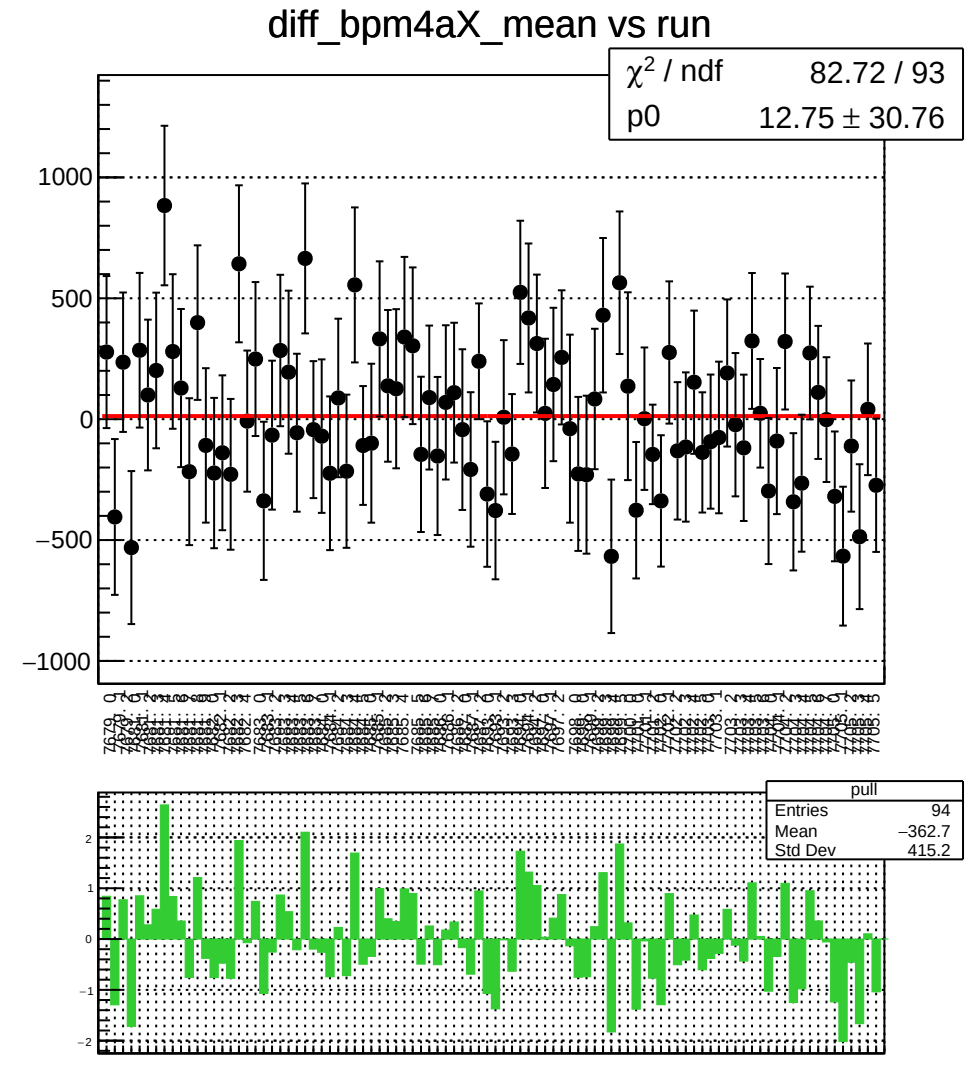
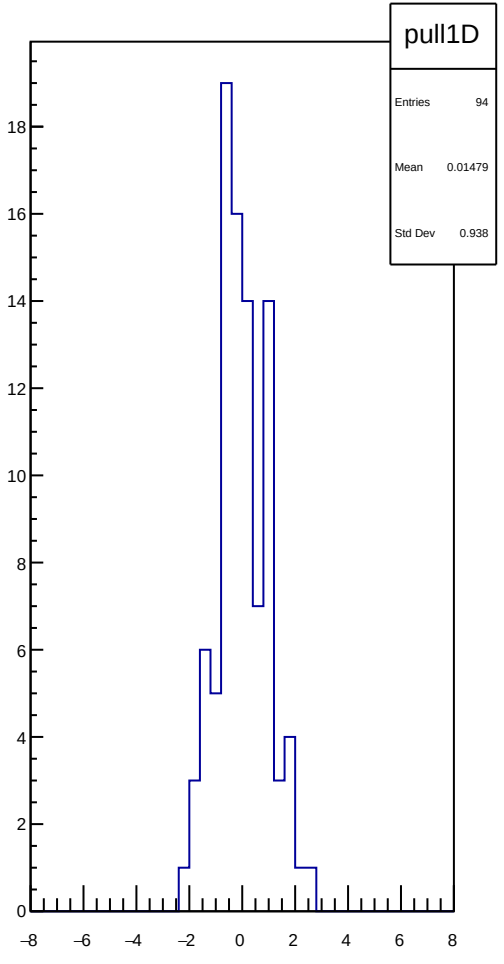
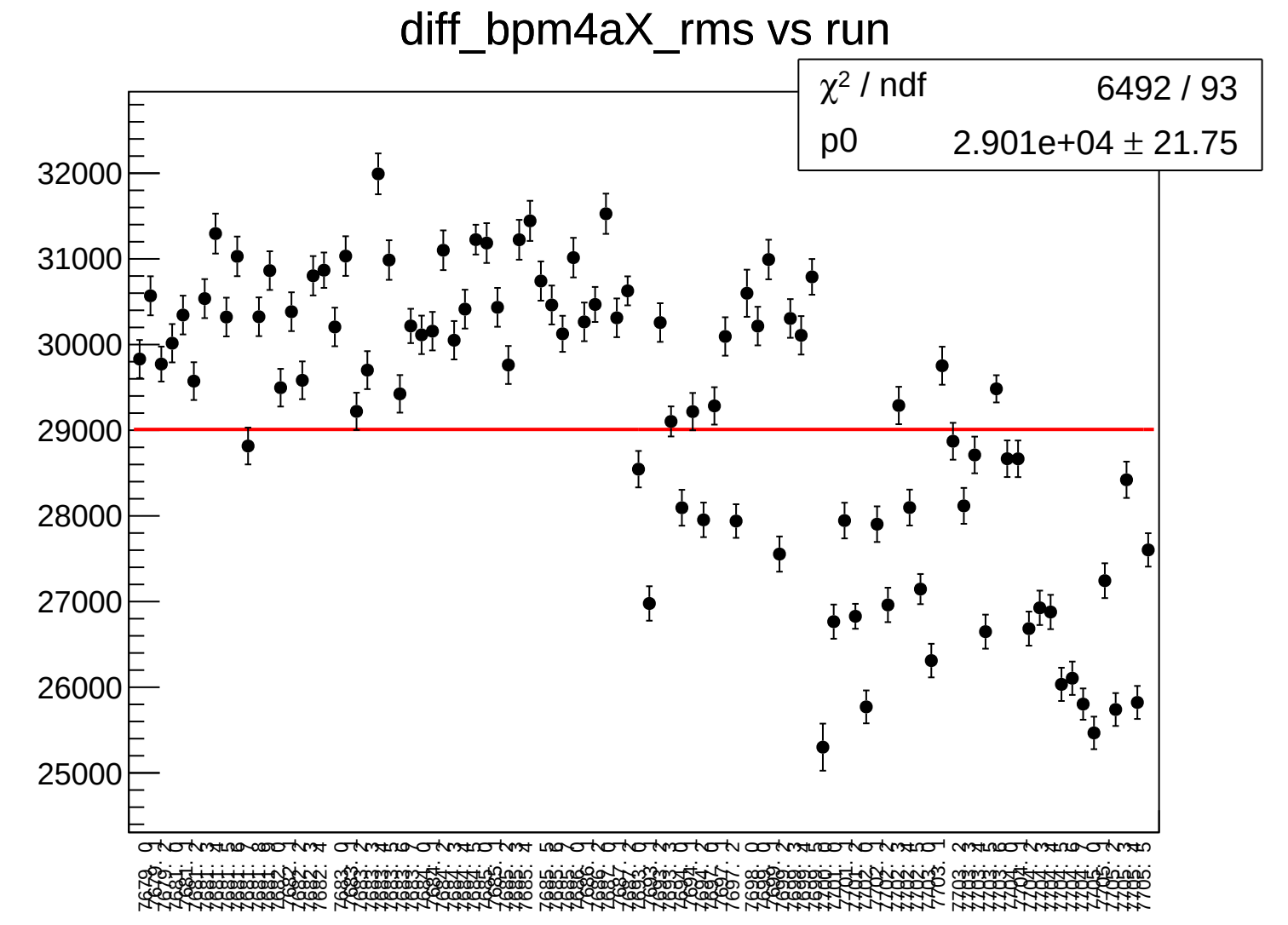
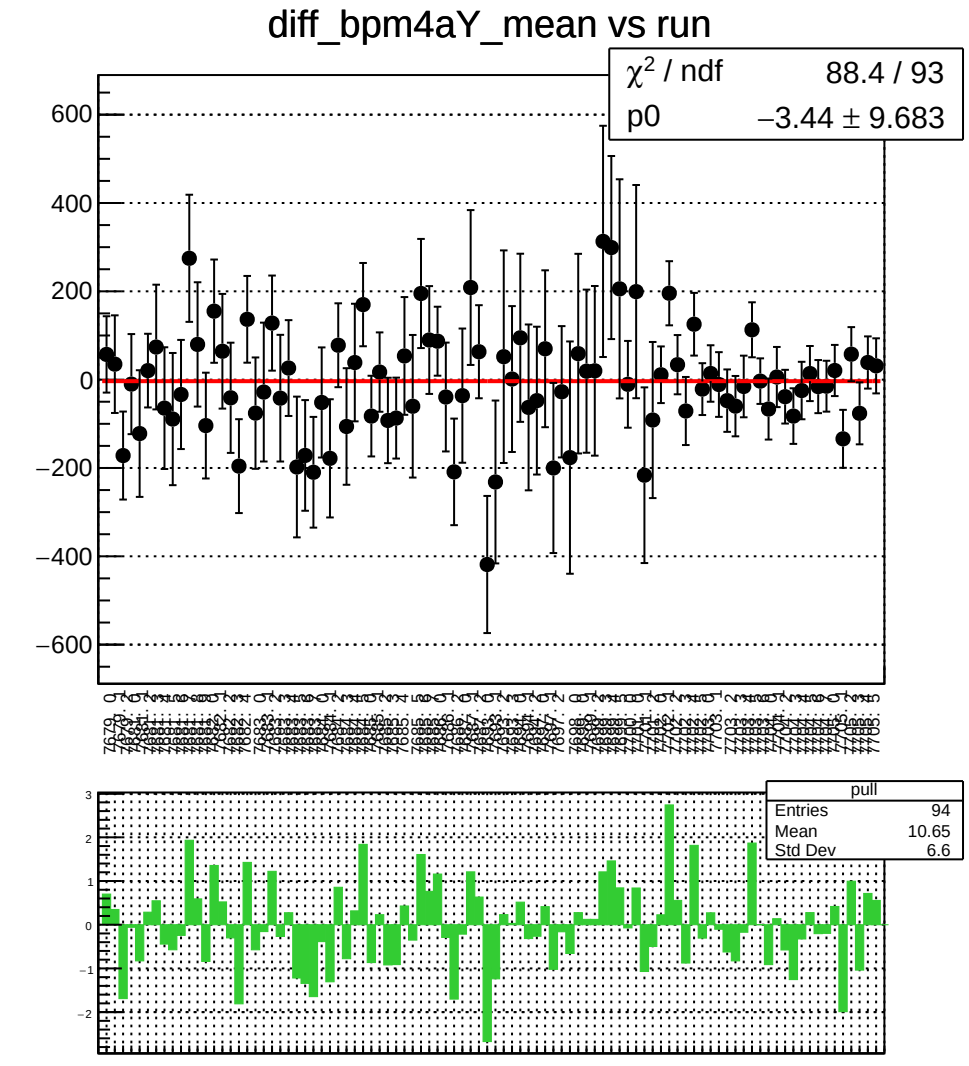
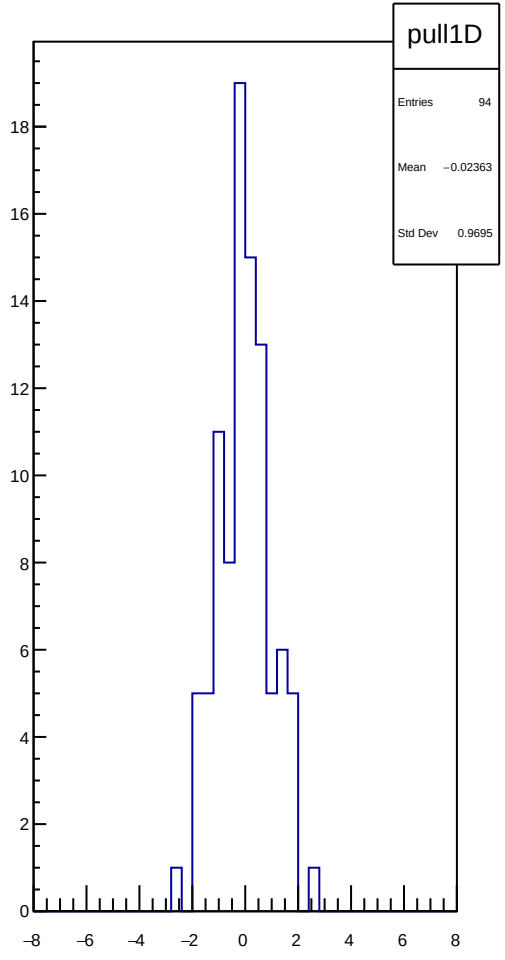
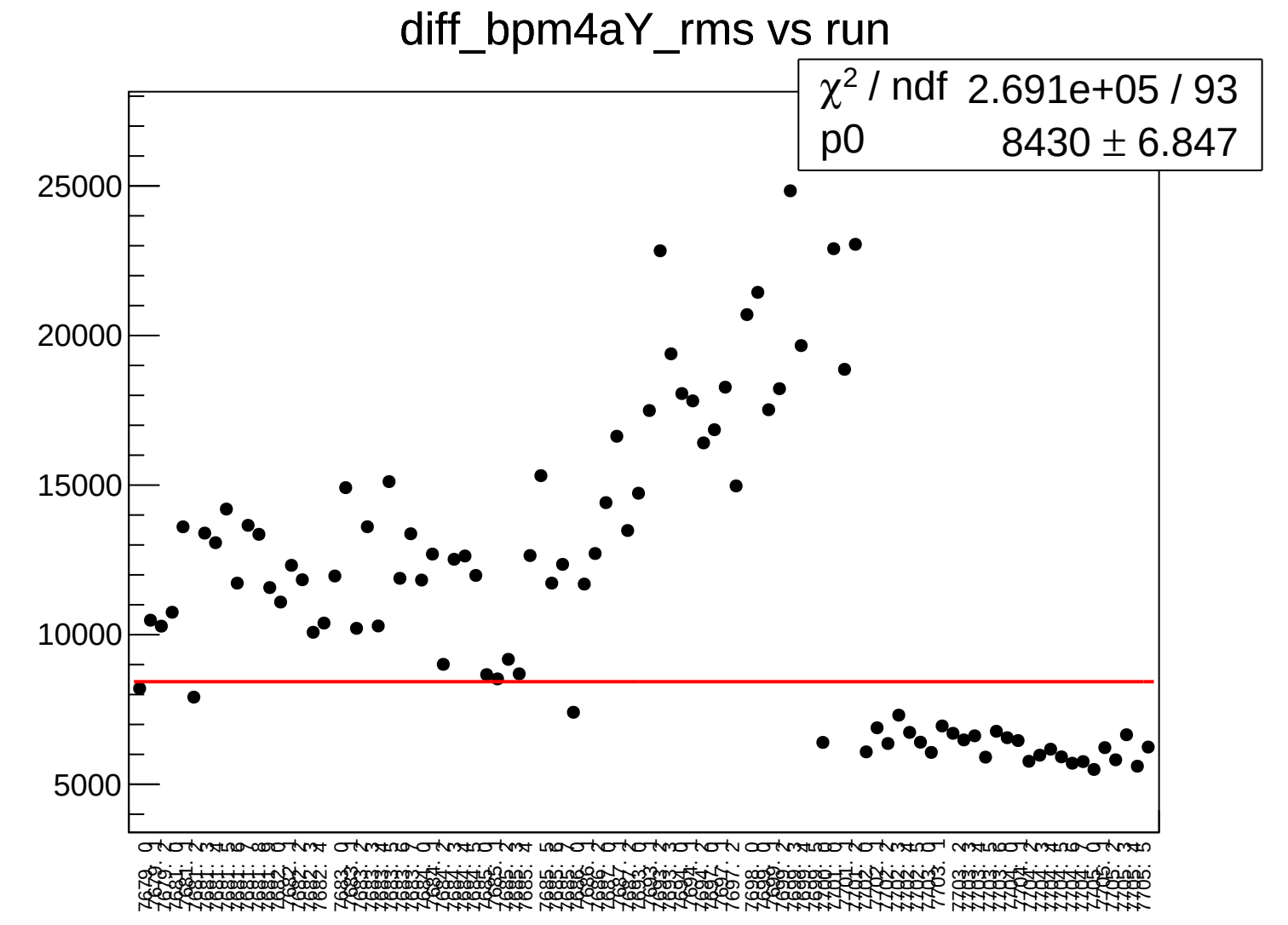

diff_bpm4aX_mean vs run
χ² / ndf 82.72 / 93
p0 12.75 ± 30.76
1000
500
0
−500
−1000
pull
Entries 94
Mean −362.7
Std Dev 415.2
2
1
0
−1
−2

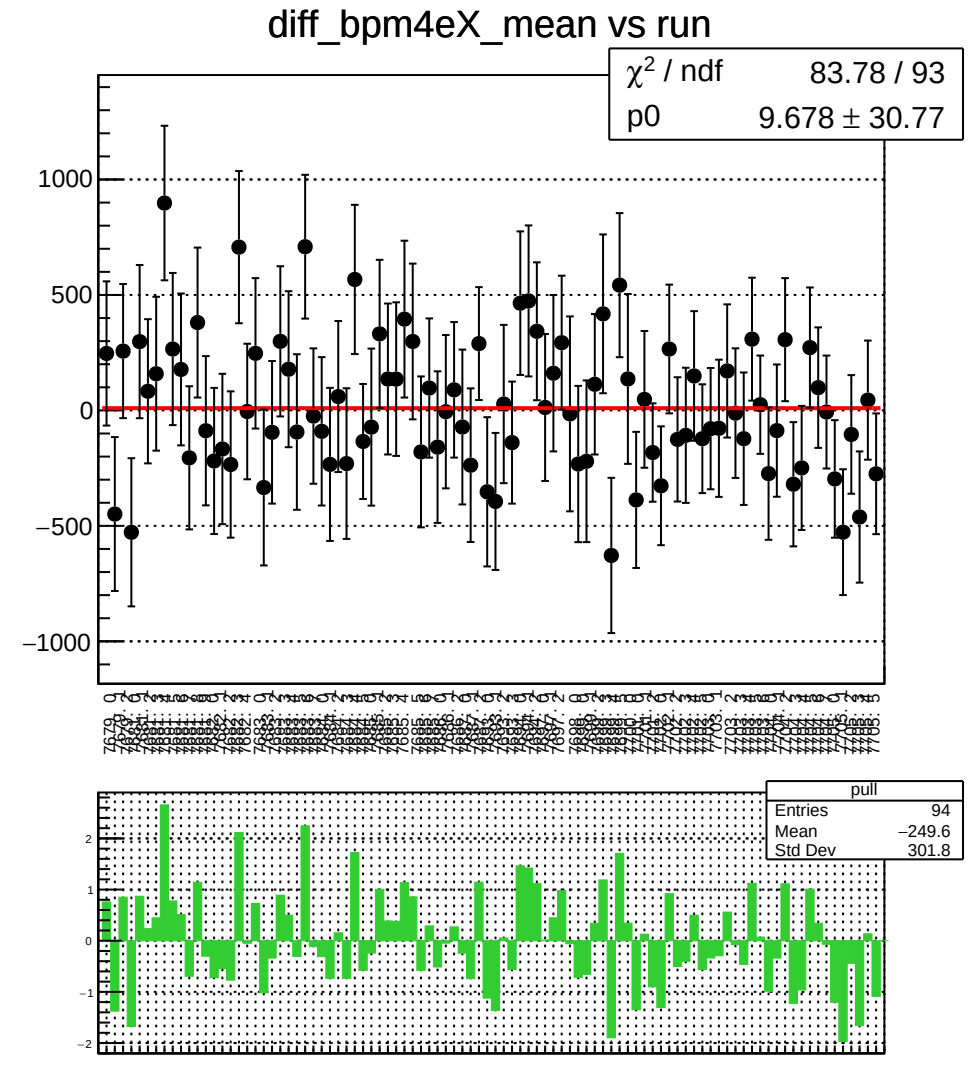

pull1D
Entries 94
Mean 0.01479
Std Dev 0.938
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

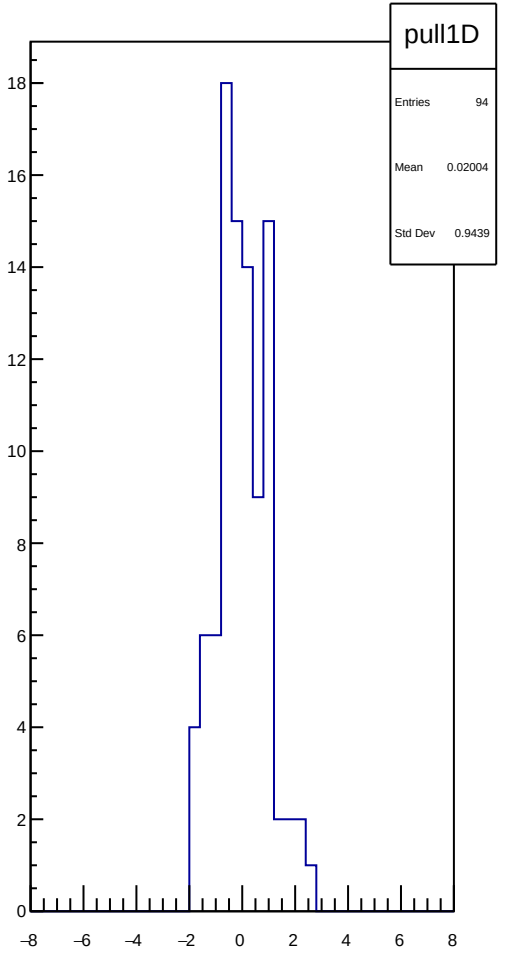

diff_bpm4aX_rms vs run
χ² / ndf 6492 / 93
p0 2.901e+04 ± 21.75
32000
31000
30000
29000
28000
27000
26000
25000

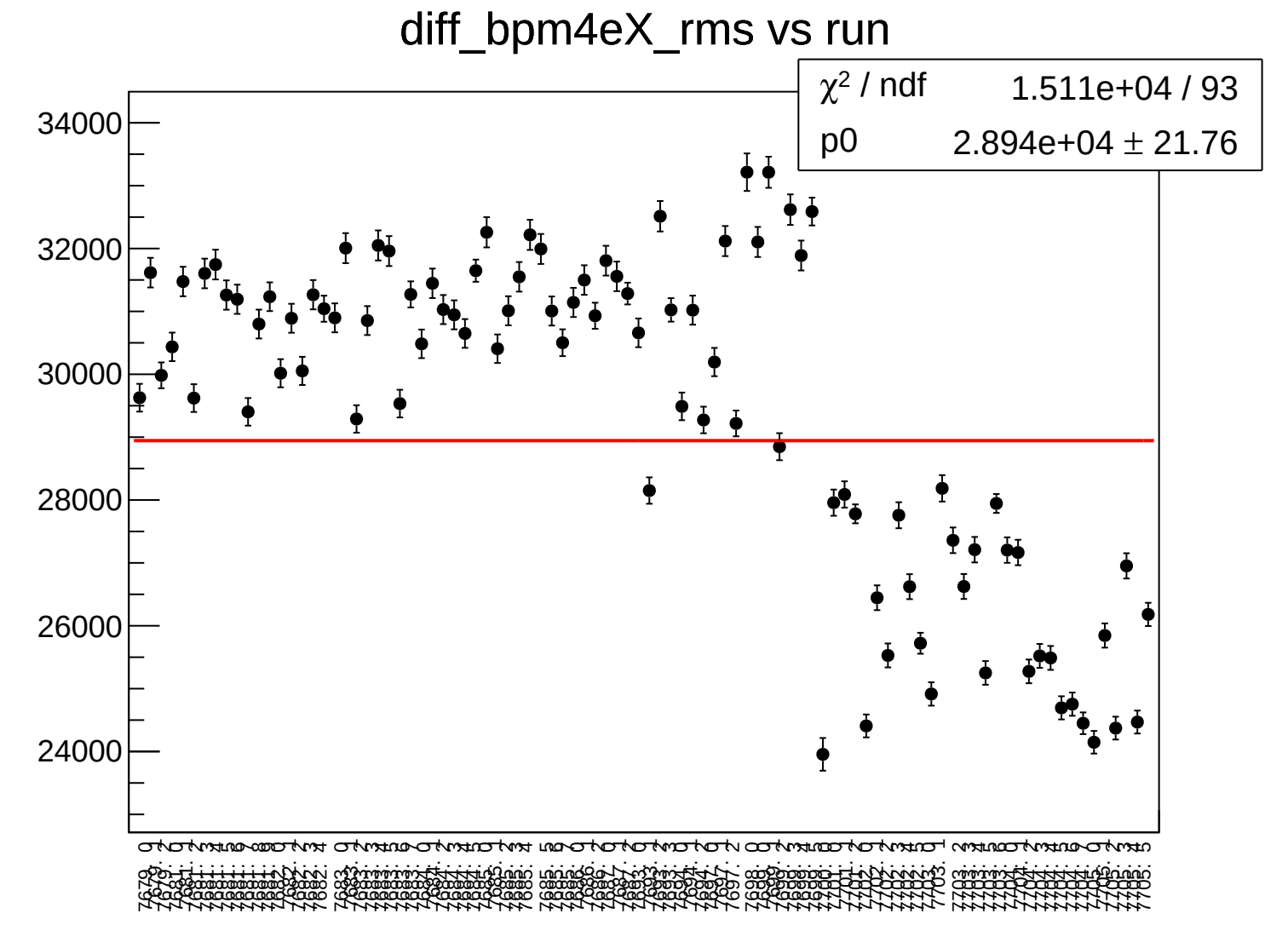

diff_bpm4aY_mean vs run
χ² / ndf 88.4 / 93
p0 −3.44 ± 9.683
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 10.65
Std Dev 6.6
3
2
1
0
−1
−2

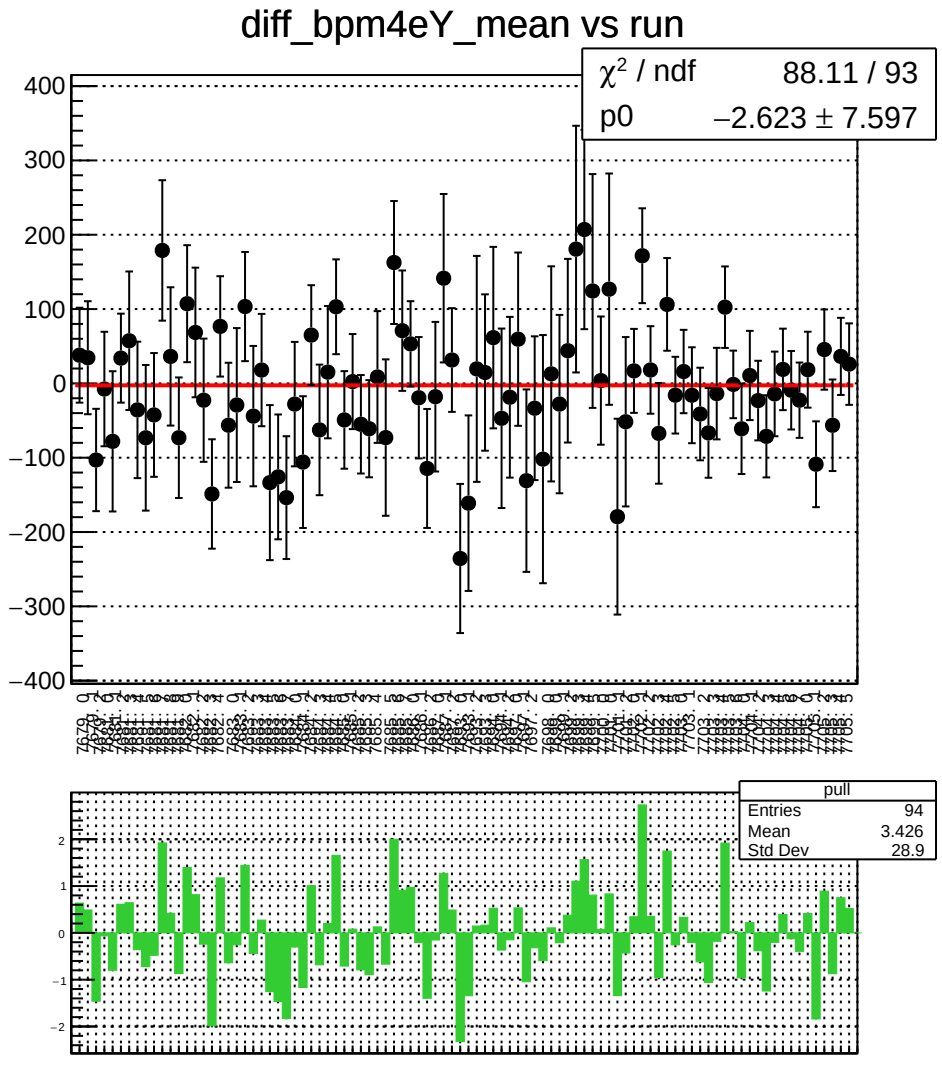

pull1D
Entries 94
Mean −0.02363
Std Dev 0.9695
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

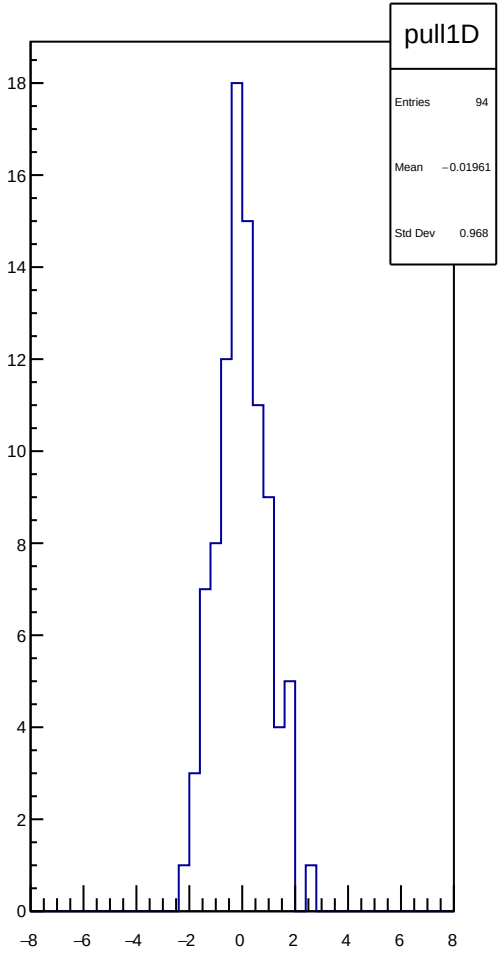

diff_bpm4aY_rms vs run
χ^2 / ndf 2.691e+05 / 93
p0 8430 ± 6.847
25000
20000
15000
10000
5000

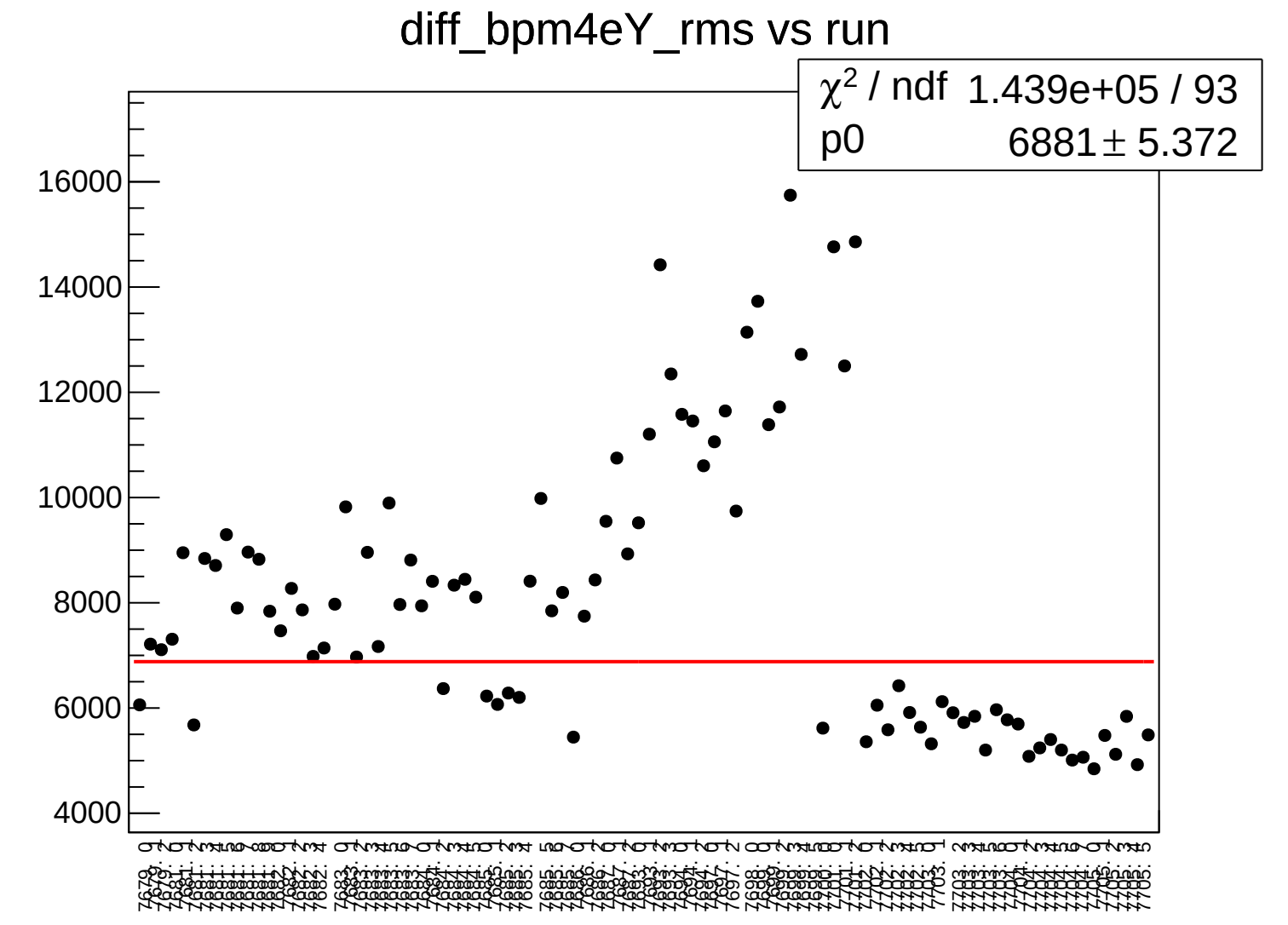

diff_bpm4eX_mean vs run
χ² / ndf 83.78 / 93
p0 9.678 ± 30.77
1000
500
0
−500
−1000
pull
Entries 94
Mean −249.6
Std Dev 301.8
2
1
0
−1
−2

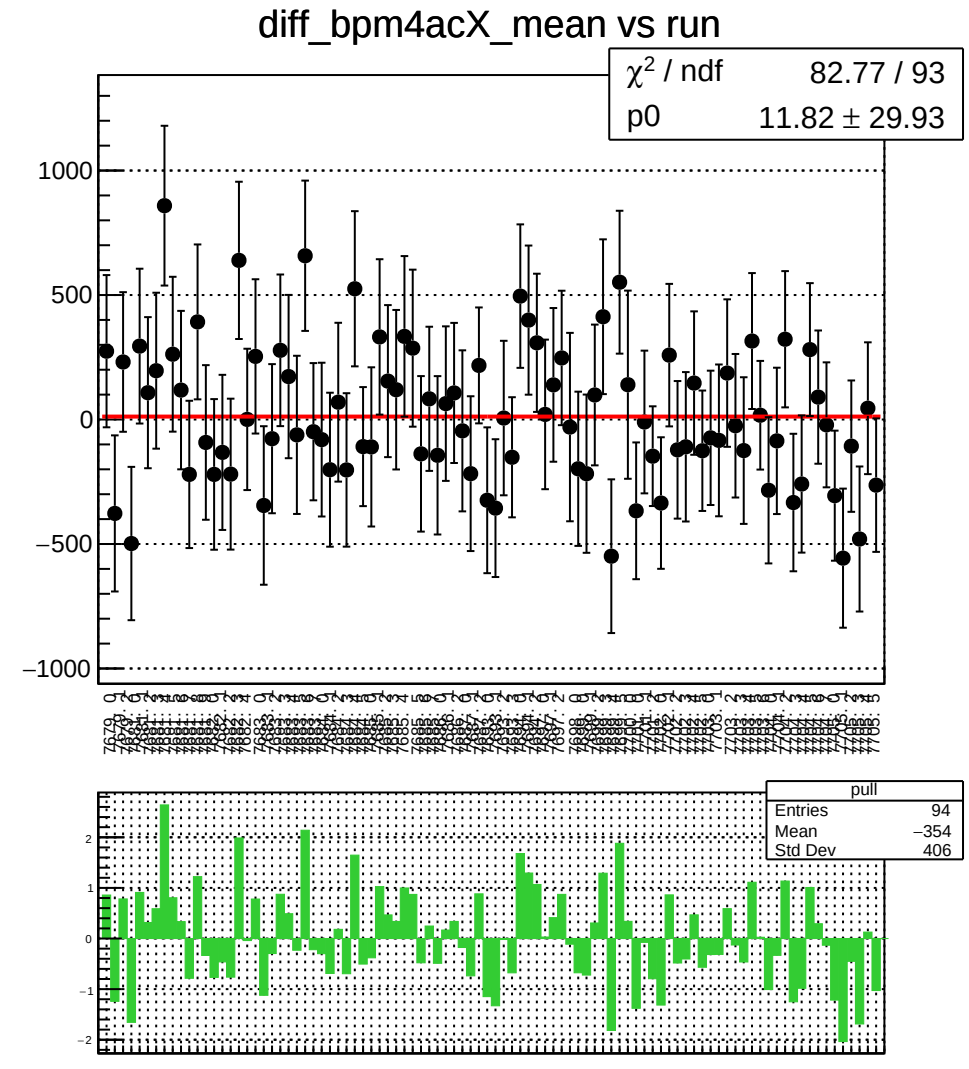

pull1D
Entries 94
Mean 0.02004
Std Dev 0.9439
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

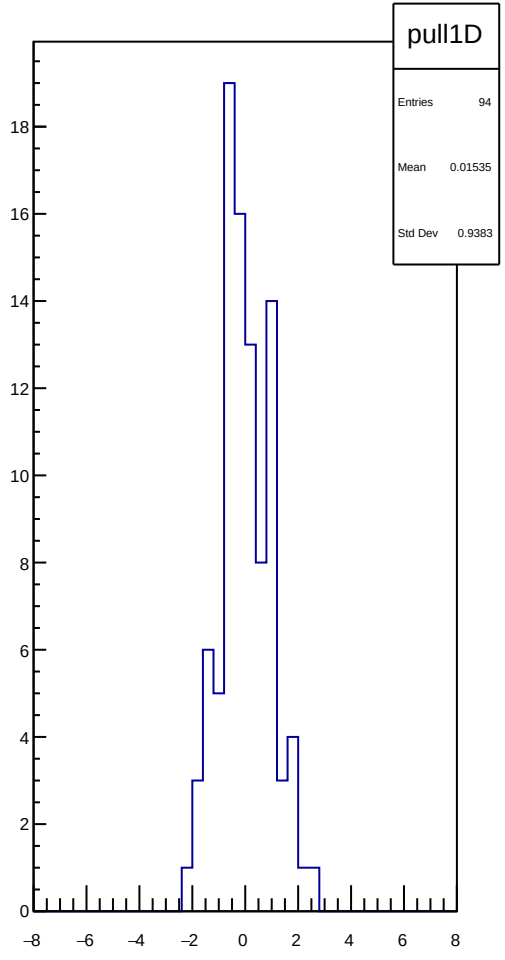

diff_bpm4eX_rms vs run
χ² / ndf 1.511e+04 / 93
p0 2.894e+04 ± 21.76
34000
32000
30000
28000
26000
24000

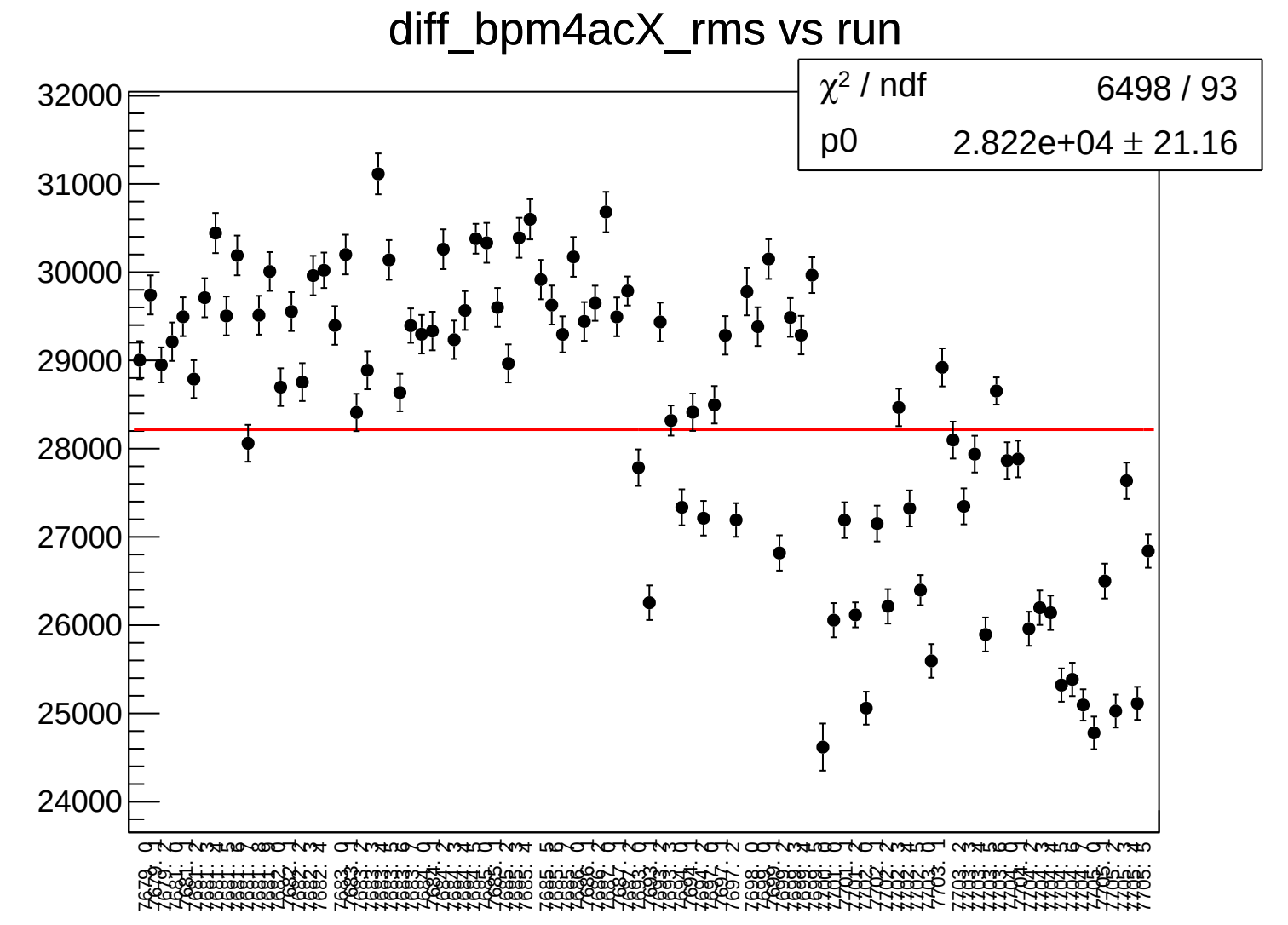

diff_bpm4eY_mean vs run
χ² / ndf 88.11 / 93
p0 −2.623 ± 7.597
pull
Entries 94
Mean 3.426
Std Dev 28.9

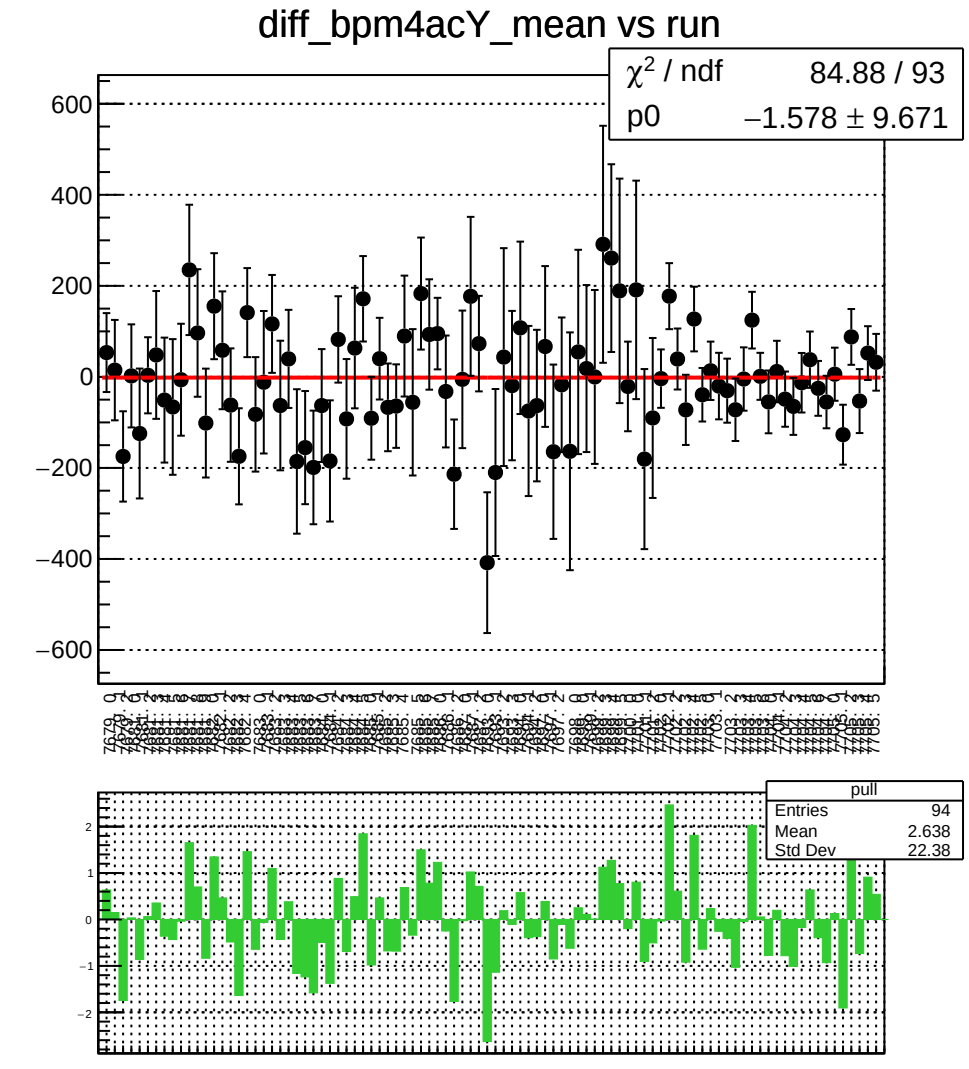

pull1D
Entries 94
Mean −0.01961
Std Dev 0.968

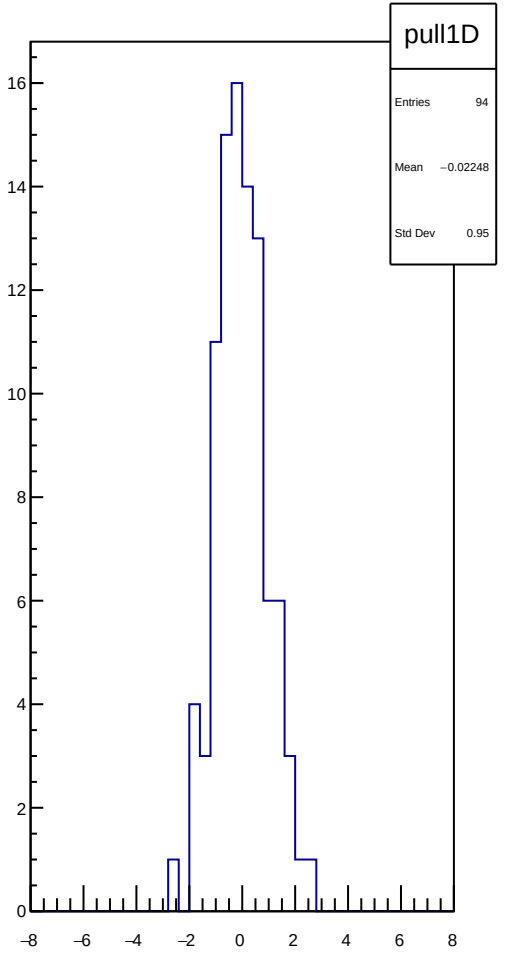

diff_bpm4eY_rms vs run
χ² / ndf 1.439e+05 / 93
p0 6881 ± 5.372
16000
14000
12000
10000
8000
6000
4000

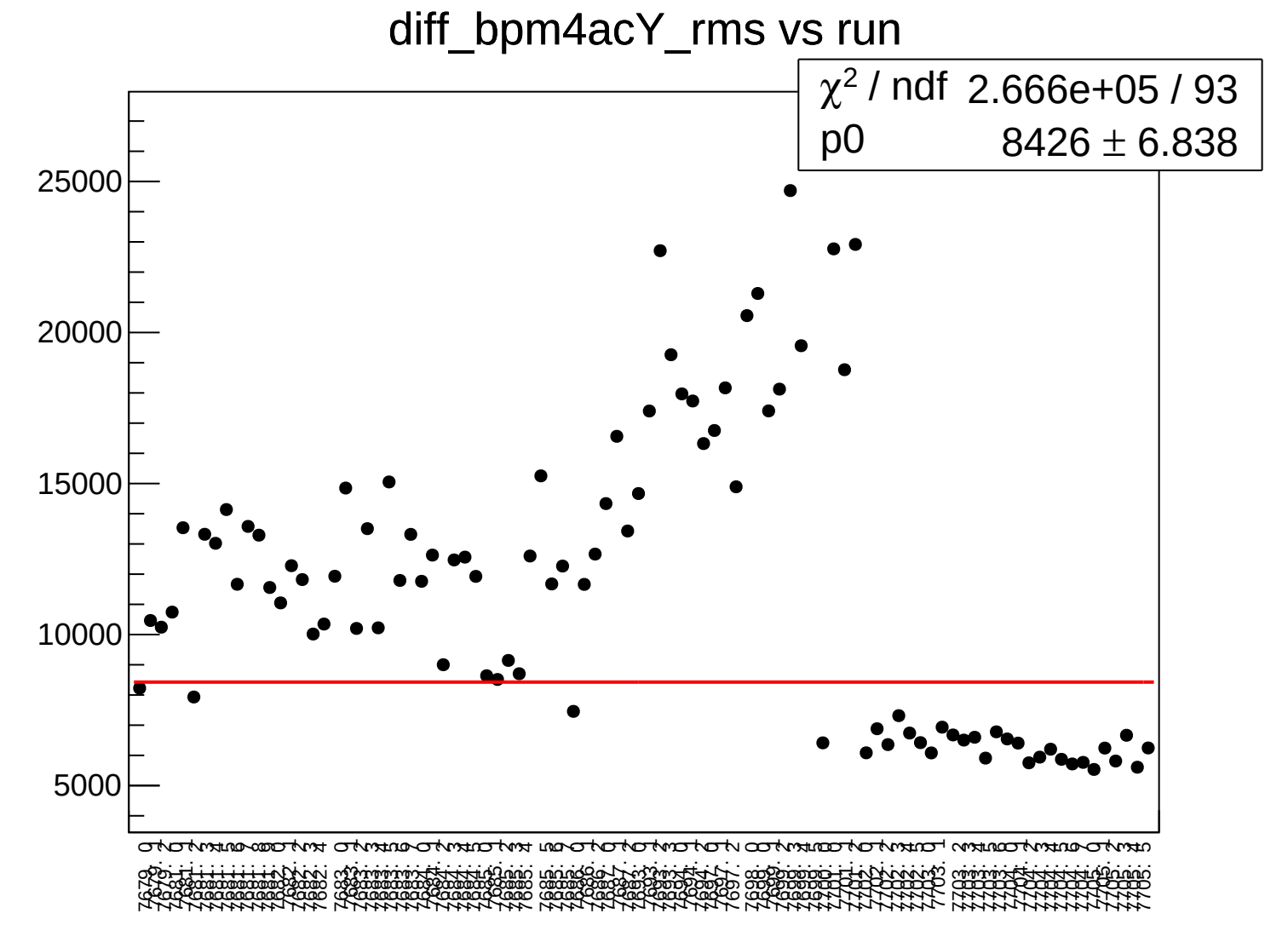

diff_bpm4acX_mean vs run
χ^2 / ndf 82.77 / 93
p0 11.82 ± 29.93
1000
500
0
−500
−1000
pull
Entries 94
Mean −354
Std Dev 406
2
1
0
−1
−2

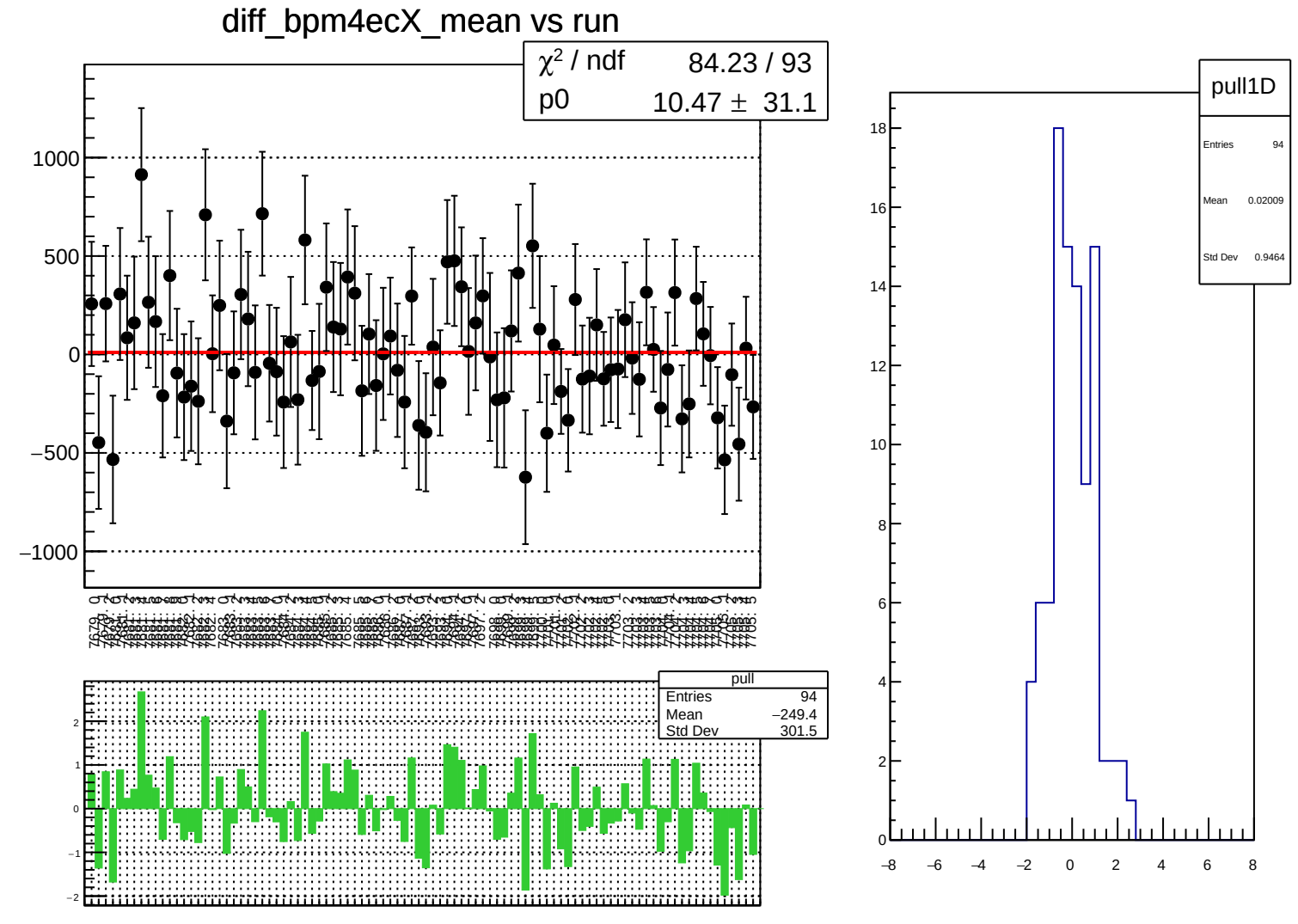

pull1D
Entries 94
Mean 0.01535
Std Dev 0.9383
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

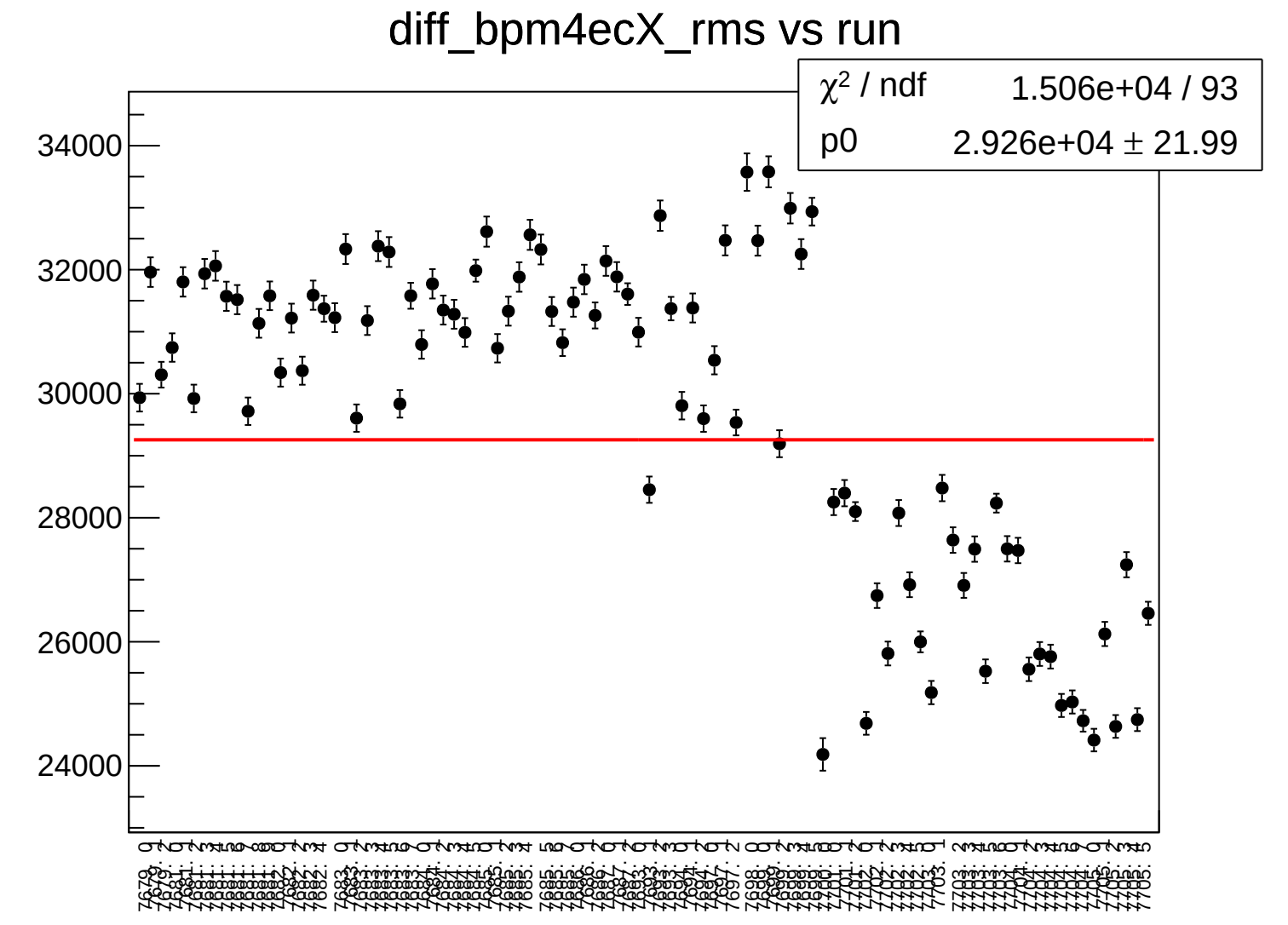

diff_bpm4acX_rms vs run
χ² / ndf 6498 / 93
p0 2.822e+04 ± 21.16
32000
31000
30000
29000
28000
27000
26000
25000
24000

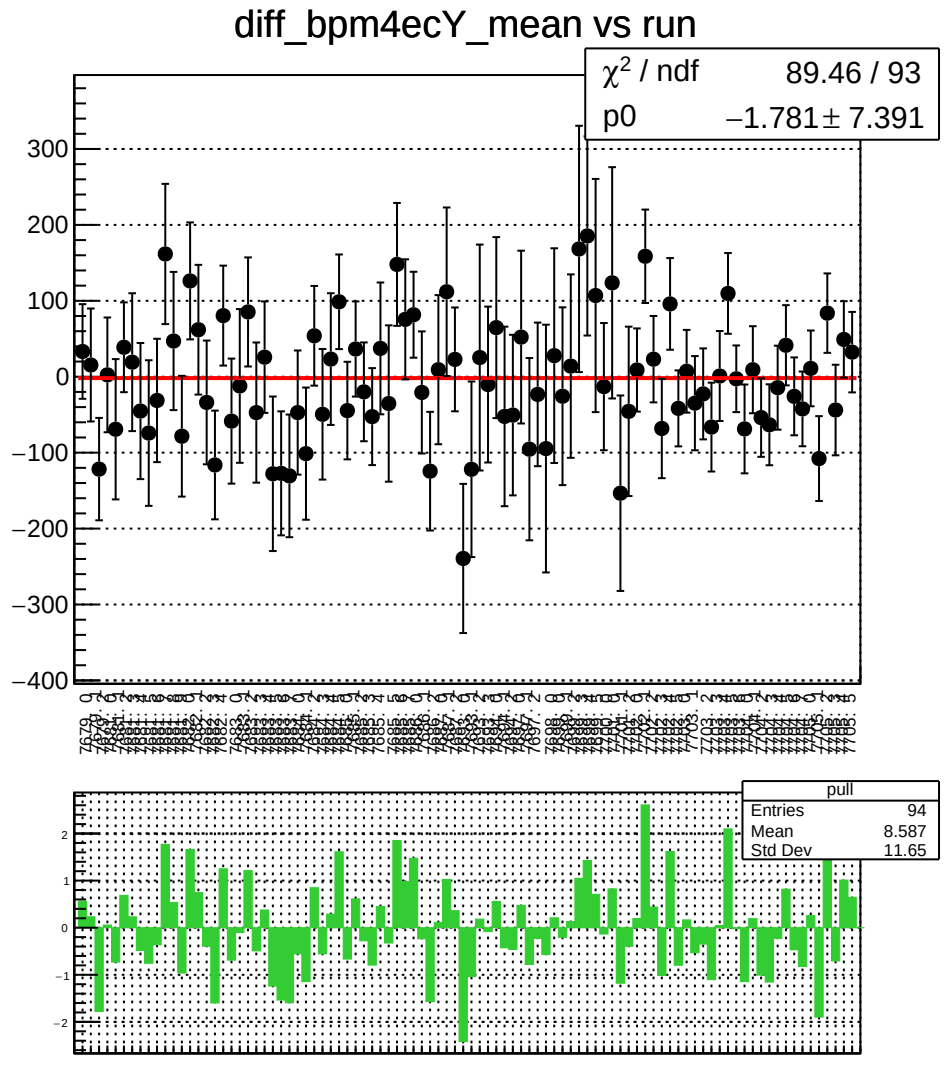

diff_bpm4acY_mean vs run
χ² / ndf 84.88 / 93
p0 −1.578 ± 9.671
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 2.638
Std Dev 22.38
2
1
0
−1
−2

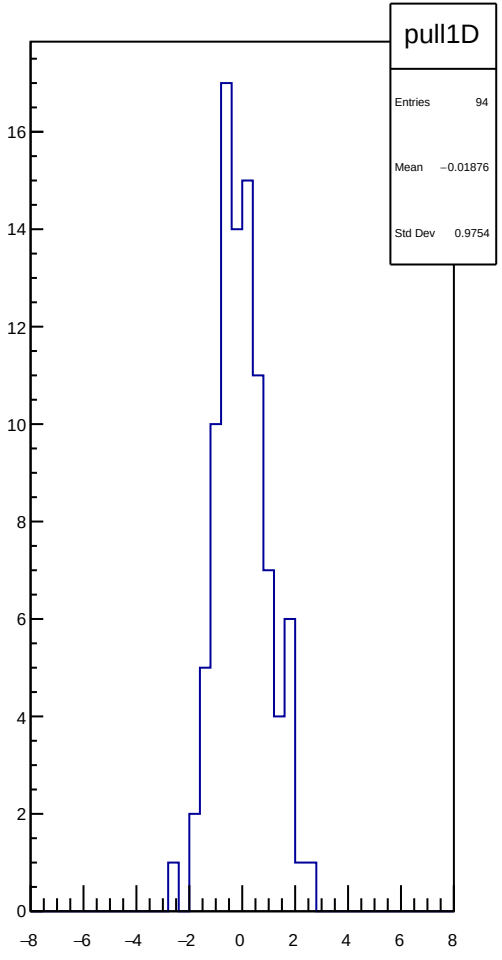

pull1D
Entries 94
Mean −0.02248
Std Dev 0.95
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

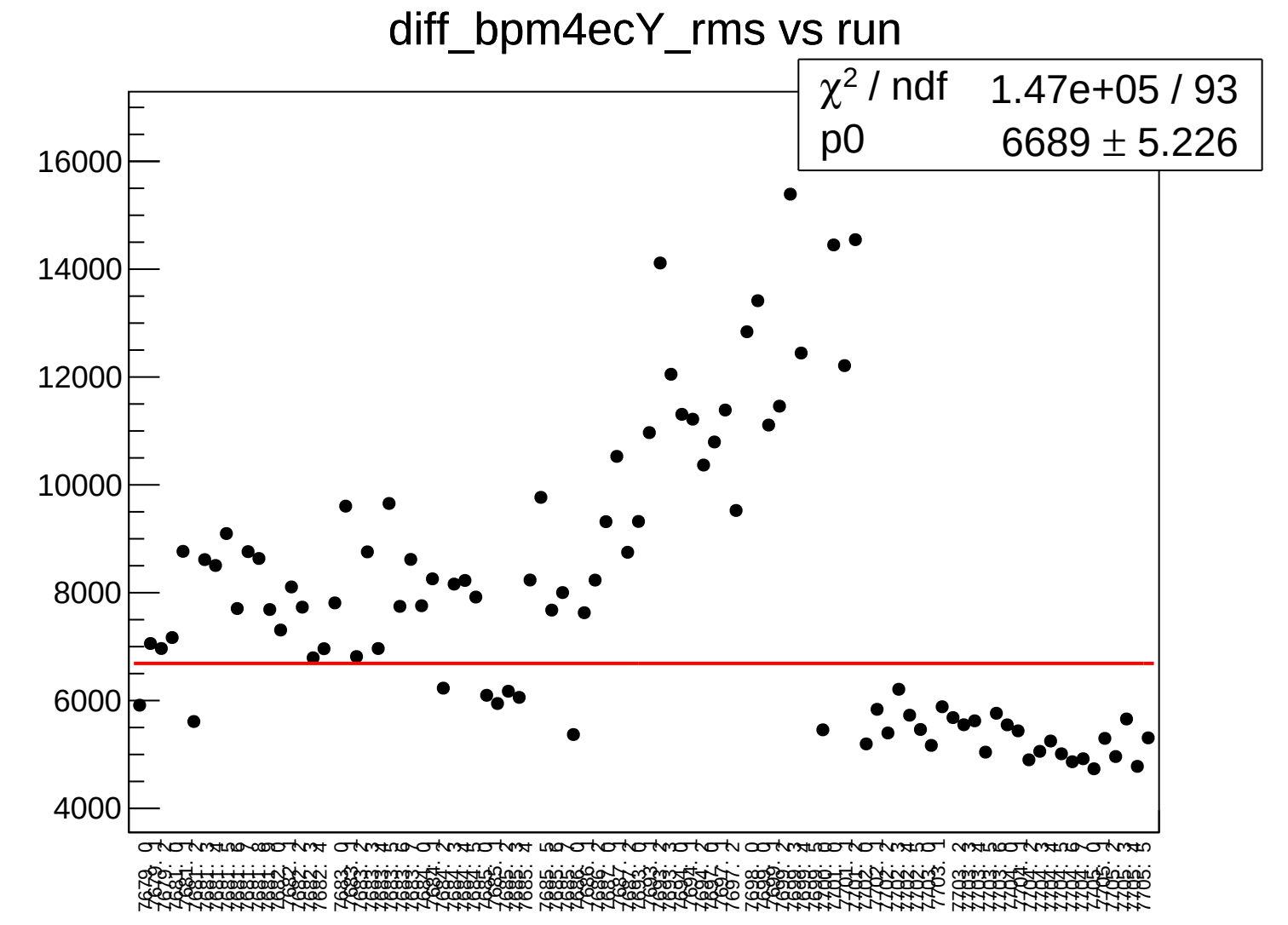

diff_bpm4acY_rms vs run
χ² / ndf 2.666e+05 / 93
p0 8426 ± 6.838
25000
20000
15000
10000
5000

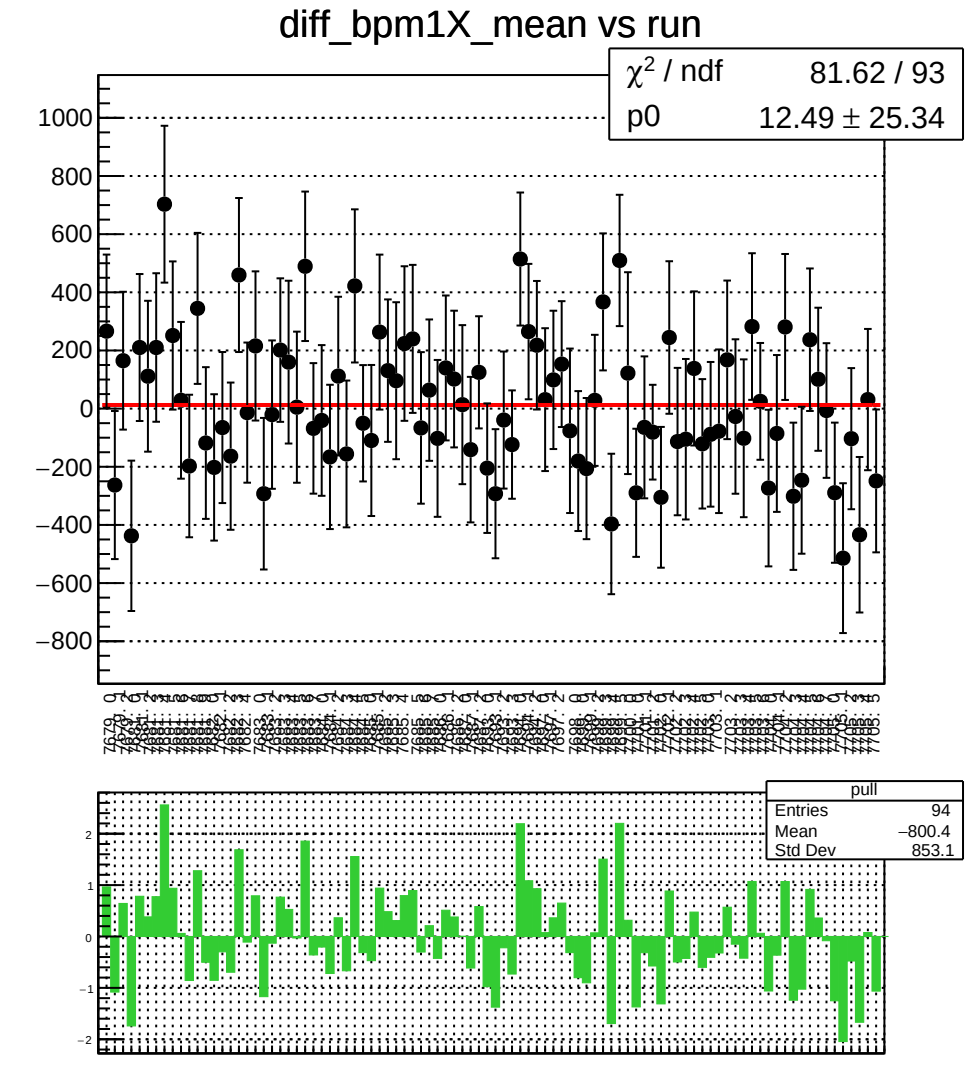

diff_bpm4ecX_mean vs run
χ² / ndf 84.23 / 93
p0 10.47 ± 31.1
1000
500
0
−500
−1000
pull
Entries 94
Mean −249.4
Std Dev 301.5
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.02009
Std Dev 0.9464
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

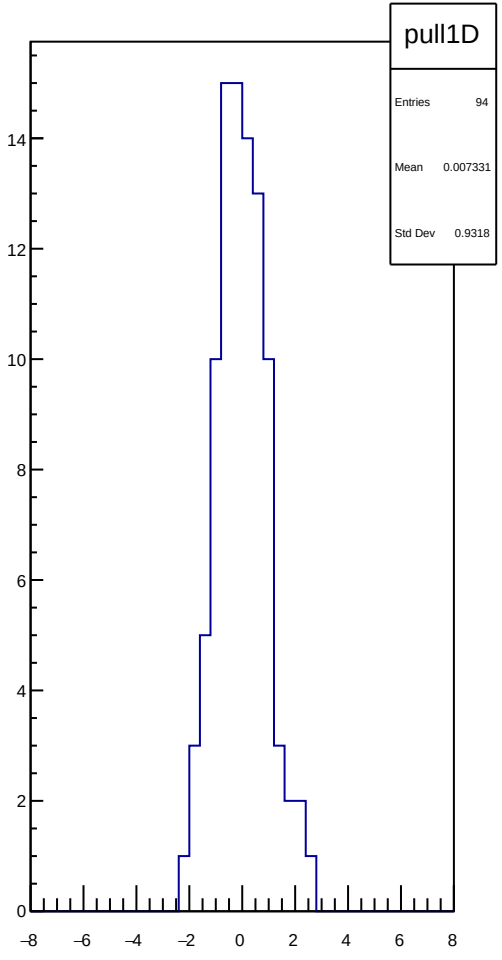

diff_bpm4ecX_rms vs run
χ² / ndf 1.506e+04 / 93
p0 2.926e+04 ± 21.99
34000
32000
30000
28000
26000
24000

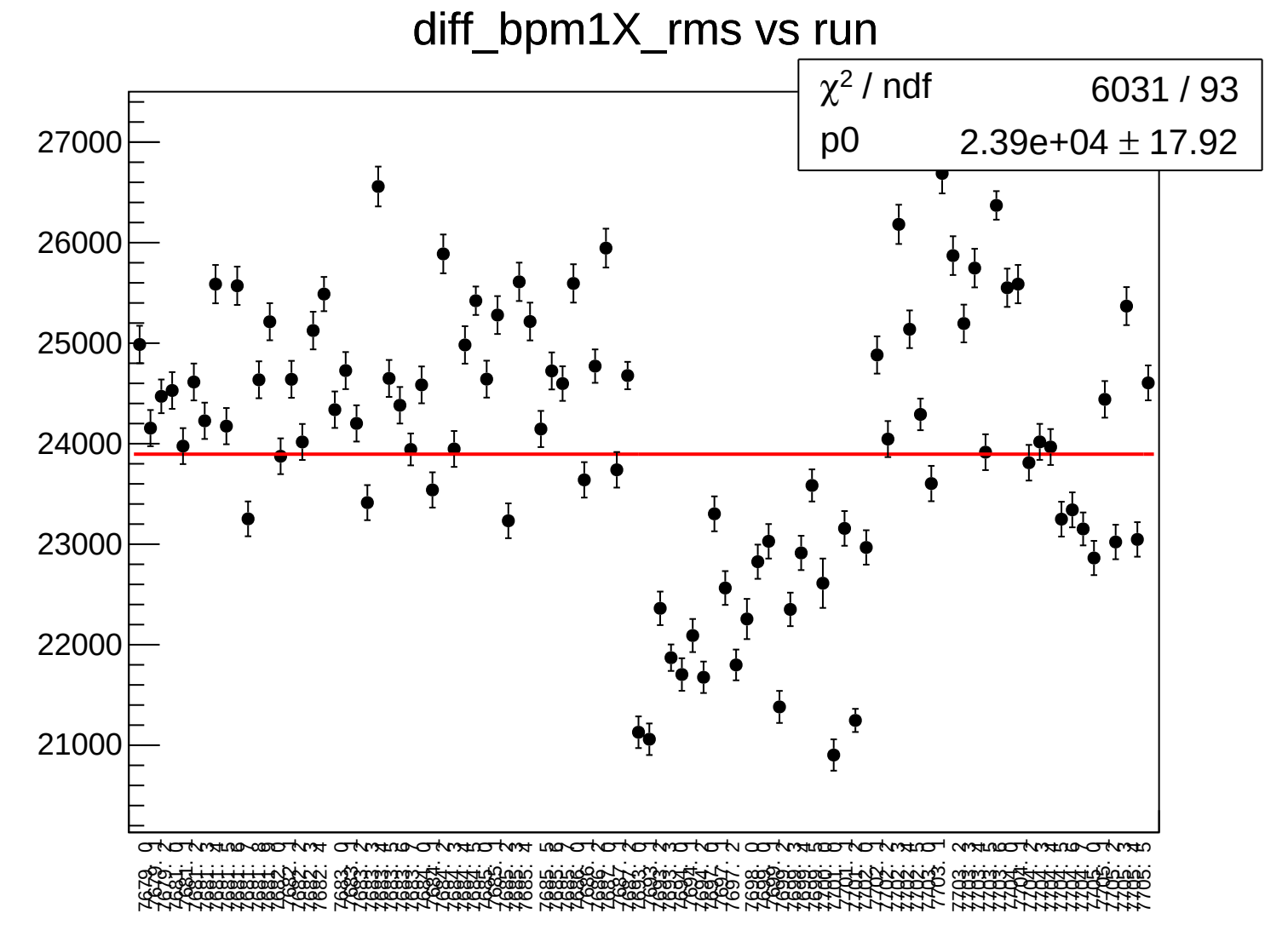

diff_bpm4ecY_mean vs run
χ^2 / ndf 89.46 / 93
p0 −1.781 ± 7.391
pull
Entries 94
Mean 8.587
Std Dev 11.65

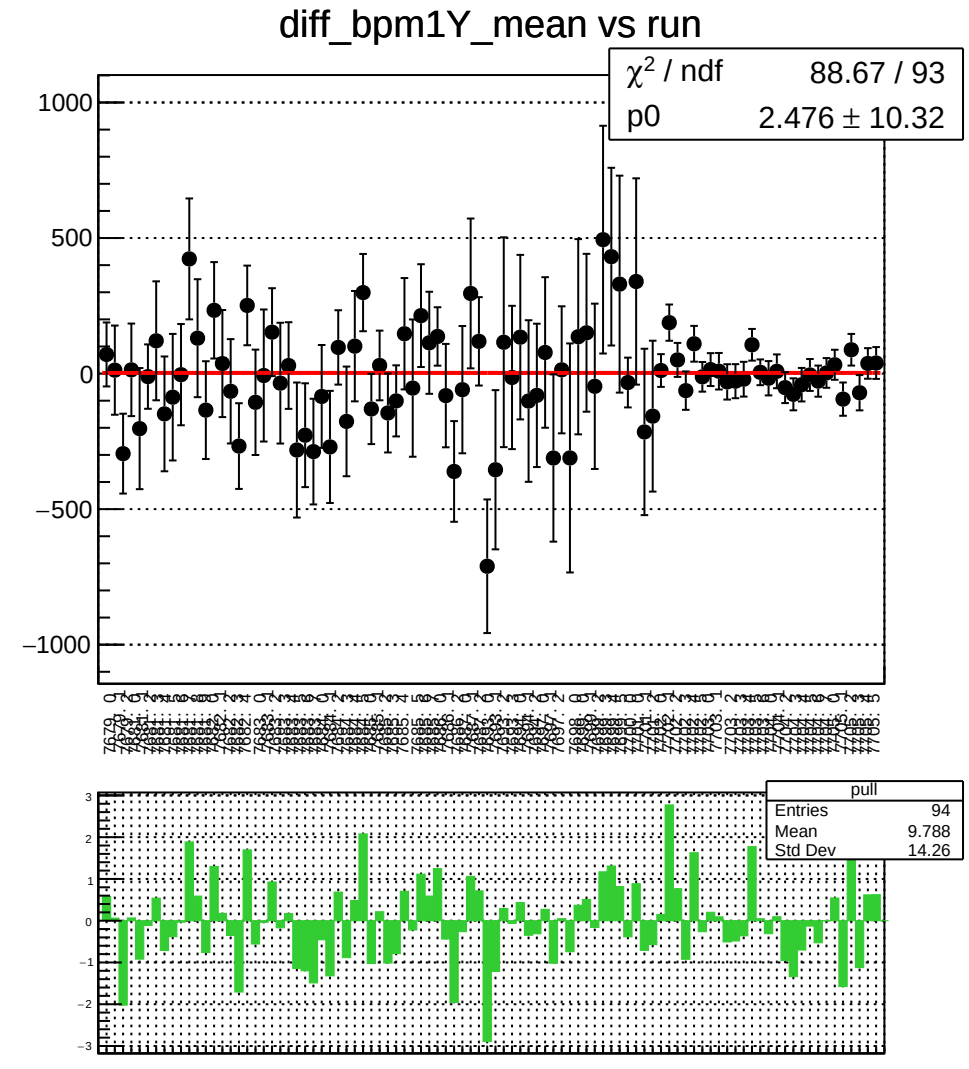

pull1D
Entries 94
Mean −0.01876
Std Dev 0.9754

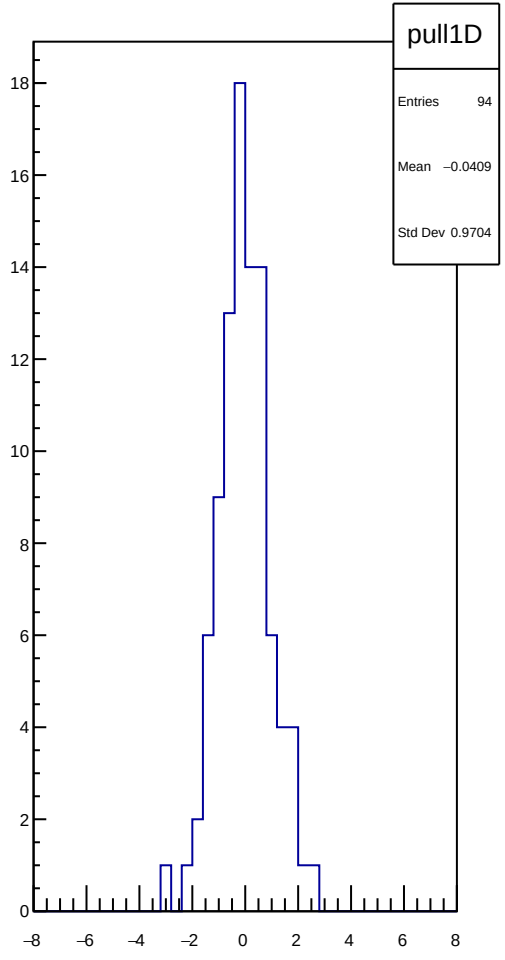

diff_bpm4ecY_rms vs run
χ² / ndf 1.47e+05 / 93
p0 6689 ± 5.226
16000
14000
12000
10000
8000
6000
4000

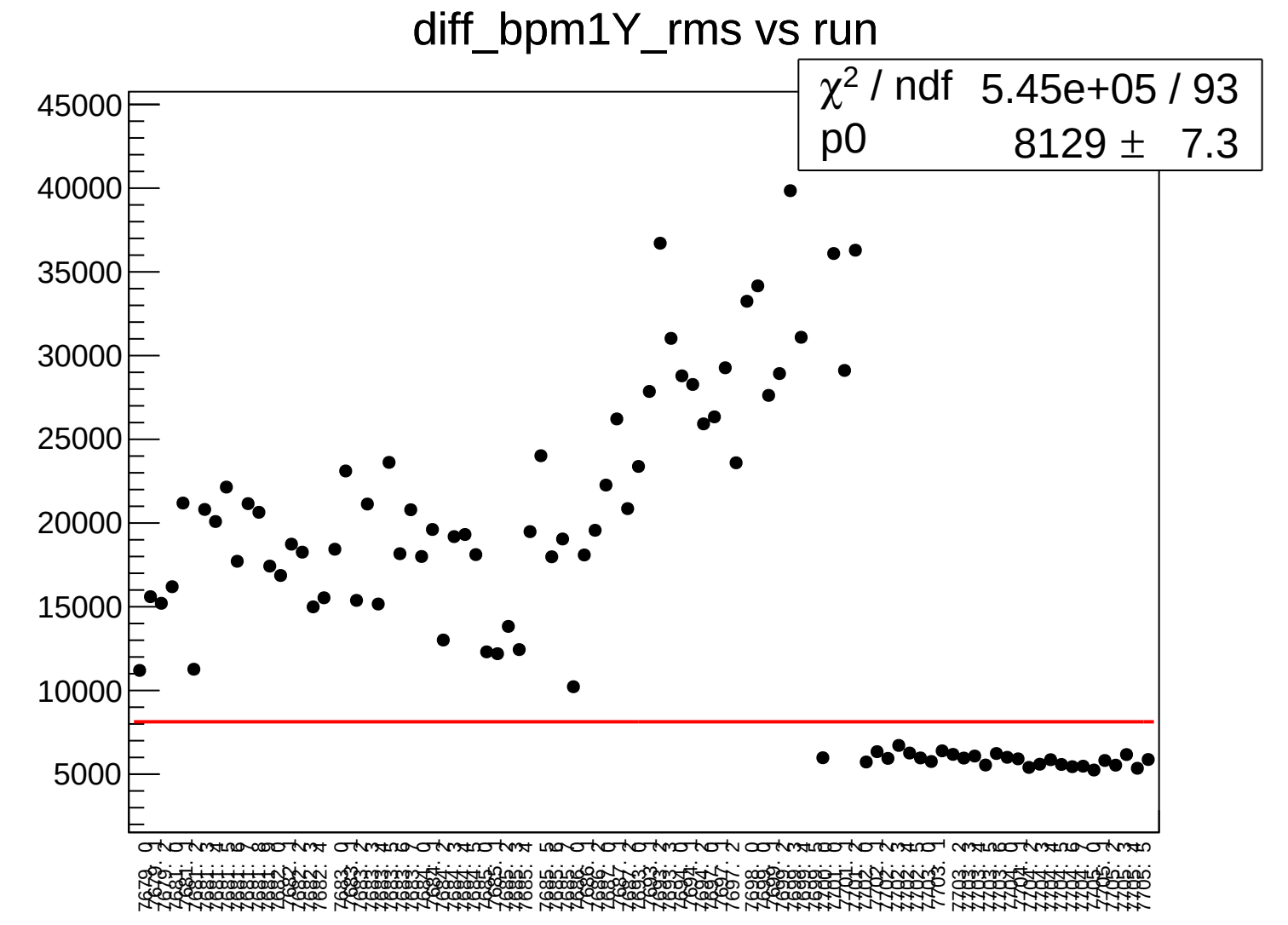

diff_bpm1X_mean vs run
χ^2 / ndf 81.62 / 93
p0 12.49 ± 25.34
pull
Entries 94
Mean −800.4
Std Dev 853.1

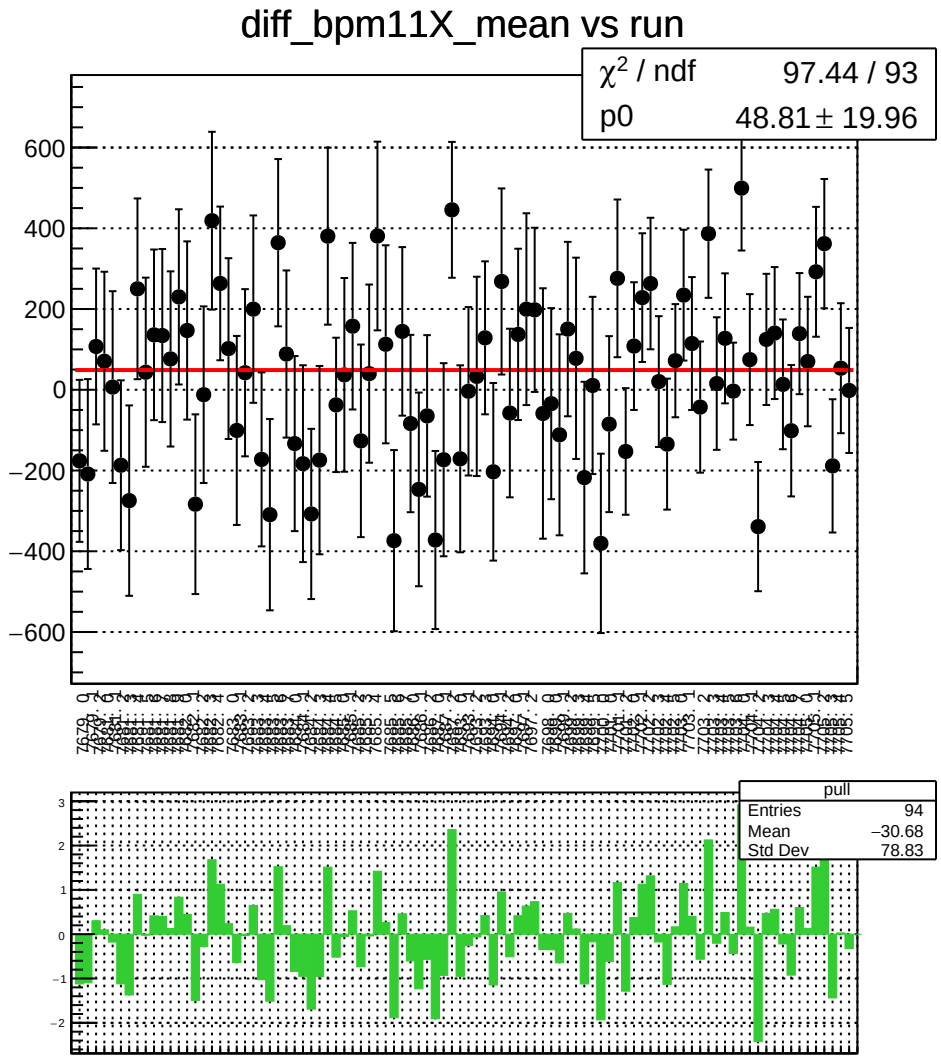

pull1D
Entries 94
Mean 0.007331
Std Dev 0.9318

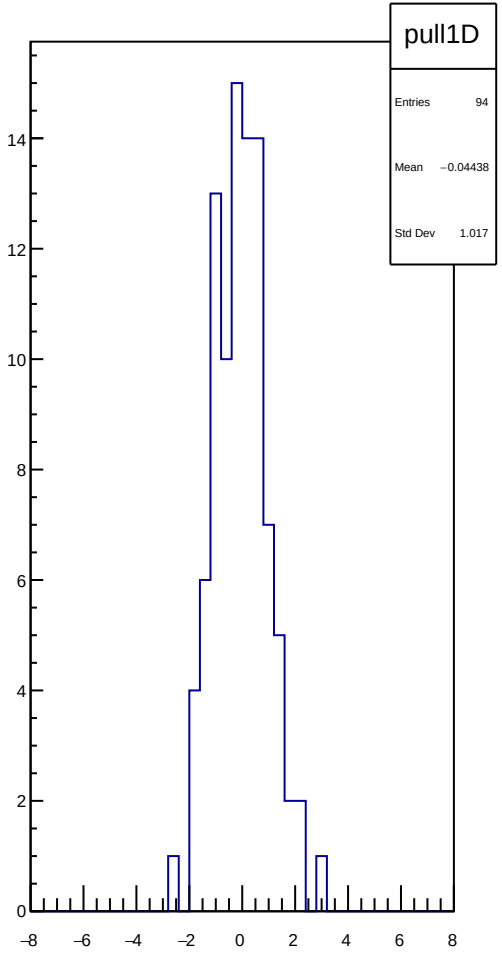

diff_bpm1X_rms vs run
χ^2 / ndf 6031 / 93
p0 2.39e+04 ± 17.92
27000
26000
25000
24000
23000
22000
21000

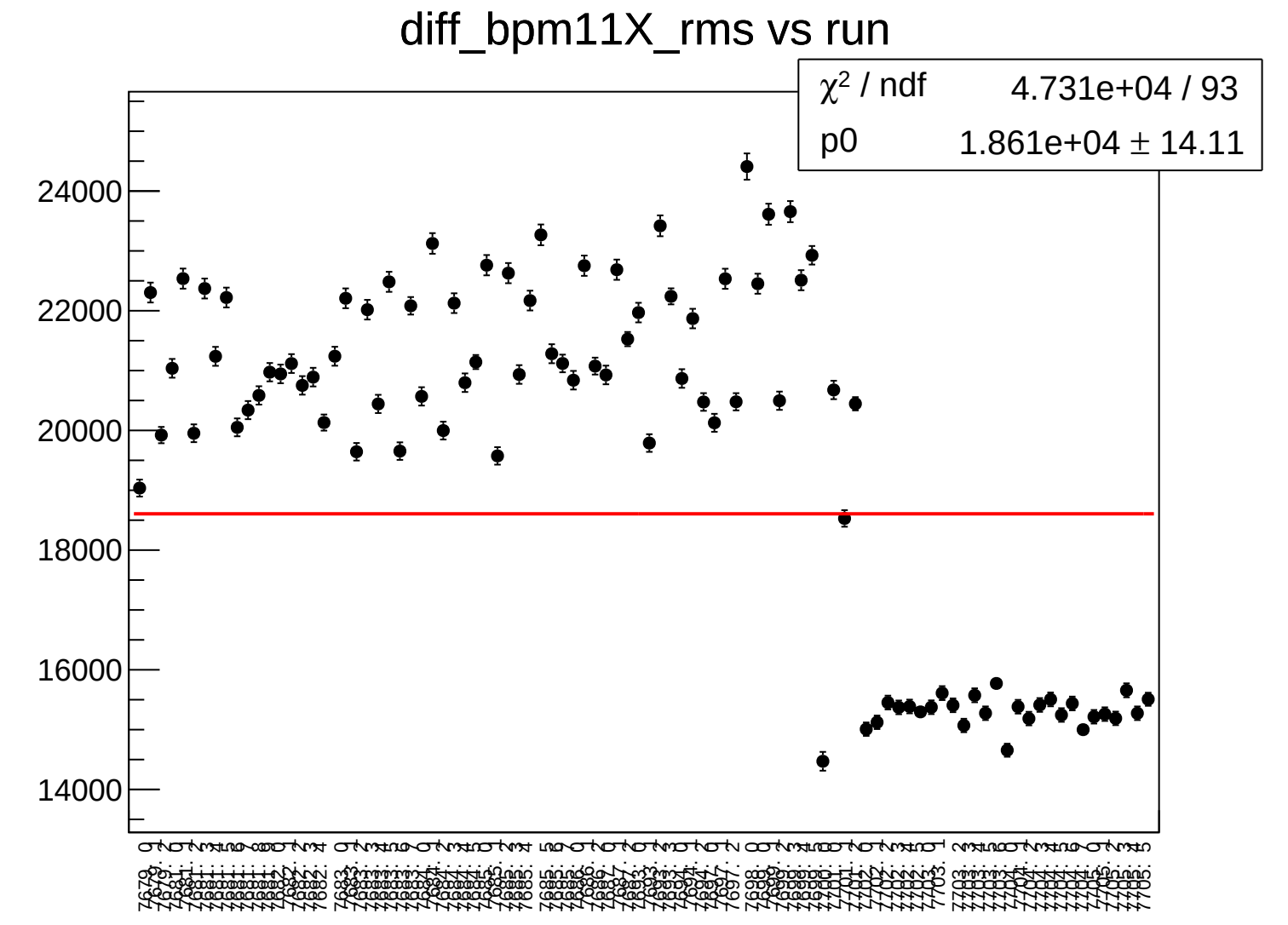

diff_bpm1Y_mean vs run
χ² / ndf 88.67 / 93
p0 2.476 ± 10.32
1000
500
0
−500
−1000
pull
Entries 94
Mean 9.788
Std Dev 14.26
3
2
1
0
−1
−2
−3

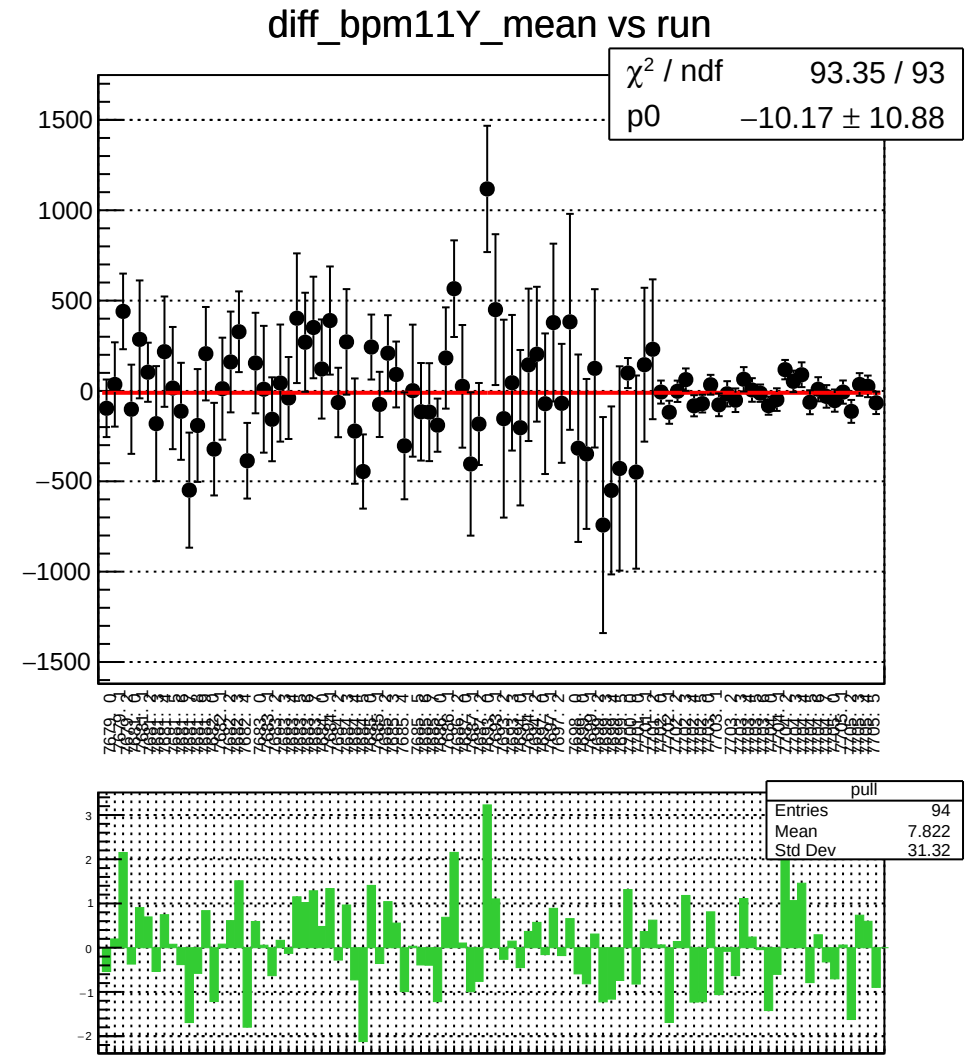

pull1D
Entries 94
Mean −0.0409
Std Dev 0.9704
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

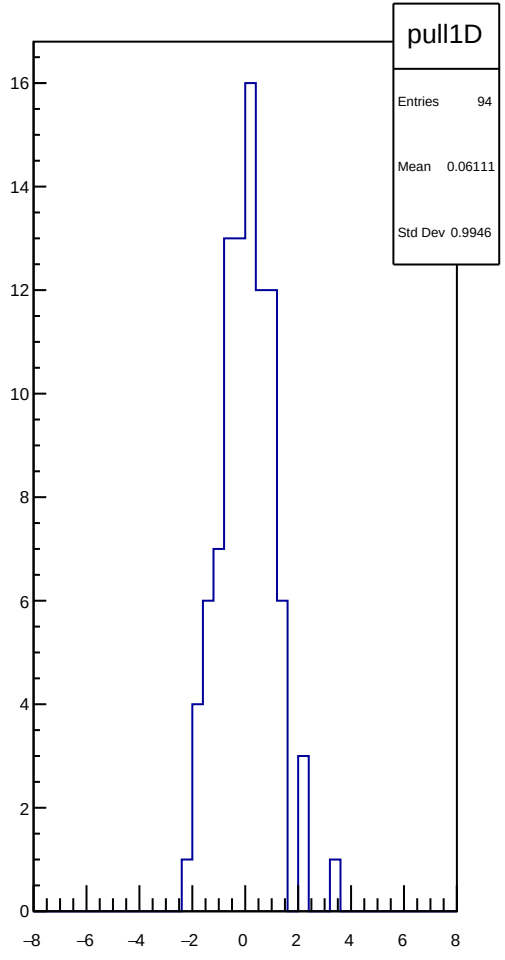

diff_bpm1Y_rms vs run
χ² / ndf 5.45e+05 / 93
p0 8129 ± 7.3
45000
40000
35000
30000
25000
20000
15000
10000
5000

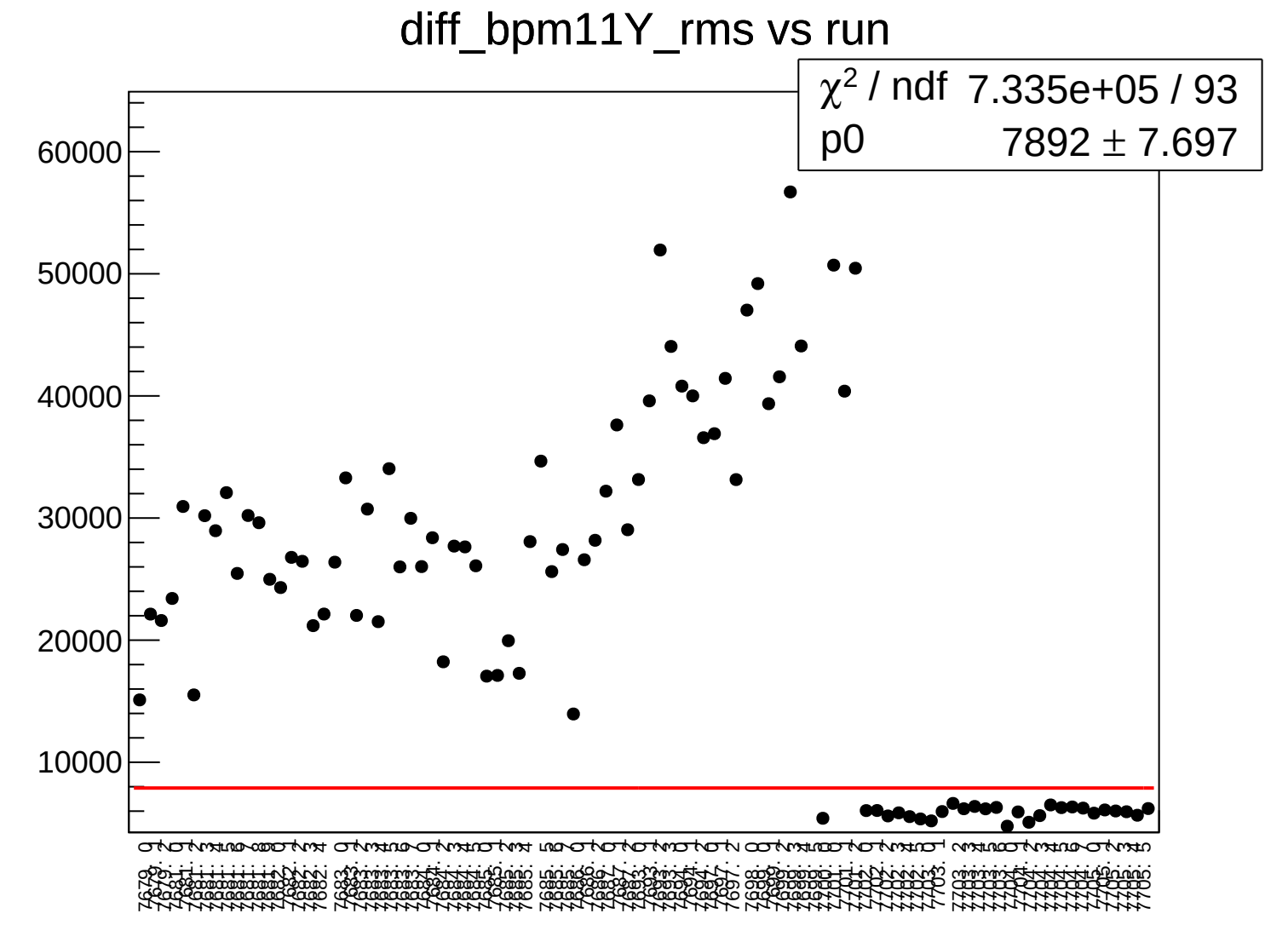

diff_bpm11X_mean vs run
χ^2 / ndf 97.44 / 93
p0 48.81 ± 19.96
pull
Entries 94
Mean −30.68
Std Dev 78.83

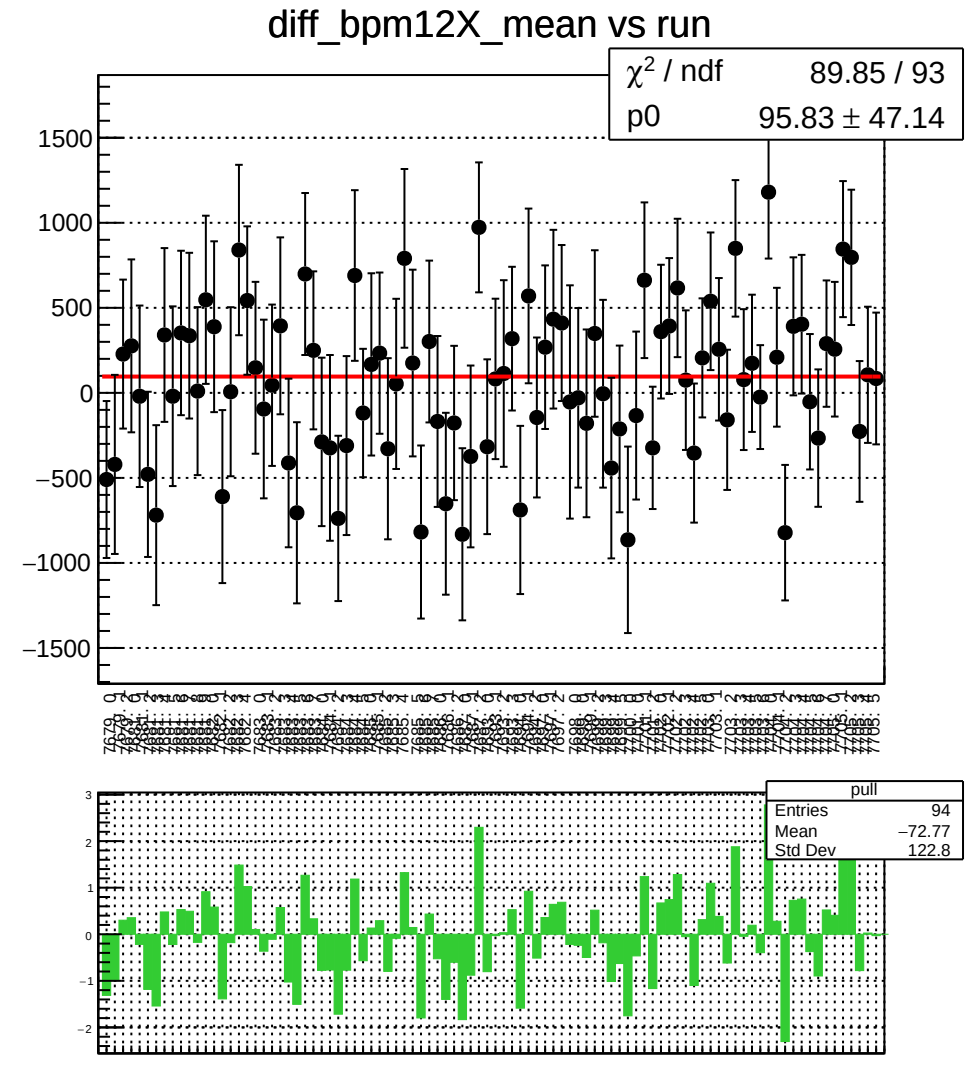

pull1D
Entries 94
Mean −0.04438
Std Dev 1.017

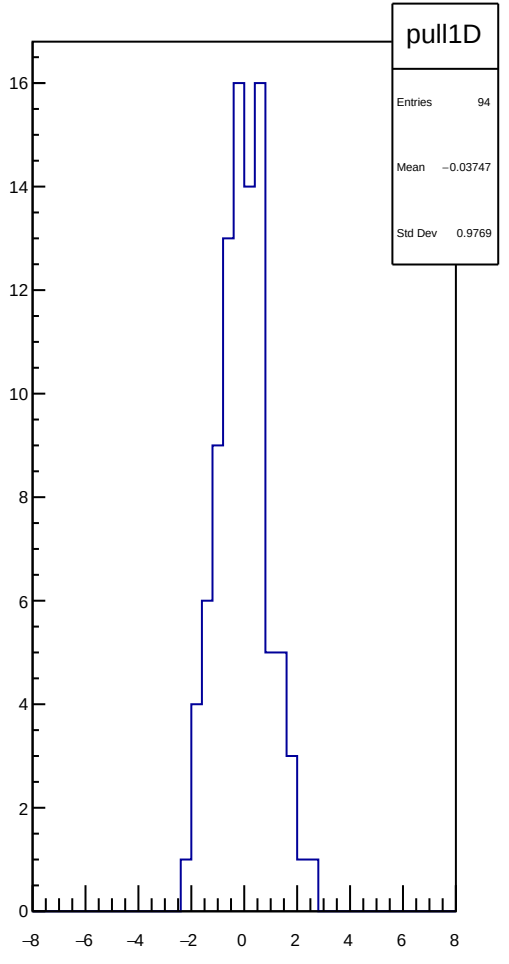

diff_bpm11X_rms vs run
χ² / ndf 4.731e+04 / 93
p0 1.861e+04 ± 14.11
24000
22000
20000
18000
16000
14000

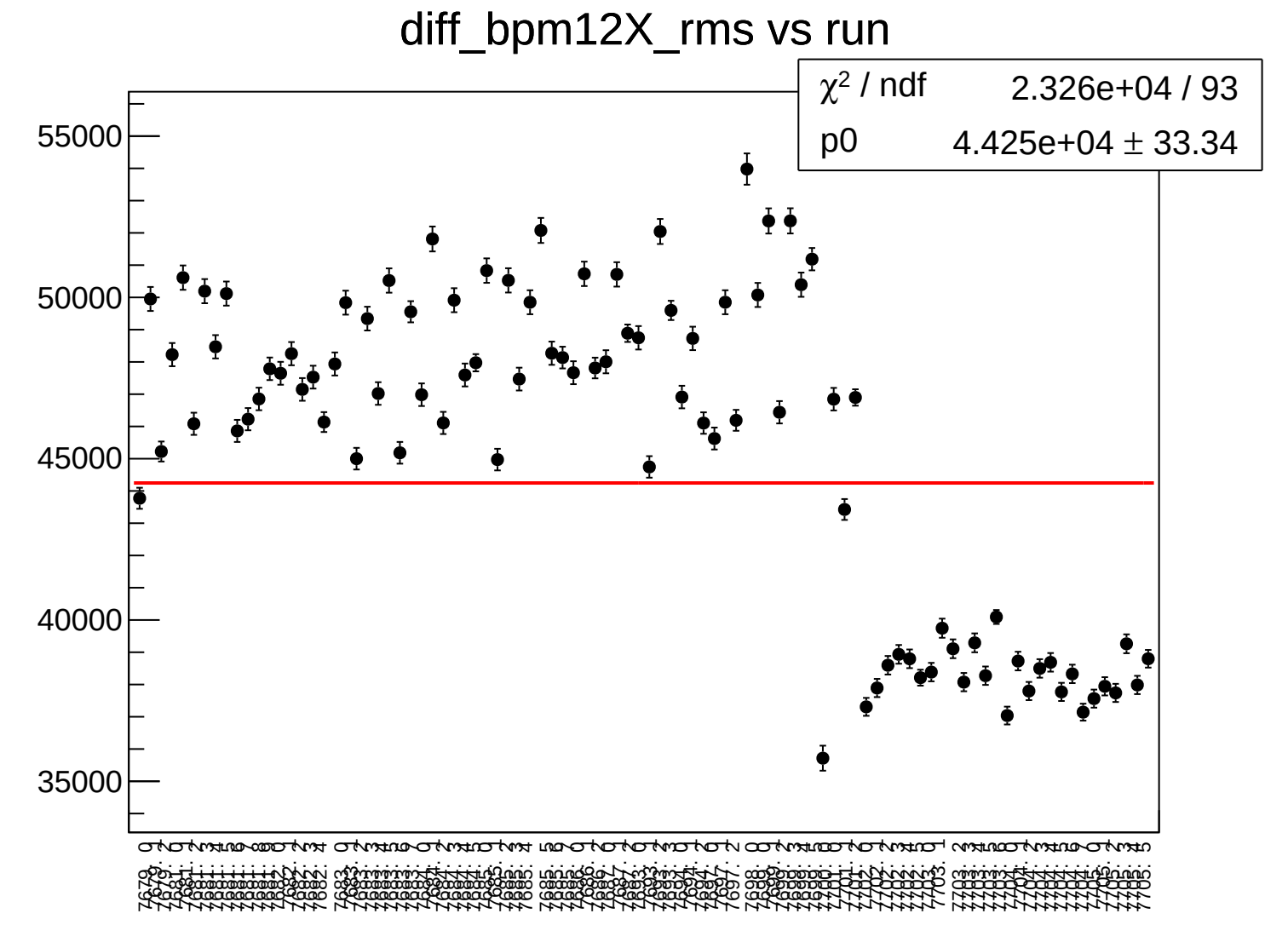

diff_bpm11Y_mean vs run
χ² / ndf 93.35 / 93
p0 −10.17 ± 10.88
1500
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean 7.822
Std Dev 31.32
3
2
1
0
−1
−2

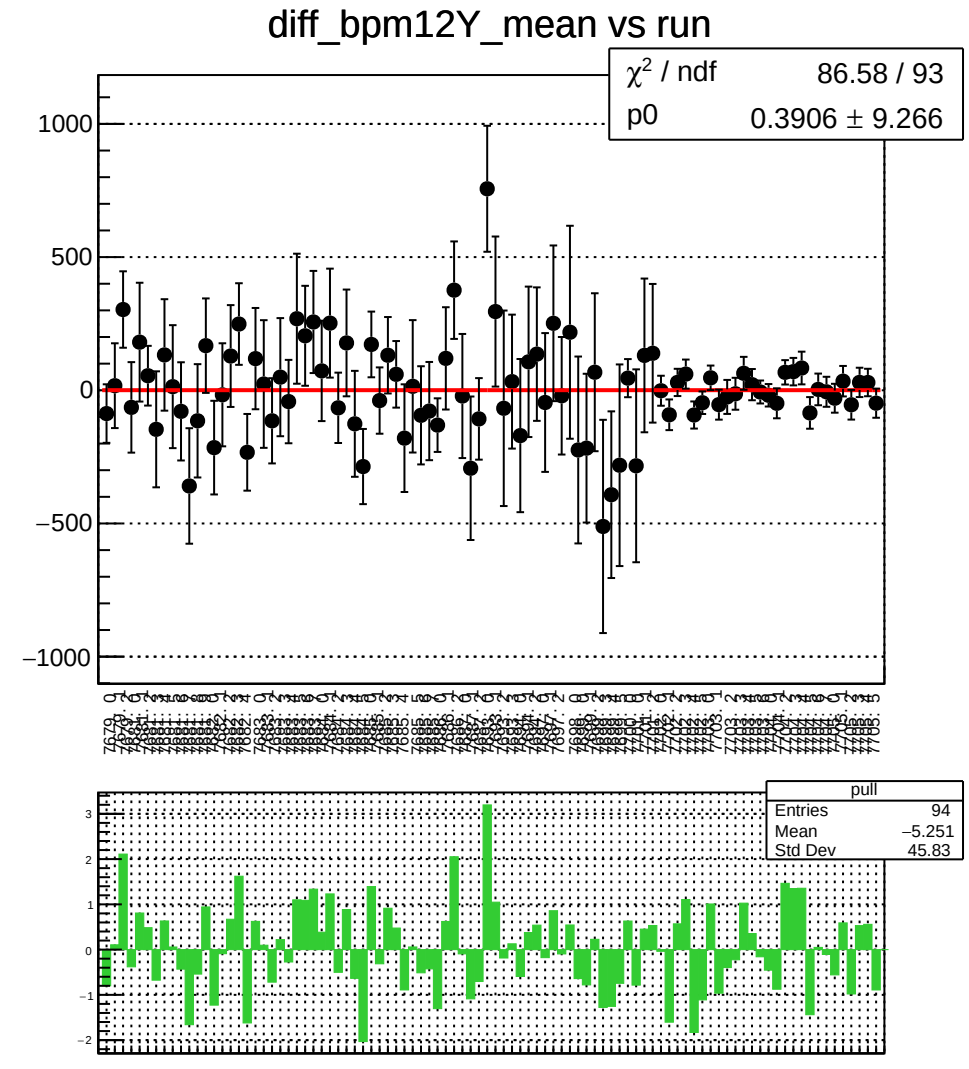

pull1D
Entries 94
Mean 0.06111
Std Dev 0.9946
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

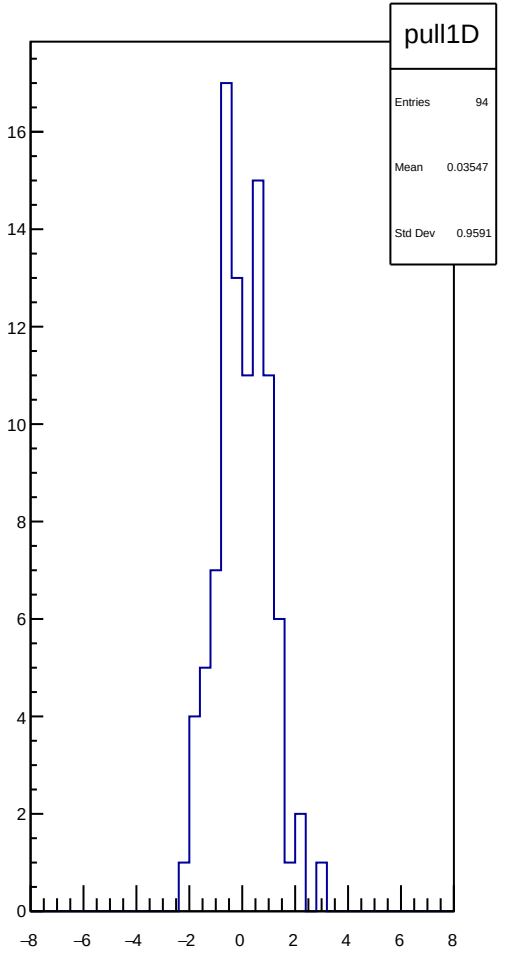

diff_bpm11Y_rms vs run
χ^2 / ndf 7.335e+05 / 93
p0 7892 ± 7.697
60000
50000
40000
30000
20000
10000

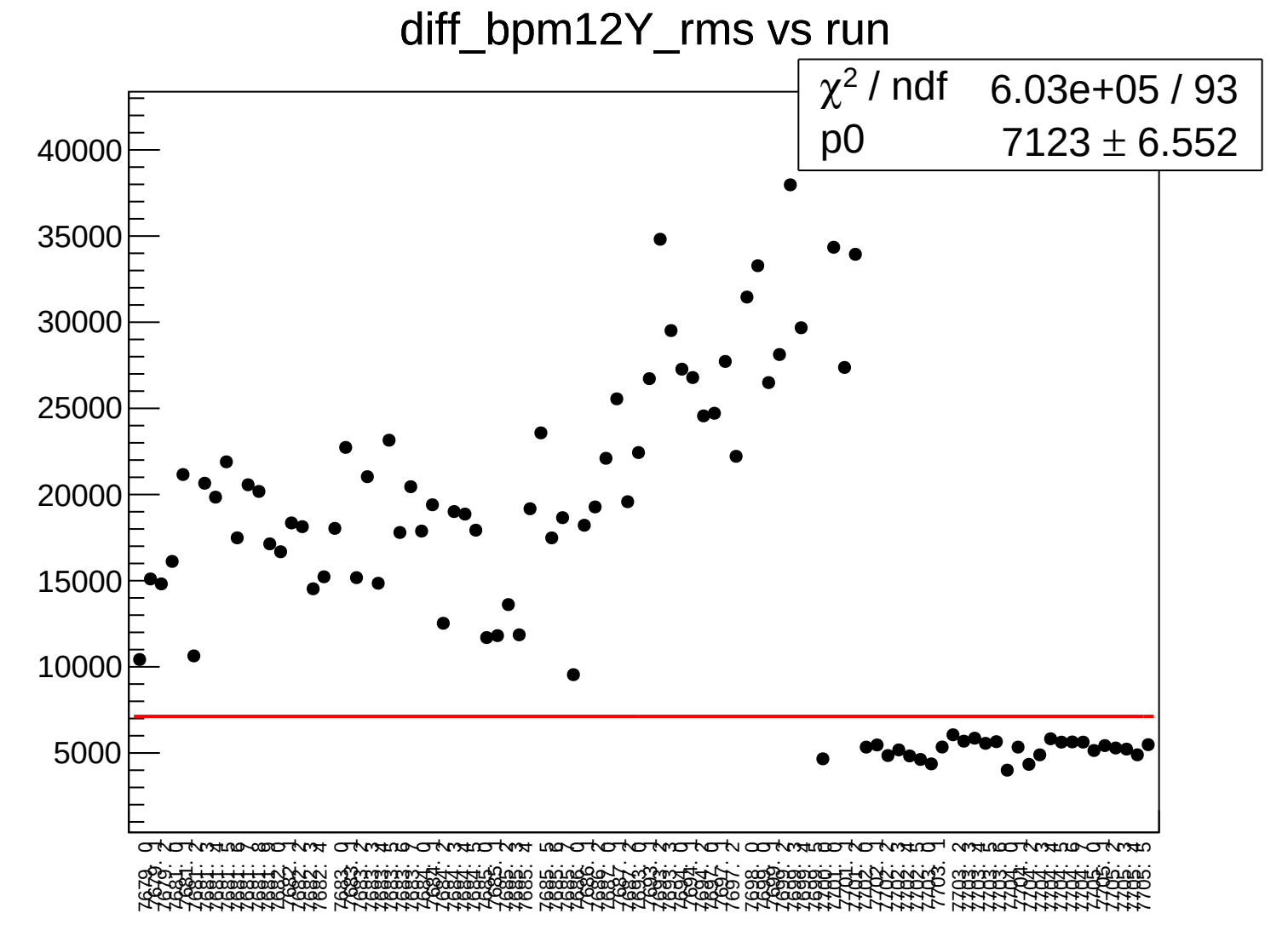

diff_bpm12X_mean vs run
χ² / ndf 89.85 / 93
p0 95.83 ± 47.14
1500
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean −72.77
Std Dev 122.8
3
2
1
0
−1
−2

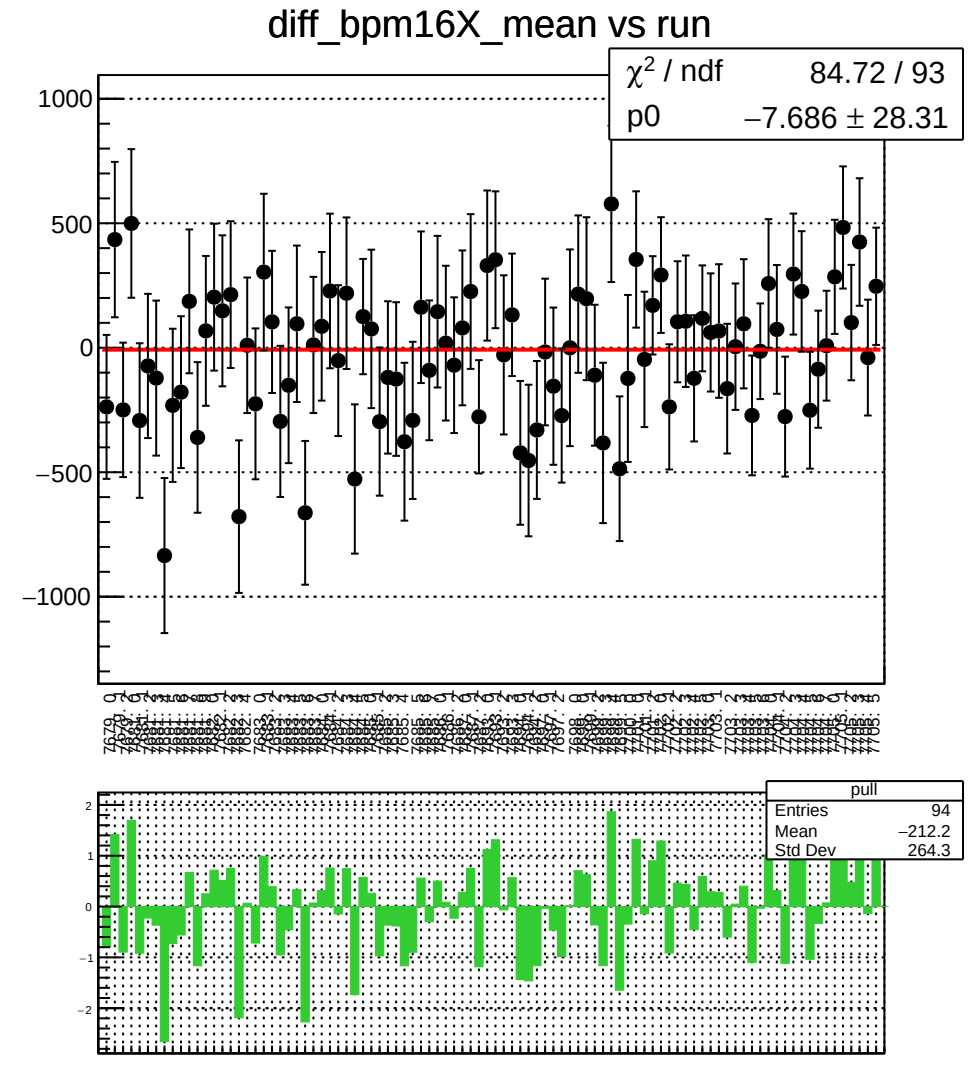

pull1D
Entries 94
Mean −0.03747
Std Dev 0.9769
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

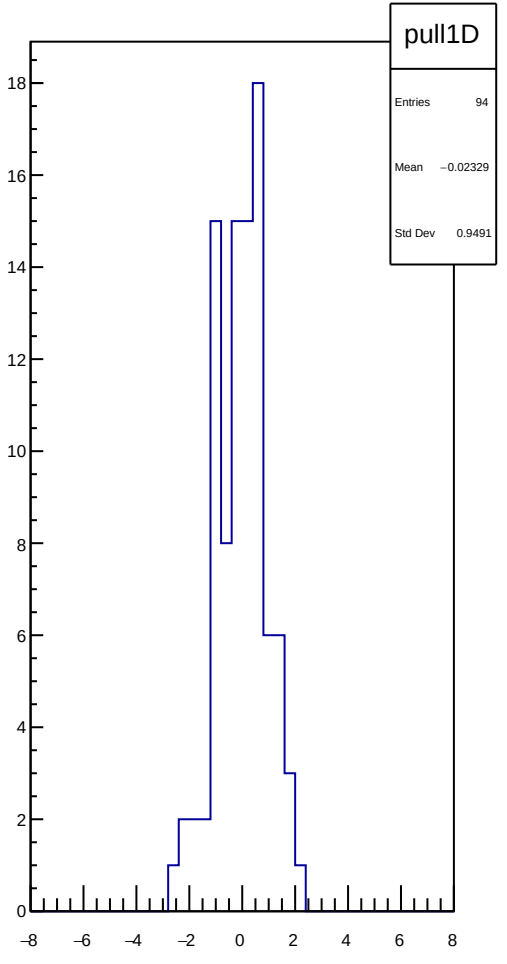

diff_bpm12X_rms vs run
χ² / ndf 2.326e+04 / 93
p0 4.425e+04 ± 33.34
55000
50000
45000
40000
35000

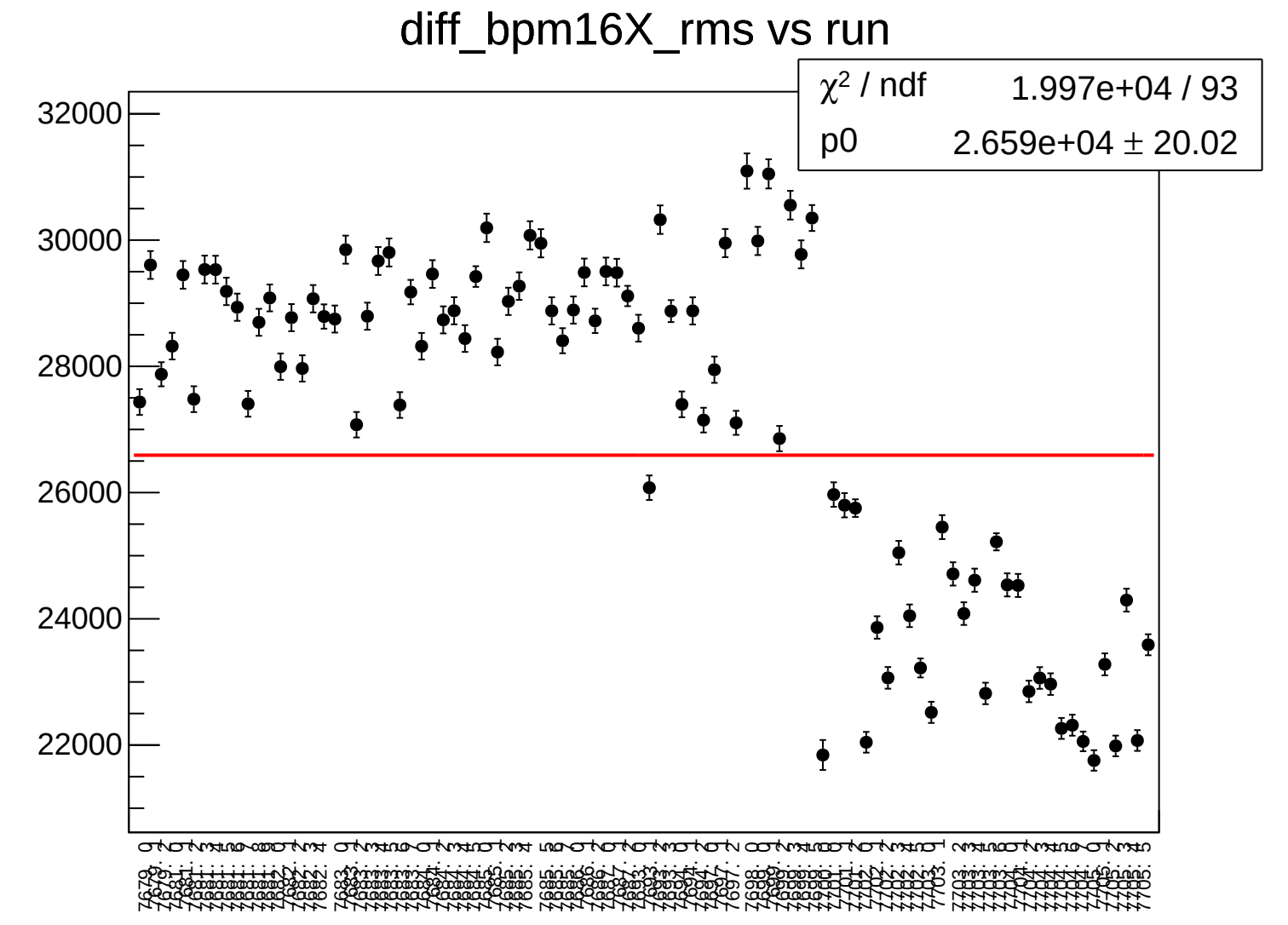

diff_bpm12Y_mean vs run
χ² / ndf 86.58 / 93
p0 0.3906 ± 9.266
1000
500
0
−500
−1000
pull
Entries 94
Mean −5.251
Std Dev 45.83
3
2
1
0
−1
−2

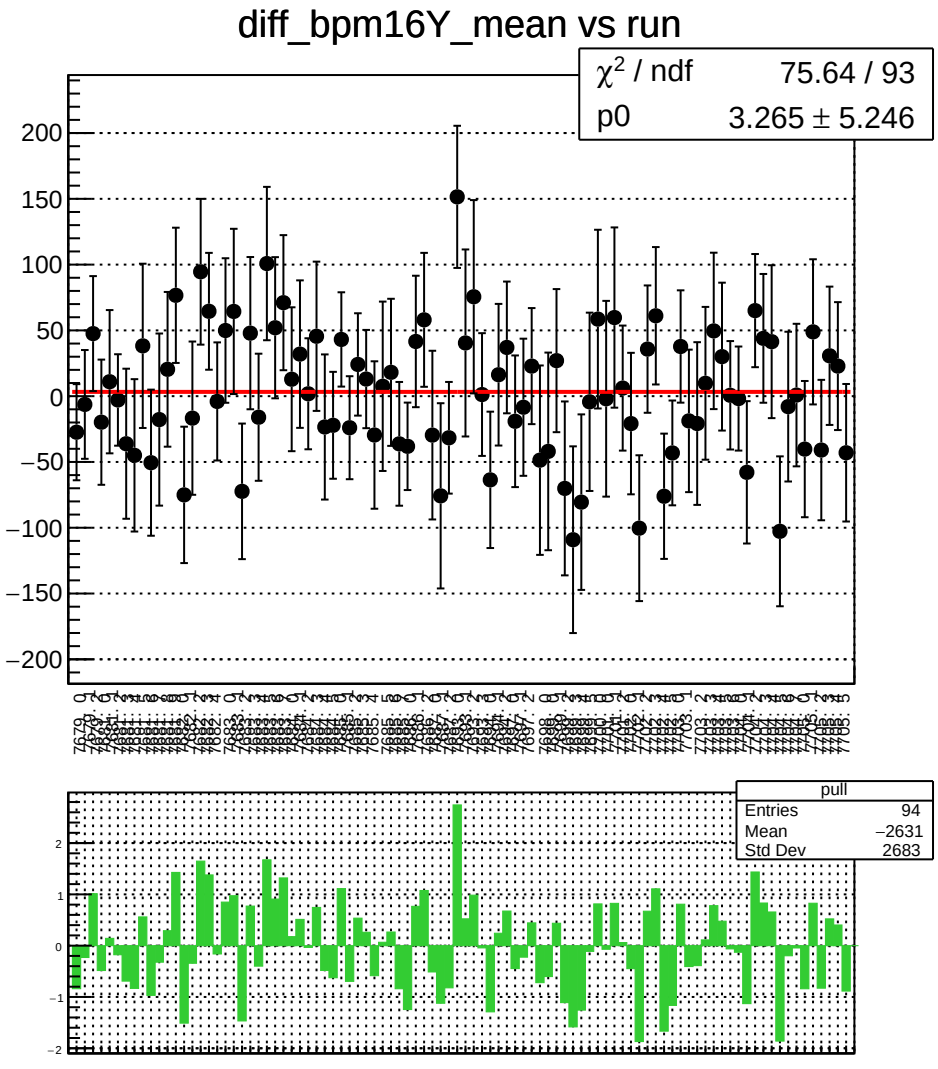

pull1D
Entries 94
Mean 0.03547
Std Dev 0.9591
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

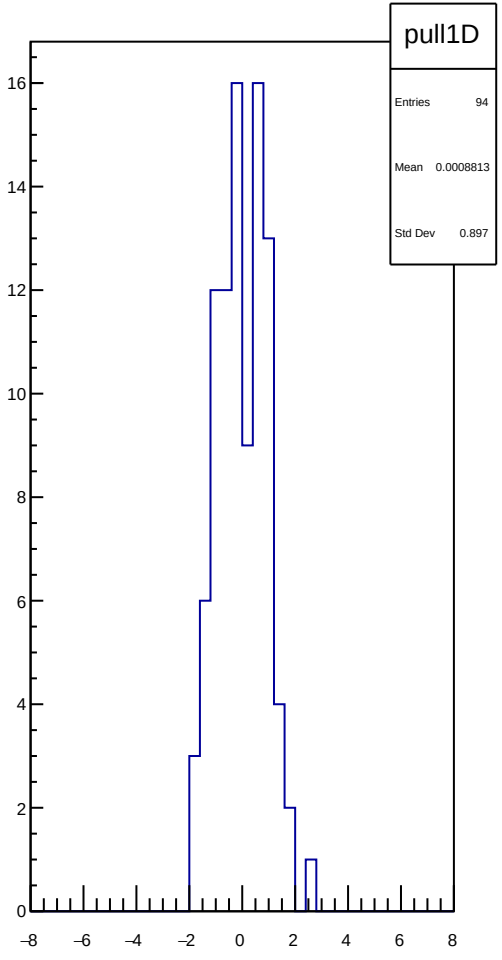

diff_bpm12Y_rms vs run
χ^2 / ndf 6.03e+05 / 93
p0 7123 ± 6.552
40000
35000
30000
25000
20000
15000
10000
5000

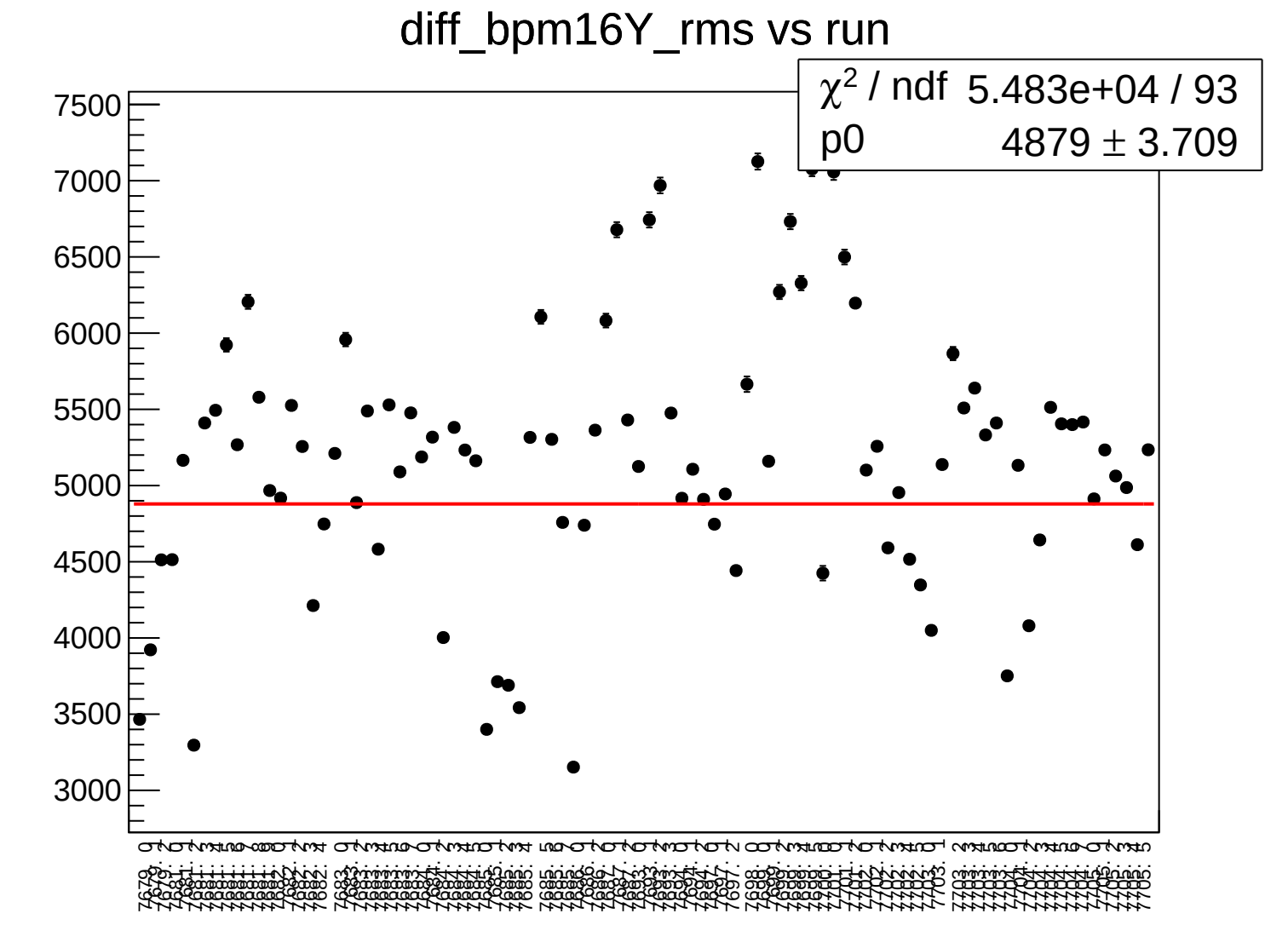

diff_bpm16X_mean vs run
χ² / ndf 84.72 / 93
p0 −7.686 ± 28.31
1000
500
0
−500
−1000
pull
Entries 94
Mean −212.2
Std Dev 264.3
2
1
0
−1
−2

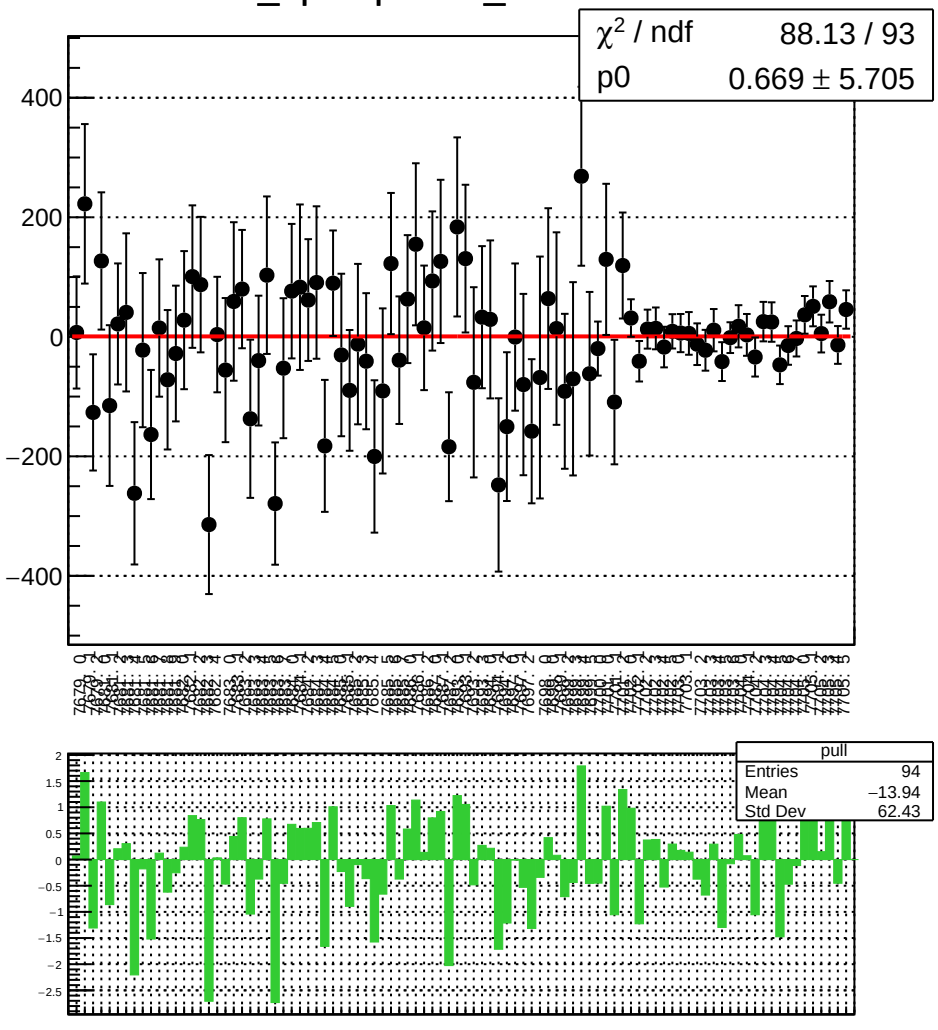

pull1D
Entries 94
Mean −0.02329
Std Dev 0.9491
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

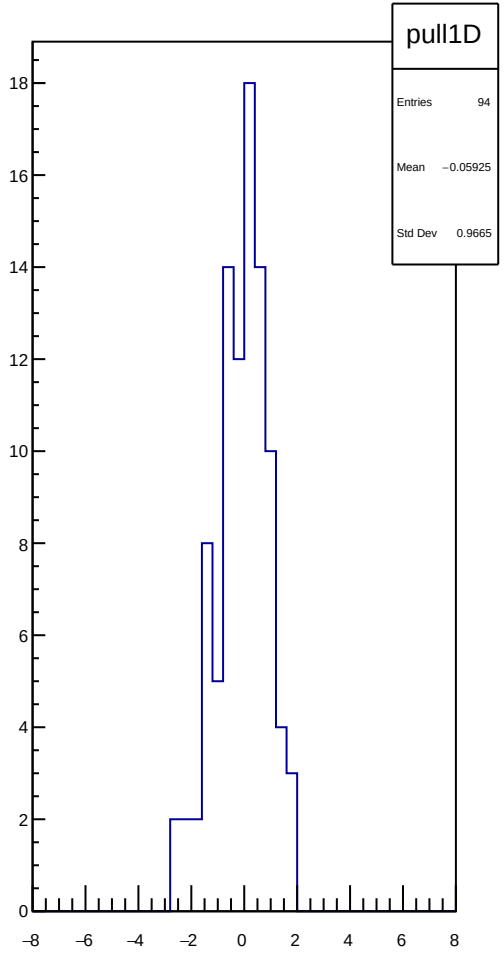

diff_bpm16X_rms vs run
χ² / ndf 1.997e+04 / 93
p0 2.659e+04 ± 20.02
32000
30000
28000
26000
24000
22000

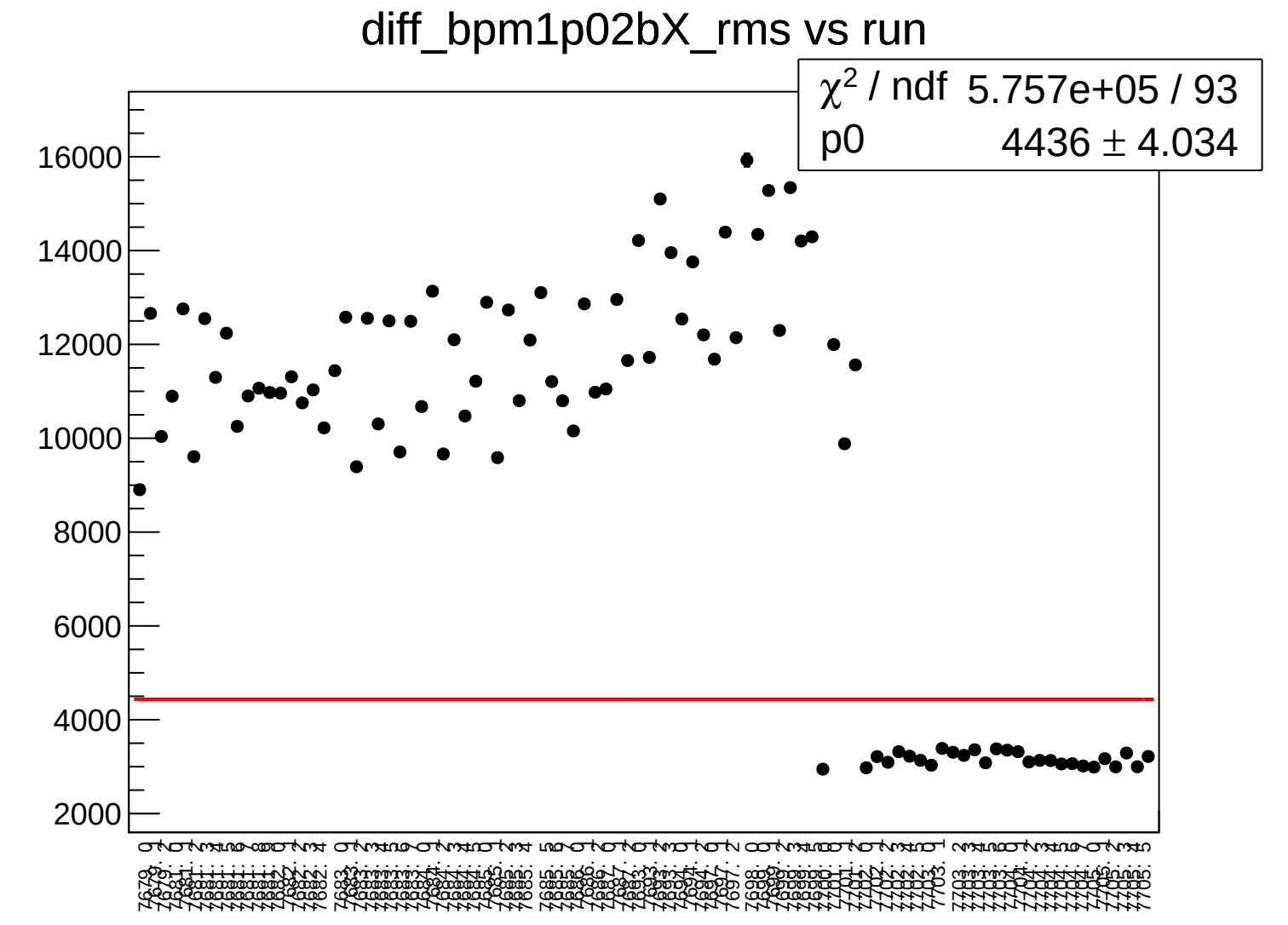

diff_bpm16Y_mean vs run
χ² / ndf 75.64 / 93
p0 3.265 ± 5.246
pull
Entries 94
Mean −2631
Std Dev 2683

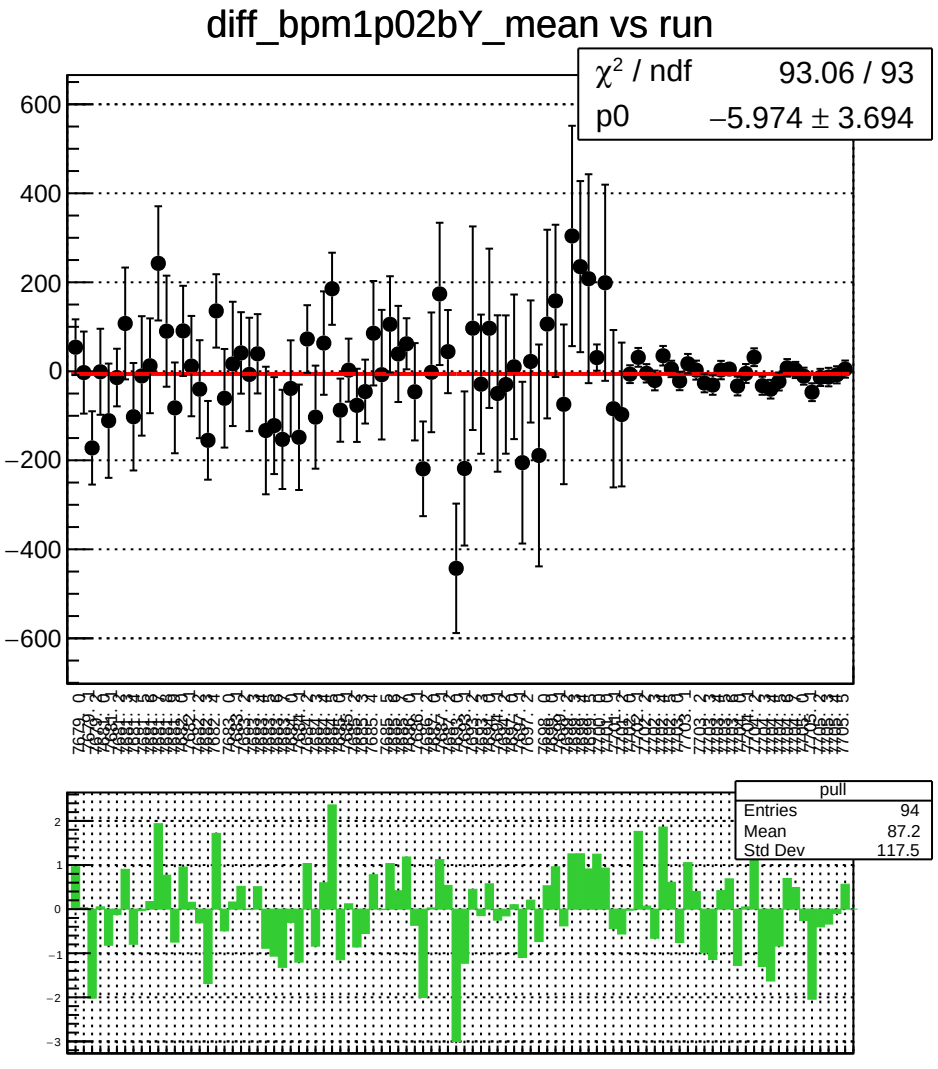

pull1D
Entries 94
Mean 0.0008813
Std Dev 0.897

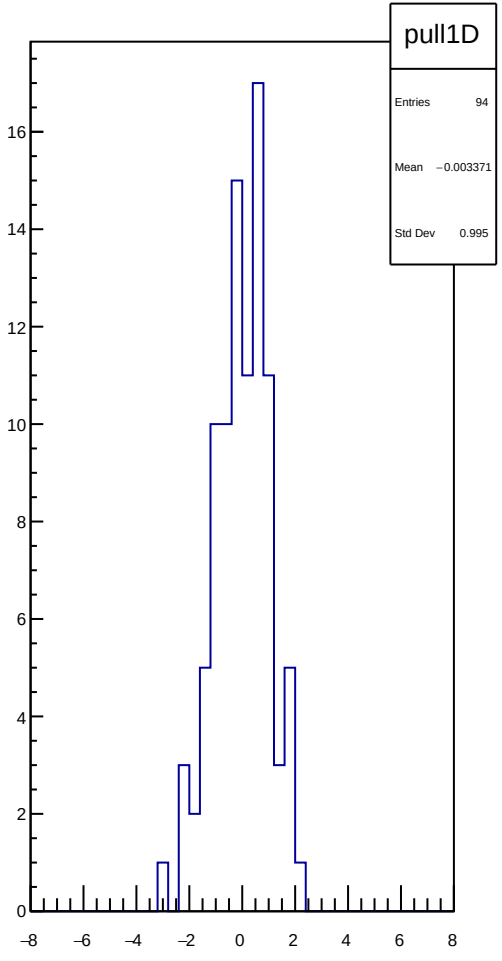

diff_bpm16Y_rms vs run
χ² / ndf 5.483e+04 / 93
p0 4879 ± 3.709
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000

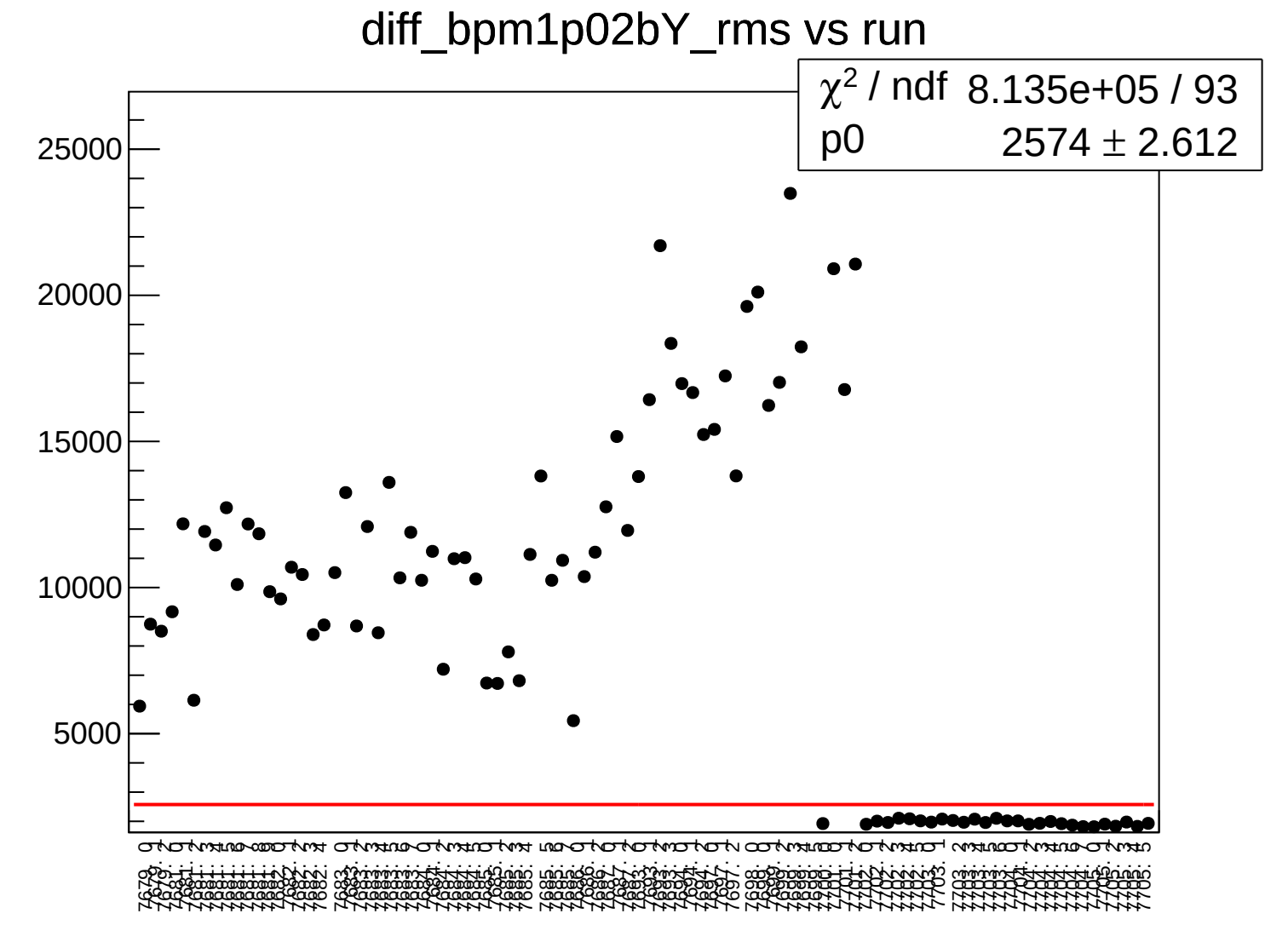

diff_bpm1p02bX_mean vs run
χ^2 / ndf 88.13 / 93
p0 0.669 ± 5.705
400
200
0
−200
−400
pull
Entries 94
Mean −13.94
Std Dev 62.43
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

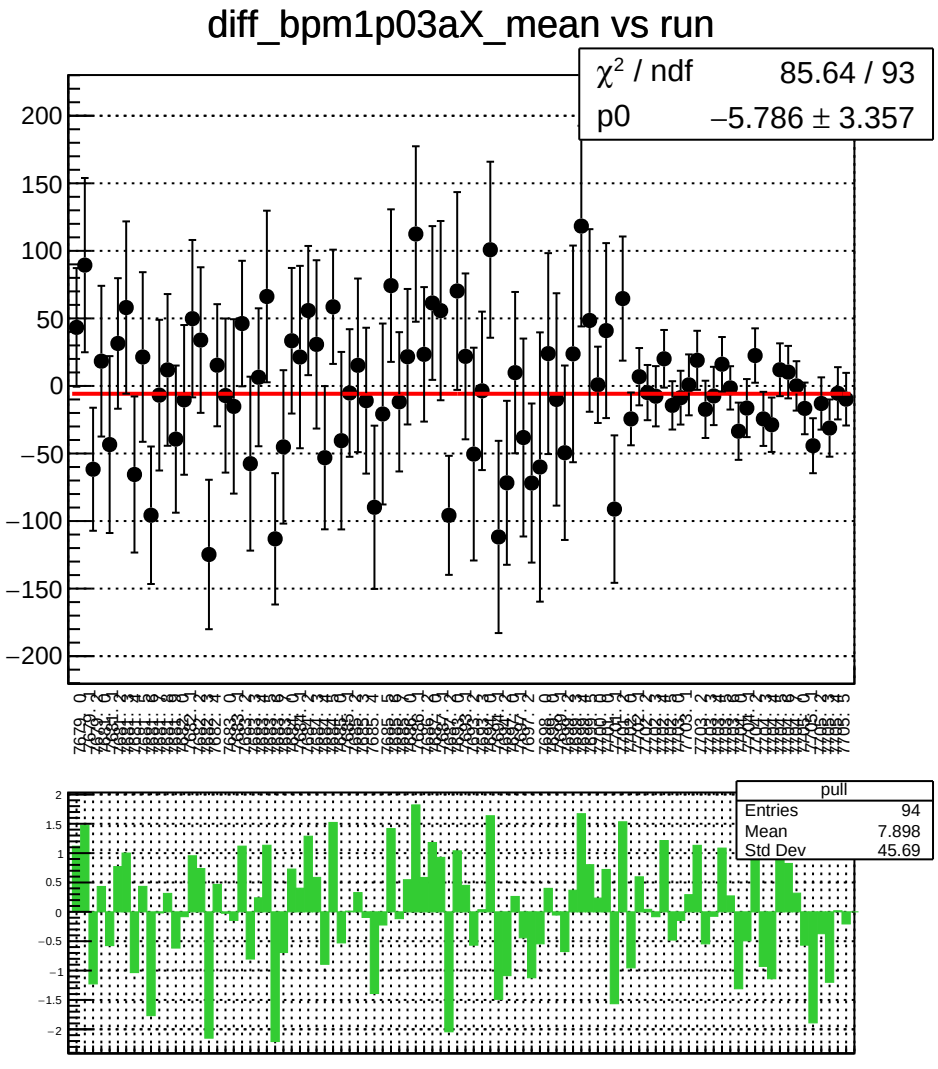

pull1D
Entries 94
Mean −0.05925
Std Dev 0.9665
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

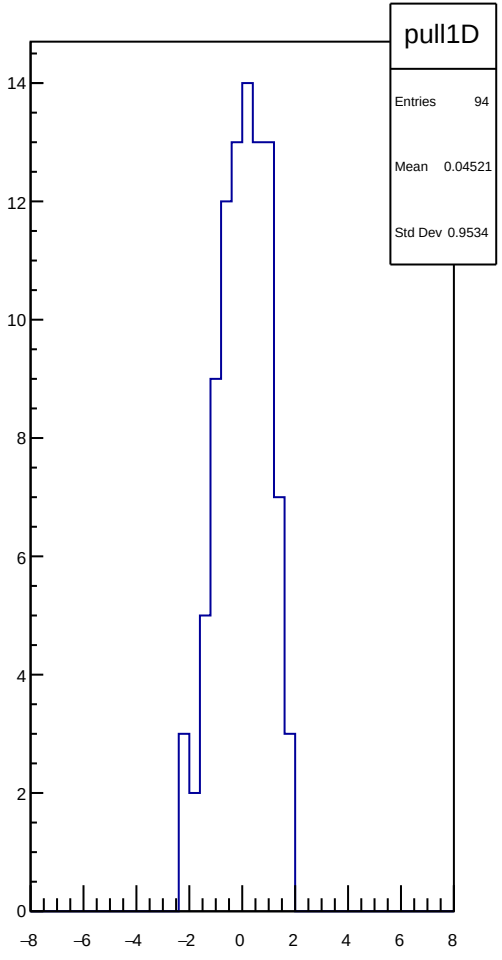

diff_bpm1p02bX_rms vs run
χ² / ndf 5.757e+05 / 93
p0 4436 ± 4.034
16000
14000
12000
10000
8000
6000
4000
2000

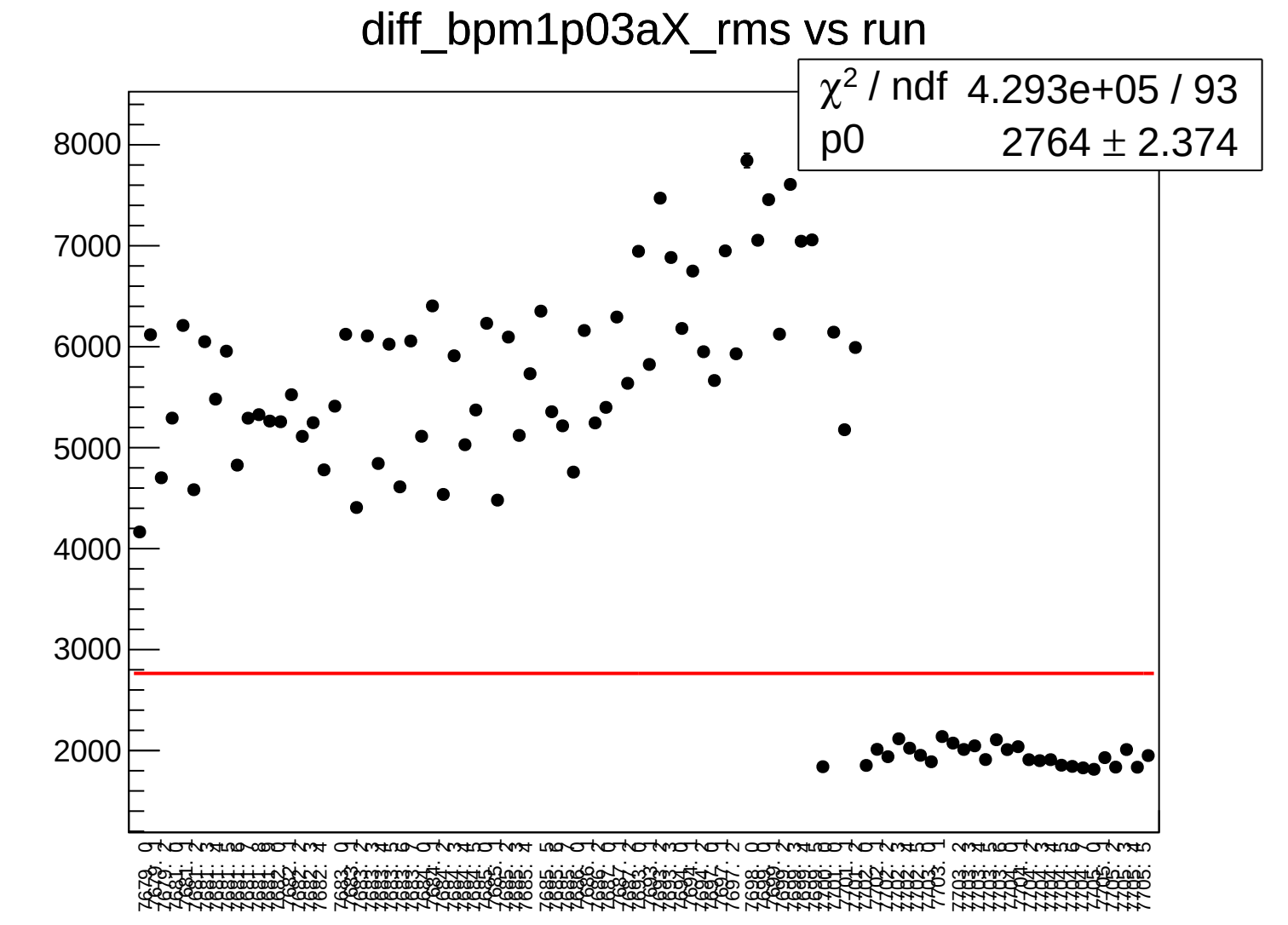

diff_bpm1p02bY_mean vs run
χ² / ndf 93.06 / 93
p0 −5.974 ± 3.694
pull
Entries 94
Mean 87.2
Std Dev 117.5

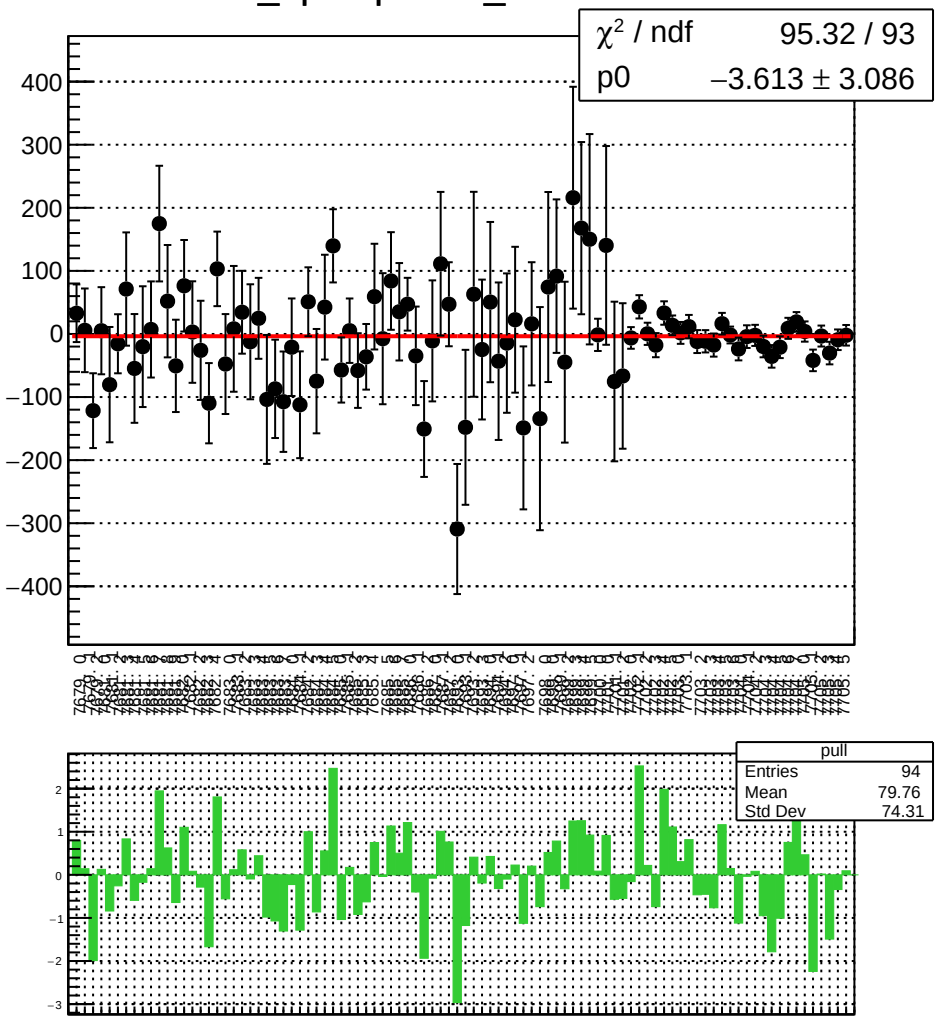

pull1D
Entries 94
Mean −0.003371
Std Dev 0.995

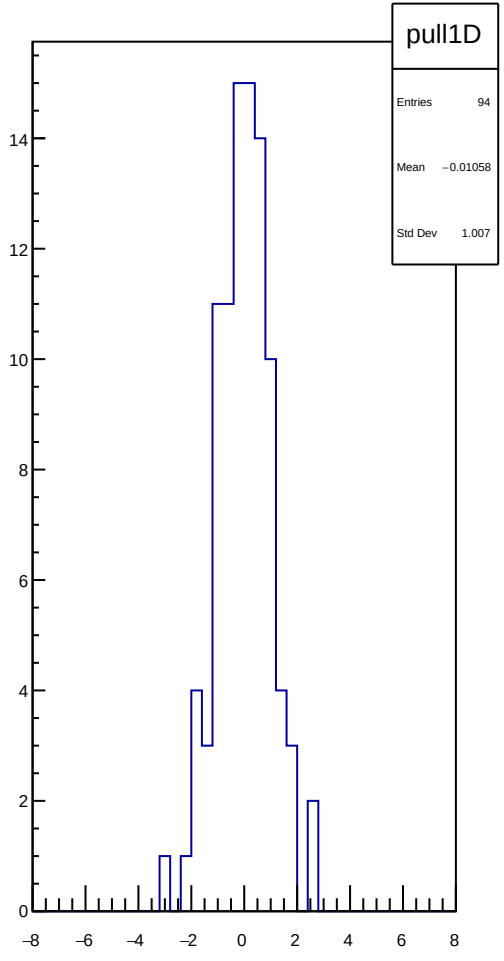

diff_bpm1p02bY_rms vs run
χ^2 / ndf 8.135e+05 / 93
p0 2574 ± 2.612
25000
20000
15000
10000
5000

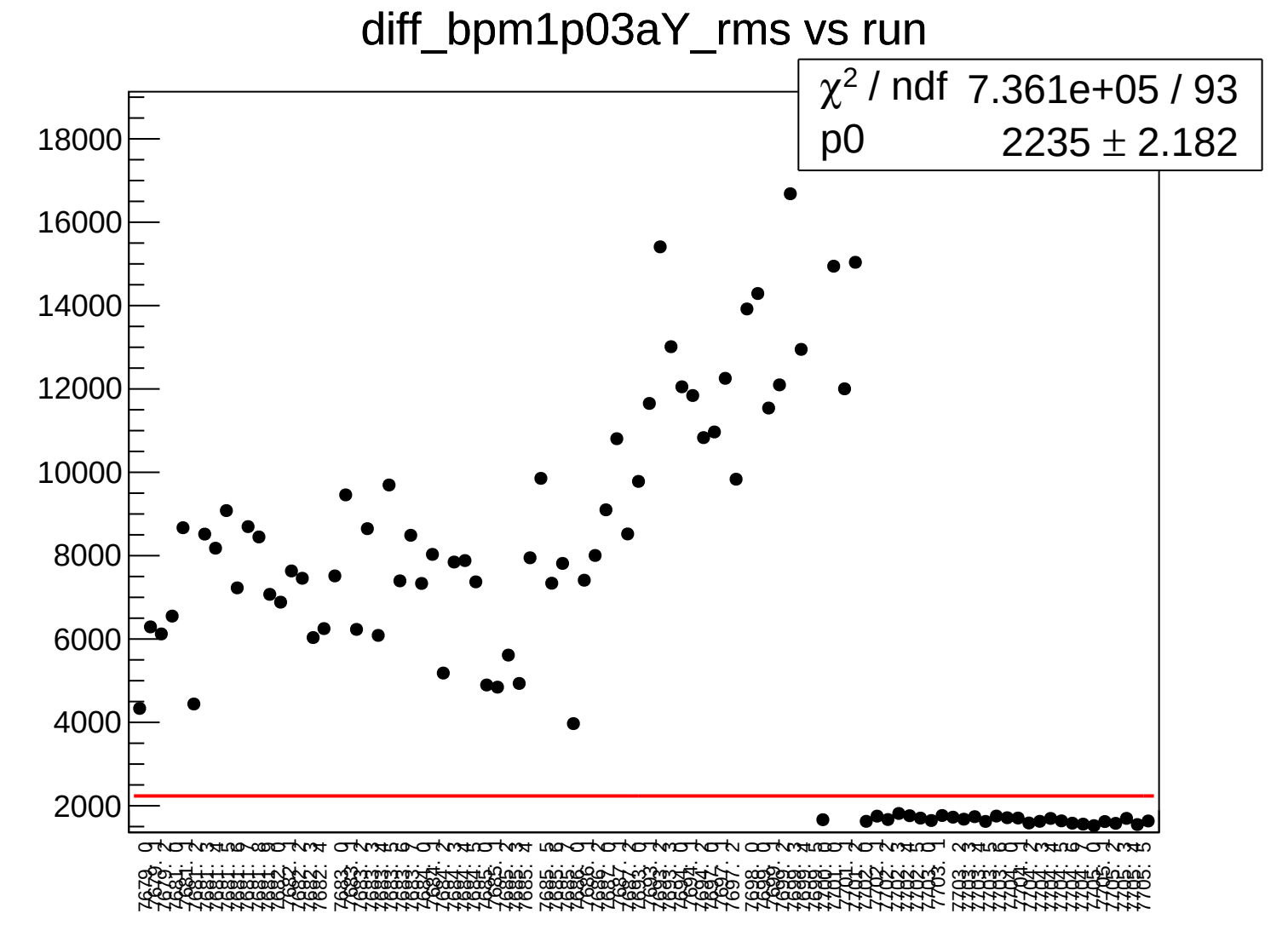

diff_bpm1p03aX_mean vs run
χ² / ndf 85.64 / 93
p0 −5.786 ± 3.357
pull
Entries 94
Mean 7.898
Std Dev 45.69

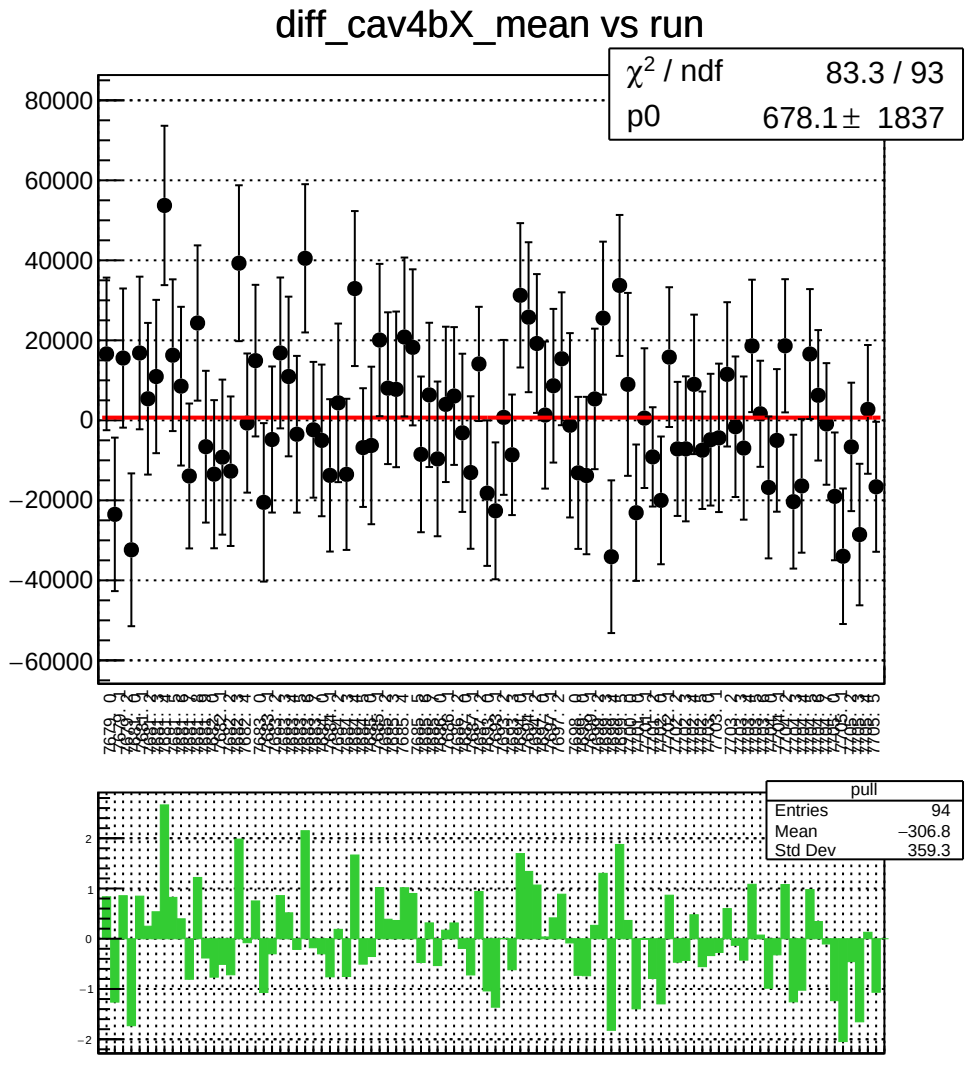

pull1D
Entries 94
Mean 0.04521
Std Dev 0.9534

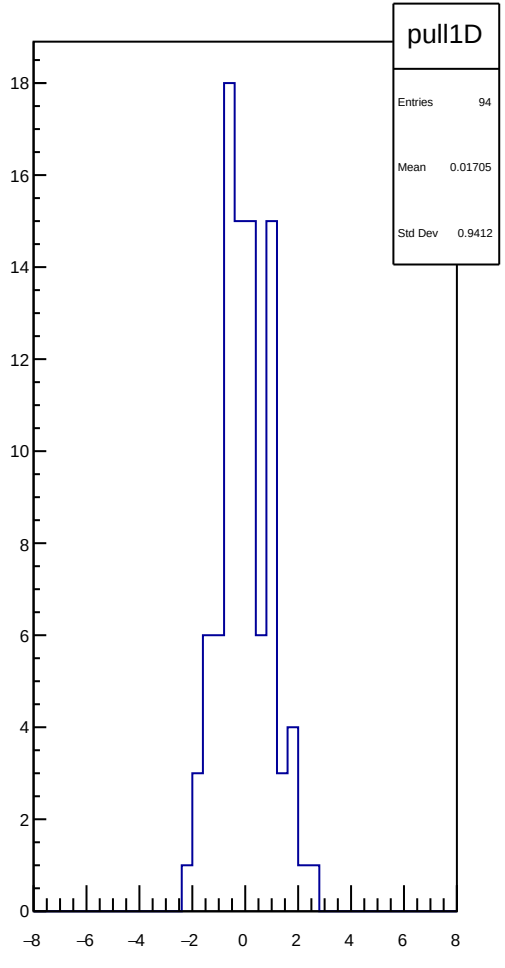

diff_bpm1p03aX_rms vs run
χ² / ndf 4.293e+05 / 93
p0 2764 ± 2.374
8000
7000
6000
5000
4000
3000
2000

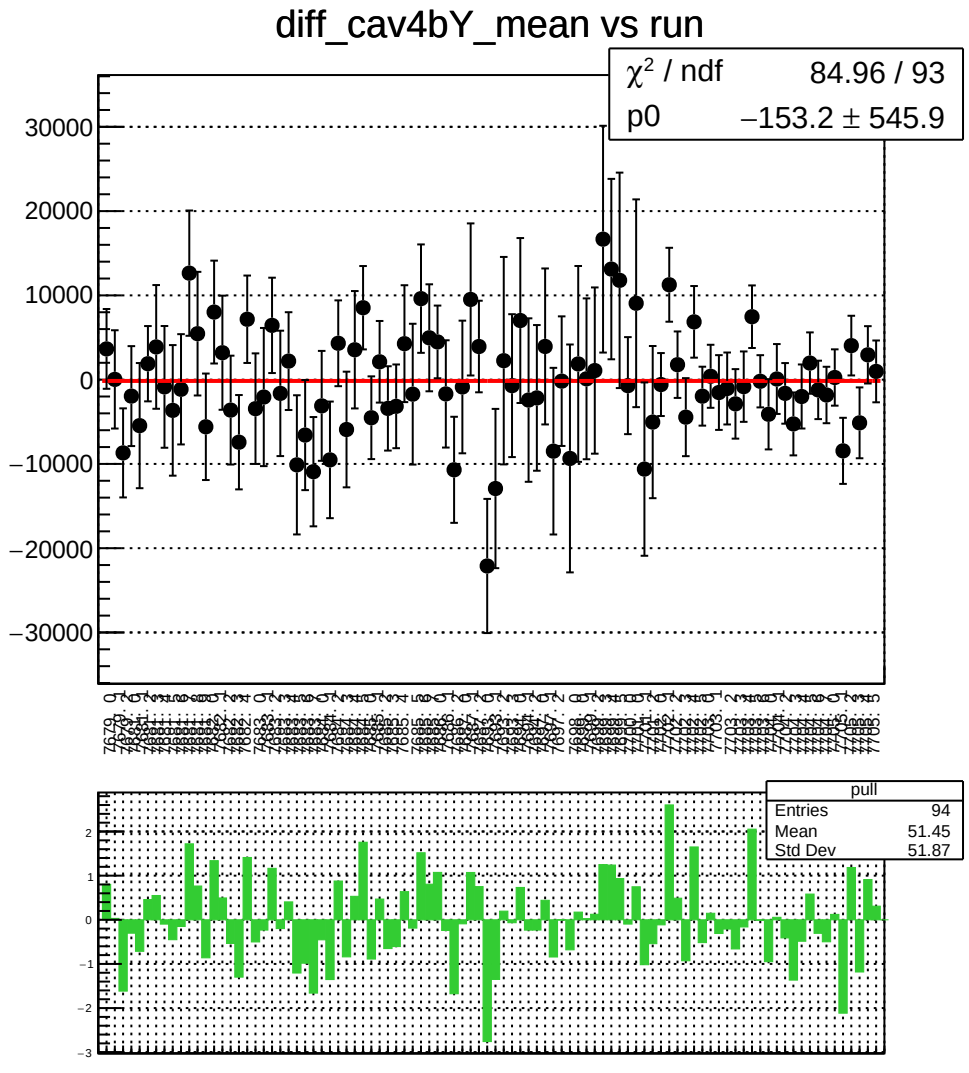

diff_bpm1p03aY_mean vs run
χ² / ndf 95.32 / 93
p0 −3.613 ± 3.086
pull
Entries 94
Mean 79.76
Std Dev 74.31

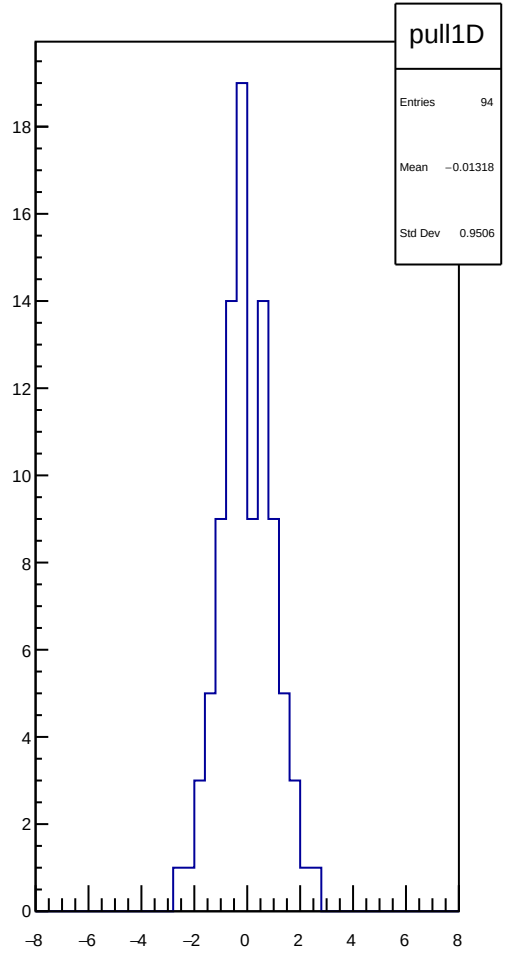

pull1D
Entries 94
Mean −0.01058
Std Dev 1.007

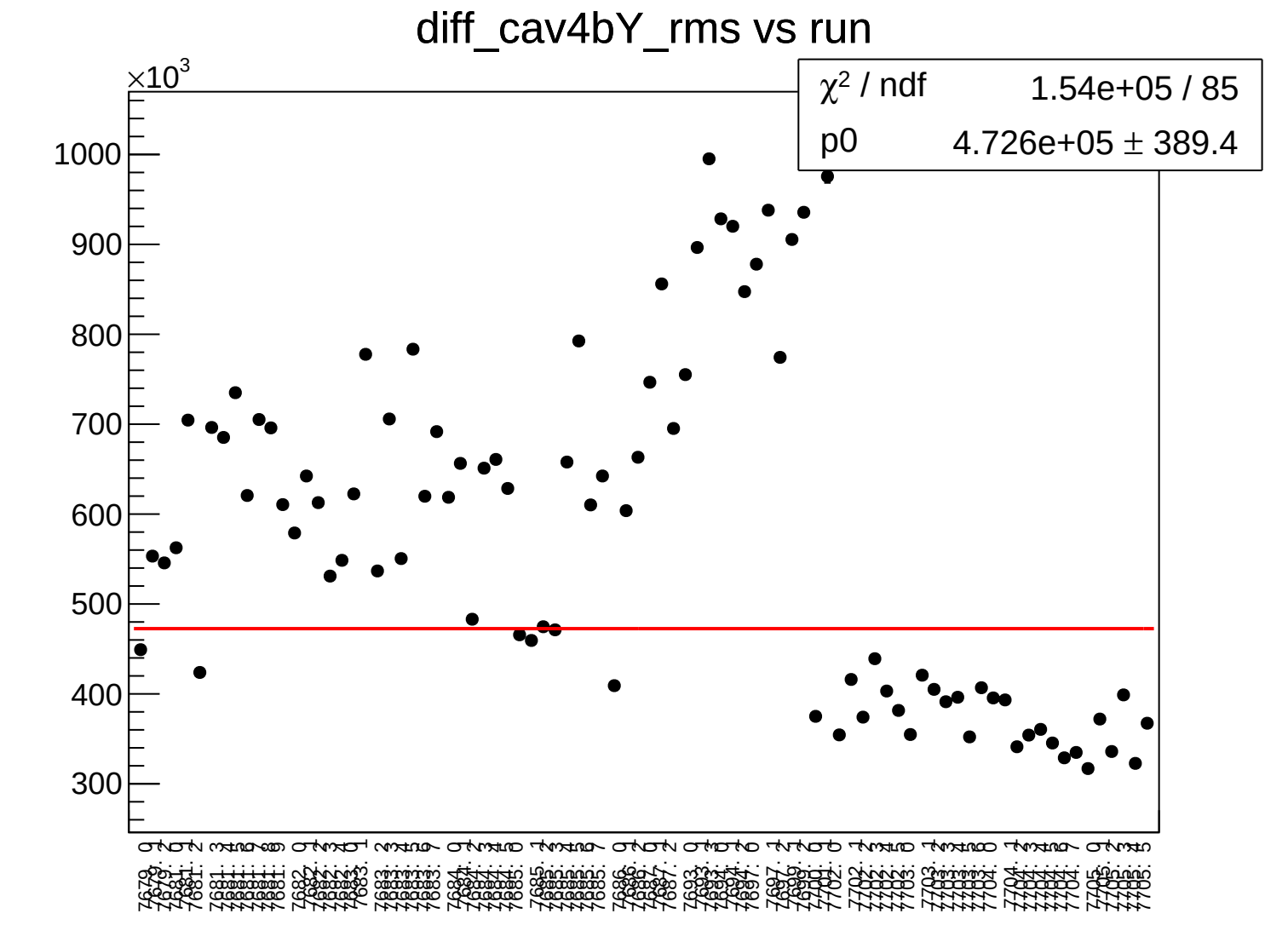

diff_bpm1p03aY_rms vs run
χ² / ndf 7.361e+05 / 93
p0 2235 ± 2.182
18000
16000
14000
12000
10000
8000
6000
4000
2000

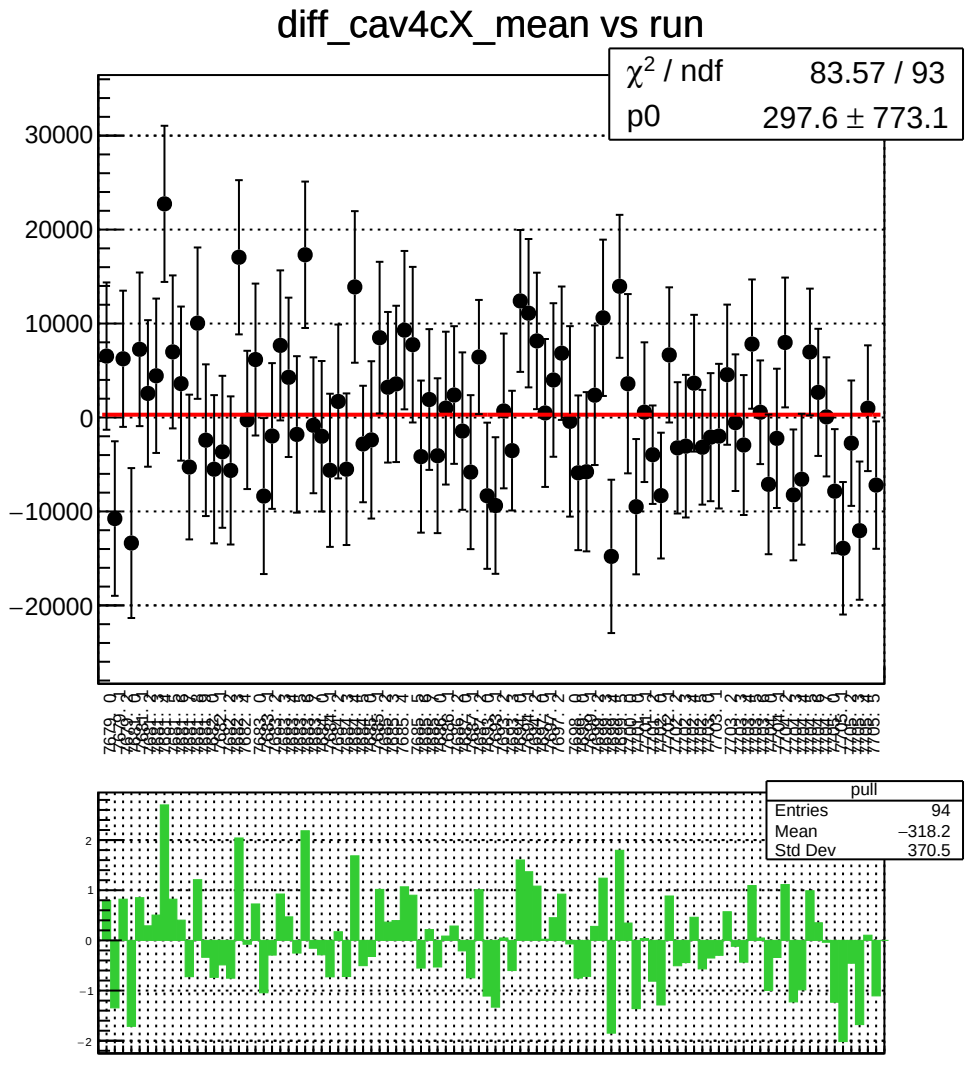

diff_cav4bX_mean vs run
χ² / ndf 83.3 / 93
p0 678.1 ± 1837
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −306.8
Std Dev 359.3
2
1
0
−1
−2

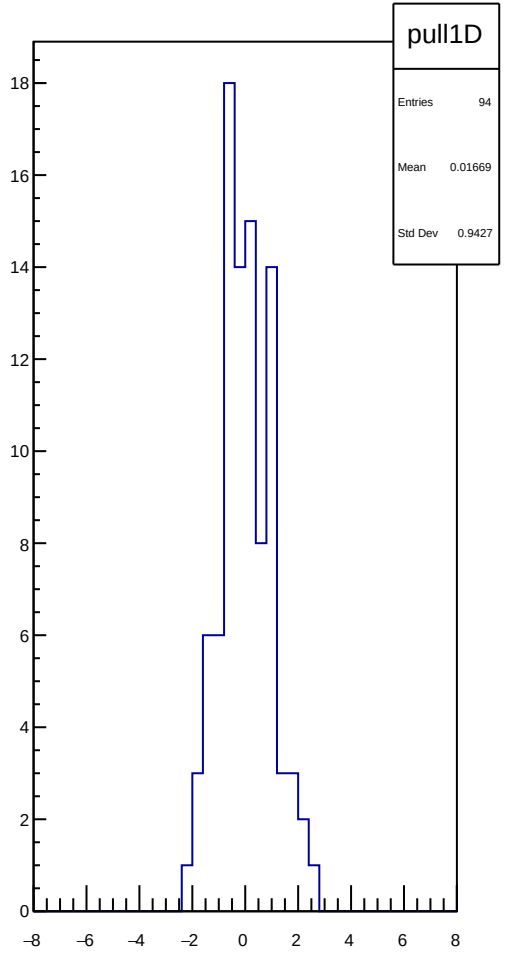

pull1D
Entries 94
Mean 0.01705
Std Dev 0.9412
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

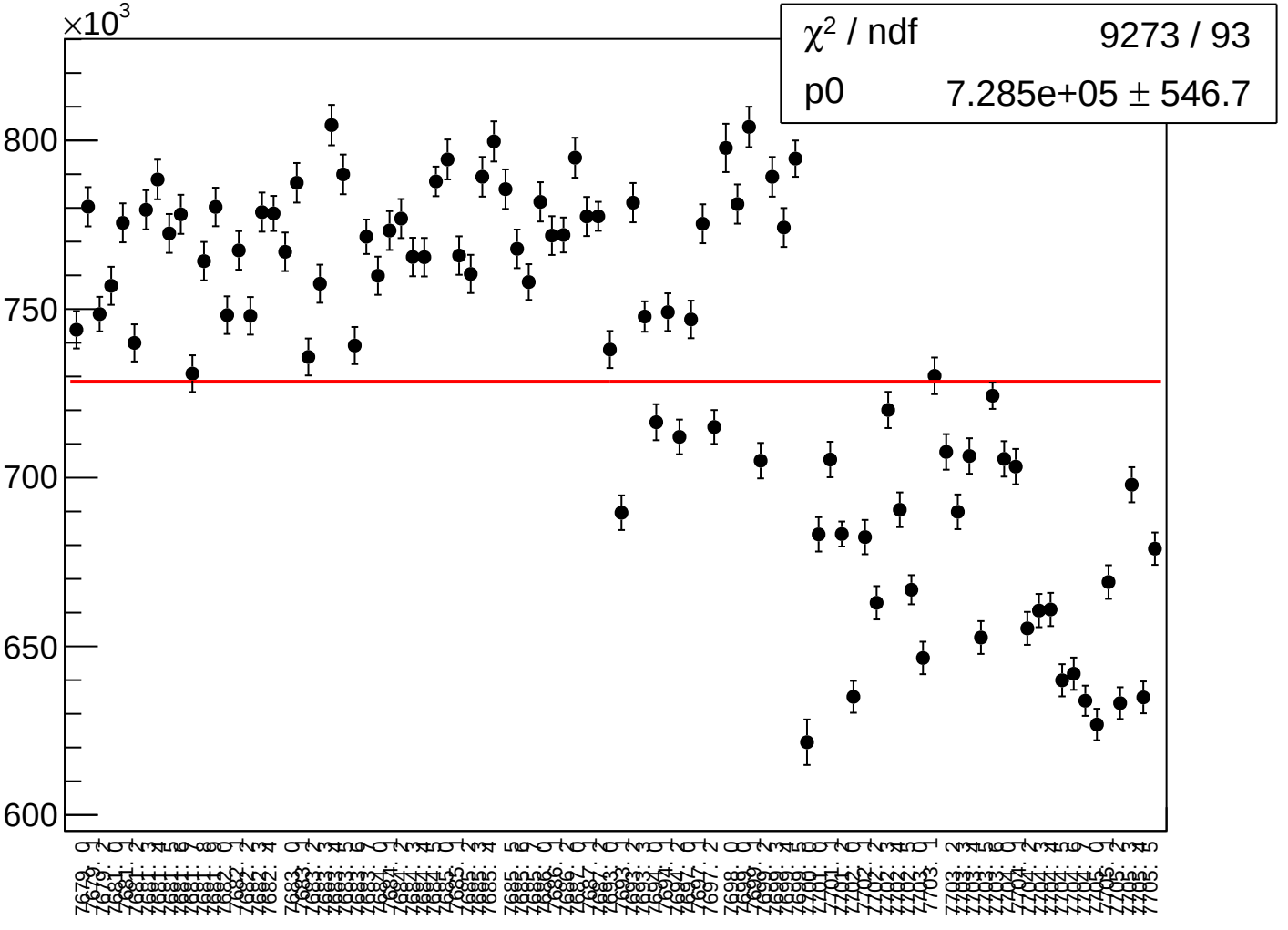

diff_cav4bY_mean vs run
χ² / ndf 84.96 / 93
p0 −153.2 ± 545.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean 51.45
Std Dev 51.87
2
1
0
−1
−2
−3

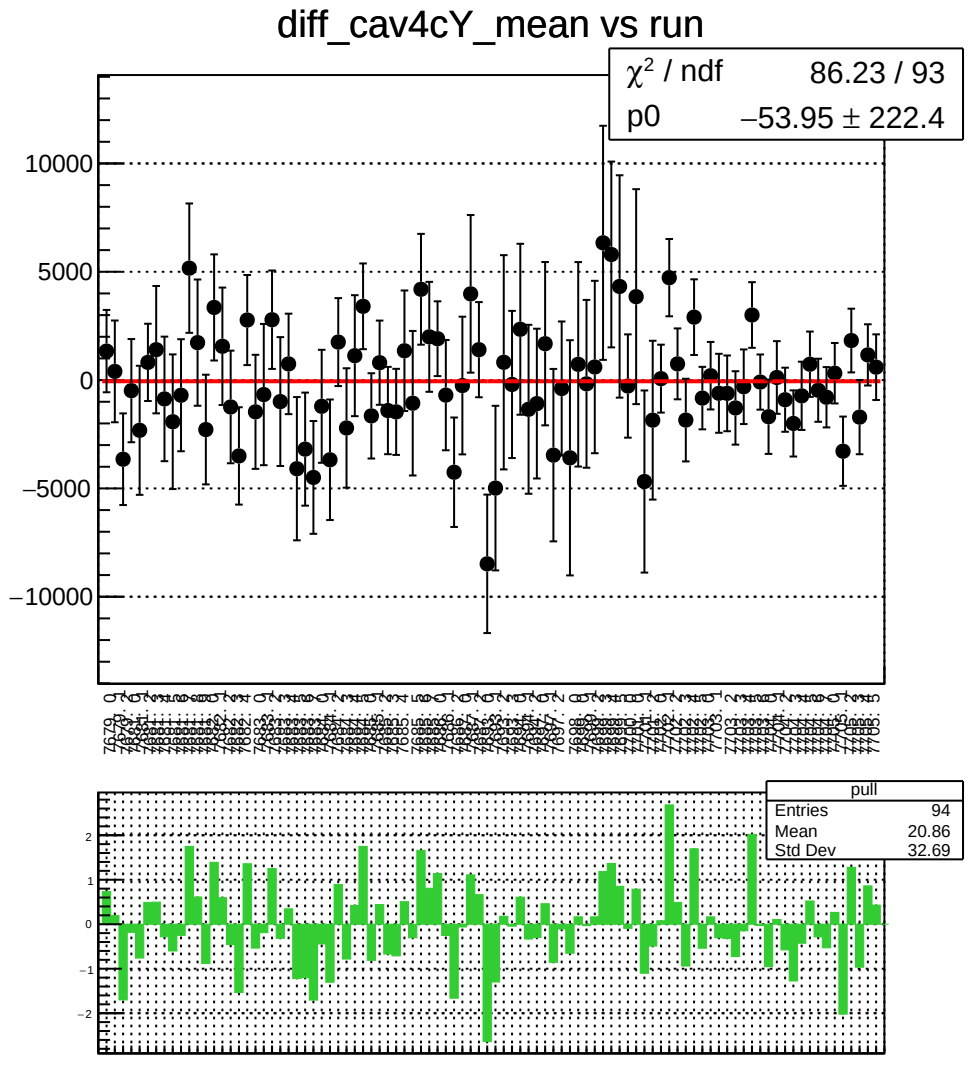

pull1D
Entries 94
Mean −0.01318
Std Dev 0.9506
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

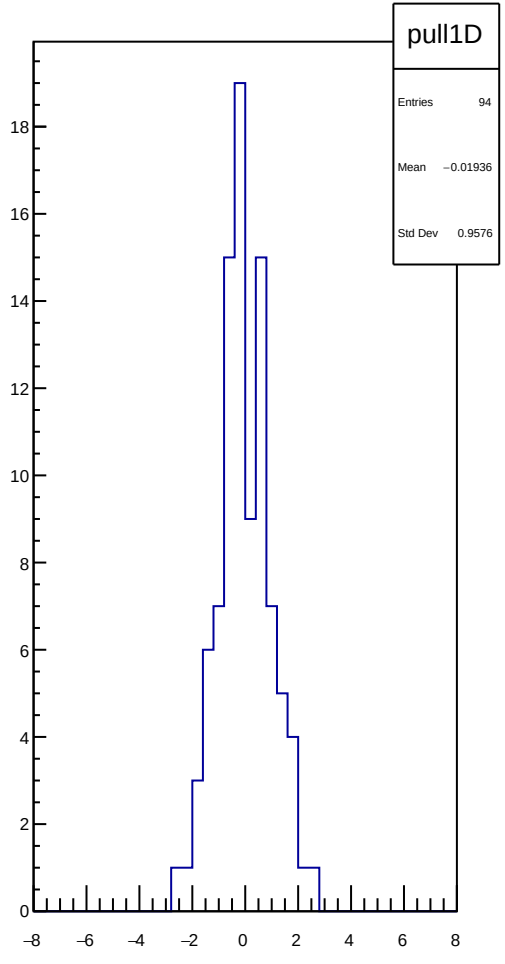

diff_cav4bY_rms vs run
×10^3
χ² / ndf 1.54e+05 / 85
p0 4.726e+05 ± 389.4
1000
900
800
700
600
500
400
300

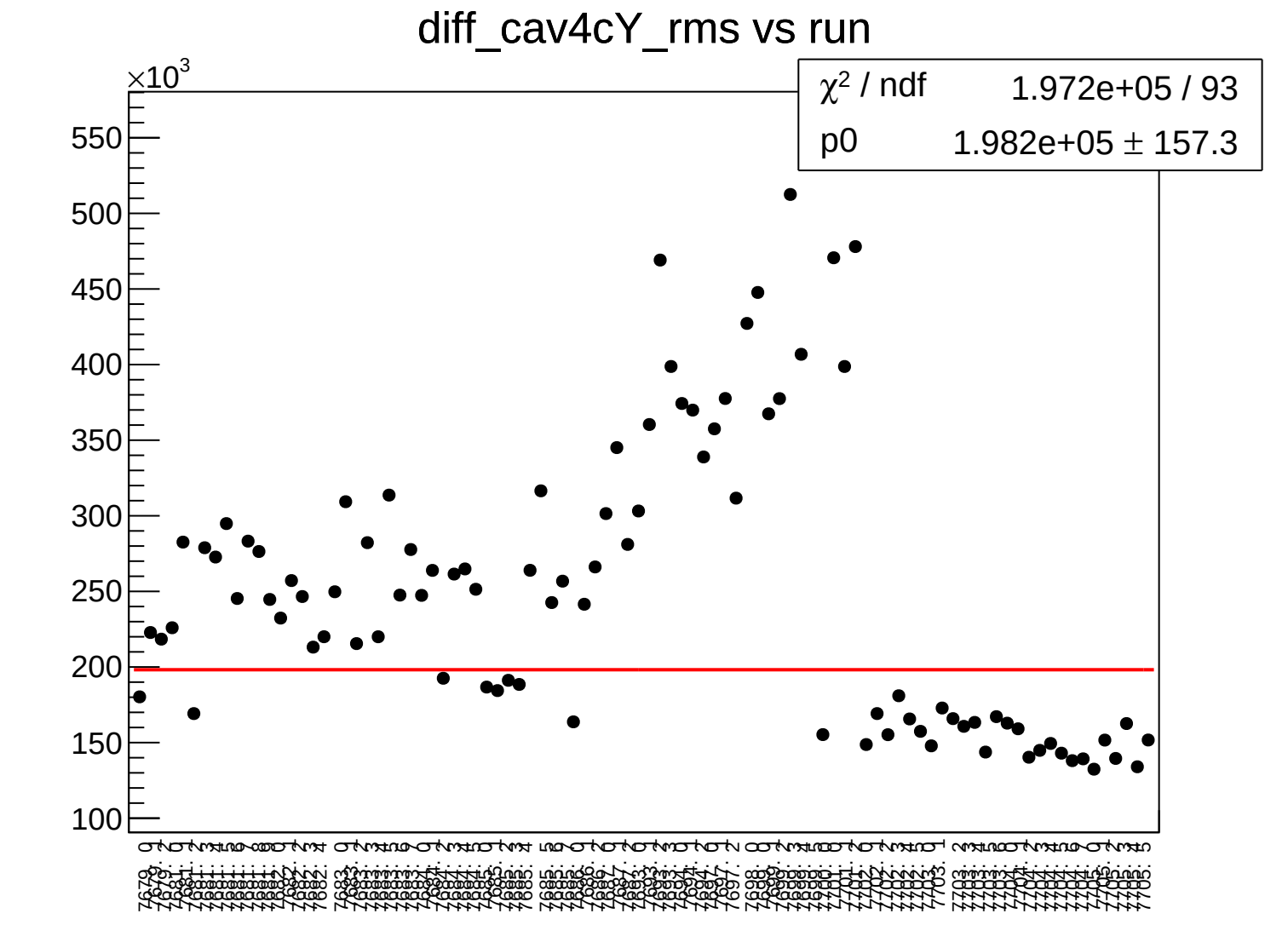

diff_cav4cX_mean vs run
χ² / ndf 83.57 / 93
p0 297.6 ± 773.1
30000
20000
10000
0
−10000
−20000
pull
Entries 94
Mean −318.2
Std Dev 370.5
2
1
0
−1
−2

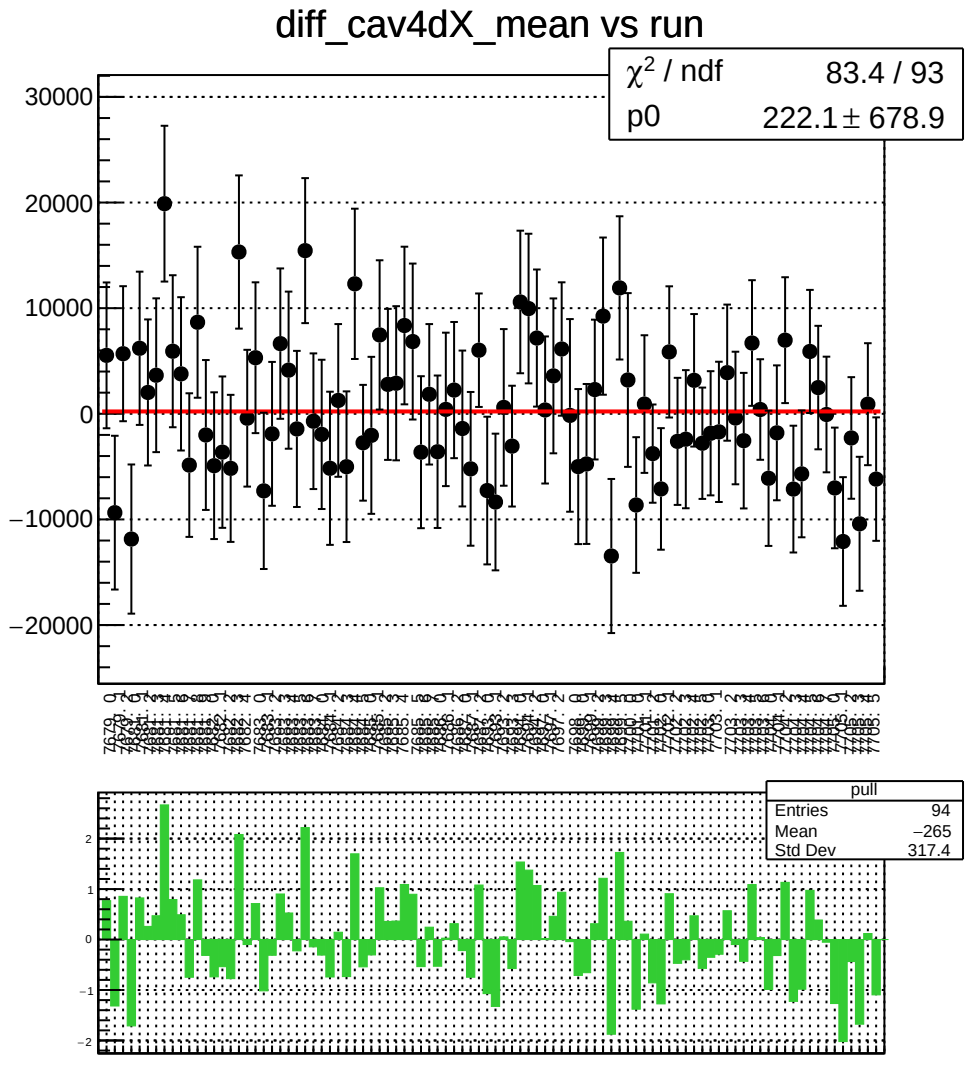

pull1D
Entries 94
Mean 0.01669
Std Dev 0.9427
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

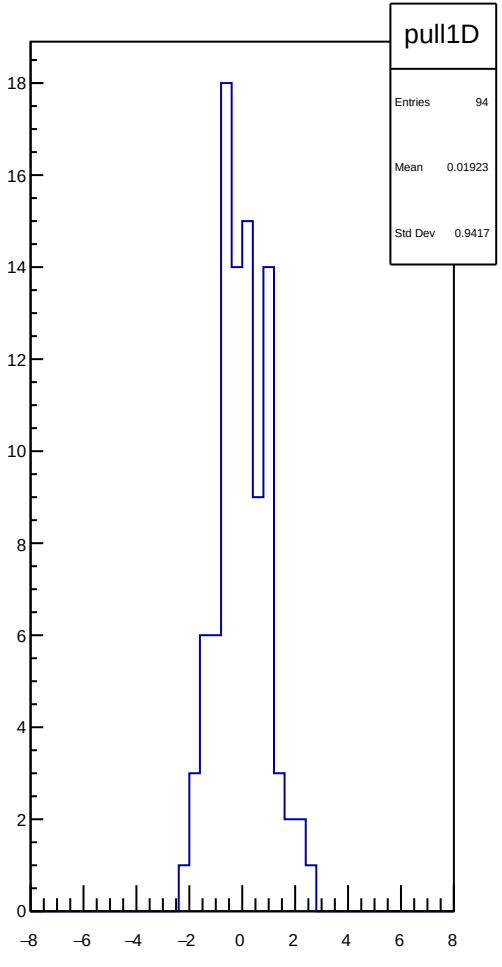

diff_cav4cX_rms vs run
×10^3
χ² / ndf 9273 / 93
p0 7.285e+05 ± 546.7
800
750
700
650
600

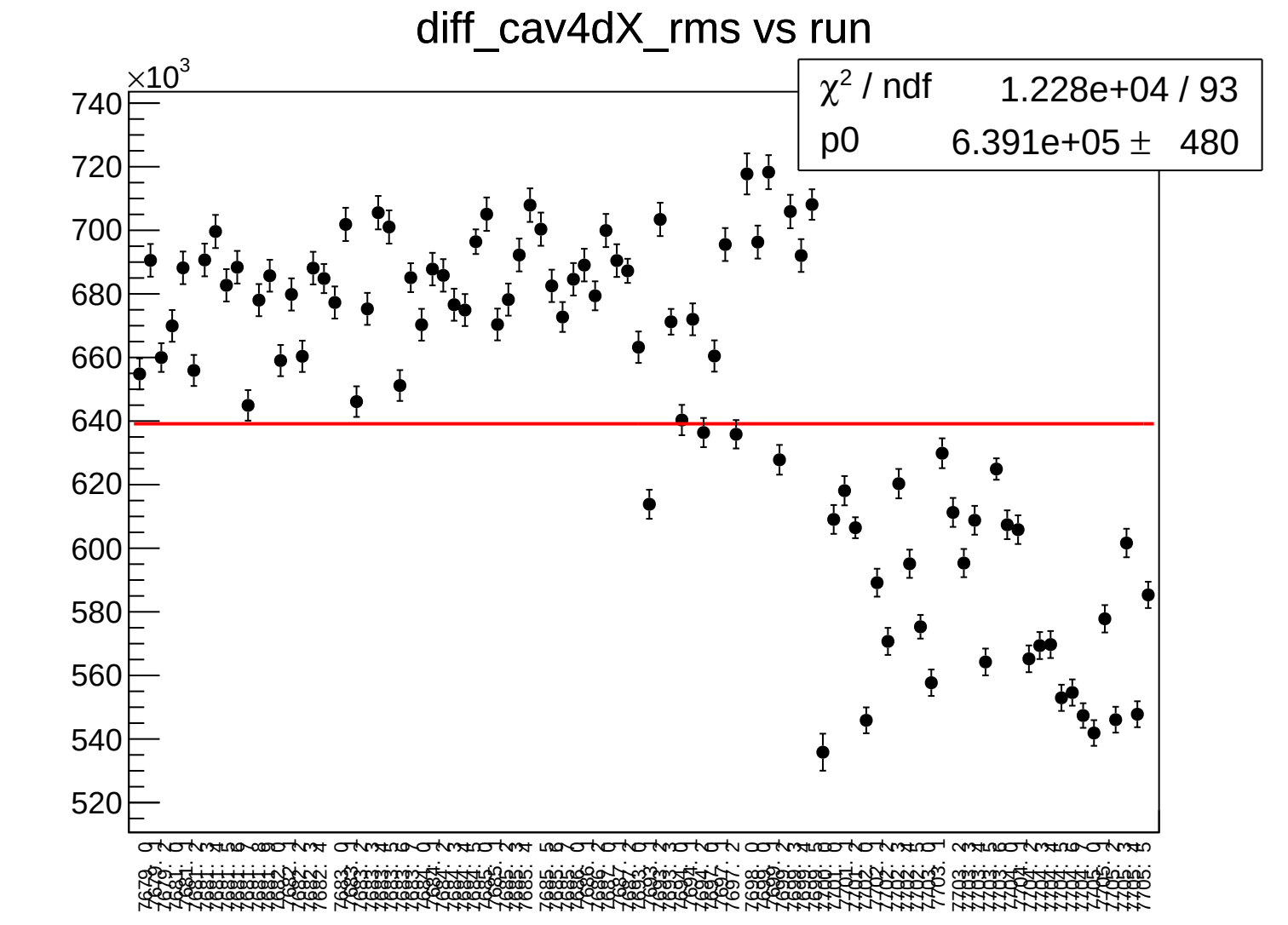

diff_cav4cY_mean vs run
χ² / ndf 86.23 / 93
p0 −53.95 ± 222.4
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 20.86
Std Dev 32.69
2
1
0
−1
−2

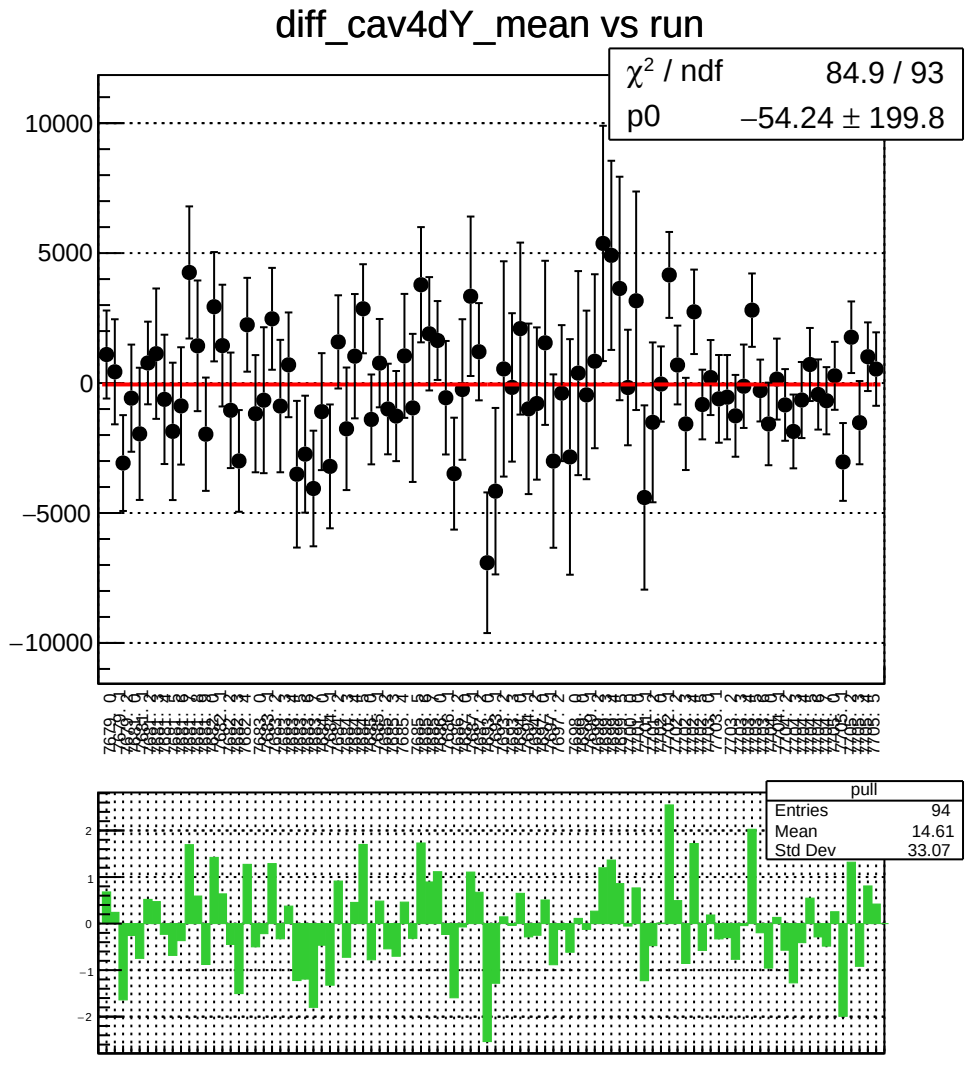

pull1D
Entries 94
Mean −0.01936
Std Dev 0.9576
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

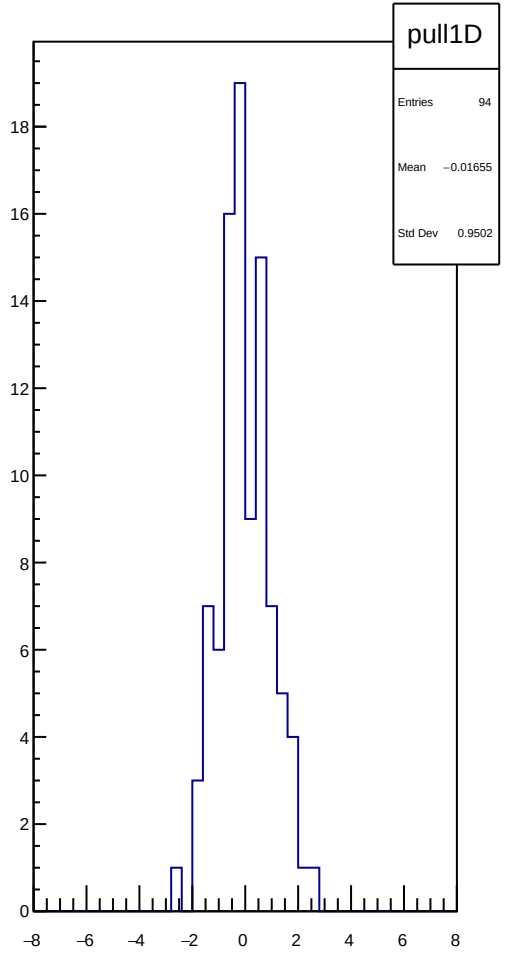

diff_cav4cY_rms vs run
×10^3
550
500
450
400
350
300
250
200
150
100
χ² / ndf 1.972e+05 / 93
p0 1.982e+05 ± 157.3

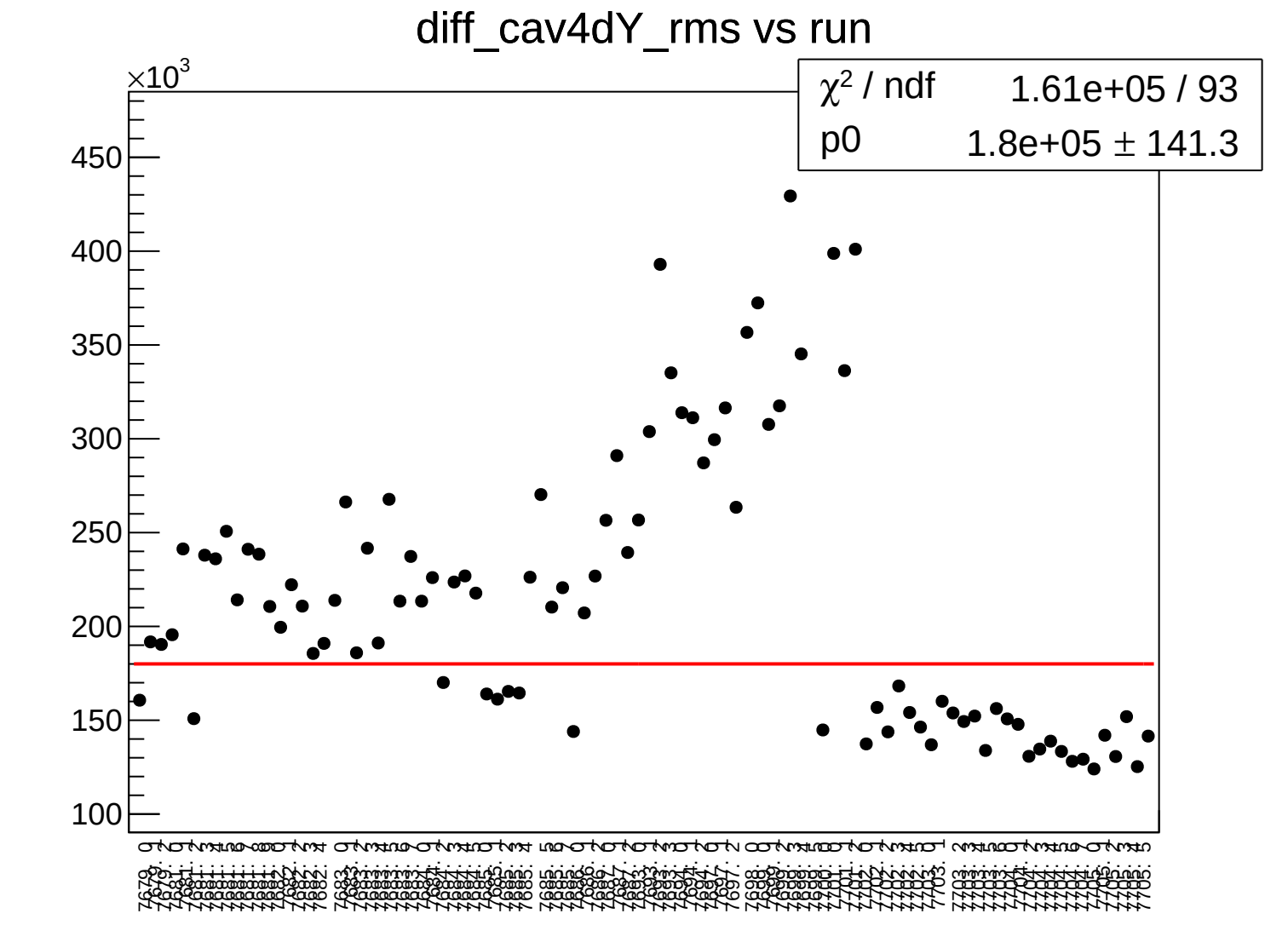

diff_cav4dX_mean vs run
χ² / ndf 83.4 / 93
p0 222.1 ± 678.9
30000
20000
10000
0
−10000
−20000
pull
Entries 94
Mean −265
Std Dev 317.4
2
1
0
−1
−2

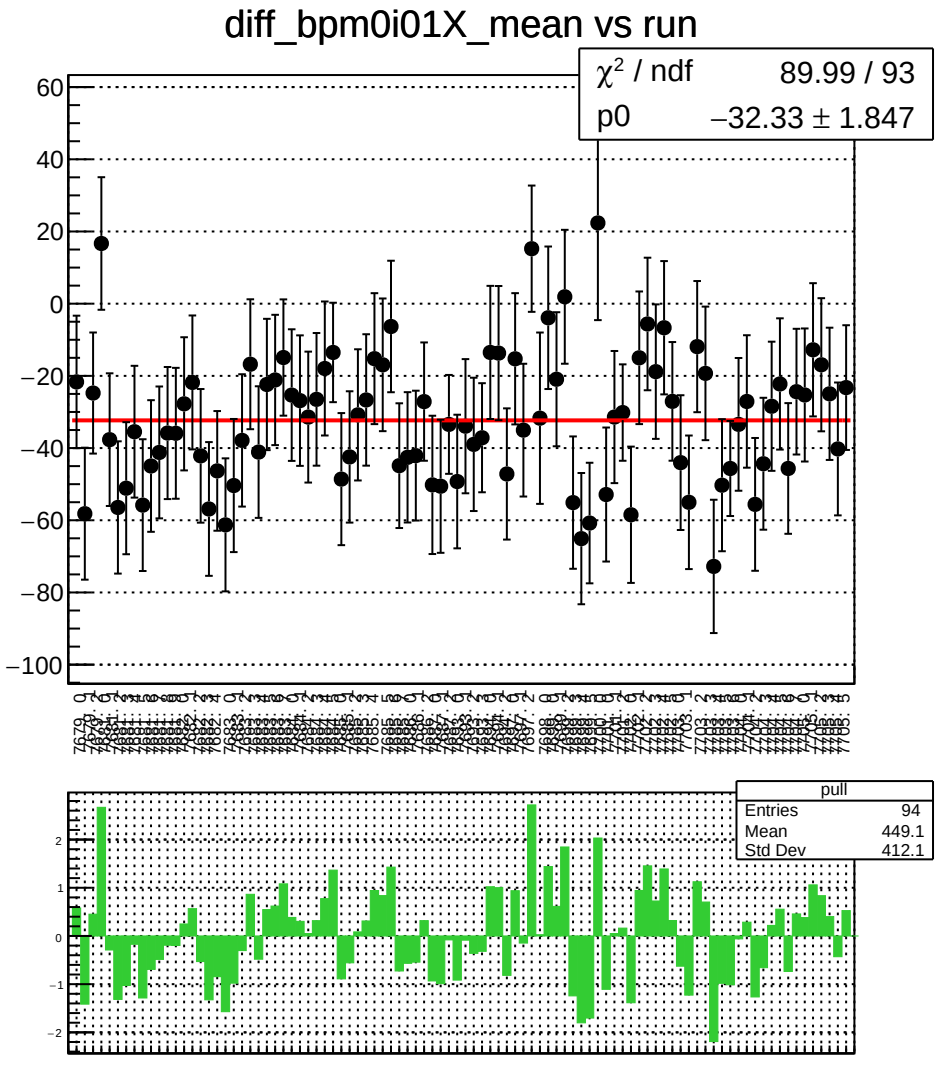

pull1D
Entries 94
Mean 0.01923
Std Dev 0.9417
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

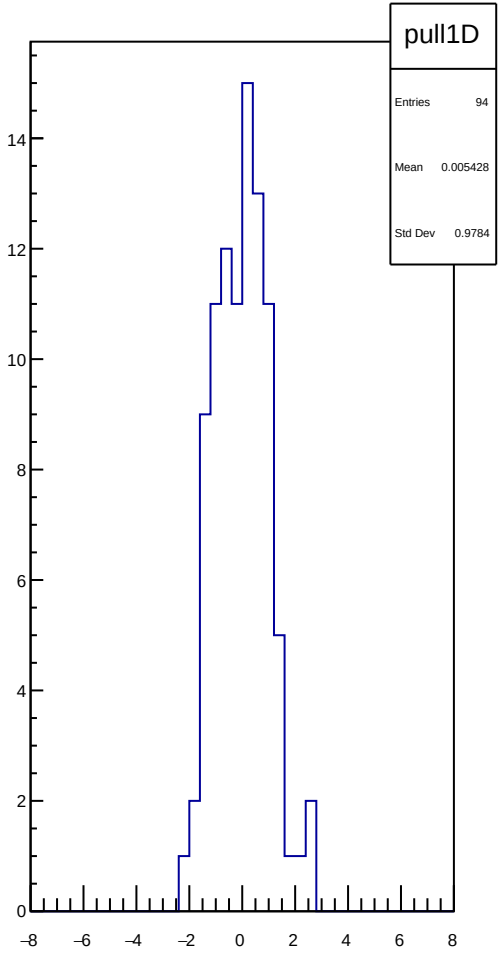

diff_cav4dX_rms vs run
×10^3
740
720
700
680
660
640
620
600
580
560
540
520
χ² / ndf 1.228e+04 / 93
p0 6.391e+05 ± 480

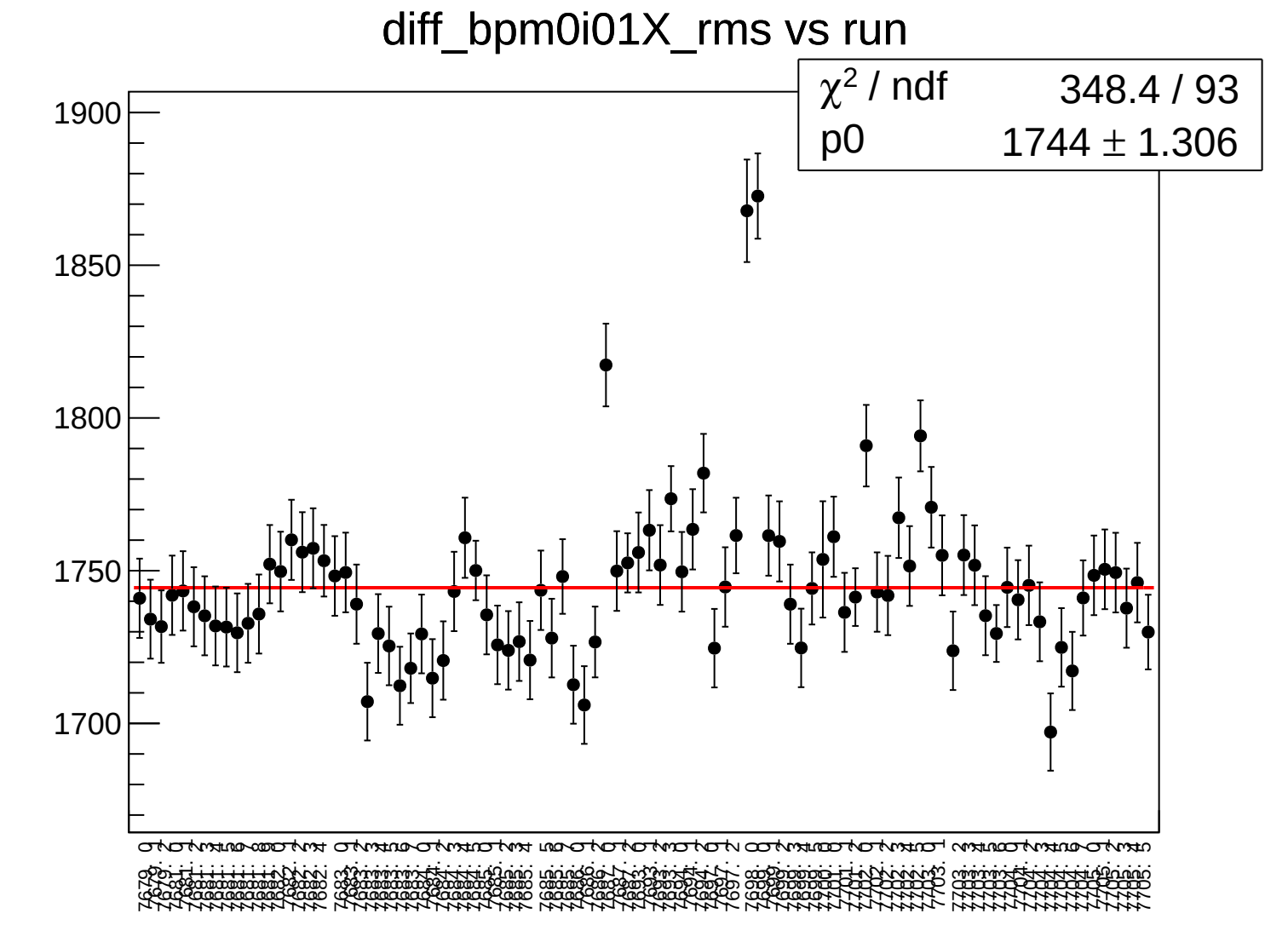

diff_cav4dY_mean vs run
χ^2 / ndf 84.9 / 93
p0 −54.24 ± 199.8
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 14.61
Std Dev 33.07
2
1
0
−1
−2

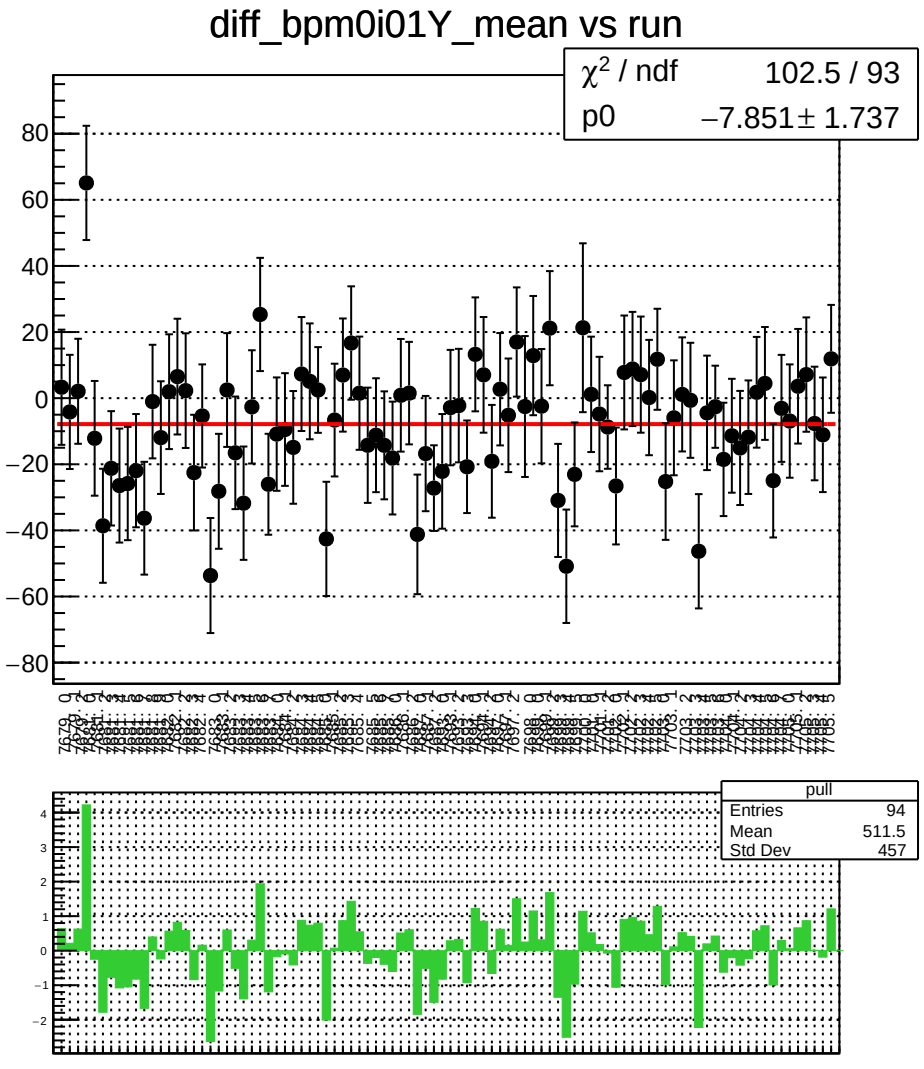

pull1D
Entries 94
Mean −0.01655
Std Dev 0.9502
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

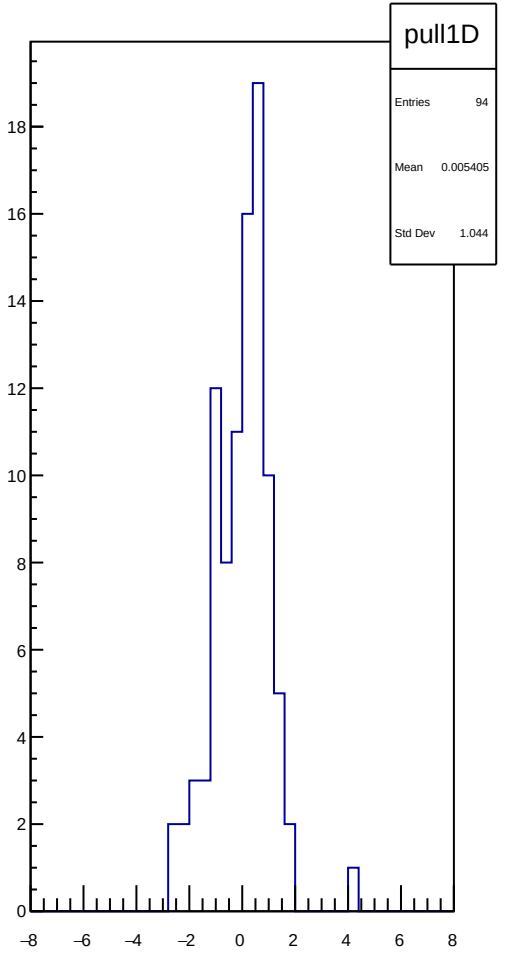

diff_cav4dY_rms vs run
×10^3
χ² / ndf 1.61e+05 / 93
p0 1.8e+05 ± 141.3
450
400
350
300
250
200
150
100

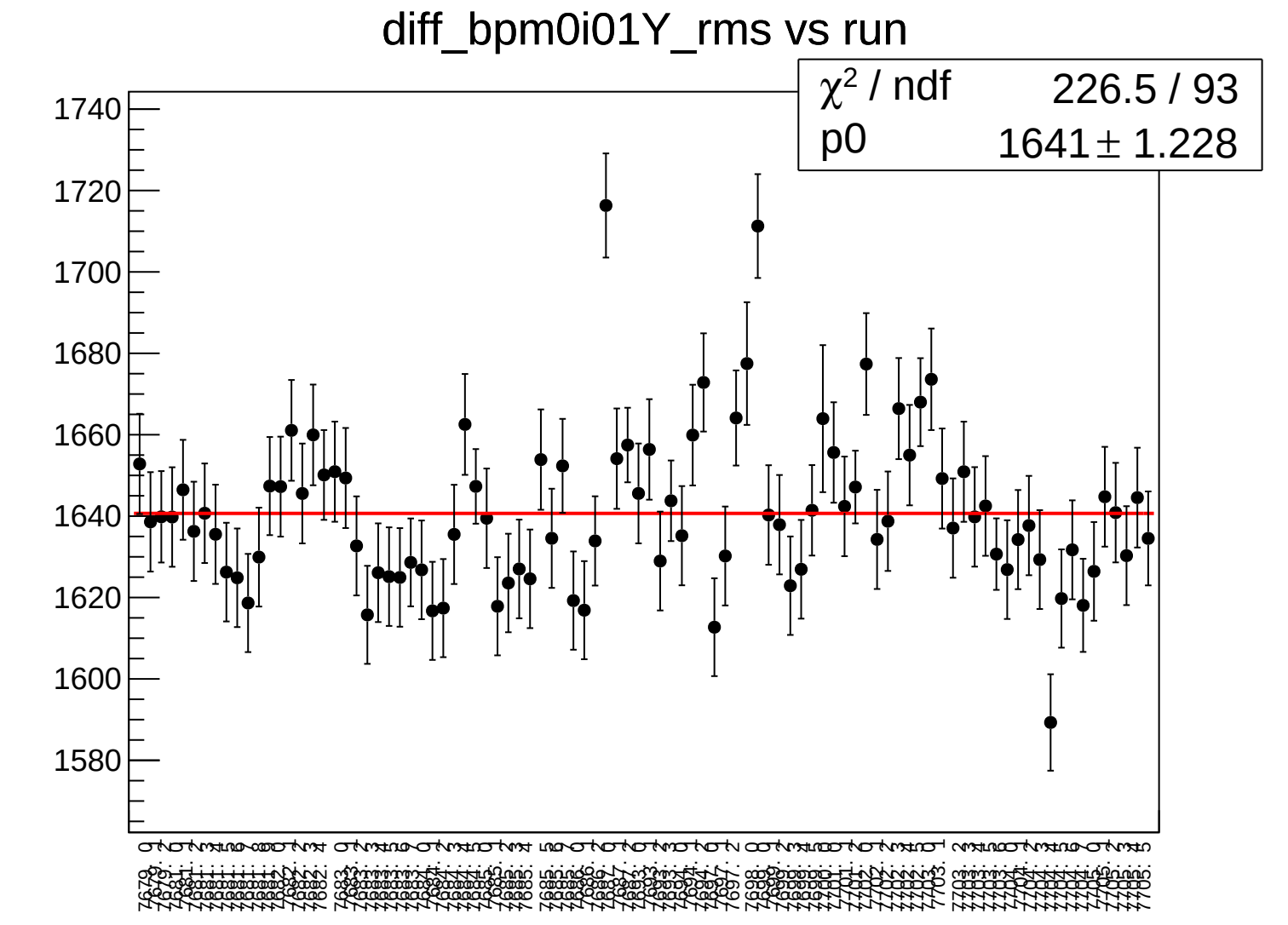

diff_bpm0i01X_mean vs run
χ² / ndf 89.99 / 93
p0 −32.33 ± 1.847
pull
Entries 94
Mean 449.1
Std Dev 412.1

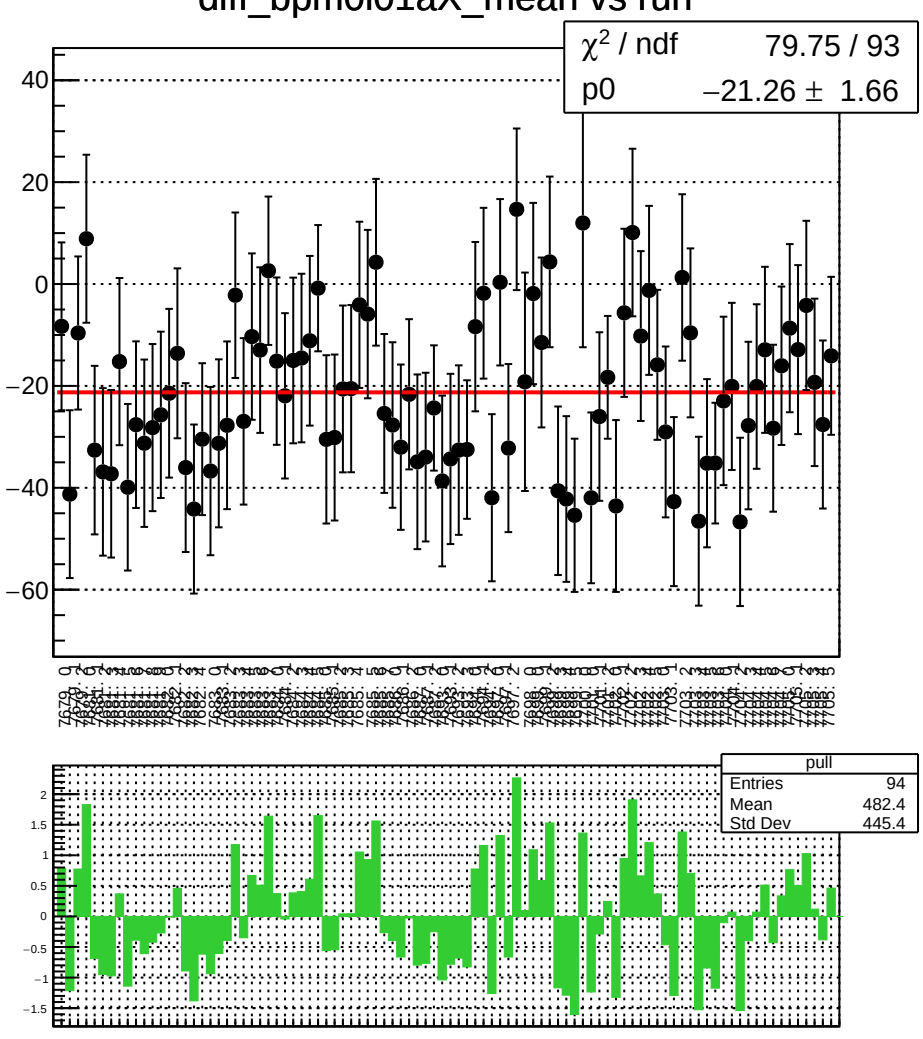

pull1D
Entries 94
Mean 0.005428
Std Dev 0.9784

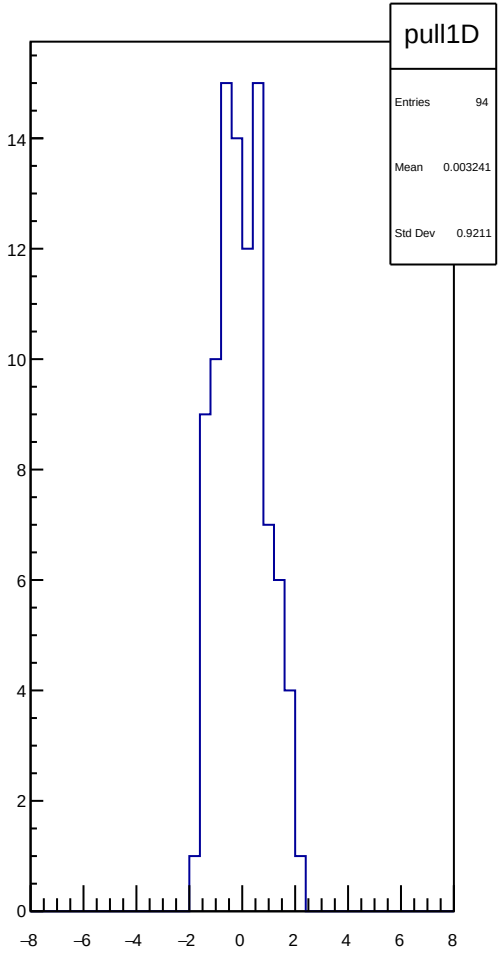

diff_bpm0i01X_rms vs run
χ² / ndf 348.4 / 93
p0 1744 ± 1.306
1900
1850
1800
1750
1700

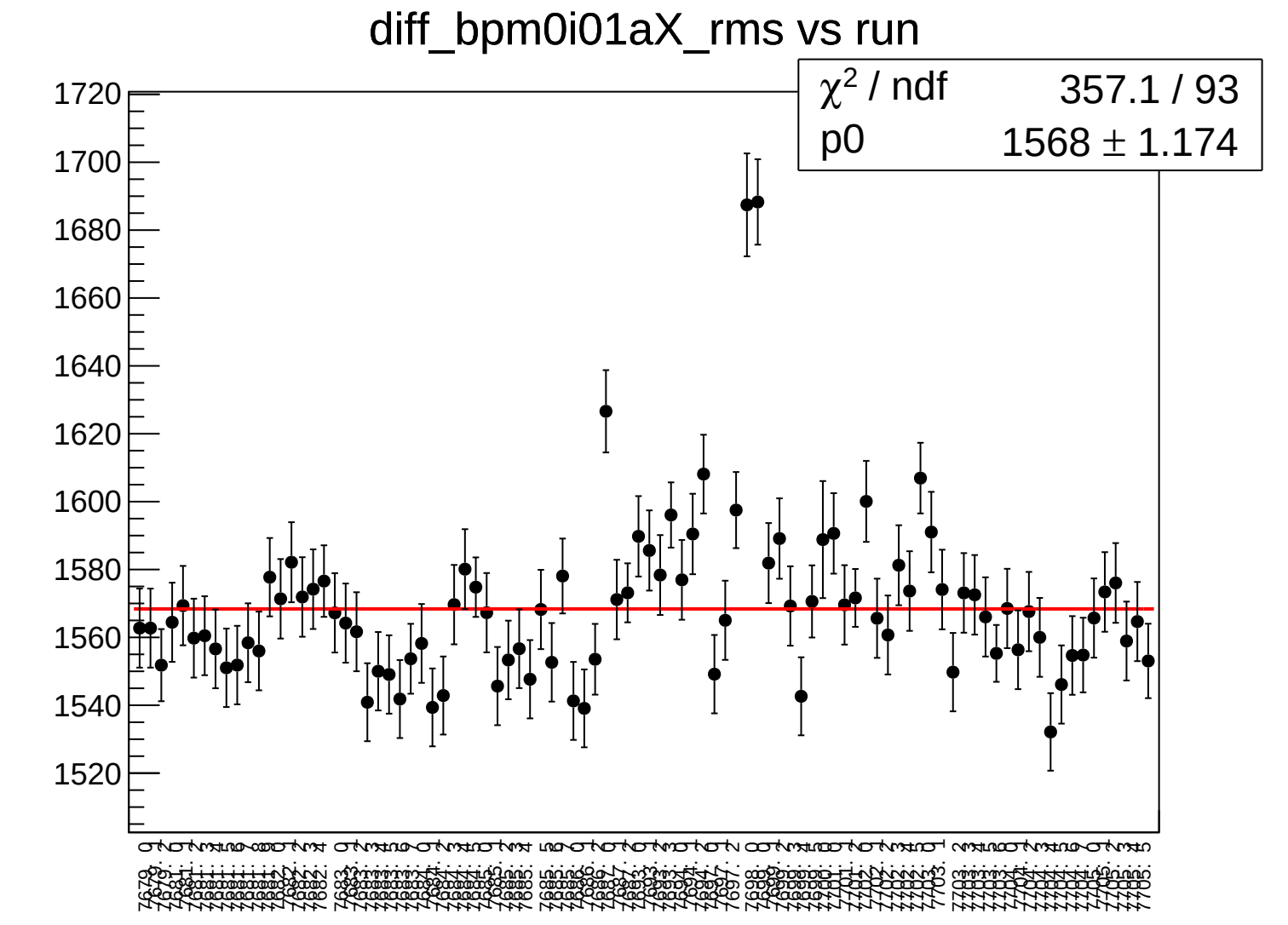

diff_bpm0i01Y_mean vs run
χ² / ndf 102.5 / 93
p0 −7.851± 1.737
pull
Entries 94
Mean 511.5
Std Dev 457

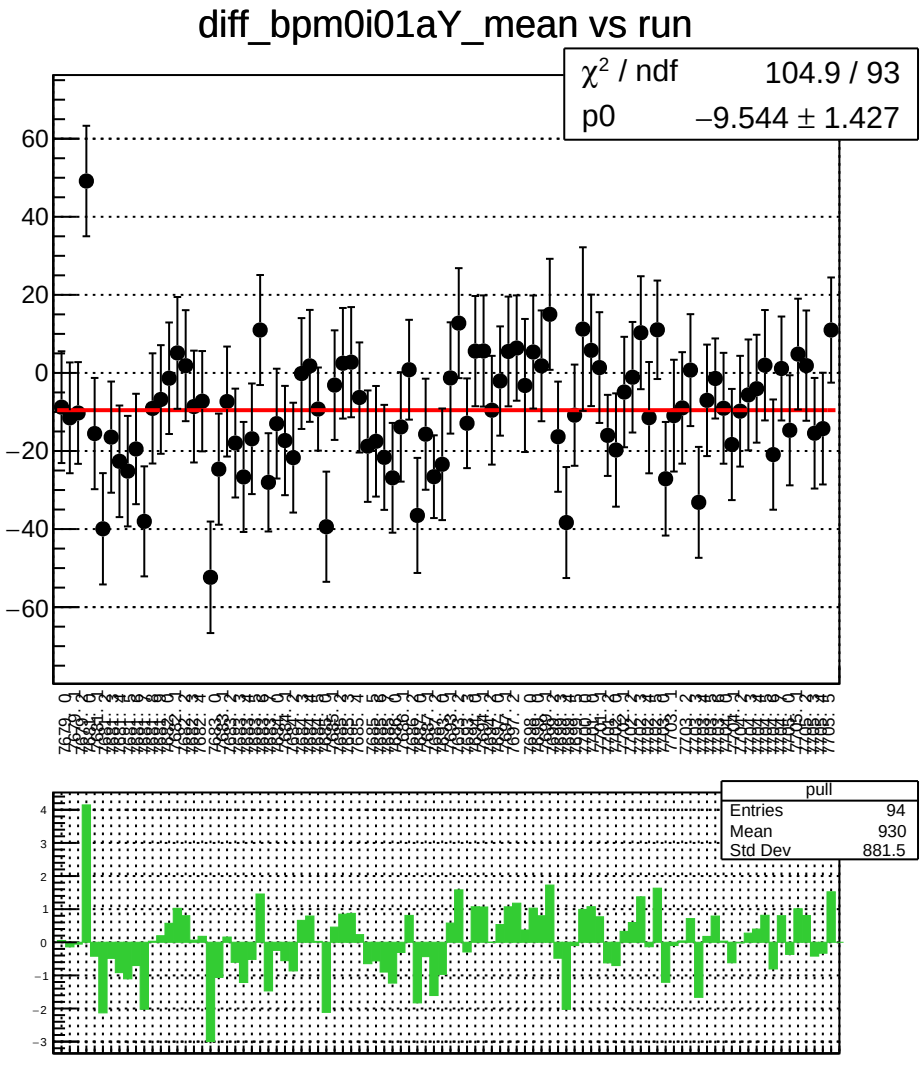

pull1D
Entries 94
Mean 0.005405
Std Dev 1.044

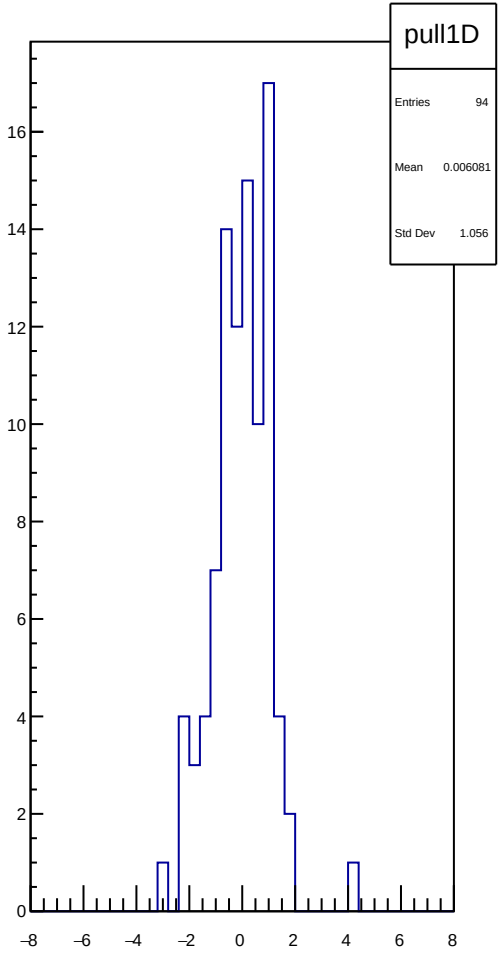

diff_bpm0i01Y_rms vs run
χ² / ndf 226.5 / 93
p0 1641 ± 1.228
1740
1720
1700
1680
1660
1640
1620
1600
1580

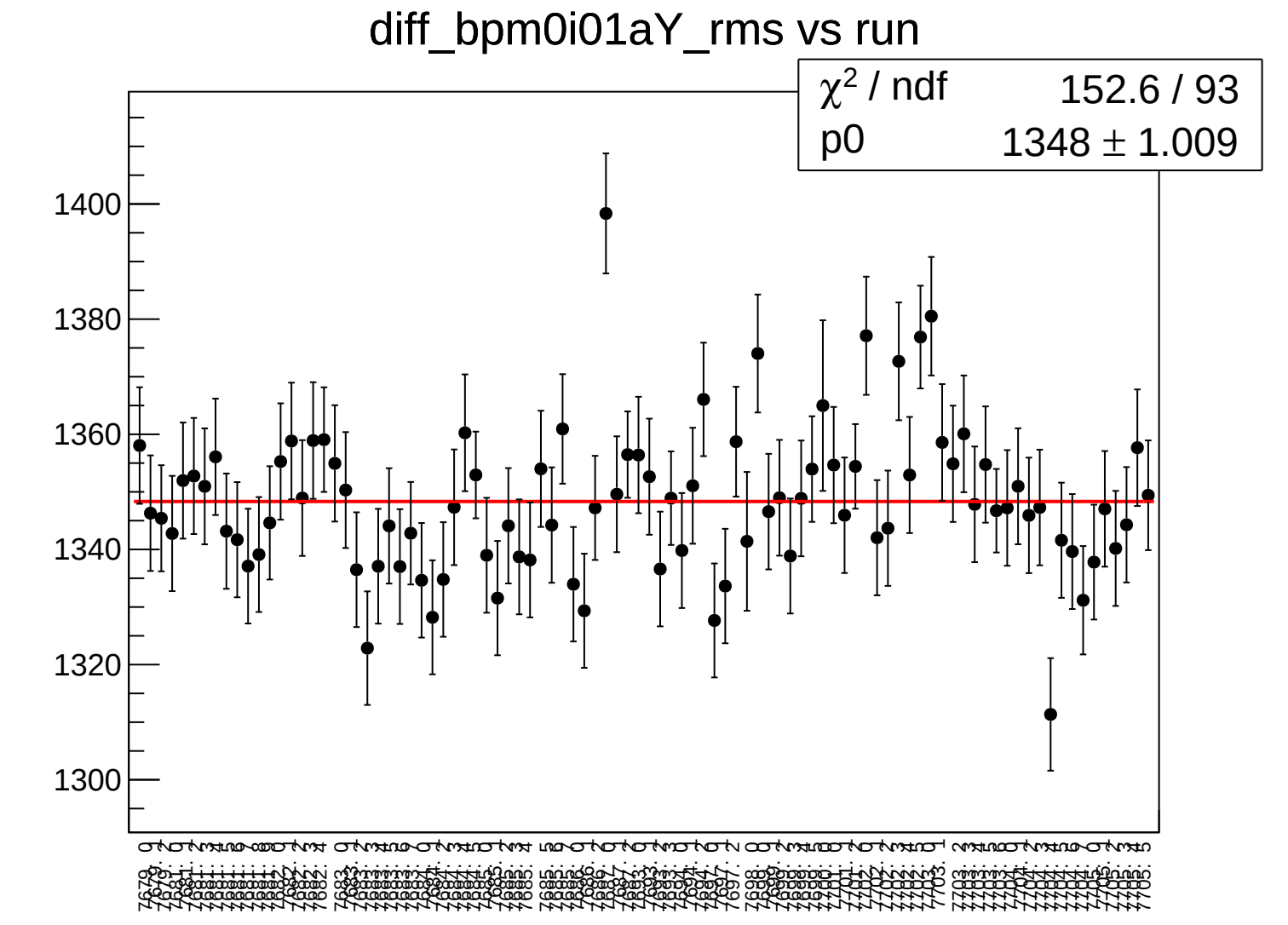

diff_bpm0i01aX_mean vs run
χ² / ndf 79.75 / 93
p0 −21.26 ± 1.66
pull
Entries 94
Mean 482.4
Std Dev 445.4

