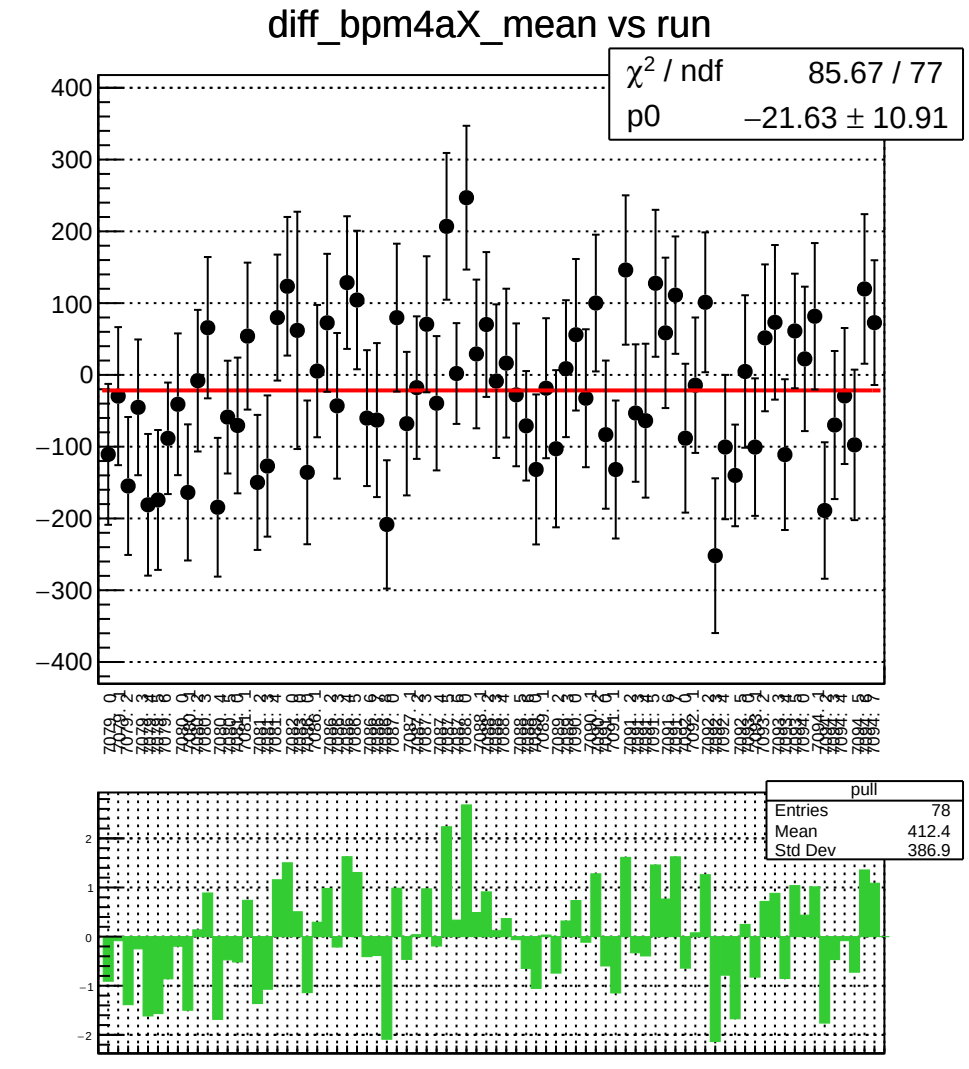
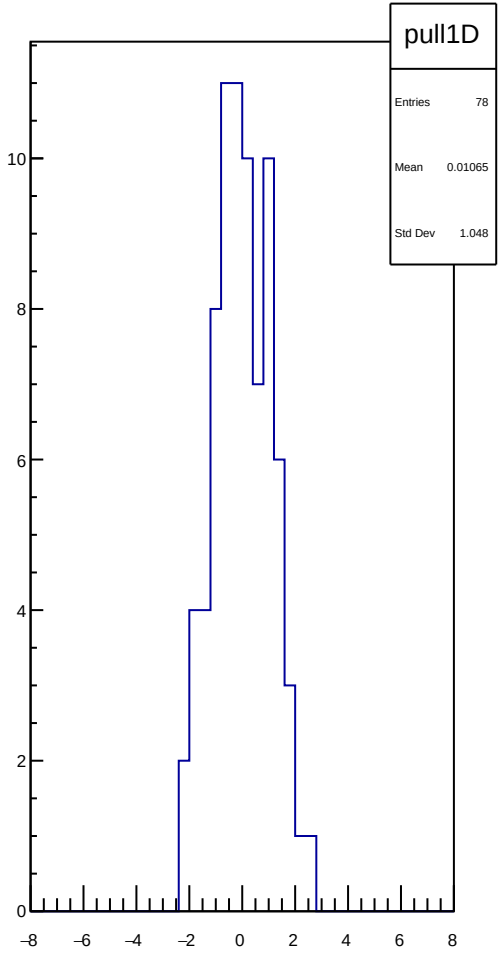
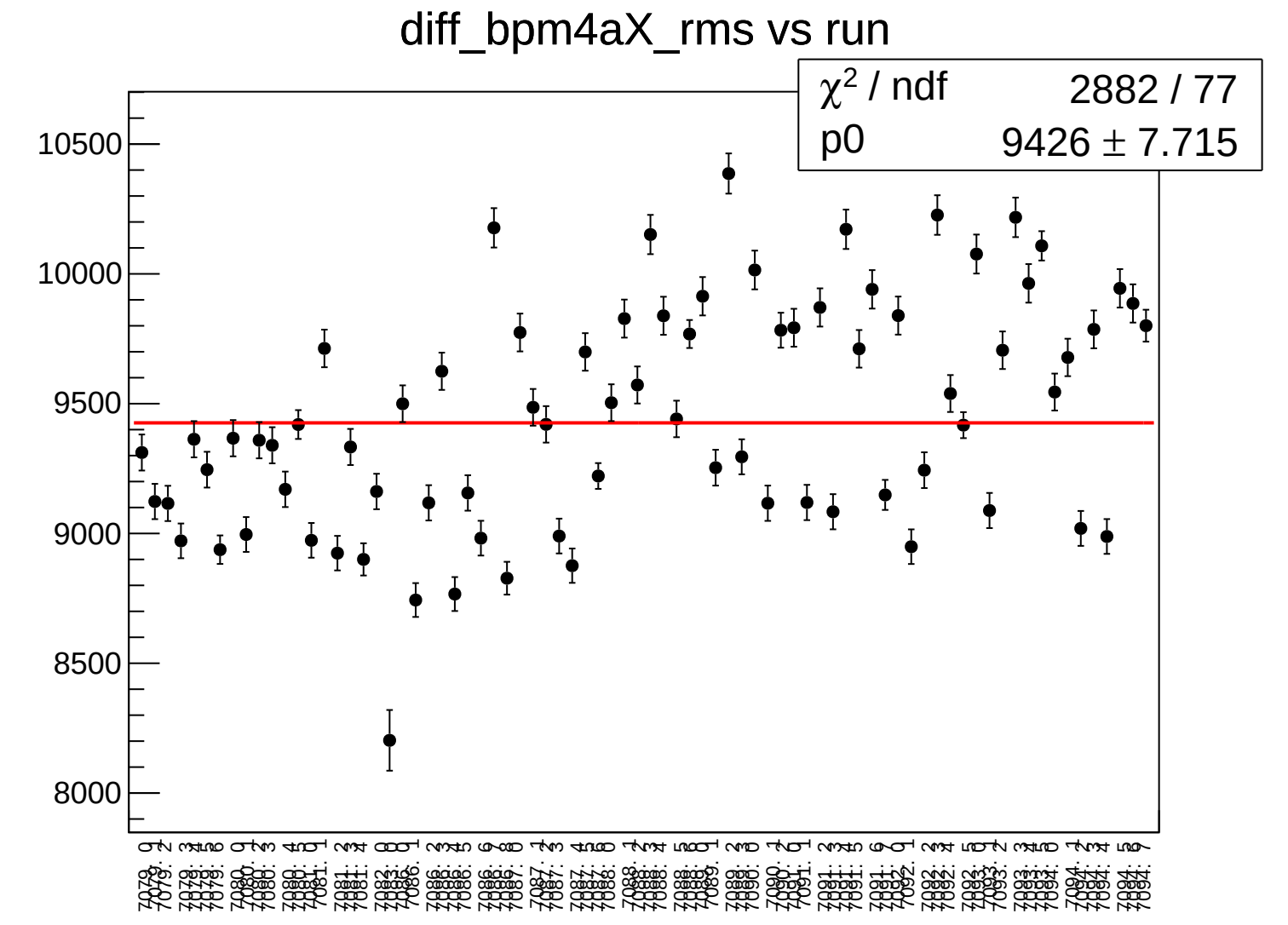
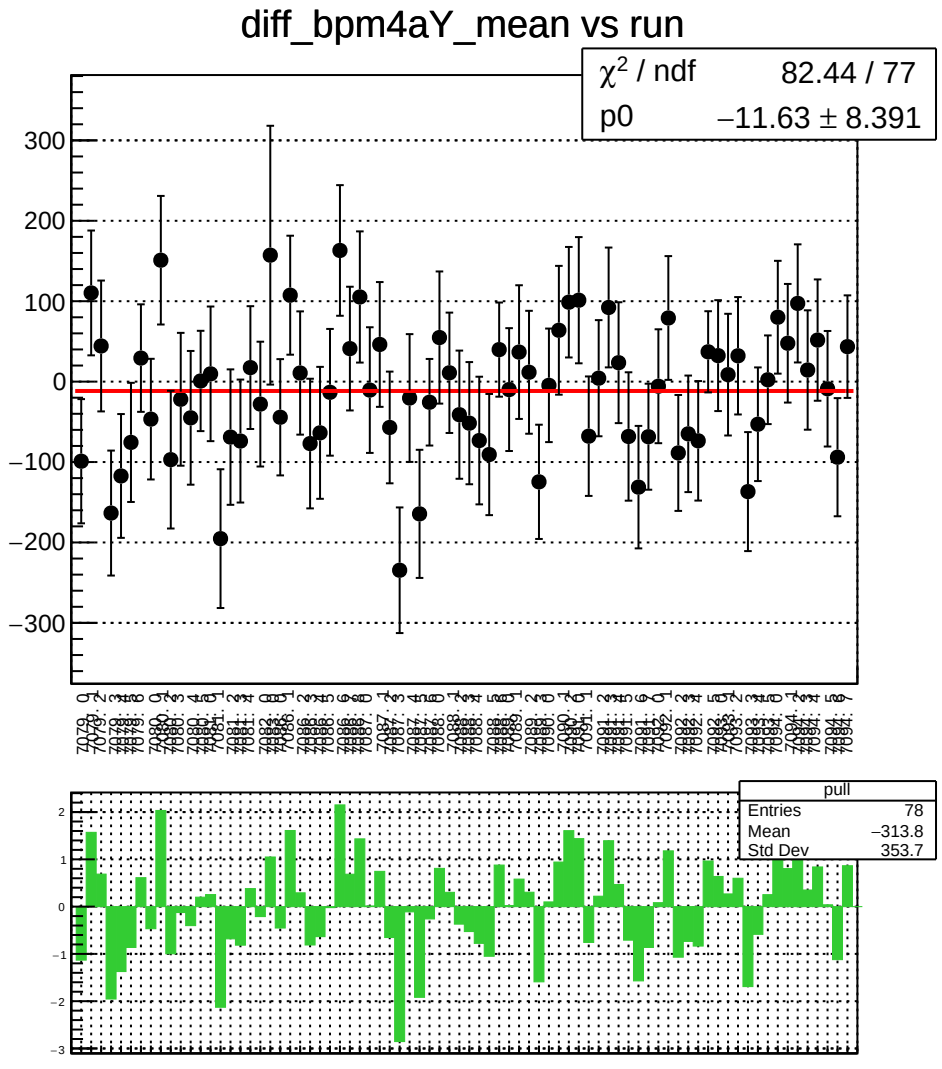
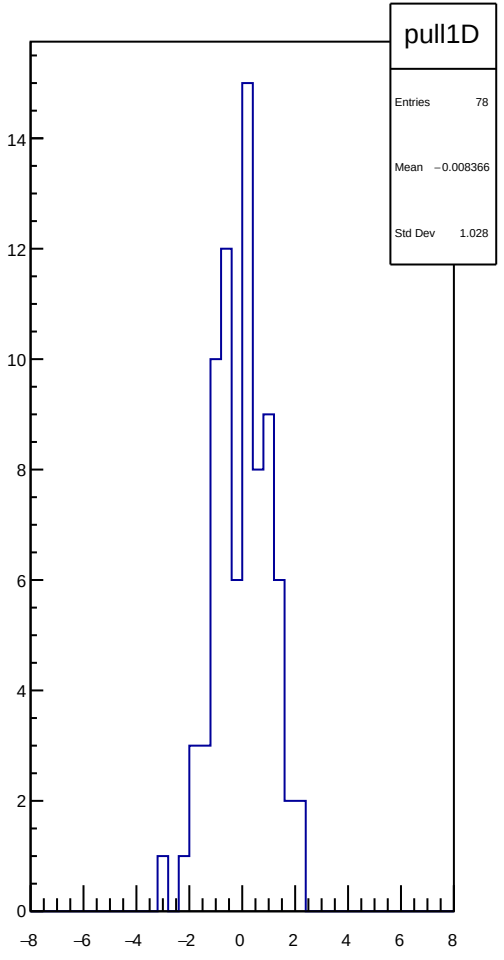
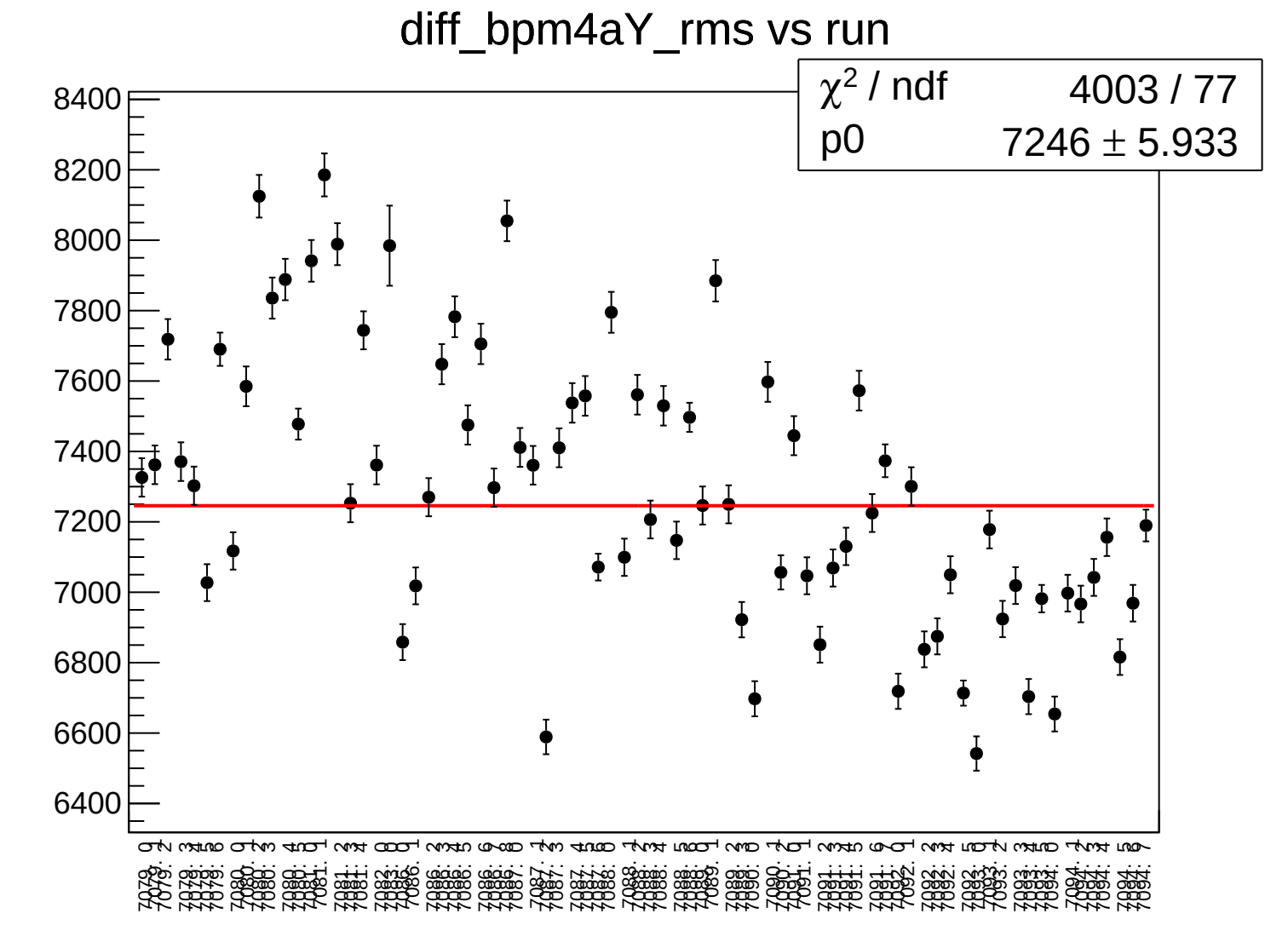

