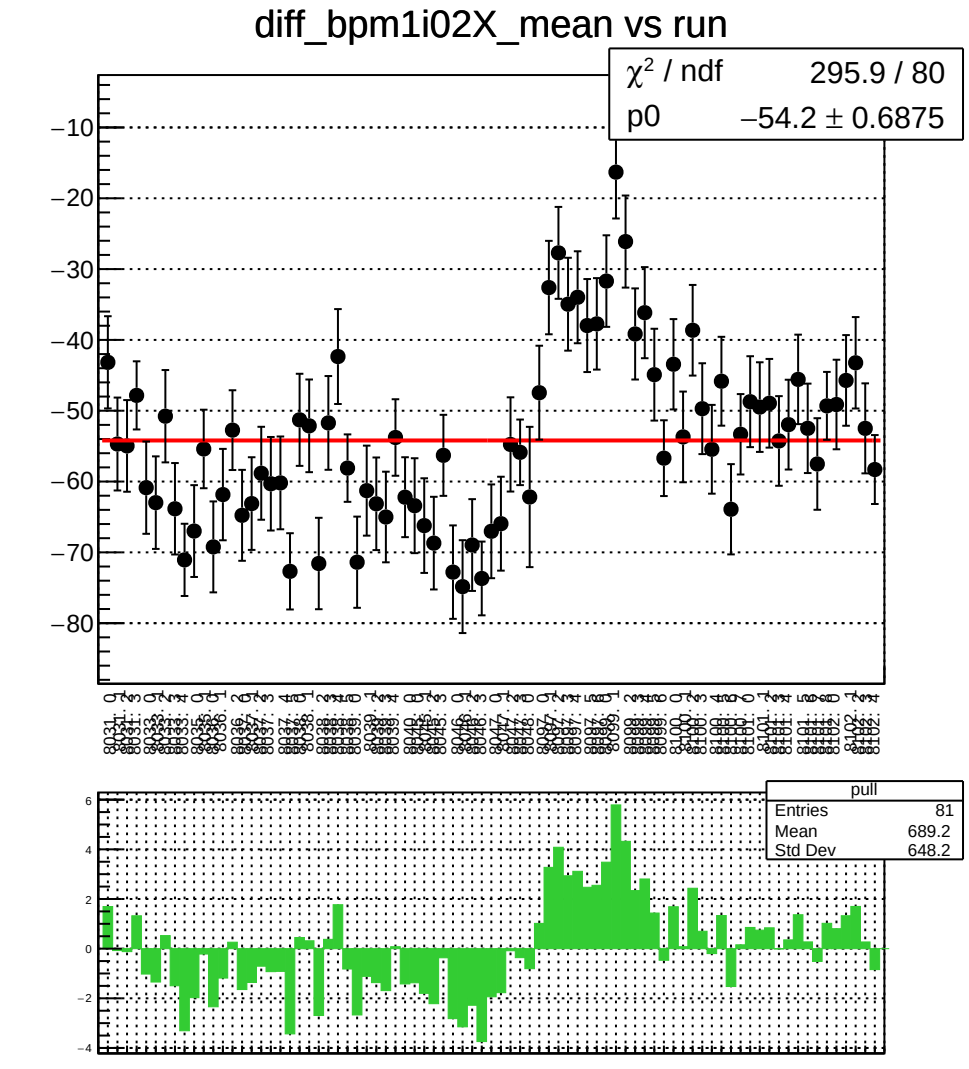

pull1D
Entries 81
Mean 0.01325
Std Dev 1.011

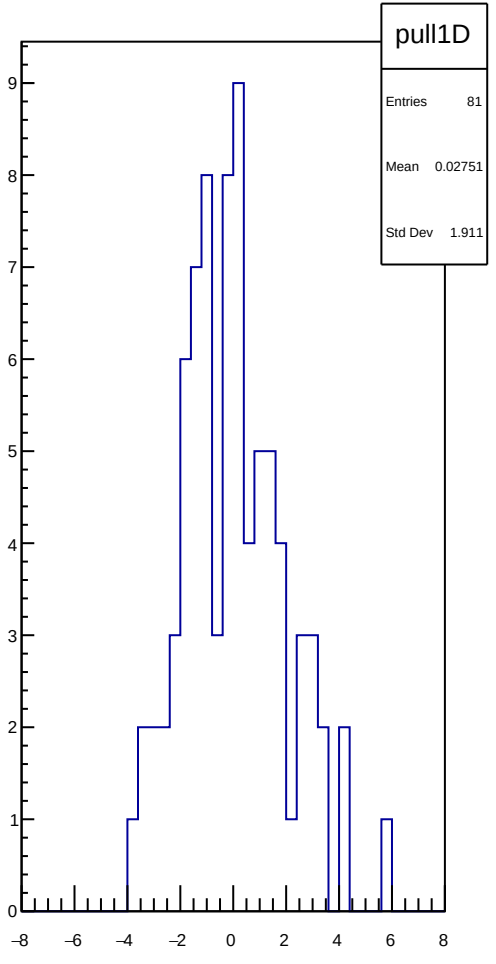

diff_bpm0i07X_rms vs run
χ² / ndf 3695 / 80
p0 6993 ± 5.541
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400
6200

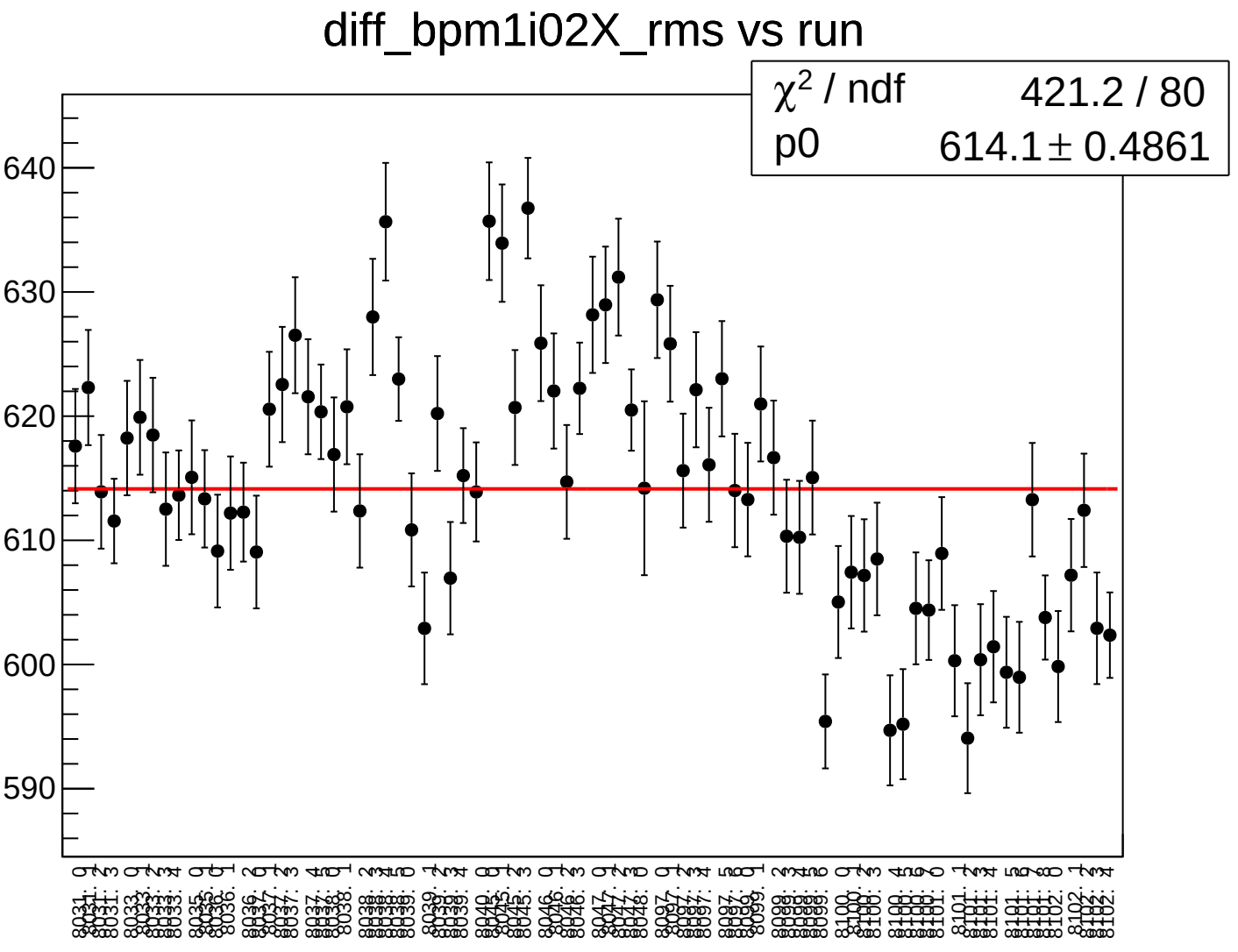

diff_bpm0i07Y_mean vs run
χ^2 / ndf 66.89 / 80
p0 2.406 ± 4.895
pull
Entries 81
Mean 175.7
Std Dev 130

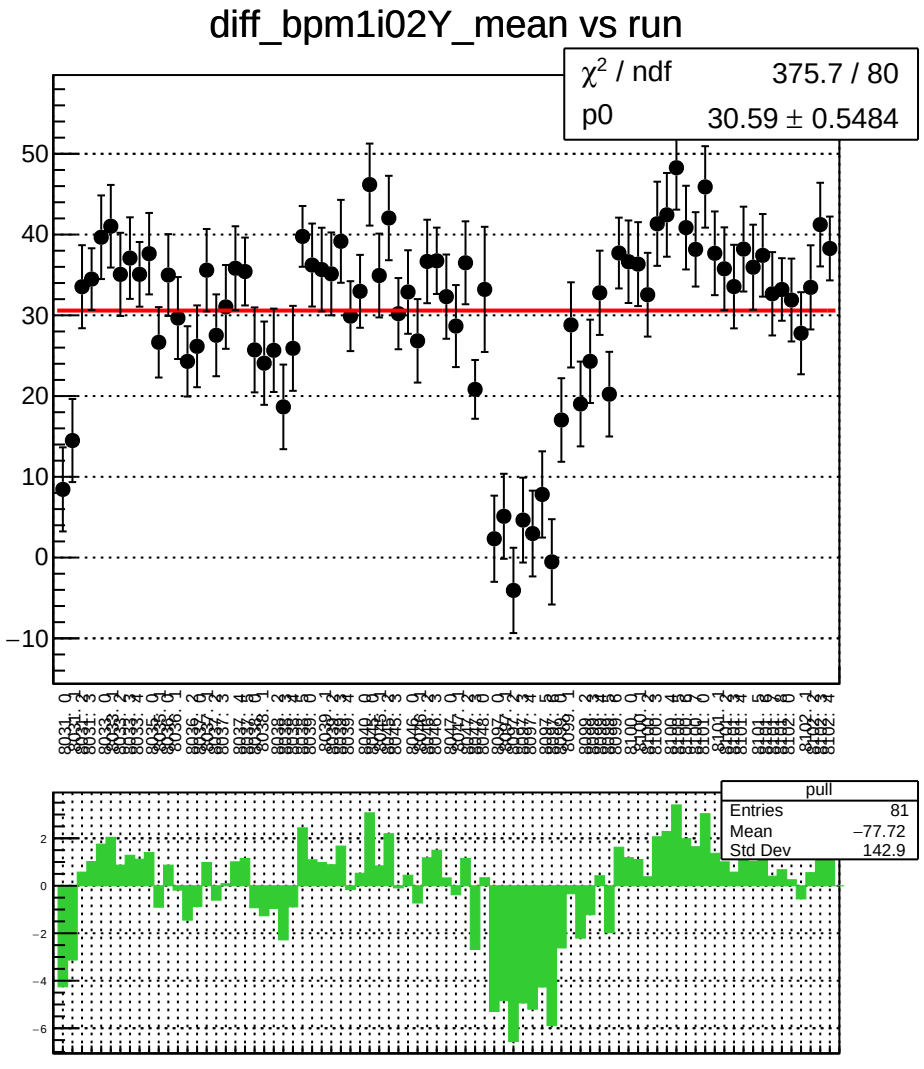

pull1D
Entries 81
Mean −0.02575
Std Dev 0.9083

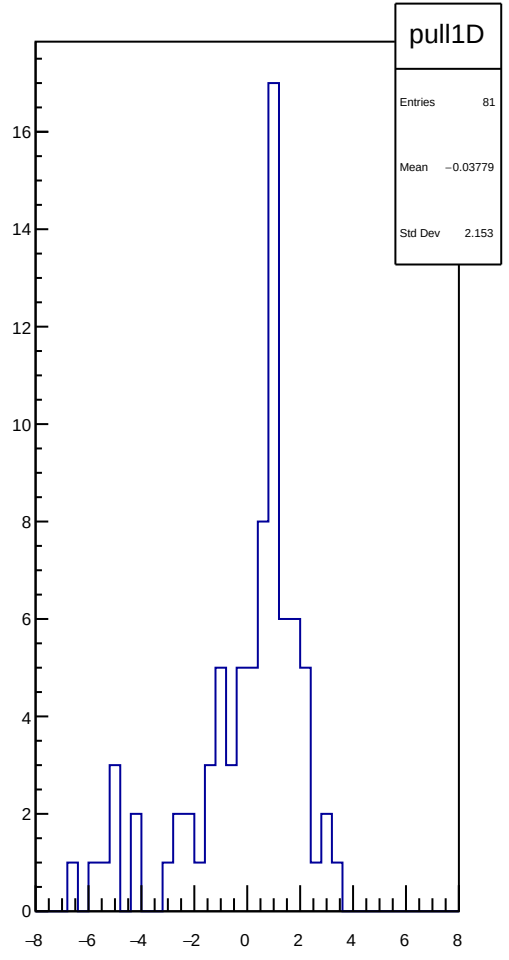

diff_bpm0i07Y_rms vs run
χ² / ndf 4785 / 80
p0 4367 ± 3.462
5000
4800
4600
4400
4200
4000

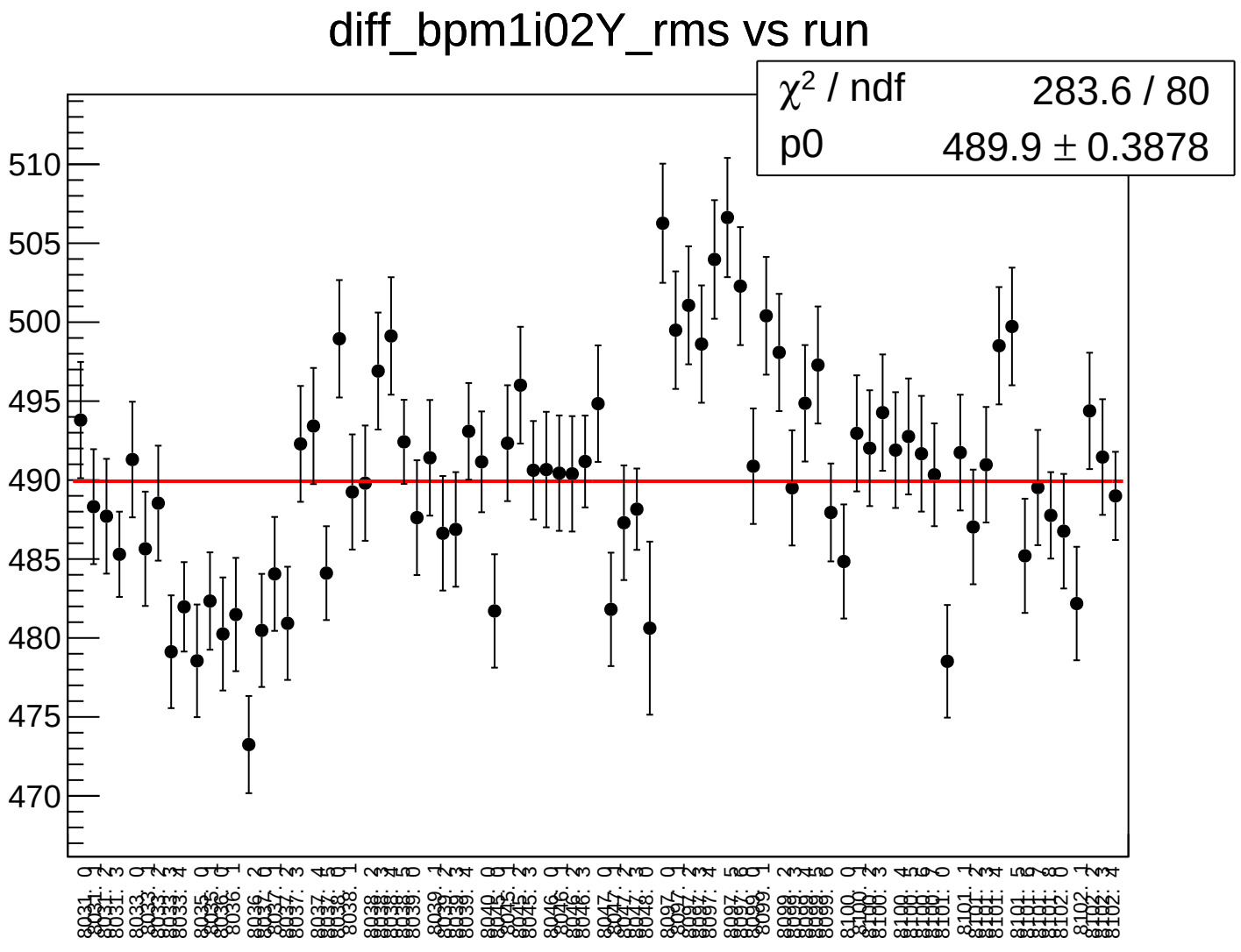

diff_bpm1i02X_mean vs run
χ² / ndf 295.9 / 80
p0 −54.2 ± 0.6875
pull
Entries 81
Mean 689.2
Std Dev 648.2

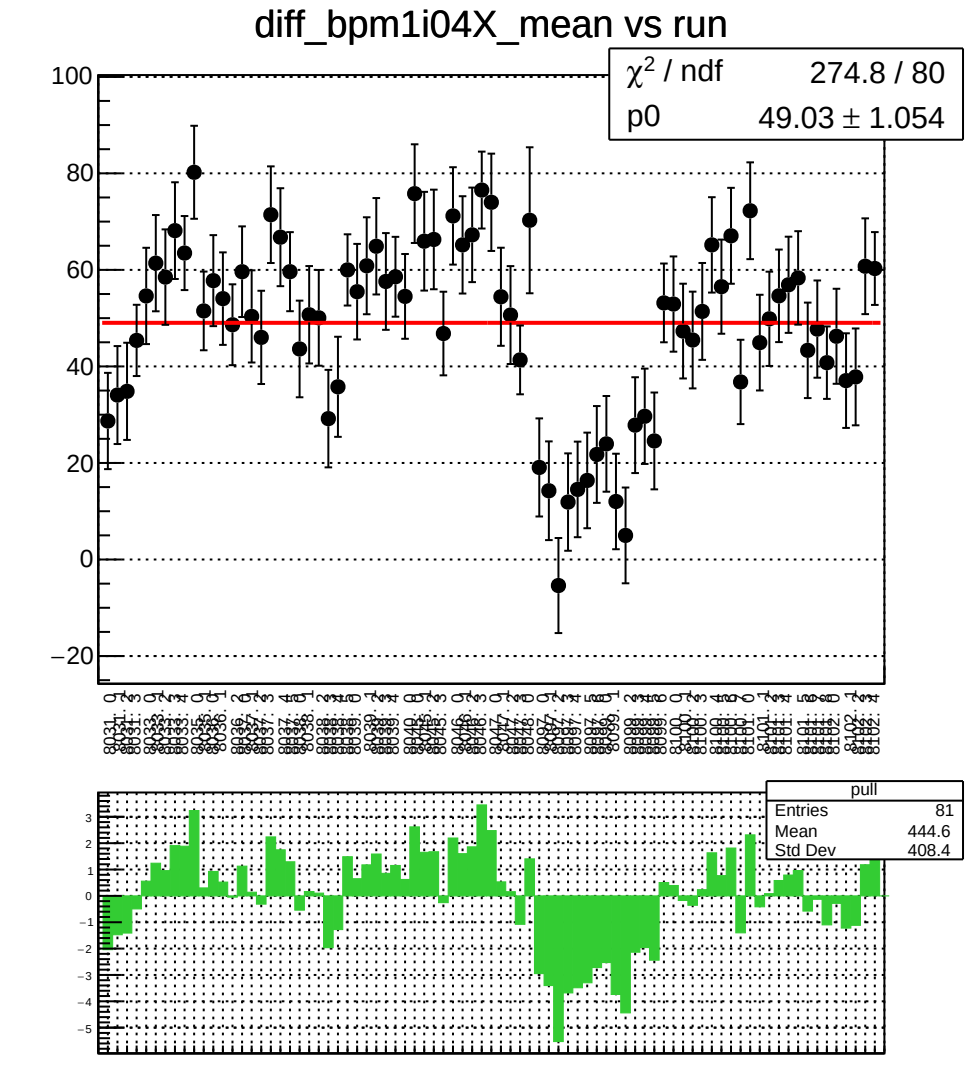

pull1D
Entries 81
Mean 0.02751
Std Dev 1.911

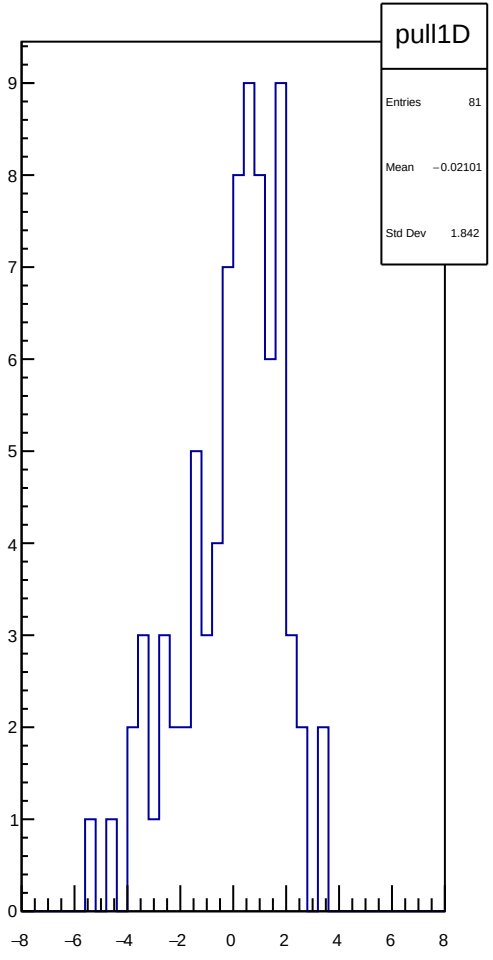

diff_bpm1i02X_rms vs run
χ² / ndf 421.2 / 80
p0 614.1 ± 0.4861
640
630
620
610
600
590

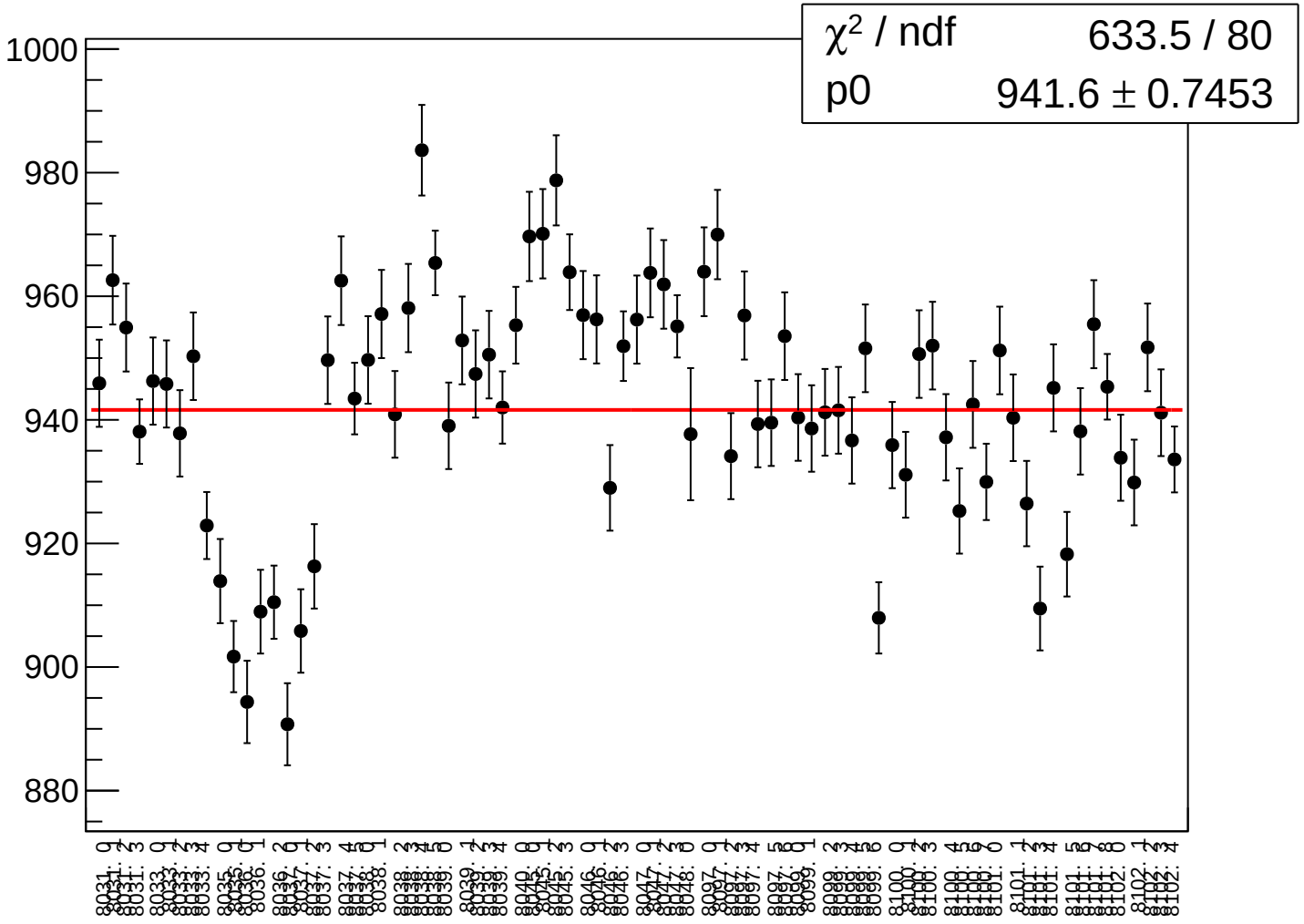

diff_bpm1i02Y_mean vs run
χ² / ndf 375.7 / 80
p0 30.59 ± 0.5484
pull
Entries 81
Mean −77.72
Std Dev 142.9

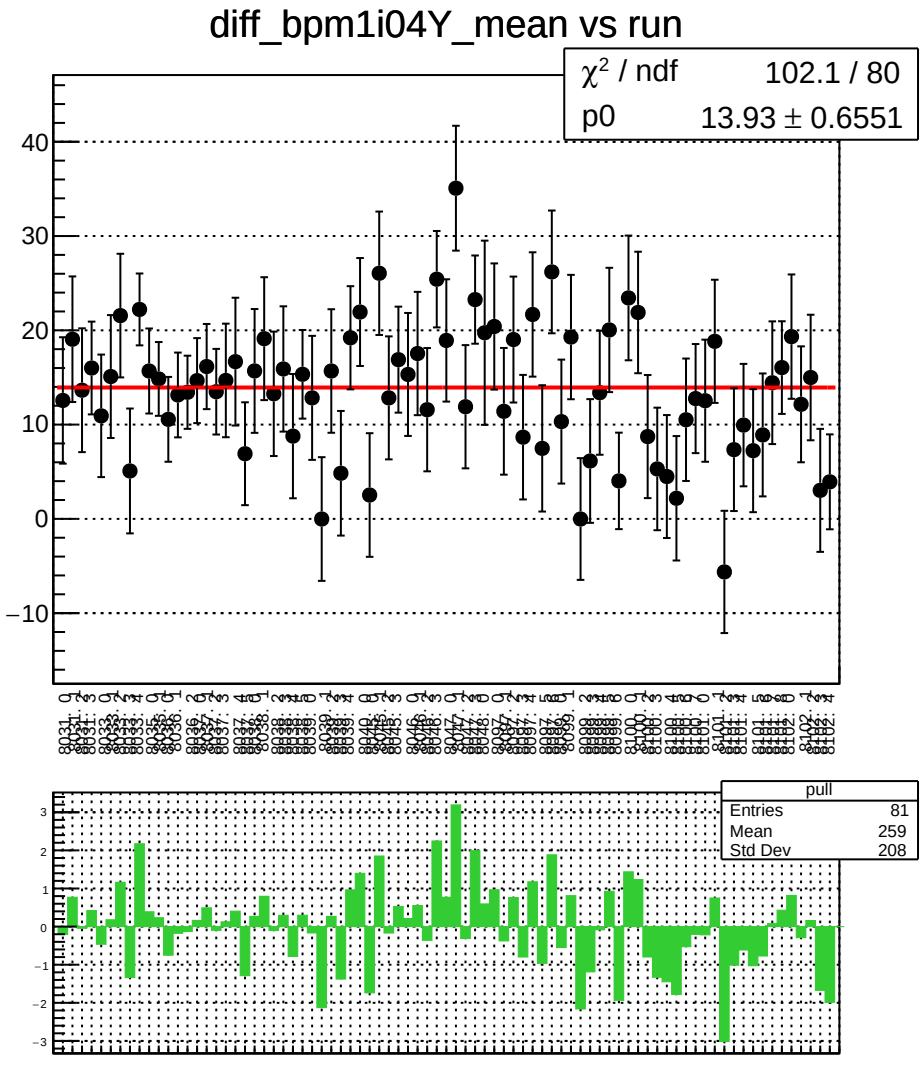

pull1D
Entries 81
Mean −0.03779
Std Dev 2.153

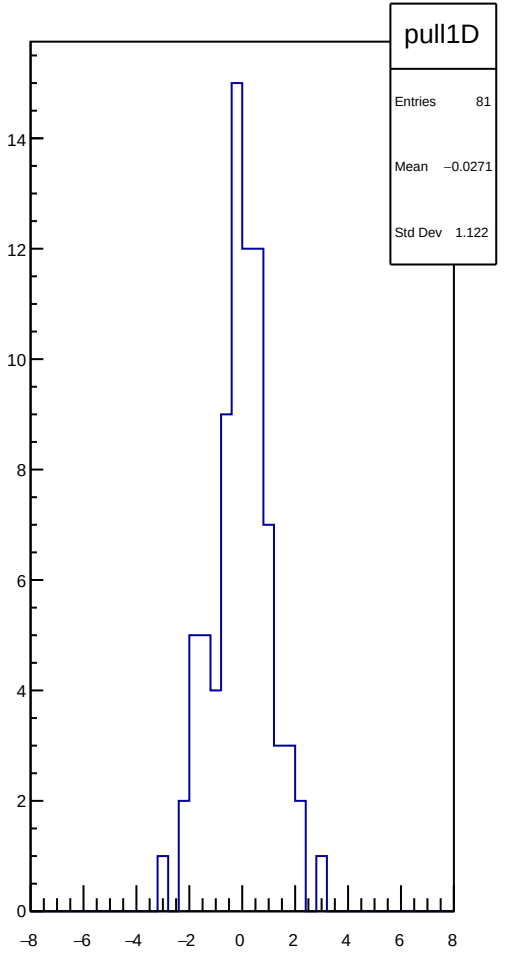

diff_bpm1i02Y_rms vs run
χ² / ndf 283.6 / 80
p0 489.9 ± 0.3878
510
505
500
495
490
485
480
475
470

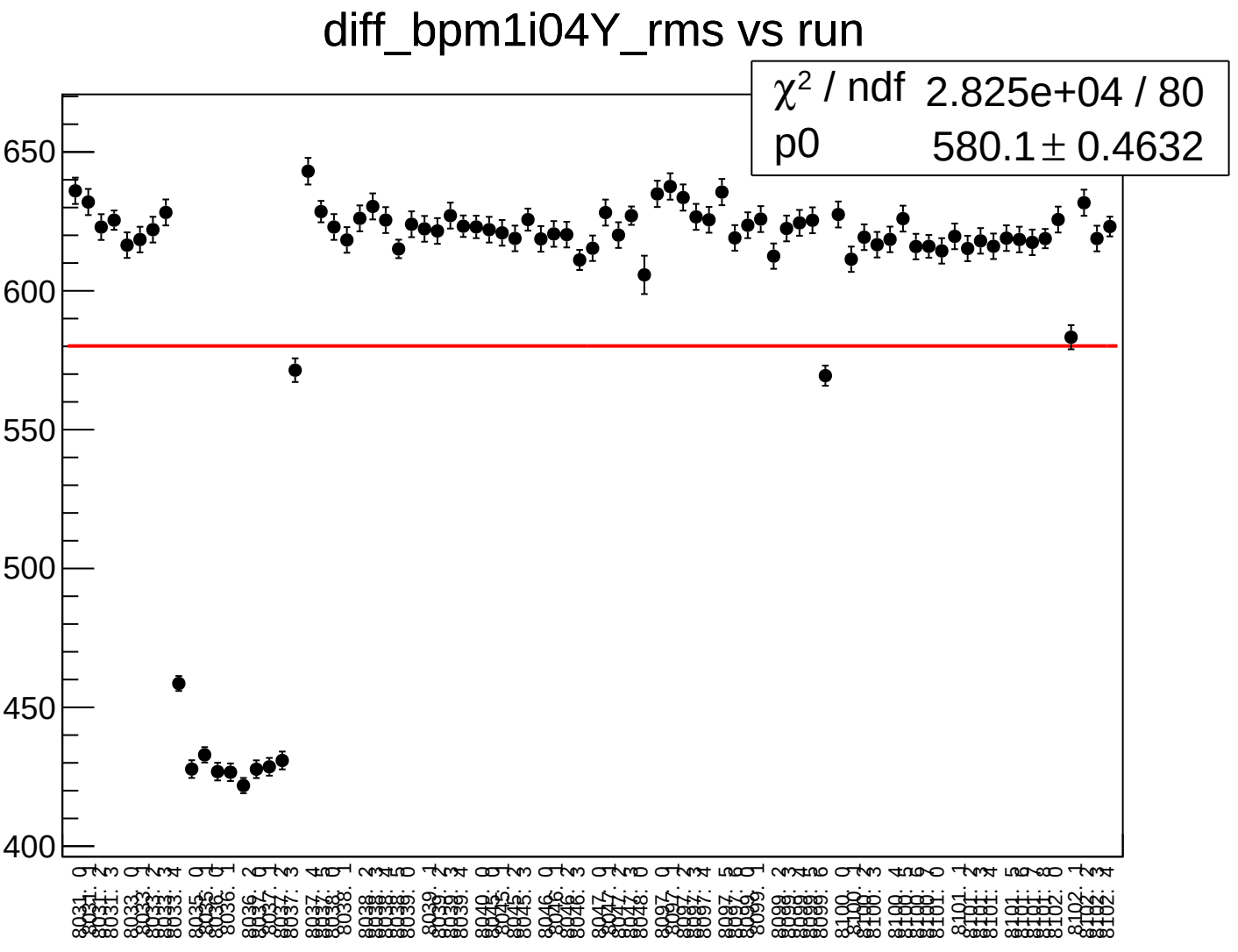

diff_bpm1i04X_mean vs run
χ² / ndf 274.8 / 80
p0 49.03 ± 1.054
pull
Entries 81
Mean 444.6
Std Dev 408.4

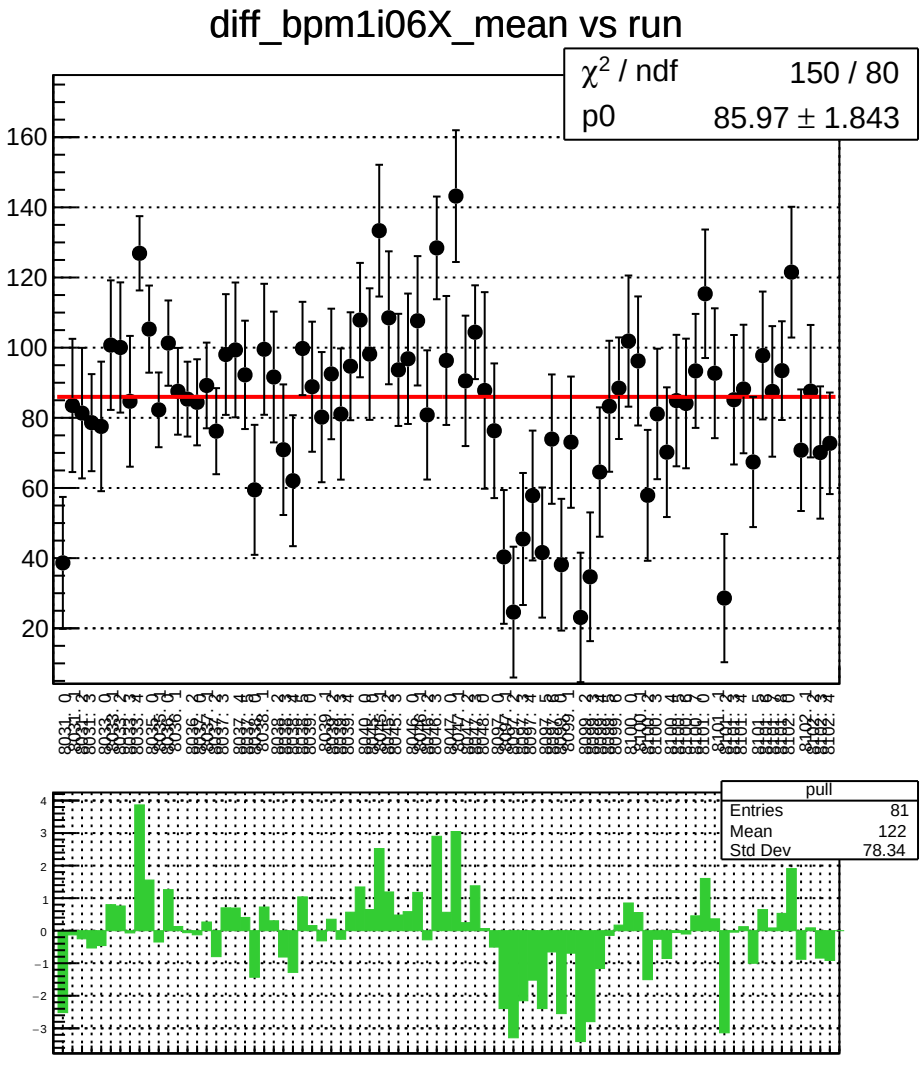

pull1D
Entries 81
Mean −0.02101
Std Dev 1.842

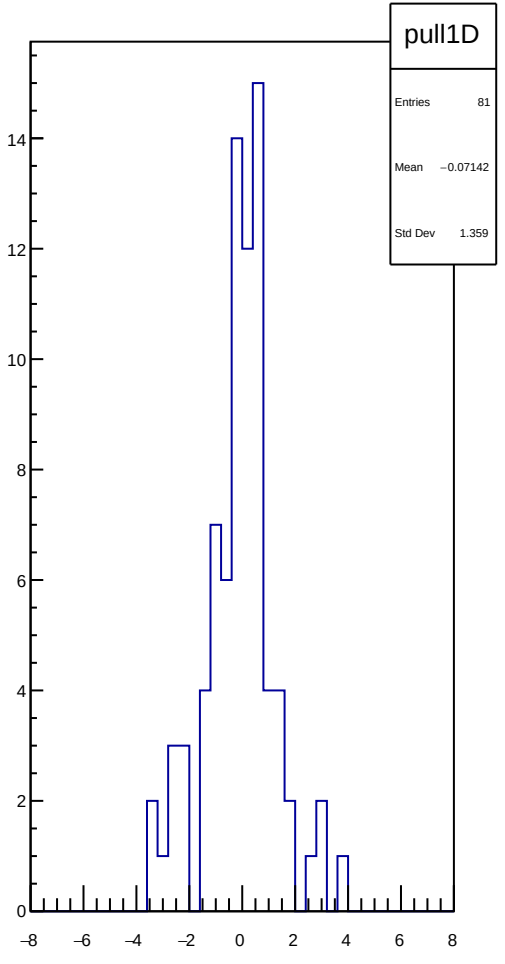

diff_bpm1i04X_rms vs run
χ² / ndf 633.5 / 80
p0 941.6 ± 0.7453
1000
980
960
940
920
900
880

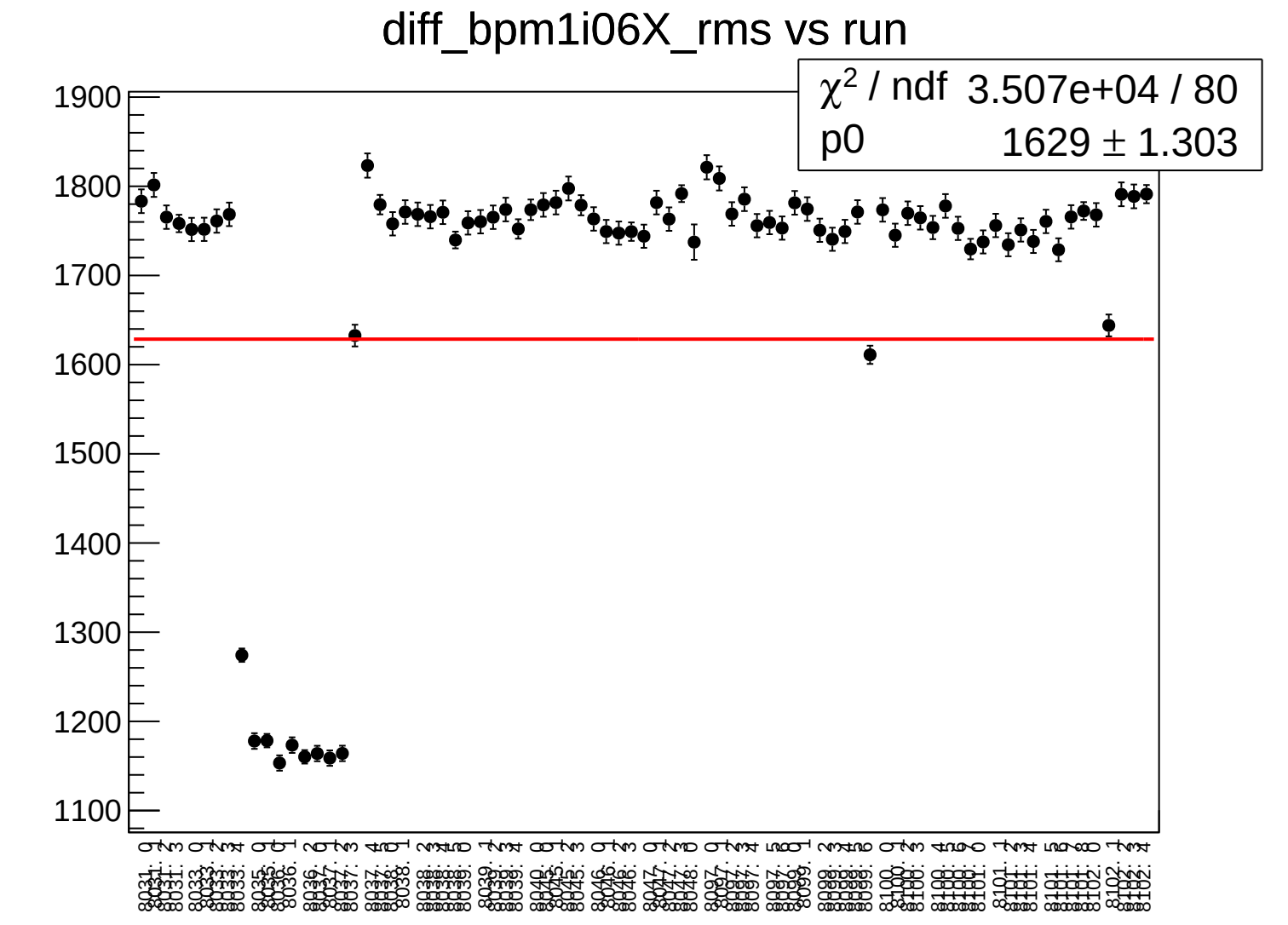

diff_bpm1i04Y_mean vs run
χ² / ndf 102.1 / 80
p0 13.93 ± 0.6551
pull
Entries 81
Mean 259
Std Dev 208

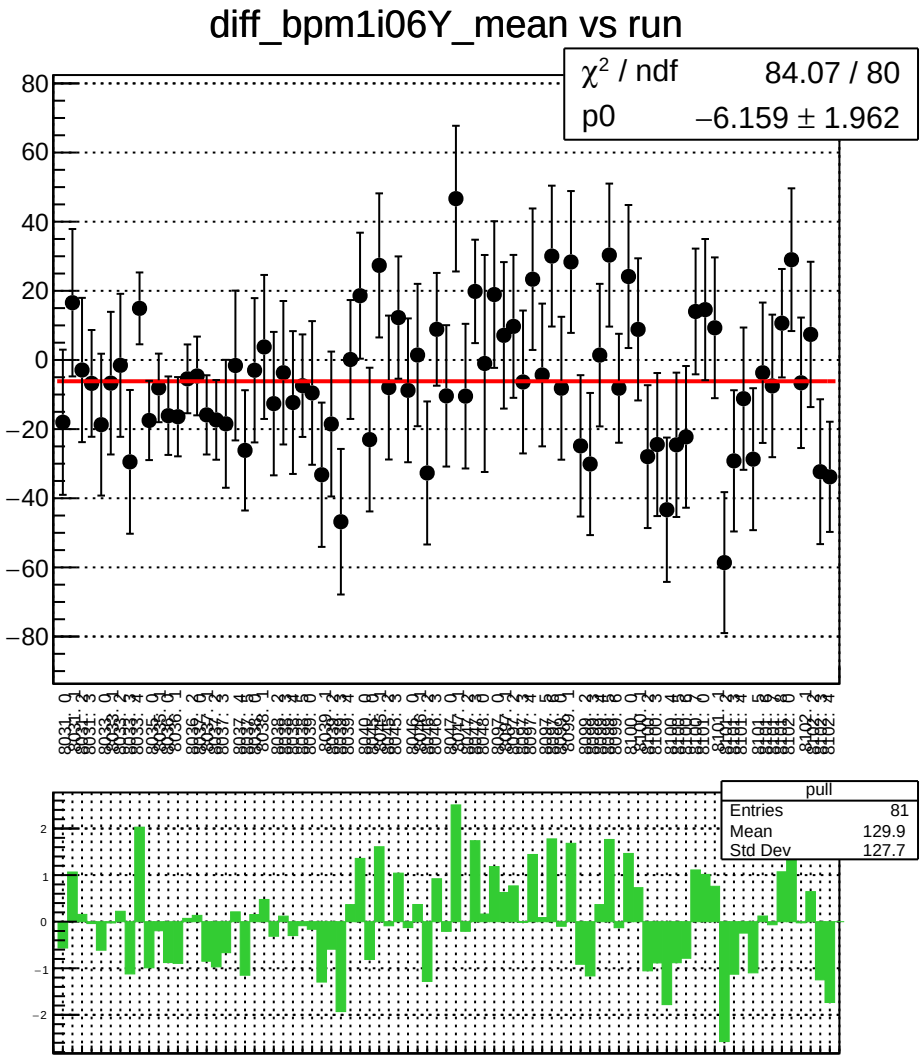

pull1D
Entries 81
Mean −0.0271
Std Dev 1.122

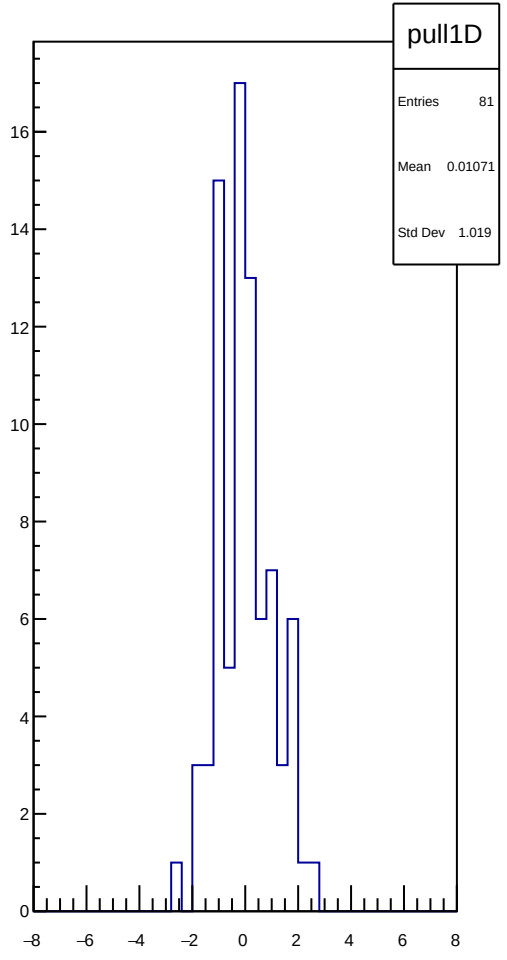

diff_bpm1i04Y_rms vs run
χ² / ndf 2.825e+04 / 80
p0 580.1 ± 0.4632
650
600
550
500
450
400

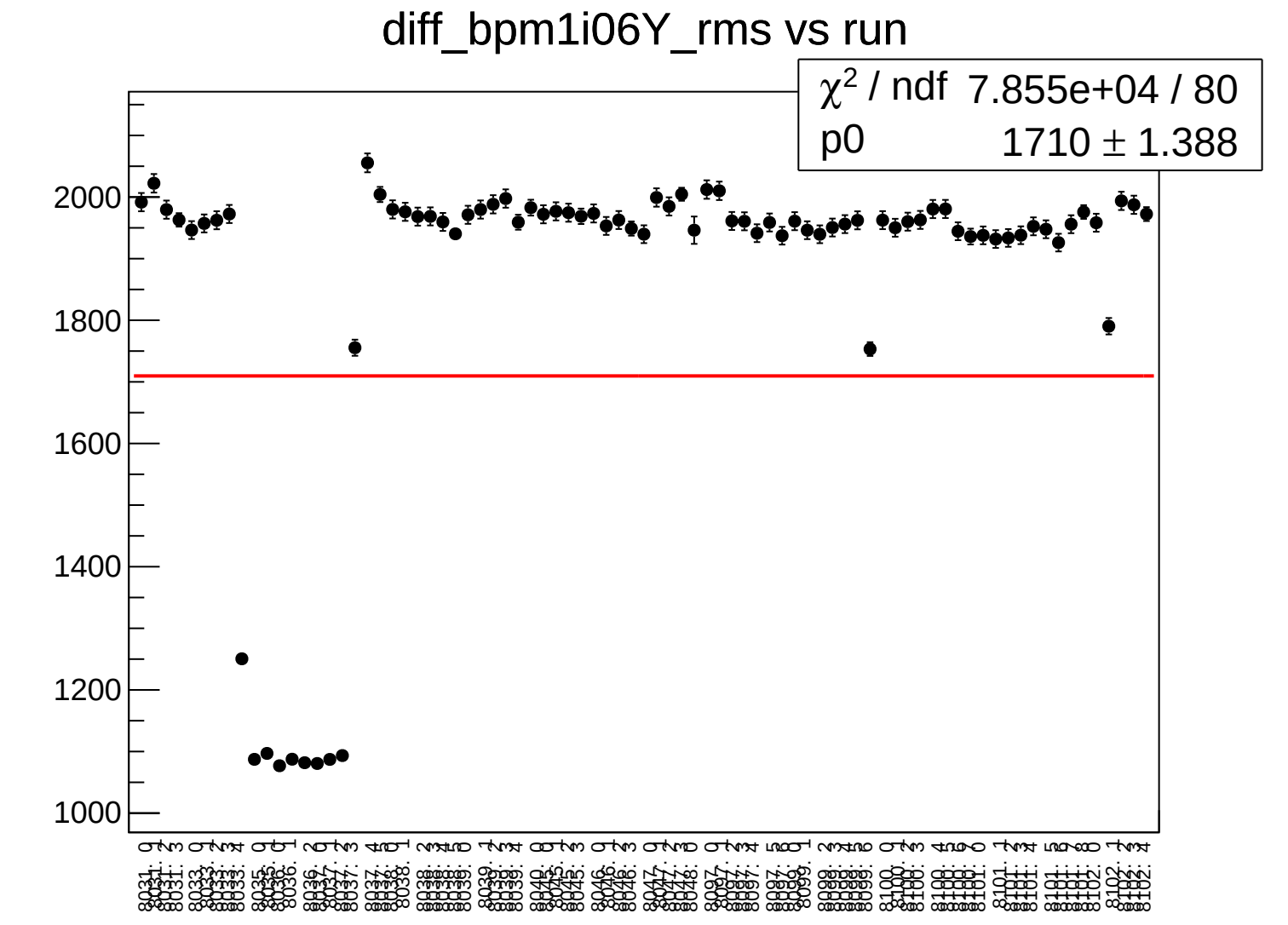

diff_bpm1i06X_mean vs run
χ^2 / ndf 150 / 80
p0 85.97 ± 1.843
pull
Entries 81
Mean 122
Std Dev 78.34

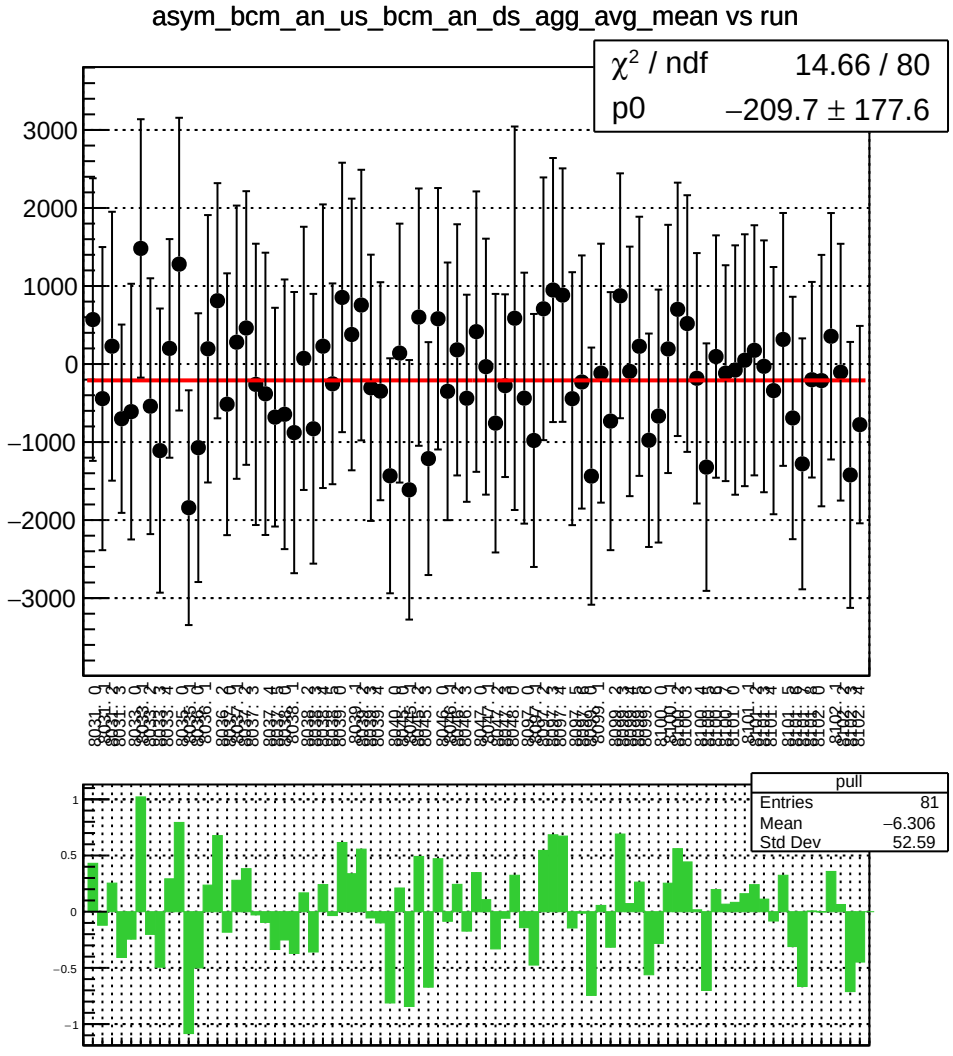

pull1D
Entries 81
Mean −0.07142
Std Dev 1.359

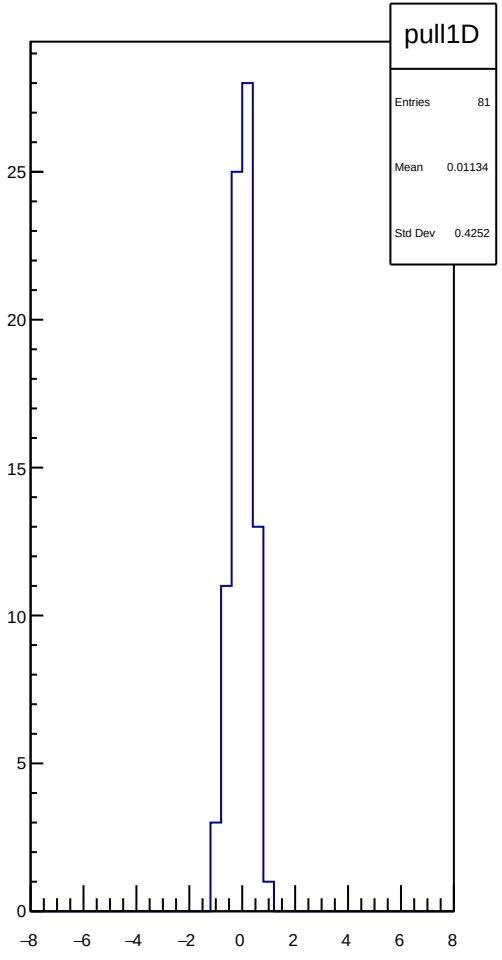

diff_bpm1i06X_rms vs run
χ² / ndf 3.507e+04 / 80
p0 1629 ± 1.303
1900
1800
1700
1600
1500
1400
1300
1200
1100

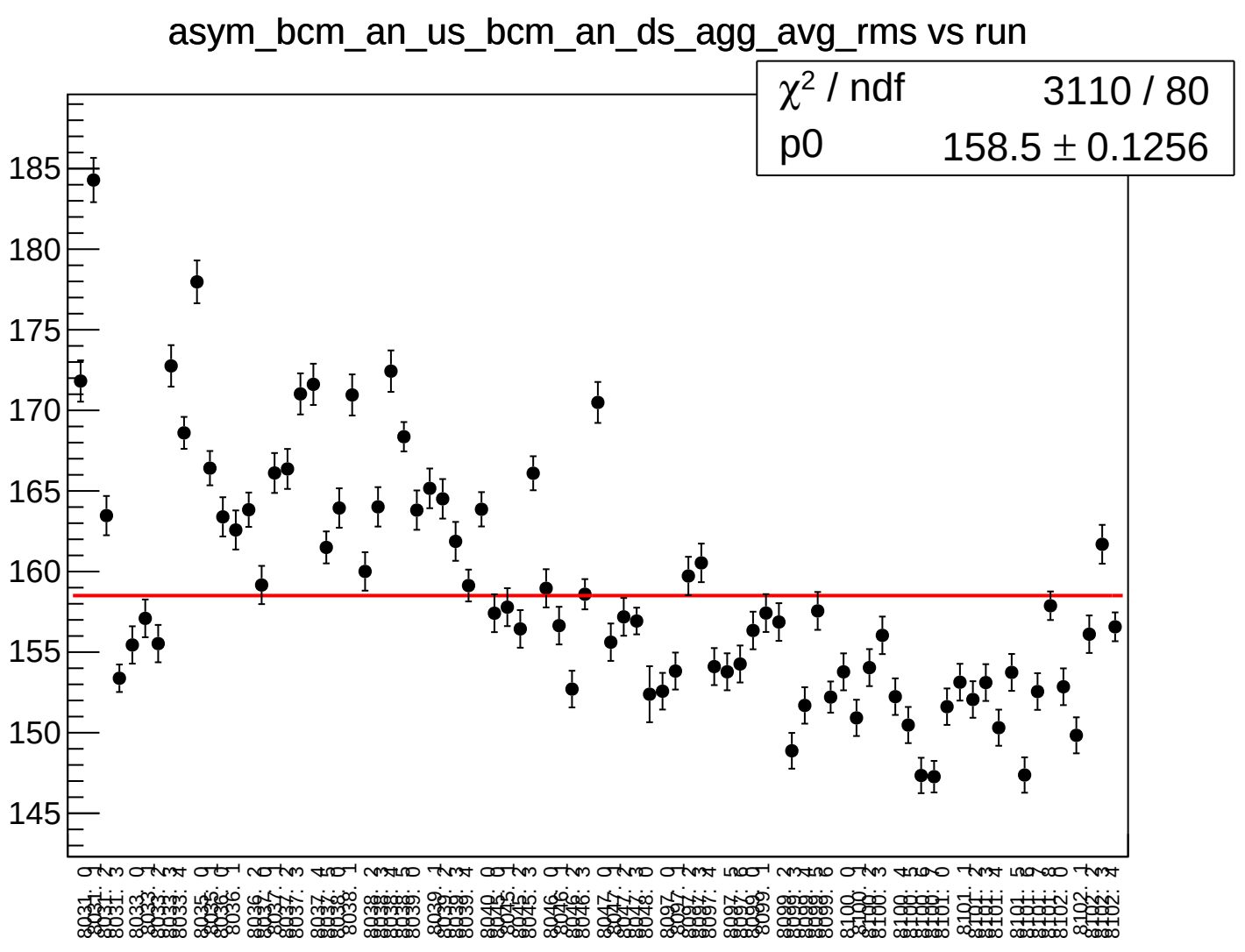

diff_bpm1i06Y_mean vs run
χ² / ndf 84.07 / 80
p0 −6.159 ± 1.962
pull
Entries 81
Mean 129.9
Std Dev 127.7

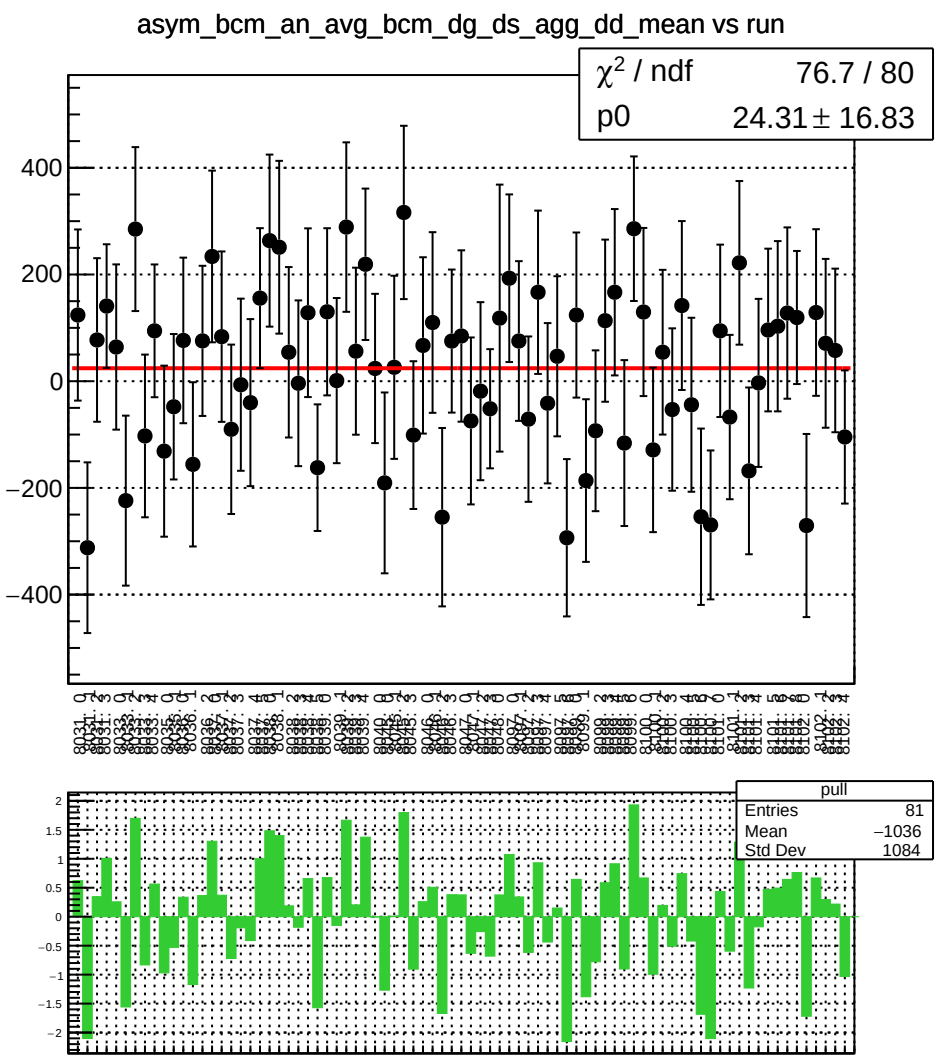

pull1D
Entries 81
Mean 0.01071
Std Dev 1.019

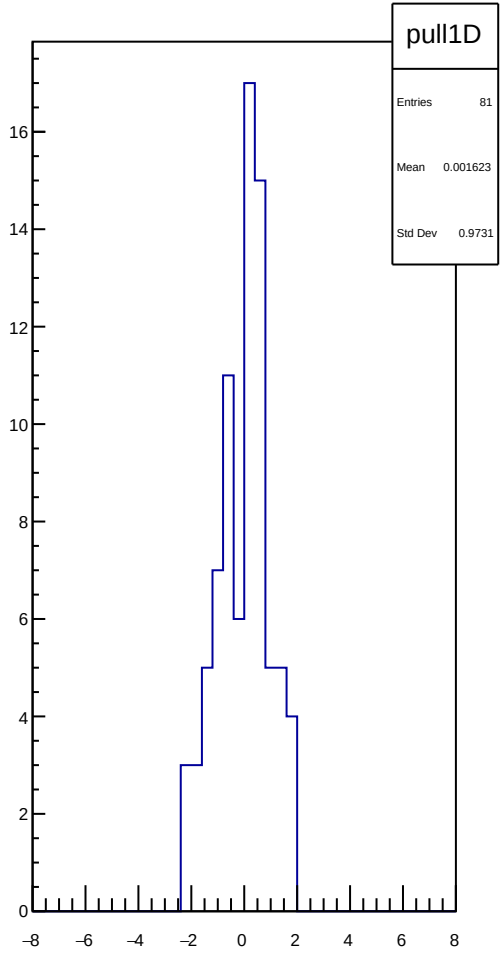

diff_bpm1i06Y_rms vs run
χ² / ndf 7.855e+04 / 80
p0 1710 ± 1.388
2000
1800
1600
1400
1200
1000

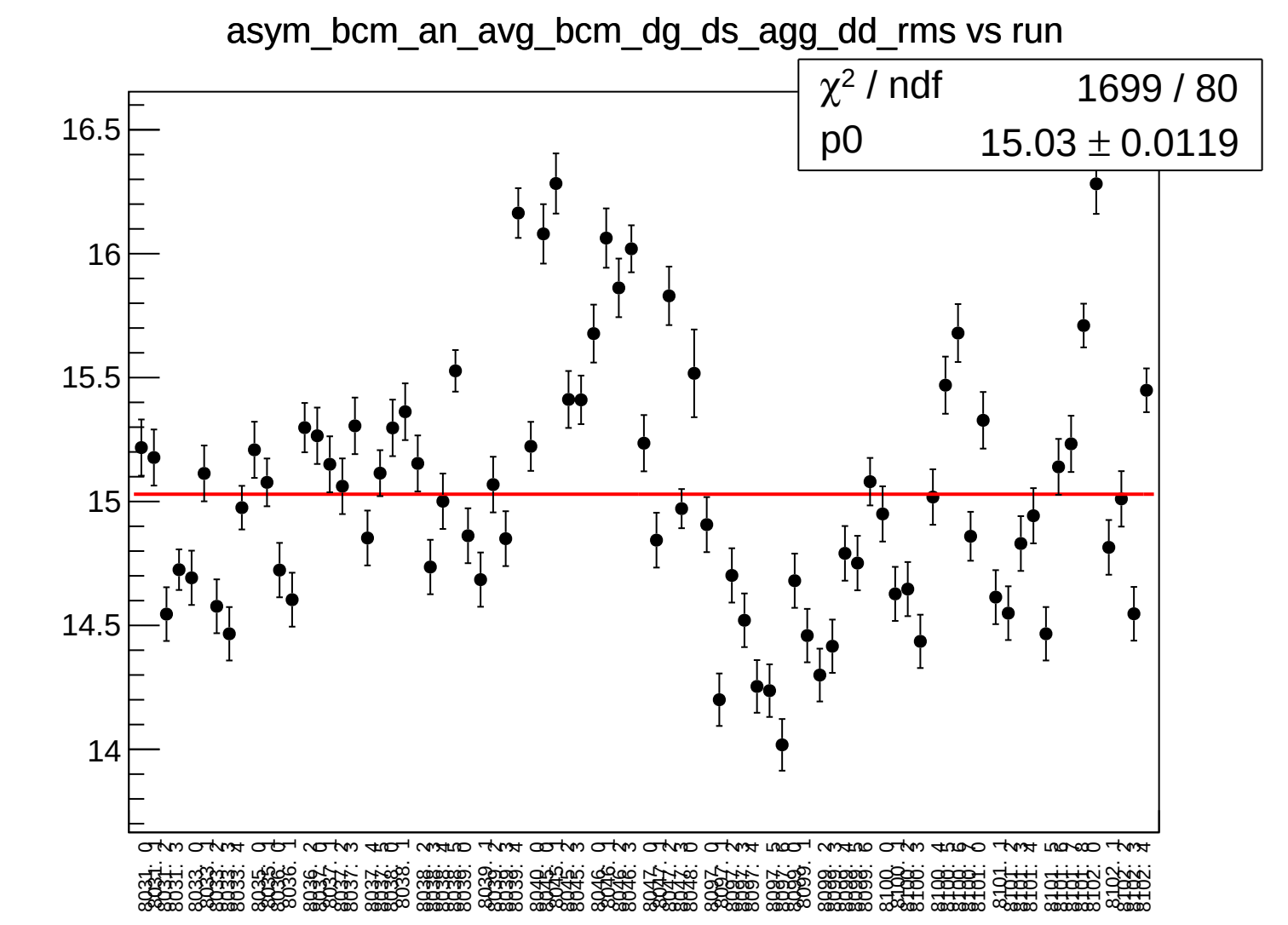

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.66 / 80
p0 −209.7 ± 177.6
pull
Entries 81
Mean −6.306
Std Dev 52.59

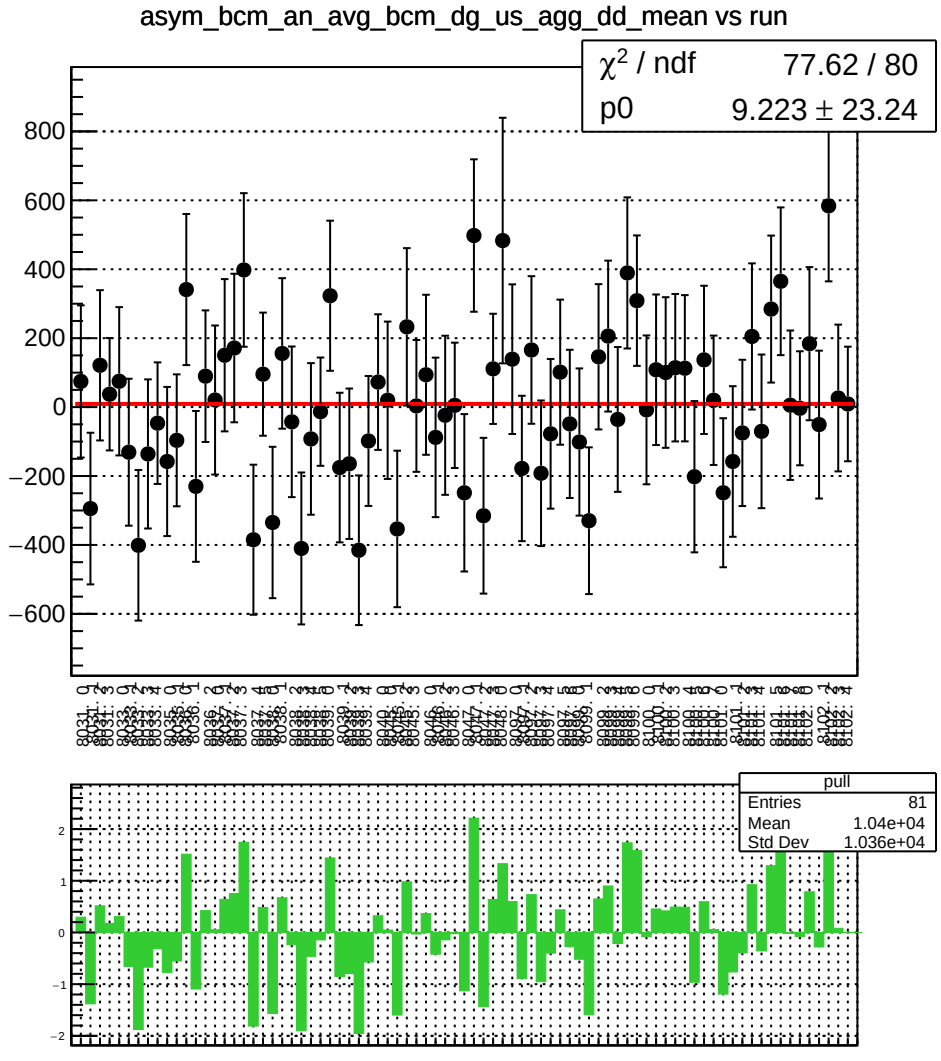

pull1D
Entries 81
Mean 0.01134
Std Dev 0.4252

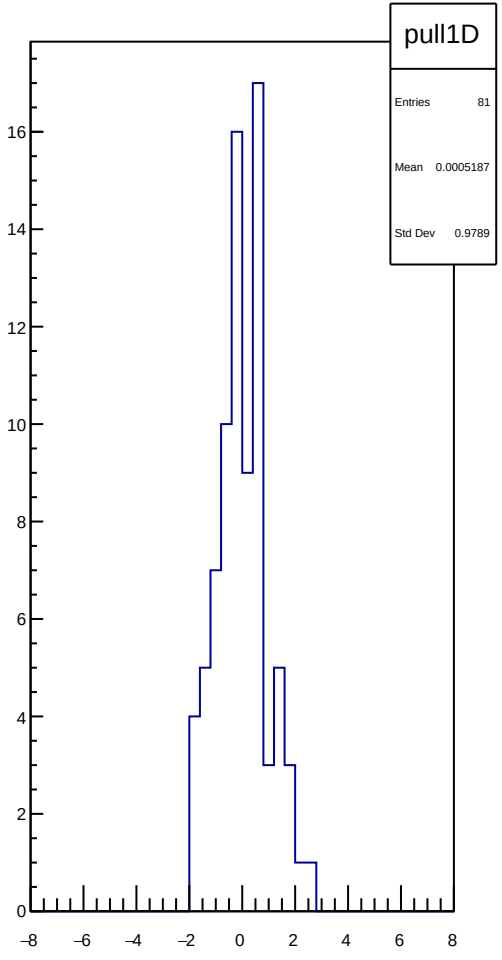

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3110 / 80
p0 158.5 ± 0.1256
185
180
175
170
165
160
155
150
145

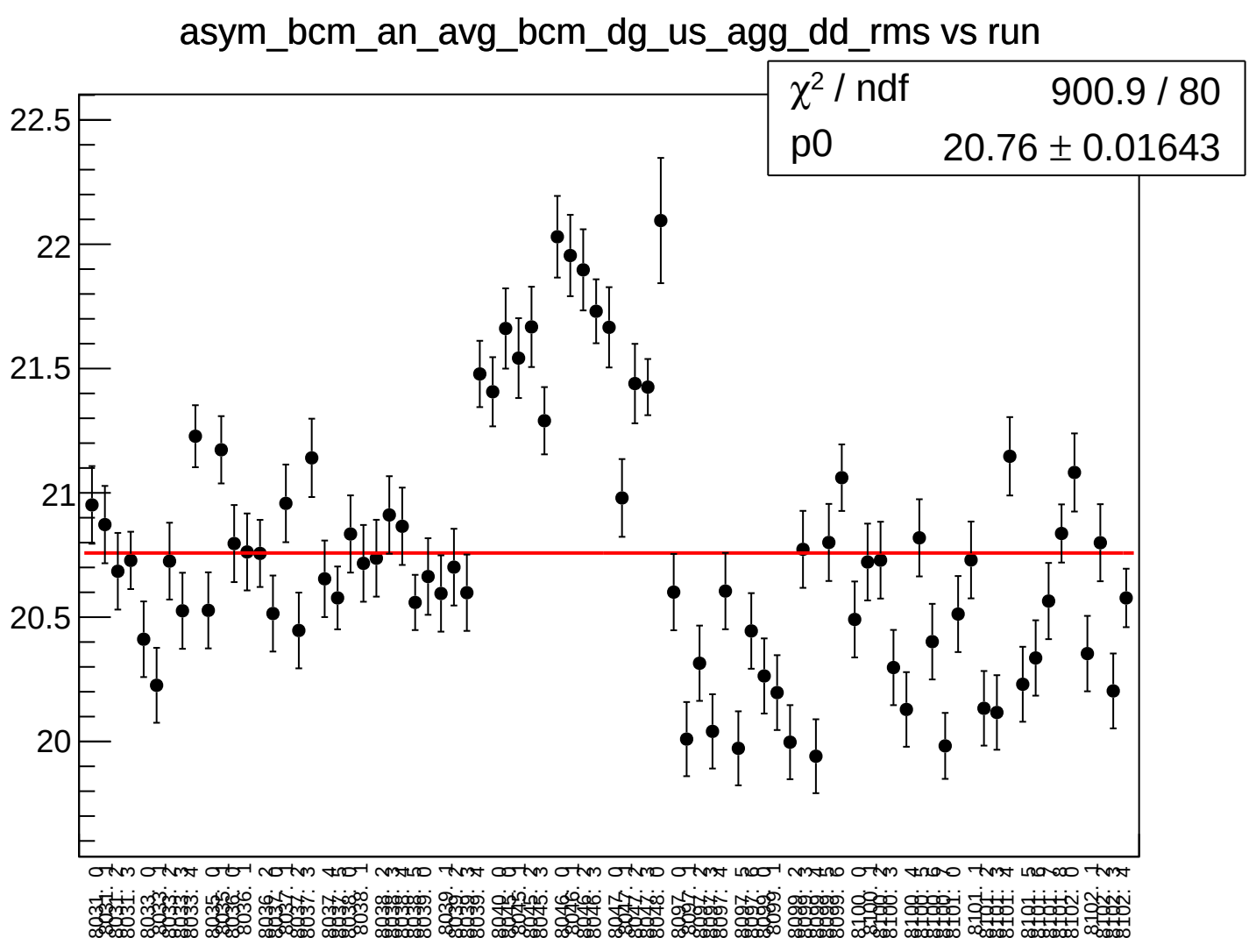

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 76.7 / 80
p0 24.31 ± 16.83
400
200
0
−200
−400
pull
Entries 81
Mean −1036
Std Dev 1084
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

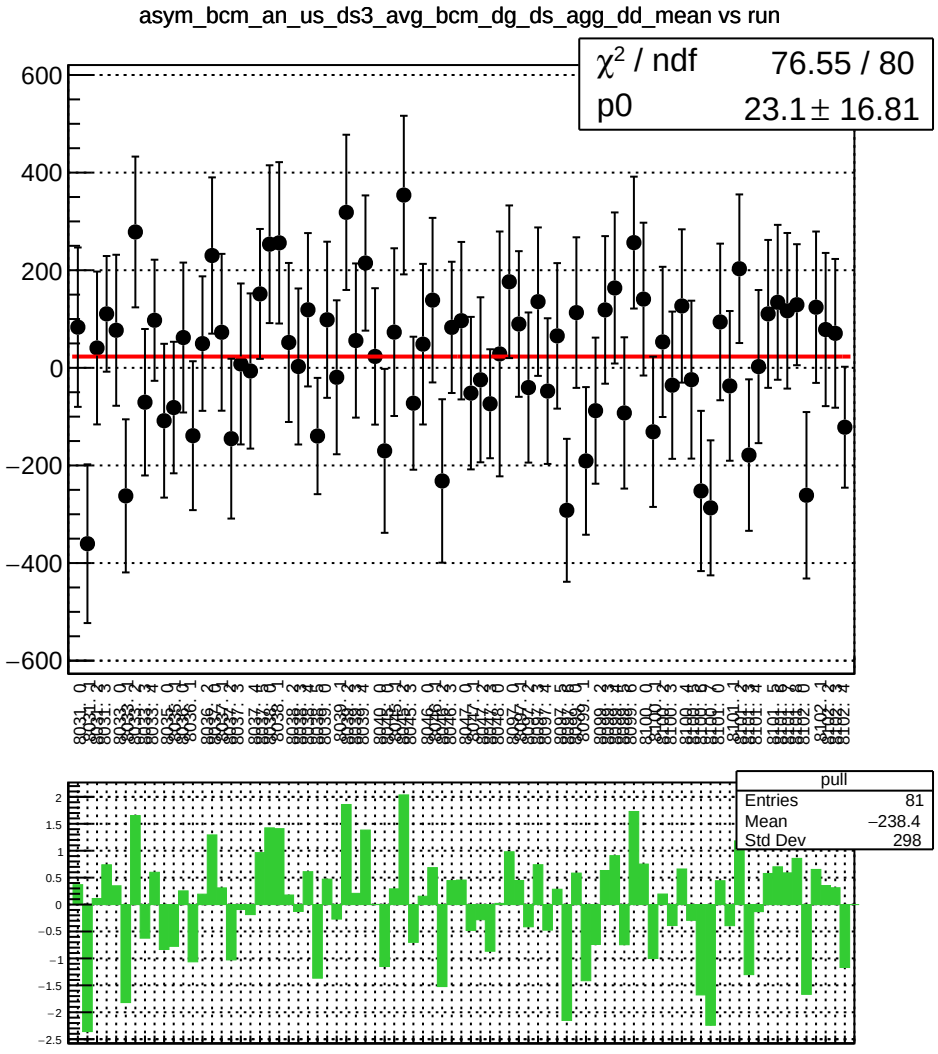

pull1D
Entries 81
Mean 0.001623
Std Dev 0.9731
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

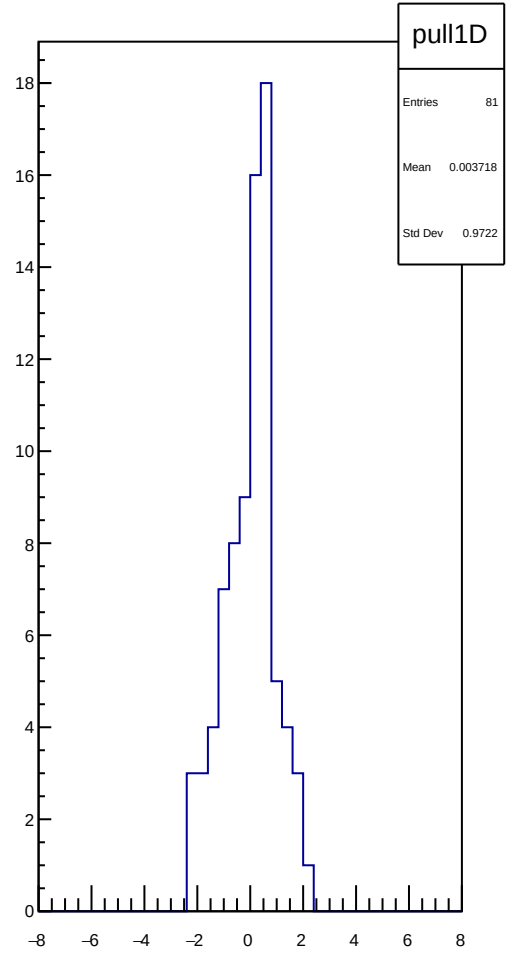

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1699 / 80
p0 15.03 ± 0.0119
16.5
16
15.5
15
14.5
14

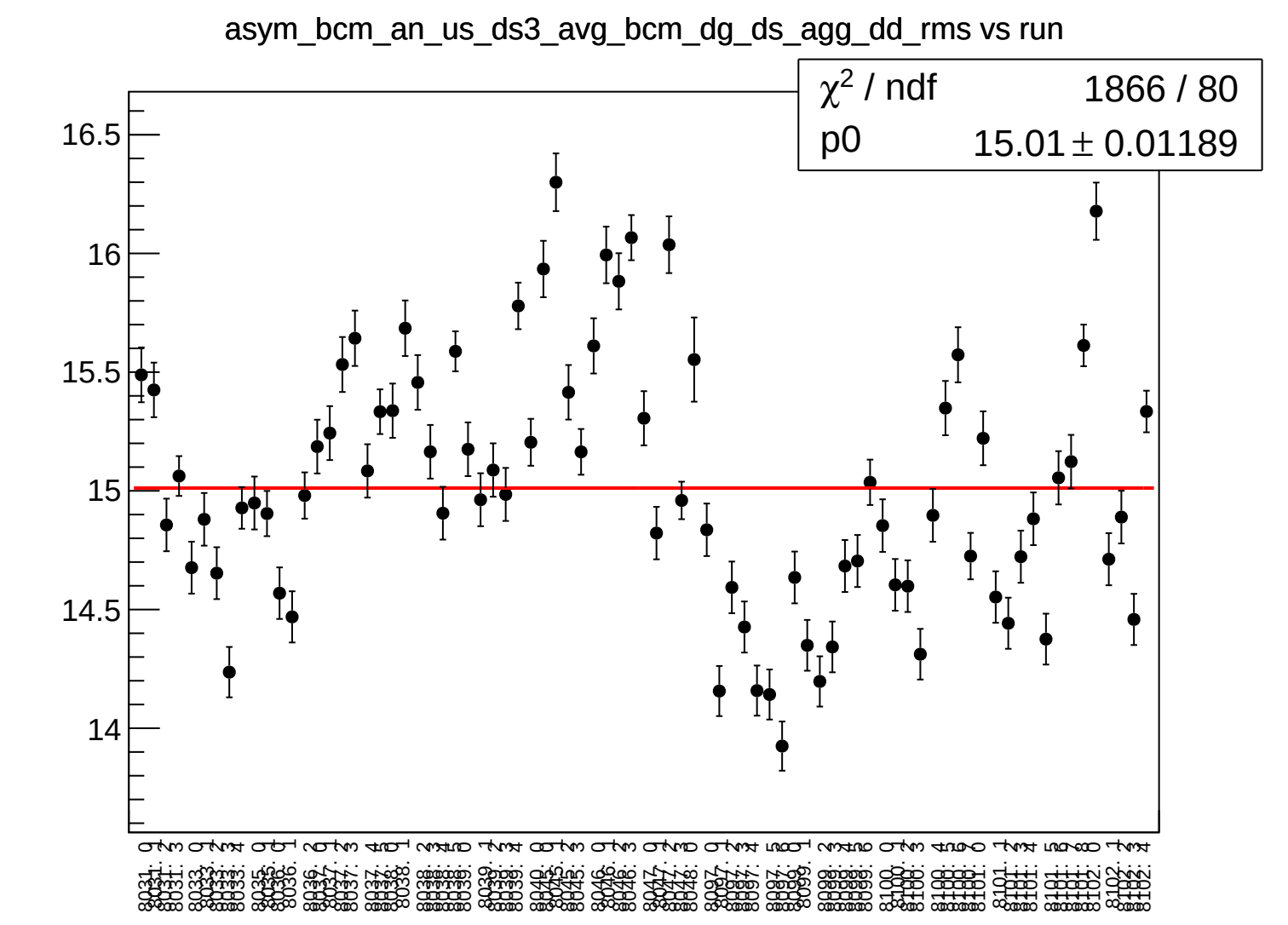

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 77.62 / 80
p0 9.223 ± 23.24
pull
Entries 81
Mean 1.04e+04
Std Dev 1.036e+04

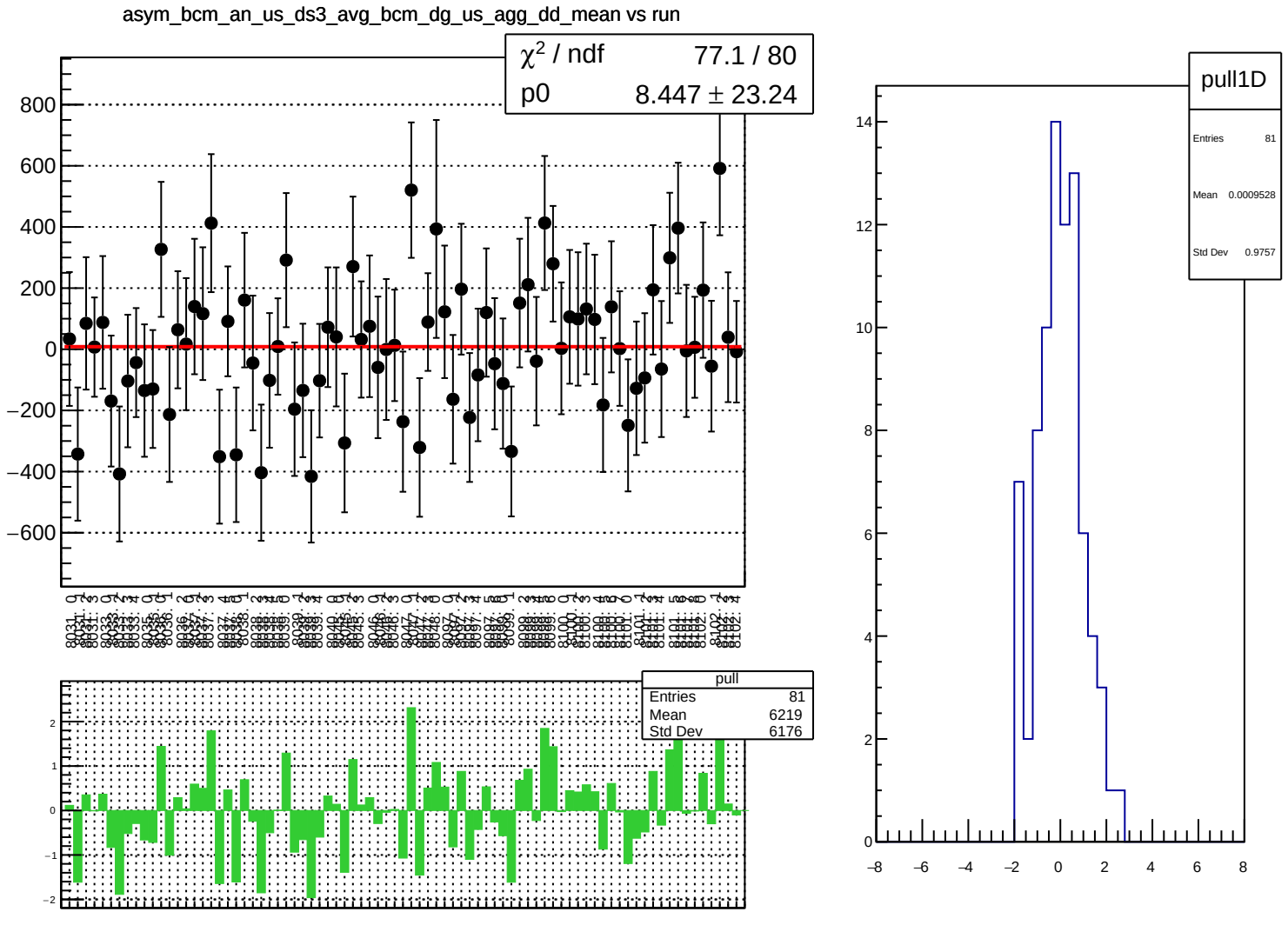

pull1D
Entries 81
Mean 0.0005187
Std Dev 0.9789

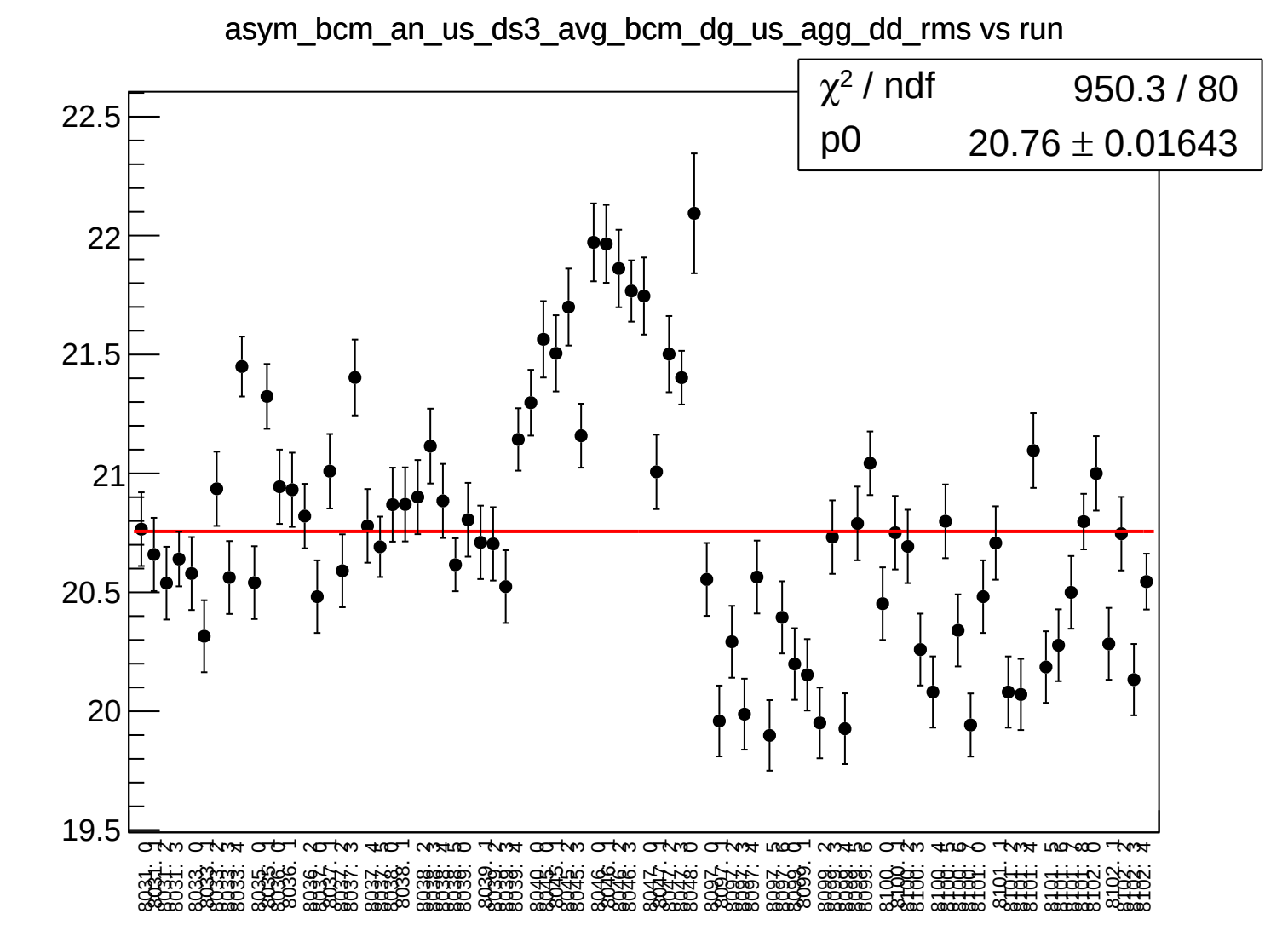

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 900.9 / 80
p0 20.76 ± 0.01643
22.5
22
21.5
21
20.5
20

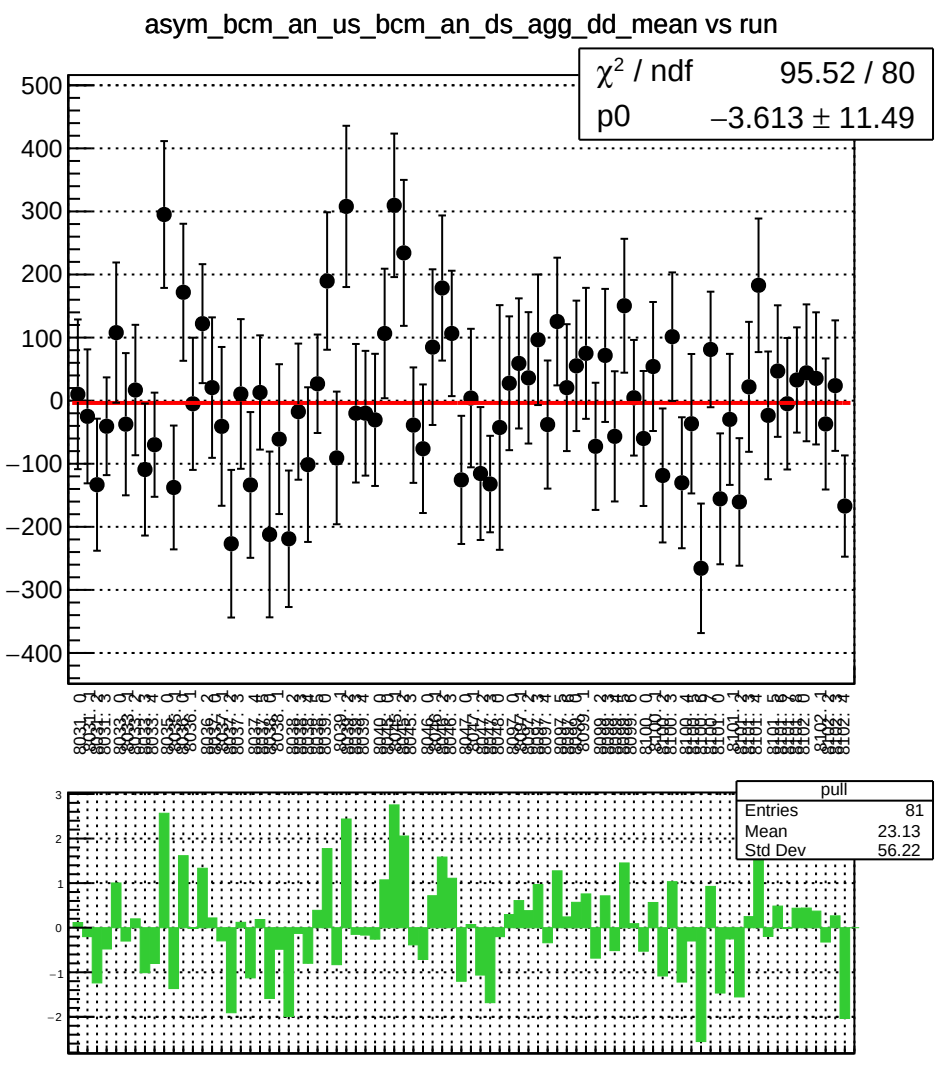

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 76.55 / 80
p0 23.1 ± 16.81
pull
Entries 81
Mean −238.4
Std Dev 298

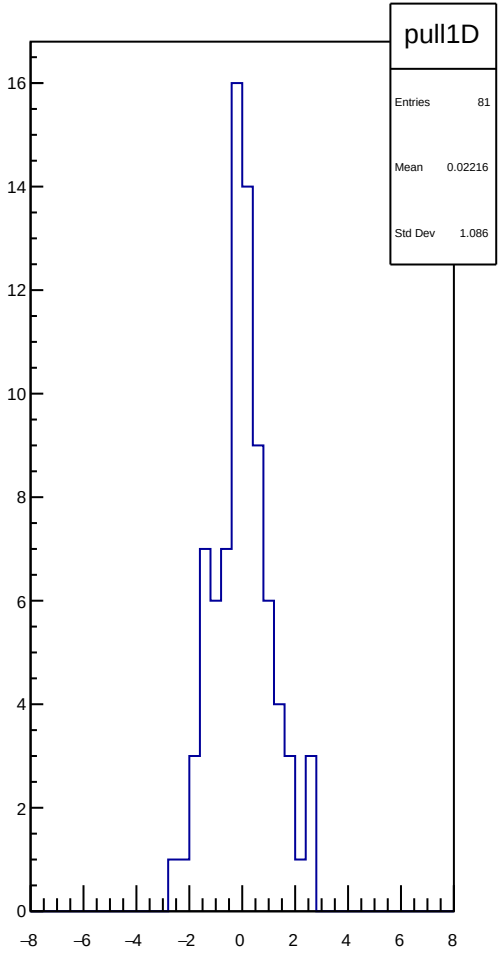

pull1D
Entries 81
Mean 0.003718
Std Dev 0.9722

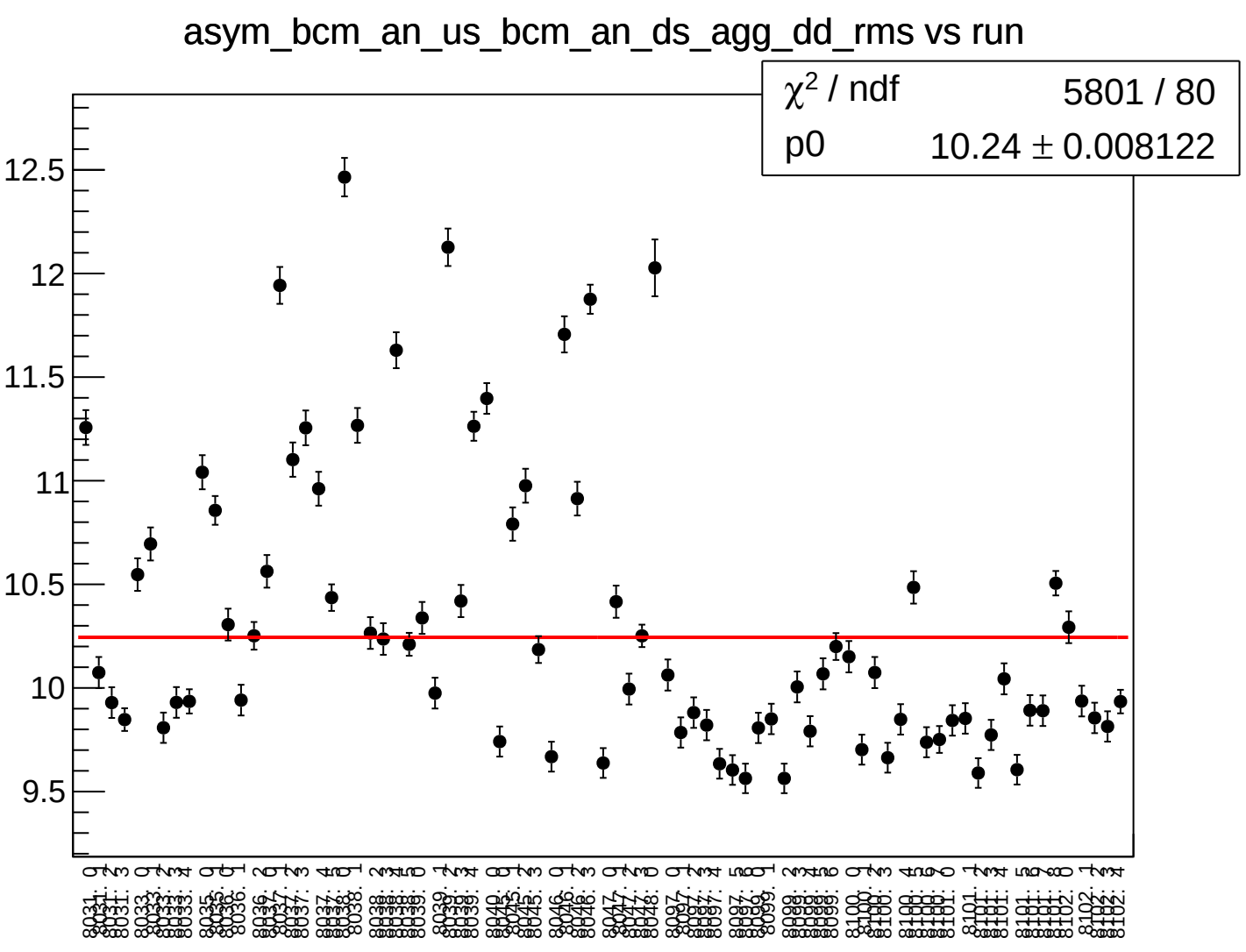

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1866 / 80
p0 15.01 ± 0.01189
16.5
16
15.5
15
14.5
14

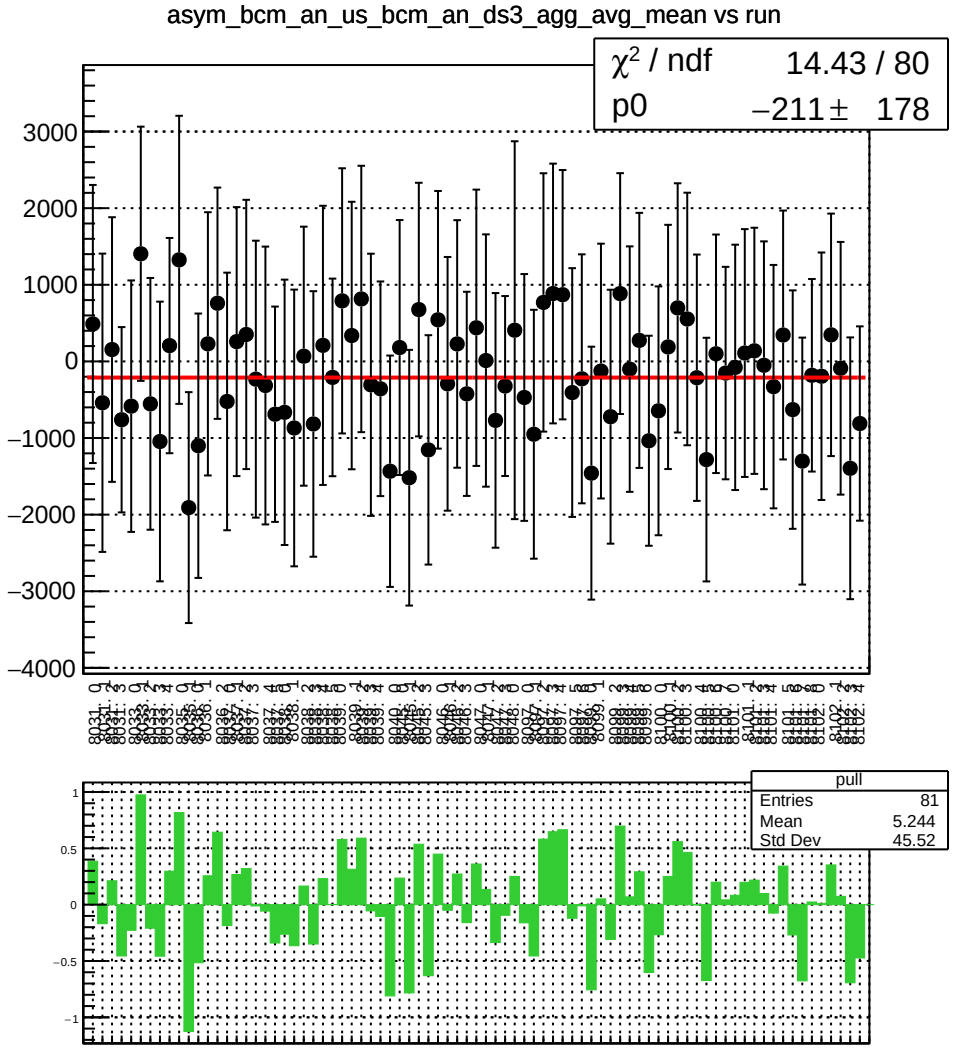

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 77.1 / 80
p0 8.447 ± 23.24
pull
Entries 81
Mean 6219
Std Dev 6176
pull1D
Entries 81
Mean 0.0009528
Std Dev 0.9757

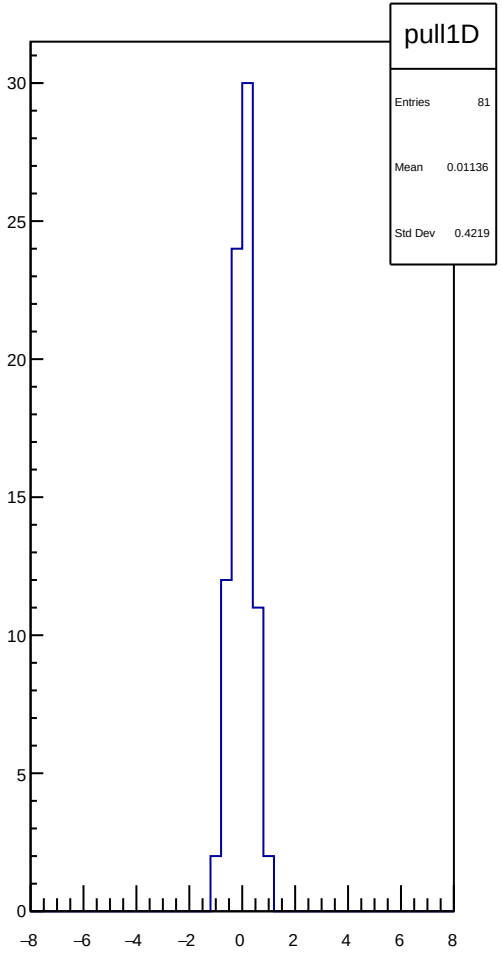

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 950.3 / 80
p0 20.76 ± 0.01643
22.5
22
21.5
21
20.5
20
19.5

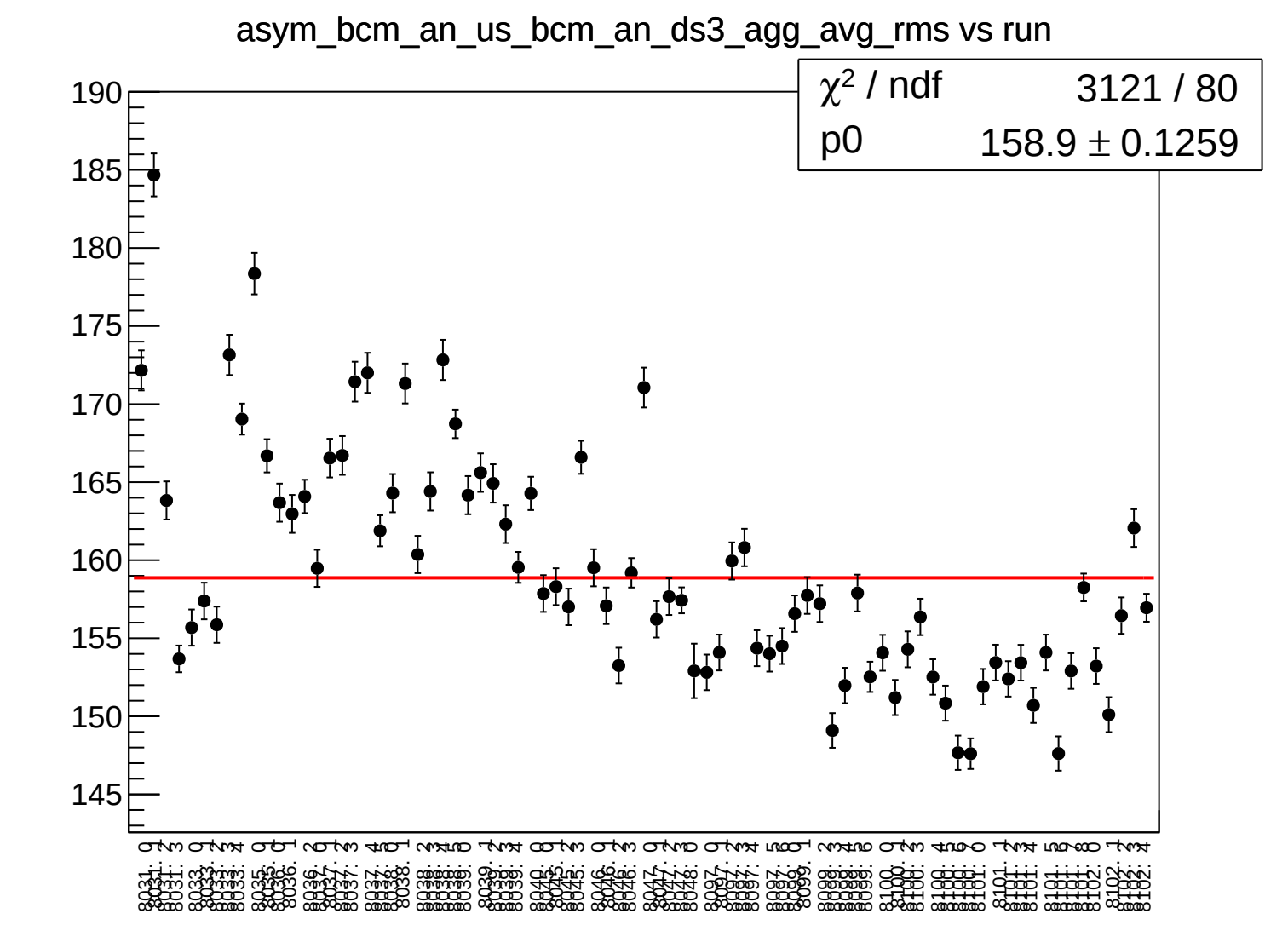

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 95.52 / 80
p0 −3.613 ± 11.49
pull
Entries 81
Mean 23.13
Std Dev 56.22

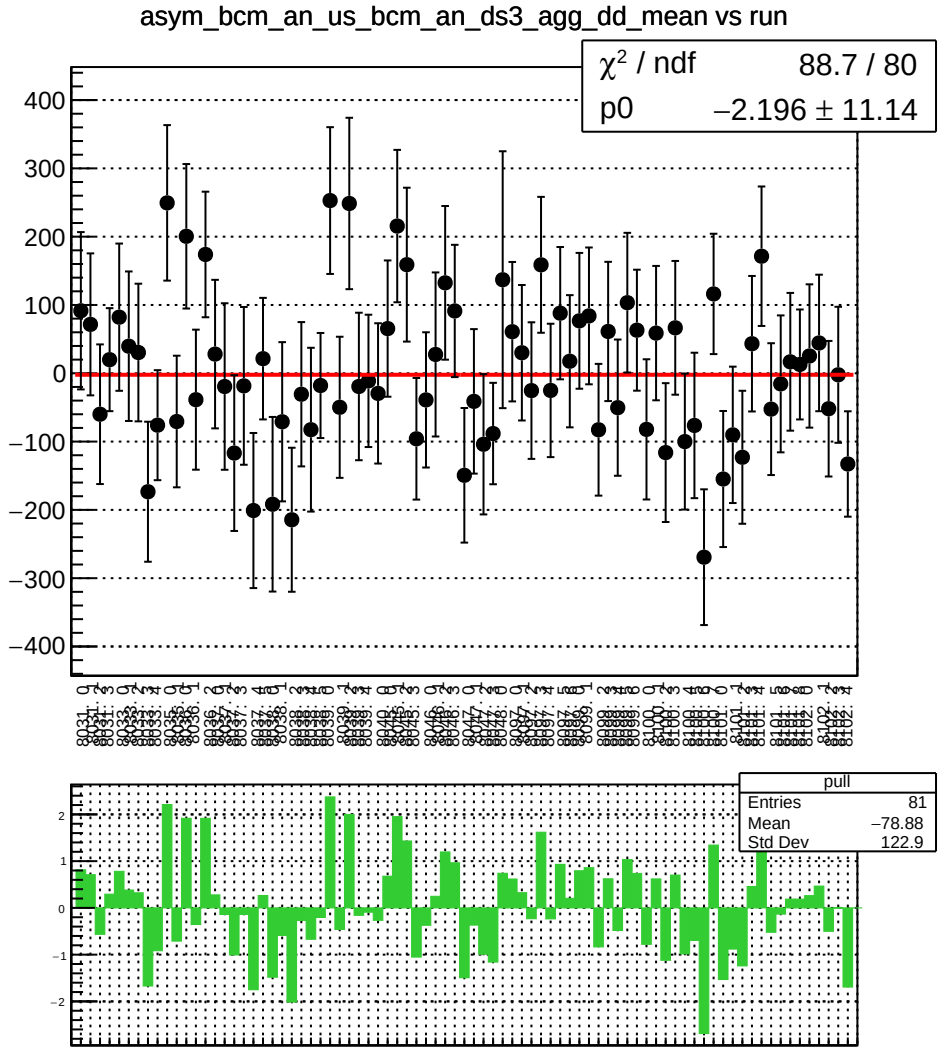

pull1D
Entries 81
Mean 0.02216
Std Dev 1.086

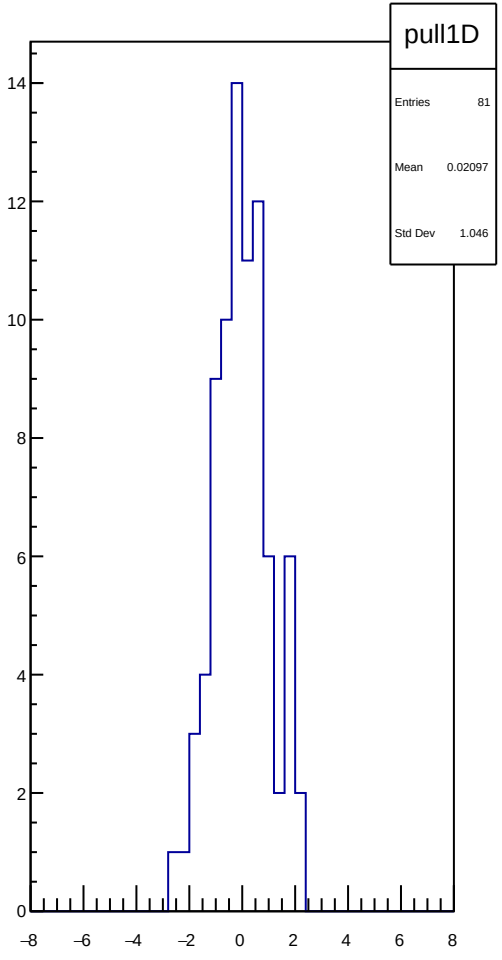

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5801 / 80
p0 10.24 ± 0.008122
12.5
12
11.5
11
10.5
10
9.5

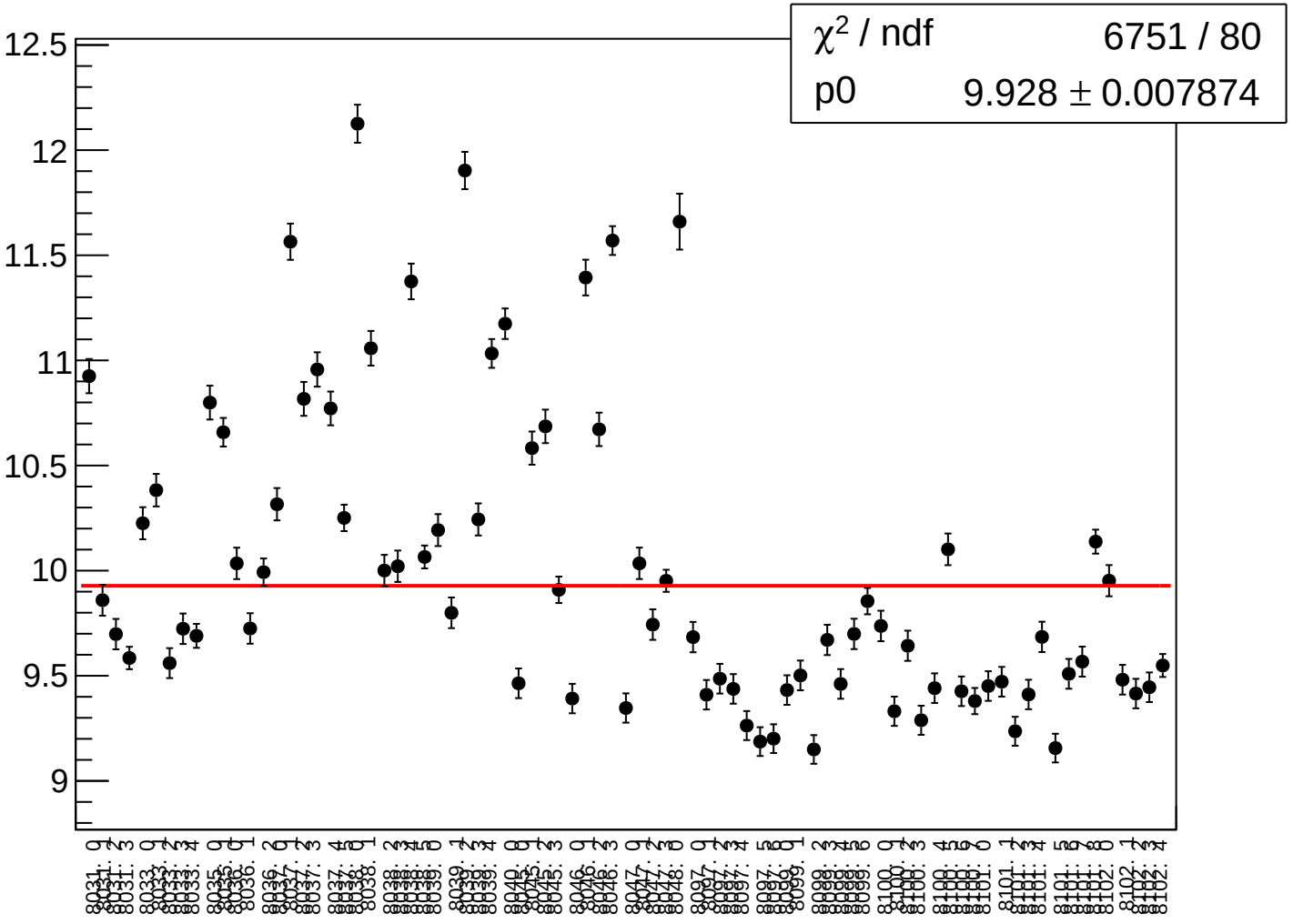

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.43 / 80
p0 −211 ± 178
pull
Entries 81
Mean 5.244
Std Dev 45.52

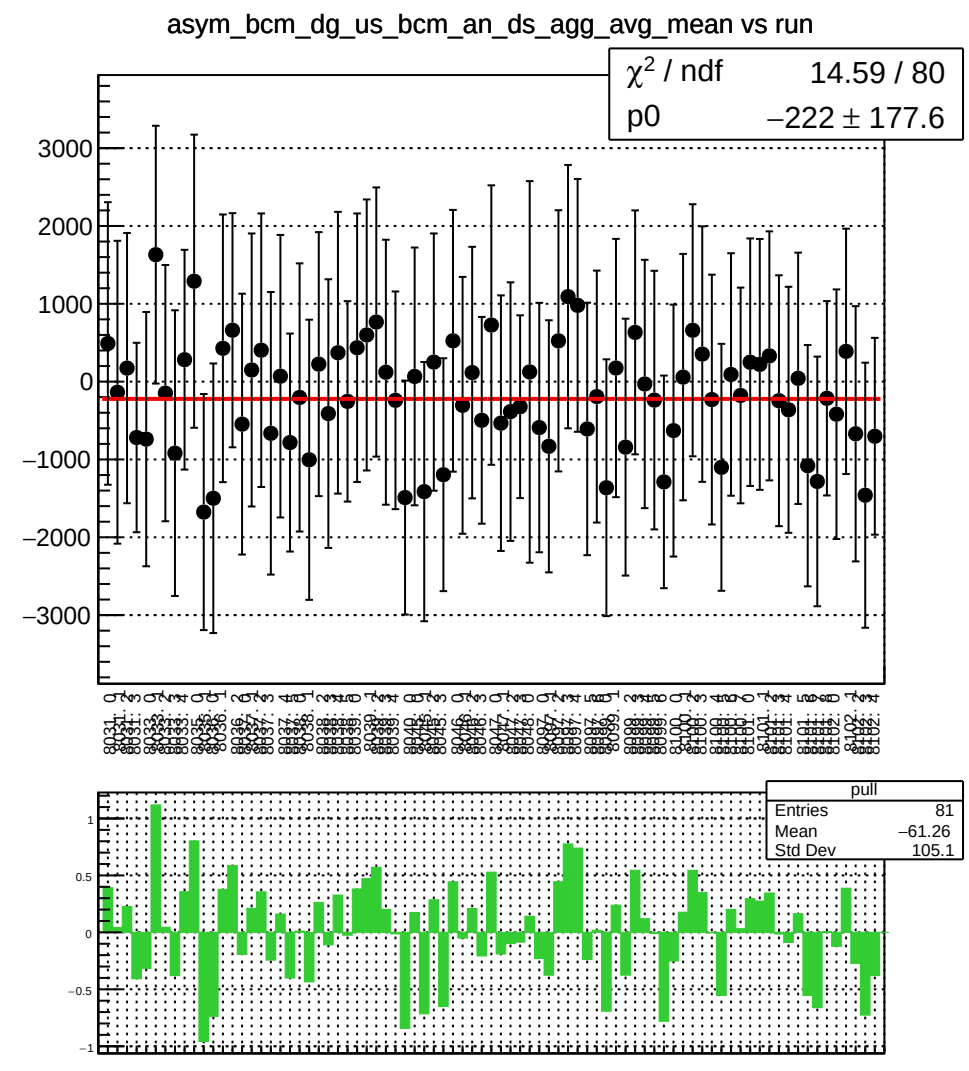

pull1D
Entries 81
Mean 0.01136
Std Dev 0.4219

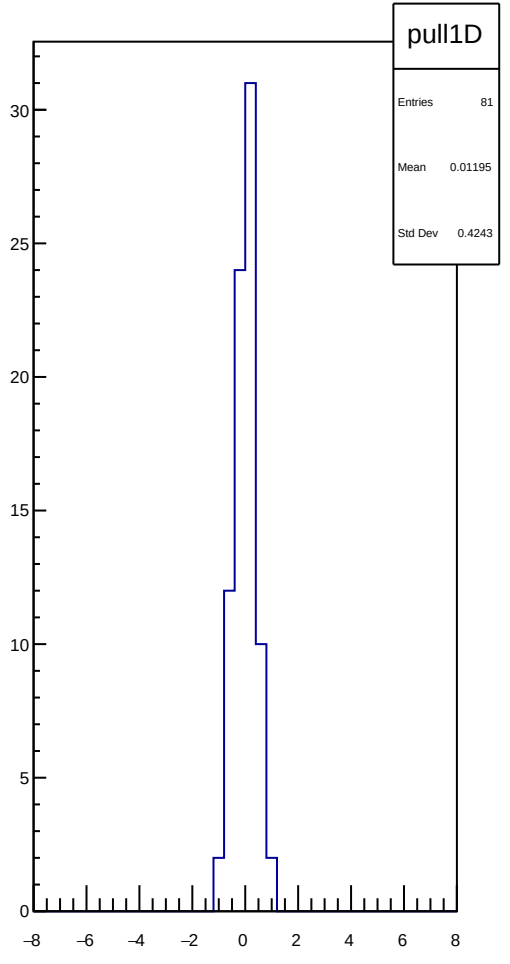

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 3121 / 80
p0 158.9 ± 0.1259
190
185
180
175
170
165
160
155
150
145

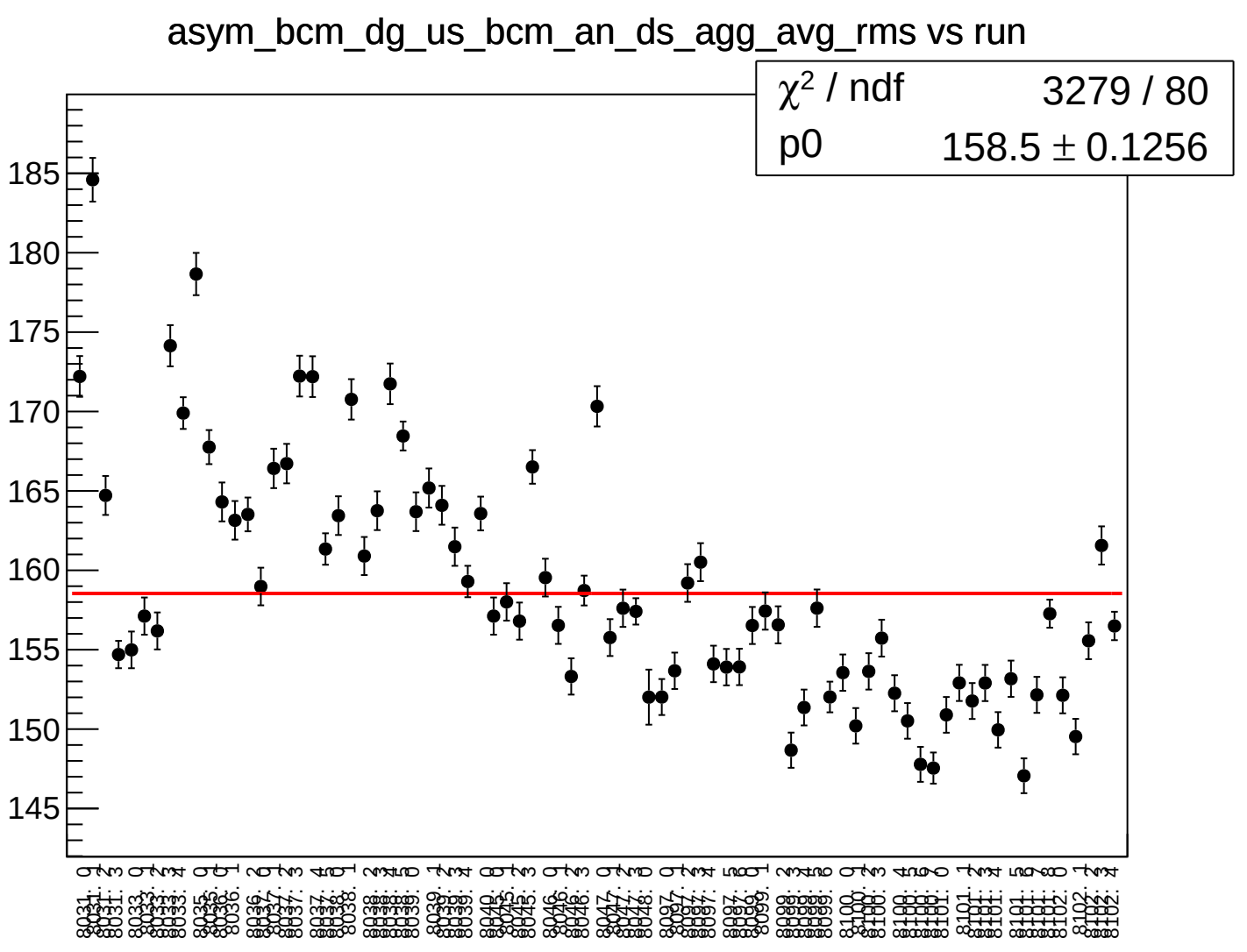

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 88.7 / 80
p0 −2.196 ± 11.14
pull
Entries 81
Mean −78.88
Std Dev 122.9

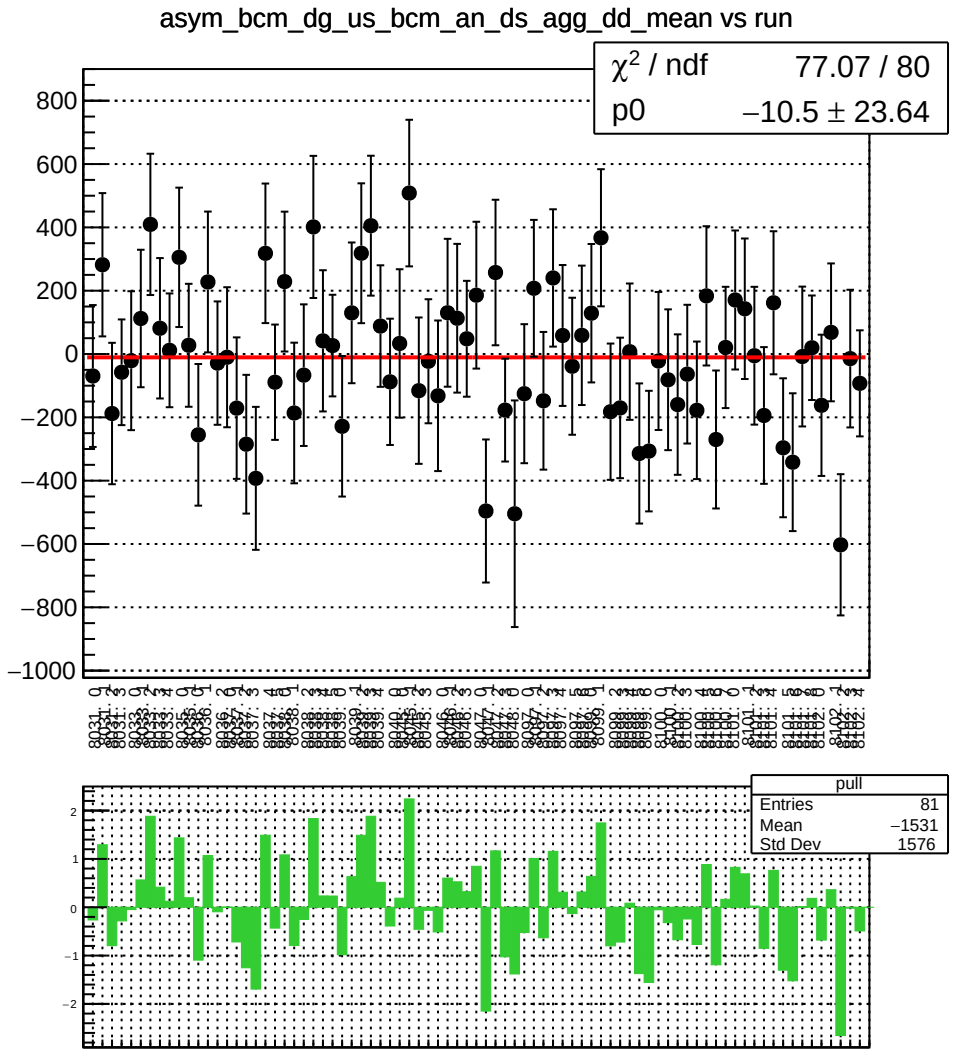

pull1D
Entries 81
Mean 0.02097
Std Dev 1.046

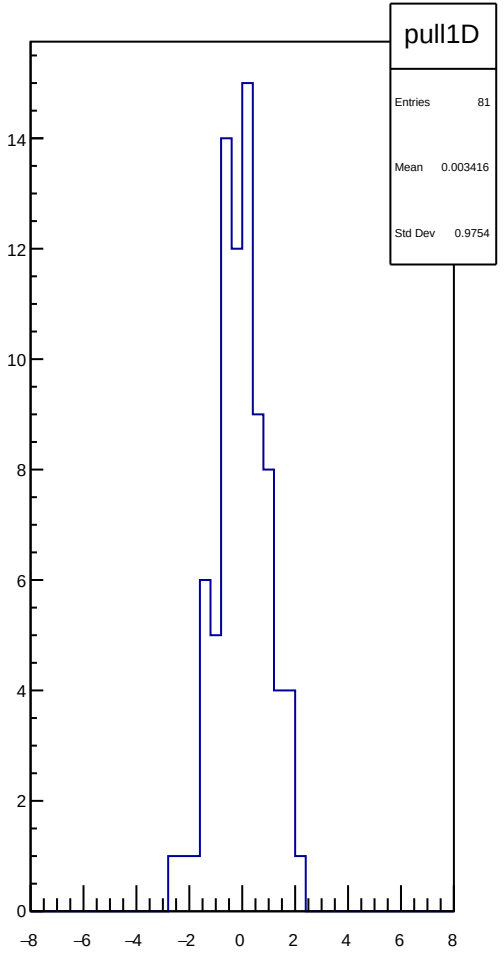

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 6751 / 80
p0 9.928 ± 0.007874
12.5
12
11.5
11
10.5
10
9.5
9

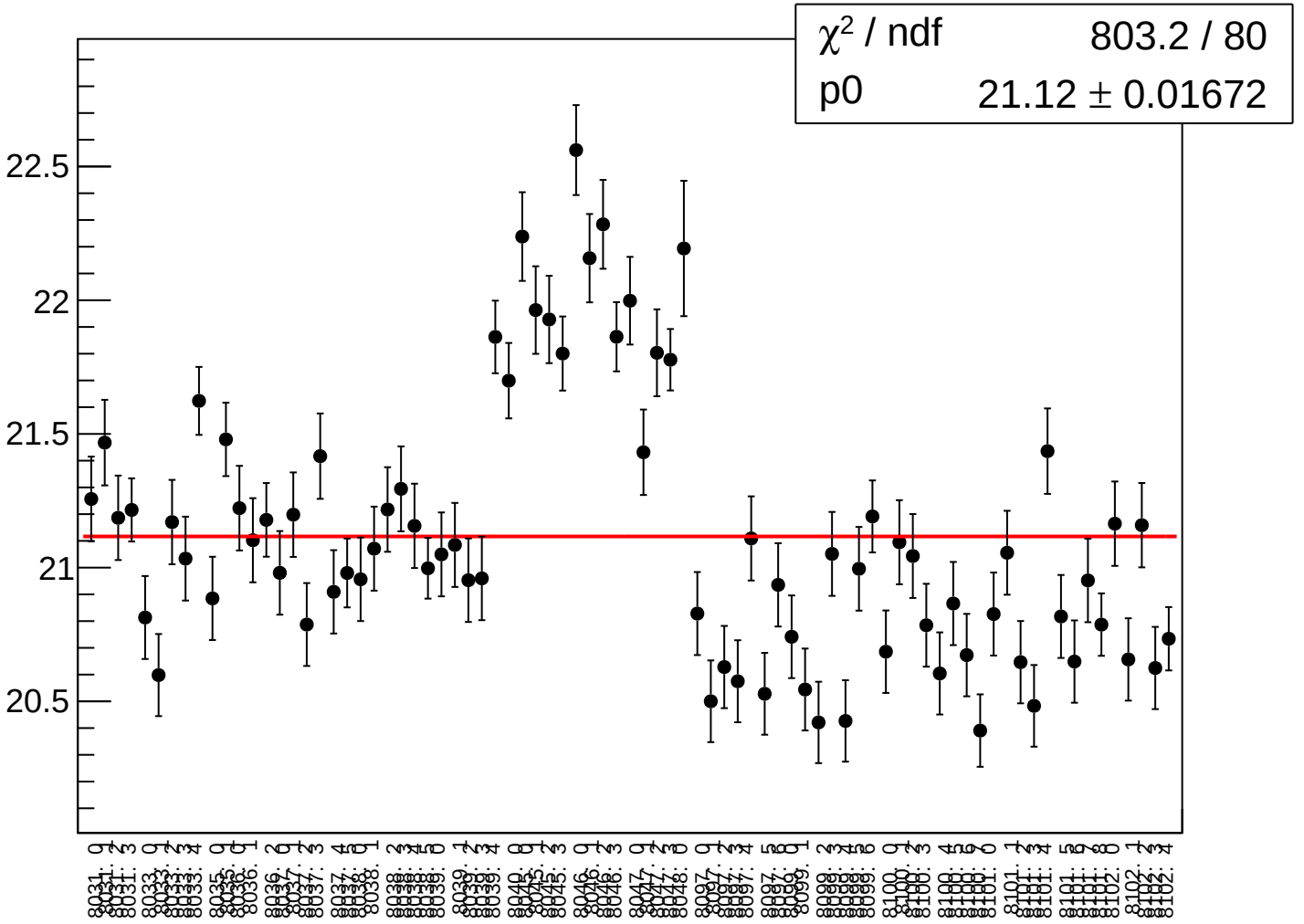

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.59 / 80
p0 −222 ± 177.6
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 81
Mean −61.26
Std Dev 105.1
1
0.5
0
−0.5
−1

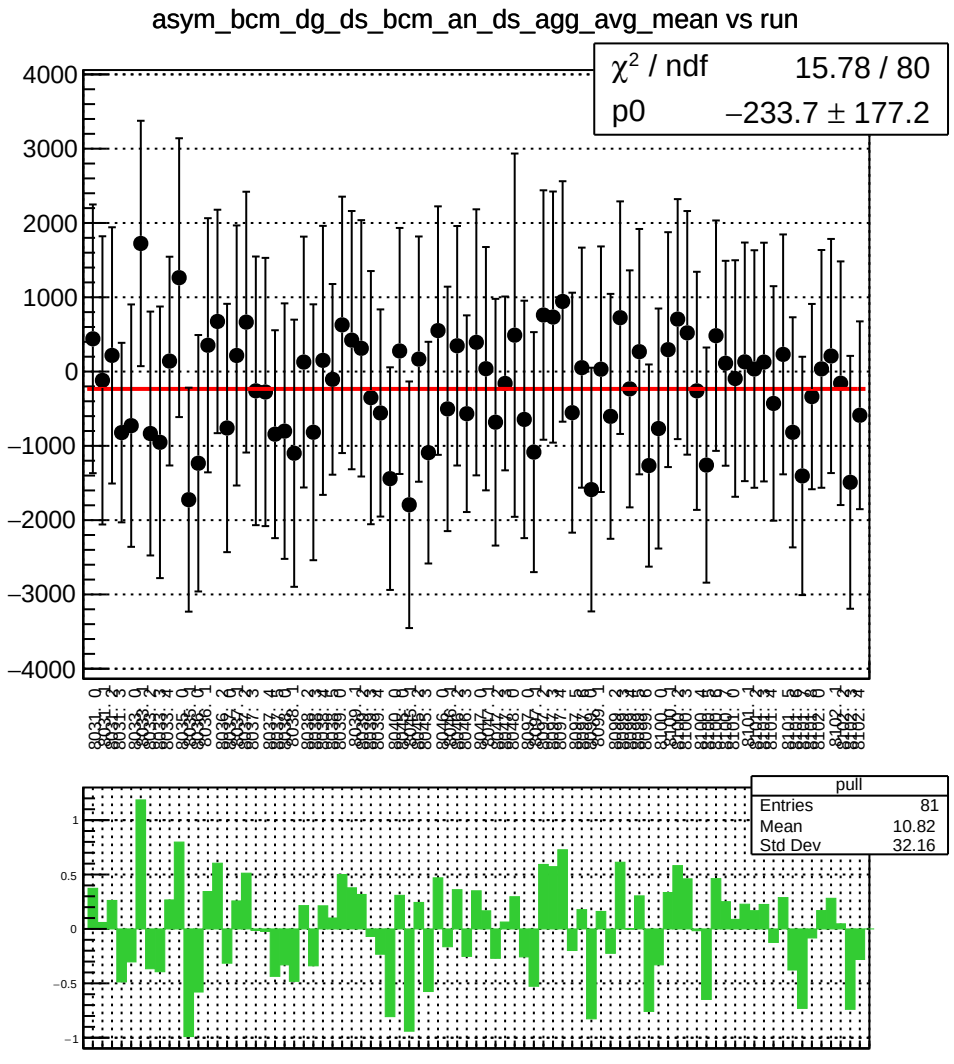

pull1D
Entries 81
Mean 0.01195
Std Dev 0.4243
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

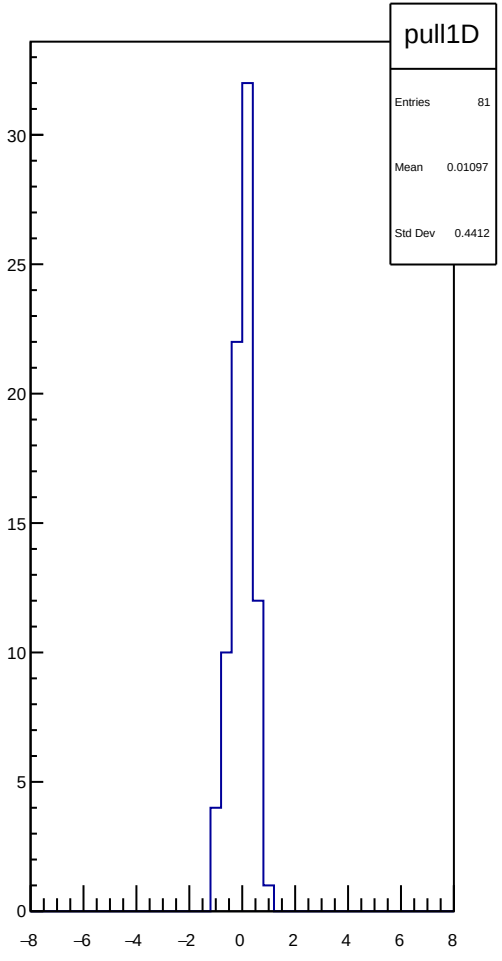

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3279 / 80
p0 158.5 ± 0.1256
185
180
175
170
165
160
155
150
145

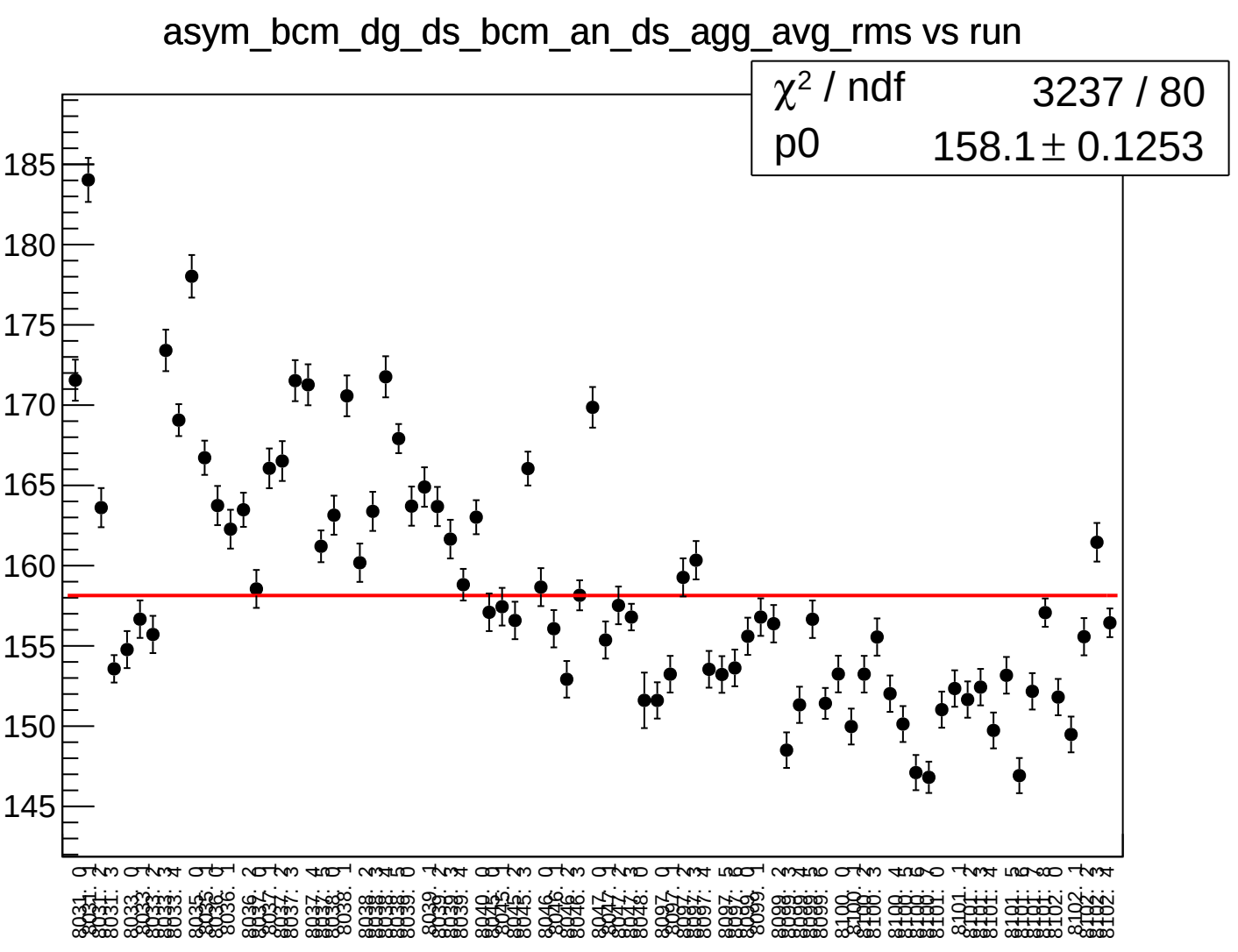

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 77.07 / 80
p0 −10.5 ± 23.64
pull
Entries 81
Mean −1531
Std Dev 1576

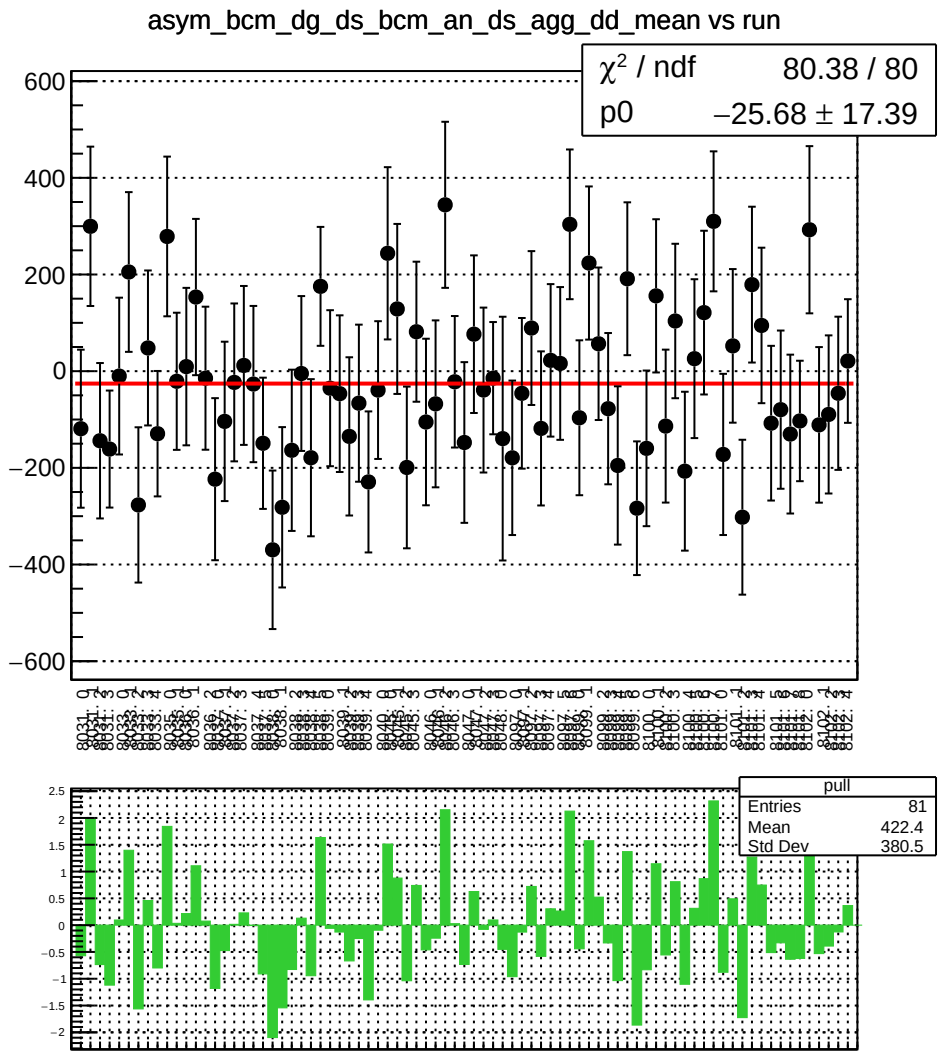

pull1D
Entries 81
Mean 0.003416
Std Dev 0.9754

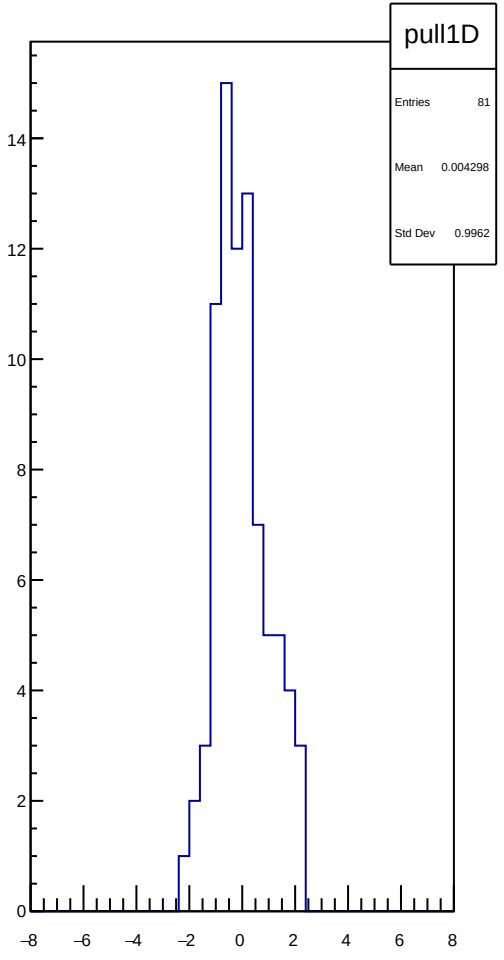

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 803.2 / 80
p0 21.12 ± 0.01672
22.5
22
21.5
21
20.5

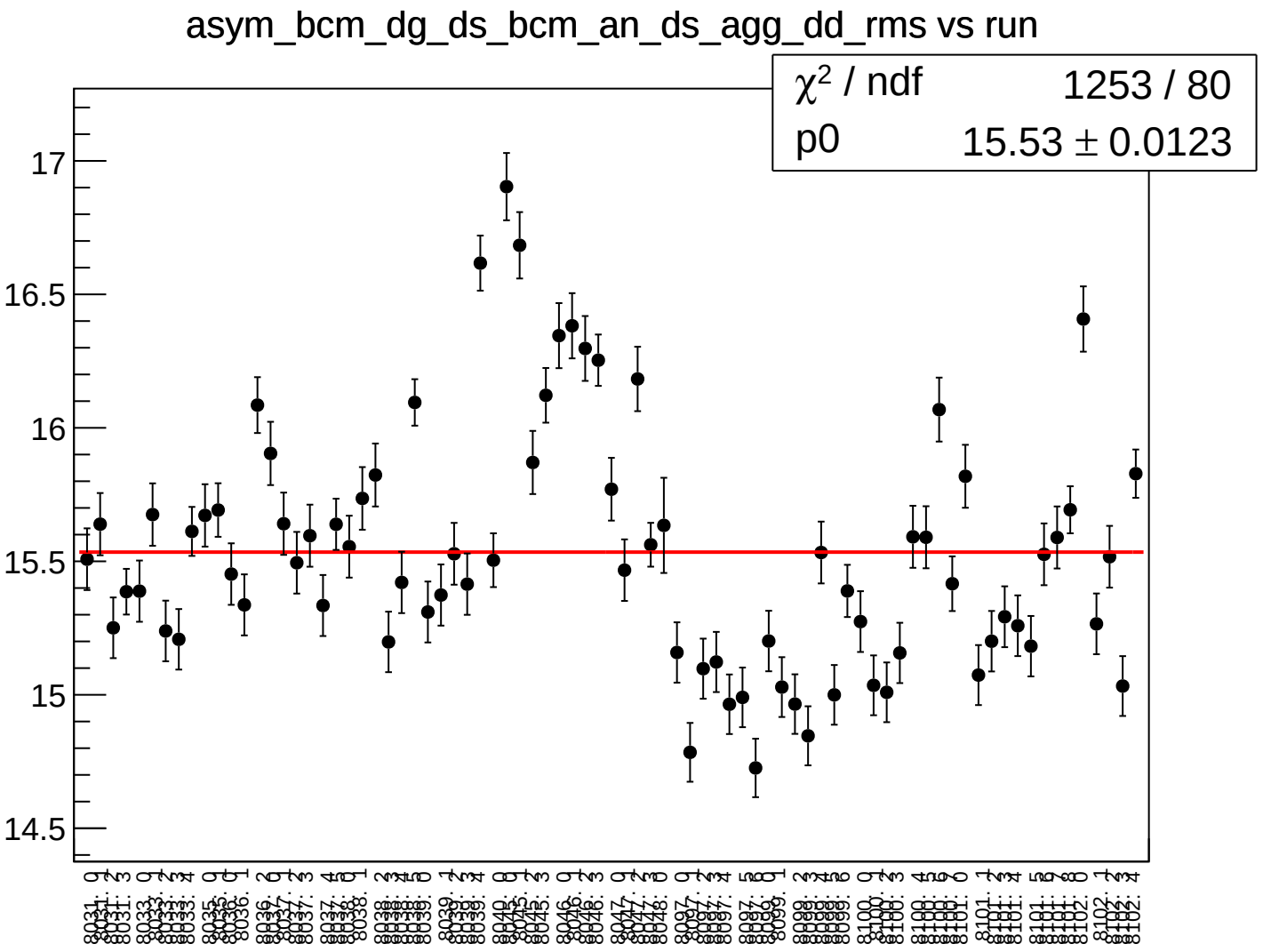

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.78 / 80
p0 −233.7 ± 177.2
pull
Entries 81
Mean 10.82
Std Dev 32.16

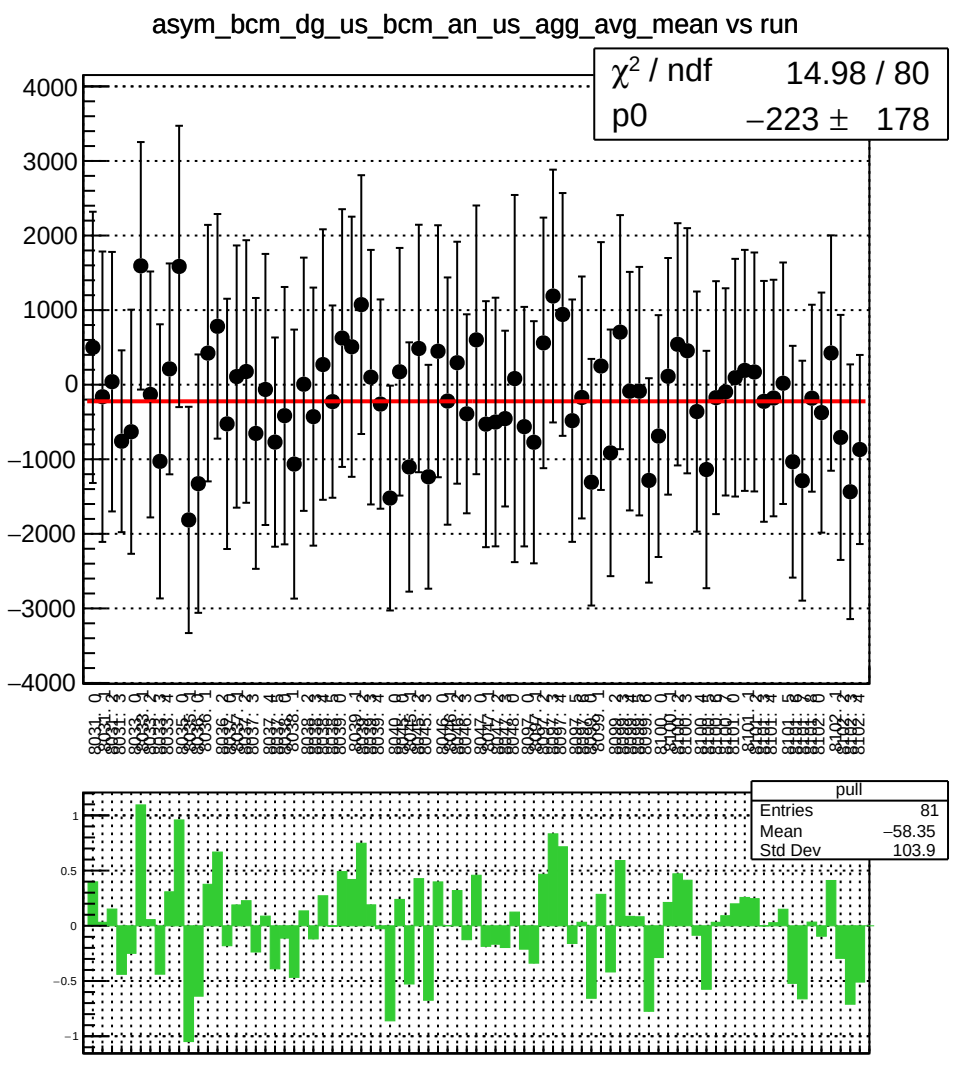

pull1D
Entries 81
Mean 0.01097
Std Dev 0.4412

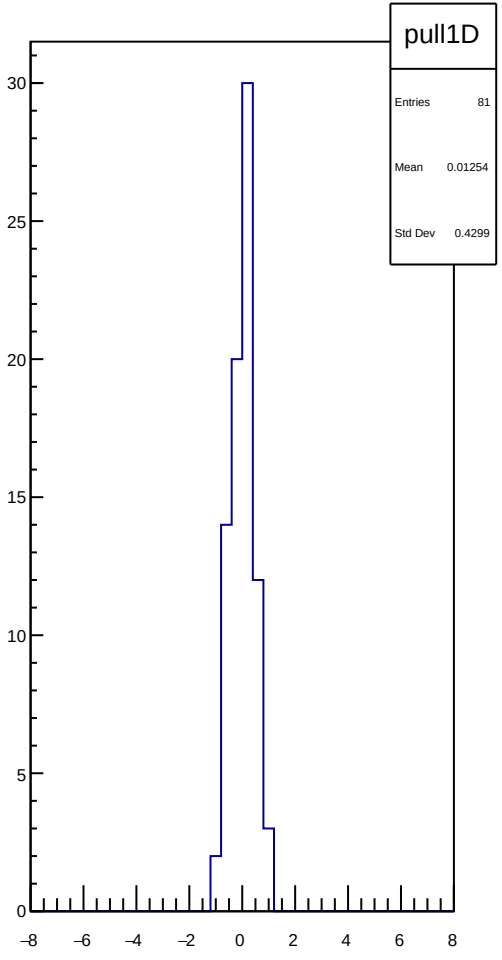

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3237 / 80
p0 158.1 ± 0.1253
185
180
175
170
165
160
155
150
145

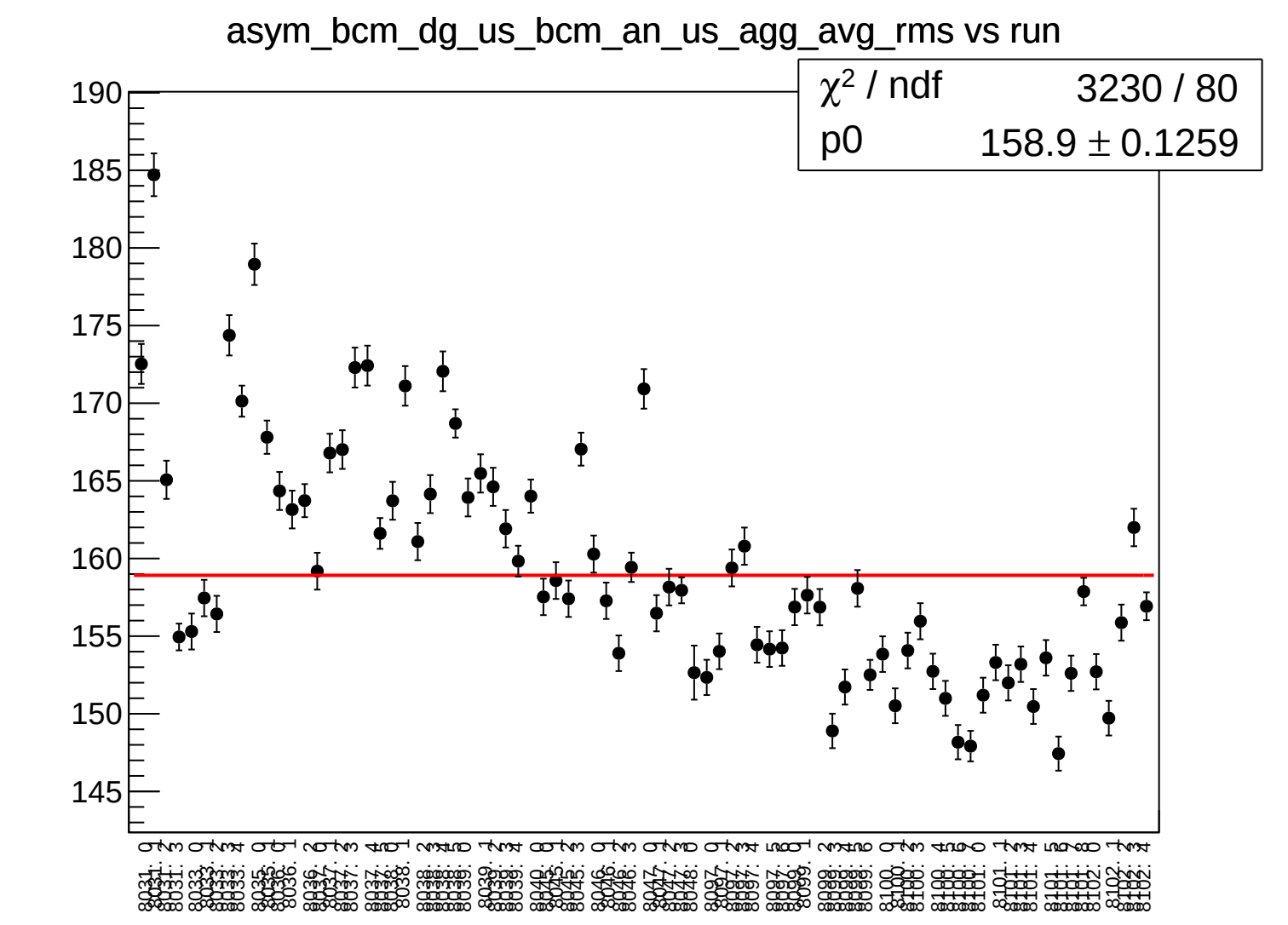

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 80.38 / 80
p0 −25.68 ± 17.39
pull
Entries 81
Mean 422.4
Std Dev 380.5

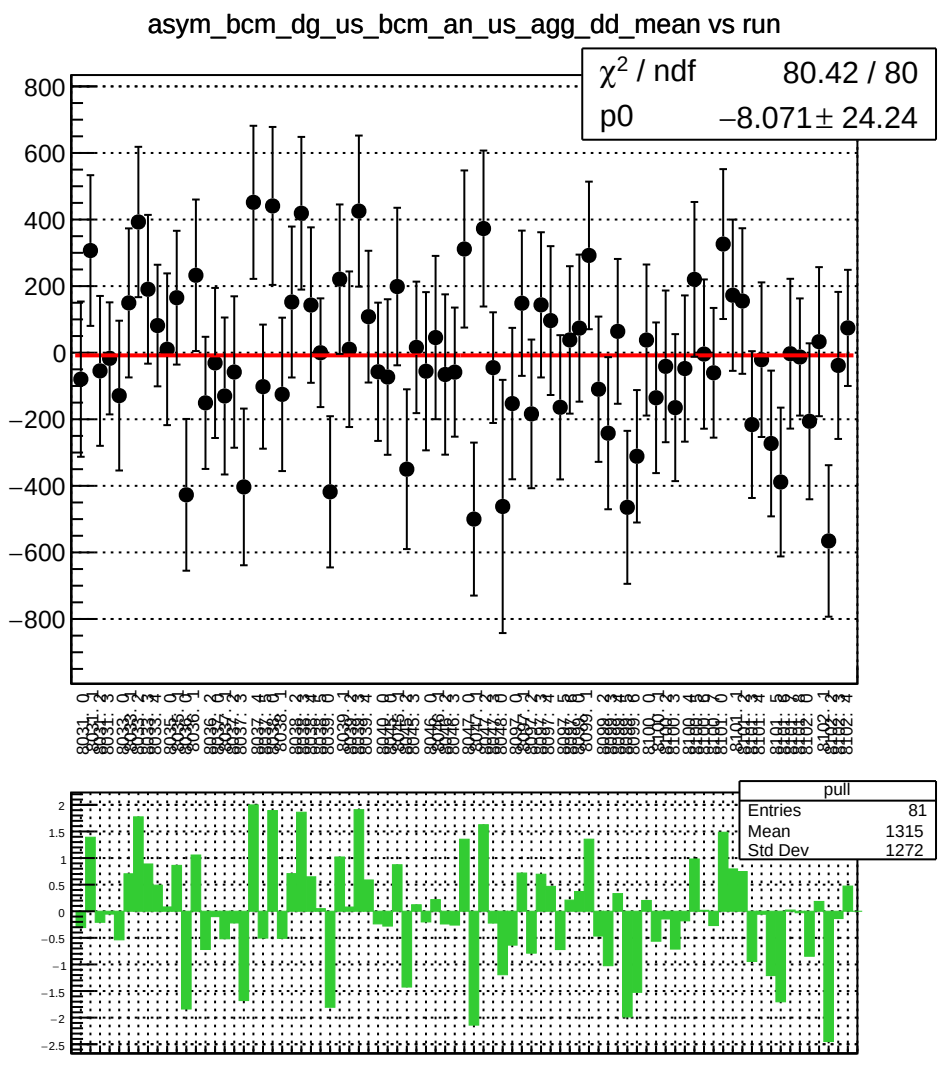

pull1D
Entries 81
Mean 0.004298
Std Dev 0.9962

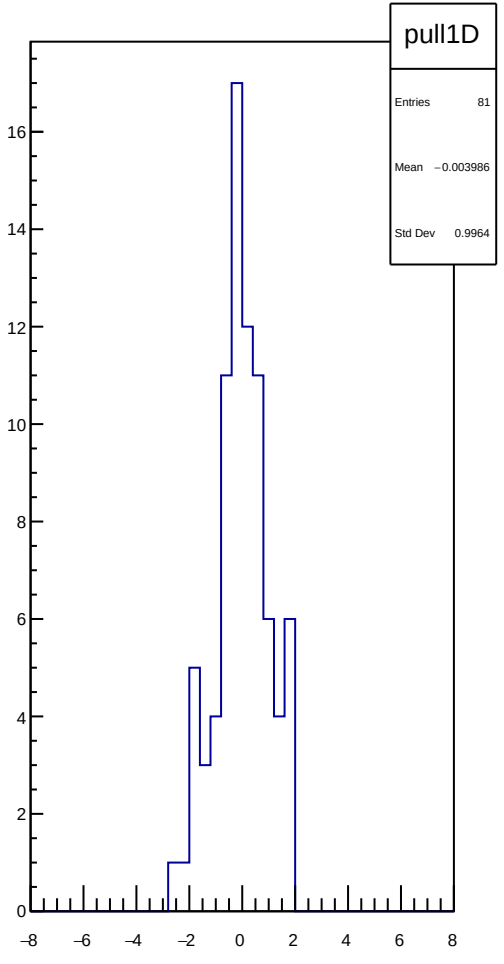

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1253 / 80
p0 15.53 ± 0.0123
17
16.5
16
15.5
15
14.5

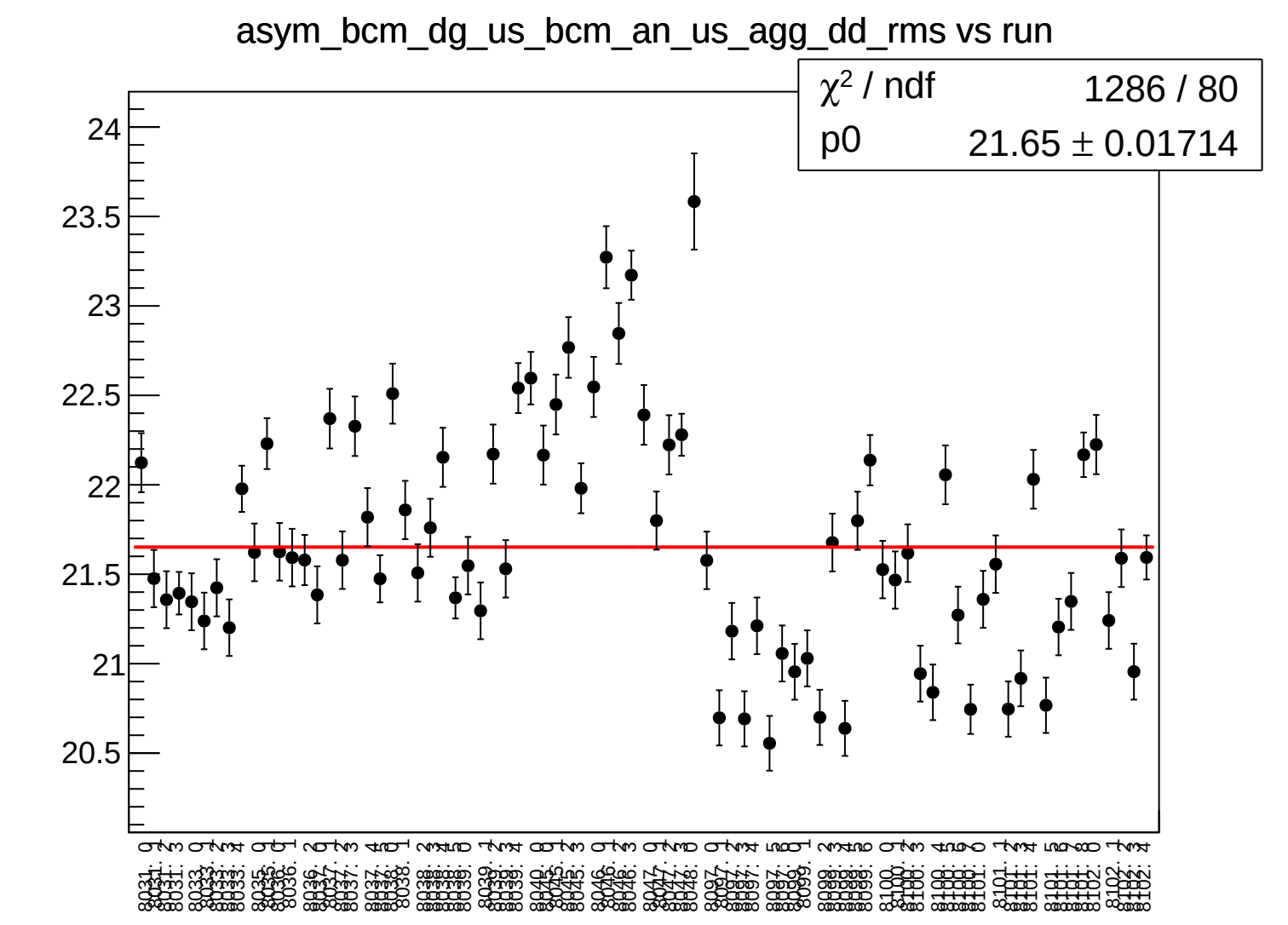

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.98 / 80
p0 −223 ± 178
pull
Entries 81
Mean −58.35
Std Dev 103.9

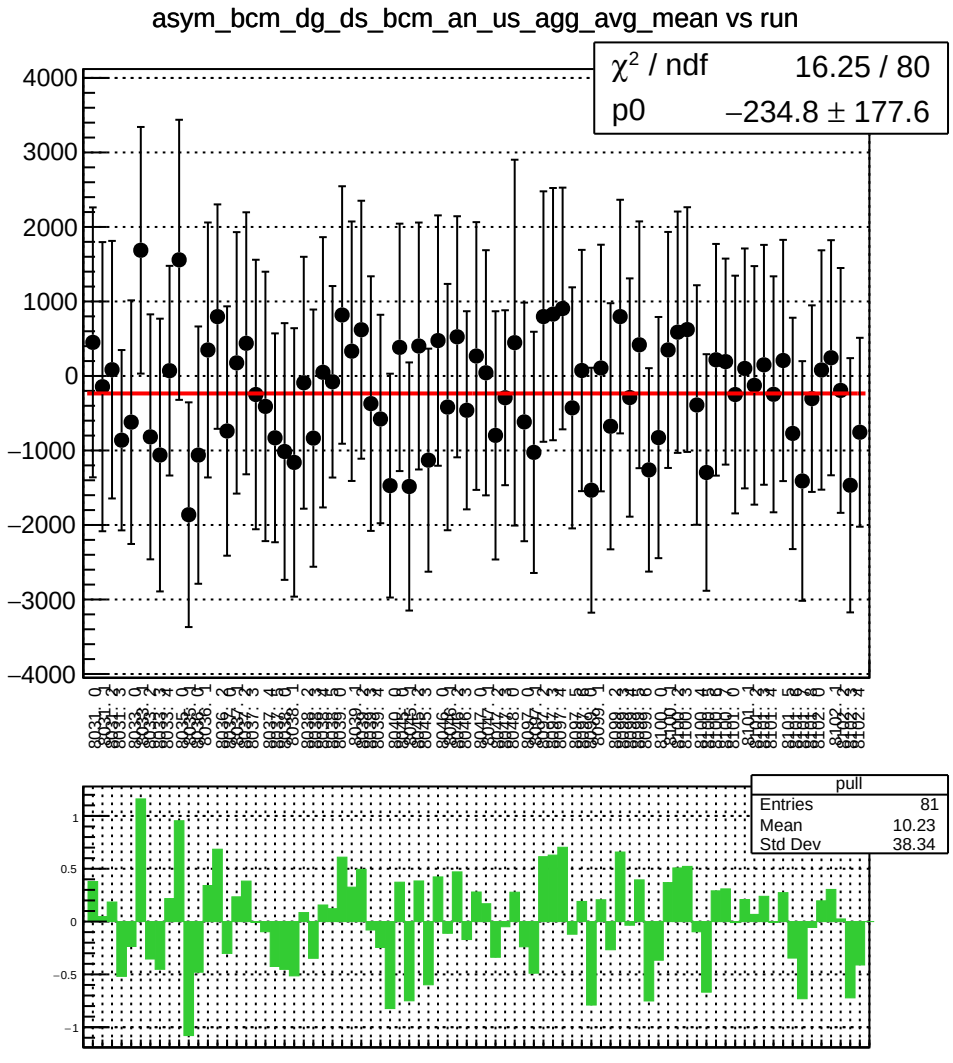

pull1D
Entries 81
Mean 0.01254
Std Dev 0.4299

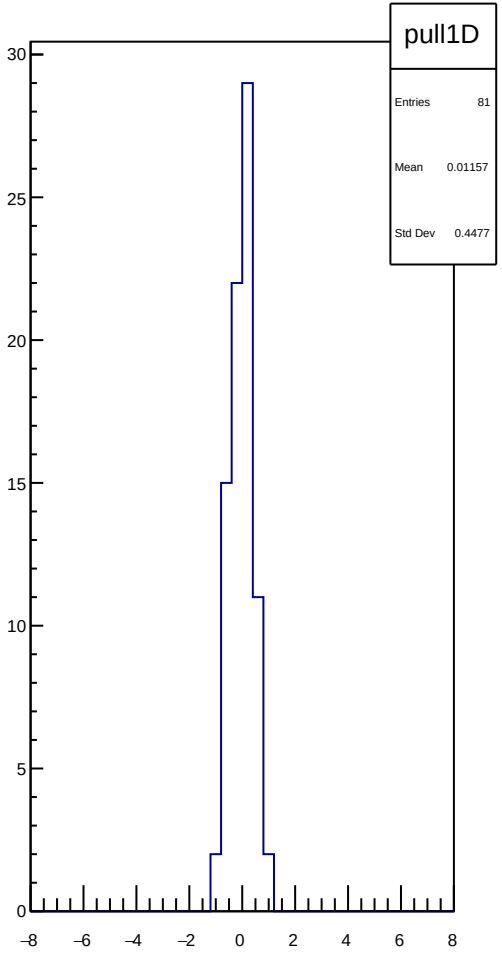

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 3230 / 80
p0 158.9 ± 0.1259
190
185
180
175
170
165
160
155
150
145

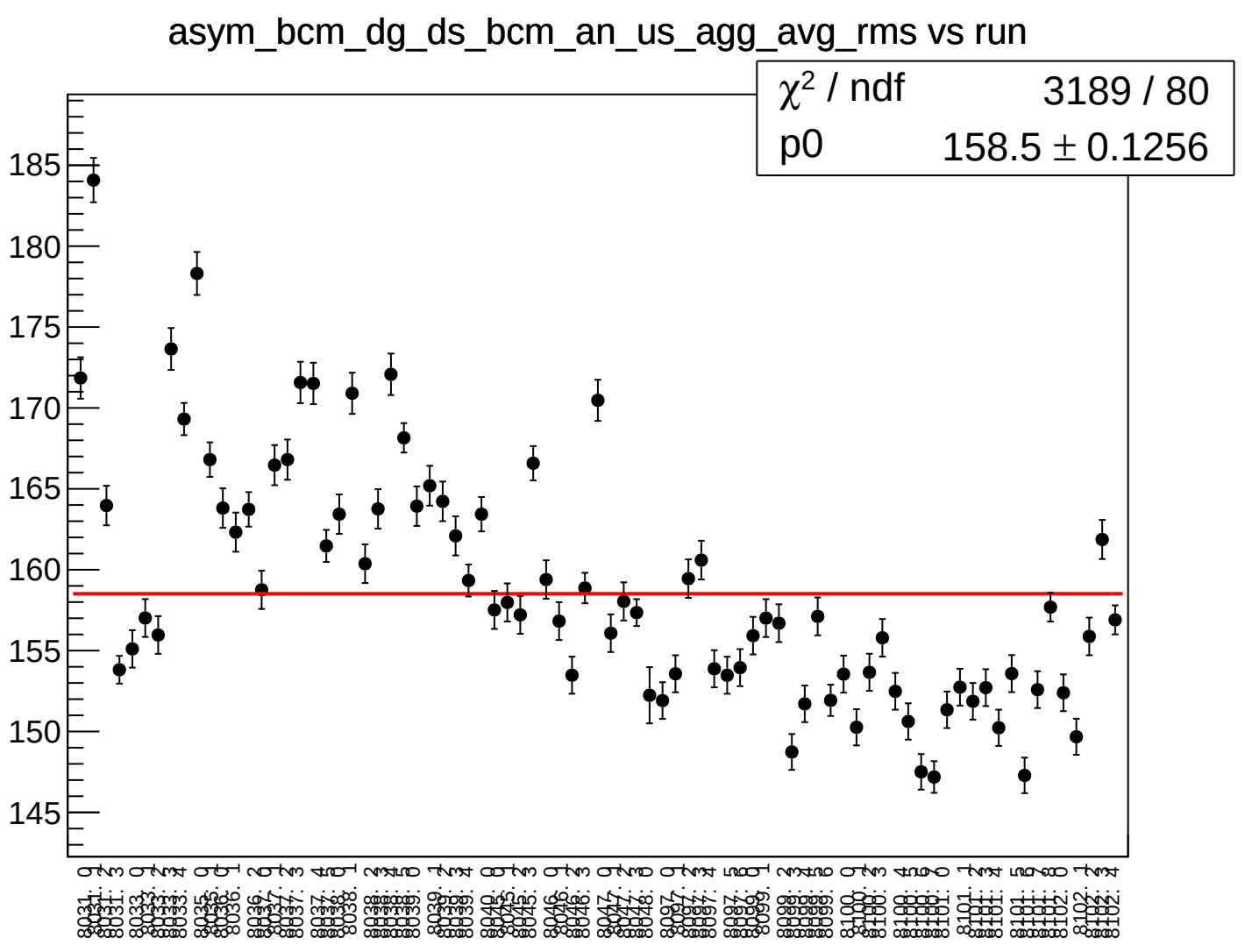

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 80.42 / 80
p0 −8.071 ± 24.24
pull
Entries 81
Mean 1315
Std Dev 1272

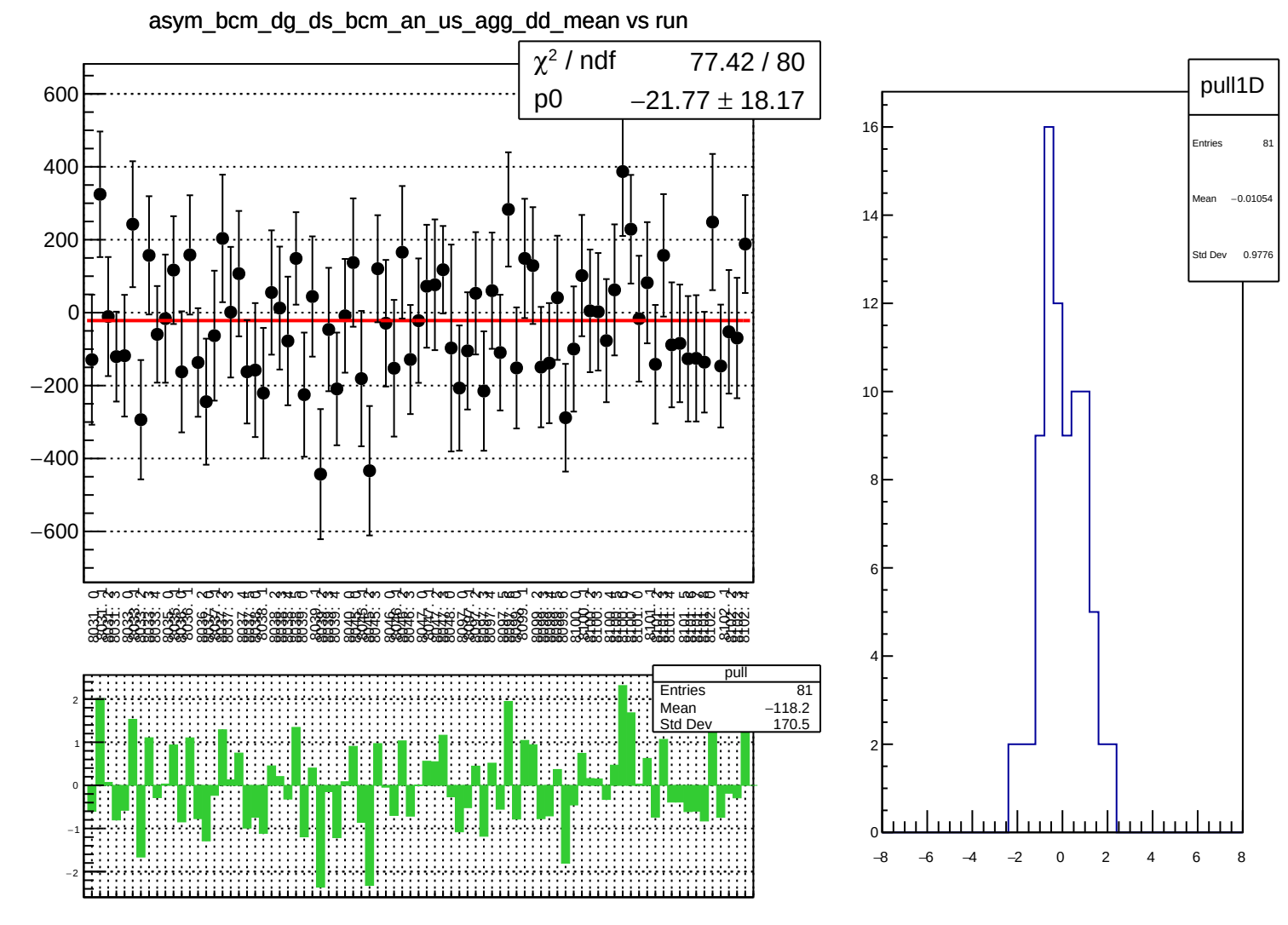

pull1D
Entries 81
Mean −0.003986
Std Dev 0.9964

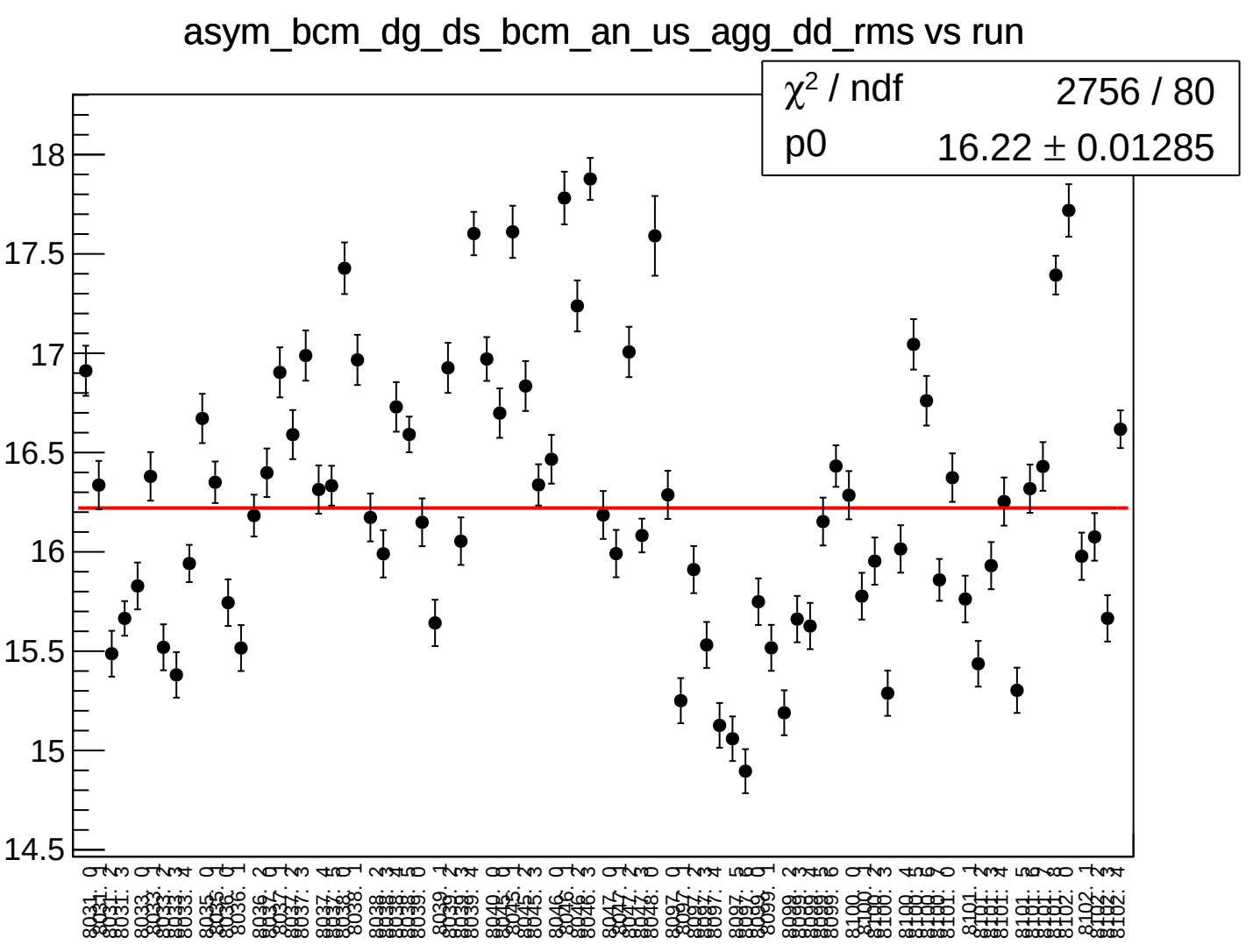

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1286 / 80
p0 21.65 ± 0.01714
24
23.5
23
22.5
22
21.5
21
20.5

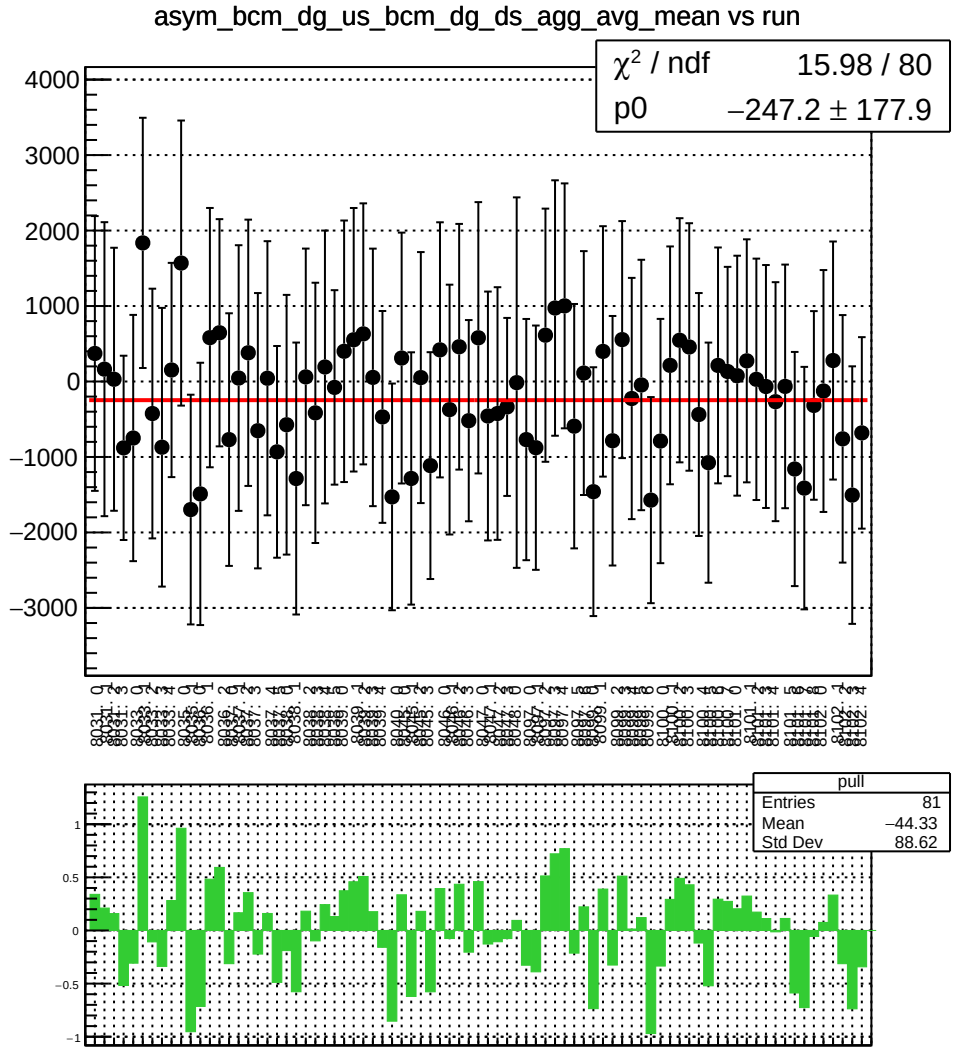

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.25 / 80
p0 −234.8 ± 177.6
pull
Entries 81
Mean 10.23
Std Dev 38.34