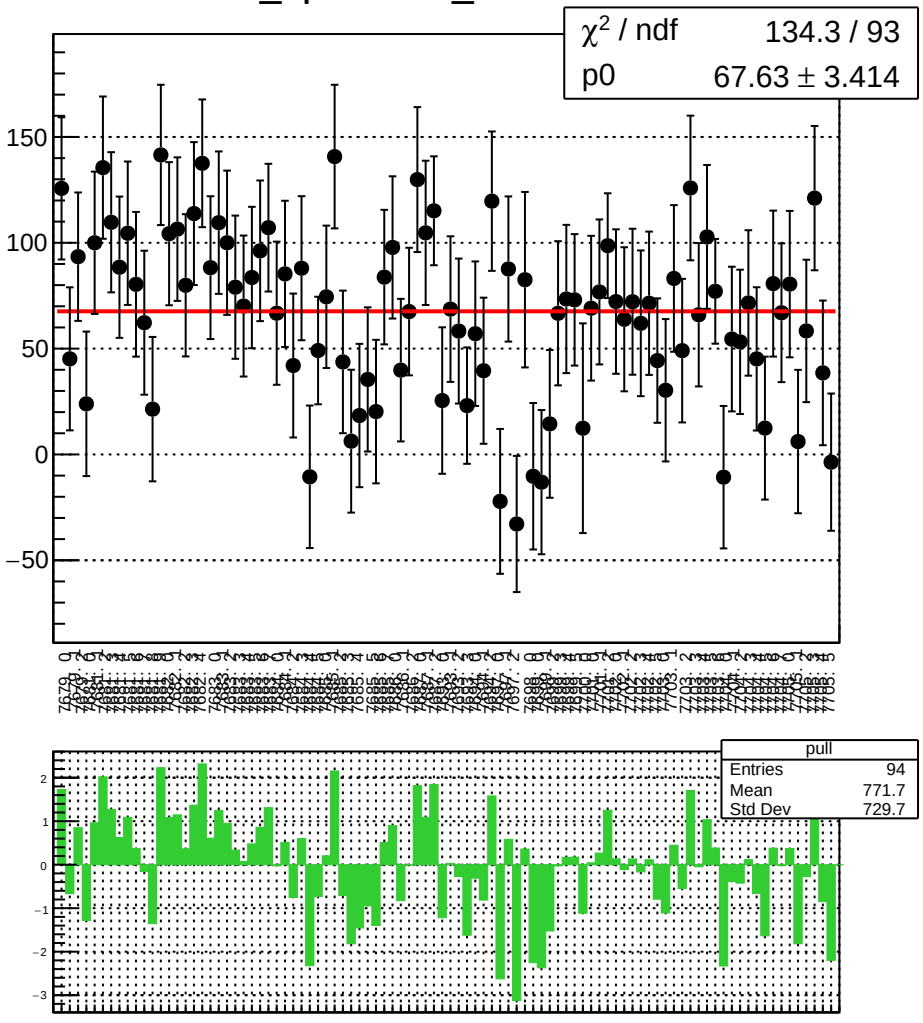

pull1D
Entries 94
Mean 0.003241
Std Dev 0.9211

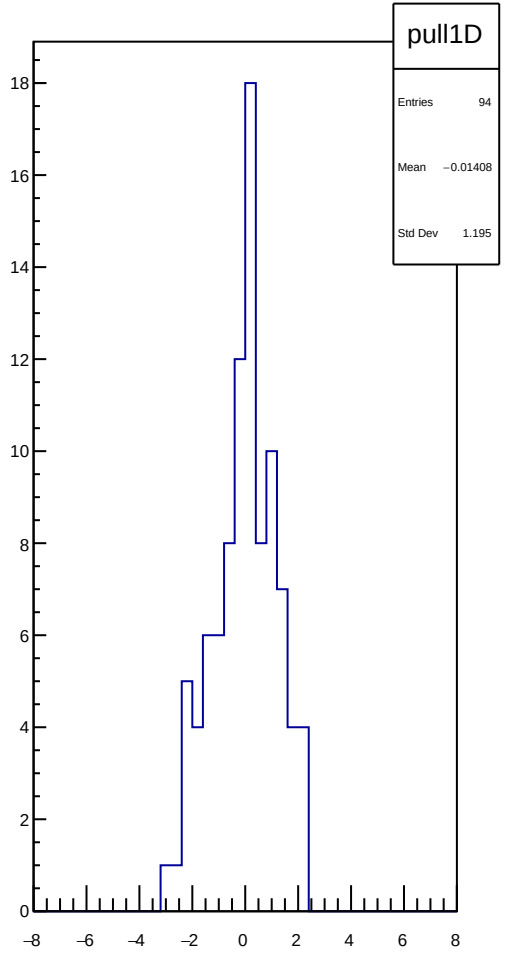

diff_bpm0i01aX_rms vs run
χ² / ndf 357.1 / 93
p0 1568 ± 1.174
1720
1700
1680
1660
1640
1620
1600
1580
1560
1540
1520

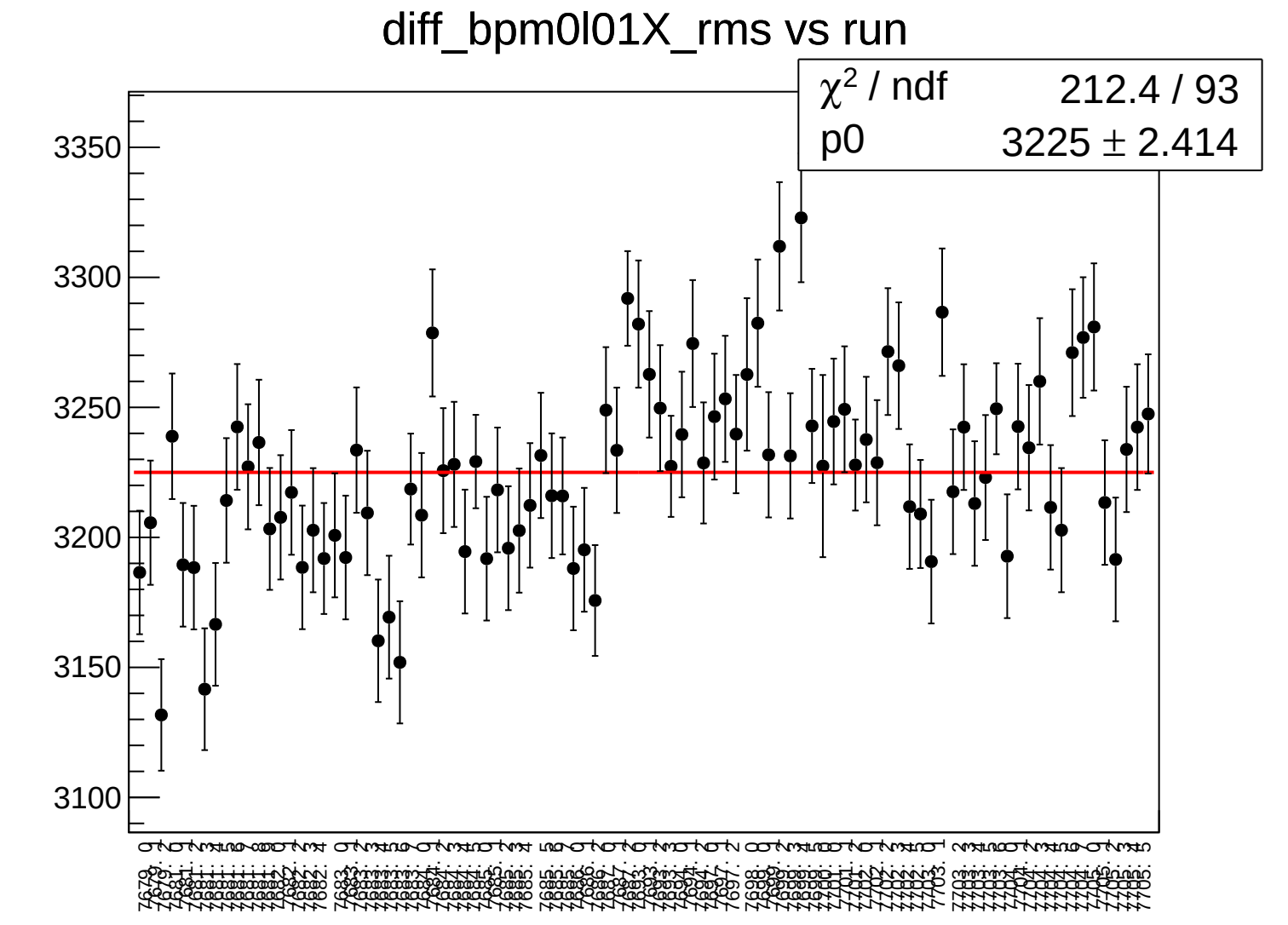

diff_bpm0i01aY_mean vs run
χ² / ndf 104.9 / 93
p0 −9.544 ± 1.427
60
40
20
0
−20
−40
−60
pull
Entries 94
Mean 930
Std Dev 881.5
4
3
2
1
0
−1
−2
−3

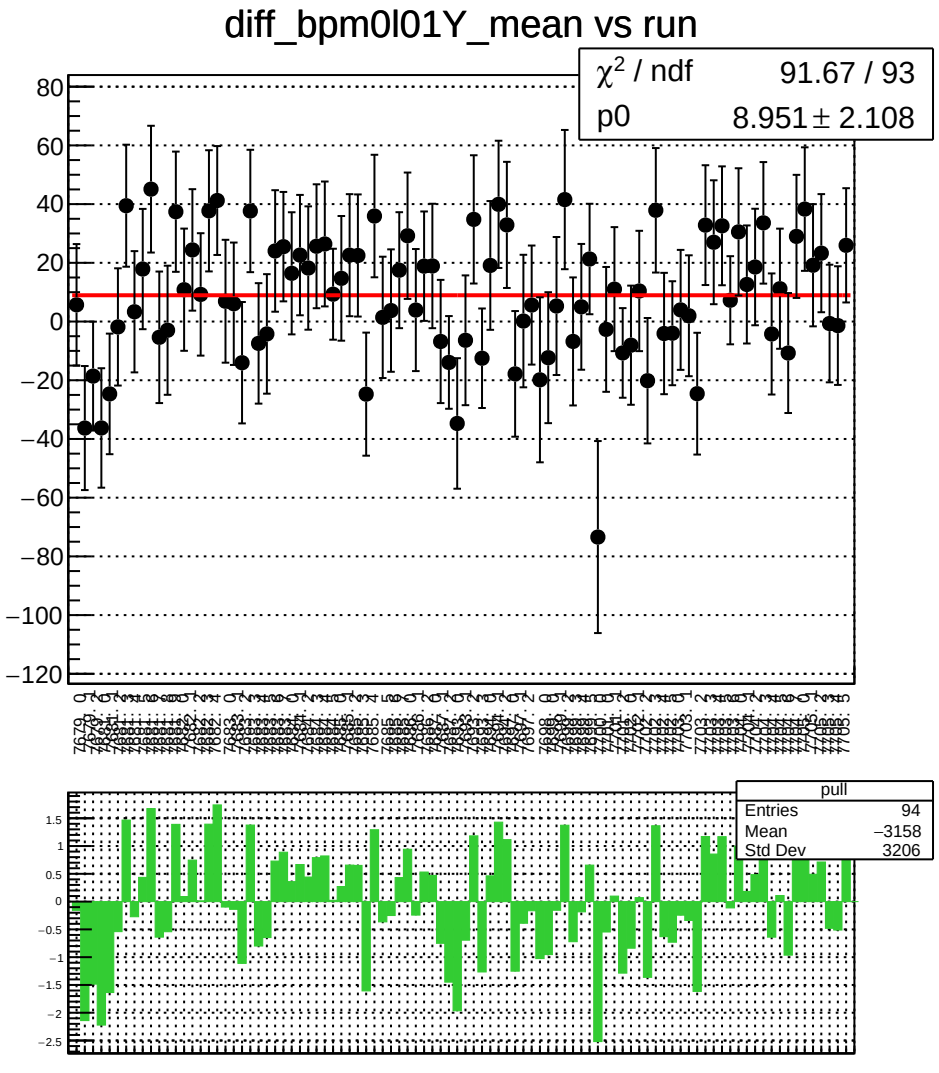

pull1D
Entries 94
Mean 0.006081
Std Dev 1.056
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

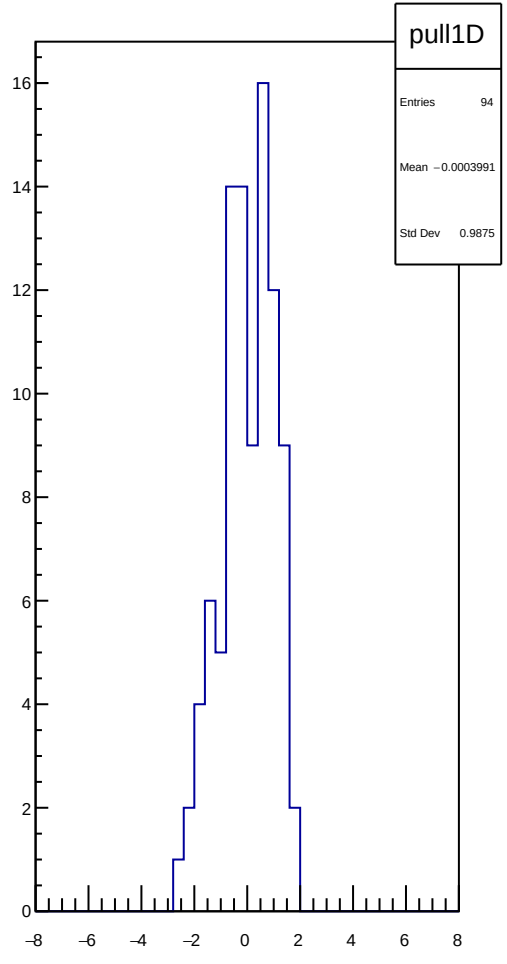

diff_bpm0i01aY_rms vs run
χ² / ndf 152.6 / 93
p0 1348 ± 1.009
1400
1380
1360
1340
1320
1300

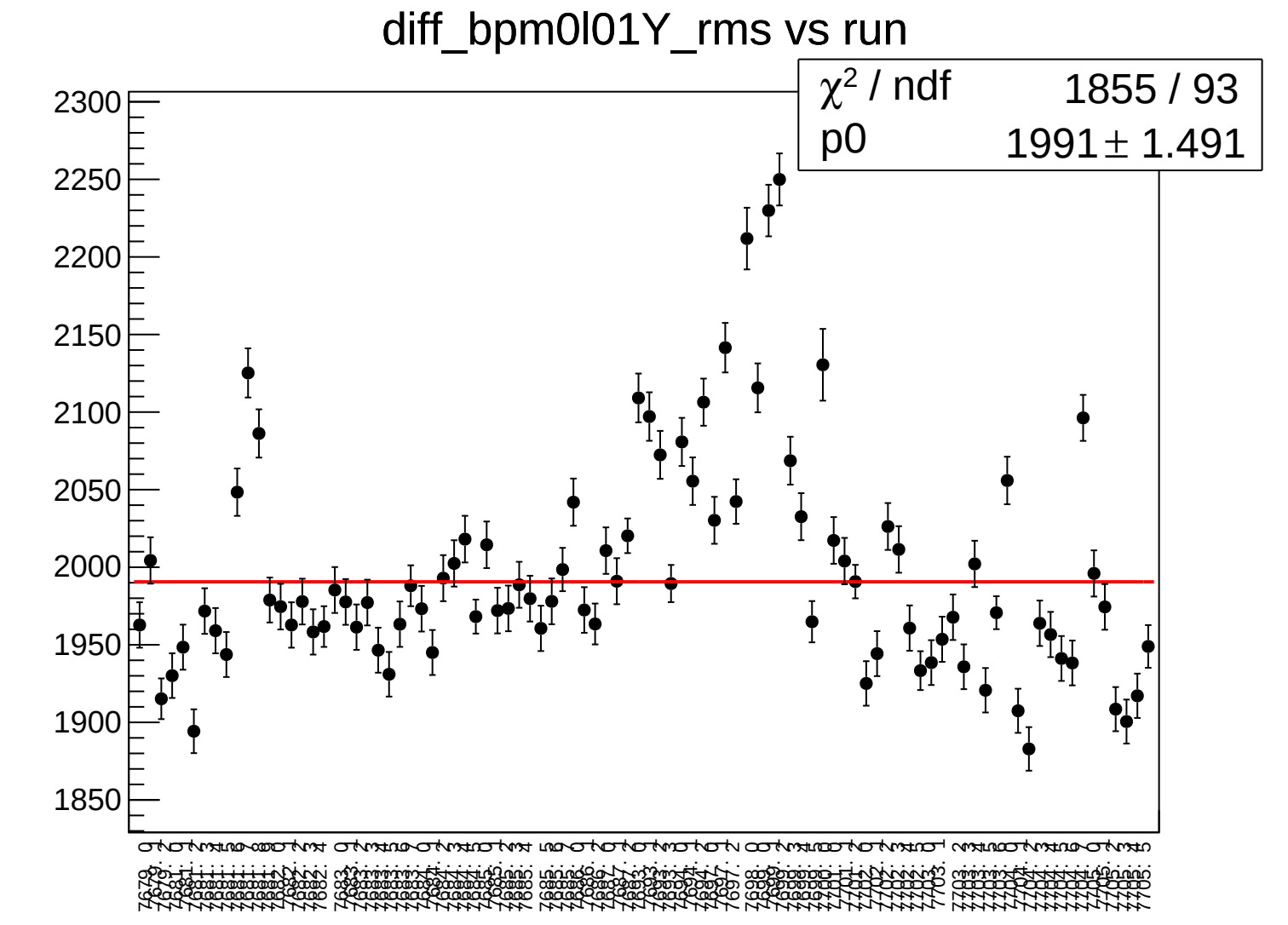

diff_bpm0l01X_mean vs run
χ² / ndf 134.3 / 93
p0 67.63 ± 3.414
150
100
50
0
−50
pull
Entries 94
Mean 771.7
Std Dev 729.7
2
1
0
−1
−2
−3

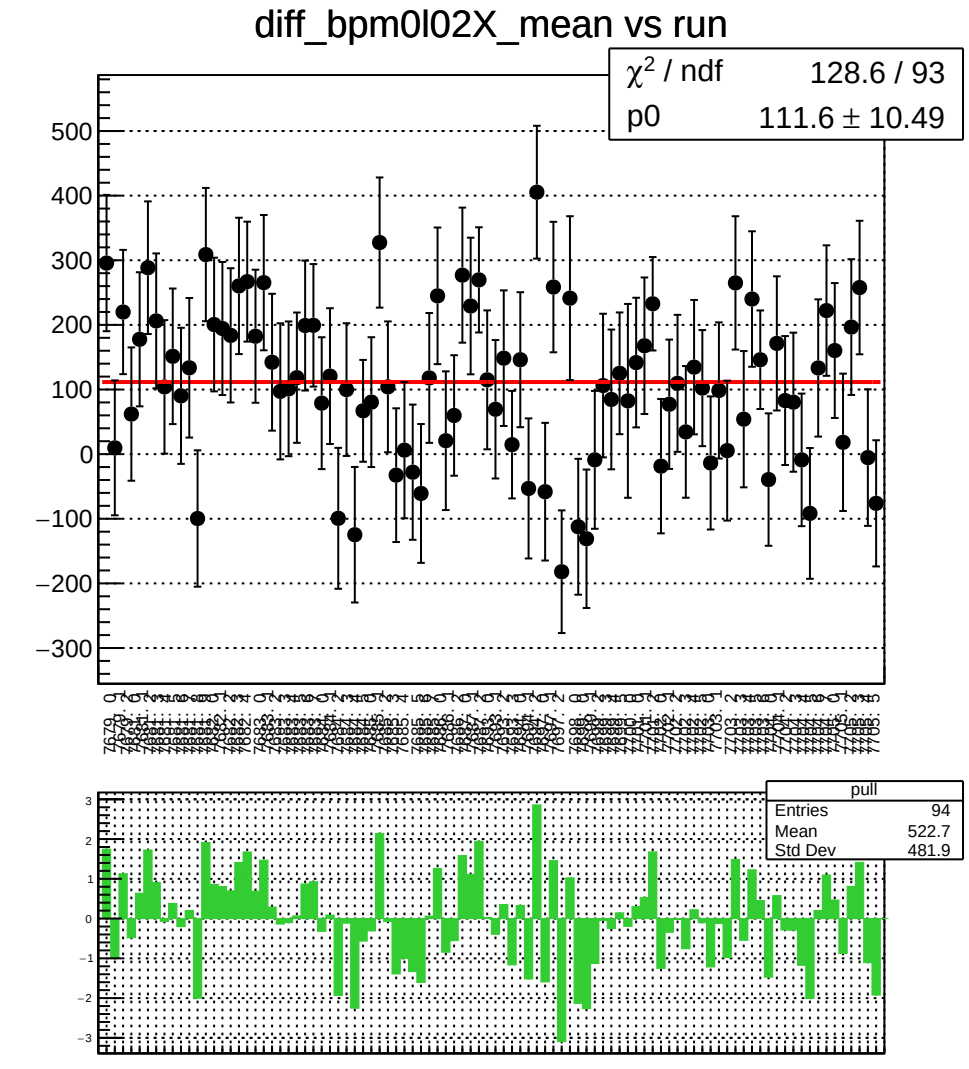

pull1D
Entries 94
Mean −0.01408
Std Dev 1.195
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

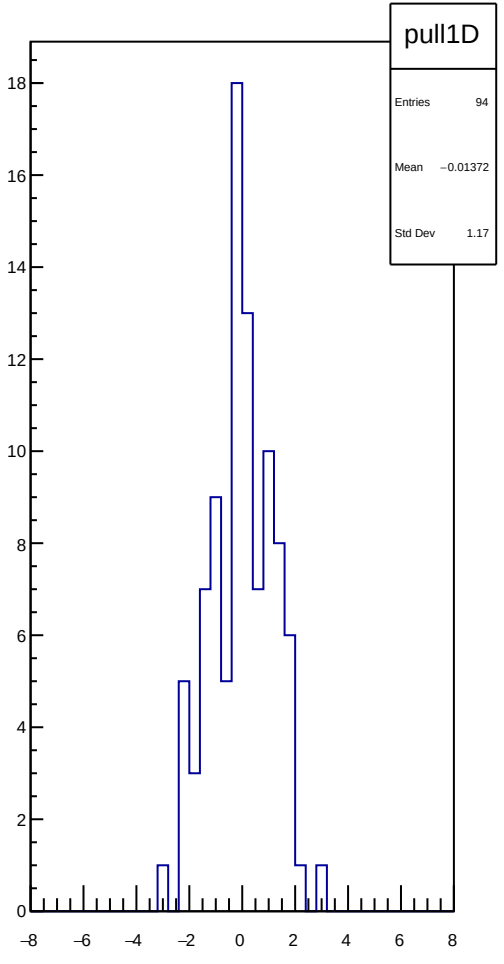

diff_bpm0l01X_rms vs run
χ² / ndf 212.4 / 93
p0 3225 ± 2.414
3350
3300
3250
3200
3150
3100

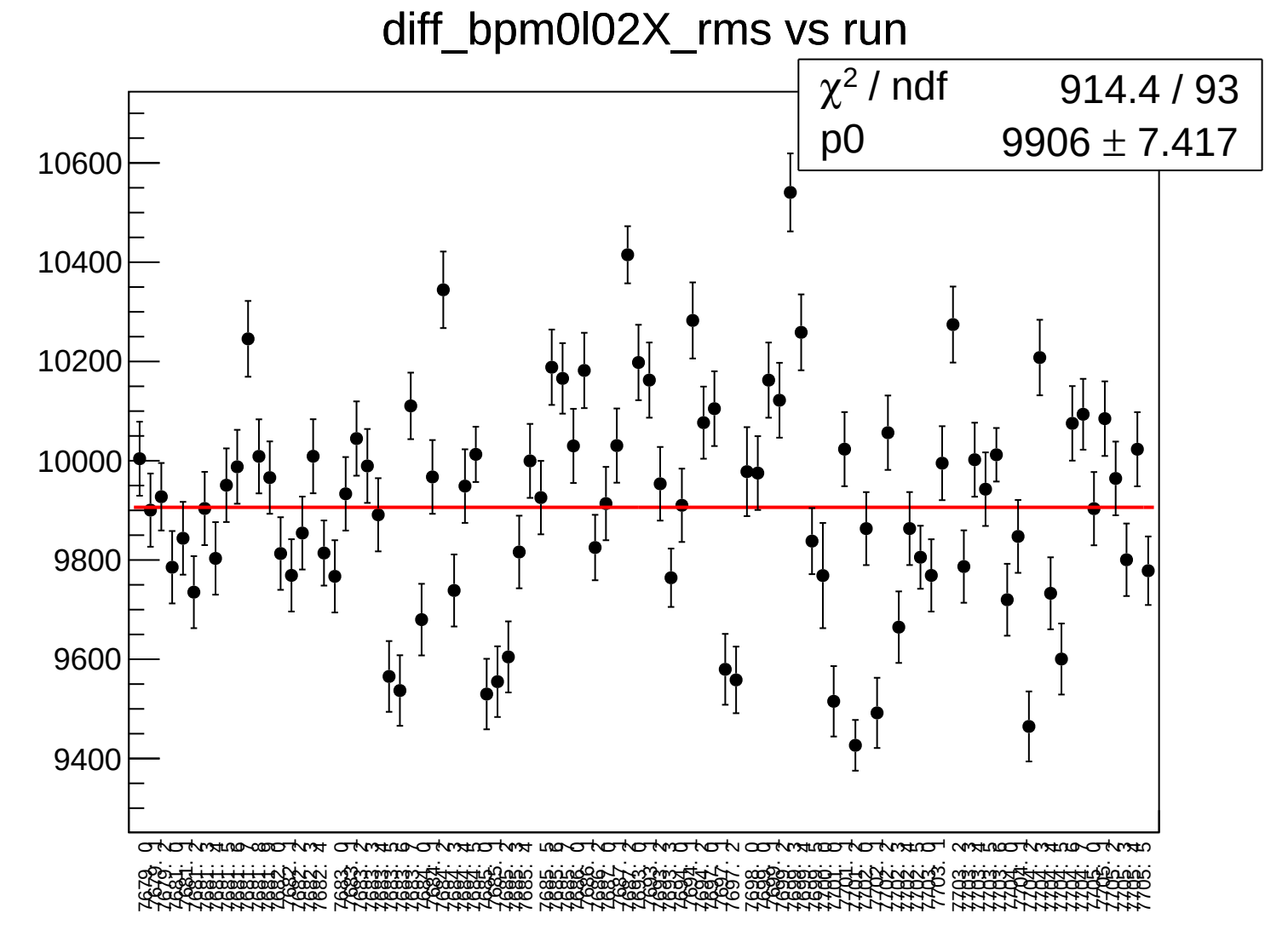

diff_bpm0l01Y_mean vs run
χ^2 / ndf 91.67 / 93
p0 8.951 ± 2.108
pull
Entries 94
Mean −3158
Std Dev 3206

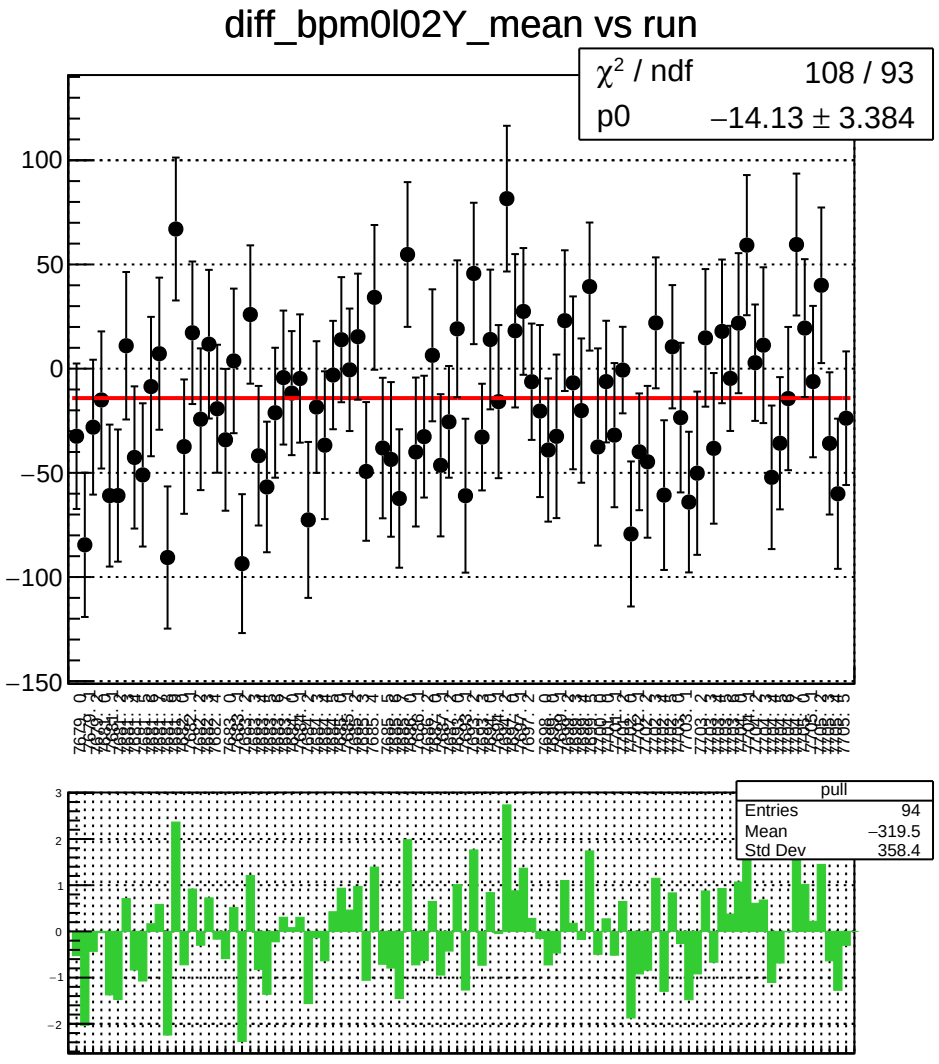

pull1D
Entries 94
Mean −0.0003991
Std Dev 0.9875

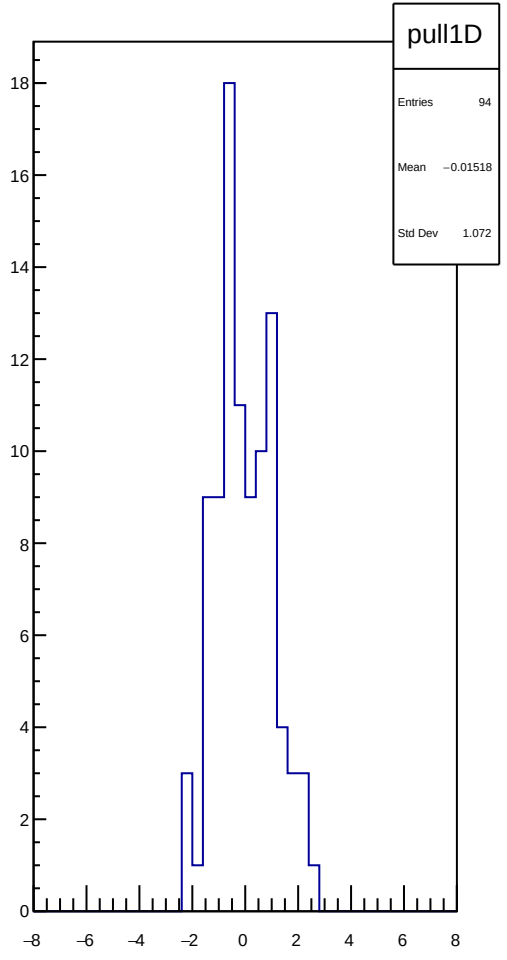

diff_bpm0l01Y_rms vs run
χ² / ndf 1855 / 93
p0 1991 ± 1.491
2300
2250
2200
2150
2100
2050
2000
1950
1900
1850

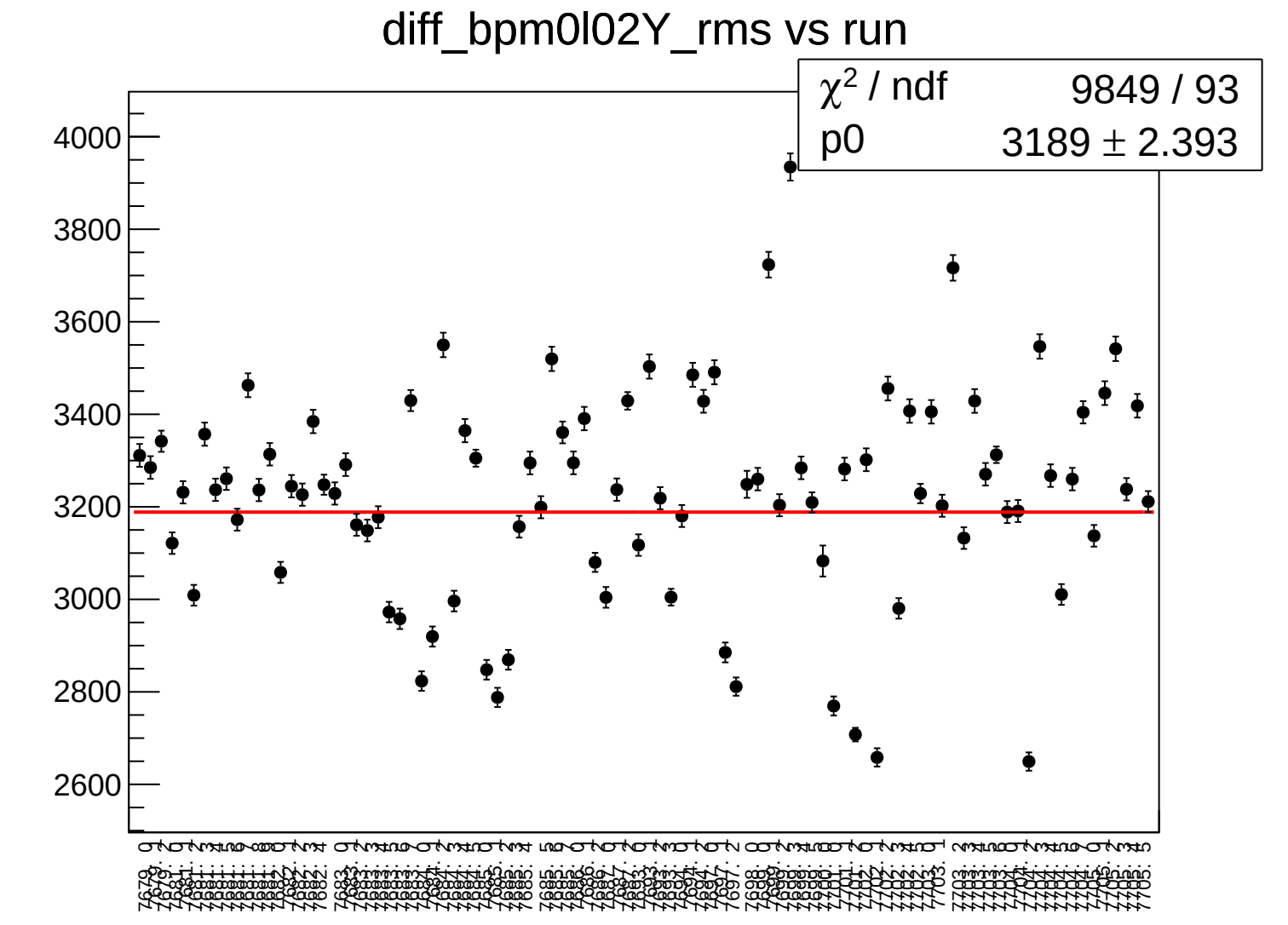

diff_bpm0l02X_mean vs run
χ² / ndf 128.6 / 93
p0 111.6 ± 10.49
pull
Entries 94
Mean 522.7
Std Dev 481.9

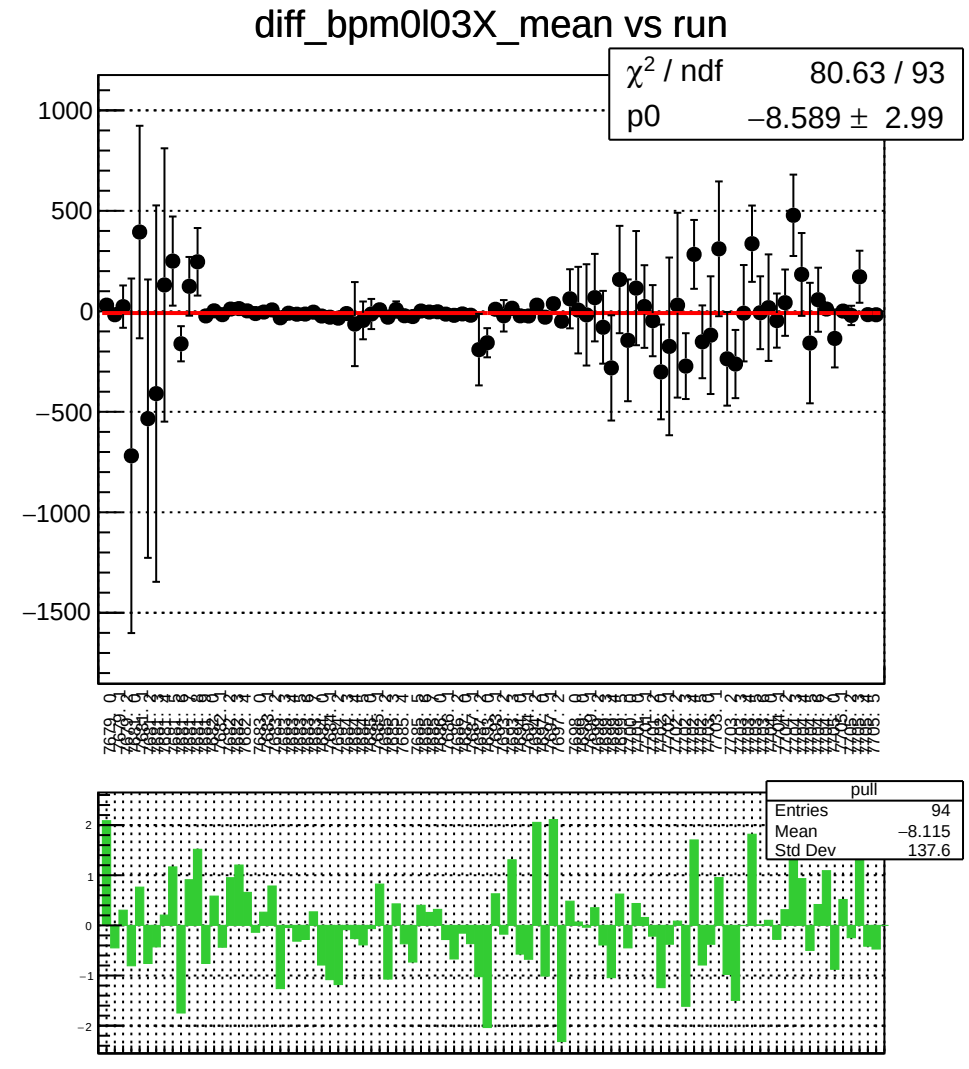

pull1D
Entries 94
Mean −0.01372
Std Dev 1.17

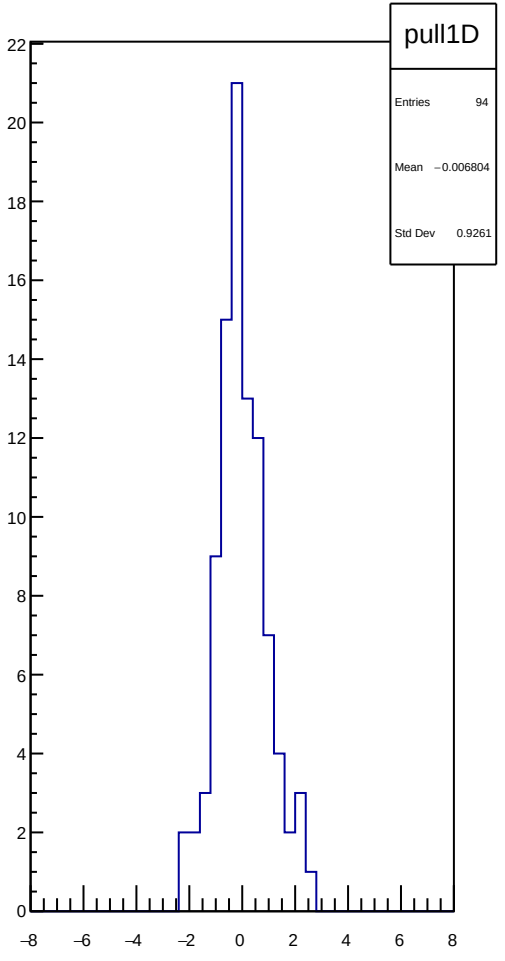

diff_bpm0l02X_rms vs run
χ² / ndf 914.4 / 93
p0 9906 ± 7.417
10600
10400
10200
10000
9800
9600
9400

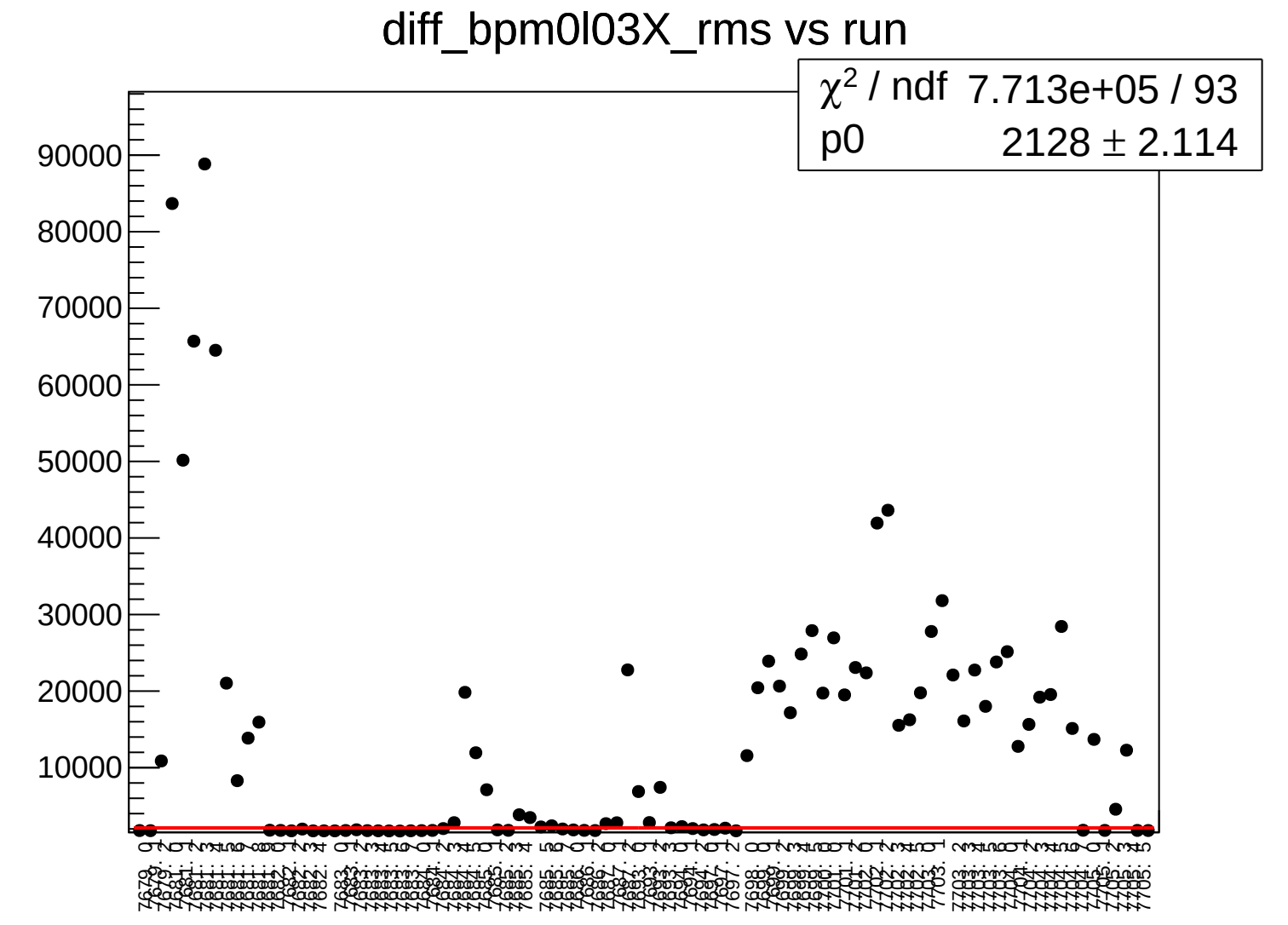

diff_bpm0l02Y_mean vs run
χ² / ndf 108 / 93
p0 −14.13 ± 3.384
100
50
0
−50
−100
−150
pull
Entries 94
Mean −319.5
Std Dev 358.4
3
2
1
0
−1
−2

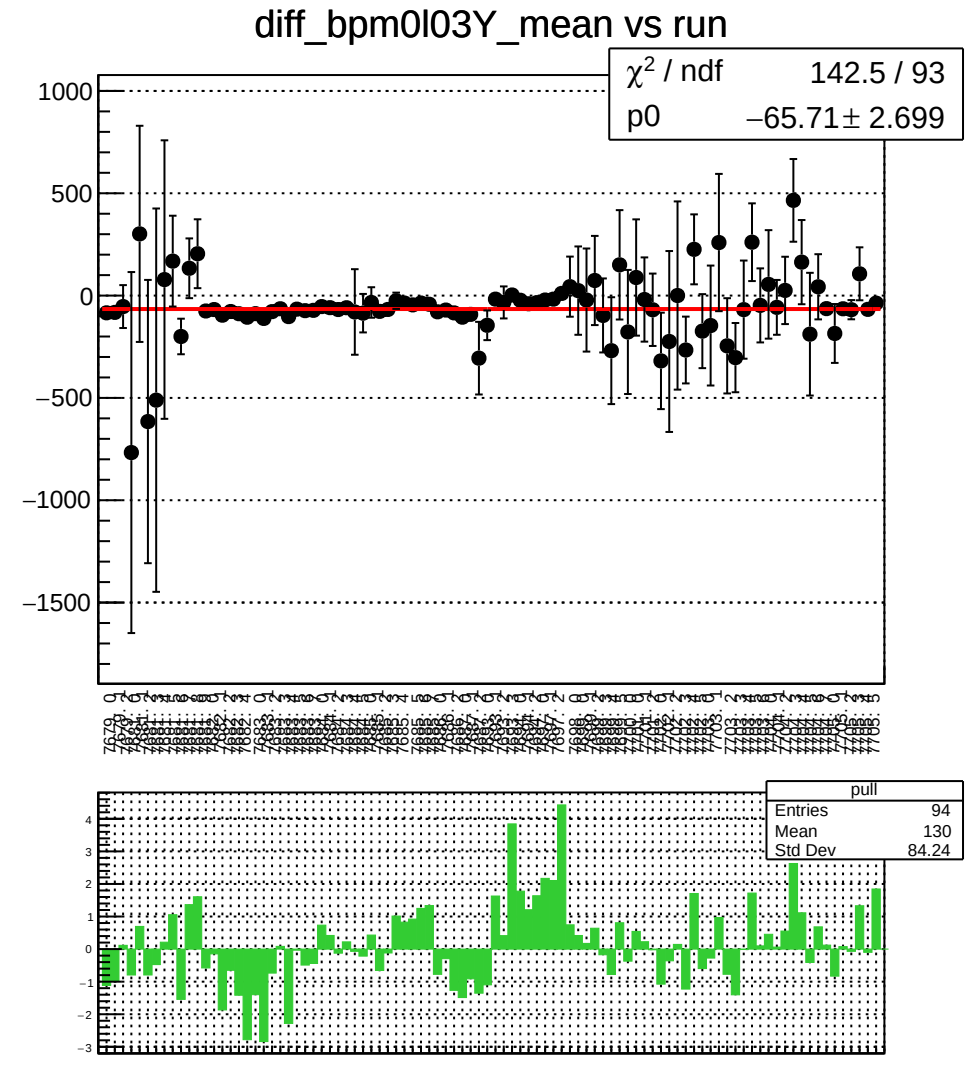

pull1D
Entries 94
Mean −0.01518
Std Dev 1.072
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

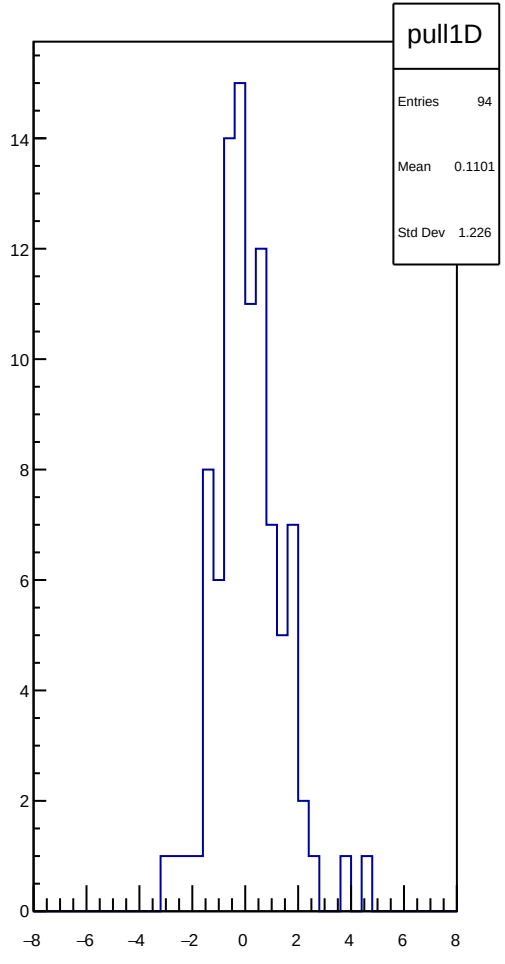

diff_bpm0l02Y_rms vs run
χ² / ndf 9849 / 93
p0 3189 ± 2.393
4000
3800
3600
3400
3200
3000
2800
2600

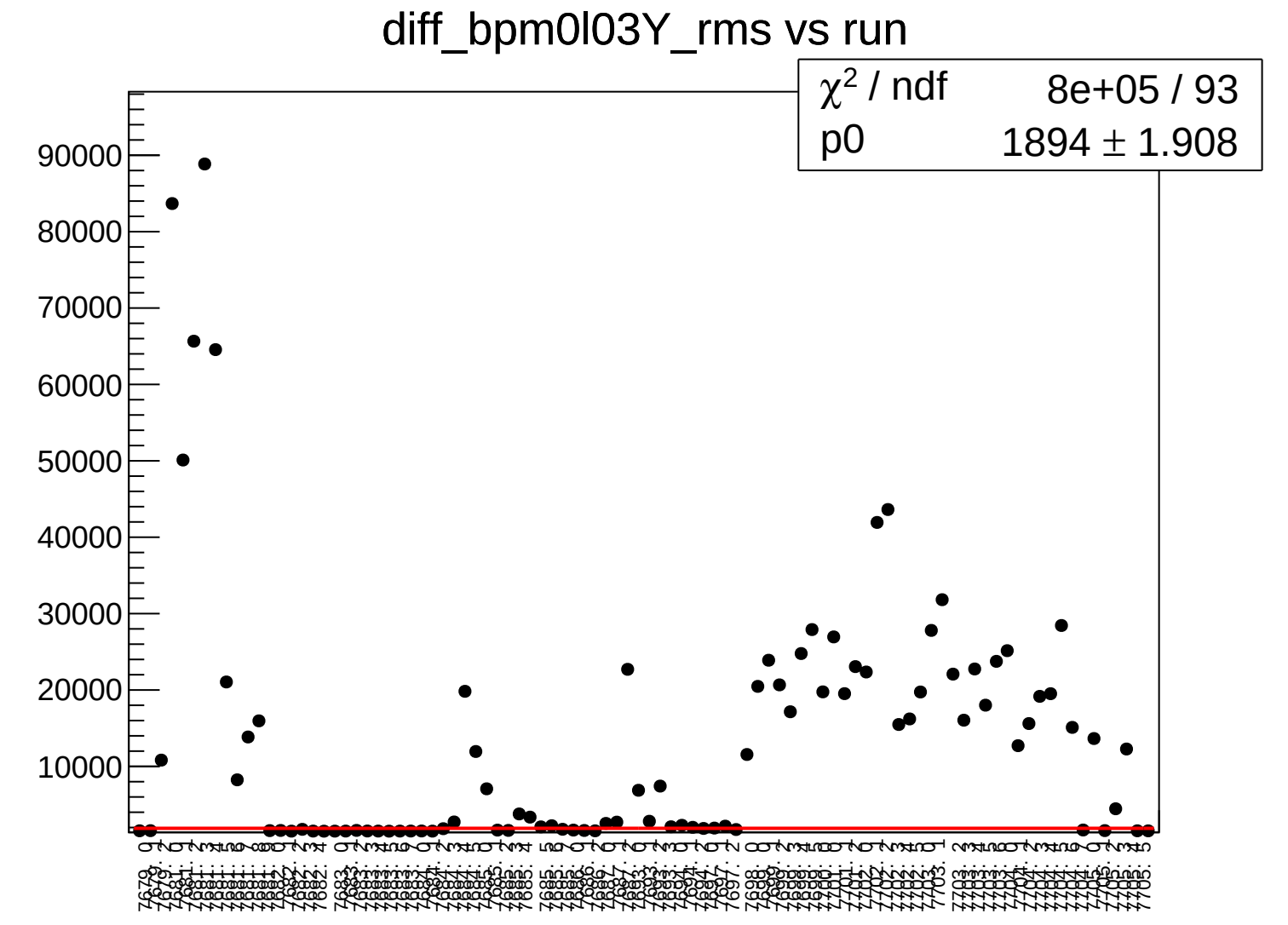

diff_bpm0l03X_mean vs run
χ² / ndf 80.63 / 93
p0 −8.589 ± 2.99
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean −8.115
Std Dev 137.6
2
1
0
−1
−2

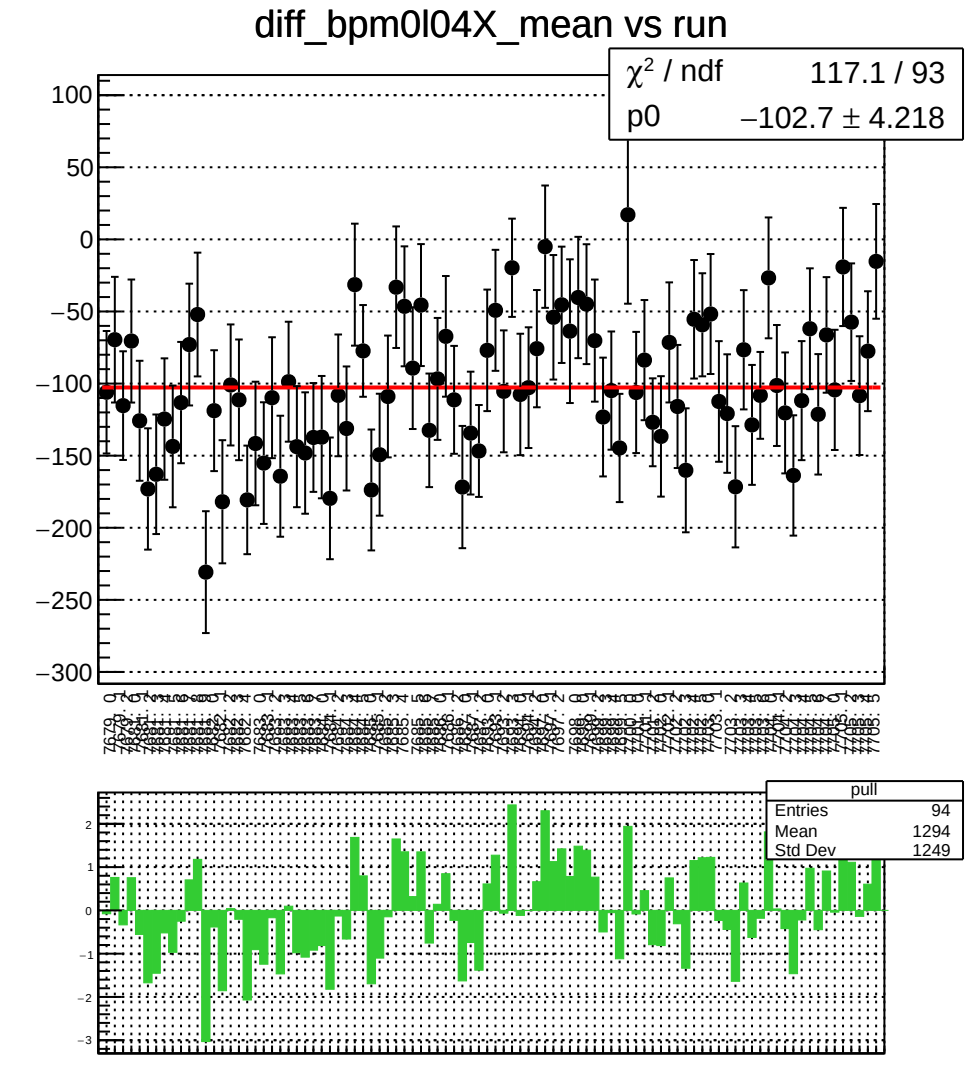

pull1D
Entries 94
Mean −0.006804
Std Dev 0.9261
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

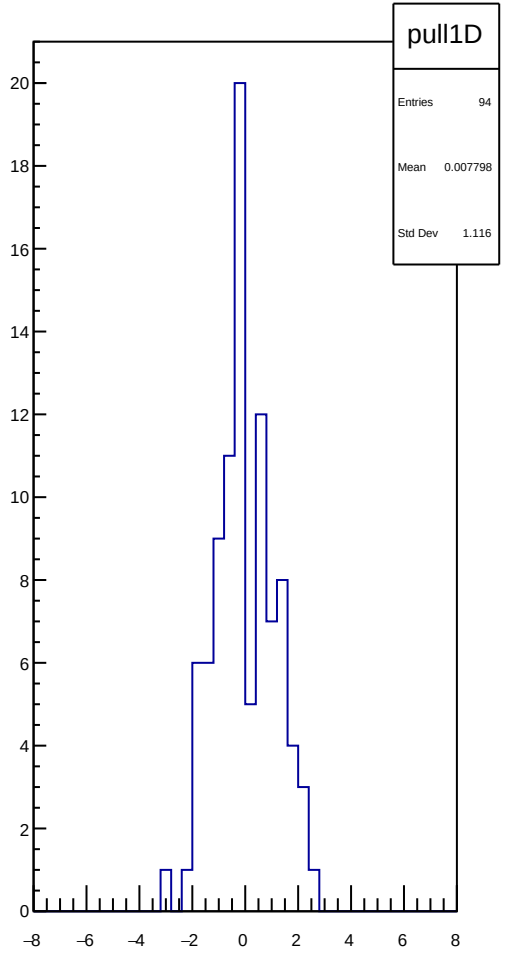

diff_bpm0l03X_rms vs run
χ^2 / ndf 7.713e+05 / 93
p0 2128 ± 2.114
90000
80000
70000
60000
50000
40000
30000
20000
10000

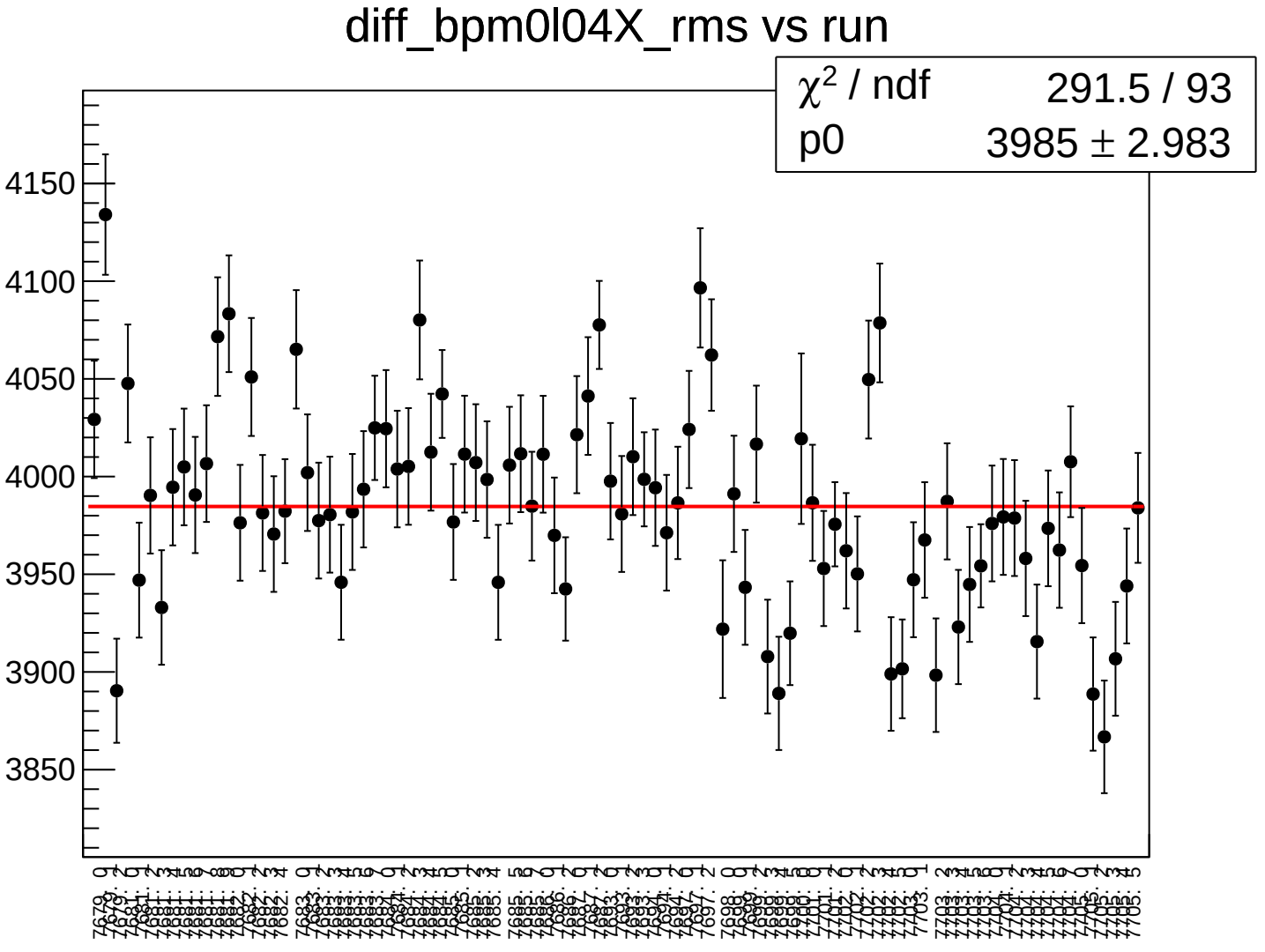

diff_bpm0l03Y_mean vs run
χ² / ndf 142.5 / 93
p0 −65.71 ± 2.699
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean 130
Std Dev 84.24
4
3
2
1
0
−1
−2
−3

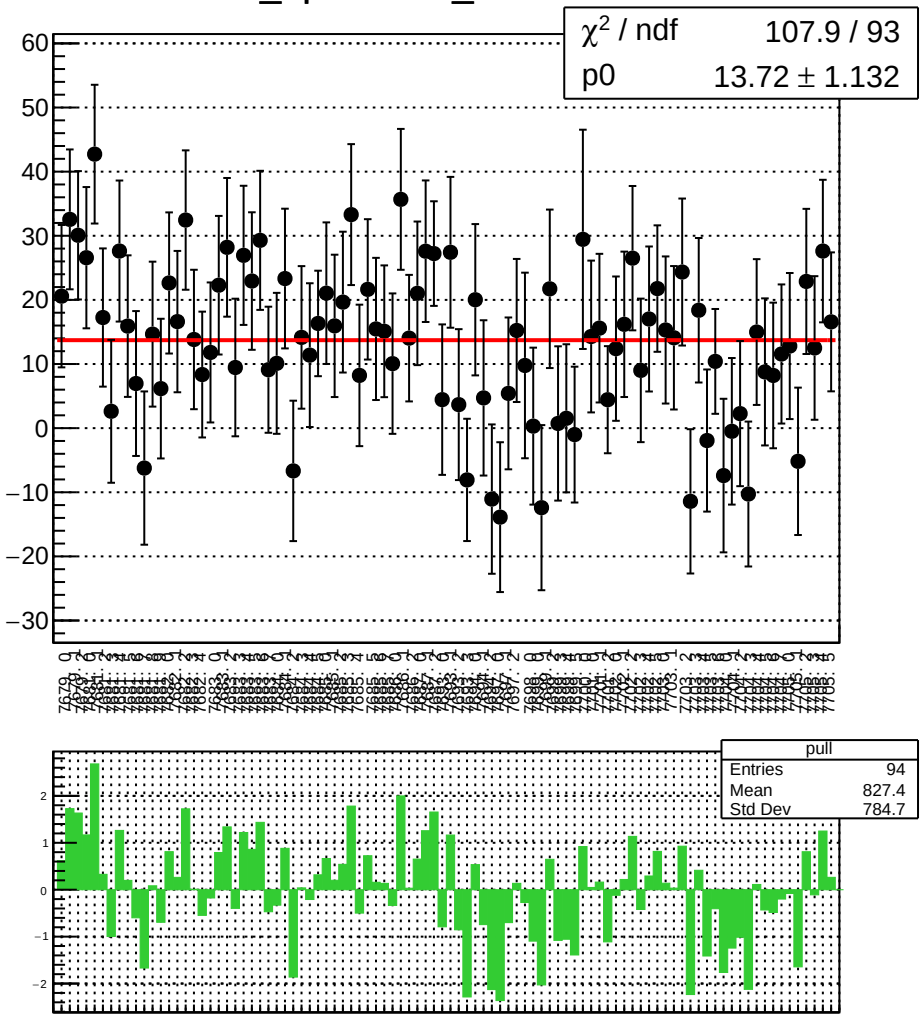

pull1D
Entries 94
Mean 0.1101
Std Dev 1.226
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

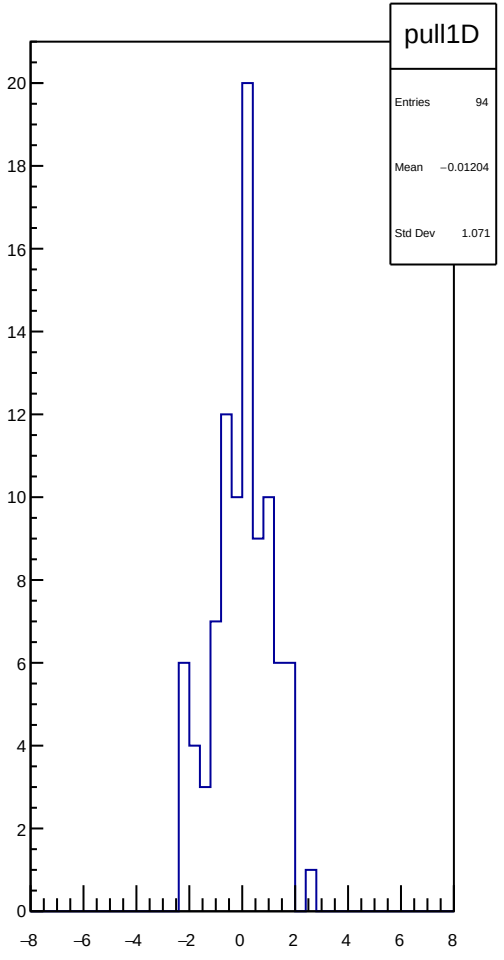

diff_bpm0l03Y_rms vs run
χ² / ndf 8e+05 / 93
p0 1894 ± 1.908
90000
80000
70000
60000
50000
40000
30000
20000
10000

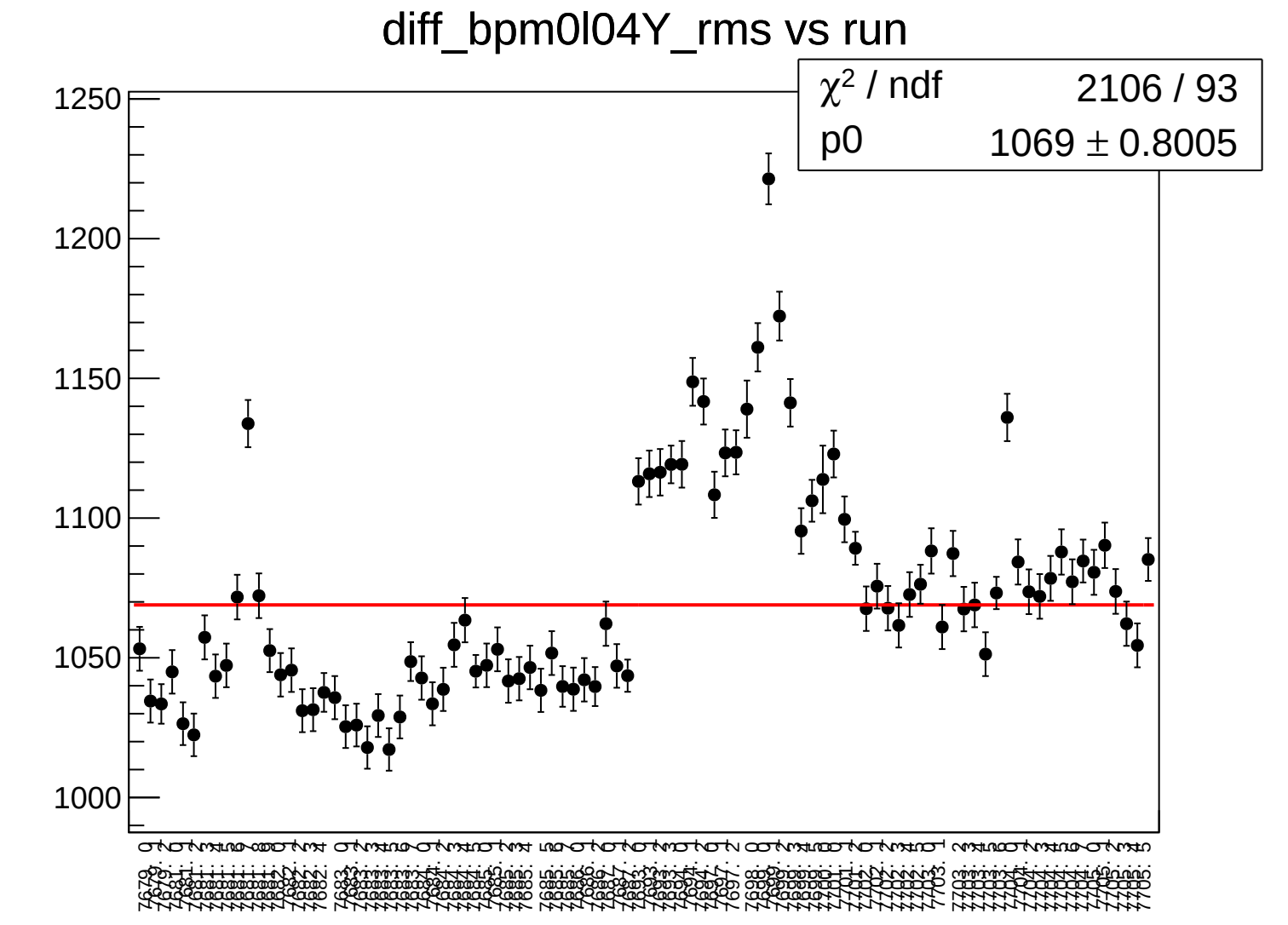

diff_bpm0l04X_mean vs run
χ² / ndf 117.1 / 93
p0 −102.7 ± 4.218
pull
Entries 94
Mean 1294
Std Dev 1249

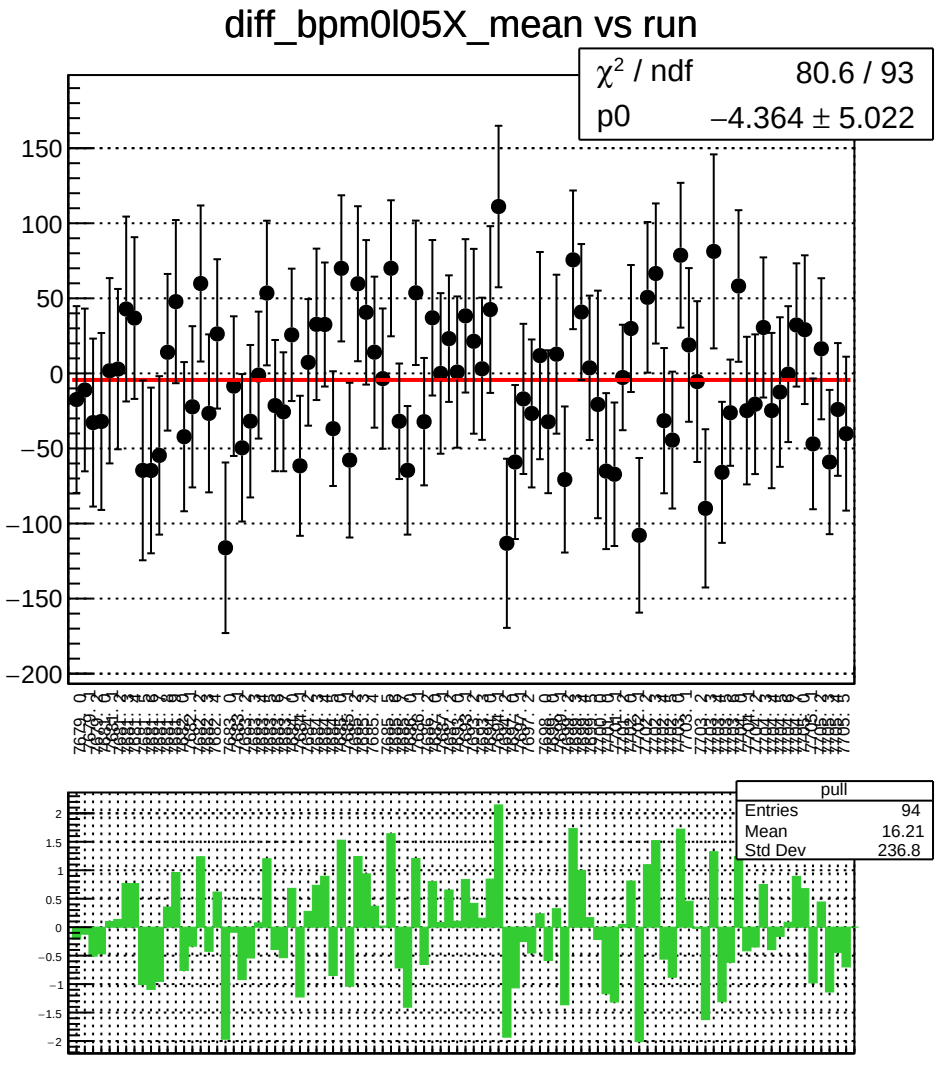

pull1D
Entries 94
Mean 0.007798
Std Dev 1.116

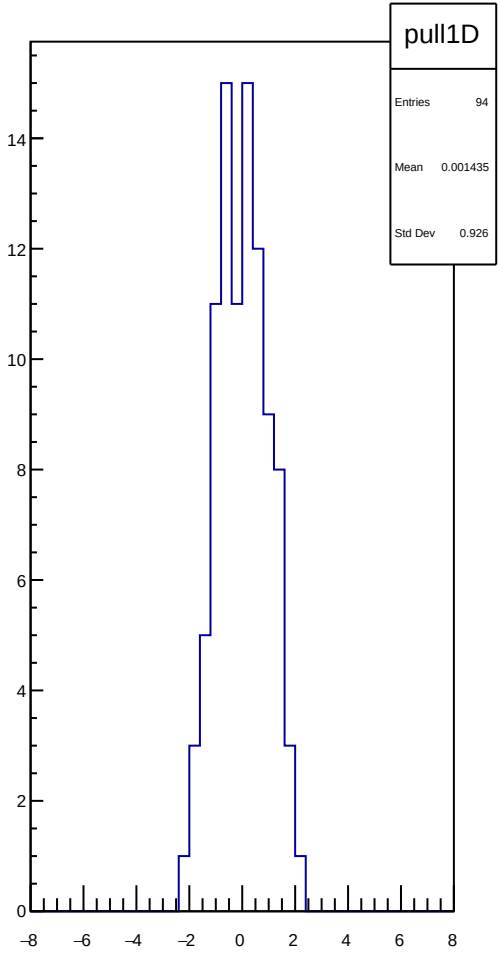

diff_bpm0l04X_rms vs run
χ² / ndf 291.5 / 93
p0 3985 ± 2.983
4150
4100
4050
4000
3950
3900
3850

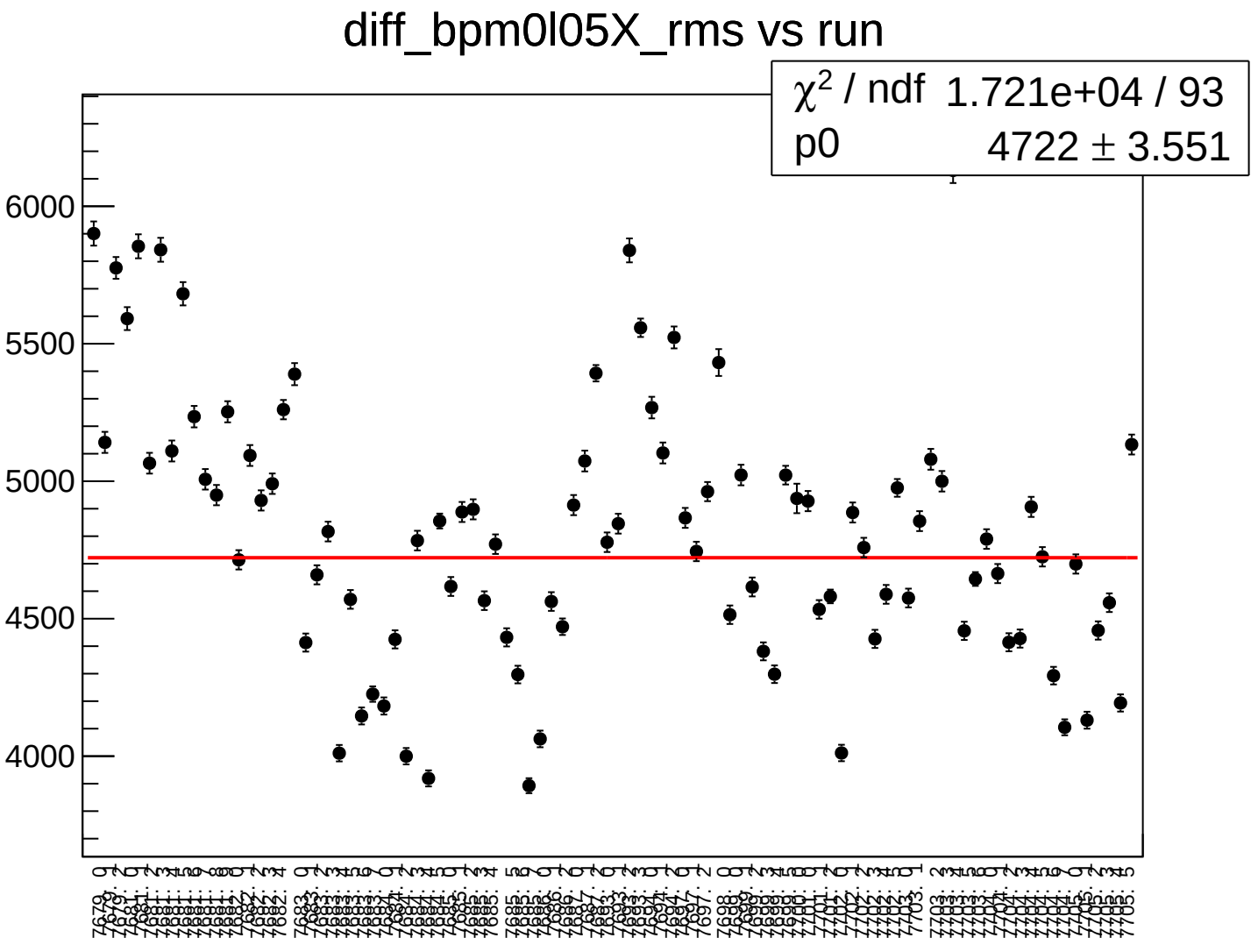

diff_bpm0l04Y_mean vs run
χ^2 / ndf 107.9 / 93
p0 13.72 ± 1.132
pull
Entries 94
Mean 827.4
Std Dev 784.7

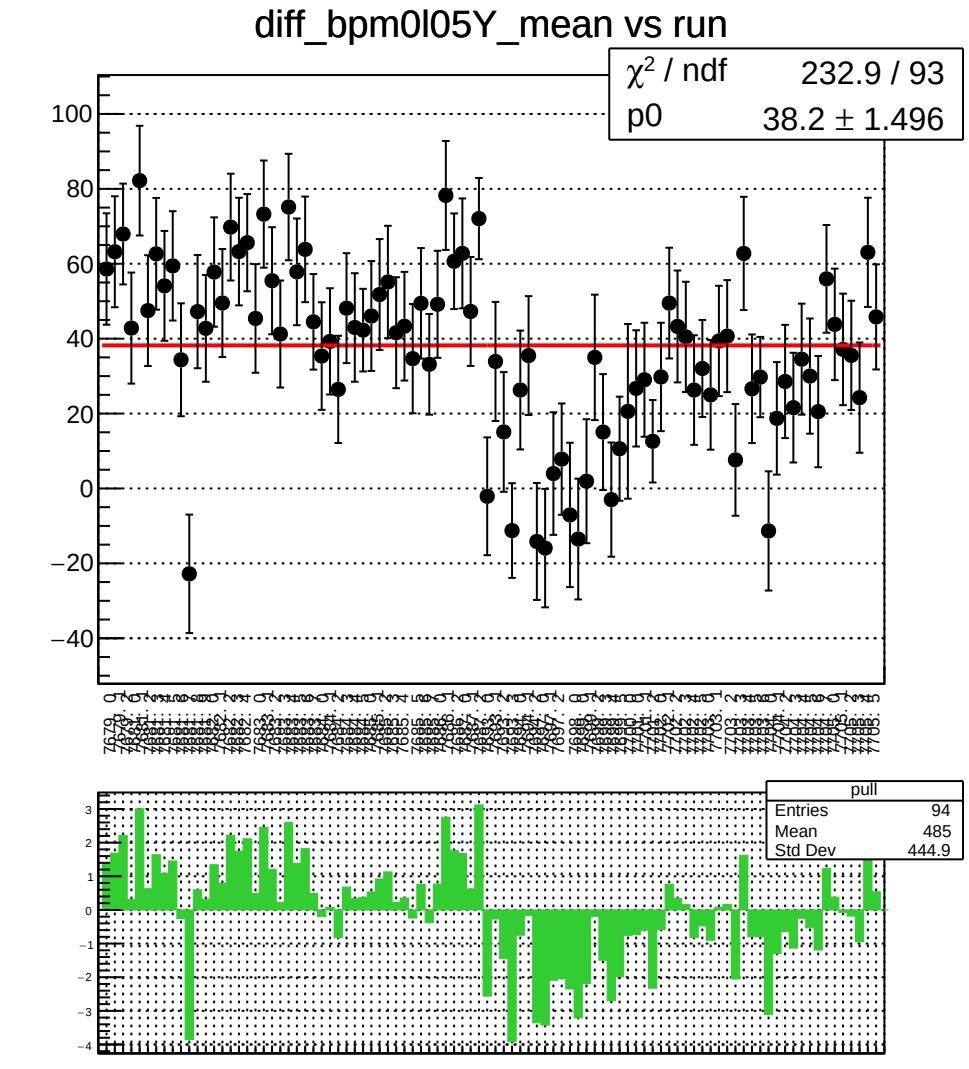

pull1D
Entries 94
Mean −0.01204
Std Dev 1.071

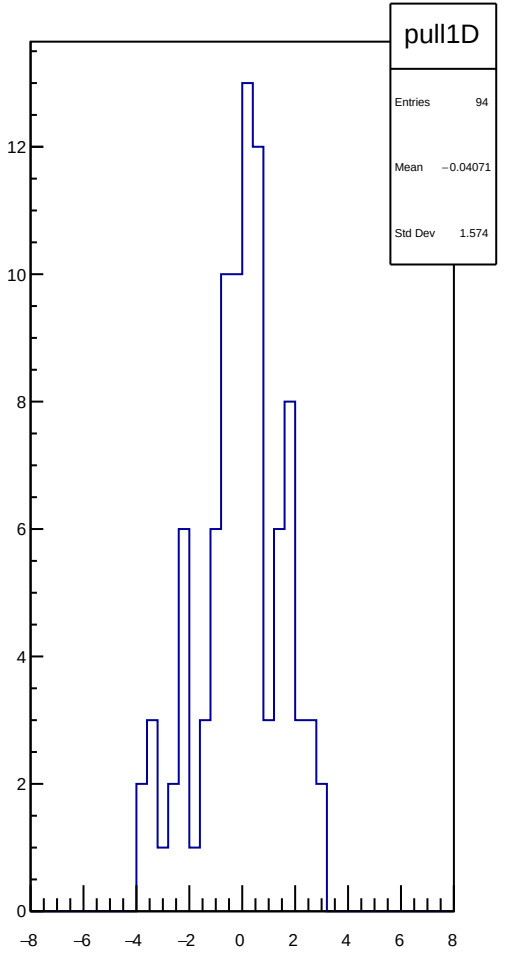

diff_bpm0l04Y_rms vs run
χ² / ndf 2106 / 93
p0 1069 ± 0.8005
1250
1200
1150
1100
1050
1000

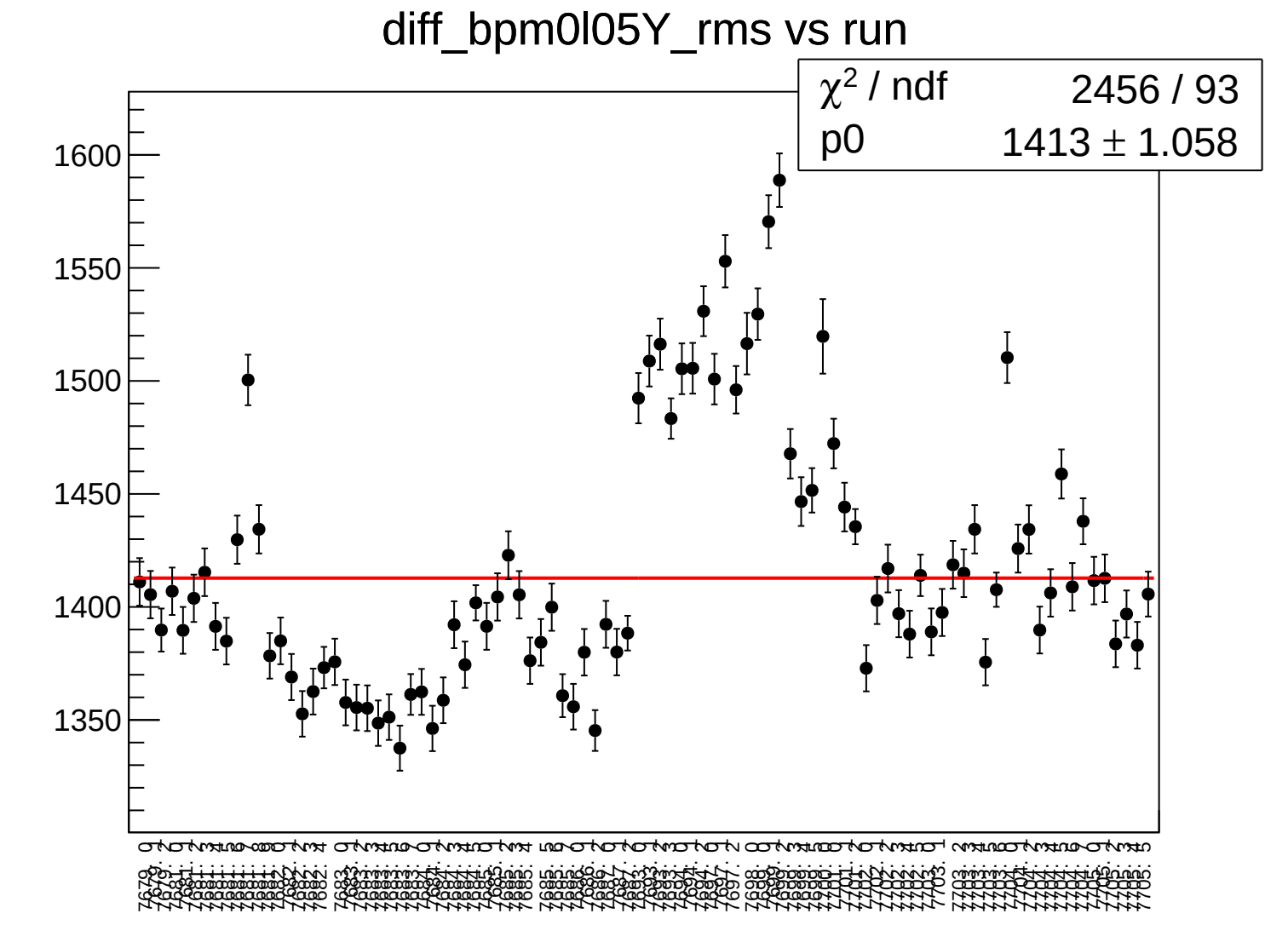

diff_bpm0l05X_mean vs run
χ^2 / ndf 80.6 / 93
p0 −4.364 ± 5.022
pull
Entries 94
Mean 16.21
Std Dev 236.8

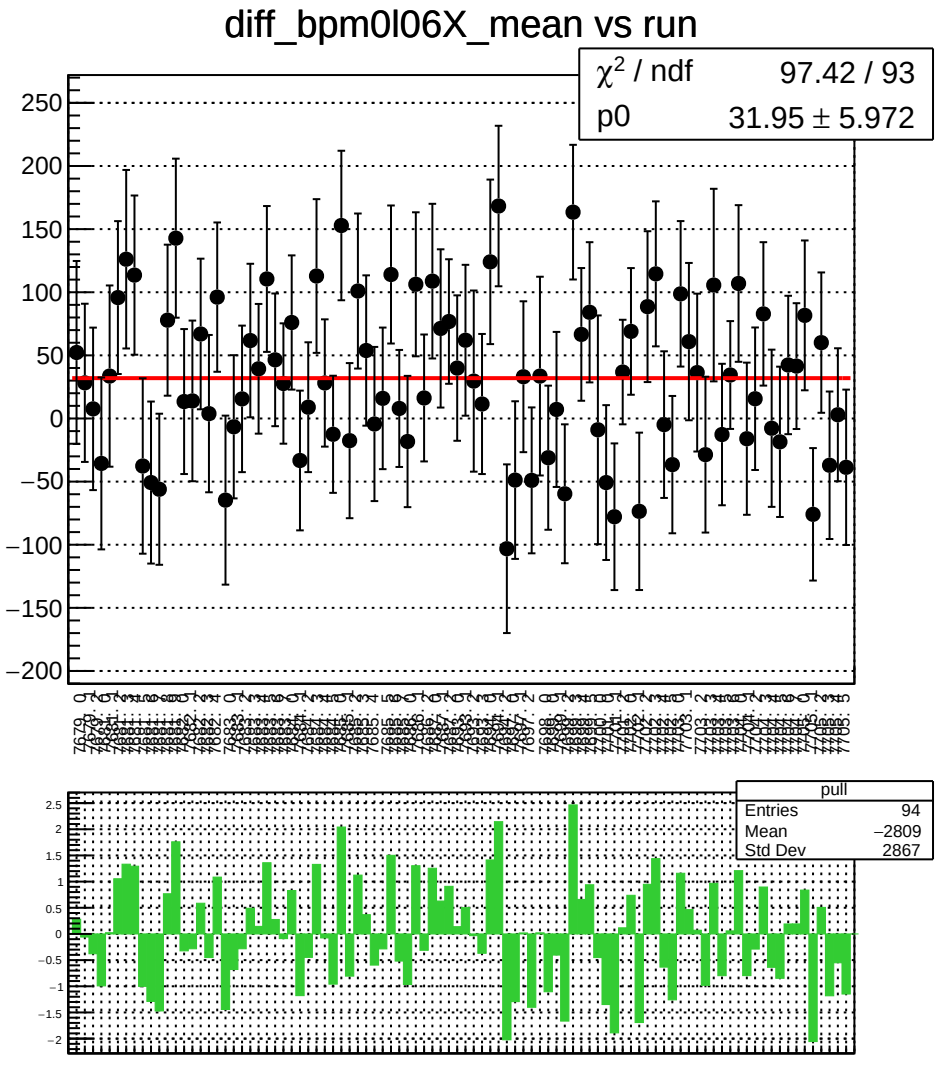

pull1D
Entries 94
Mean 0.001435
Std Dev 0.926

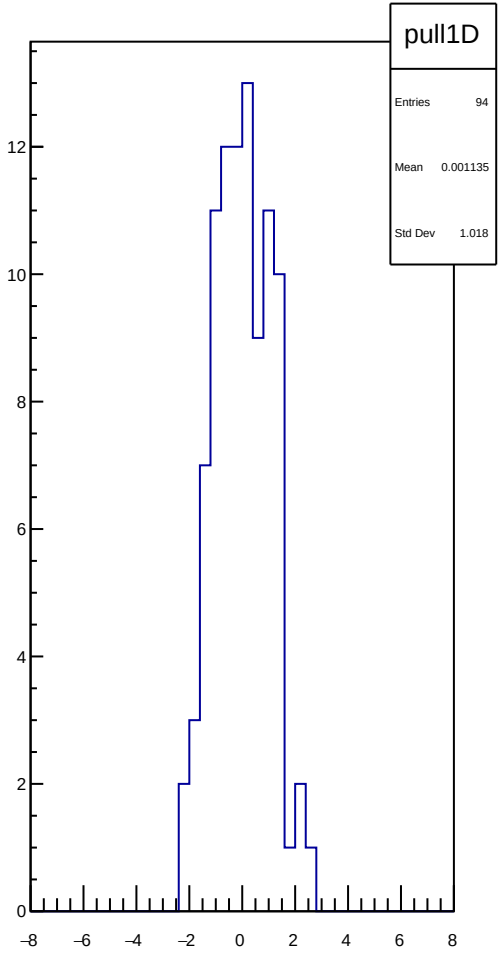

diff_bpm0l05X_rms vs run
χ² / ndf 1.721e+04 / 93
p0 4722 ± 3.551
6000
5500
5000
4500
4000


diff_bpm0l05Y_mean vs run
χ² / ndf 232.9 / 93
p0 38.2 ± 1.496
pull
Entries 94
Mean 485
Std Dev 444.9

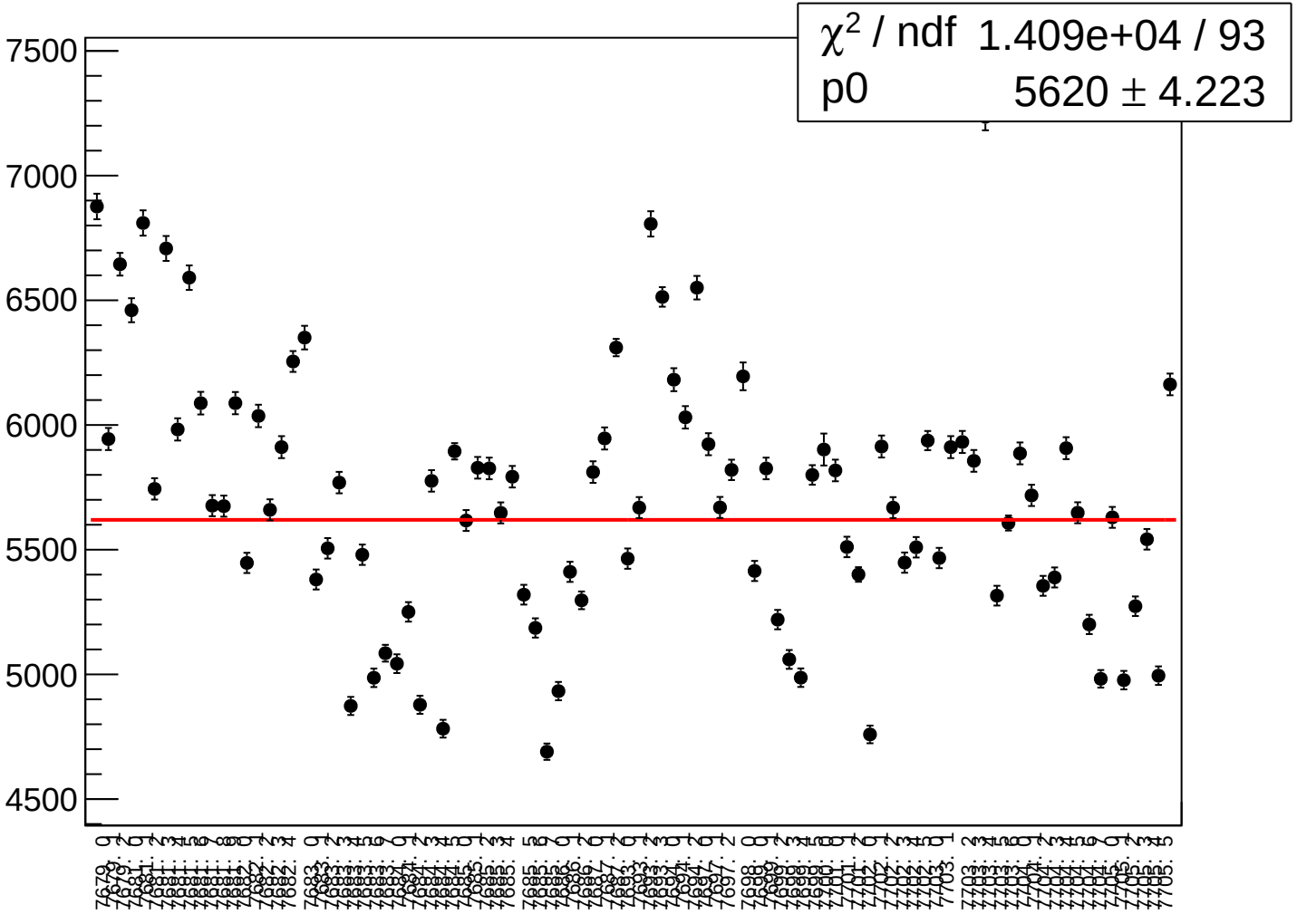

pull1D
Entries 94
Mean −0.04071
Std Dev 1.574

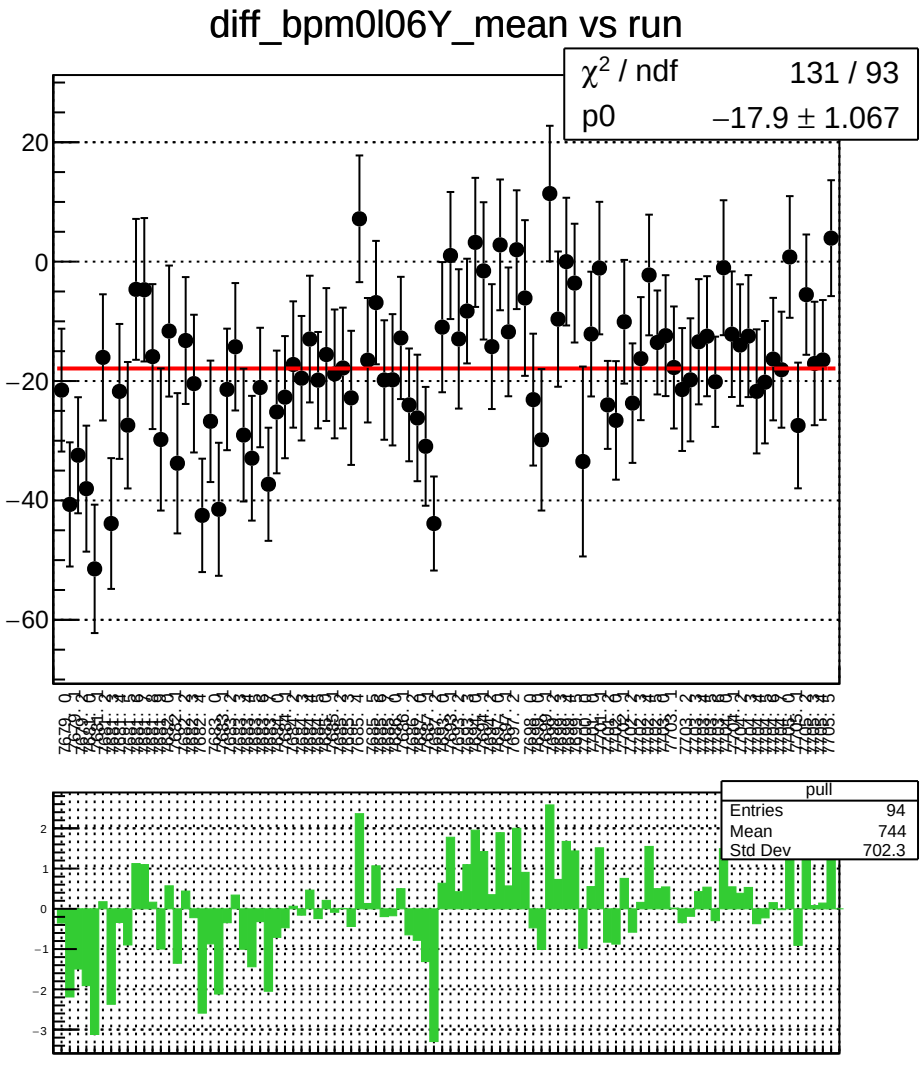

diff_bpm0l05Y_rms vs run
χ² / ndf 2456 / 93
p0 1413 ± 1.058
1600
1550
1500
1450
1400
1350

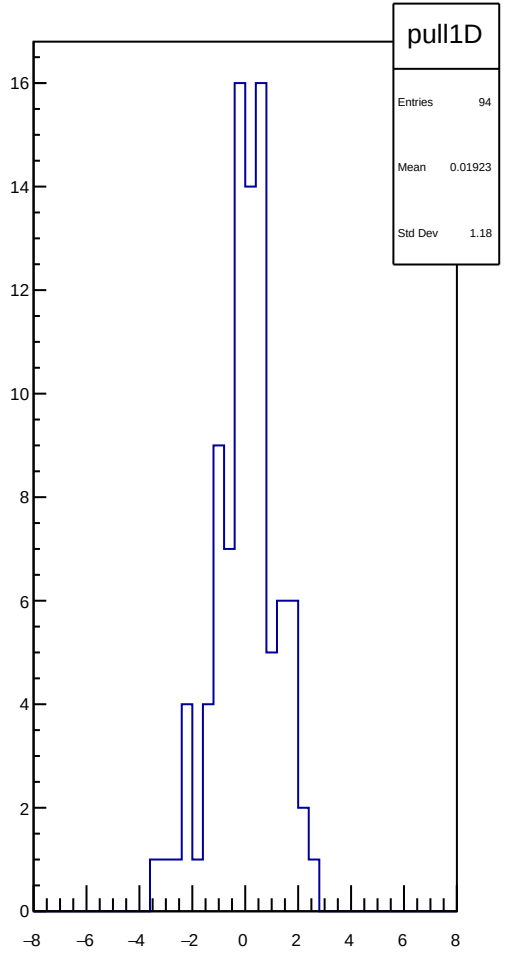

diff_bpm0l06X_mean vs run
χ^2 / ndf 97.42 / 93
p0 31.95 ± 5.972
pull
Entries 94
Mean −2809
Std Dev 2867

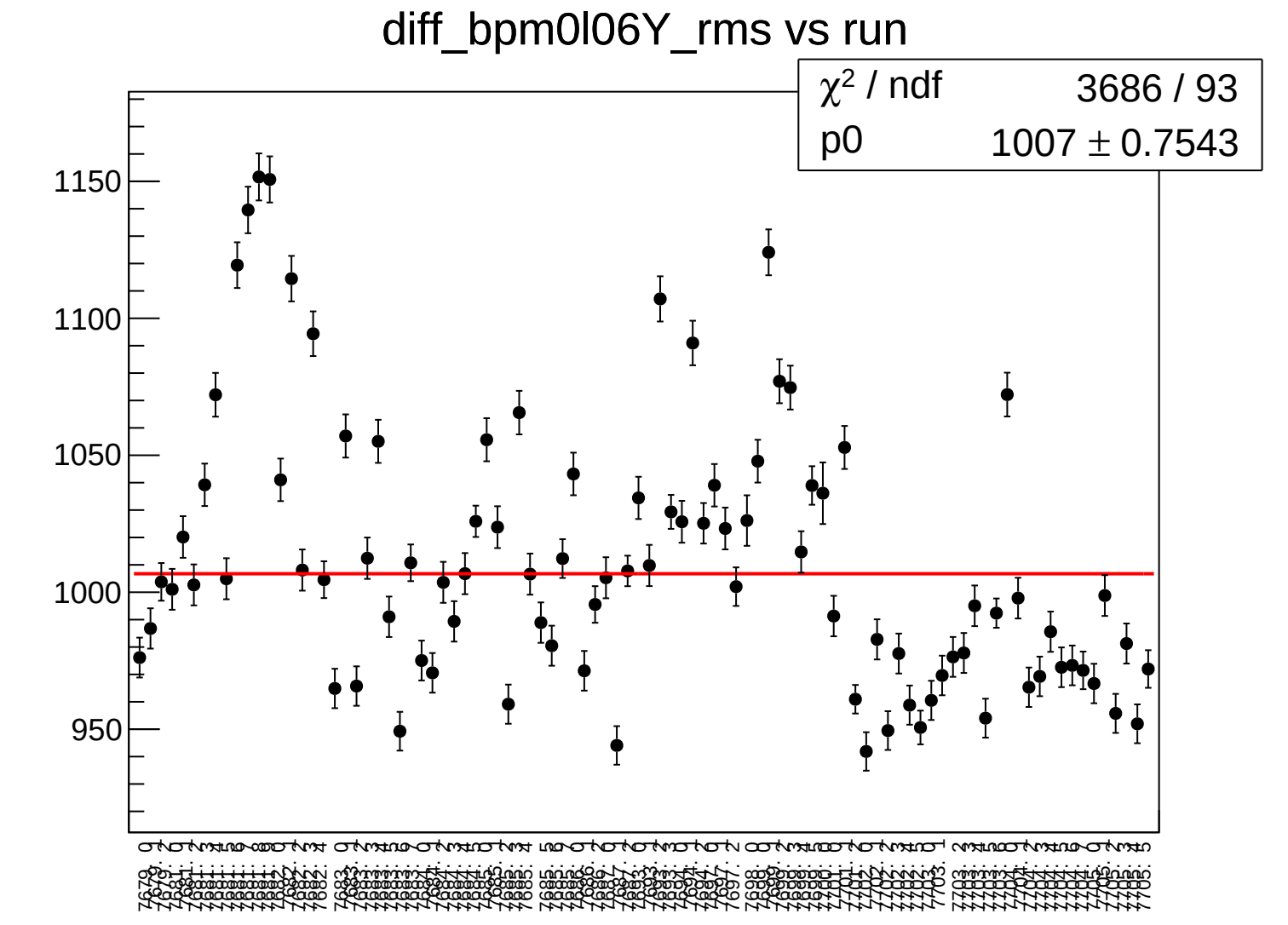

pull1D
Entries 94
Mean 0.001135
Std Dev 1.018

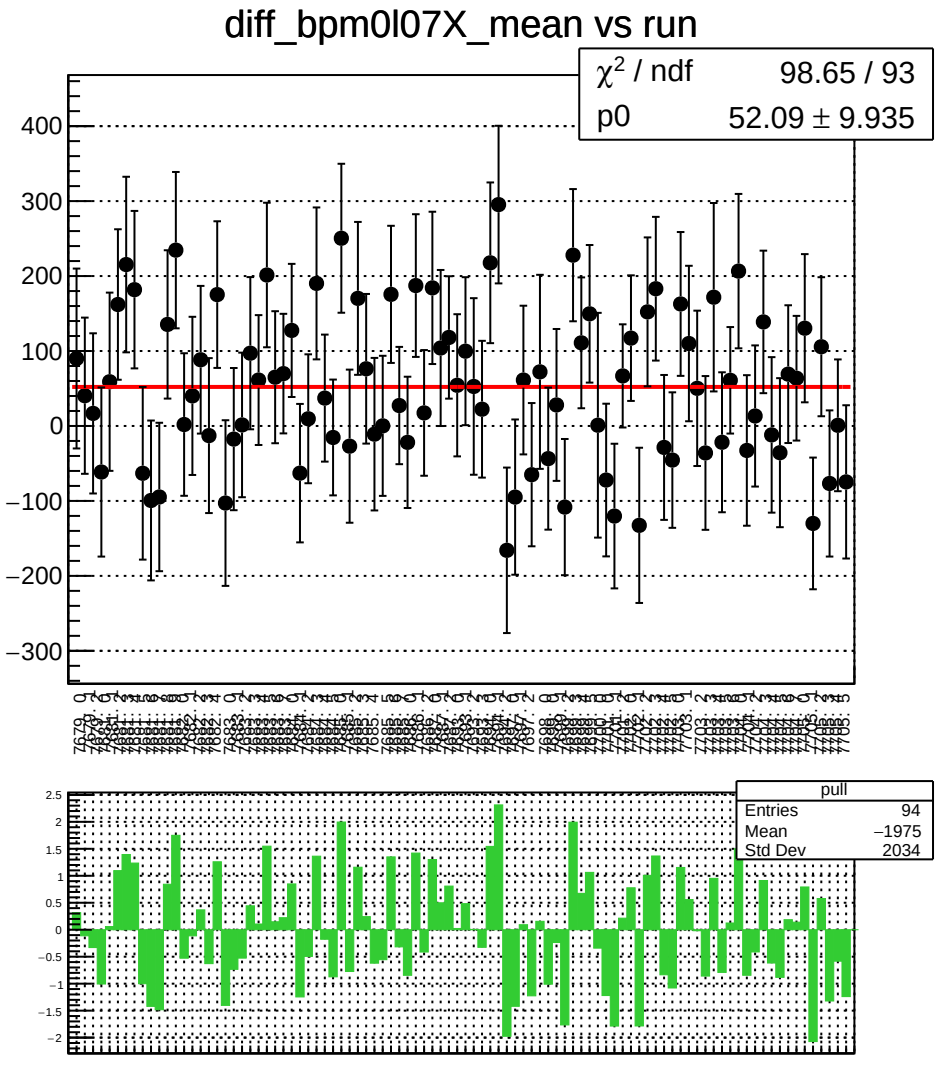
diff_bpm0l06X_rms vs run

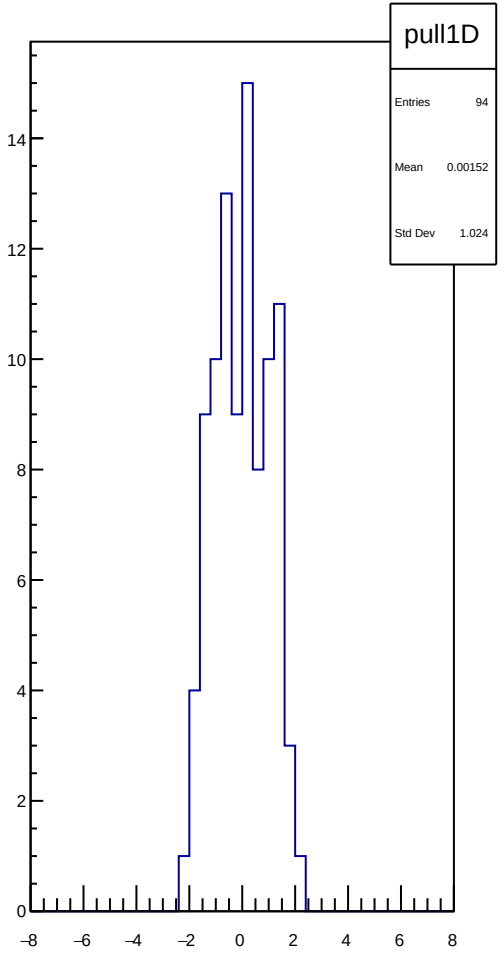


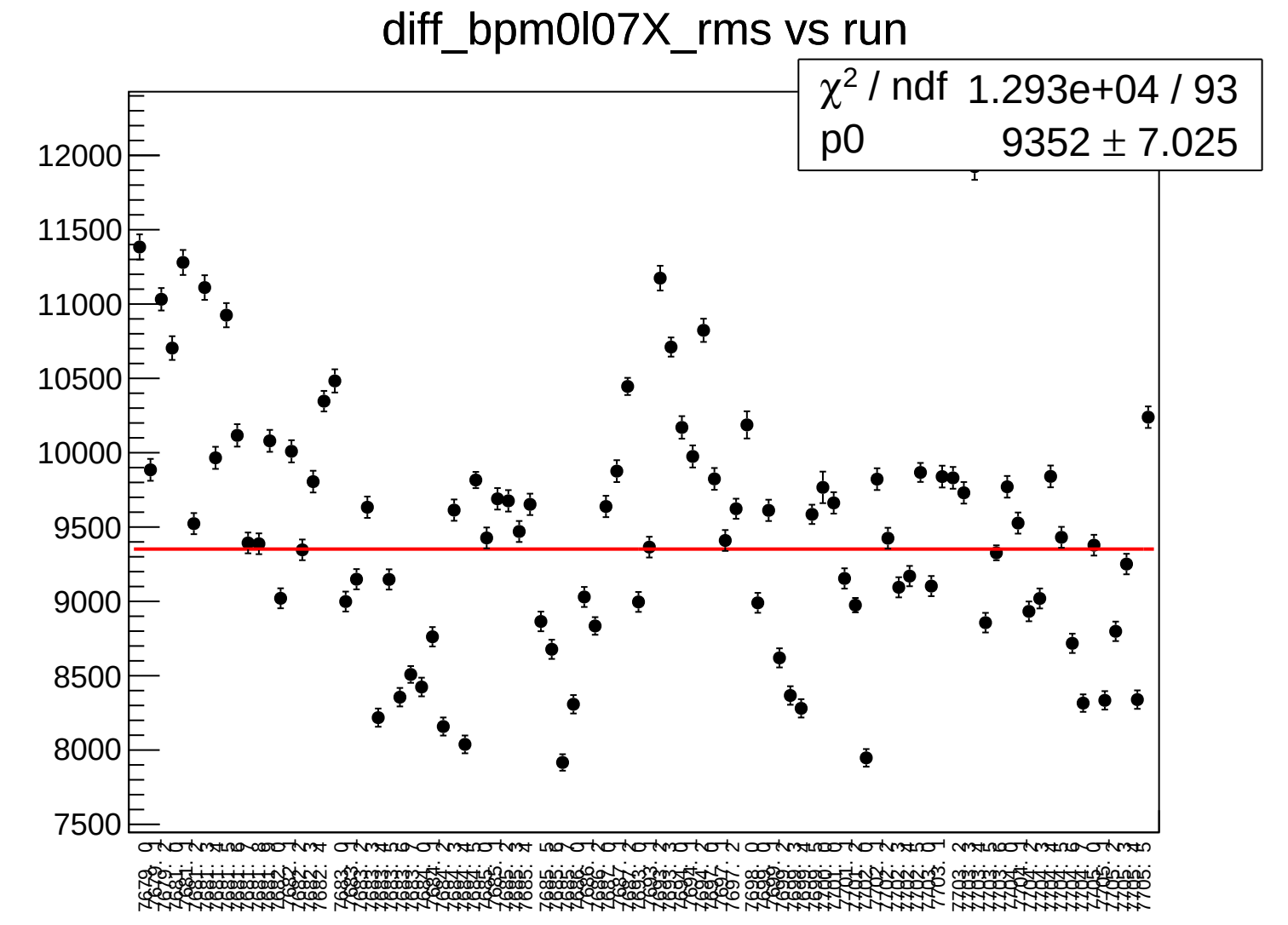

diff_bpm0l06Y_mean vs run
χ² / ndf 131 / 93
p0 −17.9 ± 1.067
20
0
−20
−40
−60
pull
Entries 94
Mean 744
Std Dev 702.3
2
1
0
−1
−2
−3

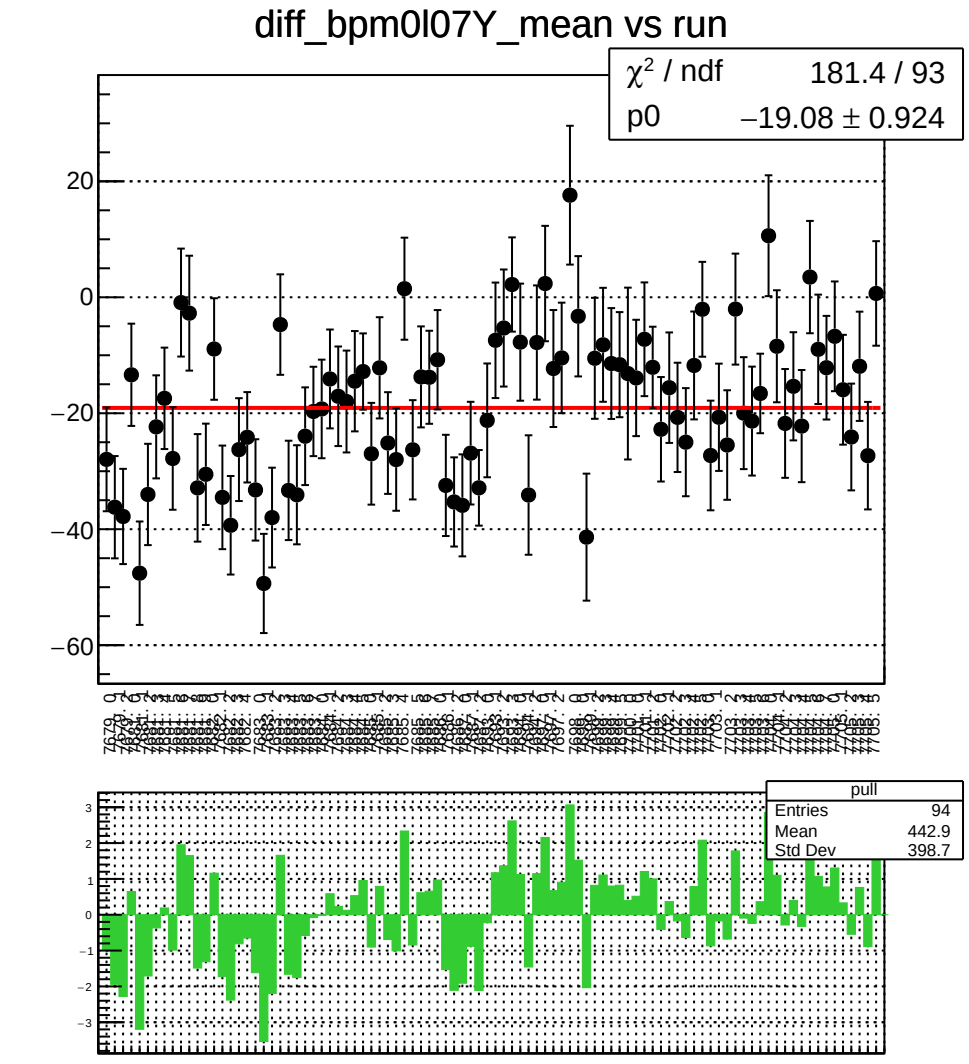

pull1D
Entries 94
Mean 0.01923
Std Dev 1.18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

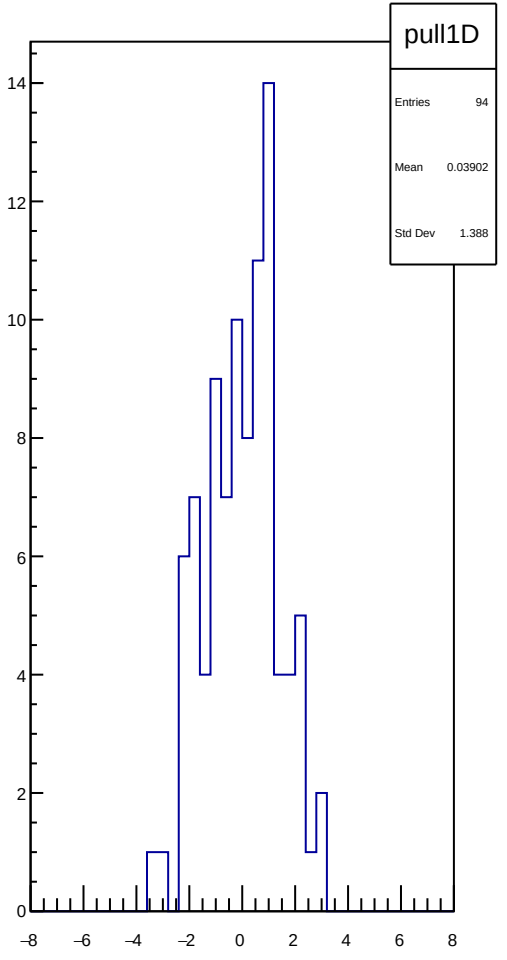

diff_bpm0l06Y_rms vs run
χ² / ndf 3686 / 93
p0 1007 ± 0.7543
1150
1100
1050
1000
950

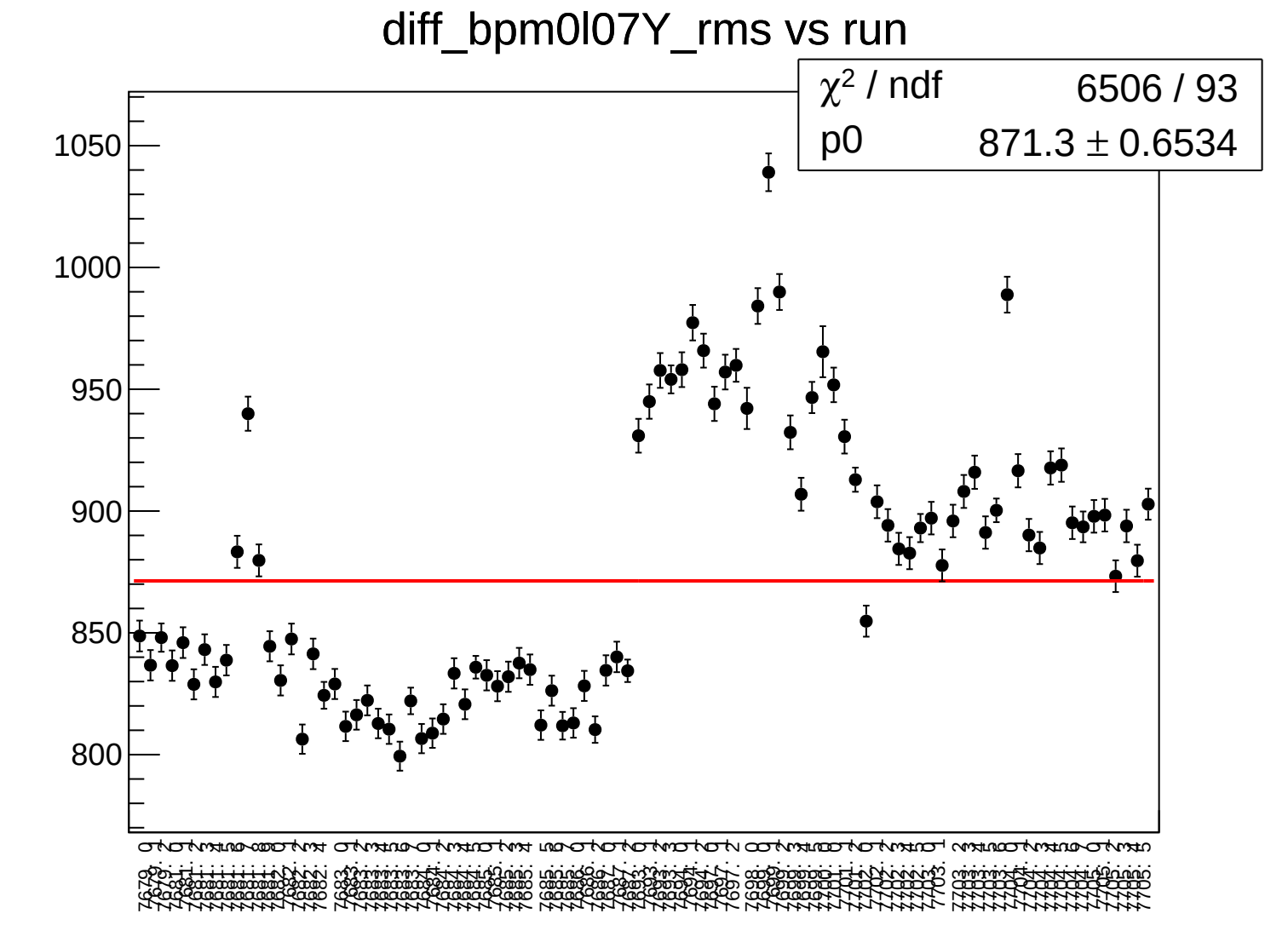

diff_bpm0l07X_mean vs run
χ² / ndf 98.65 / 93
p0 52.09 ± 9.935
pull
Entries 94
Mean −1975
Std Dev 2034

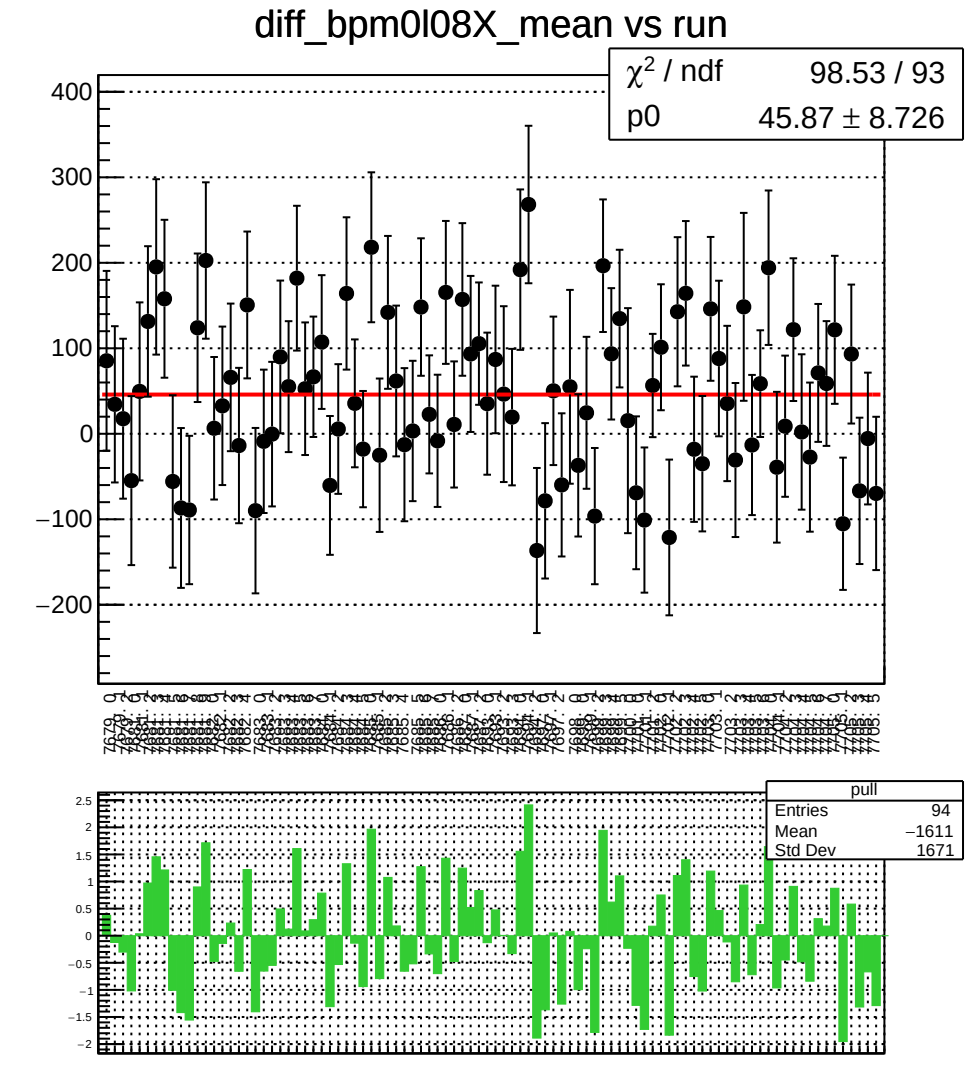

pull1D
Entries 94
Mean 0.00152
Std Dev 1.024

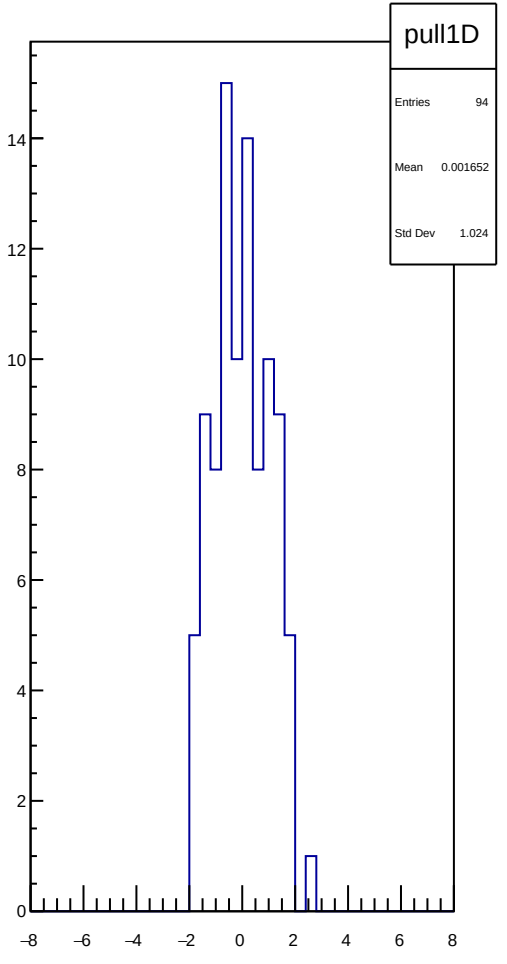

diff_bpm0l07X_rms vs run
χ² / ndf 1.293e+04 / 93
p0 9352 ± 7.025
12000
11500
11000
10500
10000
9500
9000
8500
8000
7500

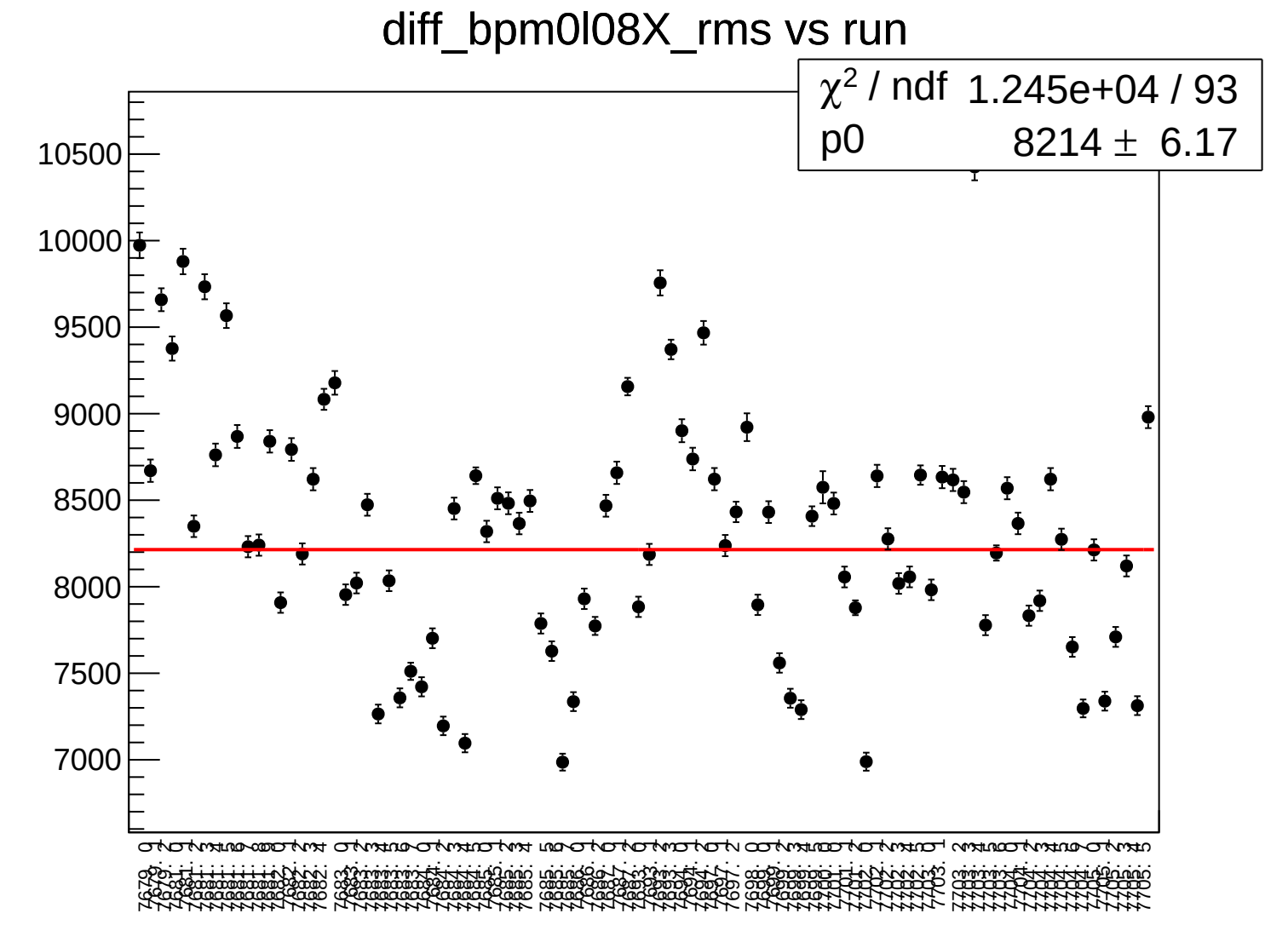

diff_bpm0l07Y_mean vs run
χ² / ndf 181.4 / 93
p0 −19.08 ± 0.924
20
0
−20
−40
−60
pull
Entries 94
Mean 442.9
Std Dev 398.7
3
2
1
0
−1
−2
−3

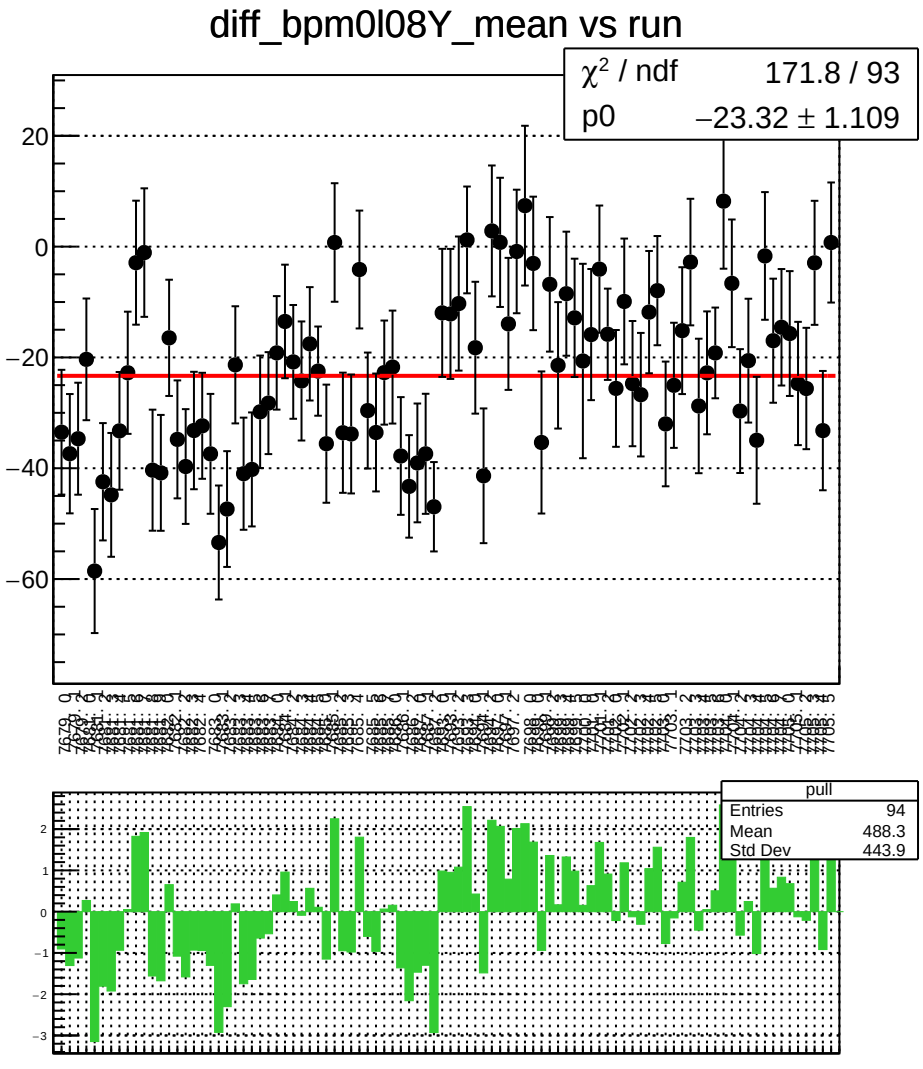

pull1D
Entries 94
Mean 0.03902
Std Dev 1.388
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

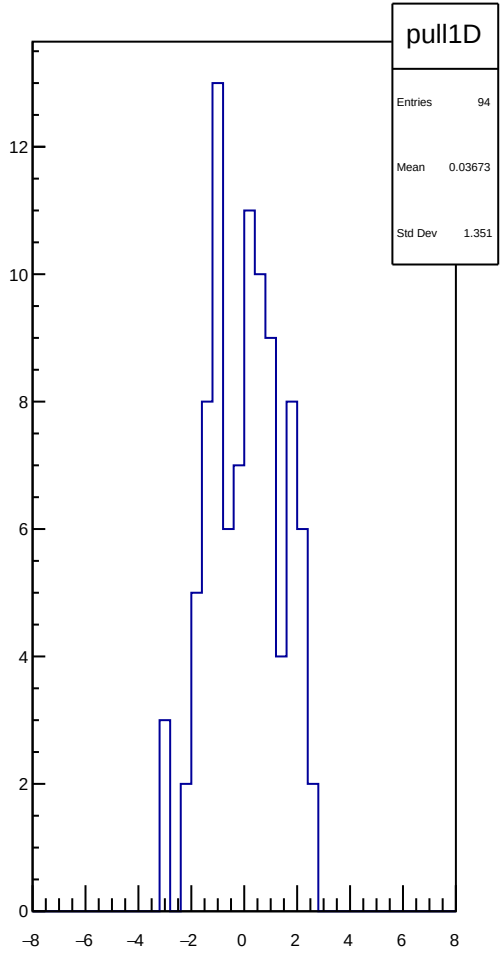

diff_bpm0l07Y_rms vs run
χ² / ndf 6506 / 93
p0 871.3 ± 0.6534
1050
1000
950
900
850
800

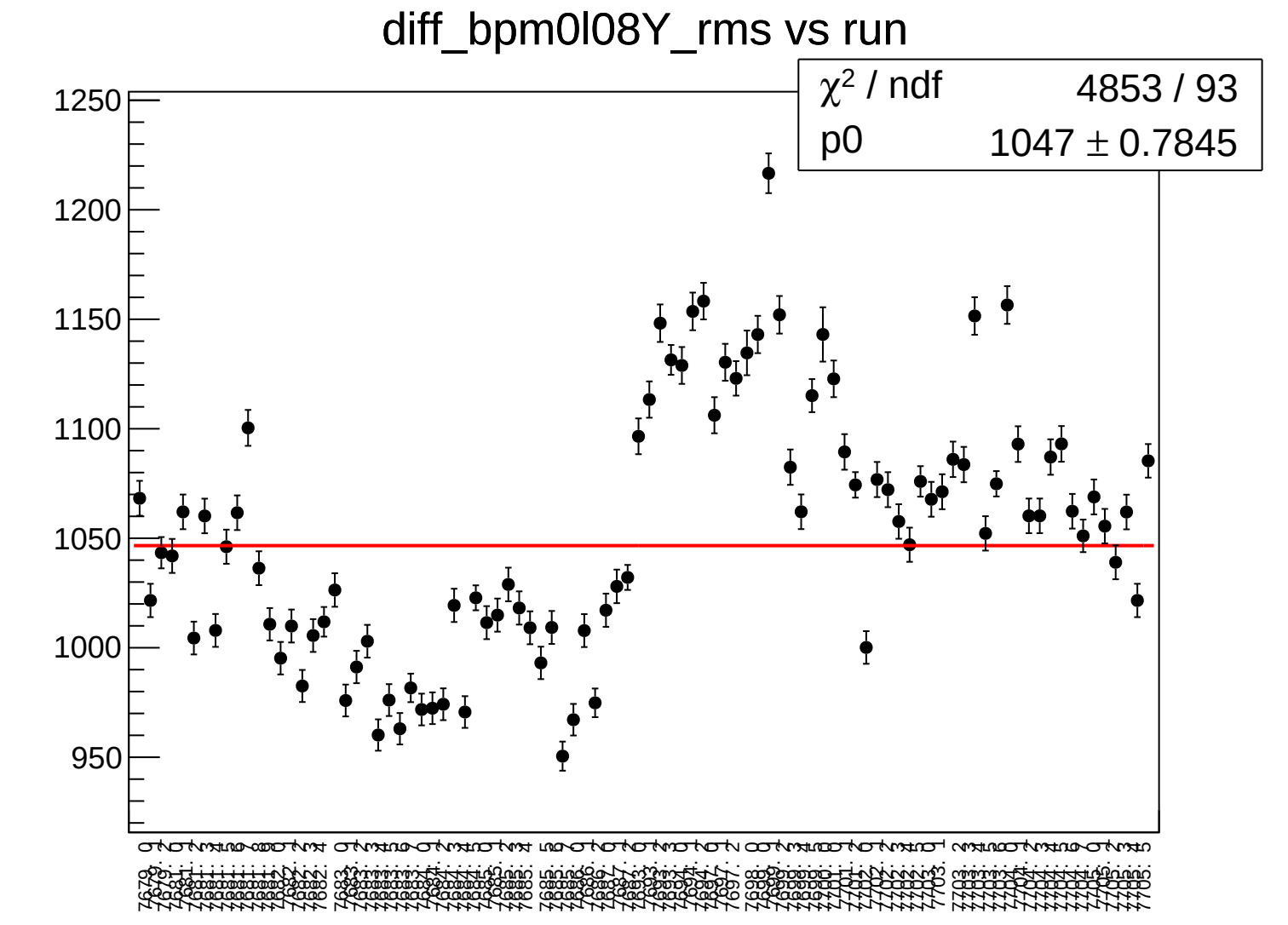

diff_bpm0l08X_mean vs run
χ² / ndf 98.53 / 93
p0 45.87 ± 8.726
pull
Entries 94
Mean −1611
Std Dev 1671

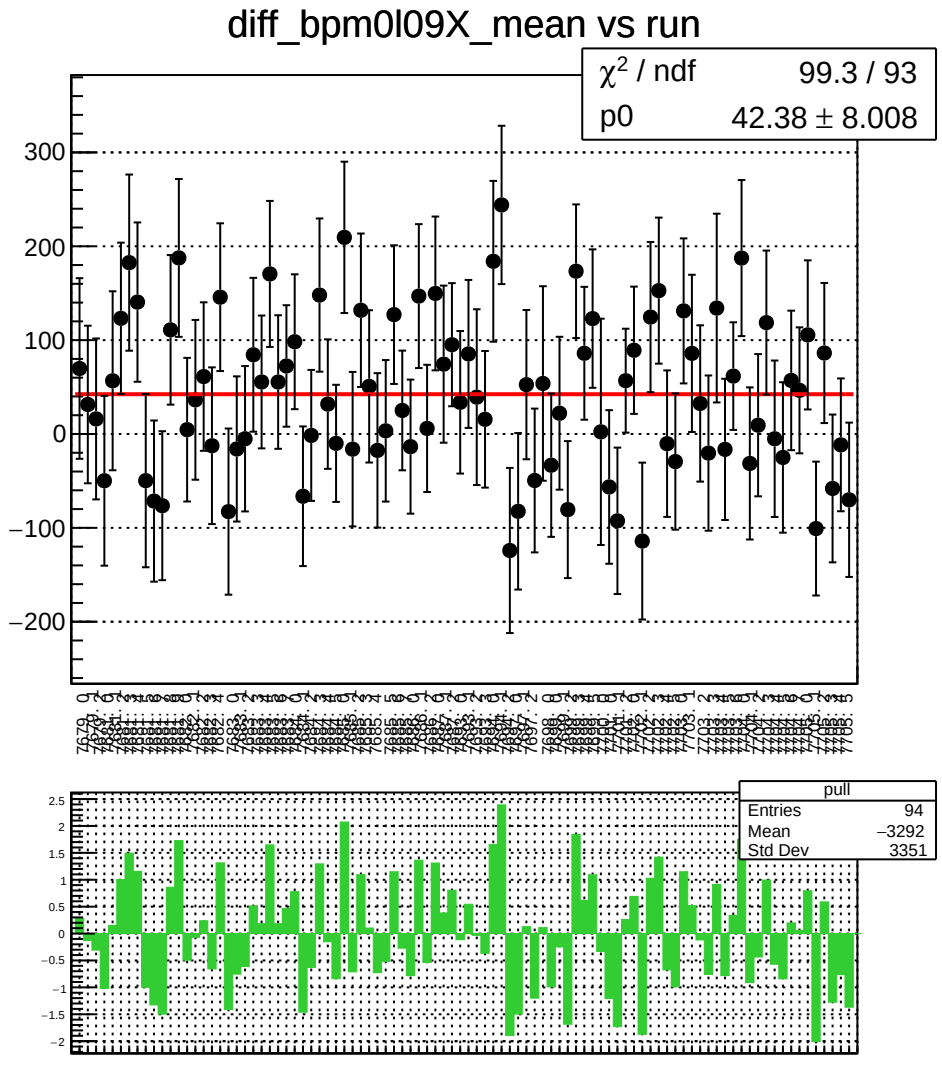

pull1D
Entries 94
Mean 0.001652
Std Dev 1.024

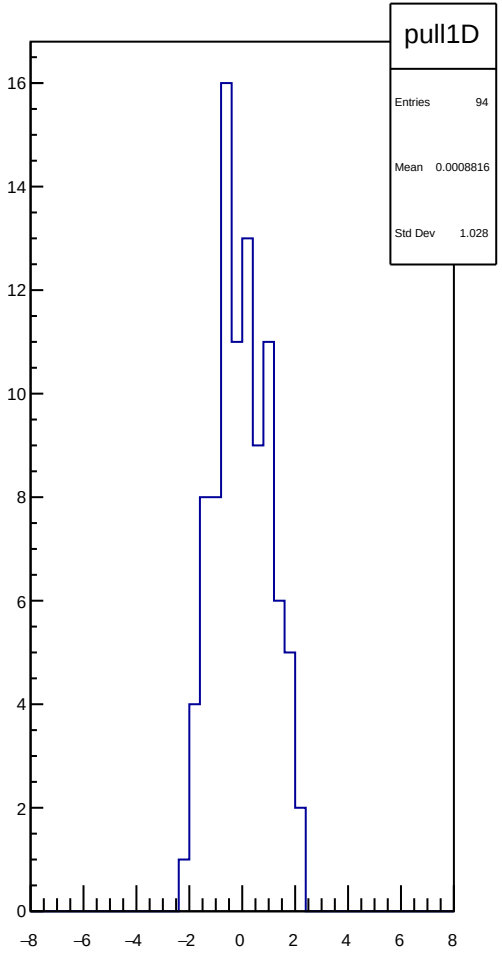

diff_bpm0l08X_rms vs run
χ^2 / ndf 1.245e+04 / 93
p0 8214 ± 6.17
10500
10000
9500
9000
8500
8000
7500
7000

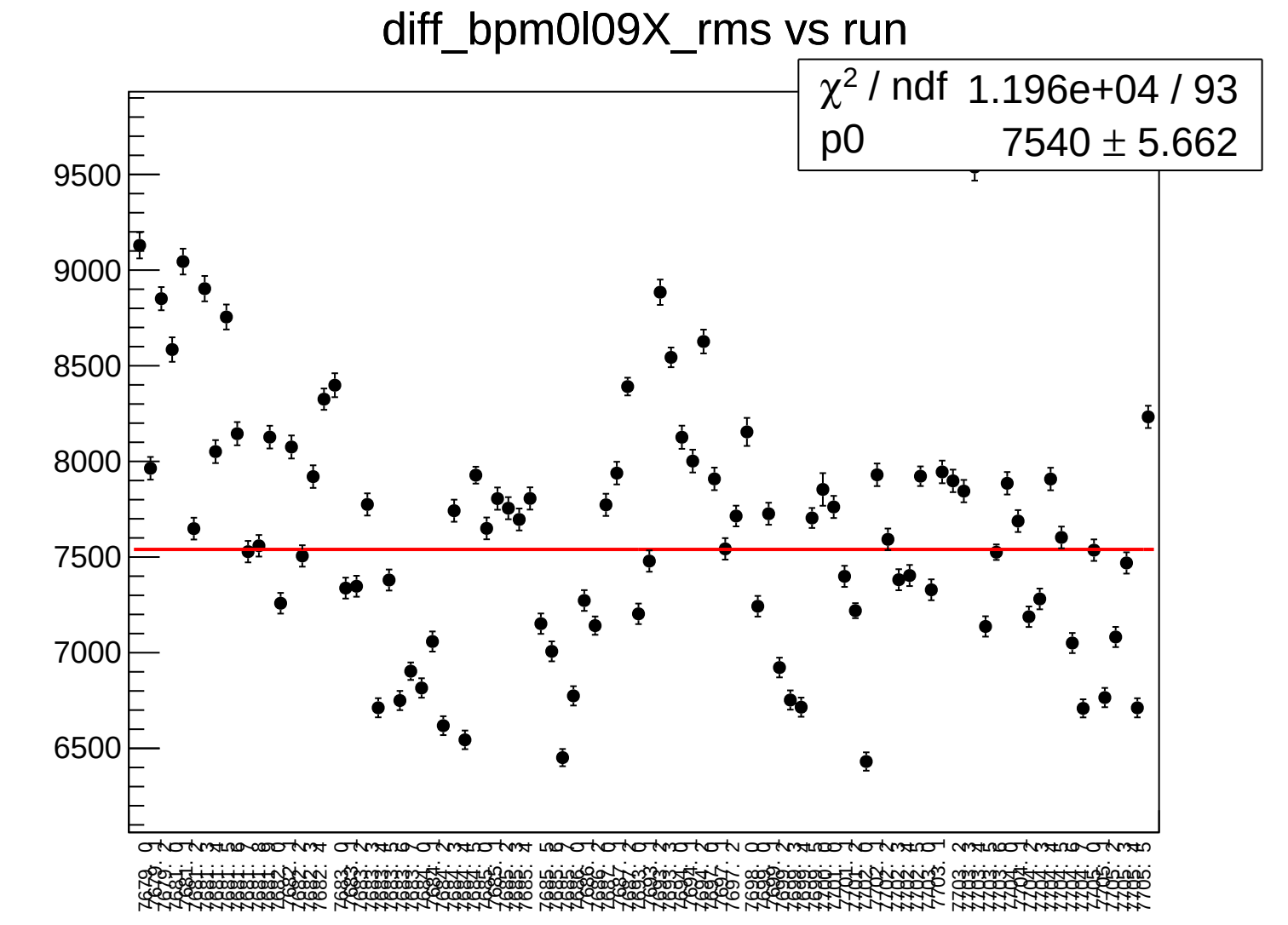

diff_bpm0l08Y_mean vs run
χ² / ndf 171.8 / 93
p0 −23.32 ± 1.109
20
0
−20
−40
−60
pull
Entries 94
Mean 488.3
Std Dev 443.9
2
1
0
−1
−2
−3

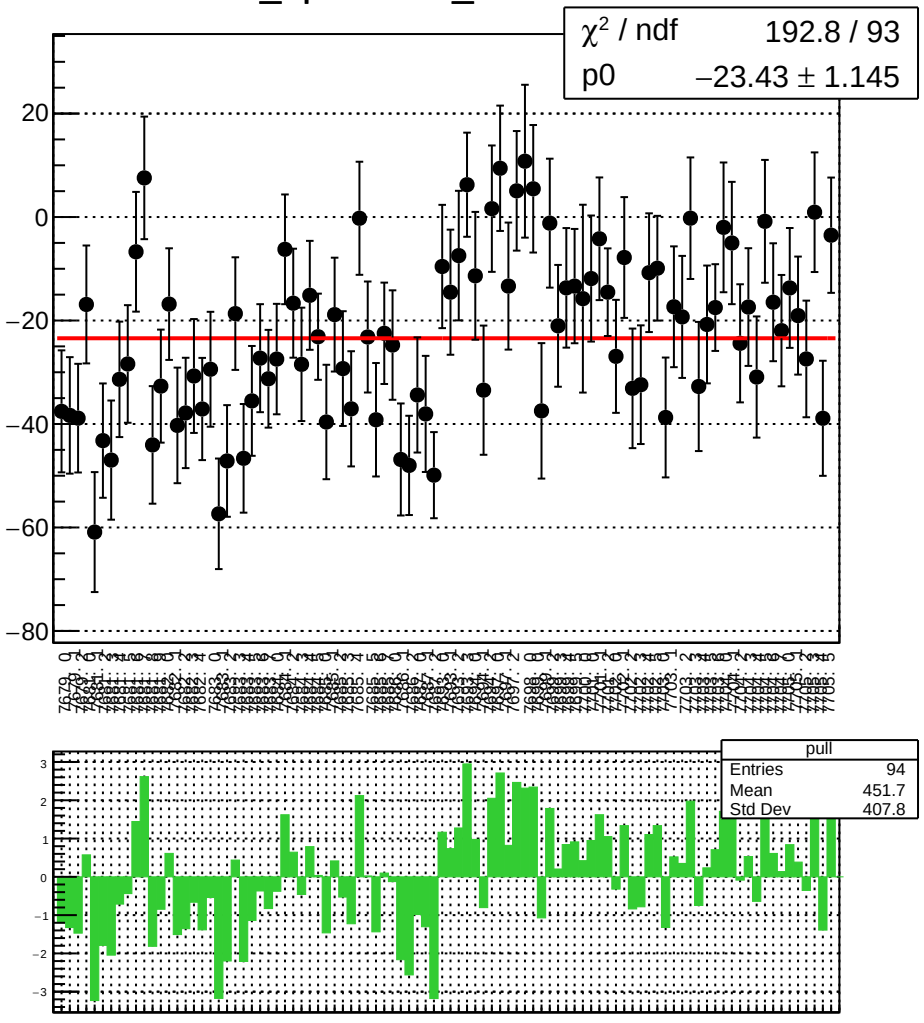

pull1D
Entries 94
Mean 0.03673
Std Dev 1.351
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

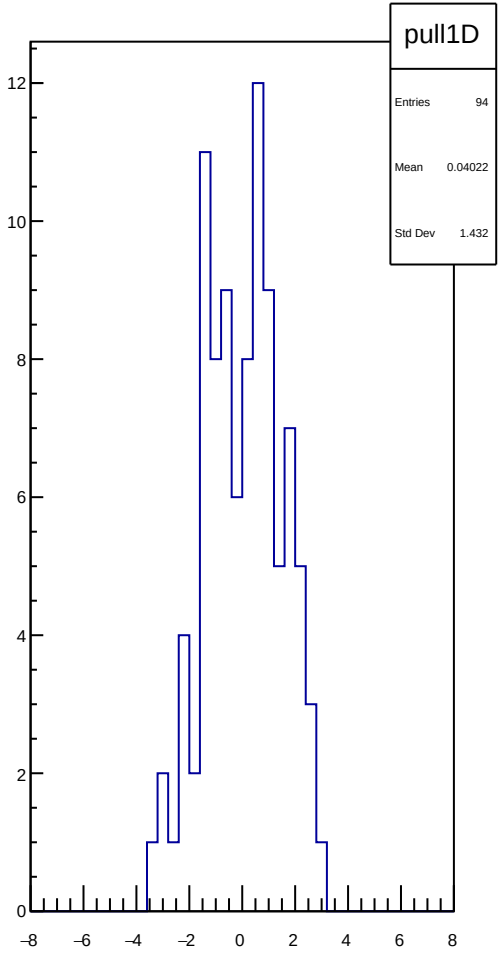

diff_bpm0l08Y_rms vs run
χ² / ndf 4853 / 93
p0 1047 ± 0.7845
1250
1200
1150
1100
1050
1000
950

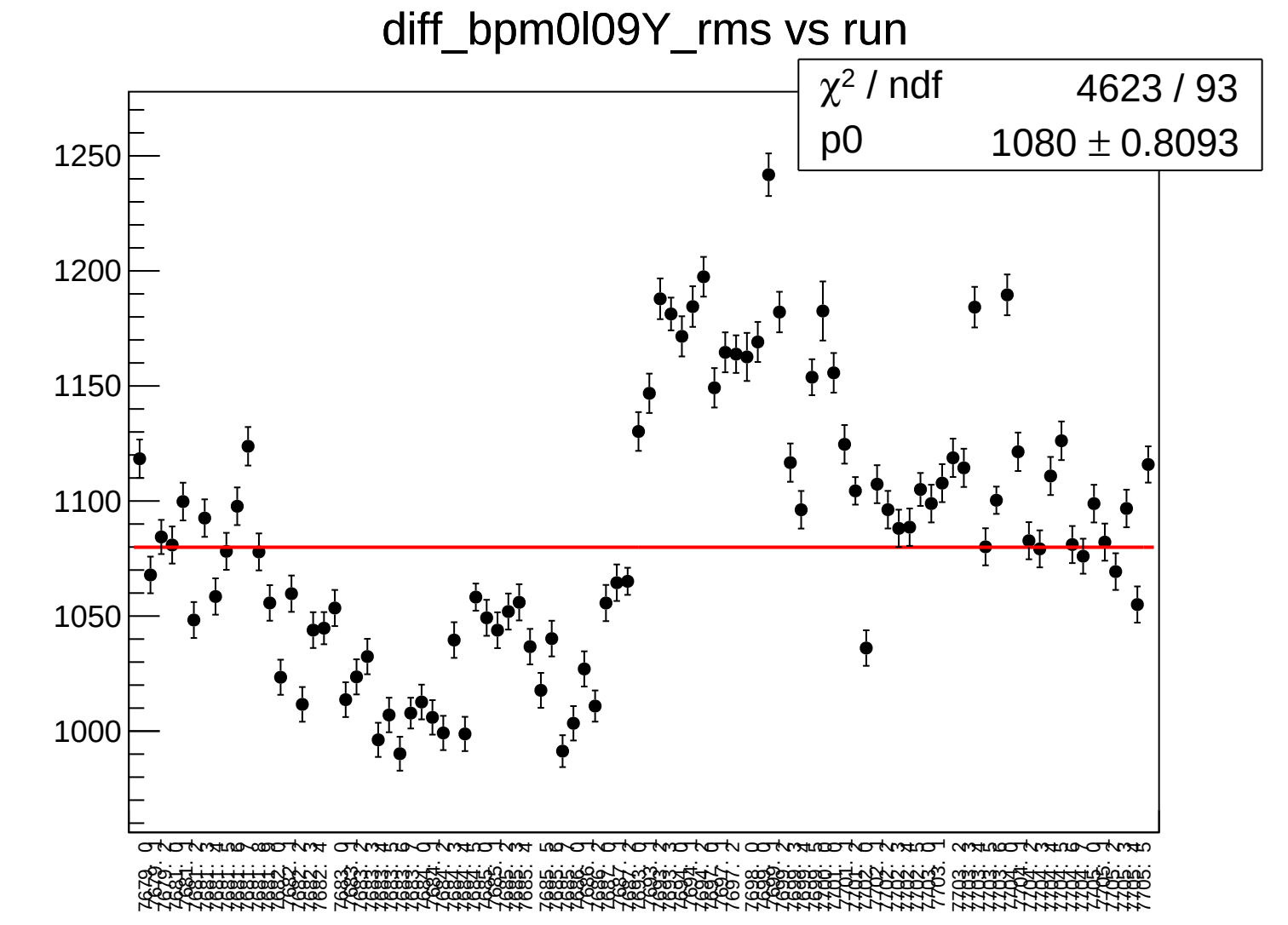

diff_bpm0l09X_mean vs run
χ^2 / ndf 99.3 / 93
p0 42.38 ± 8.008
300
200
100
0
−100
−200
pull
Entries 94
Mean −3292
Std Dev 3351
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

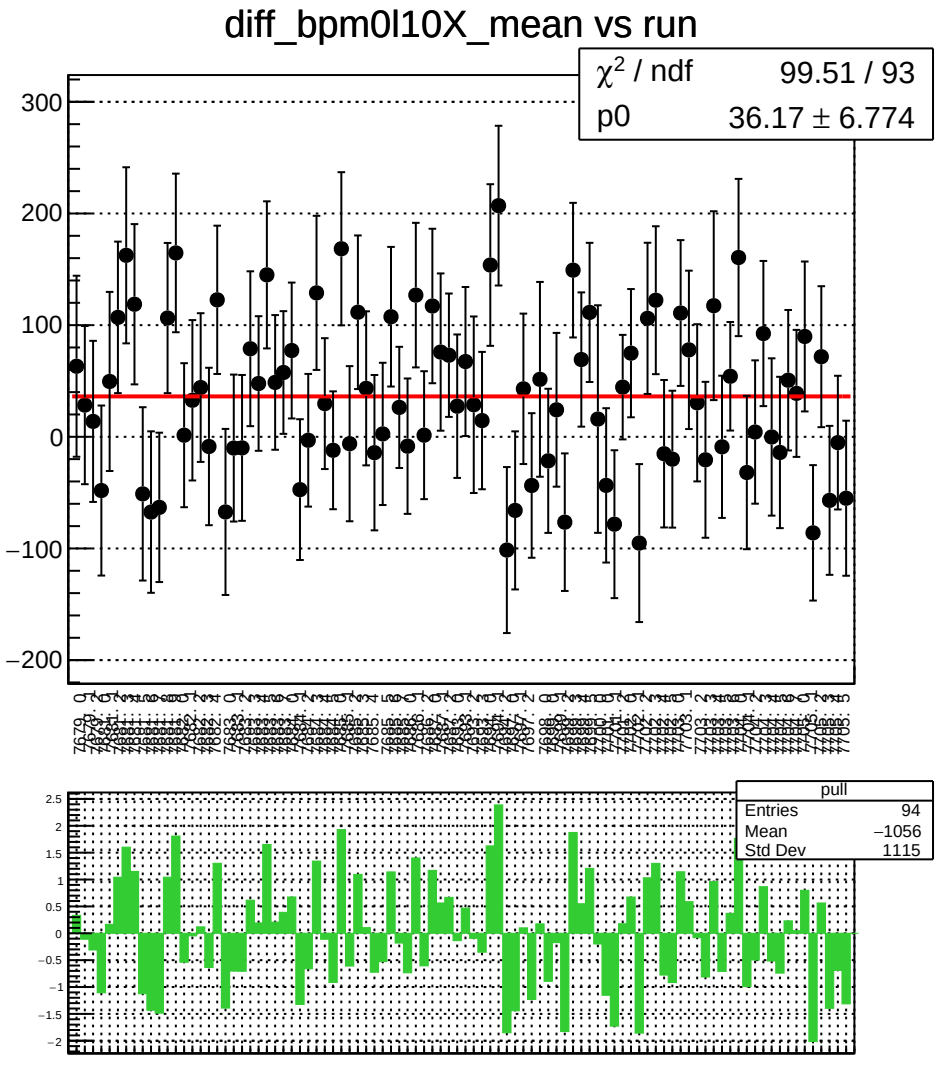

pull1D
Entries 94
Mean 0.0008816
Std Dev 1.028
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

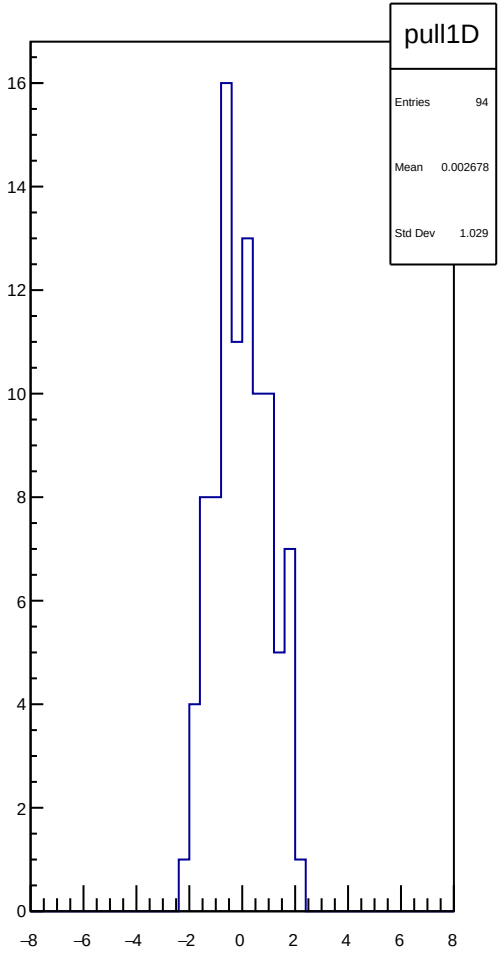

diff_bpm0l09X_rms vs run
χ² / ndf 1.196e+04 / 93
p0 7540 ± 5.662
9500
9000
8500
8000
7500
7000
6500

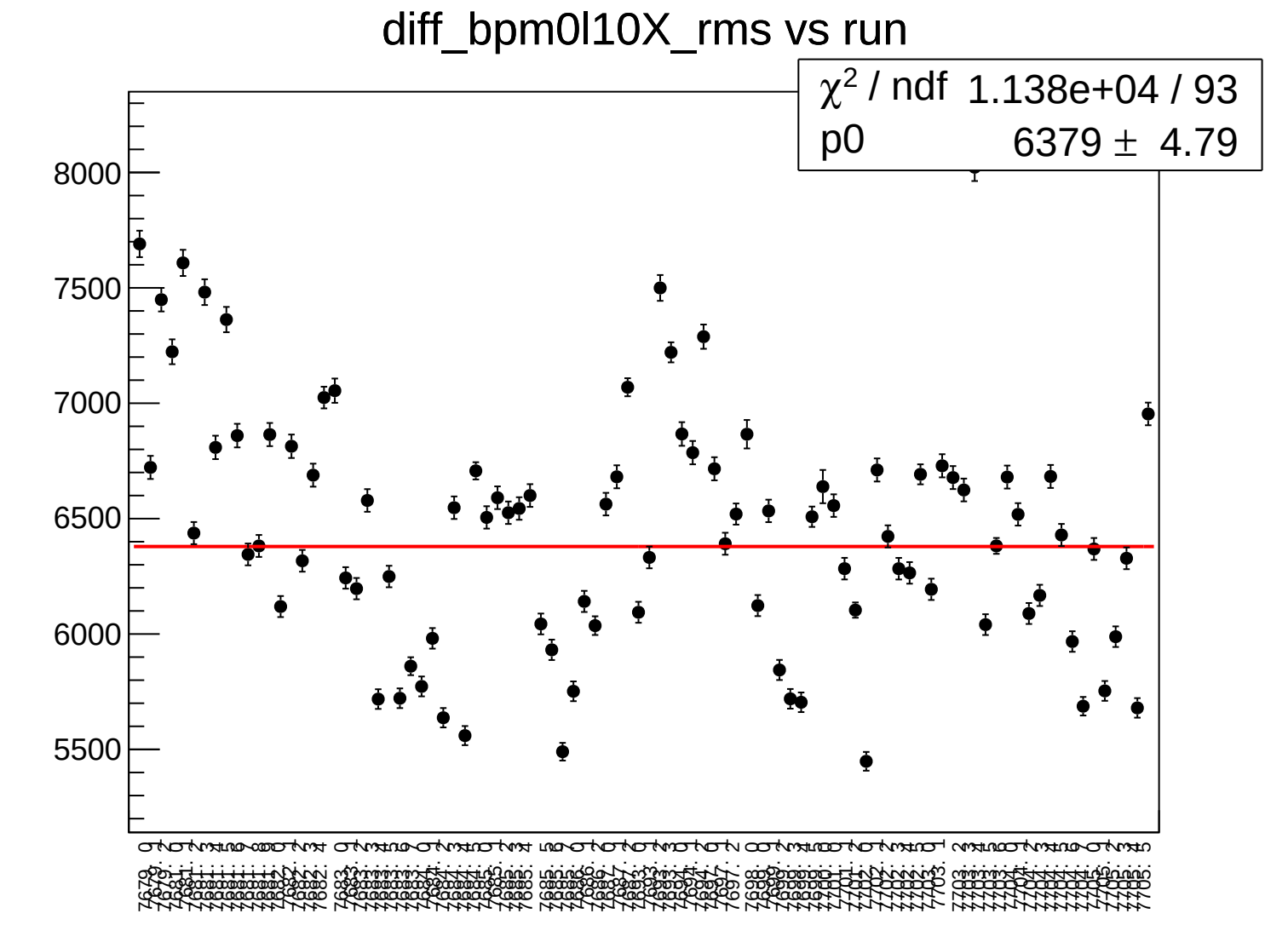

diff_bpm0l09Y_mean vs run
χ² / ndf 192.8 / 93
p0 −23.43 ± 1.145
pull
Entries 94
Mean 451.7
Std Dev 407.8

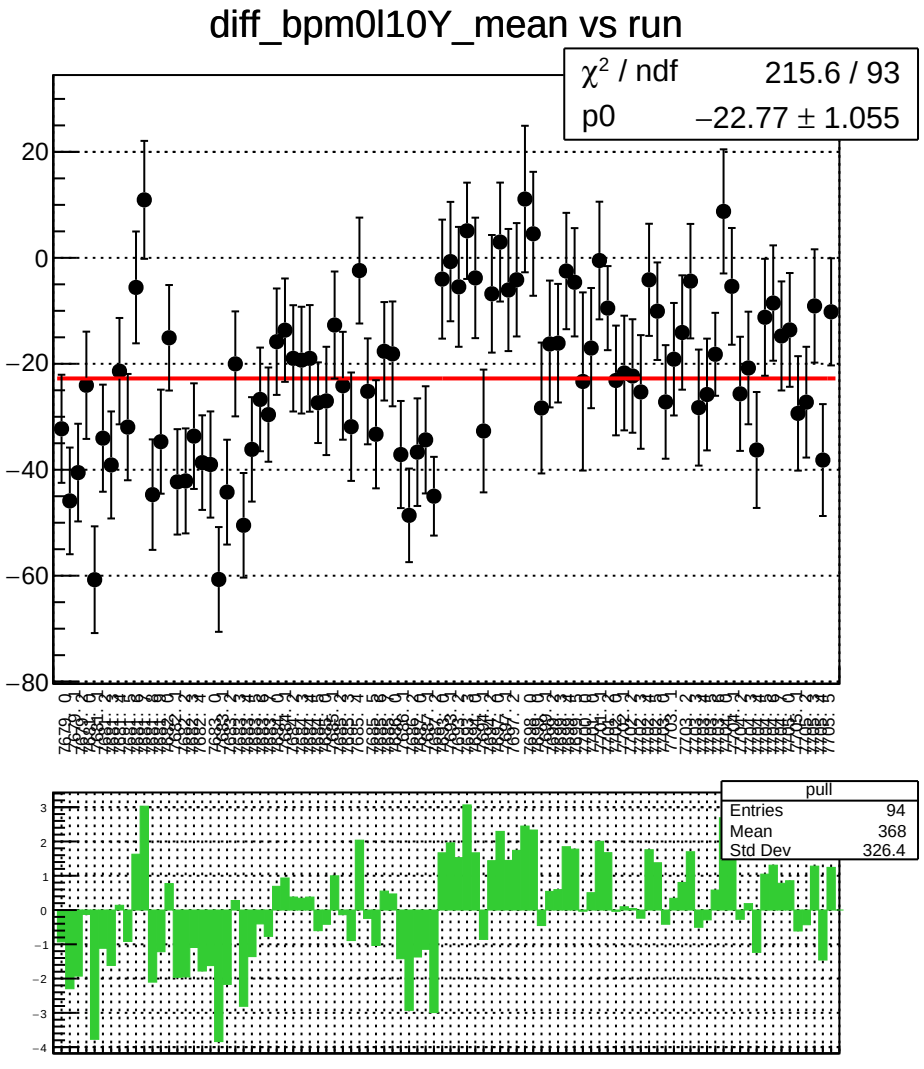

pull1D
Entries 94
Mean 0.04022
Std Dev 1.432

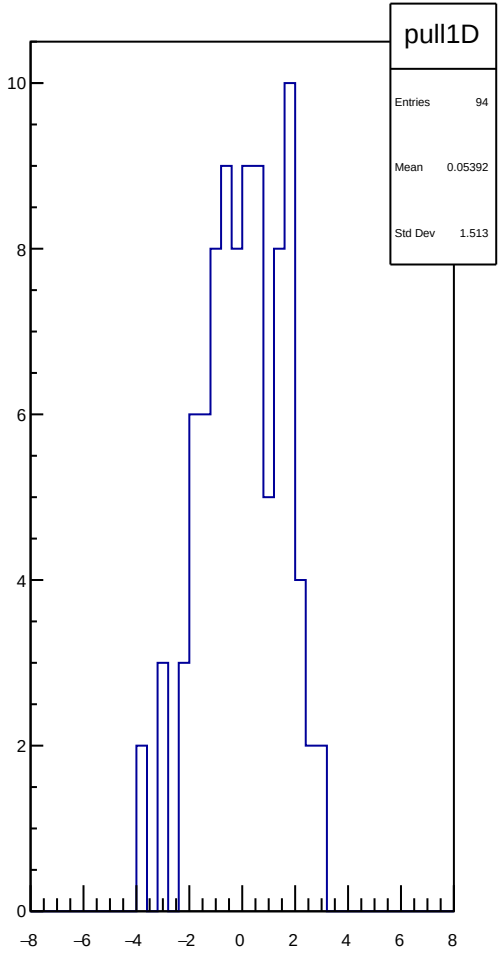

diff_bpm0l09Y_rms vs run
χ² / ndf 4623 / 93
p0 1080 ± 0.8093
1250
1200
1150
1100
1050
1000

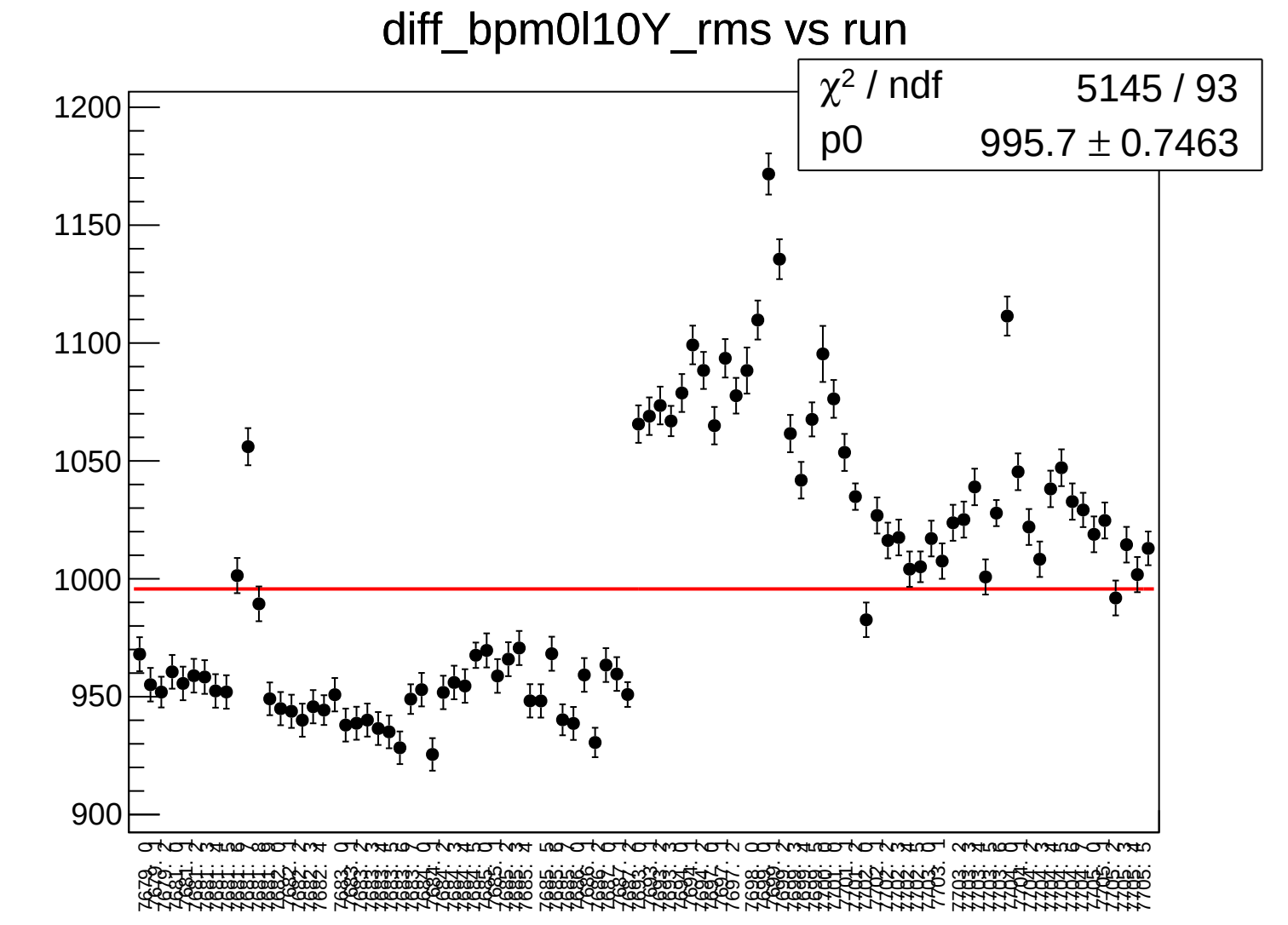

diff_bpm0l10X_mean vs run
χ^2 / ndf 99.51 / 93
p0 36.17 ± 6.774
pull
Entries 94
Mean −1056
Std Dev 1115

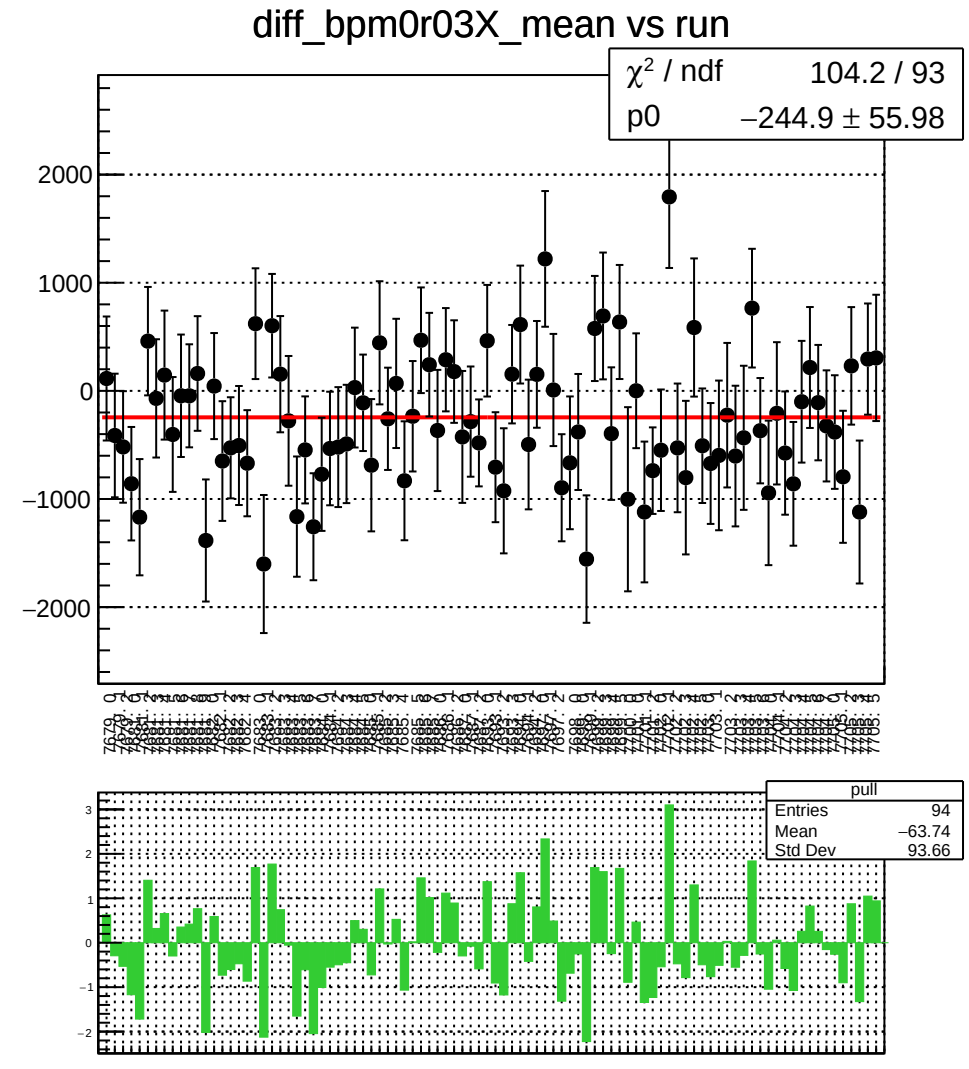

pull1D
Entries 94
Mean 0.002678
Std Dev 1.029

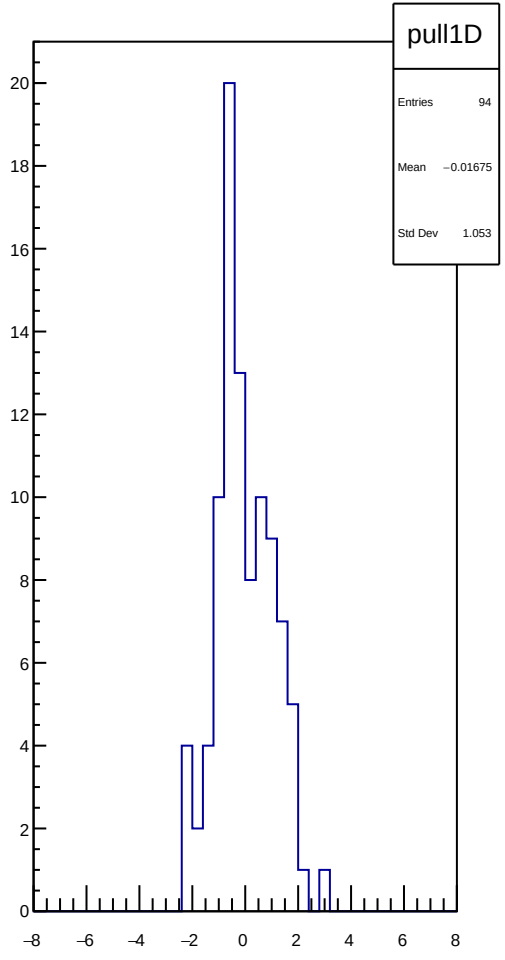

diff_bpm0l10X_rms vs run
χ² / ndf 1.138e+04 / 93
p0 6379 ± 4.79
8000
7500
7000
6500
6000
5500

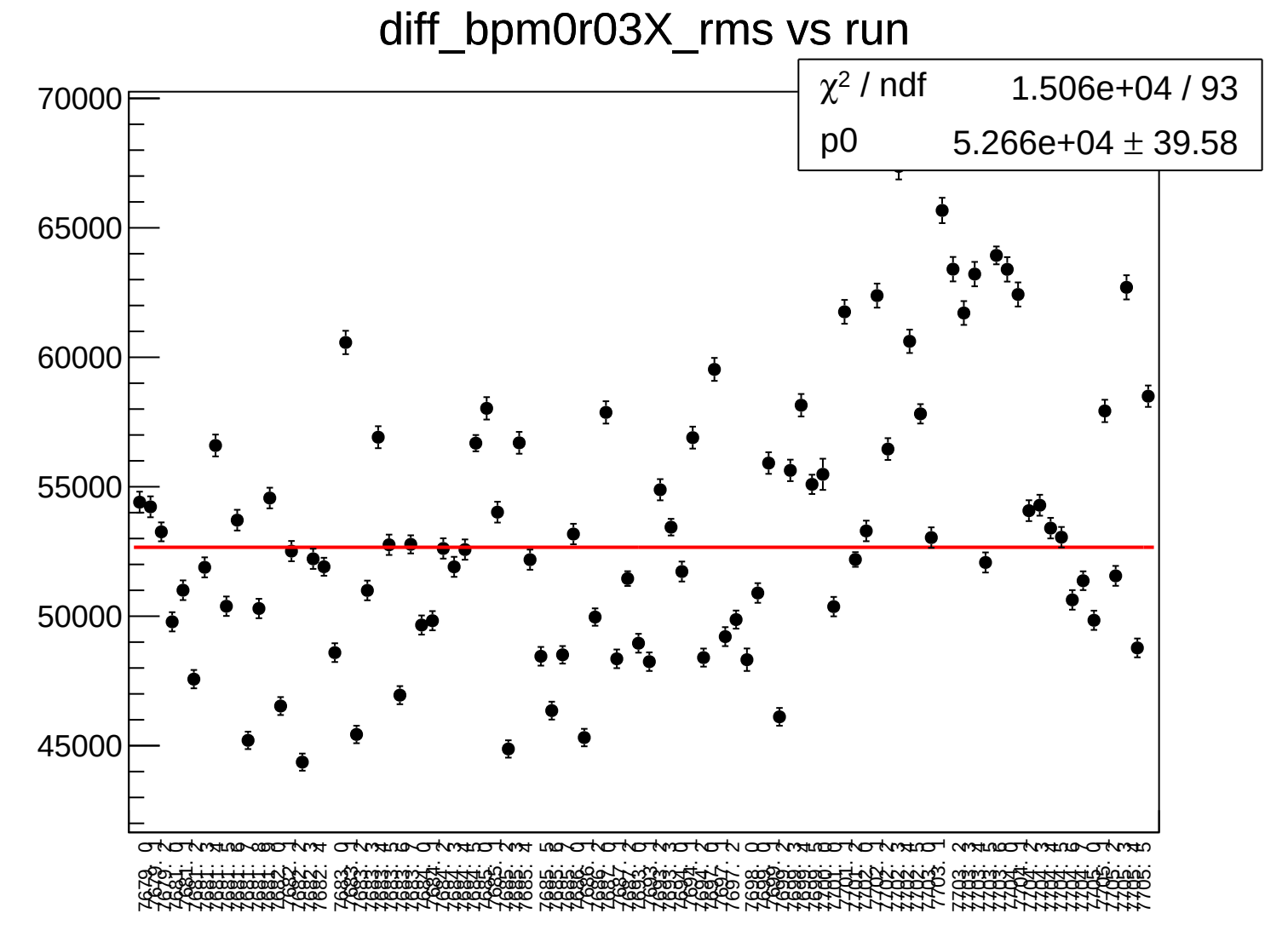

diff_bpm0l10Y_mean vs run
χ² / ndf 215.6 / 93
p0 −22.77 ± 1.055
pull
Entries 94
Mean 368
Std Dev 326.4

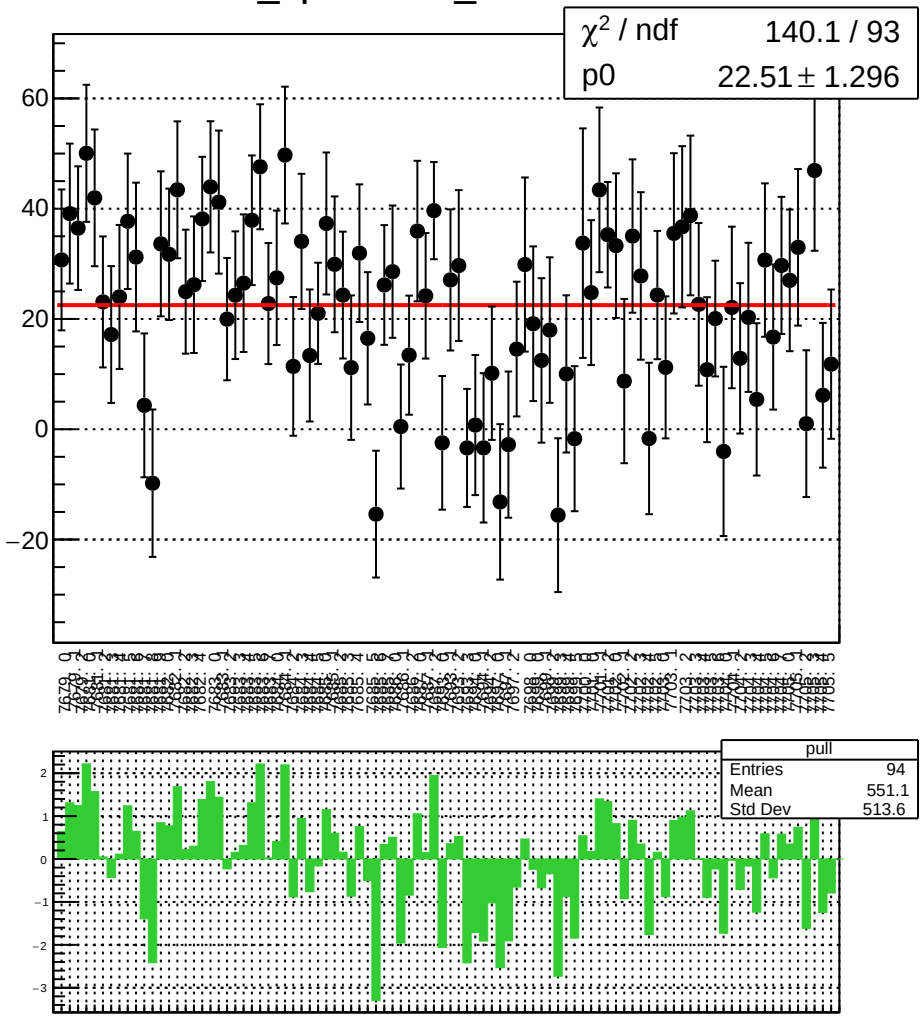

pull1D
Entries 94
Mean 0.05392
Std Dev 1.513

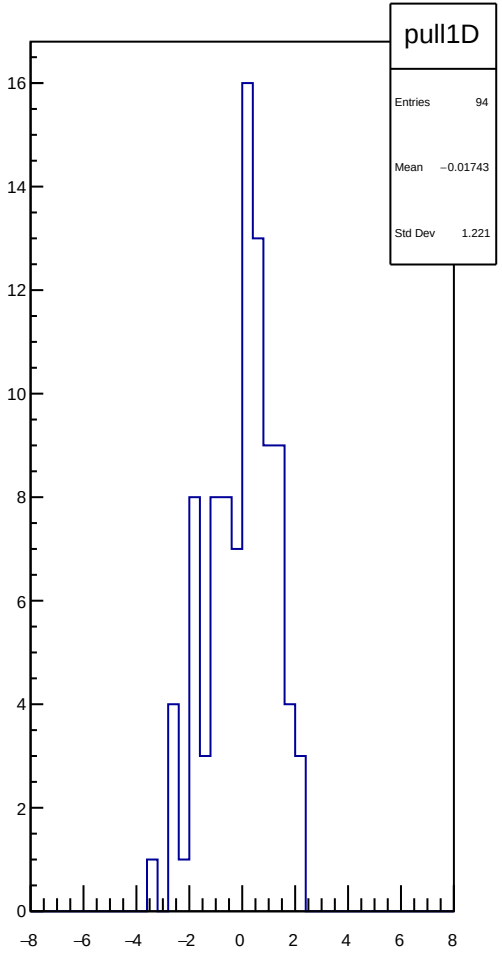

diff_bpm0l10Y_rms vs run
χ² / ndf 5145 / 93
p0 995.7 ± 0.7463
1200
1150
1100
1050
1000
950
900

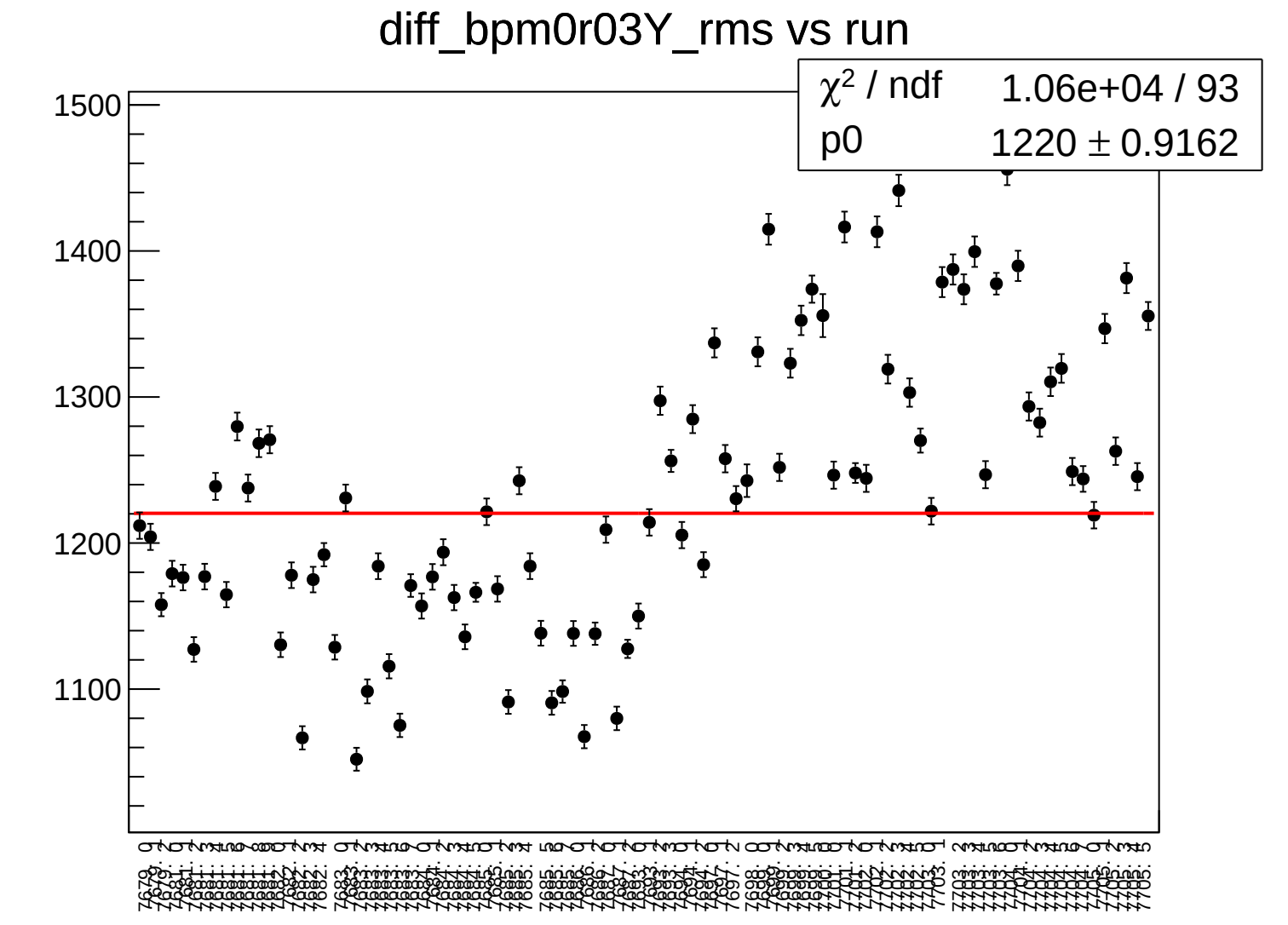

diff_bpm0r03X_mean vs run
χ^2 / ndf 104.2 / 93
p0 −244.9 ± 55.98
2000
1000
0
−1000
−2000
pull
Entries 94
Mean −63.74
Std Dev 93.66
3
2
1
0
−1
−2

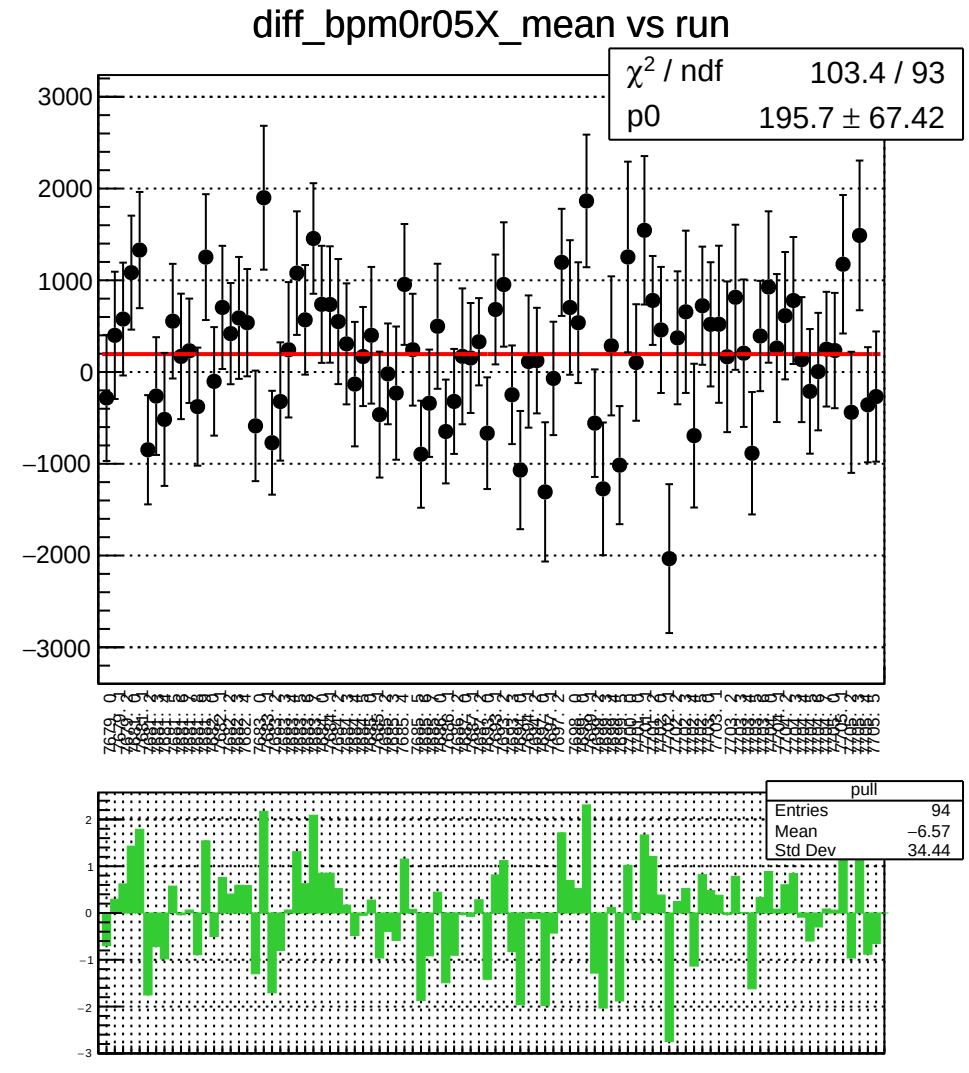

pull1D
Entries 94
Mean −0.01675
Std Dev 1.053
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

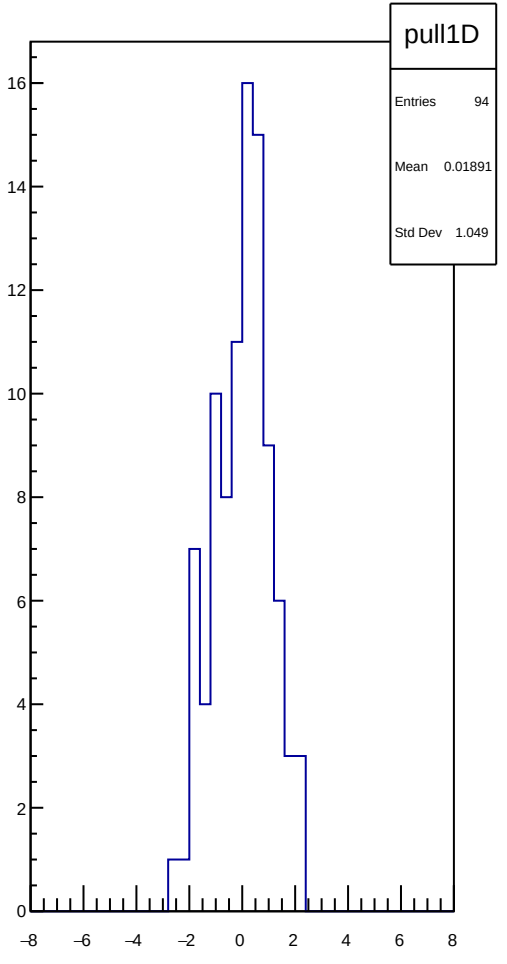

diff_bpm0r03X_rms vs run
χ^2 / ndf 1.506e+04 / 93
p0 5.266e+04 ± 39.58
70000
65000
60000
55000
50000
45000

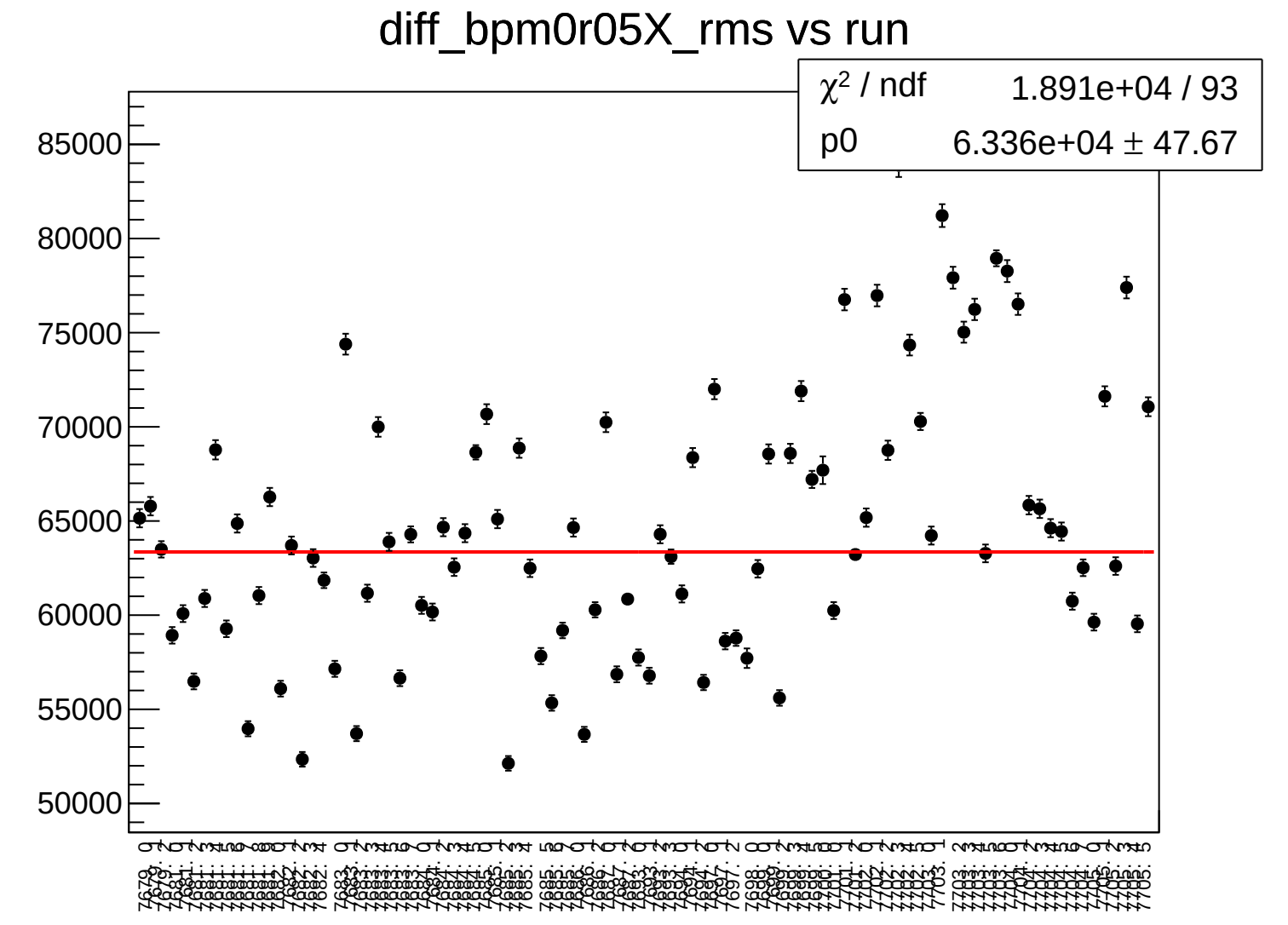

diff_bpm0r03Y_mean vs run
χ² / ndf 140.1 / 93
p0 22.51 ± 1.296
pull
Entries 94
Mean 551.1
Std Dev 513.6

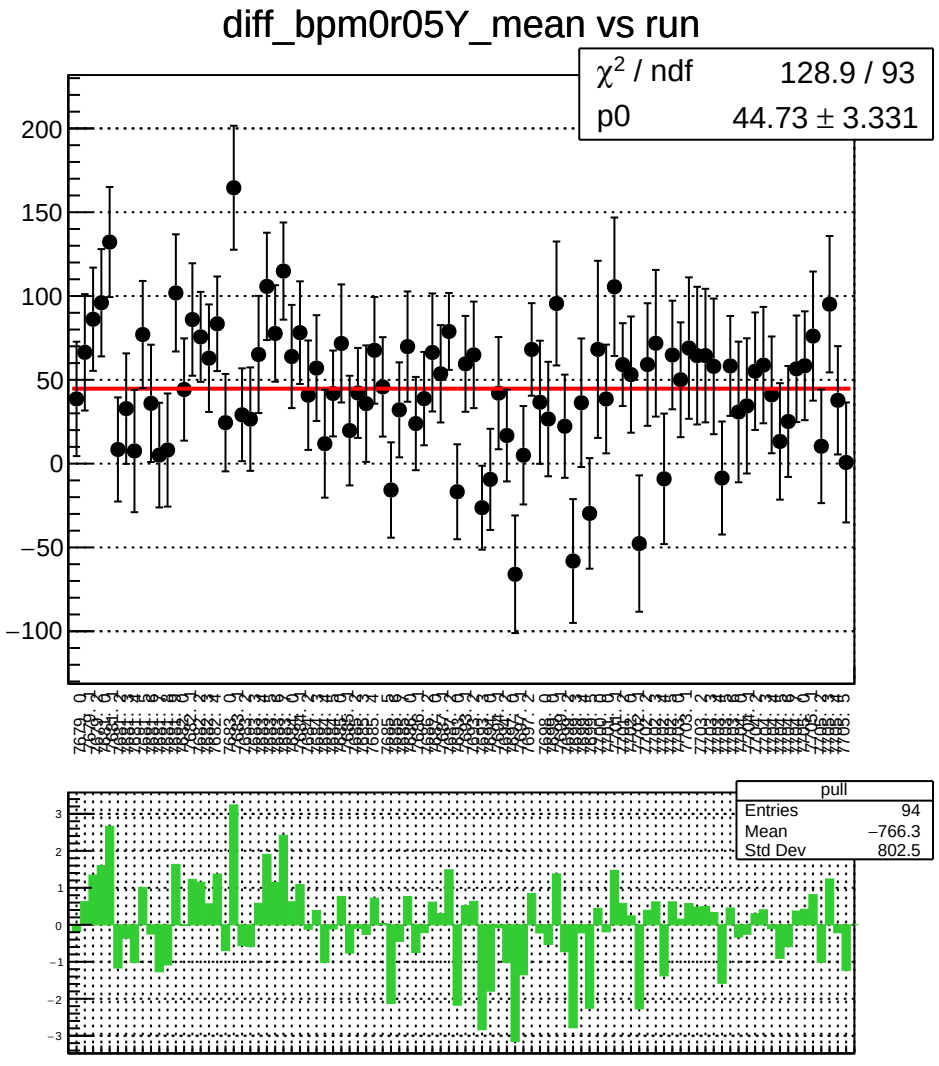

pull1D
Entries 94
Mean −0.01743
Std Dev 1.221

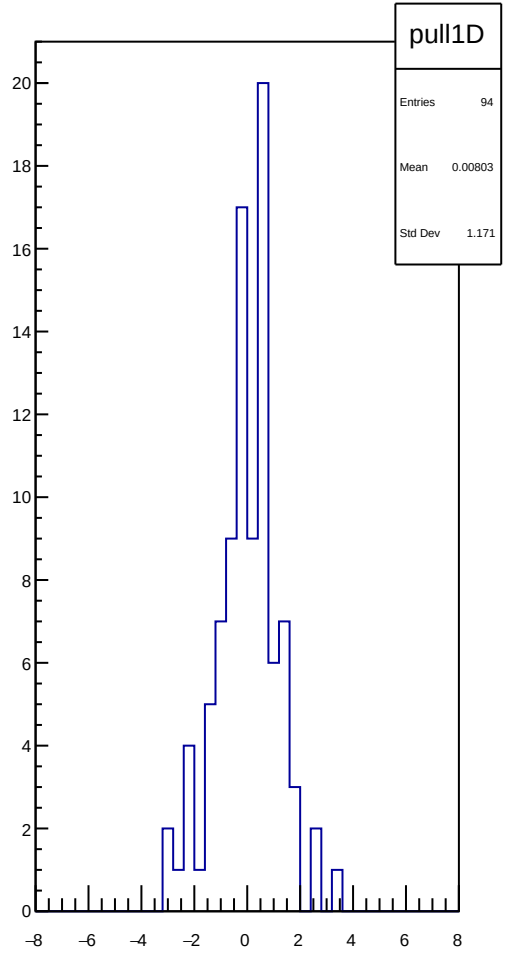

diff_bpm0r03Y_rms vs run
χ² / ndf 1.06e+04 / 93
p0 1220 ± 0.9162
1500
1400
1300
1200
1100

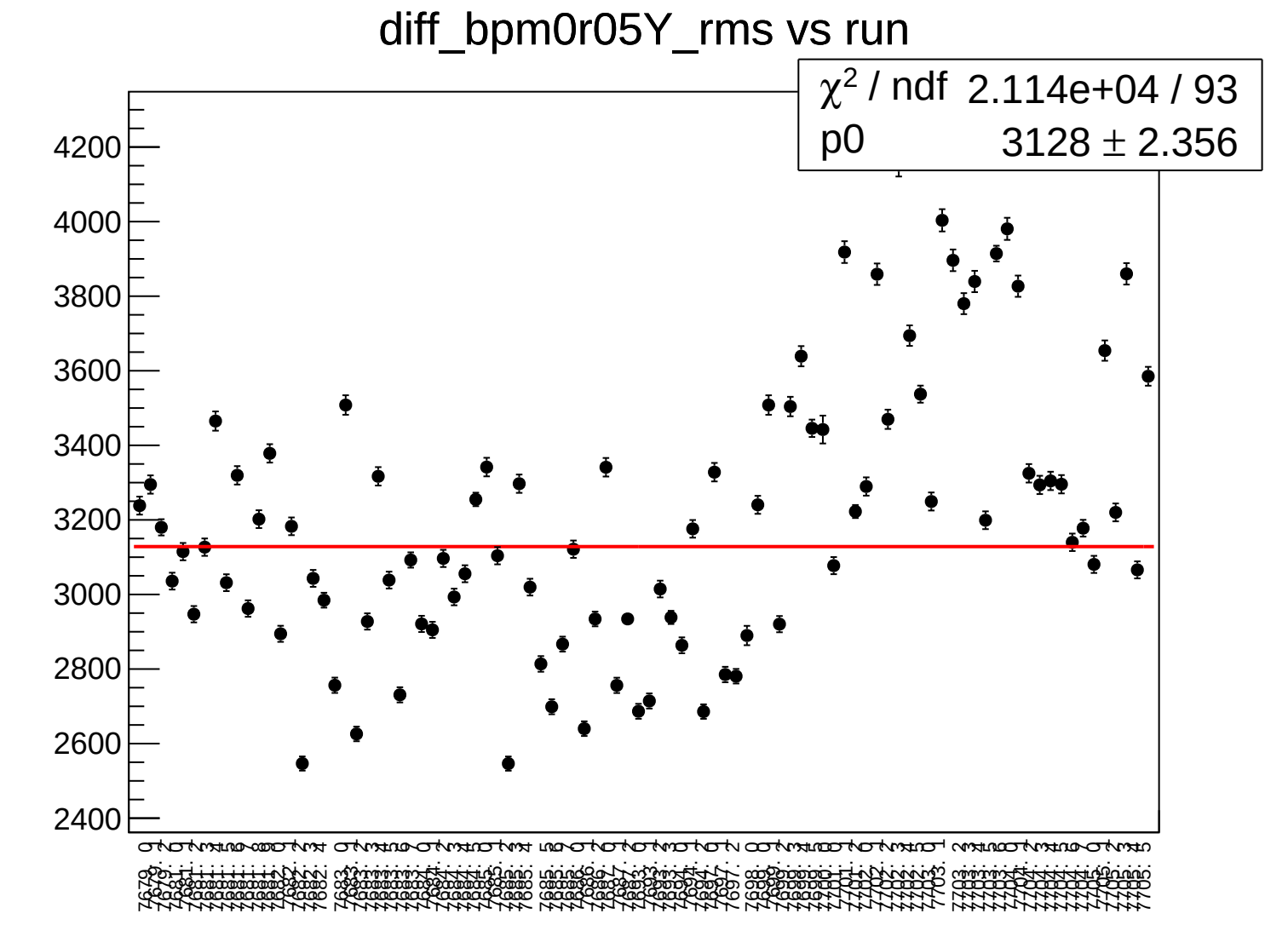

diff_bpm0r05X_mean vs run
χ² / ndf 103.4 / 93
p0 195.7 ± 67.42
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 94
Mean −6.57
Std Dev 34.44
2
1
0
−1
−2
−3

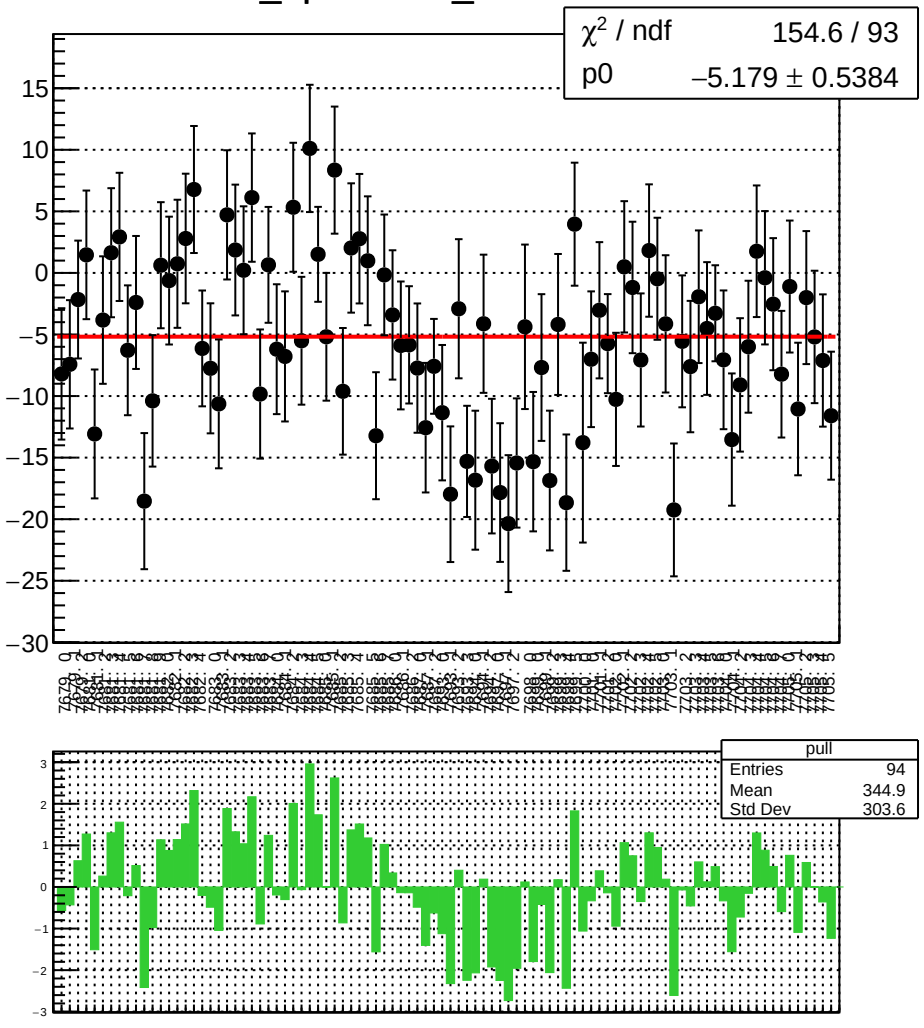

pull1D
Entries 94
Mean 0.01891
Std Dev 1.049
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

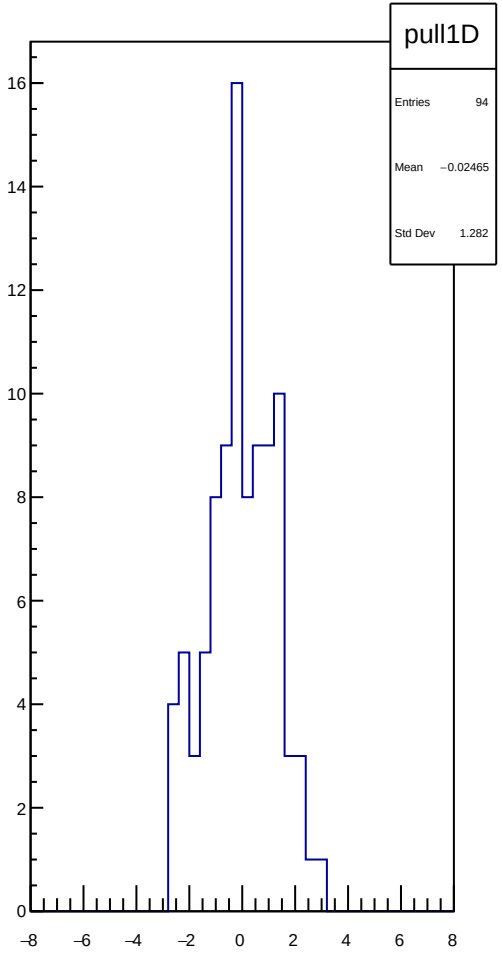

diff_bpm0r05X_rms vs run
χ^2 / ndf 1.891e+04 / 93
p0 6.336e+04 ± 47.67
85000
80000
75000
70000
65000
60000
55000
50000

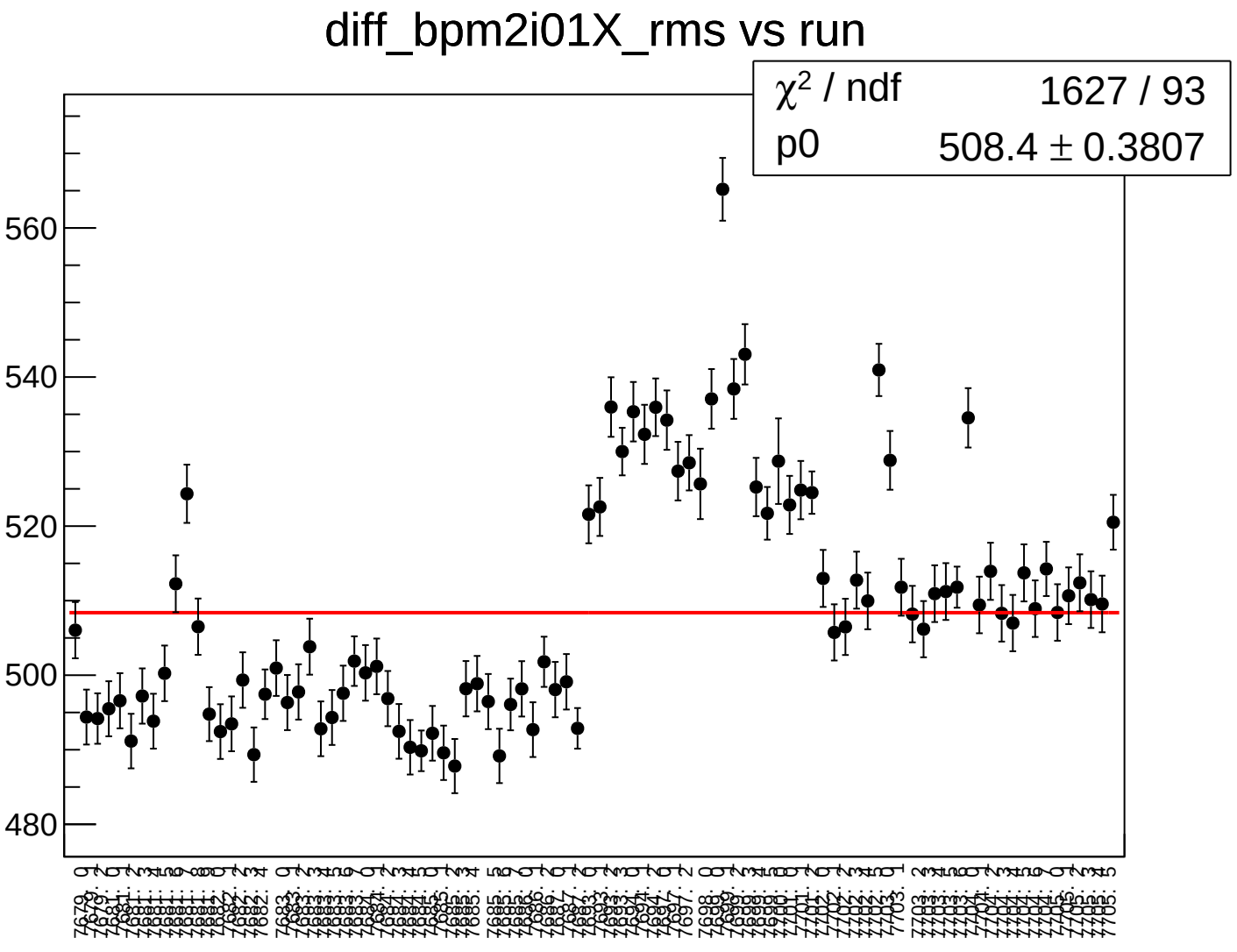

diff_bpm0r05Y_mean vs run
χ^2 / ndf 128.9 / 93
p0 44.73 ± 3.331
200
150
100
50
0
−50
−100
pull
Entries 94
Mean −766.3
Std Dev 802.5
3
2
1
0
−1
−2
−3

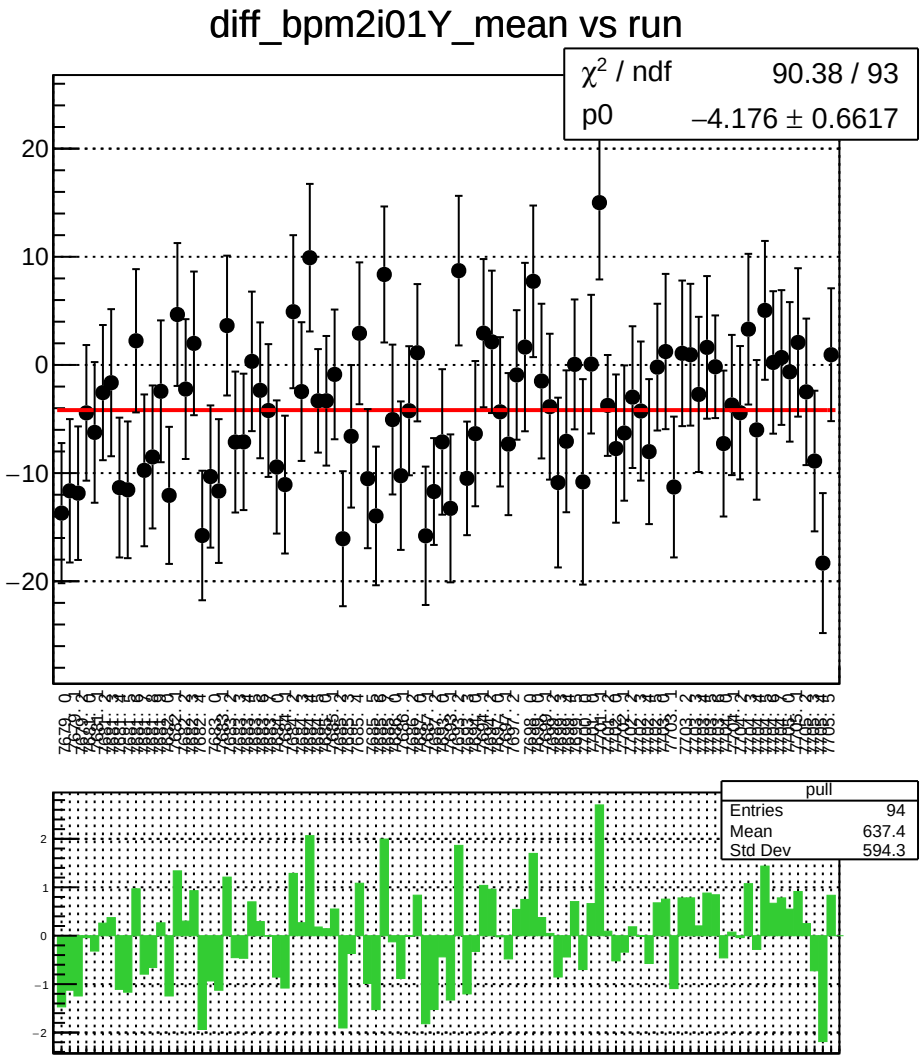

pull1D
Entries 94
Mean 0.00803
Std Dev 1.171
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

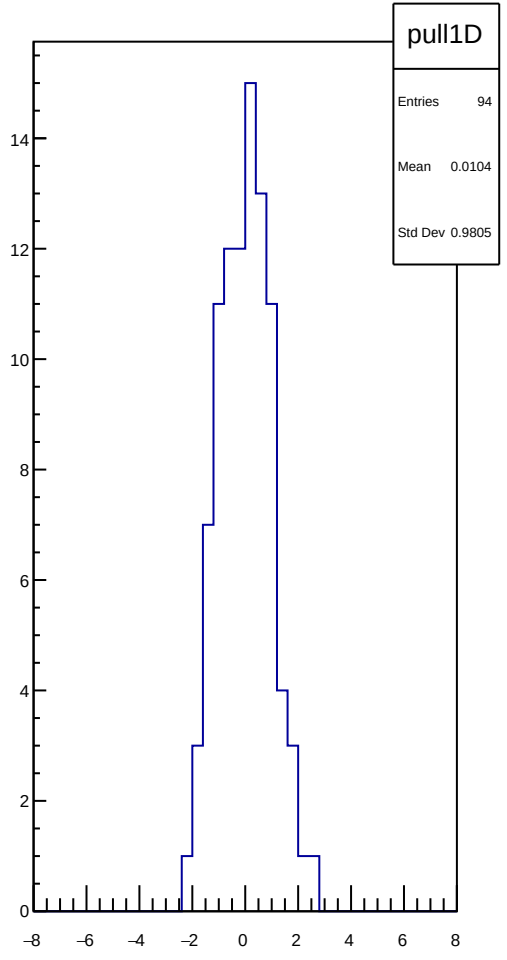

diff_bpm0r05Y_rms vs run
χ^2 / ndf 2.114e+04 / 93
p0 3128 ± 2.356
4200
4000
3800
3600
3400
3200
3000
2800
2600
2400

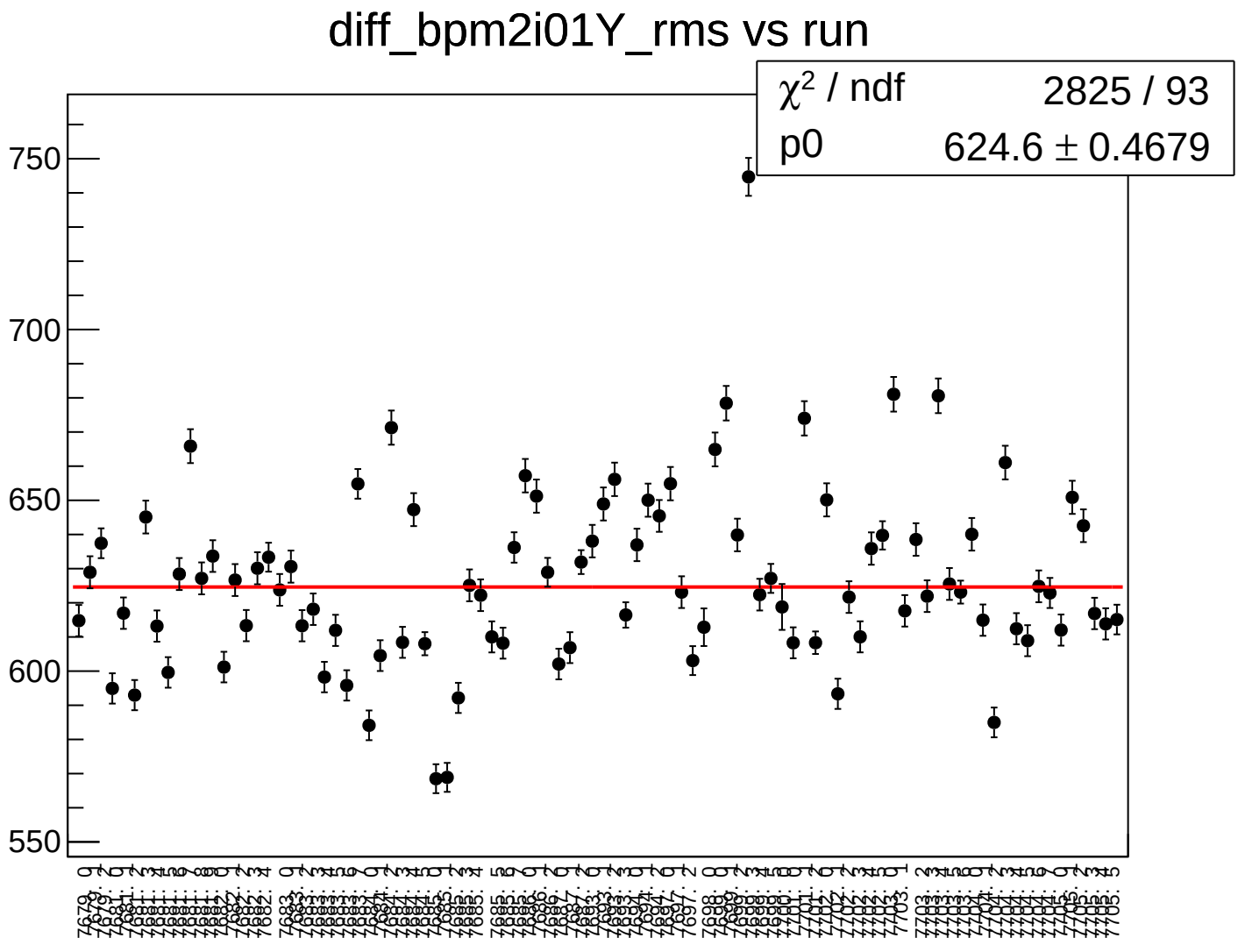

diff_bpm2i01X_mean vs run
χ² / ndf 154.6 / 93
p0 −5.179 ± 0.5384
pull
Entries 94
Mean 344.9
Std Dev 303.6

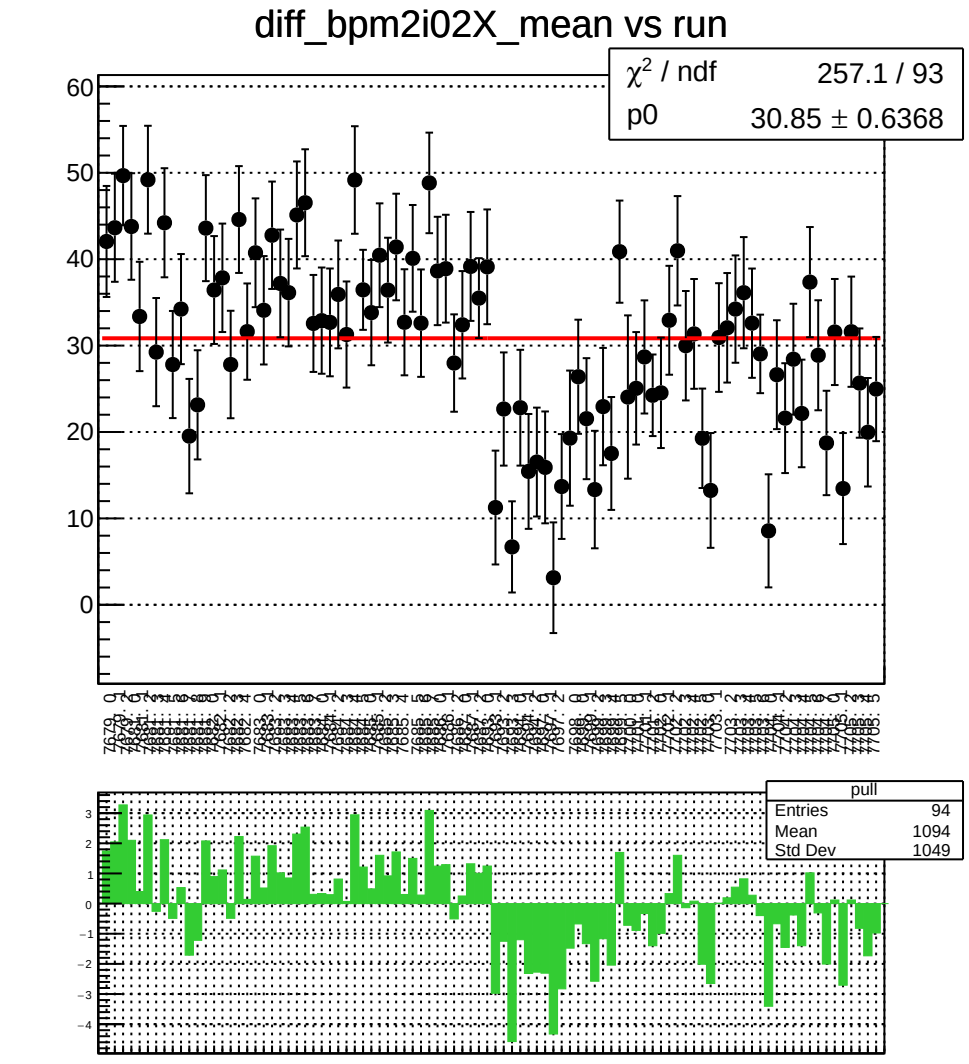

pull1D
Entries 94
Mean −0.02465
Std Dev 1.282

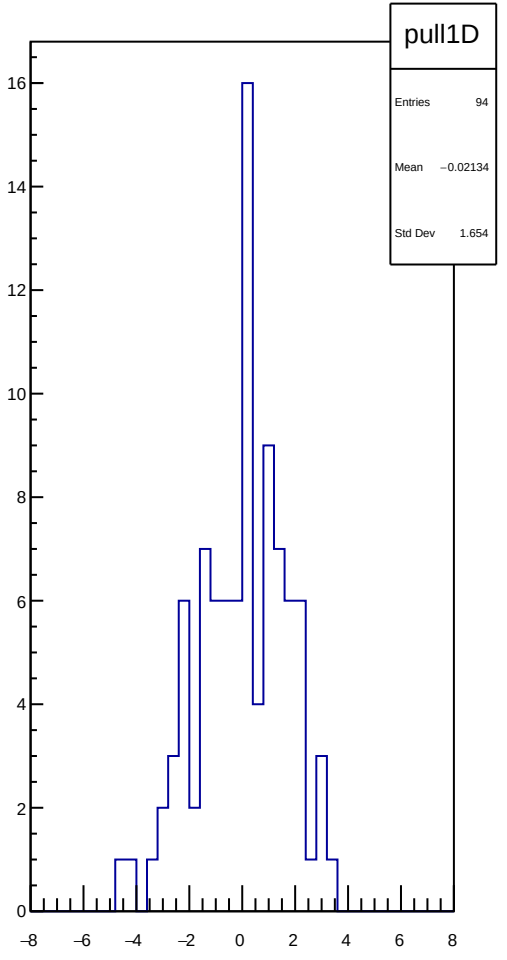

diff_bpm2i01X_rms vs run
χ² / ndf 1627 / 93
p0 508.4 ± 0.3807
560
540
520
500
480

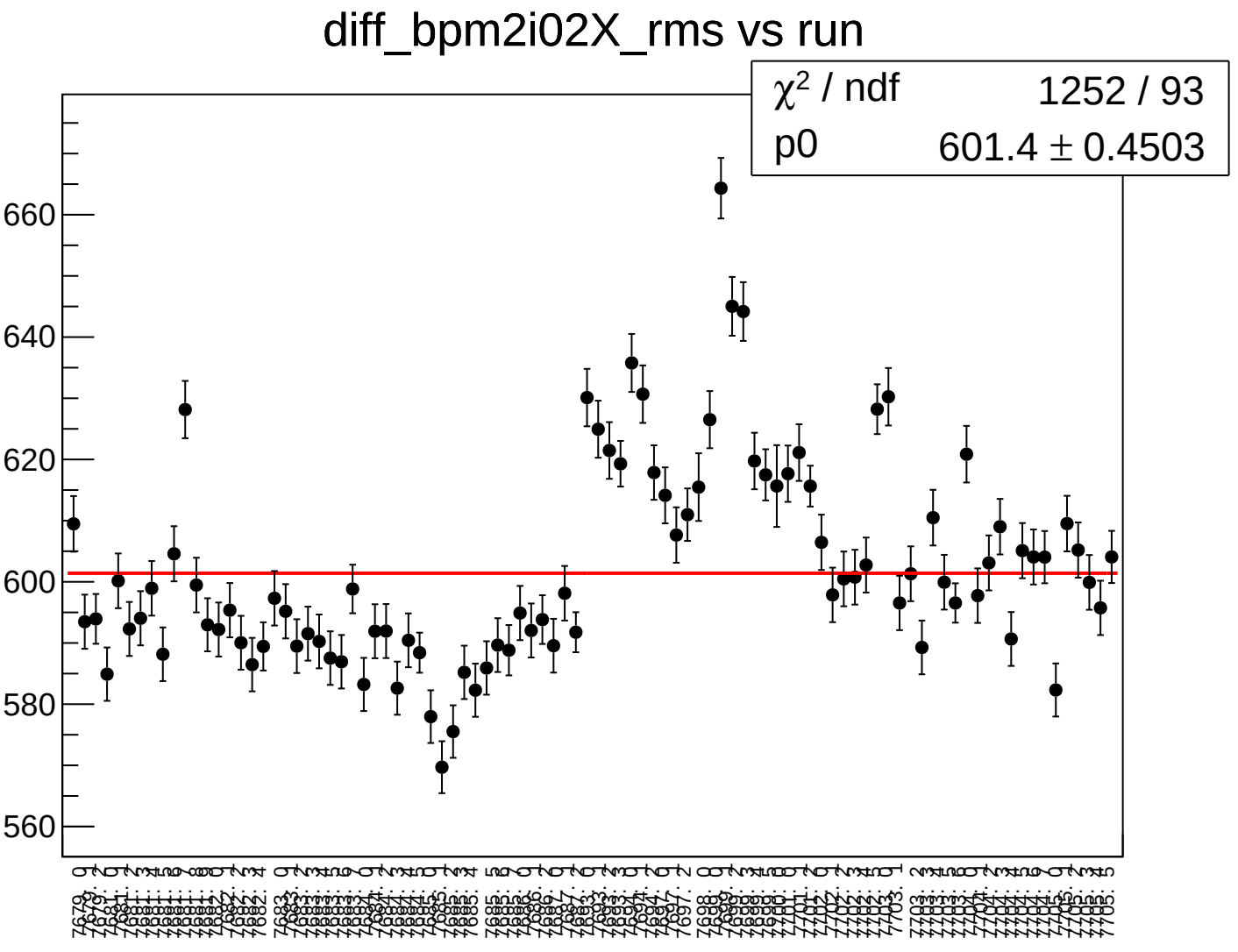

diff_bpm2i01Y_mean vs run
χ² / ndf 90.38 / 93
p0 −4.176 ± 0.6617
20
10
0
−10
−20
pull
Entries 94
Mean 637.4
Std Dev 594.3
2
1
0
−1
−2

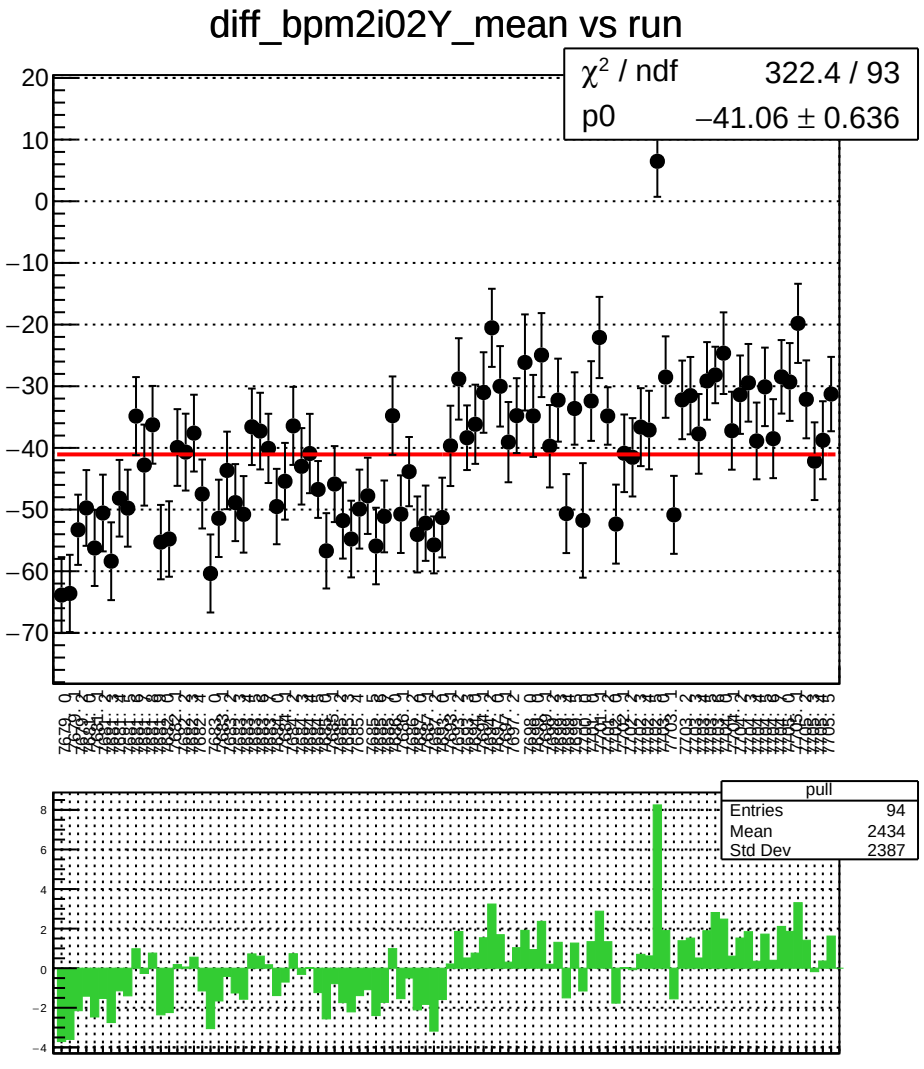

pull1D
Entries 94
Mean 0.0104
Std Dev 0.9805
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

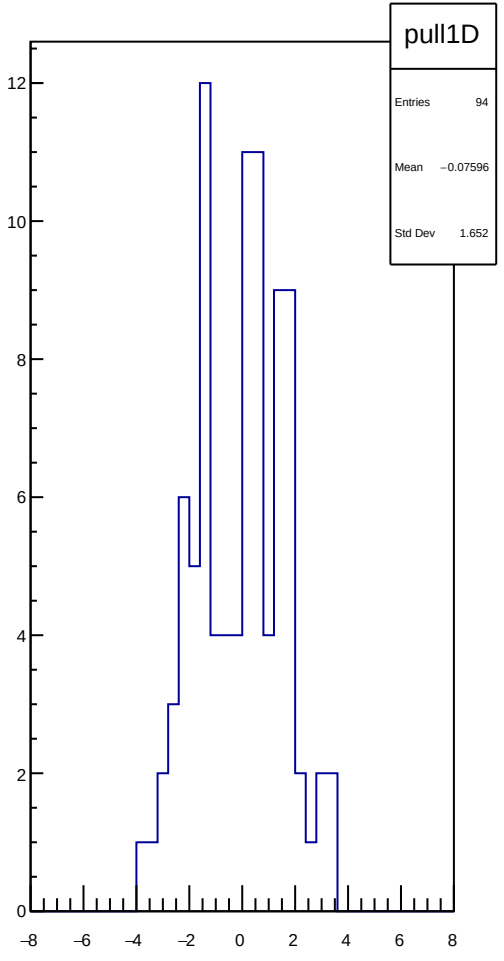

diff_bpm2i01Y_rms vs run
χ² / ndf 2825 / 93
p0 624.6 ± 0.4679
750
700
650
600
550

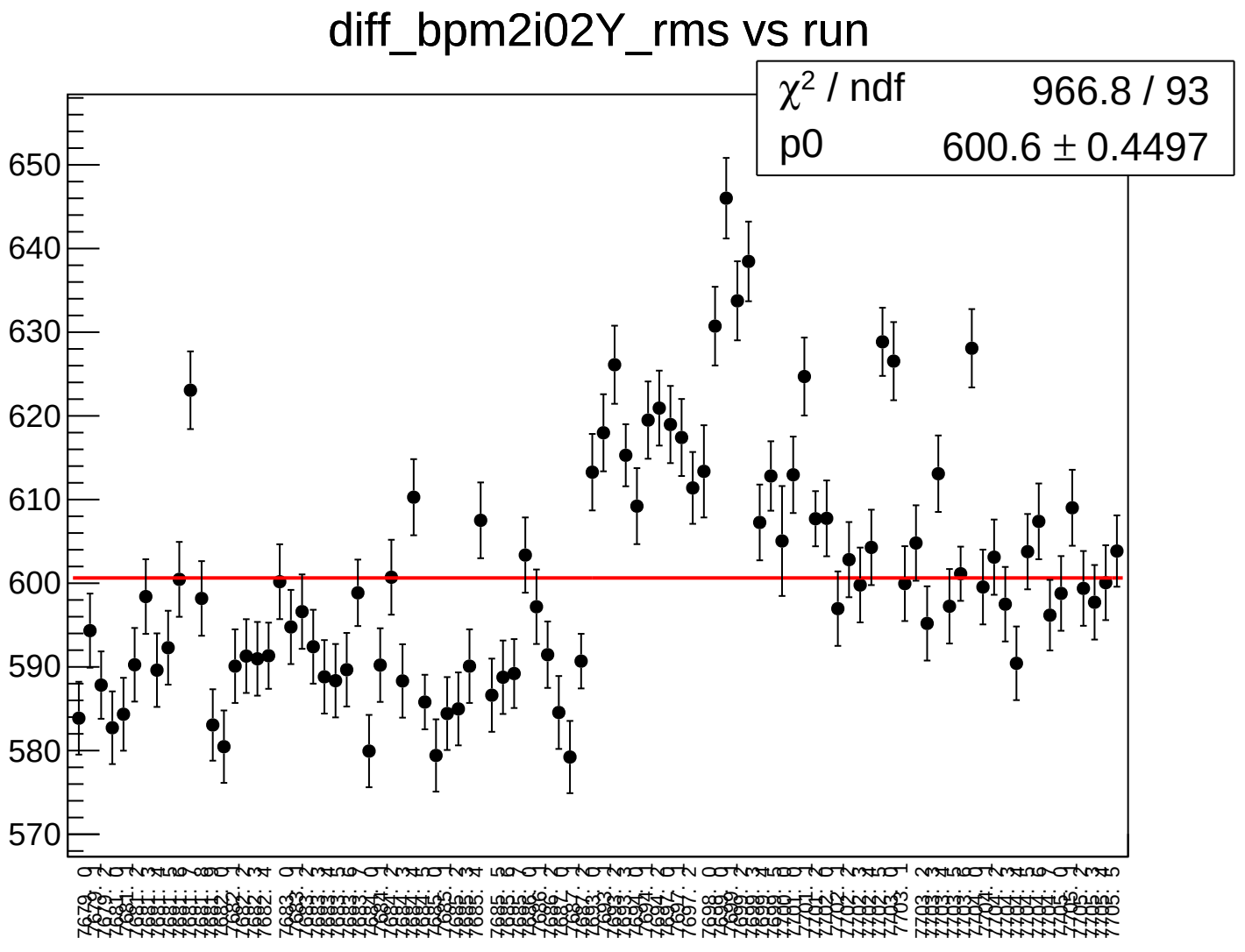

diff_bpm2i02X_mean vs run
χ² / ndf 257.1 / 93
p0 30.85 ± 0.6368
pull
Entries 94
Mean 1094
Std Dev 1049

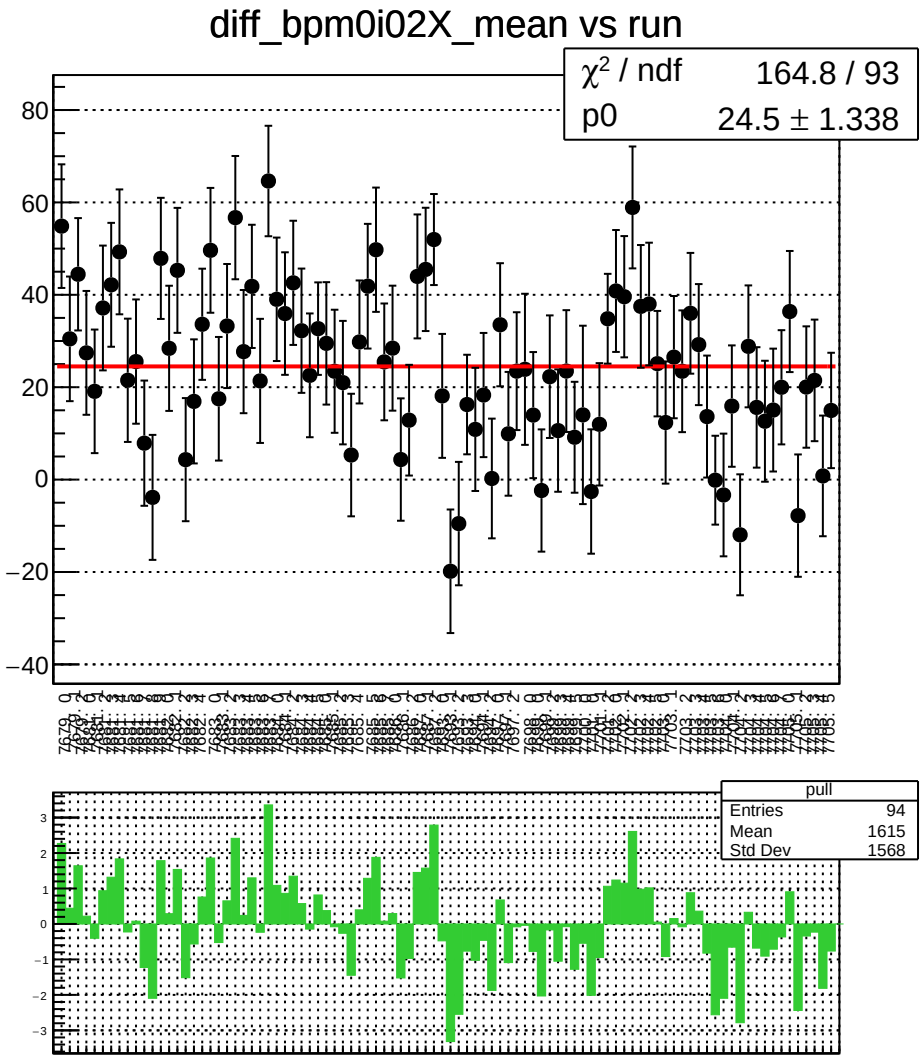

pull1D
Entries 94
Mean −0.02134
Std Dev 1.654

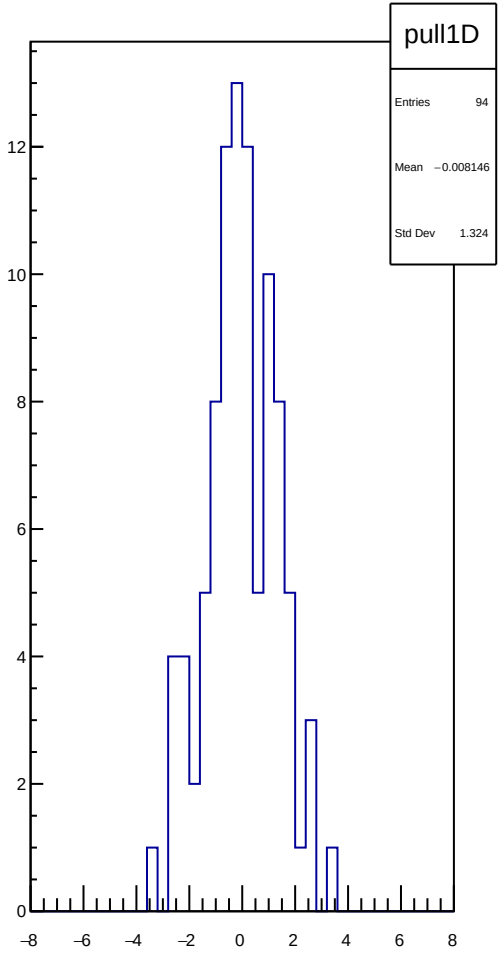

diff_bpm2i02X_rms vs run
χ² / ndf 1252 / 93
p0 601.4 ± 0.4503
660
640
620
600
580
560

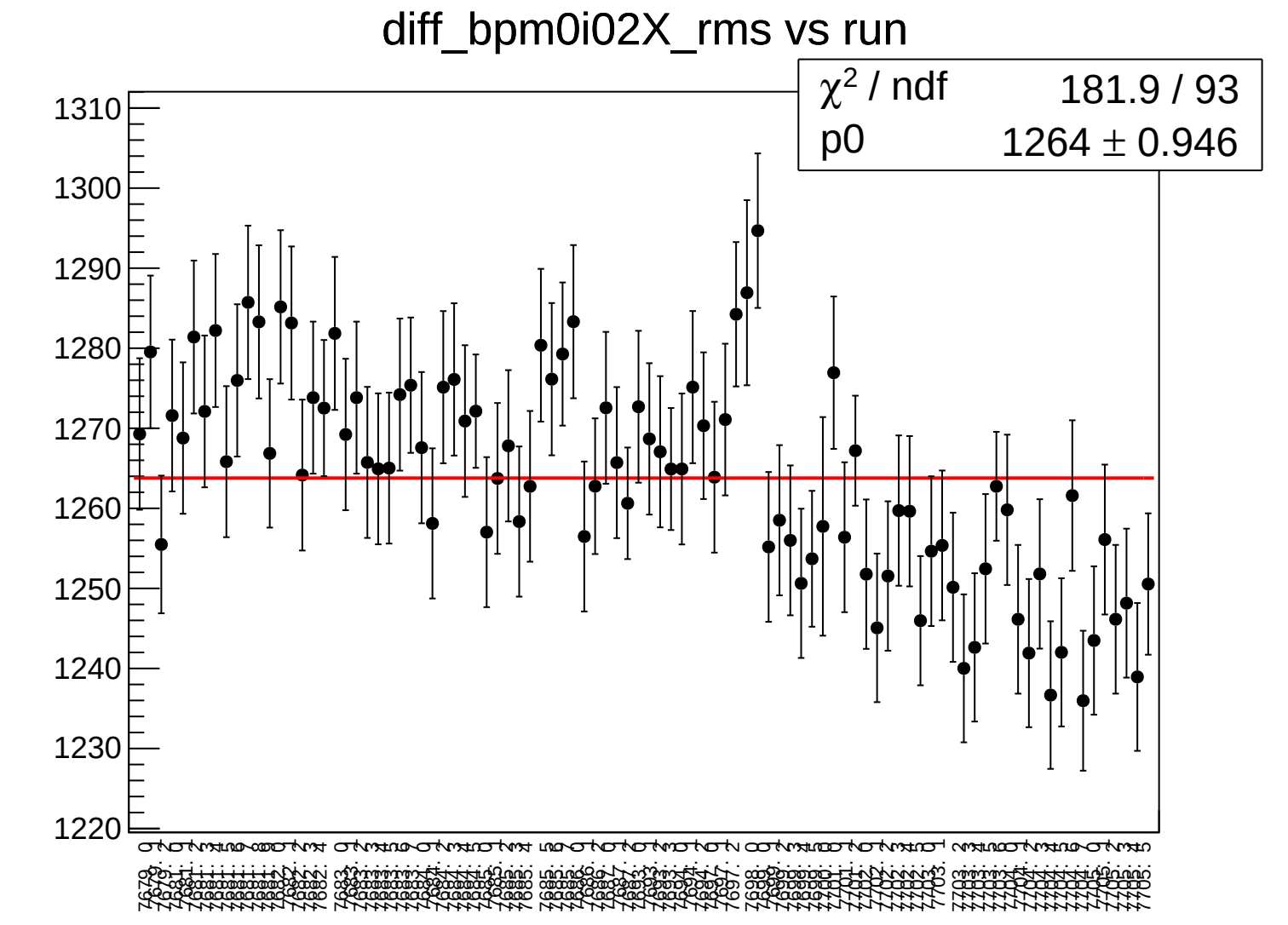

diff_bpm2i02Y_mean vs run
χ² / ndf 322.4 / 93
p0 −41.06 ± 0.636
pull
Entries 94
Mean 2434
Std Dev 2387

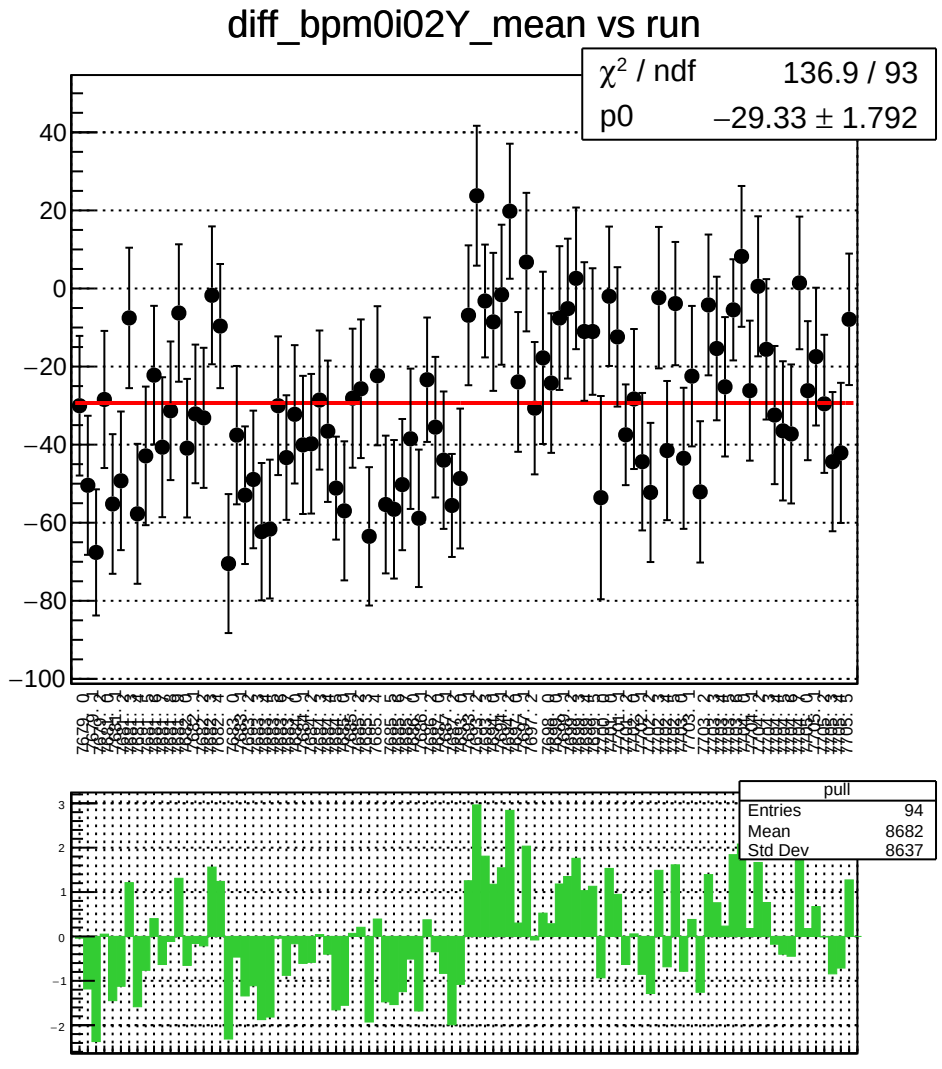

pull1D
Entries 94
Mean −0.07596
Std Dev 1.652

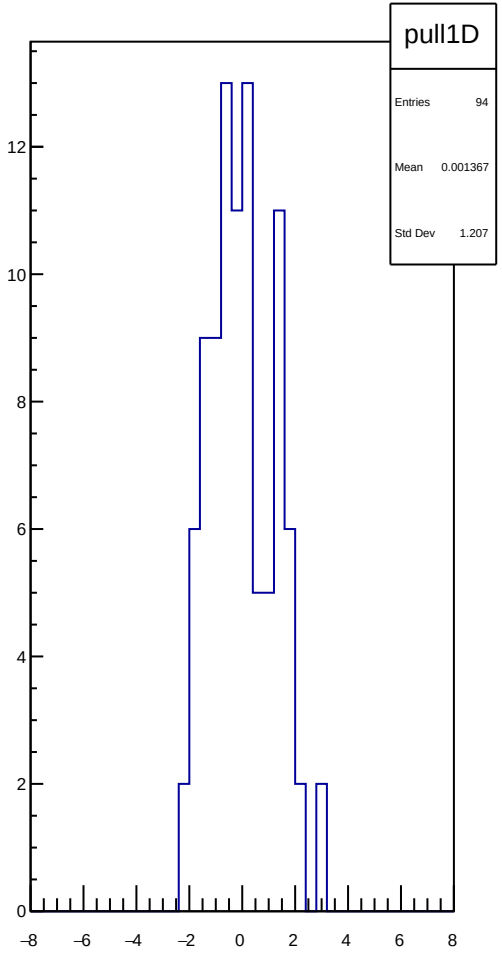

diff_bpm2i02Y_rms vs run
χ² / ndf 966.8 / 93
p0 600.6 ± 0.4497
650
640
630
620
610
600
590
580
570