diff_bpm4aX_mean vs run
χ² / ndf 85.67 / 77
p0 −21.63 ± 10.91
pull
Entries 78
Mean 412.4
Std Dev 386.9

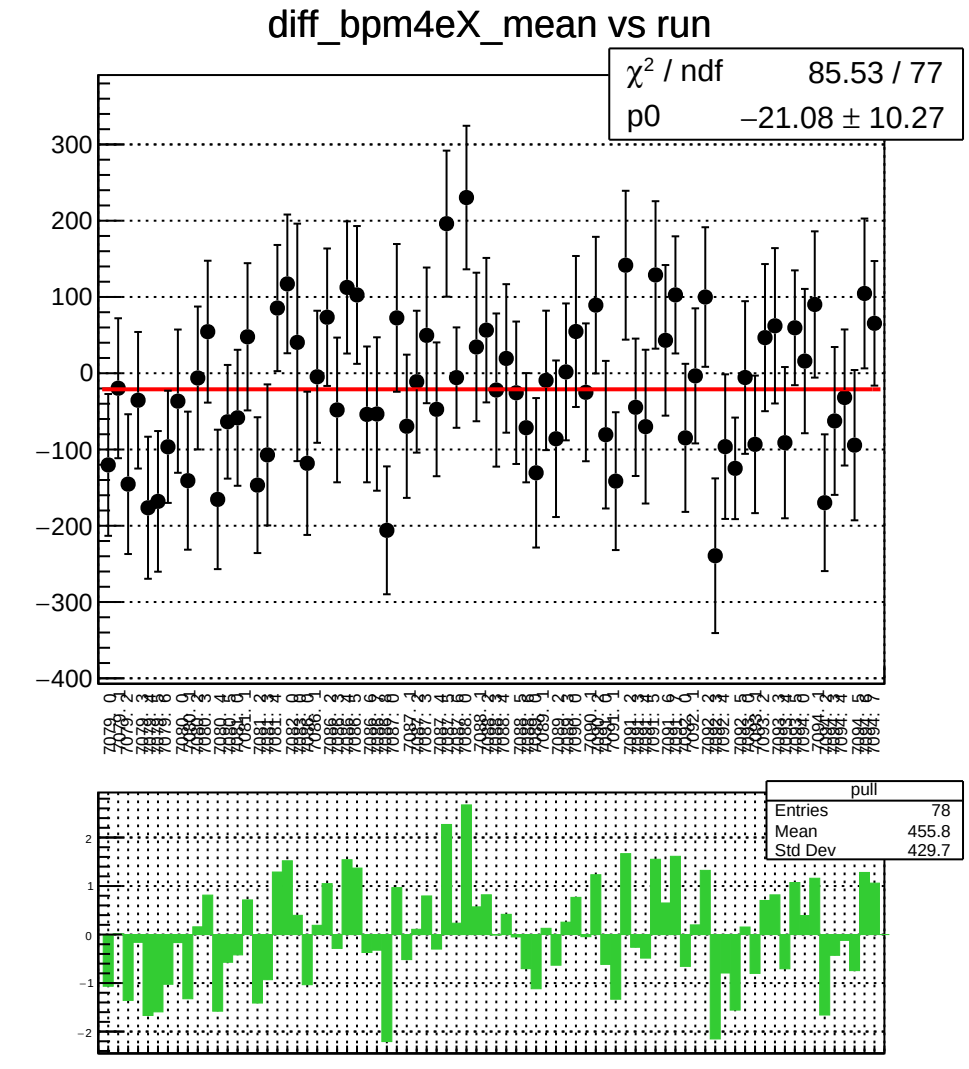

pull1D
Entries 78
Mean 0.01065
Std Dev 1.048

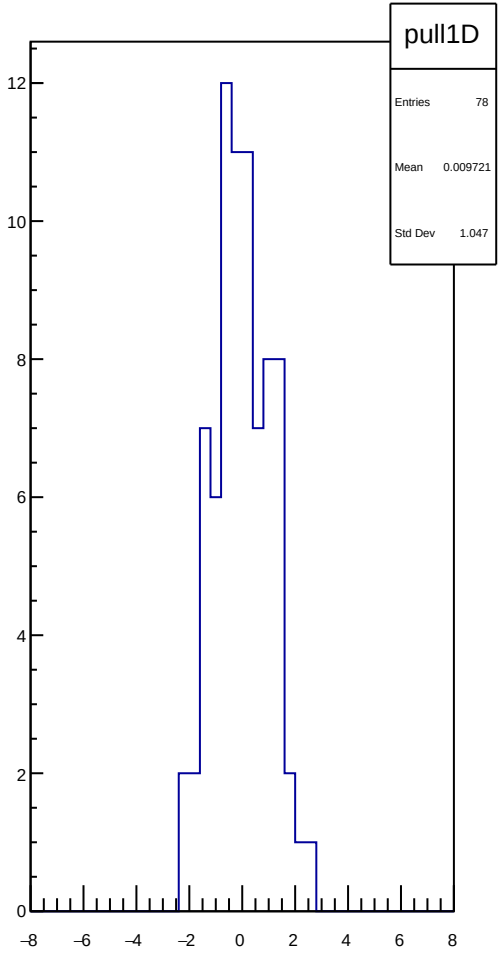

diff_bpm4aX_rms vs run
χ^2 / ndf 2882 / 77
p0 9426 ± 7.715
10500
10000
9500
9000
8500
8000

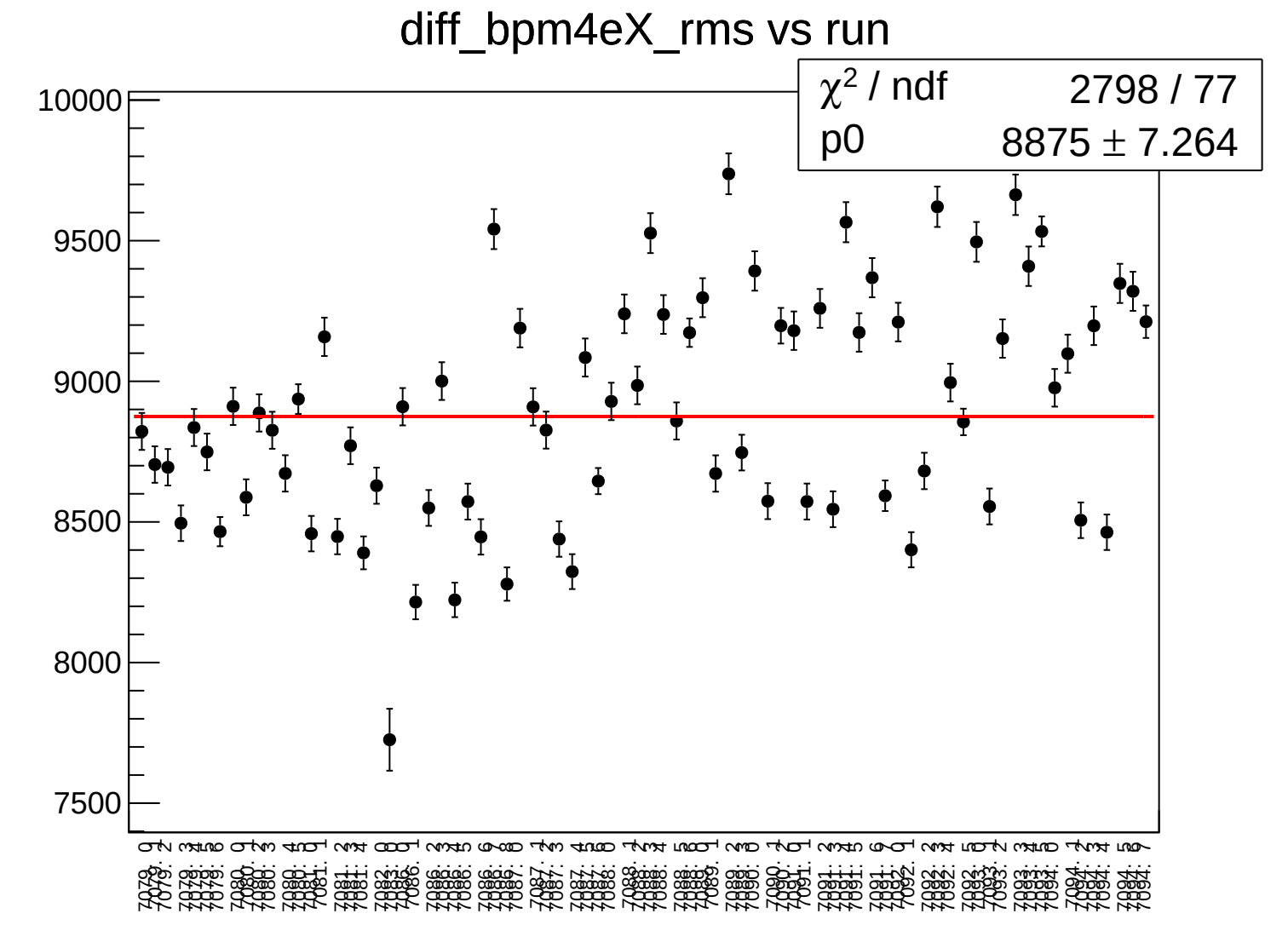

diff_bpm4aY_mean vs run
χ² / ndf 82.44 / 77
p0 −11.63 ± 8.391
pull
Entries 78
Mean −313.8
Std Dev 353.7