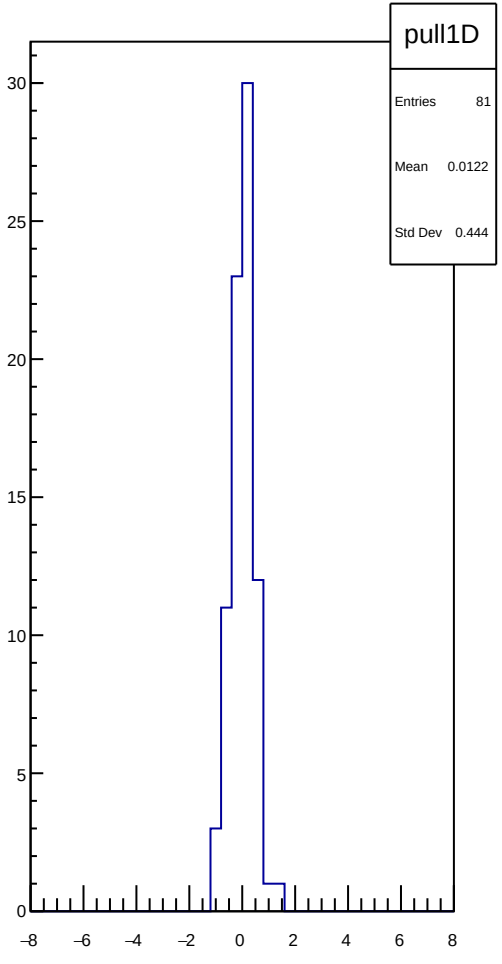

pull1D
Entries 81
Mean 0.01157
Std Dev 0.4477

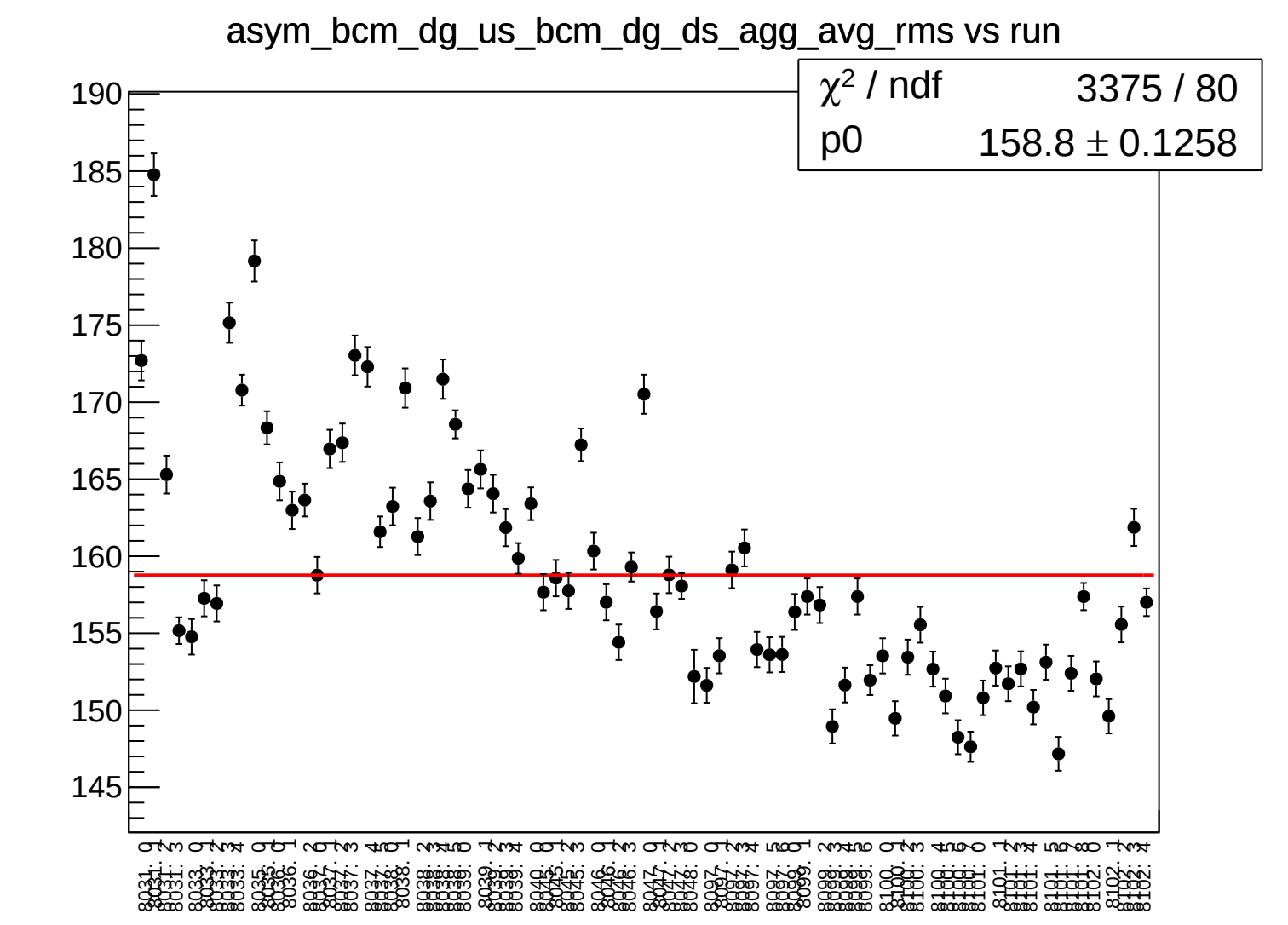

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 3189 / 80
p0 158.5 ± 0.1256
185
180
175
170
165
160
155
150
145

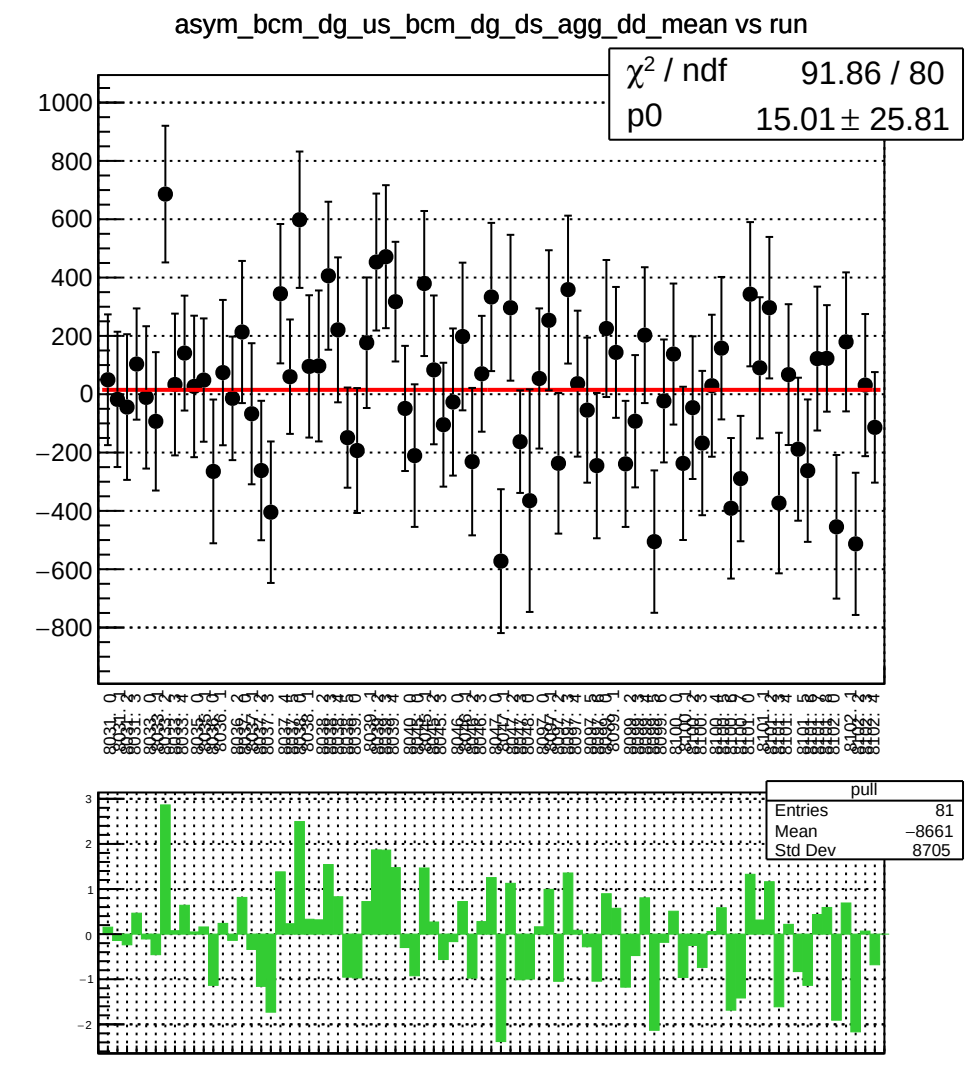

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 77.42 / 80
p0 −21.77 ± 18.17
600
400
200
0
−200
−400
−600
pull
Entries 81
Mean −118.2
Std Dev 170.5
2
1
0
−1
−2
pull1D
Entries 81
Mean −0.01054
Std Dev 0.9776
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

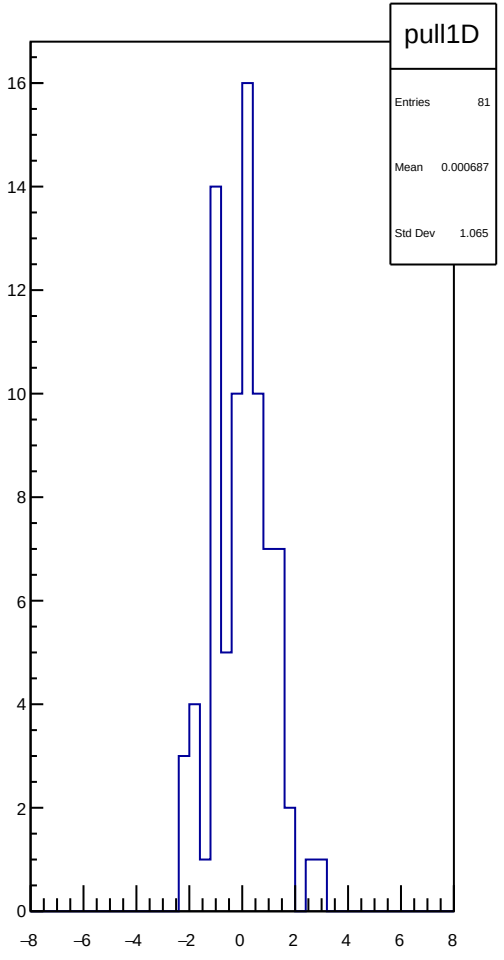

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2756 / 80
p0 16.22 ± 0.01285
18
17.5
17
16.5
16
15.5
15
14.5

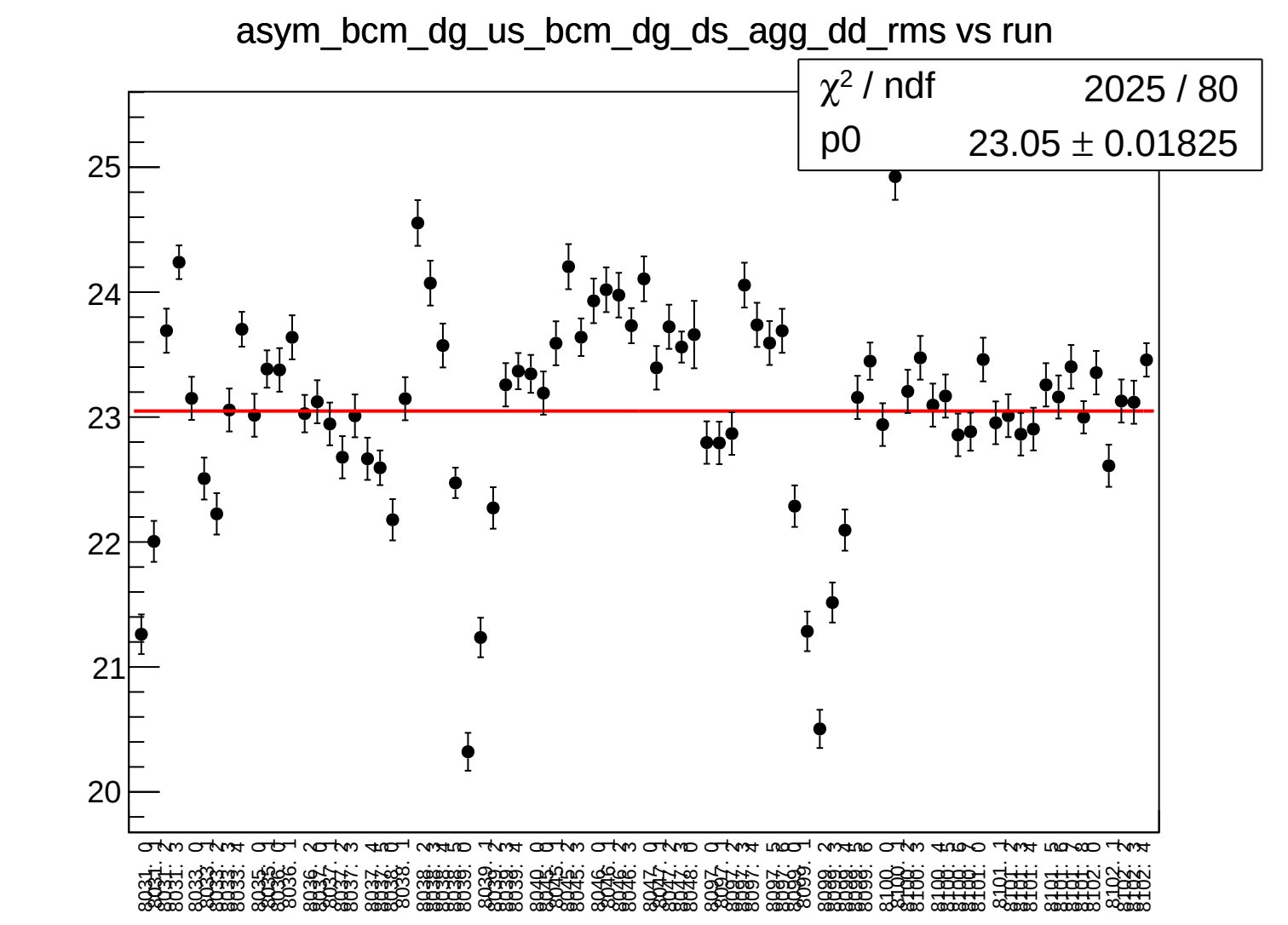

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.98 / 80
p0 −247.2 ± 177.9
pull
Entries 81
Mean −44.33
Std Dev 88.62

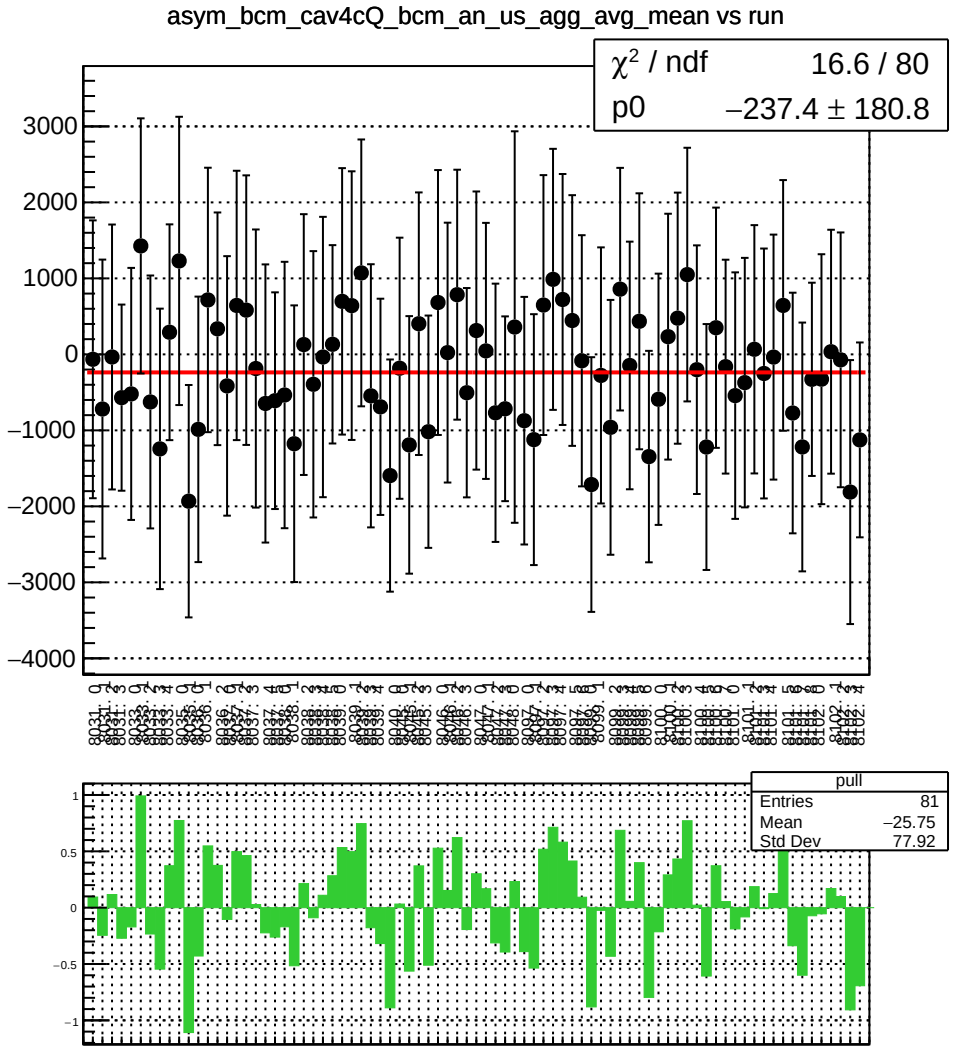

pull1D
Entries 81
Mean 0.0122
Std Dev 0.444

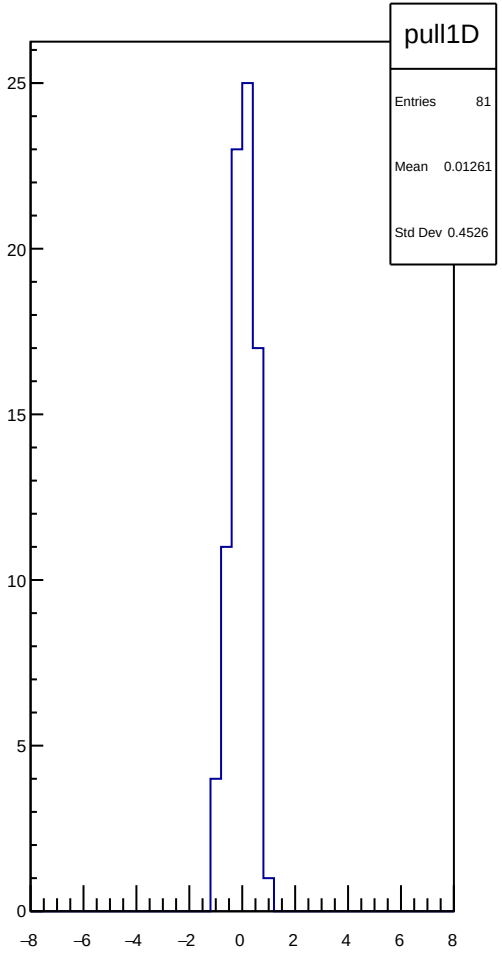

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 3375 / 80
p0 158.8 ± 0.1258
190
185
180
175
170
165
160
155
150
145

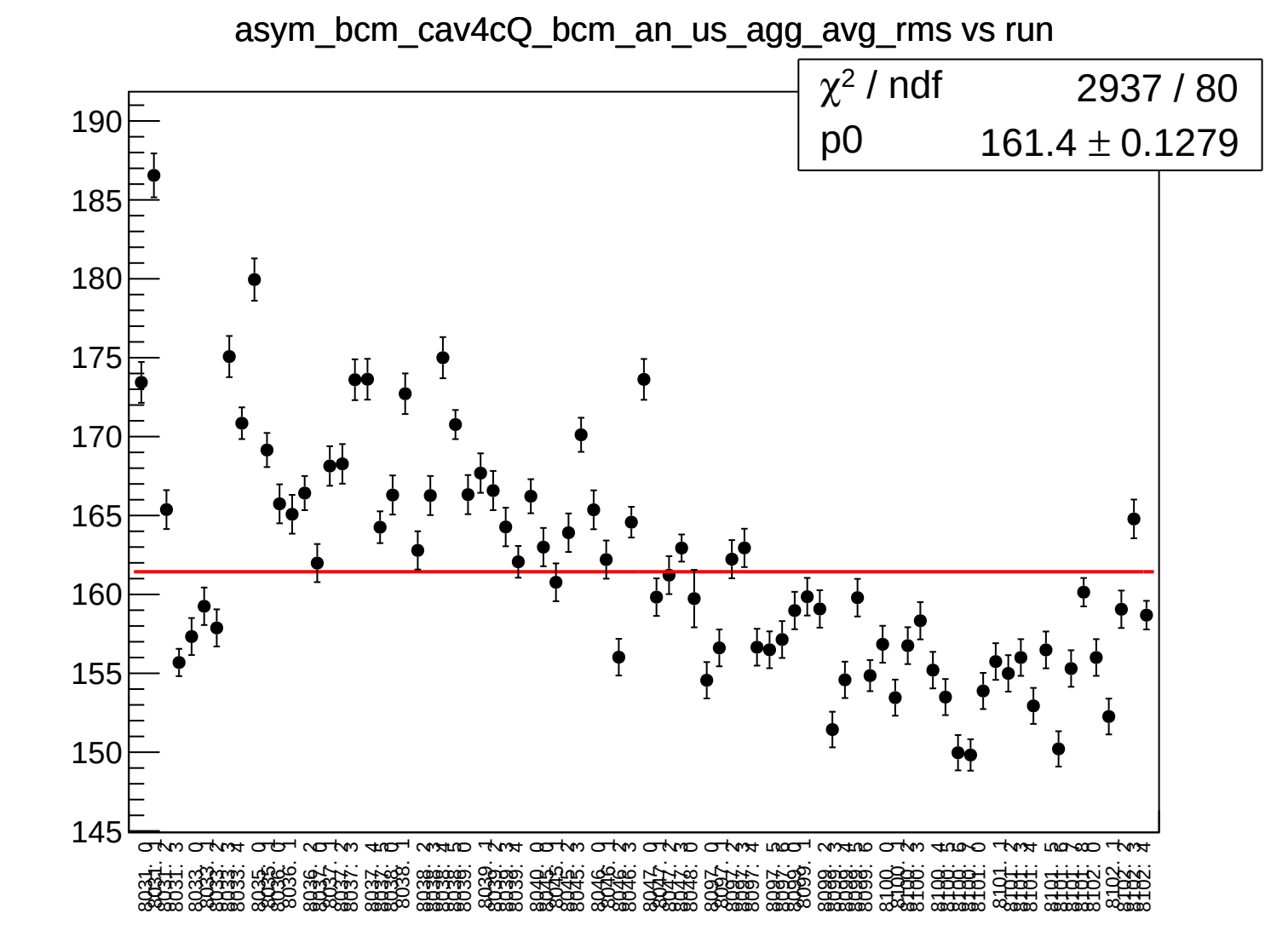

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 91.86 / 80
p0 15.01 ± 25.81
pull
Entries 81
Mean −8661
Std Dev 8705

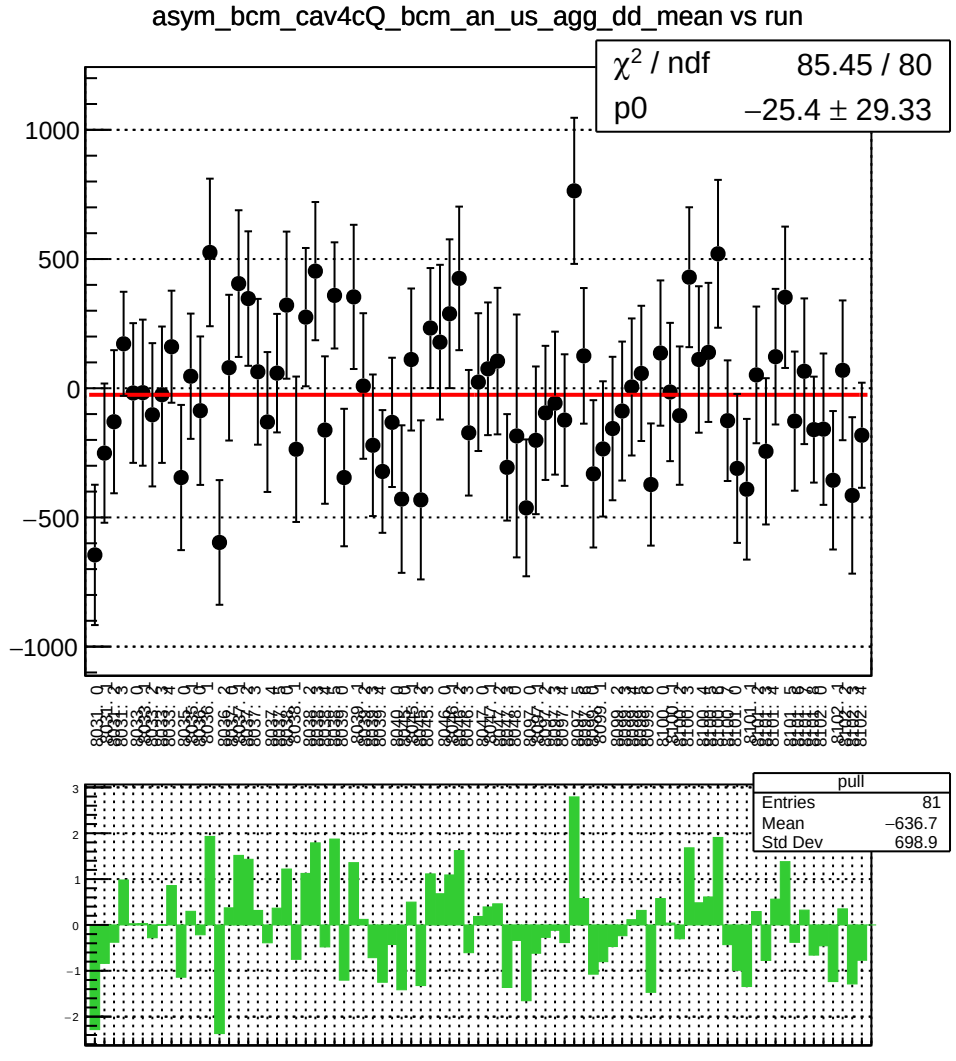

pull1D
Entries 81
Mean 0.000687
Std Dev 1.065

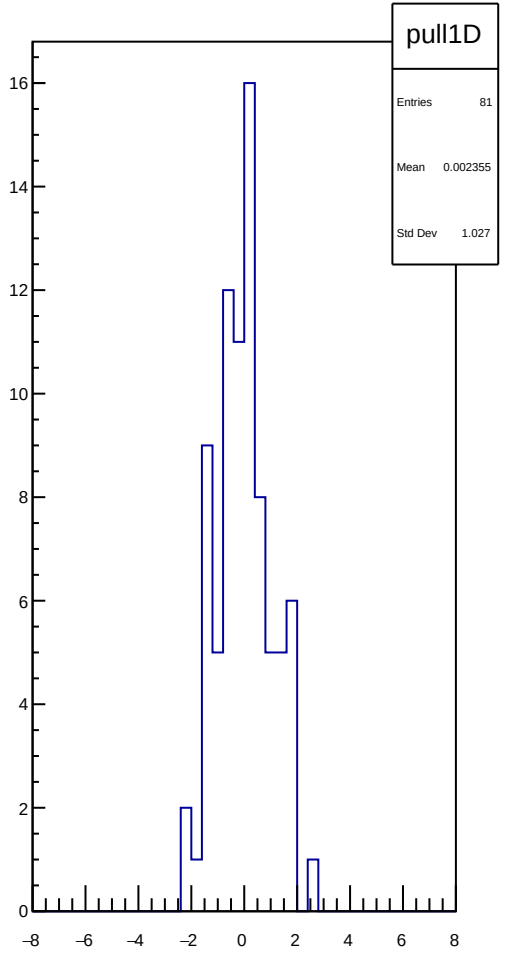

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2025 / 80
p0 23.05 ± 0.01825
25
24
23
22
21
20

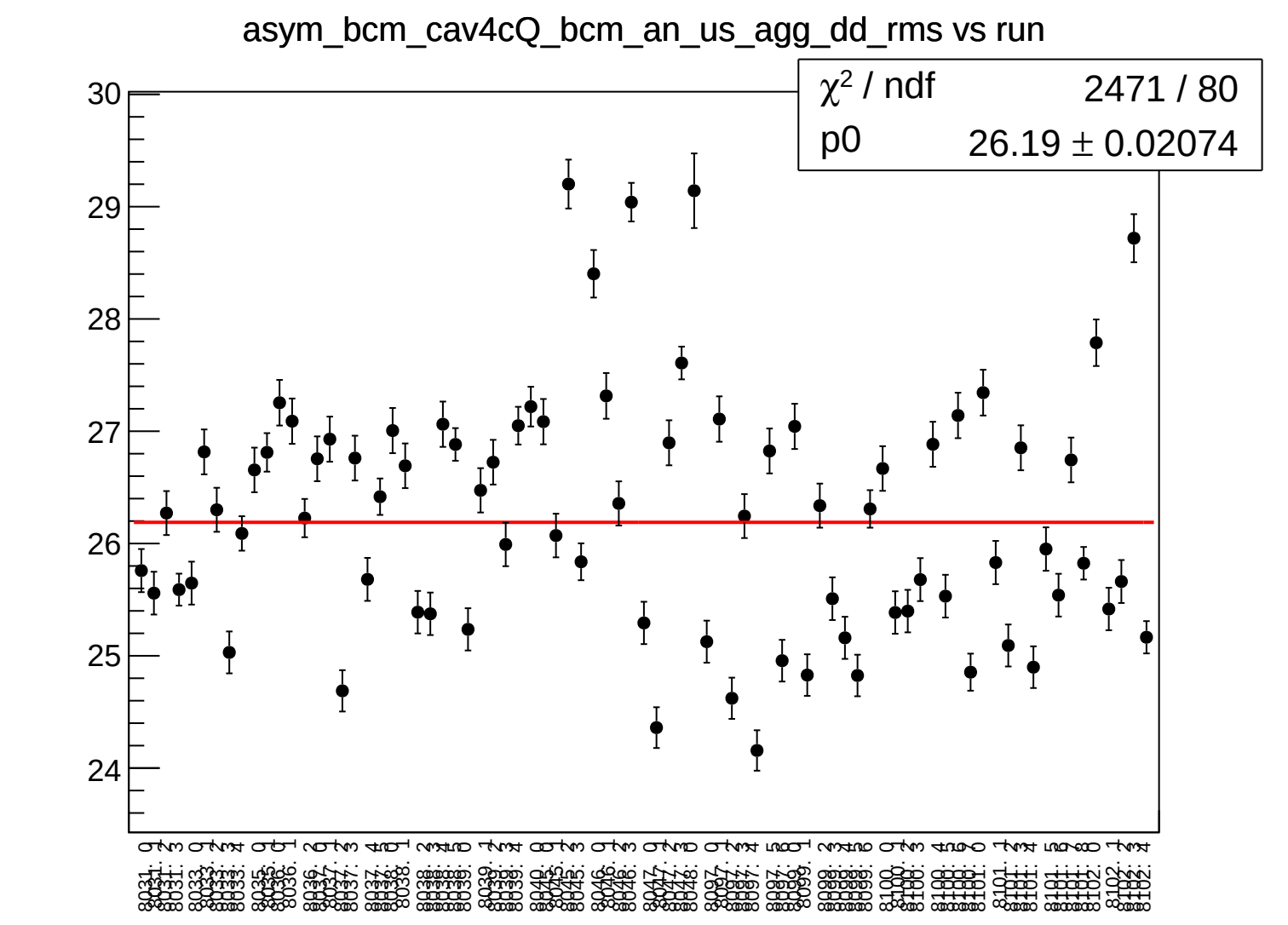

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.6 / 80
p0 −237.4 ± 180.8
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 81
Mean −25.75
Std Dev 77.92
1
0.5
0
−0.5
−1

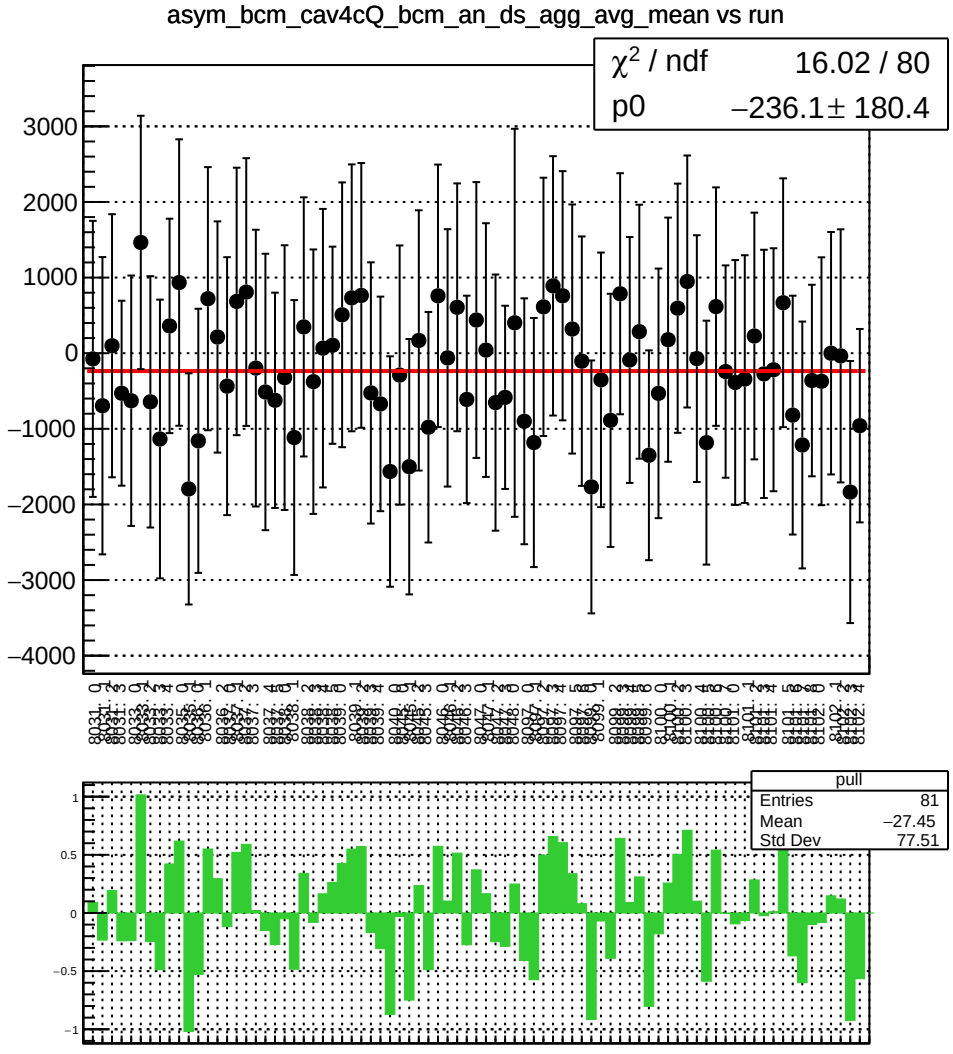

pull1D
Entries 81
Mean 0.01261
Std Dev 0.4526
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

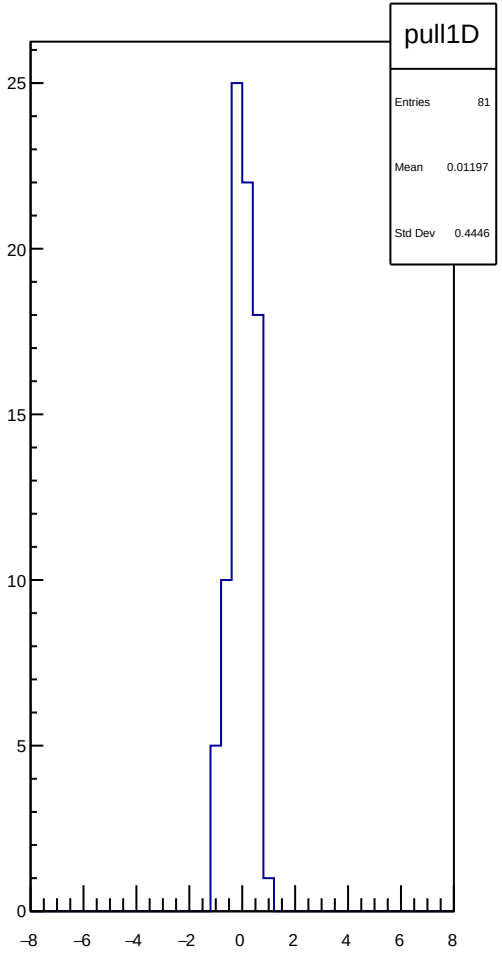

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2937 / 80
p0 161.4 ± 0.1279
190
185
180
175
170
165
160
155
150
145

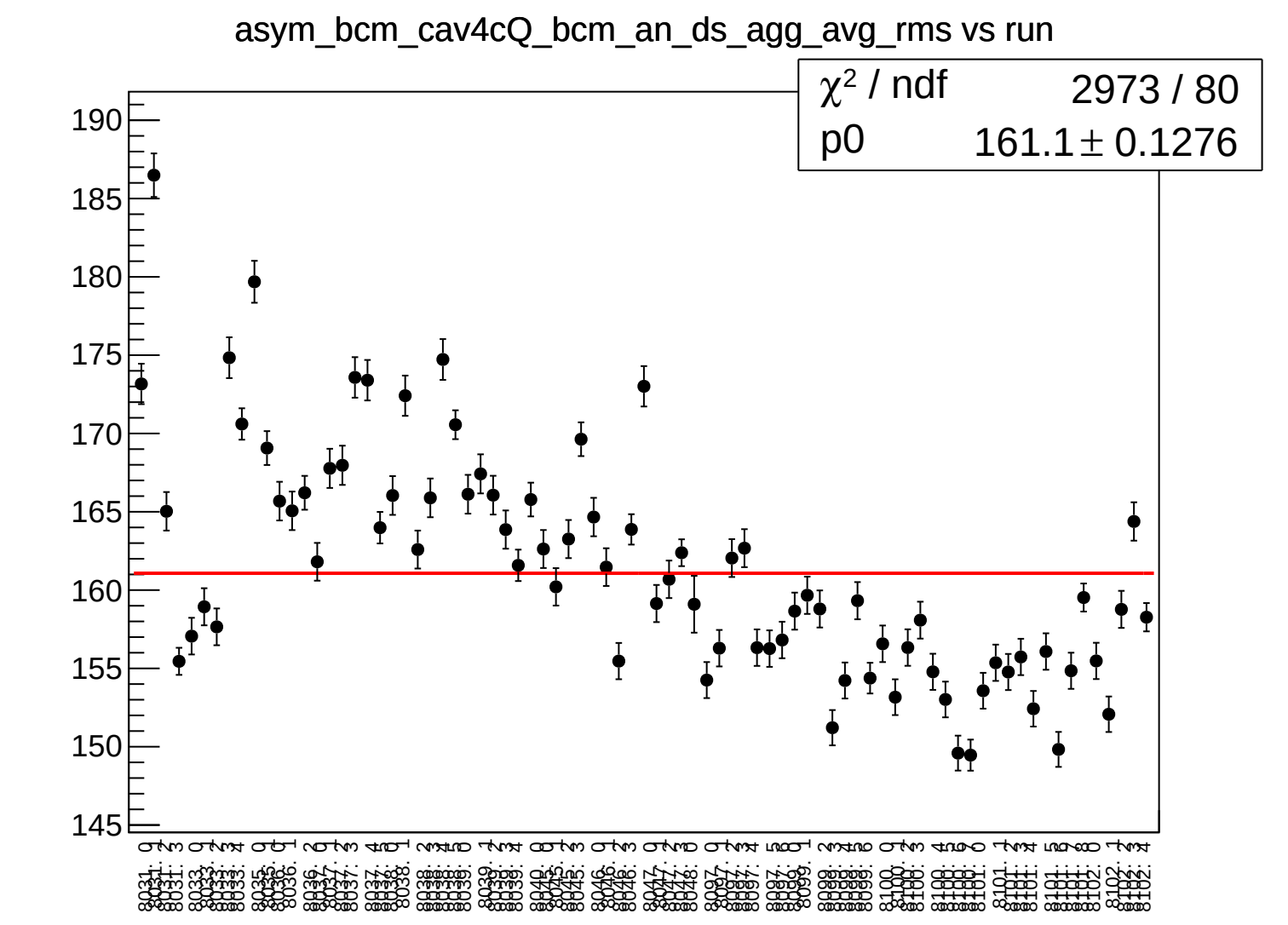

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 85.45 / 80
p0 −25.4 ± 29.33
1000
500
0
−500
−1000
pull
Entries 81
Mean −636.7
Std Dev 698.9
3
2
1
0
−1
−2

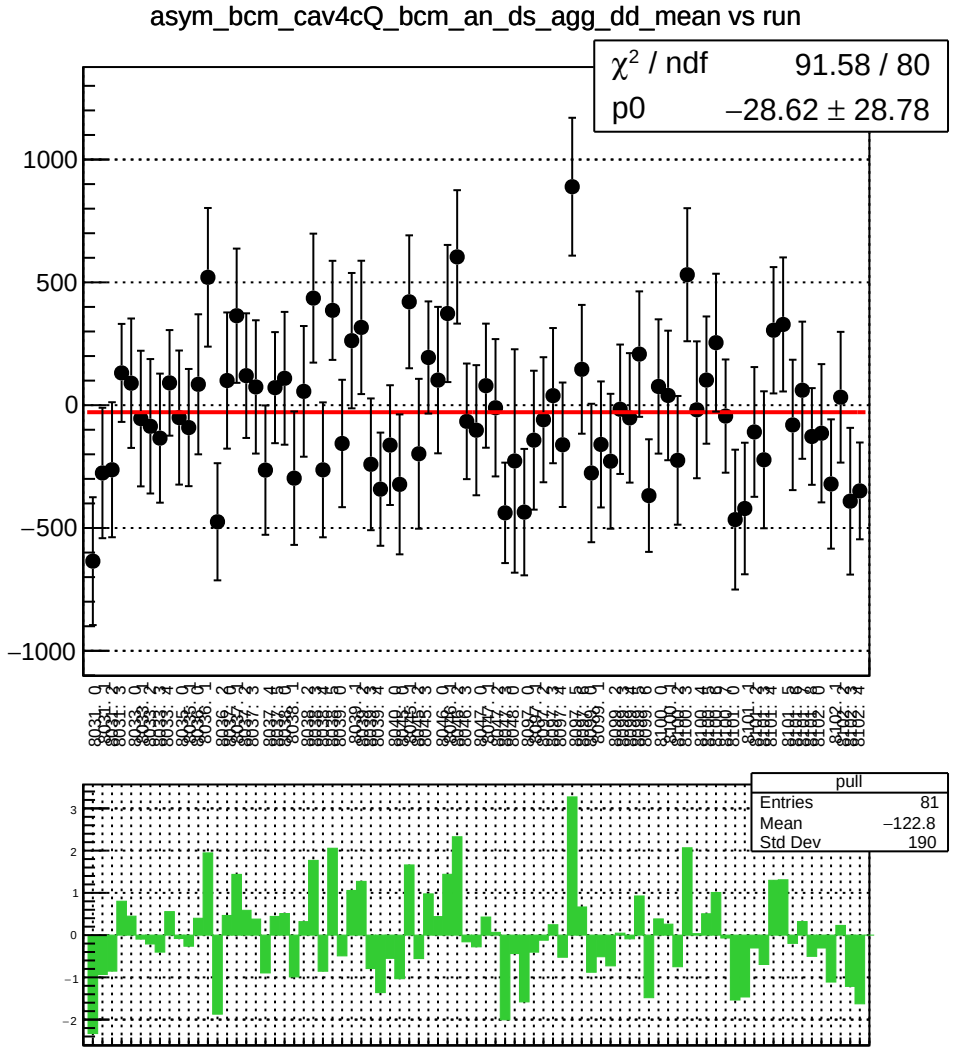

pull1D
Entries 81
Mean 0.002355
Std Dev 1.027
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

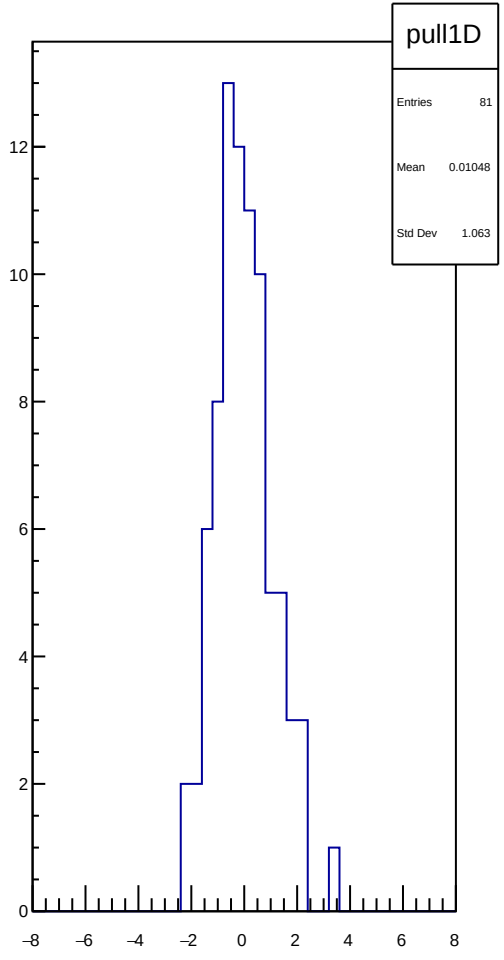

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2471 / 80
p0 26.19 ± 0.02074
30
29
28
27
26
25
24

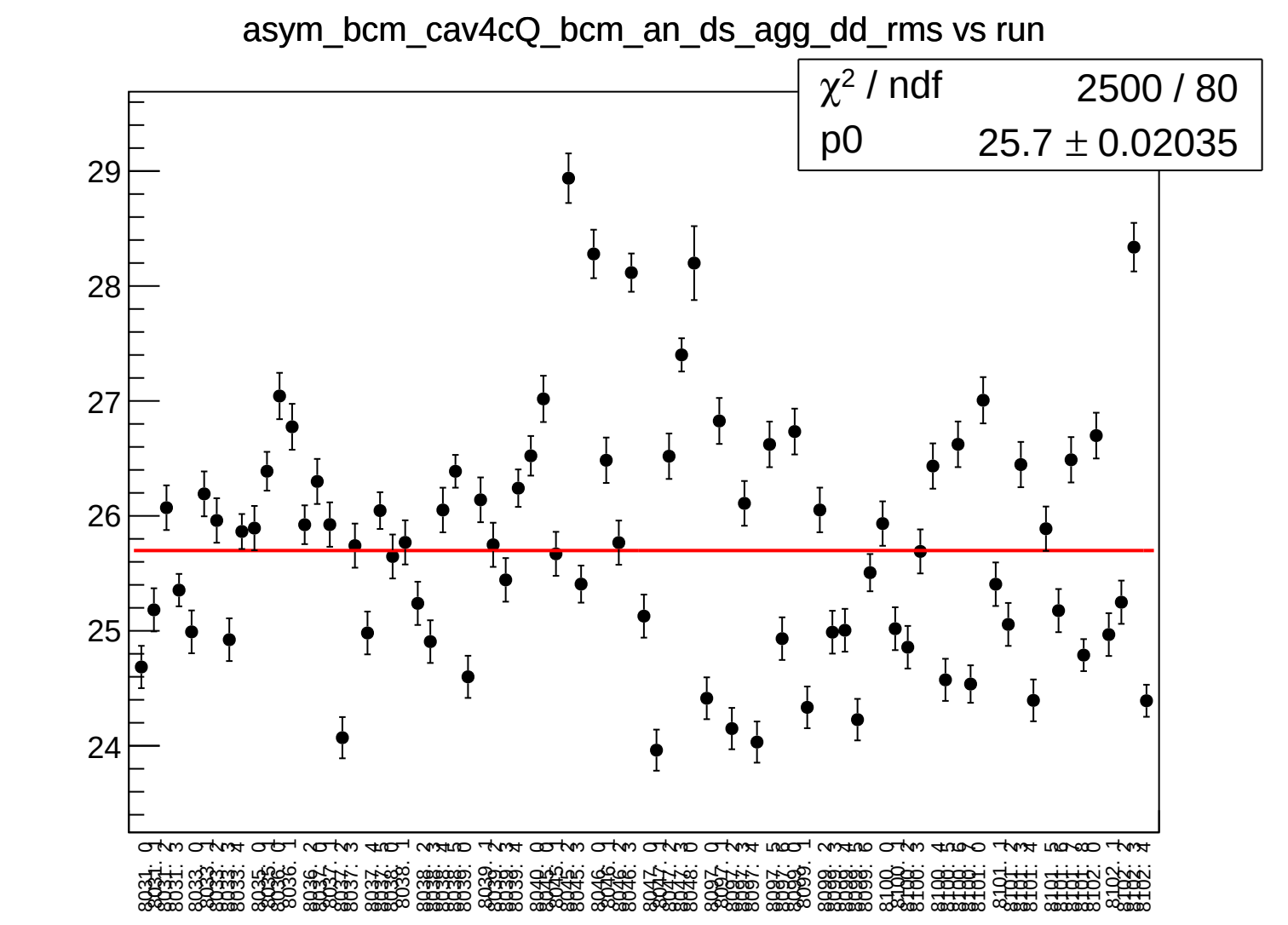

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.02 / 80
p0 −236.1± 180.4
pull
Entries 81
Mean −27.45
Std Dev 77.51

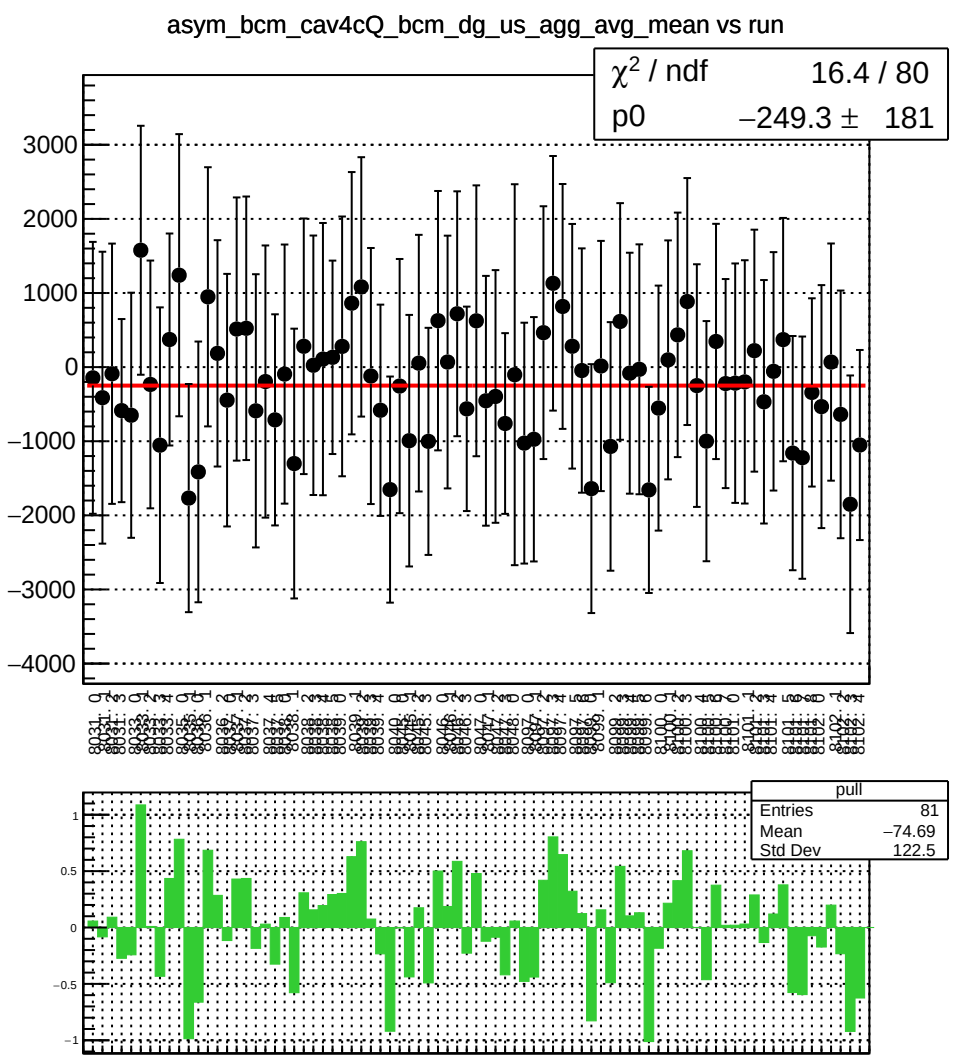

pull1D
Entries 81
Mean 0.01197
Std Dev 0.4446

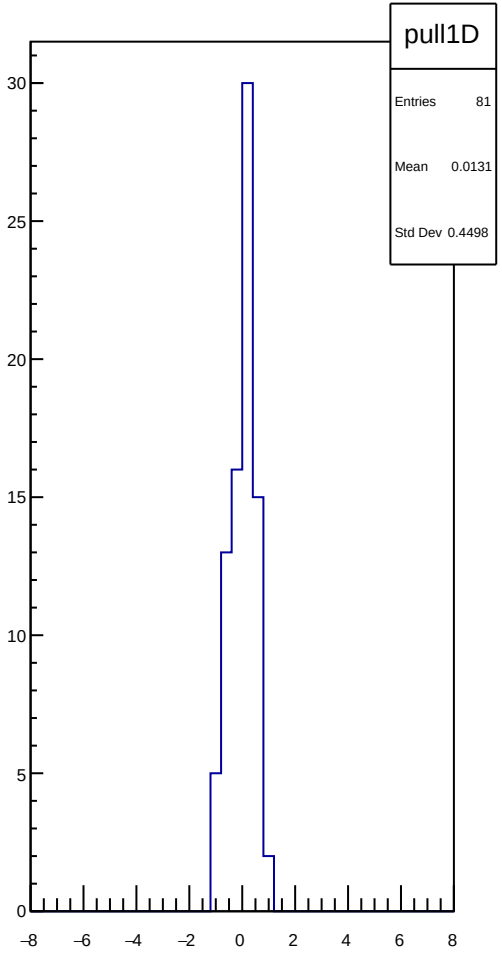

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2973 / 80
p0 161.1 ± 0.1276
190
185
180
175
170
165
160
155
150
145

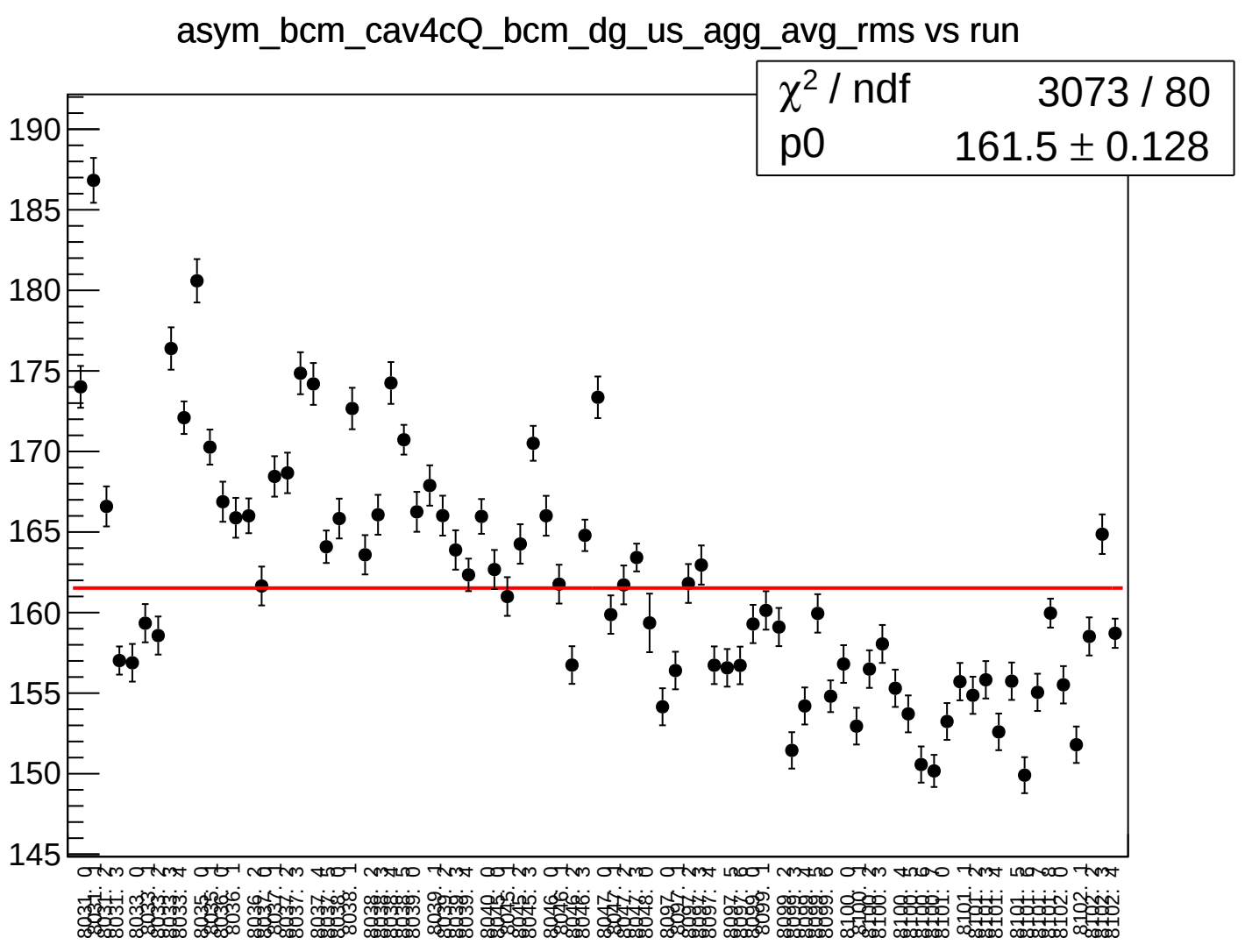

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.58 / 80
p0 −28.62 ± 28.78
1000
500
0
−500
−1000
pull
Entries 81
Mean −122.8
Std Dev 190
3
2
1
0
−1
−2

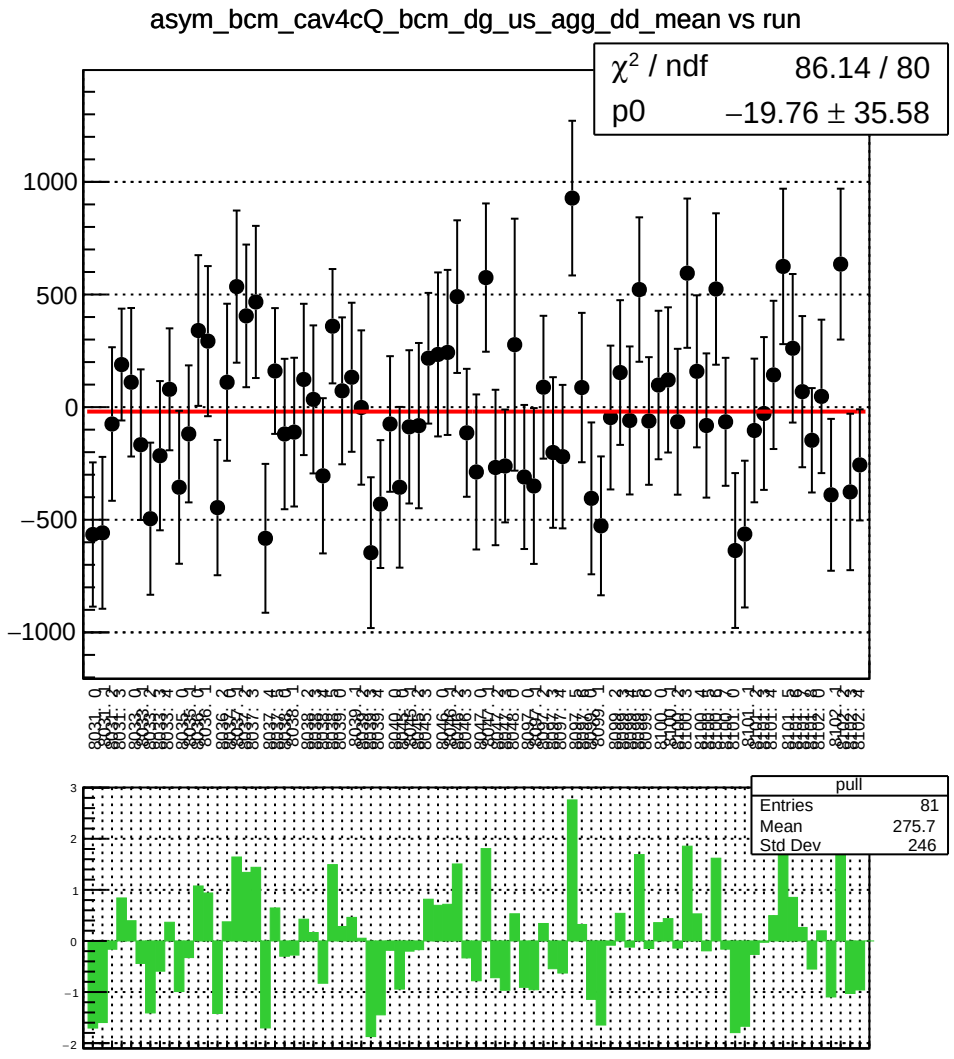

pull1D
Entries 81
Mean 0.01048
Std Dev 1.063
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

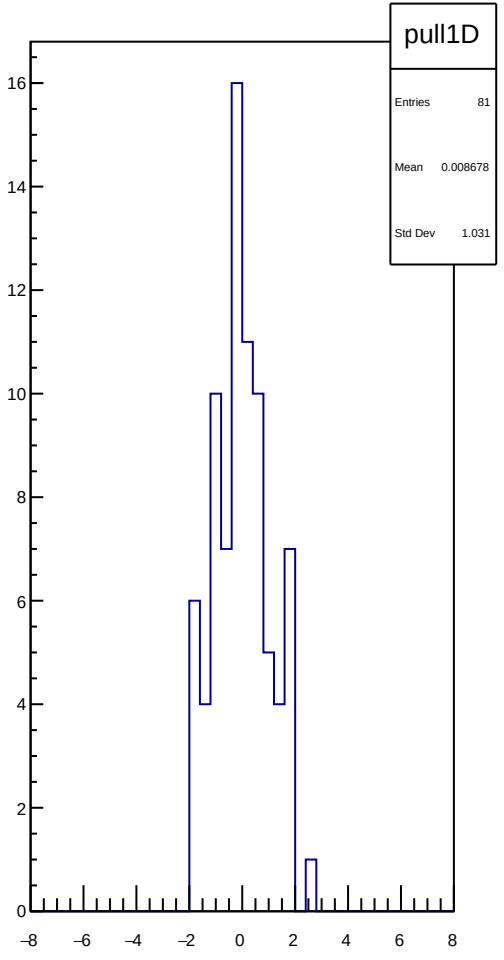

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2500 / 80
p0 25.7 ± 0.02035
29
28
27
26
25
24

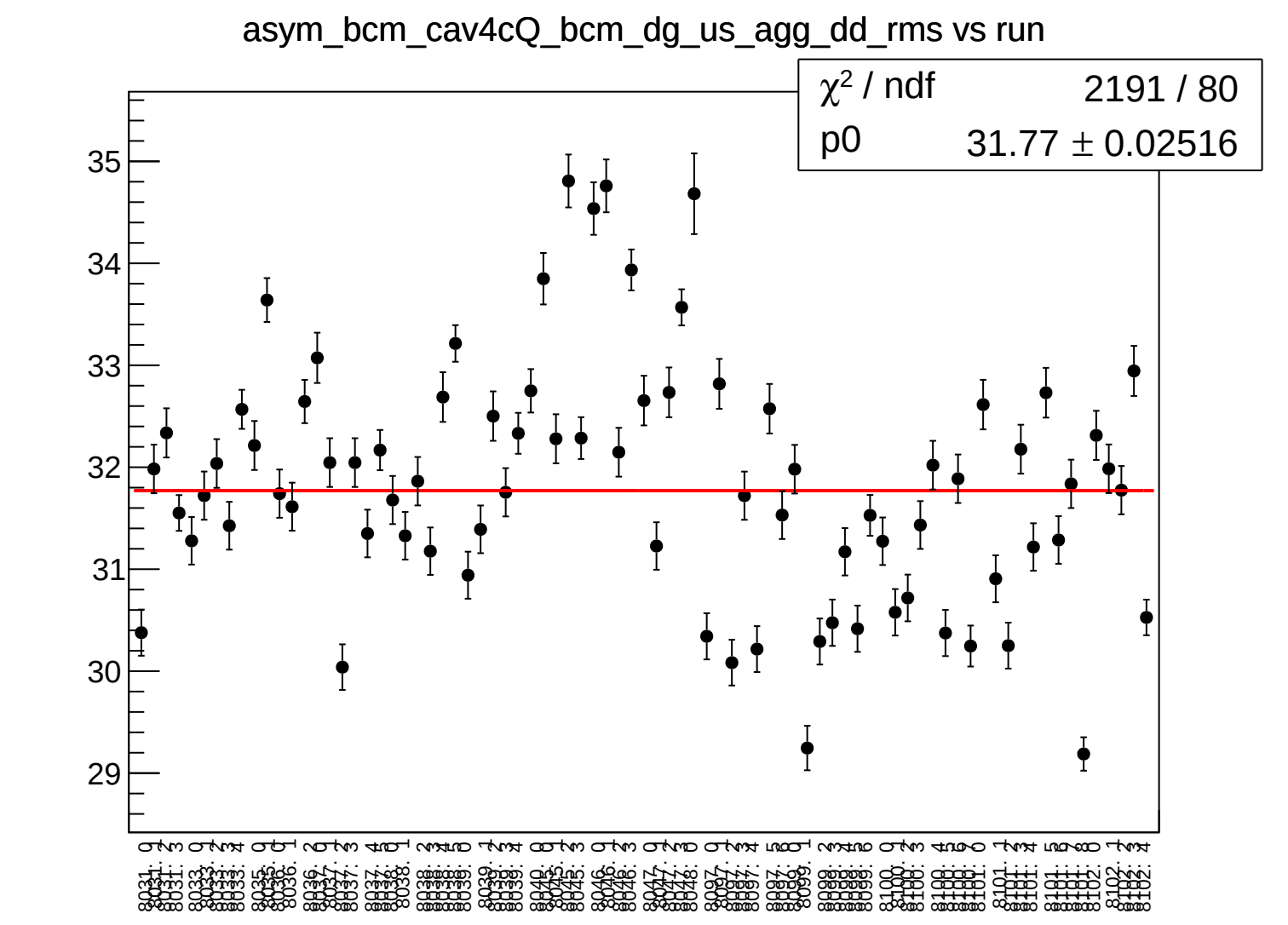

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 16.4 / 80
p0 −249.3 ± 181
pull
Entries 81
Mean −74.69
Std Dev 122.5

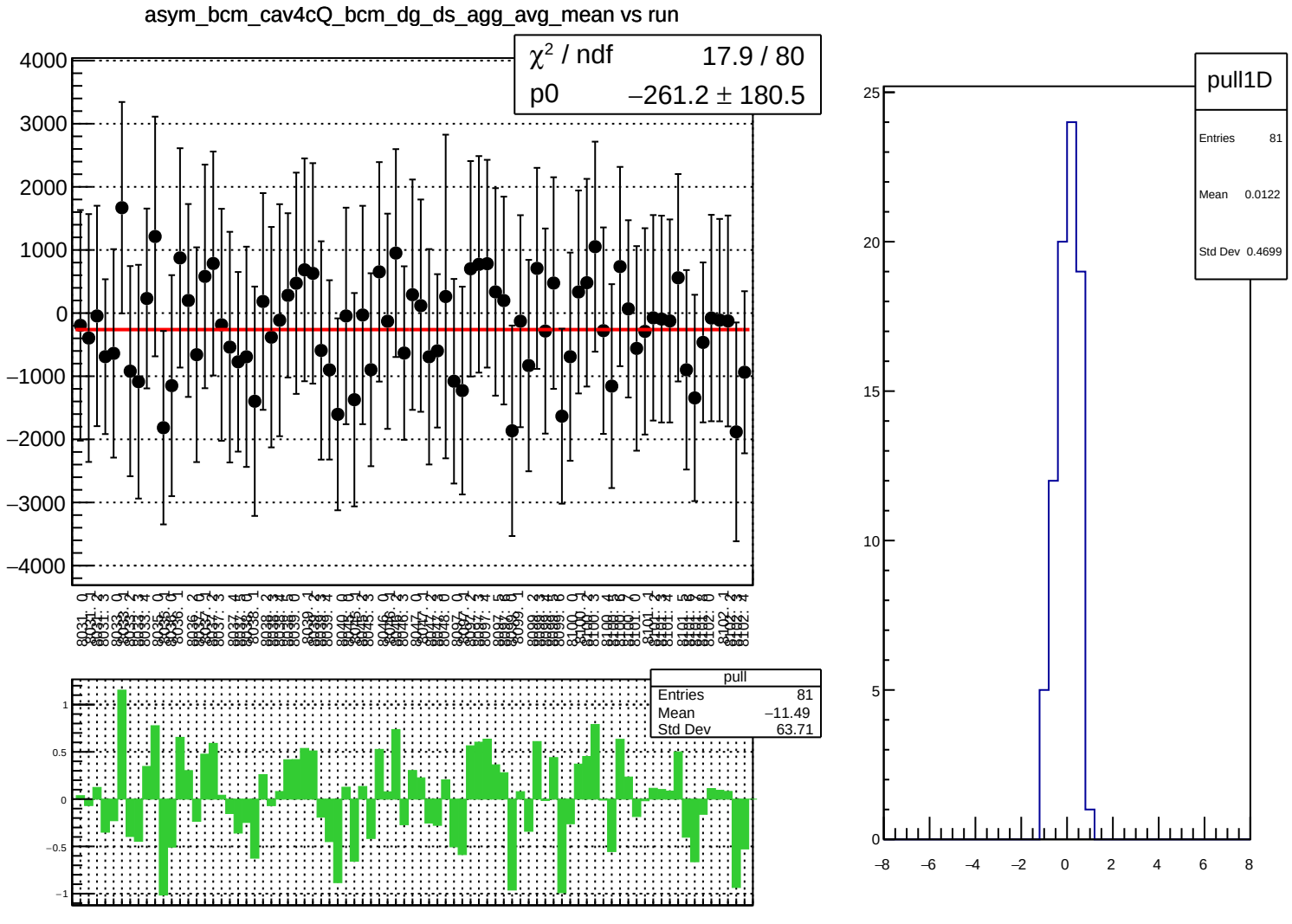

pull1D
Entries 81
Mean 0.0131
Std Dev 0.4498

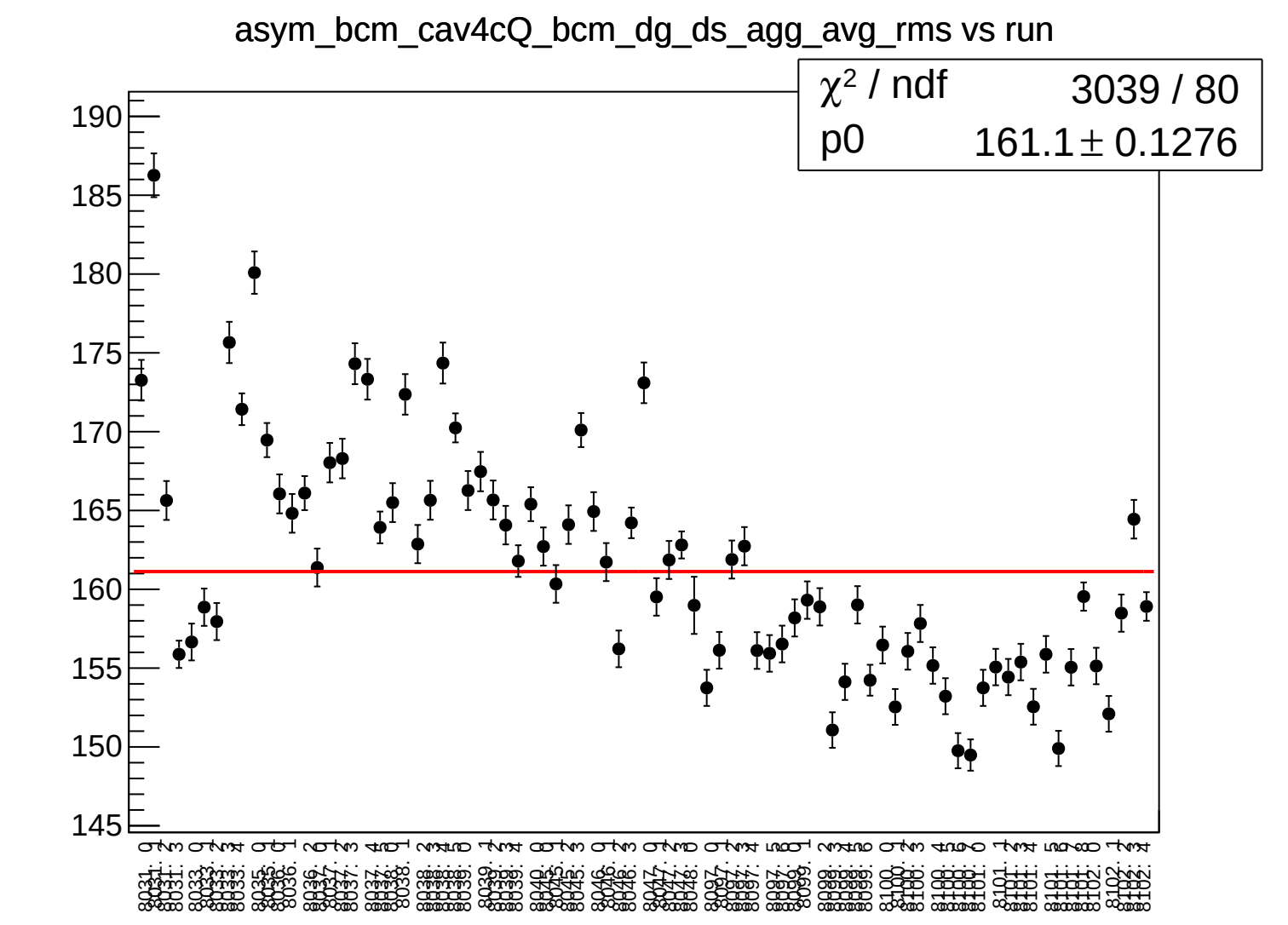

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 3073 / 80
p0 161.5 ± 0.128
190
185
180
175
170
165
160
155
150
145

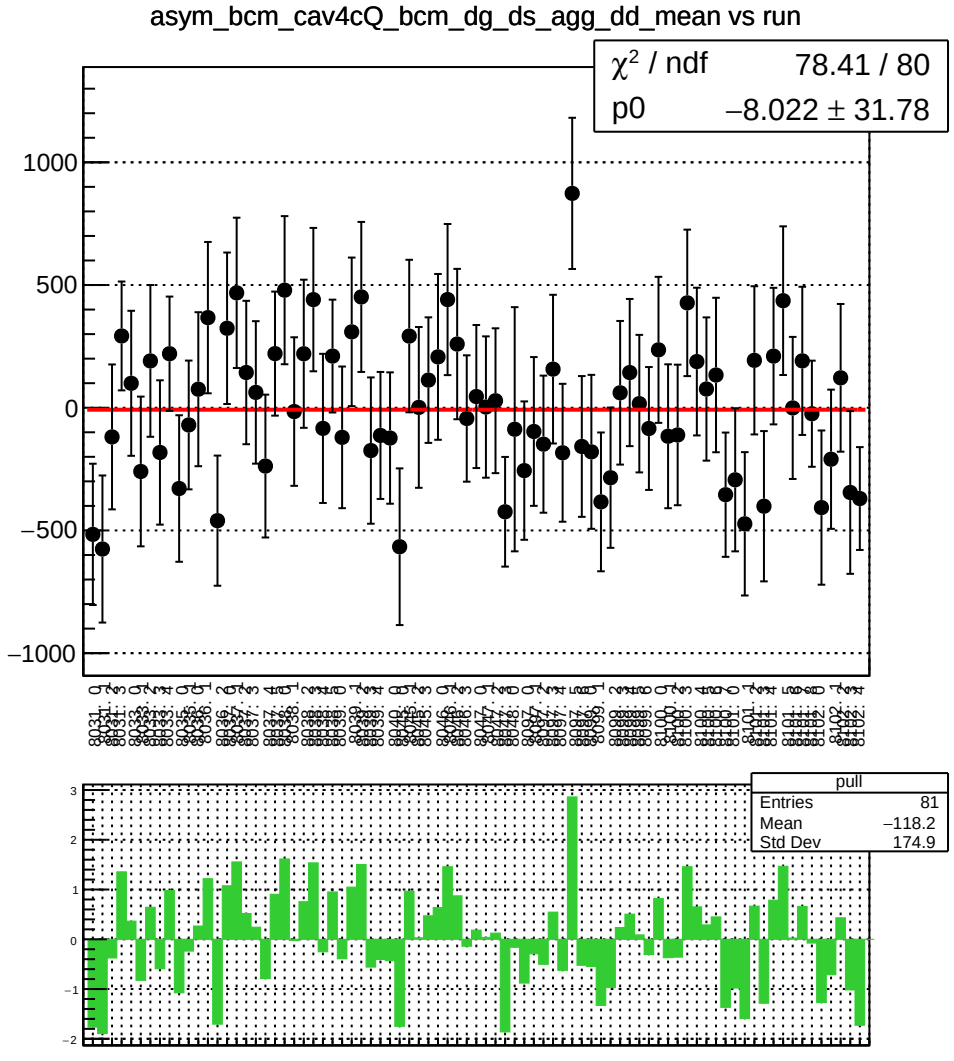

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 86.14 / 80
p0 −19.76 ± 35.58
1000
500
0
−500
−1000
pull
Entries 81
Mean 275.7
Std Dev 246
3
2
1
0
−1
−2

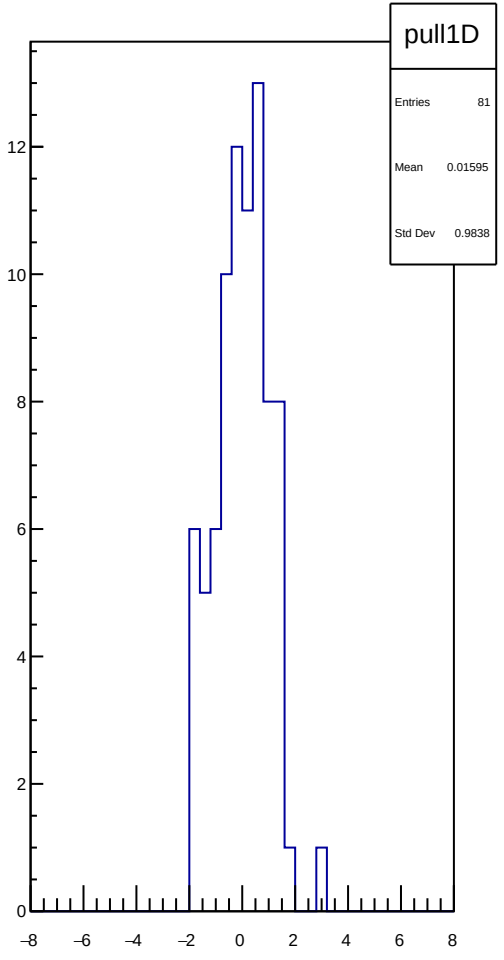

pull1D
Entries 81
Mean 0.008678
Std Dev 1.031
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

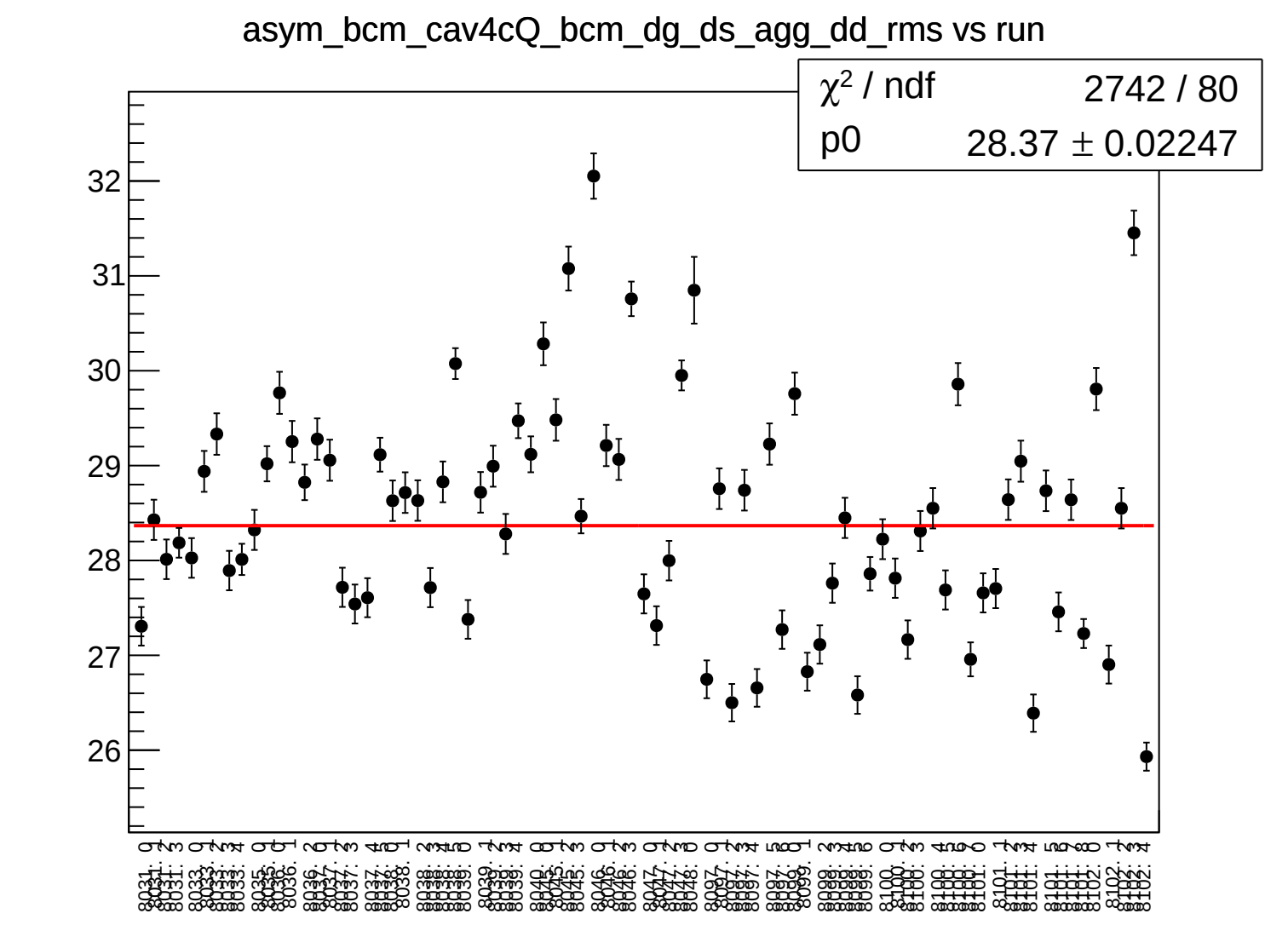

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2191 / 80
p0 31.77 ± 0.02516
35
34
33
32
31
30
29

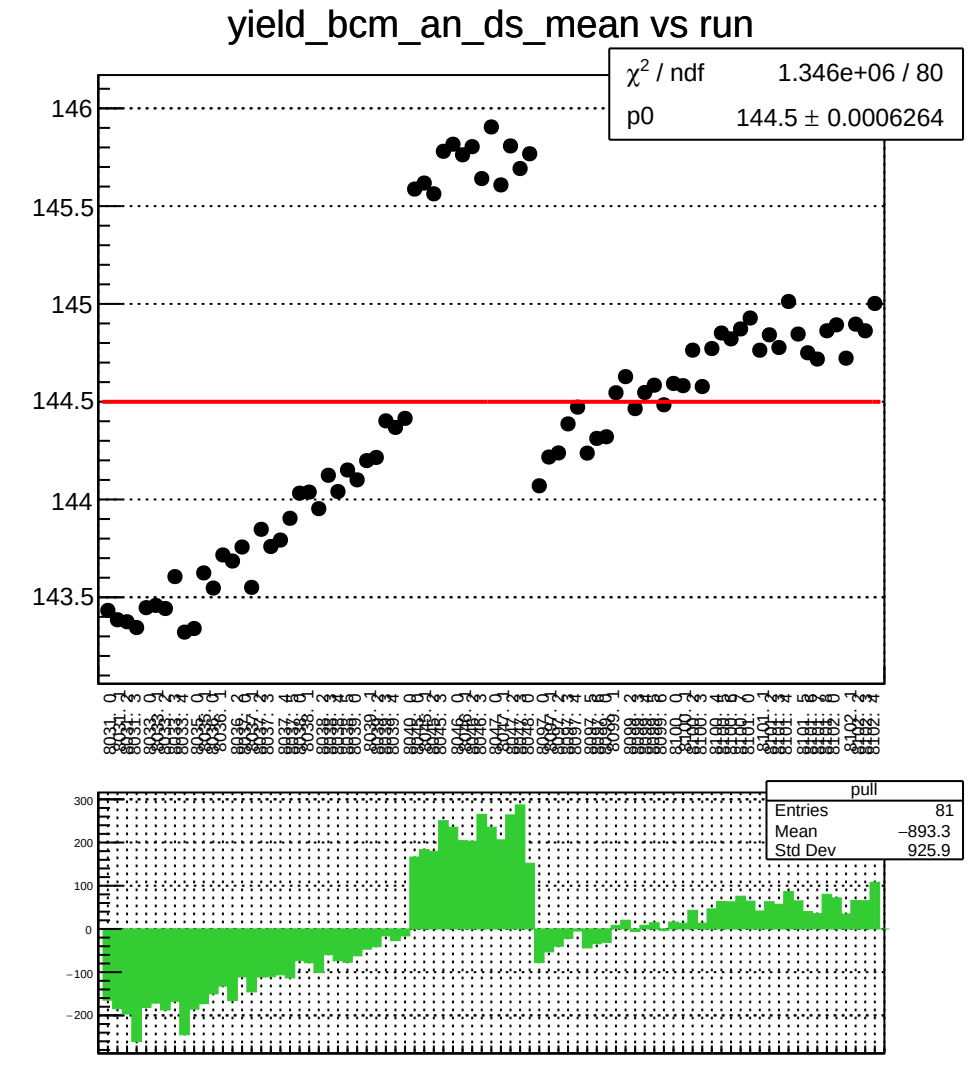

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 17.9 / 80
p0 −261.2 ± 180.5
pull
Entries 81
Mean −11.49
Std Dev 63.71
pull1D
Entries 81
Mean 0.0122
Std Dev 0.4699

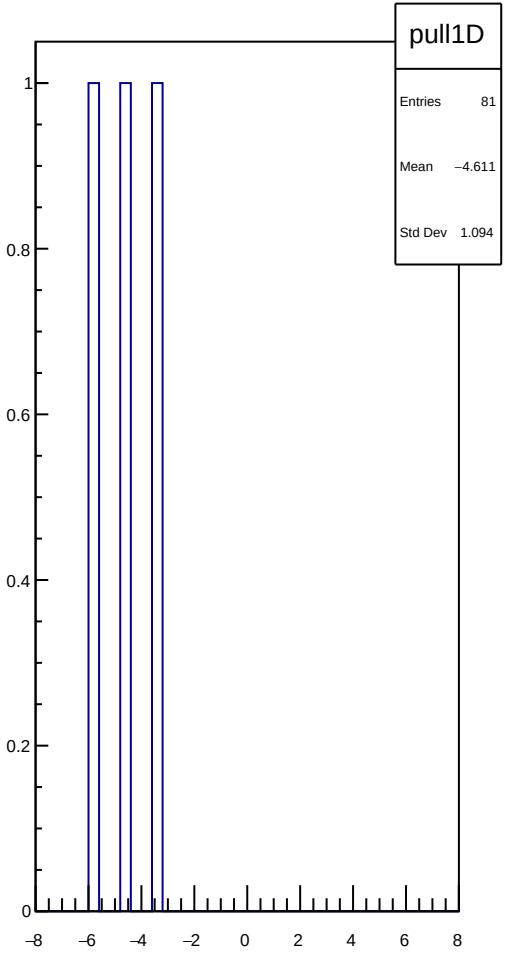

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 3039 / 80
p0 161.1 ± 0.1276
190
185
180
175
170
165
160
155
150
145

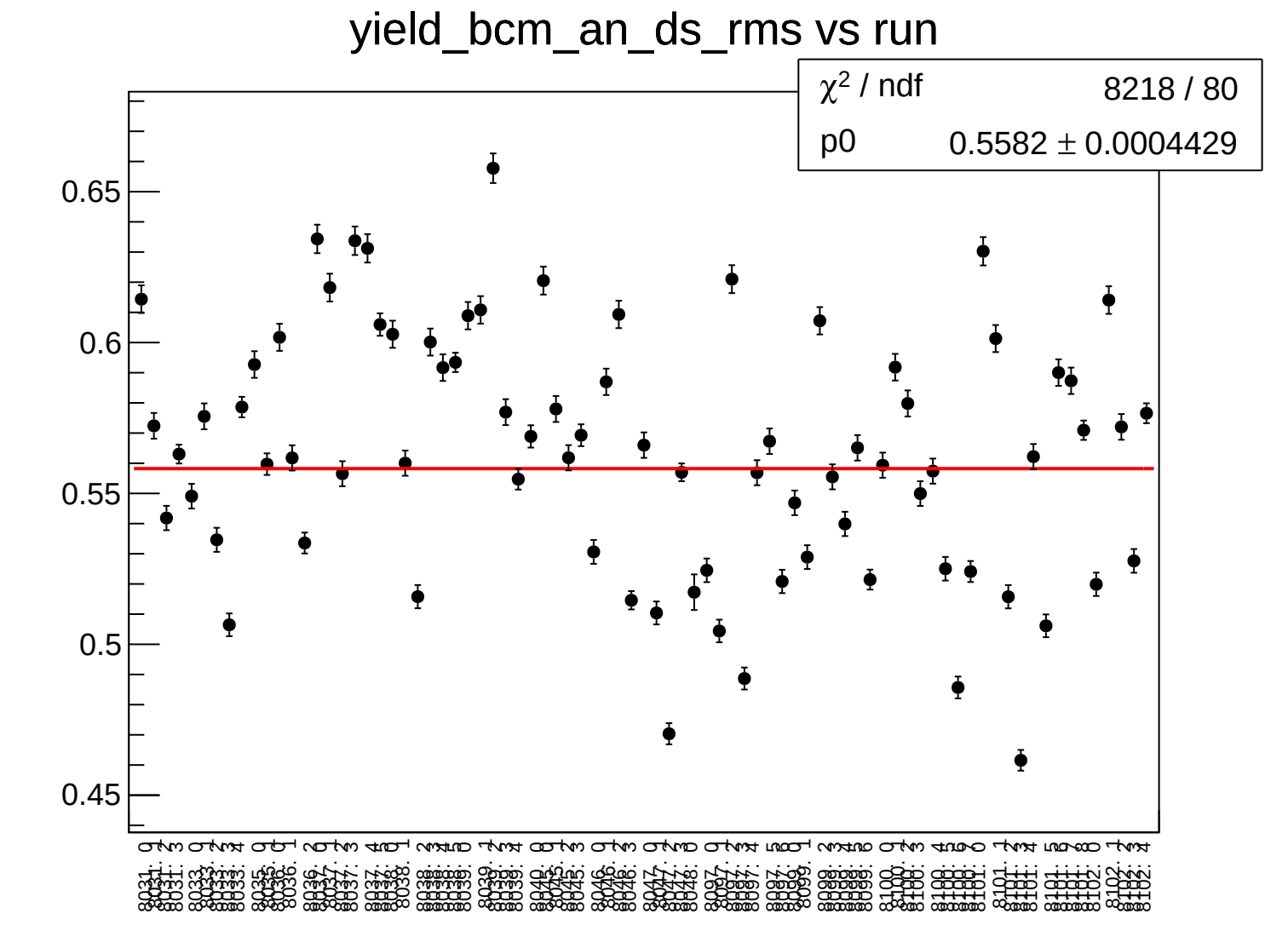

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 78.41 / 80
p0 −8.022 ± 31.78
1000
500
0
−500
−1000
pull
Entries 81
Mean −118.2
Std Dev 174.9
3
2
1
0
−1
−2

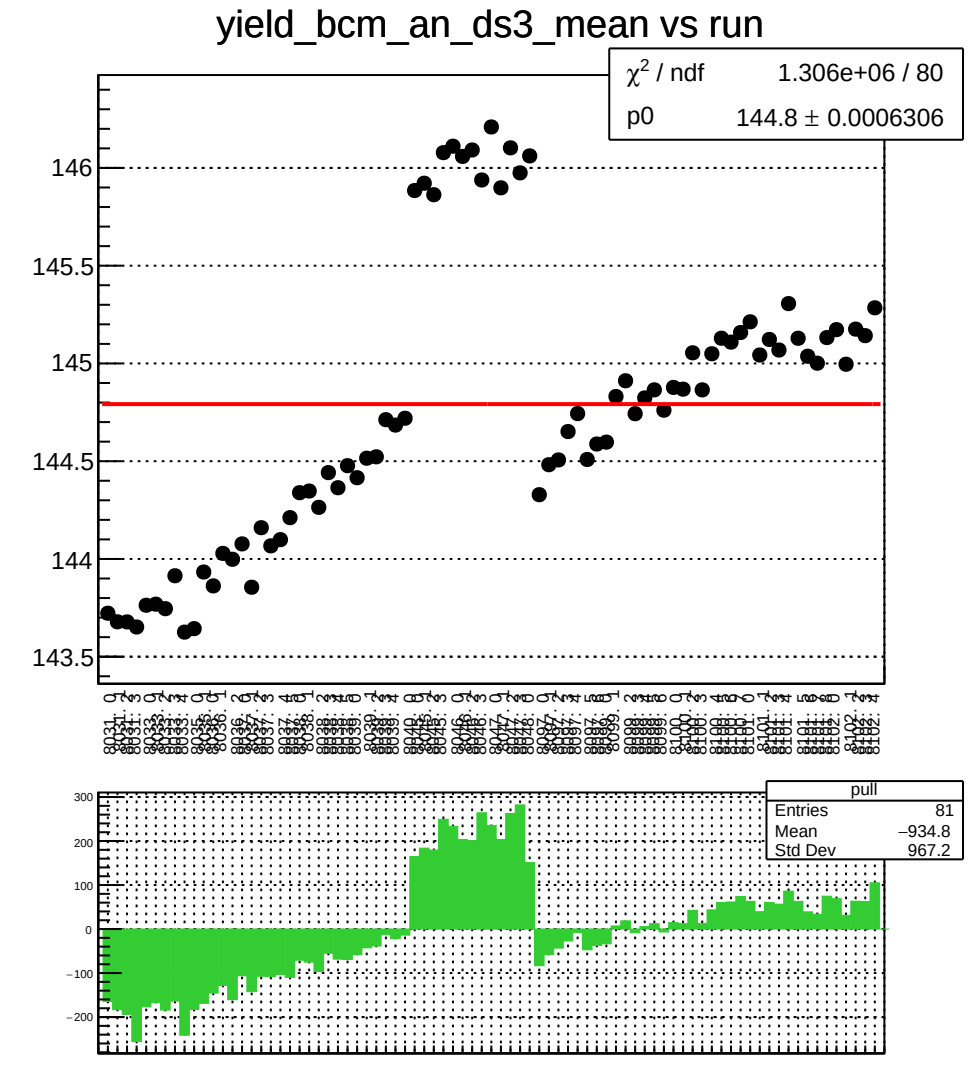

pull1D
Entries 81
Mean 0.01595
Std Dev 0.9838
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

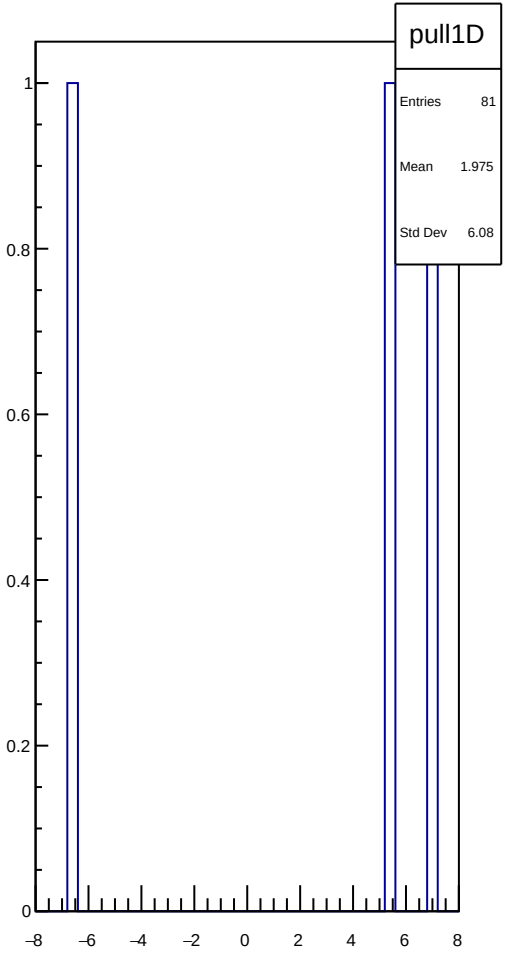

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2742 / 80
p0 28.37 ± 0.02247
32
31
30
29
28
27
26

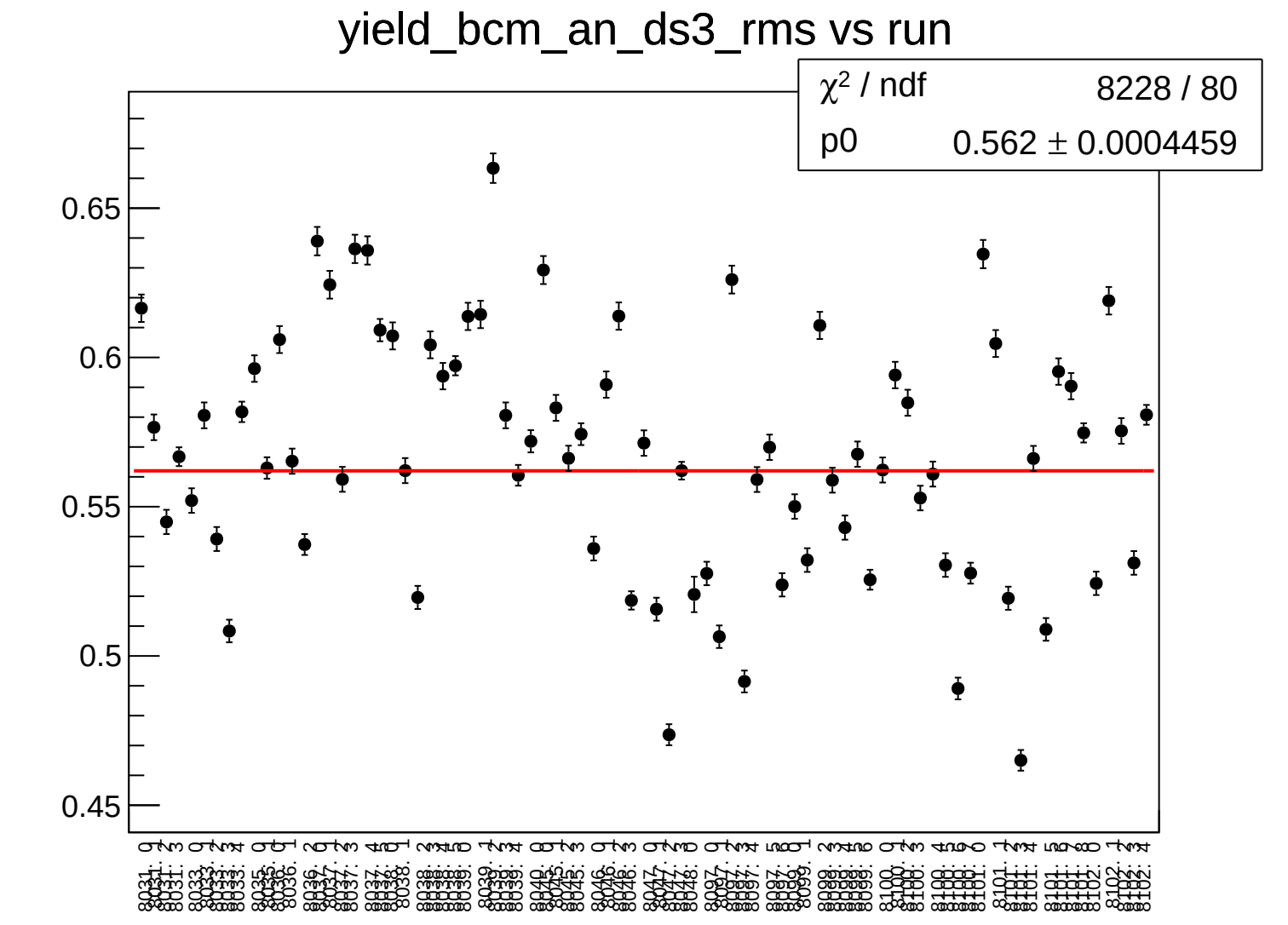

yield_bcm_an_ds_mean vs run
χ² / ndf 1.346e+06 / 80
p0 144.5 ± 0.0006264
146
145.5
145
144.5
144
143.5
pull
Entries 81
Mean −893.3
Std Dev 925.9
300
200
100
0
−100
−200

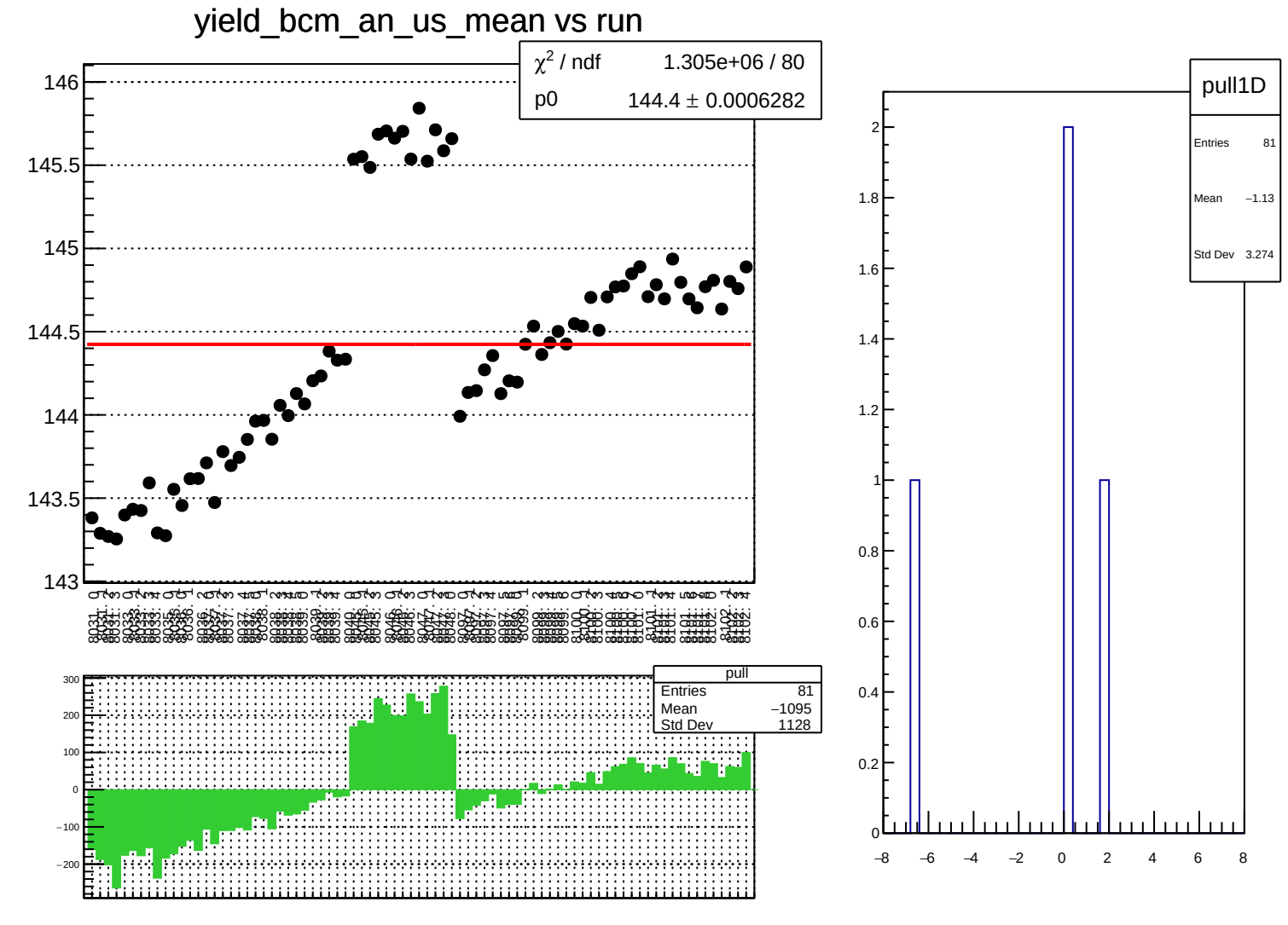

pull1D
Entries 81
Mean −4.611
Std Dev 1.094
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

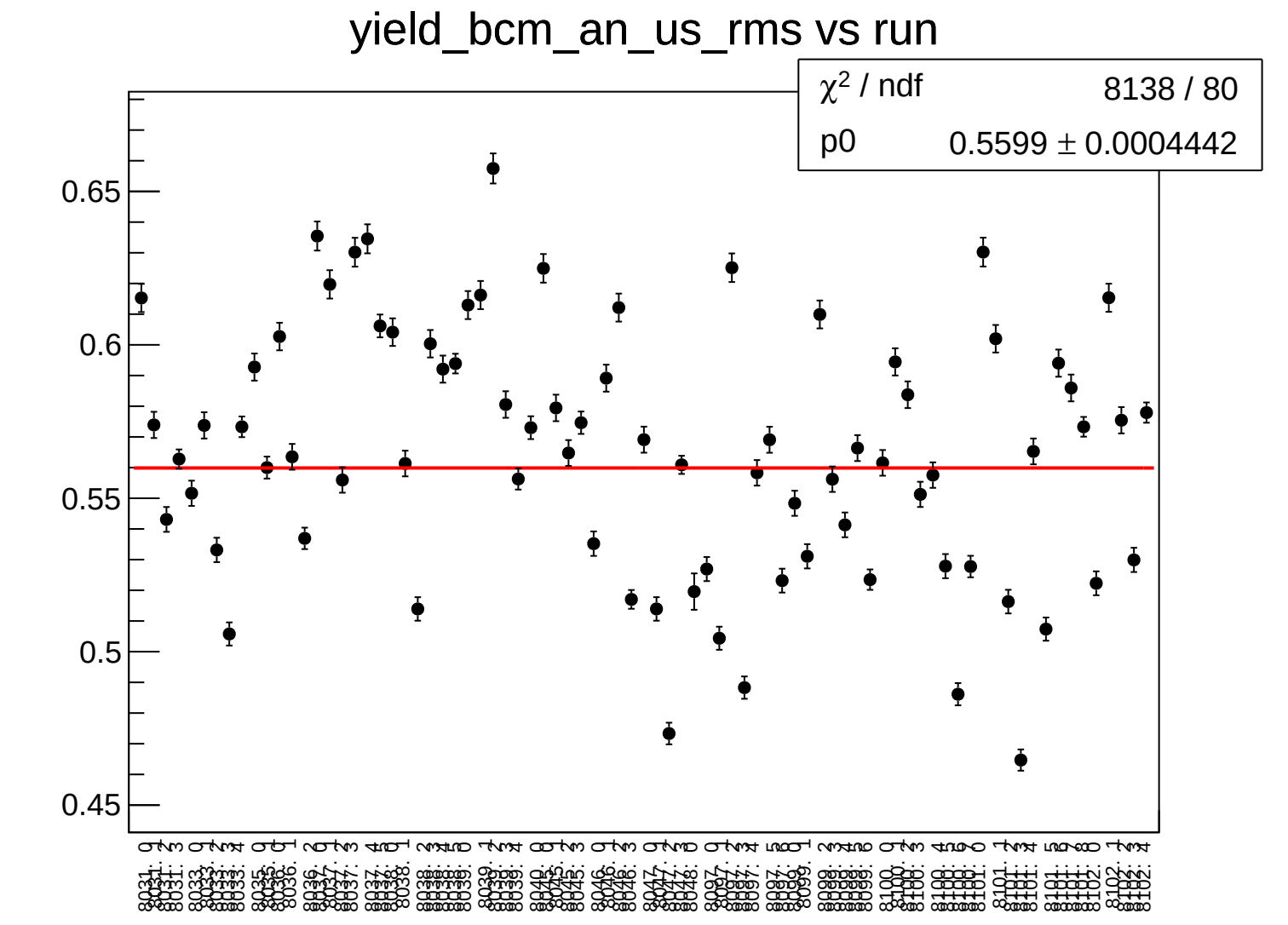

yield_bcm_an_ds_rms vs run
χ² / ndf 8218 / 80
p0 0.5582 ± 0.0004429
0.65
0.6
0.55
0.5
0.45

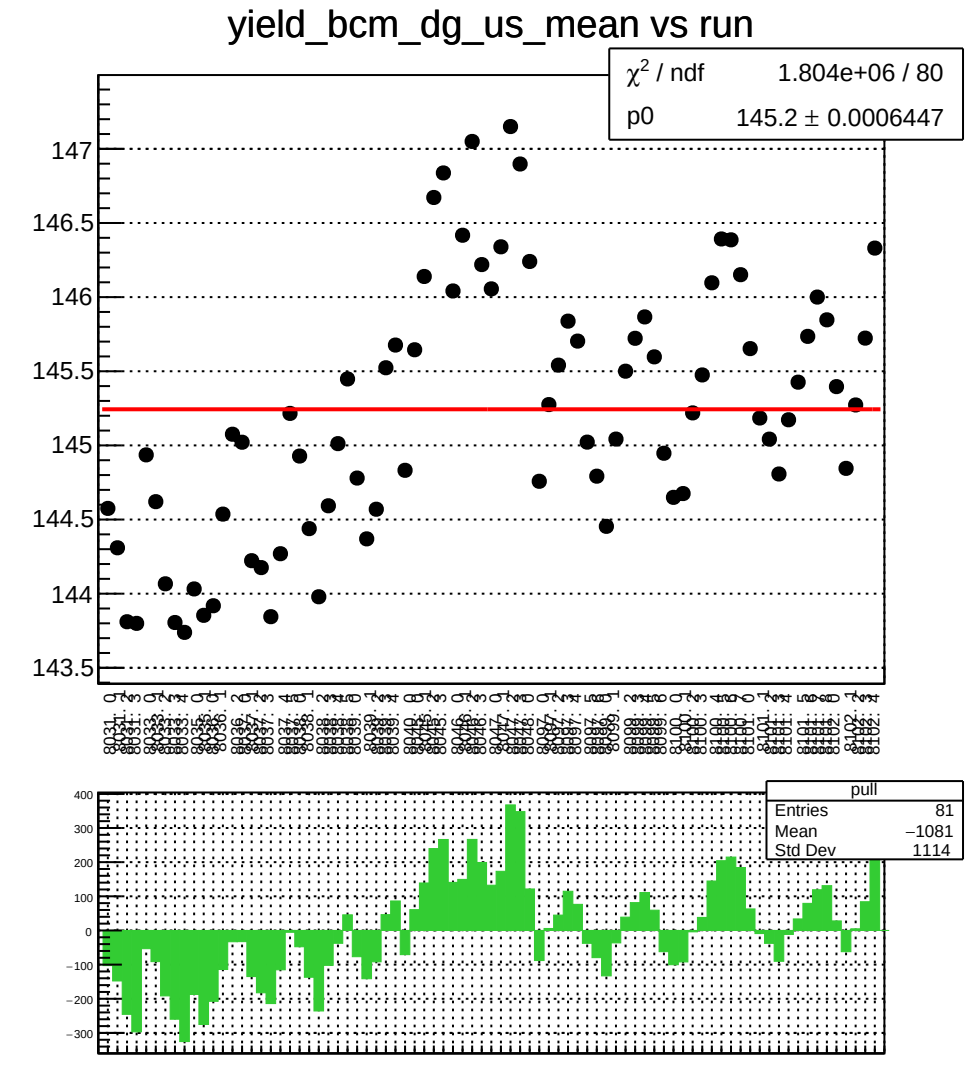

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.306e+06 / 80
p0 144.8 ± 0.0006306
146
145.5
145
144.5
144
143.5
pull
Entries 81
Mean −934.8
Std Dev 967.2
300
200
100
0
−100
−200

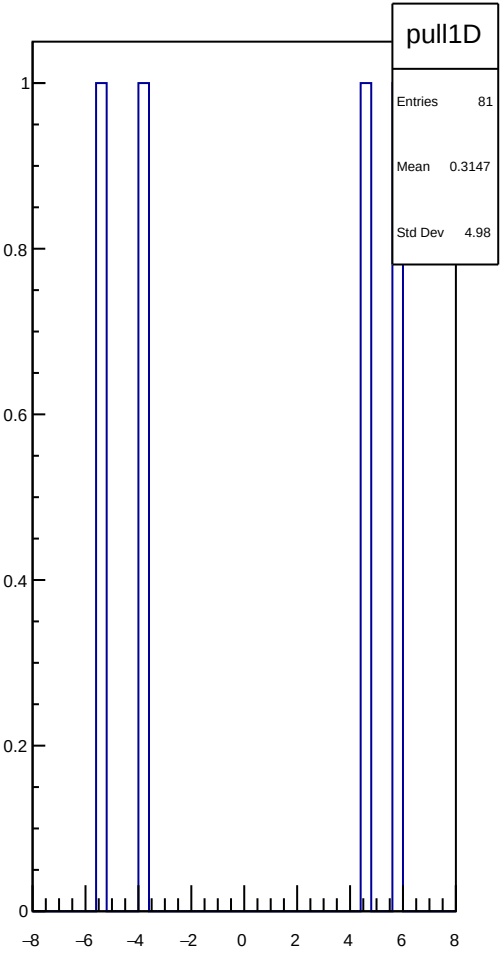

pull1D
Entries 81
Mean 1.975
Std Dev 6.08
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

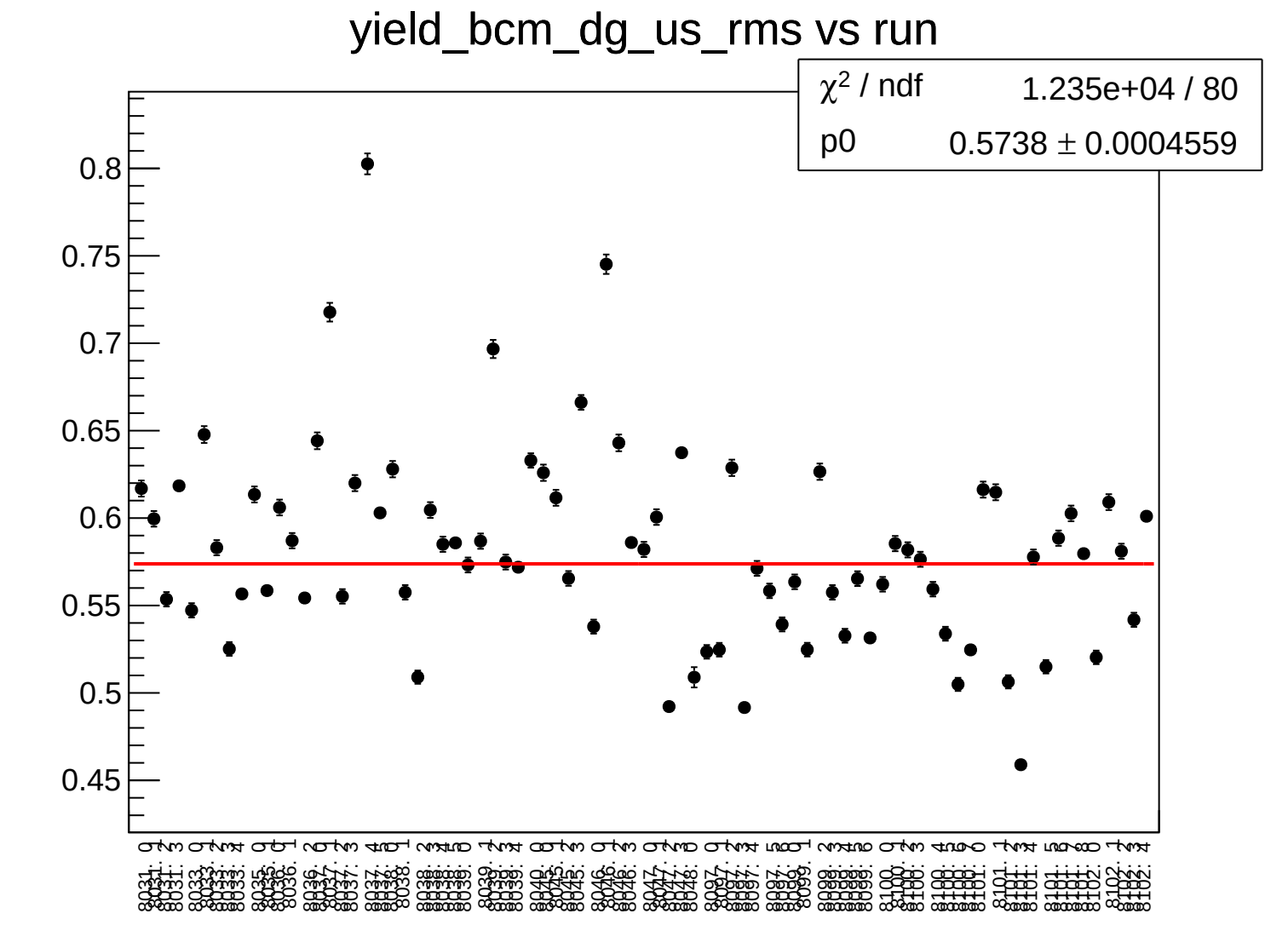

yield_bcm_an_ds3_rms vs run
χ² / ndf 8228 / 80
p0 0.562 ± 0.0004459
0.65
0.6
0.55
0.5
0.45

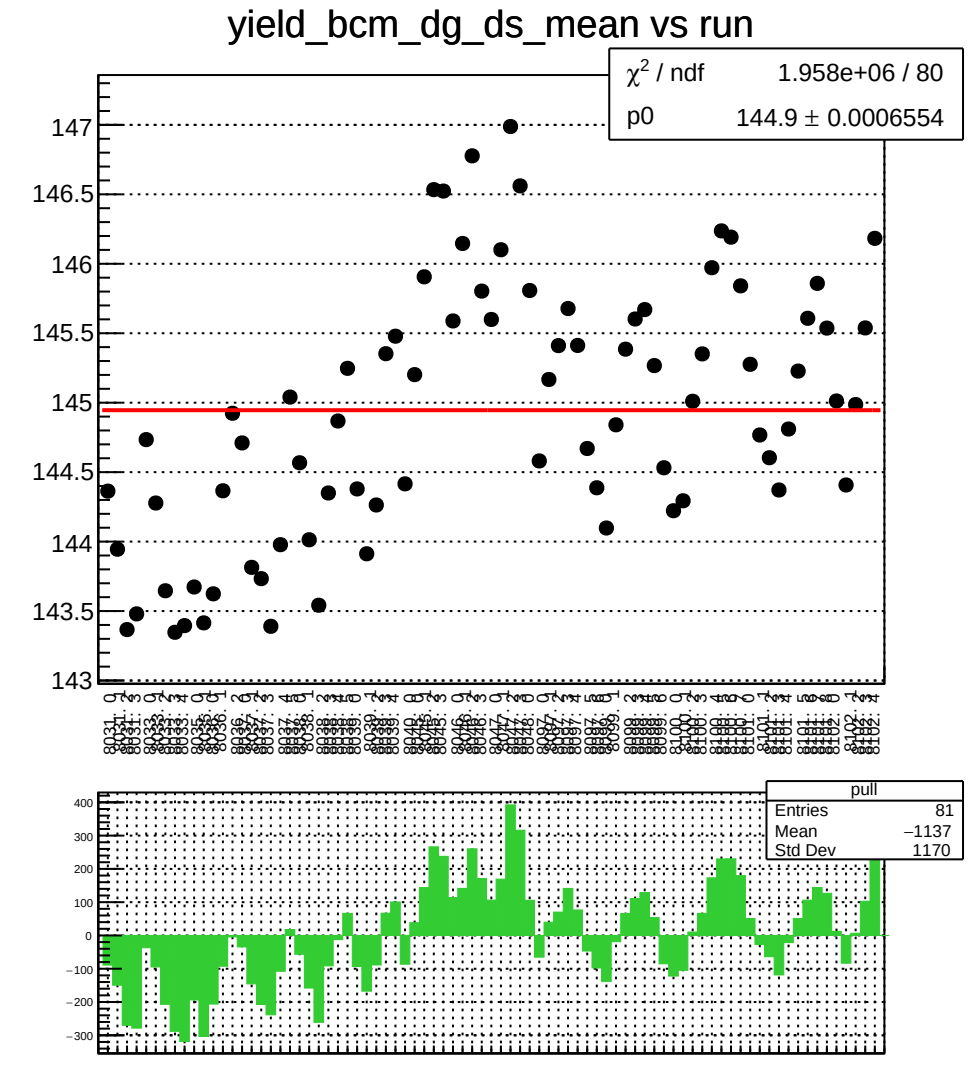

yield_bcm_an_us_mean vs run
χ² / ndf 1.305e+06 / 80
p0 144.4 ± 0.0006282
146
145.5
145
144.5
144
143.5
143
pull
Entries 81
Mean −1095
Std Dev 1128
300
200
100
0
−100
−200
pull1D
Entries 81
Mean −1.13
Std Dev 3.274
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

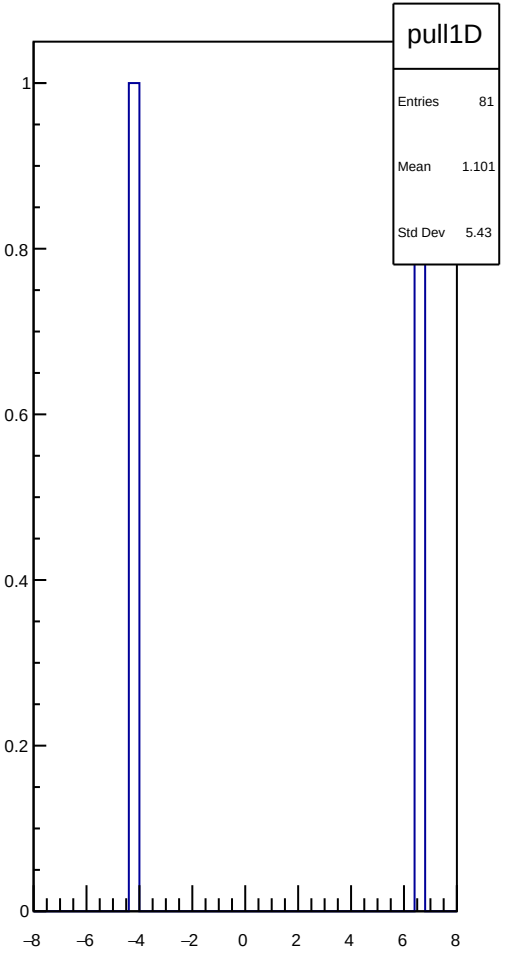

yield_bcm_an_us_rms vs run
χ² / ndf 8138 / 80
p0 0.5599 ± 0.0004442
0.65
0.6
0.55
0.5
0.45

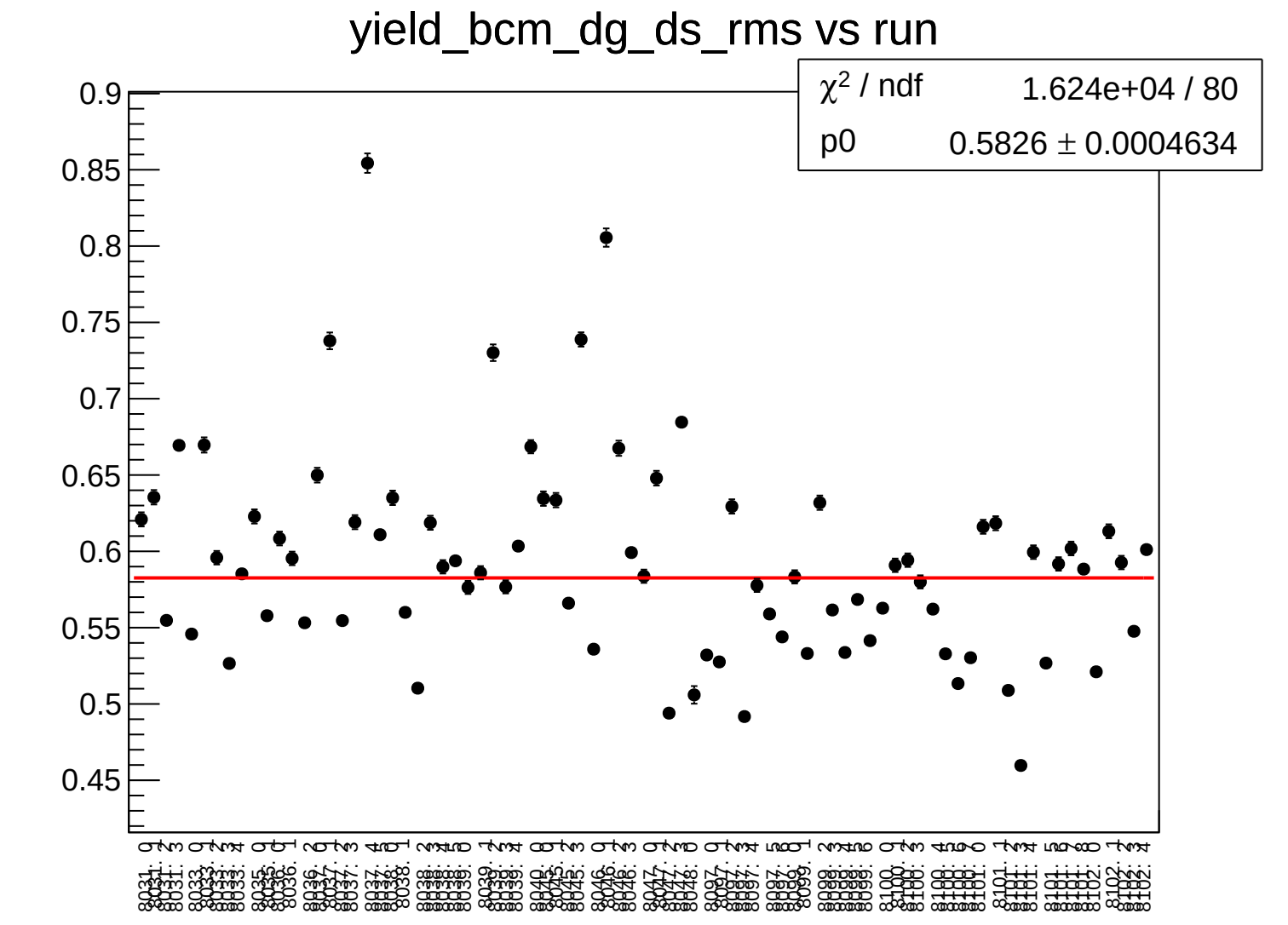

yield_bcm_dg_us_mean vs run
χ² / ndf 1.804e+06 / 80
p0 145.2 ± 0.0006447
147
146.5
146
145.5
145
144.5
144
143.5
pull
Entries 81
Mean −1081
Std Dev 1114
400
300
200
100
0
−100
−200
−300

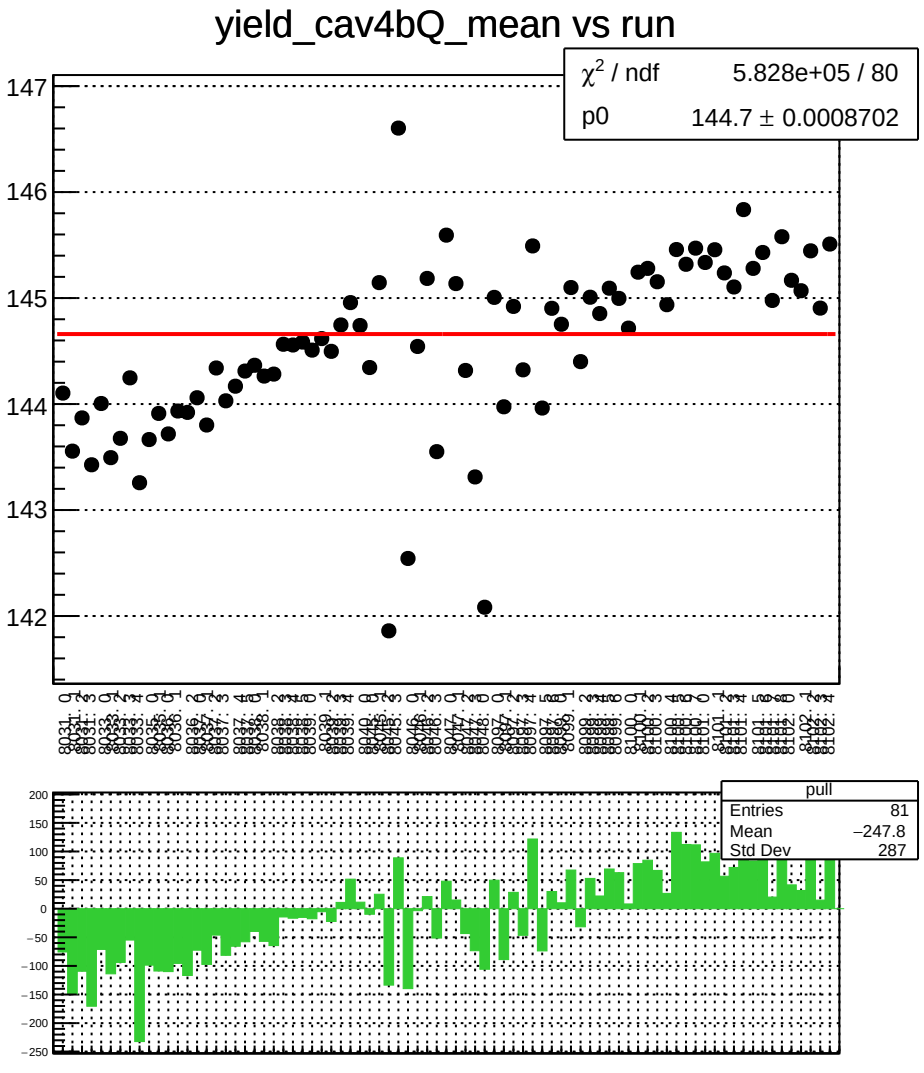

pull1D
Entries 81
Mean 0.3147
Std Dev 4.98
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

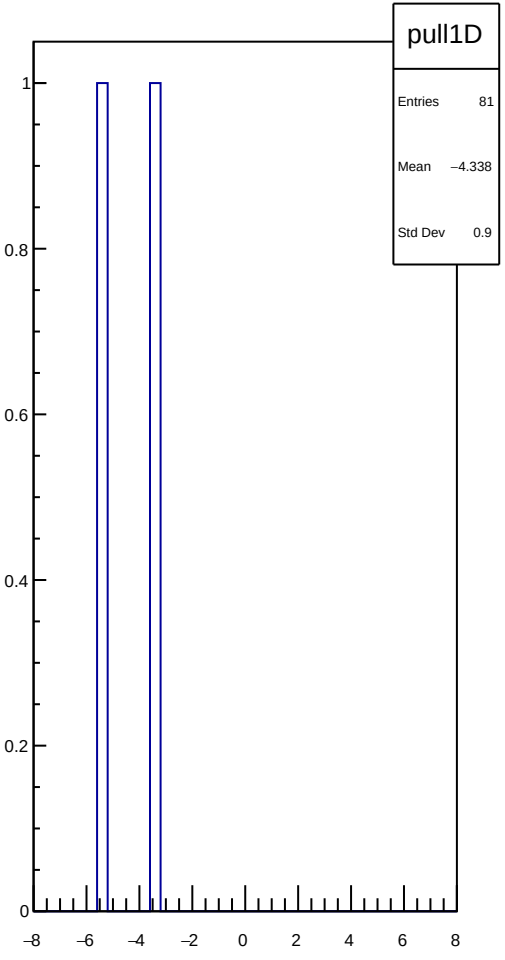

yield_bcm_dg_us_rms vs run
χ² / ndf 1.235e+04 / 80
p0 0.5738 ± 0.0004559
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

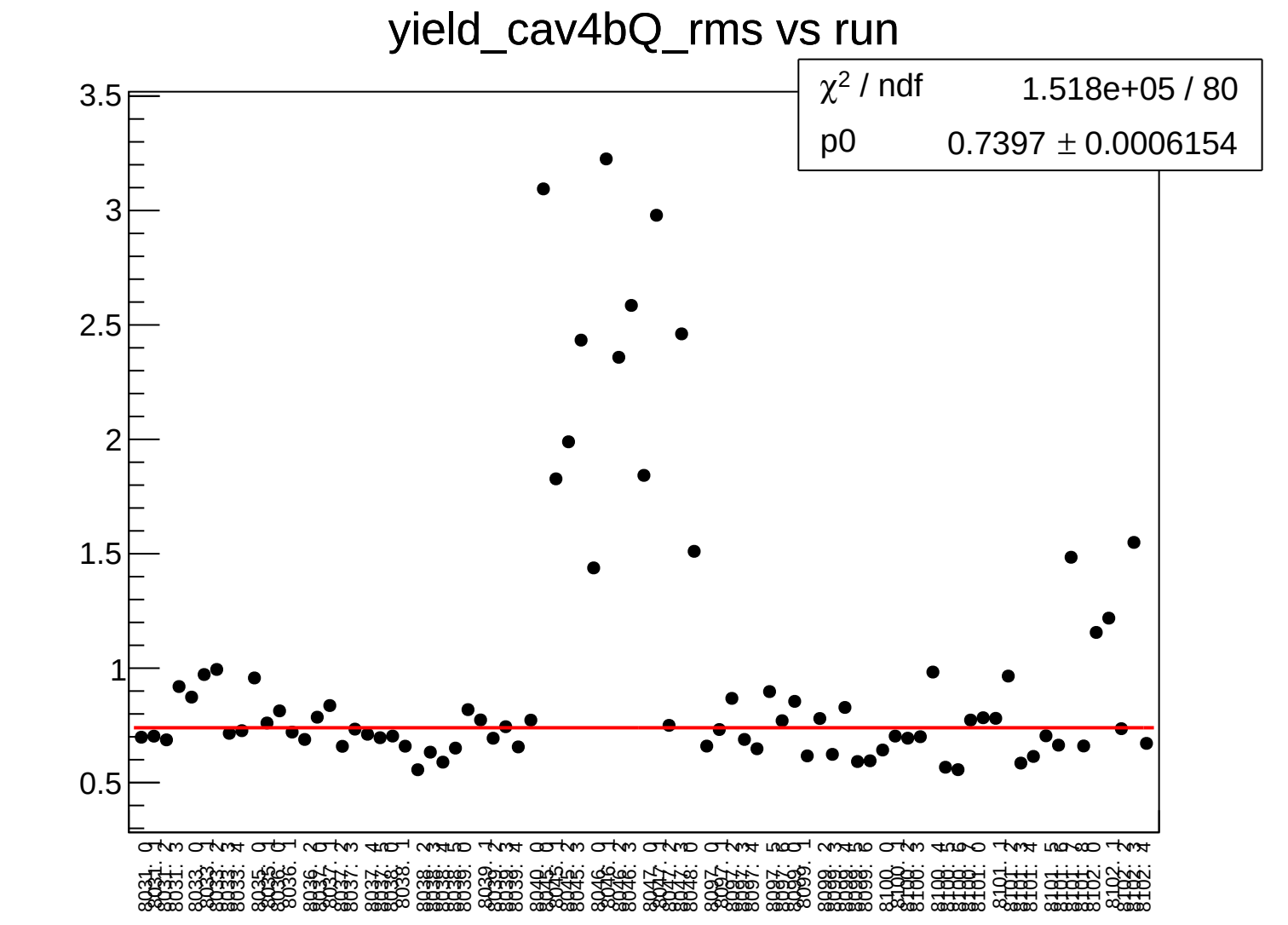

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.958e+06 / 80
p0 144.9 ± 0.0006554
147
146.5
146
145.5
145
144.5
144
143.5
143
pull
Entries 81
Mean −1137
Std Dev 1170
400
300
200
100
0
−100
−200
−300

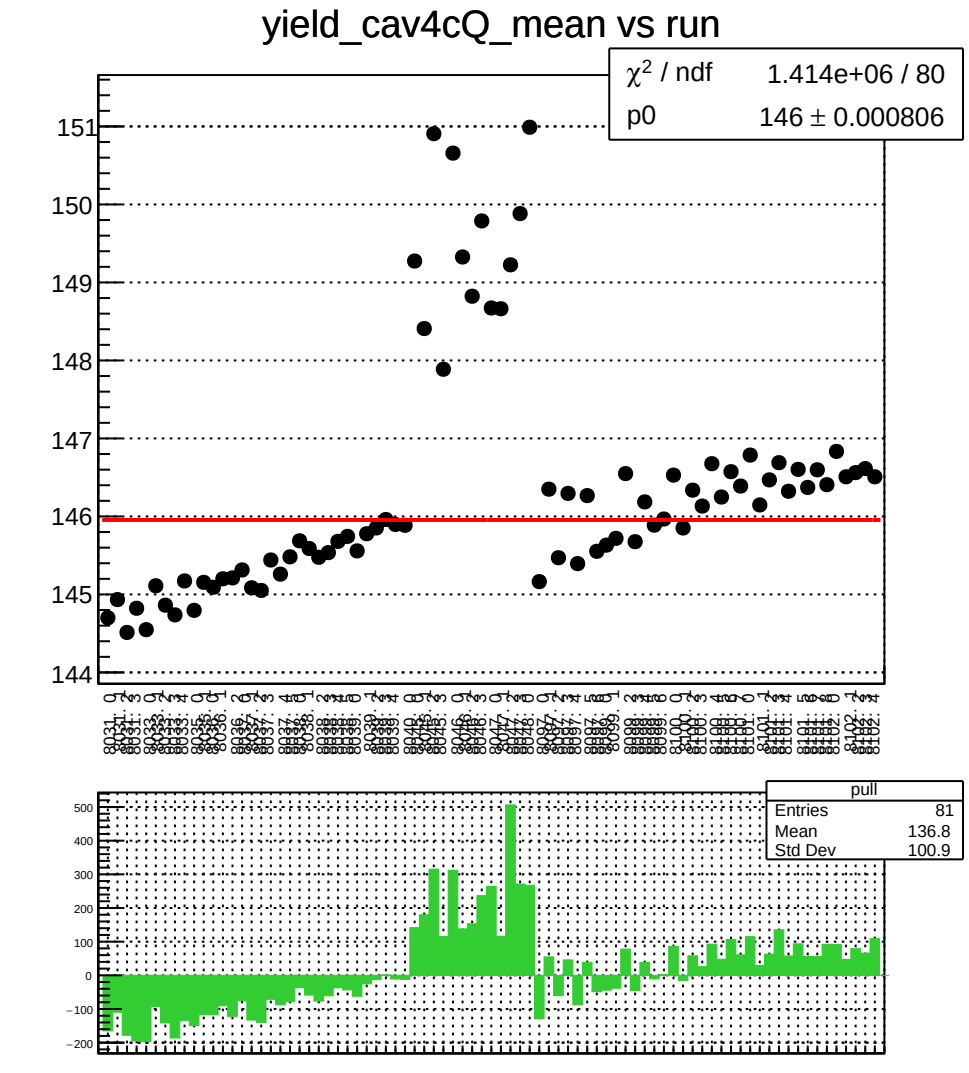

pull1D
Entries 81
Mean 1.101
Std Dev 5.43
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

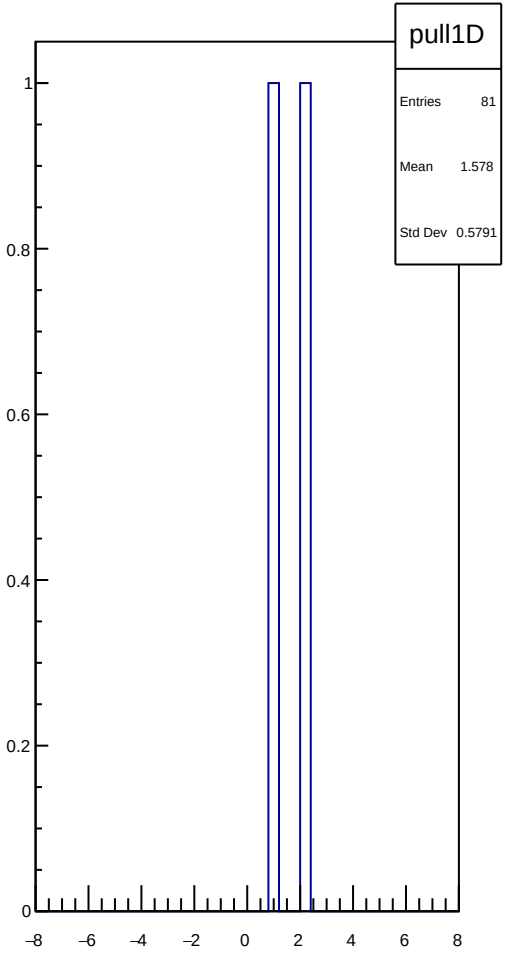

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.624e+04 / 80
p0 0.5826 ± 0.0004634
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

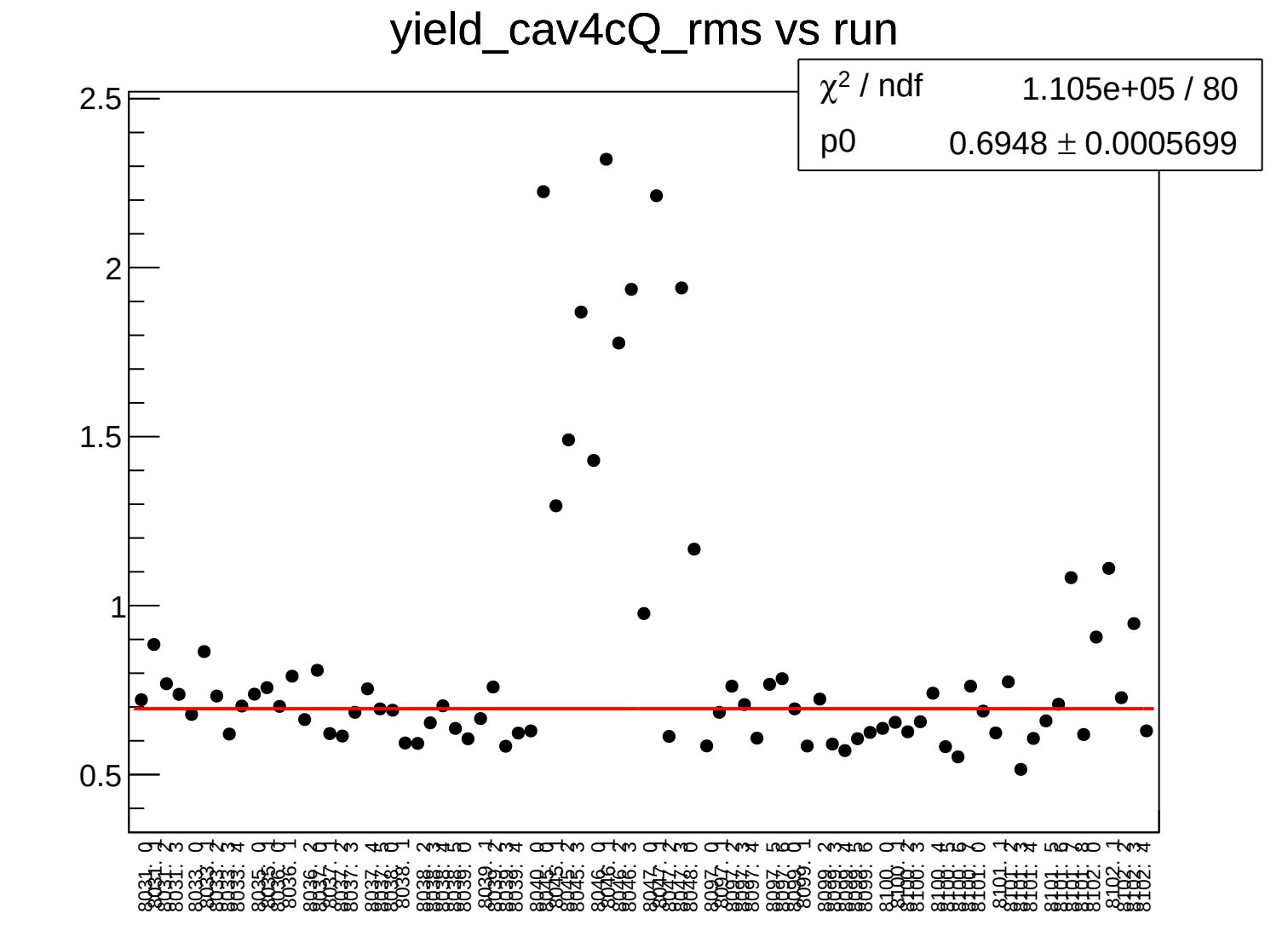

yield_cav4bQ_mean vs run
χ² / ndf 5.828e+05 / 80
p0 144.7 ± 0.0008702
147
146
145
144
143
142
pull
Entries 81
Mean −247.8
Std Dev 287
200
150
100
50
0
−50
−100
−150
−200
−250

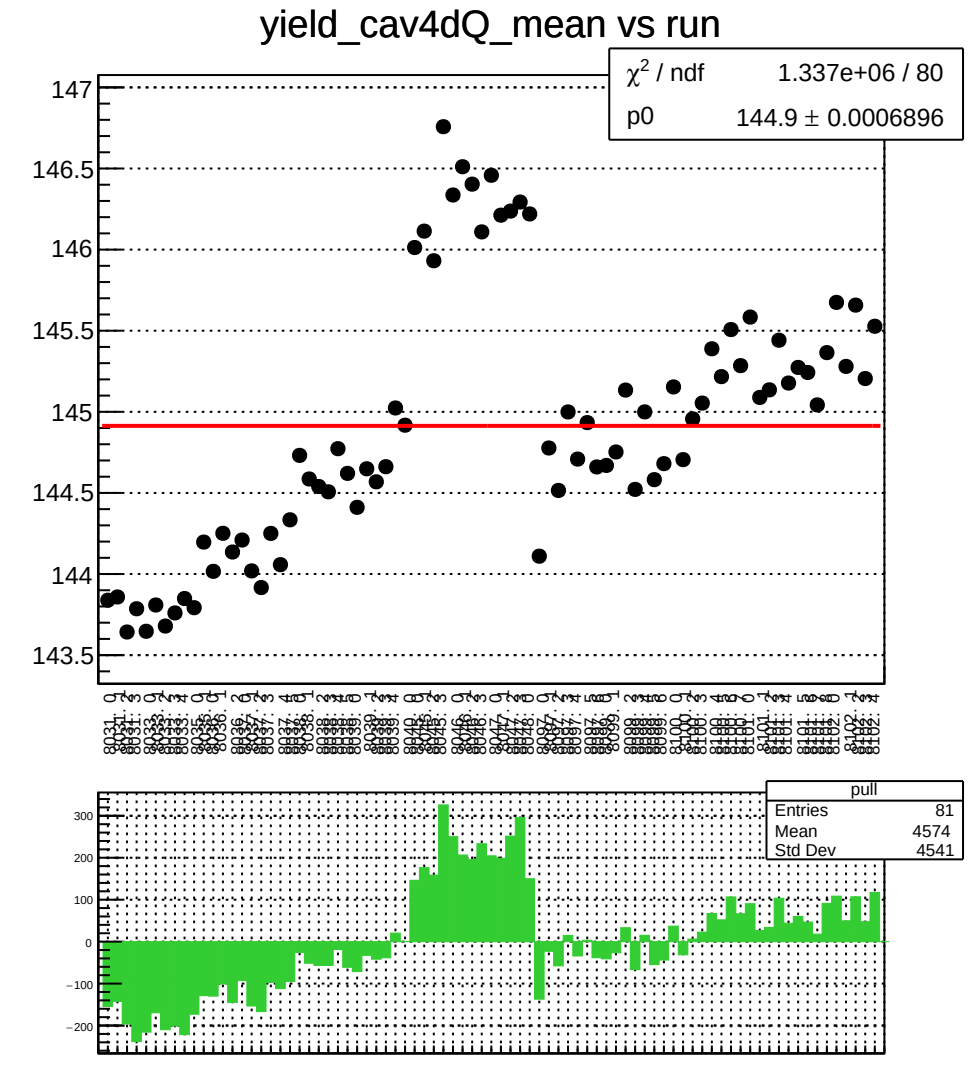

pull1D
Entries 81
Mean −4.338
Std Dev 0.9
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

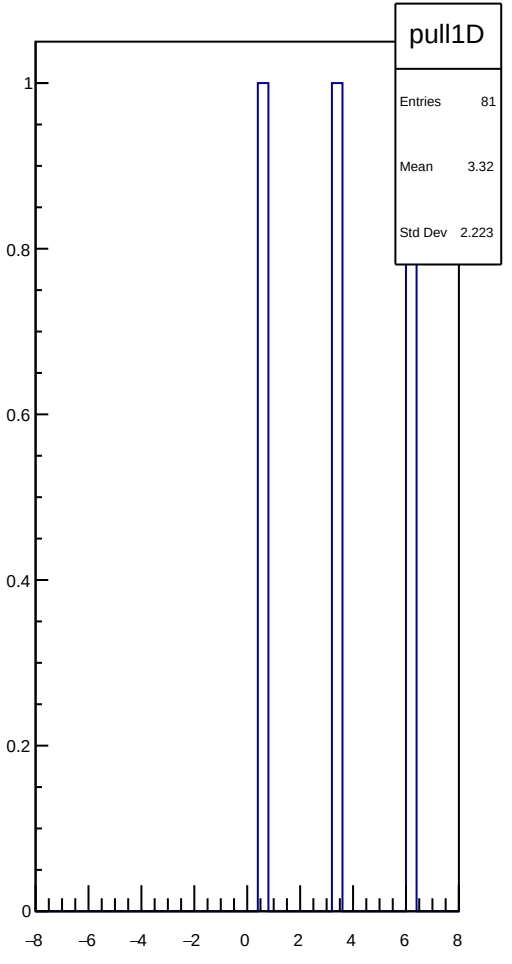

yield_cav4bQ_rms vs run
χ² / ndf 1.518e+05 / 80
p0 0.7397 ± 0.0006154
3.5
3
2.5
2
1.5
1
0.5

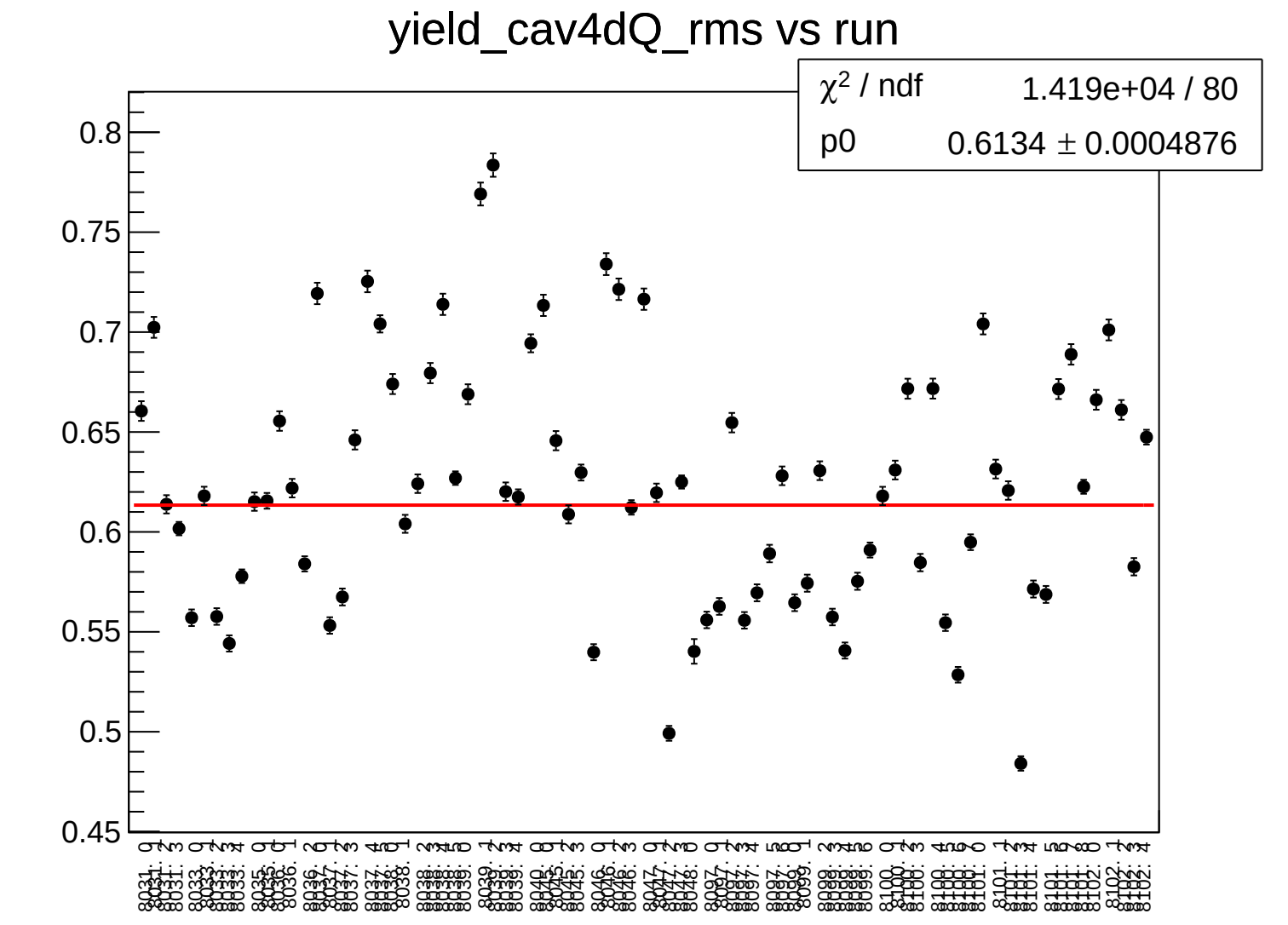

yield_cav4cQ_mean vs run
χ² / ndf 1.414e+06 / 80
p0 146 ± 0.000806
151
150
149
148
147
146
145
144
pull
Entries 81
Mean 136.8
Std Dev 100.9
500
400
300
200
100
0
−100
−200

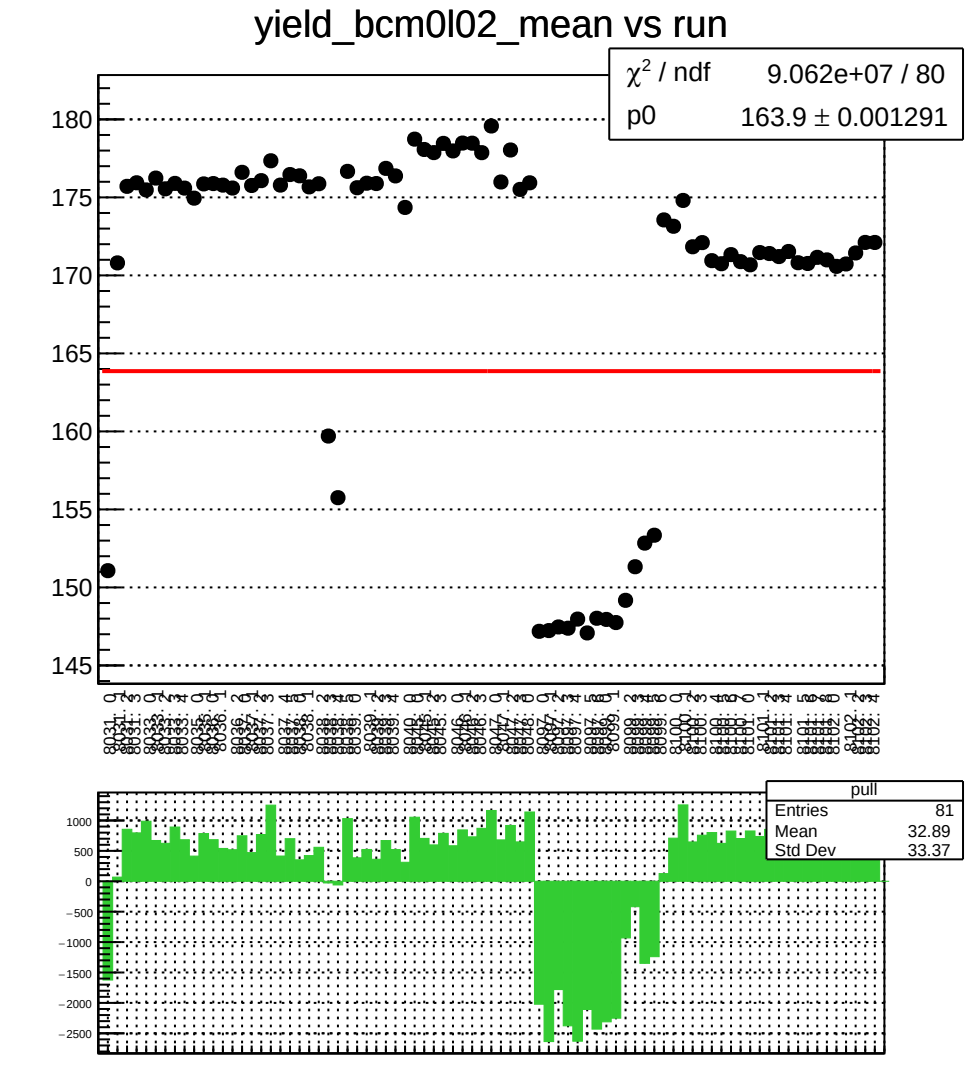

pull1D
Entries 81
Mean 1.578
Std Dev 0.5791
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

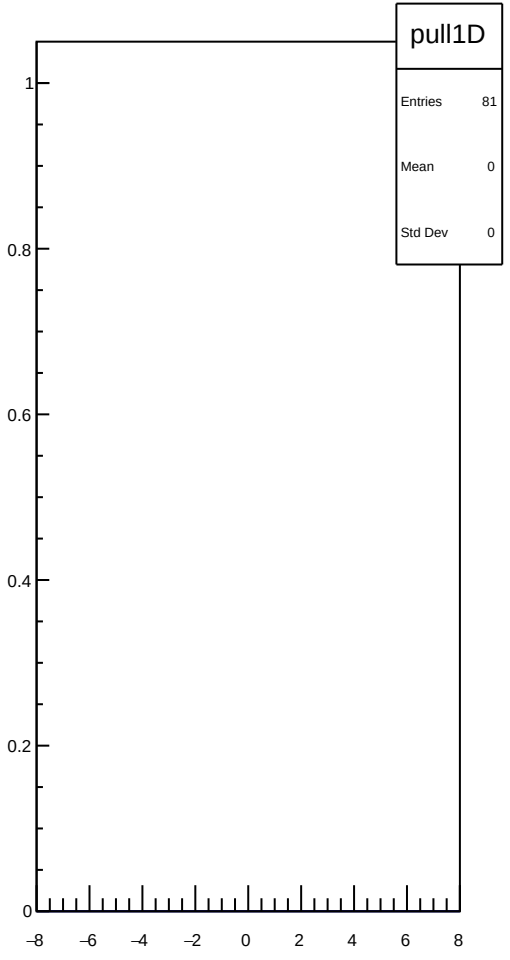

yield_cav4cQ_rms vs run
χ² / ndf 1.105e+05 / 80
p0 0.6948 ± 0.0005699
2.5
2
1.5
1
0.5

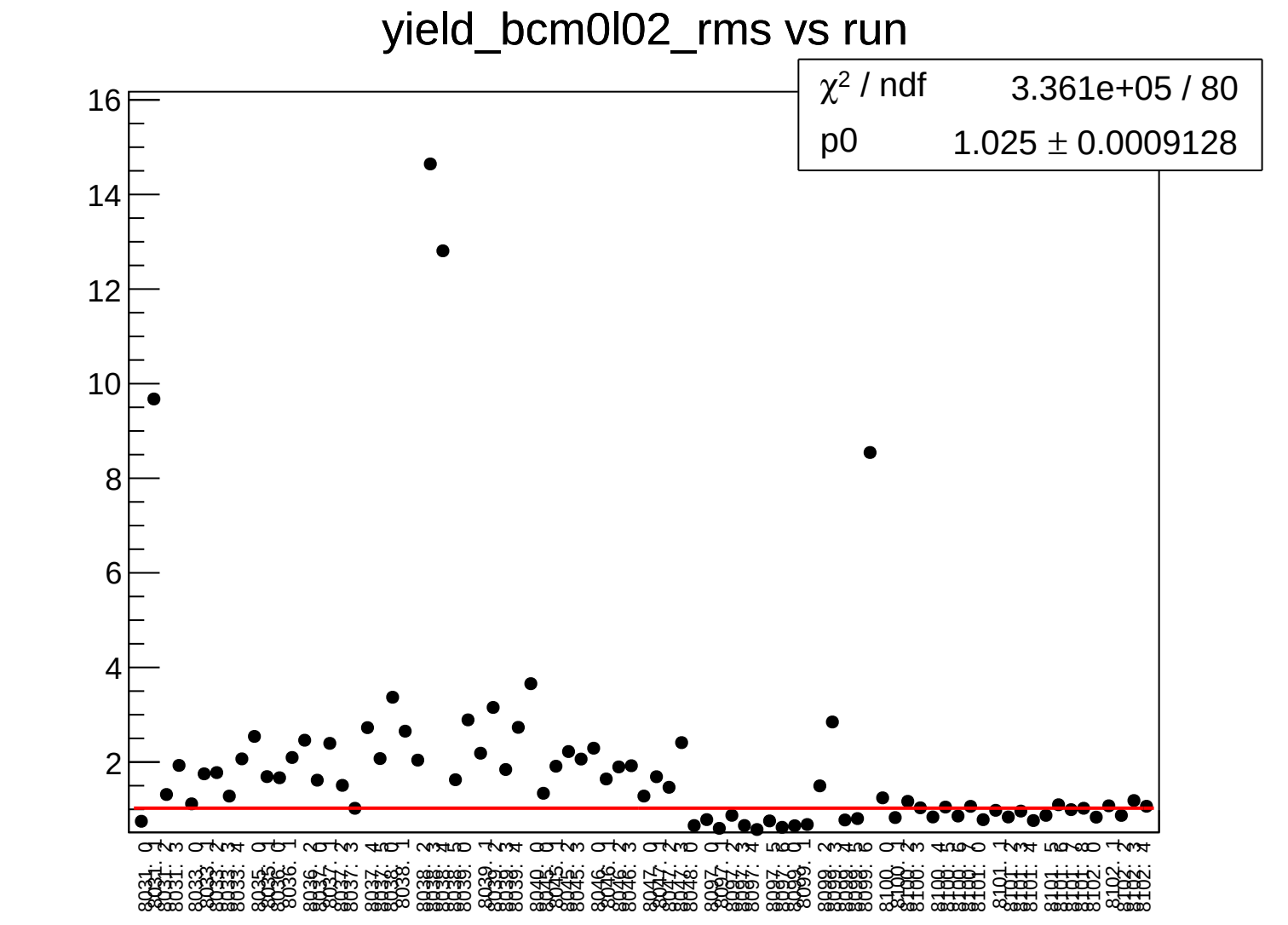

yield_cav4dQ_mean vs run
χ² / ndf 1.337e+06 / 80
p0 144.9 ± 0.0006896
147
146.5
146
145.5
145
144.5
144
143.5
pull
Entries 81
Mean 4574
Std Dev 4541
300
200
100
0
−100
−200

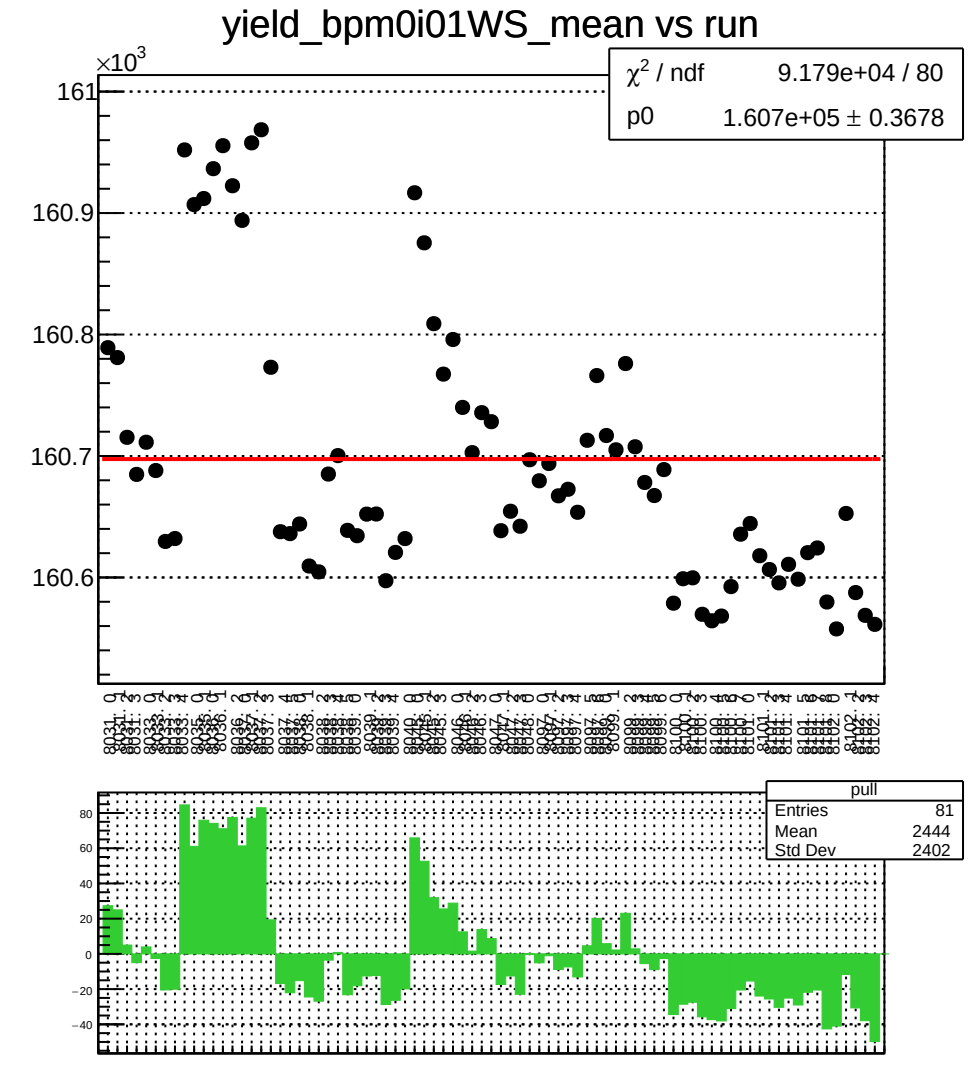

pull1D
Entries 81
Mean 3.32
Std Dev 2.223
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

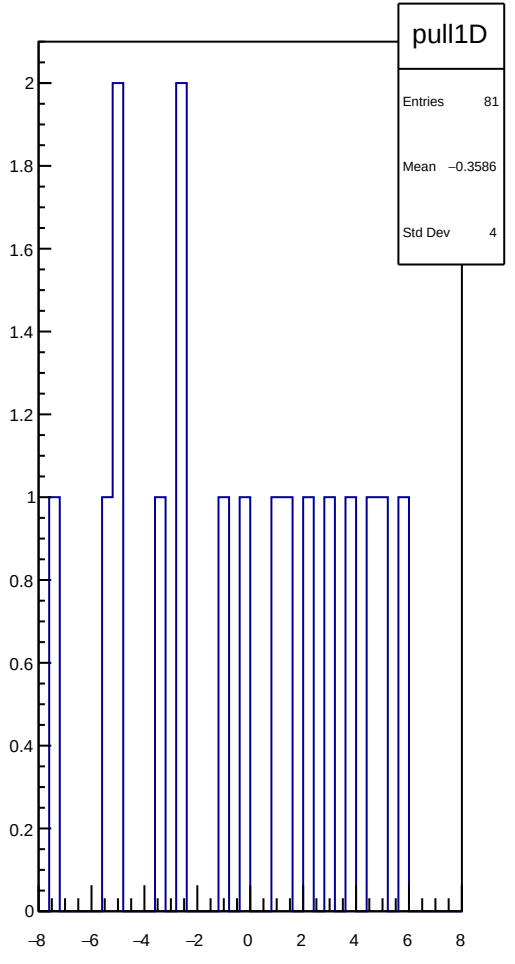

yield_cav4dQ_rms vs run
χ² / ndf 1.419e+04 / 80
p0 0.6134 ± 0.0004876
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

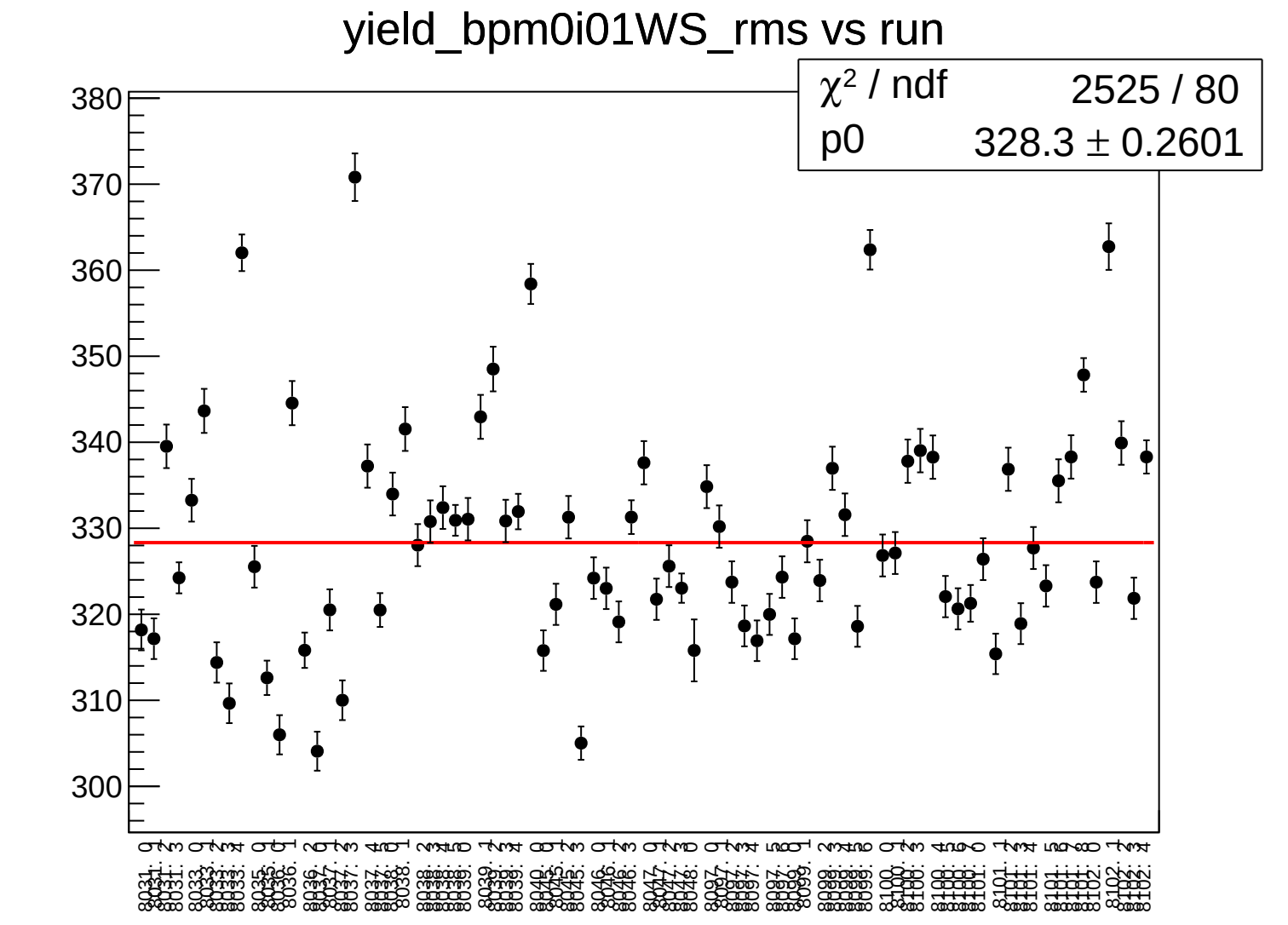

yield_bcm0l02_mean vs run
χ² / ndf 9.062e+07 / 80
p0 163.9 ± 0.001291
180
175
170
165
160
155
150
145
pull
Entries 81
Mean 32.89
Std Dev 33.37
1000
500
0
−500
−1000
−1500
−2000
−2500

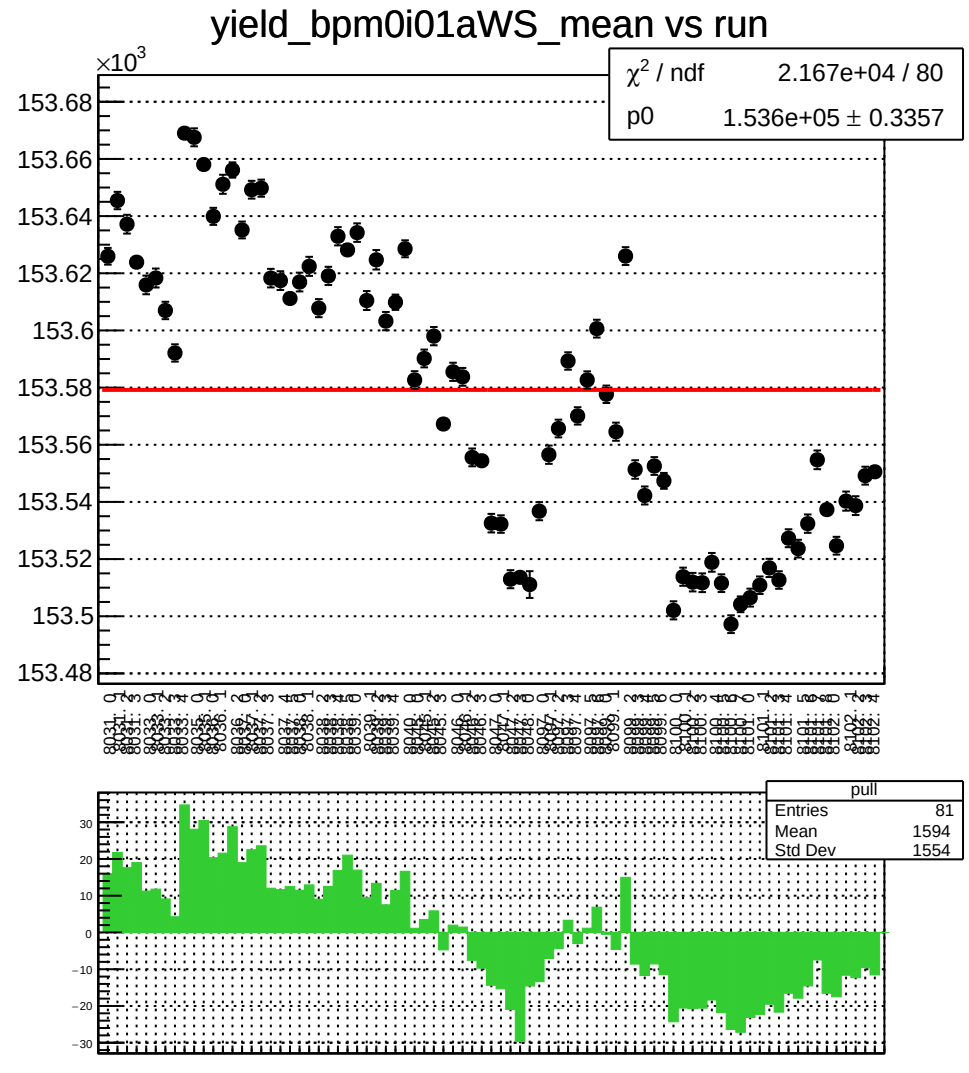

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

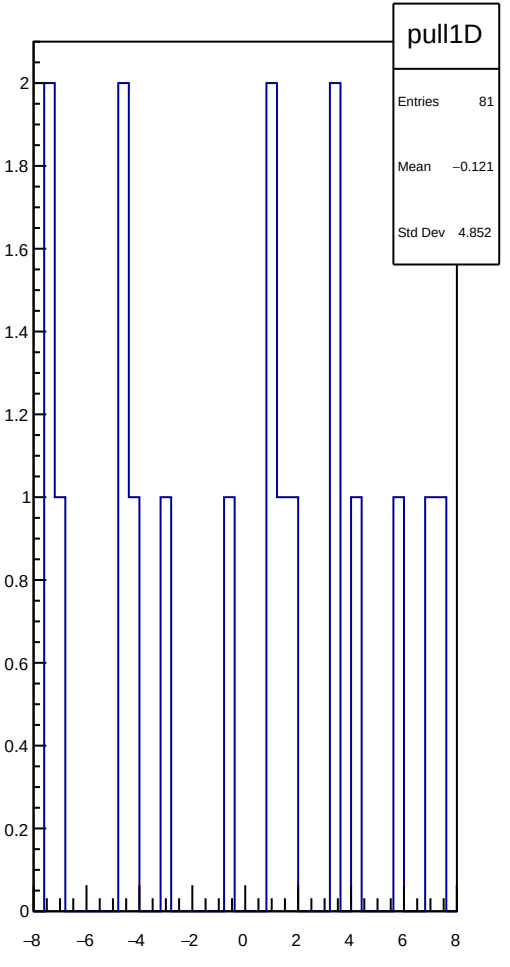

yield_bcm0l02_rms vs run
χ² / ndf 3.361e+05 / 80
p0 1.025 ± 0.0009128
16
14
12
10
8
6
4
2

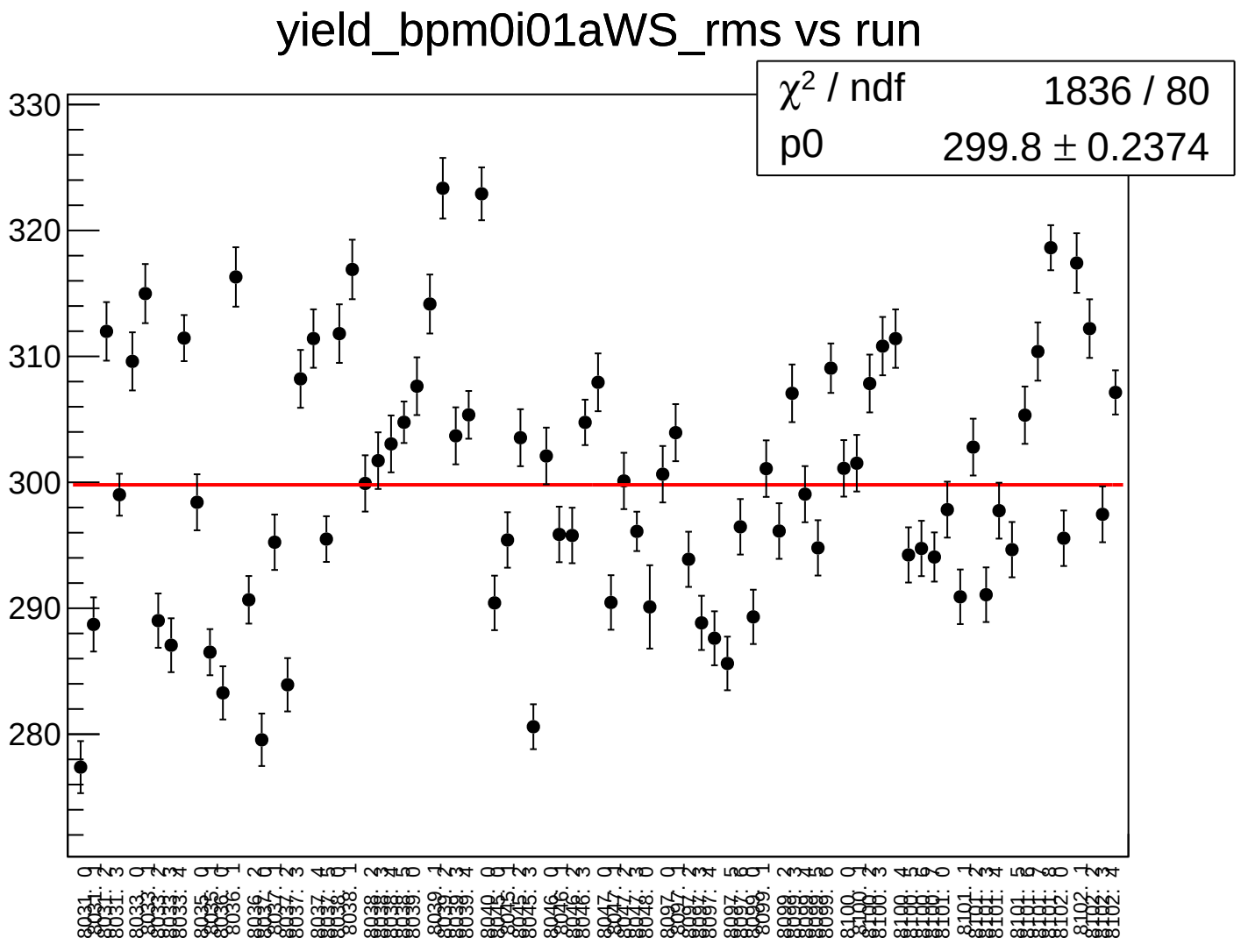

yield_bpm0i01WS_mean vs run
×10^3
161
160.9
160.8
160.7
160.6
χ² / ndf 9.179e+04 / 80
p0 1.607e+05 ± 0.3678
pull
Entries 81
Mean 2444
Std Dev 2402
80
60
40
20
0
−20
−40

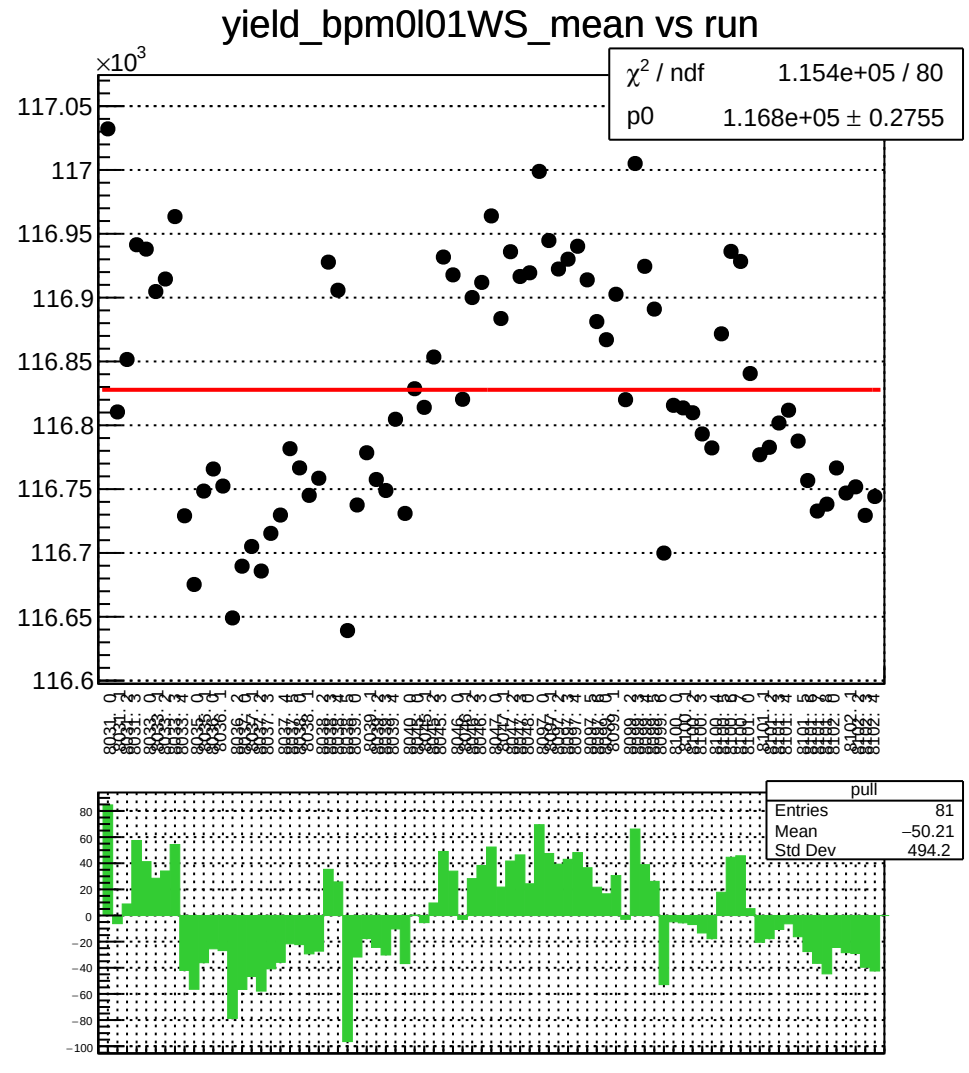

pull1D
Entries 81
Mean −0.3586
Std Dev 4
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

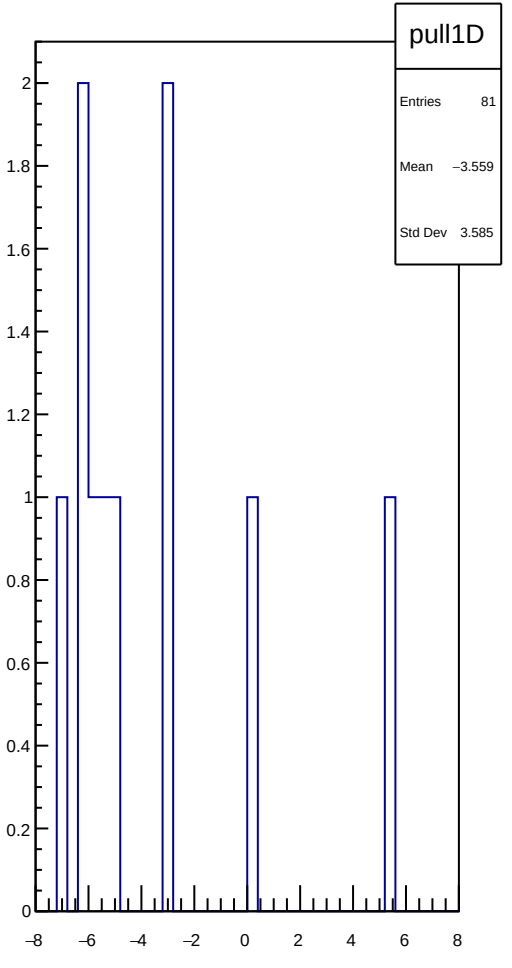

yield_bpm0i01WS_rms vs run
χ² / ndf 2525 / 80
p0 328.3 ± 0.2601
380
370
360
350
340
330
320
310
300

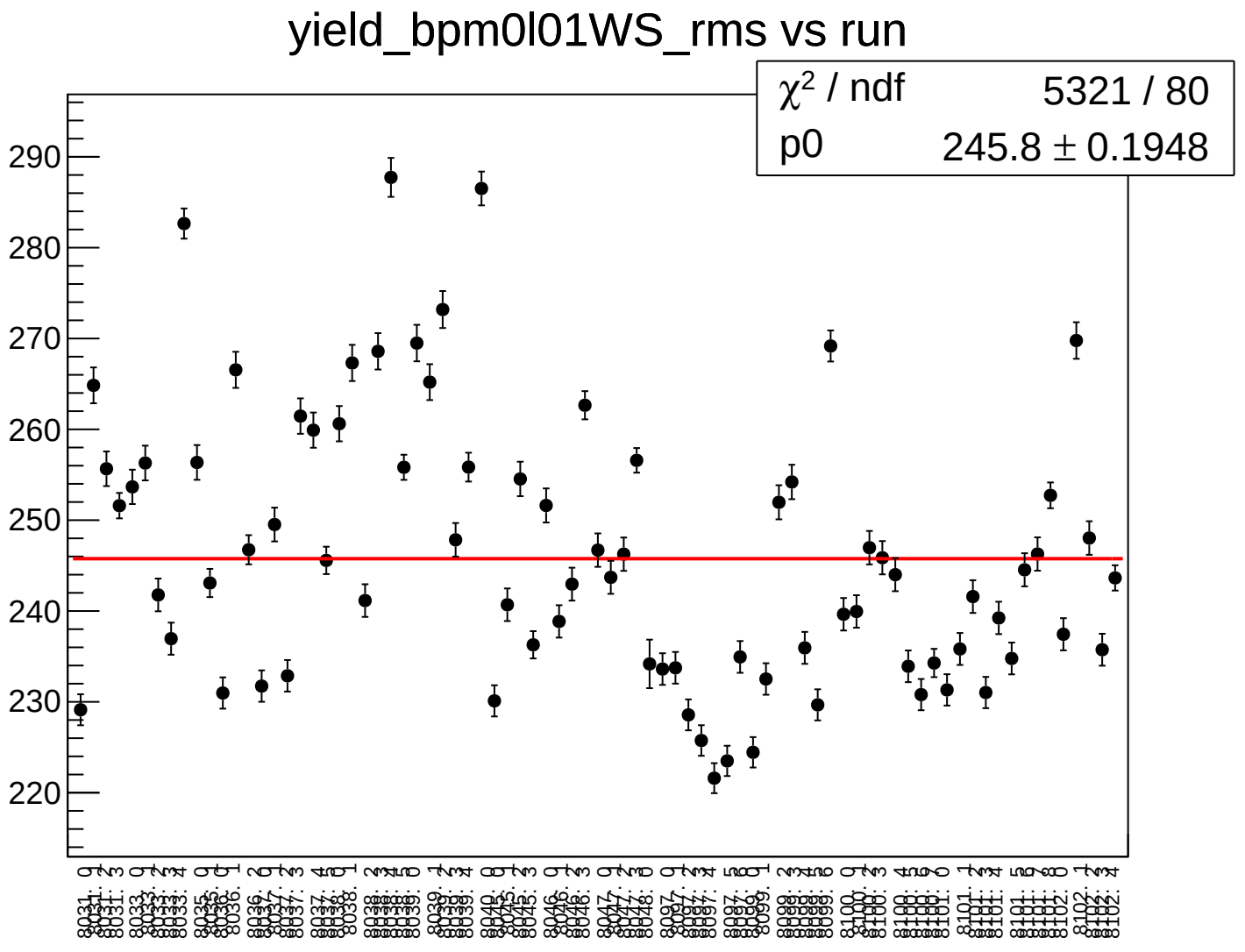

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 2.167e+04 / 80
p0 1.536e+05 ± 0.3357
153.68
153.66
153.64
153.62
153.6
153.58
153.56
153.54
153.52
153.5
153.48
pull
Entries 81
Mean 1594
Std Dev 1554
30
20
10
0
−10
−20
−30