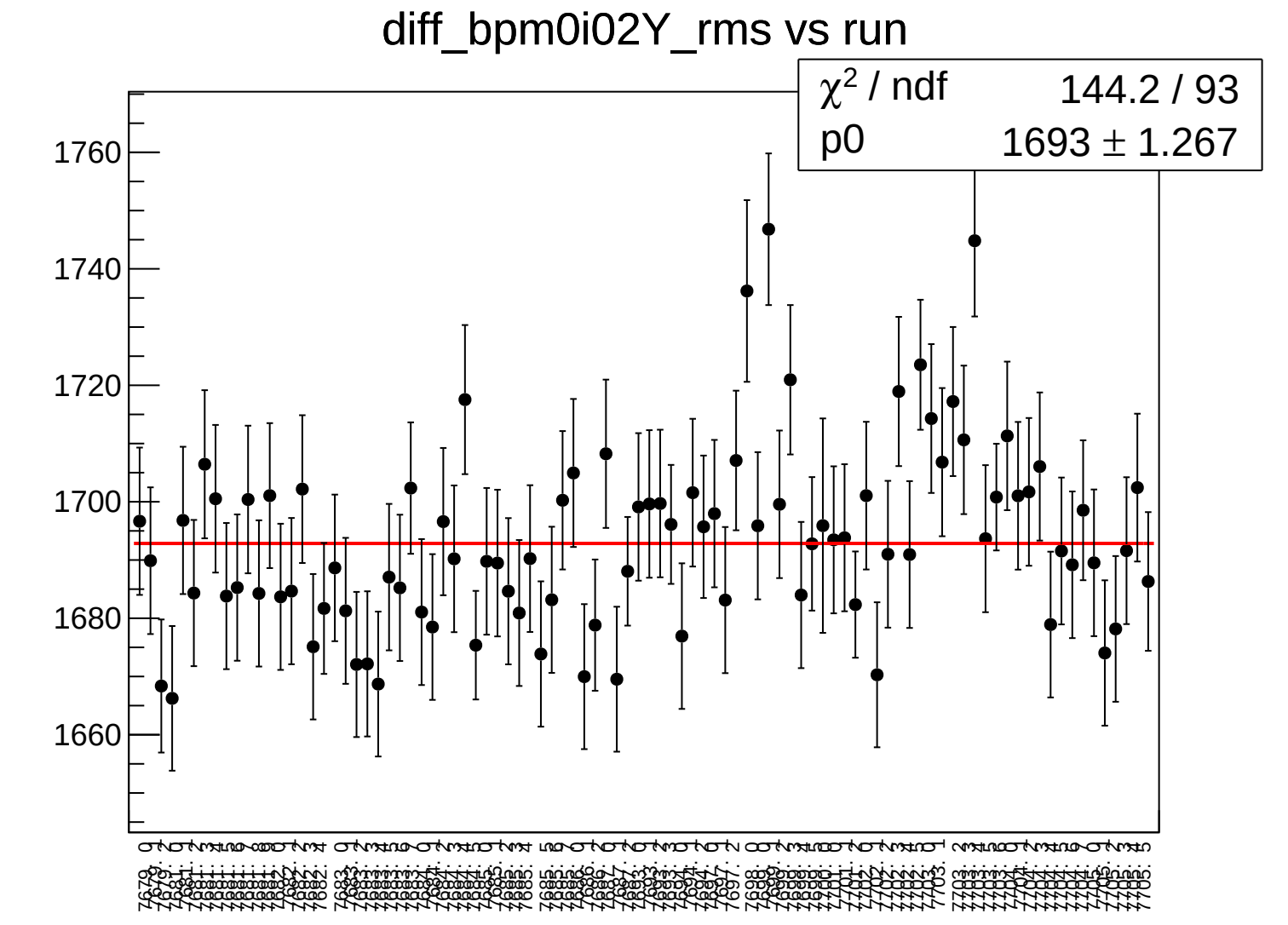

diff_bpm0i02X_mean vs run
χ² / ndf 164.8 / 93
p0 24.5 ± 1.338
pull
Entries 94
Mean 1615
Std Dev 1568

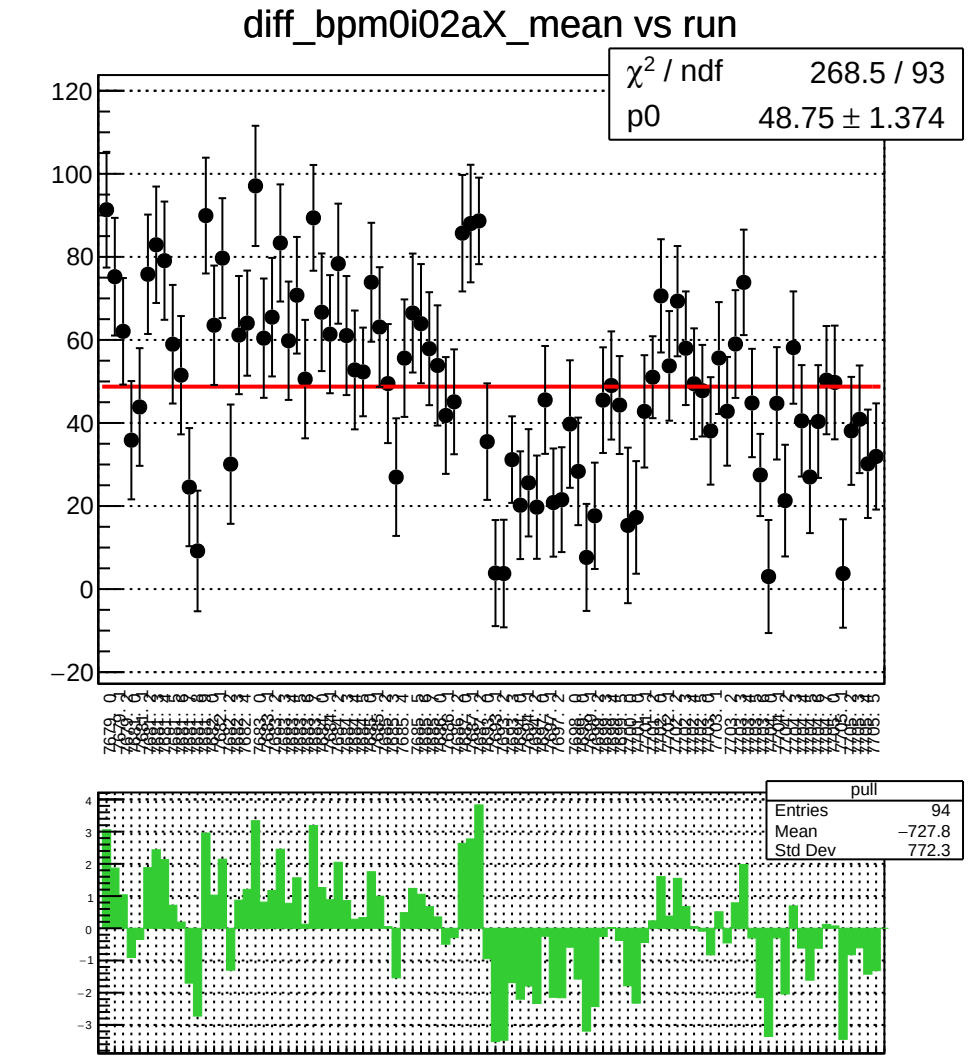

pull1D
Entries 94
Mean −0.008146
Std Dev 1.324

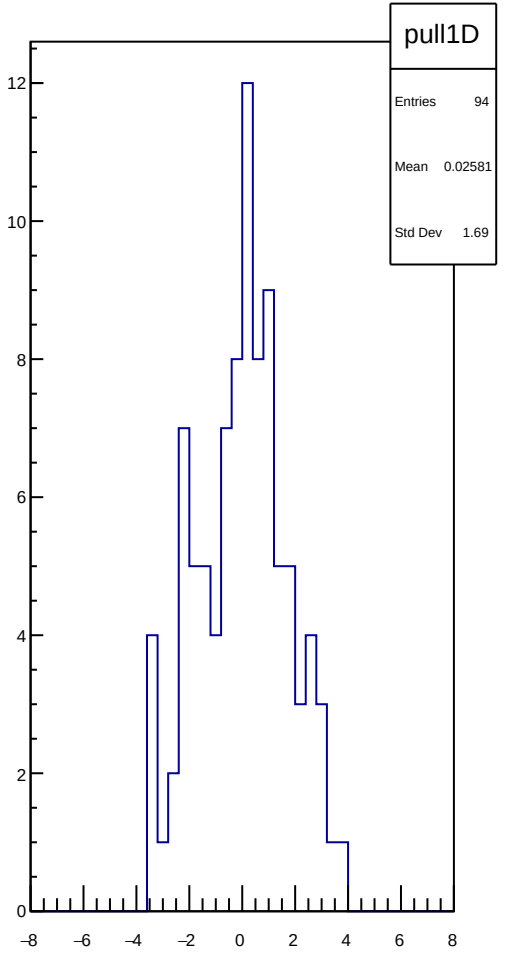

diff_bpm0i02X_rms vs run
χ^2 / ndf 181.9 / 93
p0 1264 ± 0.946
1310
1300
1290
1280
1270
1260
1250
1240
1230
1220

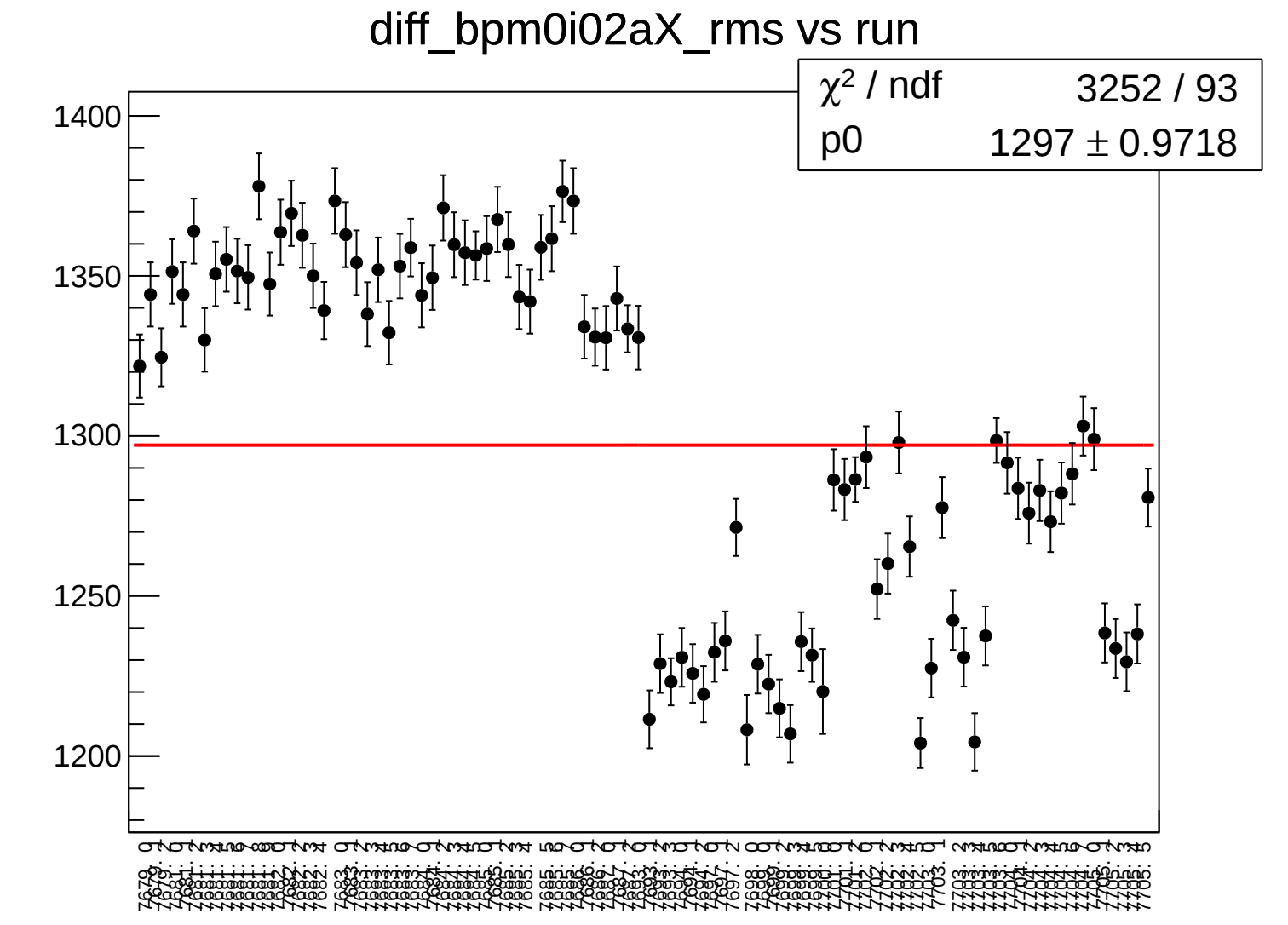

diff_bpm0i02Y_mean vs run
χ² / ndf 136.9 / 93
p0 −29.33 ± 1.792
pull
Entries 94
Mean 8682
Std Dev 8637

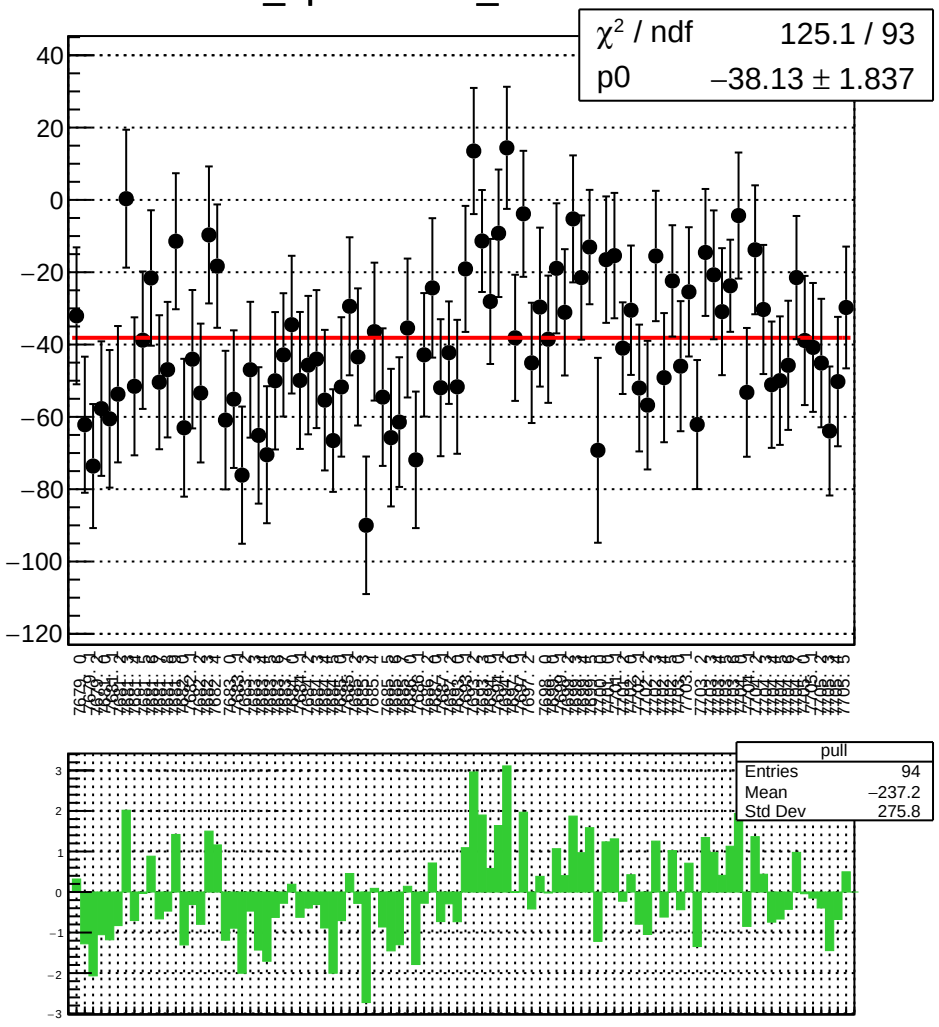

pull1D
Entries 94
Mean 0.001367
Std Dev 1.207

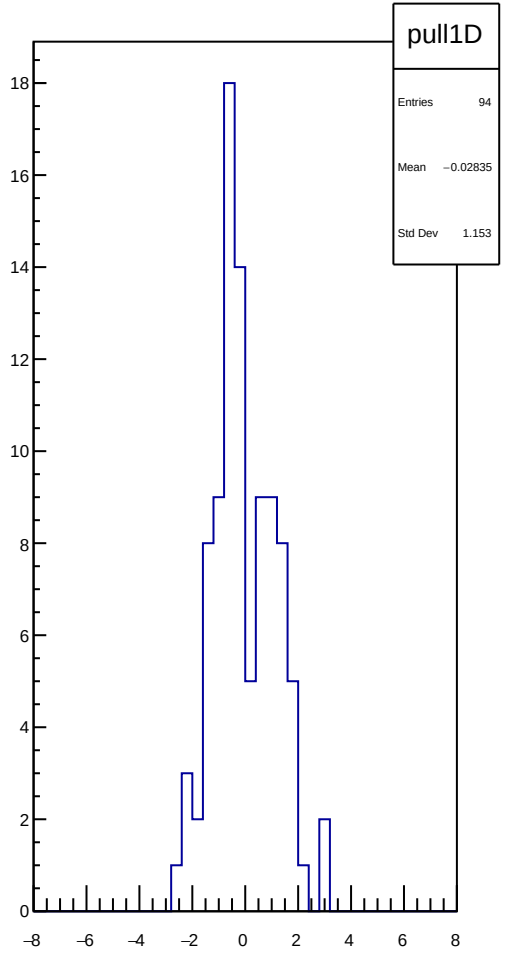

diff_bpm0i02Y_rms vs run
χ² / ndf 144.2 / 93
p0 1693 ± 1.267
1760
1740
1720
1700
1680
1660

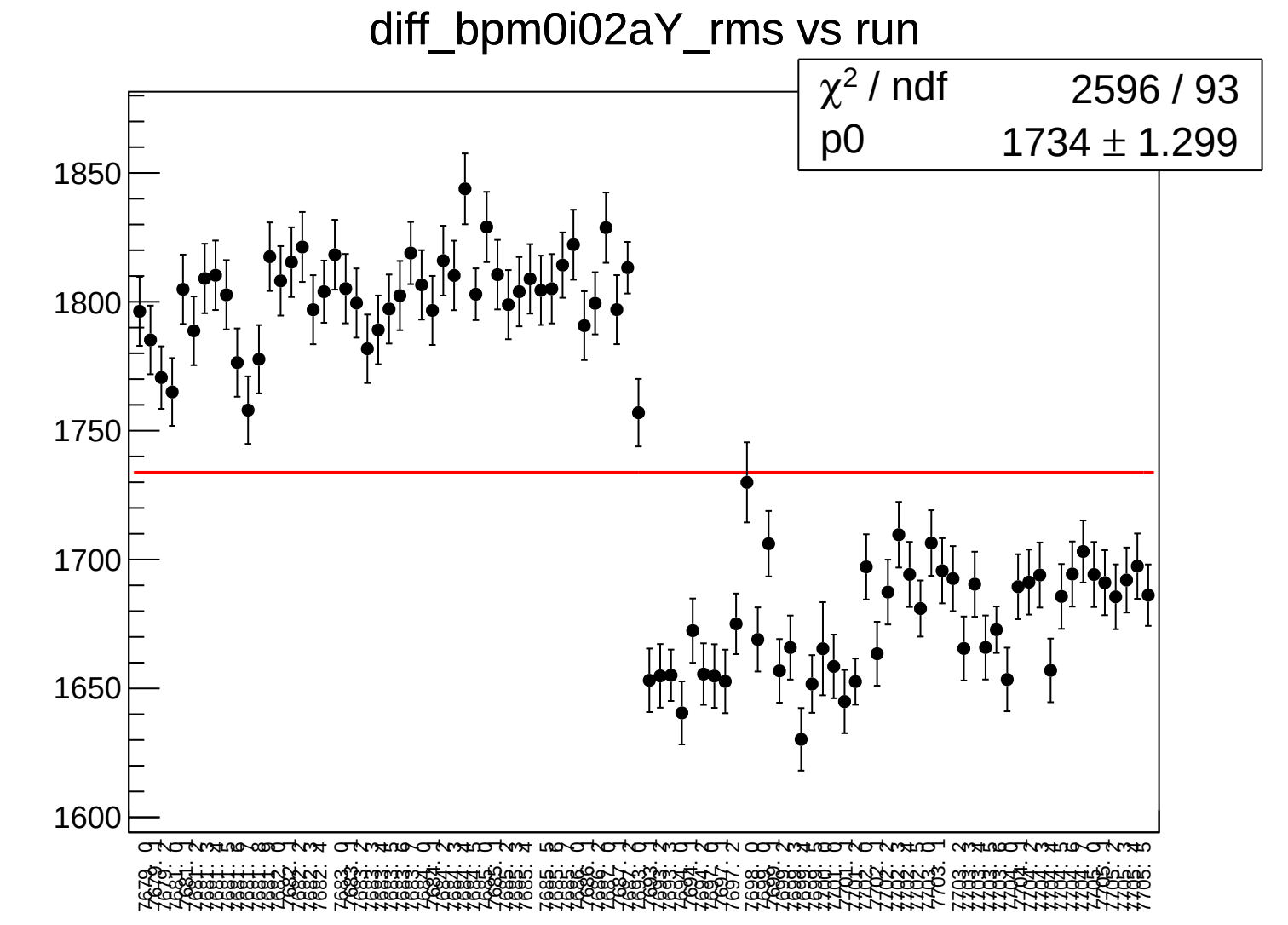

diff_bpm0i02aX_mean vs run
χ² / ndf 268.5 / 93
p0 48.75 ± 1.374
pull
Entries 94
Mean −727.8
Std Dev 772.3

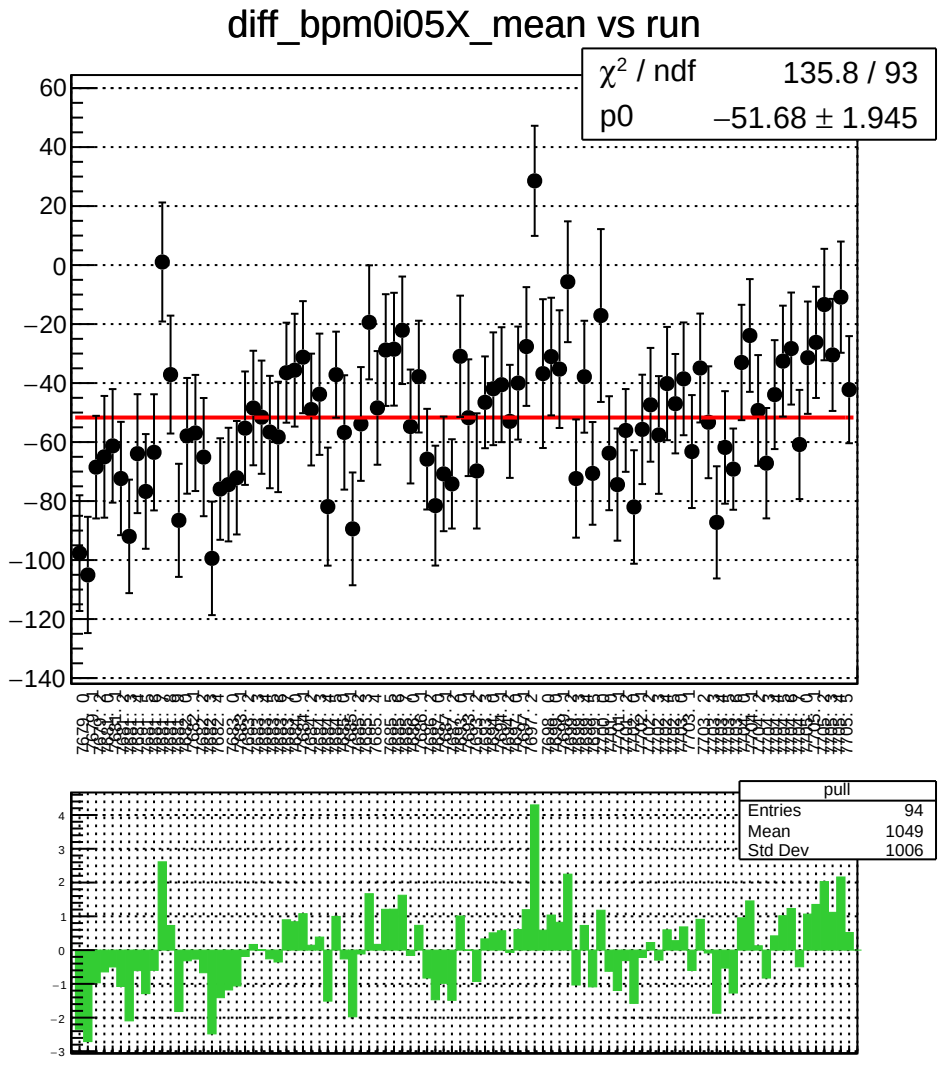

pull1D
Entries 94
Mean 0.02581
Std Dev 1.69

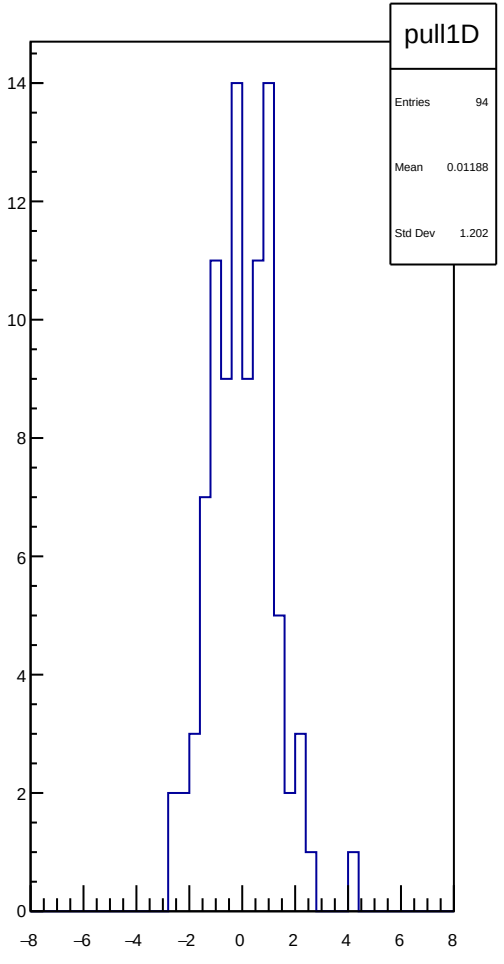

diff_bpm0i02aX_rms vs run
χ² / ndf 3252 / 93
p0 1297 ± 0.9718
1400
1350
1300
1250
1200

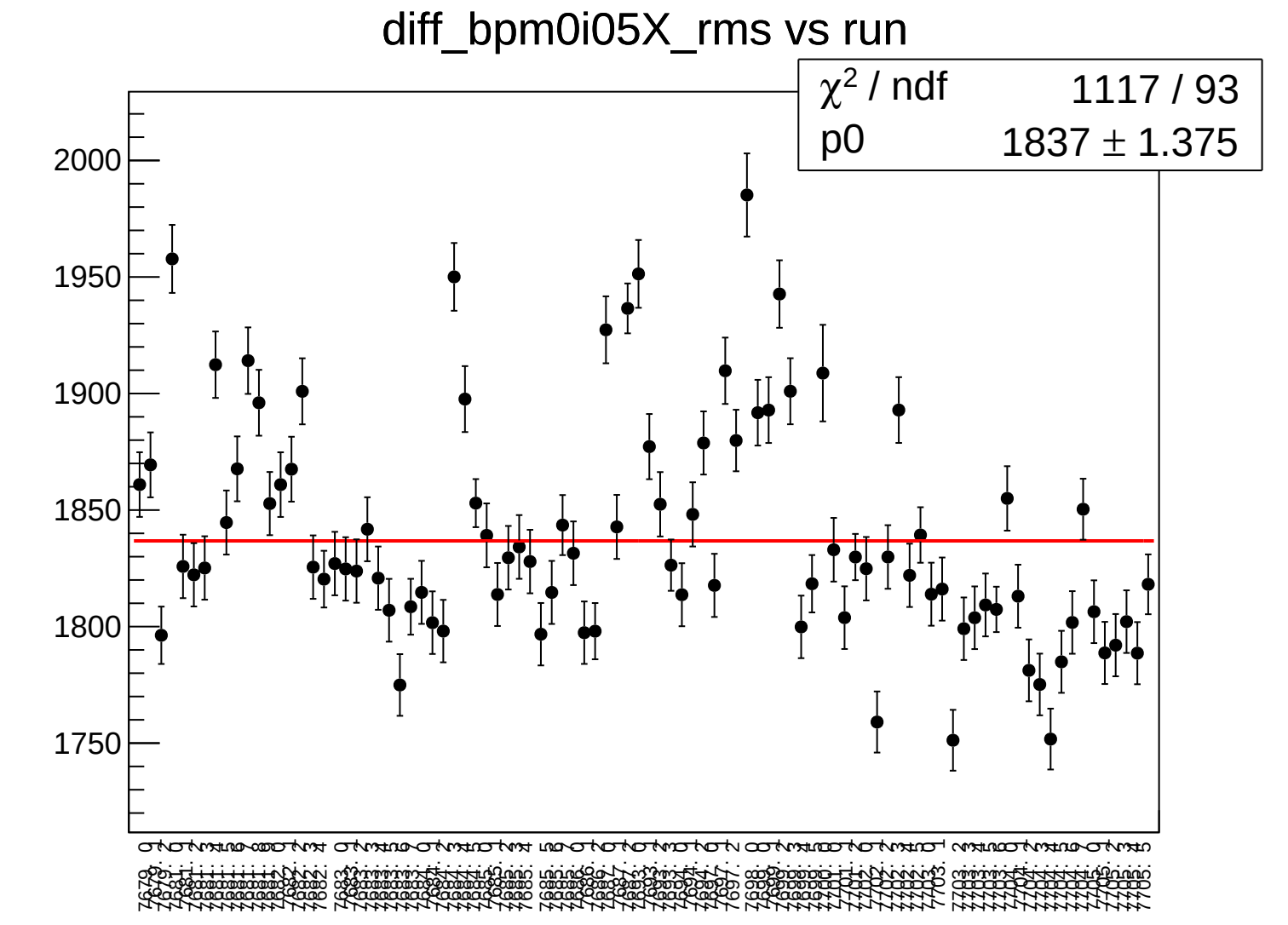

diff_bpm0i02aY_mean vs run
χ² / ndf 125.1 / 93
p0 −38.13 ± 1.837
pull
Entries 94
Mean −237.2
Std Dev 275.8

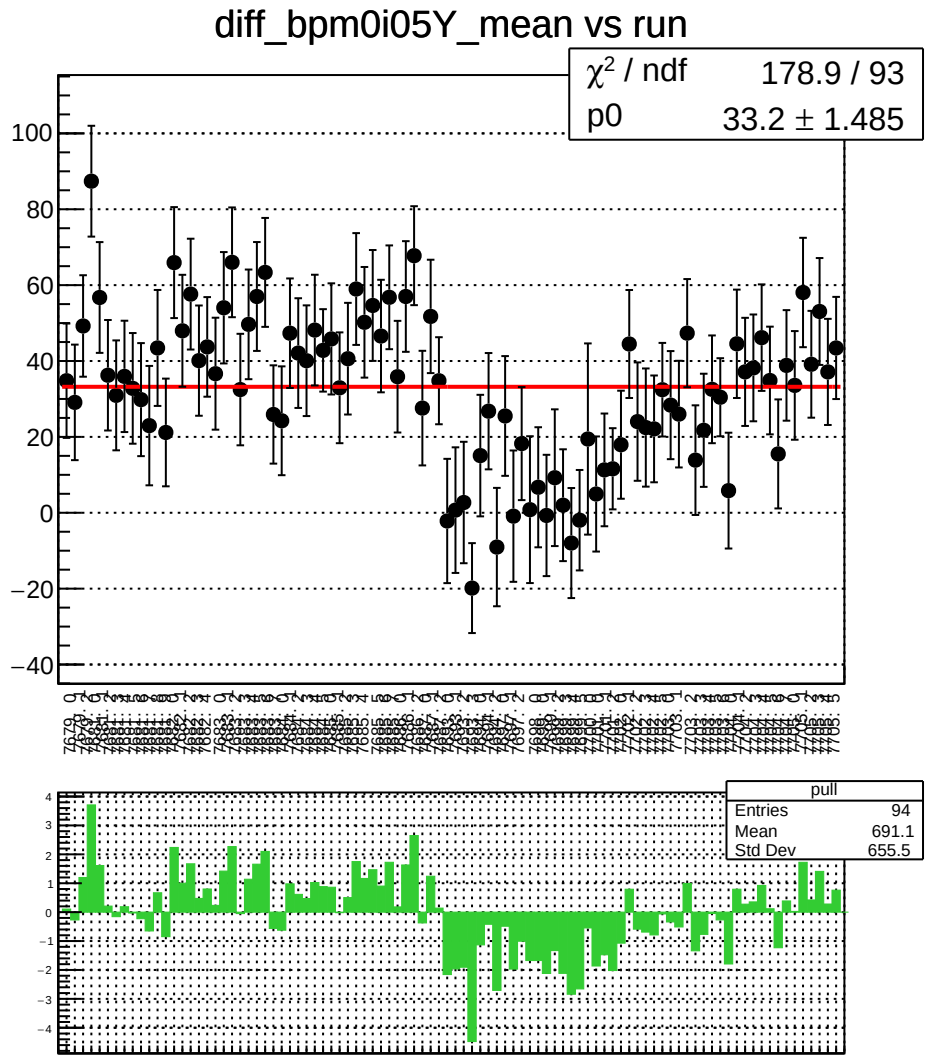

pull1D
Entries 94
Mean −0.02835
Std Dev 1.153

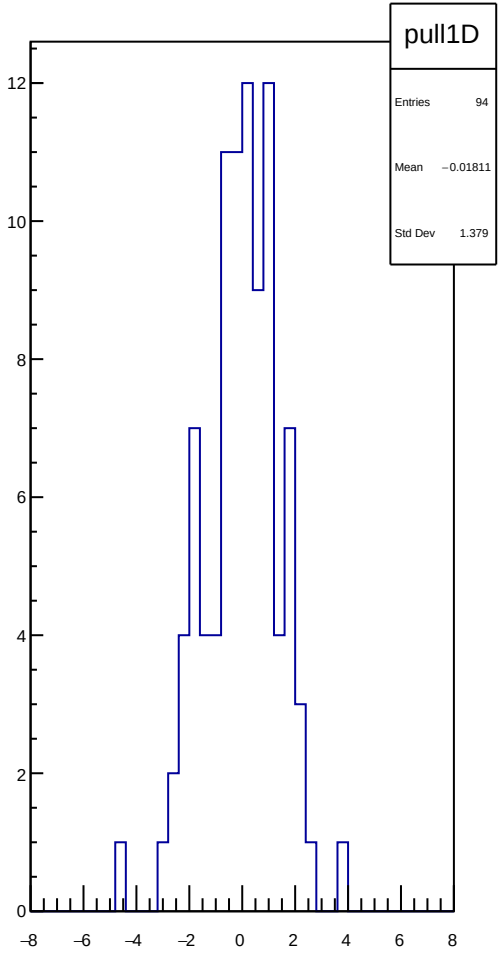

diff_bpm0i02aY_rms vs run
χ² / ndf 2596 / 93
p0 1734 ± 1.299
1850
1800
1750
1700
1650
1600

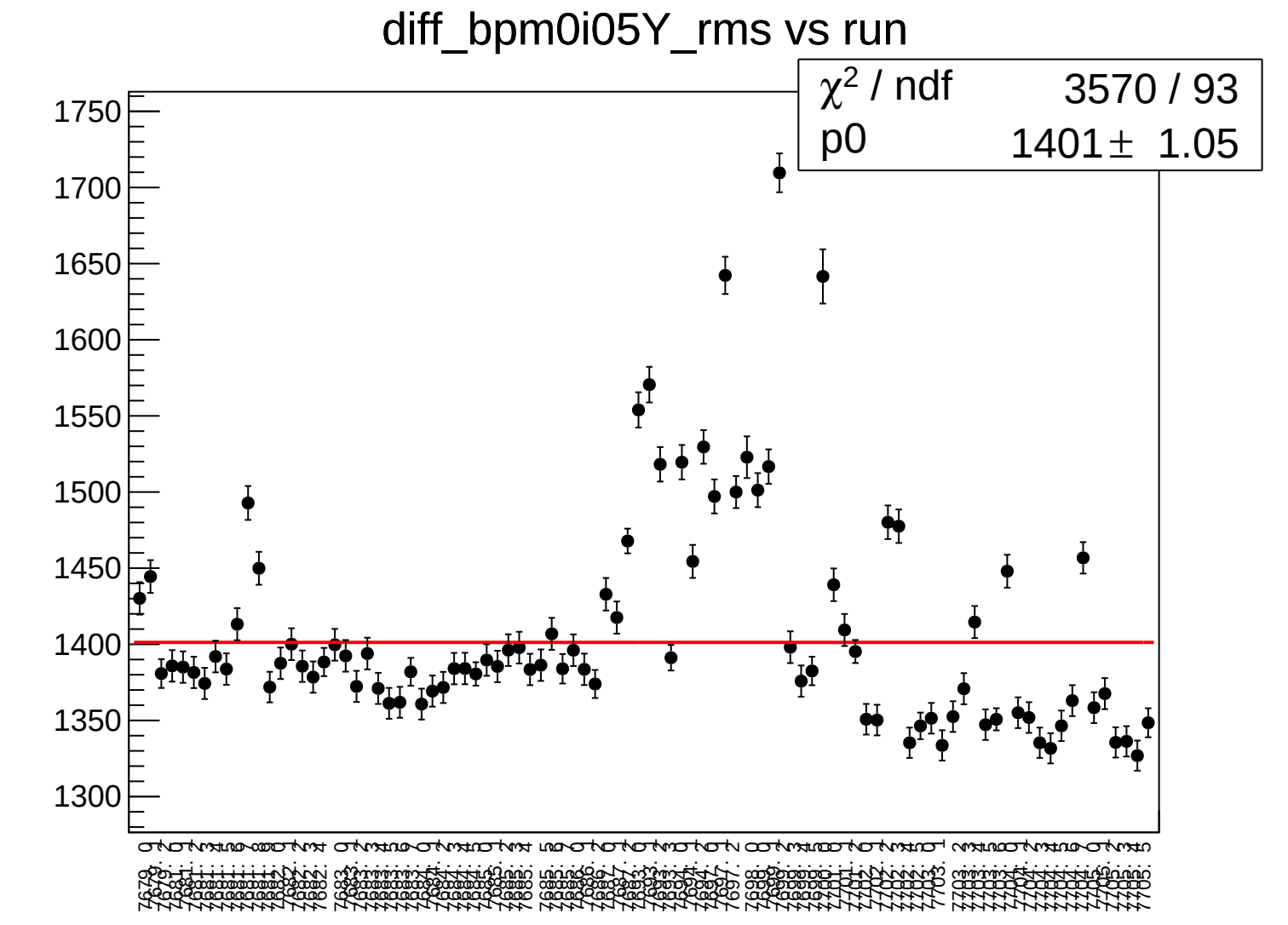

diff_bpm0i05X_mean vs run
χ² / ndf 135.8 / 93
p0 −51.68 ± 1.945
pull
Entries 94
Mean 1049
Std Dev 1006

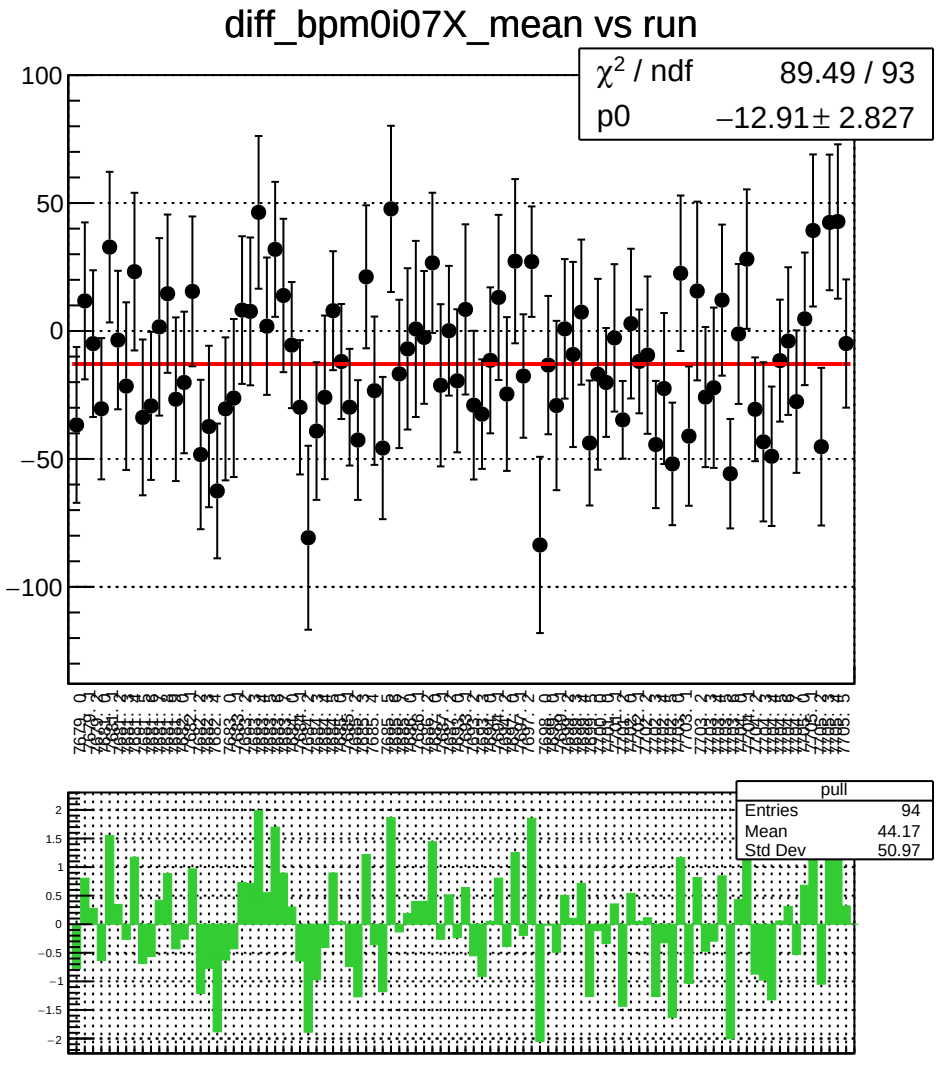

pull1D
Entries 94
Mean 0.01188
Std Dev 1.202

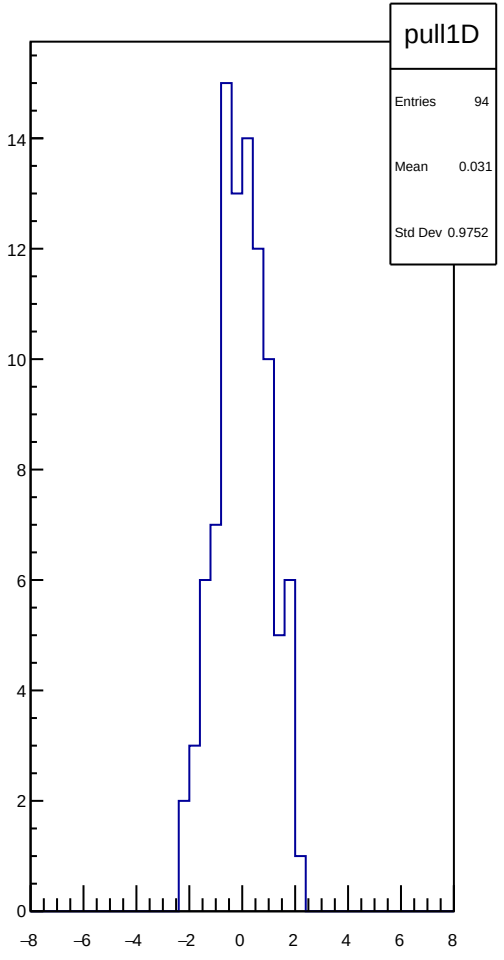

diff_bpm0i05X_rms vs run
χ² / ndf 1117 / 93
p0 1837 ± 1.375
2000
1950
1900
1850
1800
1750

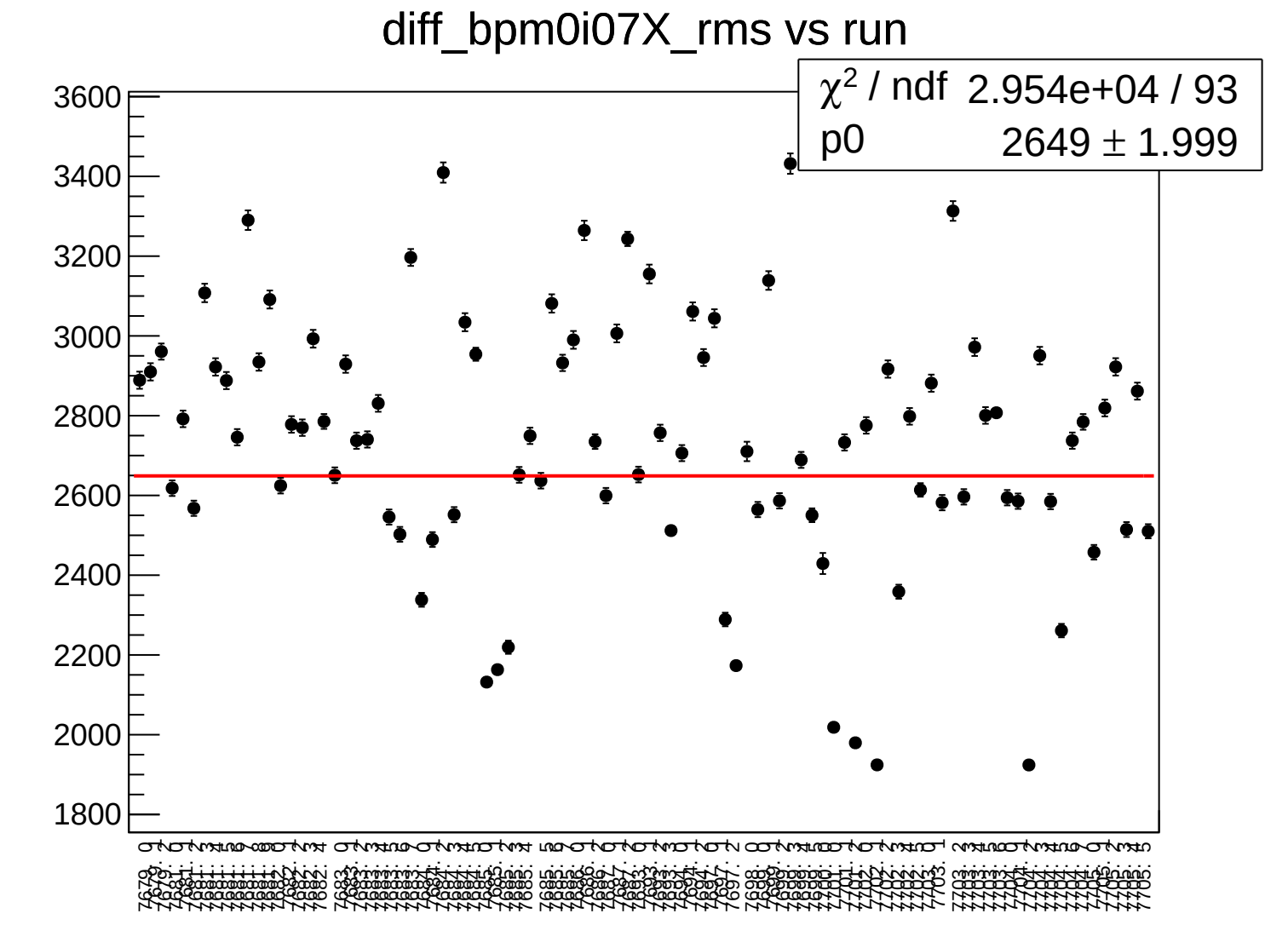

diff_bpm0i05Y_mean vs run
χ² / ndf 178.9 / 93
p0 33.2 ± 1.485
pull
Entries 94
Mean 691.1
Std Dev 655.5

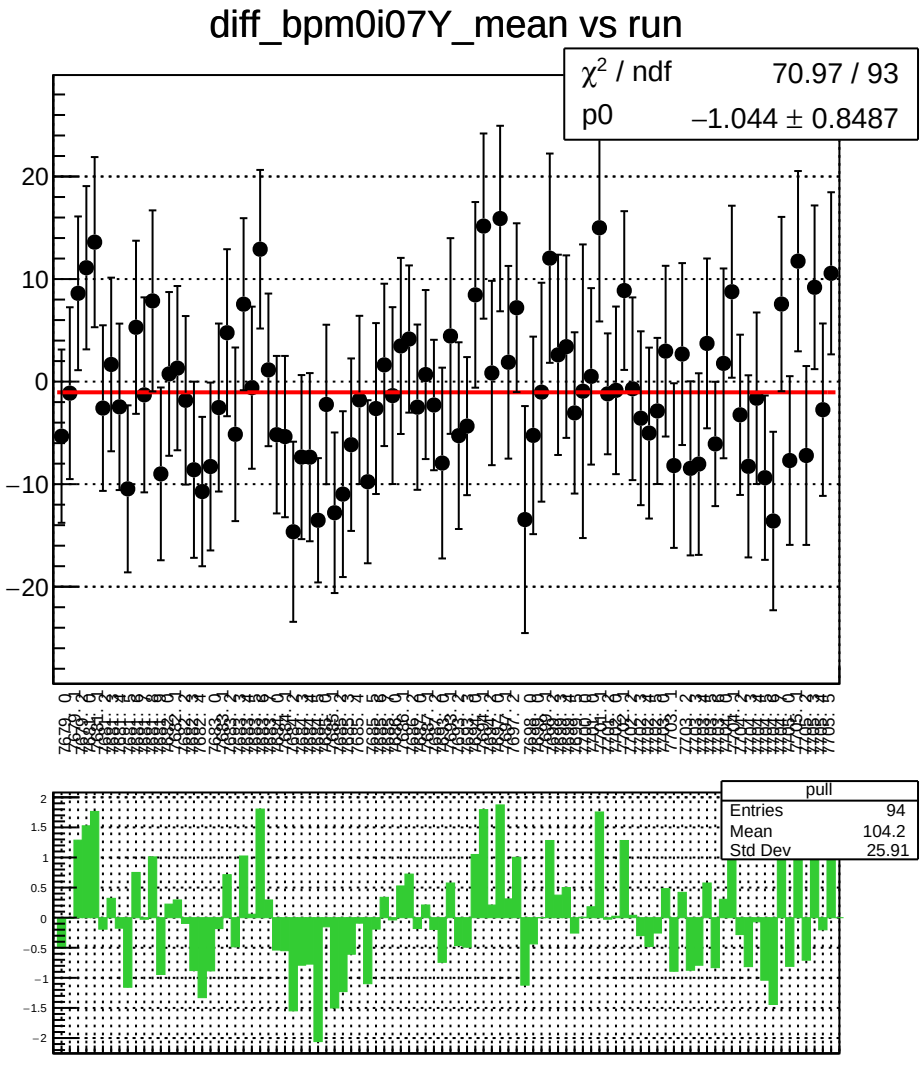

pull1D
Entries 94
Mean −0.01811
Std Dev 1.379

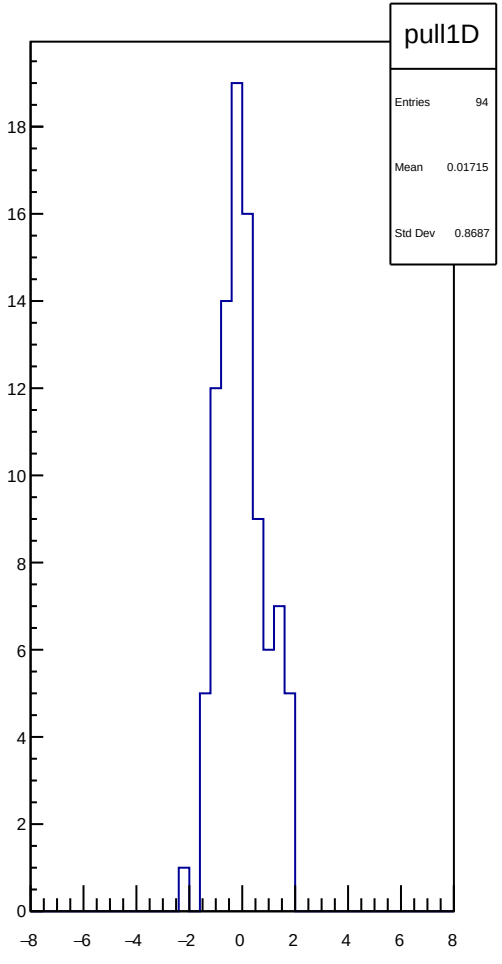

diff_bpm0i05Y_rms vs run
χ^2 / ndf 3570 / 93
p0 1401 ± 1.05
1750
1700
1650
1600
1550
1500
1450
1400
1350
1300

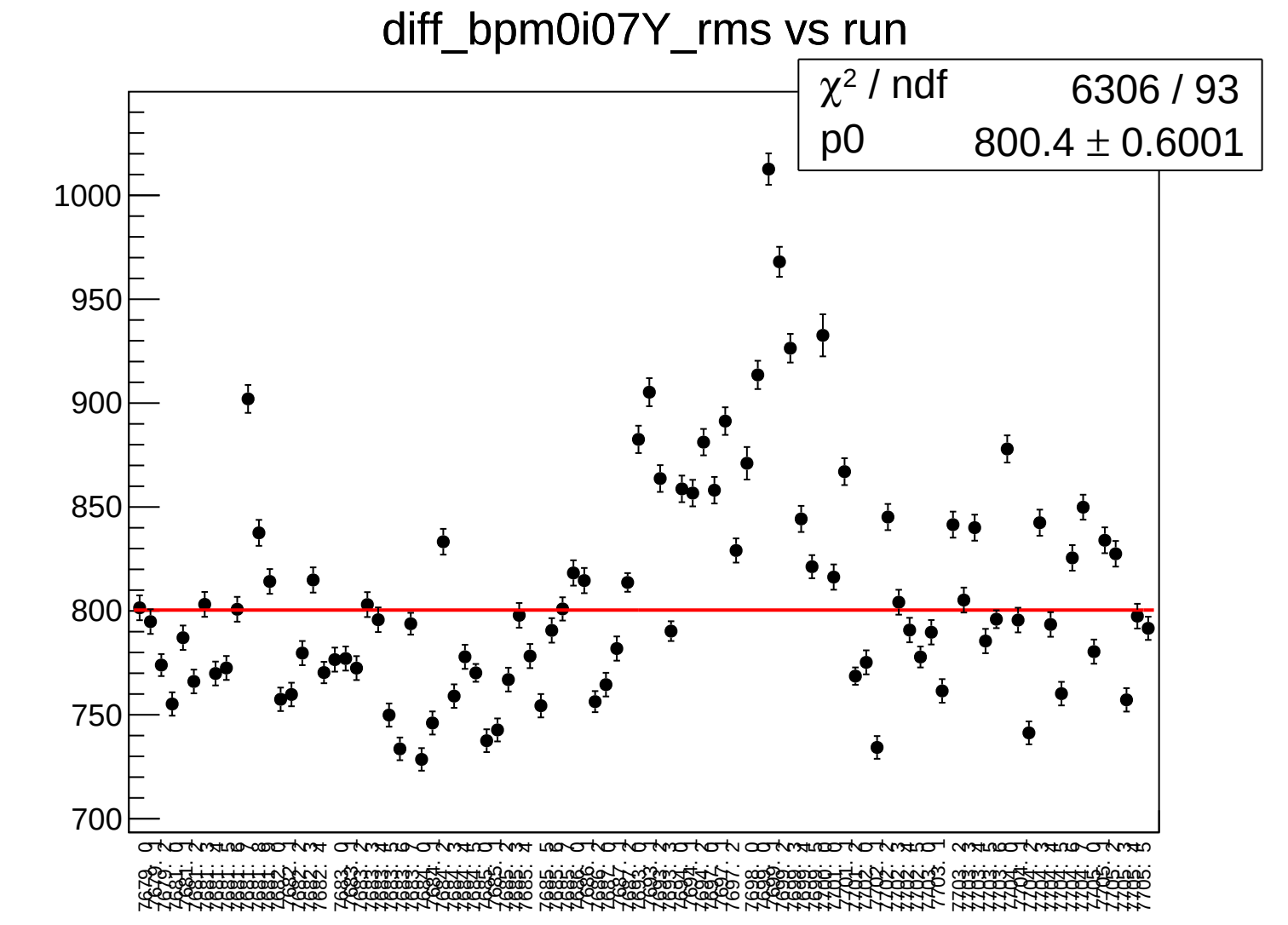

diff_bpm0i07X_mean vs run
χ² / ndf 89.49 / 93
p0 −12.91± 2.827
pull
Entries 94
Mean 44.17
Std Dev 50.97

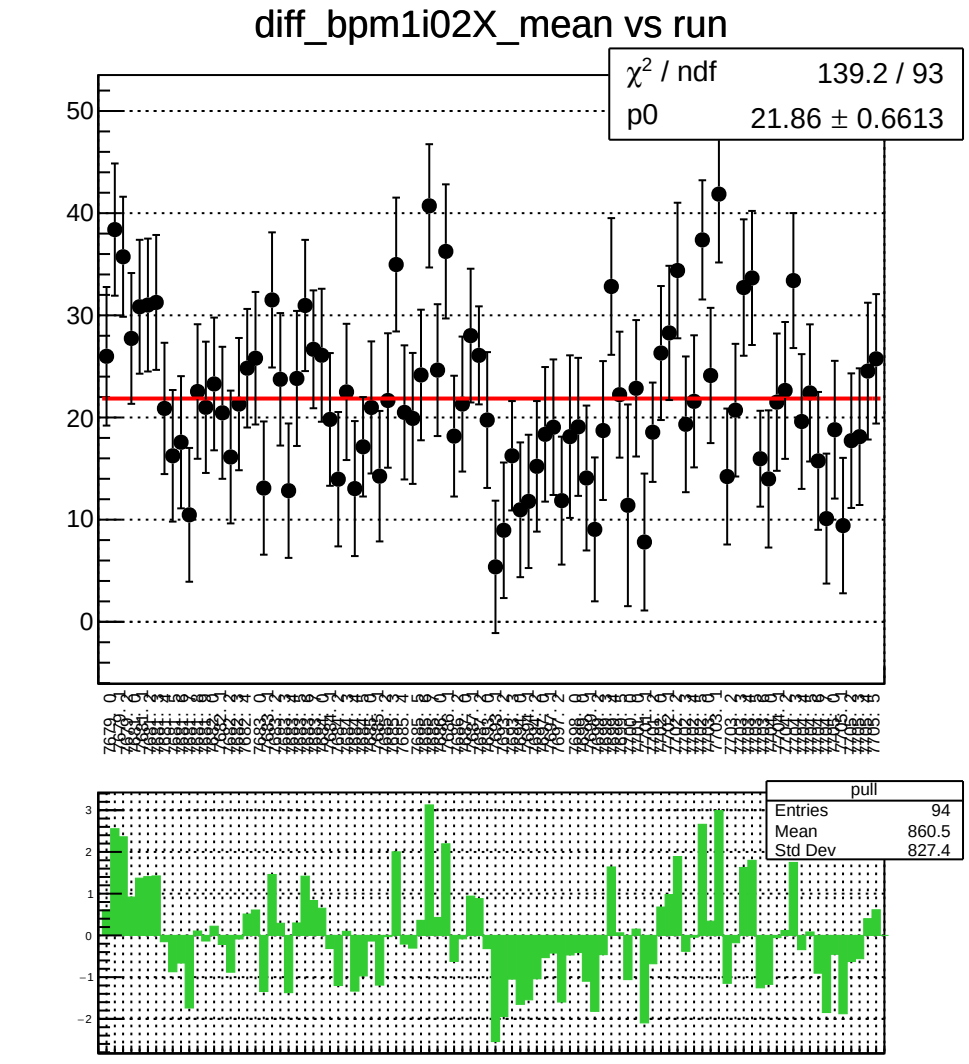

pull1D
Entries 94
Mean 0.031
Std Dev 0.9752

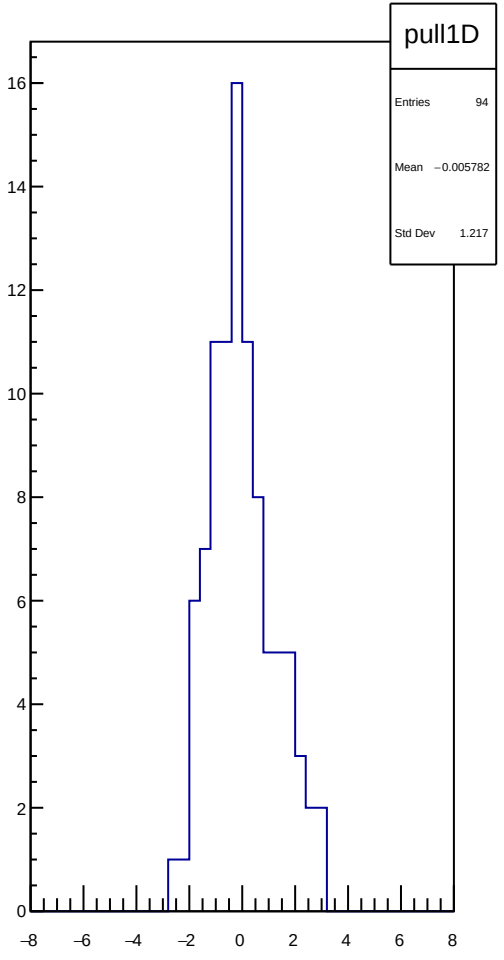

diff_bpm0i07X_rms vs run
χ² / ndf 2.954e+04 / 93
p0 2649 ± 1.999
3600
3400
3200
3000
2800
2600
2400
2200
2000
1800

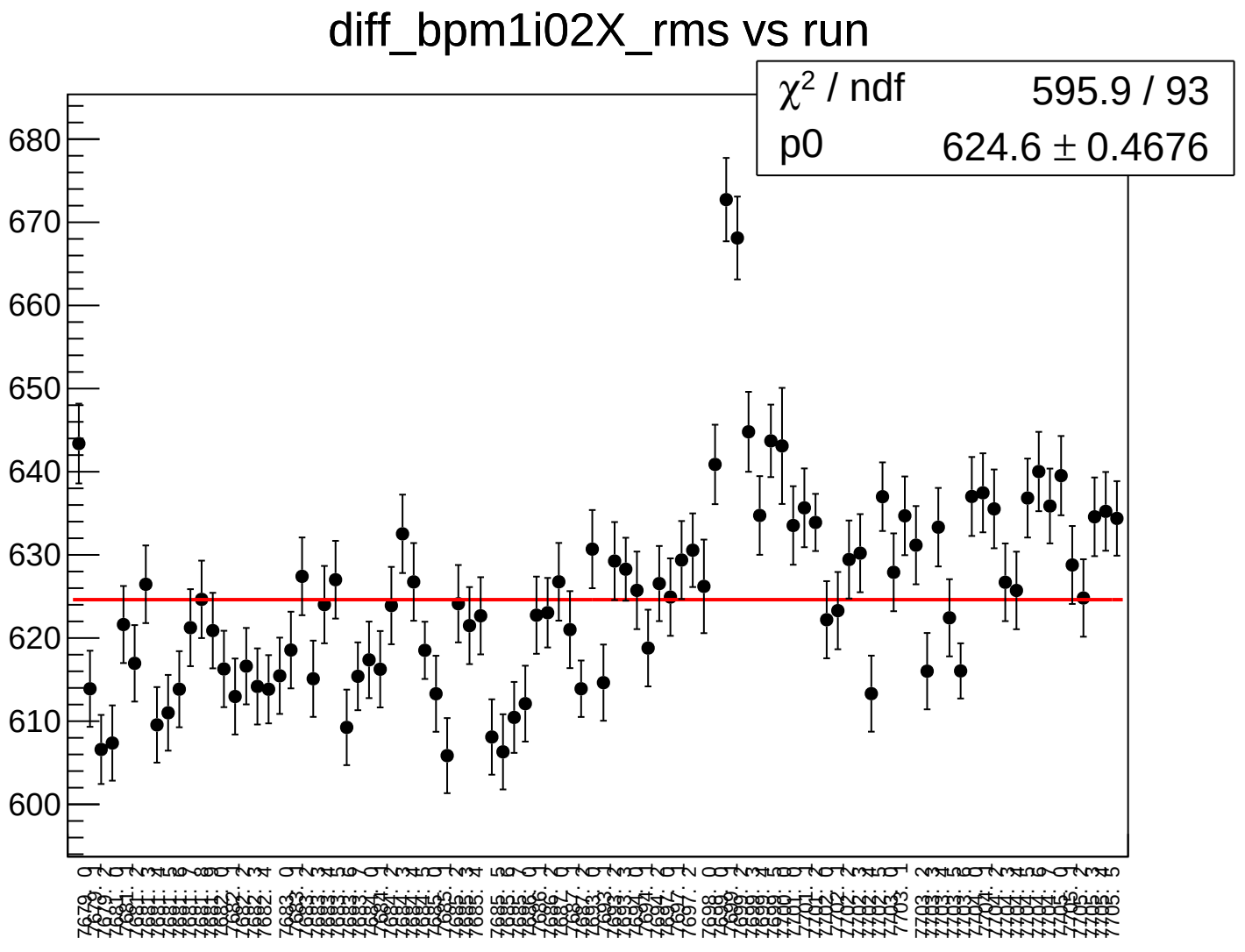

diff_bpm0i07Y_mean vs run
χ^2 / ndf 70.97 / 93
p0 −1.044 ± 0.8487
pull
Entries 94
Mean 104.2
Std Dev 25.91

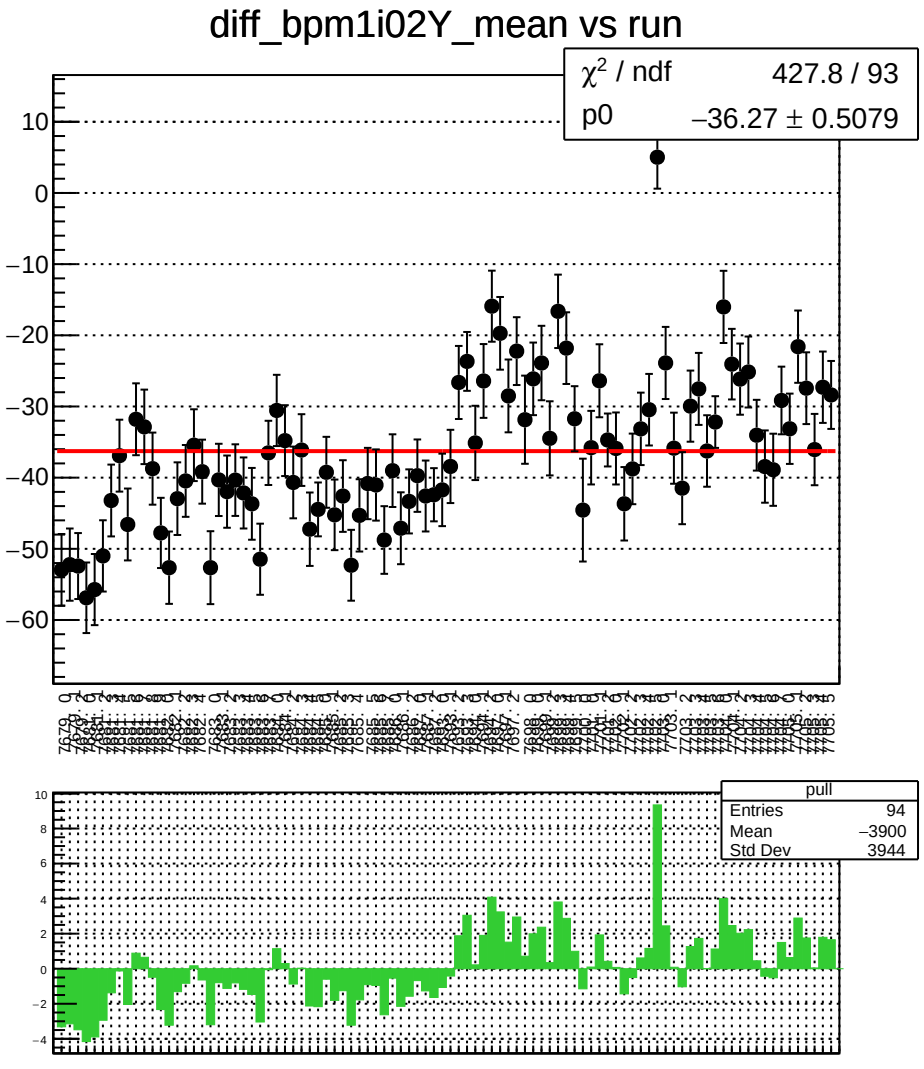

pull1D
Entries 94
Mean 0.01715
Std Dev 0.8687

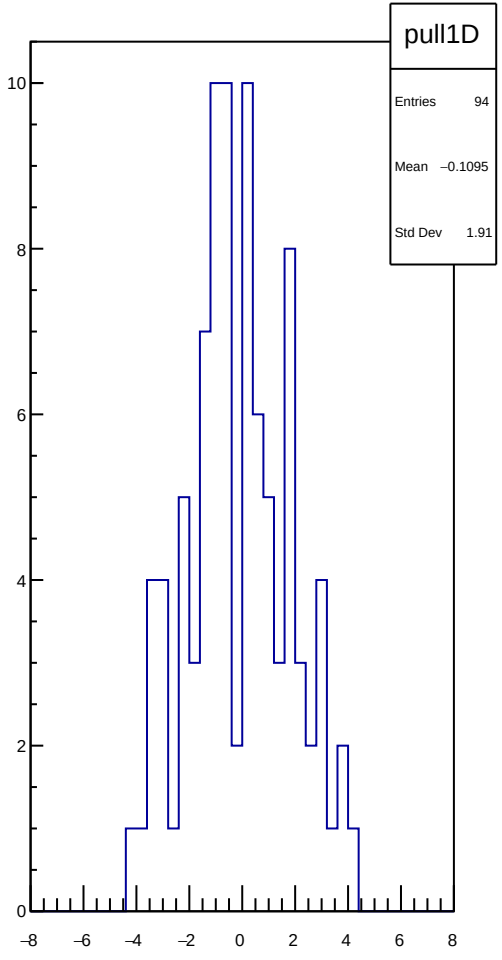

diff_bpm0i07Y_rms vs run
χ² / ndf 6306 / 93
p0 800.4 ± 0.6001
1000
950
900
850
800
750
700

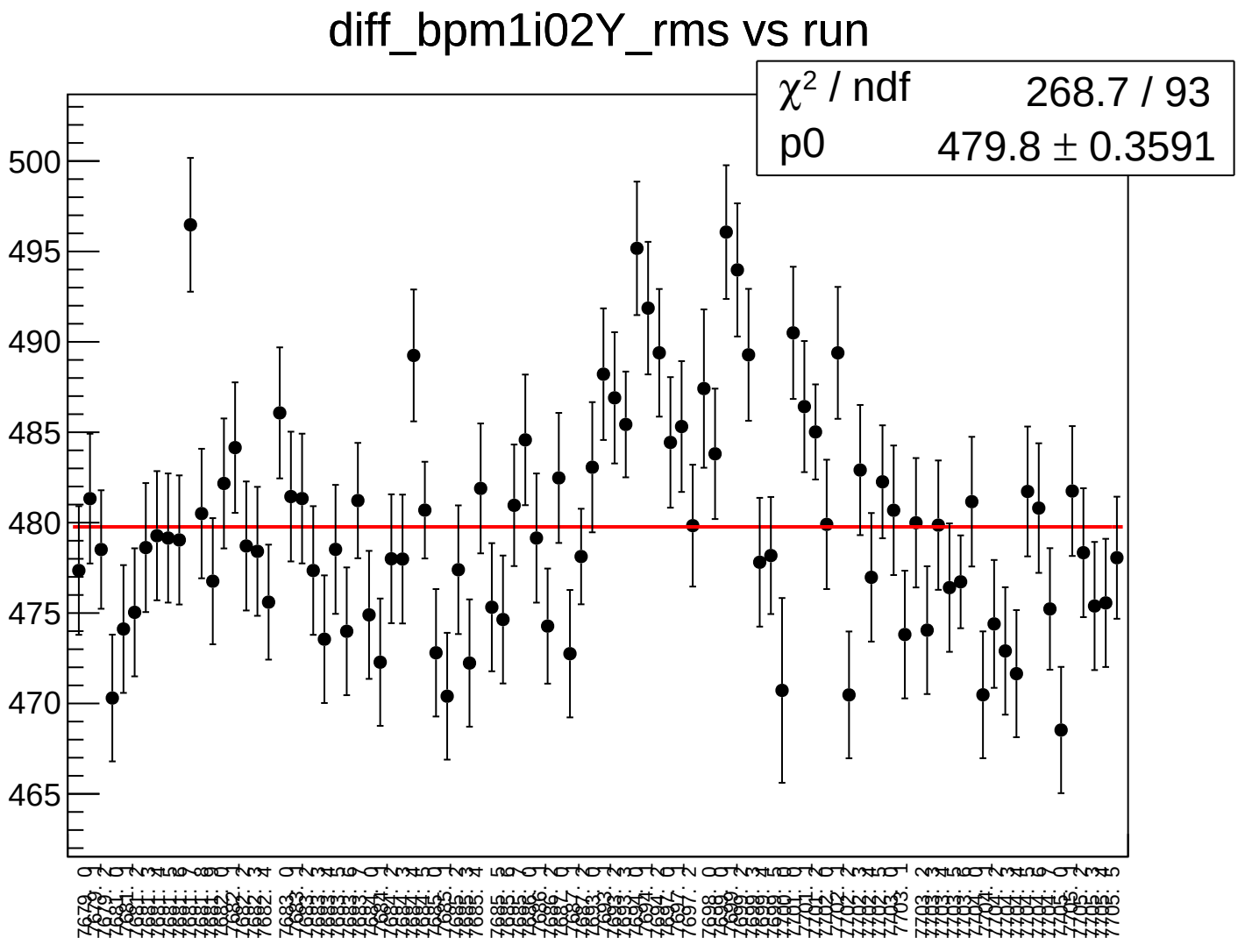

diff_bpm1i02X_mean vs run
χ² / ndf 139.2 / 93
p0 21.86 ± 0.6613
pull
Entries 94
Mean 860.5
Std Dev 827.4

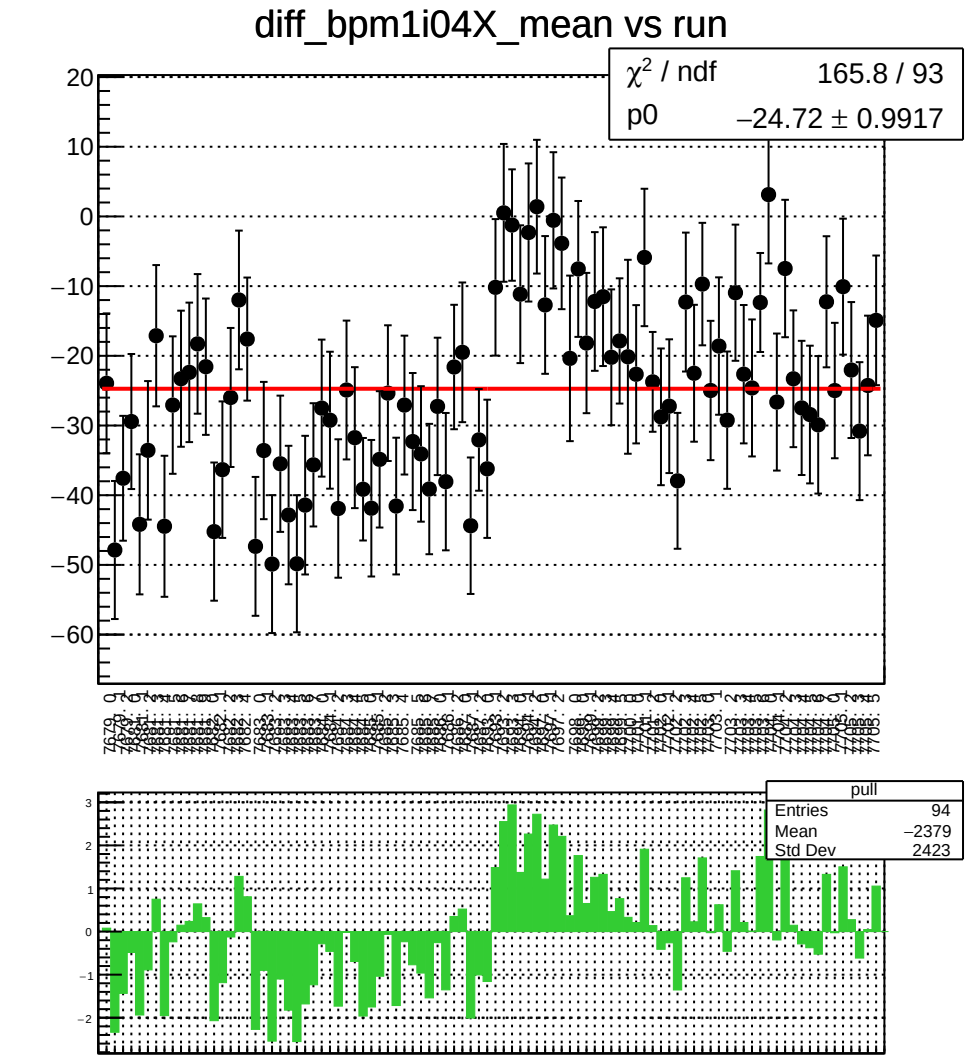

pull1D
Entries 94
Mean −0.005782
Std Dev 1.217

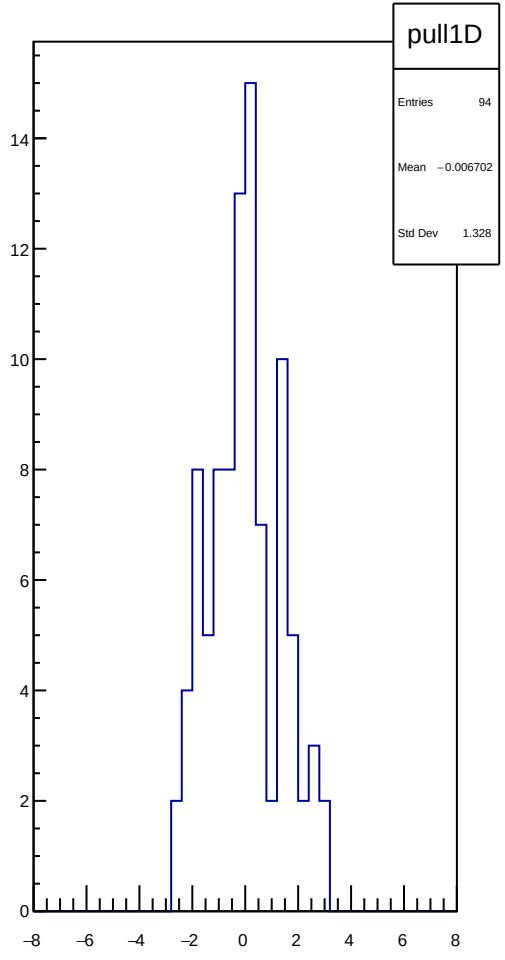

diff_bpm1i02X_rms vs run
χ^2 / ndf 595.9 / 93
p0 624.6 ± 0.4676
680
670
660
650
640
630
620
610
600

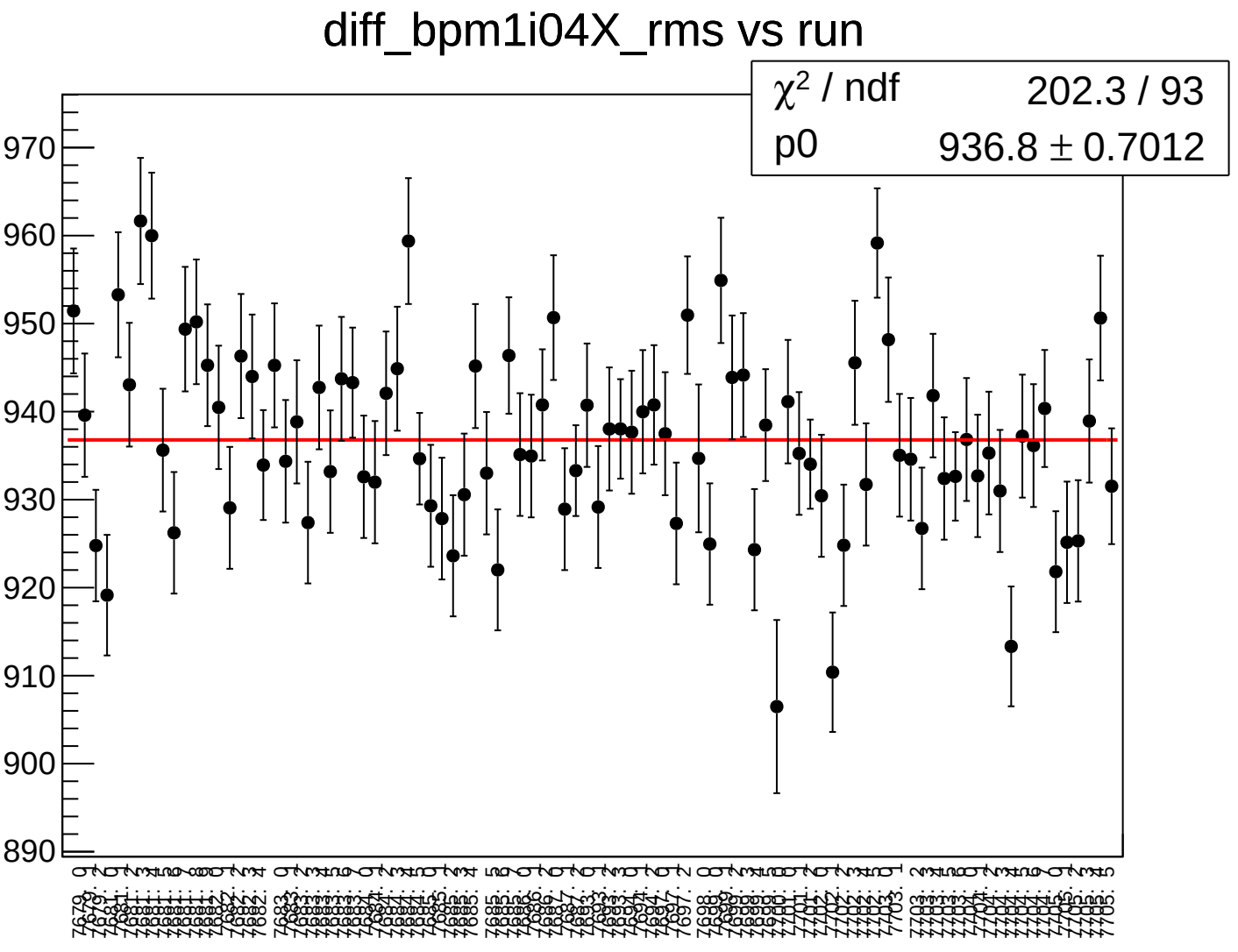

diff_bpm1i02Y_mean vs run
χ² / ndf 427.8 / 93
p0 −36.27 ± 0.5079
pull
Entries 94
Mean −3900
Std Dev 3944

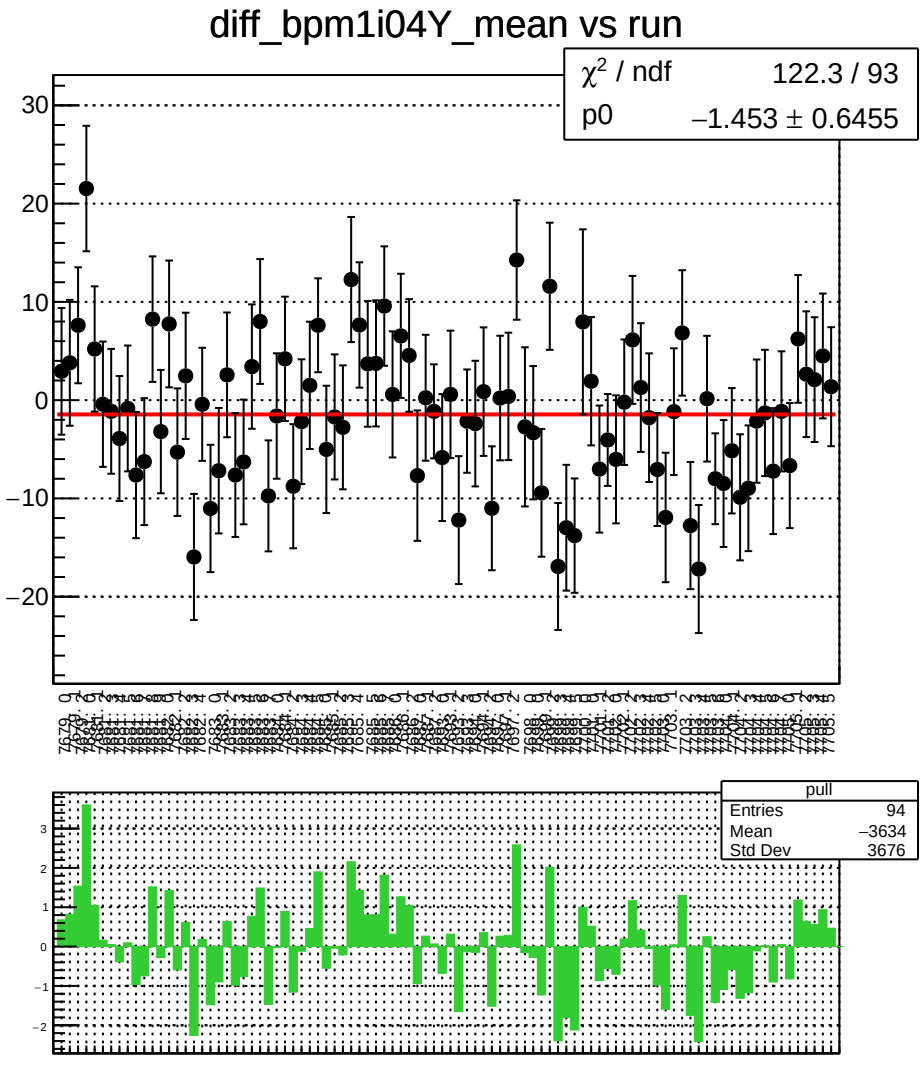

pull1D
Entries 94
Mean −0.1095
Std Dev 1.91

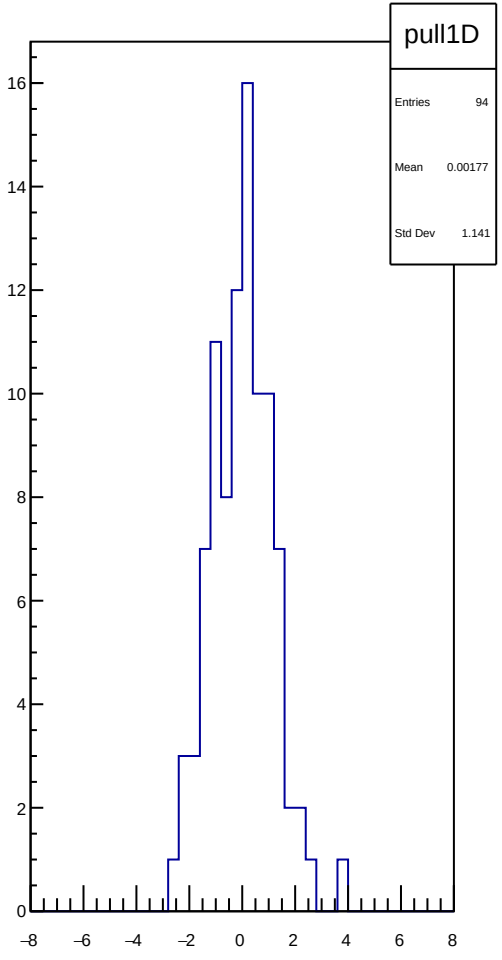

diff_bpm1i02Y_rms vs run
χ² / ndf 268.7 / 93
p0 479.8 ± 0.3591
500
495
490
485
480
475
470
465

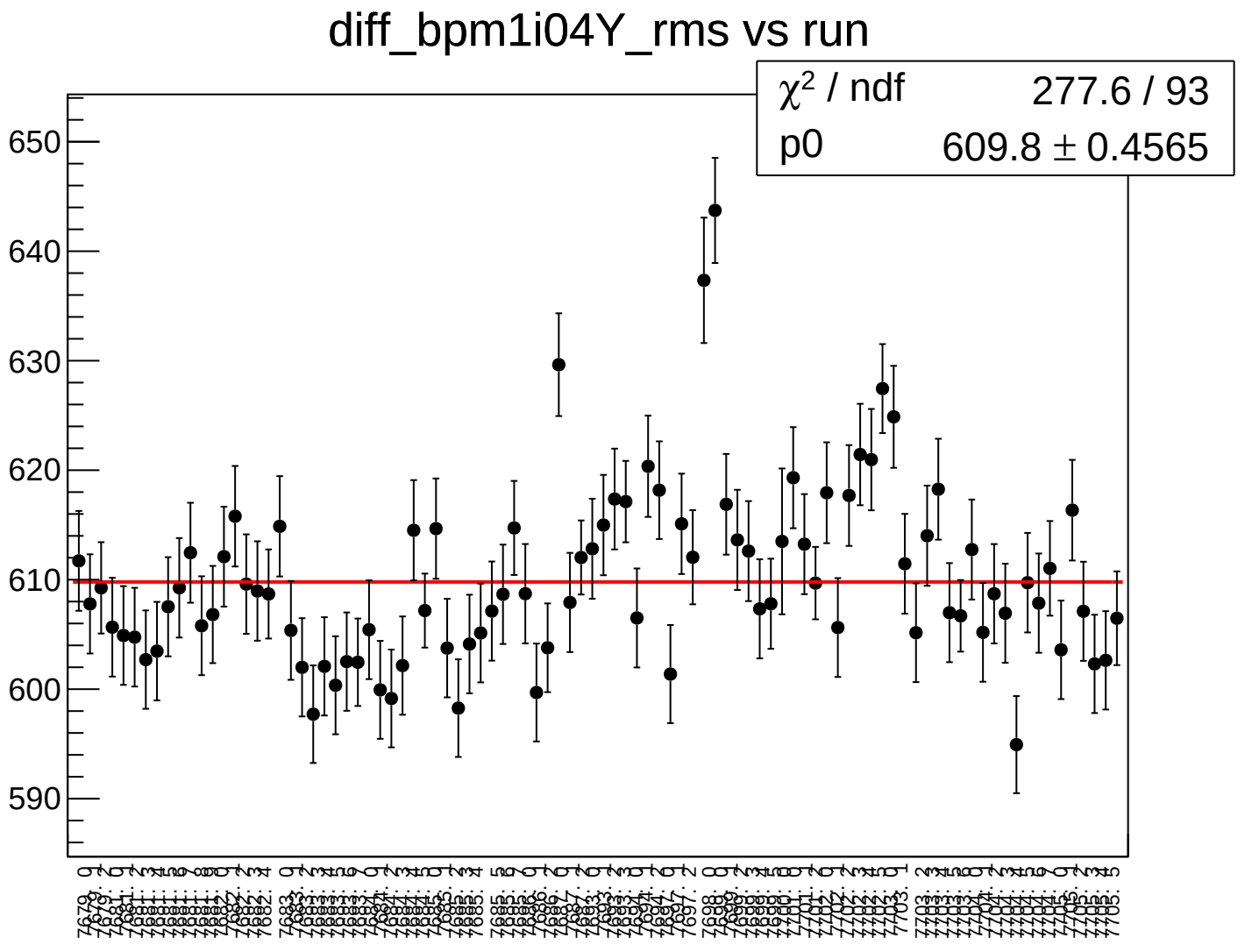

diff_bpm1i04X_mean vs run
χ² / ndf 165.8 / 93
p0 −24.72 ± 0.9917
pull
Entries 94
Mean −2379
Std Dev 2423

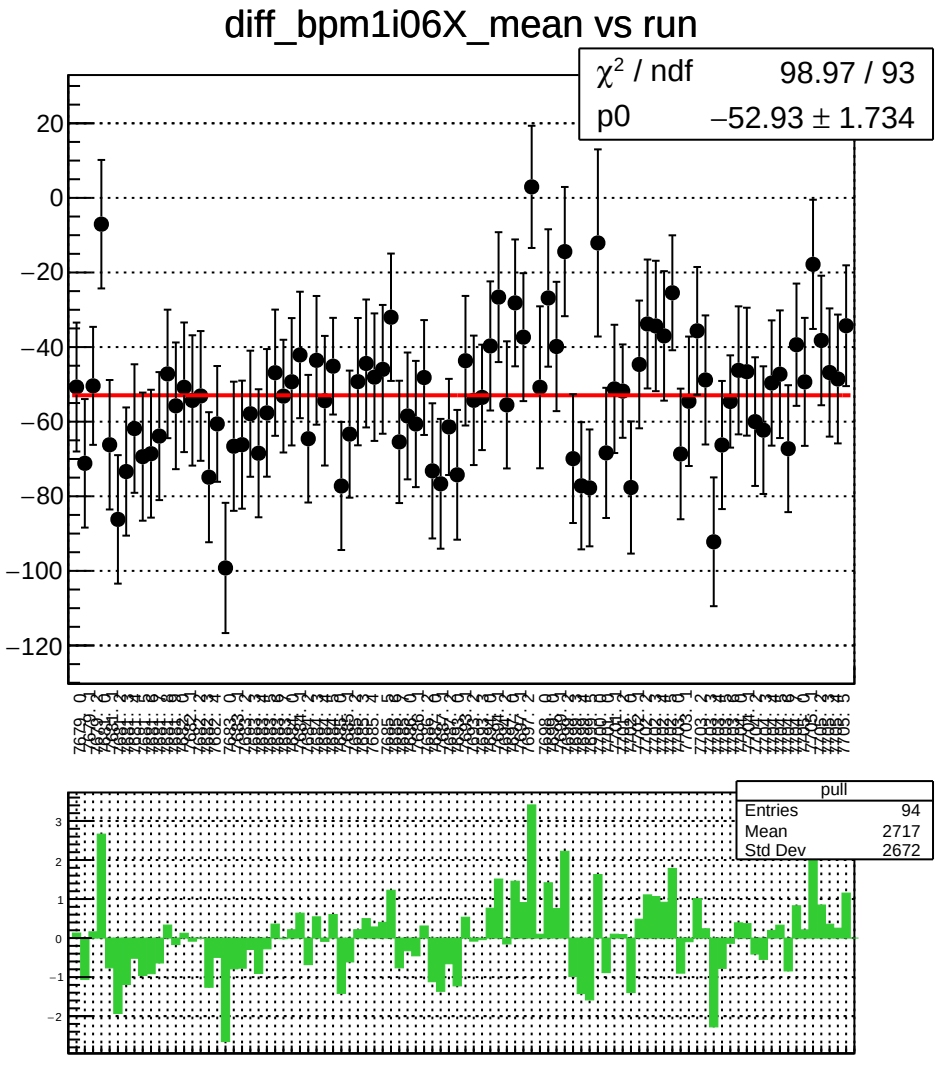

pull1D
Entries 94
Mean −0.006702
Std Dev 1.328

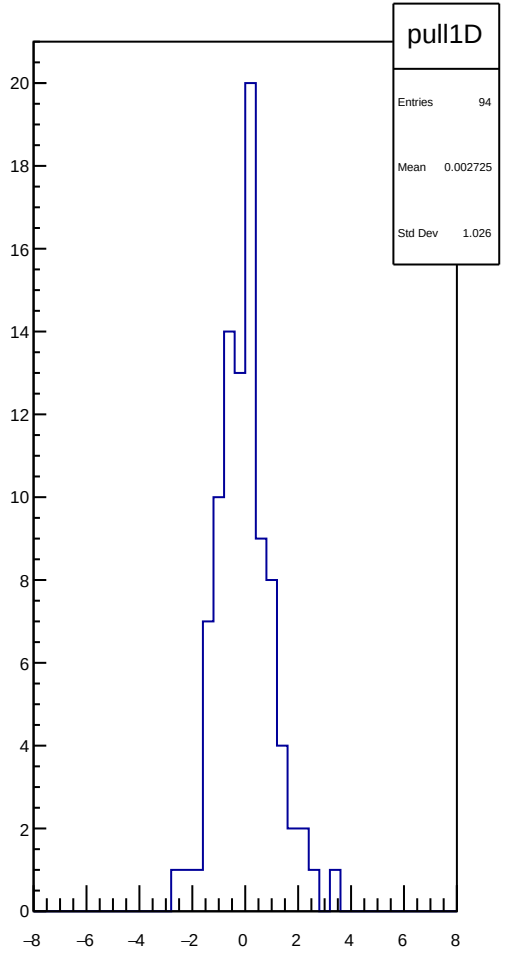

diff_bpm1i04X_rms vs run
χ² / ndf 202.3 / 93
p0 936.8 ± 0.7012
970
960
950
940
930
920
910
900
890

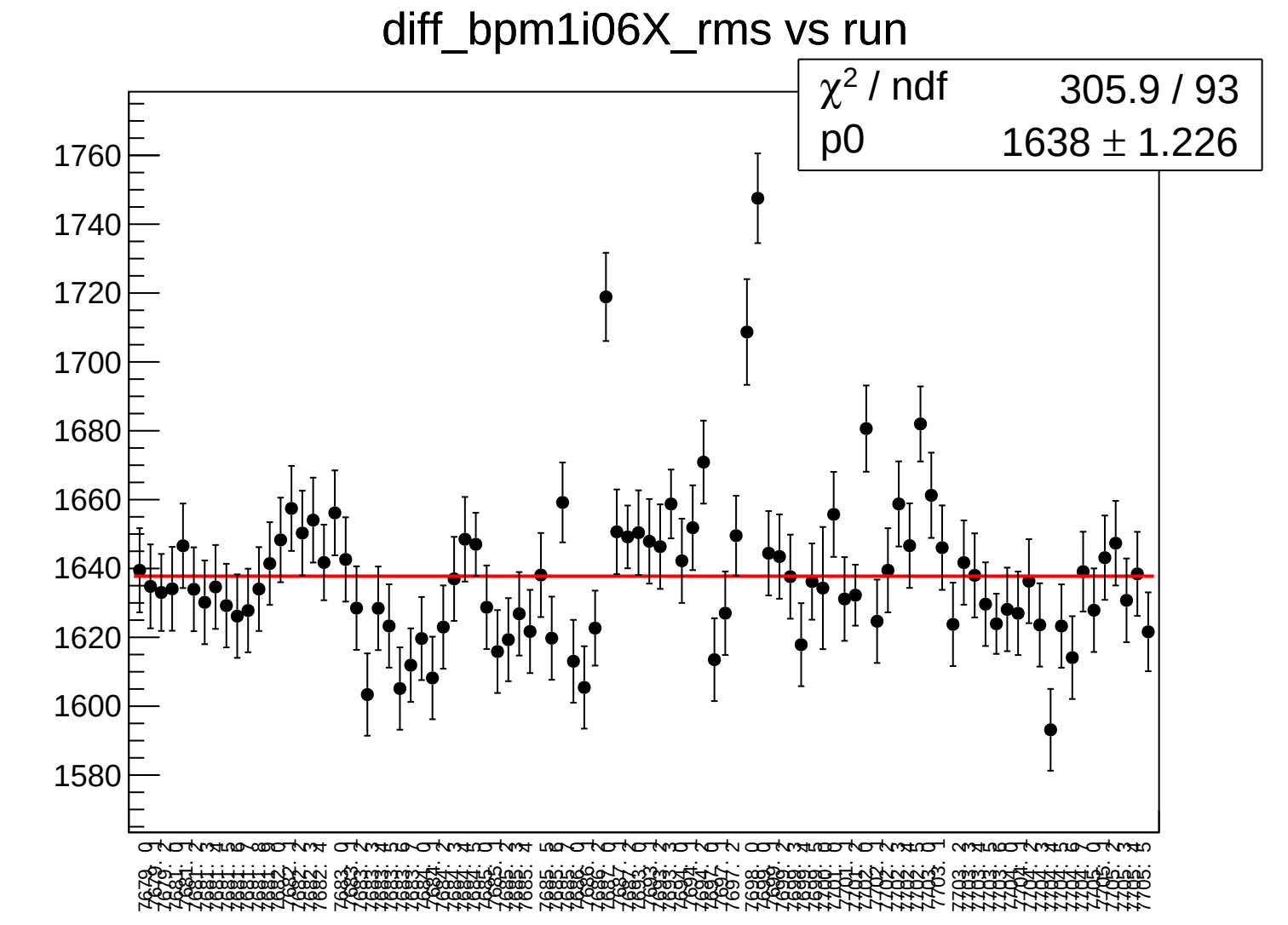

diff_bpm1i04Y_mean vs run
χ² / ndf 122.3 / 93
p0 −1.453 ± 0.6455
pull
Entries 94
Mean −3634
Std Dev 3676

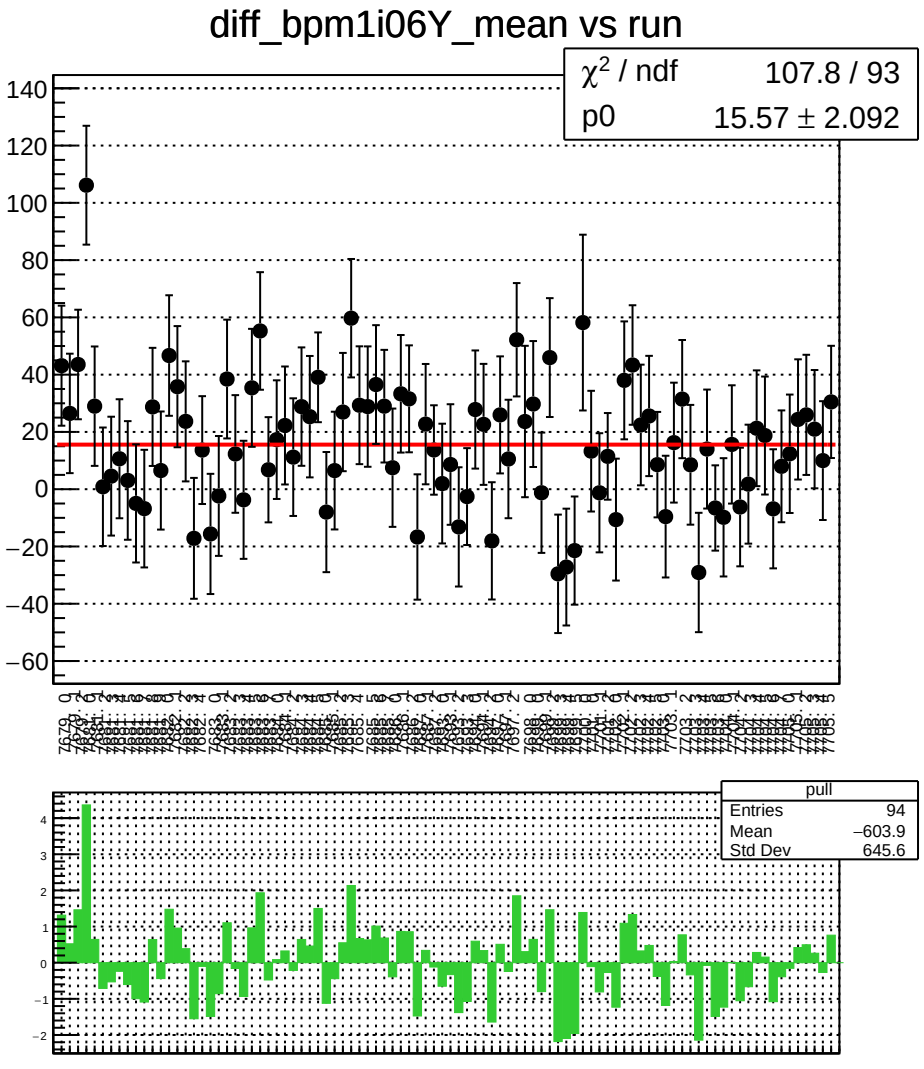

pull1D
Entries 94
Mean 0.00177
Std Dev 1.141

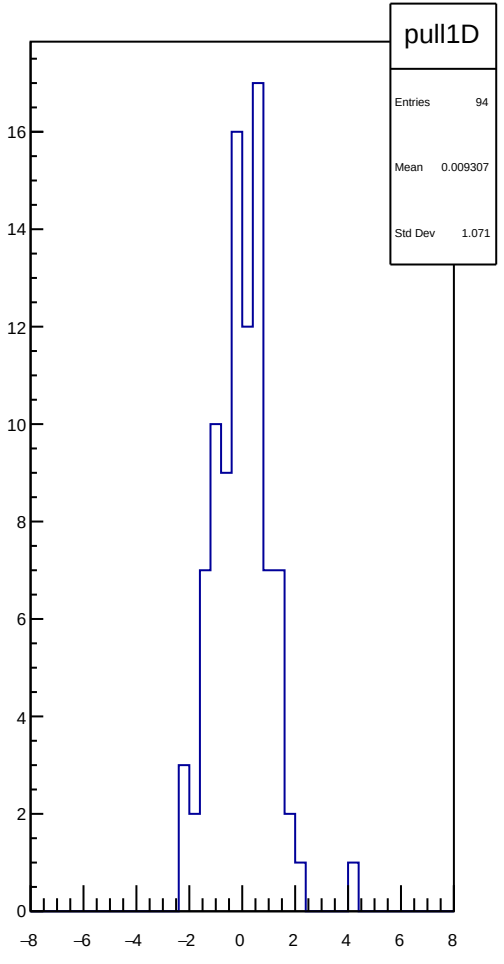

diff_bpm1i04Y_rms vs run
χ² / ndf 277.6 / 93
p0 609.8 ± 0.4565
650
640
630
620
610
600
590

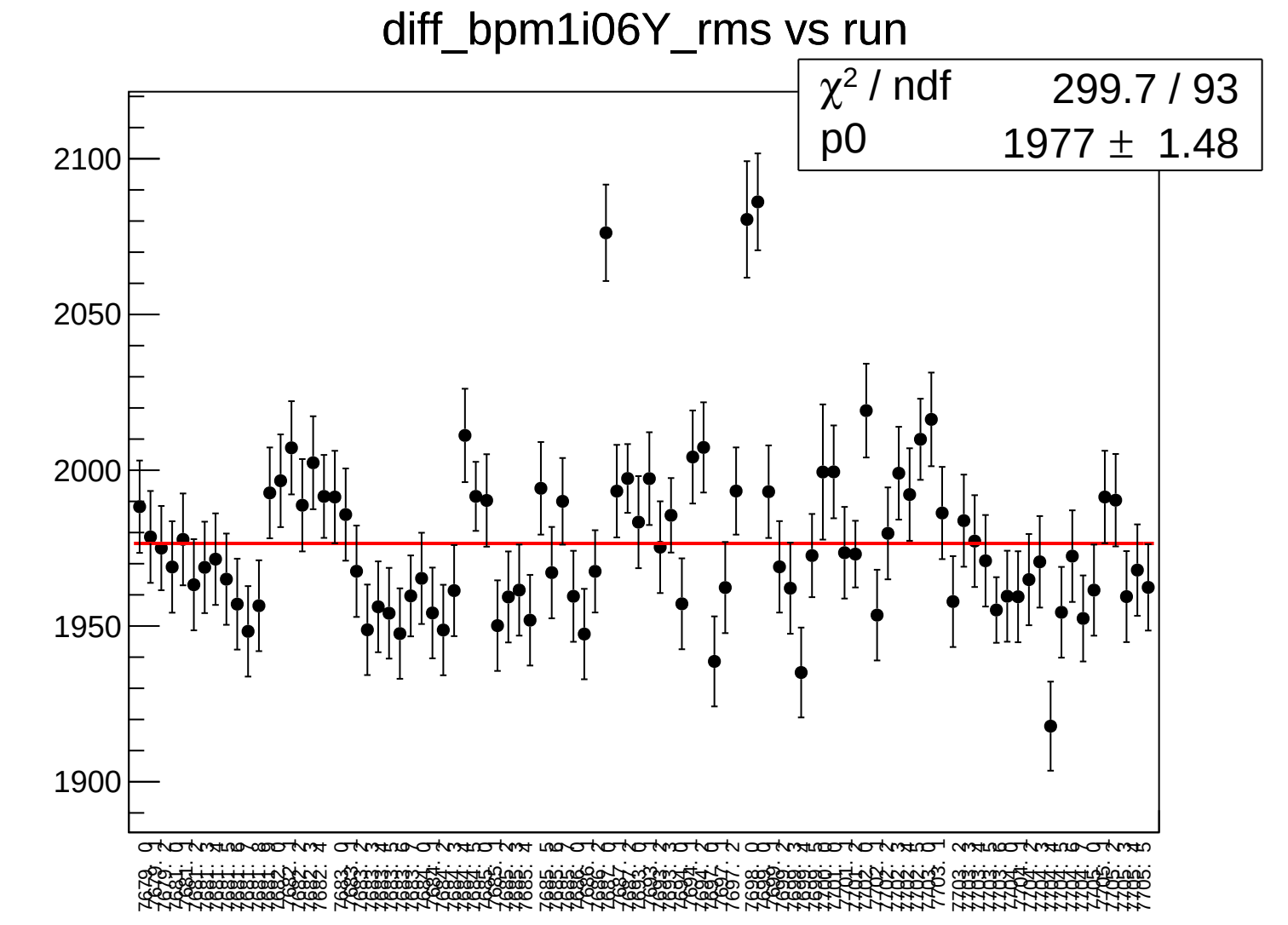

diff_bpm1i06X_mean vs run
χ² / ndf 98.97 / 93
p0 −52.93 ± 1.734
pull
Entries 94
Mean 2717
Std Dev 2672

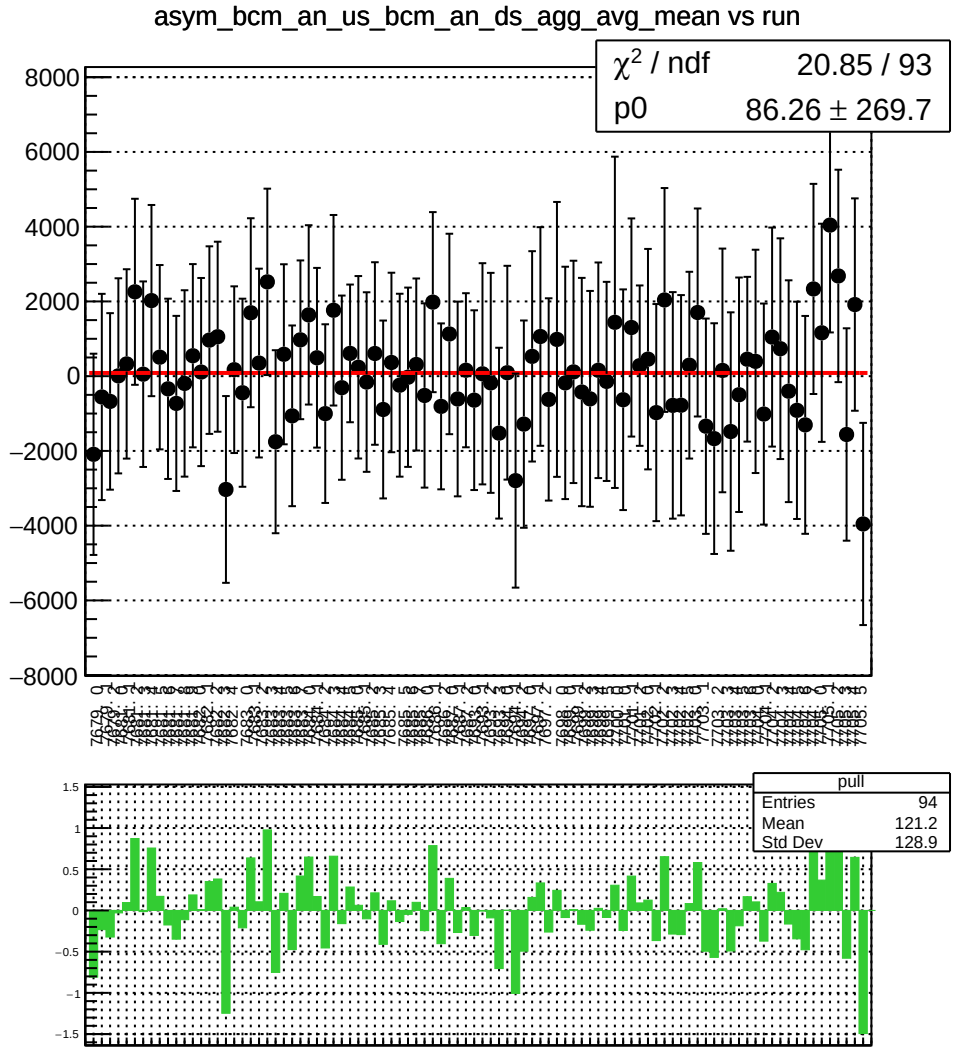

pull1D
Entries 94
Mean 0.002725
Std Dev 1.026

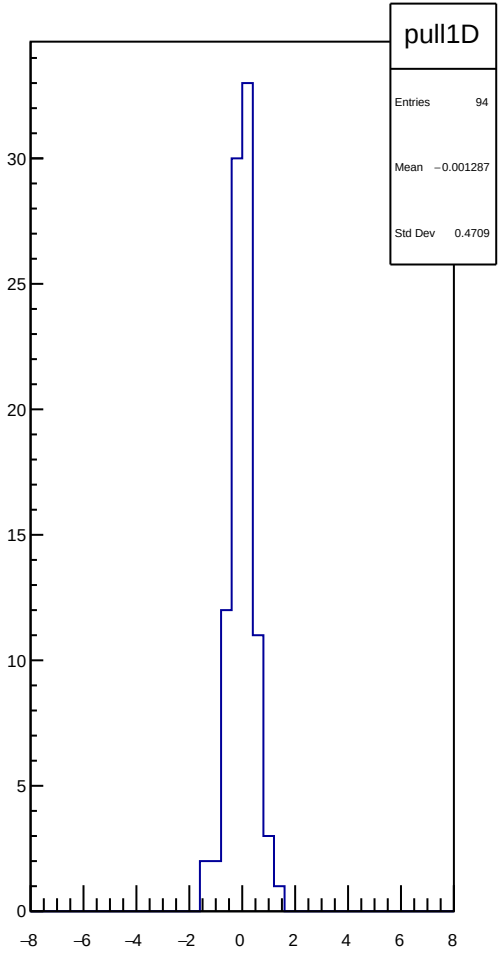

diff_bpm1i06X_rms vs run
χ² / ndf 305.9 / 93
p0 1638 ± 1.226
1760
1740
1720
1700
1680
1660
1640
1620
1600
1580

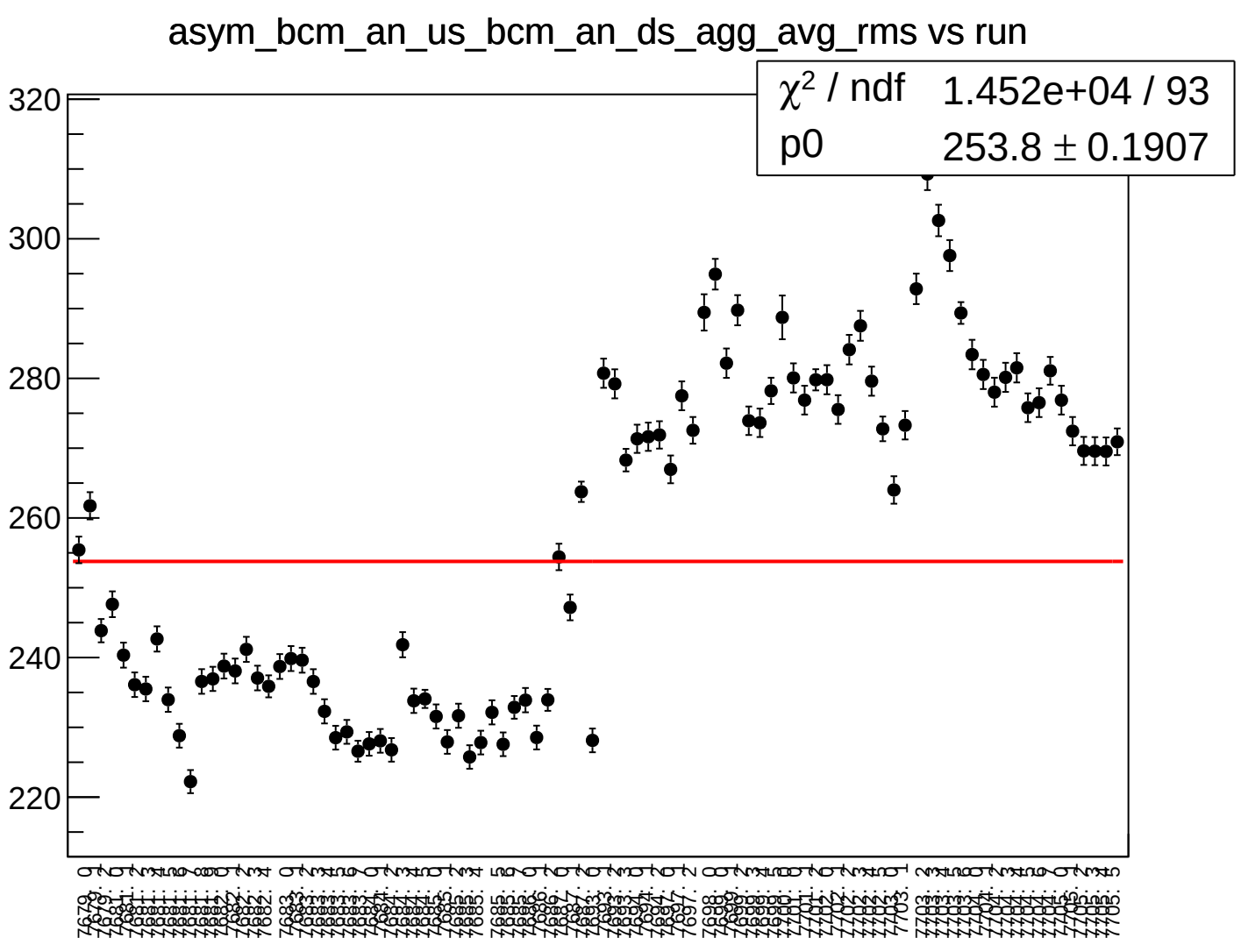

diff_bpm1i06Y_mean vs run
χ² / ndf 107.8 / 93
p0 15.57 ± 2.092
pull
Entries 94
Mean −603.9
Std Dev 645.6

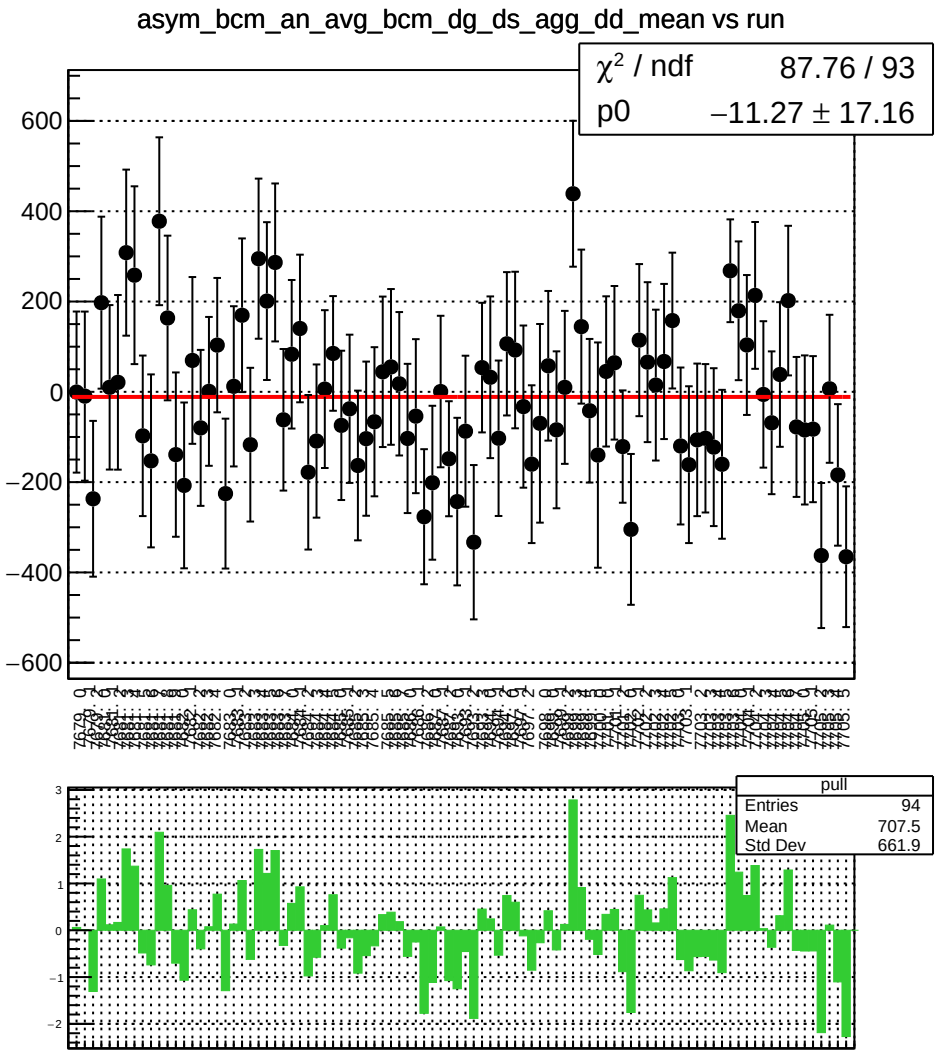

pull1D
Entries 94
Mean 0.009307
Std Dev 1.071

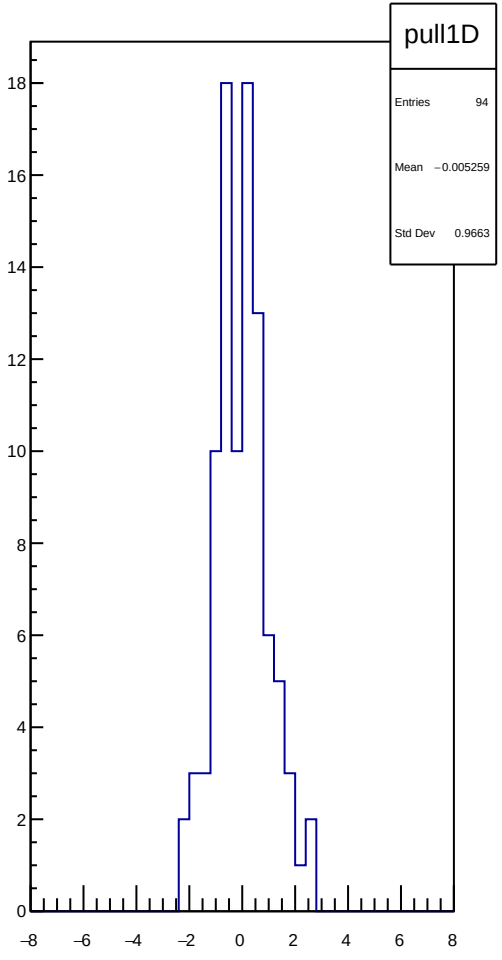

diff_bpm1i06Y_rms vs run
χ^2 / ndf 299.7 / 93
p0 1977 ± 1.48
2100
2050
2000
1950
1900

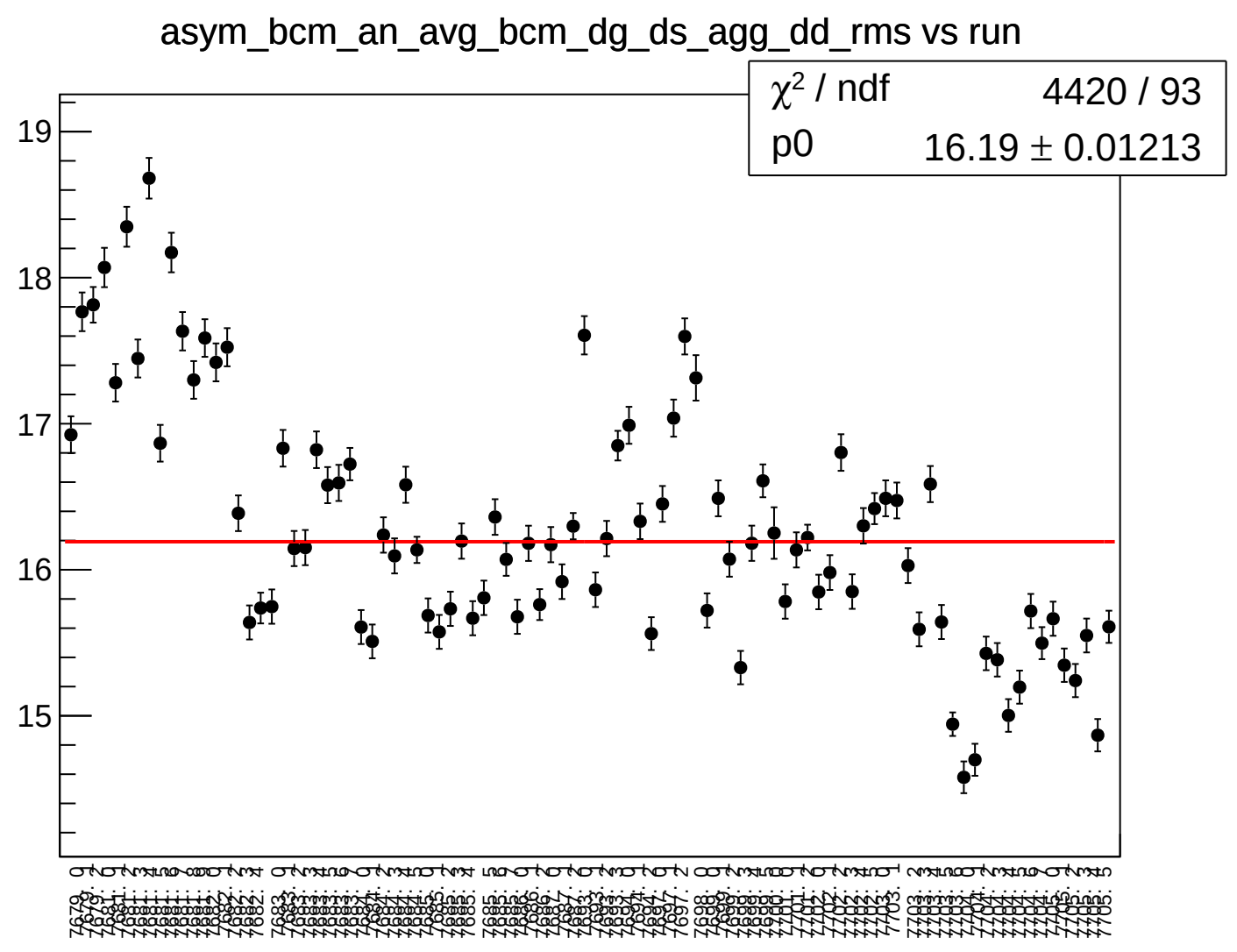

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 20.85 / 93
p0 86.26 ± 269.7
pull
Entries 94
Mean 121.2
Std Dev 128.9

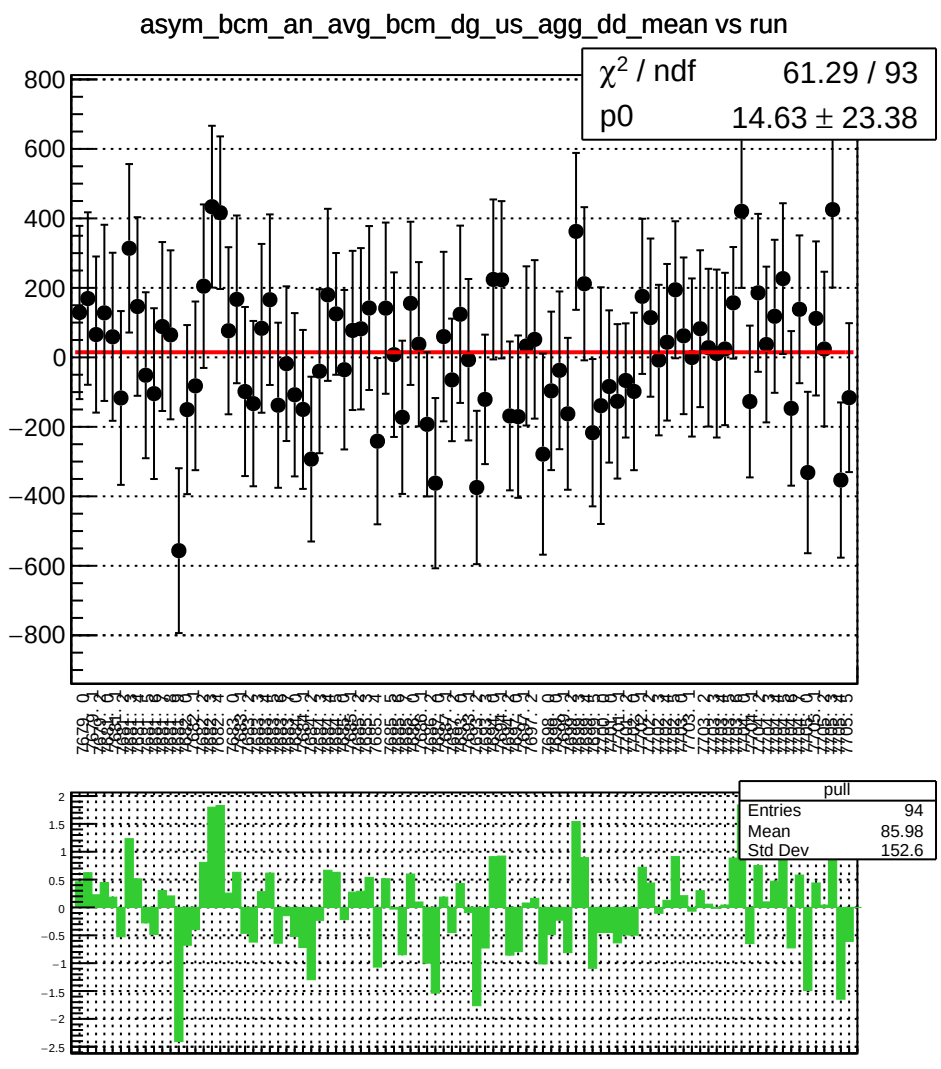

pull1D
Entries 94
Mean −0.001287
Std Dev 0.4709

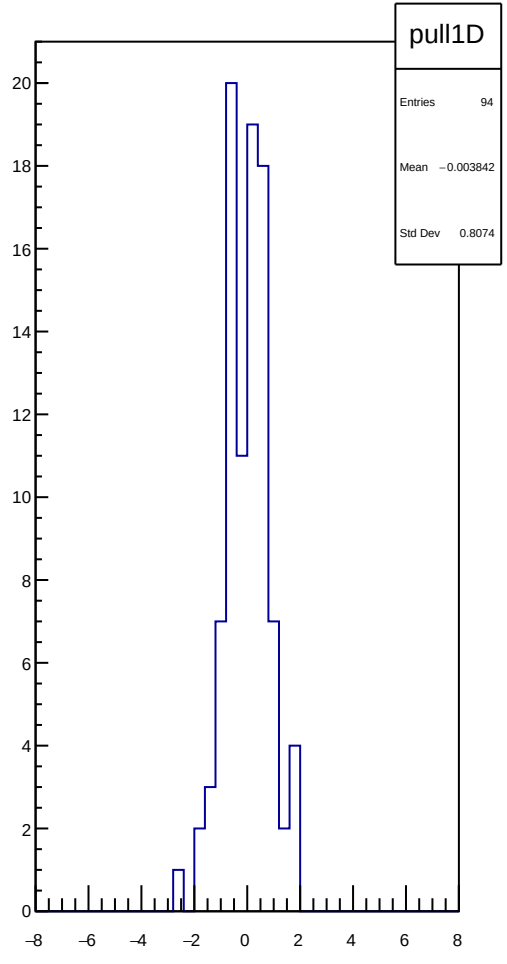

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.452e+04 / 93
p0 253.8 ± 0.1907
320
300
280
260
240
220

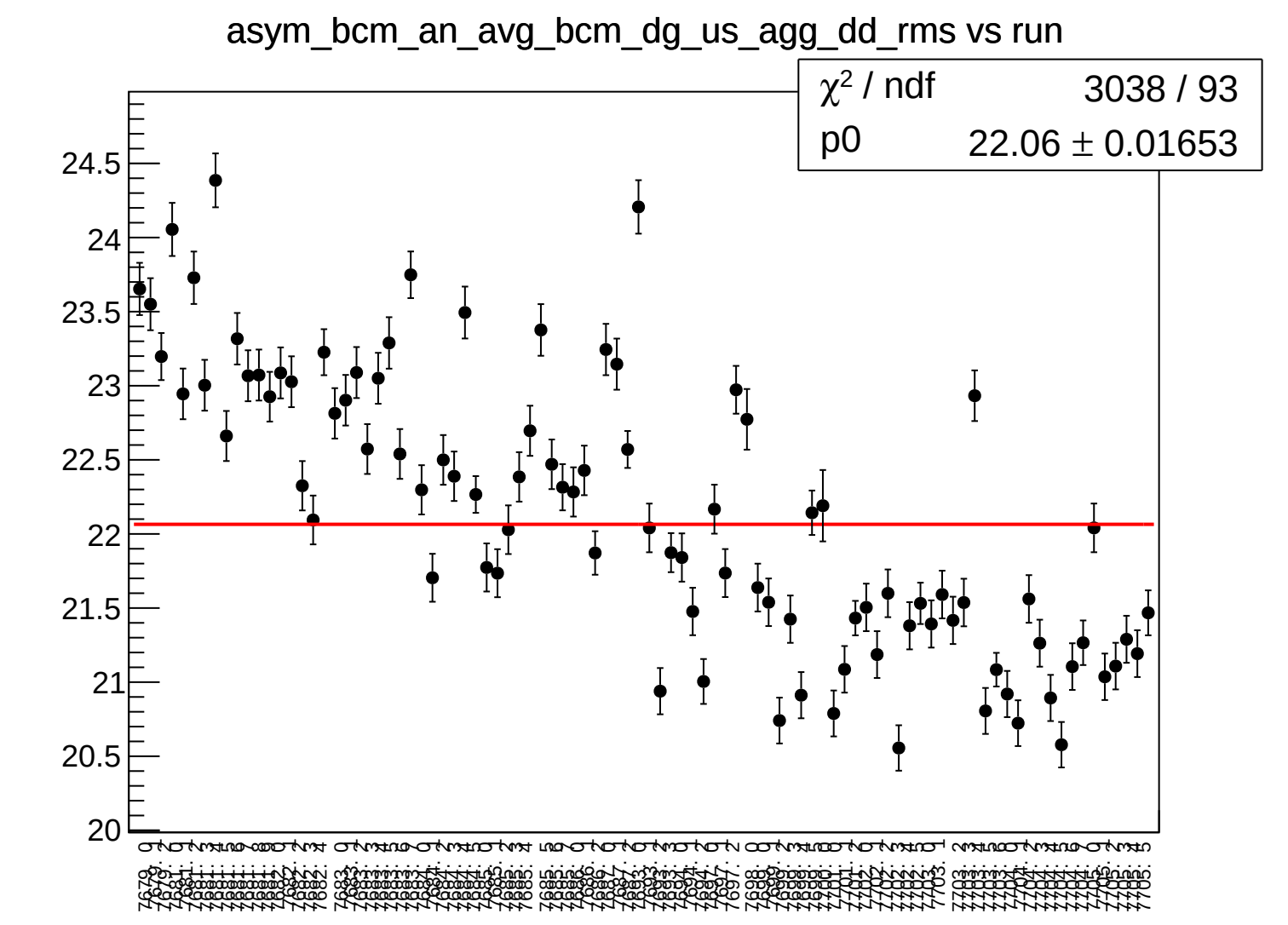

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 87.76 / 93
p0 −11.27 ± 17.16
pull
Entries 94
Mean 707.5
Std Dev 661.9

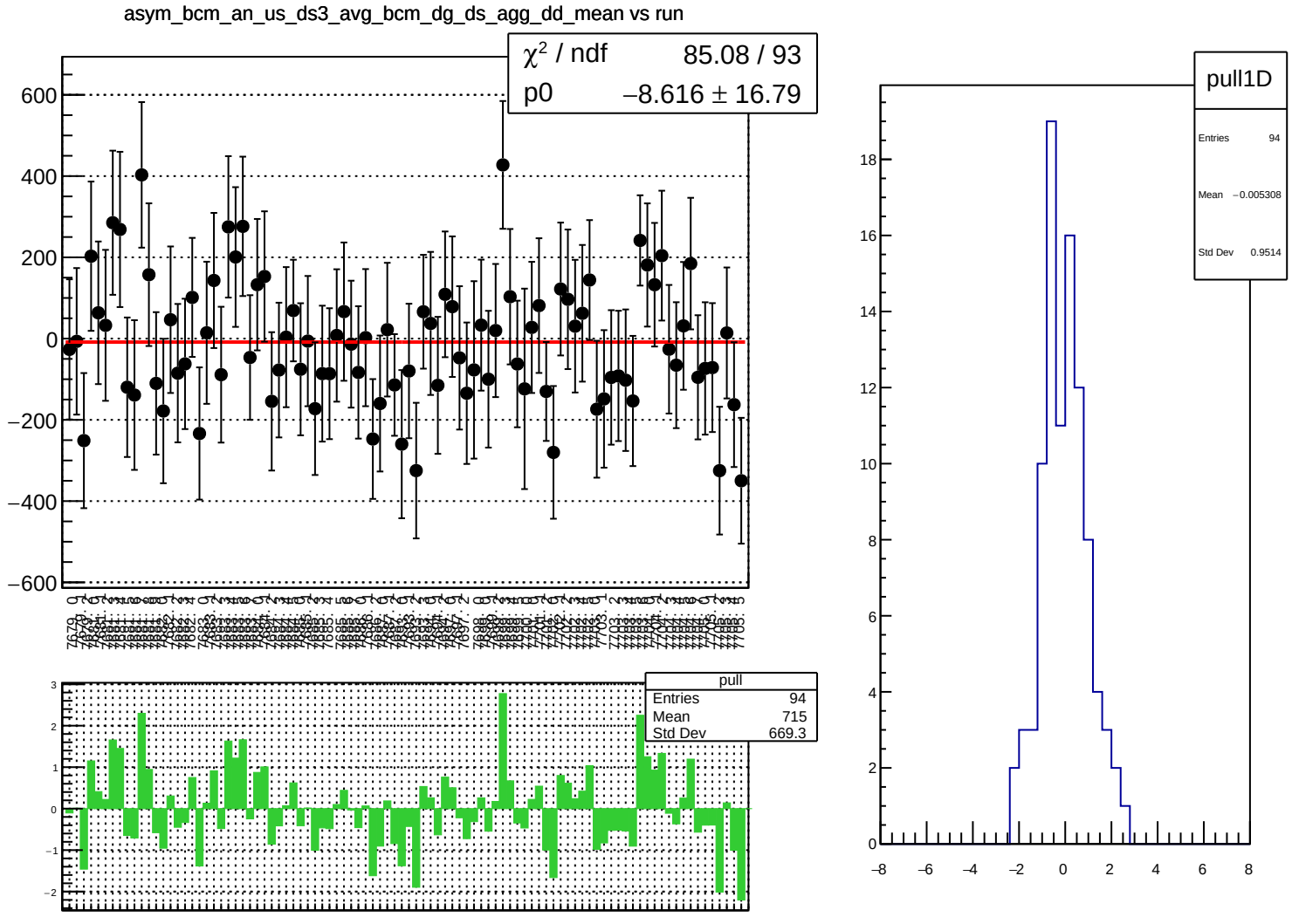

pull1D
Entries 94
Mean −0.005259
Std Dev 0.9663

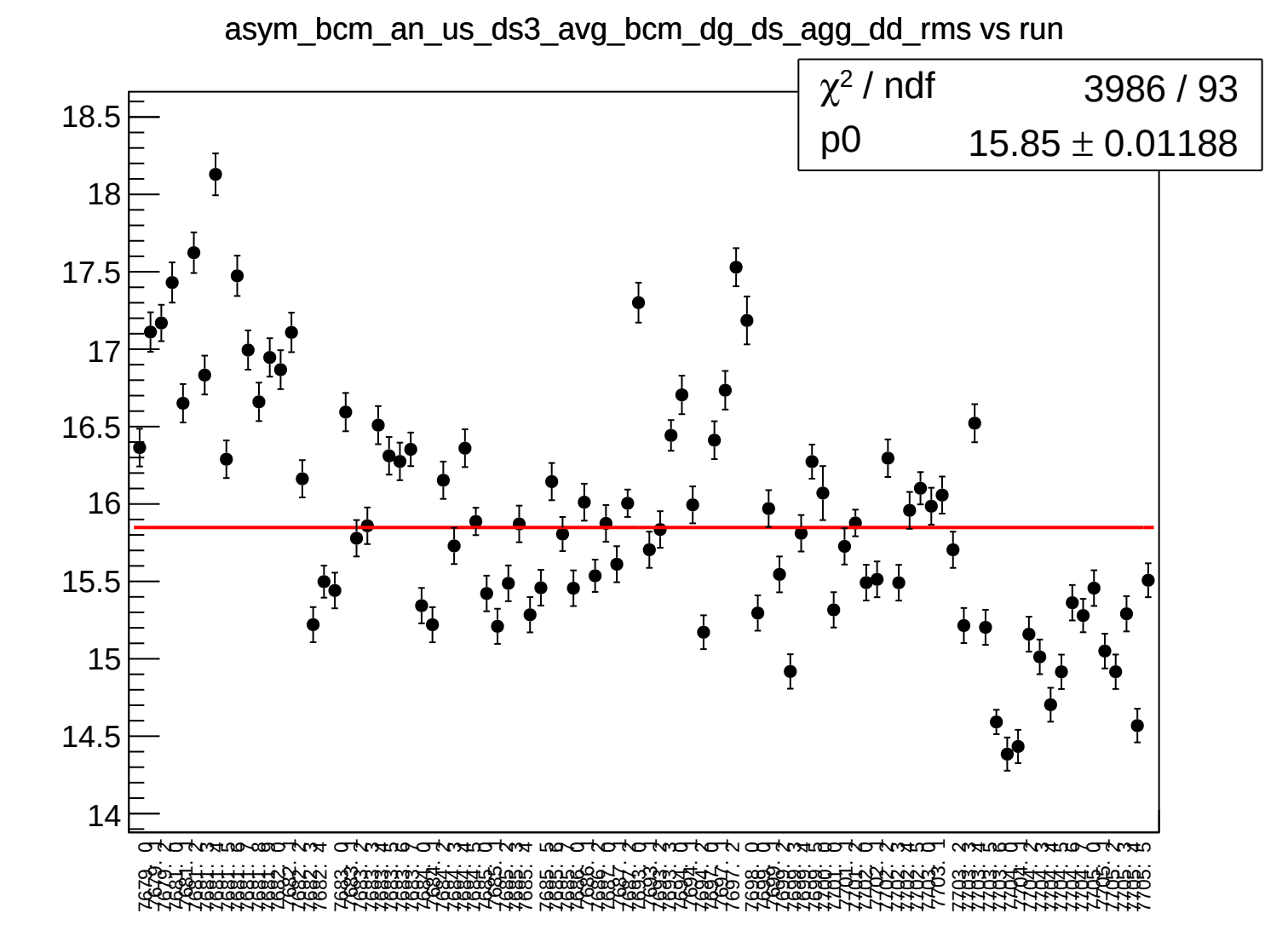

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4420 / 93
p0 16.19 ± 0.01213
19
18
17
16
15

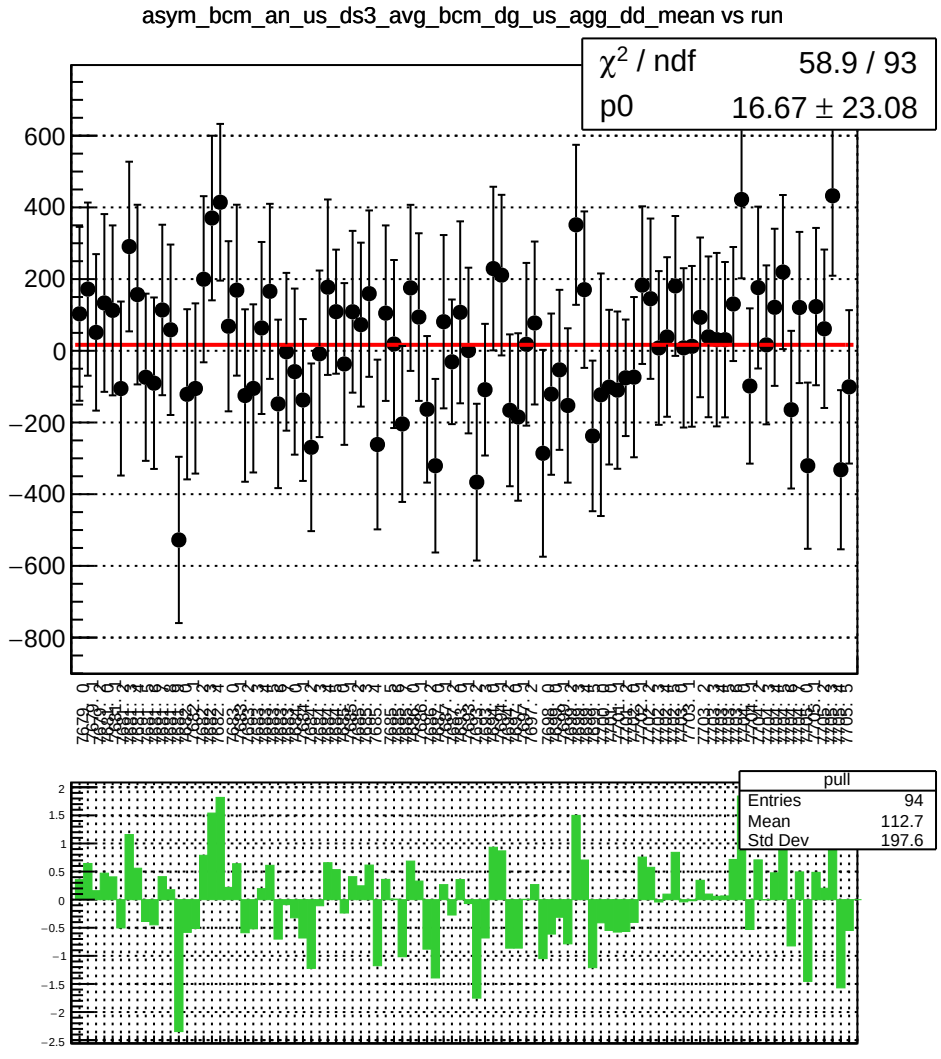

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ^2 / ndf 61.29 / 93
p0 14.63 ± 23.38
pull
Entries 94
Mean 85.98
Std Dev 152.6

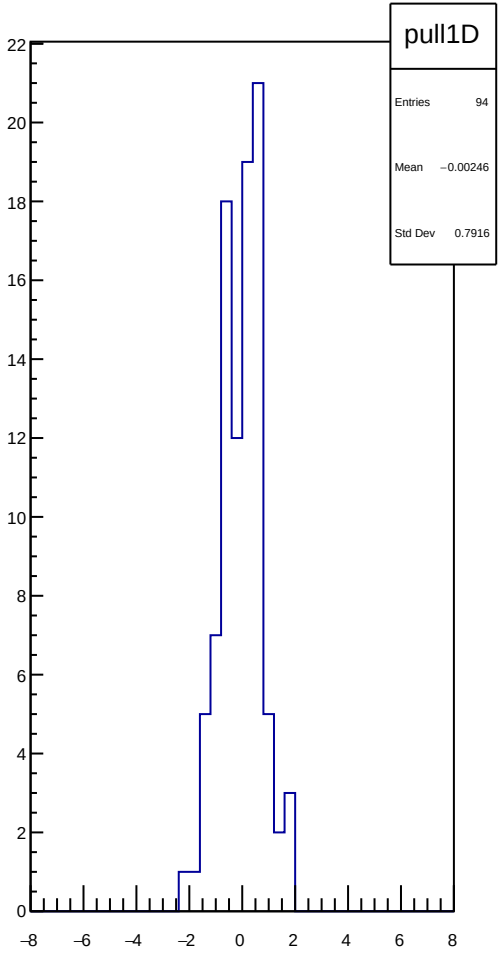

pull1D
Entries 94
Mean −0.003842
Std Dev 0.8074

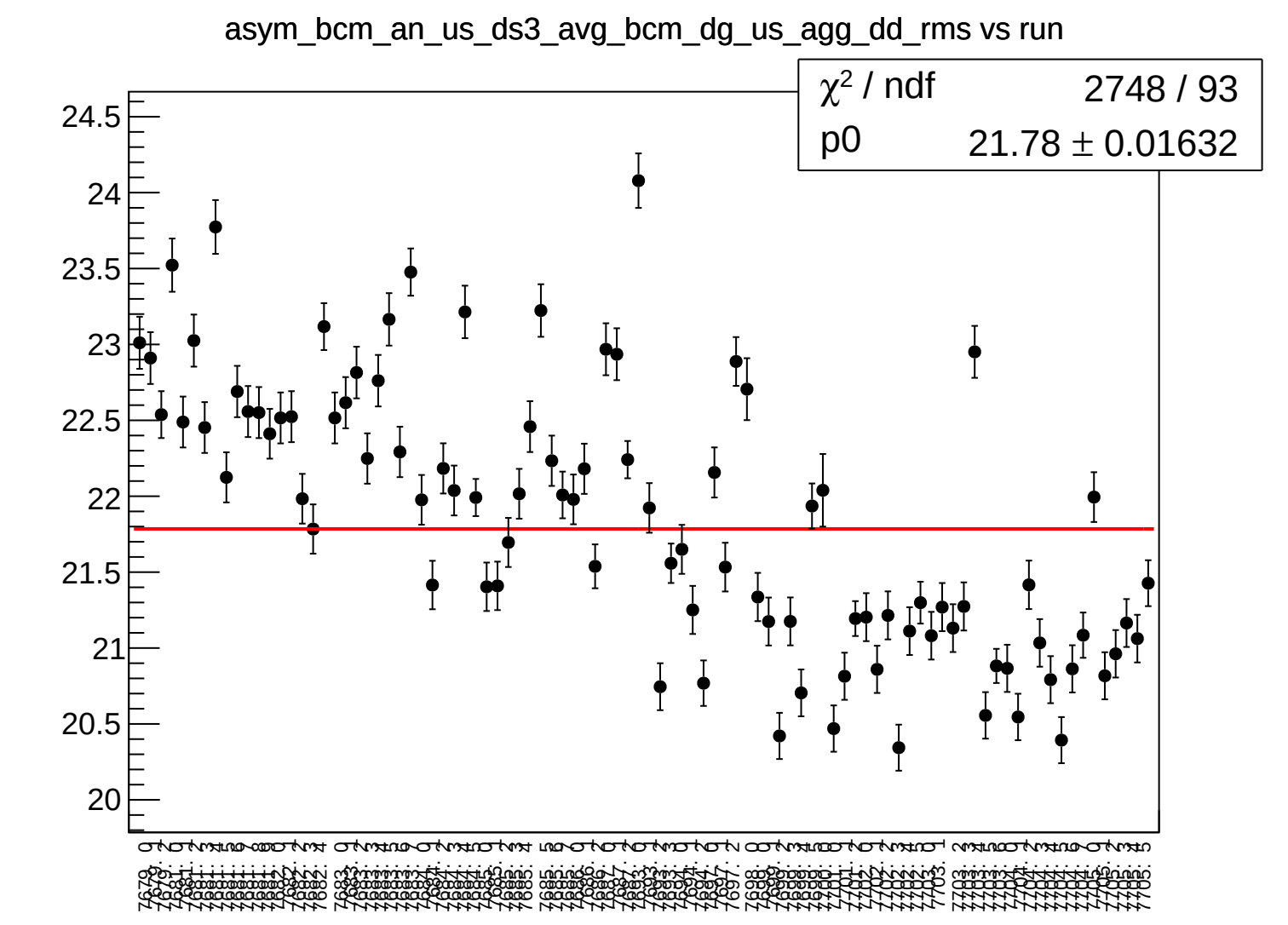

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 3038 / 93
p0 22.06 ± 0.01653
24.5
24
23.5
23
22.5
22
21.5
21
20.5
20

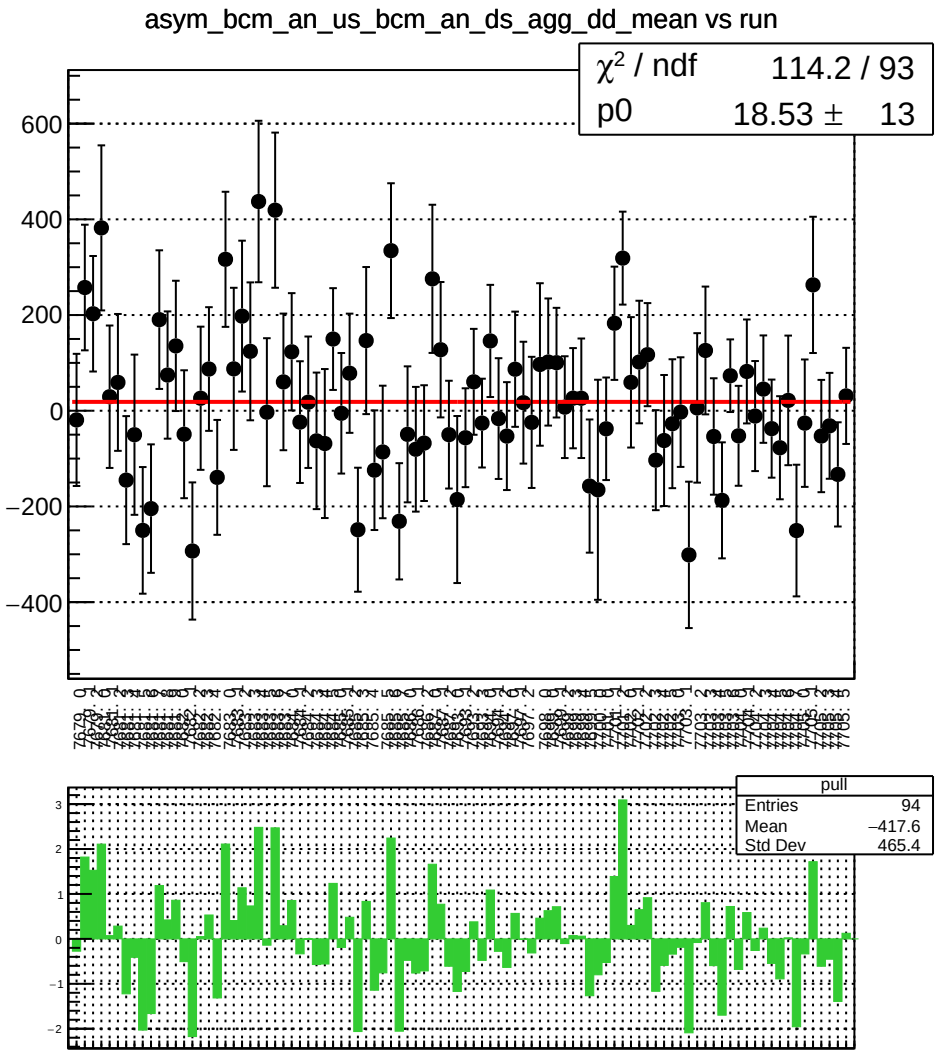

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 85.08 / 93
p0 −8.616 ± 16.79
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 715
Std Dev 669.3
3
2
1
0
−1
−2
pull1D
Entries 94
Mean −0.005308
Std Dev 0.9514
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

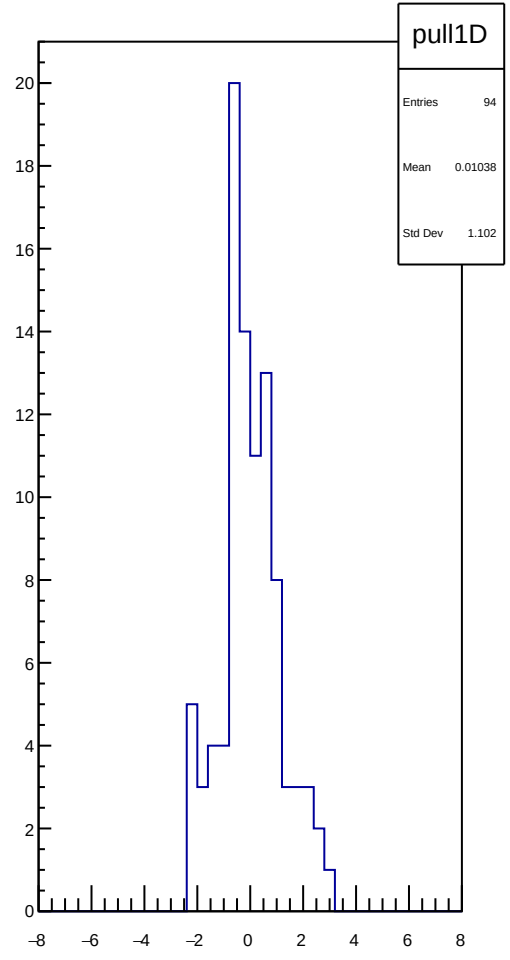

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3986 / 93
p0 15.85 ± 0.01188
18.5
18
17.5
17
16.5
16
15.5
15
14.5
14

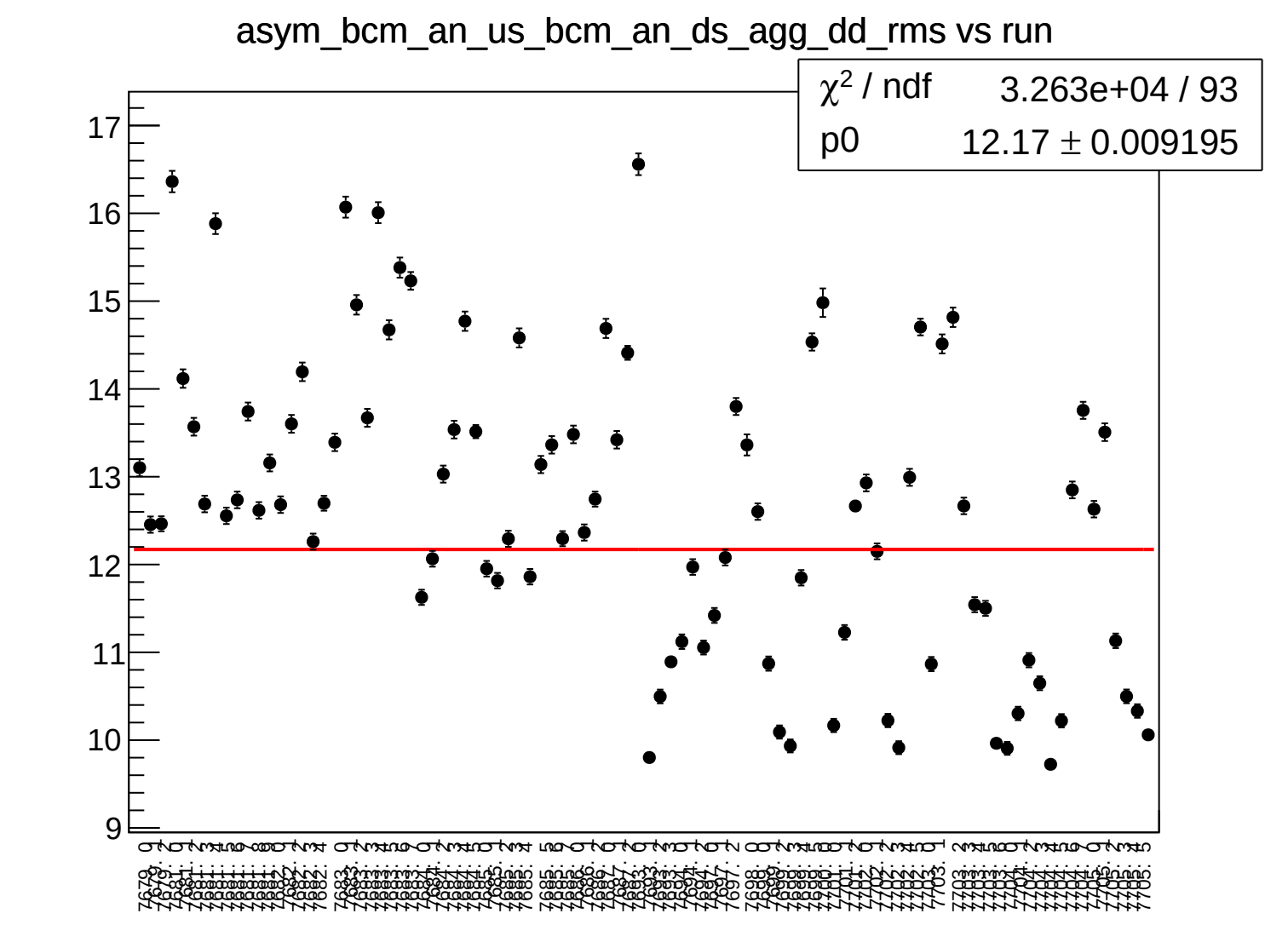

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 58.9 / 93
p0 16.67 ± 23.08
pull
Entries 94
Mean 112.7
Std Dev 197.6

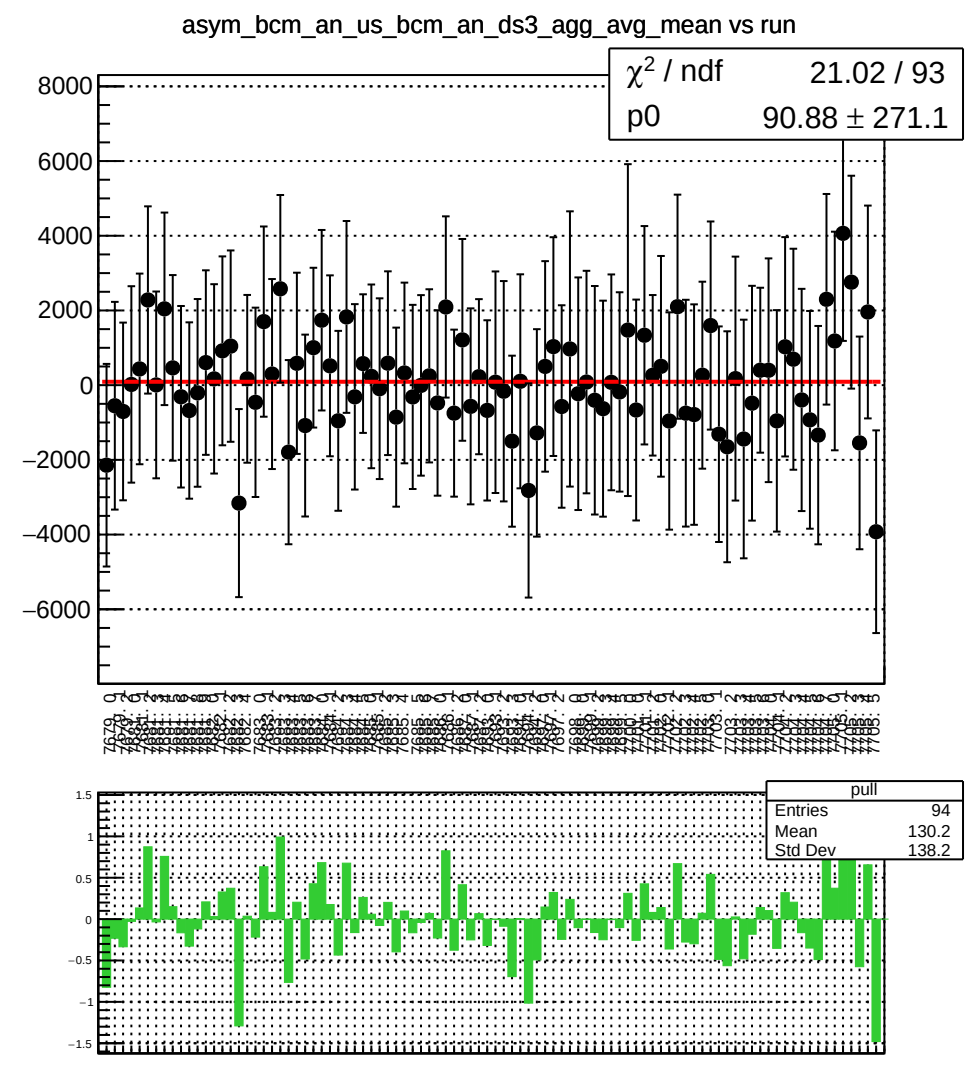

pull1D
Entries 94
Mean −0.00246
Std Dev 0.7916

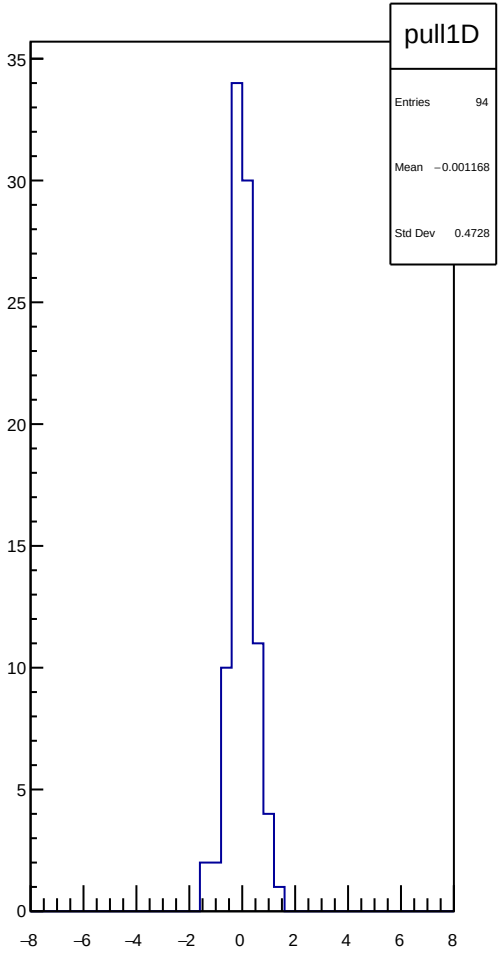

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2748 / 93
p0 21.78 ± 0.01632
24.5
24
23.5
23
22.5
22
21.5
21
20.5
20

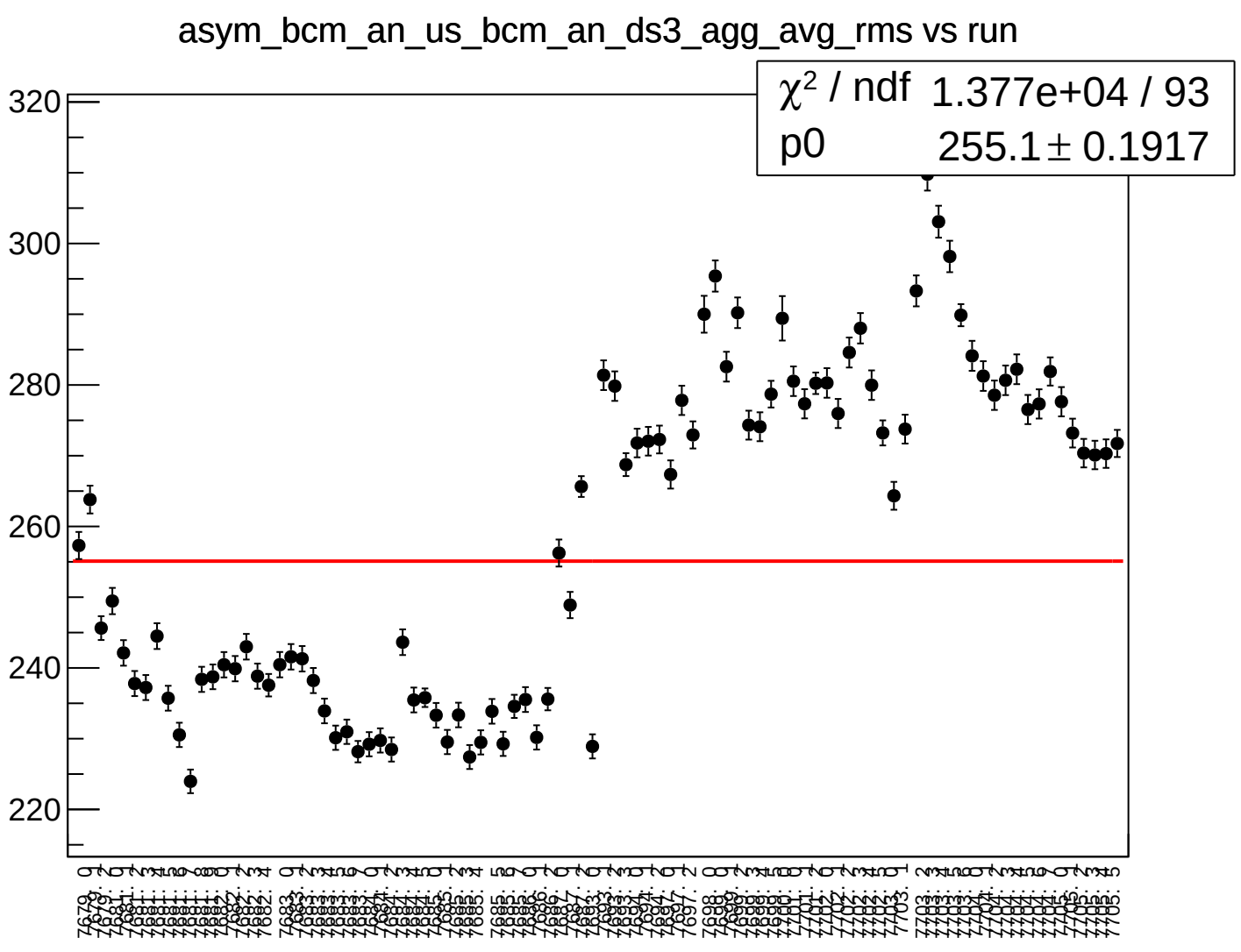

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 114.2 / 93
p0 18.53 ± 13
pull
Entries 94
Mean −417.6
Std Dev 465.4

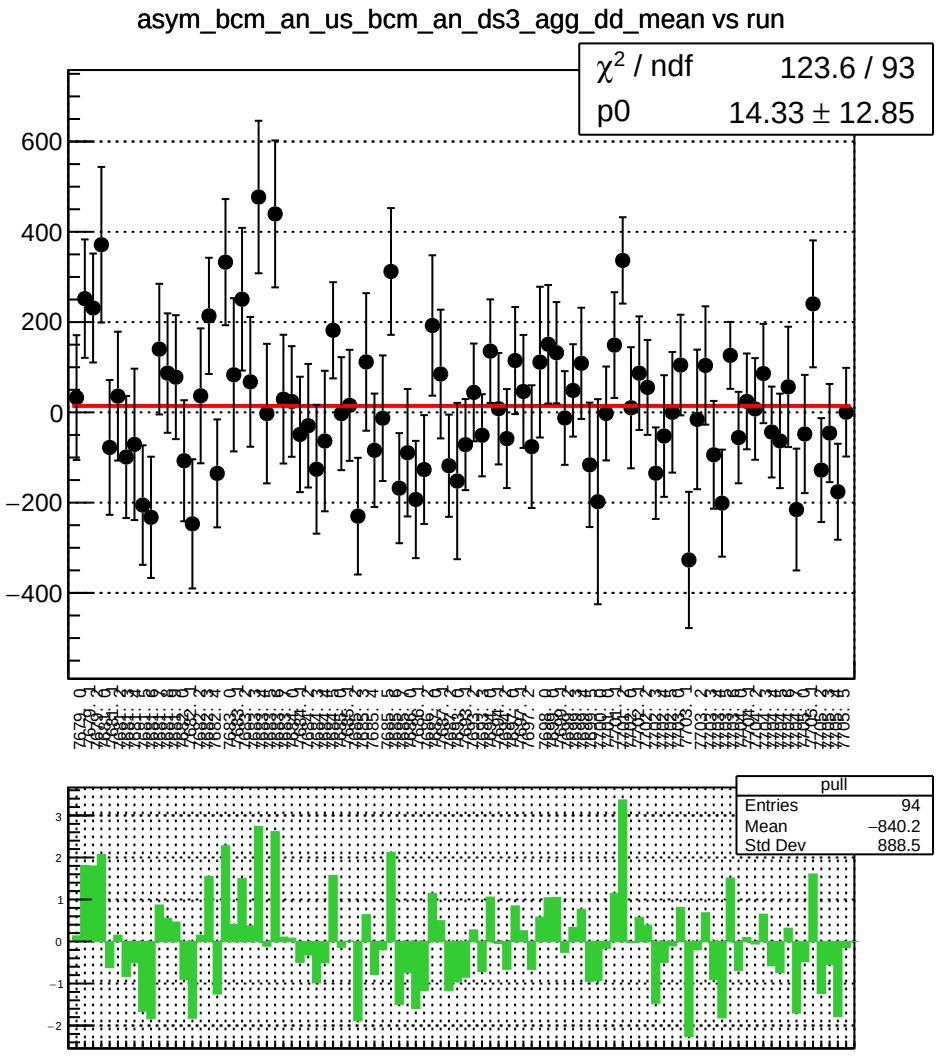

pull1D
Entries 94
Mean 0.01038
Std Dev 1.102

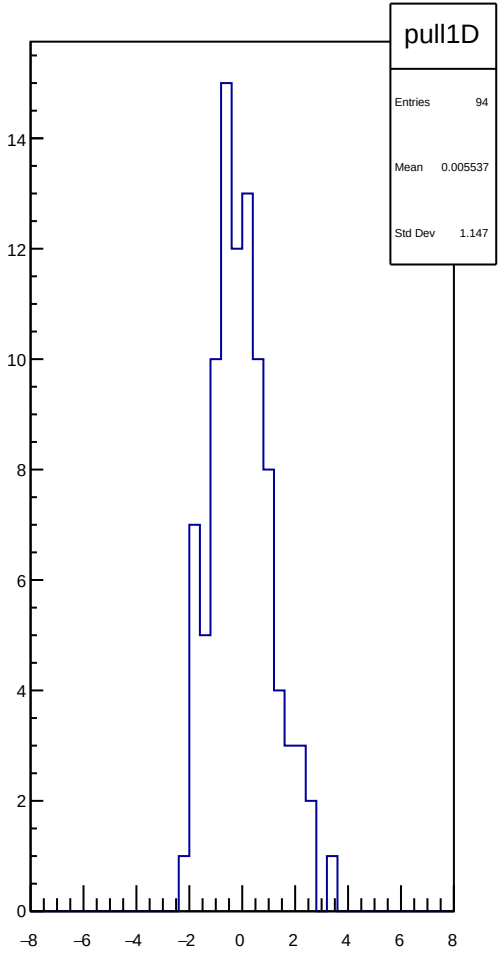

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3.263e+04 / 93
p0 12.17 ± 0.009195
17
16
15
14
13
12
11
10
9

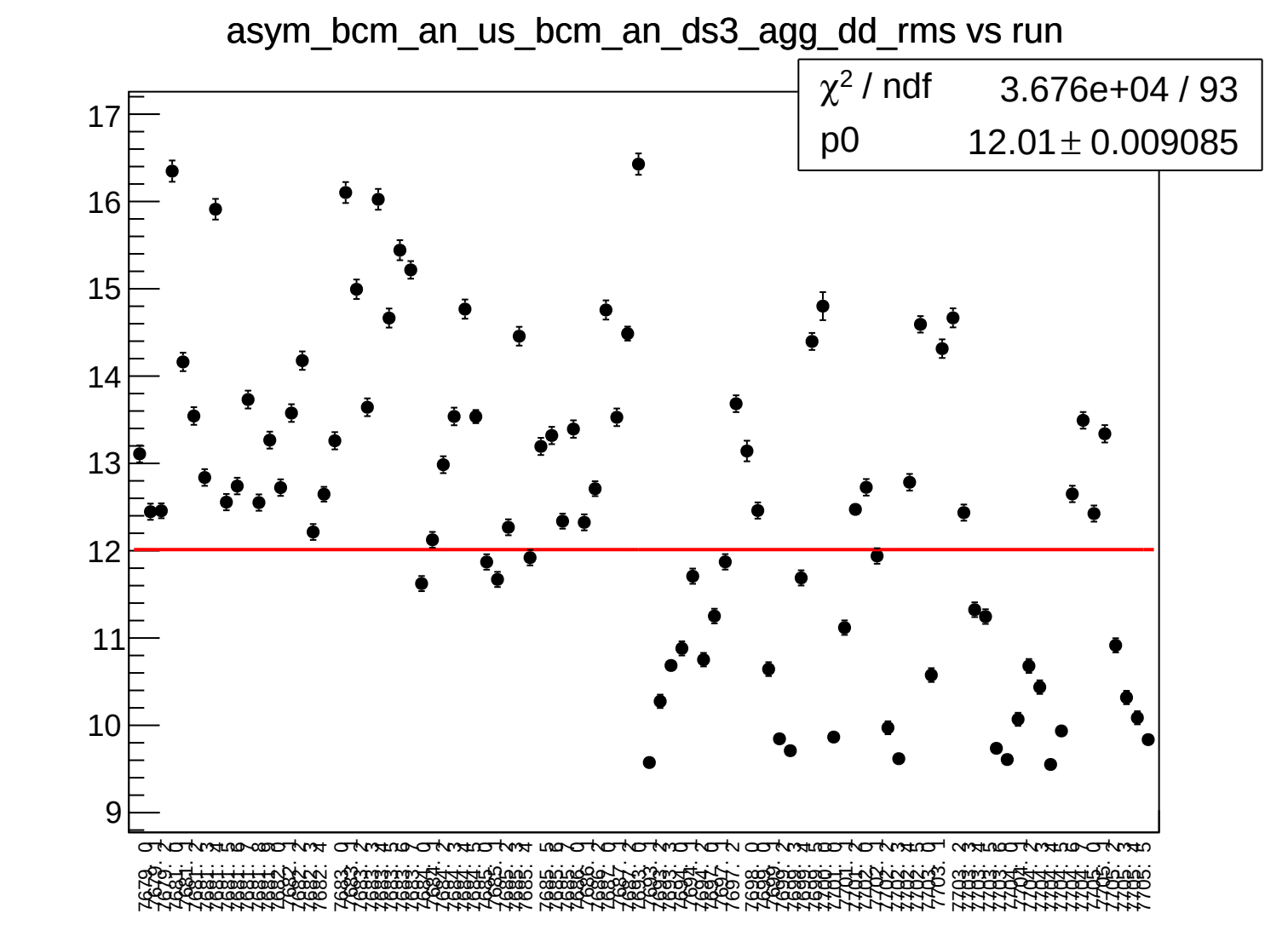

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 21.02 / 93
p0 90.88 ± 271.1
pull
Entries 94
Mean 130.2
Std Dev 138.2

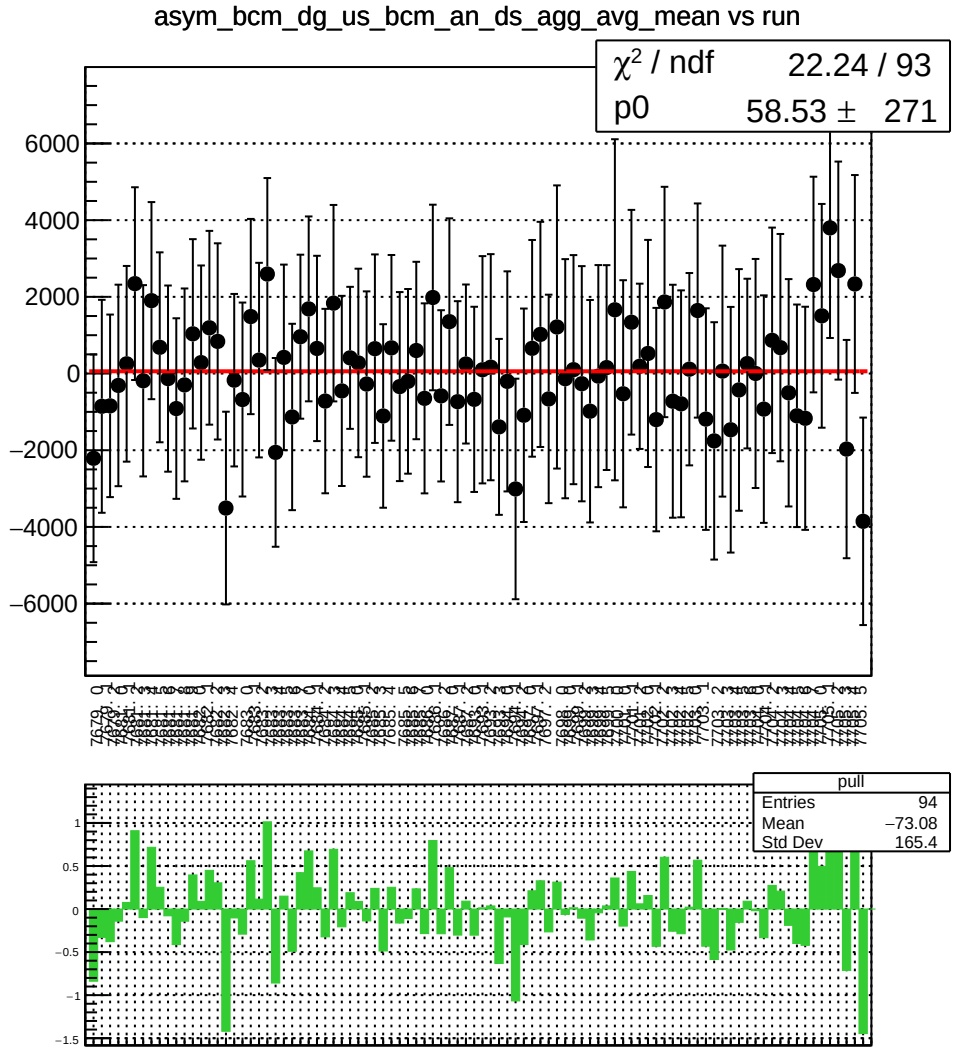

pull1D
Entries 94
Mean −0.001168
Std Dev 0.4728

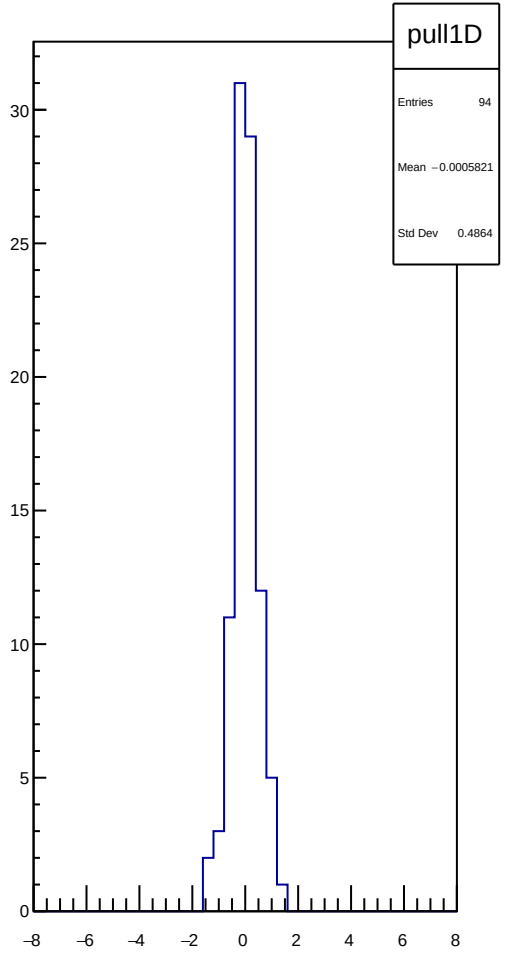

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.377e+04 / 93
p0 255.1 ± 0.1917
320
300
280
260
240
220

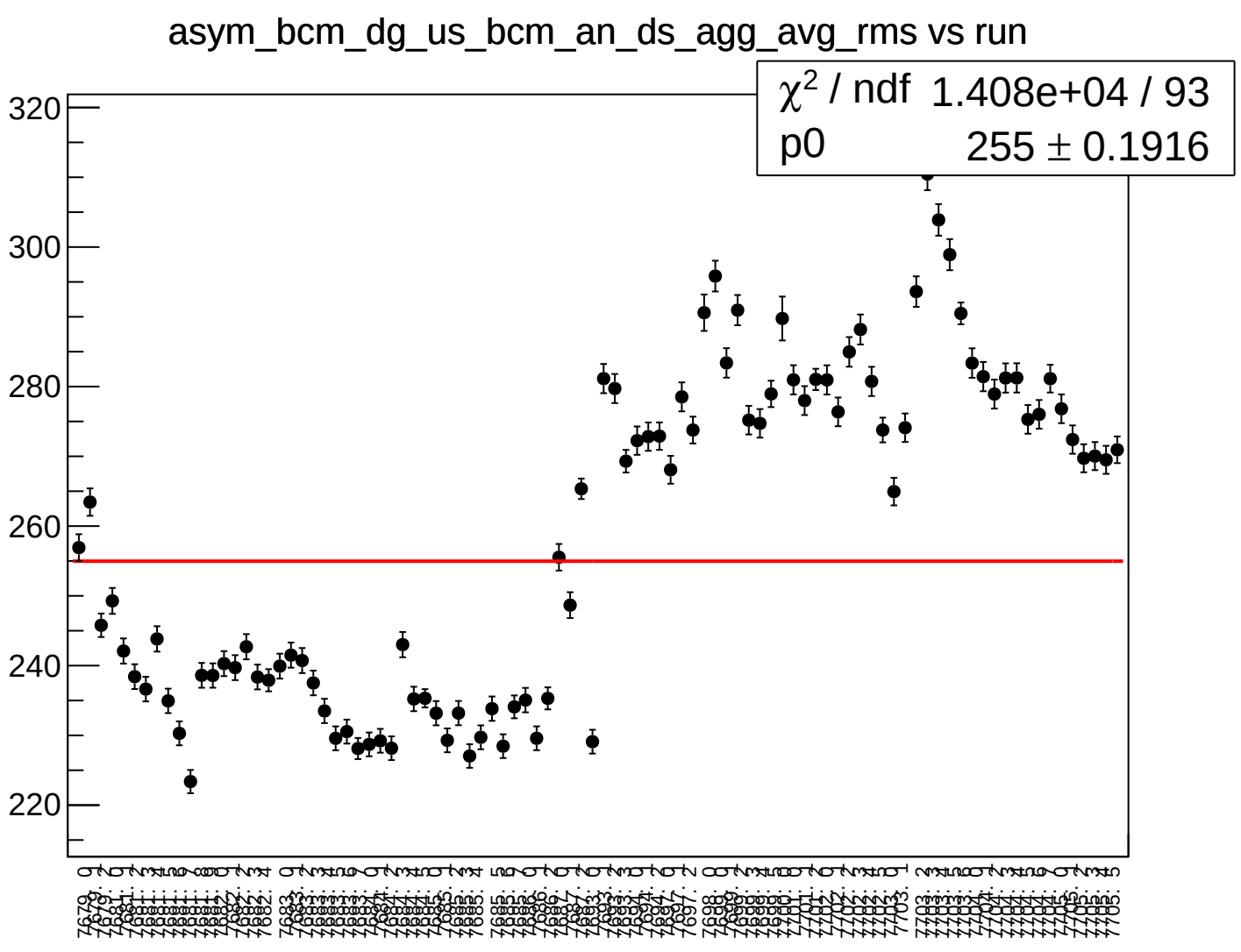

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 123.6 / 93
p0 14.33 ± 12.85
pull
Entries 94
Mean −840.2
Std Dev 888.5

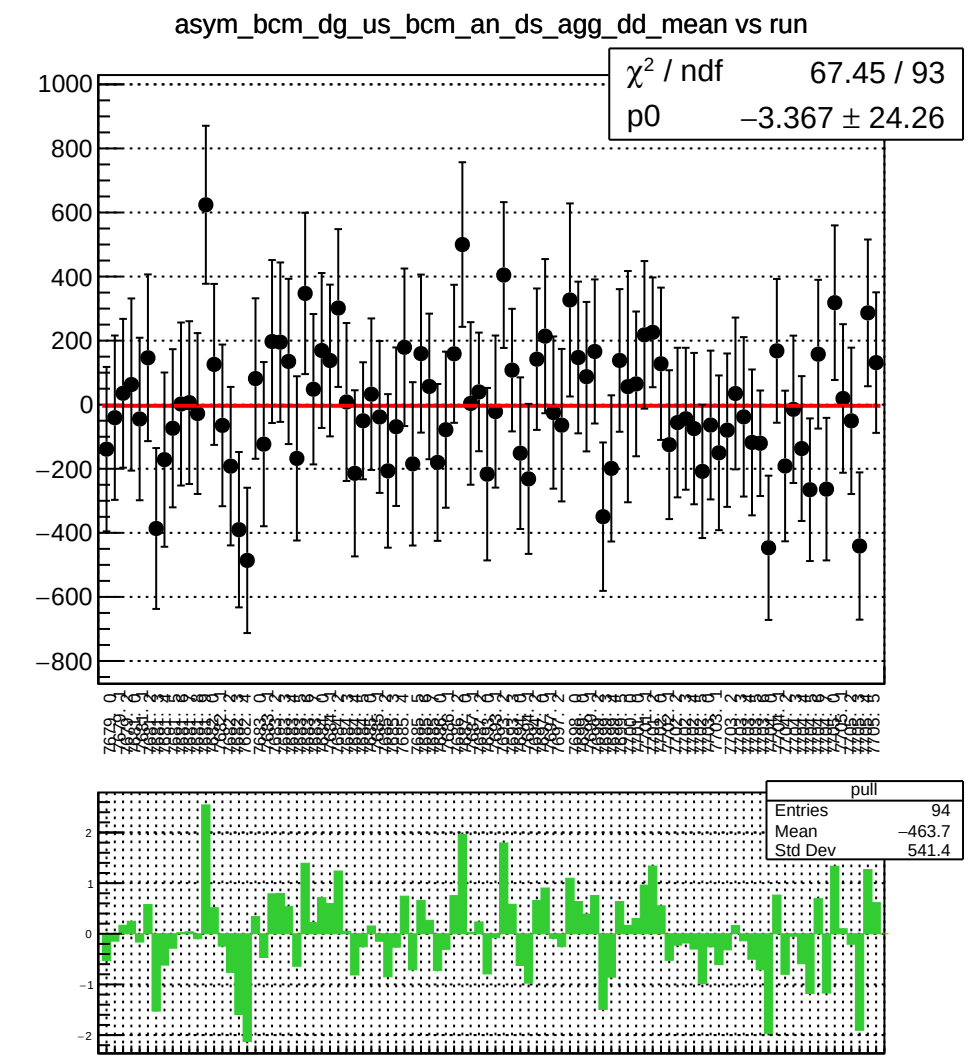

pull1D
Entries 94
Mean 0.005537
Std Dev 1.147

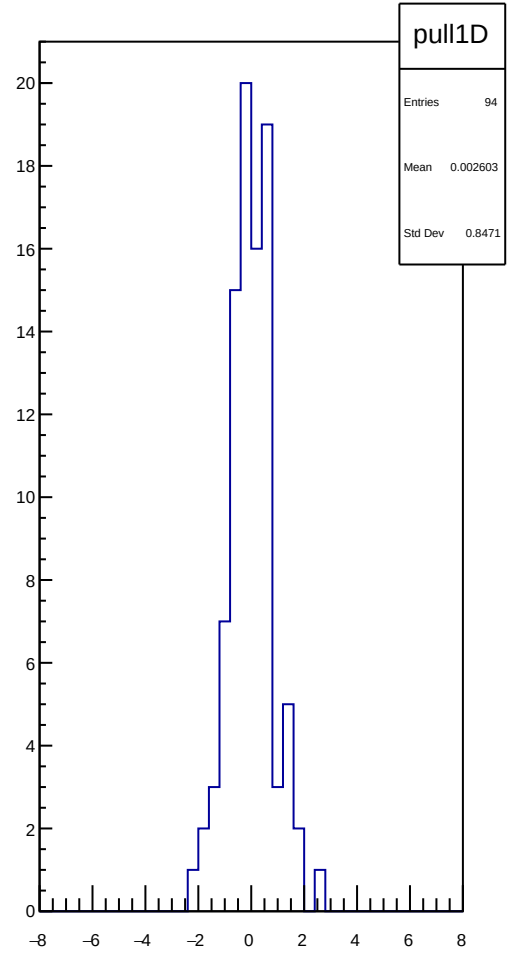

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 3.676e+04 / 93
p0 12.01 ± 0.009085
17
16
15
14
13
12
11
10
9

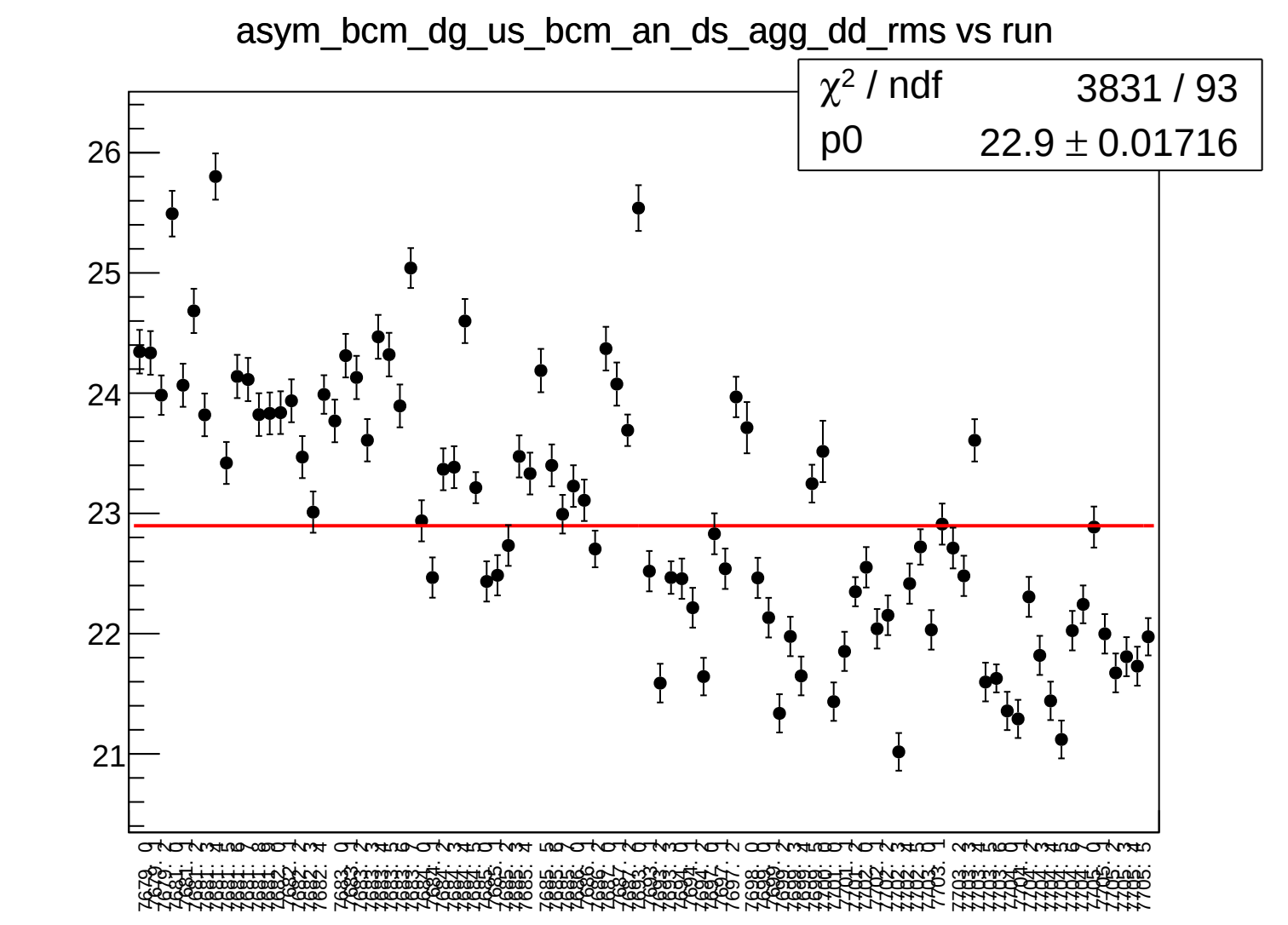

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 22.24 / 93
p0 58.53 ± 271
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean −73.08
Std Dev 165.4
1
0.5
0
−0.5
−1
−1.5

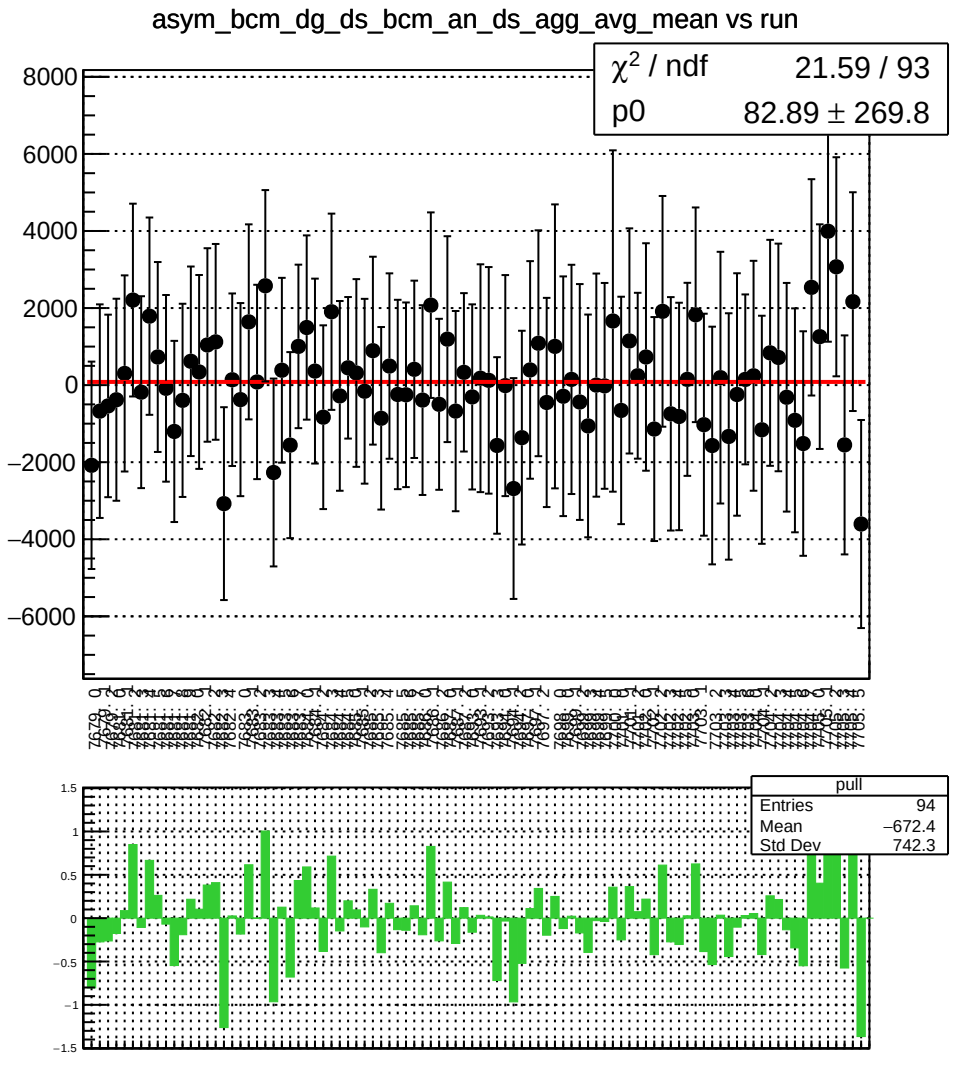

pull1D
Entries 94
Mean −0.0005821
Std Dev 0.4864
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

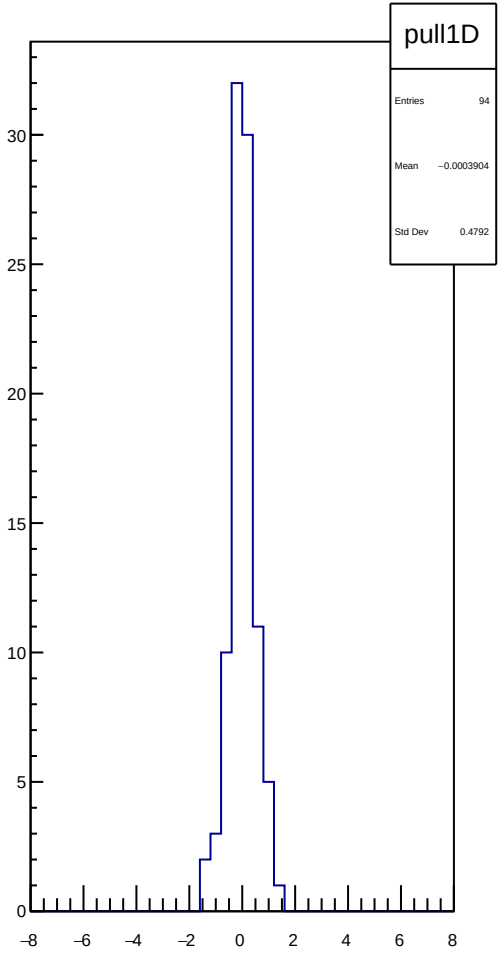

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.408e+04 / 93
p0 255 ± 0.1916
320
300
280
260
240
220

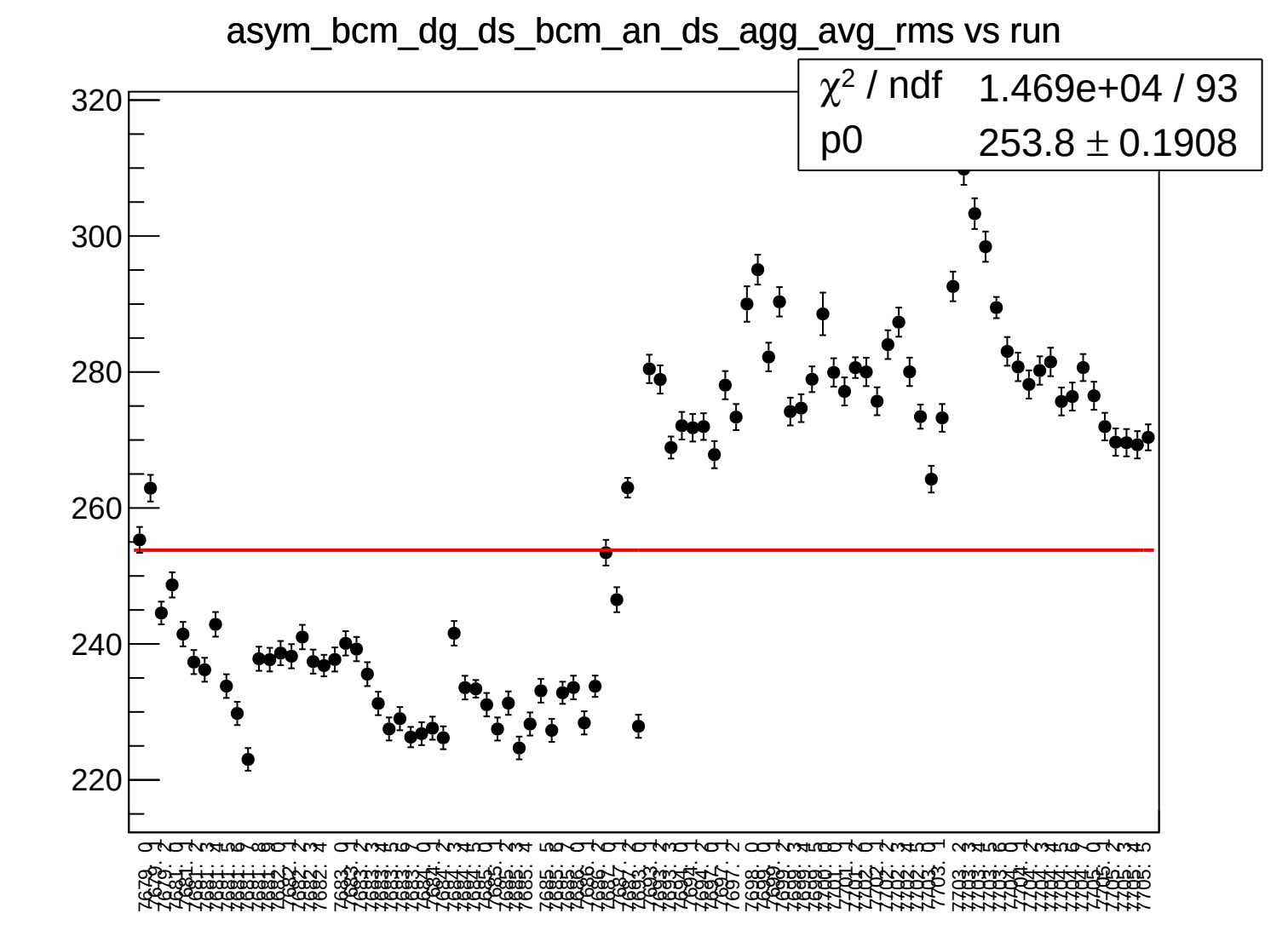

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 67.45 / 93
p0 −3.367 ± 24.26
pull
Entries 94
Mean −463.7
Std Dev 541.4

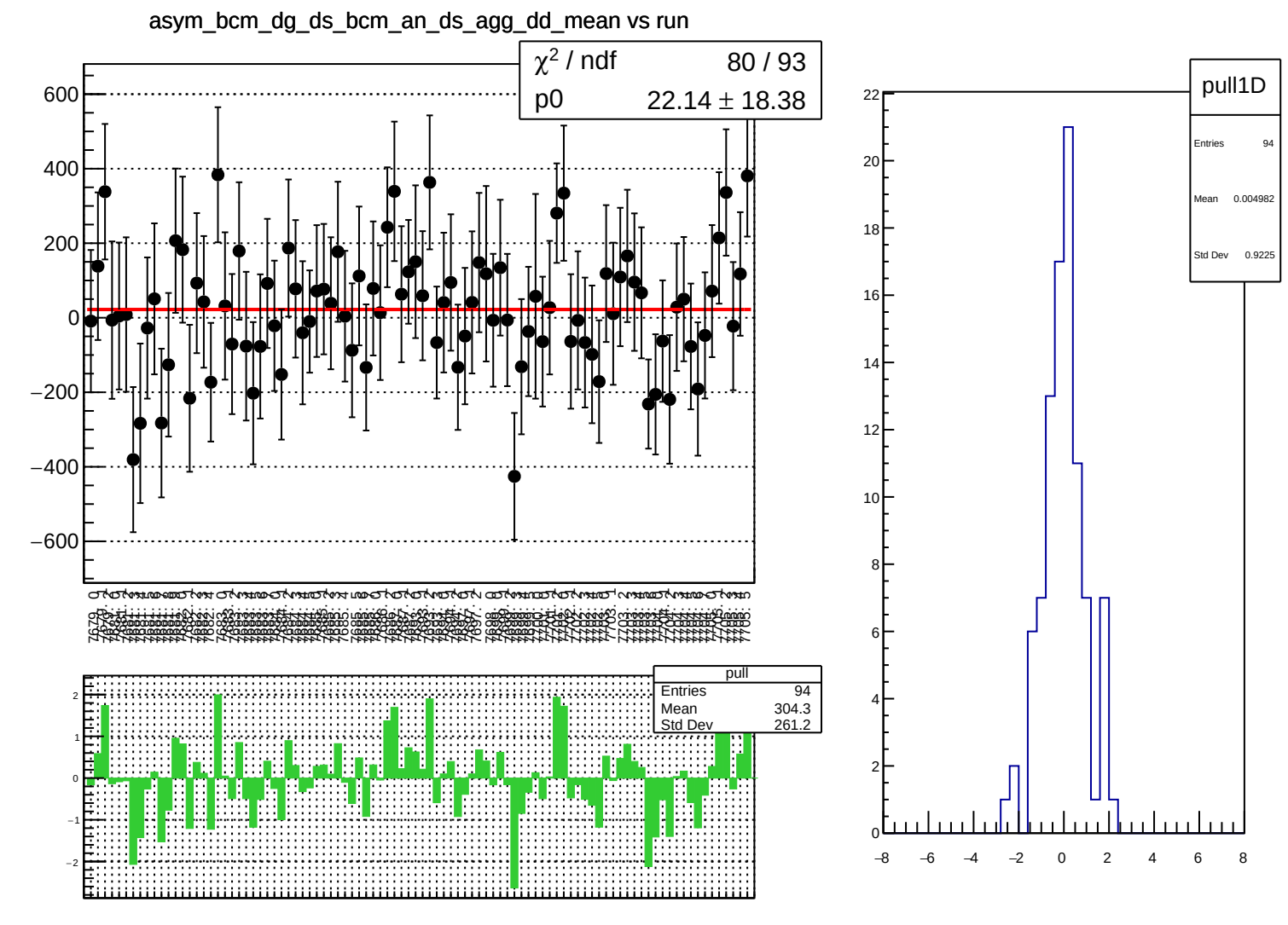

pull1D
Entries 94
Mean 0.002603
Std Dev 0.8471

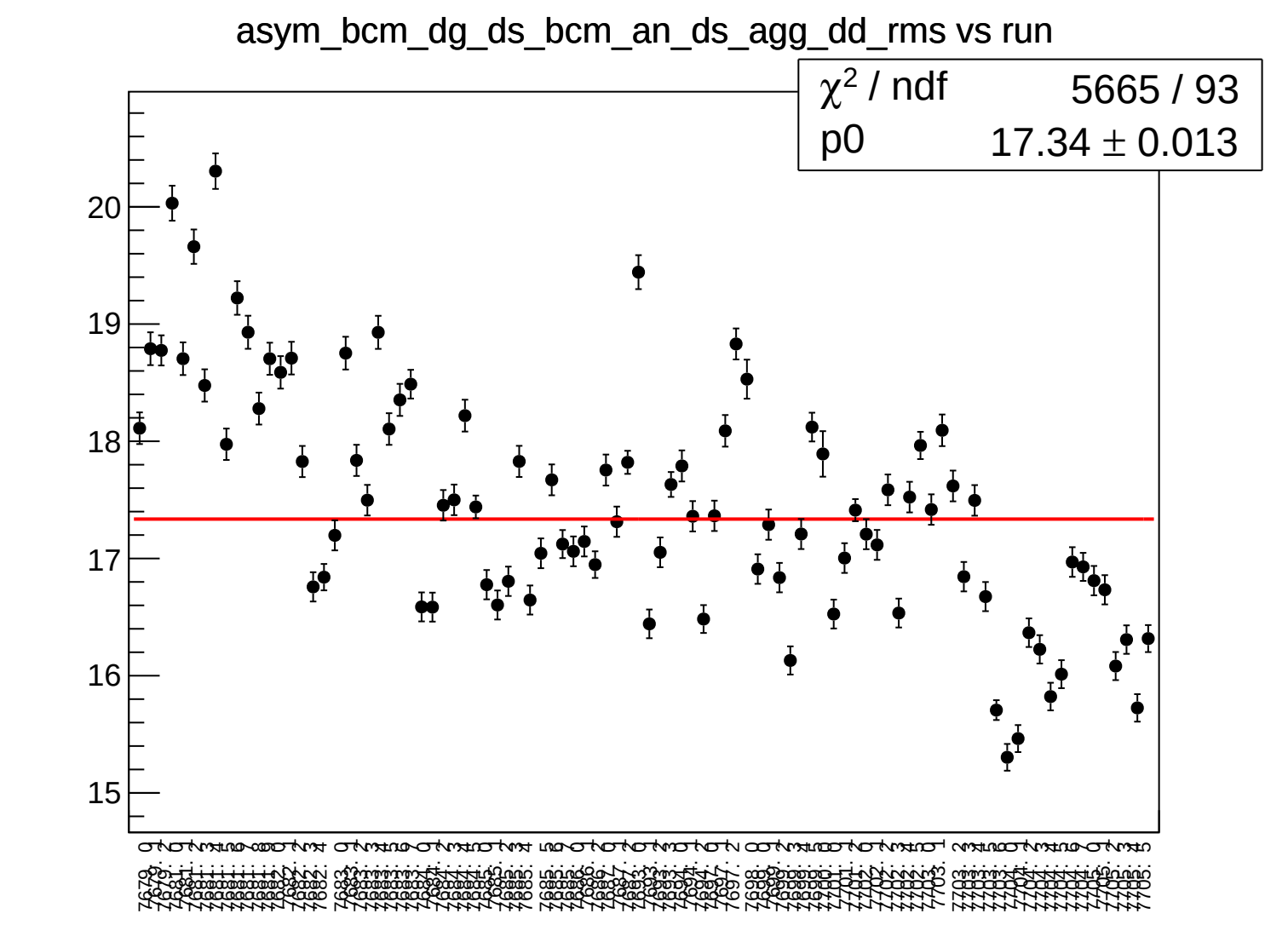

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3831 / 93
p0 22.9 ± 0.01716
26
25
24
23
22
21

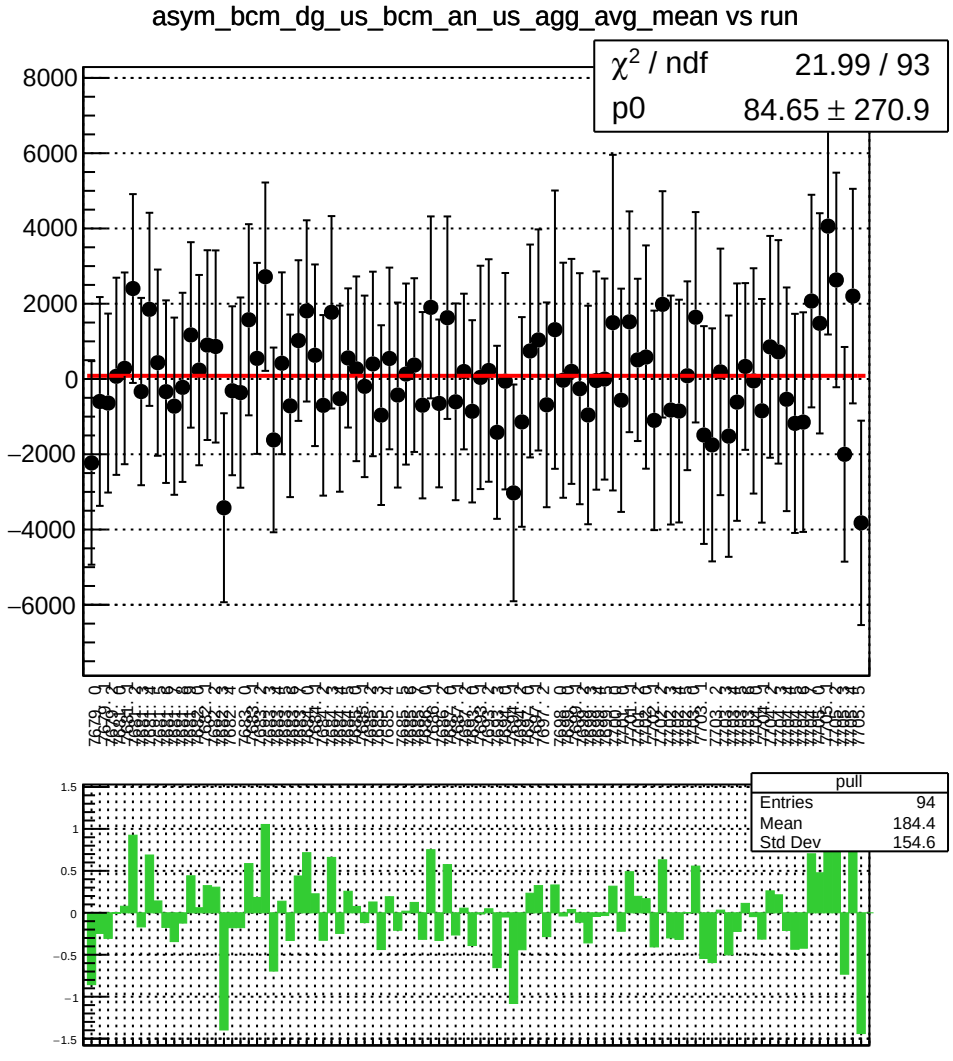

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 21.59 / 93
p0 82.89 ± 269.8
pull
Entries 94
Mean −672.4
Std Dev 742.3

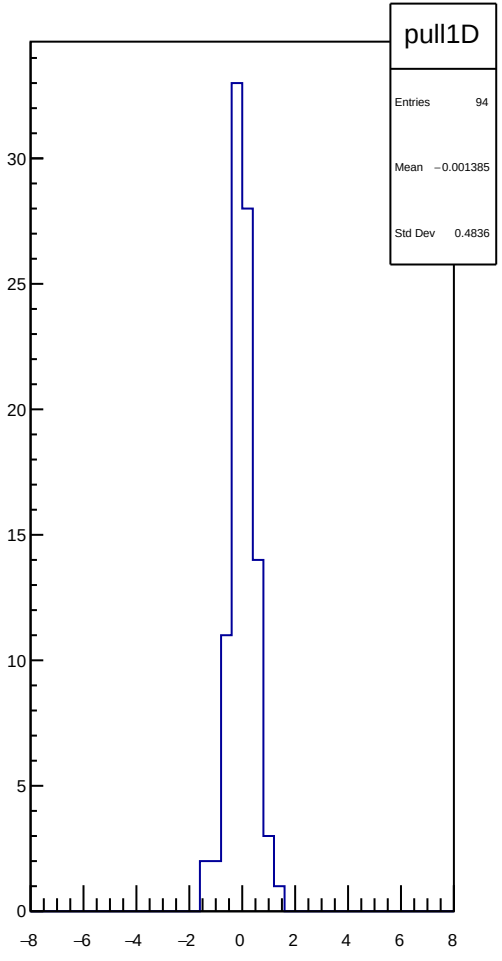

pull1D
Entries 94
Mean −0.0003904
Std Dev 0.4792

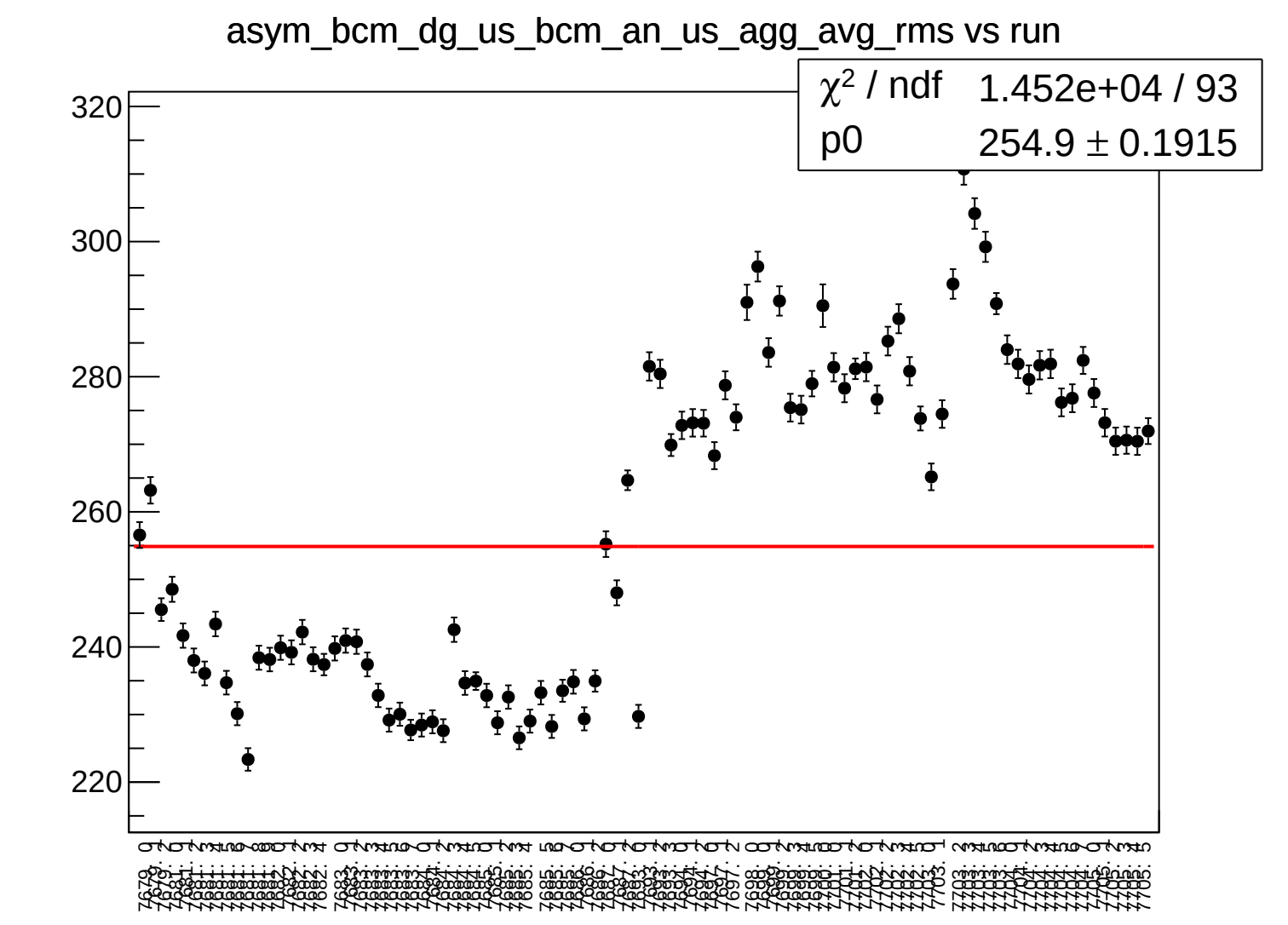

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.469e+04 / 93
p0 253.8 ± 0.1908
320
300
280
260
240
220


asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 80 / 93
p0 22.14 ± 18.38
pull
Entries 94
Mean 304.3
Std Dev 261.2
pull1D
Entries 94
Mean 0.004982
Std Dev 0.9225

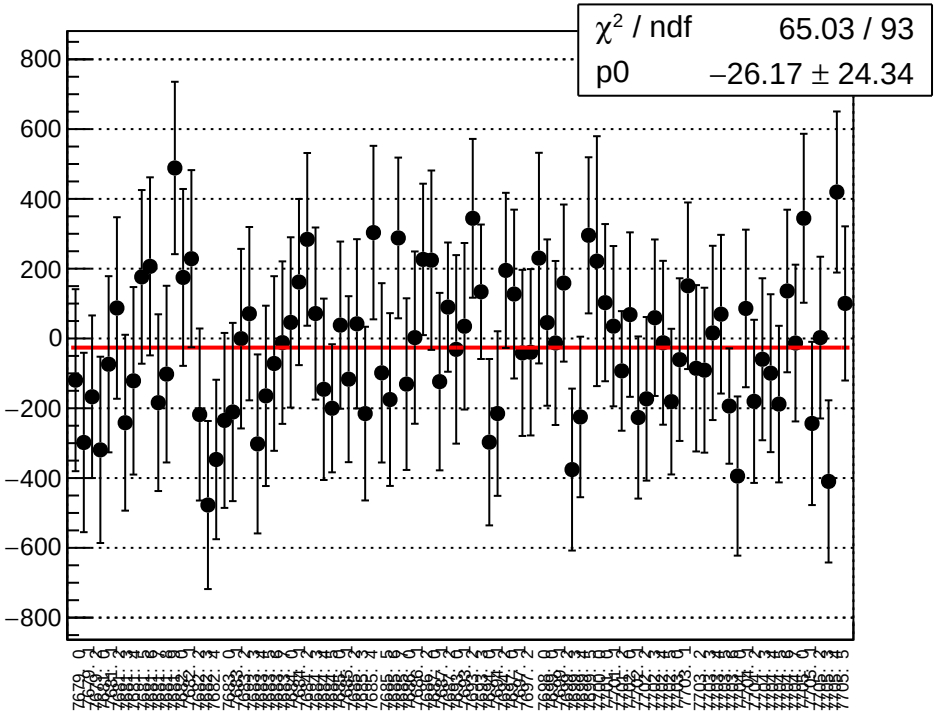

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5665 / 93
p0 17.34 ± 0.013
20
19
18
17
16
15

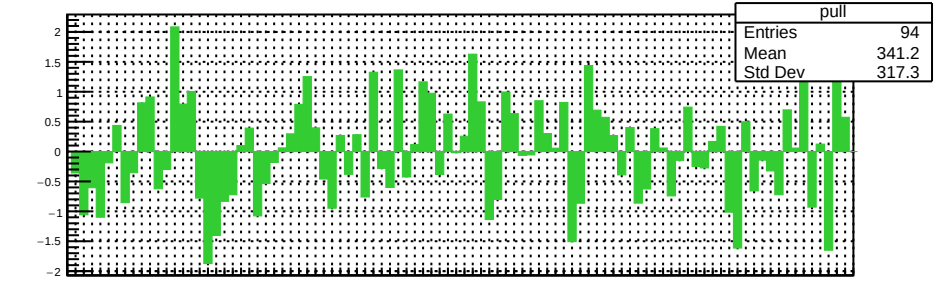

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.99 / 93
p0 84.65 ± 270.9
pull
Entries 94
Mean 184.4
Std Dev 154.6

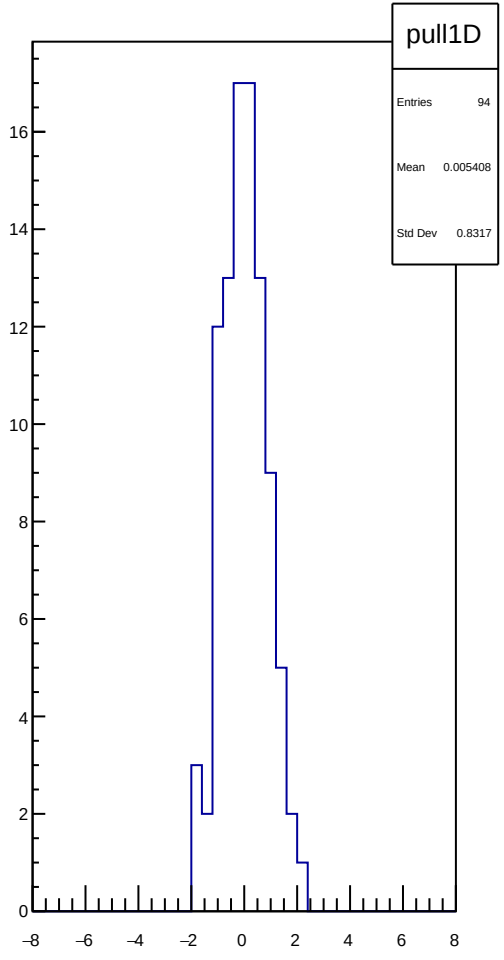

pull1D
Entries 94
Mean −0.001385
Std Dev 0.4836

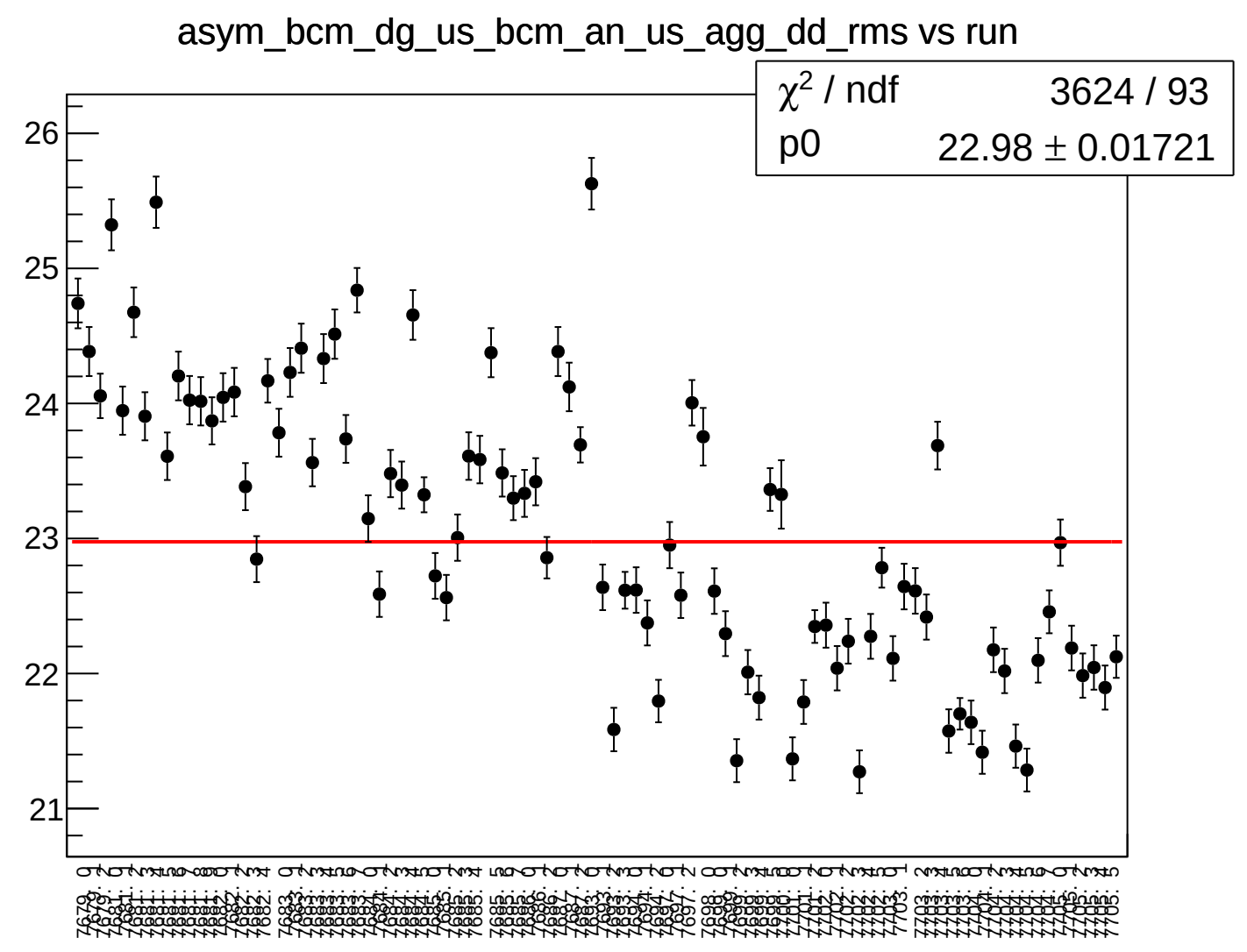

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.452e+04 / 93
p0 254.9 ± 0.1915
320
300
280
260
240
220

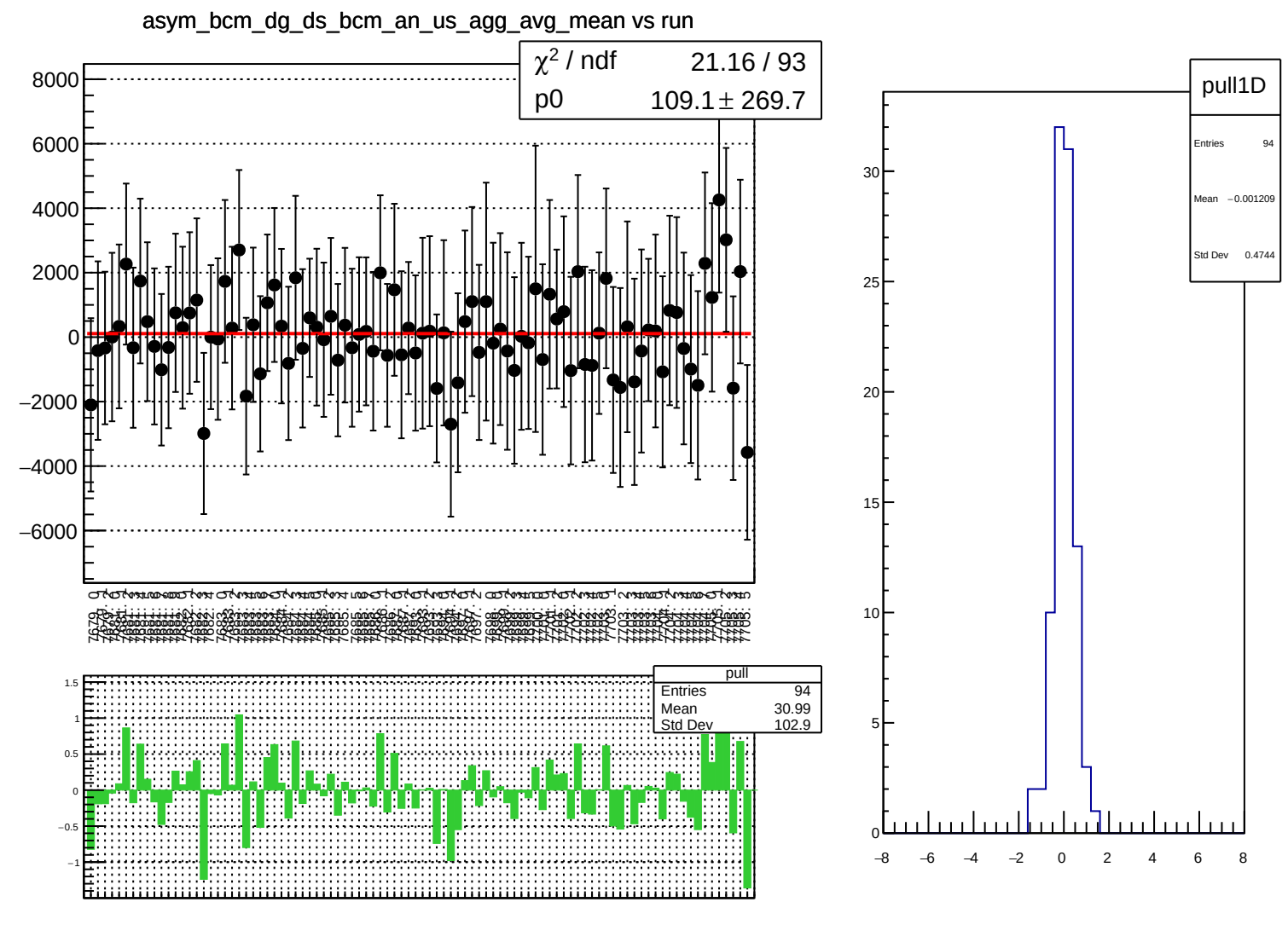
asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run

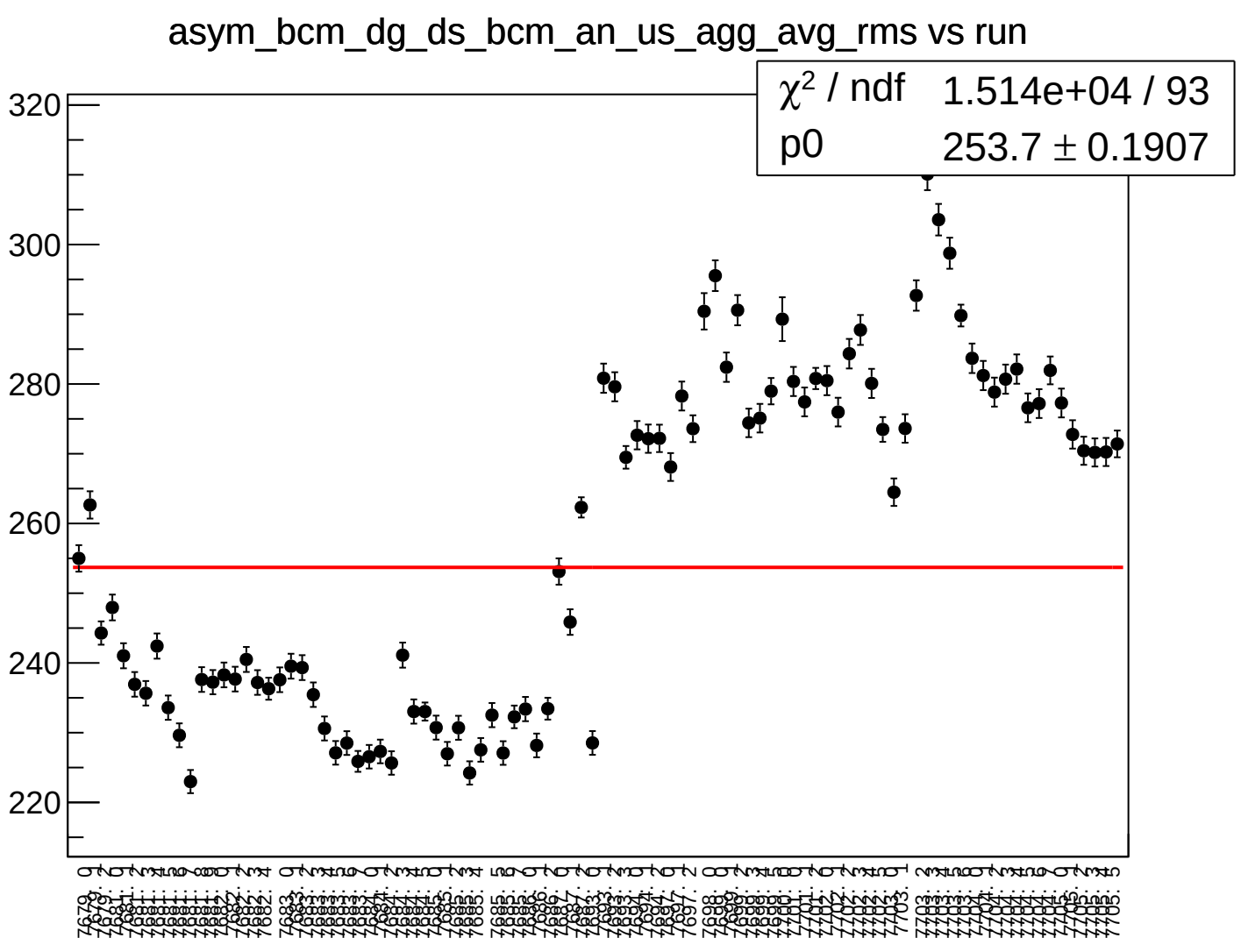


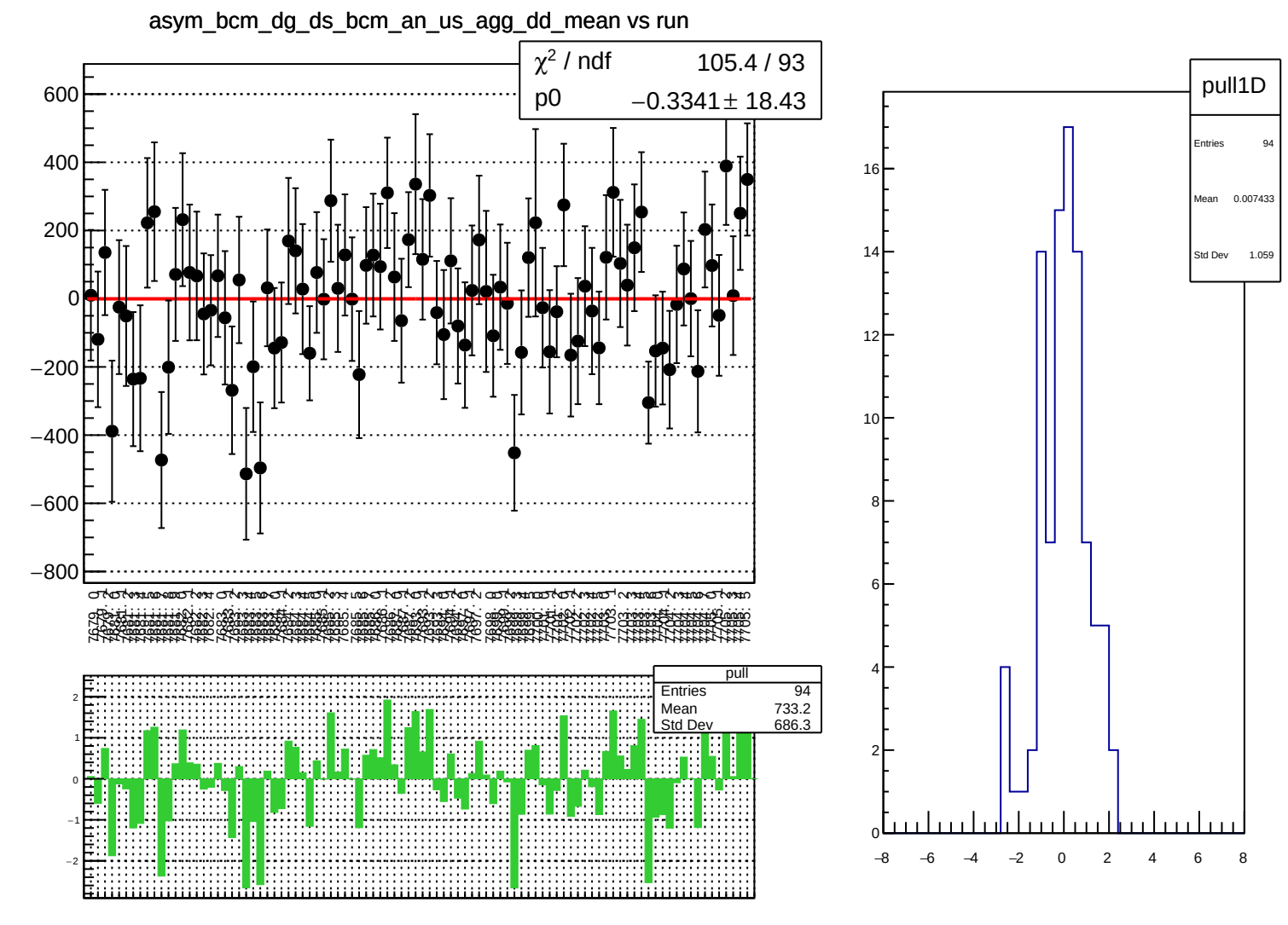


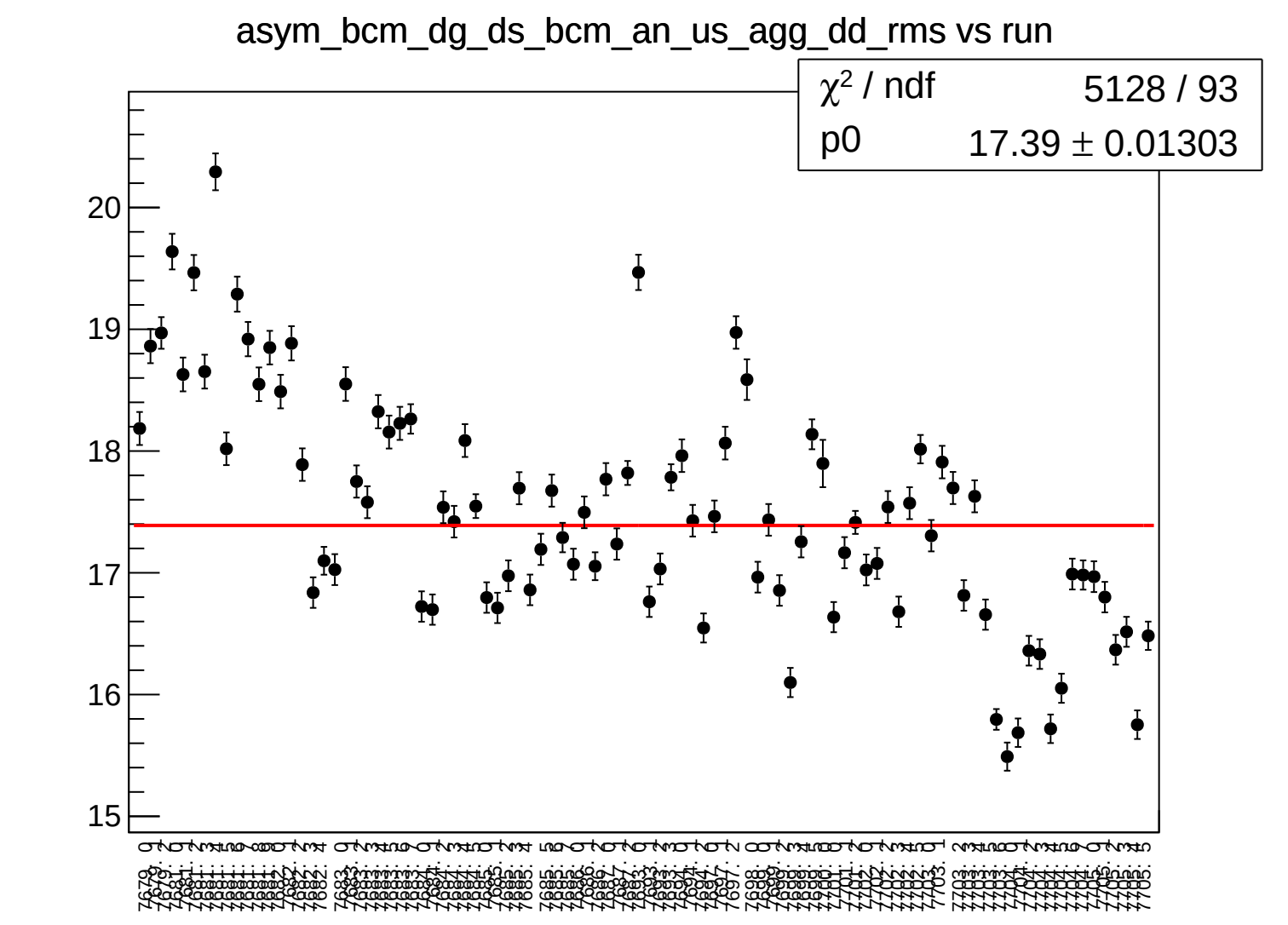


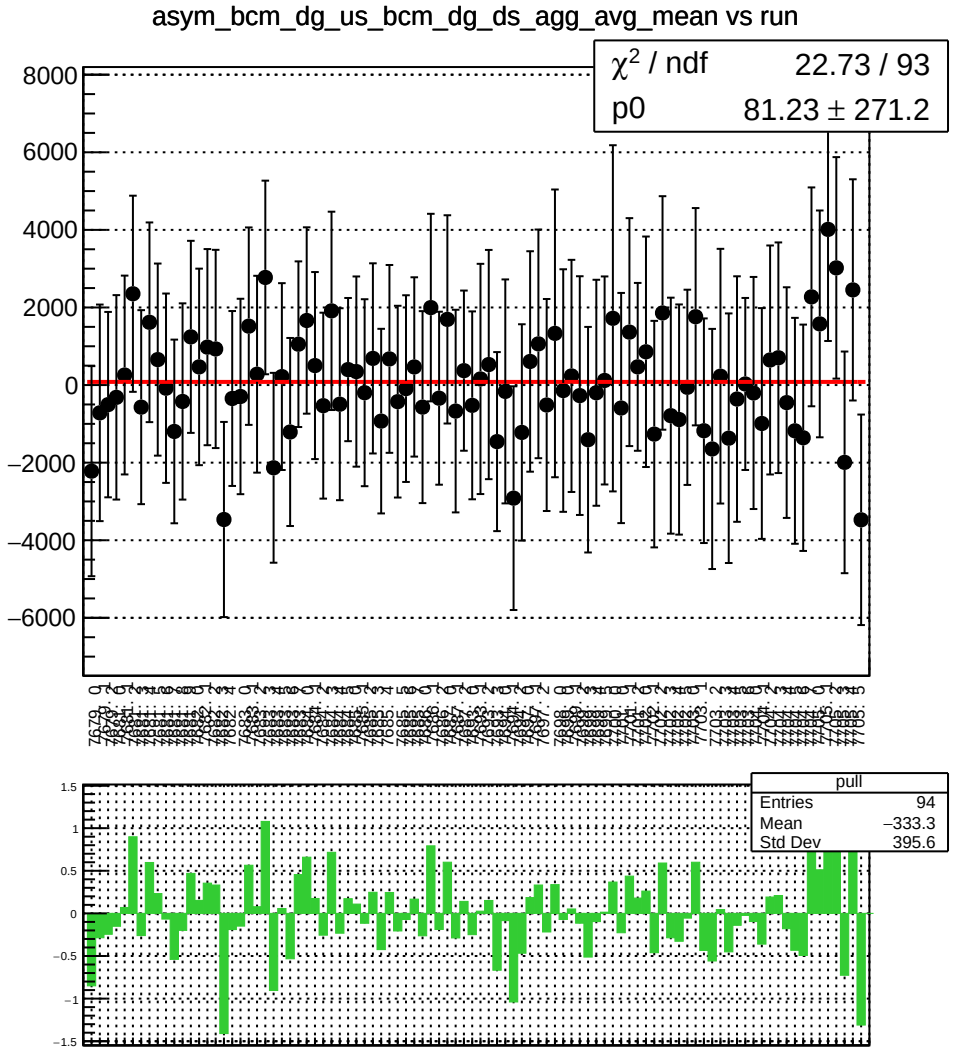

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3624 / 93
p0 22.98 ± 0.01721
26
25
24
23
22
21

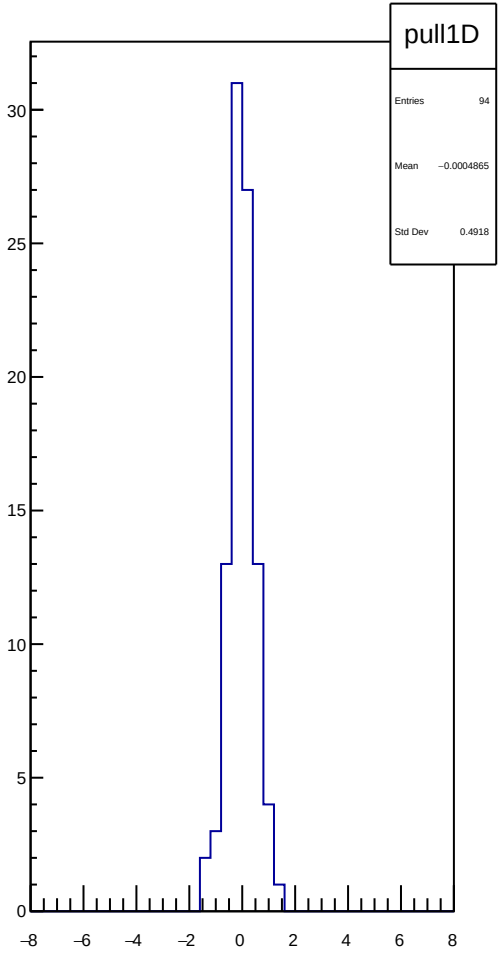

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.16 / 93
p0 109.1 ± 269.7
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 30.99
Std Dev 102.9
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean −0.001209
Std Dev 0.4744
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

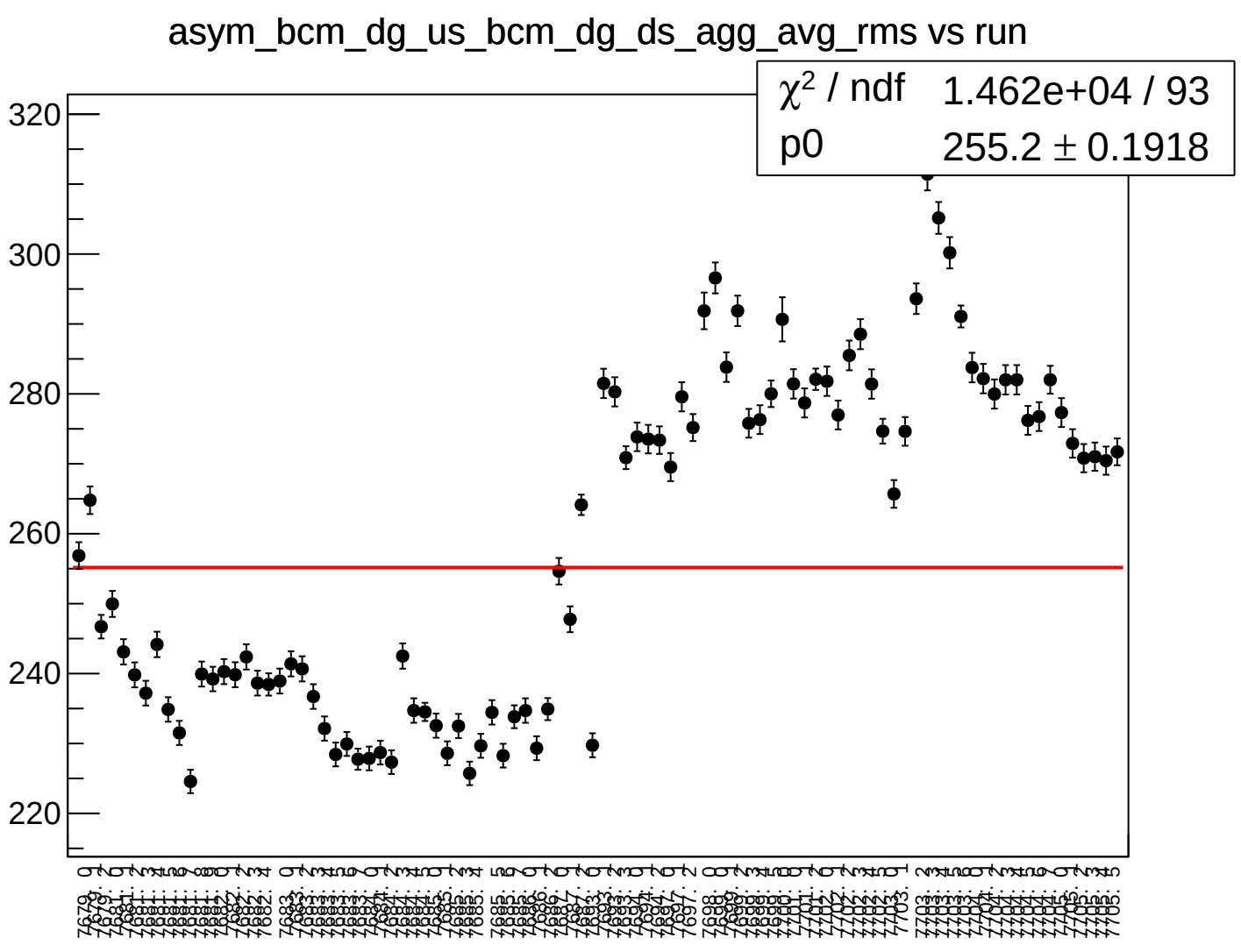

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.514e+04 / 93
p0 253.7 ± 0.1907
320
300
280
260
240
220

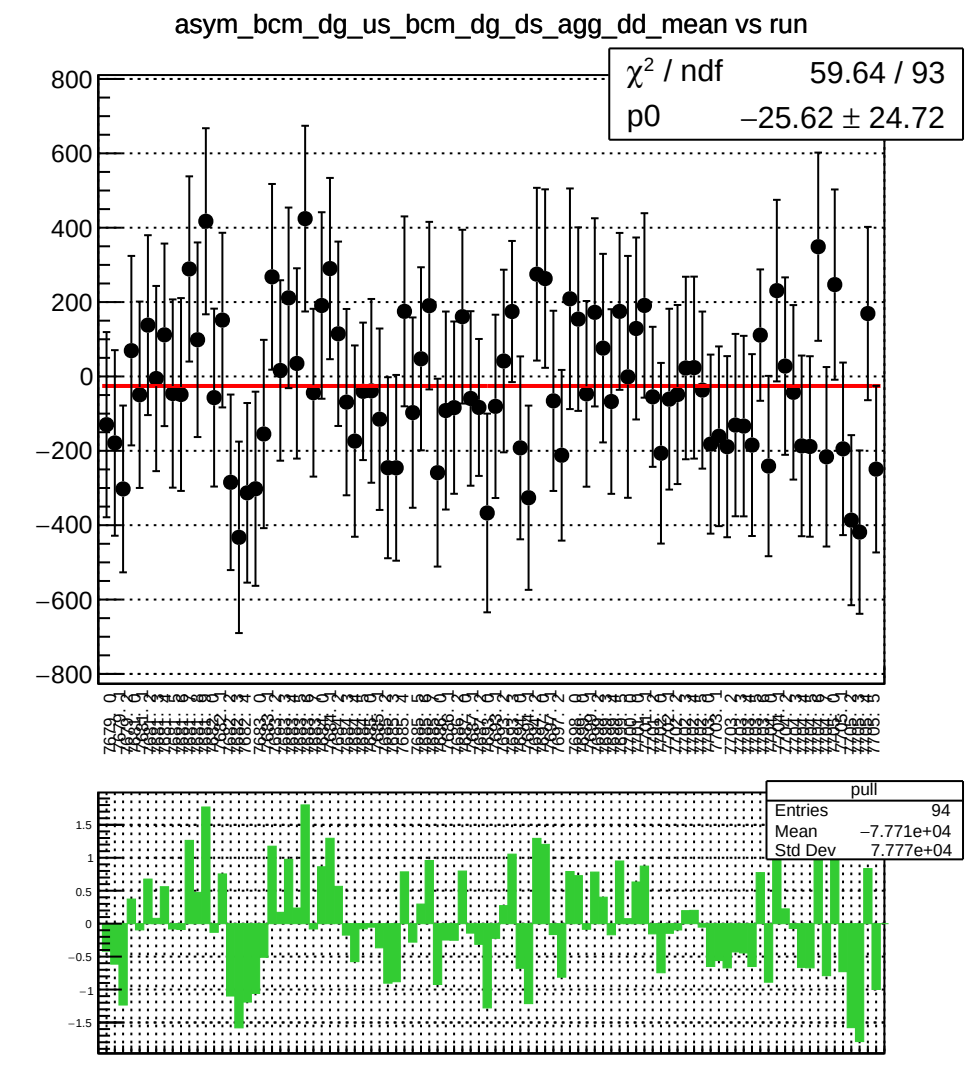

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 105.4 / 93
p0 −0.3341 ± 18.43
pull
Entries 94
Mean 733.2
Std Dev 686.3
pull1D
Entries 94
Mean 0.007433
Std Dev 1.059

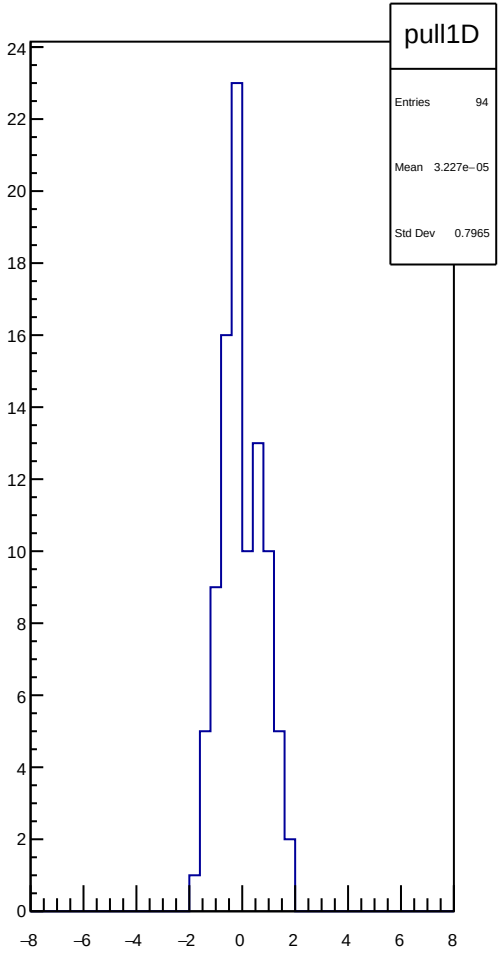

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5128 / 93
p0 17.39 ± 0.01303
20
19
18
17
16
15

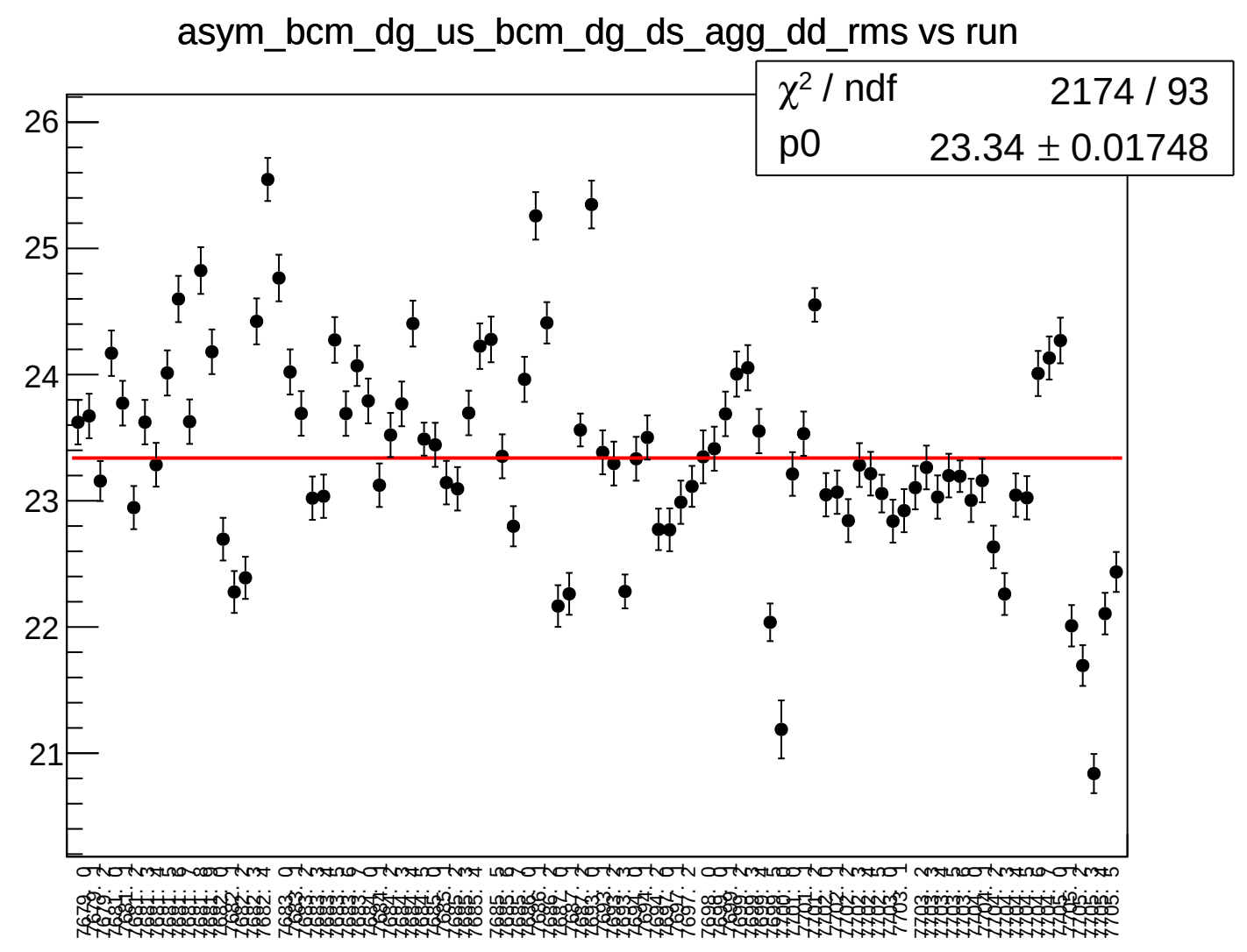

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 22.73 / 93
p0 81.23 ± 271.2
pull
Entries 94
Mean −333.3
Std Dev 395.6