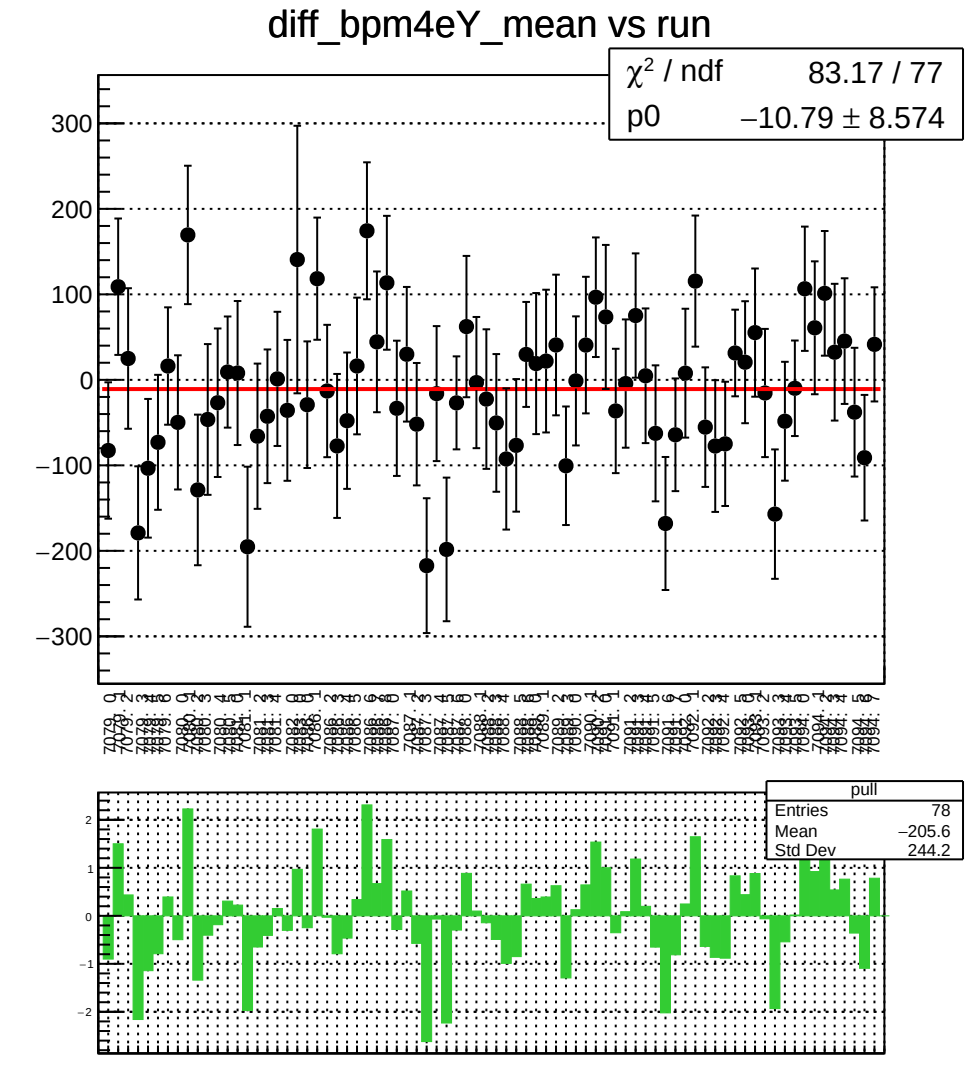

pull1D
Entries 78
Mean −0.008366
Std Dev 1.028

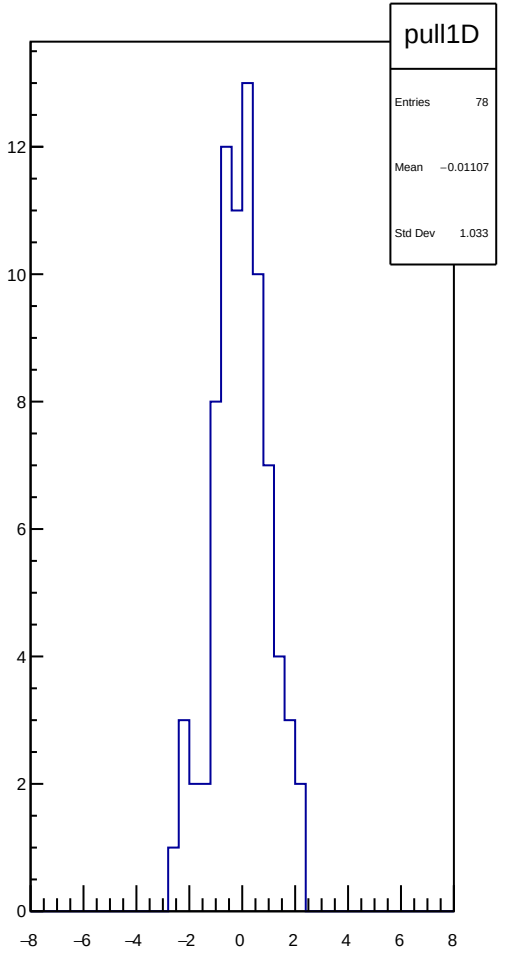

diff_bpm4aY_rms vs run
χ² / ndf 4003 / 77
p0 7246 ± 5.933
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400

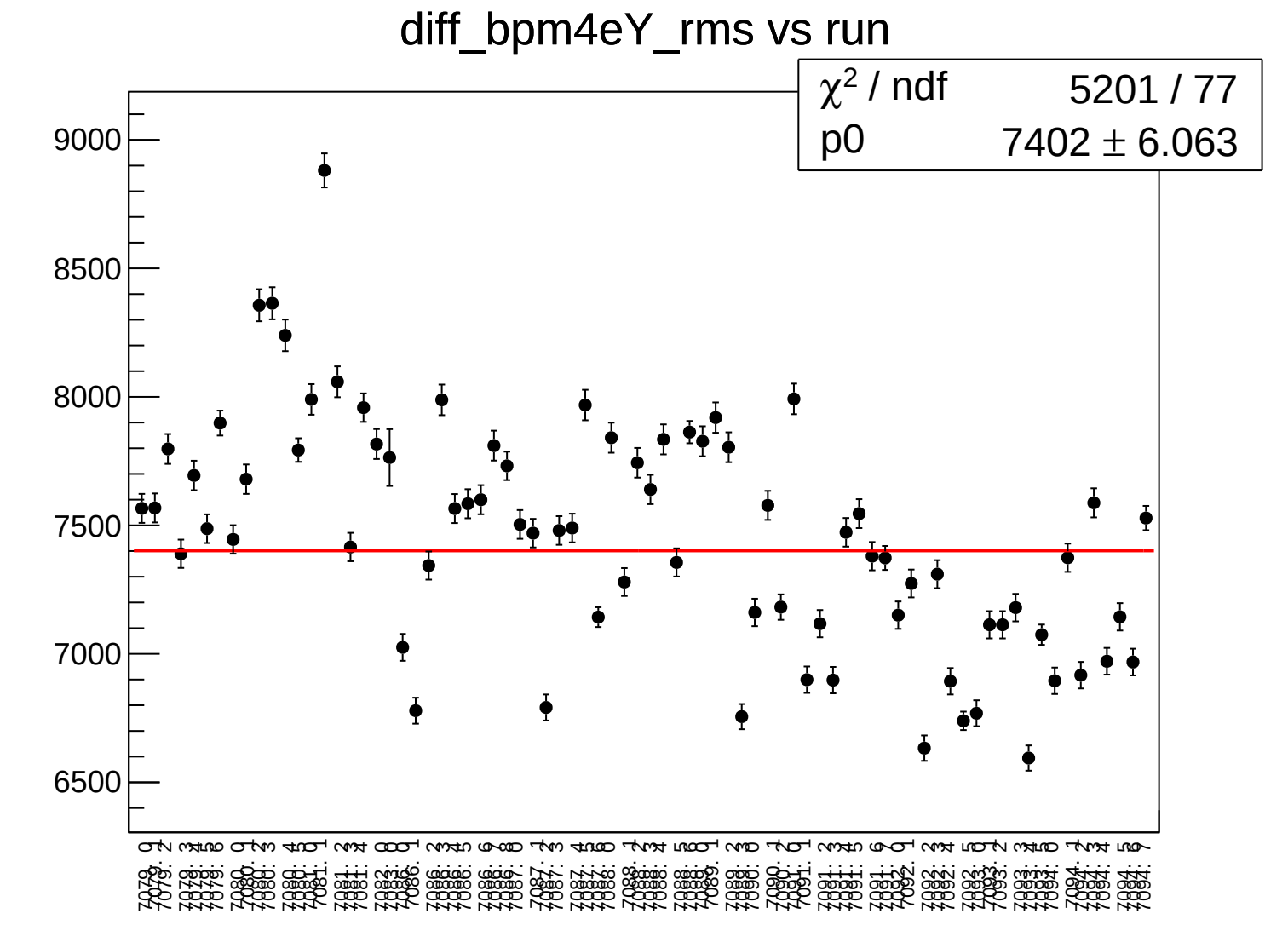

diff_bpm4eX_mean vs run
χ² / ndf 85.53 / 77
p0 −21.08 ± 10.27
pull
Entries 78
Mean 455.8
Std Dev 429.7

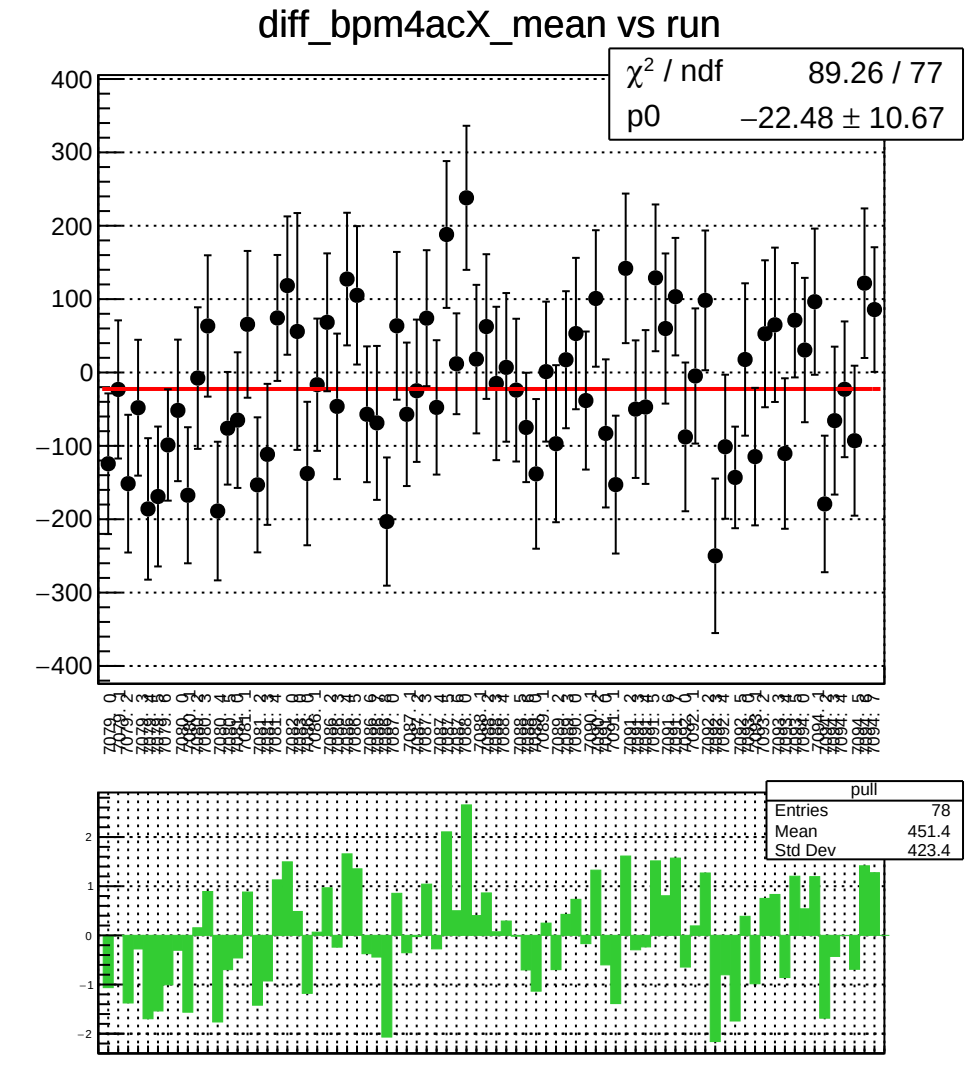

pull1D
Entries 78
Mean 0.009721
Std Dev 1.047

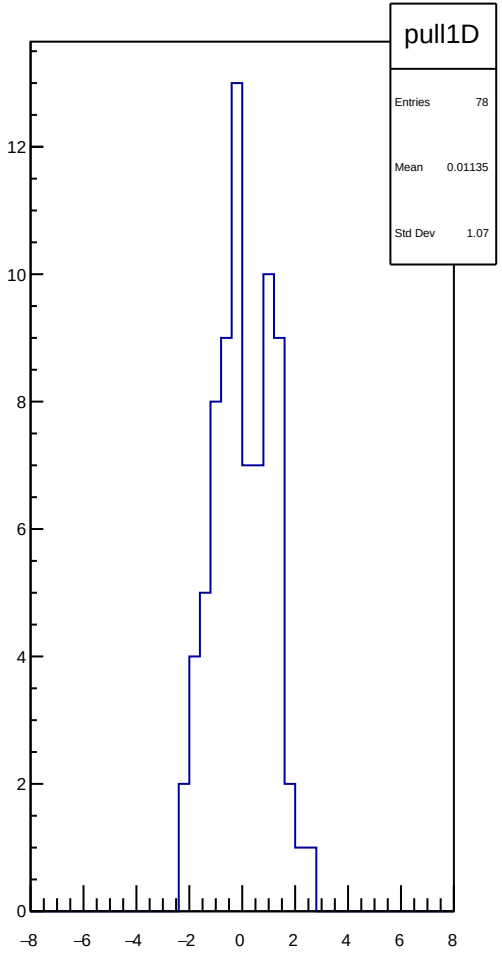

diff_bpm4eX_rms vs run
χ^2 / ndf 2798 / 77
p0 8875 ± 7.264
10000
9500
9000
8500
8000
7500