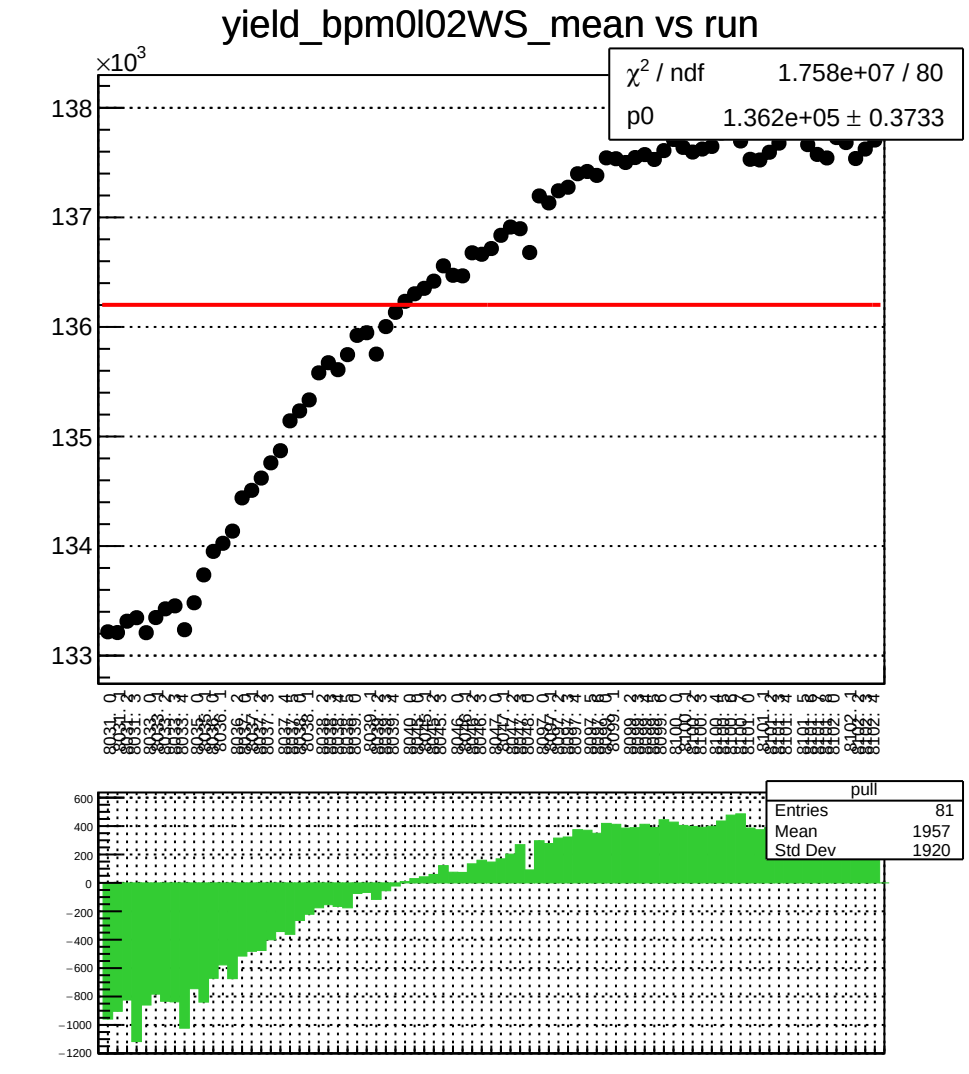

pull1D
Entries 81
Mean −0.121
Std Dev 4.852
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

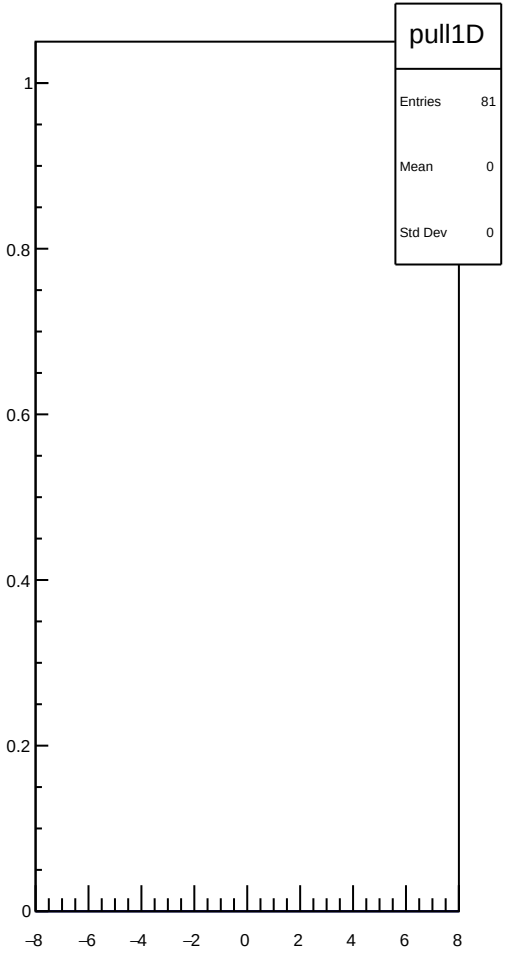

yield_bpm0i01aWS_rms vs run
χ² / ndf 1836 / 80
p0 299.8 ± 0.2374
330
320
310
300
290
280

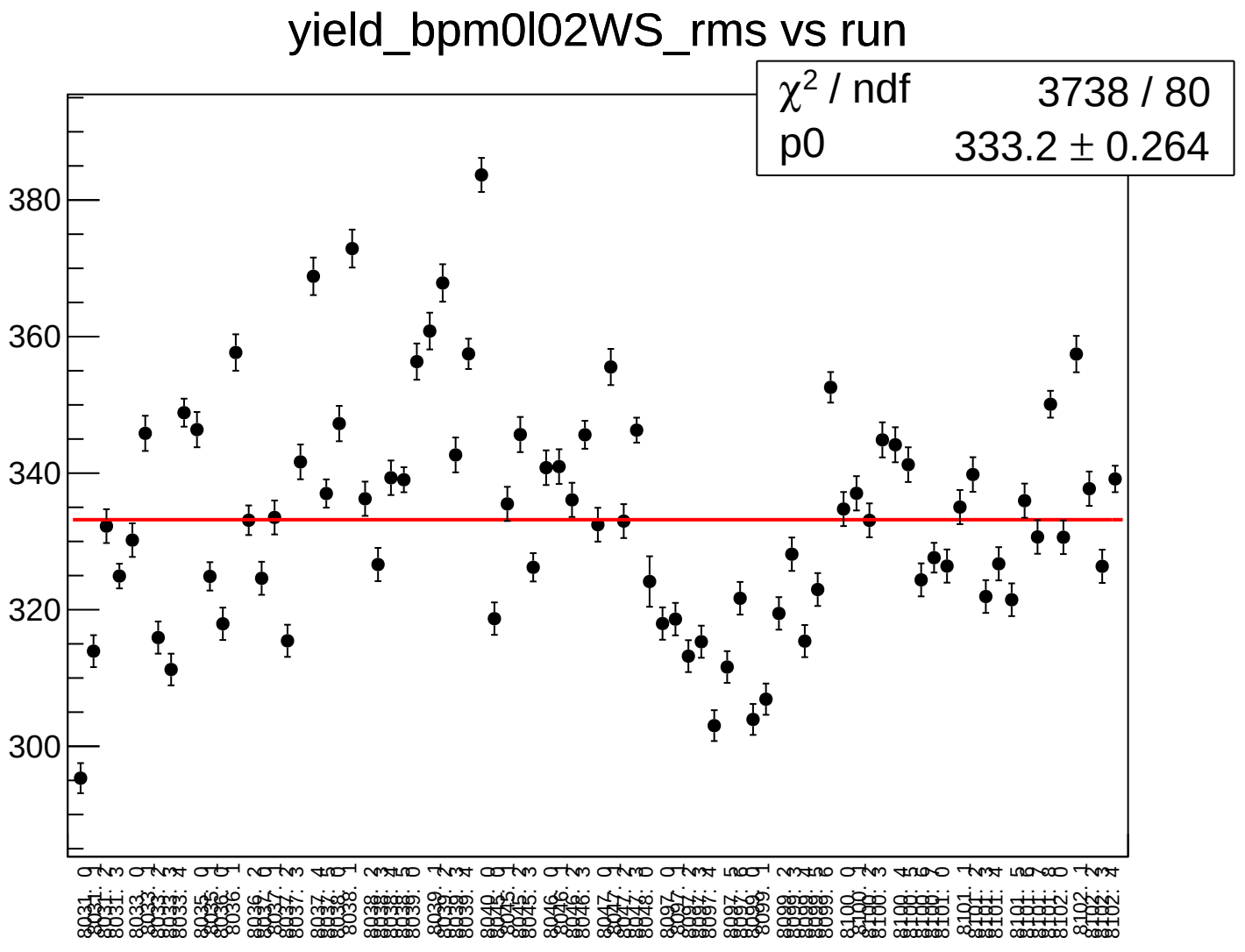

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 1.154e+05 / 80
p0 1.168e+05 ± 0.2755
117.05
117
116.95
116.9
116.85
116.8
116.75
116.7
116.65
116.6
pull
Entries 81
Mean −50.21
Std Dev 494.2
80
60
40
20
0
−20
−40
−60
−80
−100

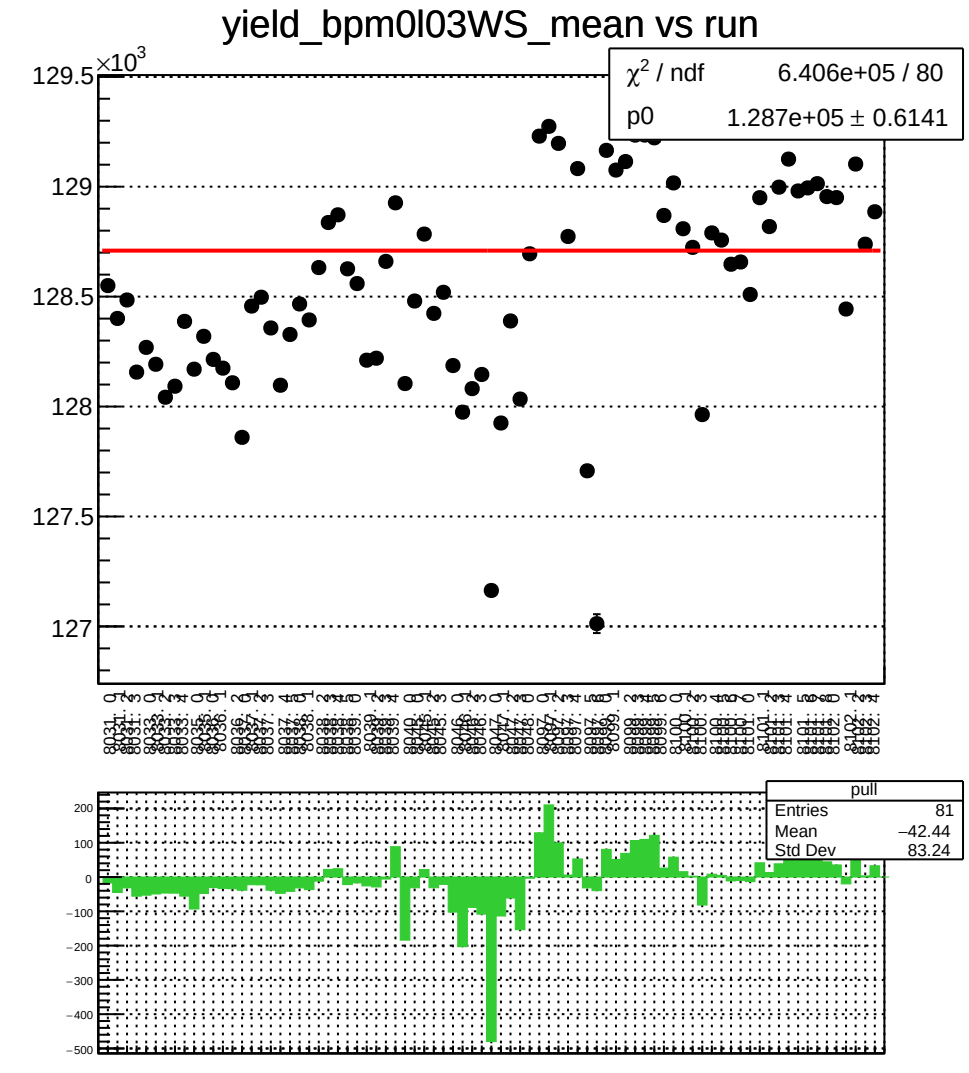

pull1D
Entries 81
Mean −3.559
Std Dev 3.585
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

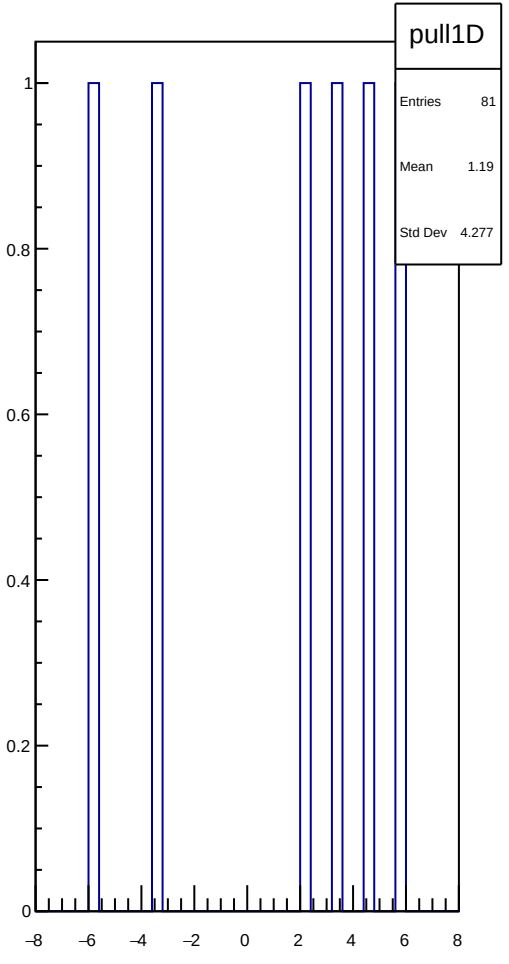

yield_bpm0l01WS_rms vs run
χ² / ndf 5321 / 80
p0 245.8 ± 0.1948
290
280
270
260
250
240
230
220

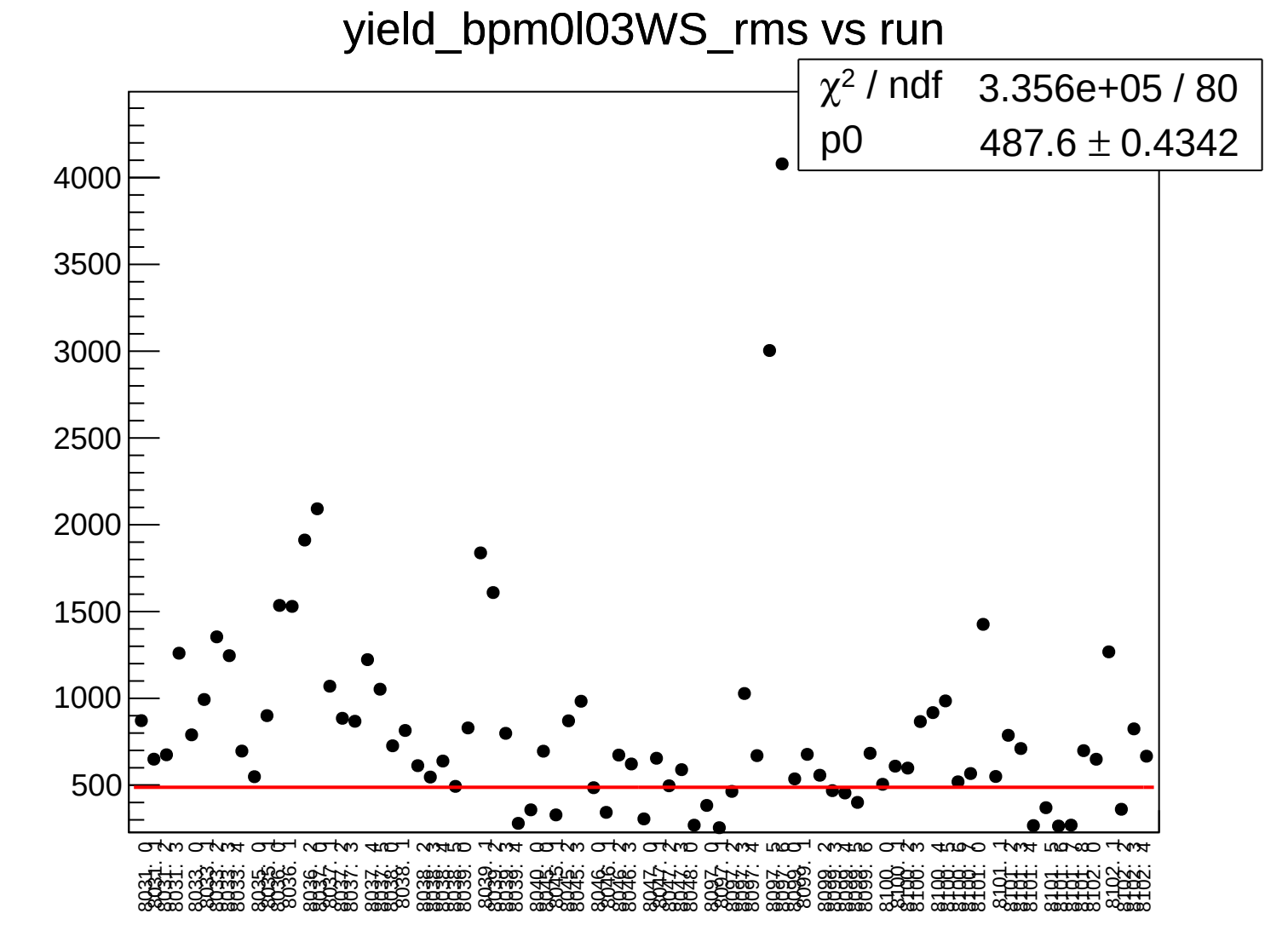

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 1.758e+07 / 80
p0 1.362e+05 ± 0.3733
138
137
136
135
134
133
pull
Entries 81
Mean 1957
Std Dev 1920
600
400
200
0
−200
−400
−600
−800
−1000
−1200

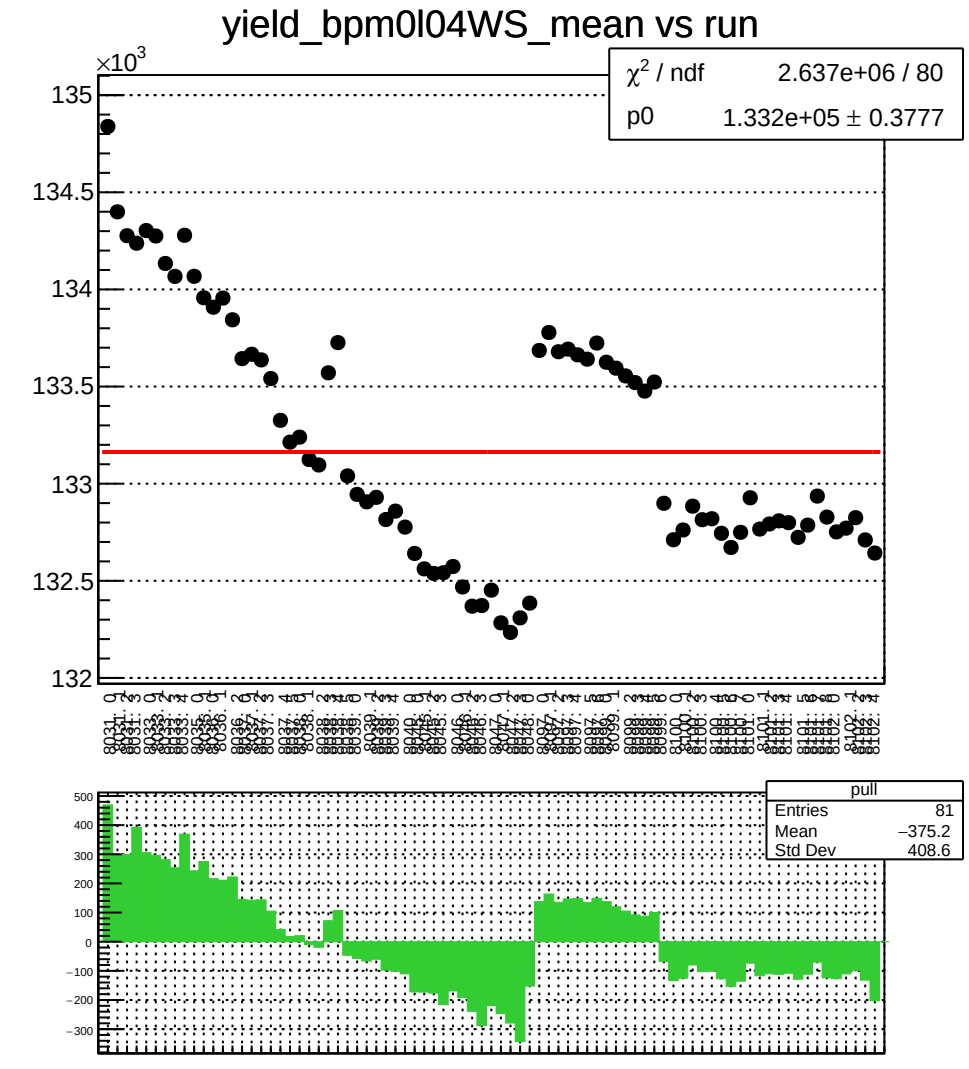

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

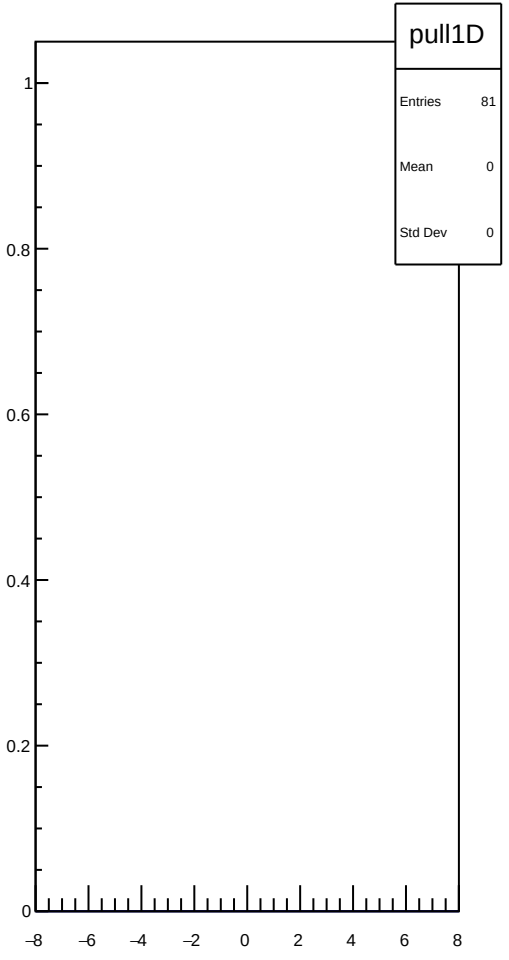

yield_bpm0l02WS_rms vs run
χ² / ndf 3738 / 80
p0 333.2 ± 0.264
380
360
340
320
300

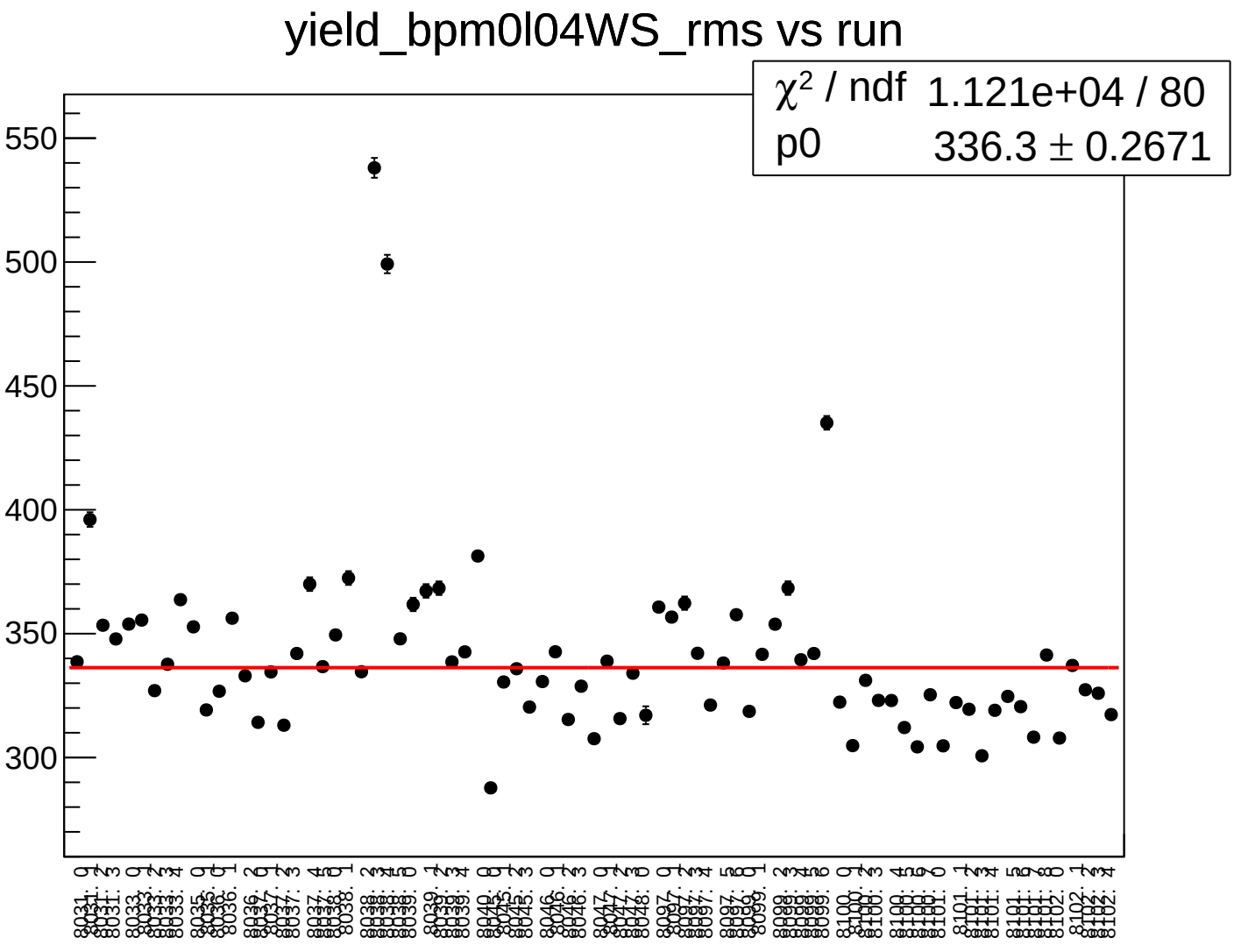

yield_bpm0l03WS_mean vs run
χ² / ndf 6.406e+05 / 80
p0 1.287e+05 ± 0.6141
×10³
129.5
129
128.5
128
127.5
127
pull
Entries 81
Mean −42.44
Std Dev 83.24
200
100
0
−100
−200
−300
−400
−500

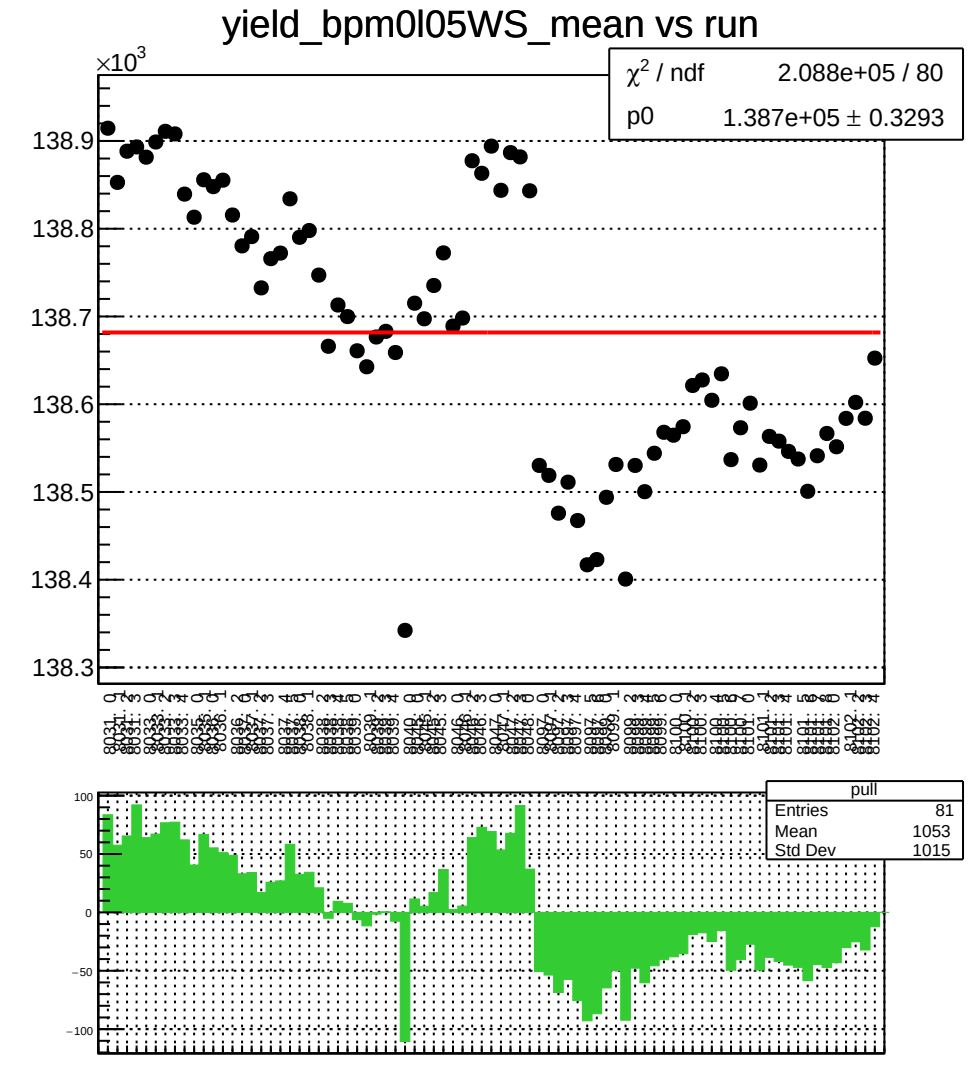

pull1D
Entries 81
Mean 1.19
Std Dev 4.277
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

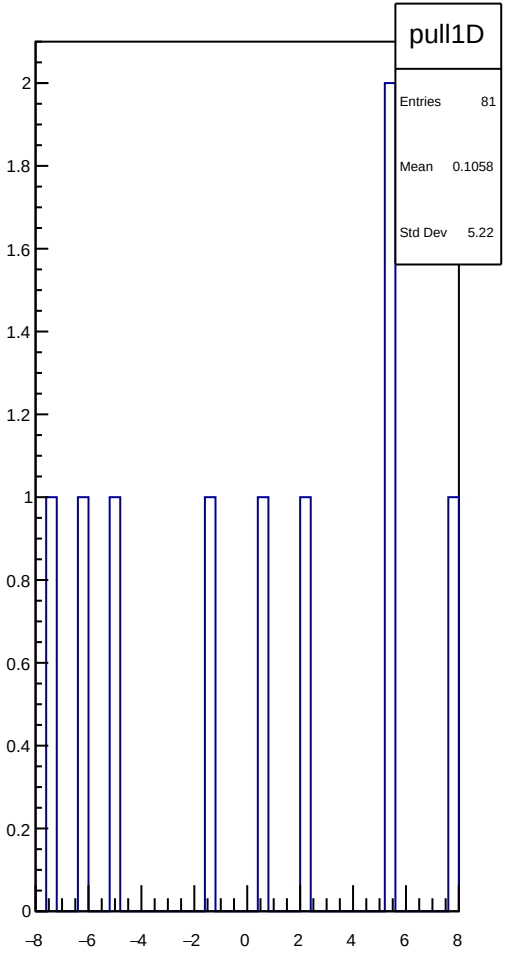

yield_bpm0l03WS_rms vs run
χ² / ndf 3.356e+05 / 80
p0 487.6 ± 0.4342
4000
3500
3000
2500
2000
1500
1000
500

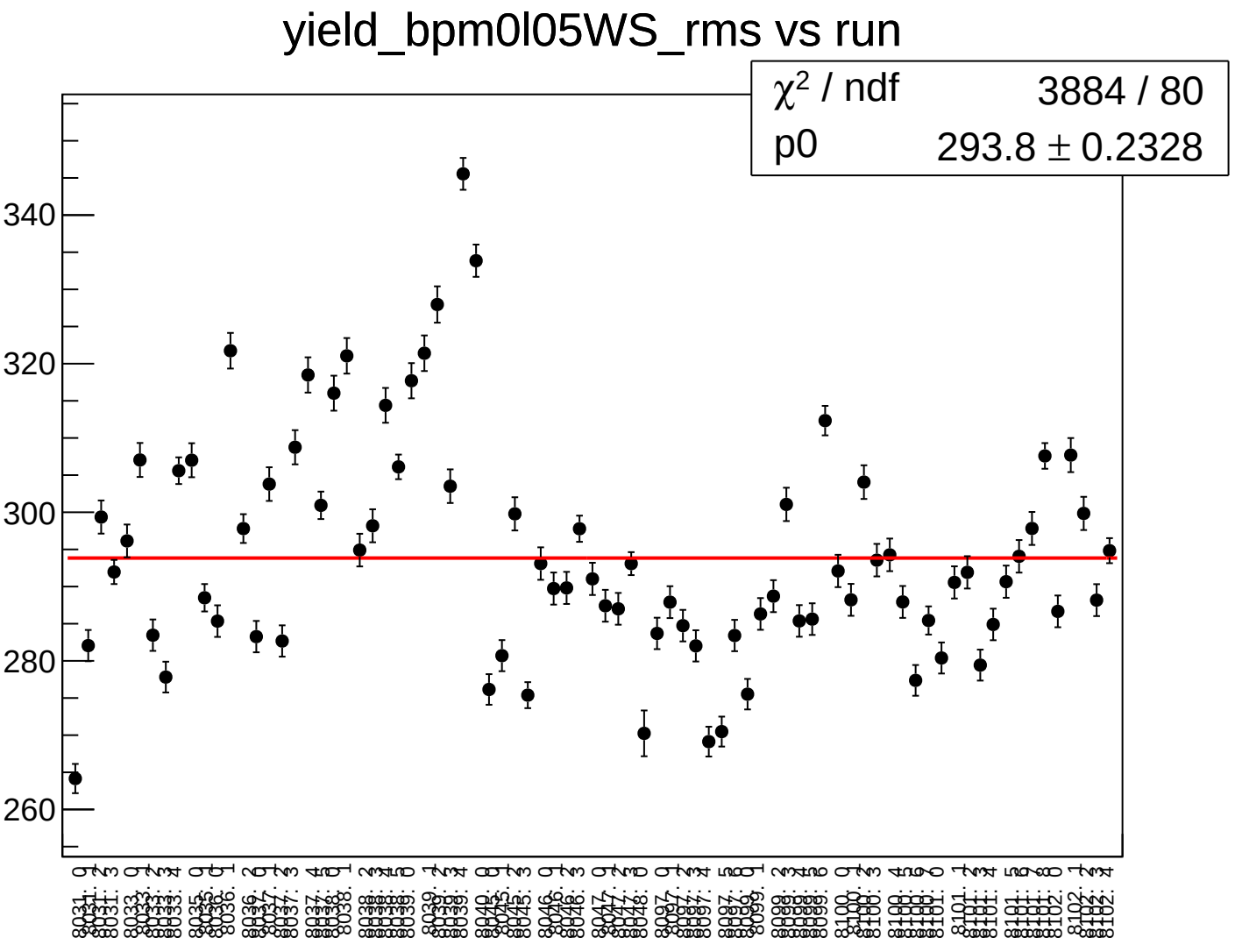

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 2.637e+06 / 80
p0 1.332e+05 ± 0.3777
135
134.5
134
133.5
133
132.5
132
pull
Entries 81
Mean −375.2
Std Dev 408.6
500
400
300
200
100
0
−100
−200
−300

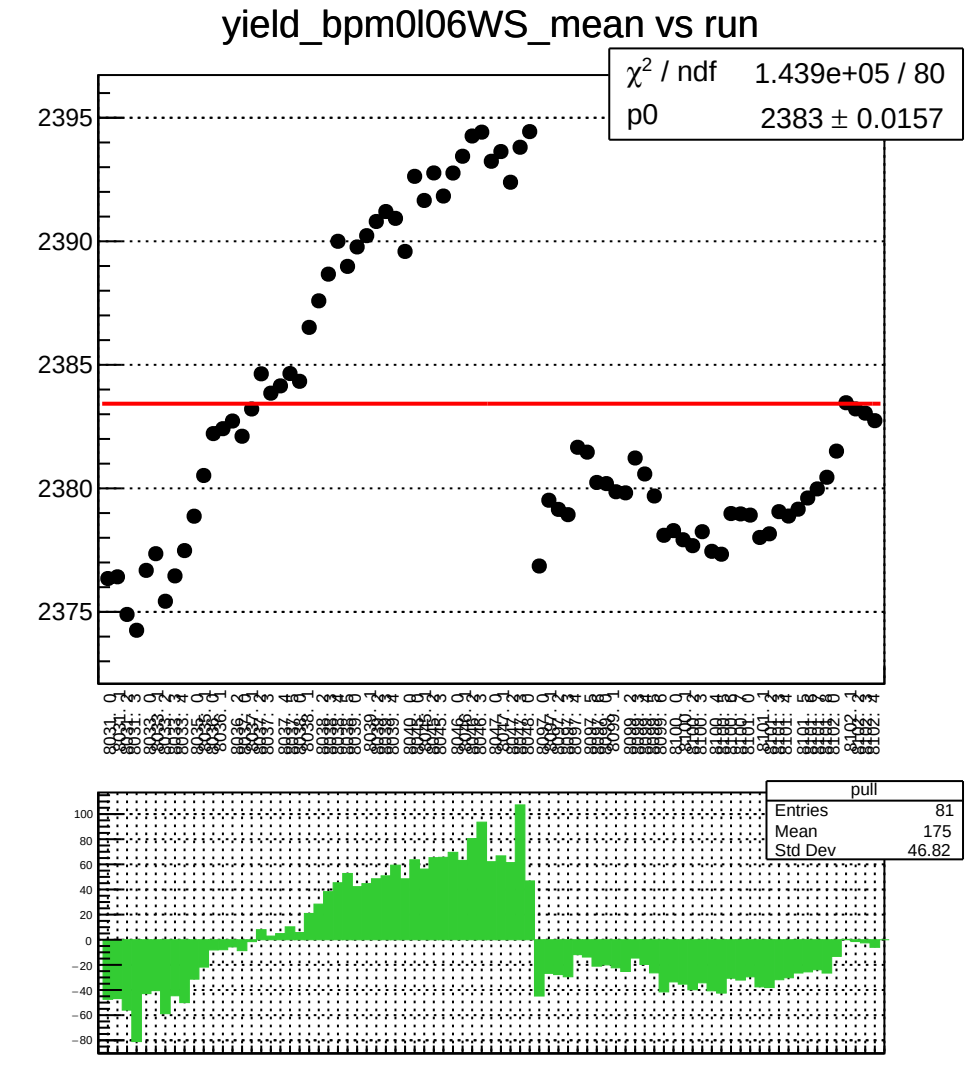

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

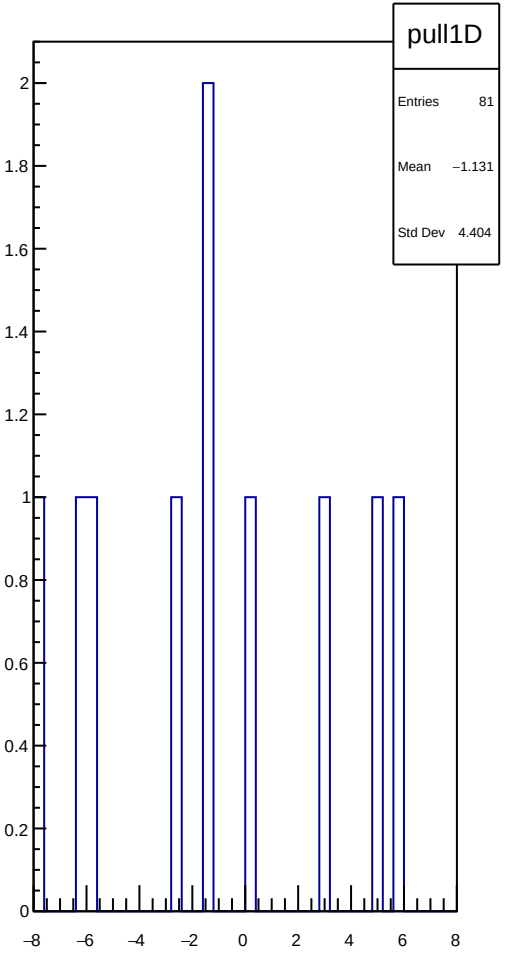

yield_bpm0l04WS_rms vs run
χ² / ndf 1.121e+04 / 80
p0 336.3 ± 0.2671
550
500
450
400
350
300

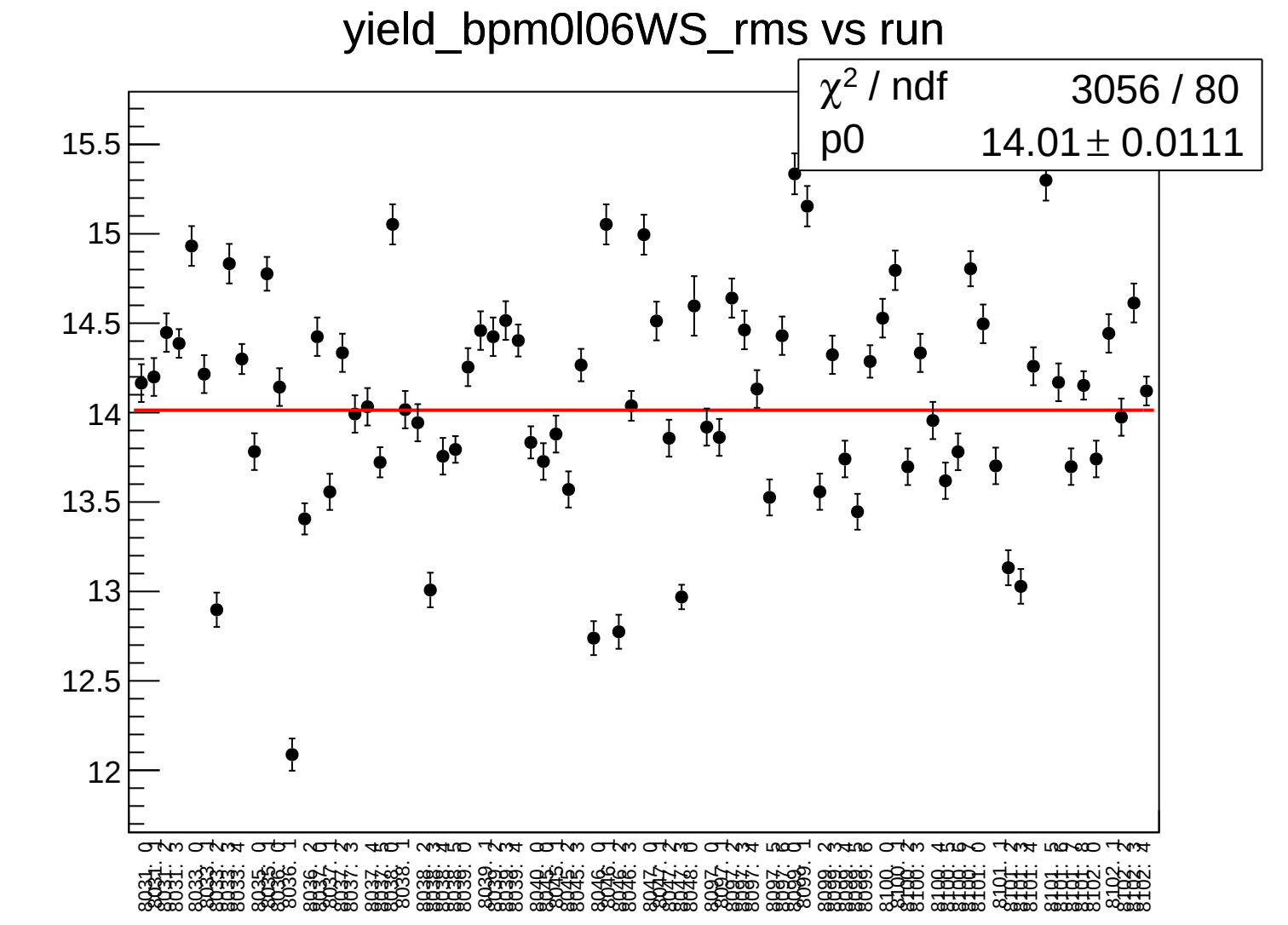

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 2.088e+05 / 80
p0 1.387e+05 ± 0.3293
138.9
138.8
138.7
138.6
138.5
138.4
138.3
pull
Entries 81
Mean 1053
Std Dev 1015
100
50
0
−50
−100

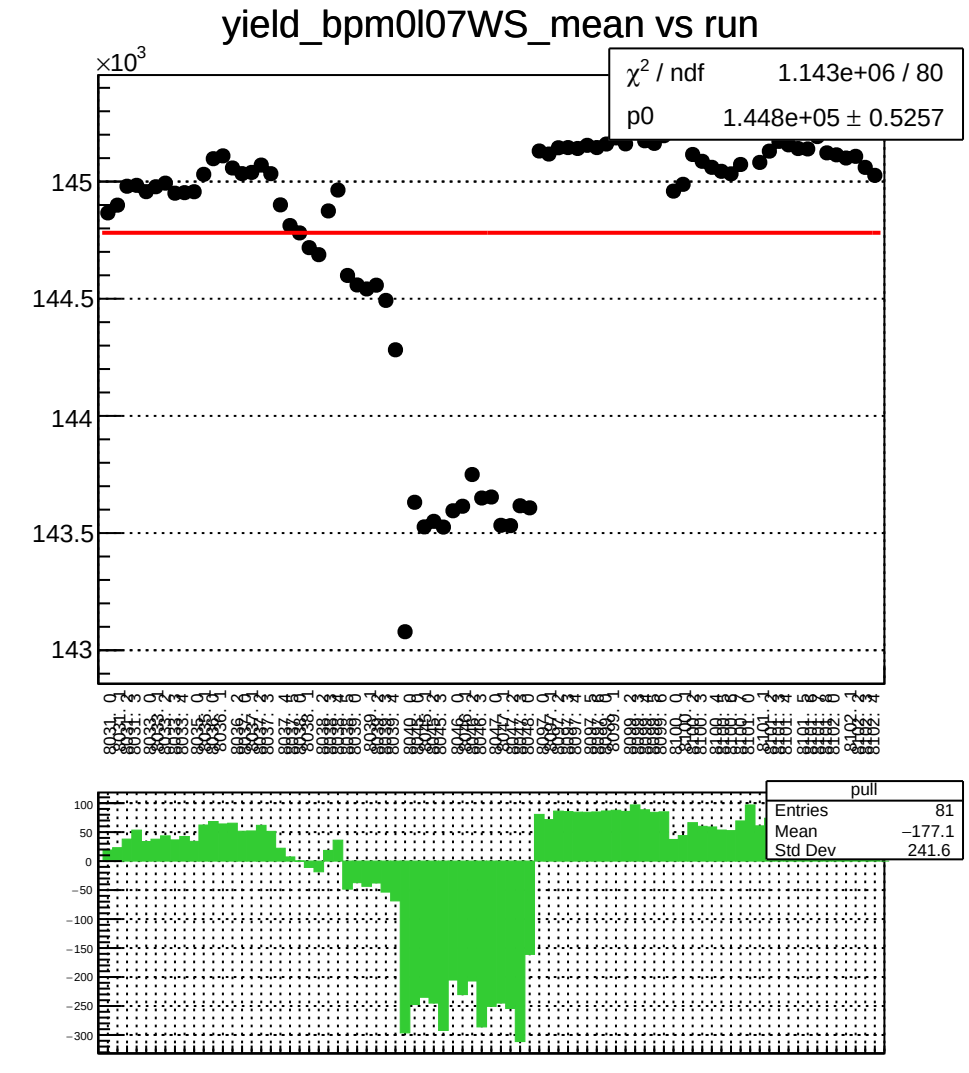

pull1D
Entries 81
Mean 0.1058
Std Dev 5.22
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

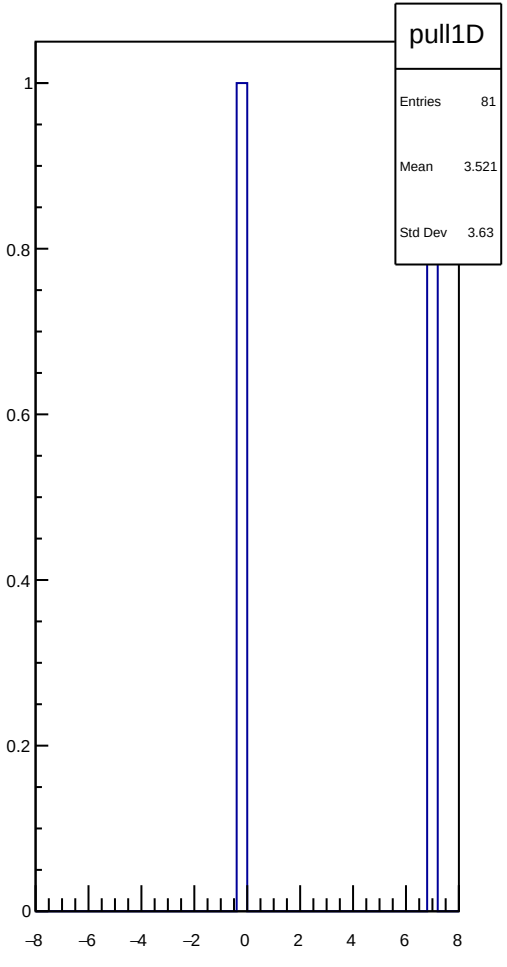

yield_bpm0l05WS_rms vs run
χ² / ndf 3884 / 80
p0 293.8 ± 0.2328
340
320
300
280
260

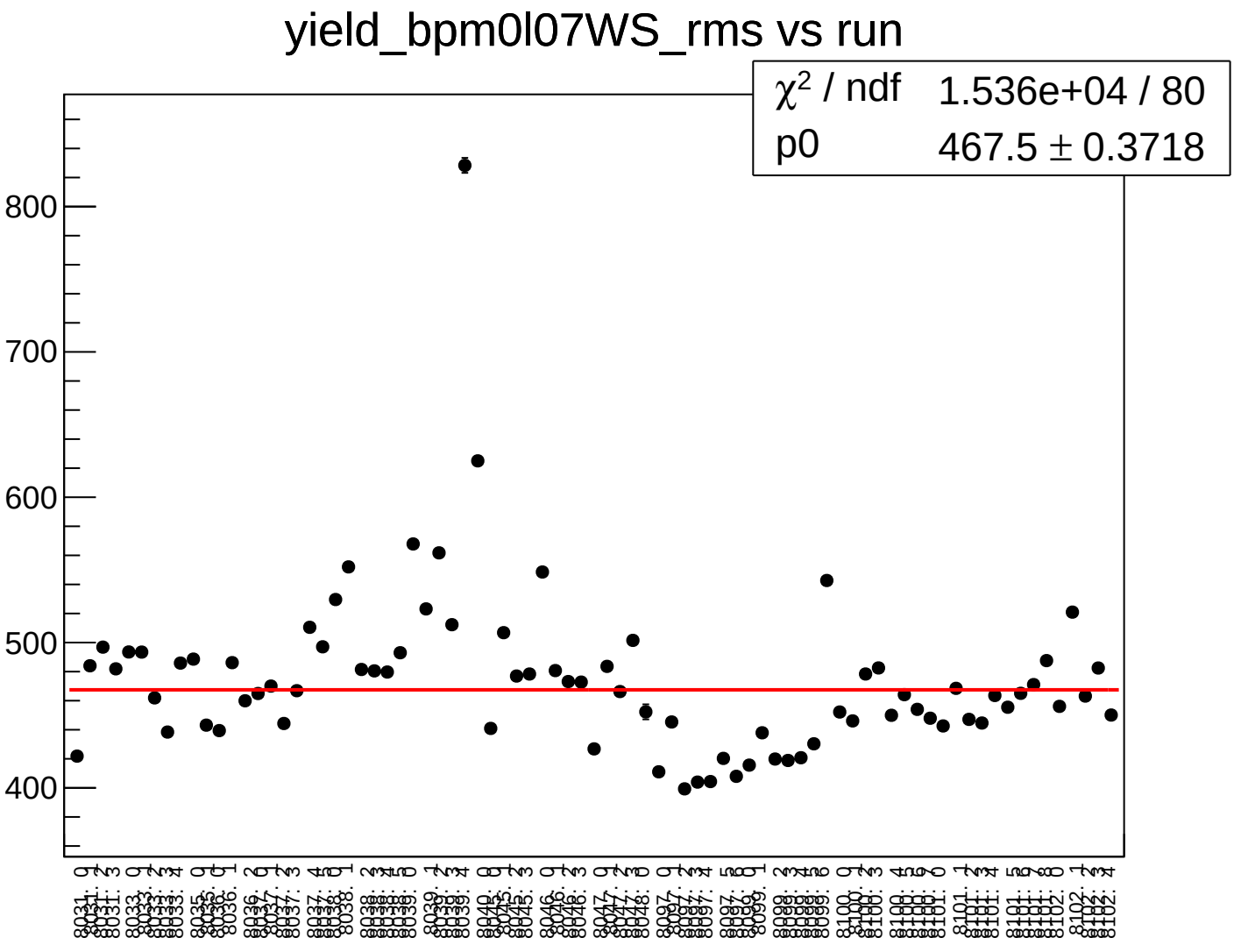

yield_bpm0l06WS_mean vs run
χ² / ndf 1.439e+05 / 80
p0 2383 ± 0.0157
2395
2390
2385
2380
2375
pull
Entries 81
Mean 175
Std Dev 46.82
100
80
60
40
20
0
−20
−40
−60
−80

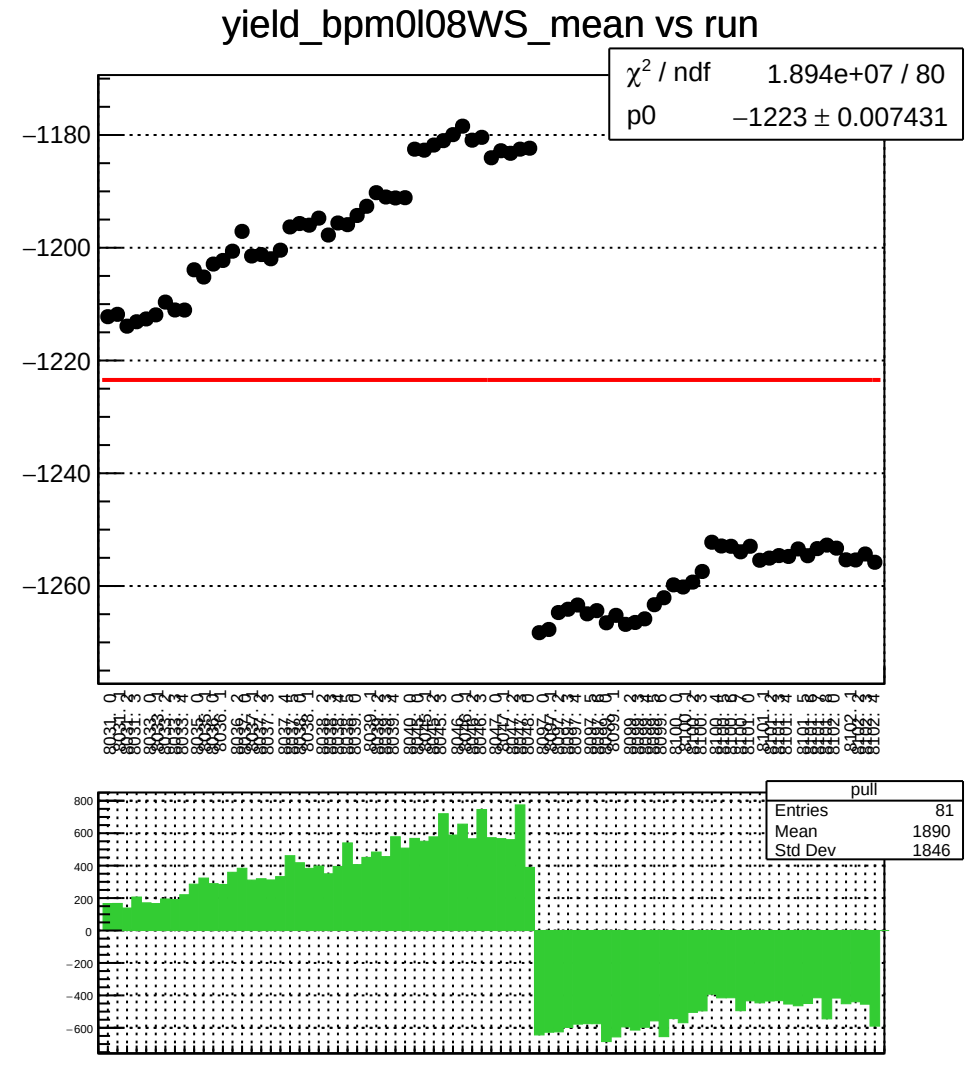

pull1D
Entries 81
Mean −1.131
Std Dev 4.404
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

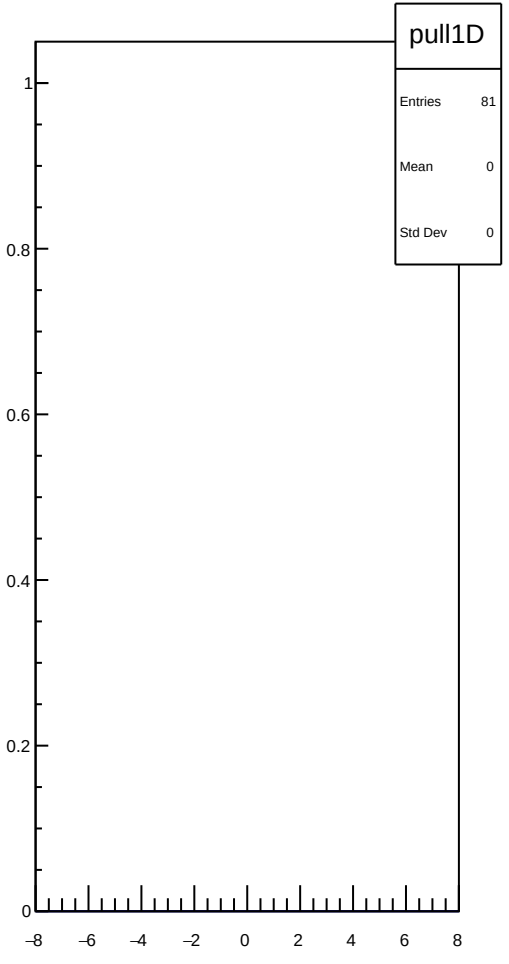

yield_bpm0l06WS_rms vs run
χ² / ndf 3056 / 80
p0 14.01 ± 0.0111
15.5
15
14.5
14
13.5
13
12.5
12

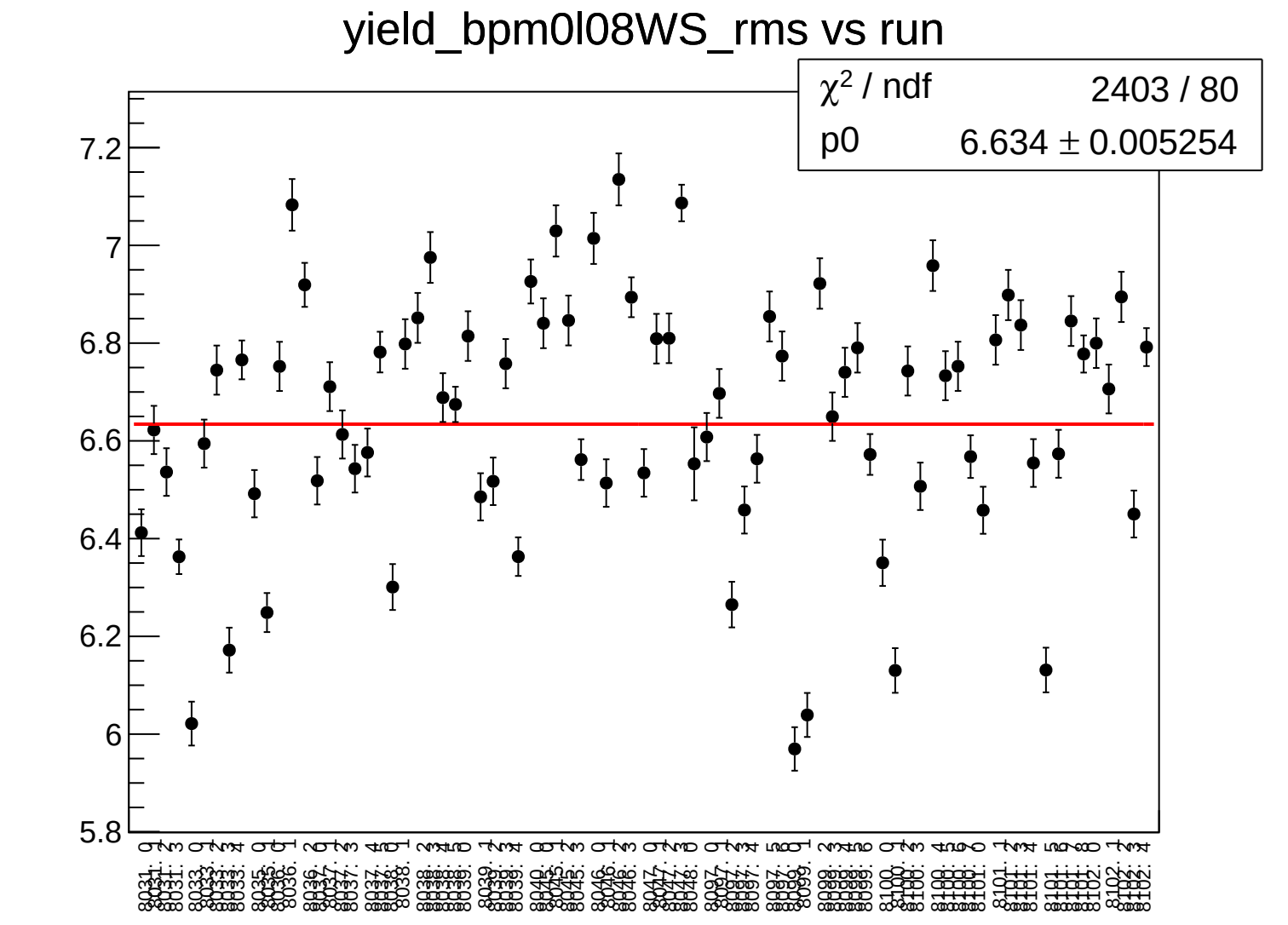

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.143e+06 / 80
p0 1.448e+05 ± 0.5257
145
144.5
144
143.5
143
pull
Entries 81
Mean −177.1
Std Dev 241.6
100
50
0
−50
−100
−150
−200
−250
−300

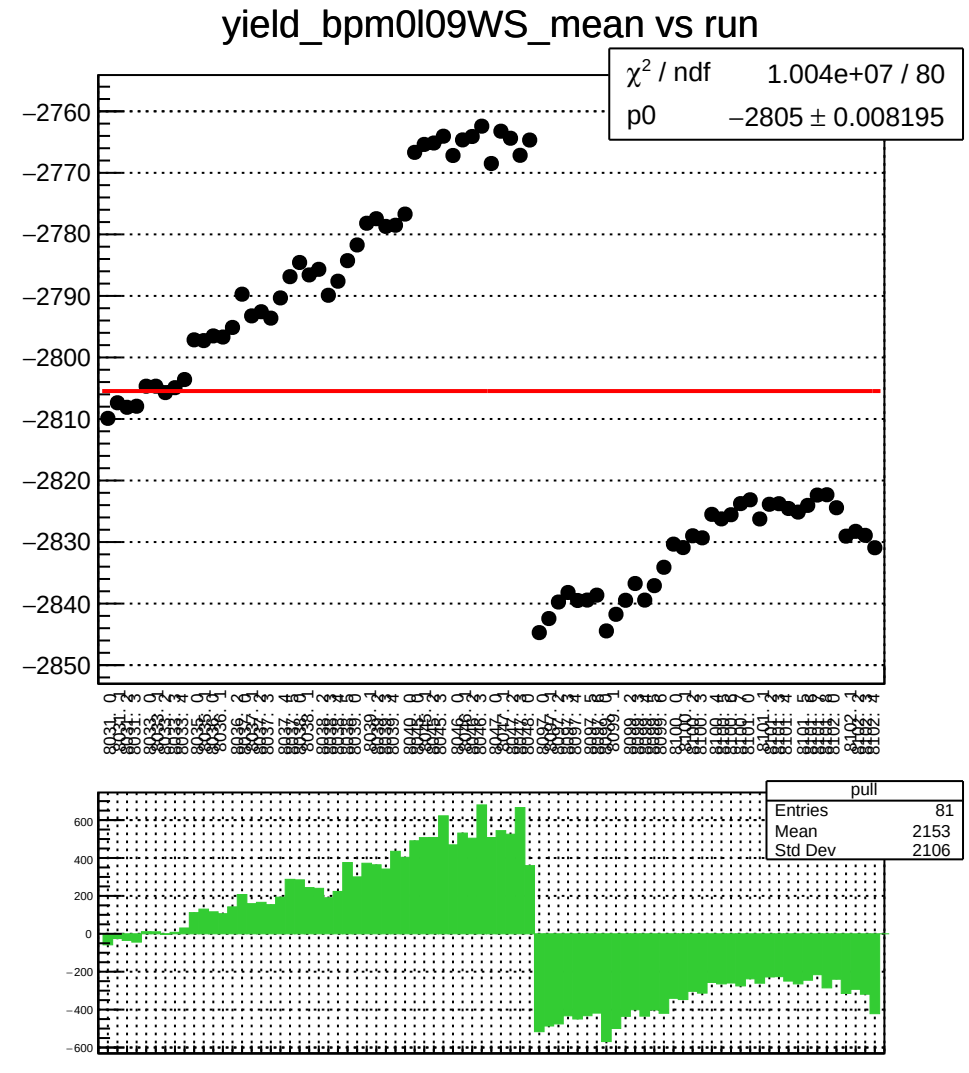

pull1D
Entries 81
Mean 3.521
Std Dev 3.63
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

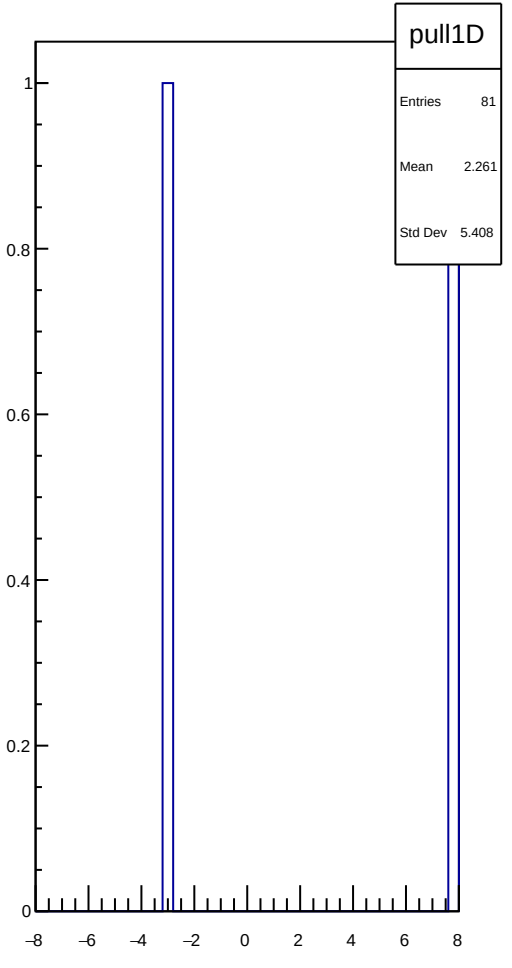

yield_bpm0l07WS_rms vs run
χ² / ndf 1.536e+04 / 80
p0 467.5 ± 0.3718
800
700
600
500
400

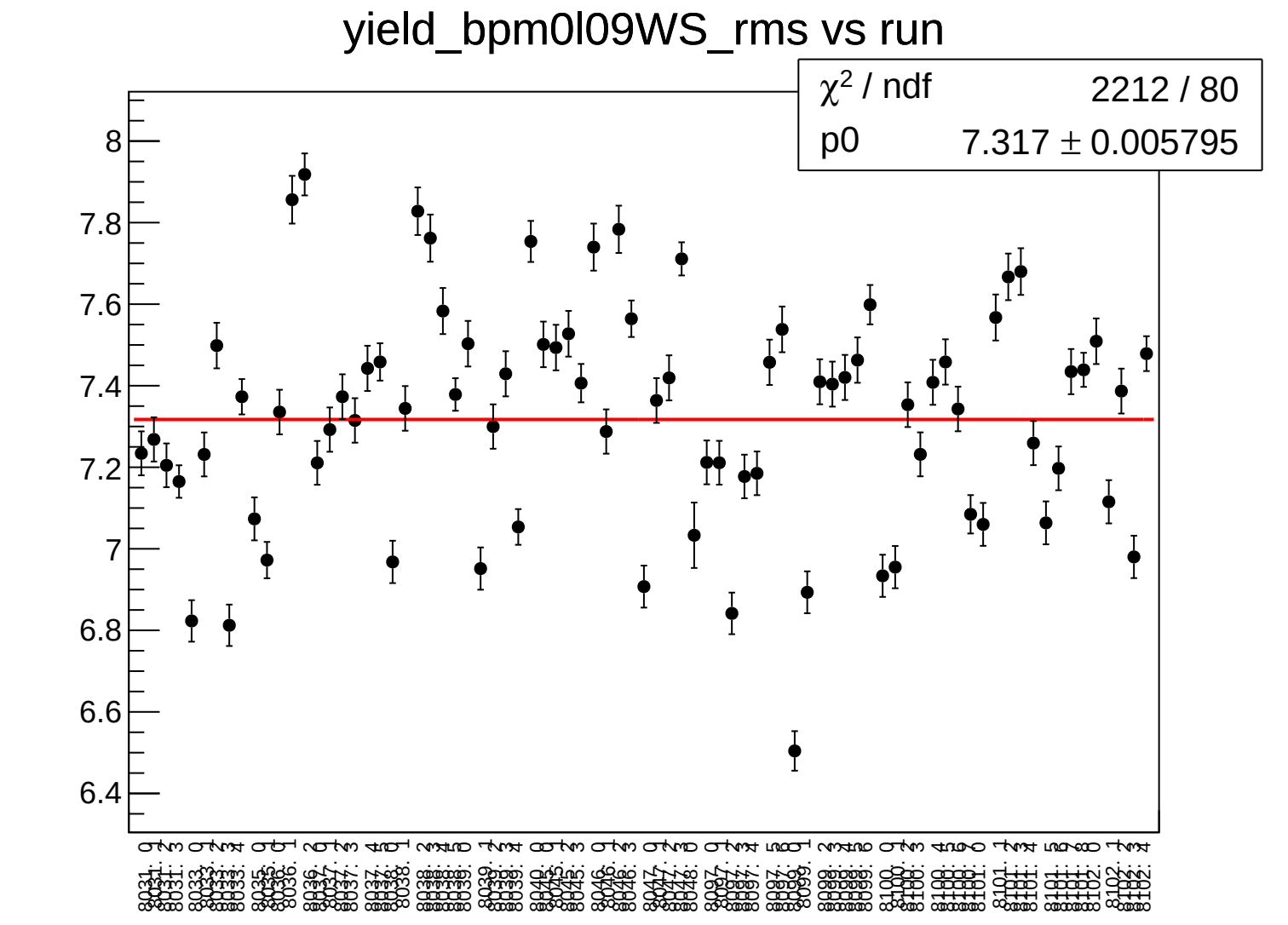

yield_bpm0l08WS_mean vs run
χ² / ndf 1.894e+07 / 80
p0 −1223 ± 0.007431
−1180
−1200
−1220
−1240
−1260
pull
Entries 81
Mean 1890
Std Dev 1846
800
600
400
200
0
−200
−400
−600

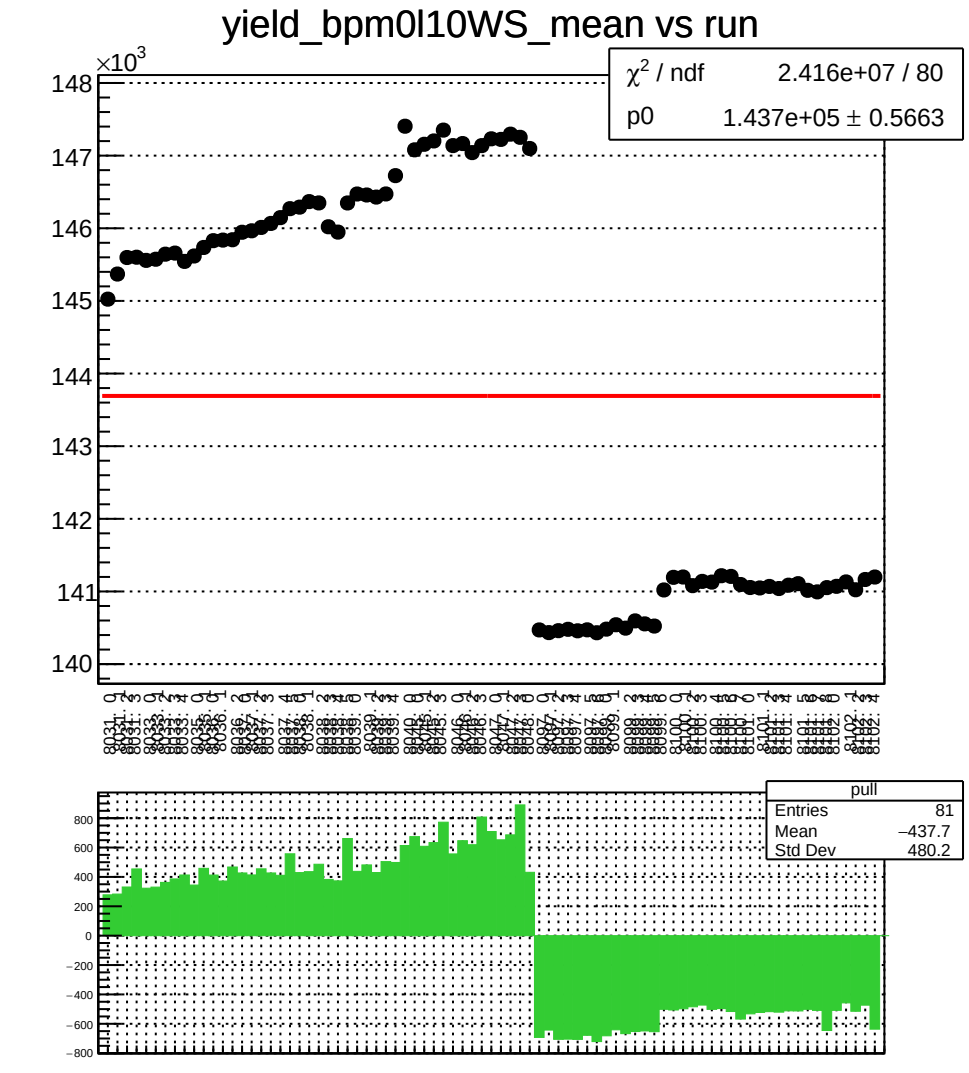

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

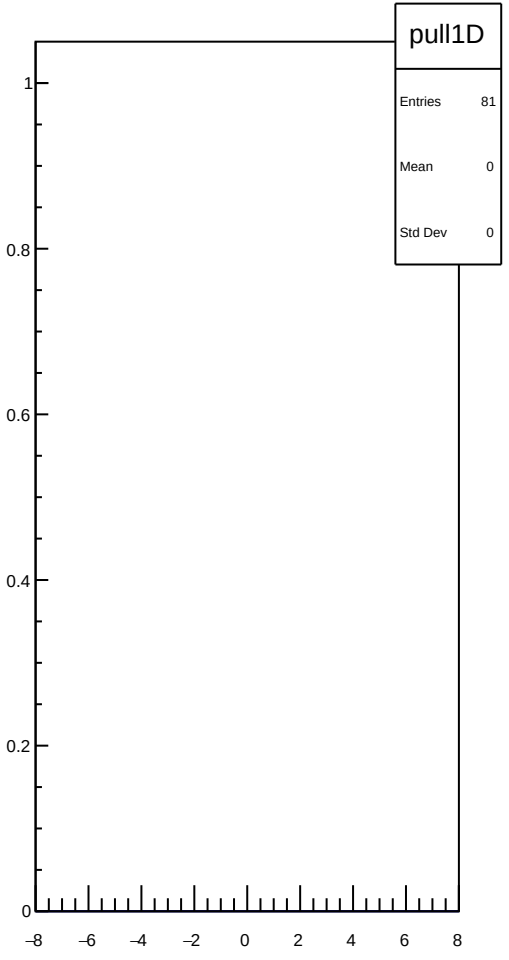

yield_bpm0l08WS_rms vs run
χ^2 / ndf 2403 / 80
p0 6.634 ± 0.005254
7.2
7
6.8
6.6
6.4
6.2
6
5.8

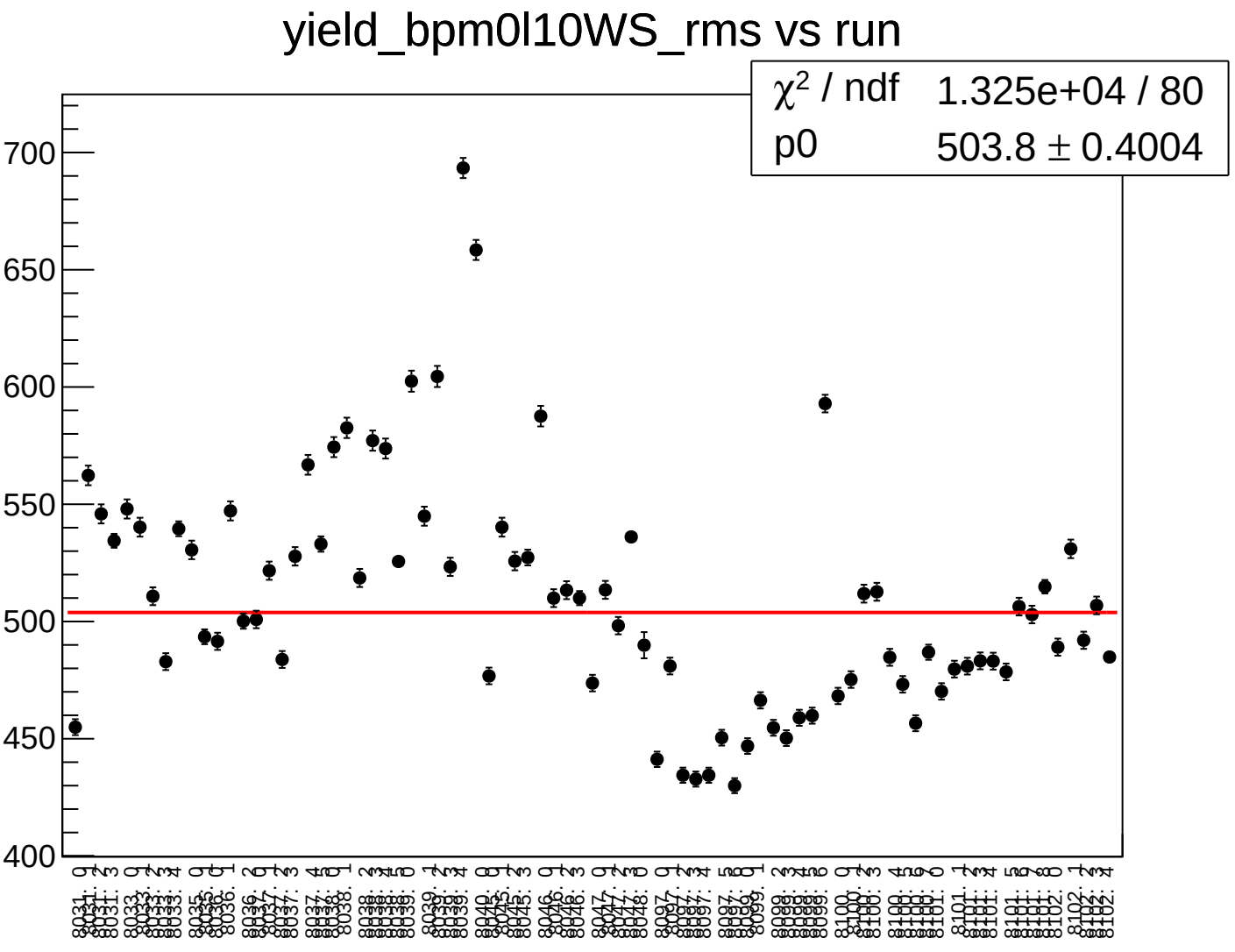

yield_bpm0l09WS_mean vs run
χ² / ndf 1.004e+07 / 80
p0 −2805 ± 0.008195
−2760
−2770
−2780
−2790
−2800
−2810
−2820
−2830
−2840
−2850
pull
Entries 81
Mean 2153
Std Dev 2106
600
400
200
0
−200
−400
−600

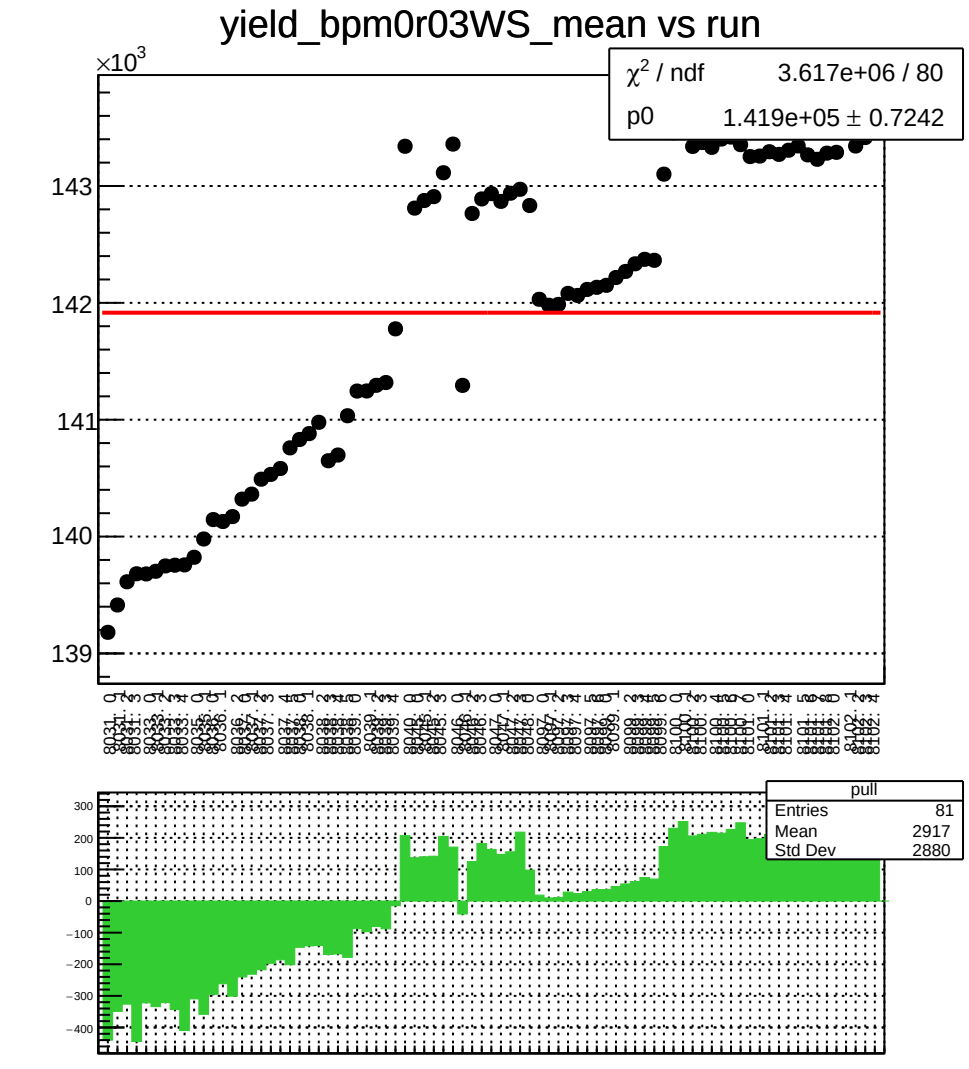

pull1D
Entries 81
Mean 2.261
Std Dev 5.408
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

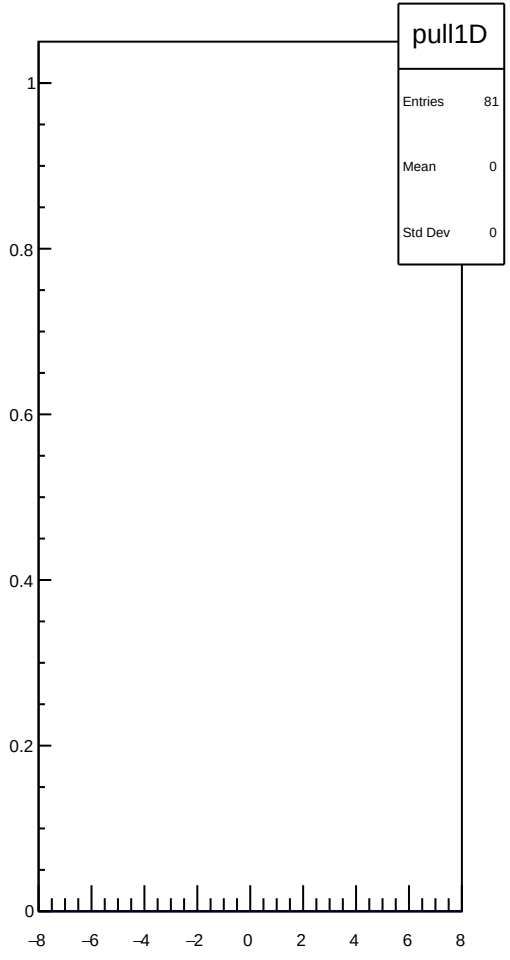

yield_bpm0l09WS_rms vs run
χ² / ndf 2212 / 80
p0 7.317 ± 0.005795
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4

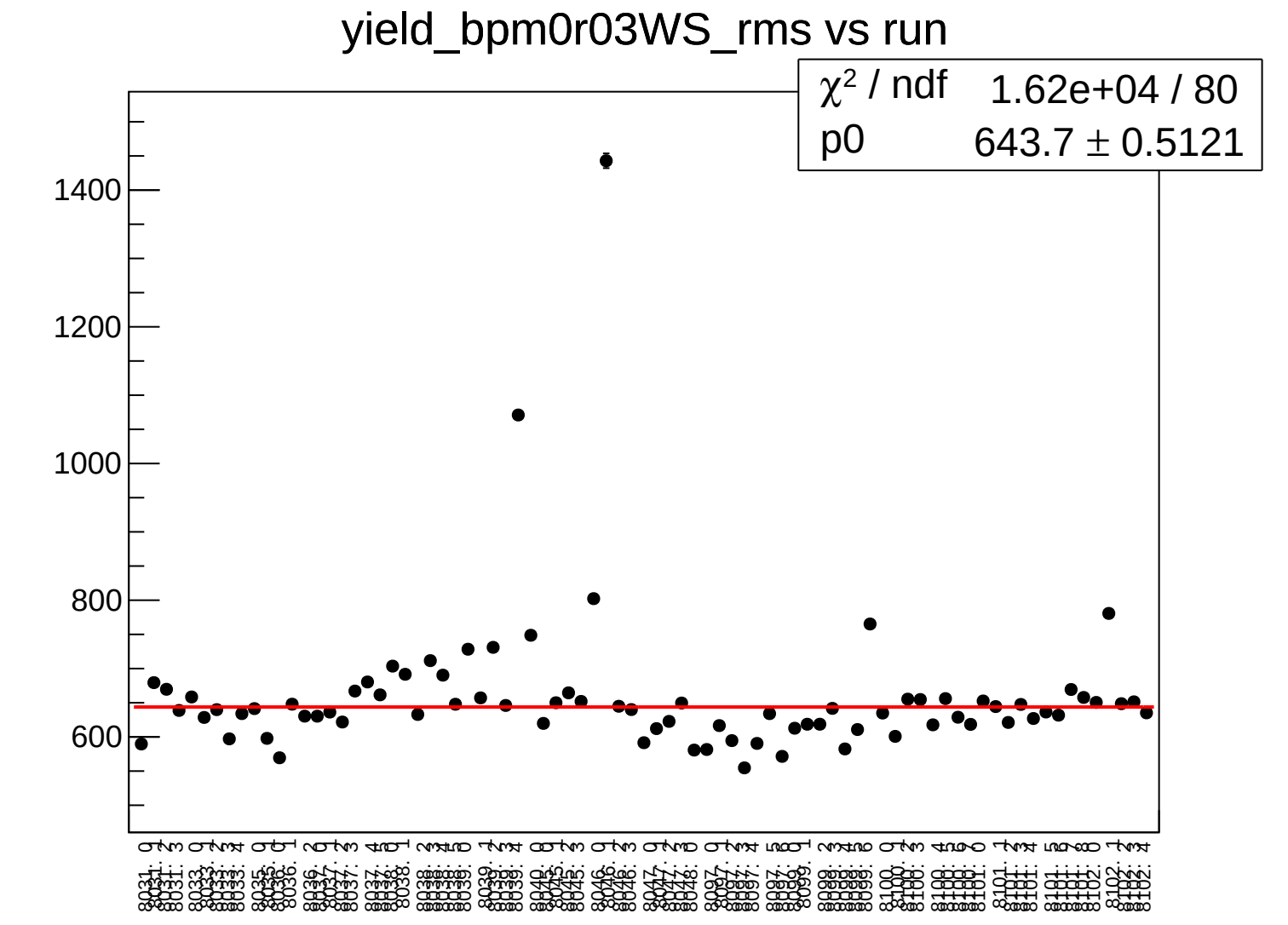

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 2.416e+07 / 80
p0 1.437e+05 ± 0.5663
148
147
146
145
144
143
142
141
140
pull
Entries 81
Mean −437.7
Std Dev 480.2
800
600
400
200
0
−200
−400
−600
−800

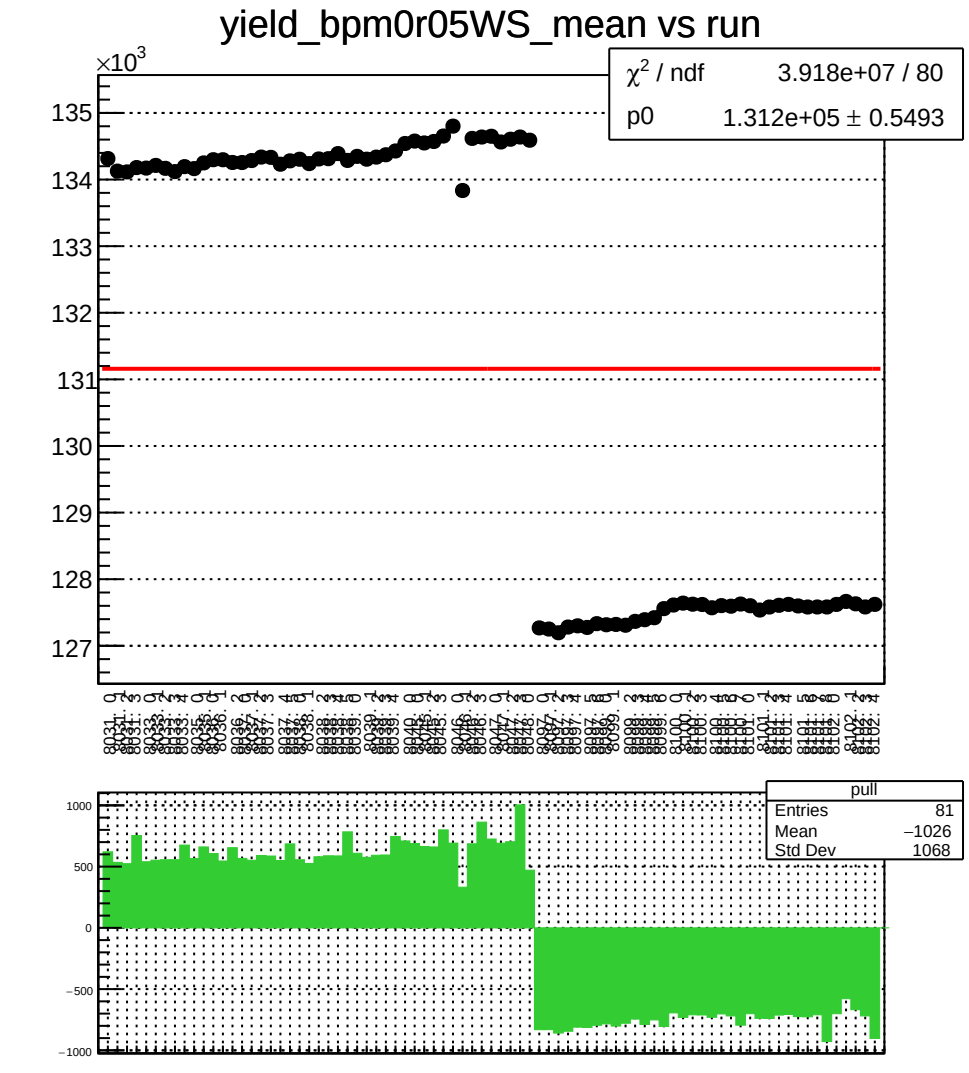

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

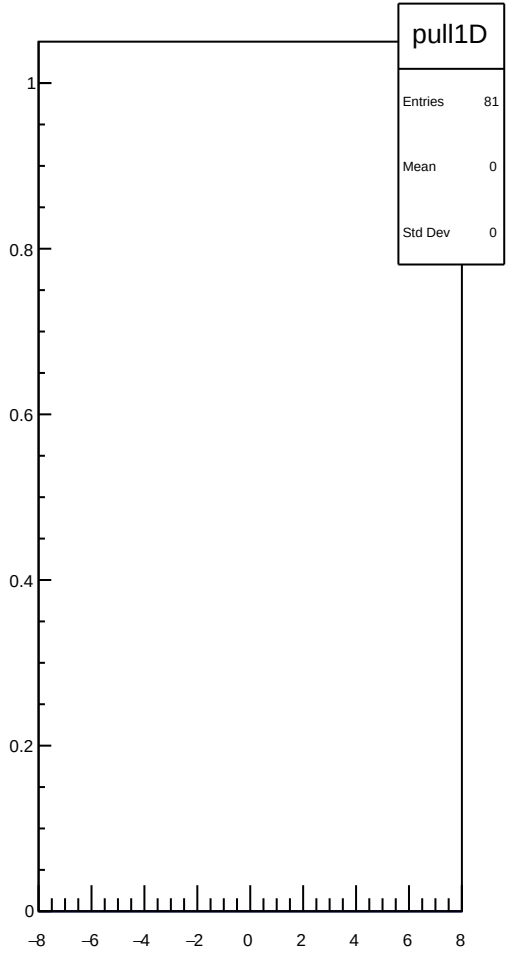

yield_bpm0l10WS_rms vs run
χ² / ndf 1.325e+04 / 80
p0 503.8 ± 0.4004
700
650
600
550
500
450
400

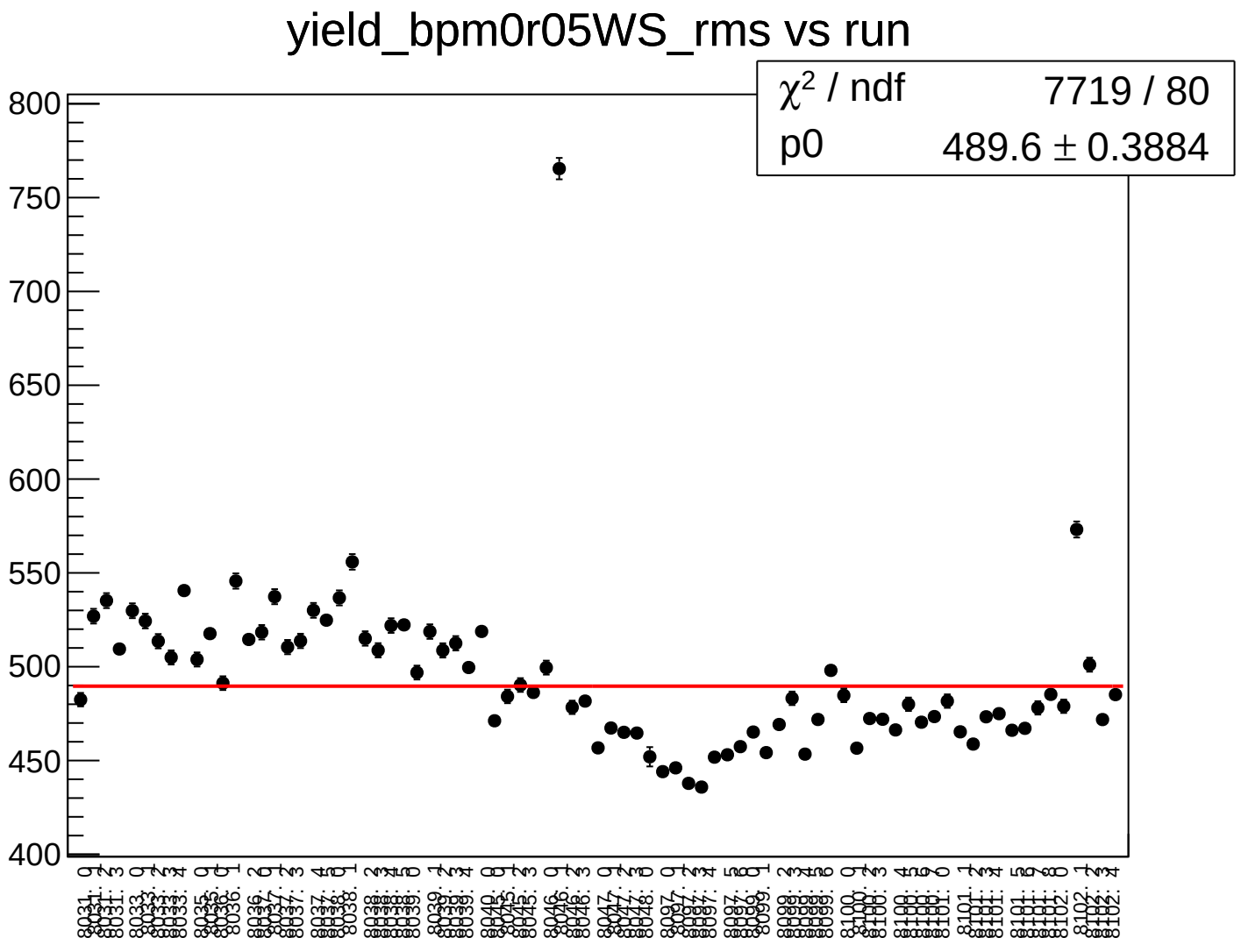

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 3.617e+06 / 80
p0 1.419e+05 ± 0.7242
143
142
141
140
139
pull
Entries 81
Mean 2917
Std Dev 2880
300
200
100
0
−100
−200
−300
−400

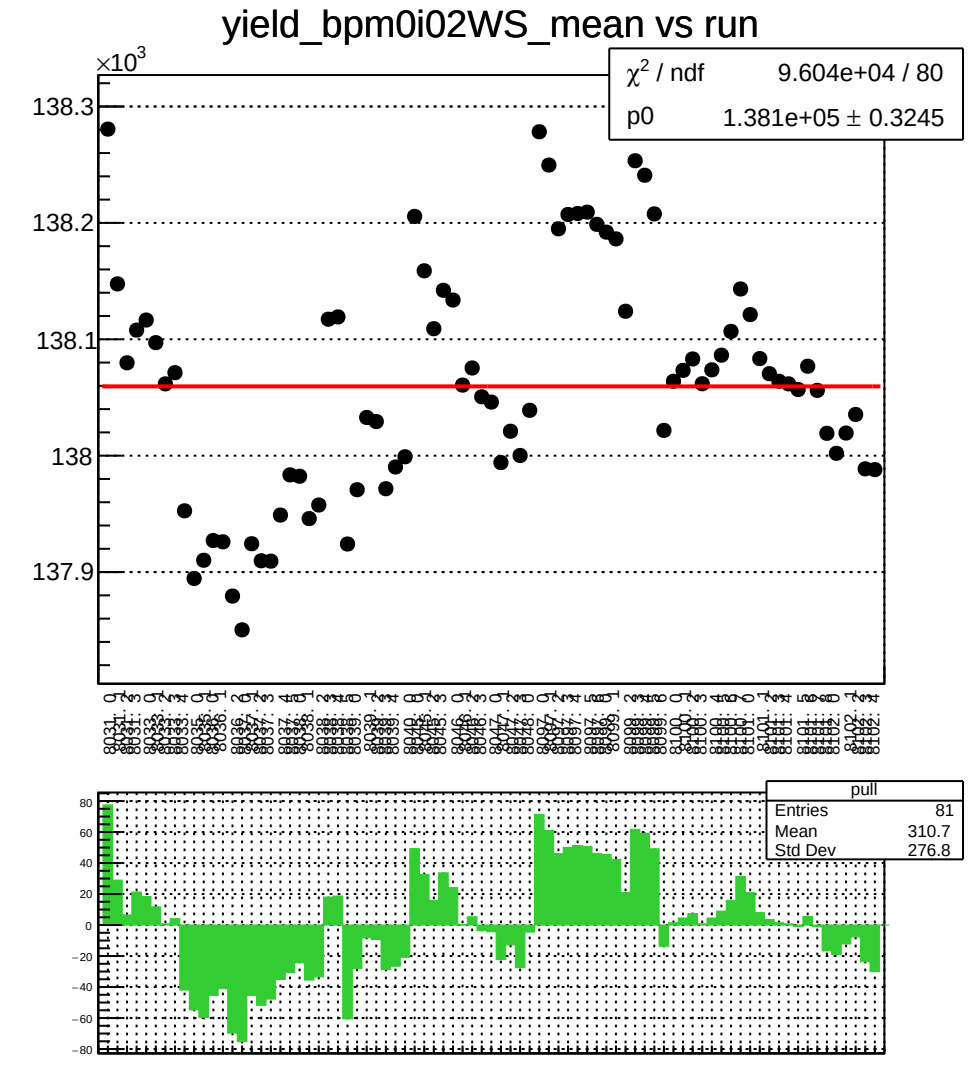

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

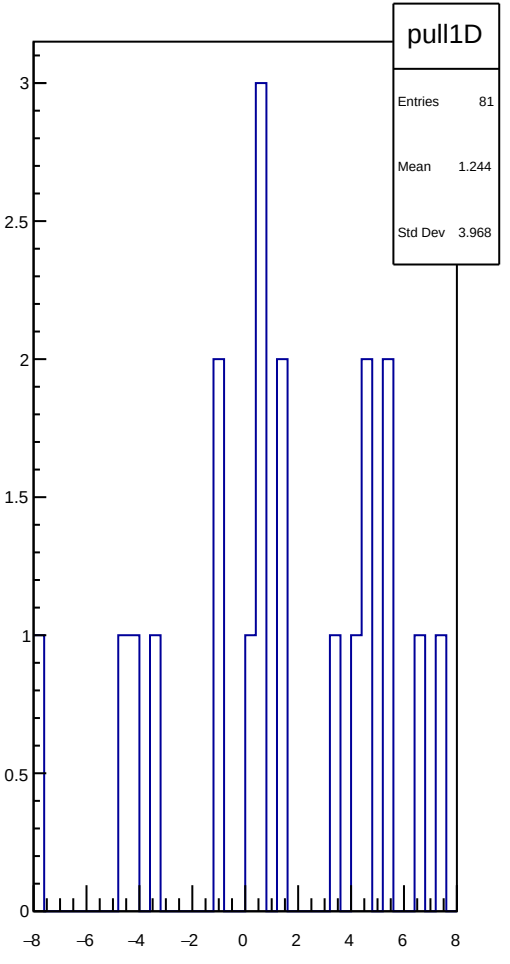

yield_bpm0r03WS_rms vs run
χ² / ndf 1.62e+04 / 80
p0 643.7 ± 0.5121
1400
1200
1000
800
600

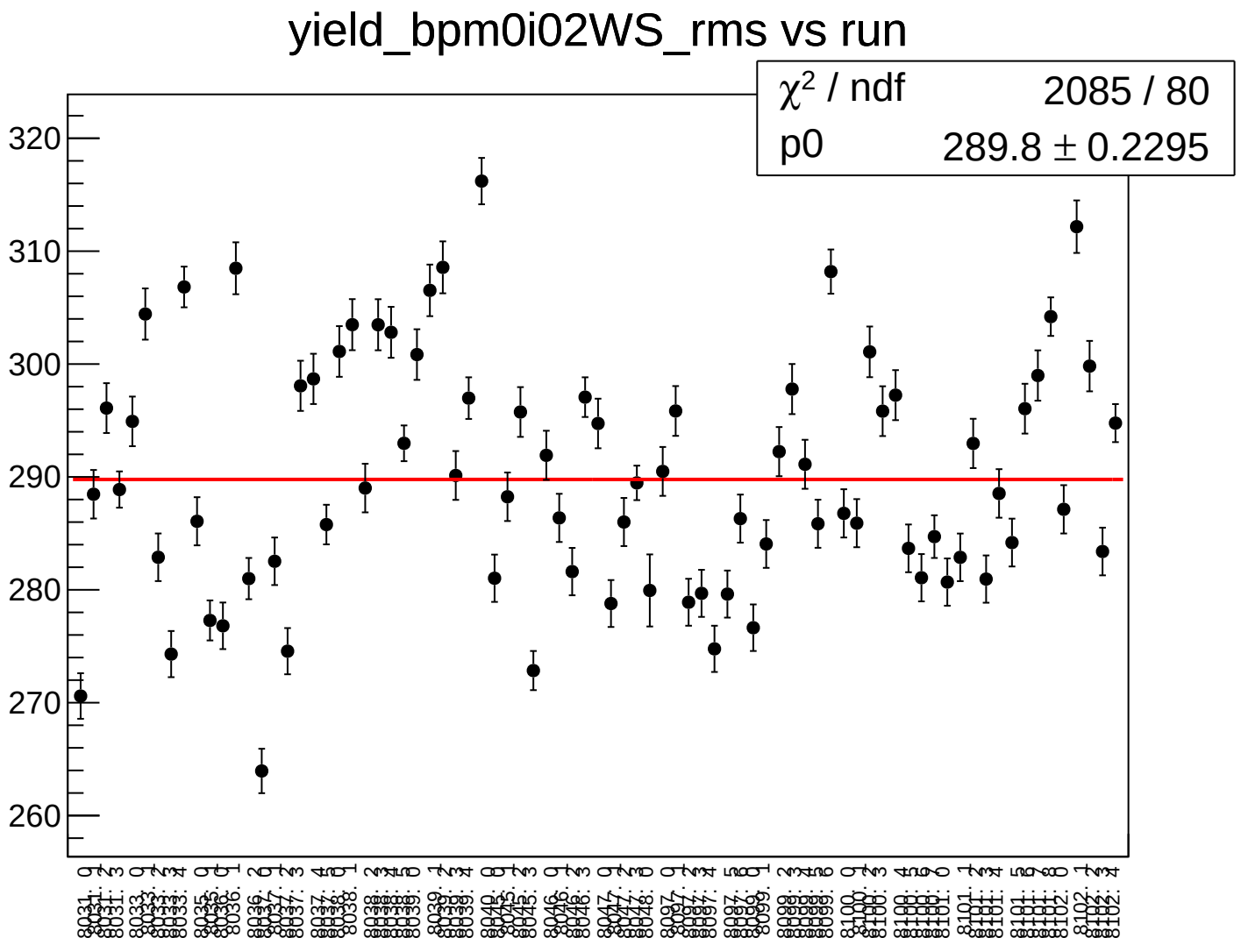

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 3.918e+07 / 80
p0 1.312e+05 ± 0.5493
135
134
133
132
131
130
129
128
127
pull
Entries 81
Mean −1026
Std Dev 1068
1000
500
0
−500
−1000

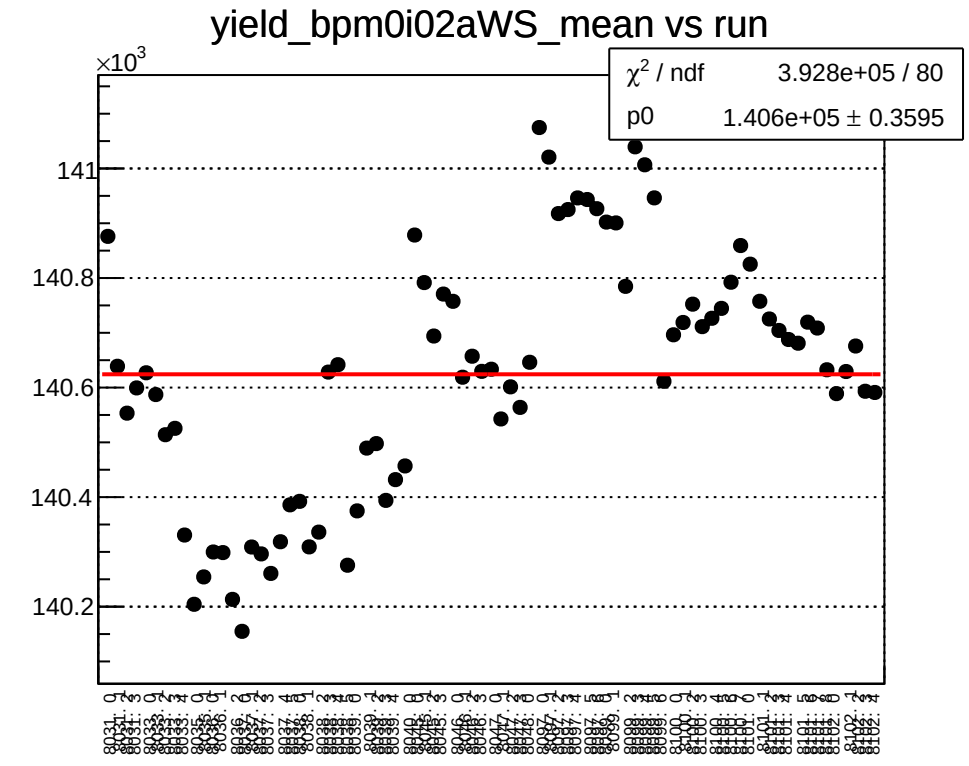

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

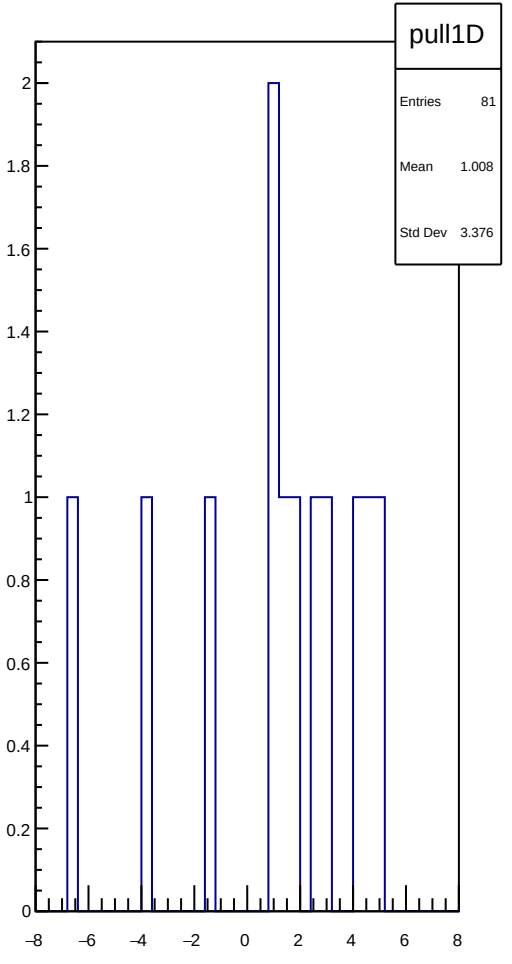

yield_bpm0r05WS_rms vs run
χ² / ndf 7719 / 80
p0 489.6 ± 0.3884
800
750
700
650
600
550
500
450
400

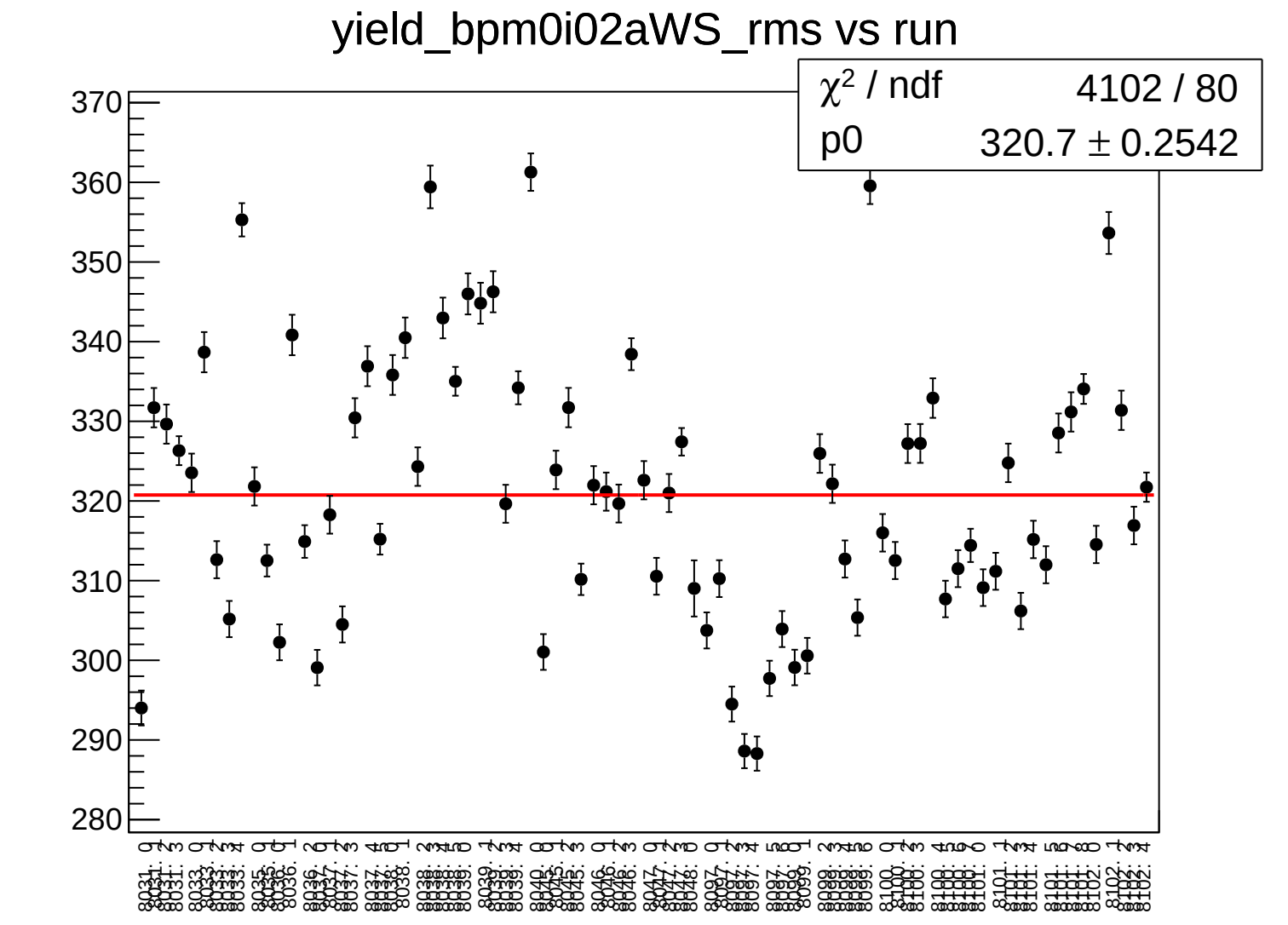

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 9.604e+04 / 80
p0 1.381e+05 ± 0.3245
138.3
138.2
138.1
138
137.9
pull
Entries 81
Mean 310.7
Std Dev 276.8
80
60
40
20
0
−20
−40
−60
−80

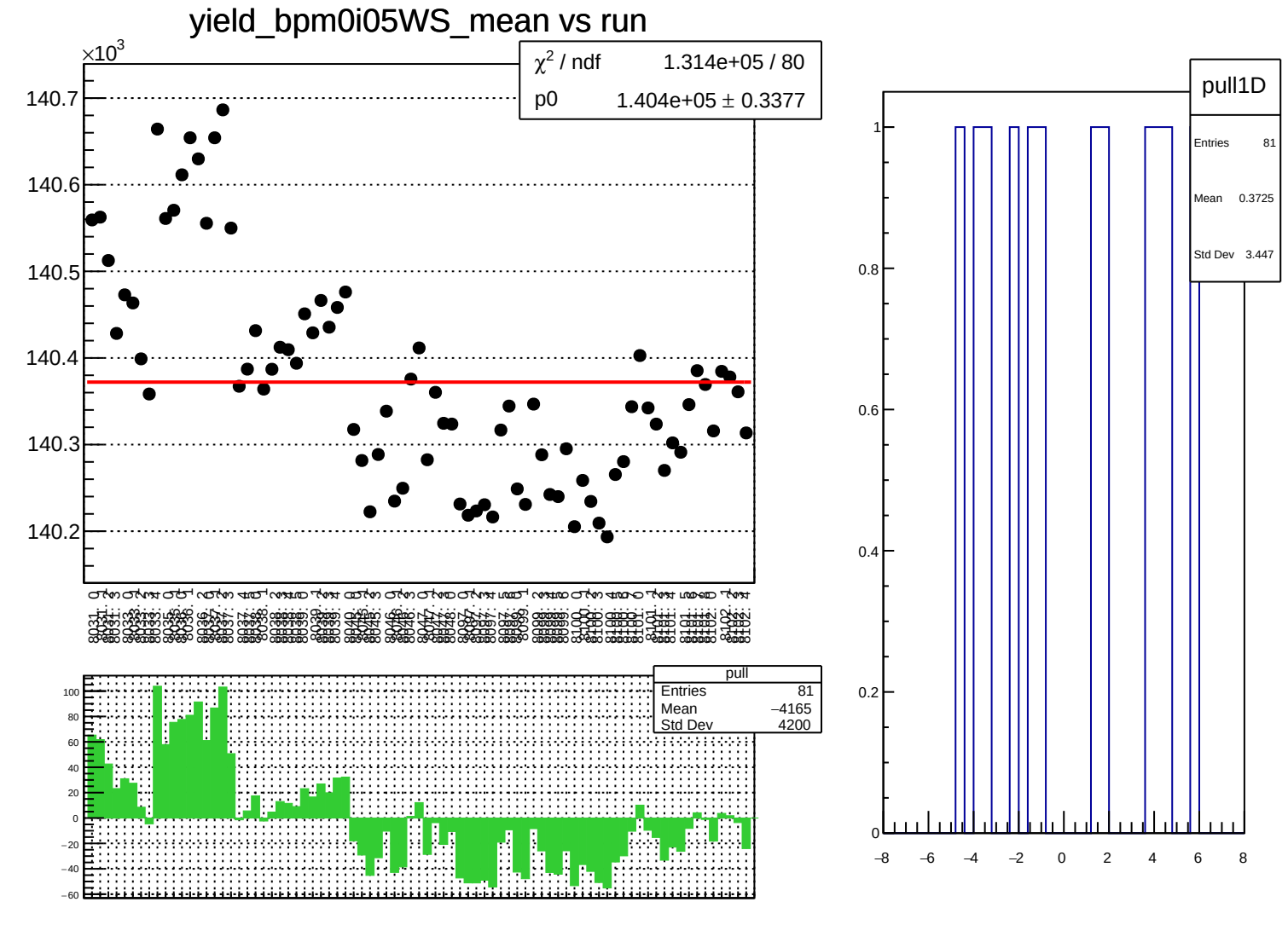

pull1D
Entries 81
Mean 1.244
Std Dev 3.968
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

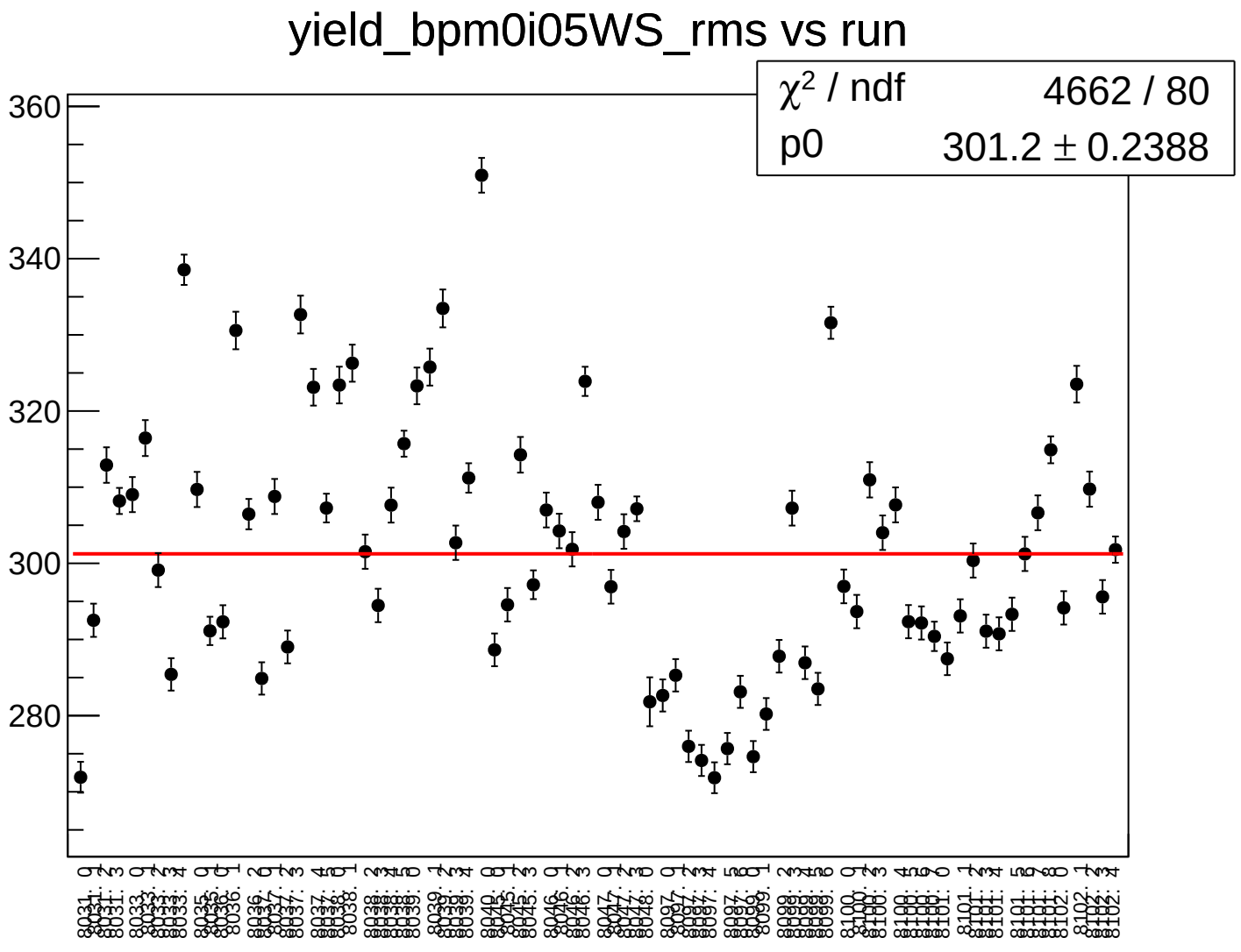

yield_bpm0i02WS_rms vs run
χ² / ndf 2085 / 80
p0 289.8 ± 0.2295
320
310
300
290
280
270
260

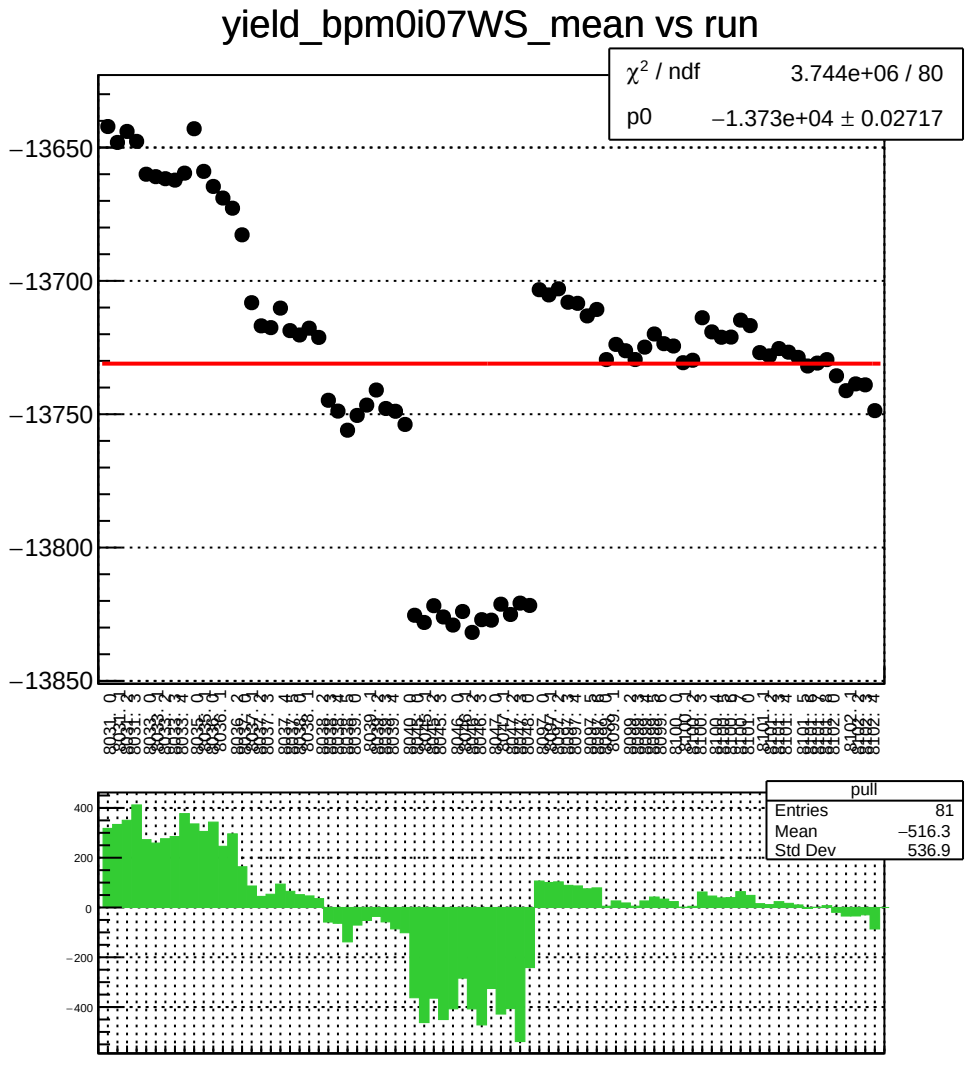

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 3.928e+05 / 80
p0 1.406e+05 ± 0.3595
141
140.8
140.6
140.4
140.2
pull
Entries 81
Mean 2072
Std Dev 2035
150
100
50
0
−50
−100
−150

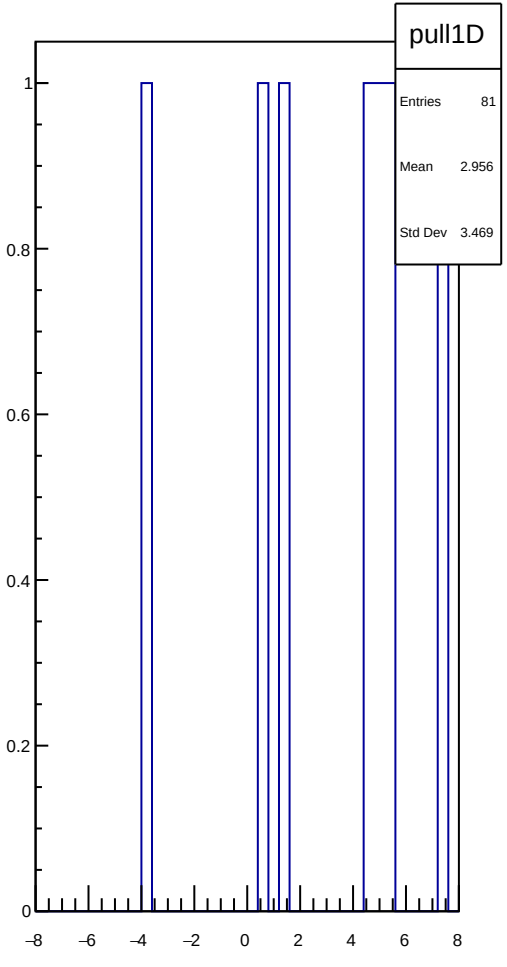

pull1D
Entries 81
Mean 1.008
Std Dev 3.376
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

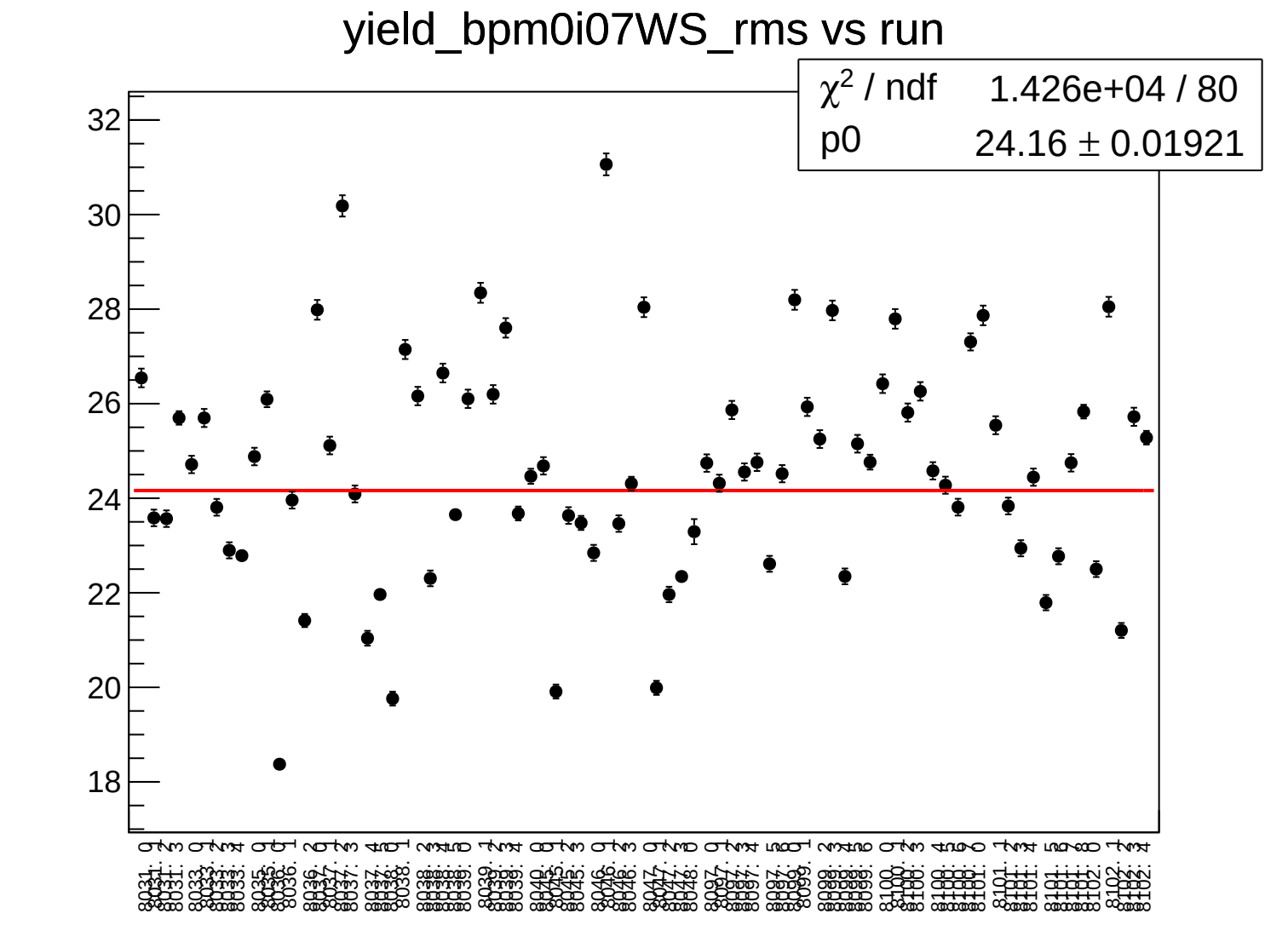

yield_bpm0i02aWS_rms vs run
χ² / ndf 4102 / 80
p0 320.7 ± 0.2542
370
360
350
340
330
320
310
300
290
280

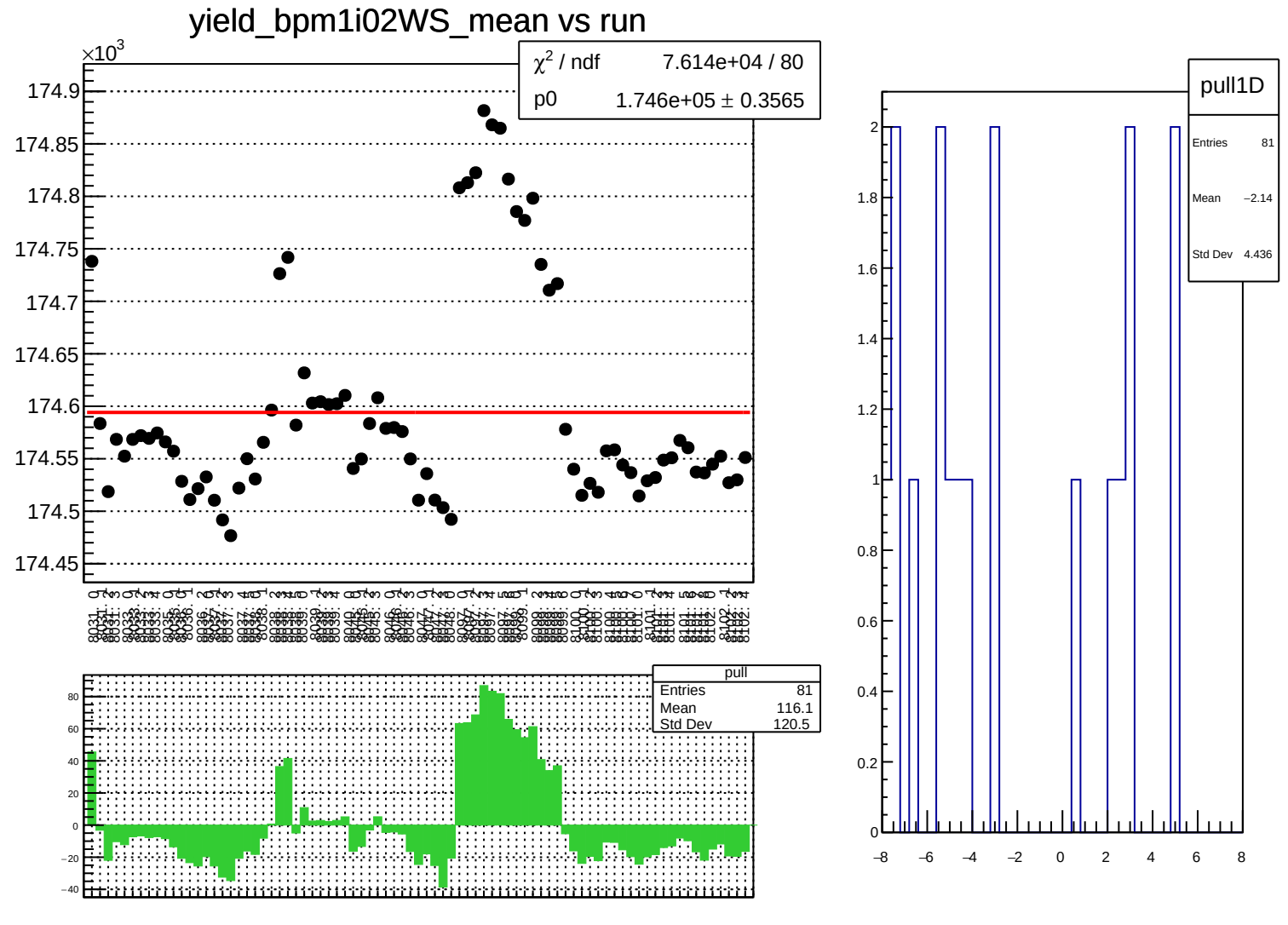

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 1.314e+05 / 80
p0 1.404e+05 ± 0.3377
140.7
140.6
140.5
140.4
140.3
140.2
pull
Entries 81
Mean −4165
Std Dev 4200
100
80
60
40
20
0
−20
−40
−60
pull1D
Entries 81
Mean 0.3725
Std Dev 3.447
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

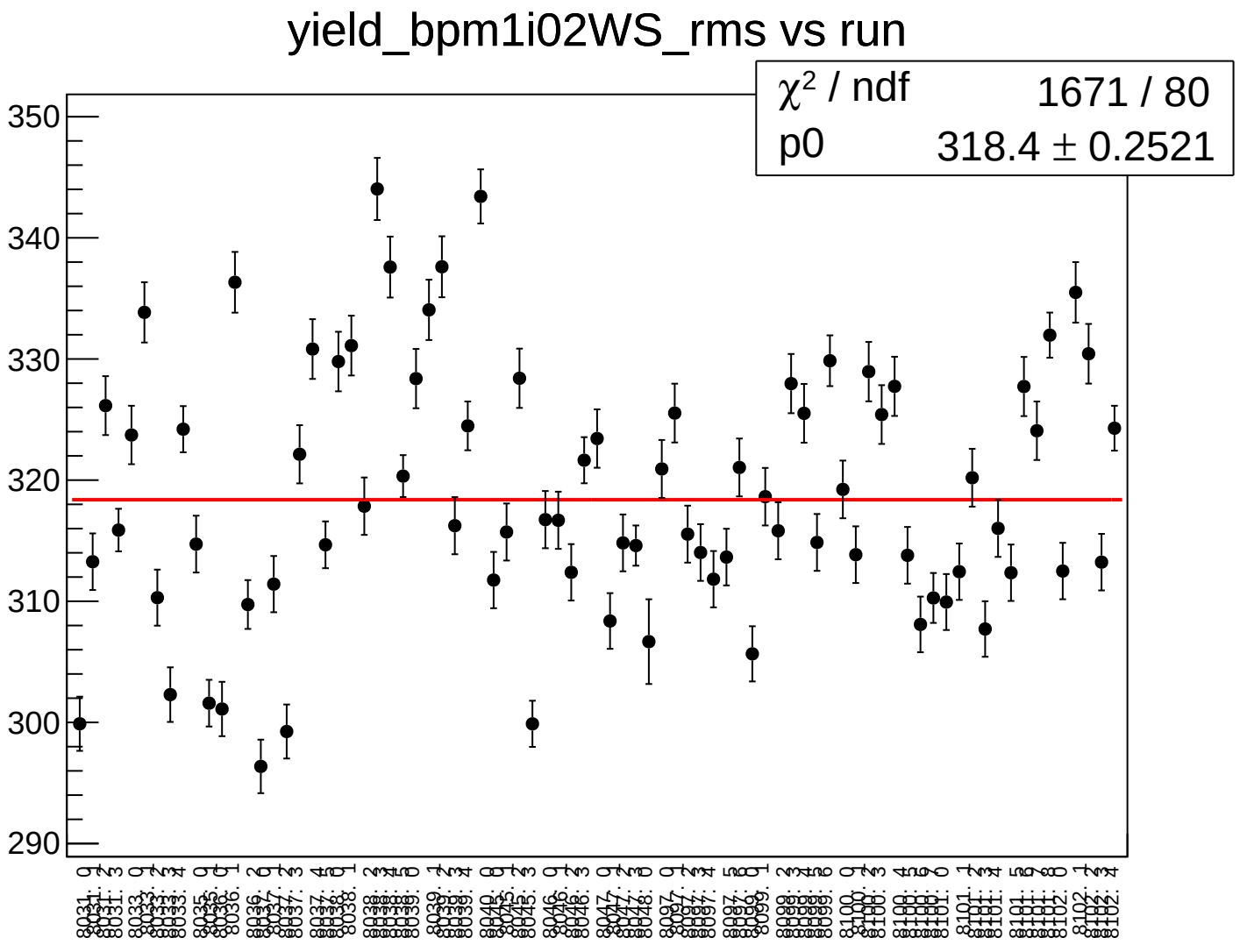

yield_bpm0i05WS_rms vs run
χ² / ndf 4662 / 80
p0 301.2 ± 0.2388
360
340
320
300
280

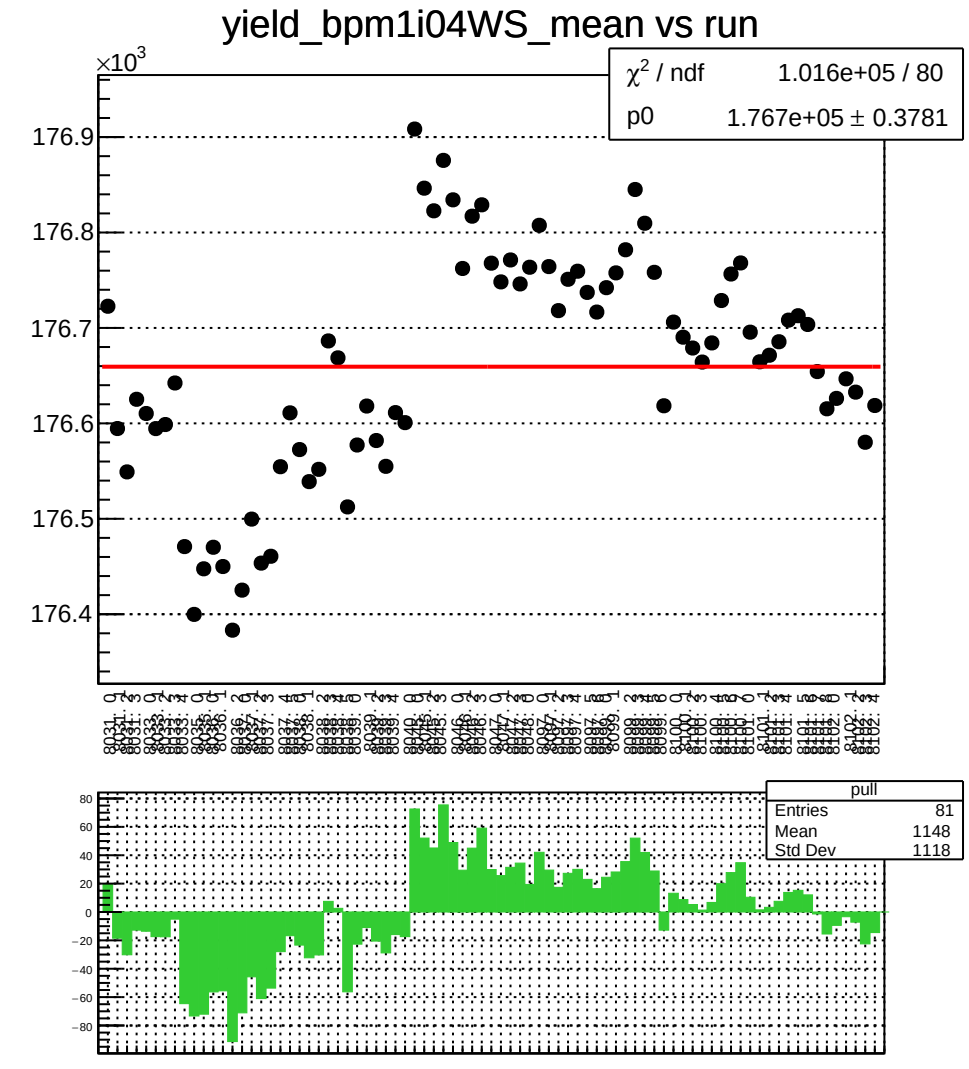

yield_bpm0i07WS_mean vs run
χ² / ndf 3.744e+06 / 80
p0 −1.373e+04 ± 0.02717
−13650
−13700
−13750
−13800
−13850
pull
Entries 81
Mean −516.3
Std Dev 536.9
400
200
0
−200
−400

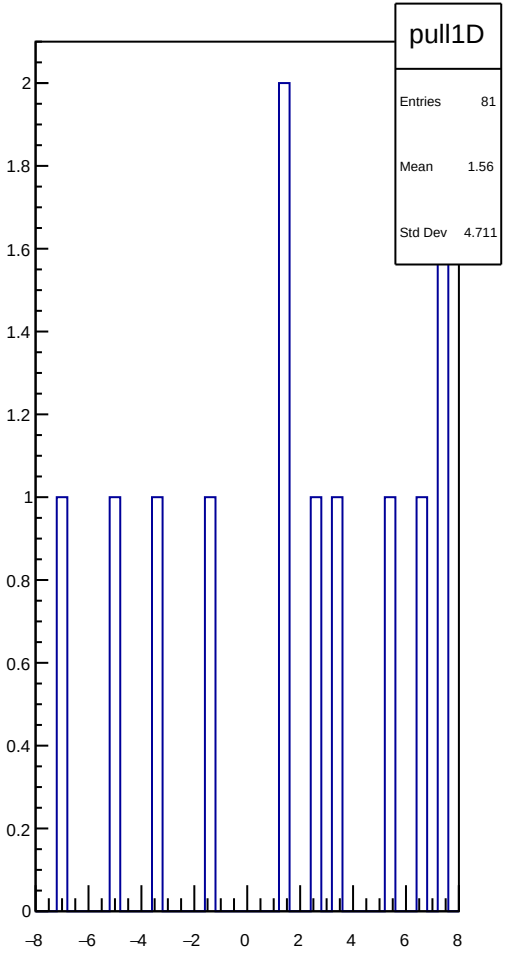

pull1D
Entries 81
Mean 2.956
Std Dev 3.469
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

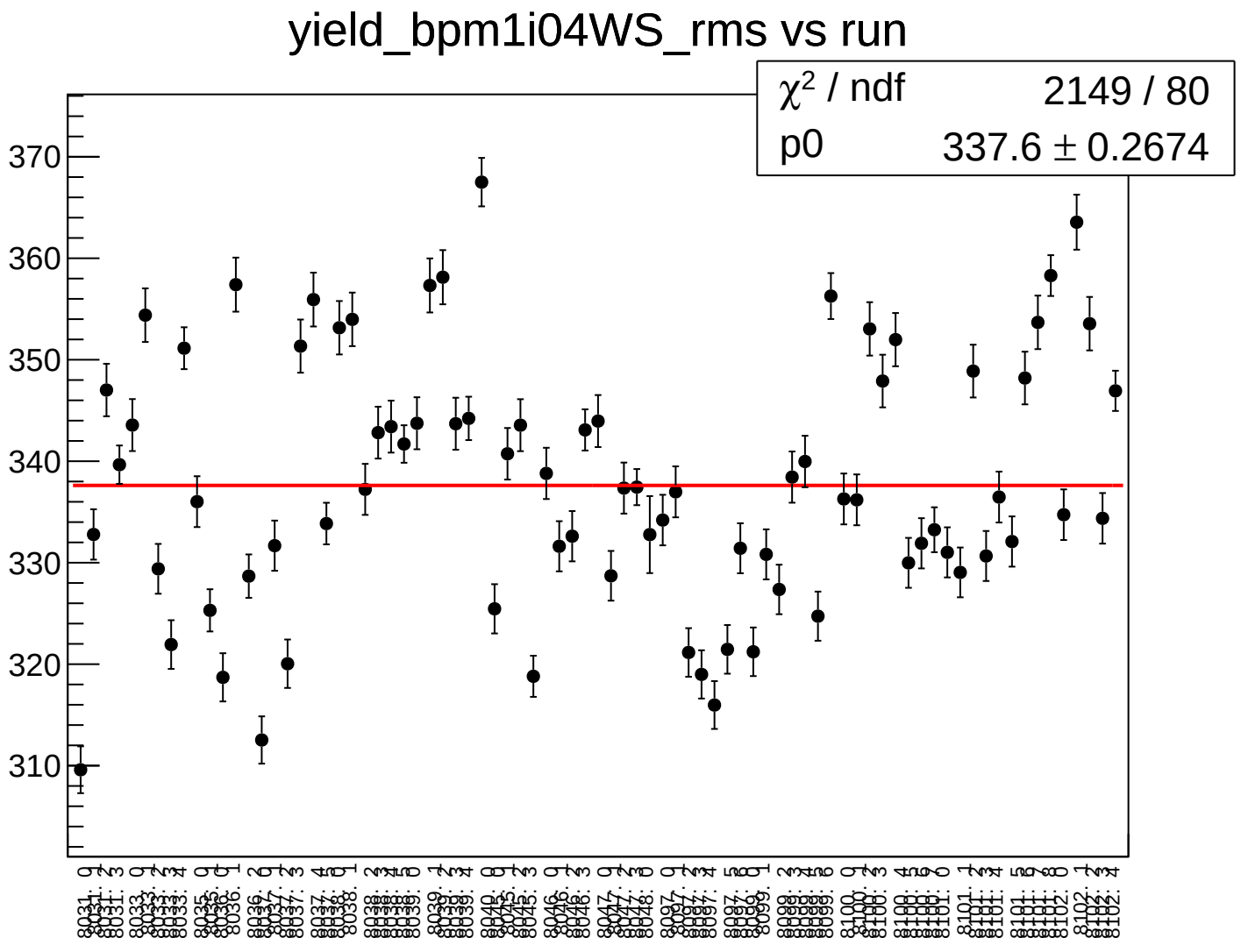

yield_bpm0i07WS_rms vs run
χ² / ndf 1.426e+04 / 80
p0 24.16 ± 0.01921
32
30
28
26
24
22
20
18

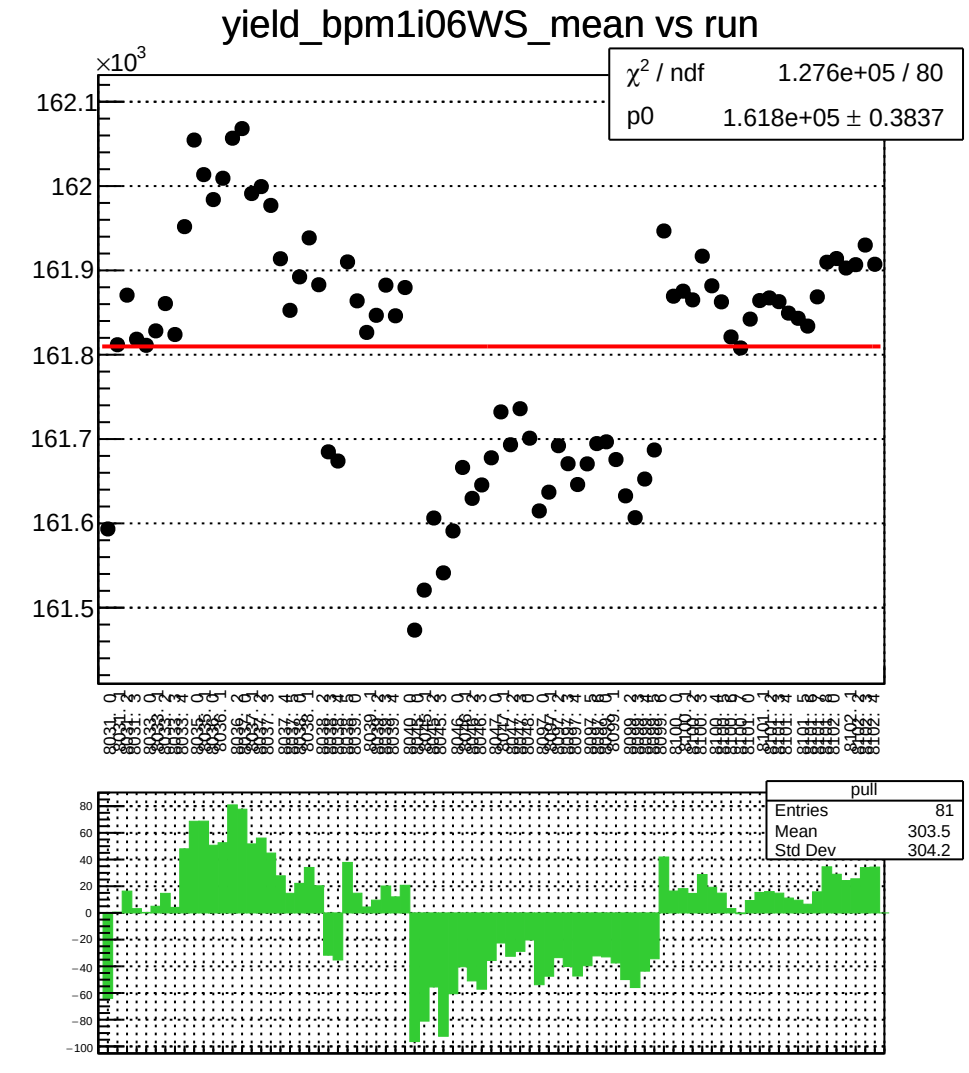

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 7.614e+04 / 80
p0 1.746e+05 ± 0.3565
174.9
174.85
174.8
174.75
174.7
174.65
174.6
174.55
174.5
174.45
pull
Entries 81
Mean 116.1
Std Dev 120.5
80
60
40
20
0
−20
−40
pull1D
Entries 81
Mean −2.14
Std Dev 4.436
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

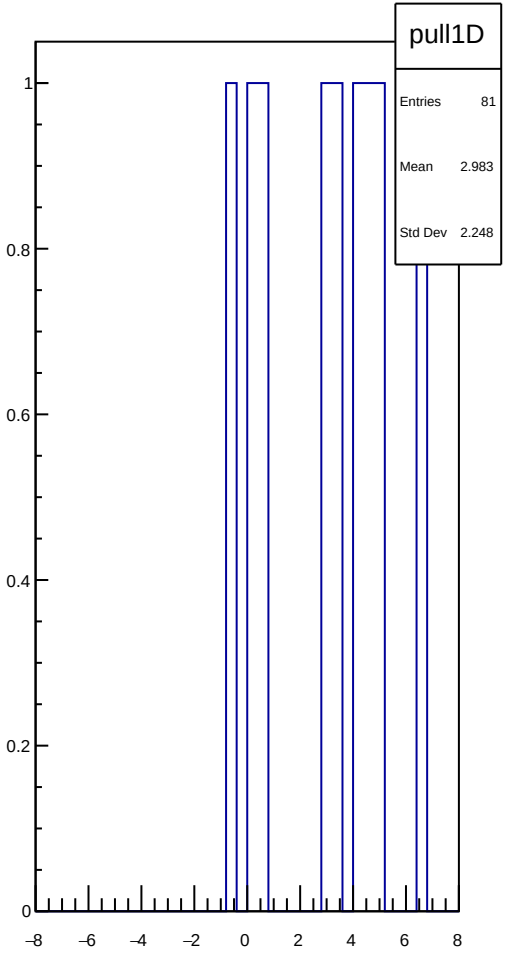

yield_bpm1i02WS_rms vs run
χ² / ndf 1671 / 80
p0 318.4 ± 0.2521
350
340
330
320
310
300
290

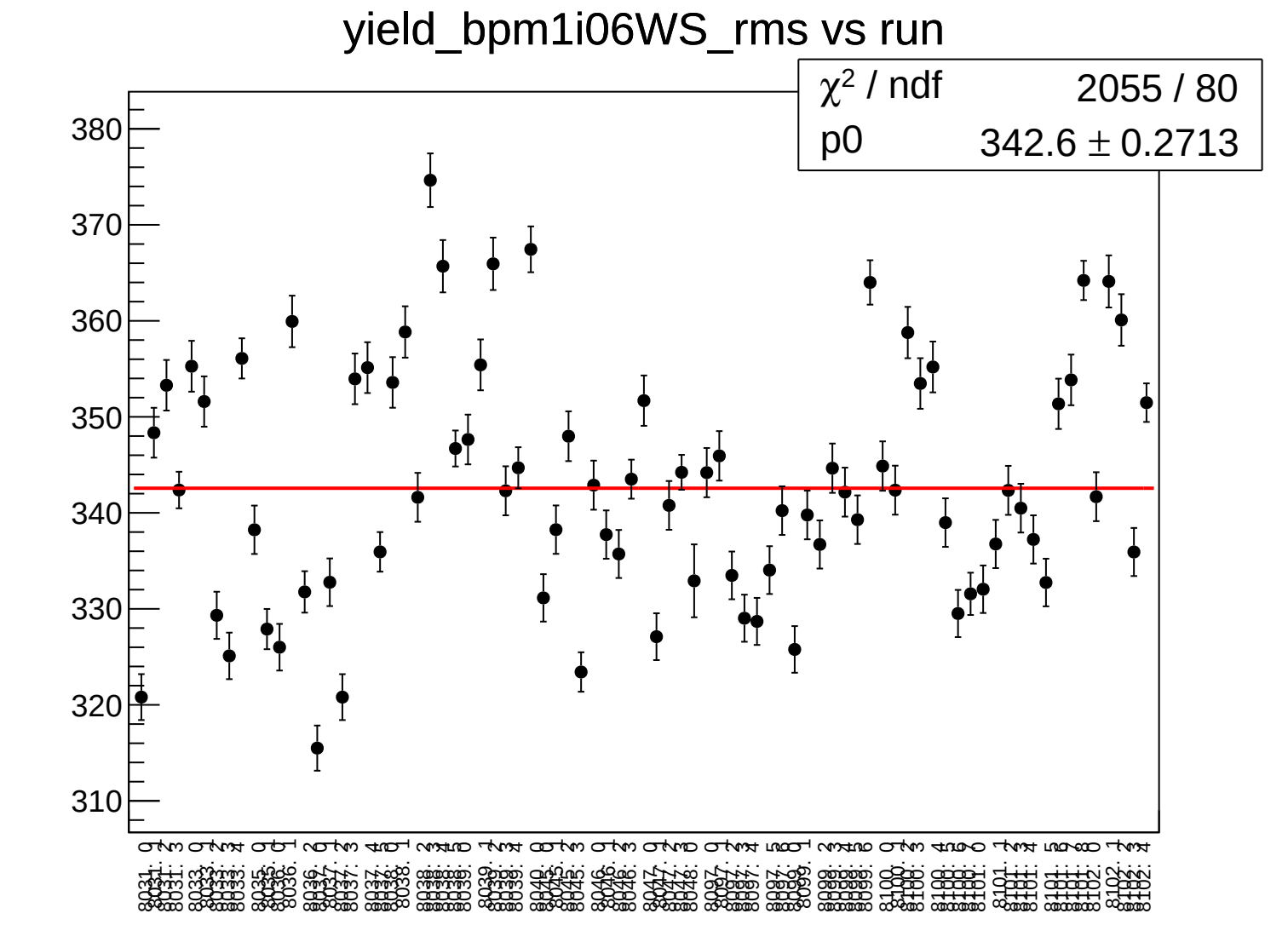

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 1.016e+05 / 80
p0 1.767e+05 ± 0.3781
176.9
176.8
176.7
176.6
176.5
176.4
pull
Entries 81
Mean 1148
Std Dev 1118
80
60
40
20
0
−20
−40
−60
−80

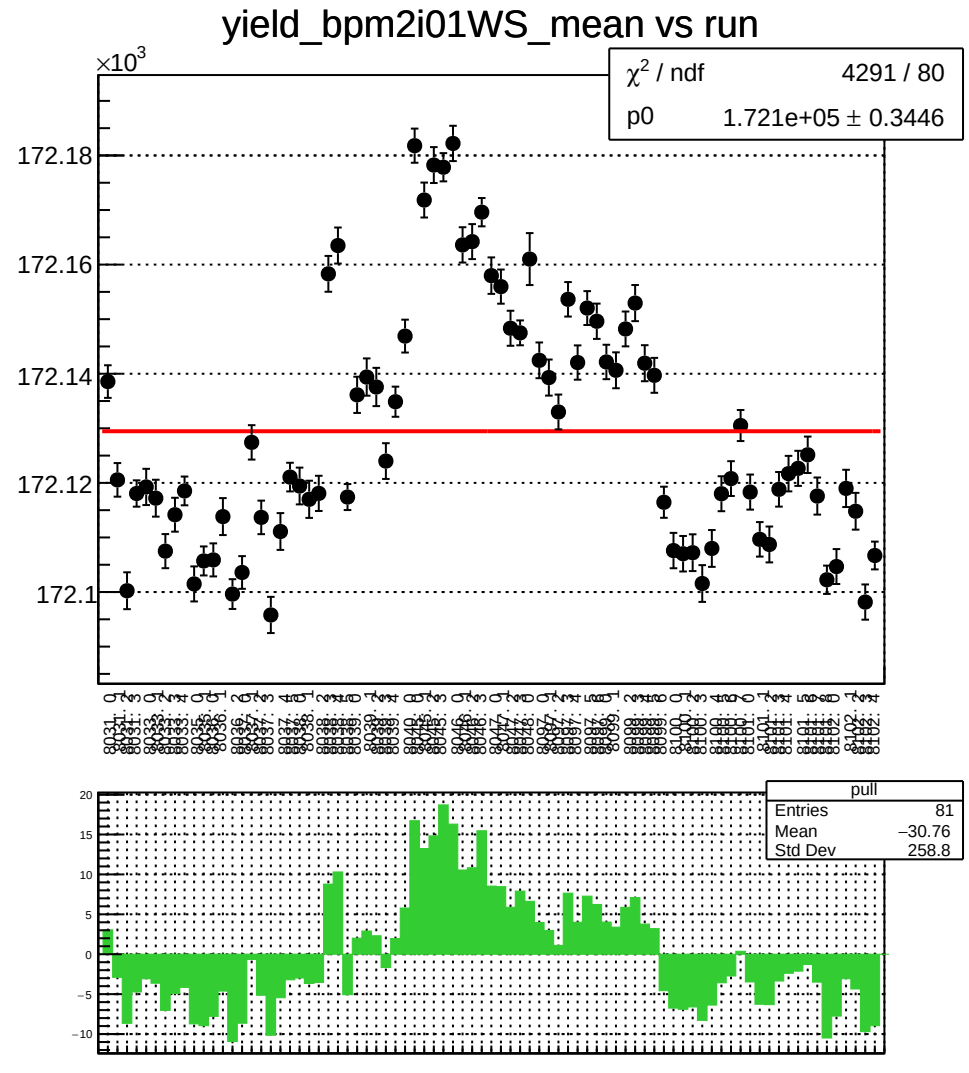

pull1D
Entries 81
Mean 1.56
Std Dev 4.711
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

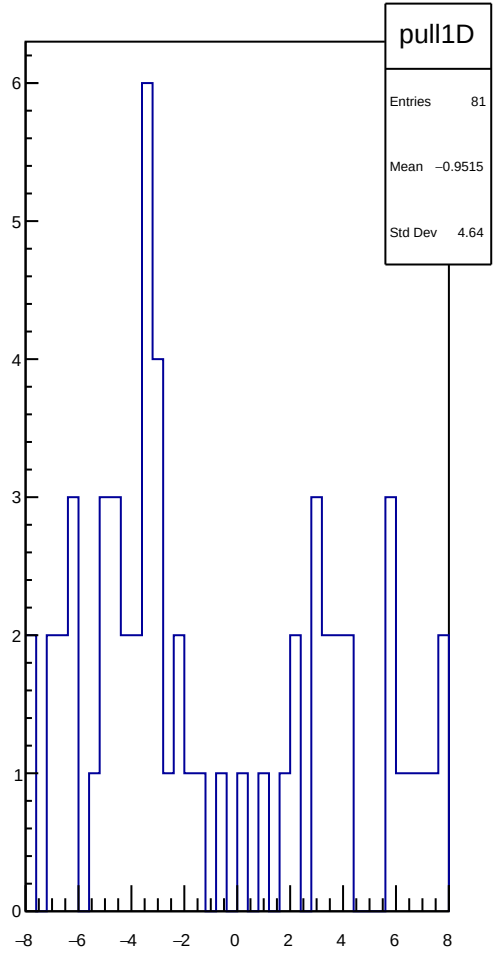

yield_bpm1i04WS_rms vs run
χ² / ndf 2149 / 80
p0 337.6 ± 0.2674
370
360
350
340
330
320
310

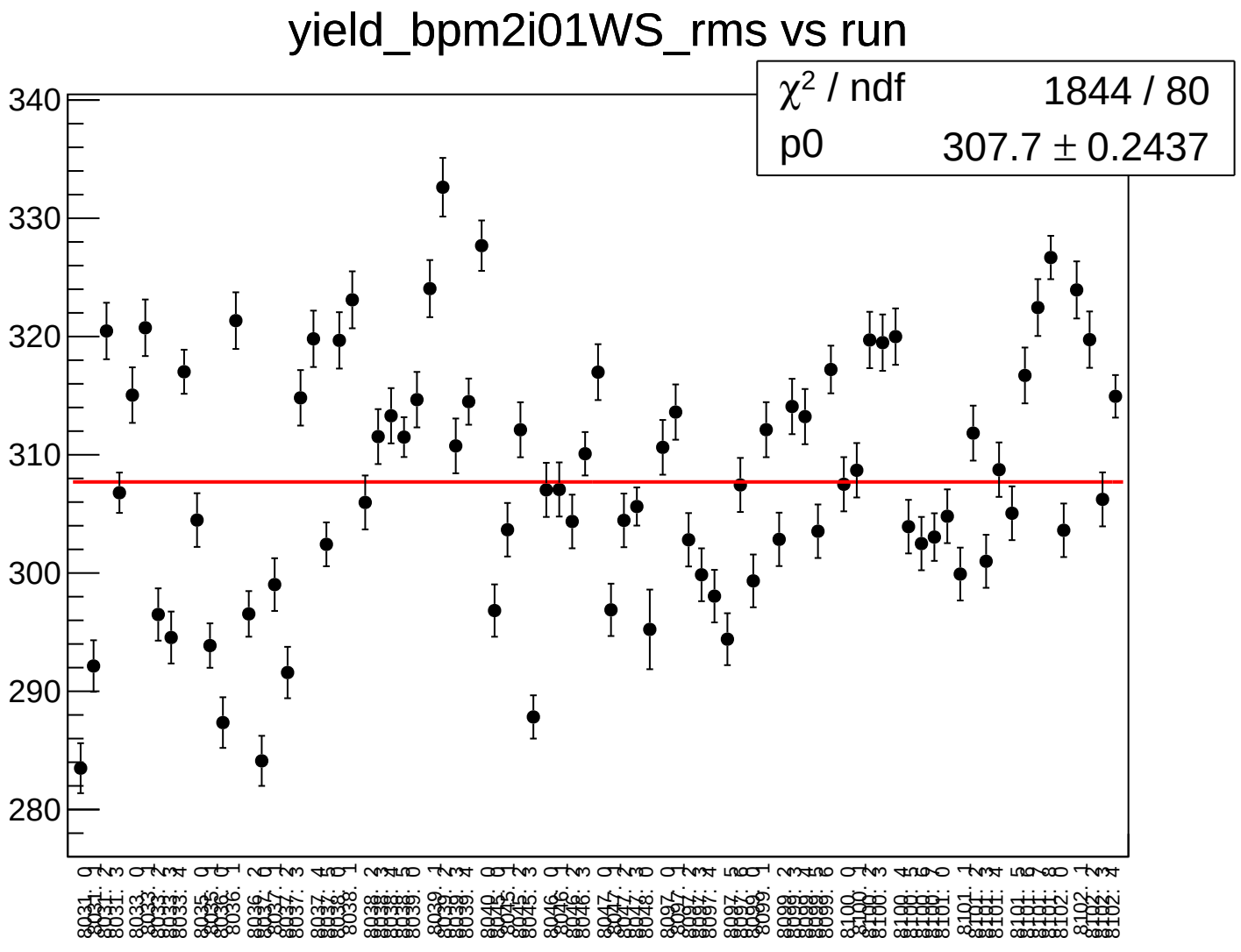

yield_bpm1i06WS_mean vs run
×10^3
χ^2 / ndf 1.276e+05 / 80
p0 1.618e+05 ± 0.3837
162.1
162
161.9
161.8
161.7
161.6
161.5
pull
Entries 81
Mean 303.5
Std Dev 304.2
80
60
40
20
0
−20
−40
−60
−80
−100

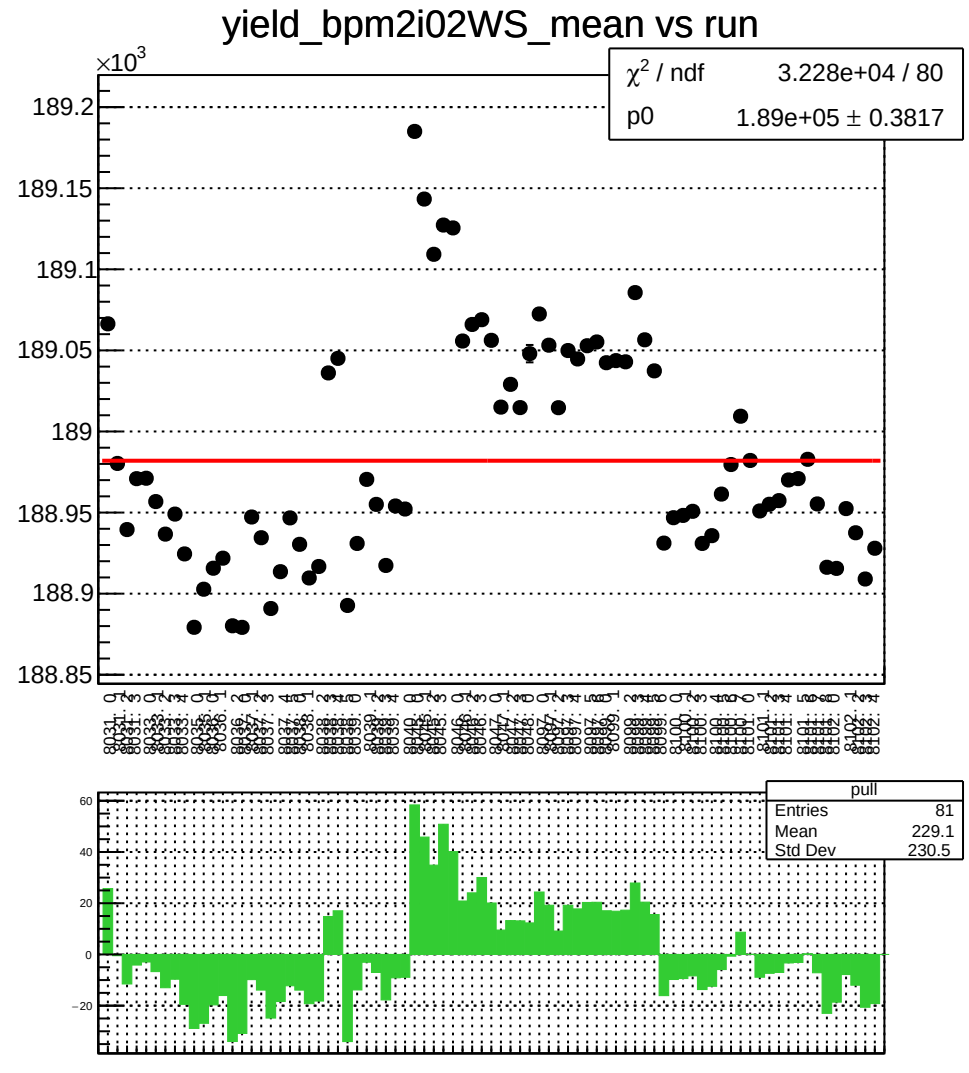

pull1D
Entries 81
Mean 2.983
Std Dev 2.248
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

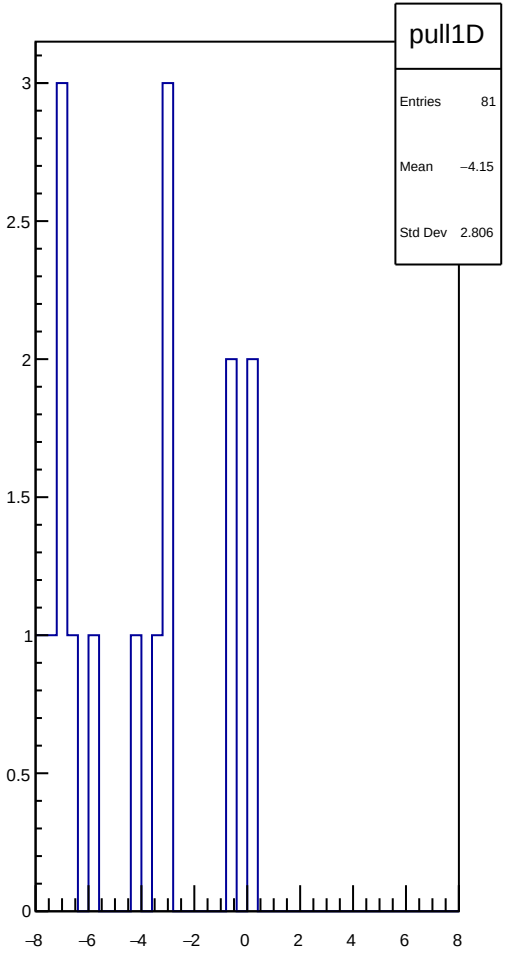

yield_bpm1i06WS_rms vs run
χ² / ndf 2055 / 80
p0 342.6 ± 0.2713
380
370
360
350
340
330
320
310

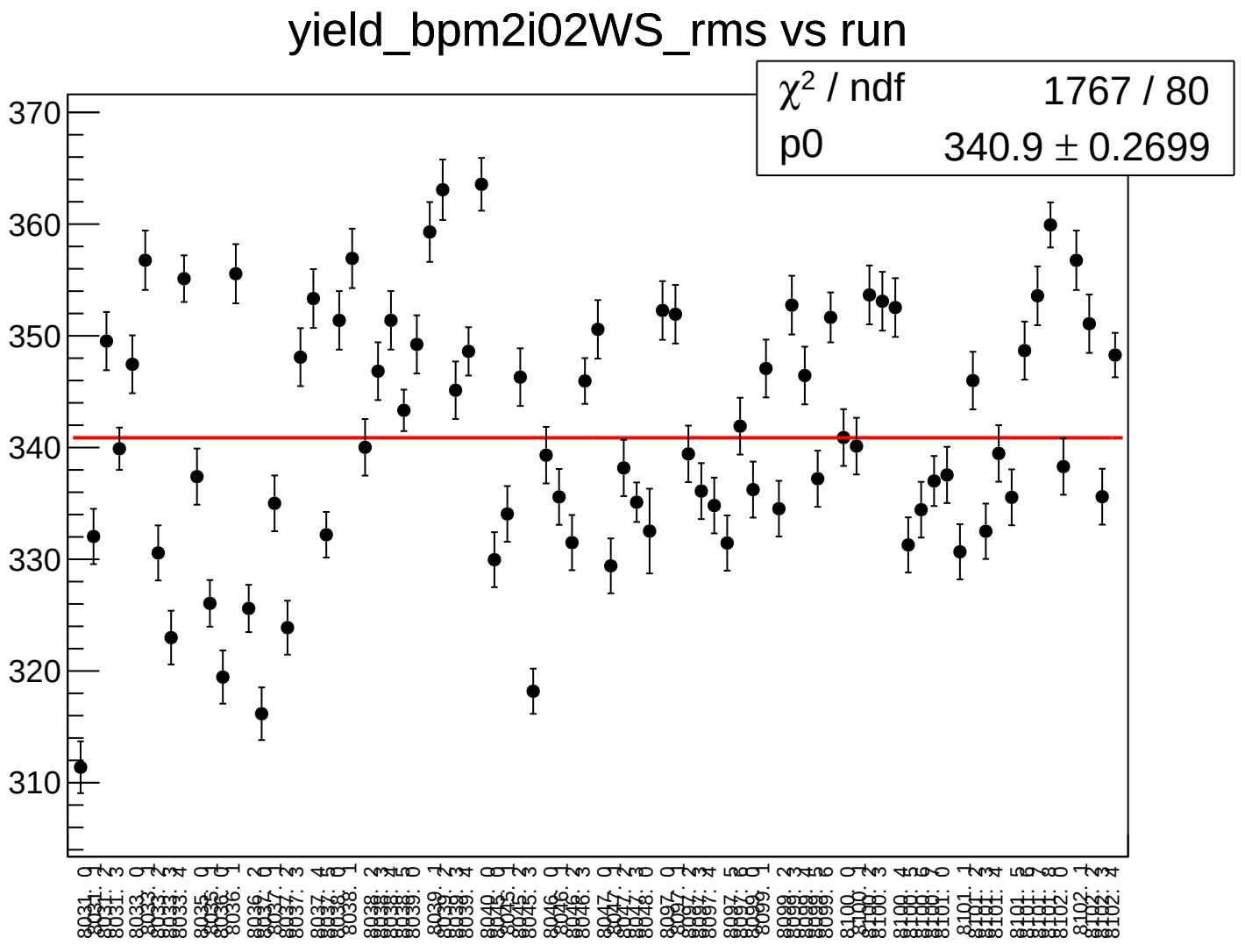

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 4291 / 80
p0 1.721e+05 ± 0.3446
172.18
172.16
172.14
172.12
172.1
pull
Entries 81
Mean −30.76
Std Dev 258.8
20
15
10
5
0
−5
−10

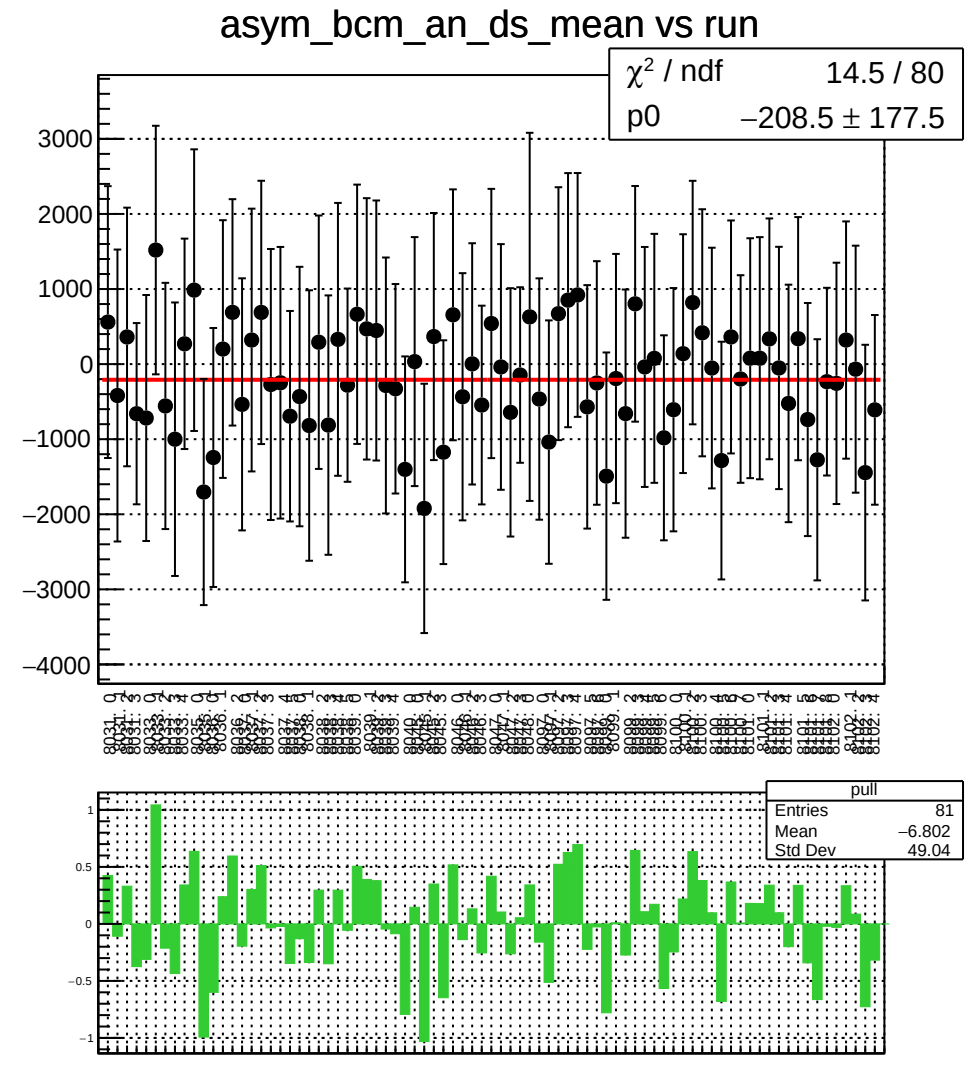

pull1D
Entries 81
Mean −0.9515
Std Dev 4.64
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

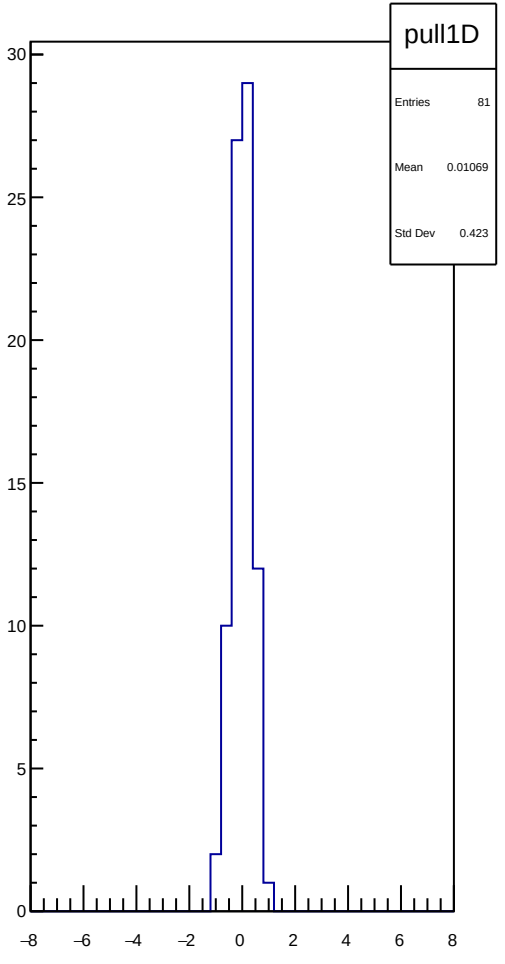

yield_bpm2i01WS_rms vs run
χ² / ndf 1844 / 80
p0 307.7 ± 0.2437
340
330
320
310
300
290
280

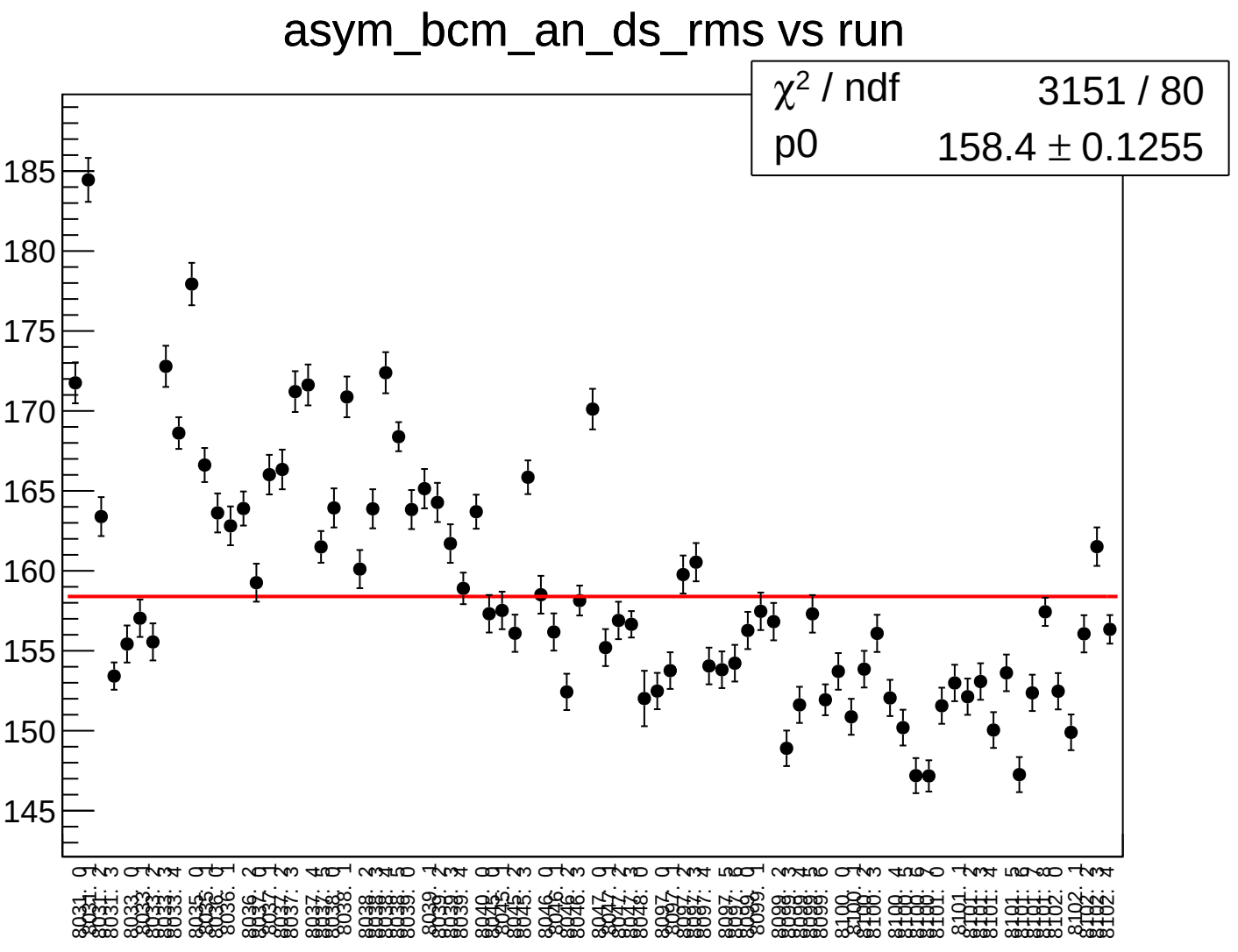

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 3.228e+04 / 80
p0 1.89e+05 ± 0.3817
189.2
189.15
189.1
189.05
189
188.95
188.9
188.85
pull
Entries 81
Mean 229.1
Std Dev 230.5
60
40
20
0
−20

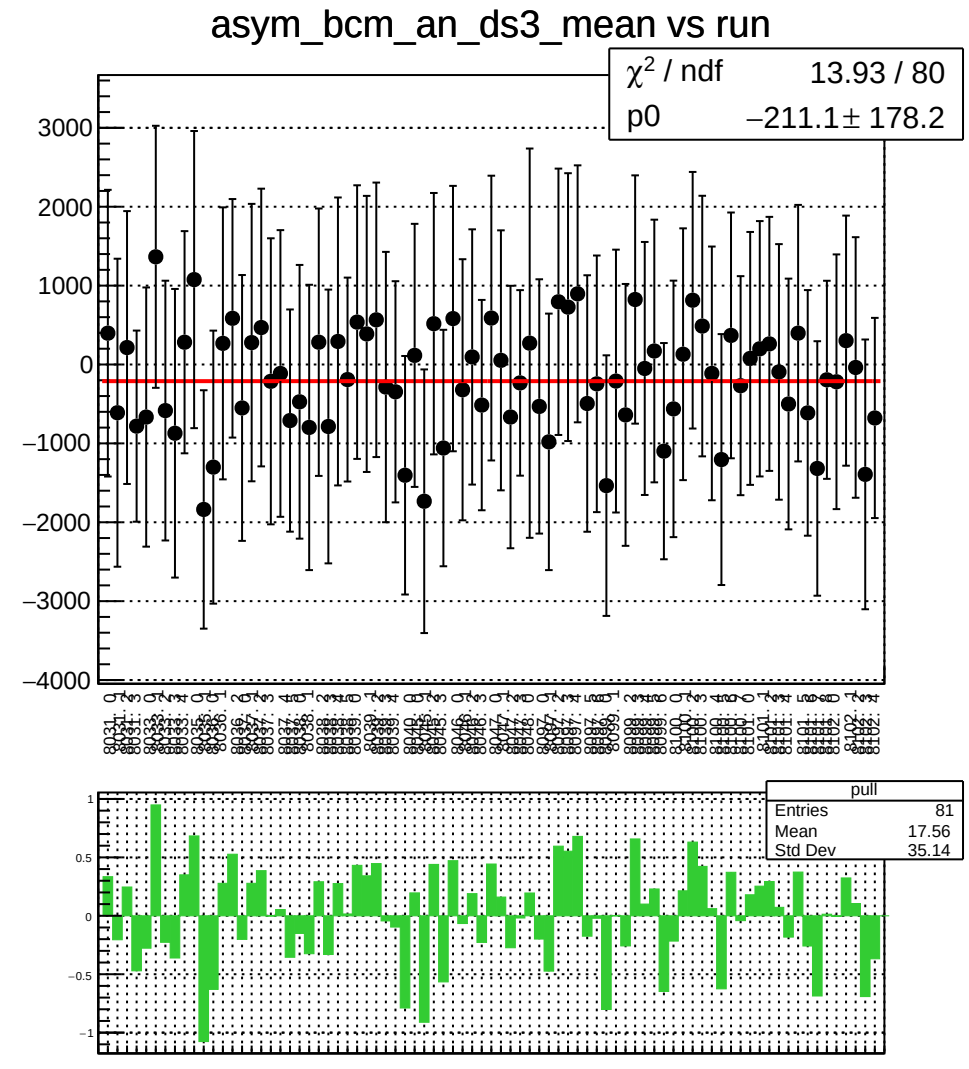

pull1D
Entries 81
Mean −4.15
Std Dev 2.806
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

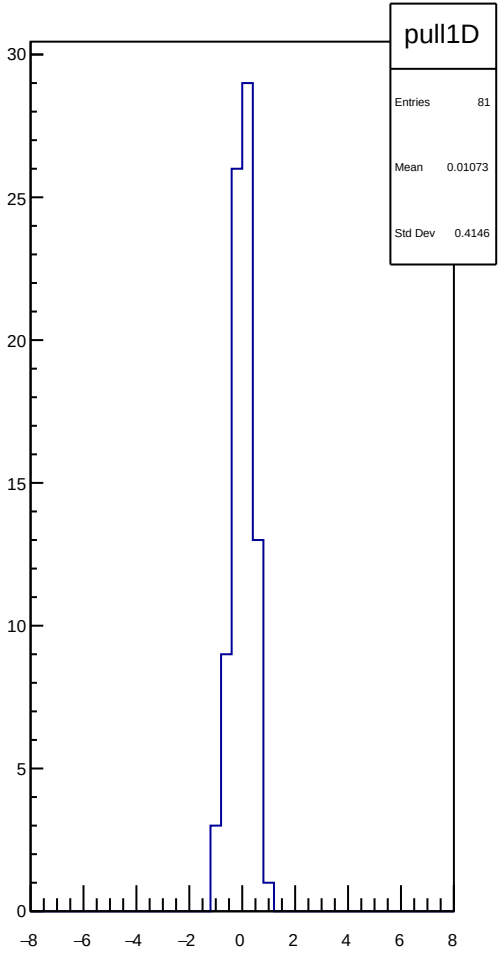

yield_bpm2i02WS_rms vs run
χ² / ndf 1767 / 80
p0 340.9 ± 0.2699
370
360
350
340
330
320
310