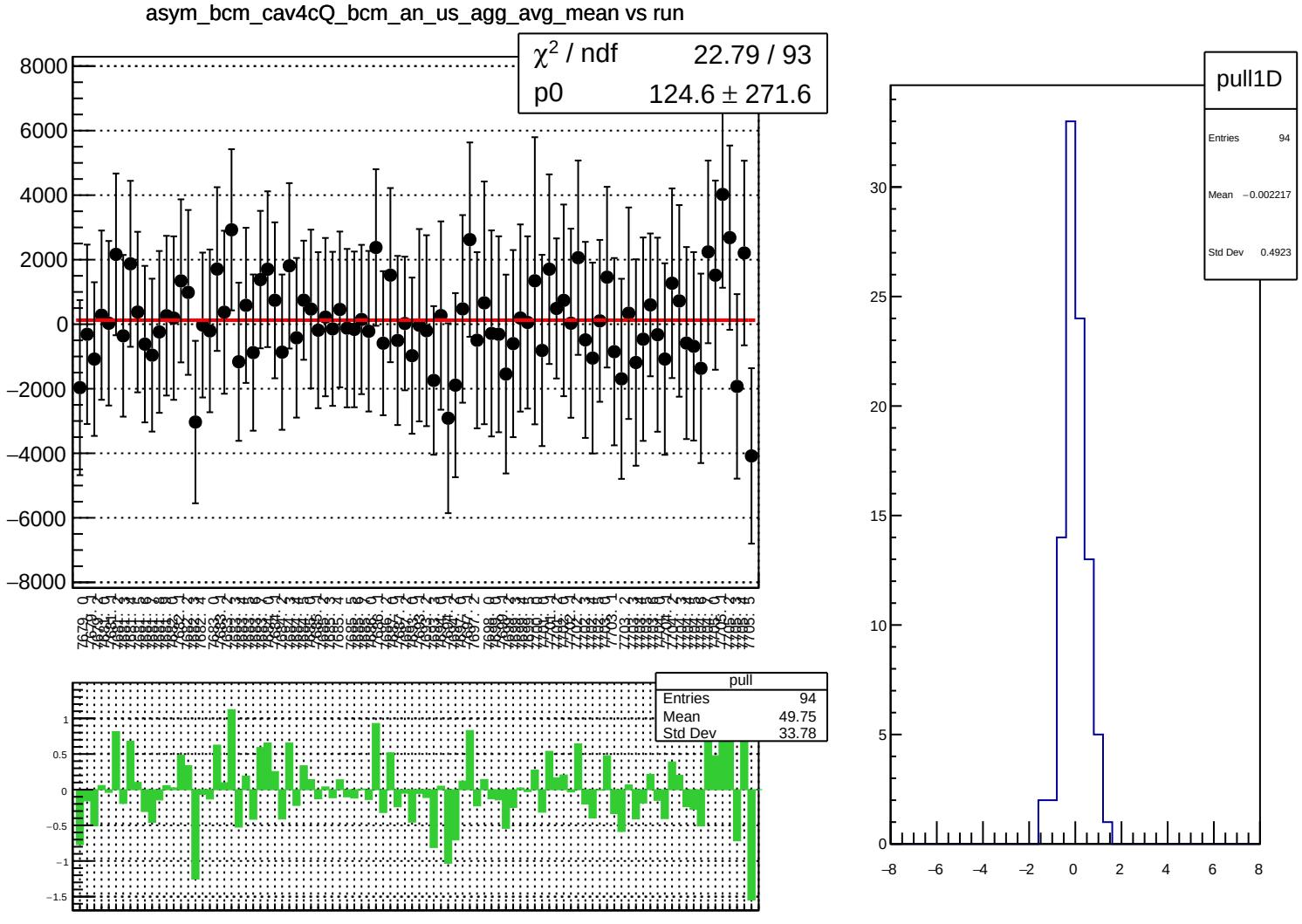

pull1D
Entries 94
Mean −0.0004865
Std Dev 0.4918

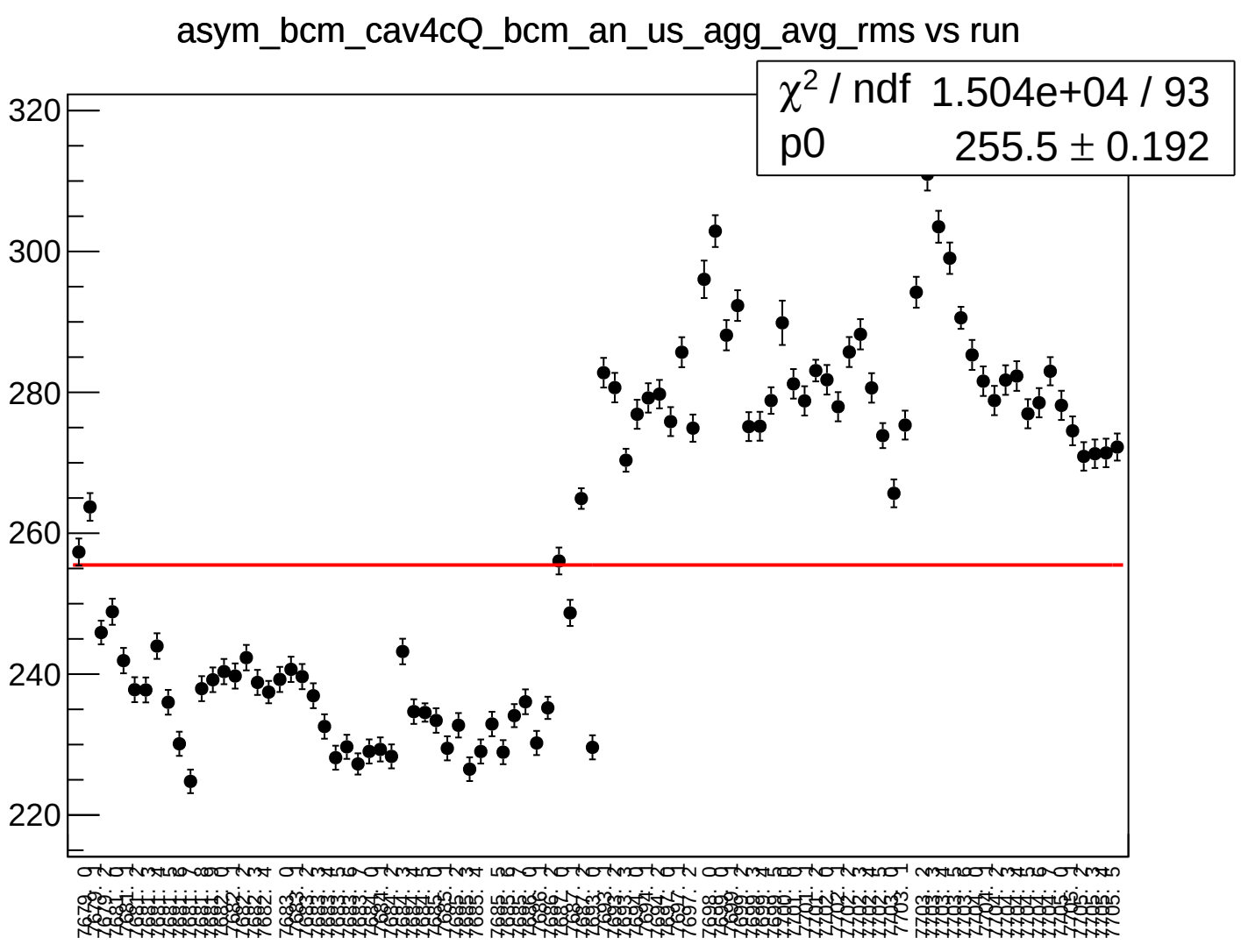

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.462e+04 / 93
p0 255.2 ± 0.1918
320
300
280
260
240
220

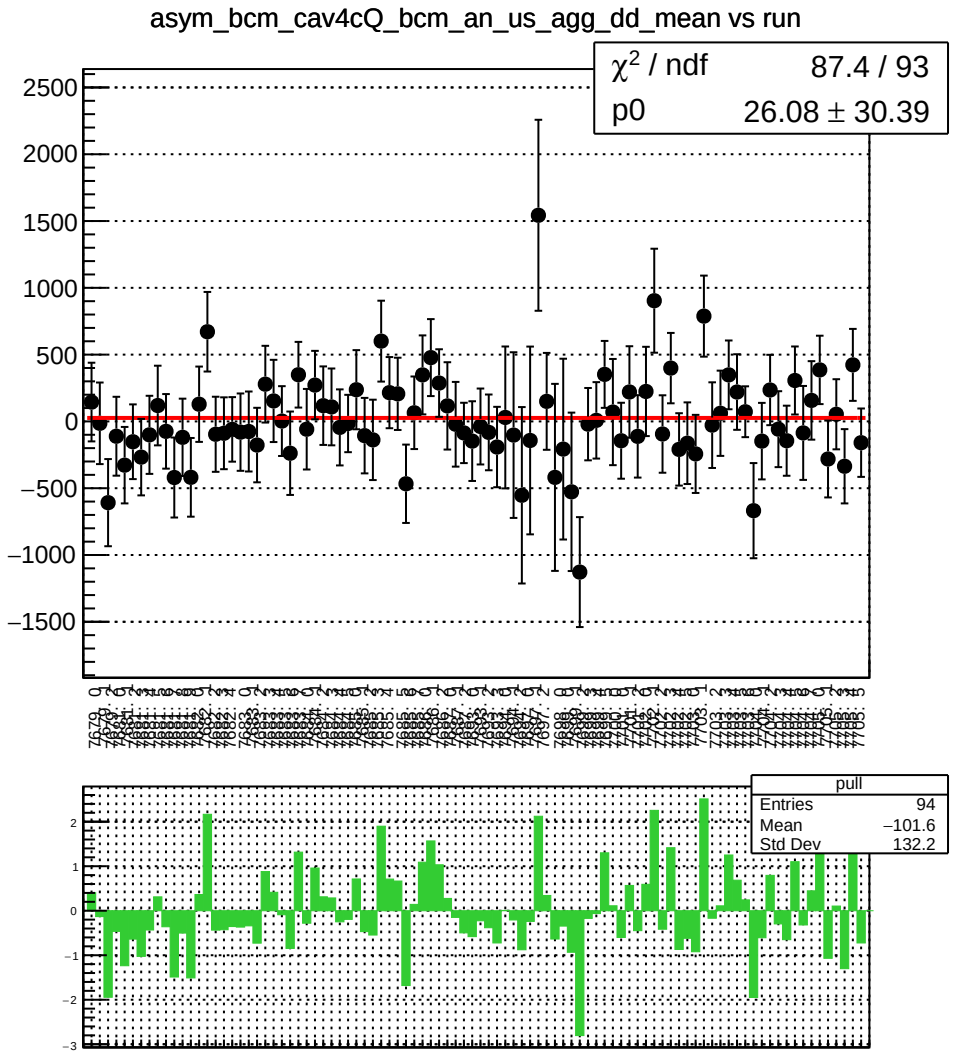

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 59.64 / 93
p0 −25.62 ± 24.72
pull
Entries 94
Mean −7.771e+04
Std Dev 7.777e+04

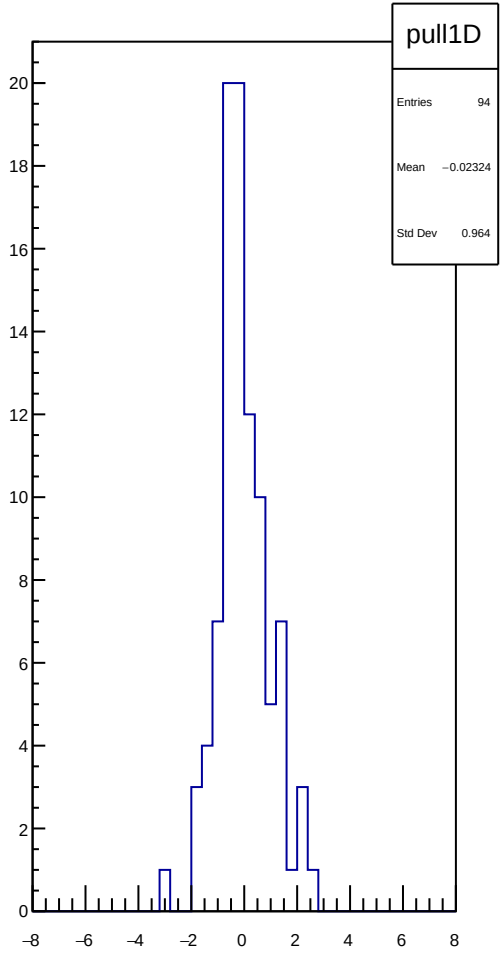

pull1D
Entries 94
Mean 3.227e−05
Std Dev 0.7965

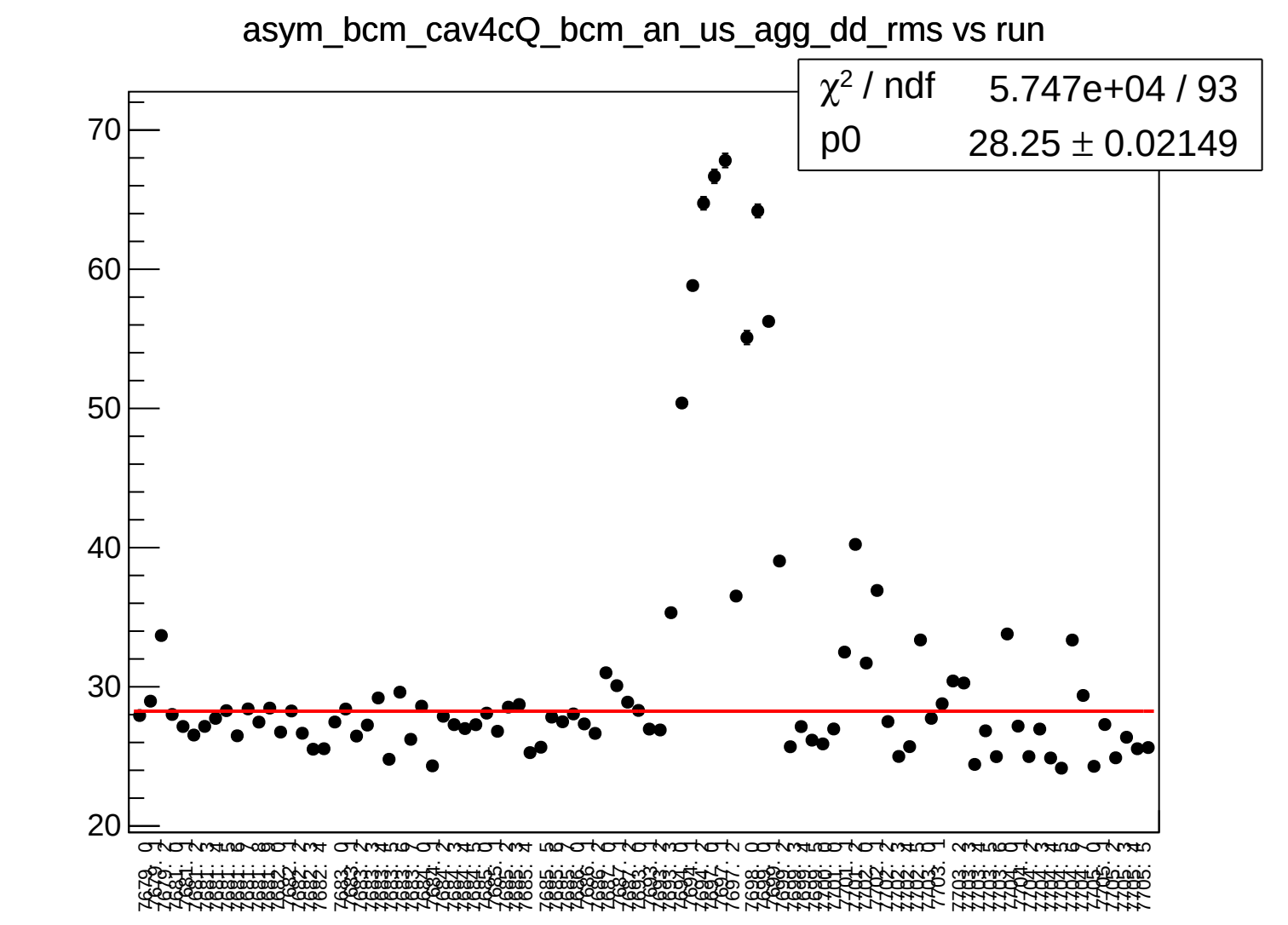

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2174 / 93
p0 23.34 ± 0.01748
26
25
24
23
22
21

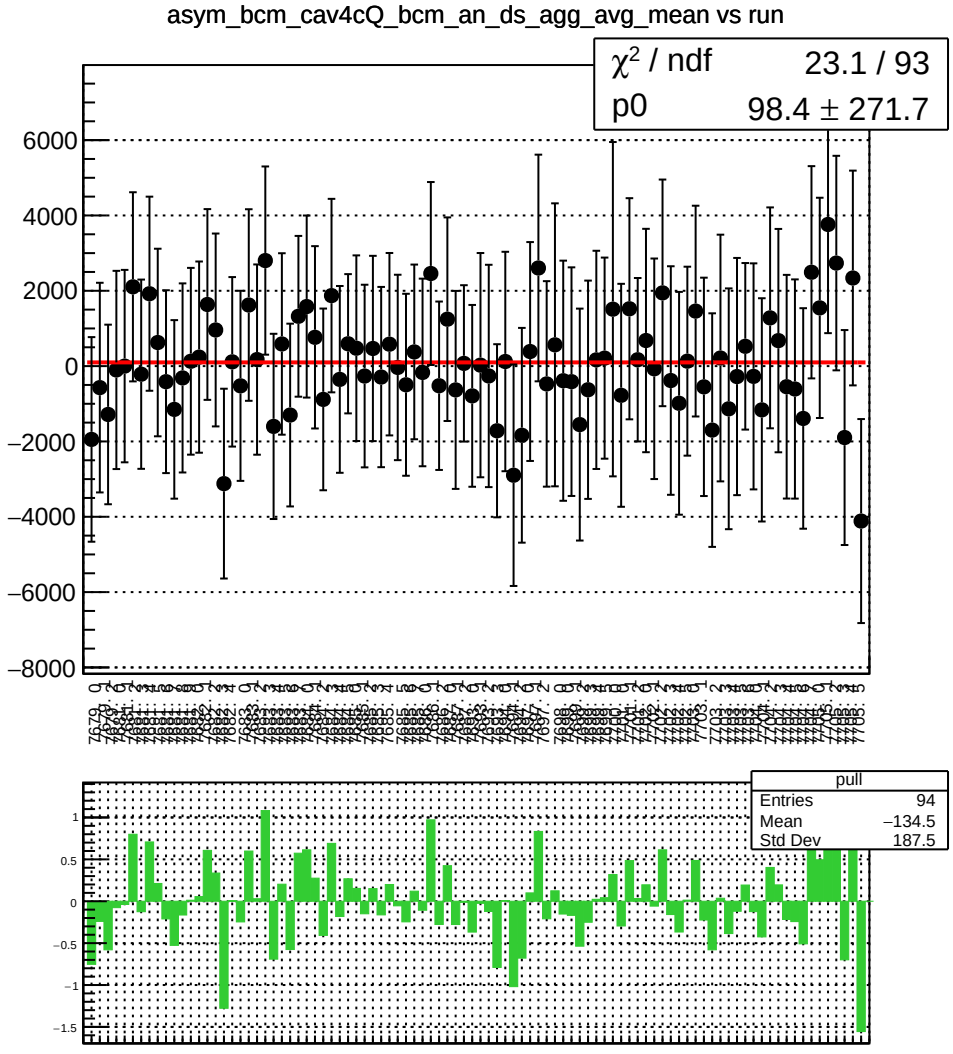

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 22.79 / 93
p0 124.6 ± 271.6
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 94
Mean 49.75
Std Dev 33.78
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.002217
Std Dev 0.4923
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

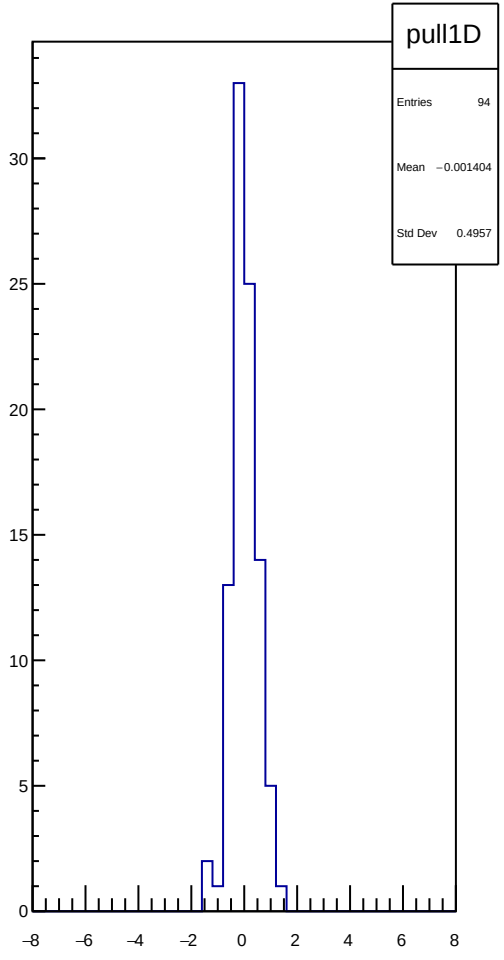

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.504e+04 / 93
p0 255.5 ± 0.192
320
300
280
260
240
220

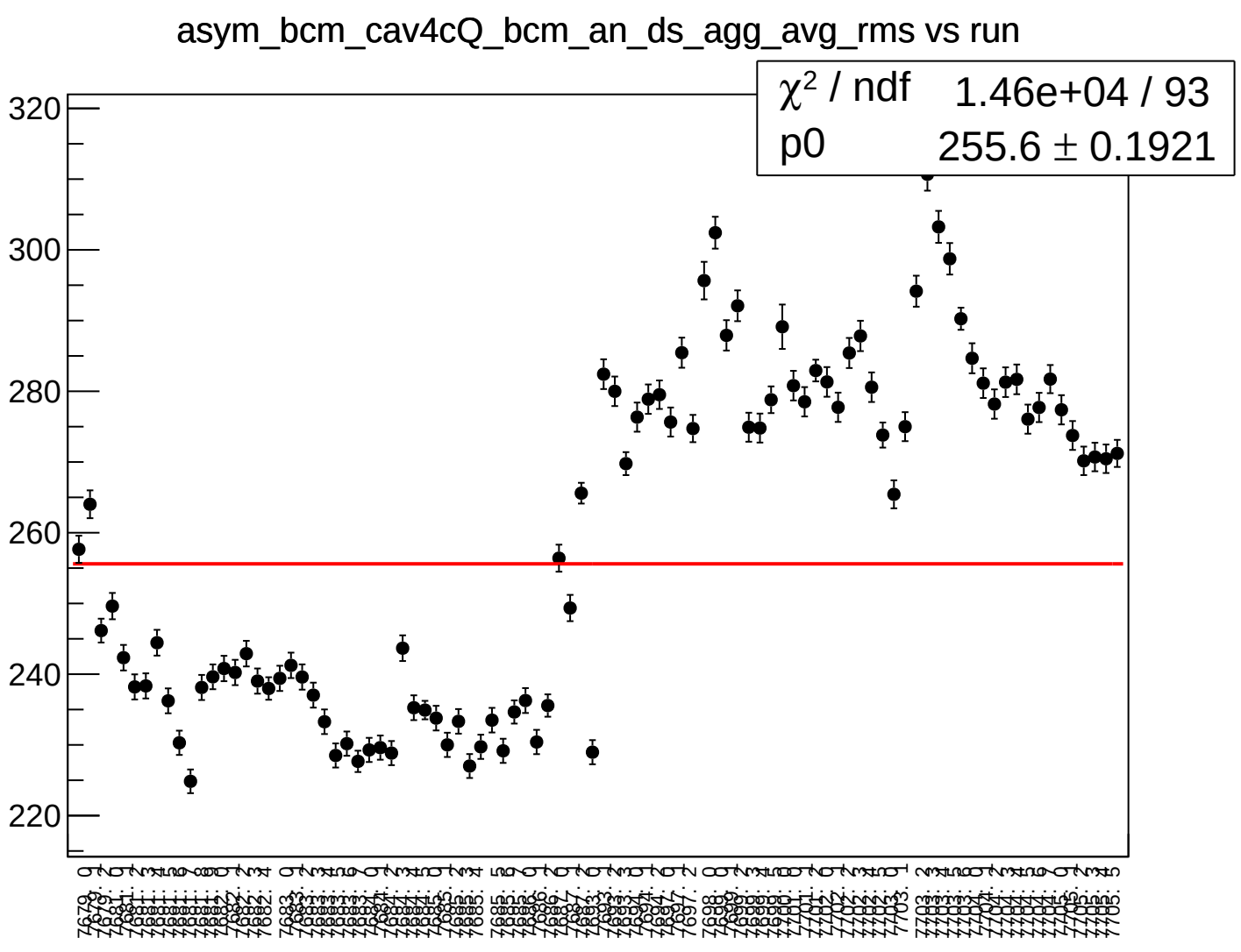

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 87.4 / 93
p0 26.08 ± 30.39
pull
Entries 94
Mean −101.6
Std Dev 132.2

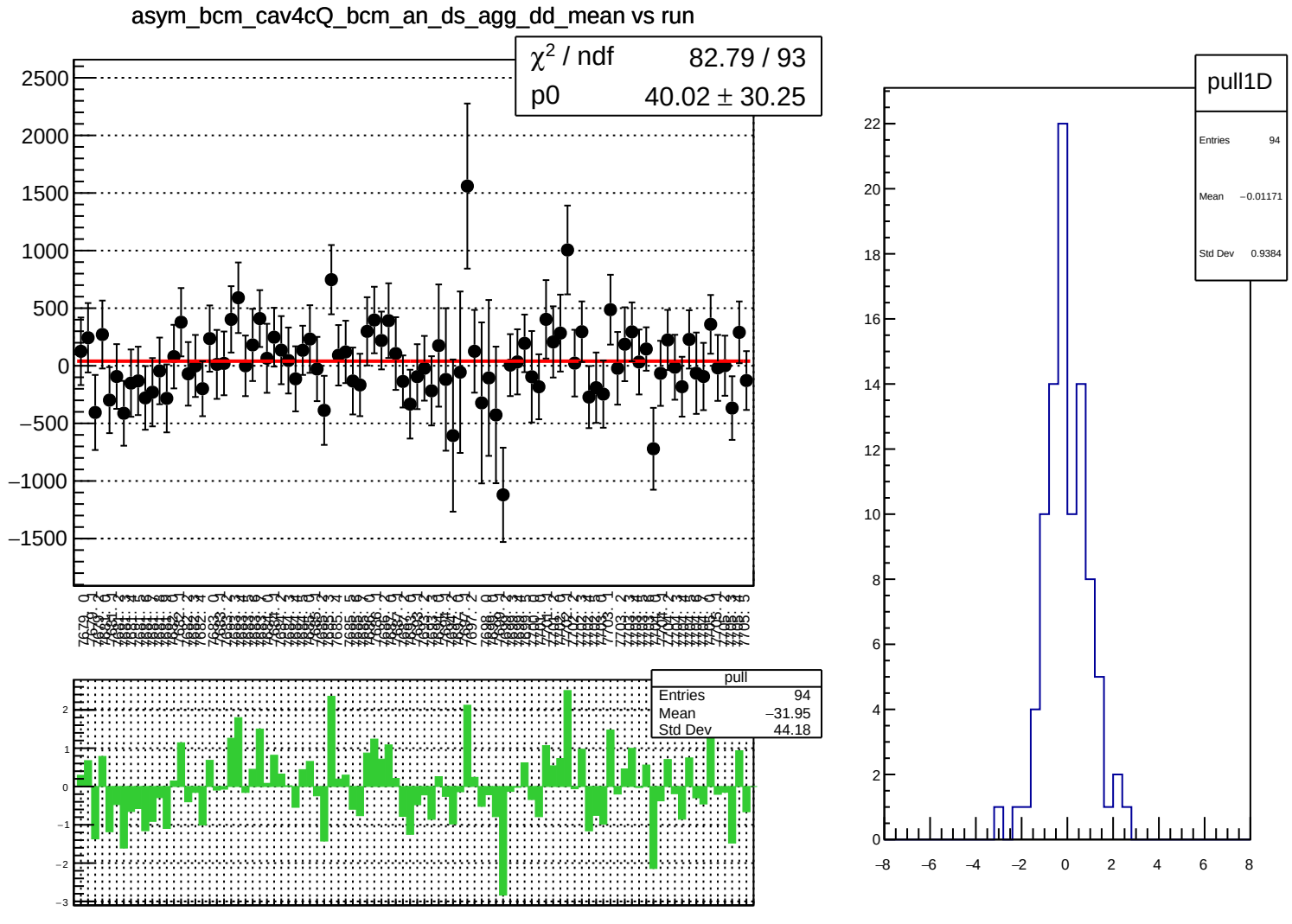

pull1D
Entries 94
Mean −0.02324
Std Dev 0.964

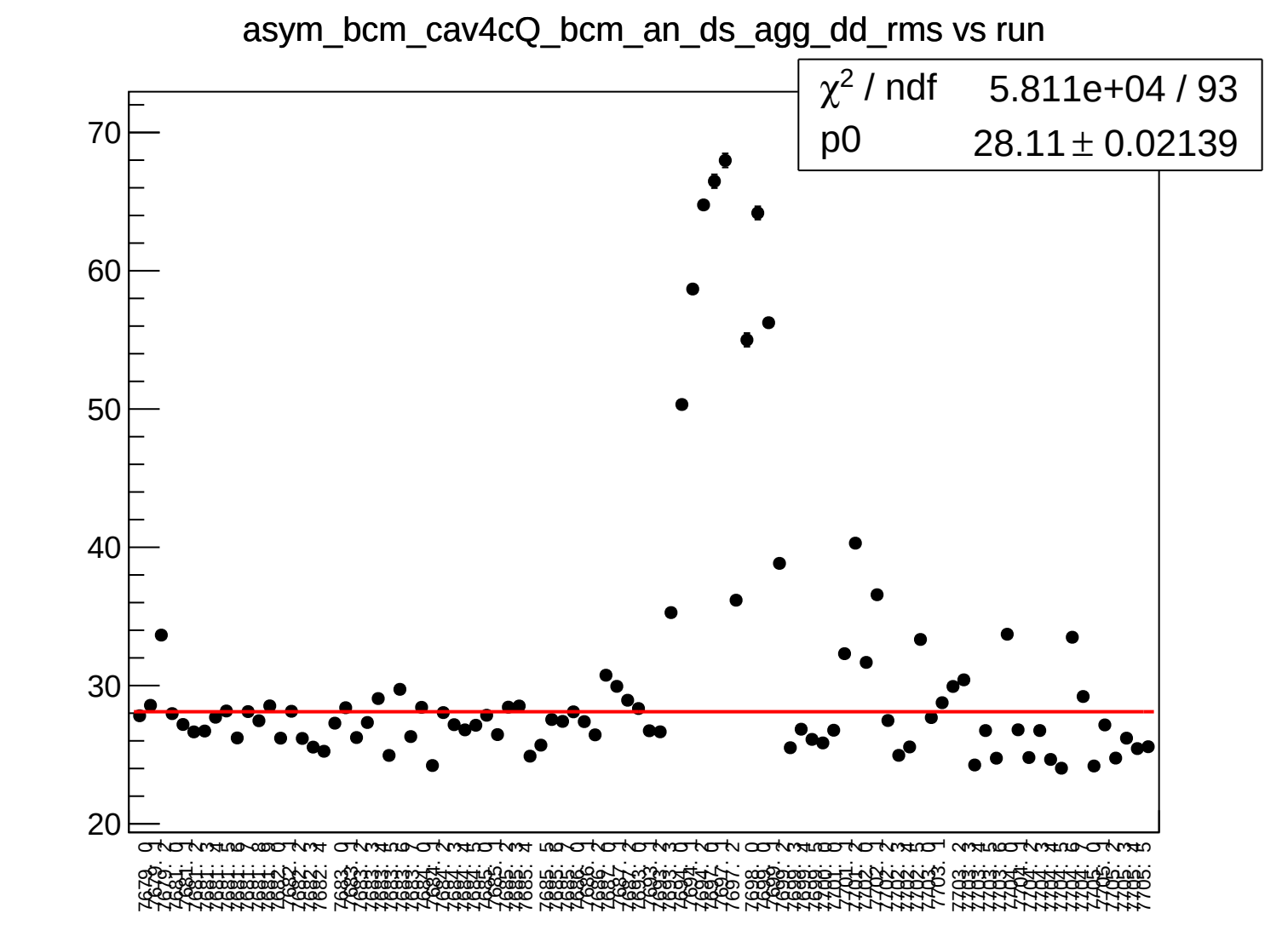

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5.747e+04 / 93
p0 28.25 ± 0.02149
70
60
50
40
30
20

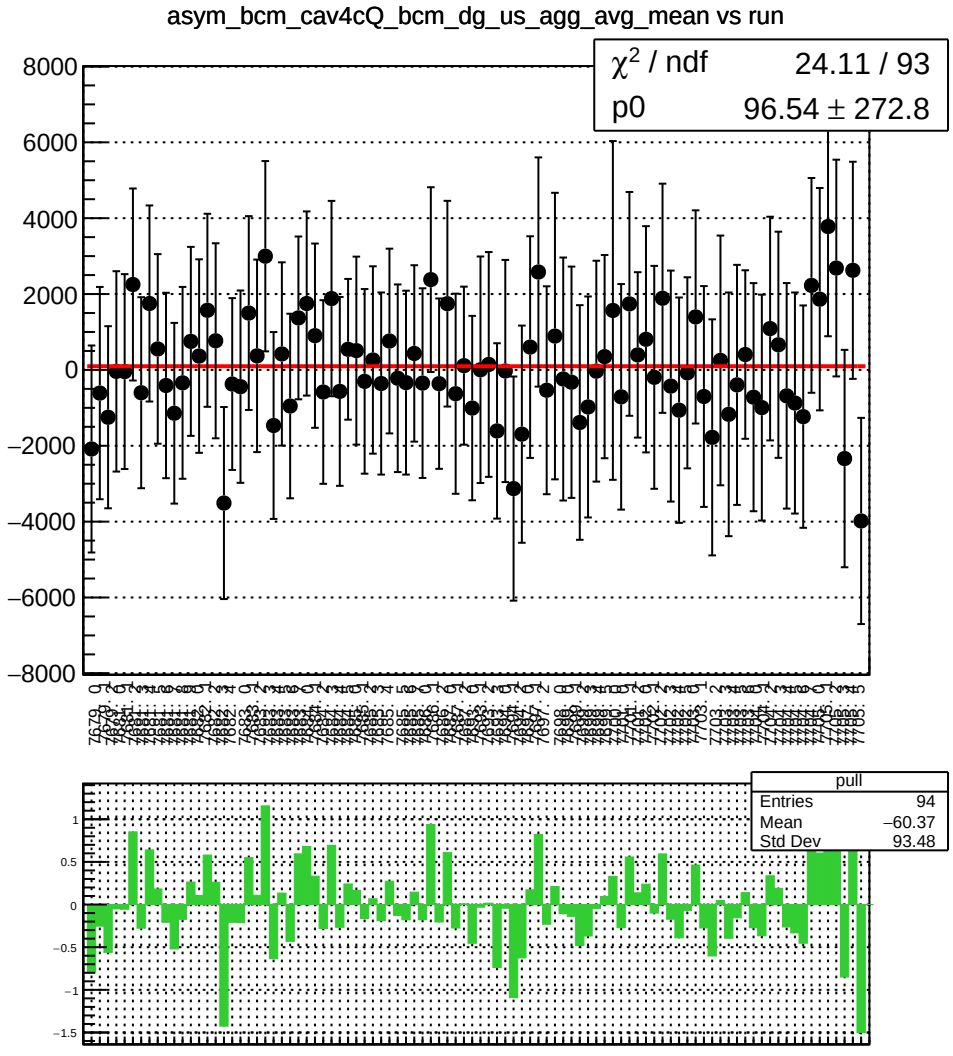

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 23.1 / 93
p0 98.4 ± 271.7
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 94
Mean −134.5
Std Dev 187.5
1
0.5
0
−0.5
−1
−1.5

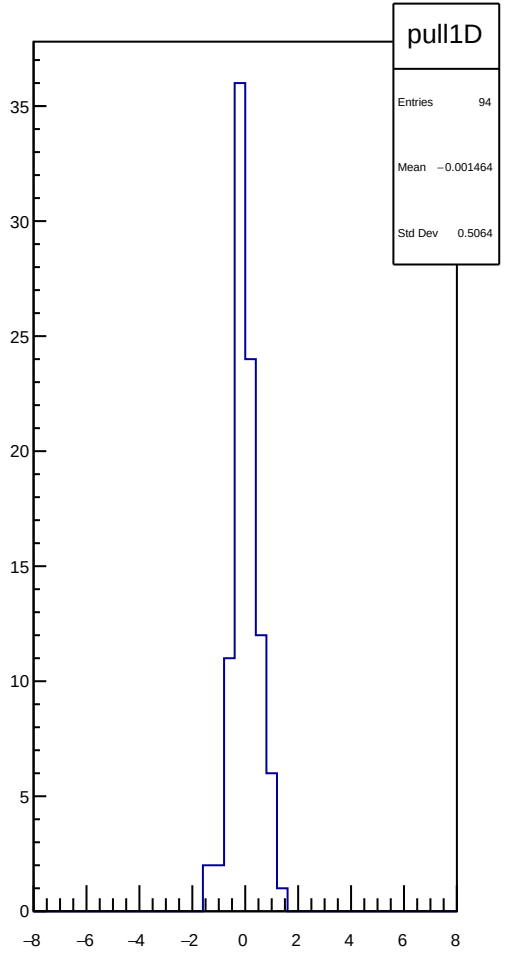

pull1D
Entries 94
Mean −0.001404
Std Dev 0.4957
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

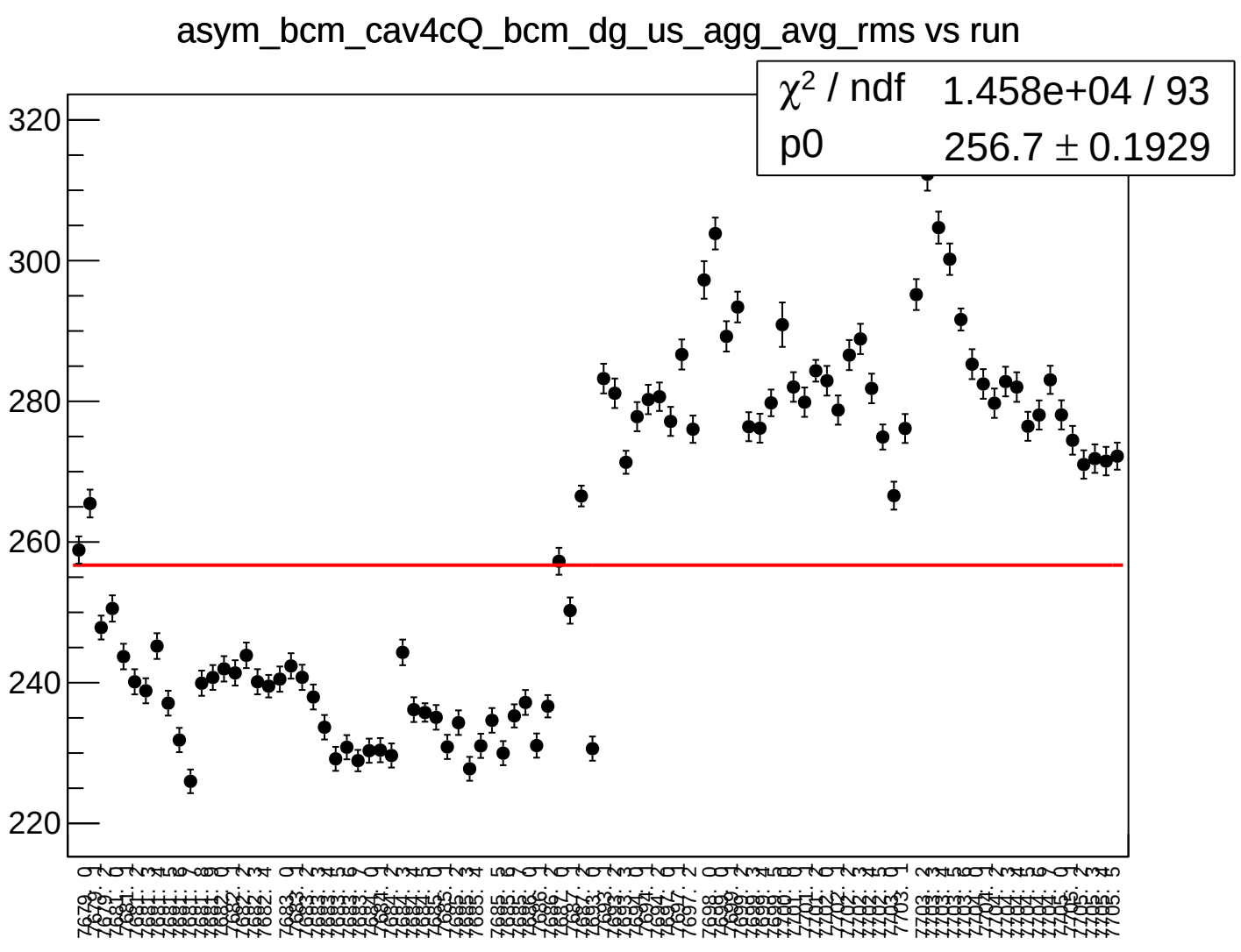

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.46e+04 / 93
p0 255.6 ± 0.1921
320
300
280
260
240
220

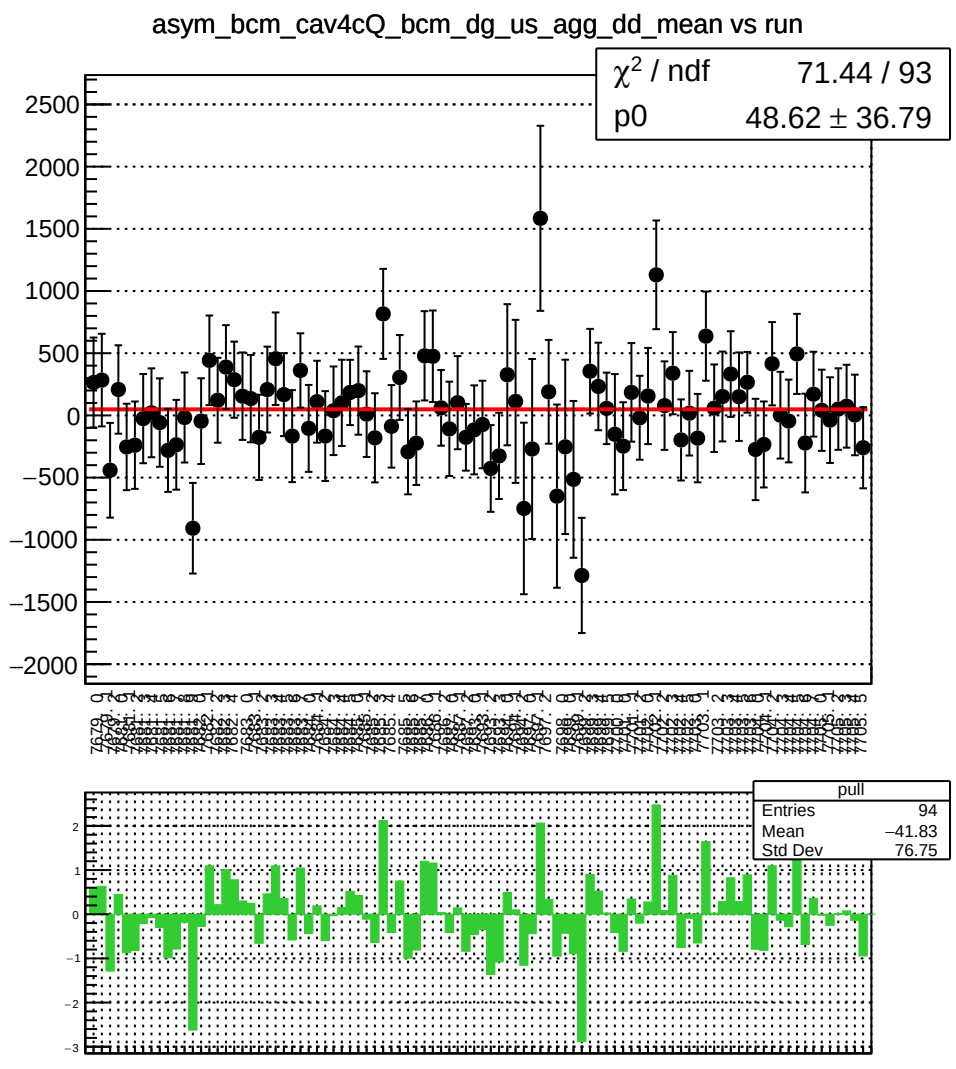

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.79 / 93
p0 40.02 ± 30.25
pull
Entries 94
Mean −31.95
Std Dev 44.18
pull1D
Entries 94
Mean −0.01171
Std Dev 0.9384

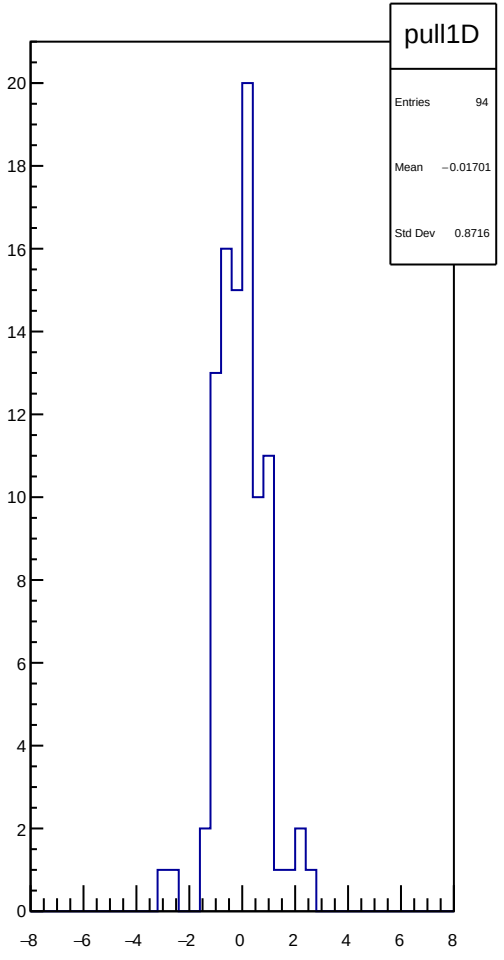

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ^2 / ndf 5.811e+04 / 93
p0 28.11 ± 0.02139
70
60
50
40
30
20

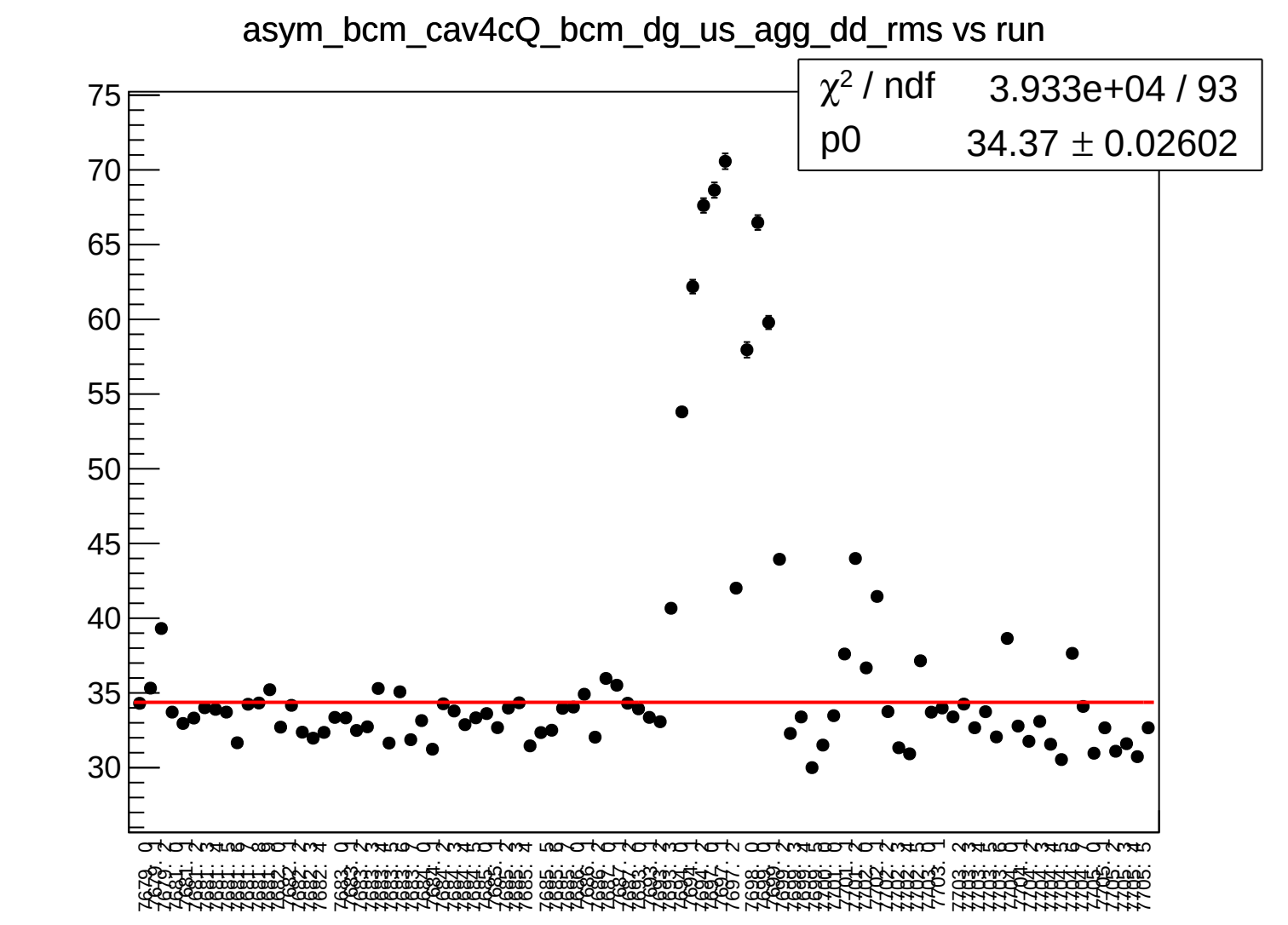

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 24.11 / 93
p0 96.54 ± 272.8
pull
Entries 94
Mean −60.37
Std Dev 93.48

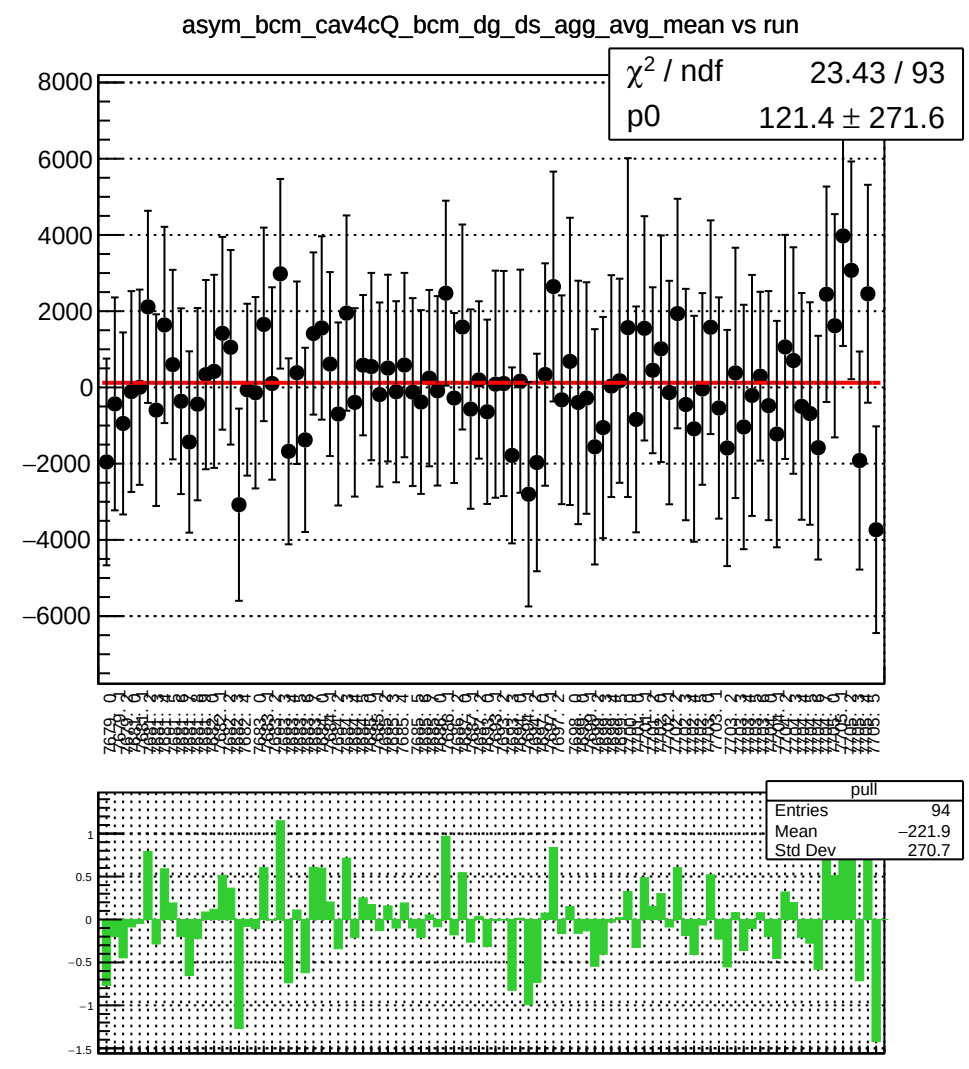

pull1D
Entries 94
Mean −0.001464
Std Dev 0.5064

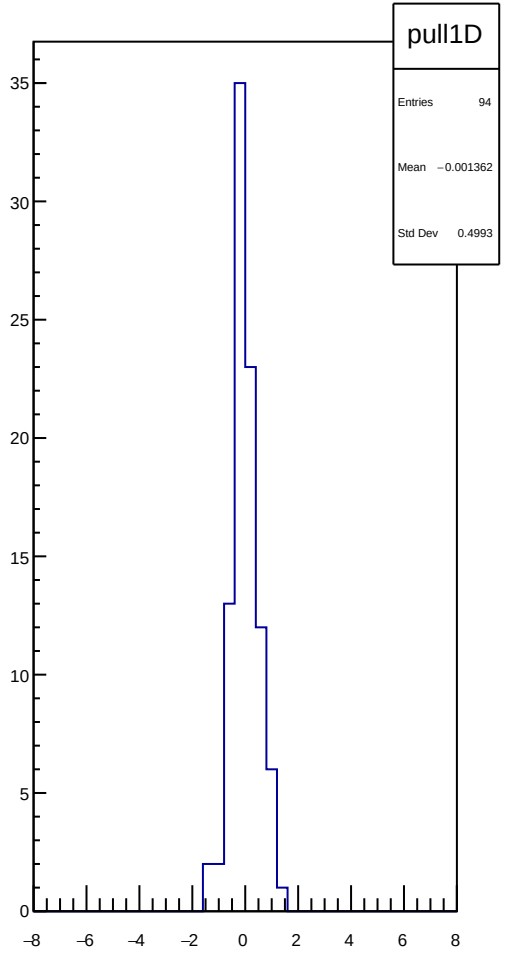

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.458e+04 / 93
p0 256.7 ± 0.1929
320
300
280
260
240
220

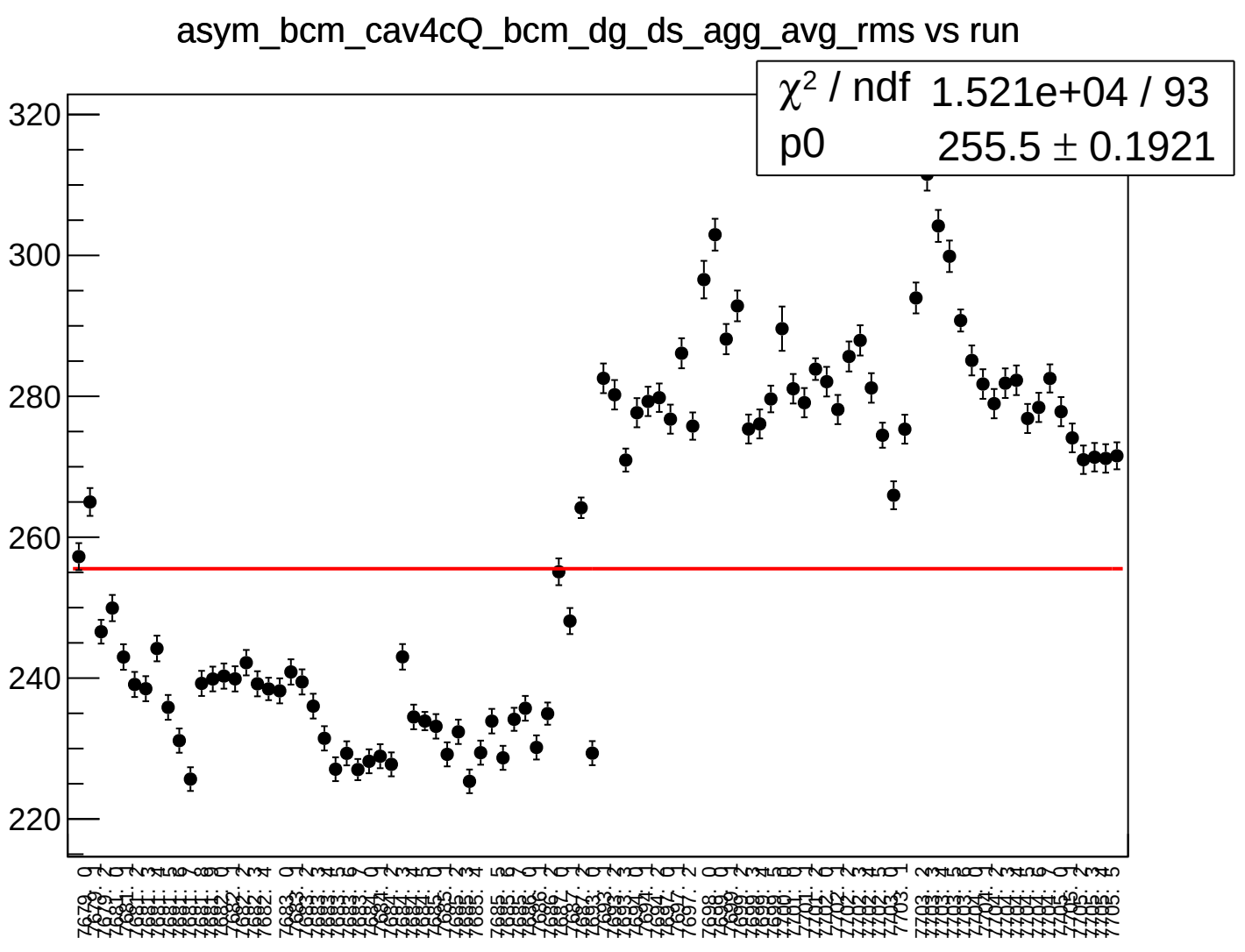

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 71.44 / 93
p0 48.62 ± 36.79
pull
Entries 94
Mean −41.83
Std Dev 76.75

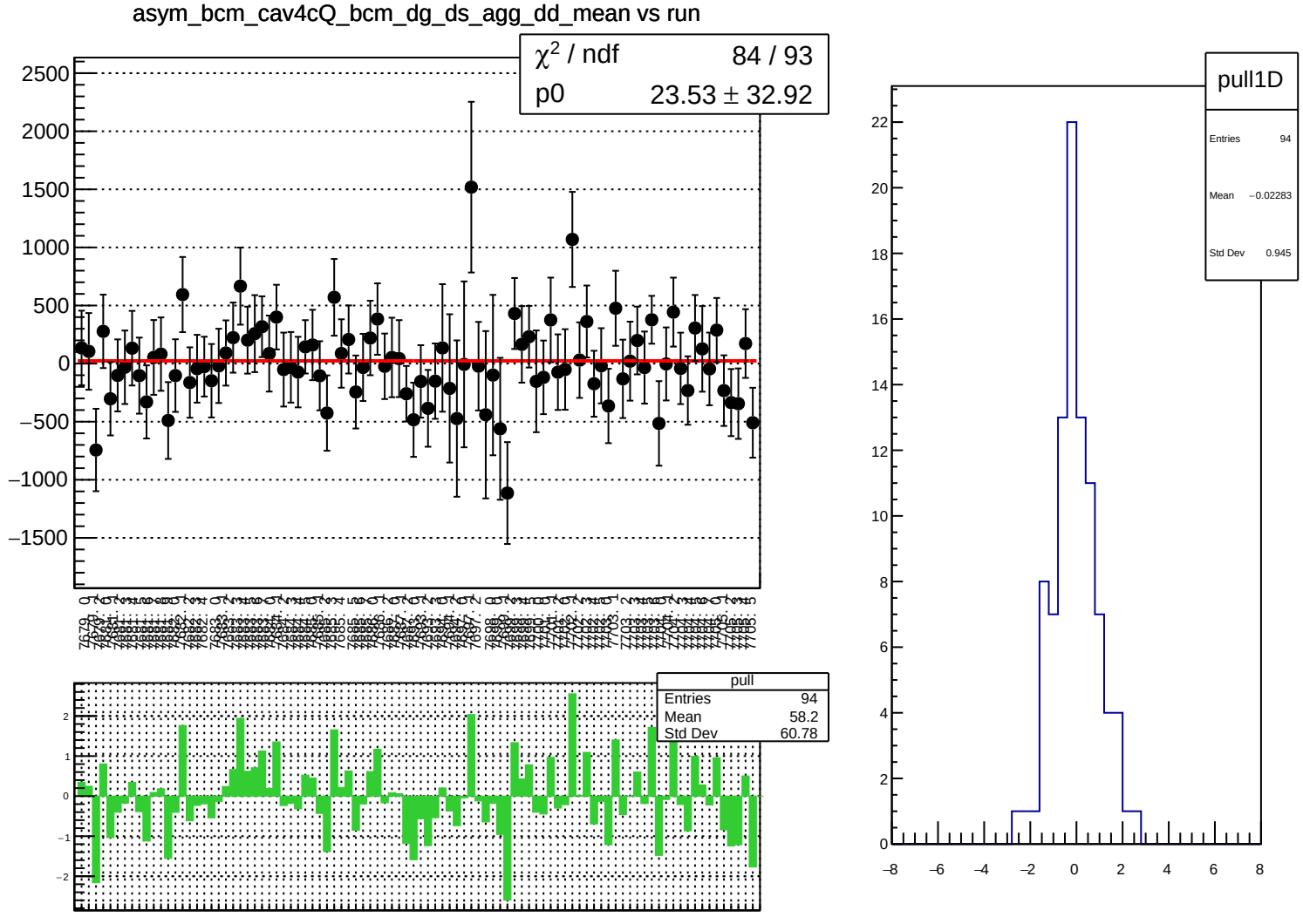

pull1D
Entries 94
Mean −0.01701
Std Dev 0.8716

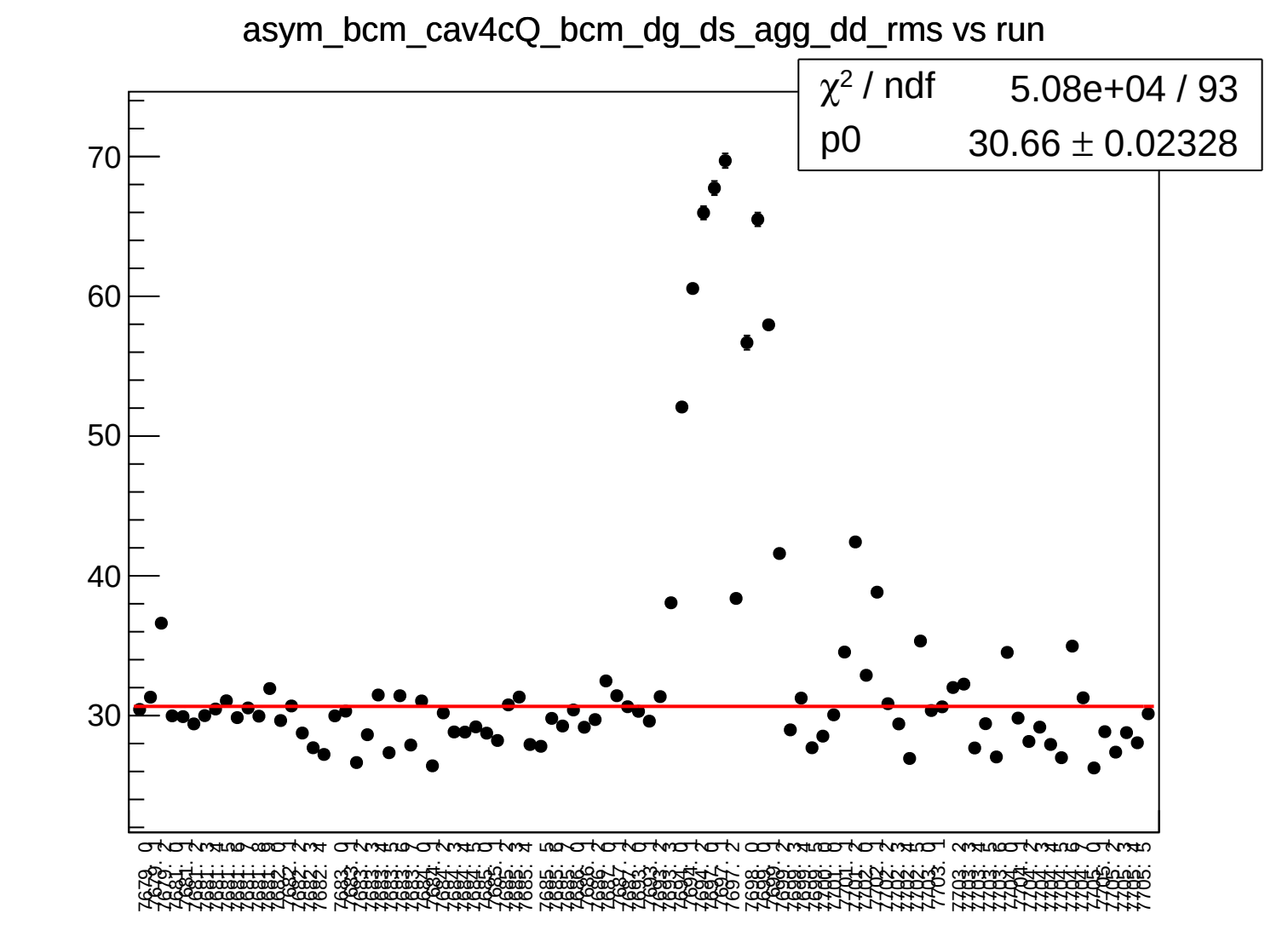

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 3.933e+04 / 93
p0 34.37 ± 0.02602
75
70
65
60
55
50
45
40
35
30

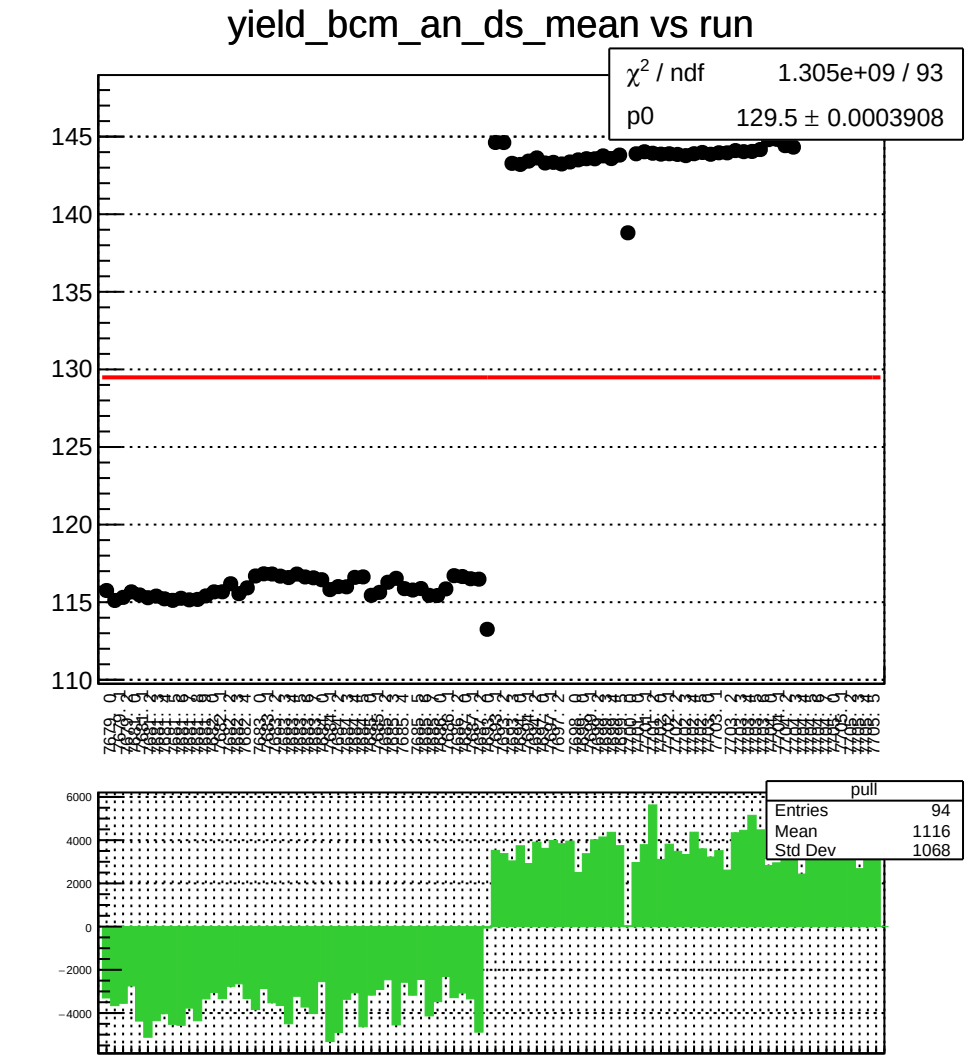

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 23.43 / 93
p0 121.4 ± 271.6
pull
Entries 94
Mean −221.9
Std Dev 270.7

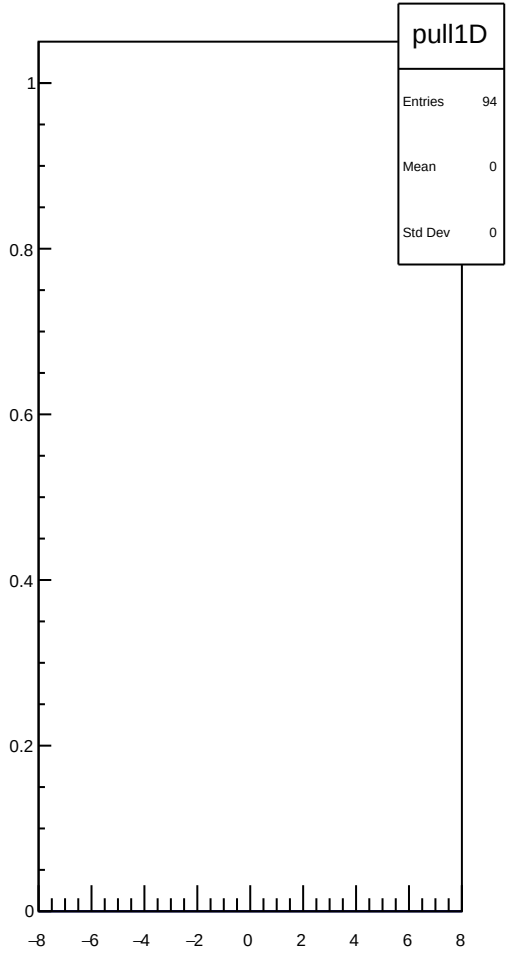

pull1D
Entries 94
Mean −0.001362
Std Dev 0.4993

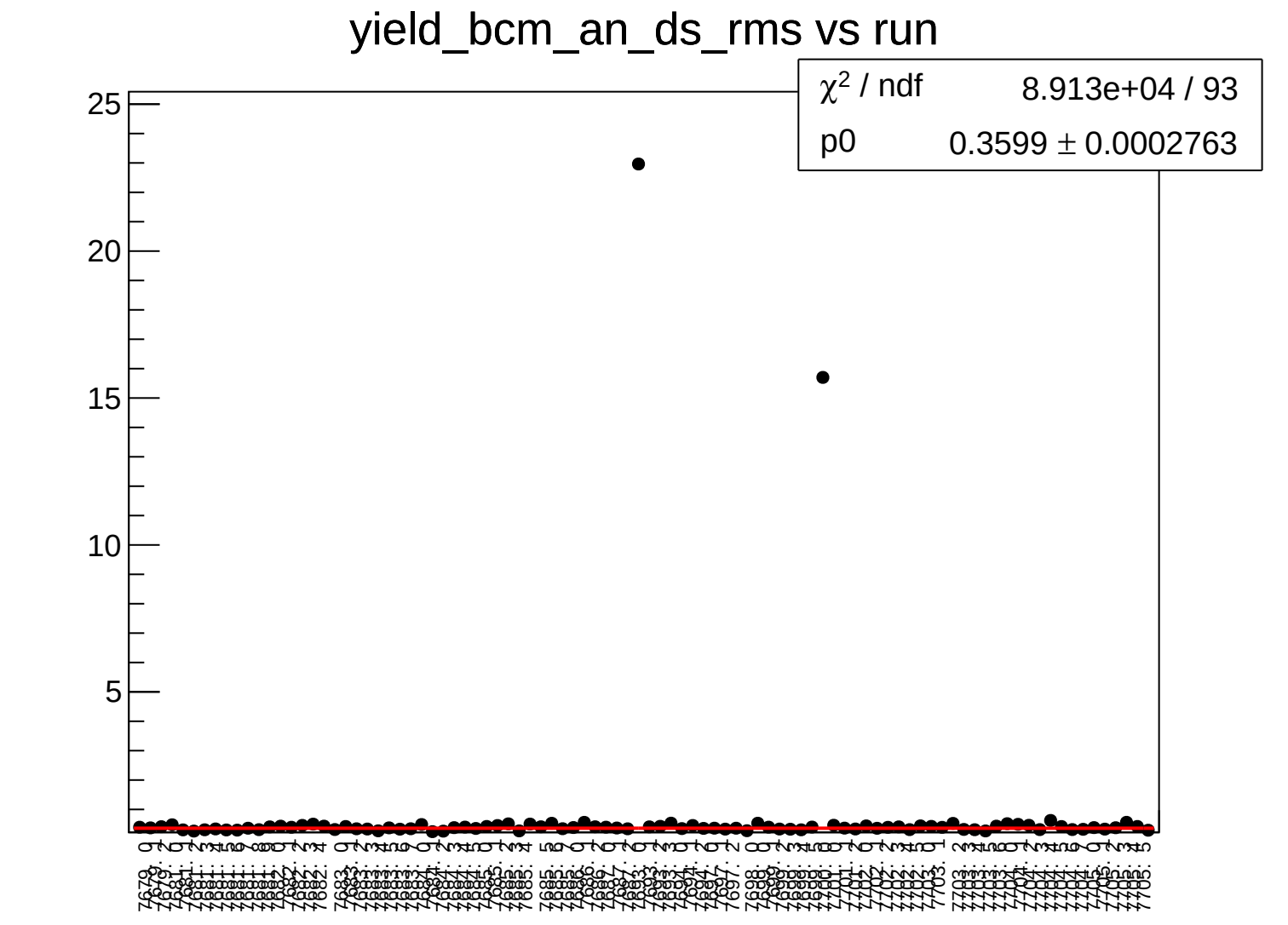

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.521e+04 / 93
p0 255.5 ± 0.1921
320
300
280
260
240
220

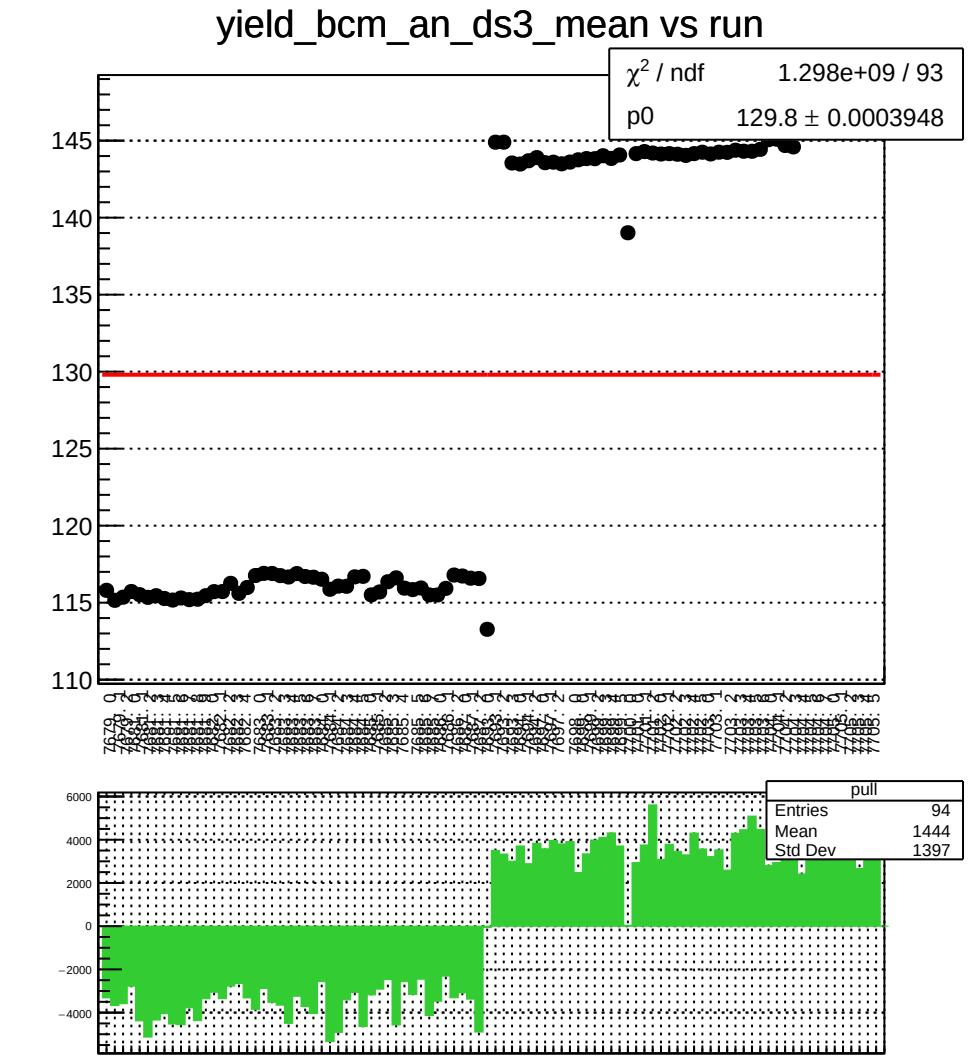

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 84 / 93
p0 23.53 ± 32.92
pull
Entries 94
Mean 58.2
Std Dev 60.78
pull1D
Entries 94
Mean −0.02283
Std Dev 0.945

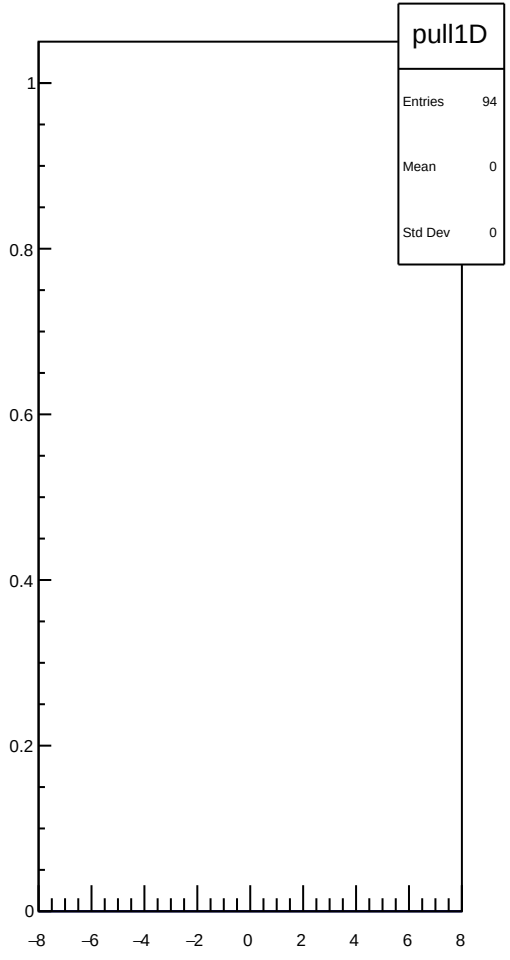

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ^2 / ndf 5.08e+04 / 93
p0 30.66 ± 0.02328
70
60
50
40
30

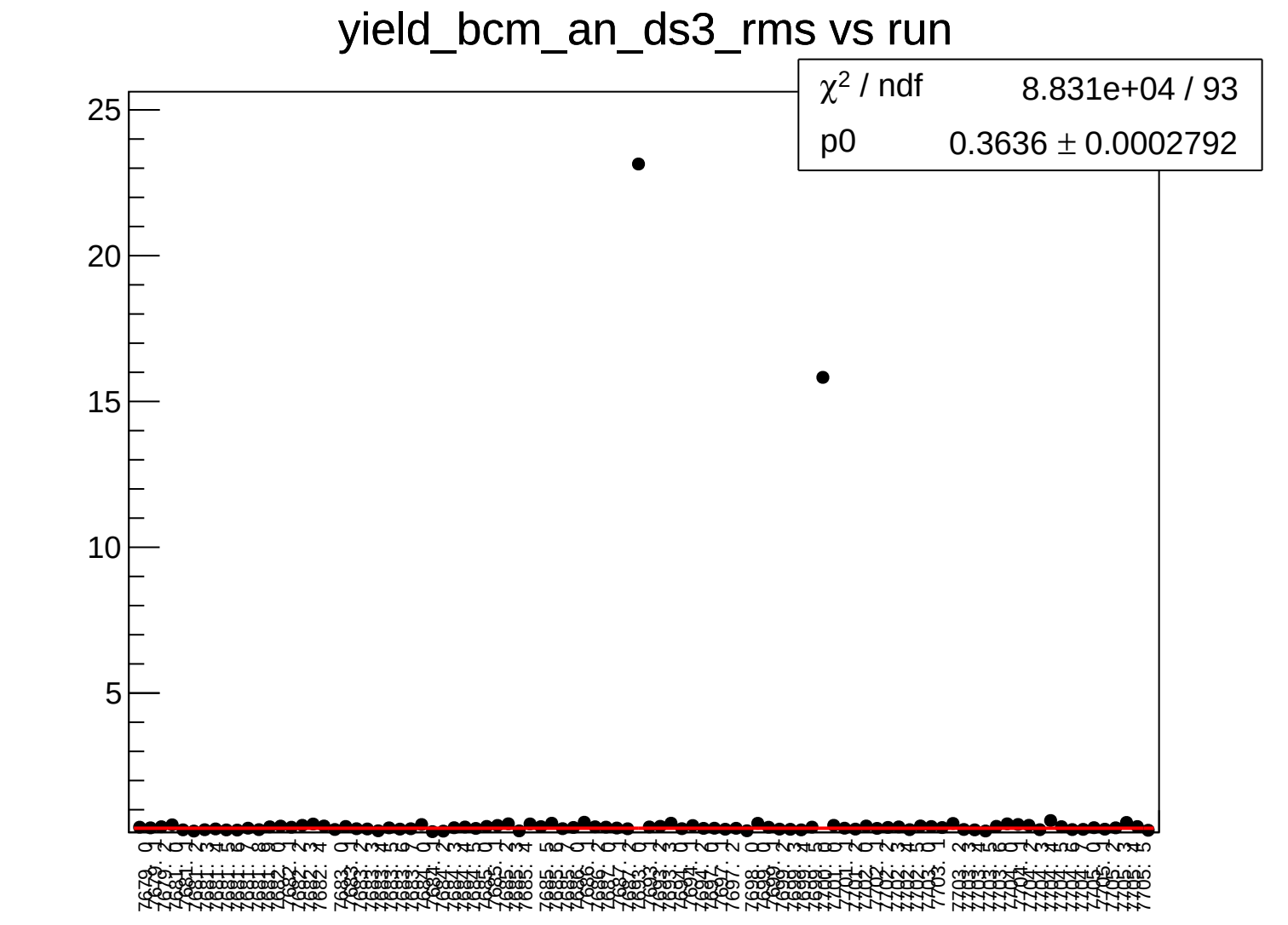

yield_bcm_an_ds_mean vs run
χ² / ndf 1.305e+09 / 93
p0 129.5 ± 0.0003908
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 1116
Std Dev 1068
6000
4000
2000
0
−2000
−4000

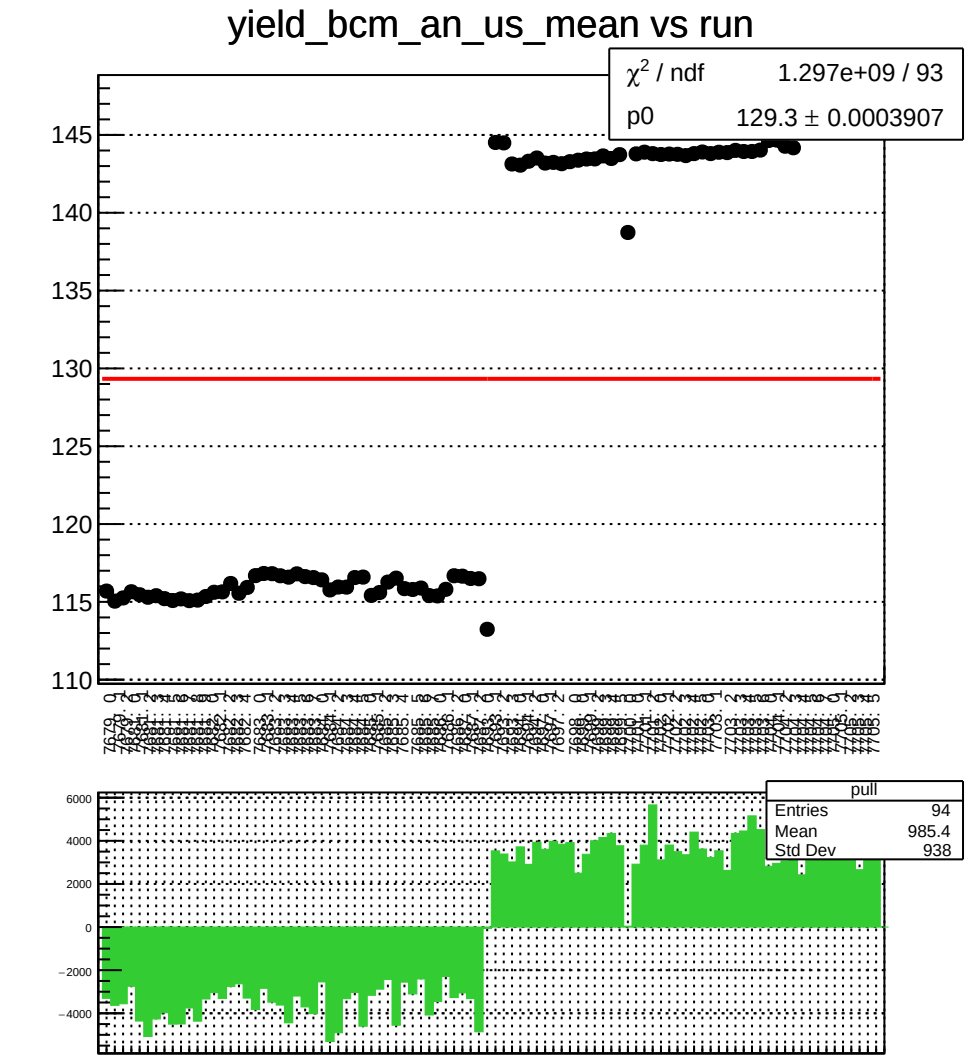

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

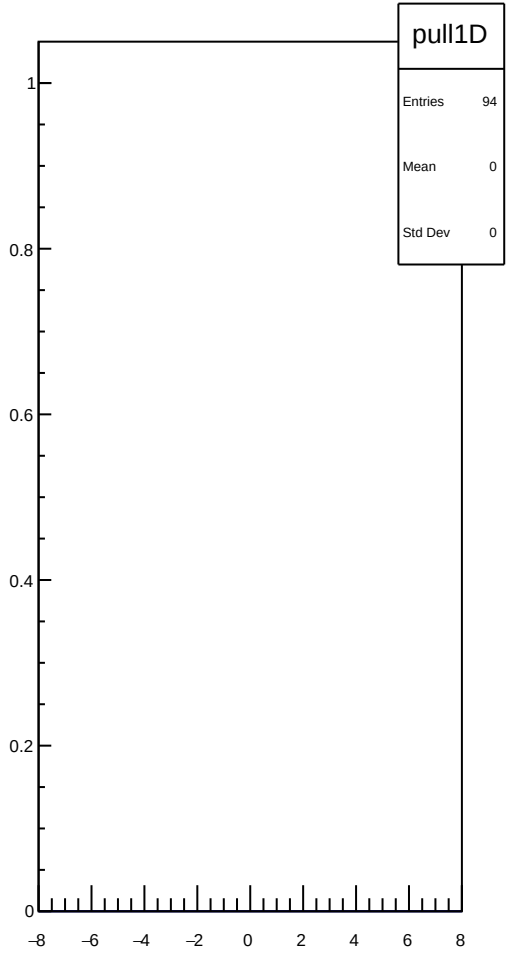

yield_bcm_an_ds_rms vs run
χ² / ndf 8.913e+04 / 93
p0 0.3599 ± 0.0002763
25
20
15
10
5

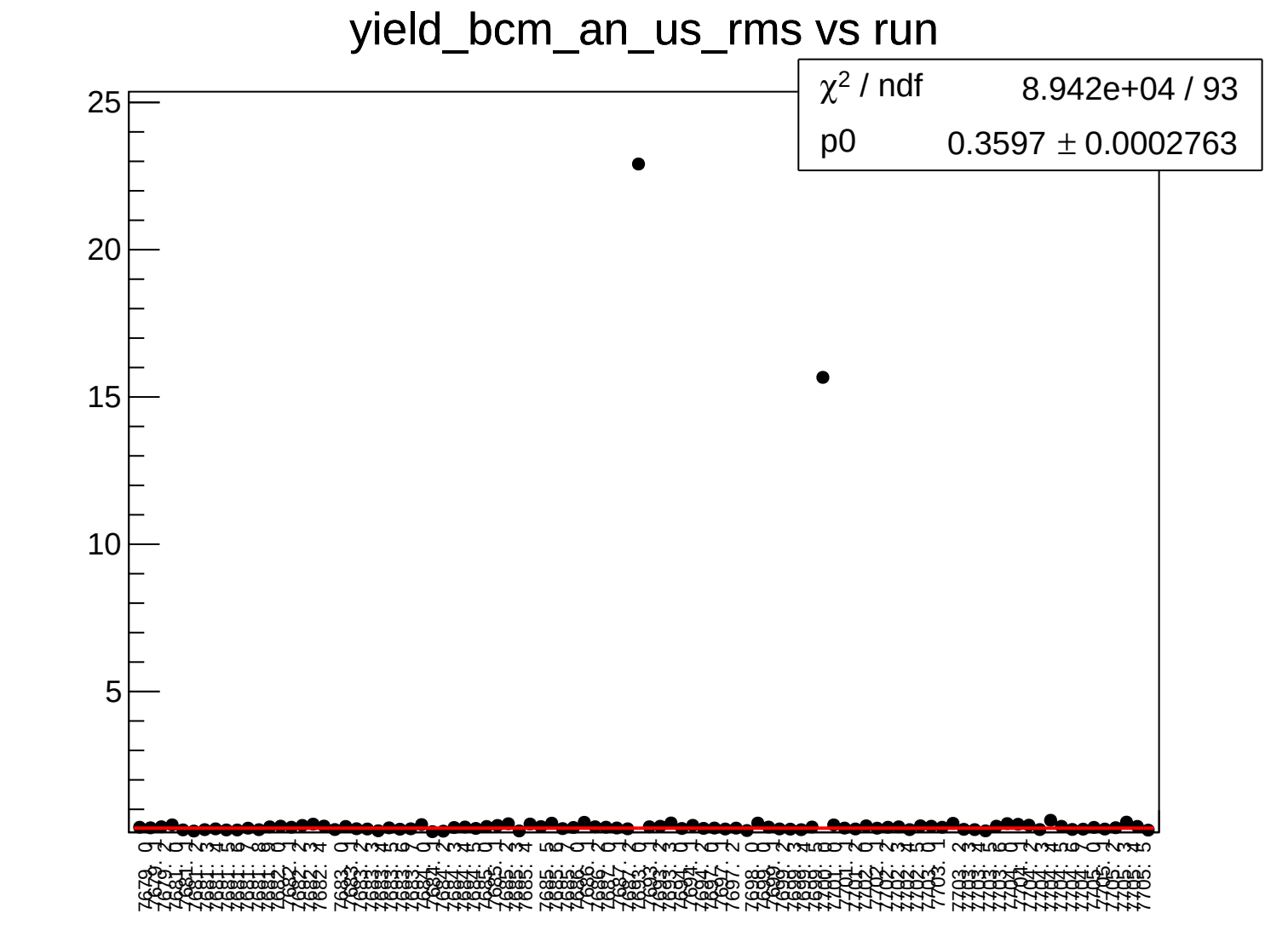

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.298e+09 / 93
p0 129.8 ± 0.0003948
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 1444
Std Dev 1397
6000
4000
2000
0
−2000
−4000

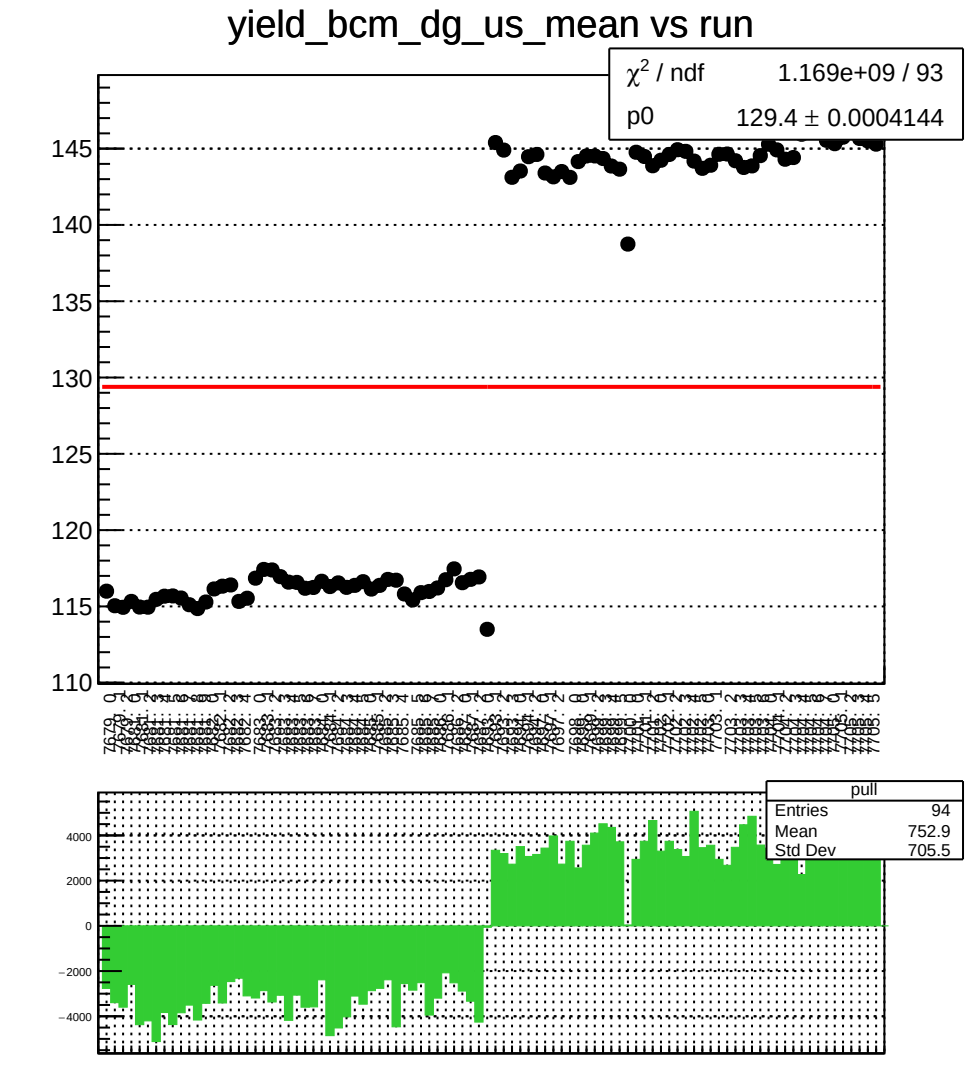

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

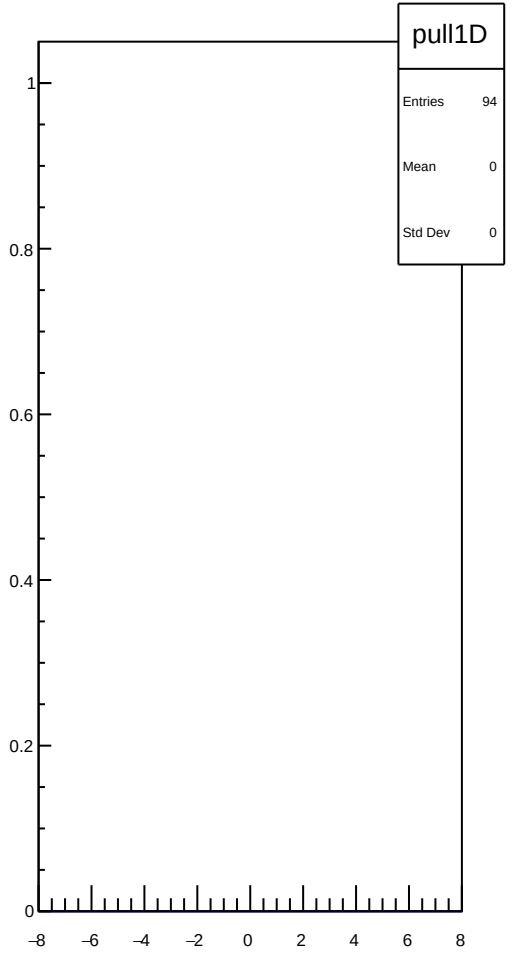

yield_bcm_an_ds3_rms vs run
χ² / ndf 8.831e+04 / 93
p0 0.3636 ± 0.0002792
25
20
15
10
5

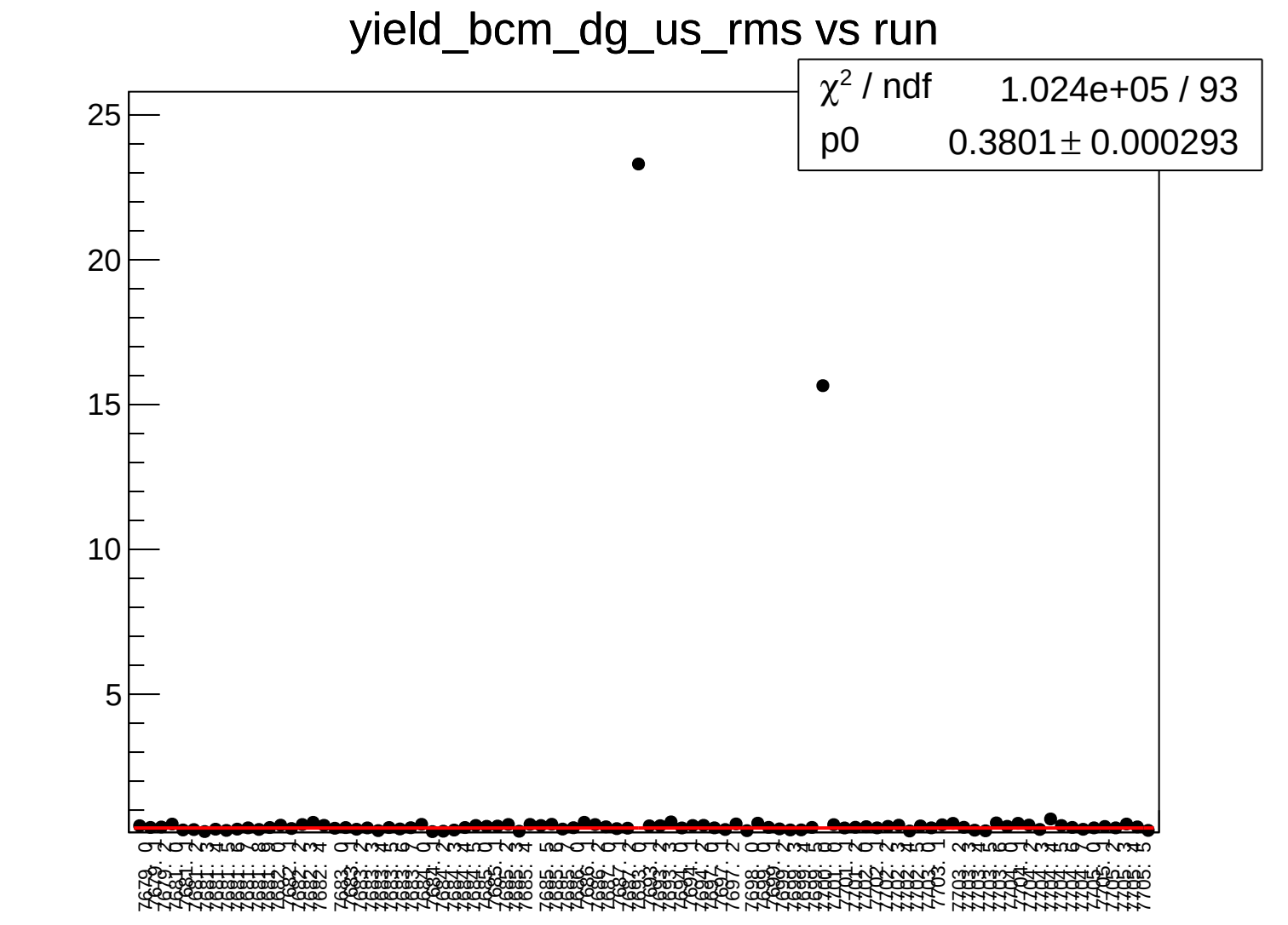

yield_bcm_an_us_mean vs run
χ² / ndf 1.297e+09 / 93
p0 129.3 ± 0.0003907
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 985.4
Std Dev 938
6000
4000
2000
0
−2000
−4000

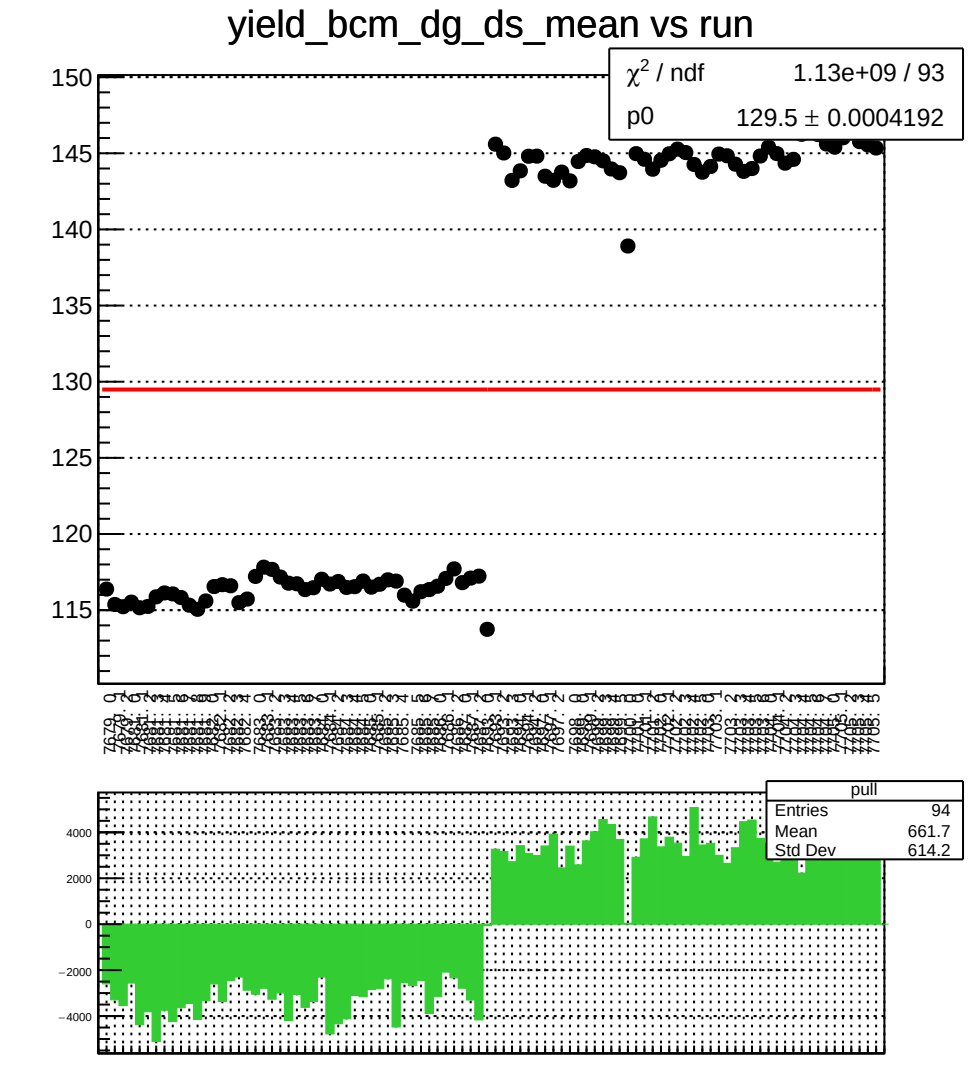

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

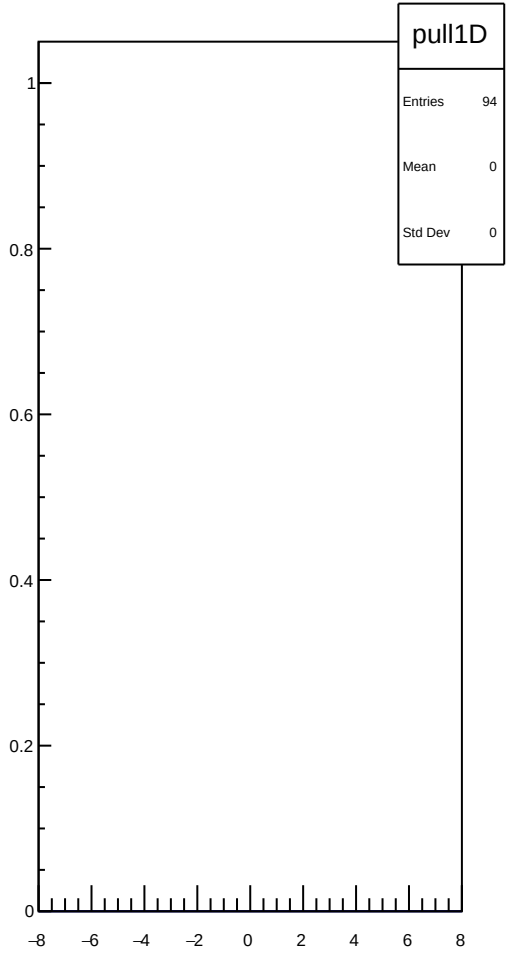

yield_bcm_an_us_rms vs run
χ² / ndf 8.942e+04 / 93
p0 0.3597 ± 0.0002763
25
20
15
10
5

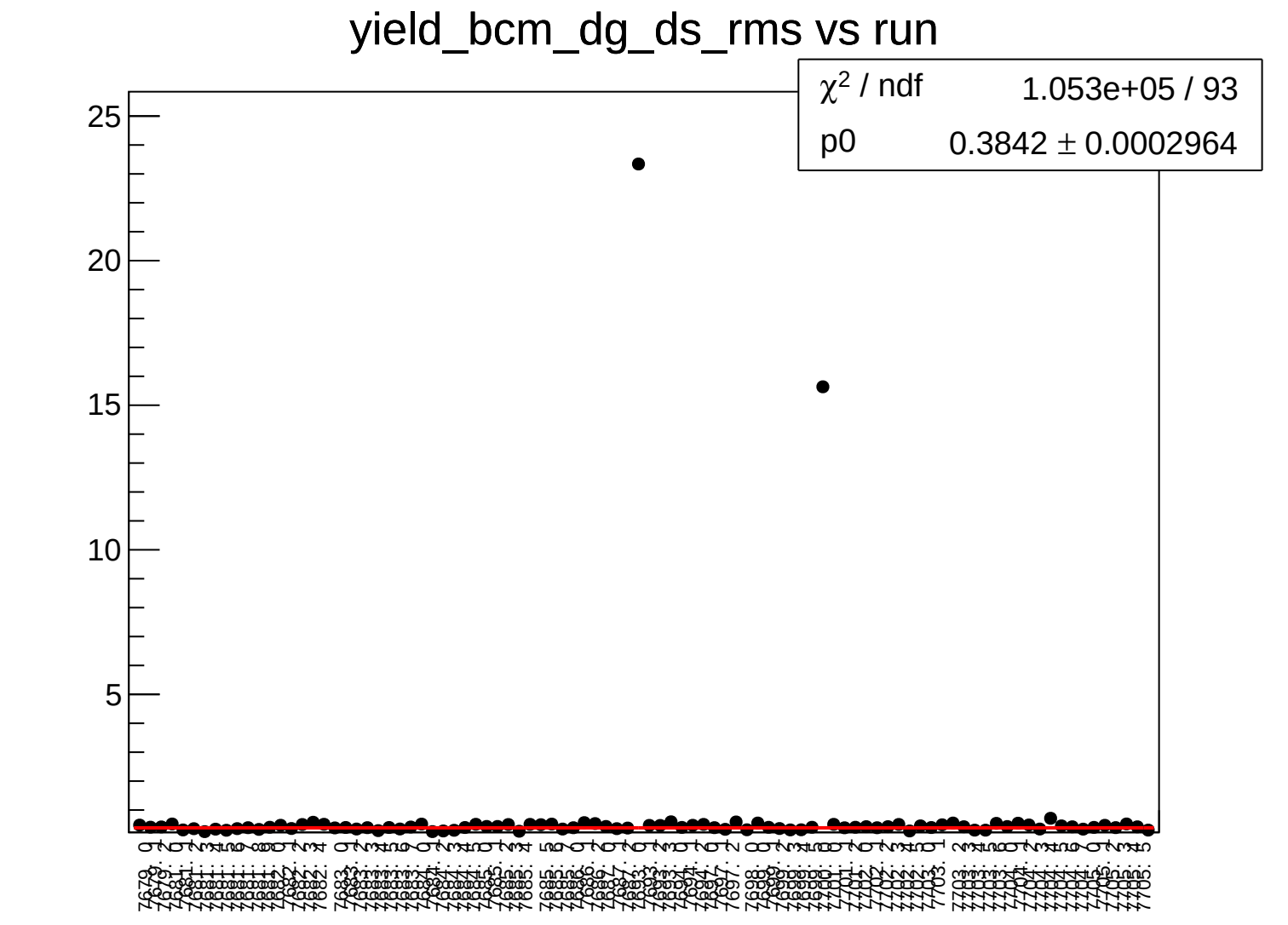

yield_bcm_dg_us_mean vs run
χ² / ndf 1.169e+09 / 93
p0 129.4 ± 0.0004144
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 752.9
Std Dev 705.5
4000
2000
0
−2000
−4000

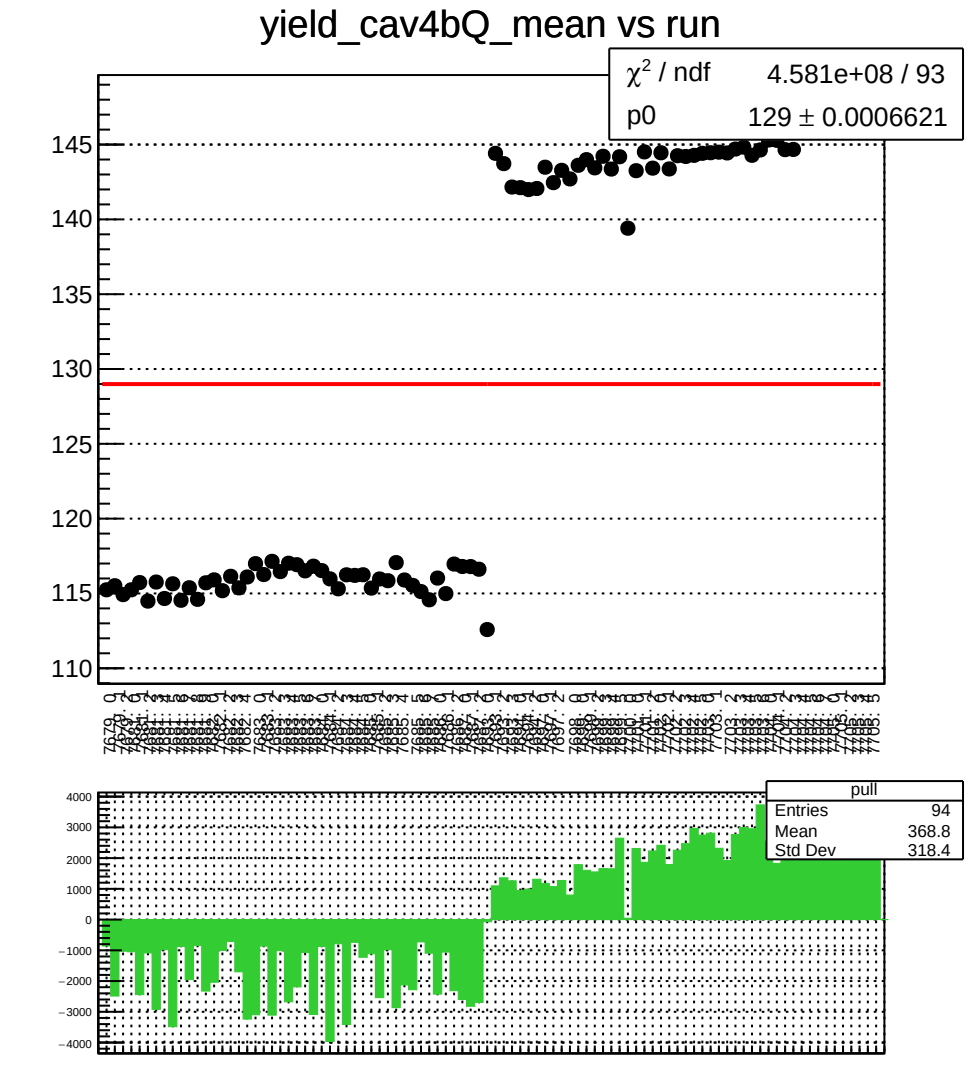

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

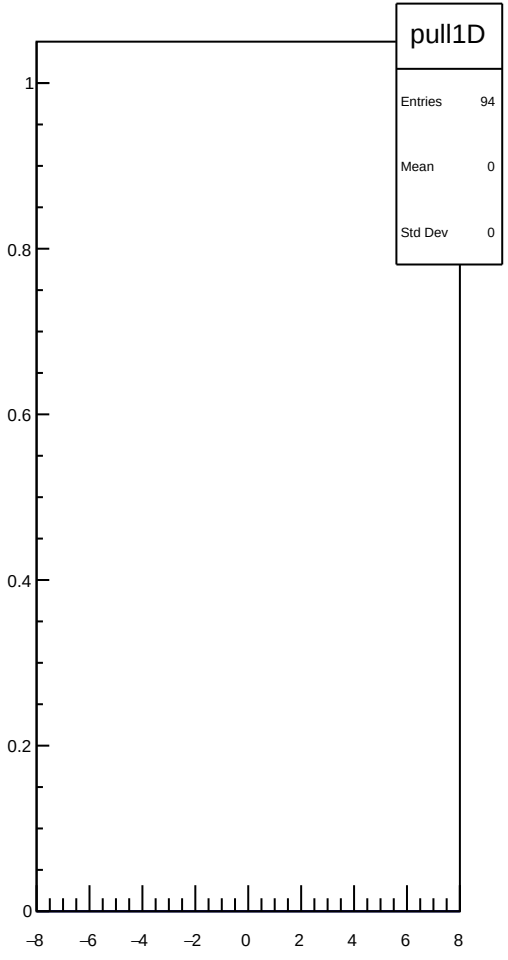

yield_bcm_dg_us_rms vs run
χ² / ndf 1.024e+05 / 93
p0 0.3801 ± 0.000293
25
20
15
10
5

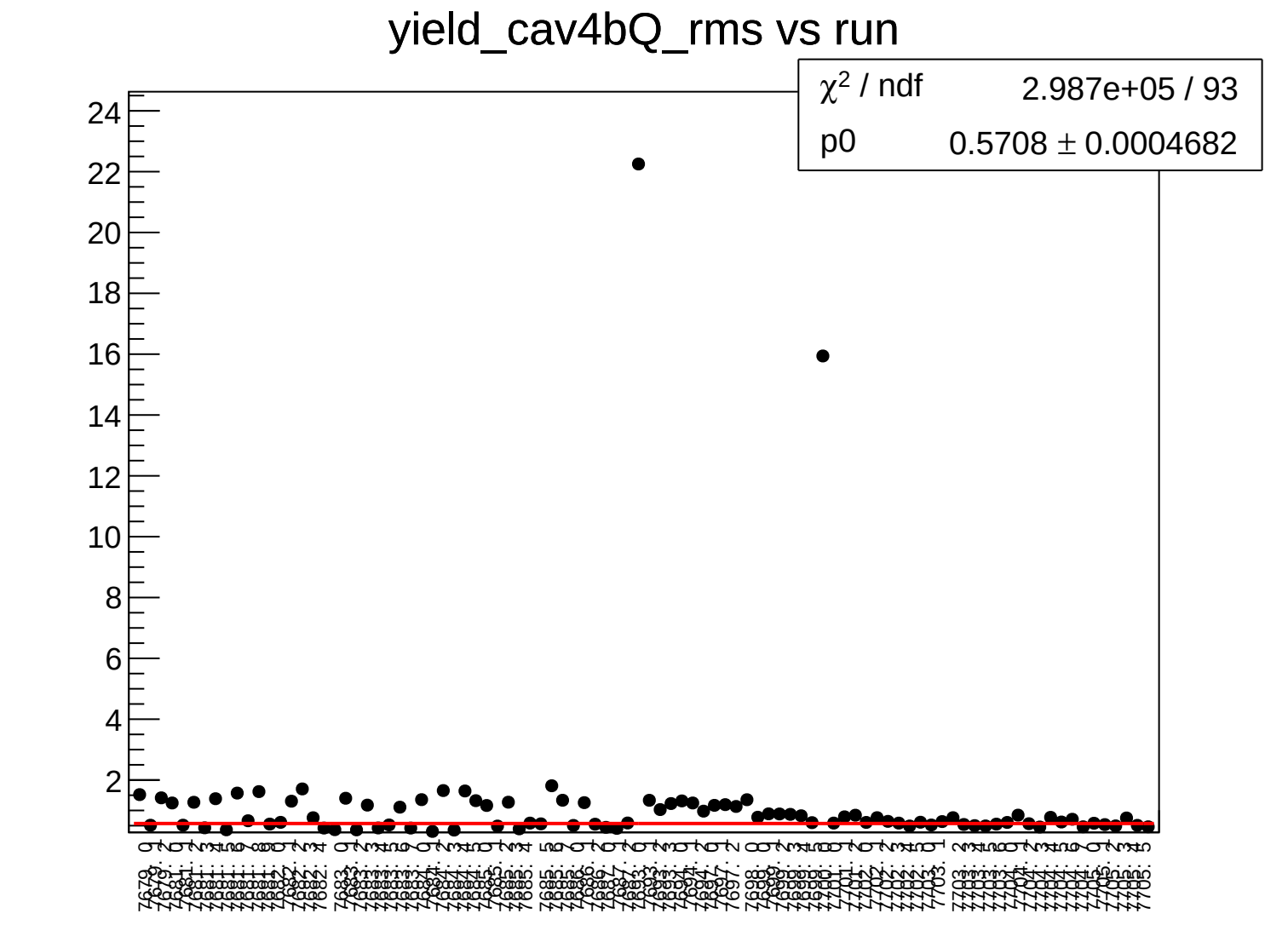

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.13e+09 / 93
p0 129.5 ± 0.0004192
150
145
140
135
130
125
120
115
pull
Entries 94
Mean 661.7
Std Dev 614.2
4000
2000
0
−2000
−4000

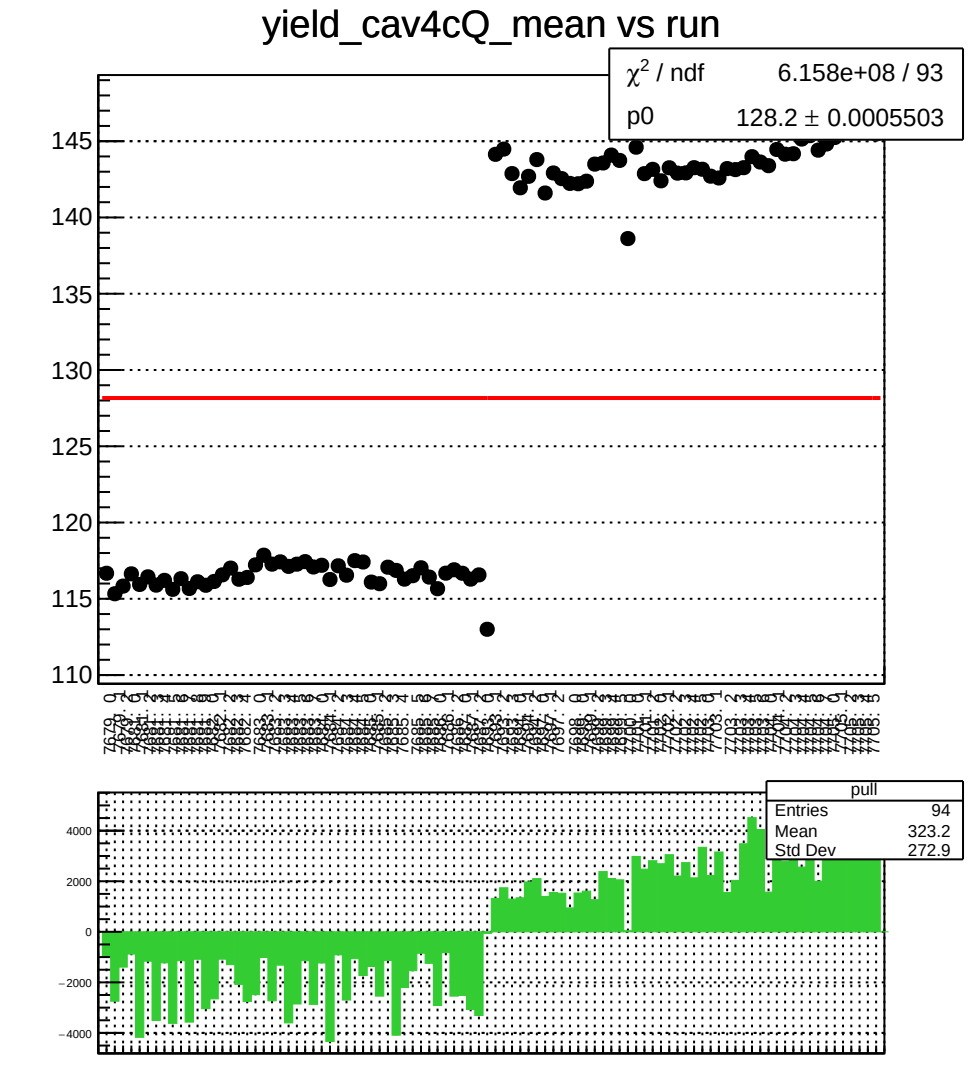

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

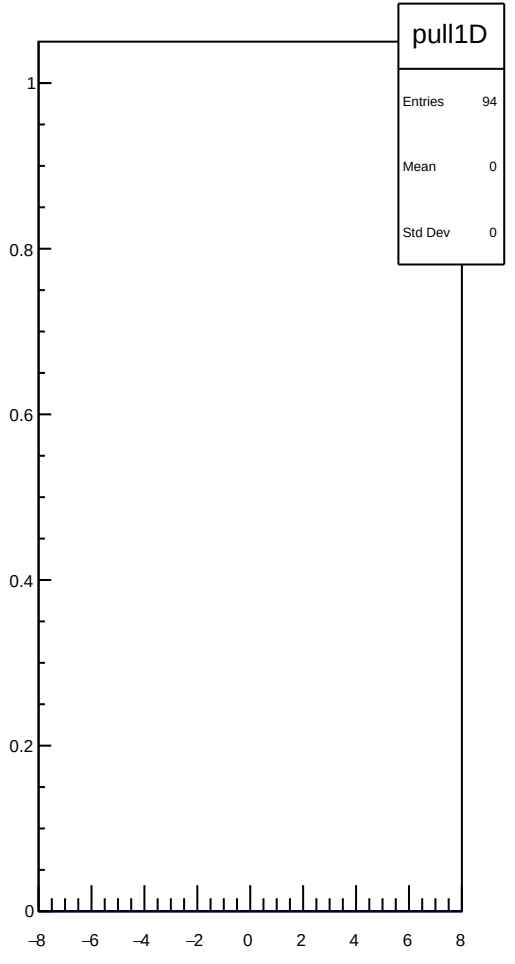

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.053e+05 / 93
p0 0.3842 ± 0.0002964
25
20
15
10
5

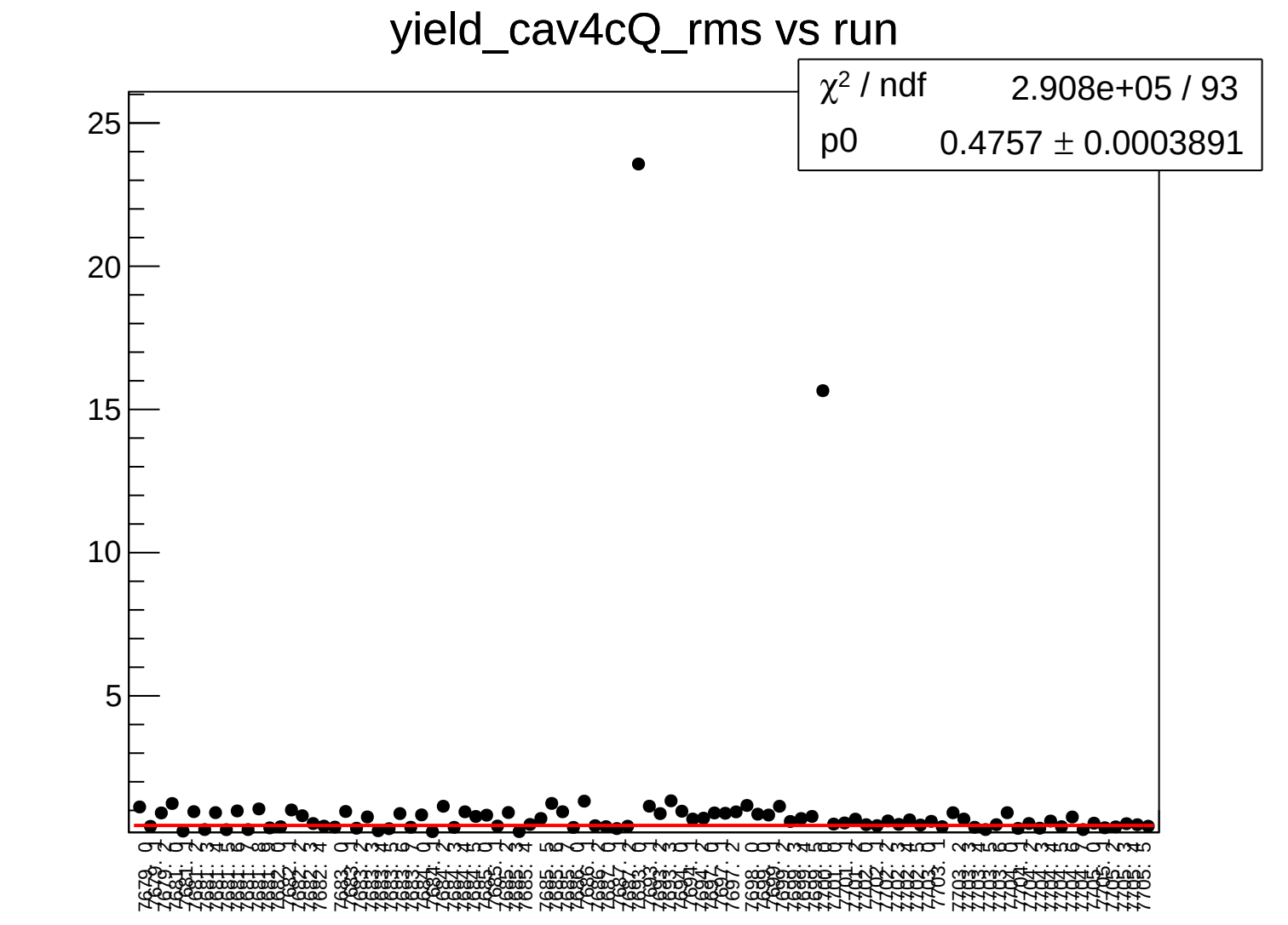

yield_cav4bQ_mean vs run
χ² / ndf 4.581e+08 / 93
p0 129 ± 0.0006621
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 368.8
Std Dev 318.4
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000

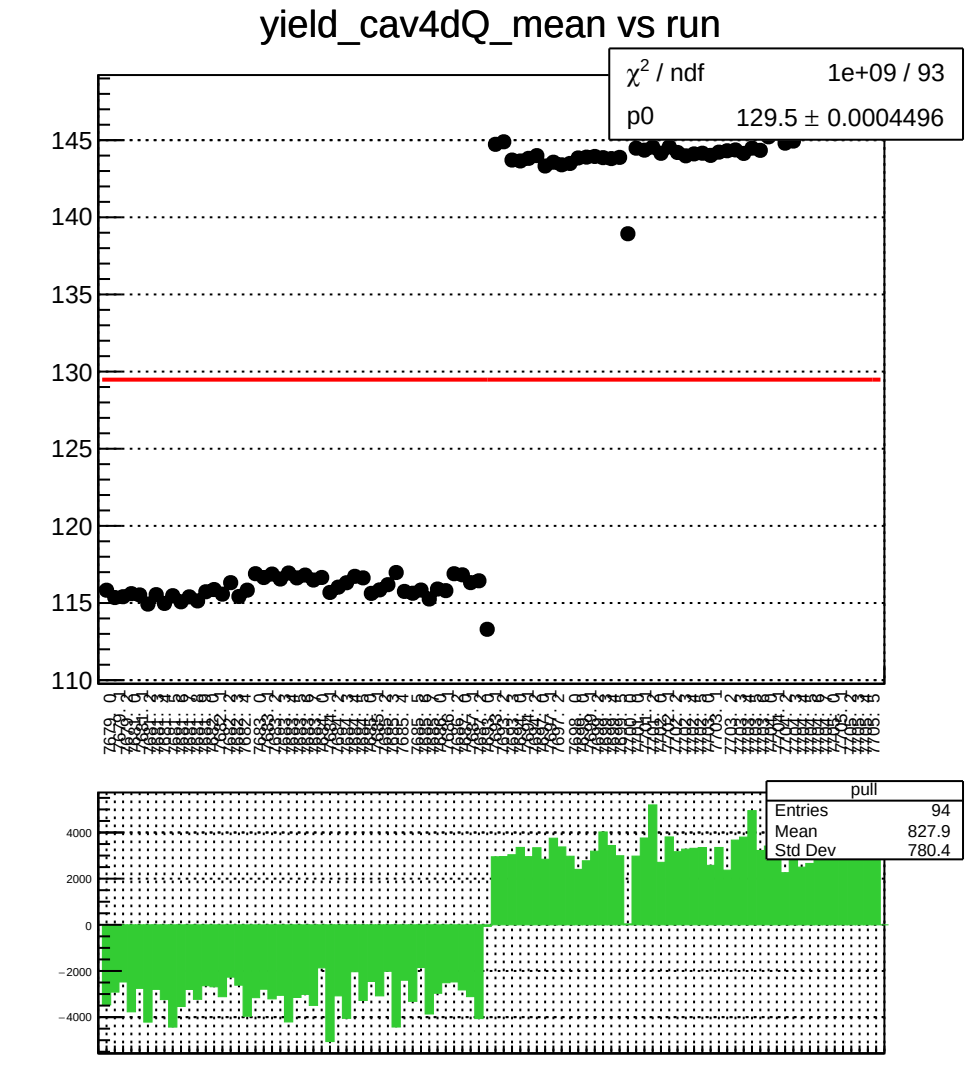

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

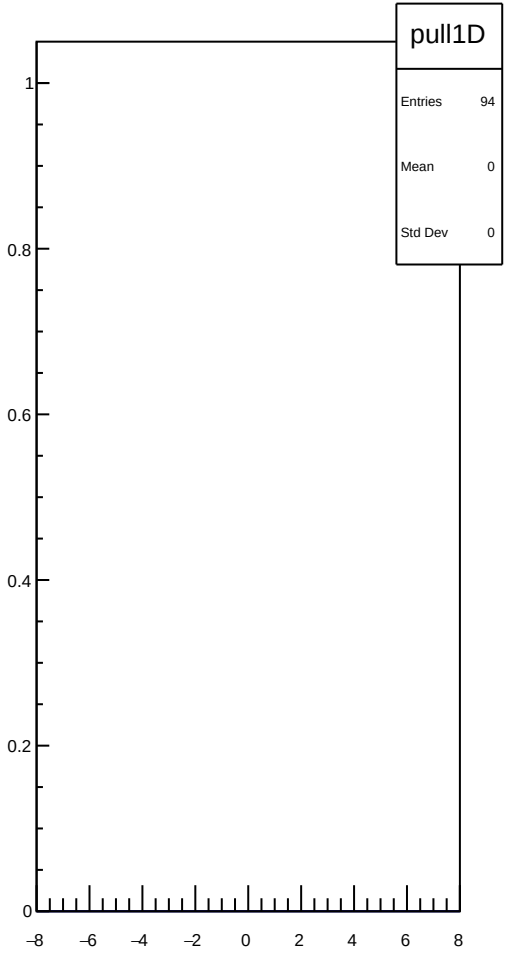

yield_cav4bQ_rms vs run
χ^2 / ndf 2.987e+05 / 93
p0 0.5708 ± 0.0004682
24
22
20
18
16
14
12
10
8
6
4
2

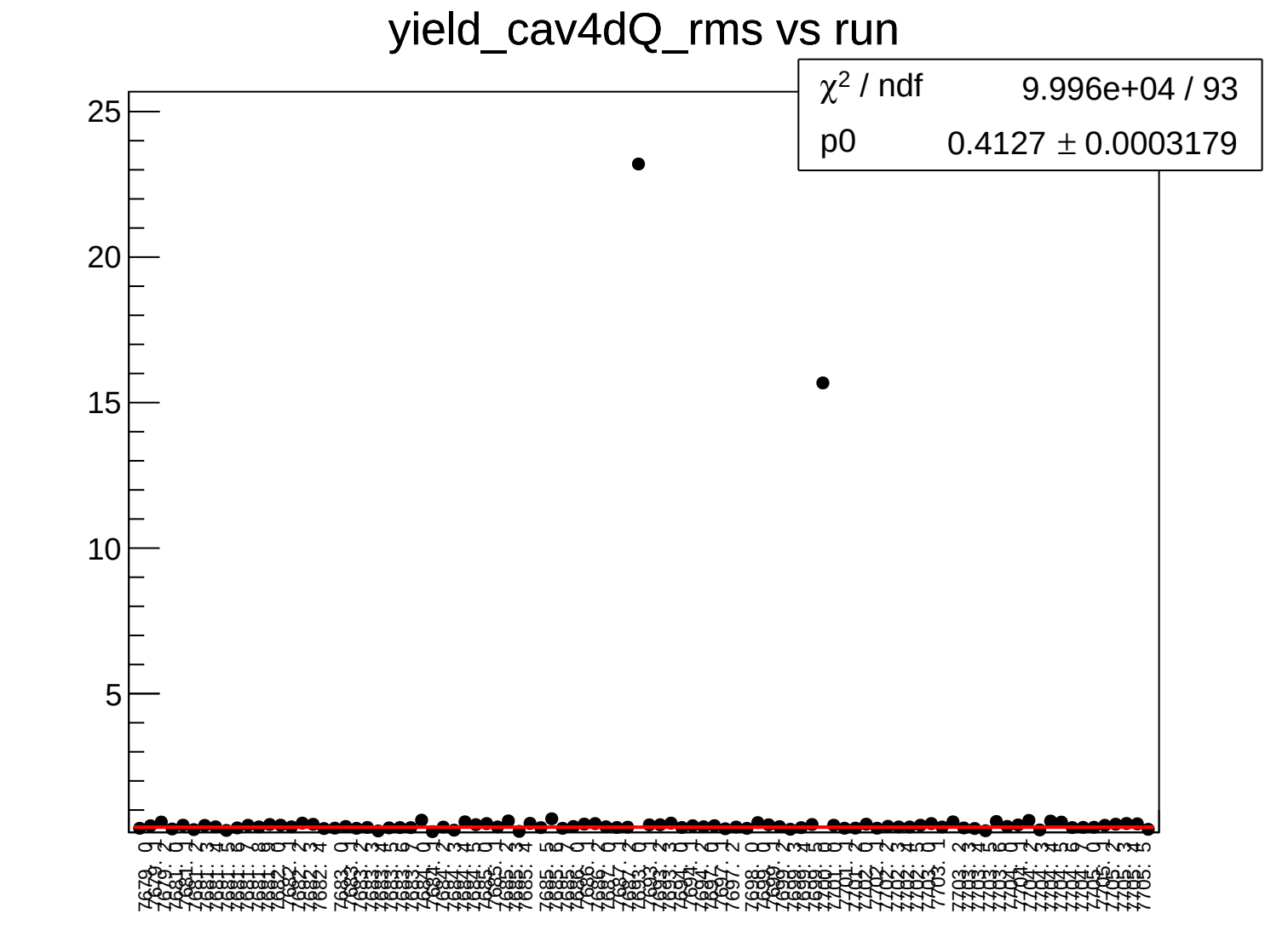

yield_cav4cQ_mean vs run
χ² / ndf 6.158e+08 / 93
p0 128.2 ± 0.0005503
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 323.2
Std Dev 272.9
4000
2000
0
−2000
−4000

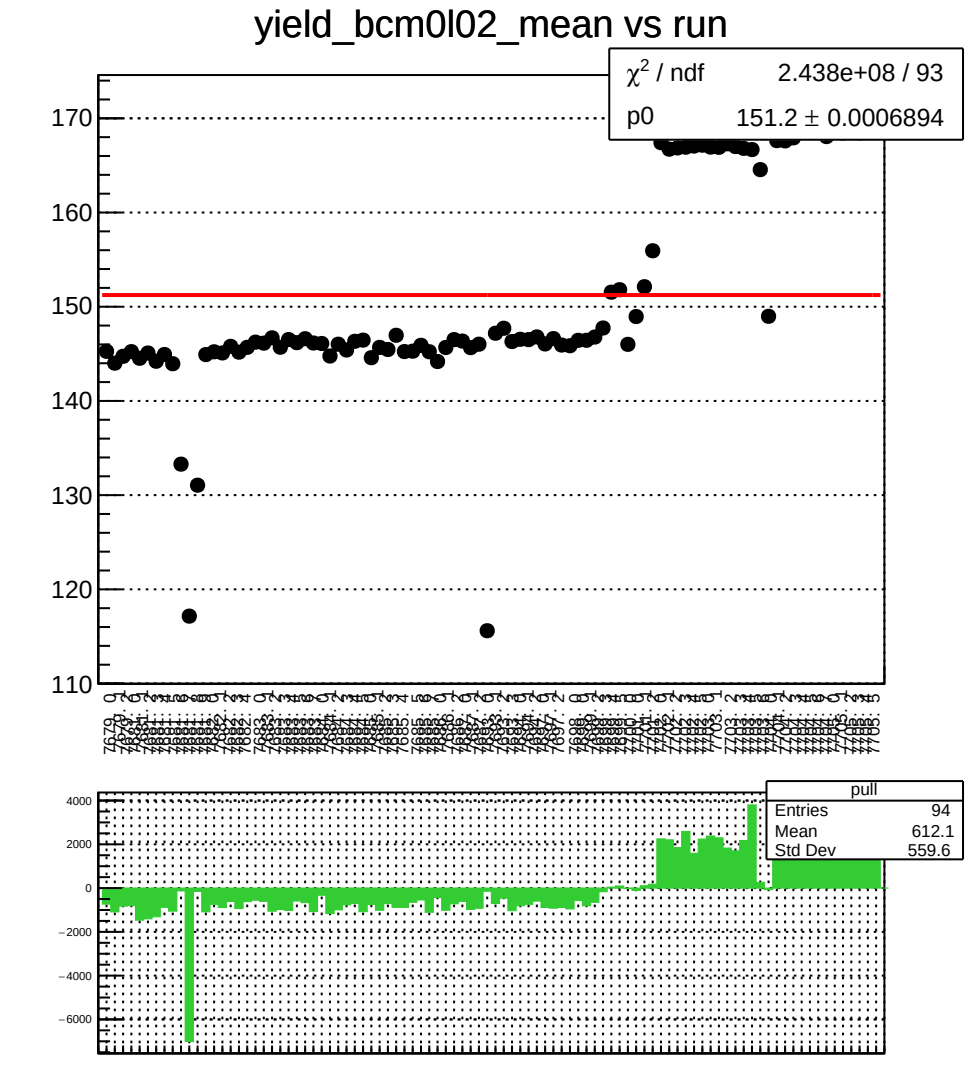

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

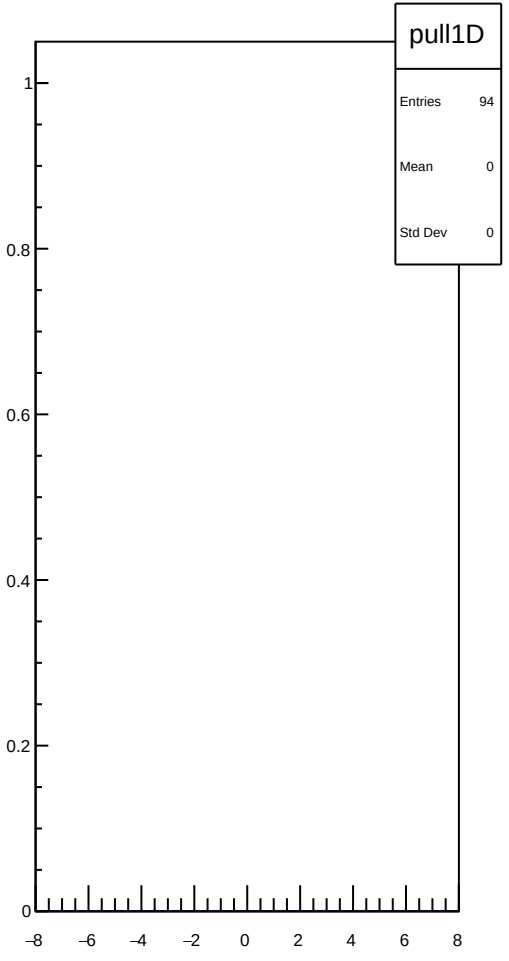

yield_cav4cQ_rms vs run
χ² / ndf 2.908e+05 / 93
p0 0.4757 ± 0.0003891
25
20
15
10
5

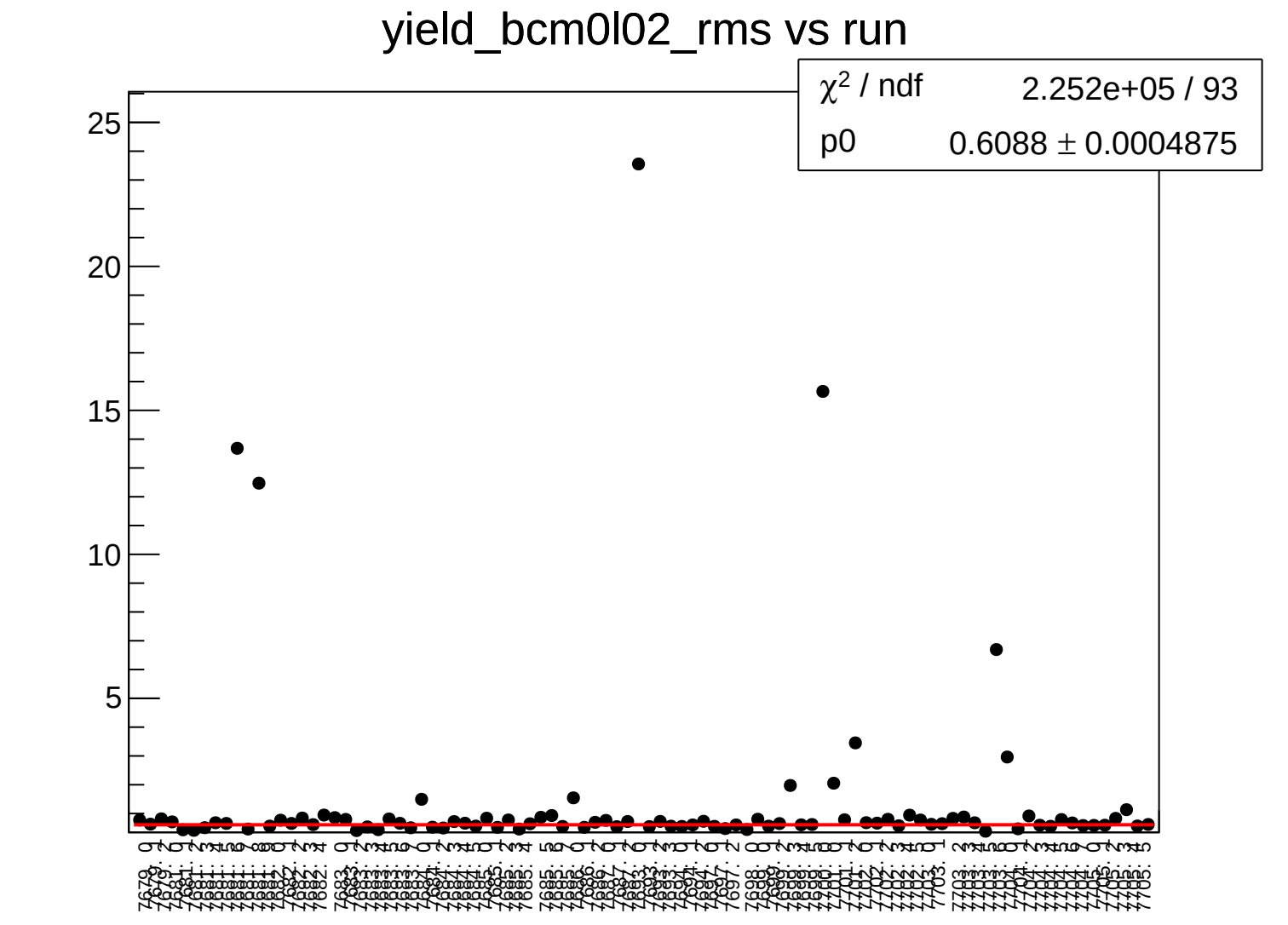

yield_cav4dQ_mean vs run
χ² / ndf 1e+09 / 93
p0 129.5 ± 0.0004496
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 827.9
Std Dev 780.4
4000
2000
0
−2000
−4000

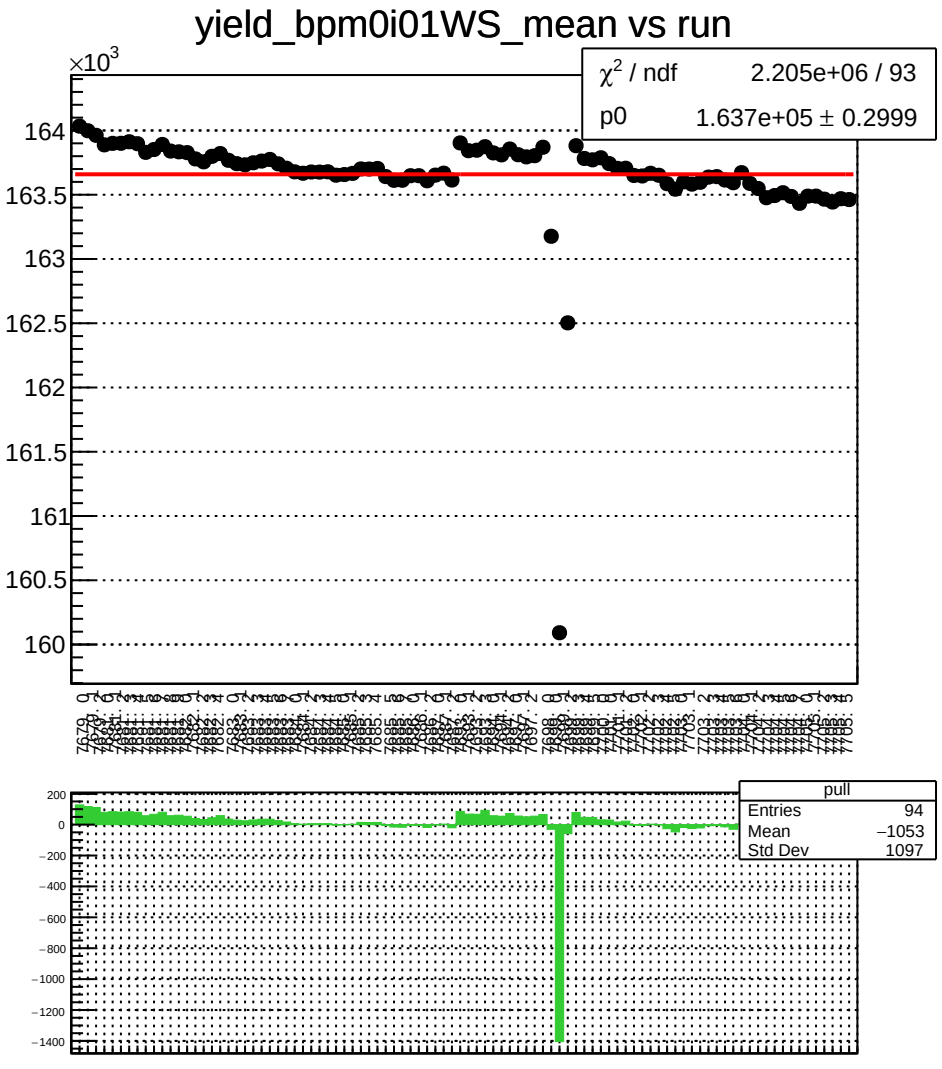

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

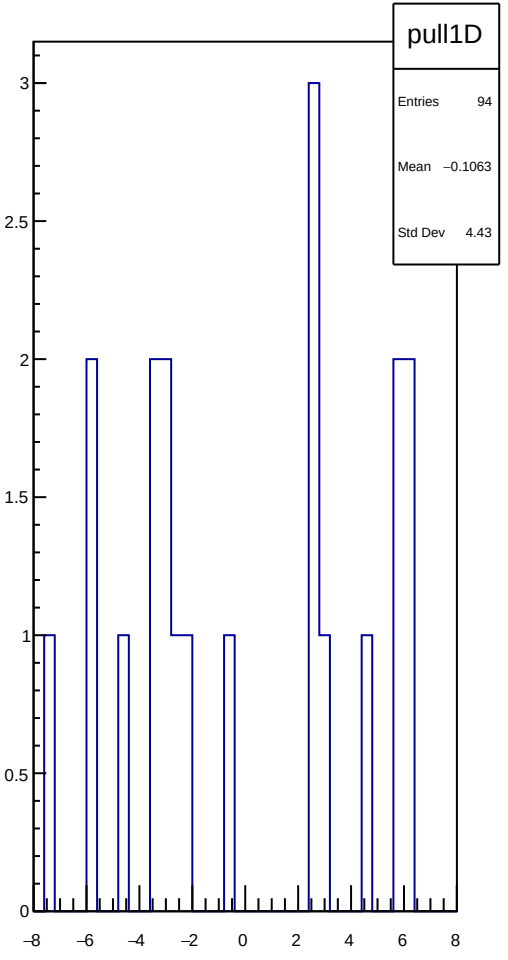

yield_cav4dQ_rms vs run
χ^2 / ndf 9.996e+04 / 93
p0 0.4127 ± 0.0003179
25
20
15
10
5

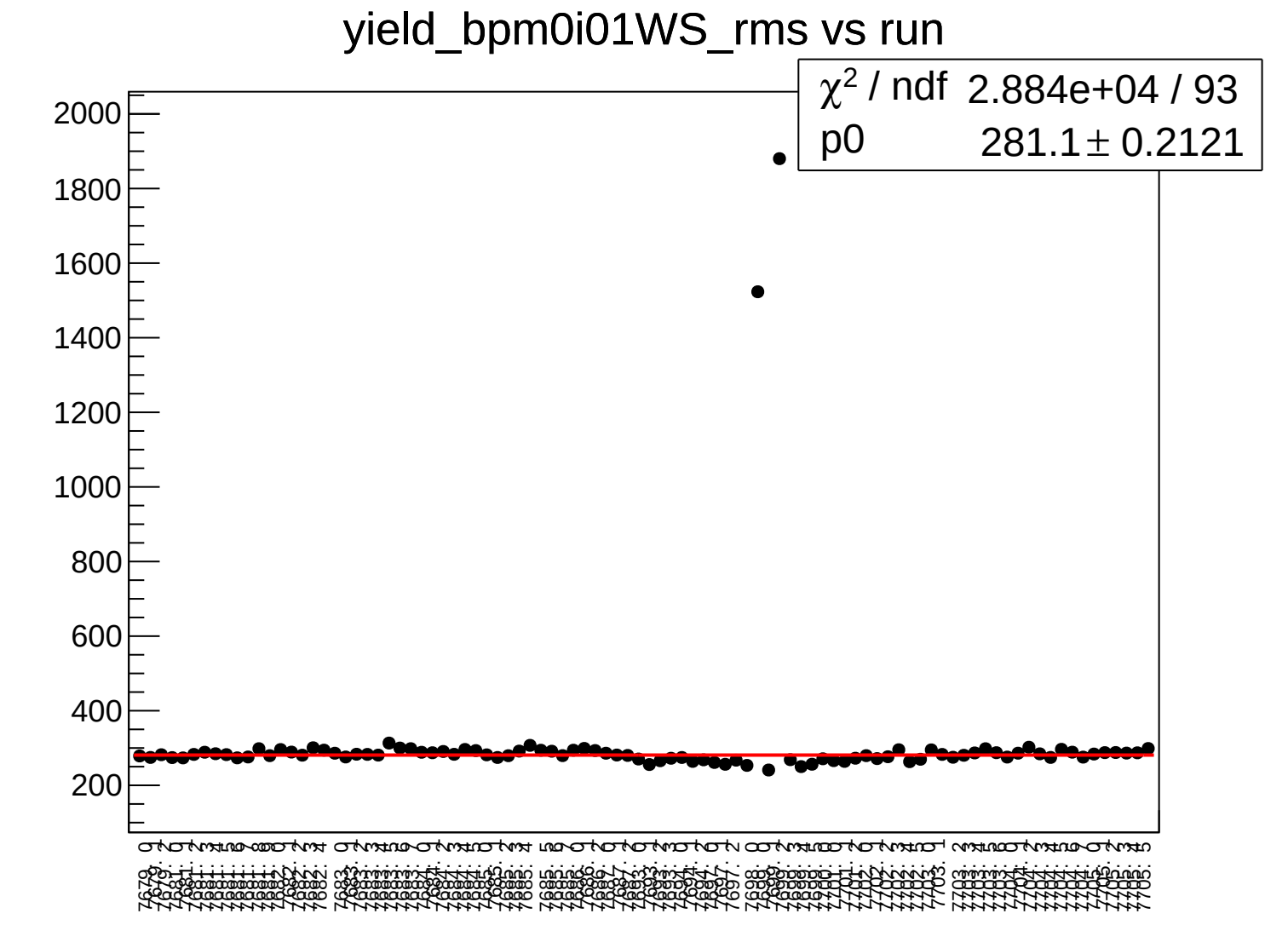

yield_bcm0l02_mean vs run
χ² / ndf 2.438e+08 / 93
p0 151.2 ± 0.0006894
170
160
150
140
130
120
110
pull
Entries 94
Mean 612.1
Std Dev 559.6
4000
2000
0
−2000
−4000
−6000

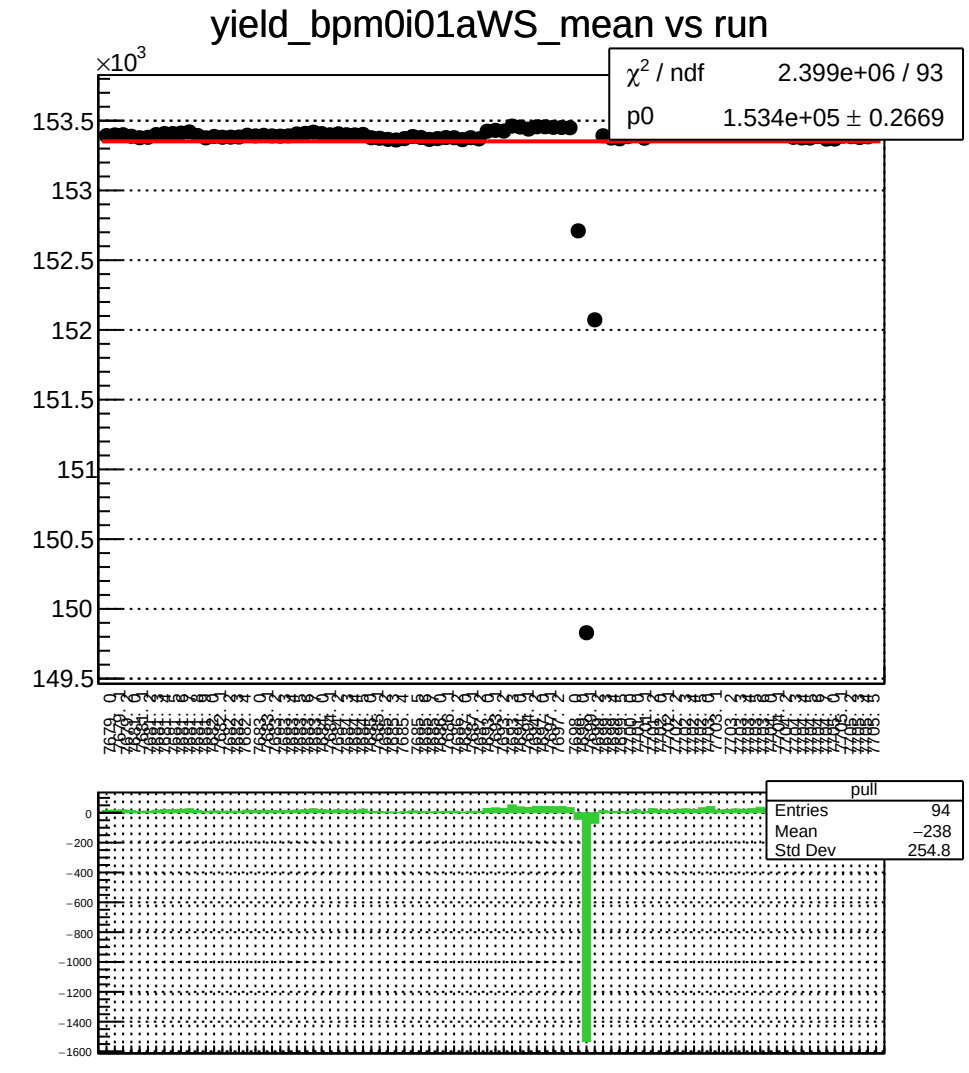

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

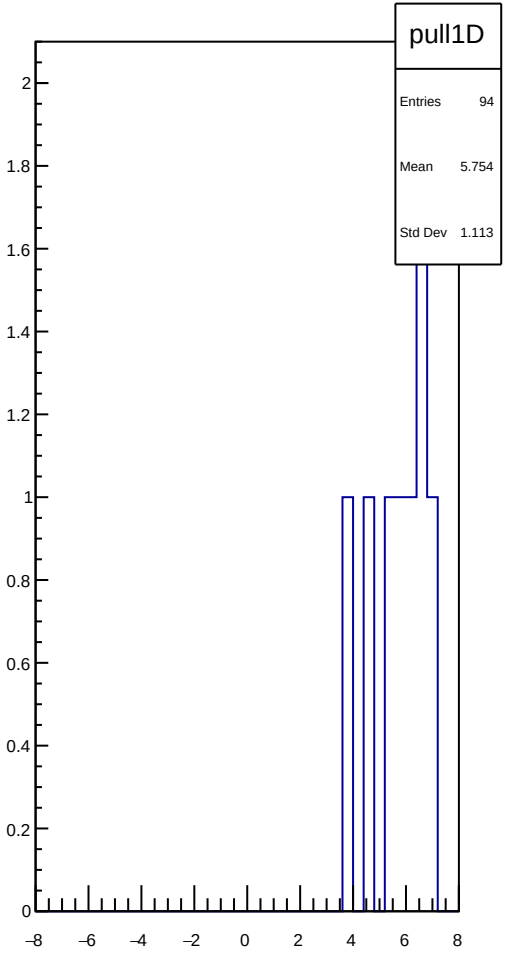

yield_bcm0l02_rms vs run
χ² / ndf 2.252e+05 / 93
p0 0.6088 ± 0.0004875
25
20
15
10
5

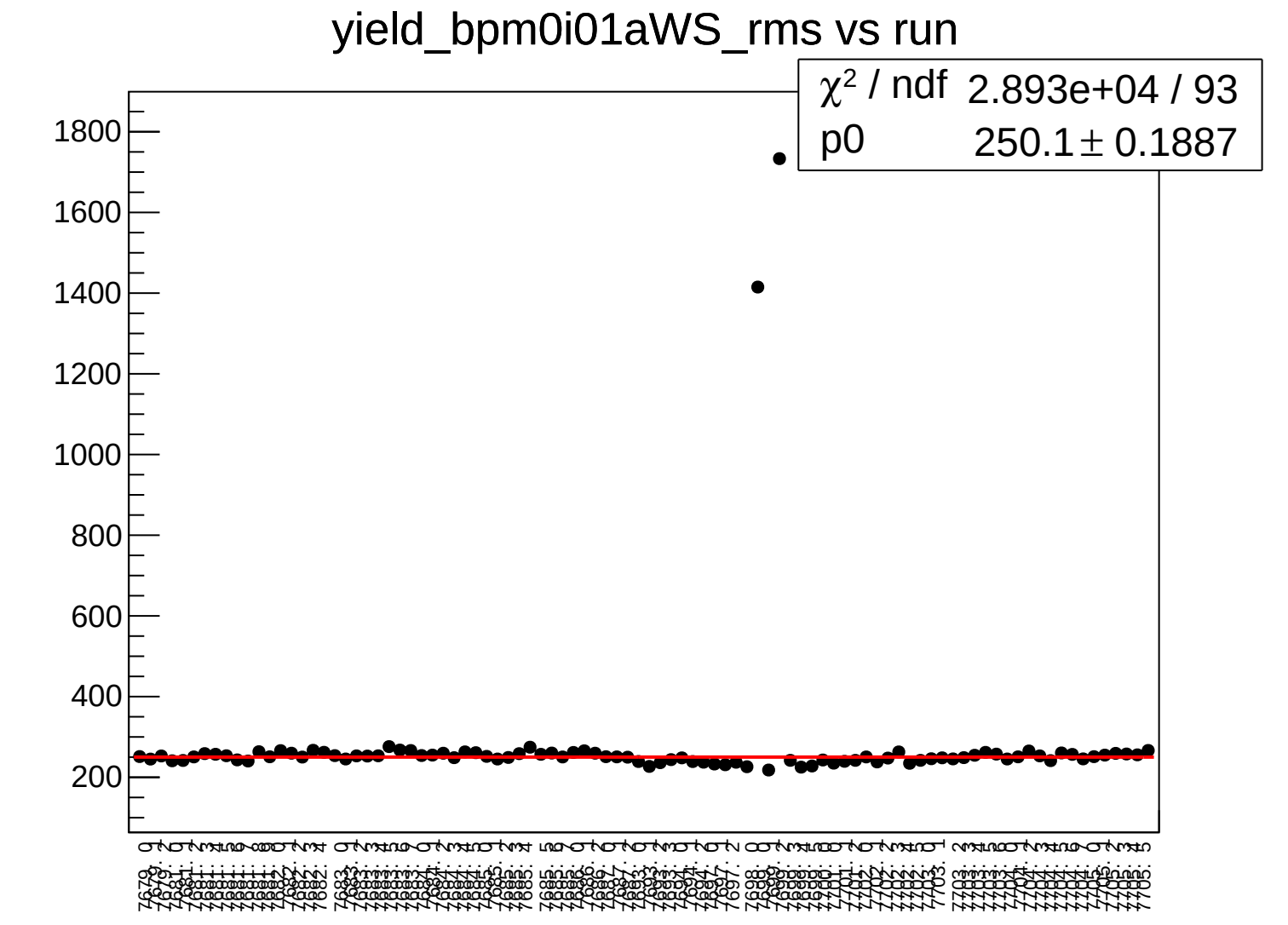

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 2.205e+06 / 93
p0 1.637e+05 ± 0.2999
164
163.5
163
162.5
162
161.5
161
160.5
160
pull
Entries 94
Mean −1053
Std Dev 1097
200
0
−200
−400
−600
−800
−1000
−1200
−1400

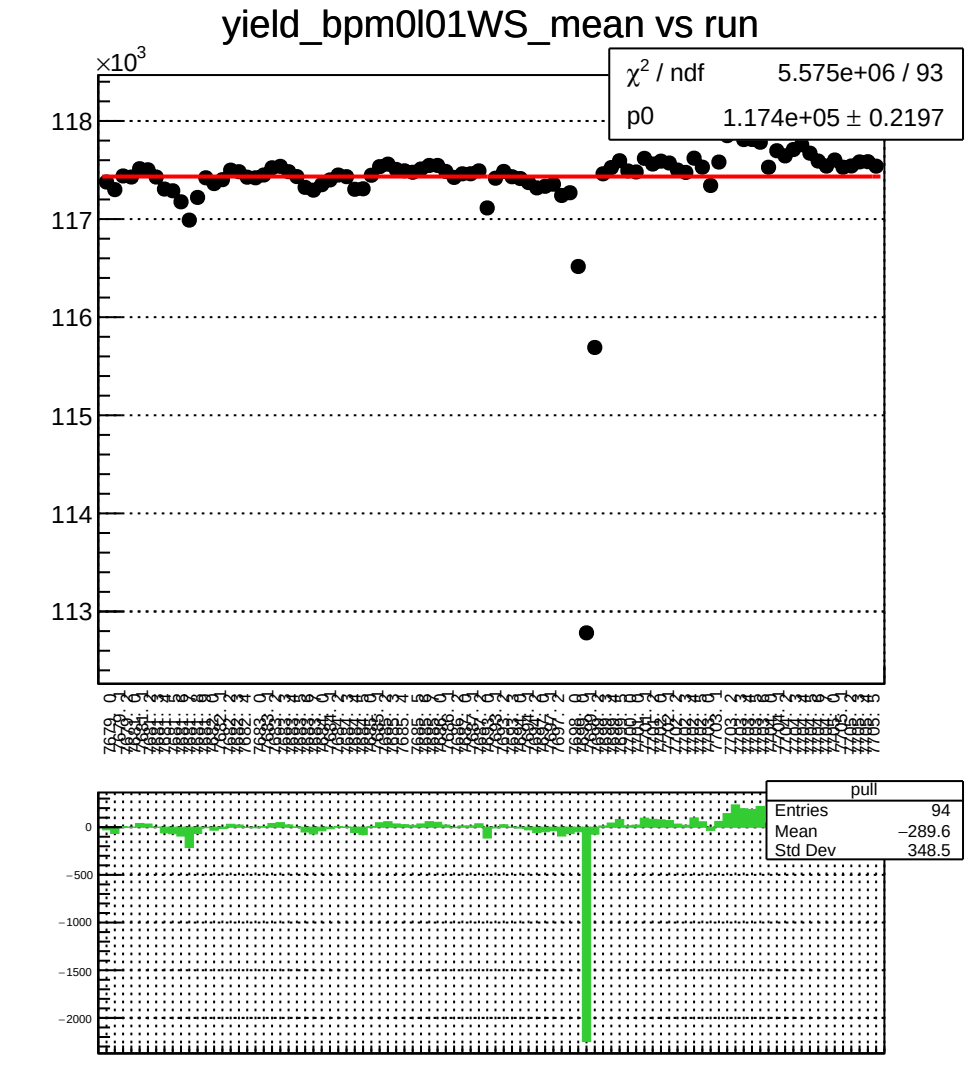

pull1D
Entries 94
Mean −0.1063
Std Dev 4.43
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

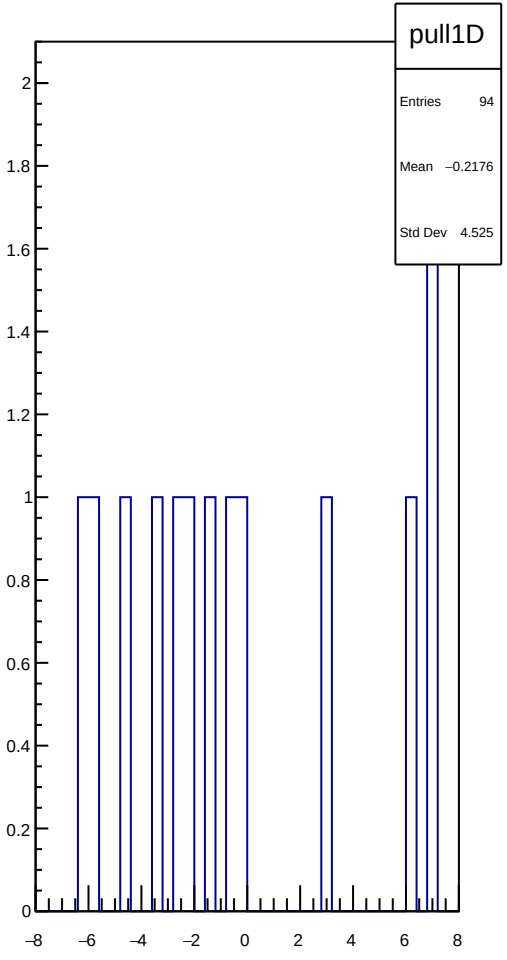

yield_bpm0i01WS_rms vs run
χ² / ndf 2.884e+04 / 93
p0 281.1 ± 0.2121
2000
1800
1600
1400
1200
1000
800
600
400
200

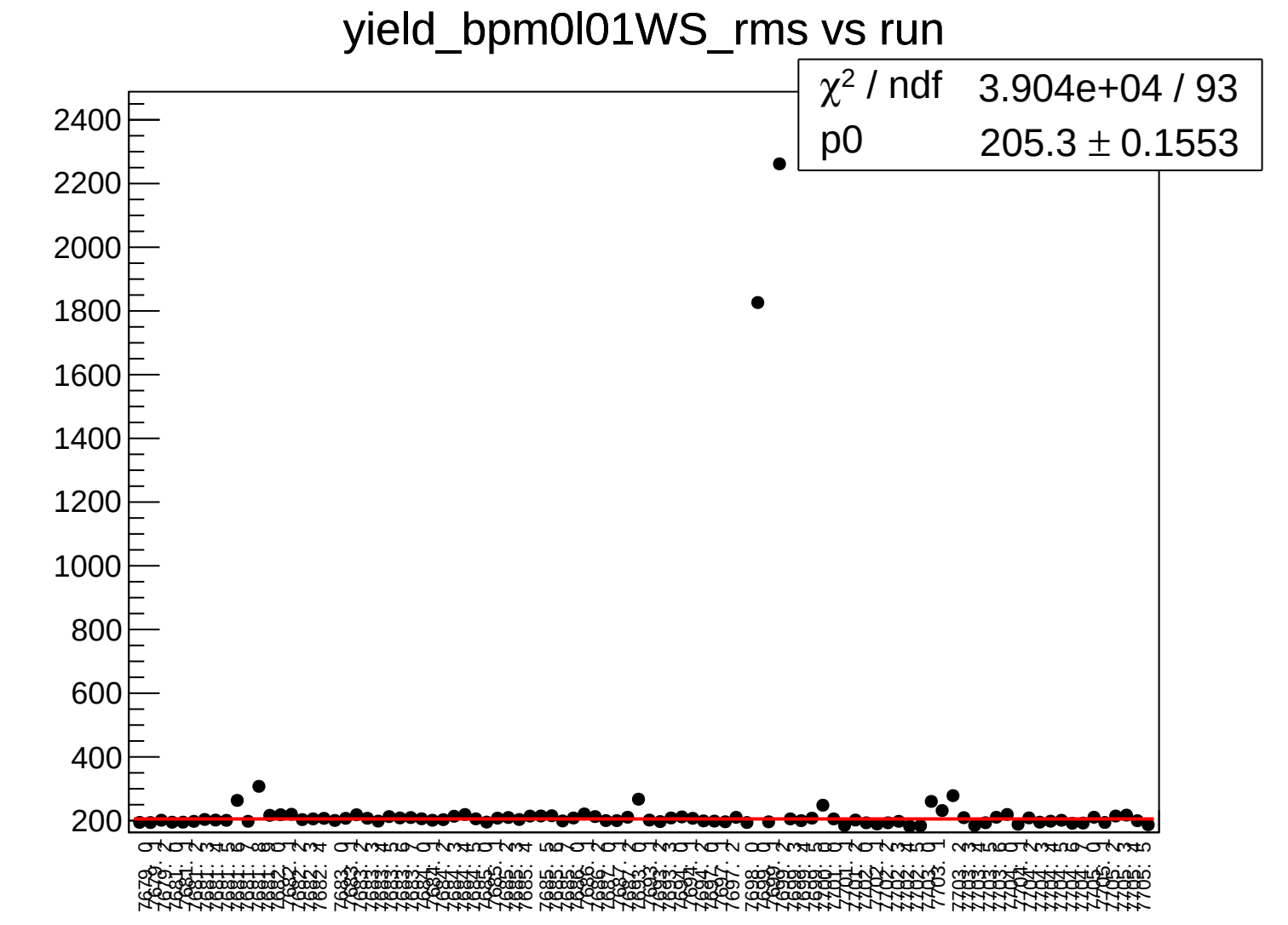

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 2.399e+06 / 93
p0 1.534e+05 ± 0.2669
153.5
153
152.5
152
151.5
151
150.5
150
149.5
pull
Entries 94
Mean −238
Std Dev 254.8
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

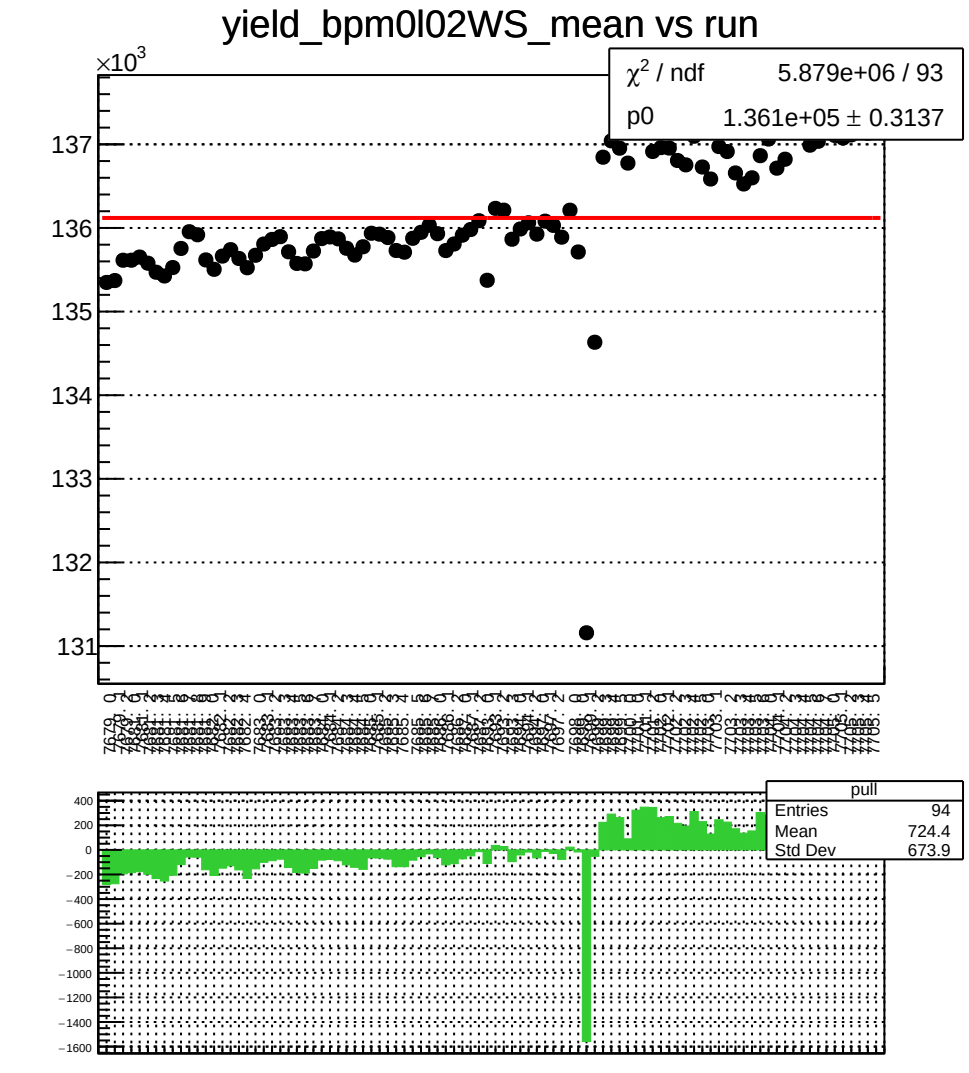

pull1D
Entries 94
Mean 5.754
Std Dev 1.113
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

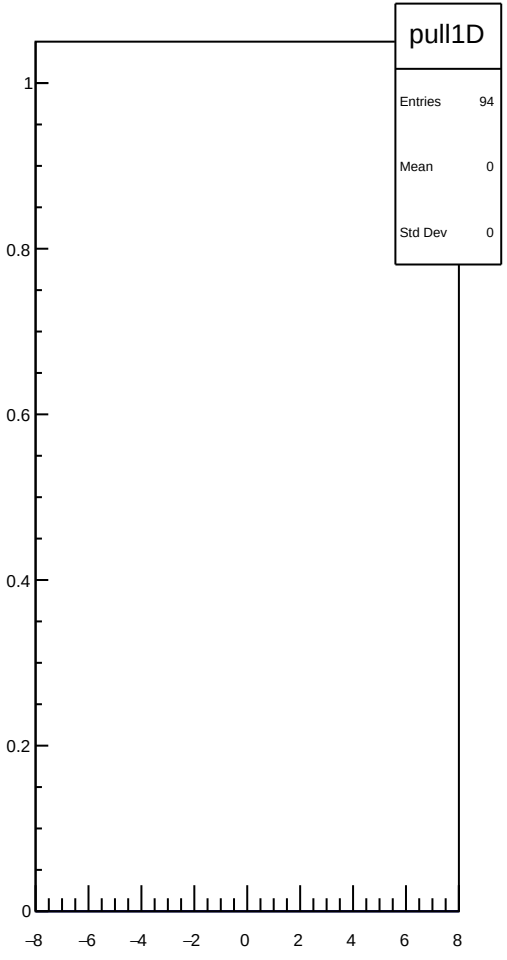

yield_bpm0i01aWS_rms vs run
χ² / ndf 2.893e+04 / 93
p0 250.1 ± 0.1887
1800
1600
1400
1200
1000
800
600
400
200

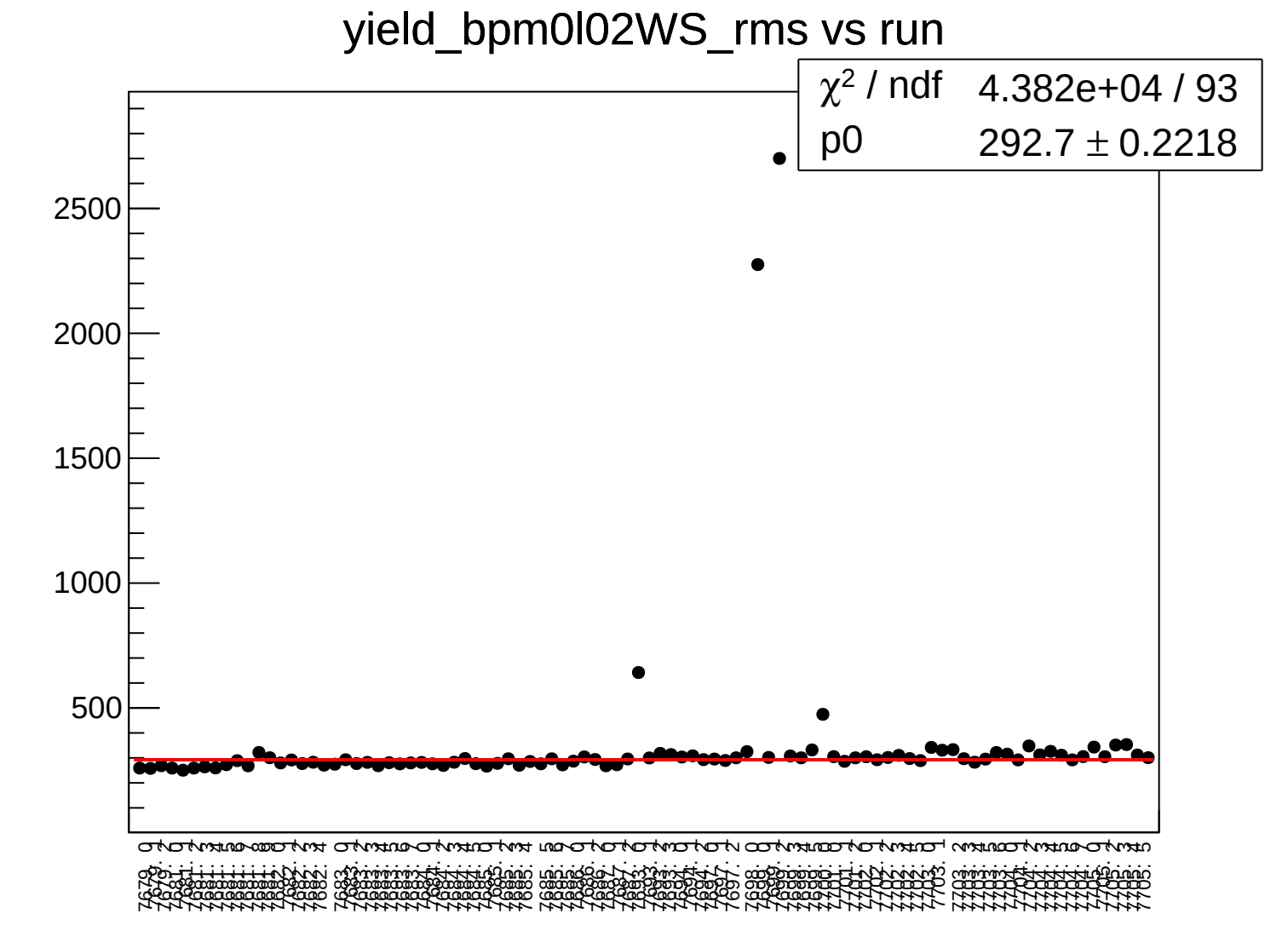

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 5.575e+06 / 93
p0 1.174e+05 ± 0.2197
118
117
116
115
114
113
pull
Entries 94
Mean −289.6
Std Dev 348.5
0
−500
−1000
−1500
−2000

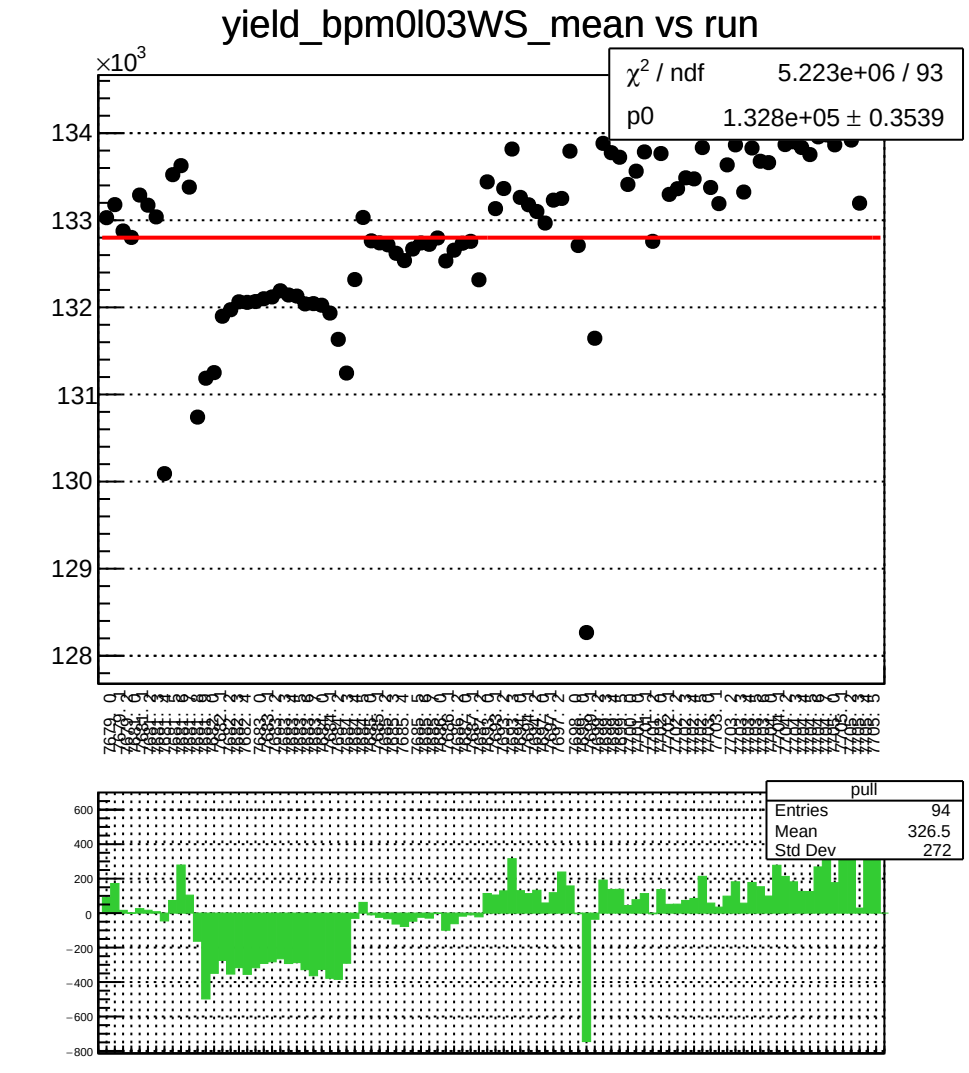

pull1D
Entries 94
Mean −0.2176
Std Dev 4.525
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

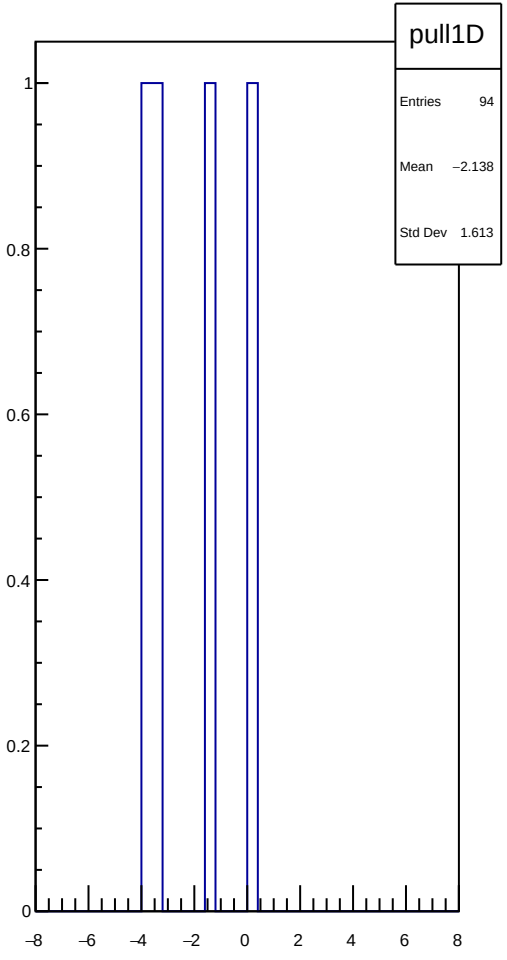

yield_bpm0l01WS_rms vs run
χ² / ndf 3.904e+04 / 93
p0 205.3 ± 0.1553
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

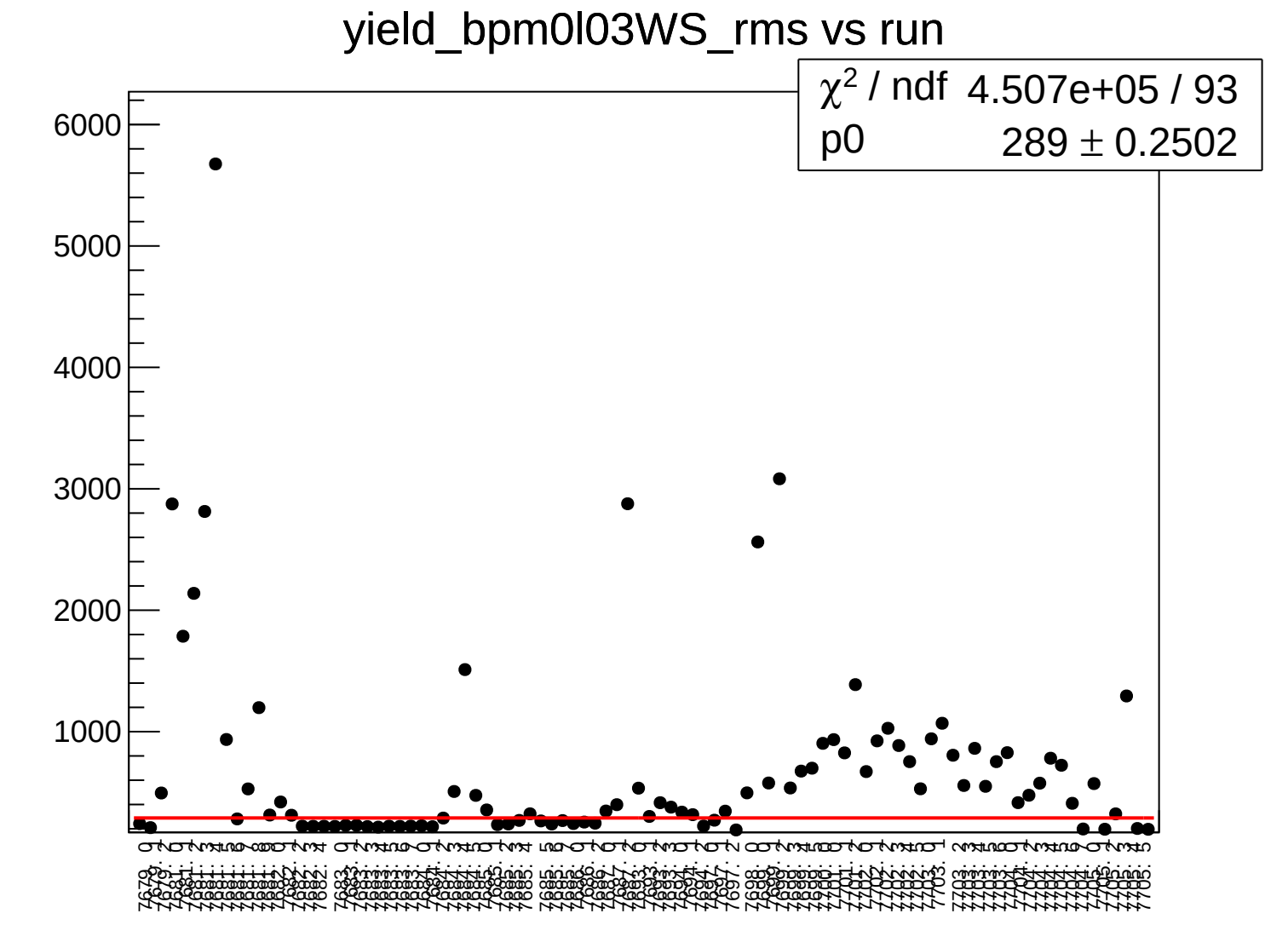

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 5.879e+06 / 93
p0 1.361e+05 ± 0.3137
137
136
135
134
133
132
131
pull
Entries 94
Mean 724.4
Std Dev 673.9
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

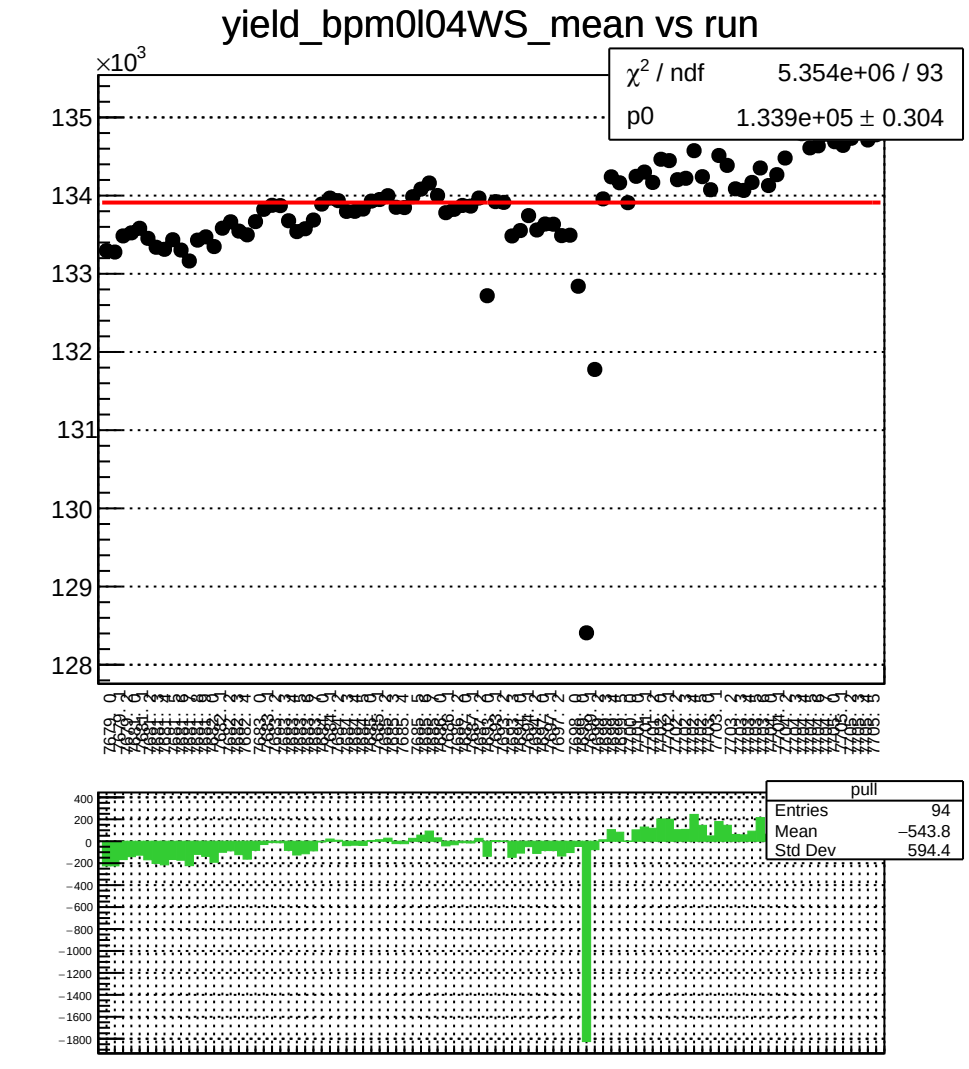

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

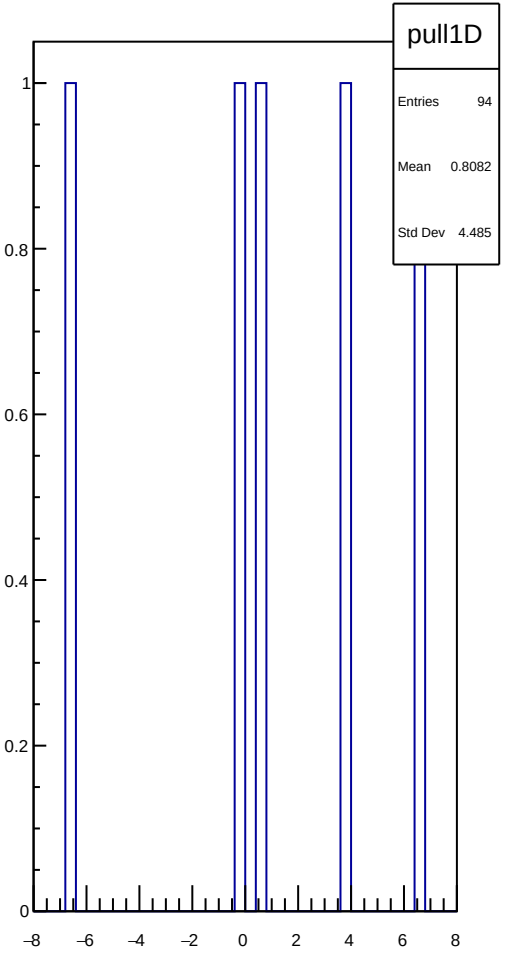

yield_bpm0l02WS_rms vs run
χ² / ndf 4.382e+04 / 93
p0 292.7 ± 0.2218
2500
2000
1500
1000
500

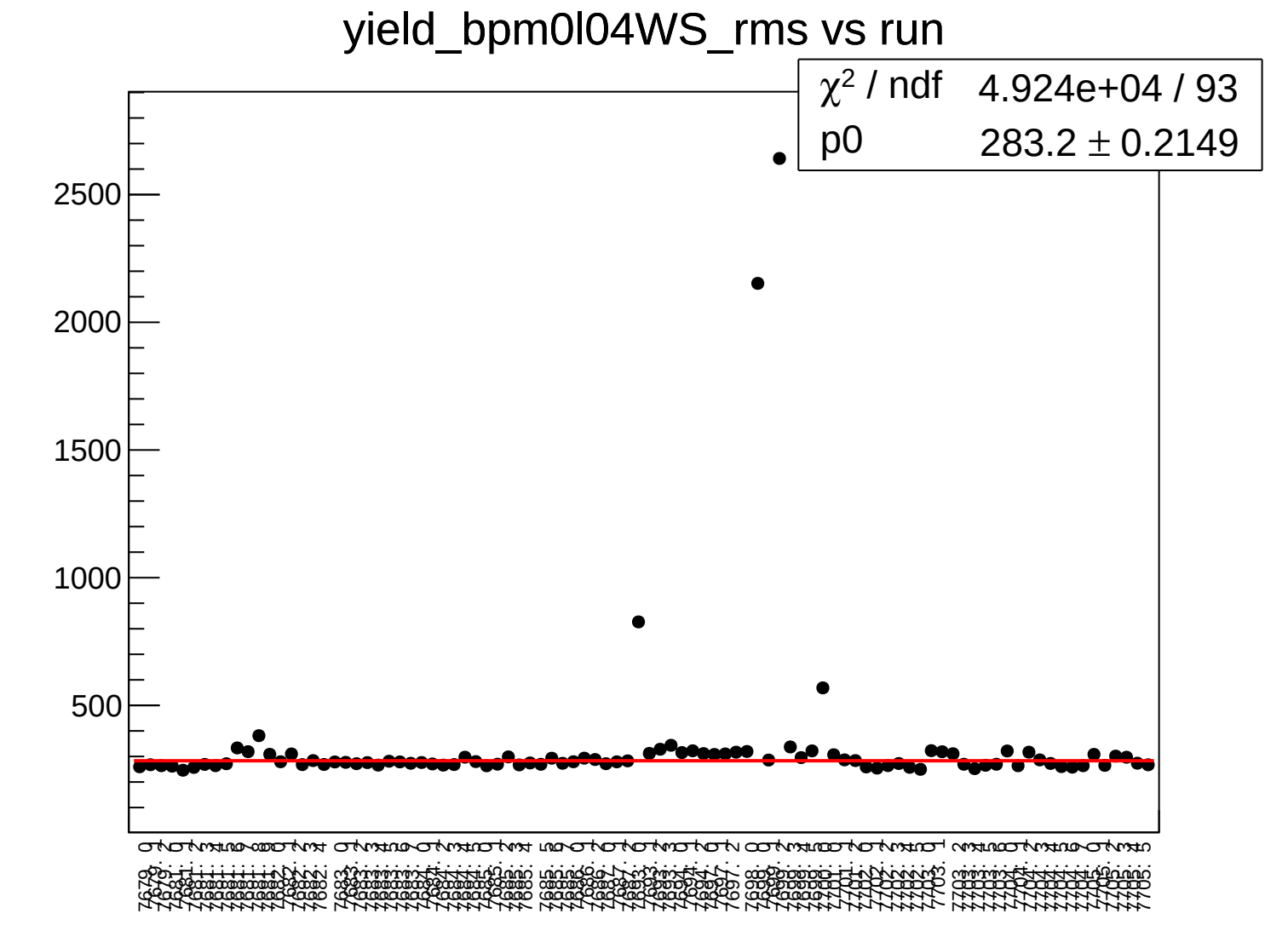

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 5.223e+06 / 93
p0 1.328e+05 ± 0.3539
134
133
132
131
130
129
128
pull
Entries 94
Mean 326.5
Std Dev 272
600
400
200
0
−200
−400
−600
−800

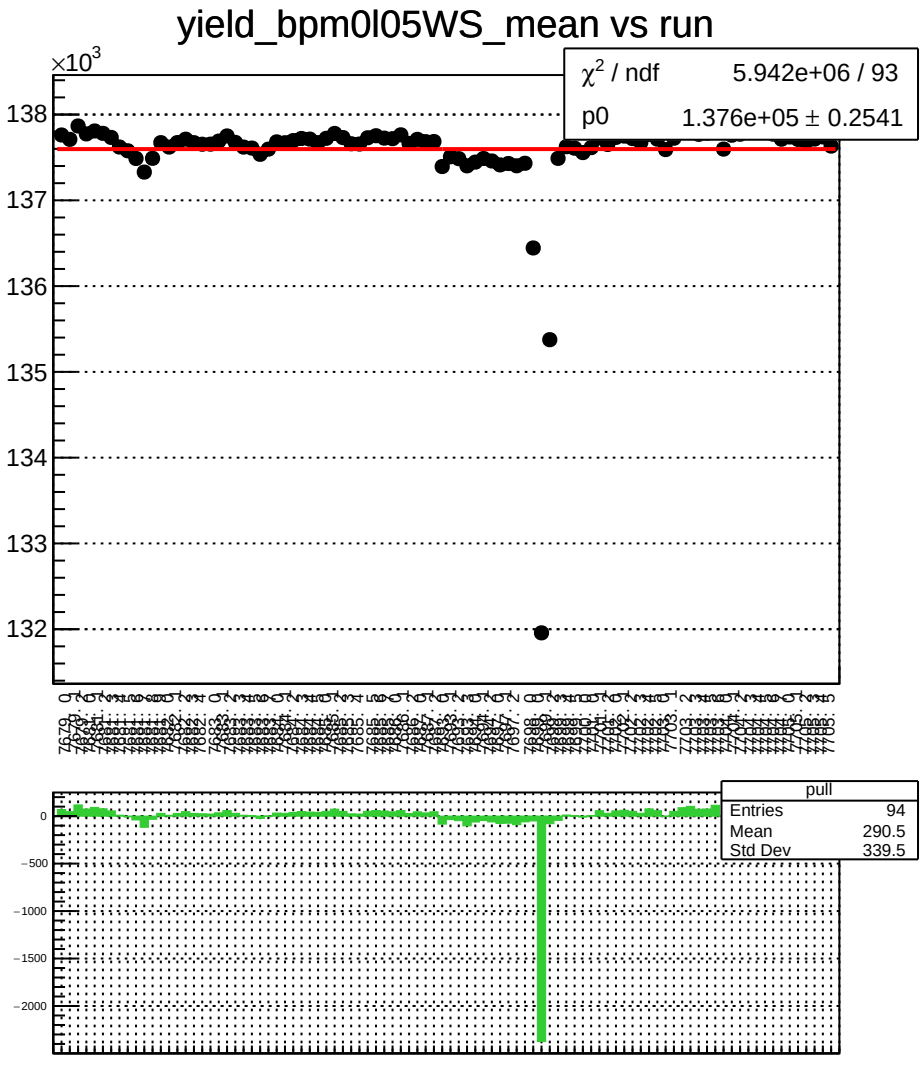

pull1D
Entries 94
Mean −2.138
Std Dev 1.613
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

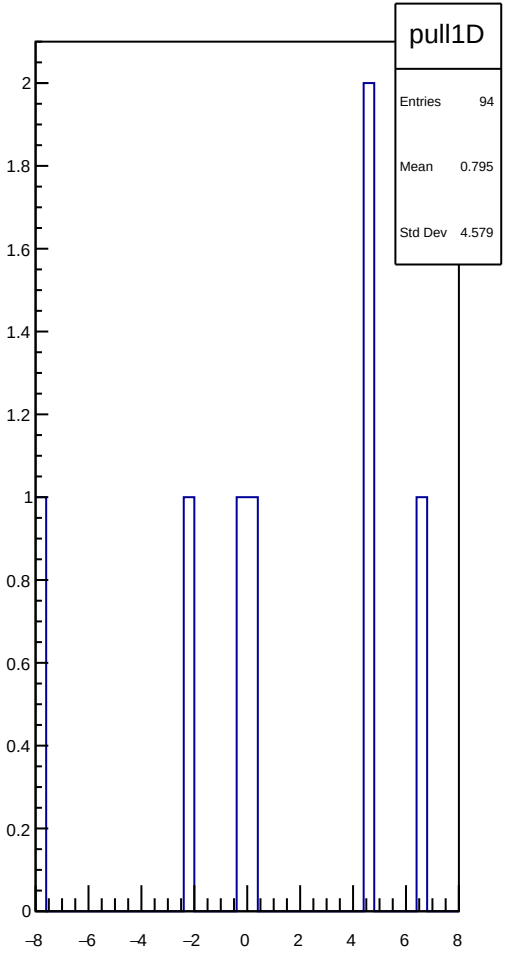

yield_bpm0l03WS_rms vs run
χ² / ndf 4.507e+05 / 93
p0 289 ± 0.2502
6000
5000
4000
3000
2000
1000

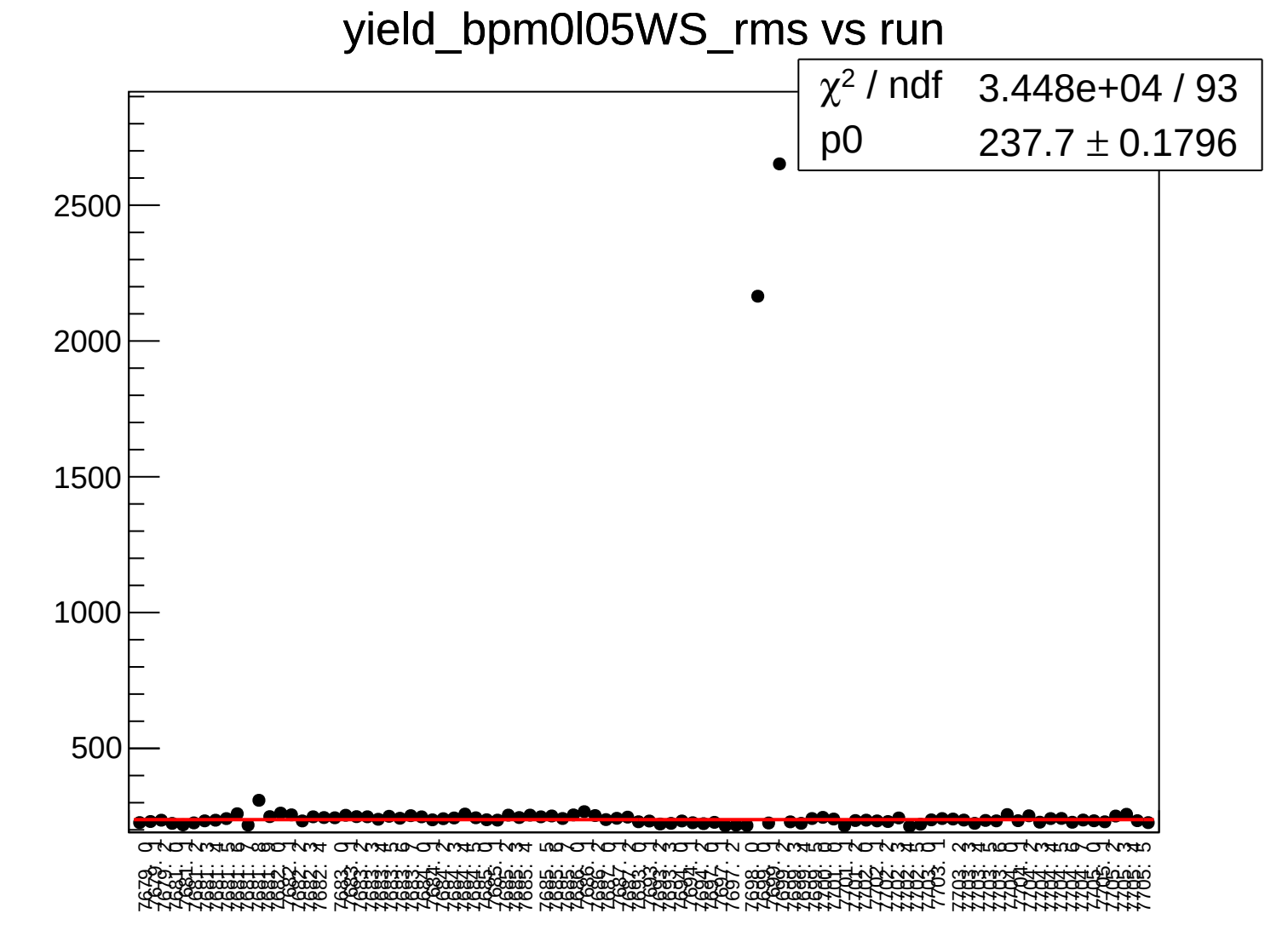

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 5.354e+06 / 93
p0 1.339e+05 ± 0.304
135
134
133
132
131
130
129
128
pull
Entries 94
Mean −543.8
Std Dev 594.4
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

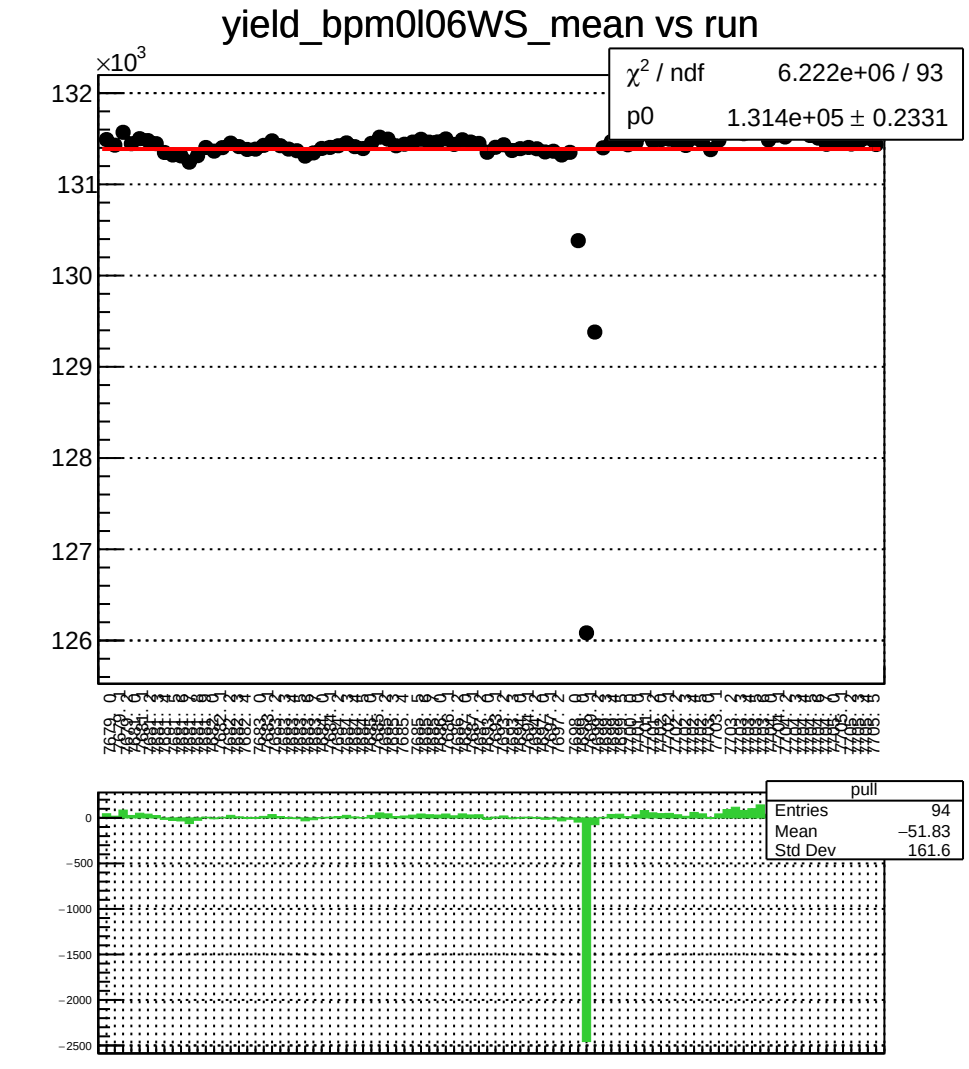

pull1D
Entries 94
Mean 0.8082
Std Dev 4.485
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

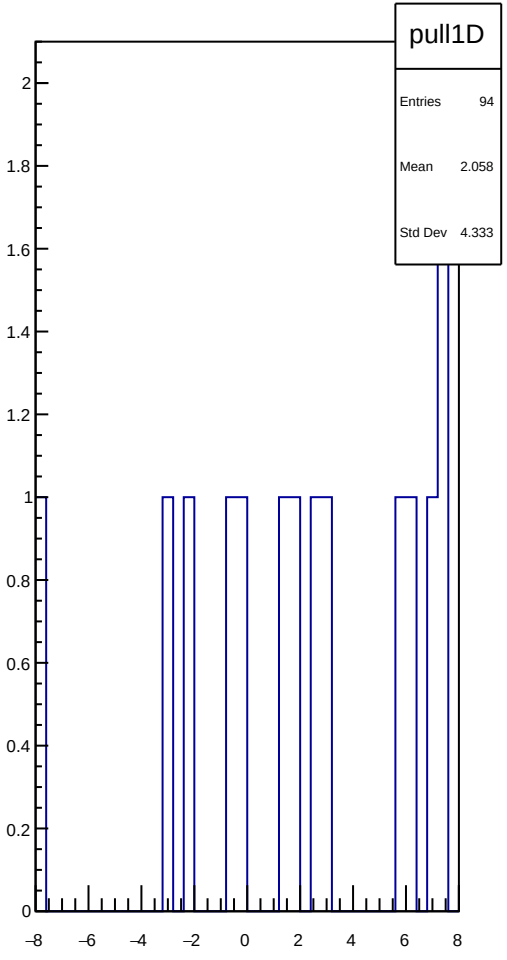

yield_bpm0l04WS_rms vs run
χ² / ndf 4.924e+04 / 93
p0 283.2 ± 0.2149
2500
2000
1500
1000
500

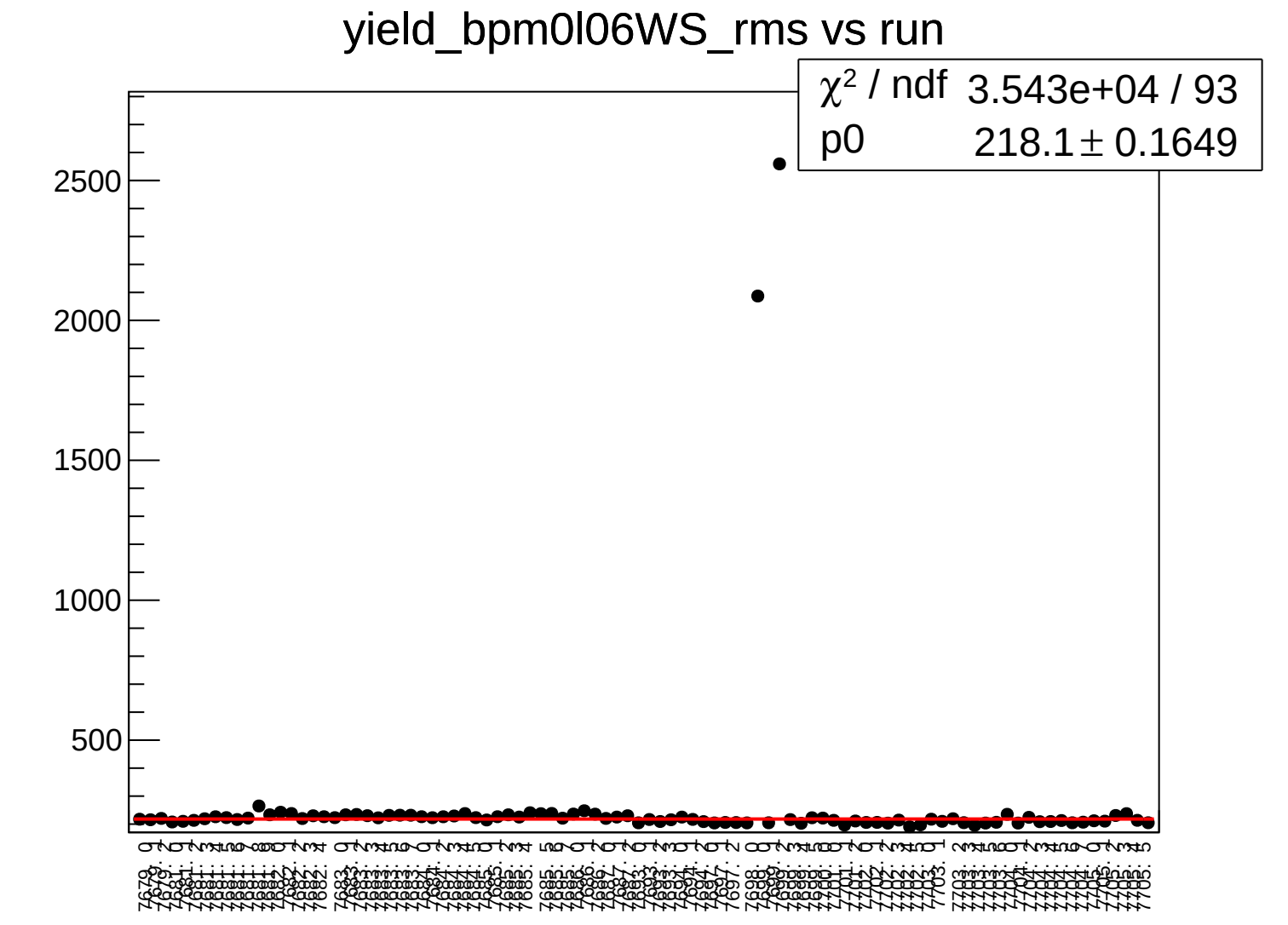

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 5.942e+06 / 93
p0 1.376e+05 ± 0.2541
138
137
136
135
134
133
132
pull
Entries 94
Mean 290.5
Std Dev 339.5
0
−500
−1000
−1500
−2000

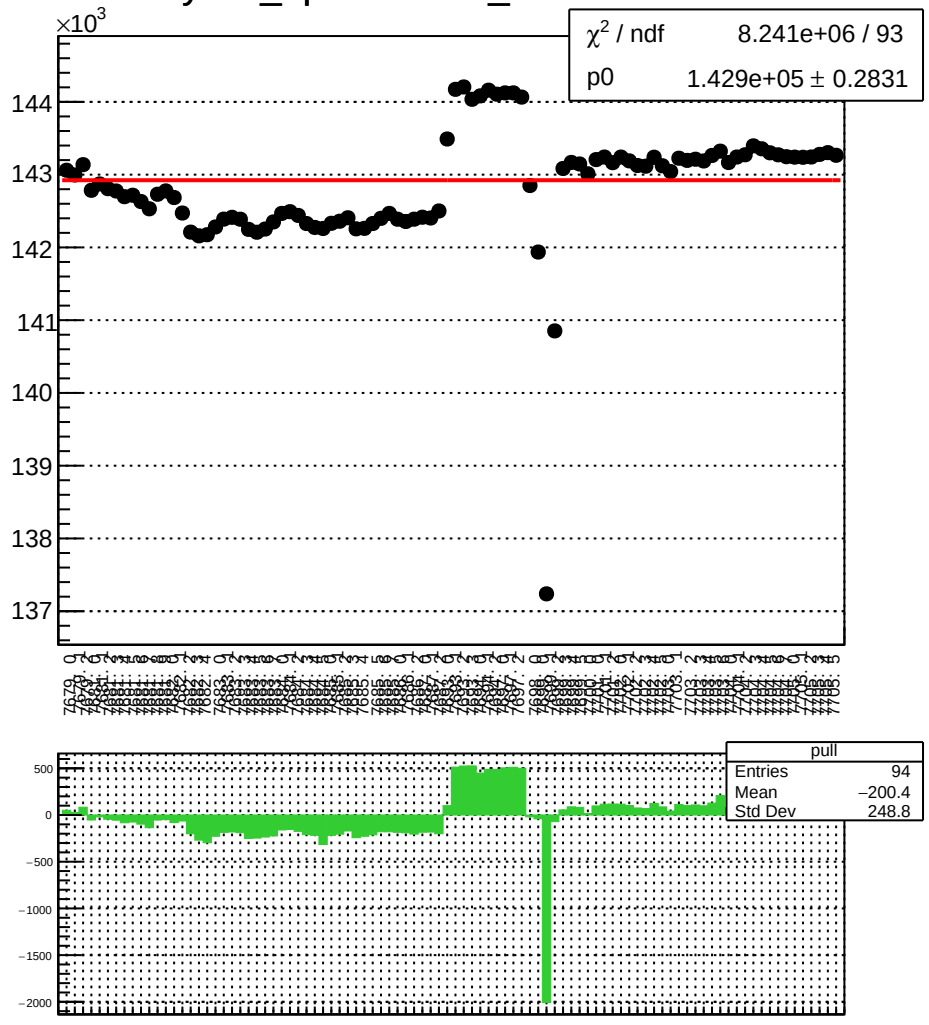

pull1D
Entries 94
Mean 0.795
Std Dev 4.579
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

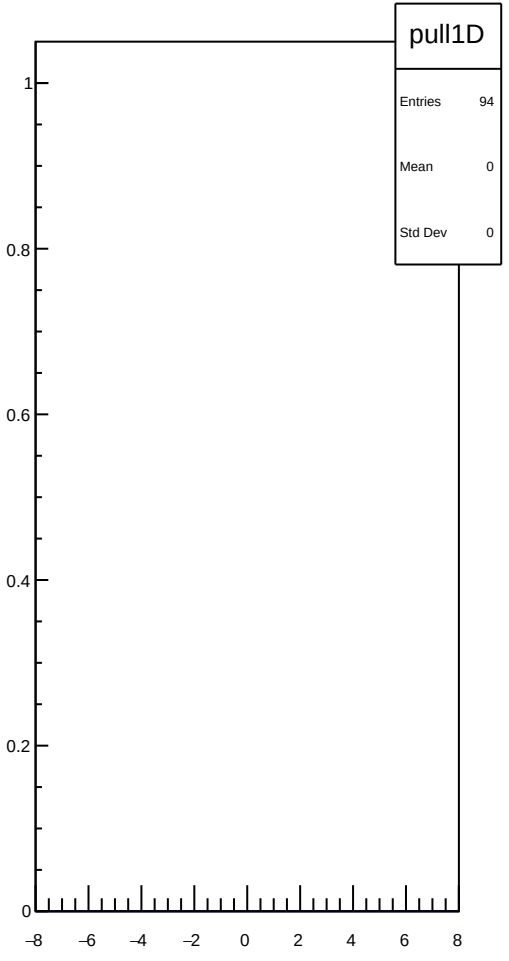

yield_bpm0l05WS_rms vs run
χ² / ndf 3.448e+04 / 93
p0 237.7 ± 0.1796
2500
2000
1500
1000
500

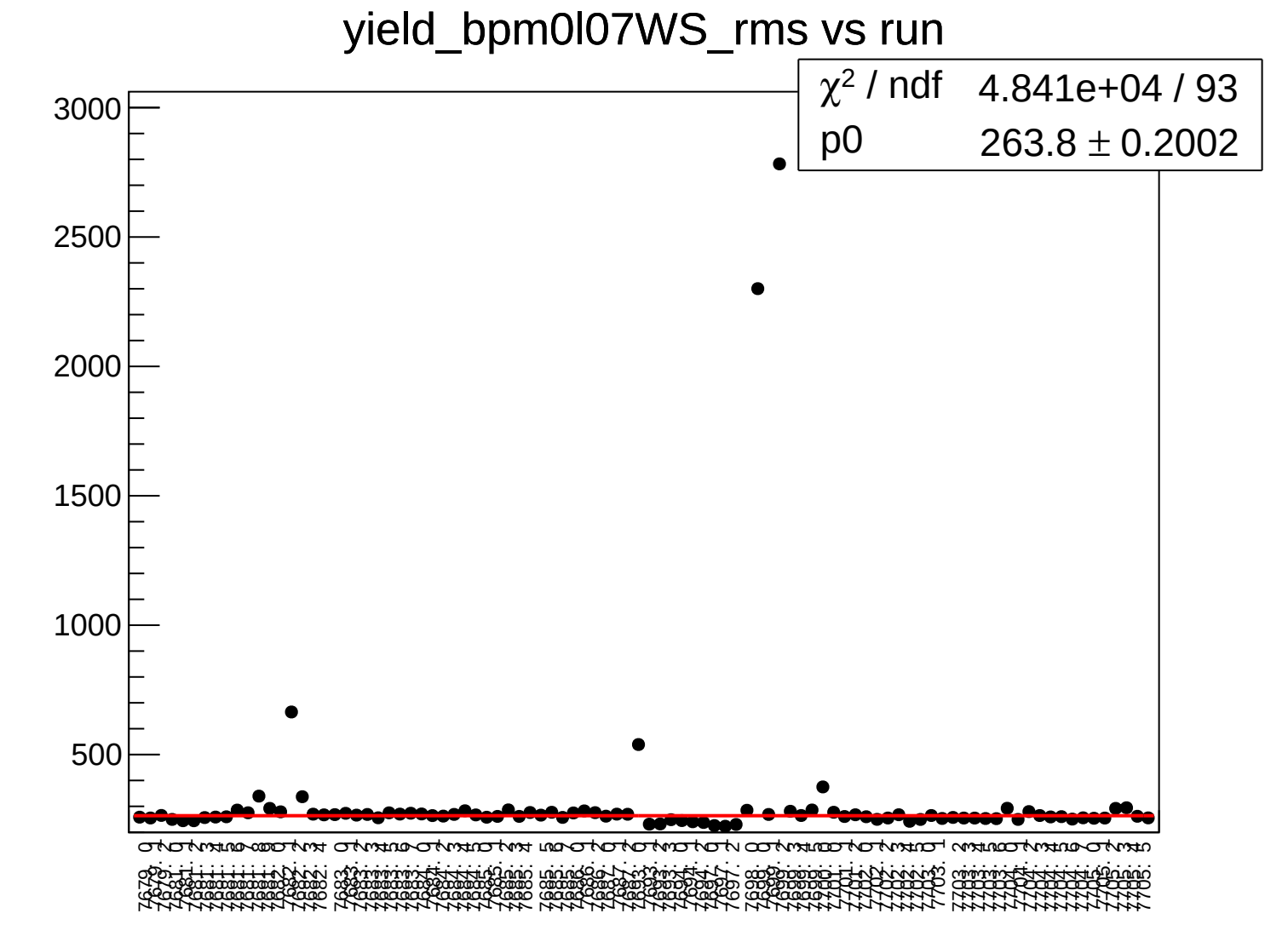

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 6.222e+06 / 93
p0 1.314e+05 ± 0.2331
132
131
130
129
128
127
126
pull
Entries 94
Mean −51.83
Std Dev 161.6
0
−500
−1000
−1500
−2000
−2500

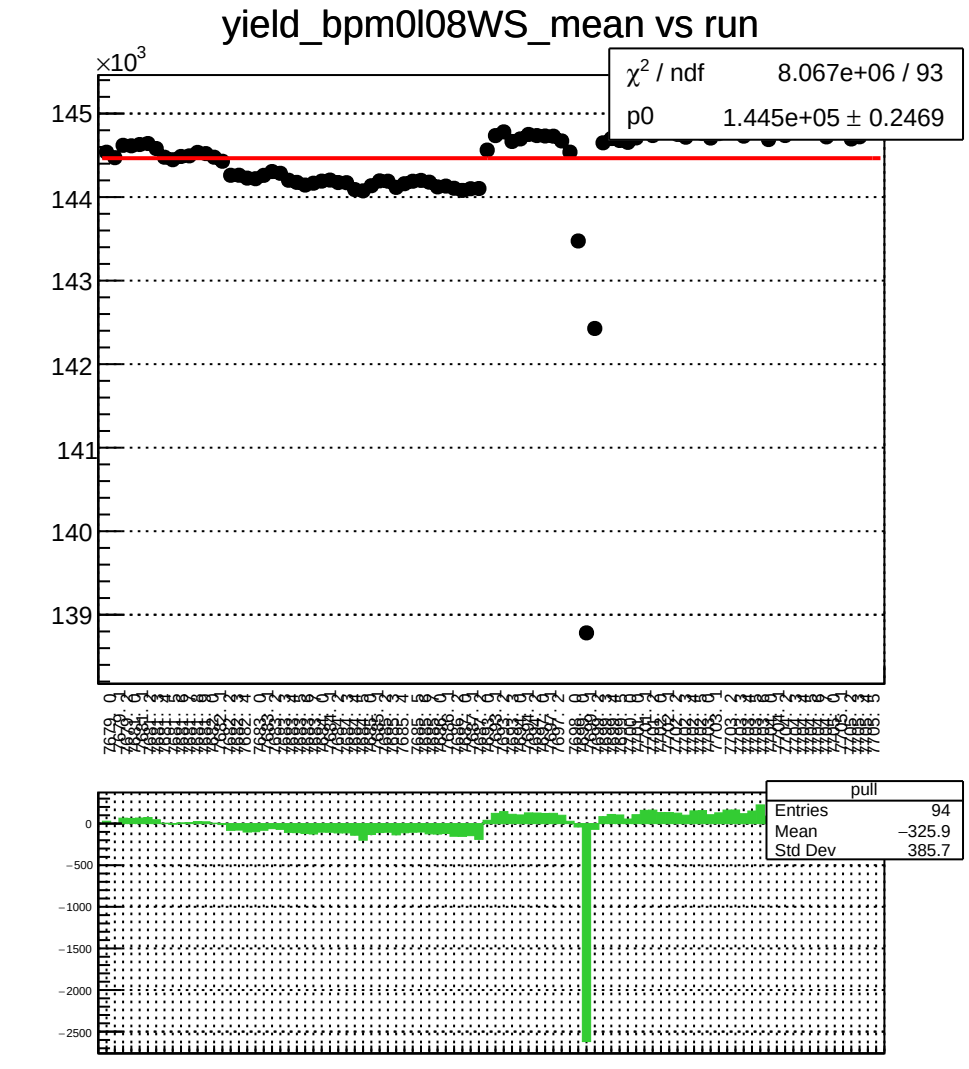

pull1D
Entries 94
Mean 2.058
Std Dev 4.333
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

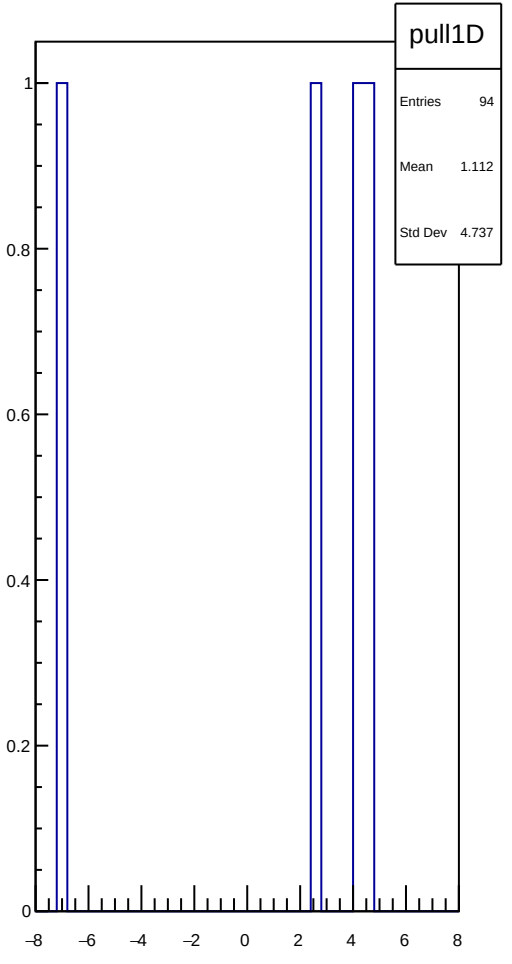

yield_bpm0l06WS_rms vs run
χ² / ndf 3.543e+04 / 93
p0 218.1 ± 0.1649
2500
2000
1500
1000
500

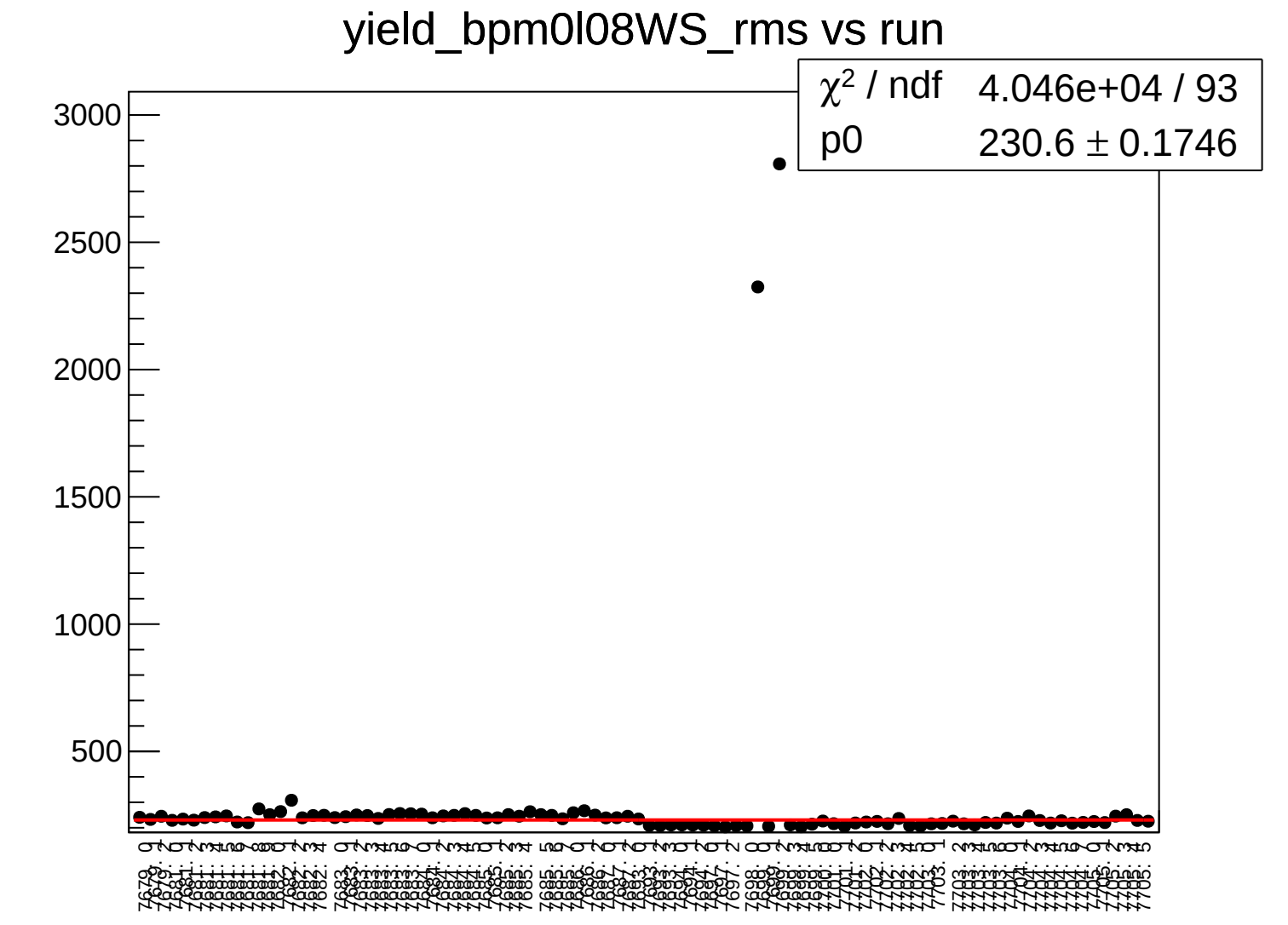

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 8.241e+06 / 93
p0 1.429e+05 ± 0.2831
144
143
142
141
140
139
138
137
pull
Entries 94
Mean −200.4
Std Dev 248.8
500
0
−500
−1000
−1500
−2000

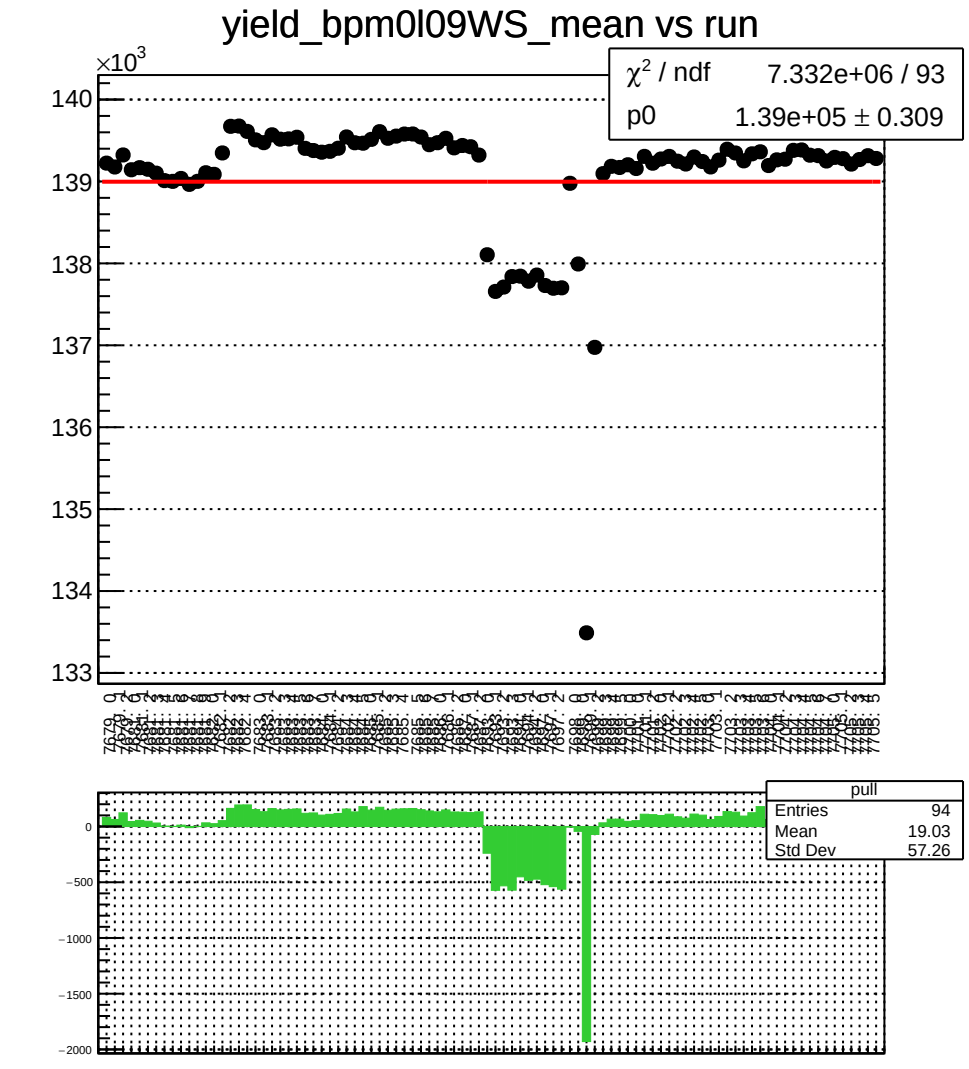

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

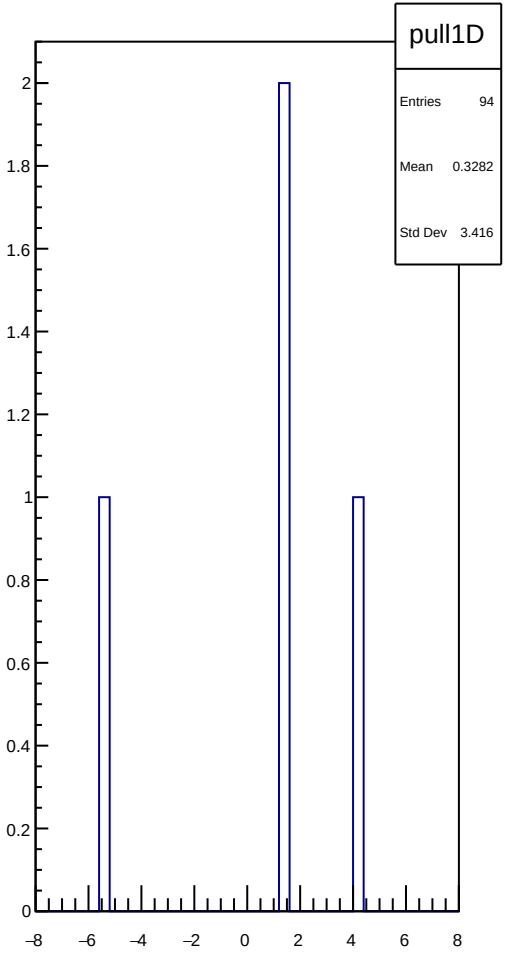

yield_bpm0l07WS_rms vs run
χ² / ndf 4.841e+04 / 93
p0 263.8 ± 0.2002
3000
2500
2000
1500
1000
500

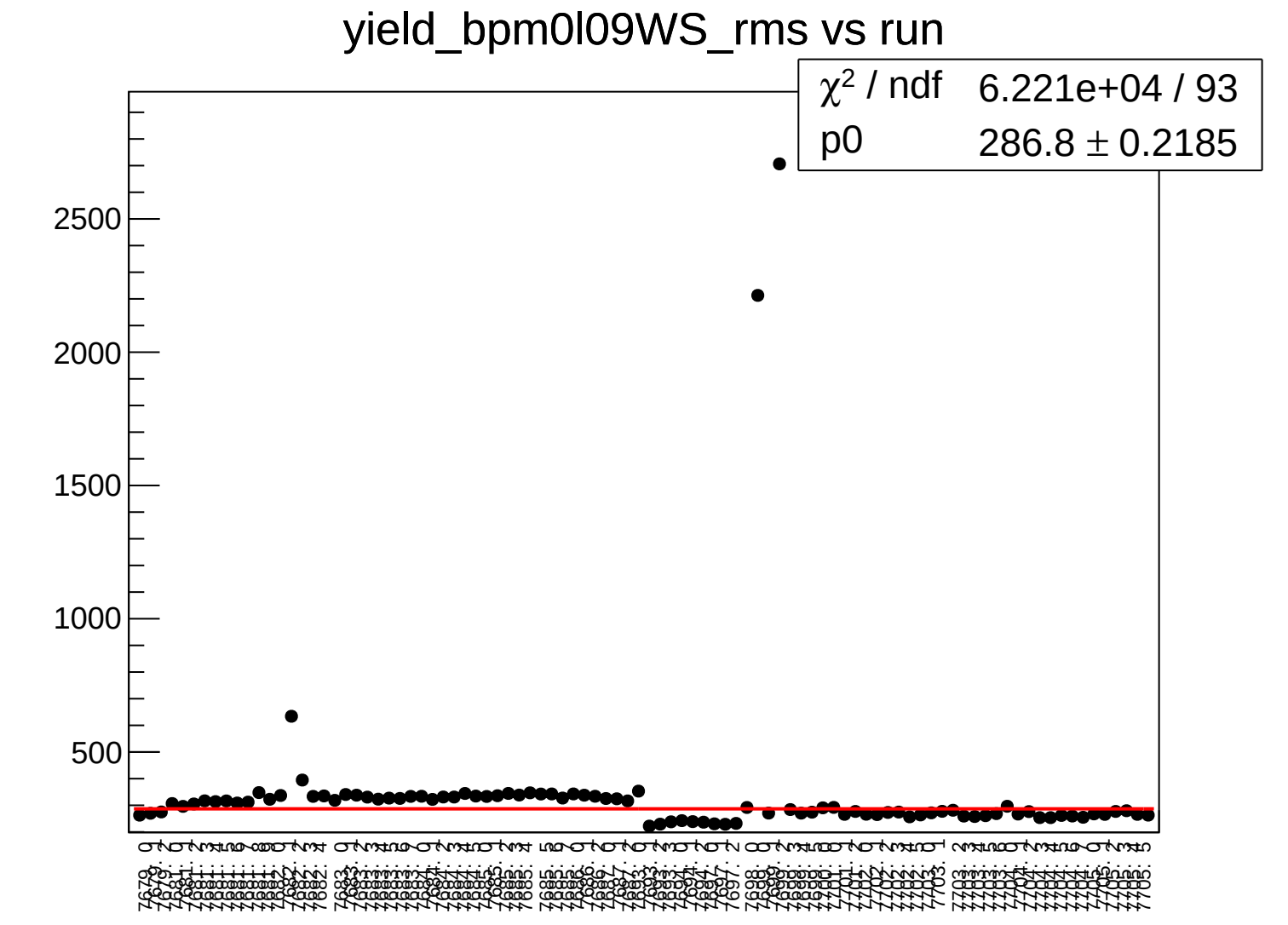

yield_bpm0l08WS_mean vs run
×10^3
145
144
143
142
141
140
139
χ² / ndf 8.067e+06 / 93
p0 1.445e+05 ± 0.2469
pull
Entries 94
Mean −325.9
Std Dev 385.7
0
−500
−1000
−1500
−2000
−2500

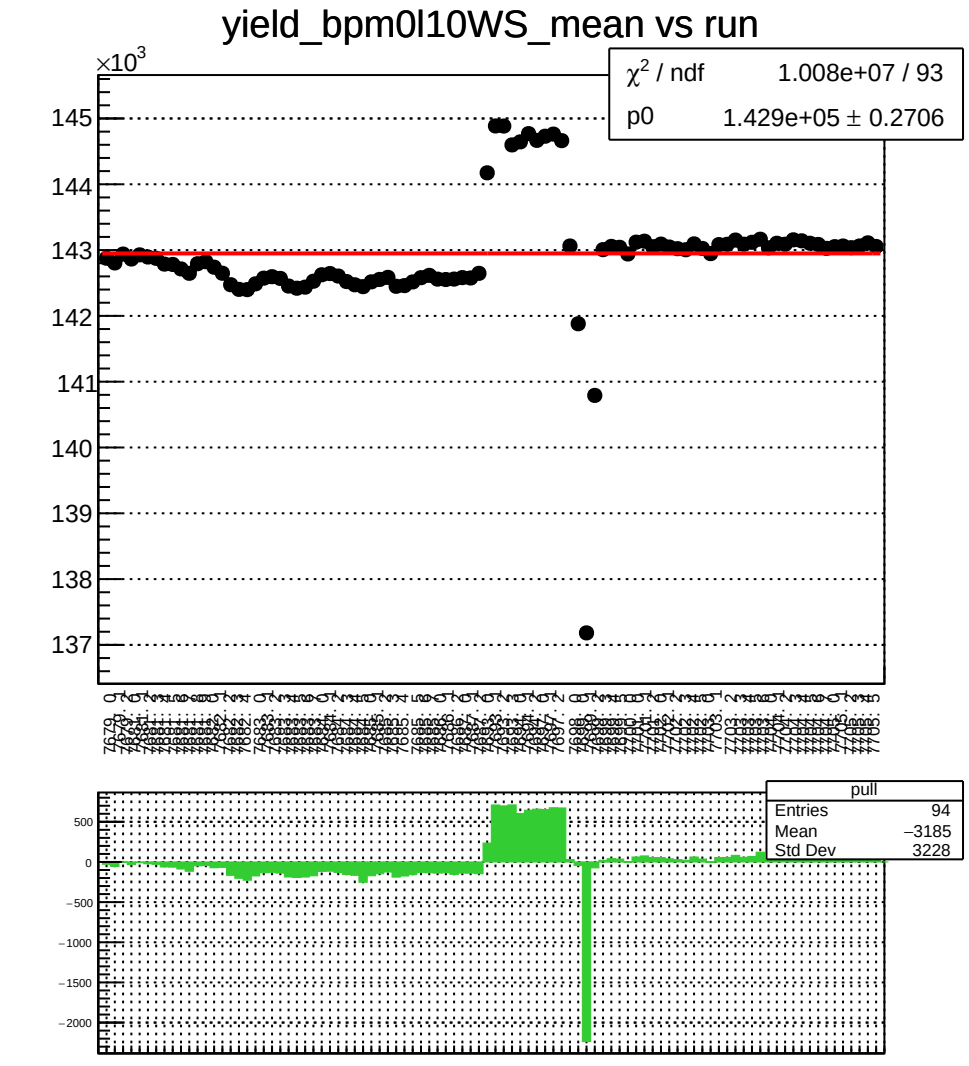

pull1D
Entries 94
Mean 1.112
Std Dev 4.737
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

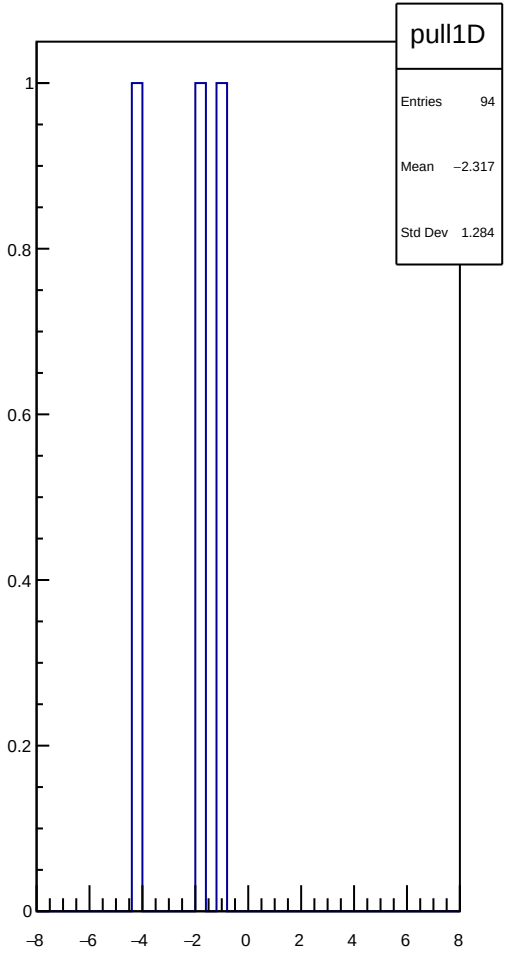

yield_bpm0l08WS_rms vs run
χ² / ndf 4.046e+04 / 93
p0 230.6 ± 0.1746
3000
2500
2000
1500
1000
500

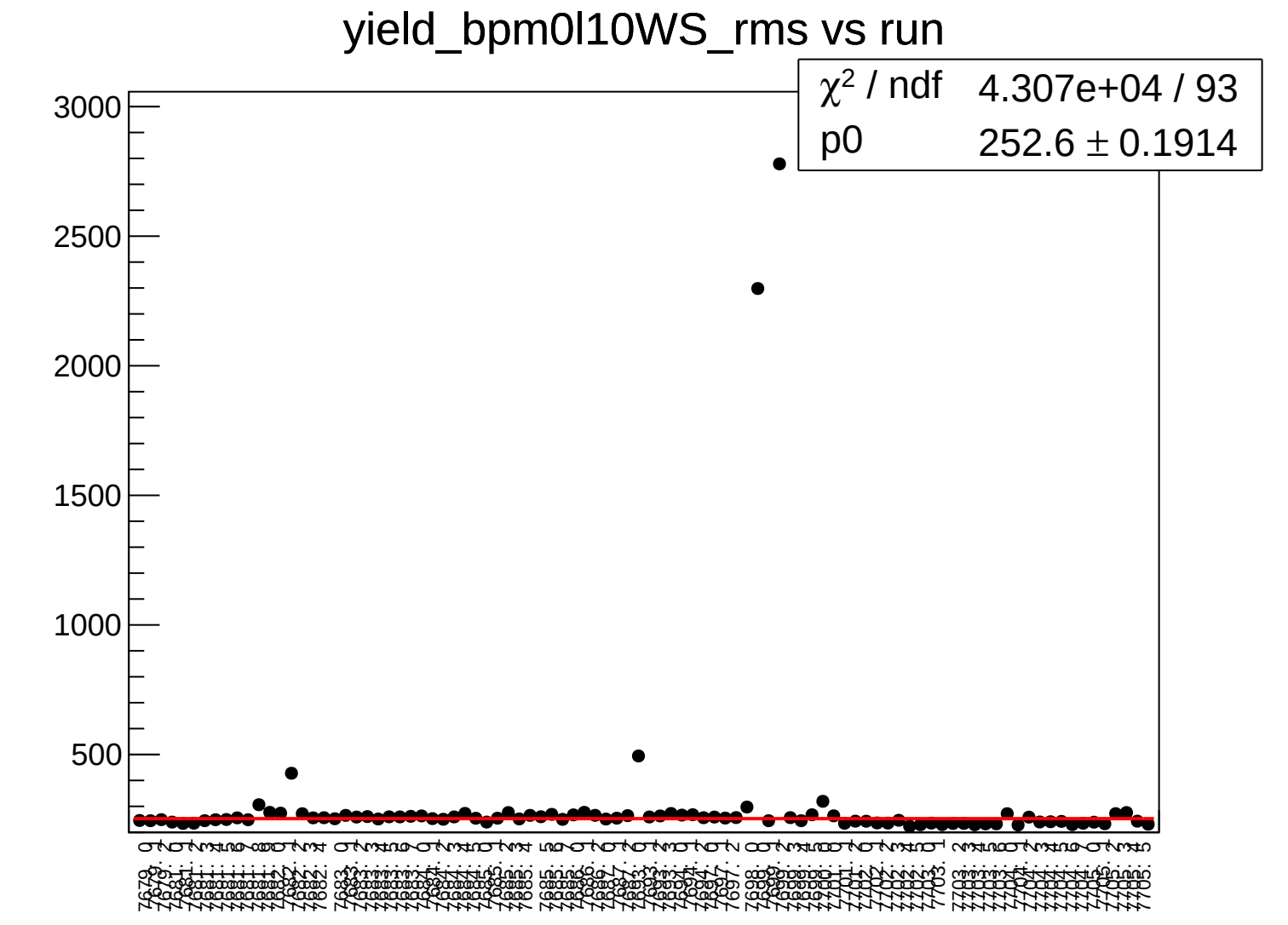

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 7.332e+06 / 93
p0 1.39e+05 ± 0.309
140
139
138
137
136
135
134
133
pull
Entries 94
Mean 19.03
Std Dev 57.26
0
−500
−1000
−1500
−2000

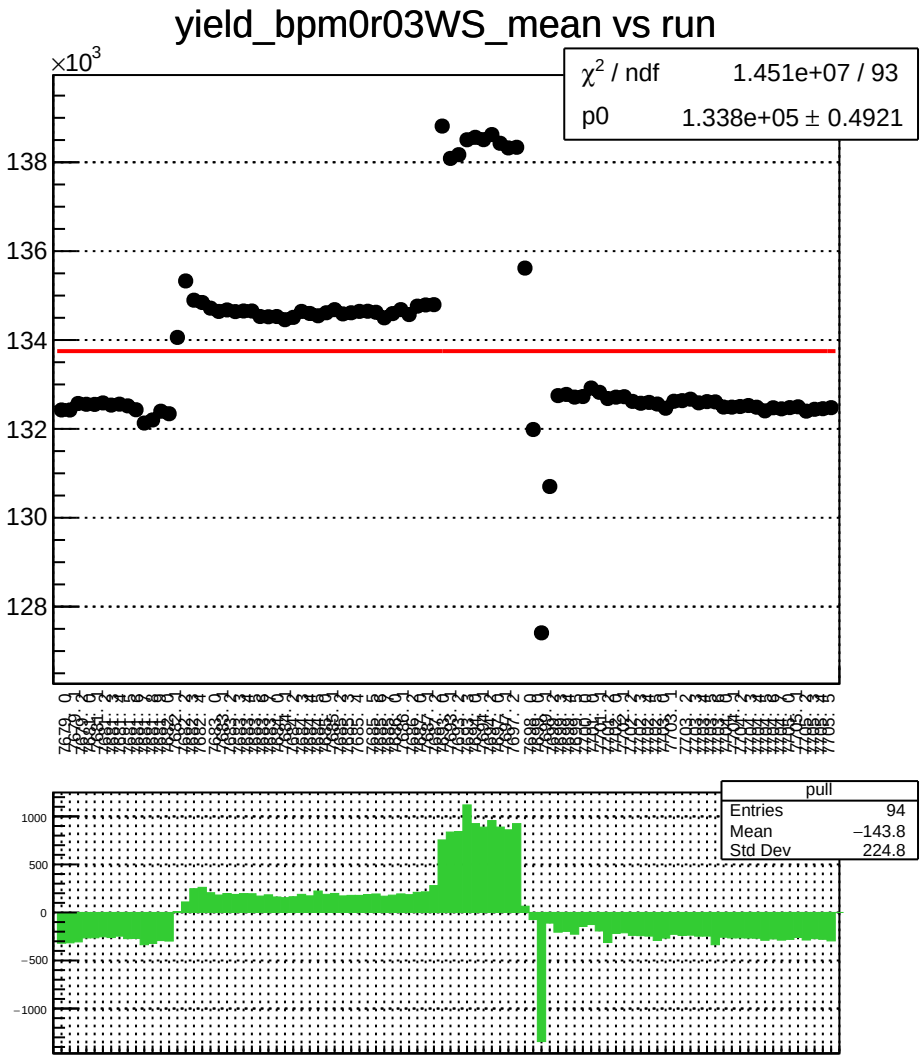

pull1D
Entries 94
Mean 0.3282
Std Dev 3.416
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

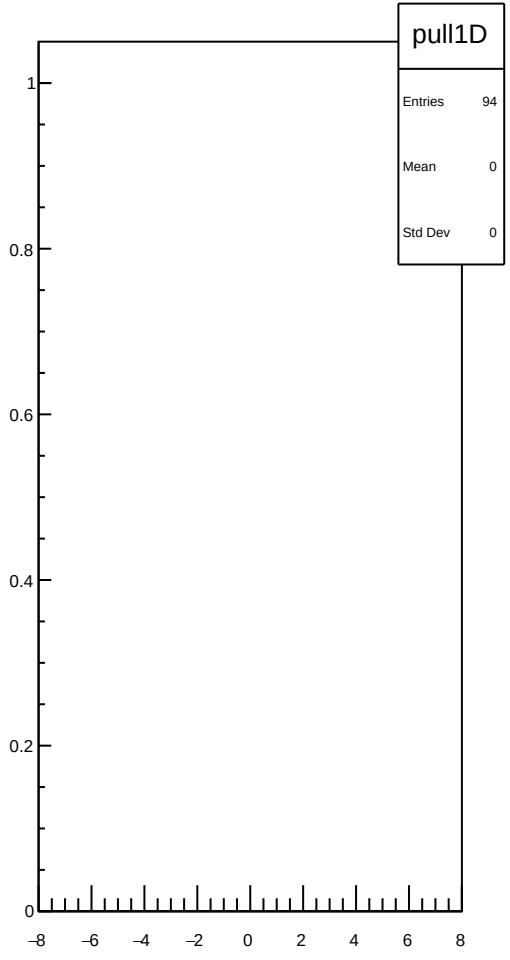

yield_bpm0l09WS_rms vs run
χ² / ndf 6.221e+04 / 93
p0 286.8 ± 0.2185
2500
2000
1500
1000
500

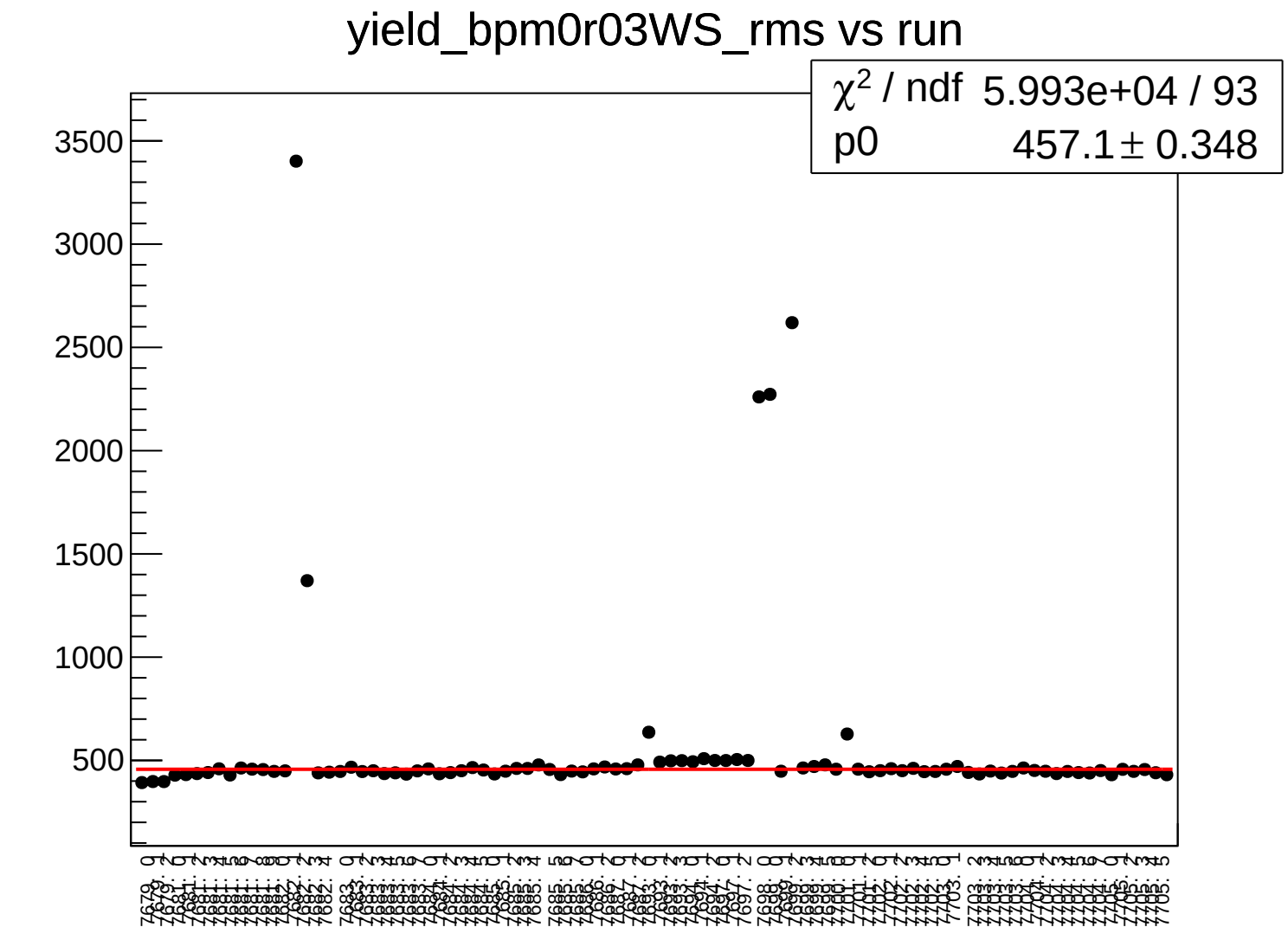

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 1.008e+07 / 93
p0 1.429e+05 ± 0.2706
145
144
143
142
141
140
139
138
137
pull
Entries 94
Mean −3185
Std Dev 3228
500
0
−500
−1000
−1500
−2000