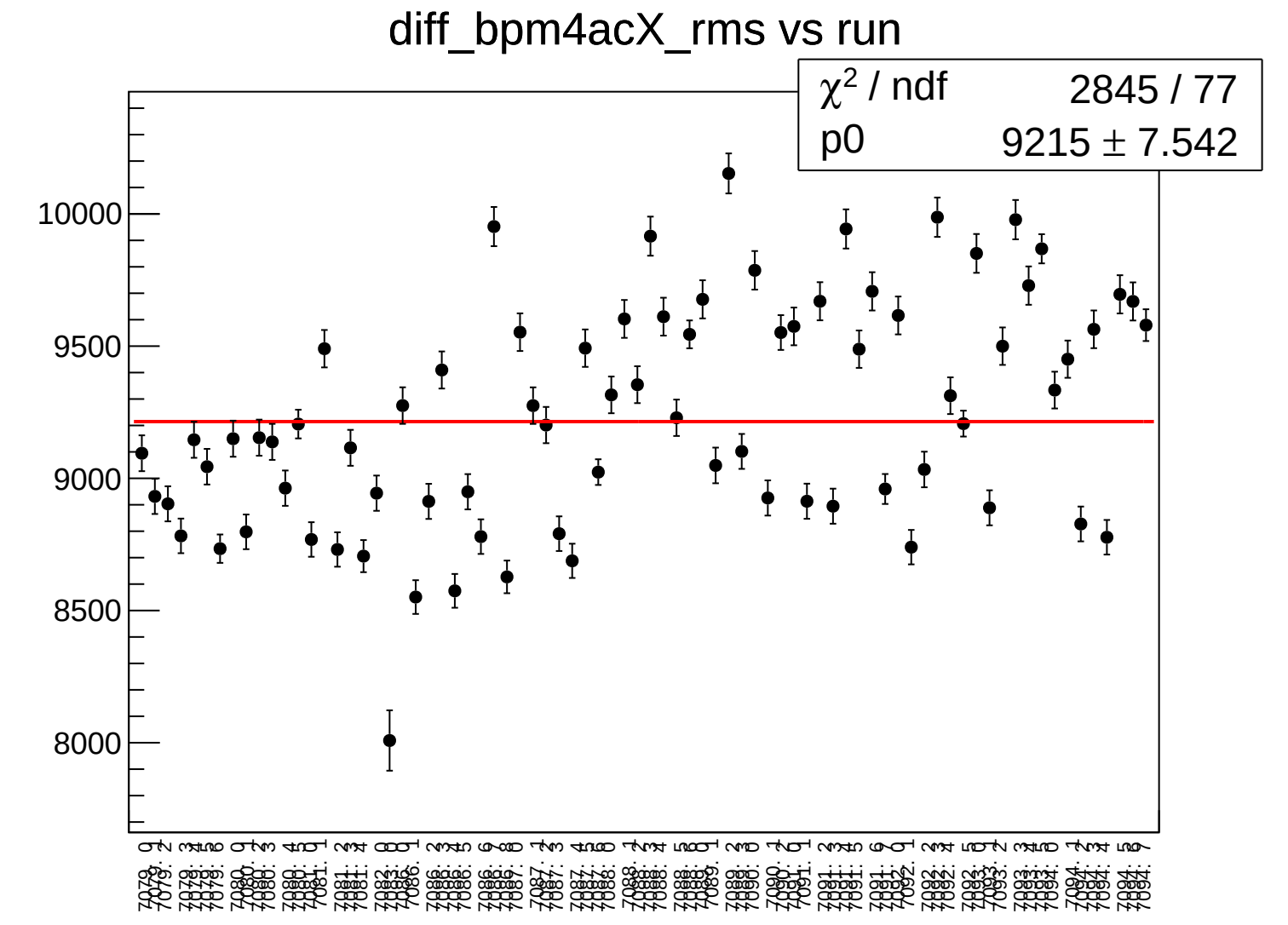

diff_bpm4eY_mean vs run
χ² / ndf 83.17 / 77
p0 −10.79 ± 8.574
300
200
100
0
−100
−200
−300
pull
Entries 78
Mean −205.6
Std Dev 244.2
2
1
0
−1
−2

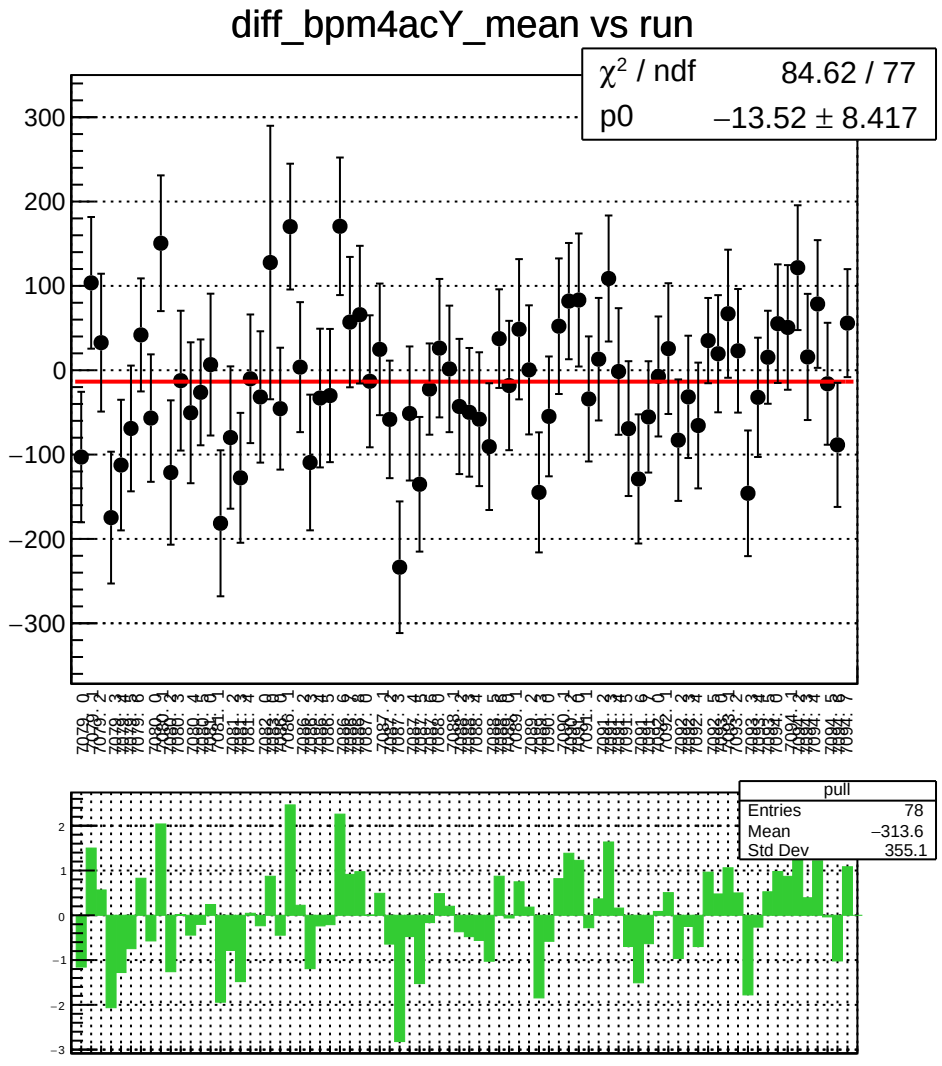

pull1D
Entries 78
Mean −0.01107
Std Dev 1.033
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

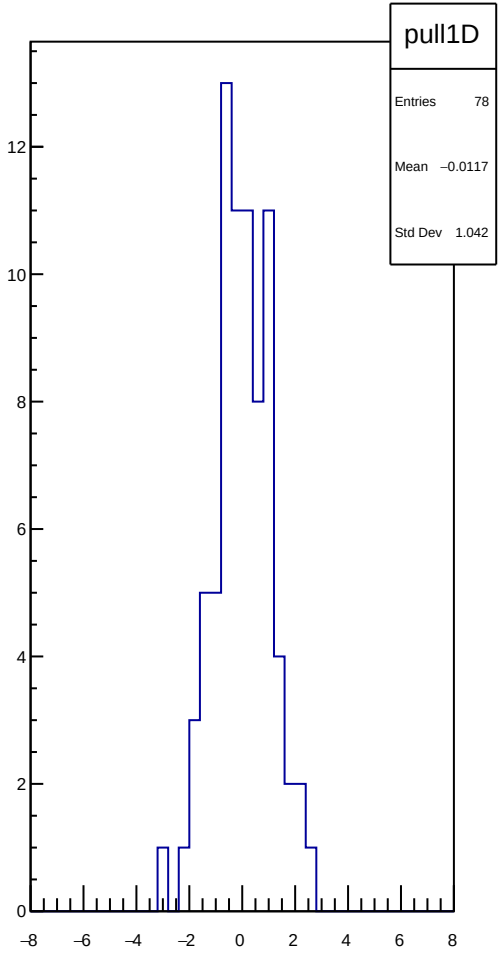

diff_bpm4eY_rms vs run
χ^2 / ndf 5201 / 77
p0 7402 ± 6.063
9000
8500
8000
7500
7000
6500

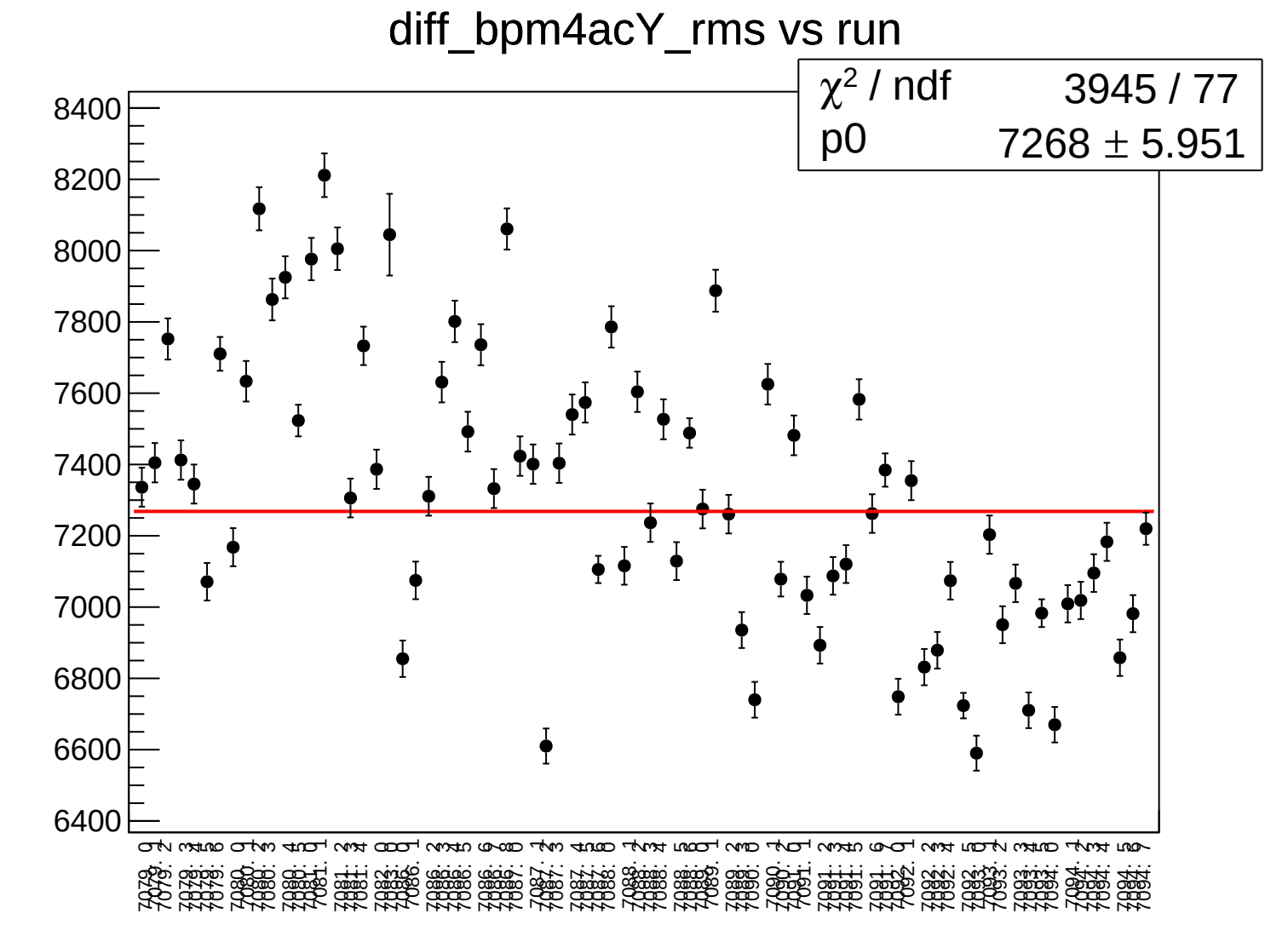

diff_bpm4acX_mean vs run
χ² / ndf 89.26 / 77
p0 −22.48 ± 10.67
pull
Entries 78
Mean 451.4
Std Dev 423.4