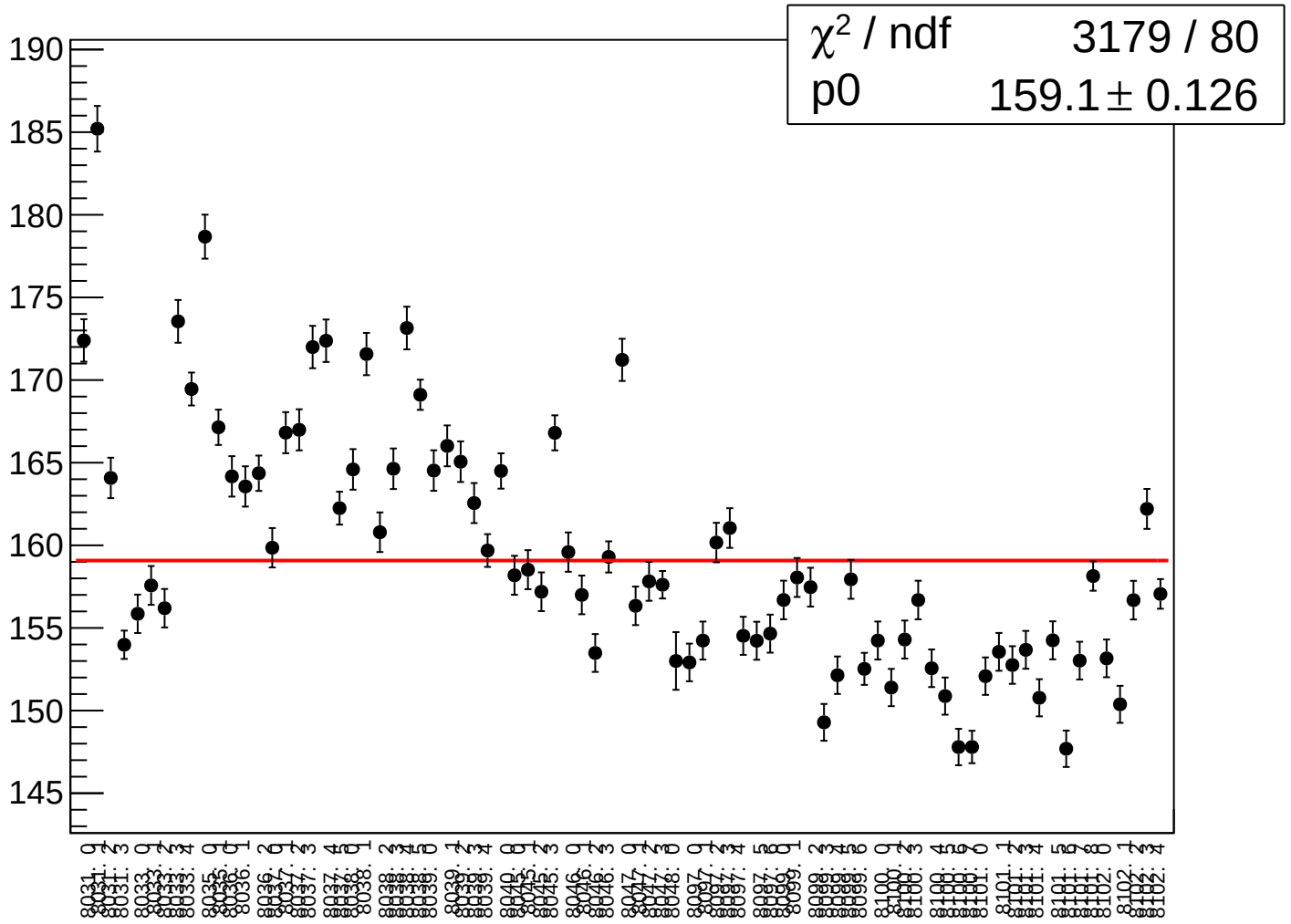

asym_bcm_an_ds_mean vs run
χ² / ndf 14.5 / 80
p0 −208.5 ± 177.5
pull
Entries 81
Mean −6.802
Std Dev 49.04

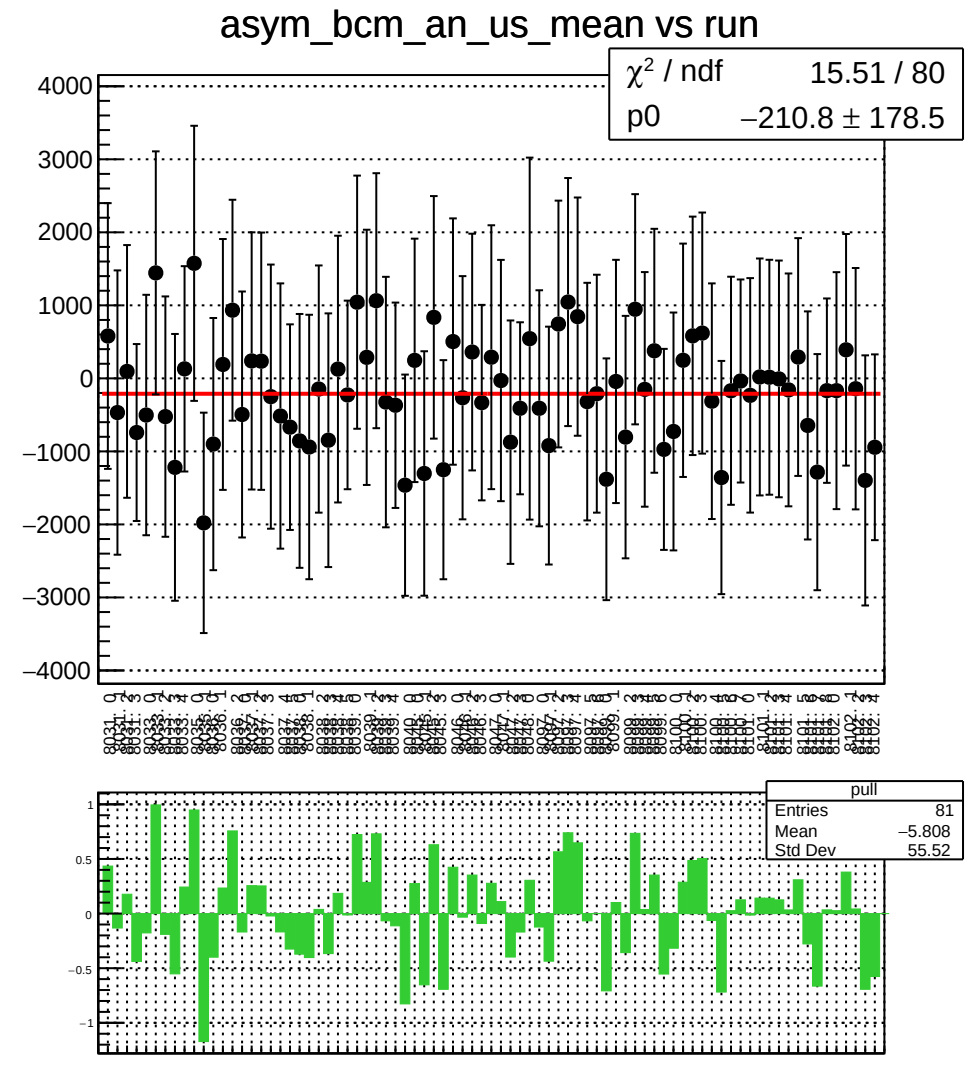

pull1D
Entries 81
Mean 0.01069
Std Dev 0.423

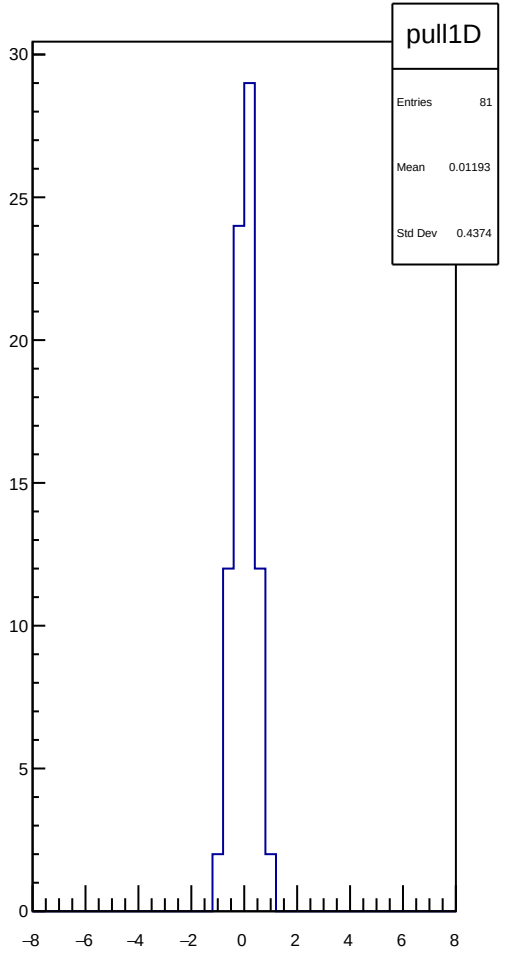

asym_bcm_an_ds_rms vs run
χ² / ndf 3151 / 80
p0 158.4 ± 0.1255
185
180
175
170
165
160
155
150
145

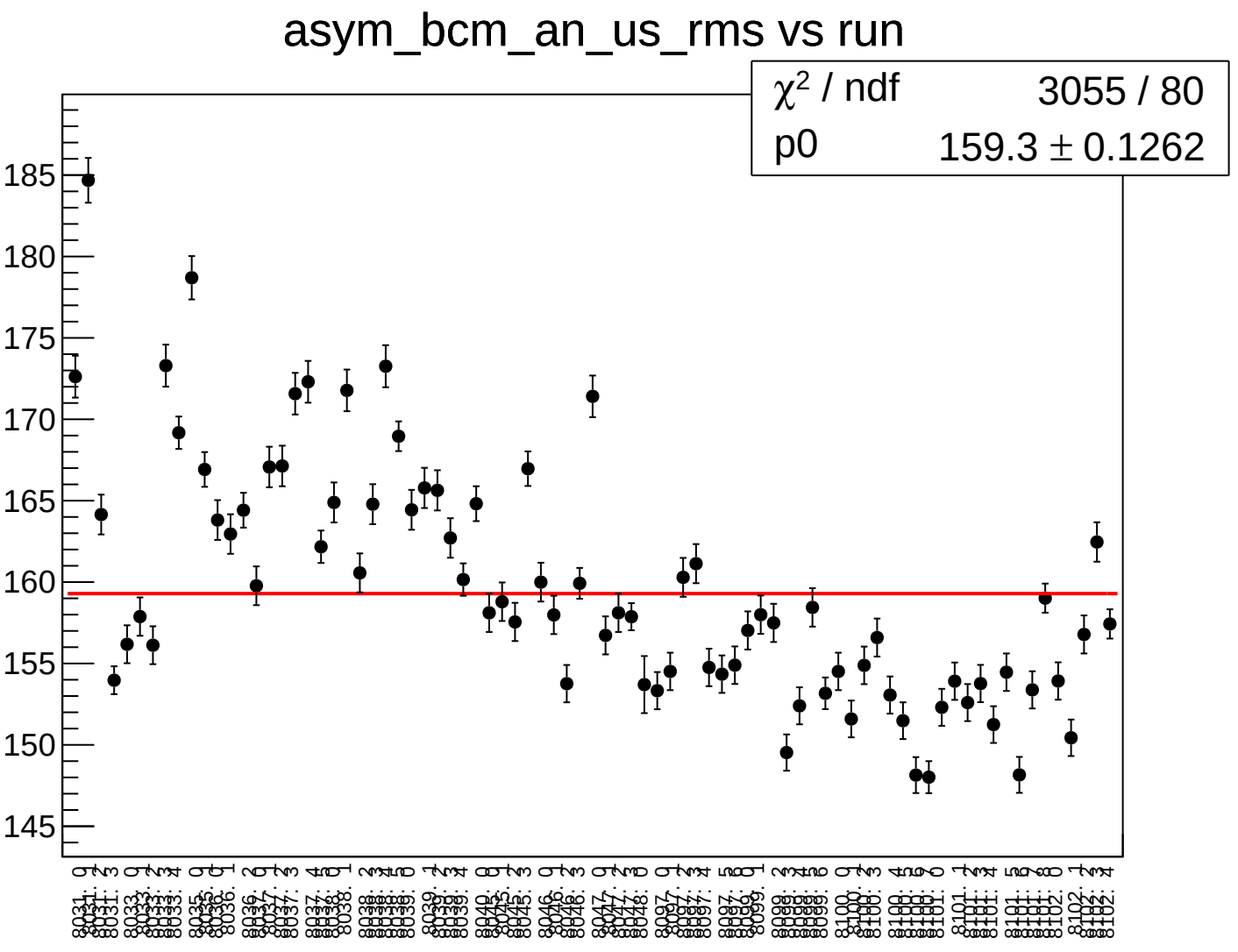

asym_bcm_an_ds3_mean vs run
χ² / ndf 13.93 / 80
p0 −211.1± 178.2
pull
Entries 81
Mean 17.56
Std Dev 35.14

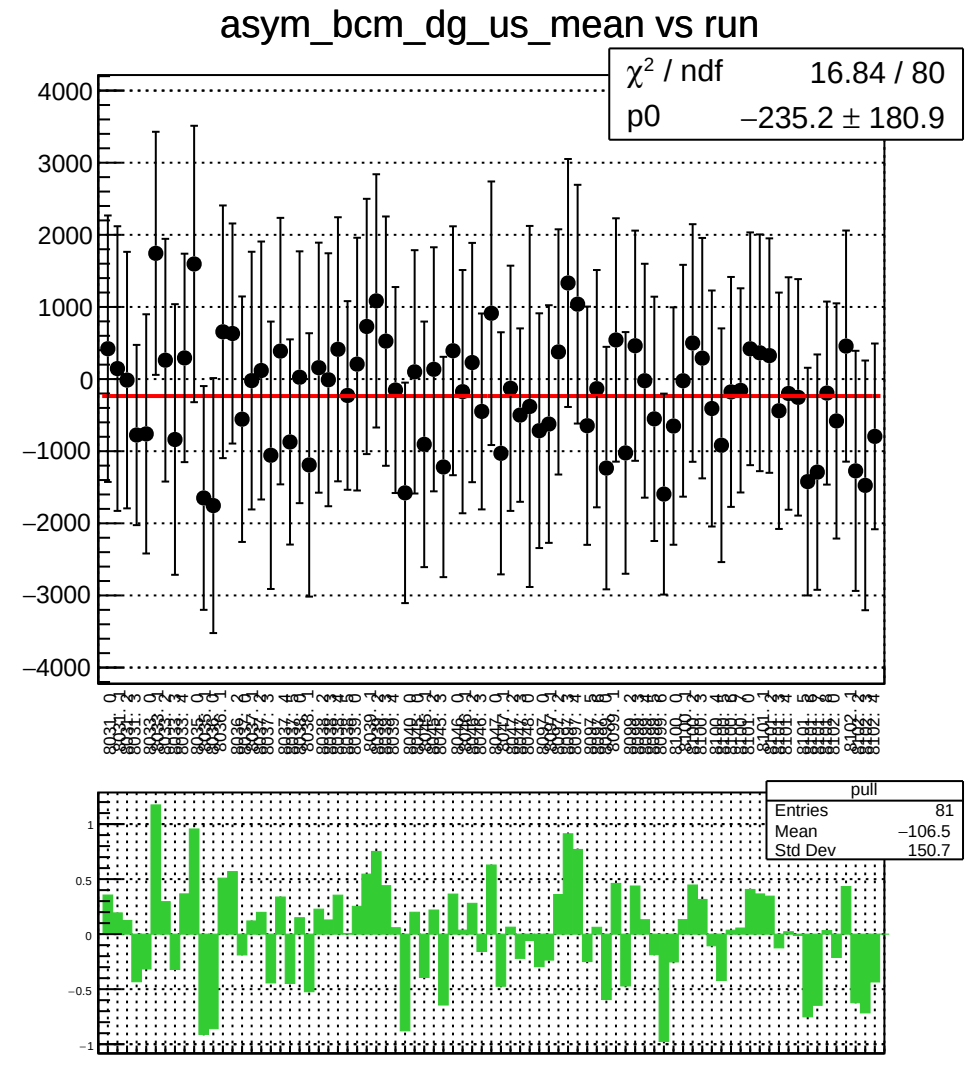

pull1D
Entries 81
Mean 0.01073
Std Dev 0.4146

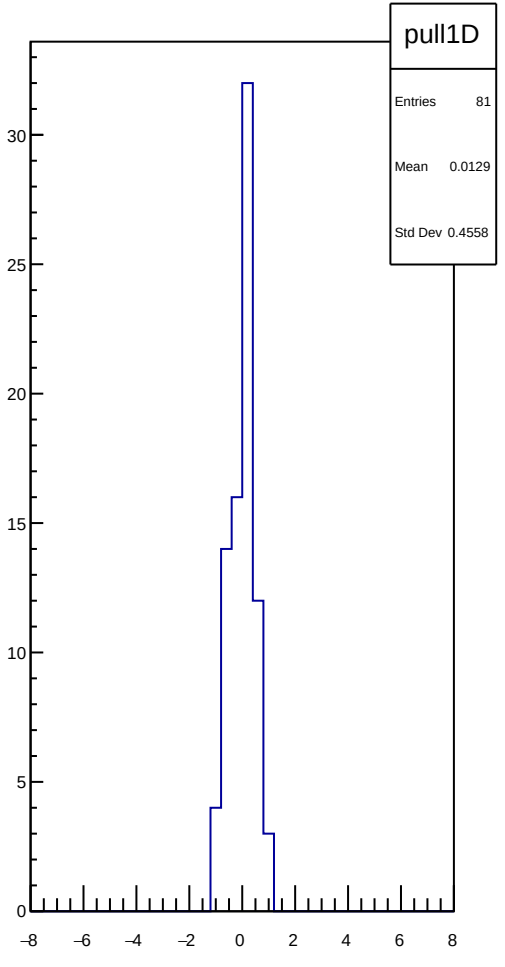

asym_bcm_an_ds3_rms vs run
χ² / ndf 3179 / 80
p0 159.1 ± 0.126
190
185
180
175
170
165
160
155
150
145

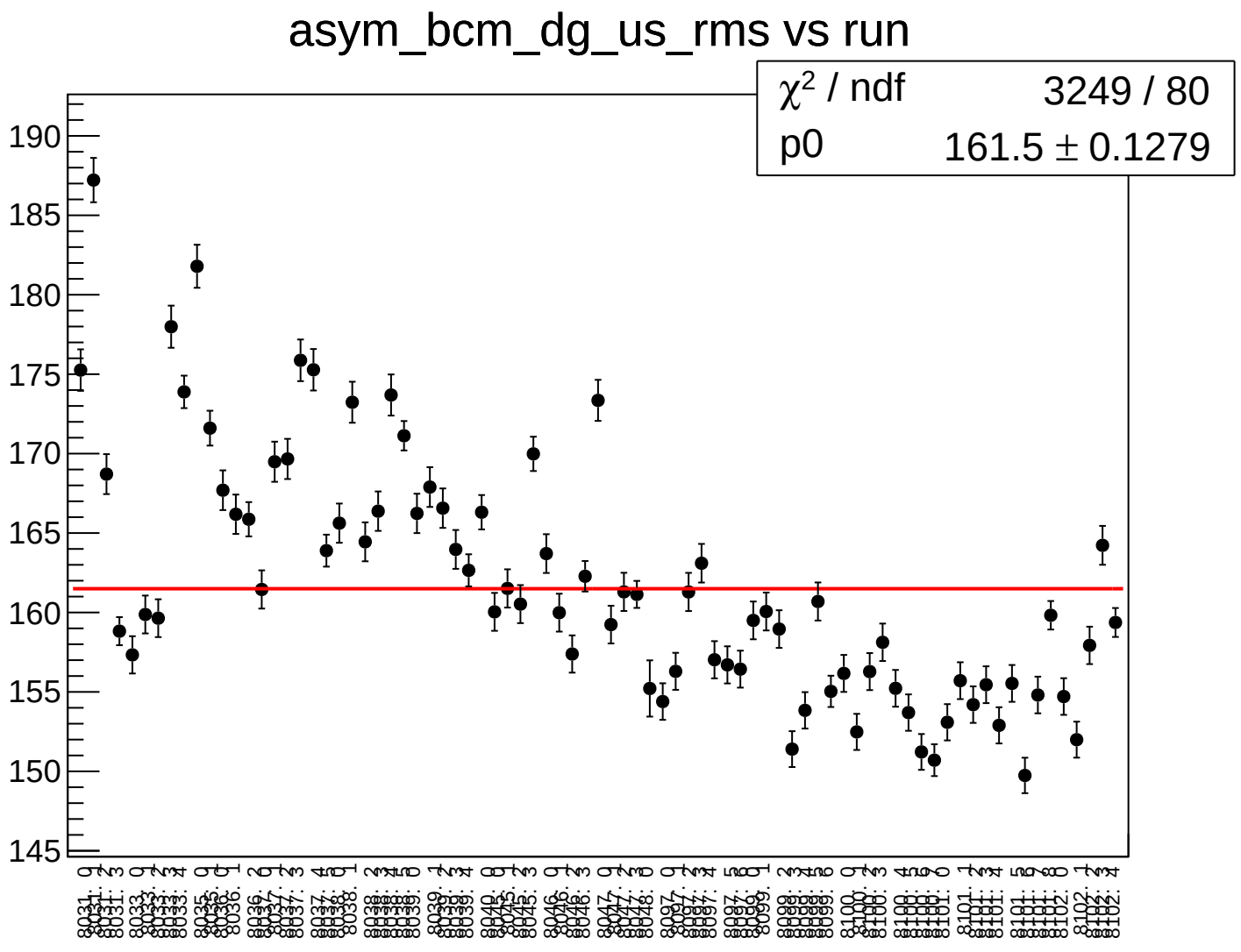

asym_bcm_an_us_mean vs run
χ² / ndf 15.51 / 80
p0 −210.8 ± 178.5
pull
Entries 81
Mean −5.808
Std Dev 55.52

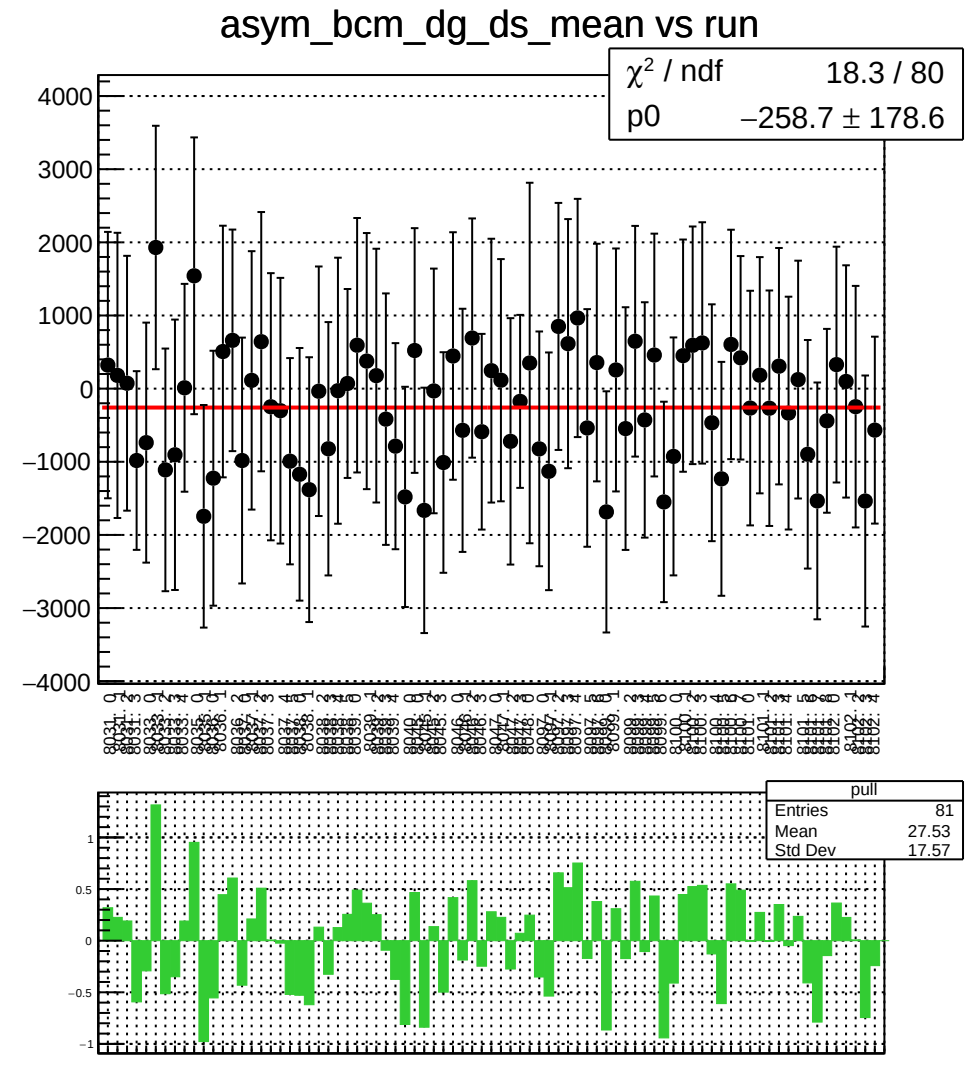

pull1D
Entries 81
Mean 0.01193
Std Dev 0.4374

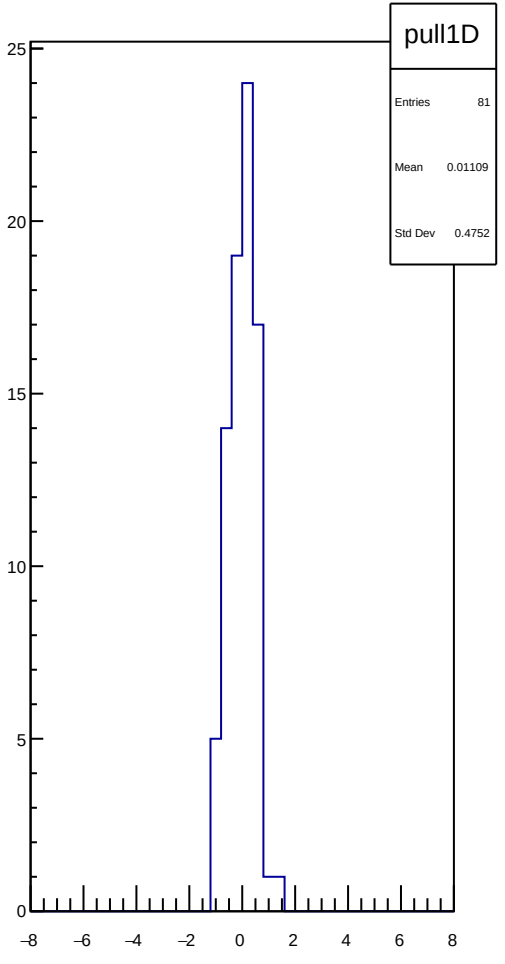

asym_bcm_an_us_rms vs run
χ² / ndf 3055 / 80
p0 159.3 ± 0.1262
185
180
175
170
165
160
155
150
145

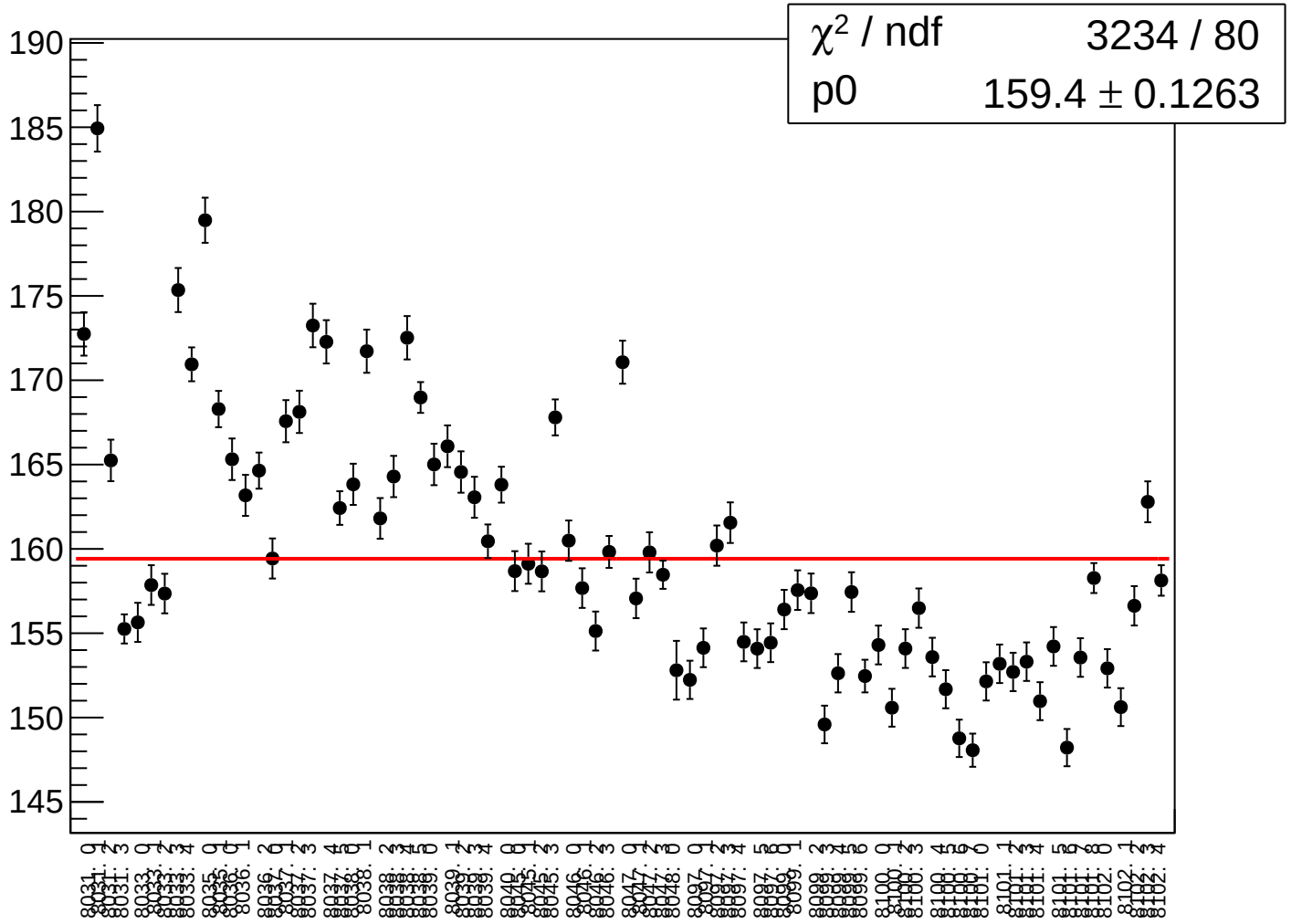

asym_bcm_dg_us_mean vs run
χ² / ndf 16.84 / 80
p0 −235.2 ± 180.9
pull
Entries 81
Mean −106.5
Std Dev 150.7

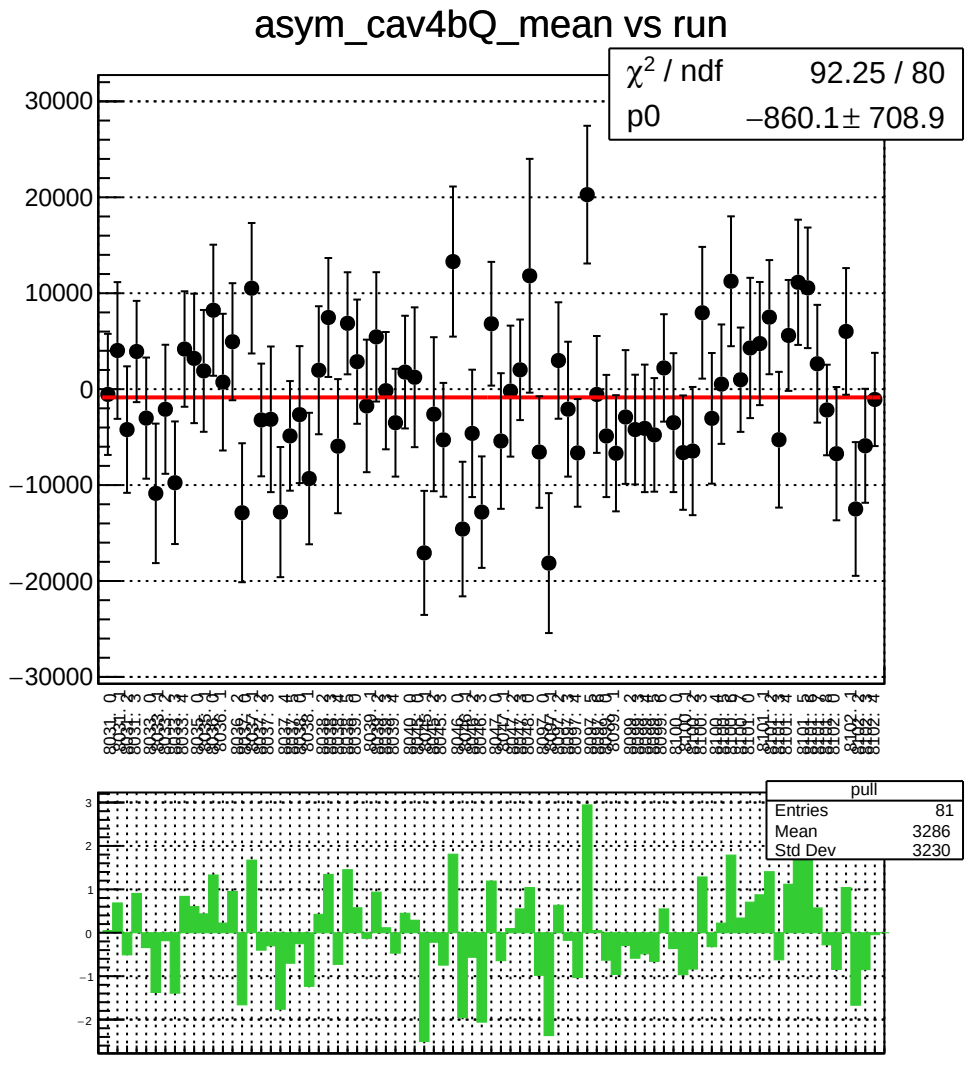

pull1D
Entries 81
Mean 0.0129
Std Dev 0.4558

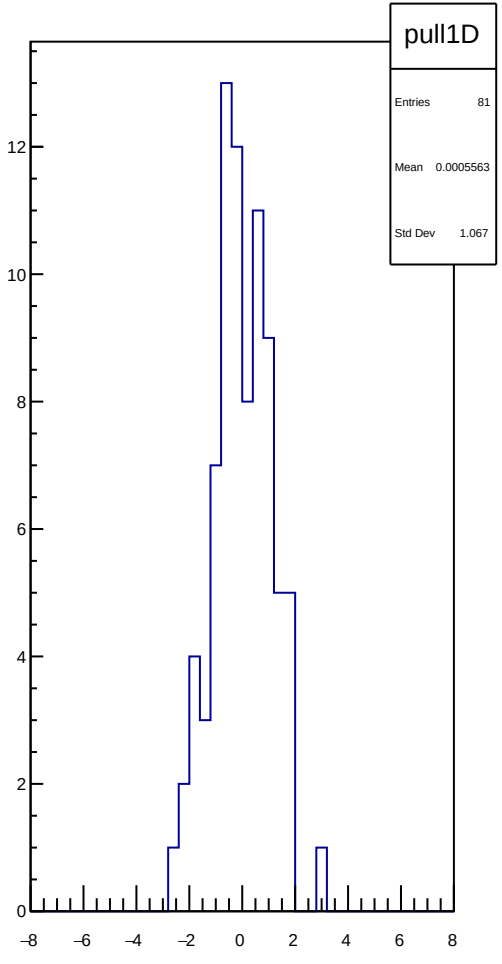

asym_bcm_dg_us_rms vs run
χ² / ndf 3249 / 80
p0 161.5 ± 0.1279
190
185
180
175
170
165
160
155
150
145

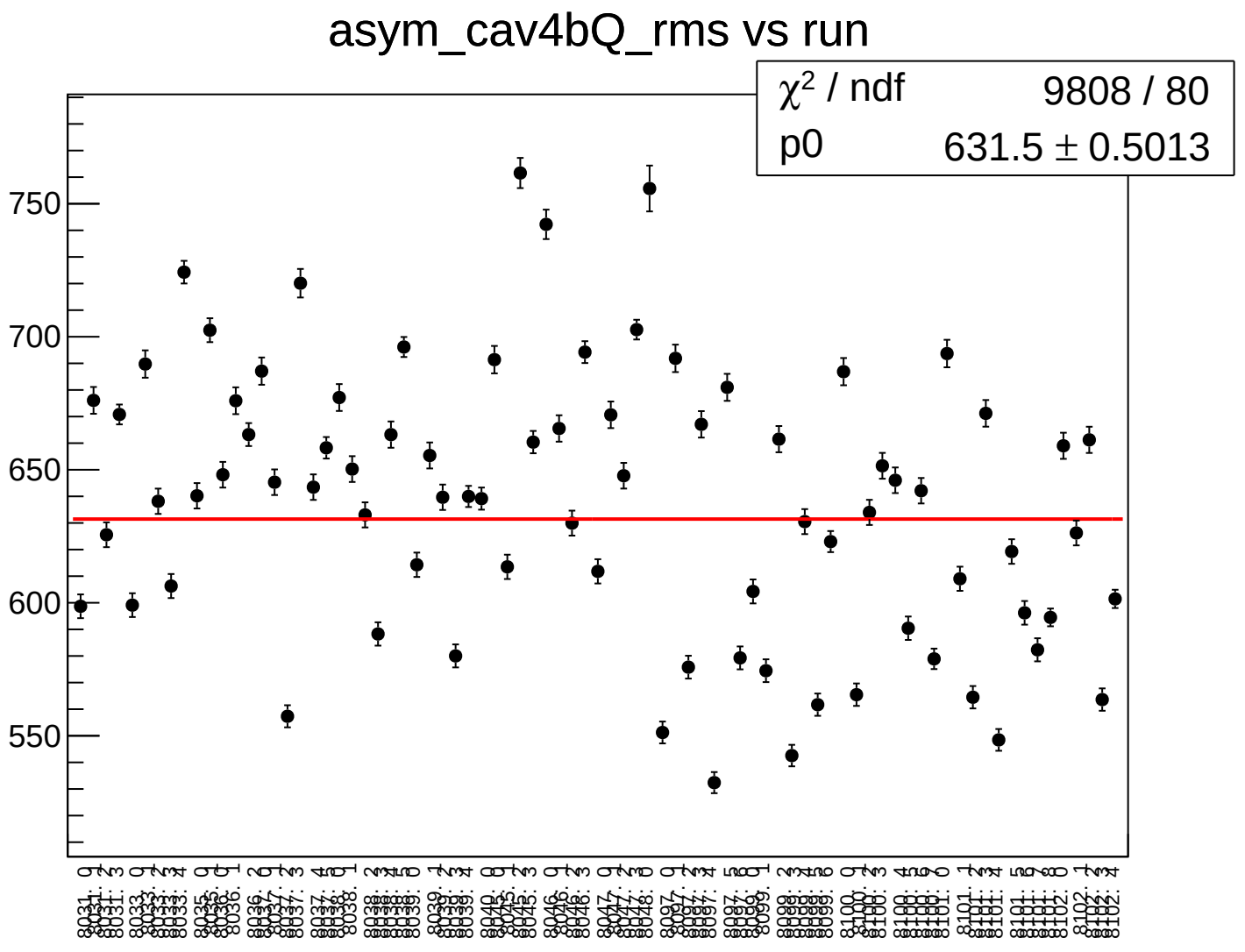

asym_bcm_dg_ds_mean vs run
χ² / ndf 18.3 / 80
p0 −258.7 ± 178.6
pull
Entries 81
Mean 27.53
Std Dev 17.57

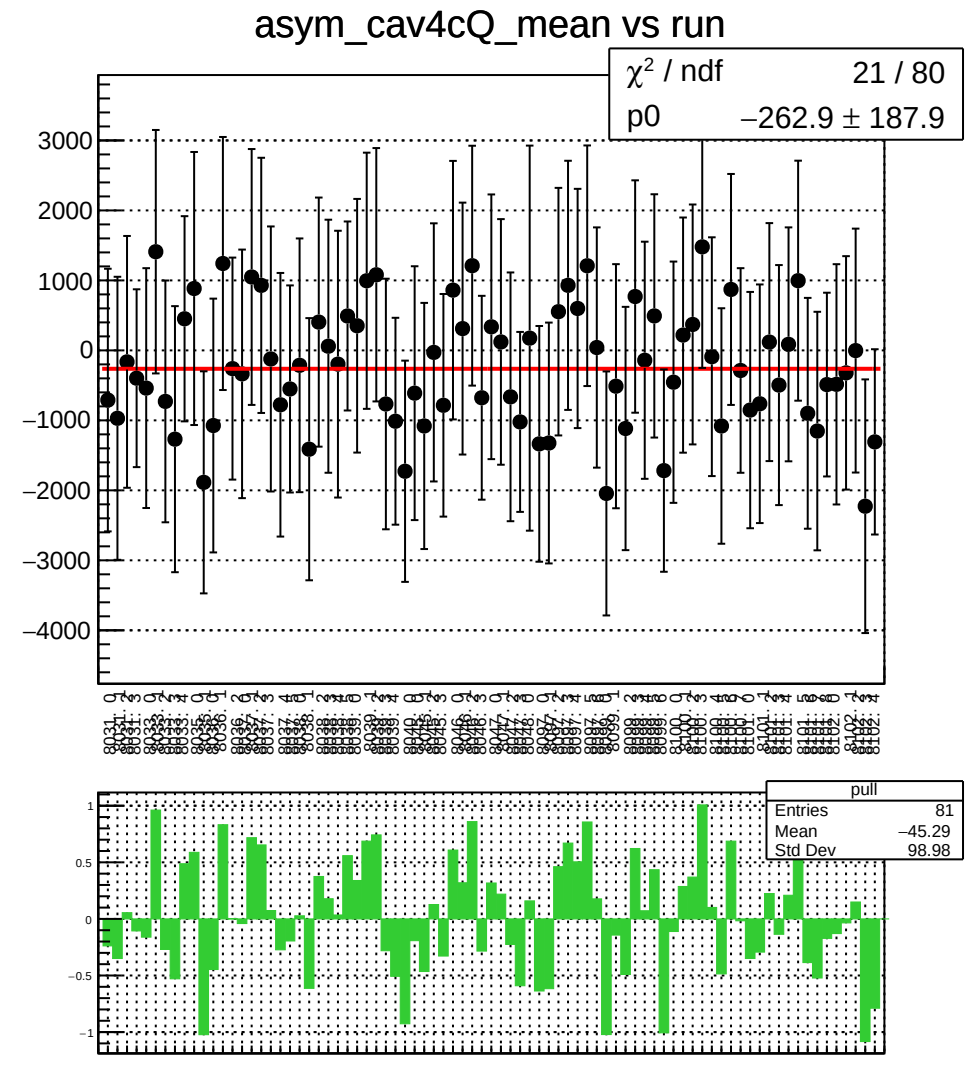

pull1D
Entries 81
Mean 0.01109
Std Dev 0.4752

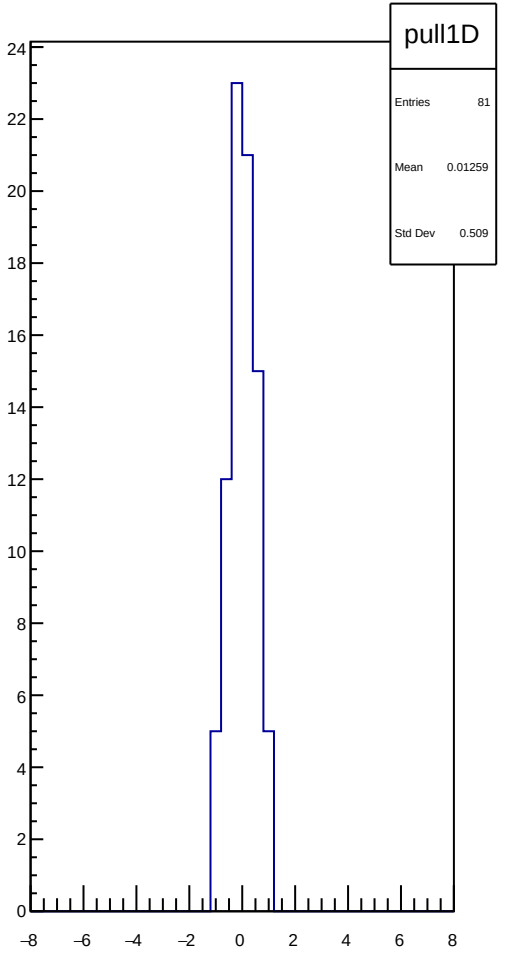

asym_bcm_dg_ds_rms vs run
χ² / ndf 3234 / 80
p0 159.4 ± 0.1263
190
185
180
175
170
165
160
155
150
145

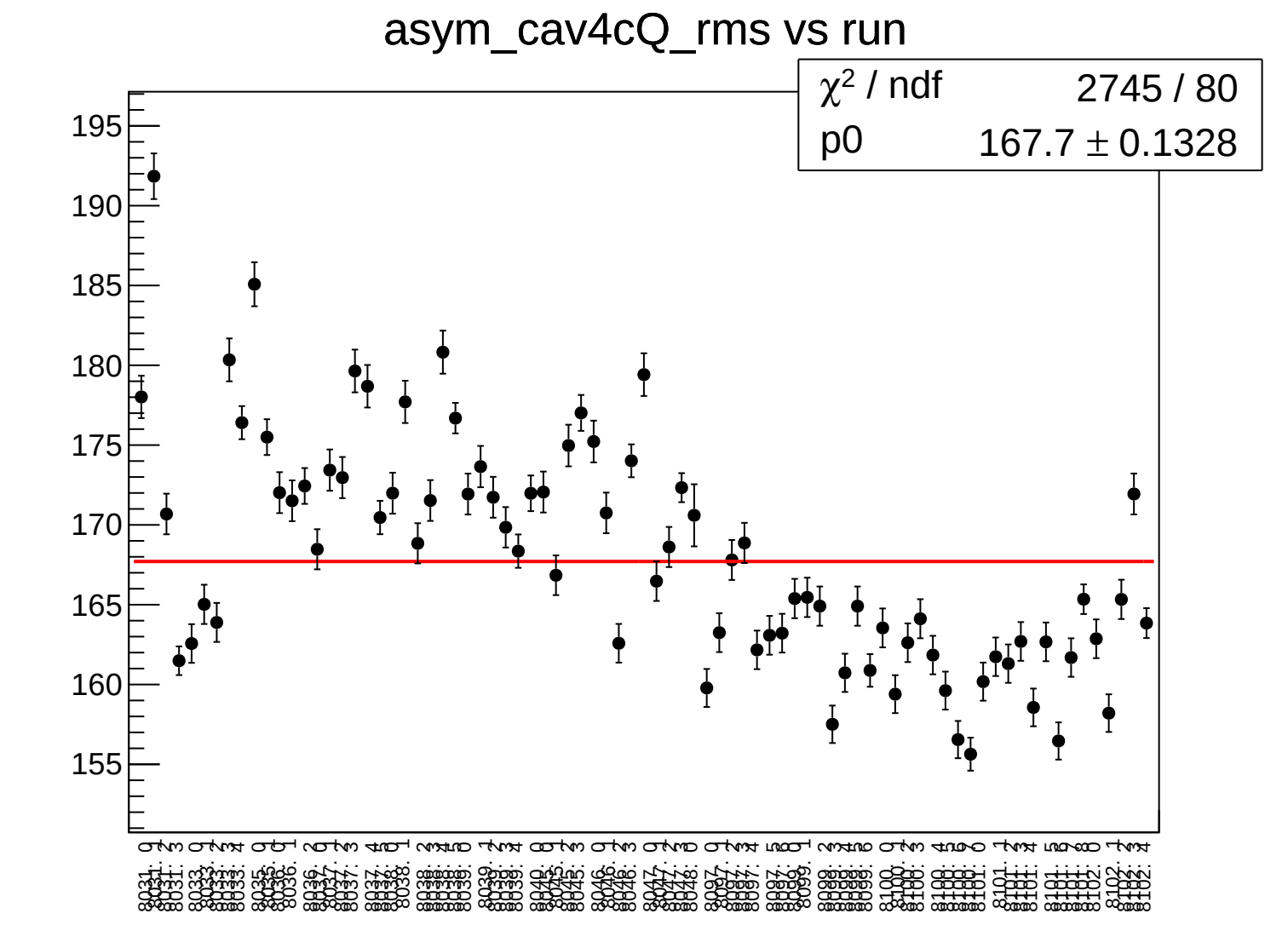

asym_cav4bQ_mean vs run
χ² / ndf 92.25 / 80
p0 −860.1± 708.9
pull
Entries 81
Mean 3286
Std Dev 3230

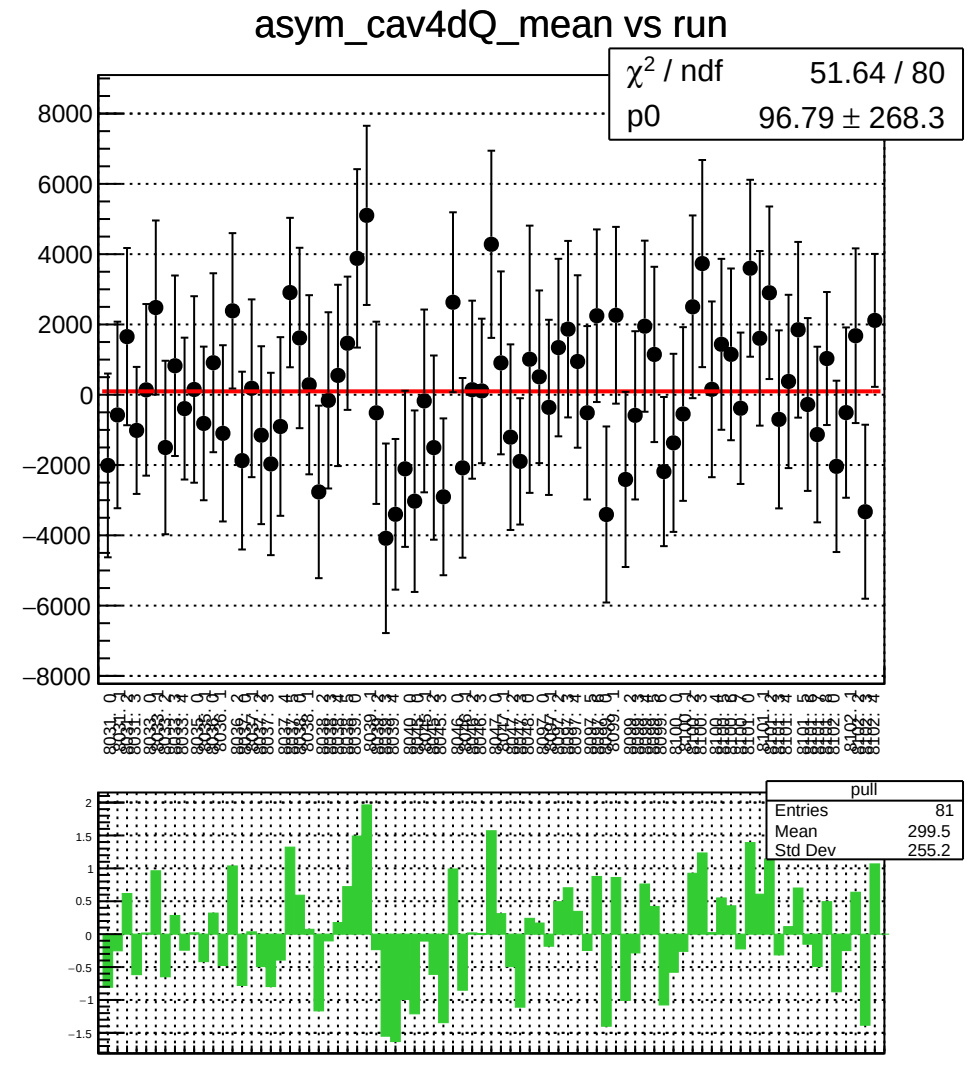

pull1D
Entries 81
Mean 0.0005563
Std Dev 1.067

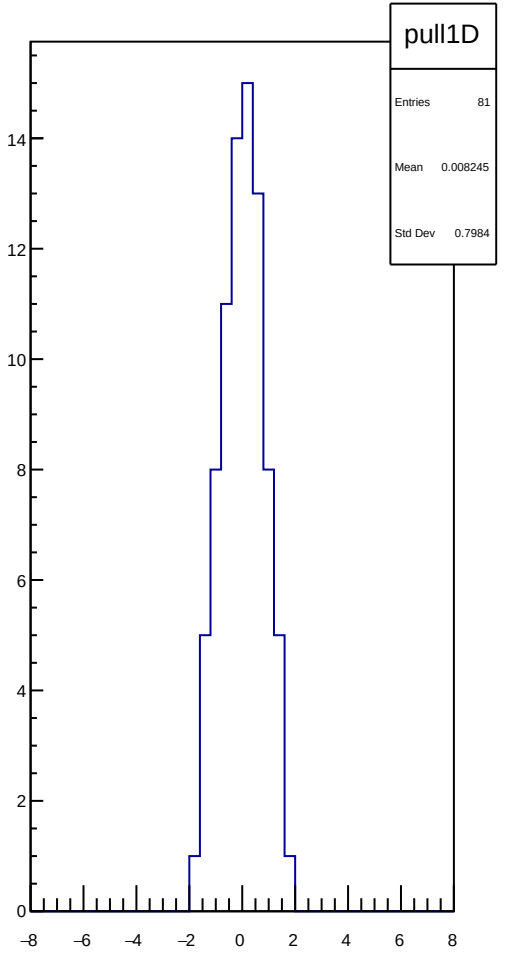

asym_cav4bQ_rms vs run
χ² / ndf 9808 / 80
p0 631.5 ± 0.5013
750
700
650
600
550

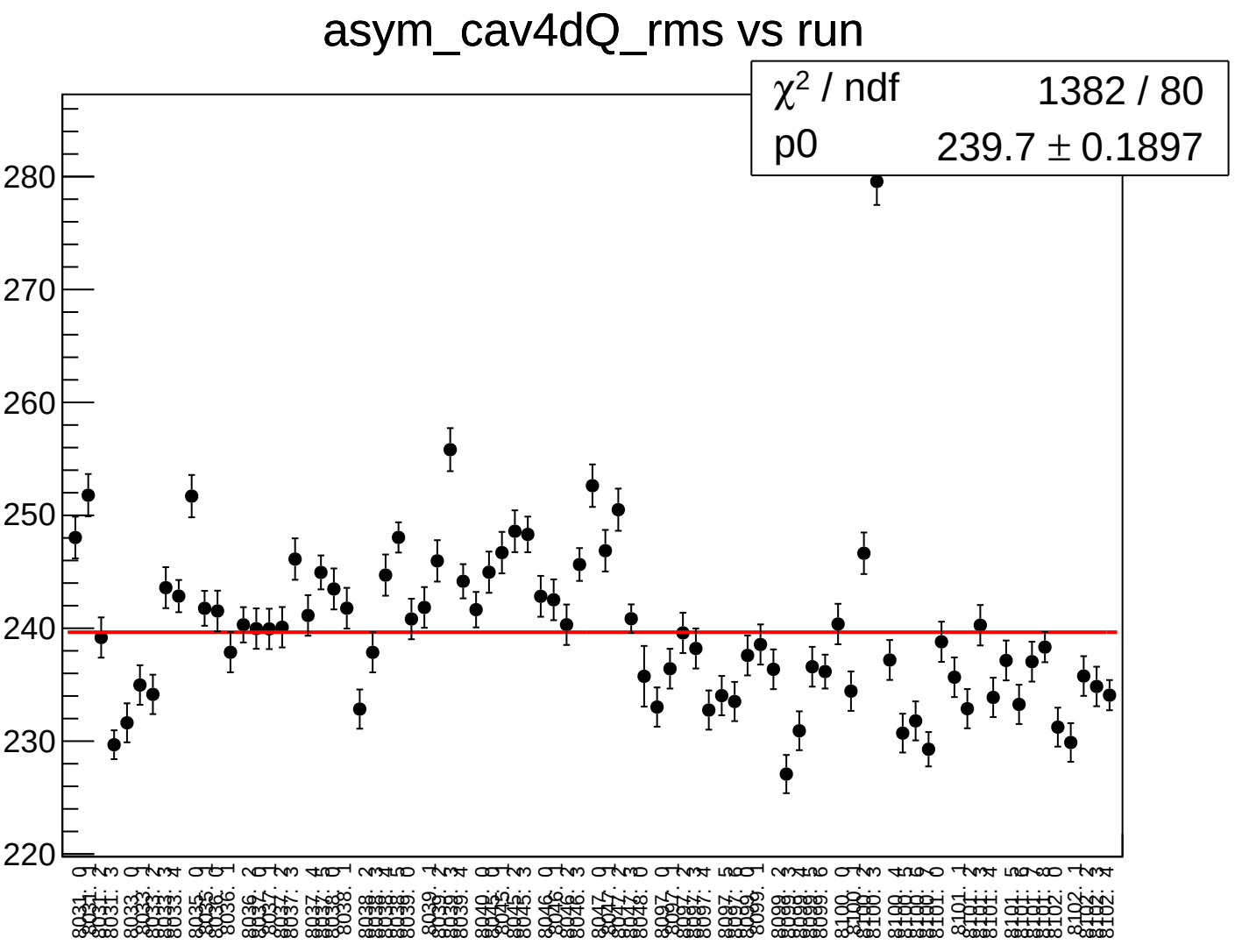

asym_cav4cQ_mean vs run
χ² / ndf 21 / 80
p0 −262.9 ± 187.9
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 81
Mean −45.29
Std Dev 98.98
1
0.5
0
−0.5
−1

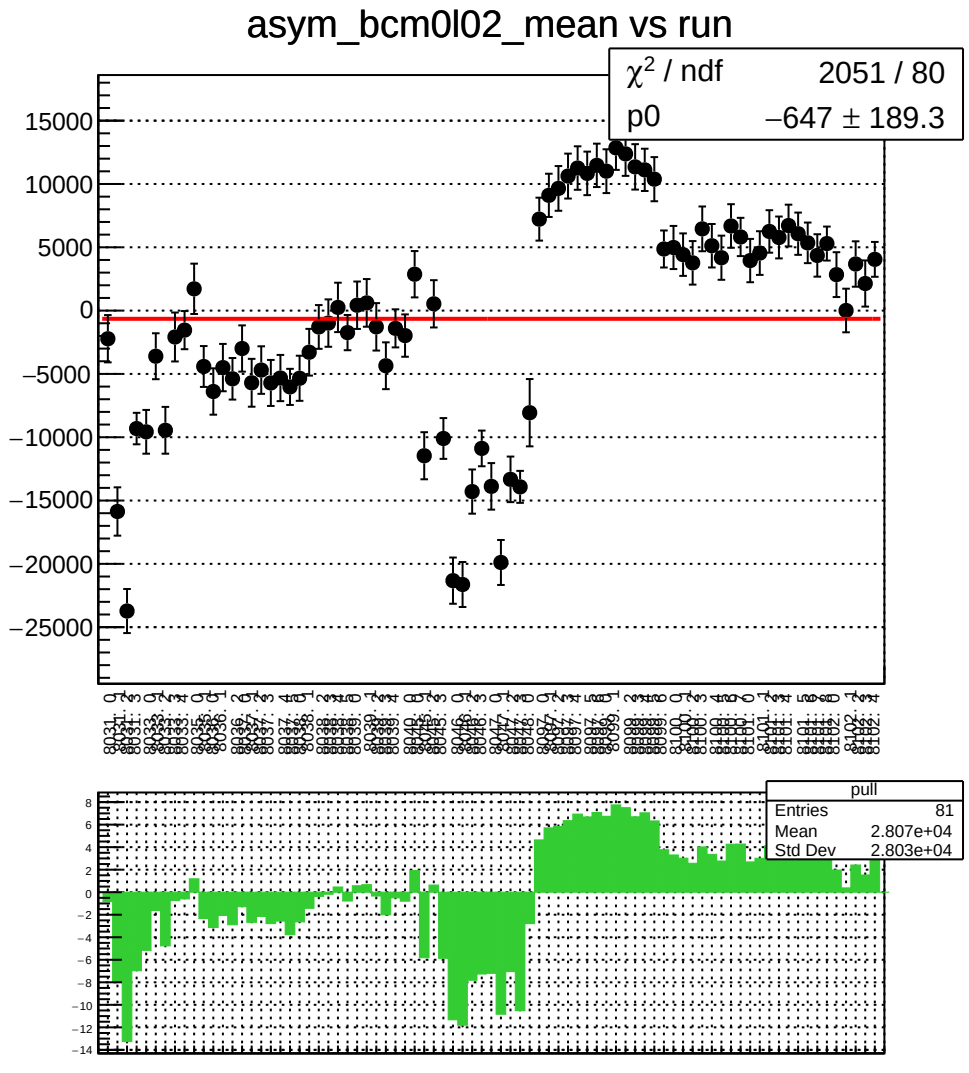

pull1D
Entries 81
Mean 0.01259
Std Dev 0.509
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

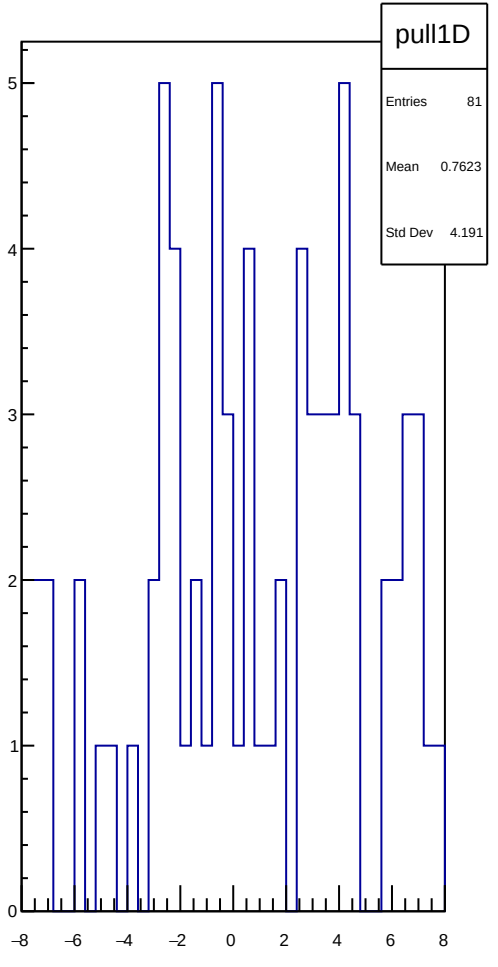

asym_cav4cQ_rms vs run
χ² / ndf 2745 / 80
p0 167.7 ± 0.1328
195
190
185
180
175
170
165
160
155

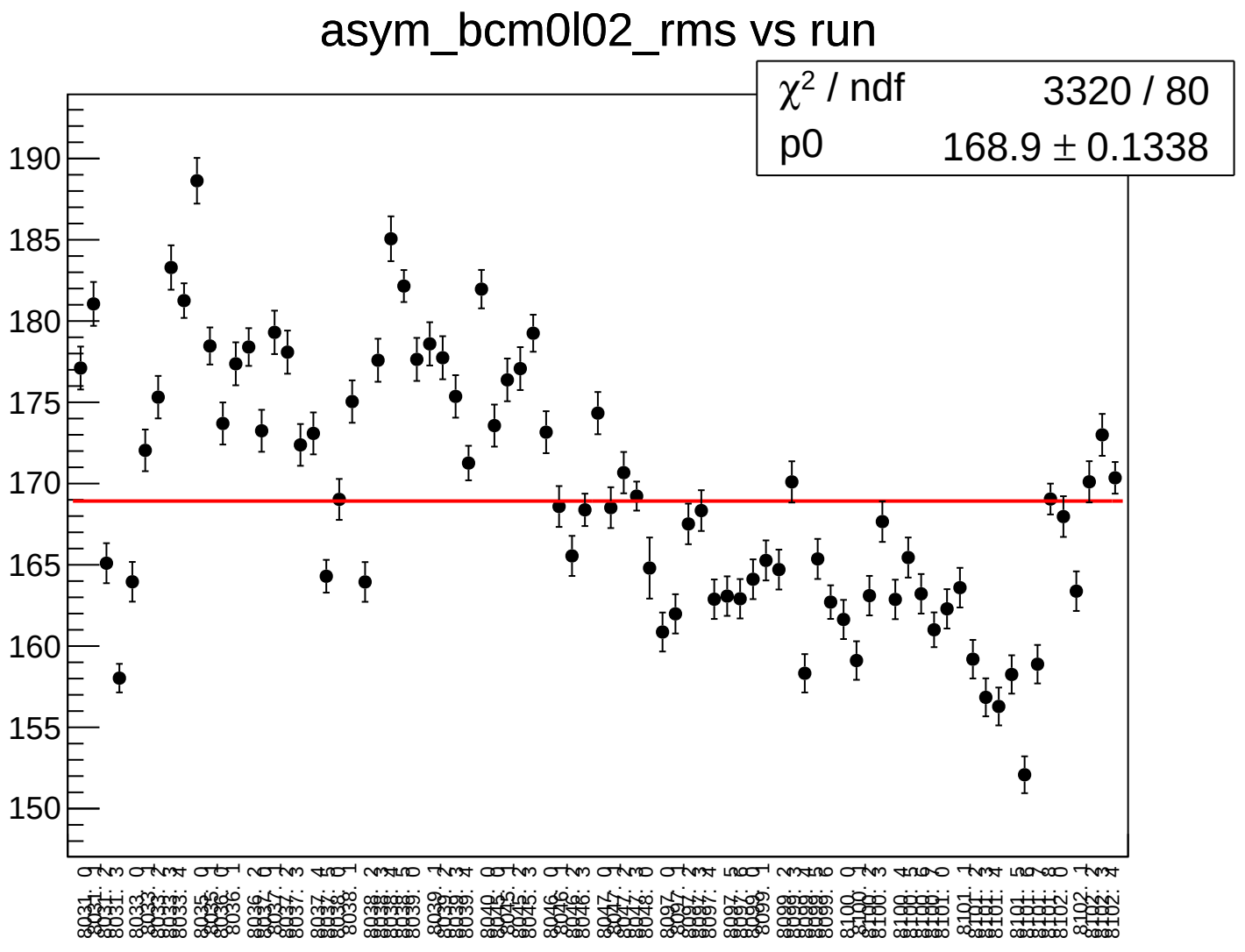

asym_cav4dQ_mean vs run
χ² / ndf 51.64 / 80
p0 96.79 ± 268.3
pull
Entries 81
Mean 299.5
Std Dev 255.2

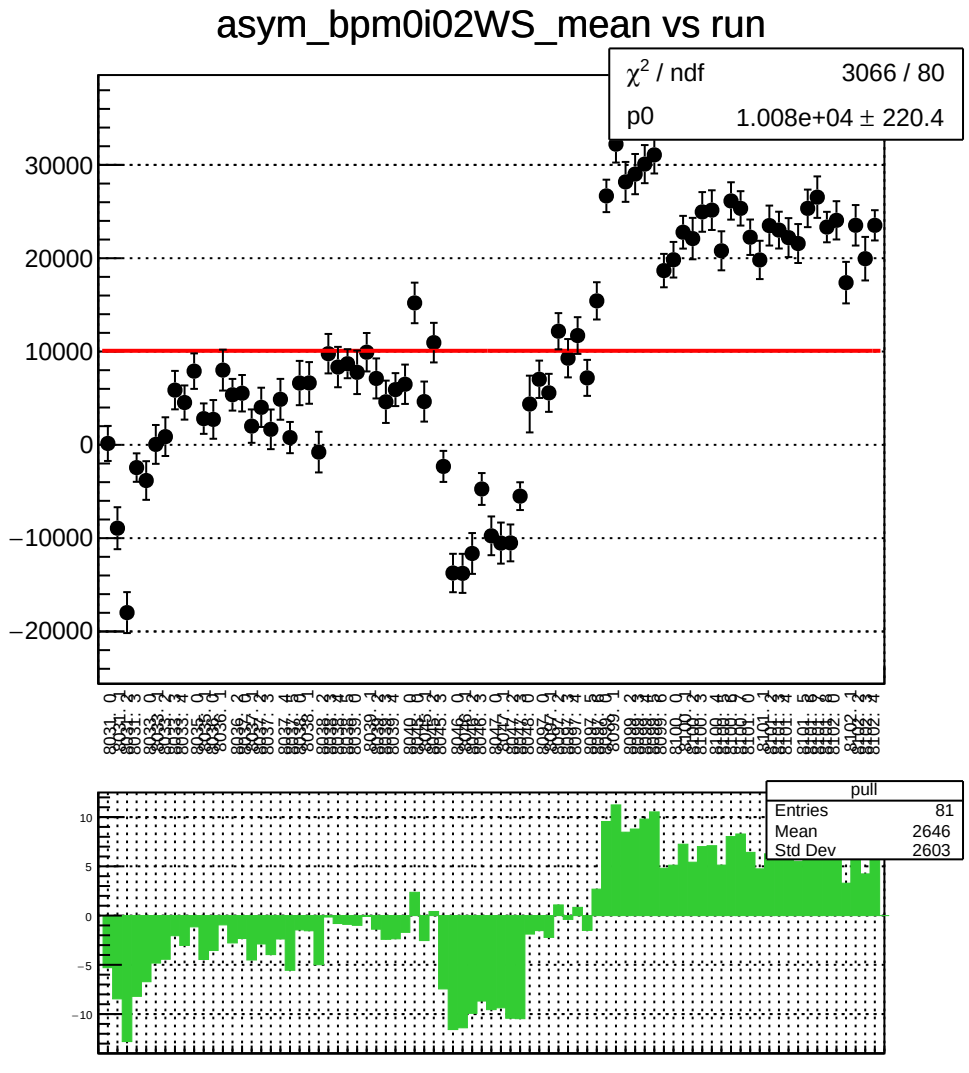

pull1D
Entries 81
Mean 0.008245
Std Dev 0.7984

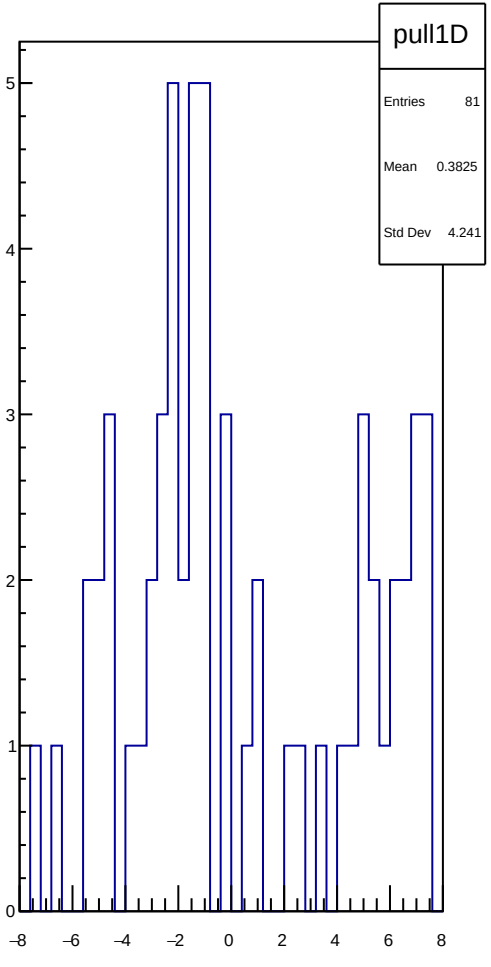

asym_cav4dQ_rms vs run
χ² / ndf 1382 / 80
p0 239.7 ± 0.1897
280
270
260
250
240
230
220

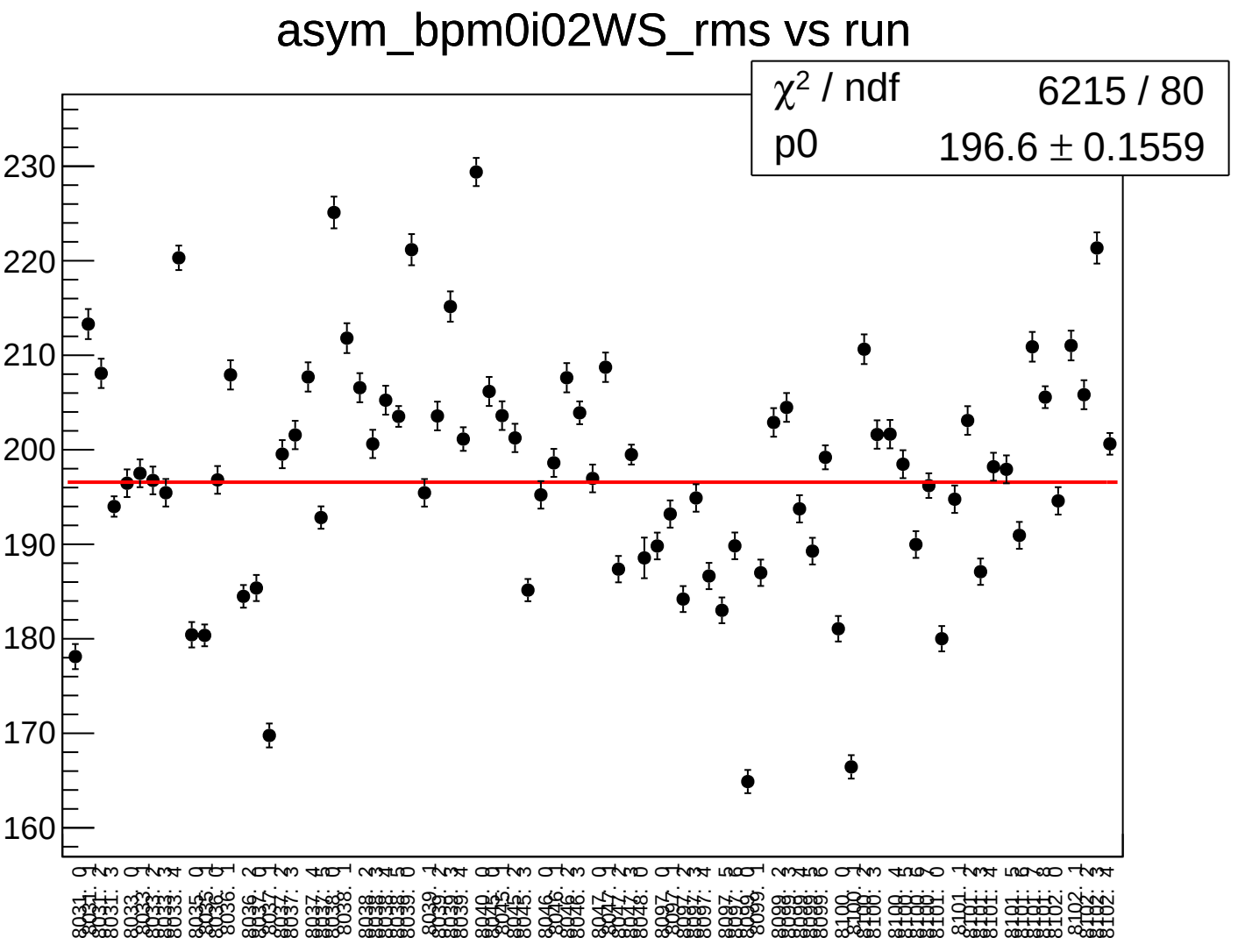

asym_bcm0l02_mean vs run
χ² / ndf 2051 / 80
p0 −647 ± 189.3
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 81
Mean 2.807e+04
Std Dev 2.803e+04
8
6
4
2
0
−2
−4
−6
−8
−10
−12
−14

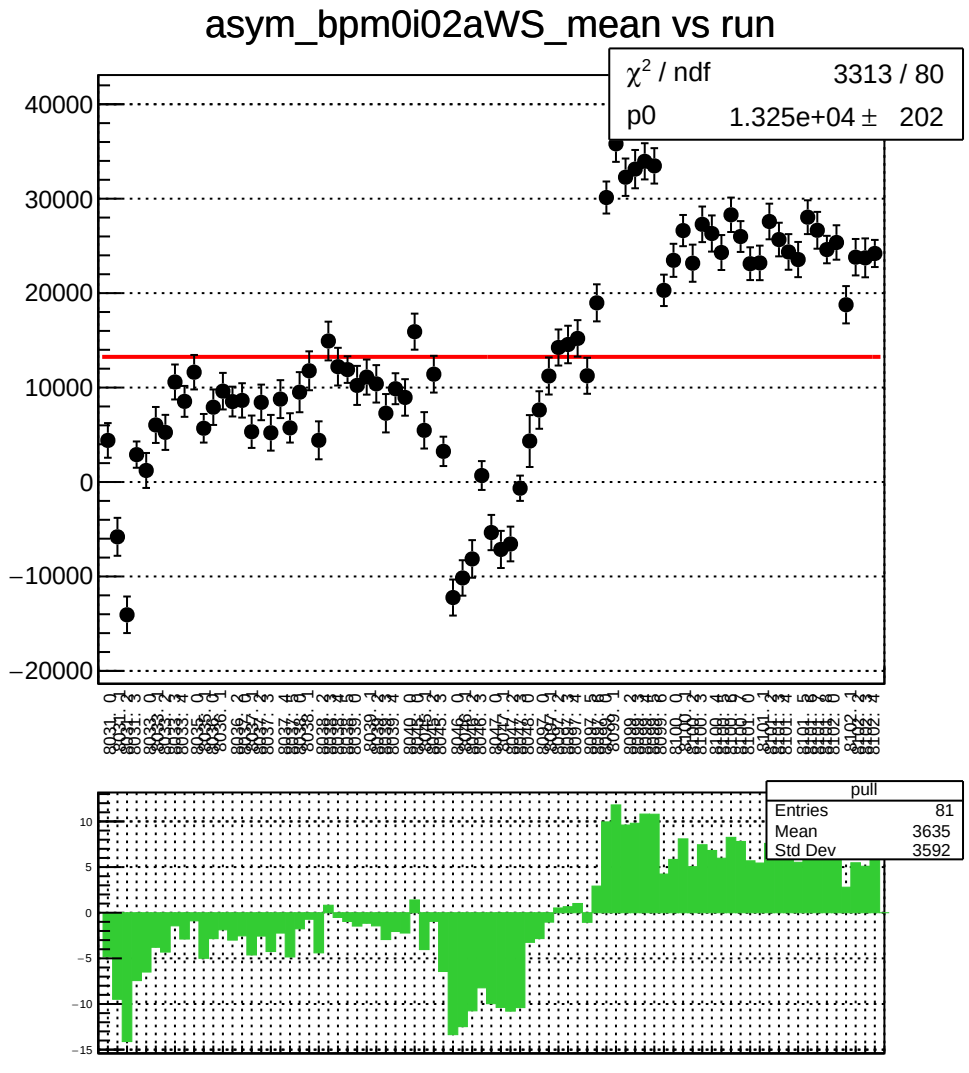

pull1D
Entries 81
Mean 0.7623
Std Dev 4.191
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

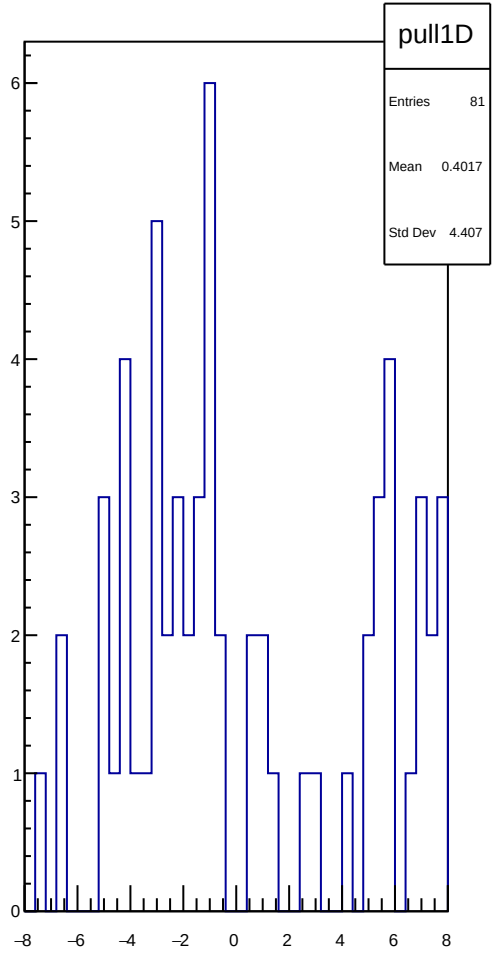

asym_bcm0l02_rms vs run
χ² / ndf 3320 / 80
p0 168.9 ± 0.1338
190
185
180
175
170
165
160
155
150

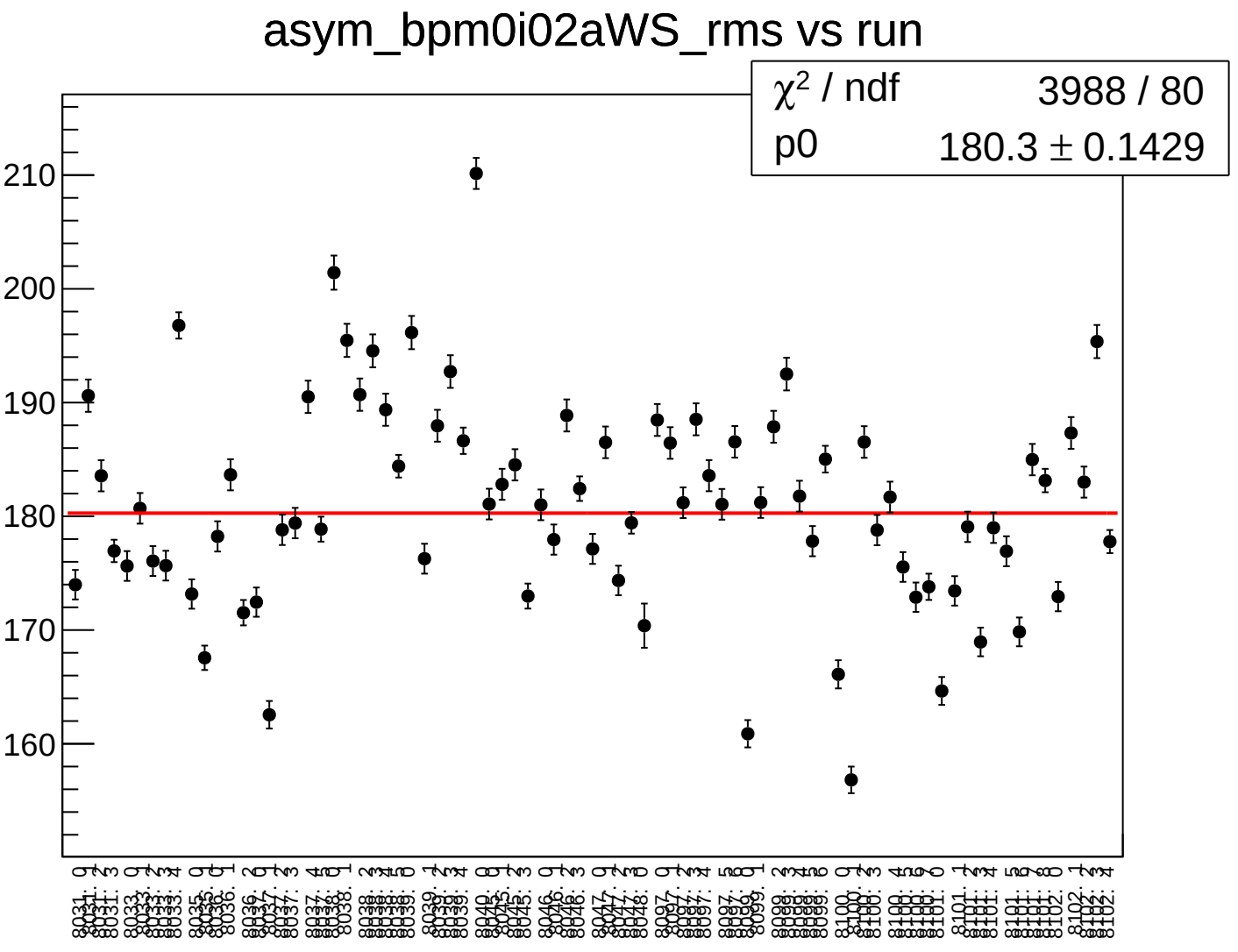

asym_bpm0i02WS_mean vs run
χ² / ndf 3066 / 80
p0 1.008e+04 ± 220.4
30000
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 2646
Std Dev 2603
10
5
0
−5
−10

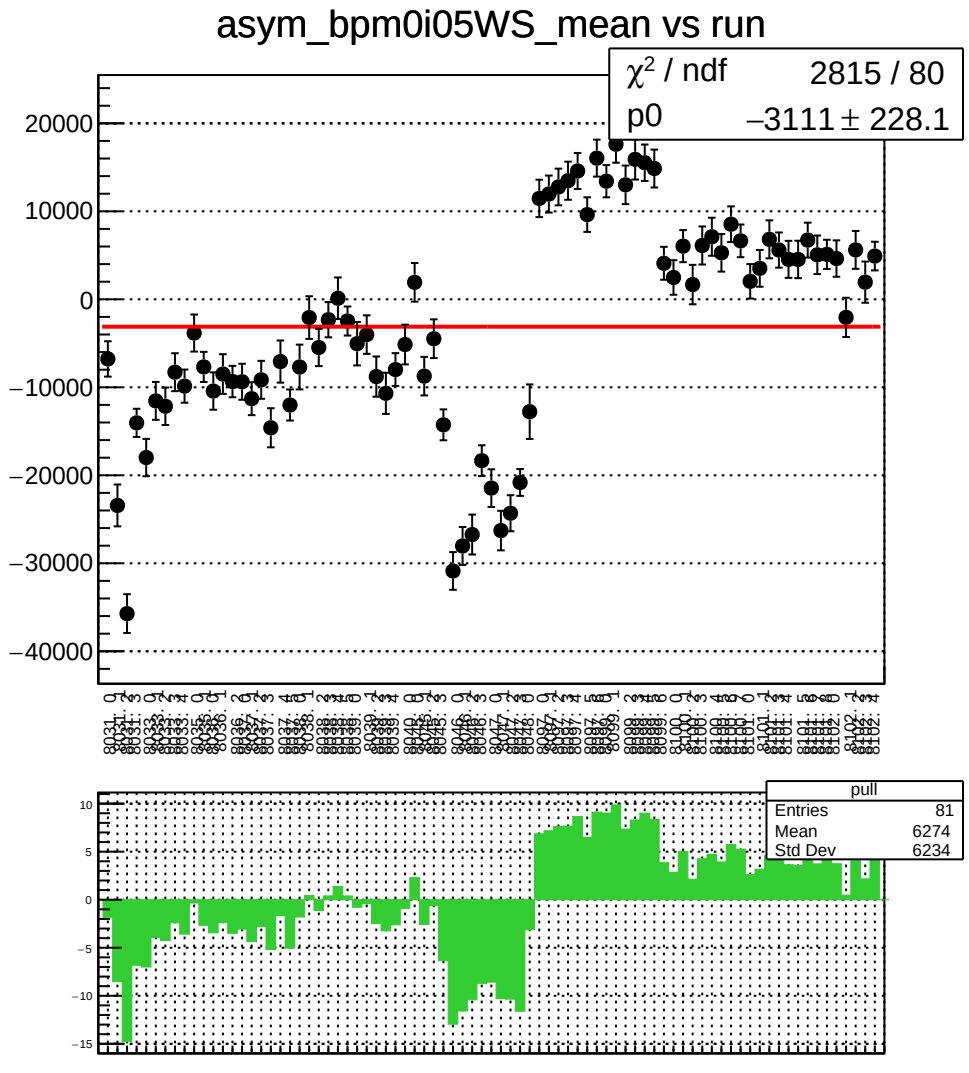

pull1D
Entries 81
Mean 0.3825
Std Dev 4.241
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

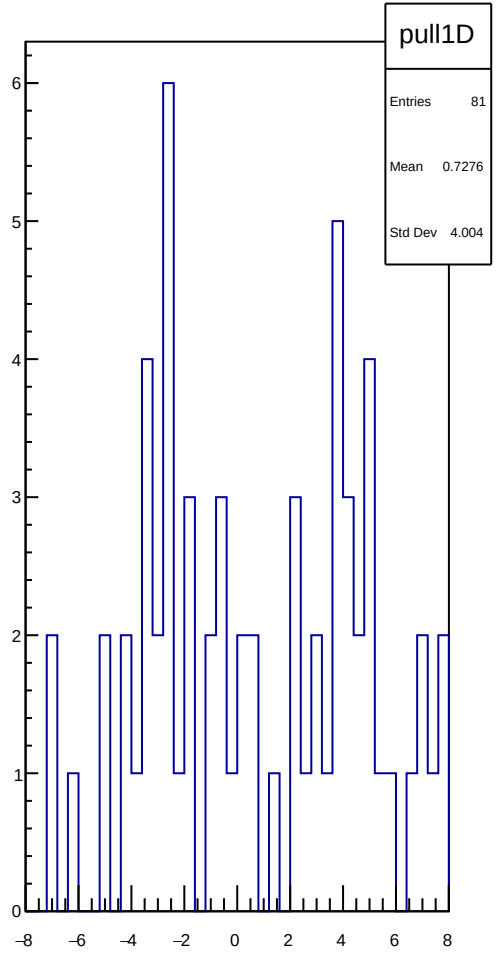

asym_bpm0i02WS_rms vs run
χ^2 / ndf 6215 / 80
p0 196.6 ± 0.1559
230
220
210
200
190
180
170
160

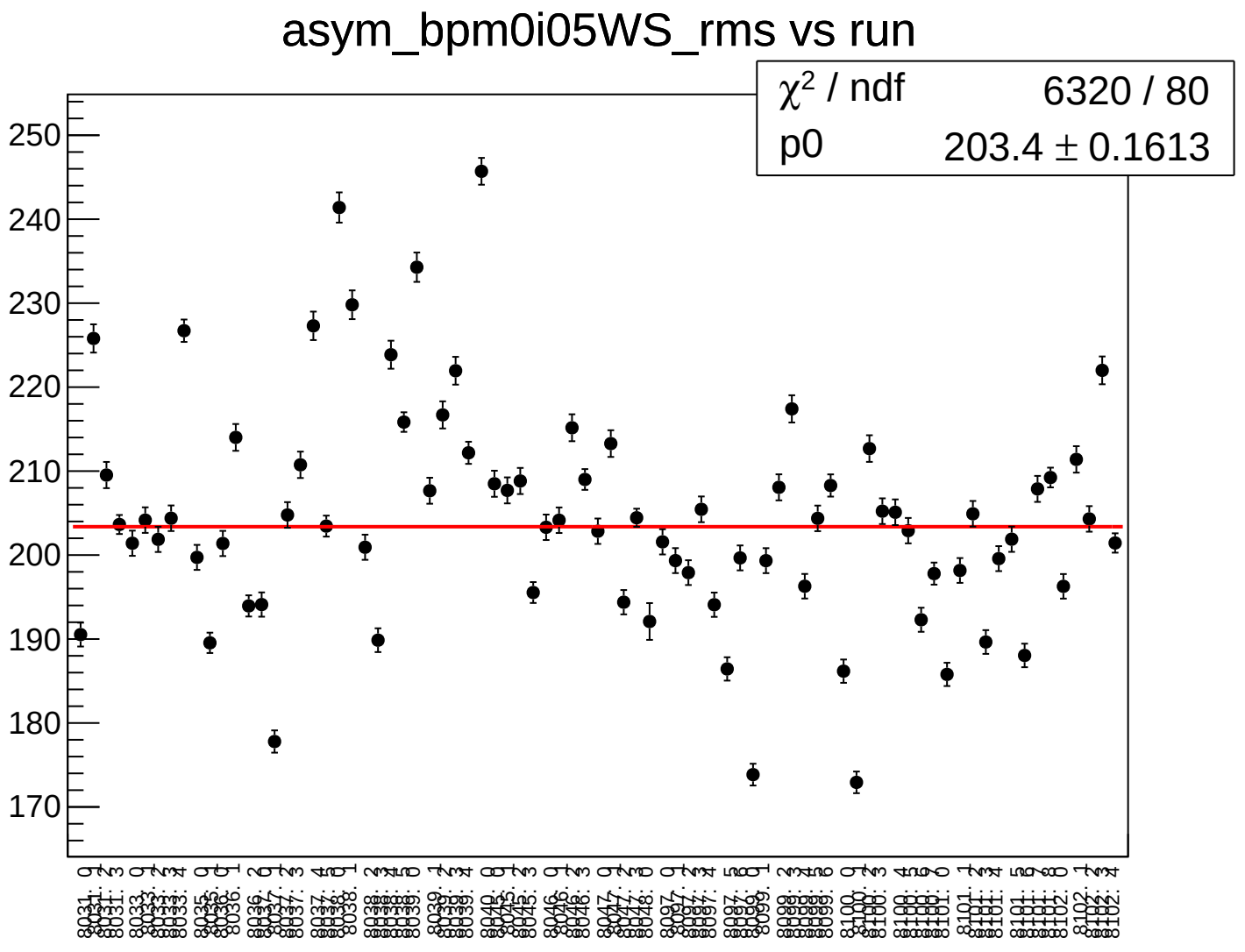

asym_bpm0i02aWS_mean vs run
χ² / ndf 3313 / 80
p0 1.325e+04 ± 202
40000
30000
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 3635
Std Dev 3592
10
5
0
−5
−10
−15

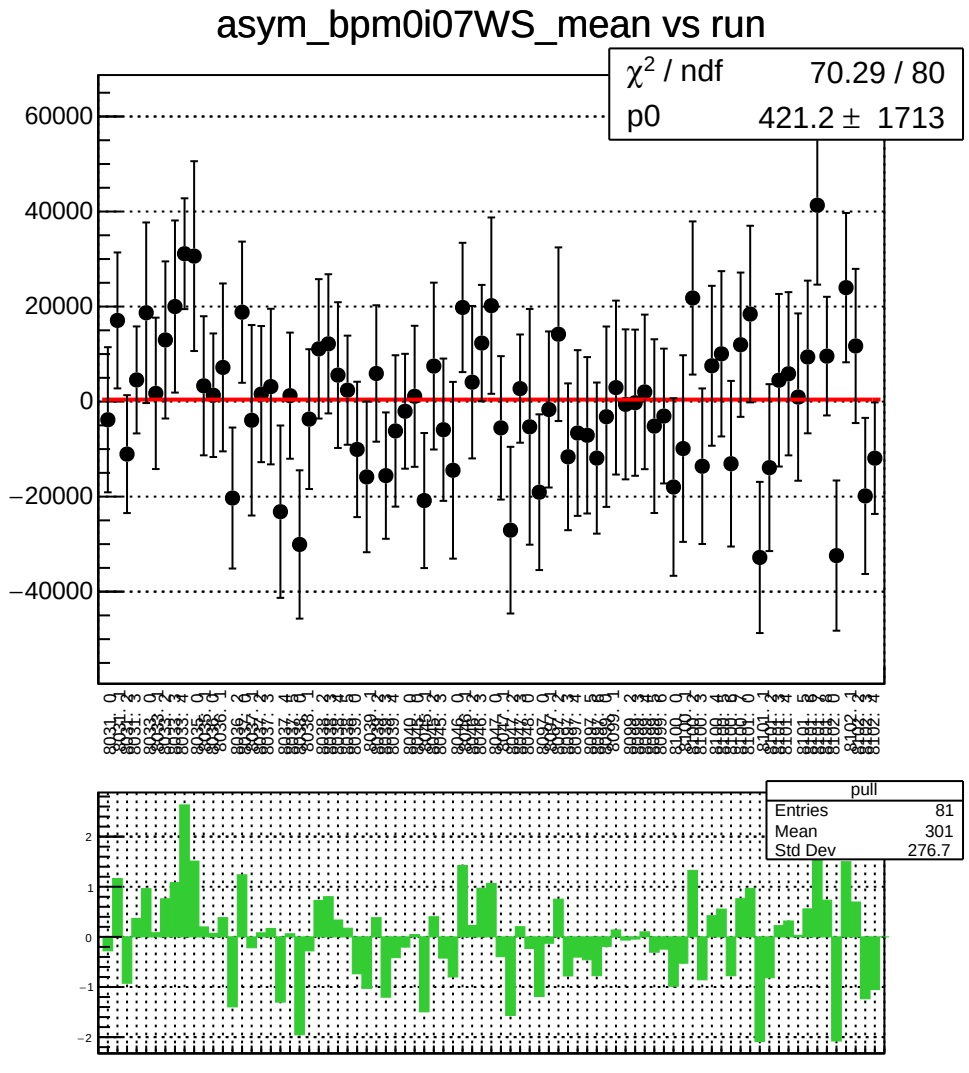

pull1D
Entries 81
Mean 0.4017
Std Dev 4.407
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

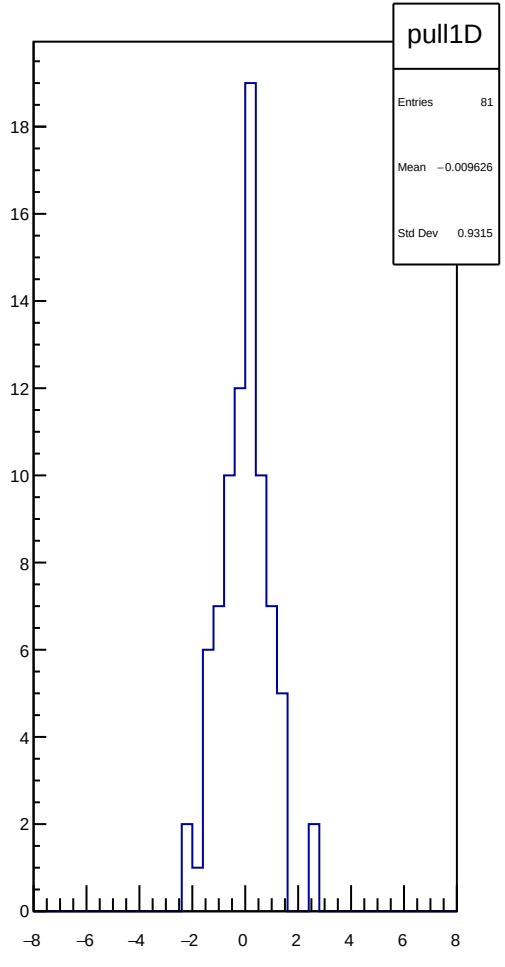

asym_bpm0i02aWS_rms vs run
χ² / ndf 3988 / 80
p0 180.3 ± 0.1429
210
200
190
180
170
160

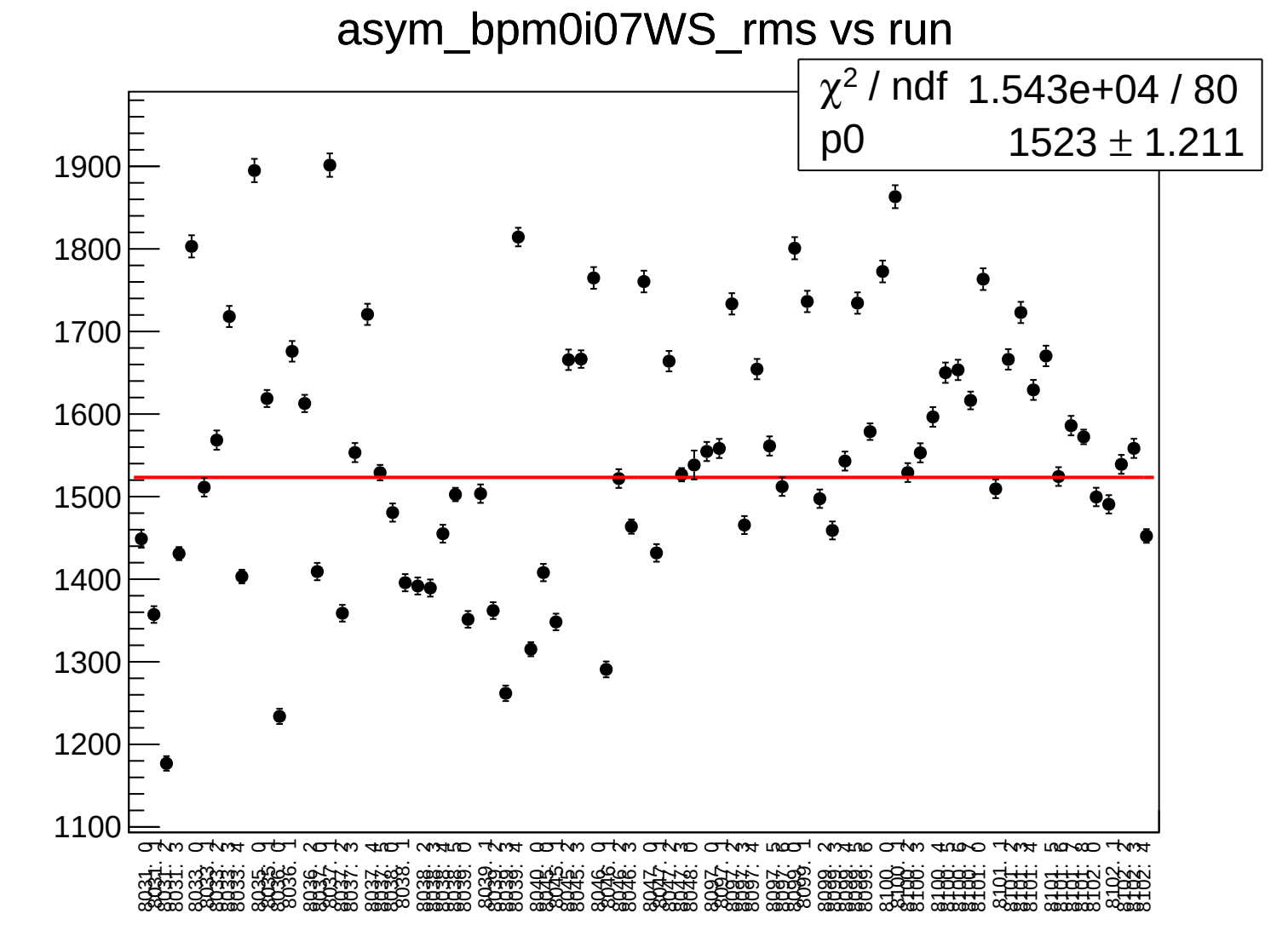

asym_bpm0i05WS_mean vs run
χ² / ndf 2815 / 80
p0 −3111 ± 228.1
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 81
Mean 6274
Std Dev 6234
10
5
0
−5
−10
−15

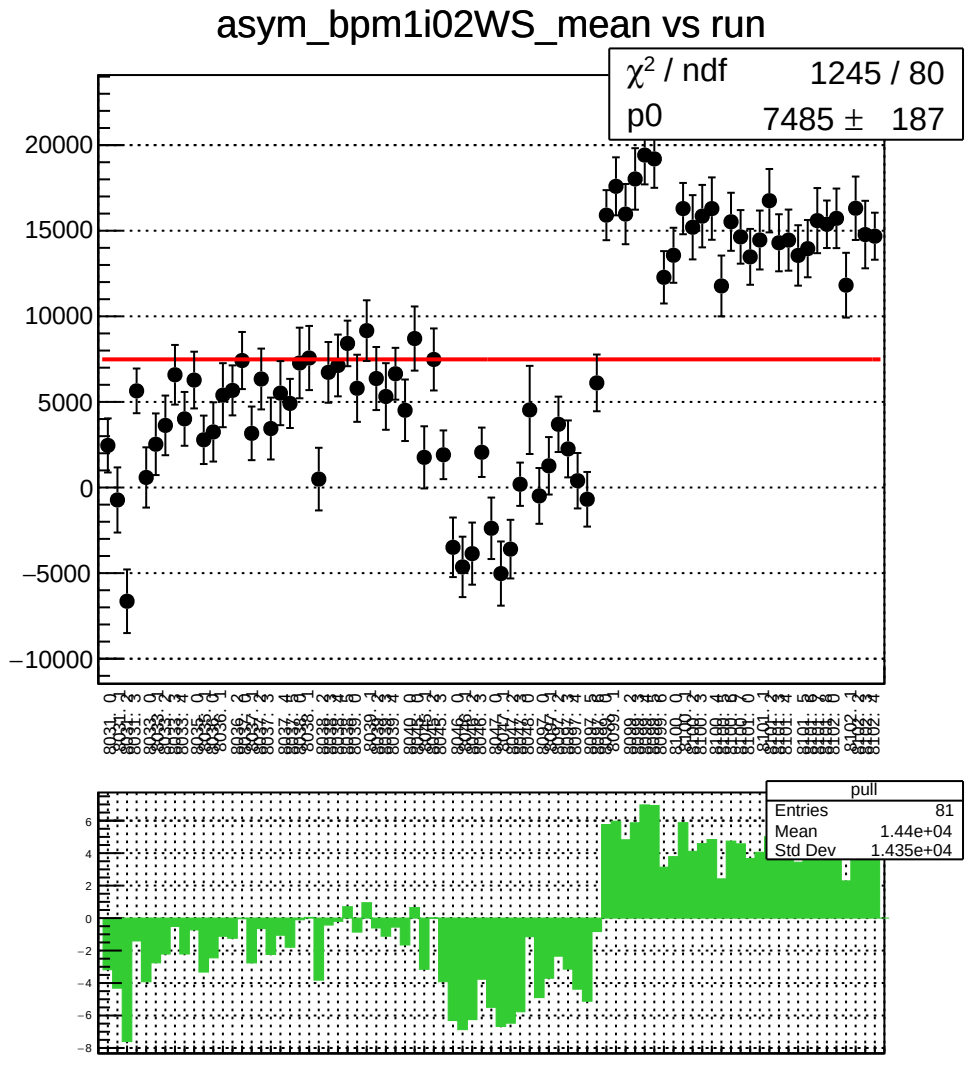

pull1D
Entries 81
Mean 0.7276
Std Dev 4.004
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

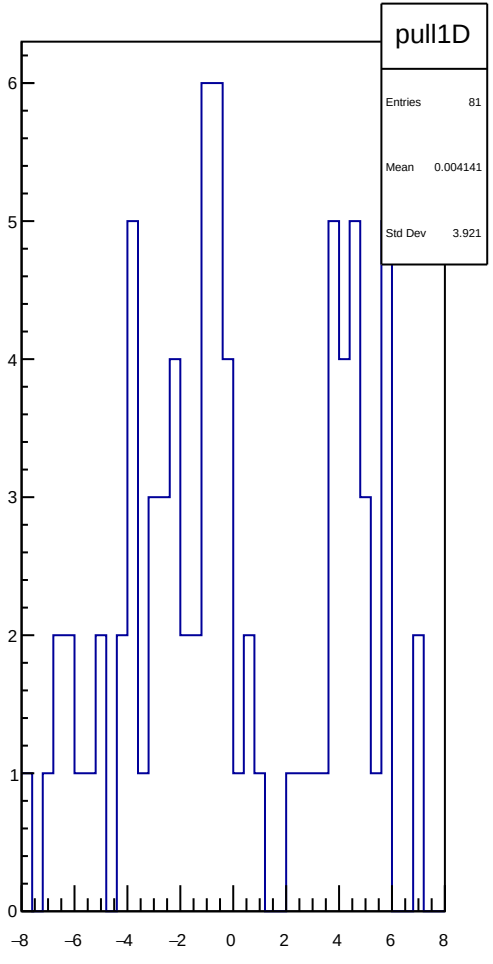

asym_bpm0i05WS_rms vs run
χ² / ndf 6320 / 80
p0 203.4 ± 0.1613
250
240
230
220
210
200
190
180
170

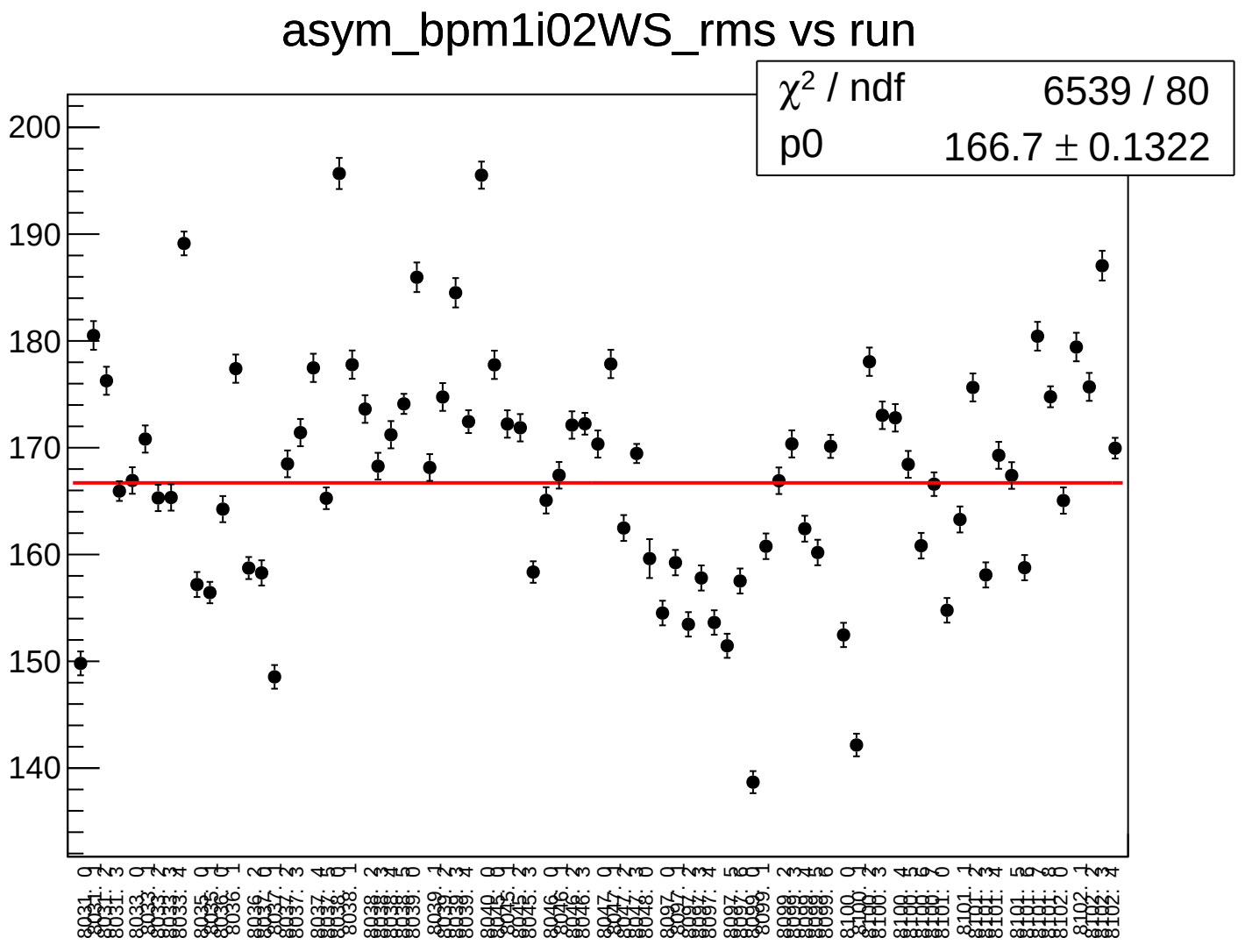

asym_bpm0i07WS_mean vs run
χ² / ndf 70.29 / 80
p0 421.2 ± 1713
60000
40000
20000
0
−20000
−40000
pull
Entries 81
Mean 301
Std Dev 276.7
2
1
0
−1
−2

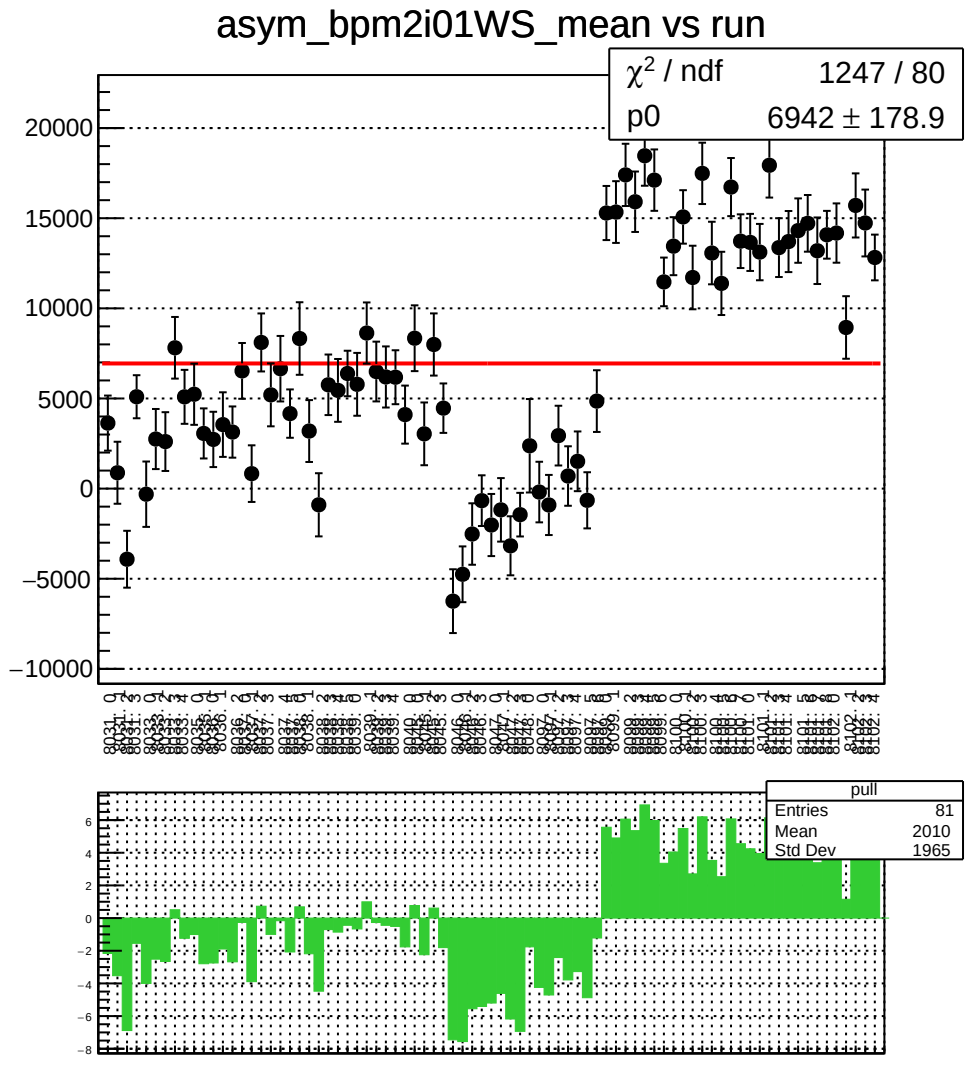

pull1D
Entries 81
Mean −0.009626
Std Dev 0.9315
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

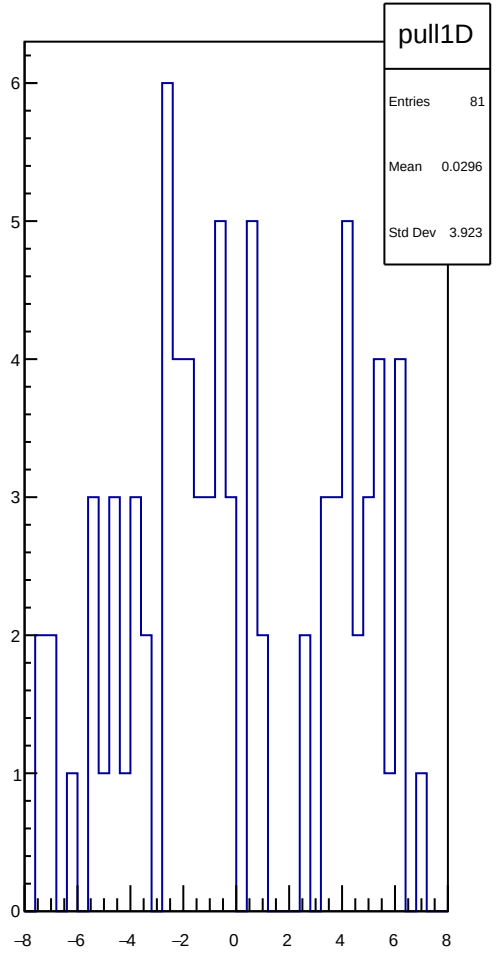

asym_bpm0i07WS_rms vs run
χ² / ndf 1.543e+04 / 80
p0 1523 ± 1.211
1900
1800
1700
1600
1500
1400
1300
1200
1100

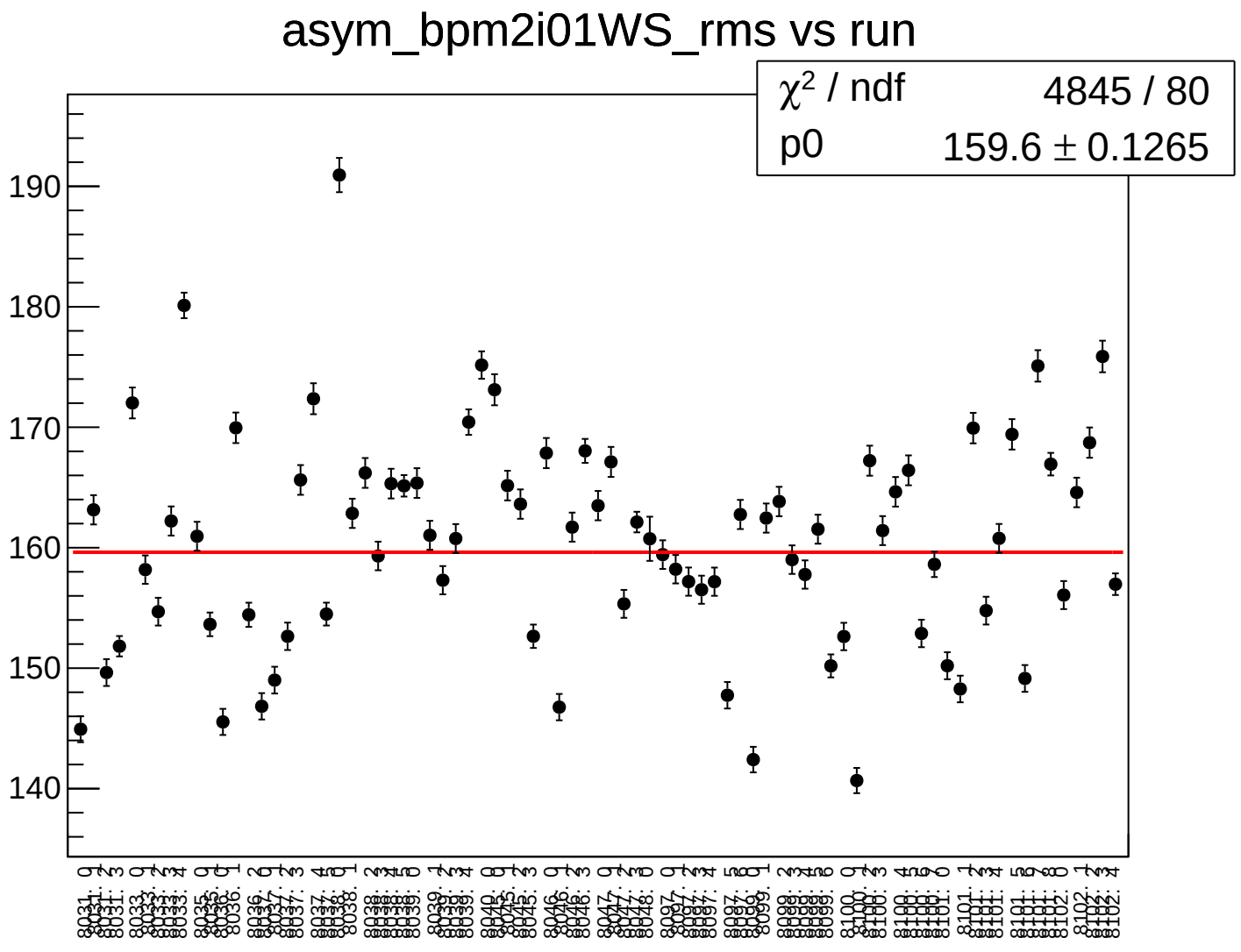

asym_bpm1i02WS_mean vs run
χ² / ndf 1245 / 80
p0 7485 ± 187
pull
Entries 81
Mean 1.44e+04
Std Dev 1.435e+04

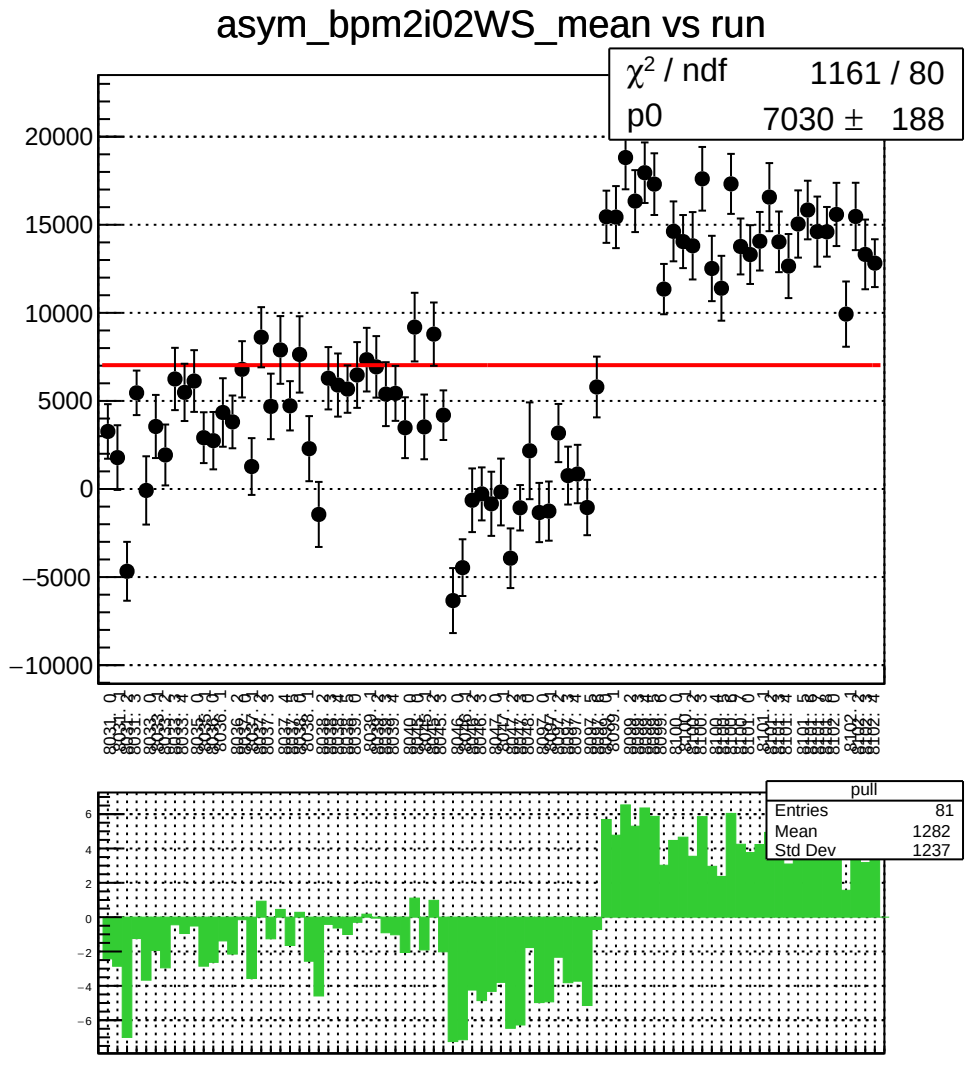

pull1D
Entries 81
Mean 0.004141
Std Dev 3.921

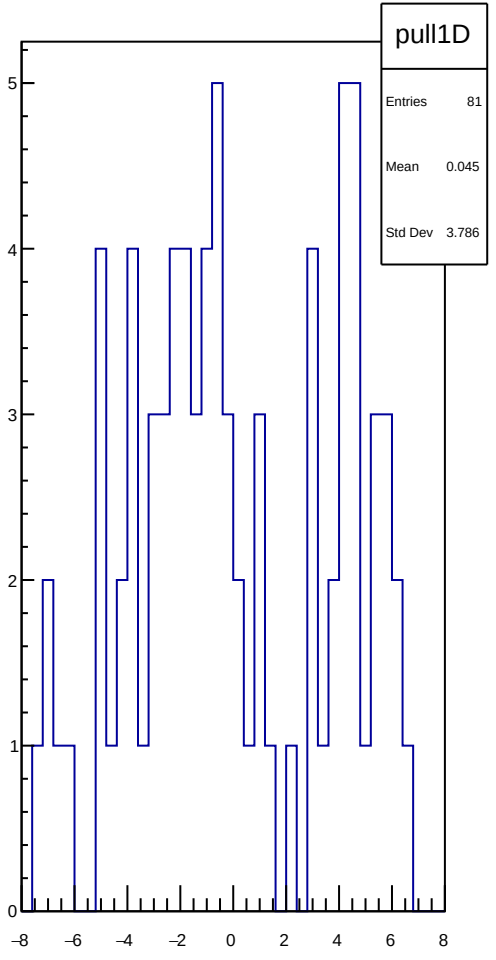

asym_bpm1i02WS_rms vs run
χ² / ndf 6539 / 80
p0 166.7 ± 0.1322
200
190
180
170
160
150
140

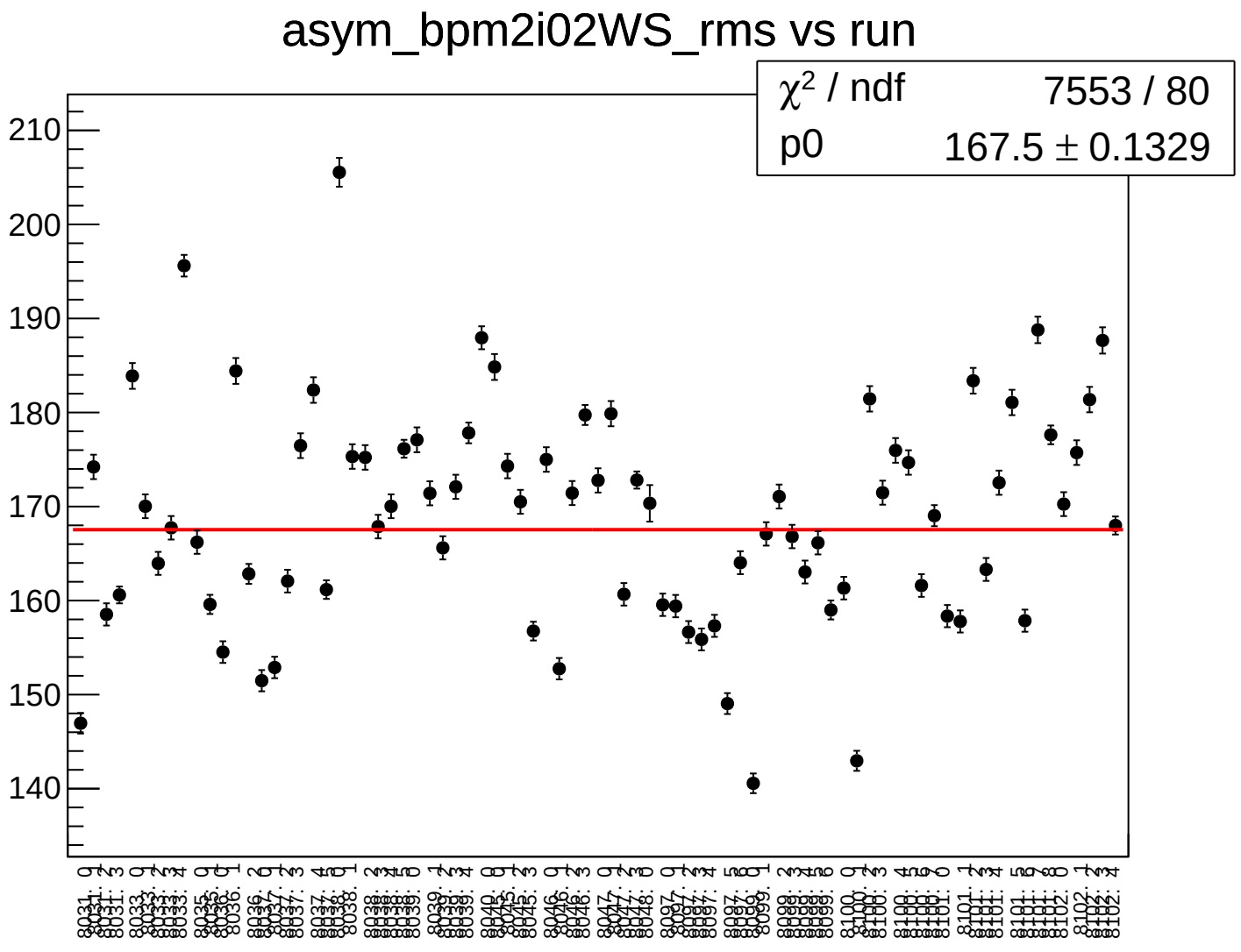

asym_bpm2i01WS_mean vs run
χ² / ndf 1247 / 80
p0 6942 ± 178.9
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 2010
Std Dev 1965
6
4
2
0
−2
−4
−6
−8

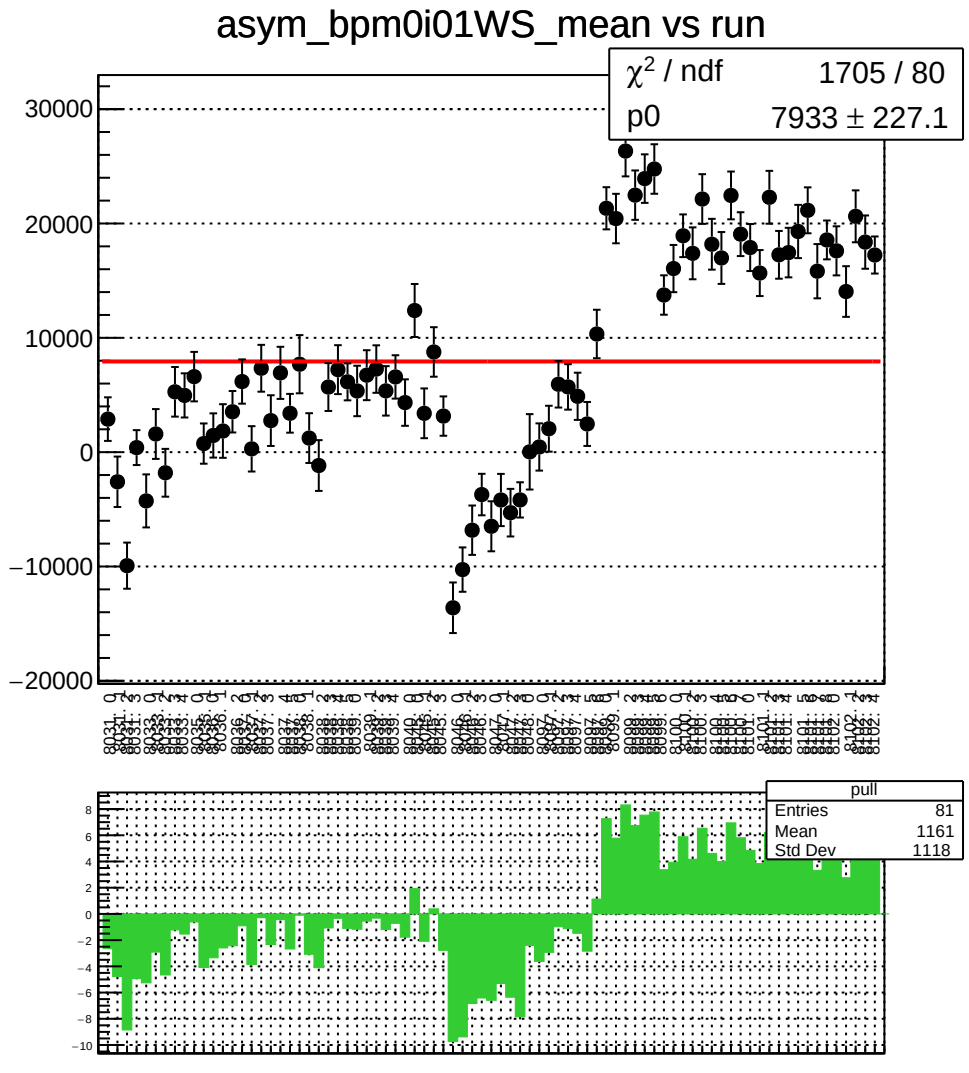

pull1D
Entries 81
Mean 0.0296
Std Dev 3.923
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

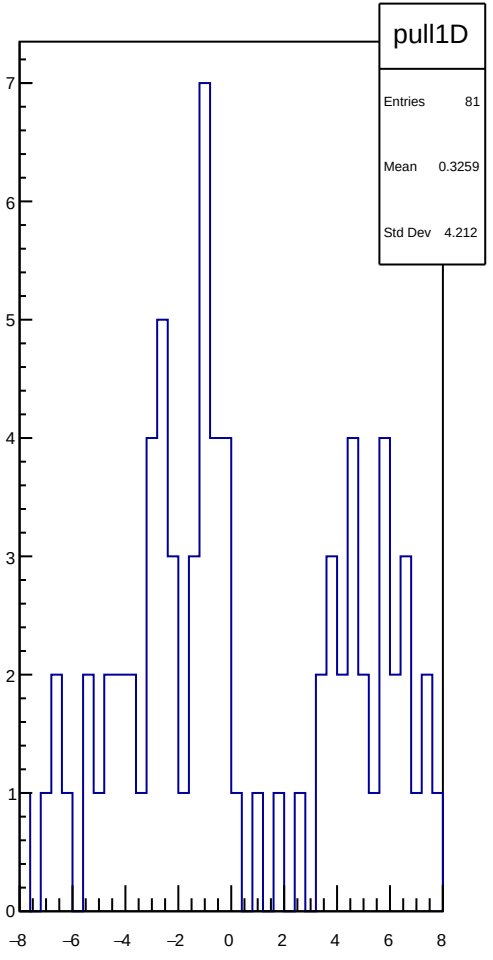

asym_bpm2i01WS_rms vs run
χ² / ndf 4845 / 80
p0 159.6 ± 0.1265
190
180
170
160
150
140

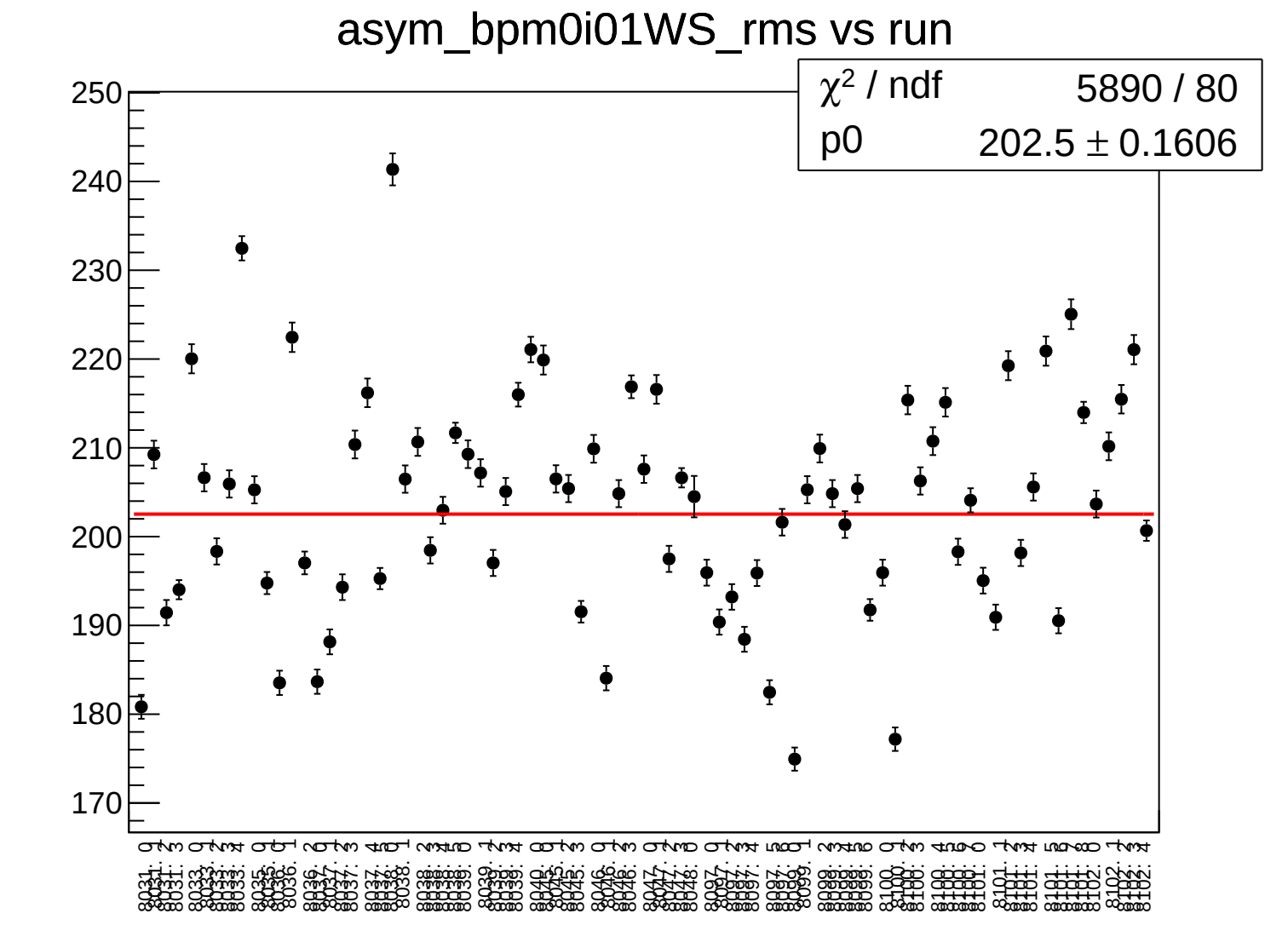

asym_bpm2i02WS_mean vs run
χ² / ndf 1161 / 80
p0 7030 ± 188
pull
Entries 81
Mean 1282
Std Dev 1237

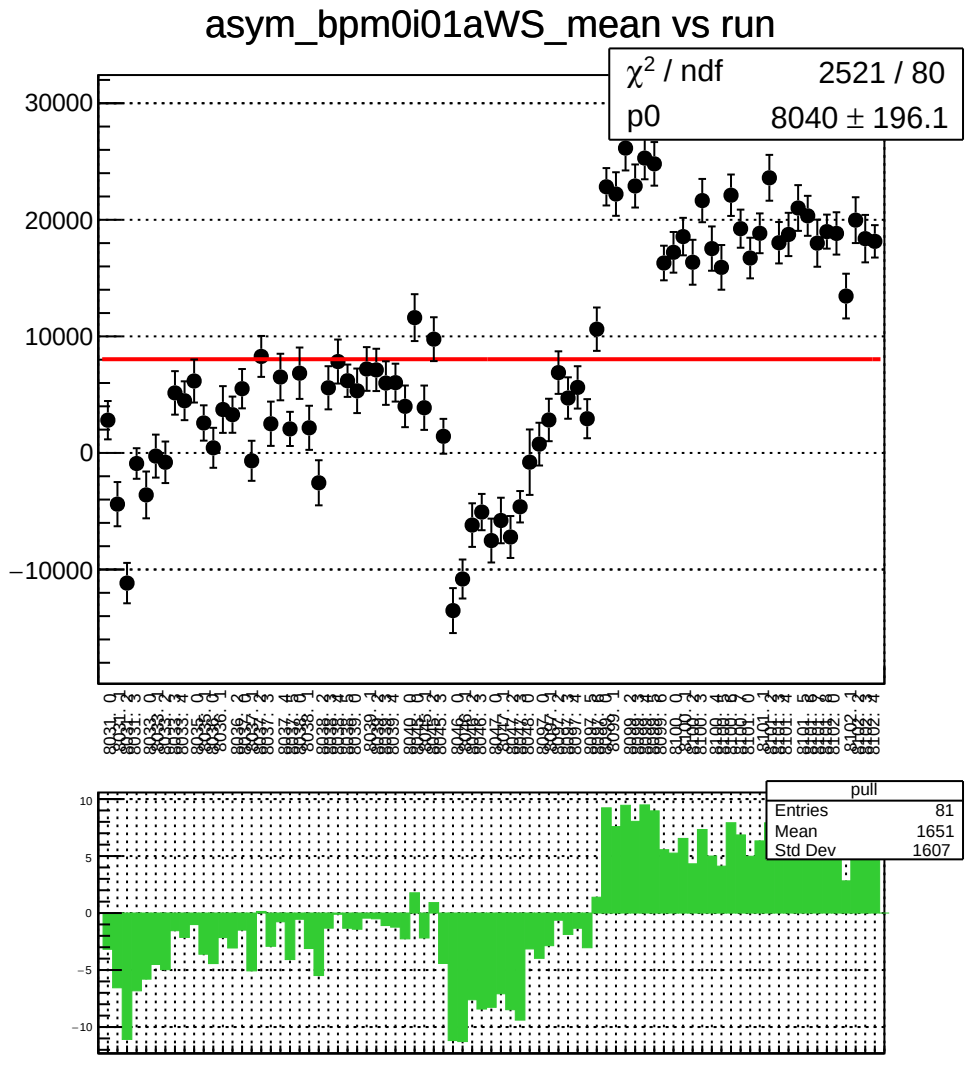

pull1D
Entries 81
Mean 0.045
Std Dev 3.786

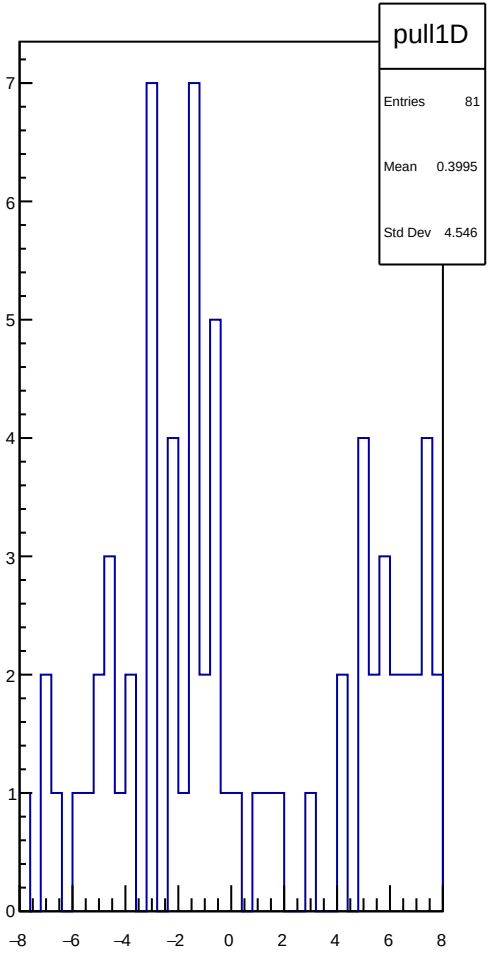

asym_bpm2i02WS_rms vs run
χ² / ndf 7553 / 80
p0 167.5 ± 0.1329
210
200
190
180
170
160
150
140

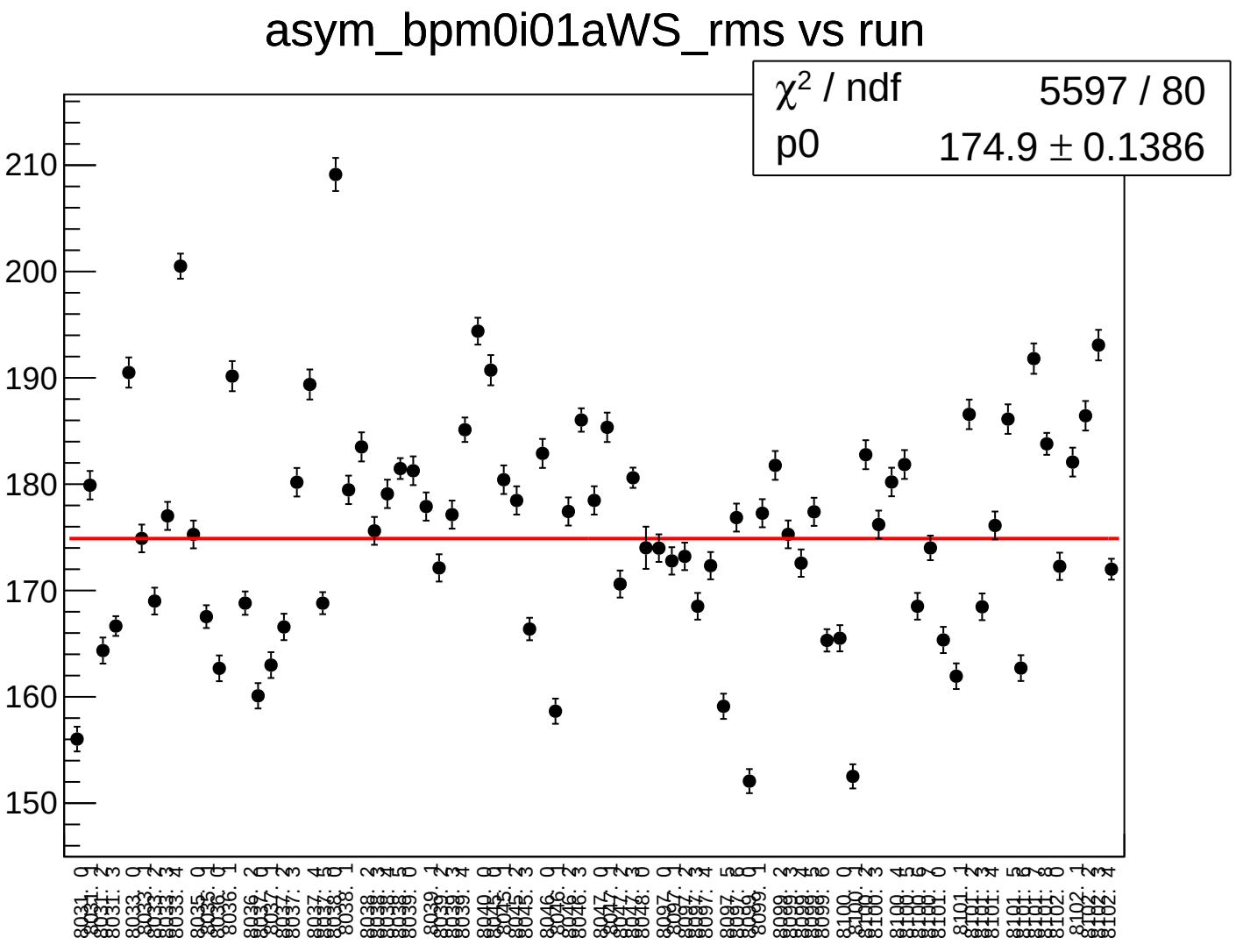

asym_bpm0i01WS_mean vs run
χ² / ndf 1705 / 80
p0 7933 ± 227.1
pull
Entries 81
Mean 1161
Std Dev 1118

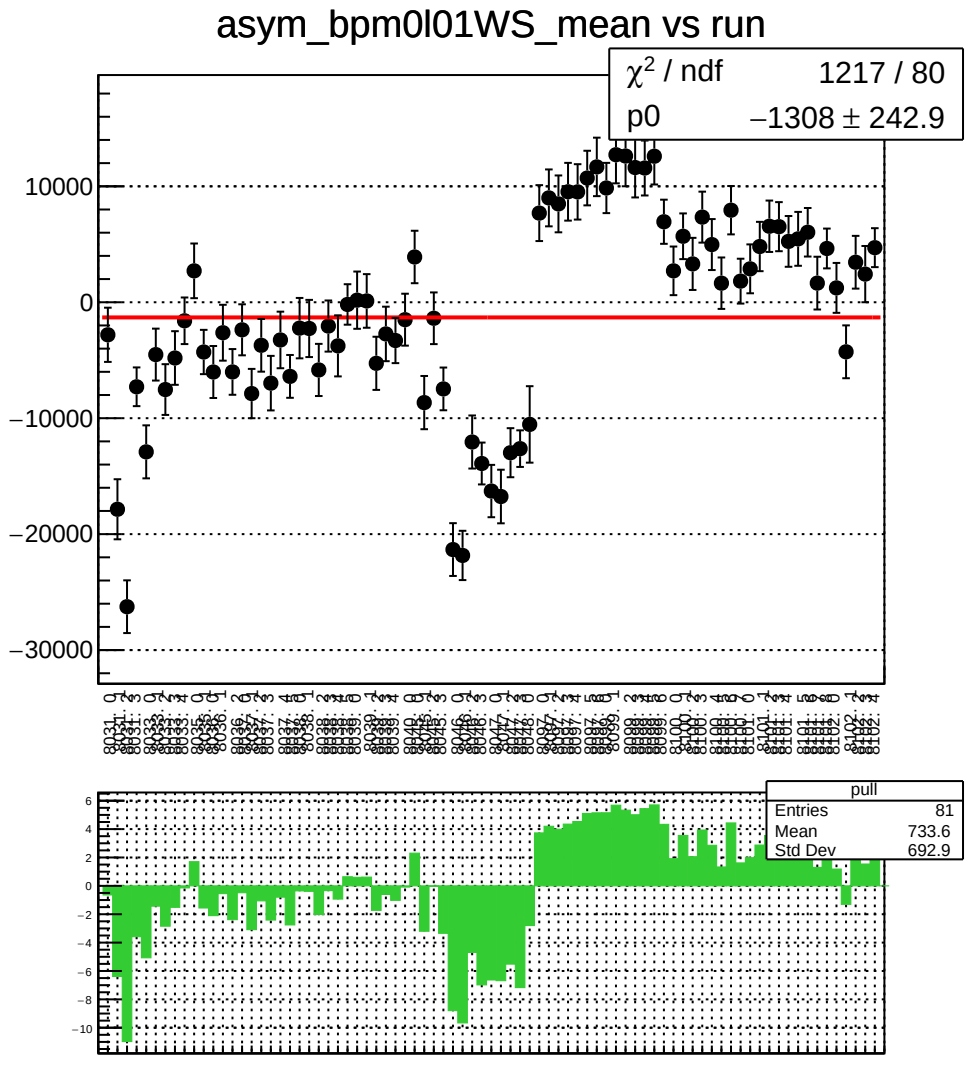

pull1D
Entries 81
Mean 0.3259
Std Dev 4.212

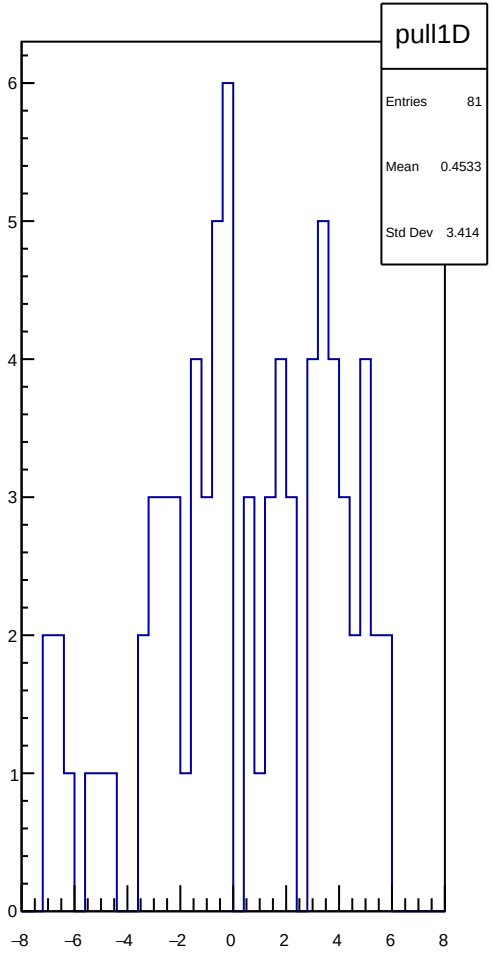

asym_bpm0i01WS_rms vs run
χ² / ndf 5890 / 80
p0 202.5 ± 0.1606
250
240
230
220
210
200
190
180
170

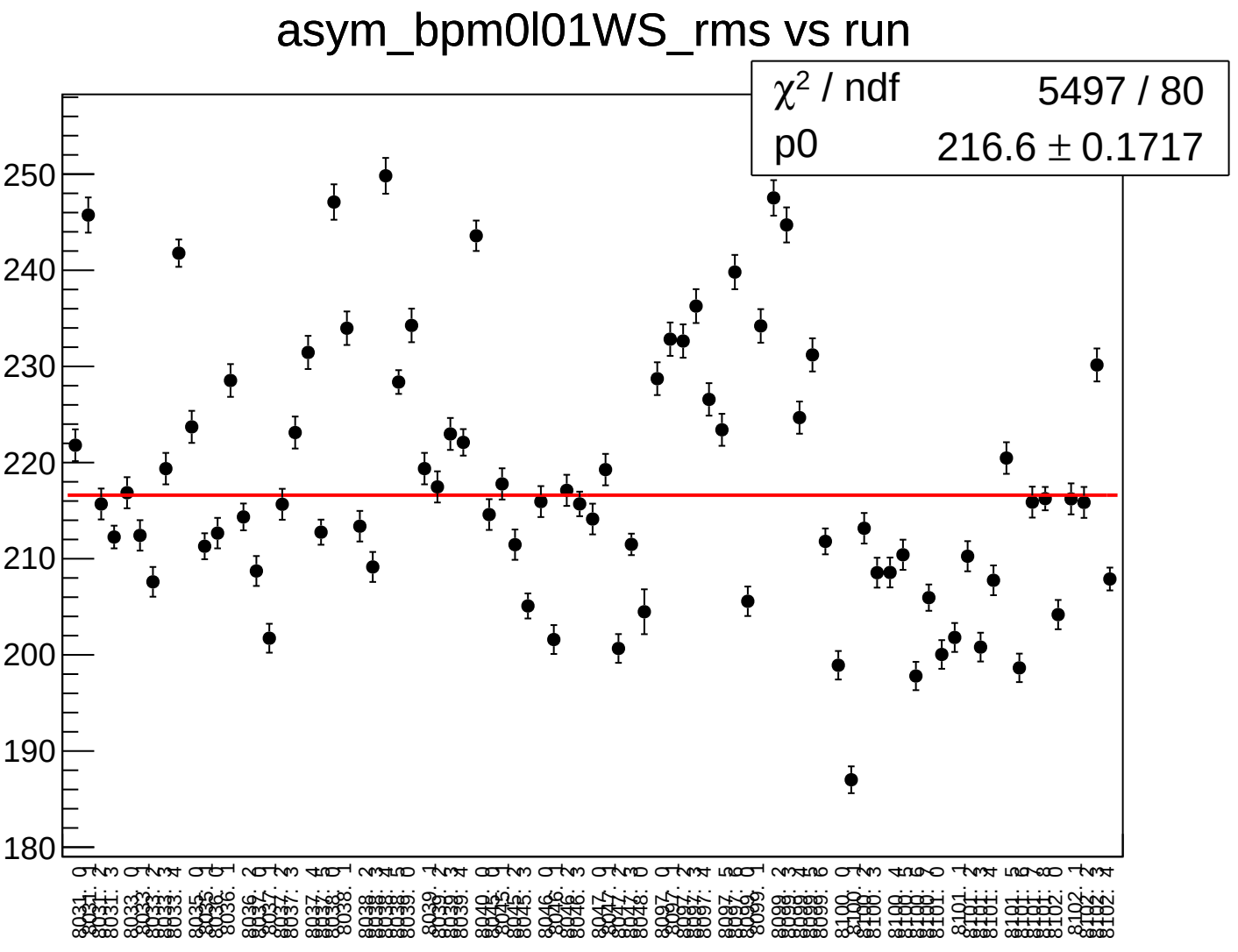

asym_bpm0i01aWS_mean vs run
χ² / ndf 2521 / 80
p0 8040 ± 196.1
30000
20000
10000
0
−10000
pull
Entries 81
Mean 1651
Std Dev 1607
10
5
0
−5
−10

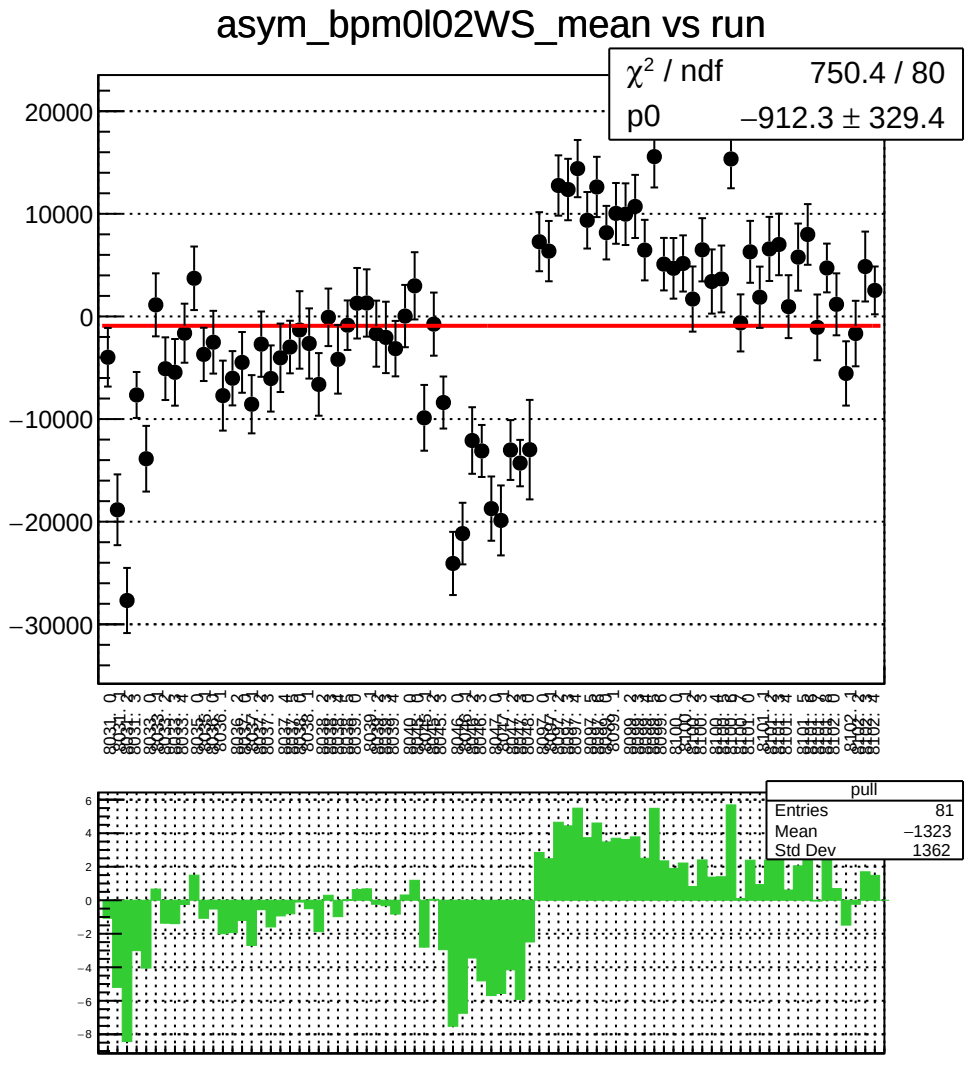

pull1D
Entries 81
Mean 0.3995
Std Dev 4.546
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

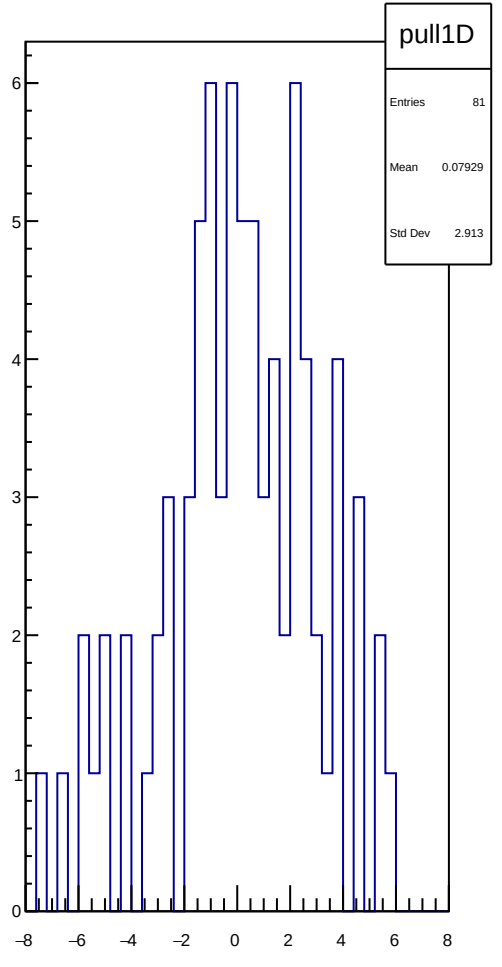

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 5597 / 80
p0 174.9 ± 0.1386
210
200
190
180
170
160
150

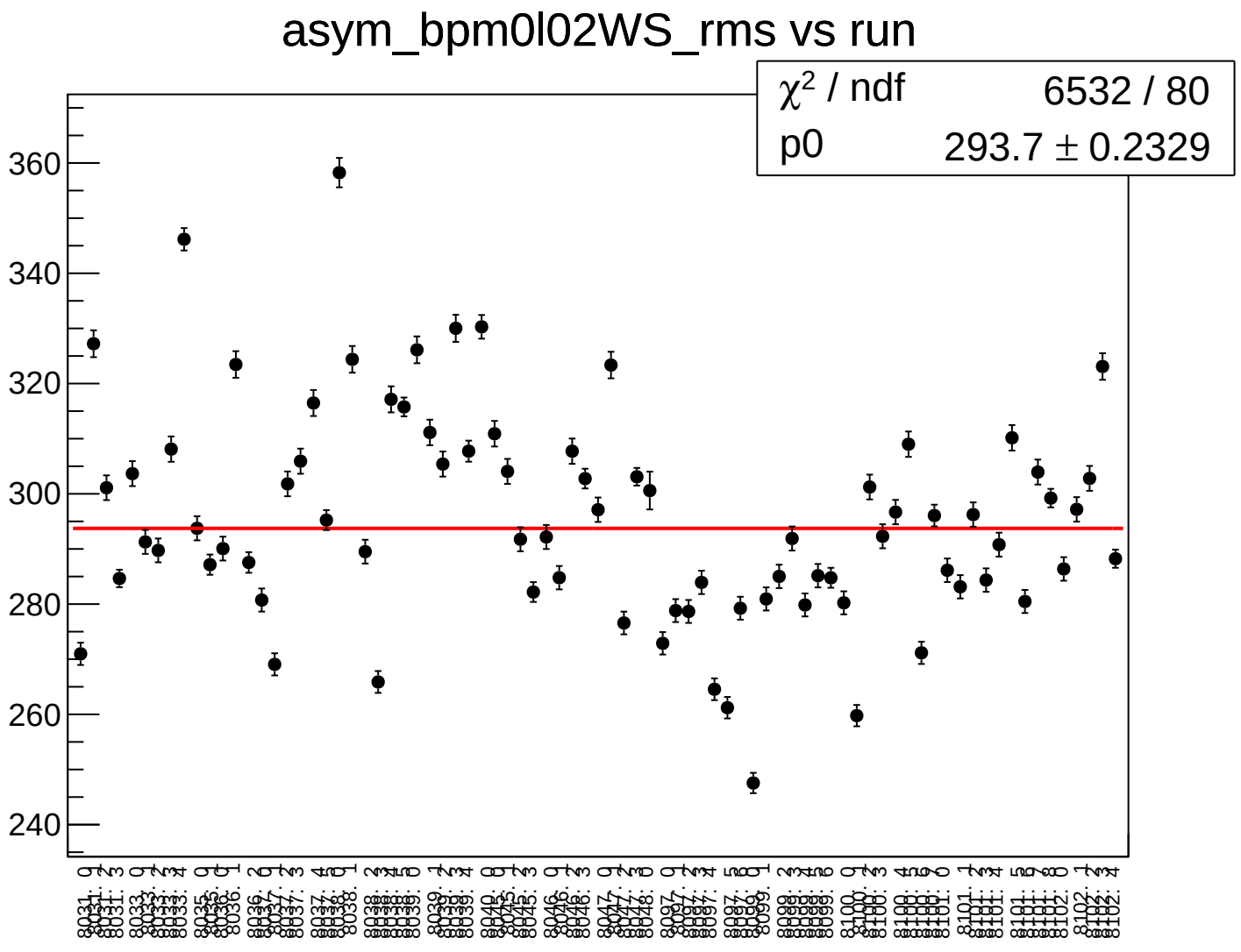

asym_bpm0l01WS_mean vs run
χ² / ndf 1217 / 80
p0 −1308 ± 242.9
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean 733.6
Std Dev 692.9
6
4
2
0
−2
−4
−6
−8
−10

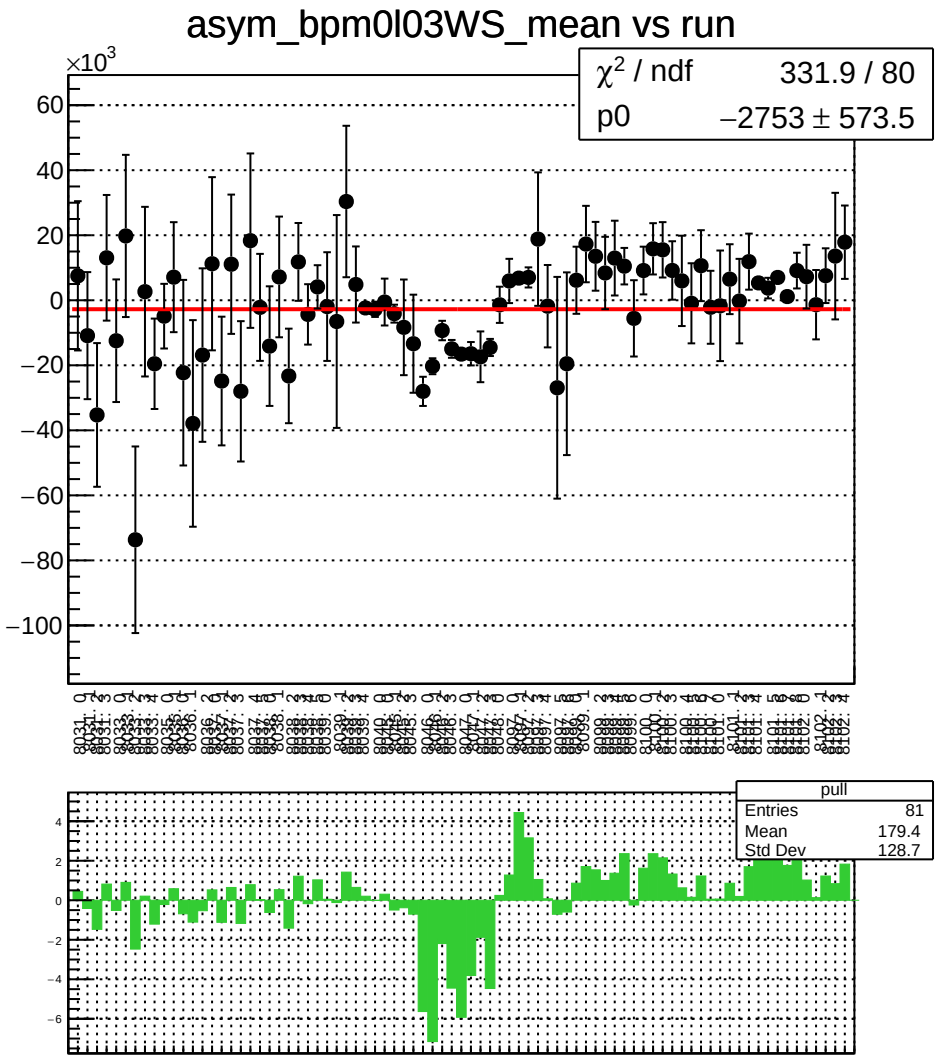

pull1D
Entries 81
Mean 0.4533
Std Dev 3.414
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

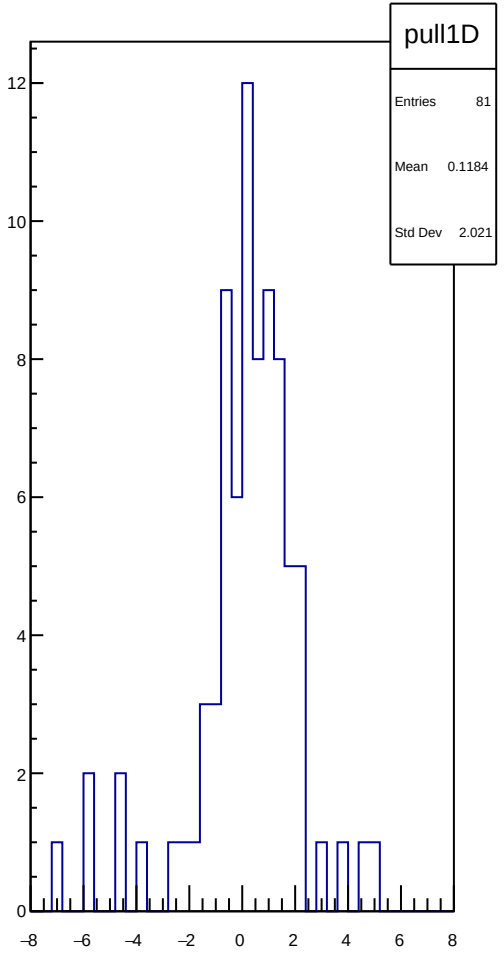

asym_bpm0l01WS_rms vs run
χ² / ndf 5497 / 80
p0 216.6 ± 0.1717
250
240
230
220
210
200
190
180

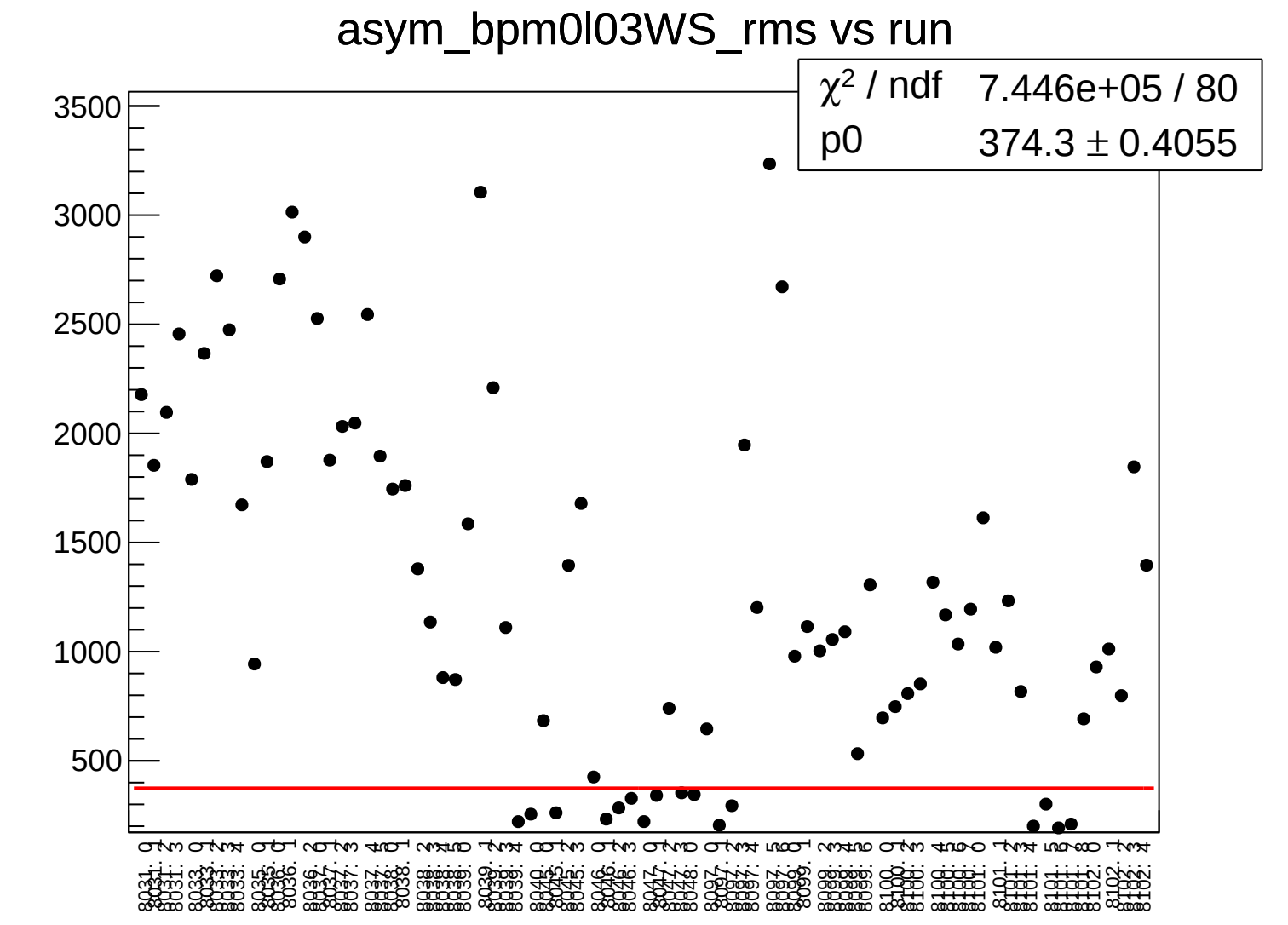

asym_bpm0l02WS_mean vs run
χ² / ndf 750.4 / 80
p0 −912.3 ± 329.4
20000
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean −1323
Std Dev 1362
6
4
2
0
−2
−4
−6
−8

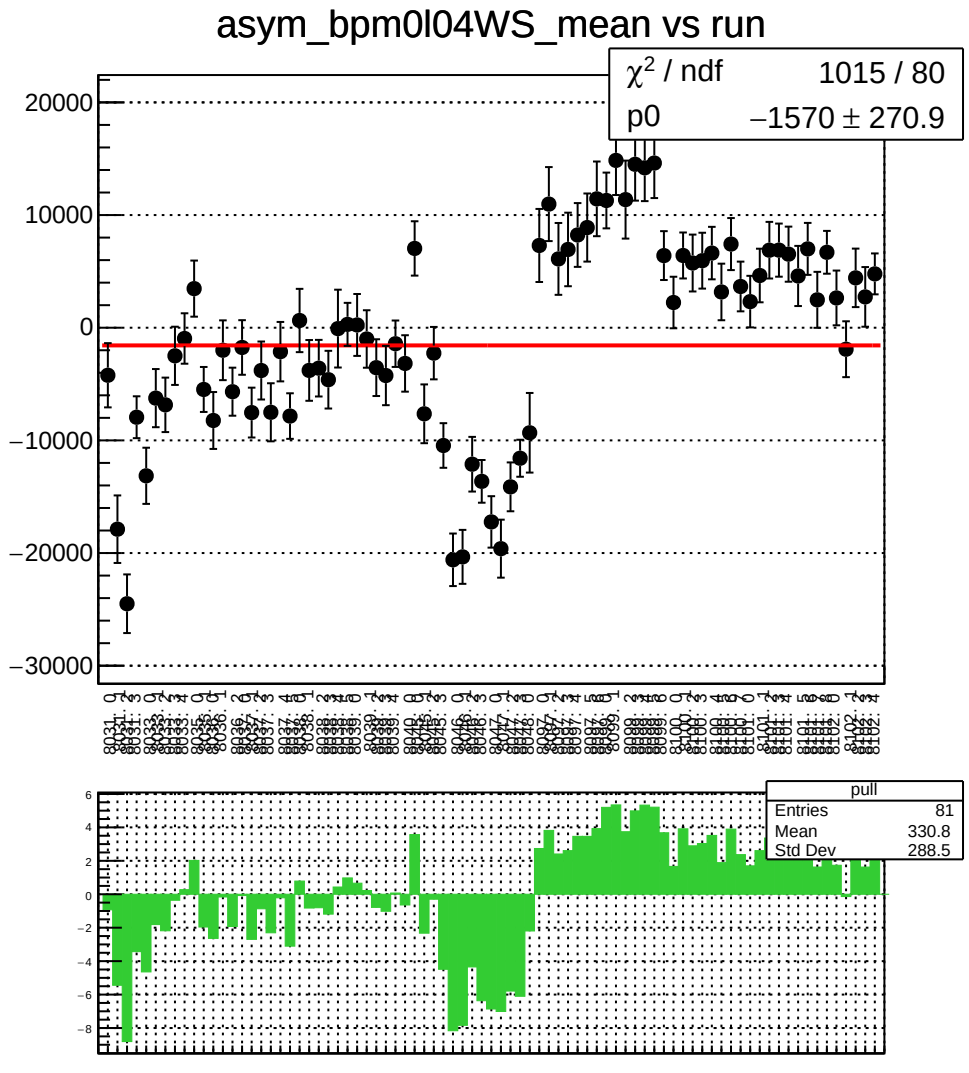

pull1D
Entries 81
Mean 0.07929
Std Dev 2.913
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

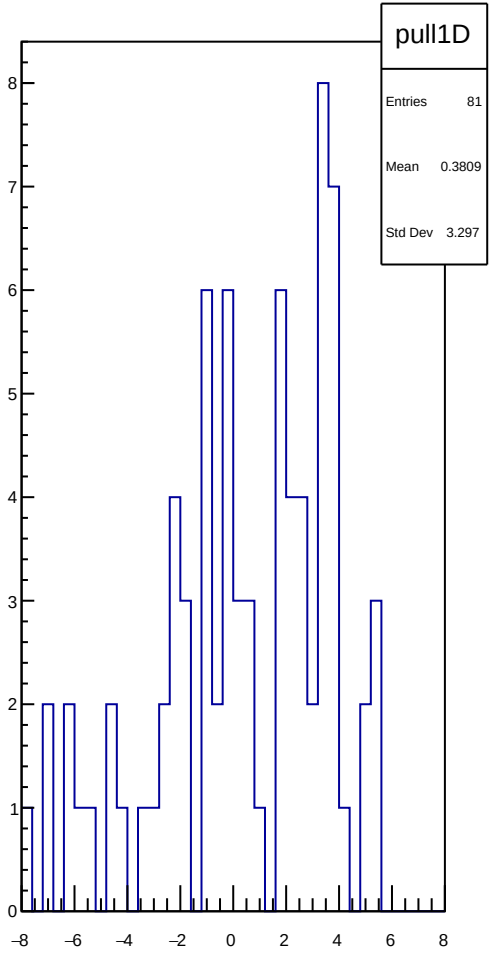

asym_bpm0l02WS_rms vs run
χ² / ndf 6532 / 80
p0 293.7 ± 0.2329
360
340
320
300
280
260
240

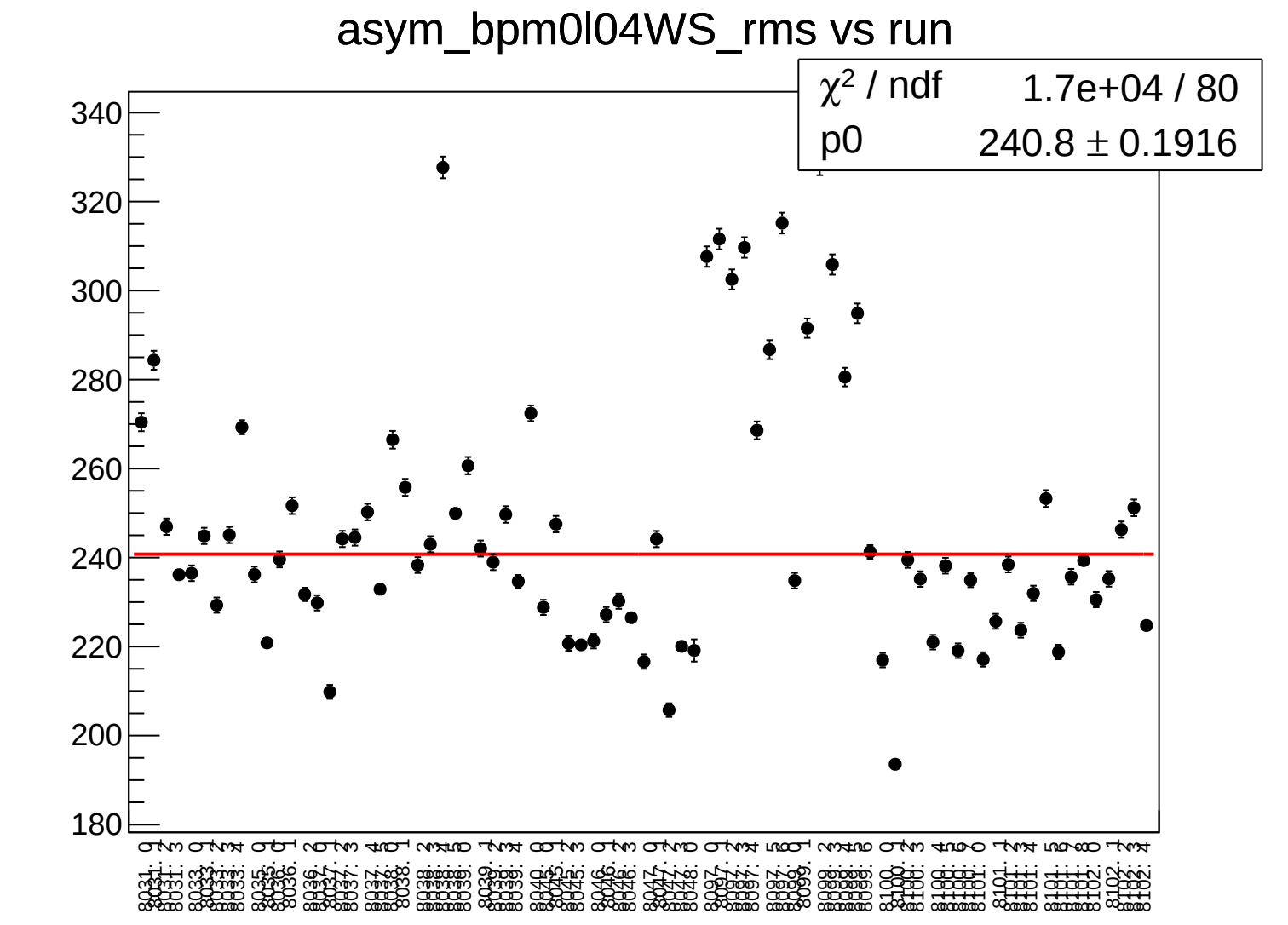

asym_bpm0l03WS_mean vs run
×10^3
χ² / ndf 331.9 / 80
p0 −2753 ± 573.5
pull
Entries 81
Mean 179.4
Std Dev 128.7

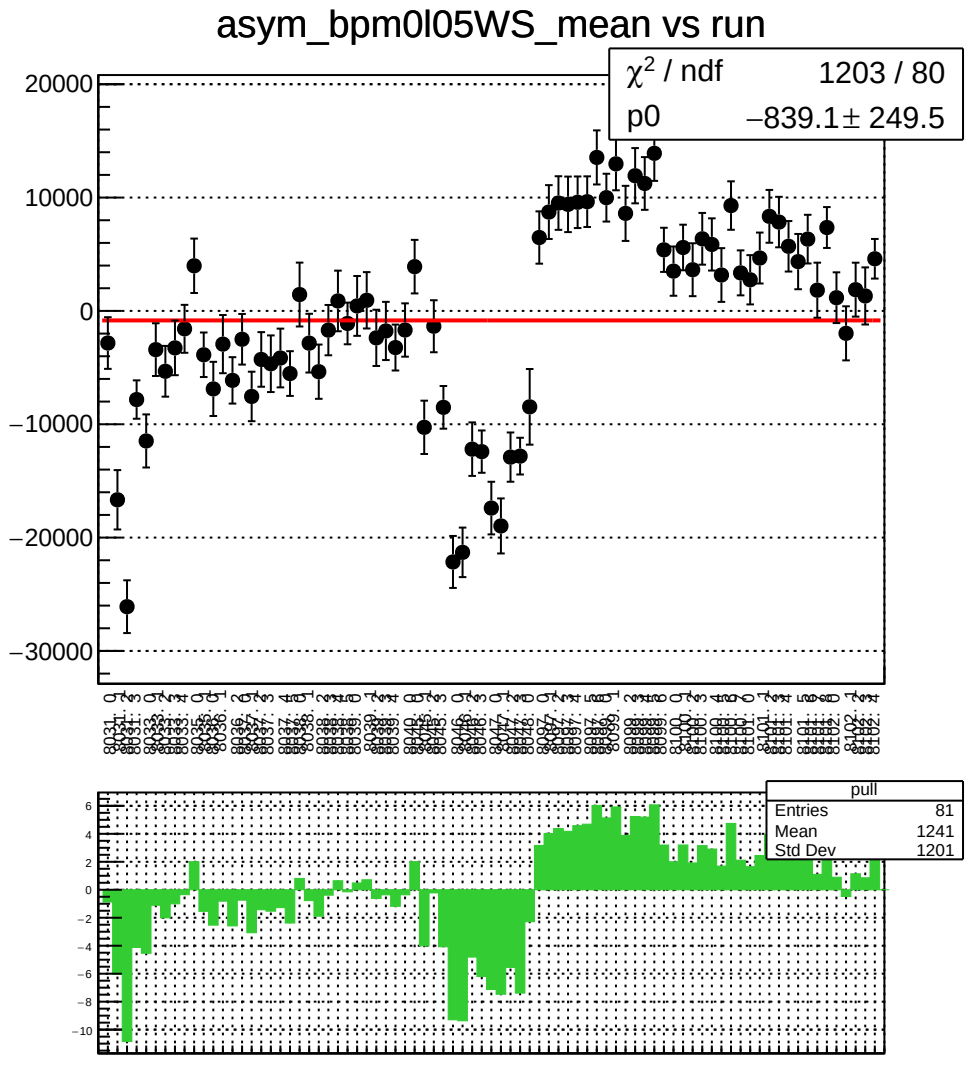

pull1D
Entries 81
Mean 0.1184
Std Dev 2.021

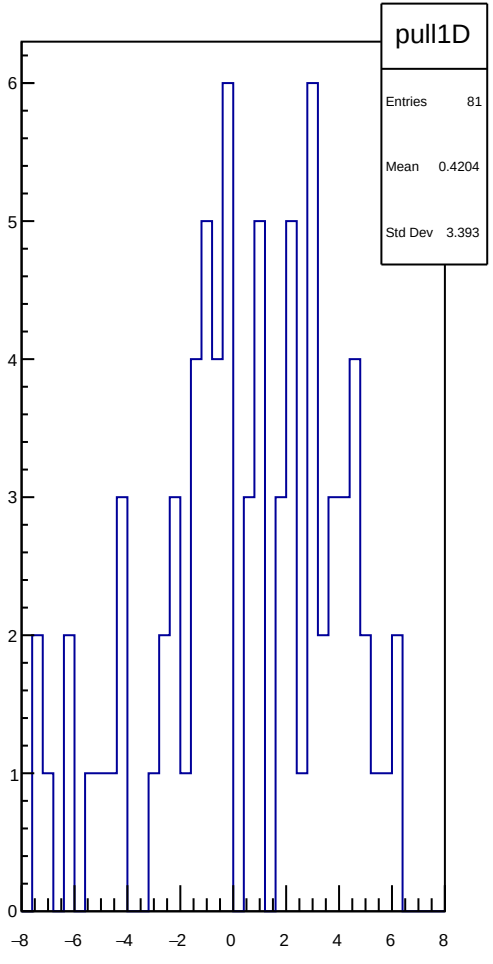

asym_bpm0l03WS_rms vs run
χ² / ndf 7.446e+05 / 80
p0 374.3 ± 0.4055
3500
3000
2500
2000
1500
1000
500

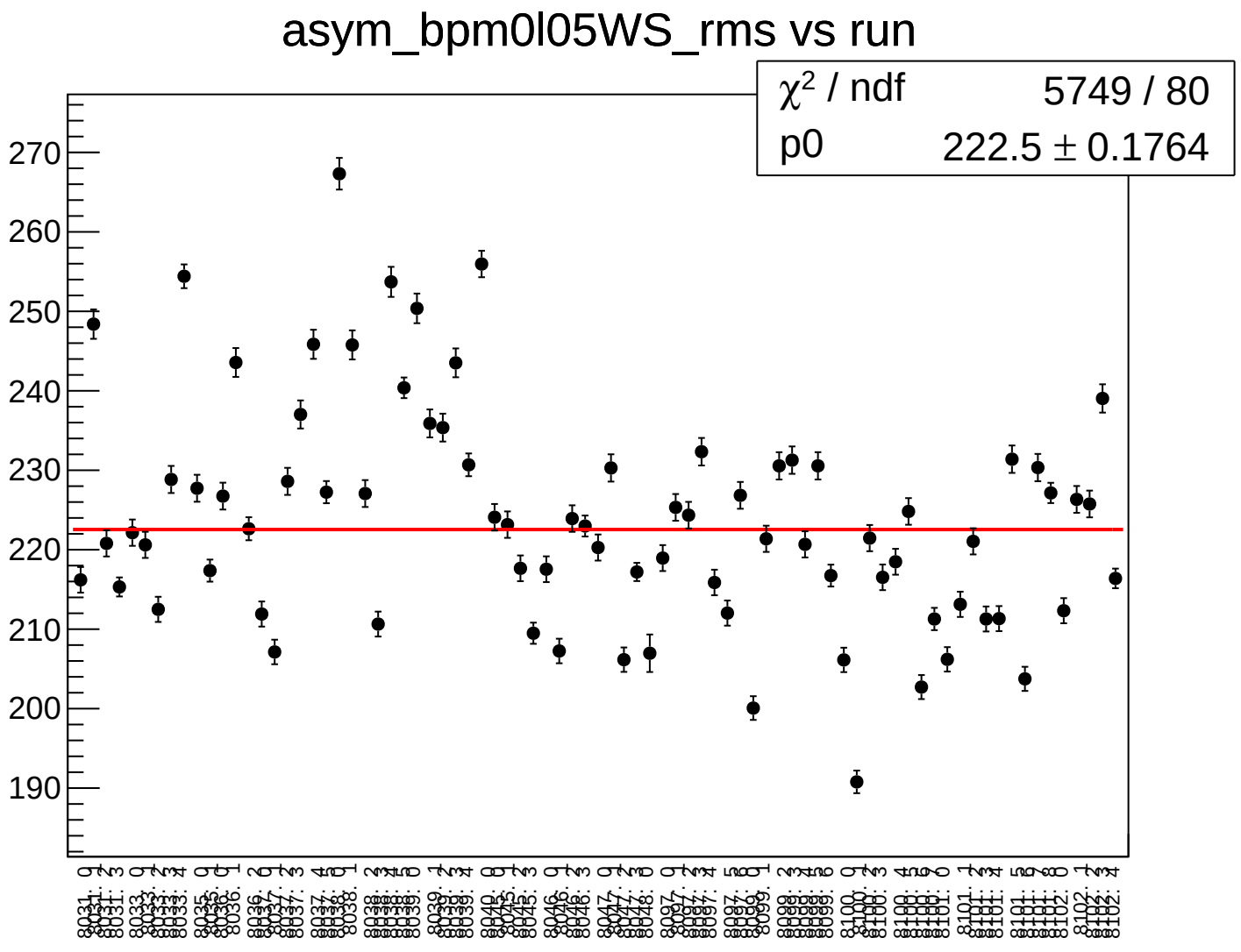

asym_bpm0l04WS_mean vs run
χ² / ndf 1015 / 80
p0 −1570 ± 270.9
pull
Entries 81
Mean 330.8
Std Dev 288.5

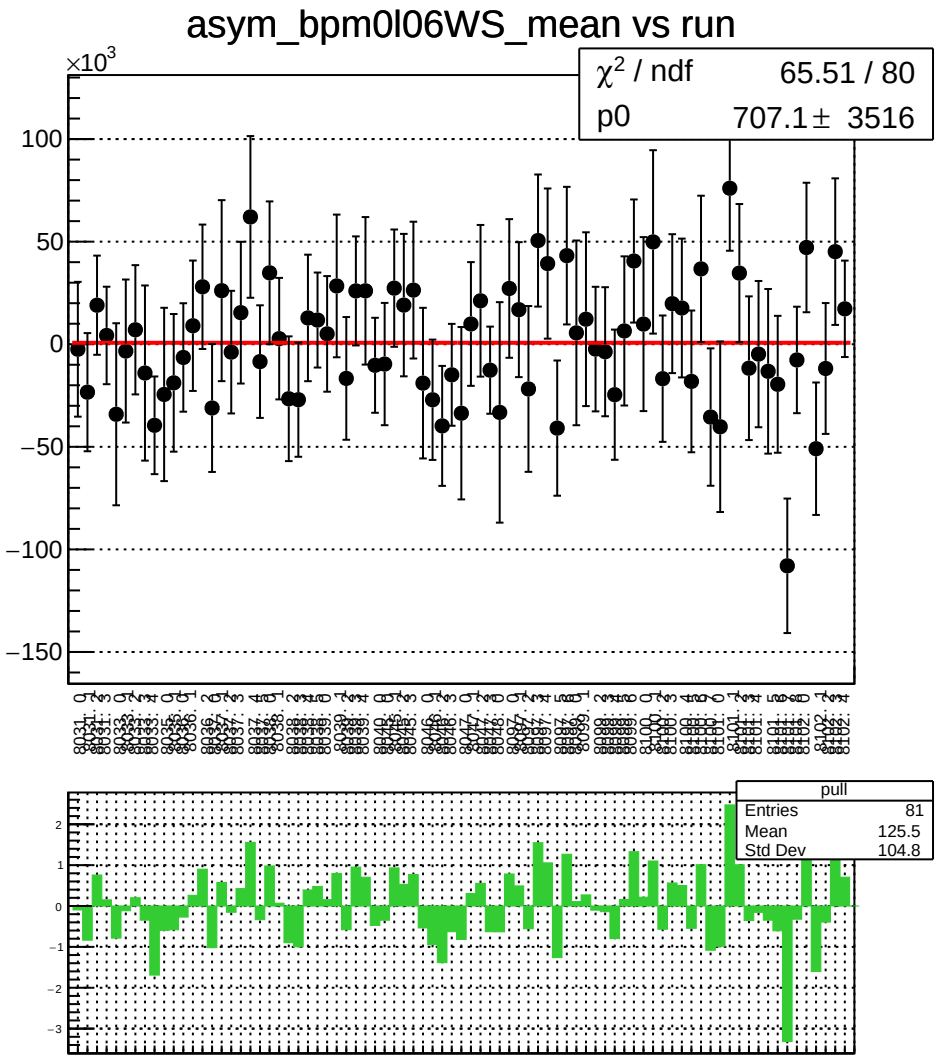

pull1D
Entries 81
Mean 0.3809
Std Dev 3.297

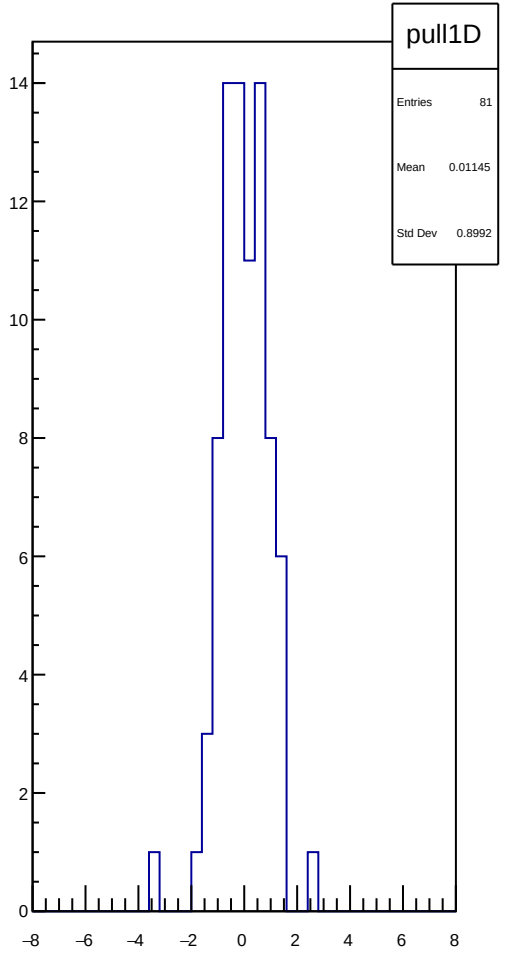

asym_bpm0l04WS_rms vs run
χ² / ndf 1.7e+04 / 80
p0 240.8 ± 0.1916
340
320
300
280
260
240
220
200
180