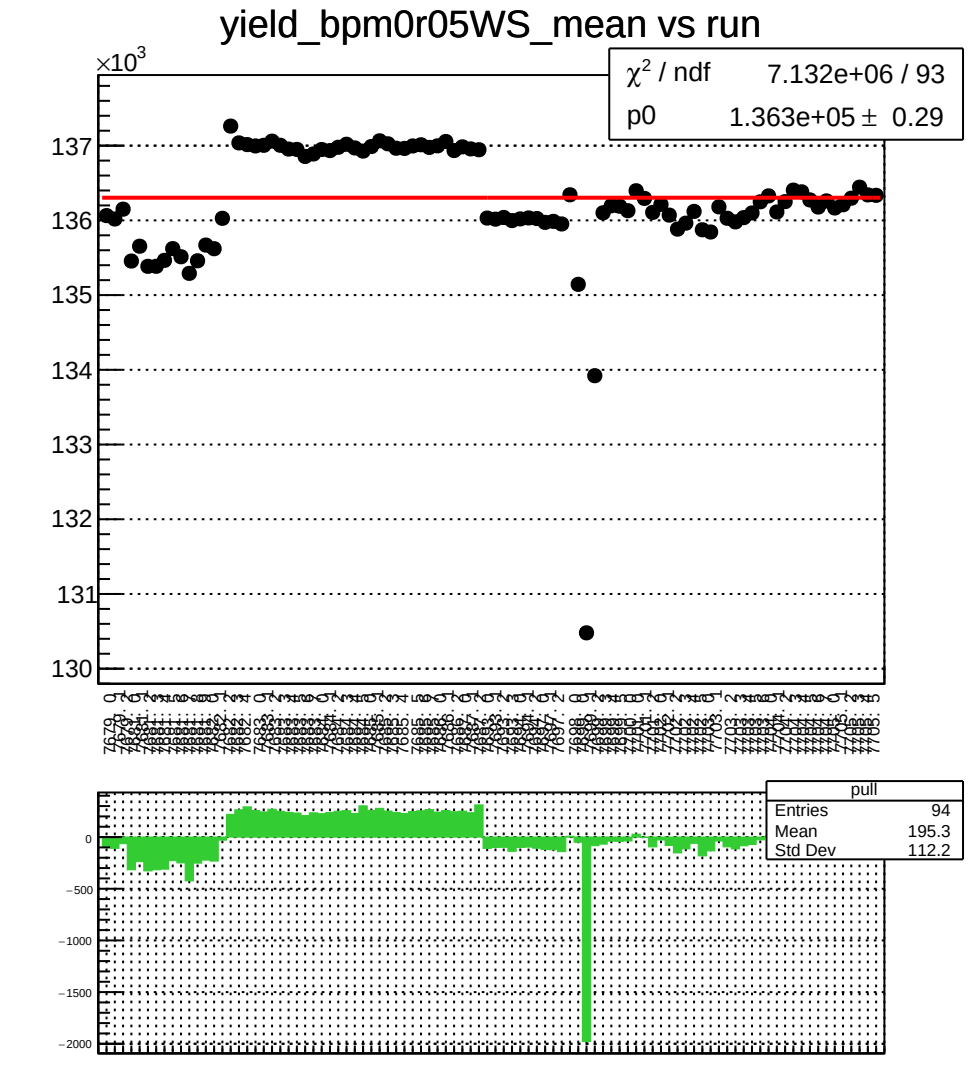

pull1D
Entries 94
Mean −2.317
Std Dev 1.284
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

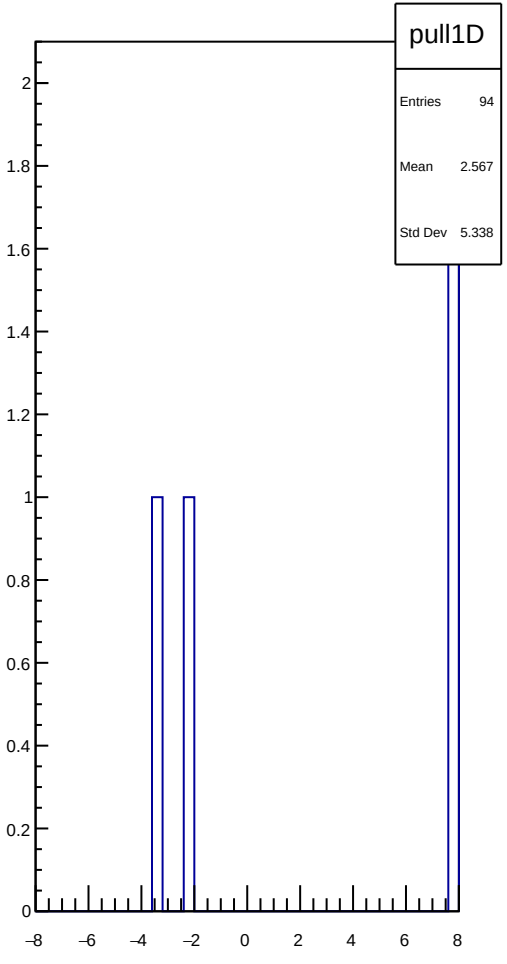

yield_bpm0l10WS_rms vs run
χ² / ndf 4.307e+04 / 93
p0 252.6 ± 0.1914
3000
2500
2000
1500
1000
500

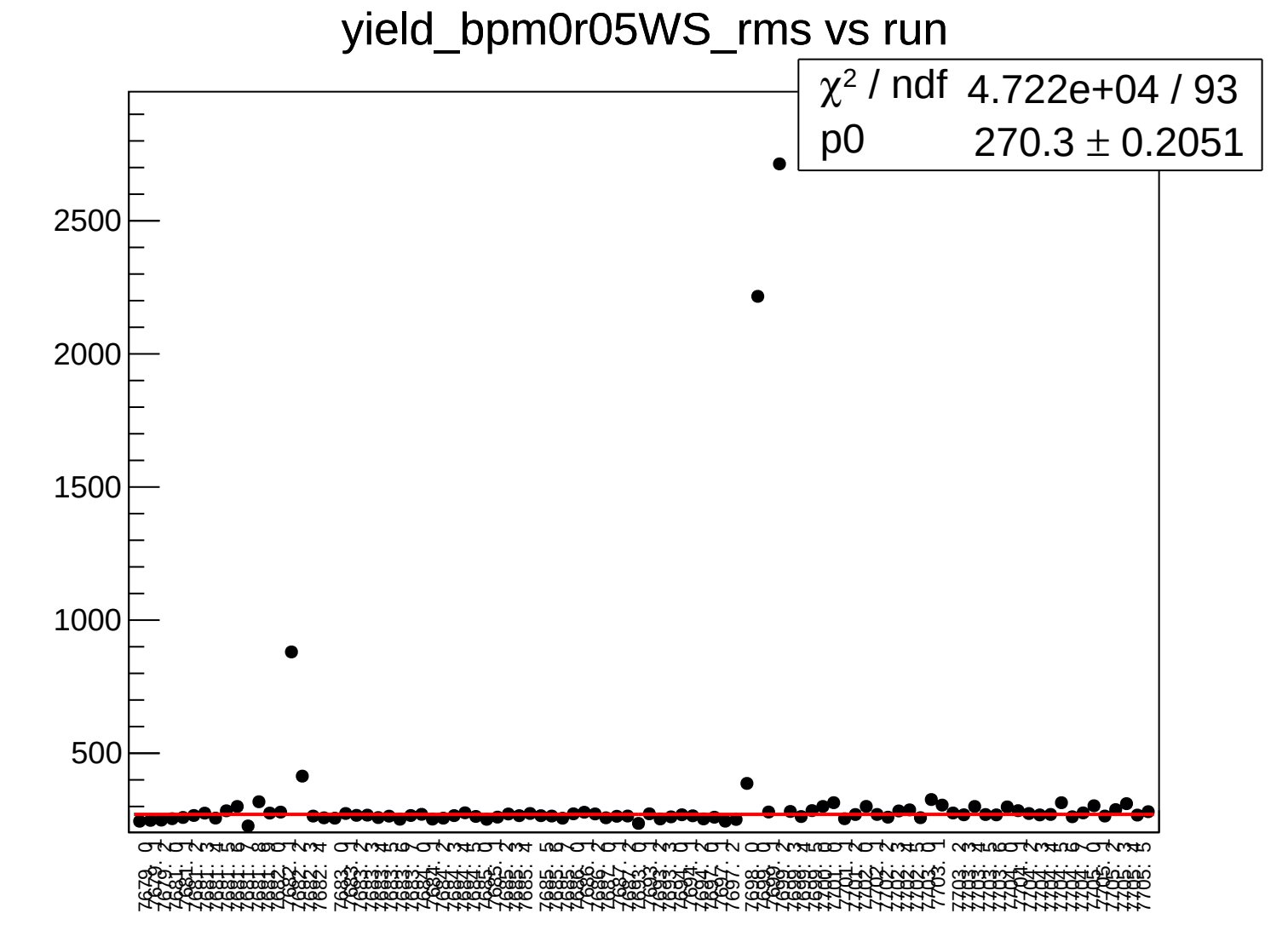

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 1.451e+07 / 93
p0 1.338e+05 ± 0.4921
138
136
134
132
130
128
pull
Entries 94
Mean −143.8
Std Dev 224.8
1000
500
0
−500
−1000

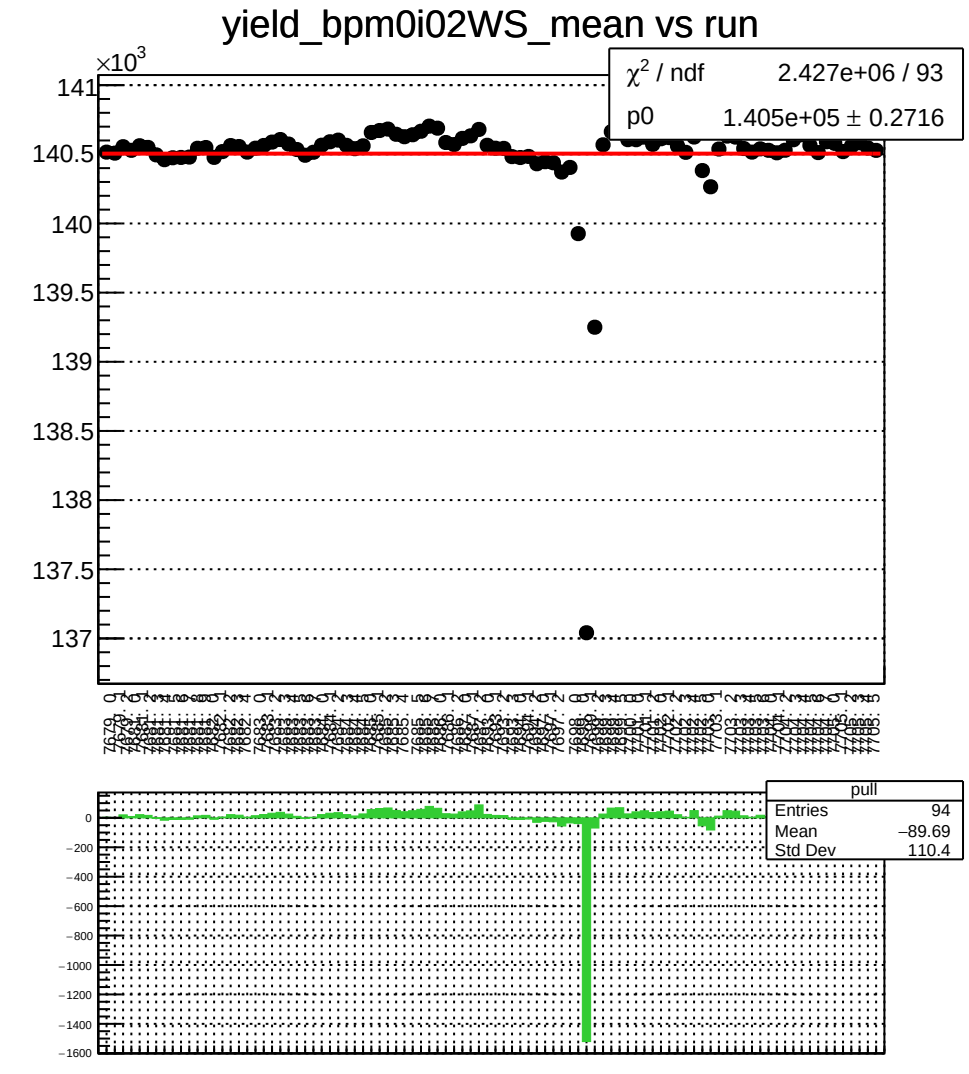

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

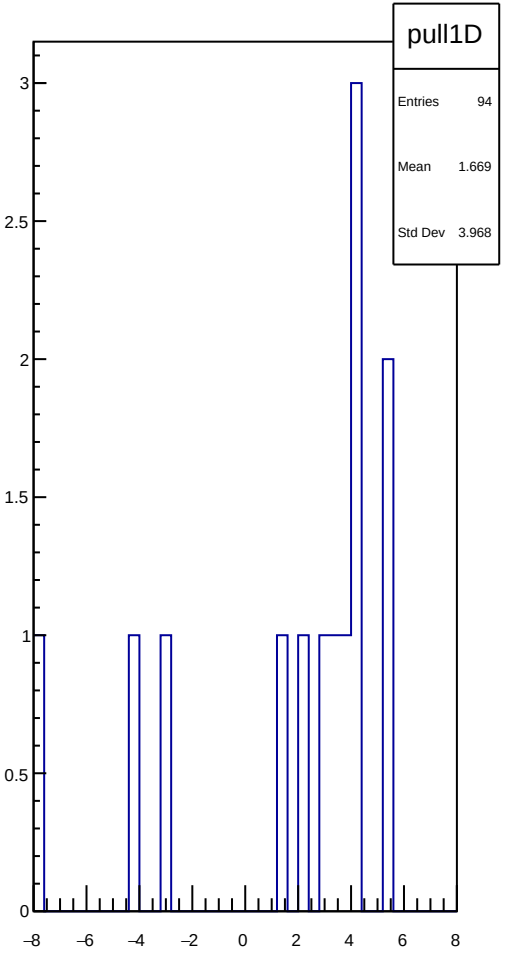

yield_bpm0r03WS_rms vs run
χ² / ndf 5.993e+04 / 93
p0 457.1 ± 0.348
3500
3000
2500
2000
1500
1000
500

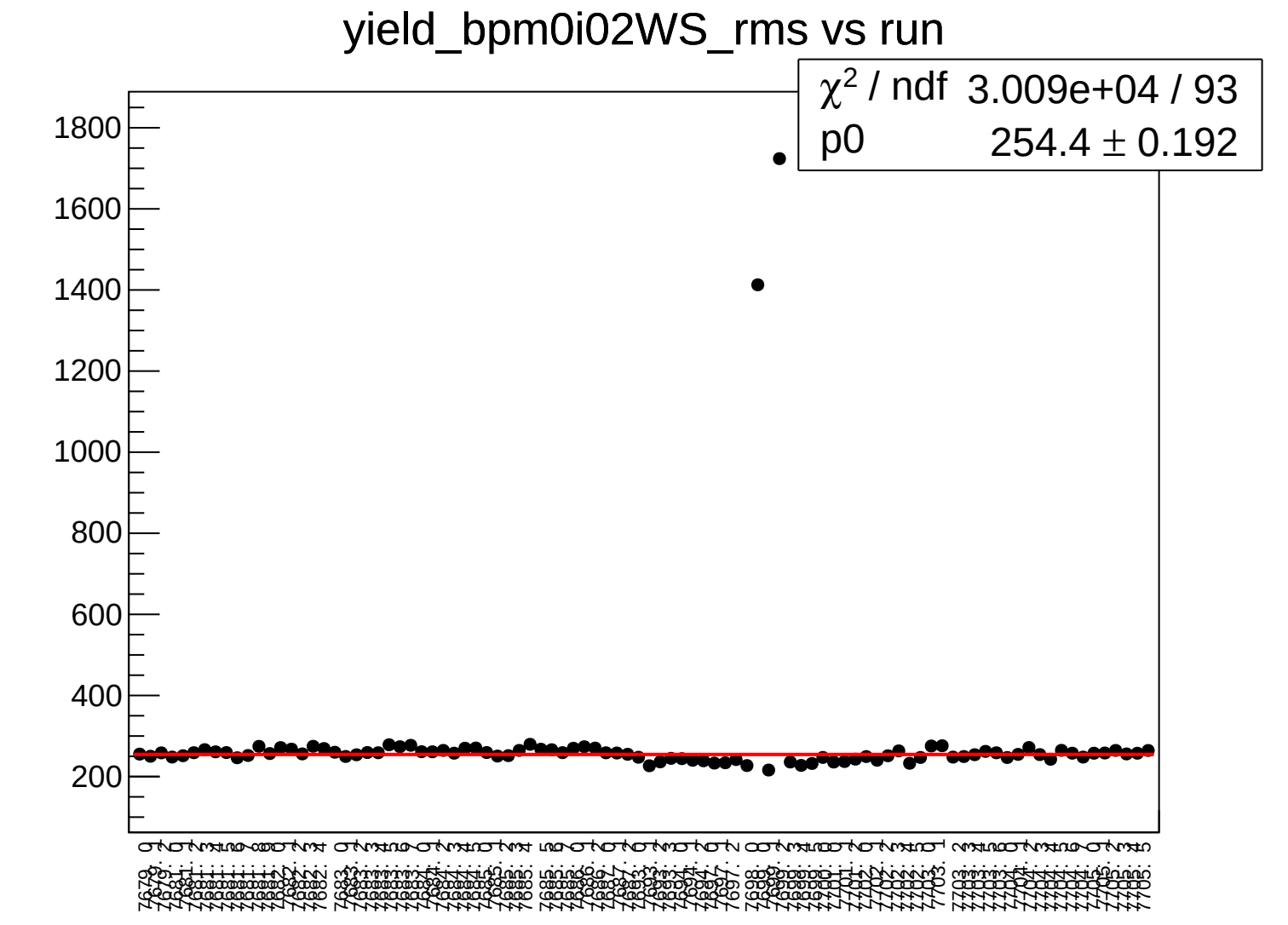

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 7.132e+06 / 93
p0 1.363e+05 ± 0.29
137
136
135
134
133
132
131
130
pull
Entries 94
Mean 195.3
Std Dev 112.2
0
−500
−1000
−1500
−2000

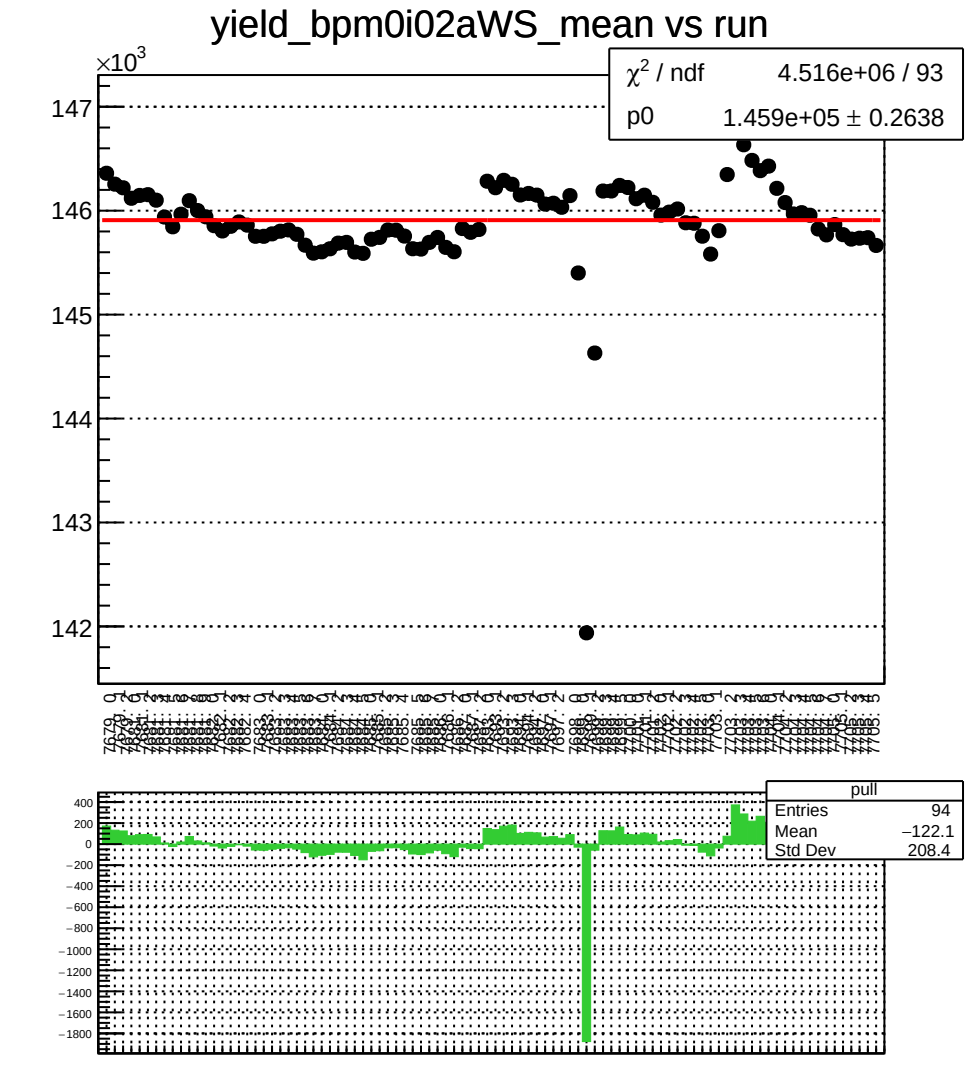

pull1D
Entries 94
Mean 2.567
Std Dev 5.338
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

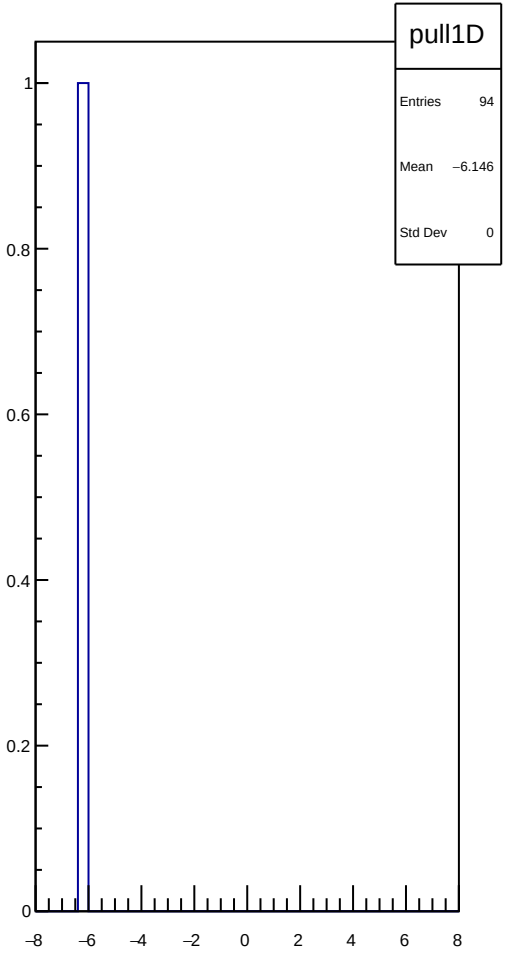

yield_bpm0r05WS_rms vs run
χ² / ndf 4.722e+04 / 93
p0 270.3 ± 0.2051
2500
2000
1500
1000
500

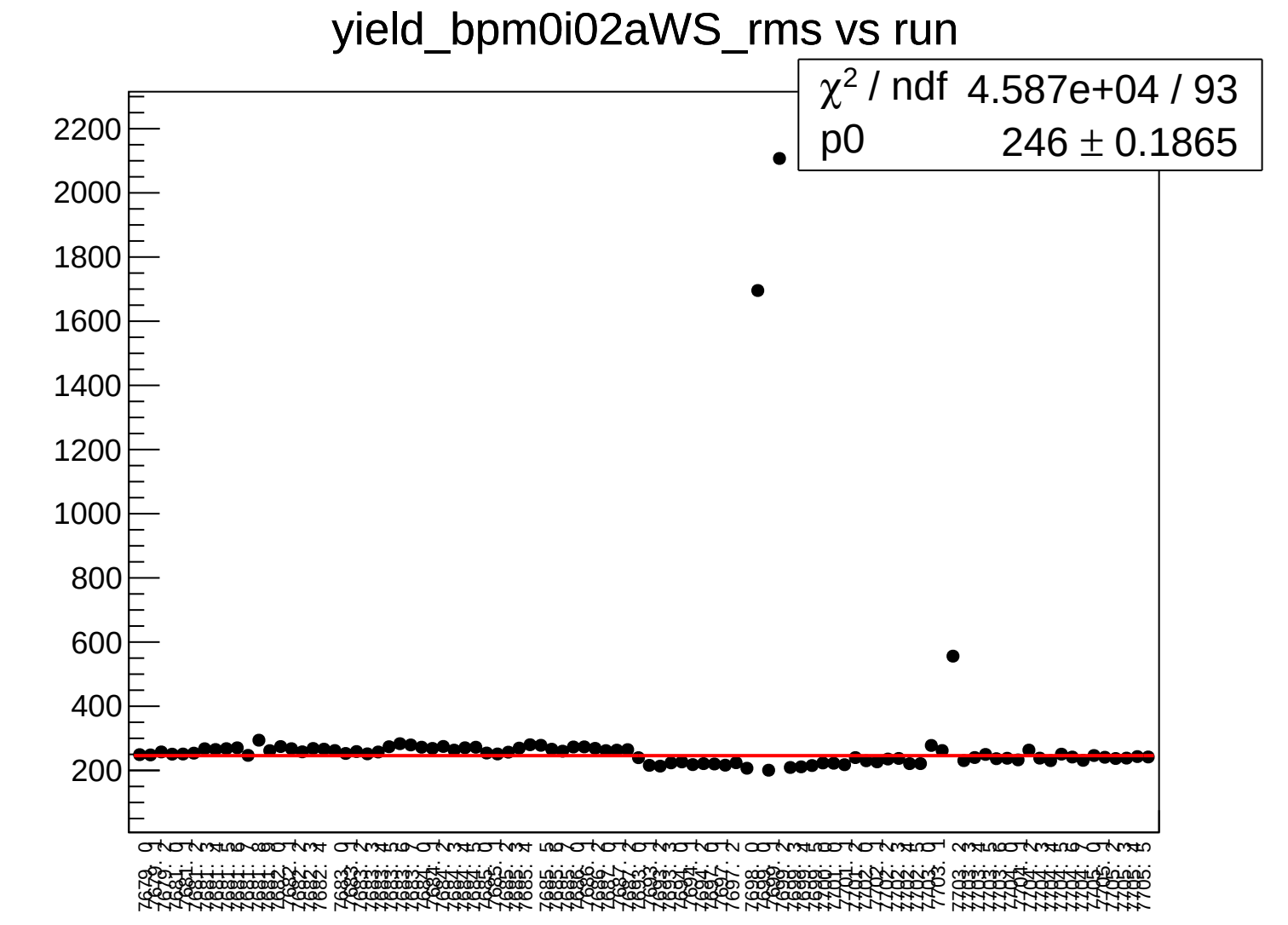

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 2.427e+06 / 93
p0 1.405e+05 ± 0.2716
141
140.5
140
139.5
139
138.5
138
137.5
137
pull
Entries 94
Mean −89.69
Std Dev 110.4
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

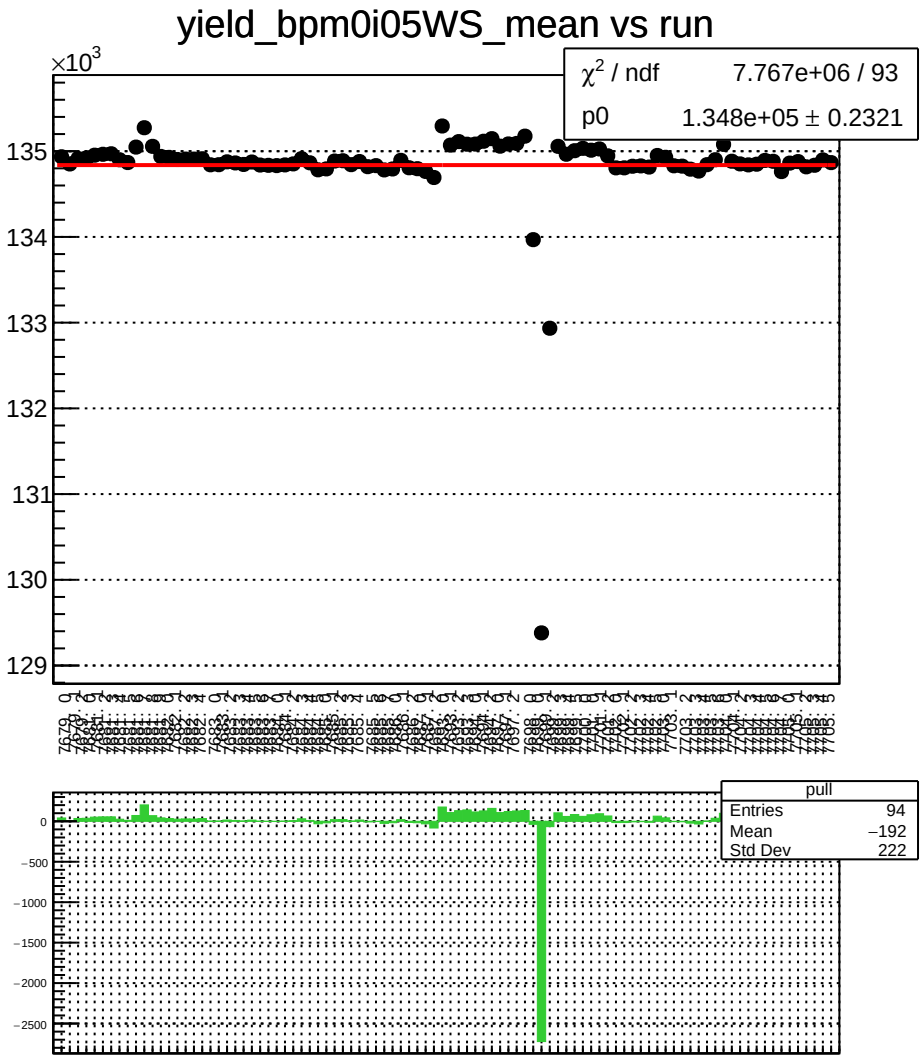

pull1D
Entries 94
Mean 1.669
Std Dev 3.968
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

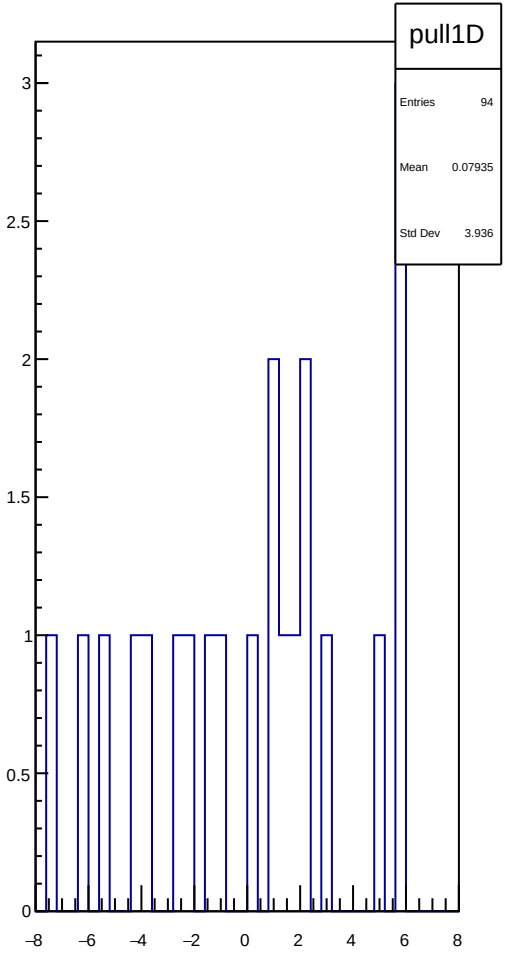

yield_bpm0i02WS_rms vs run
χ^2 / ndf 3.009e+04 / 93
p0 254.4 ± 0.192
1800
1600
1400
1200
1000
800
600
400
200

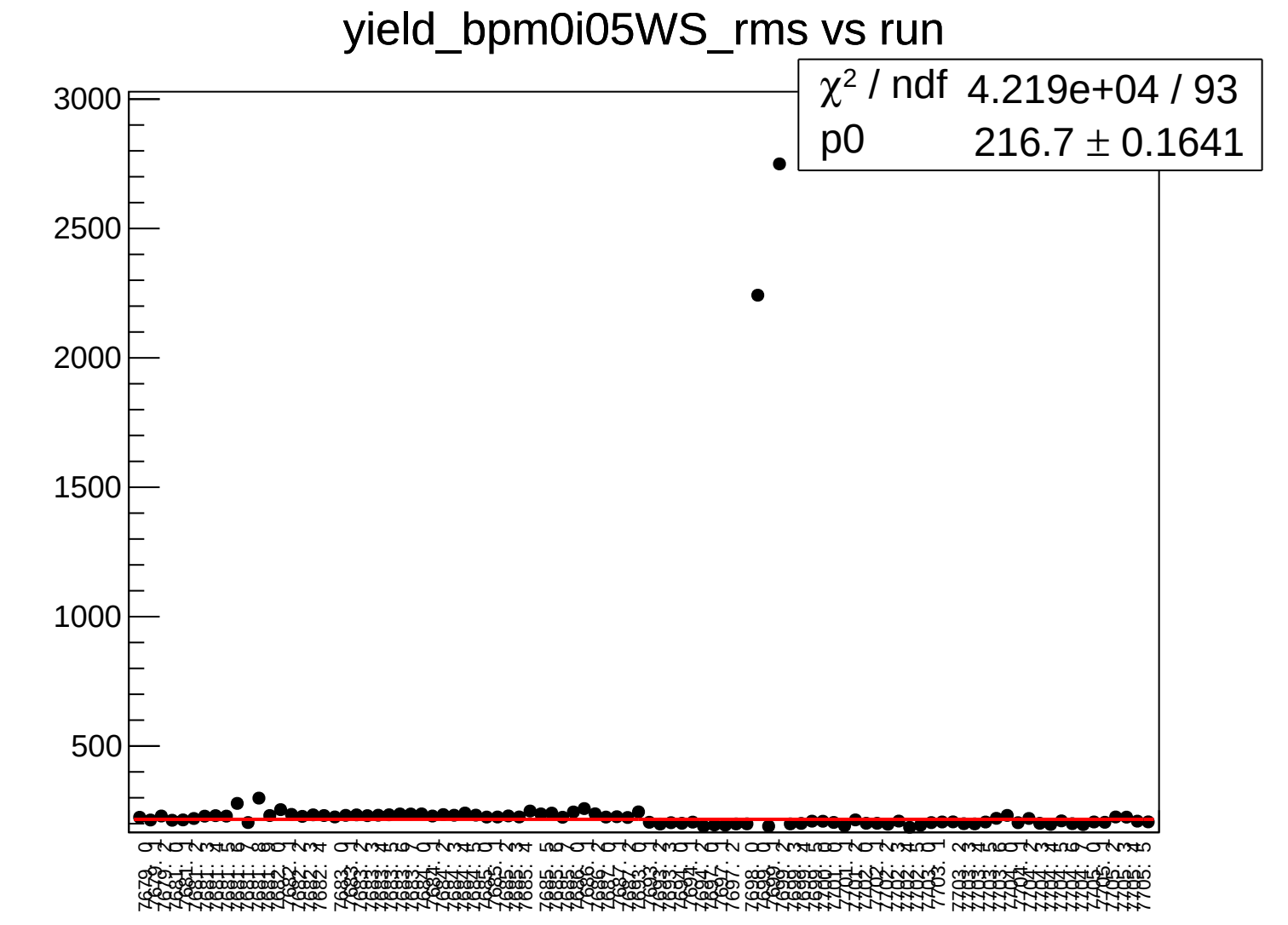

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 4.516e+06 / 93
p0 1.459e+05 ± 0.2638
147
146
145
144
143
142
pull
Entries 94
Mean −122.1
Std Dev 208.4
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

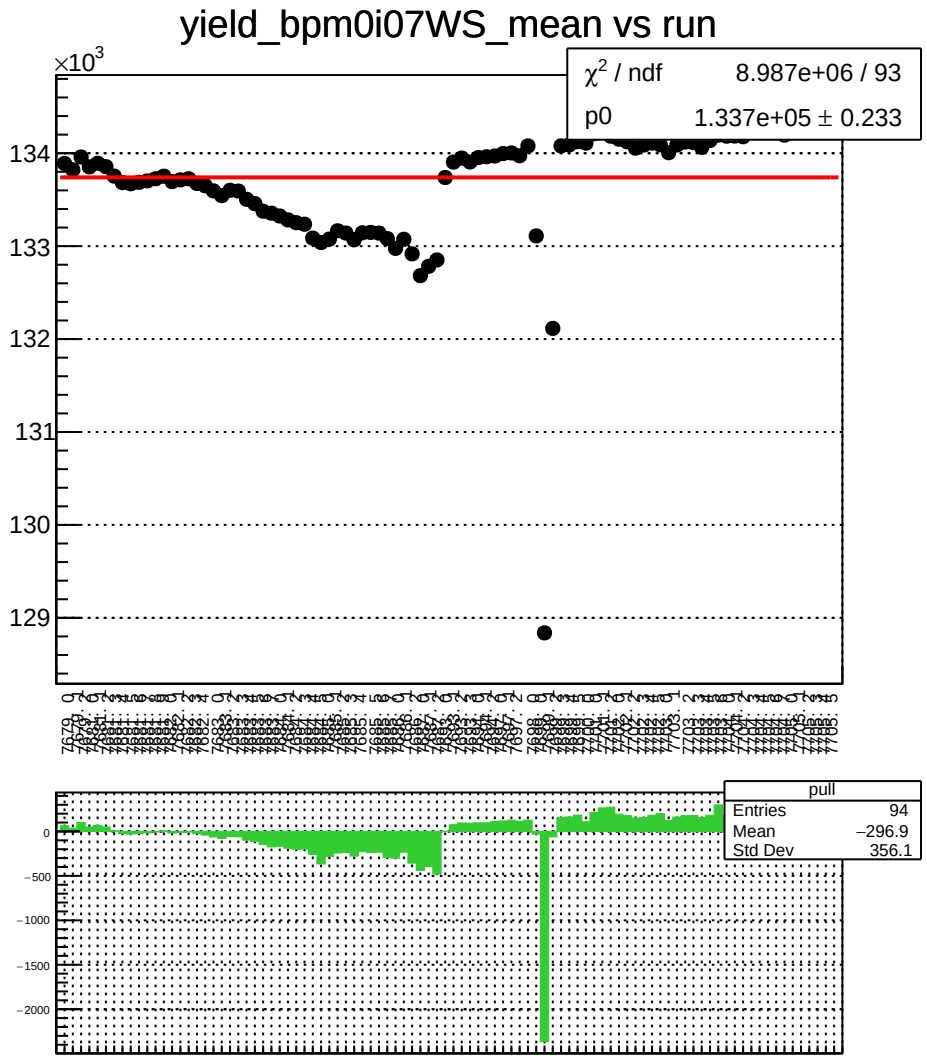

pull1D
Entries 94
Mean −6.146
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

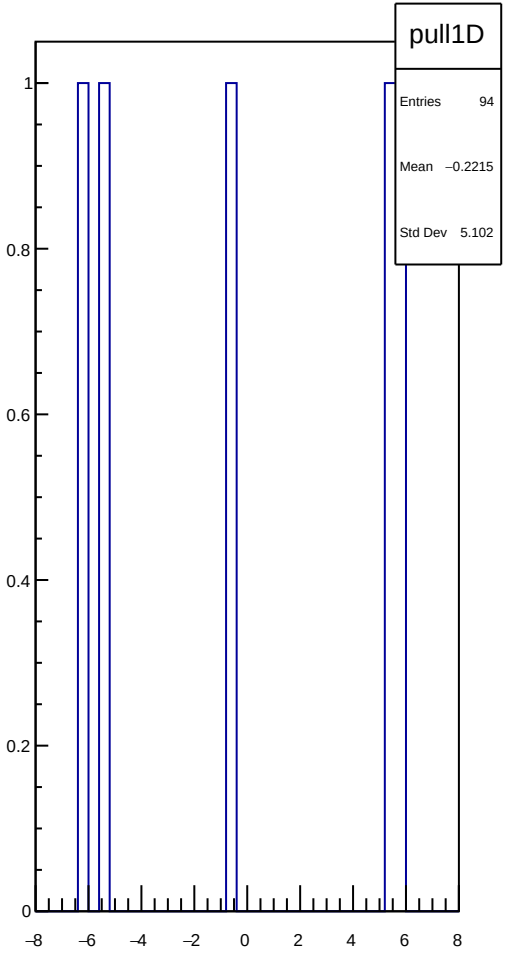

yield_bpm0i02aWS_rms vs run
χ^2 / ndf 4.587e+04 / 93
p0 246 ± 0.1865
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

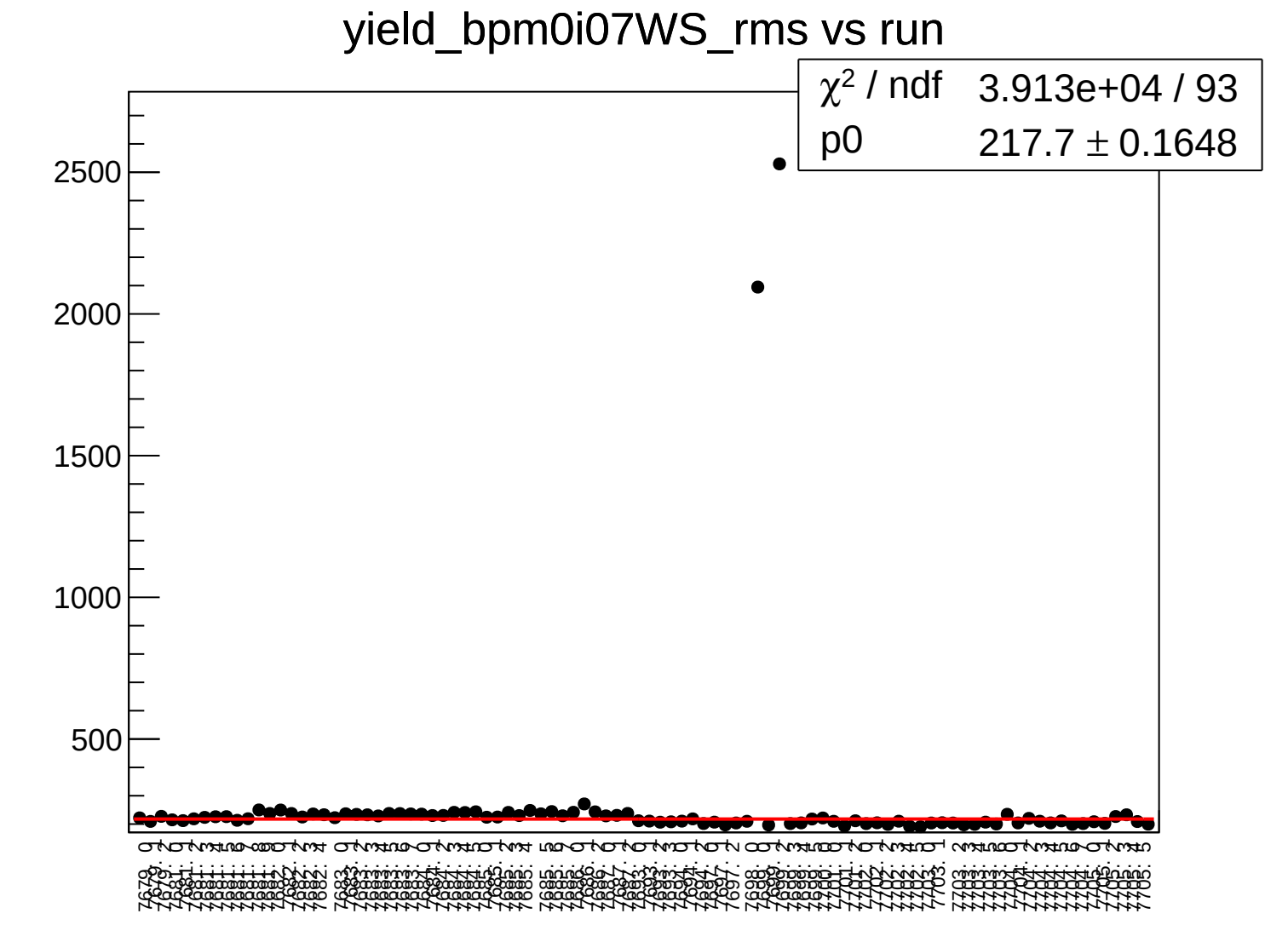

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 7.767e+06 / 93
p0 1.348e+05 ± 0.2321
135
134
133
132
131
130
129
pull
Entries 94
Mean −192
Std Dev 222
0
−500
−1000
−1500
−2000
−2500

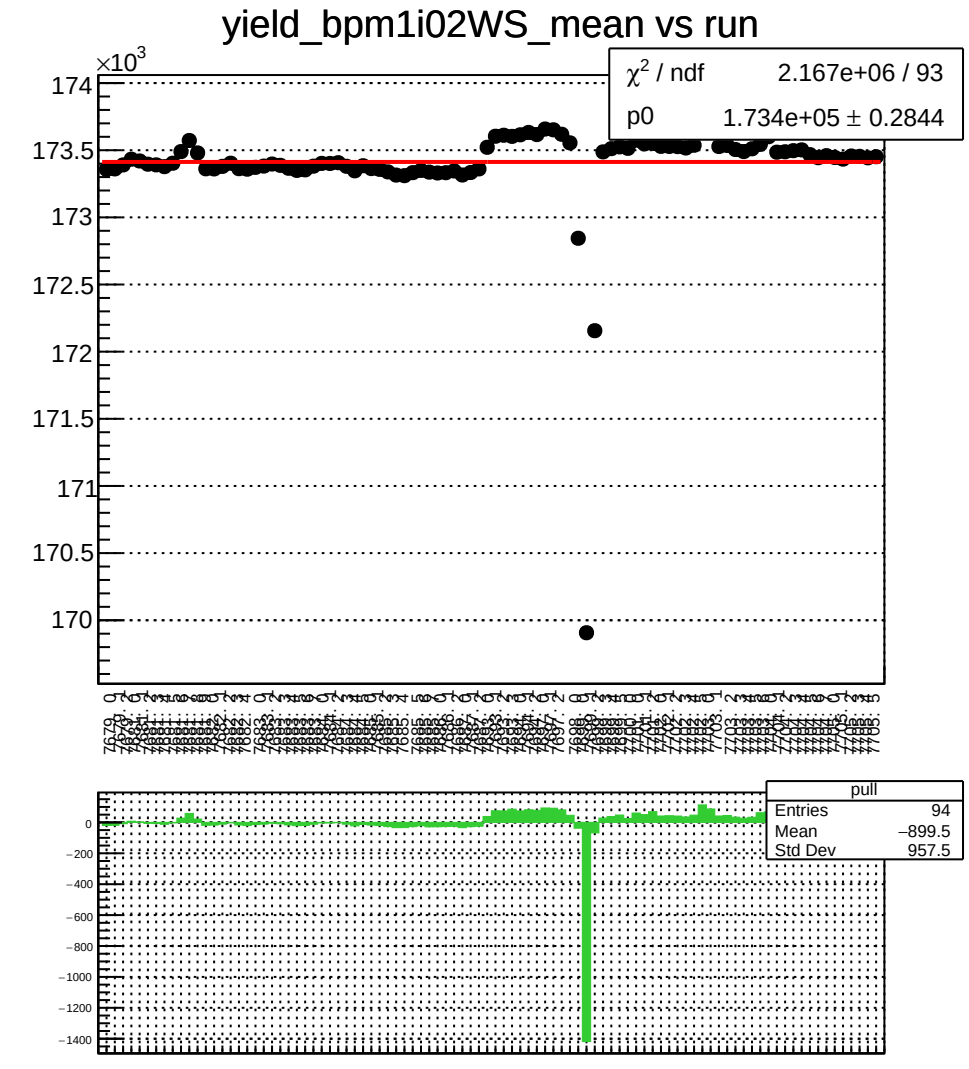

pull1D
Entries 94
Mean 0.07935
Std Dev 3.936
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

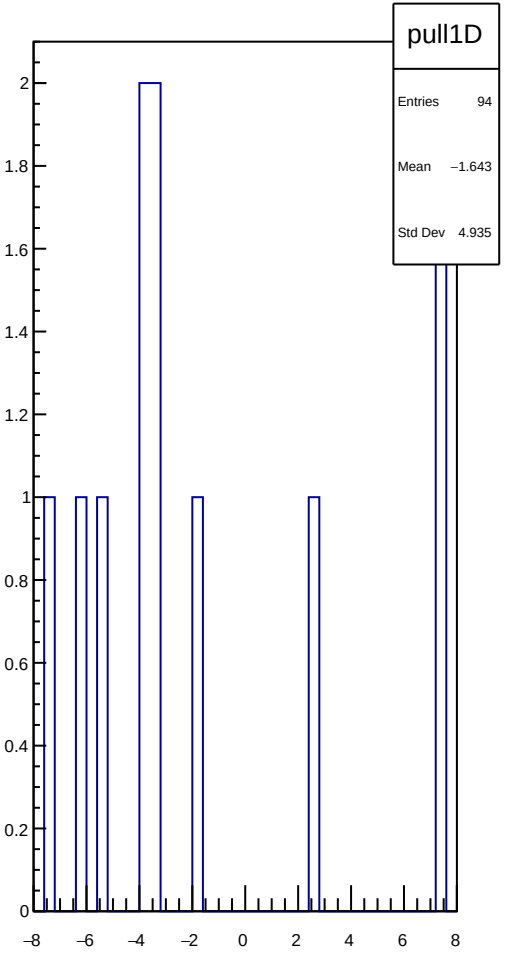

yield_bpm0i05WS_rms vs run
χ² / ndf 4.219e+04 / 93
p0 216.7 ± 0.1641
3000
2500
2000
1500
1000
500

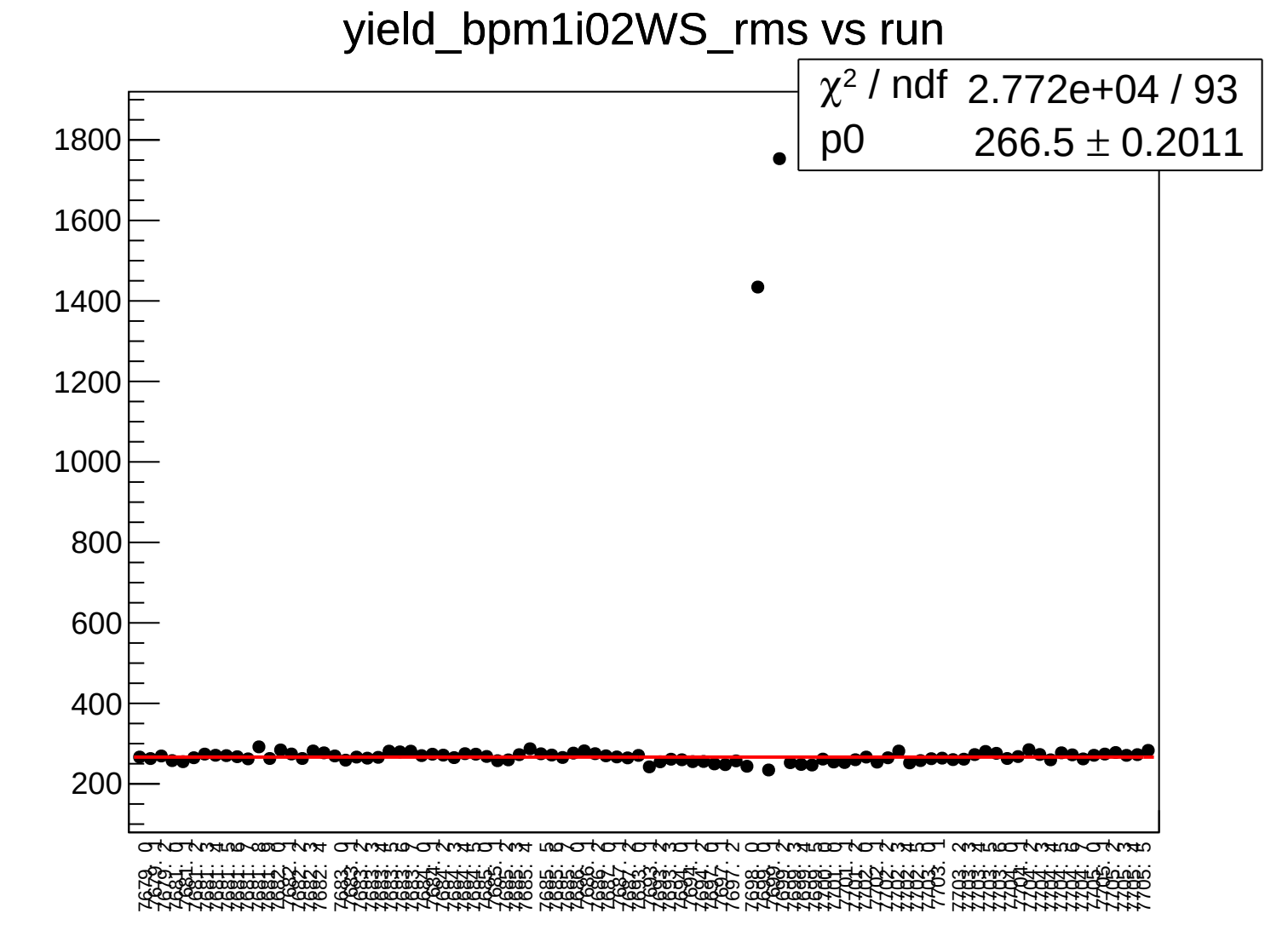

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 8.987e+06 / 93
p0 1.337e+05 ± 0.233
134
133
132
131
130
129
pull
Entries 94
Mean −296.9
Std Dev 356.1
0
−500
−1000
−1500
−2000

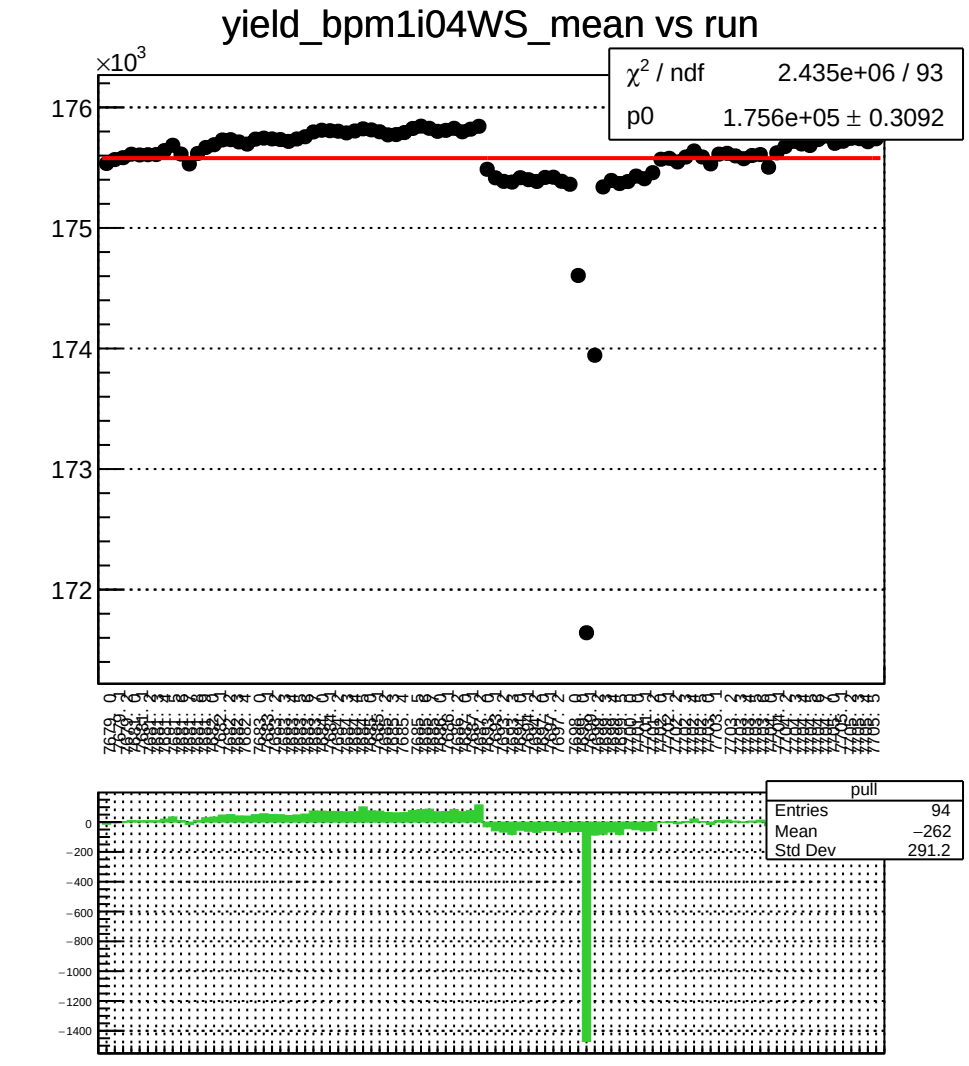

pull1D
Entries 94
Mean −0.2215
Std Dev 5.102
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

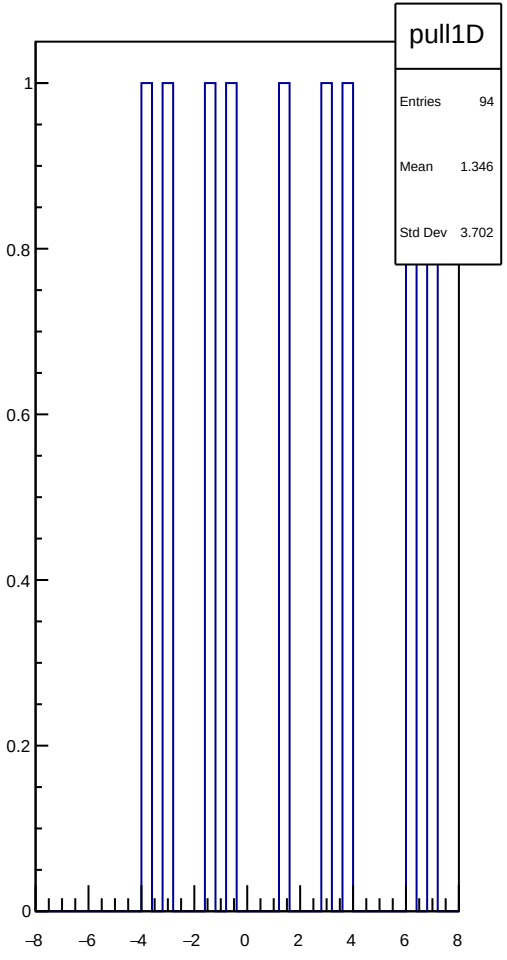

yield_bpm0i07WS_rms vs run
χ² / ndf 3.913e+04 / 93
p0 217.7 ± 0.1648
2500
2000
1500
1000
500

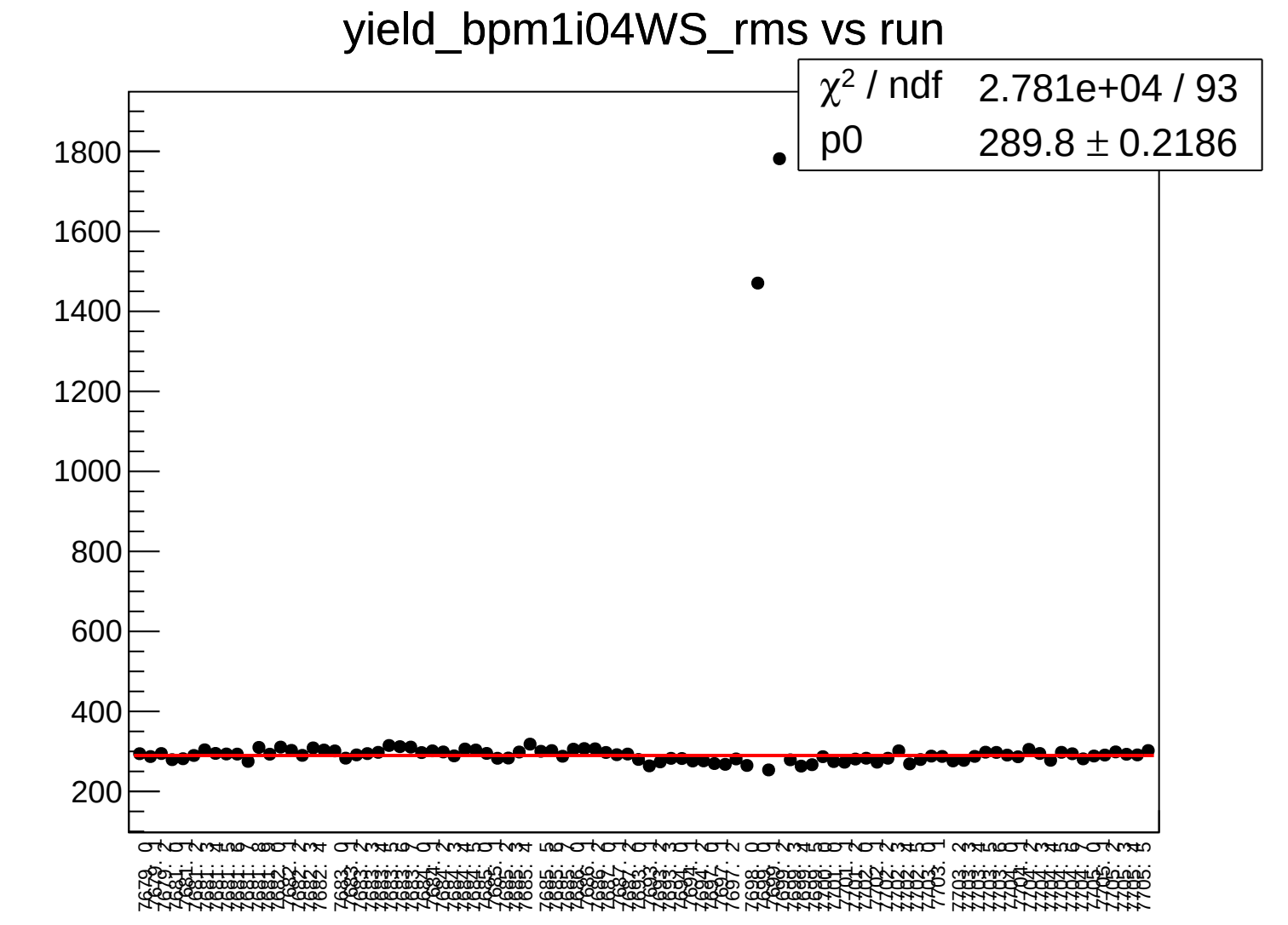

yield_bpm1i02WS_mean vs run
×10^3
174
173.5
173
172.5
172
171.5
171
170.5
170
χ² / ndf 2.167e+06 / 93
p0 1.734e+05 ± 0.2844
pull
Entries 94
Mean −899.5
Std Dev 957.5
0
−200
−400
−600
−800
−1000
−1200
−1400

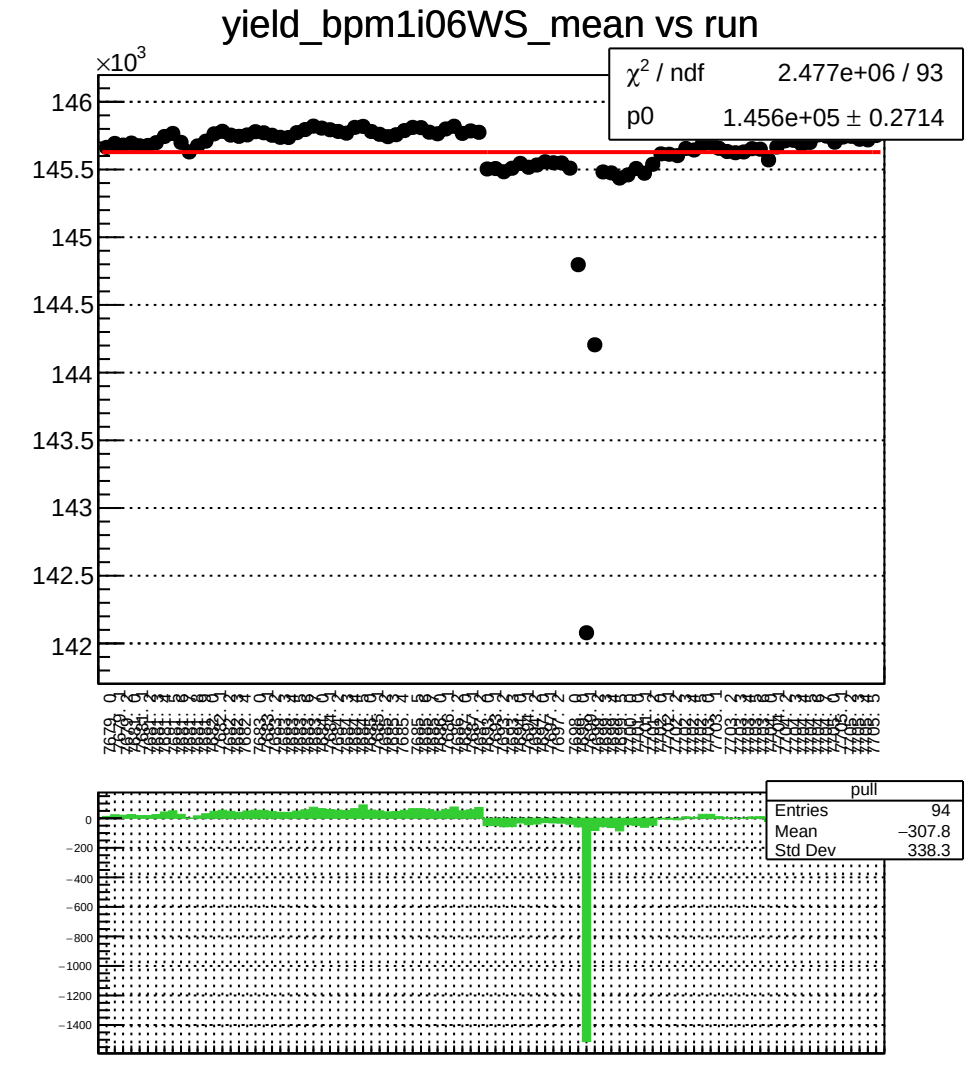

pull1D
Entries 94
Mean −1.643
Std Dev 4.935
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

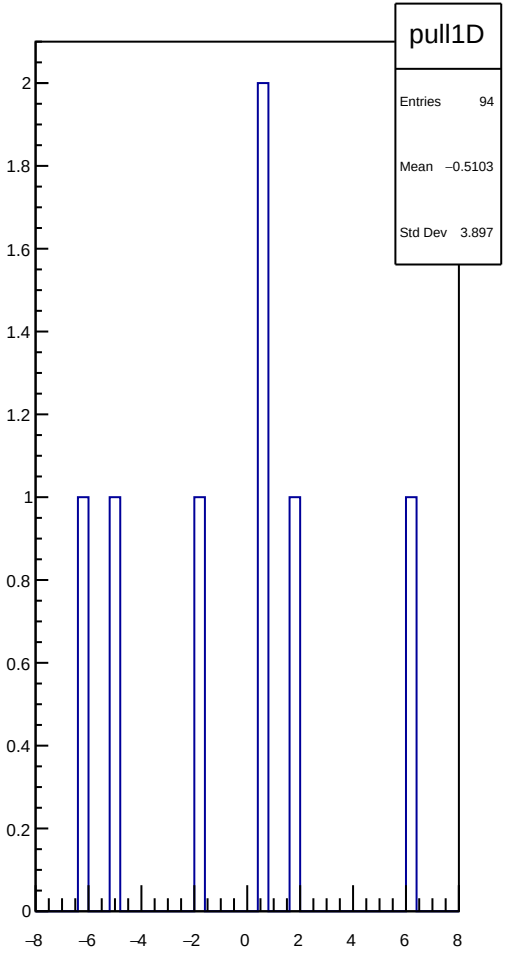

yield_bpm1i02WS_rms vs run
χ² / ndf 2.772e+04 / 93
p0 266.5 ± 0.2011
1800
1600
1400
1200
1000
800
600
400
200

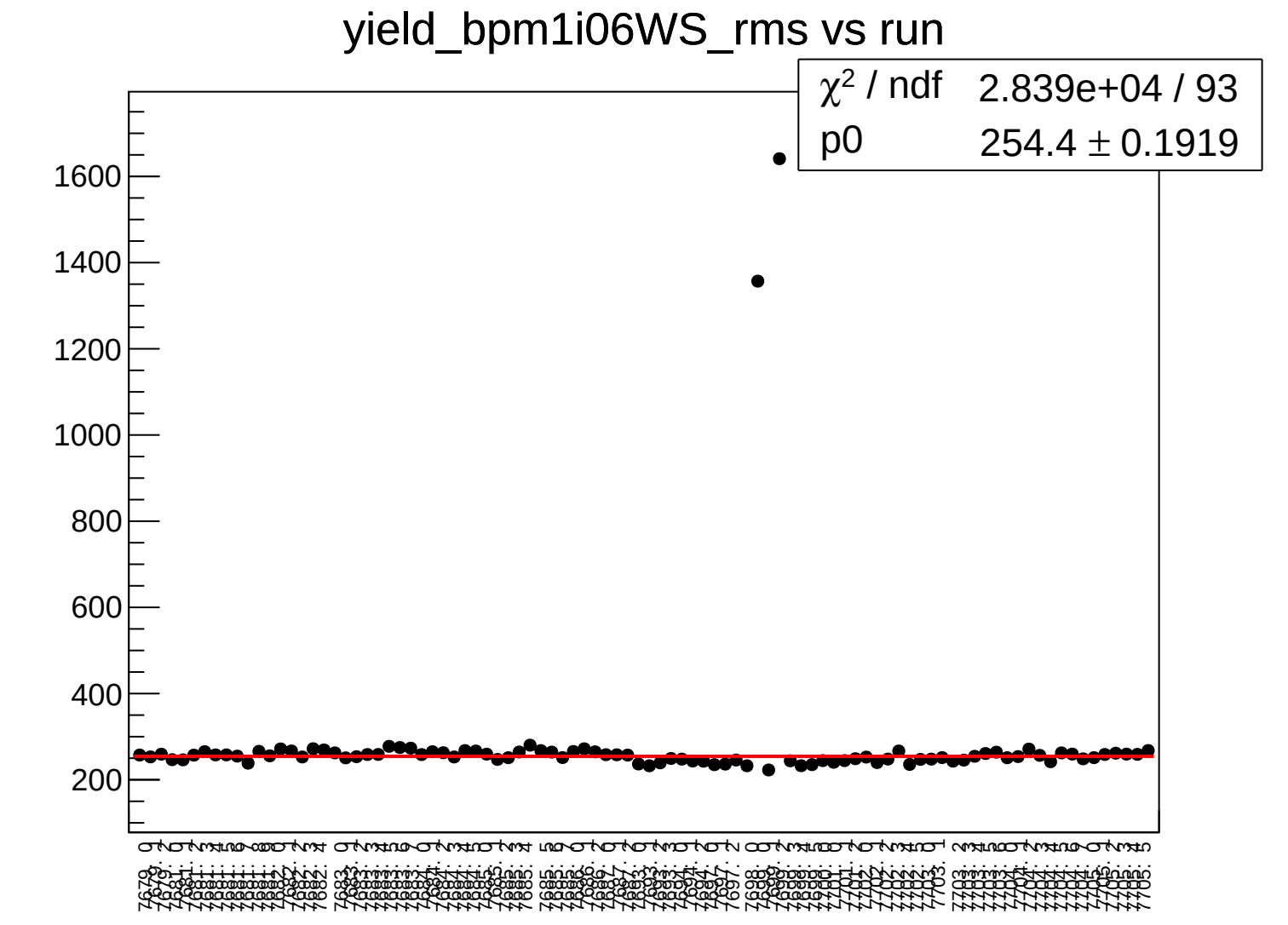

yield_bpm1i04WS_mean vs run
×10^3
χ^2 / ndf 2.435e+06 / 93
p0 1.756e+05 ± 0.3092
176
175
174
173
172
pull
Entries 94
Mean −262
Std Dev 291.2
0
−200
−400
−600
−800
−1000
−1200
−1400

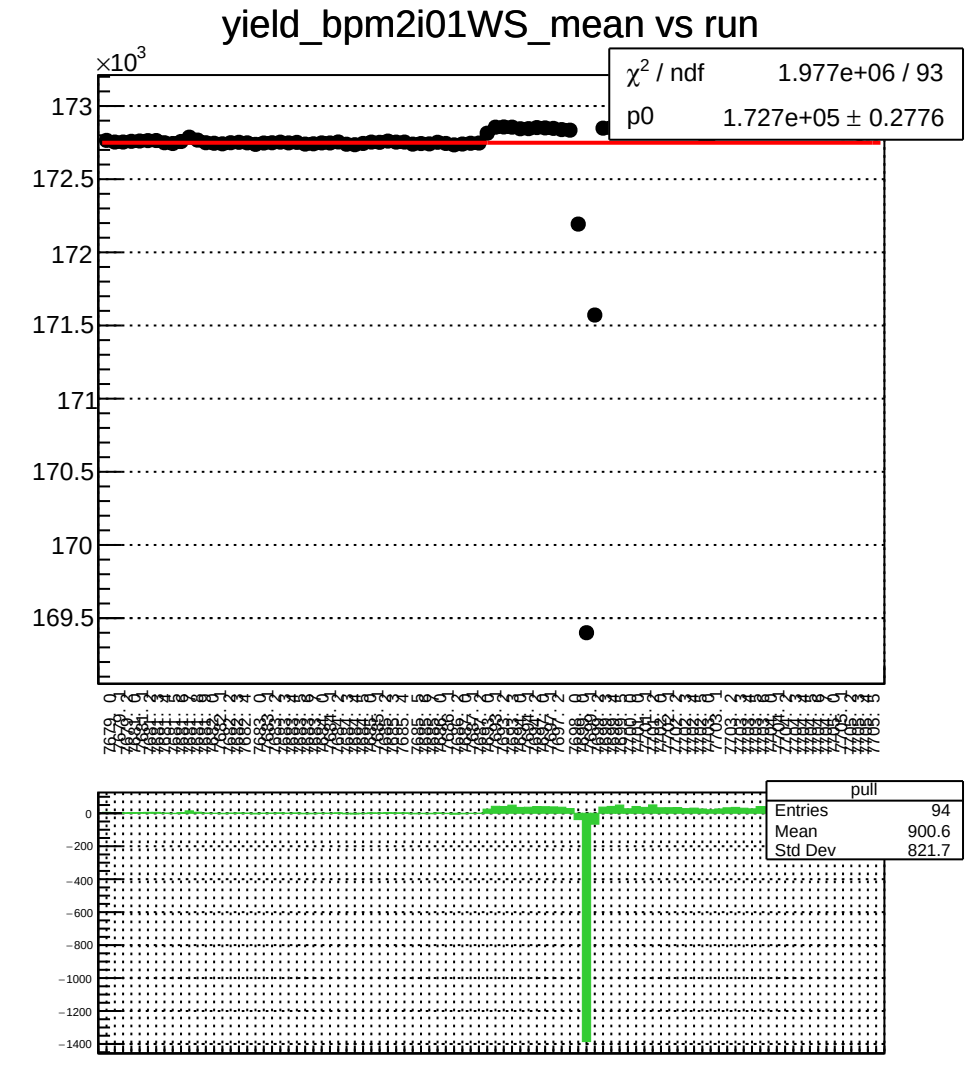

pull1D
Entries 94
Mean 1.346
Std Dev 3.702
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

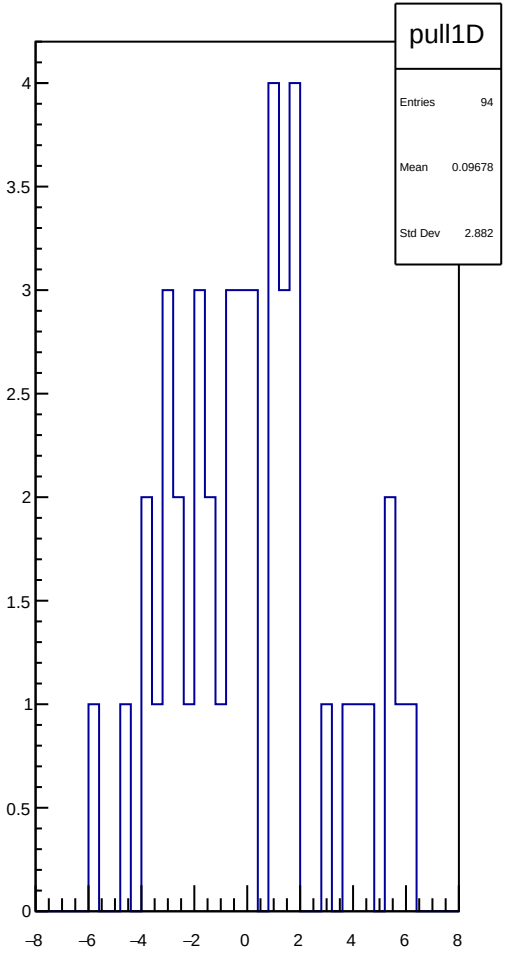

yield_bpm1i04WS_rms vs run
χ² / ndf 2.781e+04 / 93
p0 289.8 ± 0.2186
1800
1600
1400
1200
1000
800
600
400
200

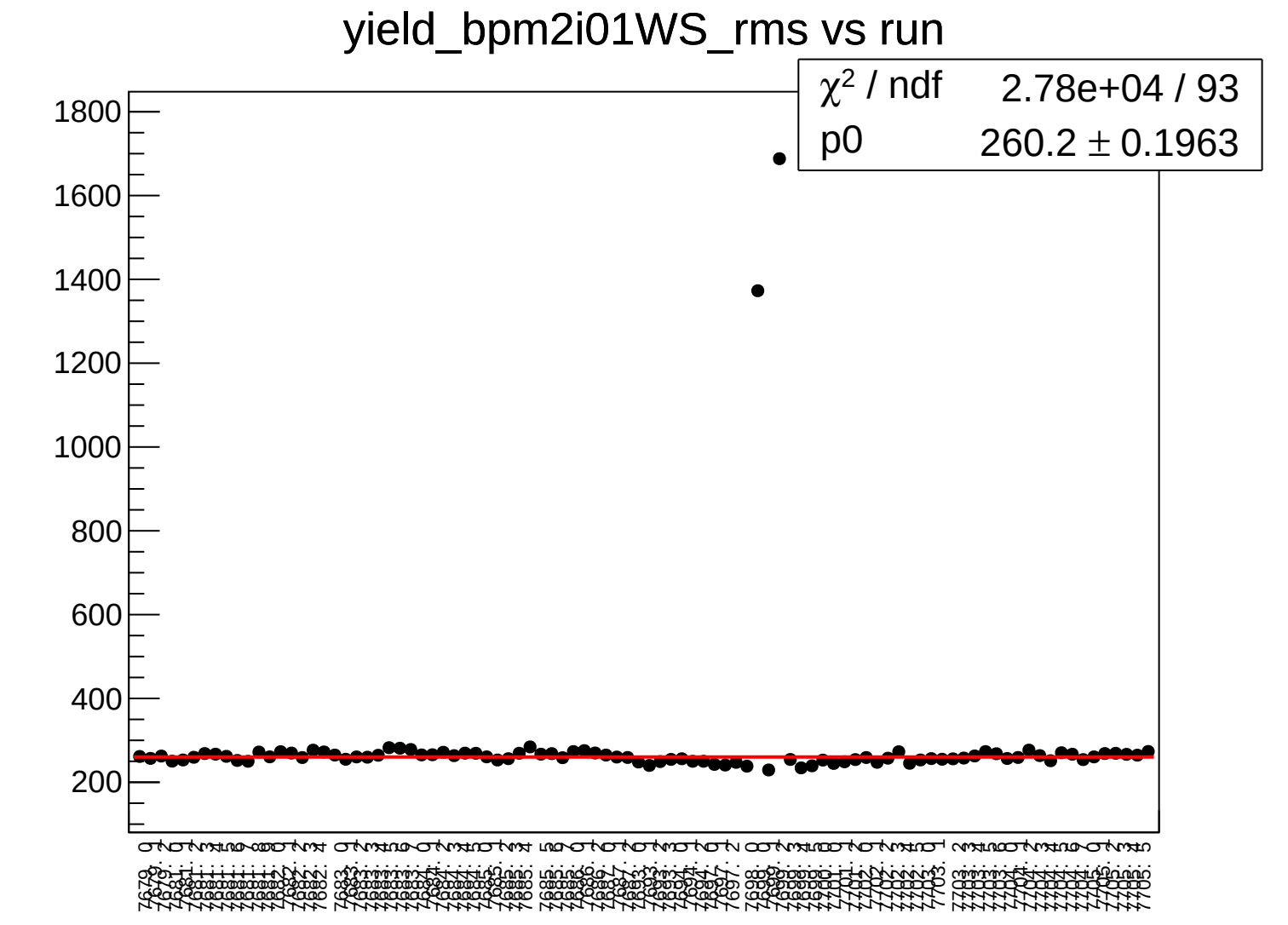

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 2.477e+06 / 93
p0 1.456e+05 ± 0.2714
146
145.5
145
144.5
144
143.5
143
142.5
142
pull
Entries 94
Mean −307.8
Std Dev 338.3
0
−200
−400
−600
−800
−1000
−1200
−1400

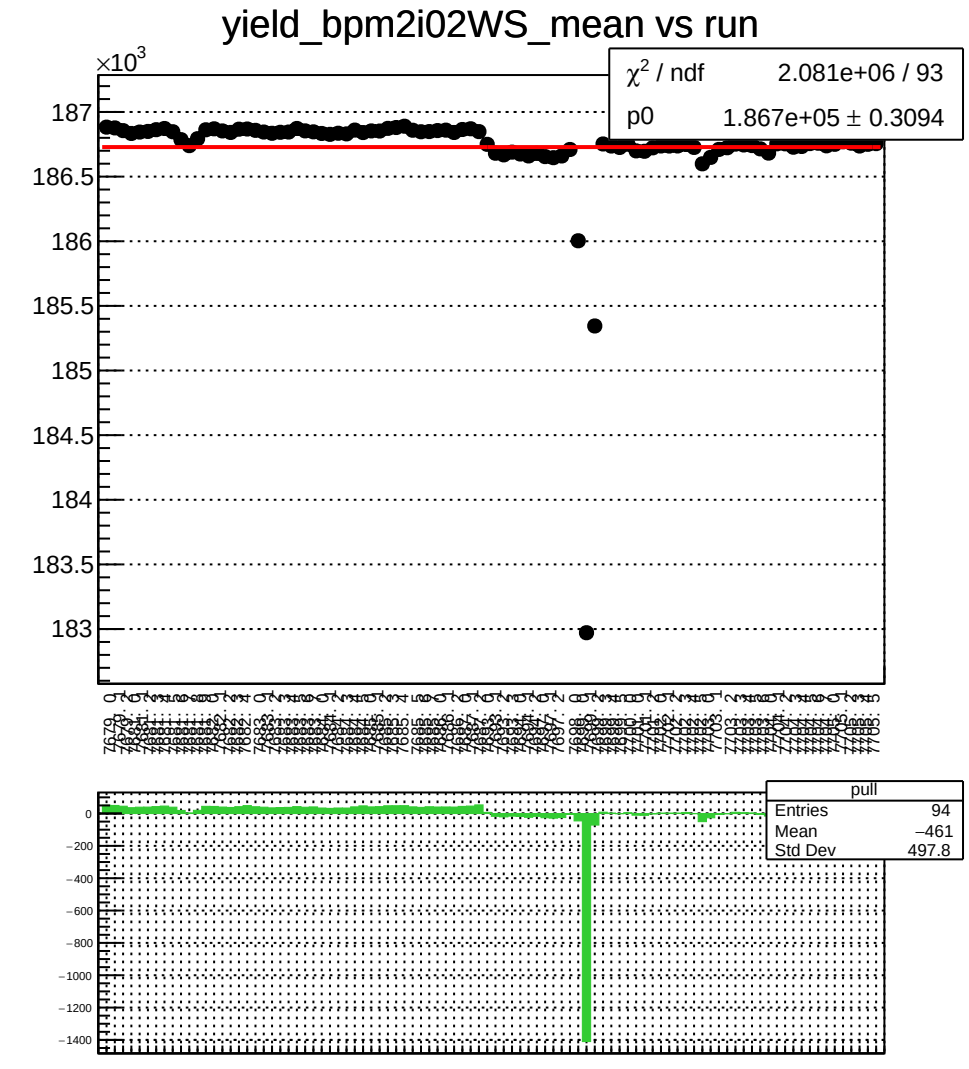

pull1D
Entries 94
Mean −0.5103
Std Dev 3.897
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

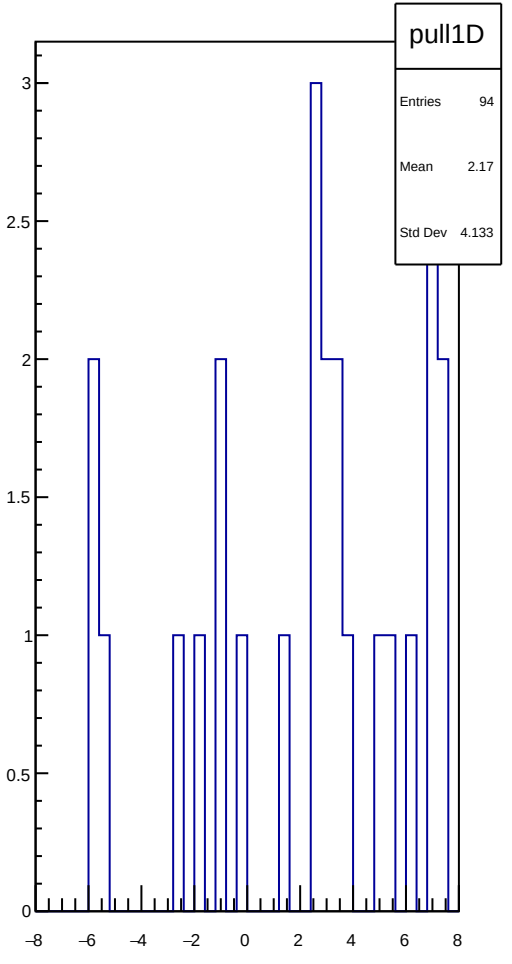

yield_bpm1i06WS_rms vs run
χ² / ndf 2.839e+04 / 93
p0 254.4 ± 0.1919
1600
1400
1200
1000
800
600
400
200

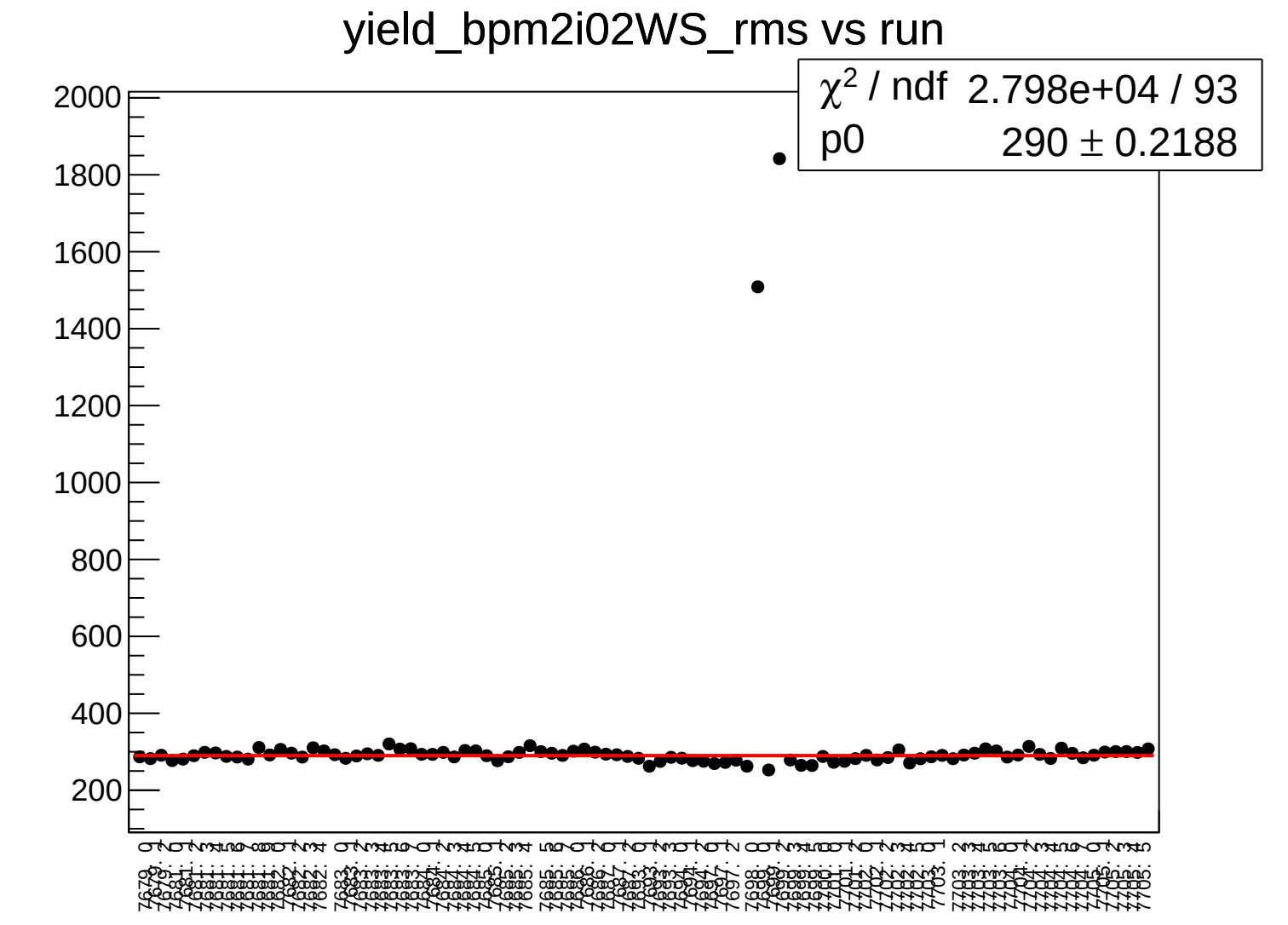

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 1.977e+06 / 93
p0 1.727e+05 ± 0.2776
173
172.5
172
171.5
171
170.5
170
169.5
pull
Entries 94
Mean 900.6
Std Dev 821.7
0
−200
−400
−600
−800
−1000
−1200
−1400

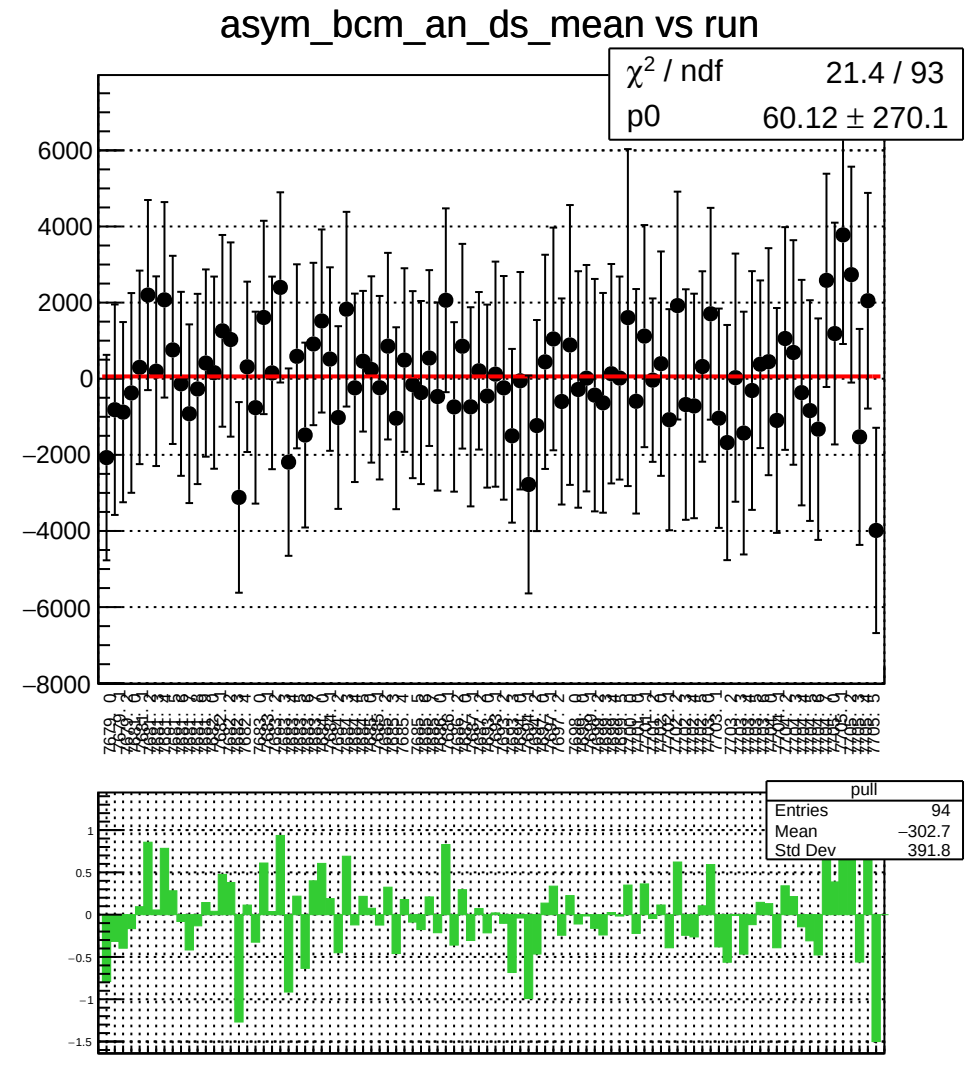

pull1D
Entries 94
Mean 0.09678
Std Dev 2.882
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

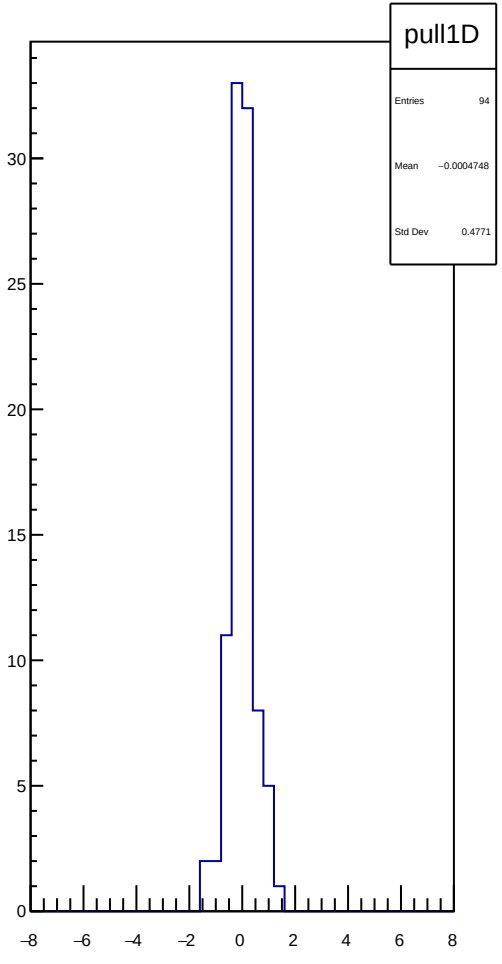

yield_bpm2i01WS_rms vs run
χ^2 / ndf 2.78e+04 / 93
p0 260.2 ± 0.1963
1800
1600
1400
1200
1000
800
600
400
200

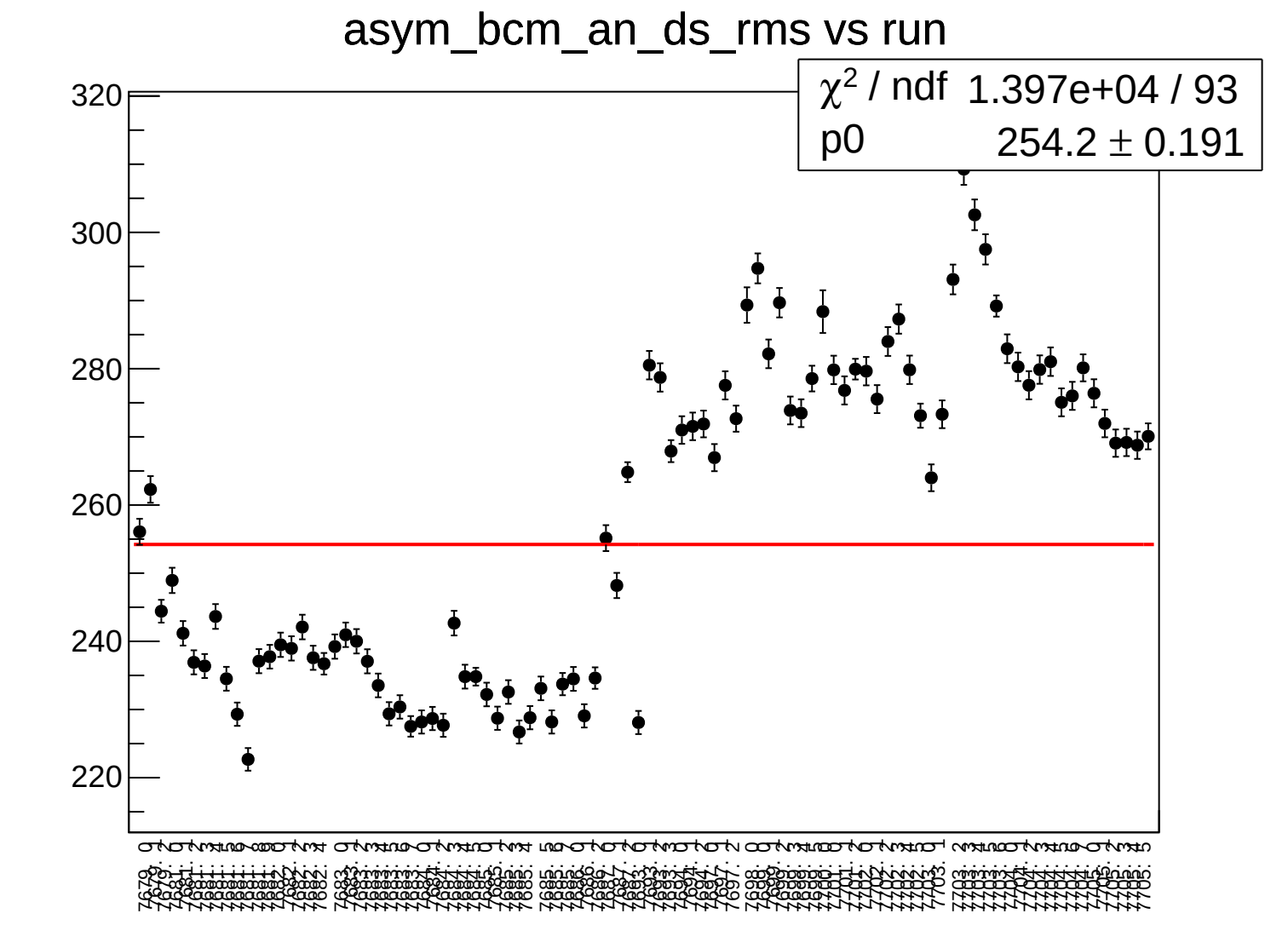

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 2.081e+06 / 93
p0 1.867e+05 ± 0.3094
187
186.5
186
185.5
185
184.5
184
183.5
183
pull
Entries 94
Mean −461
Std Dev 497.8
0
−200
−400
−600
−800
−1000
−1200
−1400

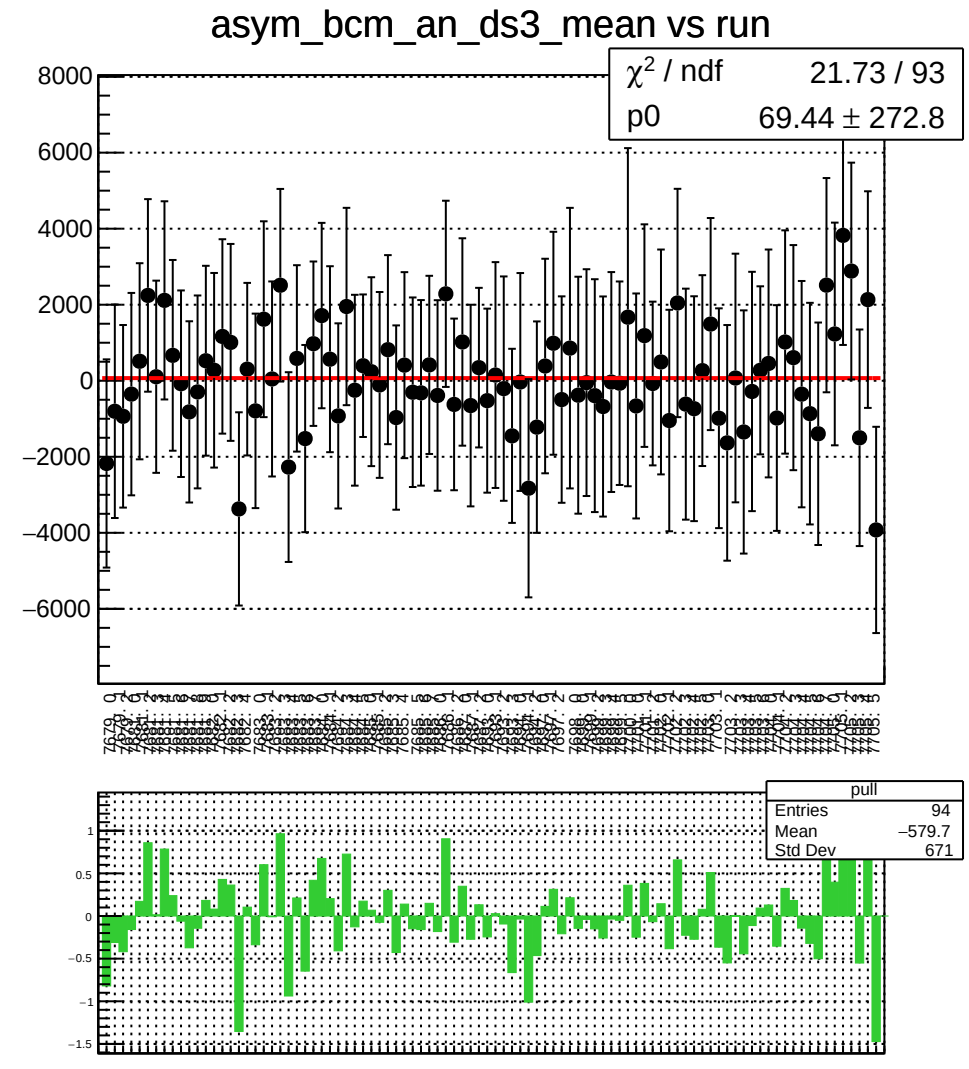

pull1D
Entries 94
Mean 2.17
Std Dev 4.133
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

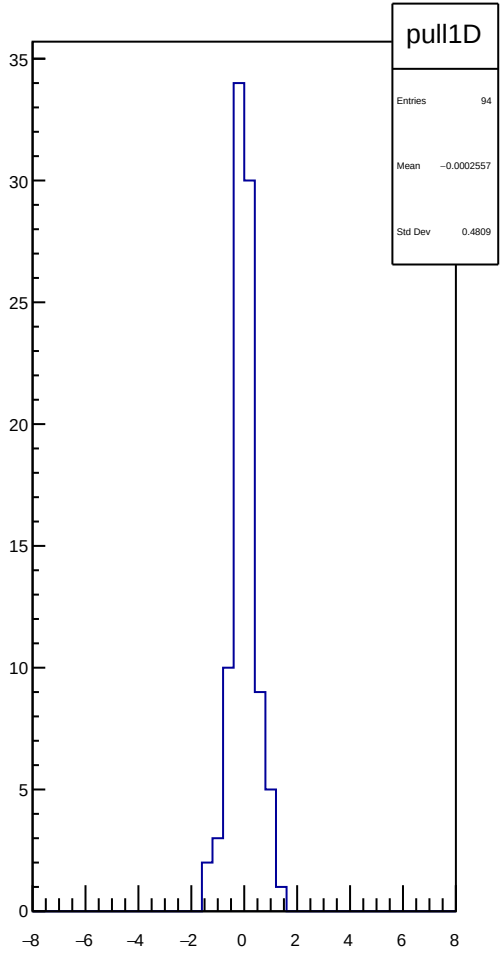

yield_bpm2i02WS_rms vs run
χ^2 / ndf 2.798e+04 / 93
p0 290 ± 0.2188
2000
1800
1600
1400
1200
1000
800
600
400
200

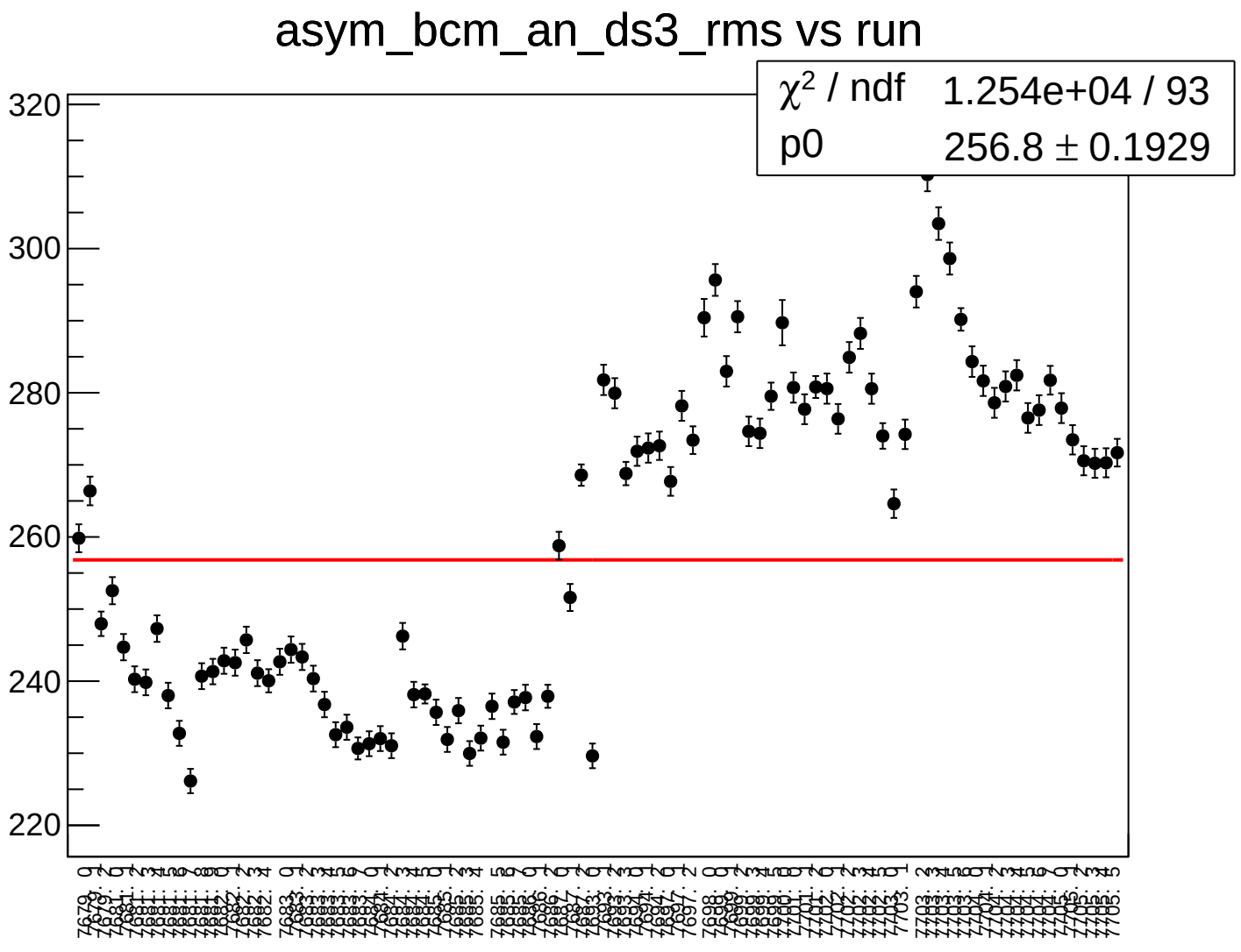

asym_bcm_an_ds_mean vs run
χ² / ndf 21.4 / 93
p0 60.12 ± 270.1
pull
Entries 94
Mean −302.7
Std Dev 391.8

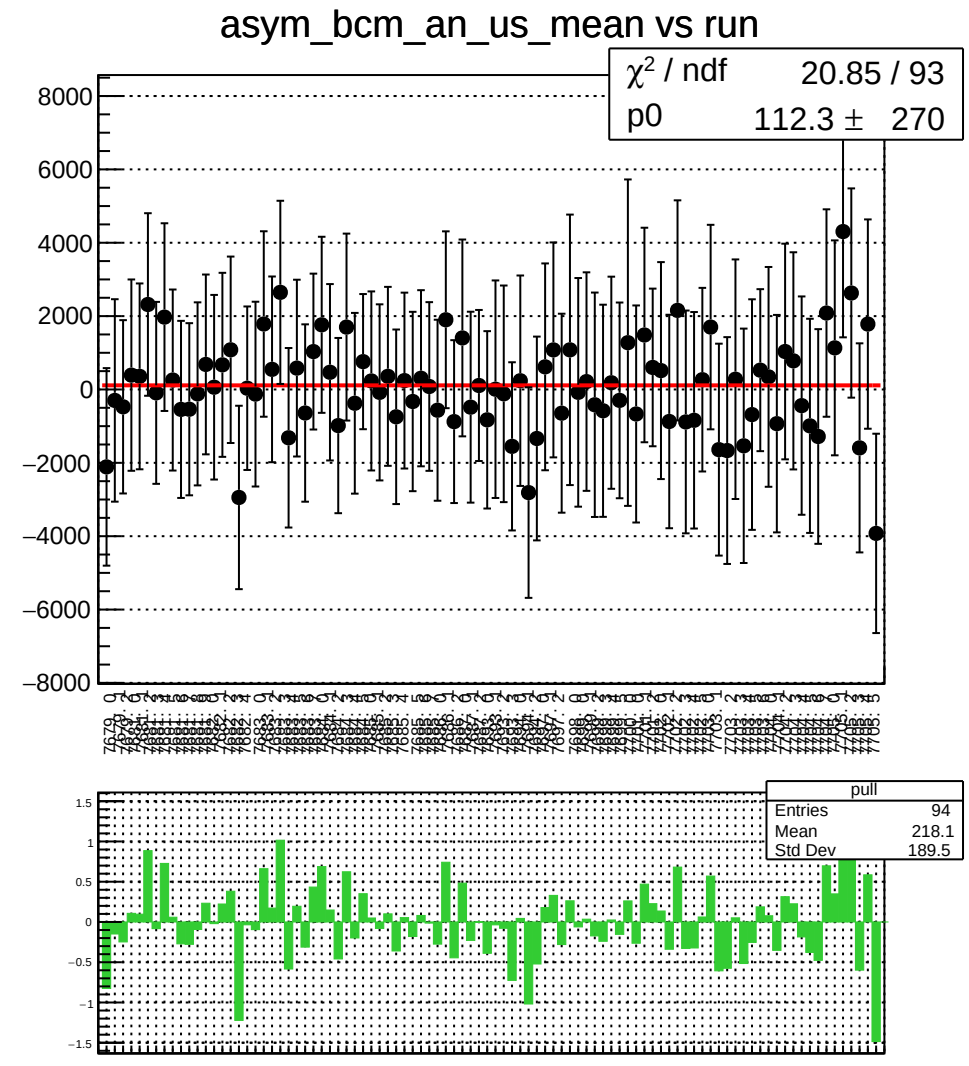

pull1D
Entries 94
Mean −0.0004748
Std Dev 0.4771

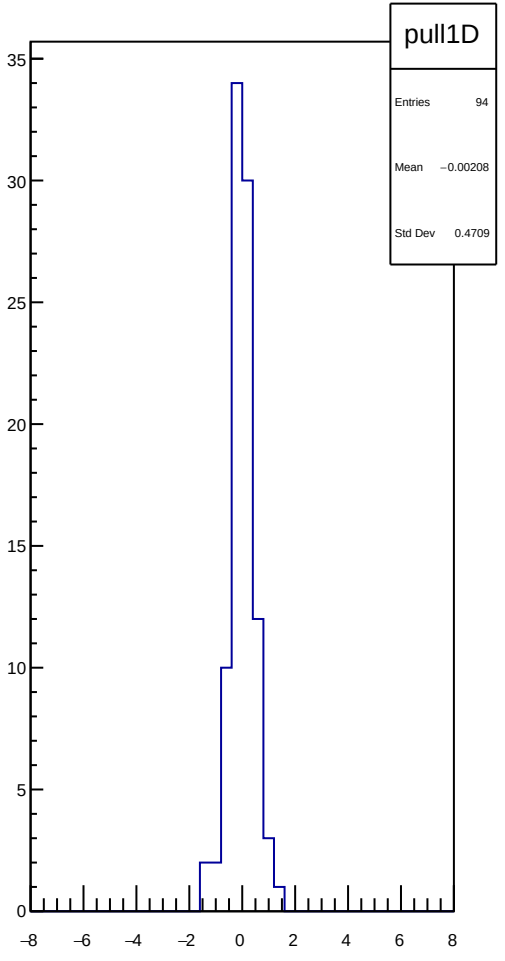

asym_bcm_an_ds_rms vs run
χ² / ndf 1.397e+04 / 93
p0 254.2 ± 0.191
320
300
280
260
240
220

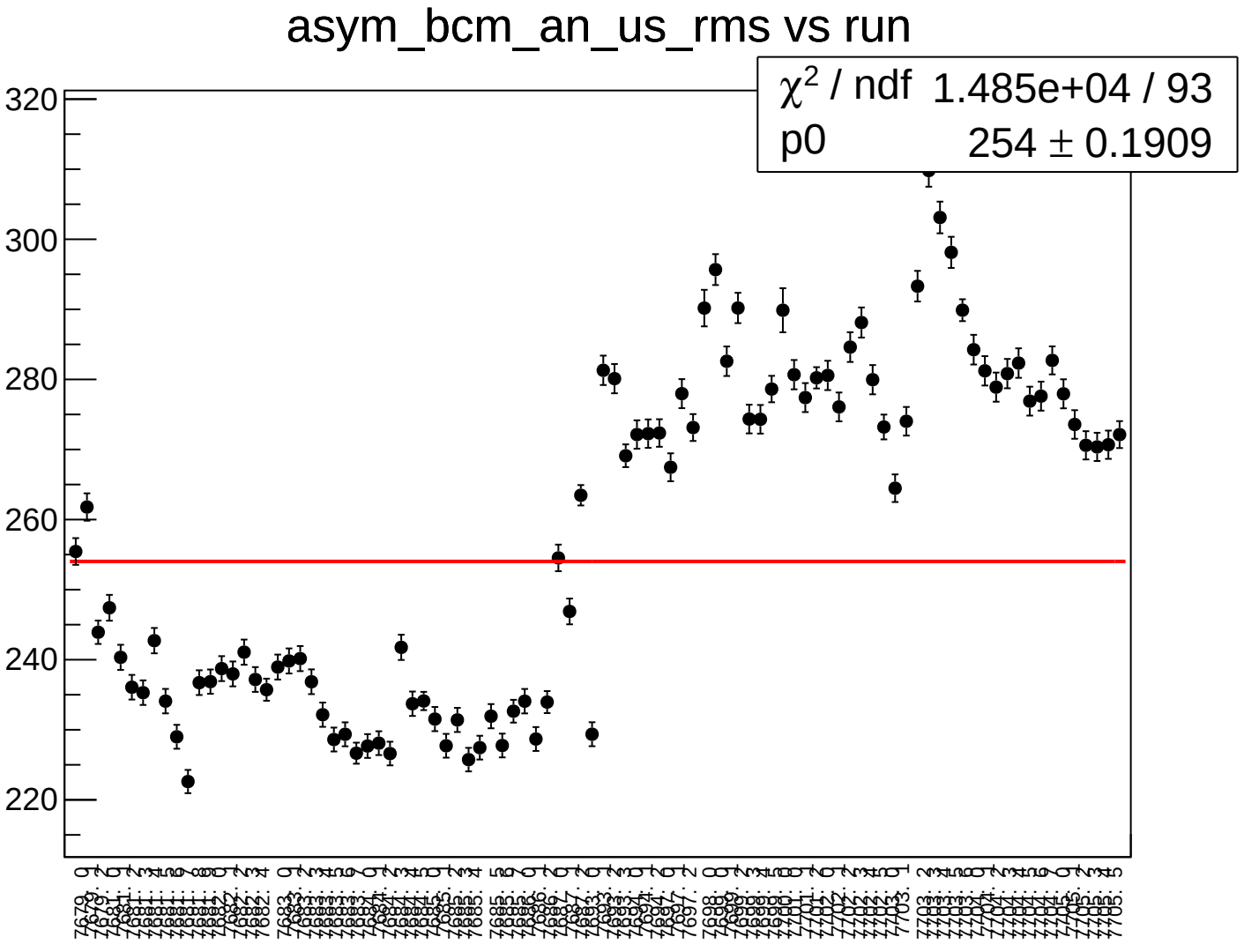

asym_bcm_an_ds3_mean vs run
χ² / ndf 21.73 / 93
p0 69.44 ± 272.8
pull
Entries 94
Mean −579.7
Std Dev 671

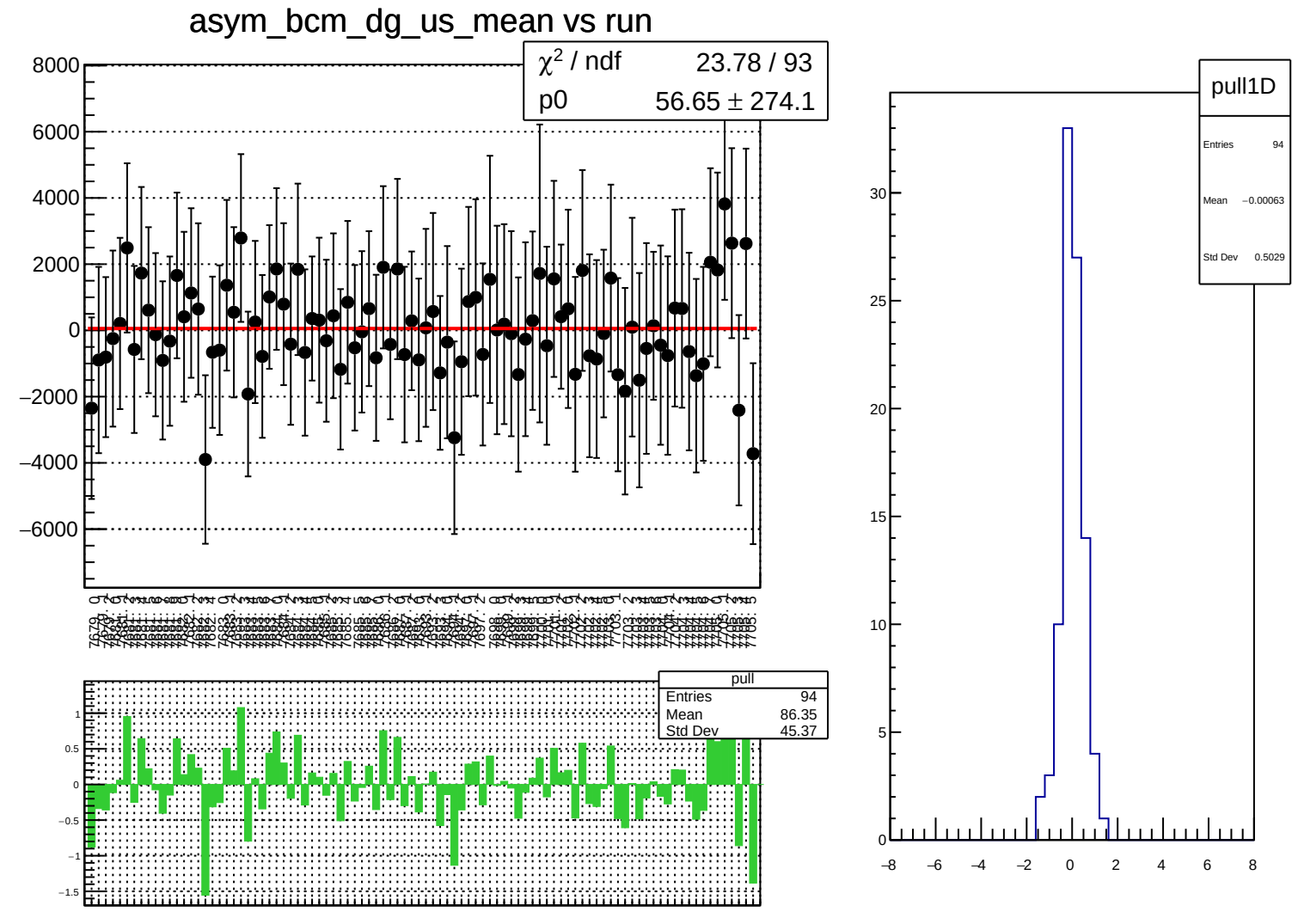

pull1D
Entries 94
Mean −0.0002557
Std Dev 0.4809

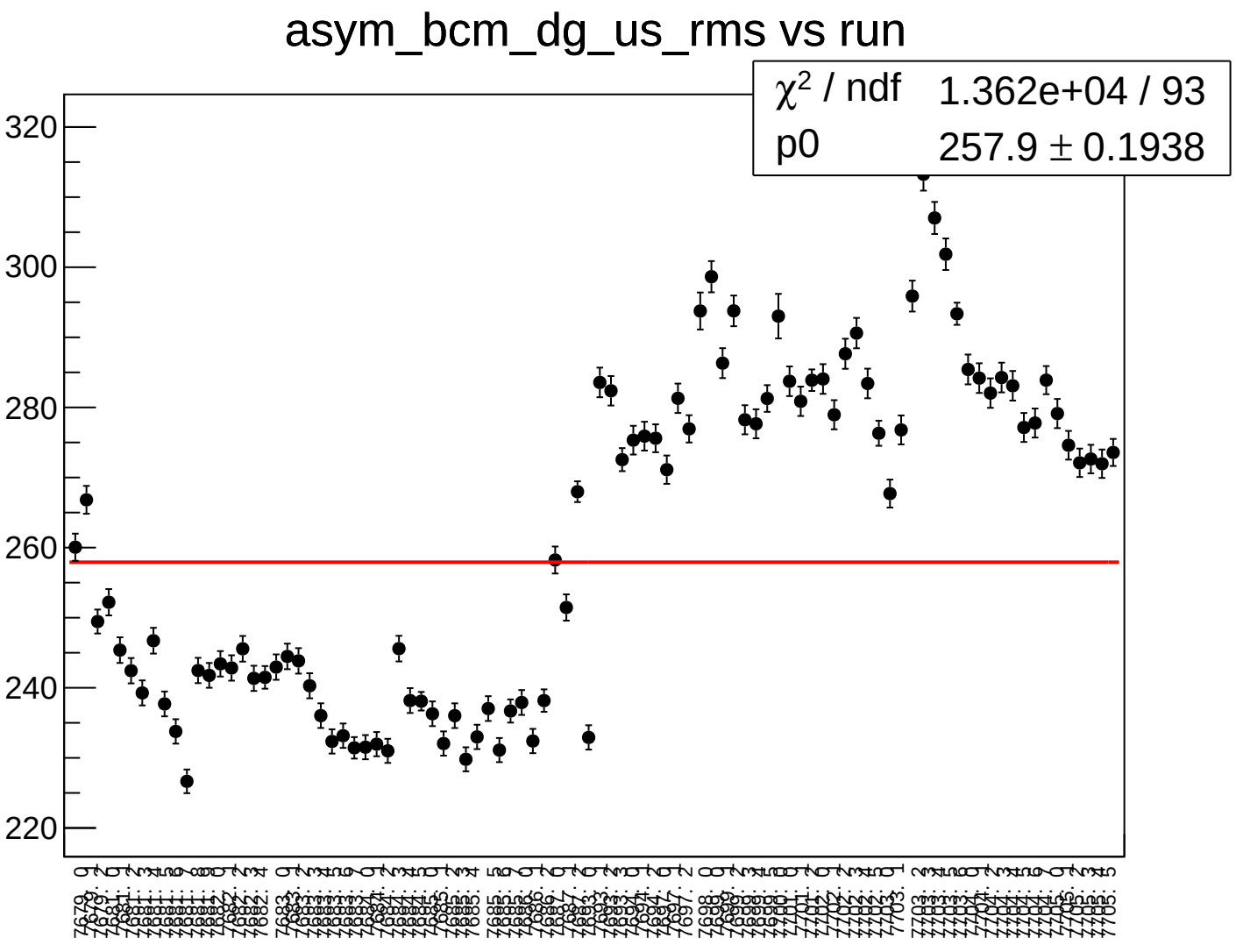

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.254e+04 / 93
p0 256.8 ± 0.1929
320
300
280
260
240
220

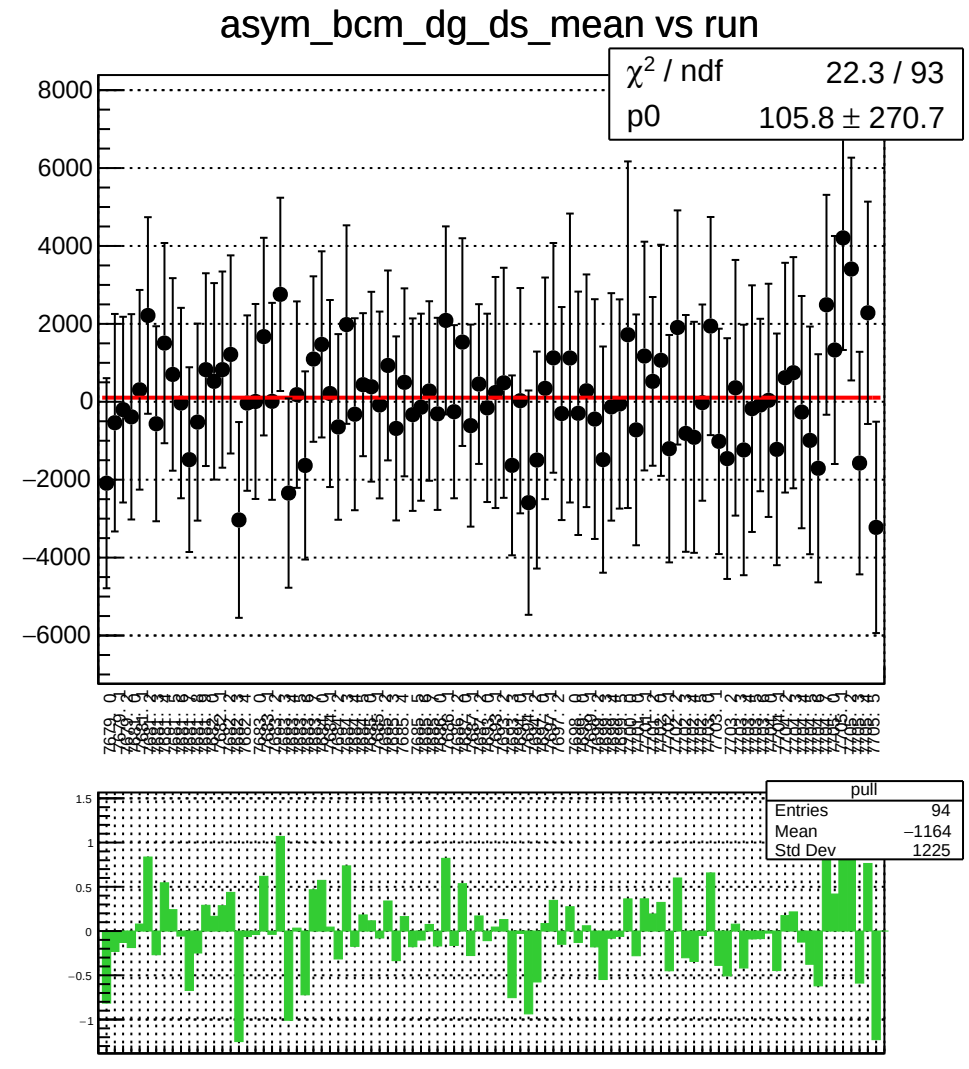

asym_bcm_an_us_mean vs run
χ² / ndf 20.85 / 93
p0 112.3 ± 270
pull
Entries 94
Mean 218.1
Std Dev 189.5

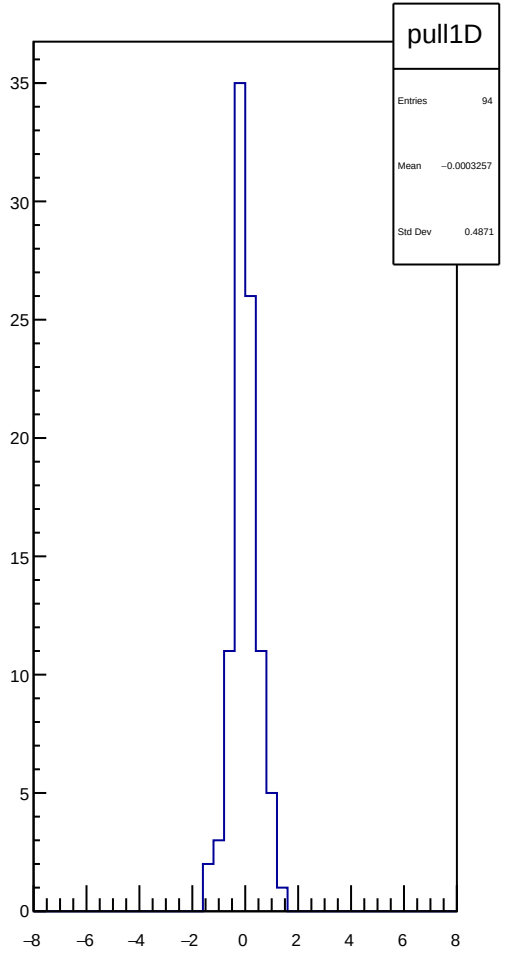

pull1D
Entries 94
Mean −0.00208
Std Dev 0.4709

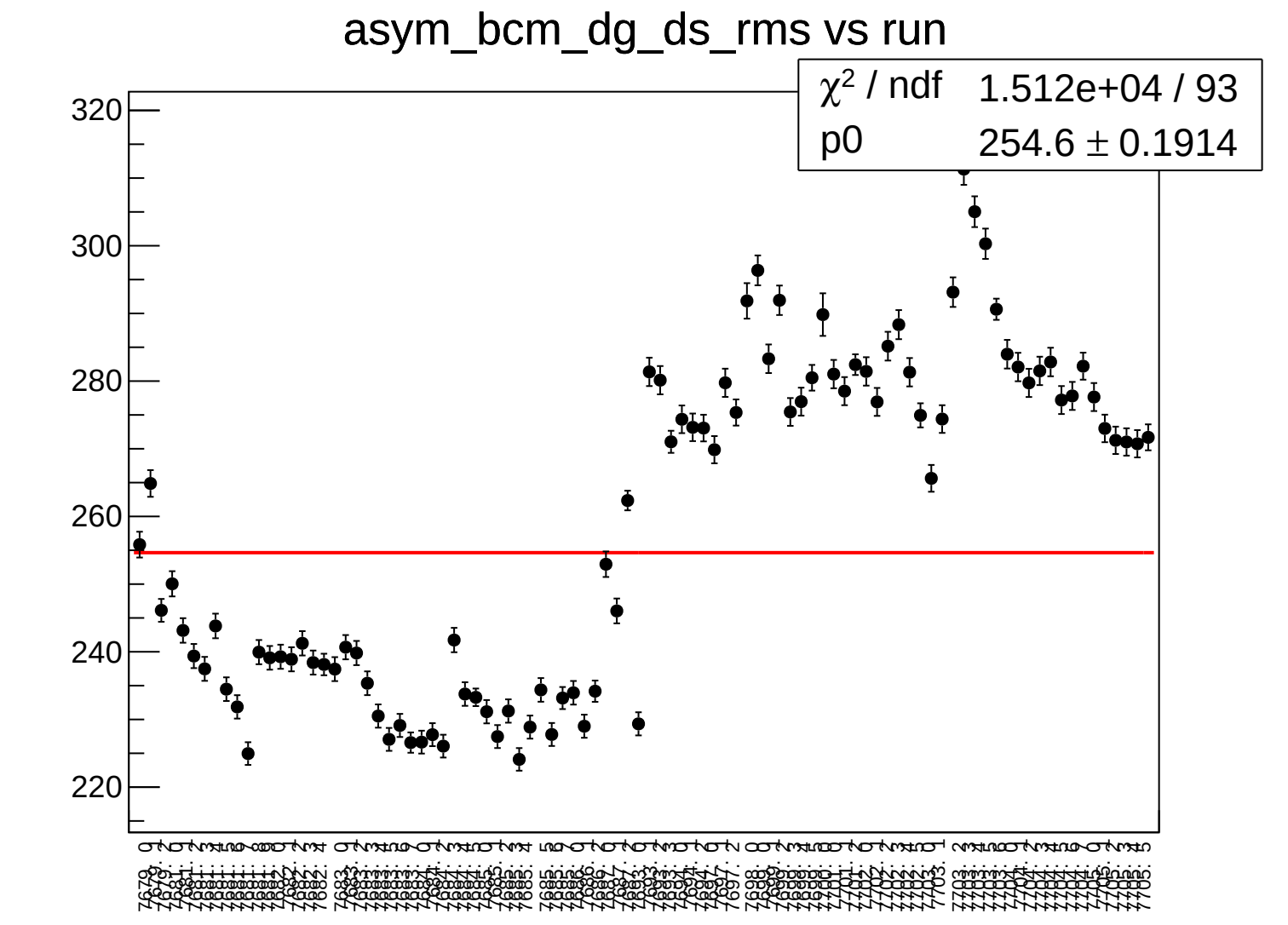

asym_bcm_an_us_rms vs run
χ² / ndf 1.485e+04 / 93
p0 254 ± 0.1909
320
300
280
260
240
220

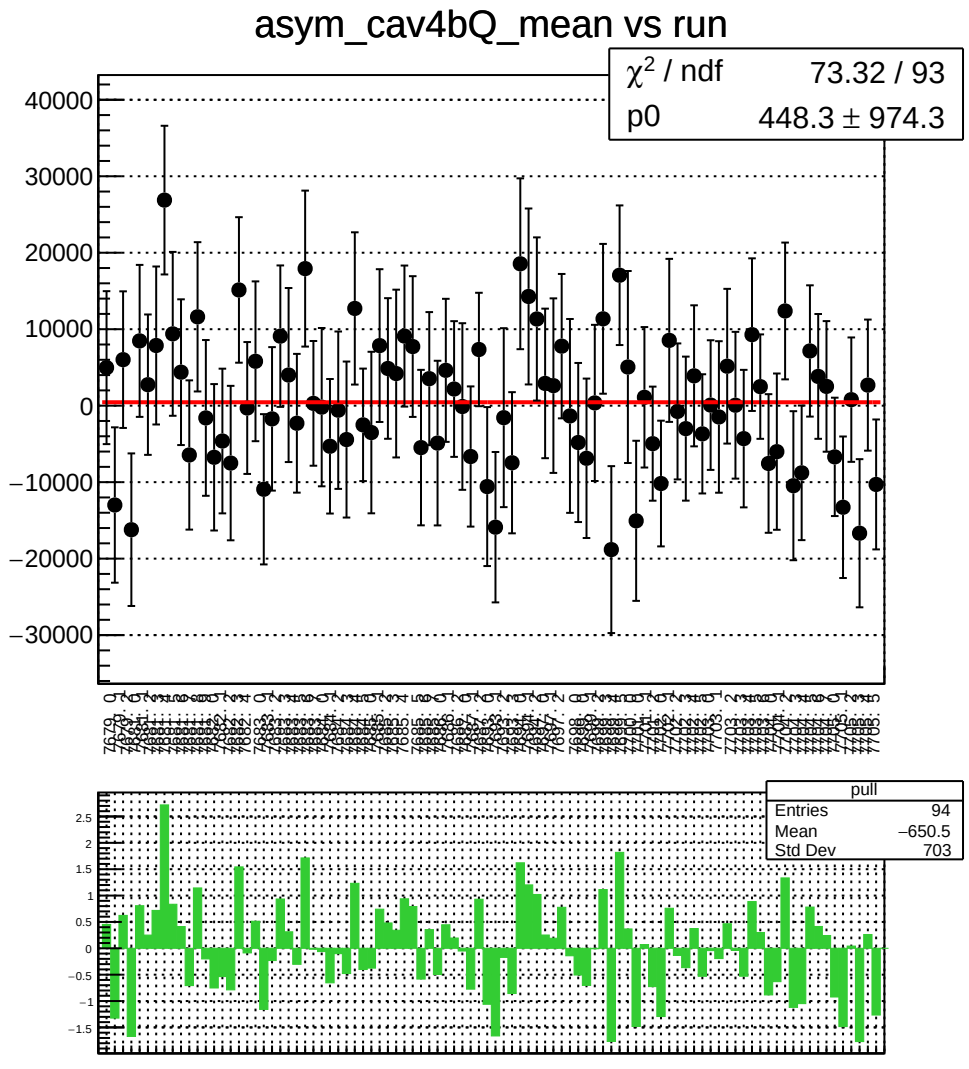

asym_bcm_dg_us_mean vs run
χ² / ndf 23.78 / 93
p0 56.65 ± 274.1
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 86.35
Std Dev 45.37
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.00063
Std Dev 0.5029
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

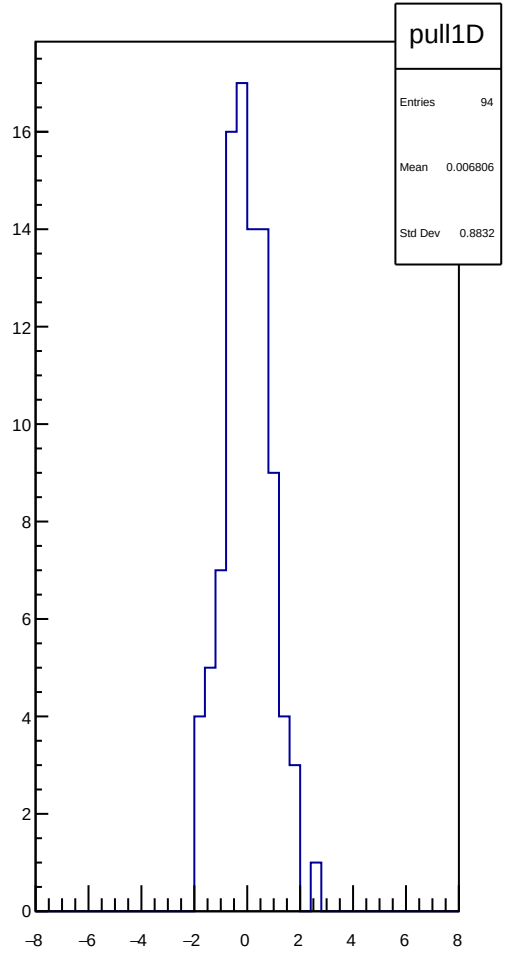

asym_bcm_dg_us_rms vs run
χ² / ndf 1.362e+04 / 93
p0 257.9 ± 0.1938
320
300
280
260
240
220

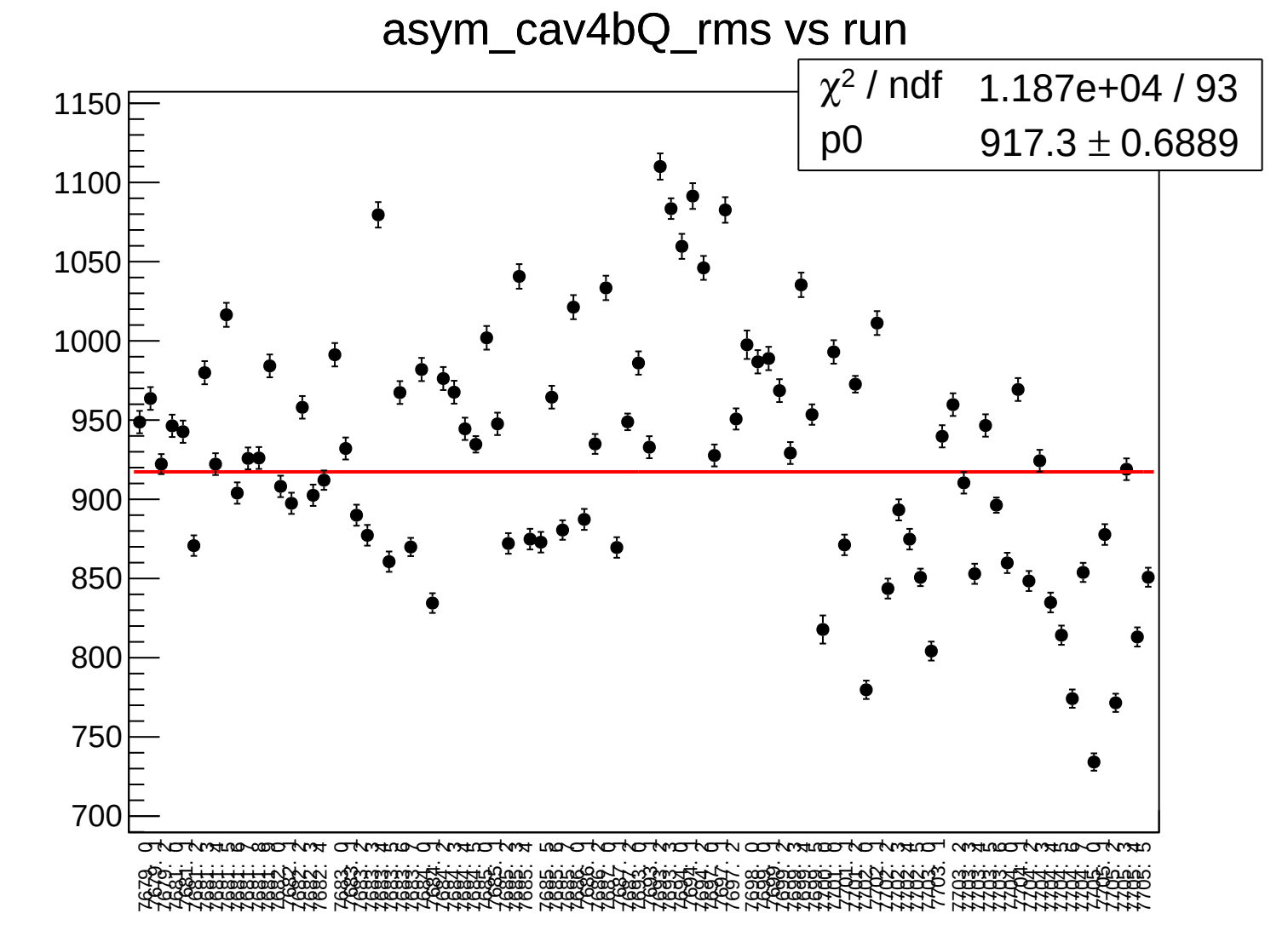

asym_bcm_dg_ds_mean vs run
χ² / ndf 22.3 / 93
p0 105.8 ± 270.7
pull
Entries 94
Mean −1164
Std Dev 1225

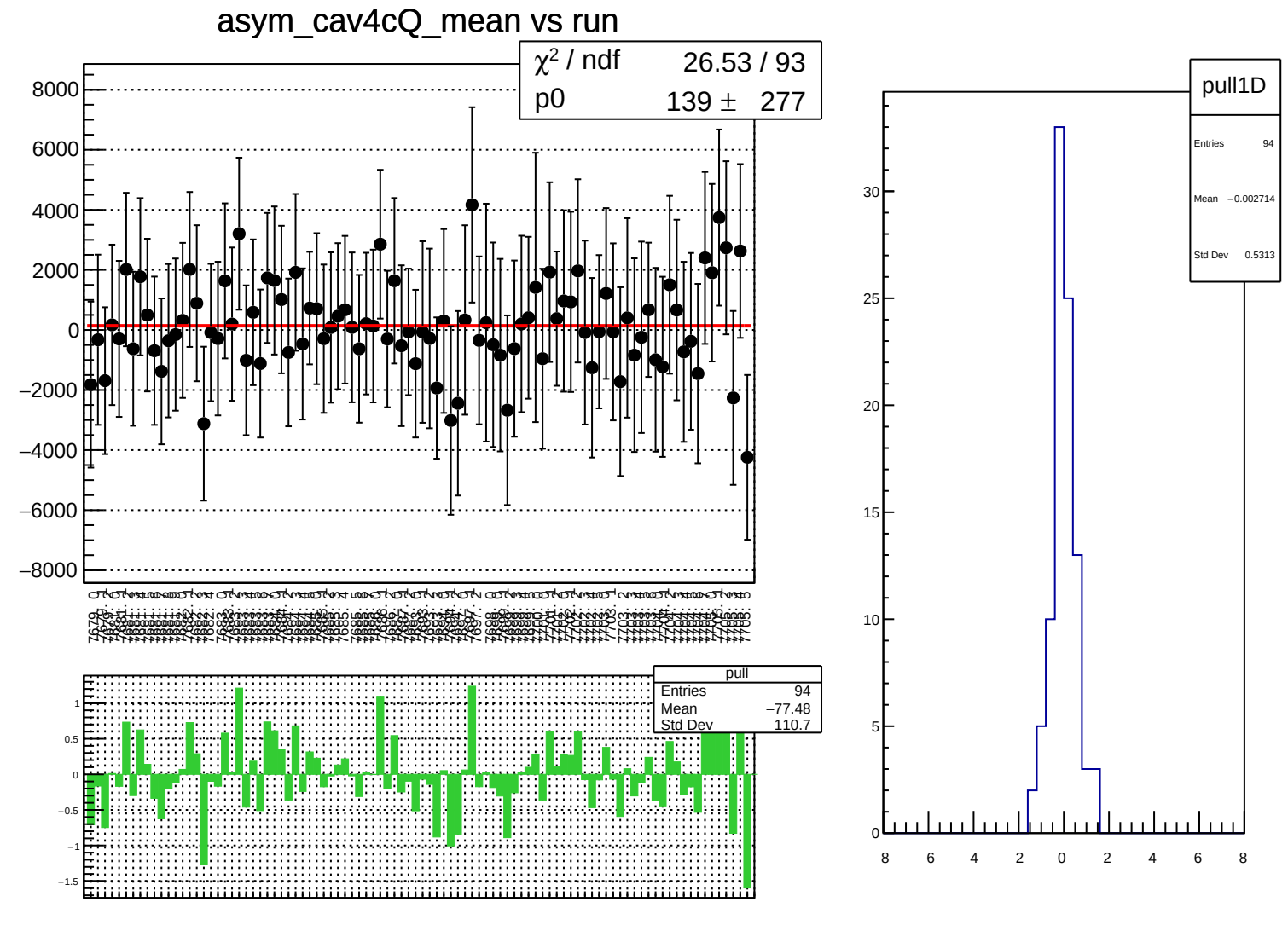

pull1D
Entries 94
Mean −0.0003257
Std Dev 0.4871

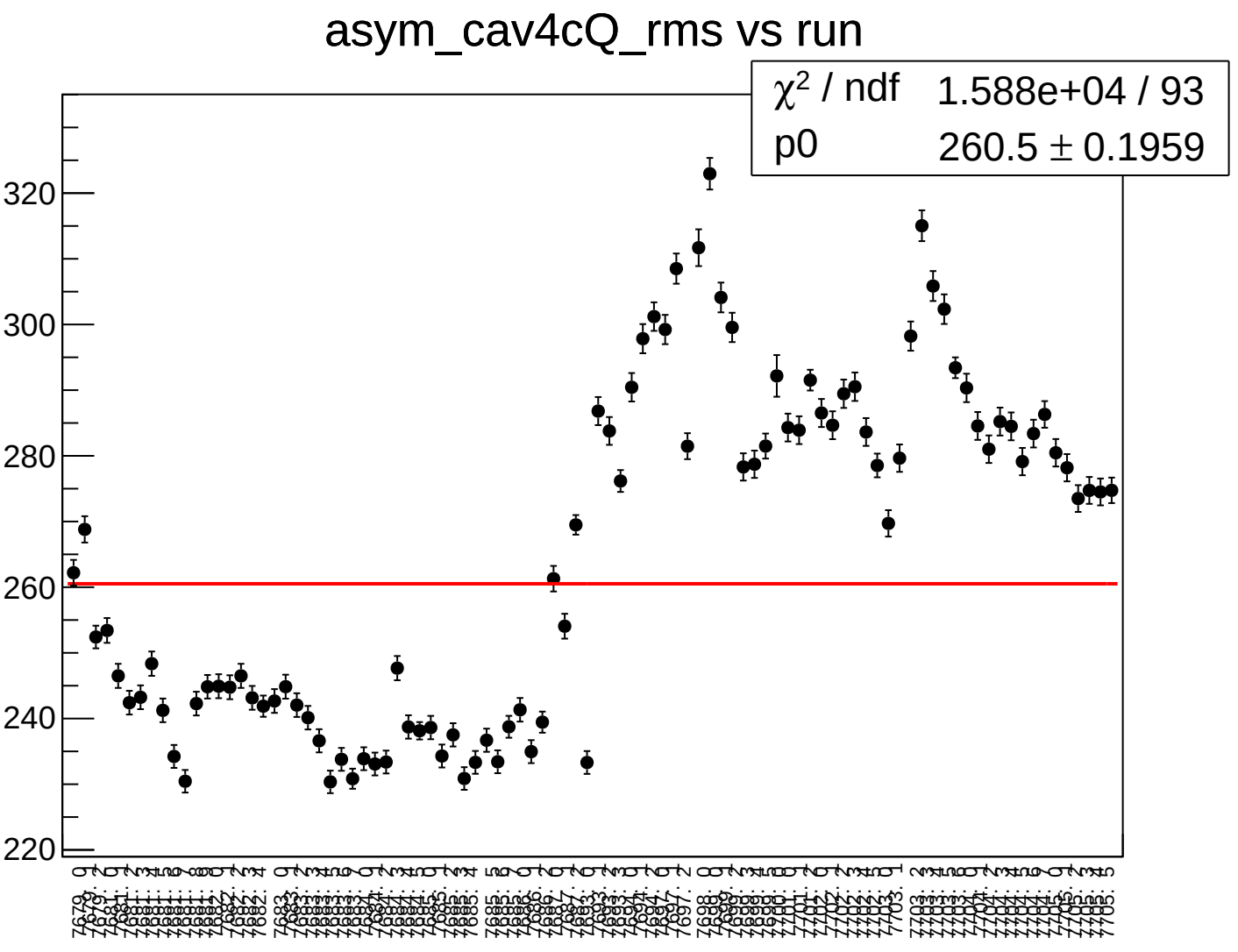

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.512e+04 / 93
p0 254.6 ± 0.1914
320
300
280
260
240
220

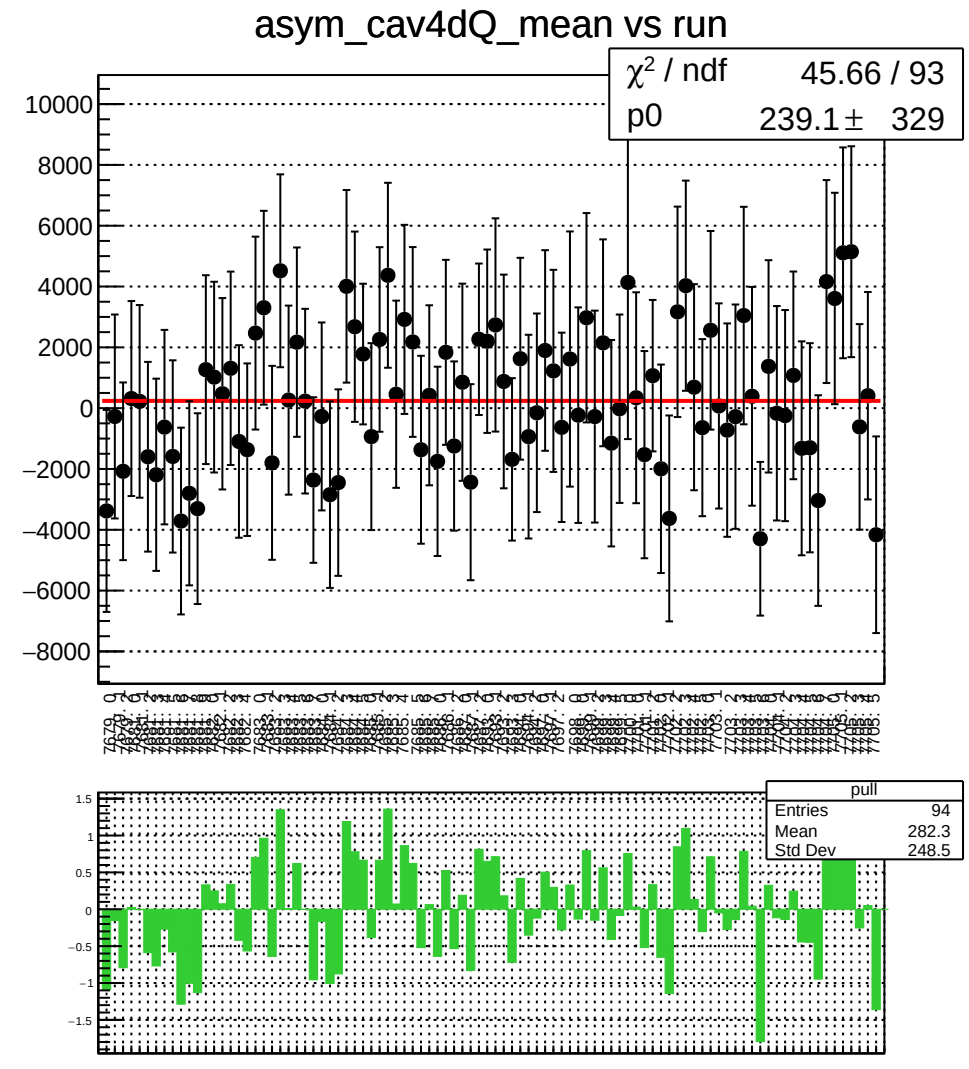

asym_cav4bQ_mean vs run
χ² / ndf 73.32 / 93
p0 448.3 ± 974.3
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −650.5
Std Dev 703
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

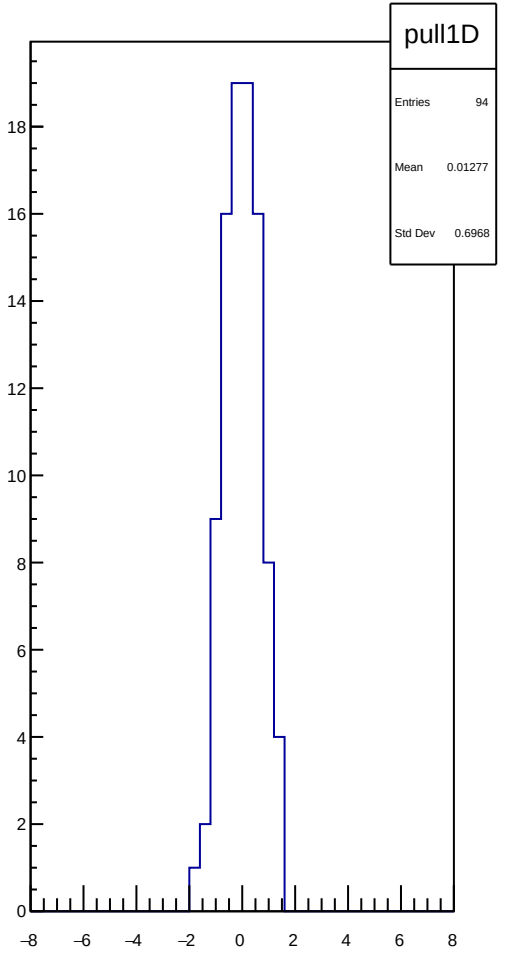

pull1D
Entries 94
Mean 0.006806
Std Dev 0.8832
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

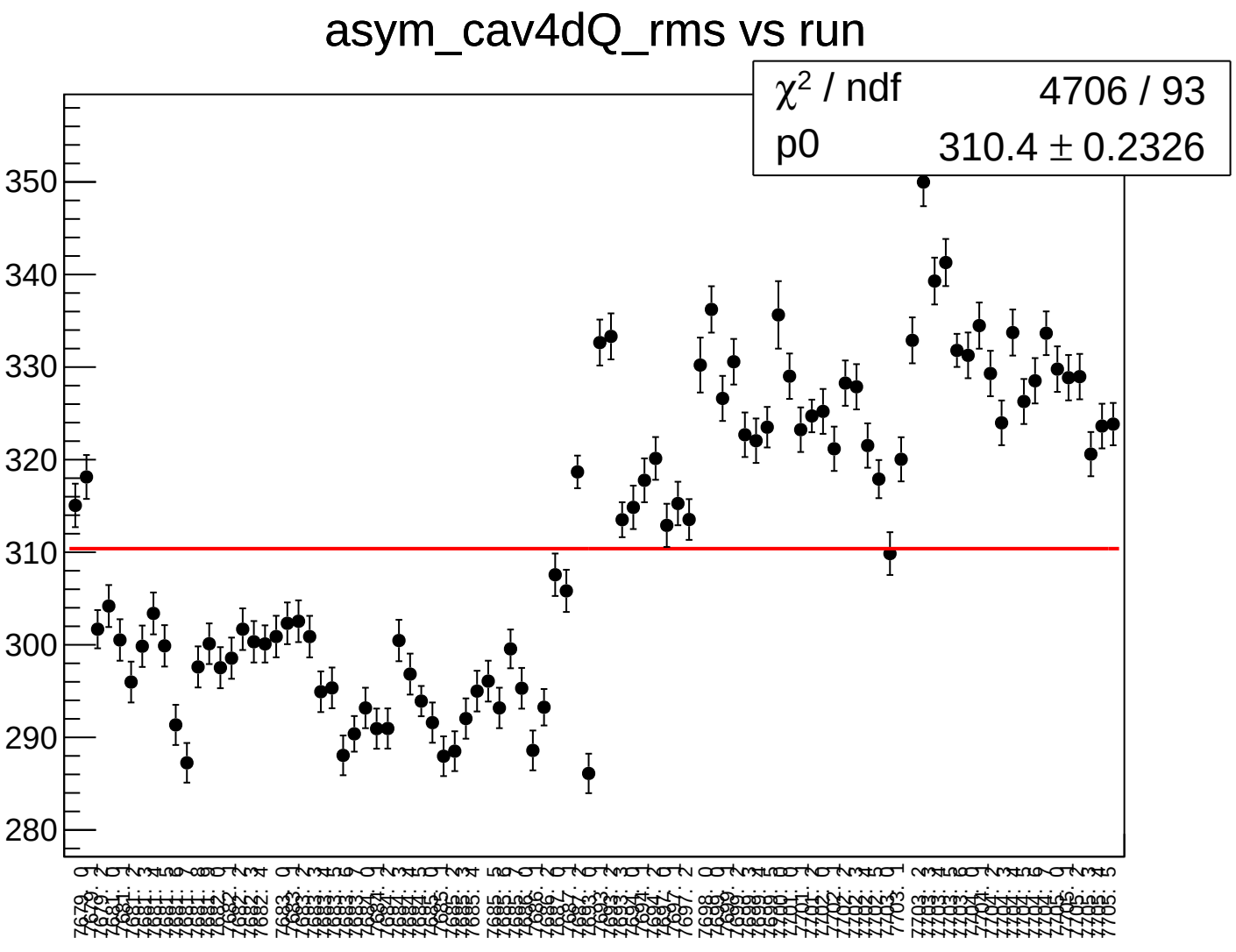

asym_cav4bQ_rms vs run
χ² / ndf 1.187e+04 / 93
p0 917.3 ± 0.6889
1150
1100
1050
1000
950
900
850
800
750
700

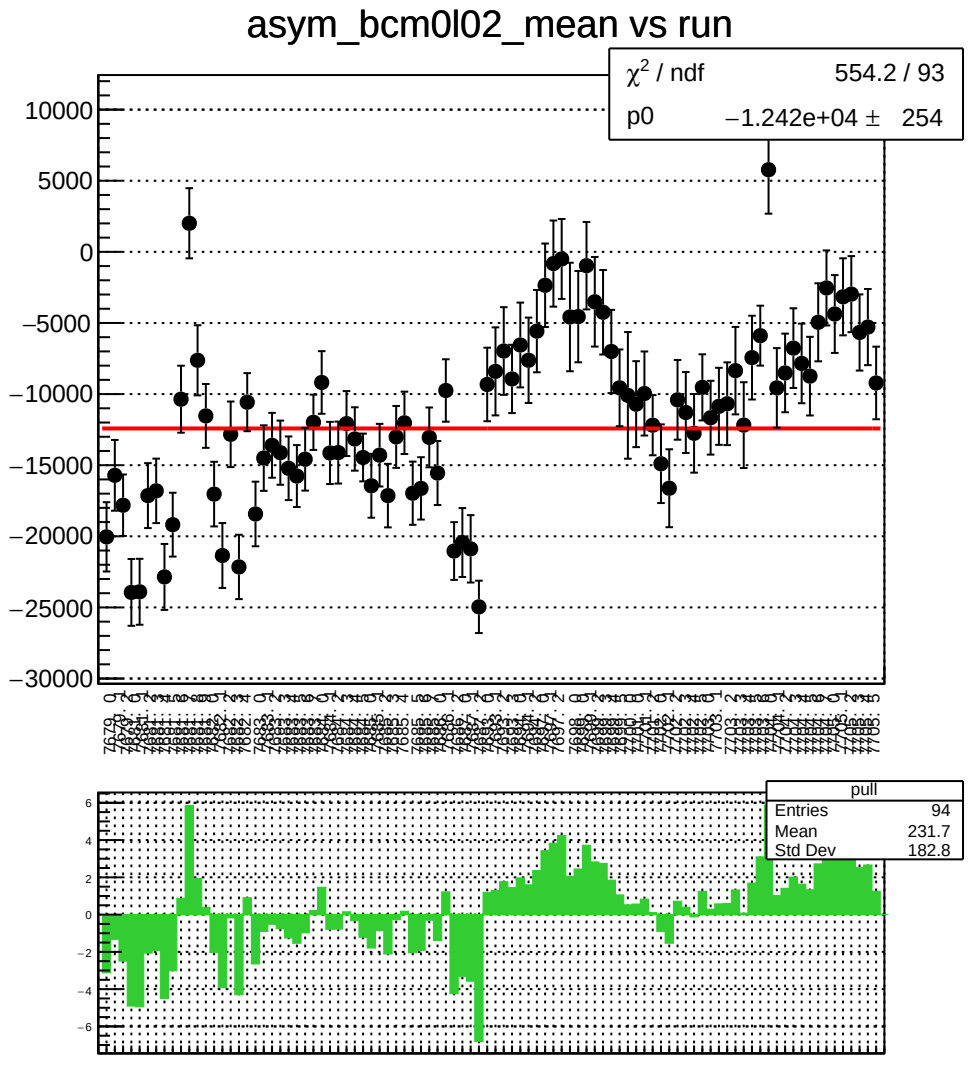

asym_cav4cQ_mean vs run
χ² / ndf 26.53 / 93
p0 139 ± 277
pull
Entries 94
Mean −77.48
Std Dev 110.7
pull1D
Entries 94
Mean −0.002714
Std Dev 0.5313

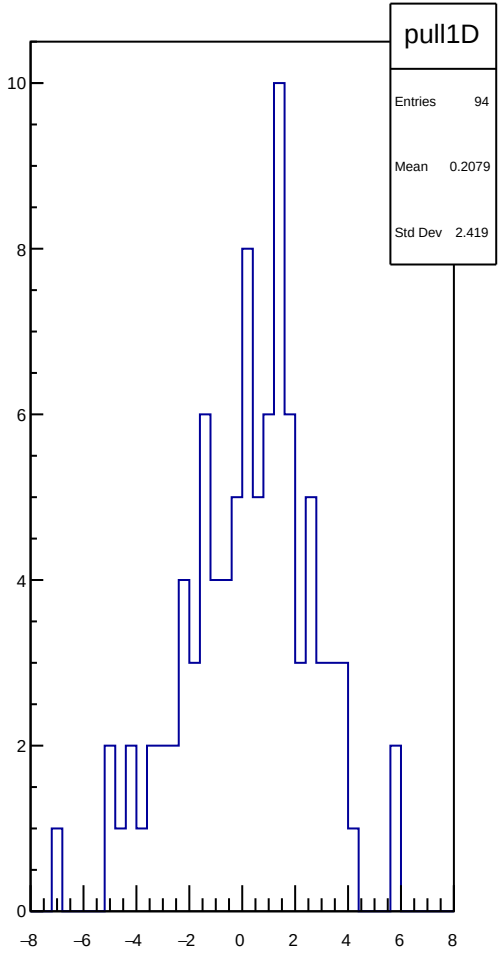

asym_cav4cQ_rms vs run
χ² / ndf 1.588e+04 / 93
p0 260.5 ± 0.1959
320
300
280
260
240
220

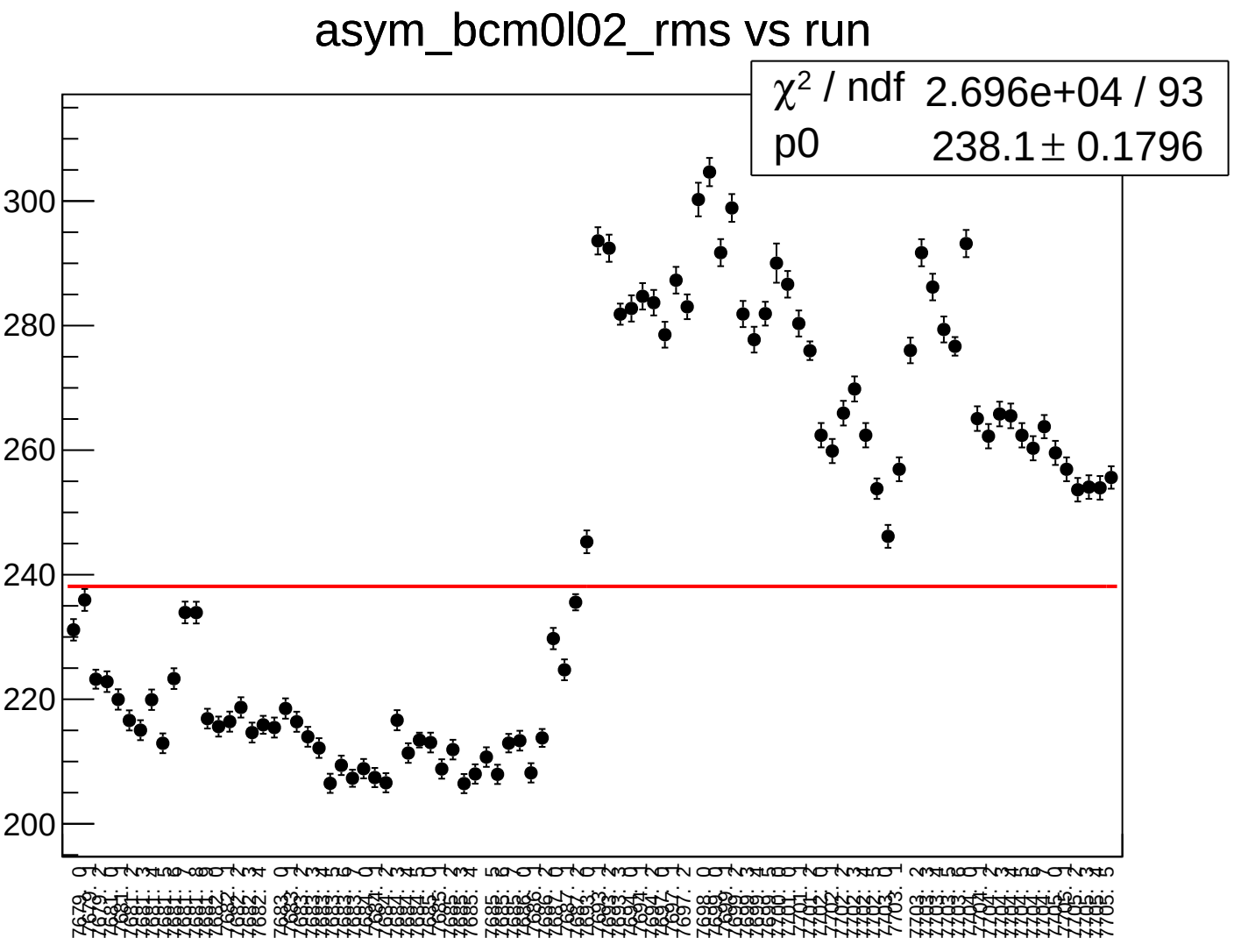

asym_cav4dQ_mean vs run
χ² / ndf 45.66 / 93
p0 239.1 ± 329
pull
Entries 94
Mean 282.3
Std Dev 248.5

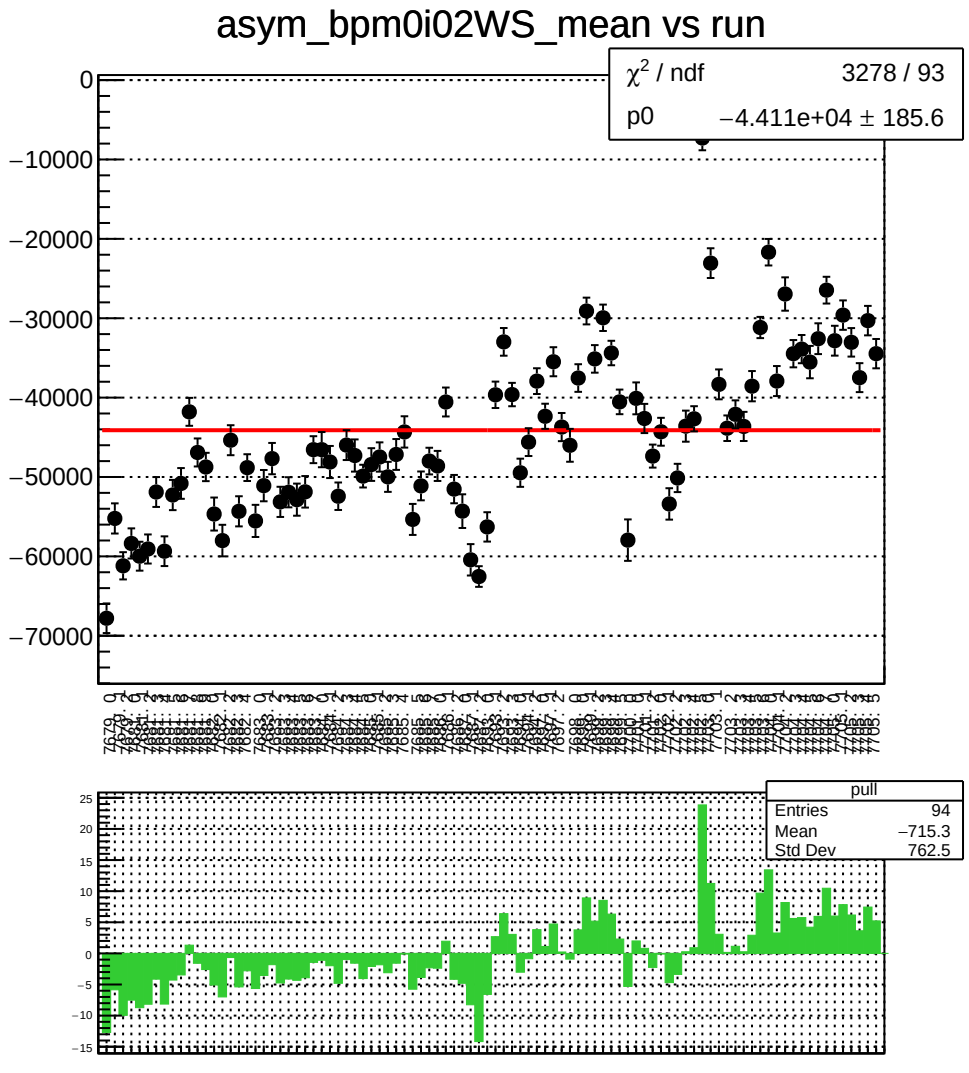

pull1D
Entries 94
Mean 0.01277
Std Dev 0.6968

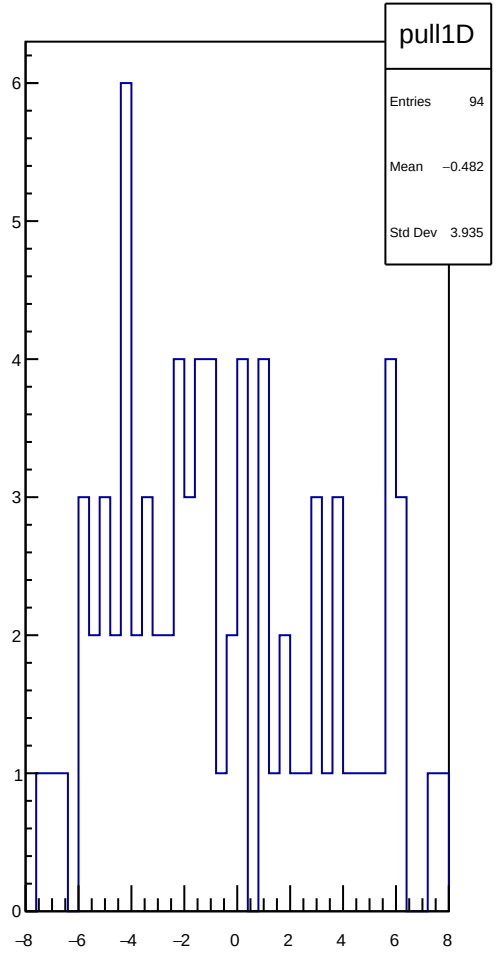

asym_cav4dQ_rms vs run
χ^2 / ndf 4706 / 93
p0 310.4 ± 0.2326
350
340
330
320
310
300
290
280

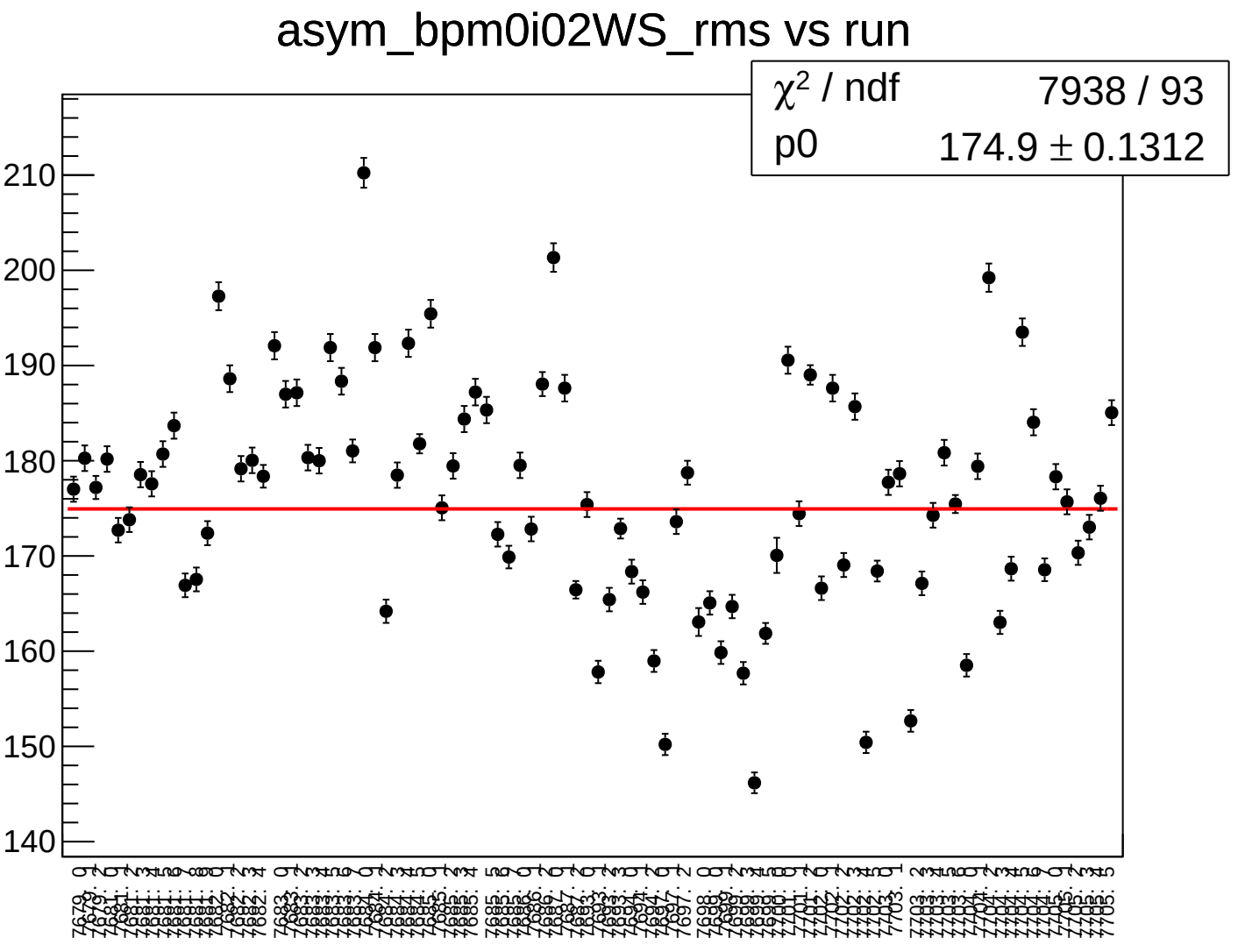

asym_bcm0l02_mean vs run
χ² / ndf 554.2 / 93
p0 −1.242e+04 ± 254
pull
Entries 94
Mean 231.7
Std Dev 182.8

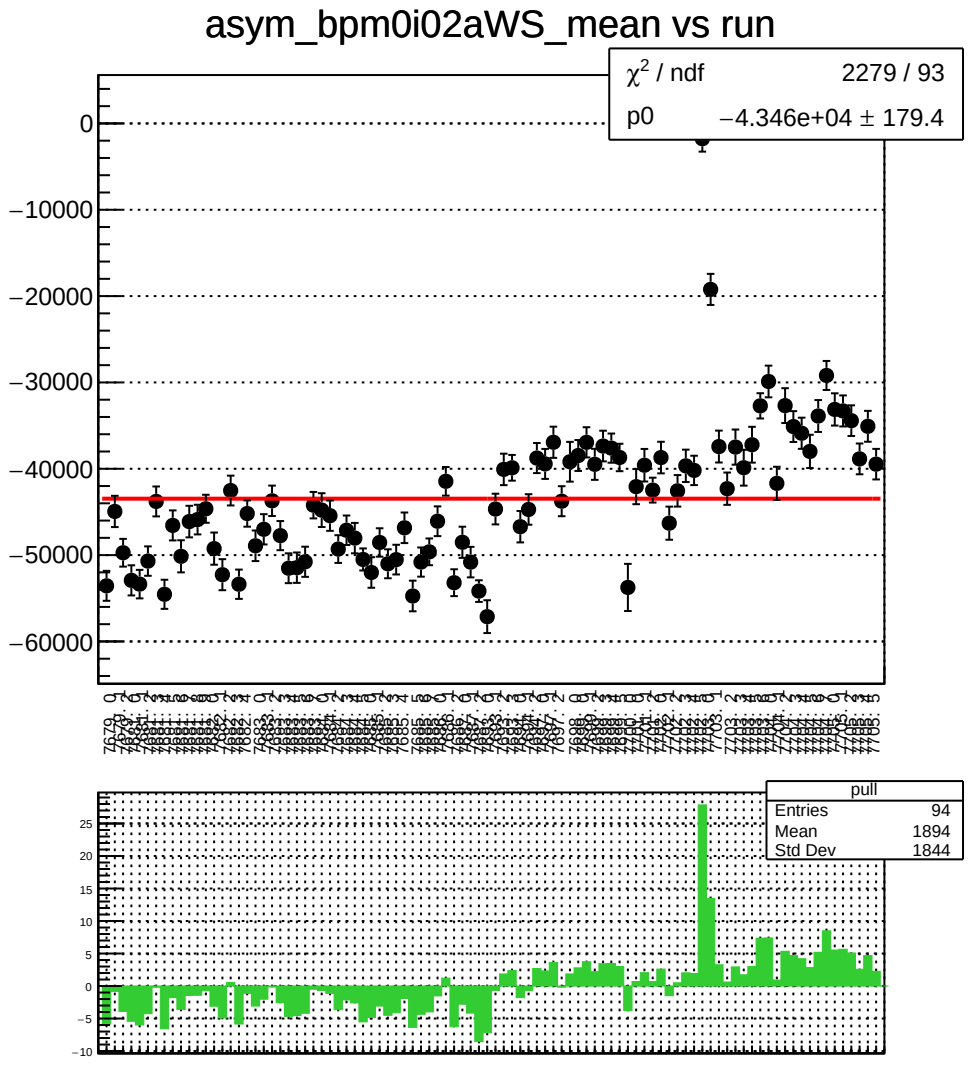

pull1D
Entries 94
Mean 0.2079
Std Dev 2.419

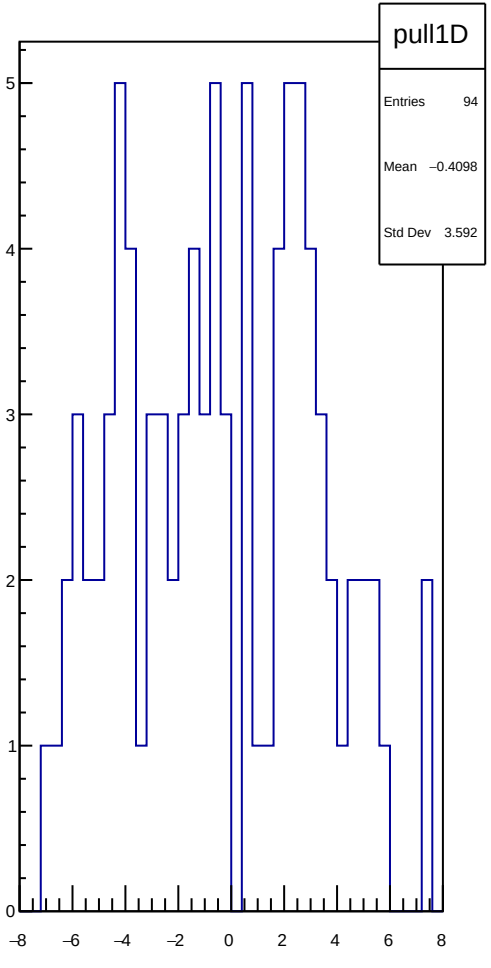

asym_bcm0l02_rms vs run
χ² / ndf 2.696e+04 / 93
p0 238.1 ± 0.1796
300
280
260
240
220
200

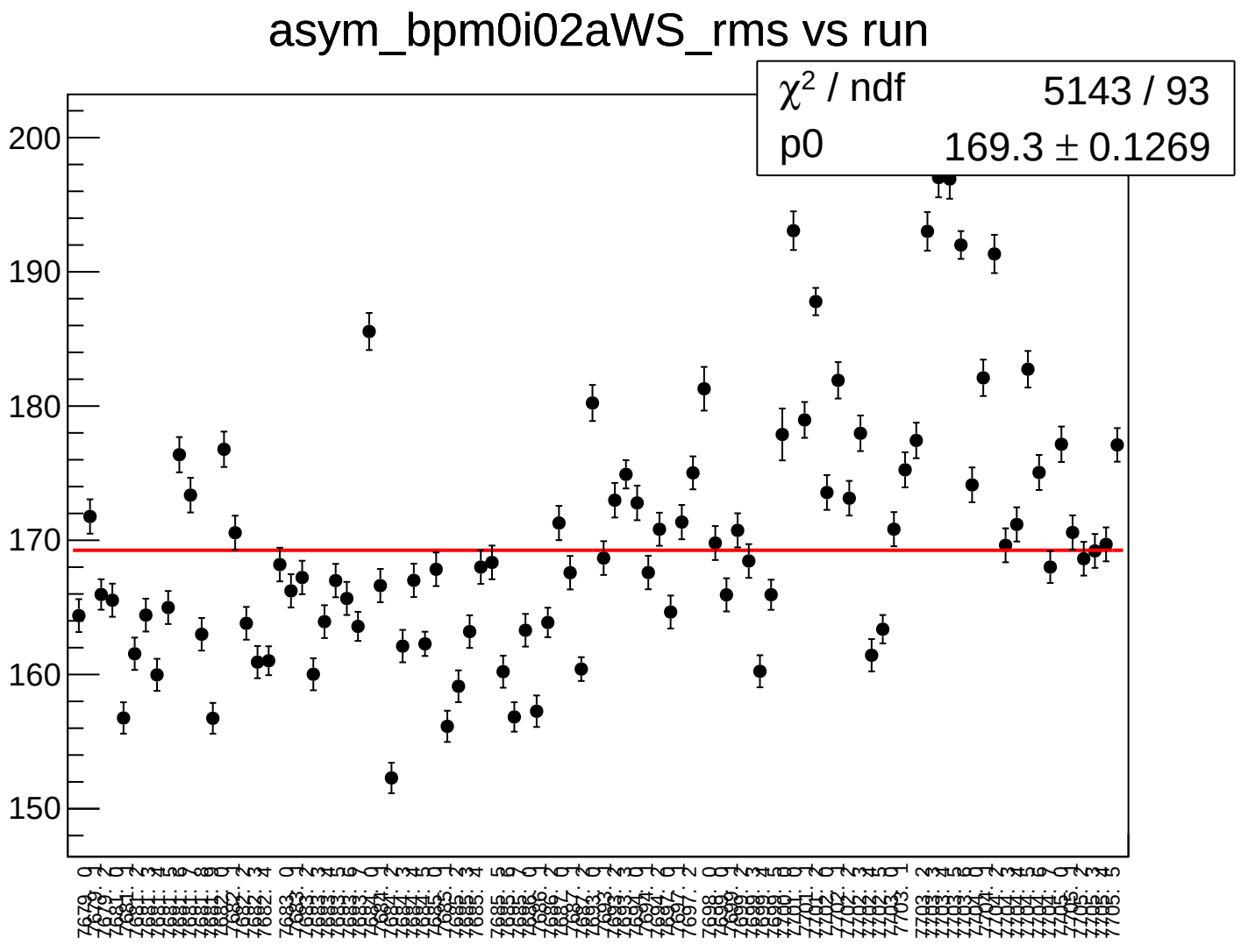

asym_bpm0i02WS_mean vs run
χ² / ndf 3278 / 93
p0 −4.411e+04 ± 185.6
pull
Entries 94
Mean −715.3
Std Dev 762.5

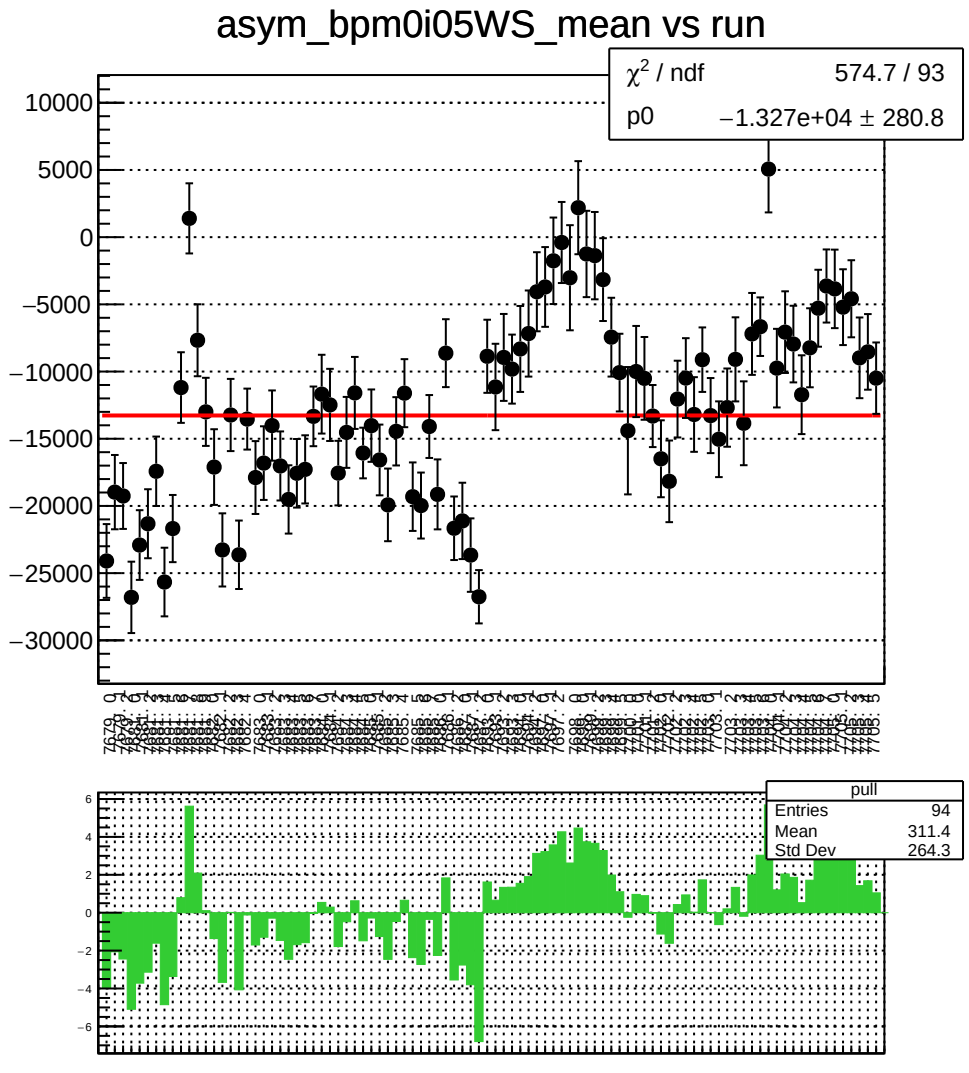

pull1D
Entries 94
Mean −0.482
Std Dev 3.935

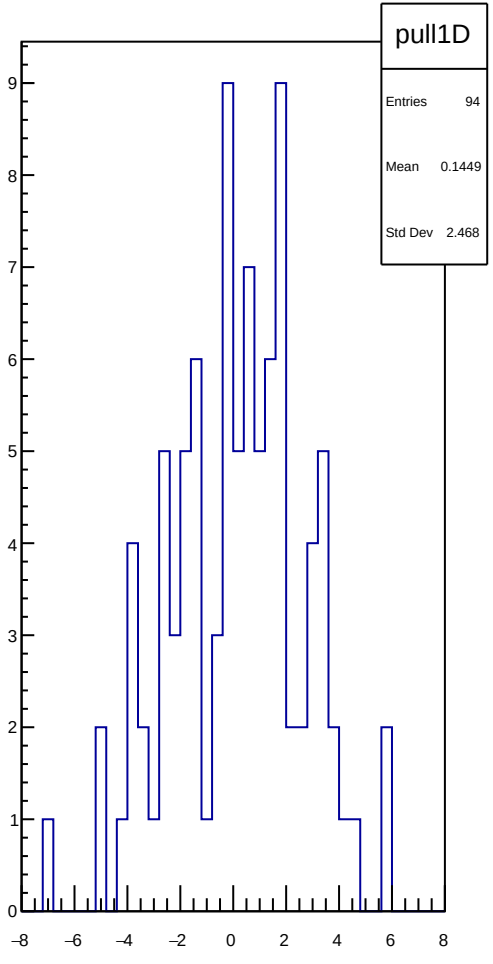

asym_bpm0i02WS_rms vs run
χ² / ndf 7938 / 93
p0 174.9 ± 0.1312
210
200
190
180
170
160
150
140

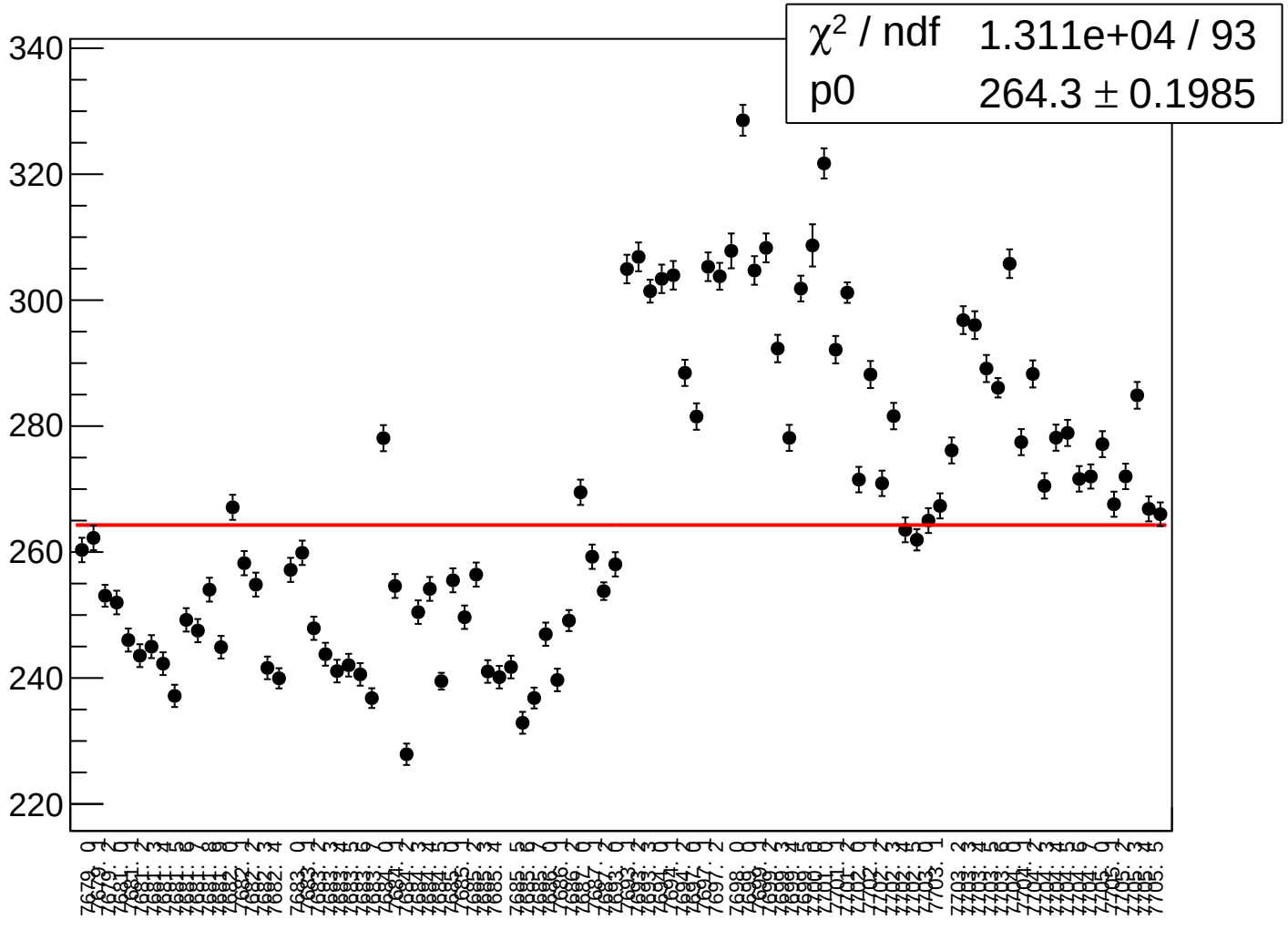

asym_bpm0i02aWS_mean vs run
χ² / ndf 2279 / 93
p0 −4.346e+04 ± 179.4
0
−10000
−20000
−30000
−40000
−50000
−60000
pull
Entries 94
Mean 1894
Std Dev 1844
25
20
15
10
5
0
−5
−10

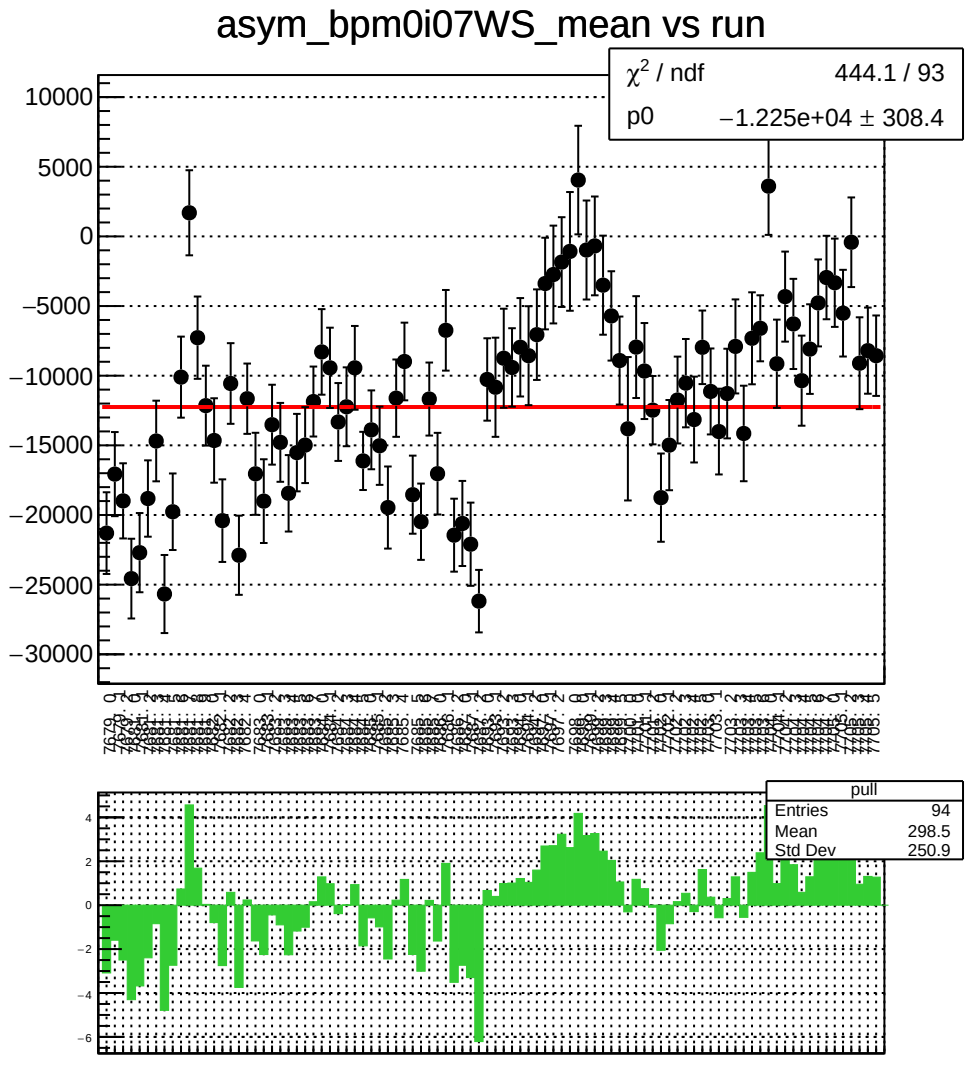

pull1D
Entries 94
Mean −0.4098
Std Dev 3.592
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

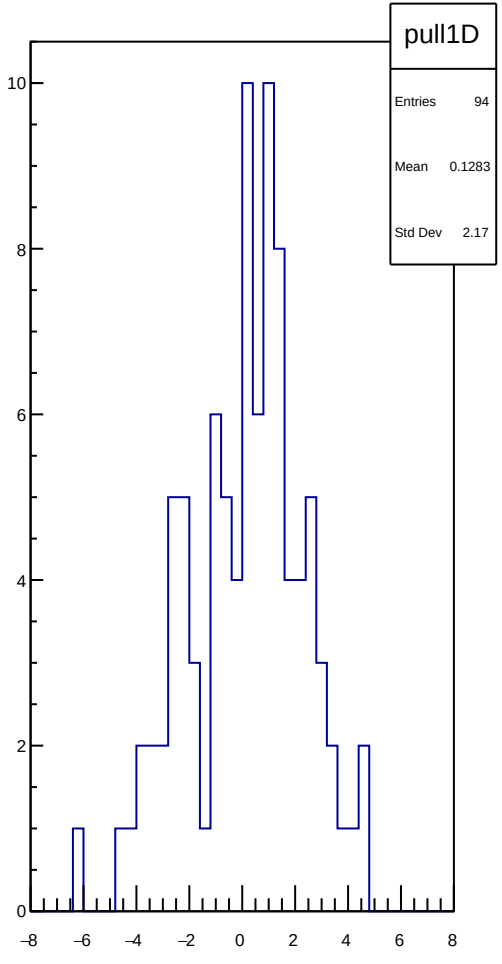

asym_bpm0i02aWS_rms vs run
χ² / ndf 5143 / 93
p0 169.3 ± 0.1269
200
190
180
170
160
150

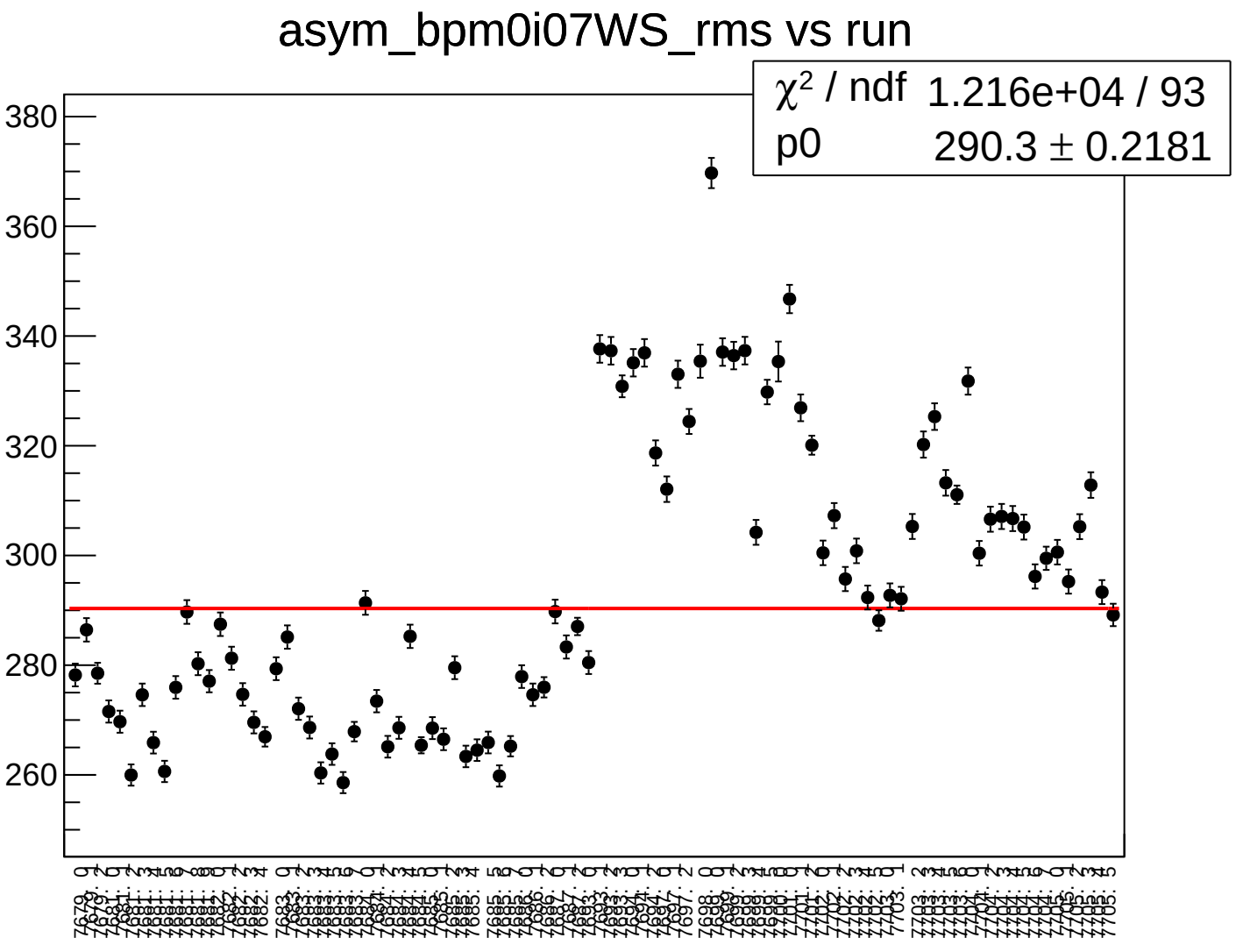

asym_bpm0i05WS_mean vs run
χ² / ndf 574.7 / 93
p0 −1.327e+04 ± 280.8
pull
Entries 94
Mean 311.4
Std Dev 264.3

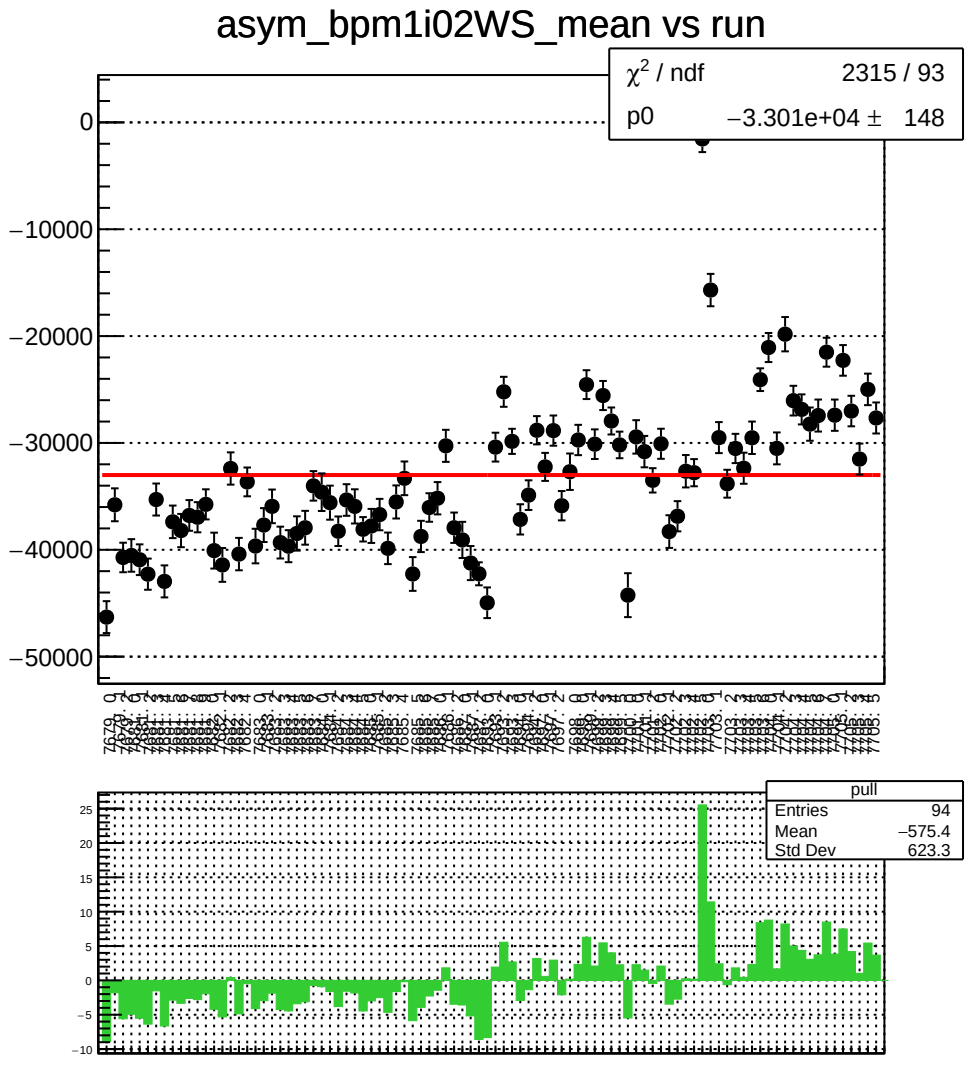

pull1D
Entries 94
Mean 0.1449
Std Dev 2.468

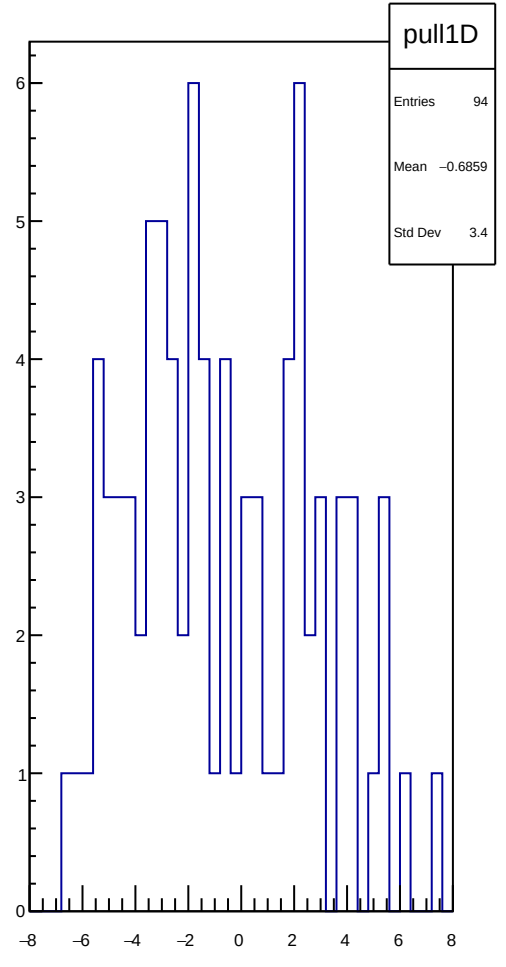

asym_bpm0i05WS_rms vs run
χ² / ndf 1.311e+04 / 93
p0 264.3 ± 0.1985
340
320
300
280
260
240
220

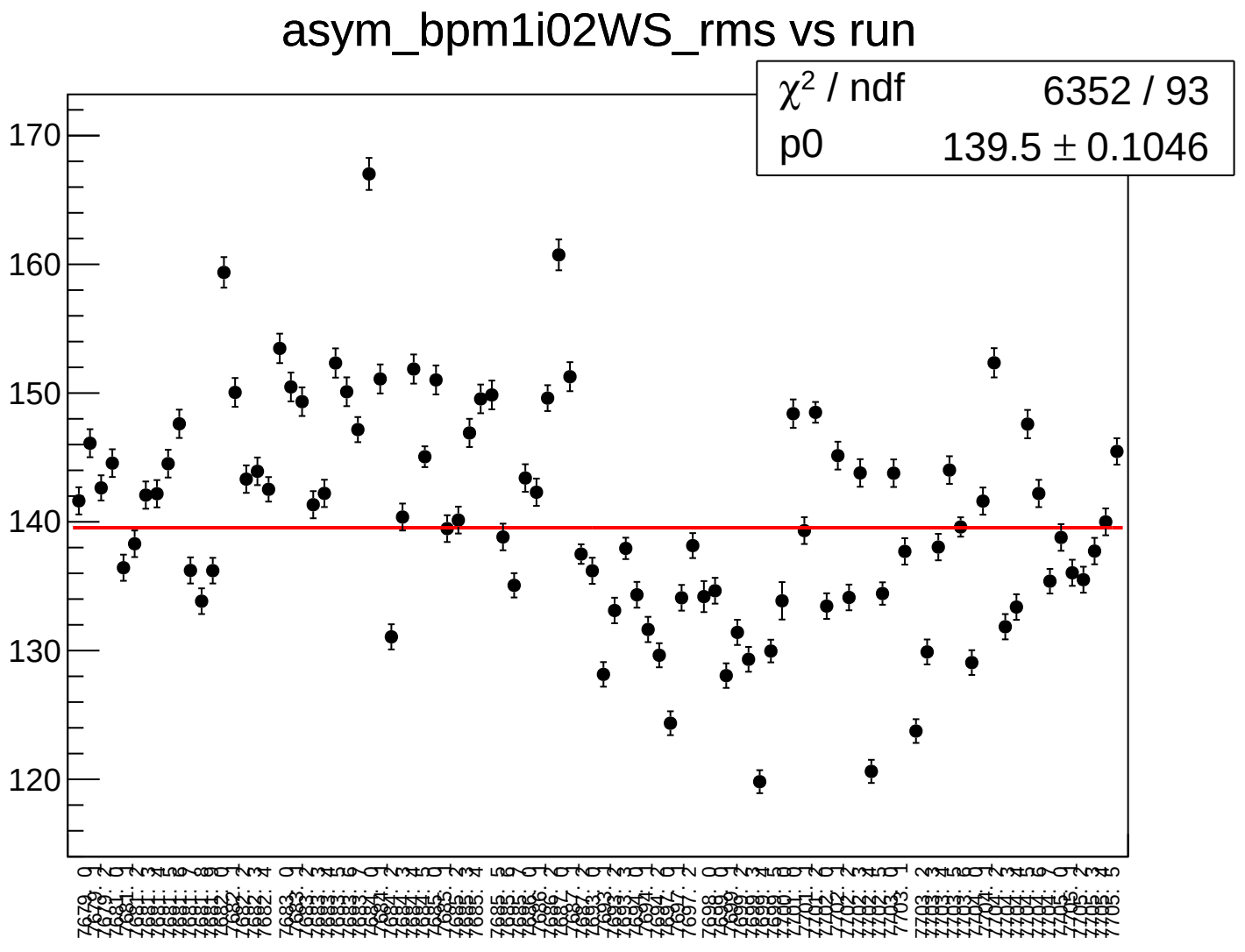

asym_bpm0i07WS_mean vs run
χ² / ndf 444.1 / 93
p0 −1.225e+04 ± 308.4
pull
Entries 94
Mean 298.5
Std Dev 250.9

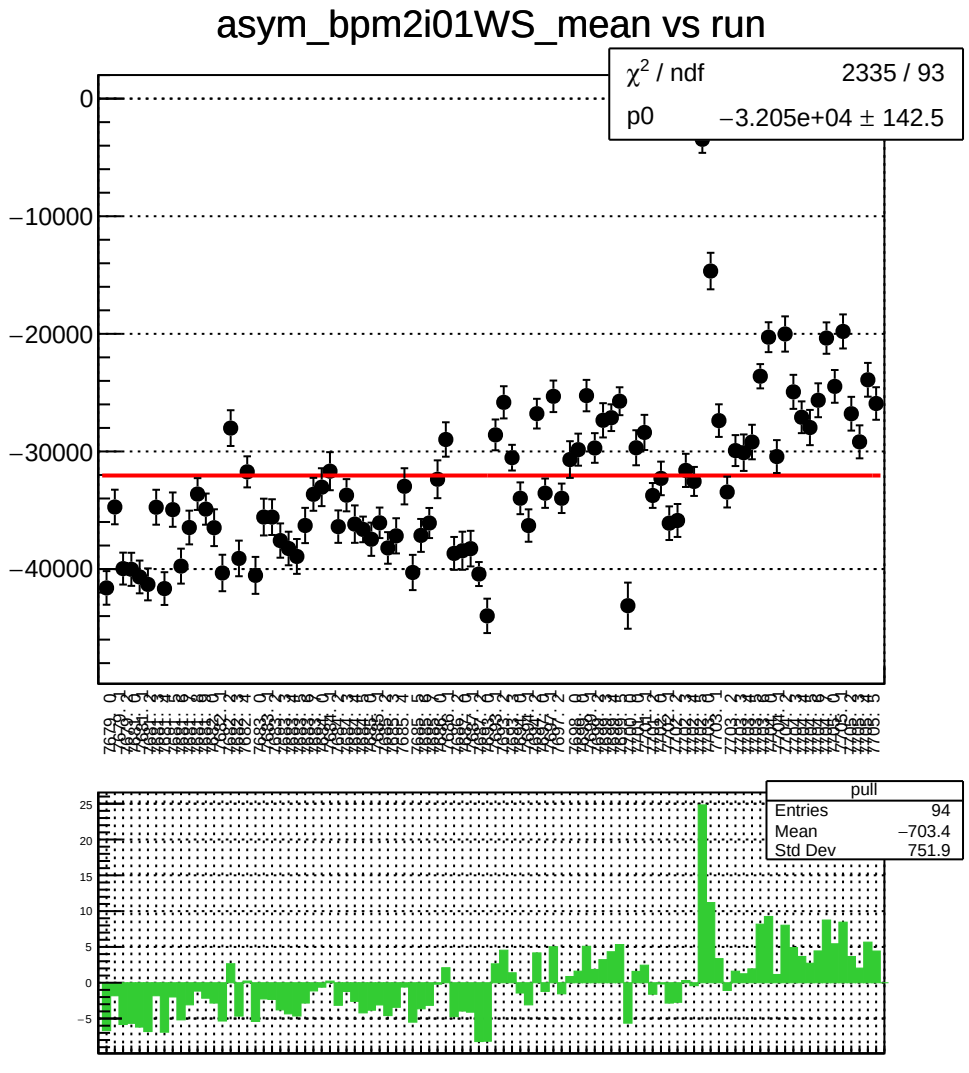

pull1D
Entries 94
Mean 0.1283
Std Dev 2.17

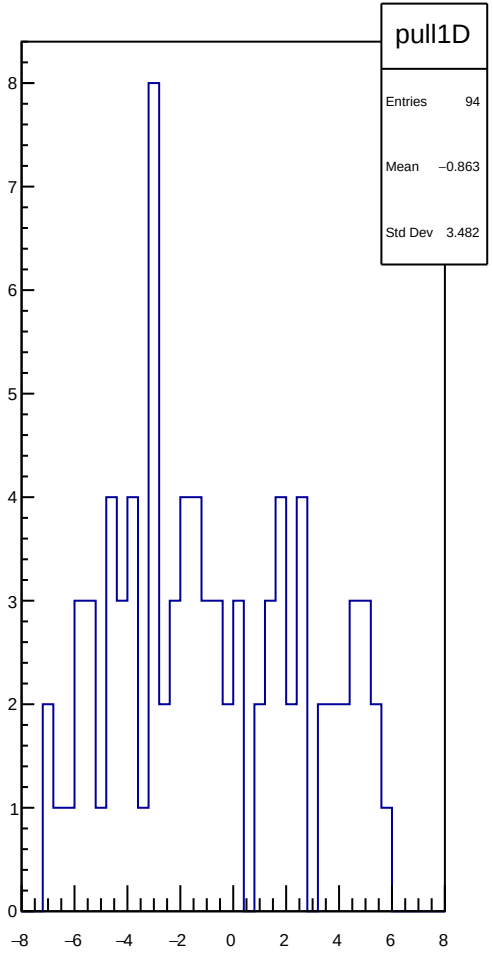

asym_bpm0i07WS_rms vs run
χ² / ndf 1.216e+04 / 93
p0 290.3 ± 0.2181
380
360
340
320
300
280
260

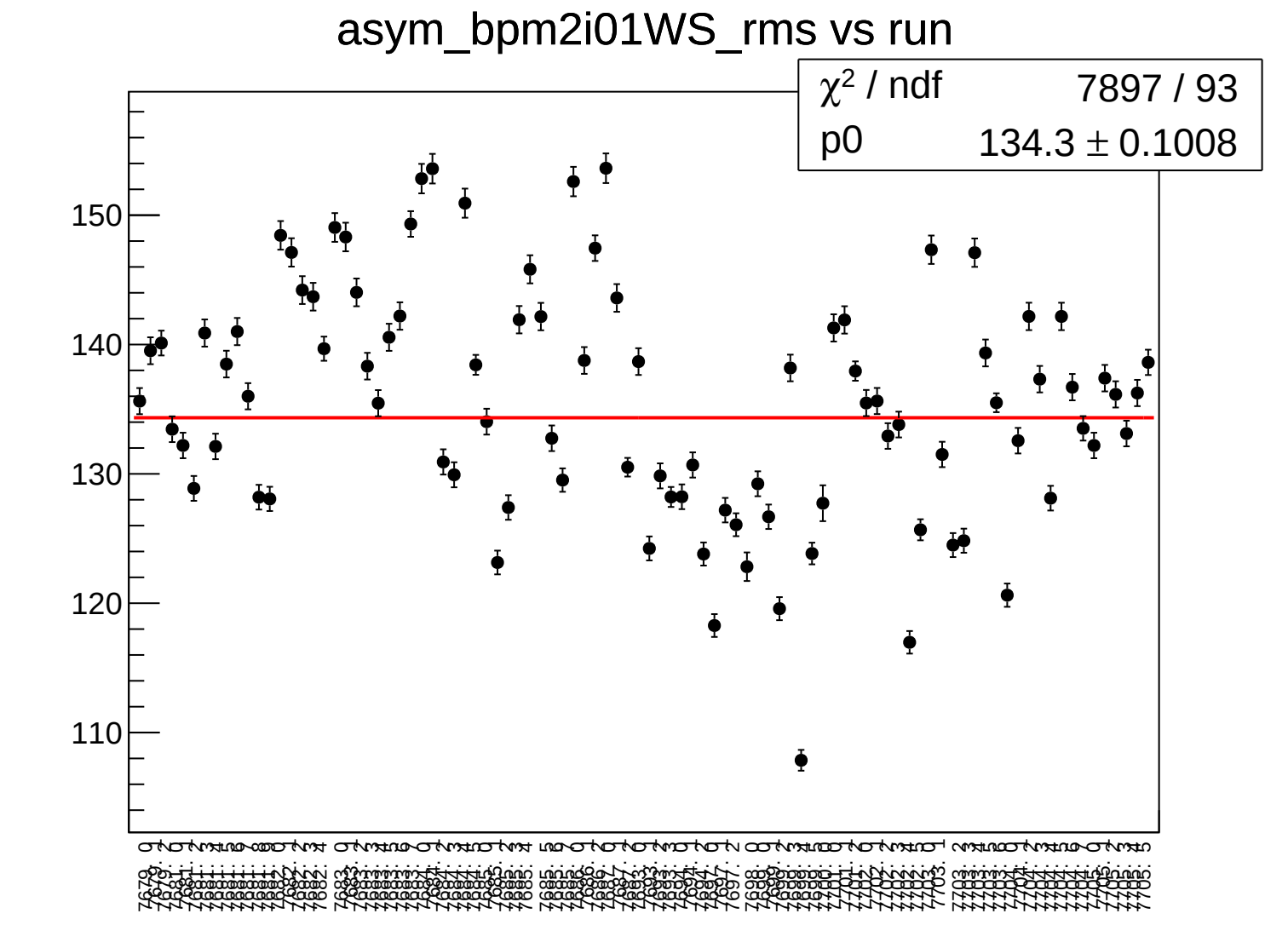

asym_bpm1i02WS_mean vs run
χ² / ndf 2315 / 93
p0 −3.301e+04 ± 148
0
−10000
−20000
−30000
−40000
−50000
pull
Entries 94
Mean −575.4
Std Dev 623.3
25
20
15
10
5
0
−5
−10

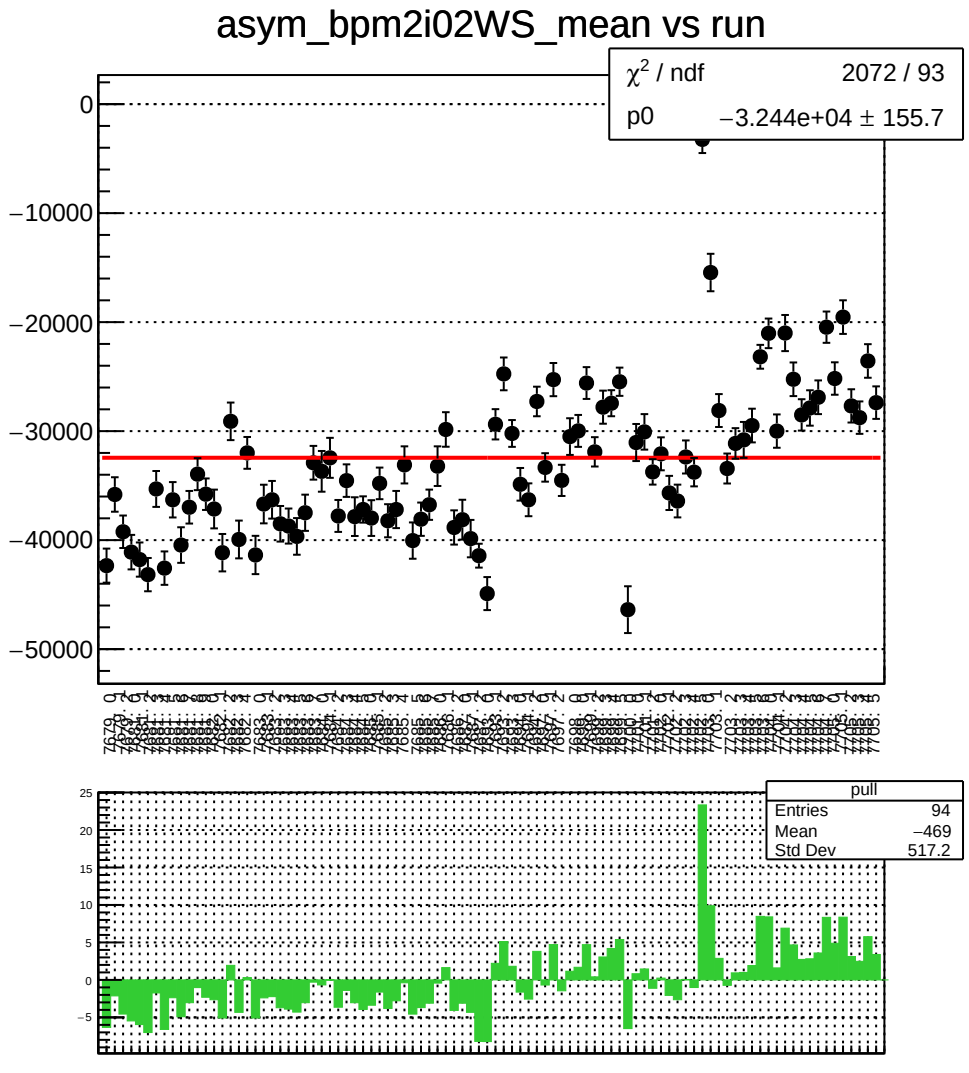

pull1D
Entries 94
Mean −0.6859
Std Dev 3.4
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

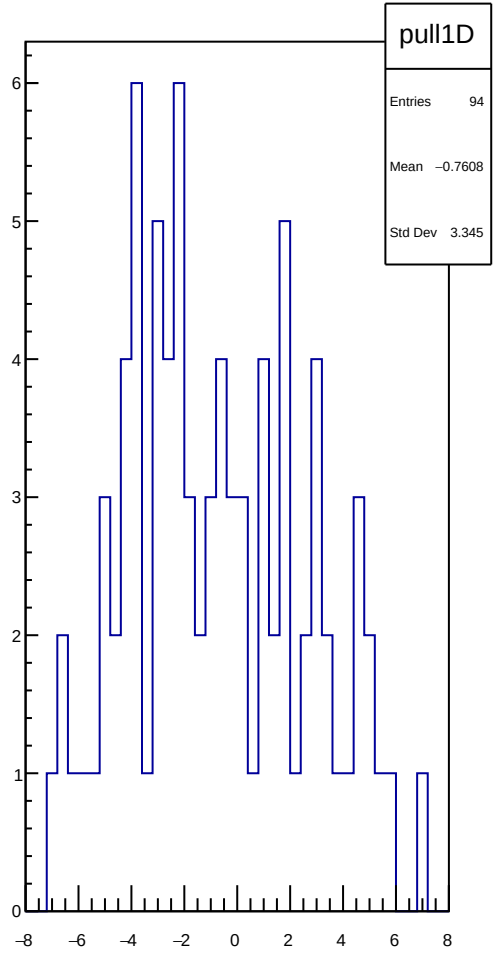

asym_bpm1i02WS_rms vs run
χ^2 / ndf 6352 / 93
p0 139.5 ± 0.1046
170
160
150
140
130
120

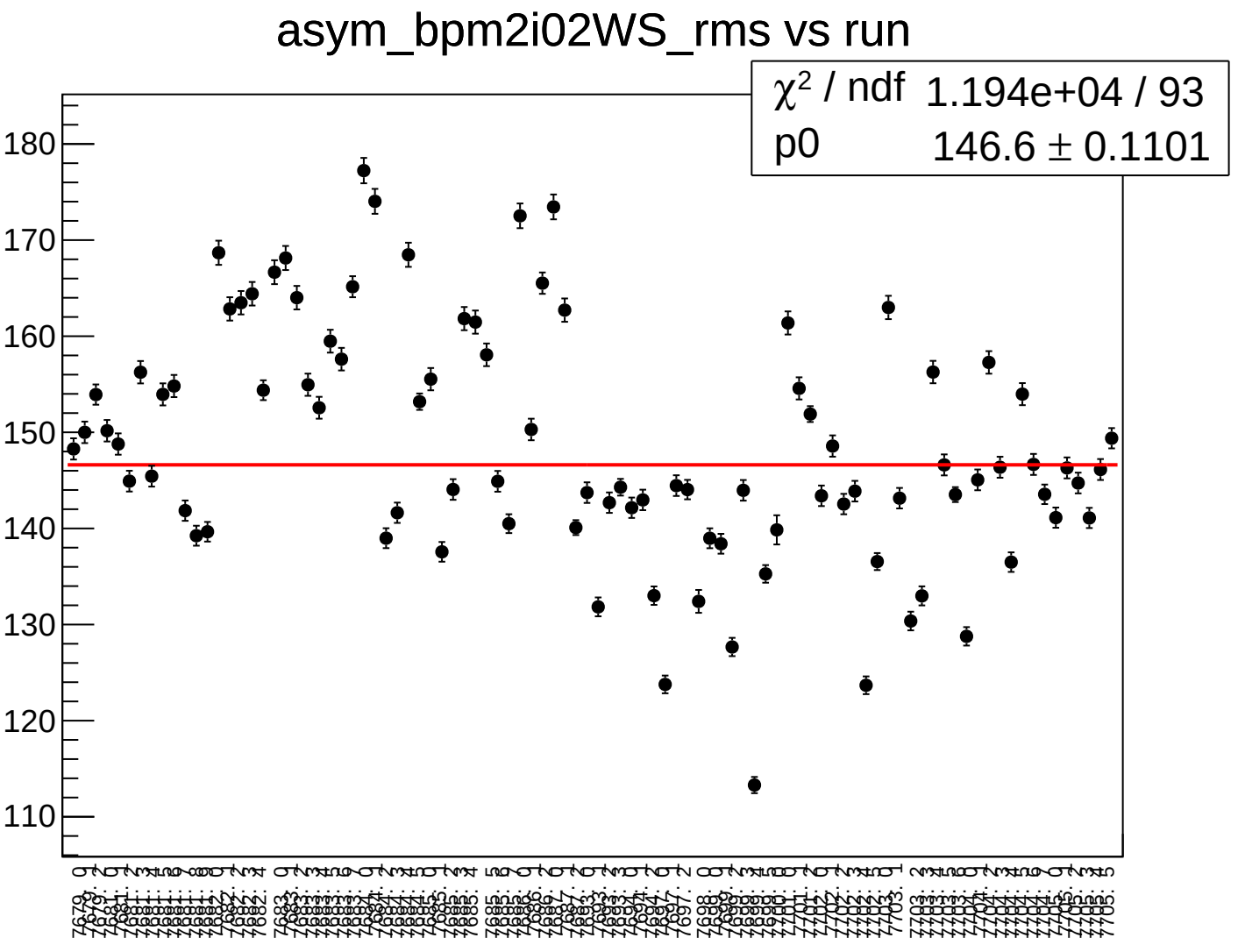

asym_bpm2i01WS_mean vs run
χ² / ndf 2335 / 93
p0 −3.205e+04 ± 142.5
0
−10000
−20000
−30000
−40000
pull
Entries 94
Mean −703.4
Std Dev 751.9
25
20
15
10
5
0
−5

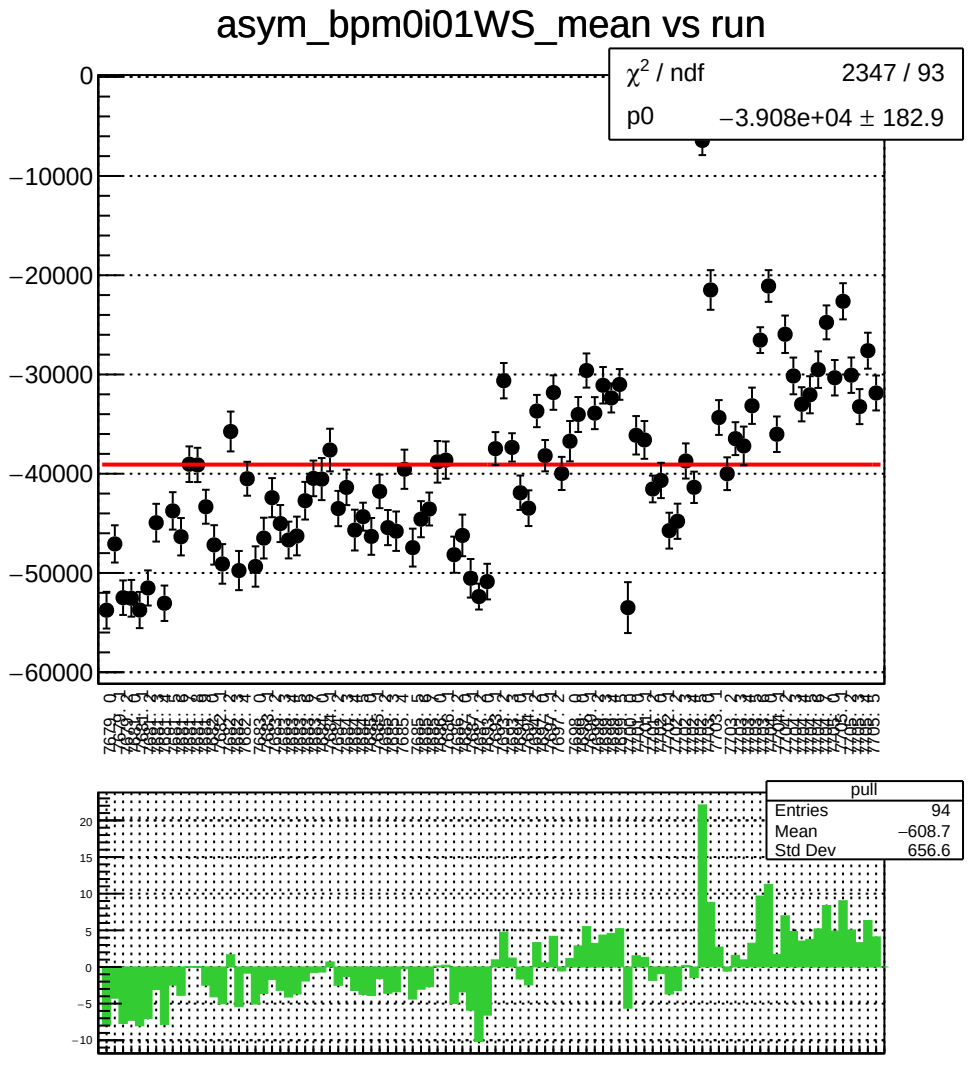

pull1D
Entries 94
Mean −0.863
Std Dev 3.482
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

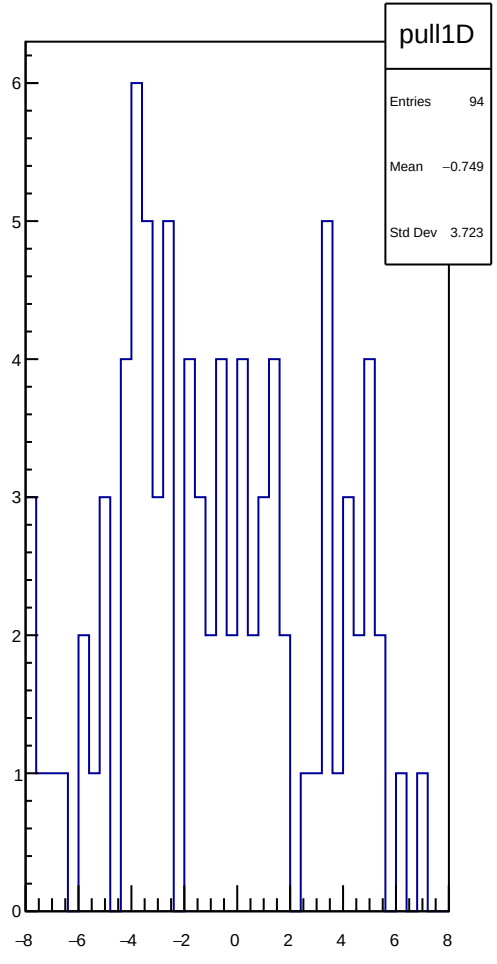

asym_bpm2i01WS_rms vs run
χ² / ndf 7897 / 93
p0 134.3 ± 0.1008
150
140
130
120
110

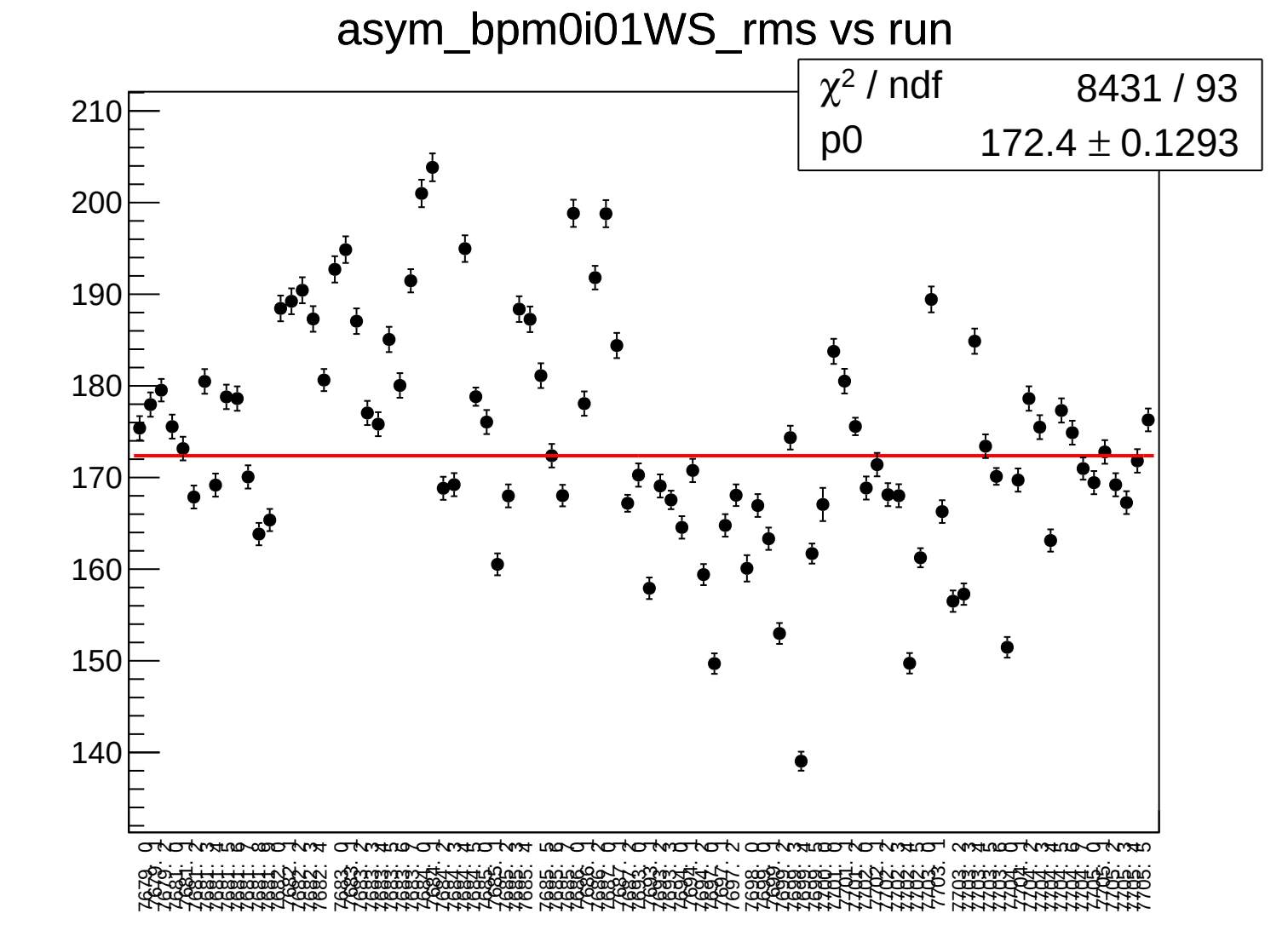

asym_bpm2i02WS_mean vs run
χ² / ndf 2072 / 93
p0 −3.244e+04 ± 155.7
0
−10000
−20000
−30000
−40000
−50000
pull
Entries 94
Mean −469
Std Dev 517.2
25
20
15
10
5
0
−5

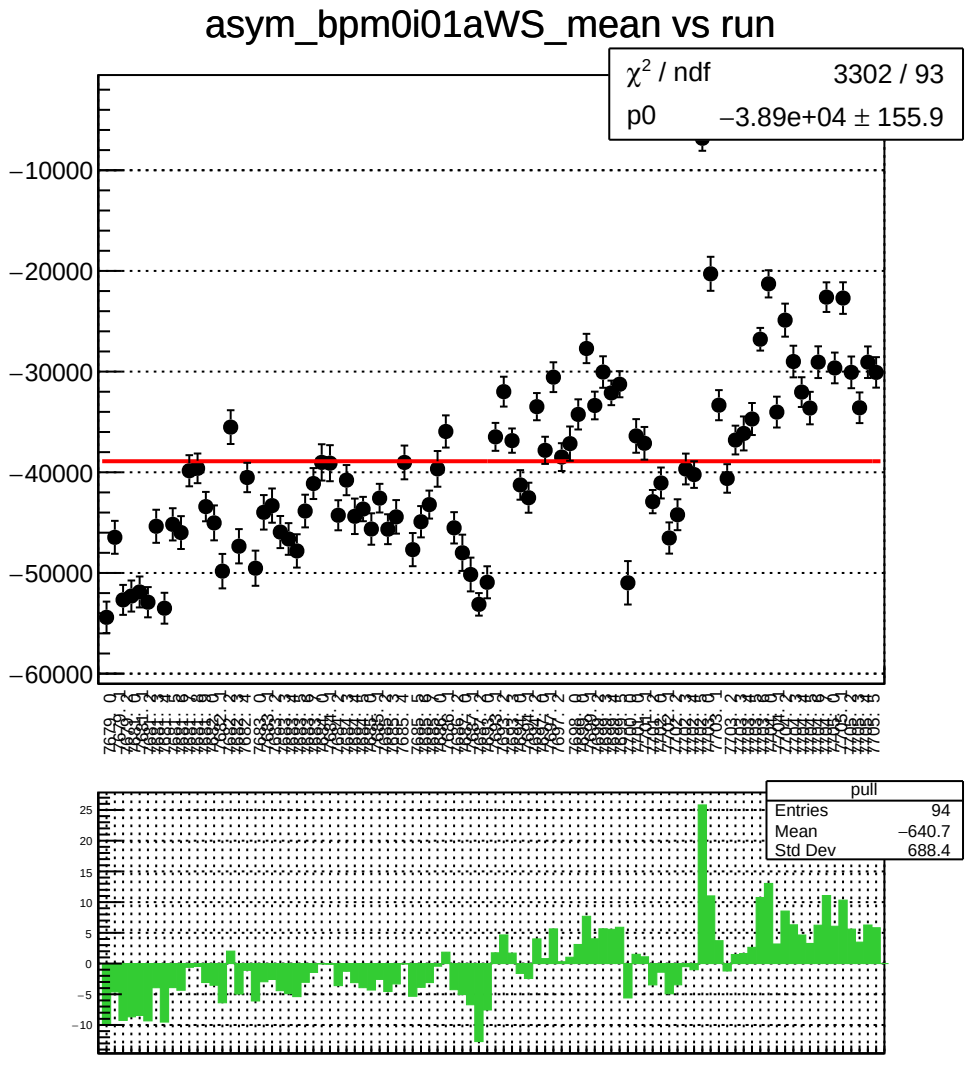

pull1D
Entries 94
Mean −0.7608
Std Dev 3.345
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

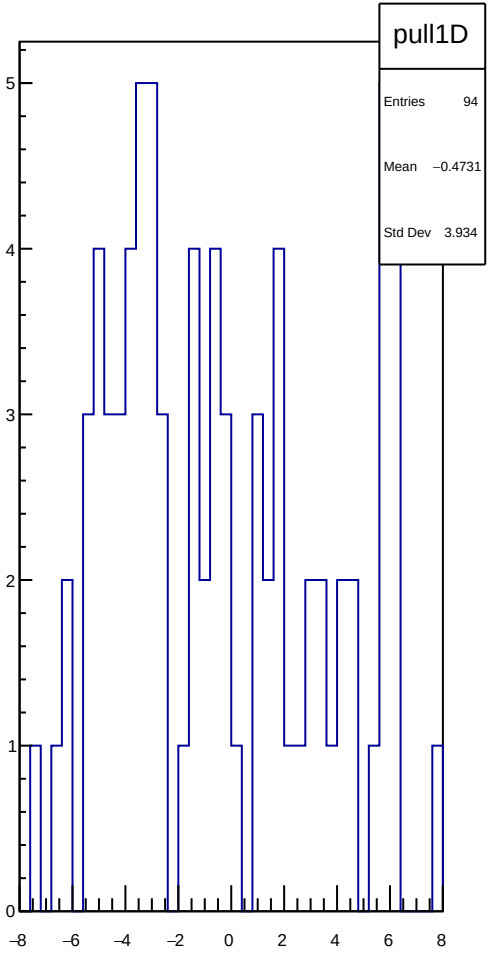

asym_bpm2i02WS_rms vs run
χ^2 / ndf 1.194e+04 / 93
p0 146.6 ± 0.1101
180
170
160
150
140
130
120
110

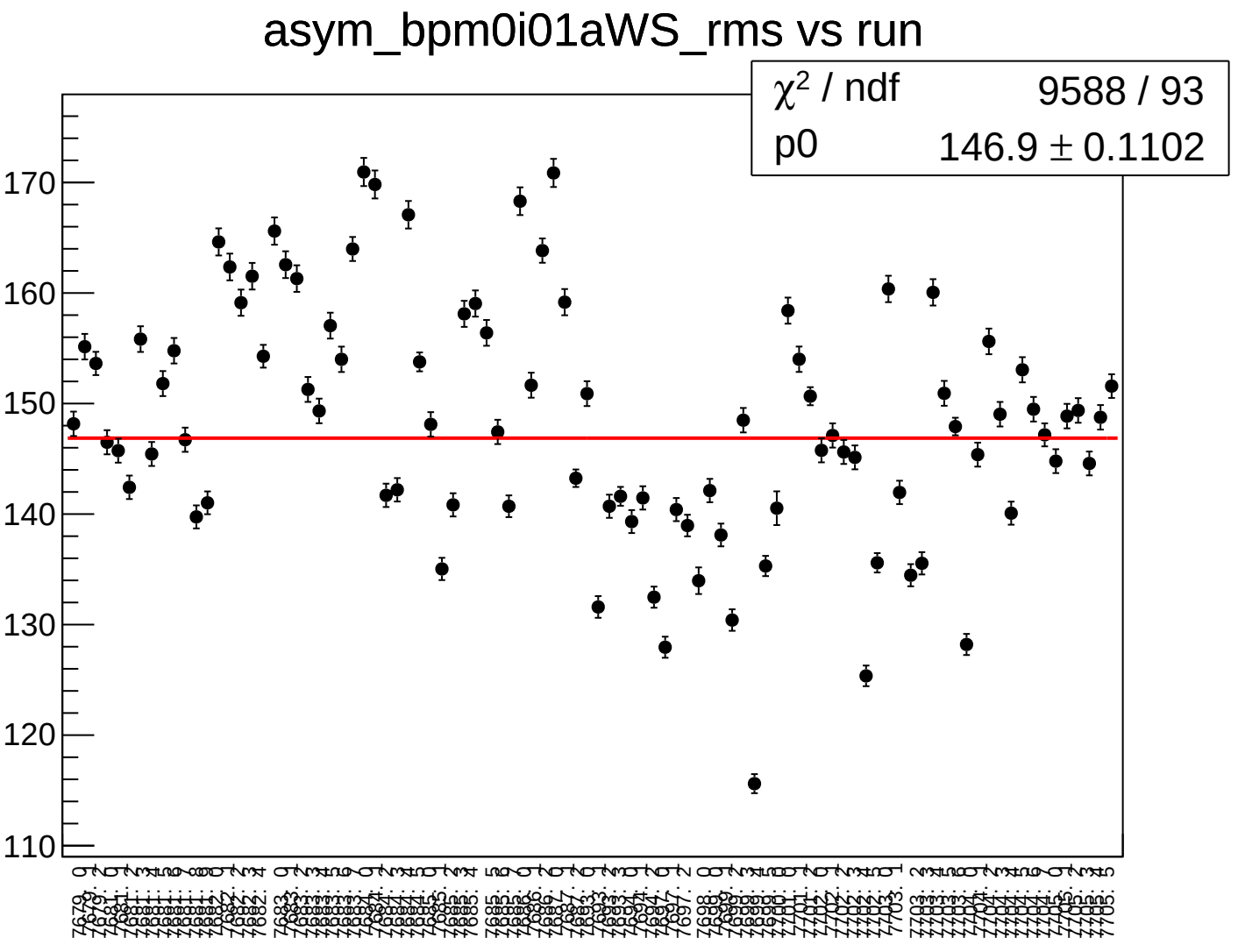

asym_bpm0i01WS_mean vs run
χ² / ndf 2347 / 93
p0 −3.908e+04 ± 182.9
0
−10000
−20000
−30000
−40000
−50000
−60000
pull
Entries 94
Mean −608.7
Std Dev 656.6
20
15
10
5
0
−5
−10

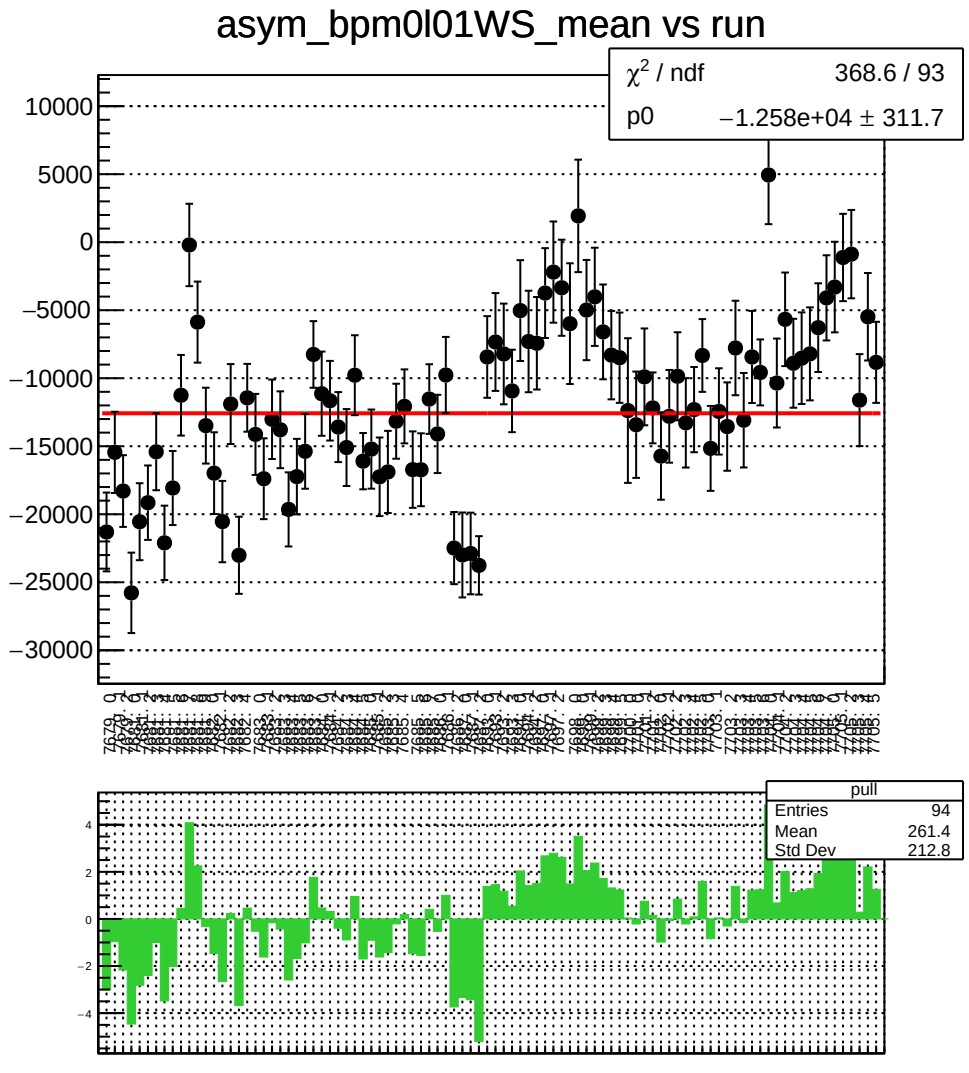

pull1D
Entries 94
Mean −0.749
Std Dev 3.723
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

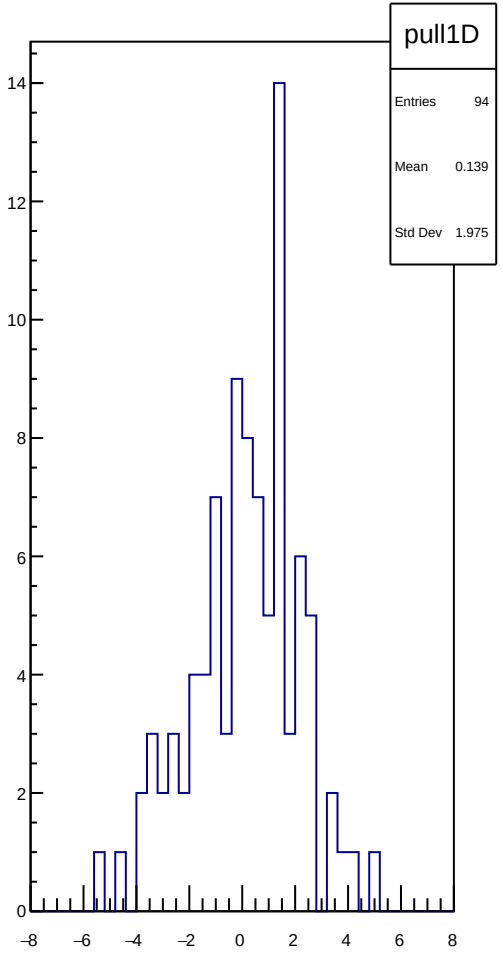

asym_bpm0i01WS_rms vs run
χ² / ndf 8431 / 93
p0 172.4 ± 0.1293
210
200
190
180
170
160
150
140

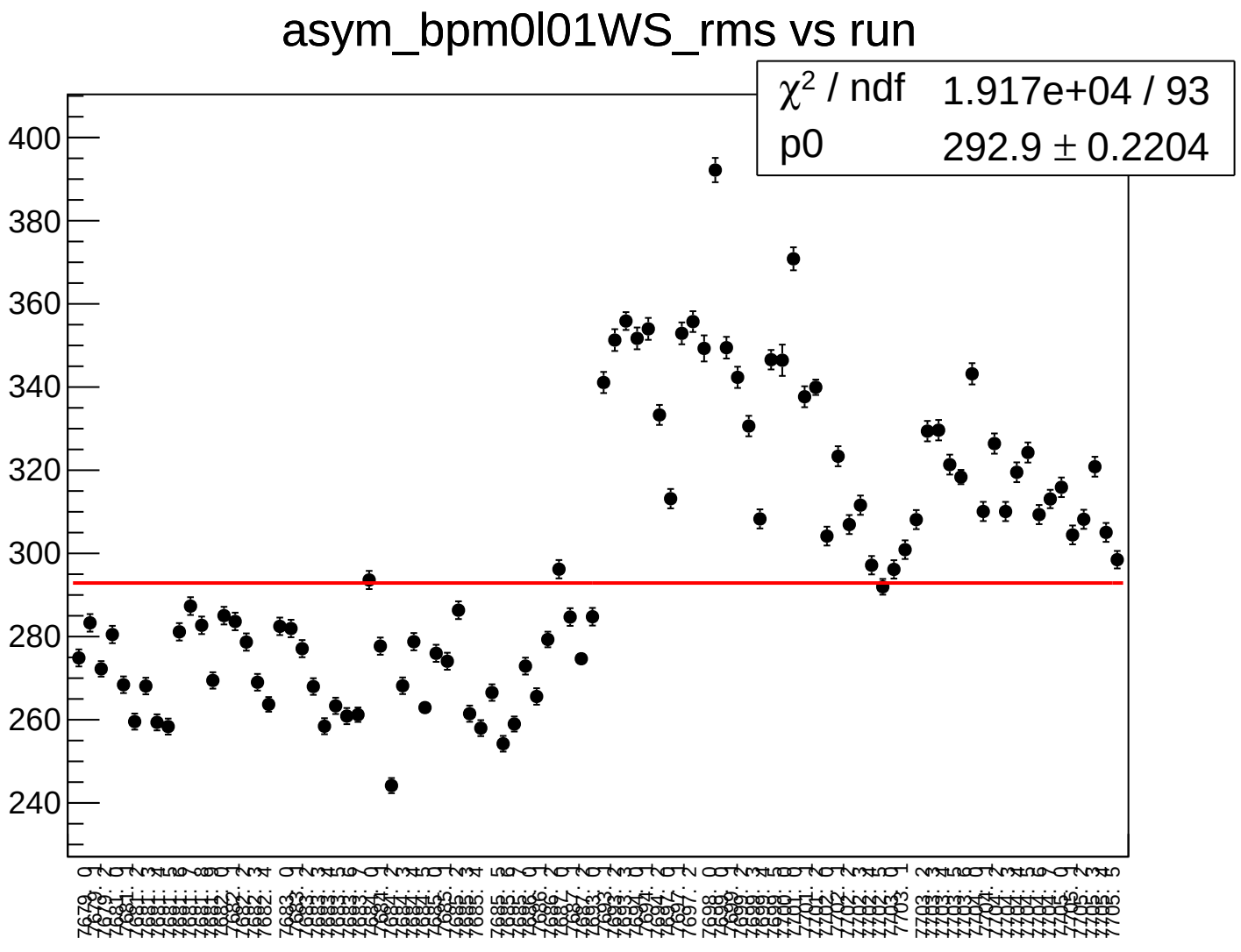

asym_bpm0i01aWS_mean vs run
χ² / ndf 3302 / 93
p0 −3.89e+04 ± 155.9
−10000
−20000
−30000
−40000
−50000
−60000
pull
Entries 94
Mean −640.7
Std Dev 688.4
25
20
15
10
5
0
−5
−10

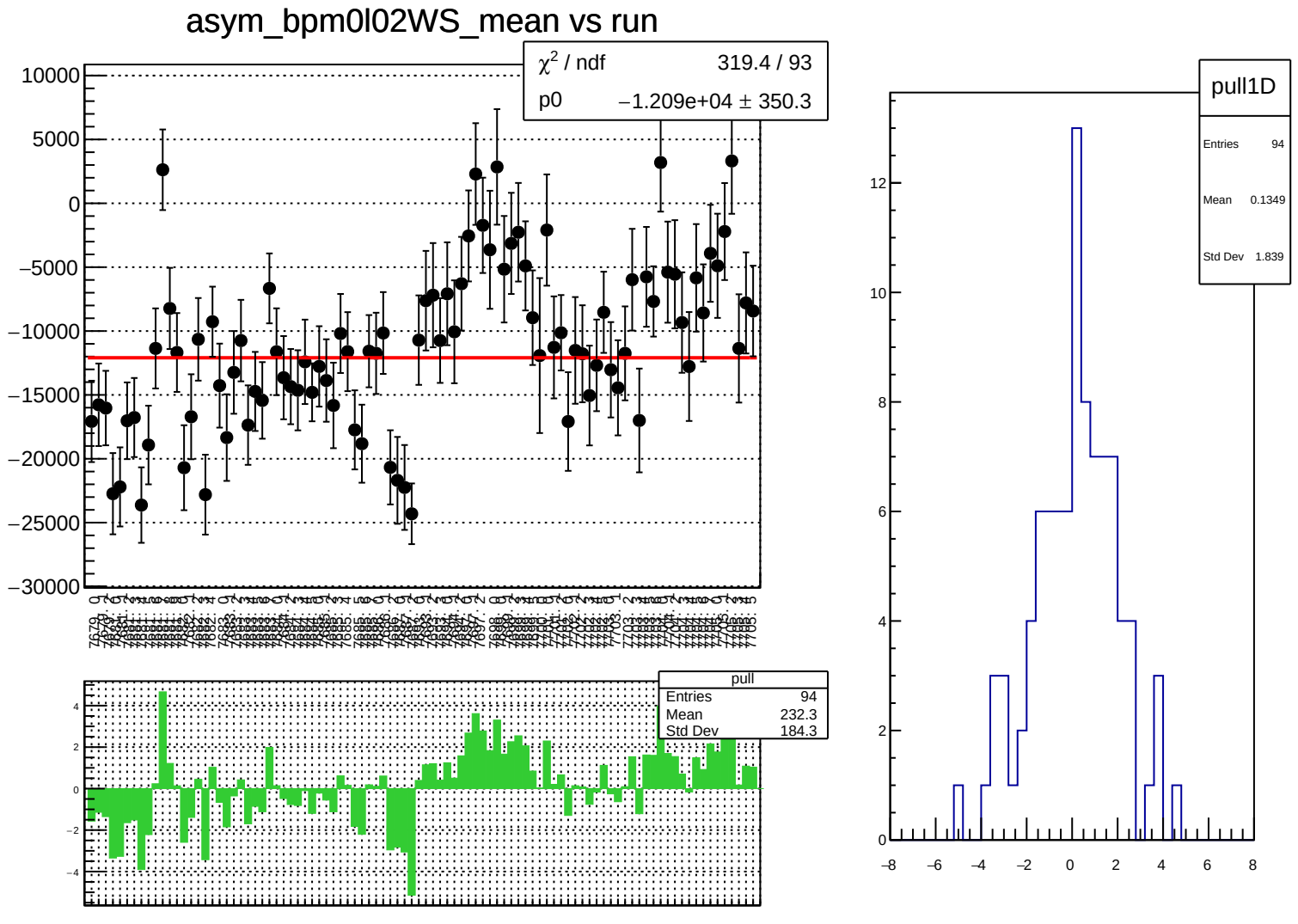

pull1D
Entries 94
Mean −0.4731
Std Dev 3.934
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