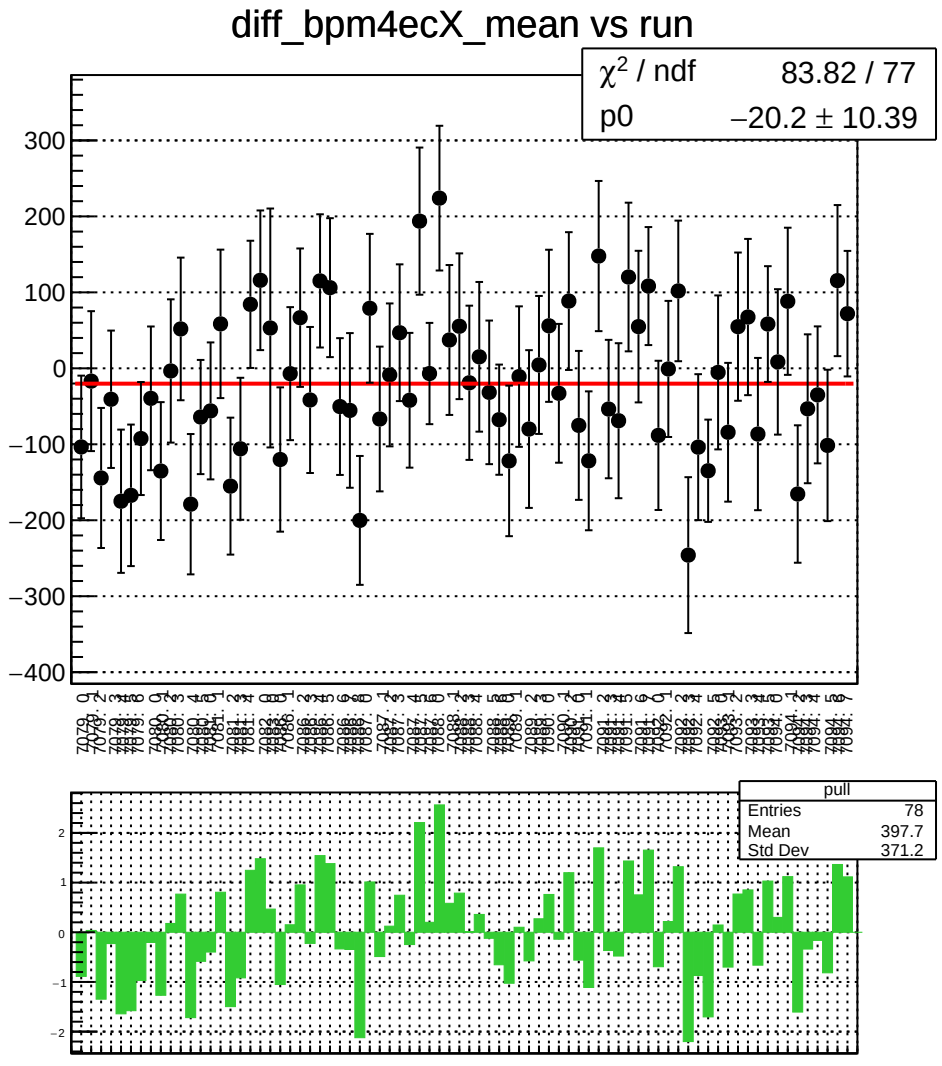

pull1D
Entries 78
Mean 0.01135
Std Dev 1.07

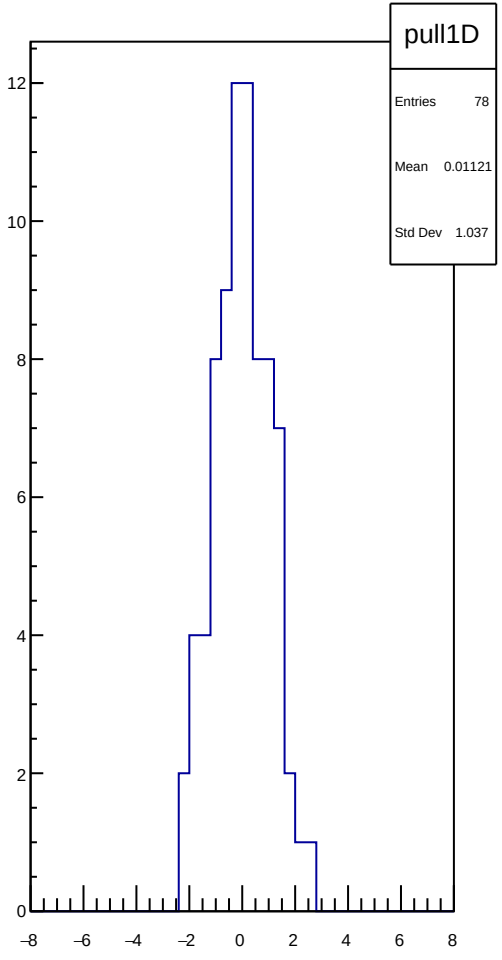

diff_bpm4acX_rms vs run
χ² / ndf 2845 / 77
p0 9215 ± 7.542
10000
9500
9000
8500
8000

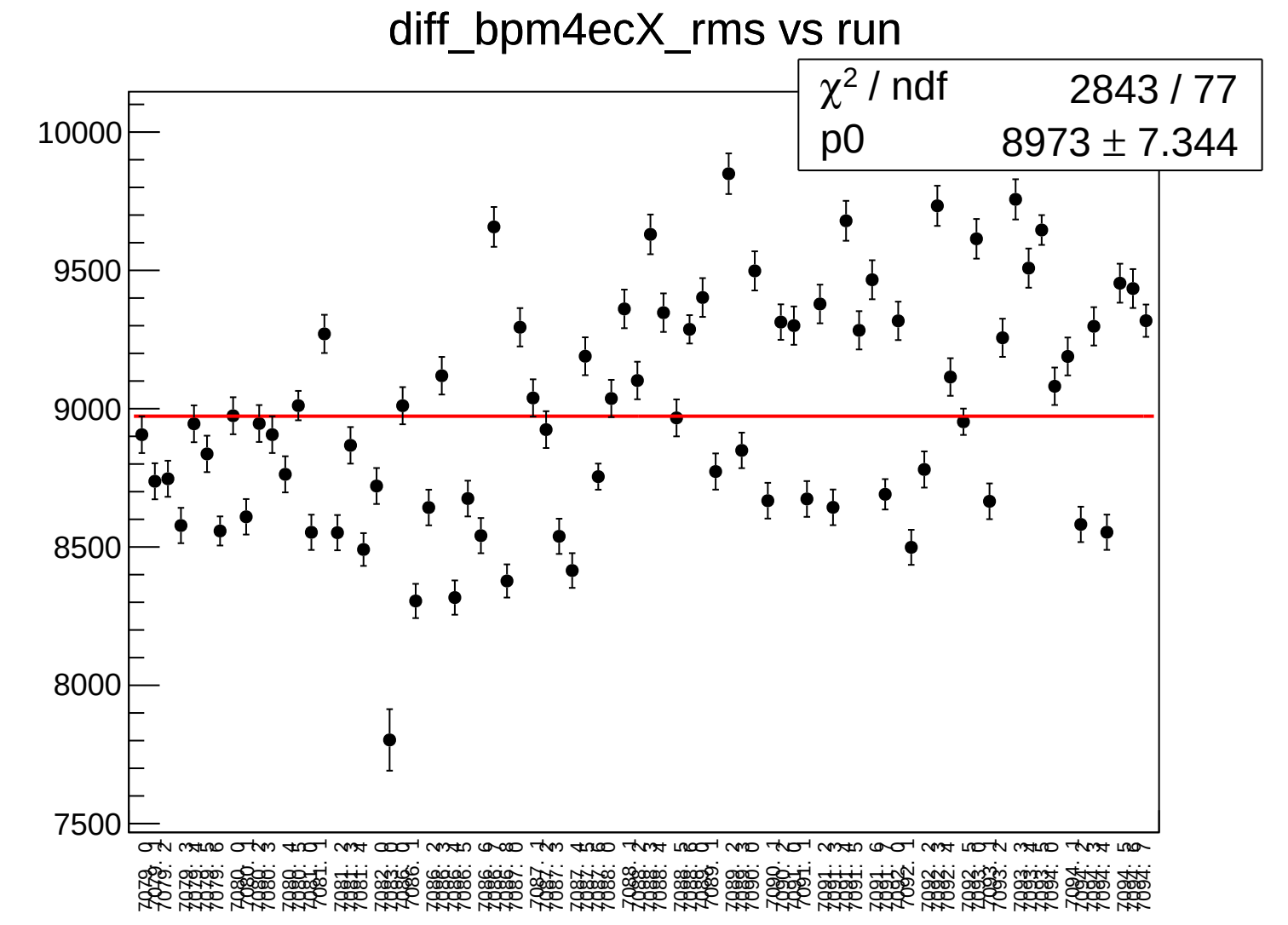

diff_bpm4acY_mean vs run
χ² / ndf 84.62 / 77
p0 −13.52 ± 8.417
pull
Entries 78
Mean −313.6
Std Dev 355.1

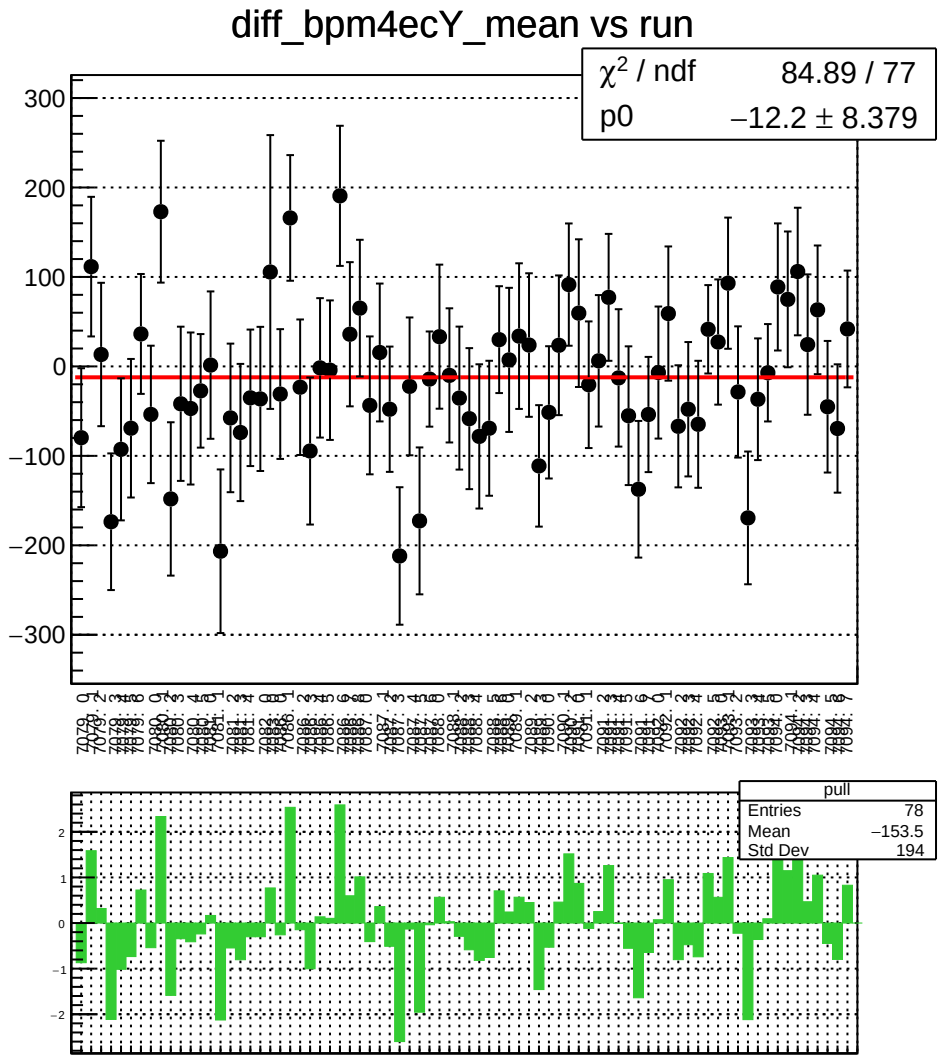

pull1D
Entries 78
Mean −0.0117
Std Dev 1.042

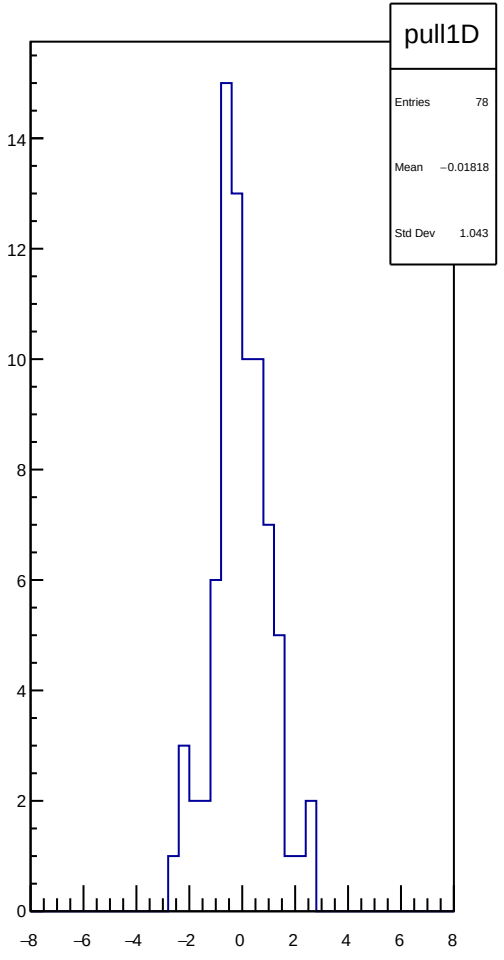

diff_bpm4acY_rms vs run
χ² / ndf 3945 / 77
p0 7268 ± 5.951
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400