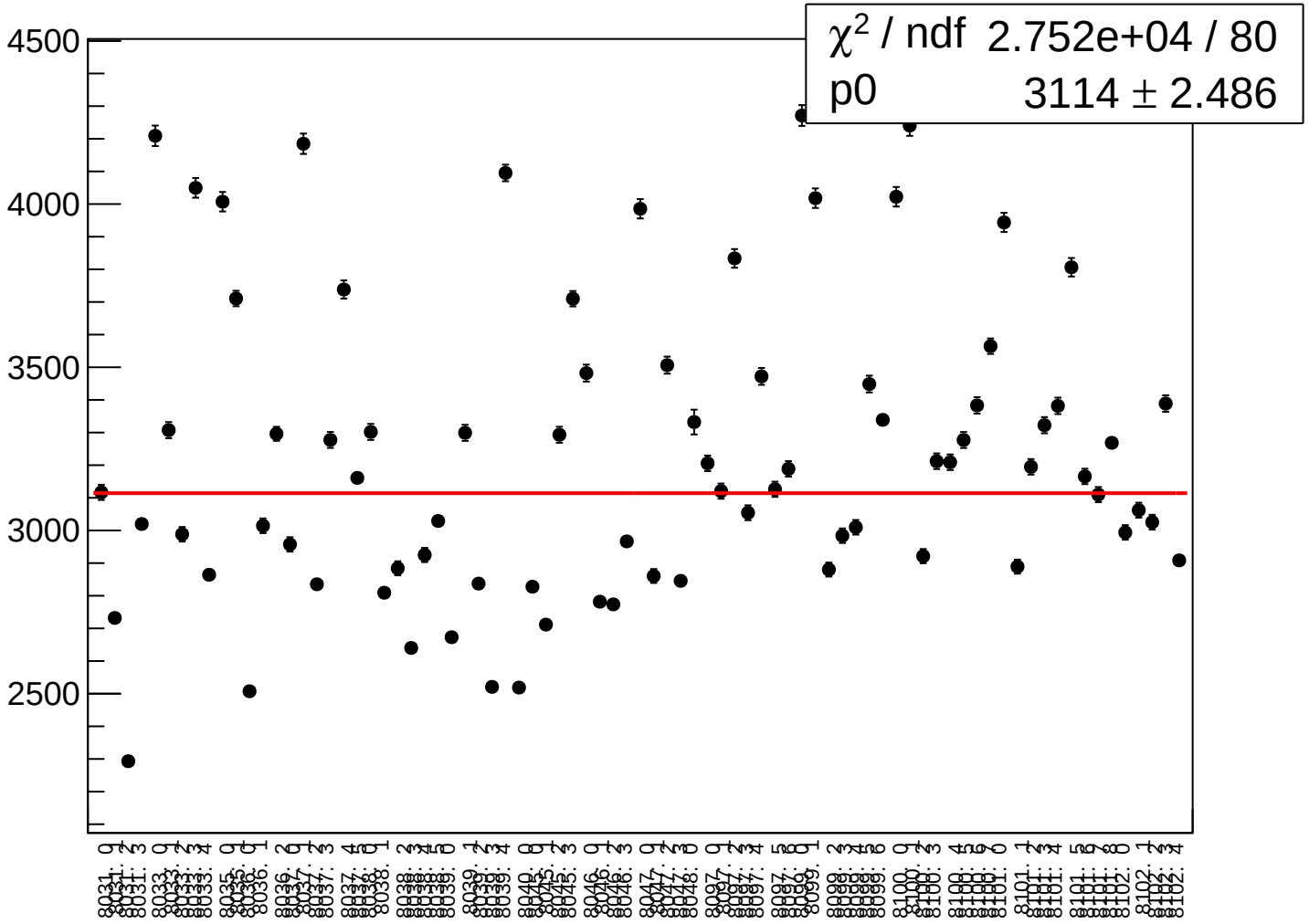

asym_bpm0l05WS_mean vs run
χ² / ndf 1203 / 80
p0 −839.1± 249.5
20000
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean 1241
Std Dev 1201
6
4
2
0
−2
−4
−6
−8
−10

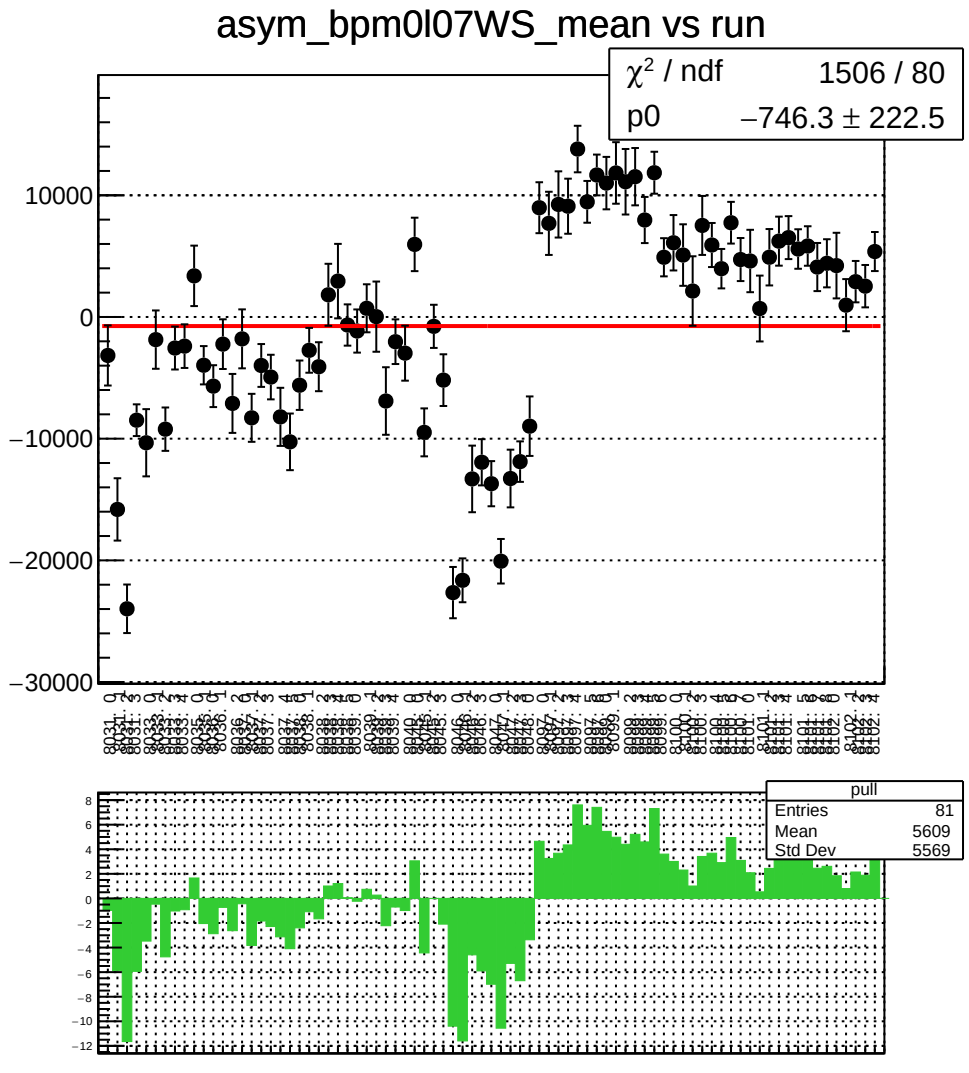

pull1D
Entries 81
Mean 0.4204
Std Dev 3.393
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

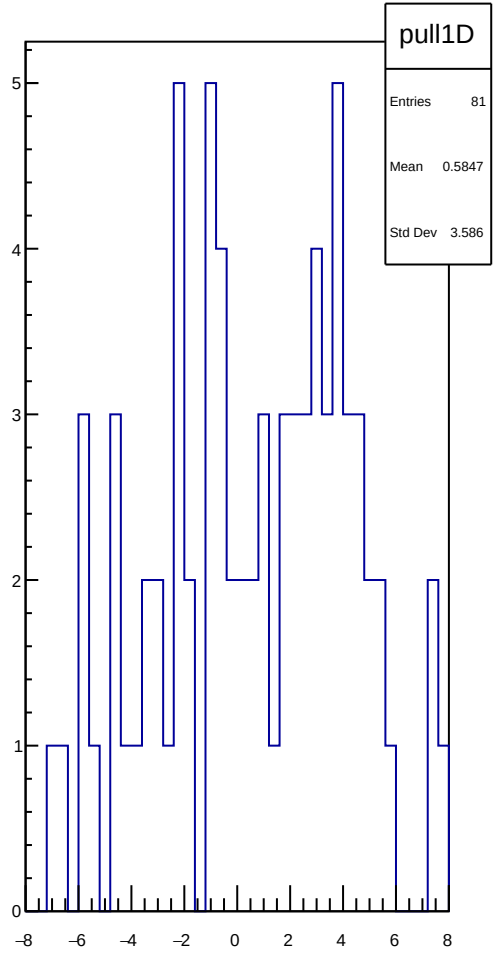

asym_bpm0l05WS_rms vs run
χ² / ndf 5749 / 80
p0 222.5 ± 0.1764
270
260
250
240
230
220
210
200
190

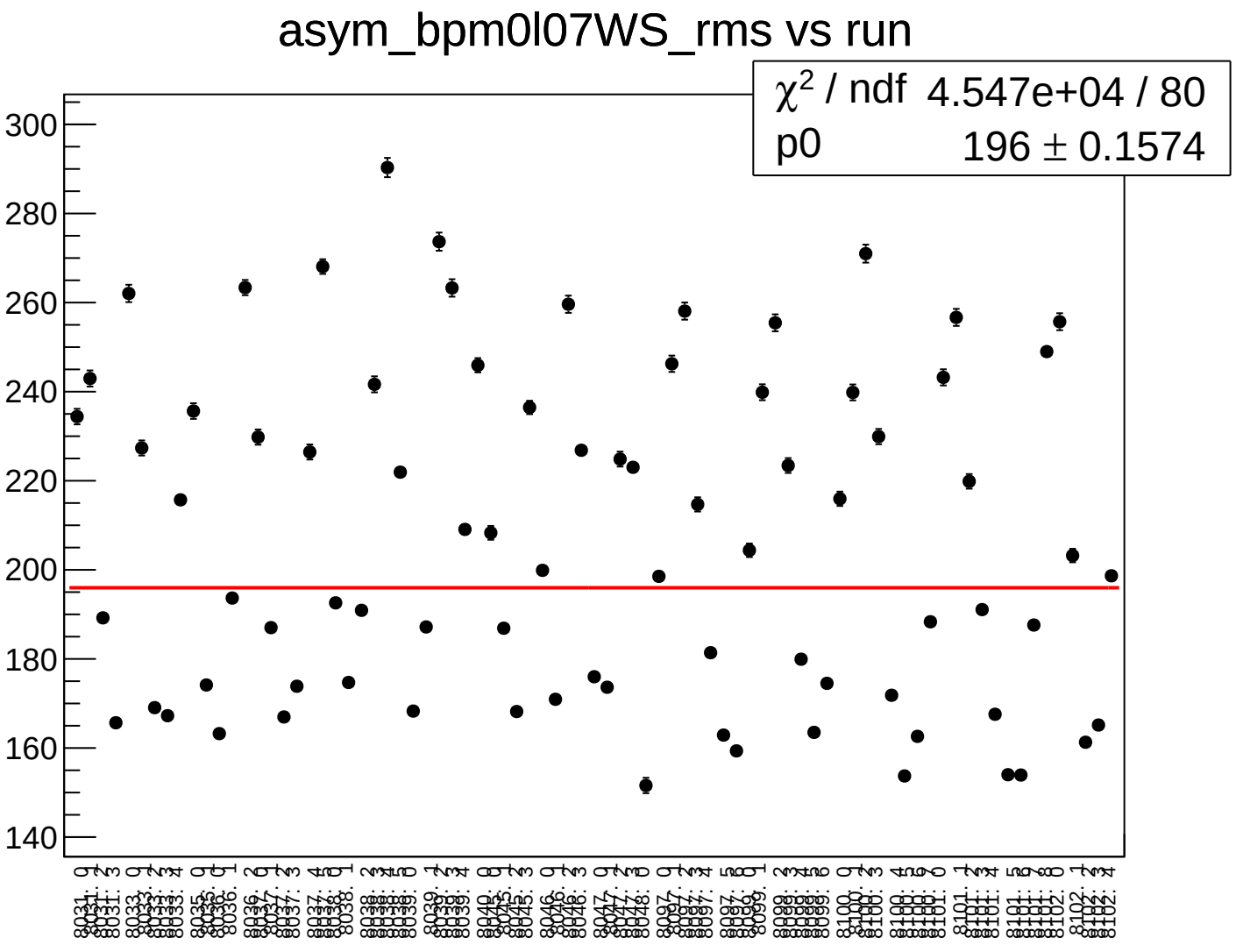

asym_bpm0l06WS_mean vs run
×10^3
χ^2 / ndf 65.51 / 80
p0 707.1 ± 3516
100
50
0
−50
−100
−150
pull
Entries 81
Mean 125.5
Std Dev 104.8
2
1
0
−1
−2
−3

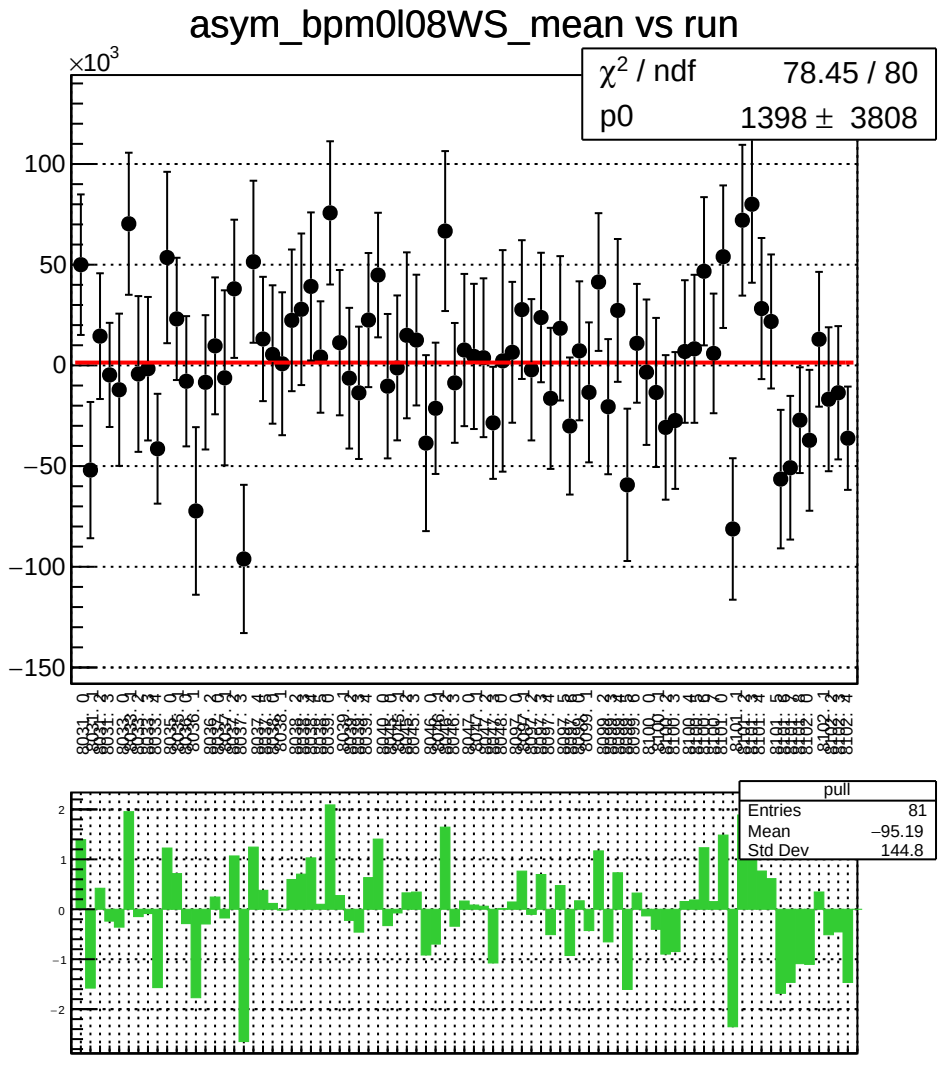

pull1D
Entries 81
Mean 0.01145
Std Dev 0.8992
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

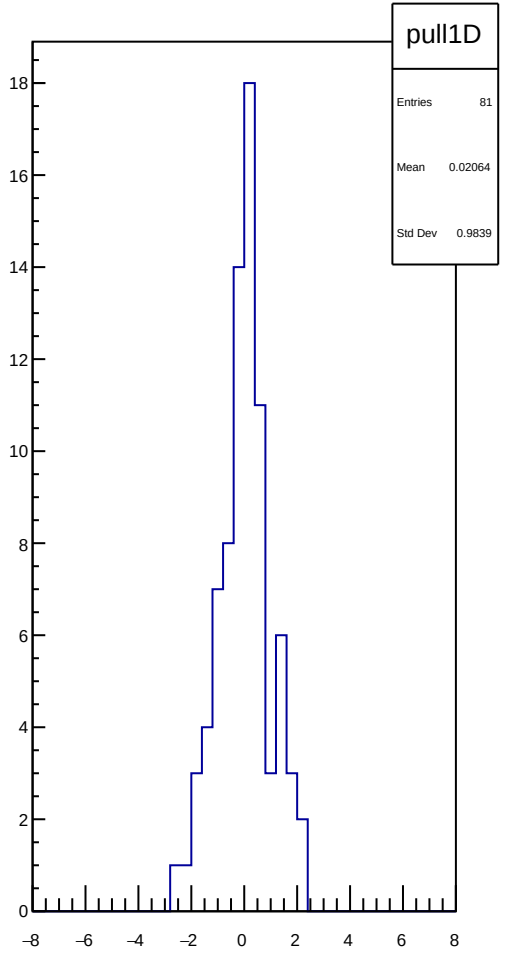

asym_bpm0l06WS_rms vs run
χ^2 / ndf 2.752e+04 / 80
p0 3114 ± 2.486
4500
4000
3500
3000
2500

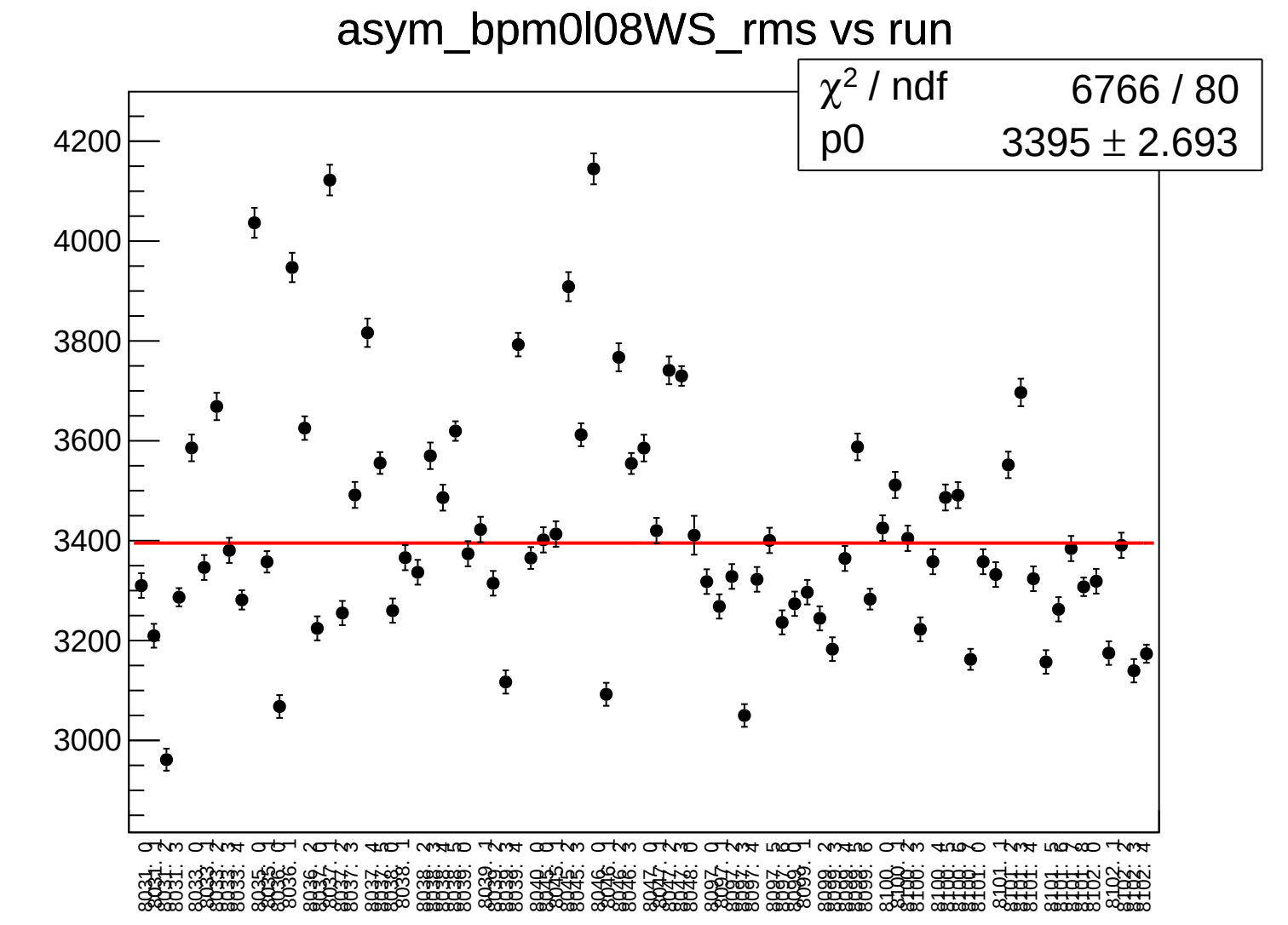

asym_bpm0l07WS_mean vs run
χ² / ndf 1506 / 80
p0 −746.3 ± 222.5
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean 5609
Std Dev 5569
8
6
4
2
0
−2
−4
−6
−8
−10
−12

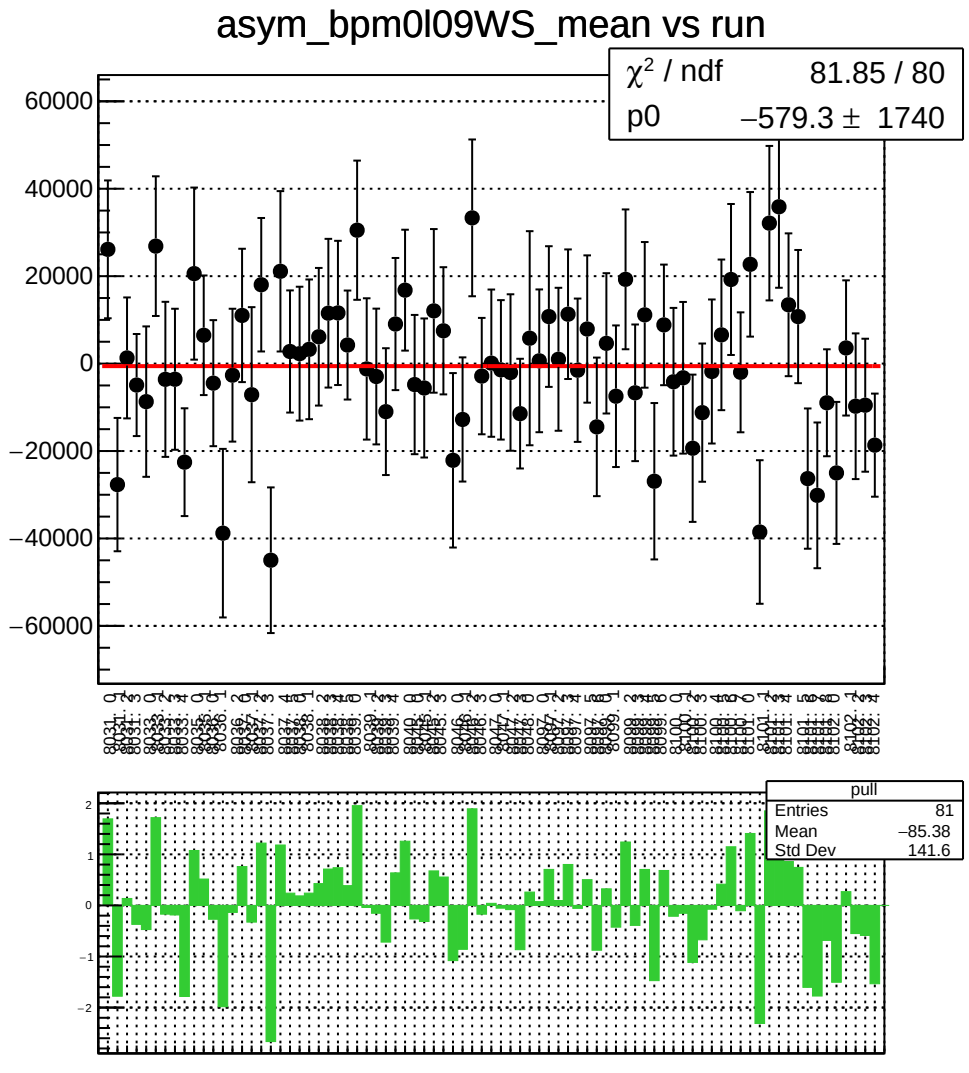

pull1D
Entries 81
Mean 0.5847
Std Dev 3.586
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

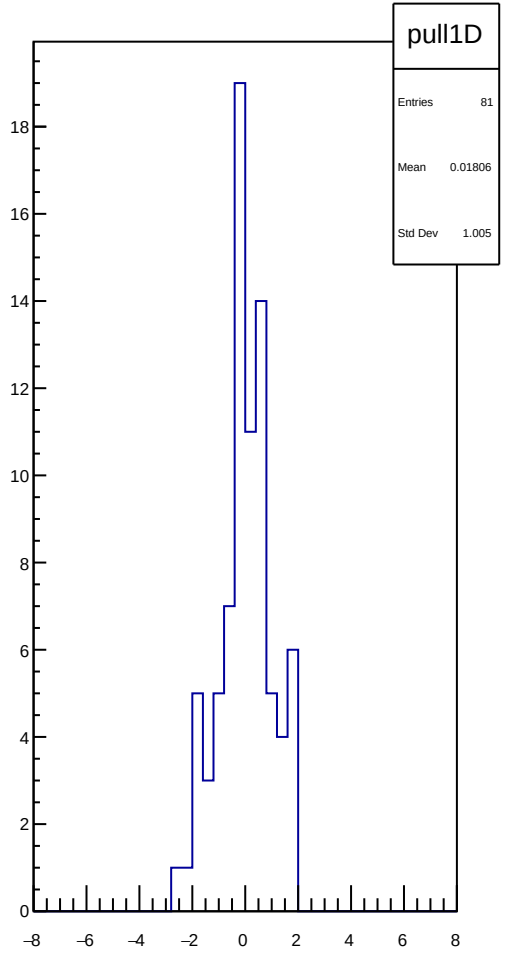

asym_bpm0l07WS_rms vs run
χ² / ndf 4.547e+04 / 80
p0 196 ± 0.1574
300
280
260
240
220
200
180
160
140

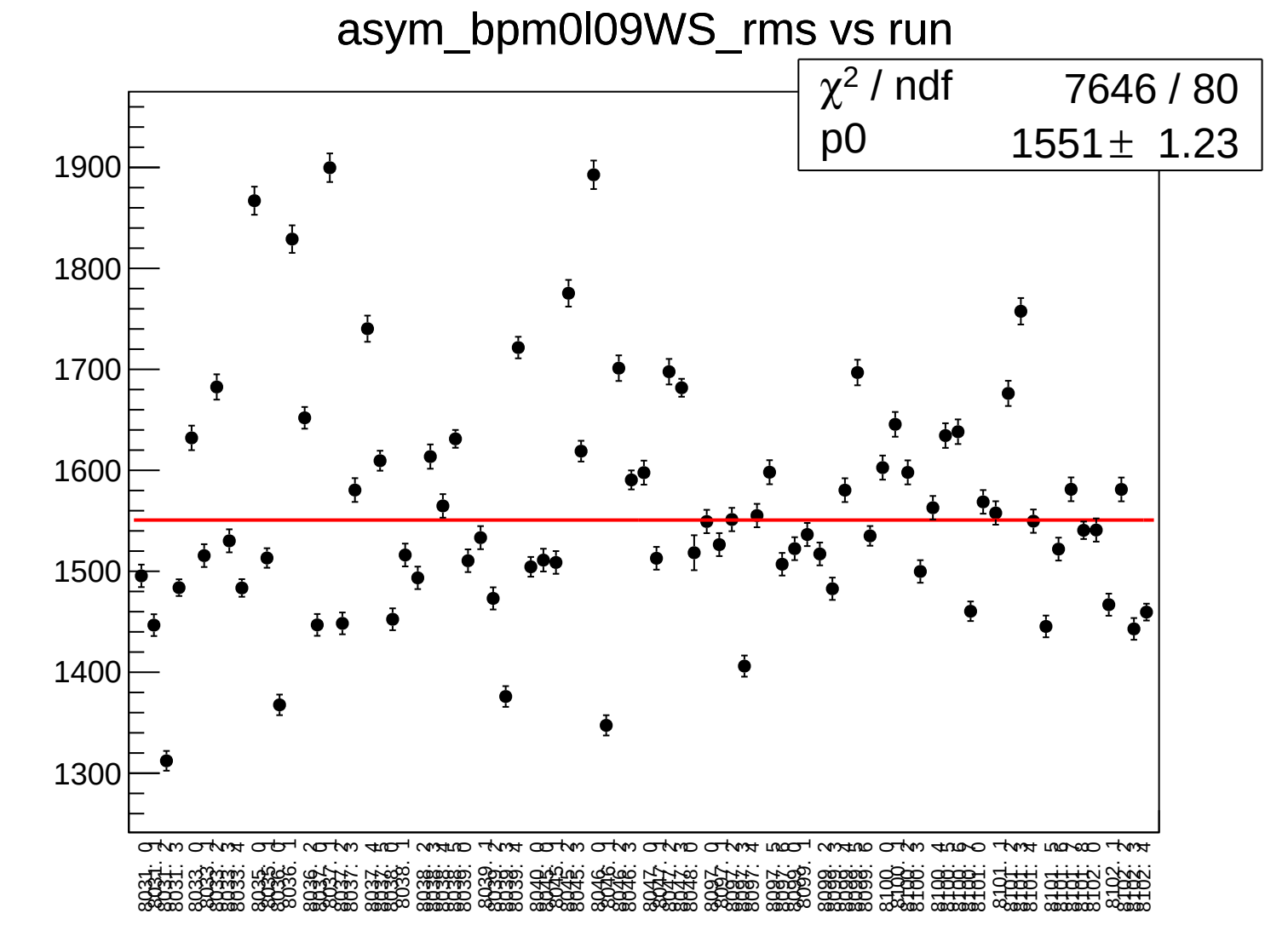

asym_bpm0l08WS_mean vs run
×10^3
χ^2 / ndf 78.45 / 80
p0 1398 ± 3808
100
50
0
−50
−100
−150
pull
Entries 81
Mean −95.19
Std Dev 144.8
2
1
0
−1
−2

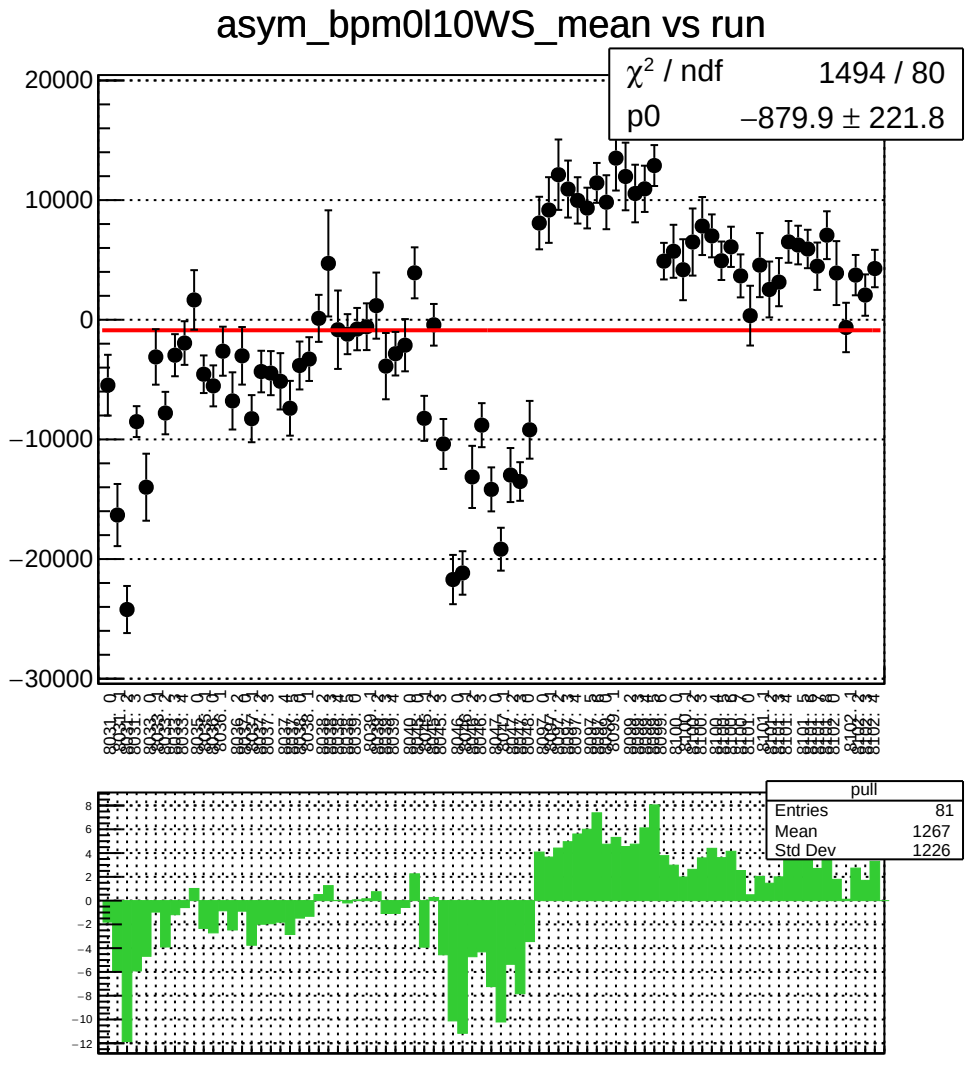

pull1D
Entries 81
Mean 0.02064
Std Dev 0.9839
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

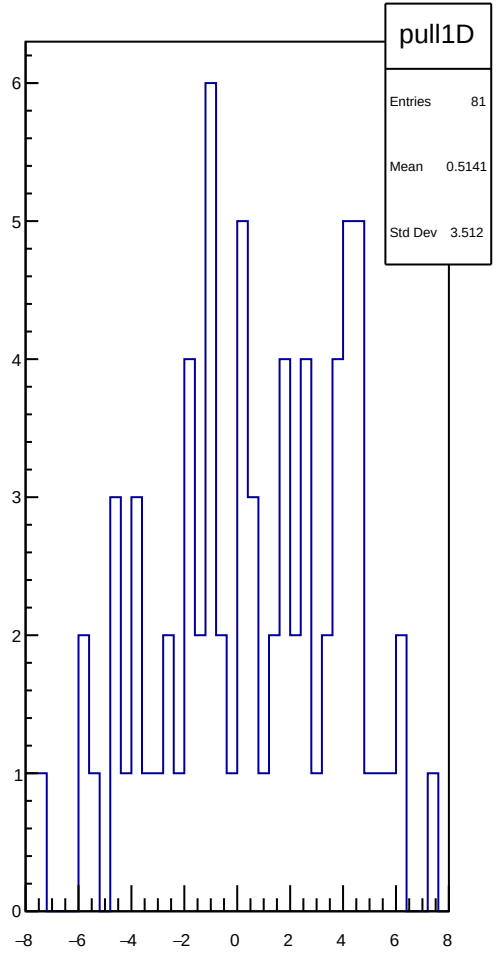

asym_bpm0l08WS_rms vs run
χ² / ndf 6766 / 80
p0 3395 ± 2.693
4200
4000
3800
3600
3400
3200
3000

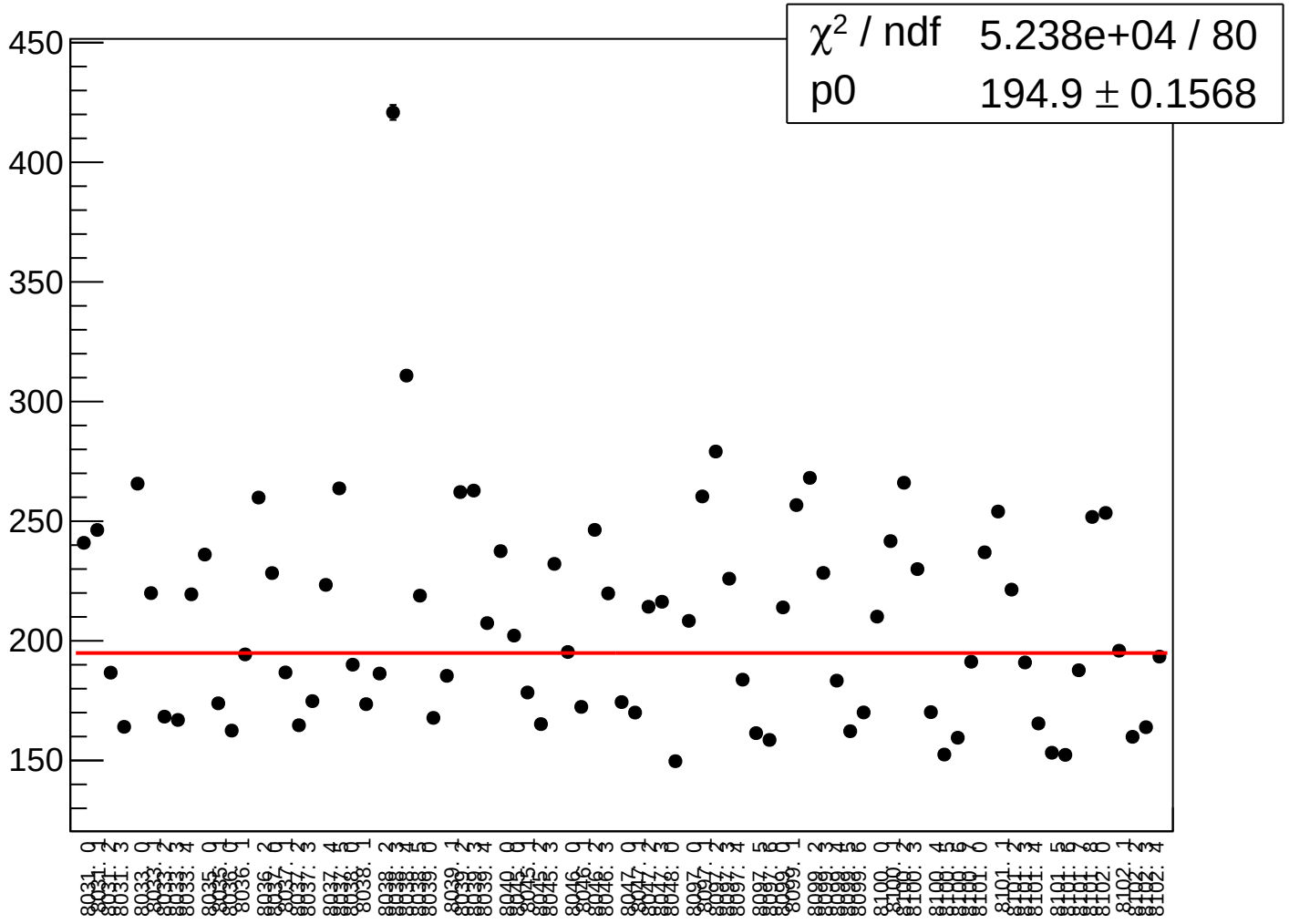

asym_bpm0l09WS_mean vs run
χ² / ndf 81.85 / 80
p0 −579.3 ± 1740
pull
Entries 81
Mean −85.38
Std Dev 141.6

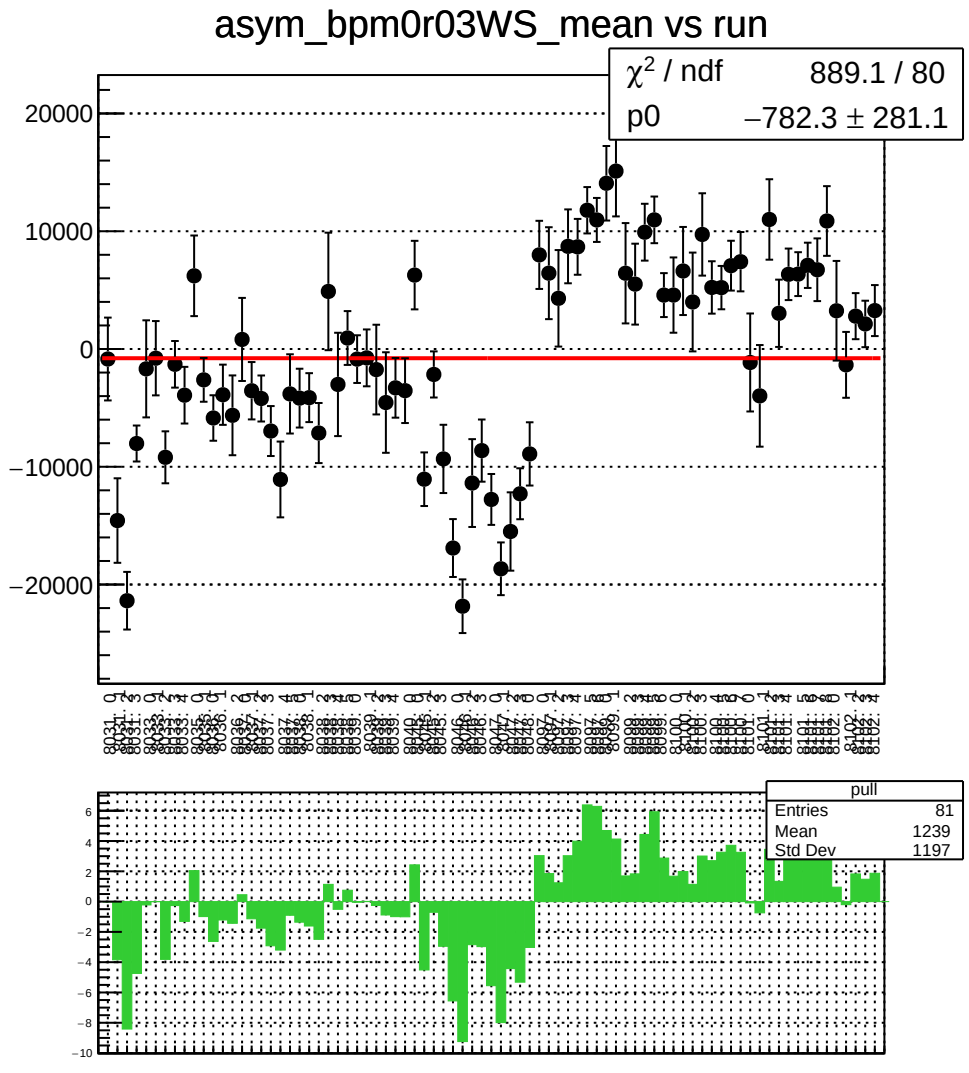

pull1D
Entries 81
Mean 0.01806
Std Dev 1.005

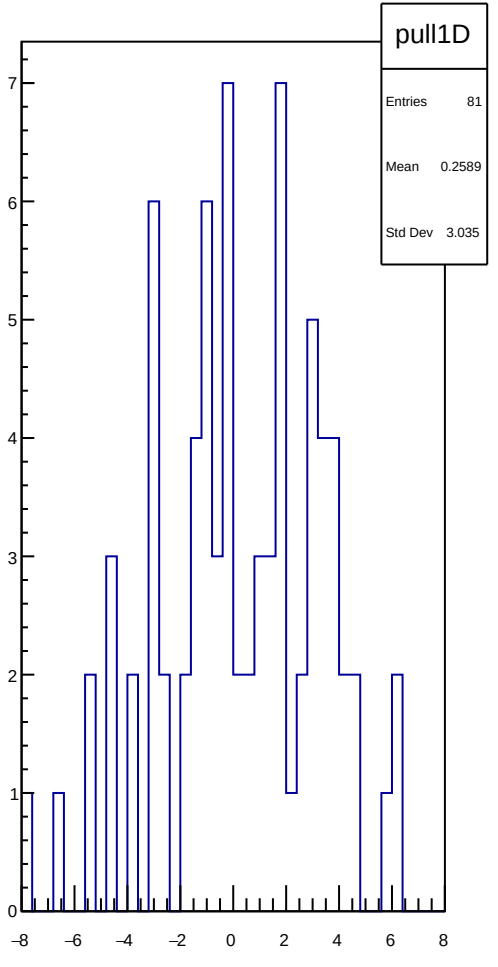

asym_bpm0l09WS_rms vs run
χ² / ndf 7646 / 80
p0 1551 ± 1.23
1900
1800
1700
1600
1500
1400
1300

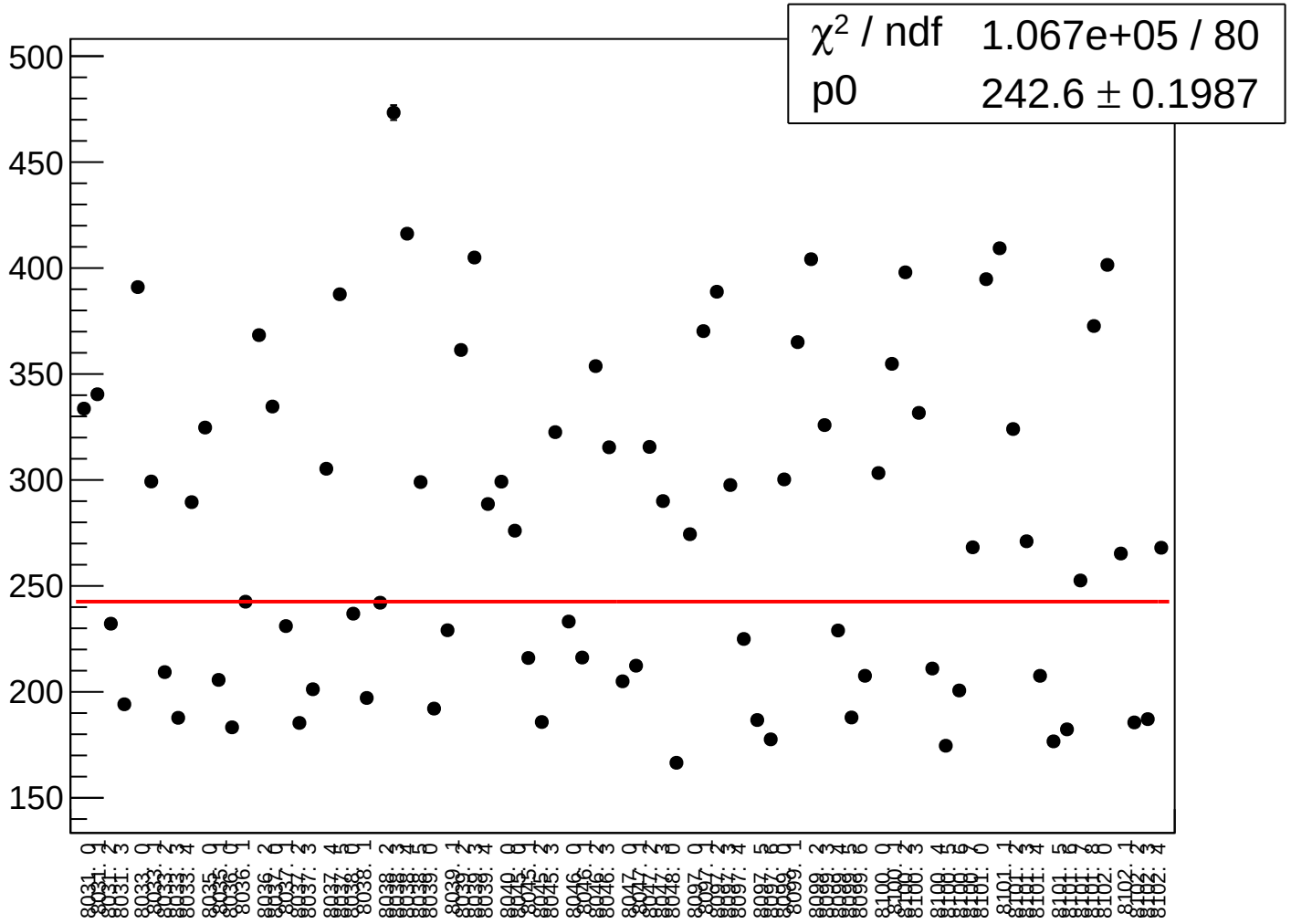

asym_bpm0l10WS_mean vs run
χ² / ndf 1494 / 80
p0 −879.9 ± 221.8
pull
Entries 81
Mean 1267
Std Dev 1226

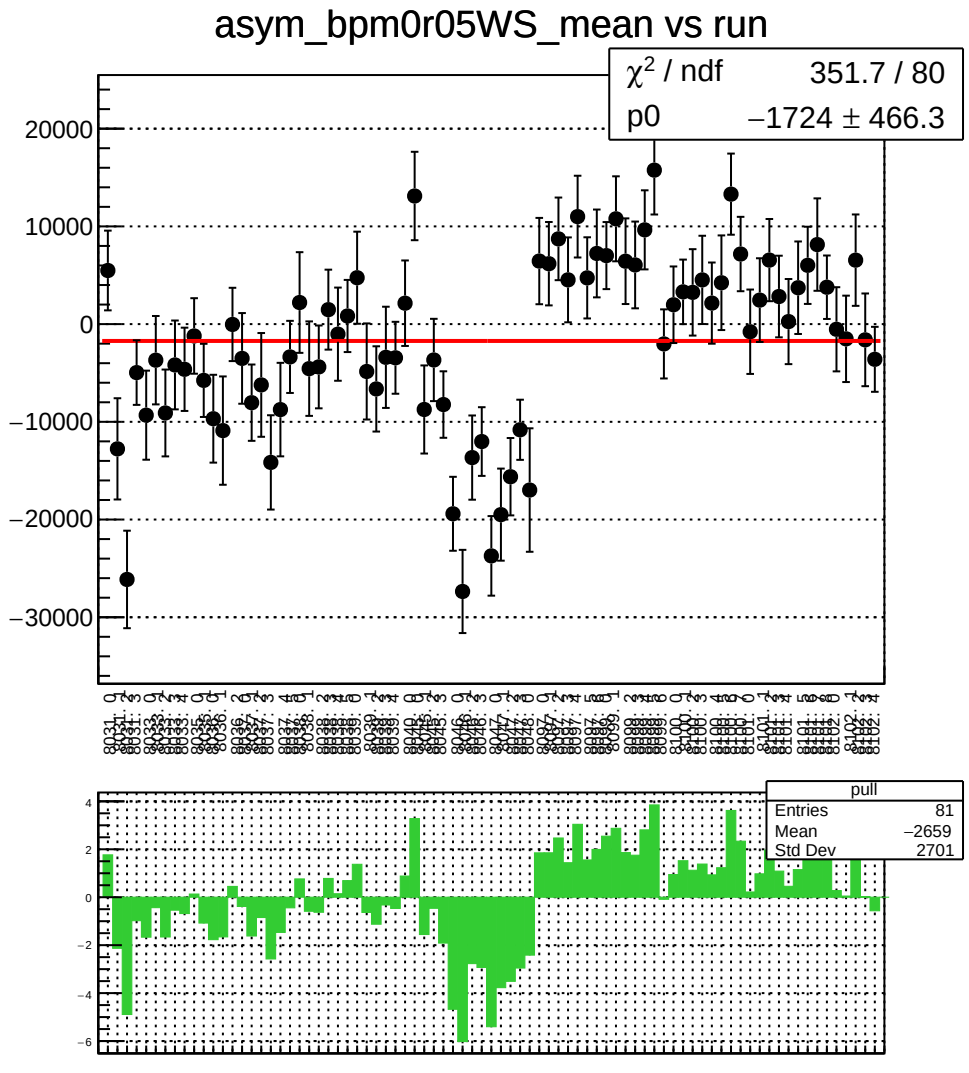

pull1D
Entries 81
Mean 0.5141
Std Dev 3.512

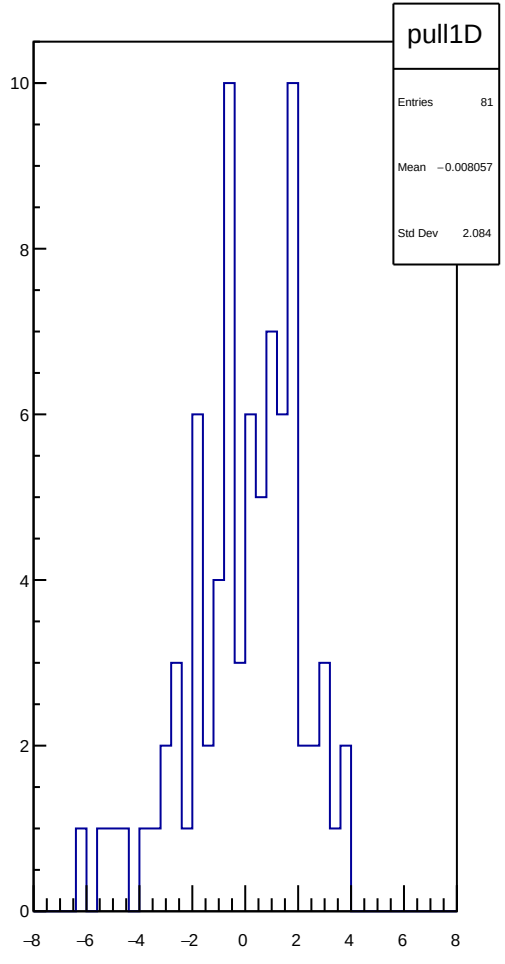

asym_bpm0l10WS_rms vs run
χ^2 / ndf 5.238e+04 / 80
p0 194.9 ± 0.1568
450
400
350
300
250
200
150

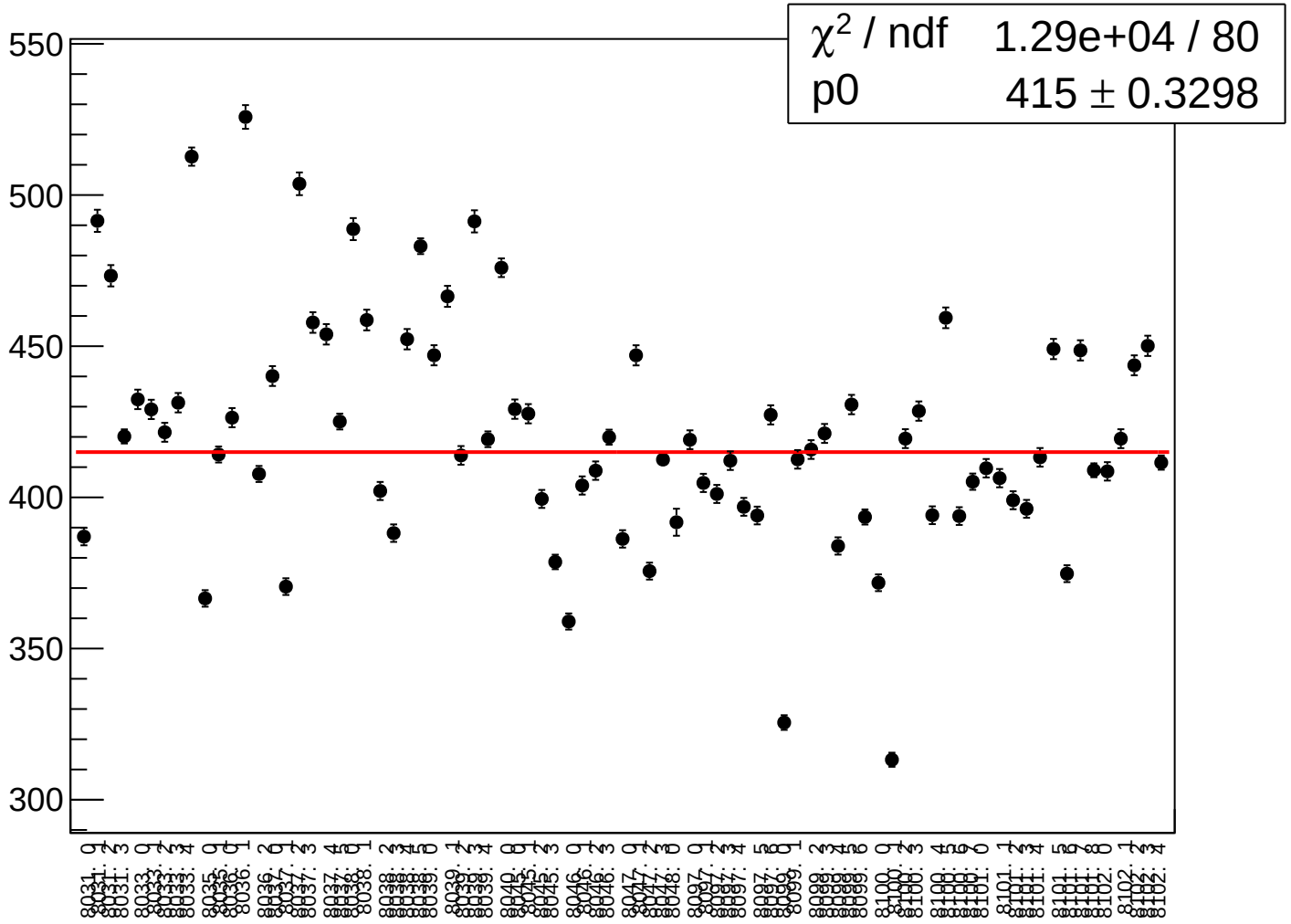

asym_bpm0r03WS_mean vs run
χ² / ndf 889.1 / 80
p0 −782.3 ± 281.1
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 1239
Std Dev 1197
6
4
2
0
−2
−4
−6
−8
−10

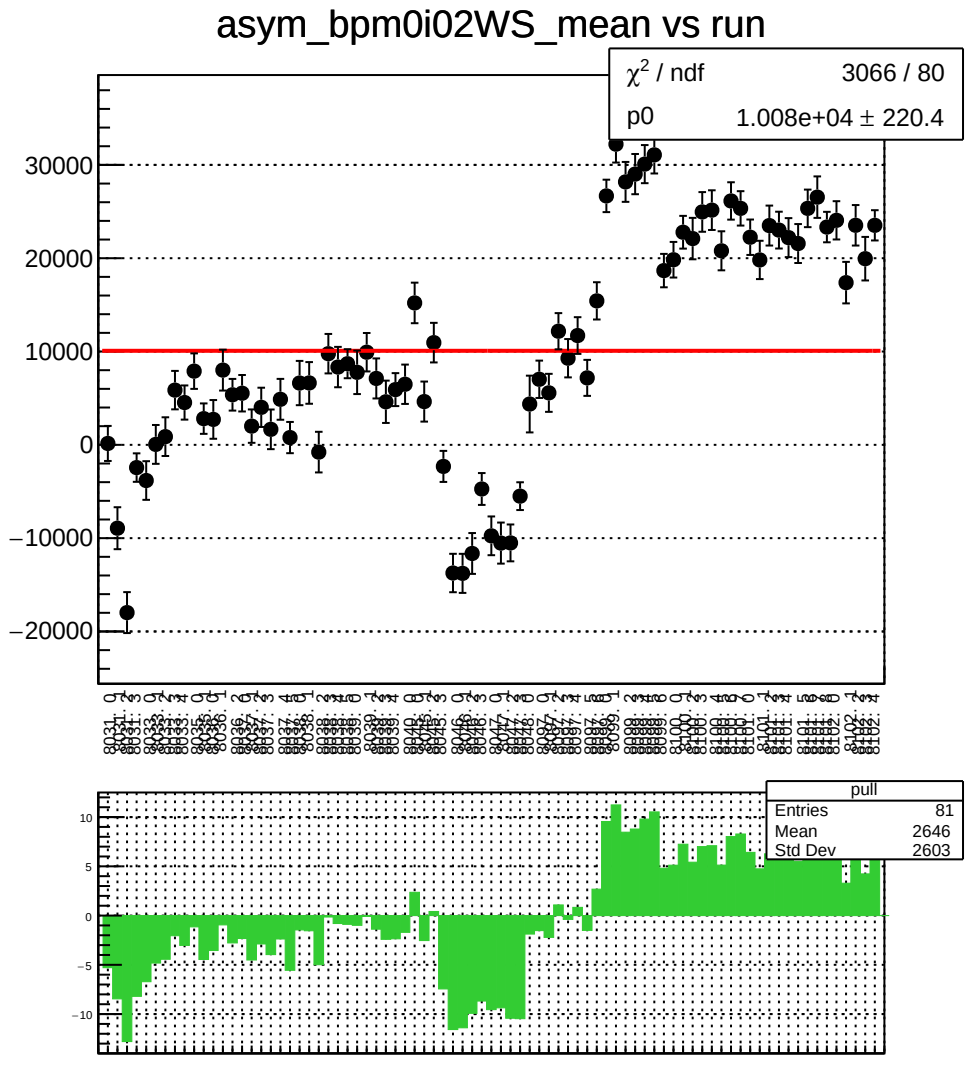

pull1D
Entries 81
Mean 0.2589
Std Dev 3.035
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

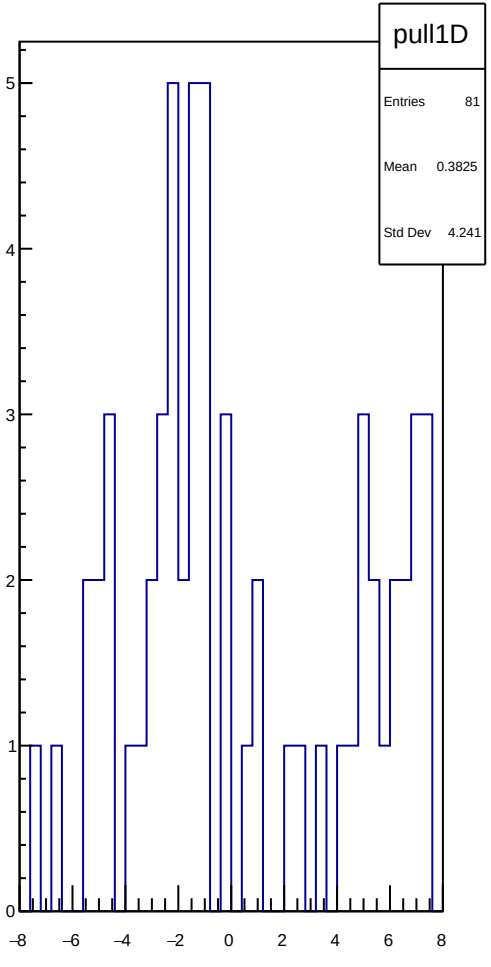

asym_bpm0r03WS_rms vs run
χ² / ndf 1.067e+05 / 80
p0 242.6 ± 0.1987
500
450
400
350
300
250
200
150

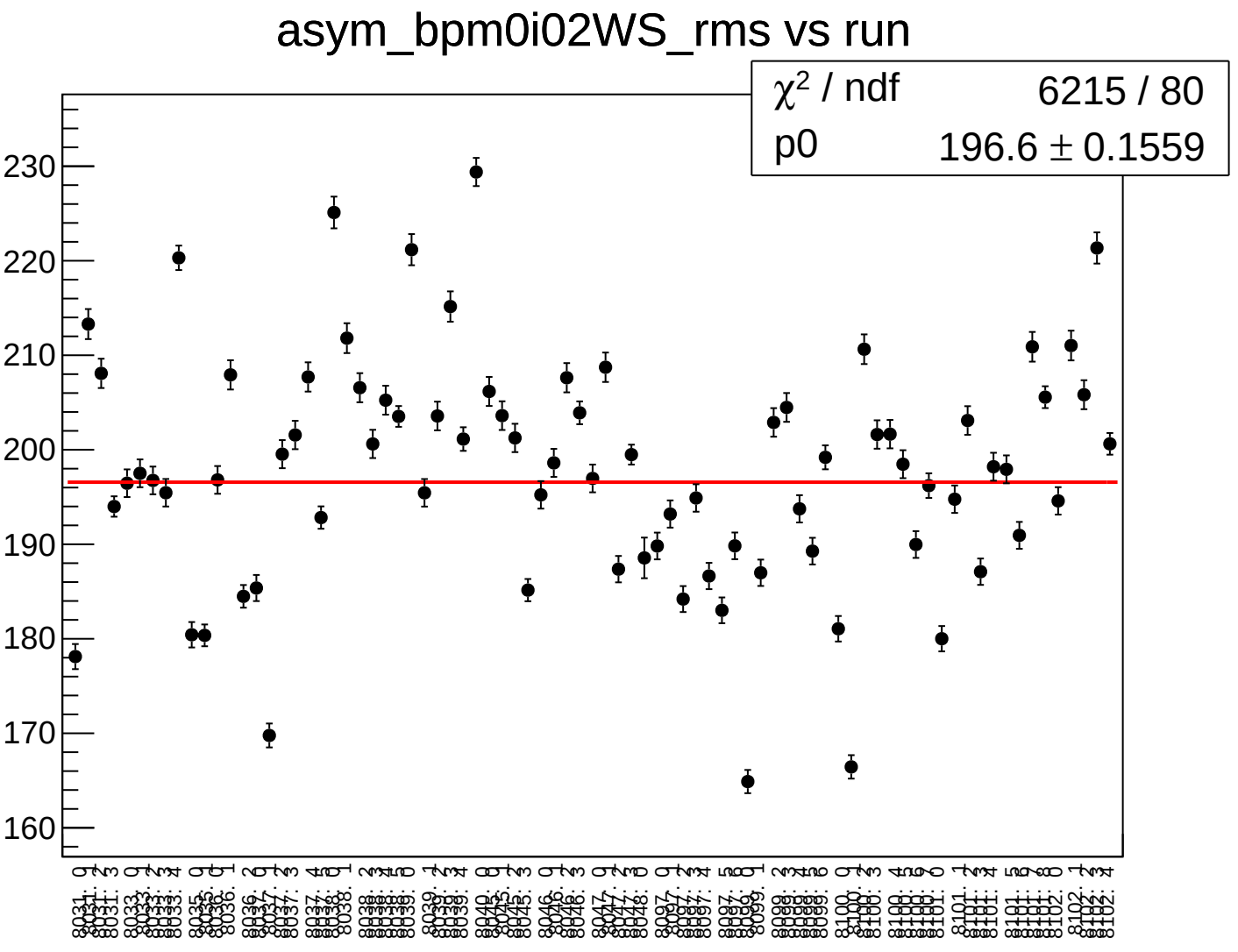

asym_bpm0r05WS_mean vs run
χ² / ndf 351.7 / 80
p0 −1724 ± 466.3
20000
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean −2659
Std Dev 2701
4
2
0
−2
−4
−6

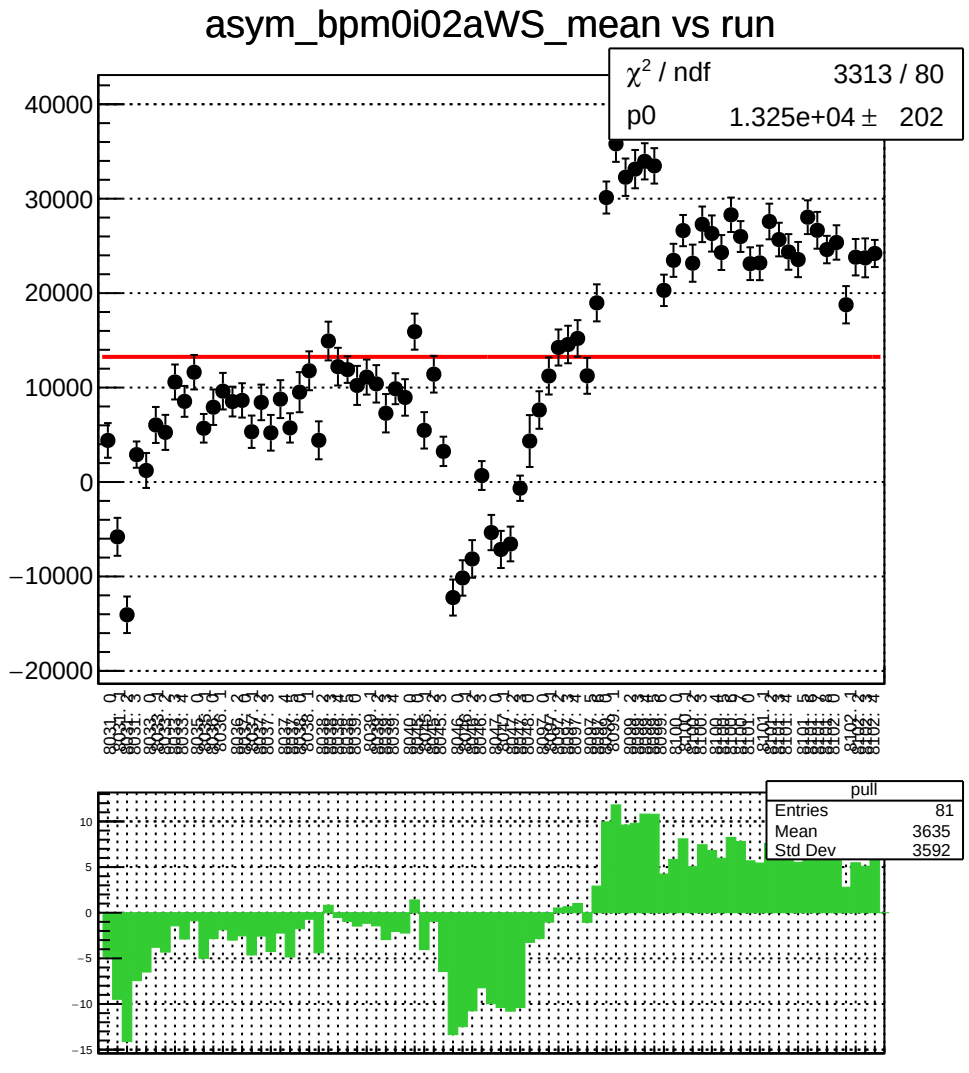

pull1D
Entries 81
Mean −0.008057
Std Dev 2.084
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

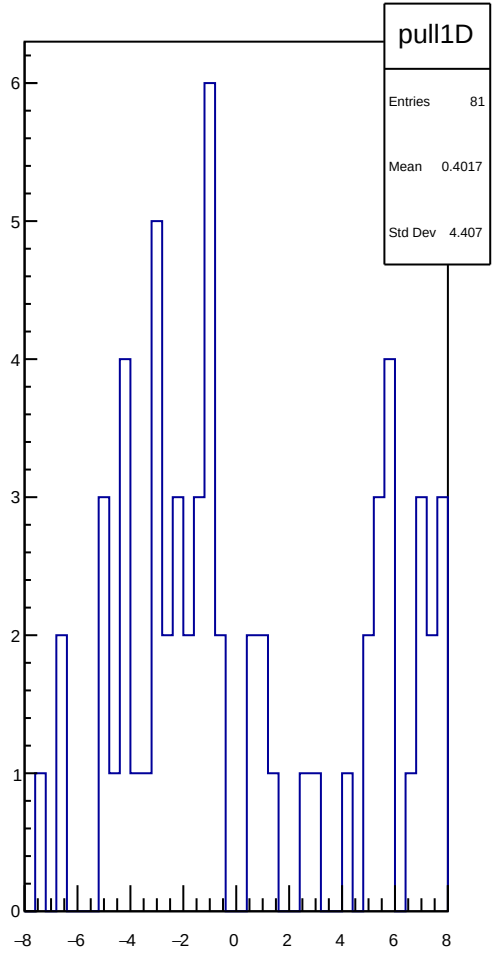

asym_bpm0r05WS_rms vs run
χ² / ndf 1.29e+04 / 80
p0 415 ± 0.3298
550
500
450
400
350
300

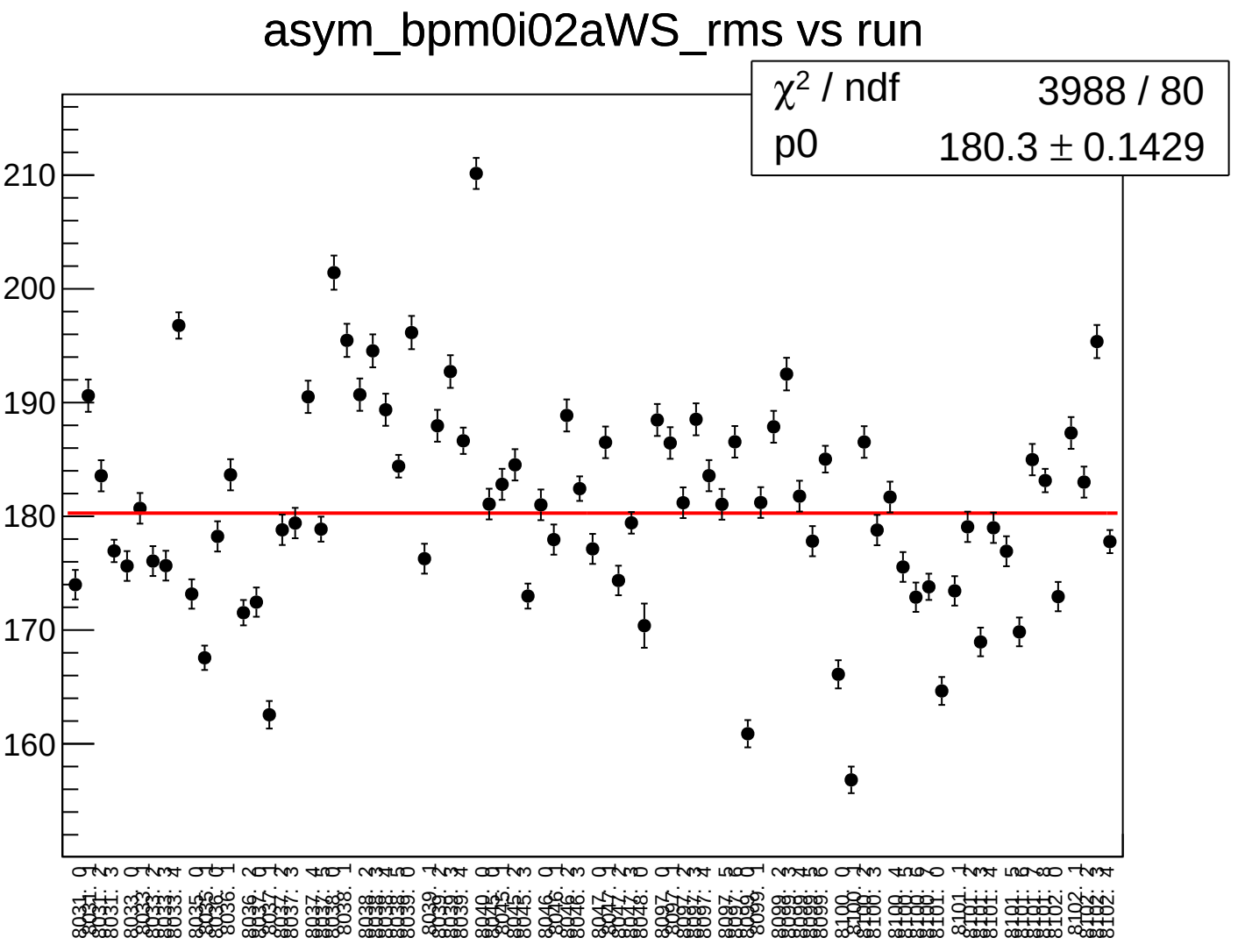

asym_bpm0i02WS_mean vs run
χ² / ndf 3066 / 80
p0 1.008e+04 ± 220.4
30000
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 2646
Std Dev 2603
10
5
0
−5
−10

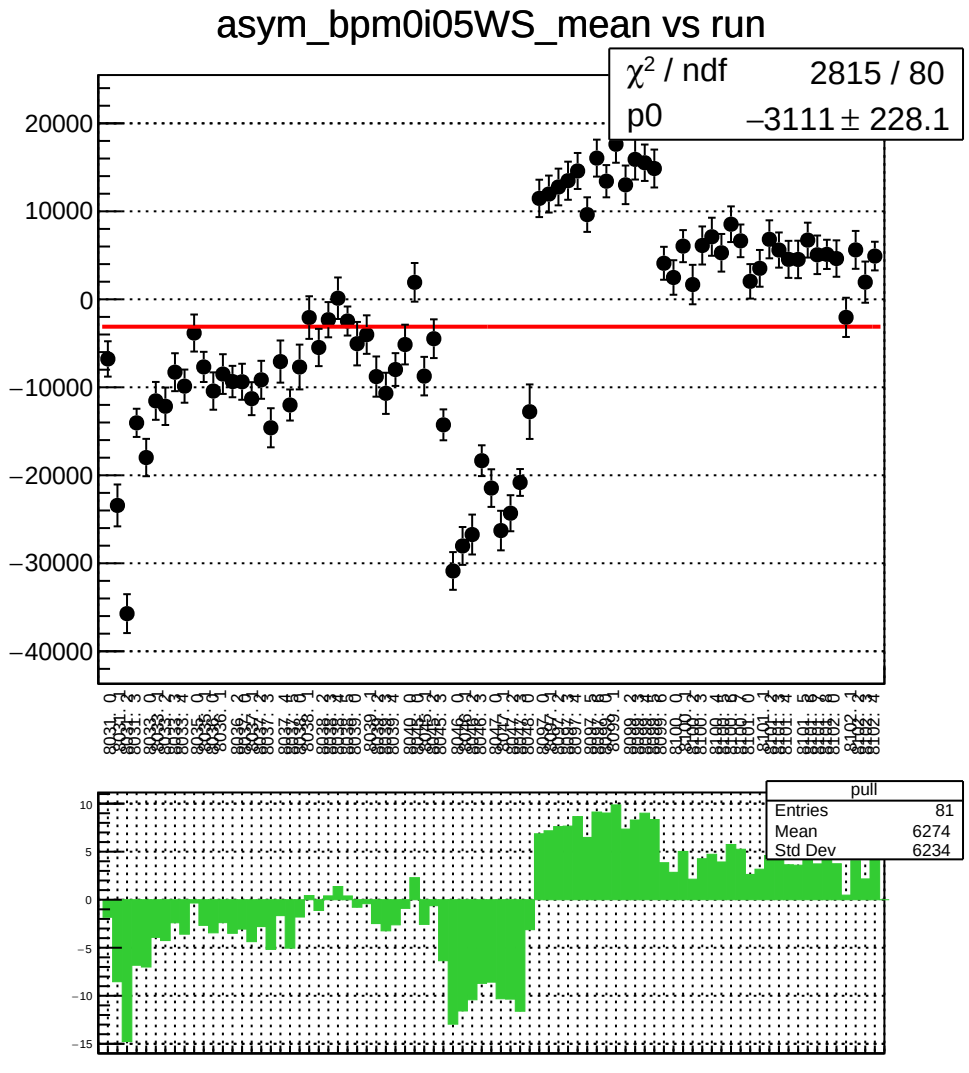

pull1D
Entries 81
Mean 0.3825
Std Dev 4.241
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

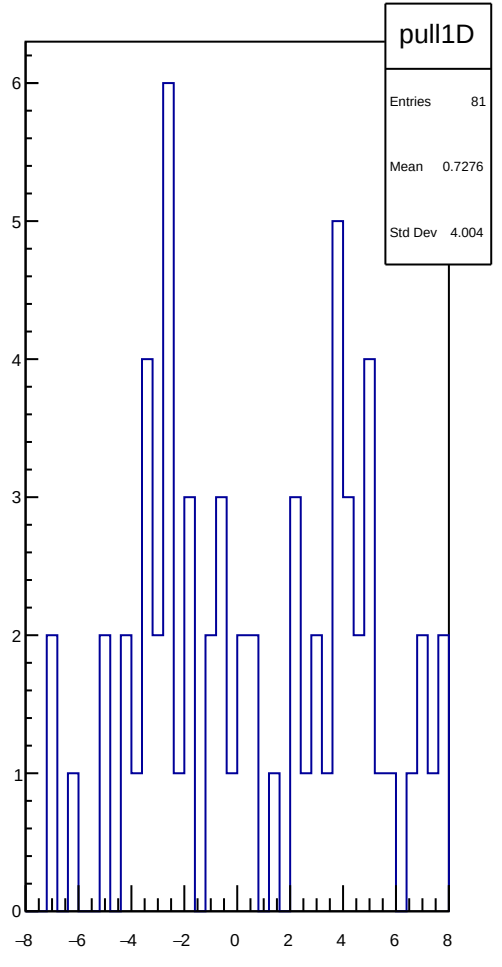

asym_bpm0i02WS_rms vs run
χ^2 / ndf 6215 / 80
p0 196.6 ± 0.1559
230
220
210
200
190
180
170
160

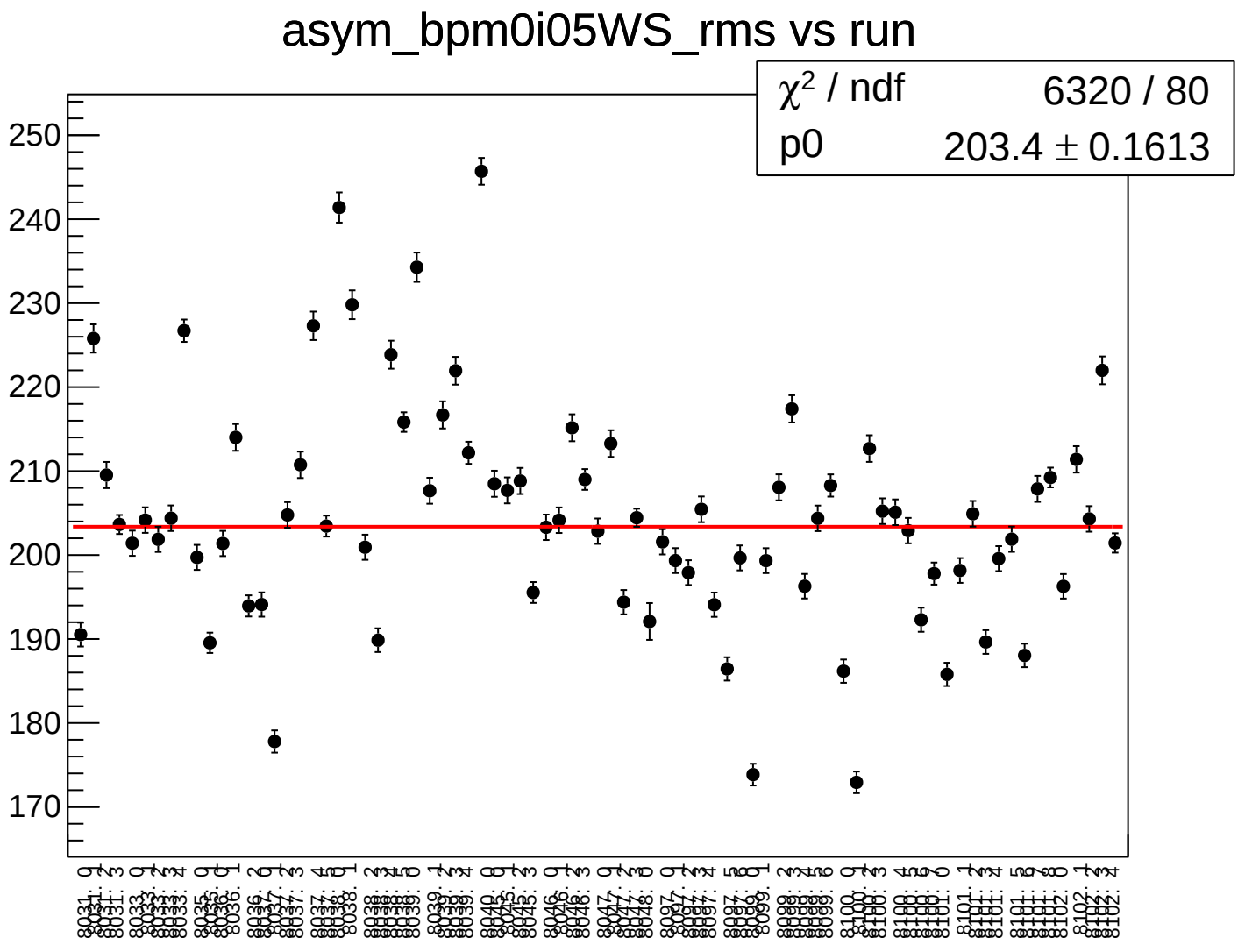

asym_bpm0i02aWS_mean vs run
χ² / ndf 3313 / 80
p0 1.325e+04 ± 202
40000
30000
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 3635
Std Dev 3592
10
5
0
−5
−10
−15

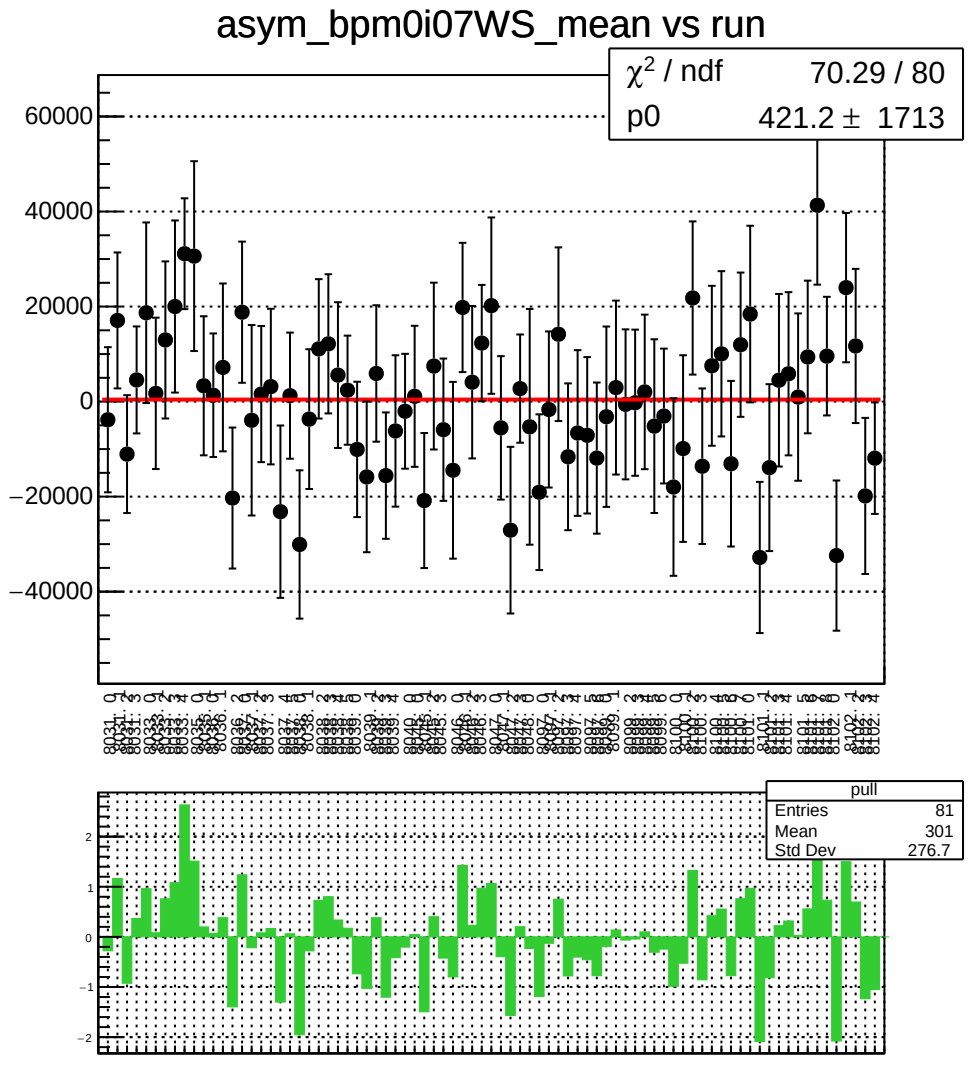

pull1D
Entries 81
Mean 0.4017
Std Dev 4.407
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

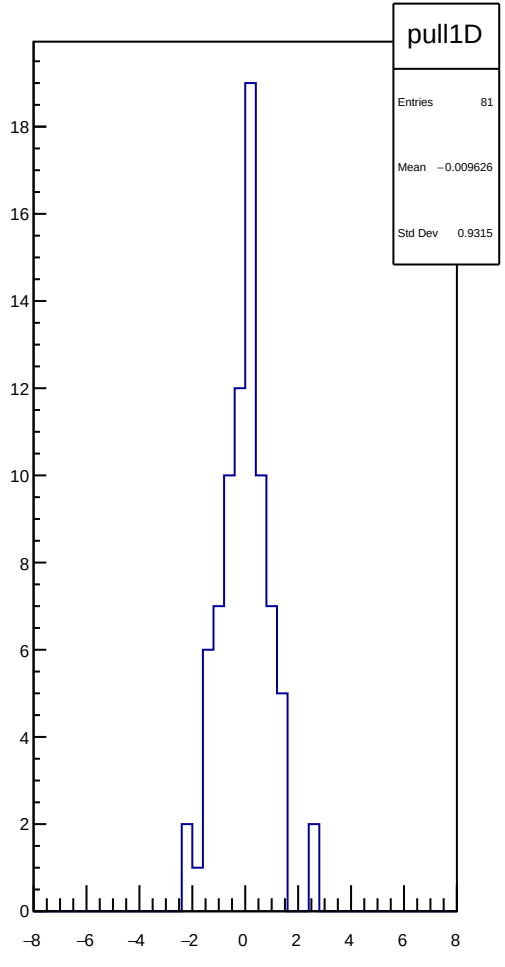

asym_bpm0i02aWS_rms vs run
χ² / ndf 3988 / 80
p0 180.3 ± 0.1429
210
200
190
180
170
160

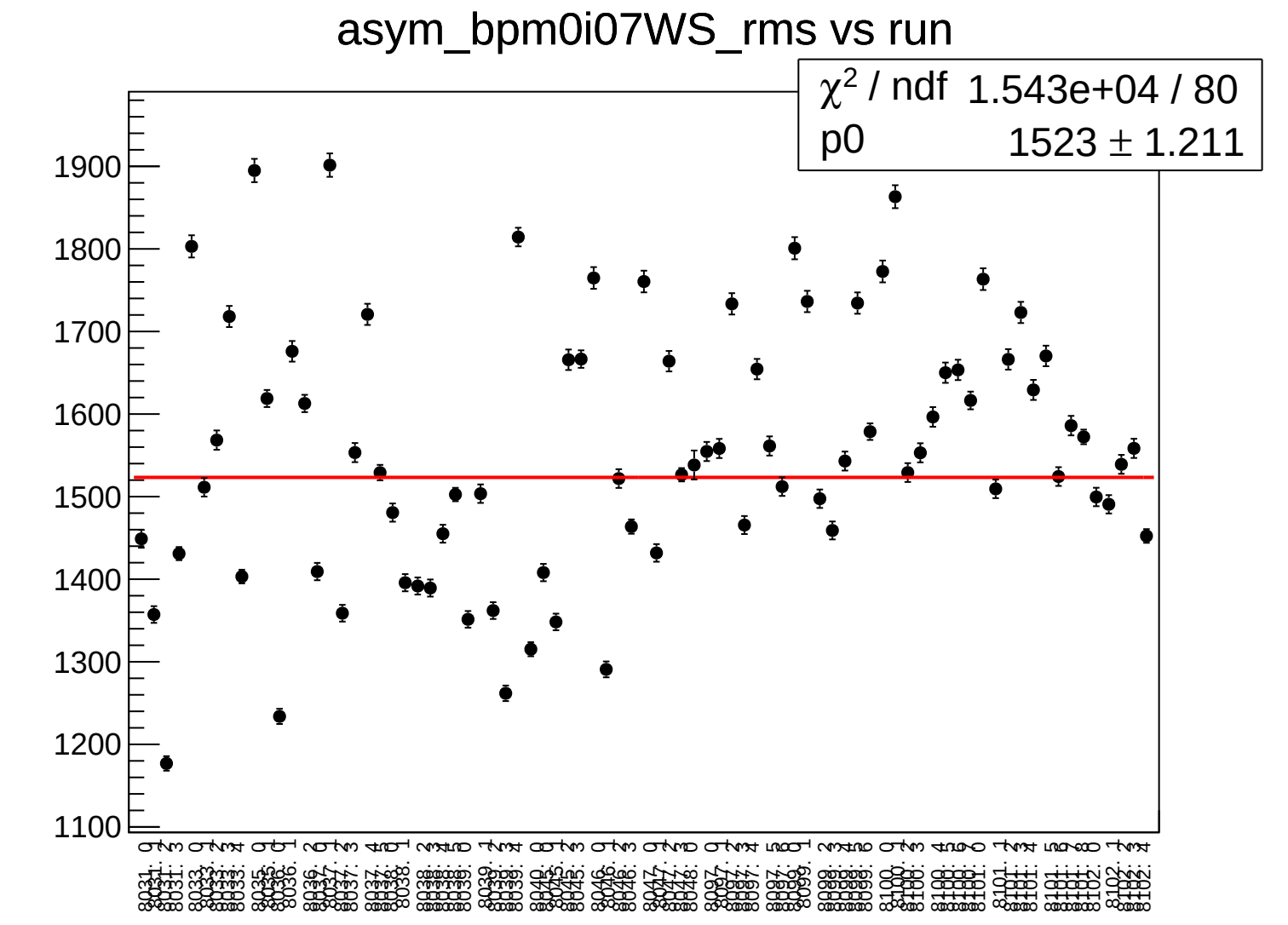

asym_bpm0i05WS_mean vs run
χ² / ndf 2815 / 80
p0 −3111 ± 228.1
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 81
Mean 6274
Std Dev 6234
10
5
0
−5
−10
−15

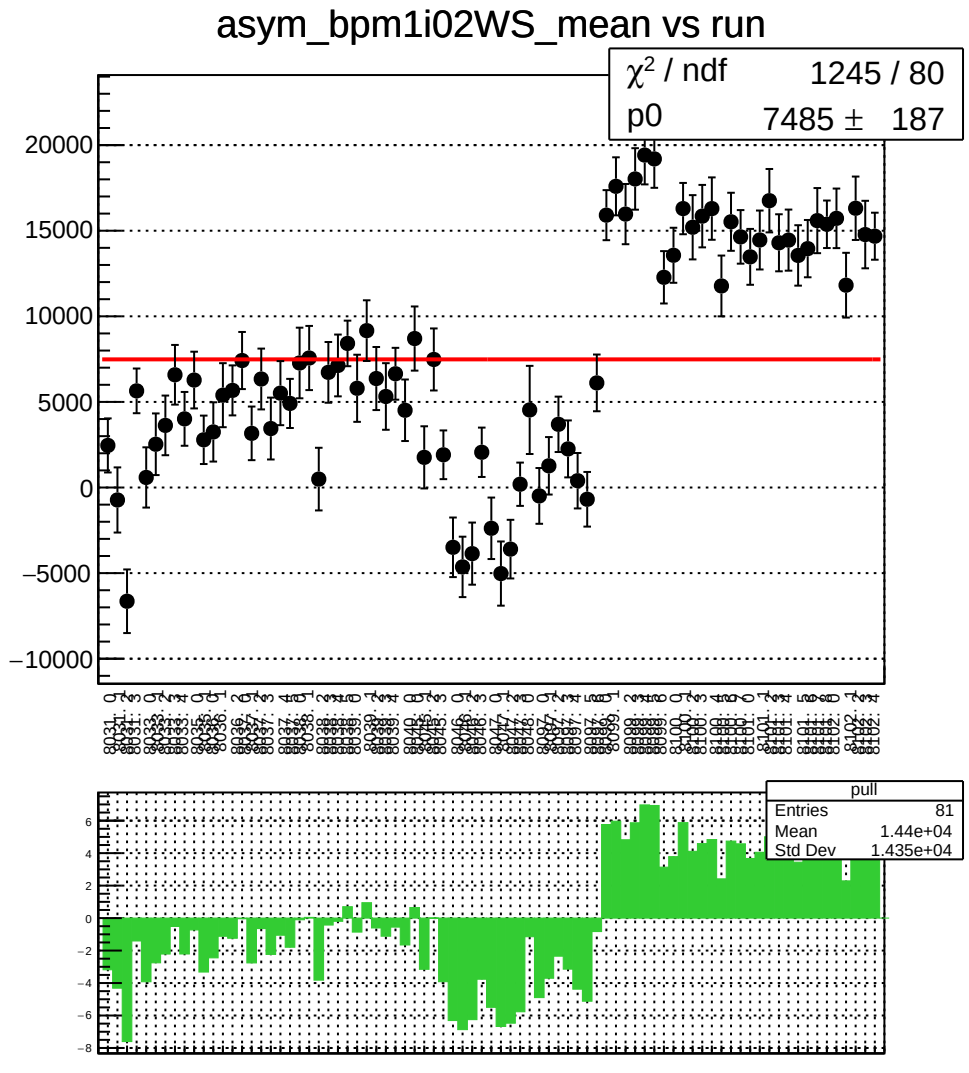

pull1D
Entries 81
Mean 0.7276
Std Dev 4.004
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

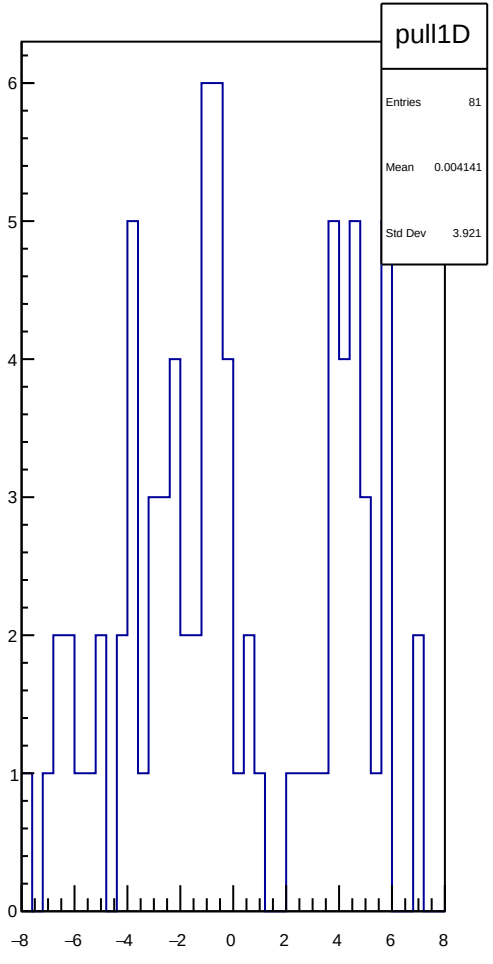

asym_bpm0i05WS_rms vs run
χ² / ndf 6320 / 80
p0 203.4 ± 0.1613
250
240
230
220
210
200
190
180
170

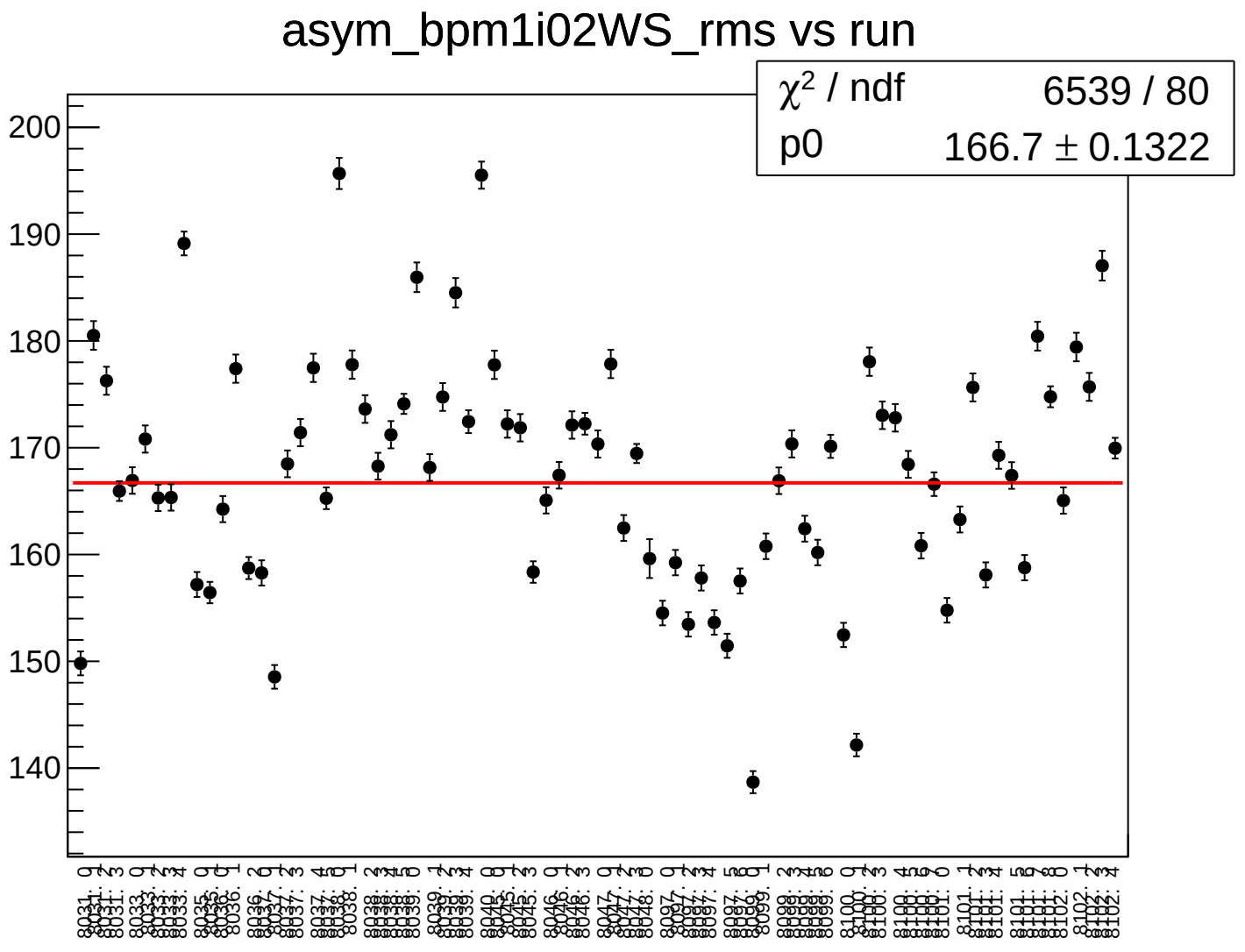

asym_bpm0i07WS_mean vs run
χ² / ndf 70.29 / 80
p0 421.2 ± 1713
60000
40000
20000
0
−20000
−40000
pull
Entries 81
Mean 301
Std Dev 276.7
2
1
0
−1
−2

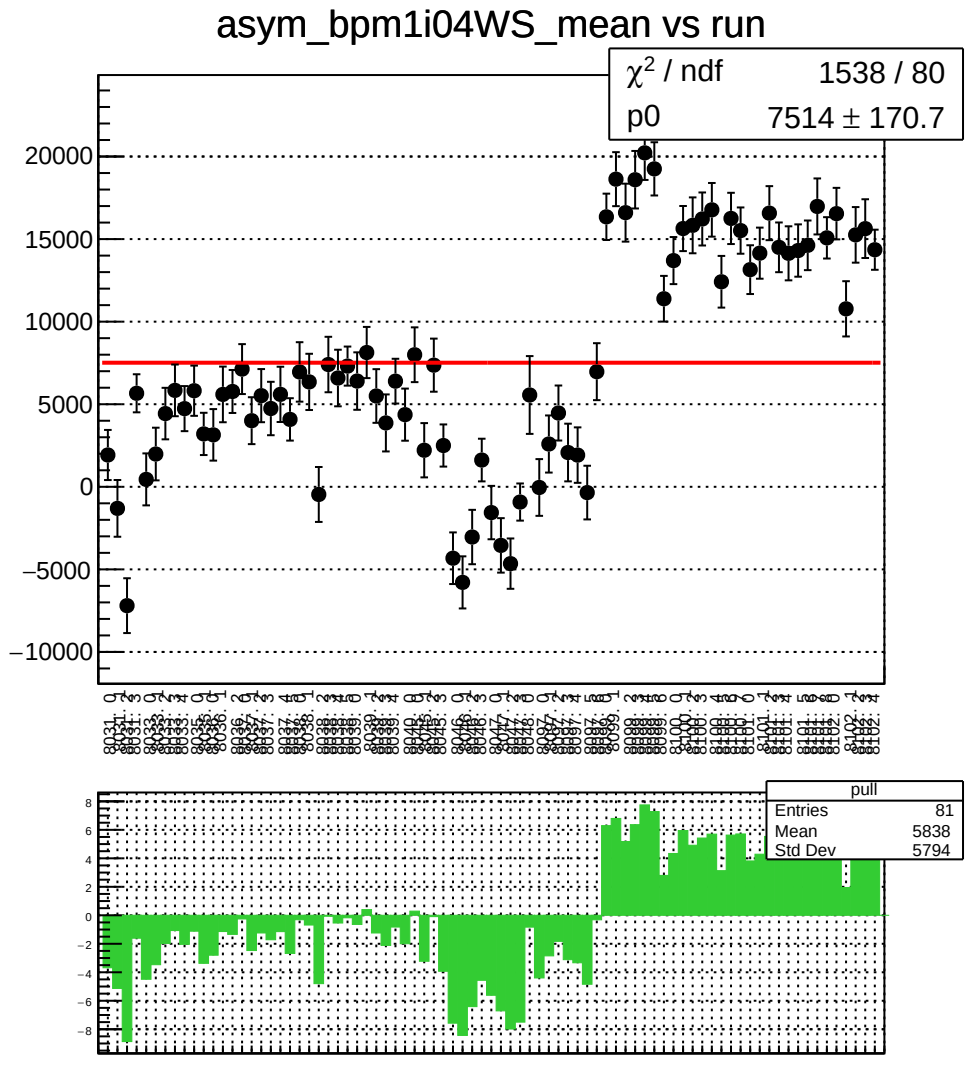

pull1D
Entries 81
Mean −0.009626
Std Dev 0.9315
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

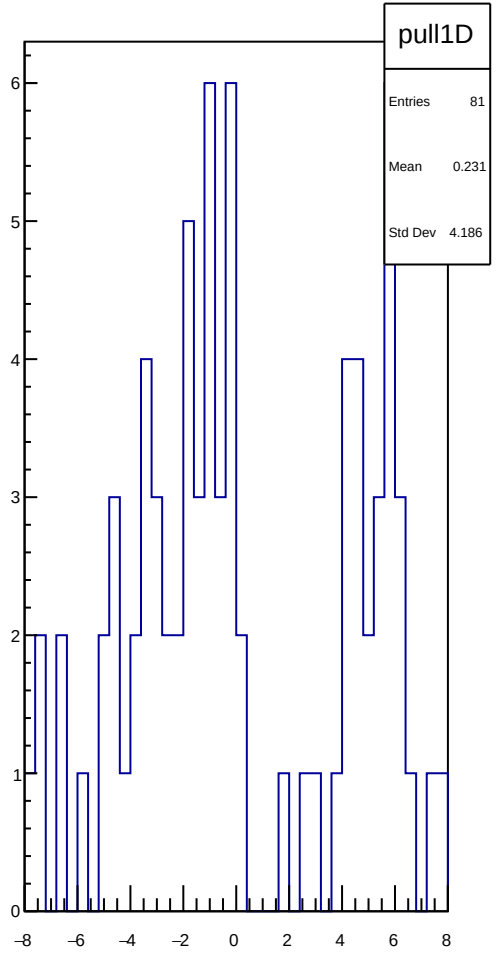

asym_bpm0i07WS_rms vs run
χ² / ndf 1.543e+04 / 80
p0 1523 ± 1.211
1900
1800
1700
1600
1500
1400
1300
1200
1100

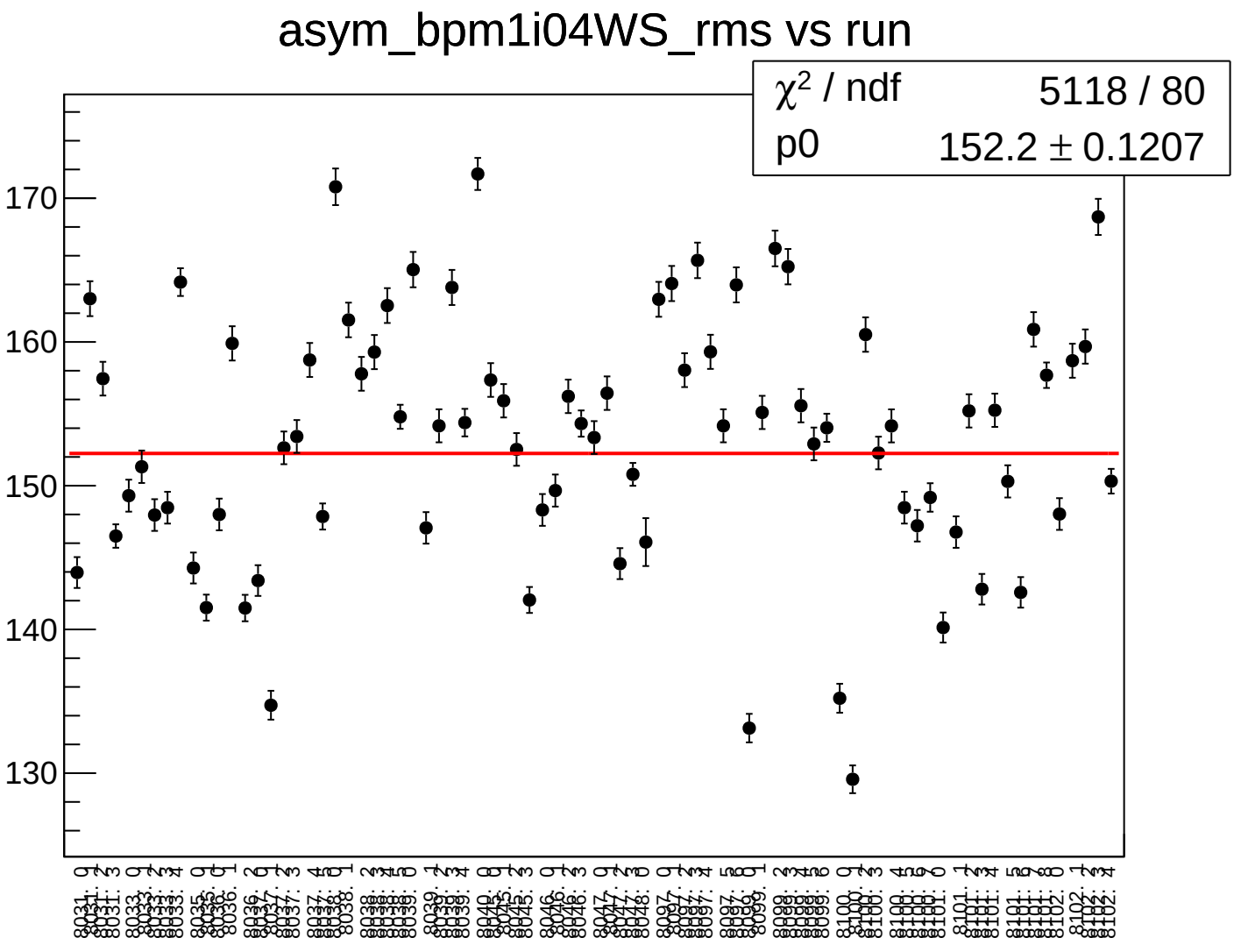

asym_bpm1i02WS_mean vs run
χ² / ndf 1245 / 80
p0 7485 ± 187
pull
Entries 81
Mean 1.44e+04
Std Dev 1.435e+04

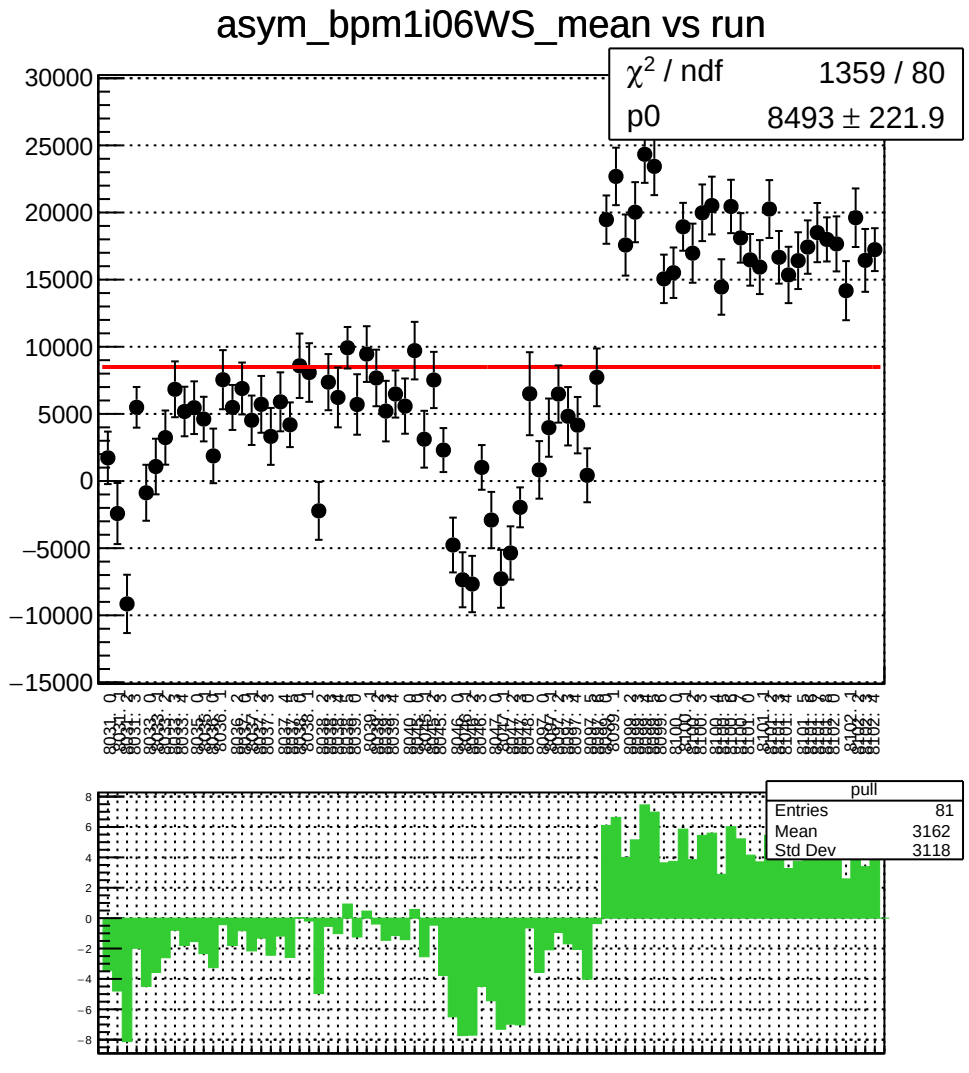

pull1D
Entries 81
Mean 0.004141
Std Dev 3.921

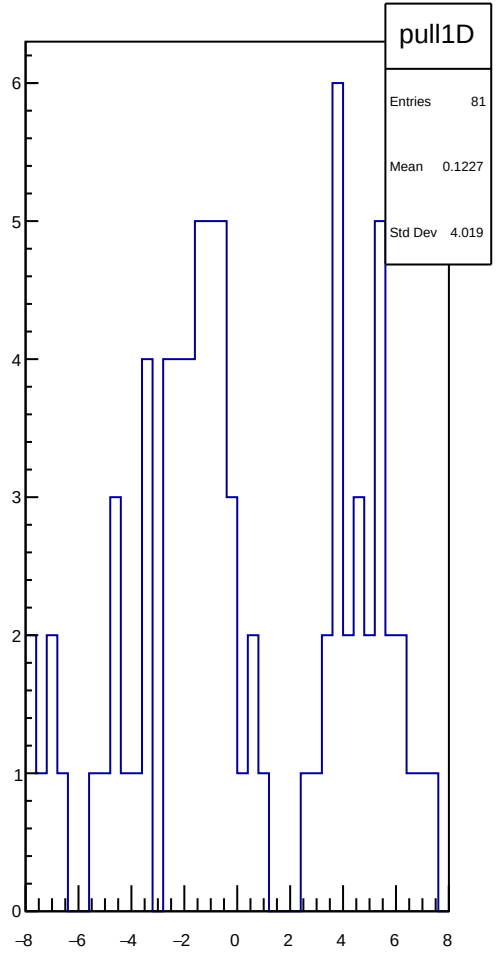

asym_bpm1i02WS_rms vs run
χ² / ndf 6539 / 80
p0 166.7 ± 0.1322
200
190
180
170
160
150
140

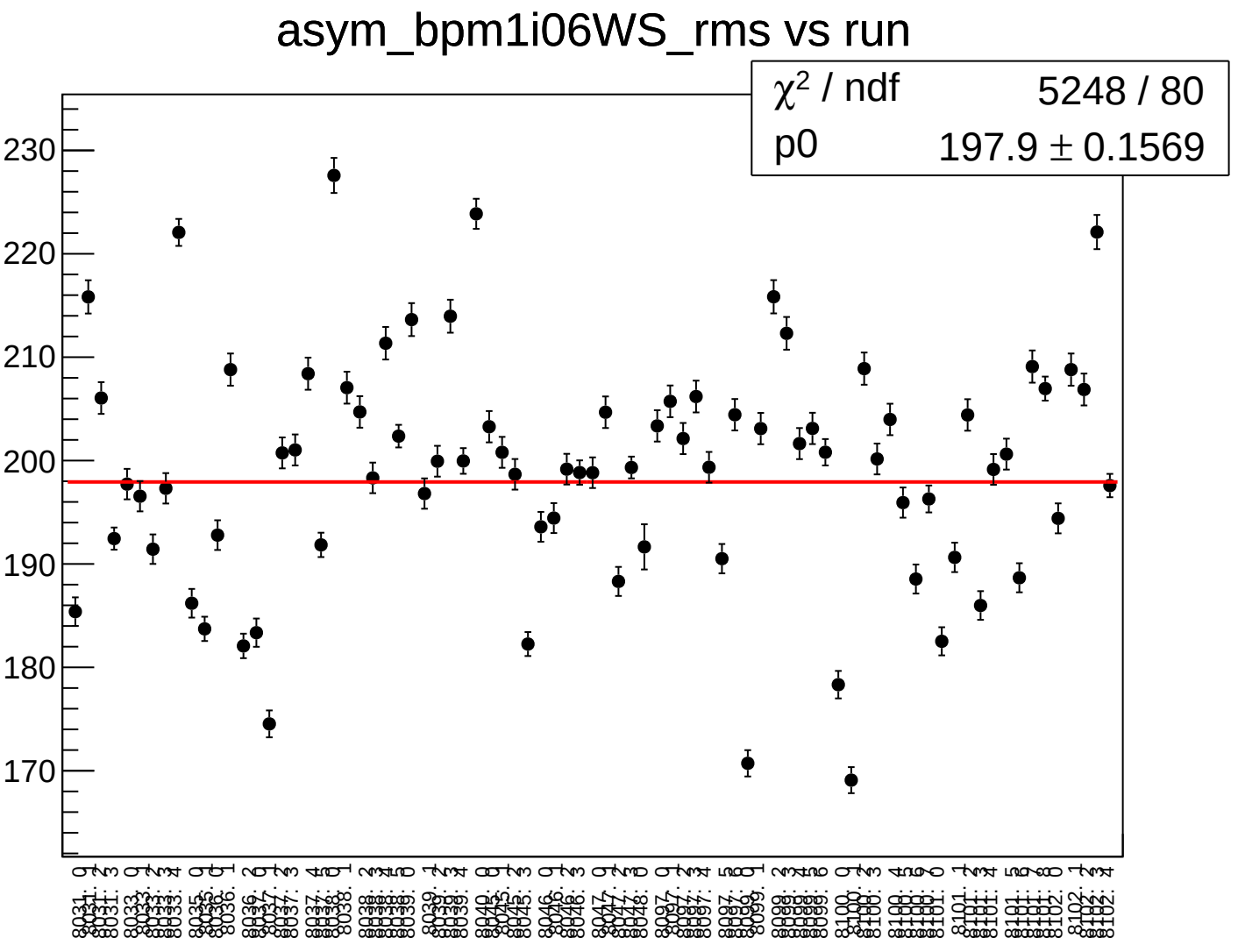

asym_bpm1i04WS_mean vs run
χ² / ndf 1538 / 80
p0 7514 ± 170.7
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 5838
Std Dev 5794
8
6
4
2
0
−2
−4
−6
−8

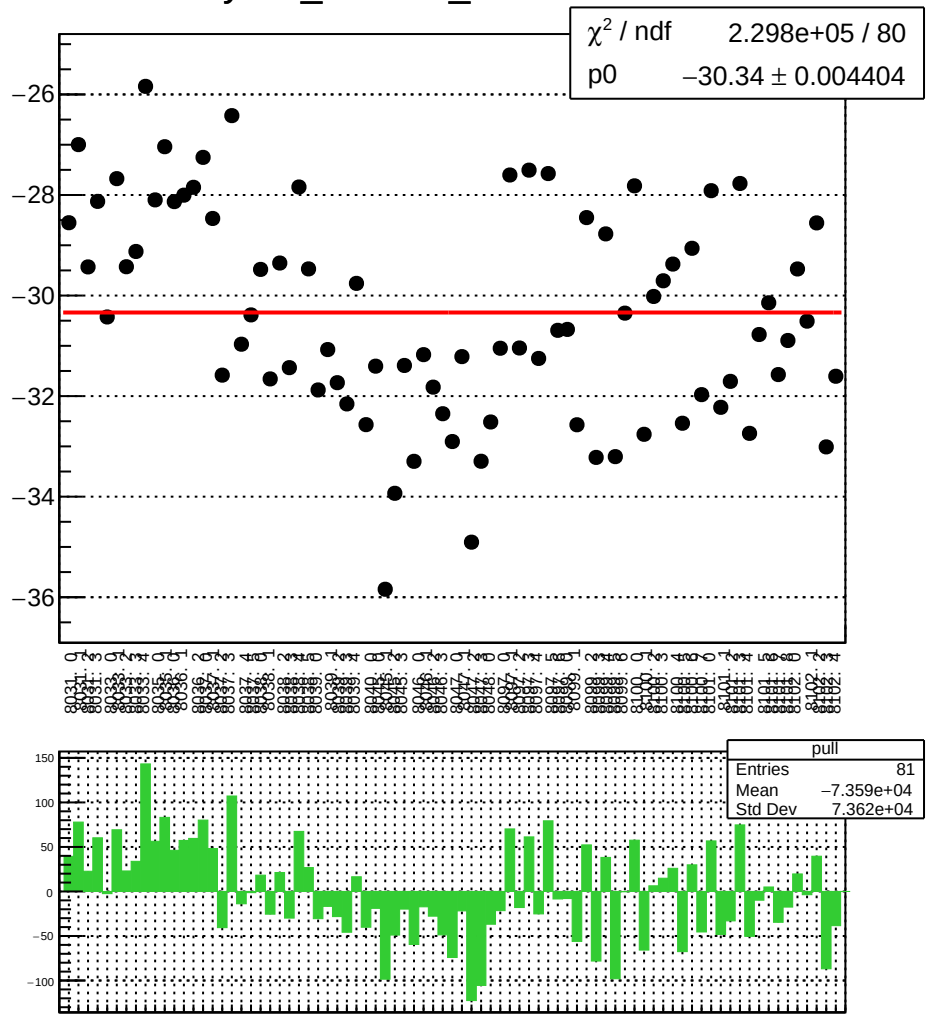

pull1D
Entries 81
Mean 0.231
Std Dev 4.186
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

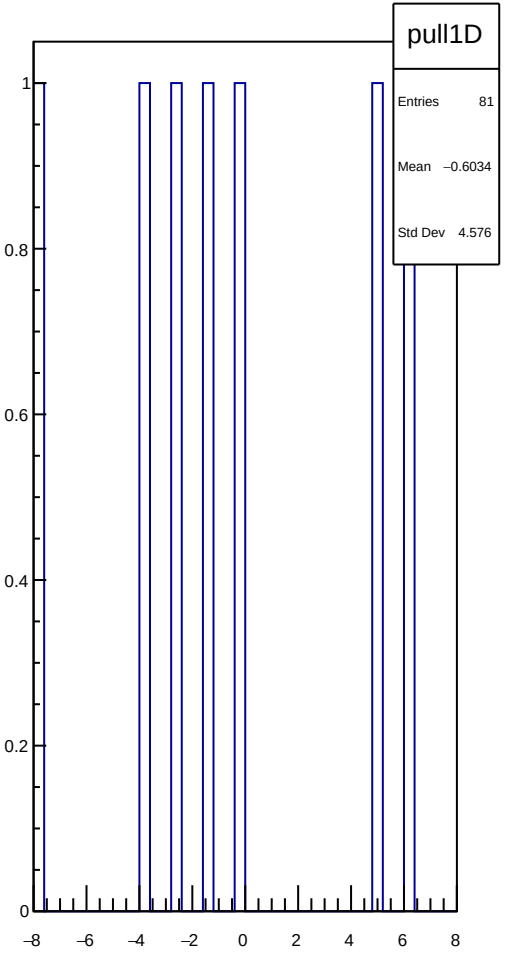

asym_bpm1i04WS_rms vs run
χ^2 / ndf 5118 / 80
p0 152.2 ± 0.1207
170
160
150
140
130

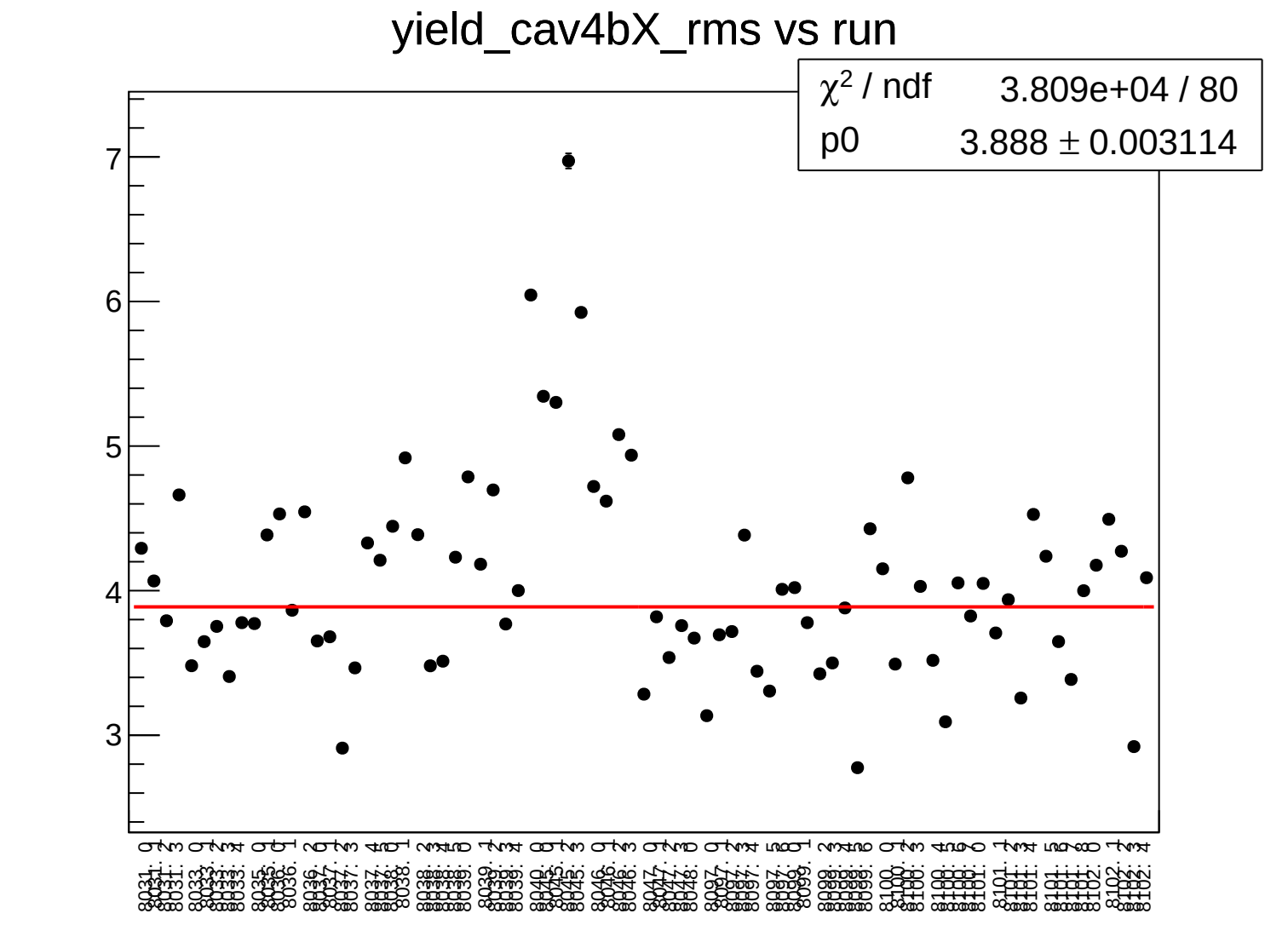

asym_bpm1i06WS_mean vs run
χ^2 / ndf 1359 / 80
p0 8493 ± 221.9
pull
Entries 81
Mean 3162
Std Dev 3118

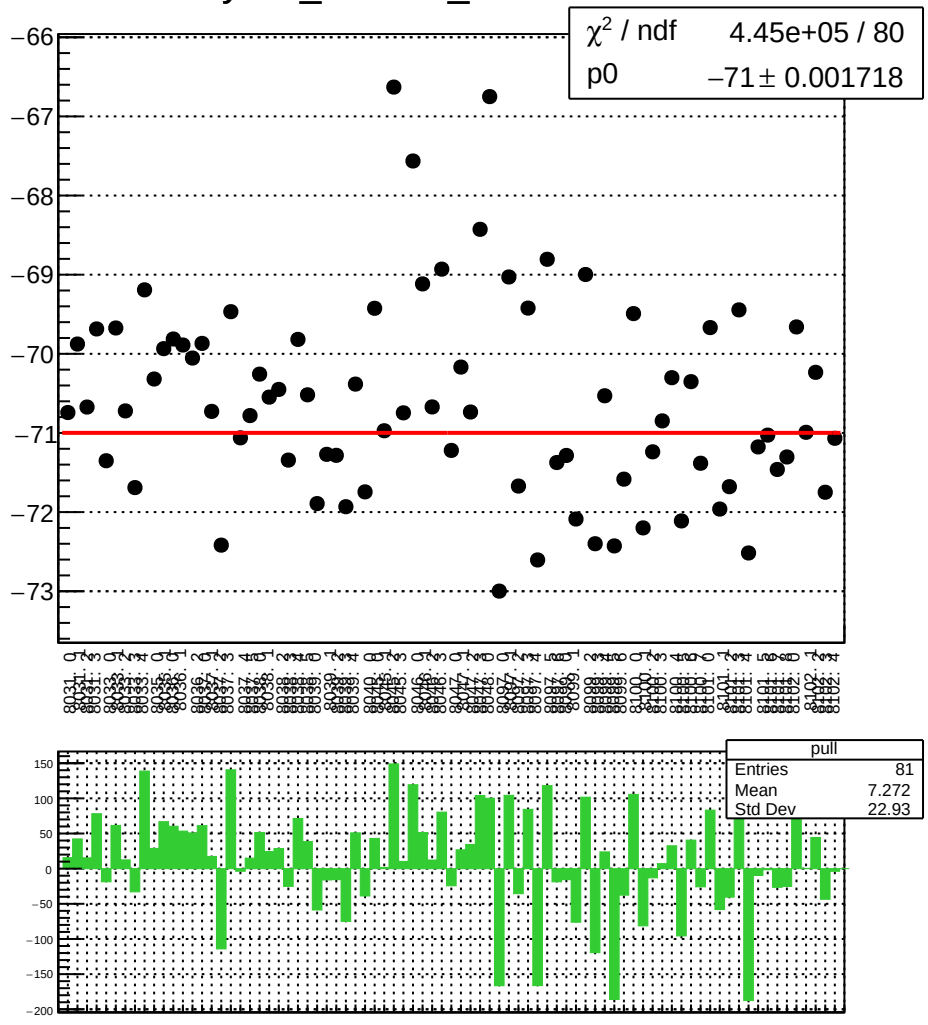

pull1D
Entries 81
Mean 0.1227
Std Dev 4.019

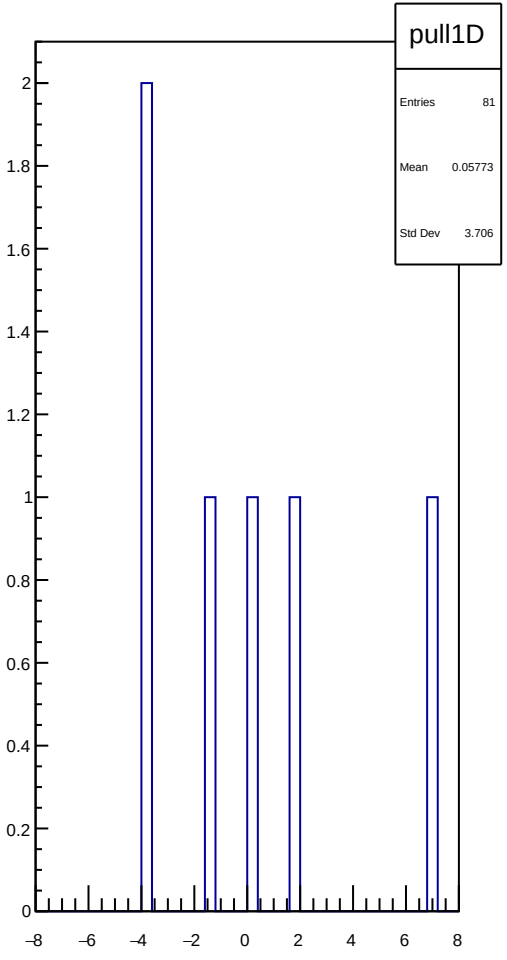

asym_bpm1i06WS_rms vs run
χ² / ndf 5248 / 80
p0 197.9 ± 0.1569
230
220
210
200
190
180
170

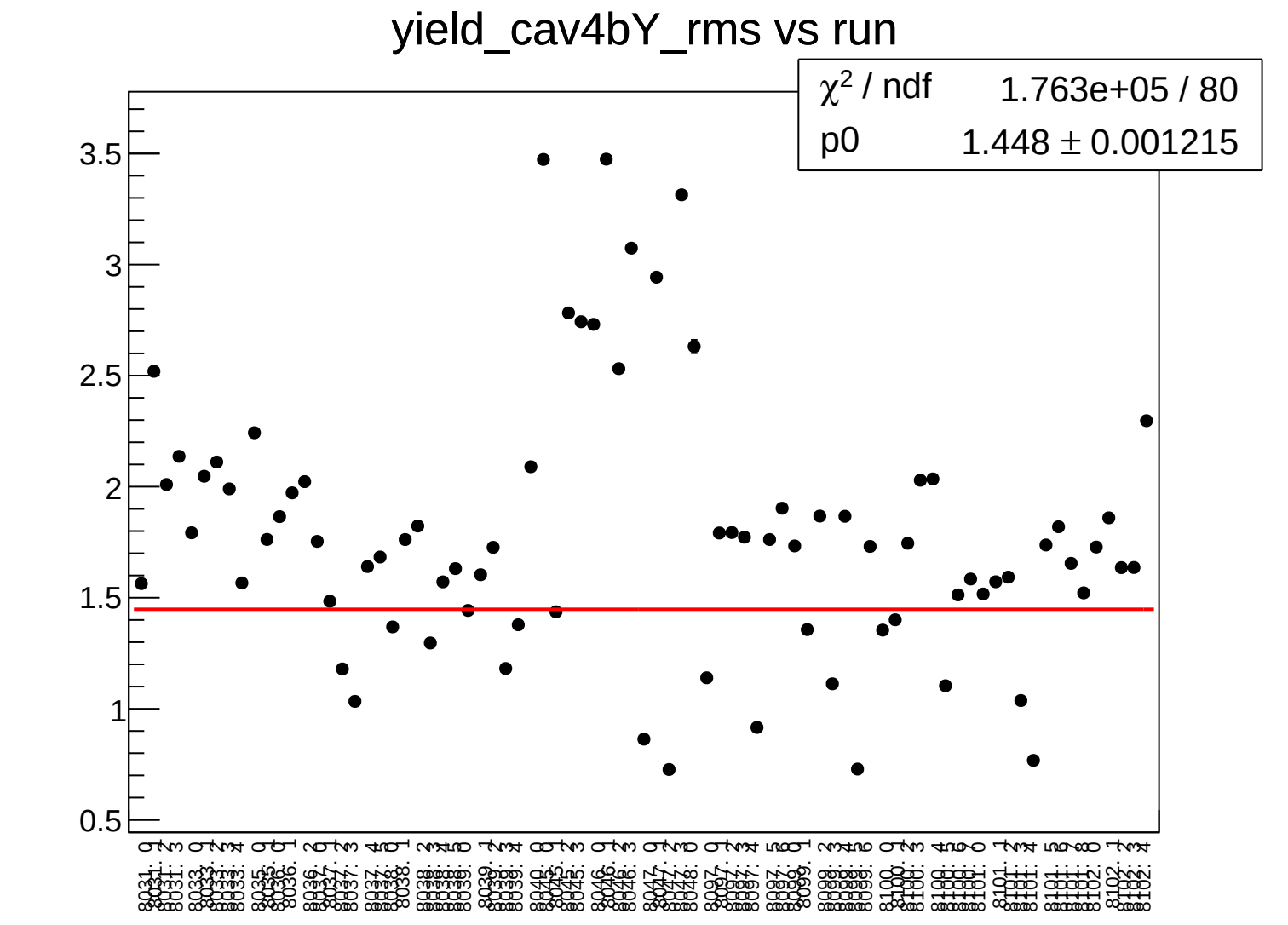

yield_cav4bX_mean vs run
χ² / ndf 2.298e+05 / 80
p0 −30.34 ± 0.004404
−26
−28
−30
−32
−34
−36
pull
Entries 81
Mean −7.359e+04
Std Dev 7.362e+04
150
100
50
0
−50
−100

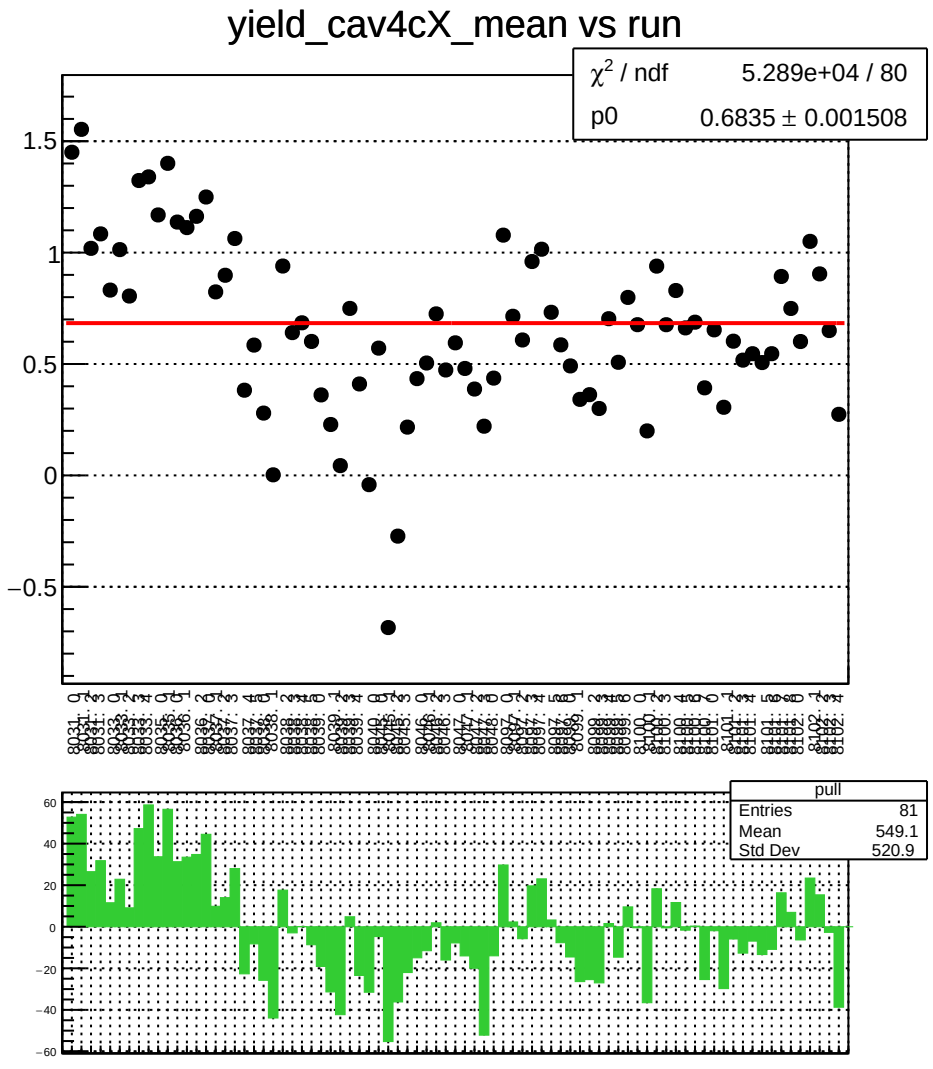

pull1D
Entries 81
Mean −0.6034
Std Dev 4.576
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

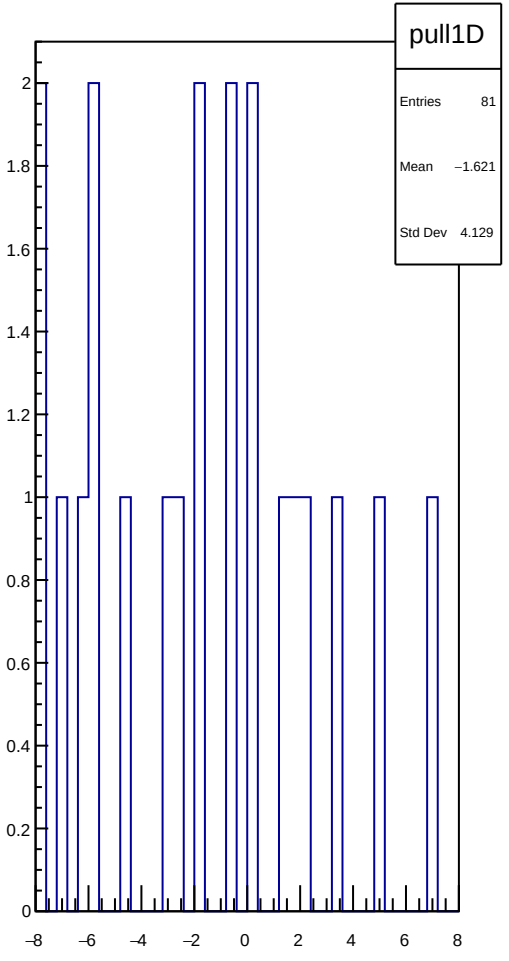

yield_cav4bX_rms vs run
χ^2 / ndf 3.809e+04 / 80
p0 3.888 ± 0.003114
7
6
5
4
3

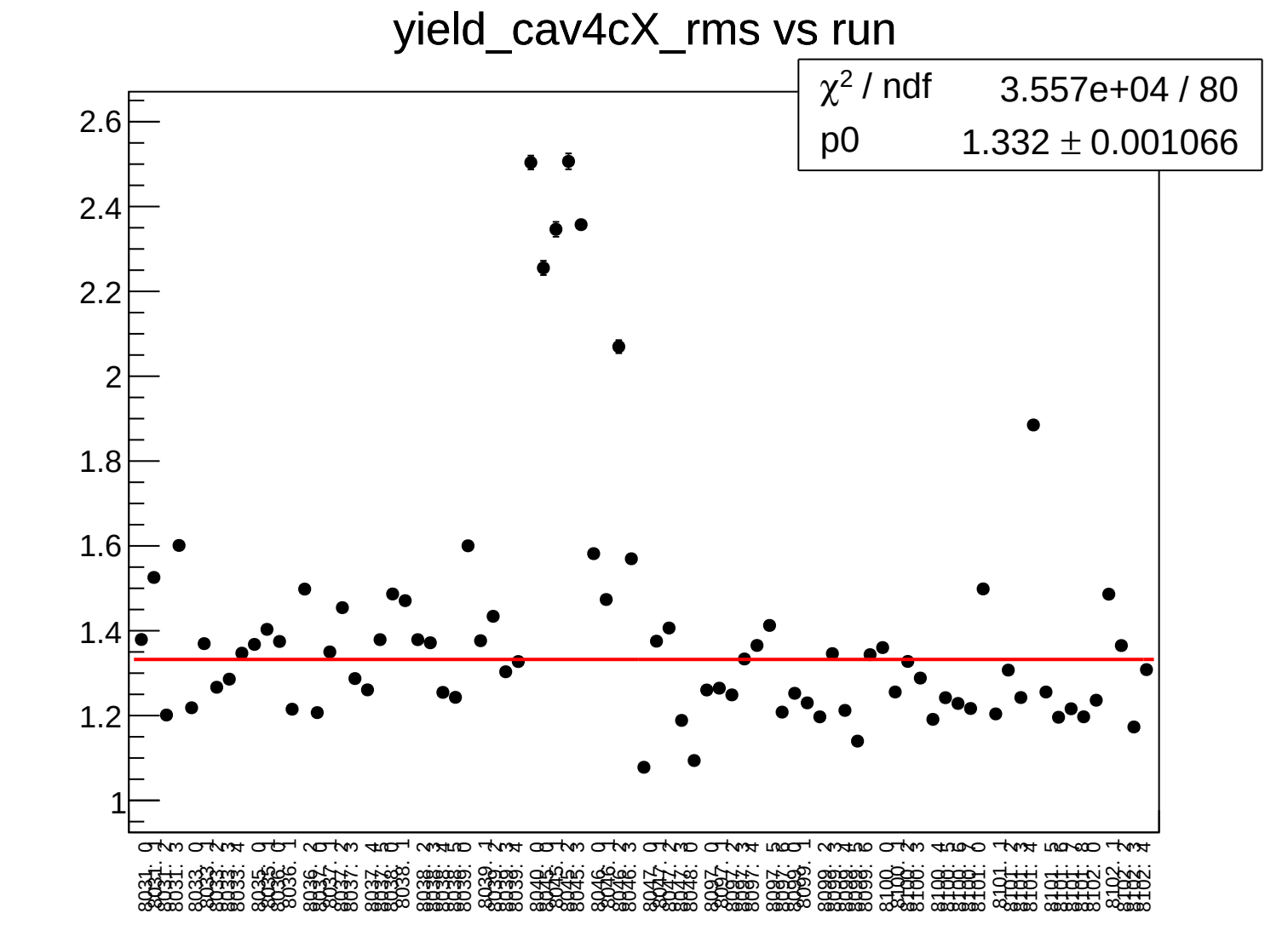

yield_cav4bY_mean vs run
χ² / ndf 4.45e+05 / 80
p0 −71 ± 0.001718
pull
Entries 81
Mean 7.272
Std Dev 22.93

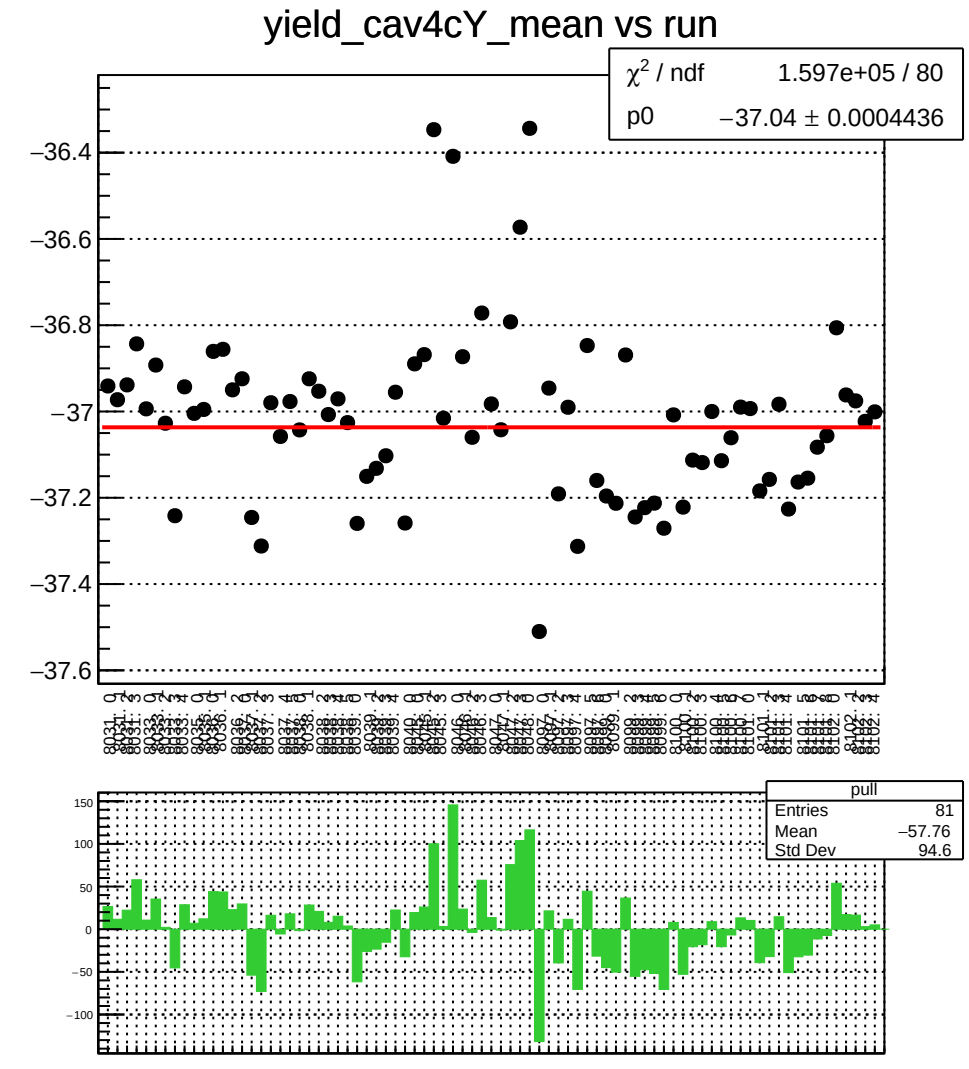

pull1D
Entries 81
Mean 0.05773
Std Dev 3.706

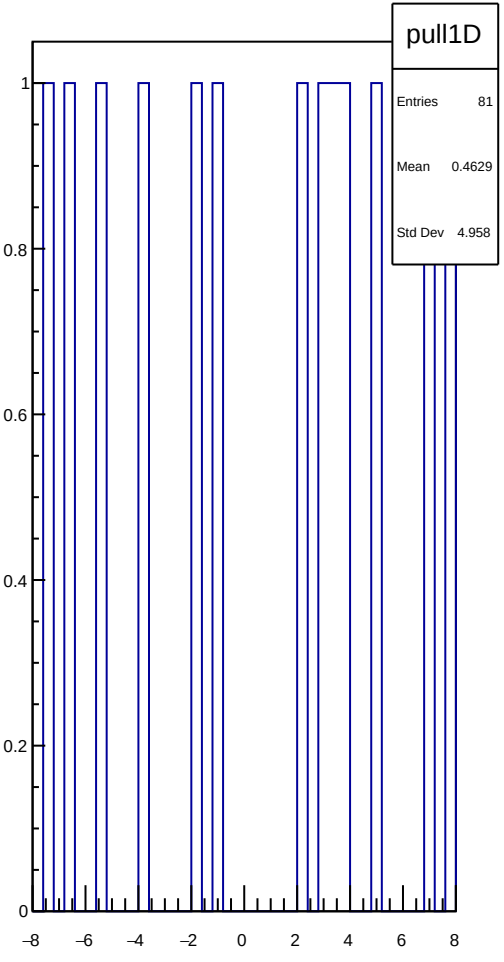

yield_cav4bY_rms vs run
χ² / ndf 1.763e+05 / 80
p0 1.448 ± 0.001215
3.5
3
2.5
2
1.5
1
0.5

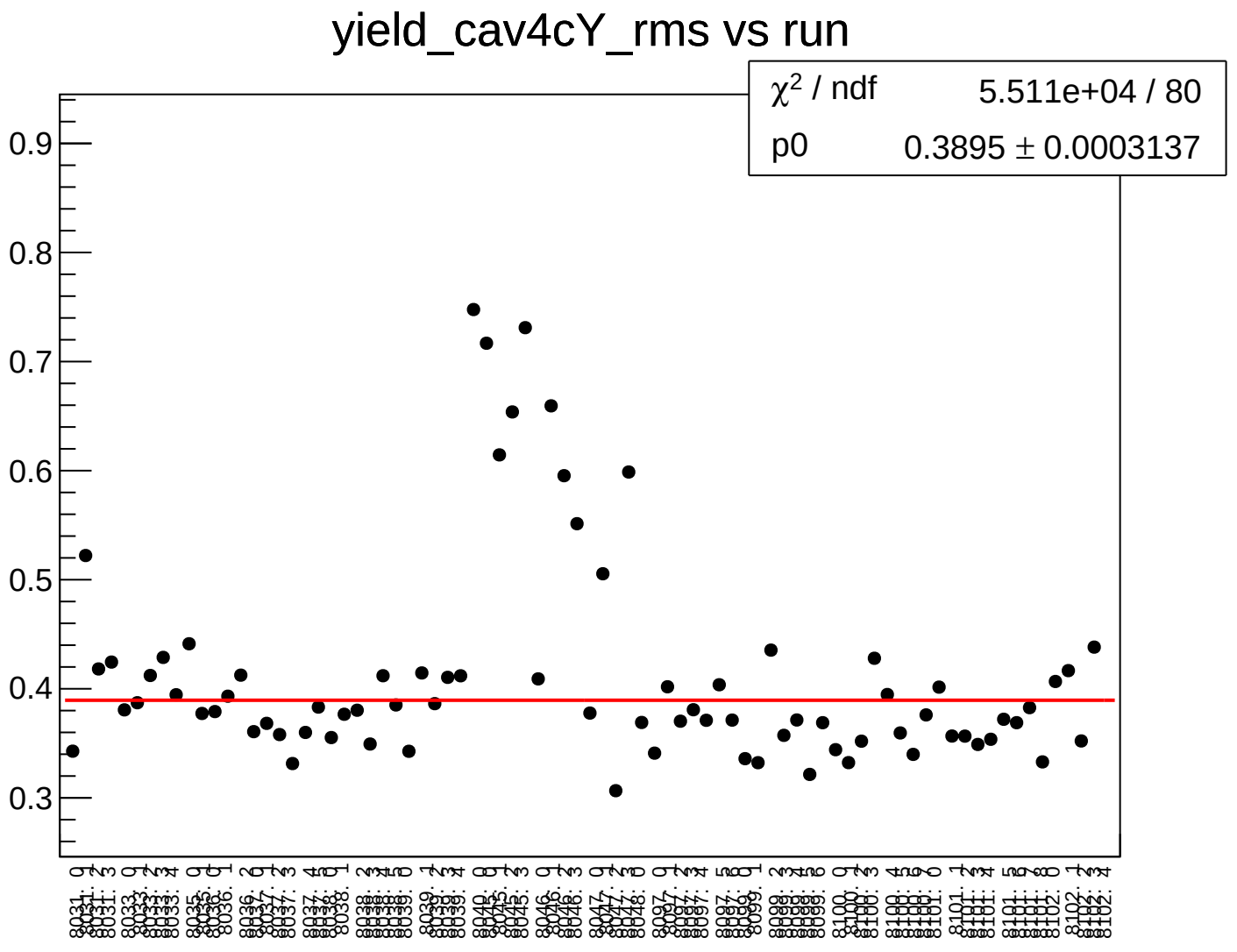

yield_cav4cX_mean vs run
χ² / ndf 5.289e+04 / 80
p0 0.6835 ± 0.001508
pull
Entries 81
Mean 549.1
Std Dev 520.9

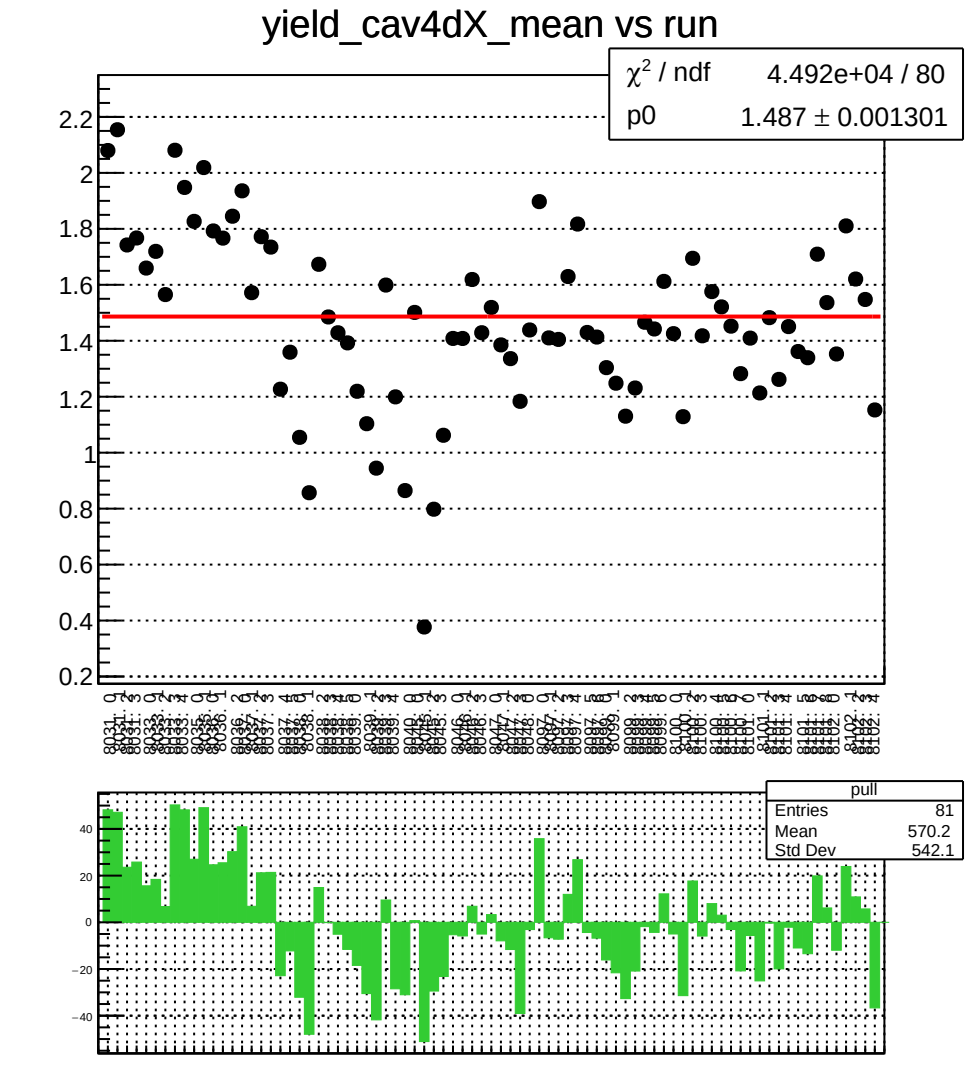

pull1D
Entries 81
Mean −1.621
Std Dev 4.129

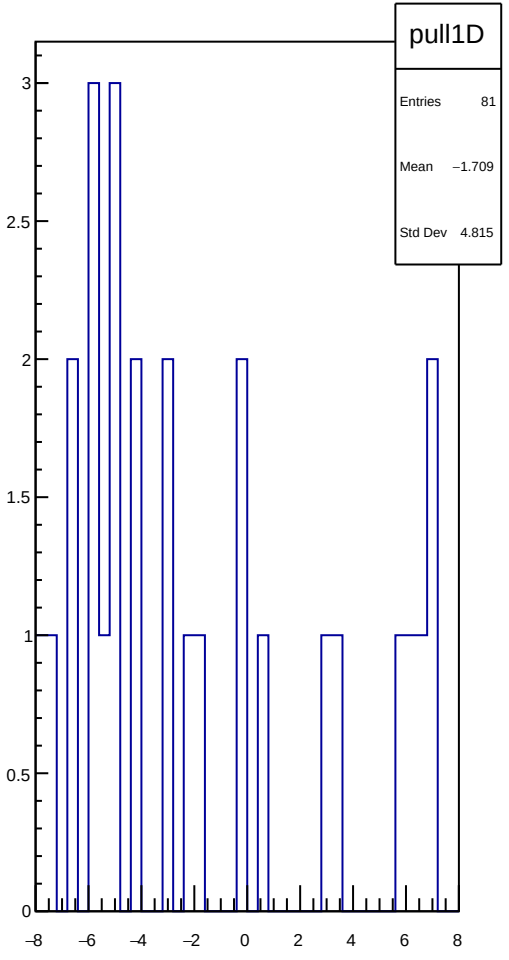

yield_cav4cX_rms vs run
χ^2 / ndf 3.557e+04 / 80
p0 1.332 ± 0.001066
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1

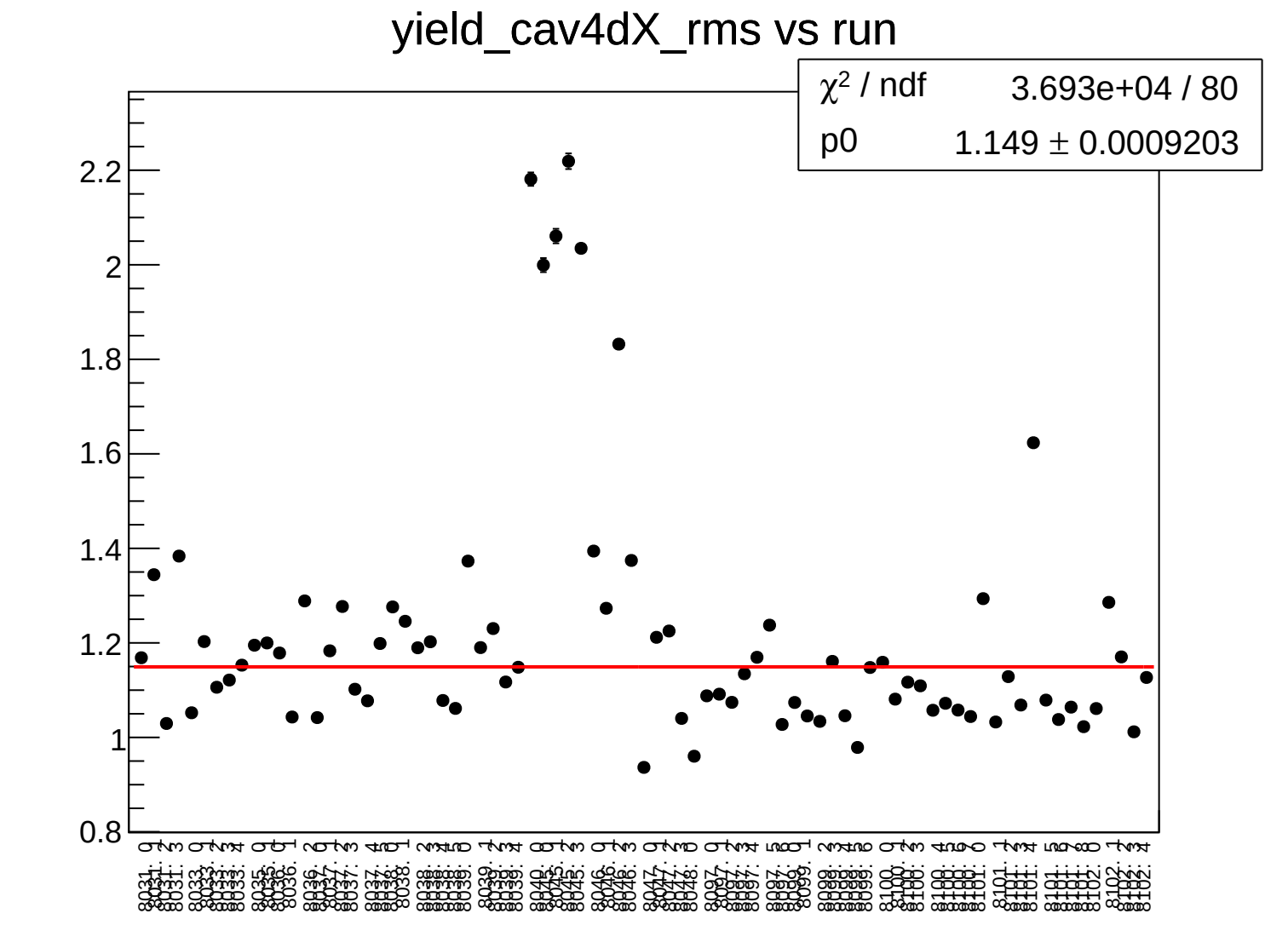

yield_cav4cY_mean vs run
χ² / ndf 1.597e+05 / 80
p0 −37.04 ± 0.0004436
−36.4
−36.6
−36.8
−37
−37.2
−37.4
−37.6
pull
Entries 81
Mean −57.76
Std Dev 94.6
150
100
50
0
−50
−100

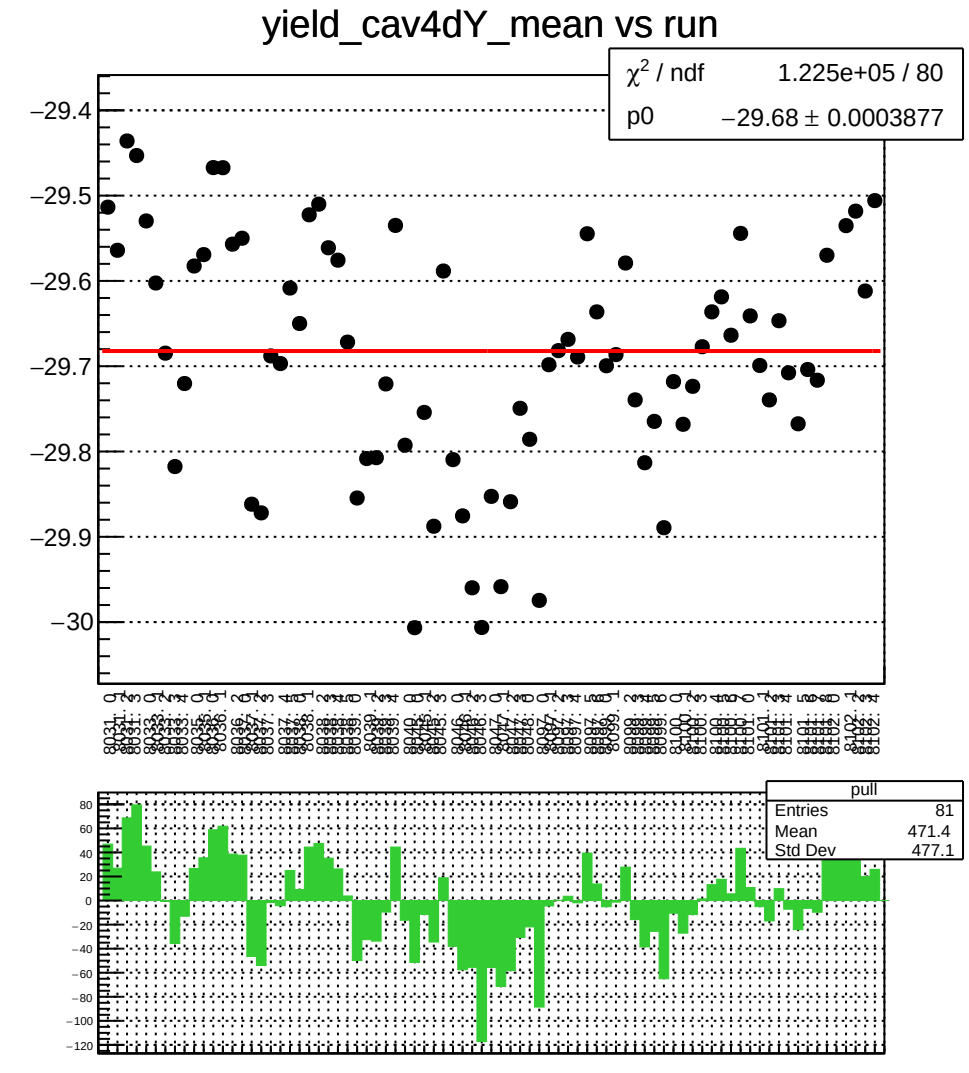

pull1D
Entries 81
Mean 0.4629
Std Dev 4.958
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

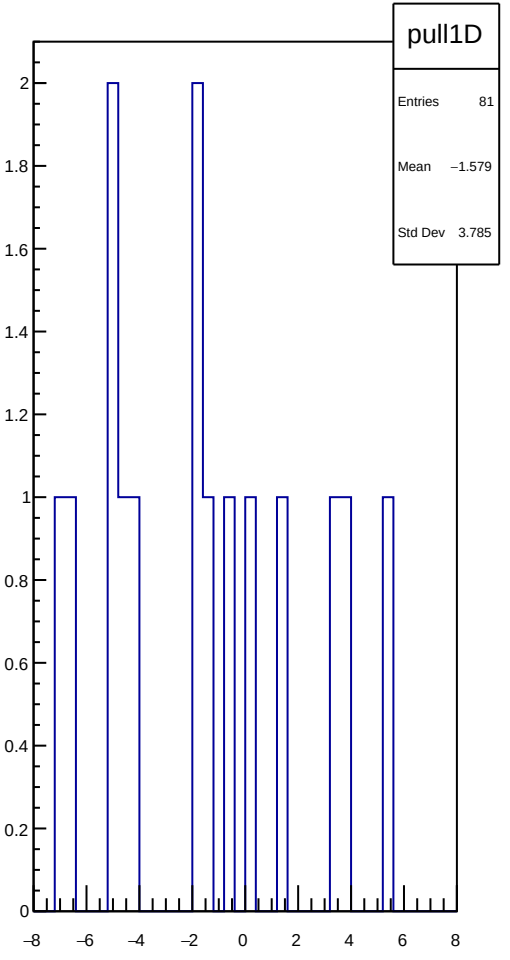

yield_cav4cY_rms vs run
χ² / ndf 5.511e+04 / 80
p0 0.3895 ± 0.0003137
0.9
0.8
0.7
0.6
0.5
0.4
0.3

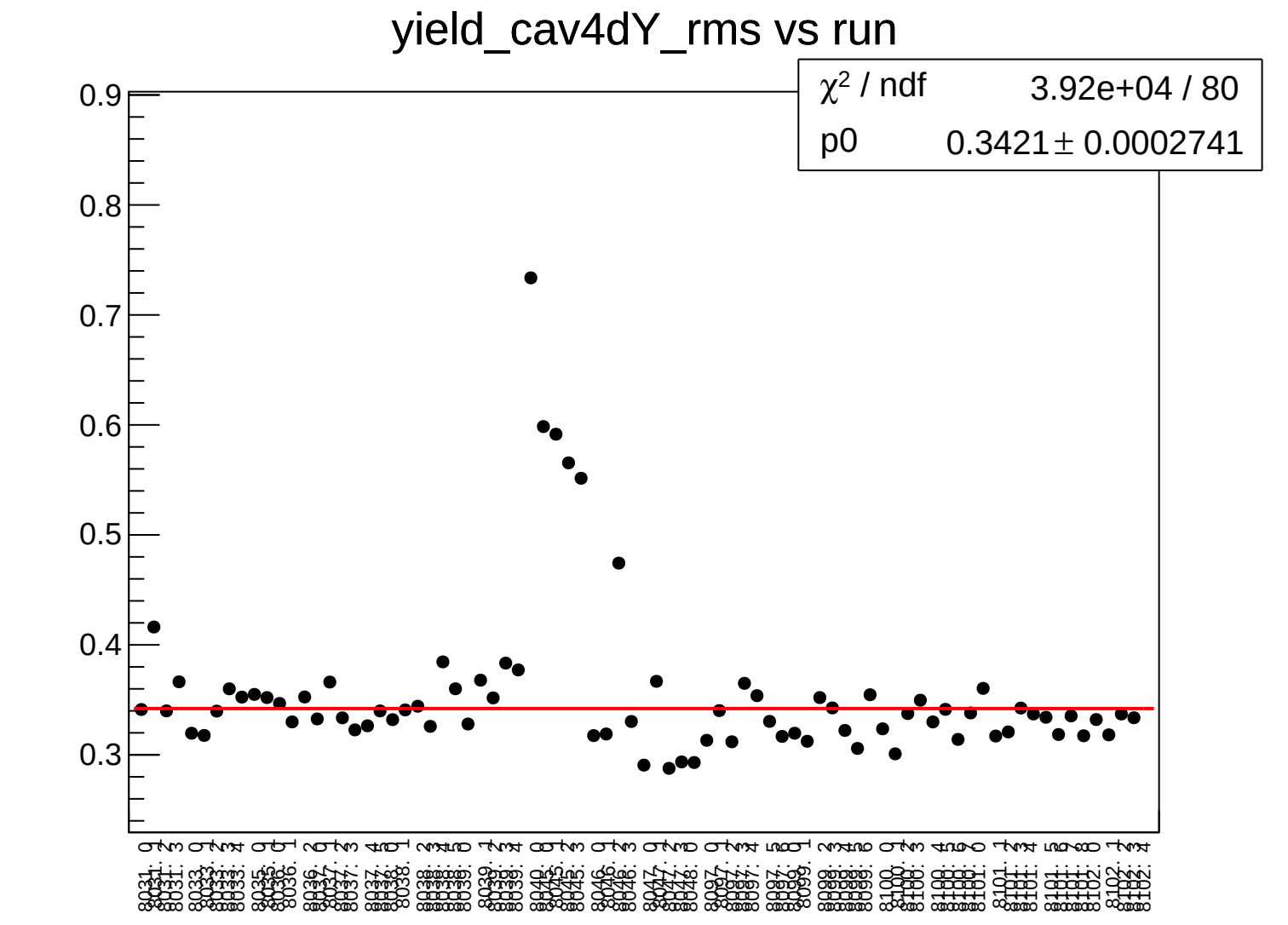

yield_cav4dX_mean vs run
χ² / ndf 4.492e+04 / 80
p0 1.487 ± 0.001301
pull
Entries 81
Mean 570.2
Std Dev 542.1

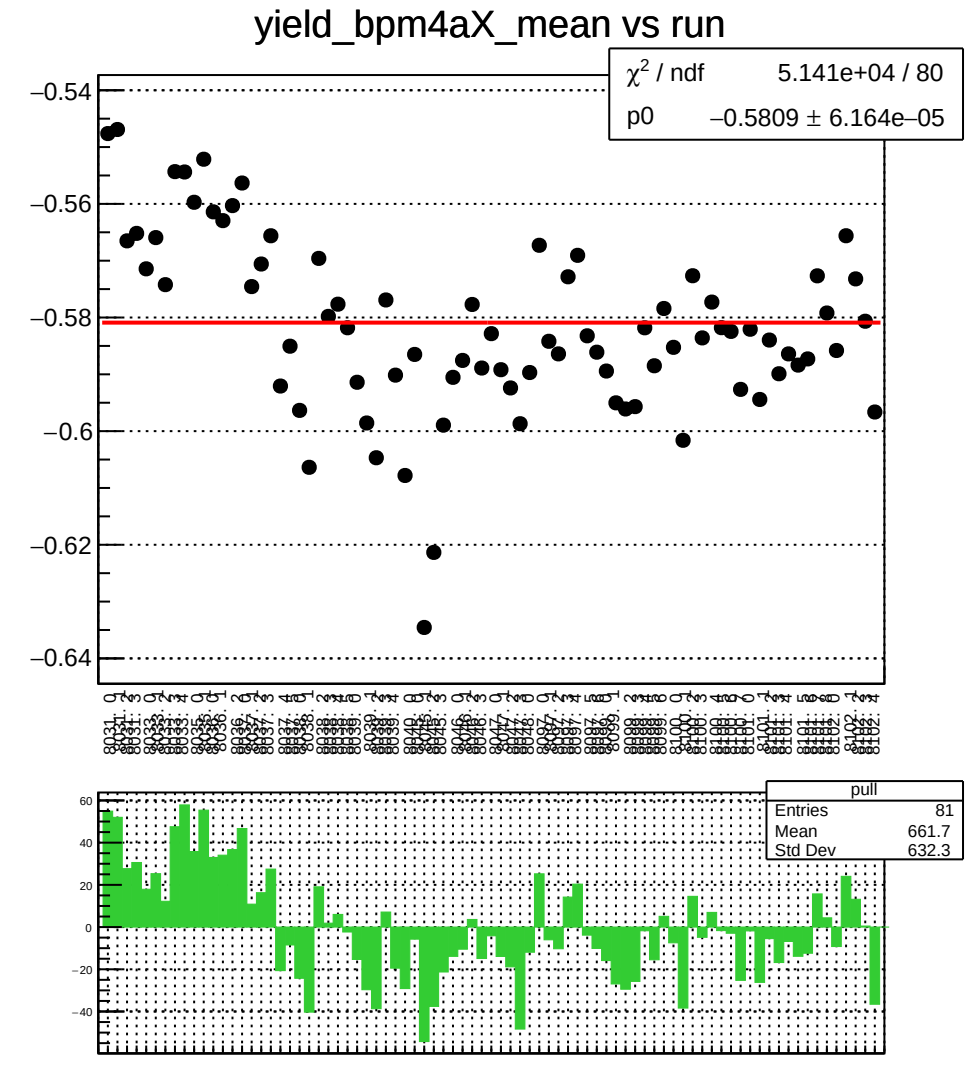

pull1D
Entries 81
Mean −1.709
Std Dev 4.815

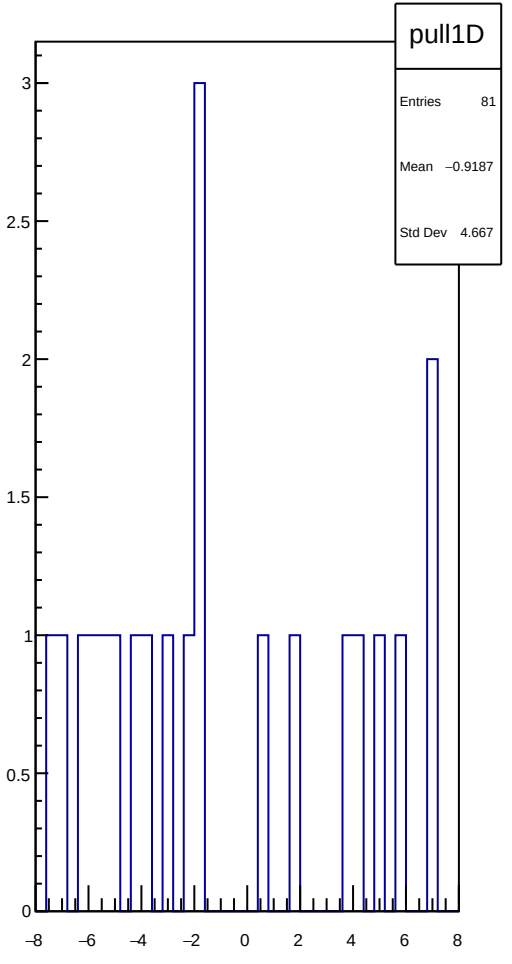

yield_cav4dX_rms vs run
χ² / ndf 3.693e+04 / 80
p0 1.149 ± 0.0009203
2.2
2
1.8
1.6
1.4
1.2
1
0.8

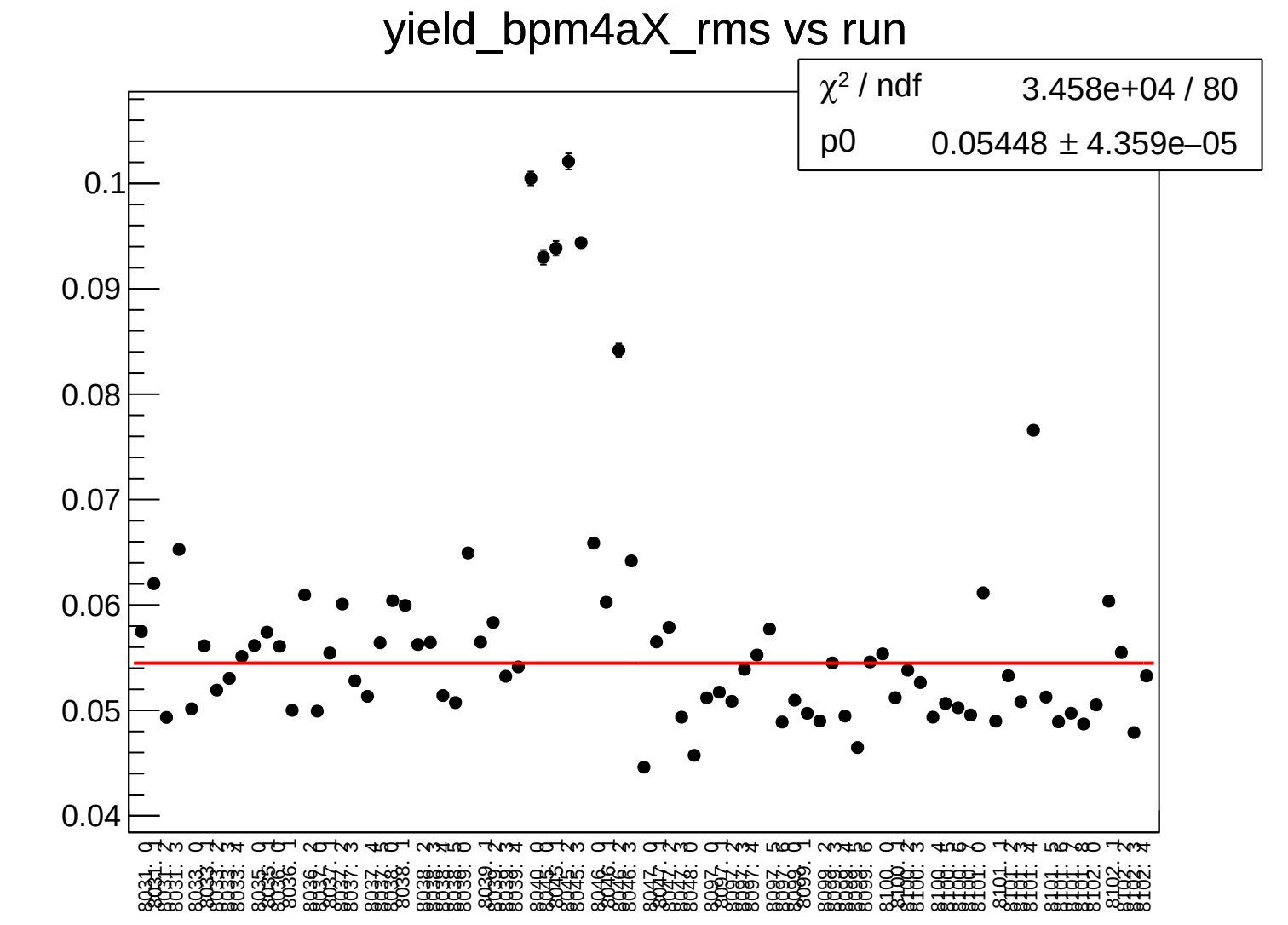

yield_cav4dY_mean vs run
χ² / ndf 1.225e+05 / 80
p0 −29.68 ± 0.0003877
−29.4
−29.5
−29.6
−29.7
−29.8
−29.9
−30
pull
Entries 81
Mean 471.4
Std Dev 477.1
80
60
40
20
0
−20
−40
−60
−80
−100
−120

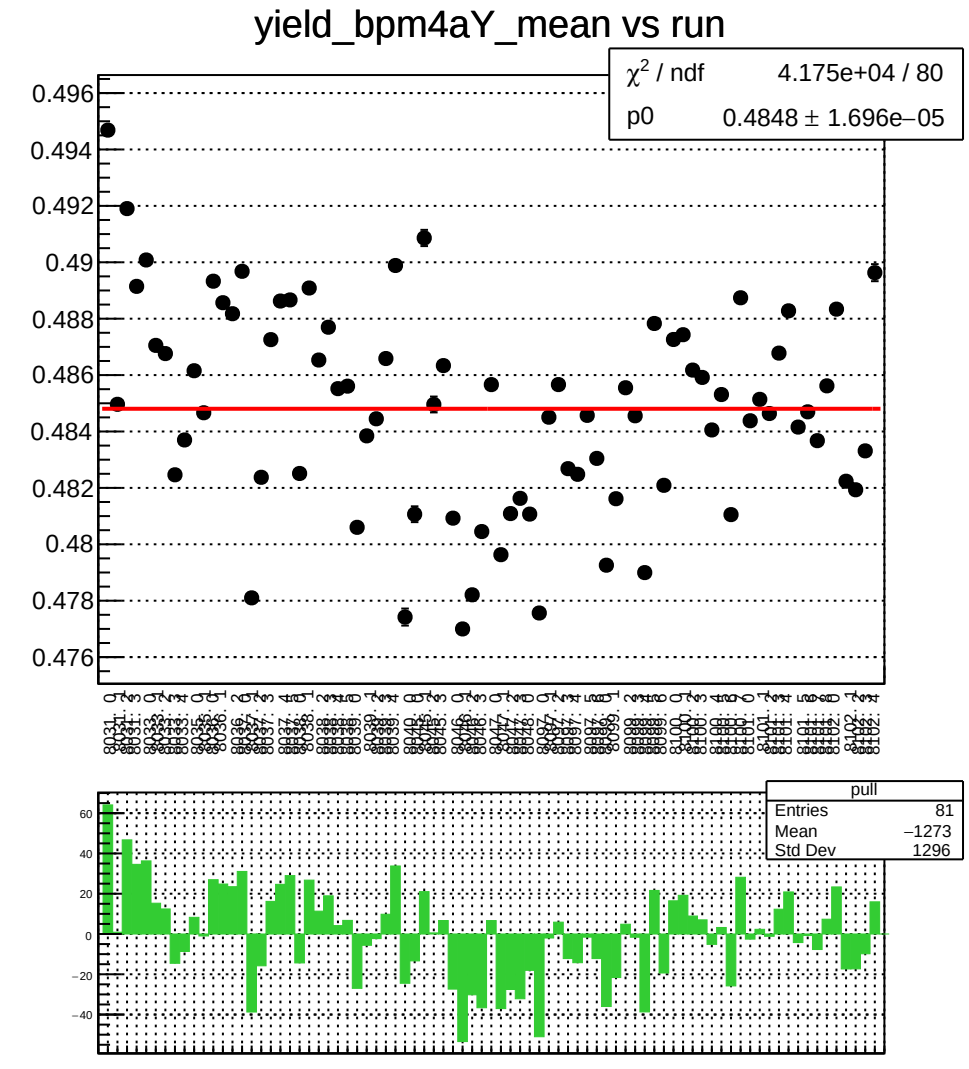

pull1D
Entries 81
Mean −1.579
Std Dev 3.785
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

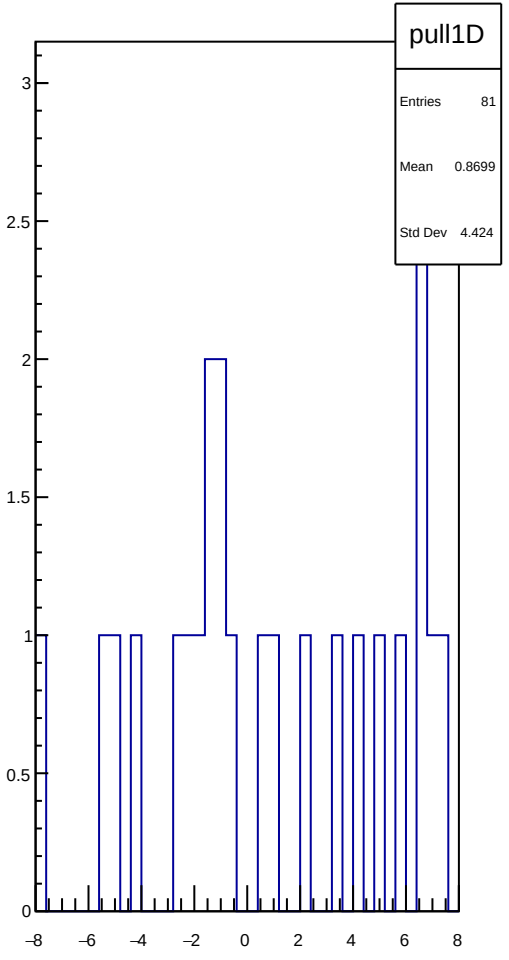

yield_cav4dY_rms vs run
χ² / ndf 3.92e+04 / 80
p0 0.3421 ± 0.0002741
0.9
0.8
0.7
0.6
0.5
0.4
0.3

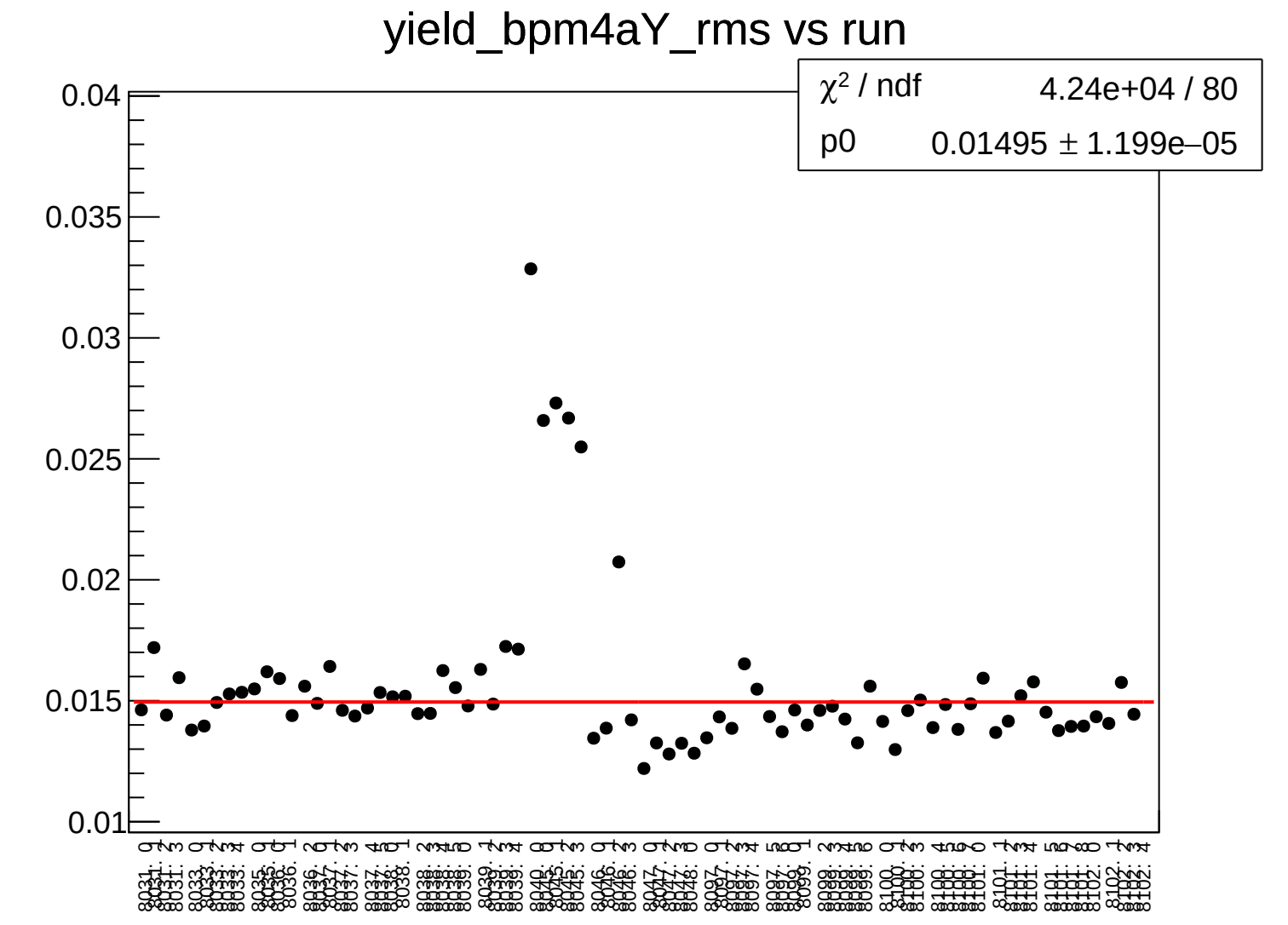

yield_bpm4aX_mean vs run
χ² / ndf 5.141e+04 / 80
p0 −0.5809 ± 6.164e−05
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
pull
Entries 81
Mean 661.7
Std Dev 632.3
60
40
20
0
−20
−40