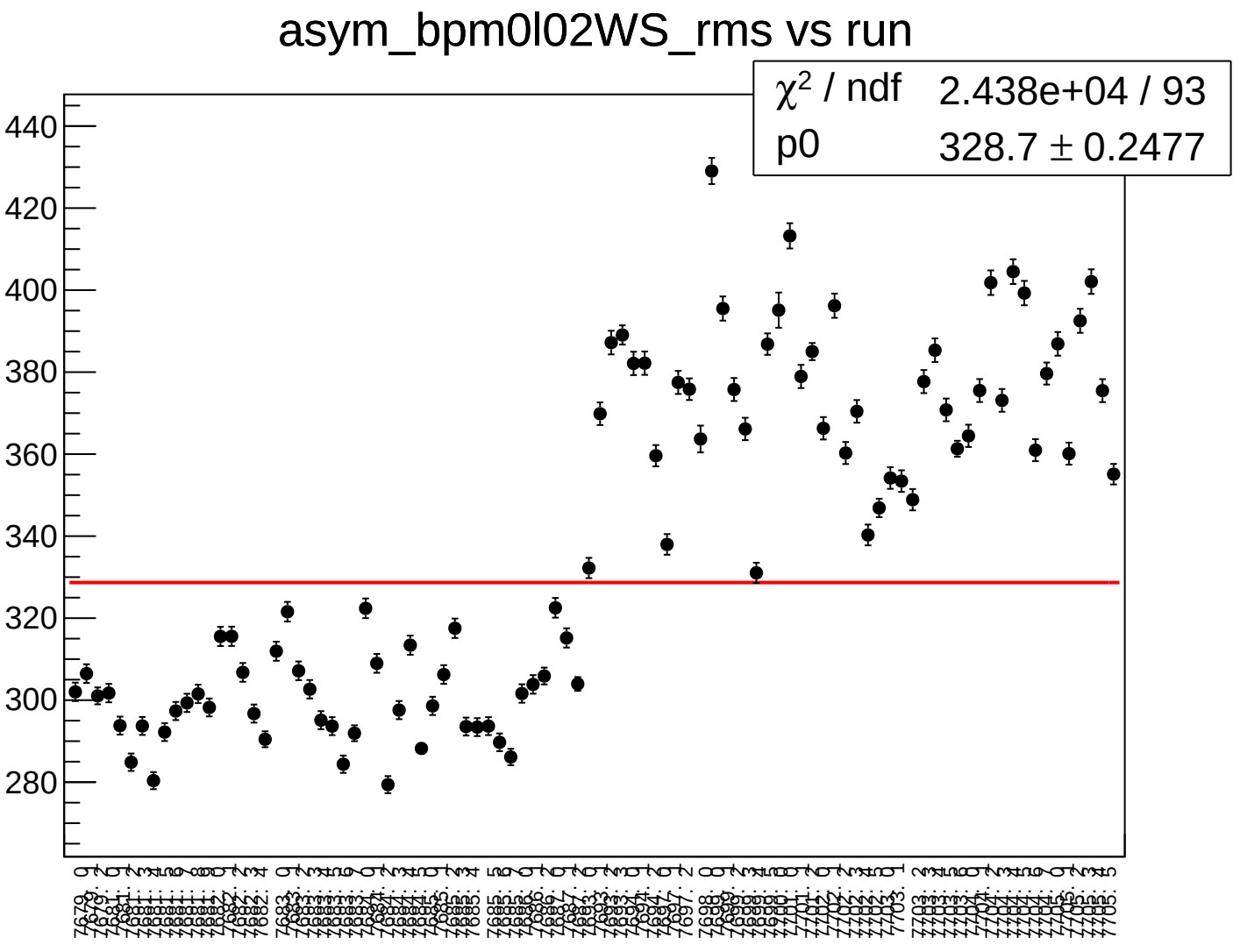

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 9588 / 93
p0 146.9 ± 0.1102
170
160
150
140
130
120
110

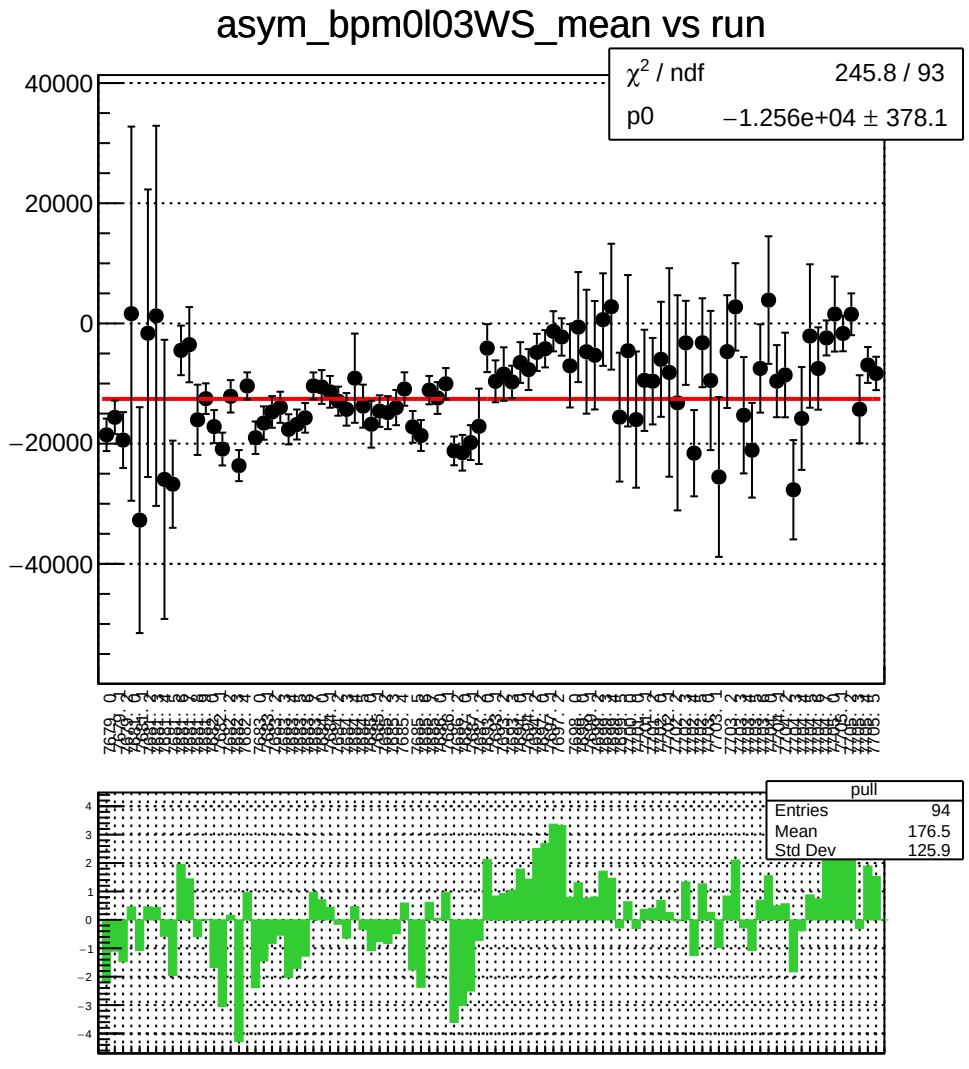

asym_bpm0l01WS_mean vs run
χ² / ndf 368.6 / 93
p0 −1.258e+04 ± 311.7
pull
Entries 94
Mean 261.4
Std Dev 212.8

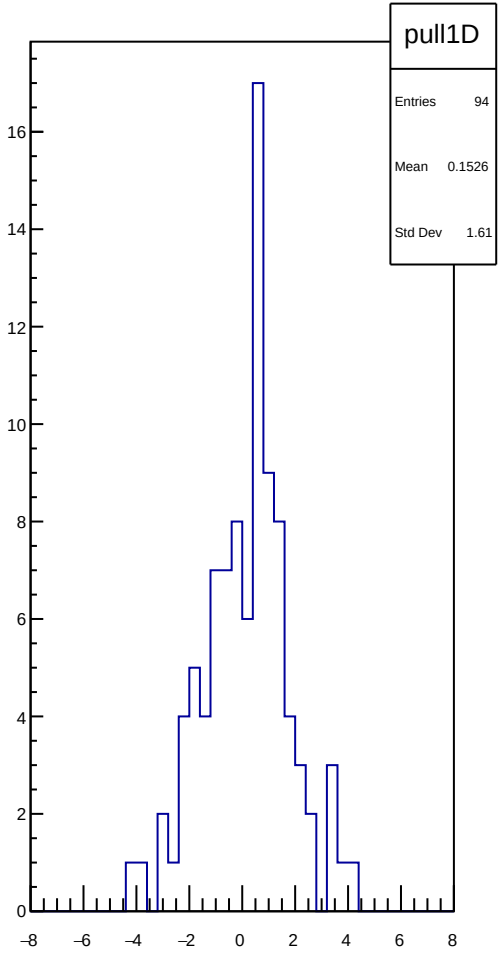

pull1D
Entries 94
Mean 0.139
Std Dev 1.975

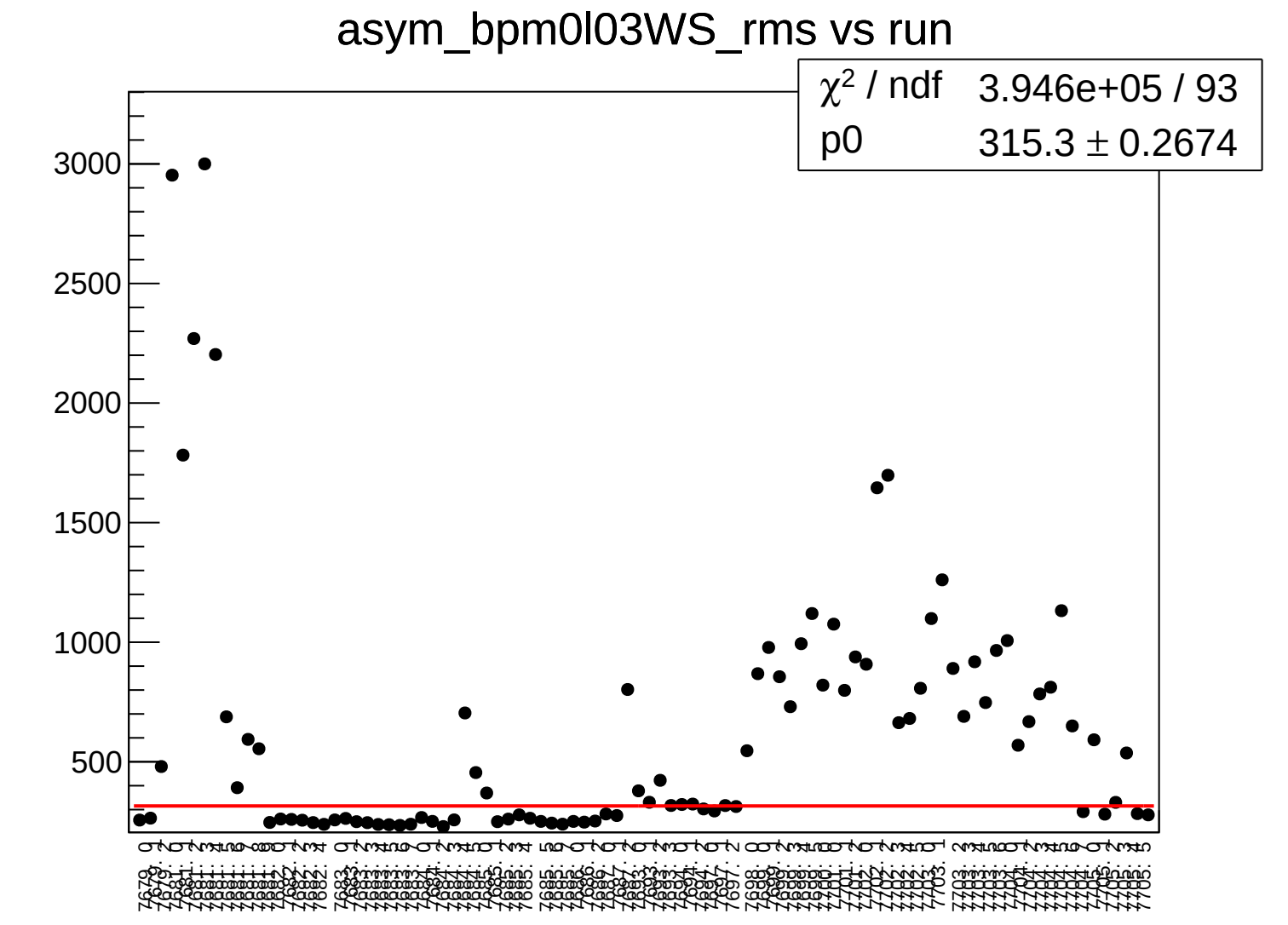

asym_bpm0l01WS_rms vs run
χ² / ndf 1.917e+04 / 93
p0 292.9 ± 0.2204
400
380
360
340
320
300
280
260
240

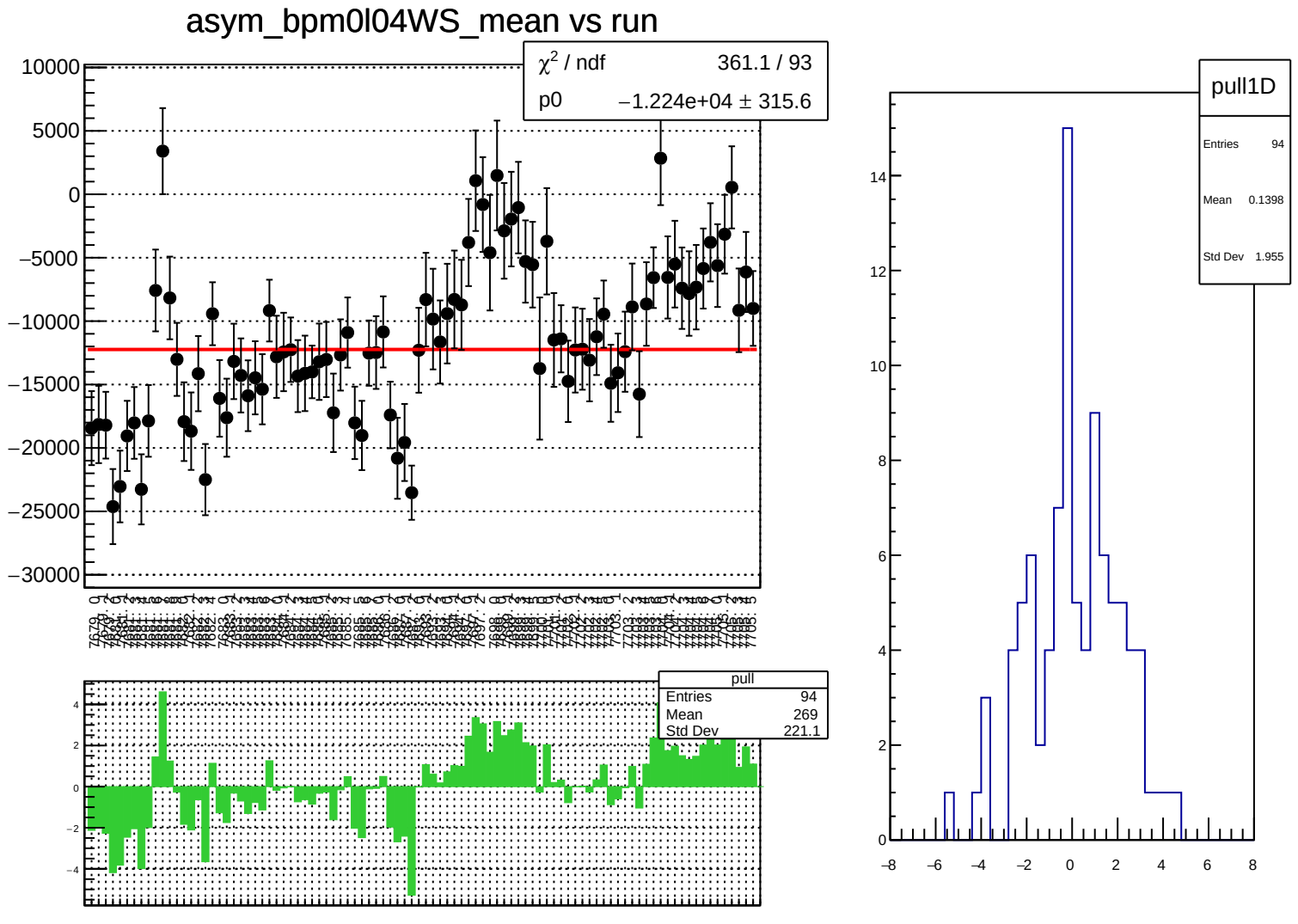

asym_bpm0l02WS_mean vs run
χ² / ndf 319.4 / 93
p0 −1.209e+04 ± 350.3
pull
Entries 94
Mean 232.3
Std Dev 184.3
pull1D
Entries 94
Mean 0.1349
Std Dev 1.839

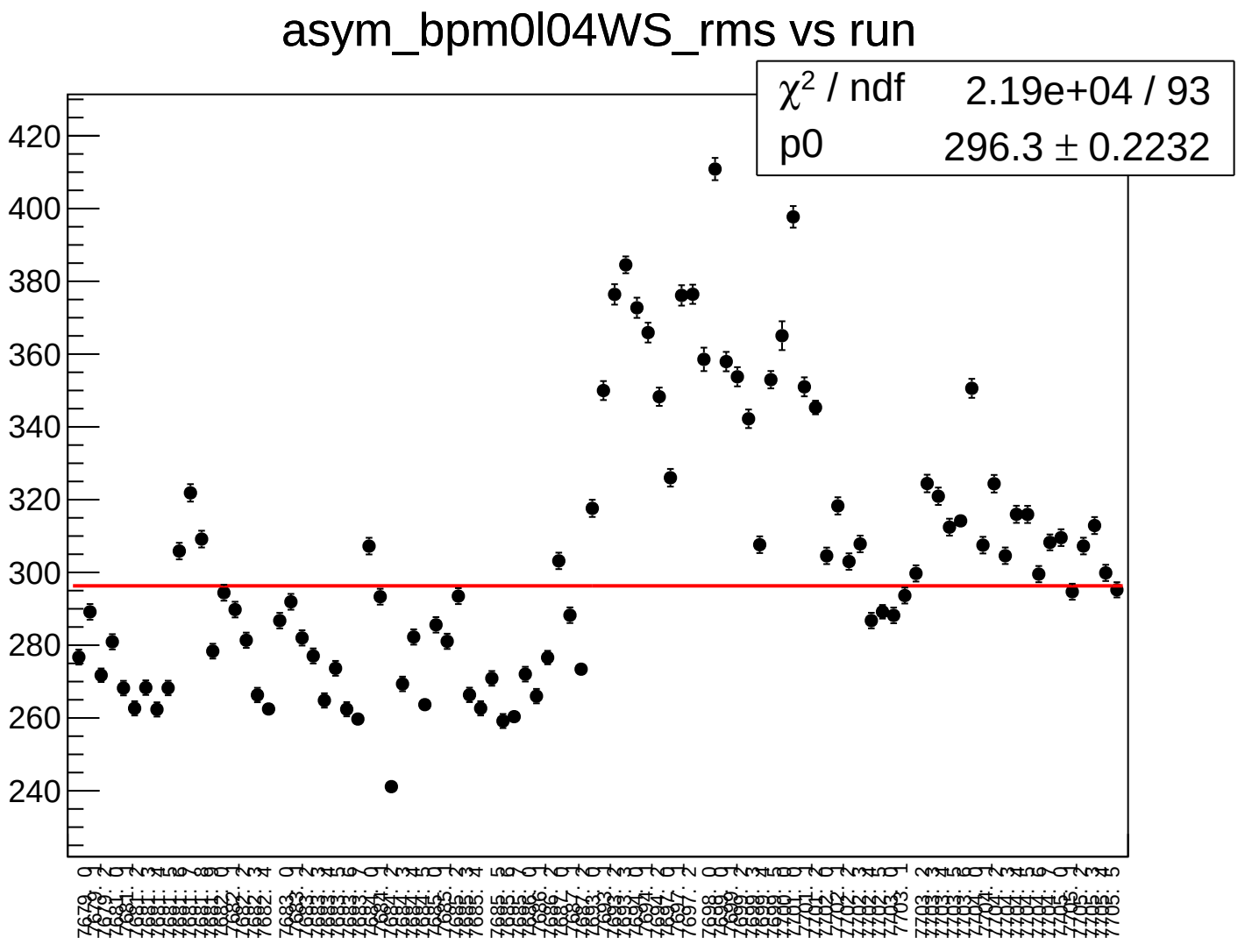

asym_bpm0l02WS_rms vs run
χ² / ndf 2.438e+04 / 93
p0 328.7 ± 0.2477
440
420
400
380
360
340
320
300
280

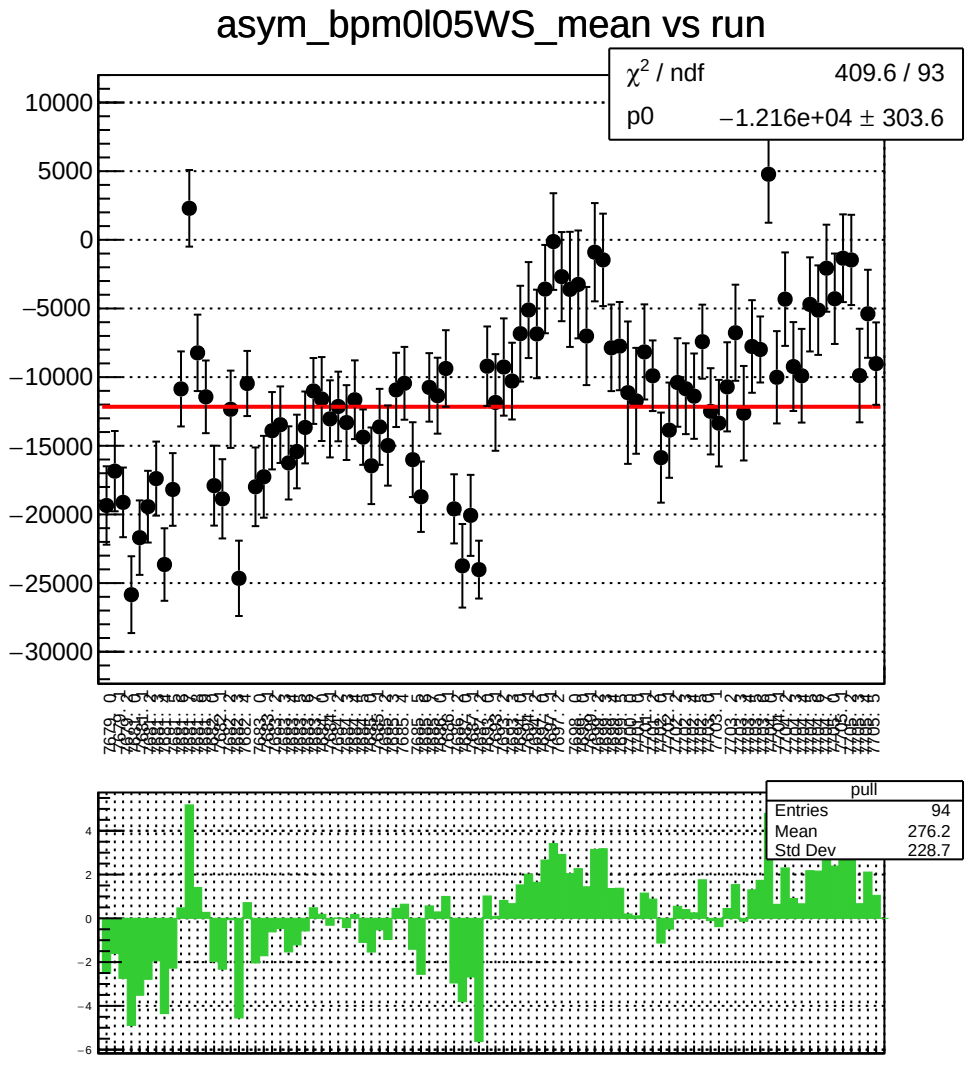

asym_bpm0l03WS_mean vs run
χ² / ndf 245.8 / 93
p0 −1.256e+04 ± 378.1
40000
20000
0
−20000
−40000
pull
Entries 94
Mean 176.5
Std Dev 125.9
4
3
2
1
0
−1
−2
−3
−4

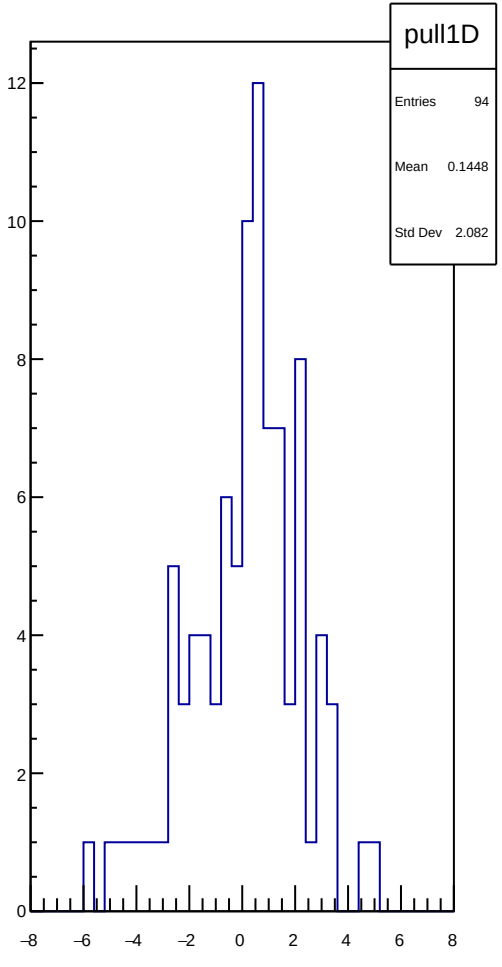

pull1D
Entries 94
Mean 0.1526
Std Dev 1.61
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

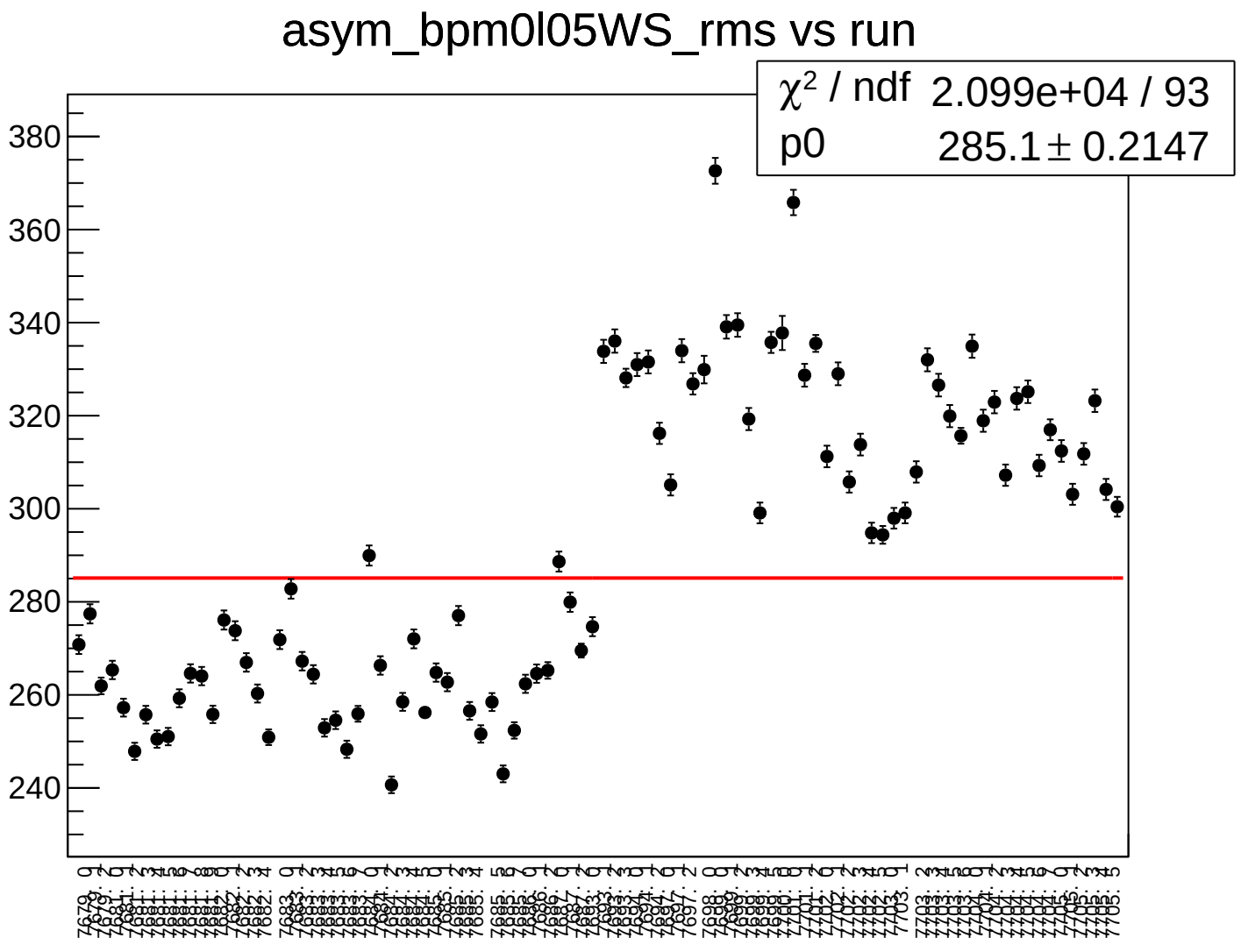

asym_bpm0l03WS_rms vs run
χ^2 / ndf 3.946e+05 / 93
p0 315.3 ± 0.2674
3000
2500
2000
1500
1000
500

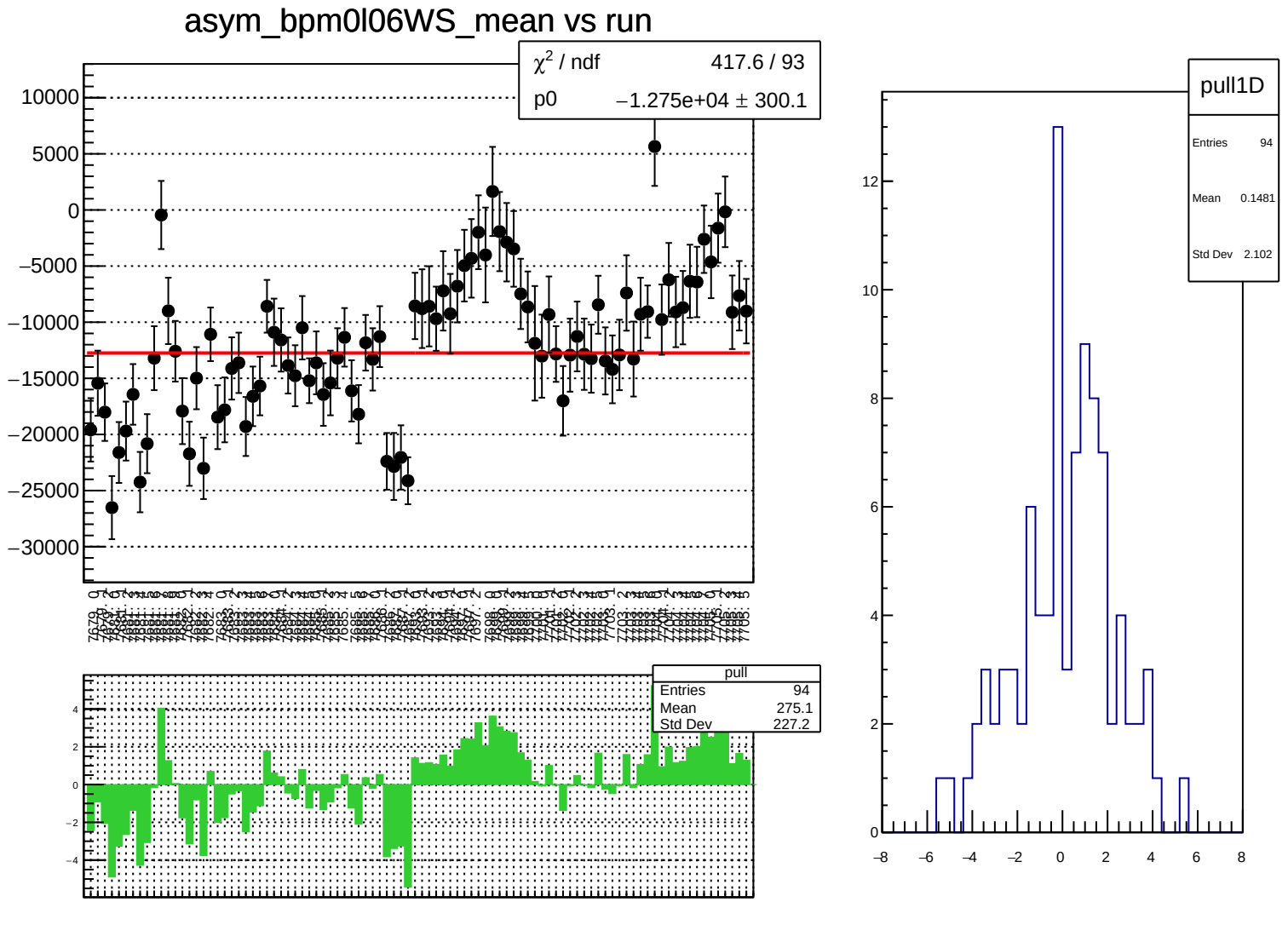

asym_bpm0l04WS_mean vs run
χ² / ndf 361.1 / 93
p0 −1.224e+04 ± 315.6
pull
Entries 94
Mean 269
Std Dev 221.1
pull1D
Entries 94
Mean 0.1398
Std Dev 1.955

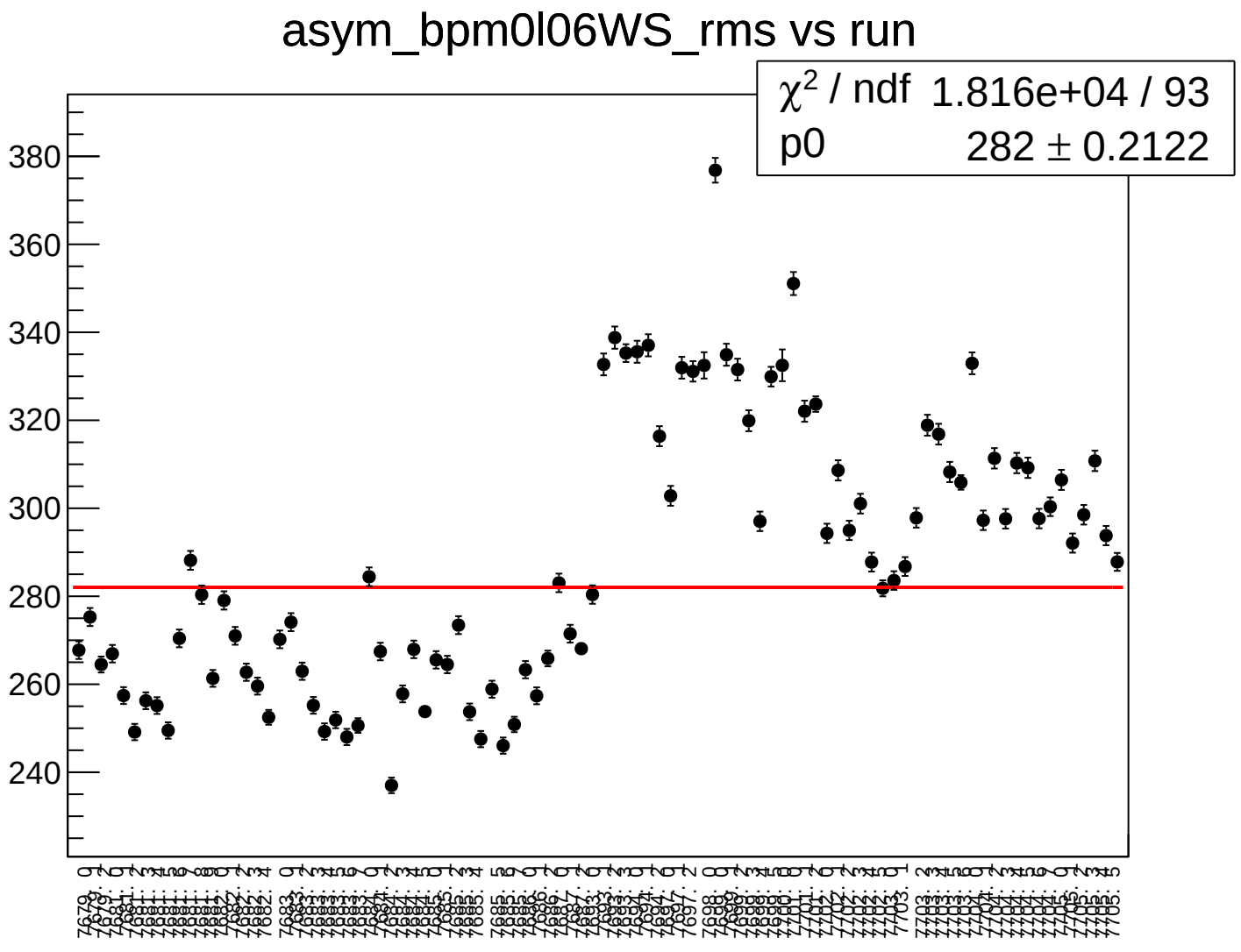

asym_bpm0l04WS_rms vs run
χ² / ndf 2.19e+04 / 93
p0 296.3 ± 0.2232
420
400
380
360
340
320
300
280
260
240

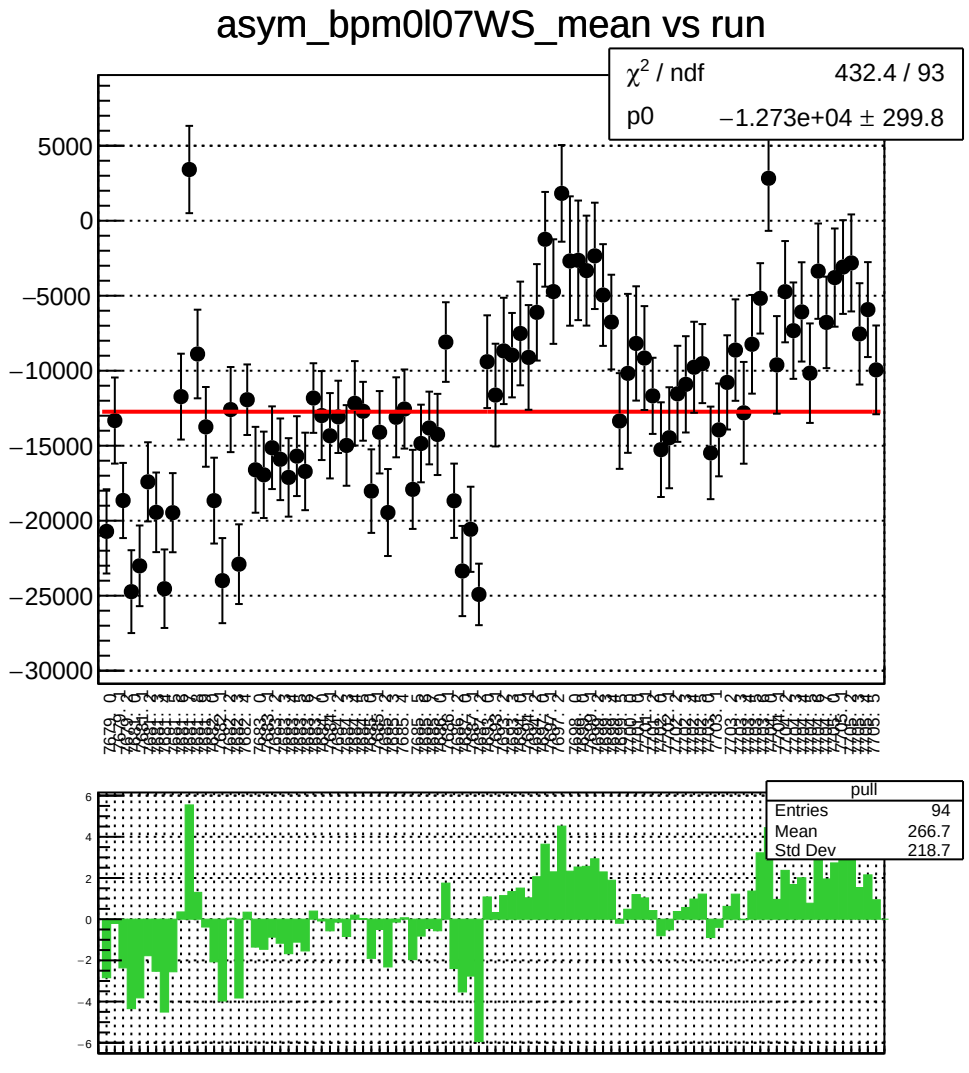

asym_bpm0l05WS_mean vs run
χ² / ndf 409.6 / 93
p0 −1.216e+04 ± 303.6
pull
Entries 94
Mean 276.2
Std Dev 228.7

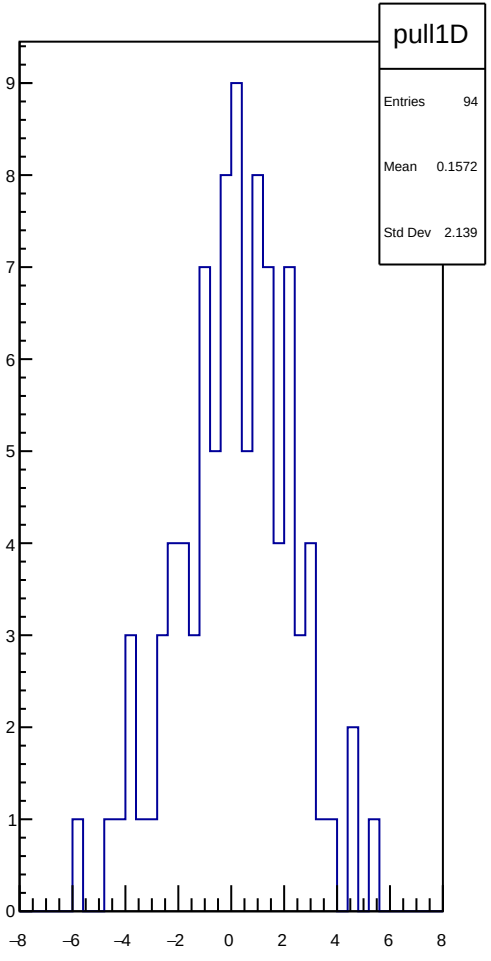

pull1D
Entries 94
Mean 0.1448
Std Dev 2.082

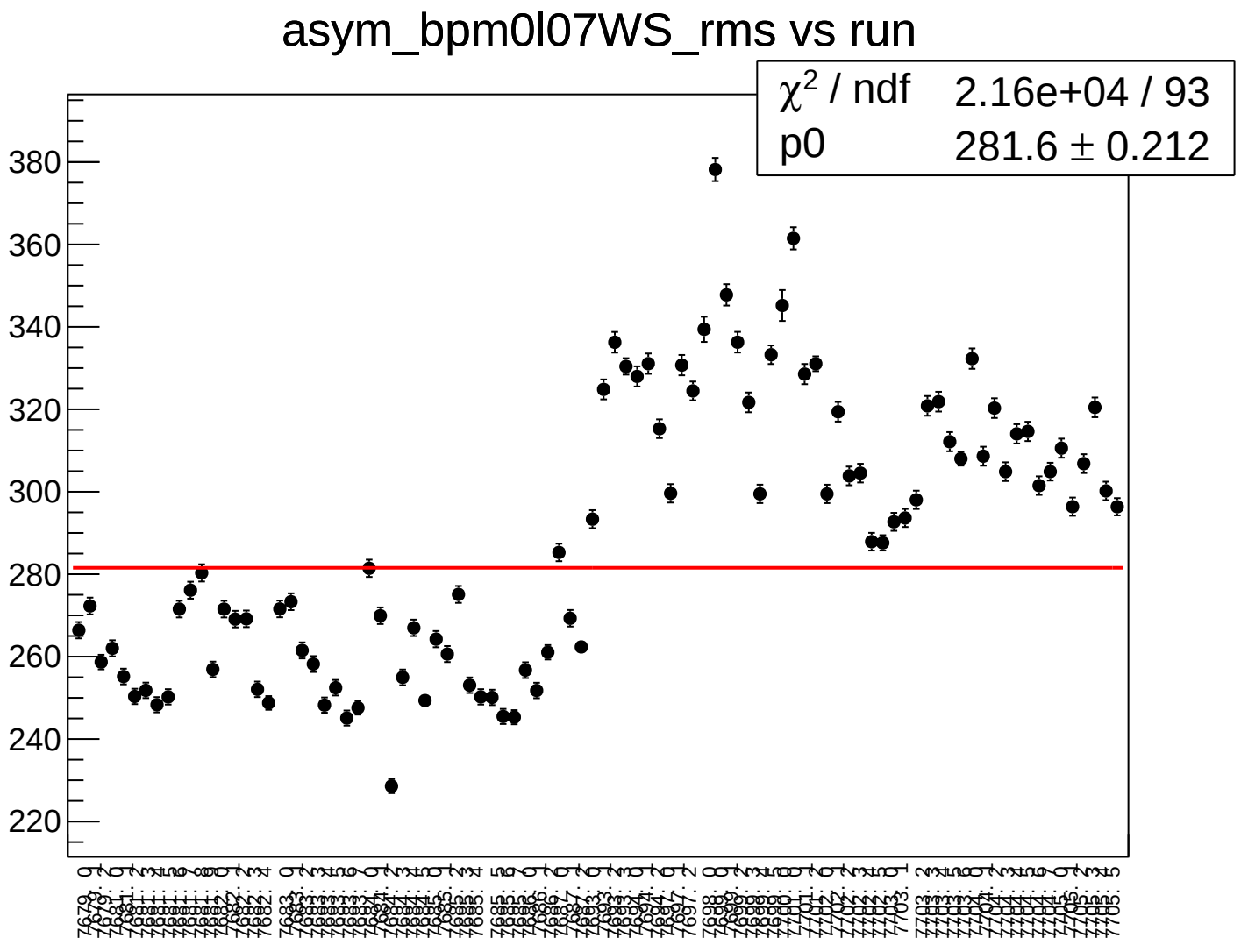

asym_bpm0l05WS_rms vs run
χ² / ndf 2.099e+04 / 93
p0 285.1 ± 0.2147
380
360
340
320
300
280
260
240

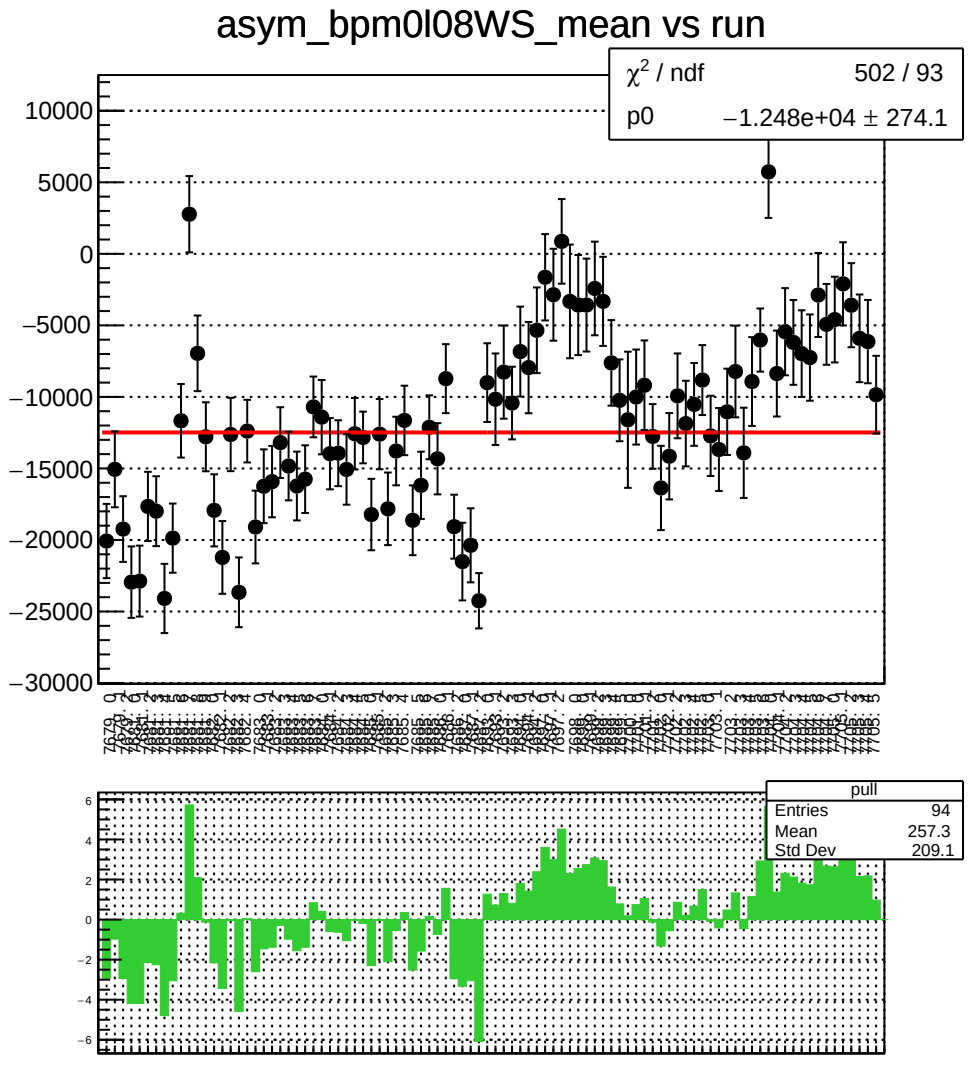

asym_bpm0l06WS_mean vs run
χ² / ndf 417.6 / 93
p0 −1.275e+04 ± 300.1
pull
Entries 94
Mean 275.1
Std Dev 227.2
pull1D
Entries 94
Mean 0.1481
Std Dev 2.102

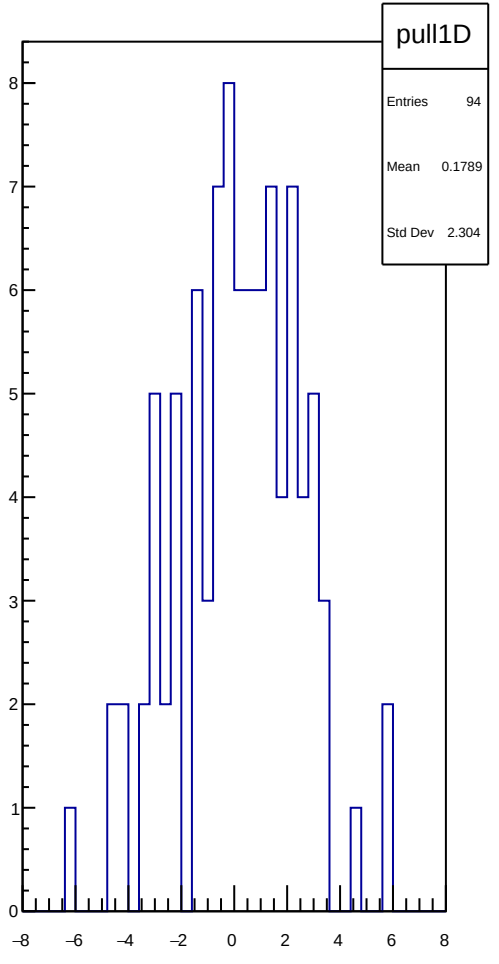

asym_bpm0l06WS_rms vs run
χ² / ndf 1.816e+04 / 93
p0 282 ± 0.2122
380
360
340
320
300
280
260
240

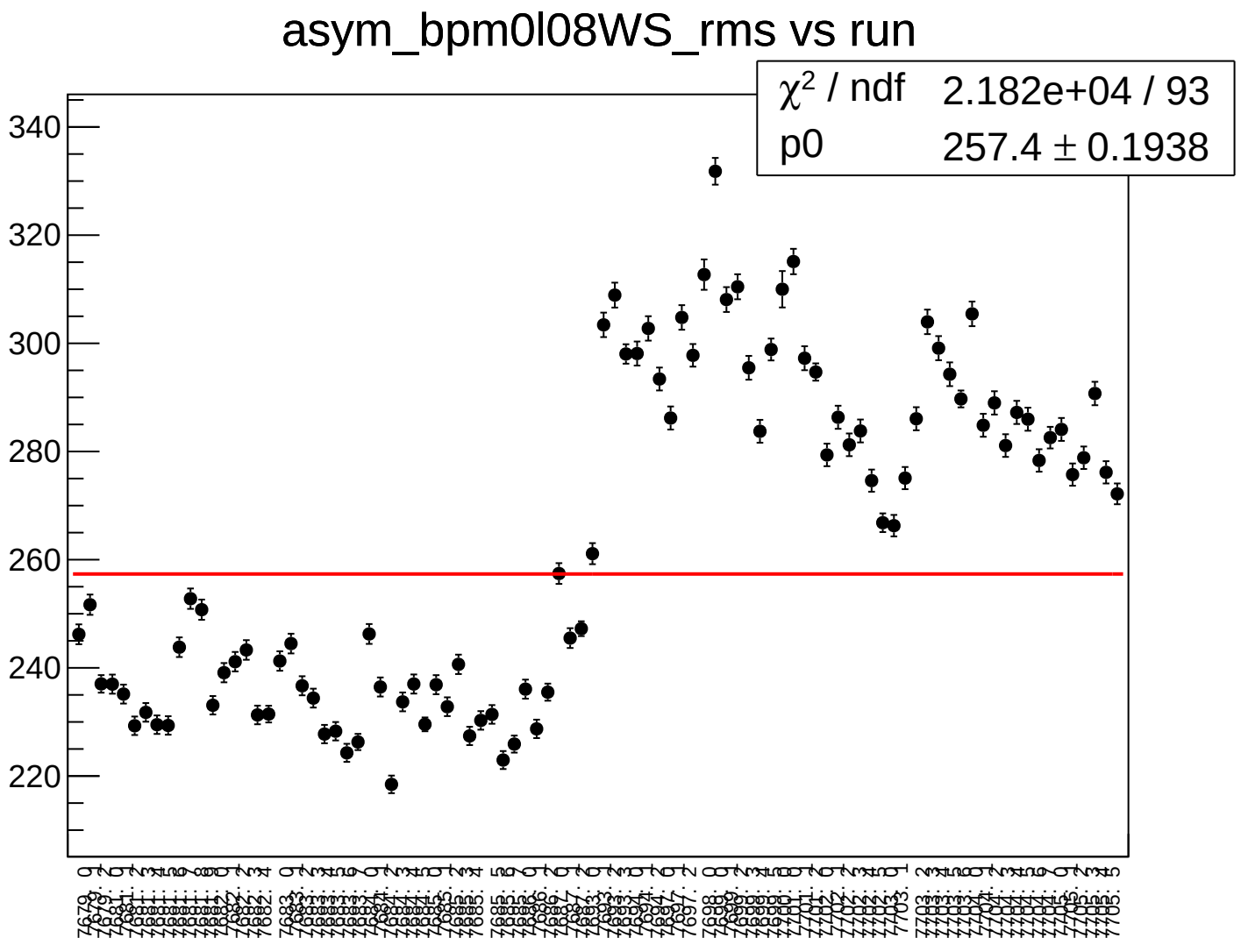

asym_bpm0l07WS_mean vs run
χ² / ndf 432.4 / 93
p0 −1.273e+04 ± 299.8
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 94
Mean 266.7
Std Dev 218.7
6
4
2
0
−2
−4
−6

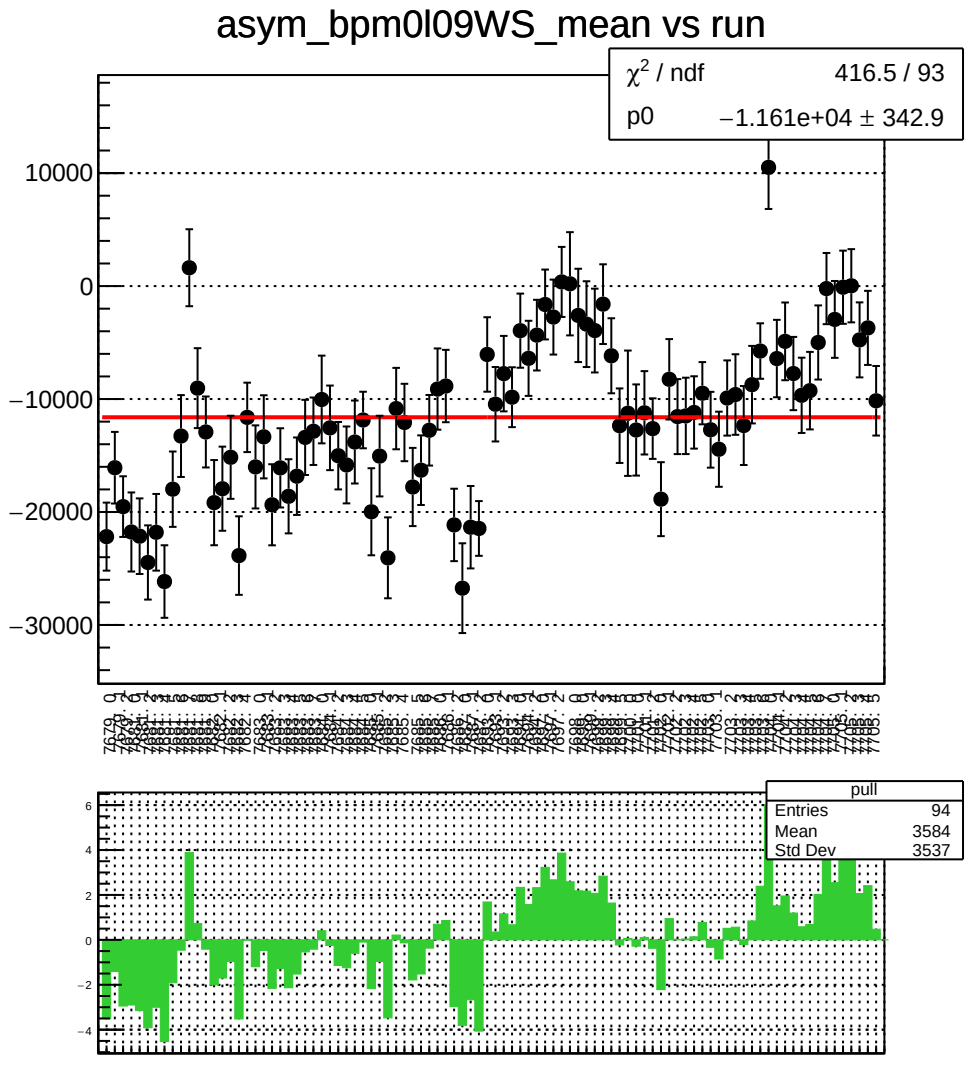

pull1D
Entries 94
Mean 0.1572
Std Dev 2.139
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

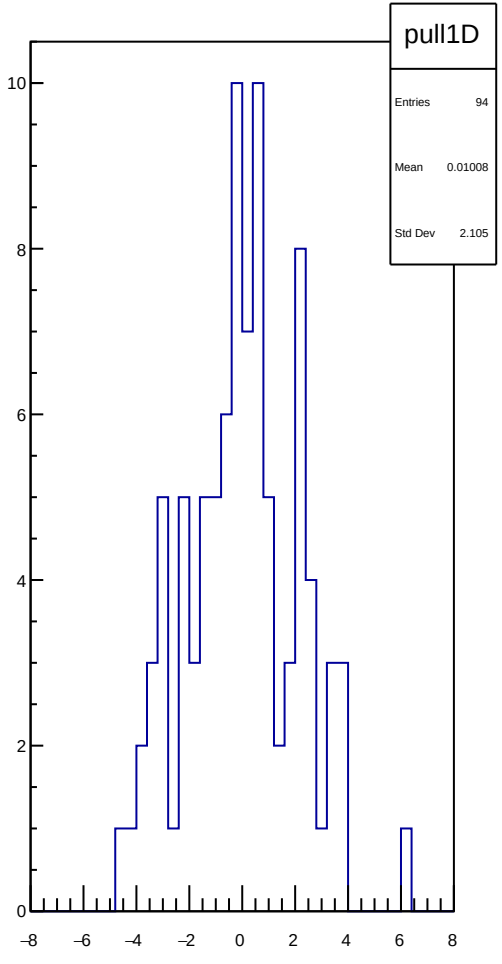

asym_bpm0l07WS_rms vs run
χ^2 / ndf 2.16e+04 / 93
p0 281.6 ± 0.212
380
360
340
320
300
280
260
240
220

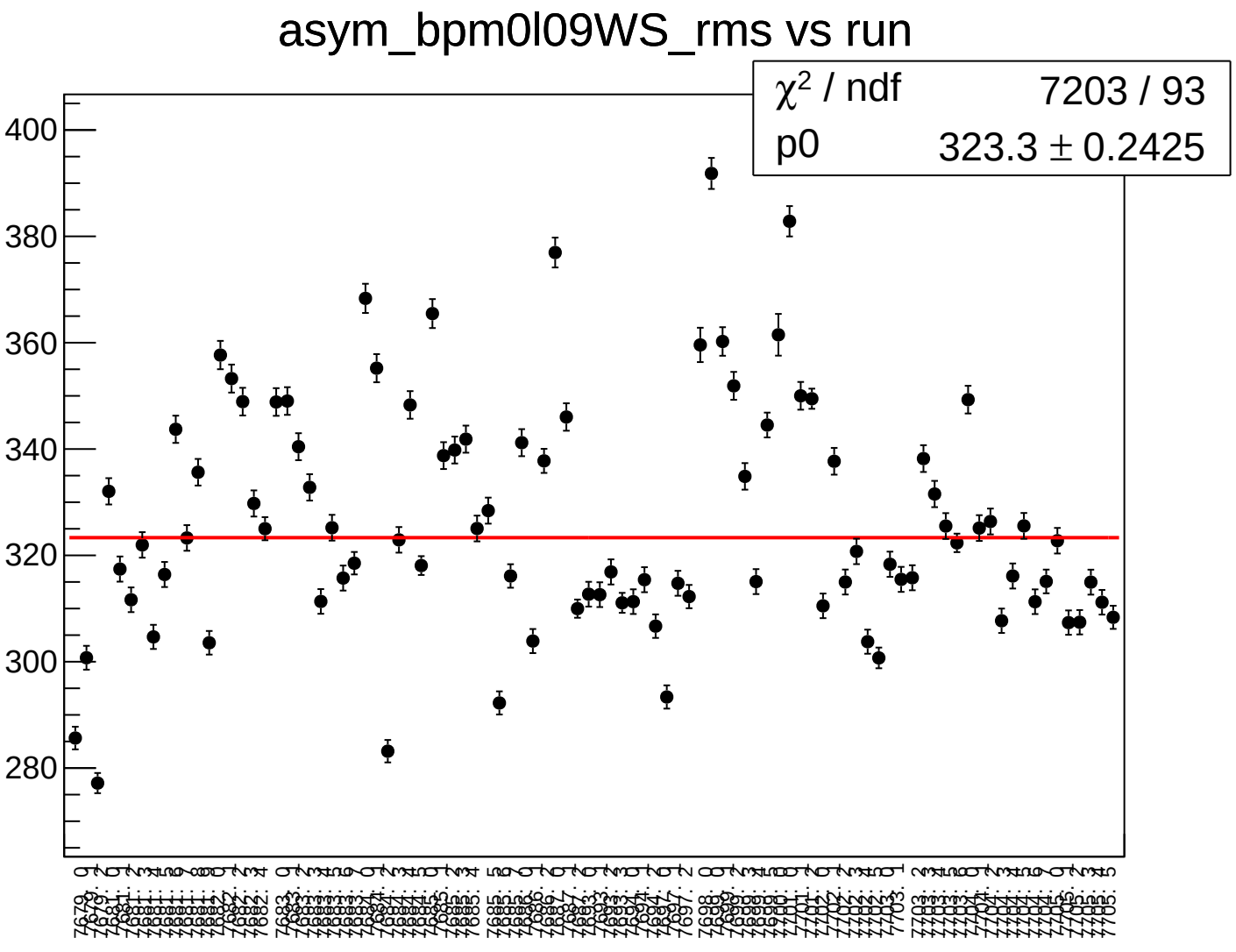

asym_bpm0l08WS_mean vs run
χ² / ndf 502 / 93
p0 −1.248e+04 ± 274.1
10000
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 94
Mean 257.3
Std Dev 209.1
6
4
2
0
−2
−4
−6

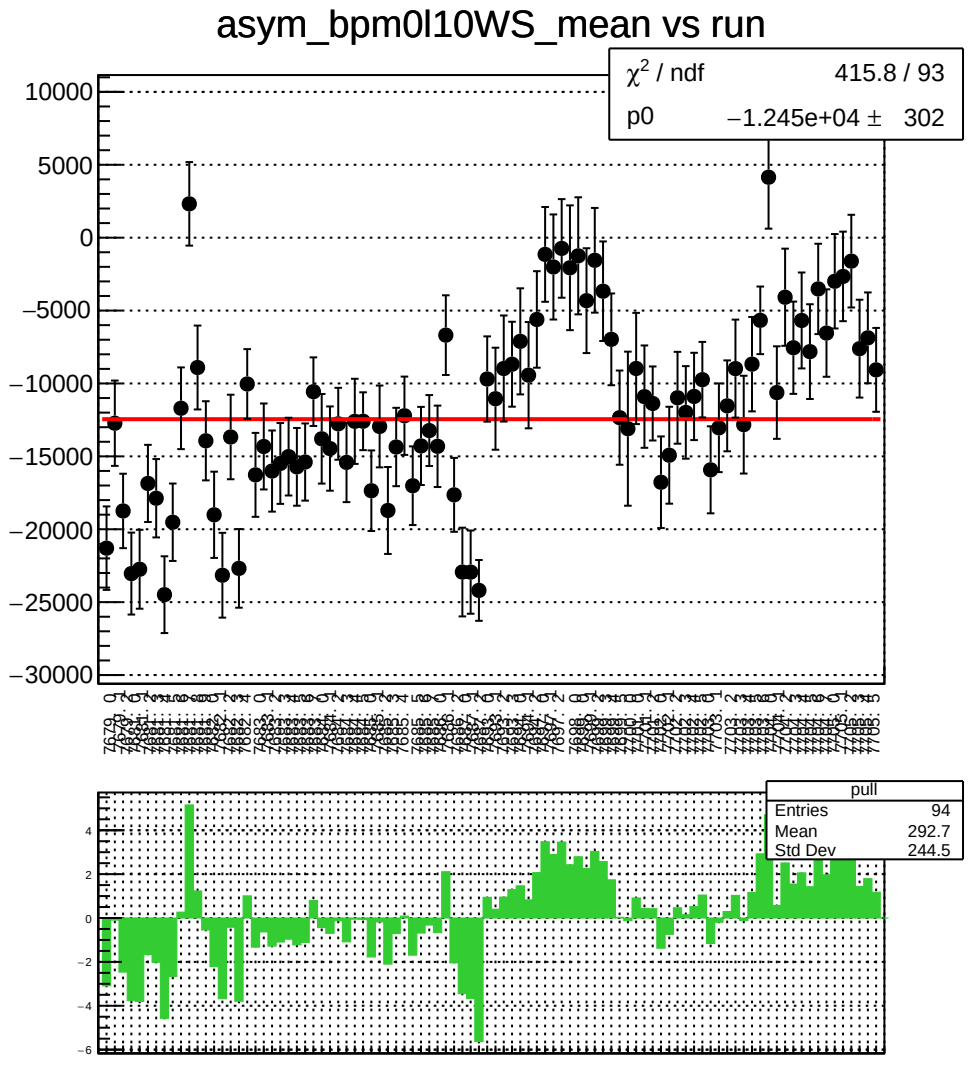

pull1D
Entries 94
Mean 0.1789
Std Dev 2.304
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

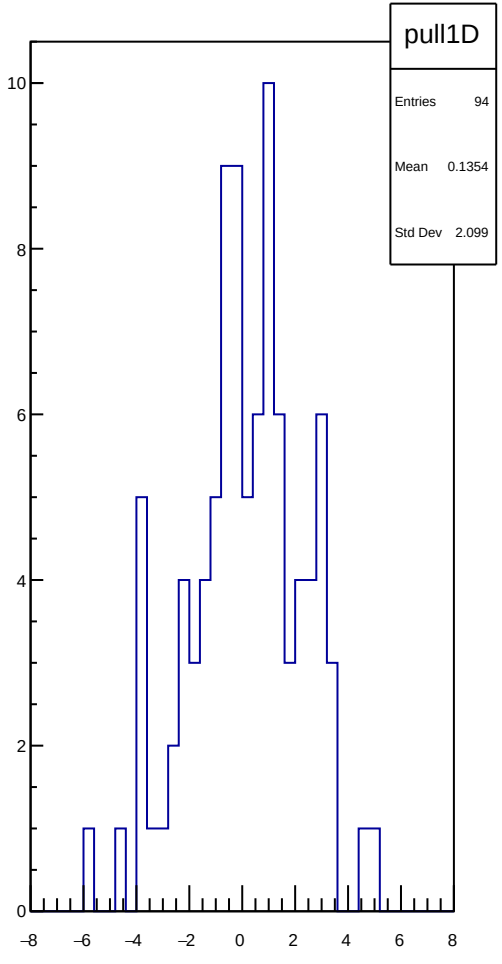

asym_bpm0l08WS_rms vs run
χ² / ndf 2.182e+04 / 93
p0 257.4 ± 0.1938
340
320
300
280
260
240
220

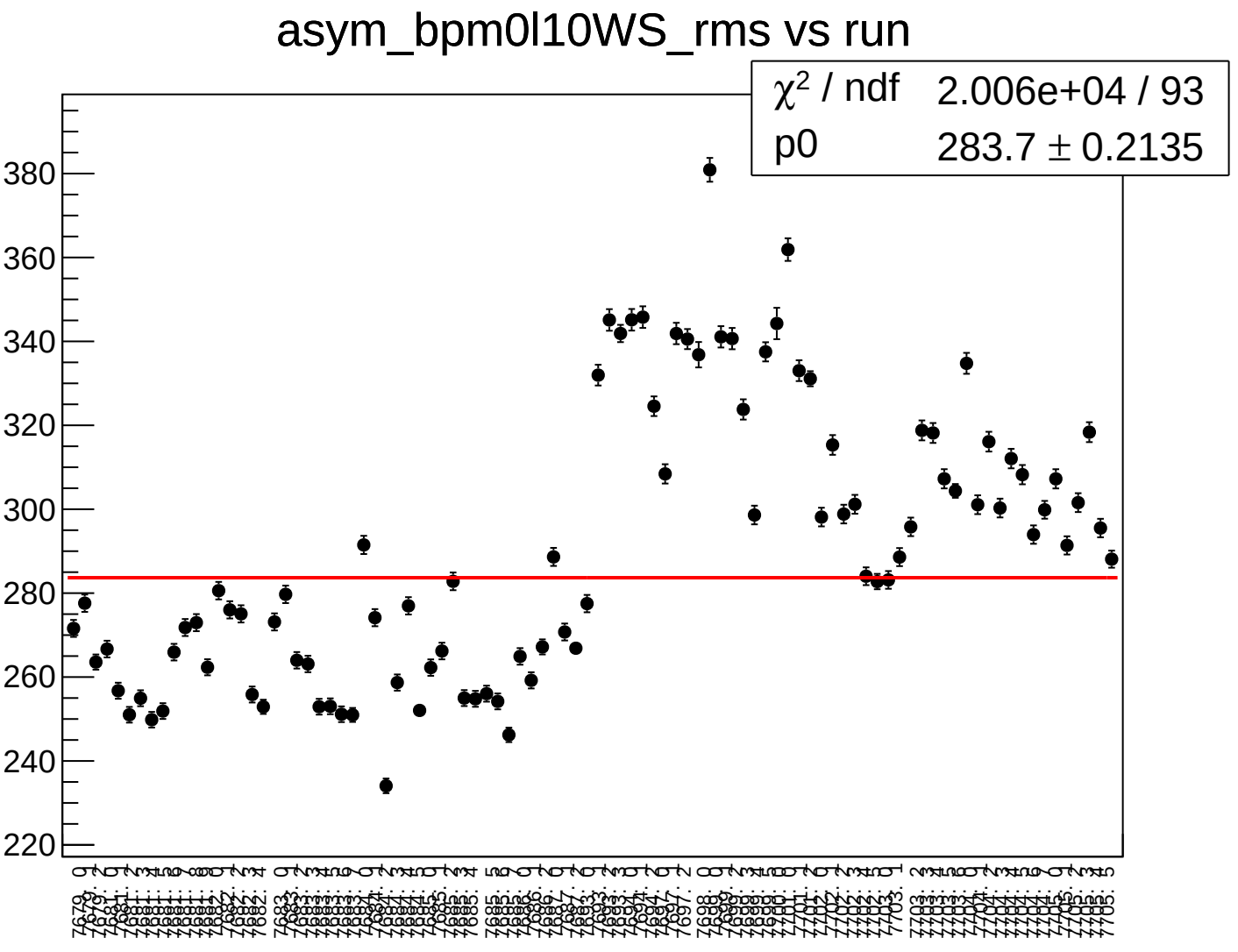

asym_bpm0l09WS_mean vs run
χ² / ndf 416.5 / 93
p0 −1.161e+04 ± 342.9
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean 3584
Std Dev 3537
6
4
2
0
−2
−4

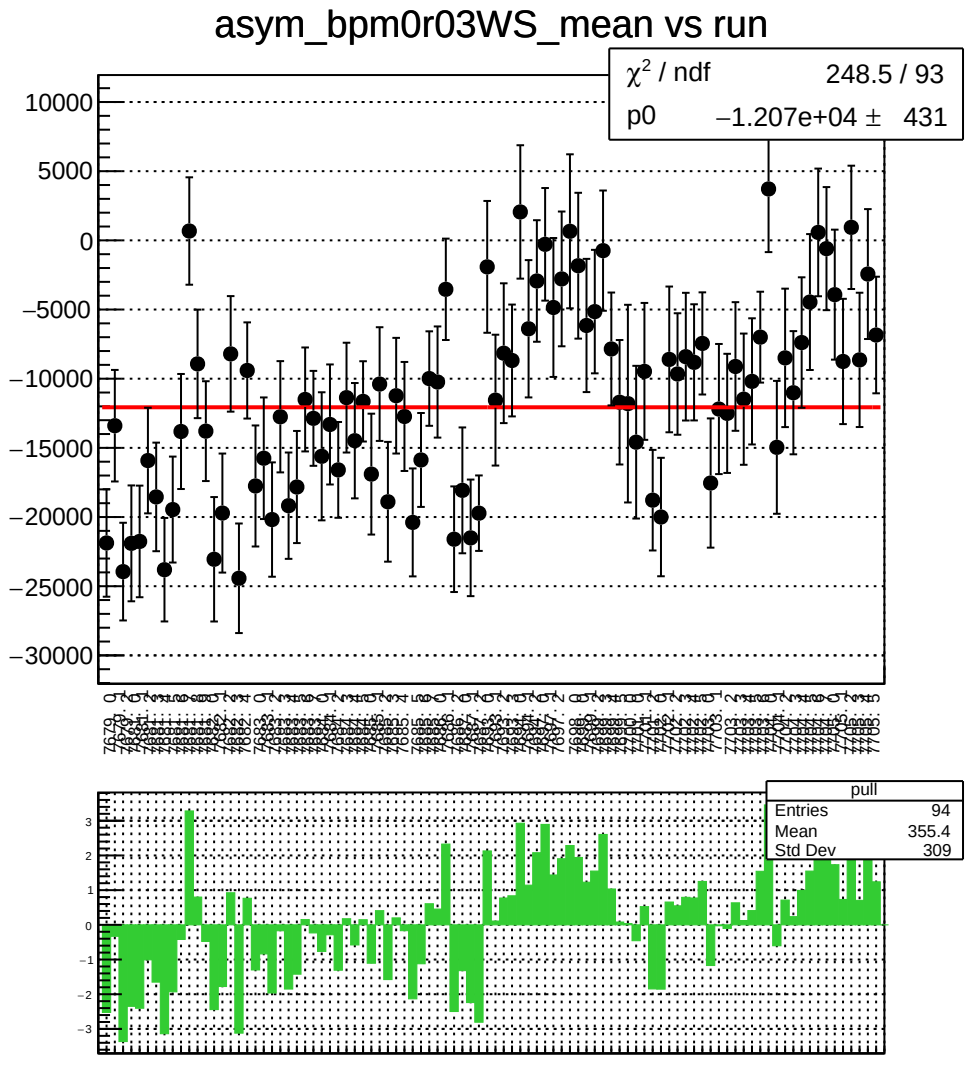

pull1D
Entries 94
Mean 0.01008
Std Dev 2.105
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

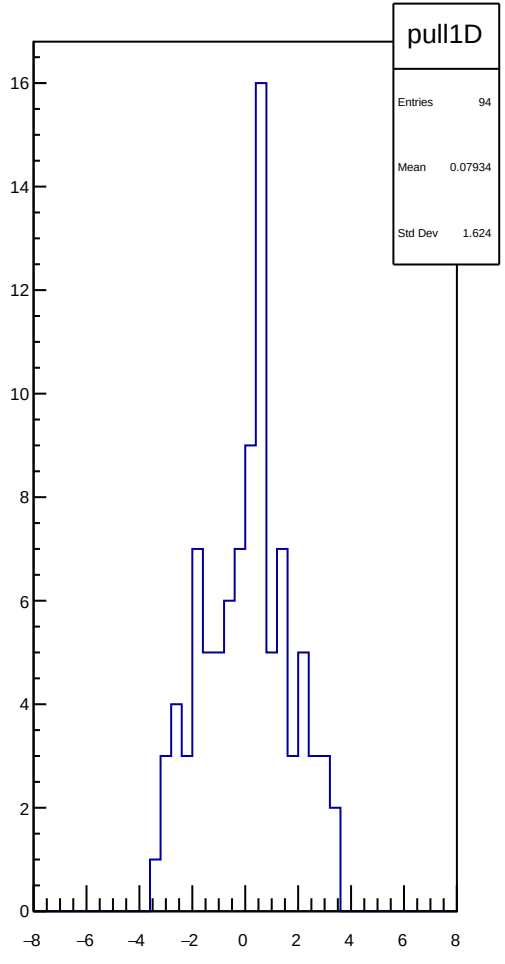

asym_bpm0l09WS_rms vs run
χ² / ndf 7203 / 93
p0 323.3 ± 0.2425
400
380
360
340
320
300
280

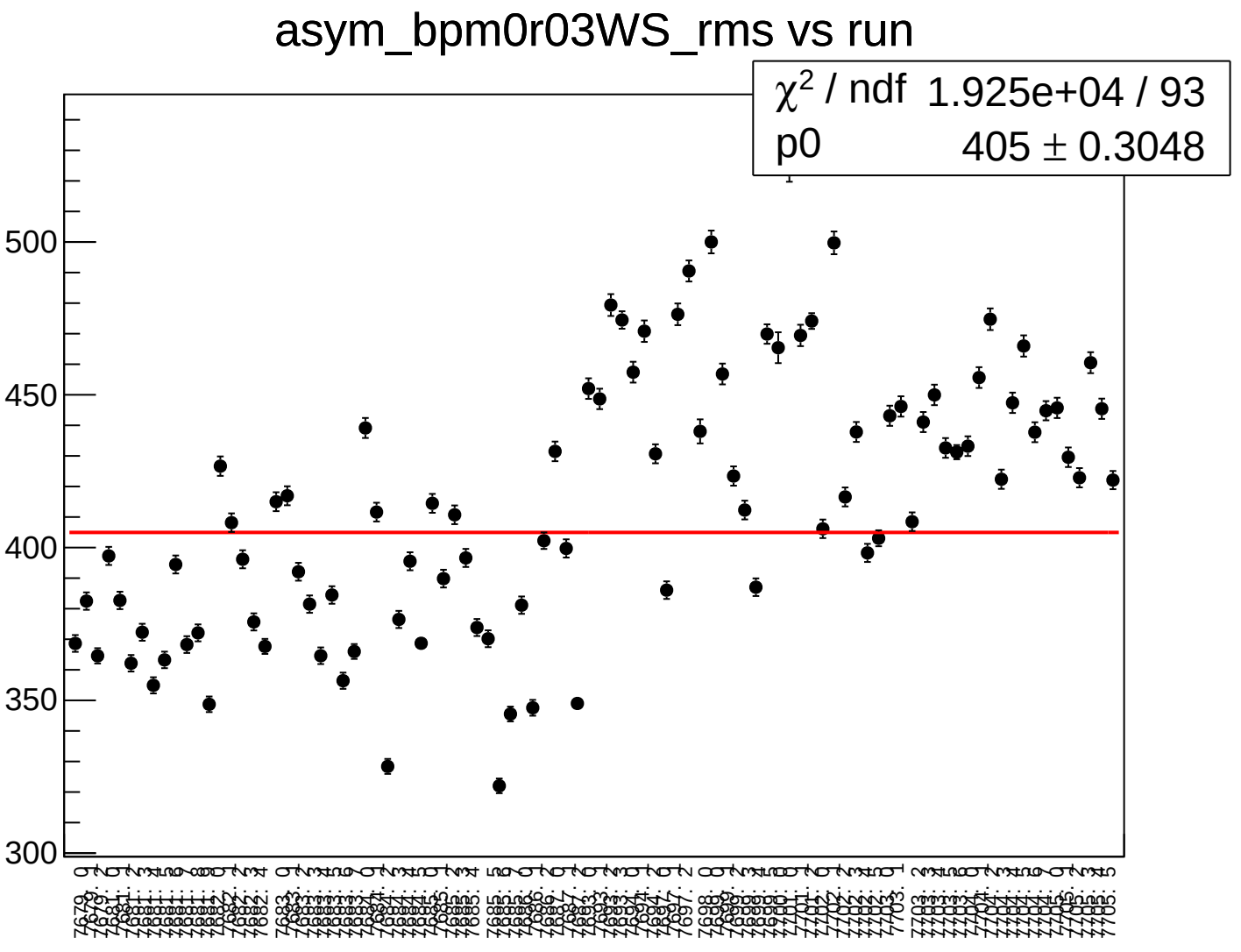

asym_bpm0l10WS_mean vs run
χ² / ndf 415.8 / 93
p0 −1.245e+04 ± 302
pull
Entries 94
Mean 292.7
Std Dev 244.5

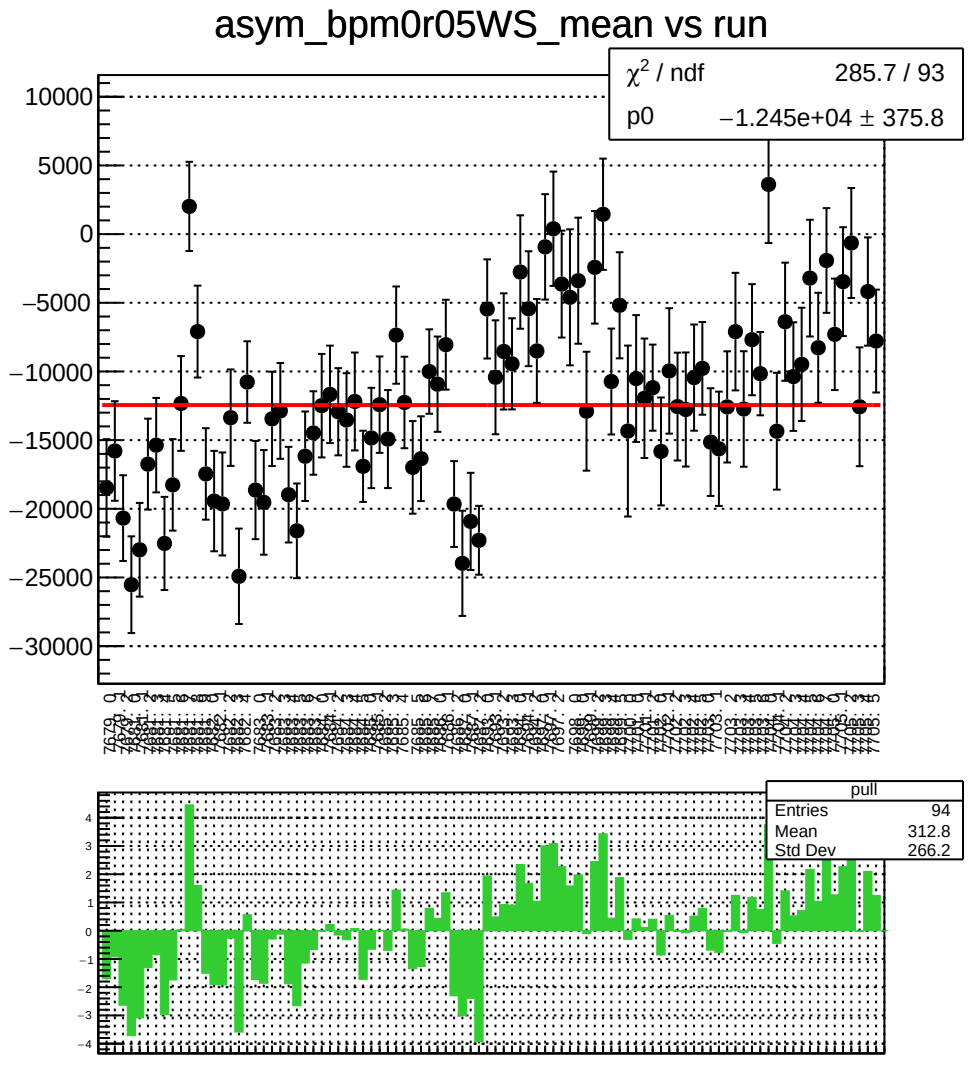

pull1D
Entries 94
Mean 0.1354
Std Dev 2.099

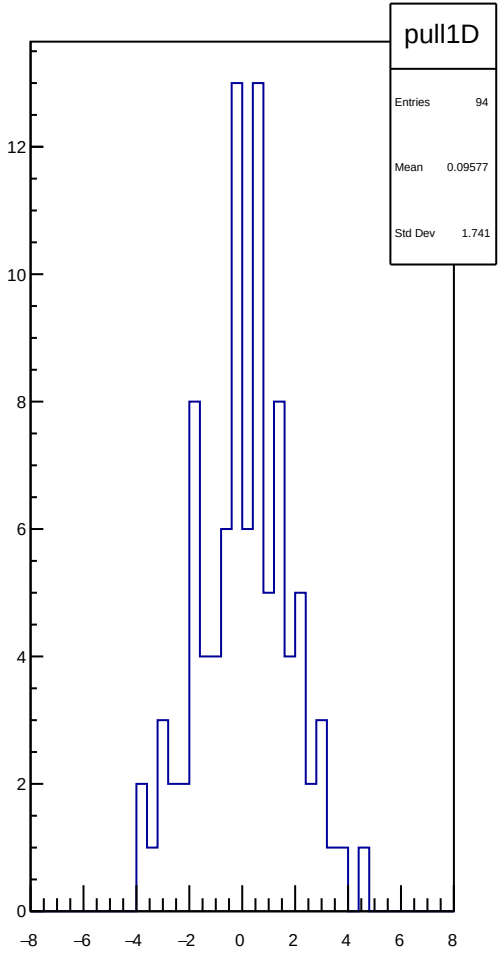

asym_bpm0l10WS_rms vs run
χ² / ndf 2.006e+04 / 93
p0 283.7 ± 0.2135
380
360
340
320
300
280
260
240
220

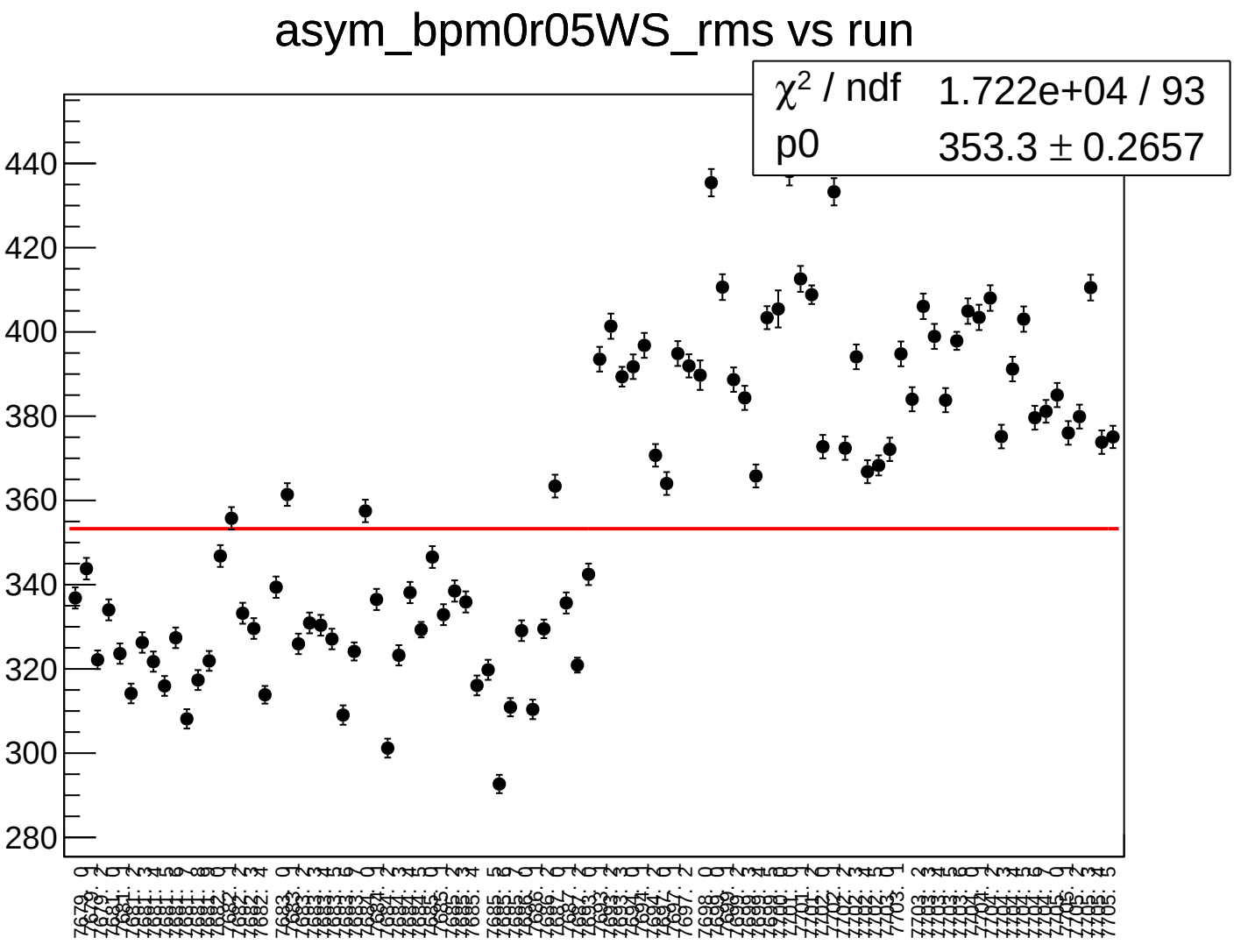

asym_bpm0r03WS_mean vs run
χ² / ndf 248.5 / 93
p0 −1.207e+04 ± 431
pull
Entries 94
Mean 355.4
Std Dev 309

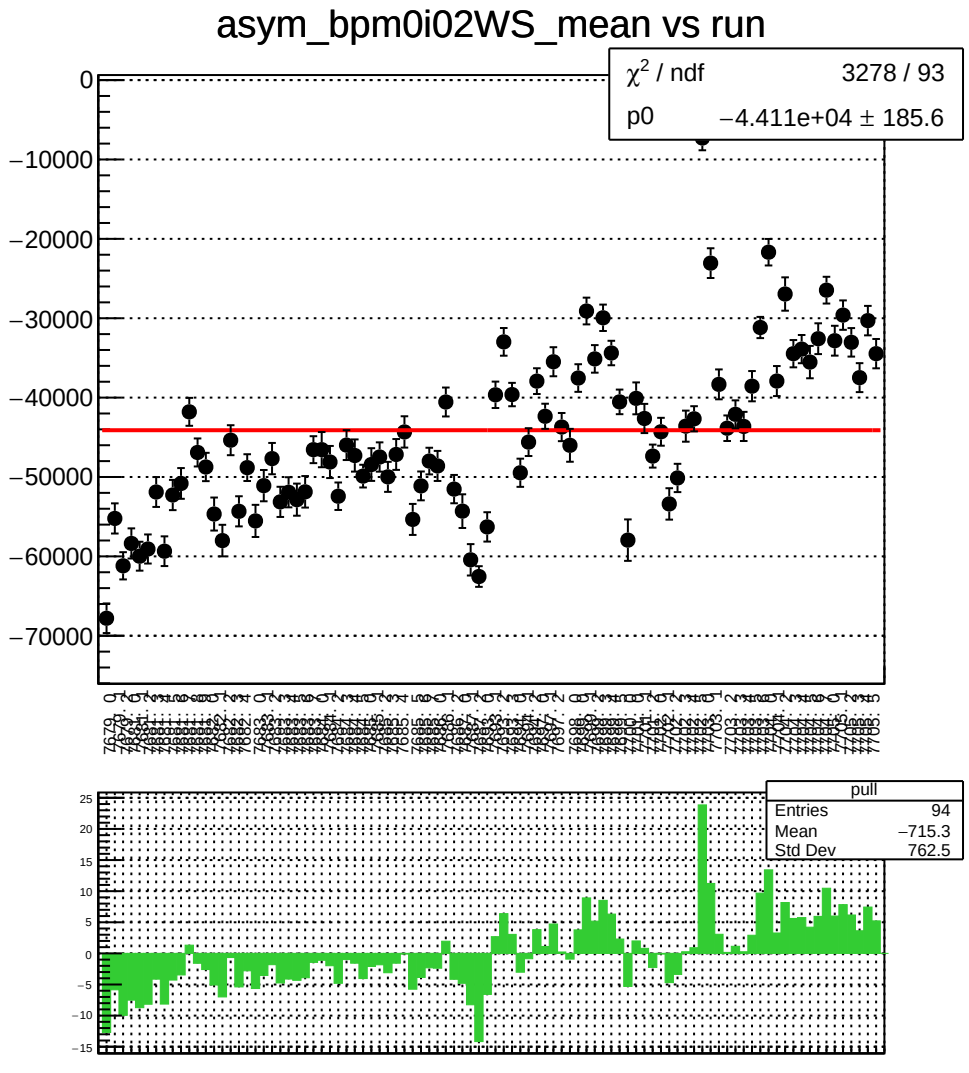

pull1D
Entries 94
Mean 0.07934
Std Dev 1.624

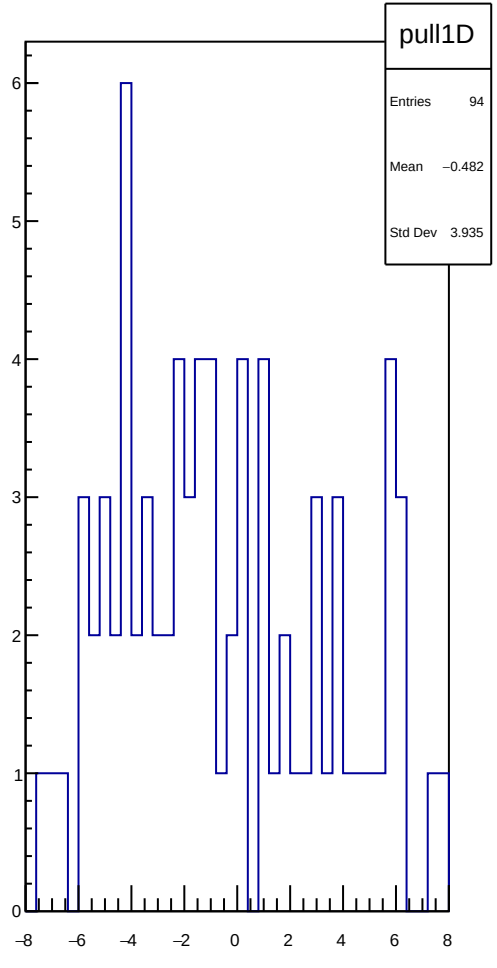

asym_bpm0r03WS_rms vs run
χ^2 / ndf 1.925e+04 / 93
p0 405 ± 0.3048
500
450
400
350
300

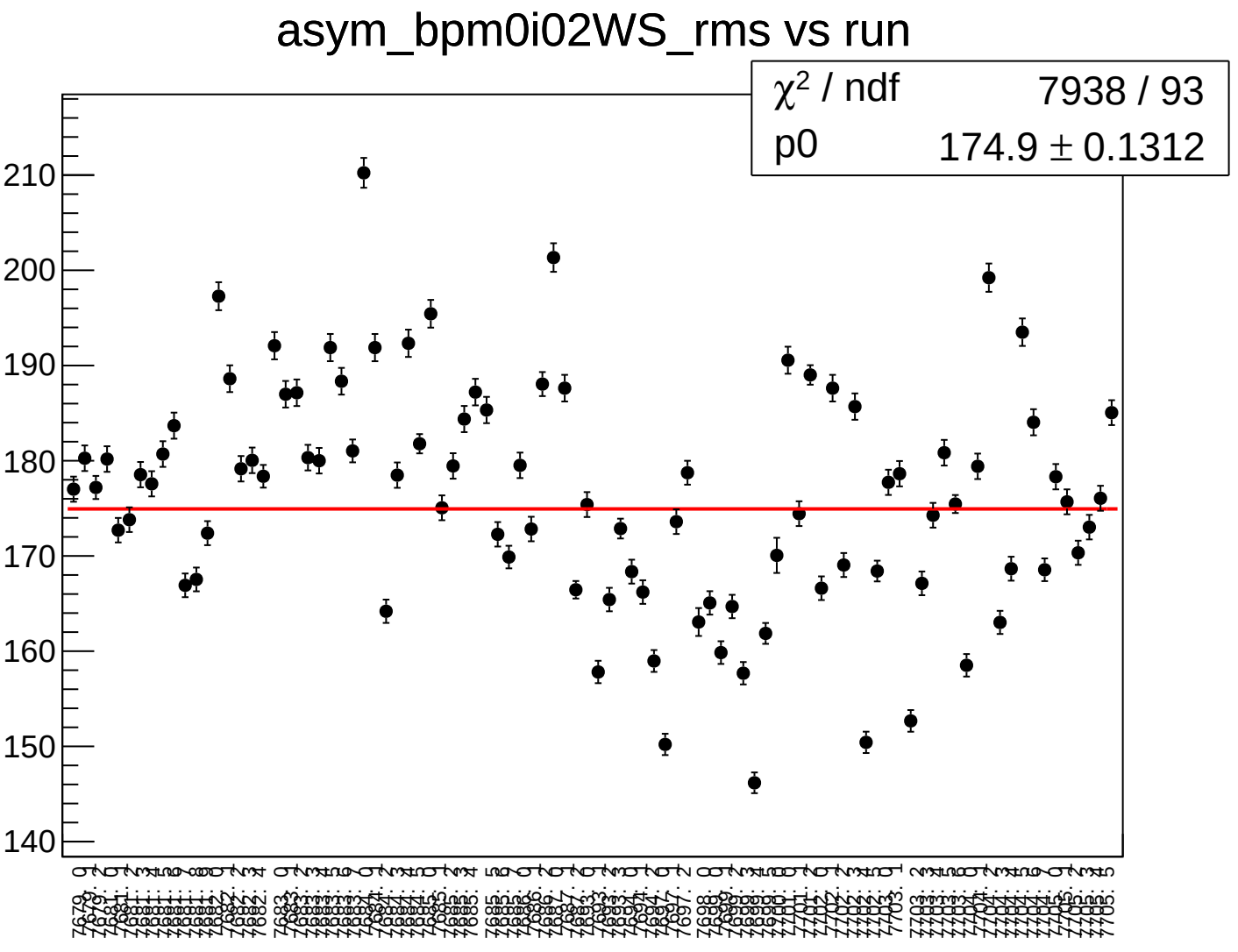

asym_bpm0r05WS_mean vs run
χ² / ndf 285.7 / 93
p0 −1.245e+04 ± 375.8
pull
Entries 94
Mean 312.8
Std Dev 266.2

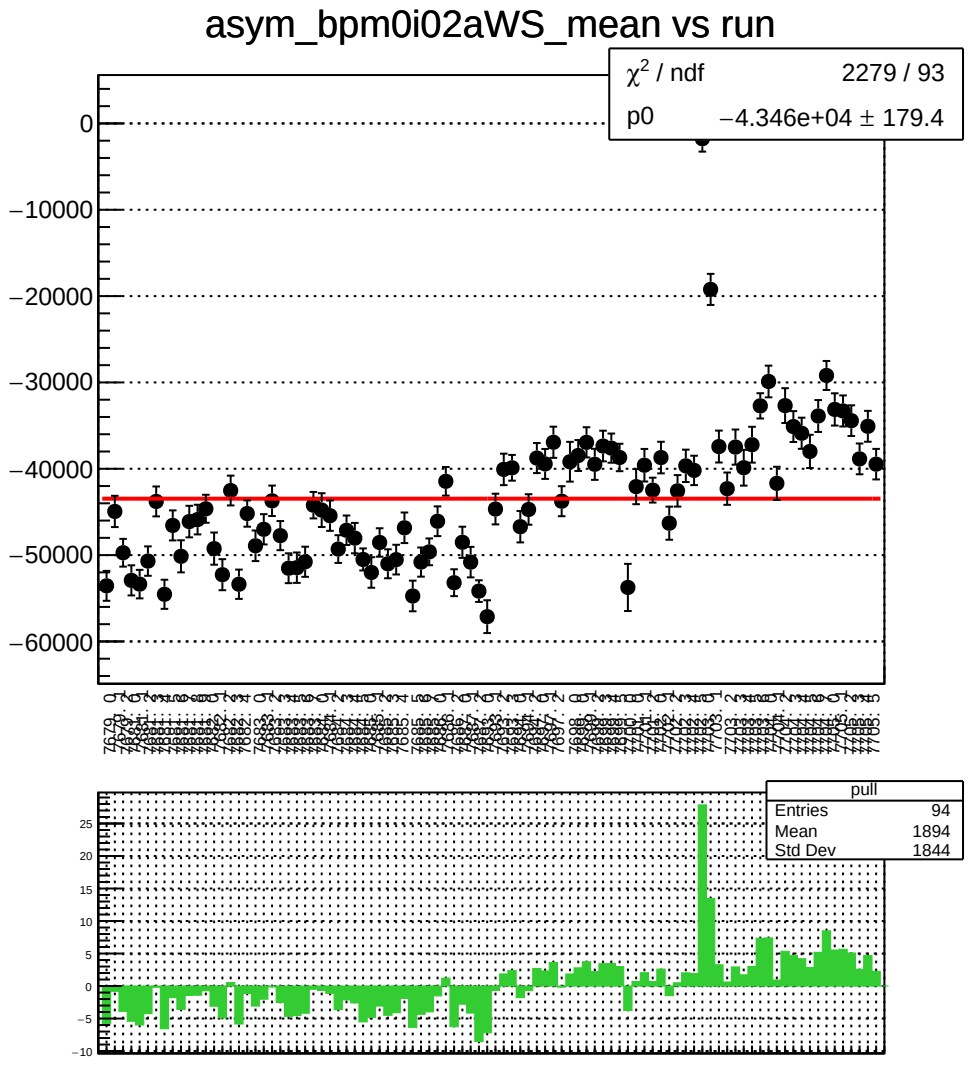

pull1D
Entries 94
Mean 0.09577
Std Dev 1.741

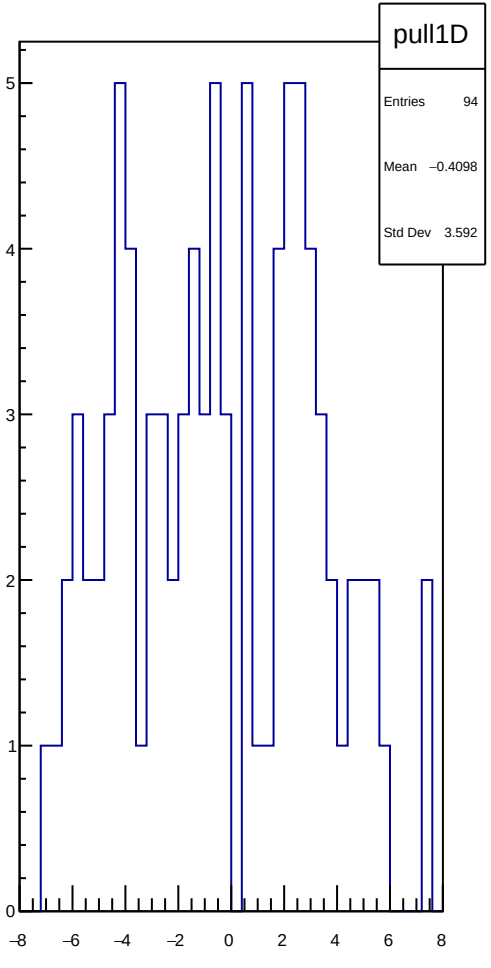

asym_bpm0r05WS_rms vs run
χ^2 / ndf 1.722e+04 / 93
p0 353.3 ± 0.2657
440
420
400
380
360
340
320
300
280

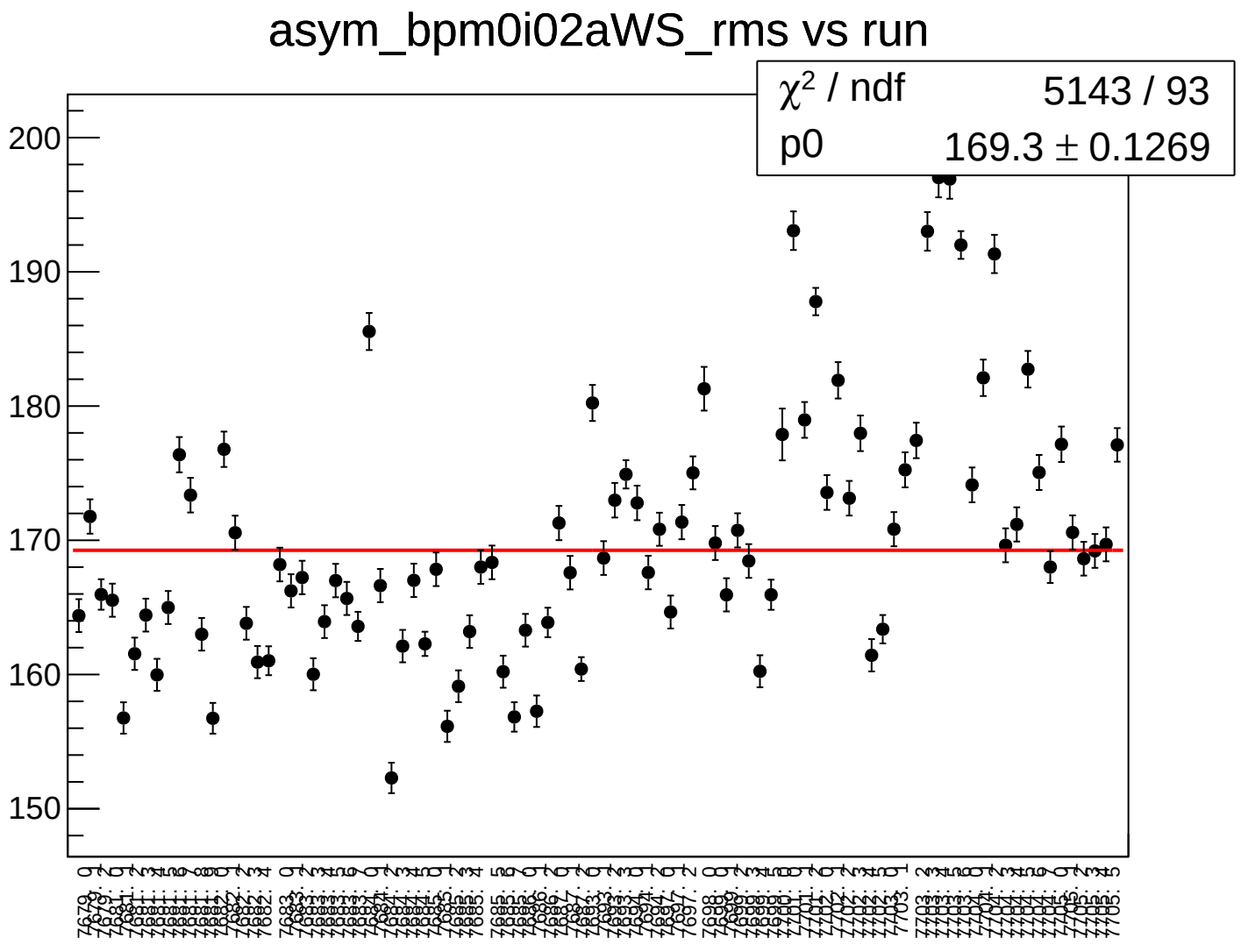

asym_bpm0i02WS_mean vs run
χ² / ndf 3278 / 93
p0 −4.411e+04 ± 185.6
pull
Entries 94
Mean −715.3
Std Dev 762.5

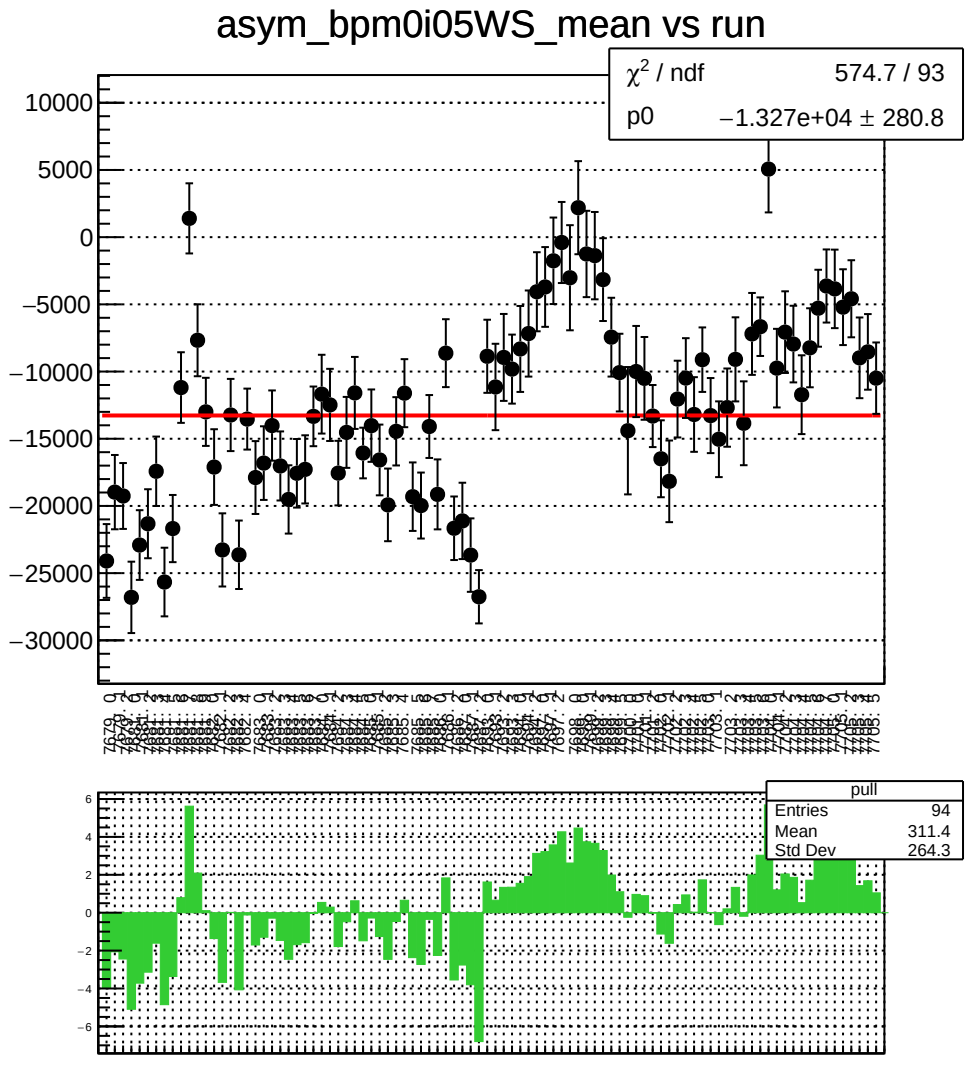

pull1D
Entries 94
Mean −0.482
Std Dev 3.935

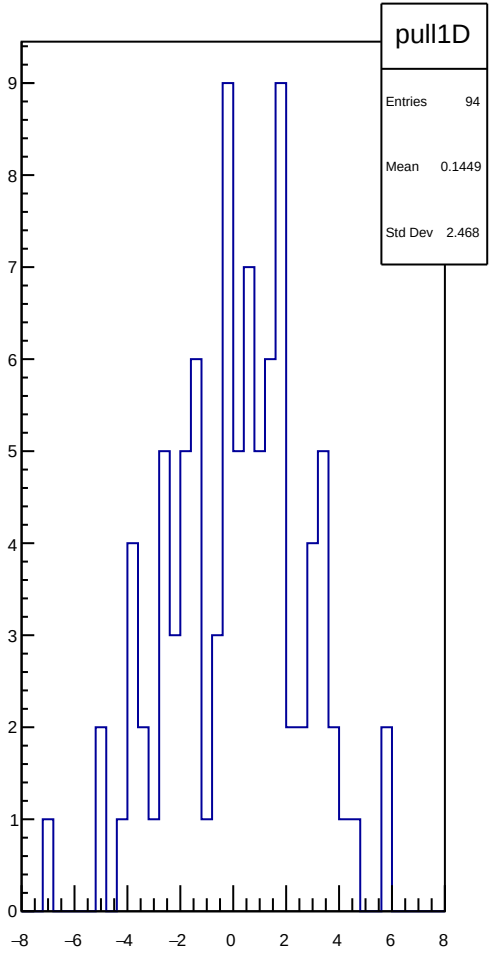

asym_bpm0i02WS_rms vs run
χ² / ndf 7938 / 93
p0 174.9 ± 0.1312
210
200
190
180
170
160
150
140

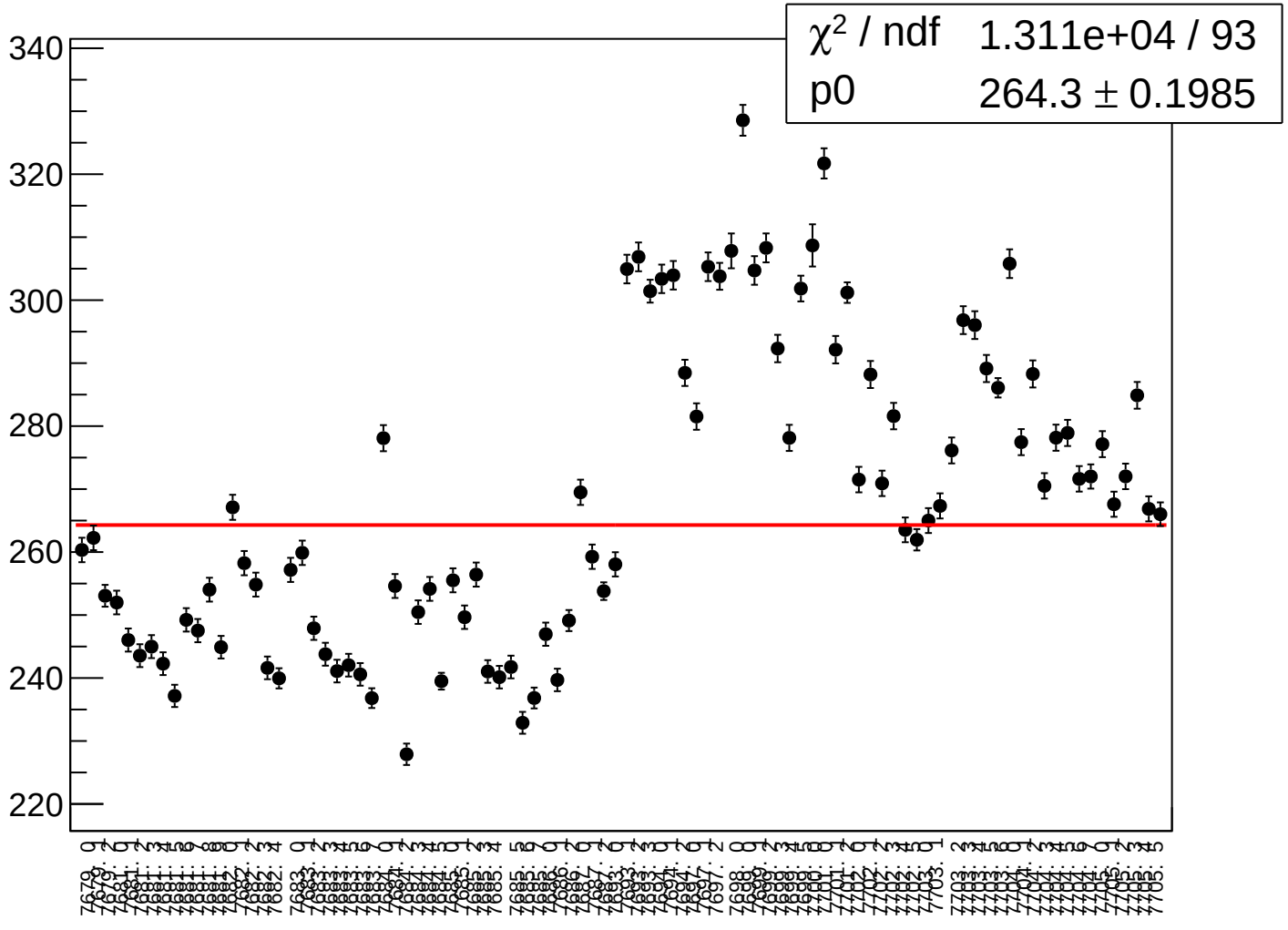

asym_bpm0i02aWS_mean vs run
χ² / ndf 2279 / 93
p0 −4.346e+04 ± 179.4
0
−10000
−20000
−30000
−40000
−50000
−60000
pull
Entries 94
Mean 1894
Std Dev 1844
25
20
15
10
5
0
−5
−10

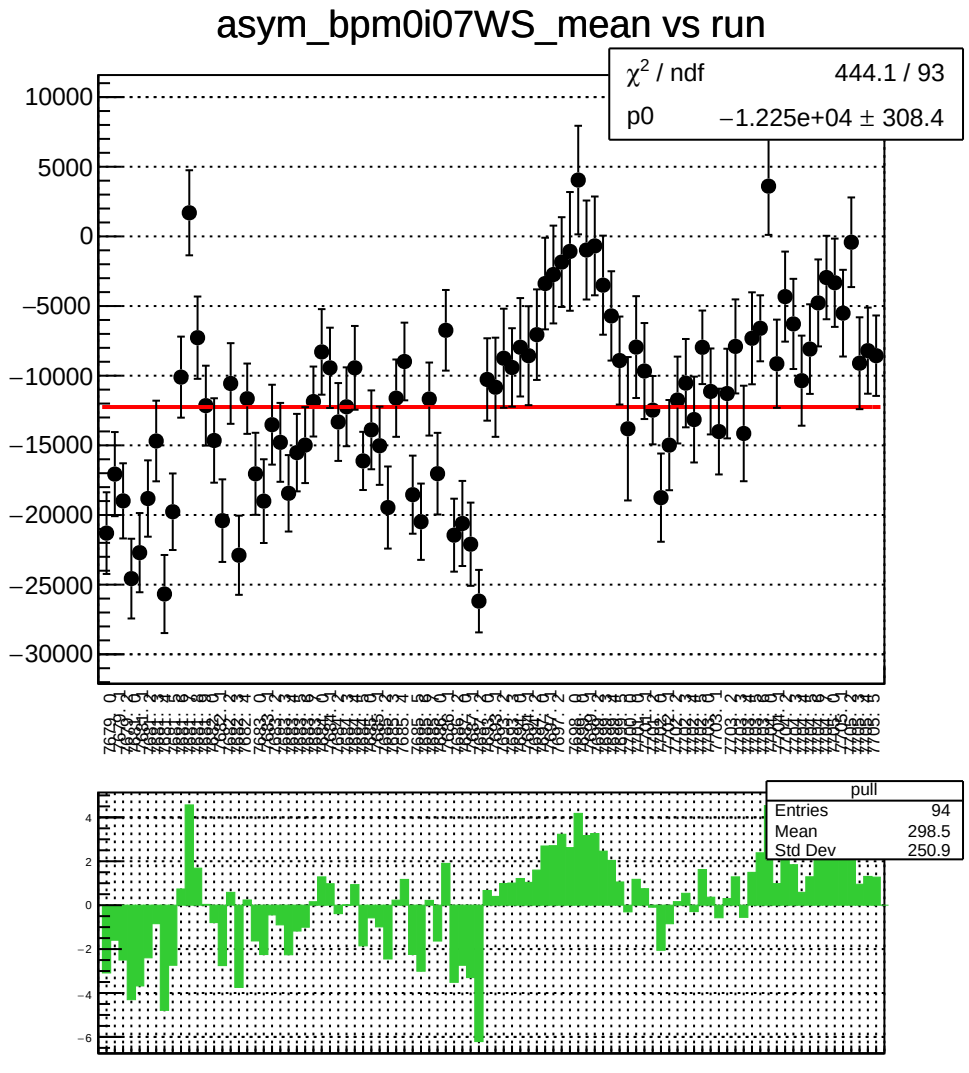

pull1D
Entries 94
Mean −0.4098
Std Dev 3.592
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

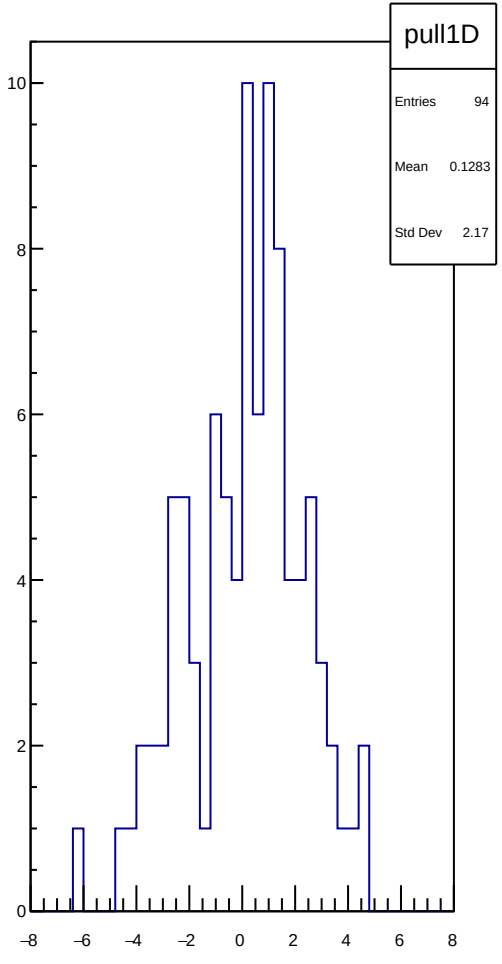

asym_bpm0i02aWS_rms vs run
χ² / ndf 5143 / 93
p0 169.3 ± 0.1269
200
190
180
170
160
150

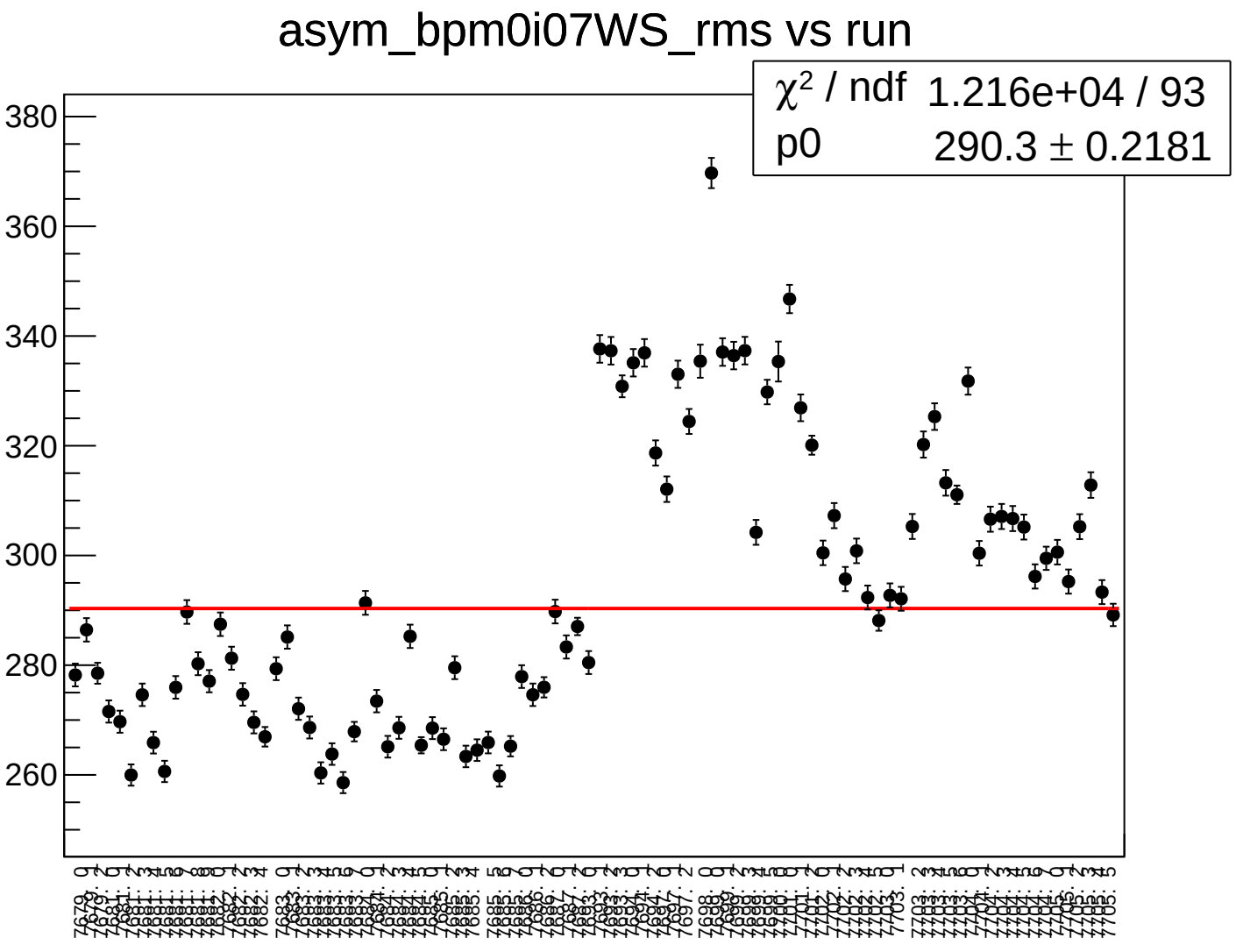

asym_bpm0i05WS_mean vs run
χ² / ndf 574.7 / 93
p0 −1.327e+04 ± 280.8
pull
Entries 94
Mean 311.4
Std Dev 264.3

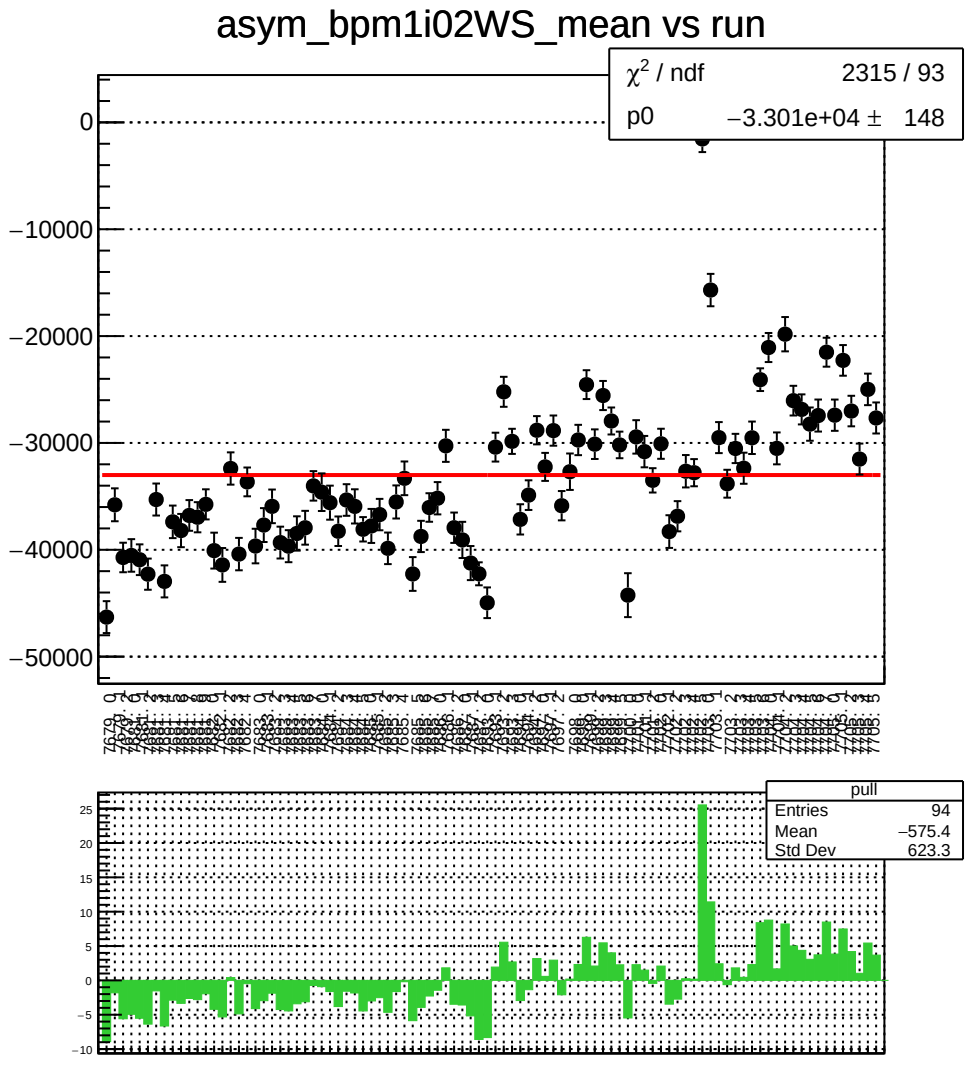

pull1D
Entries 94
Mean 0.1449
Std Dev 2.468

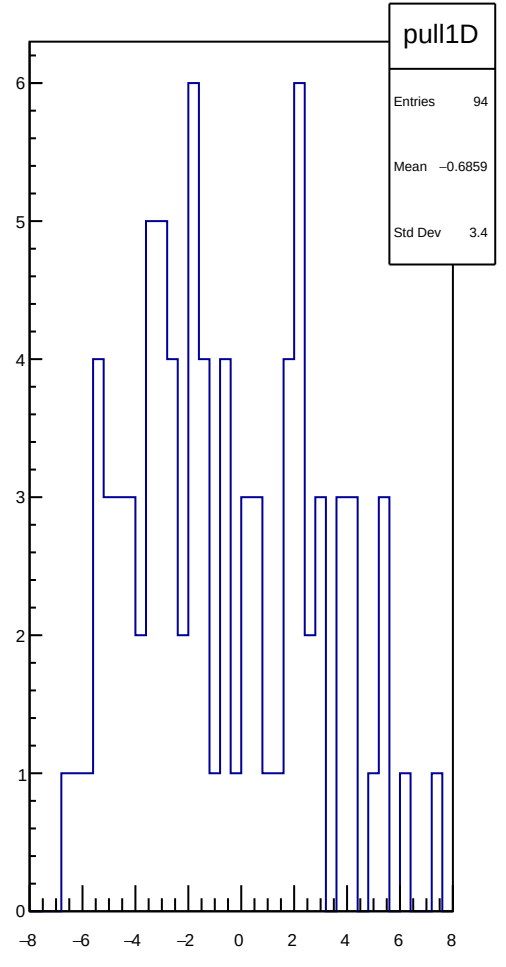

asym_bpm0i05WS_rms vs run
χ² / ndf 1.311e+04 / 93
p0 264.3 ± 0.1985
340
320
300
280
260
240
220

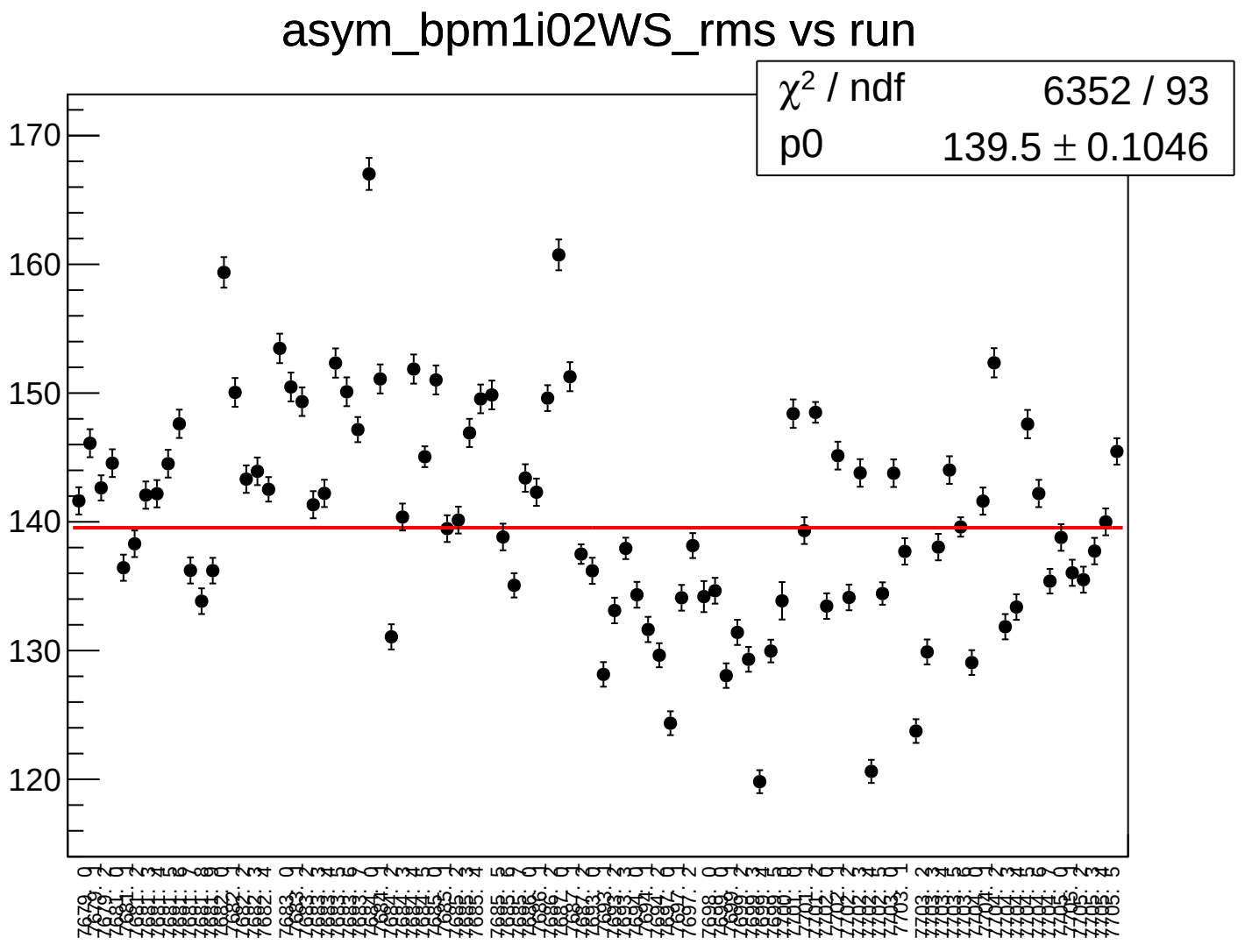

asym_bpm0i07WS_mean vs run
χ² / ndf 444.1 / 93
p0 −1.225e+04 ± 308.4
pull
Entries 94
Mean 298.5
Std Dev 250.9

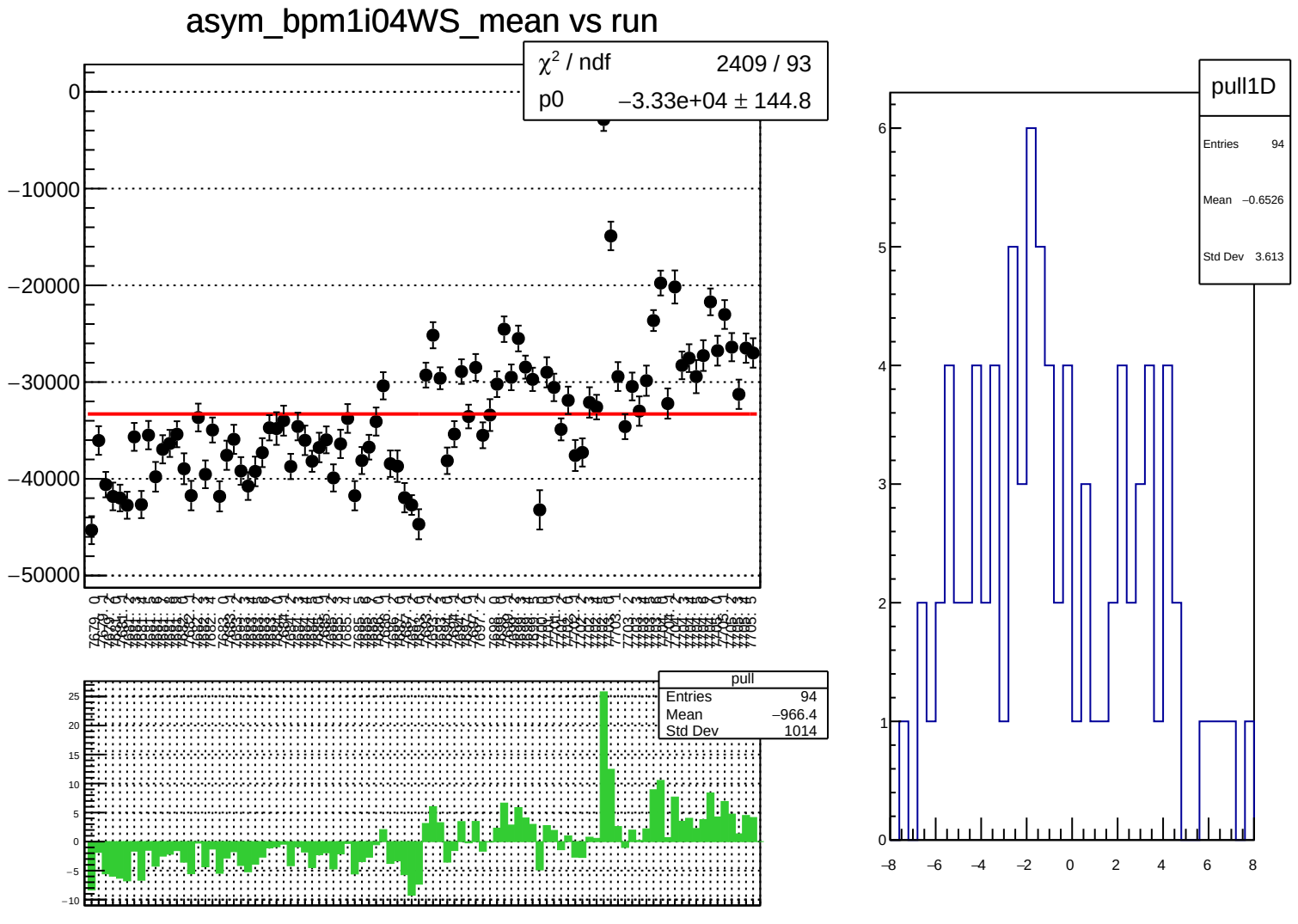

pull1D
Entries 94
Mean 0.1283
Std Dev 2.17

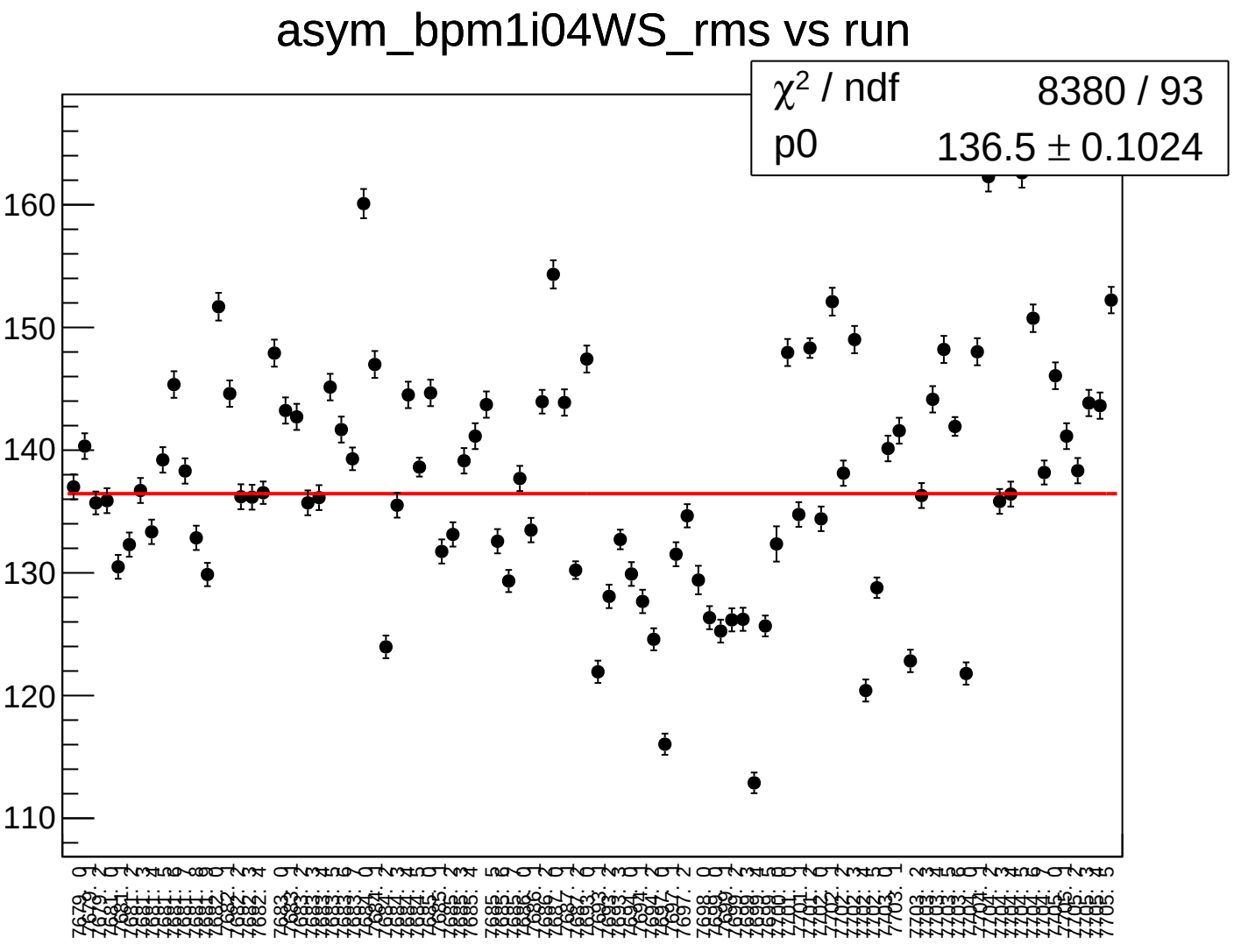

asym_bpm0i07WS_rms vs run
χ² / ndf 1.216e+04 / 93
p0 290.3 ± 0.2181
380
360
340
320
300
280
260

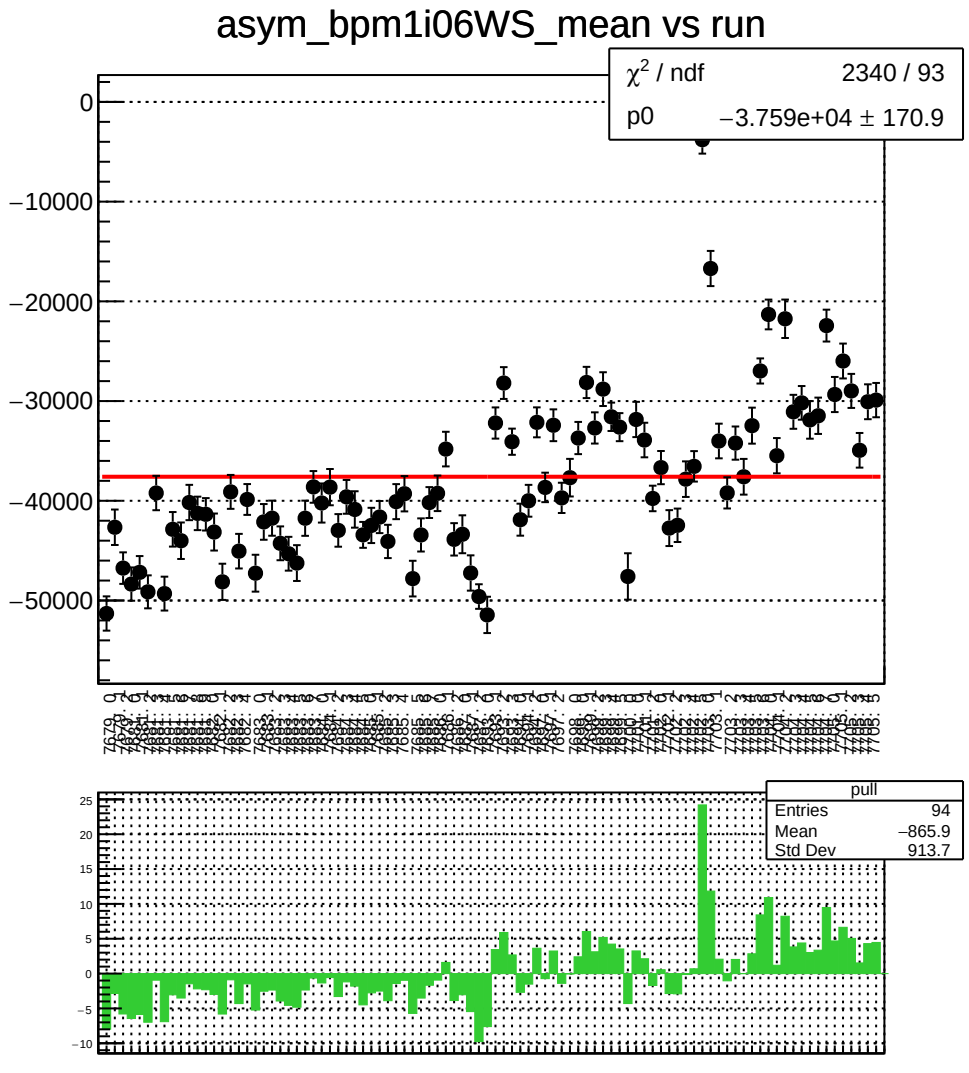

asym_bpm1i02WS_mean vs run
χ² / ndf 2315 / 93
p0 −3.301e+04 ± 148
0
−10000
−20000
−30000
−40000
−50000
pull
Entries 94
Mean −575.4
Std Dev 623.3
25
20
15
10
5
0
−5
−10

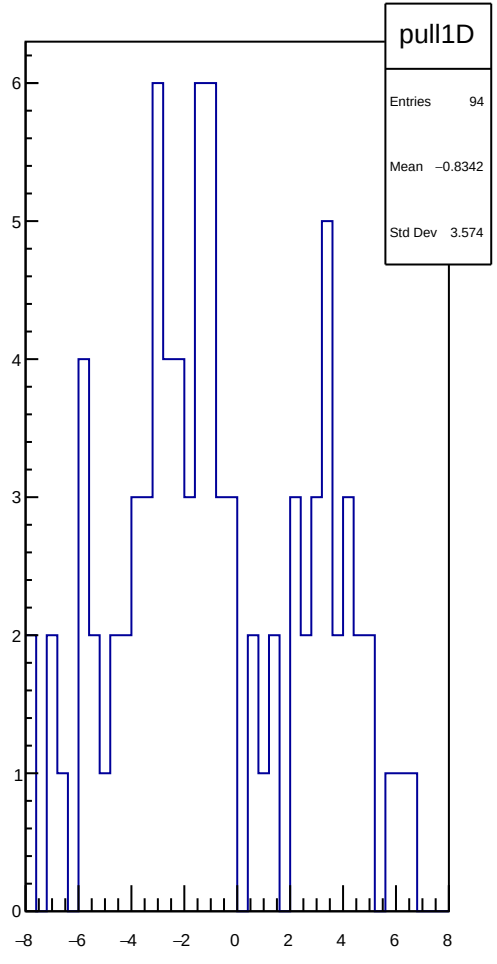

pull1D
Entries 94
Mean −0.6859
Std Dev 3.4
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

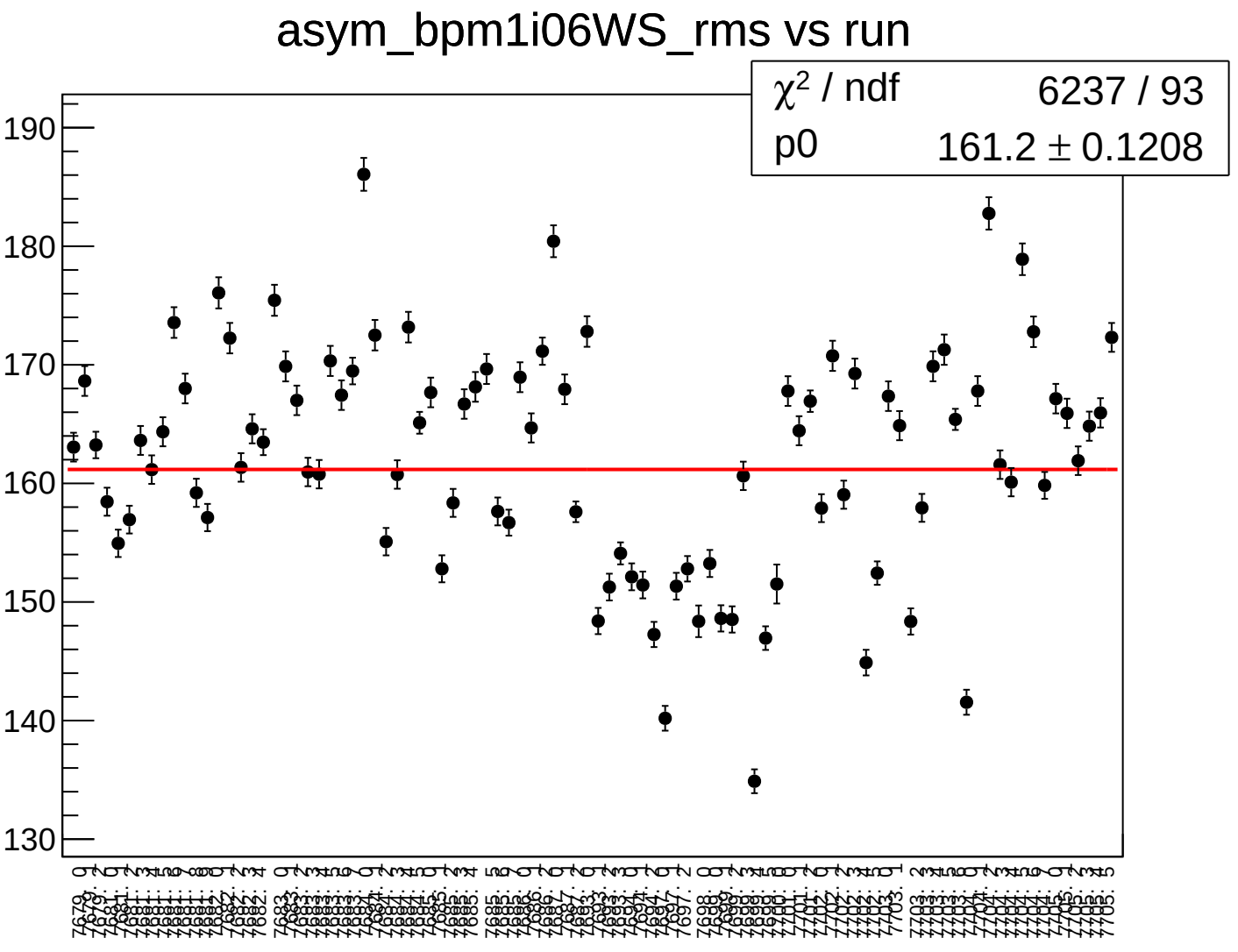

asym_bpm1i02WS_rms vs run
χ^2 / ndf 6352 / 93
p0 139.5 ± 0.1046
170
160
150
140
130
120

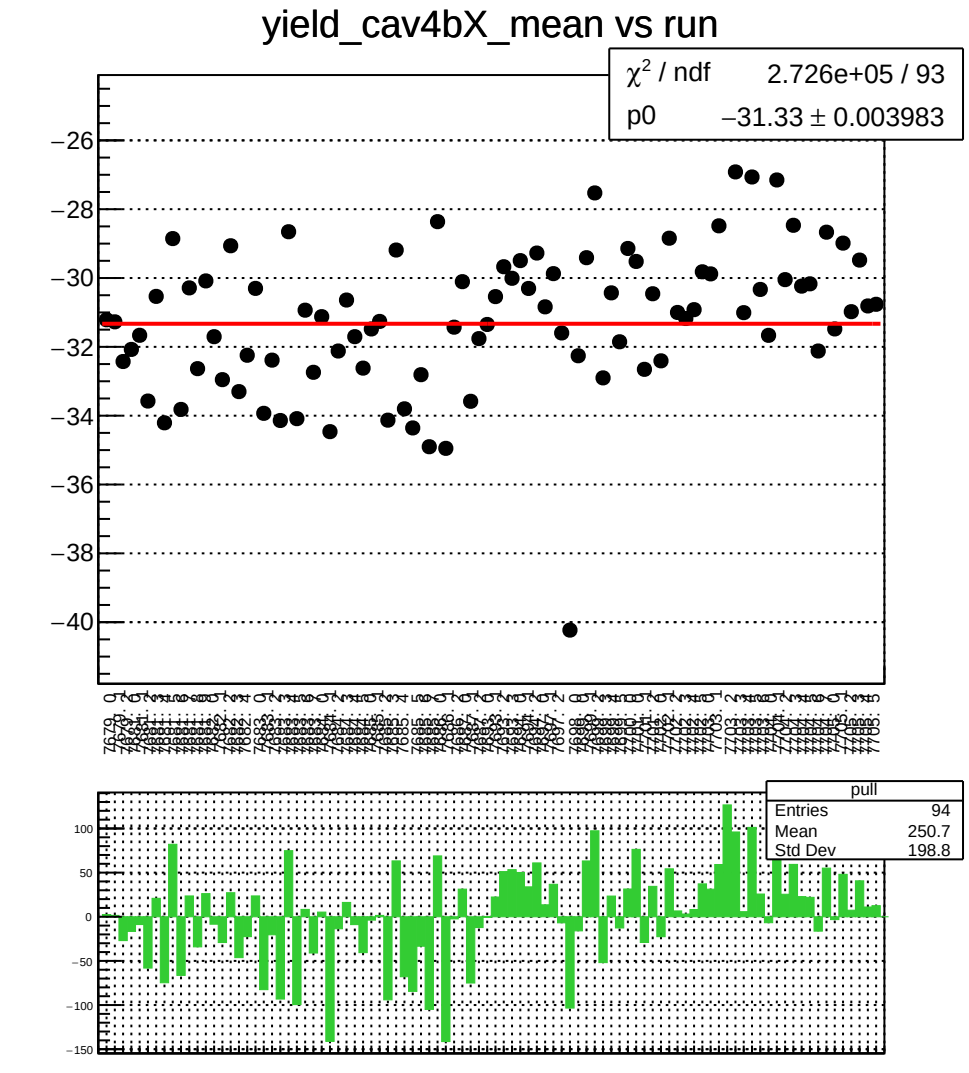

asym_bpm1i04WS_mean vs run
χ² / ndf 2409 / 93
p0 −3.33e+04 ± 144.8
0
−10000
−20000
−30000
−40000
−50000
pull
Entries 94
Mean −966.4
Std Dev 1014
25
20
15
10
5
0
−5
−10
pull1D
Entries 94
Mean −0.6526
Std Dev 3.613
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

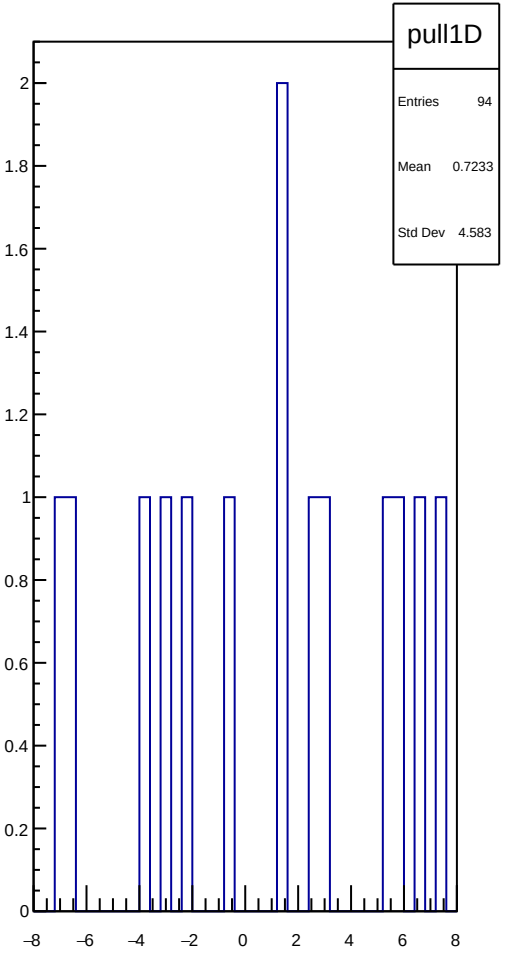

asym_bpm1i04WS_rms vs run
χ² / ndf 8380 / 93
p0 136.5 ± 0.1024
160
150
140
130
120
110

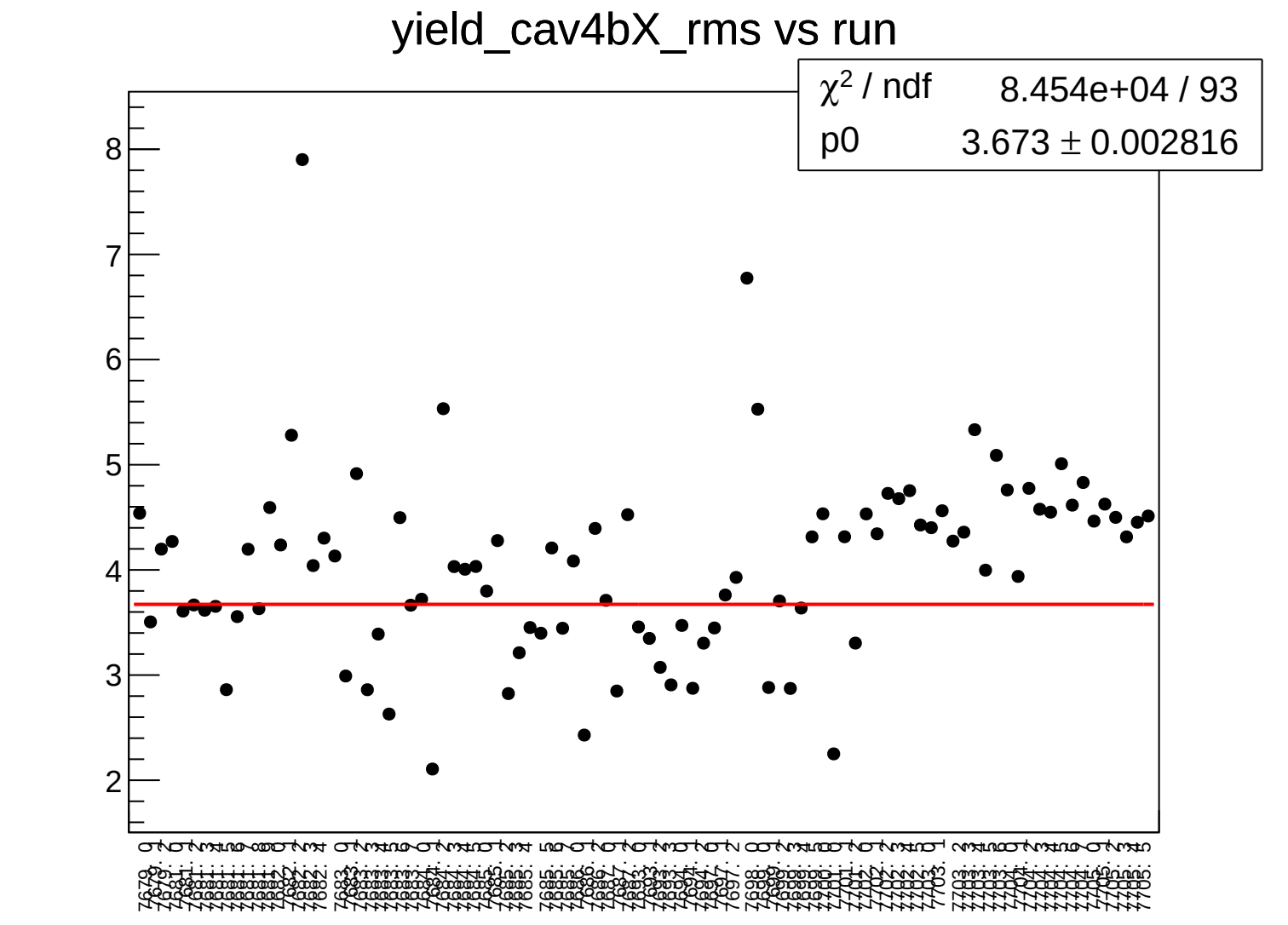

asym_bpm1i06WS_mean vs run
χ² / ndf 2340 / 93
p0 −3.759e+04 ± 170.9
0
−10000
−20000
−30000
−40000
−50000
pull
Entries 94
Mean −865.9
Std Dev 913.7
25
20
15
10
5
0
−5
−10

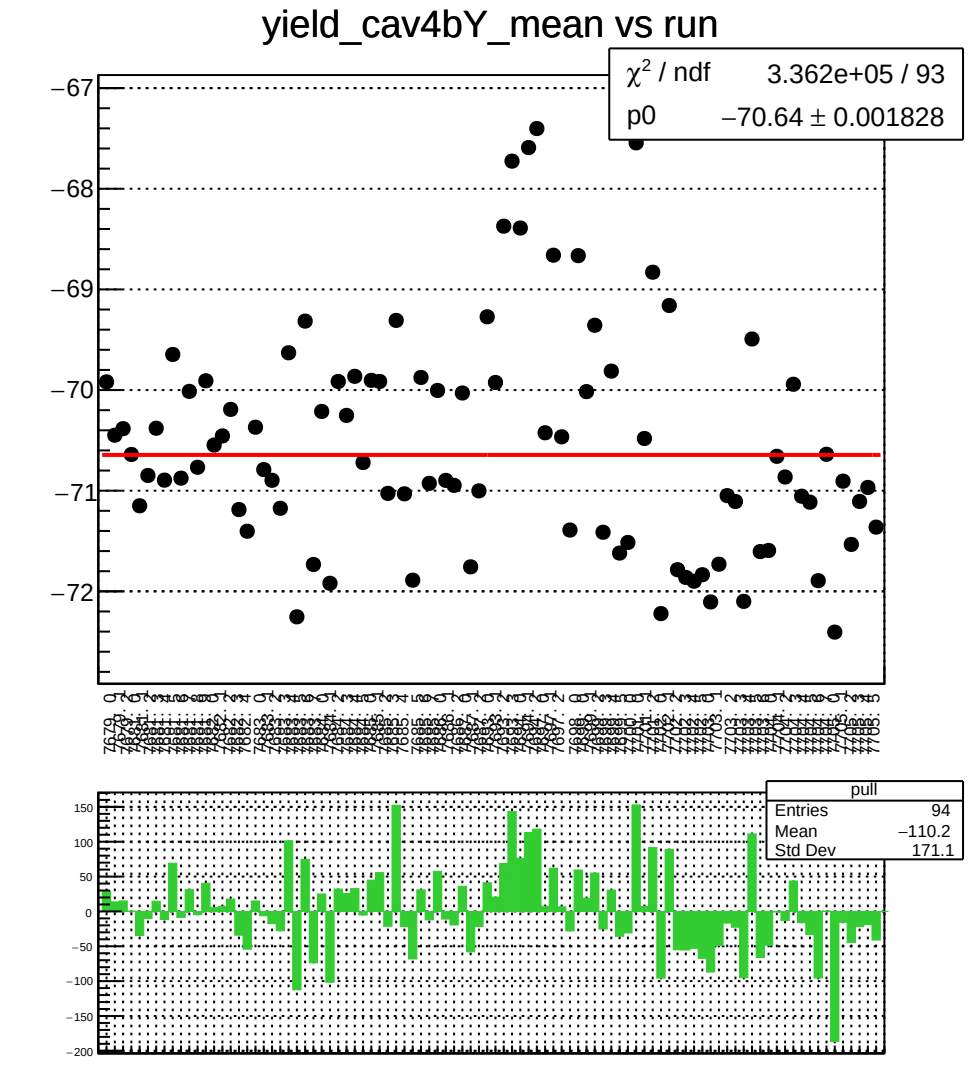

pull1D
Entries 94
Mean −0.8342
Std Dev 3.574
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

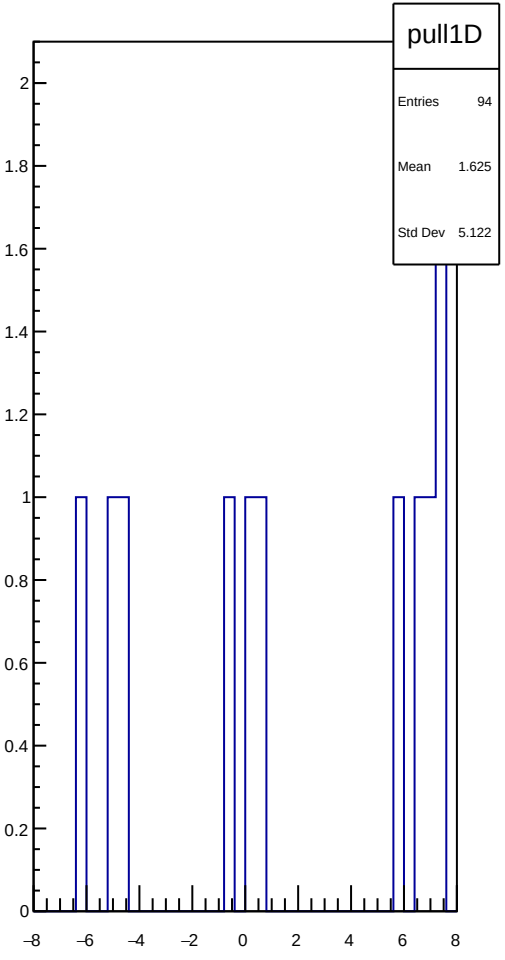

asym_bpm1i06WS_rms vs run
χ² / ndf 6237 / 93
p0 161.2 ± 0.1208
190
180
170
160
150
140
130

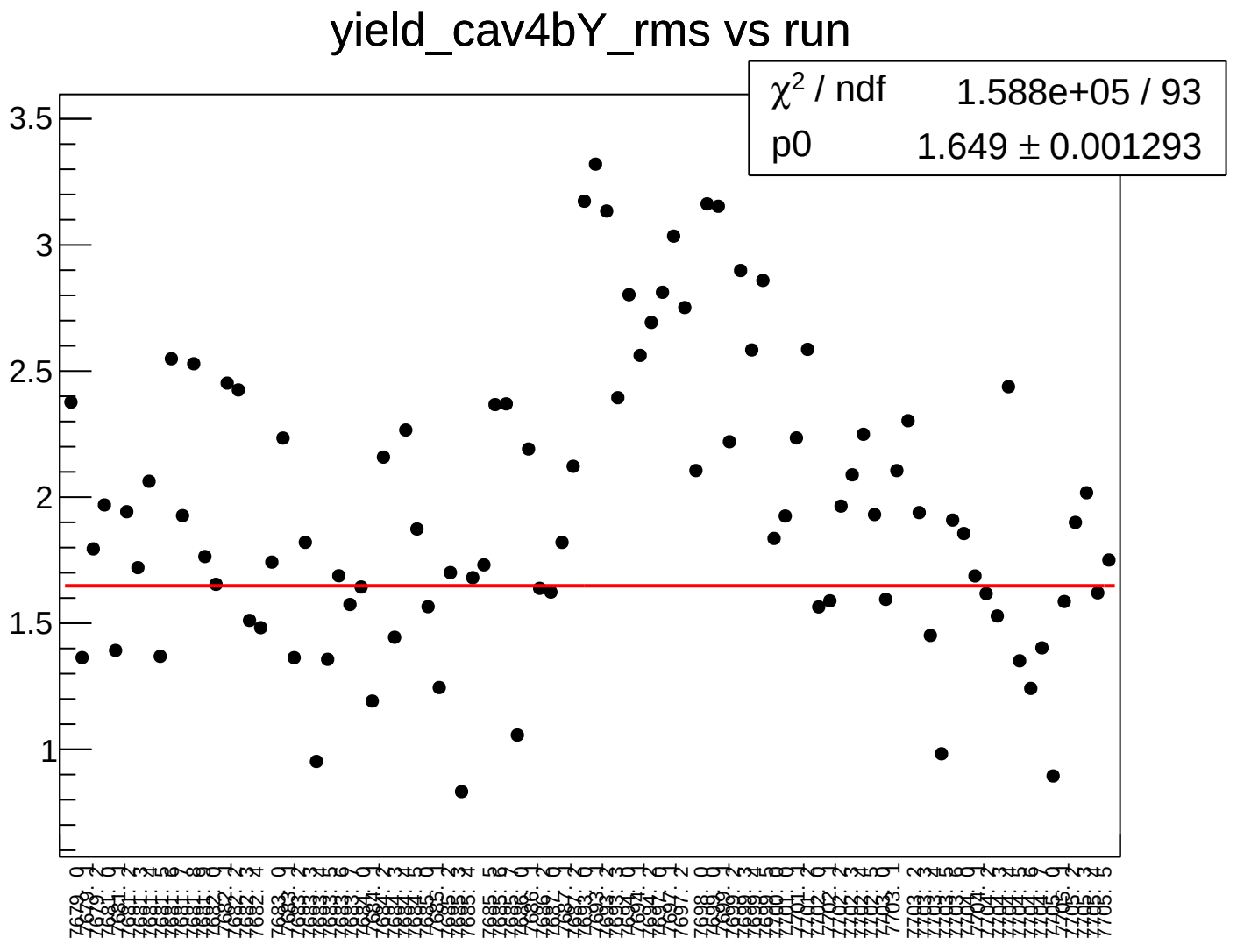

yield_cav4bX_mean vs run
χ² / ndf 2.726e+05 / 93
p0 −31.33 ± 0.003983
pull
Entries 94
Mean 250.7
Std Dev 198.8

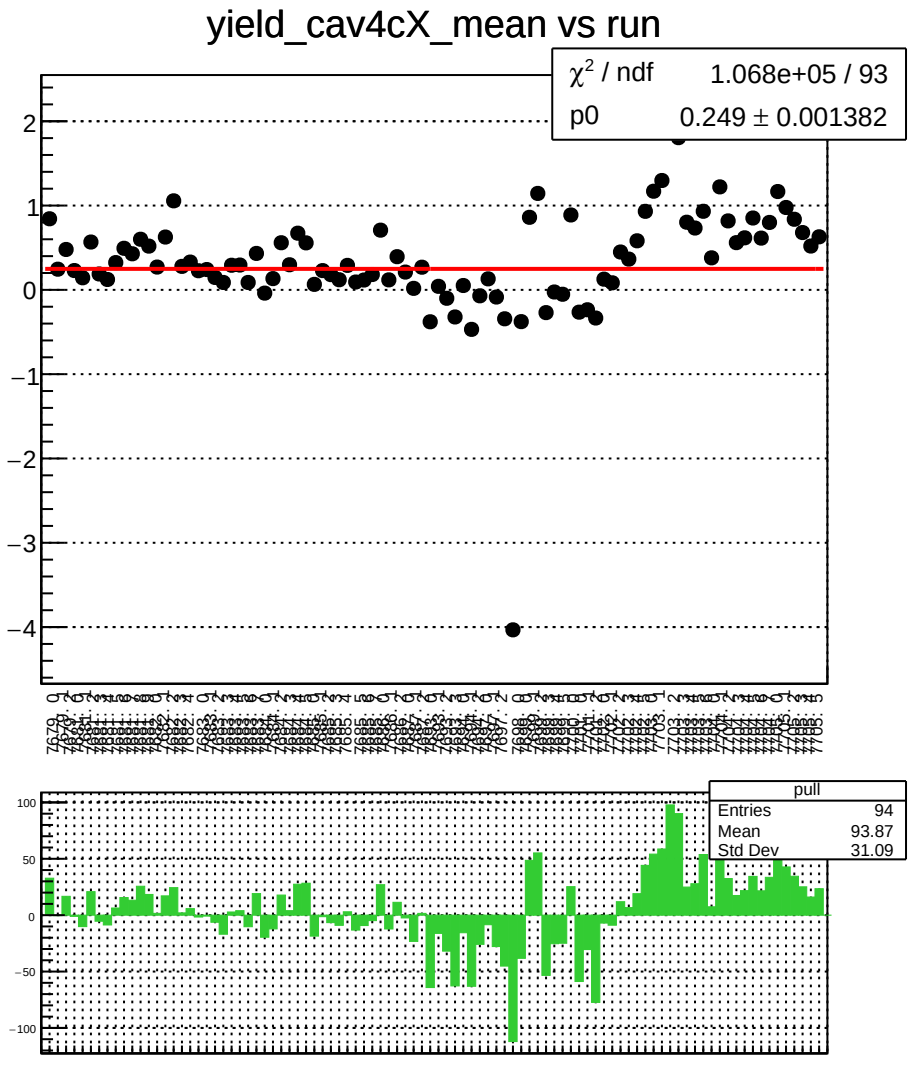

pull1D
Entries 94
Mean 0.7233
Std Dev 4.583

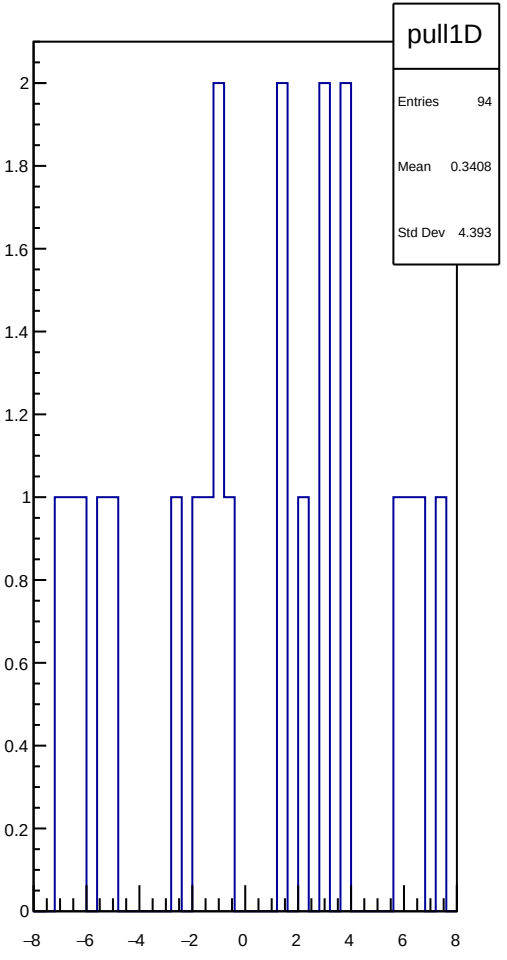

yield_cav4bX_rms vs run
χ^2 / ndf 8.454e+04 / 93
p0 3.673 ± 0.002816
8
7
6
5
4
3
2

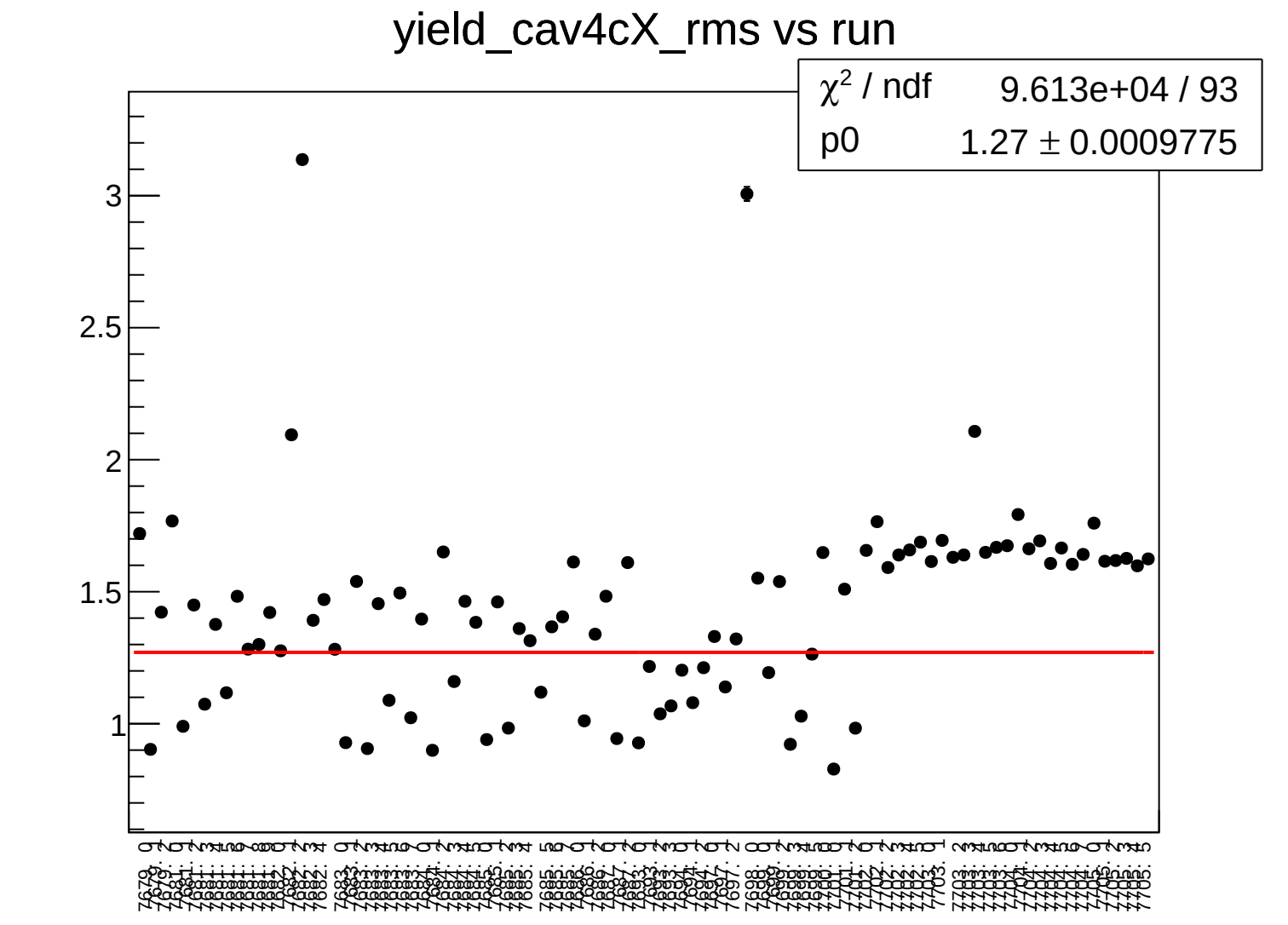

yield_cav4bY_mean vs run
χ² / ndf 3.362e+05 / 93
p0 −70.64 ± 0.001828
−67
−68
−69
−70
−71
−72
pull
Entries 94
Mean −110.2
Std Dev 171.1
150
100
50
0
−50
−100
−150
−200

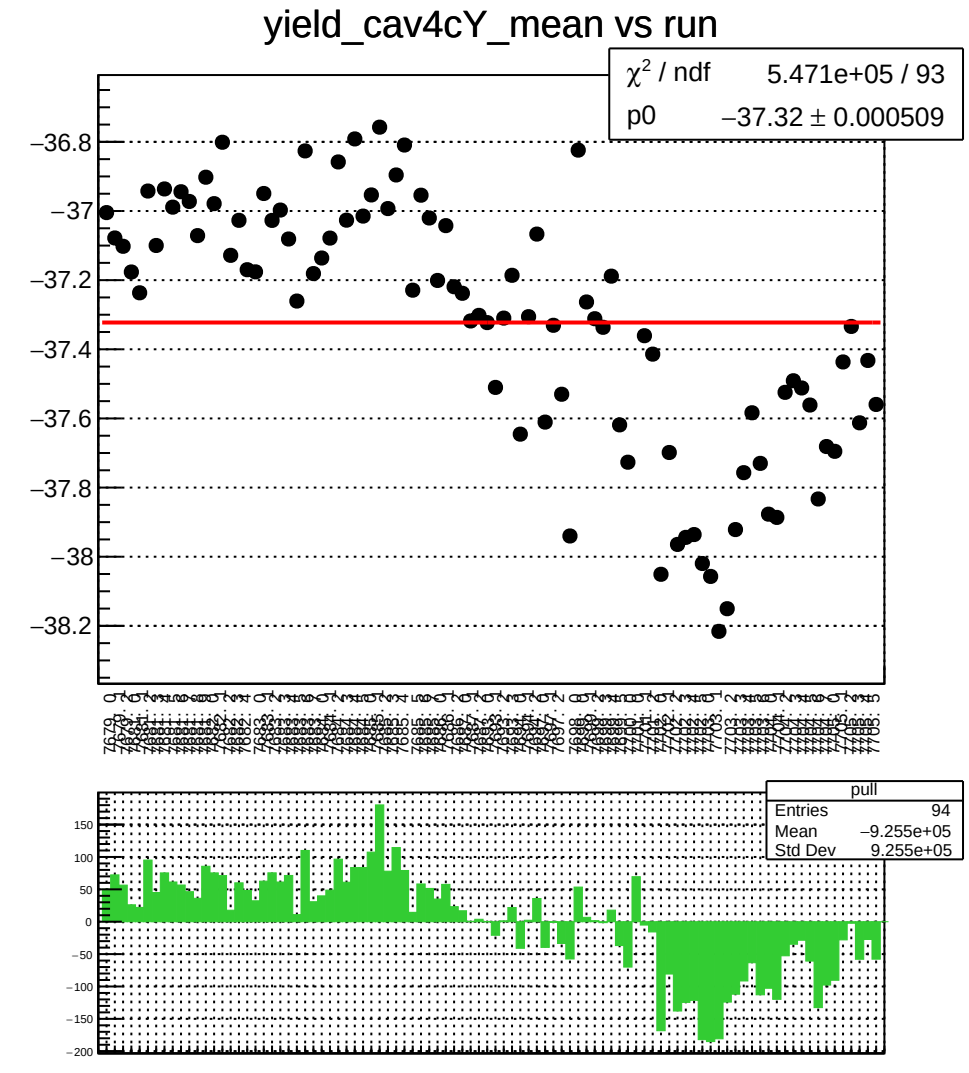

pull1D
Entries 94
Mean 1.625
Std Dev 5.122
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

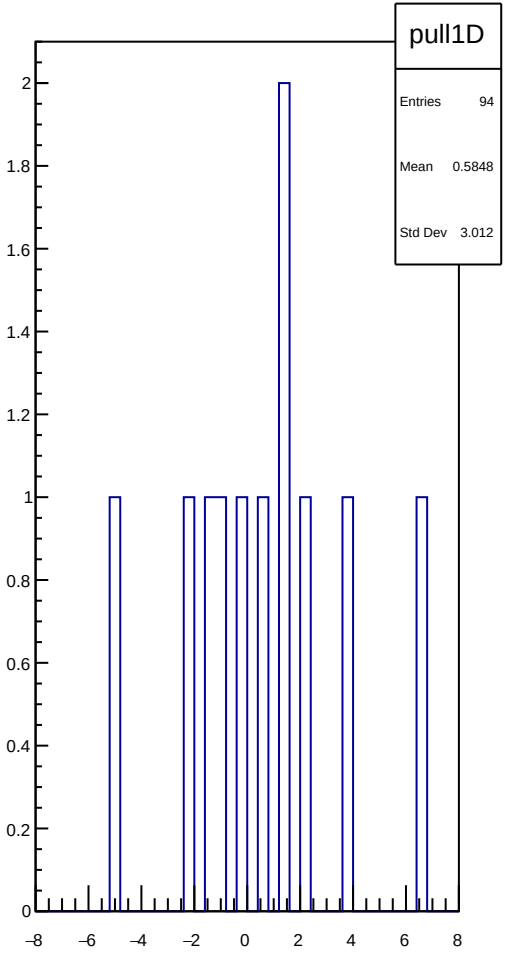

yield_cav4bY_rms vs run
χ² / ndf 1.588e+05 / 93
p0 1.649 ± 0.001293
3.5
3
2.5
2
1.5
1

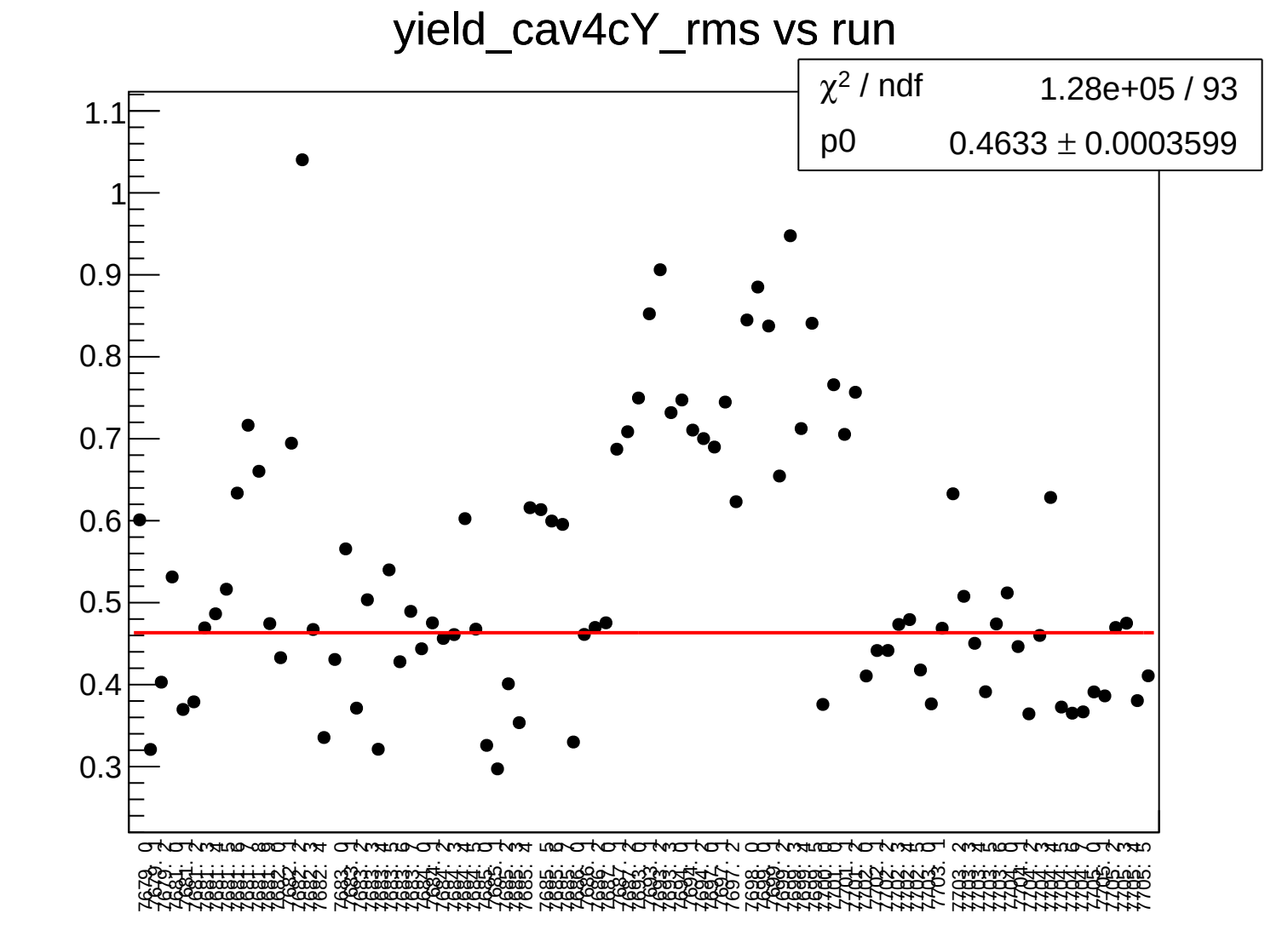

yield_cav4cX_mean vs run
χ² / ndf 1.068e+05 / 93
p0 0.249 ± 0.001382
pull
Entries 94
Mean 93.87
Std Dev 31.09

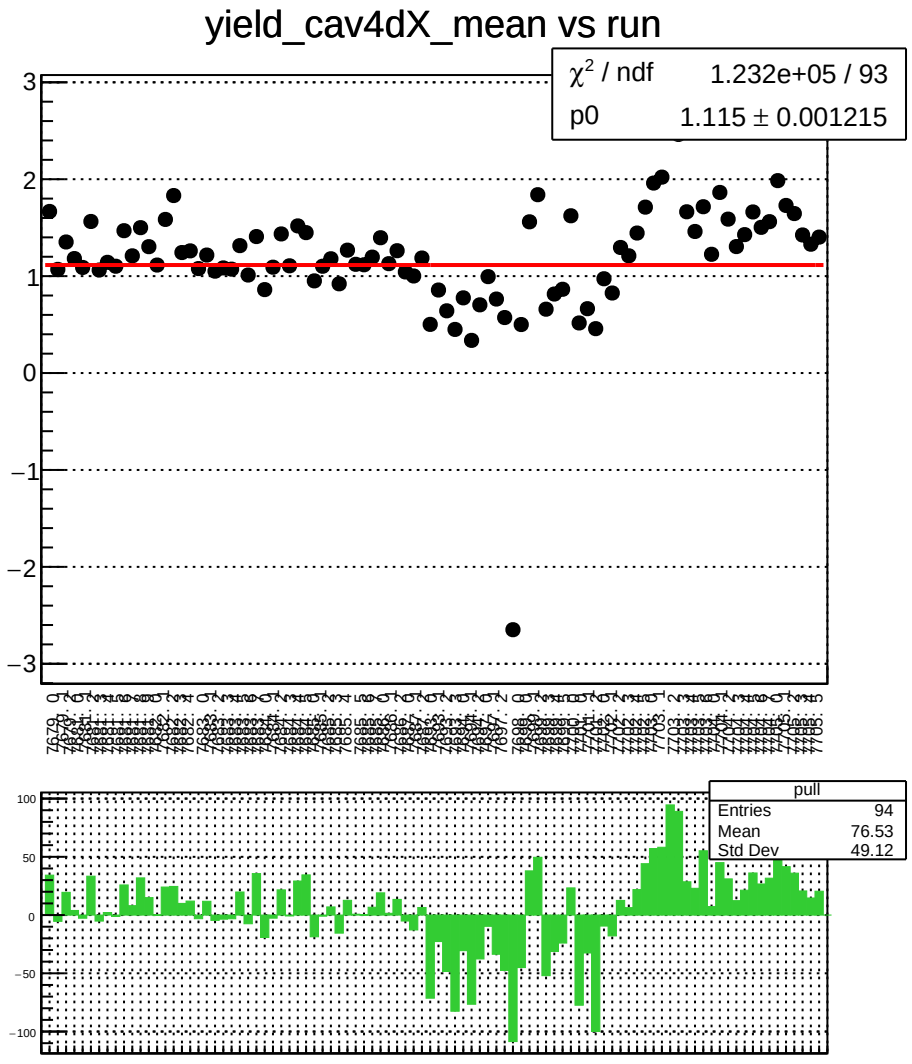

pull1D
Entries 94
Mean 0.3408
Std Dev 4.393

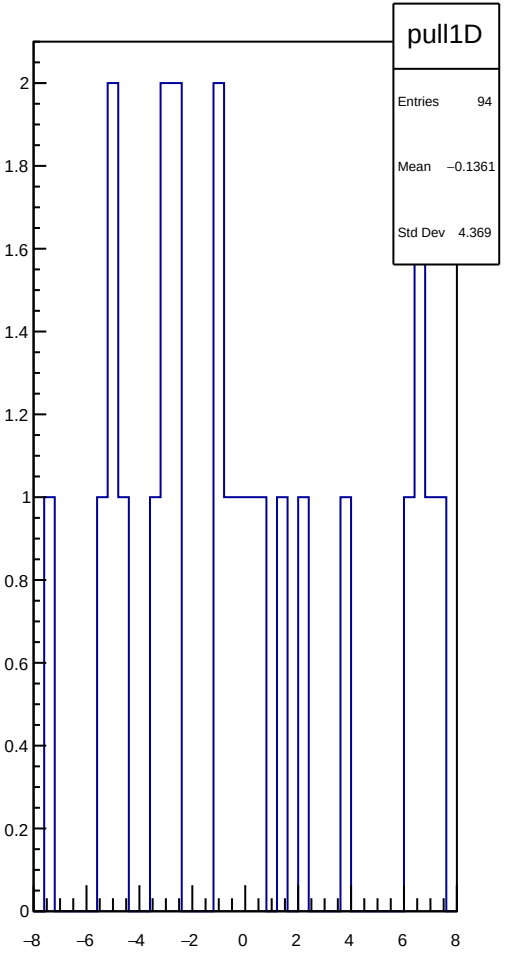

yield_cav4cX_rms vs run
χ^2 / ndf 9.613e+04 / 93
p0 1.27 ± 0.0009775
3
2.5
2
1.5
1

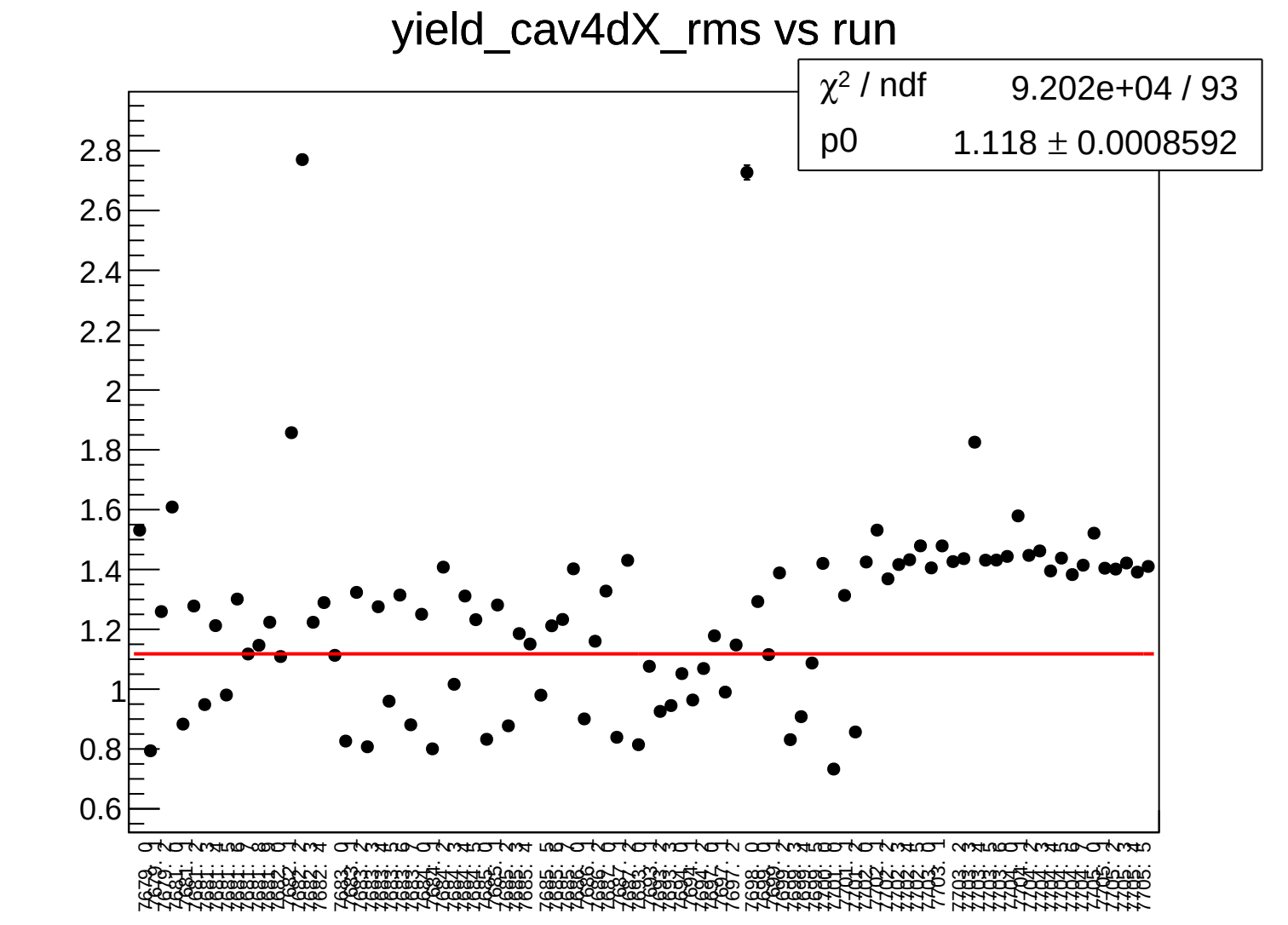

yield_cav4cY_mean vs run
χ² / ndf 5.471e+05 / 93
p0 −37.32 ± 0.000509
−36.8
−37
−37.2
−37.4
−37.6
−37.8
−38
−38.2
pull
Entries 94
Mean −9.255e+05
Std Dev 9.255e+05
150
100
50
0
−50
−100
−150
−200

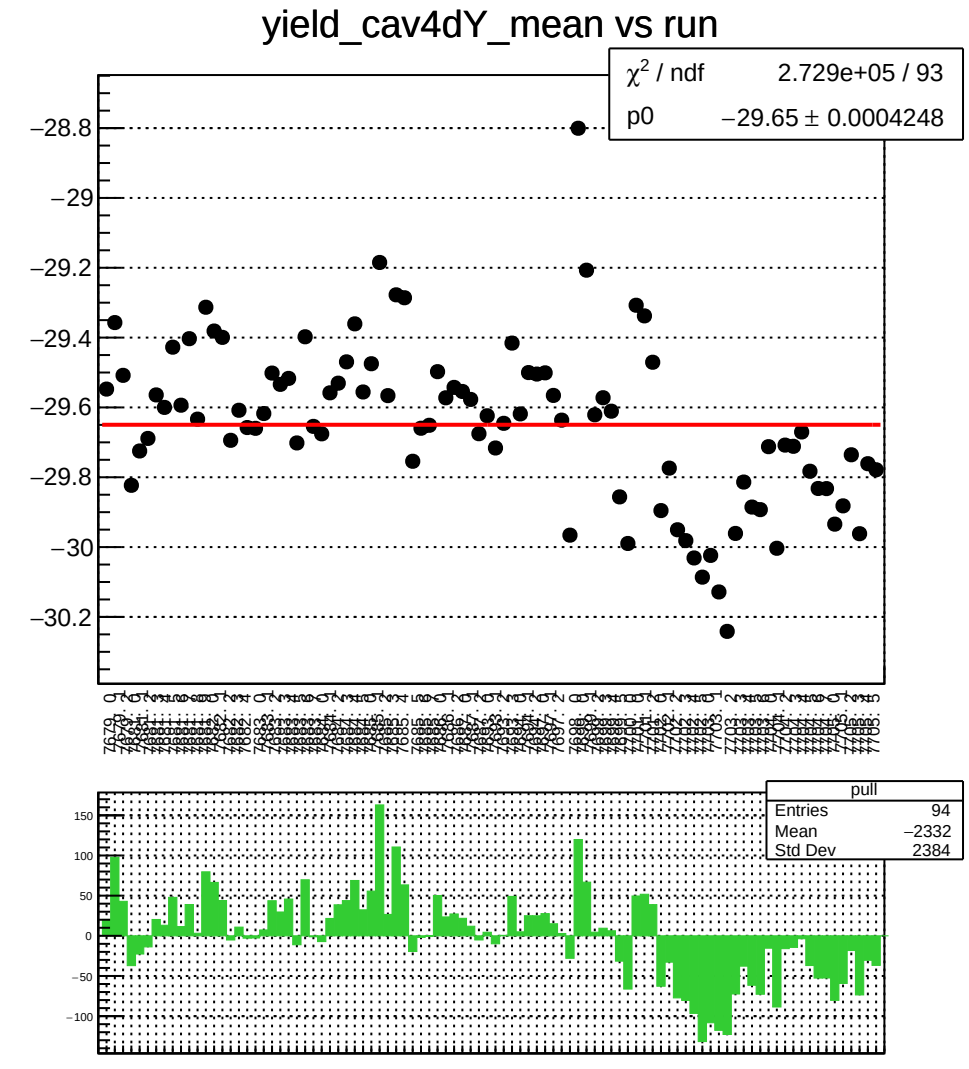

pull1D
Entries 94
Mean 0.5848
Std Dev 3.012
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

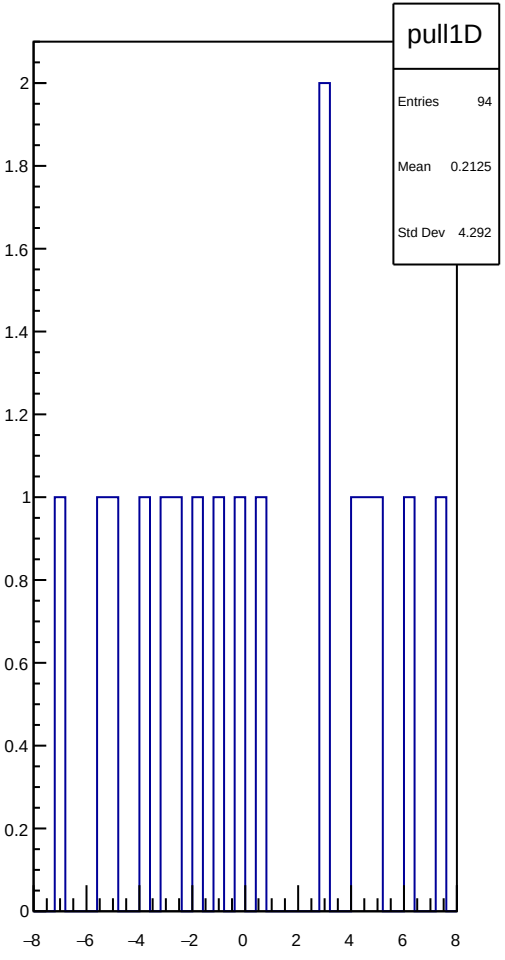

yield_cav4cY_rms vs run
χ² / ndf 1.28e+05 / 93
p0 0.4633 ± 0.0003599
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3

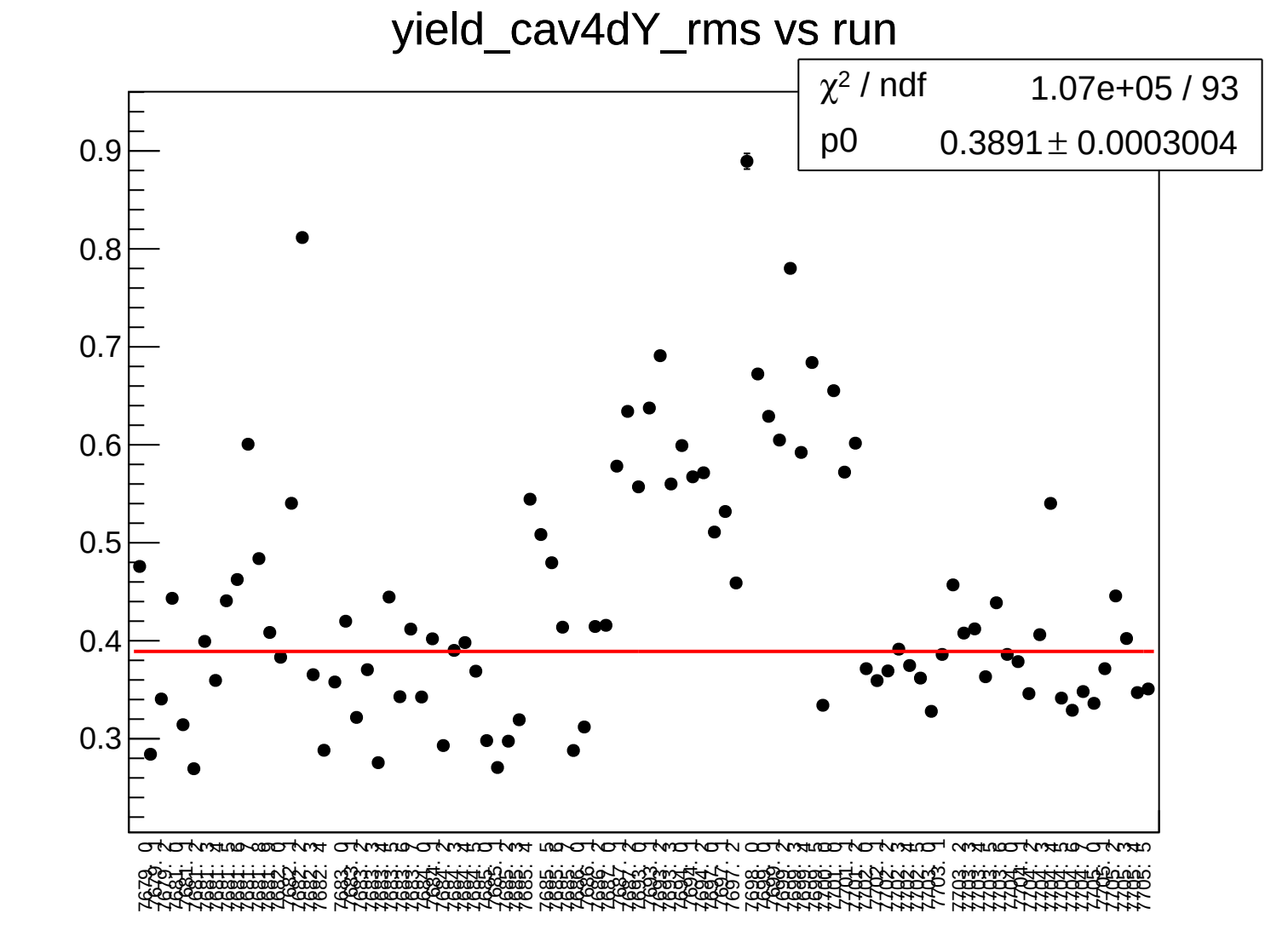

yield_cav4dX_mean vs run
χ² / ndf 1.232e+05 / 93
p0 1.115 ± 0.001215
pull
Entries 94
Mean 76.53
Std Dev 49.12

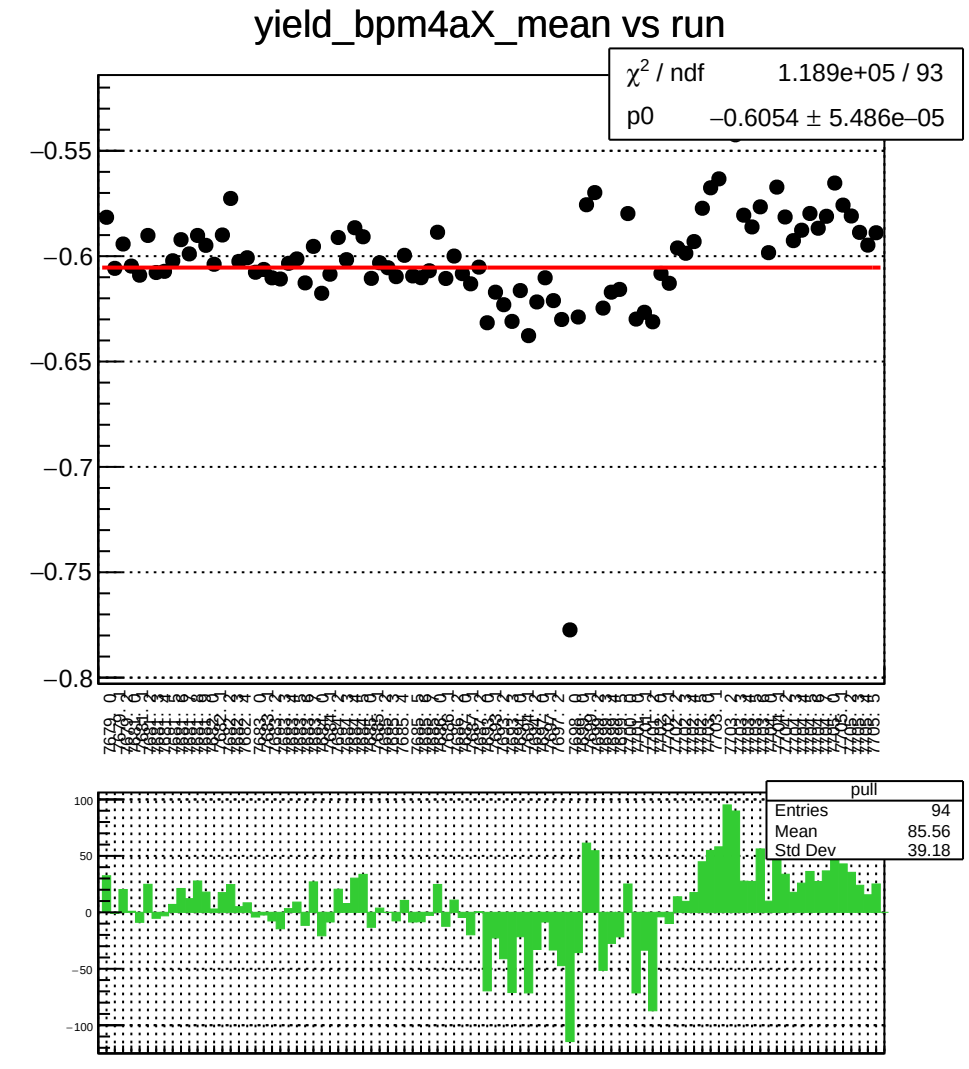

pull1D
Entries 94
Mean −0.1361
Std Dev 4.369

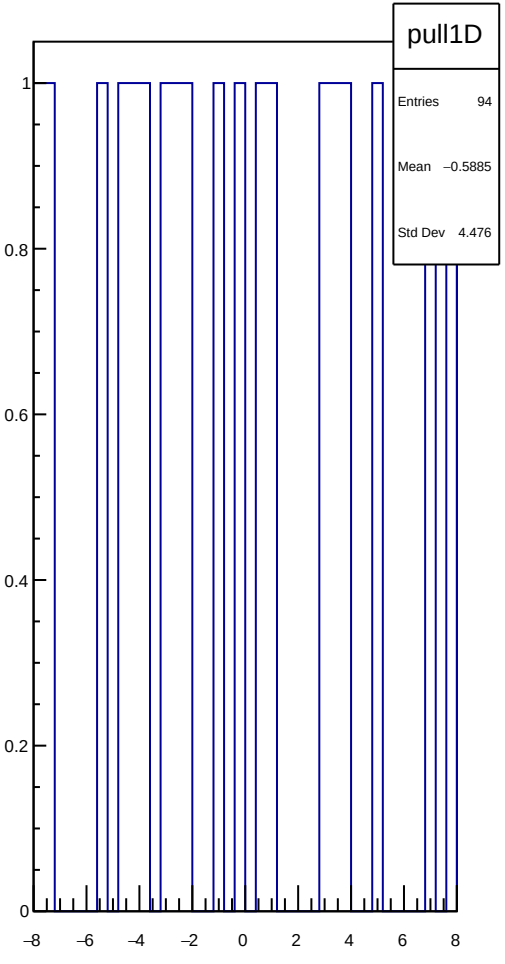

yield_cav4dX_rms vs run
χ² / ndf 9.202e+04 / 93
p0 1.118 ± 0.0008592
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6

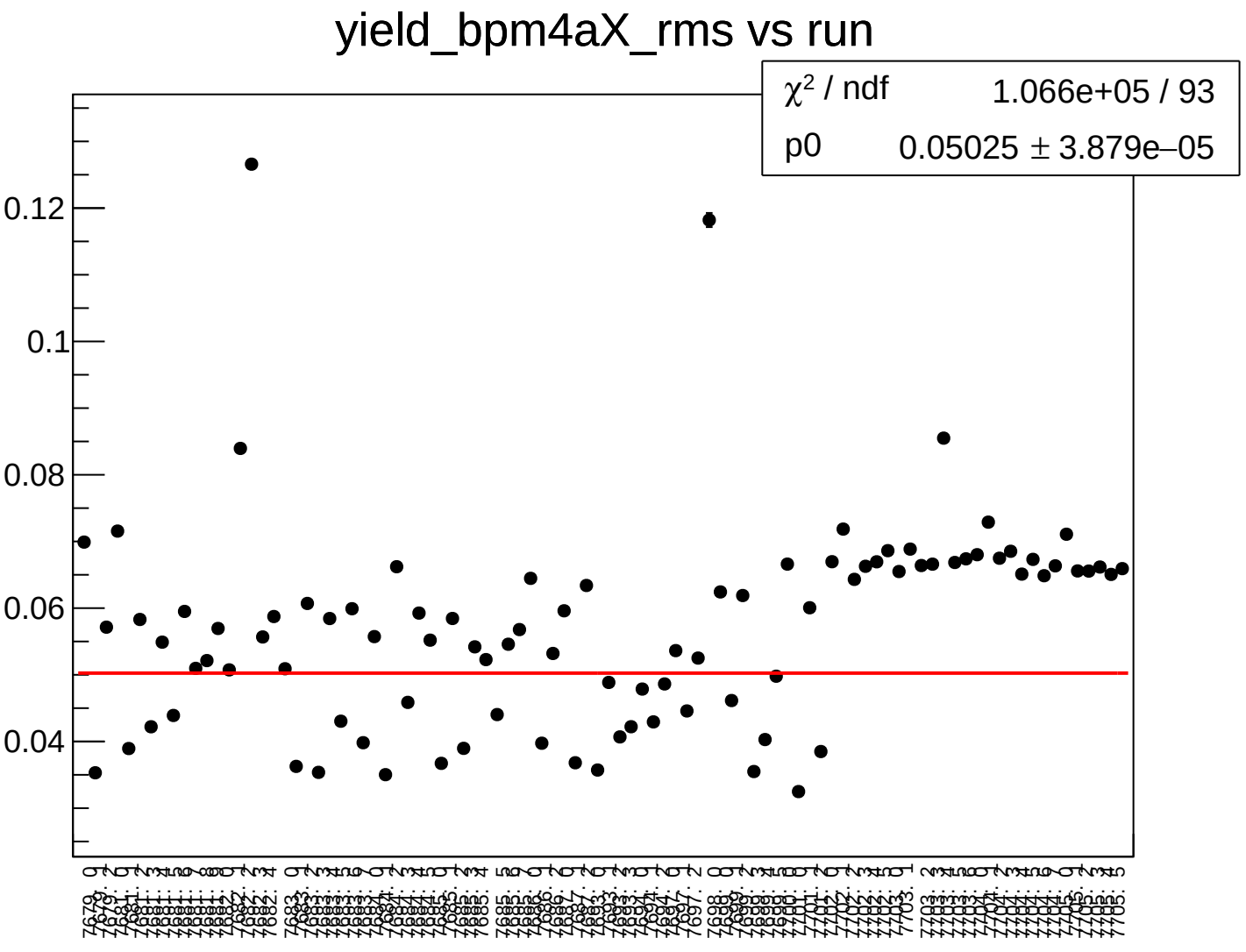

yield_cav4dY_mean vs run
χ² / ndf 2.729e+05 / 93
p0 −29.65 ± 0.0004248
−28.8
−29
−29.2
−29.4
−29.6
−29.8
−30
−30.2
pull
Entries 94
Mean −2332
Std Dev 2384
150
100
50
0
−50
−100

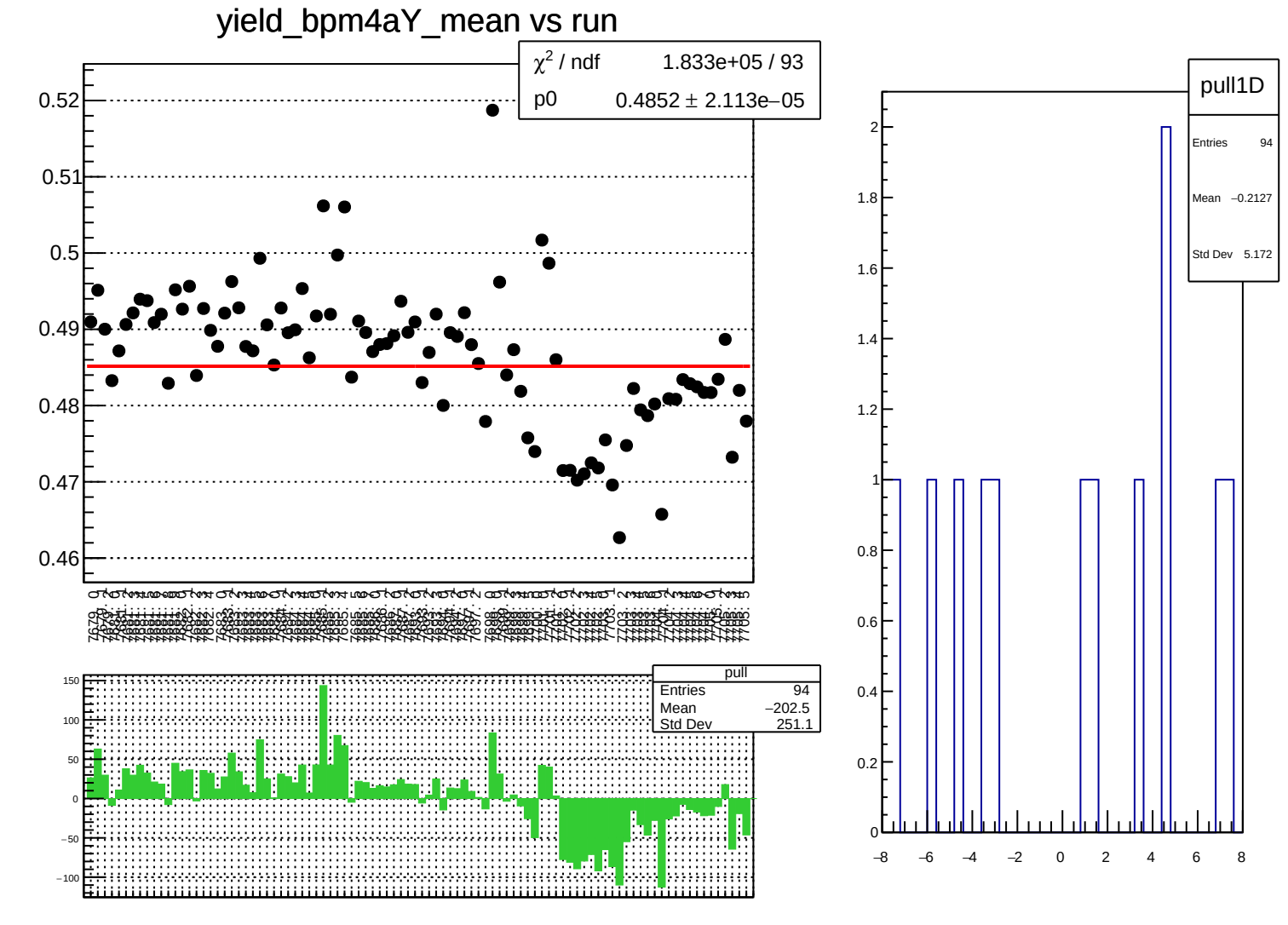

pull1D
Entries 94
Mean 0.2125
Std Dev 4.292
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

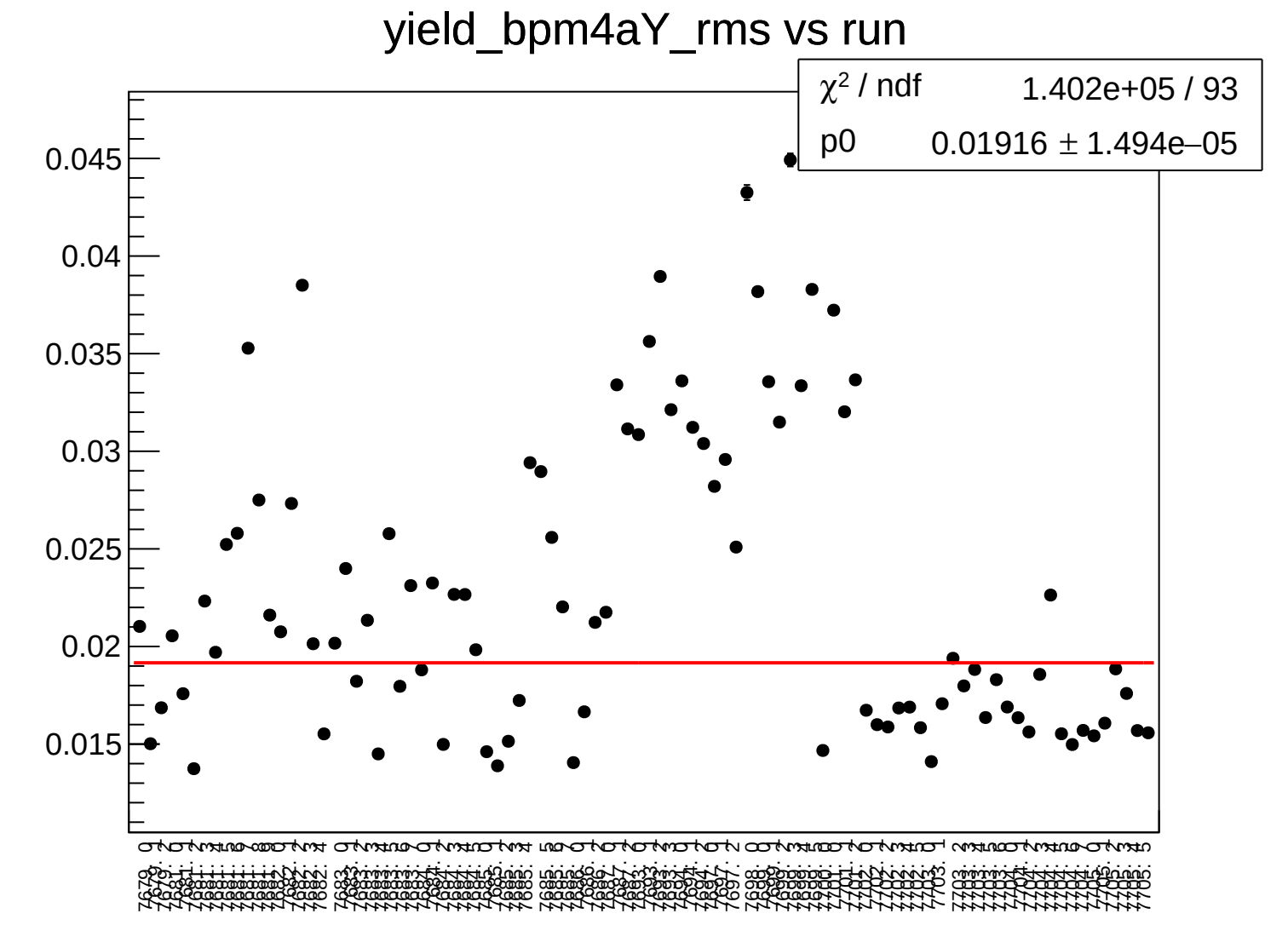

yield_cav4dY_rms vs run
χ² / ndf 1.07e+05 / 93
p0 0.3891 ± 0.0003004
0.9
0.8
0.7
0.6
0.5
0.4
0.3

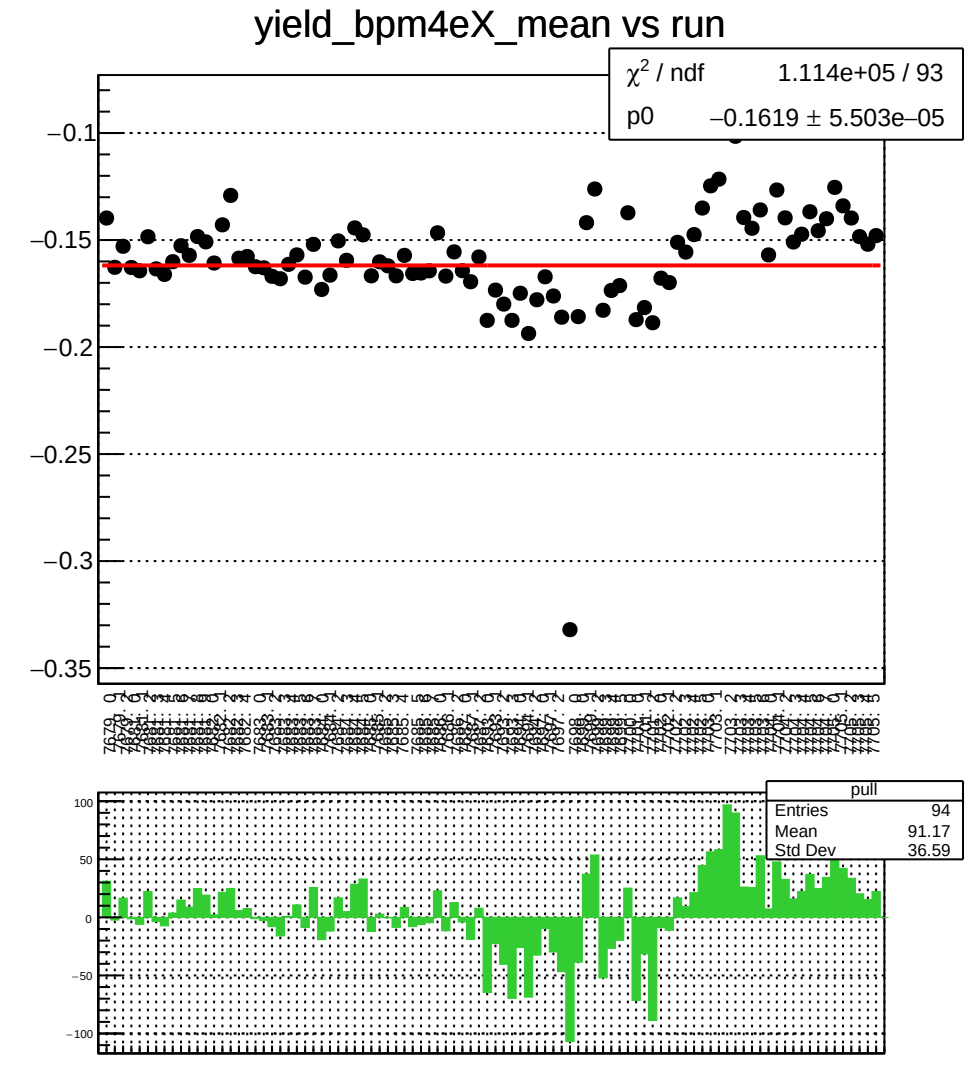

yield_bpm4aX_mean vs run
χ² / ndf 1.189e+05 / 93
p0 −0.6054 ± 5.486e−05
−0.55
−0.6
−0.65
−0.7
−0.75
−0.8
pull
Entries 94
Mean 85.56
Std Dev 39.18
100
50
0
−50
−100

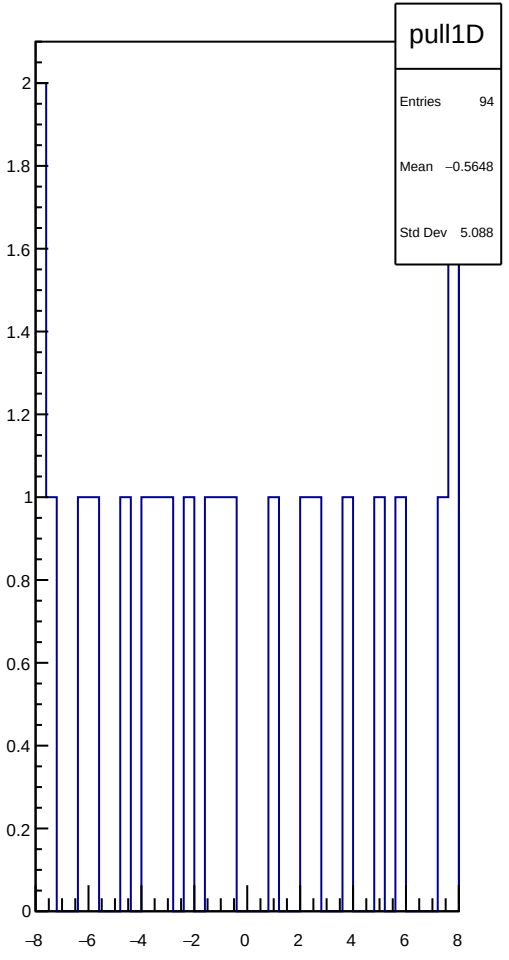

pull1D
Entries 94
Mean −0.5885
Std Dev 4.476
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

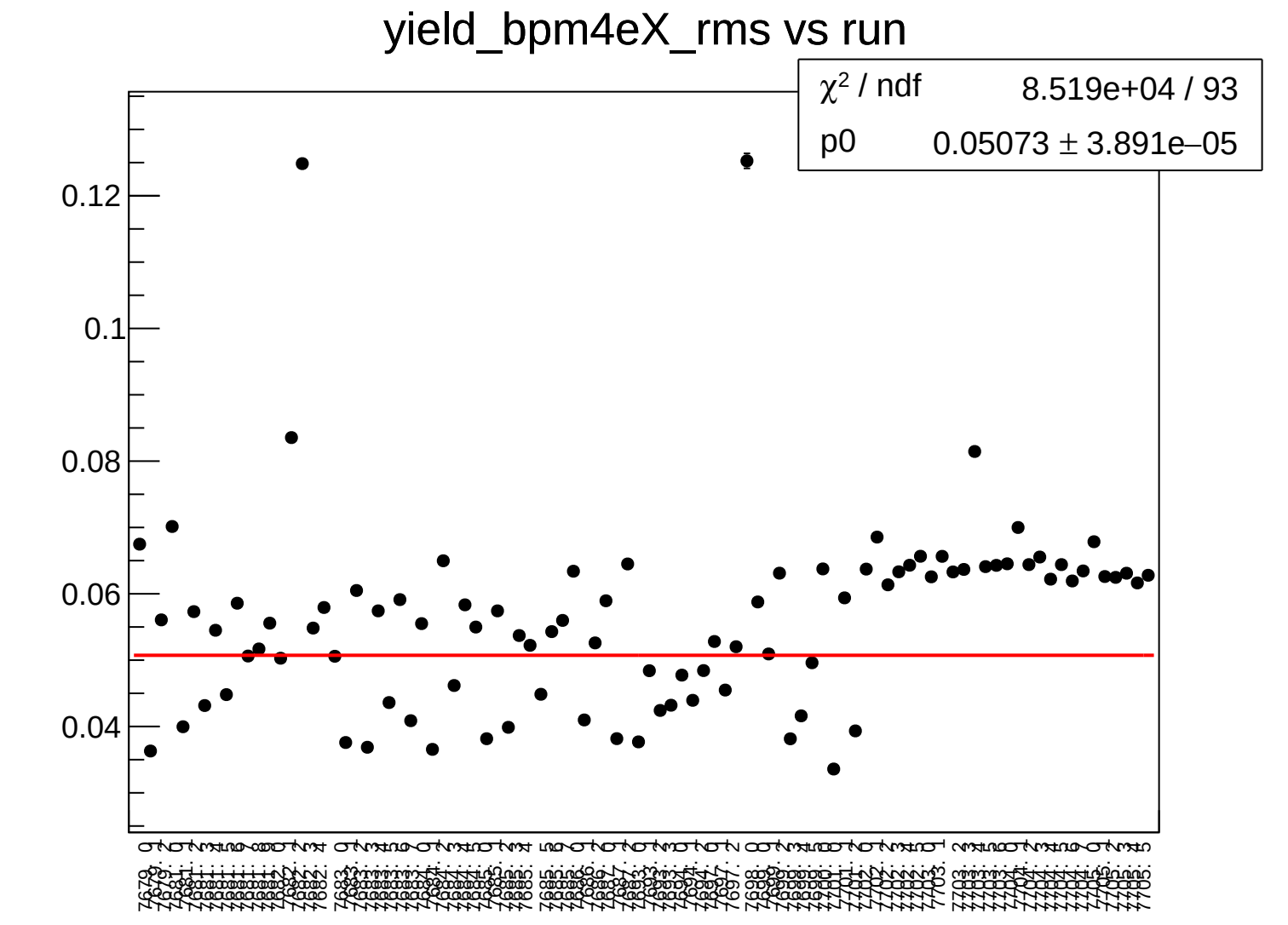

yield_bpm4aX_rms vs run
χ² / ndf 1.066e+05 / 93
p0 0.05025 ± 3.879e–05
0.12
0.1
0.08
0.06
0.04

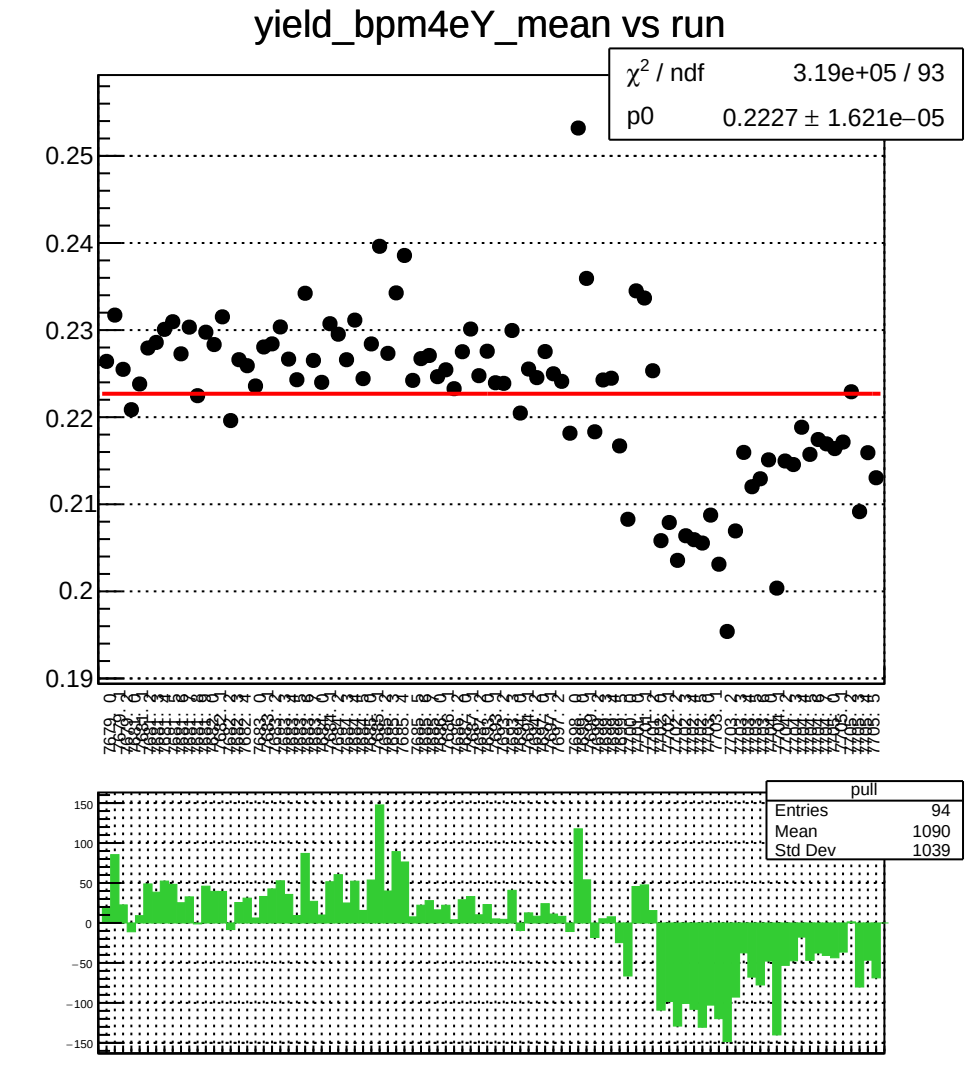

yield_bpm4aY_mean vs run
χ² / ndf 1.833e+05 / 93
p0 0.4852 ± 2.113e−05
0.52
0.51
0.5
0.49
0.48
0.47
0.46
pull
Entries 94
Mean −202.5
Std Dev 251.1
150
100
50
0
−50
−100
pull1D
Entries 94
Mean −0.2127
Std Dev 5.172
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

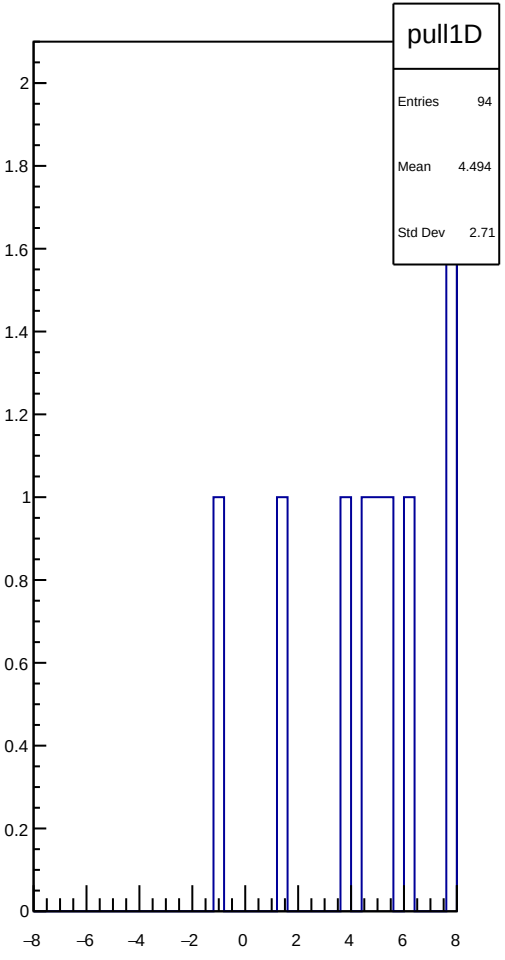

yield_bpm4aY_rms vs run
χ² / ndf 1.402e+05 / 93
p0 0.01916 ± 1.494e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

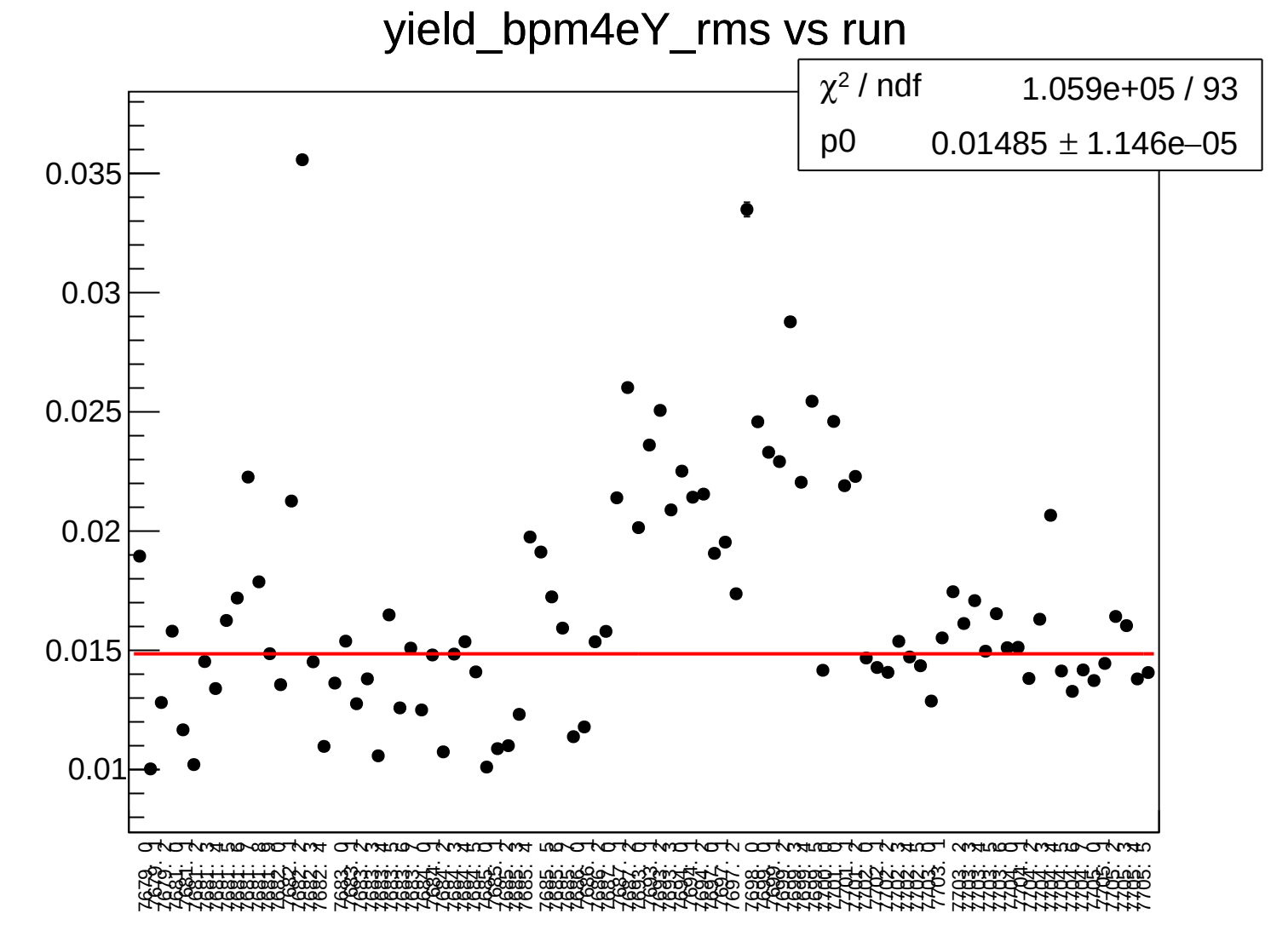

yield_bpm4eX_mean vs run
χ² / ndf 1.114e+05 / 93
p0 −0.1619 ± 5.503e−05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
pull
Entries 94
Mean 91.17
Std Dev 36.59
100
50
0
−50
−100

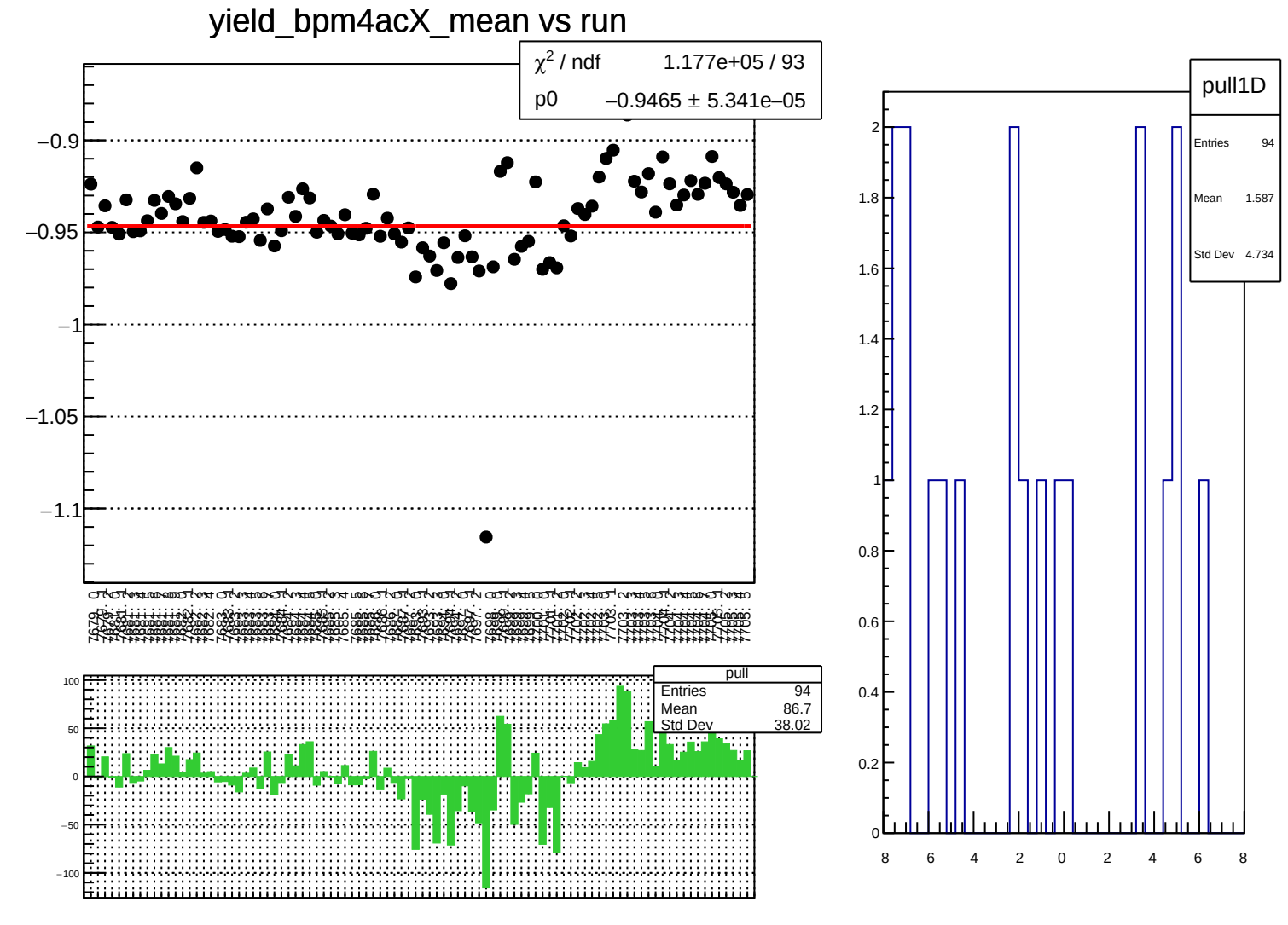

pull1D
Entries 94
Mean −0.5648
Std Dev 5.088
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

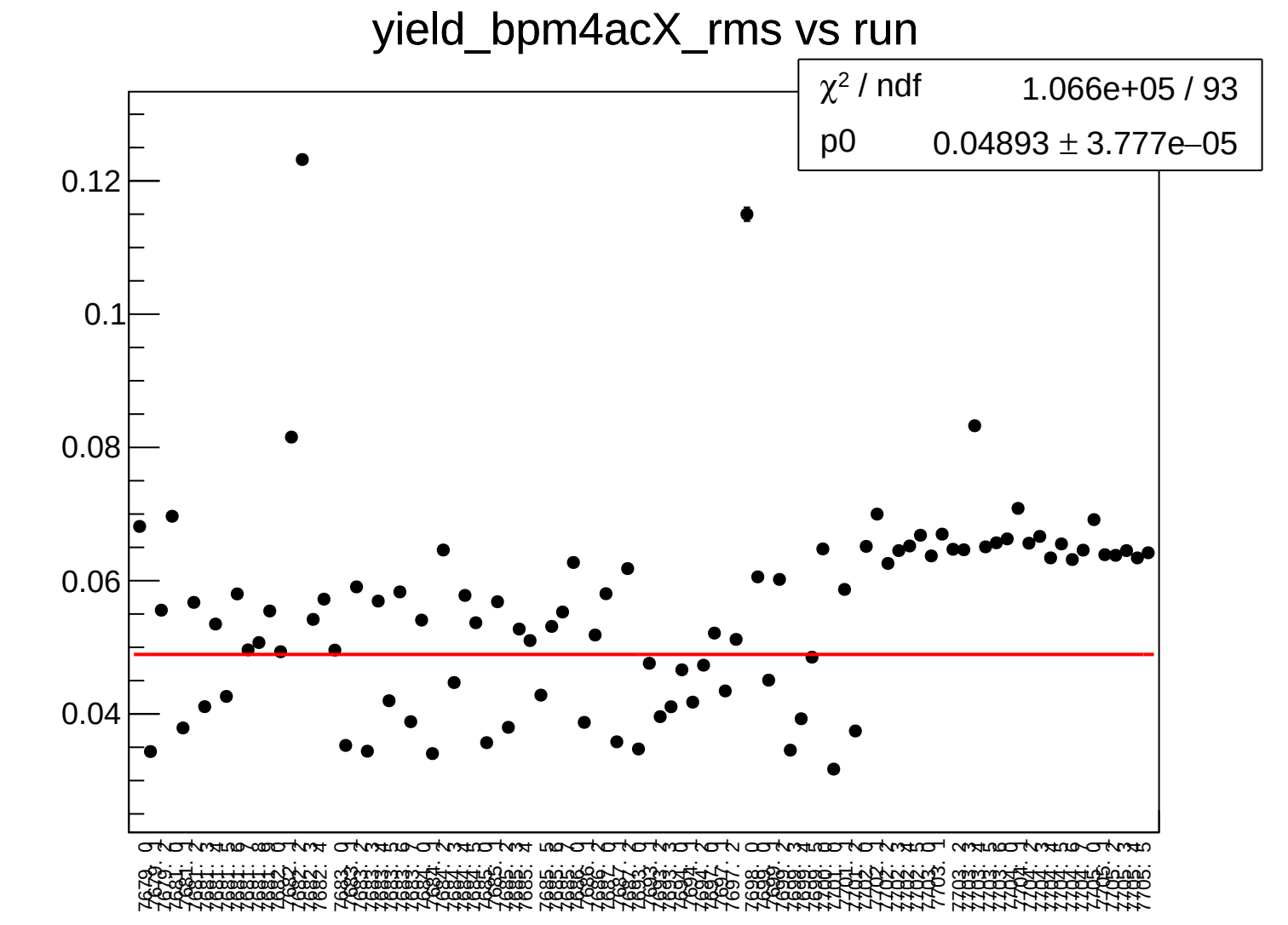

yield_bpm4eX_rms vs run
χ² / ndf 8.519e+04 / 93
p0 0.05073 ± 3.891e–05
0.12
0.1
0.08
0.06
0.04

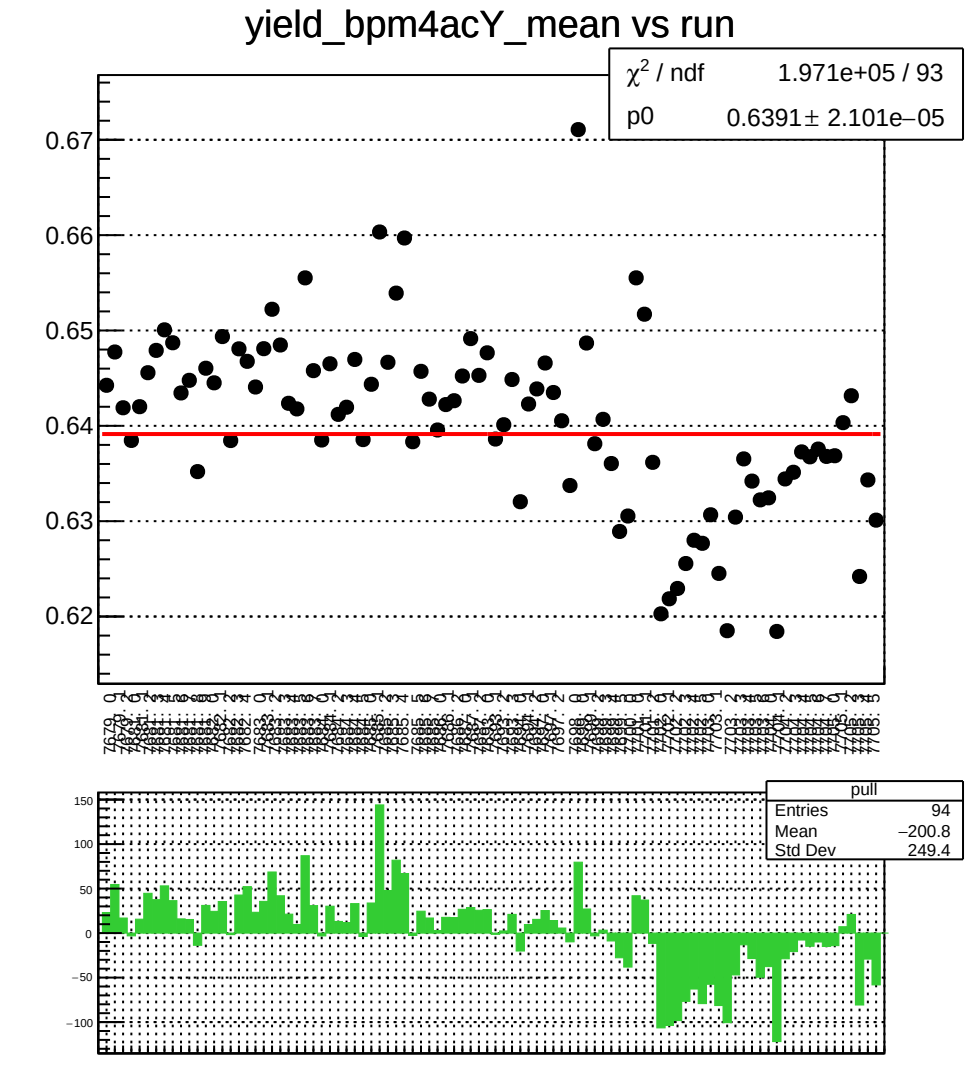

yield_bpm4eY_mean vs run
χ² / ndf 3.19e+05 / 93
p0 0.2227 ± 1.621e−05
0.25
0.24
0.23
0.22
0.21
0.2
0.19
pull
Entries 94
Mean 1090
Std Dev 1039
150
100
50
0
−50
−100
−150

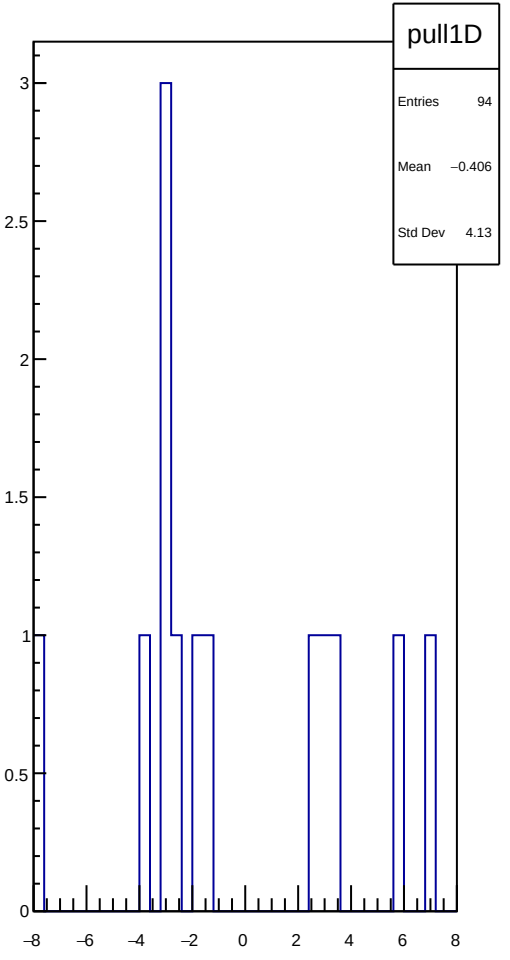

pull1D
Entries 94
Mean 4.494
Std Dev 2.71
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

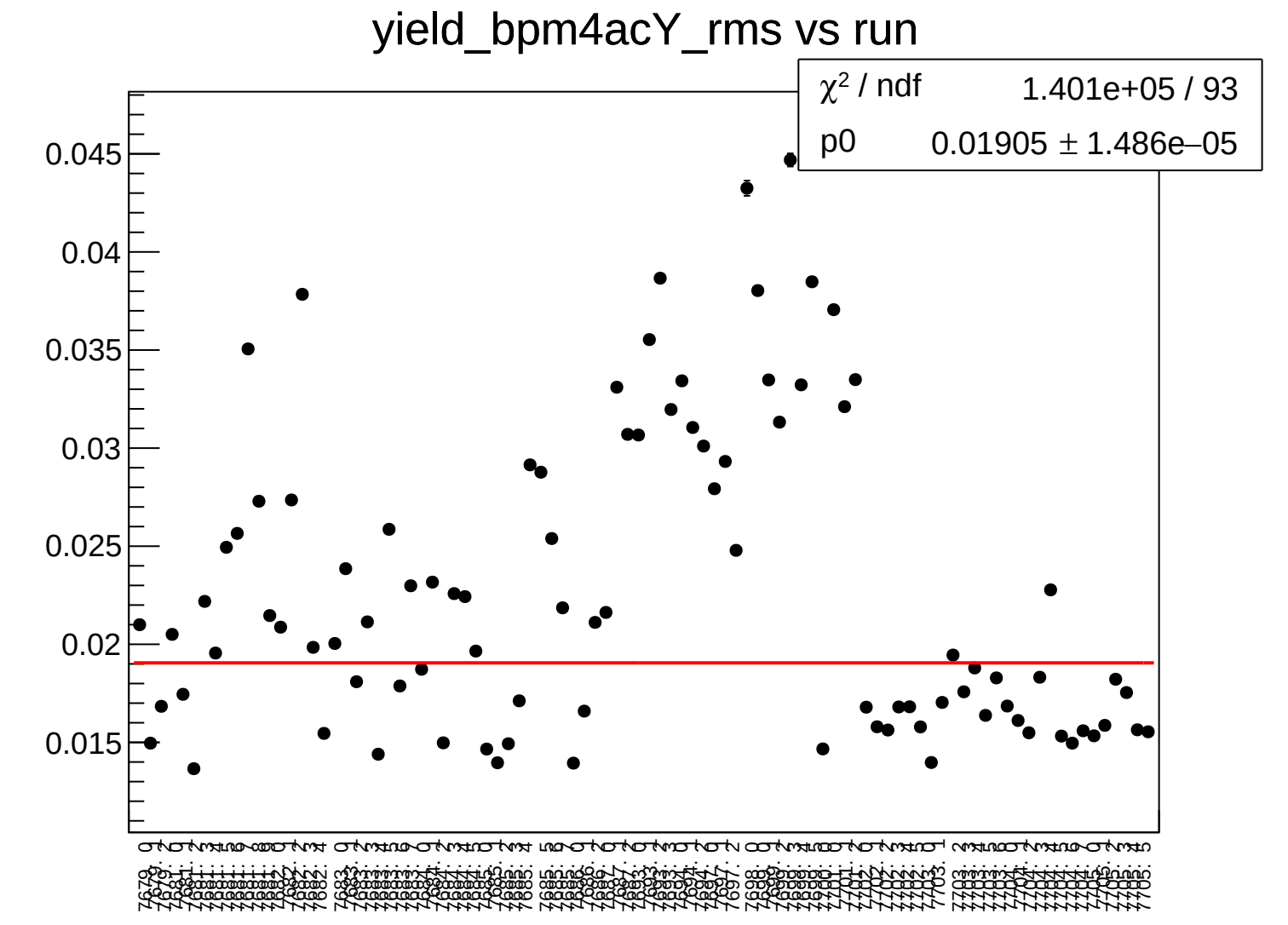

yield_bpm4eY_rms vs run
χ² / ndf 1.059e+05 / 93
p0 0.01485 ± 1.146e−05
0.035
0.03
0.025
0.02
0.015
0.01

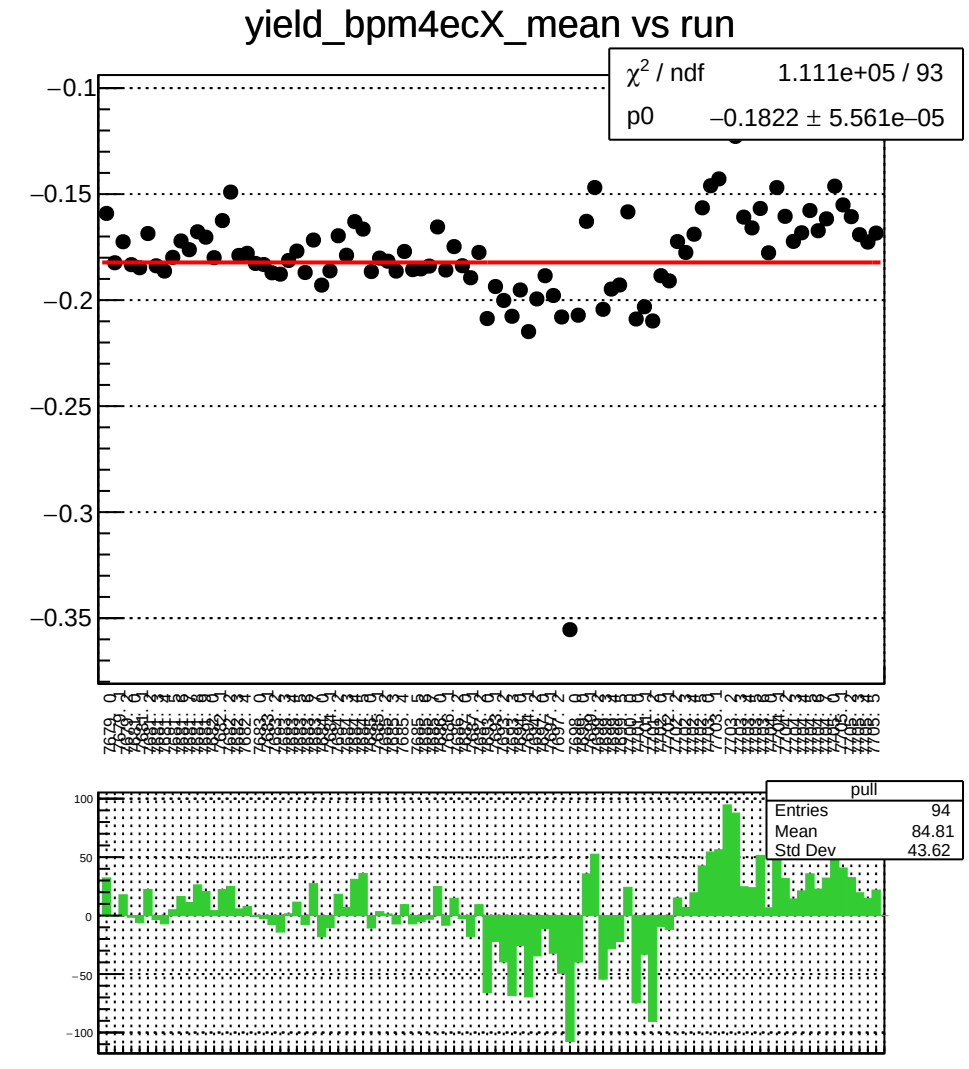

yield_bpm4acX_mean vs run
χ² / ndf 1.177e+05 / 93
p0 −0.9465 ± 5.341e−05
−0.9
−0.95
−1
−1.05
−1.1
pull
Entries 94
Mean 86.7
Std Dev 38.02
100
50
0
−50
−100
pull1D
Entries 94
Mean −1.587
Std Dev 4.734
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

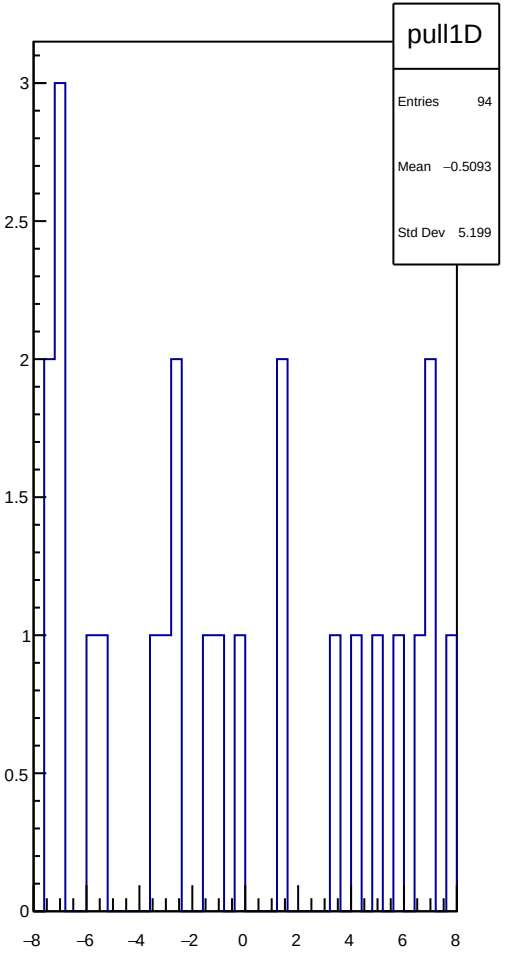

yield_bpm4acX_rms vs run
χ² / ndf 1.066e+05 / 93
p0 0.04893 ± 3.777e–05
0.12
0.1
0.08
0.06
0.04