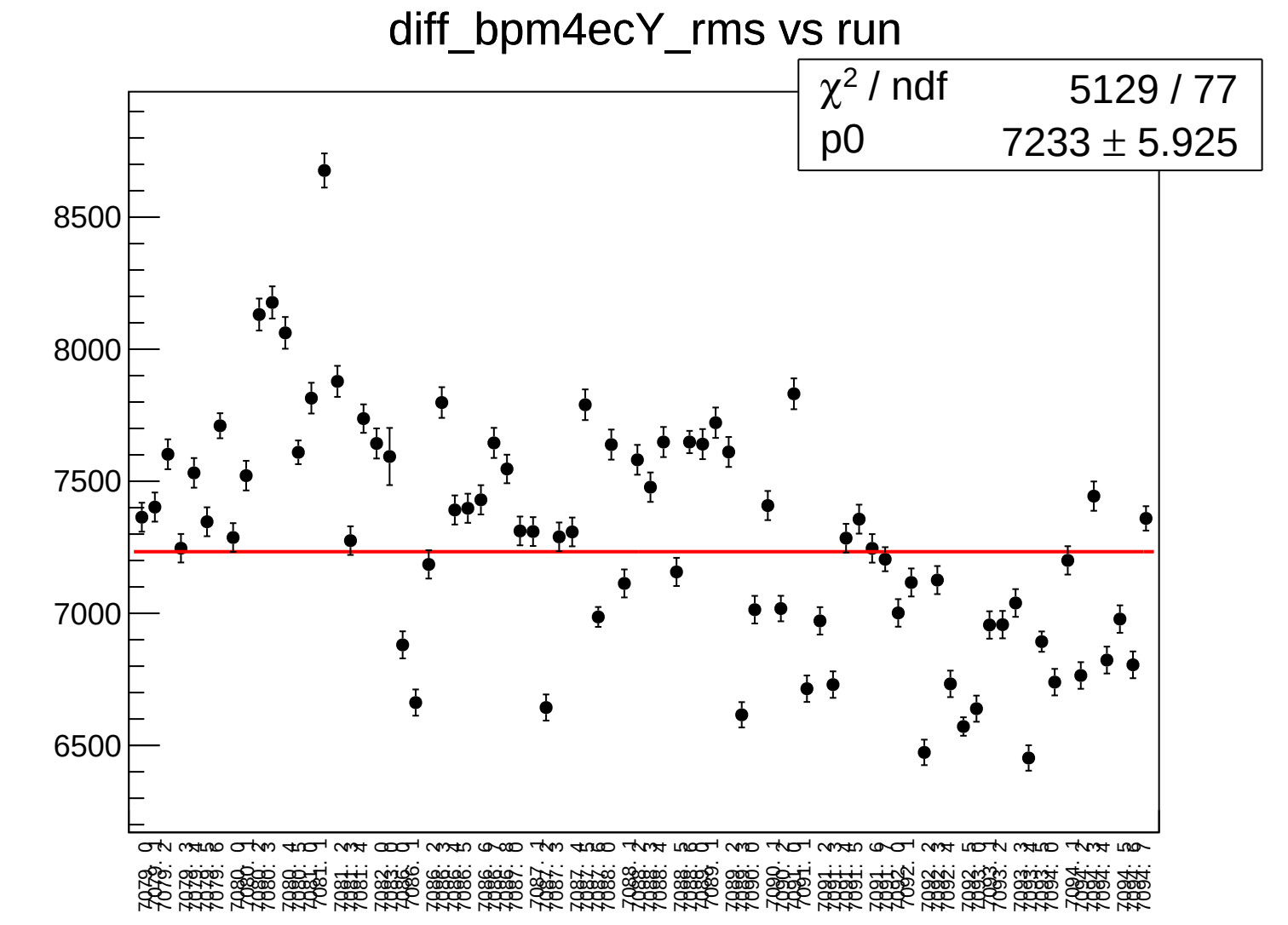

diff_bpm4ecX_mean vs run
χ² / ndf 83.82 / 77
p0 −20.2 ± 10.39
pull
Entries 78
Mean 397.7
Std Dev 371.2

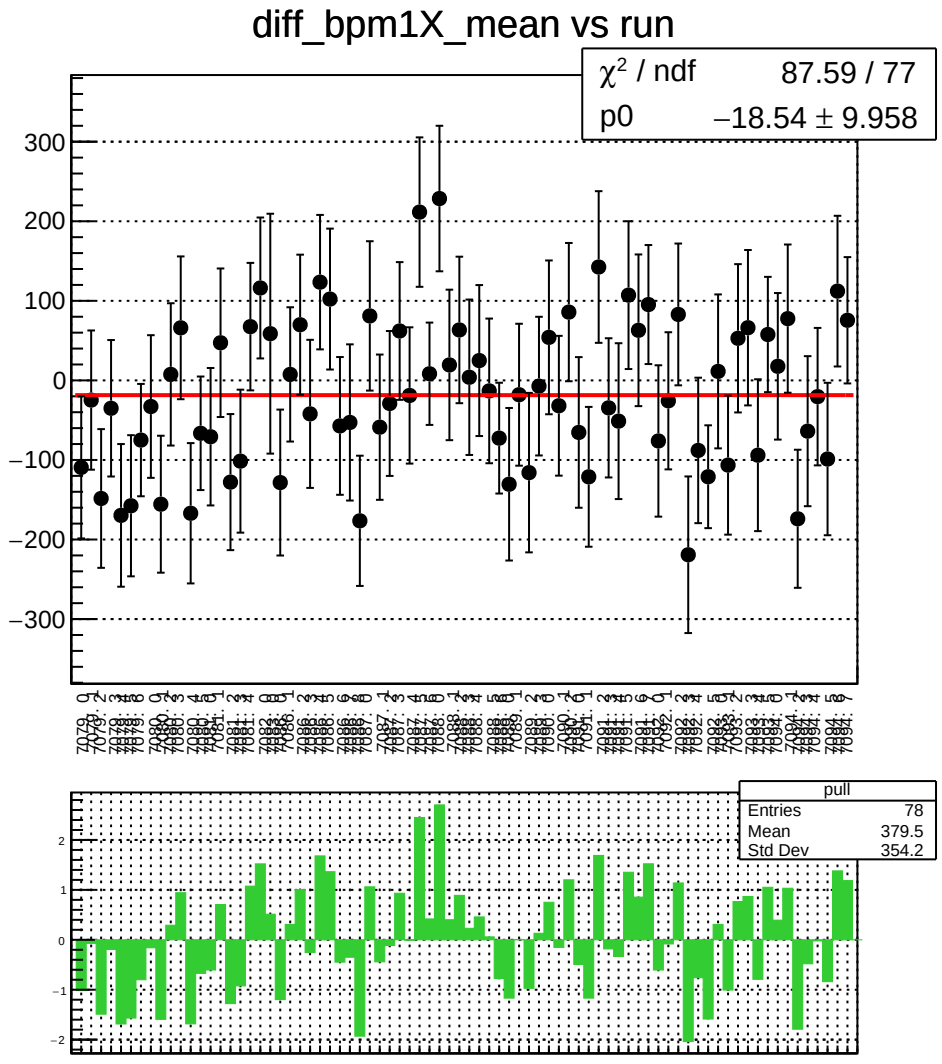

pull1D
Entries 78
Mean 0.01121
Std Dev 1.037

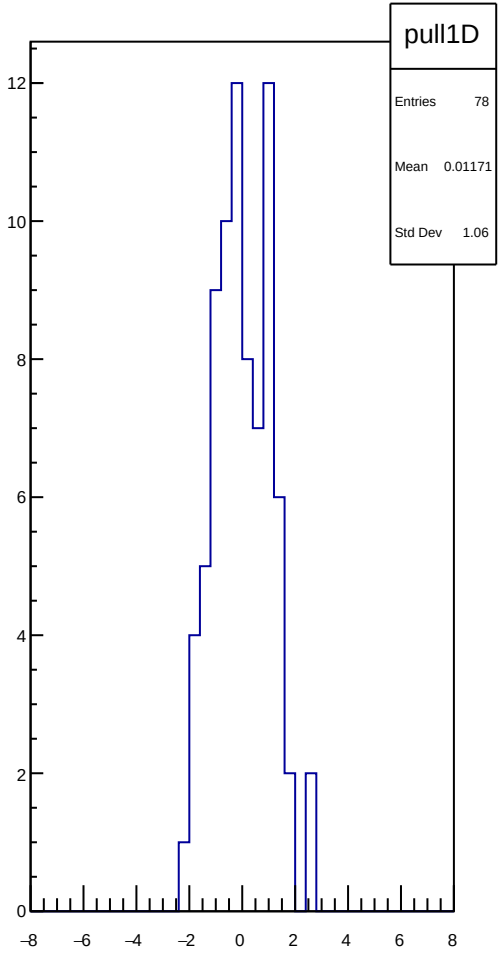

diff_bpm4ecX_rms vs run
χ² / ndf 2843 / 77
p0 8973 ± 7.344
10000
9500
9000
8500
8000
7500

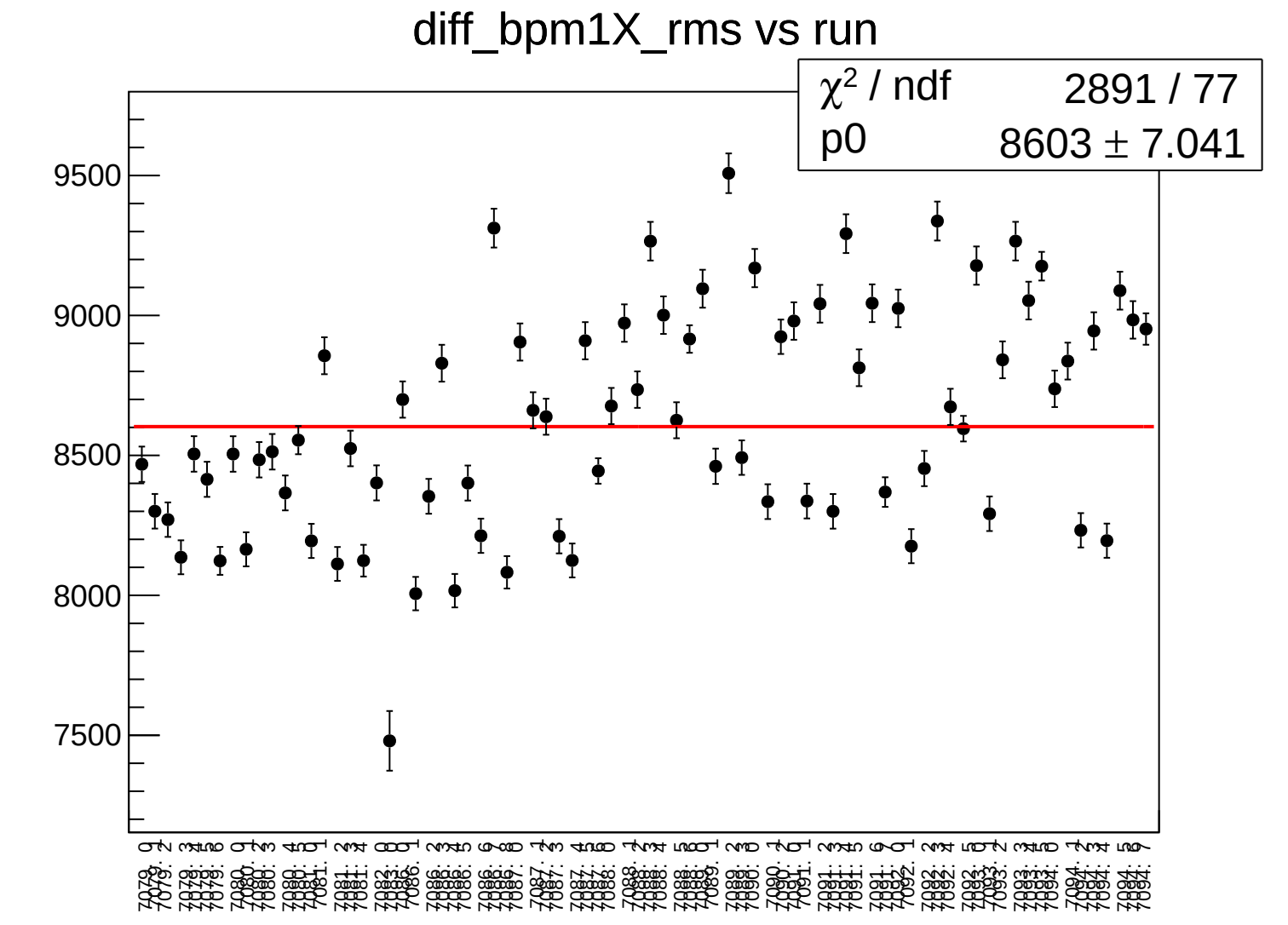

diff_bpm4ecY_mean vs run
χ² / ndf 84.89 / 77
p0 −12.2 ± 8.379
pull
Entries 78
Mean −153.5
Std Dev 194