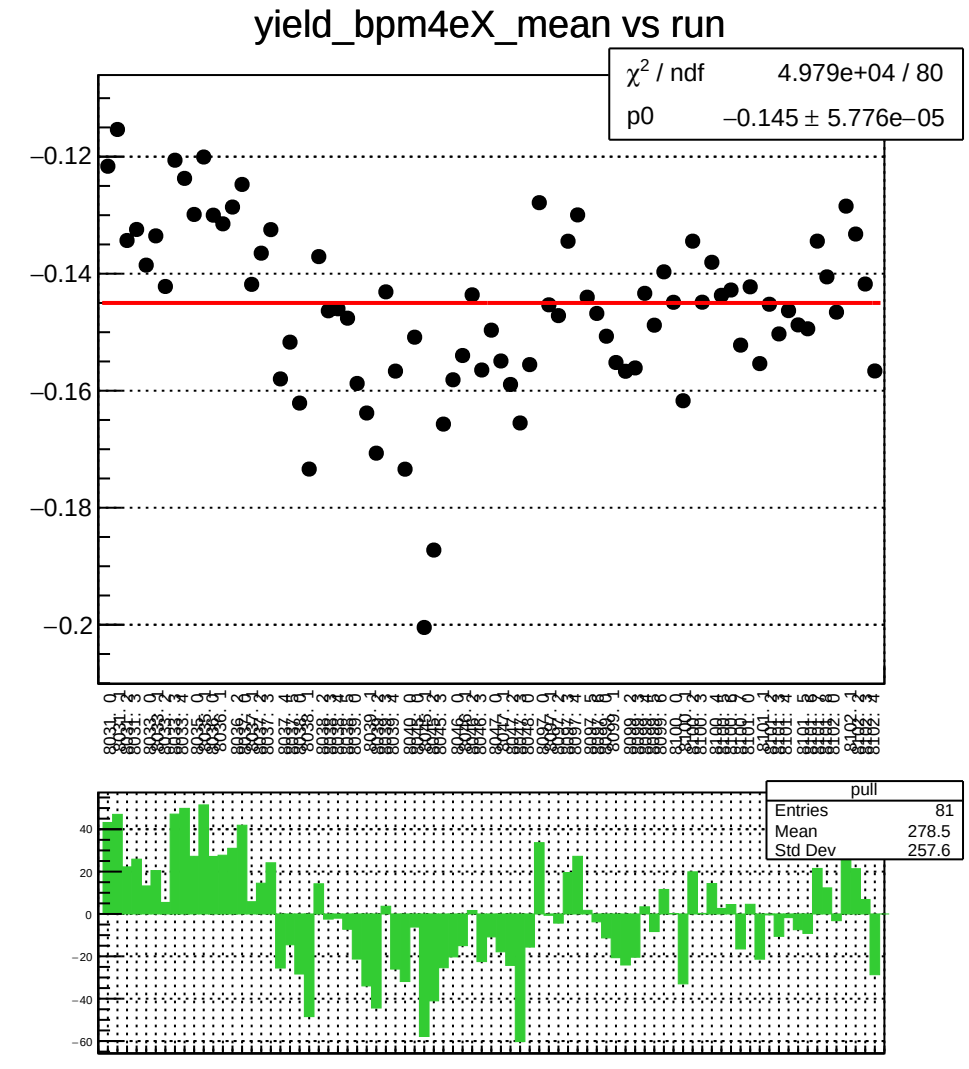

pull1D
Entries 81
Mean −0.9187
Std Dev 4.667
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

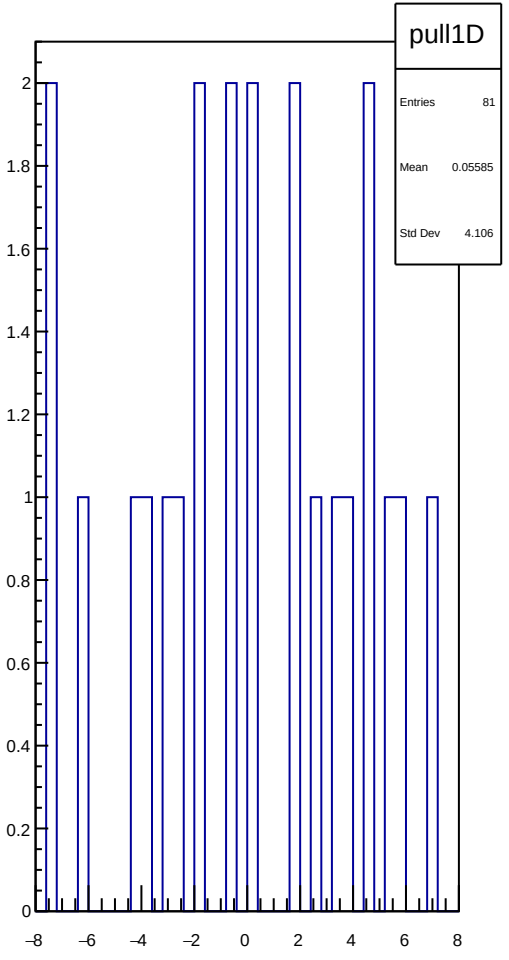

yield_bpm4aX_rms vs run
χ² / ndf 3.458e+04 / 80
p0 0.05448 ± 4.359e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

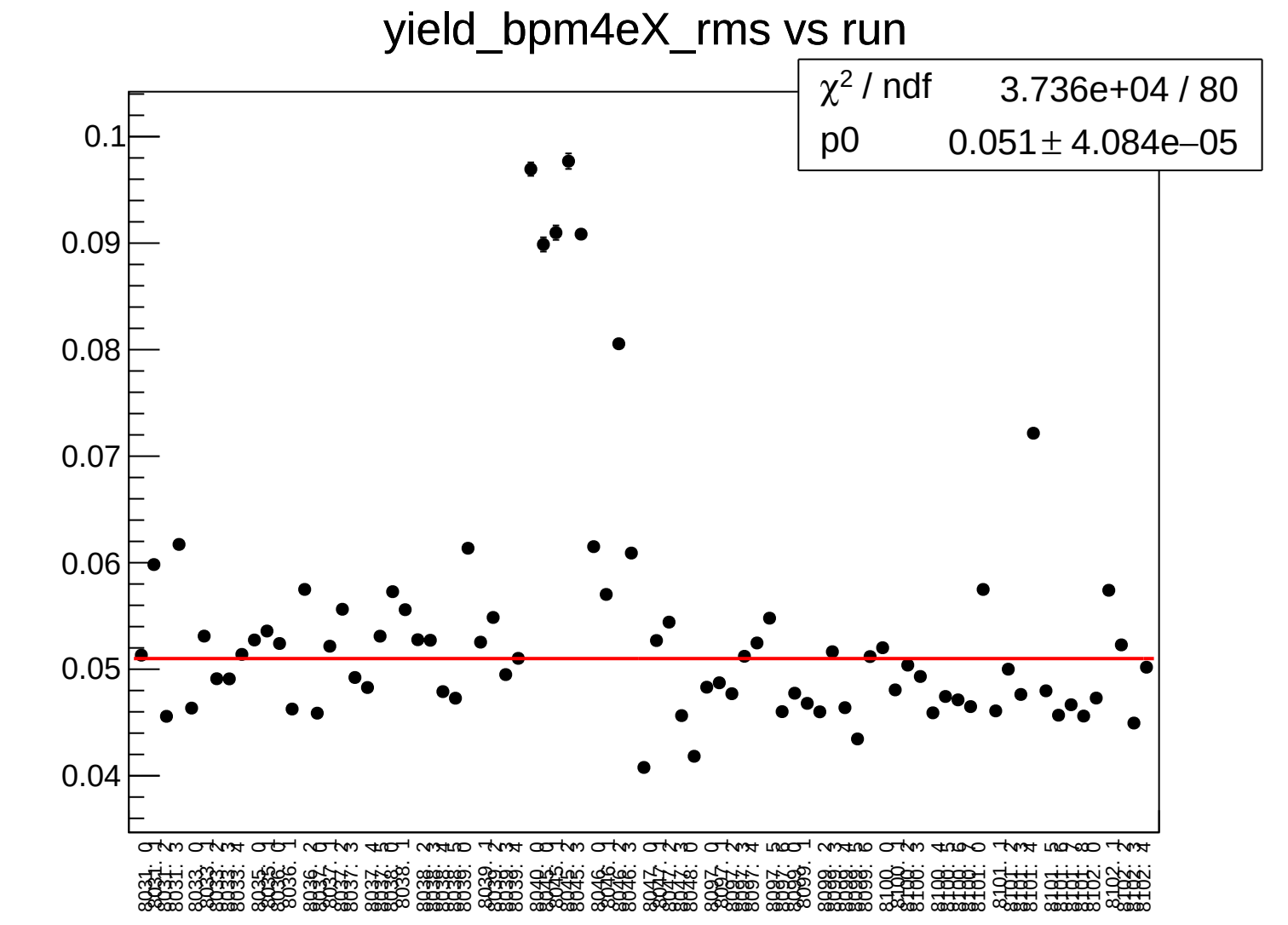

yield_bpm4aY_mean vs run
χ² / ndf 4.175e+04 / 80
p0 0.4848 ± 1.696e−05
pull
Entries 81
Mean −1273
Std Dev 1296

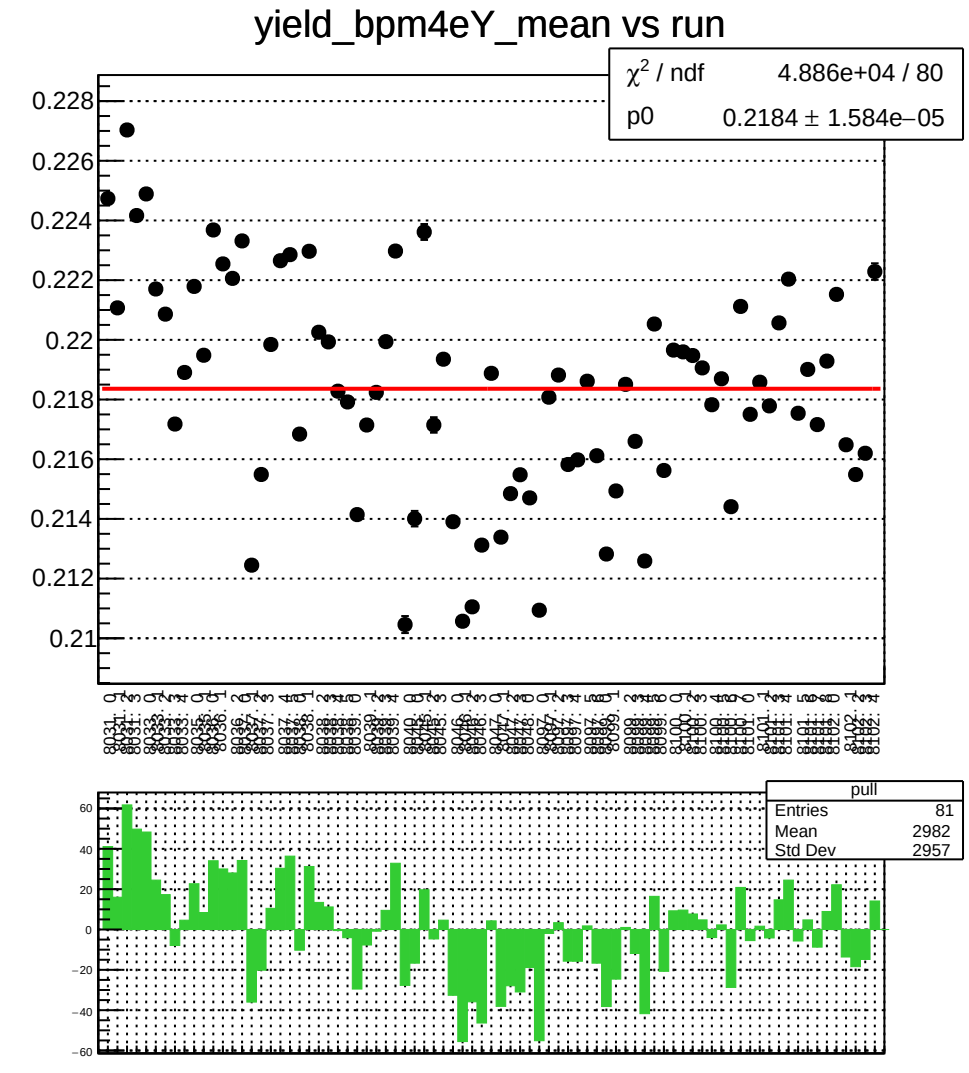

pull1D
Entries 81
Mean 0.8699
Std Dev 4.424

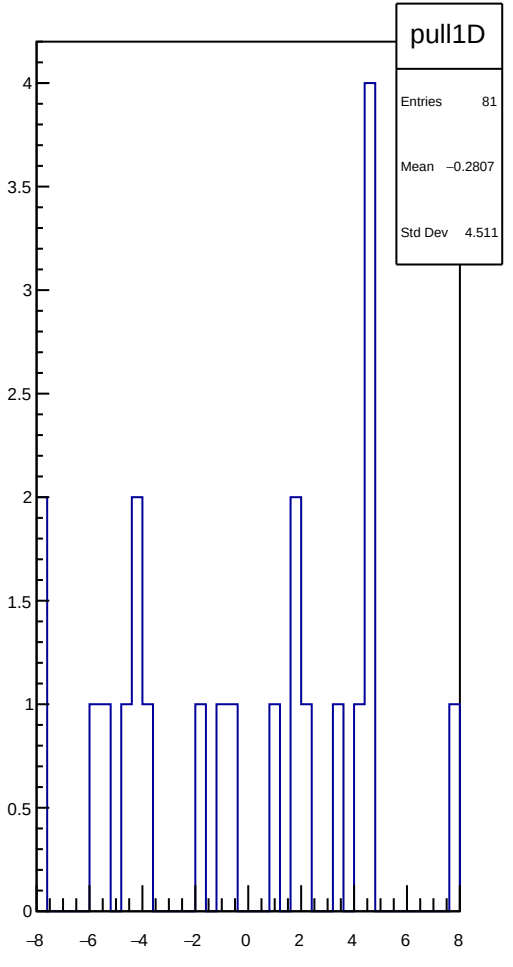

yield_bpm4aY_rms vs run
χ² / ndf 4.24e+04 / 80
p0 0.01495 ± 1.199e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

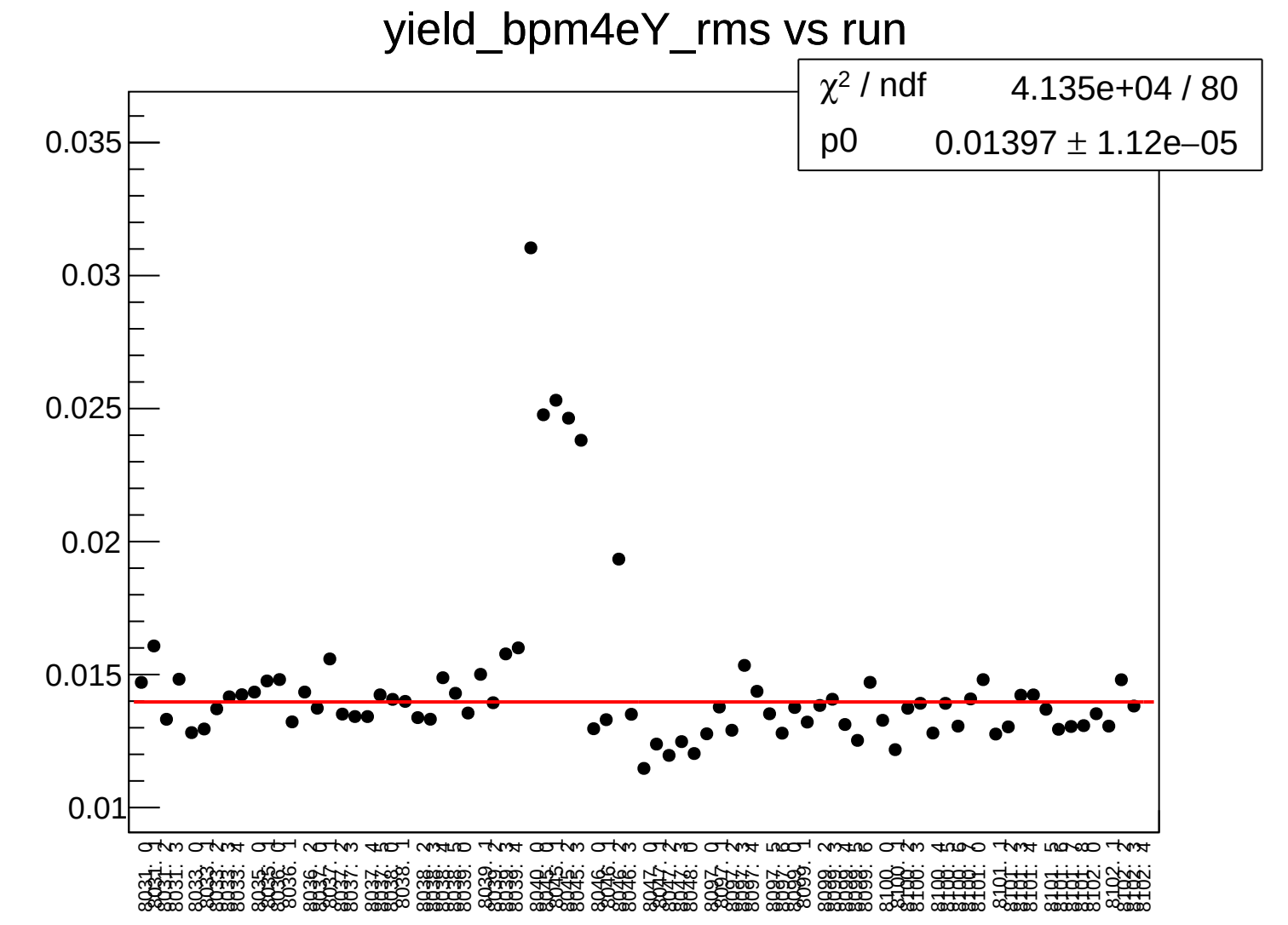

yield_bpm4eX_mean vs run
χ² / ndf 4.979e+04 / 80
p0 −0.145 ± 5.776e−05
−0.12
−0.14
−0.16
−0.18
−0.2
pull
Entries 81
Mean 278.5
Std Dev 257.6
40
20
0
−20
−40
−60

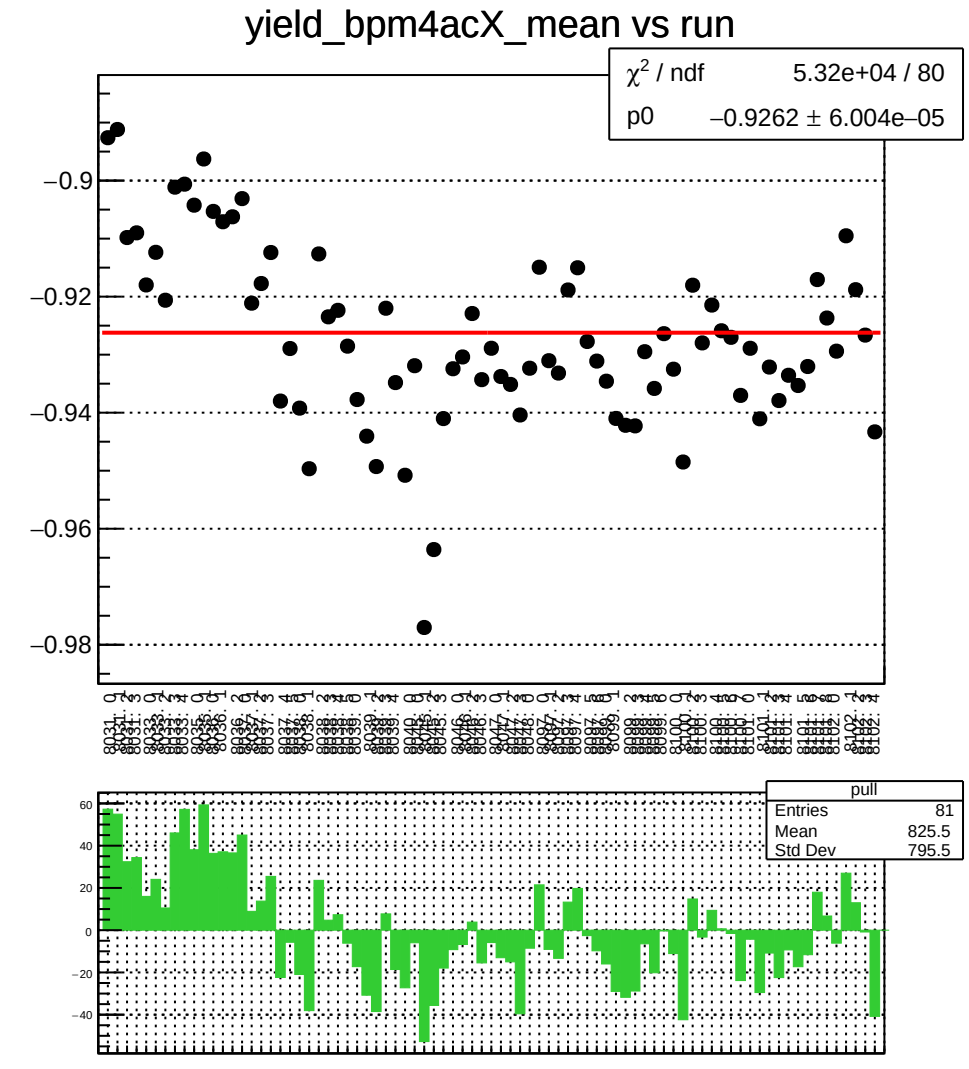

pull1D
Entries 81
Mean 0.05585
Std Dev 4.106
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

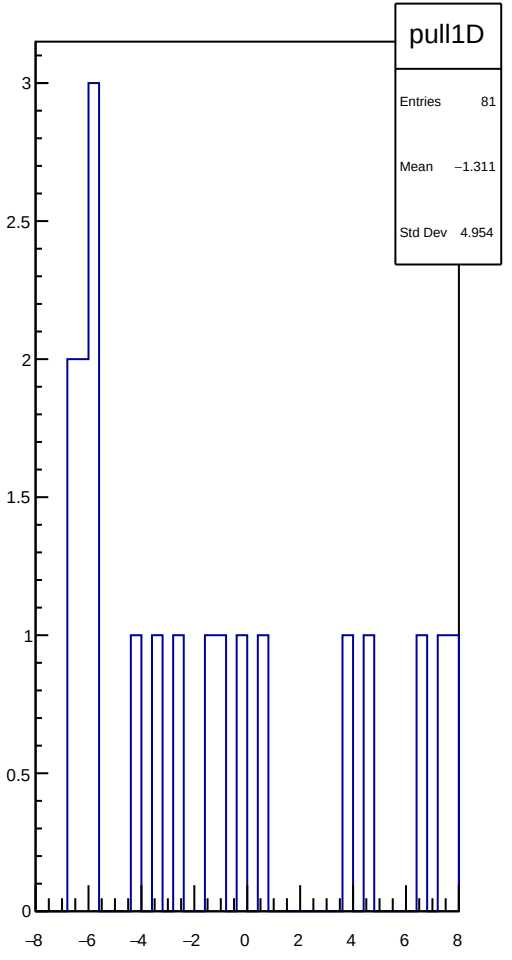

yield_bpm4eX_rms vs run
χ² / ndf 3.736e+04 / 80
p0 0.051 ± 4.084e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

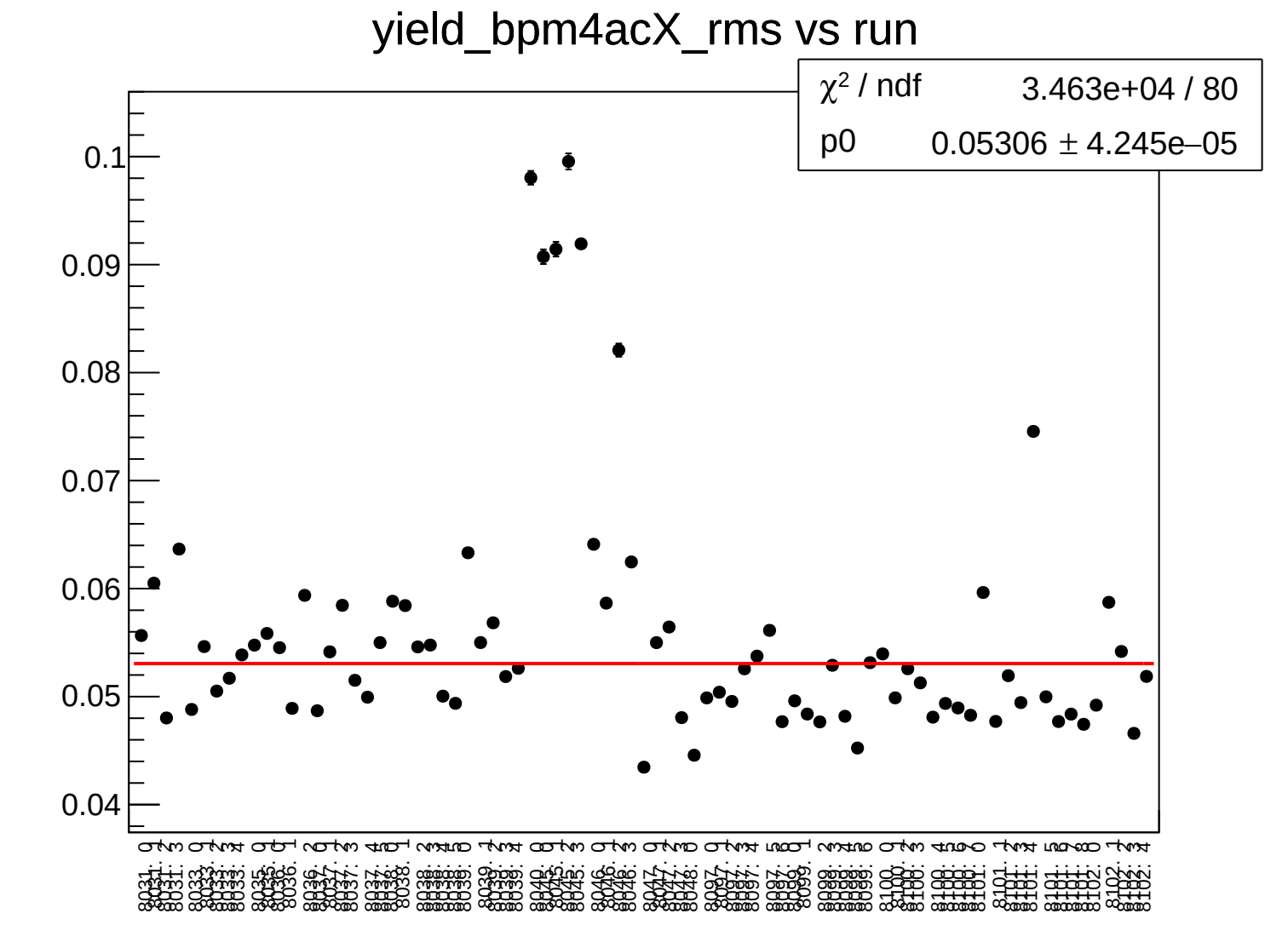

yield_bpm4eY_mean vs run
χ² / ndf 4.886e+04 / 80
p0 0.2184 ± 1.584e−05
0.228
0.226
0.224
0.222
0.22
0.218
0.216
0.214
0.212
0.21
pull
Entries 81
Mean 2982
Std Dev 2957
60
40
20
0
−20
−40
−60

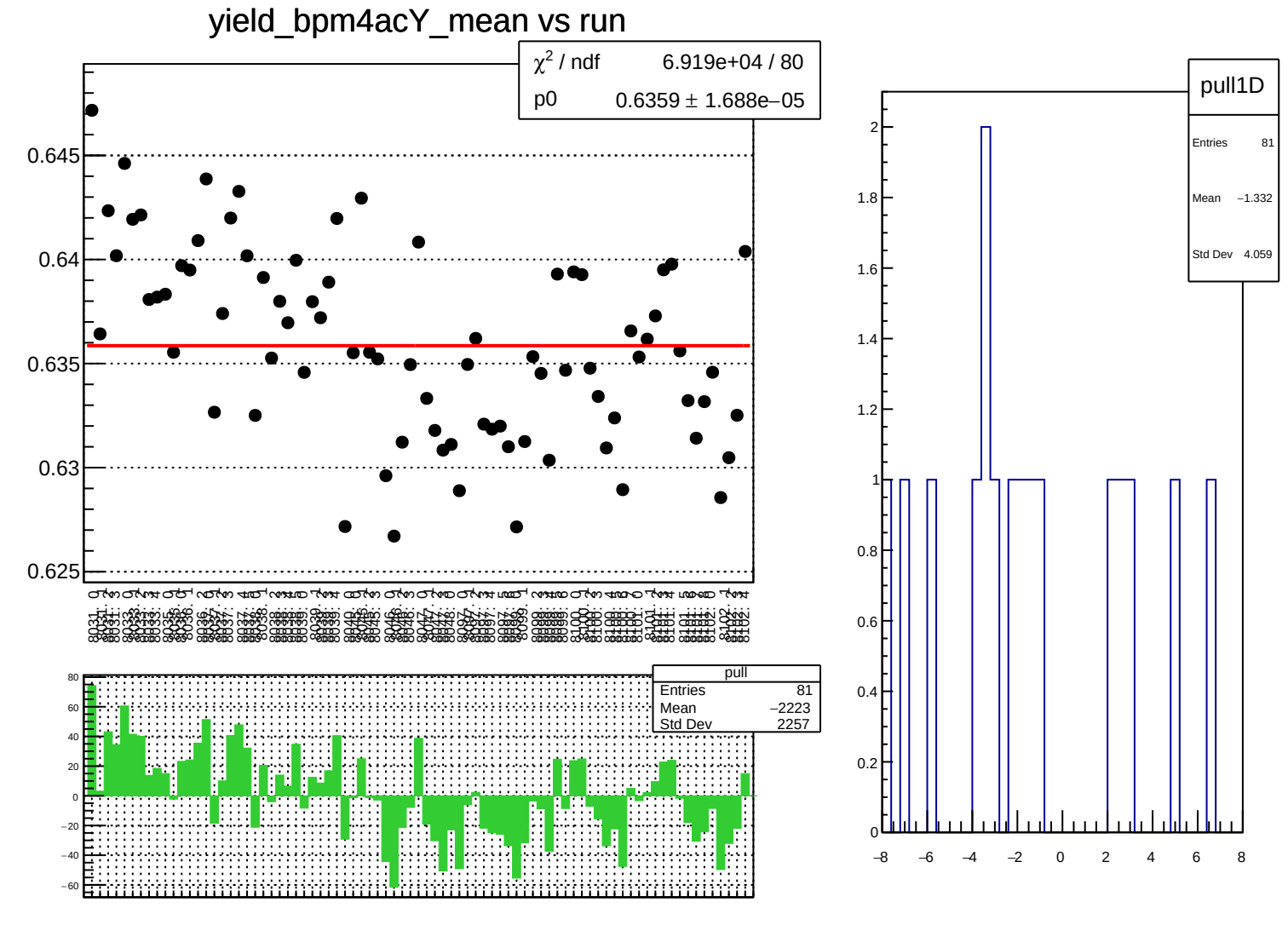

pull1D
Entries 81
Mean −0.2807
Std Dev 4.511
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

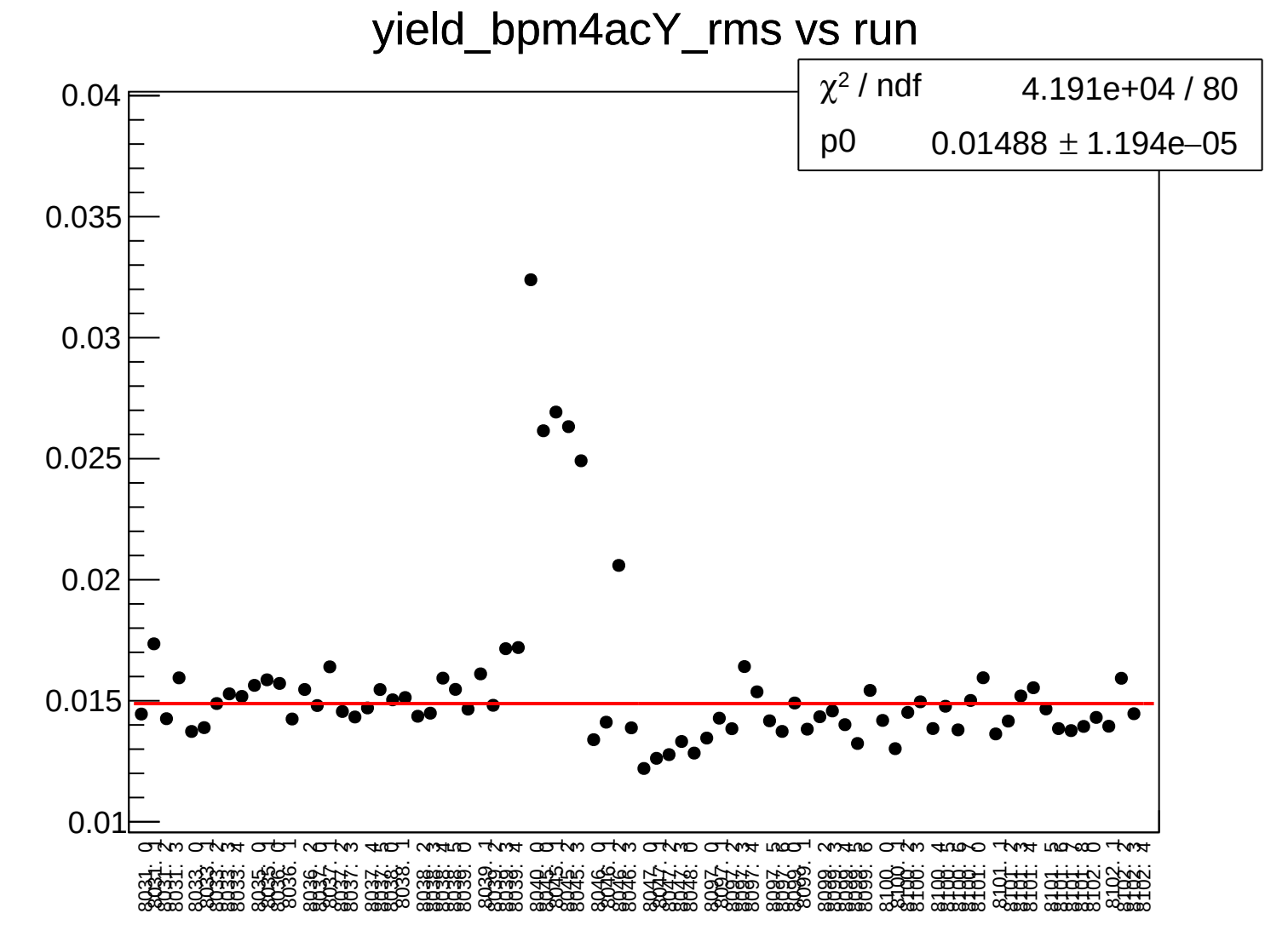

yield_bpm4eY_rms vs run
χ² / ndf 4.135e+04 / 80
p0 0.01397 ± 1.12e−05
0.035
0.03
0.025
0.02
0.015
0.01

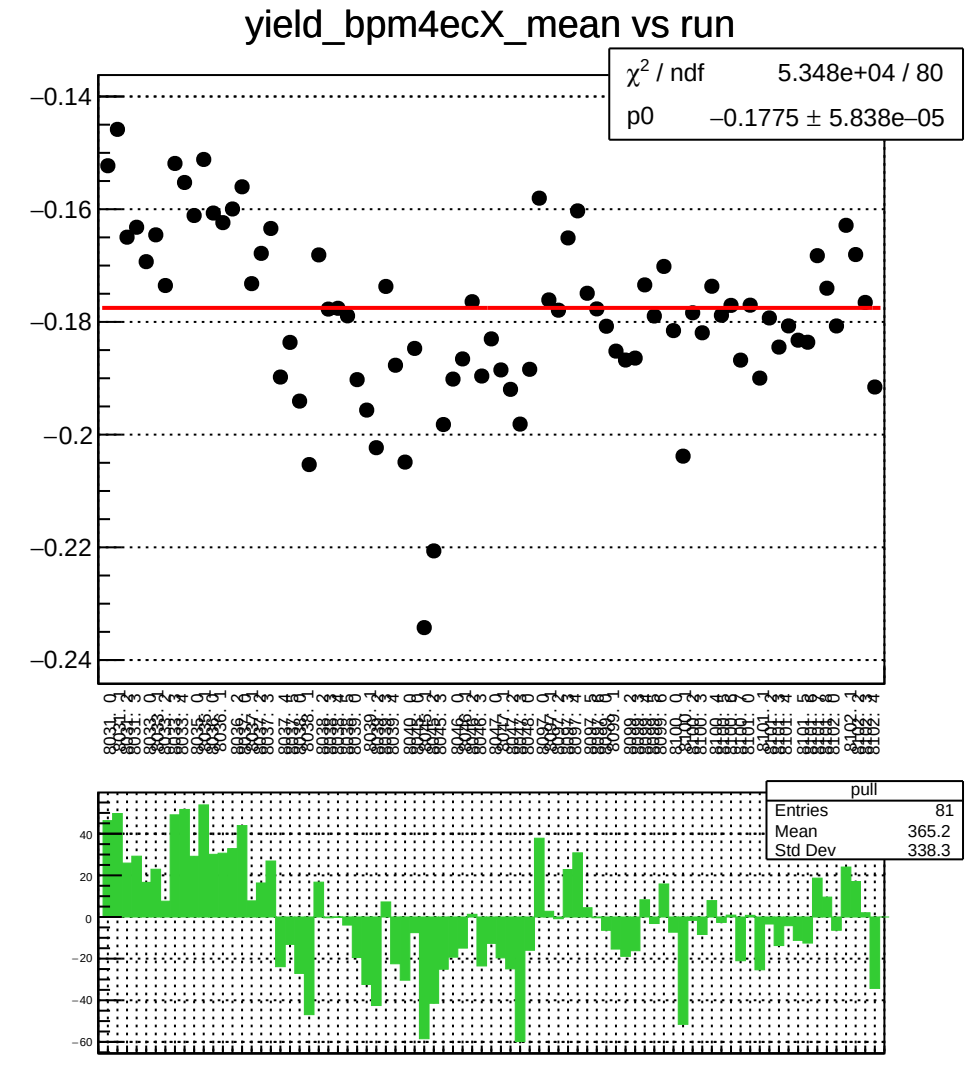

yield_bpm4acX_mean vs run
χ² / ndf 5.32e+04 / 80
p0 −0.9262 ± 6.004e−05
−0.9
−0.92
−0.94
−0.96
−0.98
pull
Entries 81
Mean 825.5
Std Dev 795.5
60
40
20
0
−20
−40

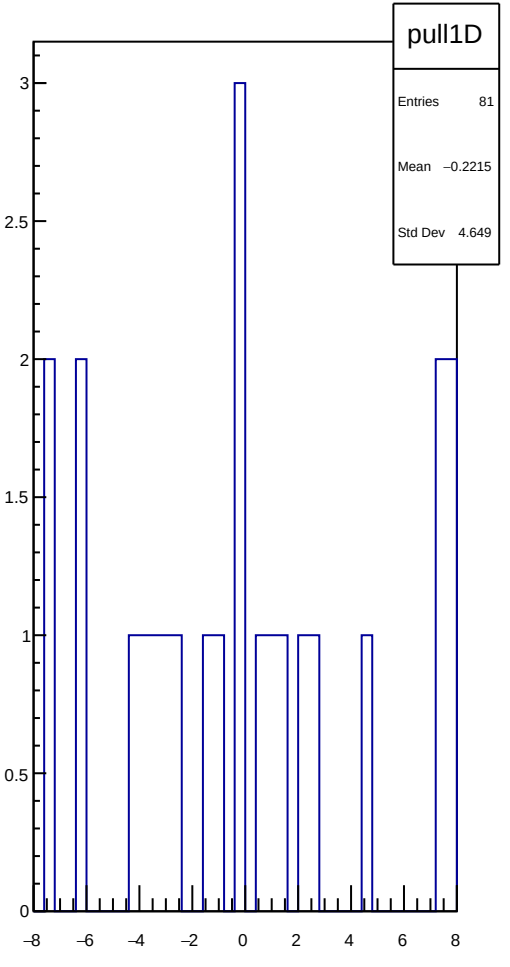

pull1D
Entries 81
Mean −1.311
Std Dev 4.954
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

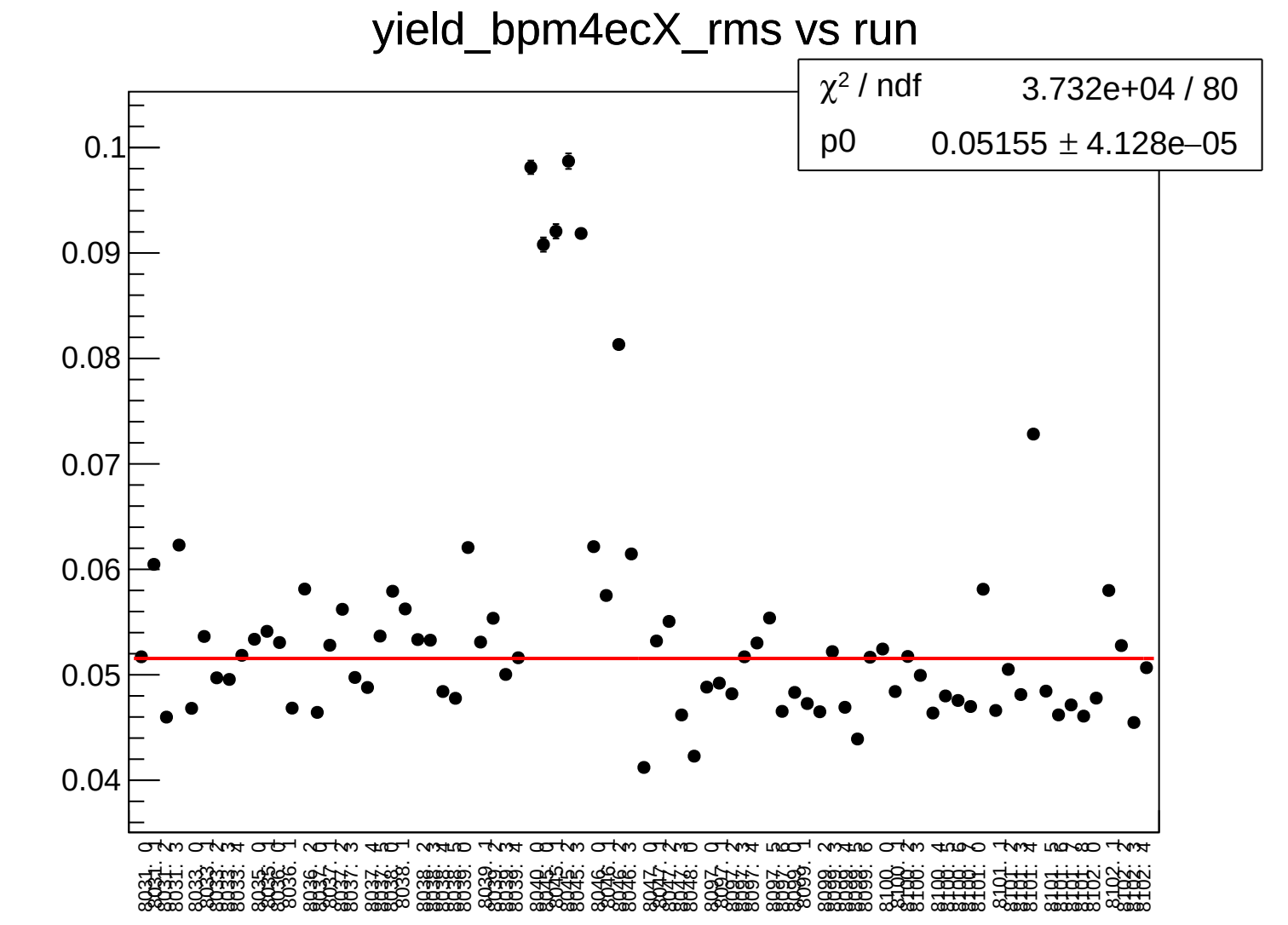

yield_bpm4acX_rms vs run
χ² / ndf 3.463e+04 / 80
p0 0.05306 ± 4.245e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

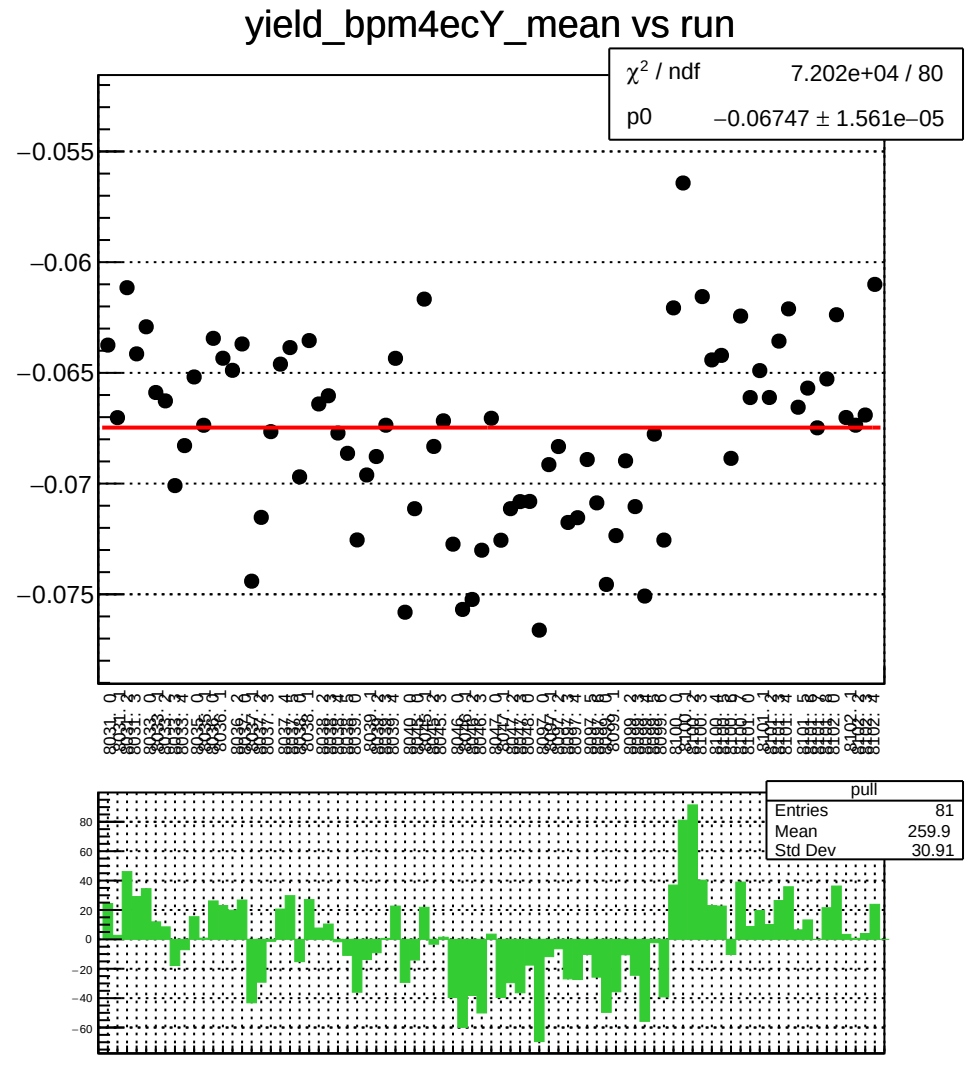

yield_bpm4acY_mean vs run
χ² / ndf 6.919e+04 / 80
p0 0.6359 ± 1.688e−05
0.645
0.64
0.635
0.63
0.625
pull
Entries 81
Mean −2223
Std Dev 2257
80
60
40
20
0
−20
−40
−60
pull1D
Entries 81
Mean −1.332
Std Dev 4.059
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

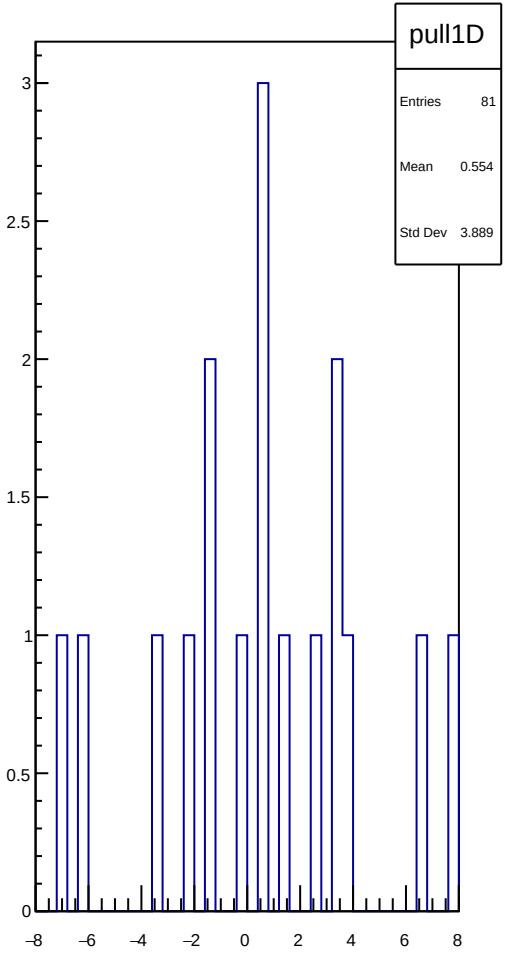

yield_bpm4acY_rms vs run
χ² / ndf 4.191e+04 / 80
p0 0.01488 ± 1.194e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

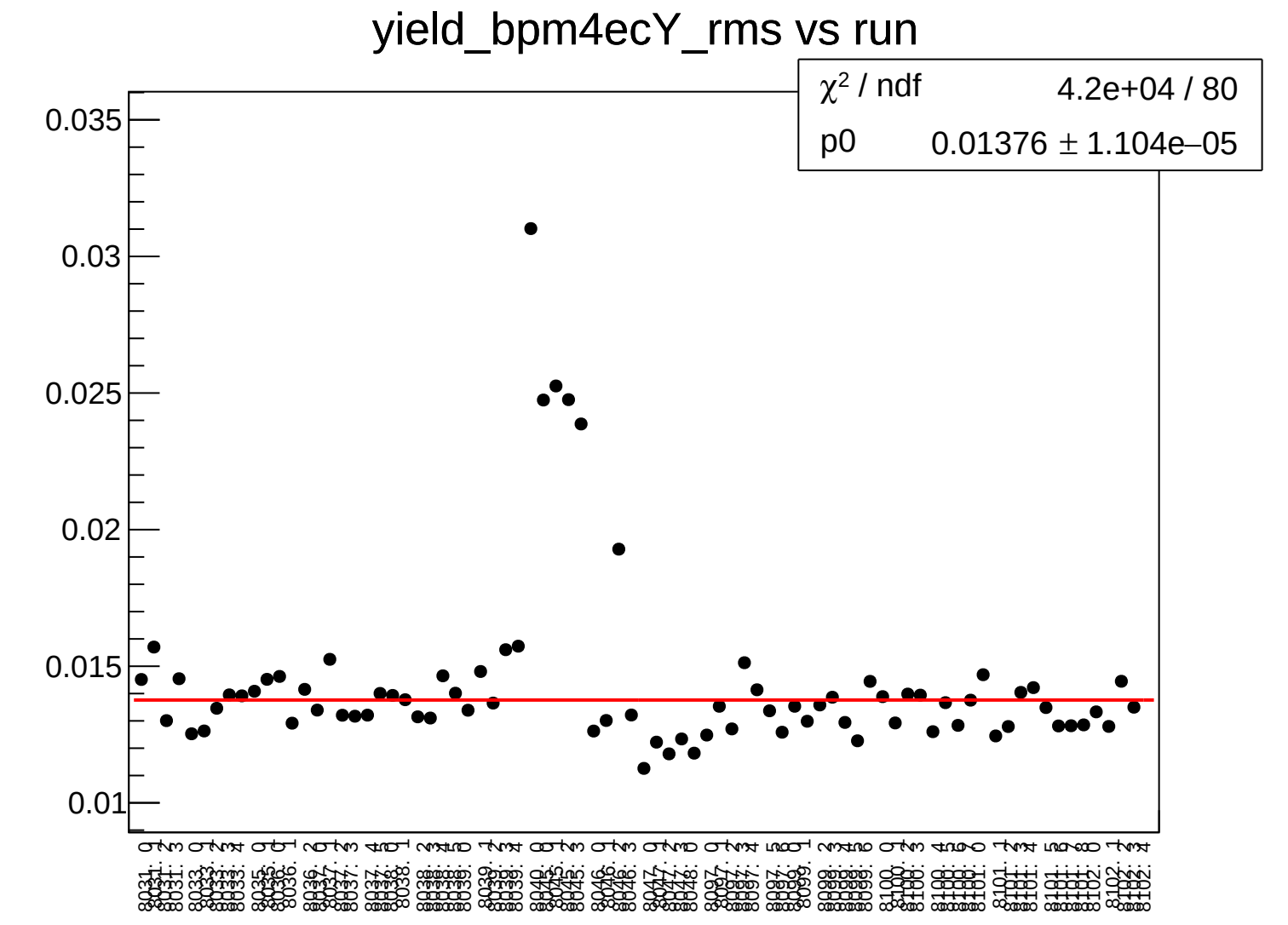

yield_bpm4ecX_mean vs run
χ² / ndf 5.348e+04 / 80
p0 −0.1775 ± 5.838e−05
−0.14
−0.16
−0.18
−0.2
−0.22
−0.24
pull
Entries 81
Mean 365.2
Std Dev 338.3
40
20
0
−20
−40
−60

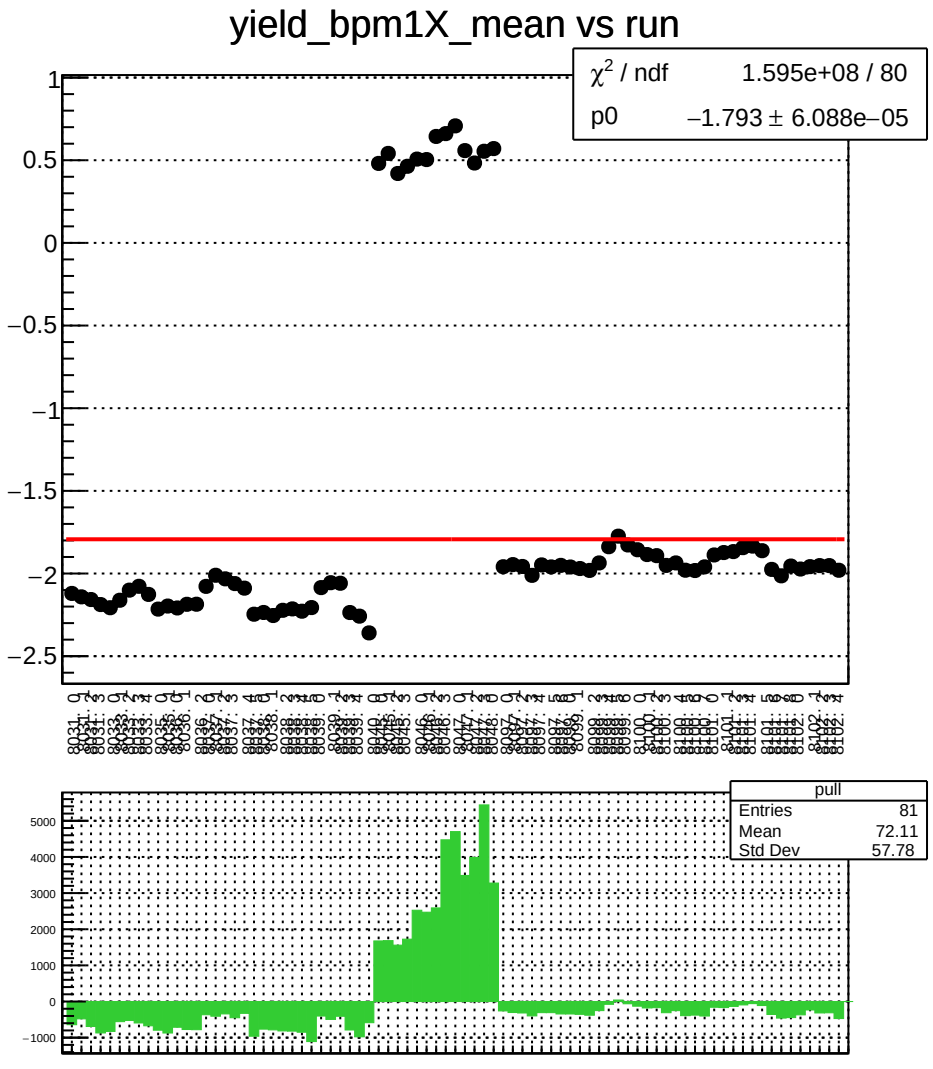

pull1D
Entries 81
Mean −0.2215
Std Dev 4.649
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

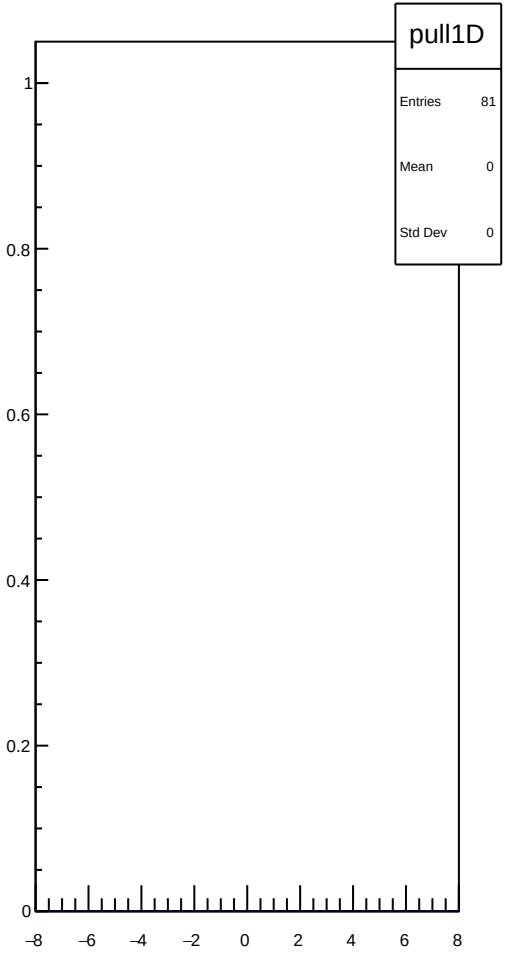

yield_bpm4ecX_rms vs run
χ² / ndf 3.732e+04 / 80
p0 0.05155 ± 4.128e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

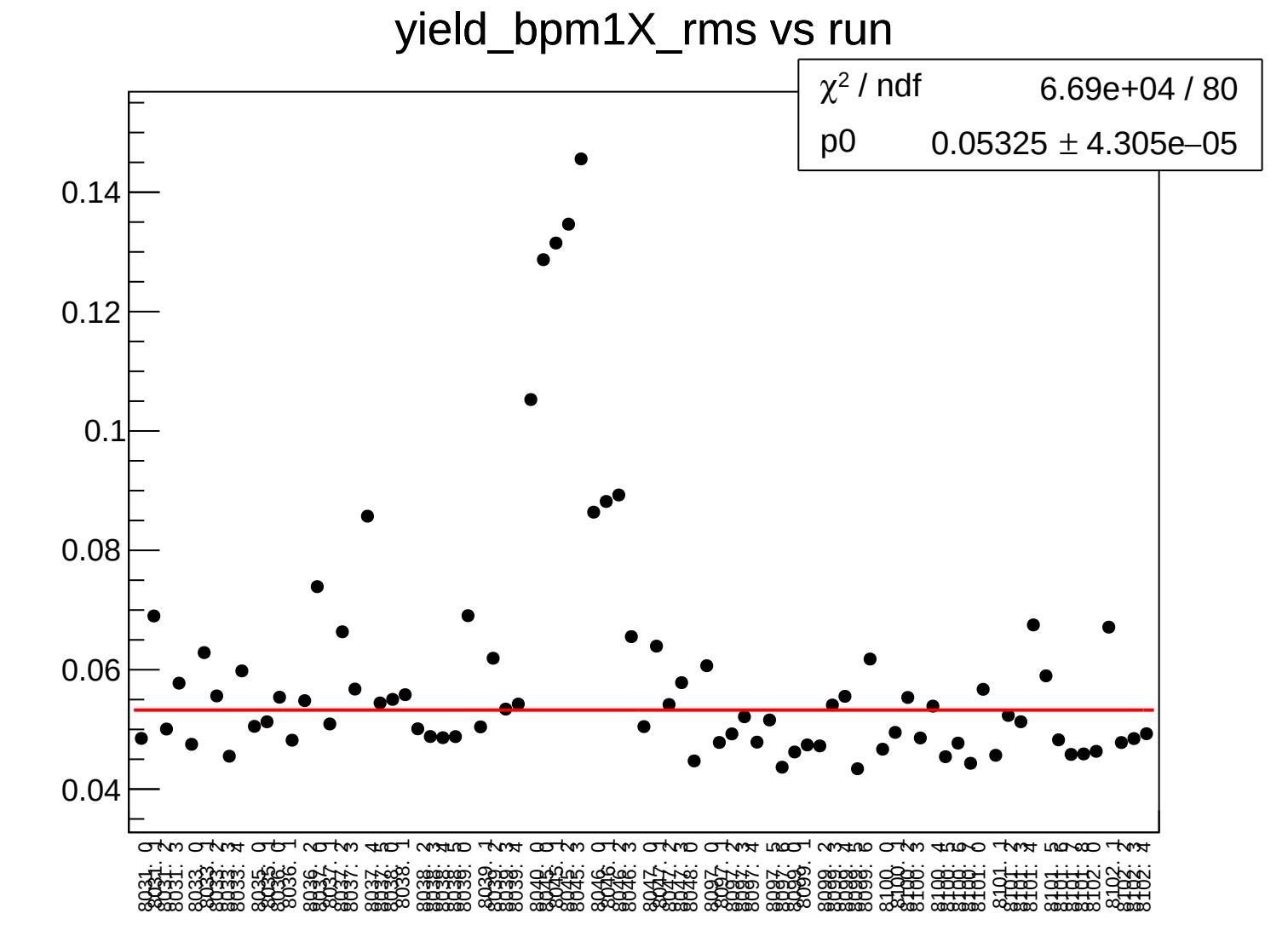

yield_bpm4ecY_mean vs run
χ² / ndf 7.202e+04 / 80
p0 −0.06747 ± 1.561e−05
−0.055
−0.06
−0.065
−0.07
−0.075
pull
Entries 81
Mean 259.9
Std Dev 30.91
80
60
40
20
0
−20
−40
−60

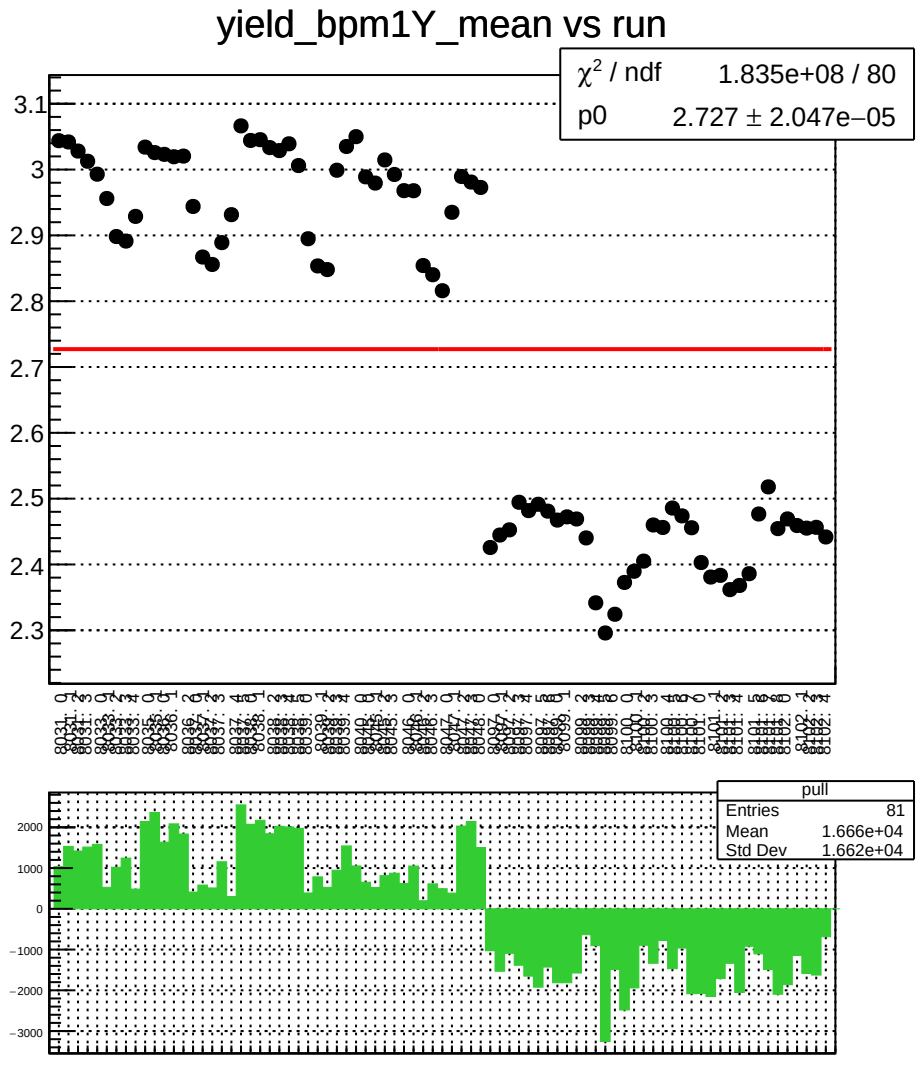

pull1D
Entries 81
Mean 0.554
Std Dev 3.889
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

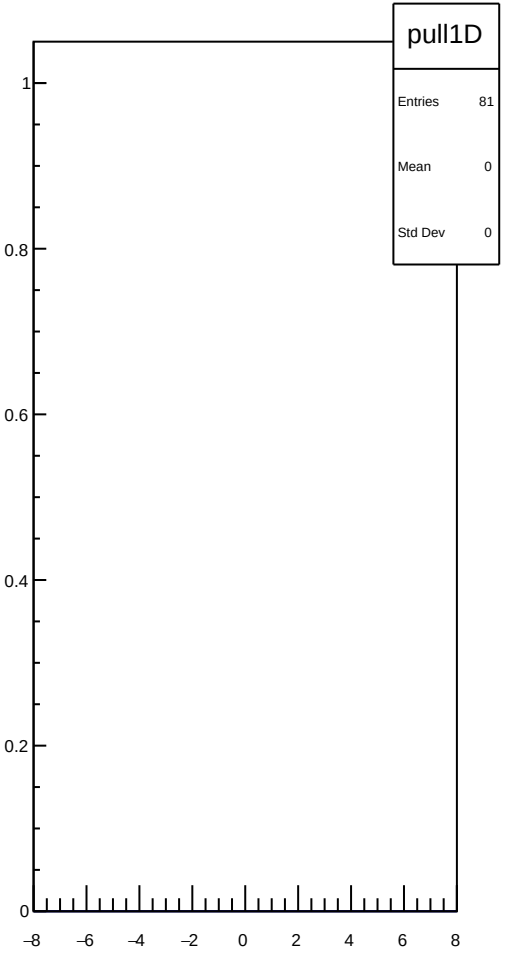

yield_bpm4ecY_rms vs run
χ² / ndf 4.2e+04 / 80
p0 0.01376 ± 1.104e−05
0.035
0.03
0.025
0.02
0.015
0.01

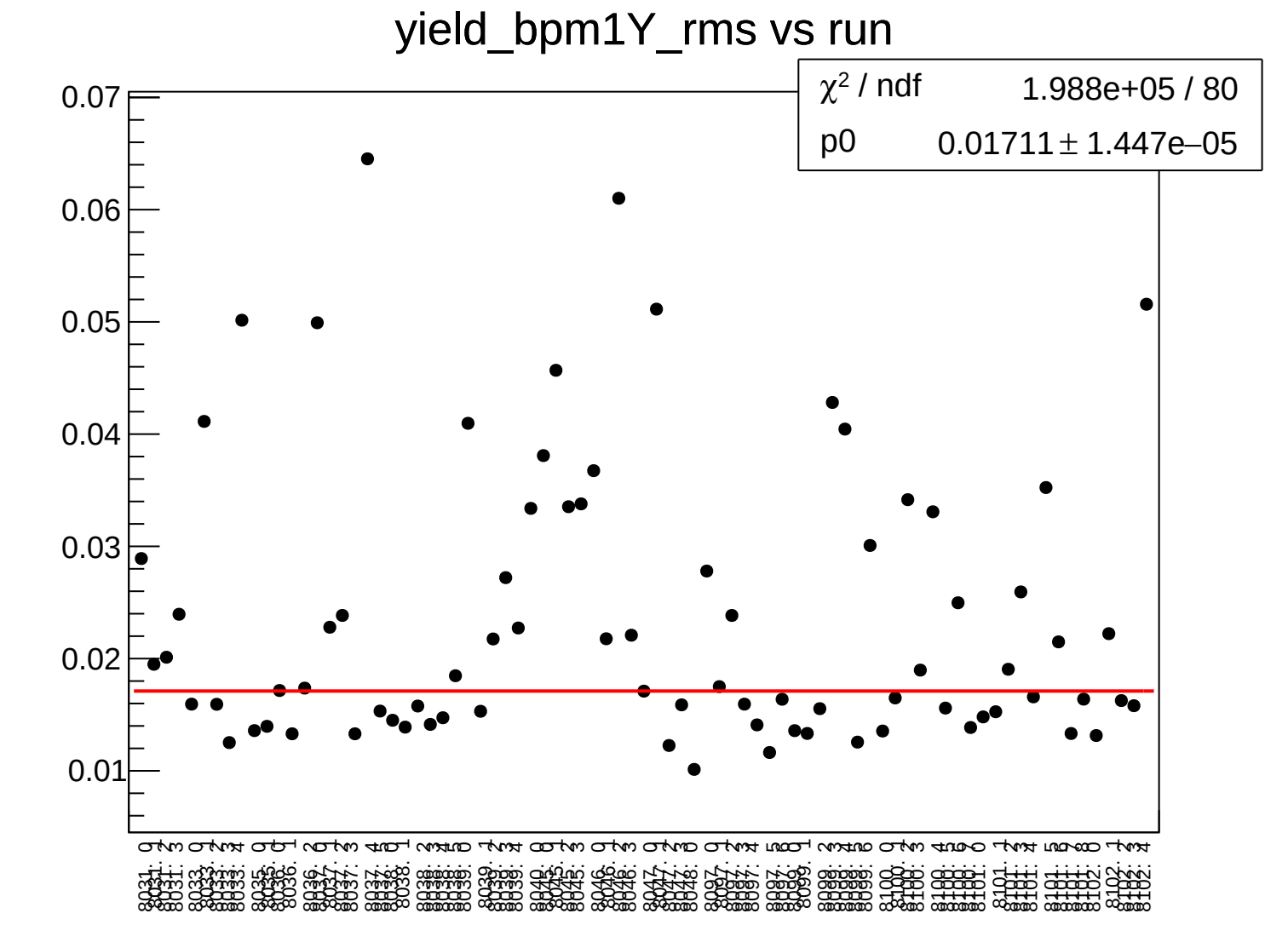

yield_bpm1X_mean vs run
χ² / ndf 1.595e+08 / 80
p0 −1.793 ± 6.088e−05
pull
Entries 81
Mean 72.11
Std Dev 57.78

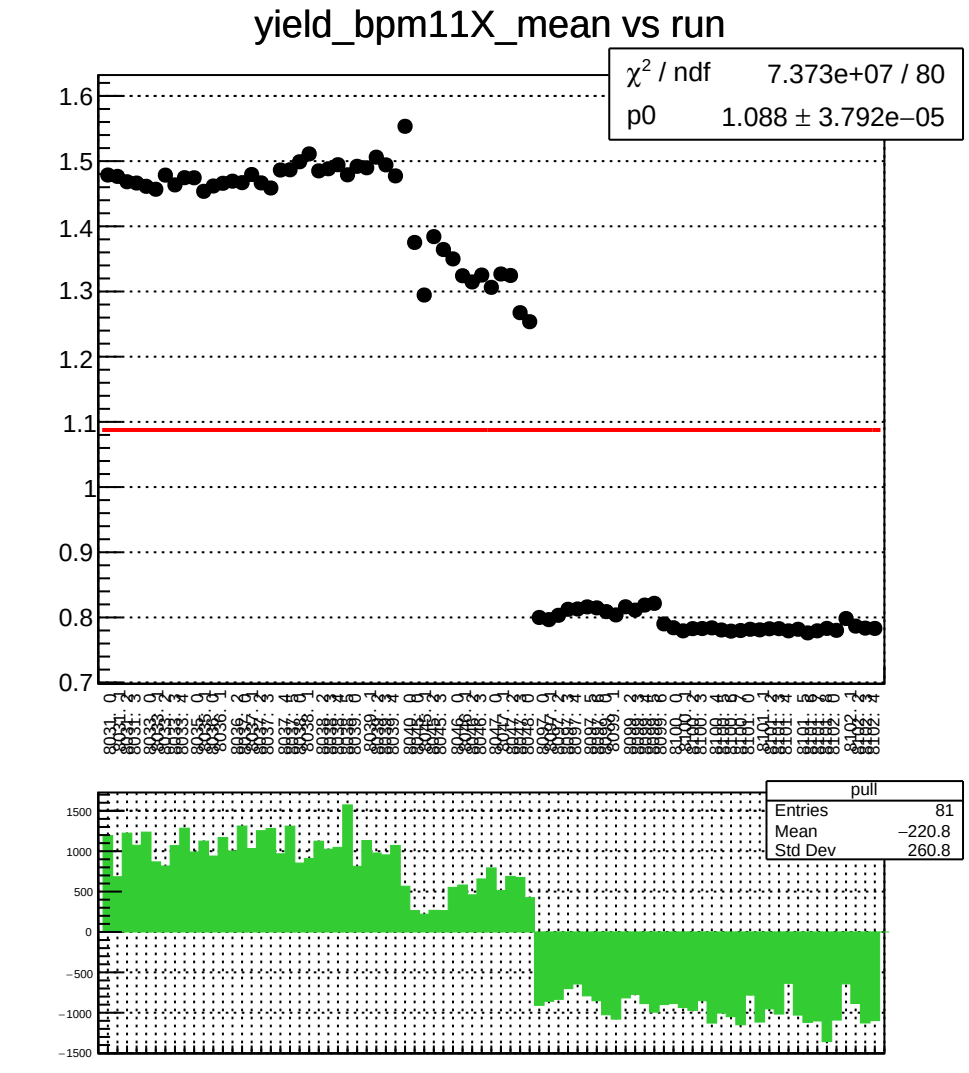

pull1D
Entries 81
Mean 0
Std Dev 0

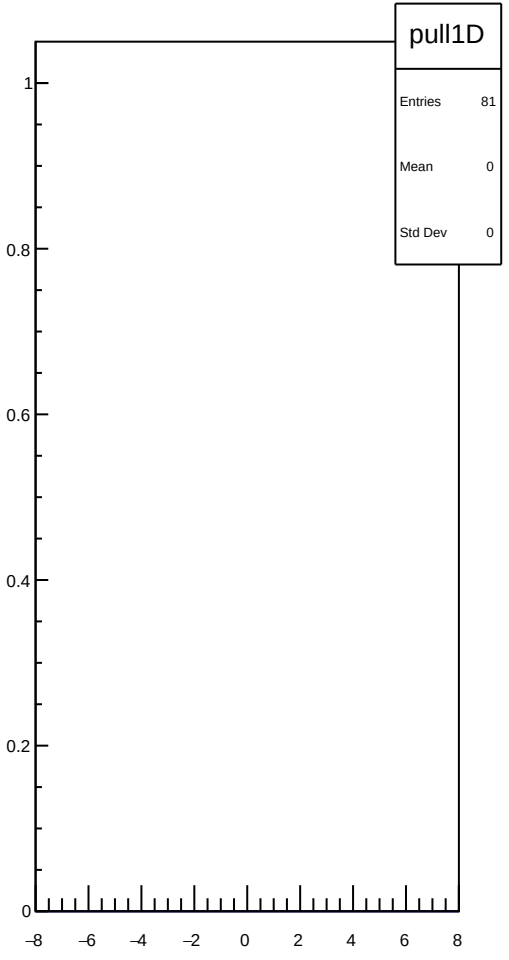

yield_bpm1X_rms vs run
χ² / ndf 6.69e+04 / 80
p0 0.05325 ± 4.305e−05
0.14
0.12
0.1
0.08
0.06
0.04

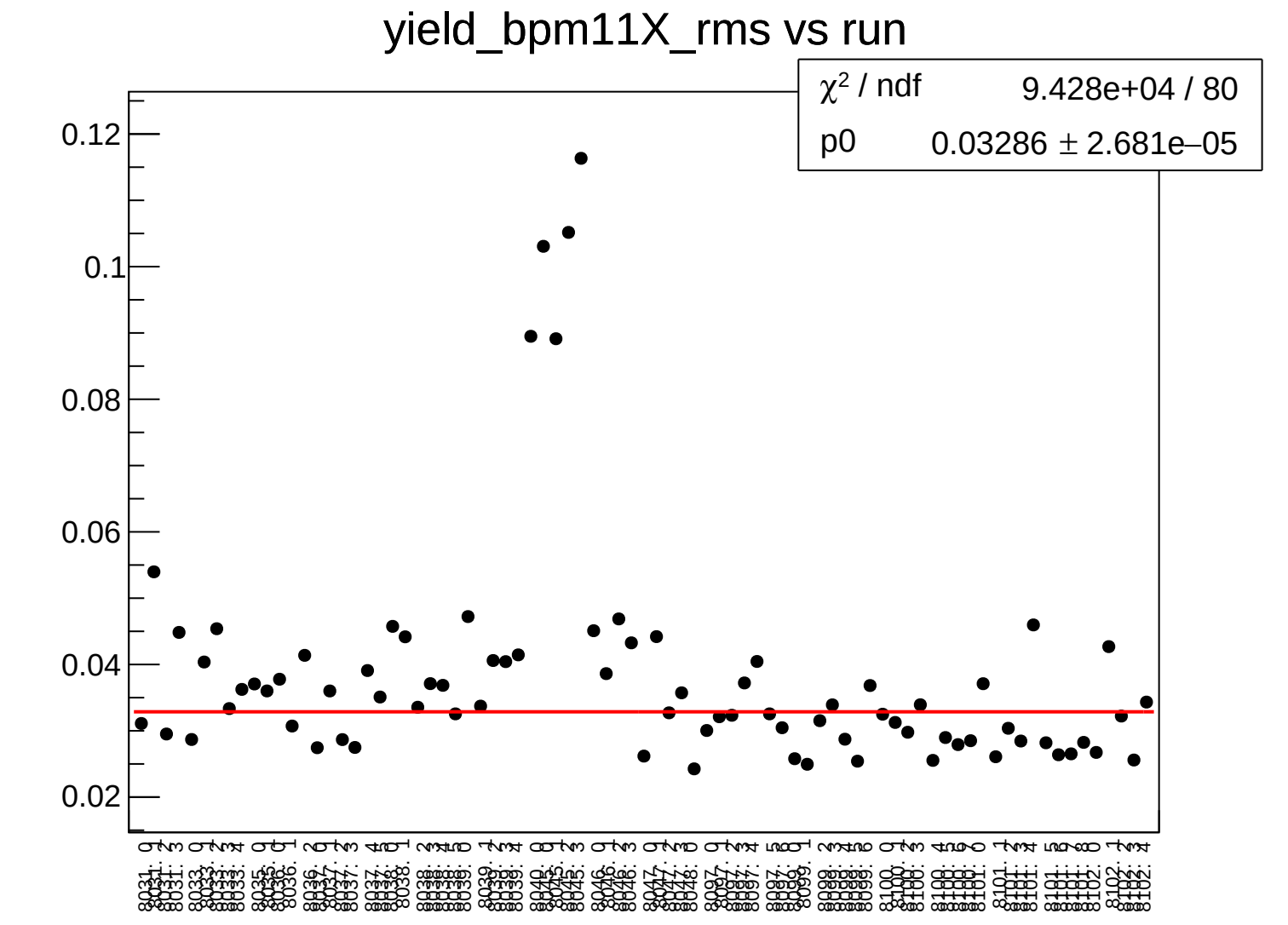

yield_bpm1Y_mean vs run
χ² / ndf 1.835e+08 / 80
p0 2.727 ± 2.047e−05
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
pull
Entries 81
Mean 1.666e+04
Std Dev 1.662e+04
2000
1000
0
−1000
−2000
−3000

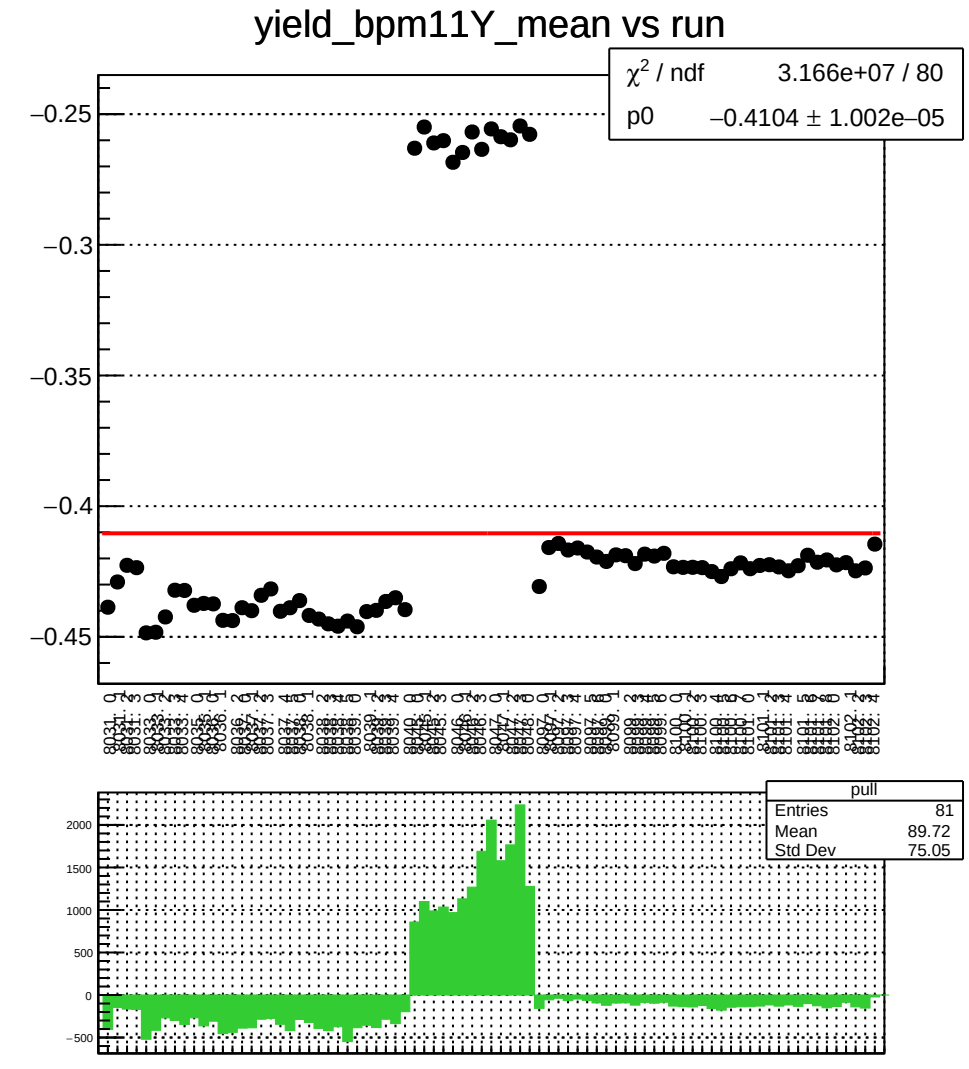

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

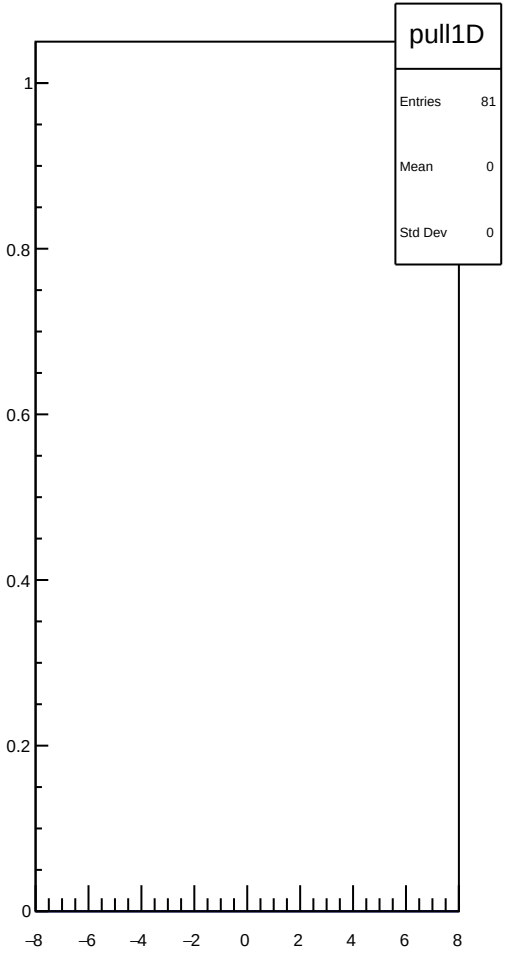

yield_bpm1Y_rms vs run
χ² / ndf 1.988e+05 / 80
p0 0.01711 ± 1.447e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

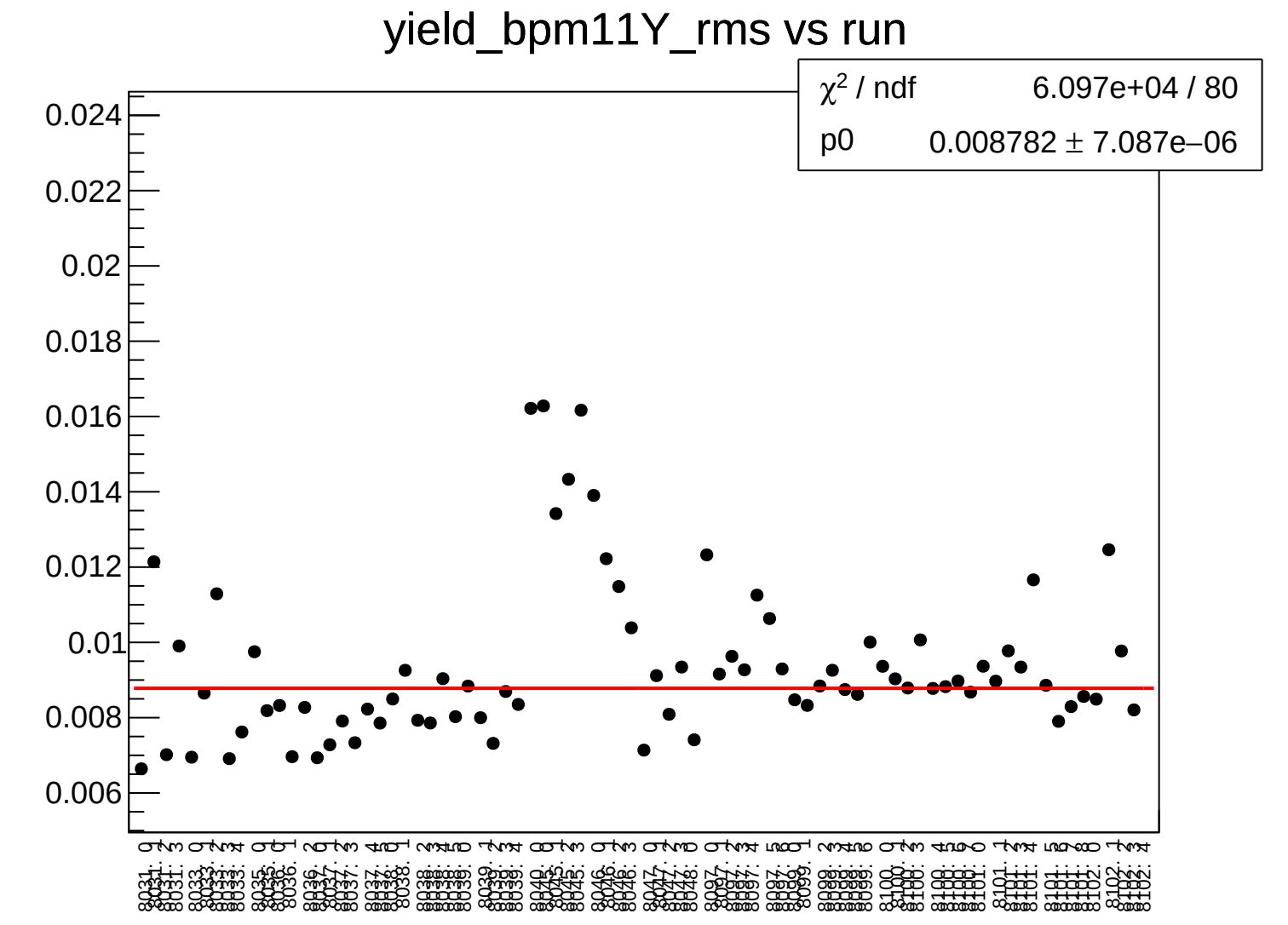

yield_bpm11X_mean vs run
χ² / ndf 7.373e+07 / 80
p0 1.088 ± 3.792e−05
pull
Entries 81
Mean −220.8
Std Dev 260.8

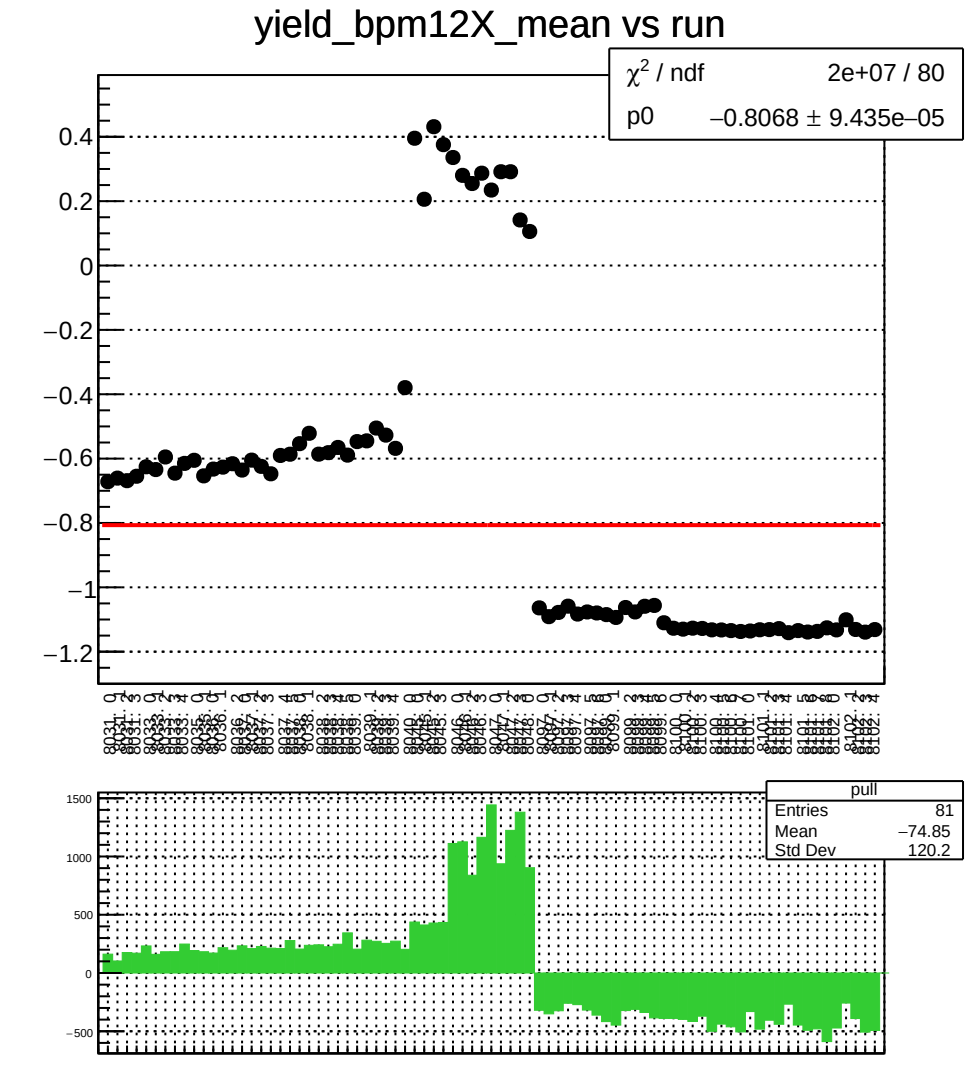

pull1D
Entries 81
Mean 0
Std Dev 0

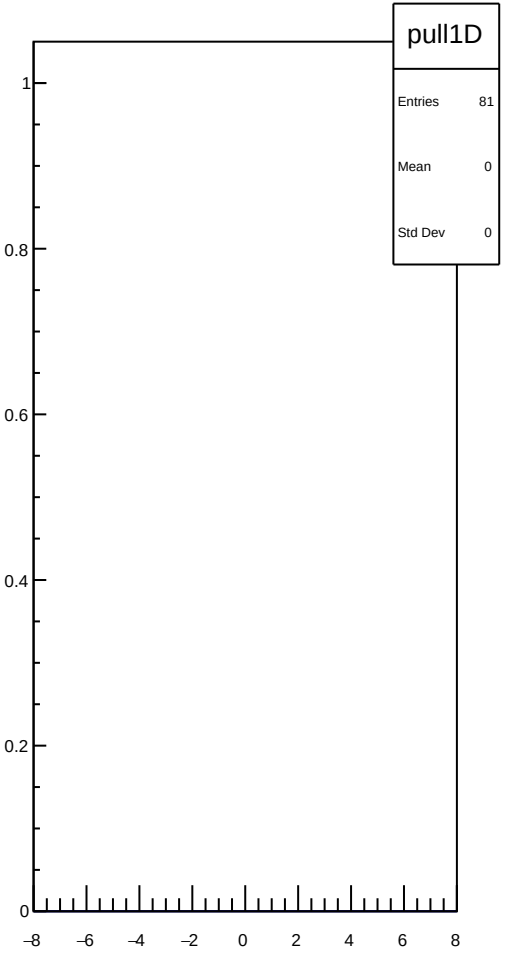

yield_bpm11X_rms vs run
χ² / ndf 9.428e+04 / 80
p0 0.03286 ± 2.681e–05
0.12
0.1
0.08
0.06
0.04
0.02

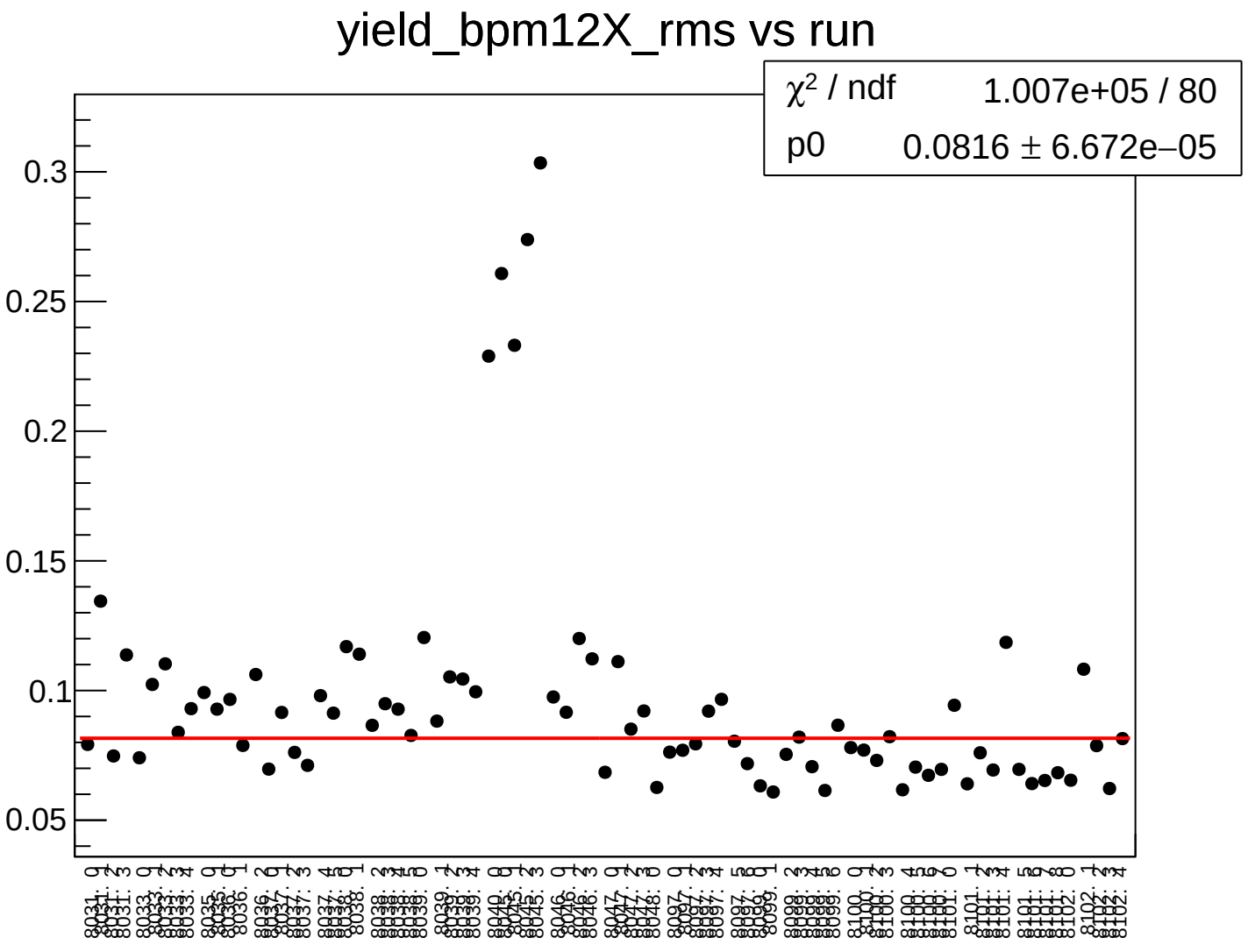

yield_bpm11Y_mean vs run
χ² / ndf 3.166e+07 / 80
p0 −0.4104 ± 1.002e−05
−0.25
−0.3
−0.35
−0.4
−0.45
pull
Entries 81
Mean 89.72
Std Dev 75.05
2000
1500
1000
500
0
−500

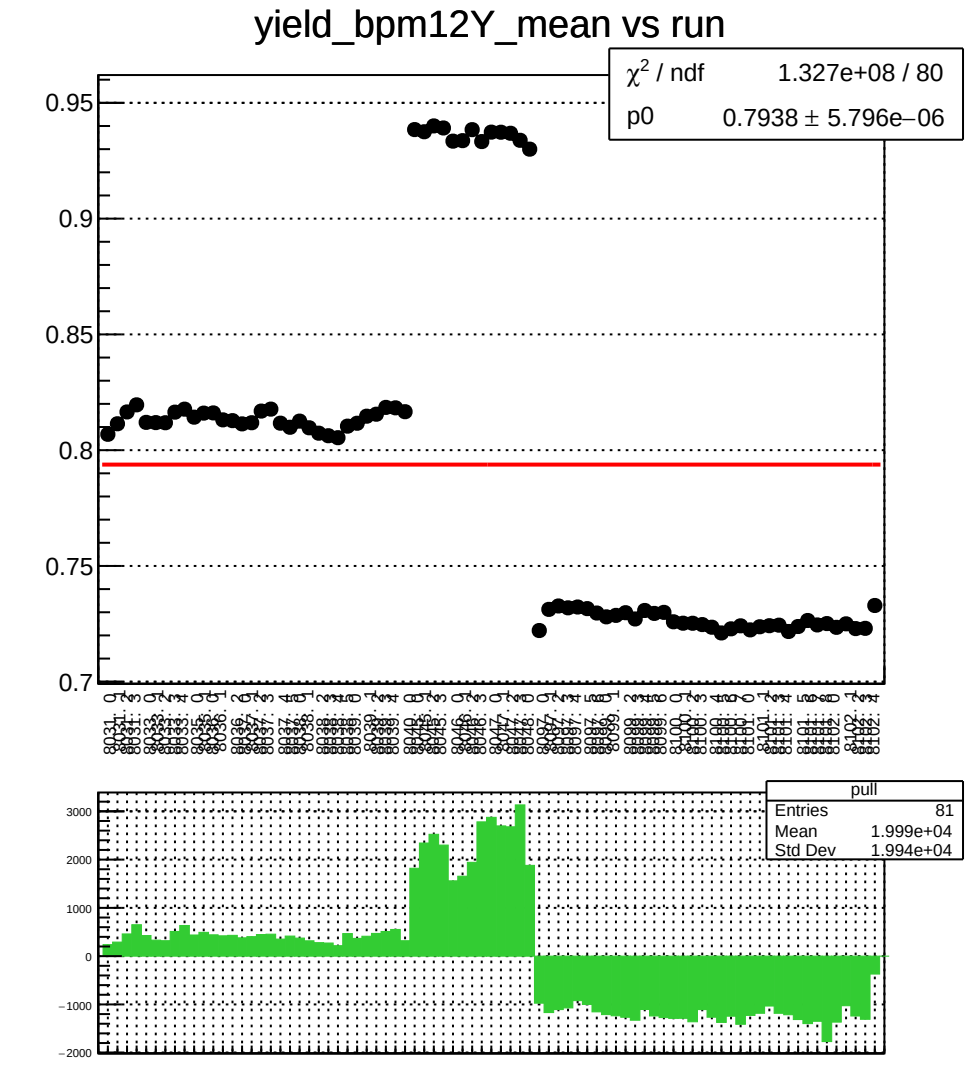

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

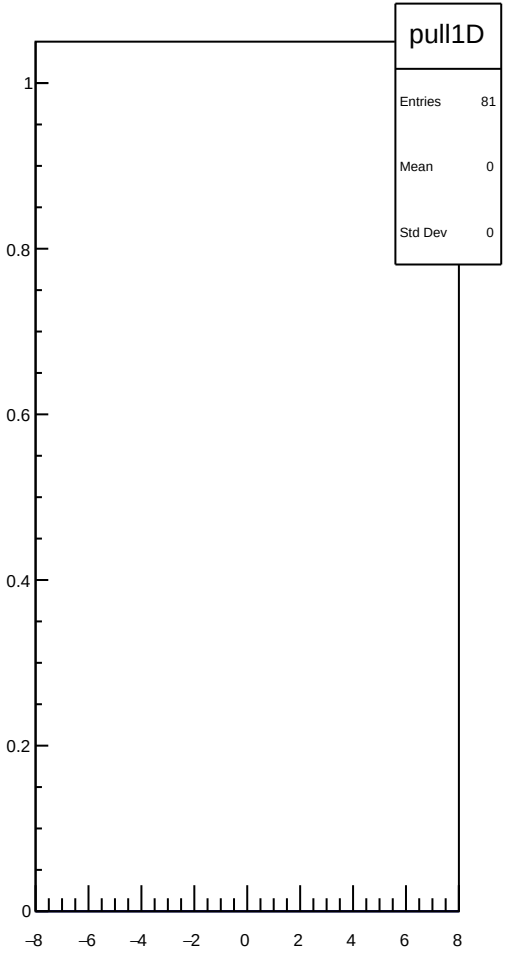

yield_bpm11Y_rms vs run
χ² / ndf 6.097e+04 / 80
p0 0.008782 ± 7.087e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

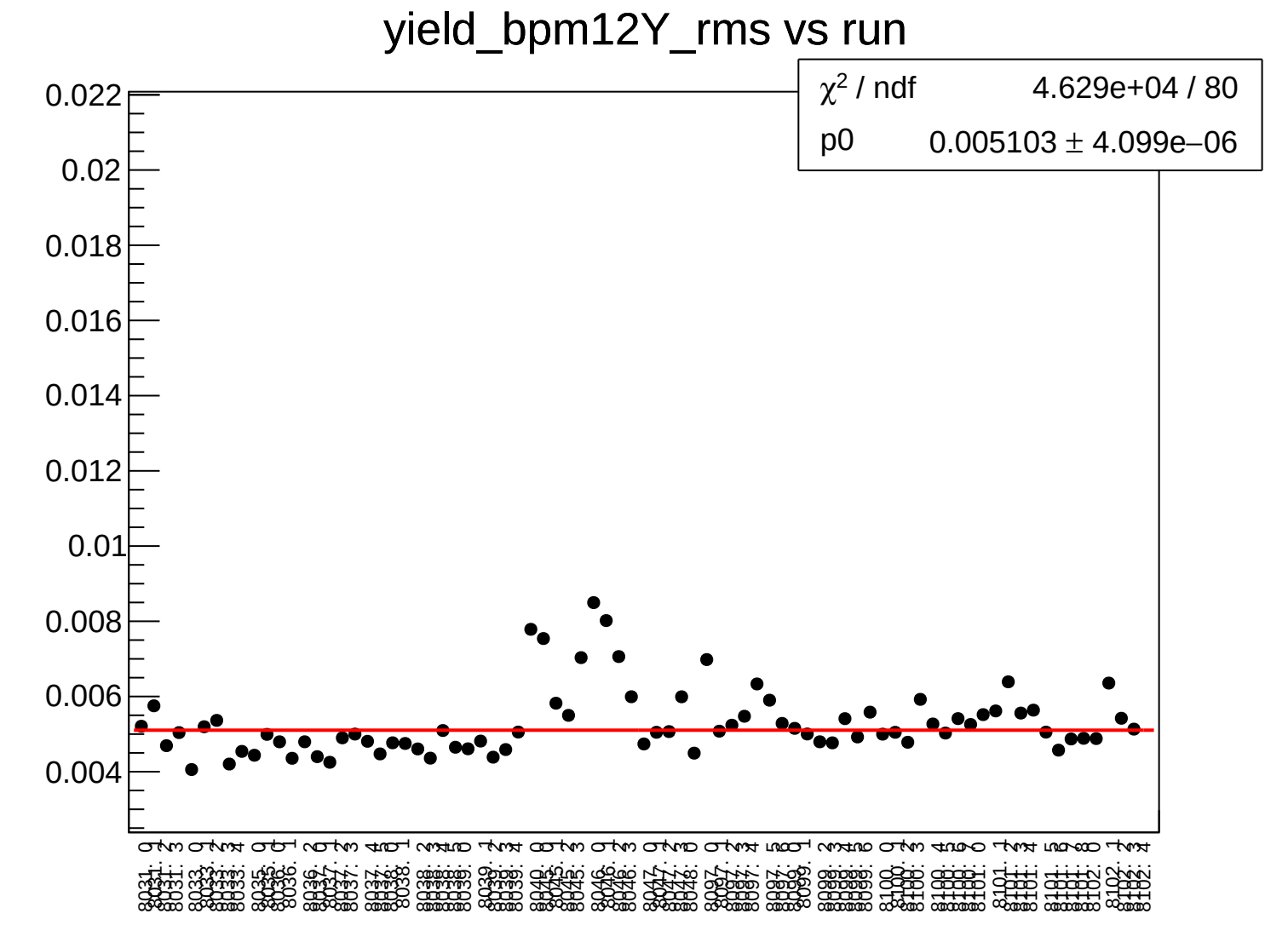

yield_bpm12X_mean vs run
χ² / ndf 2e+07 / 80
p0 −0.8068 ± 9.435e−05
pull
Entries 81
Mean −74.85
Std Dev 120.2

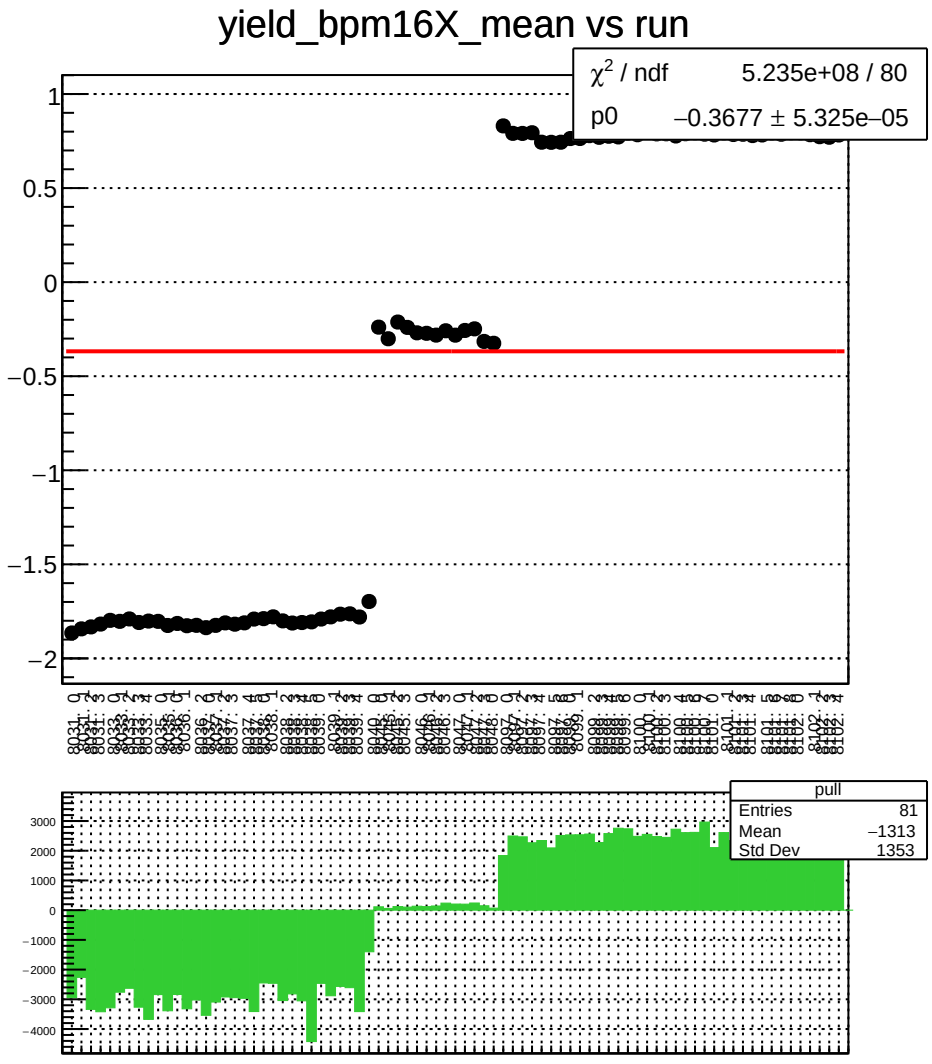

pull1D
Entries 81
Mean 0
Std Dev 0

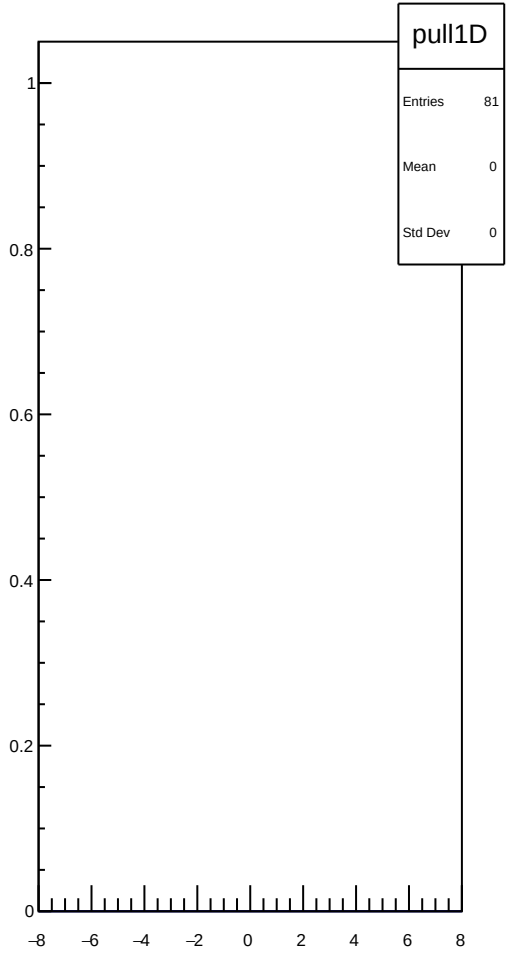

yield_bpm12X_rms vs run
χ² / ndf 1.007e+05 / 80
p0 0.0816 ± 6.672e−05
0.3
0.25
0.2
0.15
0.1
0.05

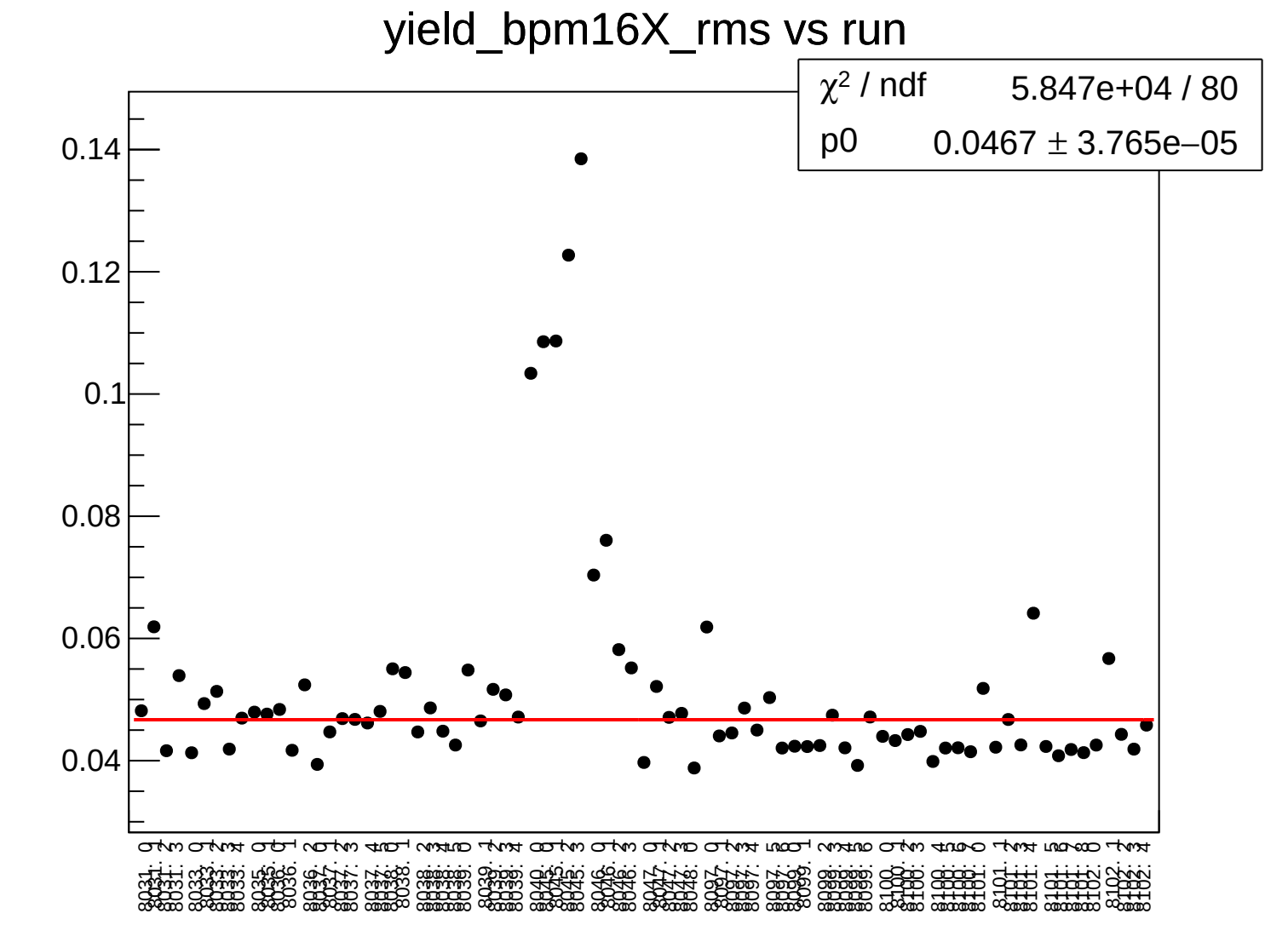

yield_bpm12Y_mean vs run
χ² / ndf 1.327e+08 / 80
p0 0.7938 ± 5.796e−06
0.95
0.9
0.85
0.8
0.75
0.7
pull
Entries 81
Mean 1.999e+04
Std Dev 1.994e+04
3000
2000
1000
0
−1000
−2000

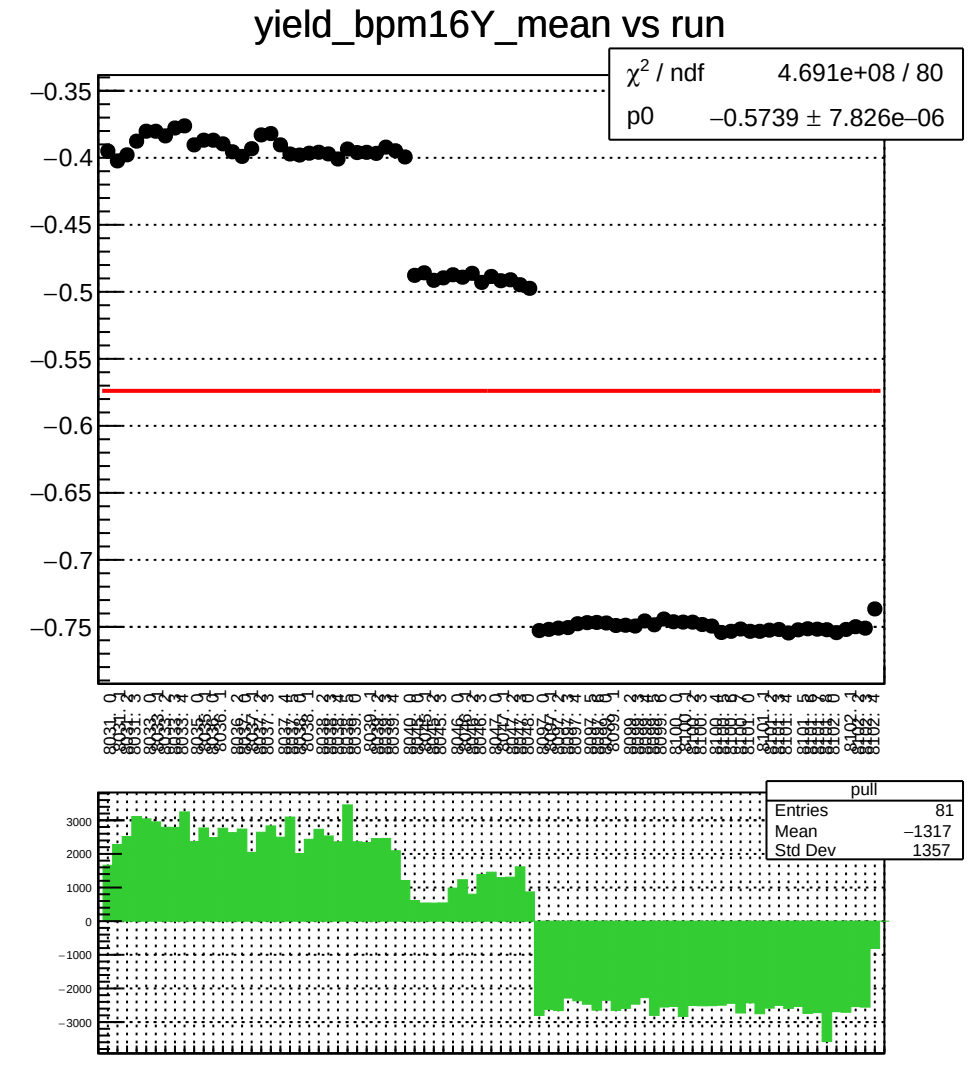

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

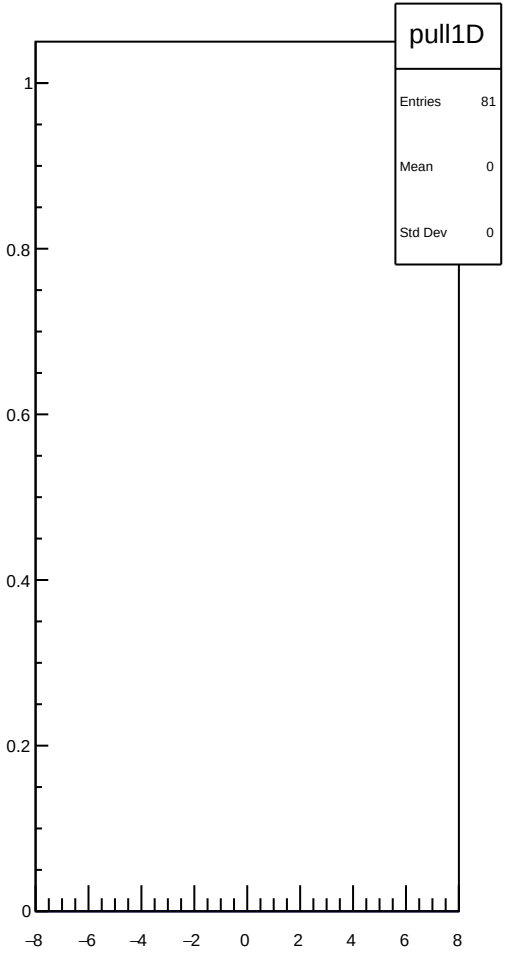

yield_bpm12Y_rms vs run
χ² / ndf 4.629e+04 / 80
p0 0.005103 ± 4.099e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

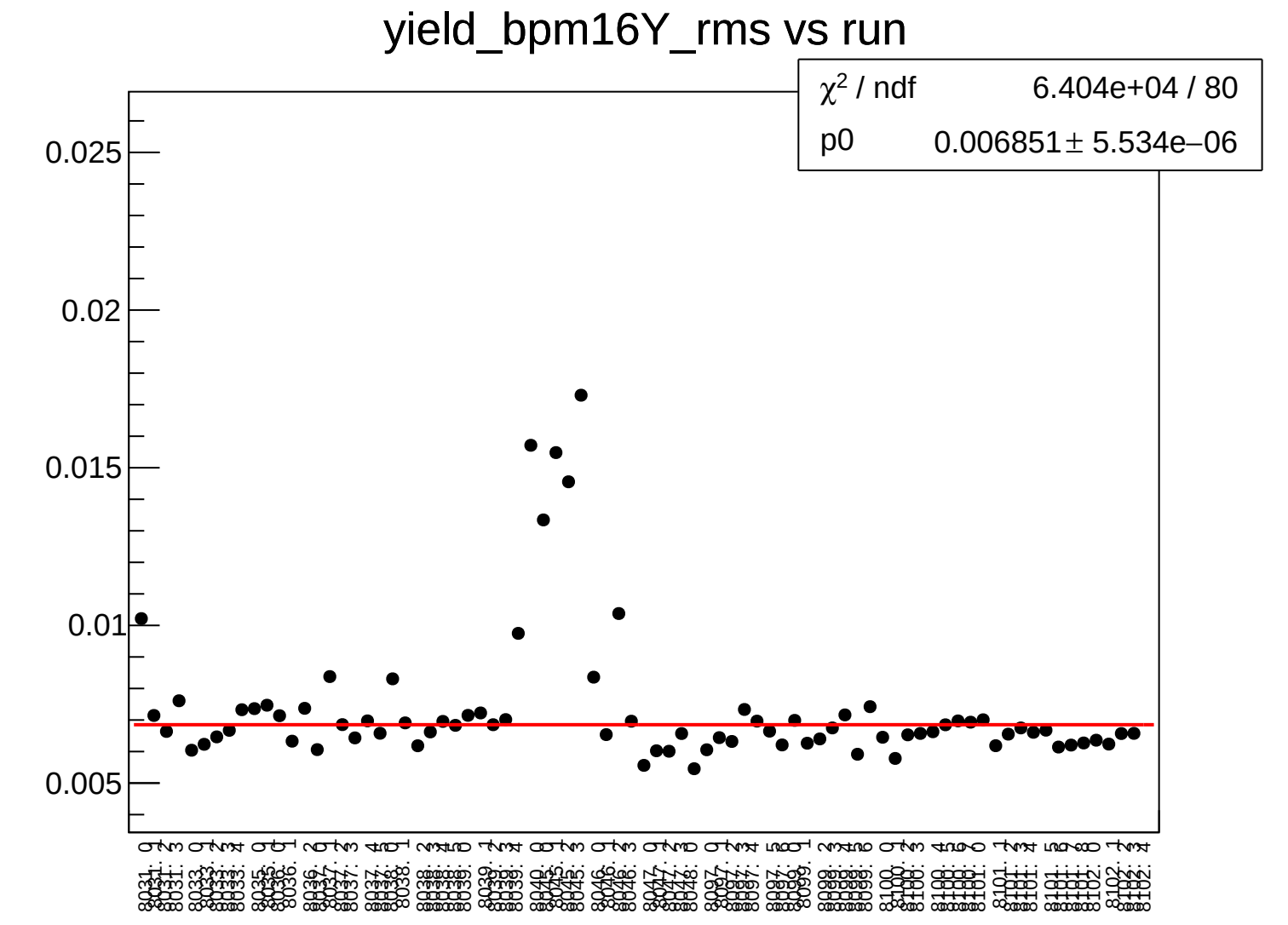

yield_bpm16X_mean vs run
χ² / ndf 5.235e+08 / 80
p0 −0.3677 ± 5.325e−05
pull
Entries 81
Mean −1313
Std Dev 1353

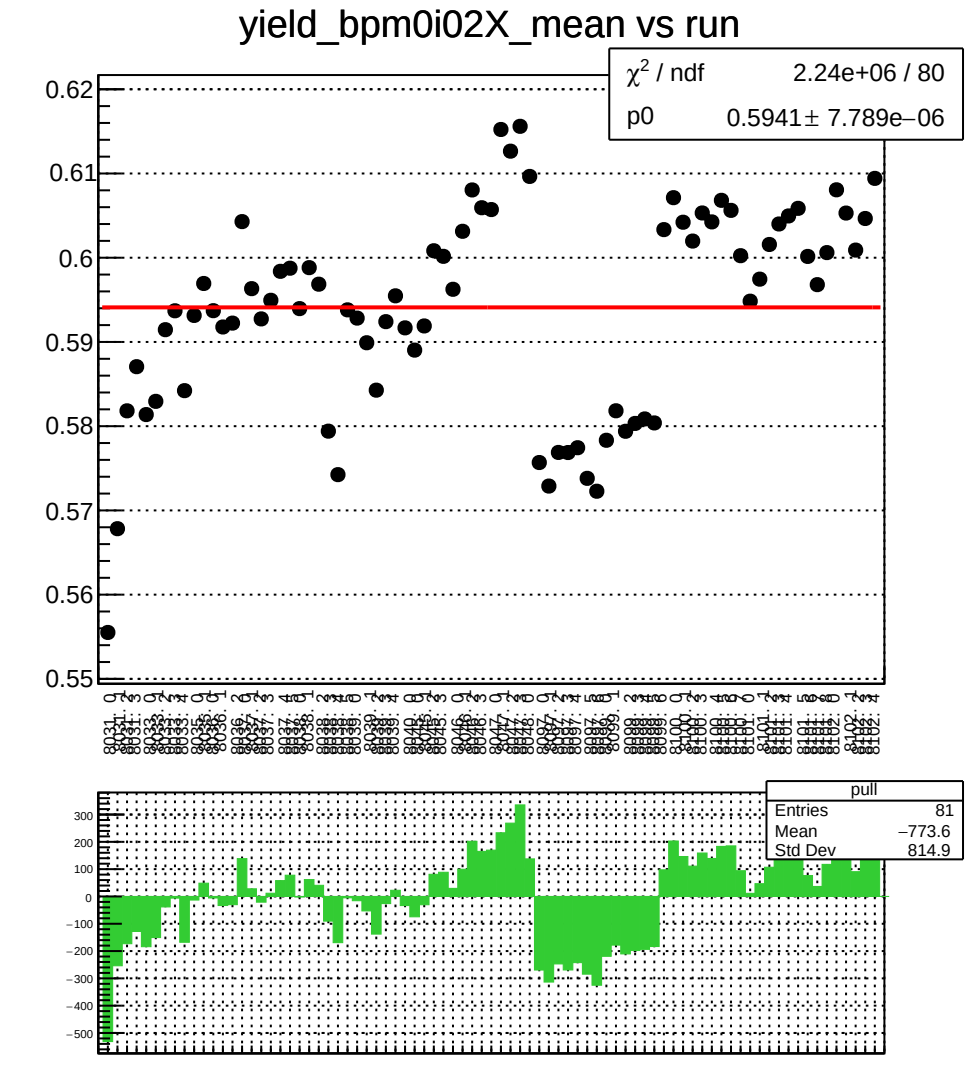

pull1D
Entries 81
Mean 0
Std Dev 0

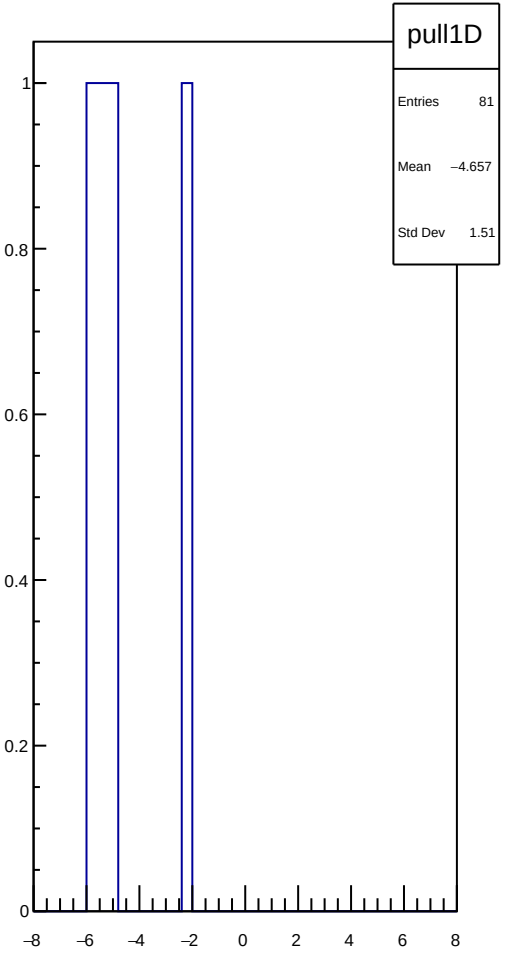

yield_bpm16X_rms vs run
χ² / ndf 5.847e+04 / 80
p0 0.0467 ± 3.765e−05
0.14
0.12
0.1
0.08
0.06
0.04

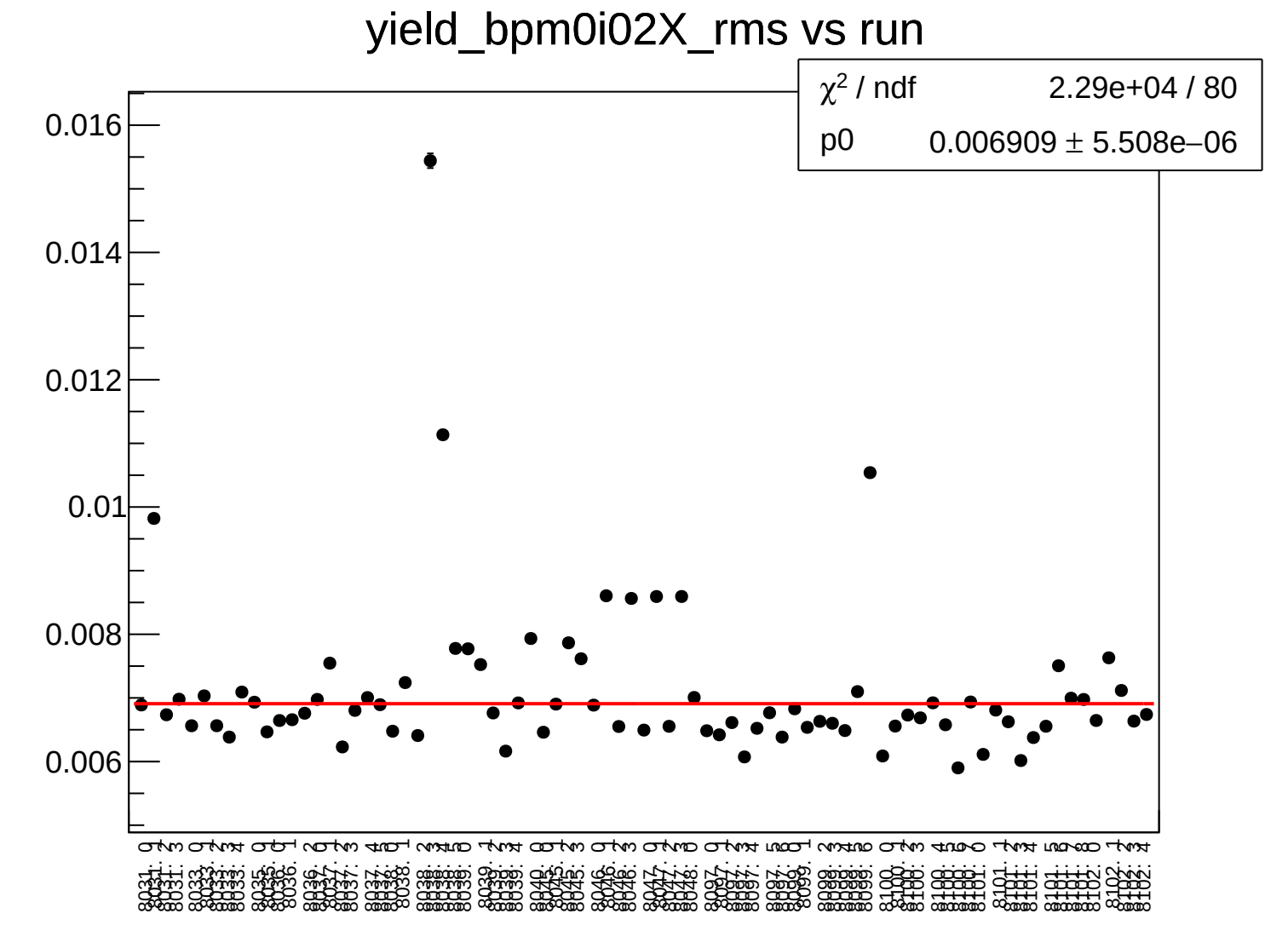

yield_bpm16Y_mean vs run
χ² / ndf 4.691e+08 / 80
p0 −0.5739 ± 7.826e−06
−0.35
−0.4
−0.45
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 81
Mean −1317
Std Dev 1357
3000
2000
1000
0
−1000
−2000
−3000

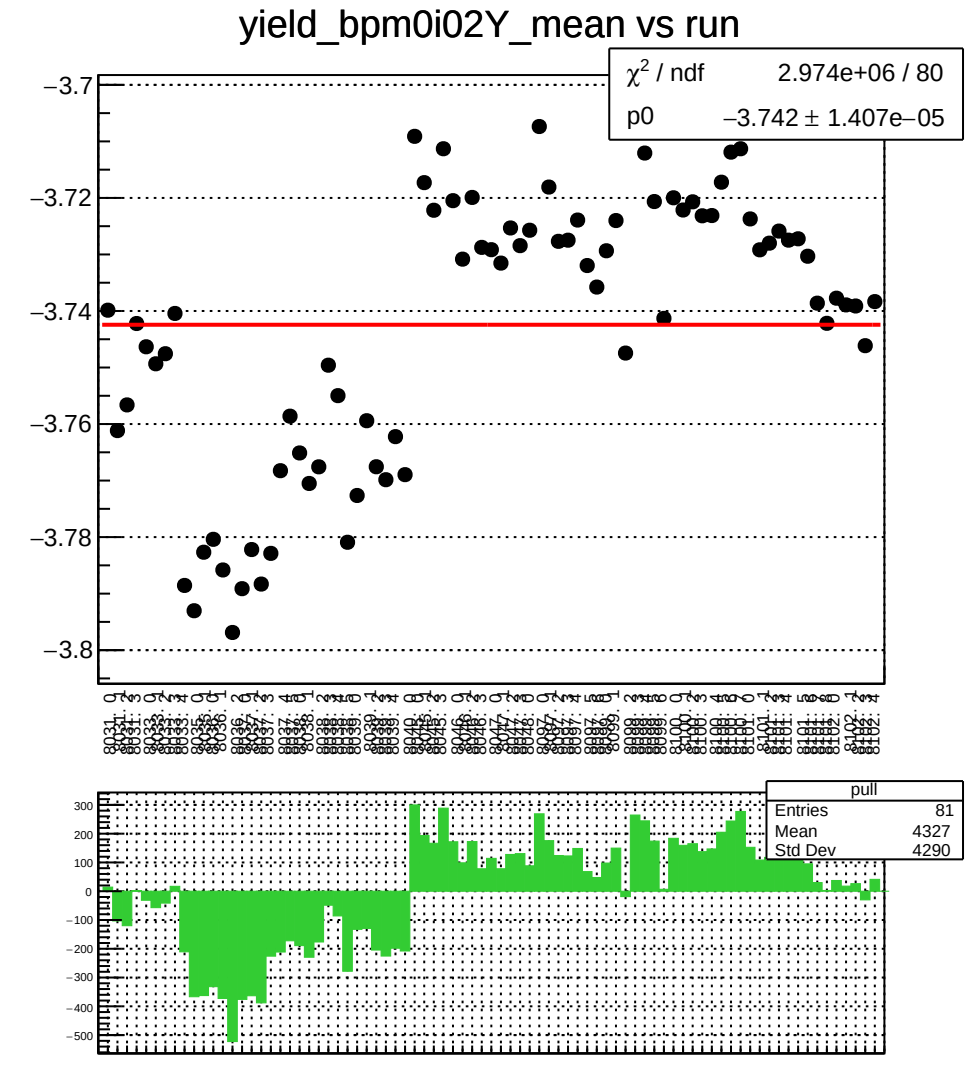

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

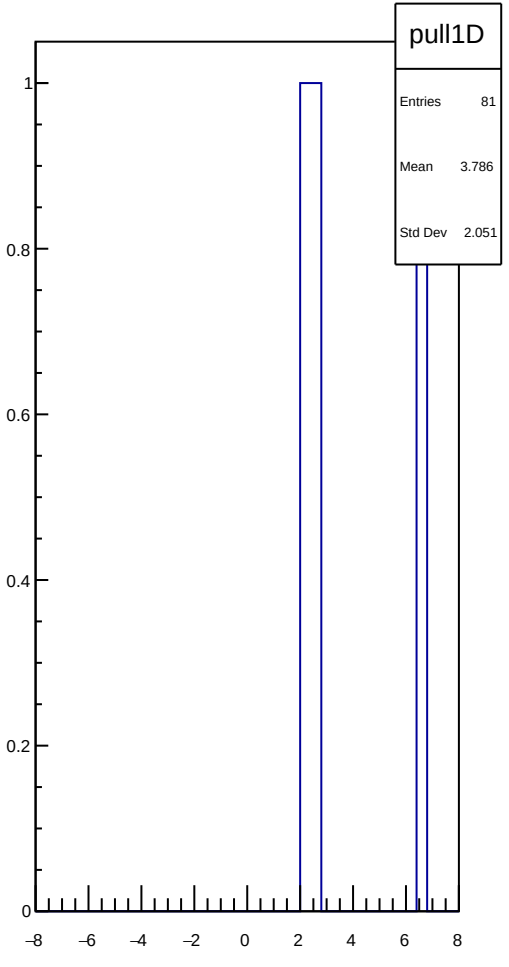

yield_bpm16Y_rms vs run
χ² / ndf 6.404e+04 / 80
p0 0.006851 ± 5.534e−06
0.025
0.02
0.015
0.01
0.005

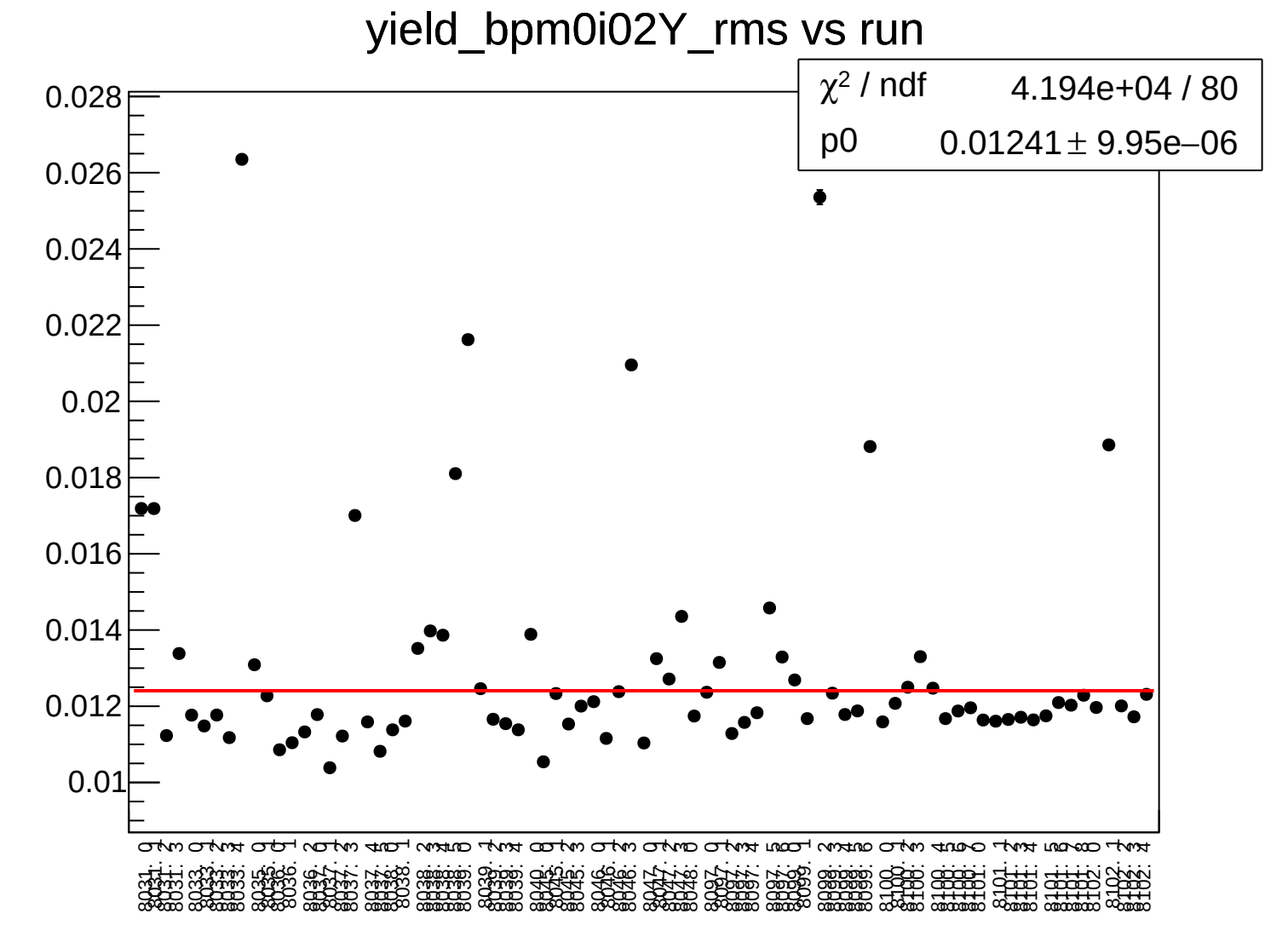

yield_bpm0i02X_mean vs run
χ² / ndf 2.24e+06 / 80
p0 0.5941 ± 7.789e−06
0.62
0.61
0.6
0.59
0.58
0.57
0.56
0.55
pull
Entries 81
Mean −773.6
Std Dev 814.9
300
200
100
0
−100
−200
−300
−400
−500

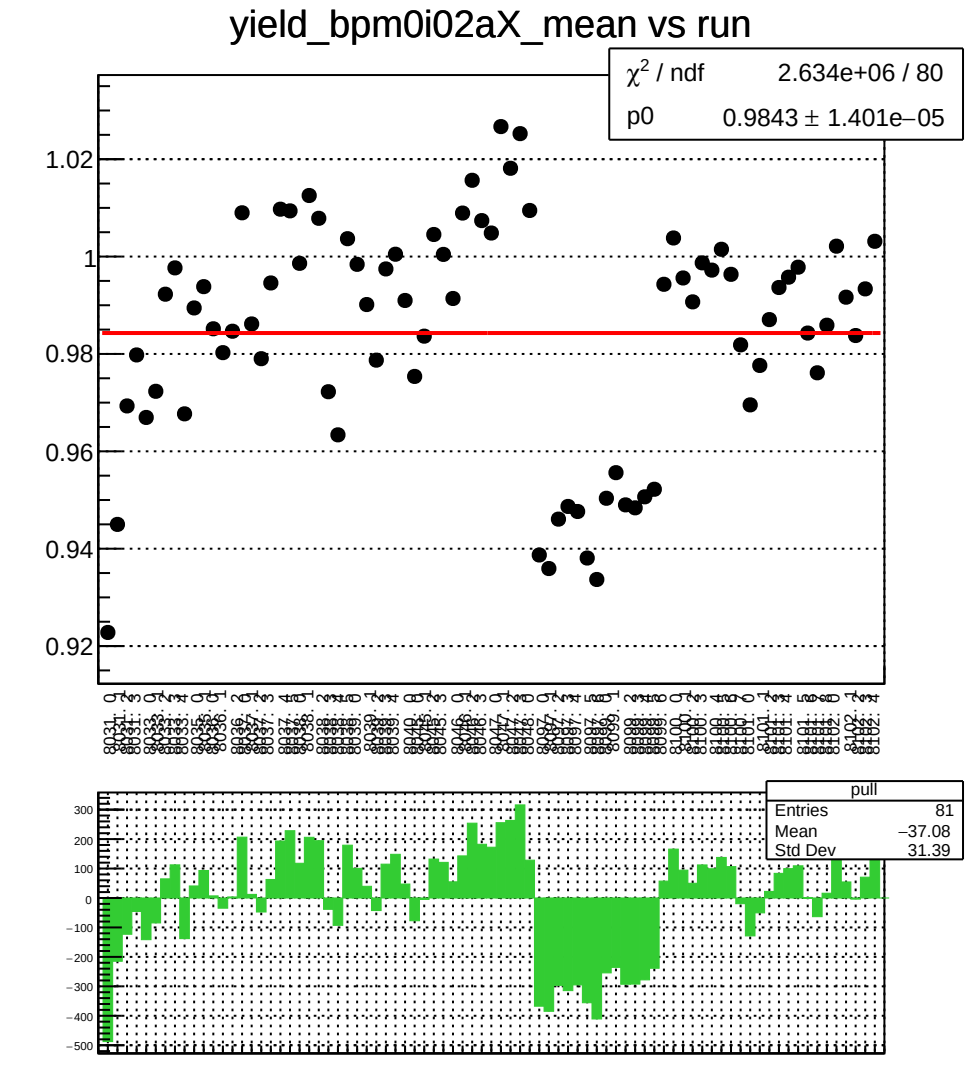

pull1D
Entries 81
Mean −4.657
Std Dev 1.51
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

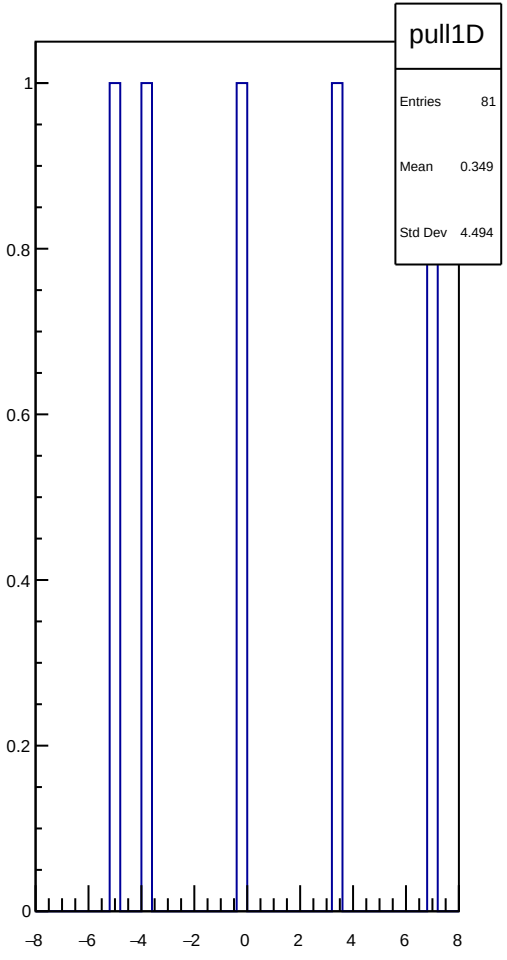

yield_bpm0i02X_rms vs run
χ² / ndf 2.29e+04 / 80
p0 0.006909 ± 5.508e−06
0.016
0.014
0.012
0.01
0.008
0.006

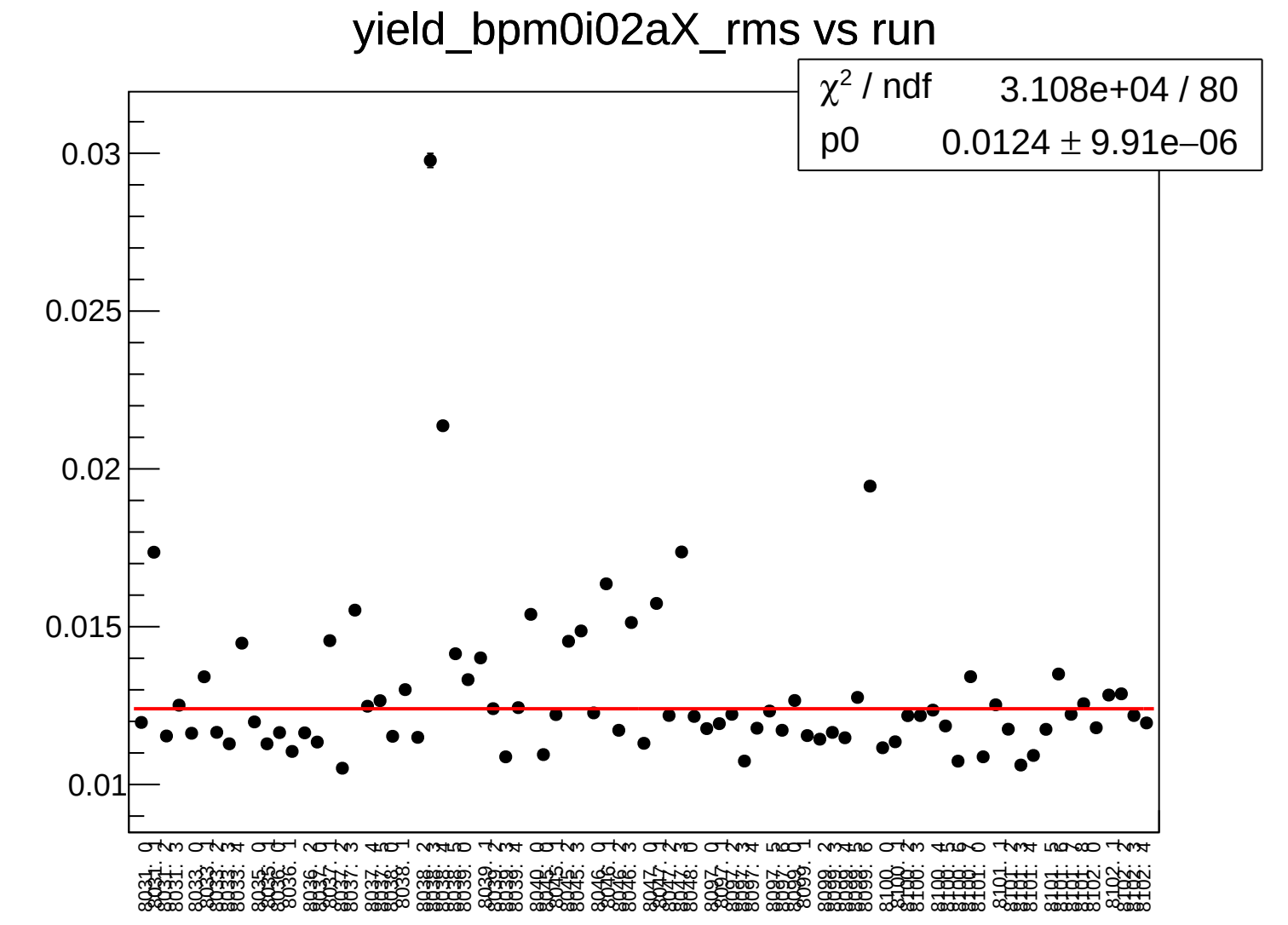

yield_bpm0i02Y_mean vs run
χ² / ndf 2.974e+06 / 80
p0 −3.742 ± 1.407e−05
−3.7
−3.72
−3.74
−3.76
−3.78
−3.8
pull
Entries 81
Mean 4327
Std Dev 4290
300
200
100
0
−100
−200
−300
−400
−500

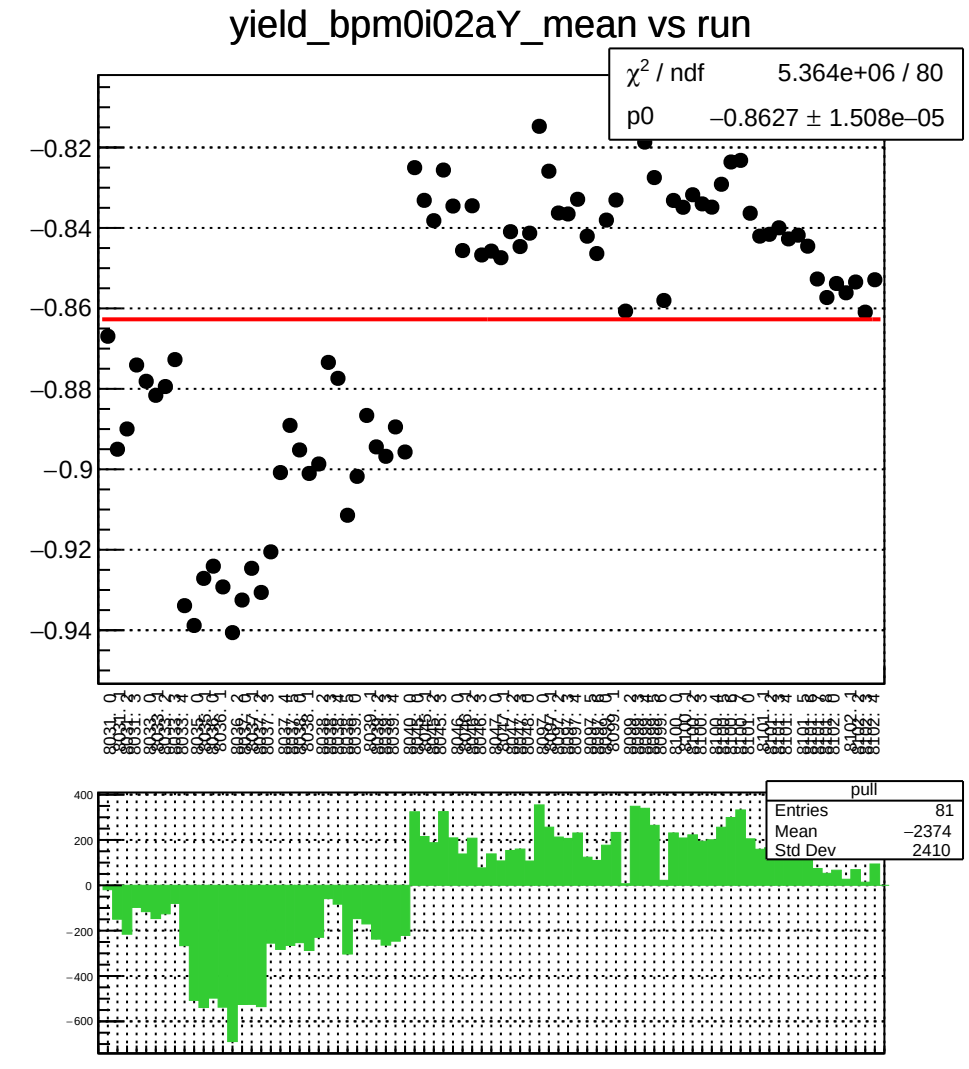

pull1D
Entries 81
Mean 3.786
Std Dev 2.051
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

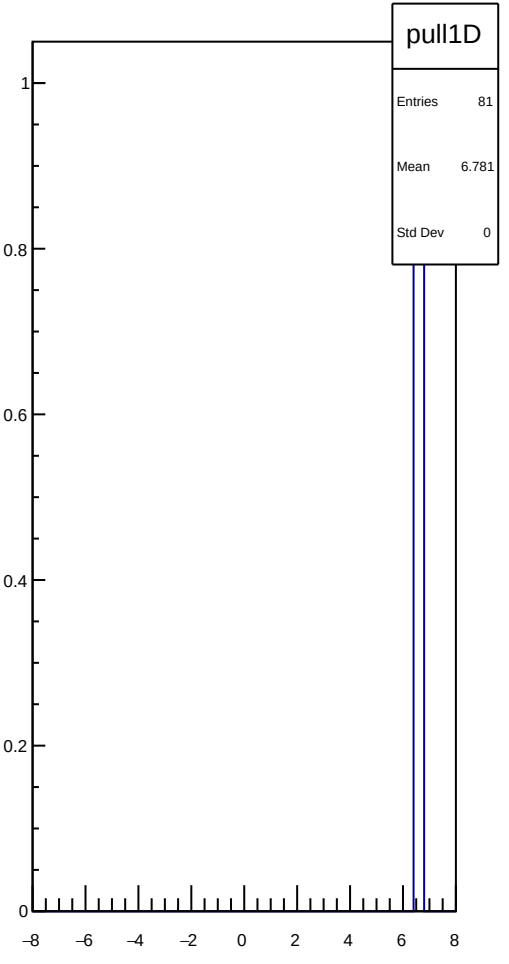

yield_bpm0i02Y_rms vs run
χ² / ndf 4.194e+04 / 80
p0 0.01241 ± 9.95e−06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

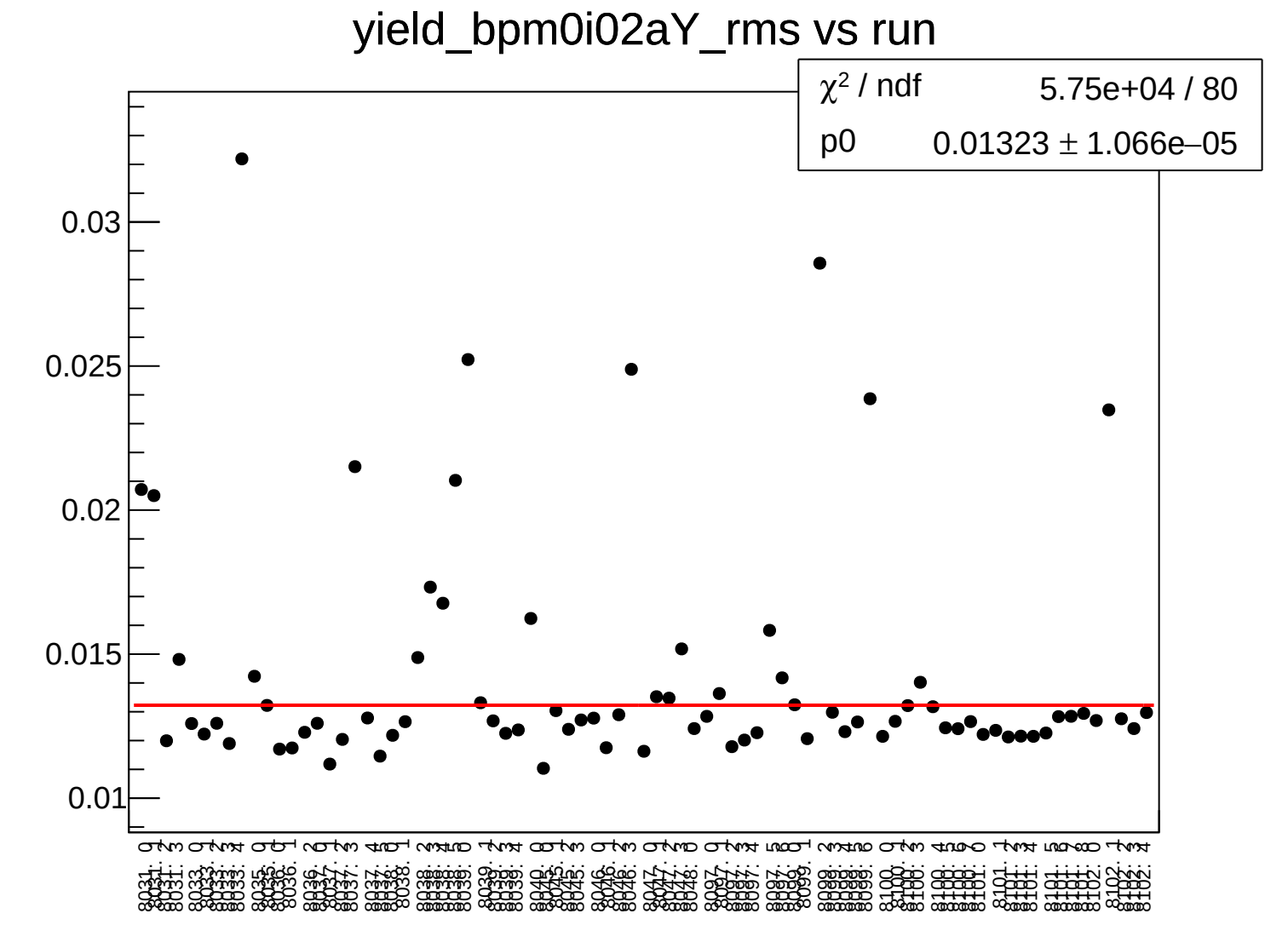

yield_bpm0i02aX_mean vs run
χ² / ndf 2.634e+06 / 80
p0 0.9843 ± 1.401e−05
1.02
1
0.98
0.96
0.94
0.92
pull
Entries 81
Mean −37.08
Std Dev 31.39
300
200
100
0
−100
−200
−300
−400
−500

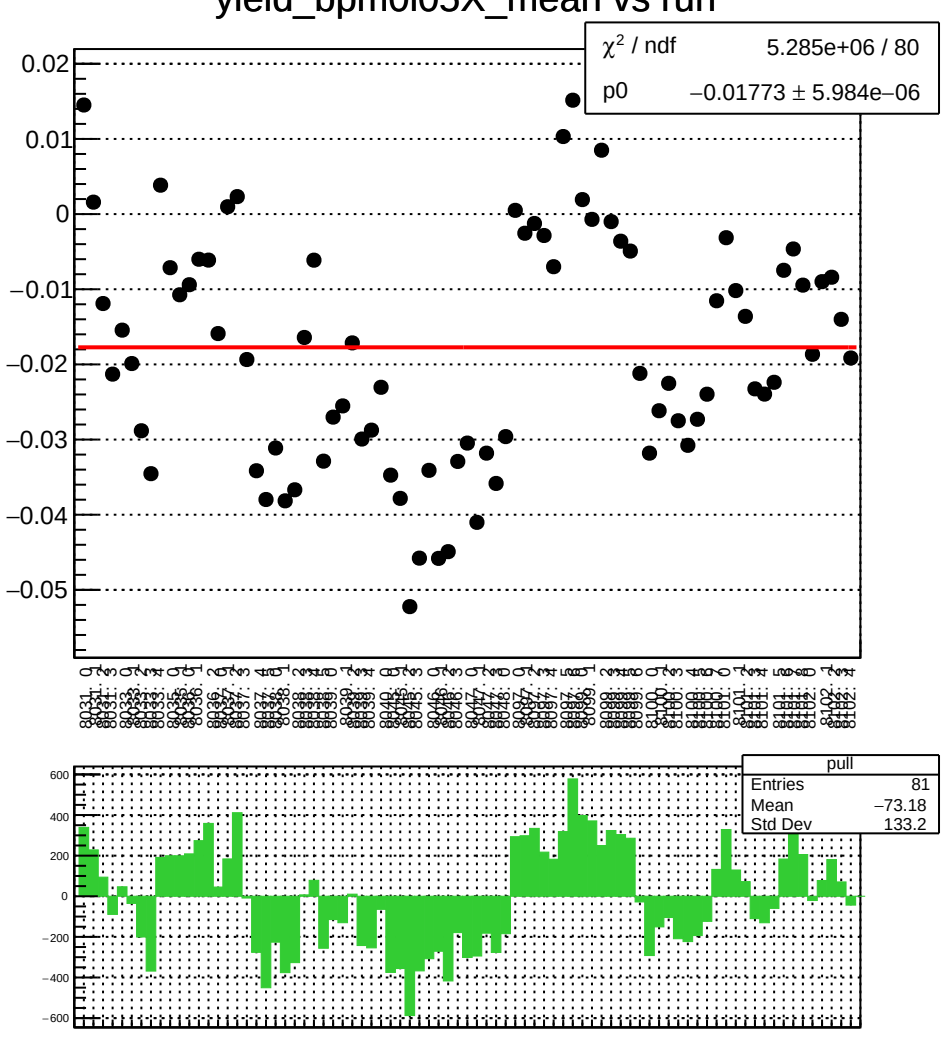

pull1D
Entries 81
Mean 0.349
Std Dev 4.494
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

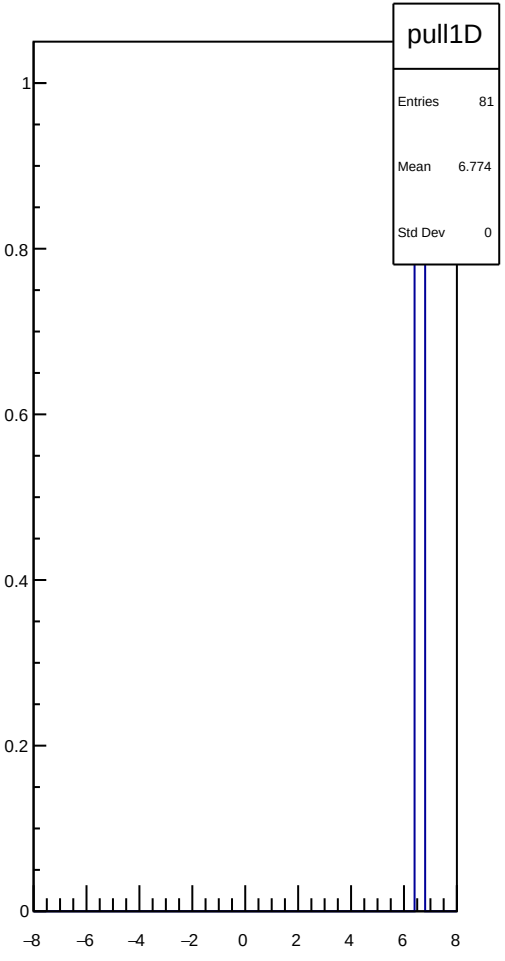

yield_bpm0i02aX_rms vs run
χ^2 / ndf 3.108e+04 / 80
p0 0.0124 ± 9.91e−06
0.03
0.025
0.02
0.015
0.01

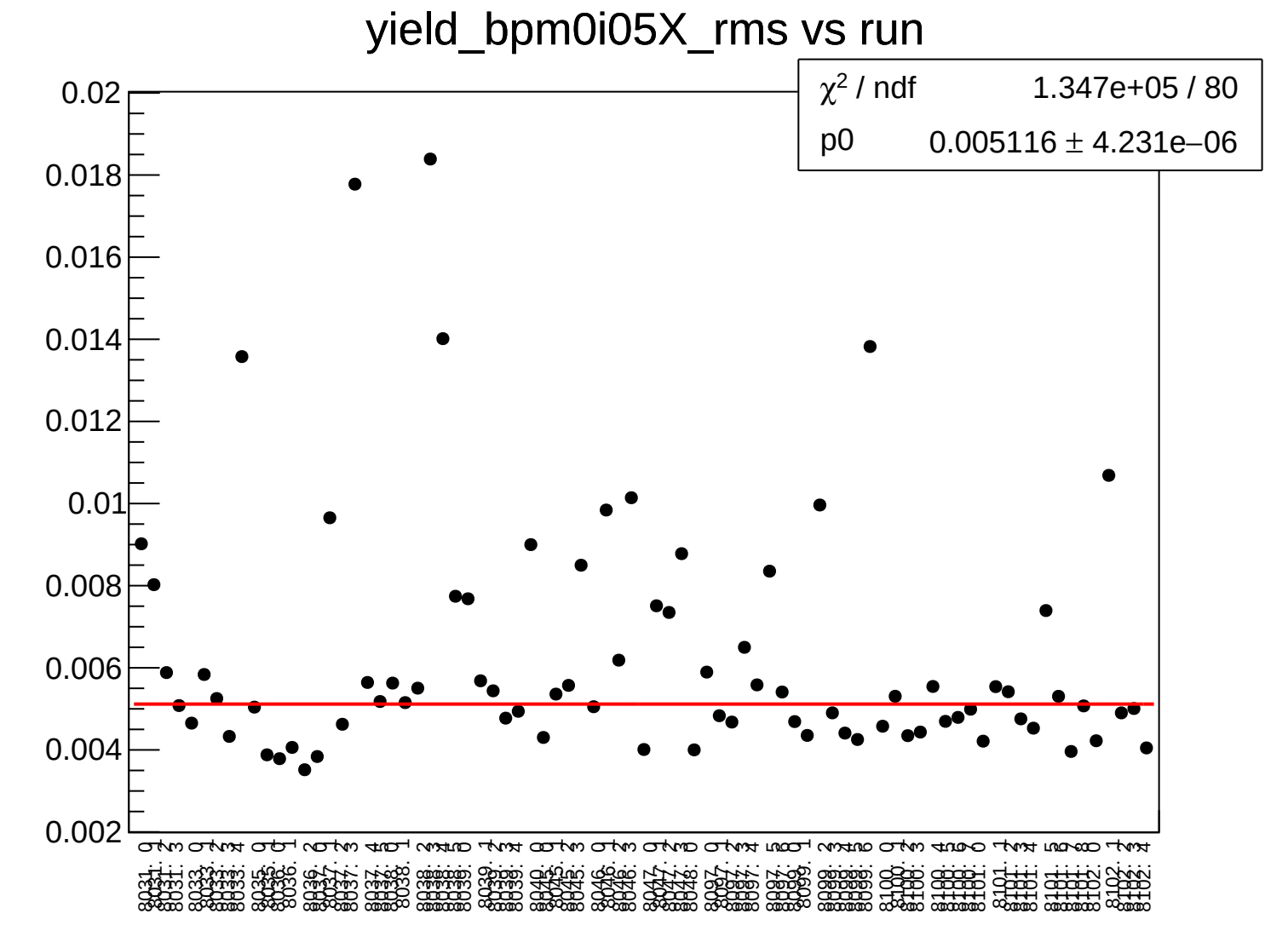

yield_bpm0i02aY_mean vs run
χ² / ndf 5.364e+06 / 80
p0 −0.8627 ± 1.508e−05
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 81
Mean −2374
Std Dev 2410
400
200
0
−200
−400
−600

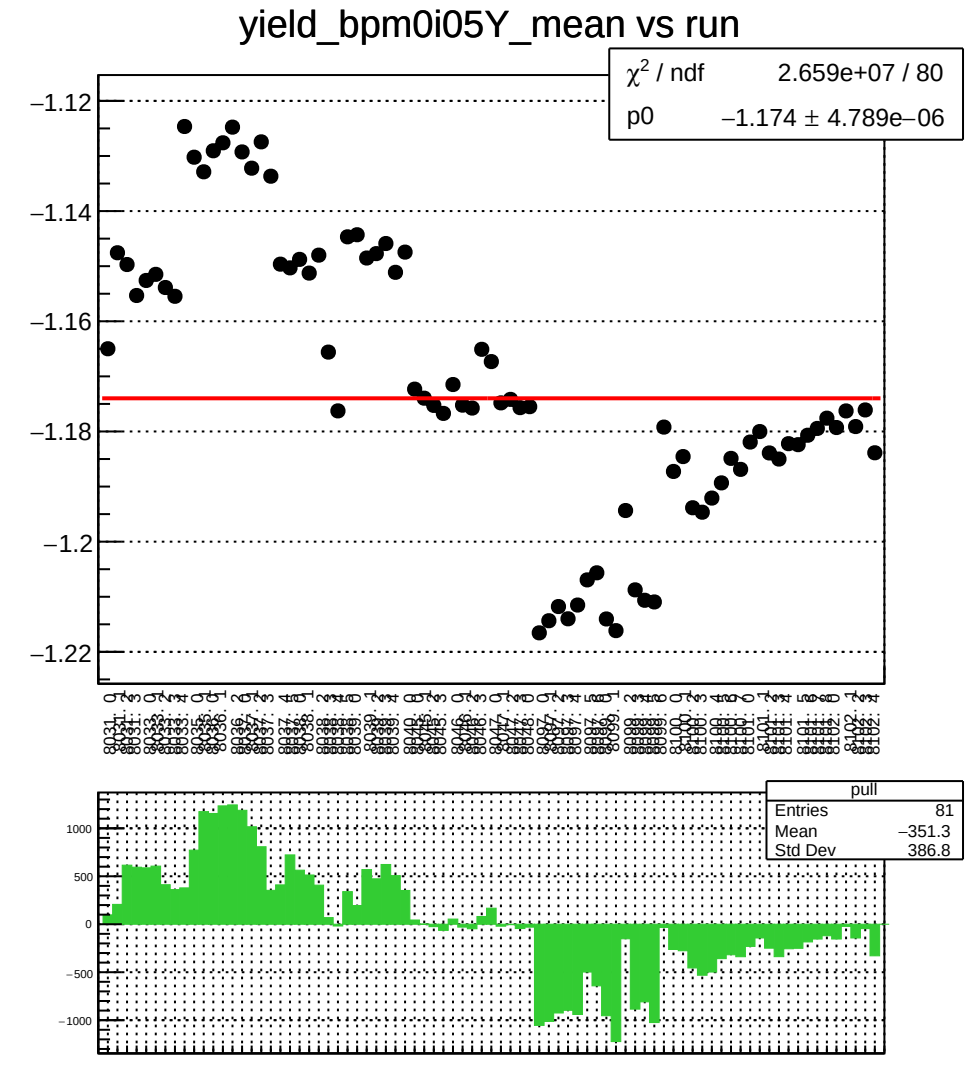

pull1D
Entries 81
Mean 6.781
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

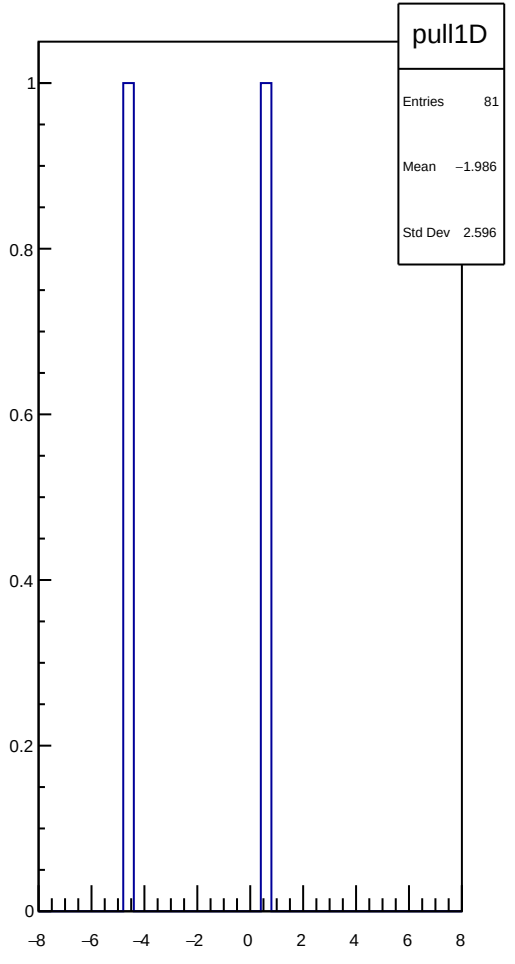

yield_bpm0i02aY_rms vs run
χ² / ndf 5.75e+04 / 80
p0 0.01323 ± 1.066e−05
0.03
0.025
0.02
0.015
0.01

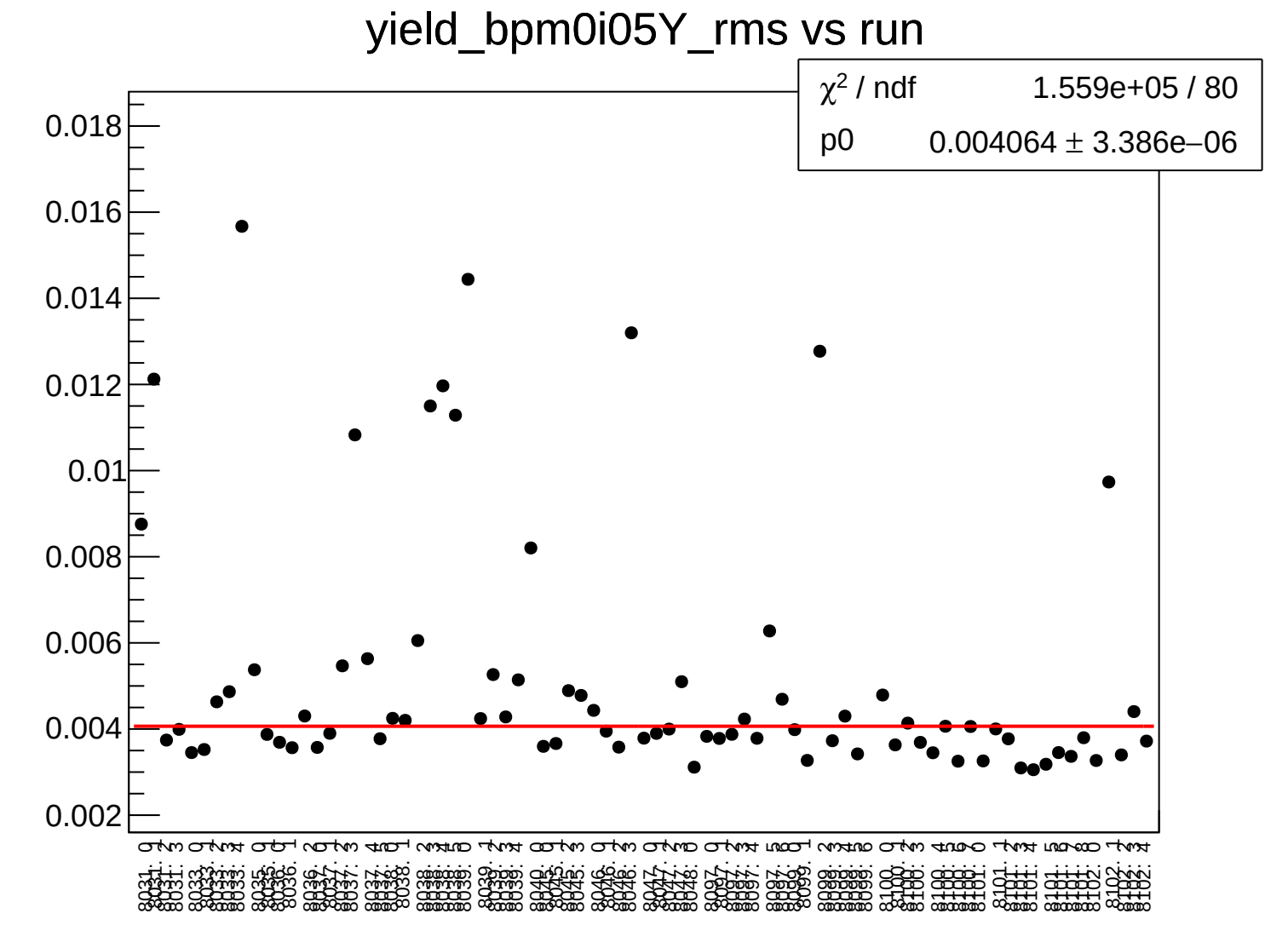

yield_bpm0i05X_mean vs run
χ² / ndf 5.285e+06 / 80
p0 −0.01773 ± 5.984e−06
pull
Entries 81
Mean −73.18
Std Dev 133.2

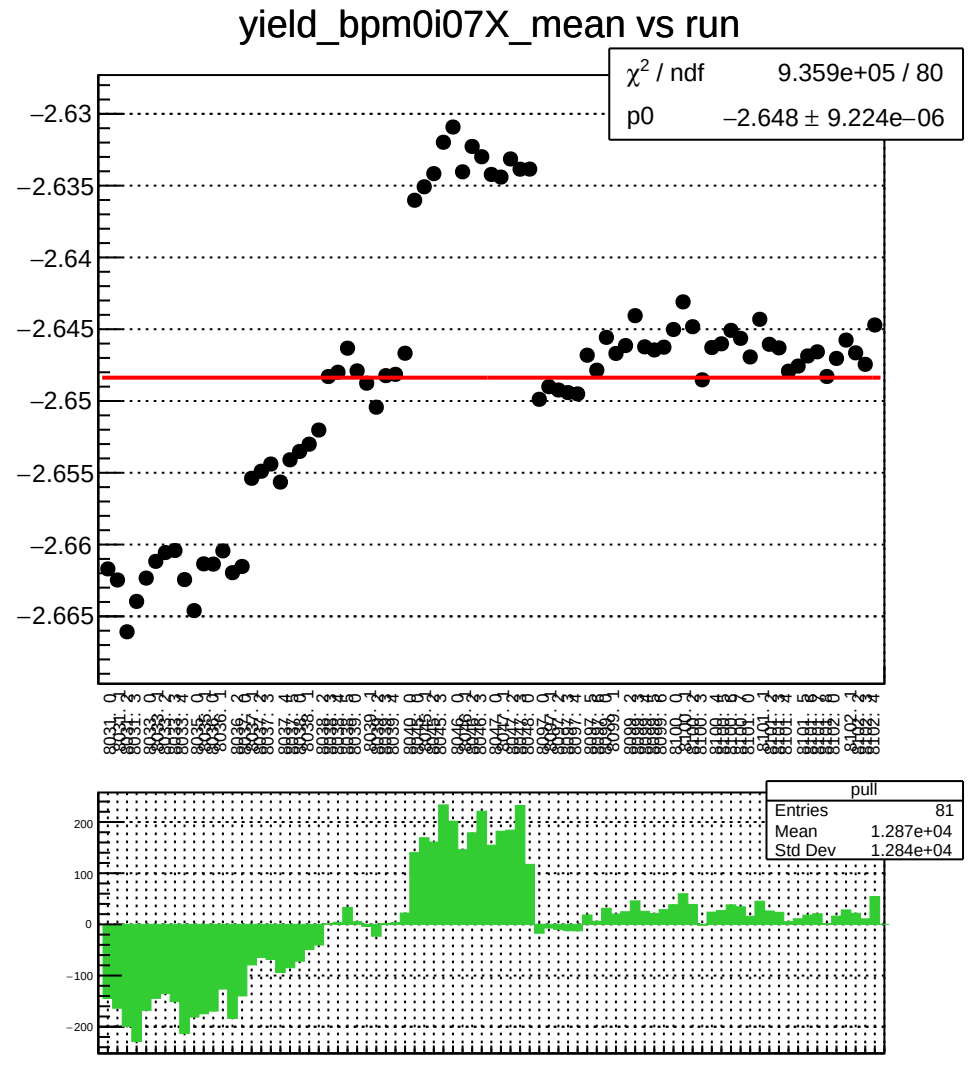

pull1D
Entries 81
Mean 6.774
Std Dev 0

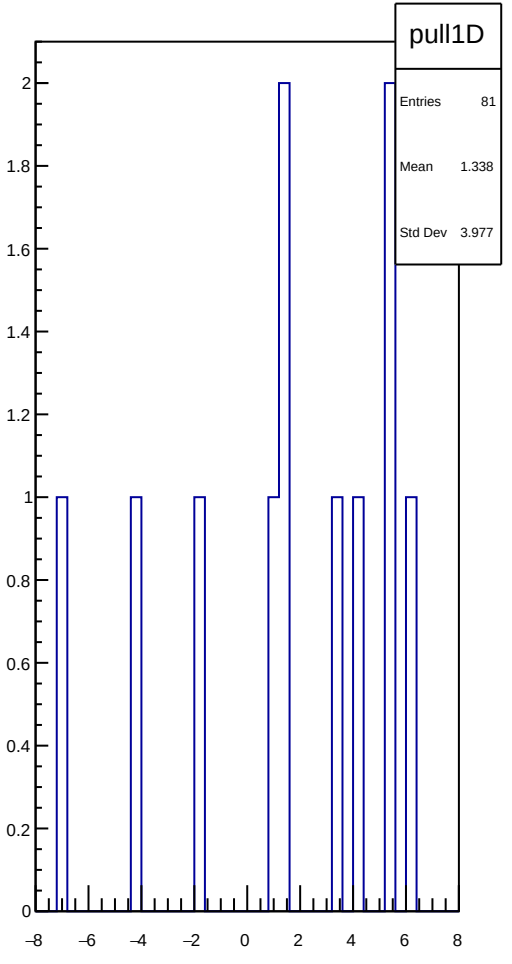

yield_bpm0i05X_rms vs run
χ² / ndf 1.347e+05 / 80
p0 0.005116 ± 4.231e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

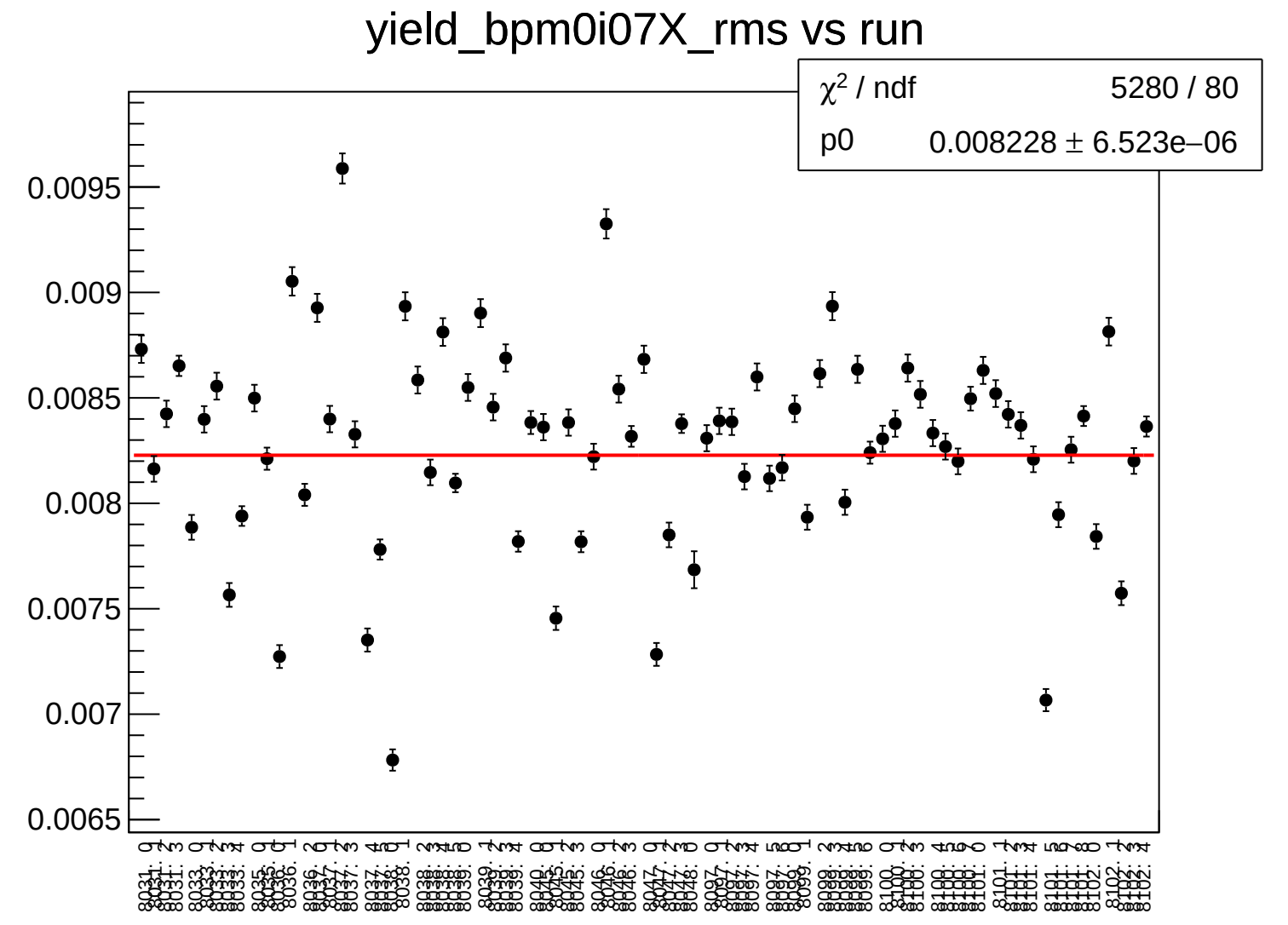

yield_bpm0i05Y_mean vs run
χ² / ndf 2.659e+07 / 80
p0 −1.174 ± 4.789e−06
−1.12
−1.14
−1.16
−1.18
−1.2
−1.22
pull
Entries 81
Mean −351.3
Std Dev 386.8
1000
500
0
−500
−1000

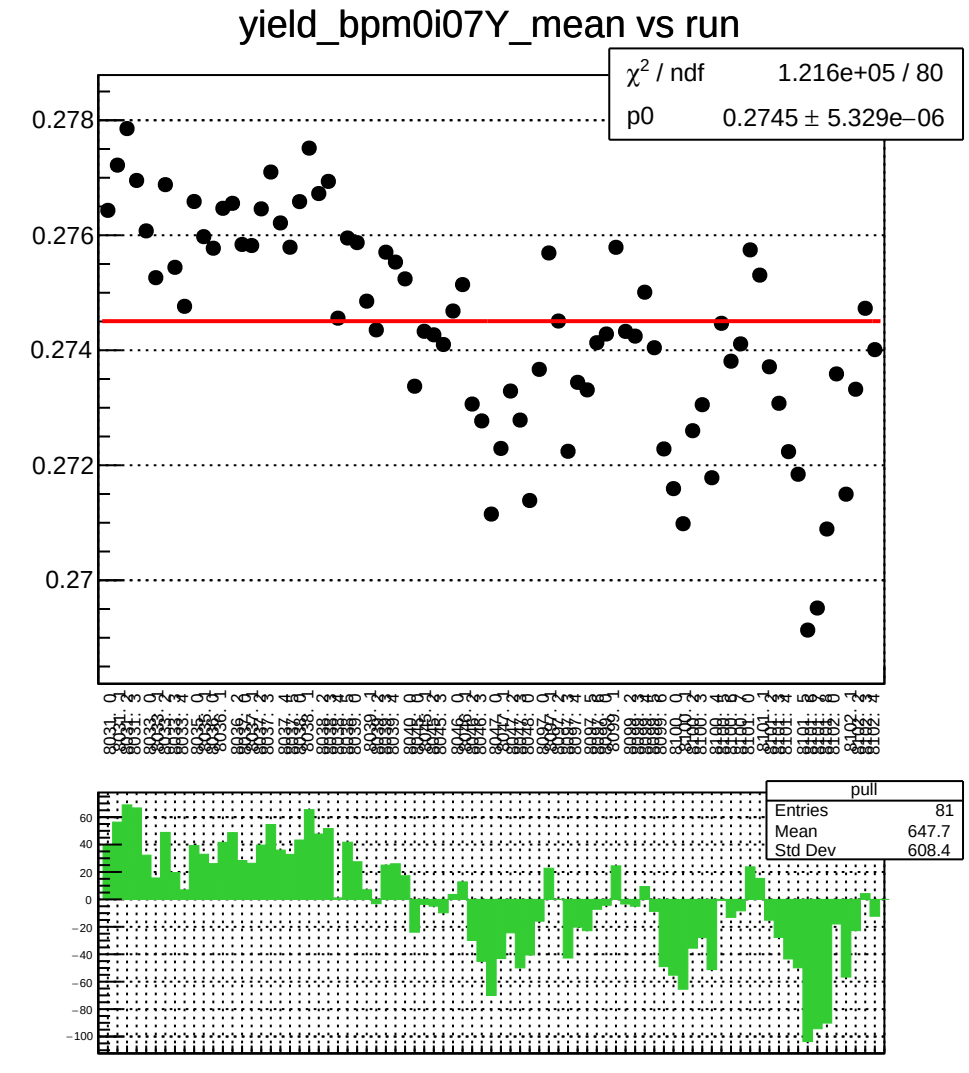

pull1D
Entries 81
Mean −1.986
Std Dev 2.596
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