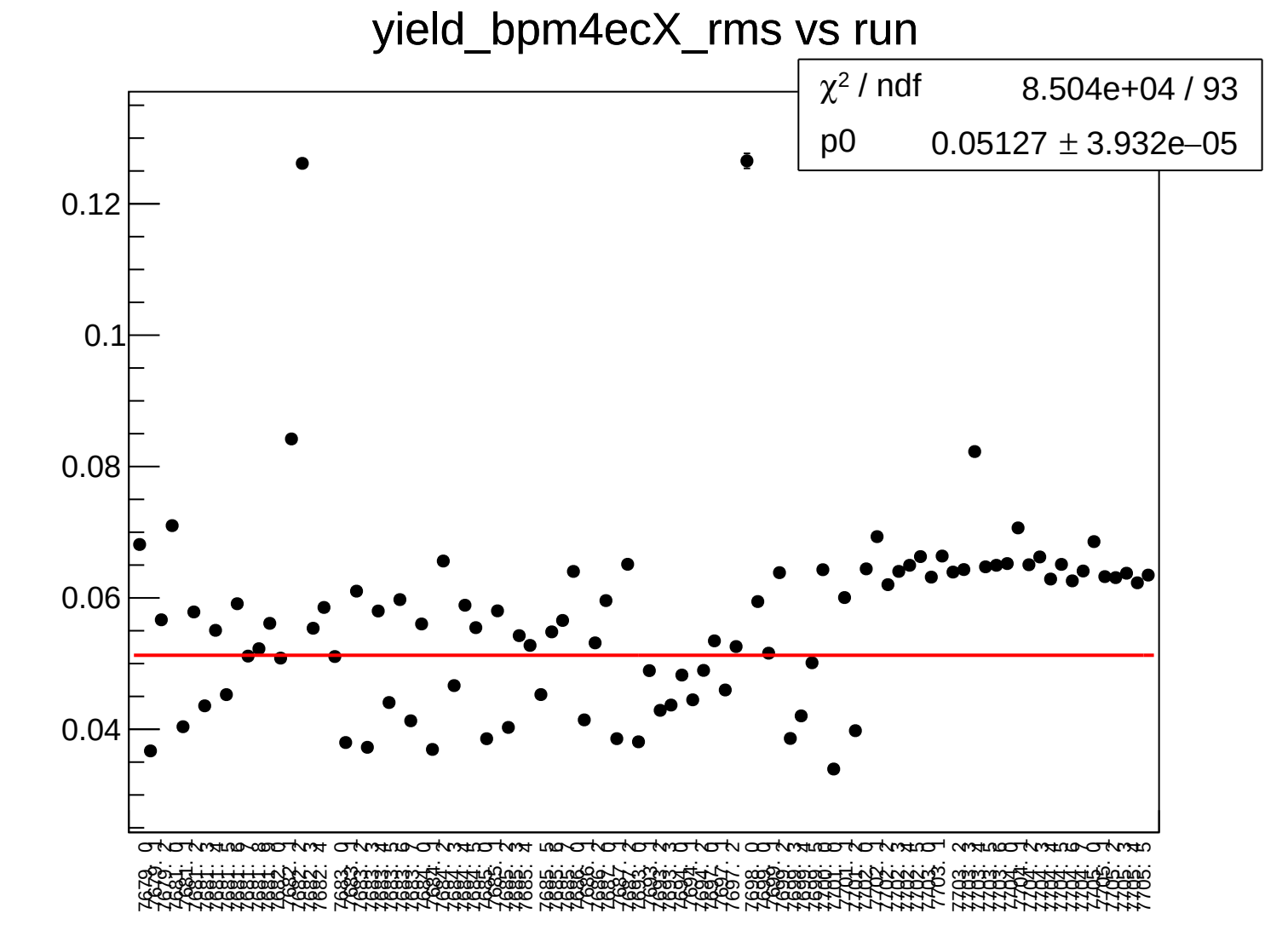

yield_bpm4acY_mean vs run
χ² / ndf 1.971e+05 / 93
p0 0.6391 ± 2.101e−05
0.67
0.66
0.65
0.64
0.63
0.62
pull
Entries 94
Mean −200.8
Std Dev 249.4
150
100
50
0
−50
−100

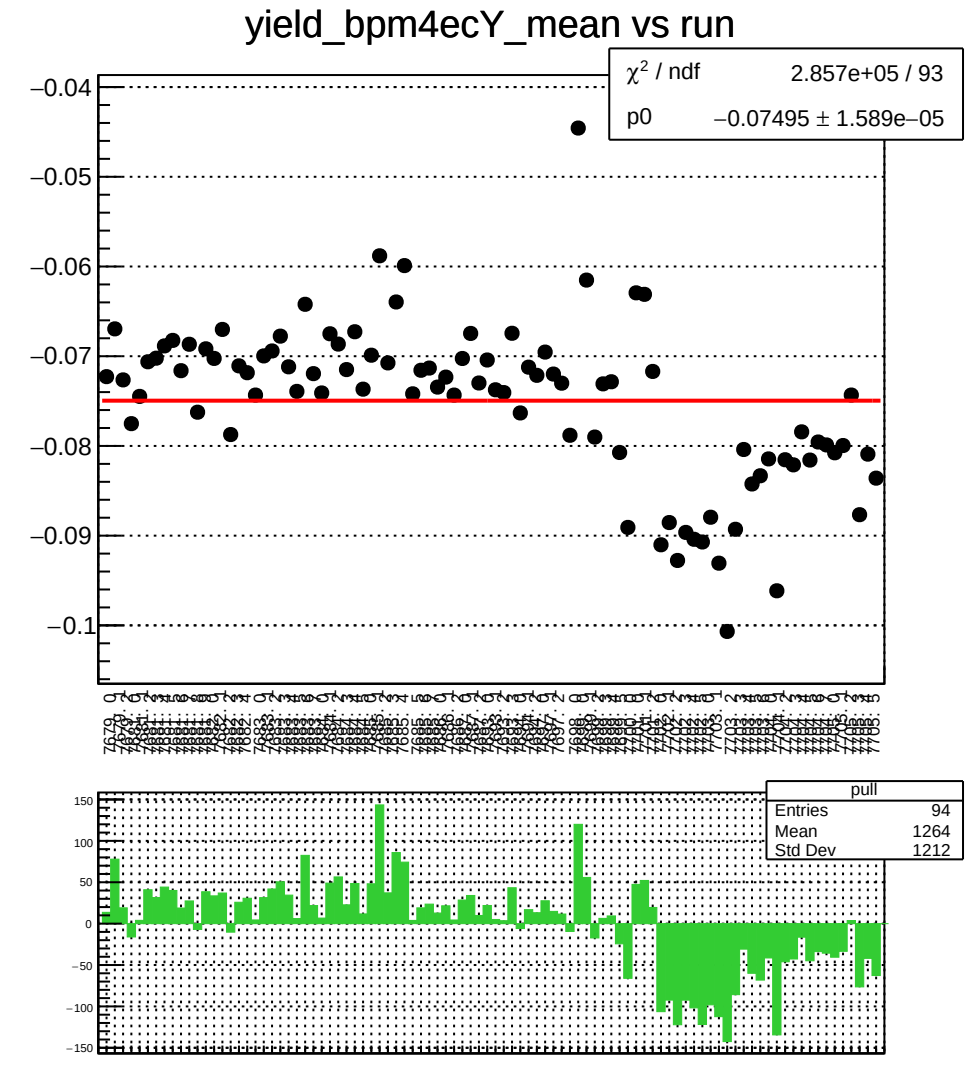

pull1D
Entries 94
Mean −0.406
Std Dev 4.13
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

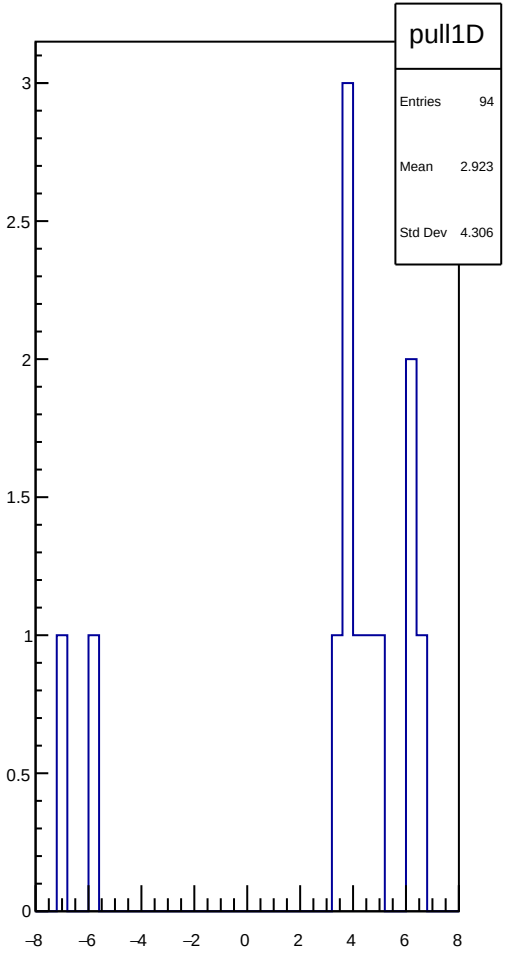

yield_bpm4acY_rms vs run
χ² / ndf 1.401e+05 / 93
p0 0.01905 ± 1.486e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

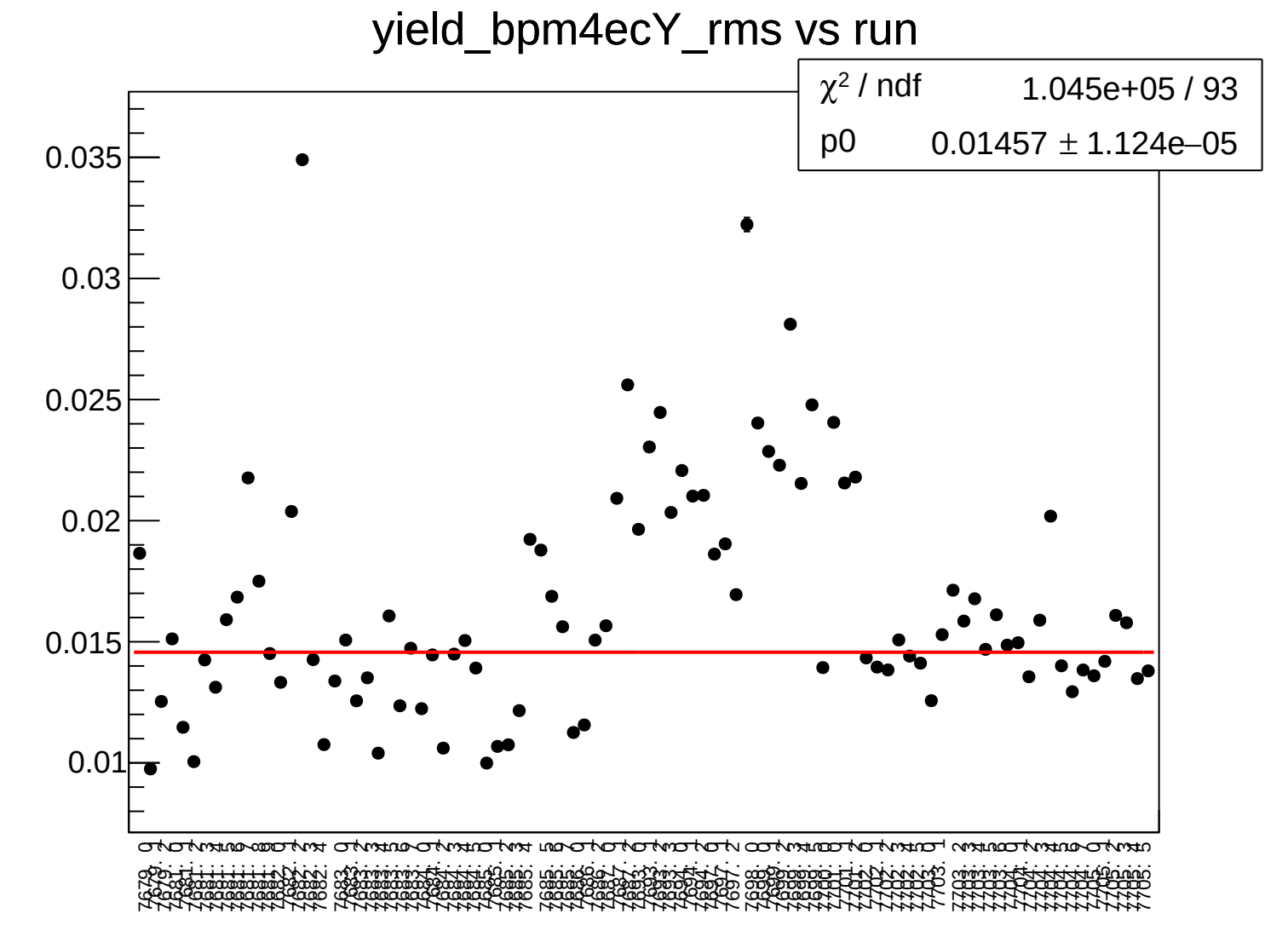

yield_bpm4ecX_mean vs run
χ² / ndf 1.111e+05 / 93
p0 −0.1822 ± 5.561e−05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
pull
Entries 94
Mean 84.81
Std Dev 43.62
100
50
0
−50
−100

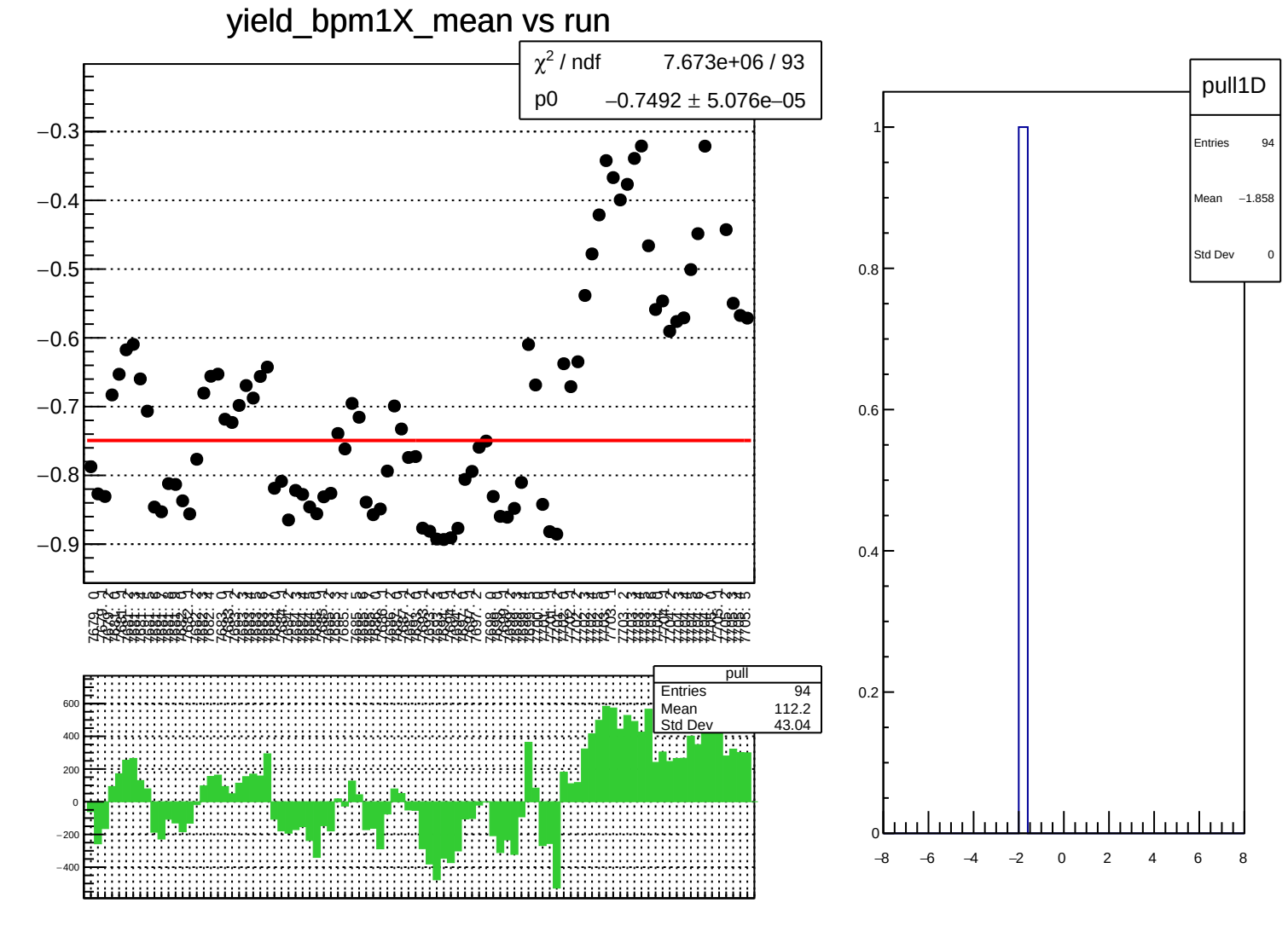

pull1D
Entries 94
Mean −0.5093
Std Dev 5.199
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

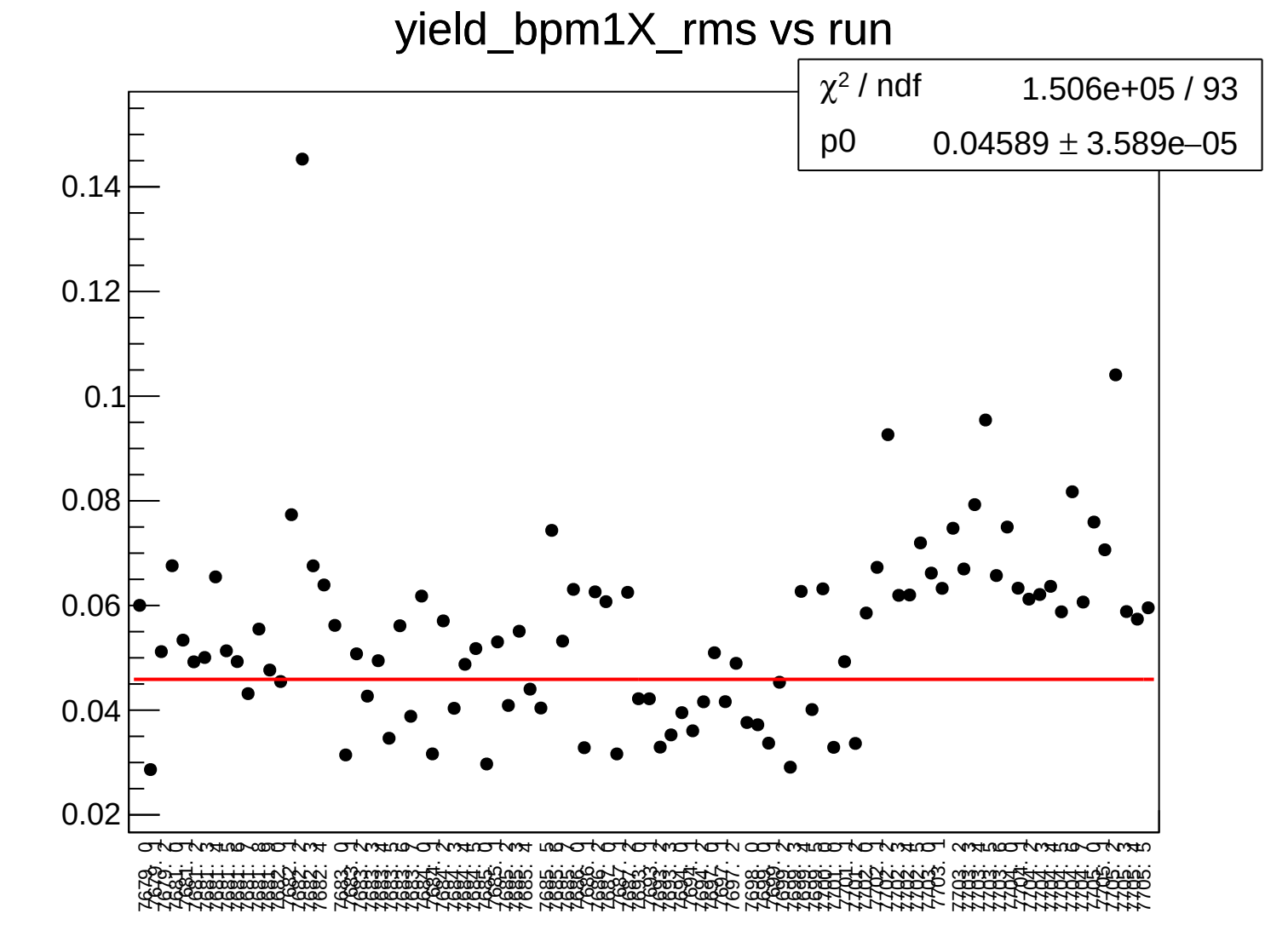

yield_bpm4ecX_rms vs run
χ² / ndf 8.504e+04 / 93
p0 0.05127 ± 3.932e–05
0.12
0.1
0.08
0.06
0.04

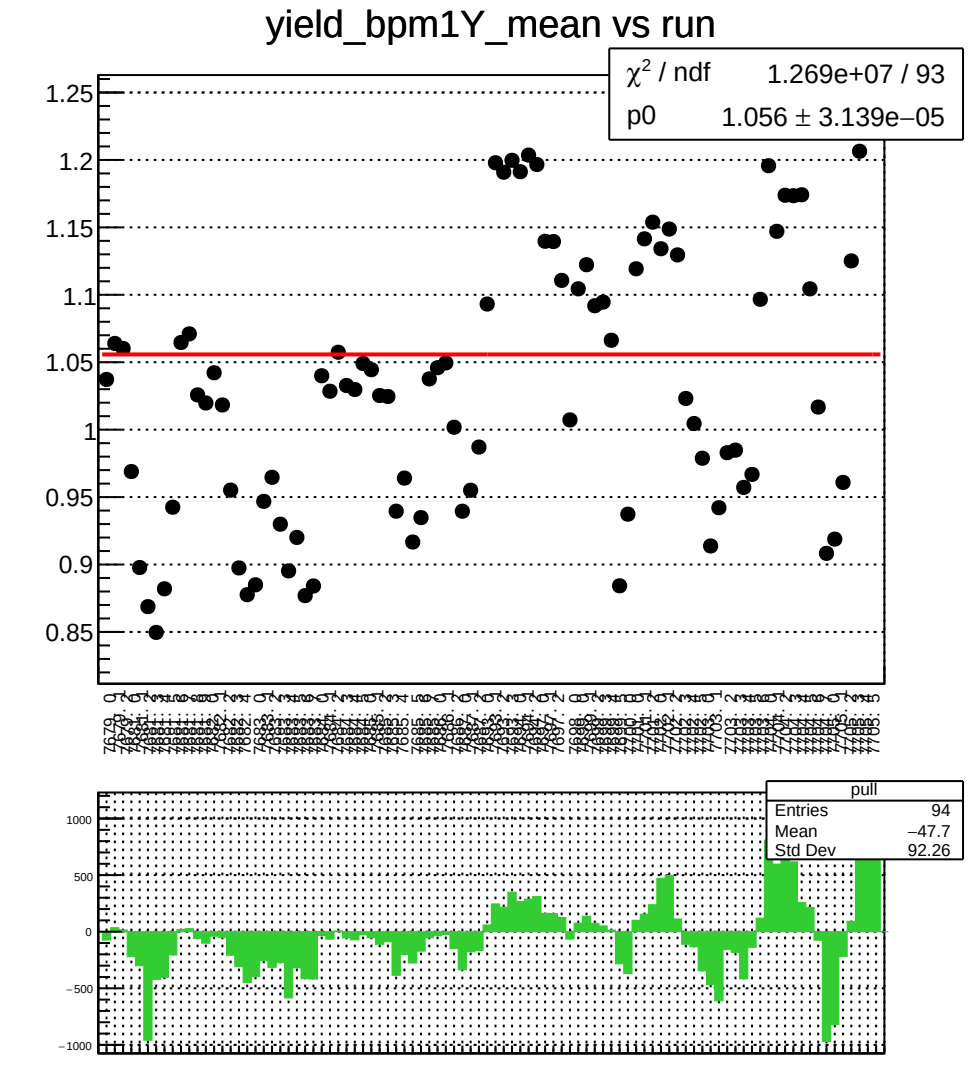

yield_bpm4ecY_mean vs run
χ² / ndf 2.857e+05 / 93
p0 −0.07495 ± 1.589e−05
−0.04
−0.05
−0.06
−0.07
−0.08
−0.09
−0.1
pull
Entries 94
Mean 1264
Std Dev 1212
150
100
50
0
−50
−100
−150

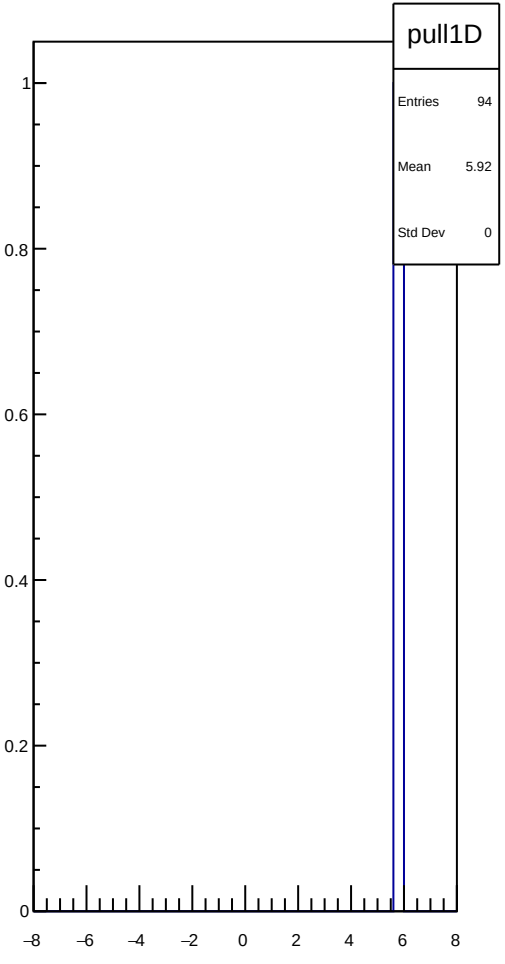

pull1D
Entries 94
Mean 2.923
Std Dev 4.306
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

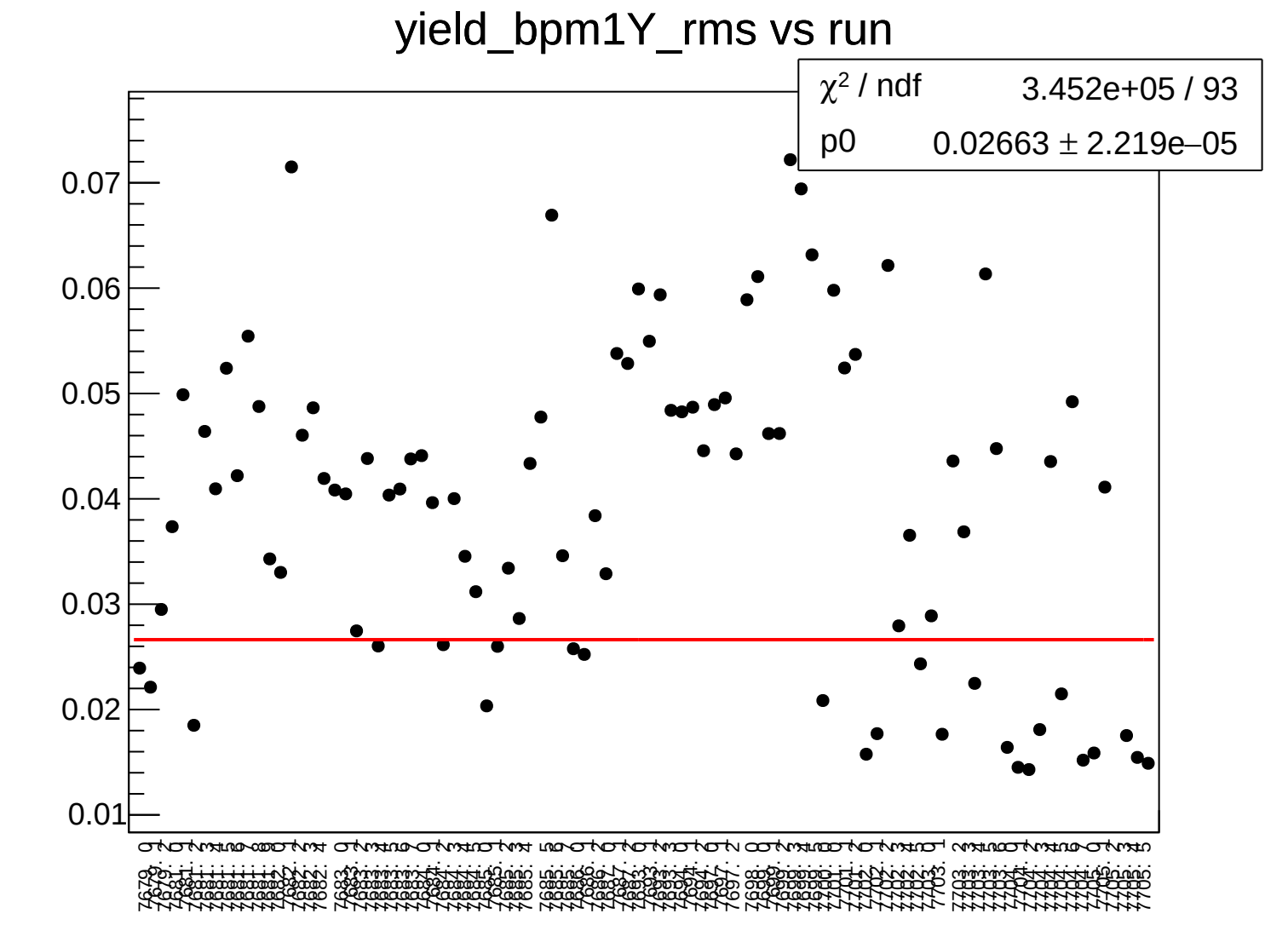

yield_bpm4ecY_rms vs run
χ² / ndf 1.045e+05 / 93
p0 0.01457 ± 1.124e−05
0.035
0.03
0.025
0.02
0.015
0.01

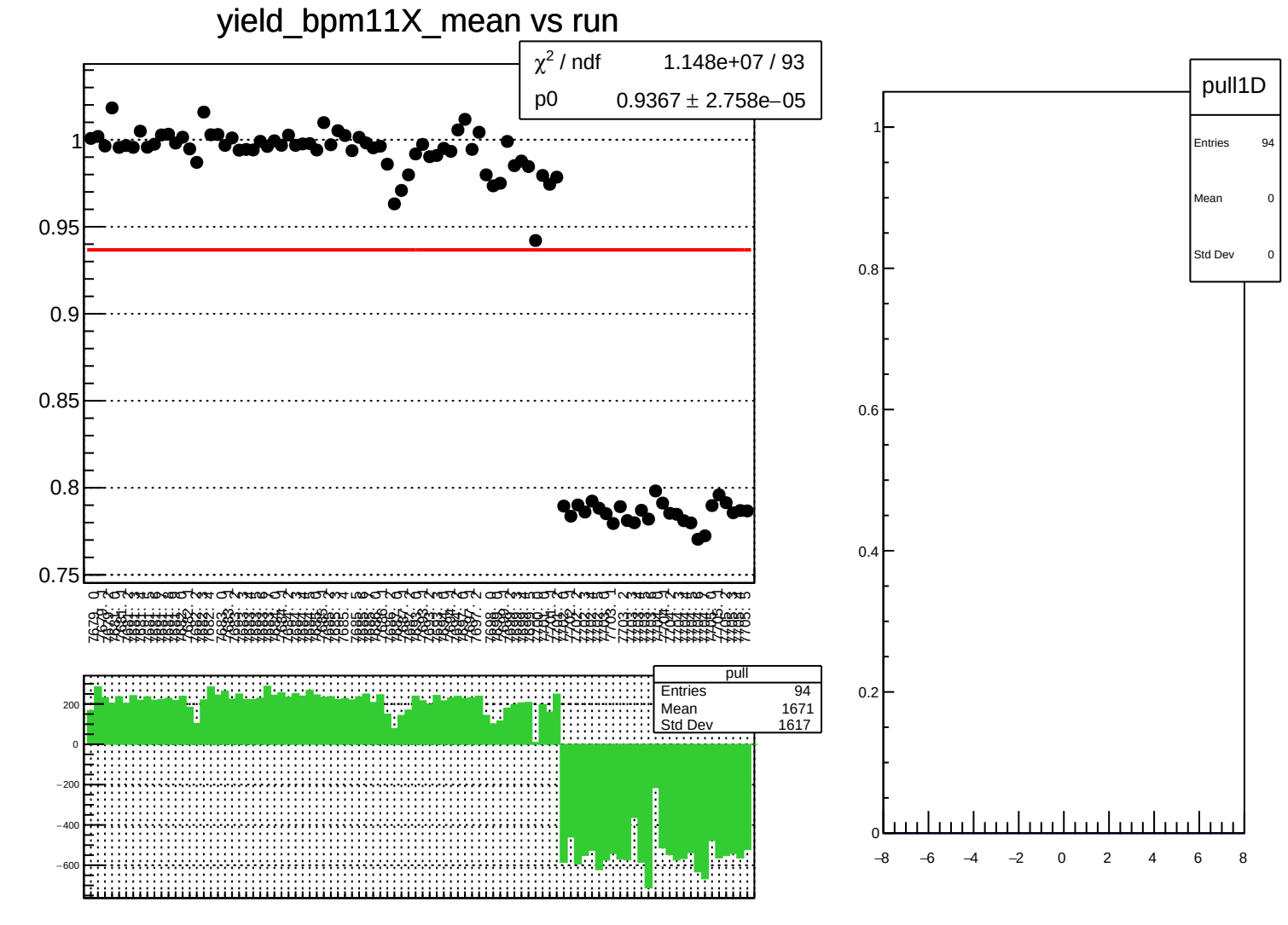

yield_bpm1X_mean vs run
χ² / ndf 7.673e+06 / 93
p0 −0.7492 ± 5.076e−05
pull
Entries 94
Mean 112.2
Std Dev 43.04
pull1D
Entries 94
Mean −1.858
Std Dev 0

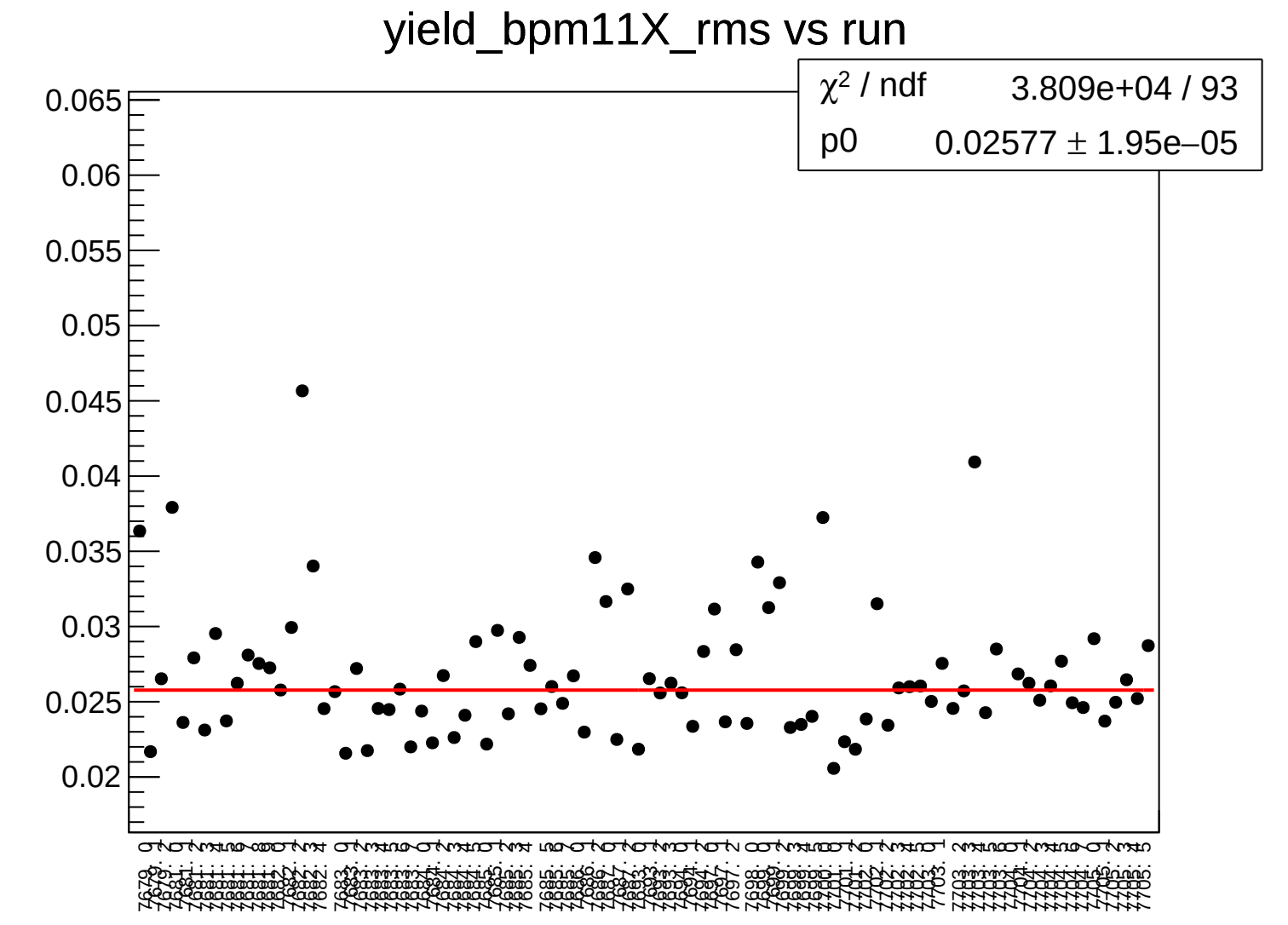

yield_bpm1X_rms vs run
χ² / ndf 1.506e+05 / 93
p0 0.04589 ± 3.589e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

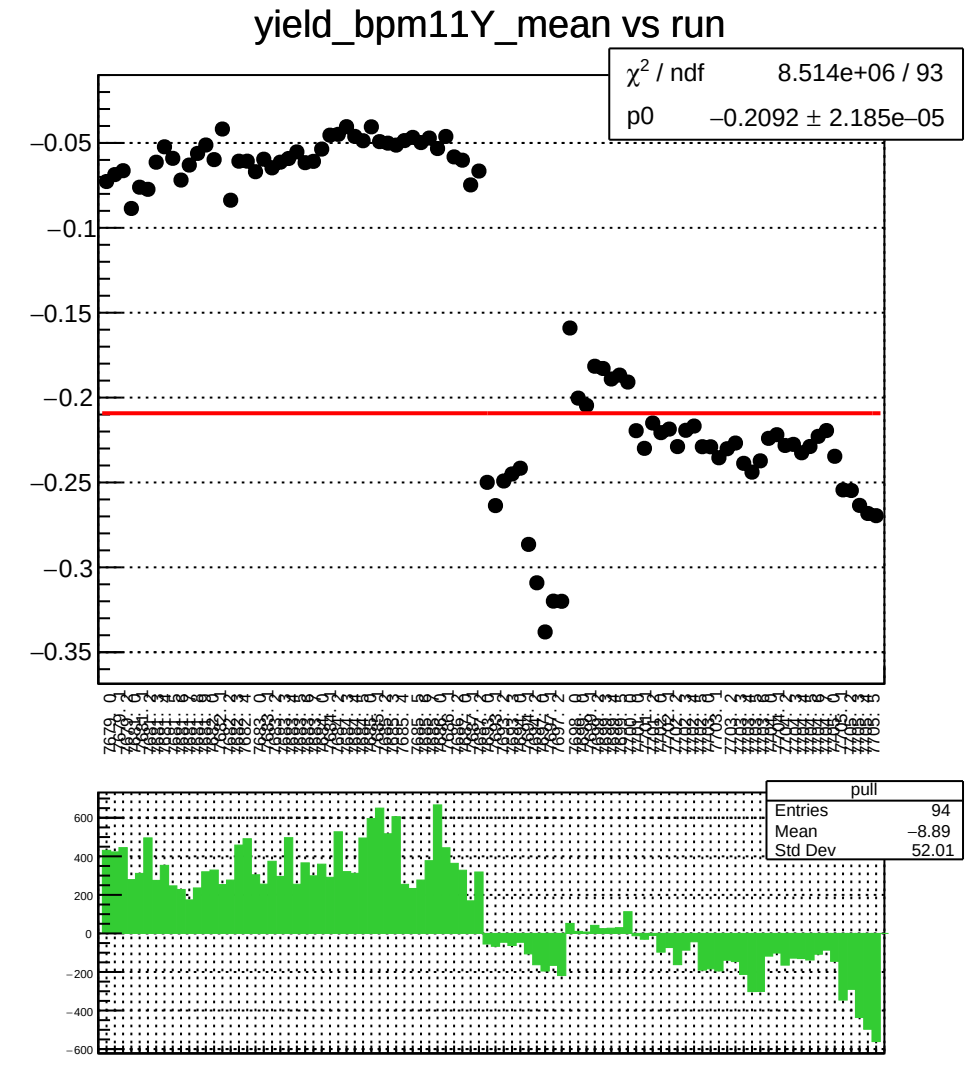

yield_bpm1Y_mean vs run
χ² / ndf 1.269e+07 / 93
p0 1.056 ± 3.139e−05
1.25
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
pull
Entries 94
Mean −47.7
Std Dev 92.26
1000
500
0
−500
−1000

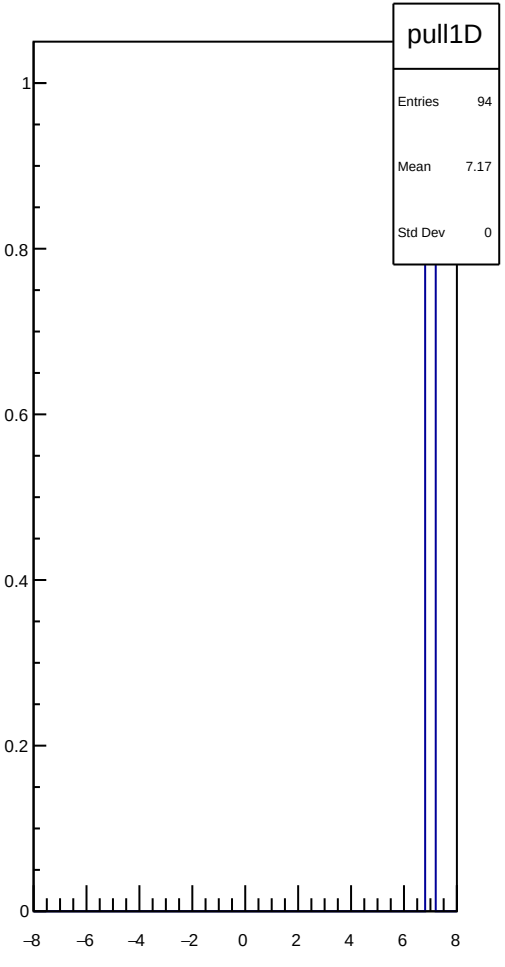

pull1D
Entries 94
Mean 5.92
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

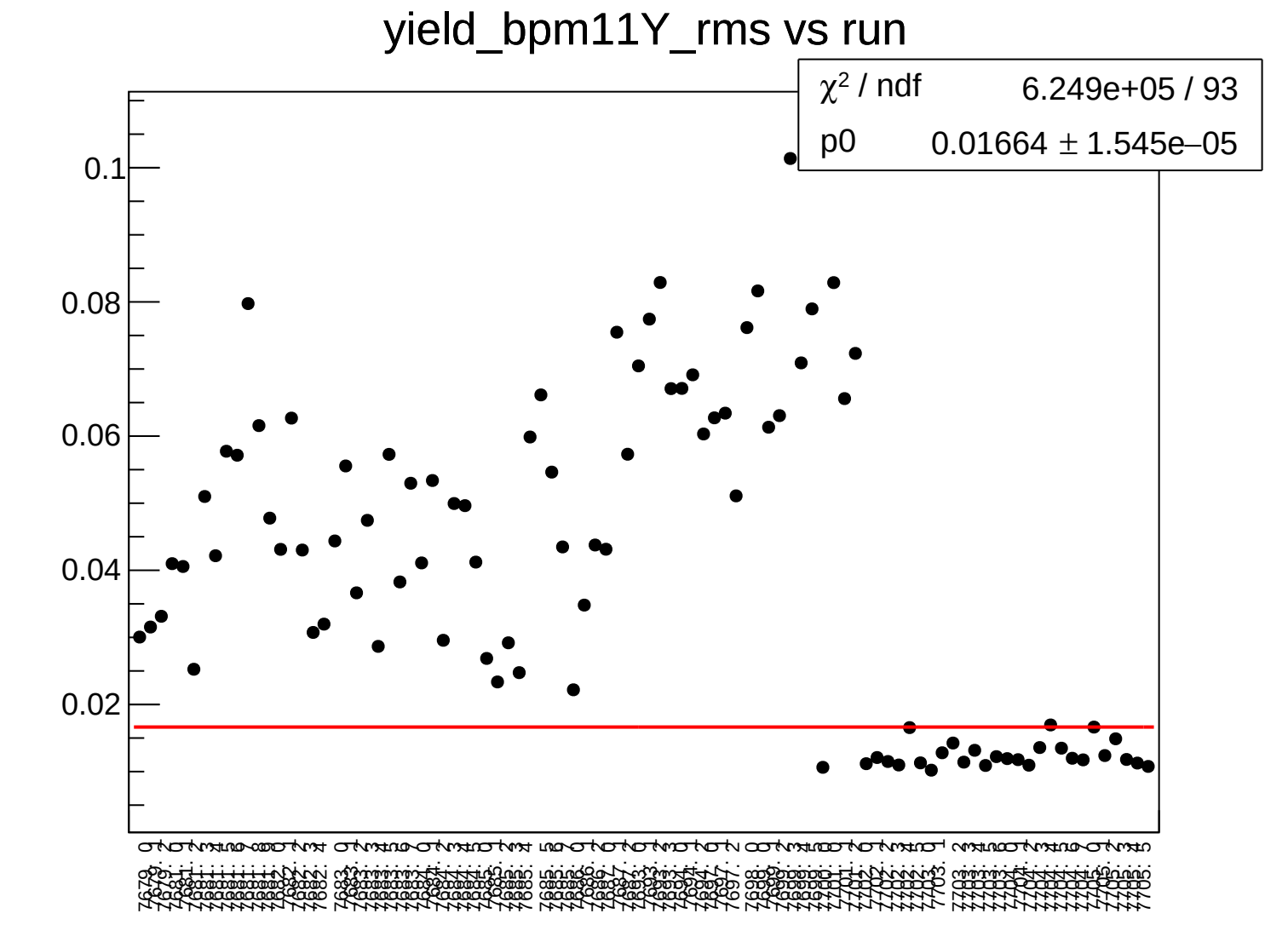

yield_bpm1Y_rms vs run
χ² / ndf 3.452e+05 / 93
p0 0.02663 ± 2.219e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

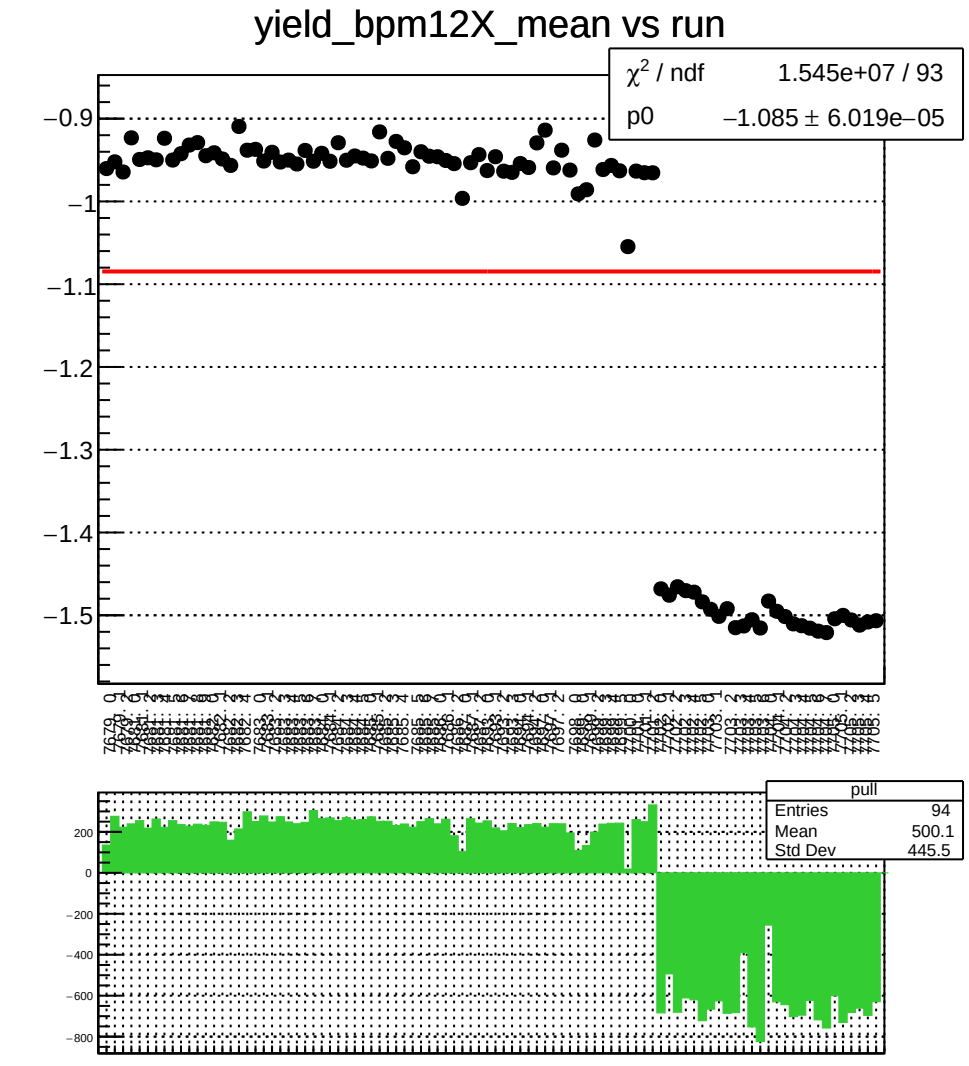

yield_bpm11X_mean vs run
χ² / ndf 1.148e+07 / 93
p0 0.9367 ± 2.758e−05
pull
Entries 94
Mean 1671
Std Dev 1617
pull1D
Entries 94
Mean 0
Std Dev 0

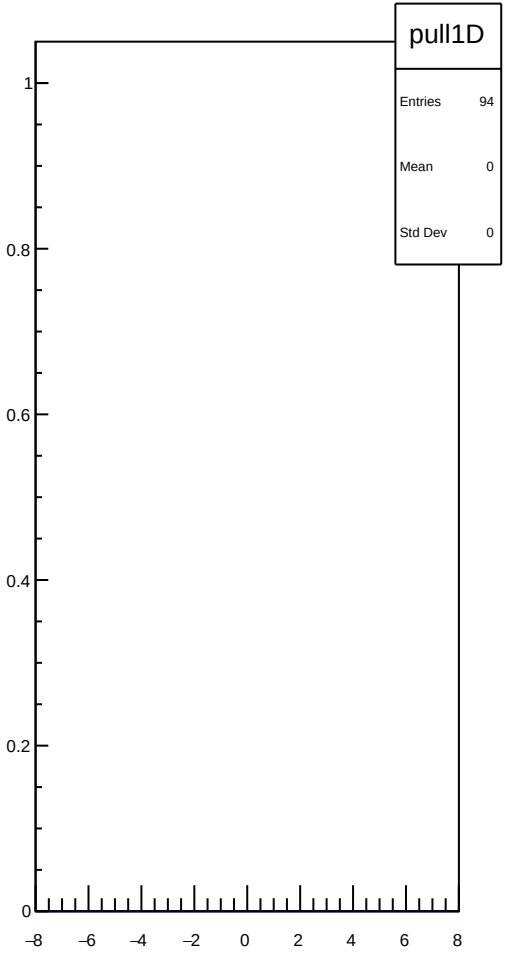

yield_bpm11X_rms vs run
χ² / ndf 3.809e+04 / 93
p0 0.02577 ± 1.95e−05
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02

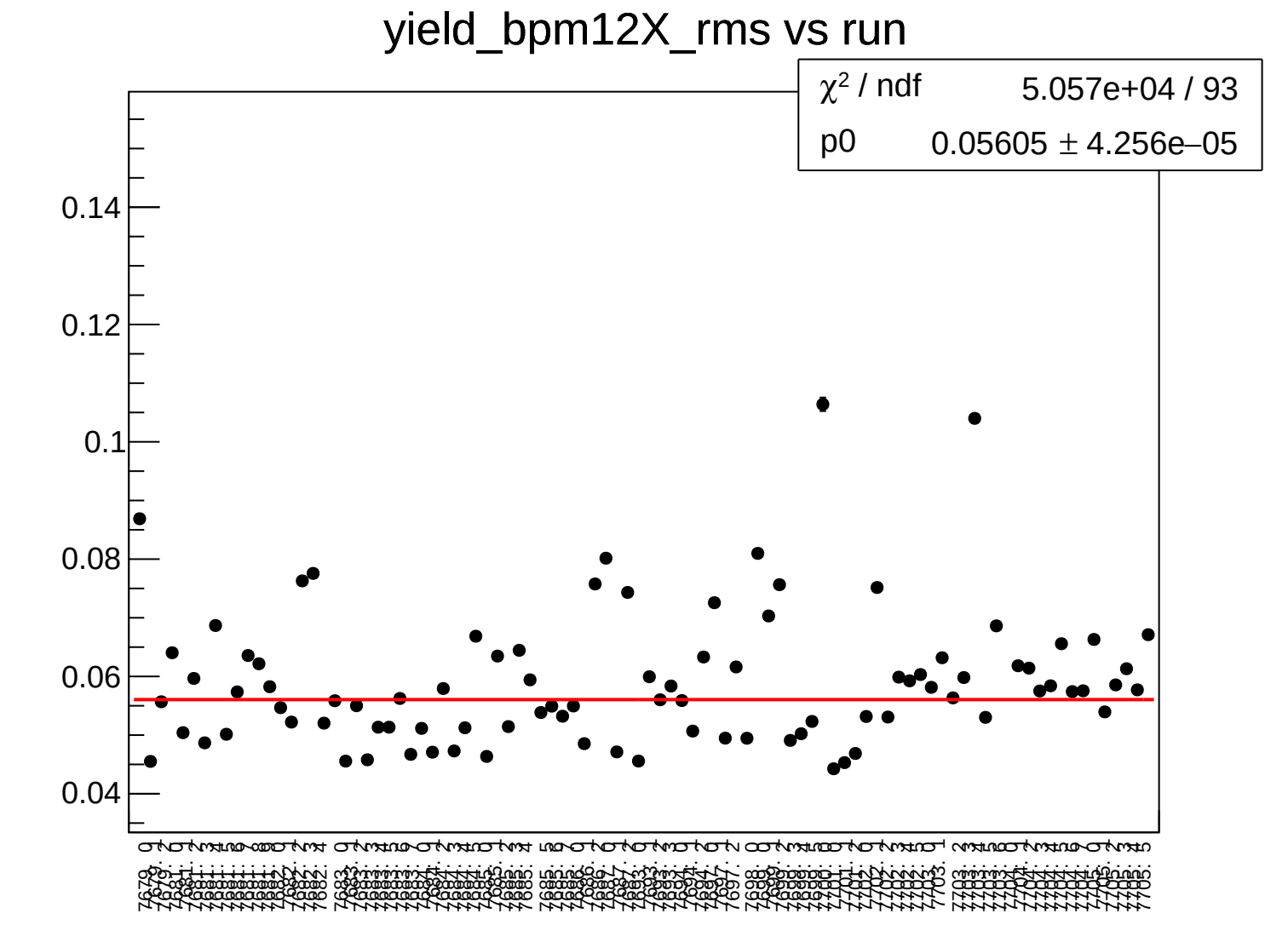

yield_bpm11Y_mean vs run
χ² / ndf 8.514e+06 / 93
p0 −0.2092 ± 2.185e−05
−0.05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
pull
Entries 94
Mean −8.89
Std Dev 52.01
600
400
200
0
−200
−400
−600

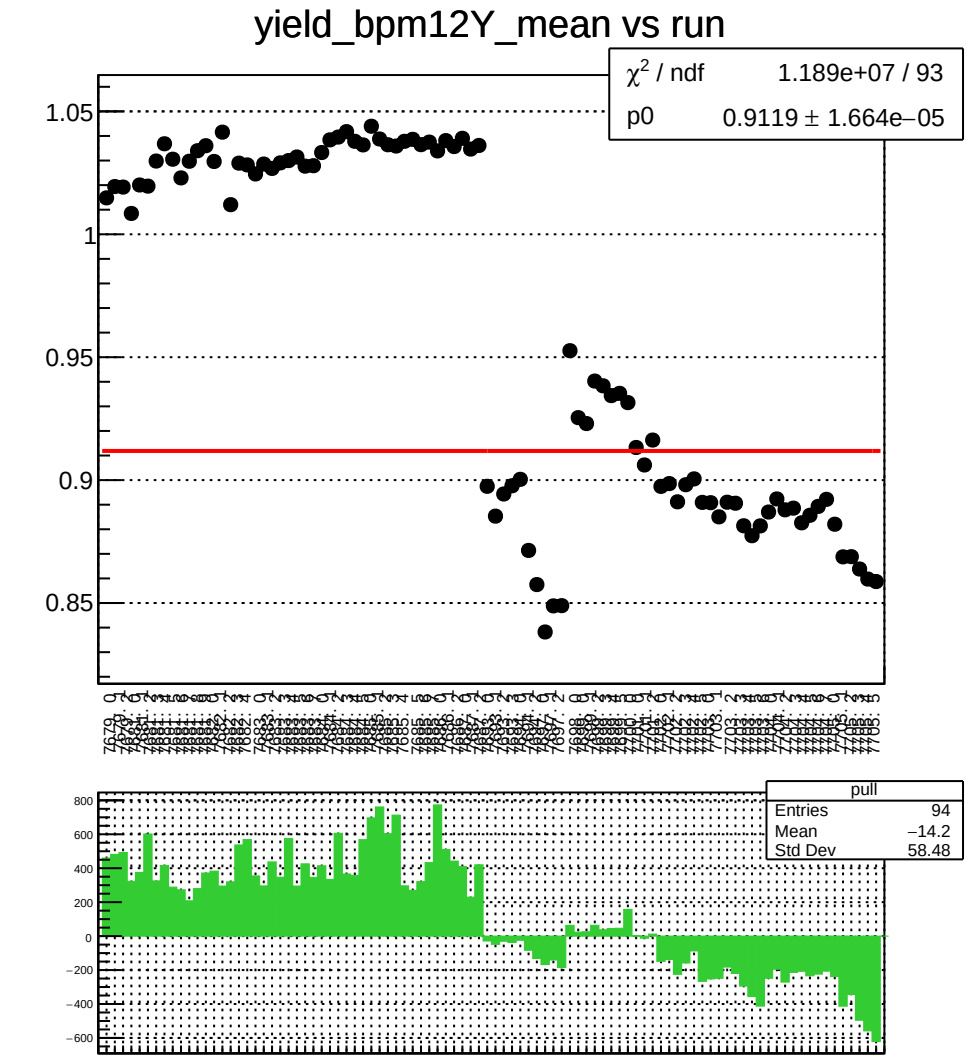

pull1D
Entries 94
Mean 7.17
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

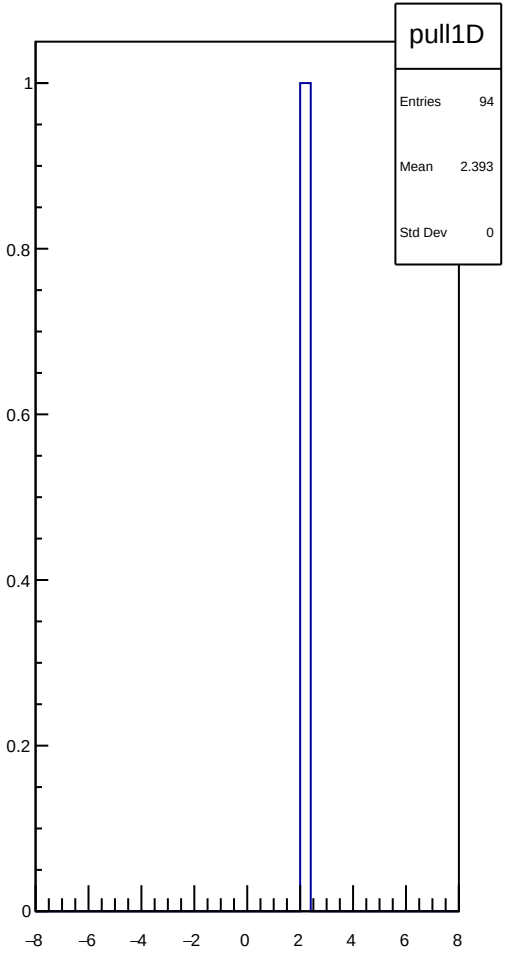

yield_bpm11Y_rms vs run
χ² / ndf 6.249e+05 / 93
p0 0.01664 ± 1.545e−05
0.1
0.08
0.06
0.04
0.02

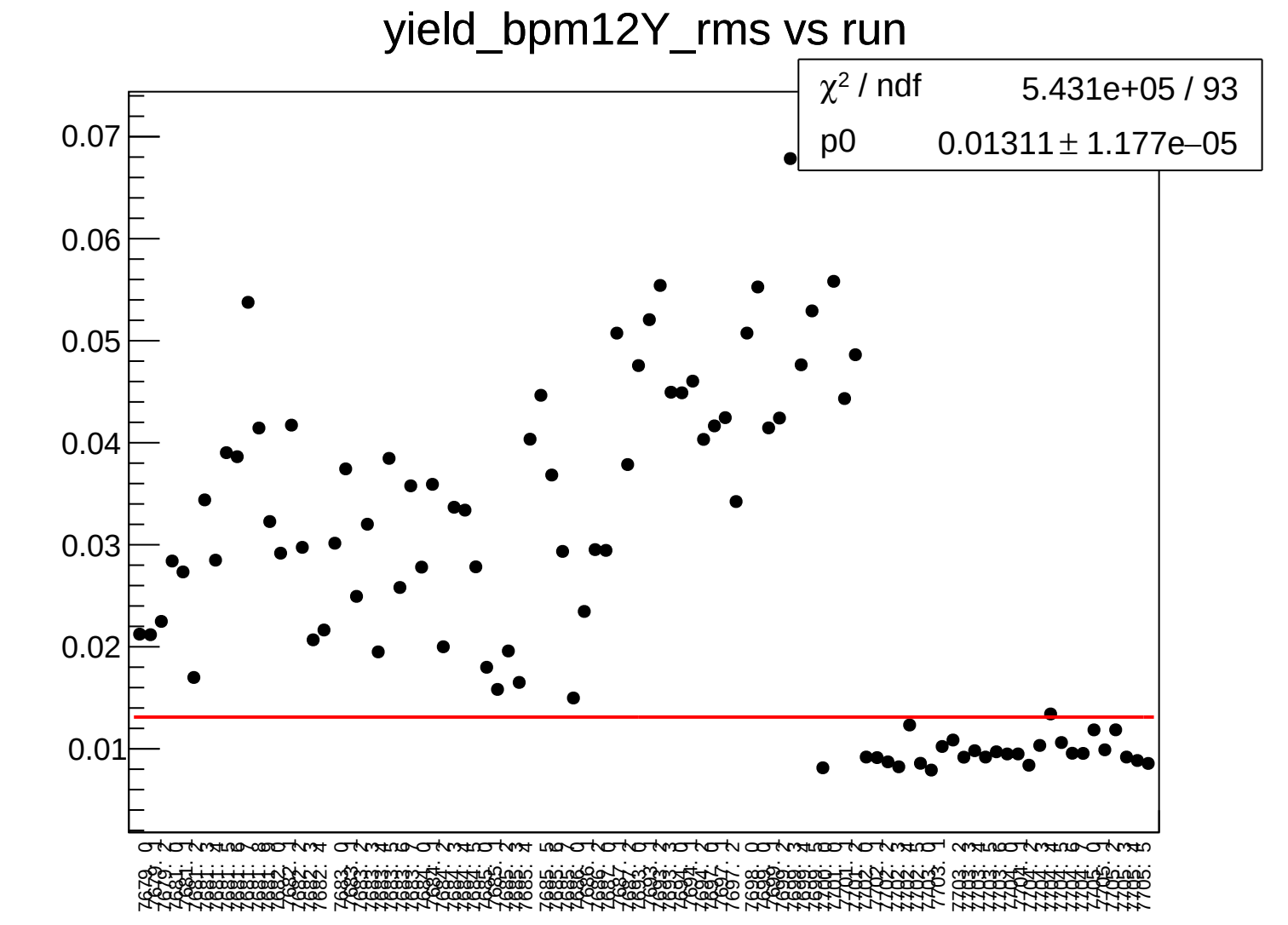

yield_bpm12X_mean vs run
χ² / ndf 1.545e+07 / 93
p0 −1.085 ± 6.019e−05
−0.9
−1
−1.1
−1.2
−1.3
−1.4
−1.5
pull
Entries 94
Mean 500.1
Std Dev 445.5
200
0
−200
−400
−600
−800

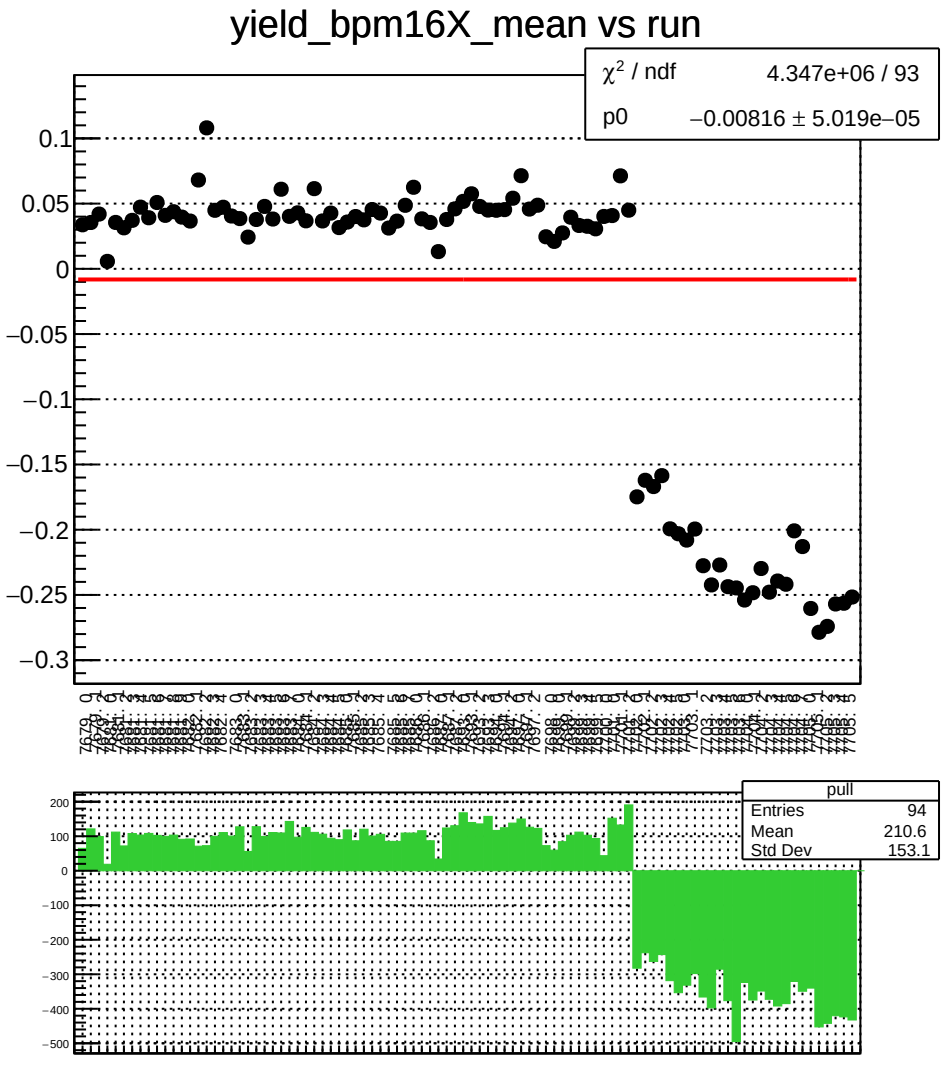

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

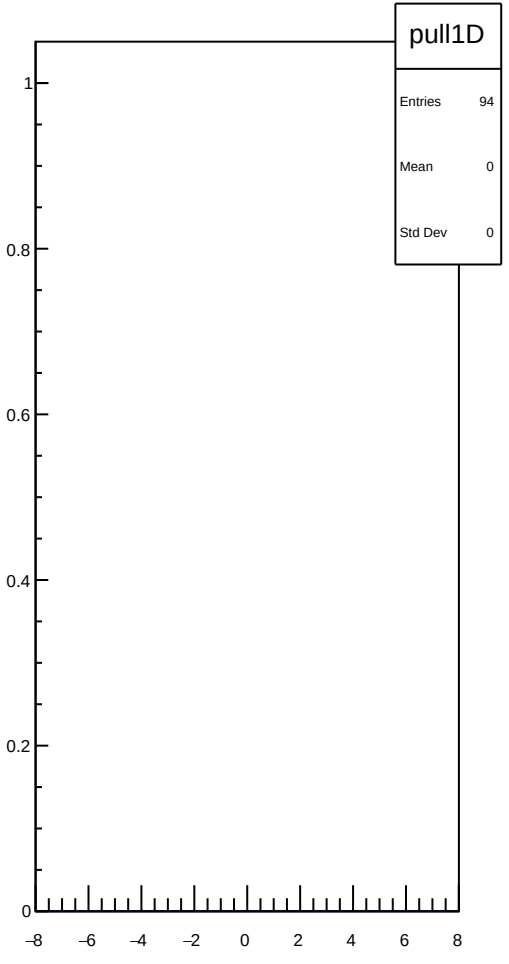

yield_bpm12X_rms vs run
χ² / ndf 5.057e+04 / 93
p0 0.05605 ± 4.256e–05
0.14
0.12
0.1
0.08
0.06
0.04

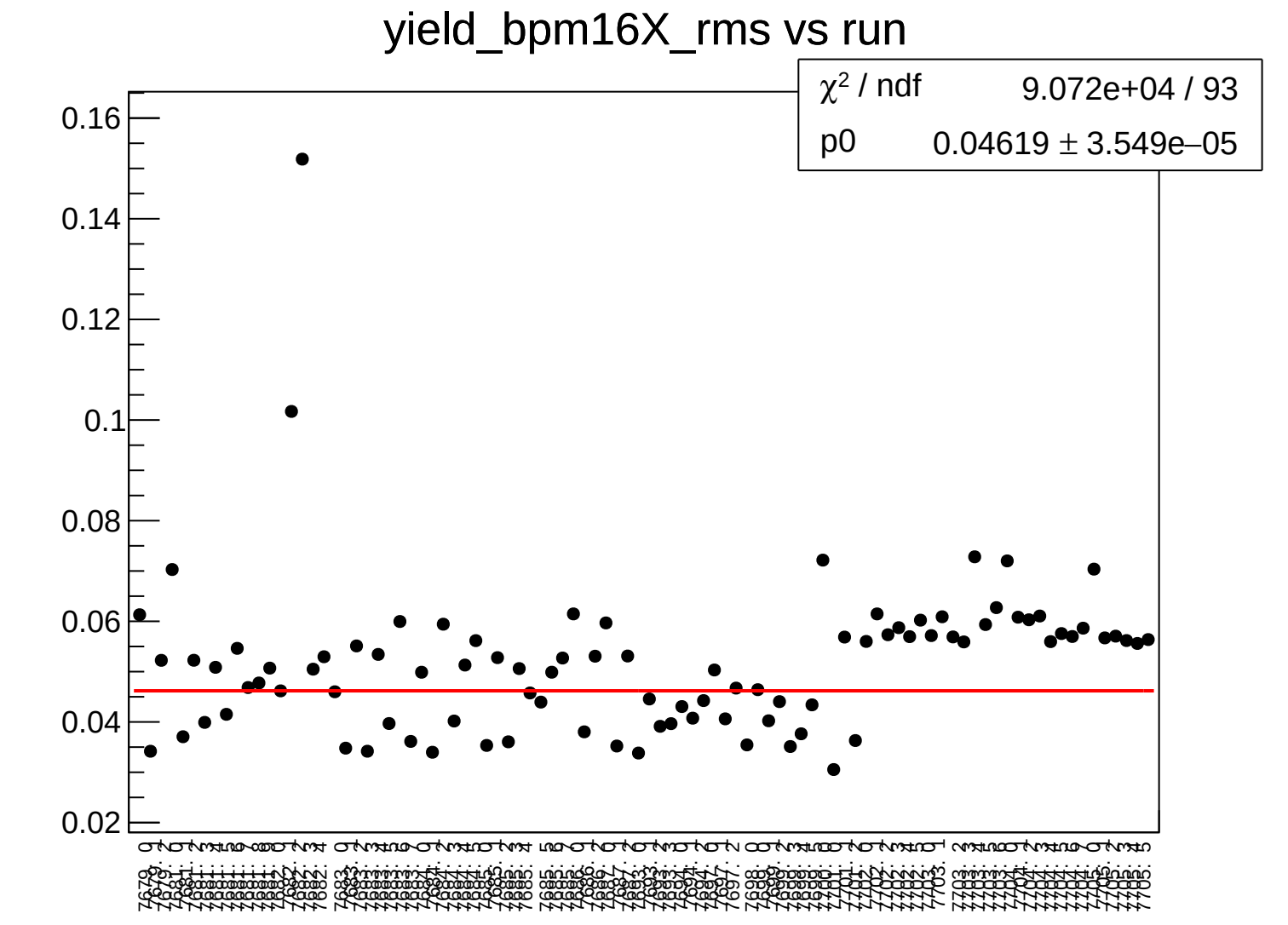

yield_bpm12Y_mean vs run
χ² / ndf 1.189e+07 / 93
p0 0.9119 ± 1.664e−05
1.05
1
0.95
0.9
0.85
pull
Entries 94
Mean −14.2
Std Dev 58.48
800
600
400
200
0
−200
−400
−600

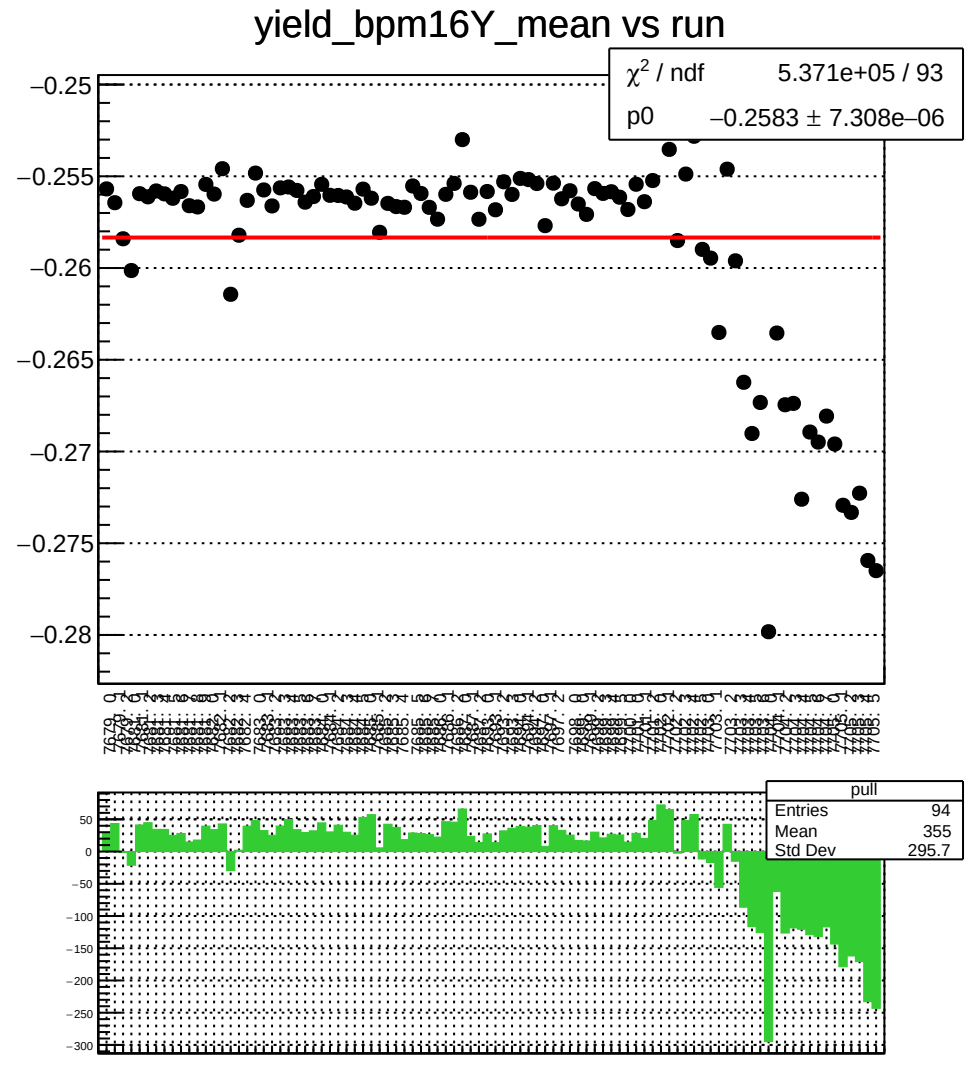

pull1D
Entries 94
Mean 2.393
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

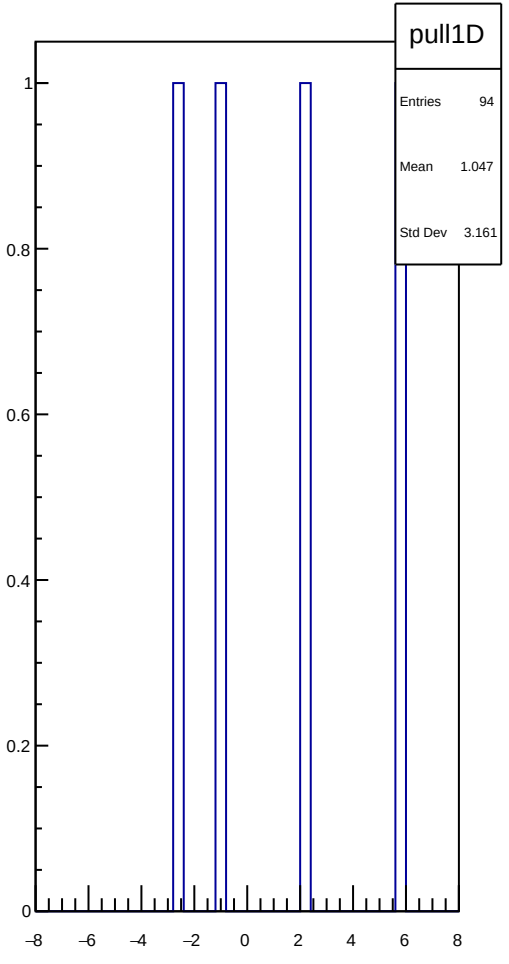

yield_bpm12Y_rms vs run
χ² / ndf 5.431e+05 / 93
p0 0.01311 ± 1.177e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

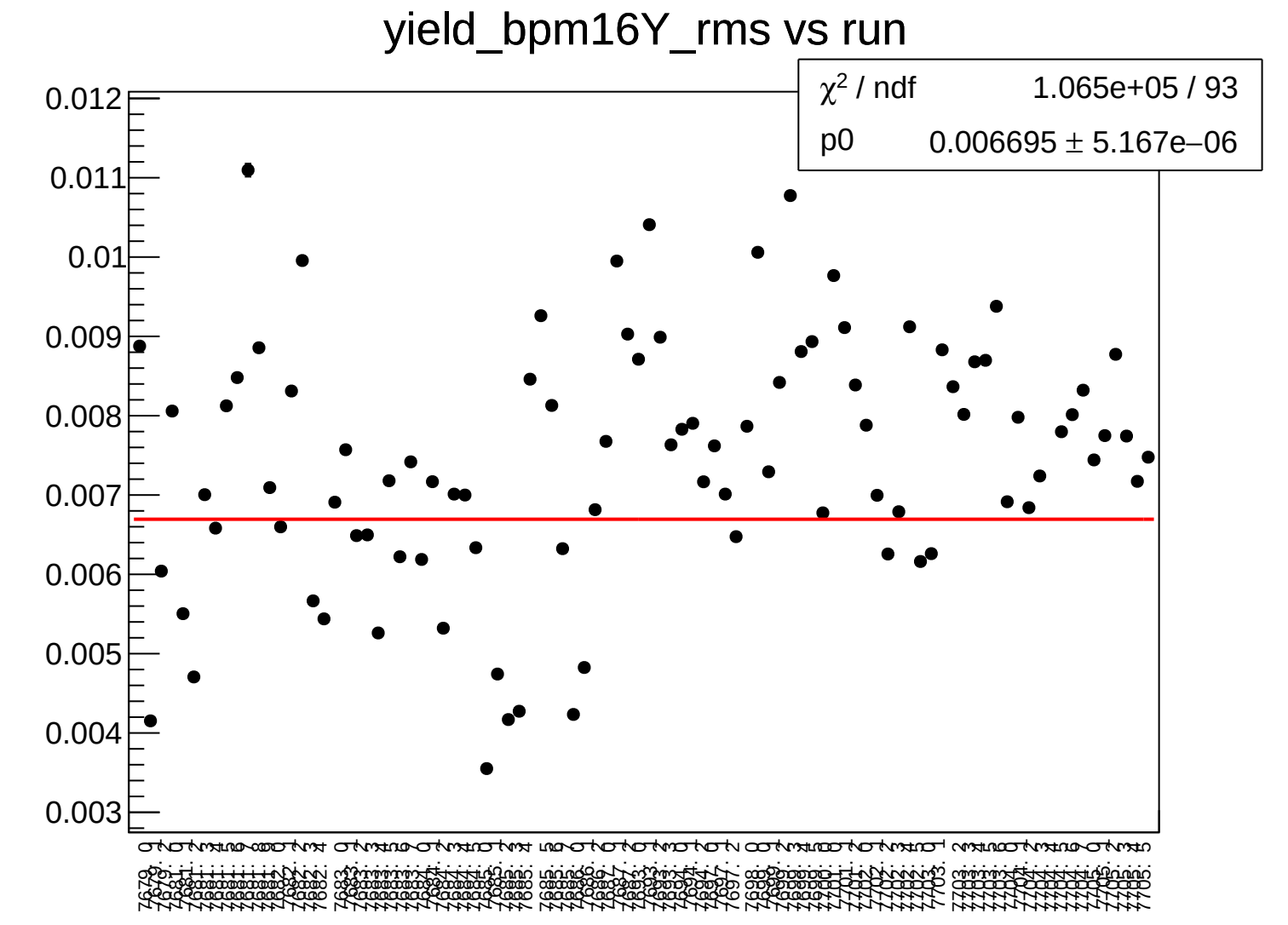

yield_bpm16X_mean vs run
χ² / ndf 4.347e+06 / 93
p0 −0.00816 ± 5.019e−05
pull
Entries 94
Mean 210.6
Std Dev 153.1

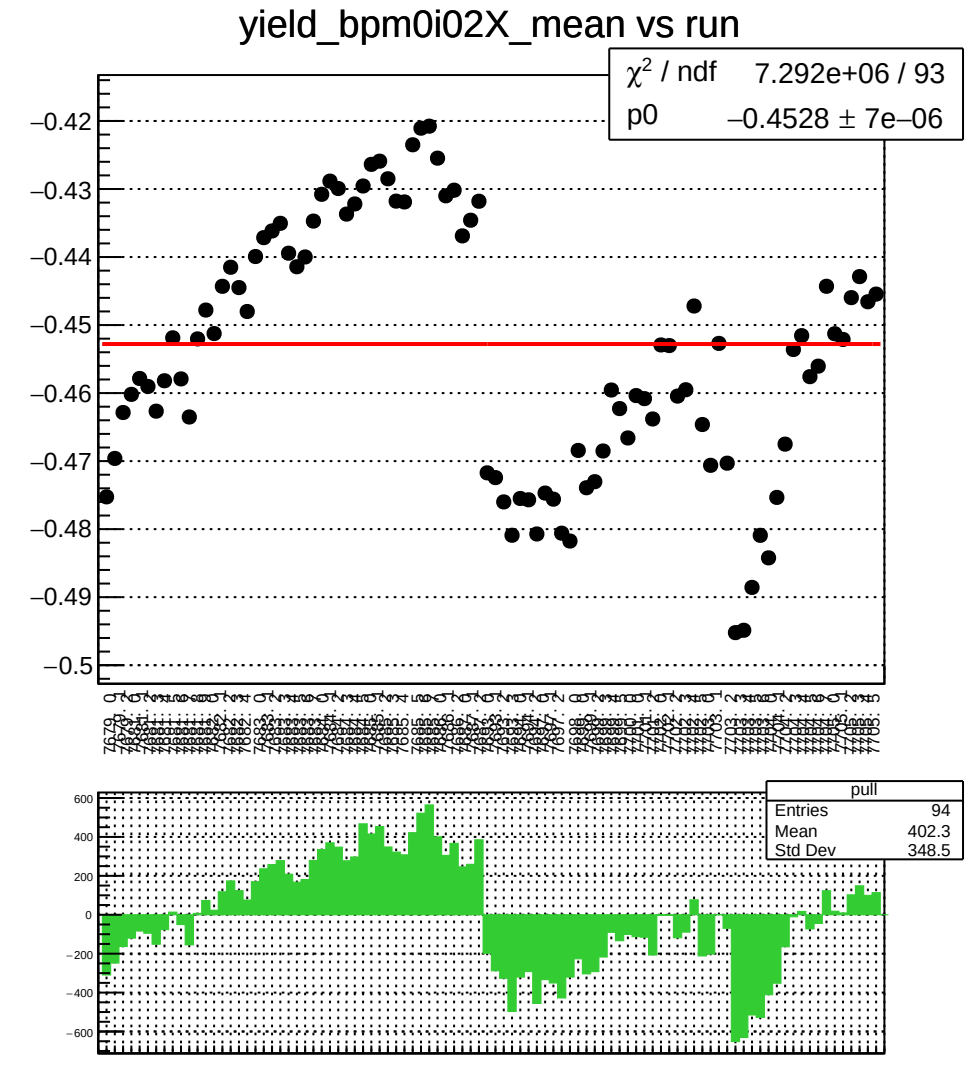

pull1D
Entries 94
Mean 0
Std Dev 0

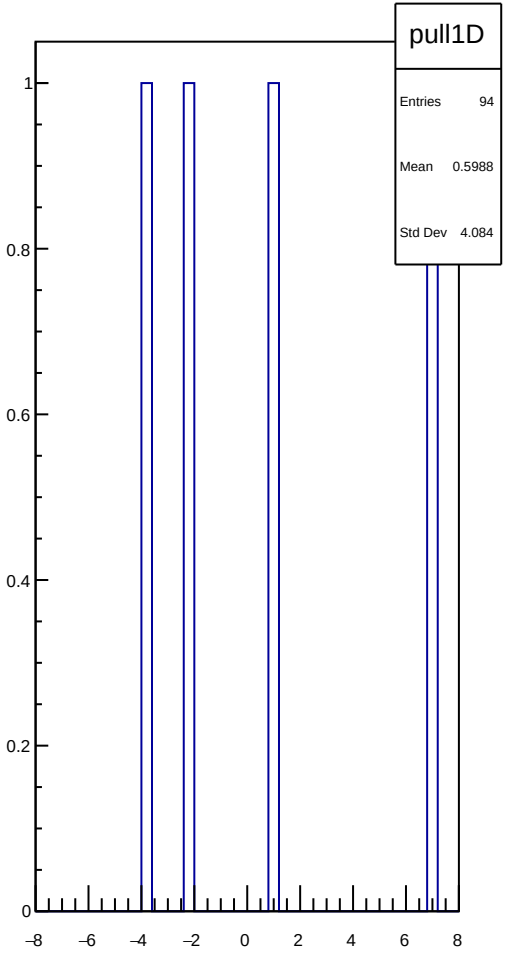

yield_bpm16X_rms vs run
χ² / ndf 9.072e+04 / 93
p0 0.04619 ± 3.549e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

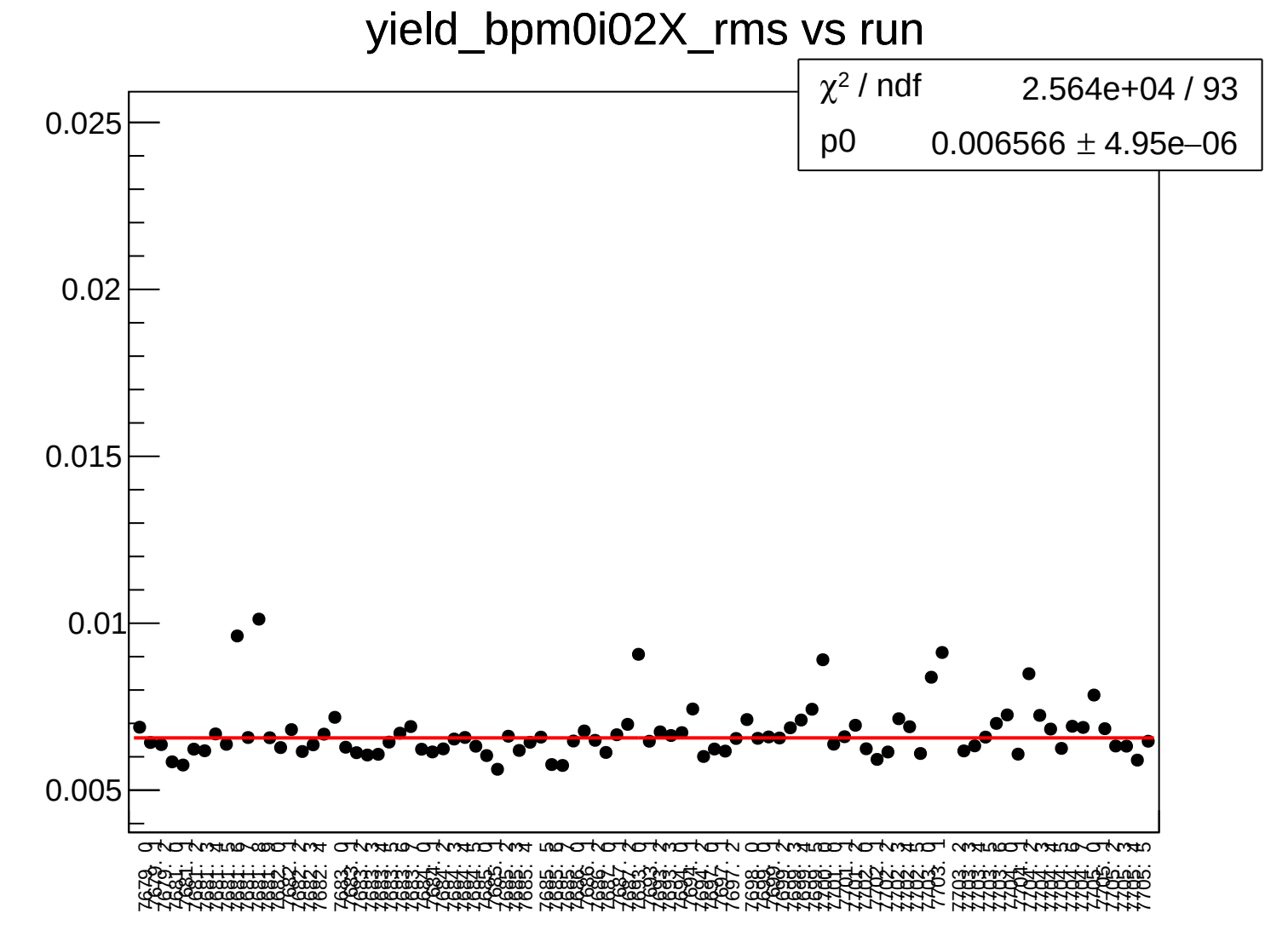

yield_bpm16Y_mean vs run
χ² / ndf 5.371e+05 / 93
p0 −0.2583 ± 7.308e−06
−0.25
−0.255
−0.26
−0.265
−0.27
−0.275
−0.28
pull
Entries 94
Mean 355
Std Dev 295.7
50
0
−50
−100
−150
−200
−250
−300

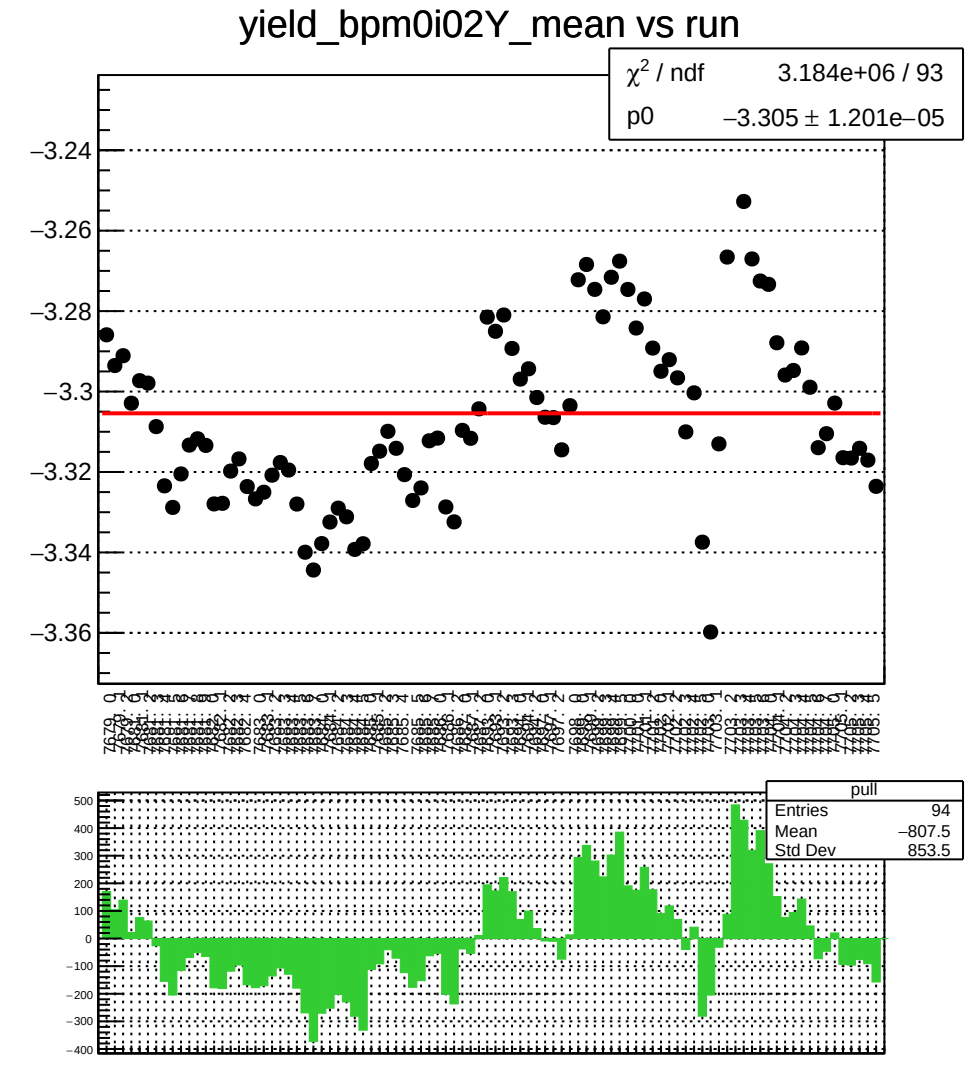

pull1D
Entries 94
Mean 1.047
Std Dev 3.161
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

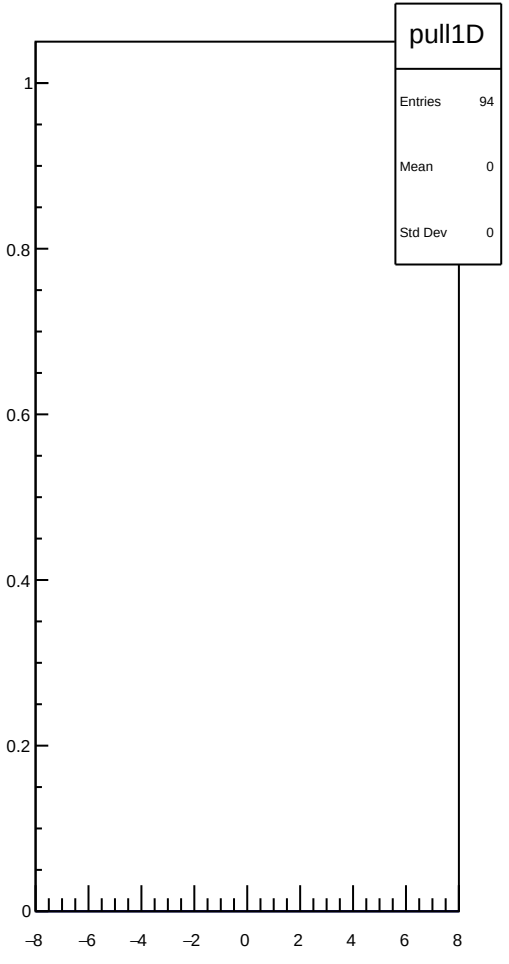

yield_bpm16Y_rms vs run
χ² / ndf 1.065e+05 / 93
p0 0.006695 ± 5.167e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

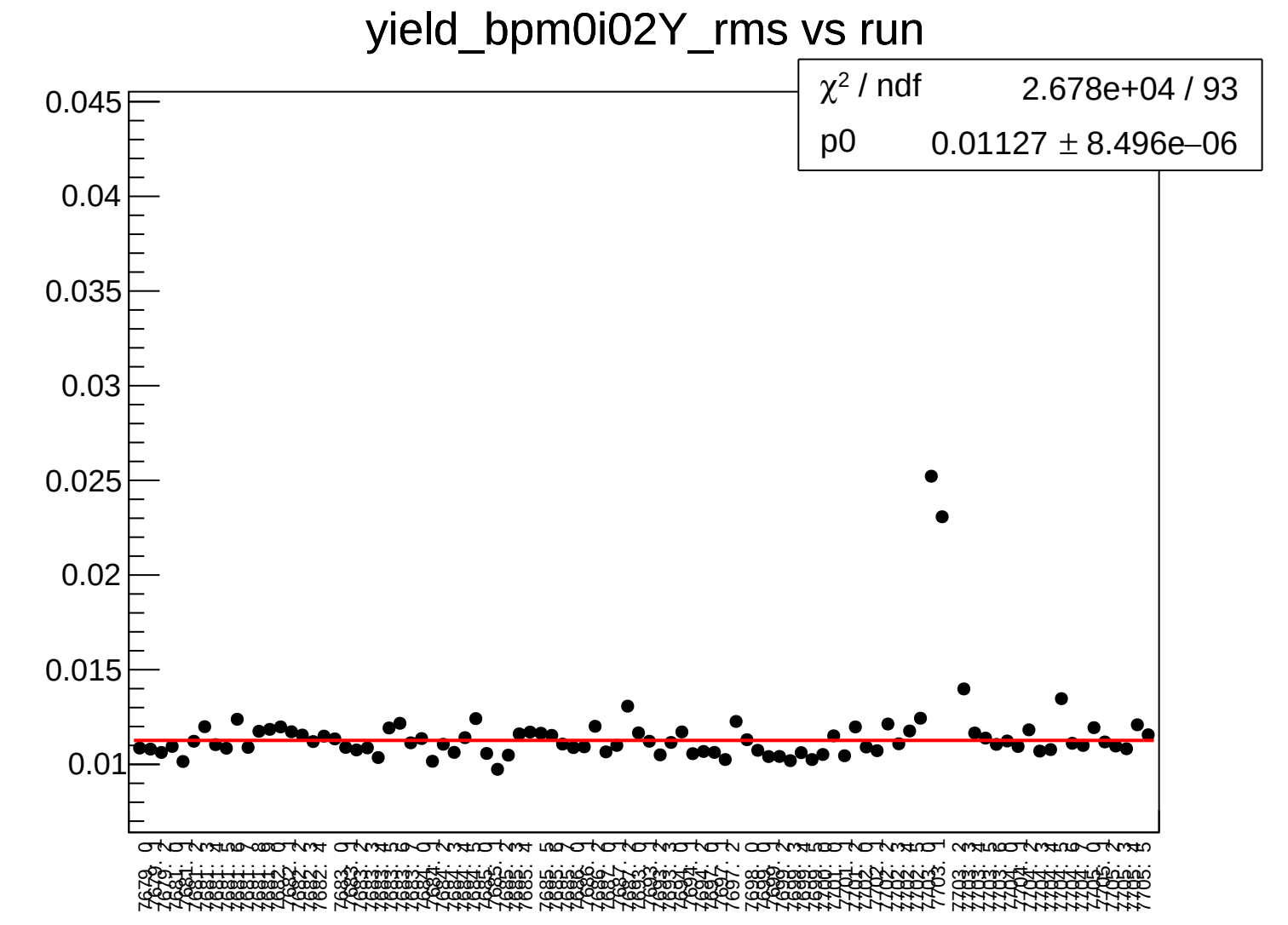

yield_bpm0i02X_mean vs run
χ² / ndf 7.292e+06 / 93
p0 −0.4528 ± 7e−06
−0.42
−0.43
−0.44
−0.45
−0.46
−0.47
−0.48
−0.49
−0.5
pull
Entries 94
Mean 402.3
Std Dev 348.5
600
400
200
0
−200
−400
−600

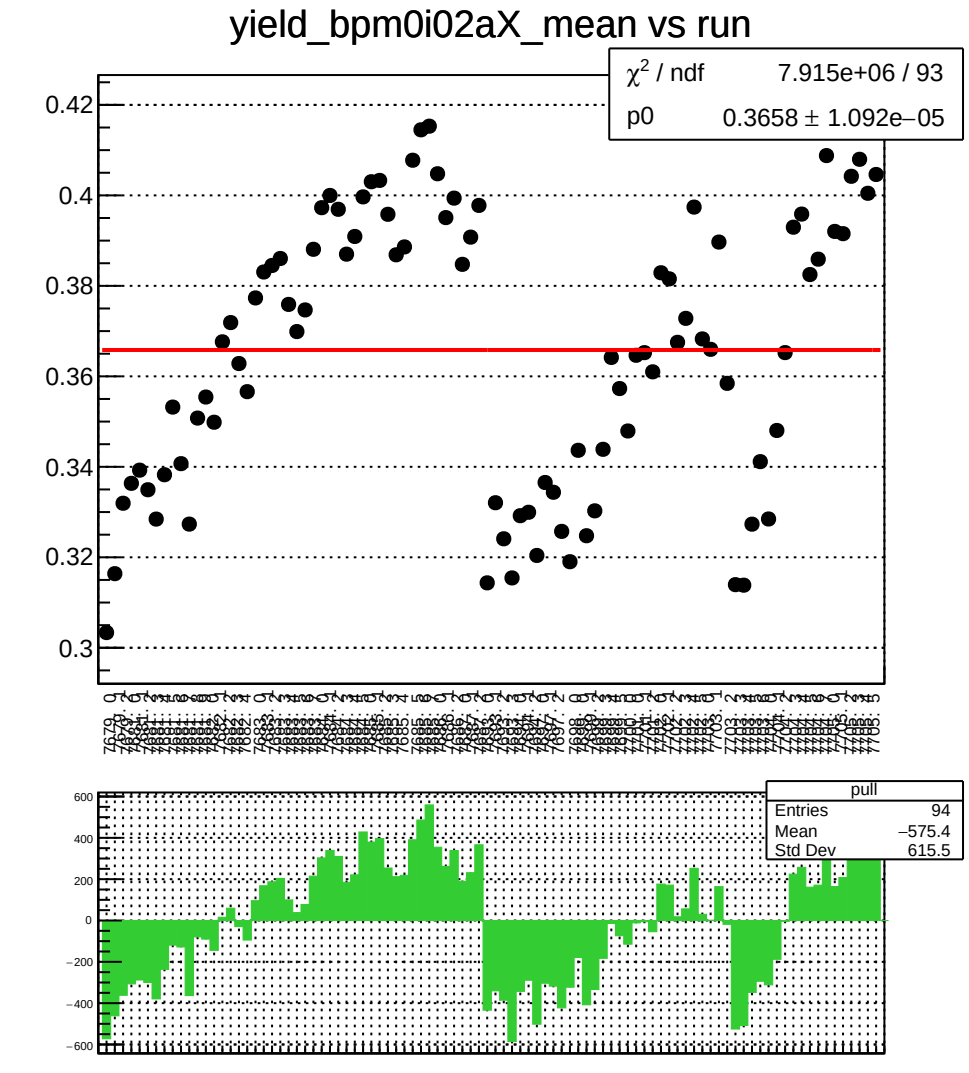

pull1D
Entries 94
Mean 0.5988
Std Dev 4.084
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

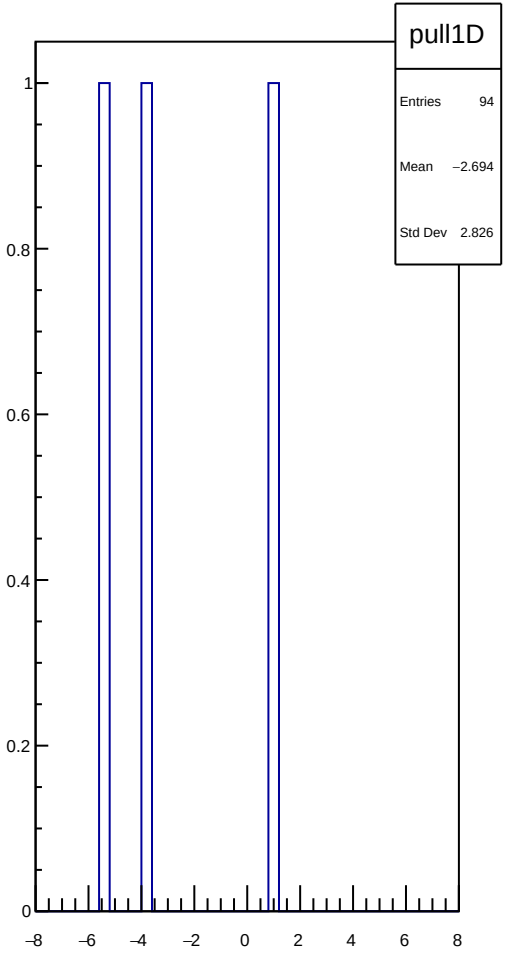

yield_bpm0i02X_rms vs run
χ² / ndf 2.564e+04 / 93
p0 0.006566 ± 4.95e–06
0.025
0.02
0.015
0.01
0.005

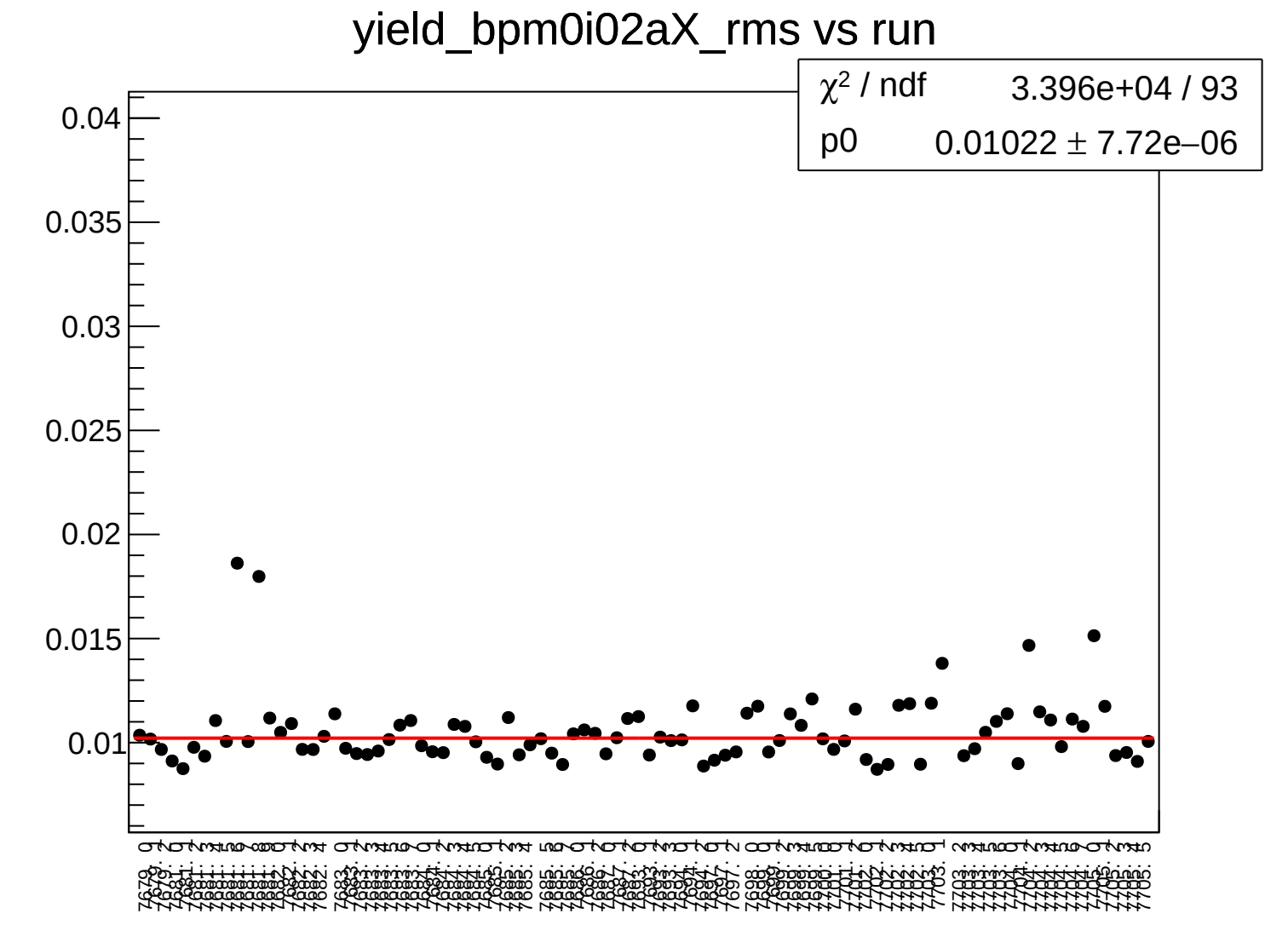

yield_bpm0i02Y_mean vs run
χ² / ndf 3.184e+06 / 93
p0 −3.305 ± 1.201e−05
−3.24
−3.26
−3.28
−3.3
−3.32
−3.34
−3.36
pull
Entries 94
Mean −807.5
Std Dev 853.5
500
400
300
200
100
0
−100
−200
−300
−400

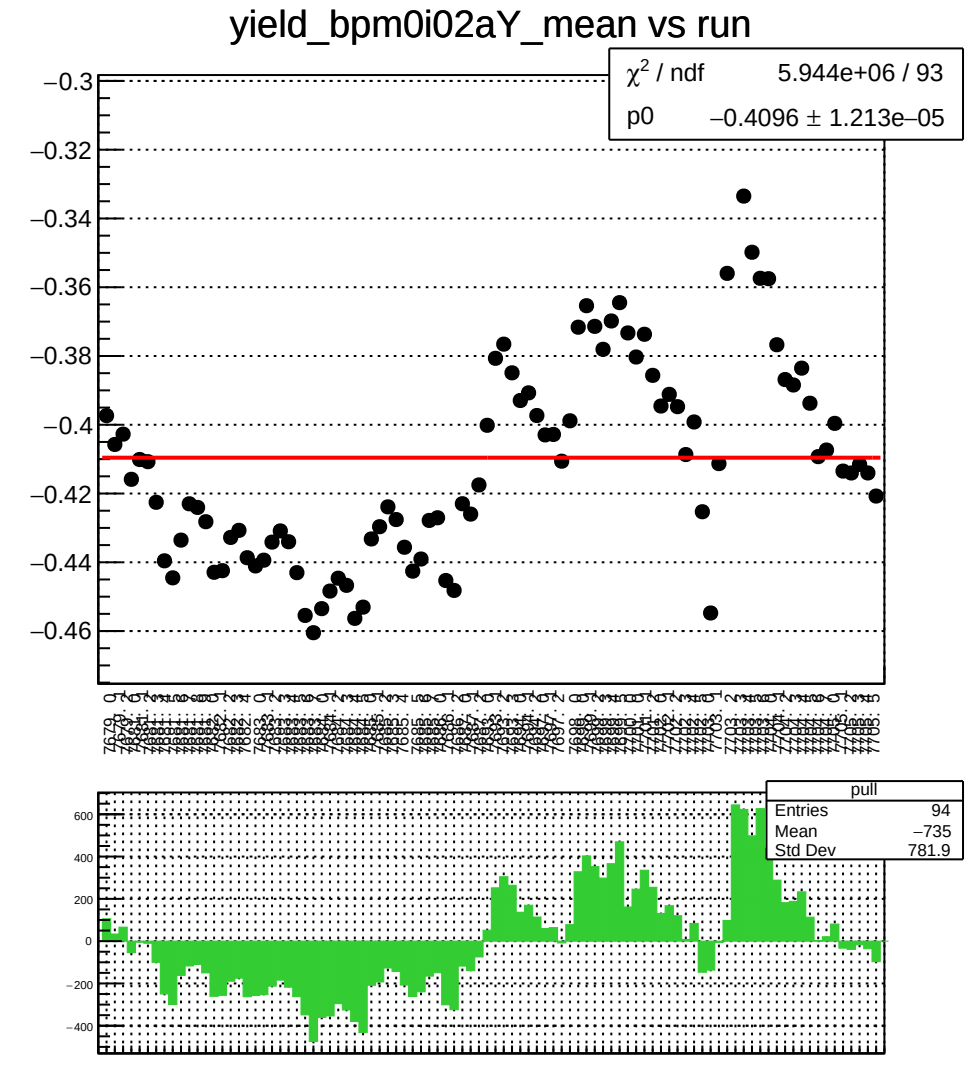

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

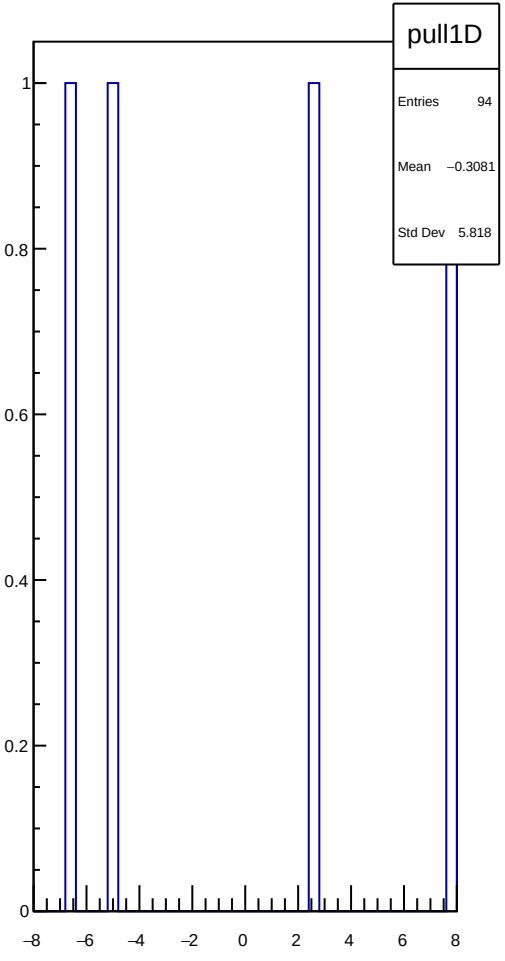

yield_bpm0i02Y_rms vs run
χ² / ndf 2.678e+04 / 93
p0 0.01127 ± 8.496e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

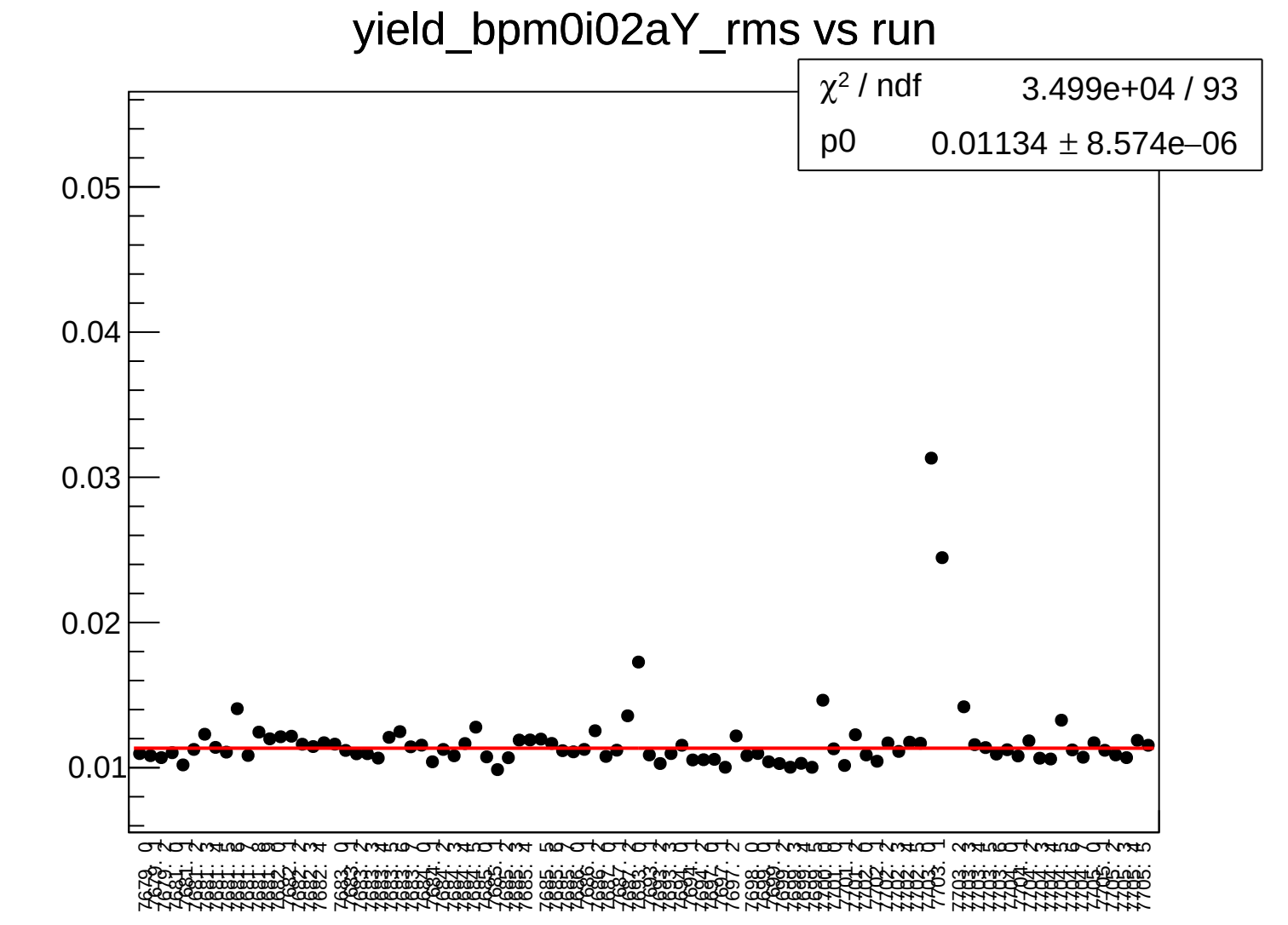

yield_bpm0i02aX_mean vs run
χ² / ndf 7.915e+06 / 93
p0 0.3658 ± 1.092e−05
0.42
0.4
0.38
0.36
0.34
0.32
0.3
pull
Entries 94
Mean −575.4
Std Dev 615.5
600
400
200
0
−200
−400
−600

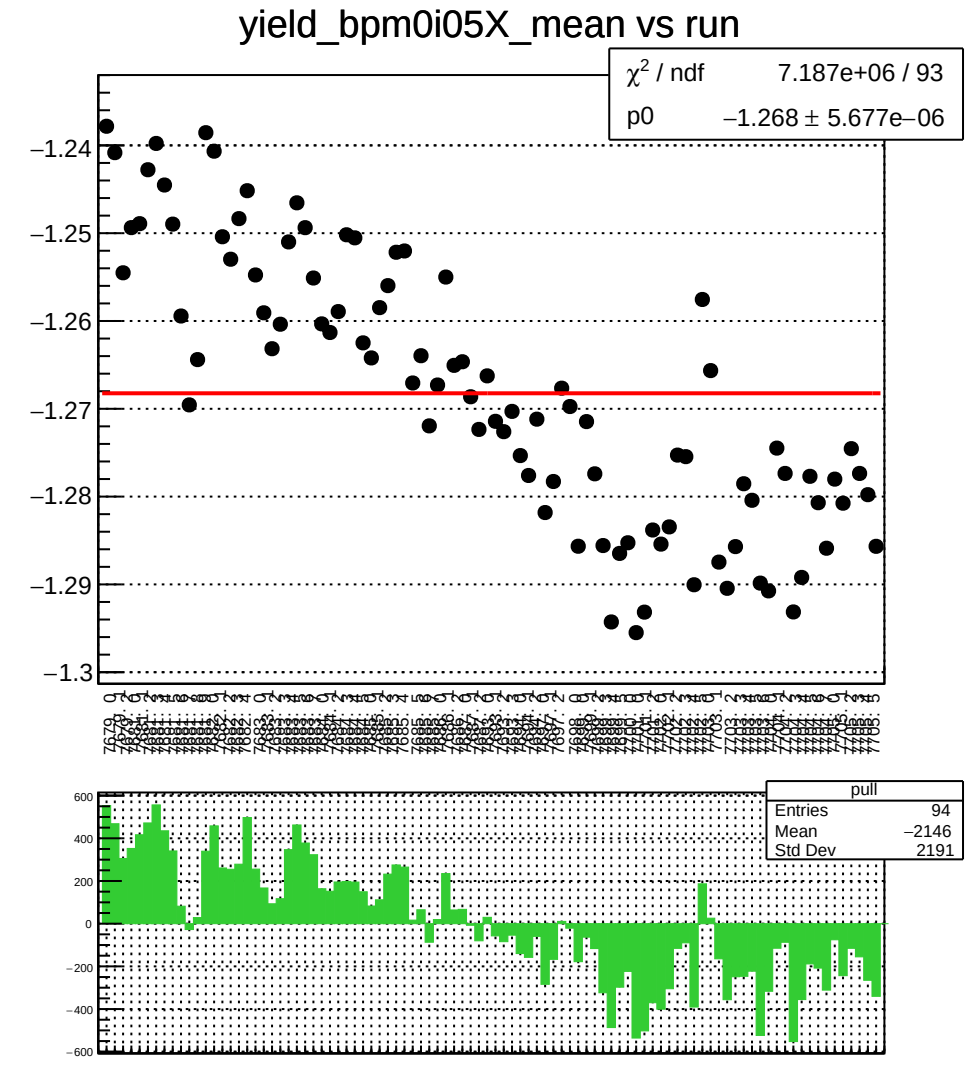

pull1D
Entries 94
Mean −2.694
Std Dev 2.826
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

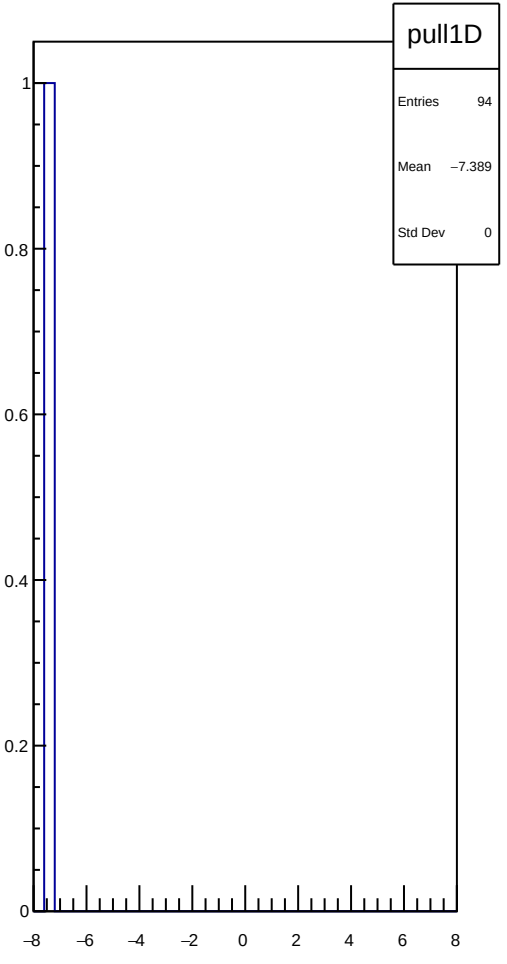

yield_bpm0i02aX_rms vs run
χ² / ndf 3.396e+04 / 93
p0 0.01022 ± 7.72e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

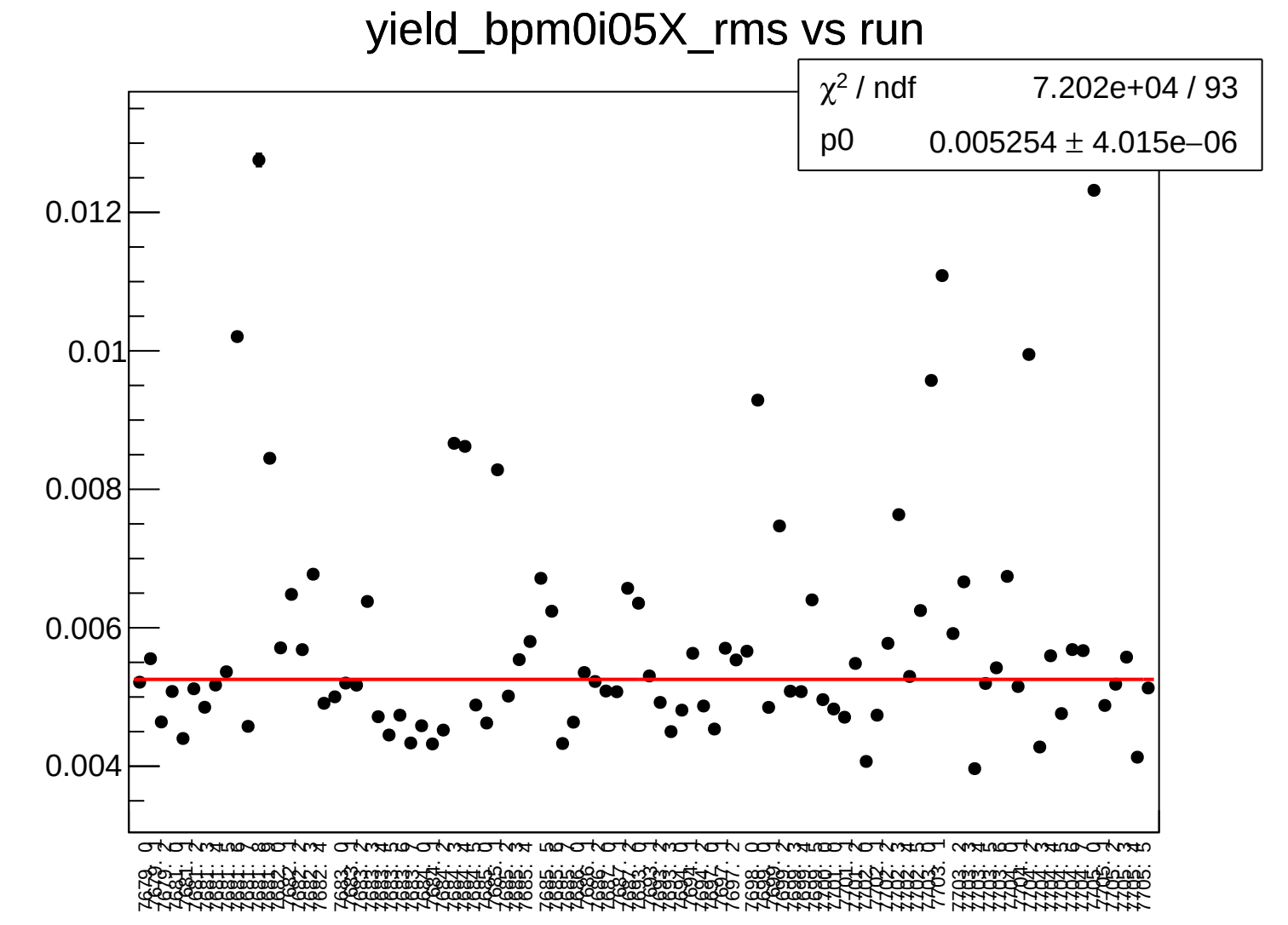

yield_bpm0i02aY_mean vs run
χ² / ndf 5.944e+06 / 93
p0 −0.4096 ± 1.213e−05
−0.3
−0.32
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
−0.46
pull
Entries 94
Mean −735
Std Dev 781.9
600
400
200
0
−200
−400

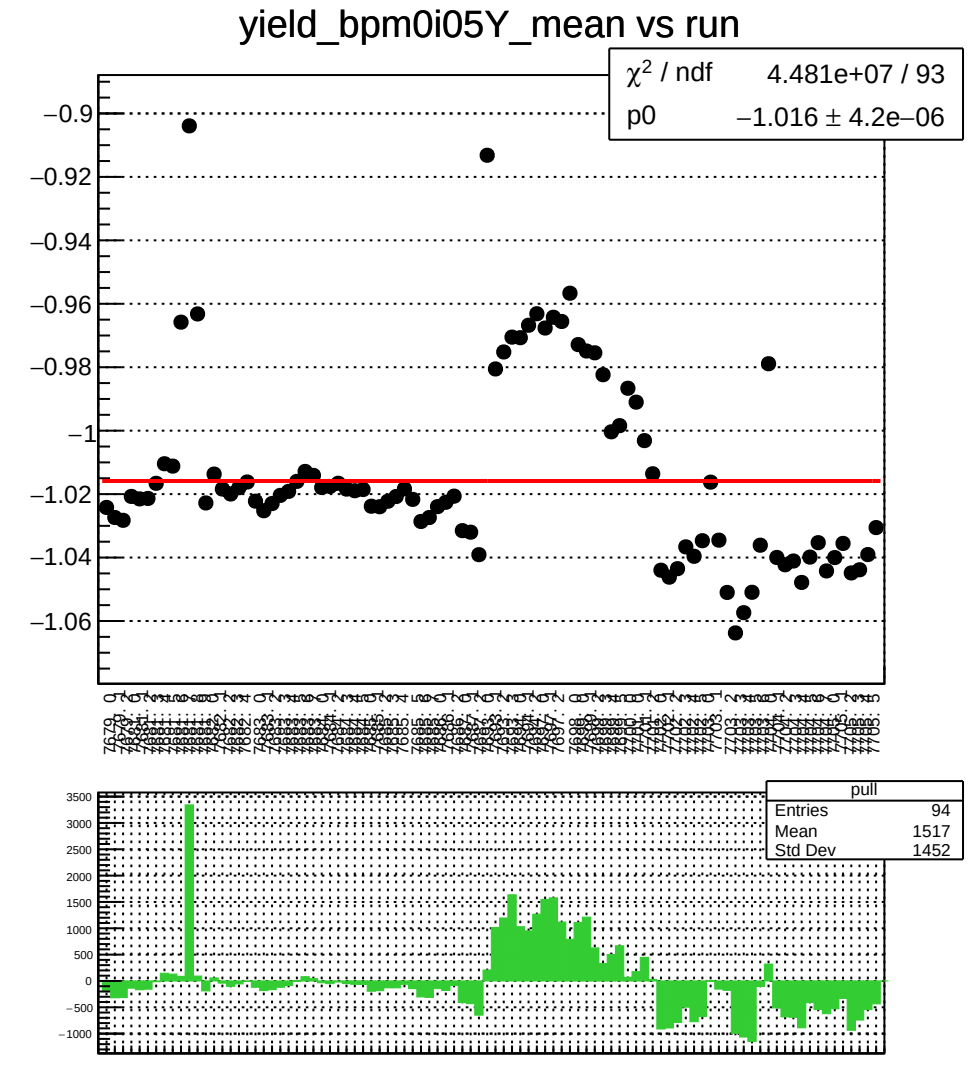

pull1D
Entries 94
Mean −0.3081
Std Dev 5.818
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

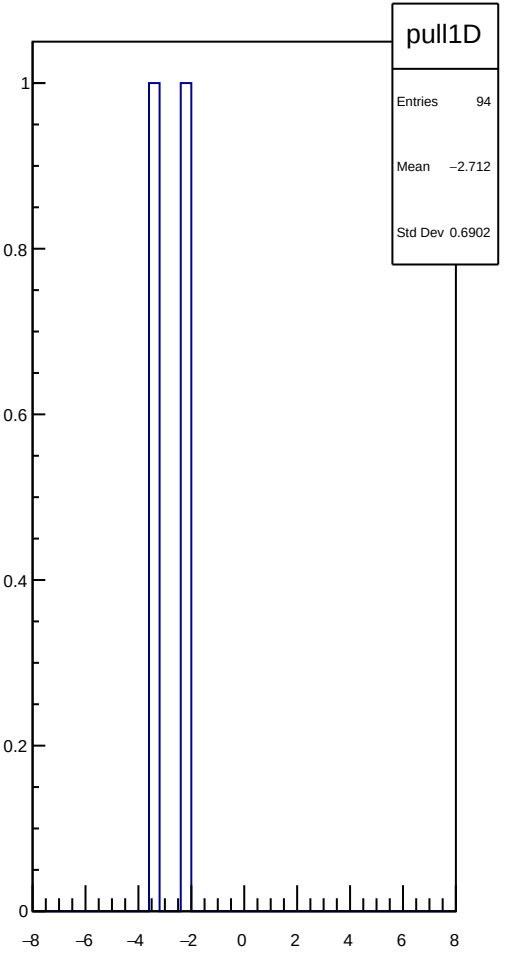

yield_bpm0i02aY_rms vs run
χ² / ndf 3.499e+04 / 93
p0 0.01134 ± 8.574e–06
0.05
0.04
0.03
0.02
0.01

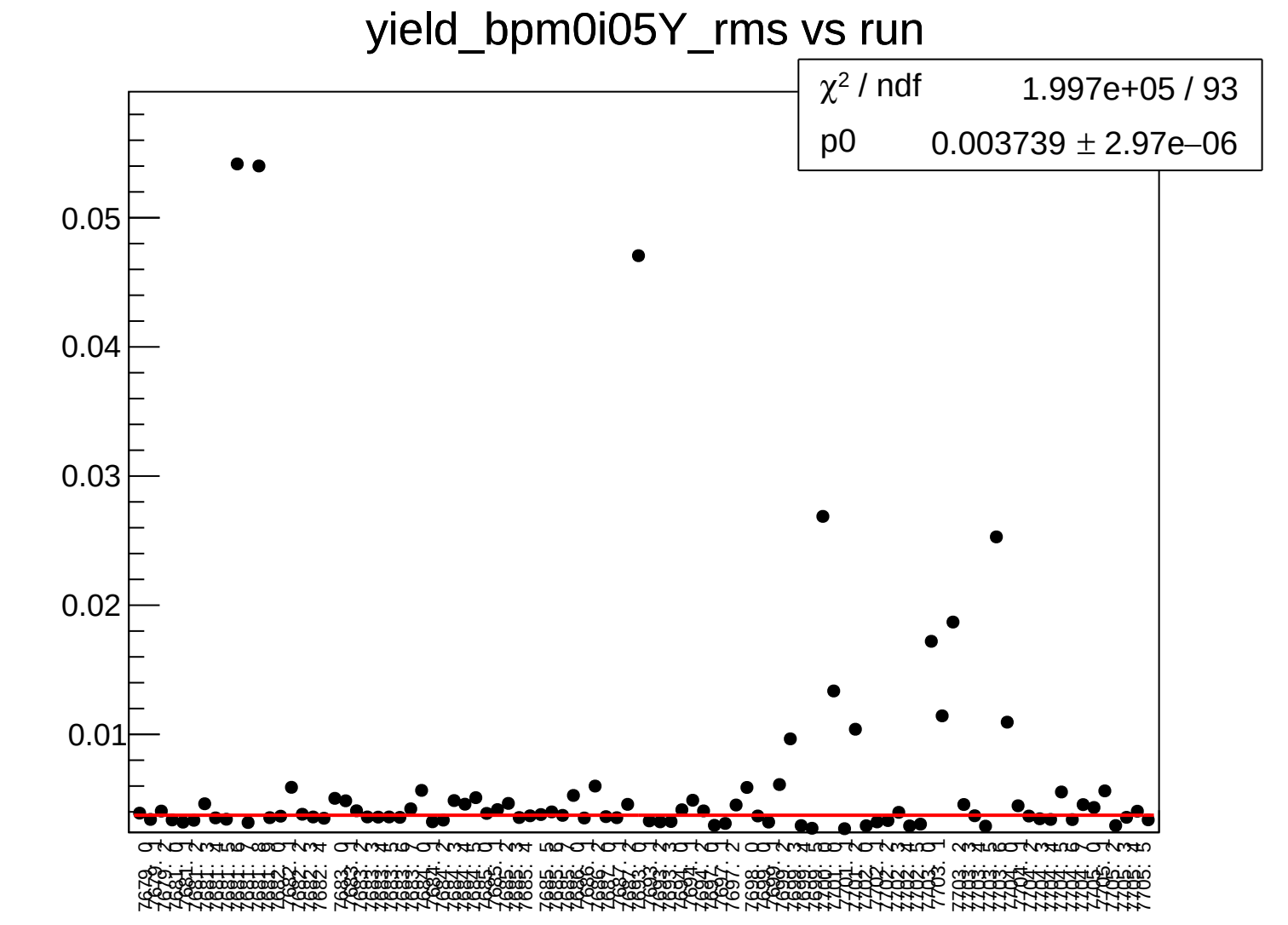

yield_bpm0i05X_mean vs run
χ² / ndf 7.187e+06 / 93
p0 −1.268 ± 5.677e−06
−1.24
−1.25
−1.26
−1.27
−1.28
−1.29
−1.3
pull
Entries 94
Mean −2146
Std Dev 2191
600
400
200
0
−200
−400
−600

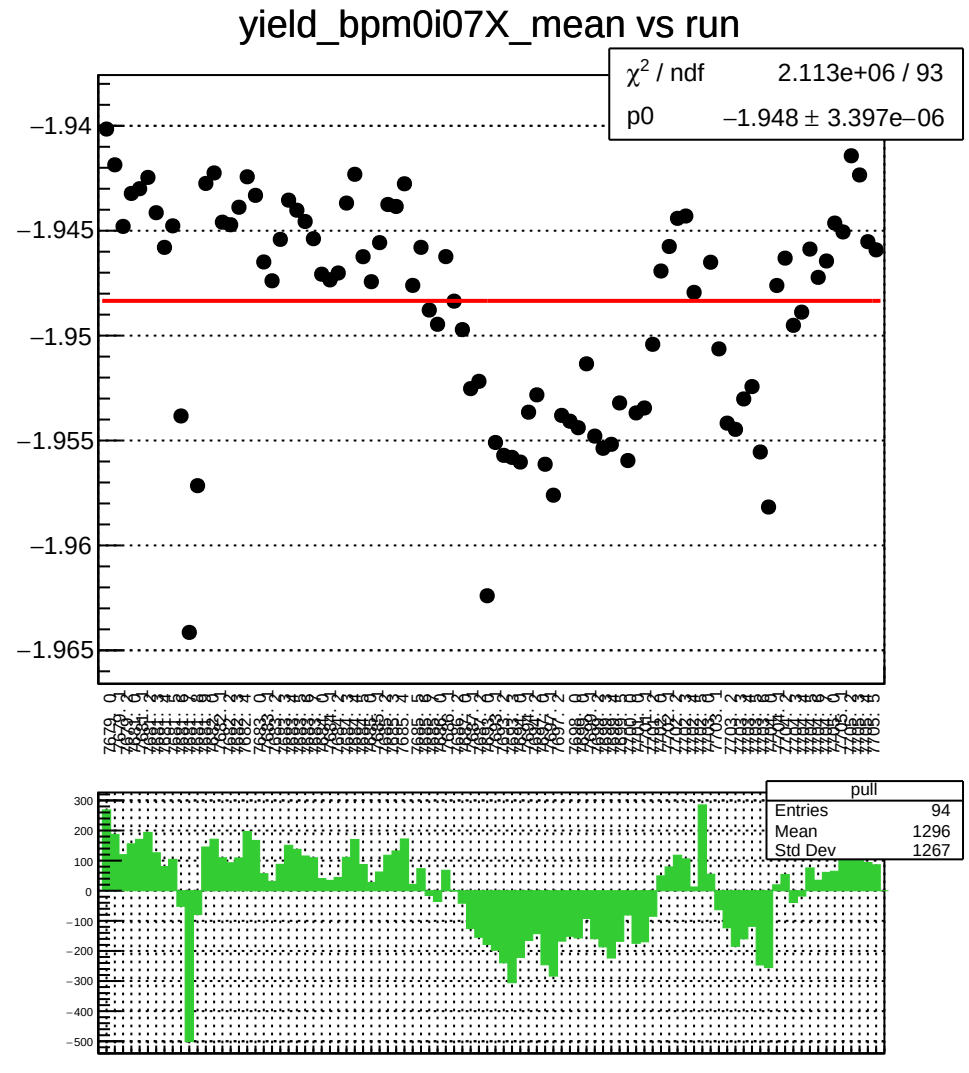

pull1D
Entries 94
Mean −7.389
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

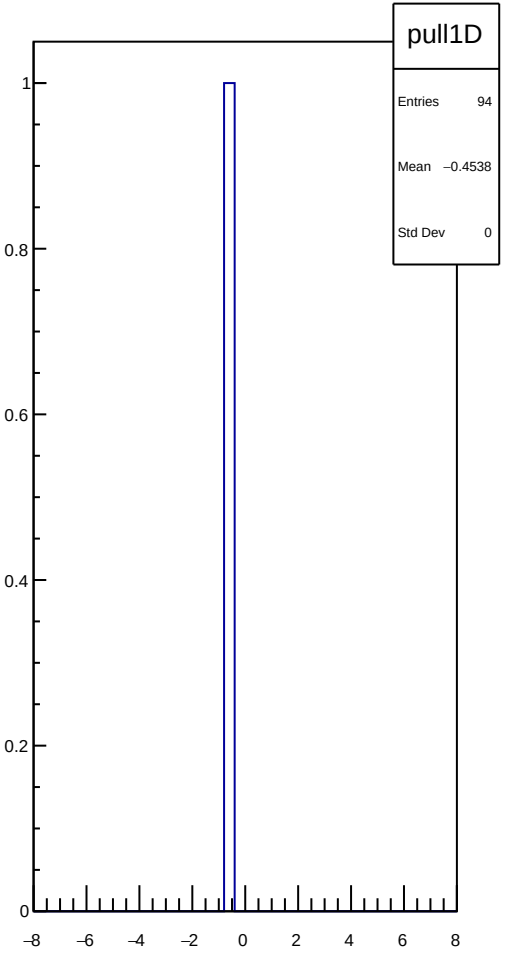

yield_bpm0i05X_rms vs run
χ² / ndf 7.202e+04 / 93
p0 0.005254 ± 4.015e−06
0.012
0.01
0.008
0.006
0.004

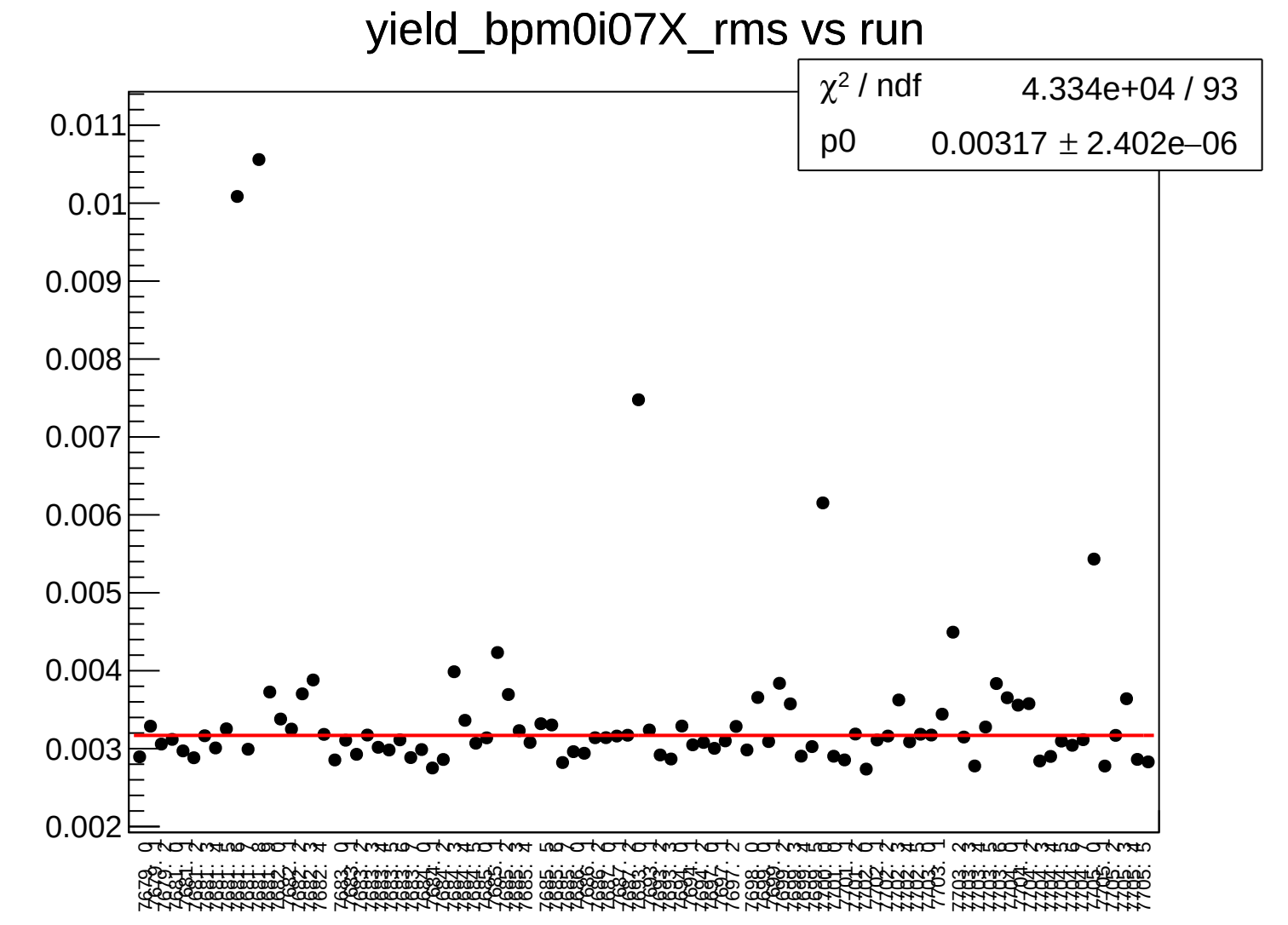

yield_bpm0i05Y_mean vs run
χ² / ndf 4.481e+07 / 93
p0 −1.016 ± 4.2e−06
−0.9
−0.92
−0.94
−0.96
−0.98
−1
−1.02
−1.04
−1.06
pull
Entries 94
Mean 1517
Std Dev 1452
3500
3000
2500
2000
1500
1000
500
0
−500
−1000

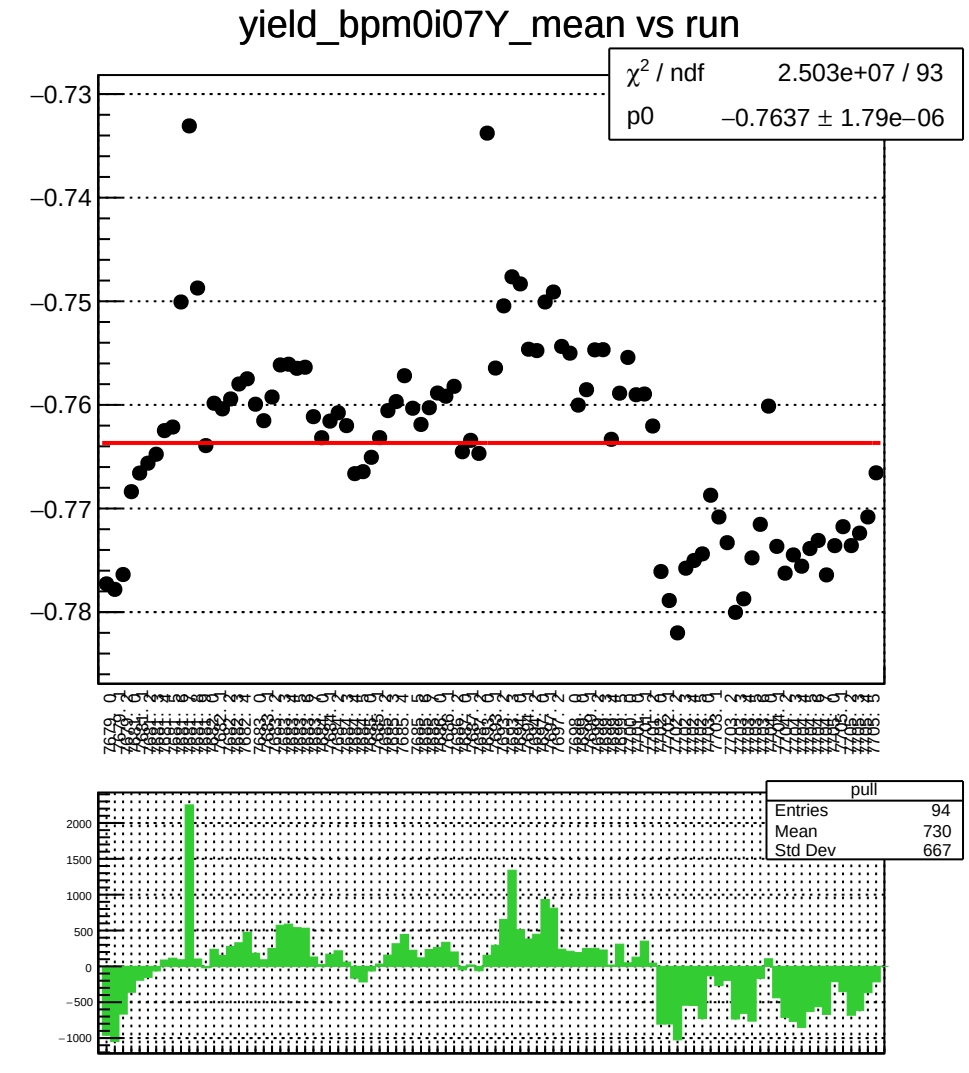

pull1D
Entries 94
Mean −2.712
Std Dev 0.6902
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

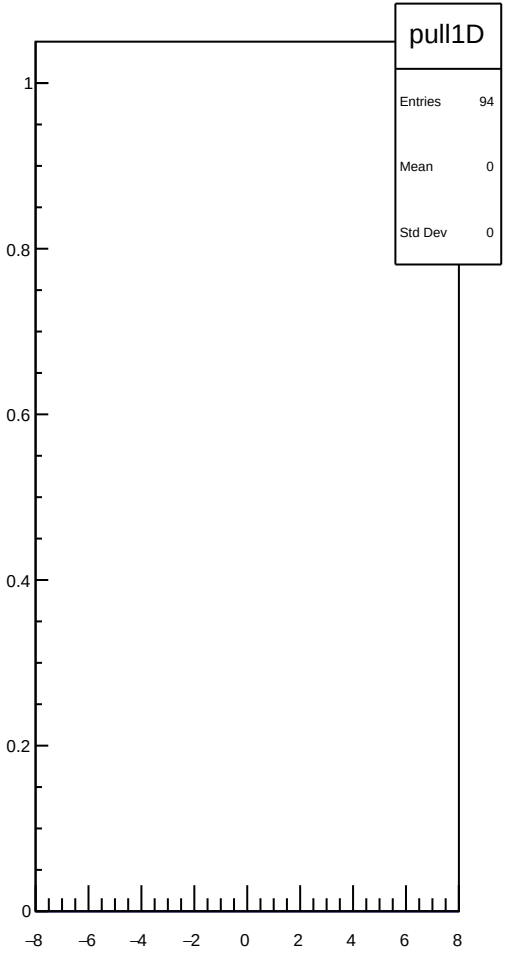

yield_bpm0i05Y_rms vs run
χ² / ndf 1.997e+05 / 93
p0 0.003739 ± 2.97e–06
0.05
0.04
0.03
0.02
0.01

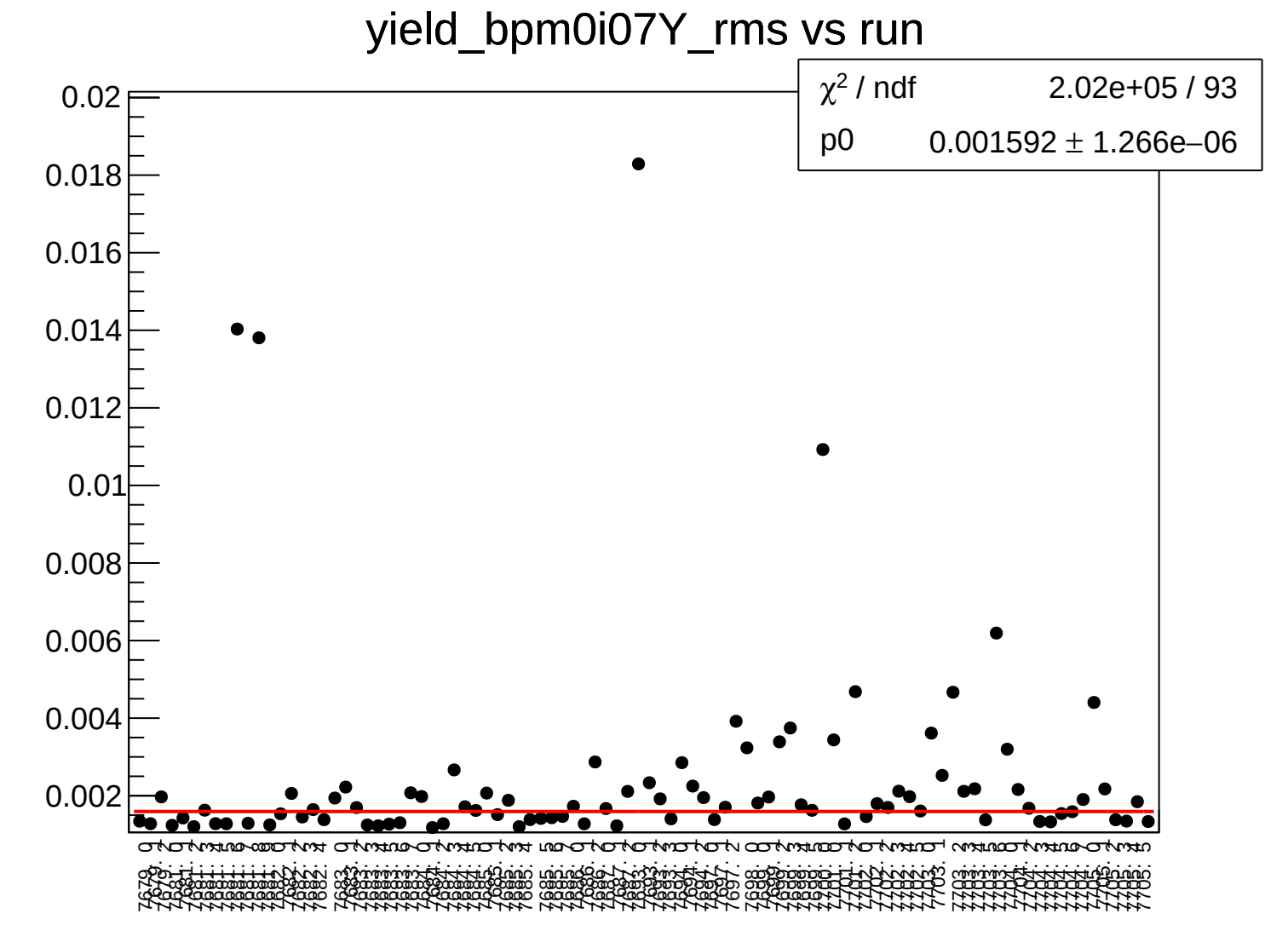

yield_bpm0i07X_mean vs run
χ² / ndf 2.113e+06 / 93
p0 −1.948 ± 3.397e−06
−1.94
−1.945
−1.95
−1.955
−1.96
−1.965
pull
Entries 94
Mean 1296
Std Dev 1267
300
200
100
0
−100
−200
−300
−400
−500

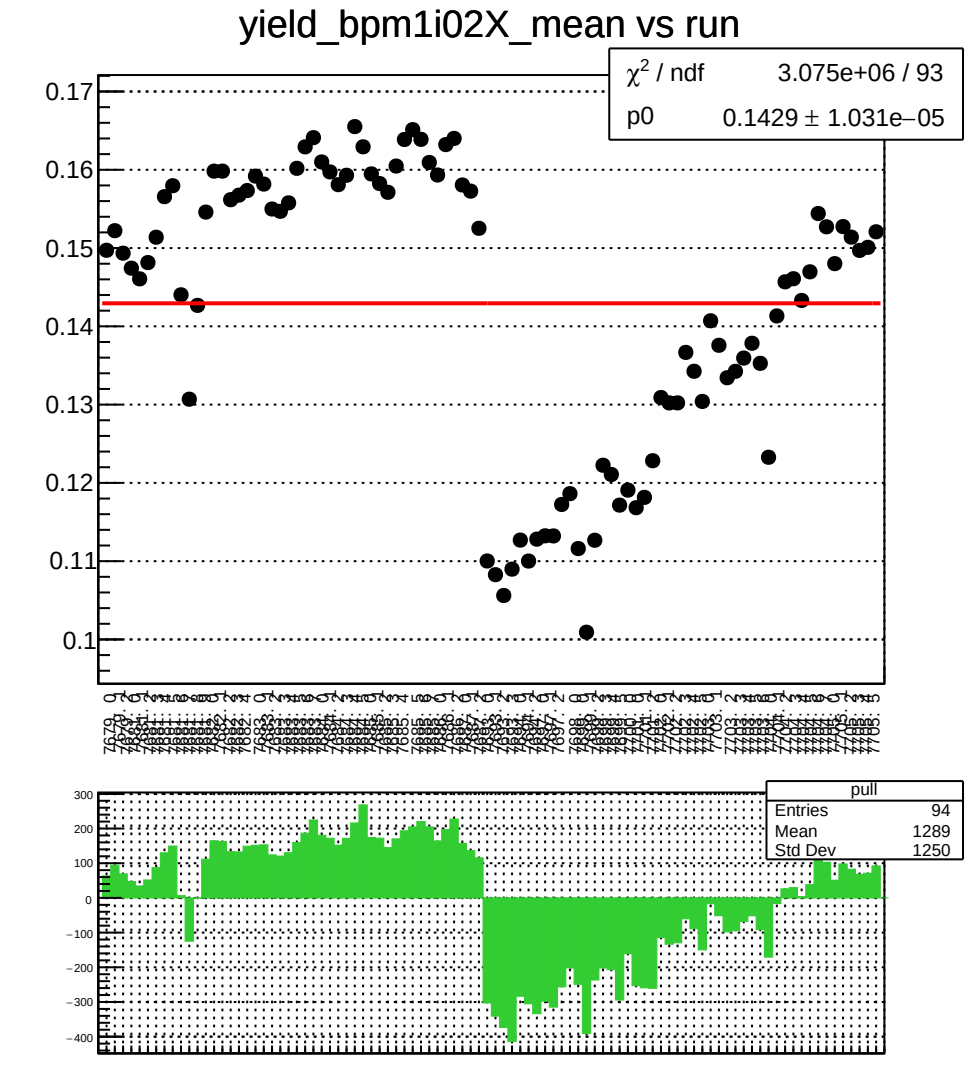

pull1D
Entries 94
Mean −0.4538
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

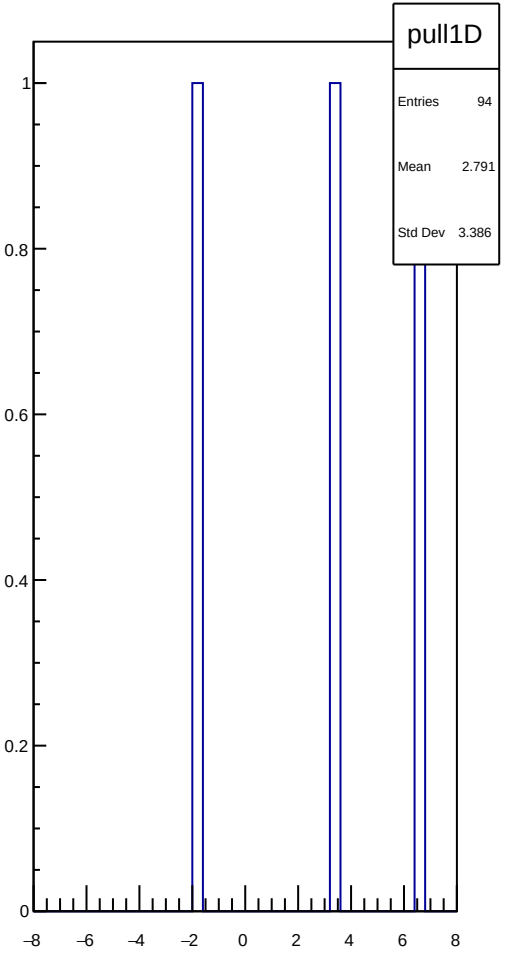

yield_bpm0i07X_rms vs run
χ² / ndf 4.334e+04 / 93
p0 0.00317 ± 2.402e–06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

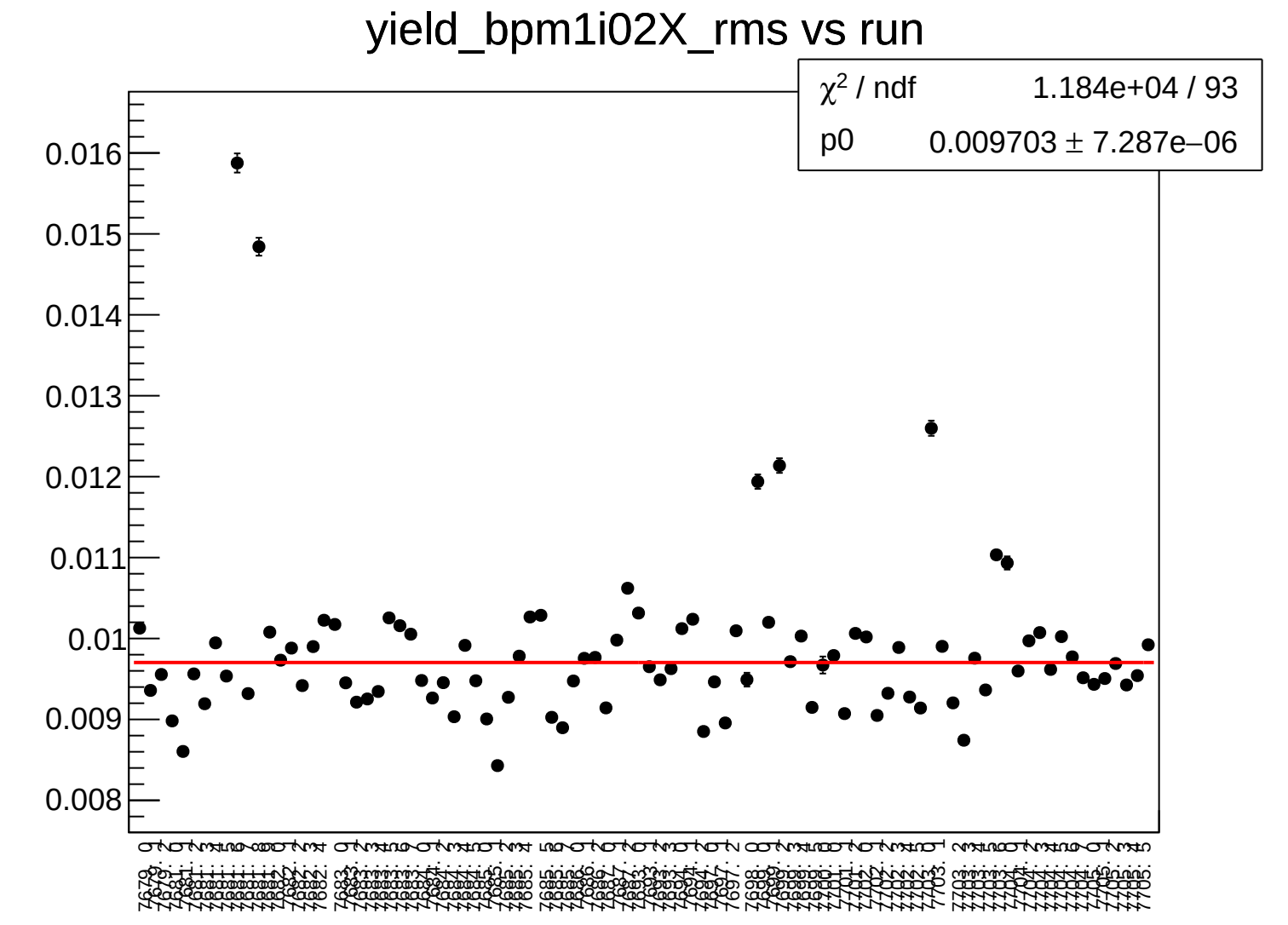

yield_bpm0i07Y_mean vs run
χ² / ndf 2.503e+07 / 93
p0 −0.7637 ± 1.79e−06
−0.73
−0.74
−0.75
−0.76
−0.77
−0.78
pull
Entries 94
Mean 730
Std Dev 667
2000
1500
1000
500
0
−500
−1000

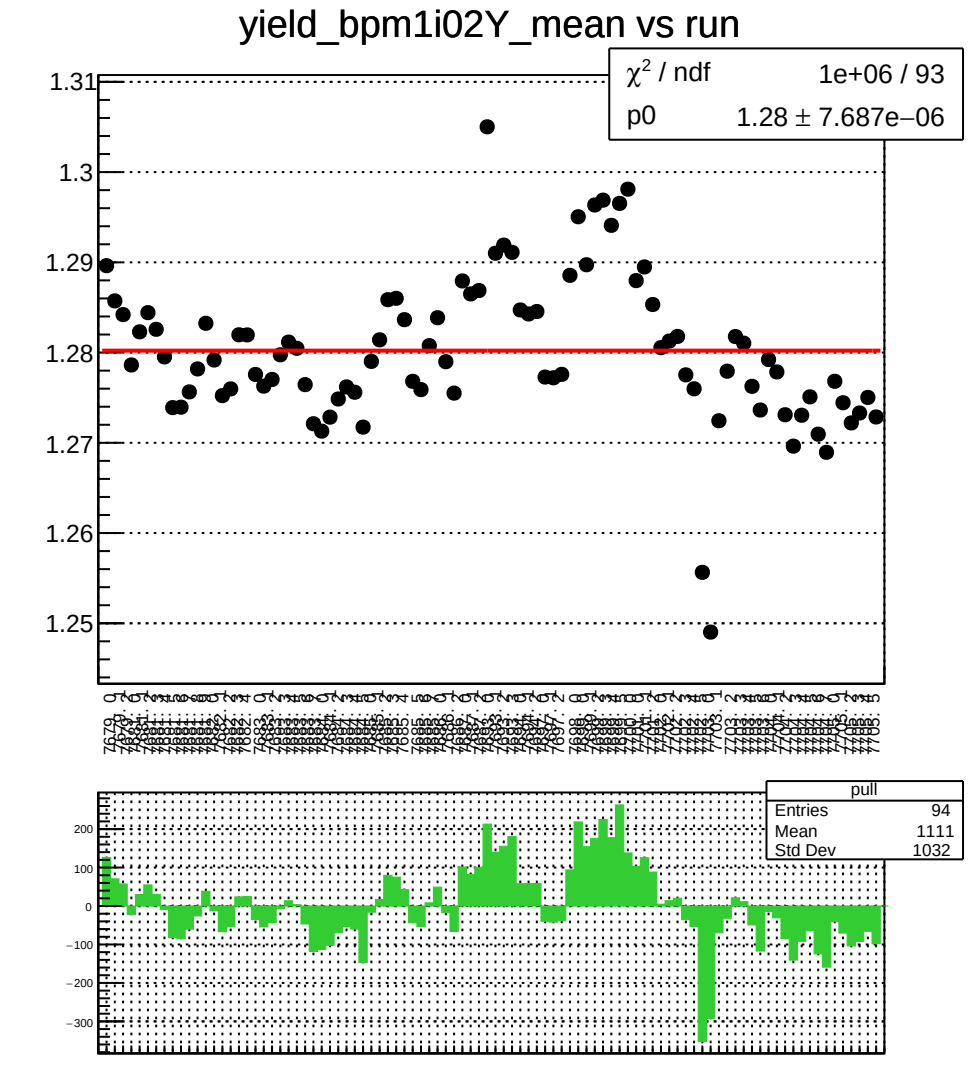

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

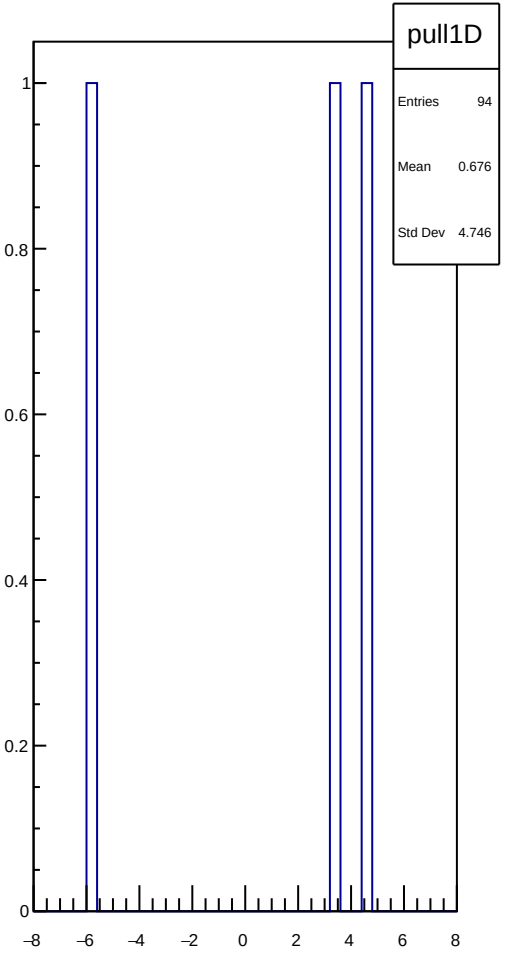

yield_bpm0i07Y_rms vs run
χ² / ndf 2.02e+05 / 93
p0 0.001592 ± 1.266e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

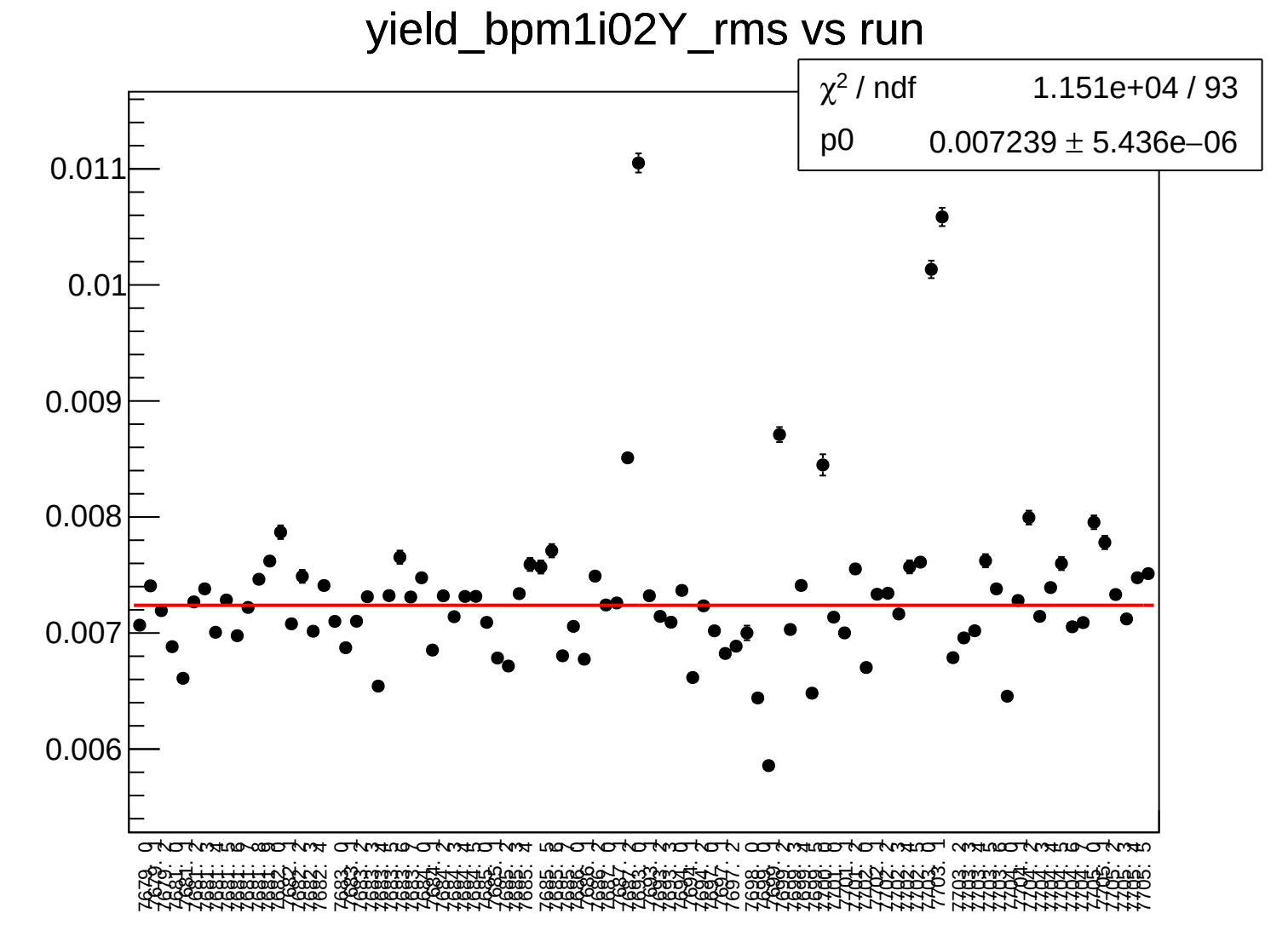

yield_bpm1i02X_mean vs run
χ² / ndf 3.075e+06 / 93
p0 0.1429 ± 1.031e−05
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
pull
Entries 94
Mean 1289
Std Dev 1250
300
200
100
0
−100
−200
−300
−400

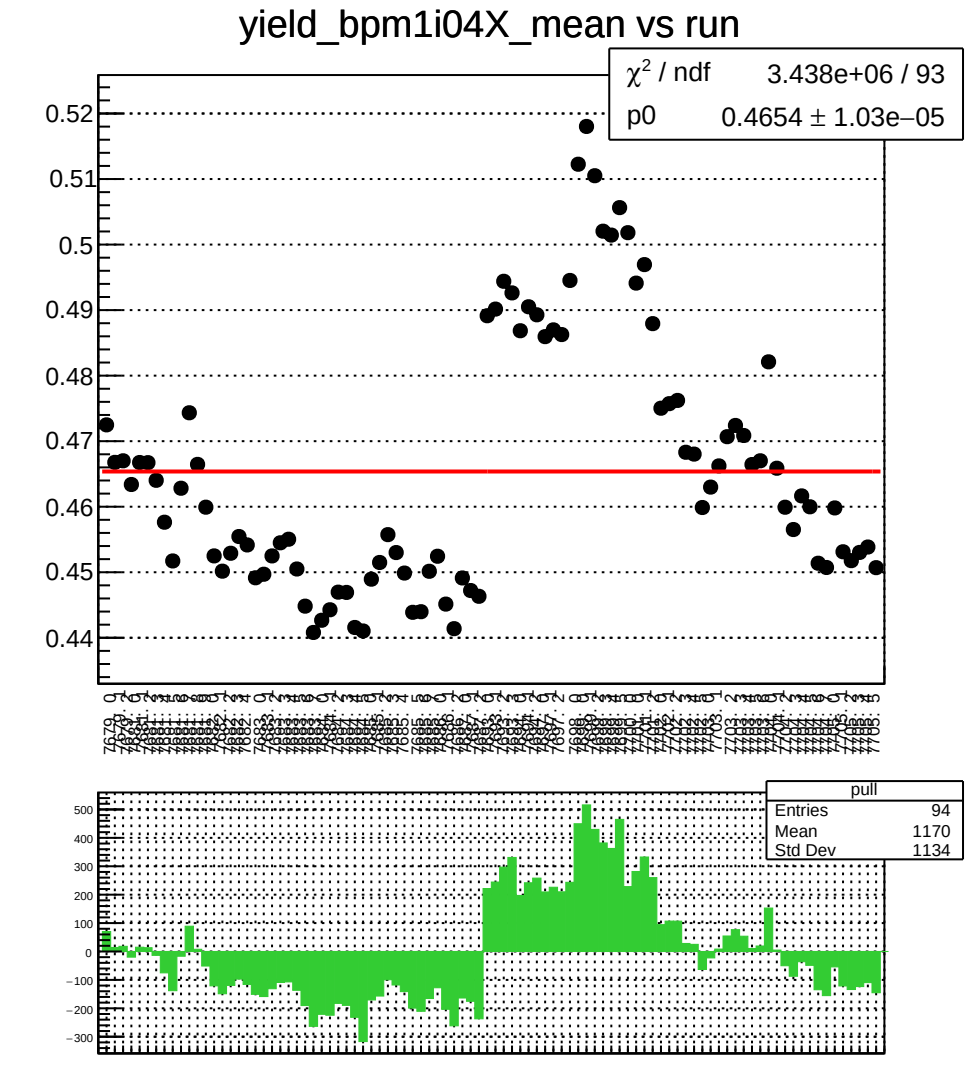

pull1D
Entries 94
Mean 2.791
Std Dev 3.386
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

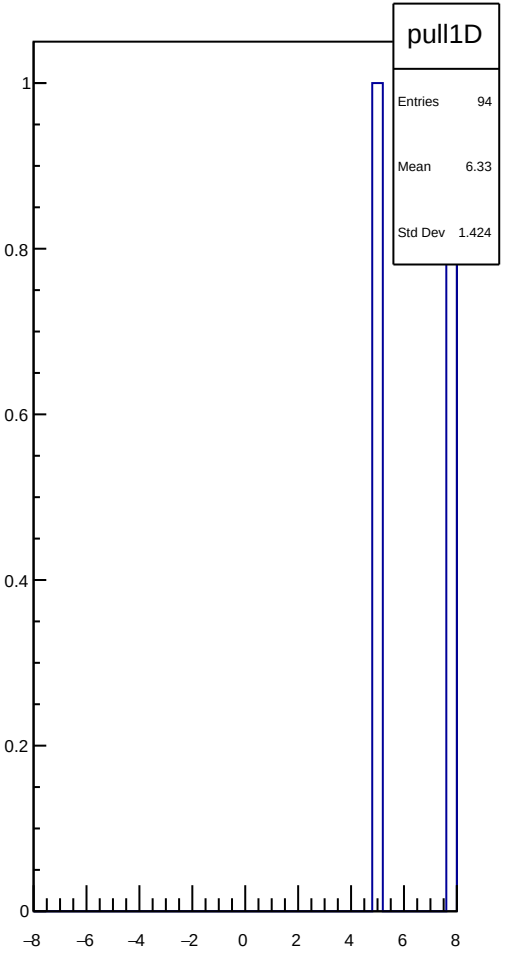

yield_bpm1i02X_rms vs run
χ² / ndf 1.184e+04 / 93
p0 0.009703 ± 7.287e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008


yield_bpm1i02Y_mean vs run
χ² / ndf 1e+06 / 93
p0 1.28 ± 7.687e−06
1.31
1.3
1.29
1.28
1.27
1.26
1.25
pull
Entries 94
Mean 1111
Std Dev 1032
200
100
0
−100
−200
−300

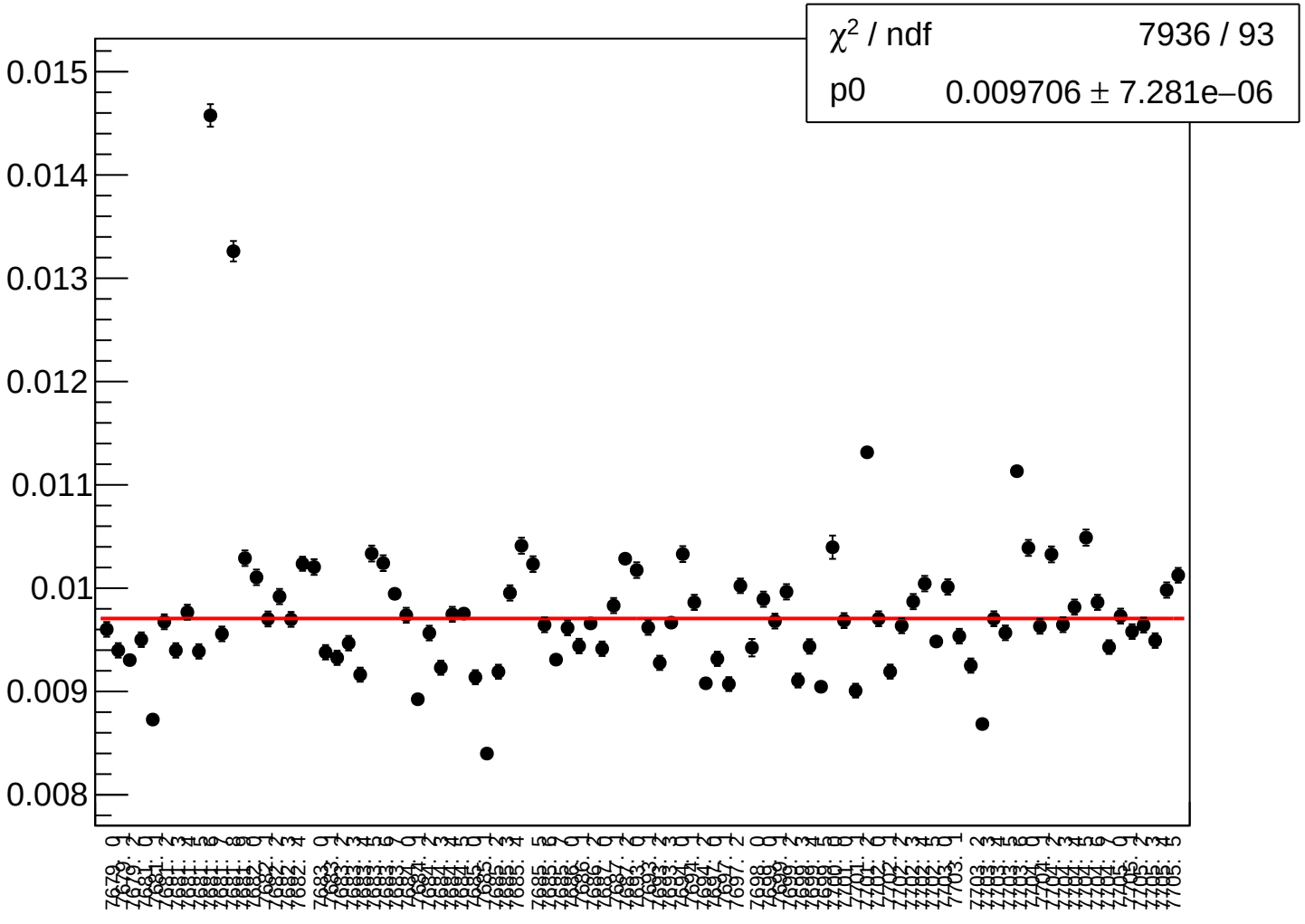

pull1D
Entries 94
Mean 0.676
Std Dev 4.746
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

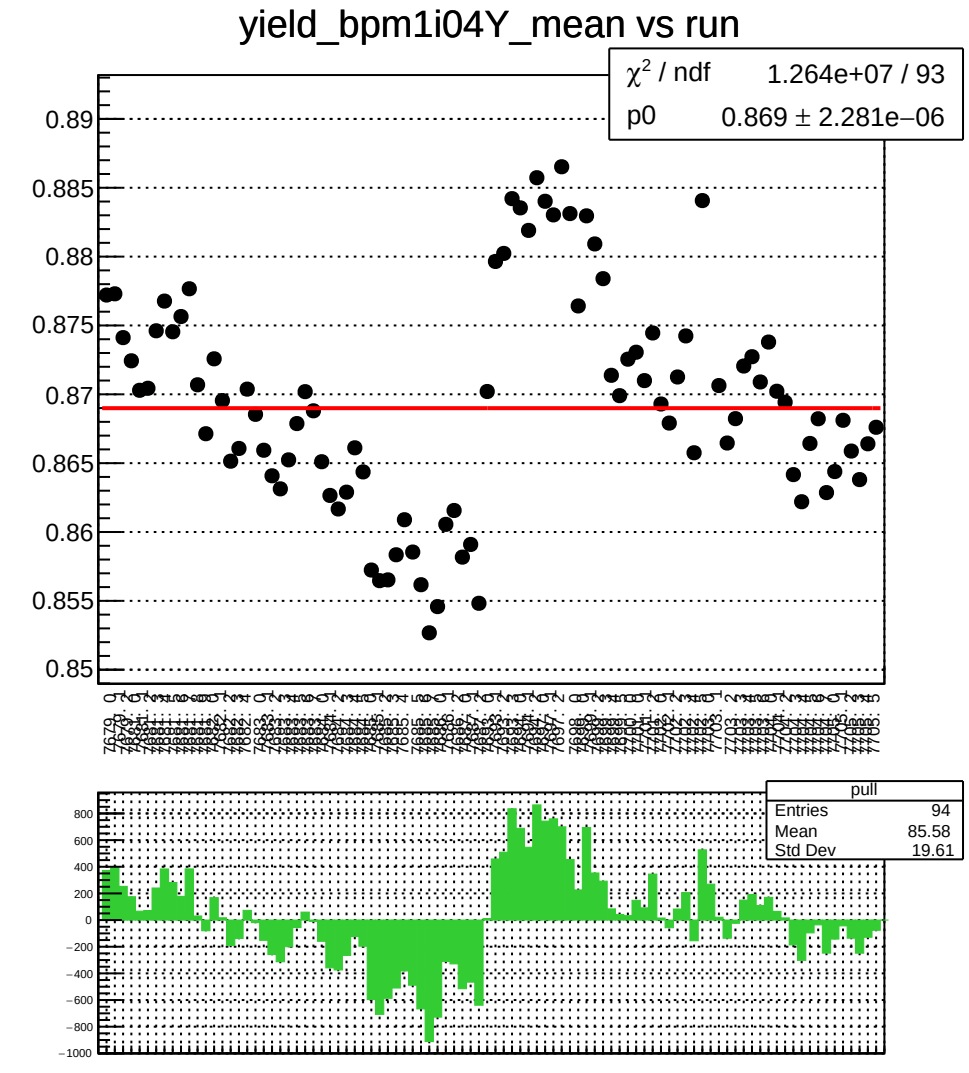

yield_bpm1i02Y_rms vs run
χ² / ndf 1.151e+04 / 93
p0 0.007239 ± 5.436e−06
0.011
0.01
0.009
0.008
0.007
0.006

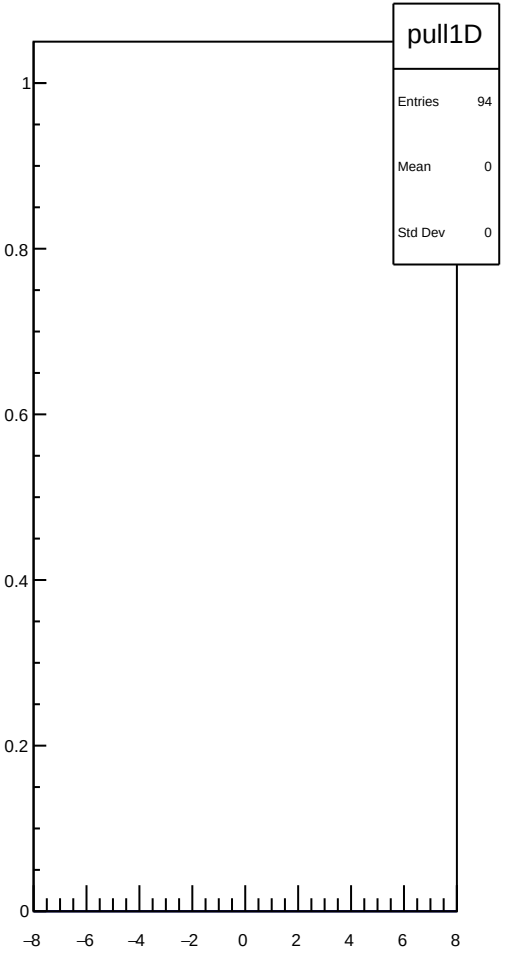

yield_bpm1i04X_mean vs run
χ² / ndf 3.438e+06 / 93
p0 0.4654 ± 1.03e−05
0.52
0.51
0.5
0.49
0.48
0.47
0.46
0.45
0.44
pull
Entries 94
Mean 1170
Std Dev 1134
500
400
300
200
100
0
−100
−200
−300

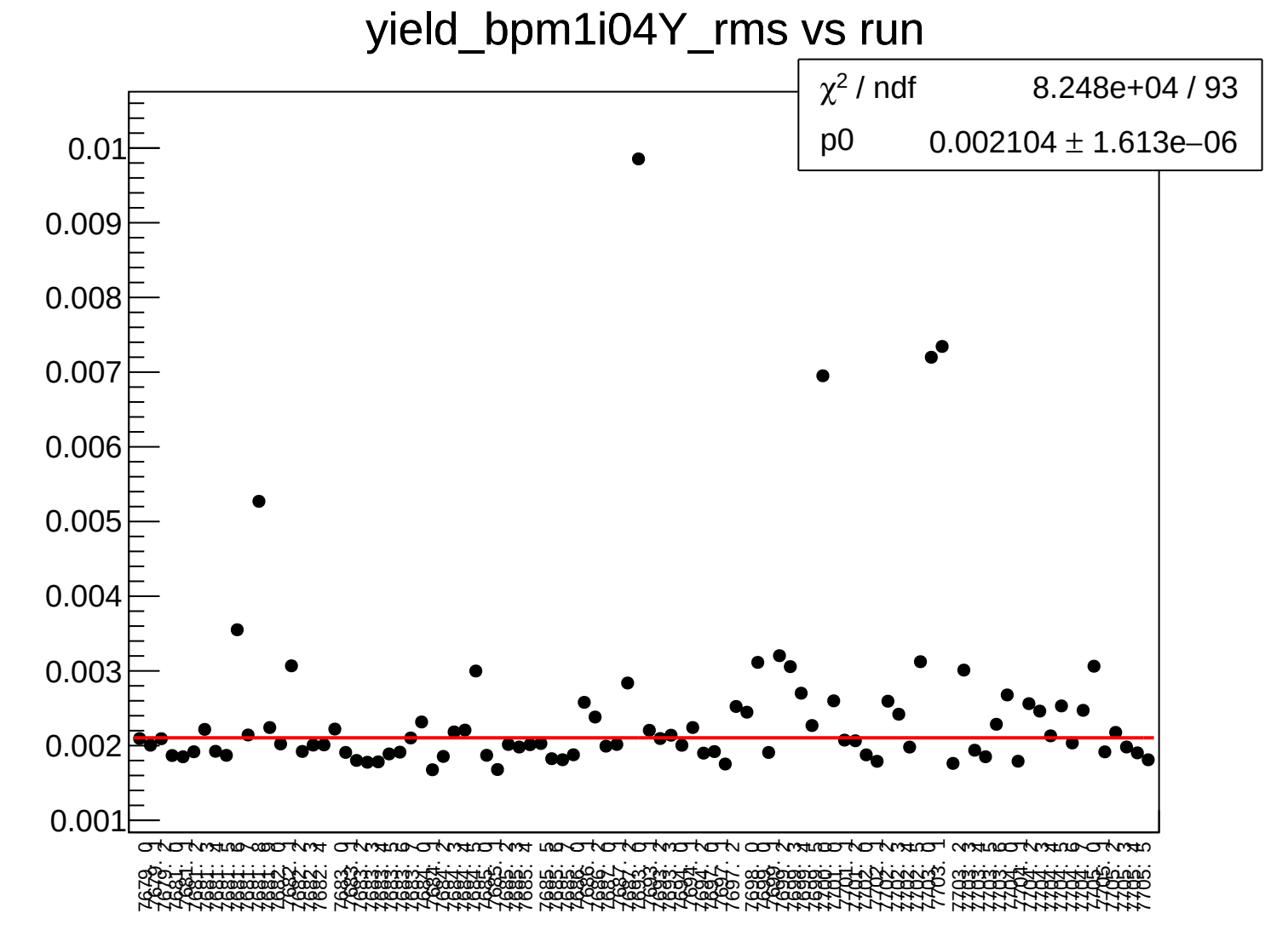

pull1D
Entries 94
Mean 6.33
Std Dev 1.424
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

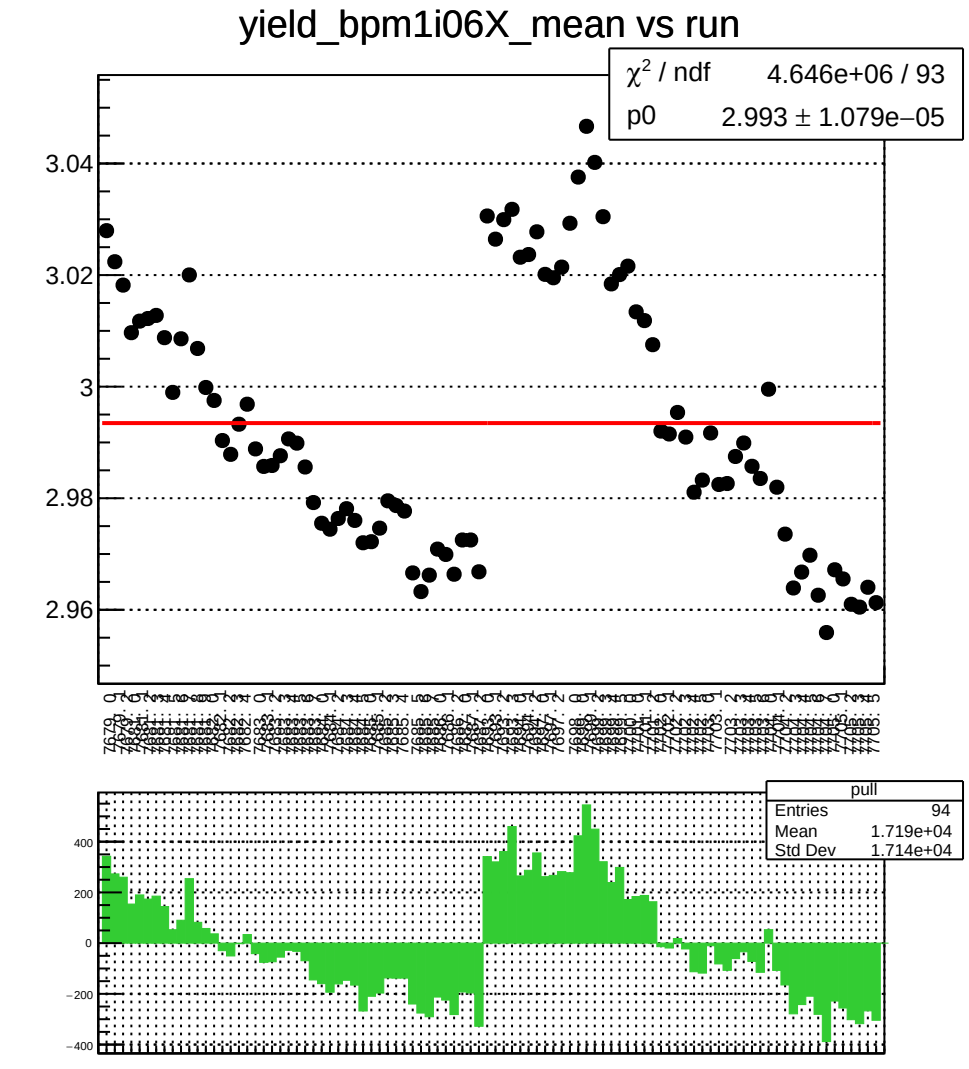
yield_bpm1i04X_rms vs run

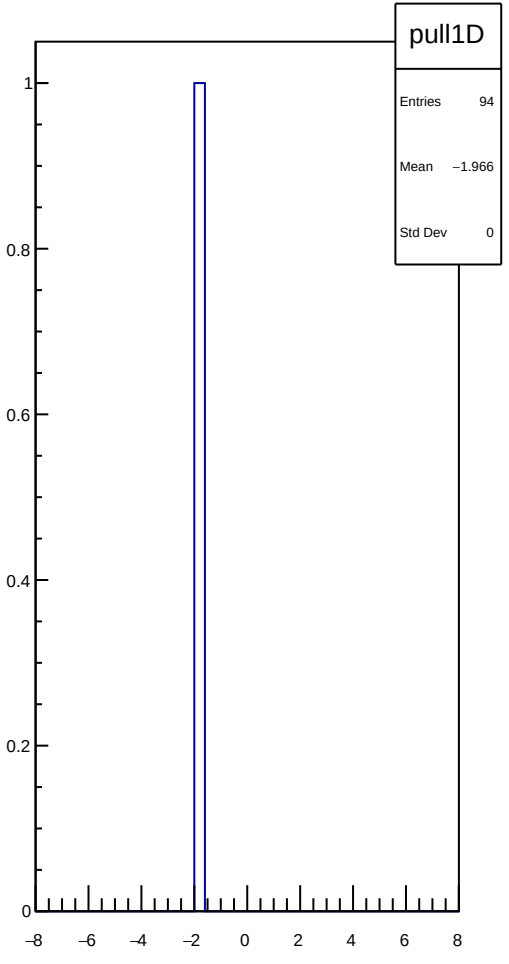


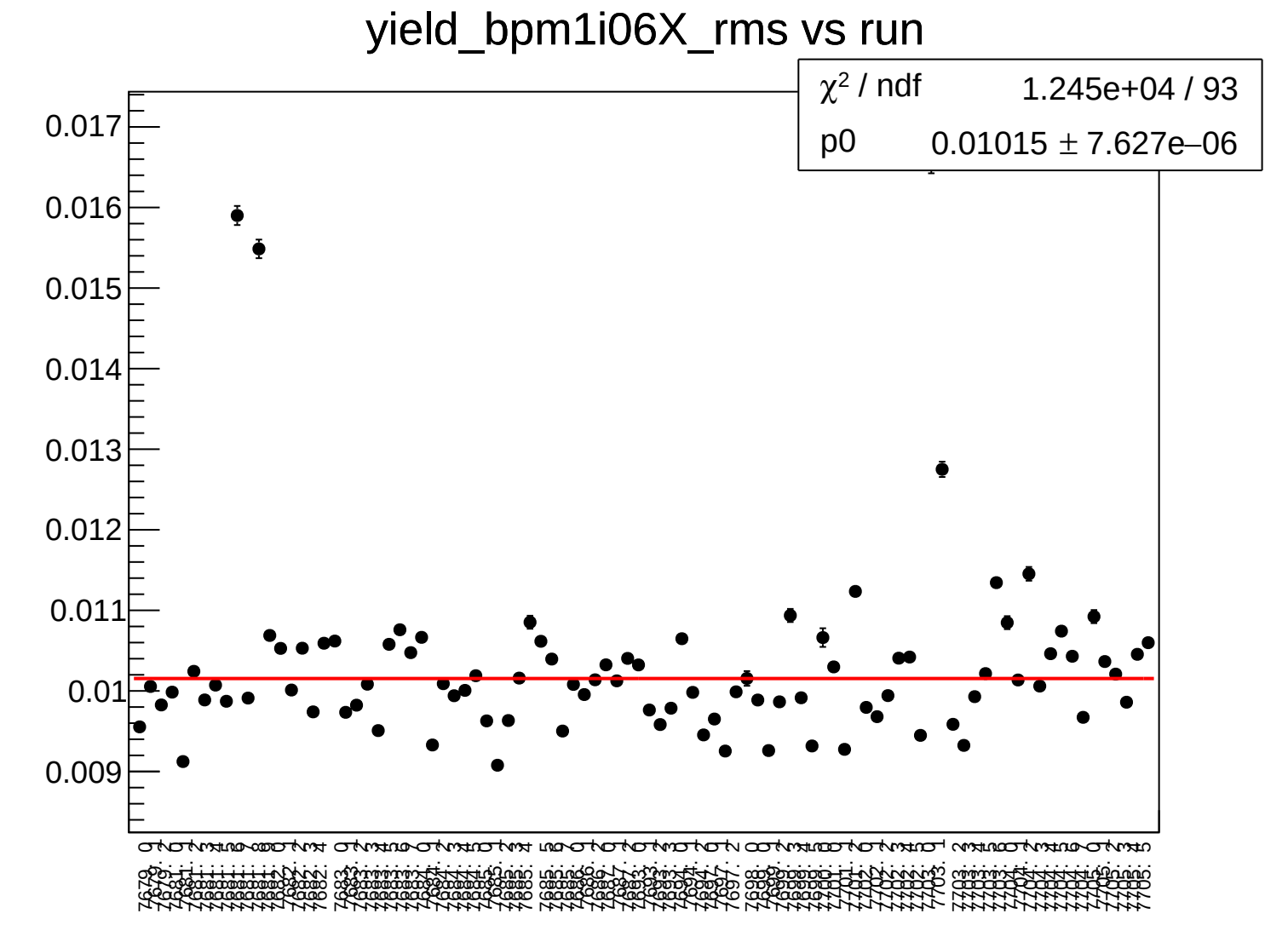

yield_bpm1i04Y_mean vs run
χ² / ndf 1.264e+07 / 93
p0 0.869 ± 2.281e−06
pull
Entries 94
Mean 85.58
Std Dev 19.61

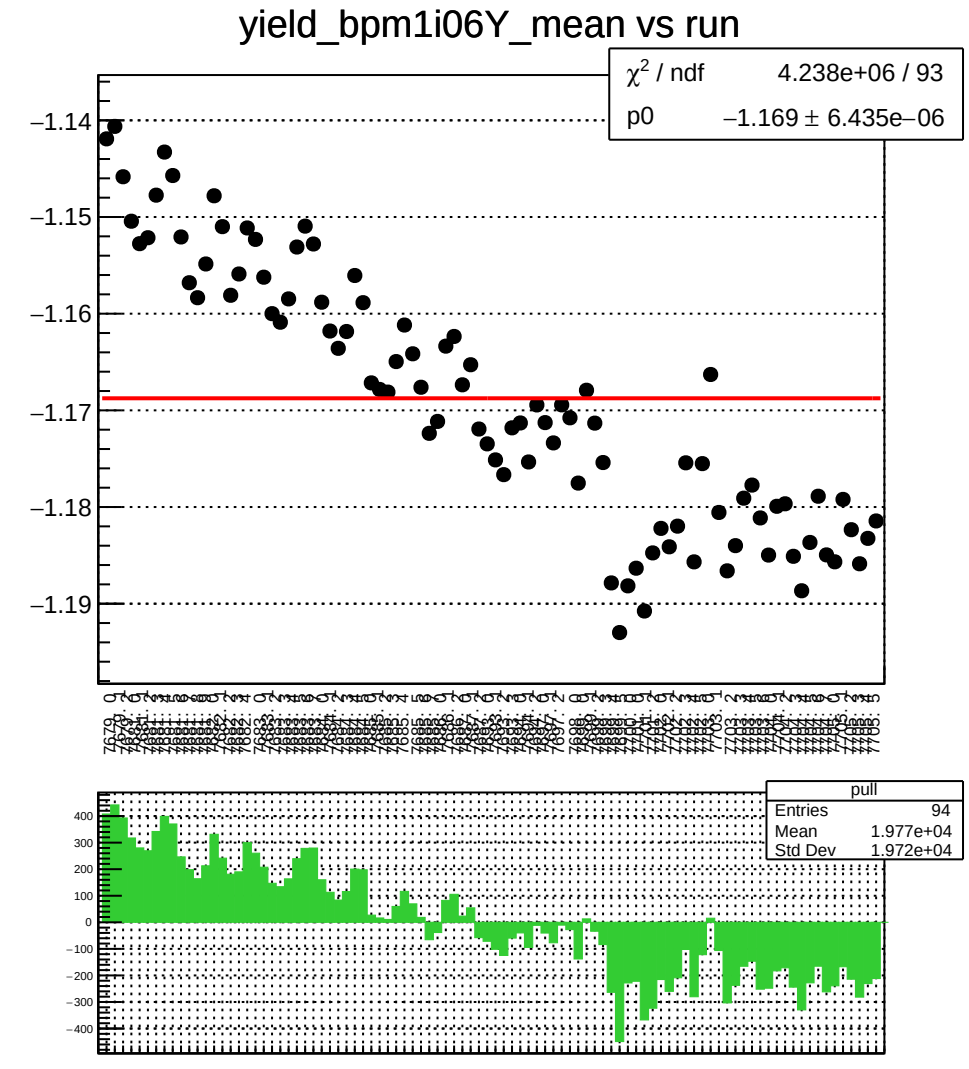

pull1D
Entries 94
Mean 0
Std Dev 0

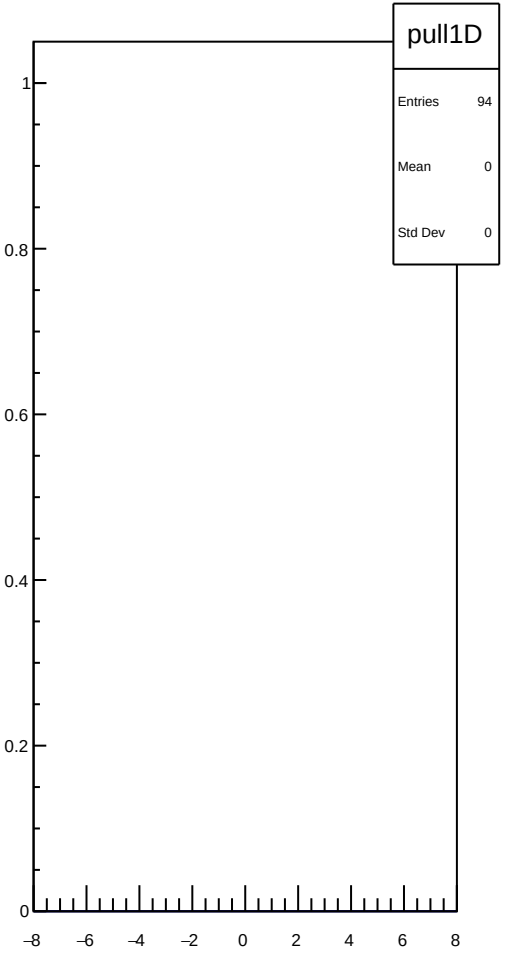

yield_bpm1i04Y_rms vs run
χ² / ndf 8.248e+04 / 93
p0 0.002104 ± 1.613e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

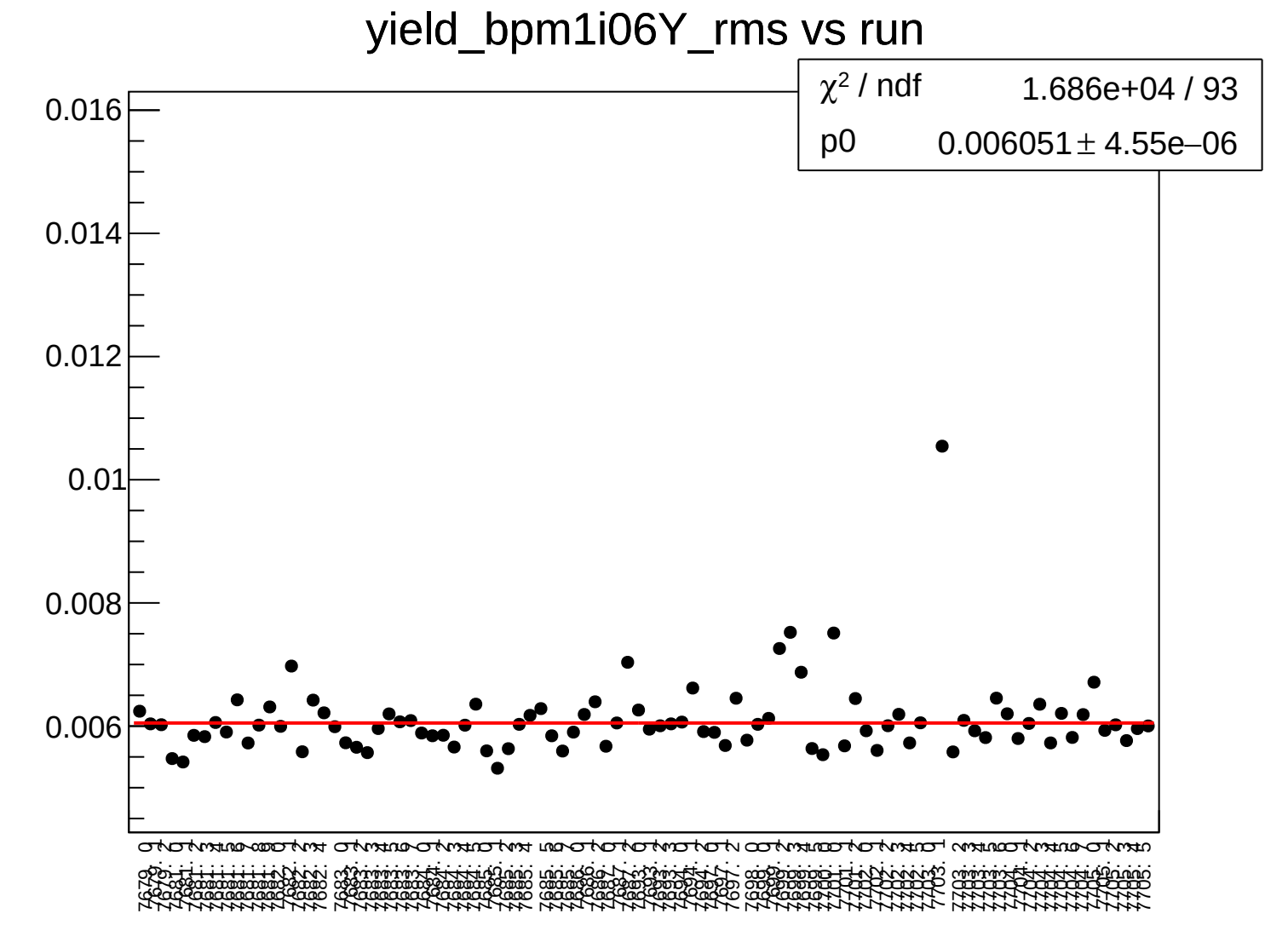

yield_bpm1i06X_mean vs run
χ² / ndf 4.646e+06 / 93
p0 2.993 ± 1.079e−05
3.04
3.02
3
2.98
2.96
pull
Entries 94
Mean 1.719e+04
Std Dev 1.714e+04
400
200
0
−200
−400

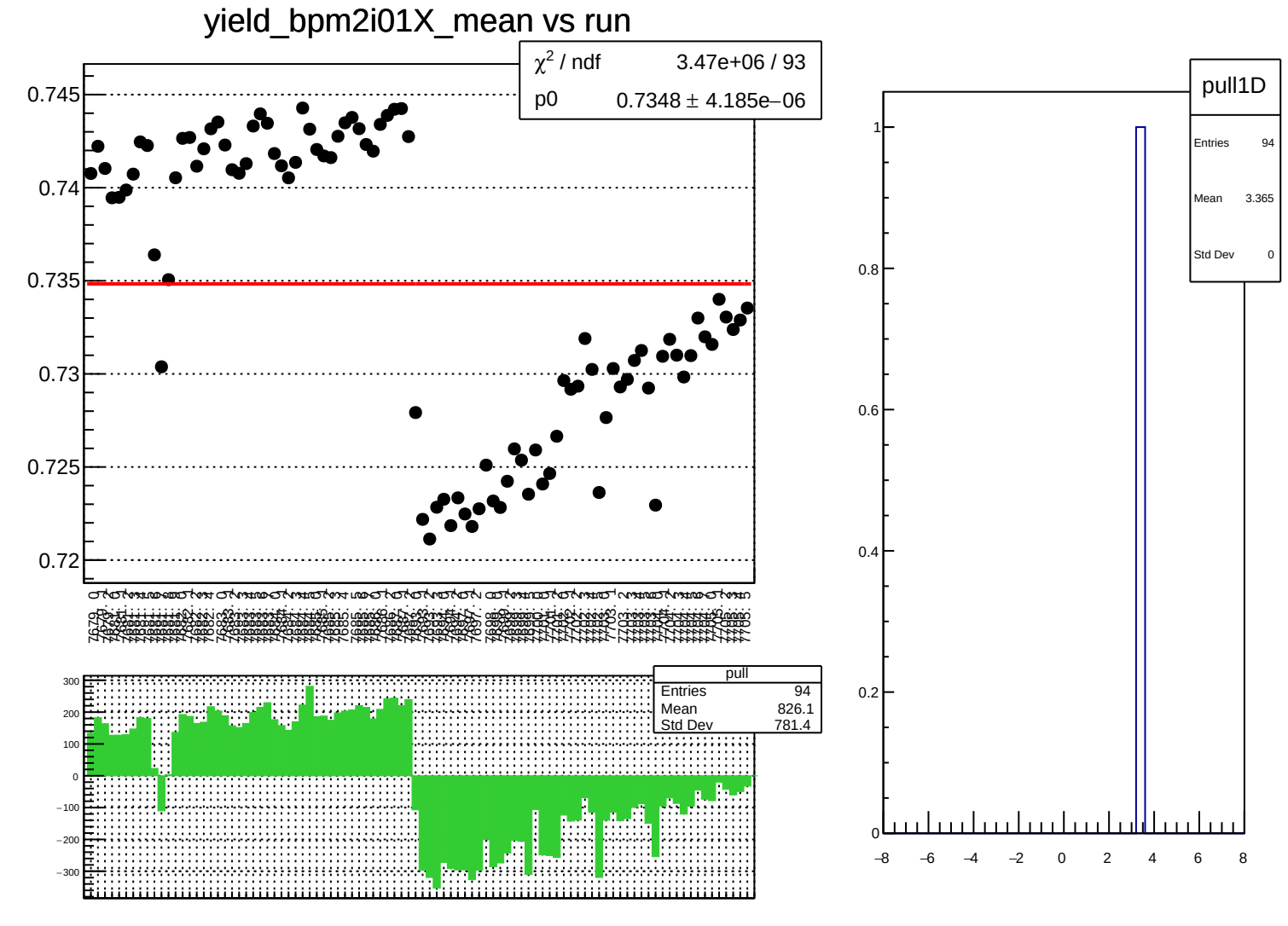

pull1D
Entries 94
Mean −1.966
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

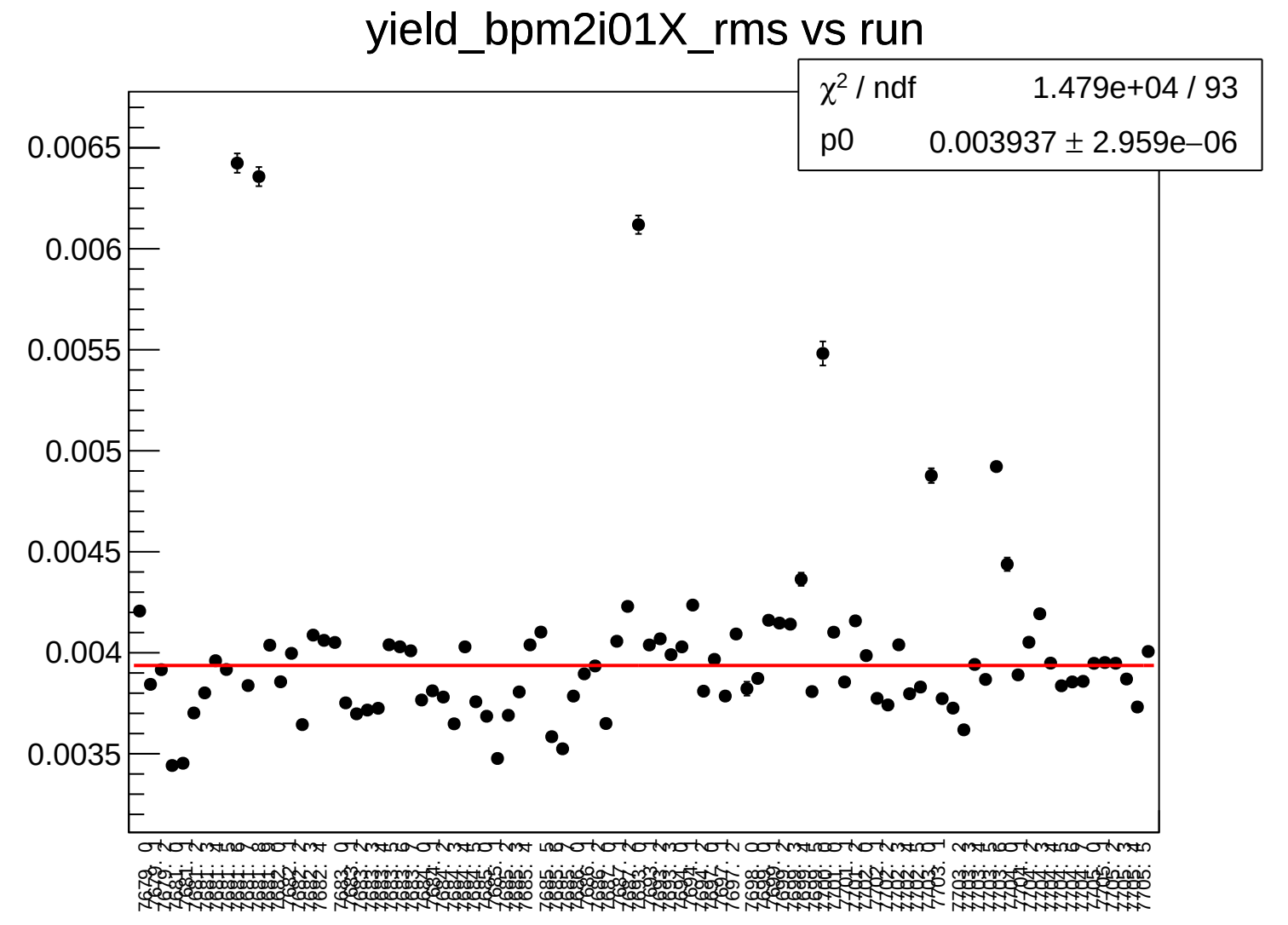

yield_bpm1i06X_rms vs run
χ² / ndf 1.245e+04 / 93
p0 0.01015 ± 7.627e–06
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

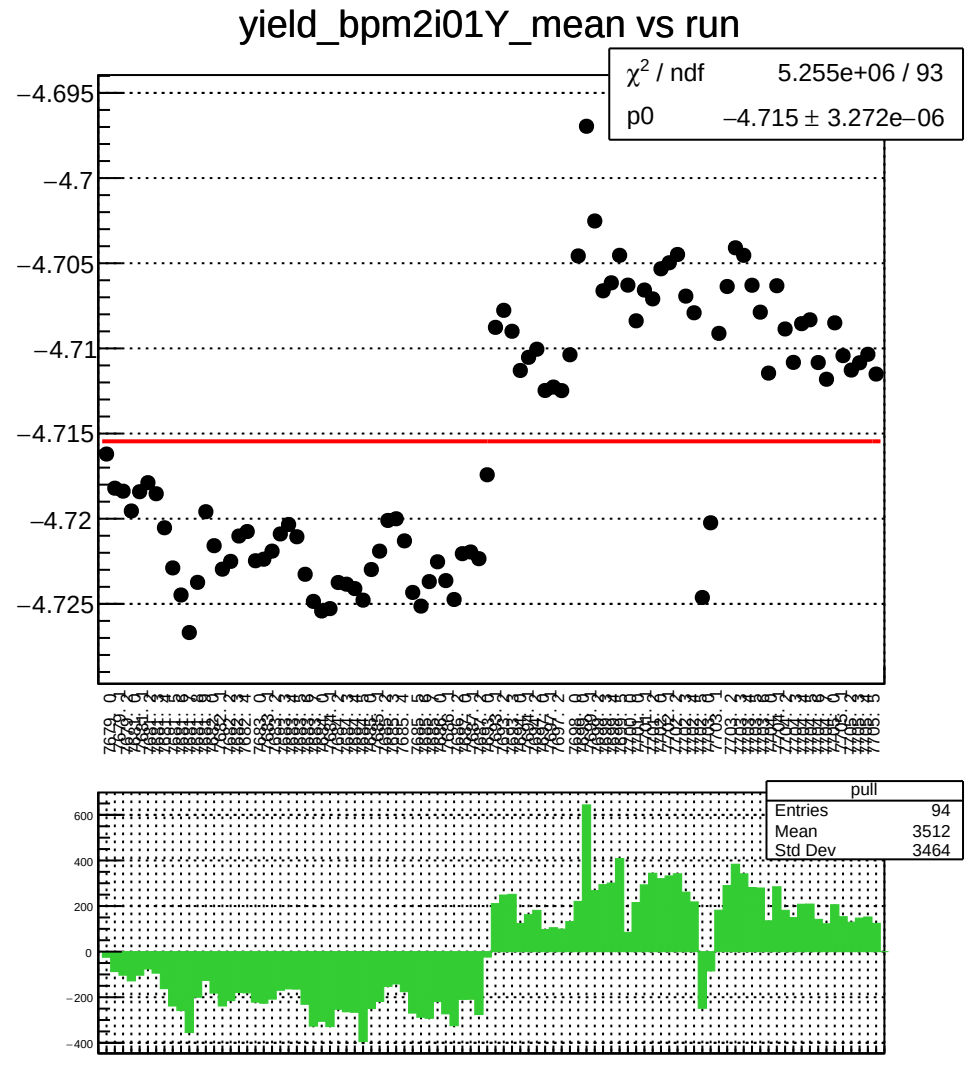

yield_bpm1i06Y_mean vs run
χ² / ndf 4.238e+06 / 93
p0 −1.169 ± 6.435e−06
−1.14
−1.15
−1.16
−1.17
−1.18
−1.19
pull
Entries 94
Mean 1.977e+04
Std Dev 1.972e+04
400
300
200
100
0
−100
−200
−300
−400

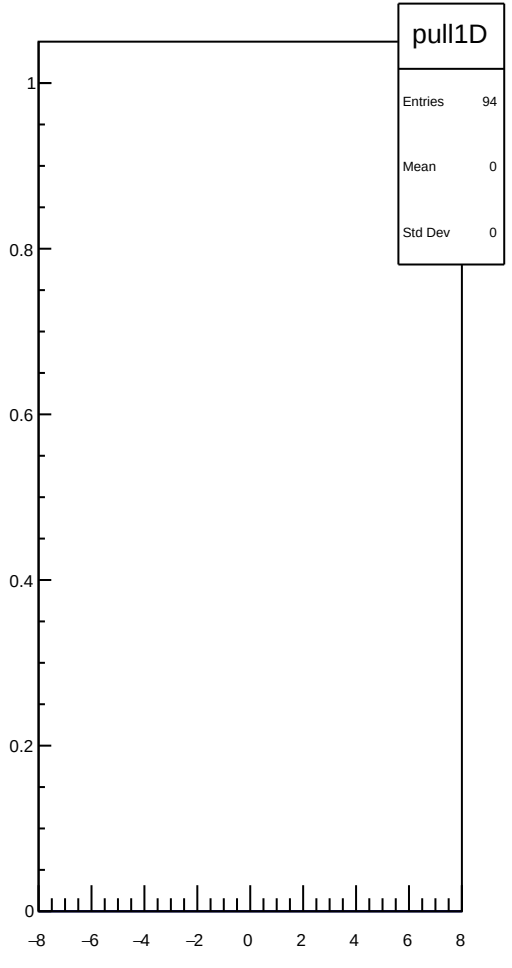

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

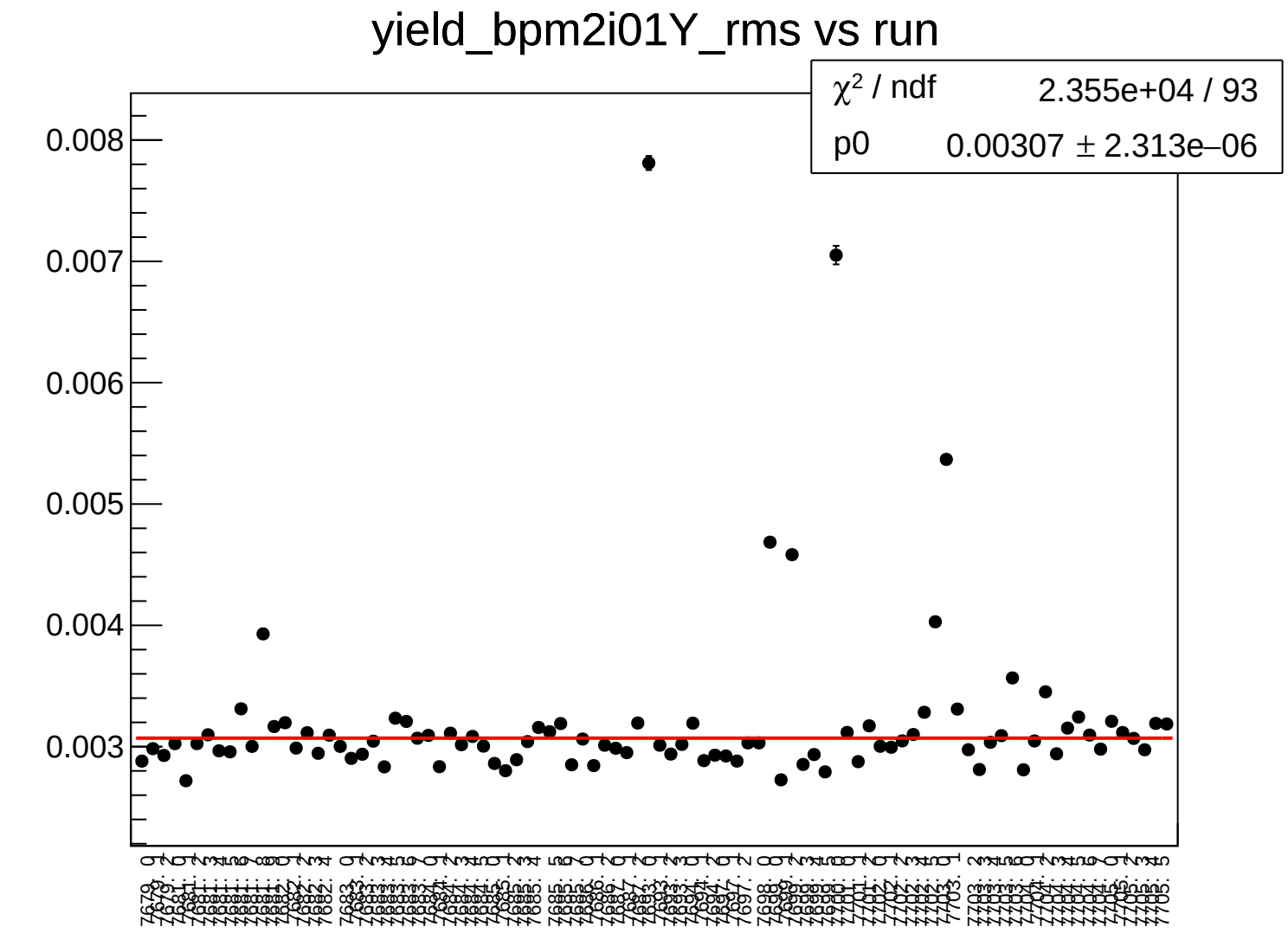

yield_bpm1i06Y_rms vs run
χ² / ndf 1.686e+04 / 93
p0 0.006051 ± 4.55e–06
0.016
0.014
0.012
0.01
0.008
0.006

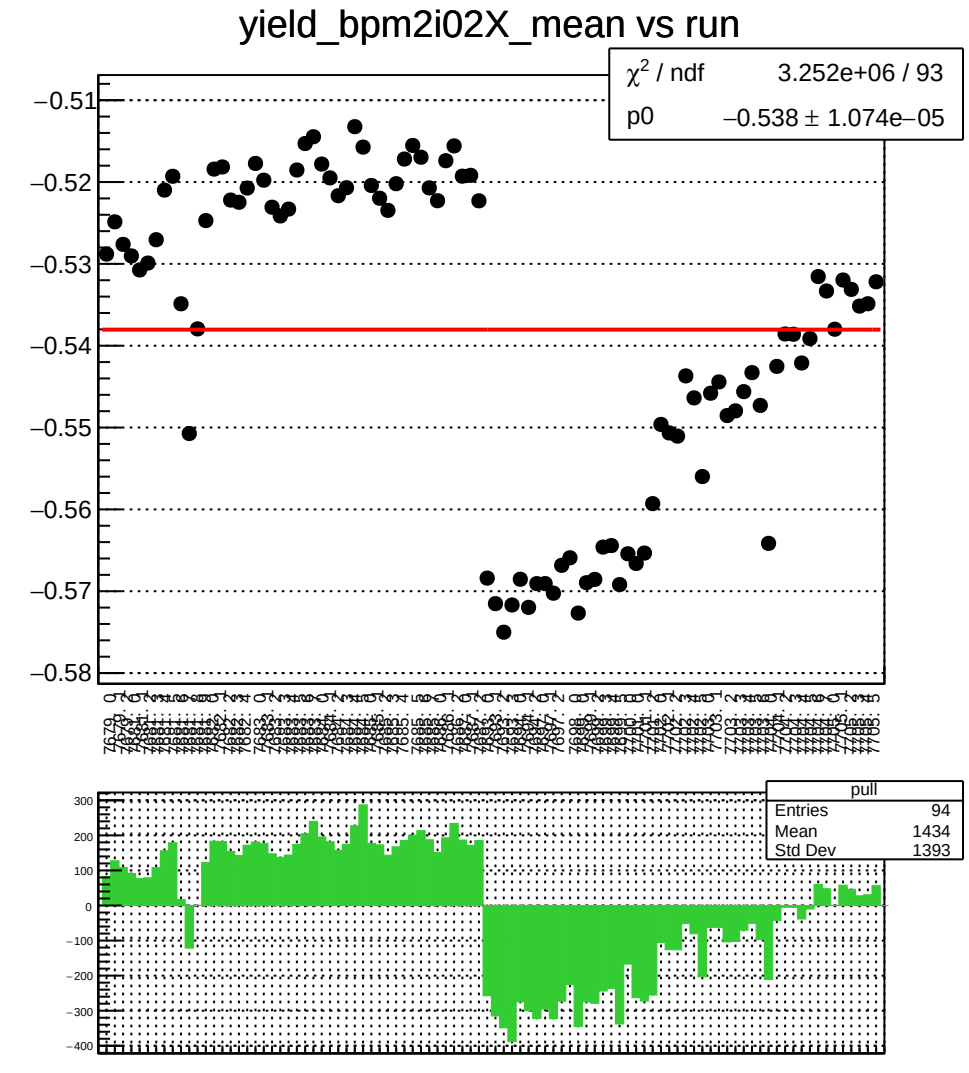

yield_bpm2i01X_mean vs run
χ² / ndf 3.47e+06 / 93
p0 0.7348 ± 4.185e−06
0.745
0.74
0.735
0.73
0.725
0.72
pull
Entries 94
Mean 826.1
Std Dev 781.4
300
200
100
0
−100
−200
−300
pull1D
Entries 94
Mean 3.365
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

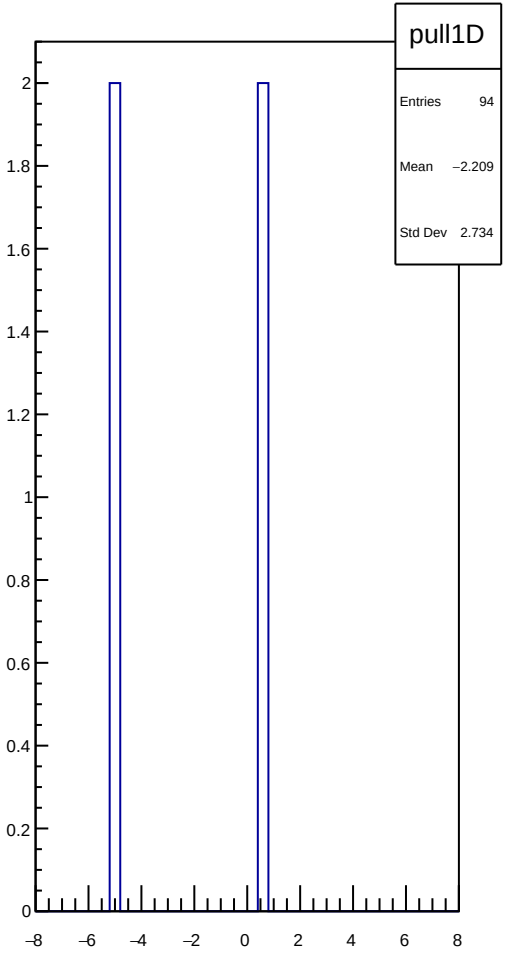

yield_bpm2i01X_rms vs run
χ² / ndf 1.479e+04 / 93
p0 0.003937 ± 2.959e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035

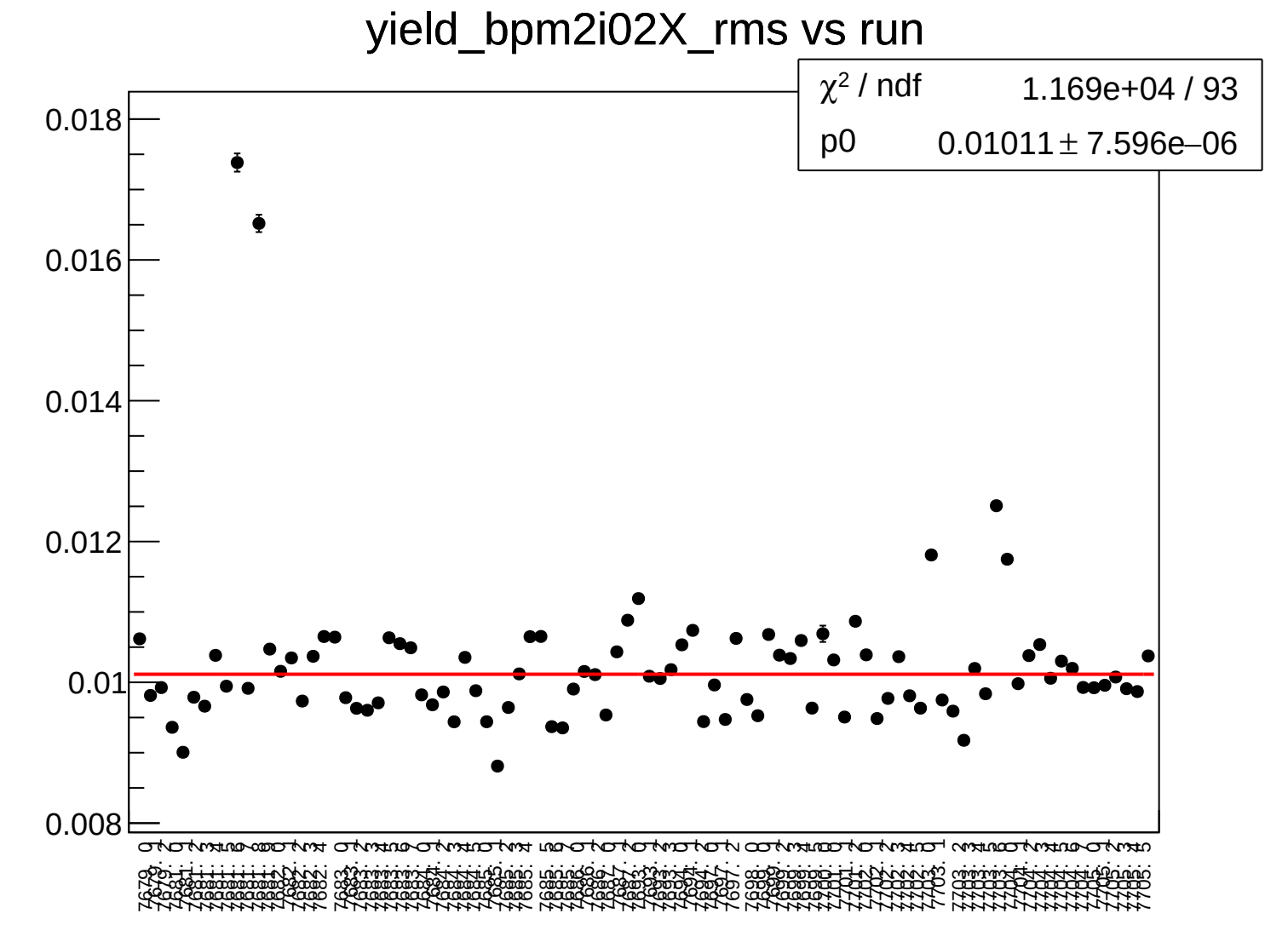

yield_bpm2i01Y_mean vs run
χ² / ndf 5.255e+06 / 93
p0 −4.715 ± 3.272e−06
−4.695
−4.7
−4.705
−4.71
−4.715
−4.72
−4.725
pull
Entries 94
Mean 3512
Std Dev 3464
600
400
200
0
−200
−400

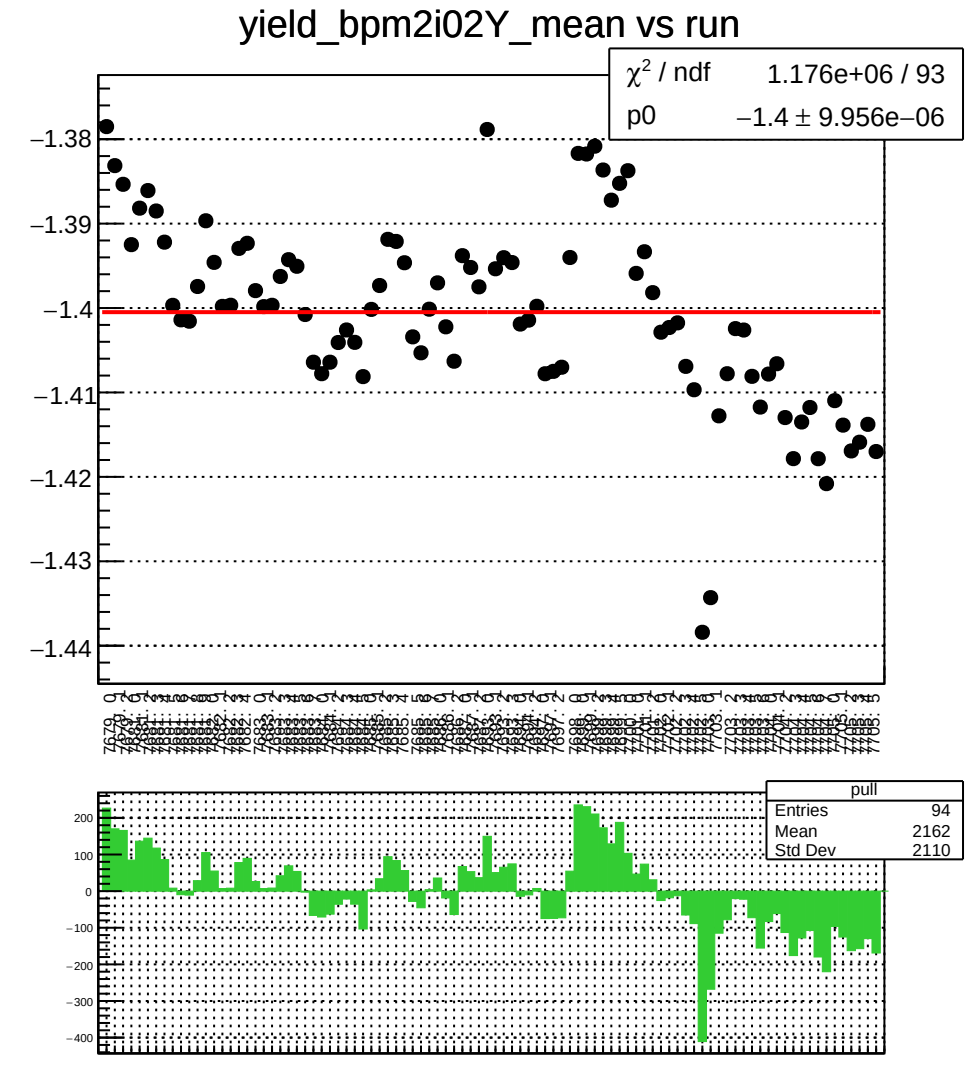

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

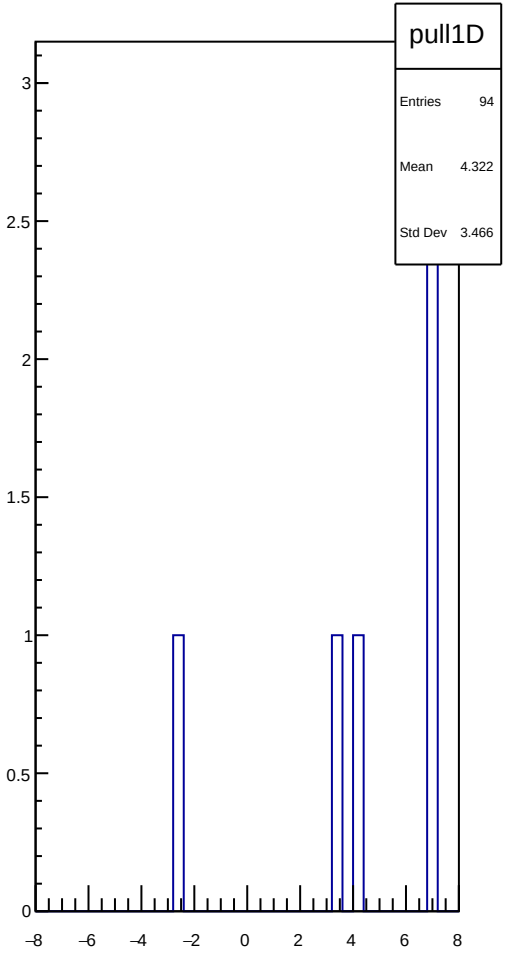

yield_bpm2i01Y_rms vs run
χ² / ndf 2.355e+04 / 93
p0 0.00307 ± 2.313e–06
0.008
0.007
0.006
0.005
0.004
0.003

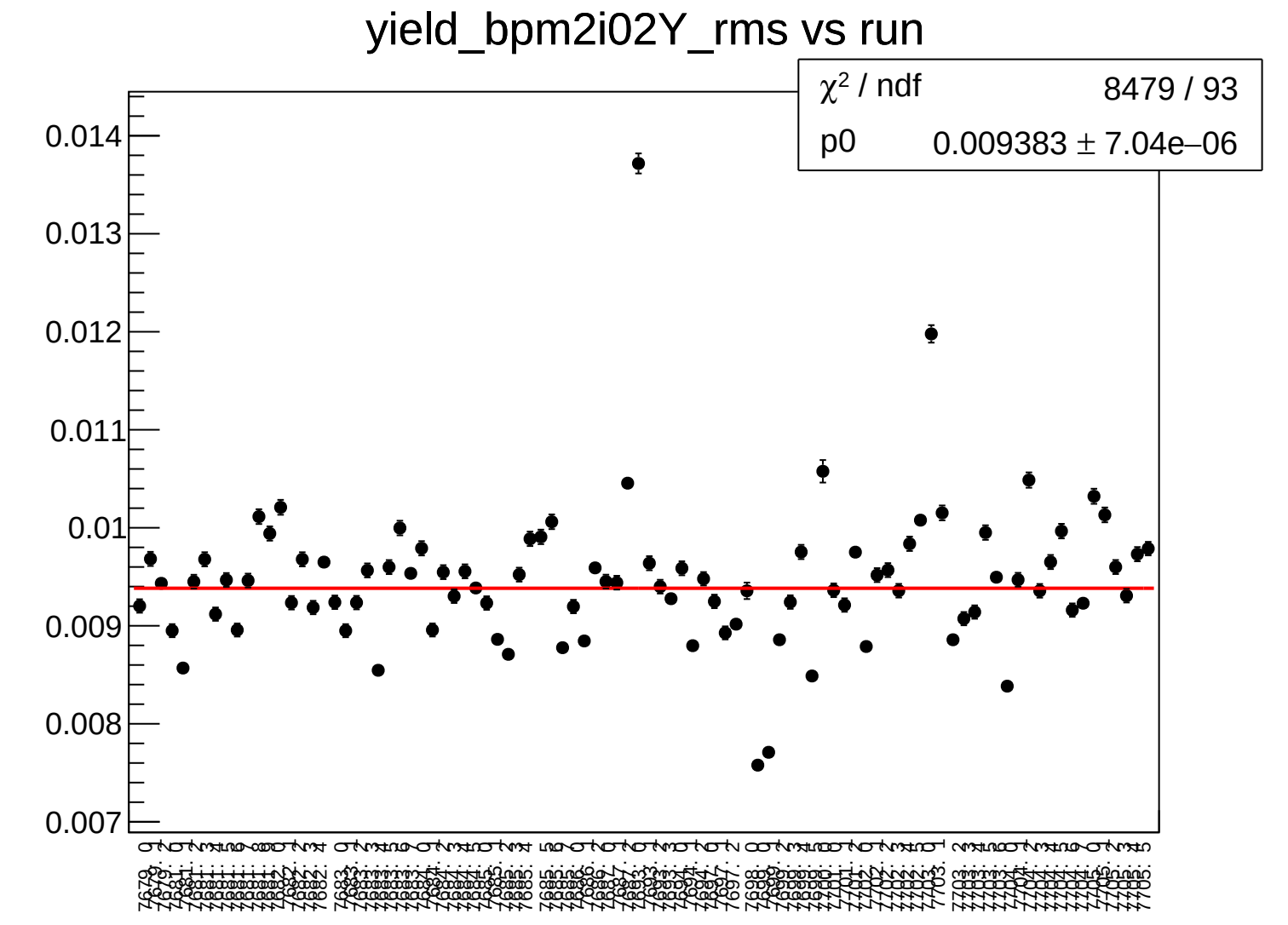

yield_bpm2i02X_mean vs run
χ² / ndf 3.252e+06 / 93
p0 −0.538 ± 1.074e−05
−0.51
−0.52
−0.53
−0.54
−0.55
−0.56
−0.57
−0.58
pull
Entries 94
Mean 1434
Std Dev 1393
300
200
100
0
−100
−200
−300
−400

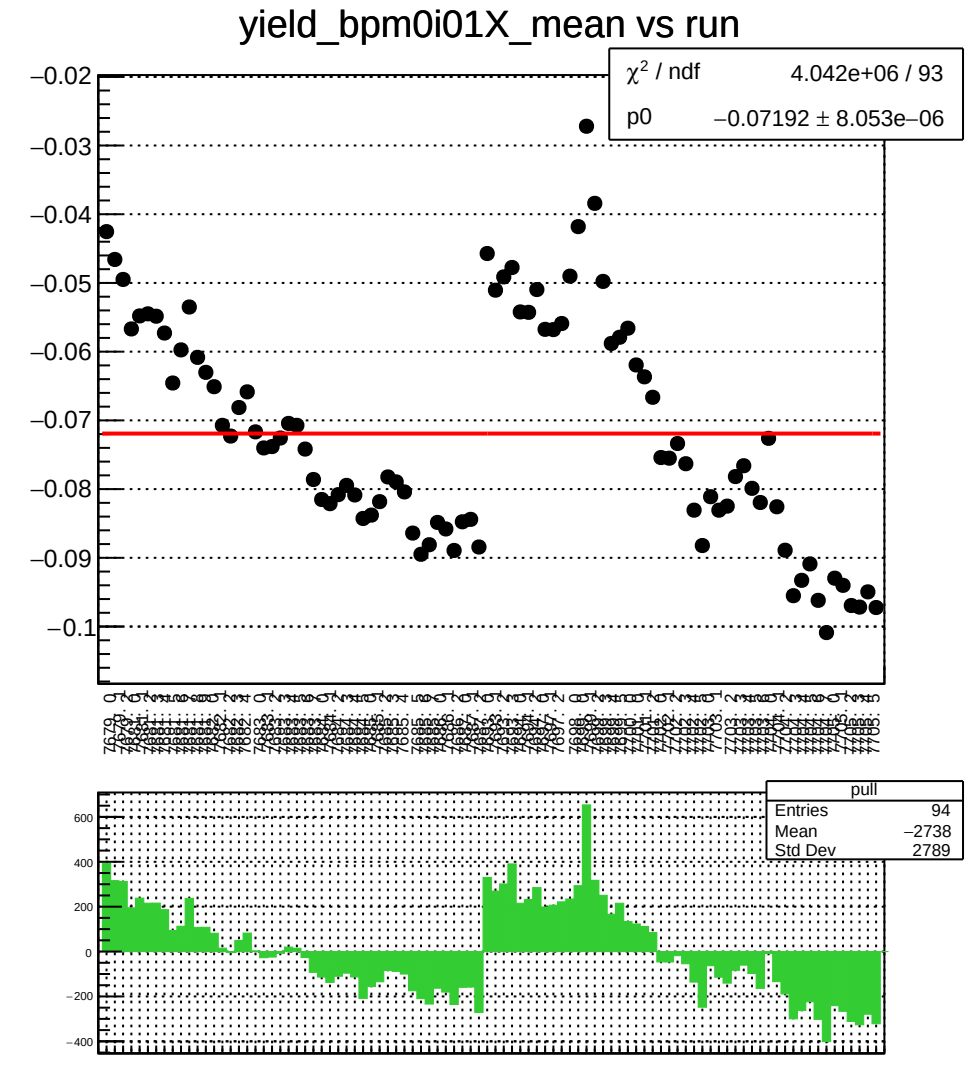

pull1D
Entries 94
Mean −2.209
Std Dev 2.734
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

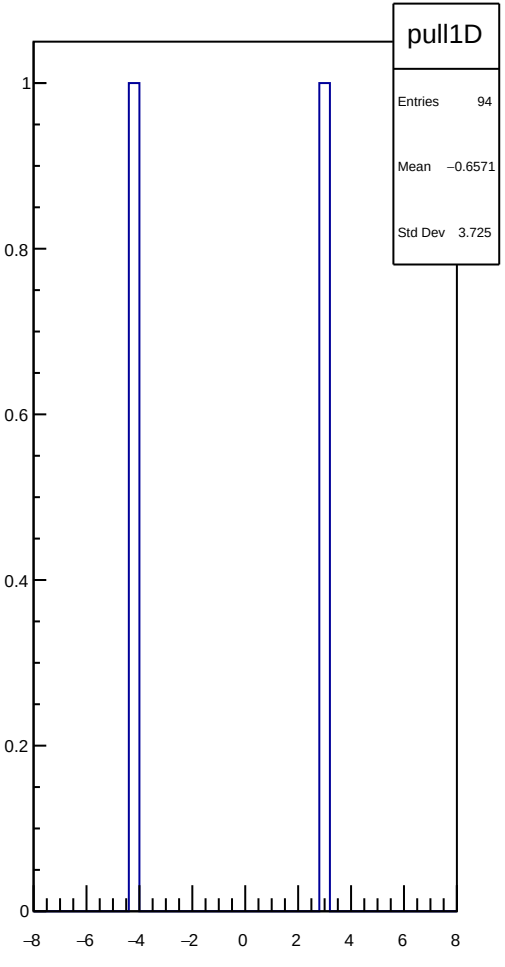

yield_bpm2i02X_rms vs run
χ^2 / ndf 1.169e+04 / 93
p0 0.01011 ± 7.596e–06
0.018
0.016
0.014
0.012
0.01
0.008

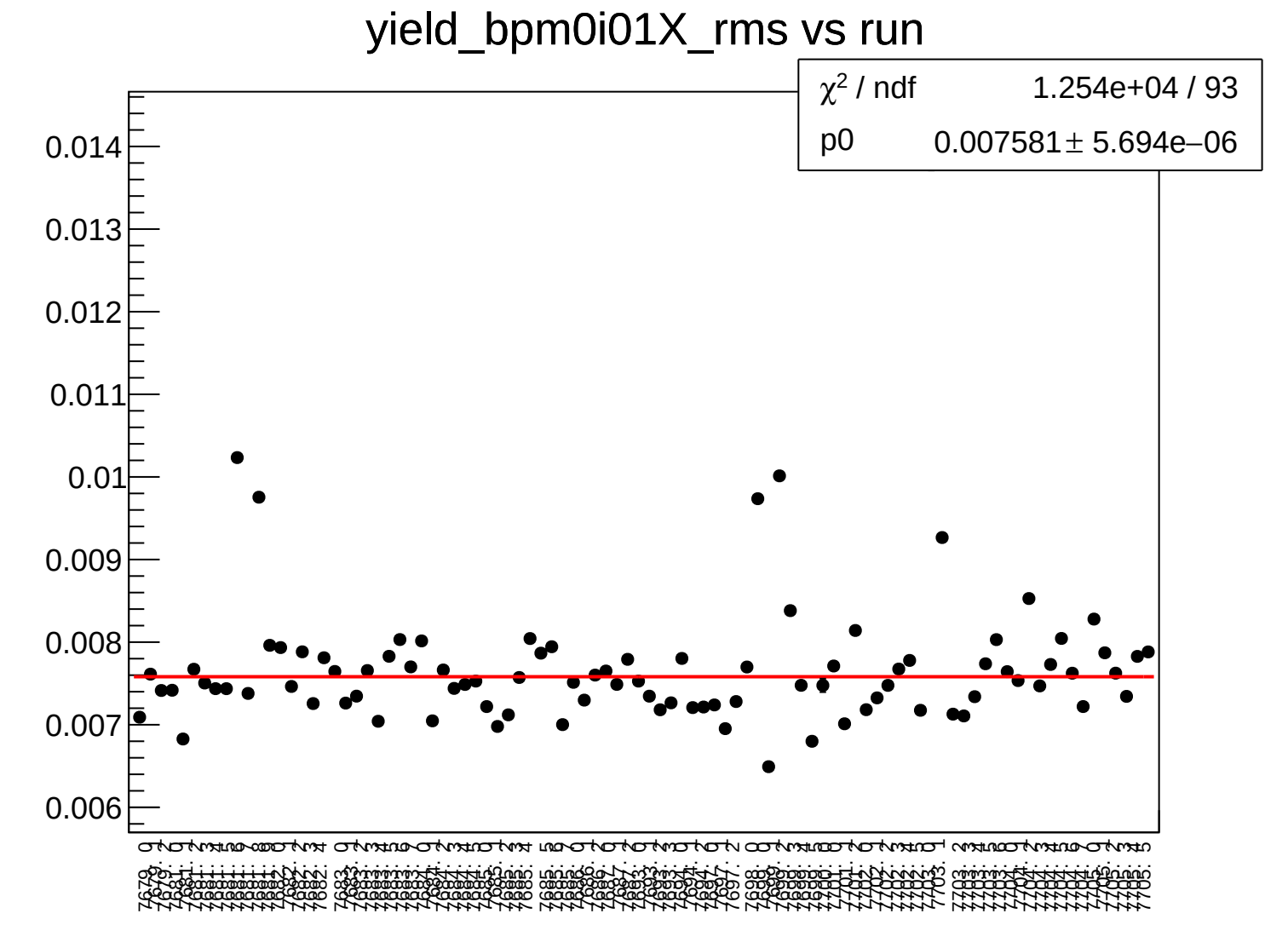

yield_bpm2i02Y_mean vs run
χ² / ndf 1.176e+06 / 93
p0 −1.4 ± 9.956e−06
−1.38
−1.39
−1.4
−1.41
−1.42
−1.43
−1.44
pull
Entries 94
Mean 2162
Std Dev 2110
200
100
0
−100
−200
−300
−400

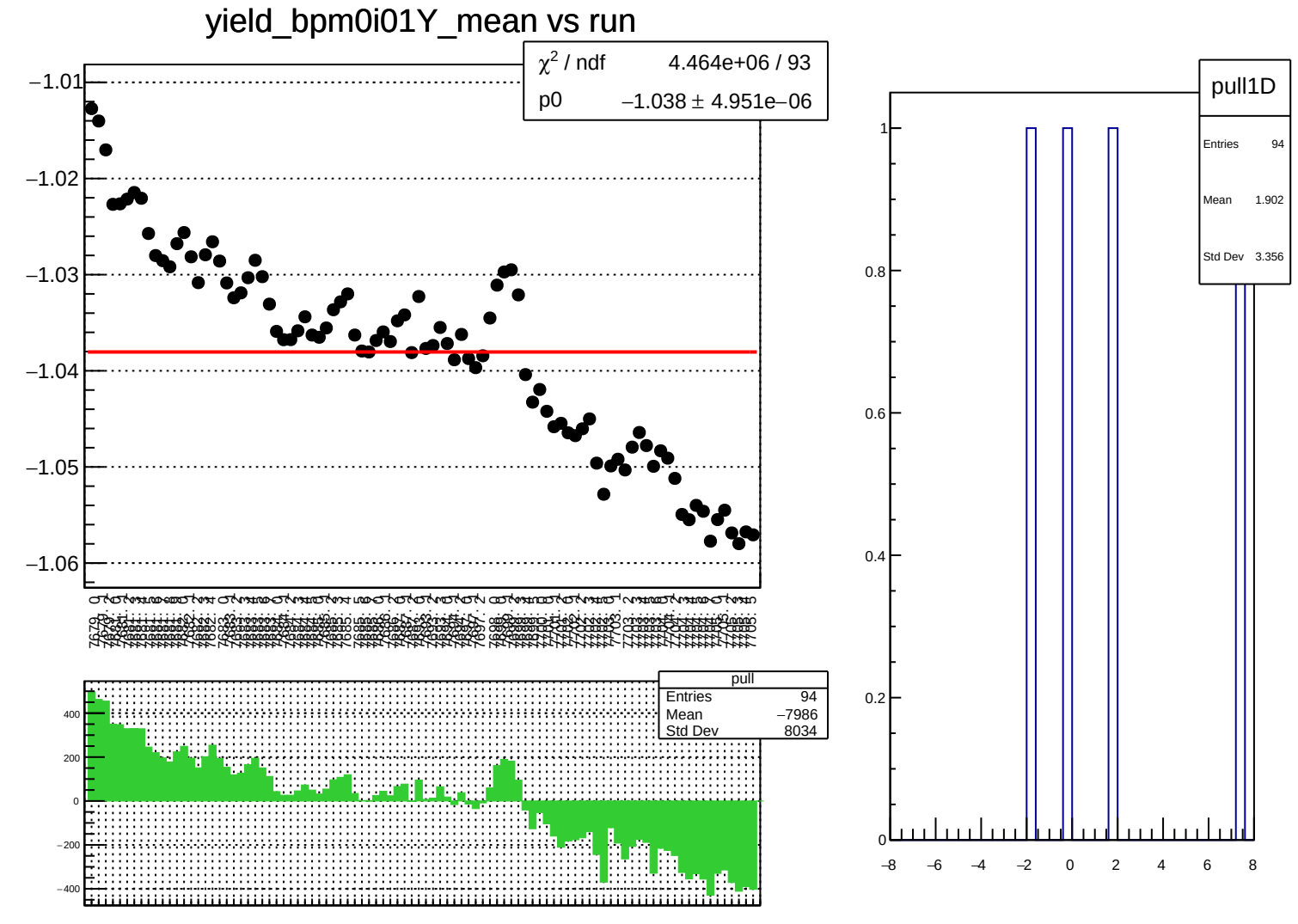

pull1D
Entries 94
Mean 4.322
Std Dev 3.466
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

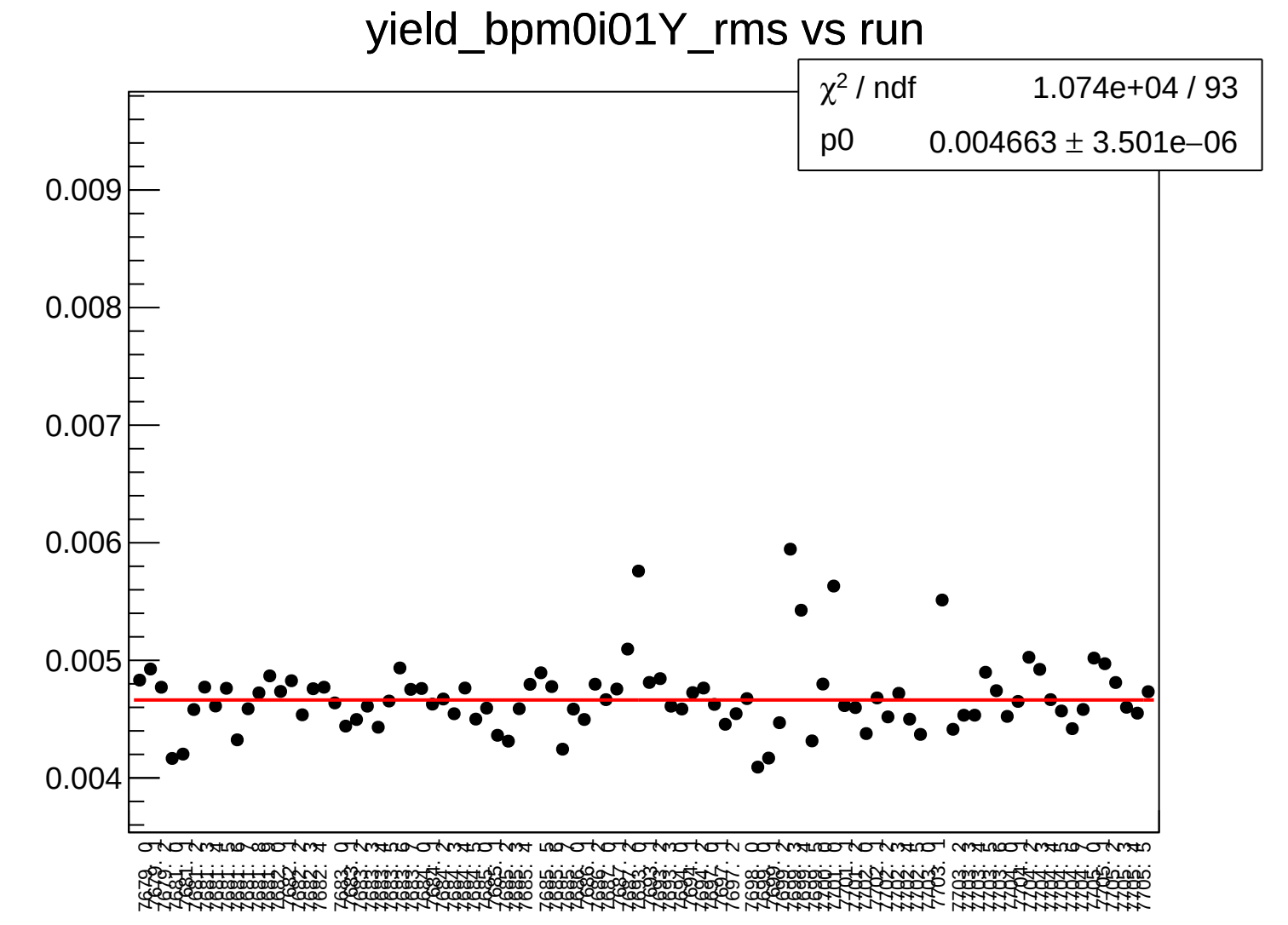

yield_bpm2i02Y_rms vs run
χ² / ndf 8479 / 93
p0 0.009383 ± 7.04e–06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