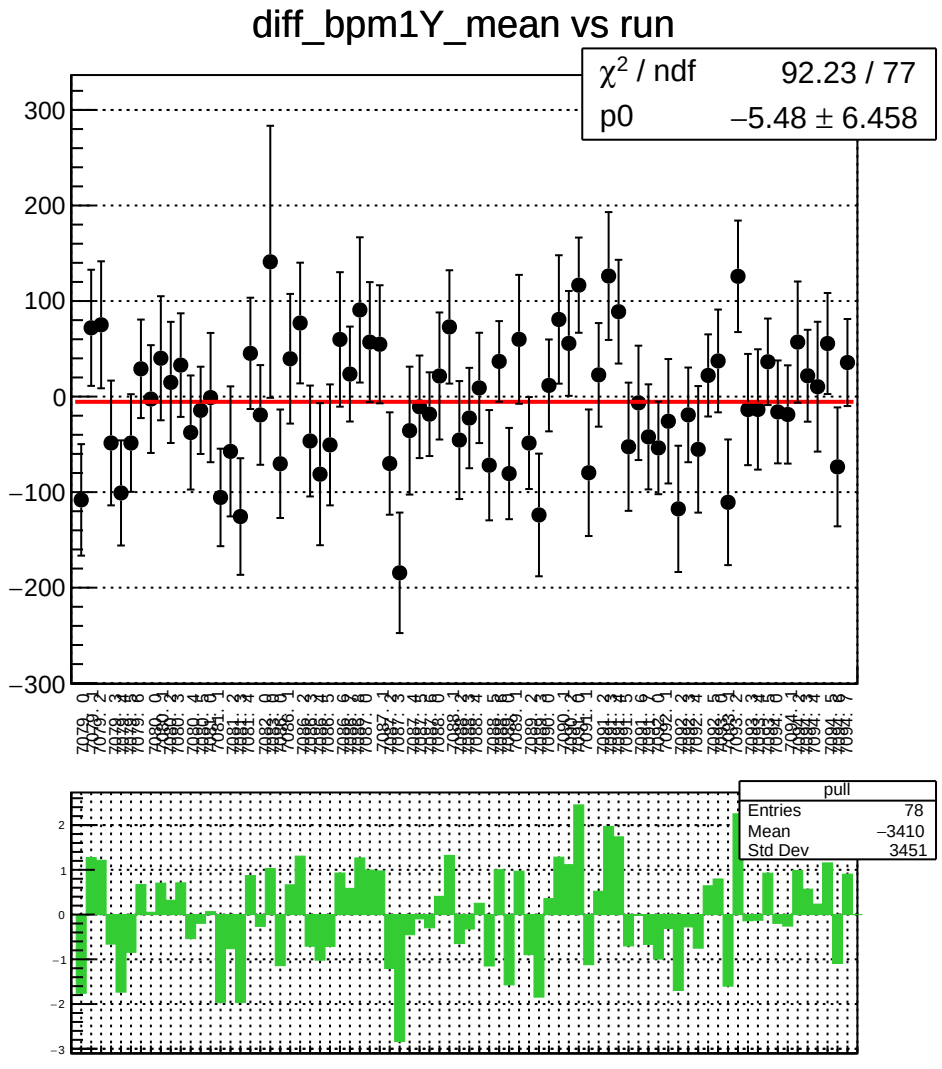

pull1D
Entries 78
Mean −0.01818
Std Dev 1.043

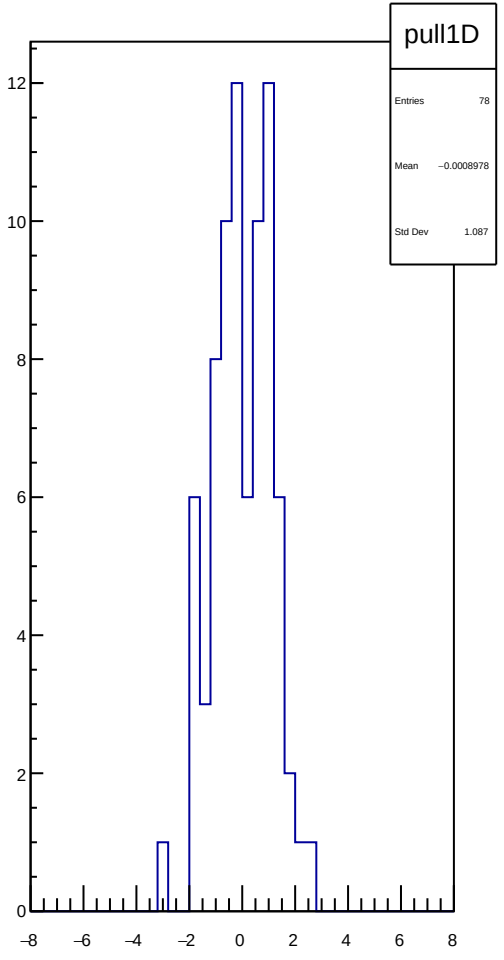

diff_bpm4ecY_rms vs run
χ² / ndf 5129 / 77
p0 7233 ± 5.925
8500
8000
7500
7000
6500

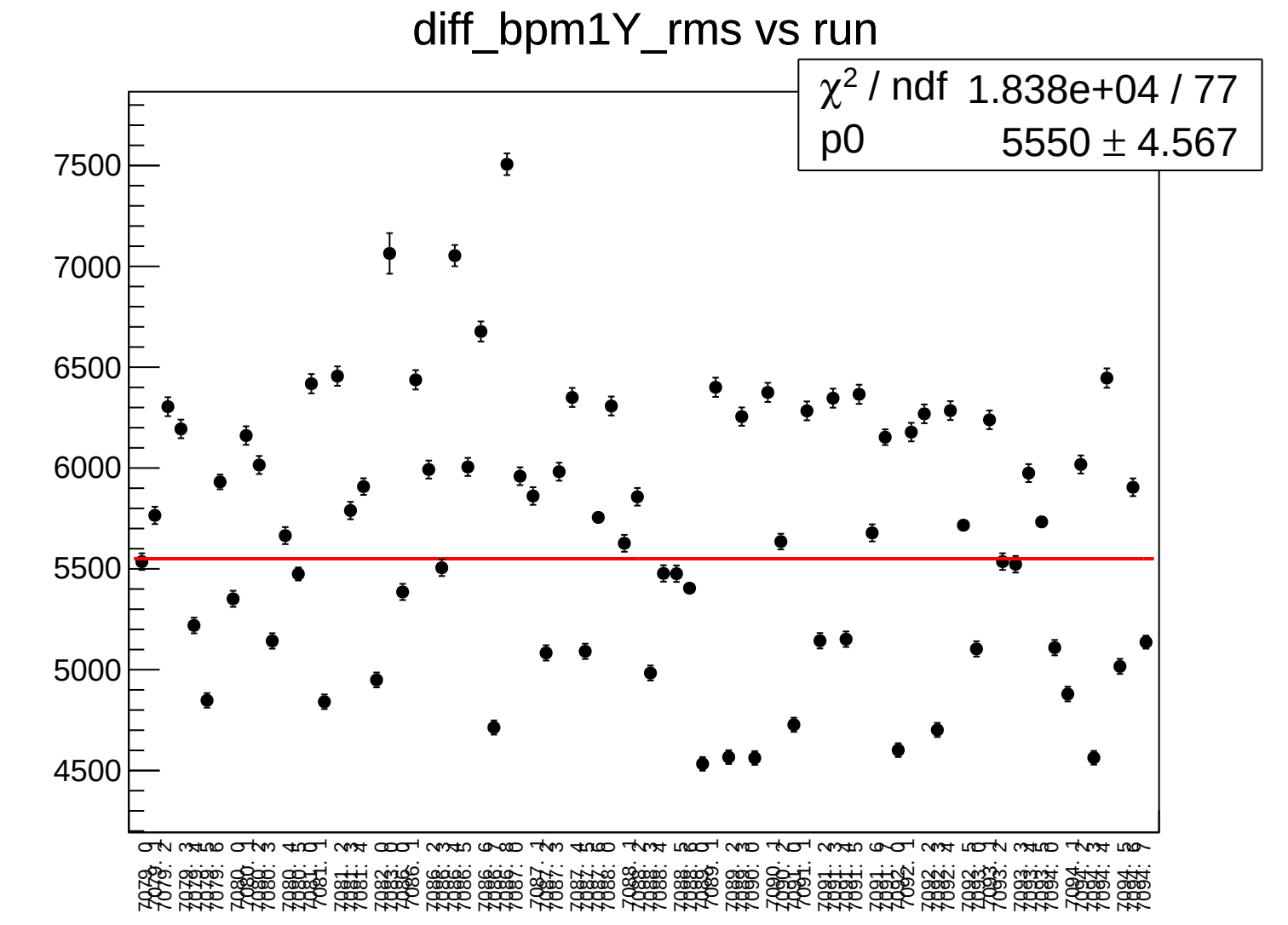

diff_bpm1X_mean vs run
χ² / ndf 87.59 / 77
p0 −18.54 ± 9.958
pull
Entries 78
Mean 379.5
Std Dev 354.2

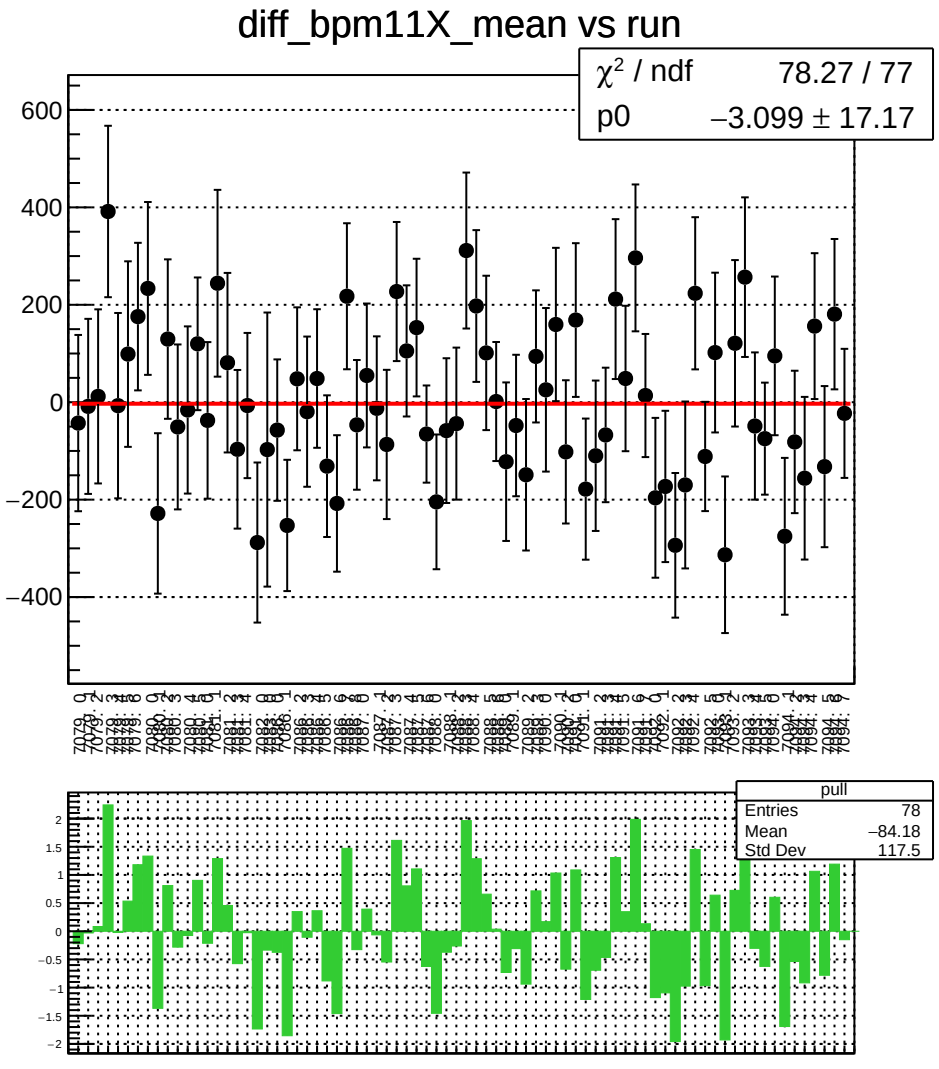

pull1D
Entries 78
Mean 0.01171
Std Dev 1.06

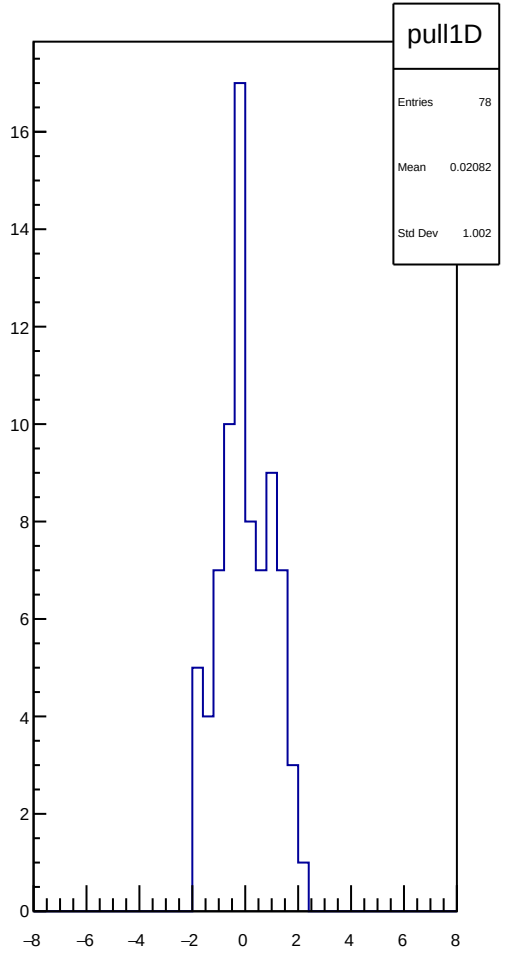

diff_bpm1X_rms vs run
χ² / ndf 2891 / 77
p0 8603 ± 7.041
9500
9000
8500
8000
7500

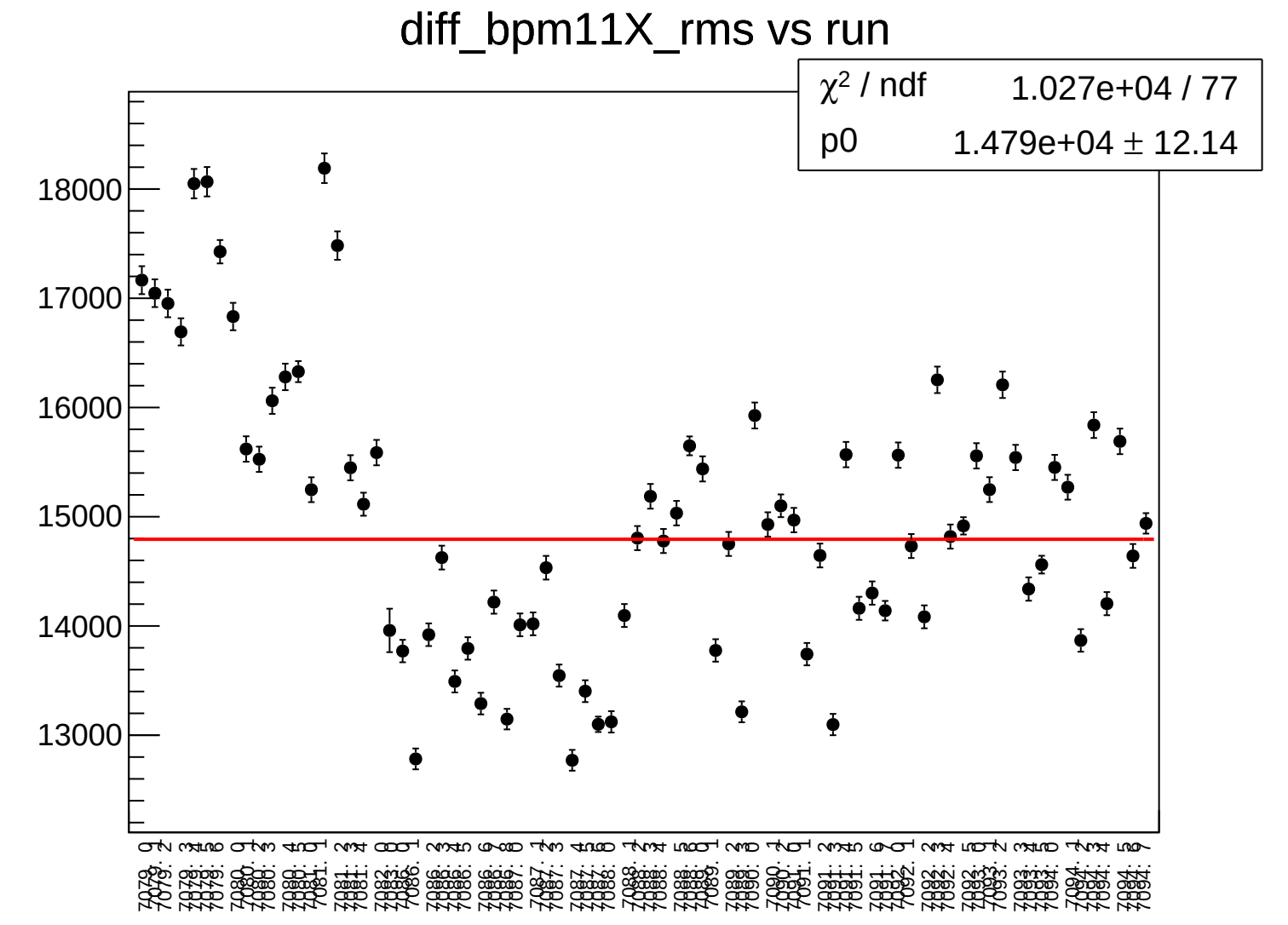

diff_bpm1Y_mean vs run
χ² / ndf 92.23 / 77
p0 −5.48 ± 6.458
pull
Entries 78
Mean −3410
Std Dev 3451