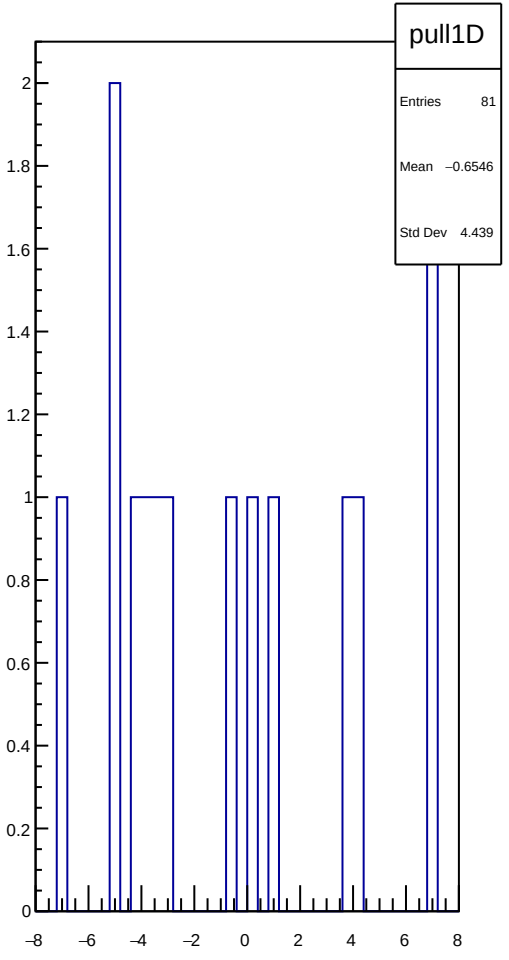

yield_bpm0i05Y_rms vs run
χ² / ndf 1.559e+05 / 80
p0 0.004064 ± 3.386e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

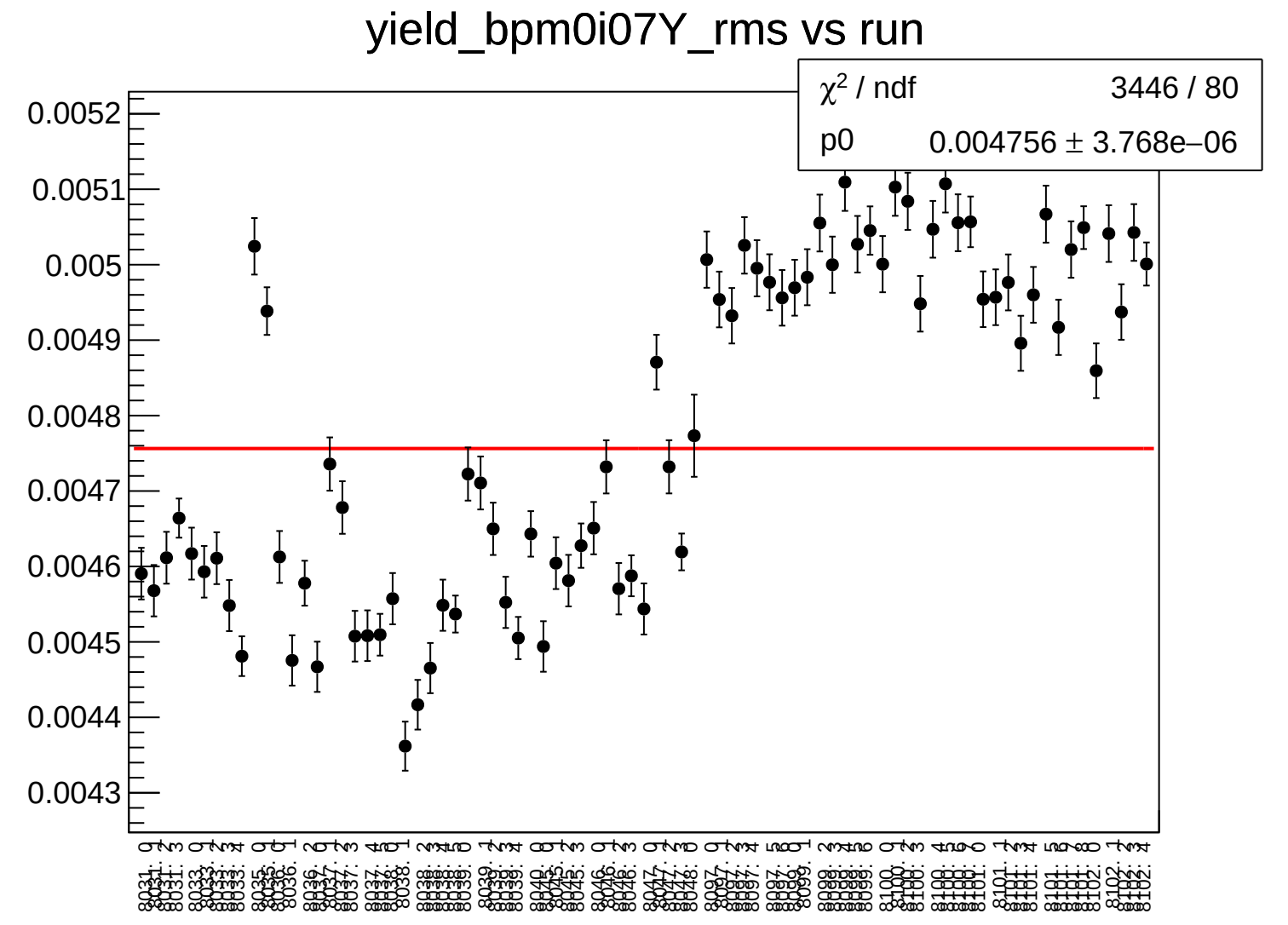

yield_bpm0i07X_mean vs run
χ² / ndf 9.359e+05 / 80
p0 −2.648 ± 9.224e−06
−2.63
−2.635
−2.64
−2.645
−2.65
−2.655
−2.66
−2.665
pull
Entries 81
Mean 1.287e+04
Std Dev 1.284e+04
200
100
0
−100
−200

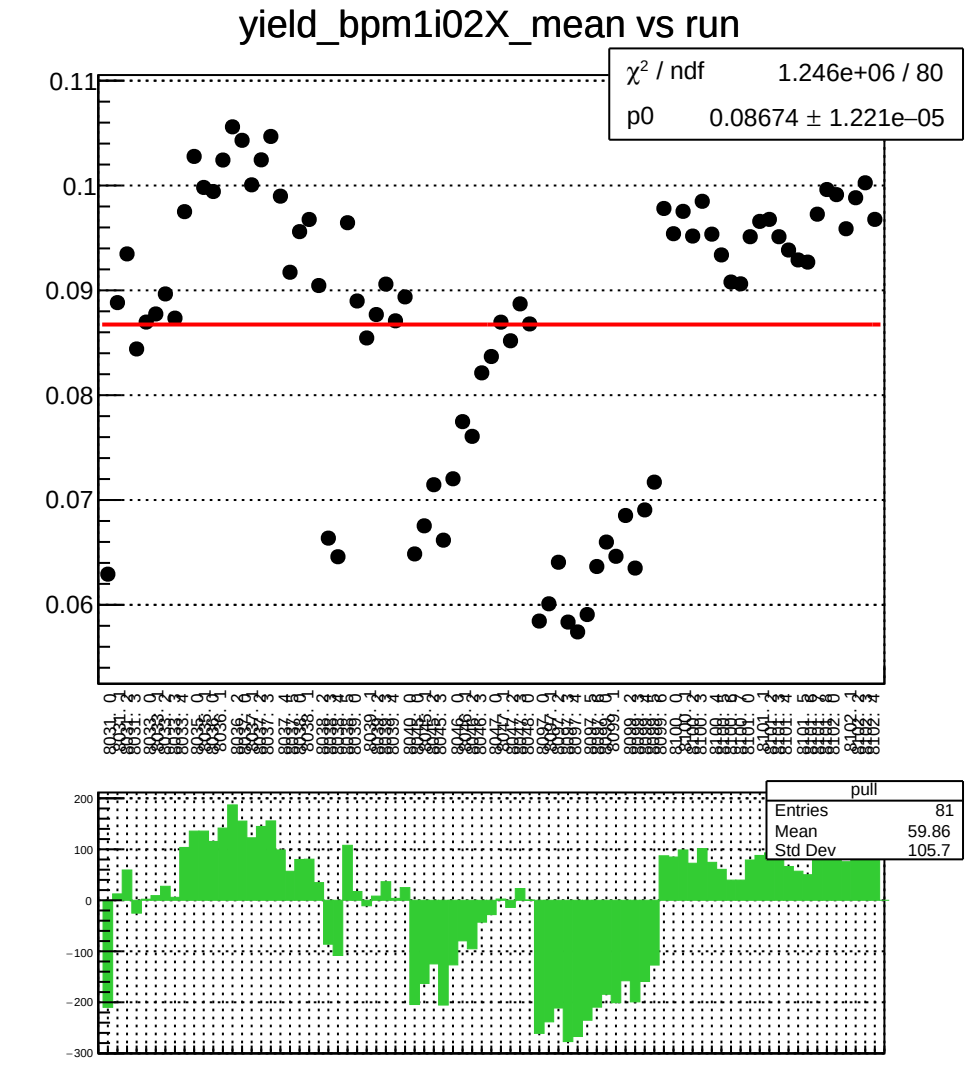

pull1D
Entries 81
Mean 1.338
Std Dev 3.977
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

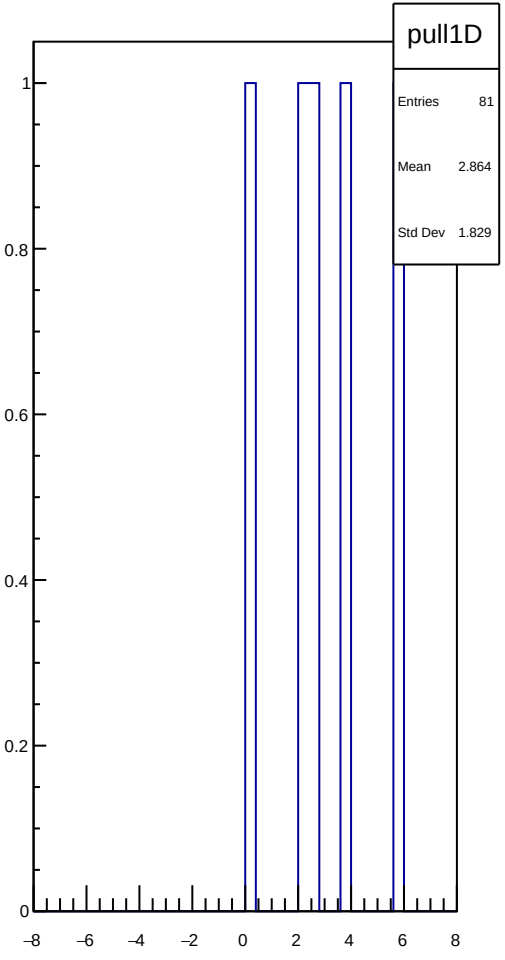

yield_bpm0i07X_rms vs run
χ² / ndf 5280 / 80
p0 0.008228 ± 6.523e−06
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065

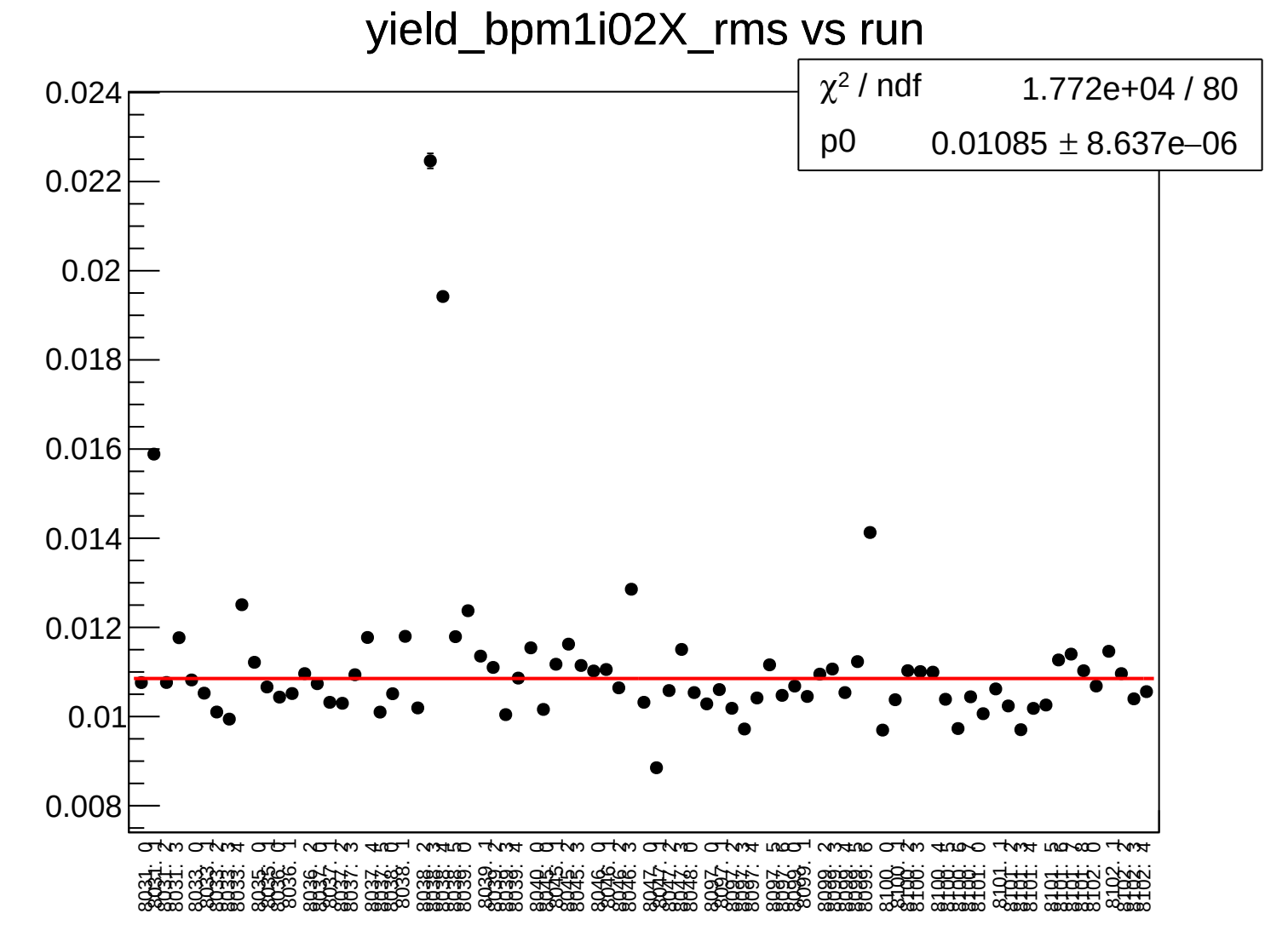

yield_bpm0i07Y_mean vs run
χ² / ndf 1.216e+05 / 80
p0 0.2745 ± 5.329e−06
0.278
0.276
0.274
0.272
0.27
pull
Entries 81
Mean 647.7
Std Dev 608.4
60
40
20
0
−20
−40
−60
−80
−100

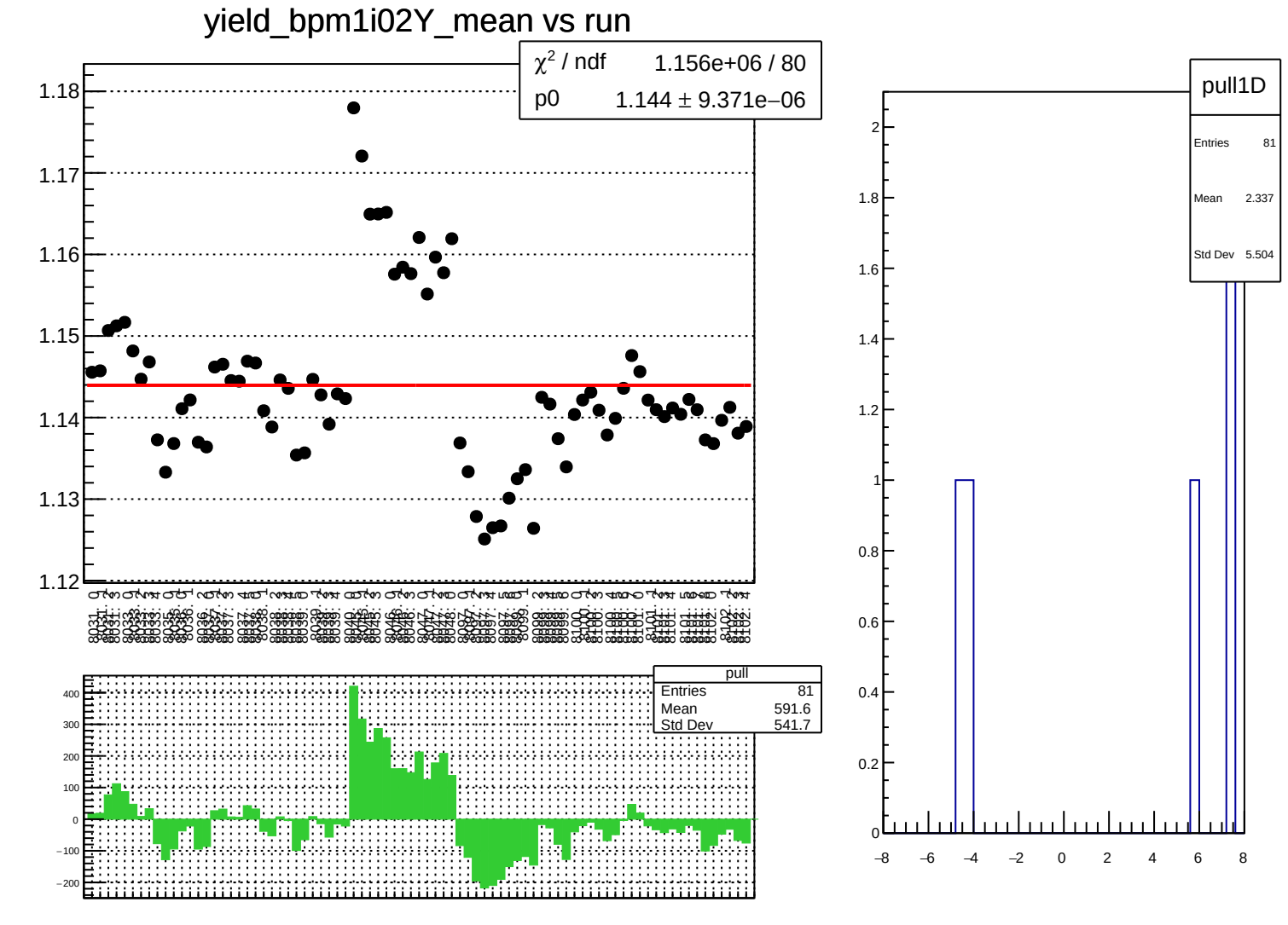

pull1D
Entries 81
Mean −0.6546
Std Dev 4.439
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

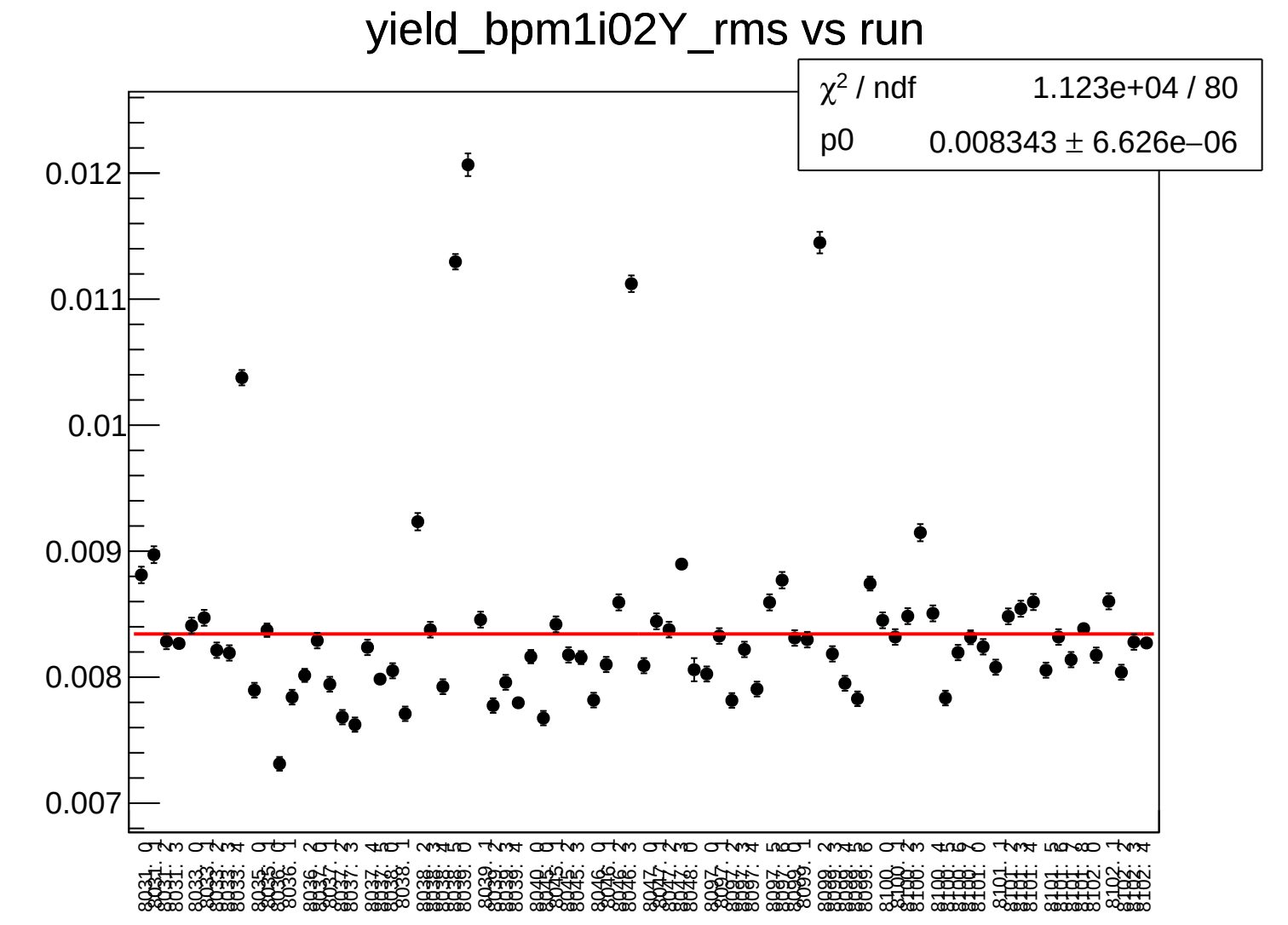

yield_bpm0i07Y_rms vs run
χ² / ndf 3446 / 80
p0 0.004756 ± 3.768e−06
0.0052
0.0051
0.005
0.0049
0.0048
0.0047
0.0046
0.0045
0.0044
0.0043

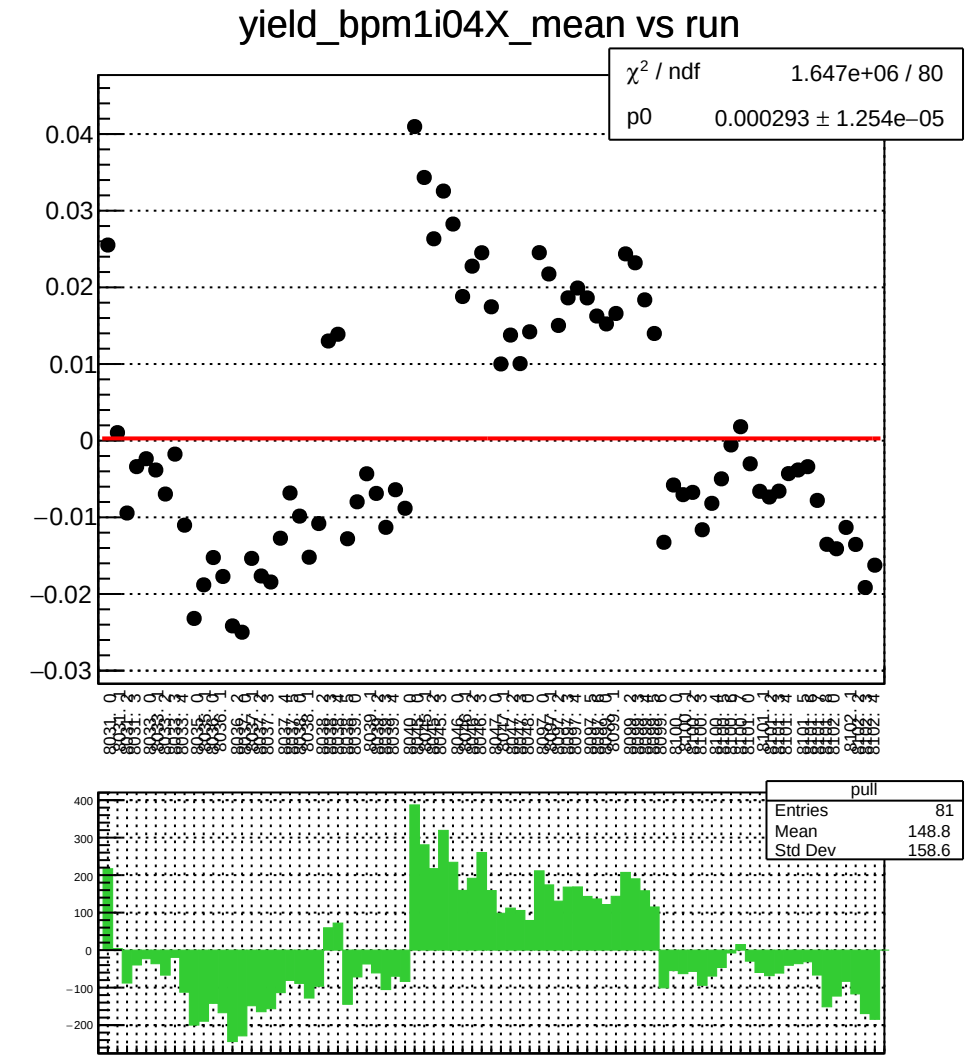

yield_bpm1i02X_mean vs run
χ² / ndf 1.246e+06 / 80
p0 0.08674 ± 1.221e−05
0.11
0.1
0.09
0.08
0.07
0.06
pull
Entries 81
Mean 59.86
Std Dev 105.7
200
100
0
−100
−200
−300

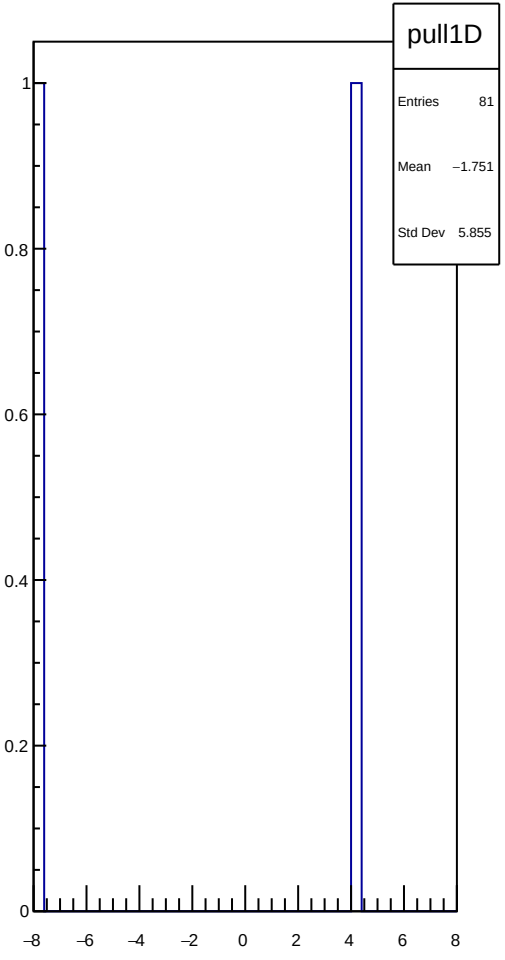

pull1D
Entries 81
Mean 2.864
Std Dev 1.829
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

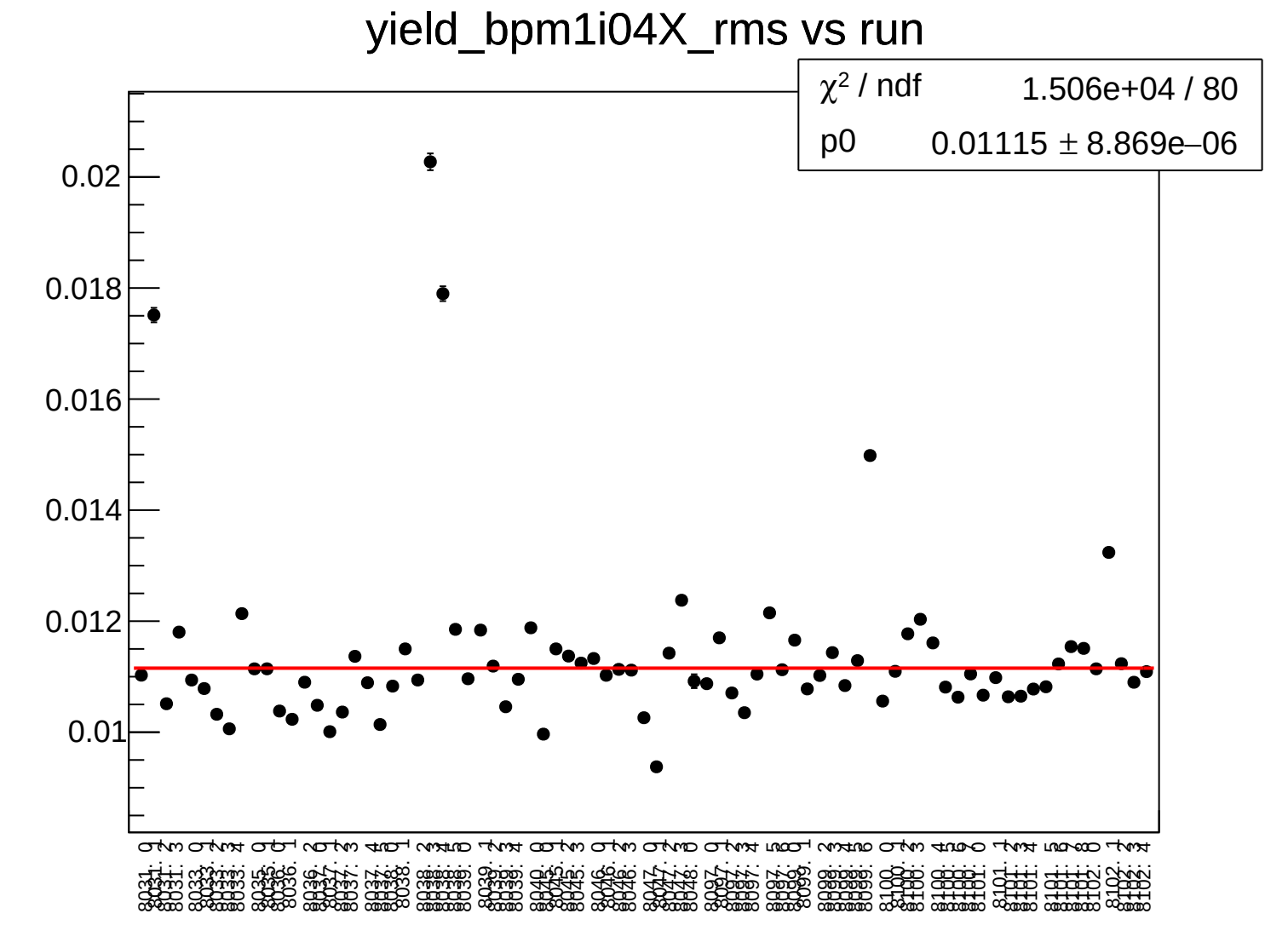

yield_bpm1i02X_rms vs run
χ² / ndf 1.772e+04 / 80
p0 0.01085 ± 8.637e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

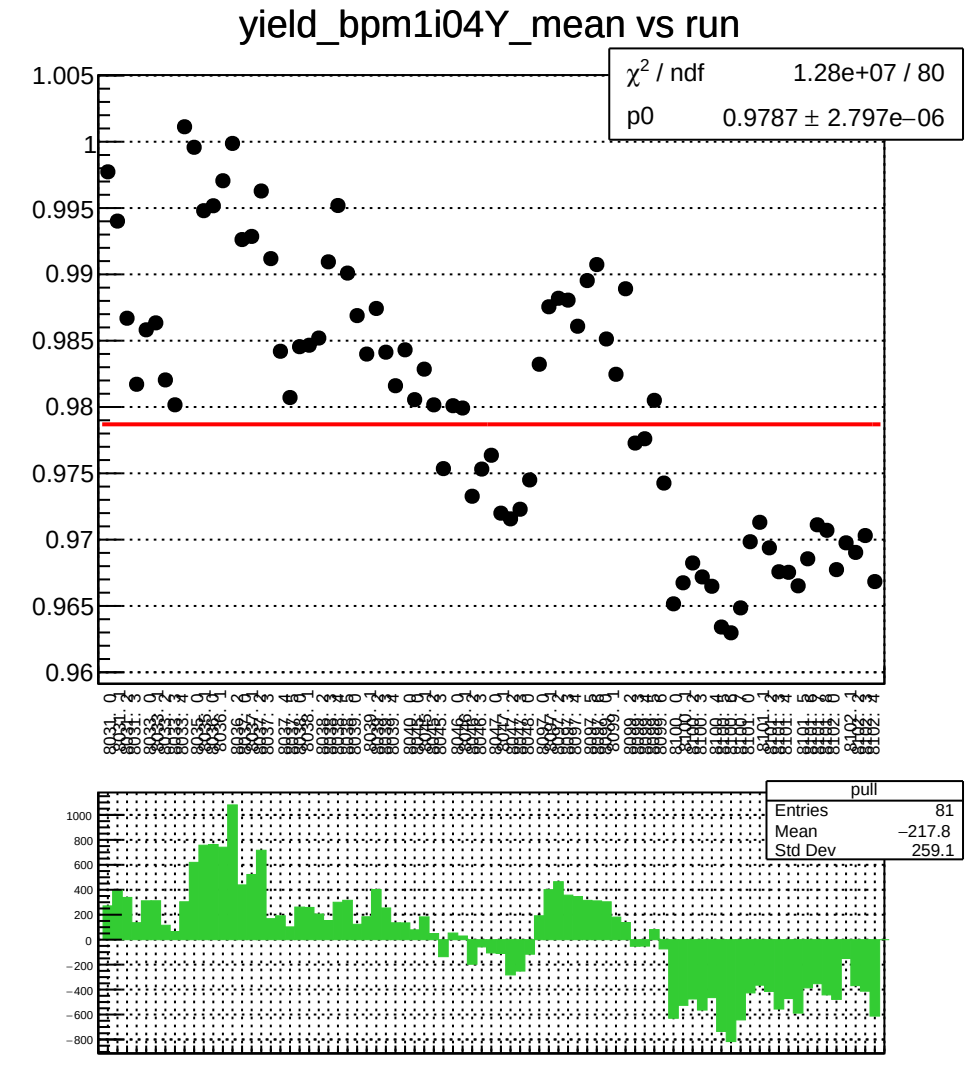

yield_bpm1i02Y_mean vs run
χ² / ndf 1.156e+06 / 80
p0 1.144 ± 9.371e−06
1.18
1.17
1.16
1.15
1.14
1.13
1.12
pull
Entries 81
Mean 591.6
Std Dev 541.7
400
300
200
100
0
−100
−200
pull1D
Entries 81
Mean 2.337
Std Dev 5.504
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

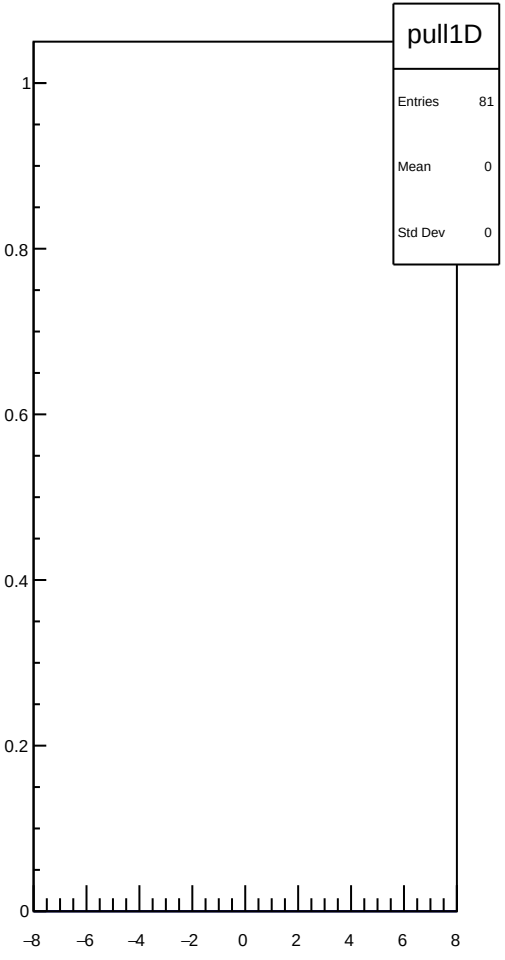

yield_bpm1i02Y_rms vs run
χ² / ndf 1.123e+04 / 80
p0 0.008343 ± 6.626e−06
0.012
0.011
0.01
0.009
0.008
0.007

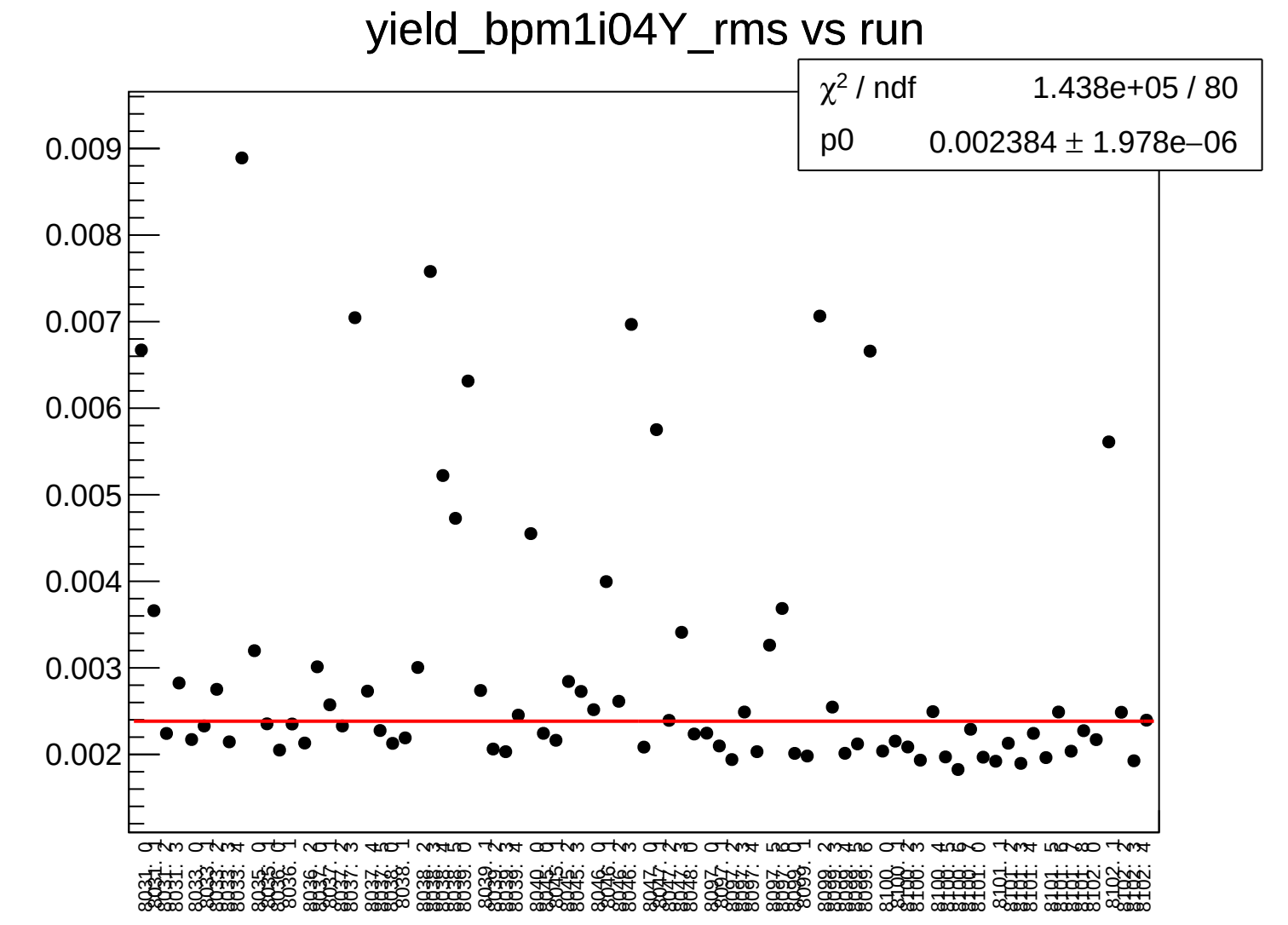

yield_bpm1i04X_mean vs run
χ² / ndf 1.647e+06 / 80
p0 0.000293 ± 1.254e−05
0.04
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
pull
Entries 81
Mean 148.8
Std Dev 158.6
400
300
200
100
0
−100
−200

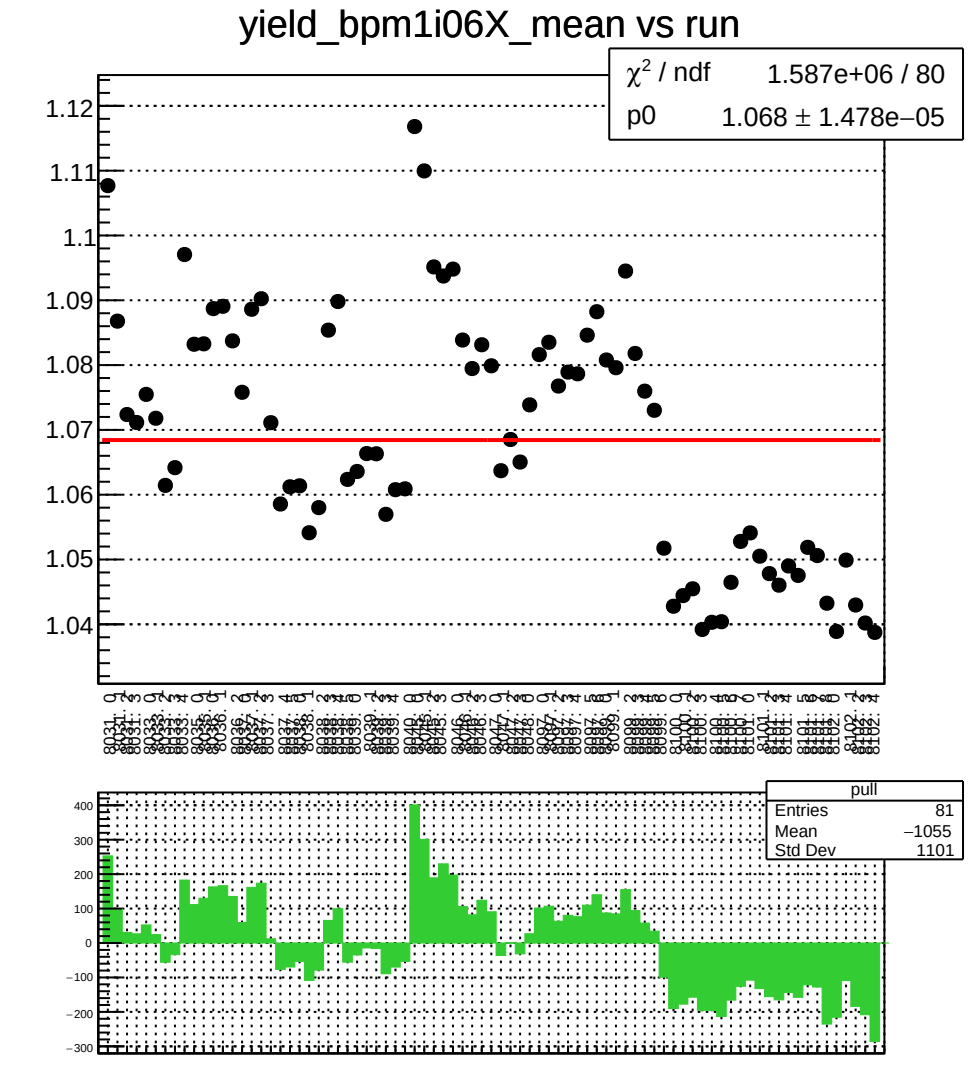

pull1D
Entries 81
Mean −1.751
Std Dev 5.855
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

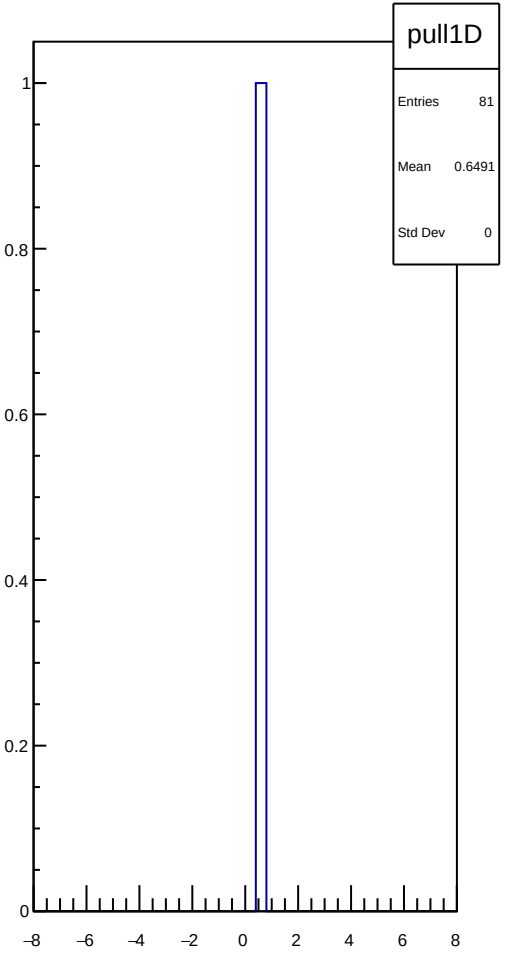

yield_bpm1i04X_rms vs run
χ² / ndf 1.506e+04 / 80
p0 0.01115 ± 8.869e–06
0.02
0.018
0.016
0.014
0.012
0.01

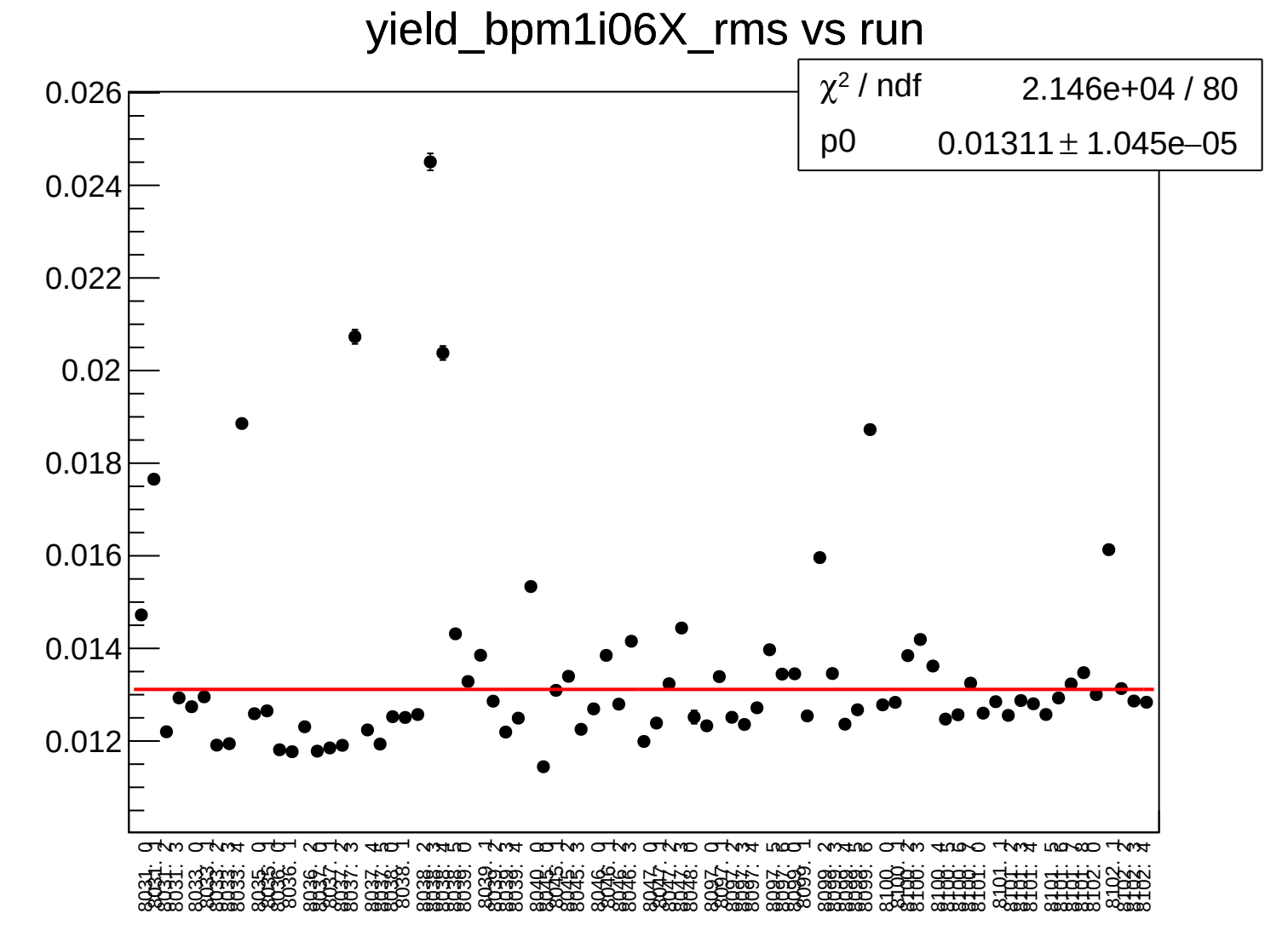

yield_bpm1i04Y_mean vs run
χ² / ndf 1.28e+07 / 80
p0 0.9787 ± 2.797e−06
pull
Entries 81
Mean −217.8
Std Dev 259.1

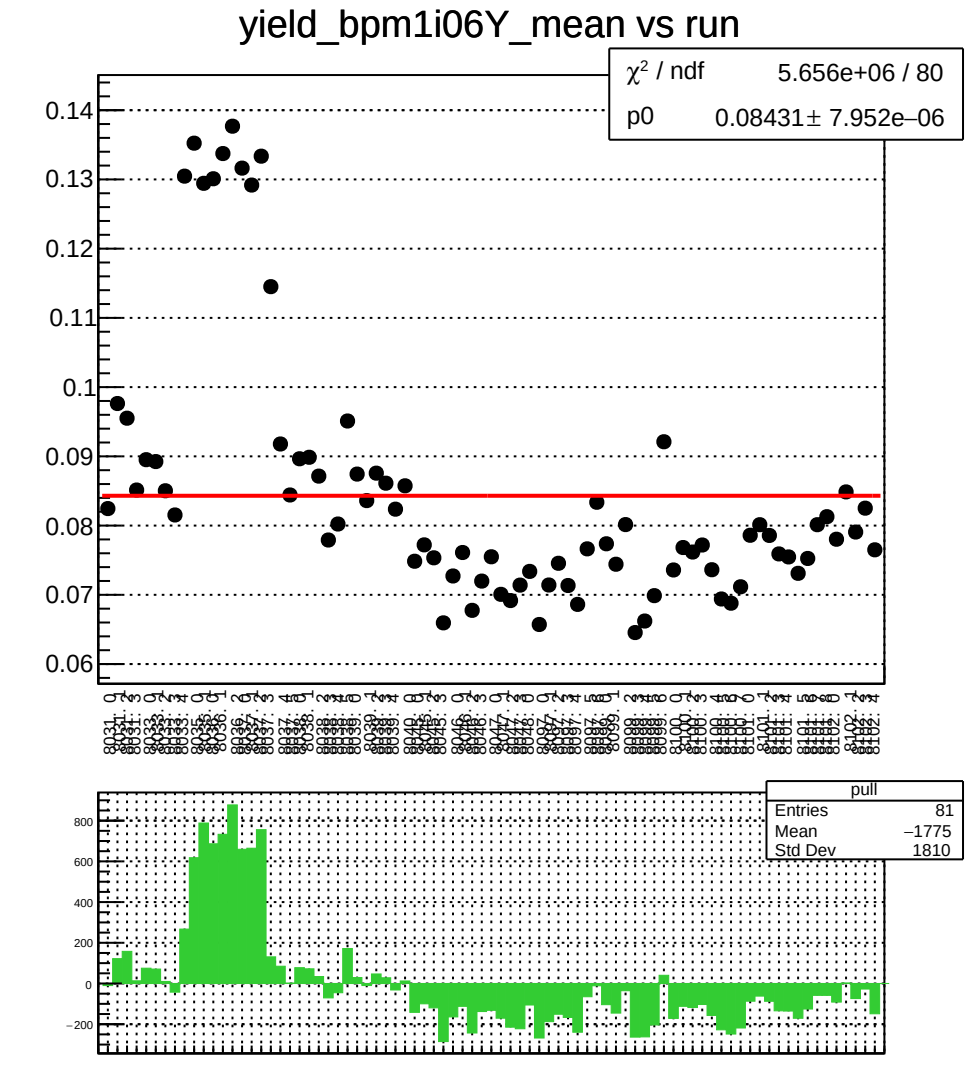

pull1D
Entries 81
Mean 0
Std Dev 0

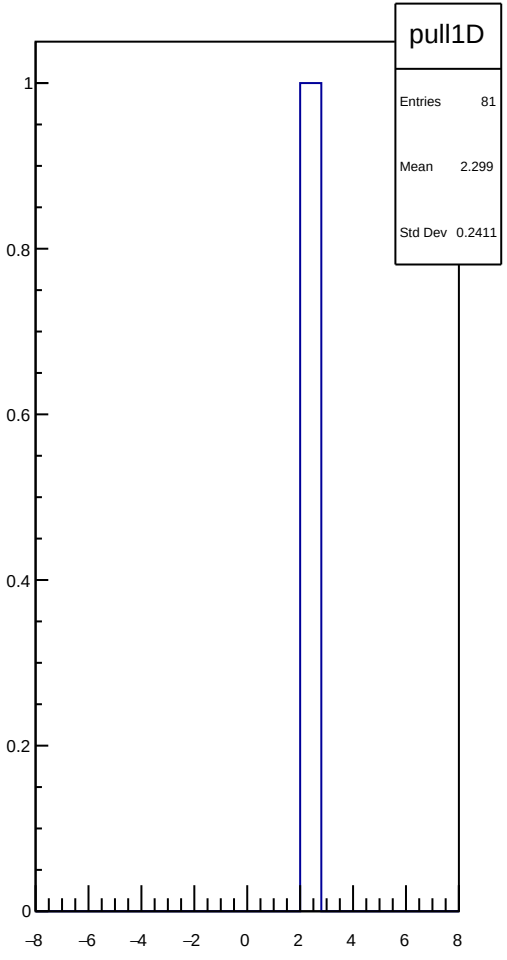

yield_bpm1i04Y_rms vs run
χ^2 / ndf 1.438e+05 / 80
p0 0.002384 ± 1.978e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

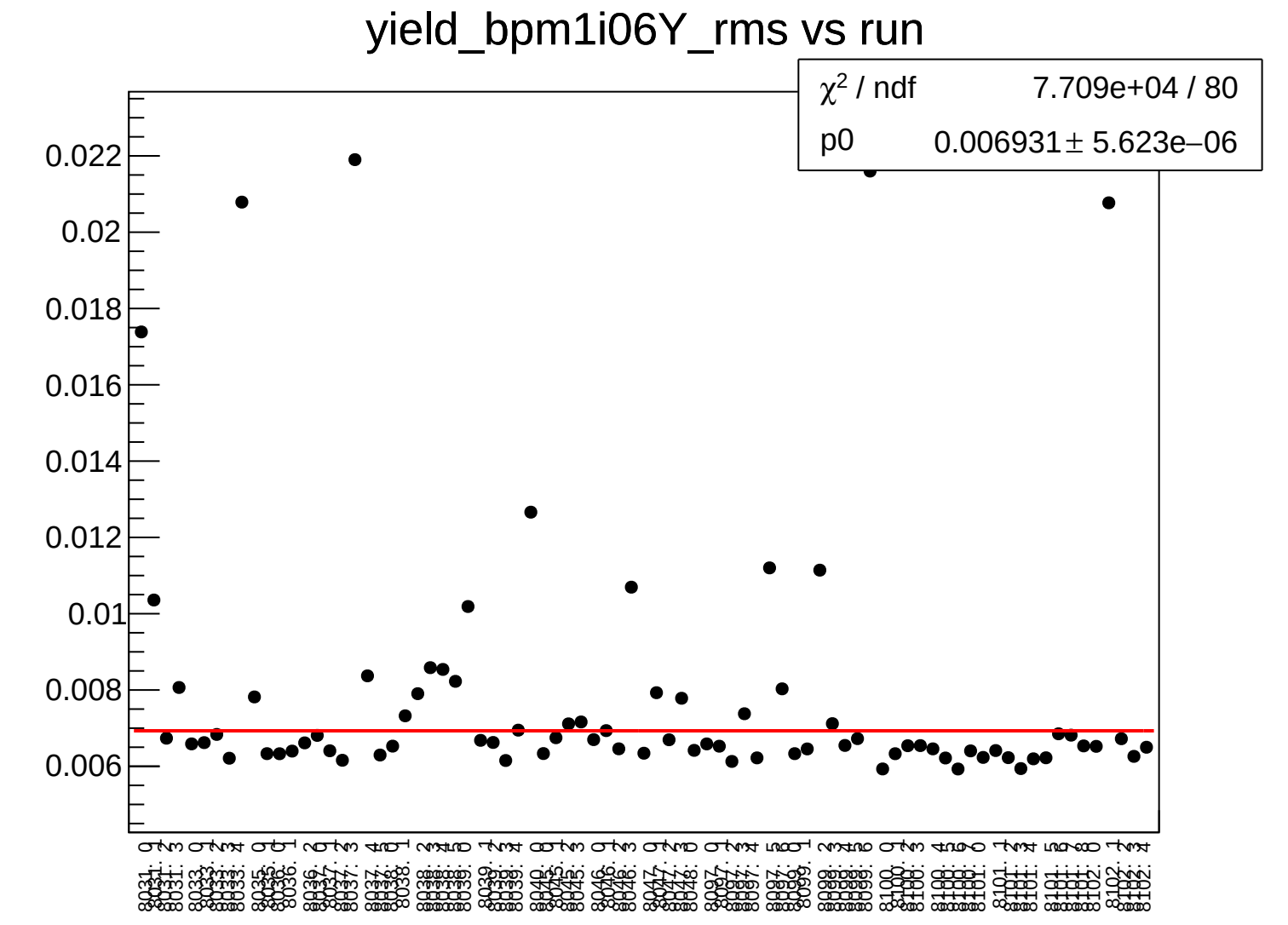

yield_bpm1i06X_mean vs run
χ² / ndf 1.587e+06 / 80
p0 1.068 ± 1.478e−05
1.12
1.11
1.1
1.09
1.08
1.07
1.06
1.05
1.04
pull
Entries 81
Mean −1055
Std Dev 1101
400
300
200
100
0
−100
−200
−300

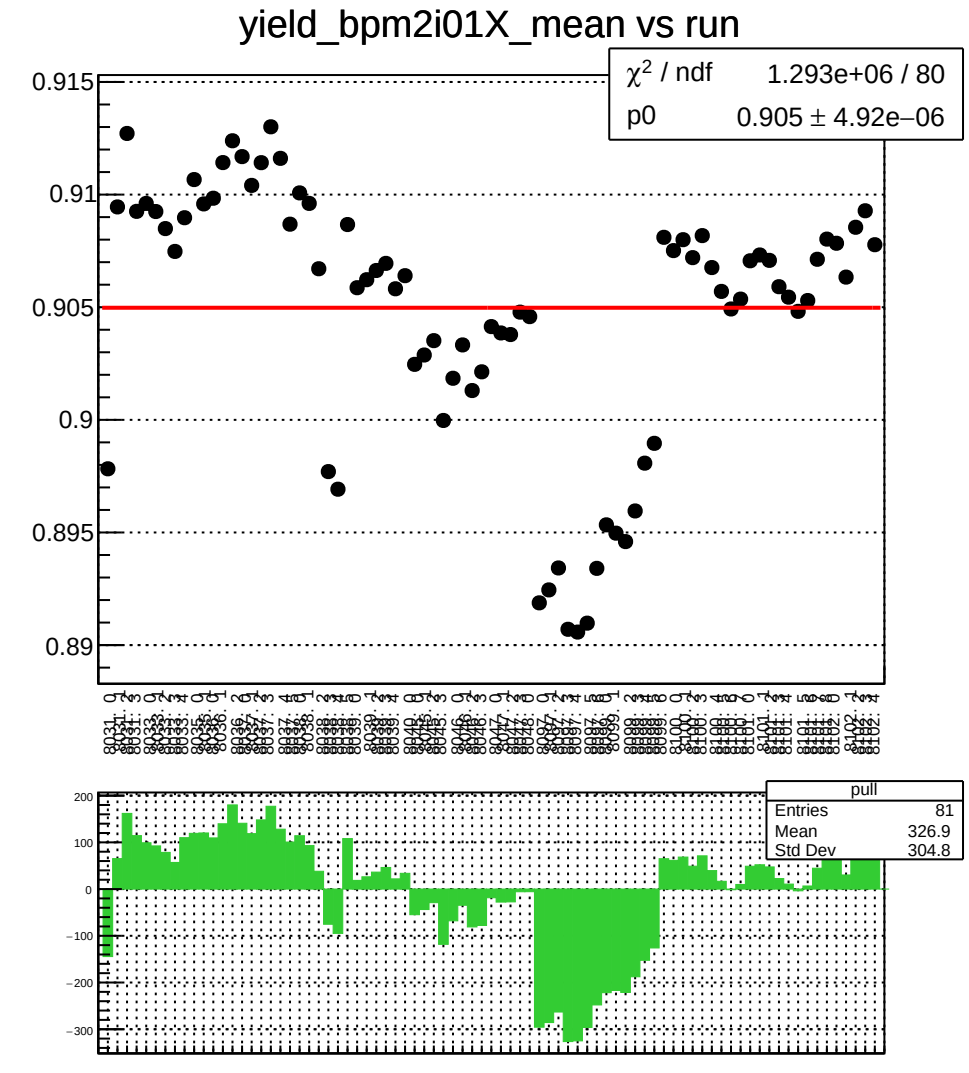

pull1D
Entries 81
Mean 0.6491
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

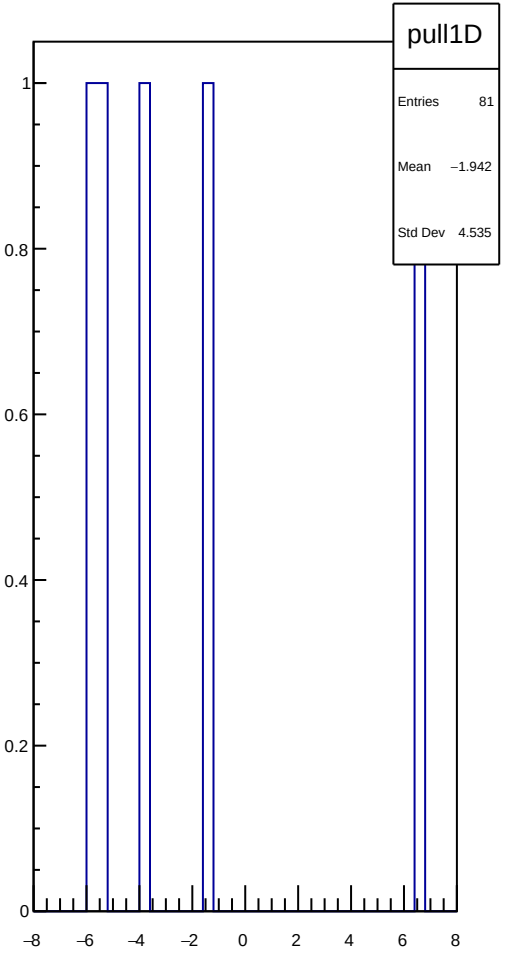

yield_bpm1i06X_rms vs run
χ² / ndf 2.146e+04 / 80
p0 0.01311 ± 1.045e–05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

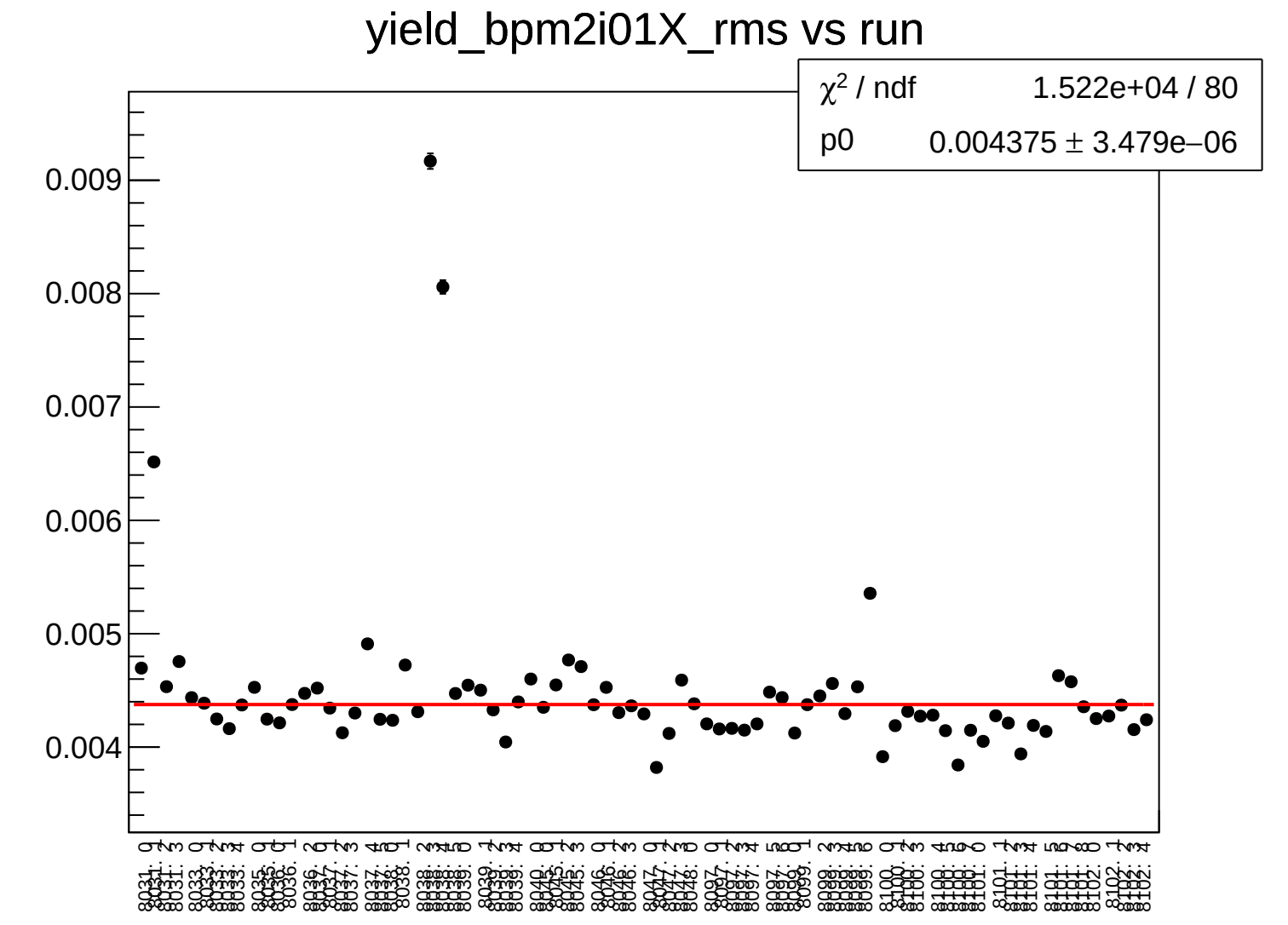

yield_bpm1i06Y_mean vs run
χ² / ndf 5.656e+06 / 80
p0 0.08431± 7.952e−06
pull
Entries 81
Mean −1775
Std Dev 1810

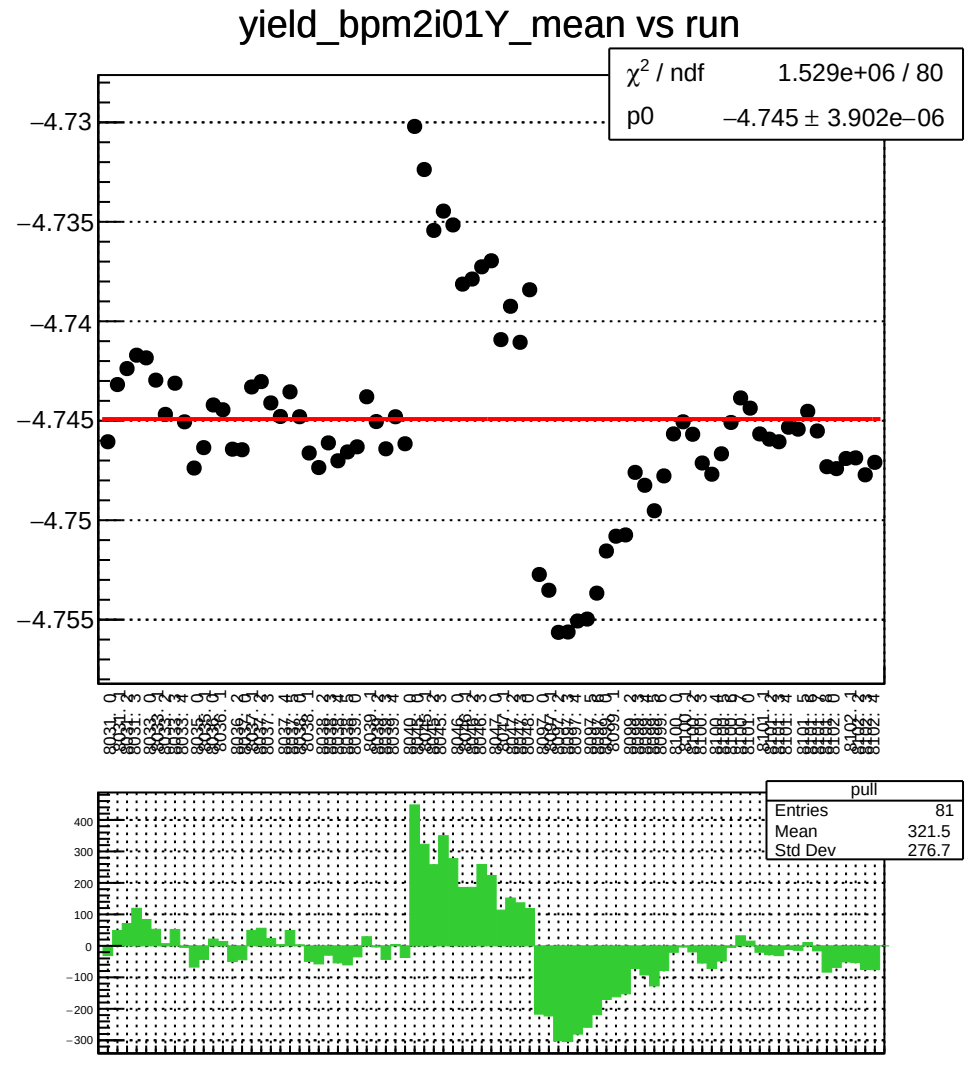

pull1D
Entries 81
Mean 2.299
Std Dev 0.2411

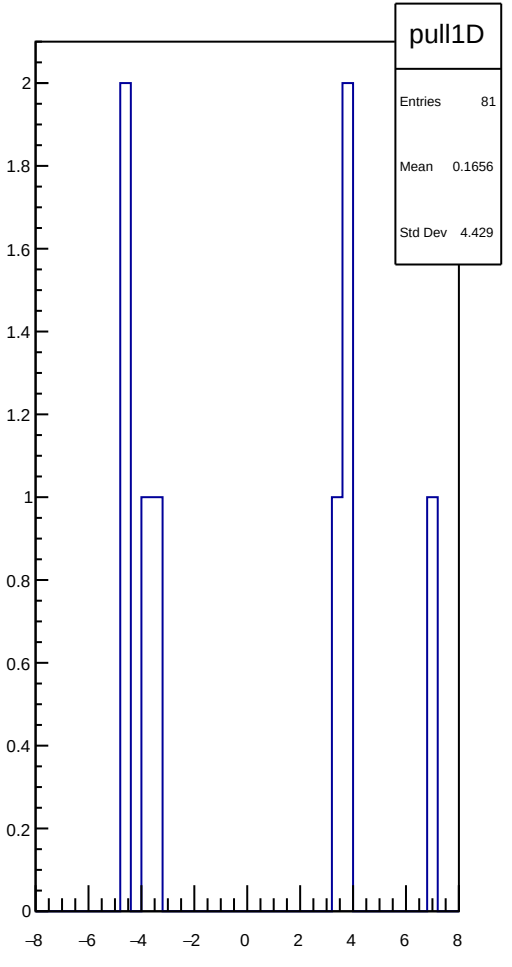

yield_bpm1i06Y_rms vs run
χ² / ndf 7.709e+04 / 80
p0 0.006931 ± 5.623e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

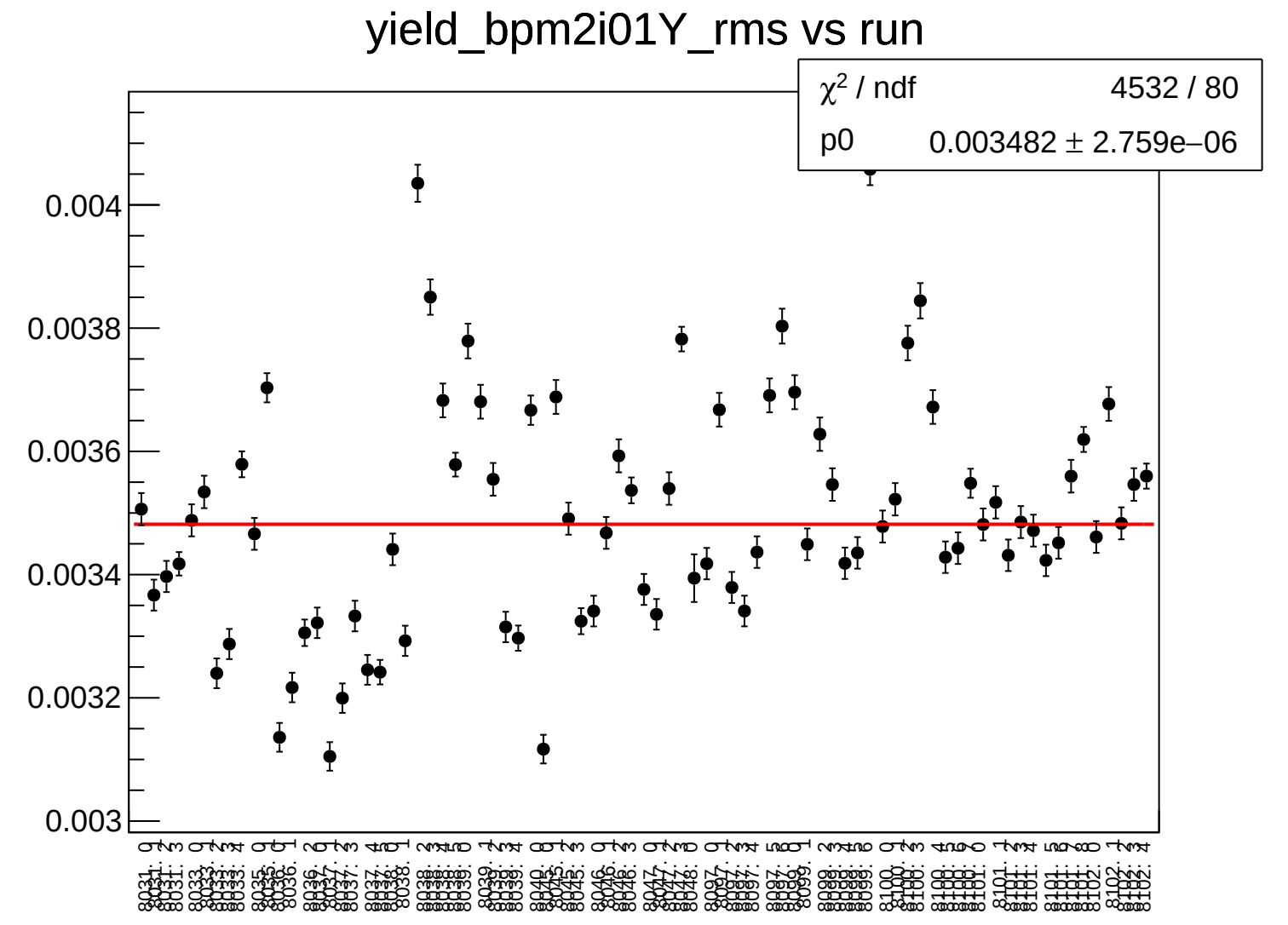

yield_bpm2i01X_mean vs run
χ² / ndf 1.293e+06 / 80
p0 0.905 ± 4.92e−06
0.915
0.91
0.905
0.9
0.895
0.89
pull
Entries 81
Mean 326.9
Std Dev 304.8
200
100
0
−100
−200
−300

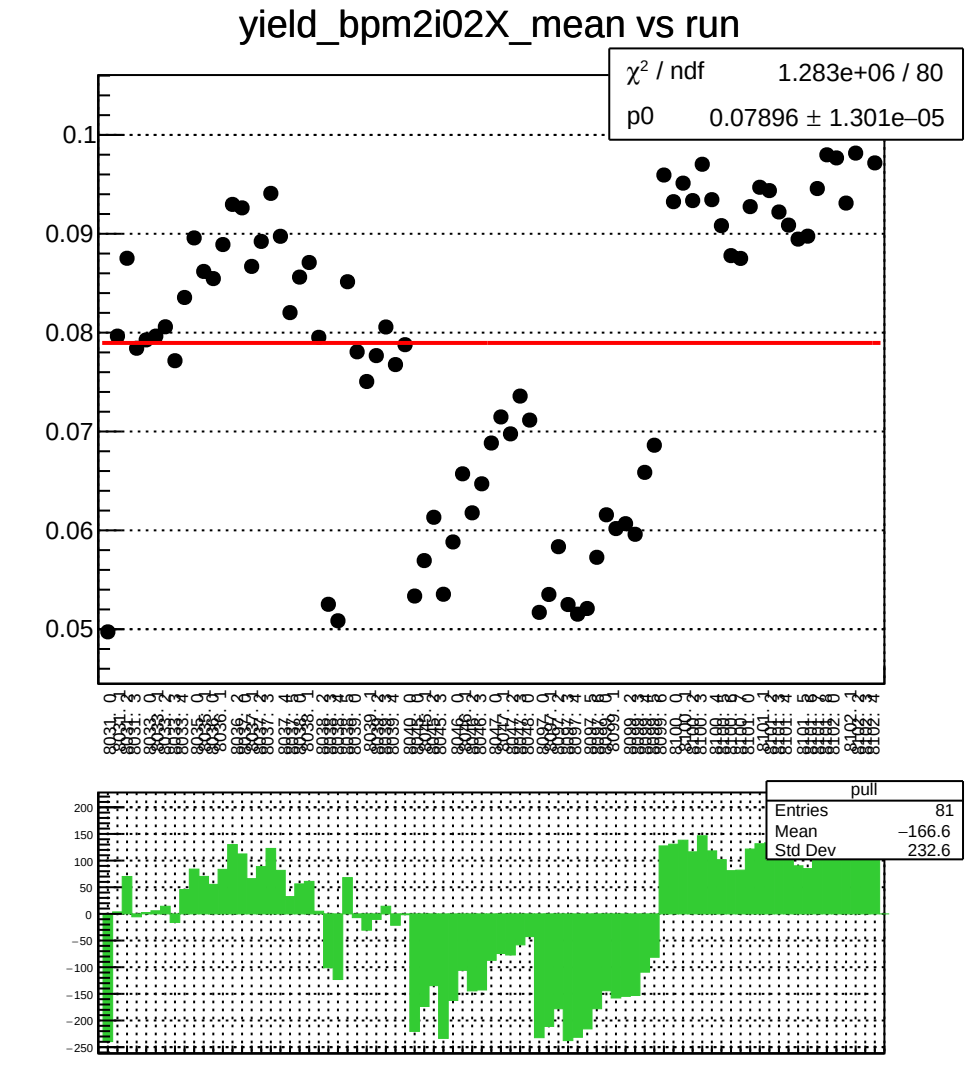

pull1D
Entries 81
Mean −1.942
Std Dev 4.535
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

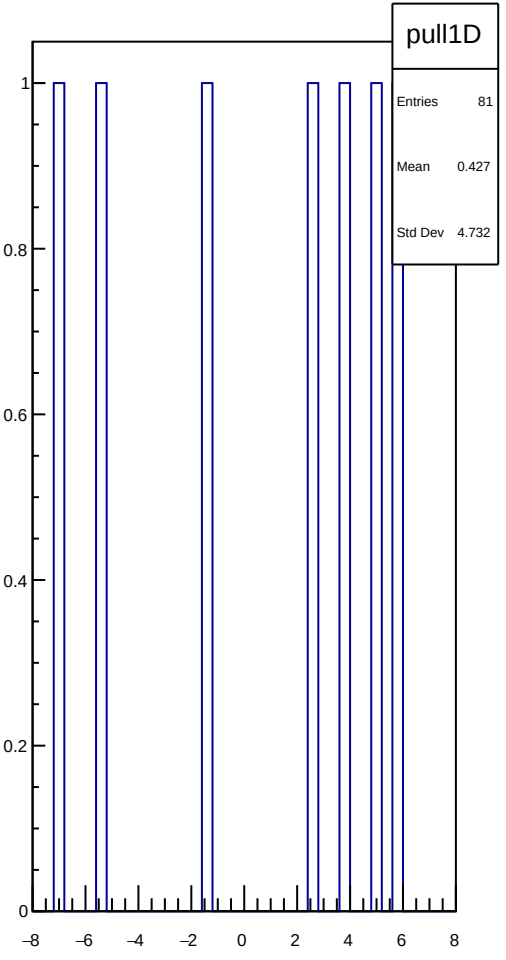

yield_bpm2i01X_rms vs run
χ² / ndf 1.522e+04 / 80
p0 0.004375 ± 3.479e−06
0.009
0.008
0.007
0.006
0.005
0.004

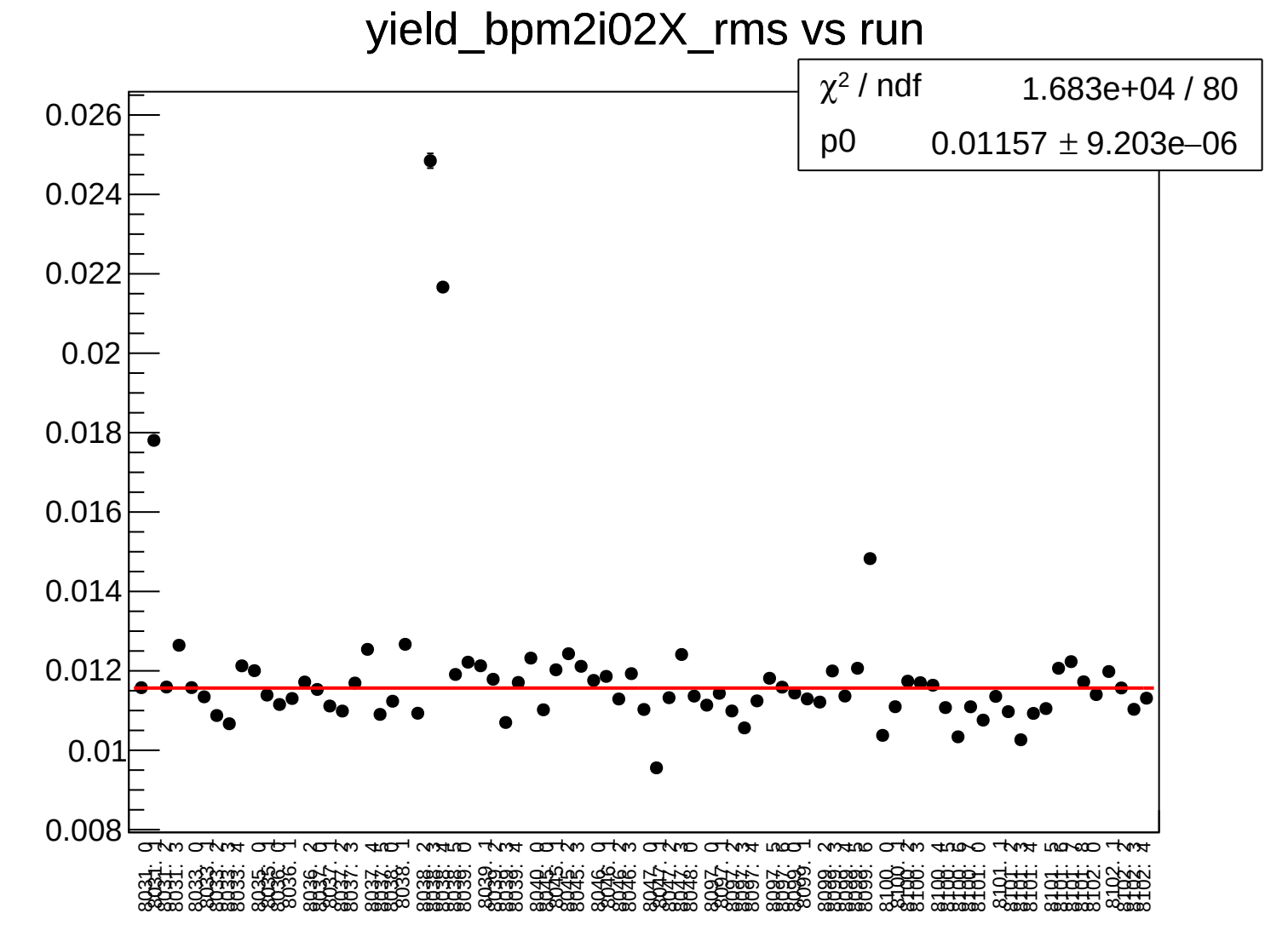

yield_bpm2i01Y_mean vs run
χ² / ndf 1.529e+06 / 80
p0 −4.745 ± 3.902e−06
−4.73
−4.735
−4.74
−4.745
−4.75
−4.755
pull
Entries 81
Mean 321.5
Std Dev 276.7
400
300
200
100
0
−100
−200
−300

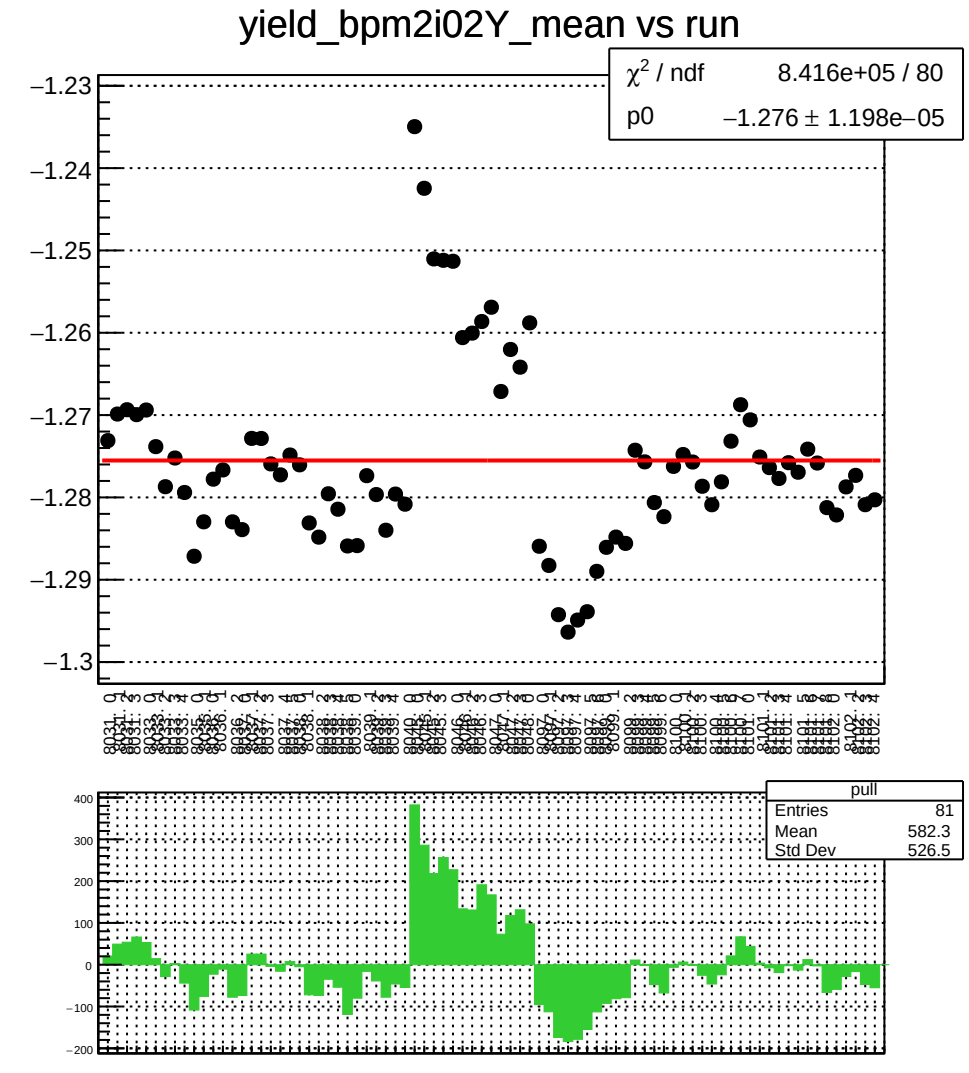

pull1D
Entries 81
Mean 0.1656
Std Dev 4.429
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

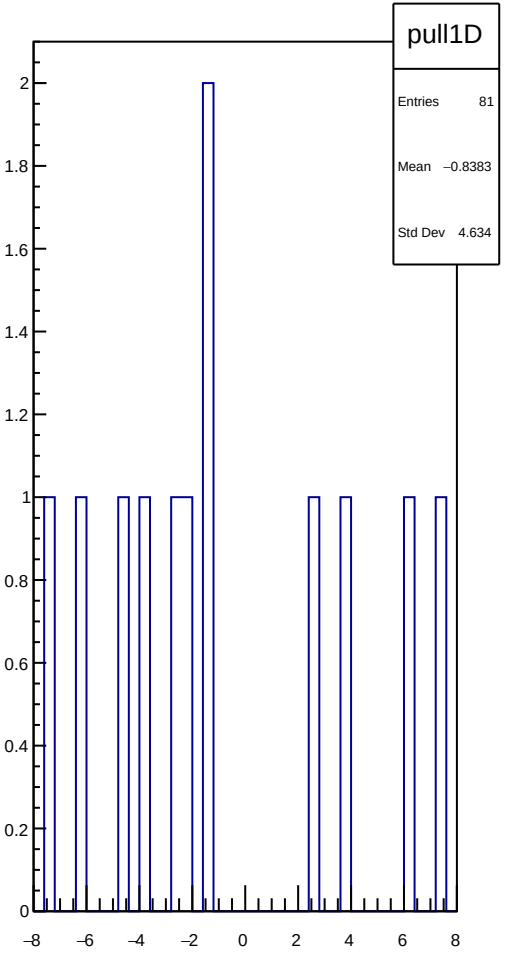

yield_bpm2i01Y_rms vs run
χ² / ndf 4532 / 80
p0 0.003482 ± 2.759e−06
0.004
0.0038
0.0036
0.0034
0.0032
0.003

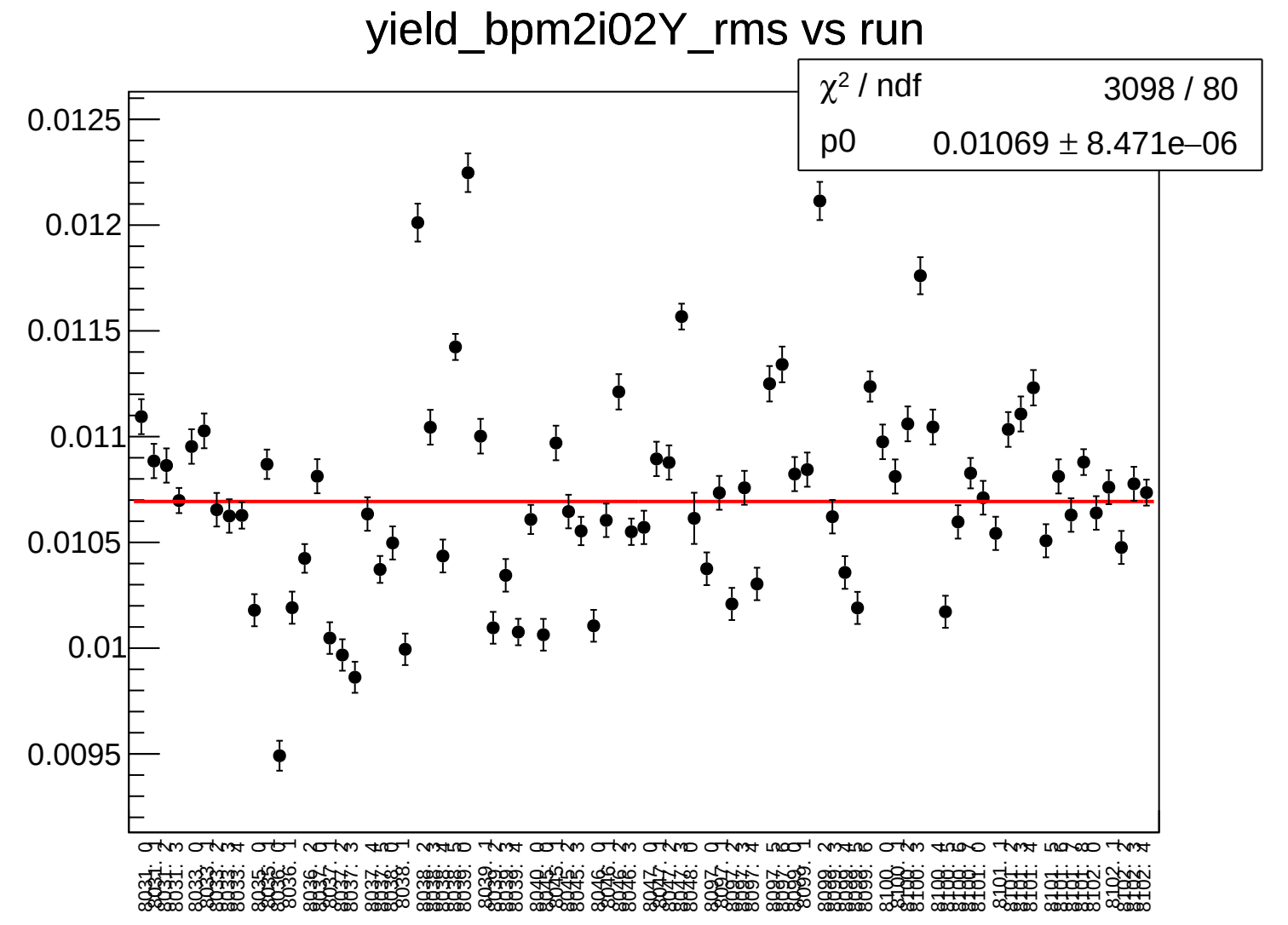

yield_bpm2i02X_mean vs run
χ² / ndf 1.283e+06 / 80
p0 0.07896 ± 1.301e−05
0.1
0.09
0.08
0.07
0.06
0.05
pull
Entries 81
Mean −166.6
Std Dev 232.6
200
150
100
50
0
−50
−100
−150
−200
−250

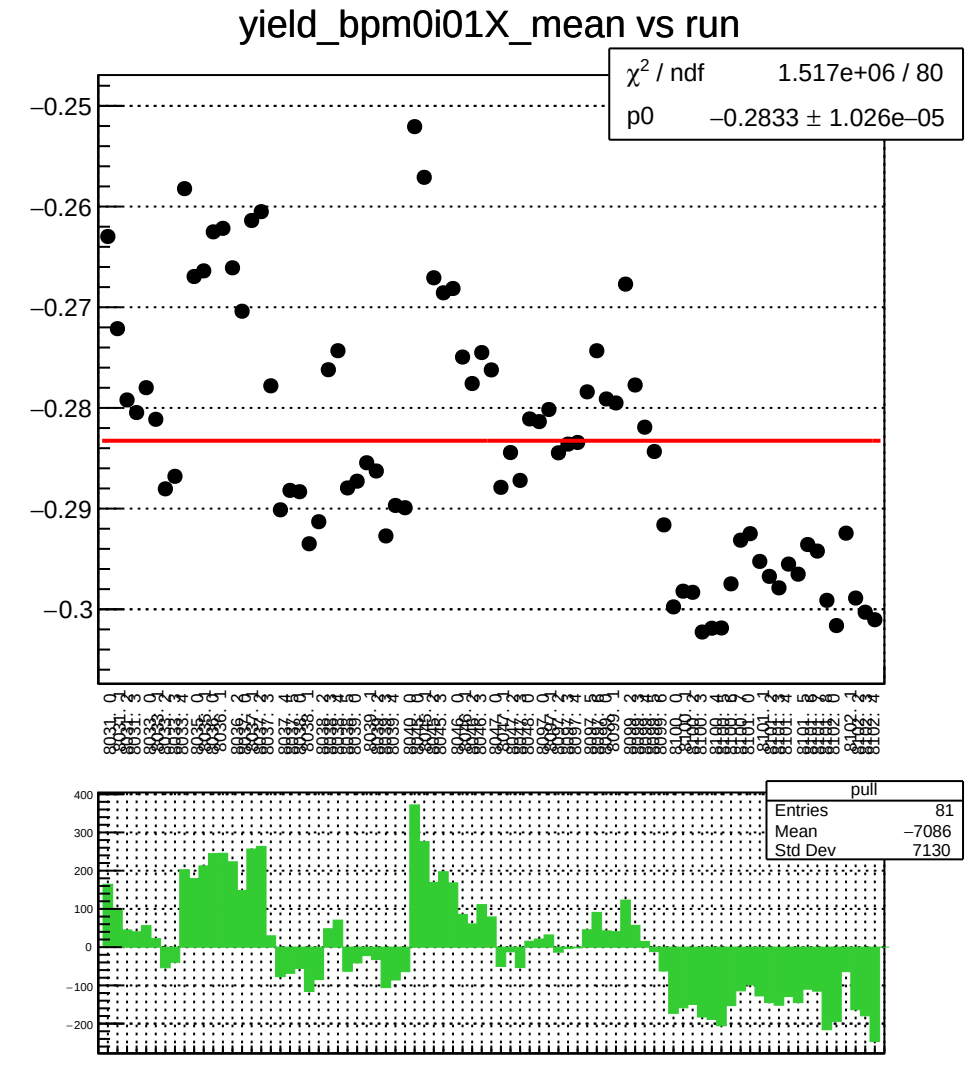

pull1D
Entries 81
Mean 0.427
Std Dev 4.732
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

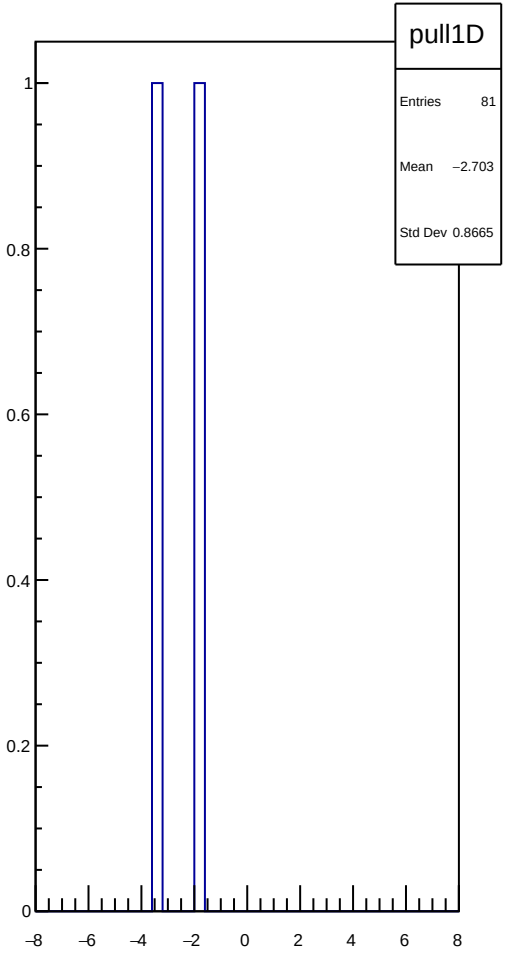

yield_bpm2i02X_rms vs run
χ² / ndf 1.683e+04 / 80
p0 0.01157 ± 9.203e–06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

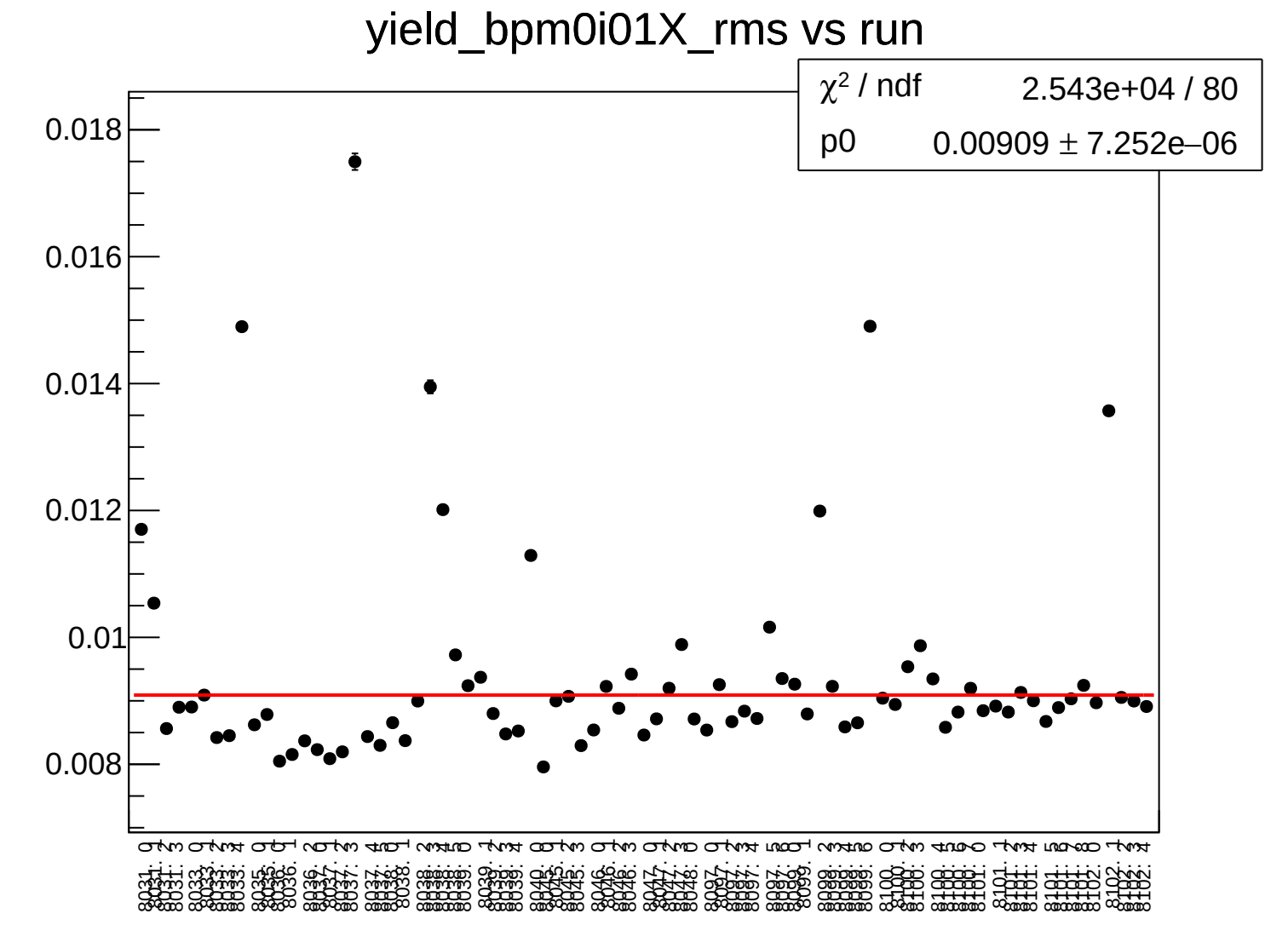

yield_bpm2i02Y_mean vs run
χ² / ndf 8.416e+05 / 80
p0 −1.276 ± 1.198e−05
−1.23
−1.24
−1.25
−1.26
−1.27
−1.28
−1.29
−1.3
pull
Entries 81
Mean 582.3
Std Dev 526.5
400
300
200
100
0
−100
−200

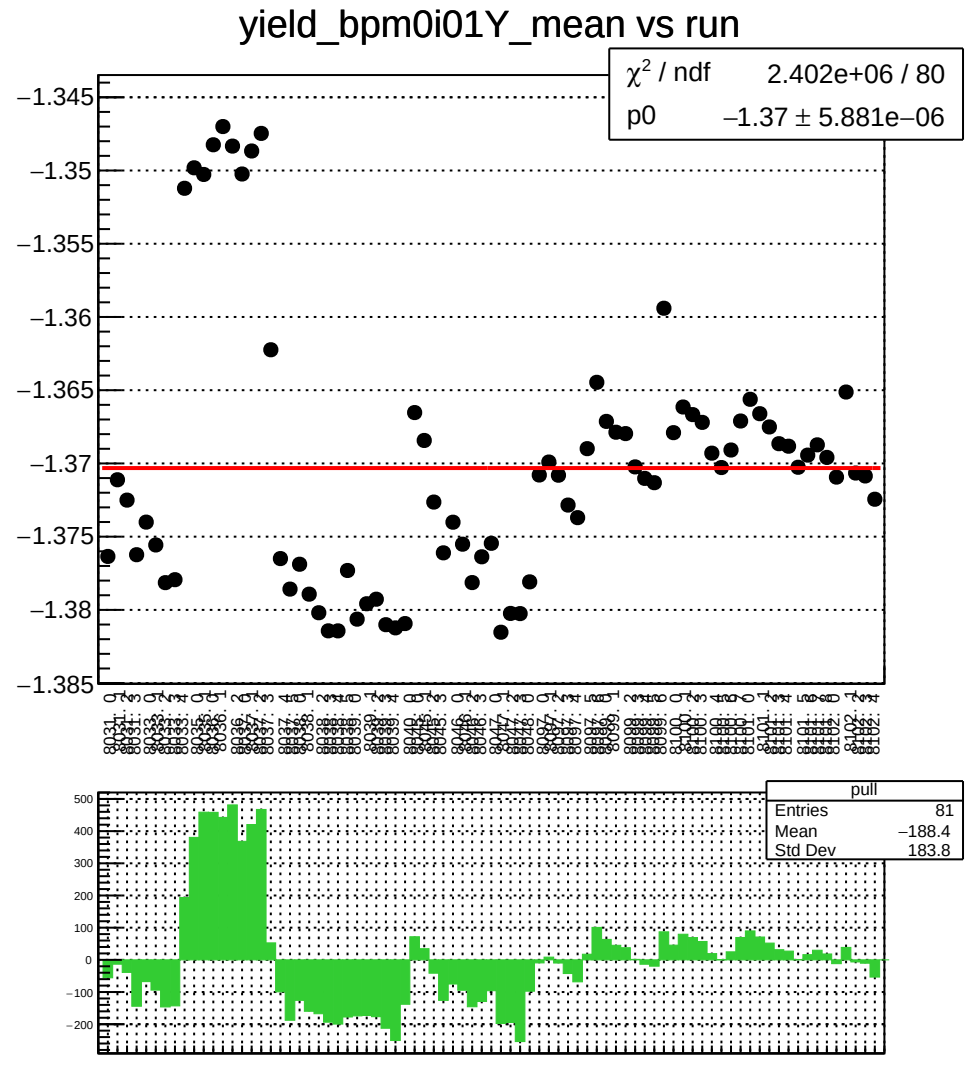

pull1D
Entries 81
Mean −0.8383
Std Dev 4.634
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

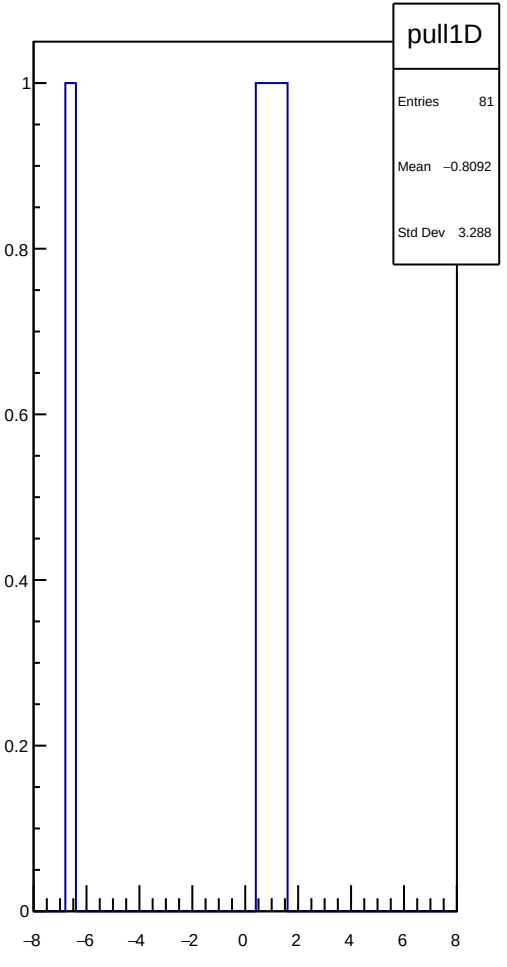

yield_bpm2i02Y_rms vs run
χ² / ndf 3098 / 80
p0 0.01069 ± 8.471e–06
0.0125
0.012
0.0115
0.011
0.0105
0.01
0.0095

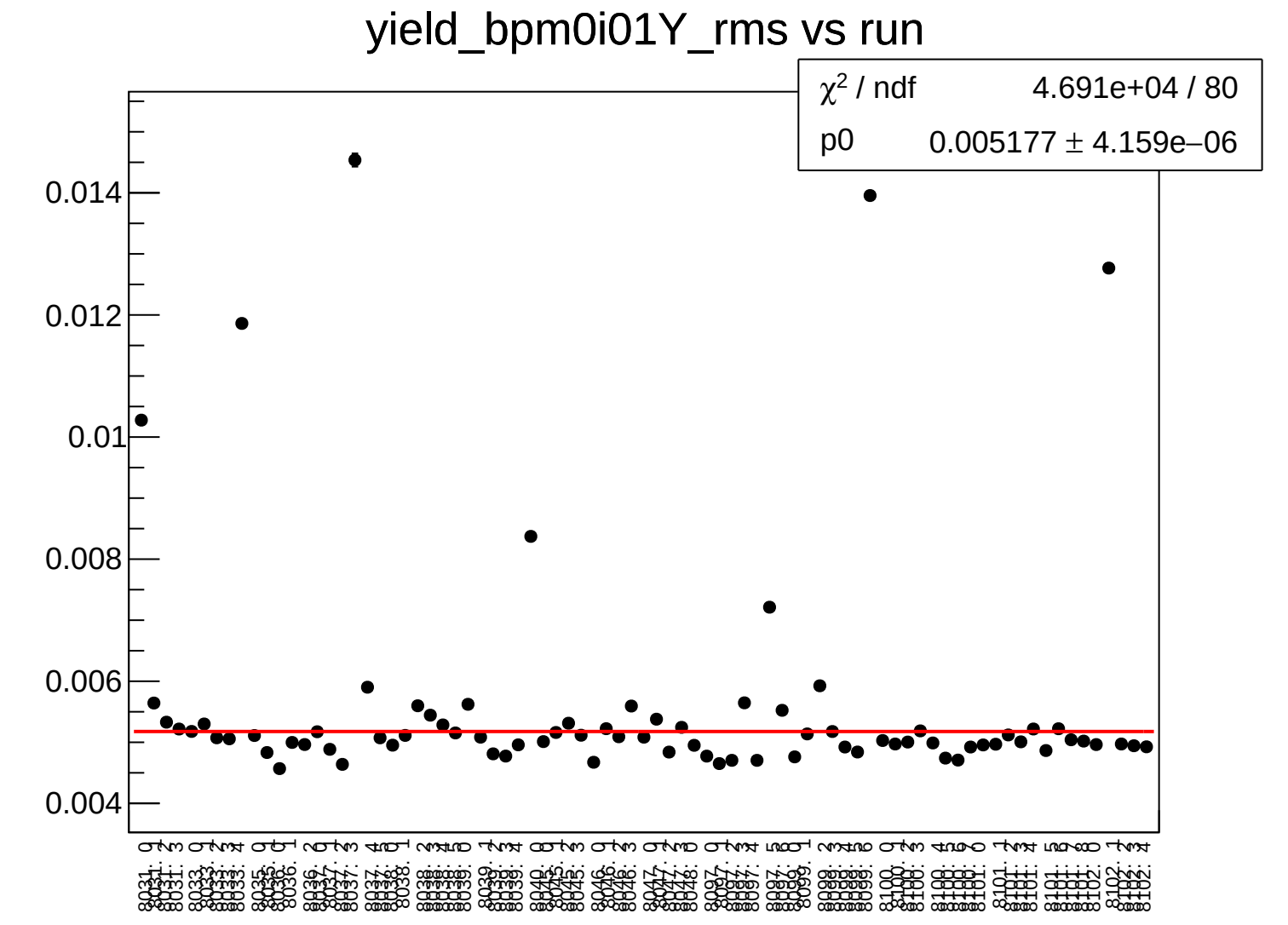

yield_bpm0i01X_mean vs run
χ² / ndf 1.517e+06 / 80
p0 −0.2833 ± 1.026e−05
−0.25
−0.26
−0.27
−0.28
−0.29
−0.3
pull
Entries 81
Mean −7086
Std Dev 7130
400
300
200
100
0
−100
−200

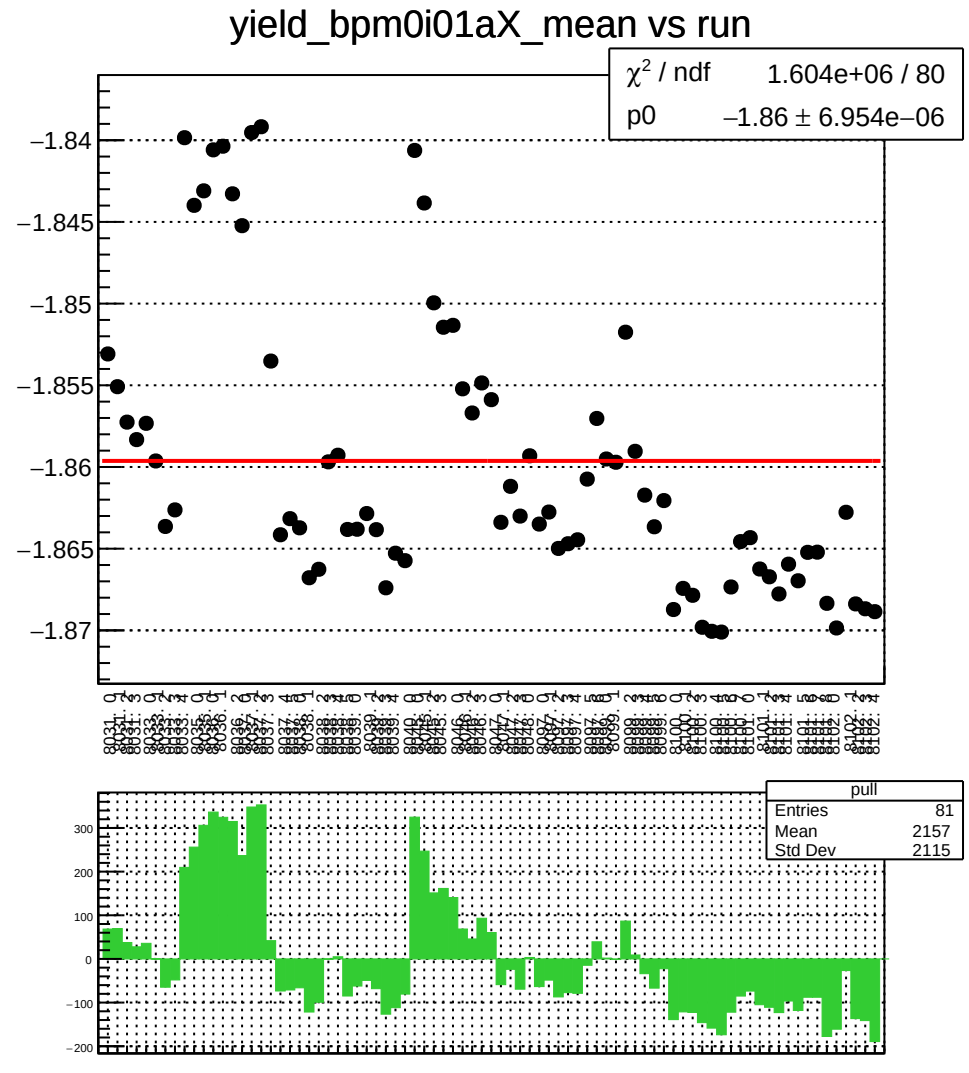

pull1D
Entries 81
Mean −2.703
Std Dev 0.8665
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

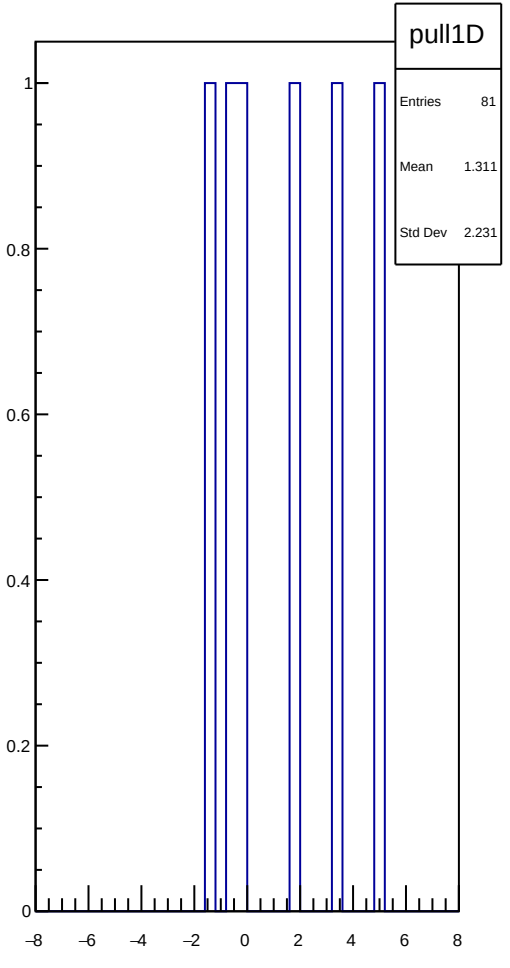

yield_bpm0i01X_rms vs run
χ² / ndf 2.543e+04 / 80
p0 0.00909 ± 7.252e–06
0.018
0.016
0.014
0.012
0.01
0.008

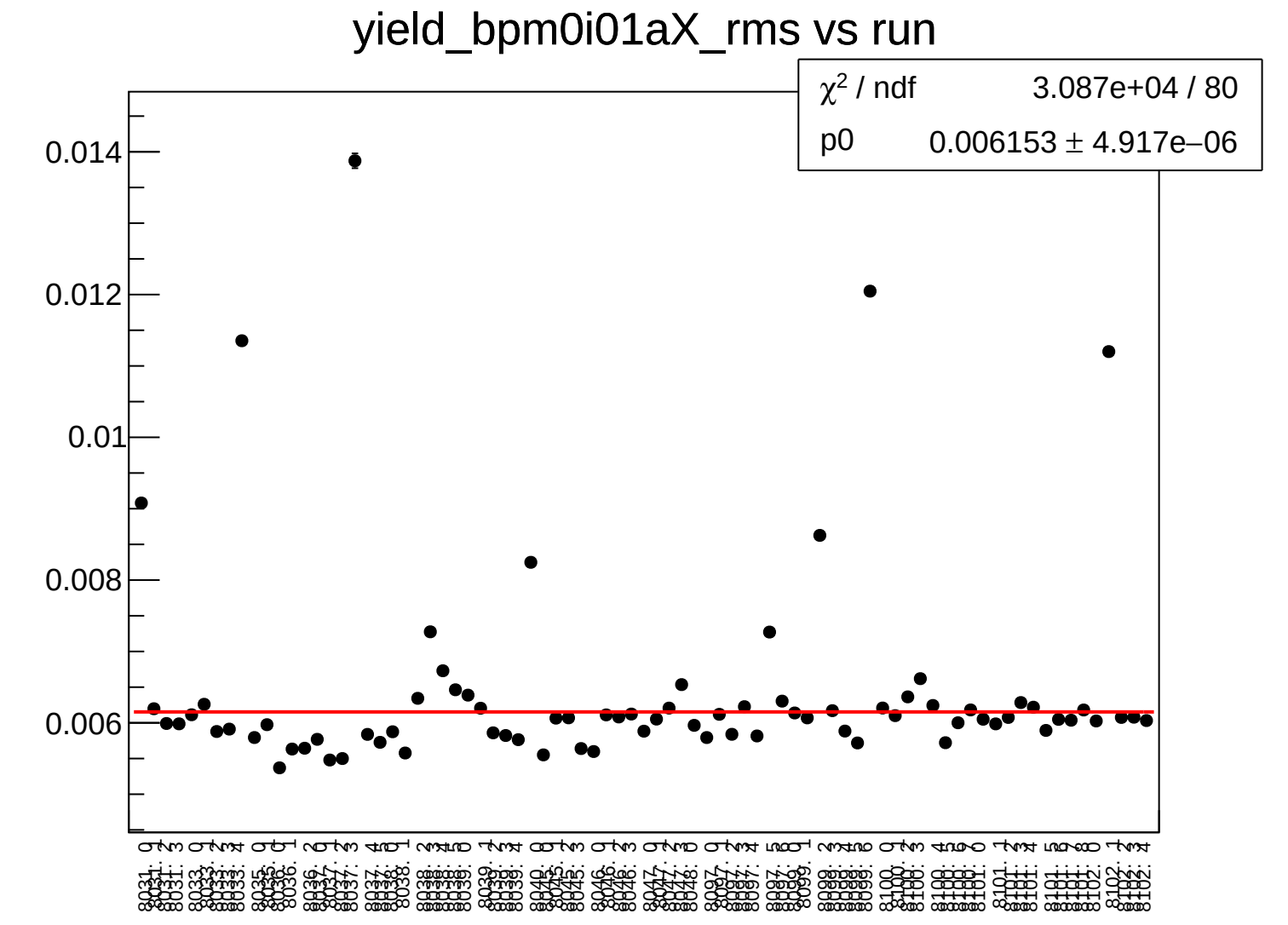

yield_bpm0i01Y_mean vs run
χ² / ndf 2.402e+06 / 80
p0 −1.37 ± 5.881e−06
−1.345
−1.35
−1.355
−1.36
−1.365
−1.37
−1.375
−1.38
−1.385
pull
Entries 81
Mean −188.4
Std Dev 183.8
500
400
300
200
100
0
−100
−200

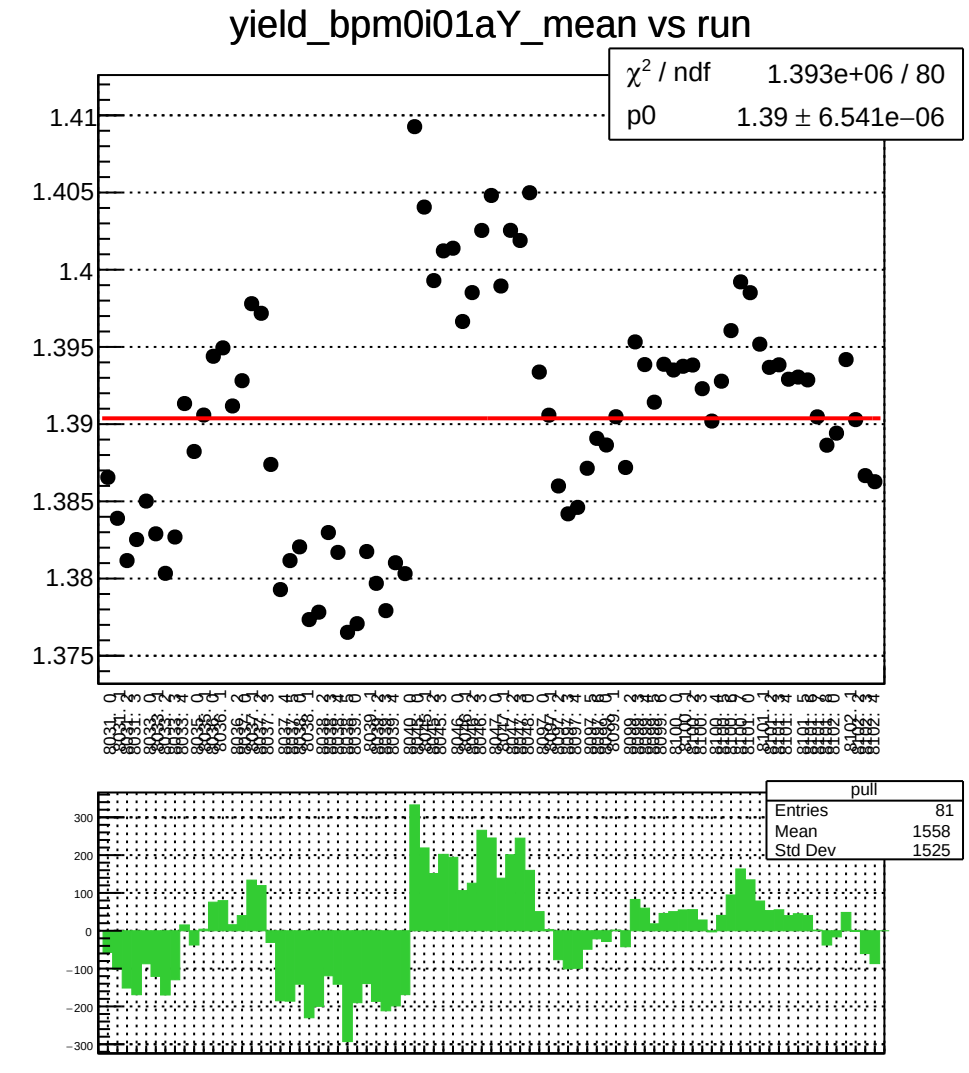

pull1D
Entries 81
Mean −0.8092
Std Dev 3.288
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

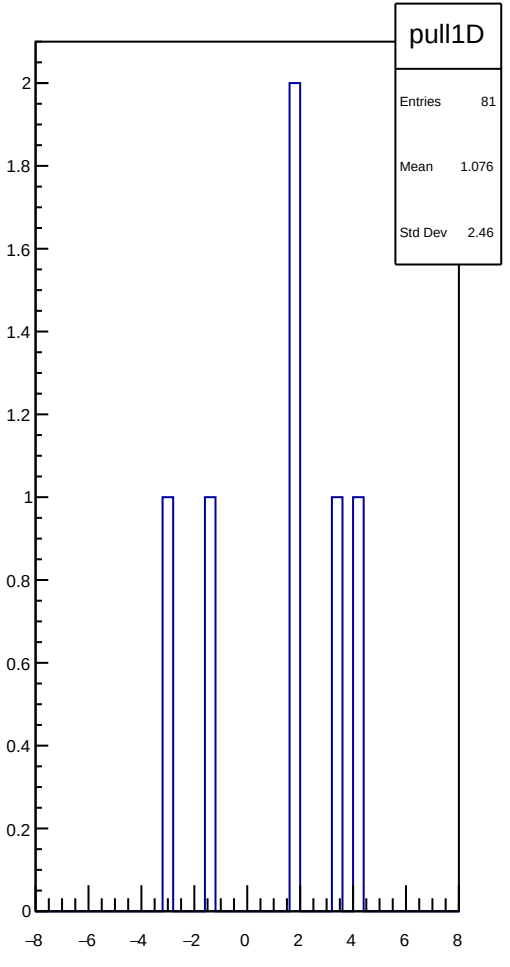

yield_bpm0i01Y_rms vs run
χ² / ndf 4.691e+04 / 80
p0 0.005177 ± 4.159e−06
0.014
0.012
0.01
0.008
0.006
0.004

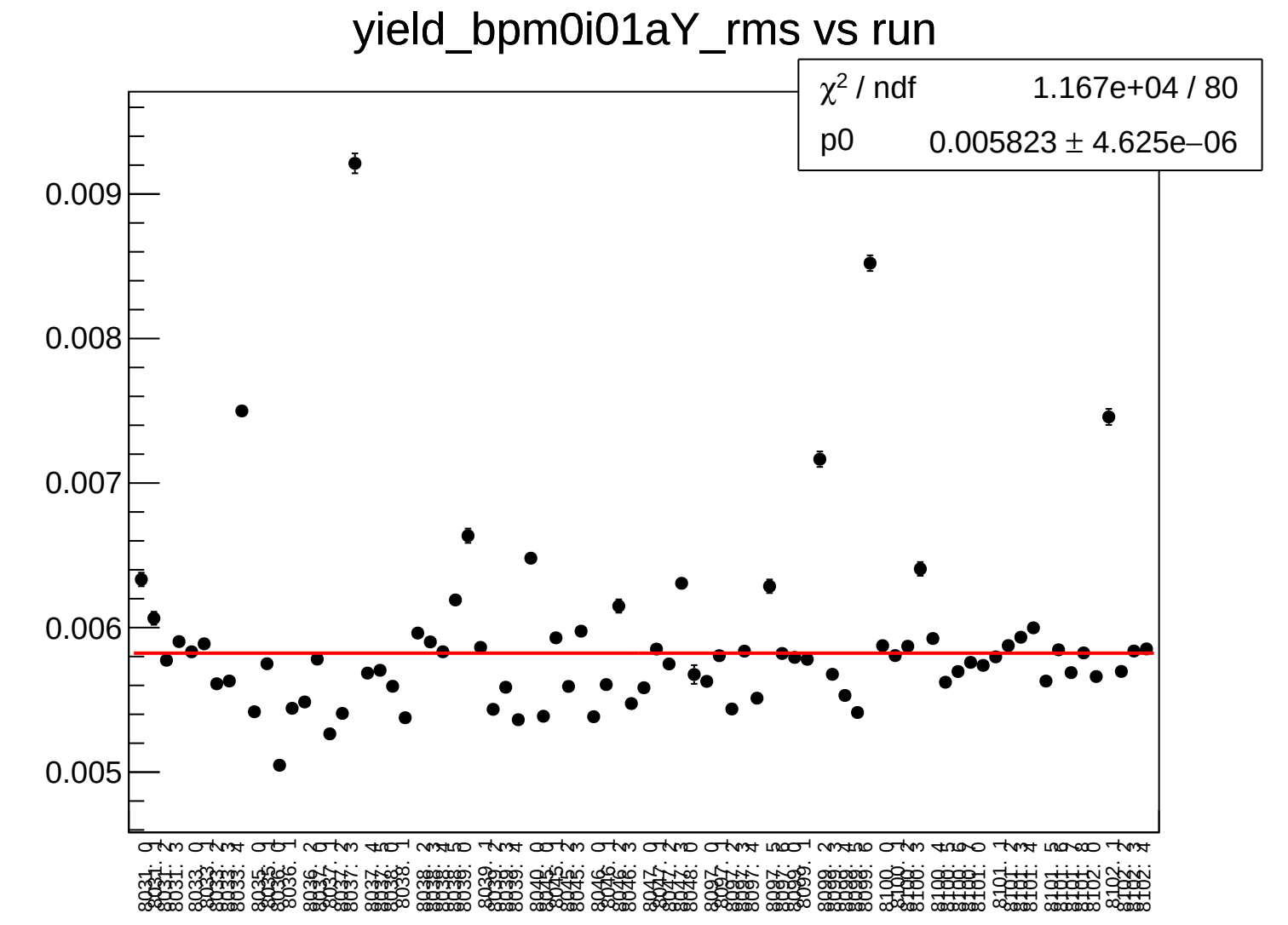

yield_bpm0i01aX_mean vs run
χ² / ndf 1.604e+06 / 80
p0 −1.86 ± 6.954e−06
−1.84
−1.845
−1.85
−1.855
−1.86
−1.865
−1.87
pull
Entries 81
Mean 2157
Std Dev 2115
300
200
100
0
−100
−200

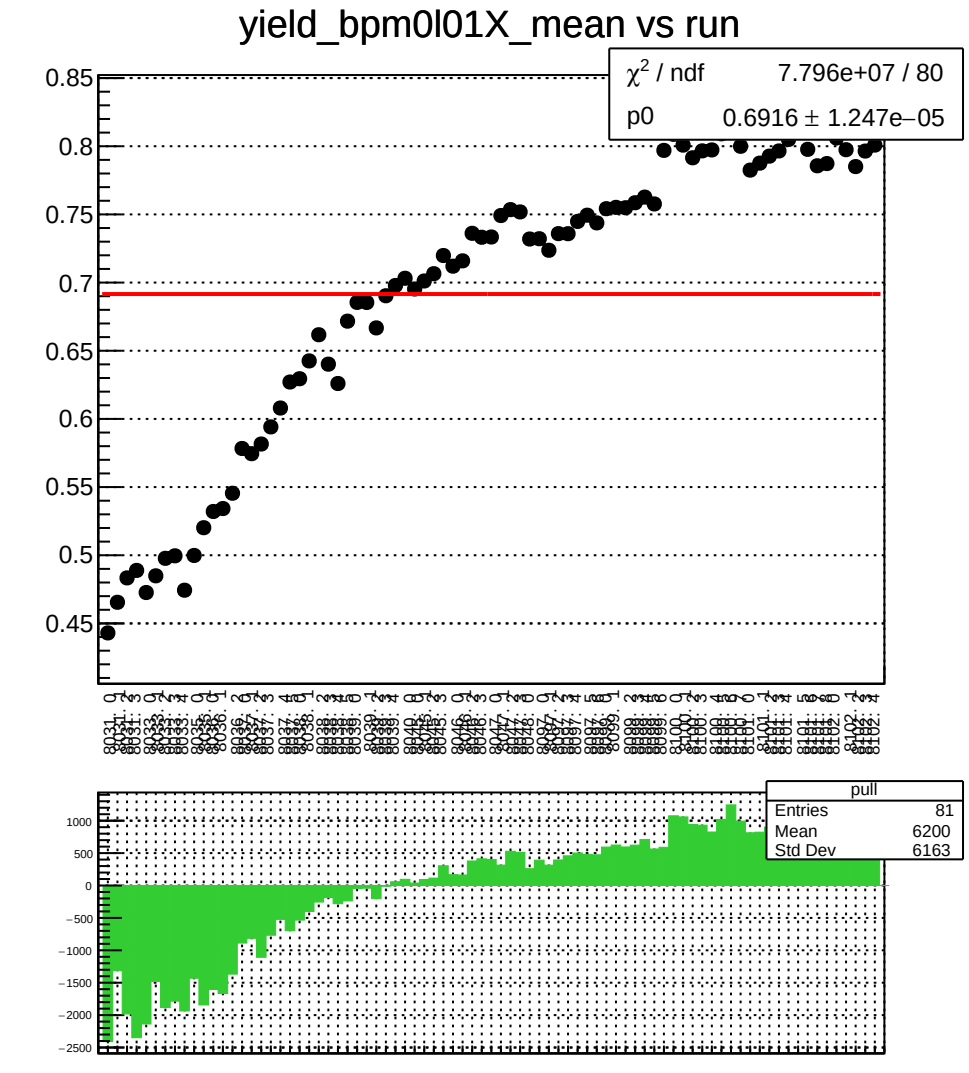

pull1D
Entries 81
Mean 1.311
Std Dev 2.231
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

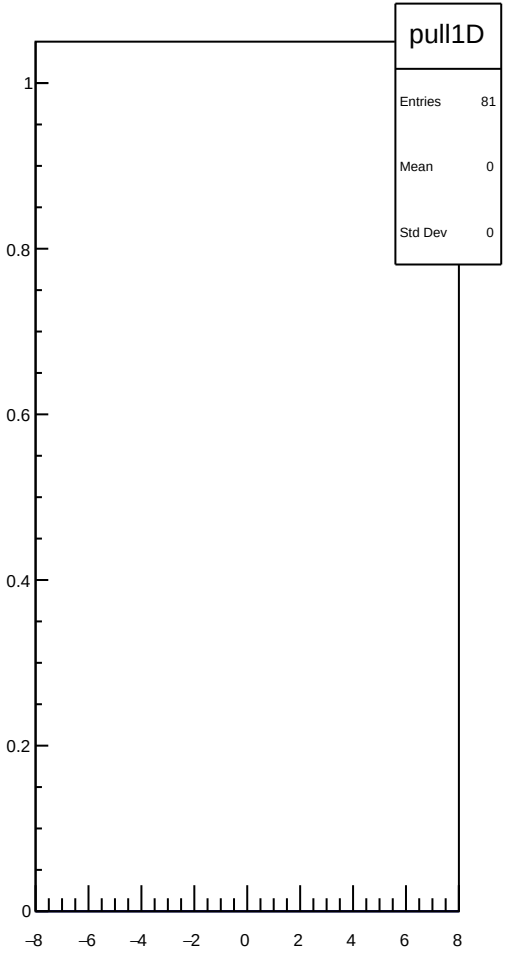

yield_bpm0i01aX_rms vs run
χ² / ndf 3.087e+04 / 80
p0 0.006153 ± 4.917e−06
0.014
0.012
0.01
0.008
0.006

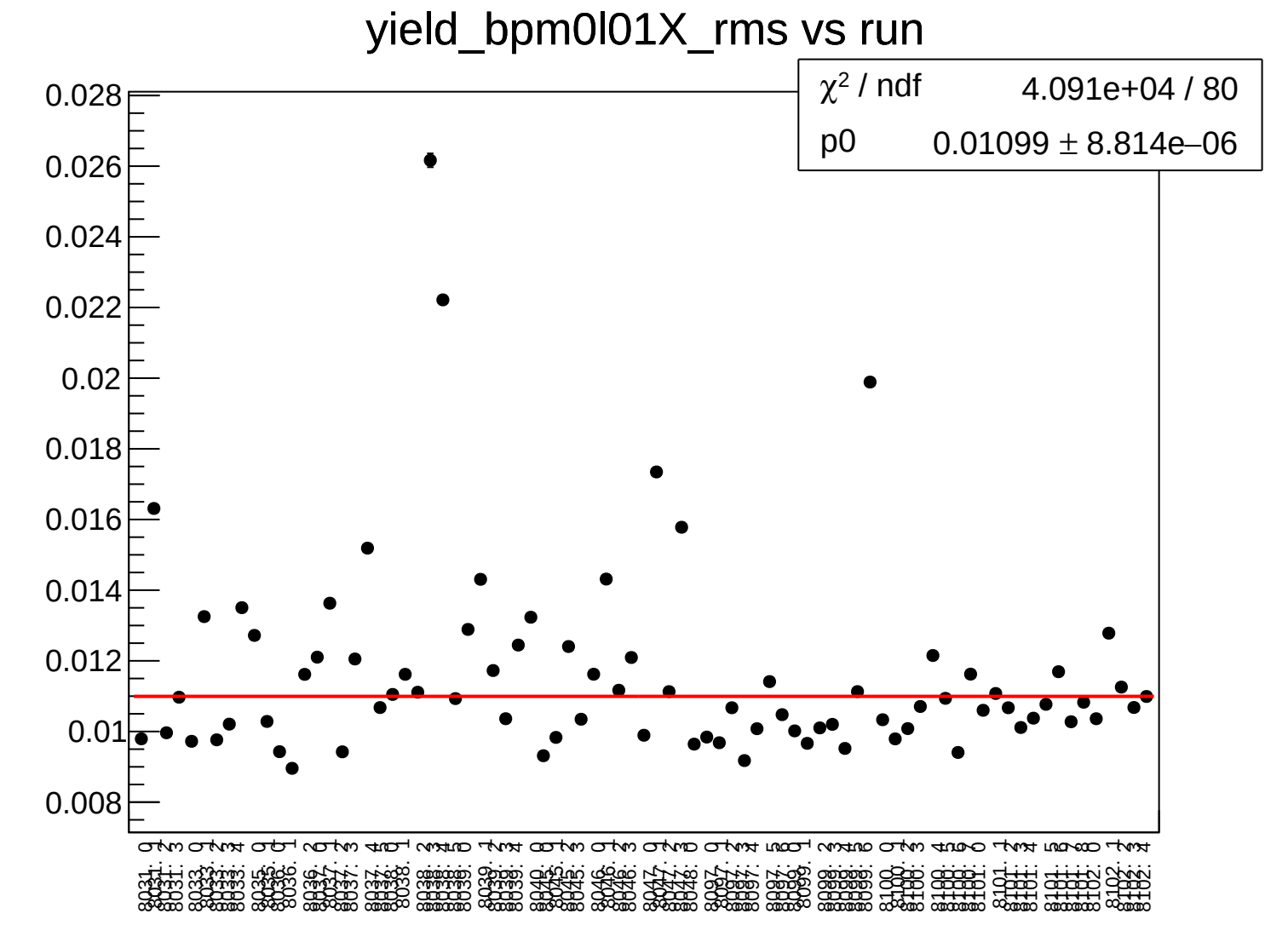

yield_bpm0i01aY_mean vs run
χ² / ndf 1.393e+06 / 80
p0 1.39 ± 6.541e−06
pull
Entries 81
Mean 1558
Std Dev 1525

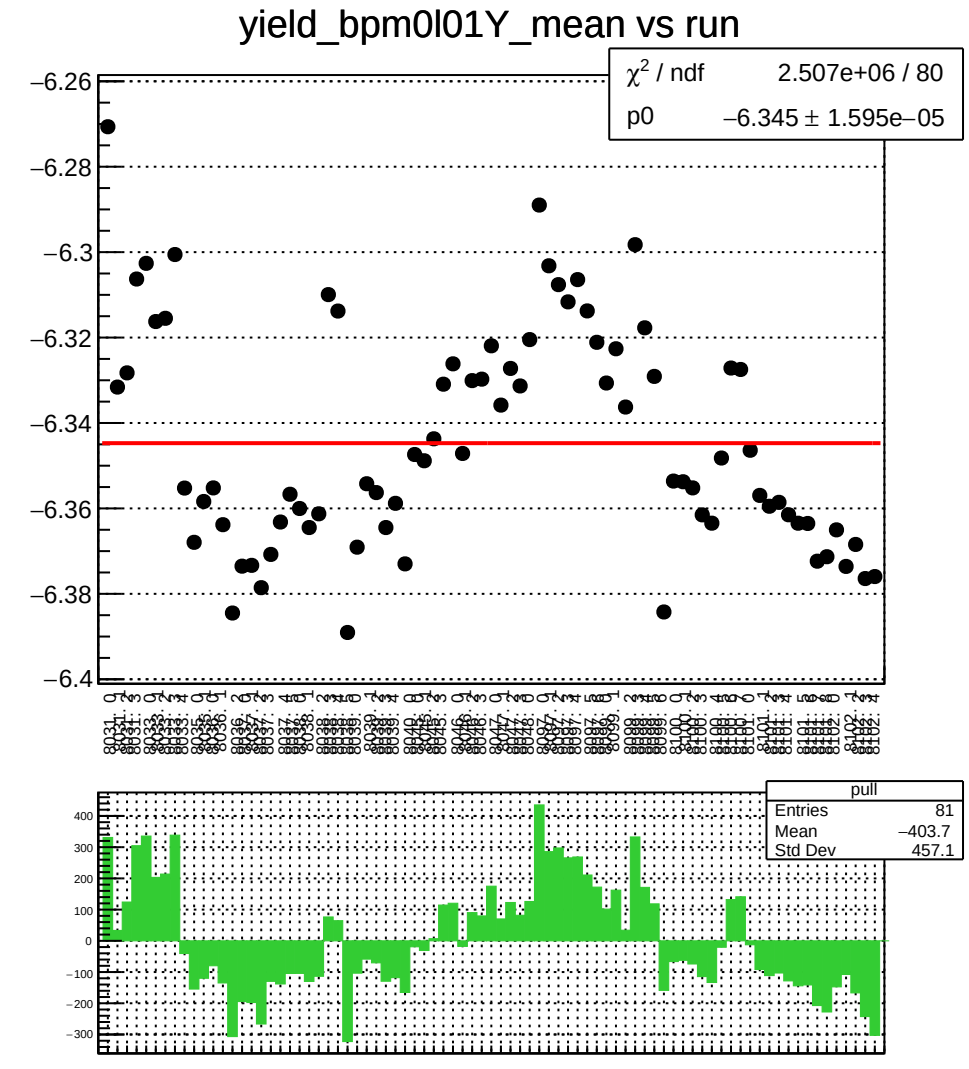

pull1D
Entries 81
Mean 1.076
Std Dev 2.46

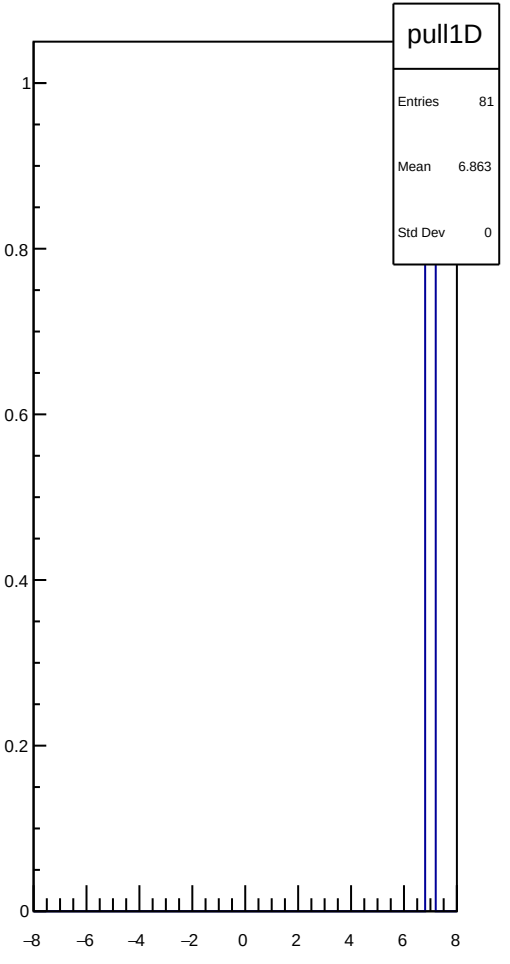

yield_bpm0i01aY_rms vs run
χ² / ndf 1.167e+04 / 80
p0 0.005823 ± 4.625e−06
0.009
0.008
0.007
0.006
0.005

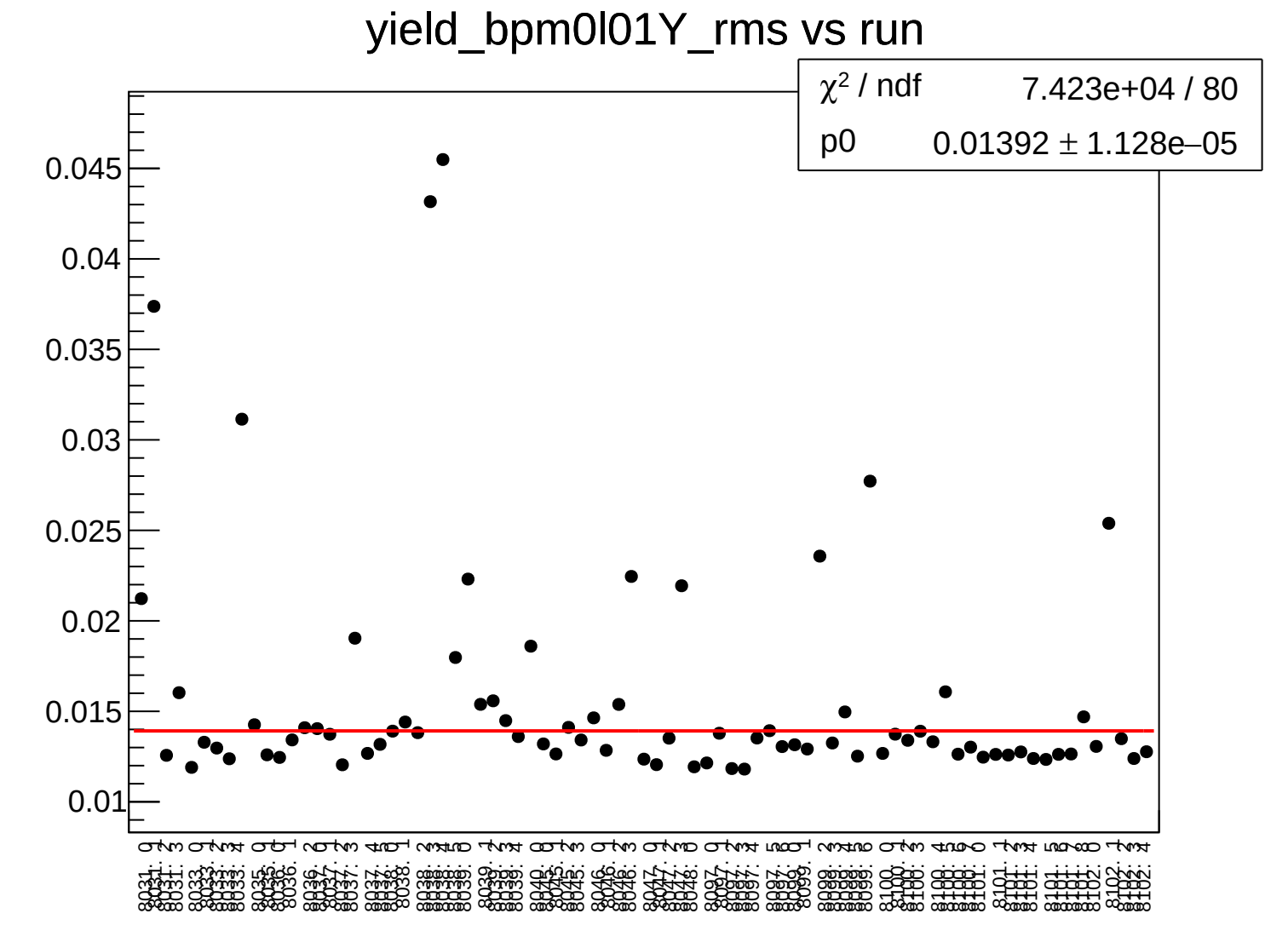

yield_bpm0l01X_mean vs run
χ² / ndf 7.796e+07 / 80
p0 0.6916 ± 1.247e−05
pull
Entries 81
Mean 6200
Std Dev 6163

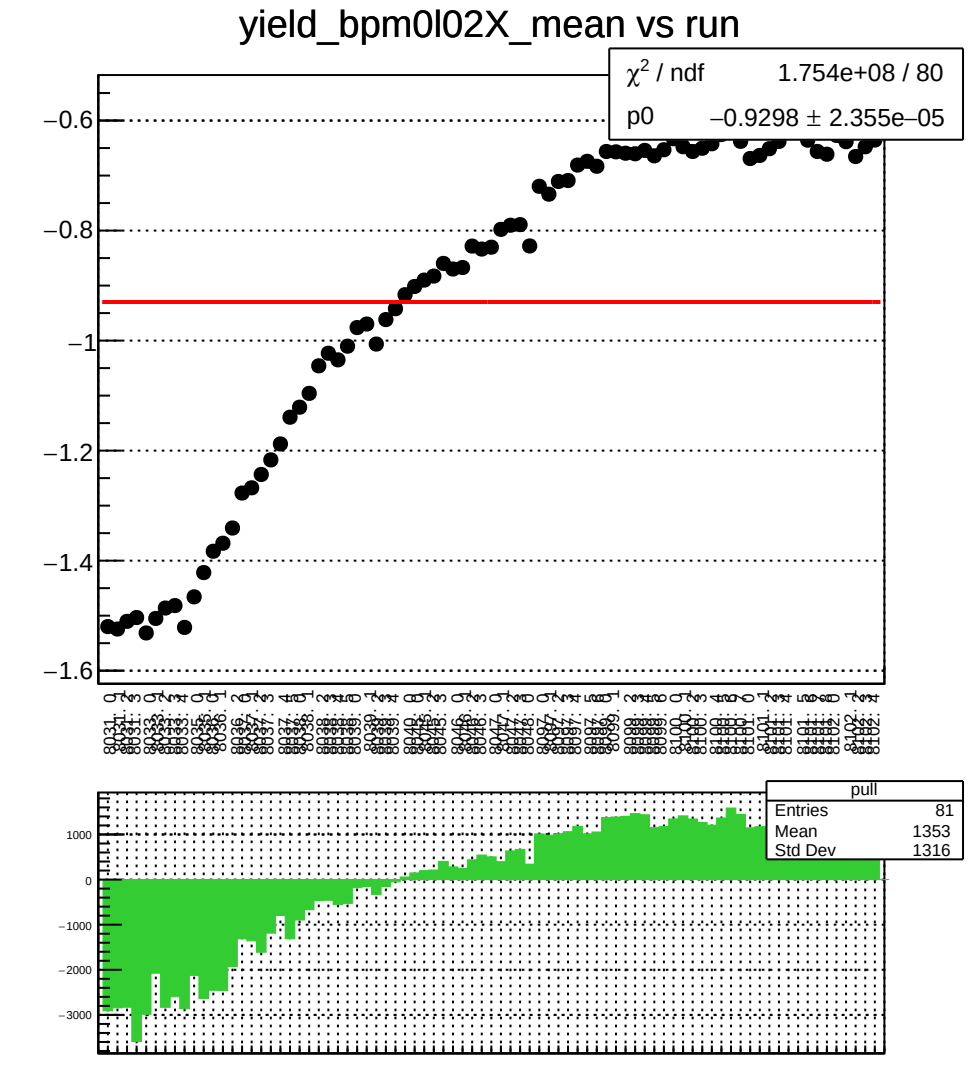

pull1D
Entries 81
Mean 0
Std Dev 0

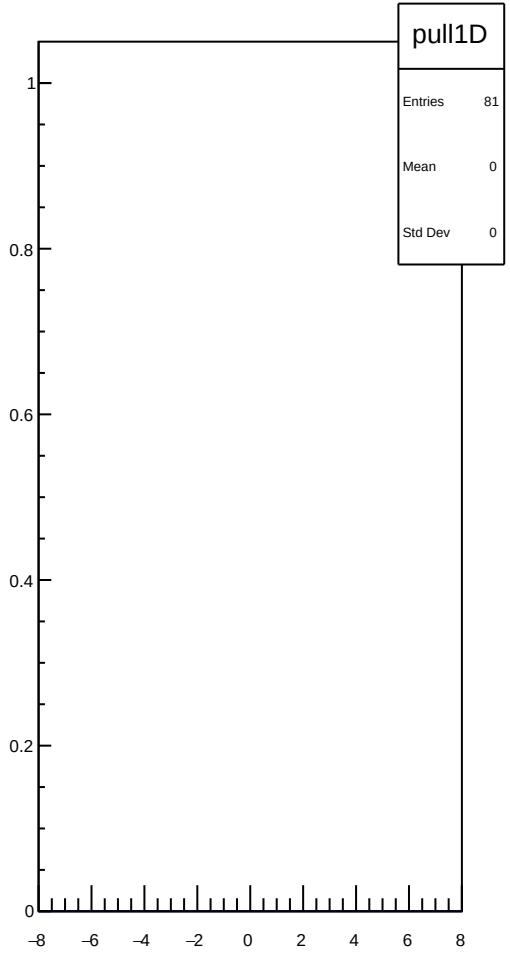

yield_bpm0l01X_rms vs run
χ² / ndf 4.091e+04 / 80
p0 0.01099 ± 8.814e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

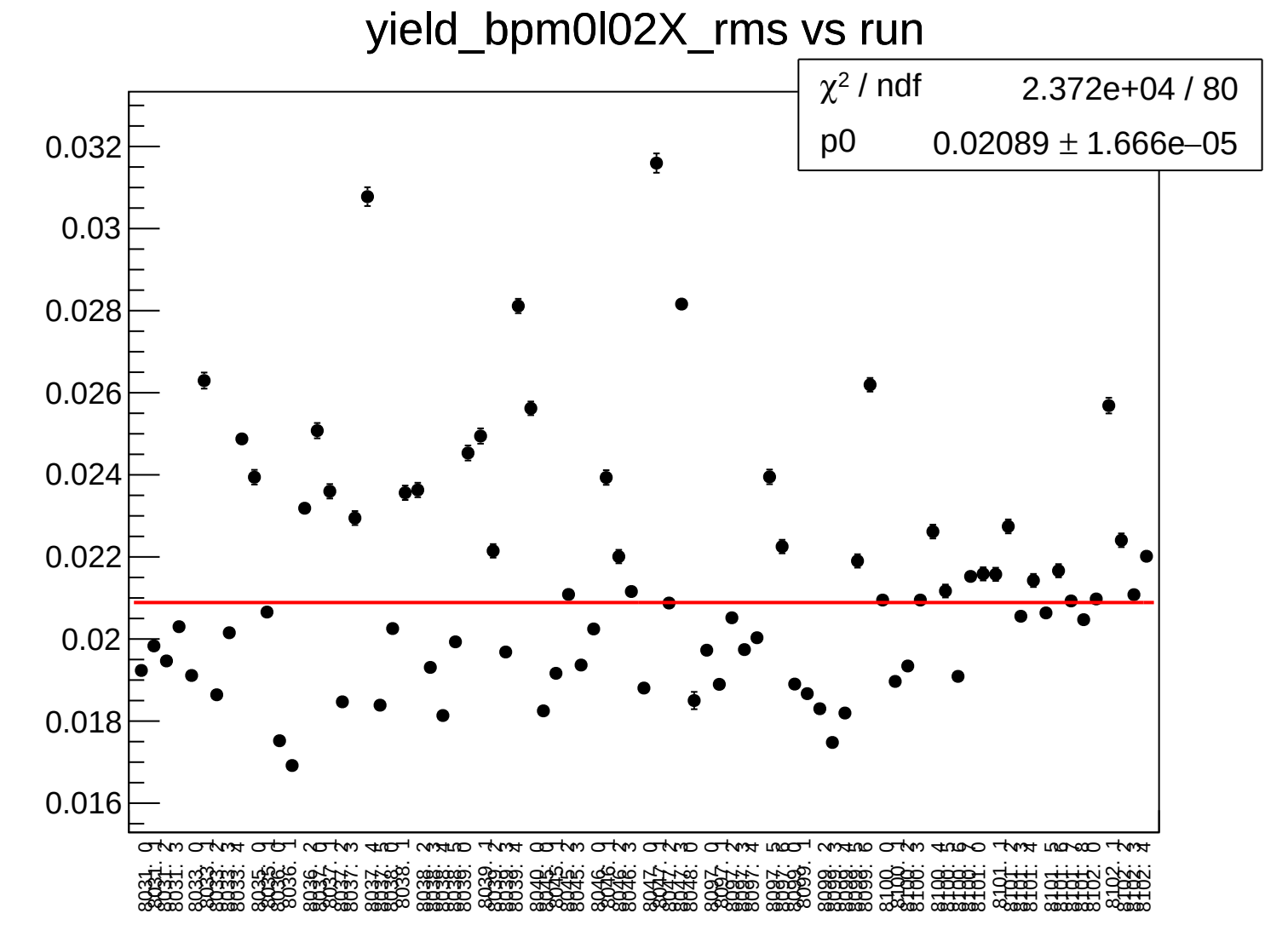

yield_bpm0l01Y_mean vs run
χ² / ndf 2.507e+06 / 80
p0 −6.345 ± 1.595e−05
−6.26
−6.28
−6.3
−6.32
−6.34
−6.36
−6.38
−6.4
pull
Entries 81
Mean −403.7
Std Dev 457.1
400
300
200
100
0
−100
−200
−300

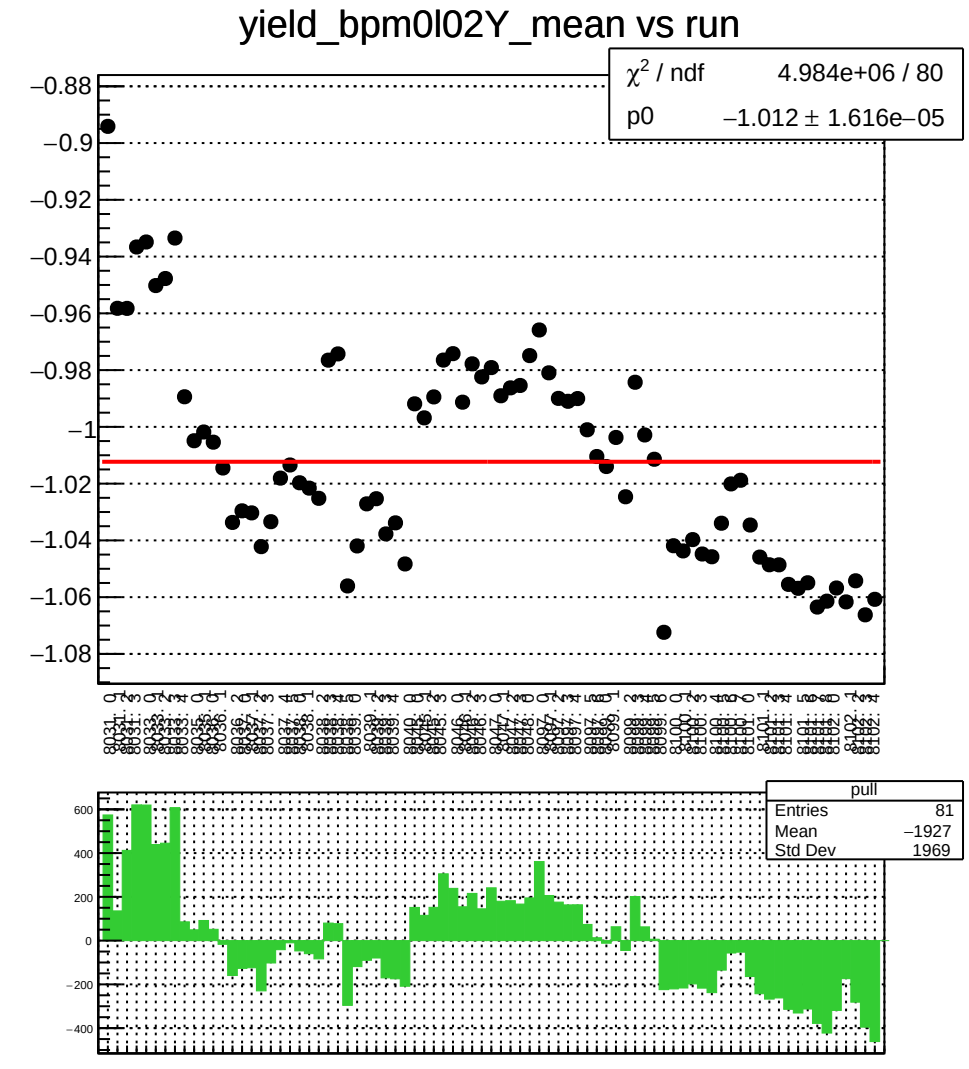

pull1D
Entries 81
Mean 6.863
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

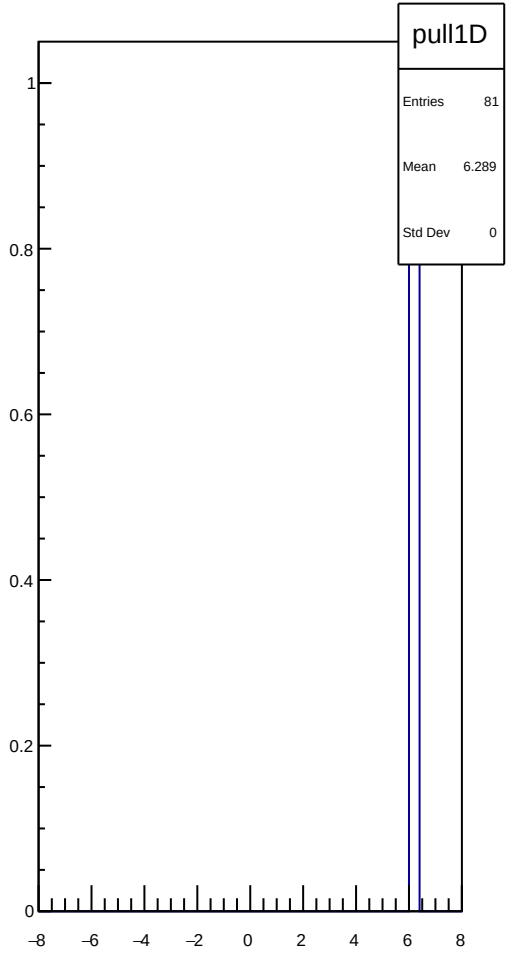

yield_bpm0l01Y_rms vs run
χ² / ndf 7.423e+04 / 80
p0 0.01392 ± 1.128e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

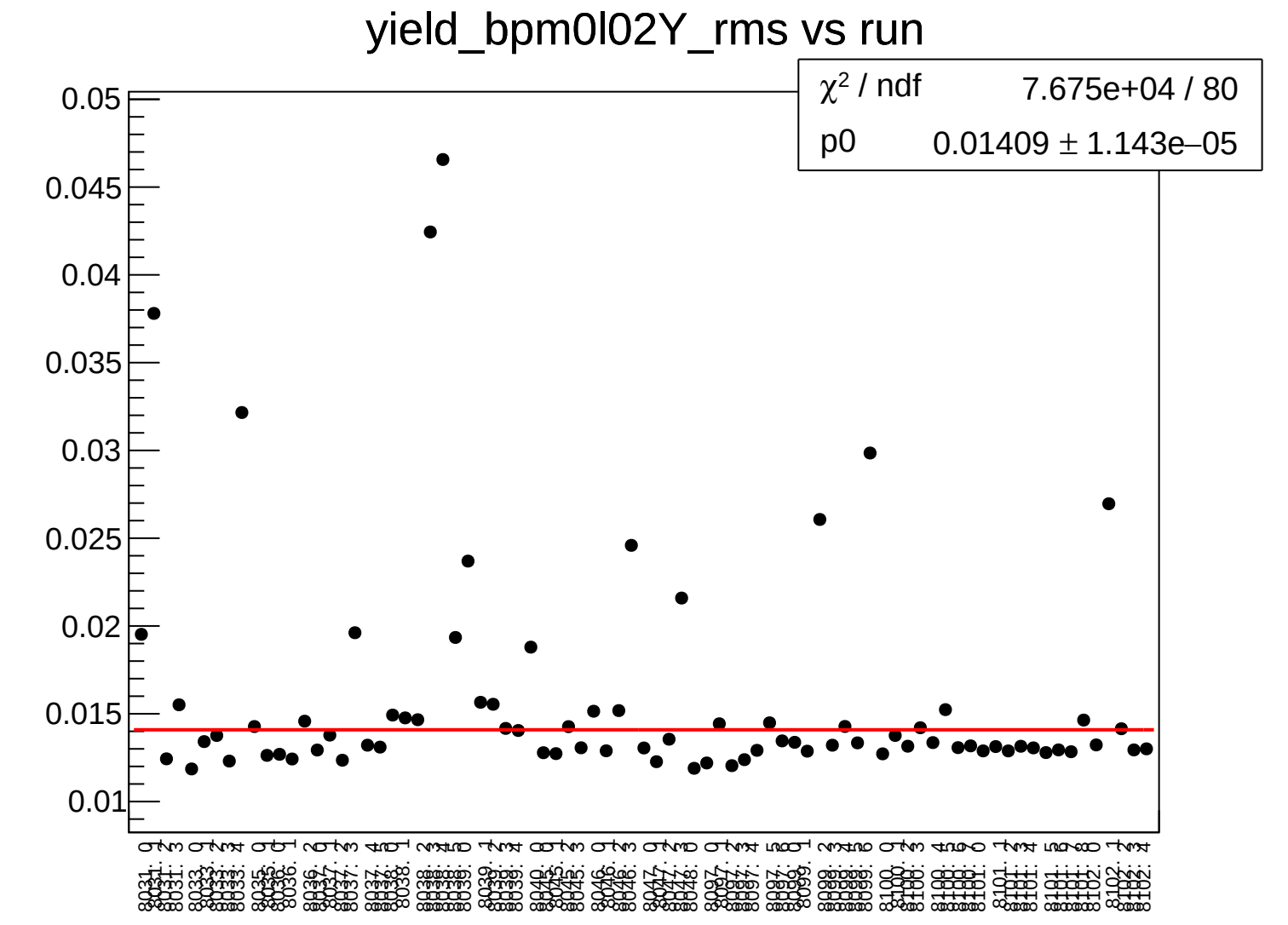

yield_bpm0l02X_mean vs run
χ² / ndf 1.754e+08 / 80
p0 −0.9298 ± 2.355e−05
−0.6
−0.8
−1
−1.2
−1.4
−1.6
pull
Entries 81
Mean 1353
Std Dev 1316
1000
0
−1000
−2000
−3000

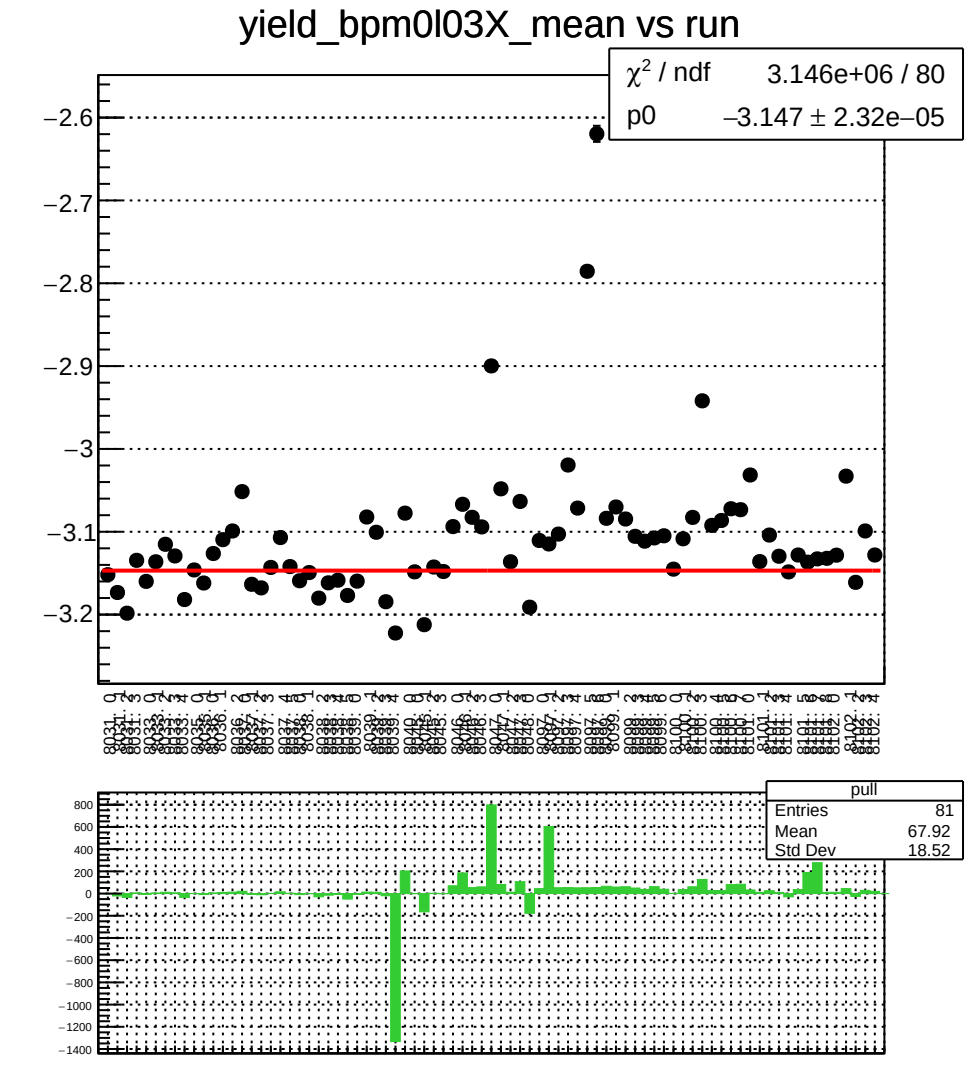

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

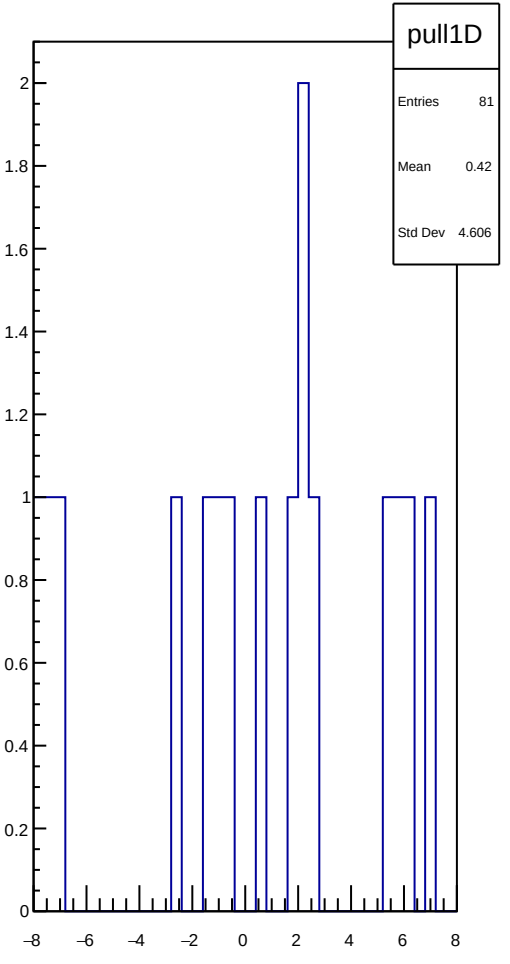

yield_bpm0l02X_rms vs run
χ² / ndf 2.372e+04 / 80
p0 0.02089 ± 1.666e−05
0.032
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016

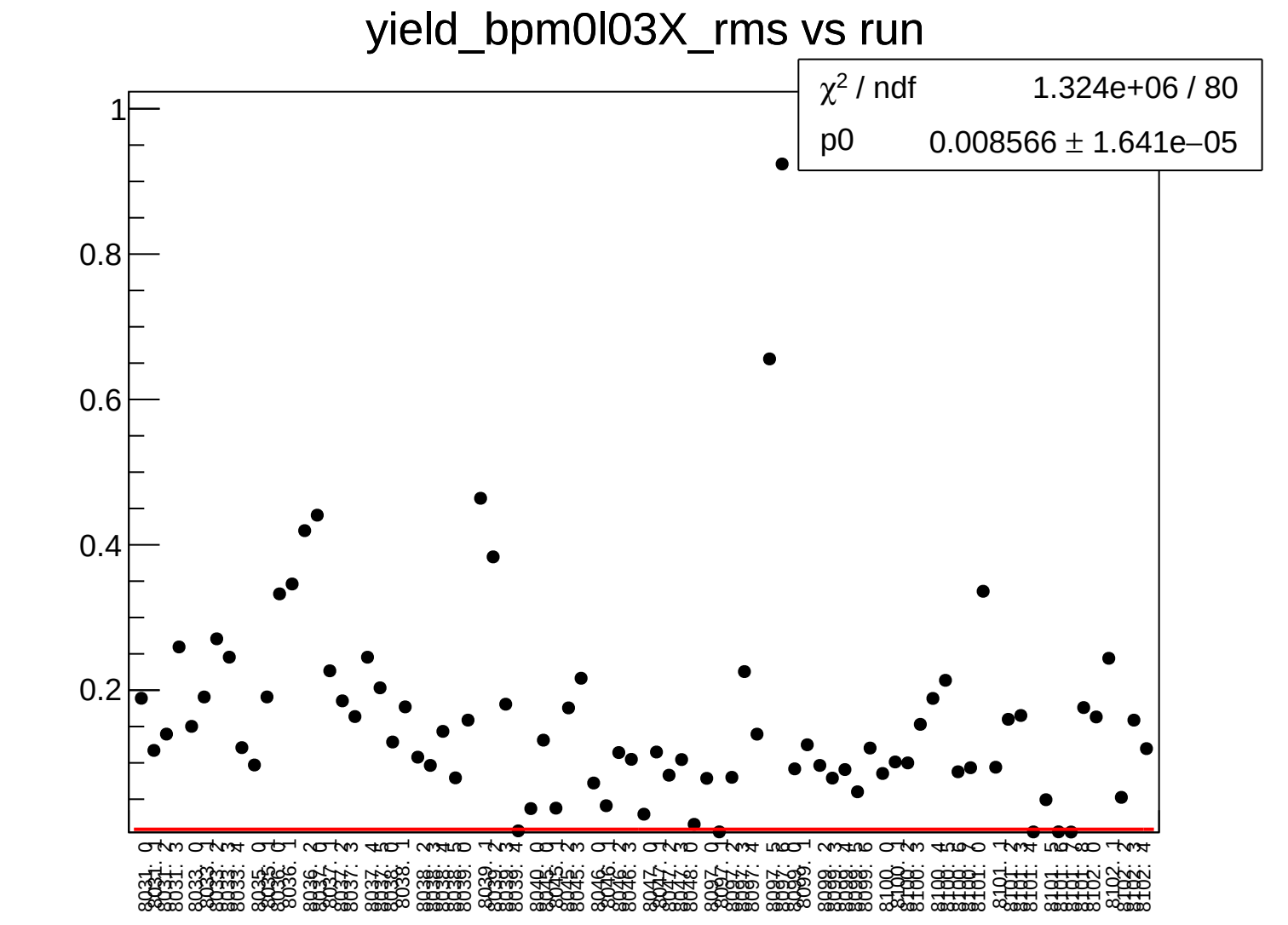

yield_bpm0l02Y_mean vs run
χ² / ndf 4.984e+06 / 80
p0 −1.012 ± 1.616e−05
pull
Entries 81
Mean −1927
Std Dev 1969

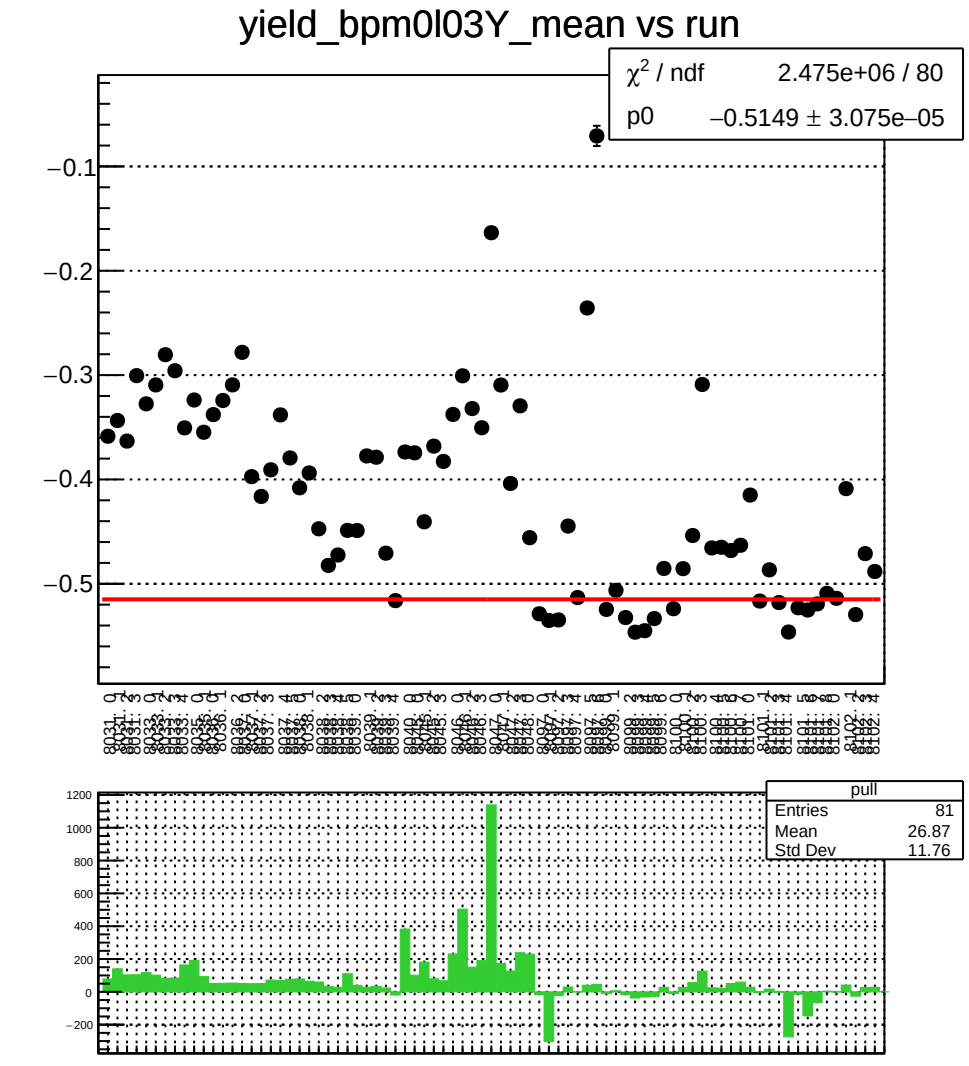

pull1D
Entries 81
Mean 6.289
Std Dev 0

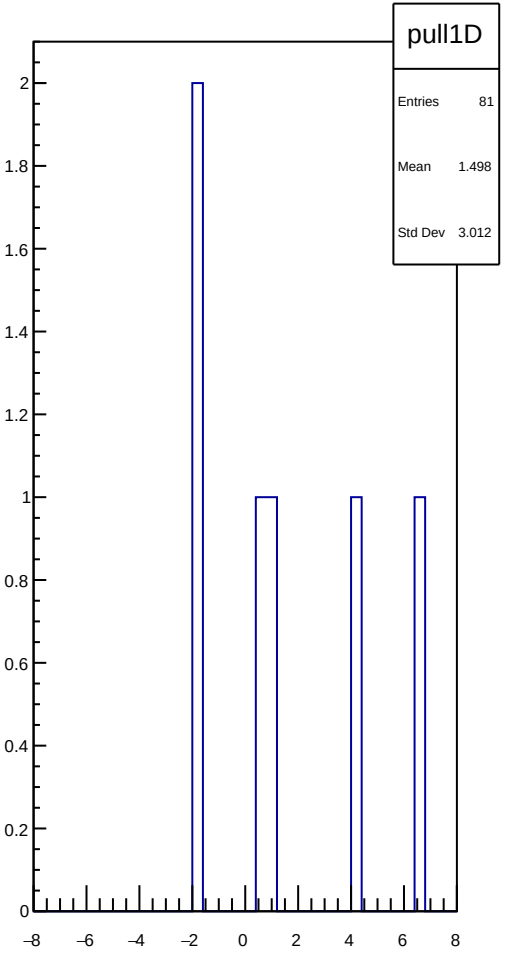

yield_bpm0l02Y_rms vs run
χ² / ndf 7.675e+04 / 80
p0 0.01409 ± 1.143e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

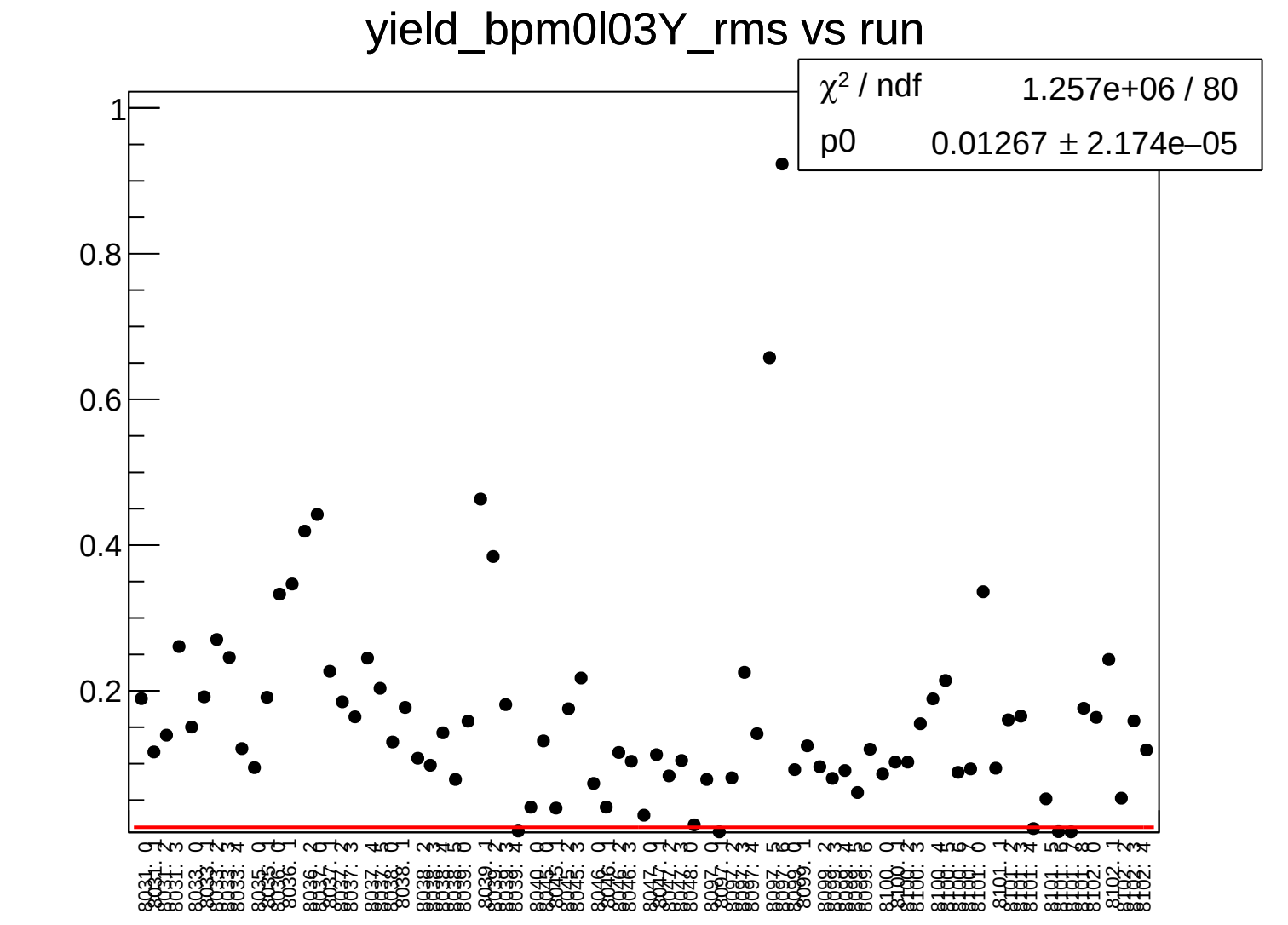

yield_bpm0l03X_mean vs run
χ² / ndf 3.146e+06 / 80
p0 −3.147 ± 2.32e−05
pull
Entries 81
Mean 67.92
Std Dev 18.52

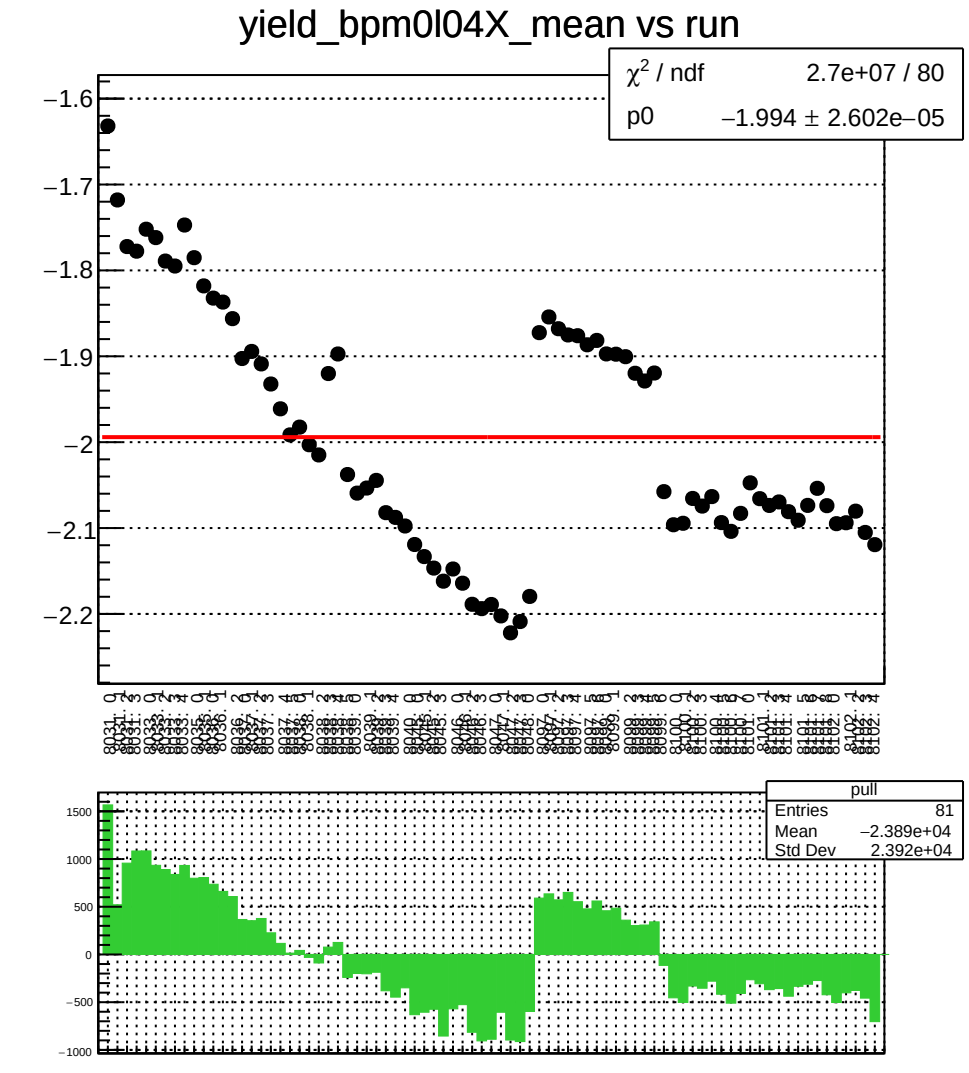

pull1D
Entries 81
Mean 0.42
Std Dev 4.606

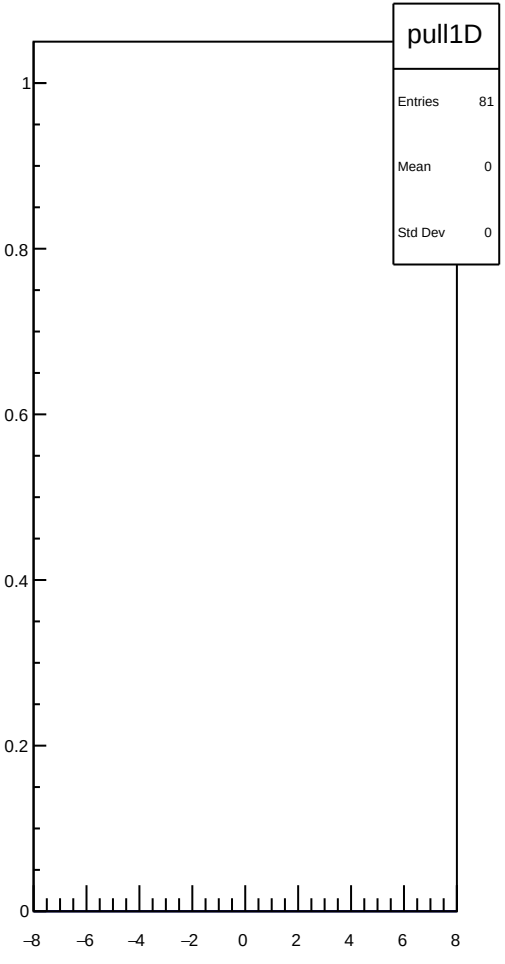

yield_bpm0l03X_rms vs run
χ² / ndf 1.324e+06 / 80
p0 0.008566 ± 1.641e−05
1
0.8
0.6
0.4
0.2