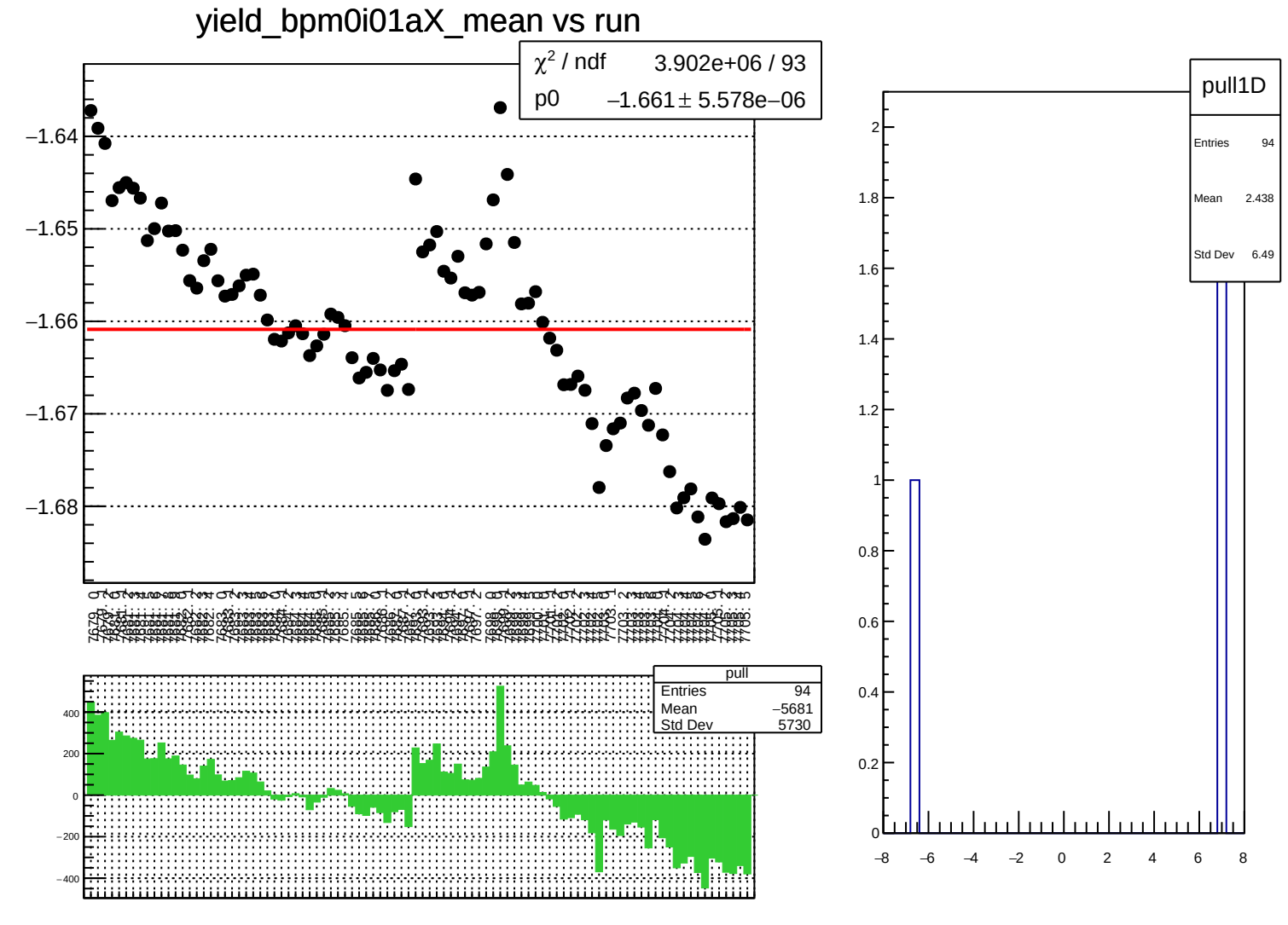

yield_bpm0i01X_mean vs run
χ² / ndf 4.042e+06 / 93
p0 −0.07192 ± 8.053e−06
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
−0.08
−0.09
−0.1
pull
Entries 94
Mean −2738
Std Dev 2789
600
400
200
0
−200
−400

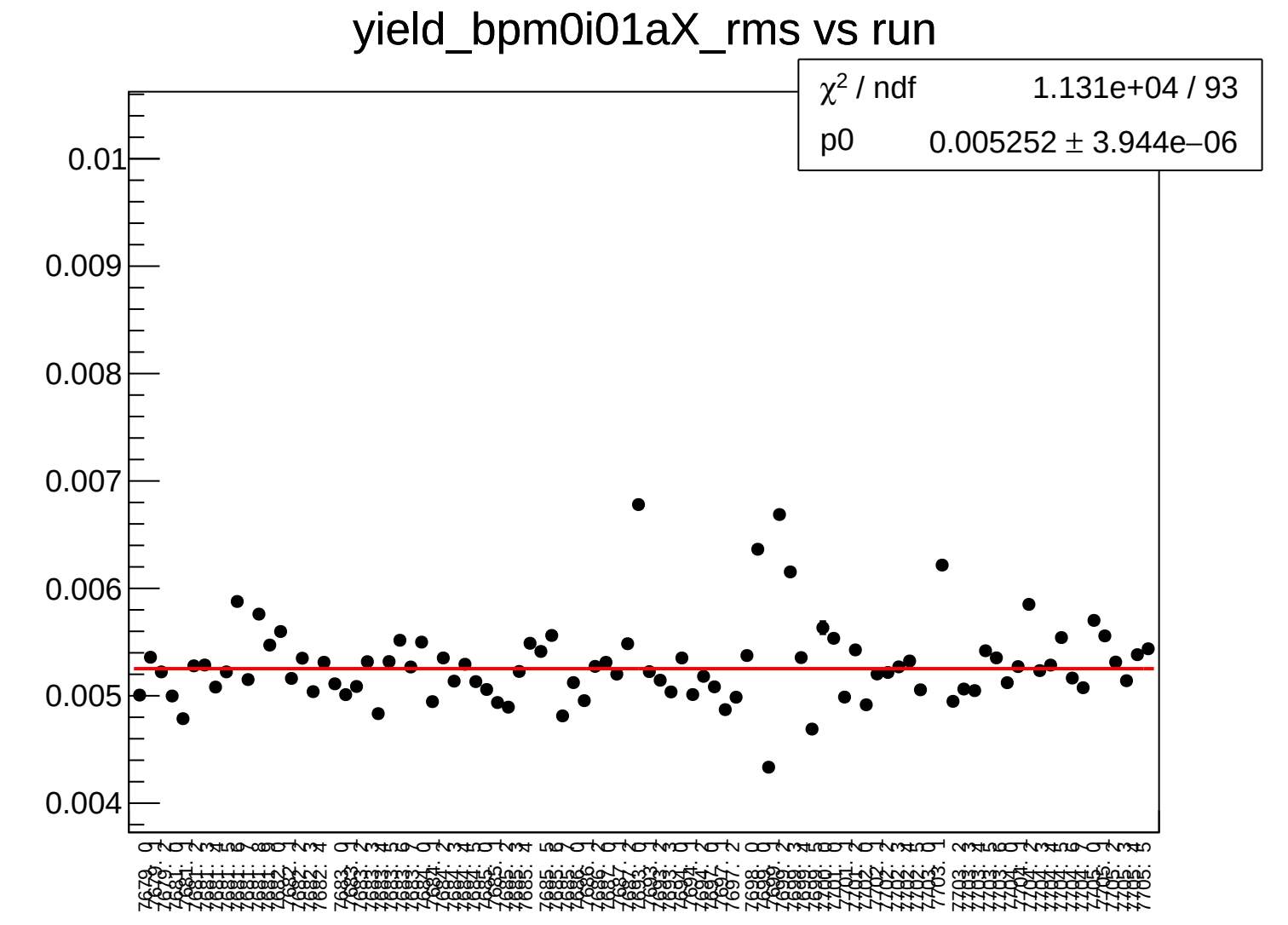

pull1D
Entries 94
Mean −0.6571
Std Dev 3.725
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

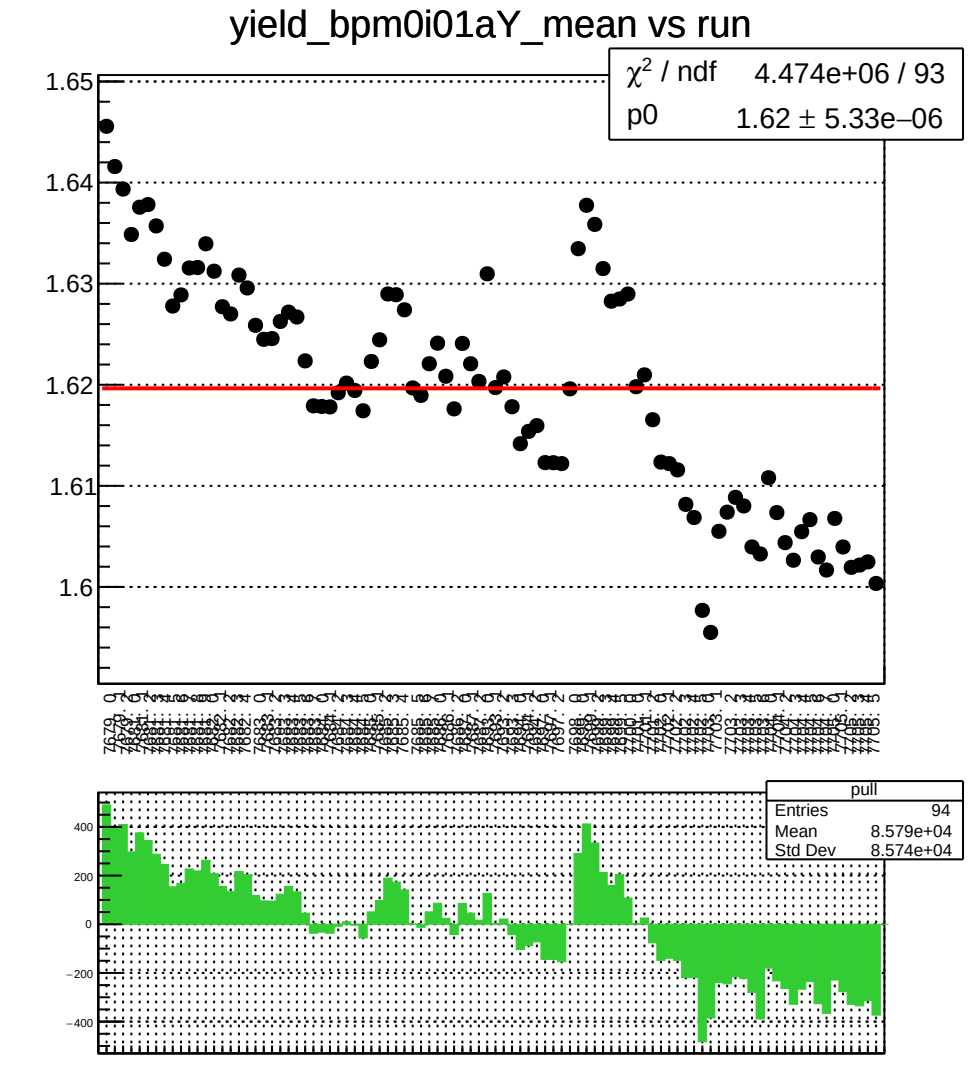

yield_bpm0i01X_rms vs run
χ^2 / ndf 1.254e+04 / 93
p0 0.007581 ± 5.694e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

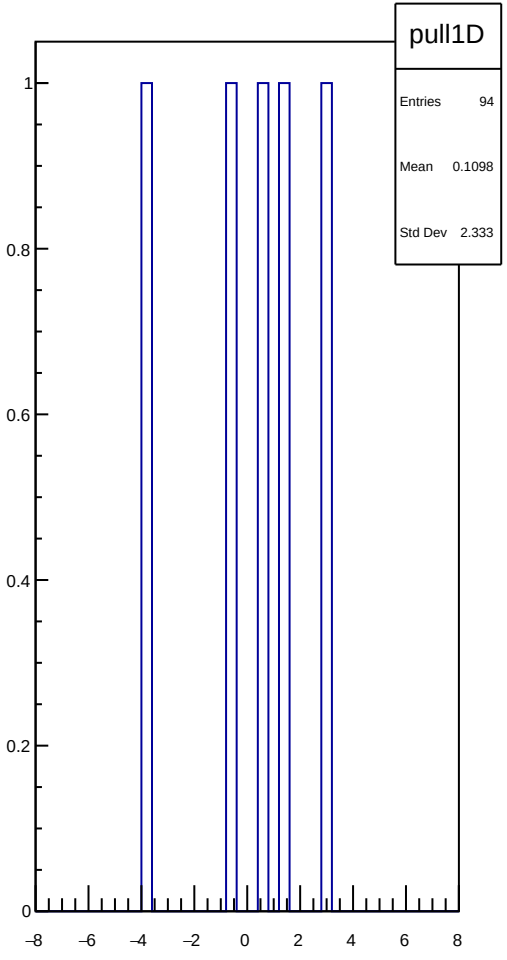

yield_bpm0i01Y_mean vs run
χ² / ndf 4.464e+06 / 93
p0 −1.038 ± 4.951e−06
−1.01
−1.02
−1.03
−1.04
−1.05
−1.06
pull
Entries 94
Mean −7986
Std Dev 8034
400
200
0
−200
−400
pull1D
Entries 94
Mean 1.902
Std Dev 3.356
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

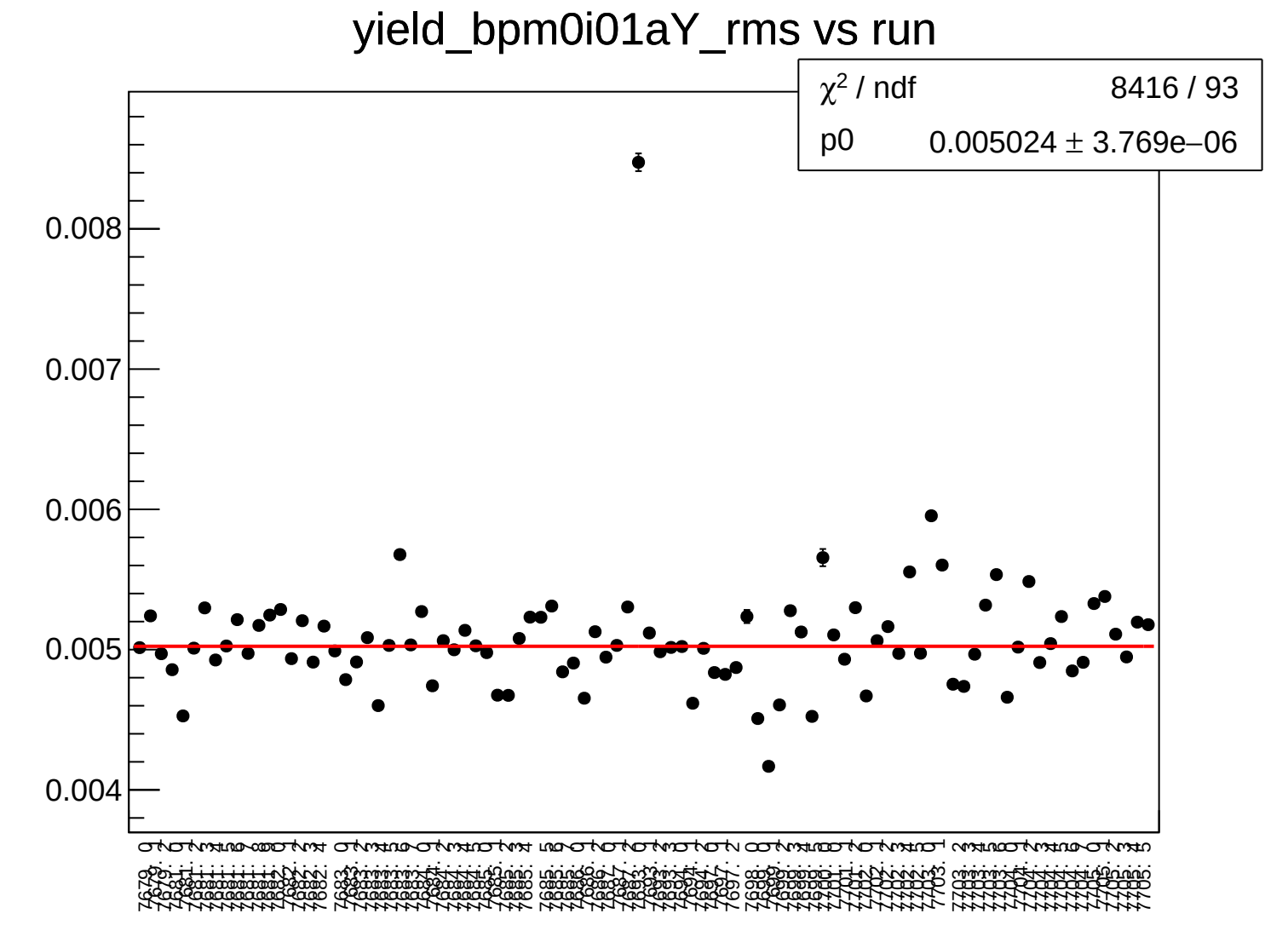

yield_bpm0i01Y_rms vs run
χ² / ndf 1.074e+04 / 93
p0 0.004663 ± 3.501e−06
0.009
0.008
0.007
0.006
0.005
0.004

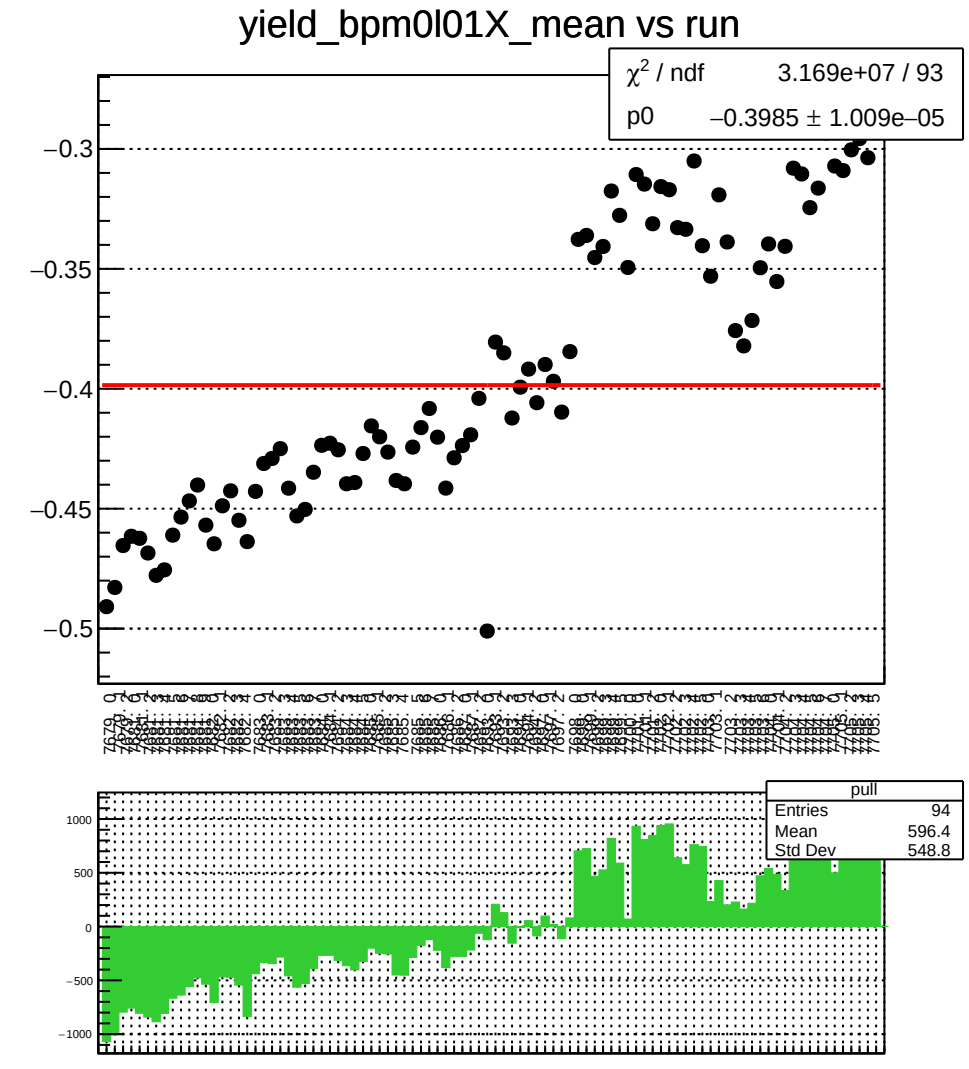

yield_bpm0i01aX_mean vs run
χ² / ndf 3.902e+06 / 93
p0 −1.661 ± 5.578e−06
−1.64
−1.65
−1.66
−1.67
−1.68
pull
Entries 94
Mean −5681
Std Dev 5730
400
200
0
−200
−400
pull1D
Entries 94
Mean 2.438
Std Dev 6.49
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

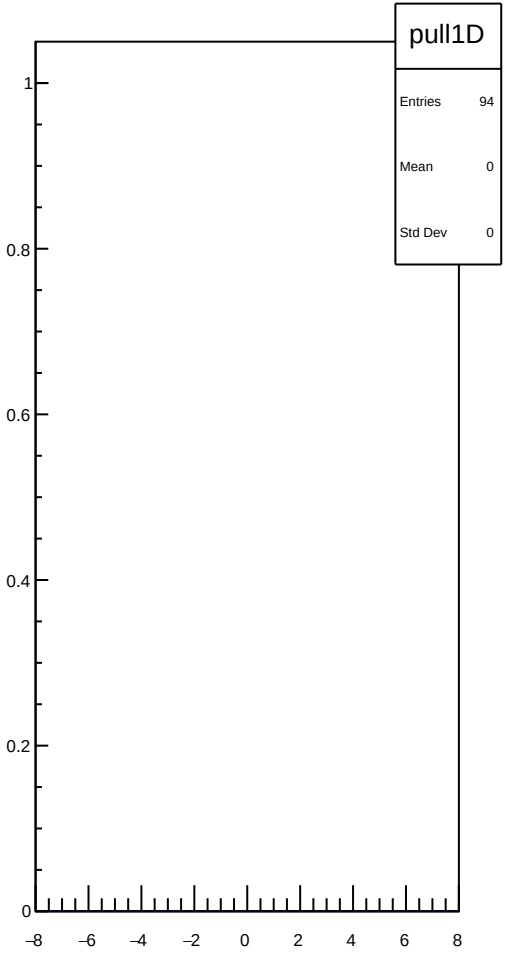

yield_bpm0i01aX_rms vs run
χ^2 / ndf 1.131e+04 / 93
p0 0.005252 ± 3.944e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004

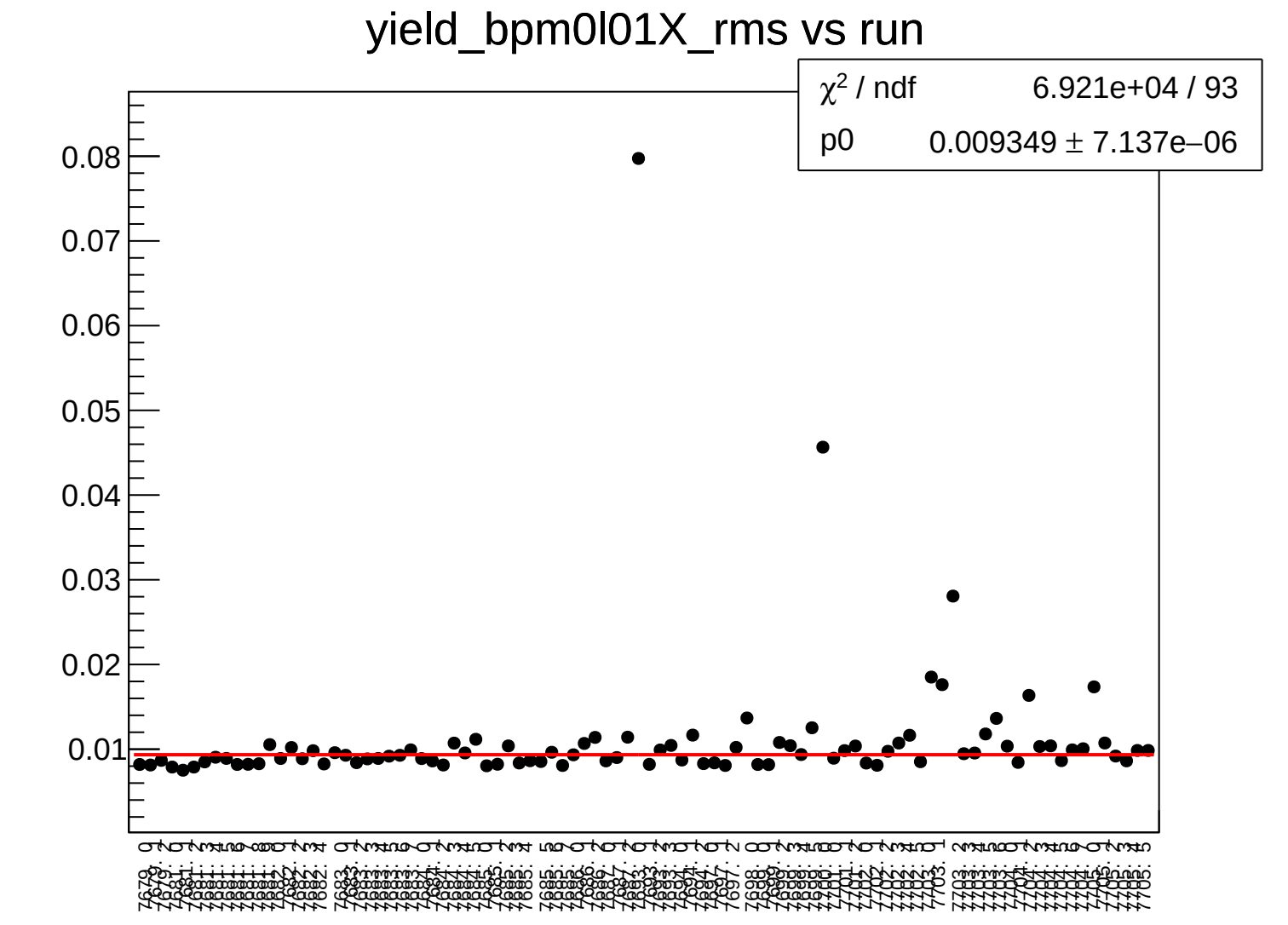

yield_bpm0i01aY_mean vs run
χ² / ndf 4.474e+06 / 93
p0 1.62 ± 5.33e−06
1.65
1.64
1.63
1.62
1.61
1.6
pull
Entries 94
Mean 8.579e+04
Std Dev 8.574e+04
400
200
0
−200
−400

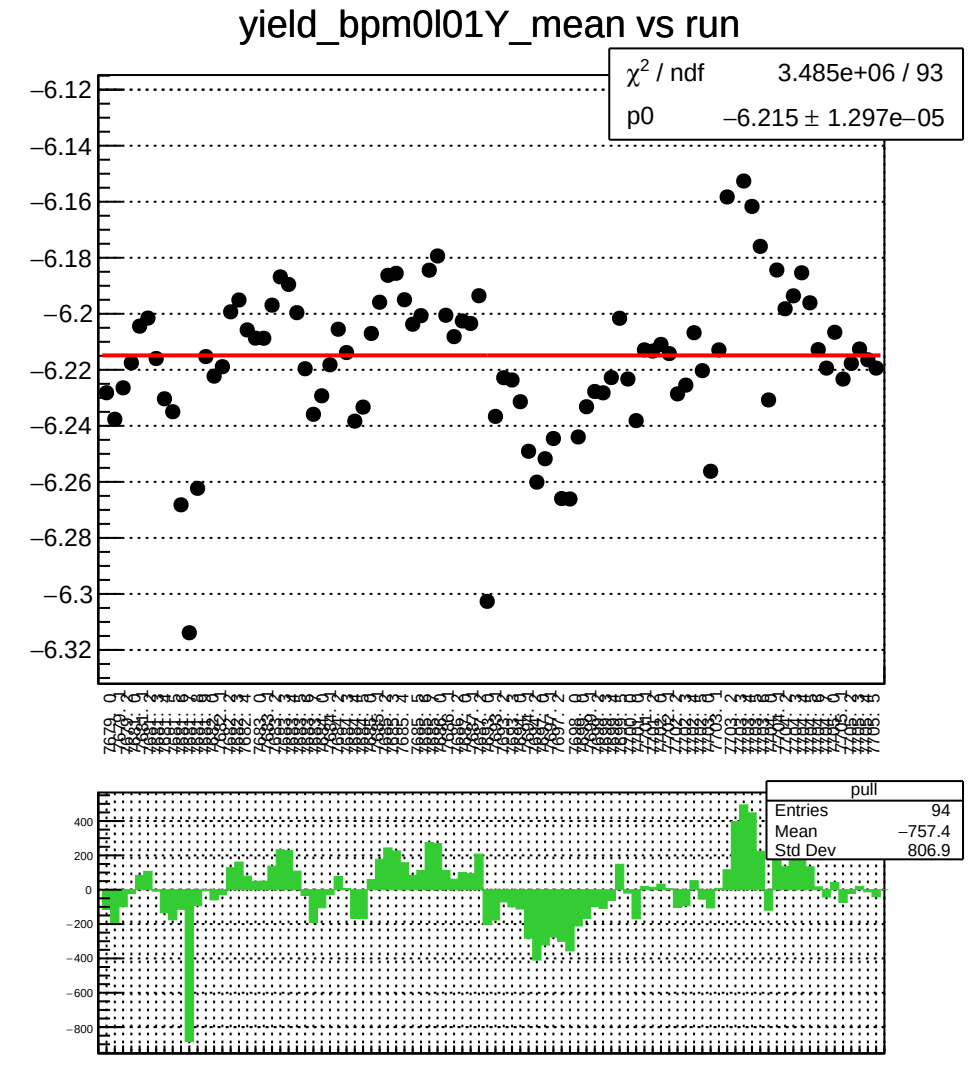

pull1D
Entries 94
Mean 0.1098
Std Dev 2.333
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

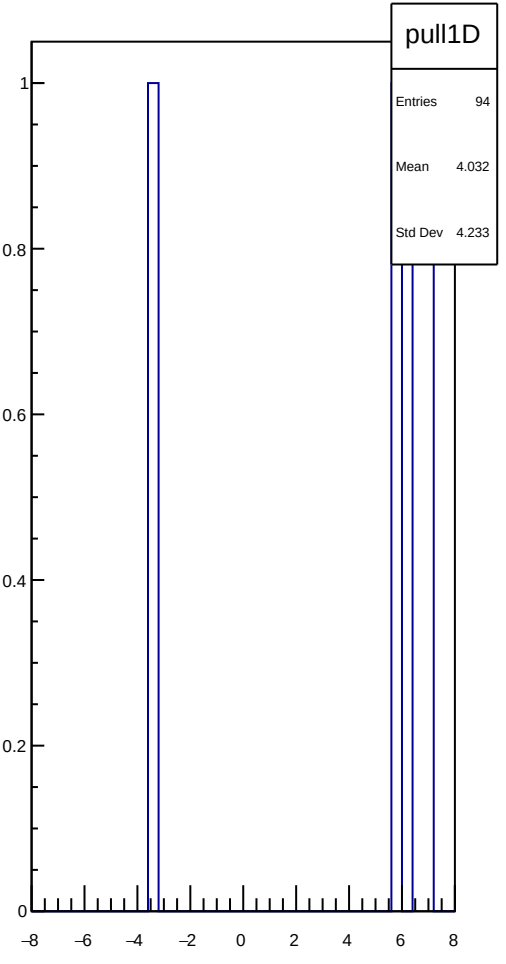

yield_bpm0i01aY_rms vs run
χ² / ndf 8416 / 93
p0 0.005024 ± 3.769e−06
0.008
0.007
0.006
0.005
0.004

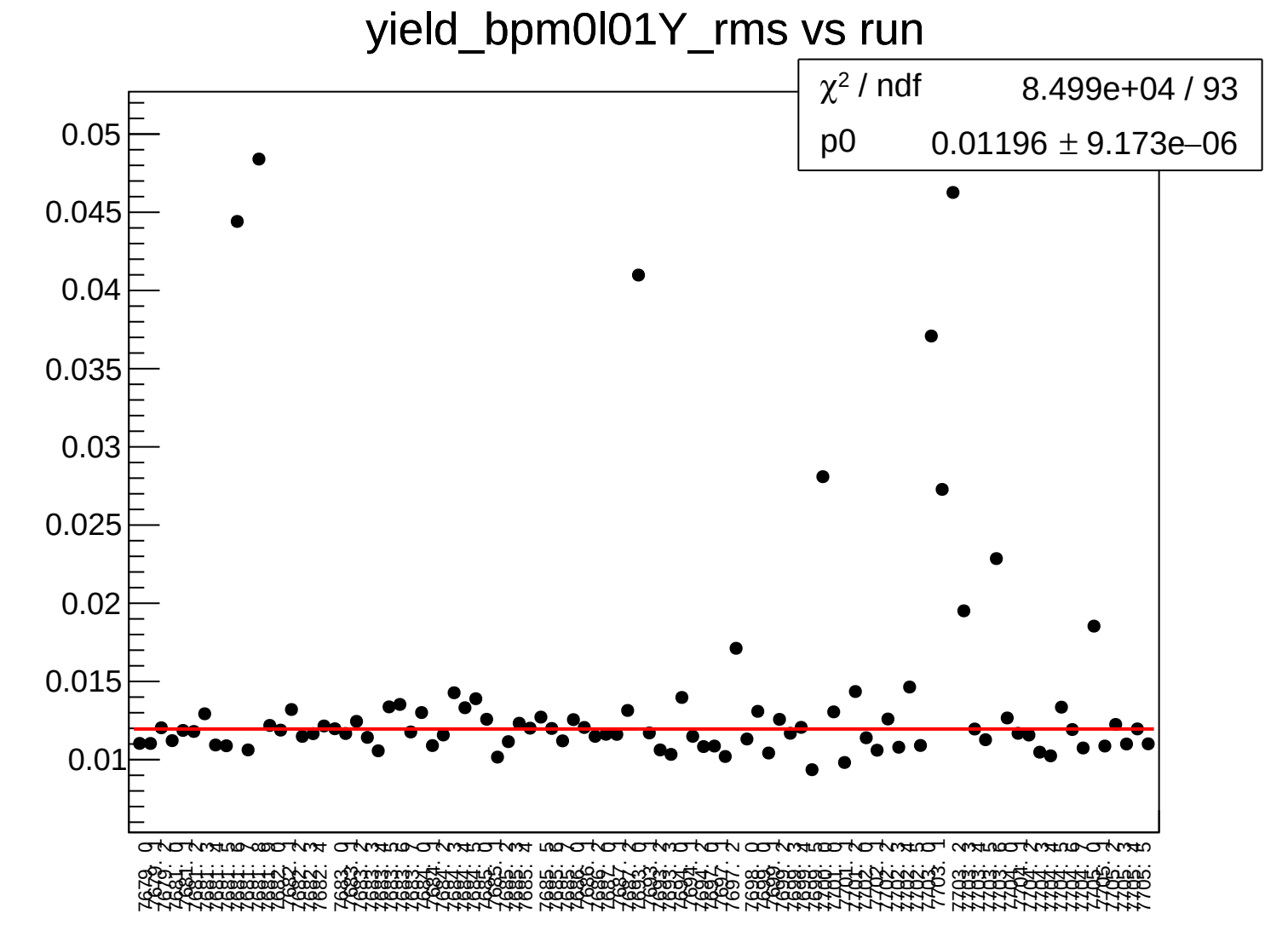

yield_bpm0l01X_mean vs run
χ² / ndf 3.169e+07 / 93
p0 −0.3985 ± 1.009e−05
−0.3
−0.35
−0.4
−0.45
−0.5
pull
Entries 94
Mean 596.4
Std Dev 548.8
1000
500
0
−500
−1000

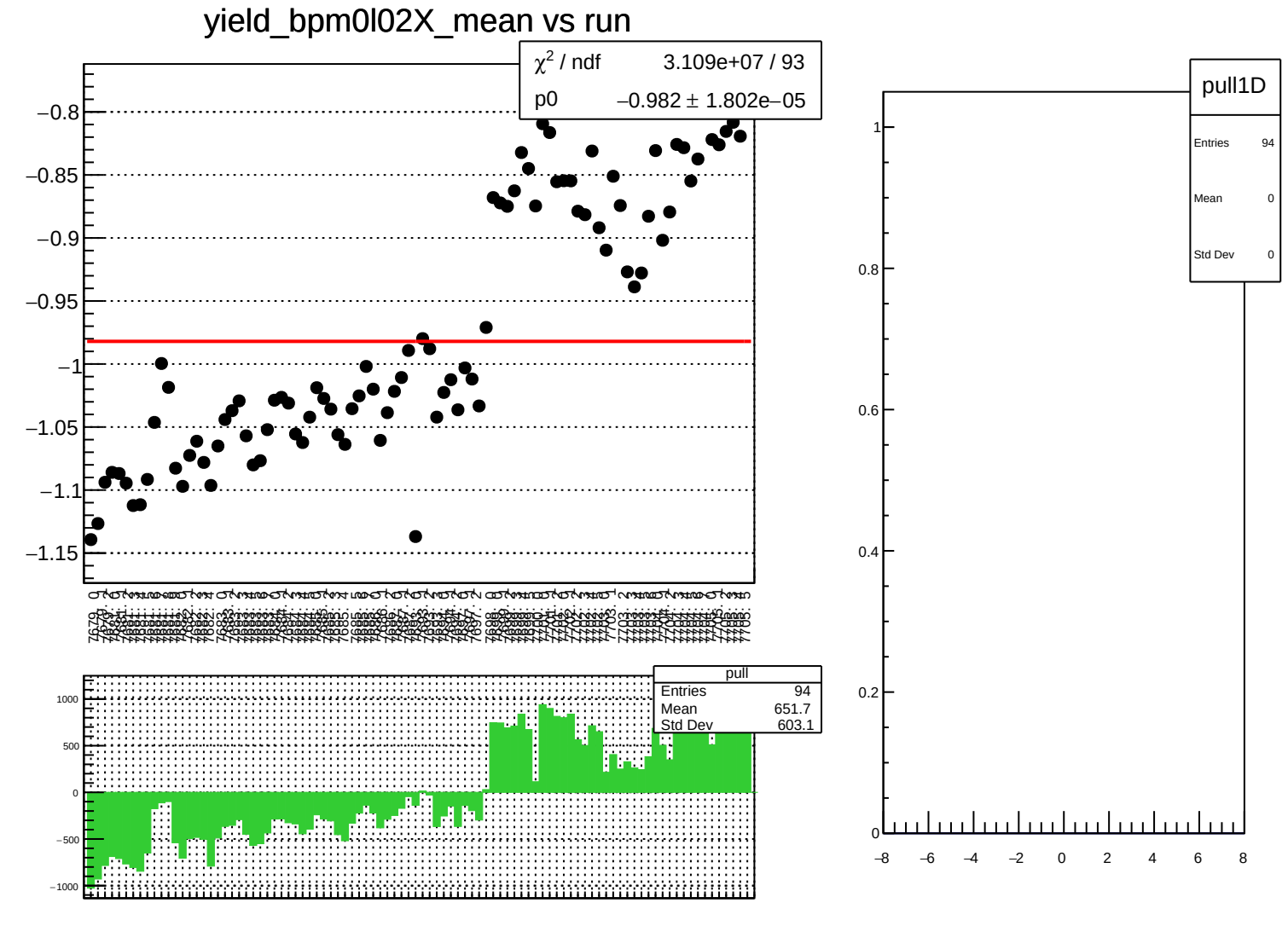

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

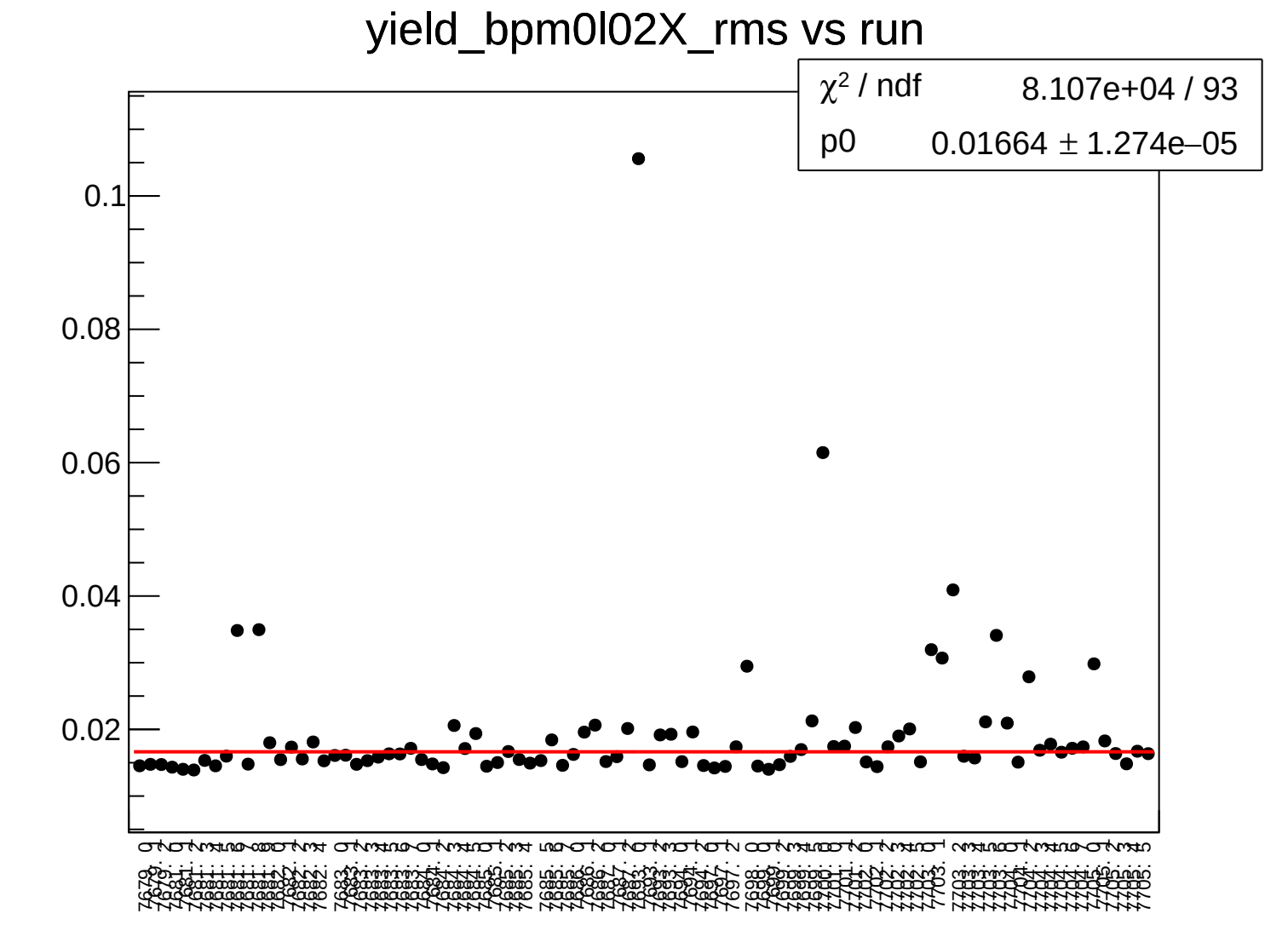

yield_bpm0l01X_rms vs run
χ² / ndf 6.921e+04 / 93
p0 0.009349 ± 7.137e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

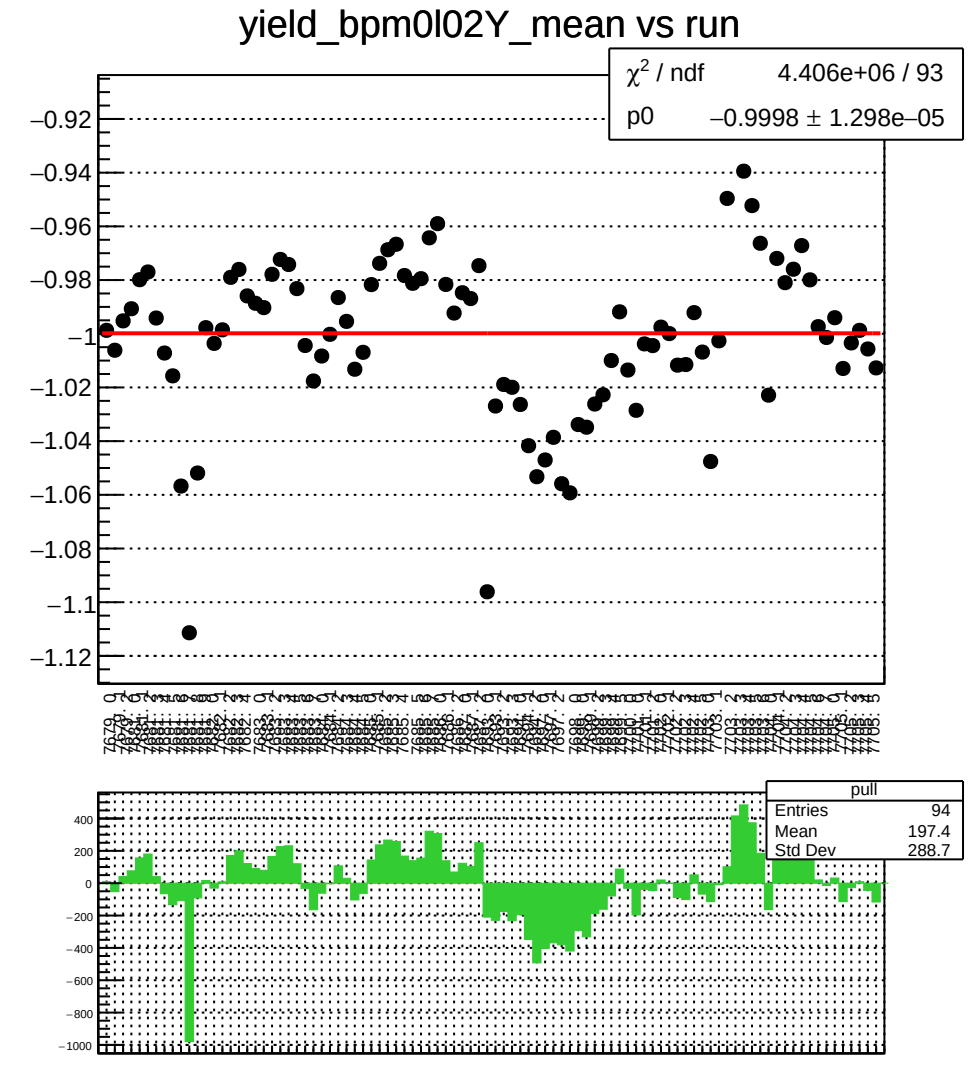

yield_bpm0l01Y_mean vs run
χ² / ndf 3.485e+06 / 93
p0 −6.215 ± 1.297e−05
−6.12
−6.14
−6.16
−6.18
−6.2
−6.22
−6.24
−6.26
−6.28
−6.3
−6.32
pull
Entries 94
Mean −757.4
Std Dev 806.9
400
200
0
−200
−400
−600
−800

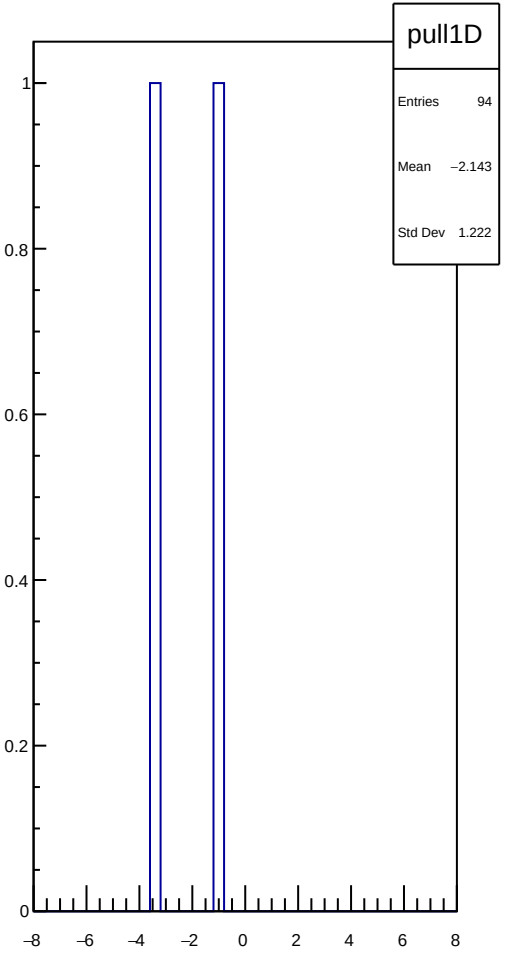

pull1D
Entries 94
Mean 4.032
Std Dev 4.233
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

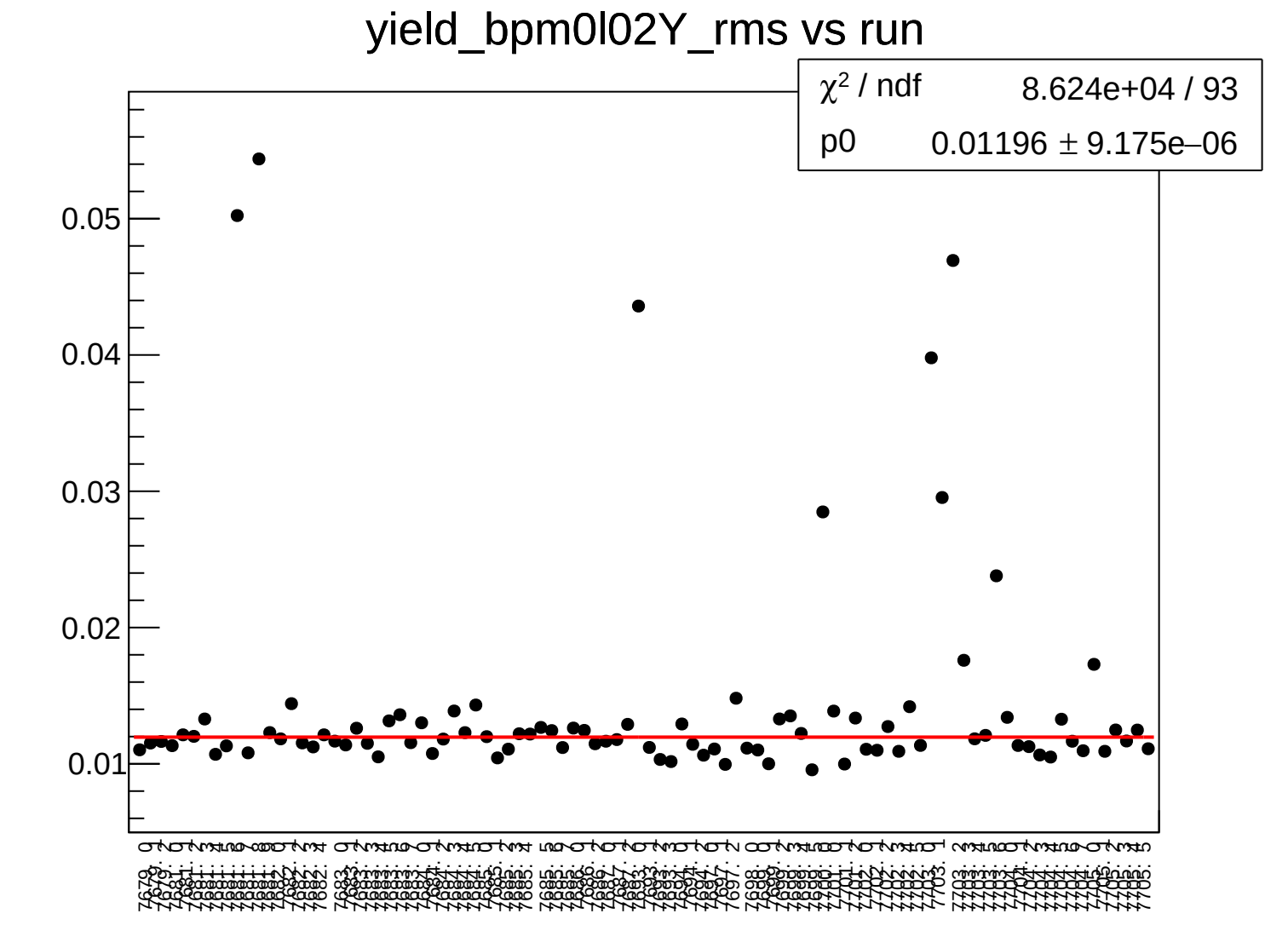

yield_bpm0l01Y_rms vs run
χ² / ndf 8.499e+04 / 93
p0 0.01196 ± 9.173e–06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

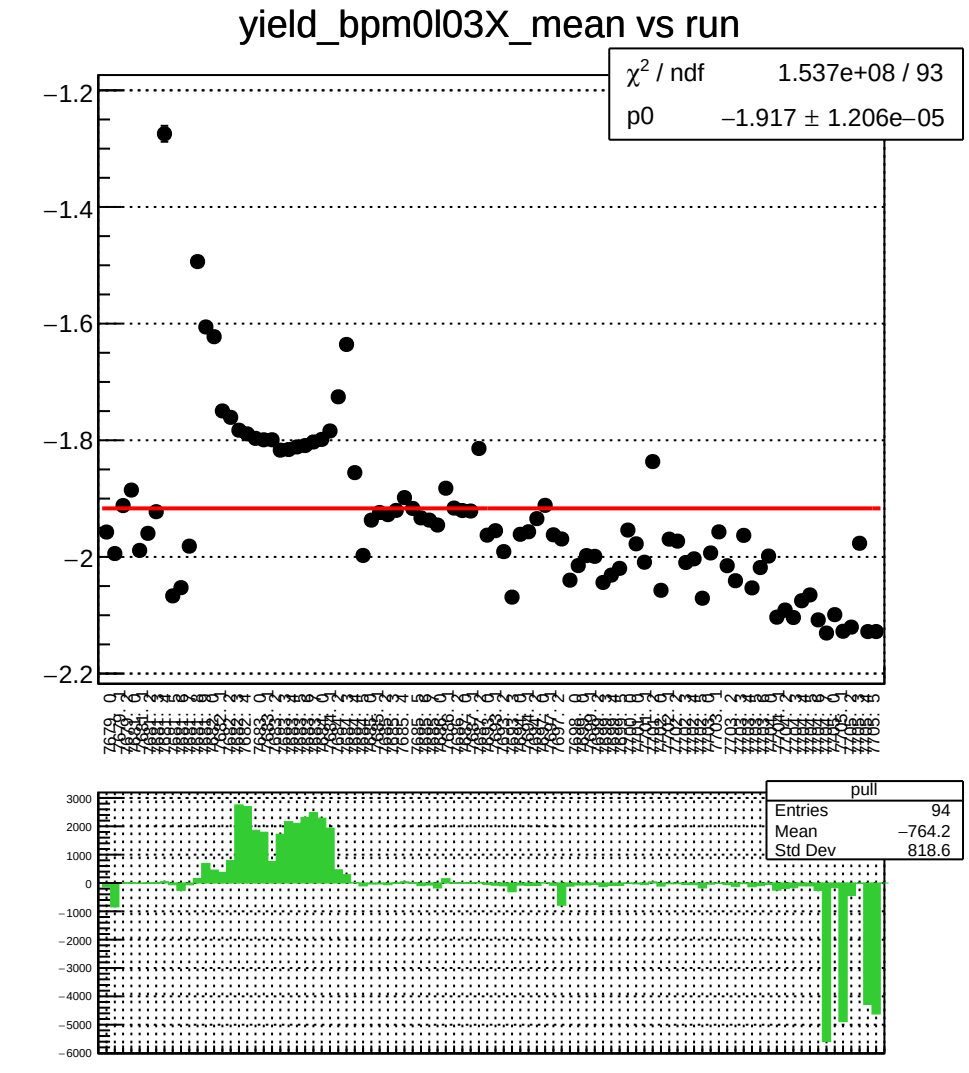

yield_bpm0l02X_mean vs run
χ² / ndf 3.109e+07 / 93
p0 −0.982 ± 1.802e−05
−0.8
−0.85
−0.9
−0.95
−1
−1.05
−1.1
−1.15
pull
Entries 94
Mean 651.7
Std Dev 603.1
1000
500
0
−500
−1000
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

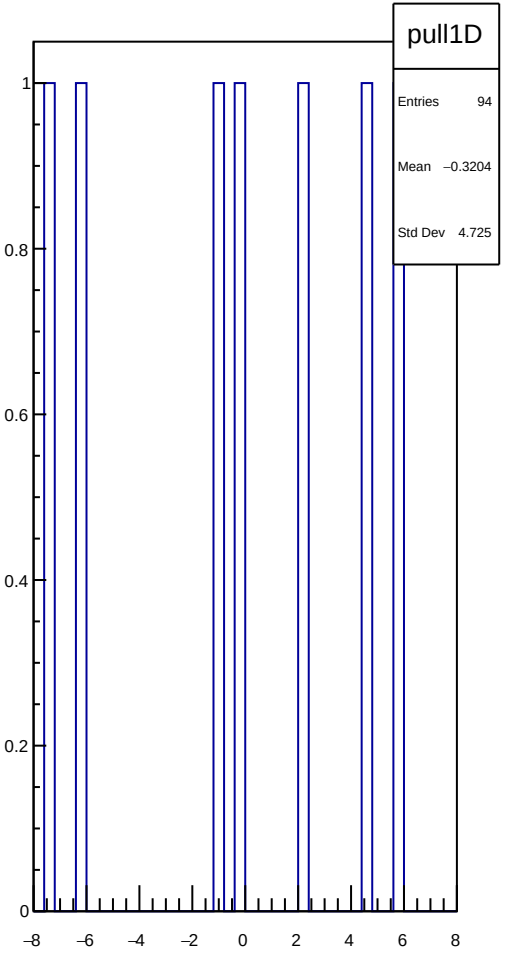

yield_bpm0l02X_rms vs run
χ² / ndf 8.107e+04 / 93
p0 0.01664 ± 1.274e−05
0.1
0.08
0.06
0.04
0.02

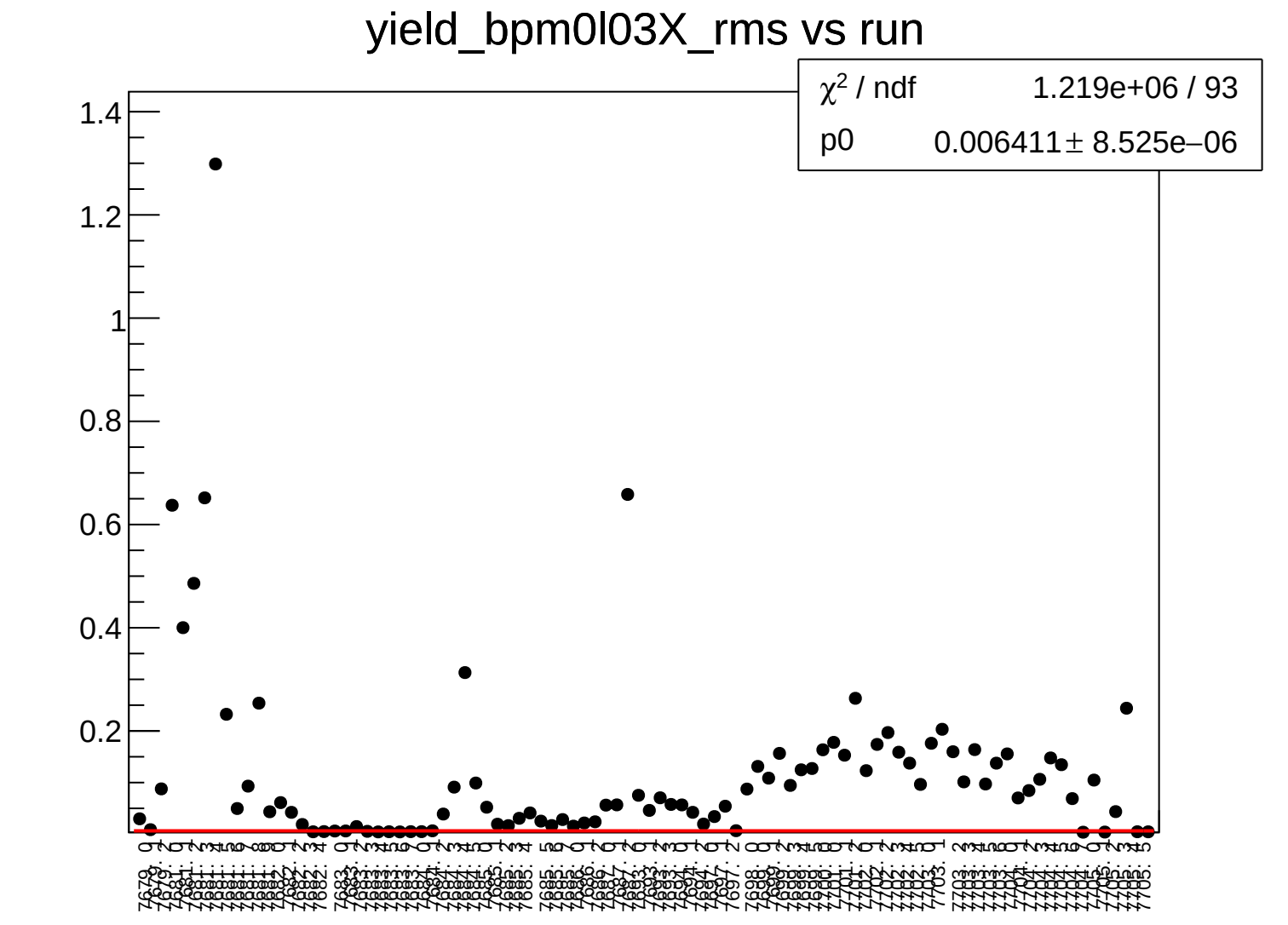

yield_bpm0l02Y_mean vs run
χ² / ndf 4.406e+06 / 93
p0 −0.9998 ± 1.298e−05
pull
Entries 94
Mean 197.4
Std Dev 288.7

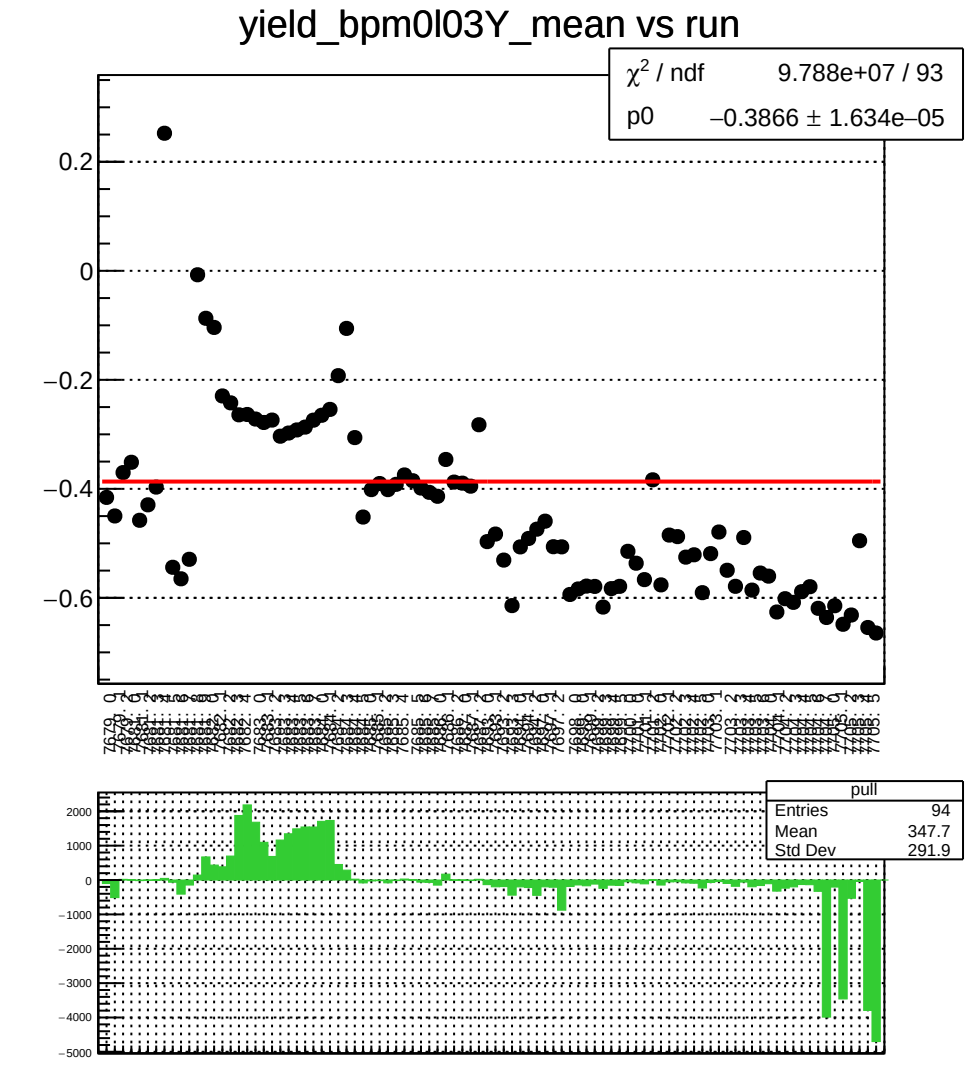

pull1D
Entries 94
Mean −2.143
Std Dev 1.222

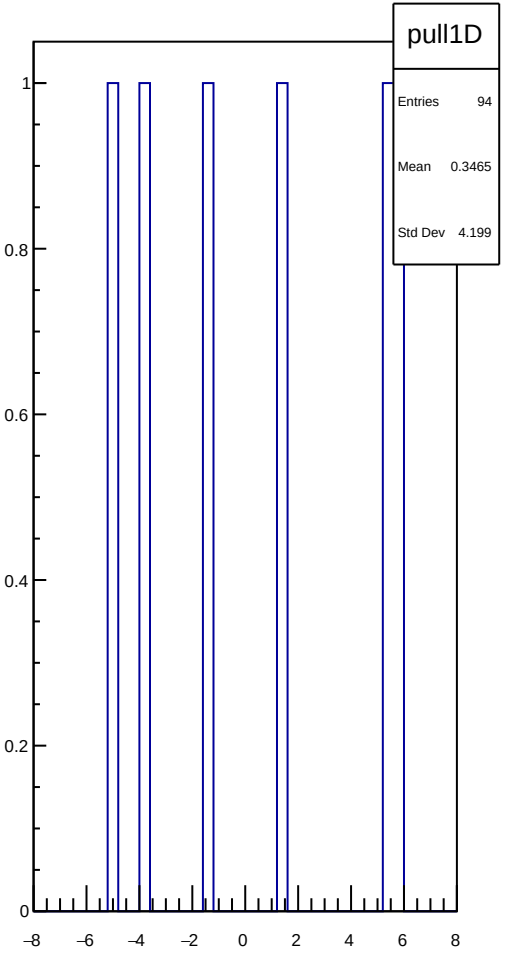

yield_bpm0l02Y_rms vs run
χ² / ndf 8.624e+04 / 93
p0 0.01196 ± 9.175e–06
0.05
0.04
0.03
0.02
0.01

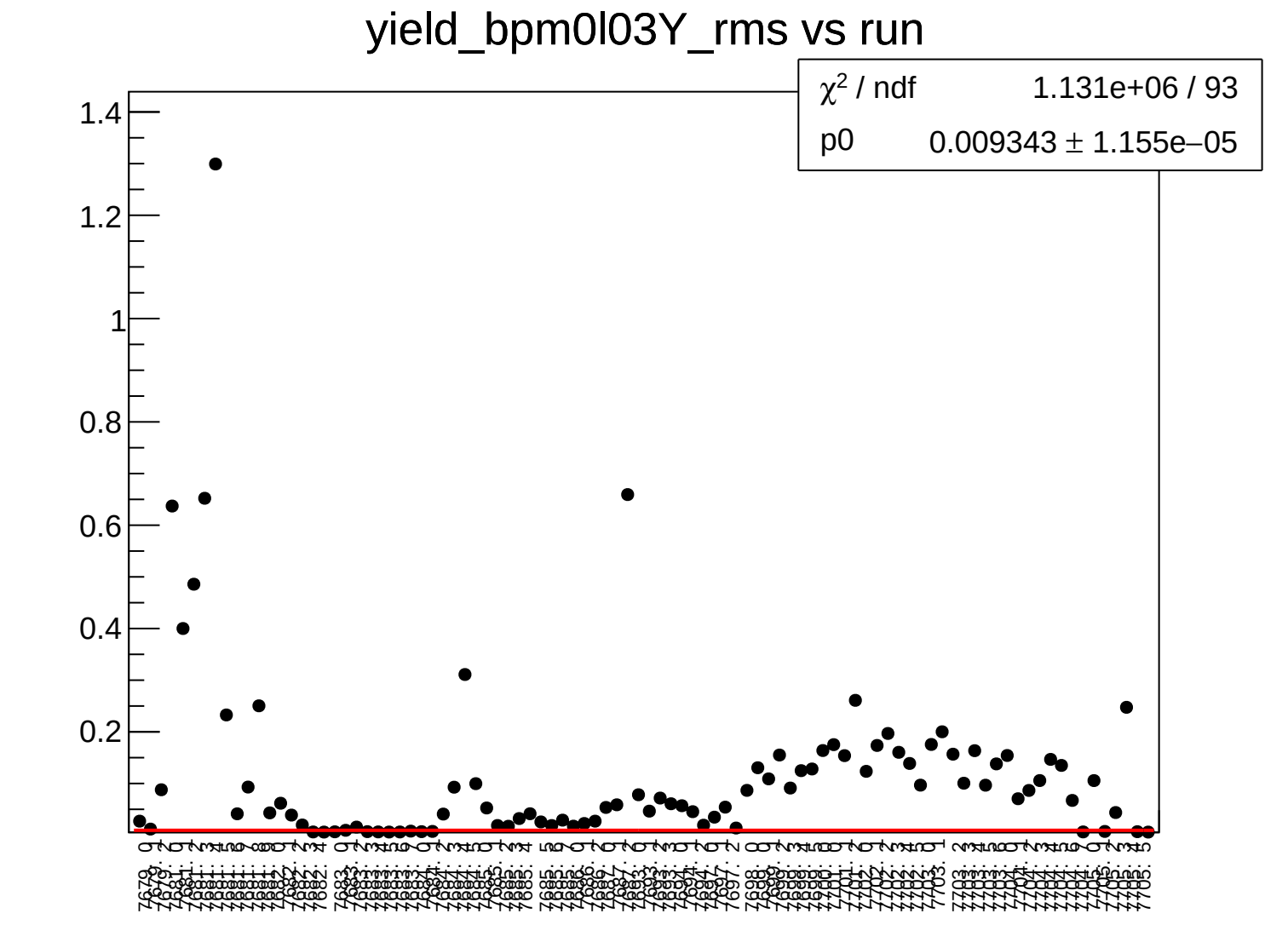

yield_bpm0l03X_mean vs run
χ² / ndf 1.537e+08 / 93
p0 −1.917 ± 1.206e−05
−1.2
−1.4
−1.6
−1.8
−2
−2.2
pull
Entries 94
Mean −764.2
Std Dev 818.6
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000
−6000

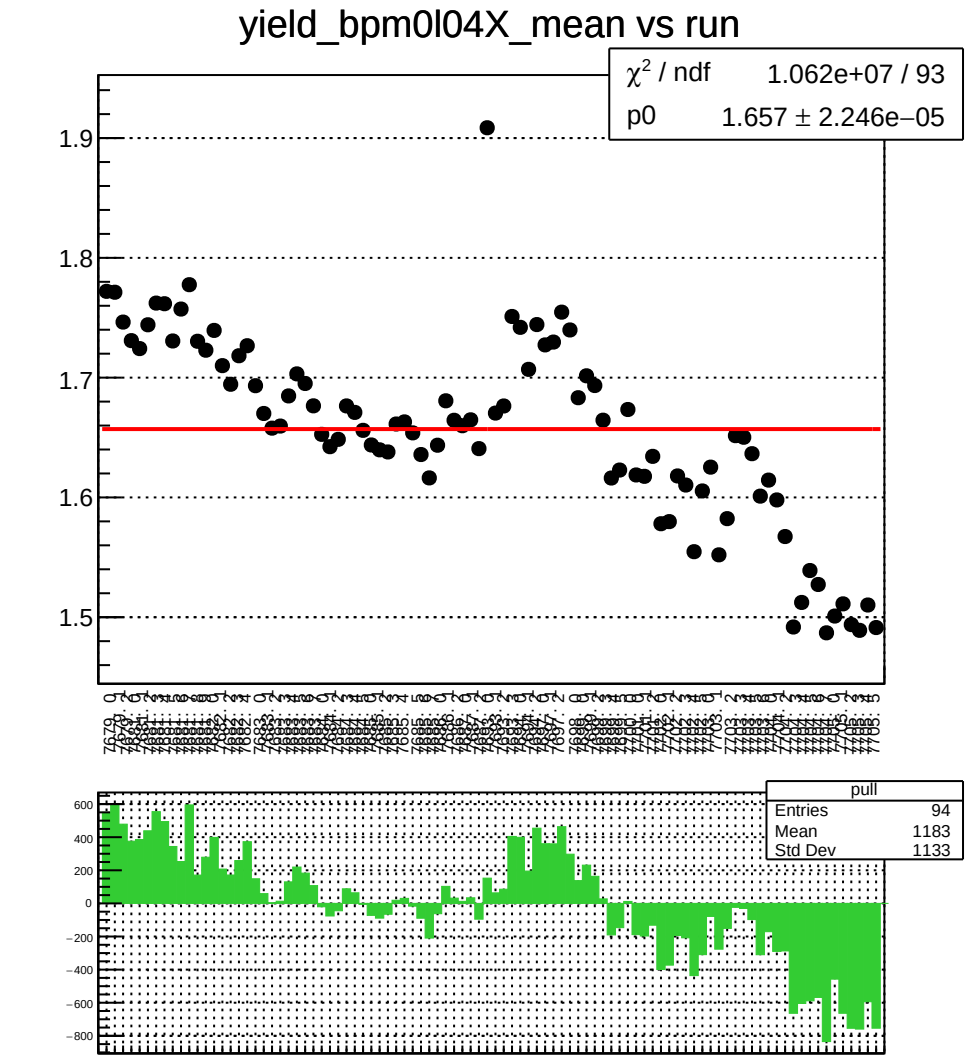

pull1D
Entries 94
Mean −0.3204
Std Dev 4.725
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

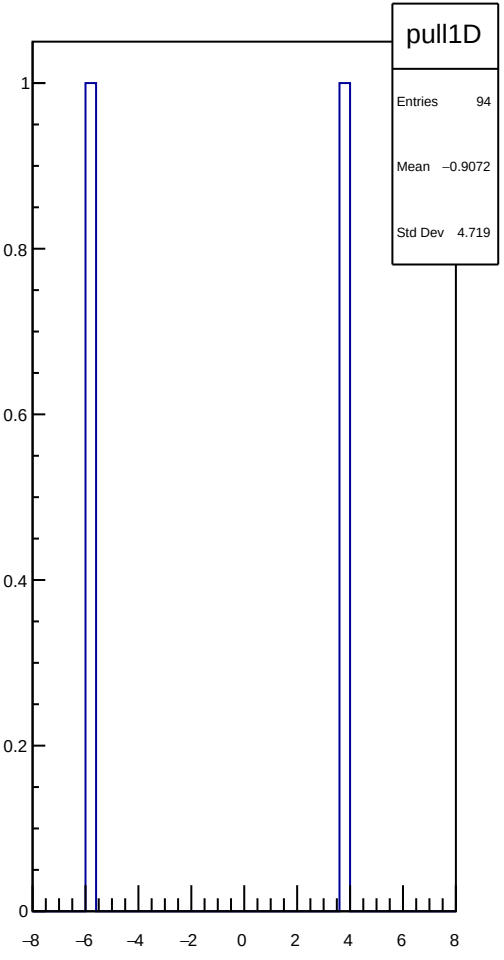

yield_bpm0l03X_rms vs run
χ² / ndf 1.219e+06 / 93
p0 0.006411 ± 8.525e−06
1.4
1.2
1
0.8
0.6
0.4
0.2

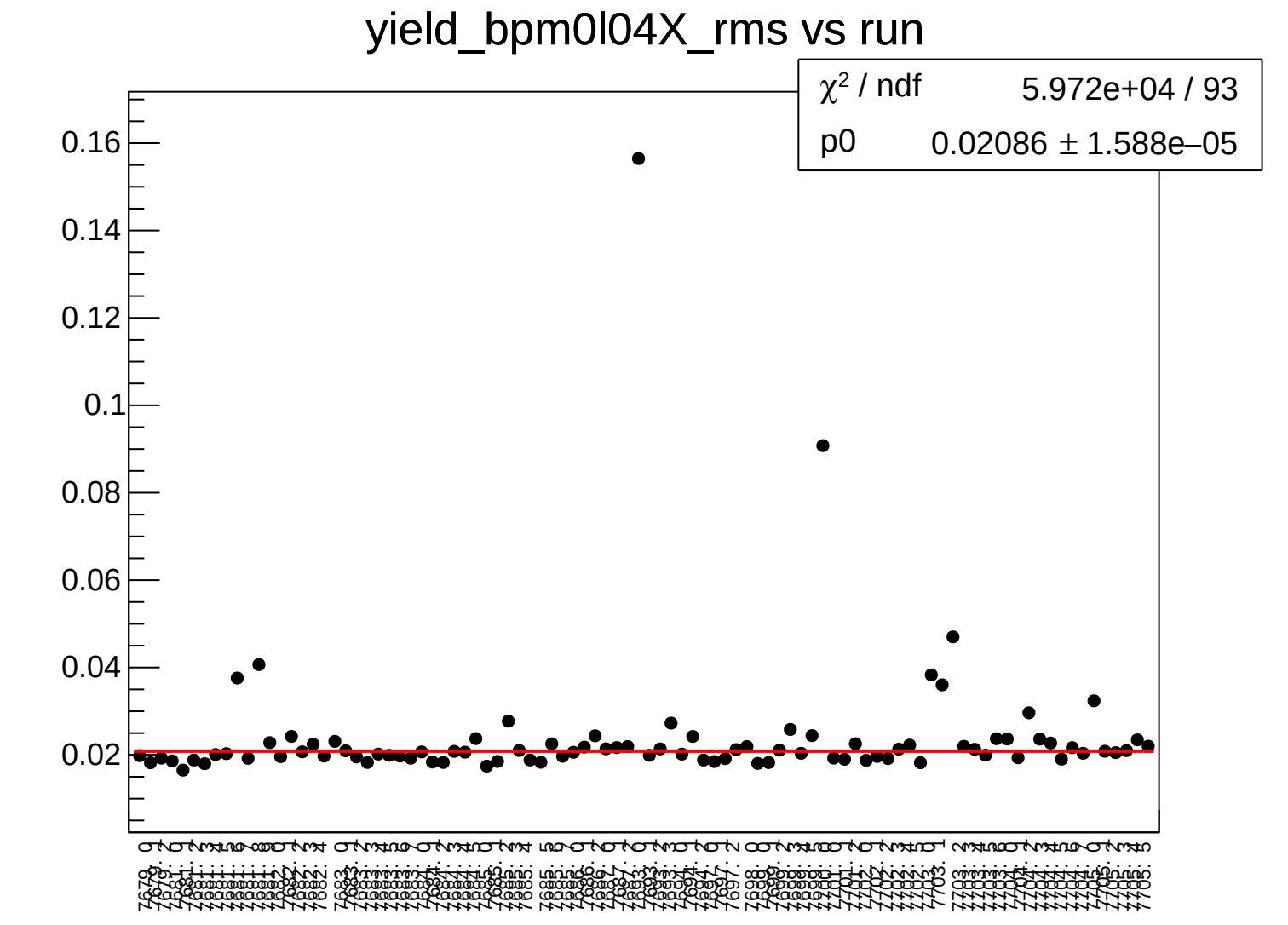

yield_bpm0l03Y_mean vs run
χ² / ndf 9.788e+07 / 93
p0 −0.3866 ± 1.634e−05
0.2
0
−0.2
−0.4
−0.6
pull
Entries 94
Mean 347.7
Std Dev 291.9
2000
1000
0
−1000
−2000
−3000
−4000
−5000

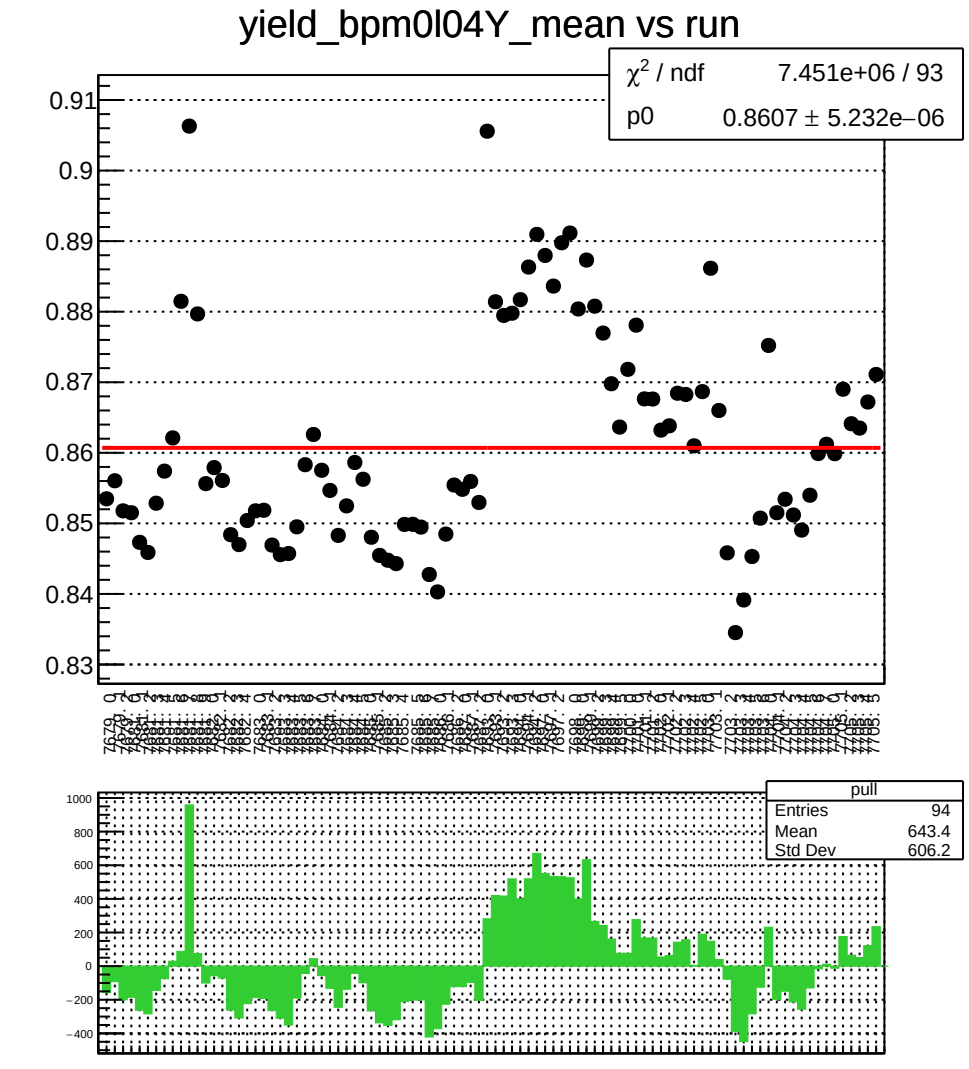

pull1D
Entries 94
Mean 0.3465
Std Dev 4.199
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

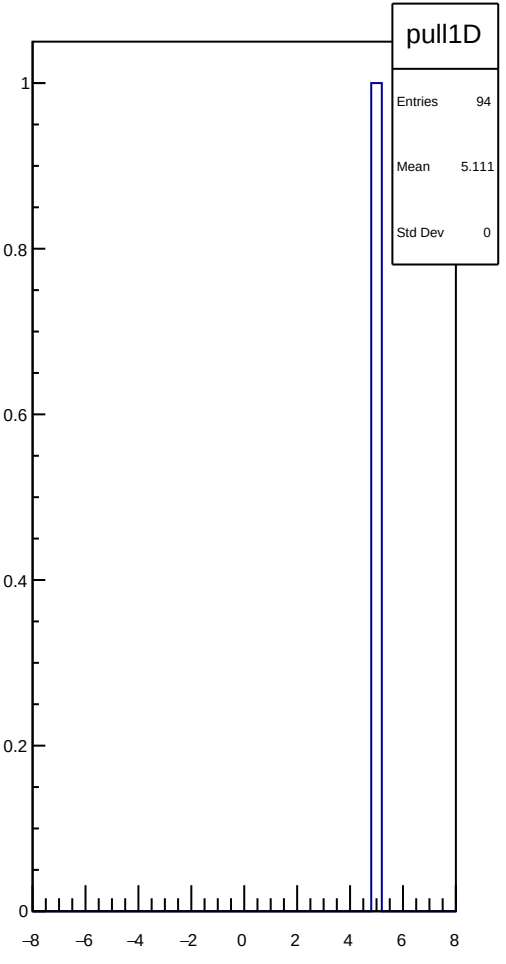

yield_bpm0l03Y_rms vs run
χ² / ndf 1.131e+06 / 93
p0 0.009343 ± 1.155e−05
1.4
1.2
1
0.8
0.6
0.4
0.2

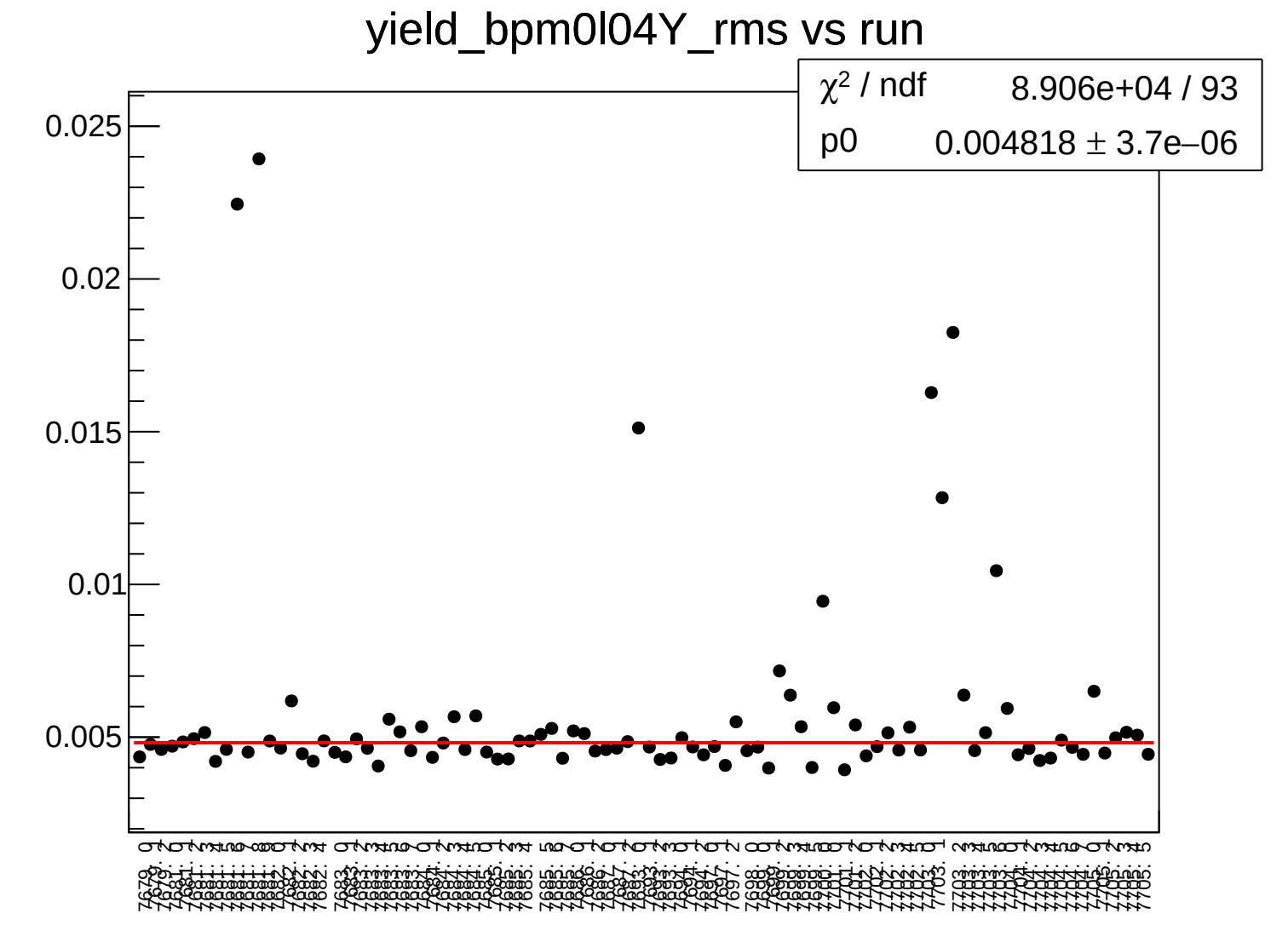

yield_bpm0l04X_mean vs run
χ² / ndf 1.062e+07 / 93
p0 1.657 ± 2.246e−05
1.9
1.8
1.7
1.6
1.5
pull
Entries 94
Mean 1183
Std Dev 1133
600
400
200
0
−200
−400
−600
−800

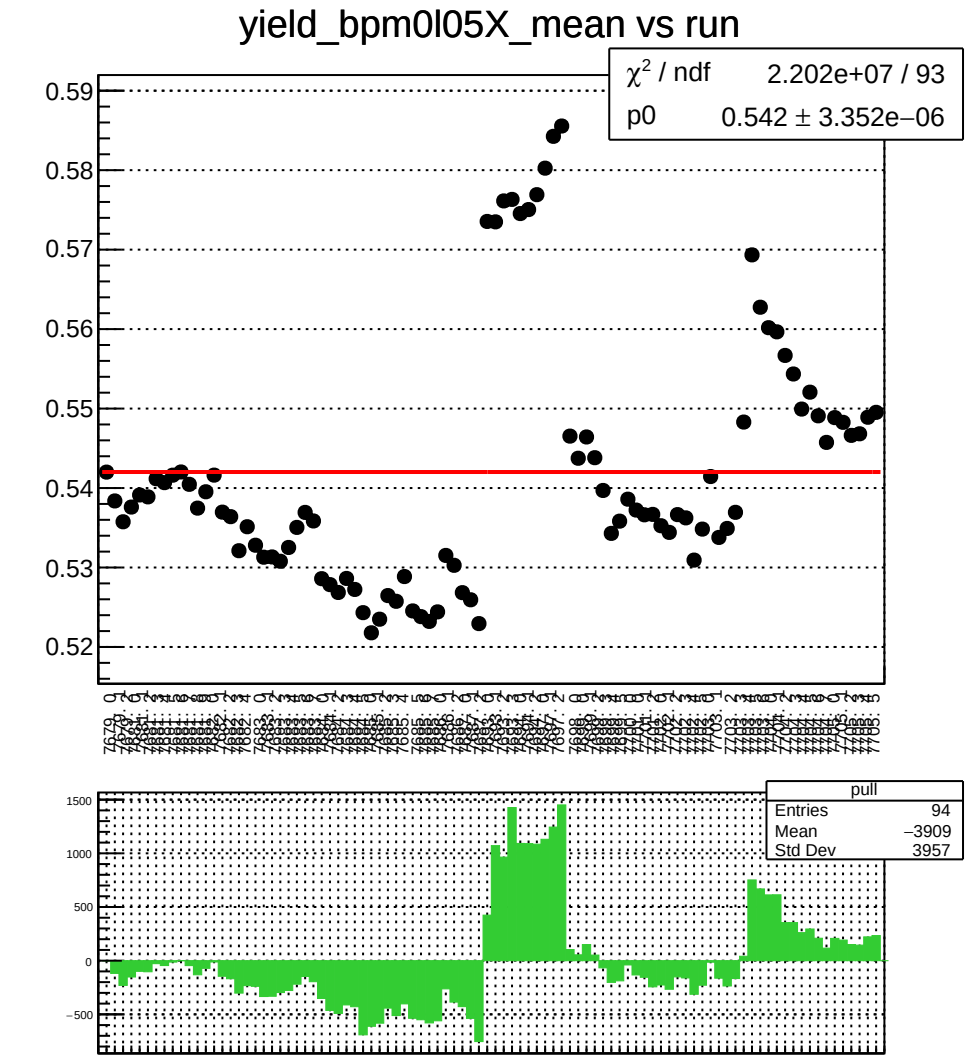

pull1D
Entries 94
Mean −0.9072
Std Dev 4.719
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

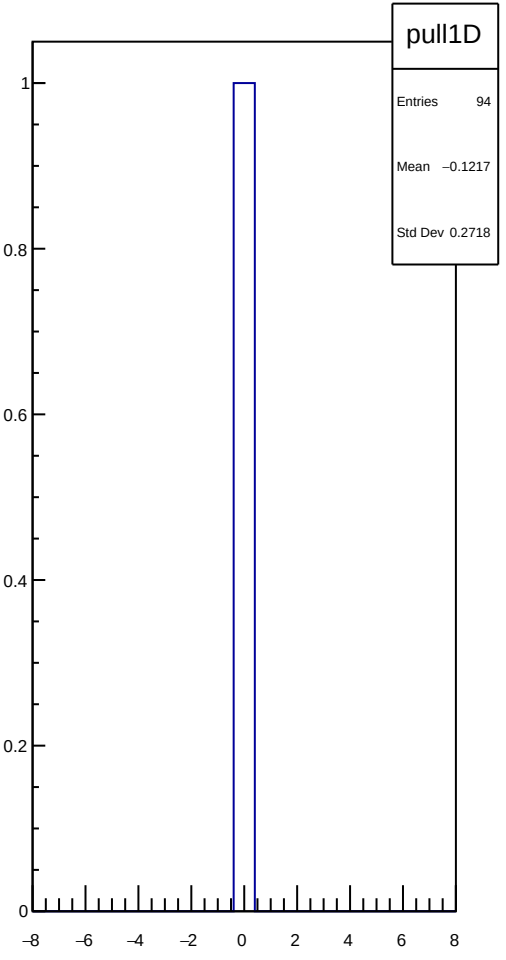

yield_bpm0l04X_rms vs run
χ² / ndf 5.972e+04 / 93
p0 0.02086 ± 1.588e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

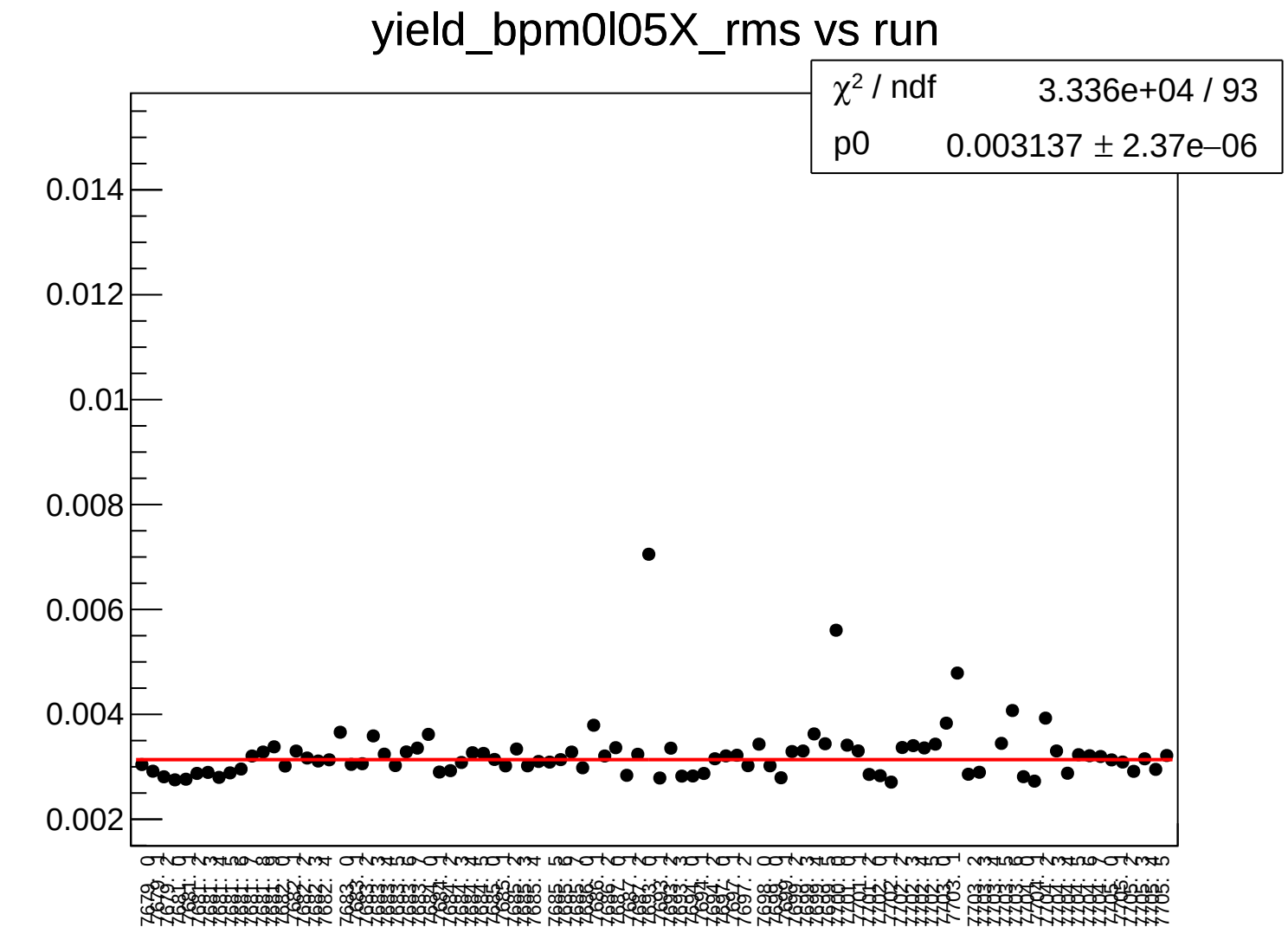

yield_bpm0l04Y_mean vs run
χ² / ndf 7.451e+06 / 93
p0 0.8607 ± 5.232e−06
0.91
0.9
0.89
0.88
0.87
0.86
0.85
0.84
0.83
pull
Entries 94
Mean 643.4
Std Dev 606.2
1000
800
600
400
200
0
−200
−400

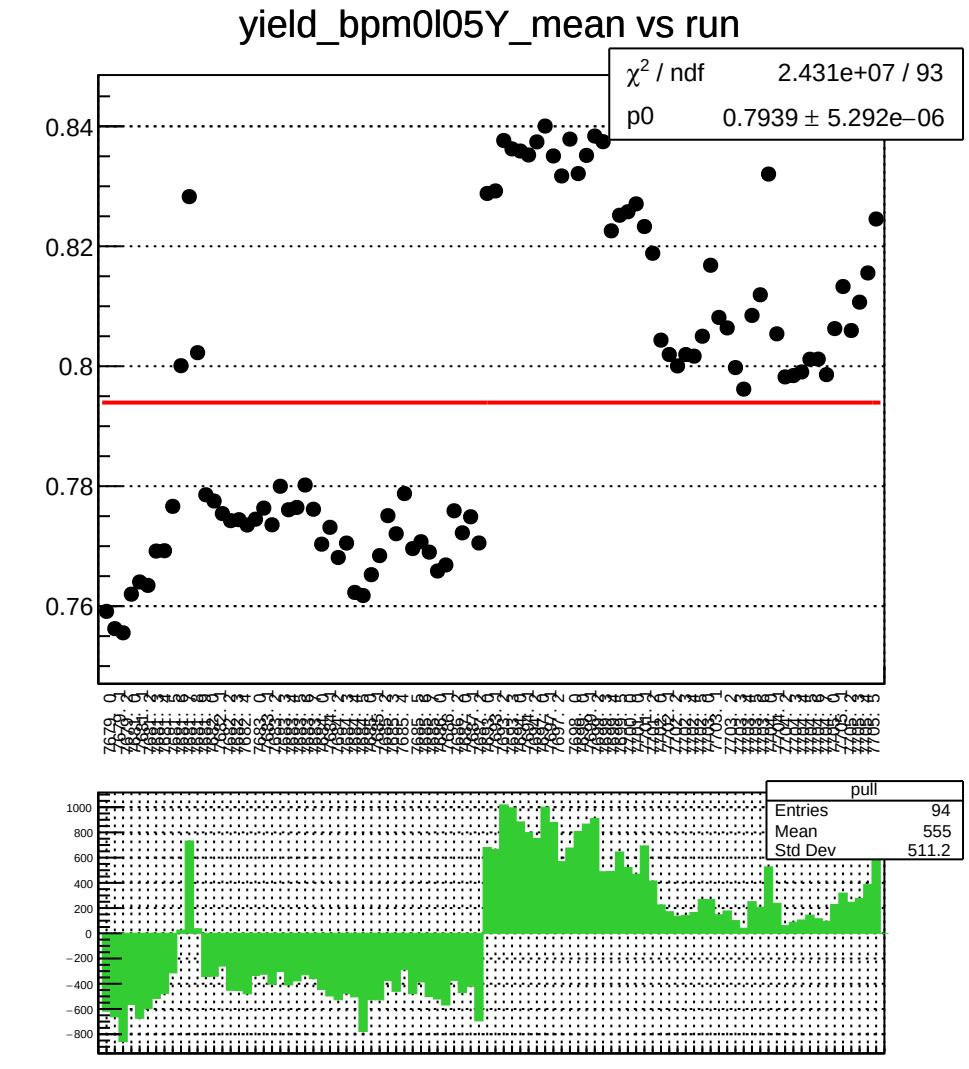

pull1D
Entries 94
Mean 5.111
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

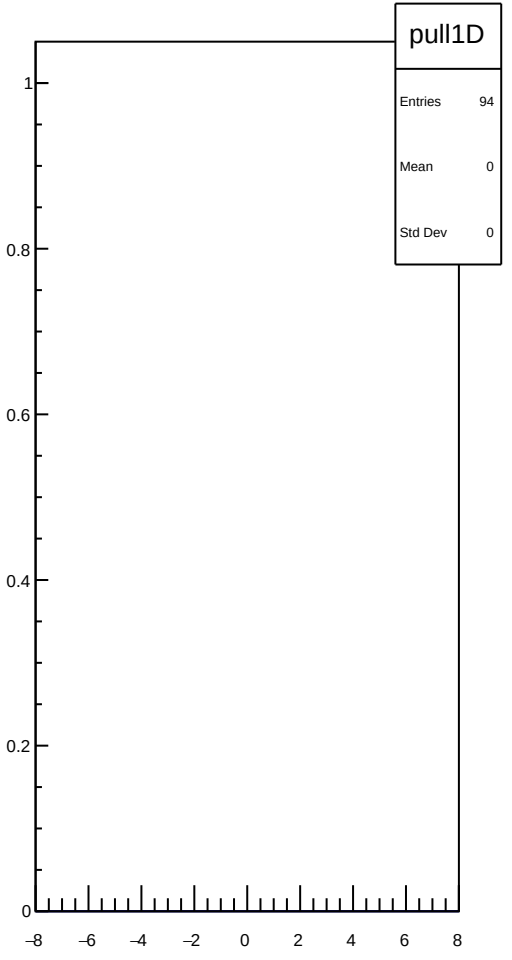

yield_bpm0l04Y_rms vs run
χ² / ndf 8.906e+04 / 93
p0 0.004818 ± 3.7e−06
0.025
0.02
0.015
0.01
0.005


yield_bpm0l05X_mean vs run
χ² / ndf 2.202e+07 / 93
p0 0.542 ± 3.352e−06
0.59
0.58
0.57
0.56
0.55
0.54
0.53
0.52
pull
Entries 94
Mean −3909
Std Dev 3957
1500
1000
500
0
−500

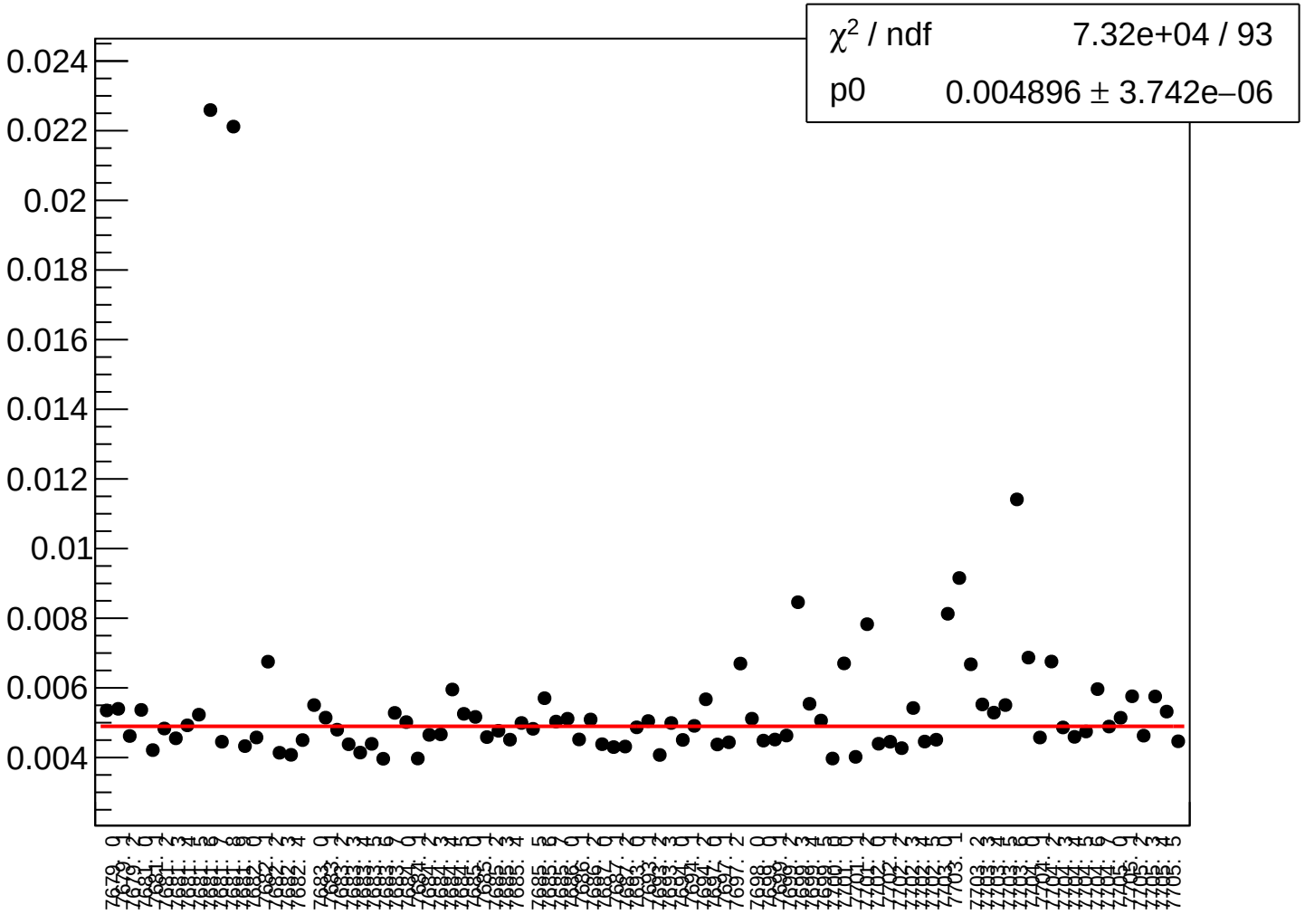

pull1D
Entries 94
Mean −0.1217
Std Dev 0.2718
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

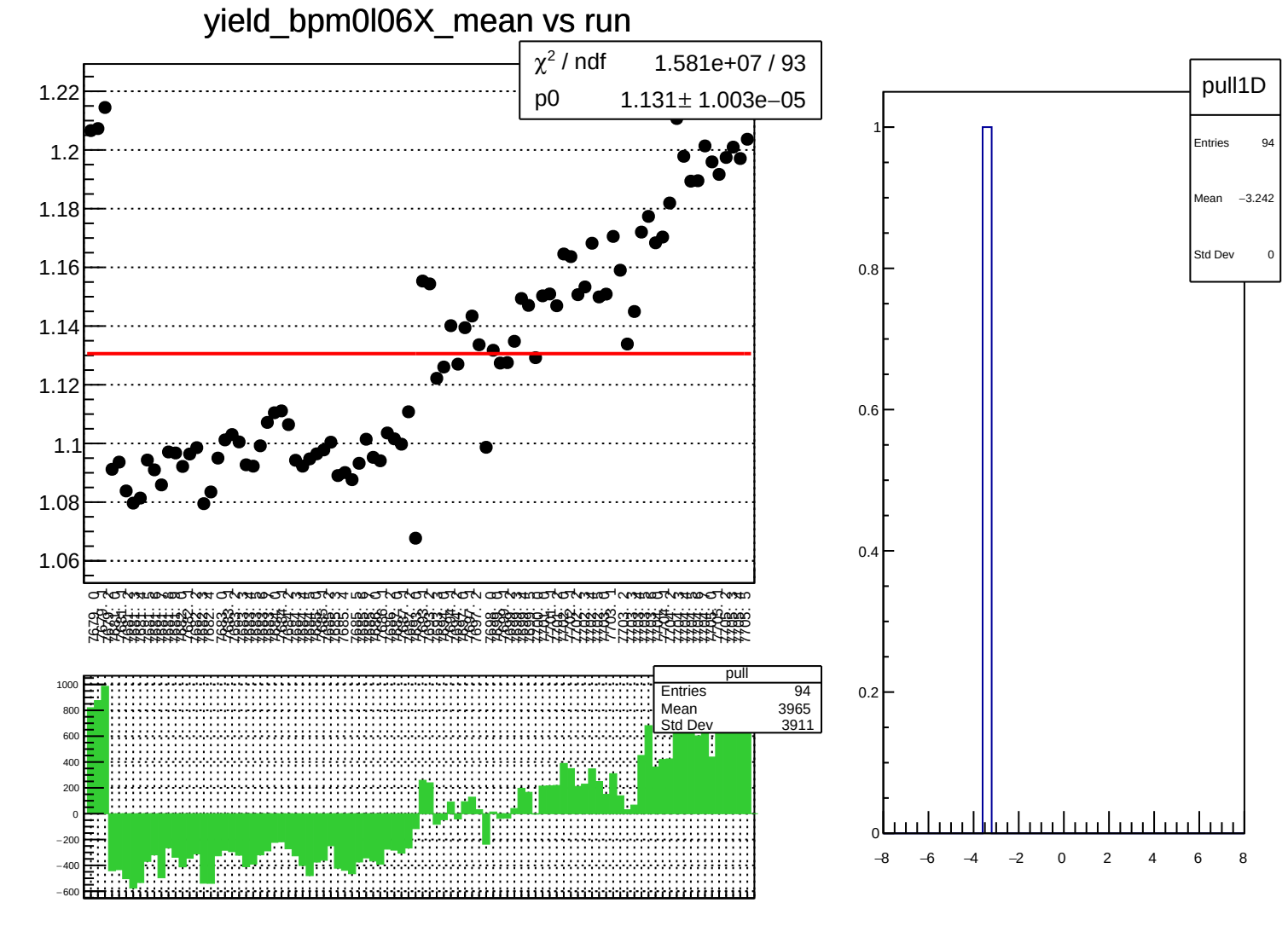

yield_bpm0l05X_rms vs run
χ² / ndf 3.336e+04 / 93
p0 0.003137 ± 2.37e–06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

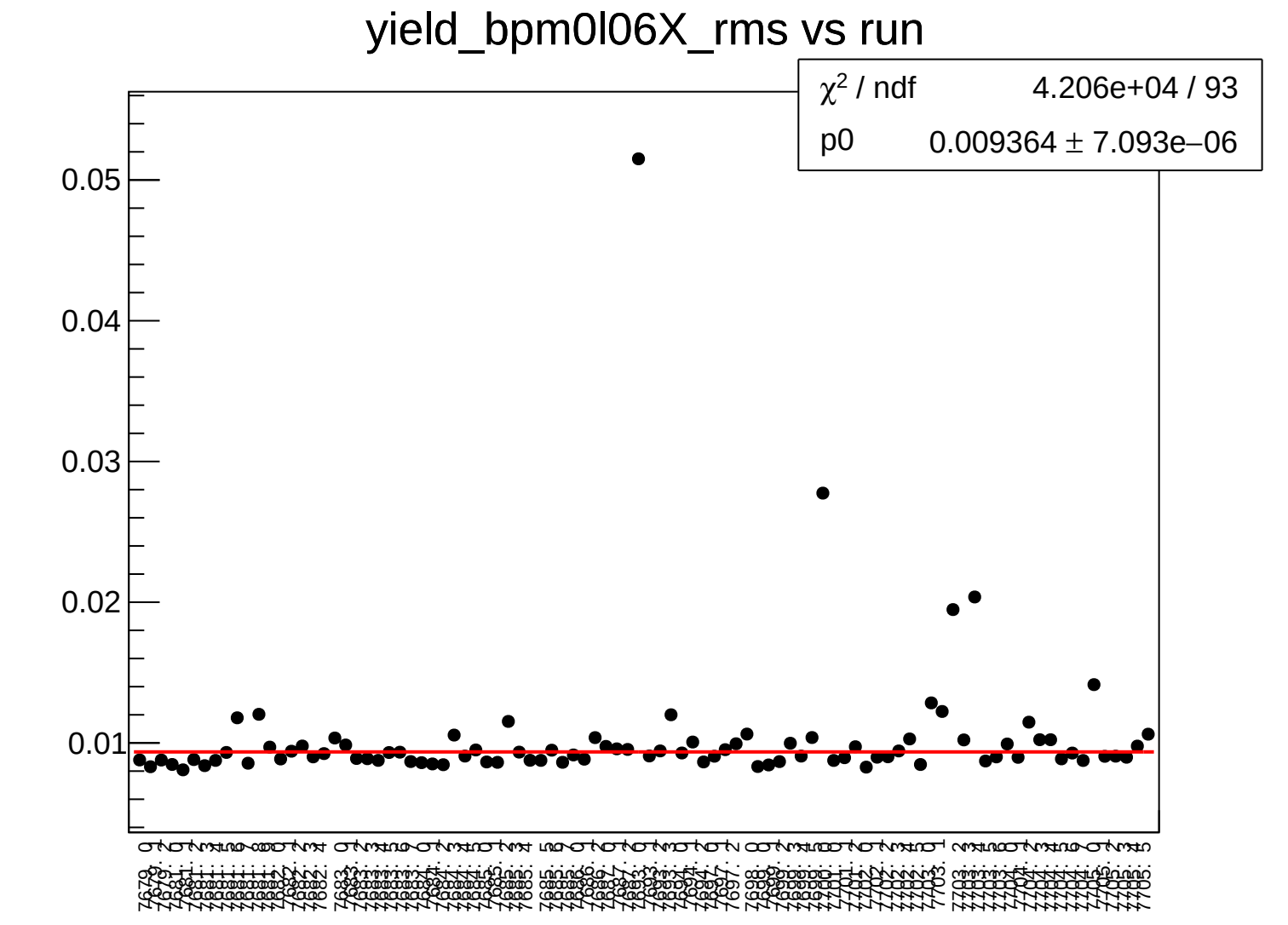

yield_bpm0l05Y_mean vs run
χ² / ndf 2.431e+07 / 93
p0 0.7939 ± 5.292e−06
0.84
0.82
0.8
0.78
0.76
pull
Entries 94
Mean 555
Std Dev 511.2
1000
800
600
400
200
0
−200
−400
−600
−800

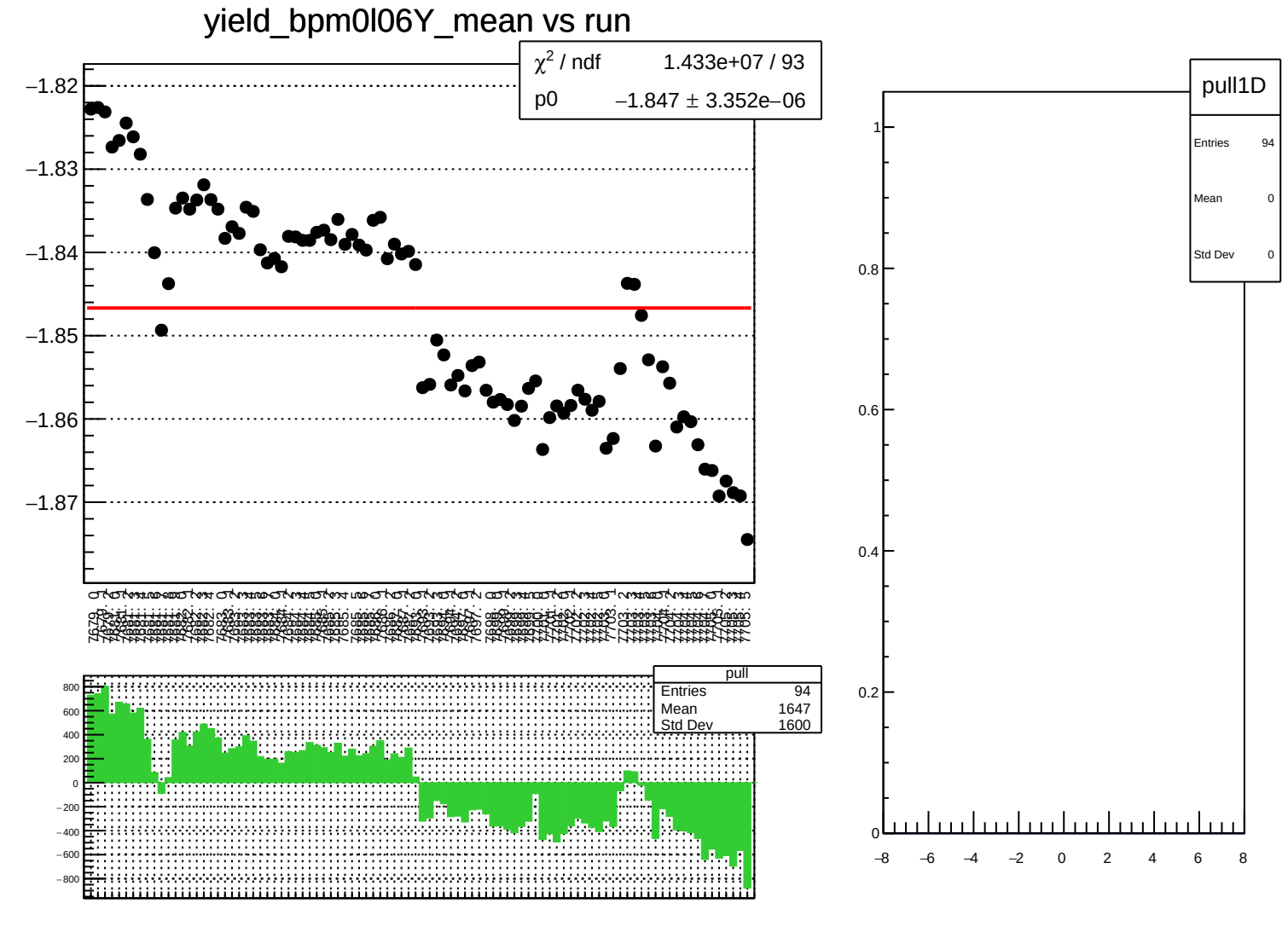

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

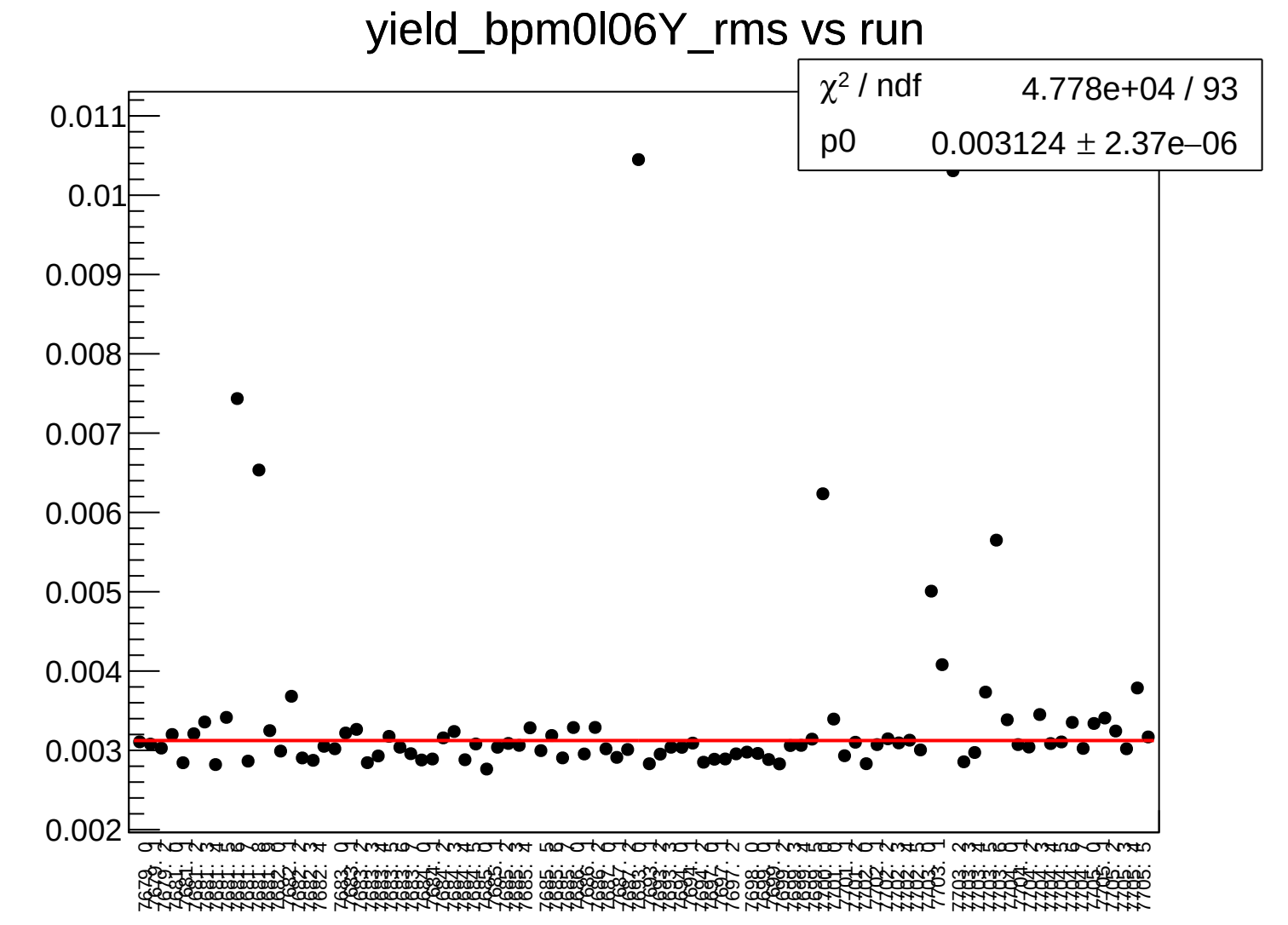
yield_bpm0l05Y_rms vs run

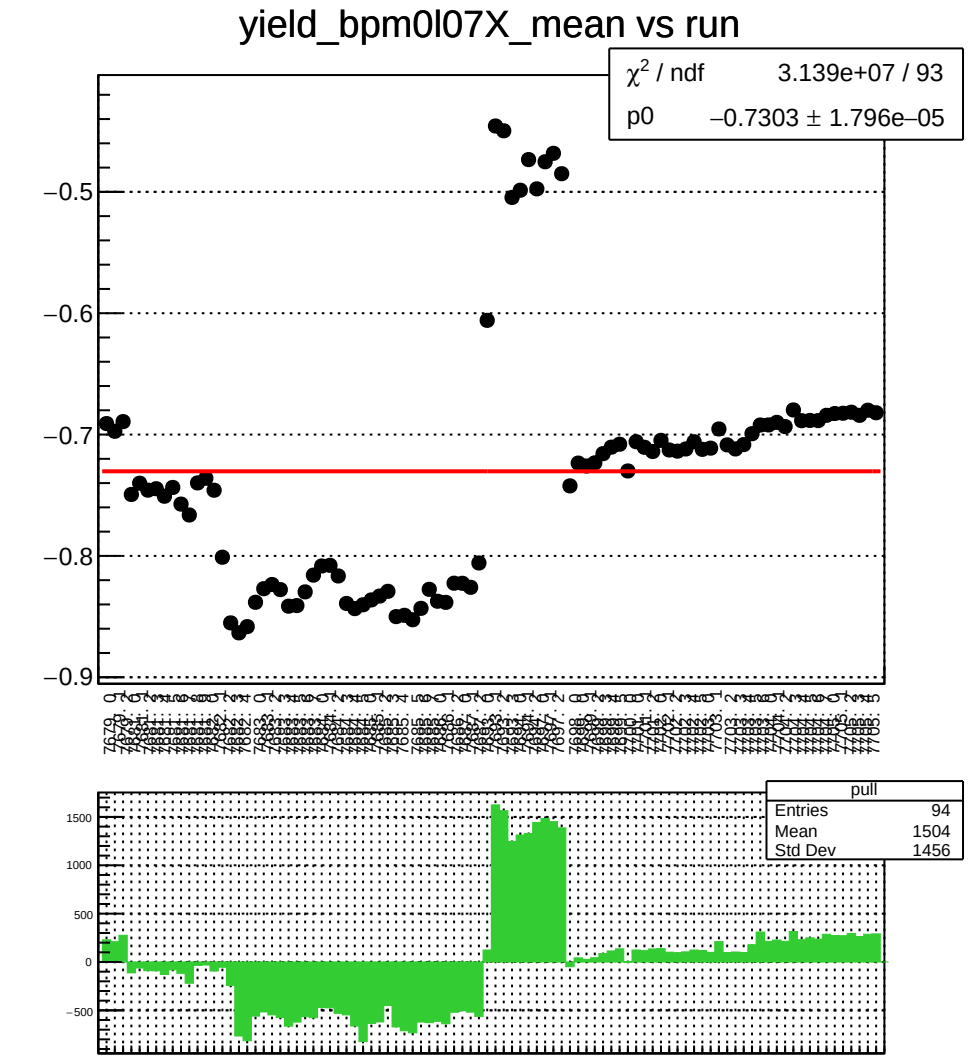


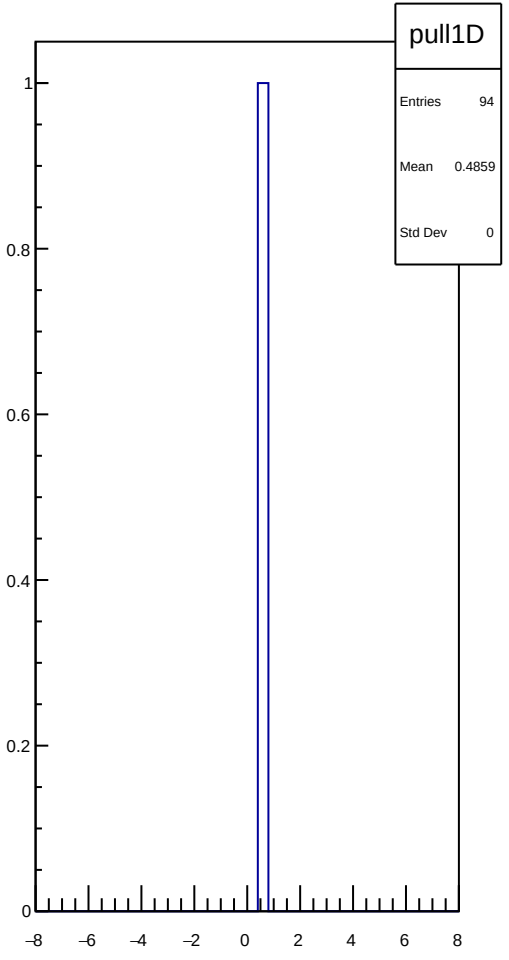

yield_bpm0l06X_mean vs run
χ² / ndf 1.581e+07 / 93
p0 1.131± 1.003e−05
pull
Entries 94
Mean 3965
Std Dev 3911
pull1D
Entries 94
Mean −3.242
Std Dev 0

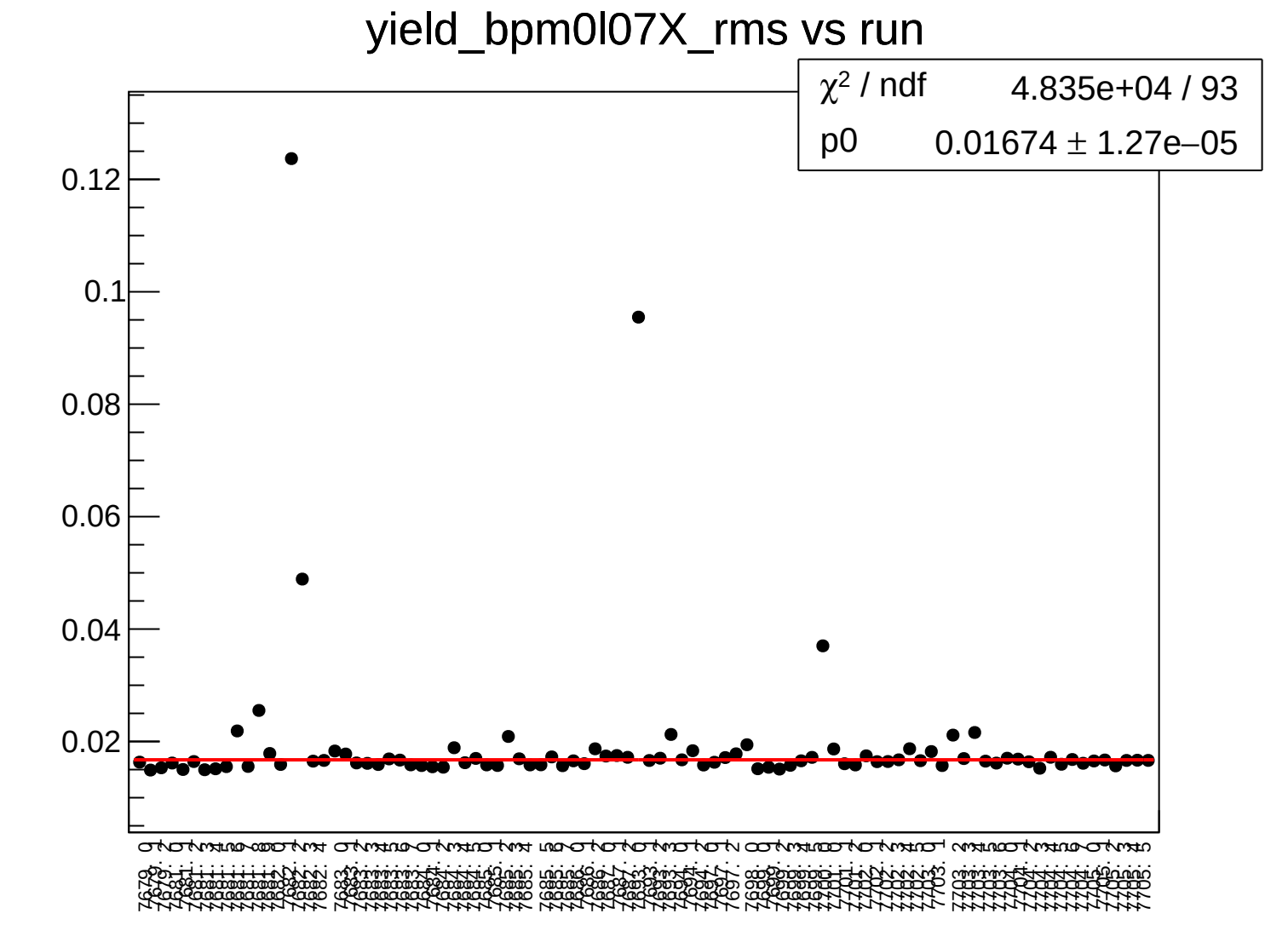

yield_bpm0l06X_rms vs run
χ² / ndf 4.206e+04 / 93
p0 0.009364 ± 7.093e−06
0.05
0.04
0.03
0.02
0.01

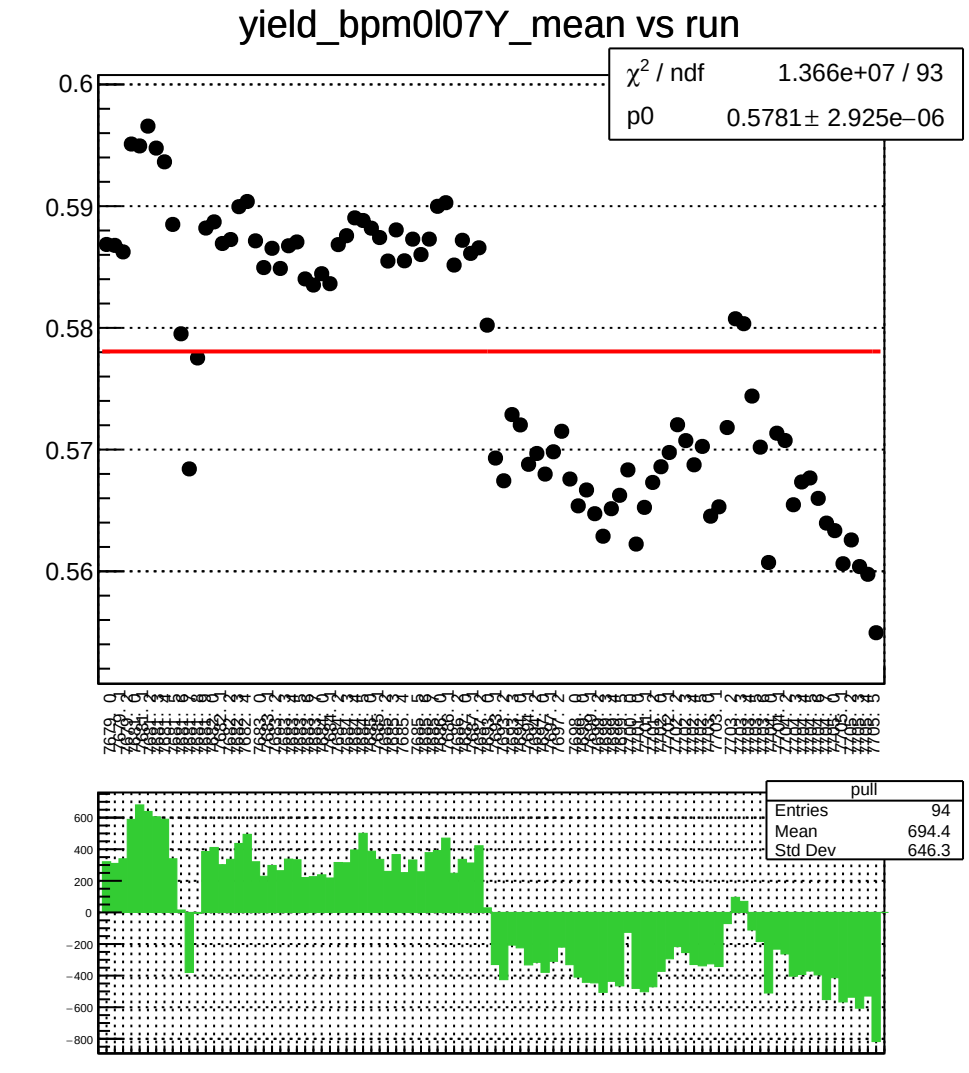

yield_bpm0l06Y_mean vs run
χ² / ndf 1.433e+07 / 93
p0 −1.847 ± 3.352e−06
−1.82
−1.83
−1.84
−1.85
−1.86
−1.87
pull
Entries 94
Mean 1647
Std Dev 1600
800
600
400
200
0
−200
−400
−600
−800
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

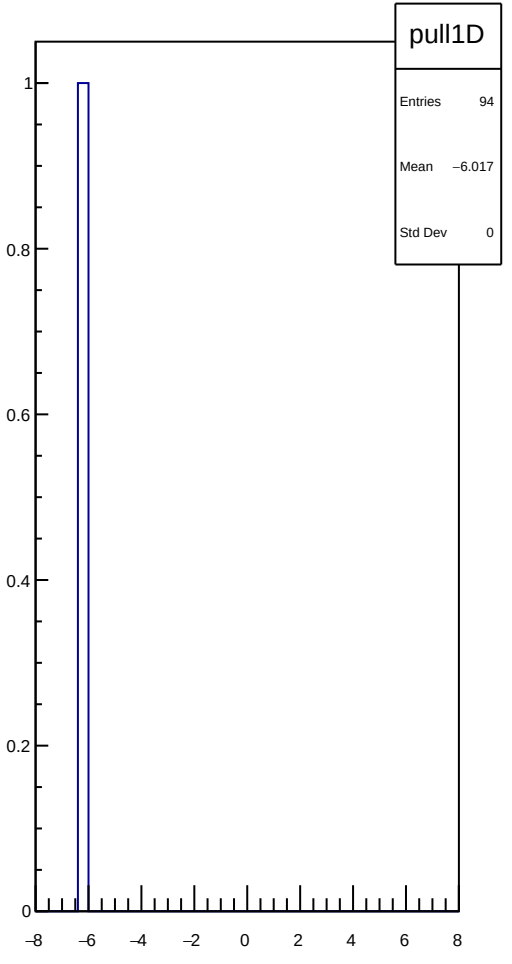

yield_bpm0l06Y_rms vs run
χ² / ndf 4.778e+04 / 93
p0 0.003124 ± 2.37e–06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

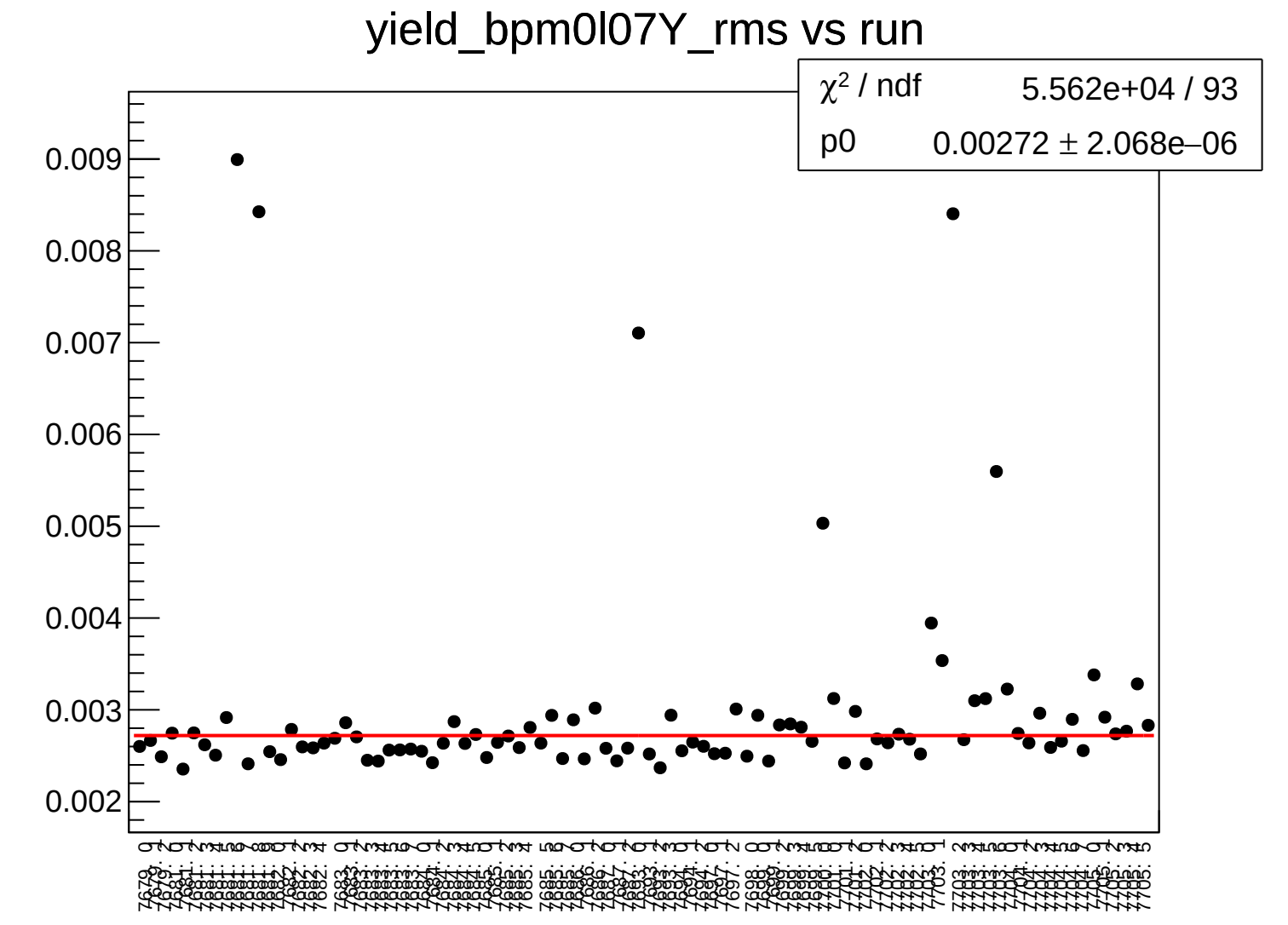

yield_bpm0l07X_mean vs run
χ² / ndf 3.139e+07 / 93
p0 −0.7303 ± 1.796e−05
−0.5
−0.6
−0.7
−0.8
−0.9
pull
Entries 94
Mean 1504
Std Dev 1456
1500
1000
500
0
−500

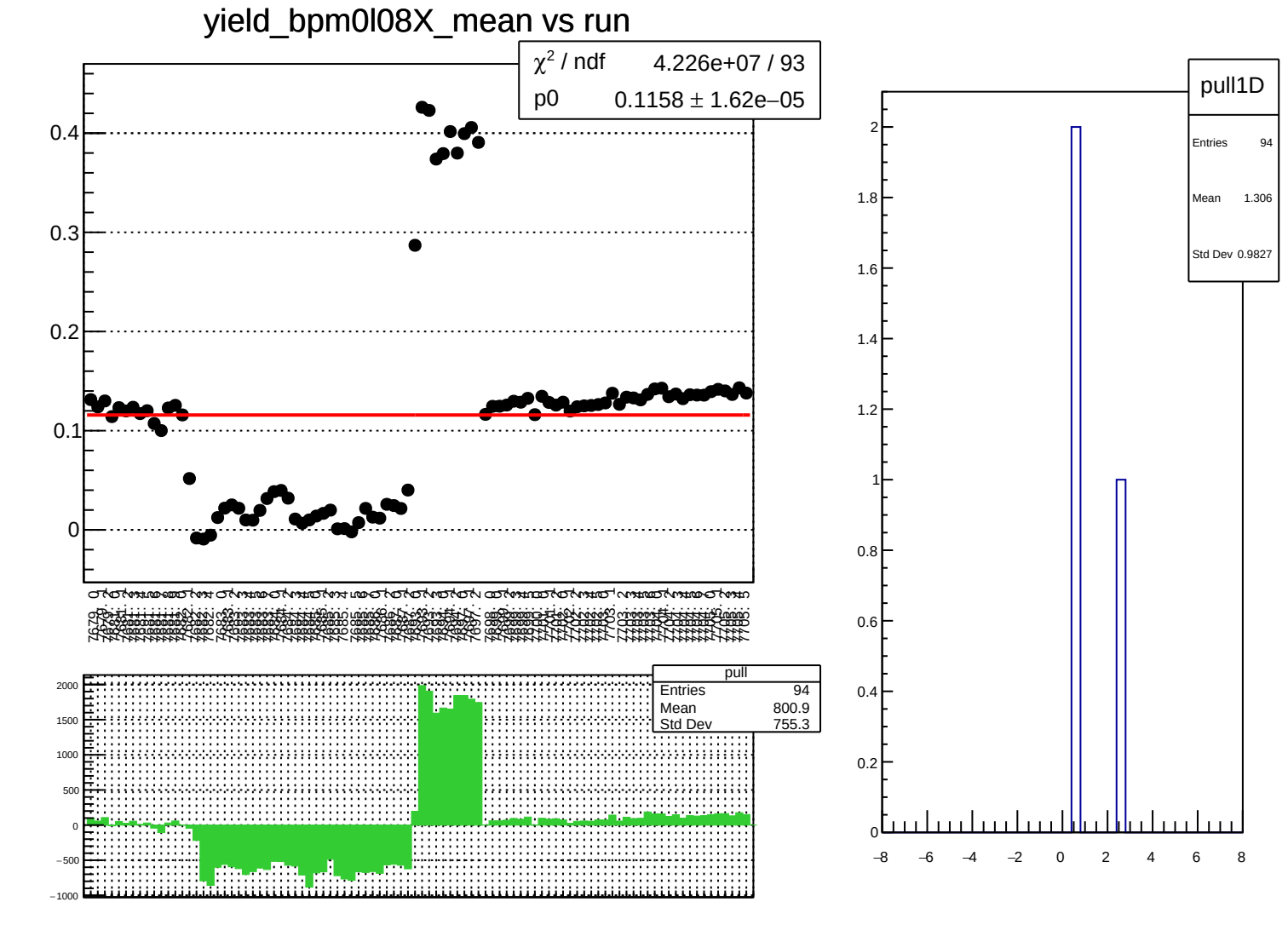

pull1D
Entries 94
Mean 0.4859
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

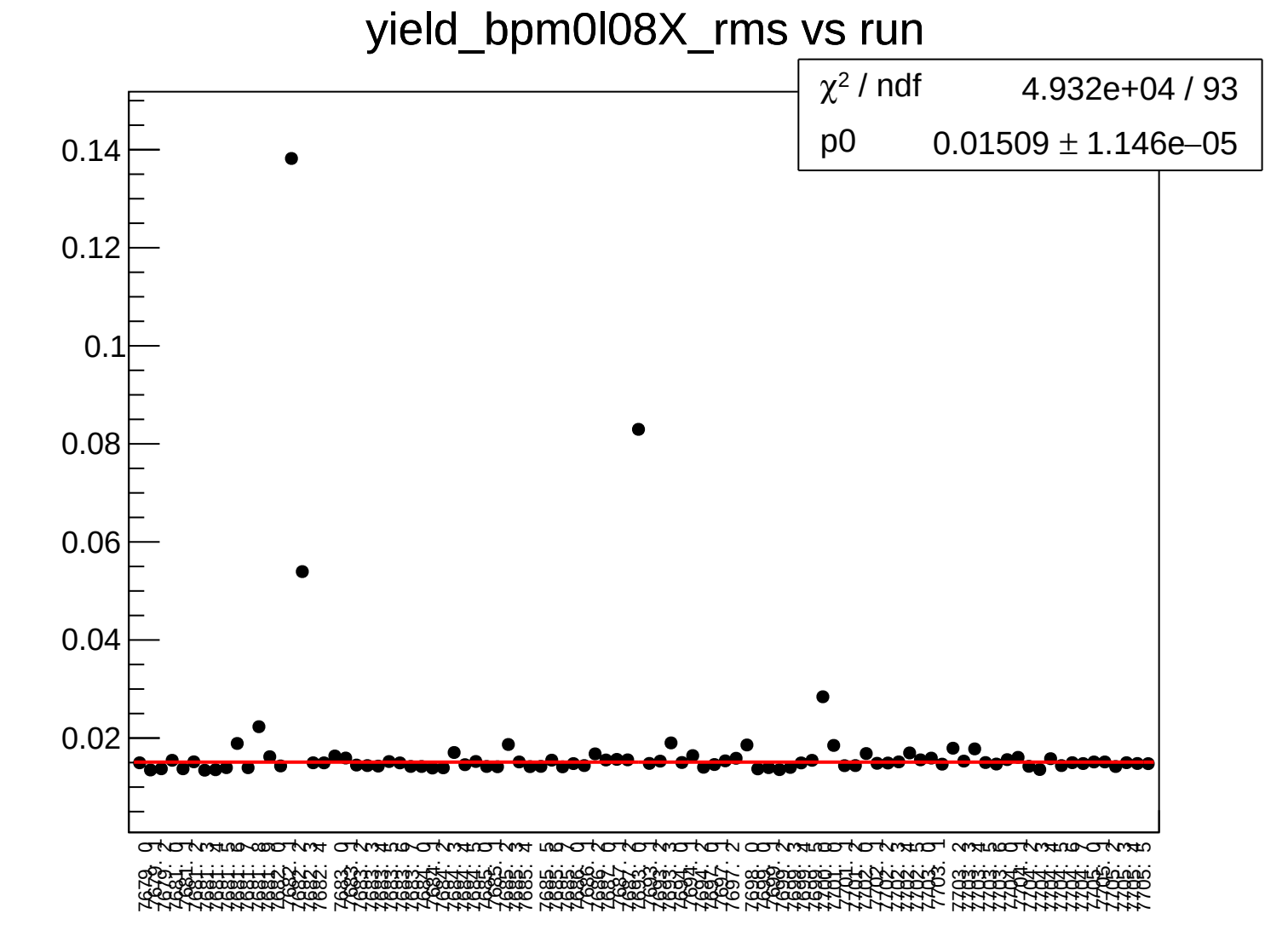

yield_bpm0l07X_rms vs run
χ² / ndf 4.835e+04 / 93
p0 0.01674 ± 1.27e−05
0.12
0.1
0.08
0.06
0.04
0.02

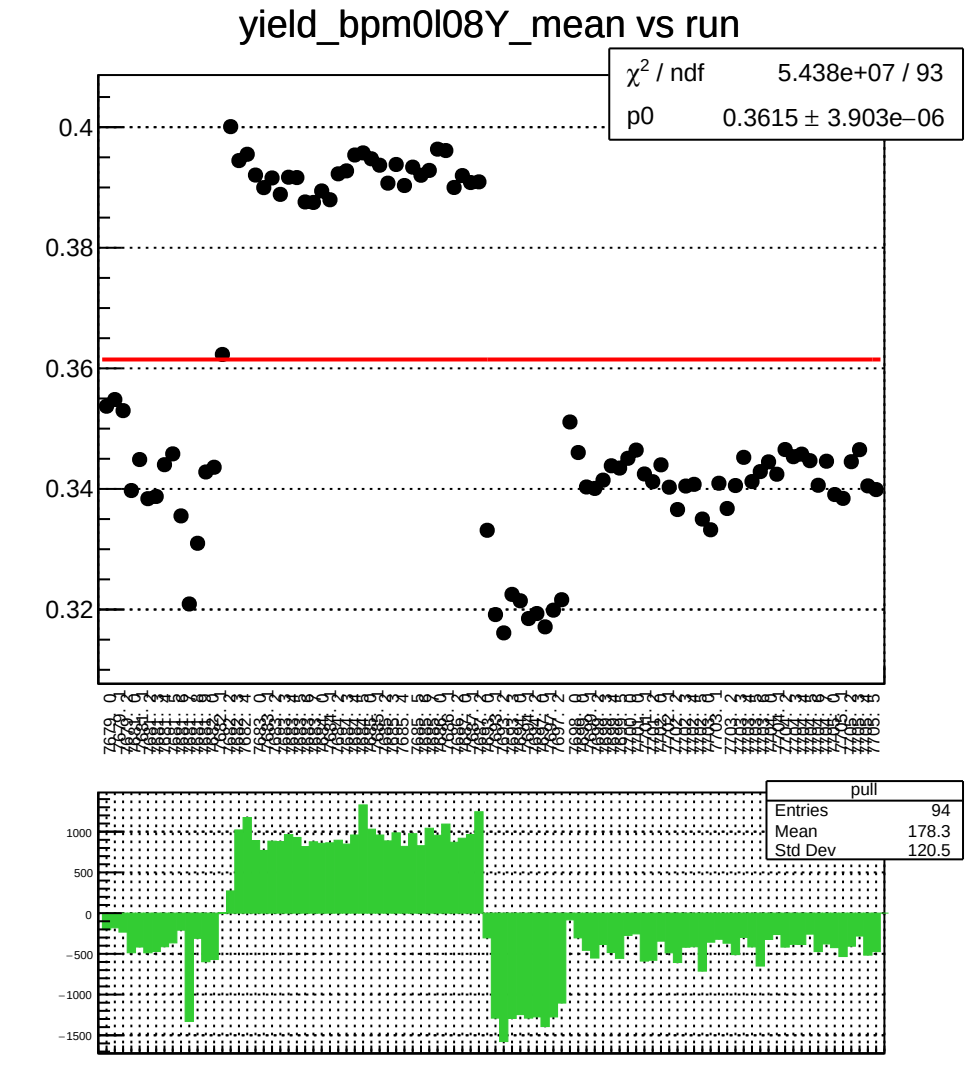

yield_bpm0l07Y_mean vs run
χ² / ndf 1.366e+07 / 93
p0 0.5781 ± 2.925e−06
0.6
0.59
0.58
0.57
0.56
pull
Entries 94
Mean 694.4
Std Dev 646.3
600
400
200
0
−200
−400
−600
−800

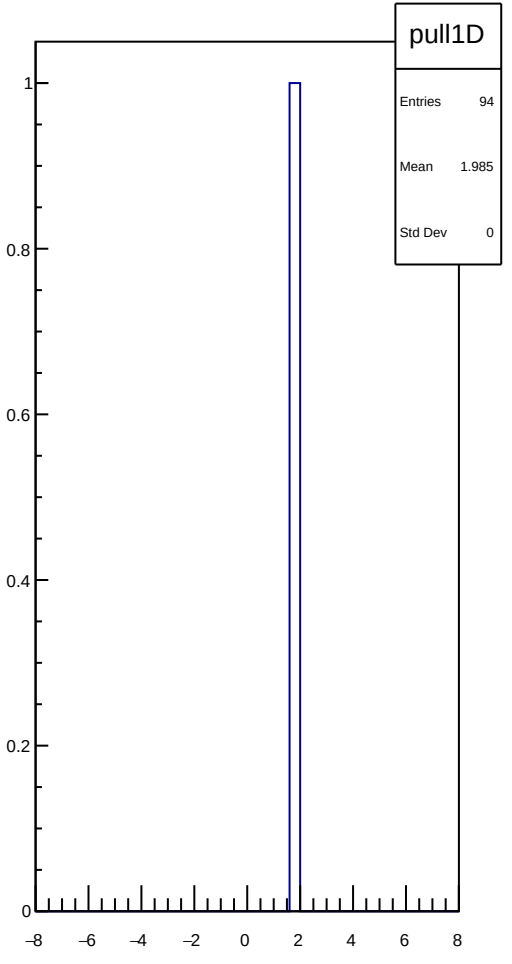

pull1D
Entries 94
Mean −6.017
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

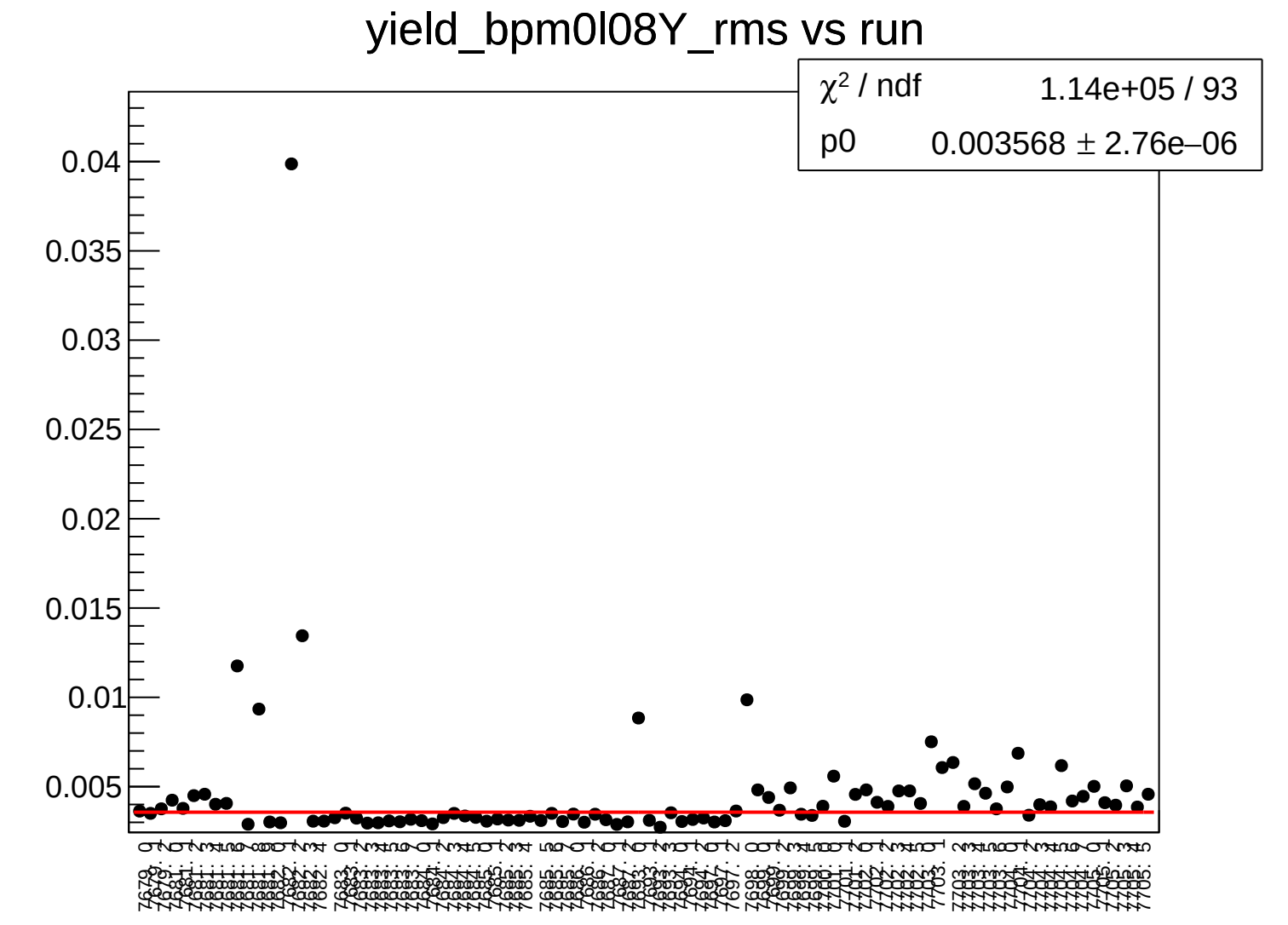

yield_bpm0l07Y_rms vs run
χ² / ndf 5.562e+04 / 93
p0 0.00272 ± 2.068e–06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

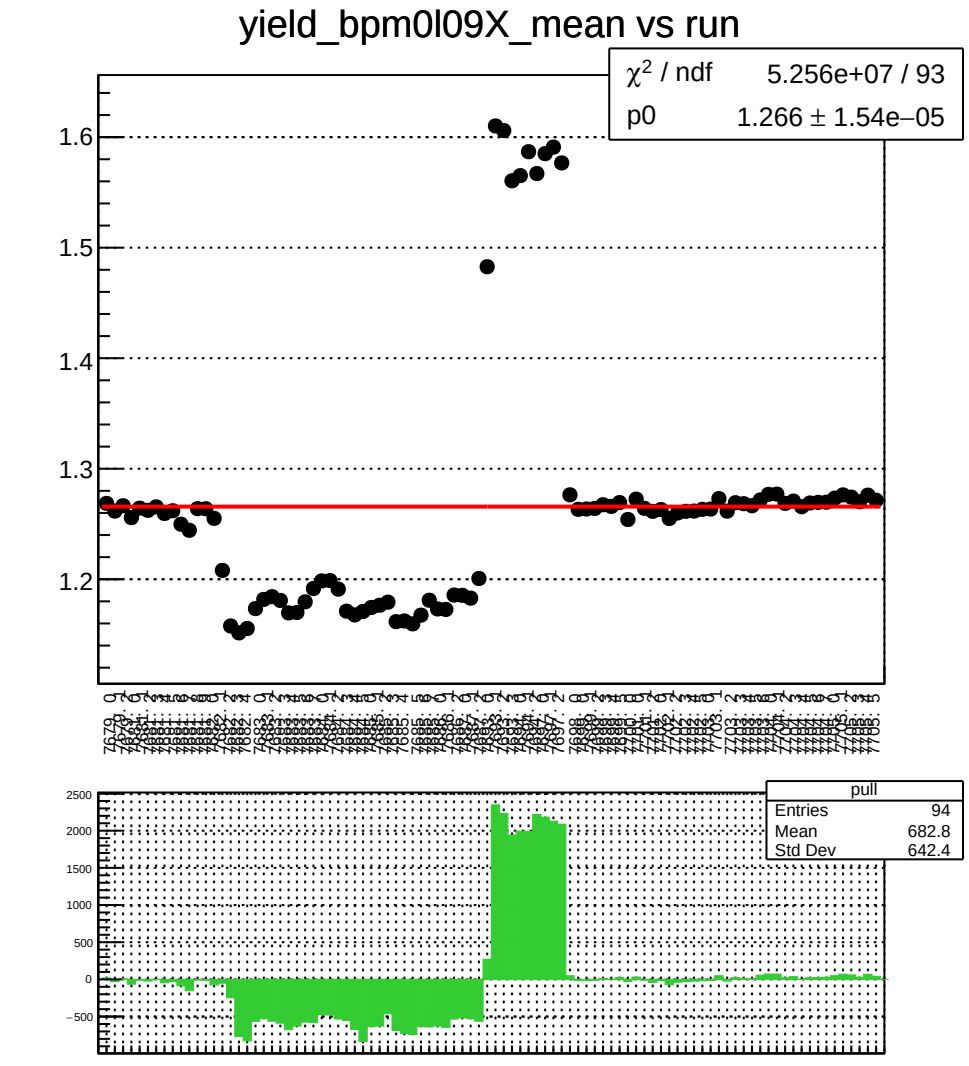

yield_bpm0l08X_mean vs run
χ² / ndf 4.226e+07 / 93
p0 0.1158 ± 1.62e−05
0.4
0.3
0.2
0.1
0
pull
Entries 94
Mean 800.9
Std Dev 755.3
2000
1500
1000
500
0
−500
−1000
pull1D
Entries 94
Mean 1.306
Std Dev 0.9827
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

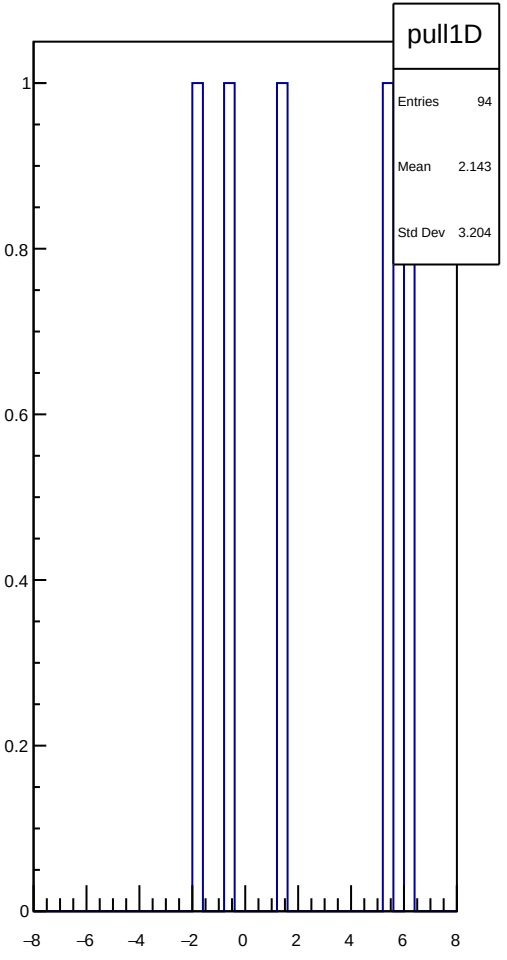

yield_bpm0l08X_rms vs run
χ² / ndf 4.932e+04 / 93
p0 0.01509 ± 1.146e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

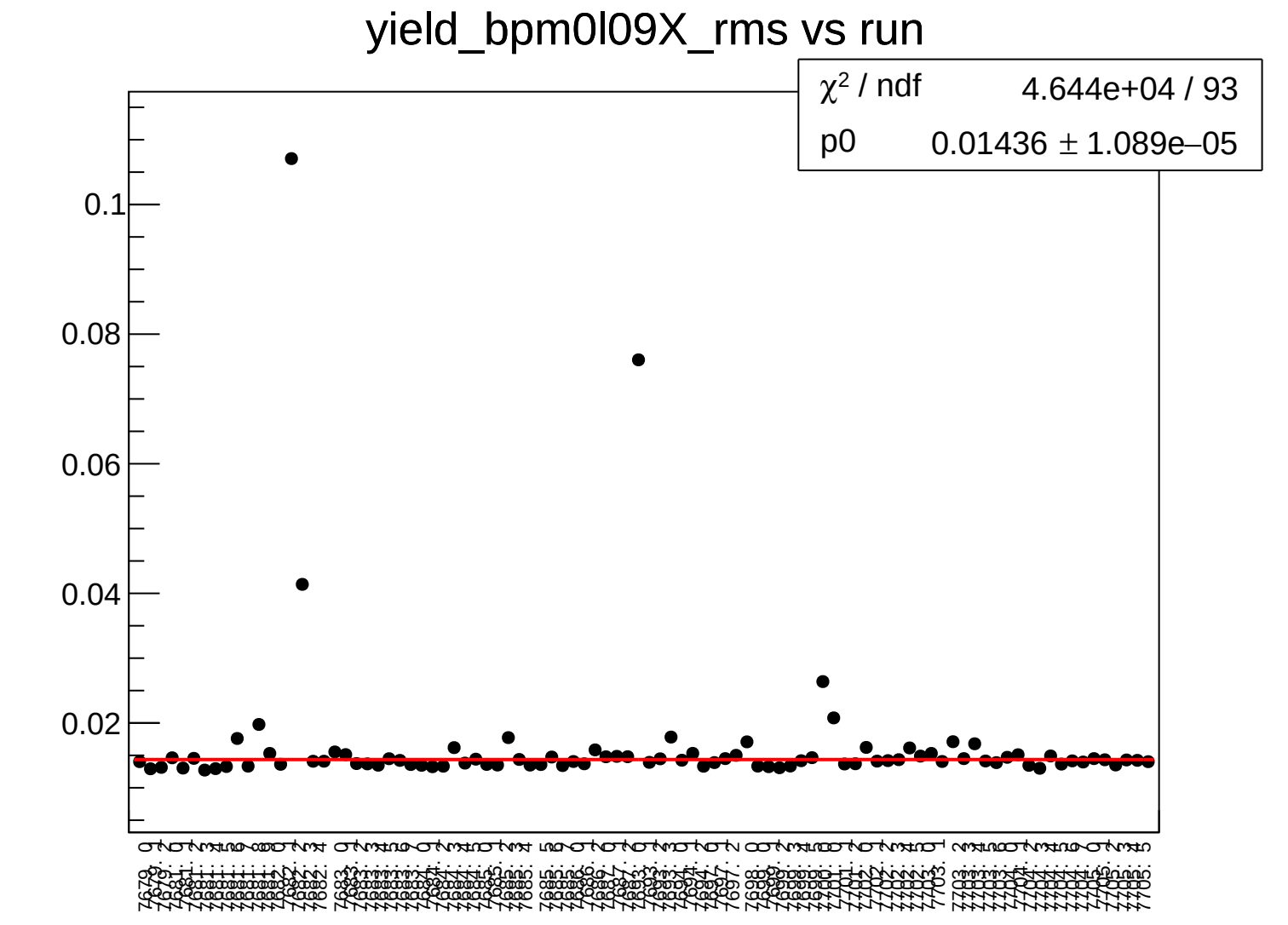

yield_bpm0l08Y_mean vs run
χ² / ndf 5.438e+07 / 93
p0 0.3615 ± 3.903e−06
0.4
0.38
0.36
0.34
0.32
pull
Entries 94
Mean 178.3
Std Dev 120.5
1000
500
0
−500
−1000
−1500

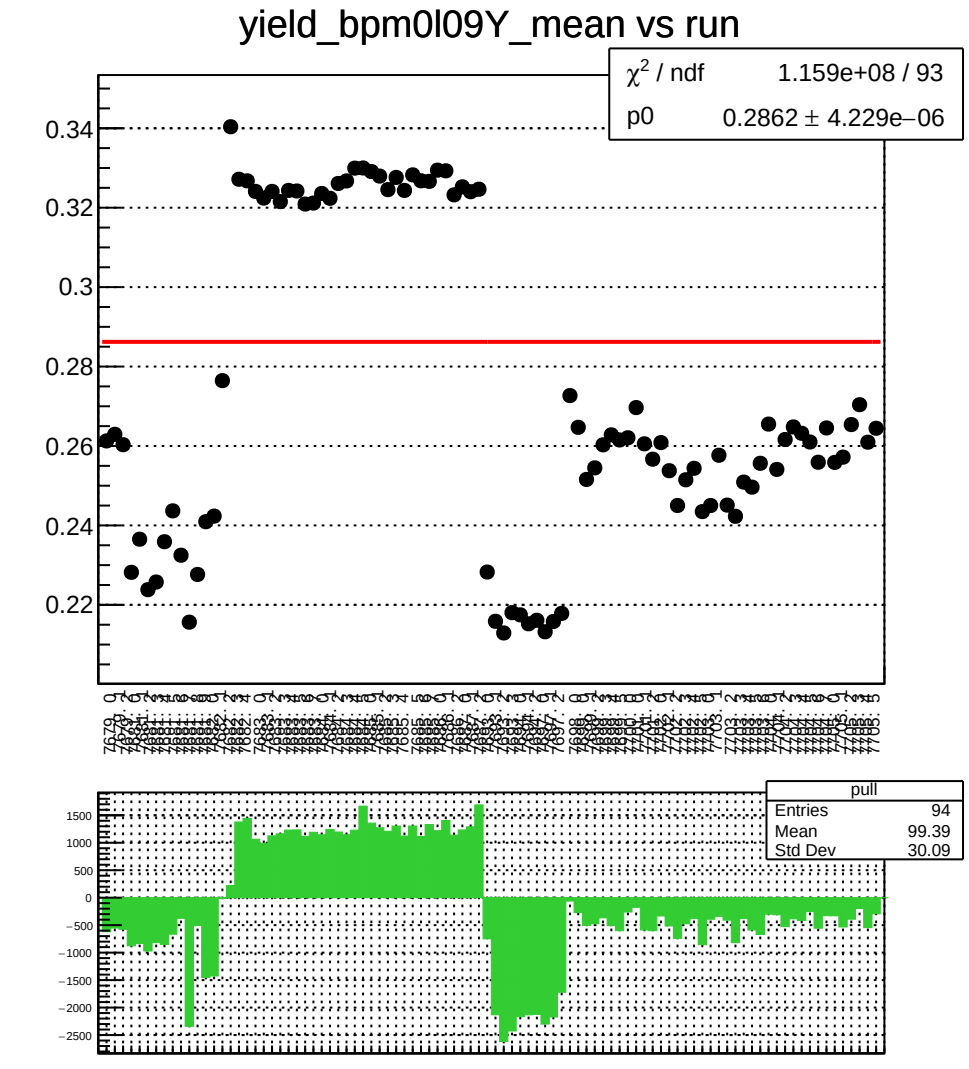

pull1D
Entries 94
Mean 1.985
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

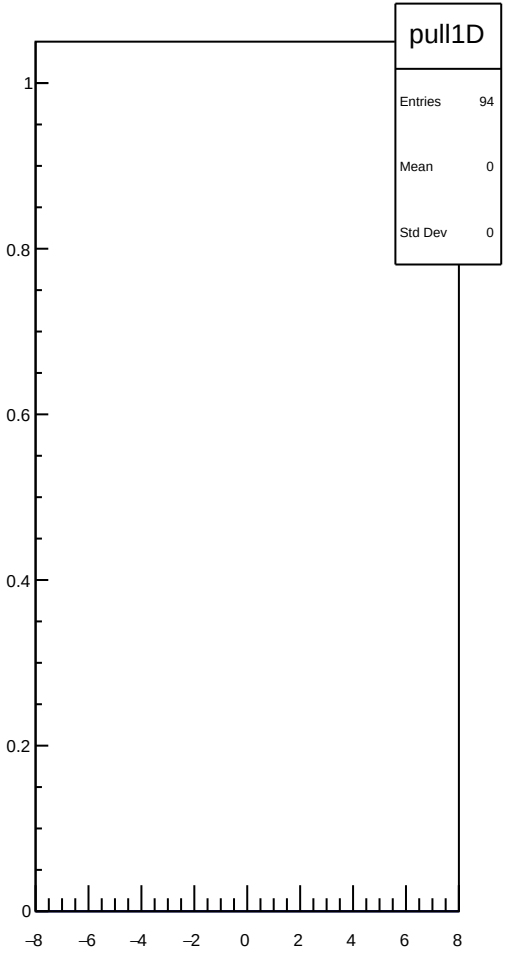

yield_bpm0l08Y_rms vs run
χ² / ndf 1.14e+05 / 93
p0 0.003568 ± 2.76e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

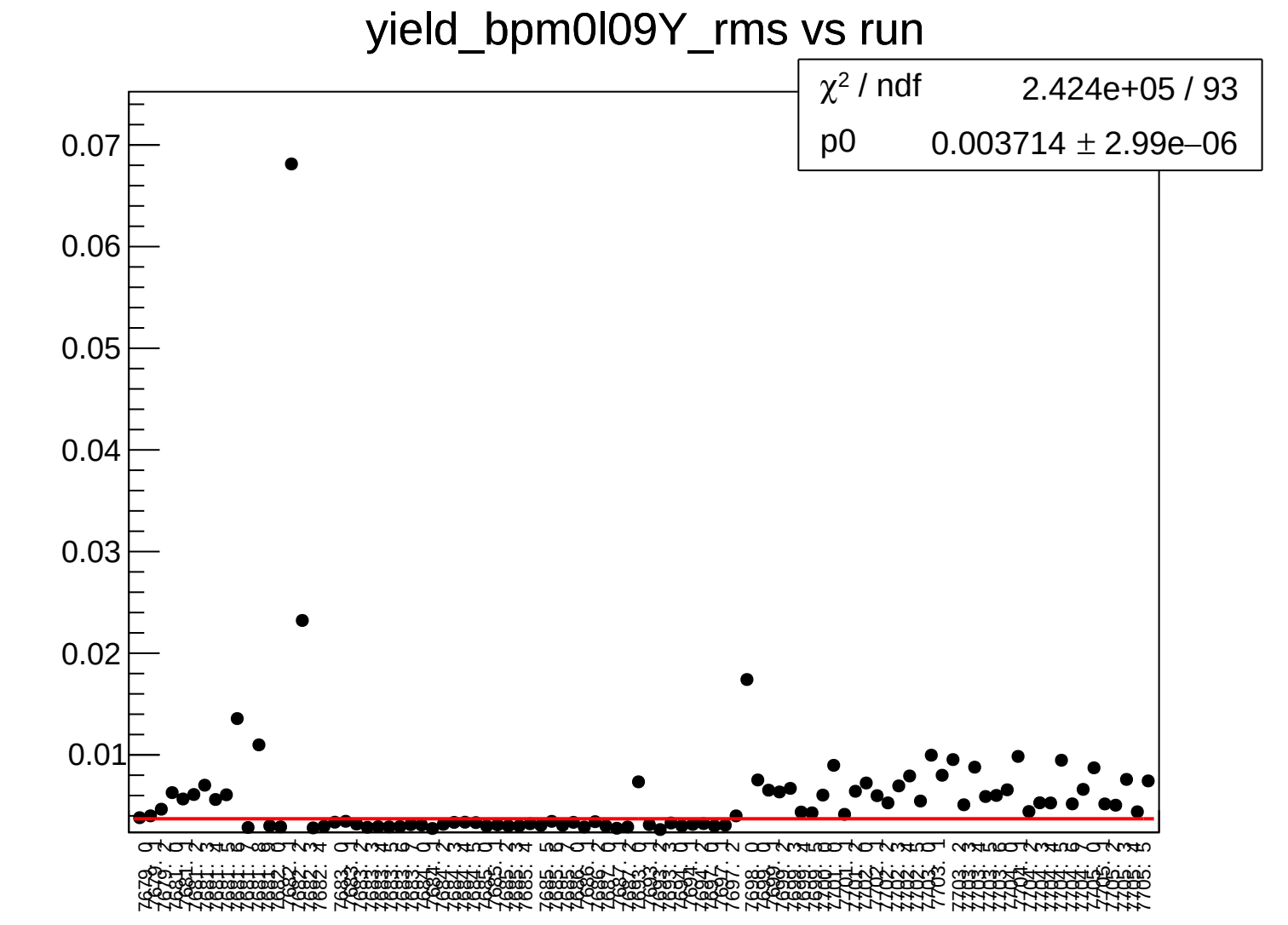

yield_bpm0l09X_mean vs run
χ² / ndf 5.256e+07 / 93
p0 1.266 ± 1.54e−05
1.6
1.5
1.4
1.3
1.2
pull
Entries 94
Mean 682.8
Std Dev 642.4
2500
2000
1500
1000
500
0
−500

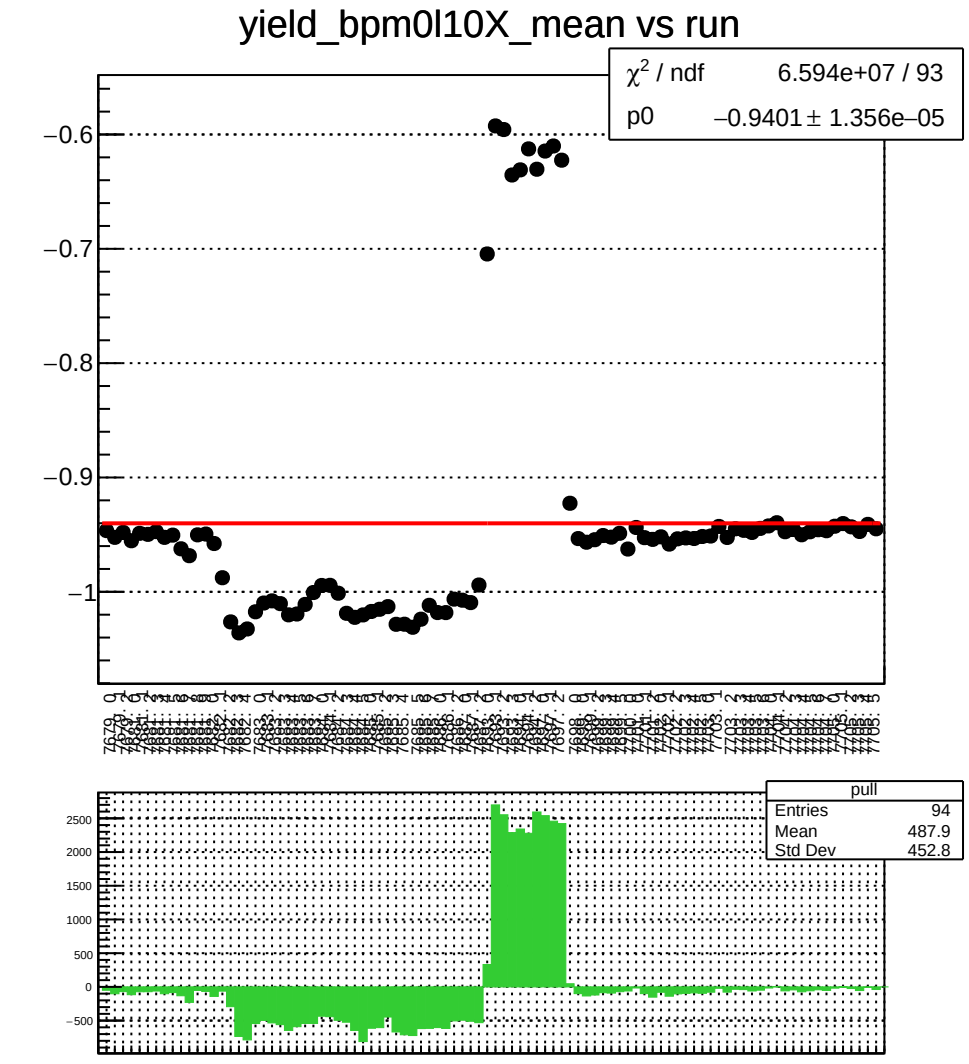

pull1D
Entries 94
Mean 2.143
Std Dev 3.204
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

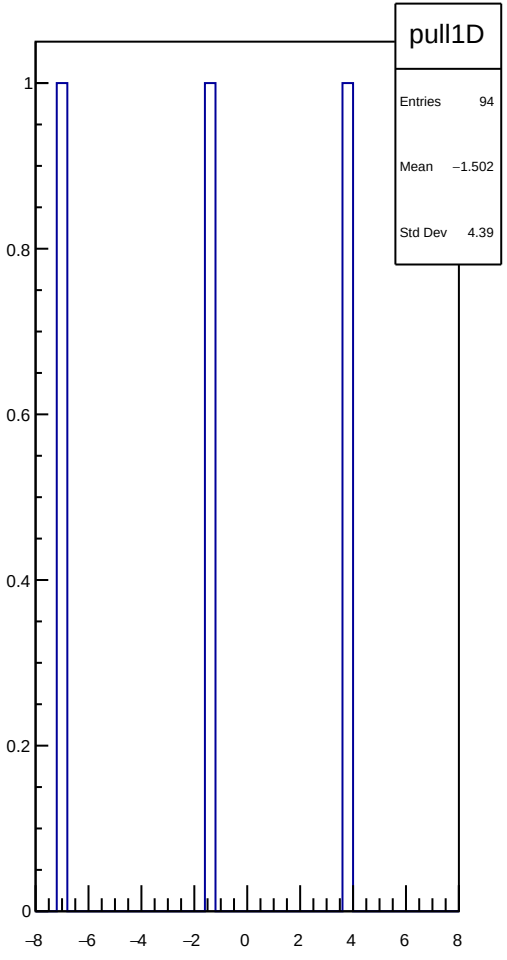

yield_bpm0l09X_rms vs run
χ² / ndf 4.644e+04 / 93
p0 0.01436 ± 1.089e–05
0.1
0.08
0.06
0.04
0.02

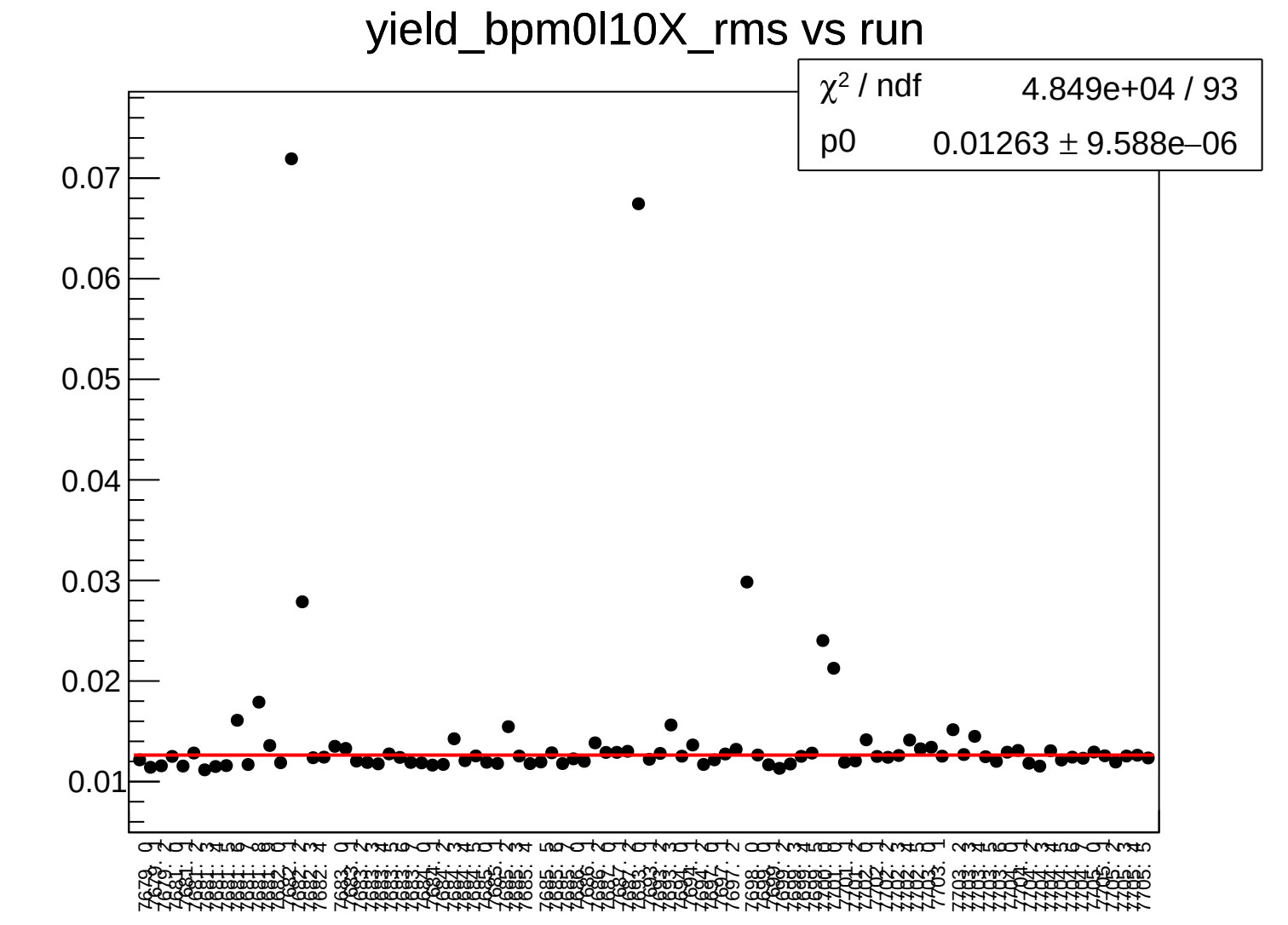

yield_bpm0l09Y_mean vs run
χ² / ndf 1.159e+08 / 93
p0 0.2862 ± 4.229e−06
0.34
0.32
0.3
0.28
0.26
0.24
0.22
pull
Entries 94
Mean 99.39
Std Dev 30.09
1500
1000
500
0
−500
−1000
−1500
−2000
−2500

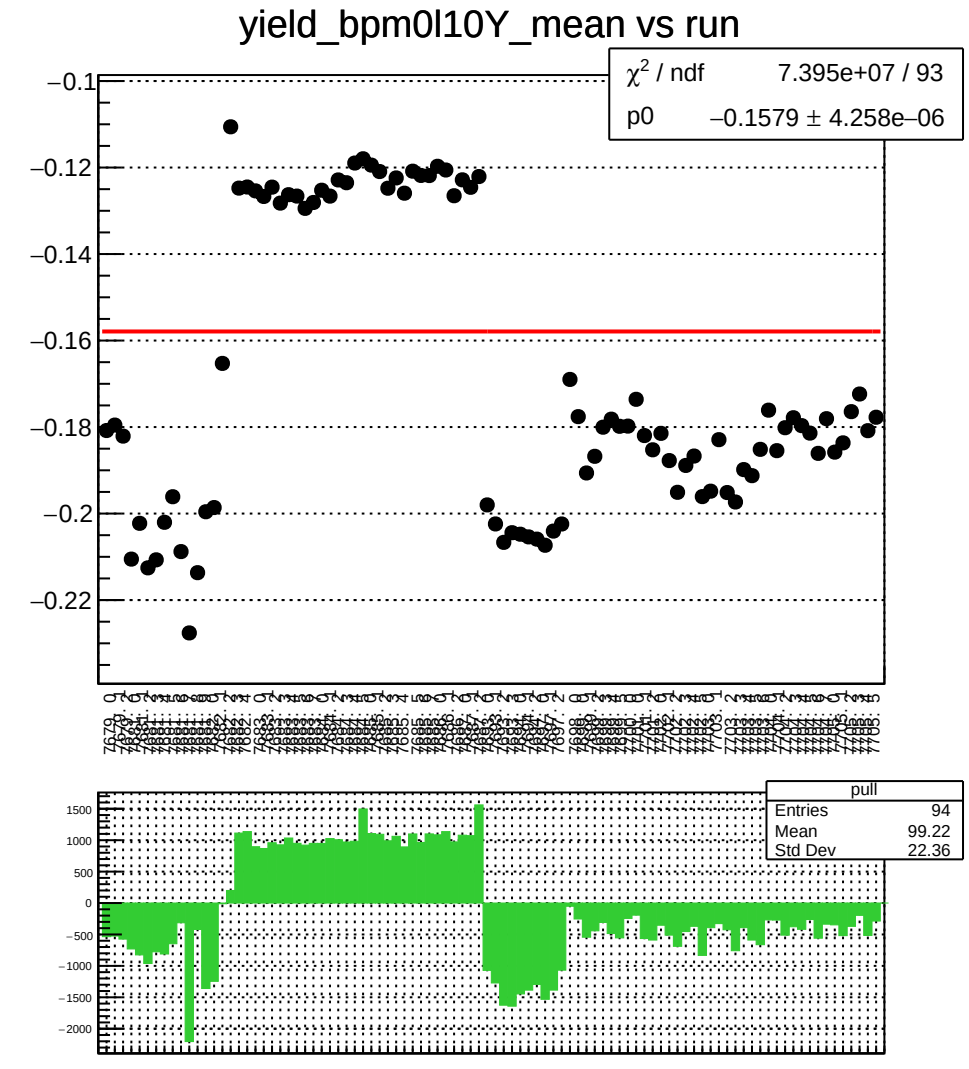

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

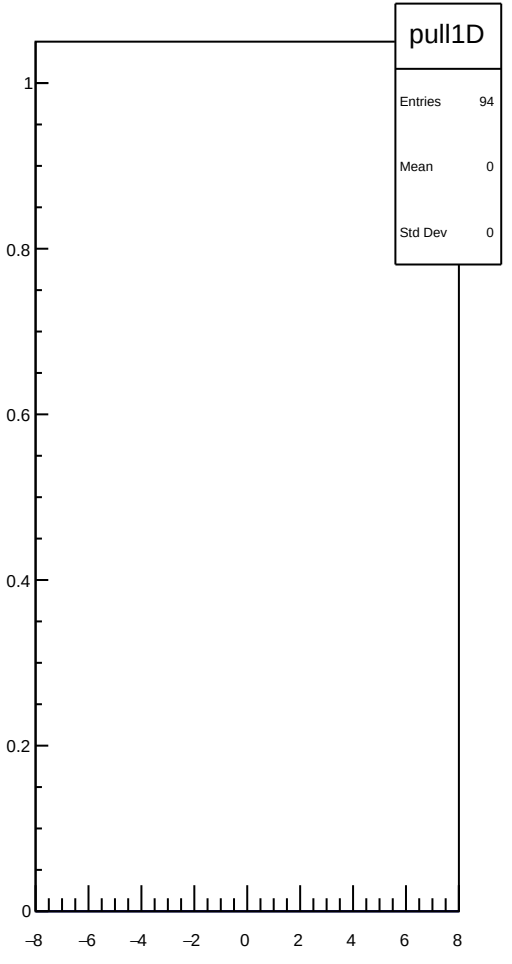

yield_bpm0l09Y_rms vs run
χ² / ndf 2.424e+05 / 93
p0 0.003714 ± 2.99e–06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

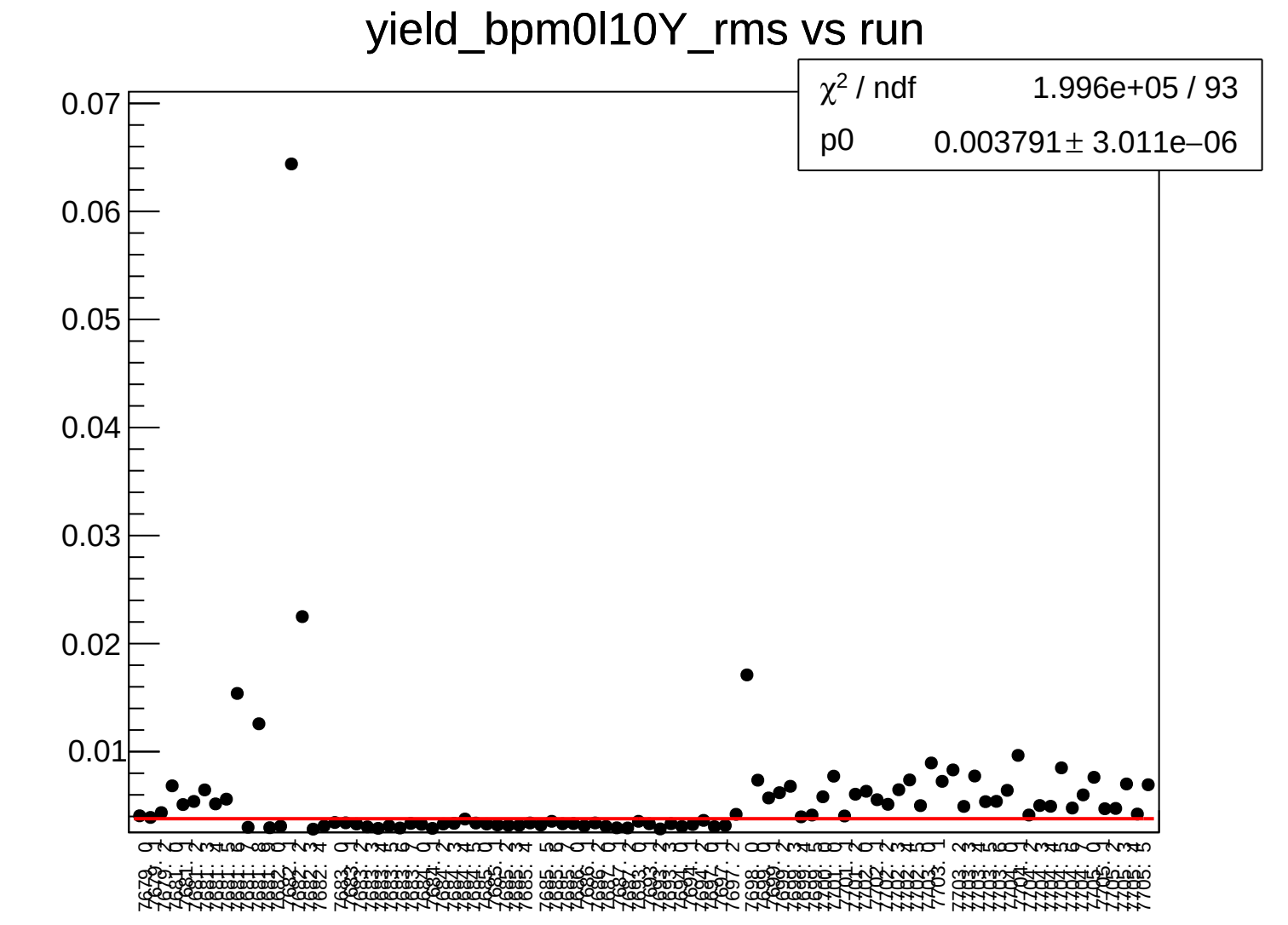

yield_bpm0l10X_mean vs run
χ² / ndf 6.594e+07 / 93
p0 −0.9401 ± 1.356e−05
−0.6
−0.7
−0.8
−0.9
−1
pull
Entries 94
Mean 487.9
Std Dev 452.8
2500
2000
1500
1000
500
0
−500

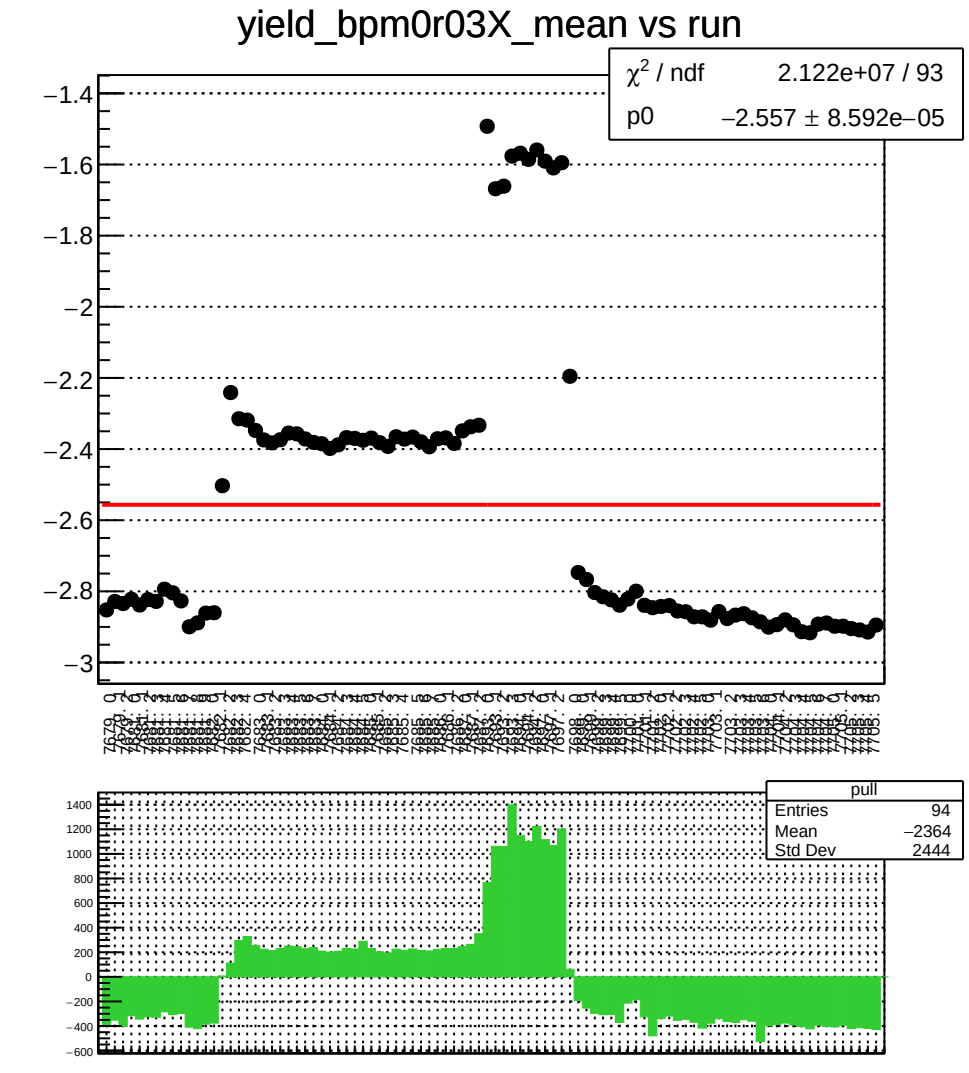

pull1D
Entries 94
Mean −1.502
Std Dev 4.39
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

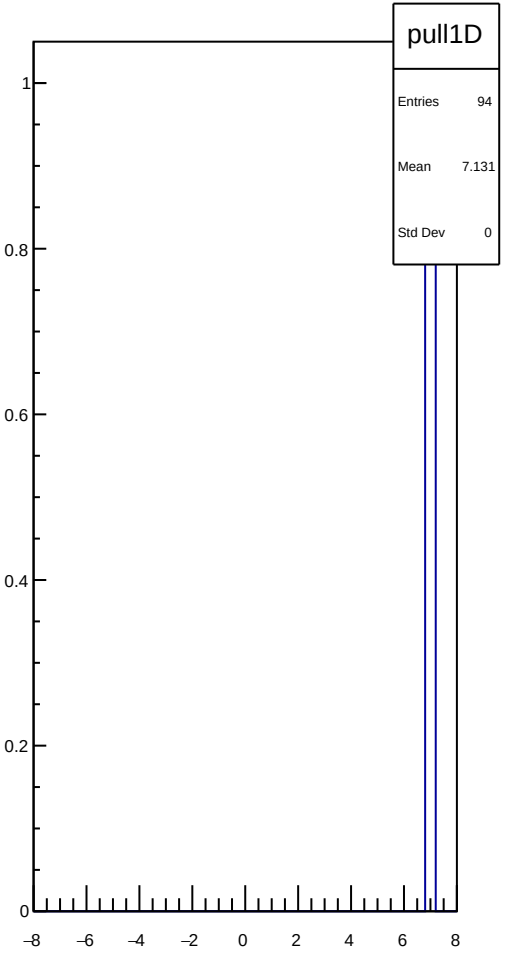

yield_bpm0l10X_rms vs run
χ² / ndf 4.849e+04 / 93
p0 0.01263 ± 9.588e–06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

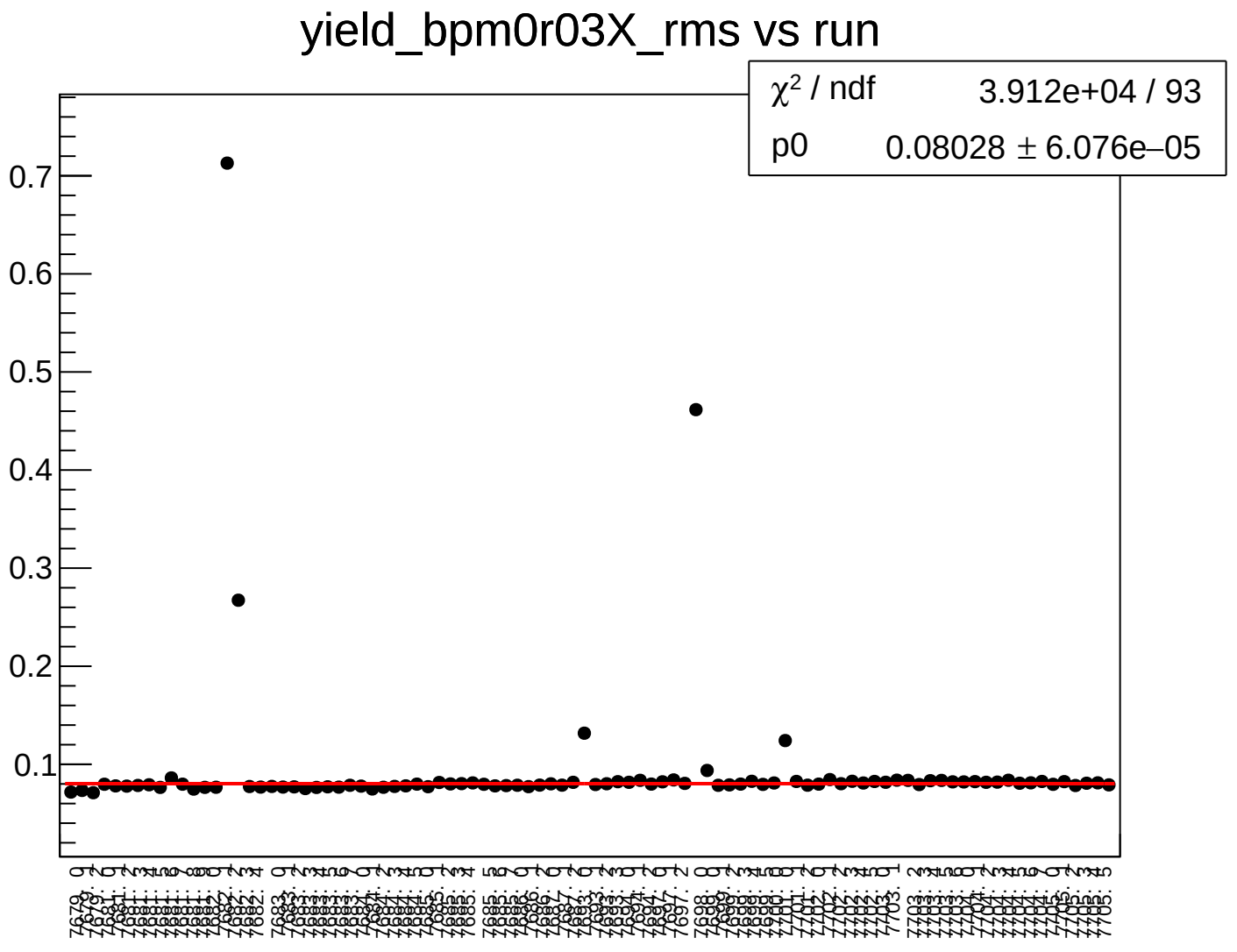

yield_bpm0l10Y_mean vs run
χ² / ndf 7.395e+07 / 93
p0 −0.1579 ± 4.258e−06
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
−0.22
pull
Entries 94
Mean 99.22
Std Dev 22.36
1500
1000
500
0
−500
−1000
−1500
−2000

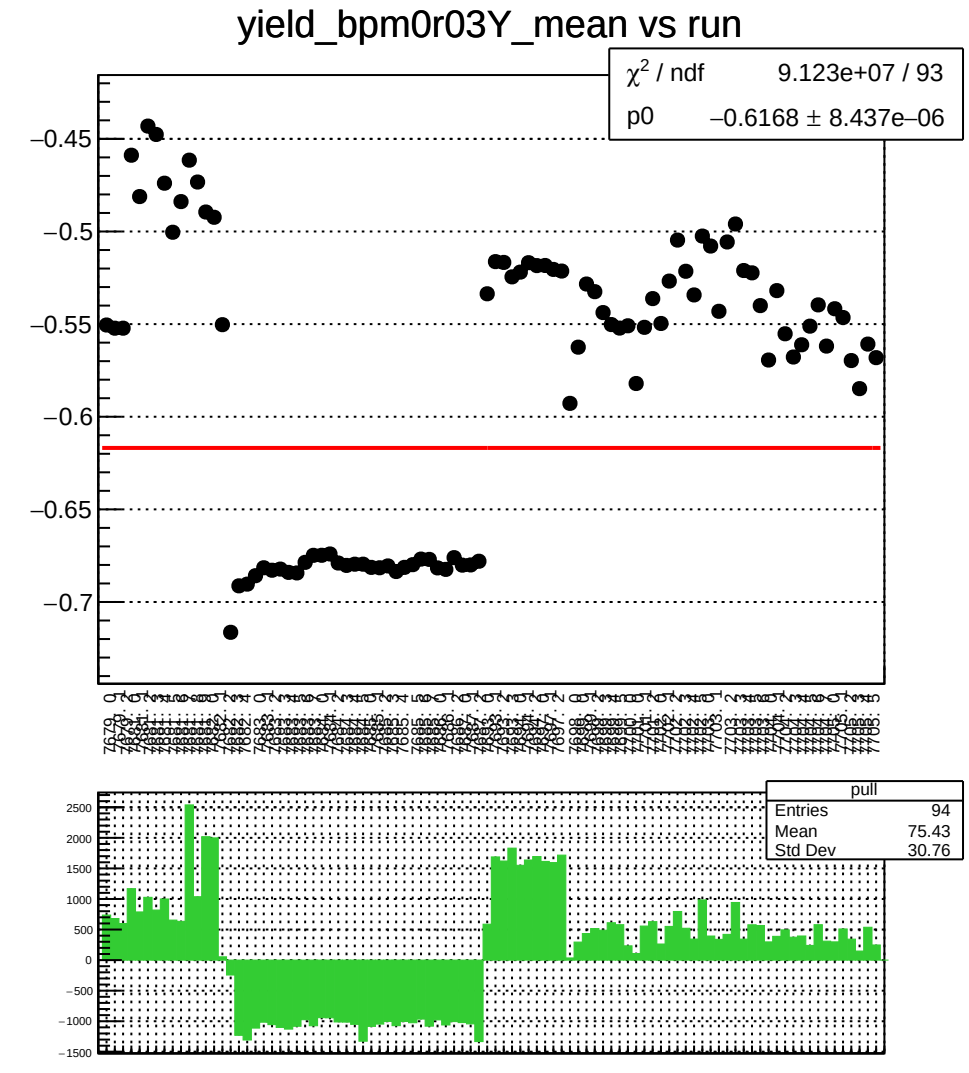

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

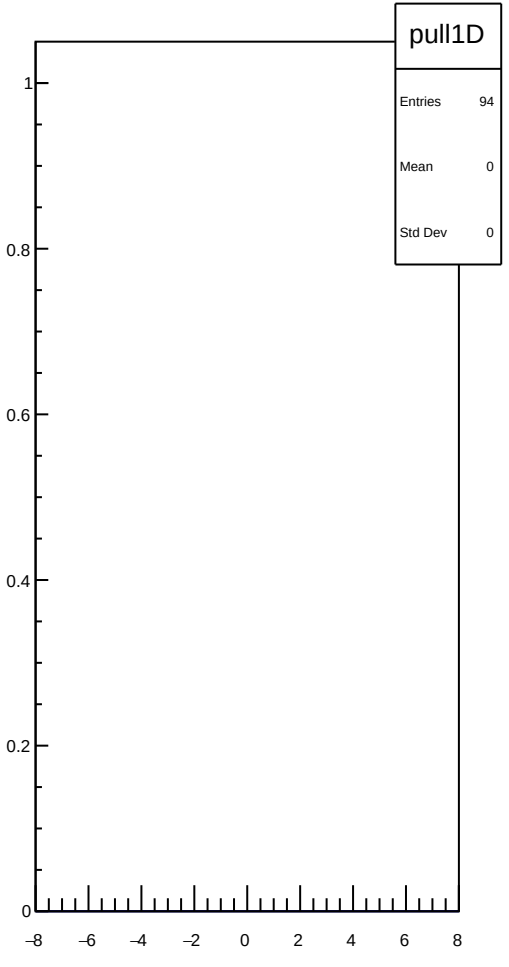

yield_bpm0l10Y_rms vs run
χ² / ndf 1.996e+05 / 93
p0 0.003791 ± 3.011e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

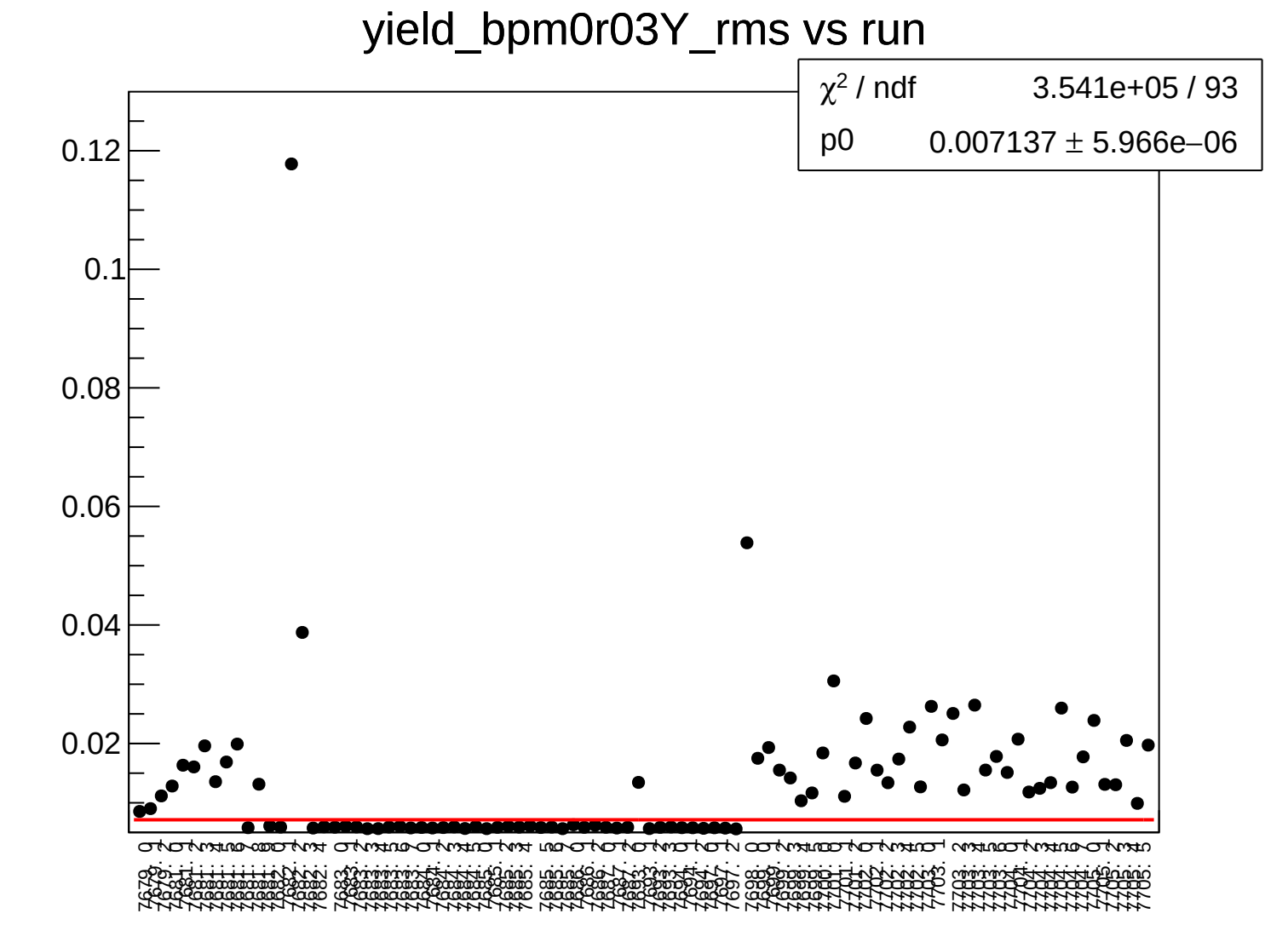

yield_bpm0r03X_mean vs run
χ² / ndf 2.122e+07 / 93
p0 −2.557 ± 8.592e−05
pull
Entries 94
Mean −2364
Std Dev 2444

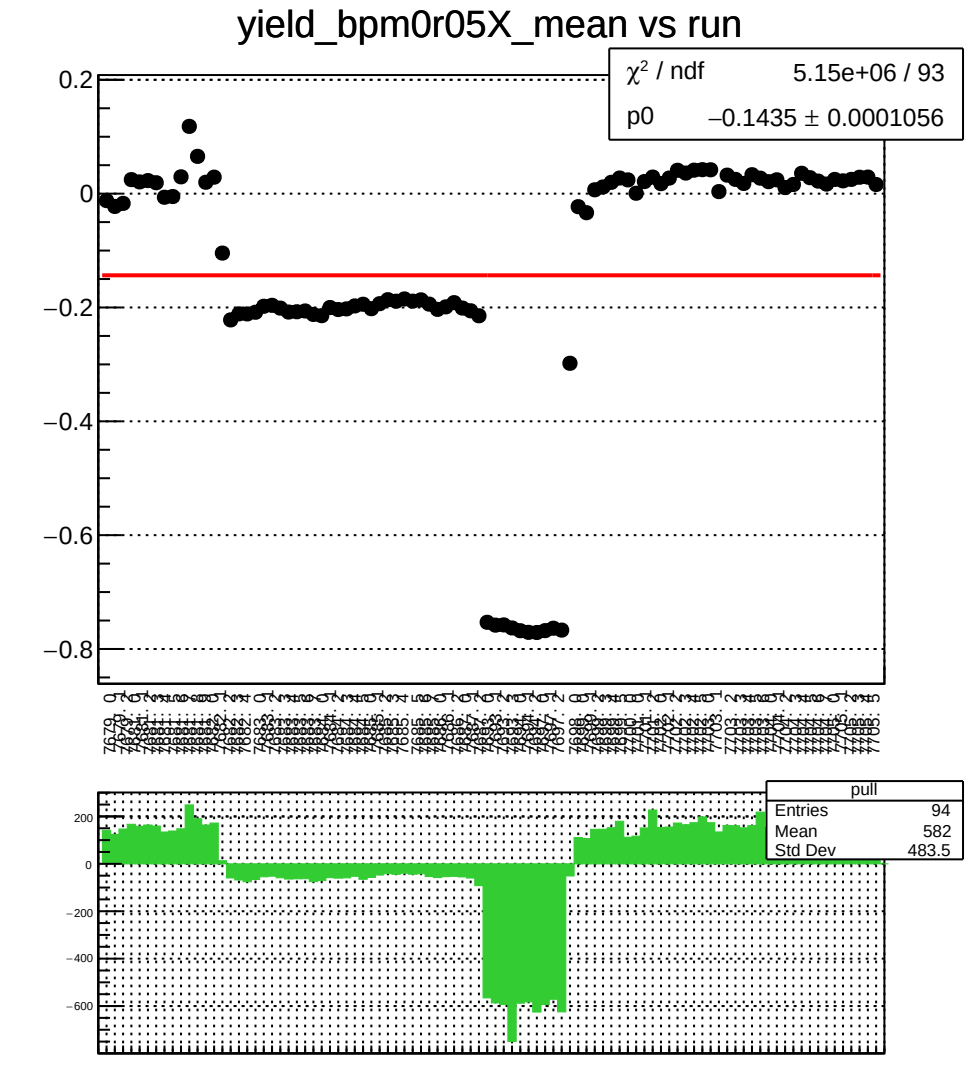

pull1D
Entries 94
Mean 7.131
Std Dev 0

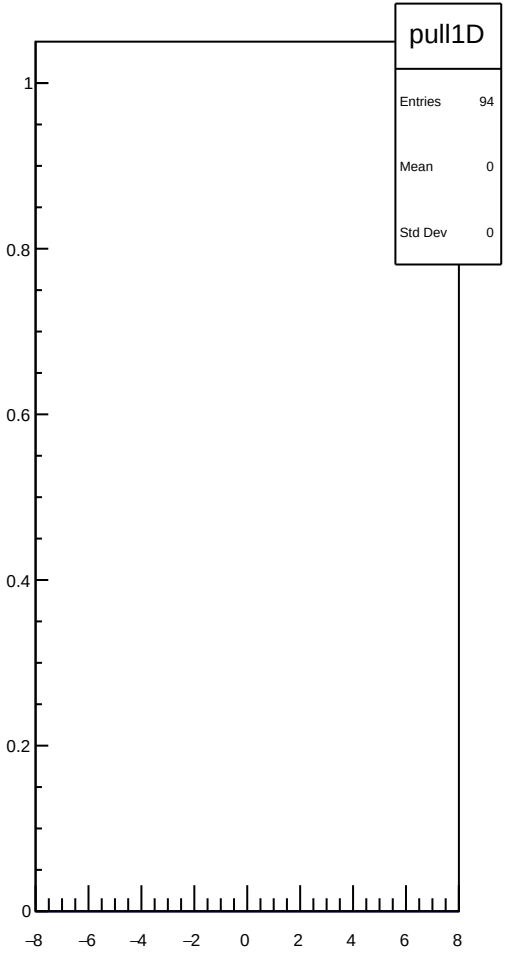

yield_bpm0r03X_rms vs run
χ² / ndf 3.912e+04 / 93
p0 0.08028 ± 6.076e–05
0.7
0.6
0.5
0.4
0.3
0.2
0.1

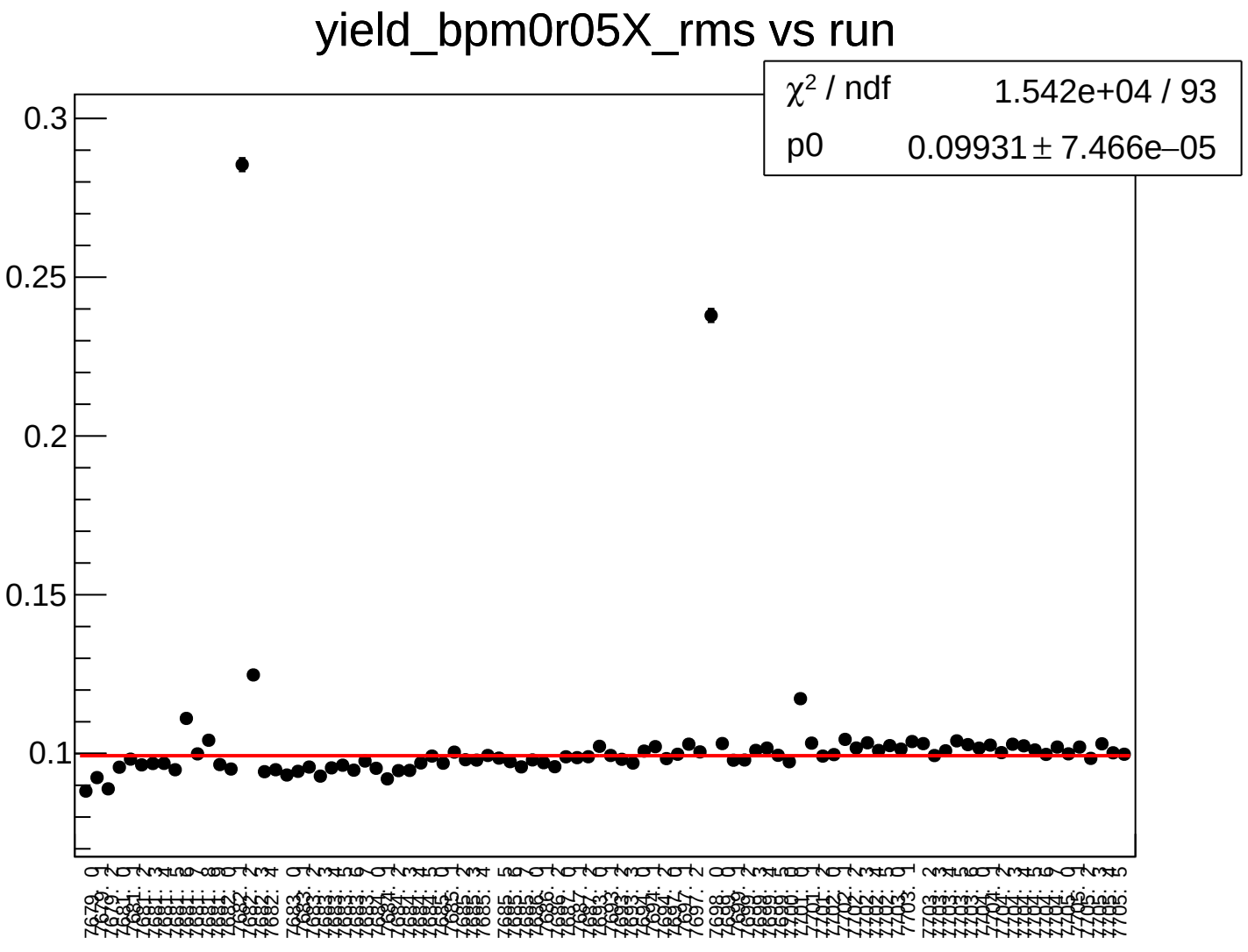

yield_bpm0r03Y_mean vs run
χ² / ndf 9.123e+07 / 93
p0 −0.6168 ± 8.437e−06
−0.45
−0.5
−0.55
−0.6
−0.65
−0.7
pull
Entries 94
Mean 75.43
Std Dev 30.76
2500
2000
1500
1000
500
0
−500
−1000
−1500

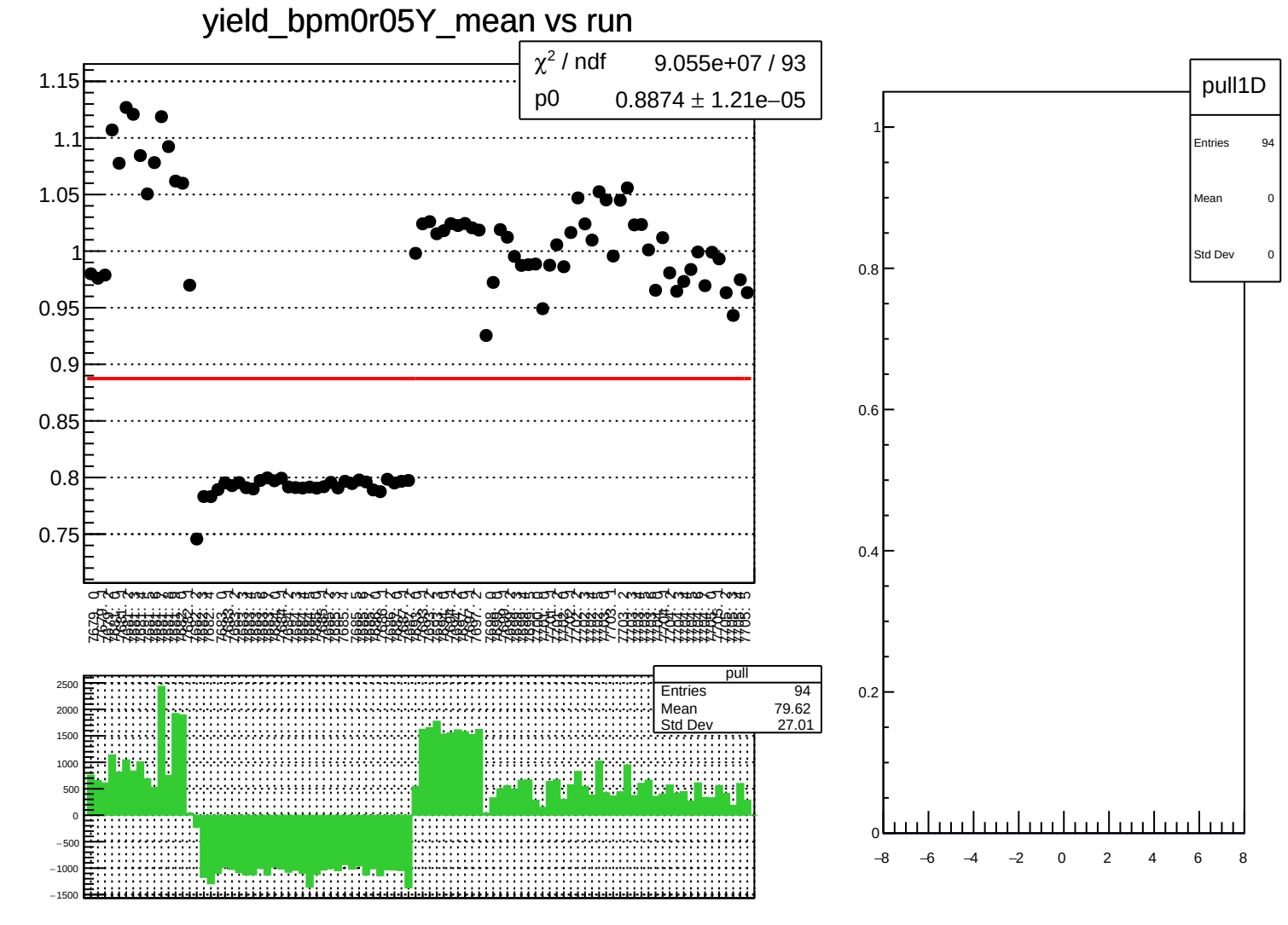

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

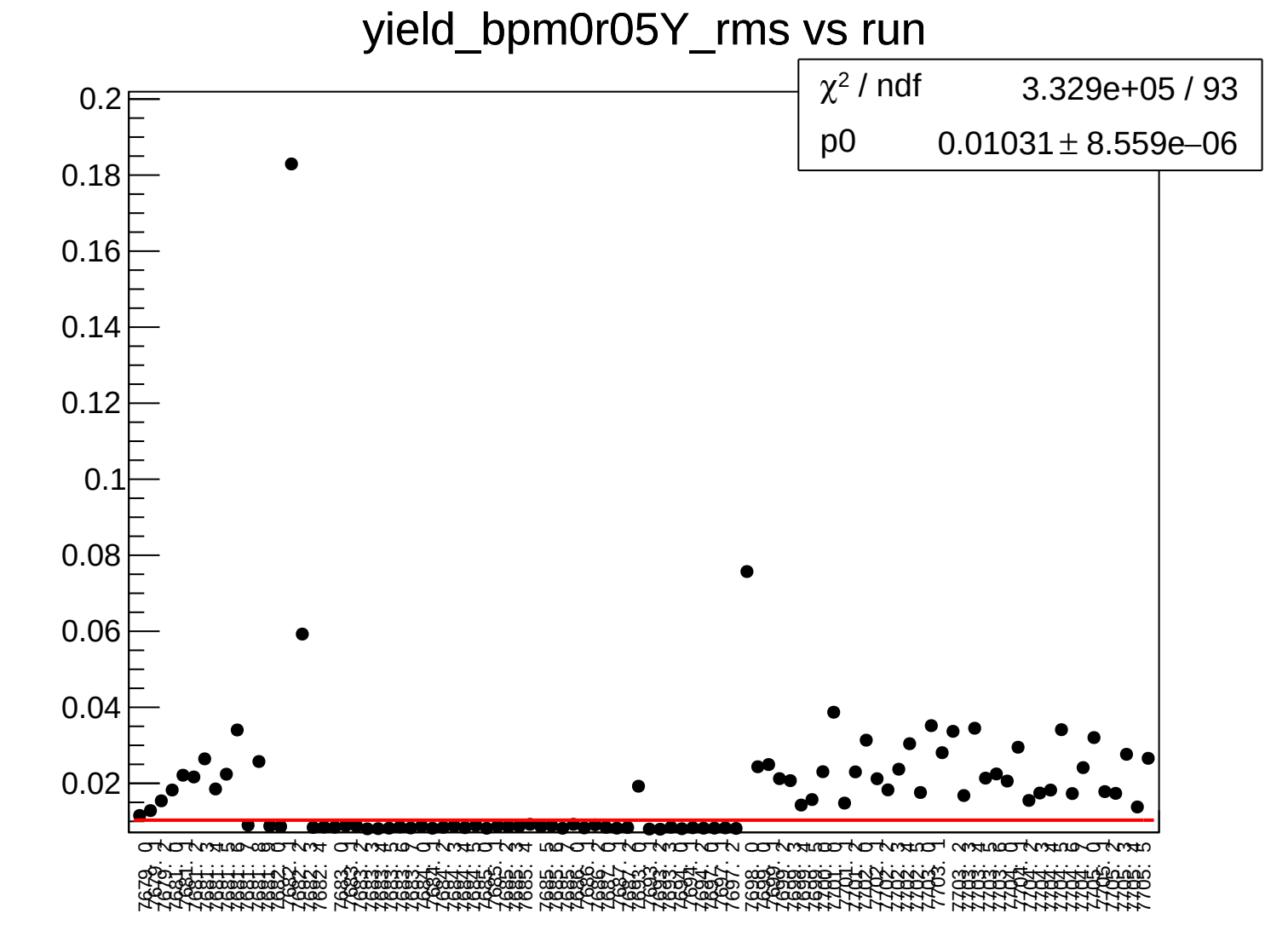

yield_bpm0r03Y_rms vs run
χ² / ndf 3.541e+05 / 93
p0 0.007137 ± 5.966e−06
0.12
0.1
0.08
0.06
0.04
0.02

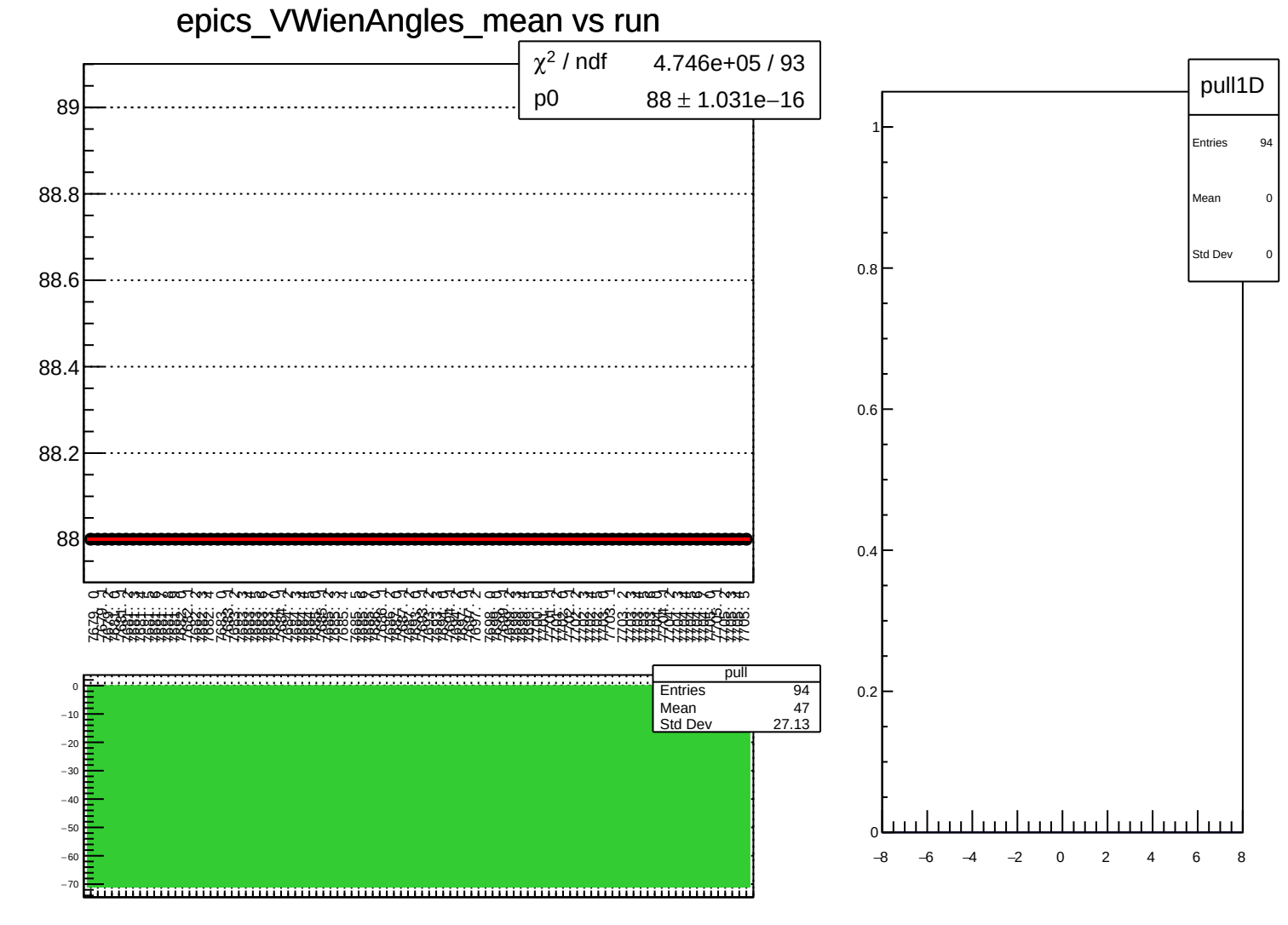

yield_bpm0r05X_mean vs run
χ² / ndf 5.15e+06 / 93
p0 −0.1435 ± 0.0001056
pull
Entries 94
Mean 582
Std Dev 483.5

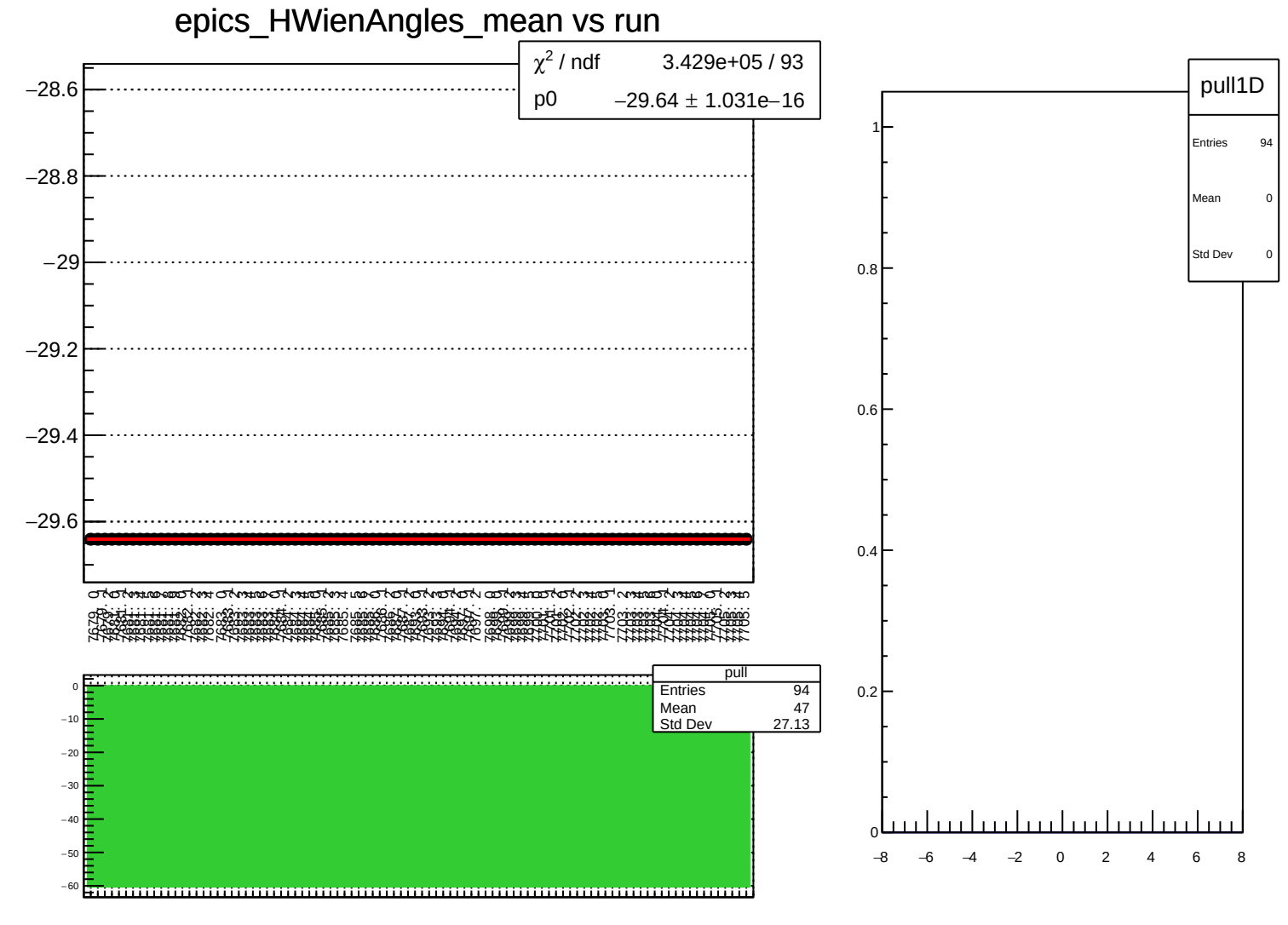

pull1D
Entries 94
Mean 0
Std Dev 0

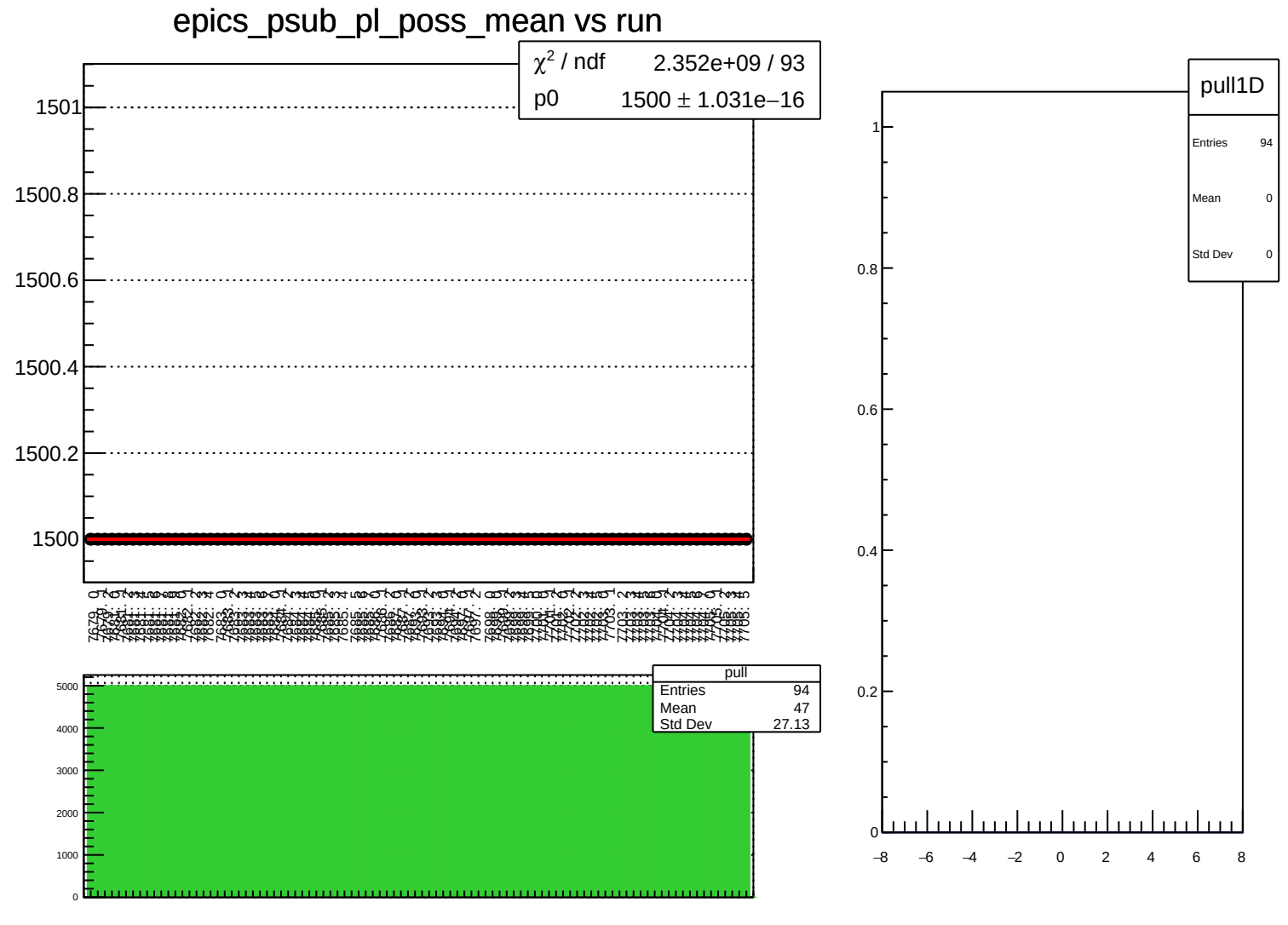

yield_bpm0r05X_rms vs run
χ² / ndf 1.542e+04 / 93
p0 0.09931 ± 7.466e–05
0.3
0.25
0.2
0.15
0.1

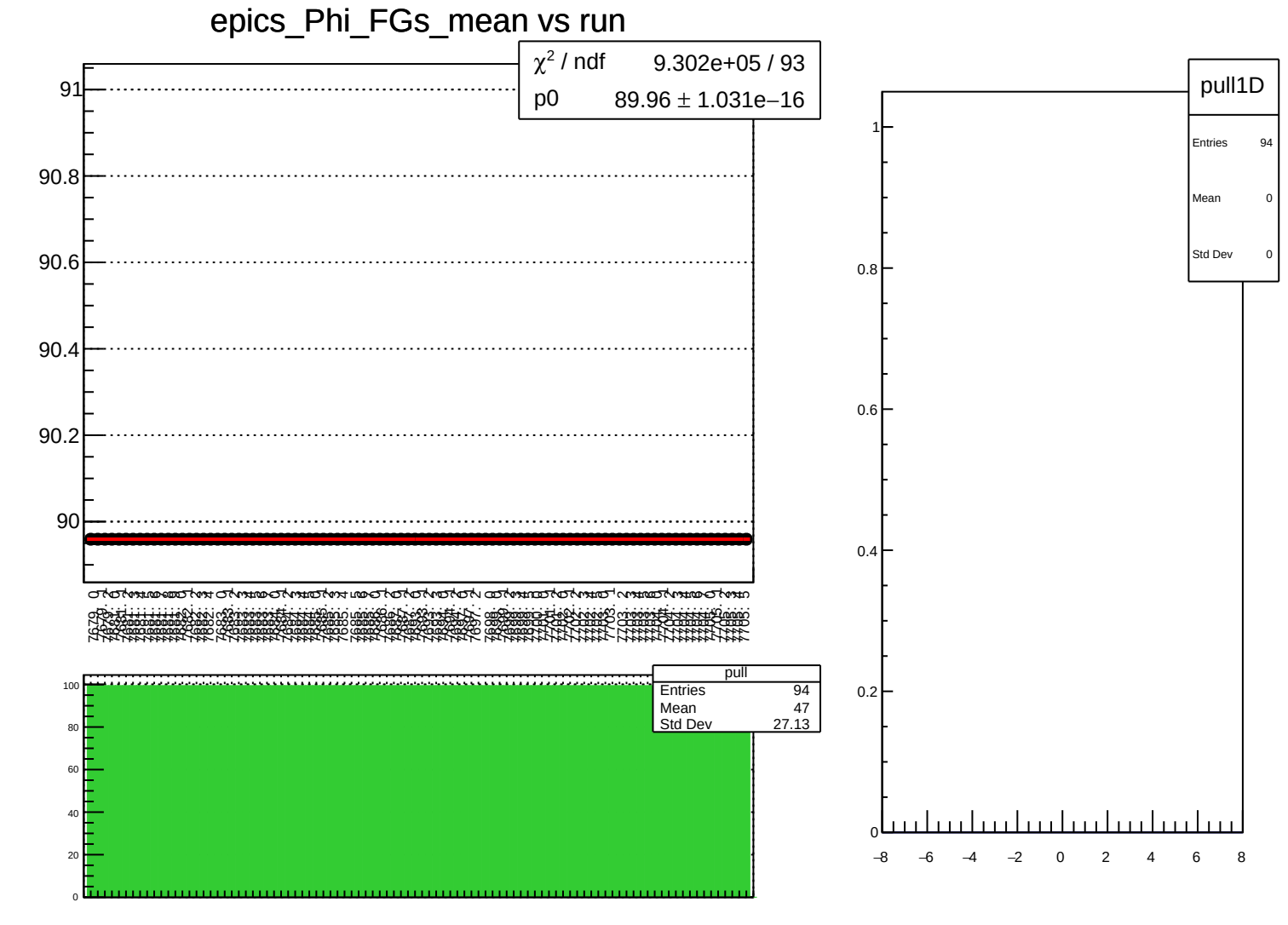

yield_bpm0r05Y_mean vs run
χ² / ndf 9.055e+07 / 93
p0 0.8874 ± 1.21e−05
pull
Entries 94
Mean 79.62
Std Dev 27.01
pull1D
Entries 94
Mean 0
Std Dev 0

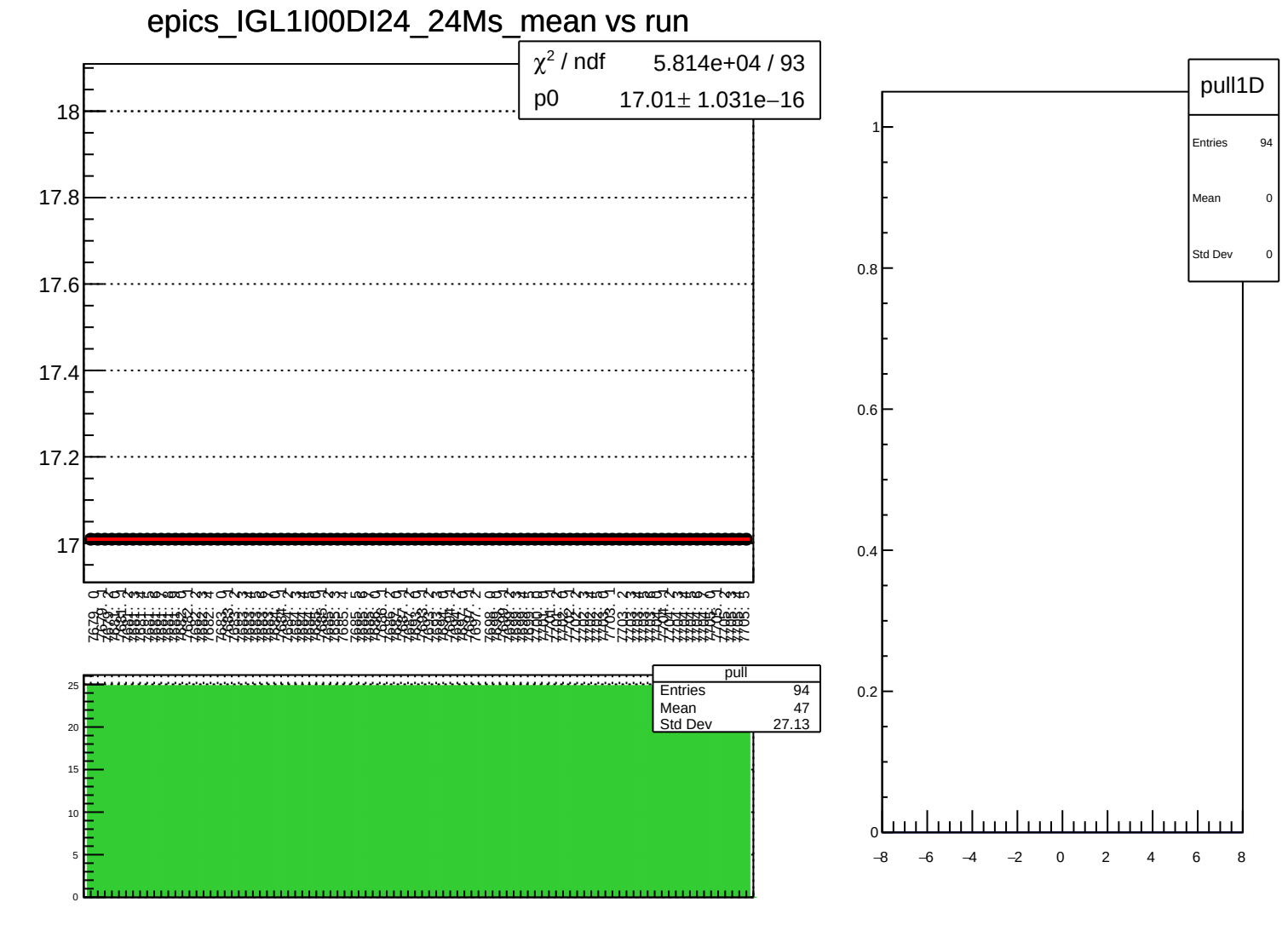

yield_bpm0r05Y_rms vs run
χ² / ndf 3.329e+05 / 93
p0 0.01031 ± 8.559e–06
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

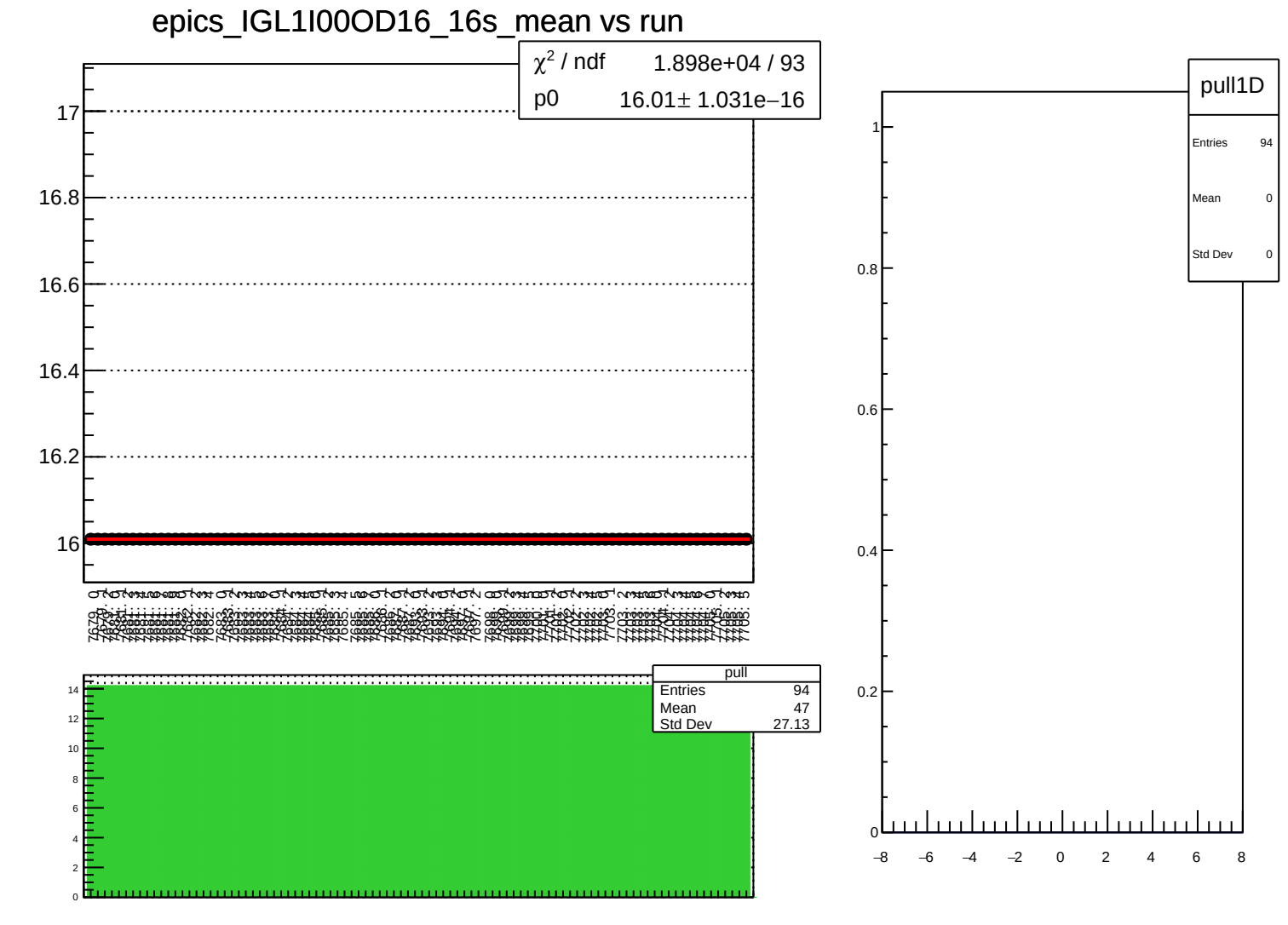

epics_VWienAngles_mean vs run
χ² / ndf 4.746e+05 / 93
p0 88 ± 1.031e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 94
Mean 47
Std Dev 27.13
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

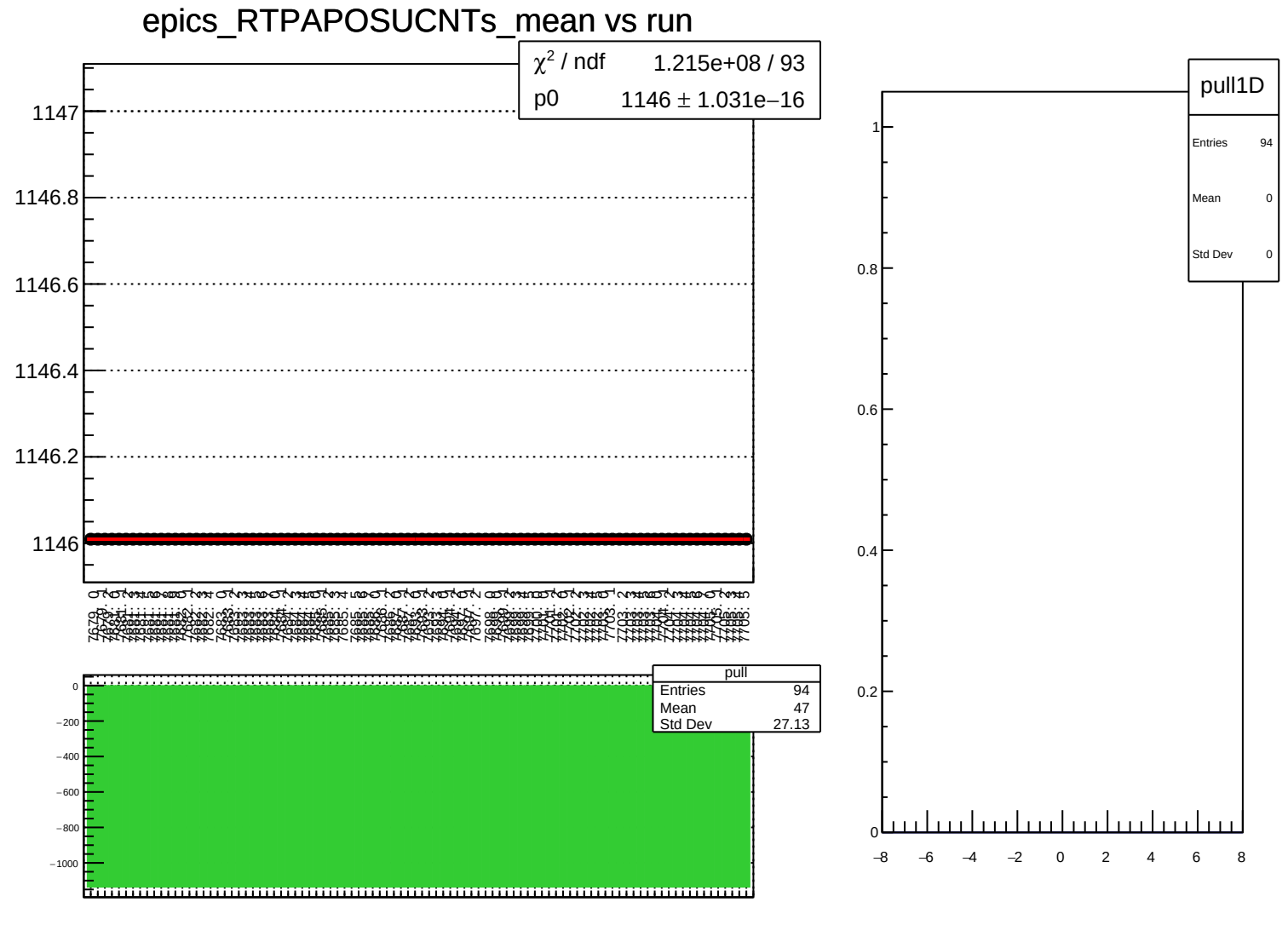

epics_HWienAngles_mean vs run
χ² / ndf 3.429e+05 / 93
p0 −29.64 ± 1.031e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 94
Mean 47
Std Dev 27.13
0
−10
−20
−30
−40
−50
−60
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

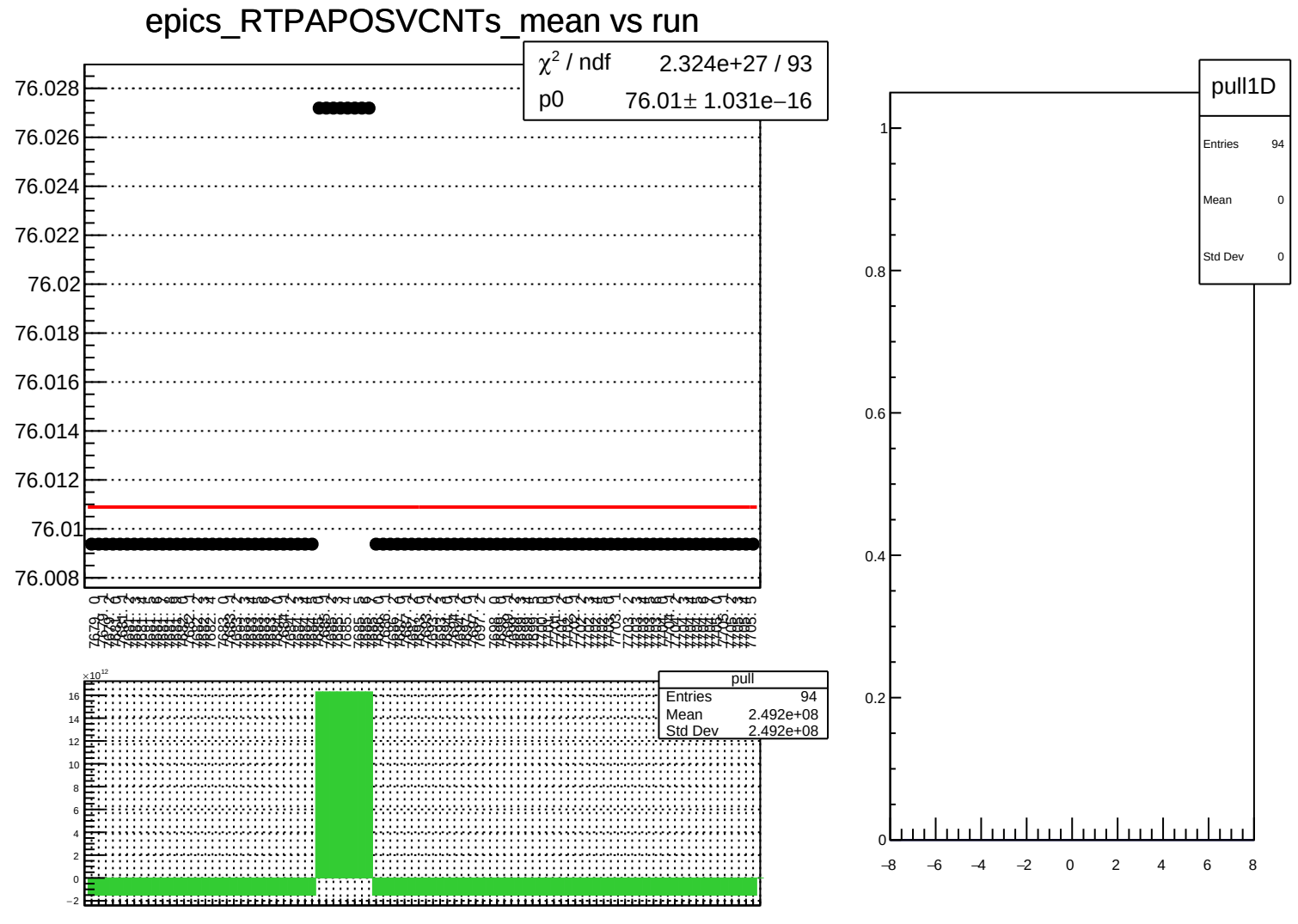

epics_psub_pl_poss_mean vs run
χ² / ndf 2.352e+09 / 93
p0 1500 ± 1.031e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 94
Mean 47
Std Dev 27.13
5000
4000
3000
2000
1000
0
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_Phi_FGs_mean vs run
χ² / ndf 9.302e+05 / 93
p0 89.96 ± 1.031e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 94
Mean 47
Std Dev 27.13
100
80
60
40
20
0
pull1D
Entries 94
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 5.814e+04 / 93
p0 17.01± 1.031e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 94
Mean 47
Std Dev 27.13
25
20
15
10
5
0
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 1.898e+04 / 93
p0 16.01± 1.031e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 94
Mean 47
Std Dev 27.13
14
12
10
8
6
4
2
0
pull1D
Entries 94
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 1.215e+08 / 93
p0 1146 ± 1.031e−16
1147
1146.8
1146.6
1146.4
1146.2
1146
pull
Entries 94
Mean 47
Std Dev 27.13
0
−200
−400
−600
−800
−1000
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 2.324e+27 / 93
p0 76.01± 1.031e−16
76.028
76.026
76.024
76.022
76.02
76.018
76.016
76.014
76.012
76.01
76.008
pull
Entries 94
Mean 2.492e+08
Std Dev 2.492e+08
×10¹²
16
14
12
10
8
6
4
2
0
−2
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8