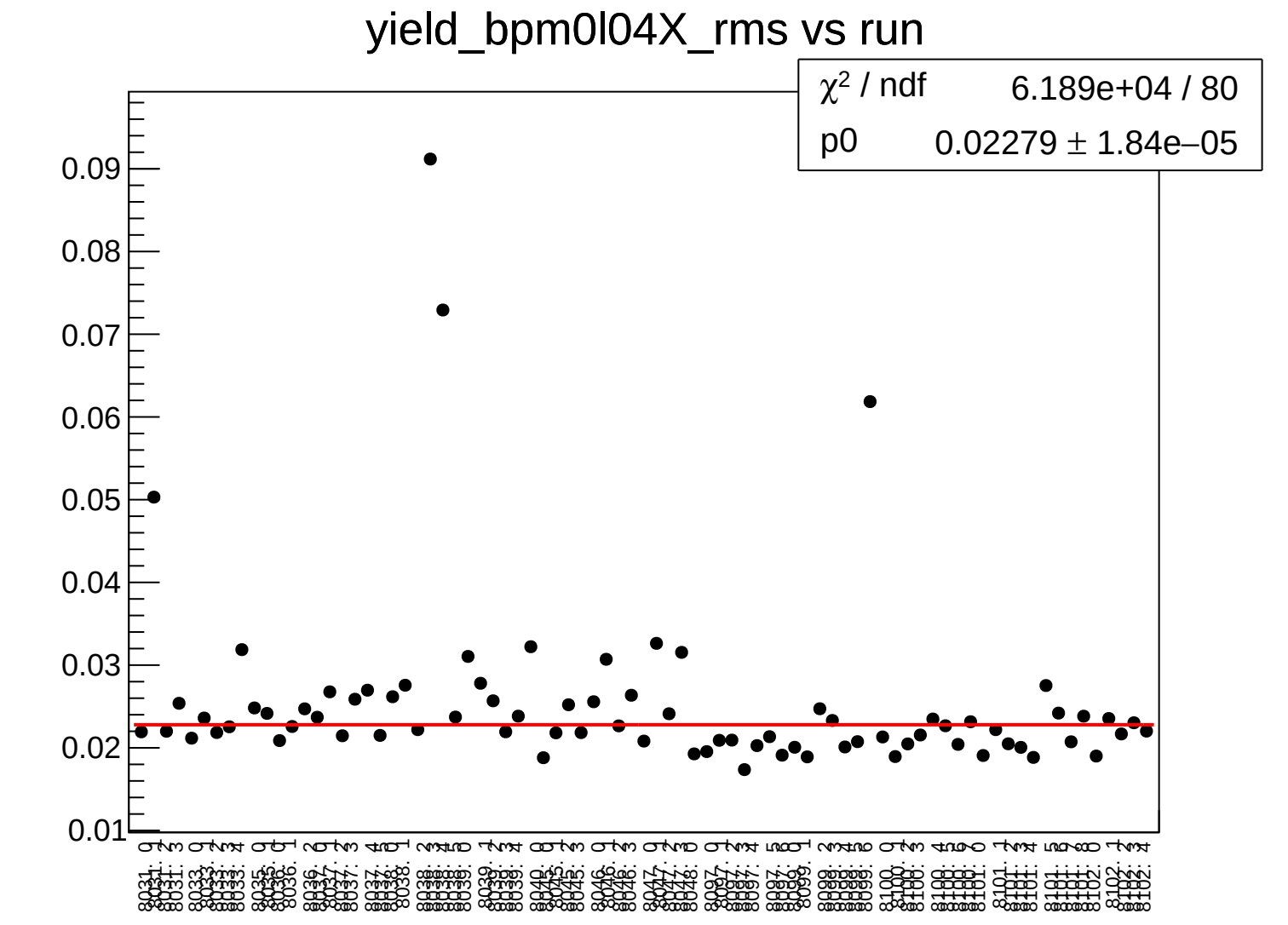

yield_bpm0l03Y_mean vs run
χ² / ndf 2.475e+06 / 80
p0 −0.5149 ± 3.075e−05
pull
Entries 81
Mean 26.87
Std Dev 11.76

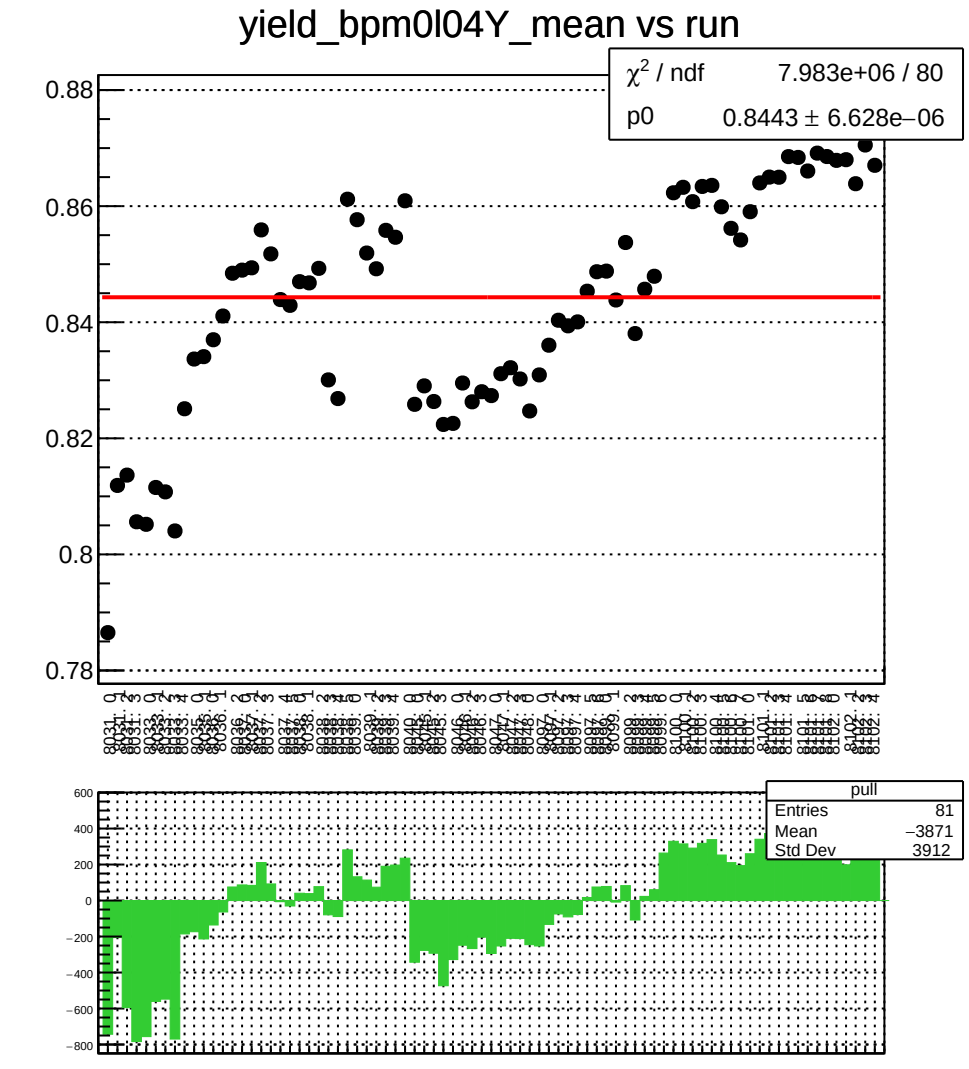

pull1D
Entries 81
Mean 1.498
Std Dev 3.012

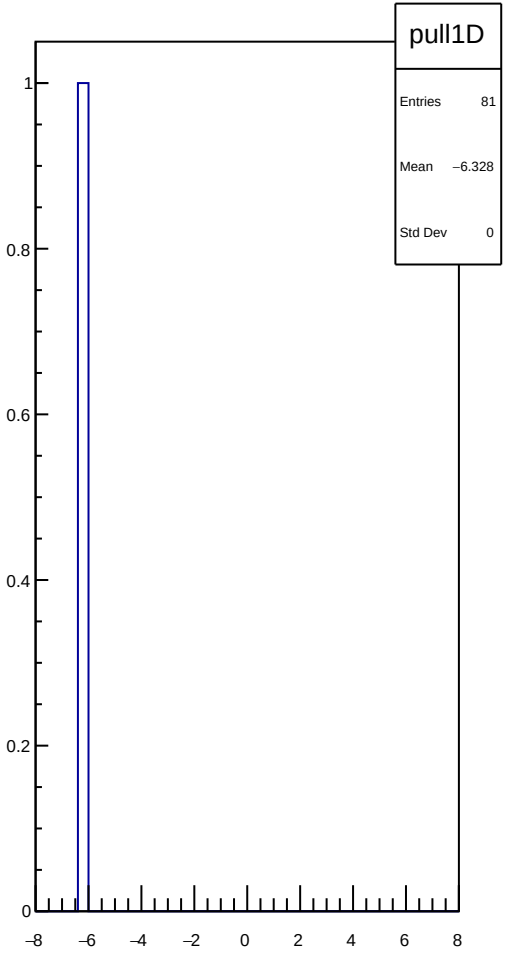

yield_bpm0l03Y_rms vs run
χ² / ndf 1.257e+06 / 80
p0 0.01267 ± 2.174e–05
1
0.8
0.6
0.4
0.2

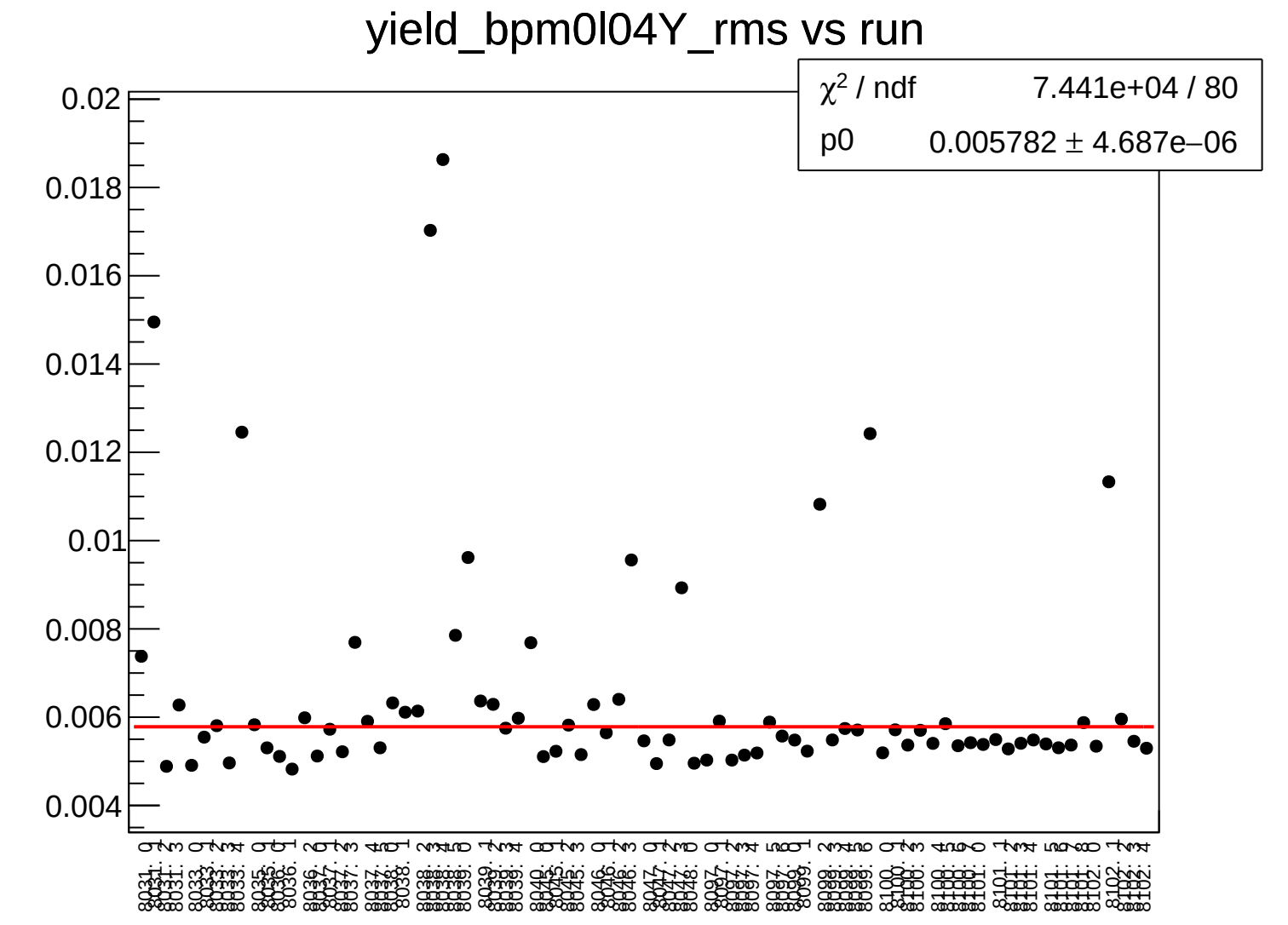

yield_bpm0l04X_mean vs run
χ² / ndf 2.7e+07 / 80
p0 −1.994 ± 2.602e−05
−1.6
−1.7
−1.8
−1.9
−2
−2.1
−2.2
pull
Entries 81
Mean −2.389e+04
Std Dev 2.392e+04
1500
1000
500
0
−500
−1000

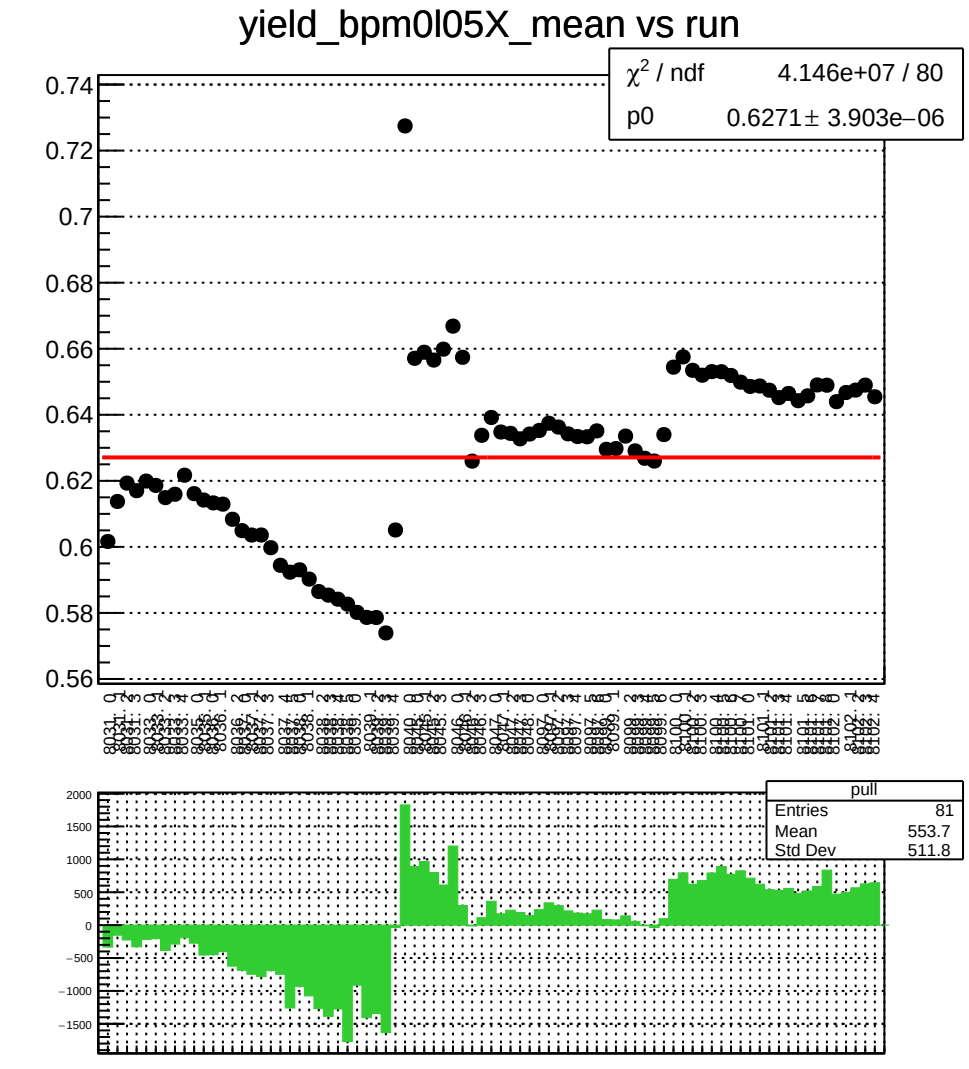

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

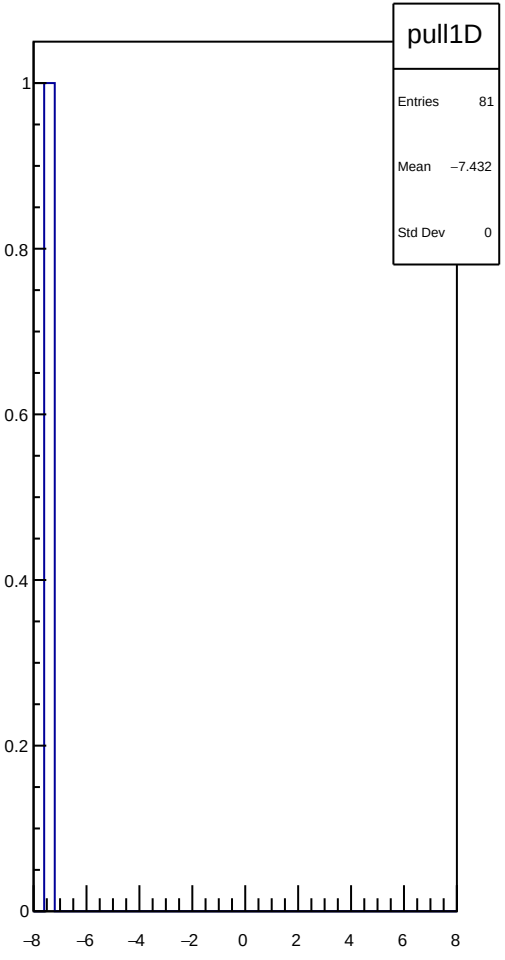

yield_bpm0l04X_rms vs run
χ² / ndf 6.189e+04 / 80
p0 0.02279 ± 1.84e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

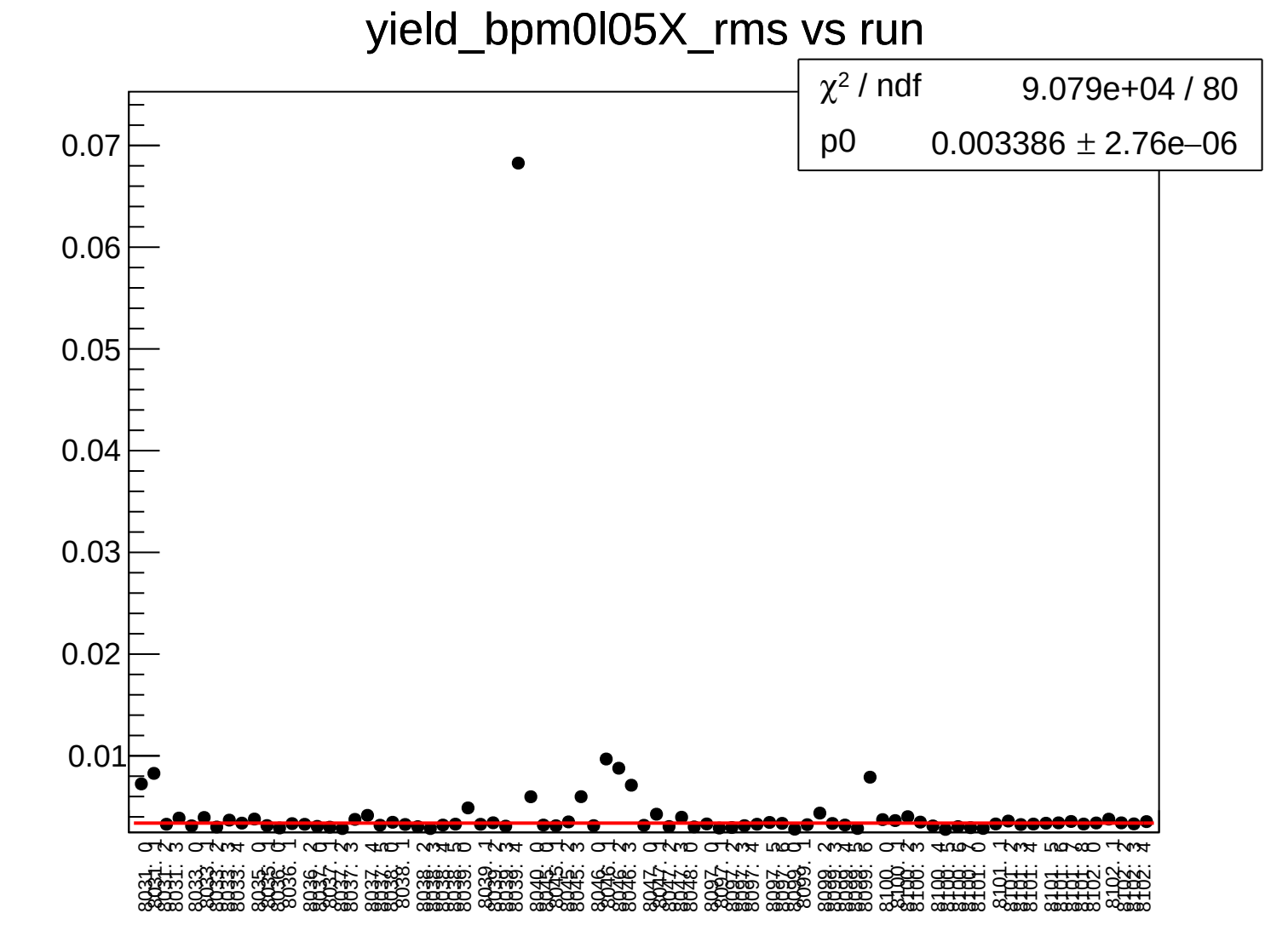

yield_bpm0l04Y_mean vs run
χ² / ndf 7.983e+06 / 80
p0 0.8443 ± 6.628e−06
0.88
0.86
0.84
0.82
0.8
0.78
pull
Entries 81
Mean −3871
Std Dev 3912
600
400
200
0
−200
−400
−600
−800

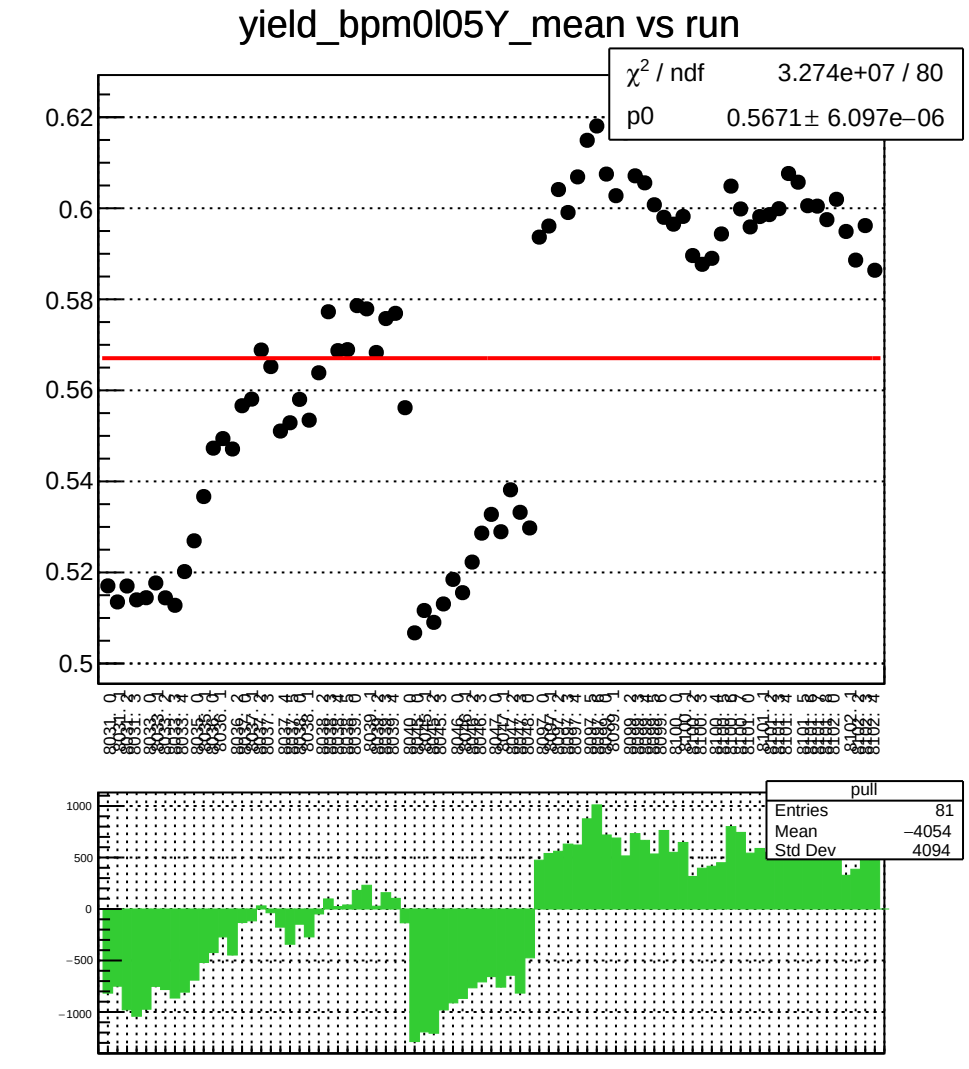

pull1D
Entries 81
Mean −6.328
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

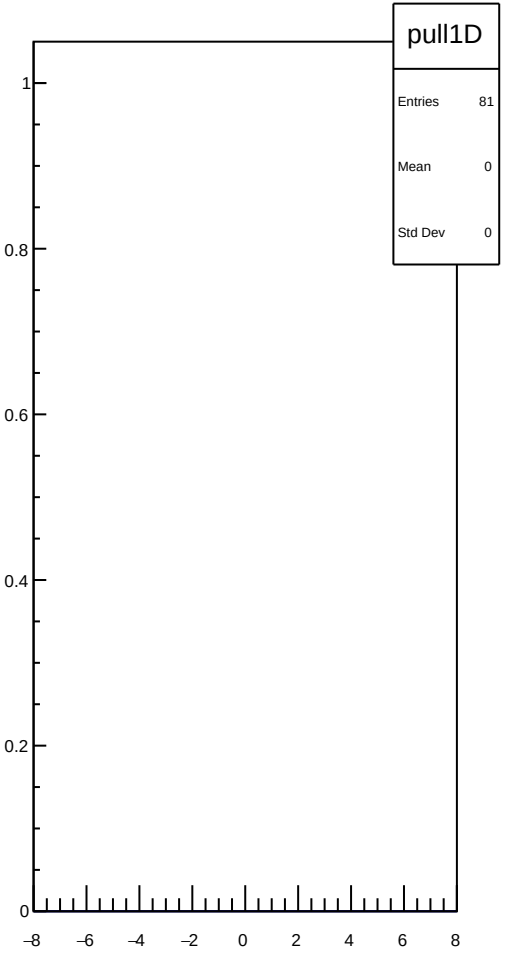

yield_bpm0l04Y_rms vs run
χ² / ndf 7.441e+04 / 80
p0 0.005782 ± 4.687e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

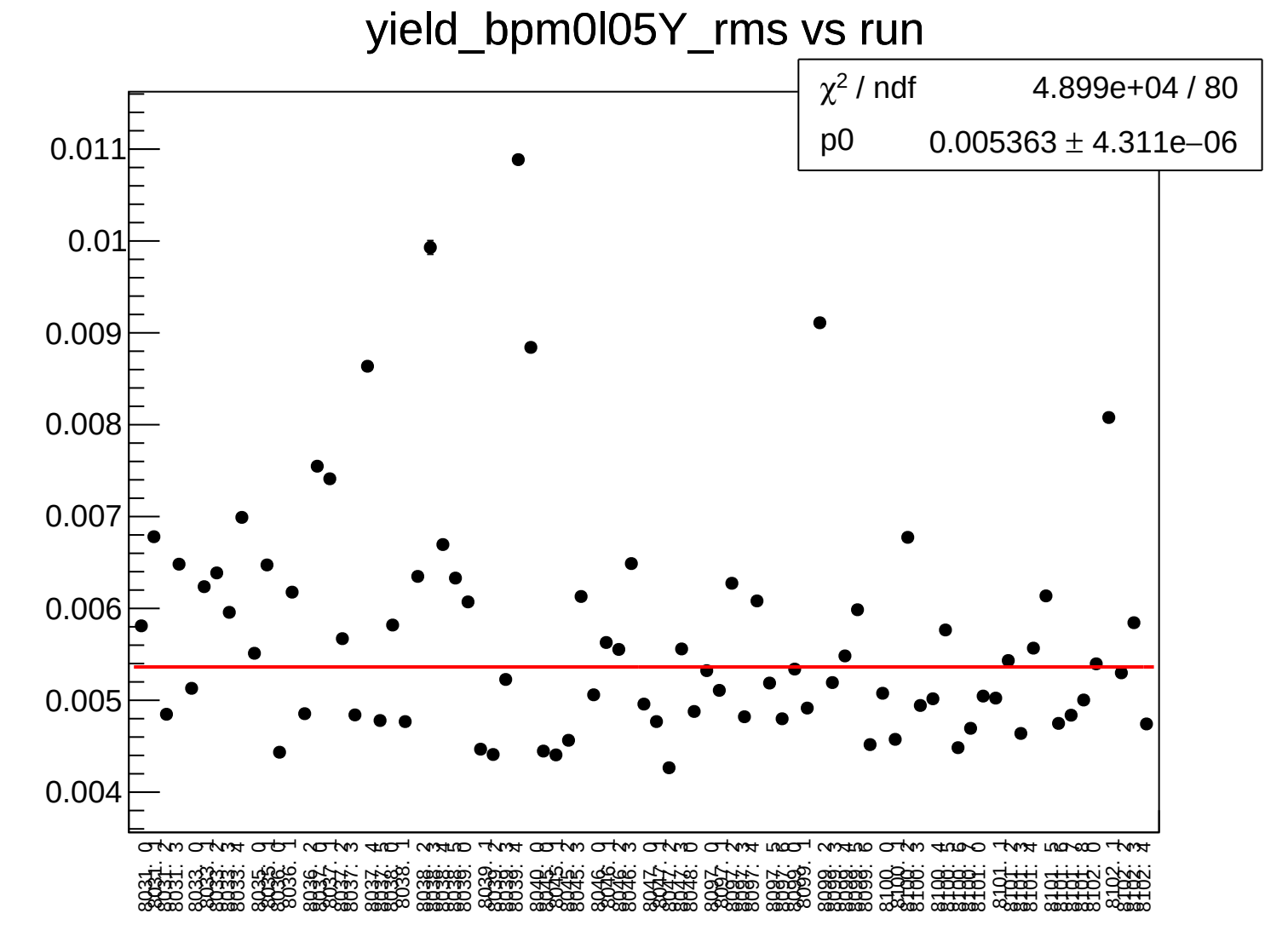

yield_bpm0l05X_mean vs run
χ² / ndf 4.146e+07 / 80
p0 0.6271 ± 3.903e−06
pull
Entries 81
Mean 553.7
Std Dev 511.8

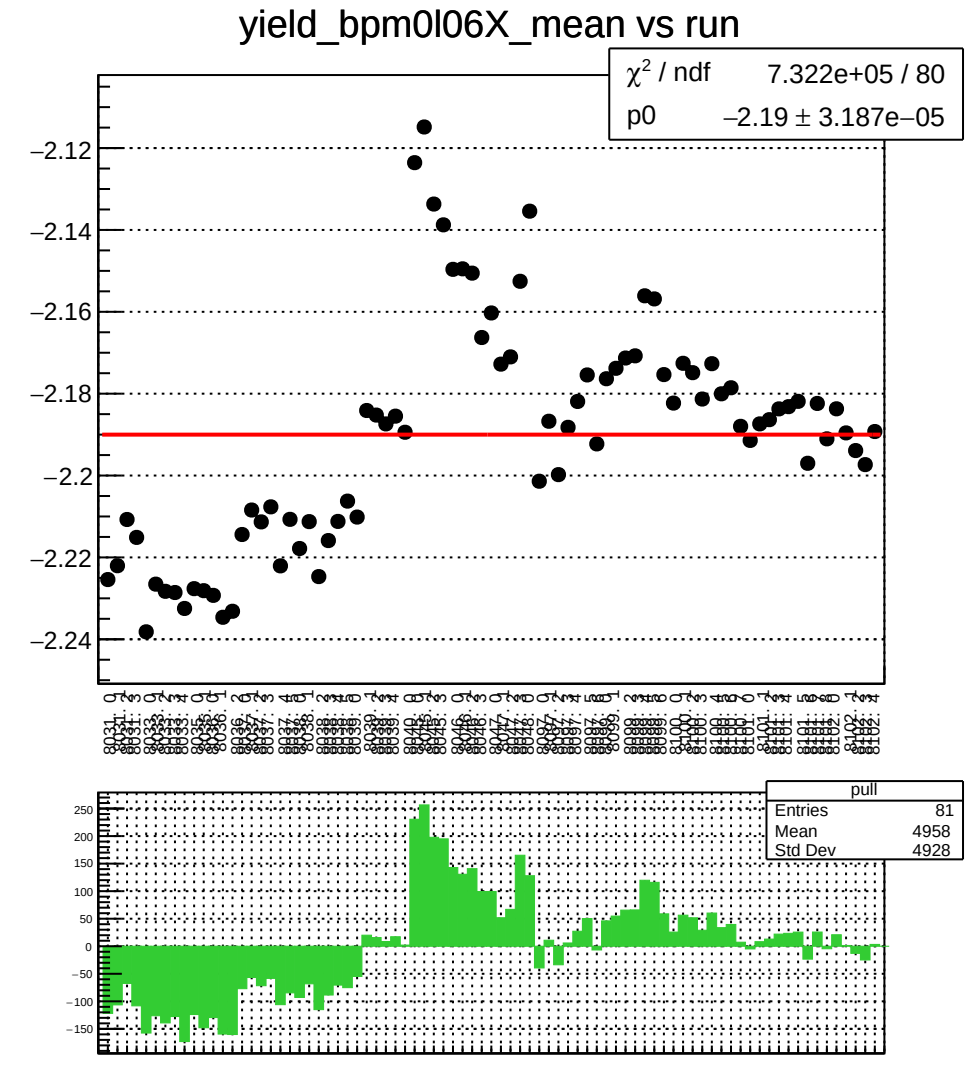

pull1D
Entries 81
Mean −7.432
Std Dev 0

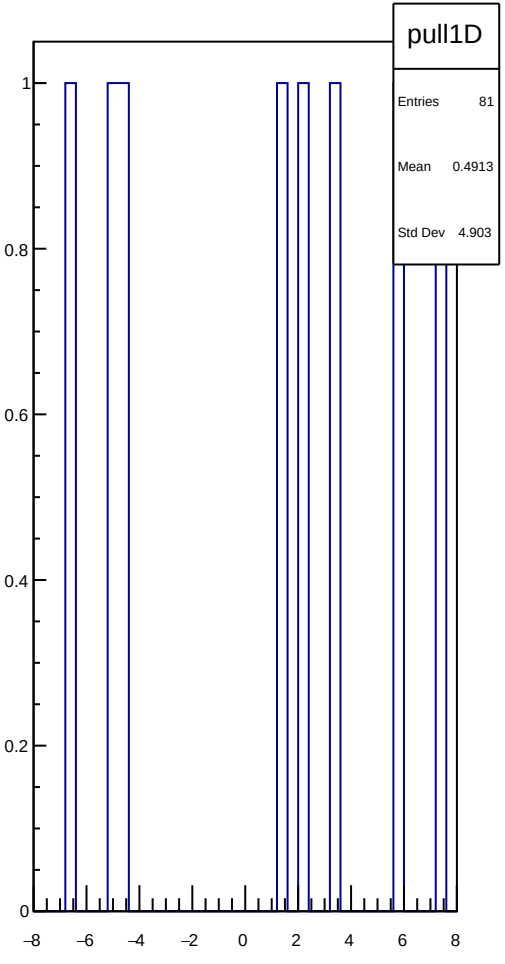

yield_bpm0l05X_rms vs run
χ² / ndf 9.079e+04 / 80
p0 0.003386 ± 2.76e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

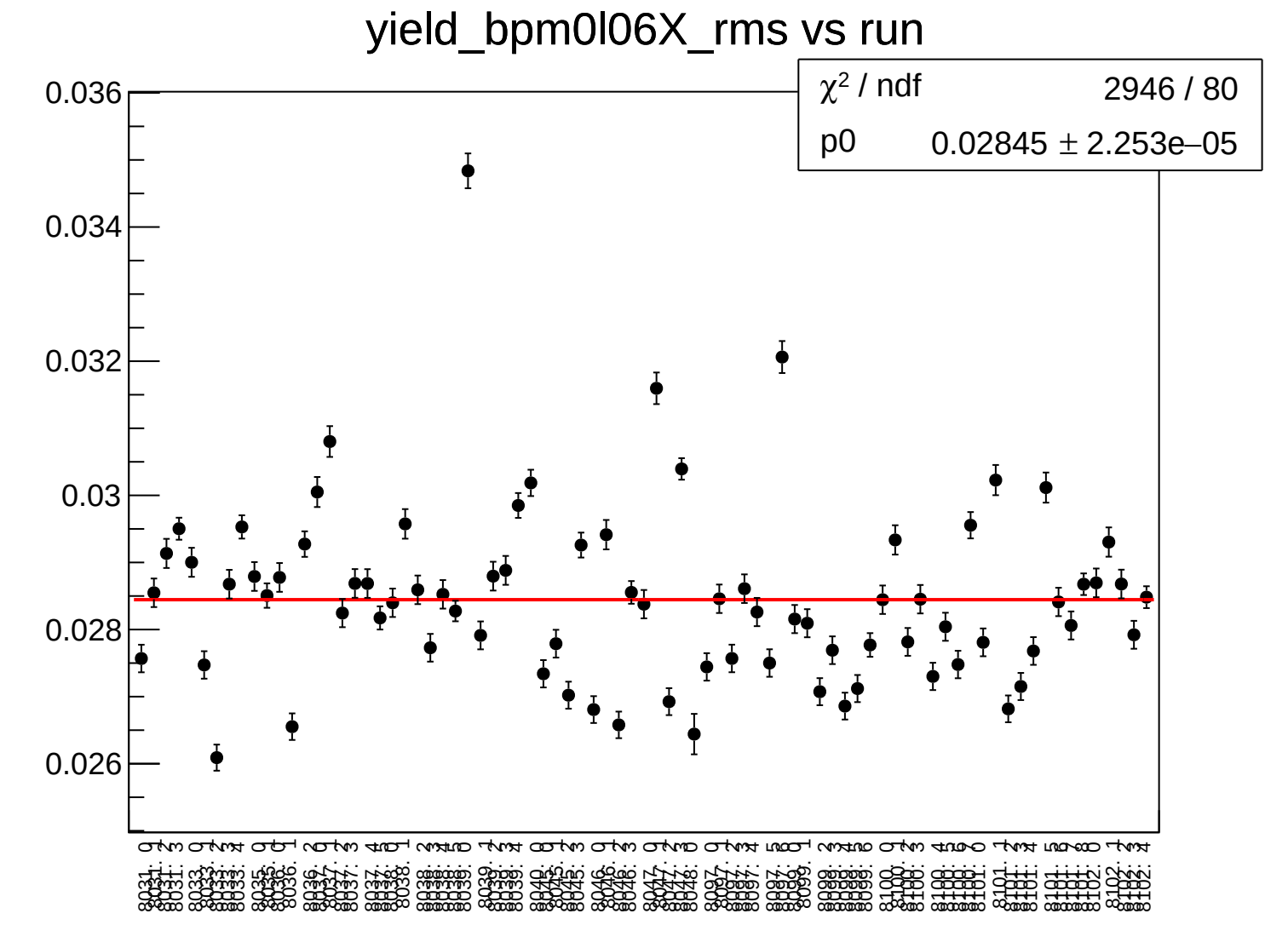

yield_bpm0l05Y_mean vs run
χ² / ndf 3.274e+07 / 80
p0 0.5671 ± 6.097e−06
0.62
0.6
0.58
0.56
0.54
0.52
0.5
pull
Entries 81
Mean −4054
Std Dev 4094
1000
500
0
−500
−1000

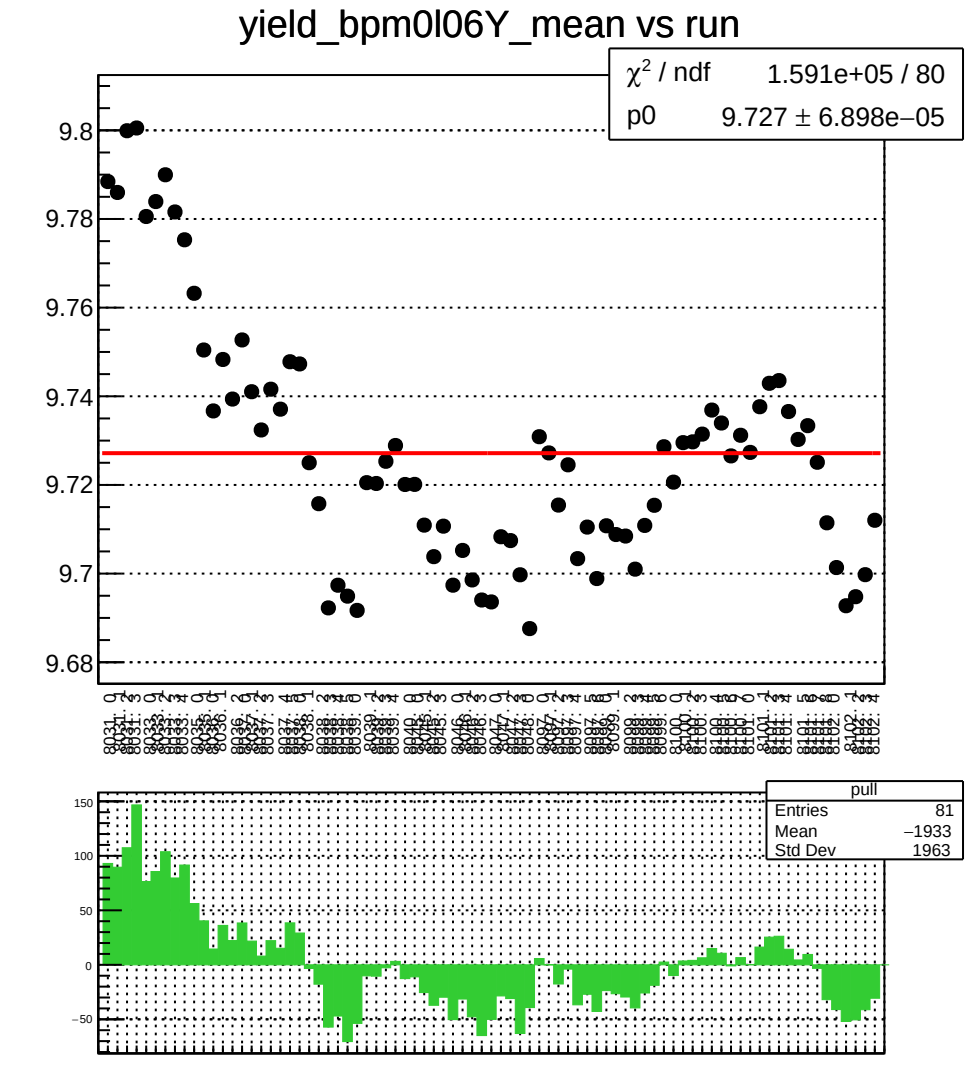

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

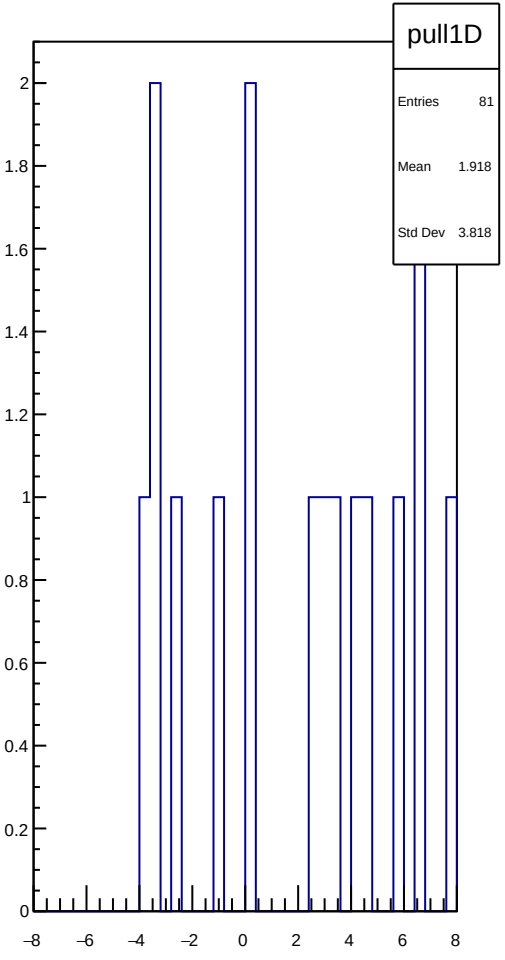

yield_bpm0l05Y_rms vs run
χ² / ndf 4.899e+04 / 80
p0 0.005363 ± 4.311e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

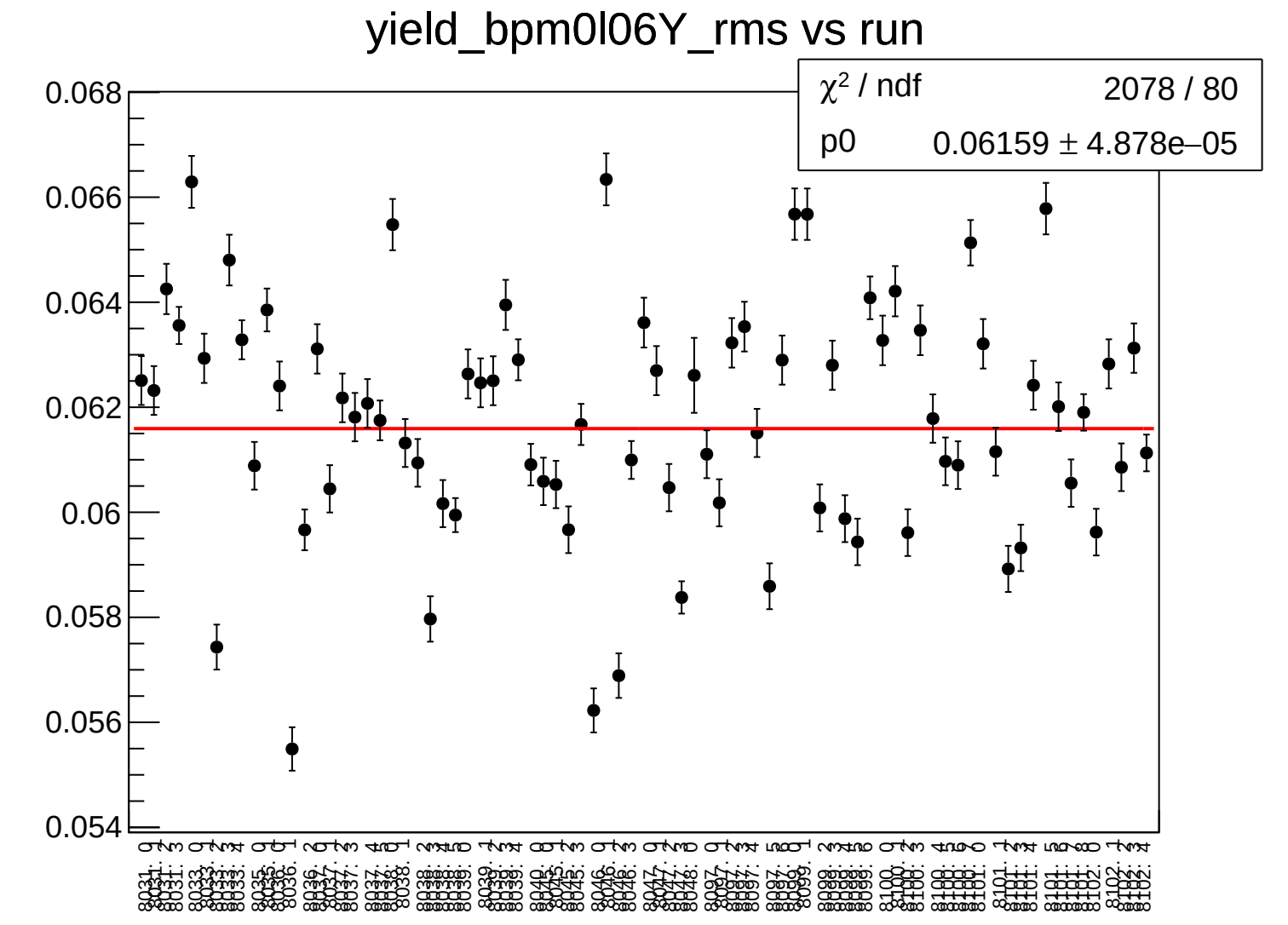

yield_bpm0l06X_mean vs run
χ² / ndf 7.322e+05 / 80
p0 −2.19 ± 3.187e−05
−2.12
−2.14
−2.16
−2.18
−2.2
−2.22
−2.24
pull
Entries 81
Mean 4958
Std Dev 4928
250
200
150
100
50
0
−50
−100
−150

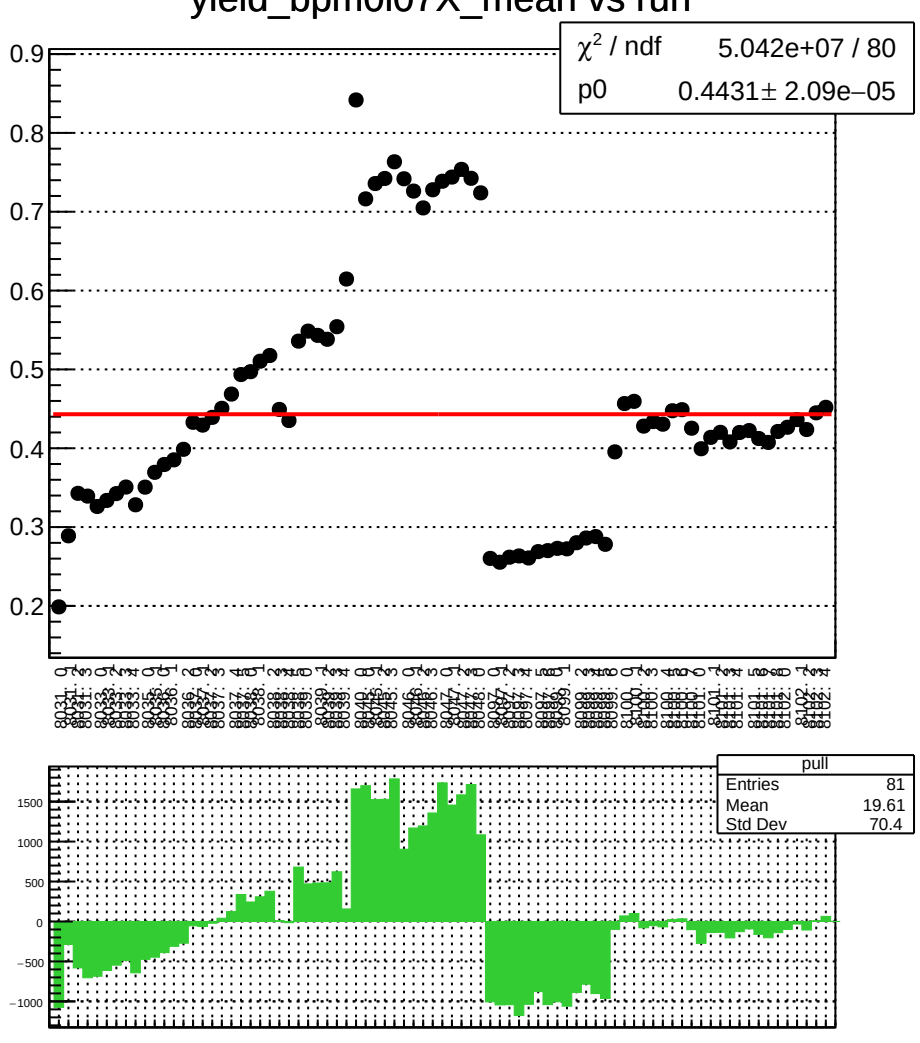

pull1D
Entries 81
Mean 0.4913
Std Dev 4.903
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

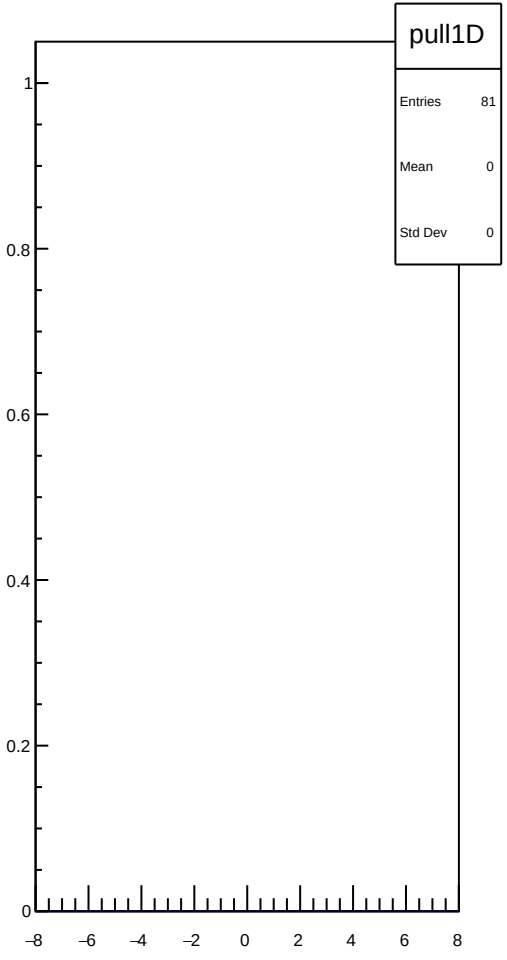

yield_bpm0l06X_rms vs run
χ² / ndf 2946 / 80
p0 0.02845 ± 2.253e−05
0.036
0.034
0.032
0.03
0.028
0.026

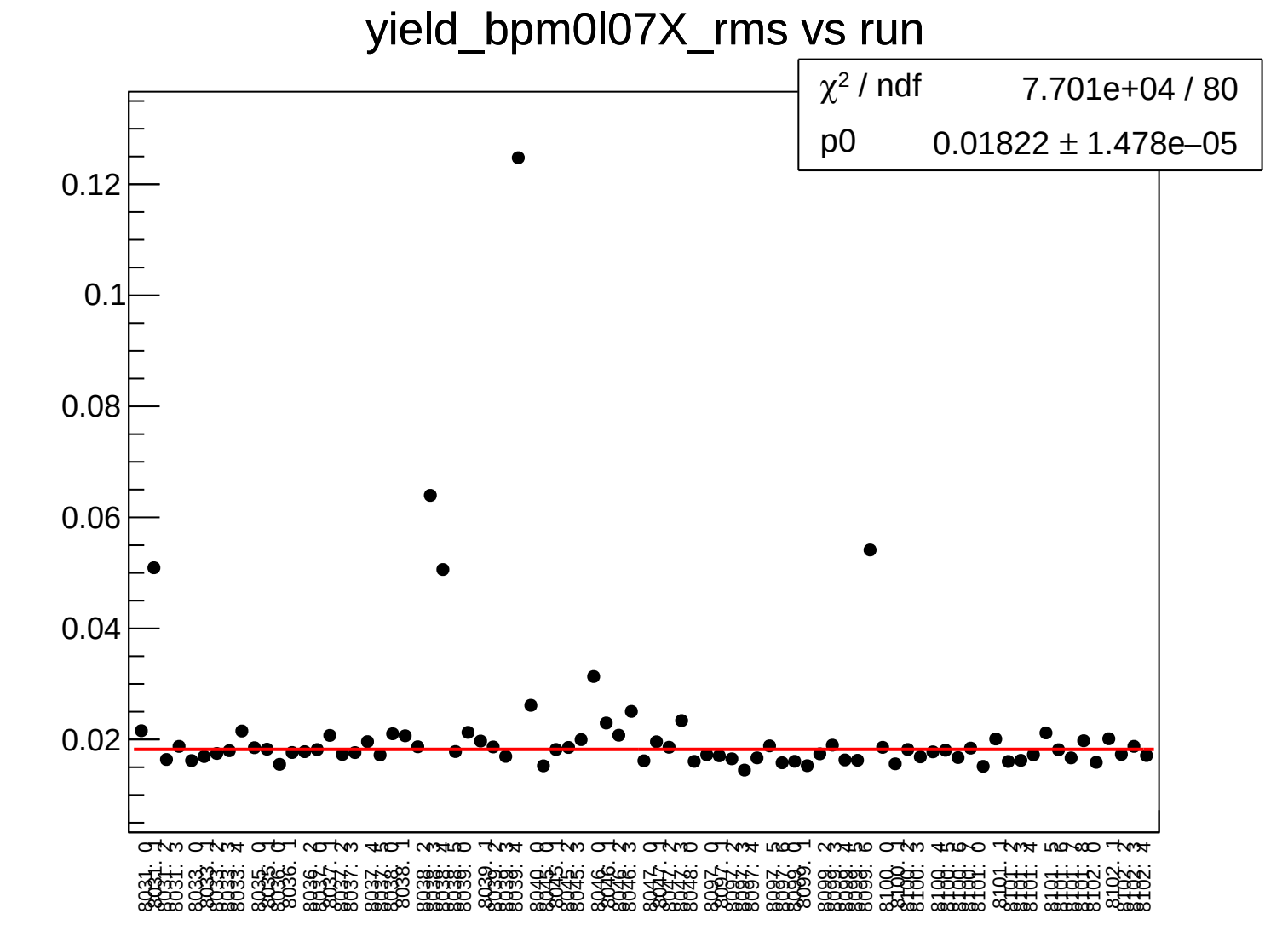

yield_bpm0l06Y_mean vs run
χ² / ndf 1.591e+05 / 80
p0 9.727 ± 6.898e−05
9.8
9.78
9.76
9.74
9.72
9.7
9.68
pull
Entries 81
Mean −1933
Std Dev 1963
150
100
50
0
−50

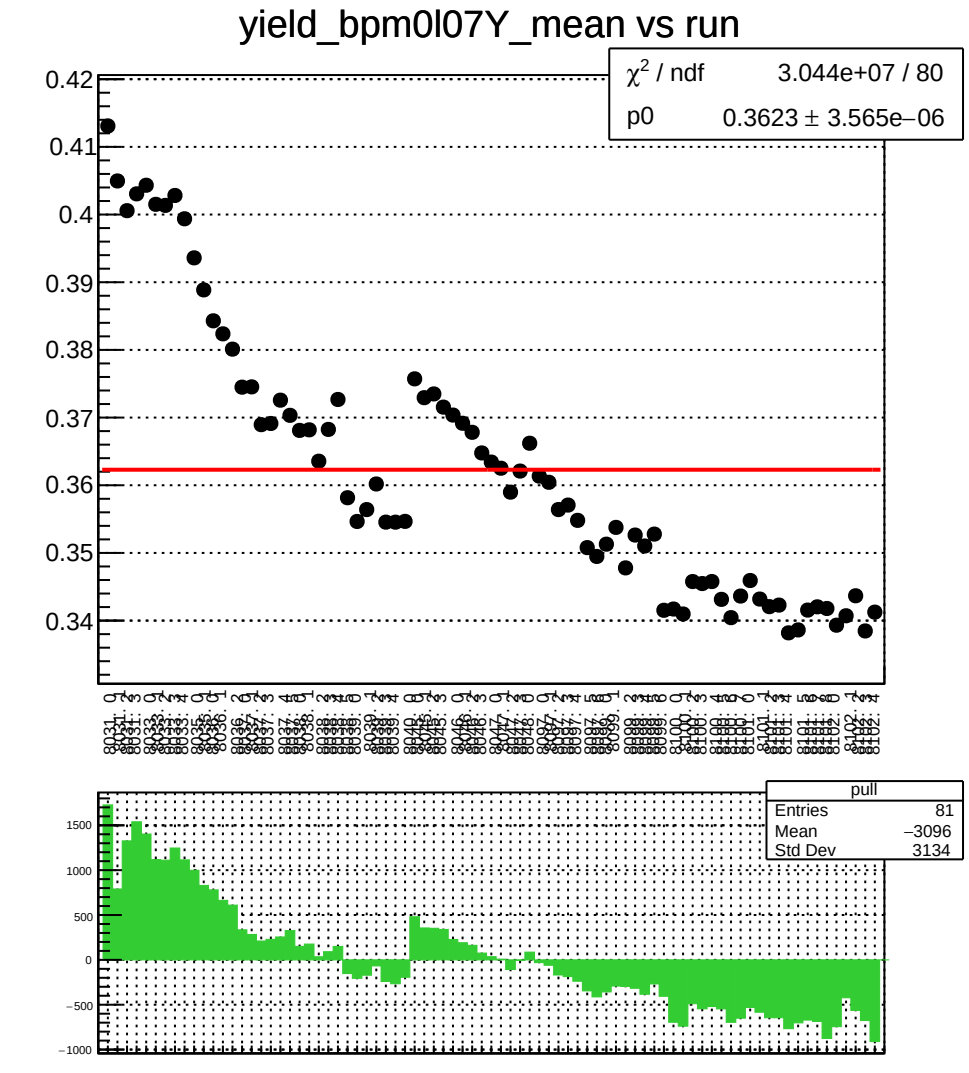

pull1D
Entries 81
Mean 1.918
Std Dev 3.818
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

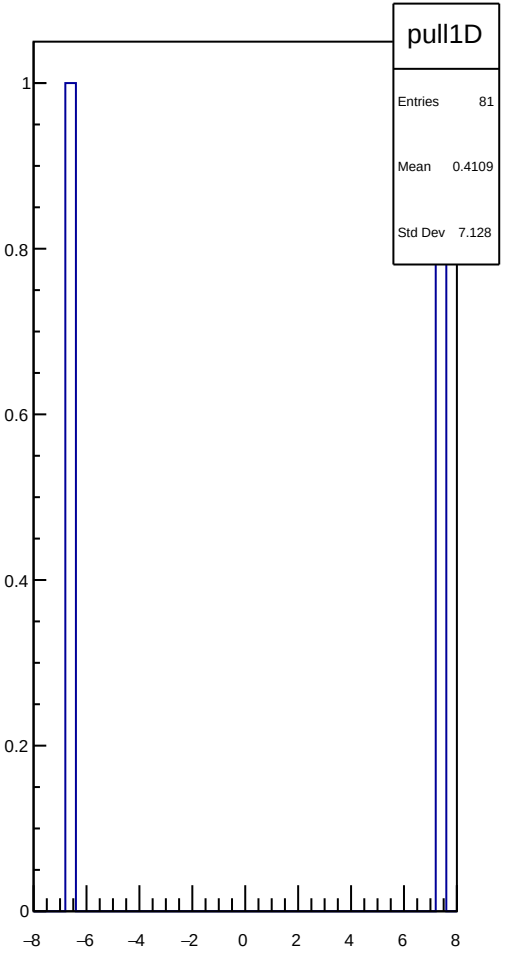

yield_bpm0l06Y_rms vs run
χ² / ndf 2078 / 80
p0 0.06159 ± 4.878e−05
0.068
0.066
0.064
0.062
0.06
0.058
0.056
0.054

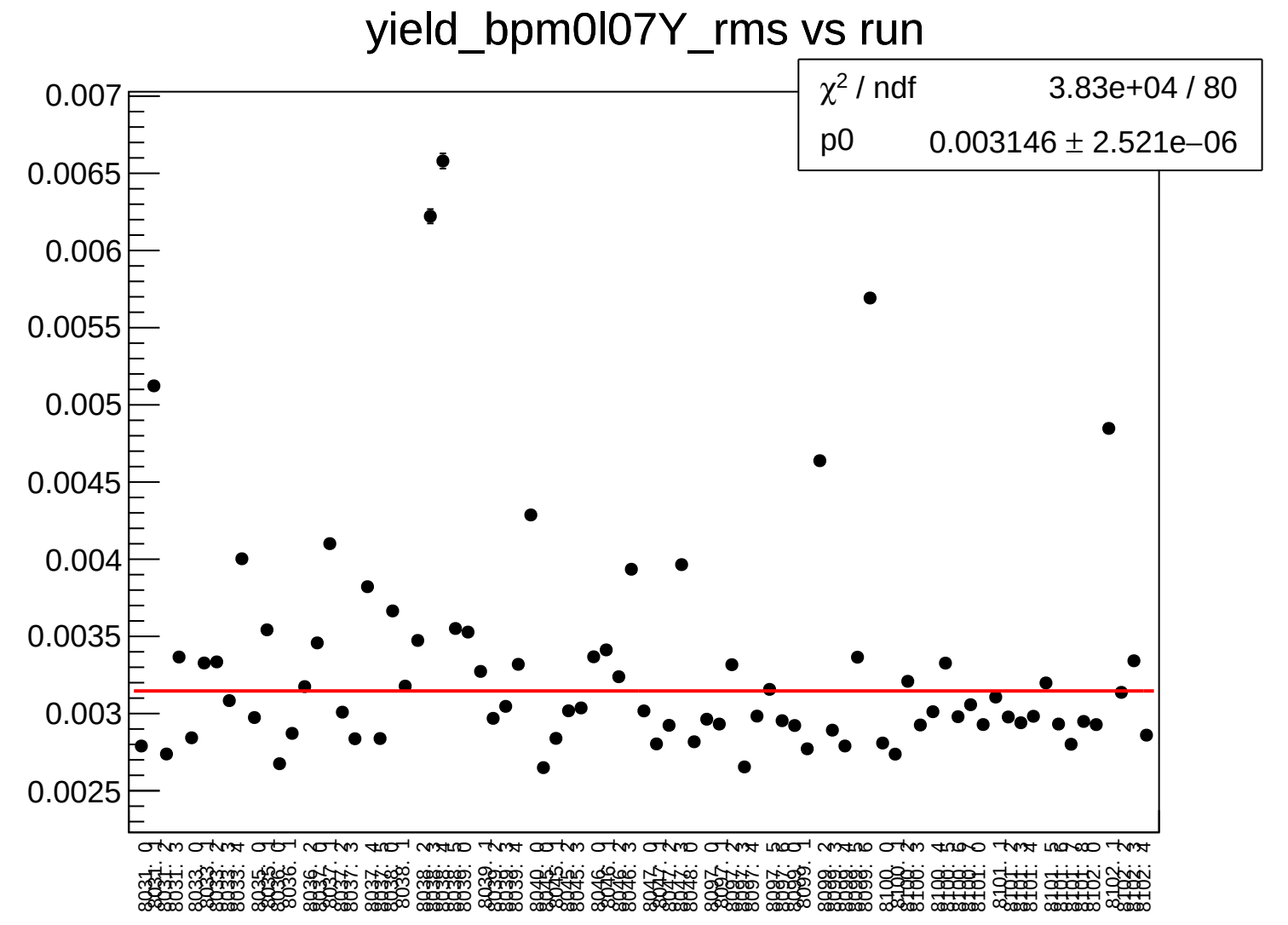

yield_bpm0l07X_mean vs run
χ² / ndf 5.042e+07 / 80
p0 0.4431± 2.09e−05
pull
Entries 81
Mean 19.61
Std Dev 70.4

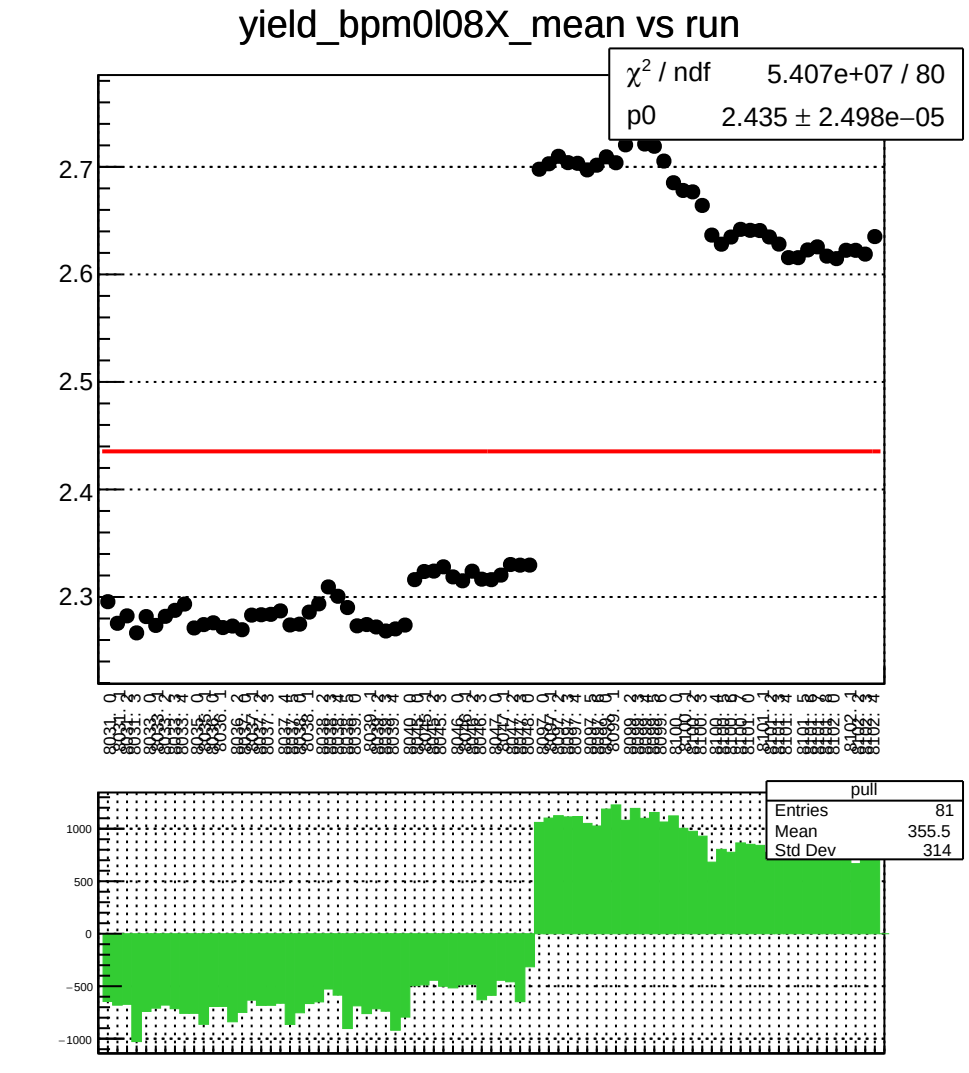

pull1D
Entries 81
Mean 0
Std Dev 0

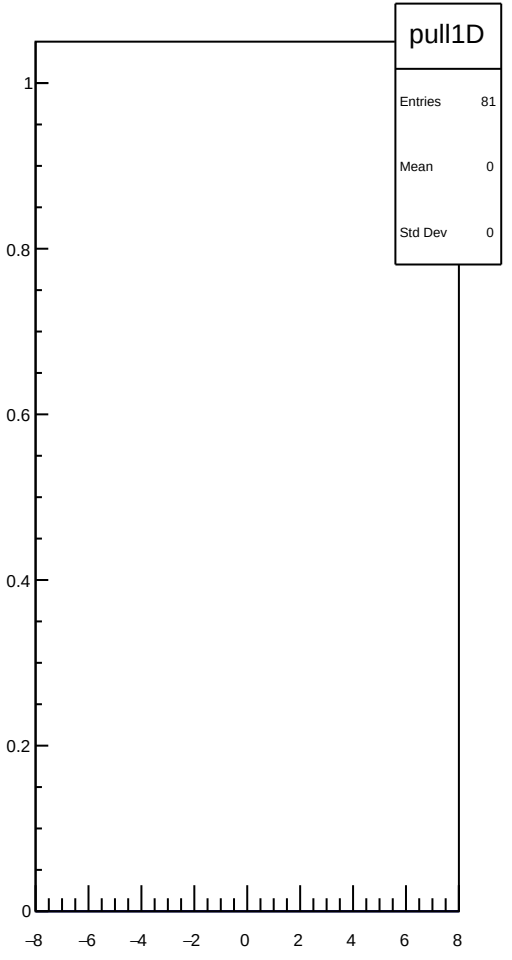

yield_bpm0l07X_rms vs run
χ² / ndf 7.701e+04 / 80
p0 0.01822 ± 1.478e−05
0.12
0.1
0.08
0.06
0.04
0.02

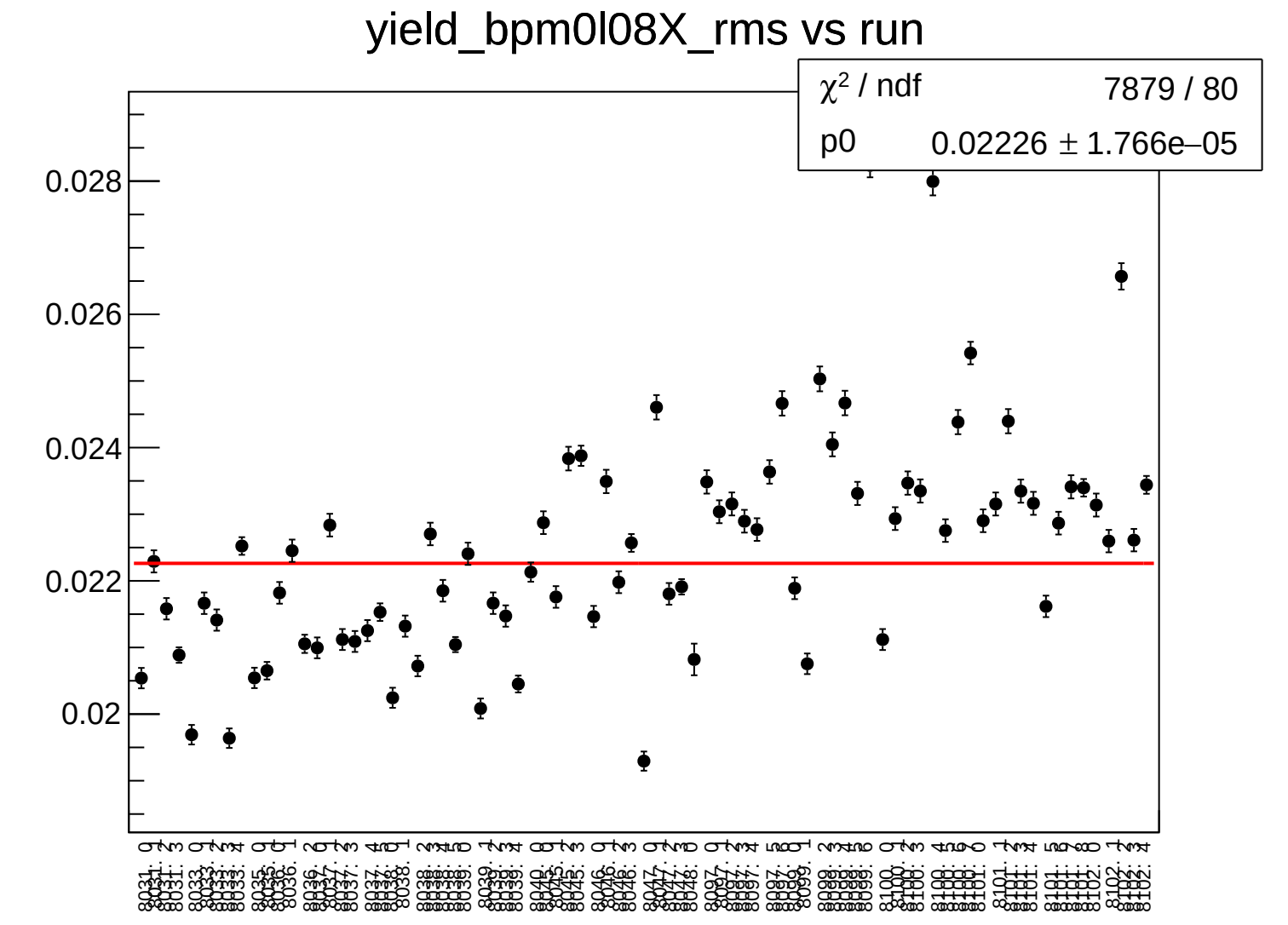

yield_bpm0l07Y_mean vs run
χ² / ndf 3.044e+07 / 80
p0 0.3623 ± 3.565e−06
0.42
0.41
0.4
0.39
0.38
0.37
0.36
0.35
0.34
pull
Entries 81
Mean −3096
Std Dev 3134
1500
1000
500
0
−500
−1000

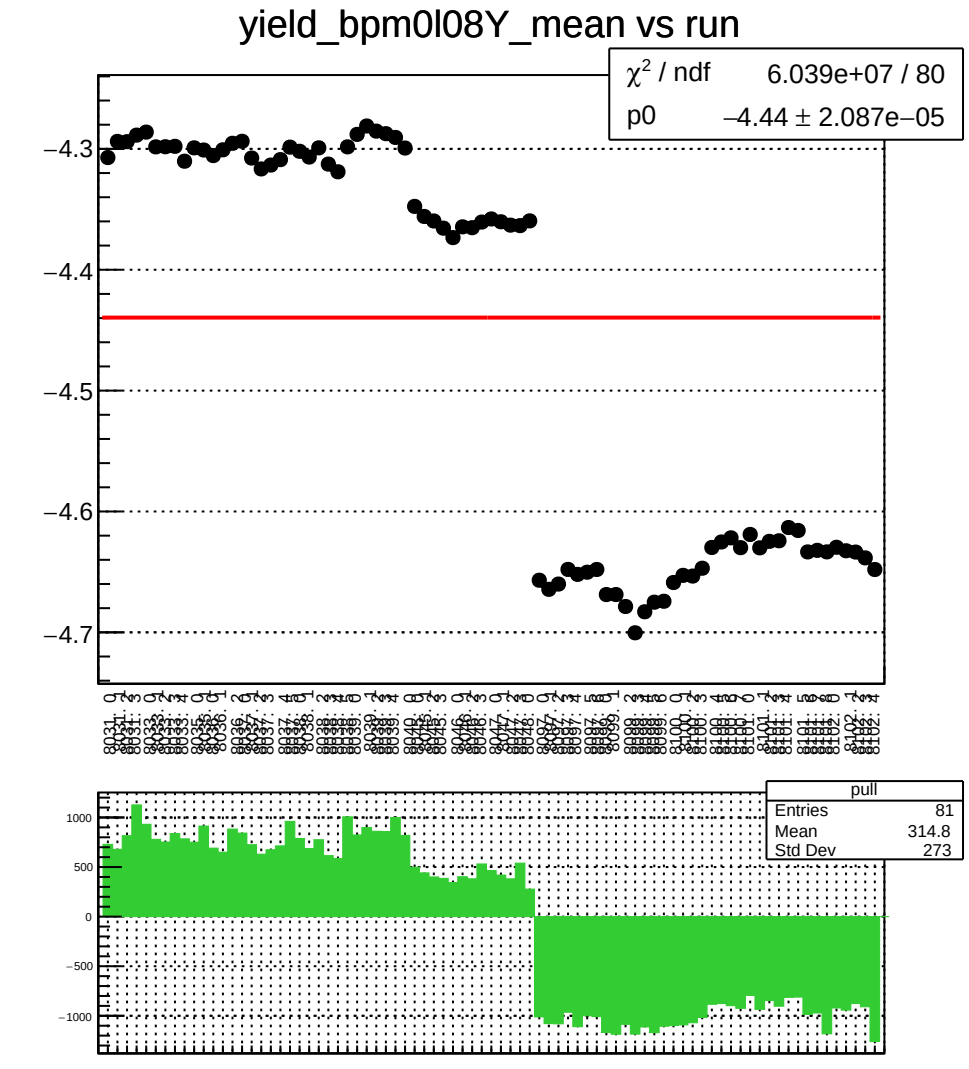

pull1D
Entries 81
Mean 0.4109
Std Dev 7.128
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

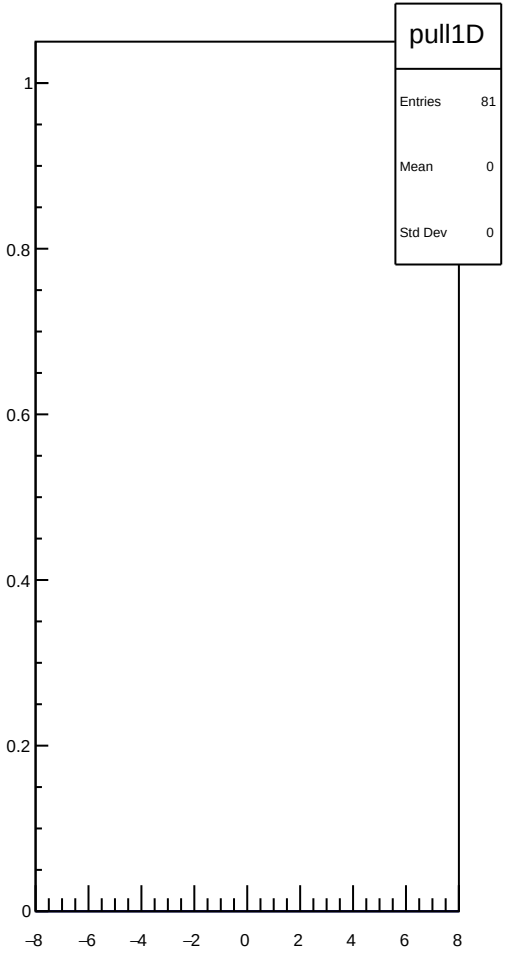

yield_bpm0l07Y_rms vs run
χ² / ndf 3.83e+04 / 80
p0 0.003146 ± 2.521e−06
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025

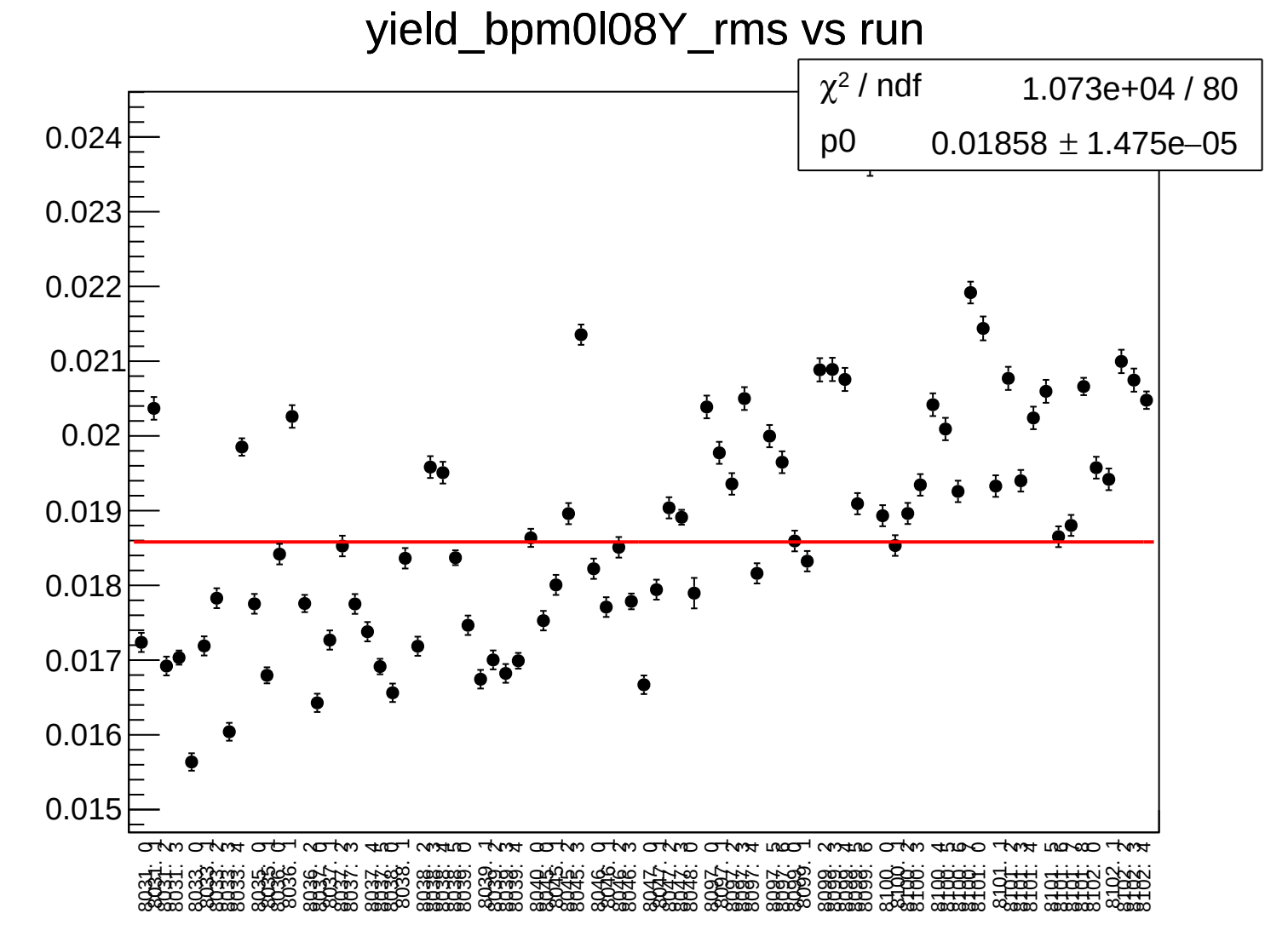

yield_bpm0l08X_mean vs run
χ² / ndf 5.407e+07 / 80
p0 2.435 ± 2.498e−05
2.7
2.6
2.5
2.4
2.3
pull
Entries 81
Mean 355.5
Std Dev 314
1000
500
0
−500
−1000

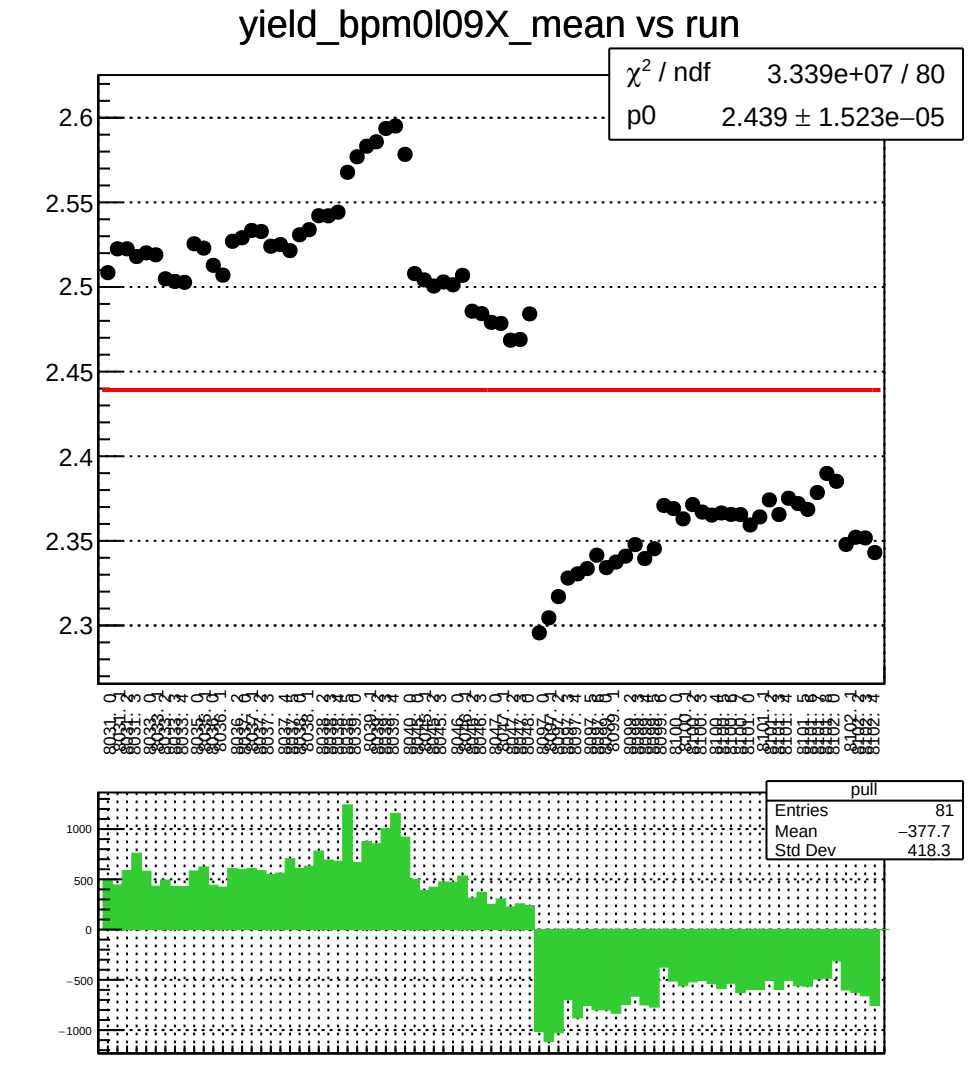

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

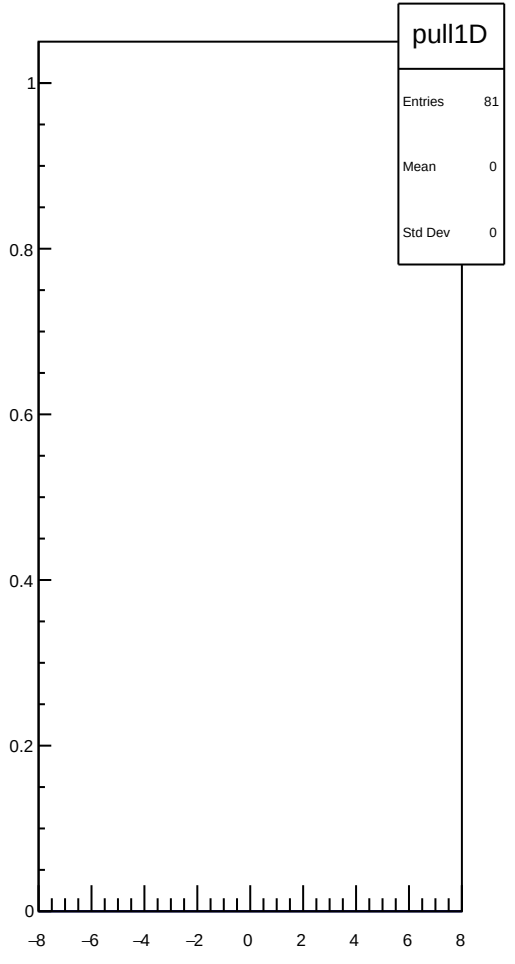

yield_bpm0l08X_rms vs run
χ² / ndf 7879 / 80
p0 0.02226 ± 1.766e−05
0.028
0.026
0.024
0.022
0.02

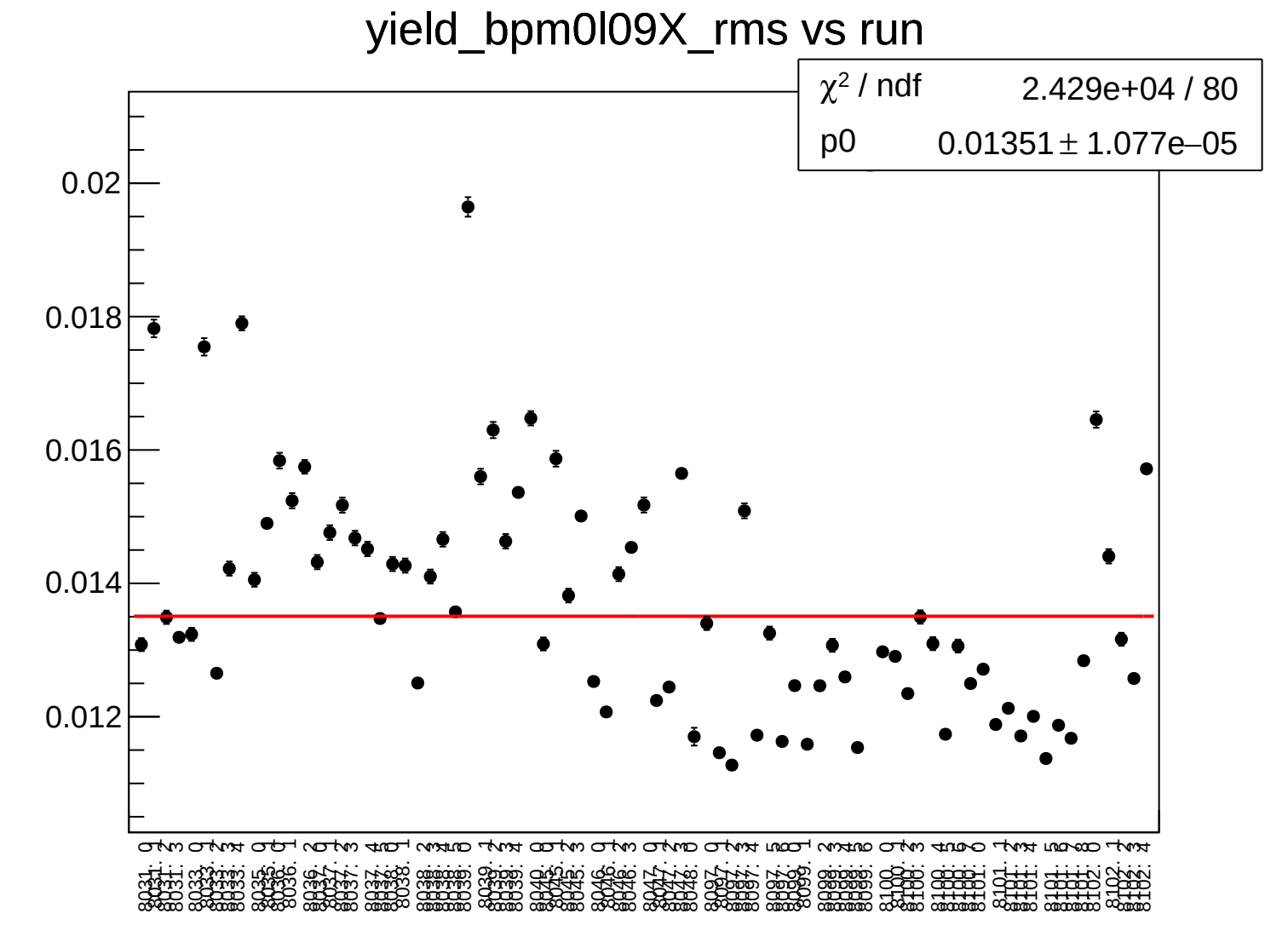

yield_bpm0l08Y_mean vs run
χ² / ndf 6.039e+07 / 80
p0 −4.44 ± 2.087e−05
−4.3
−4.4
−4.5
−4.6
−4.7
pull
Entries 81
Mean 314.8
Std Dev 273
1000
500
0
−500
−1000

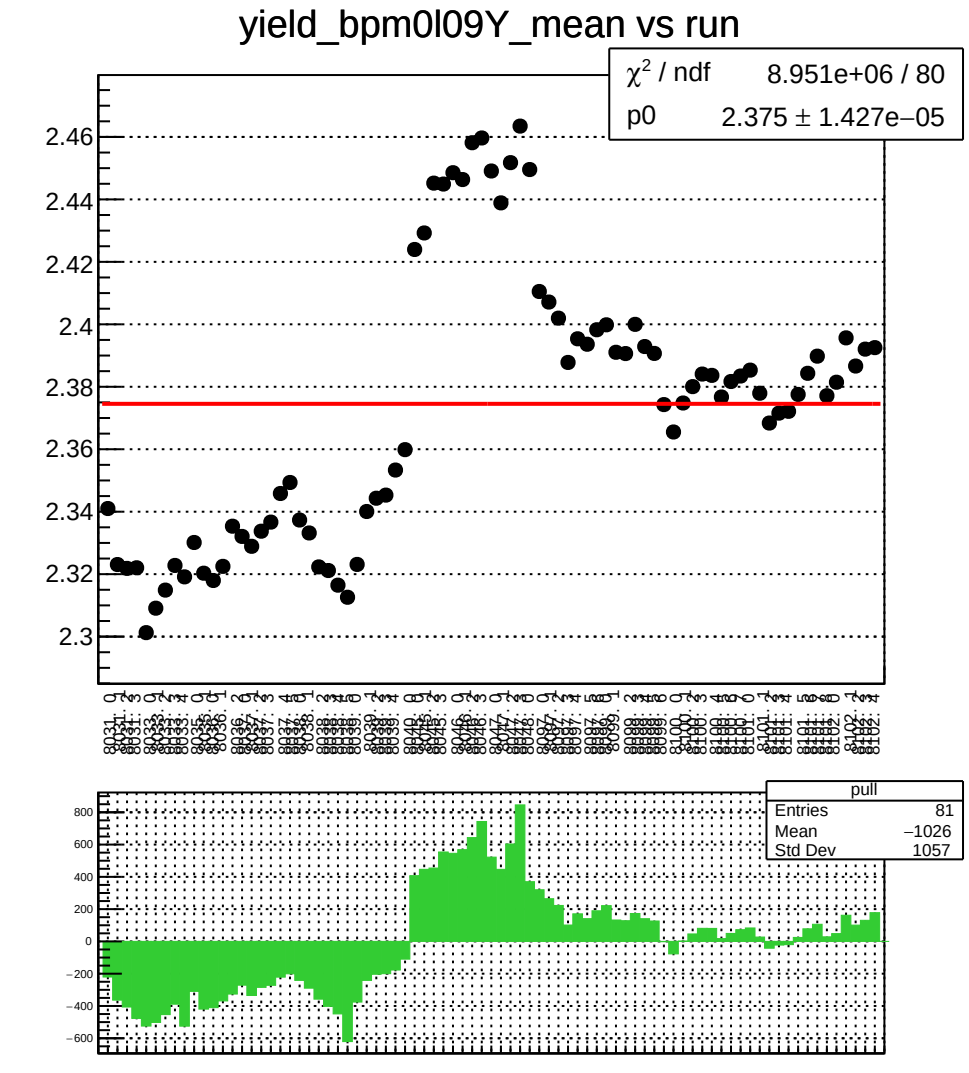

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

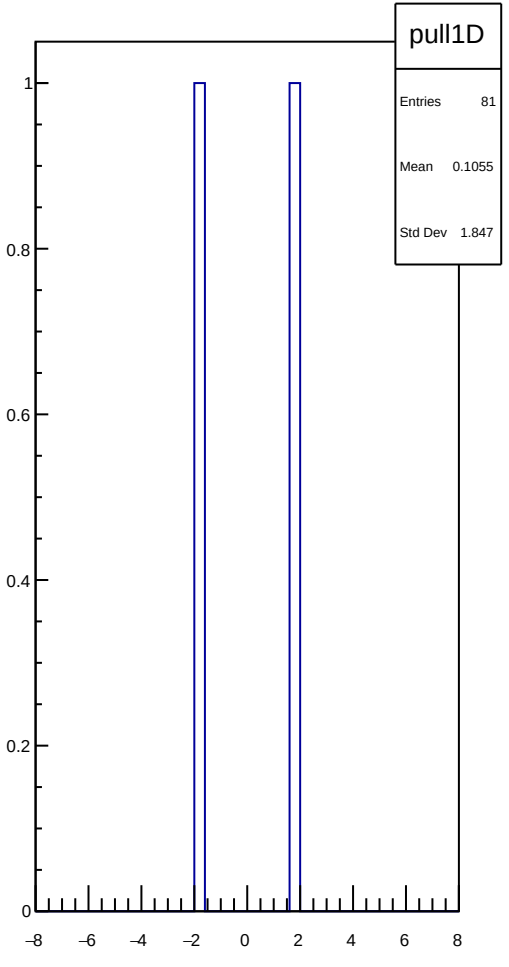

yield_bpm0l08Y_rms vs run
χ² / ndf 1.073e+04 / 80
p0 0.01858 ± 1.475e−05
0.024
0.023
0.022
0.021
0.02
0.019
0.018
0.017
0.016
0.015

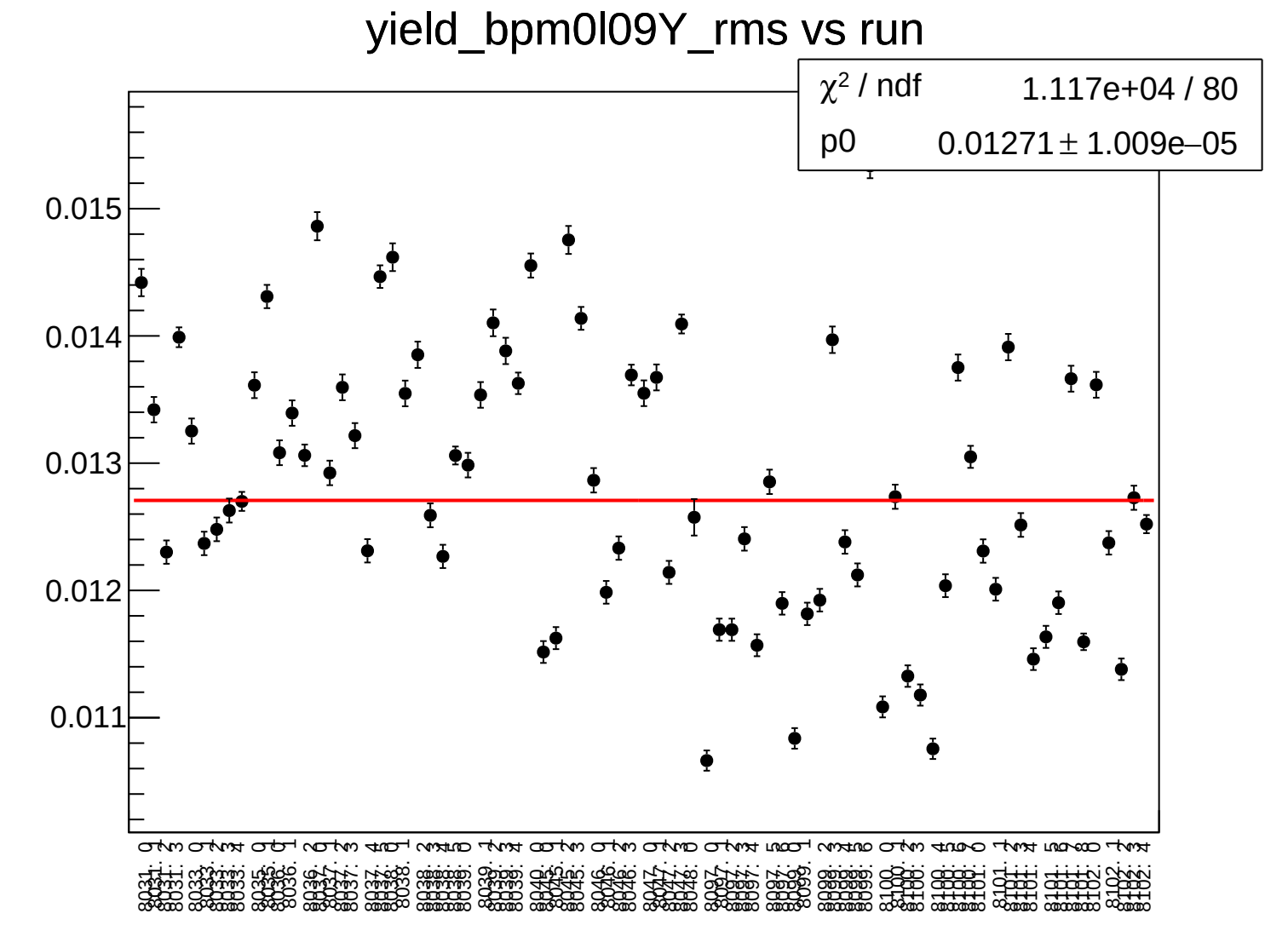

yield_bpm0l09X_mean vs run
χ² / ndf 3.339e+07 / 80
p0 2.439 ± 1.523e−05
2.6
2.55
2.5
2.45
2.4
2.35
2.3
pull
Entries 81
Mean −377.7
Std Dev 418.3
1000
500
0
−500
−1000

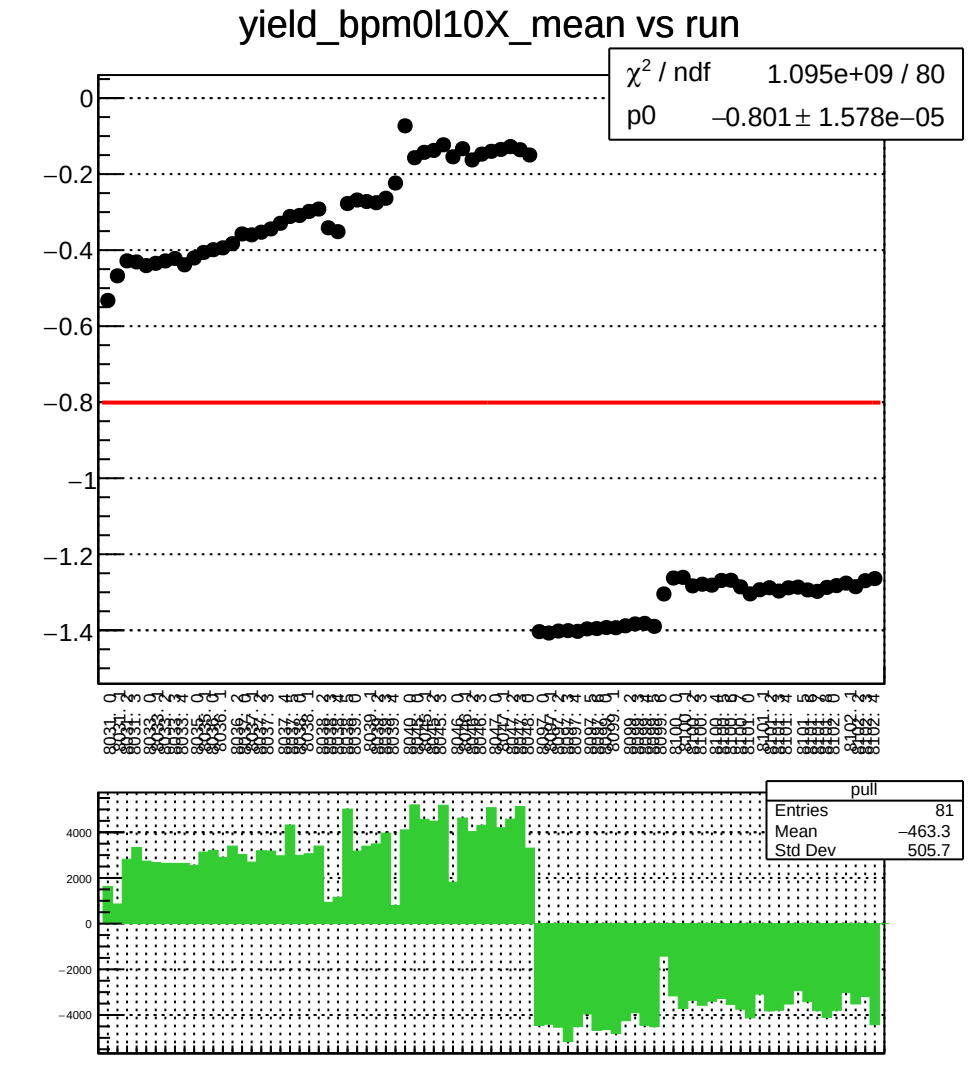

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

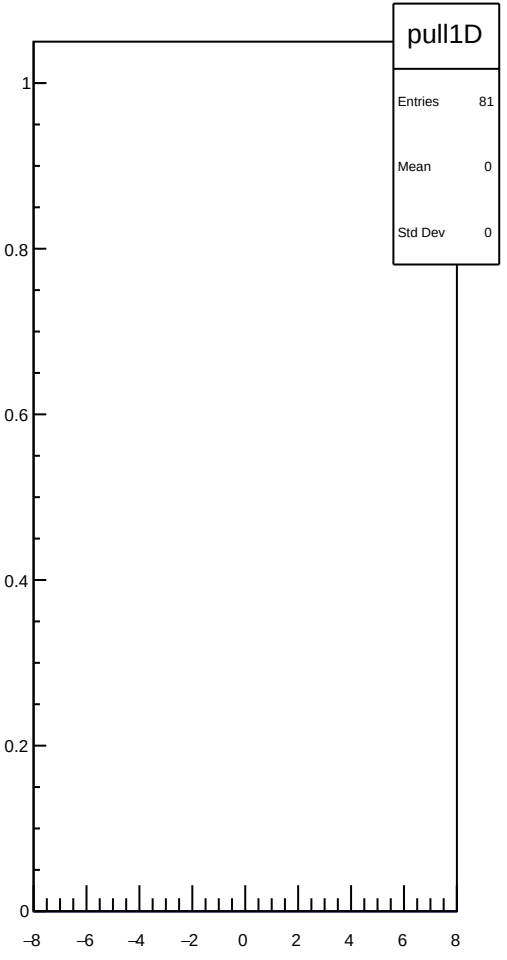

yield_bpm0l09X_rms vs run
χ² / ndf 2.429e+04 / 80
p0 0.01351 ± 1.077e–05
0.02
0.018
0.016
0.014
0.012

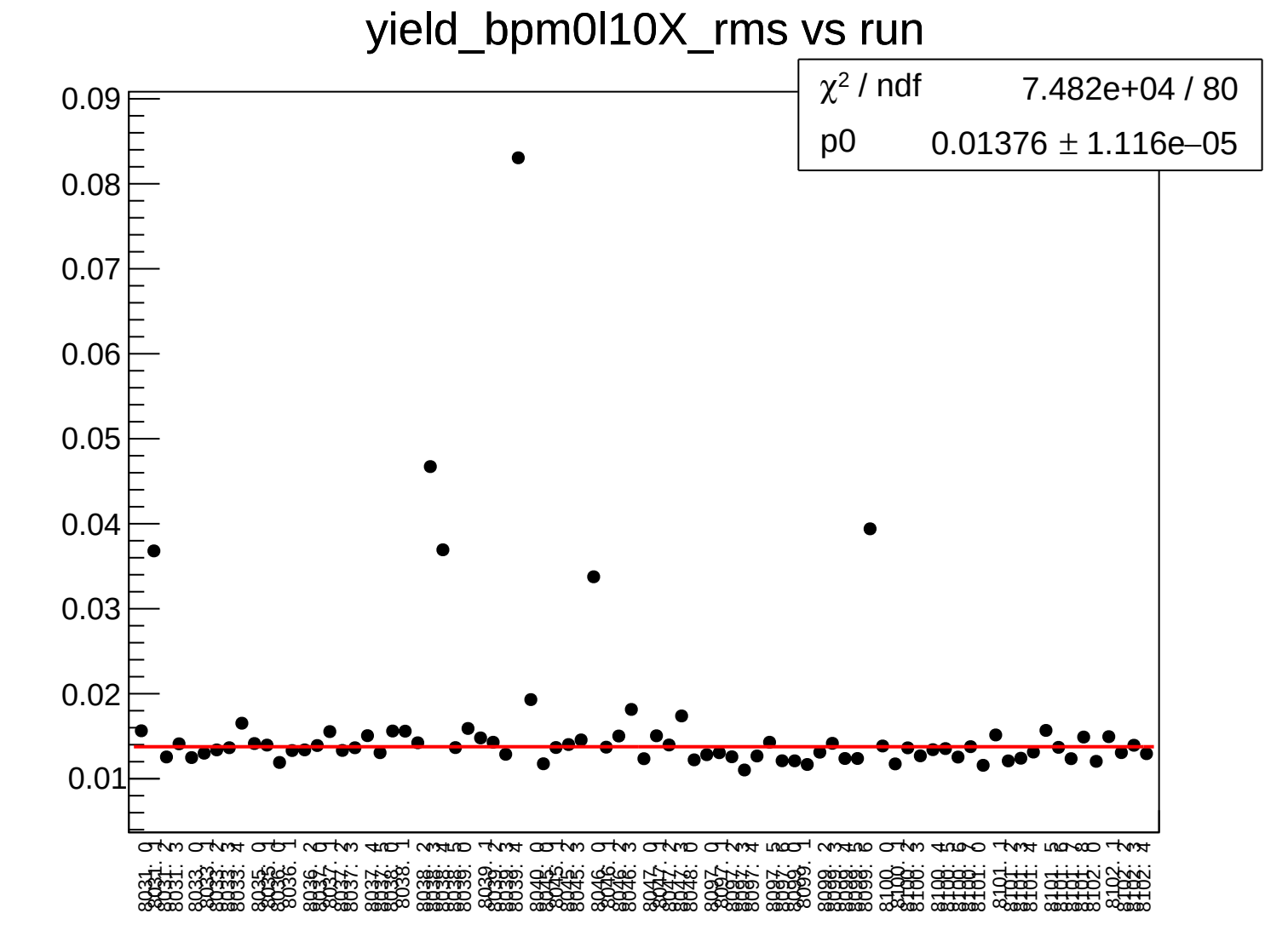

yield_bpm0l09Y_mean vs run
χ² / ndf 8.951e+06 / 80
p0 2.375 ± 1.427e−05
2.46
2.44
2.42
2.4
2.38
2.36
2.34
2.32
2.3
pull
Entries 81
Mean −1026
Std Dev 1057
800
600
400
200
0
−200
−400
−600

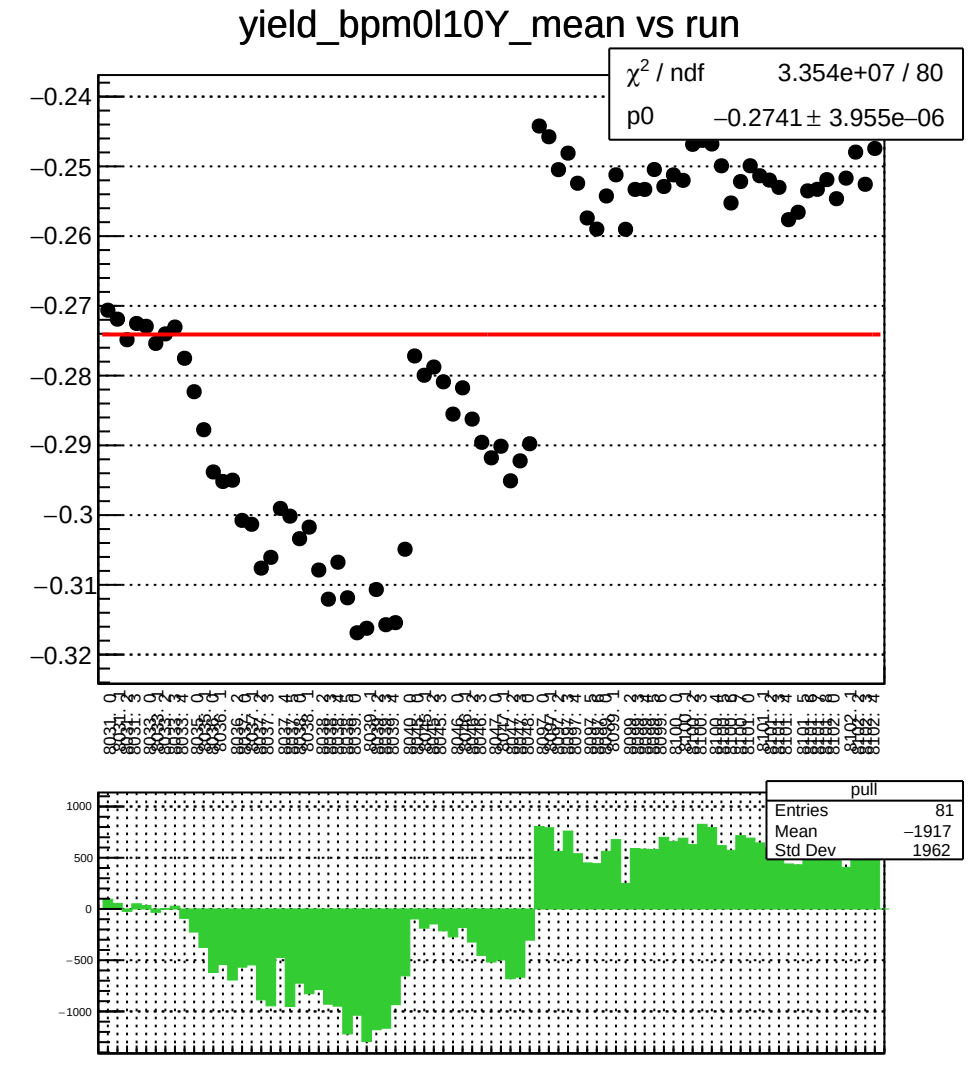

pull1D
Entries 81
Mean 0.1055
Std Dev 1.847
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

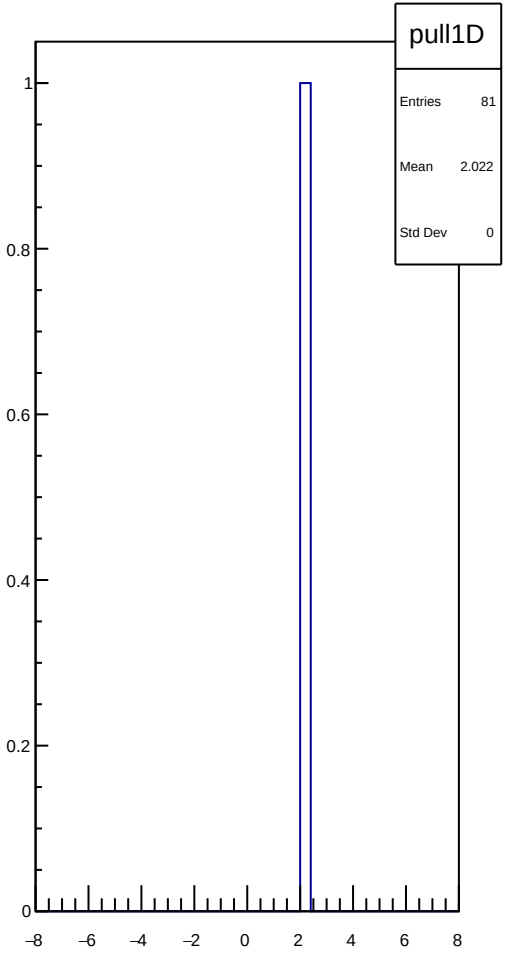

yield_bpm0l09Y_rms vs run
χ² / ndf 1.117e+04 / 80
p0 0.01271 ± 1.009e–05
0.015
0.014
0.013
0.012
0.011

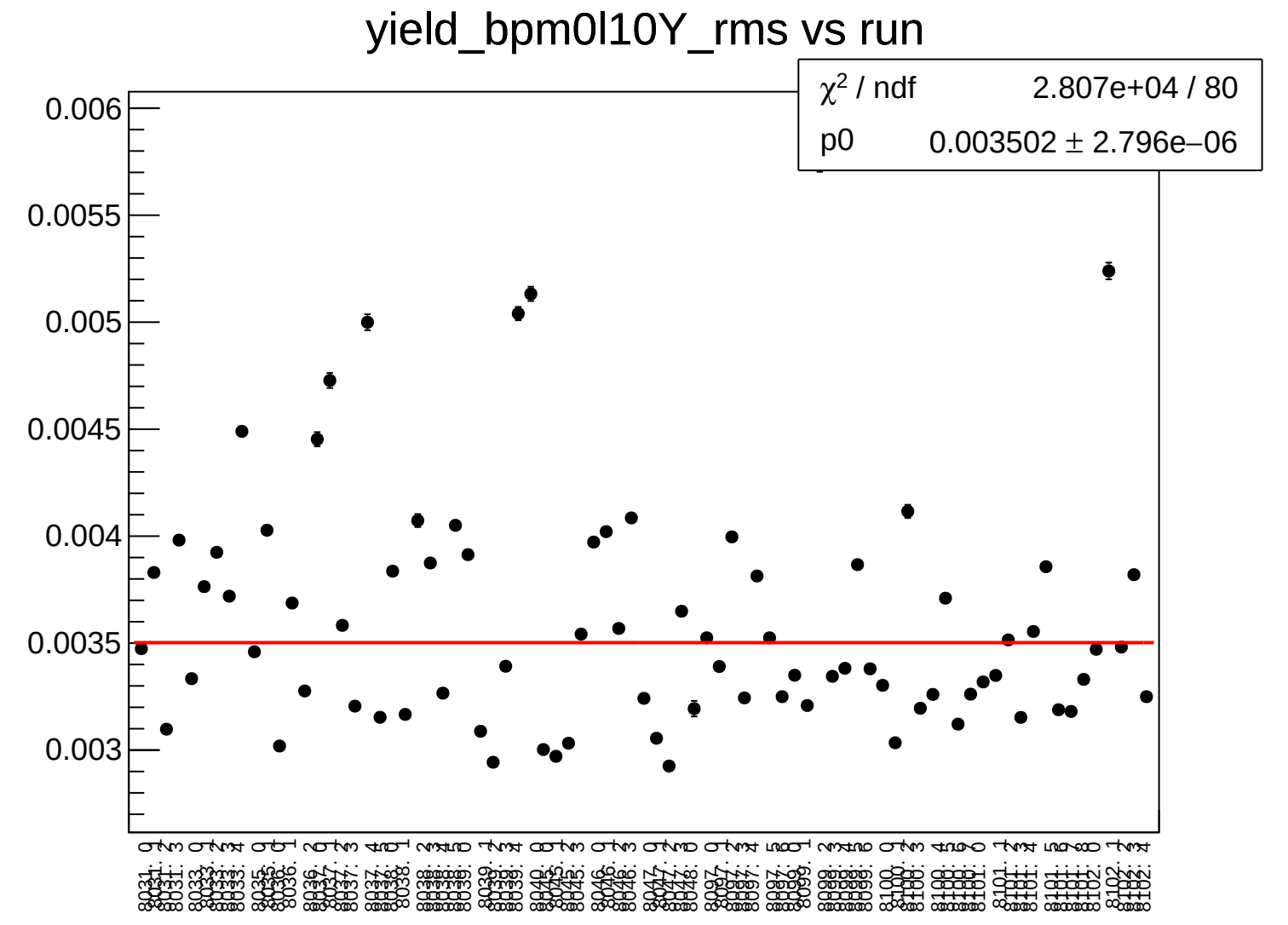

yield_bpm0l10X_mean vs run
χ² / ndf 1.095e+09 / 80
p0 −0.801 ± 1.578e−05
pull
Entries 81
Mean −463.3
Std Dev 505.7

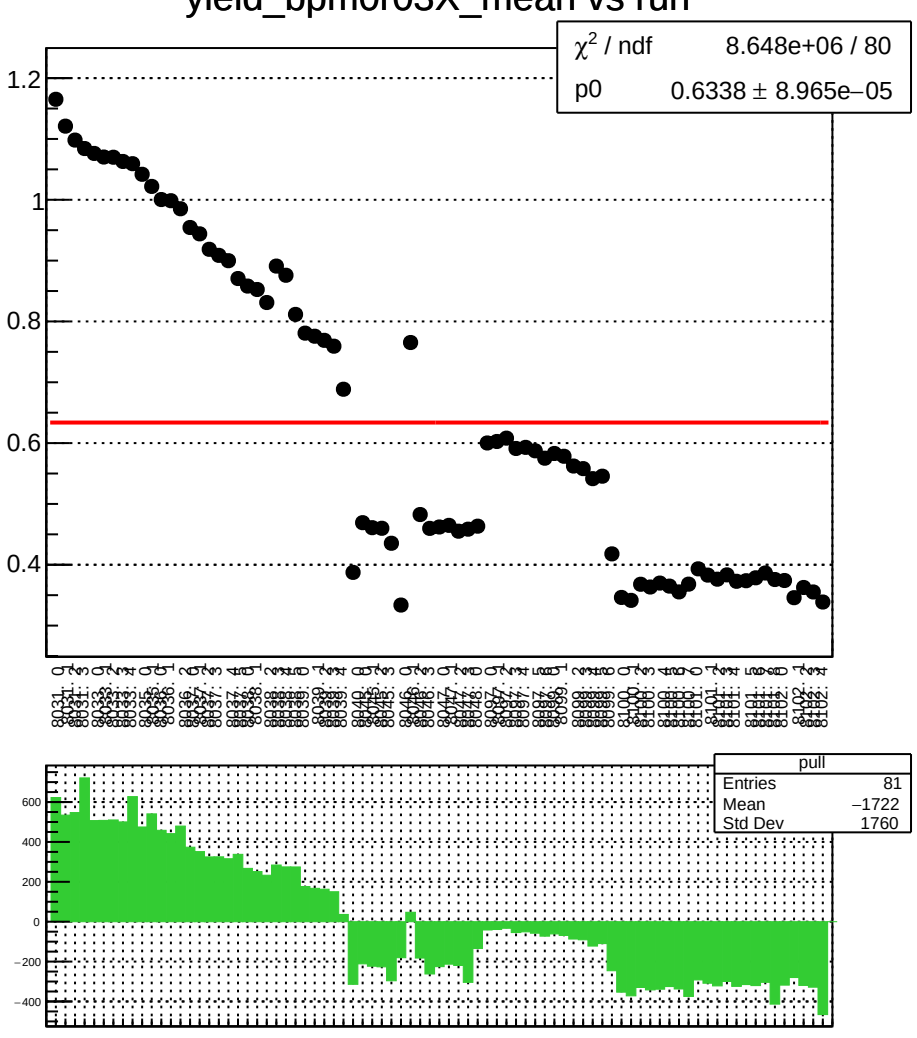

pull1D
Entries 81
Mean 0
Std Dev 0

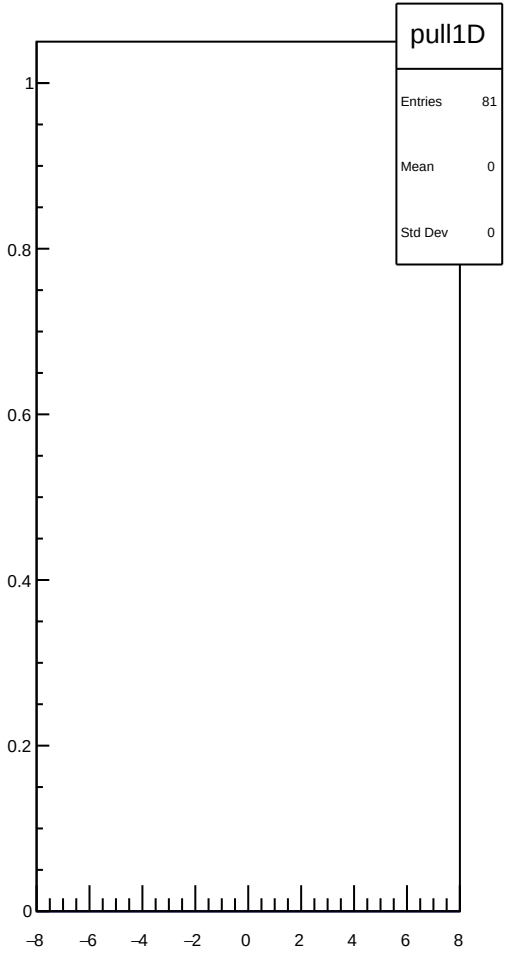

yield_bpm0l10X_rms vs run
χ² / ndf 7.482e+04 / 80
p0 0.01376 ± 1.116e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

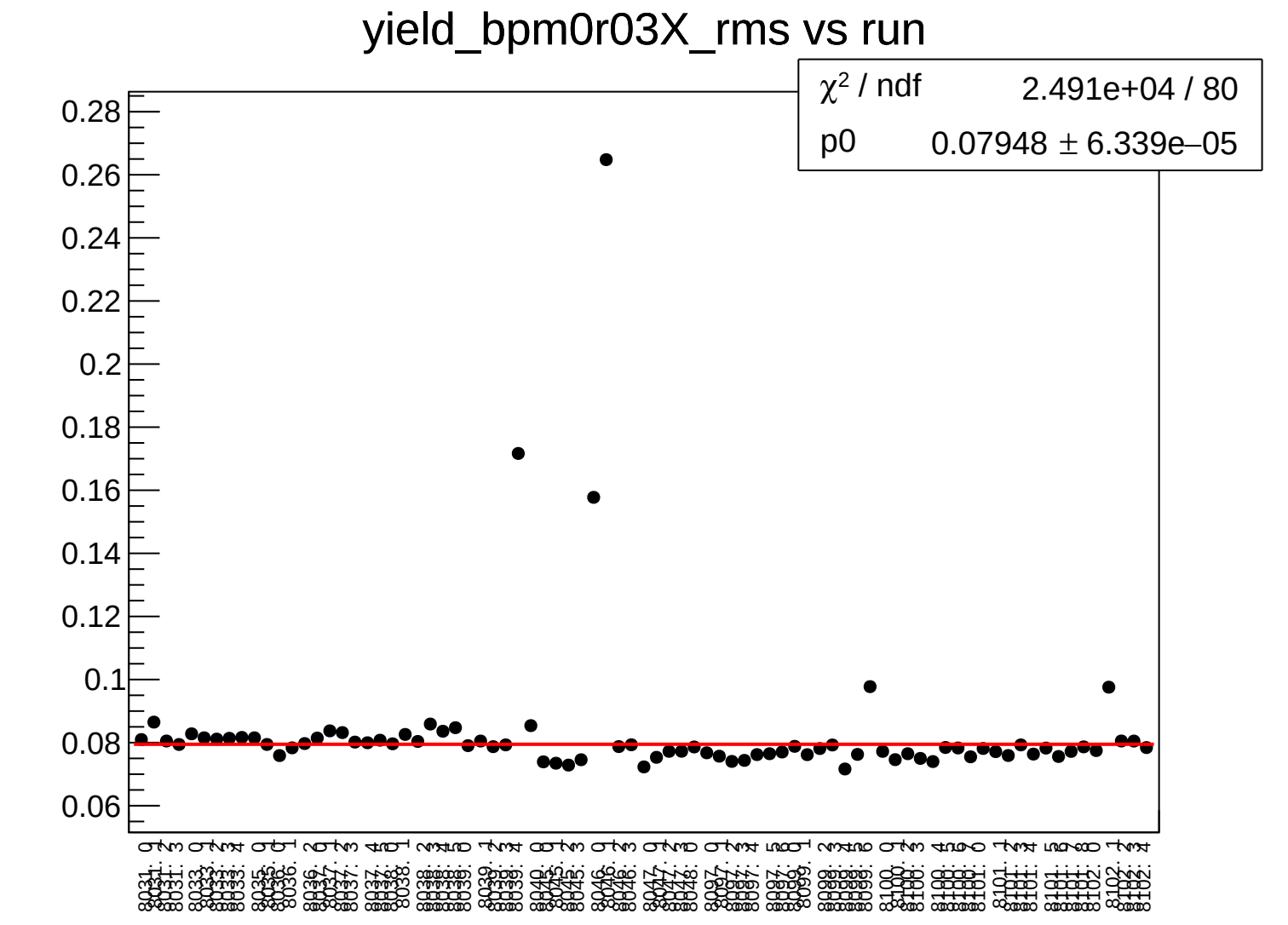

yield_bpm0l10Y_mean vs run
χ² / ndf 3.354e+07 / 80
p0 −0.2741 ± 3.955e−06
−0.24
−0.25
−0.26
−0.27
−0.28
−0.29
−0.3
−0.31
−0.32
pull
Entries 81
Mean −1917
Std Dev 1962
1000
500
0
−500
−1000

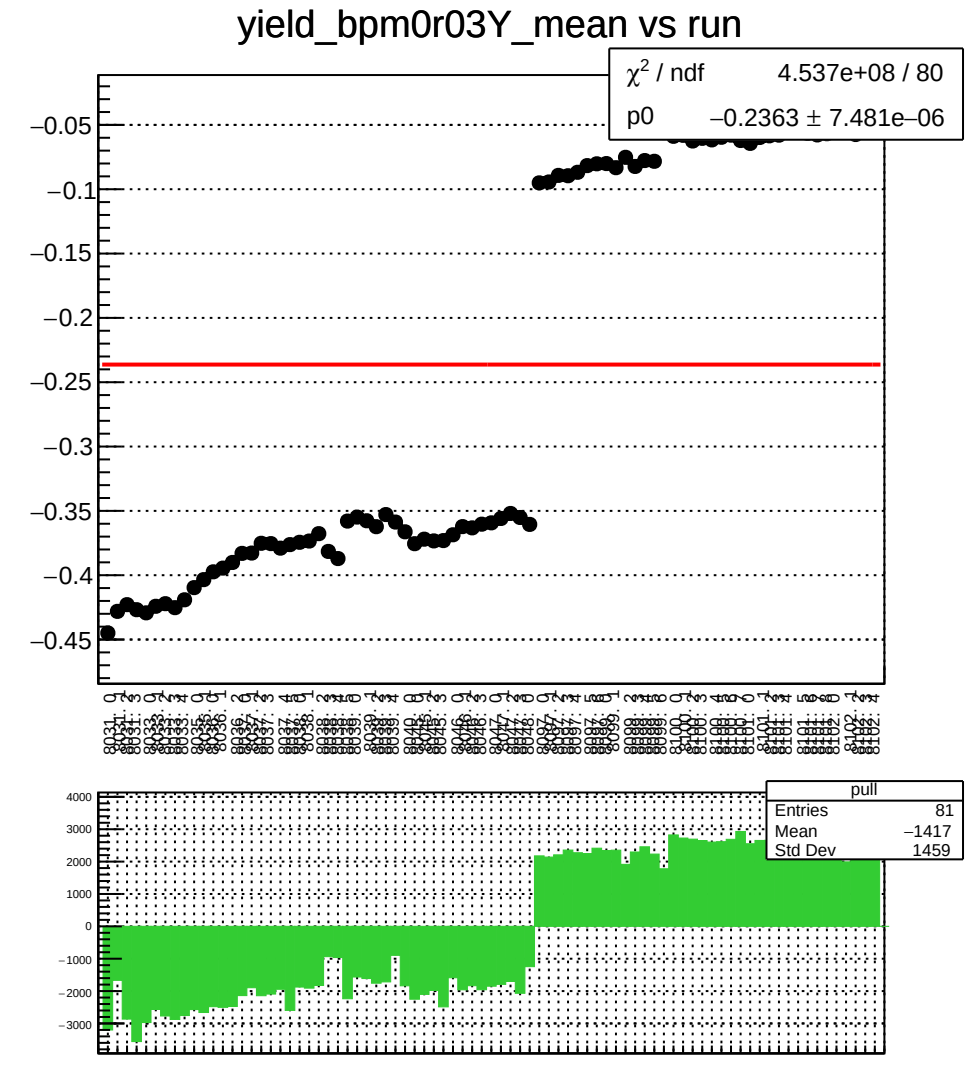

pull1D
Entries 81
Mean 2.022
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

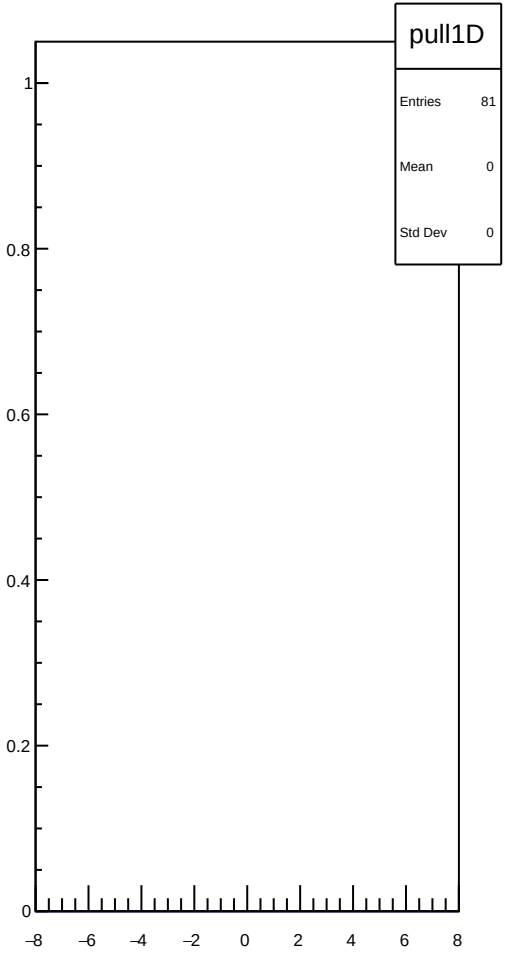

yield_bpm0l10Y_rms vs run
χ² / ndf 2.807e+04 / 80
p0 0.003502 ± 2.796e−06
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

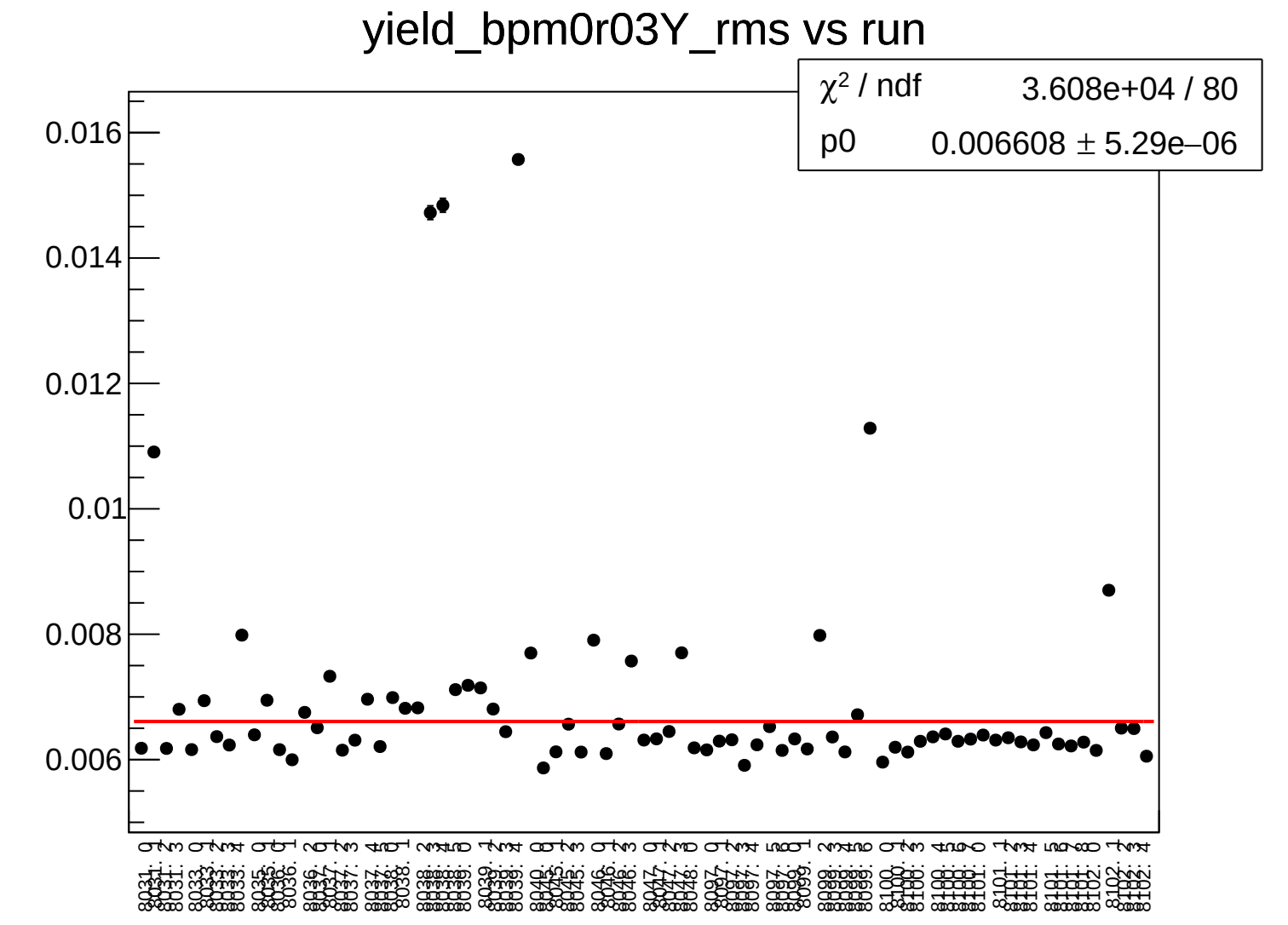

yield_bpm0r03X_mean vs run
χ² / ndf 8.648e+06 / 80
p0 0.6338 ± 8.965e−05
1.2
1
0.8
0.6
0.4
pull
Entries 81
Mean −1722
Std Dev 1760
600
400
200
0
−200
−400

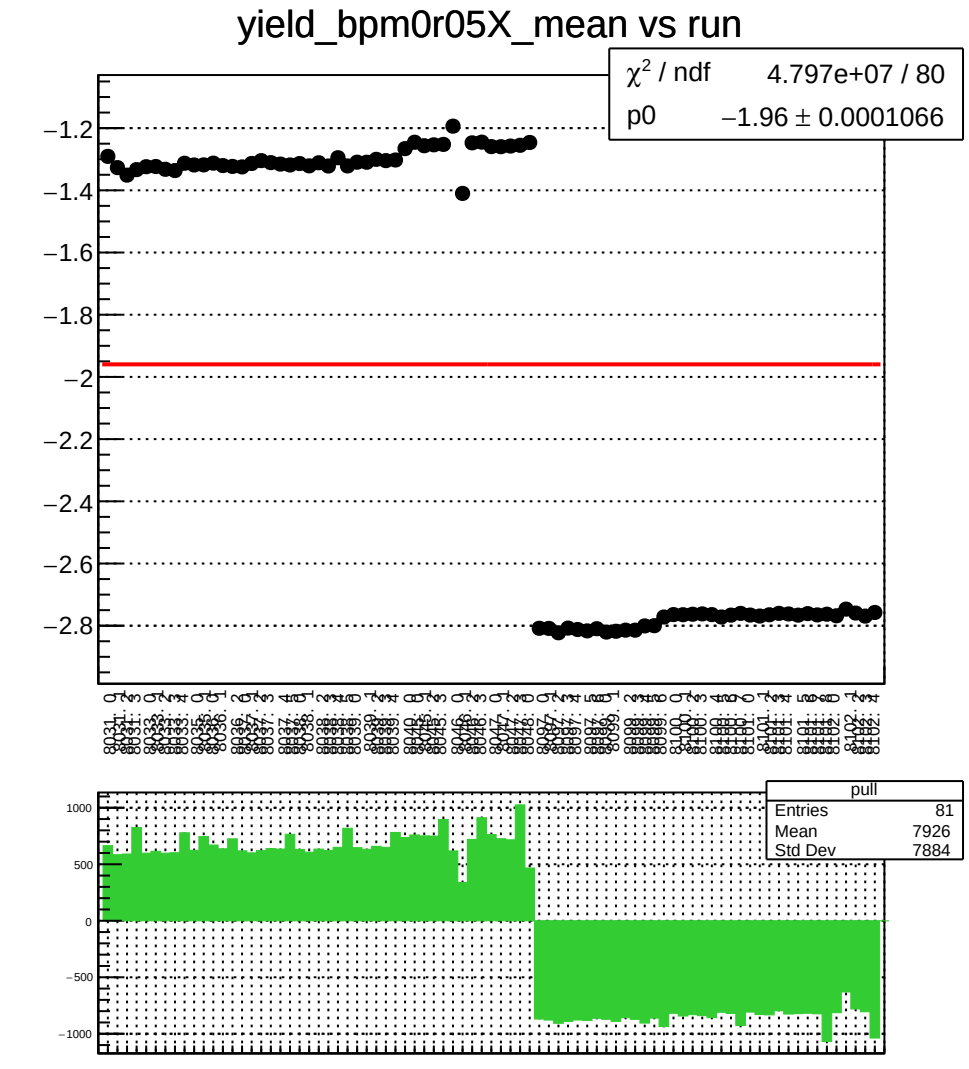

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

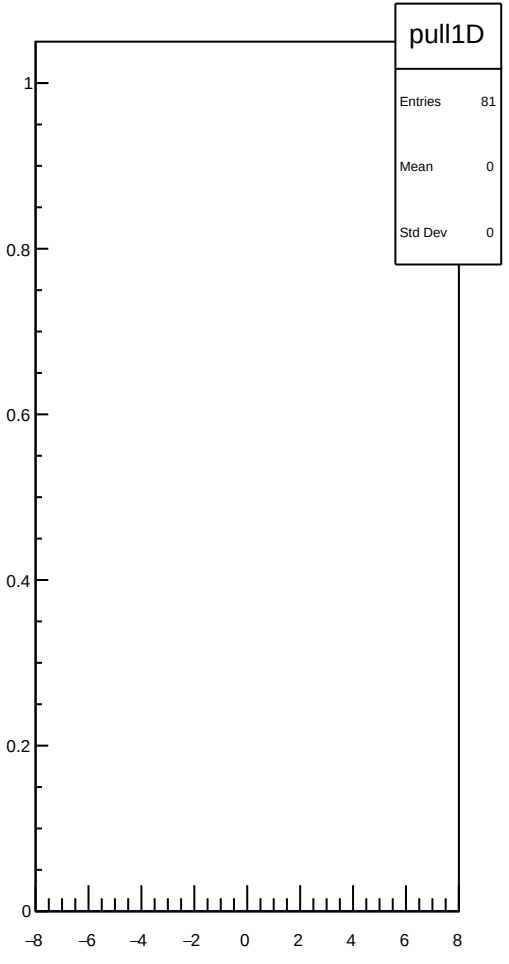

yield_bpm0r03X_rms vs run
χ² / ndf 2.491e+04 / 80
p0 0.07948 ± 6.339e–05
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

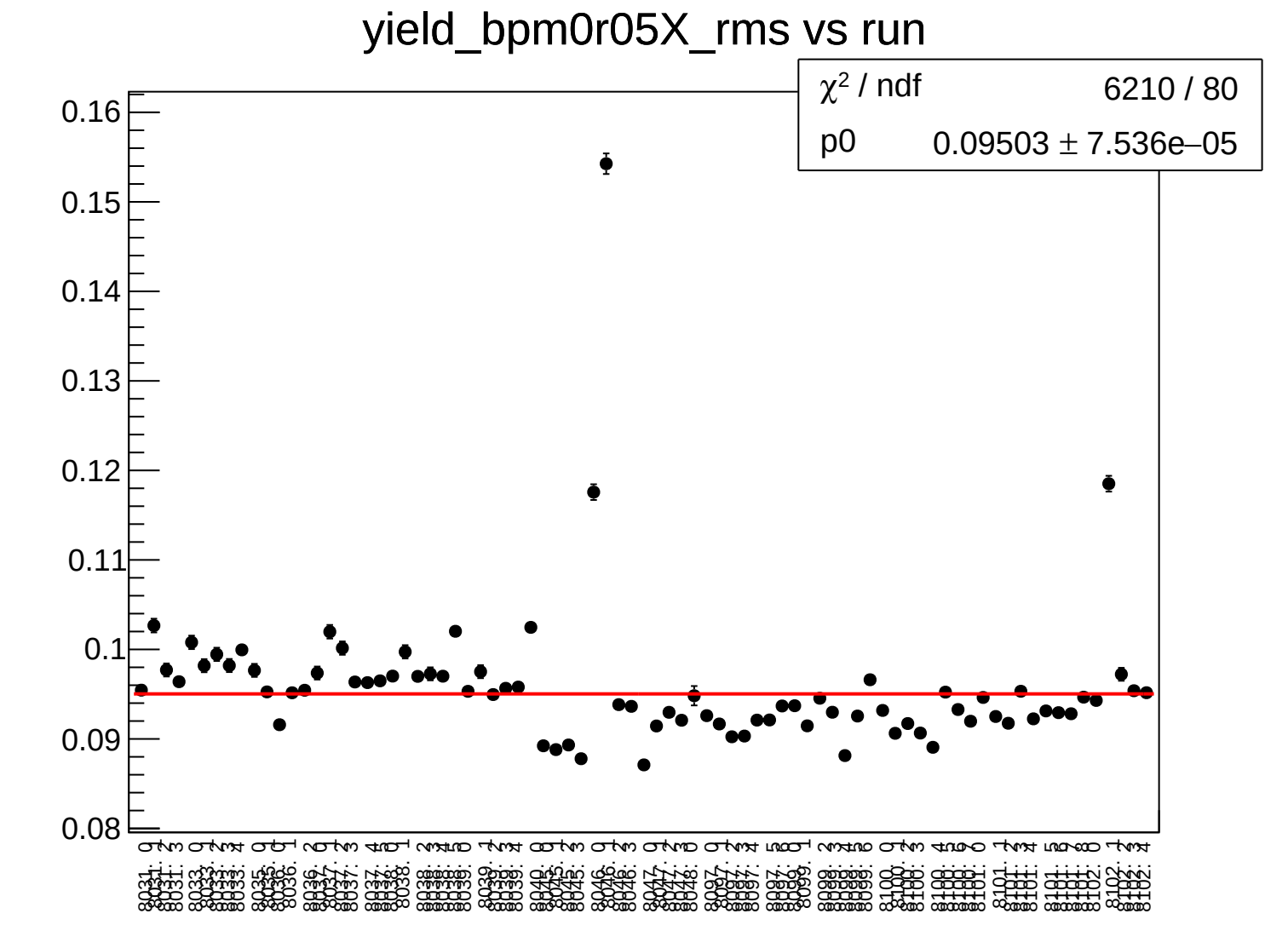

yield_bpm0r03Y_mean vs run
χ² / ndf 4.537e+08 / 80
p0 −0.2363 ± 7.481e−06
−0.05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
−0.4
−0.45
pull
Entries 81
Mean −1417
Std Dev 1459
4000
3000
2000
1000
0
−1000
−2000
−3000

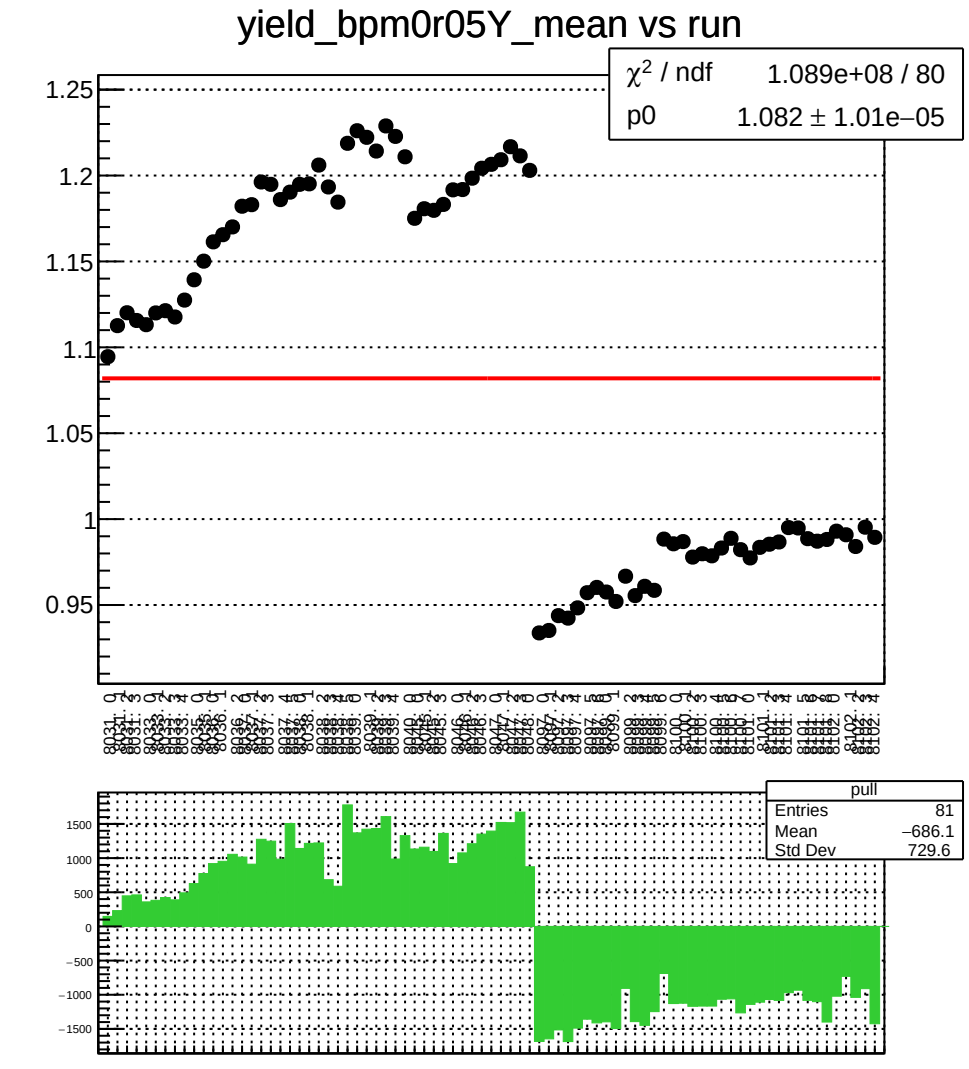

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

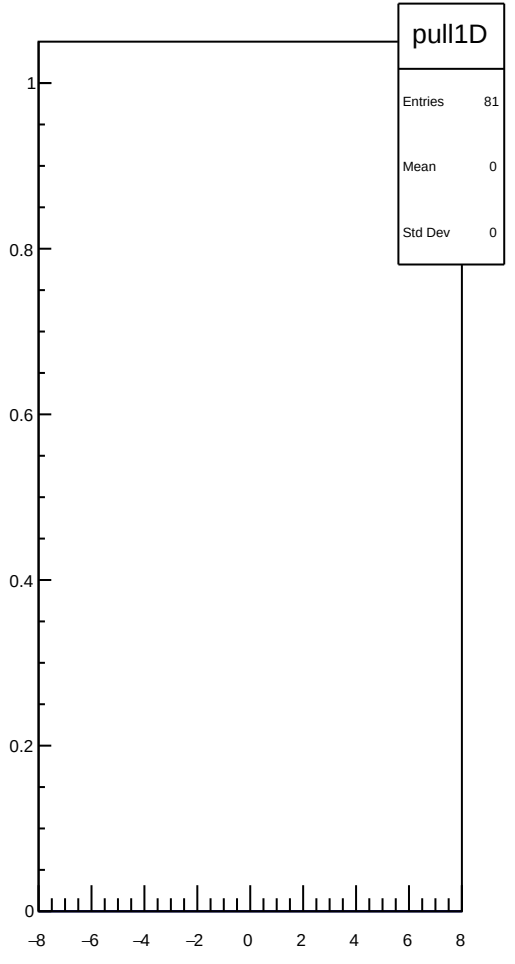

yield_bpm0r03Y_rms vs run
χ² / ndf 3.608e+04 / 80
p0 0.006608 ± 5.29e−06
0.016
0.014
0.012
0.01
0.008
0.006

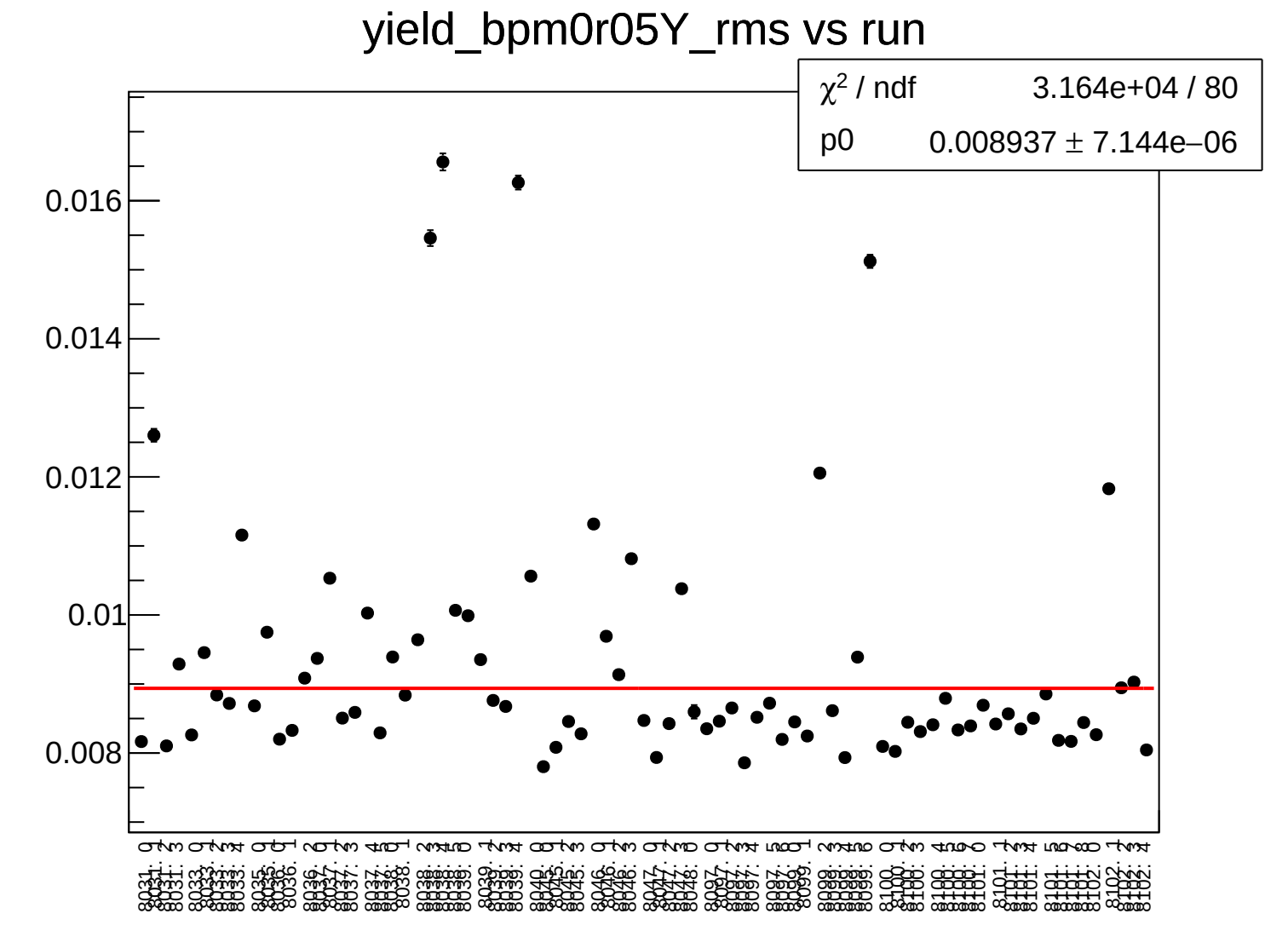

yield_bpm0r05X_mean vs run
χ² / ndf 4.797e+07 / 80
p0 −1.96 ± 0.0001066
−1.2
−1.4
−1.6
−1.8
−2
−2.2
−2.4
−2.6
−2.8
pull
Entries 81
Mean 7926
Std Dev 7884
1000
500
0
−500
−1000

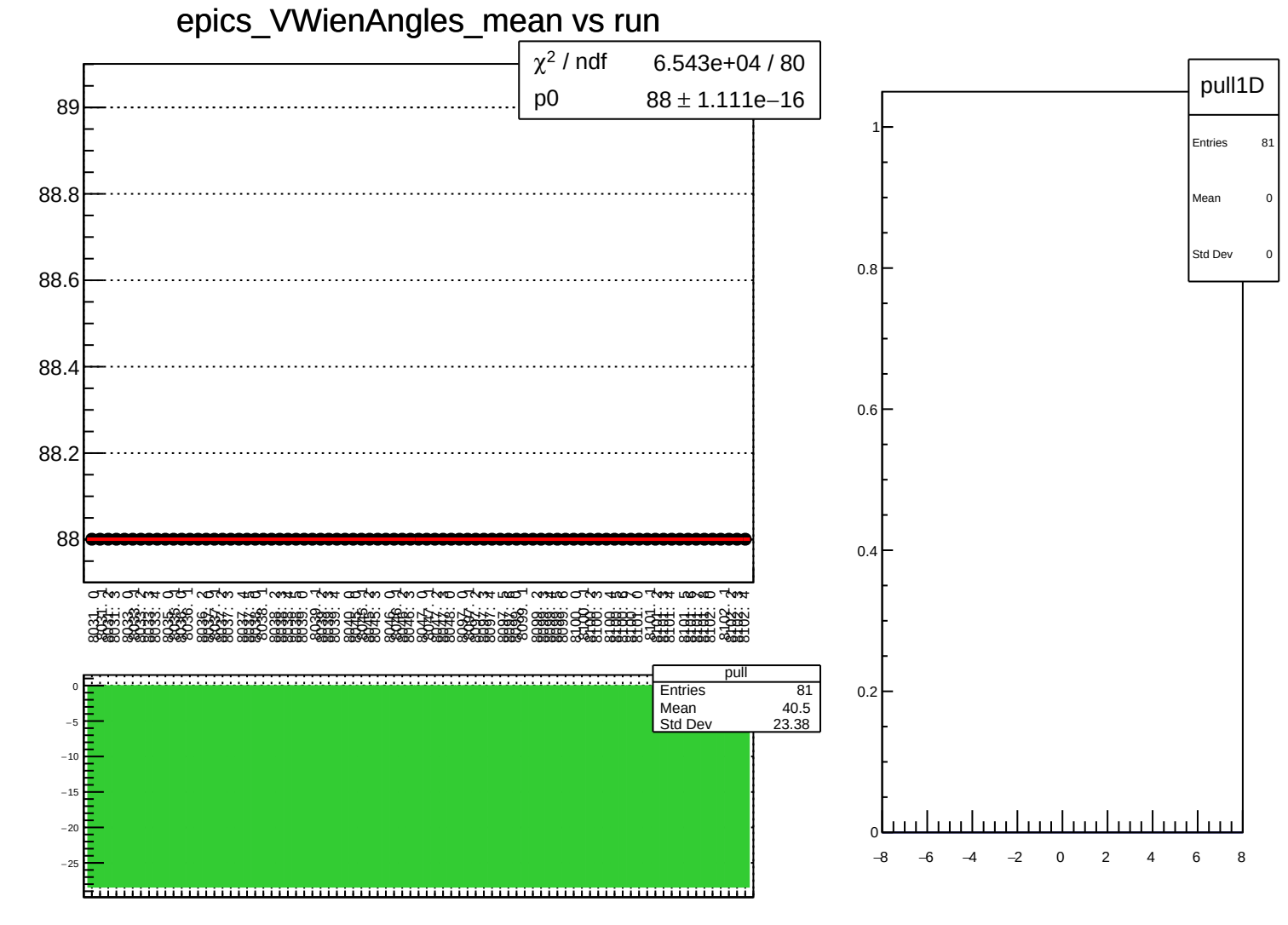

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

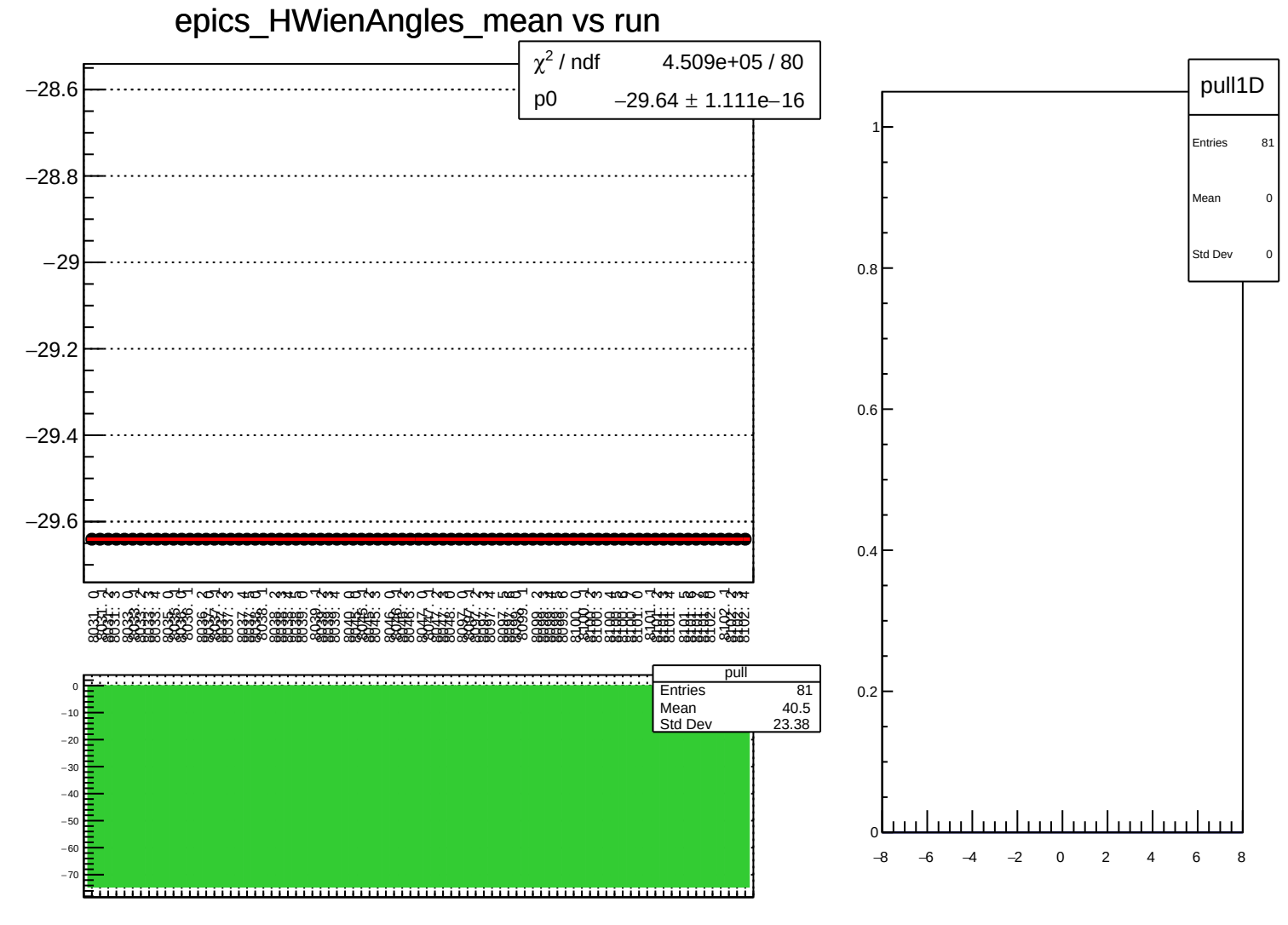

yield_bpm0r05X_rms vs run
χ² / ndf 6210 / 80
p0 0.09503 ± 7.536e−05
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08

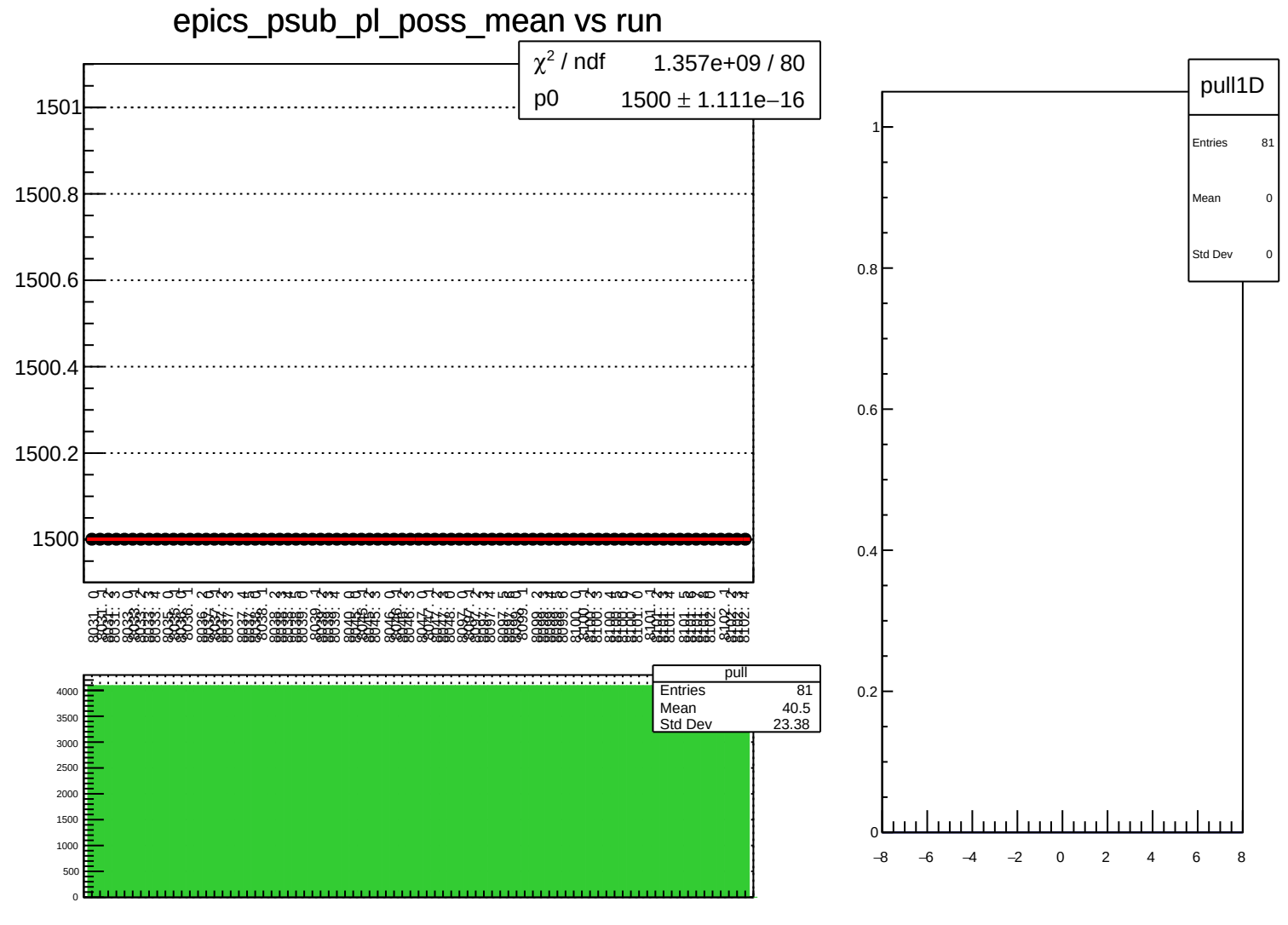

yield_bpm0r05Y_mean vs run
χ² / ndf 1.089e+08 / 80
p0 1.082 ± 1.01e−05
1.25
1.2
1.15
1.1
1.05
1
0.95
pull
Entries 81
Mean −686.1
Std Dev 729.6
1500
1000
500
0
−500
−1000
−1500

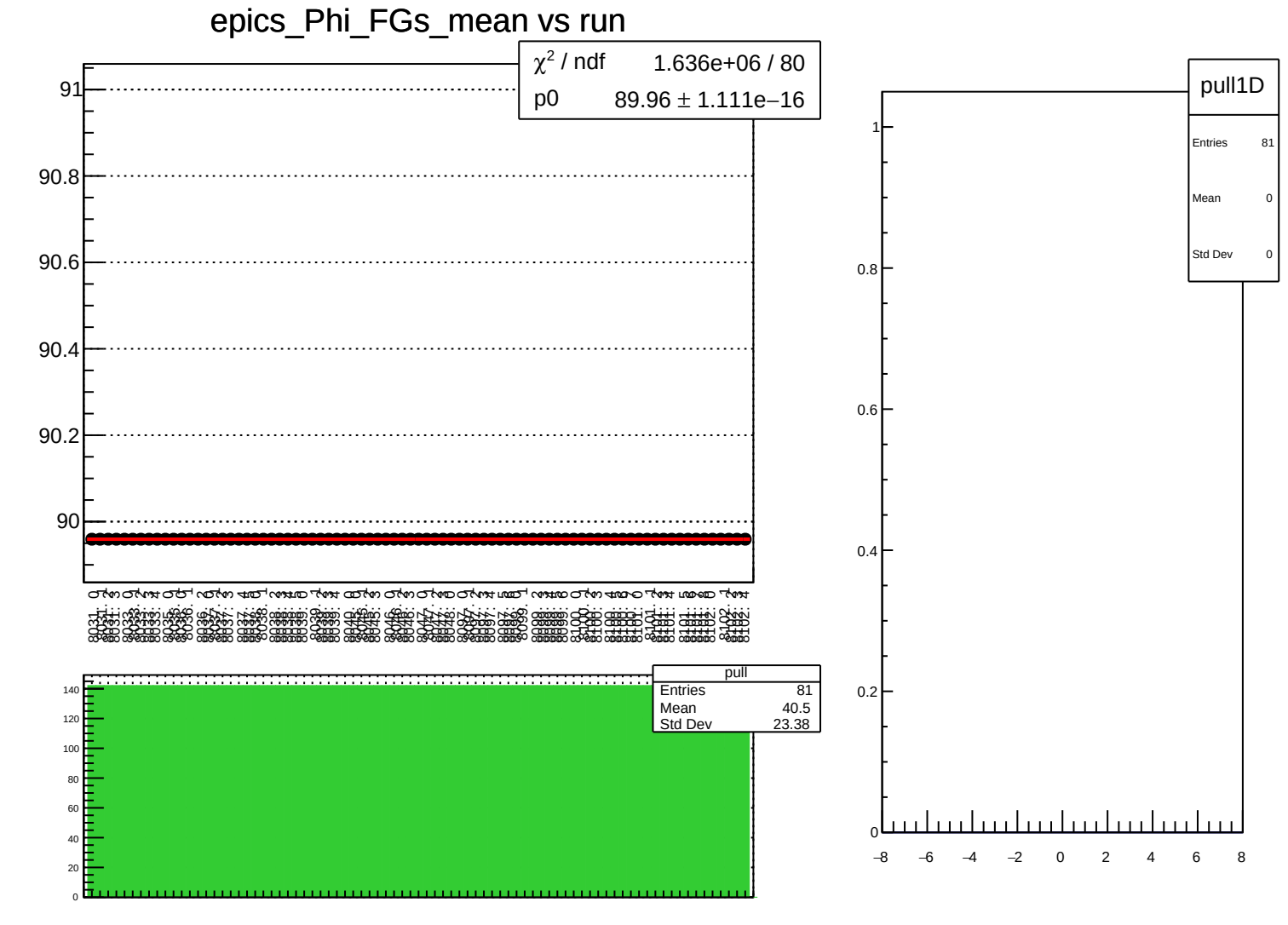

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

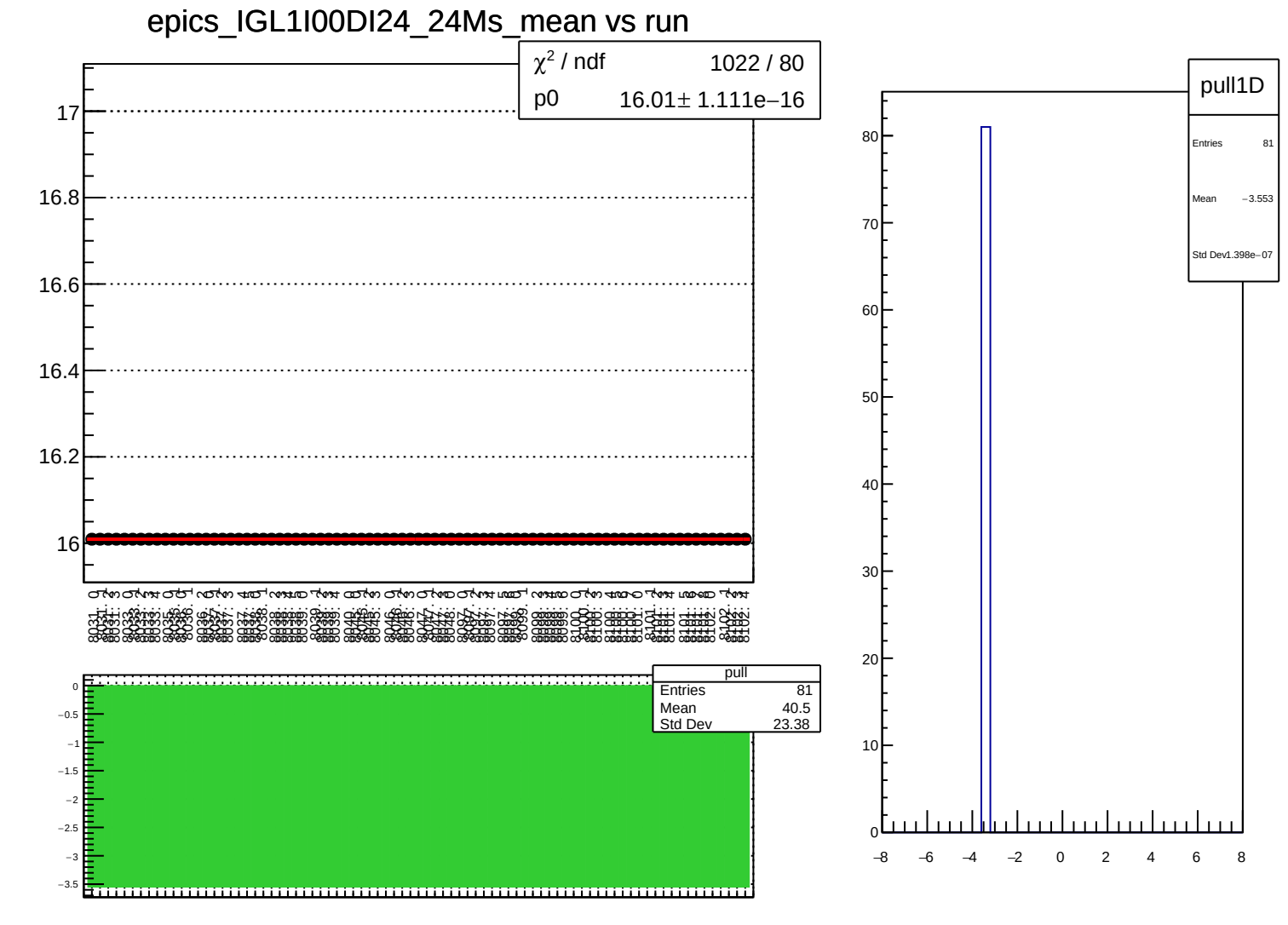

yield_bpm0r05Y_rms vs run
χ² / ndf 3.164e+04 / 80
p0 0.008937 ± 7.144e−06
0.016
0.014
0.012
0.01
0.008

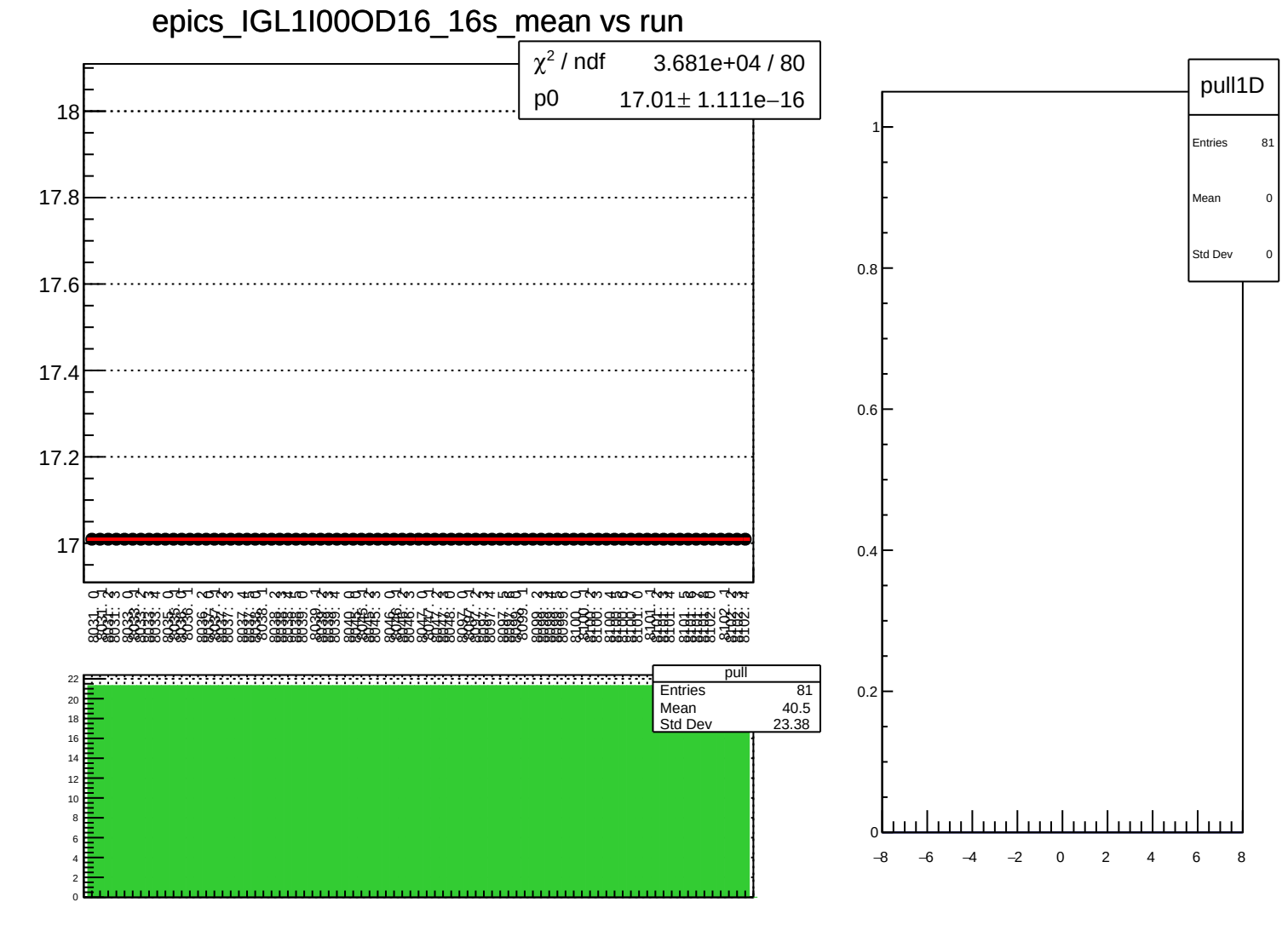

epics_VWienAngles_mean vs run
χ² / ndf 6.543e+04 / 80
p0 88 ± 1.111e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−5
−10
−15
−20
−25
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

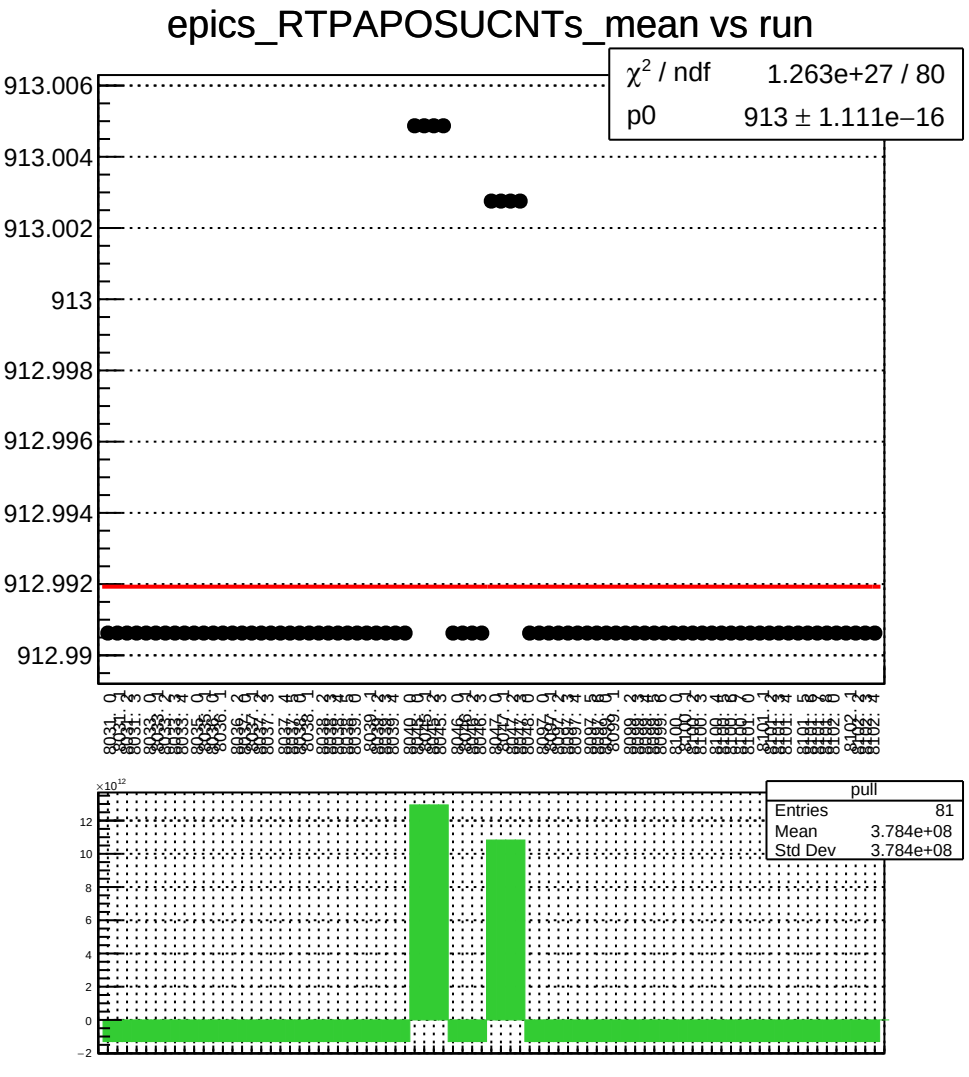

epics_HWienAngles_mean vs run
χ² / ndf 4.509e+05 / 80
p0 −29.64 ± 1.111e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

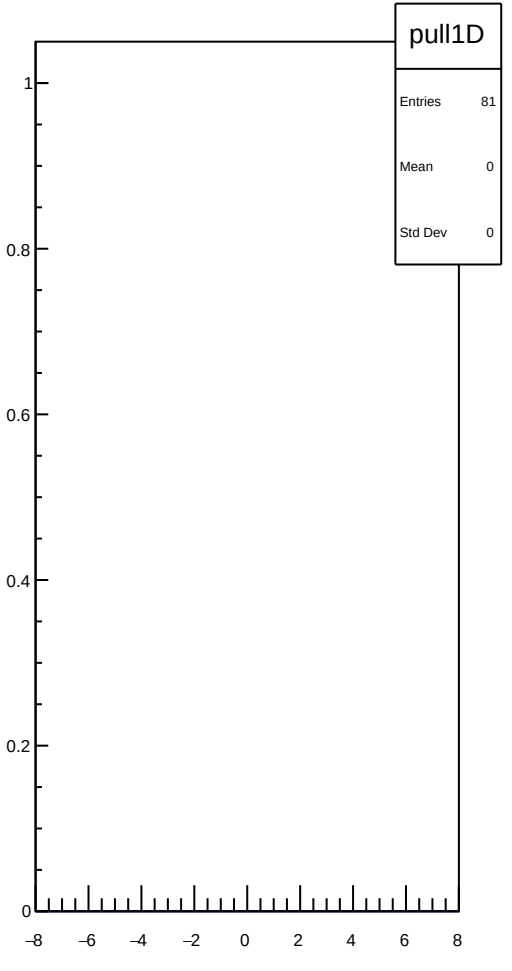

epics_psub_pl_poss_mean vs run
χ² / ndf 1.357e+09 / 80
p0 1500 ± 1.111e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 81
Mean 40.5
Std Dev 23.38
4000
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

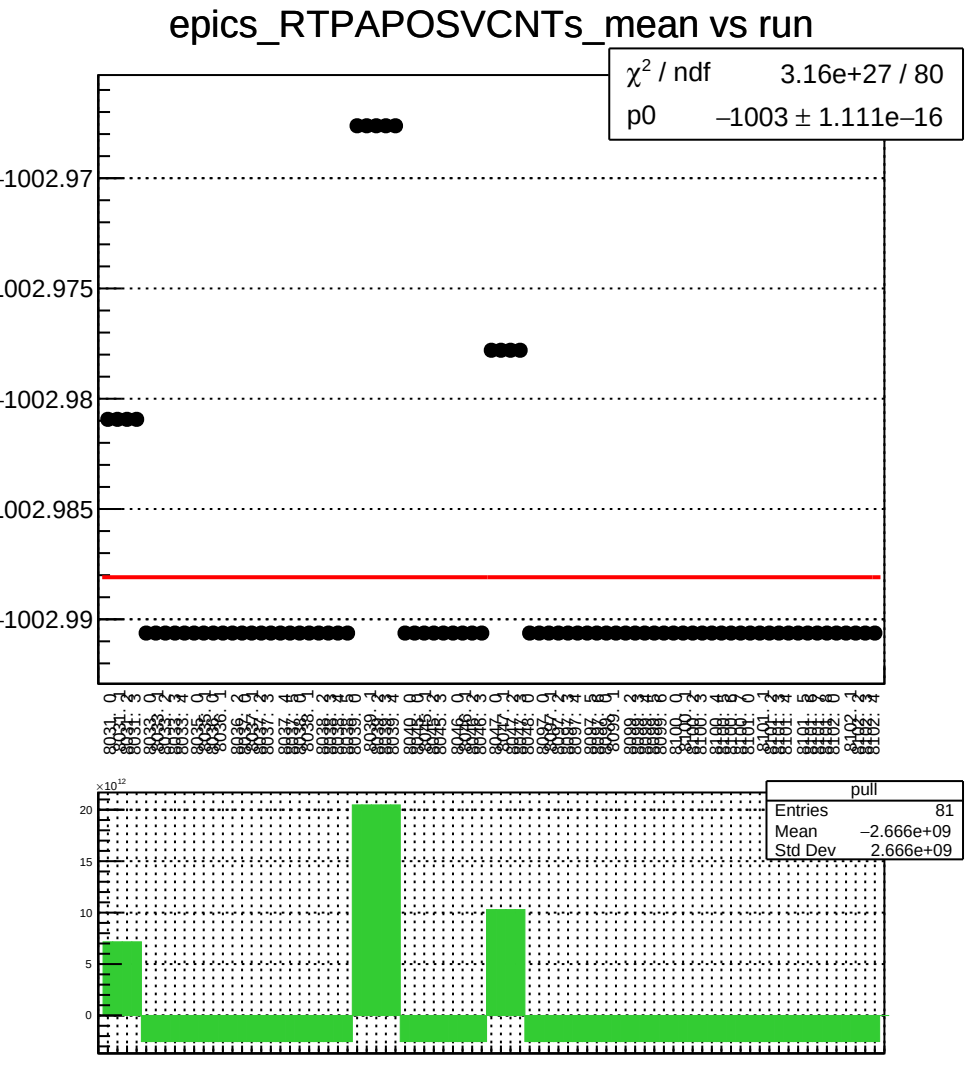

epics_Phi_FGs_mean vs run
χ² / ndf 1.636e+06 / 80
p0 89.96 ± 1.111e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 81
Mean 40.5
Std Dev 23.38
140
120
100
80
60
40
20
0
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

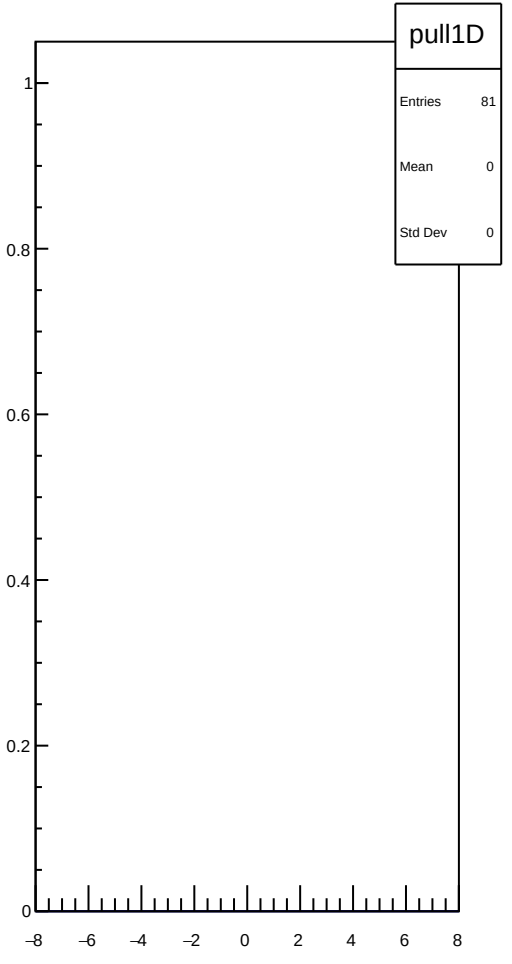

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 1022 / 80
p0 16.01± 1.111e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−0.5
−1
−1.5
−2
−2.5
−3
−3.5
pull1D
Entries 81
Mean −3.553
Std Dev1.398e−07
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 3.681e+04 / 80
p0 17.01± 1.111e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 81
Mean 40.5
Std Dev 23.38
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 1.263e+27 / 80
p0 913 ± 1.111e−16
913.006
913.004
913.002
913
912.998
912.996
912.994
912.992
912.99
×10¹²
12
10
8
6
4
2
0
−2
pull
Entries 81
Mean 3.784e+08
Std Dev 3.784e+08


pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 3.16e+27 / 80
p0 −1003 ± 1.111e−16
−1002.97
−1002.975
−1002.98
−1002.985
−1002.99
pull
Entries 81
Mean −2.666e+09
Std Dev 2.666e+09
×10¹²
20
15
10
5
0


pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8