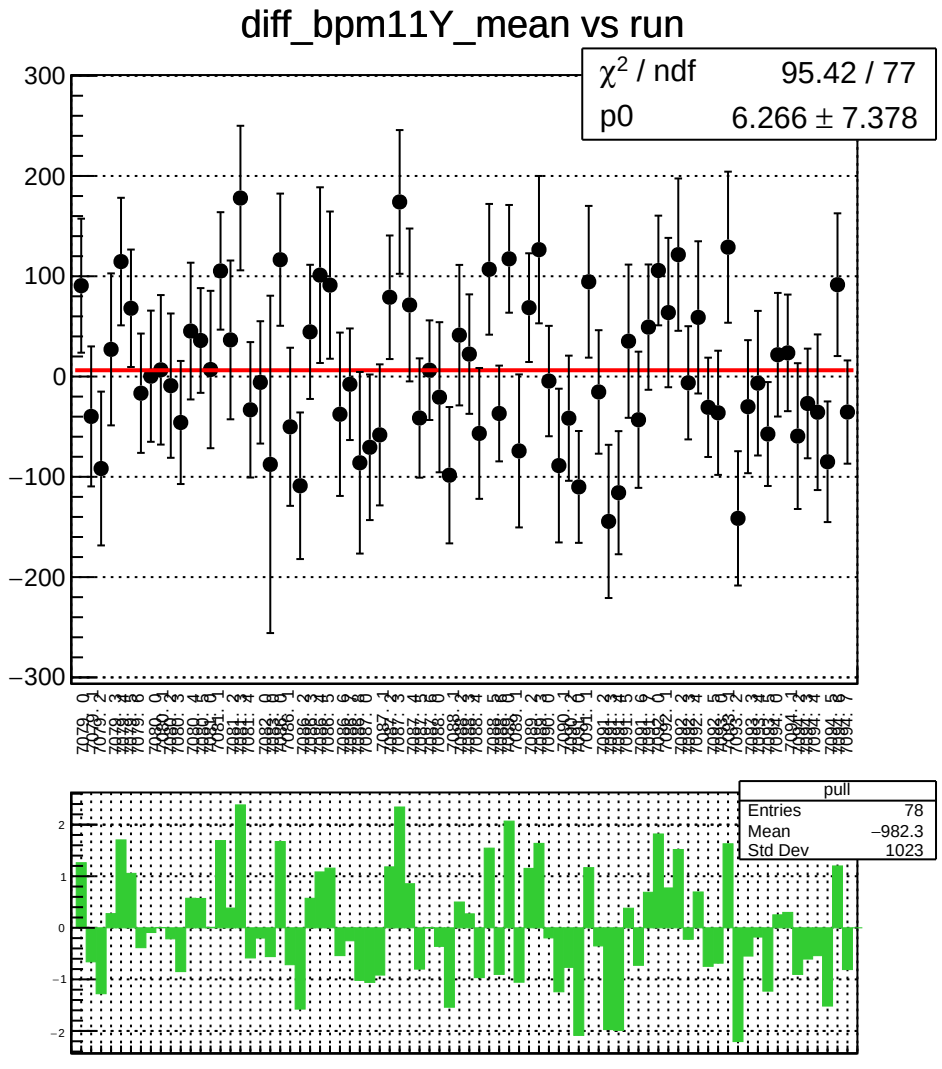

pull1D
Entries 78
Mean −0.0008978
Std Dev 1.087

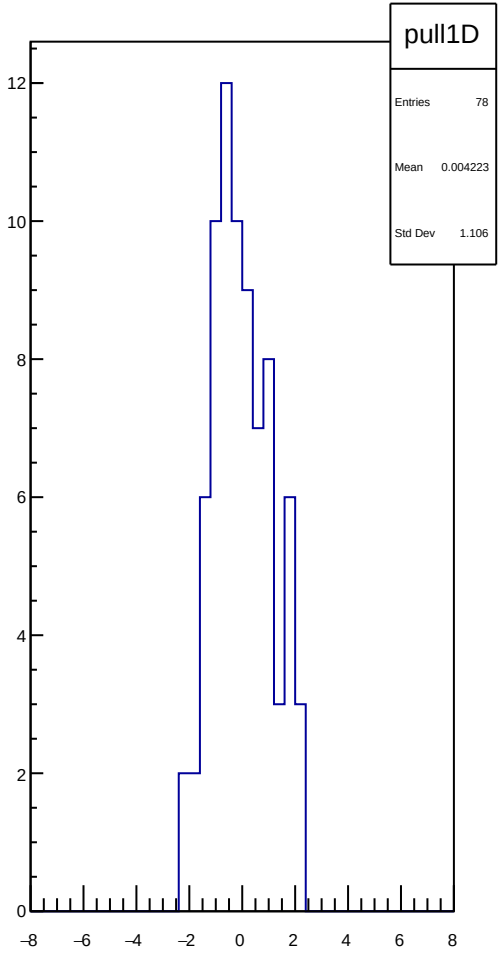

diff_bpm1Y_rms vs run
χ^2 / ndf 1.838e+04 / 77
p0 5550 ± 4.567
7500
7000
6500
6000
5500
5000
4500

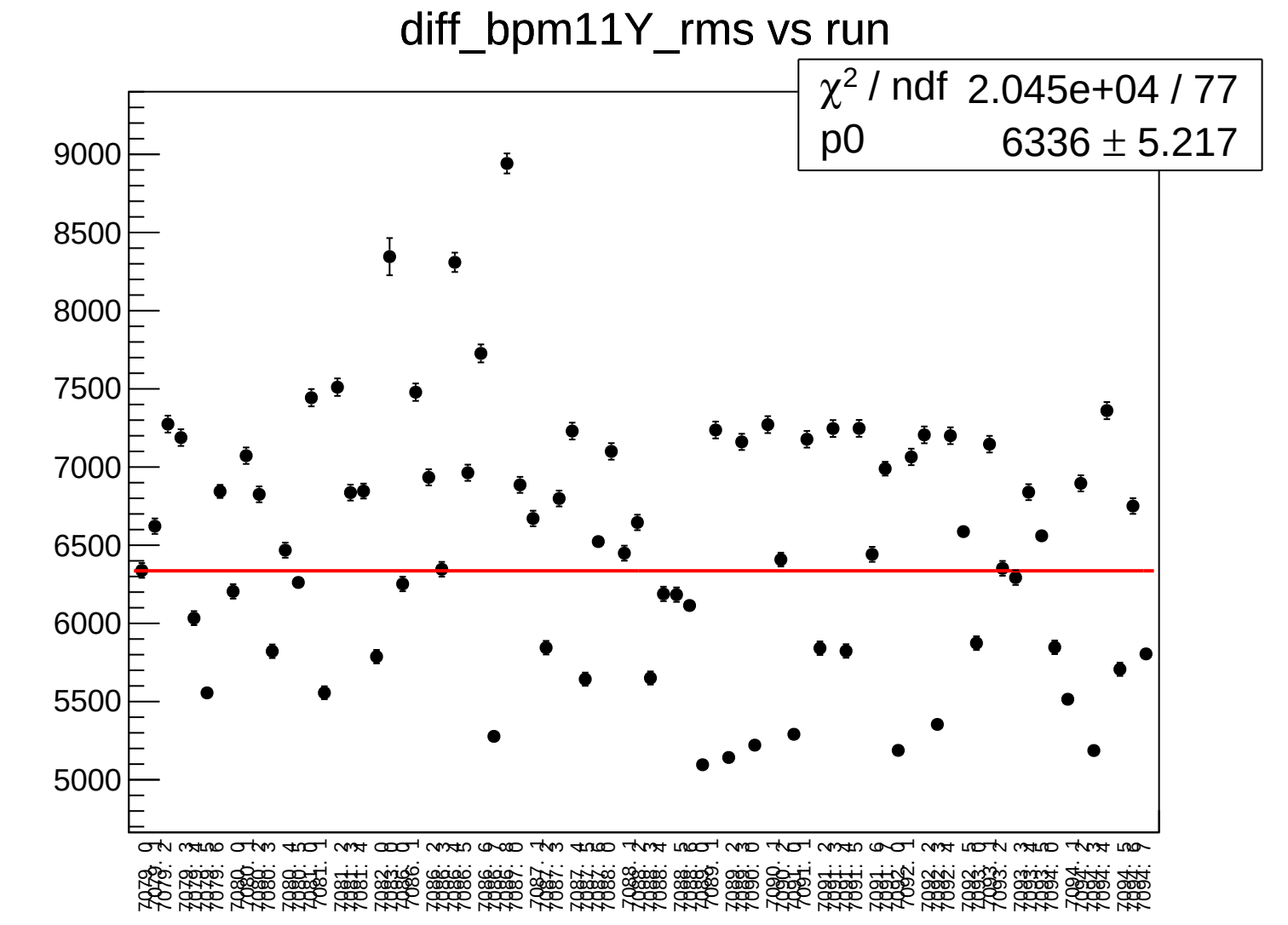

diff_bpm11X_mean vs run
χ² / ndf 78.27 / 77
p0 −3.099 ± 17.17
600
400
200
0
−200
−400
pull
Entries 78
Mean −84.18
Std Dev 117.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

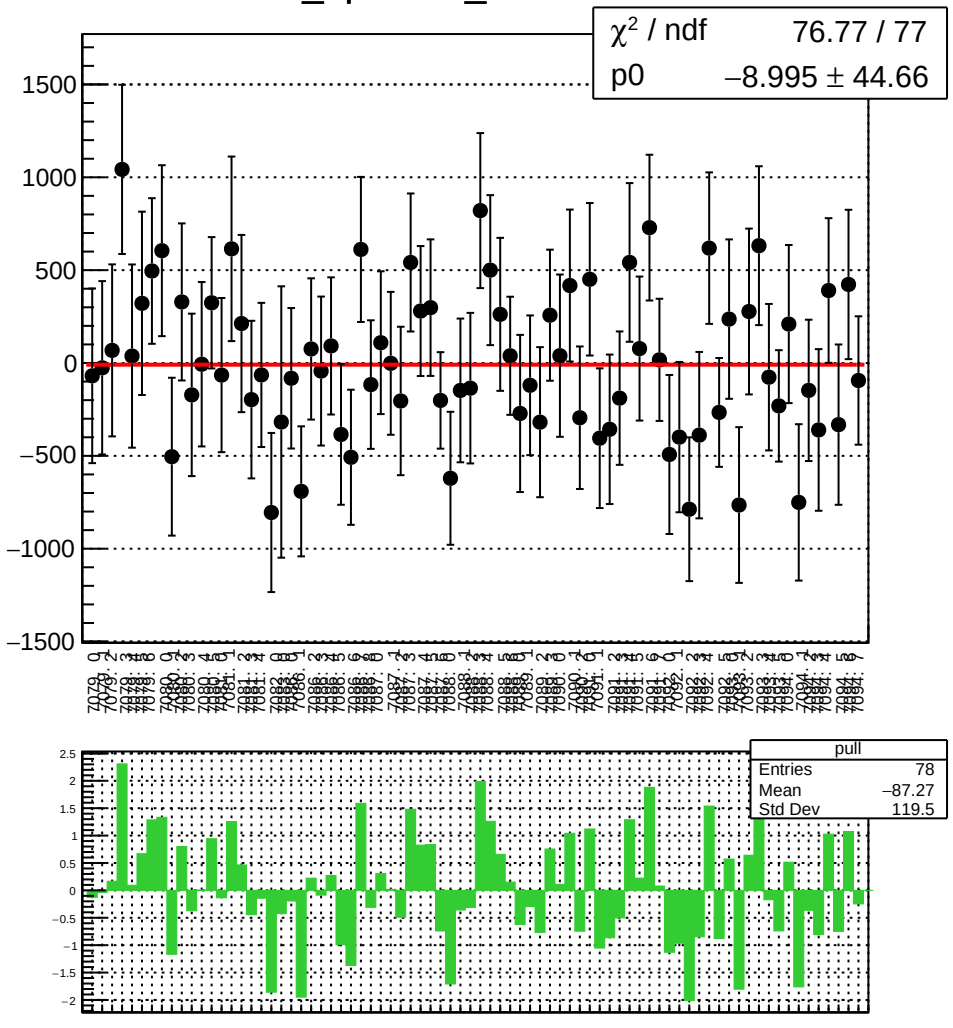

pull1D
Entries 78
Mean 0.02082
Std Dev 1.002
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

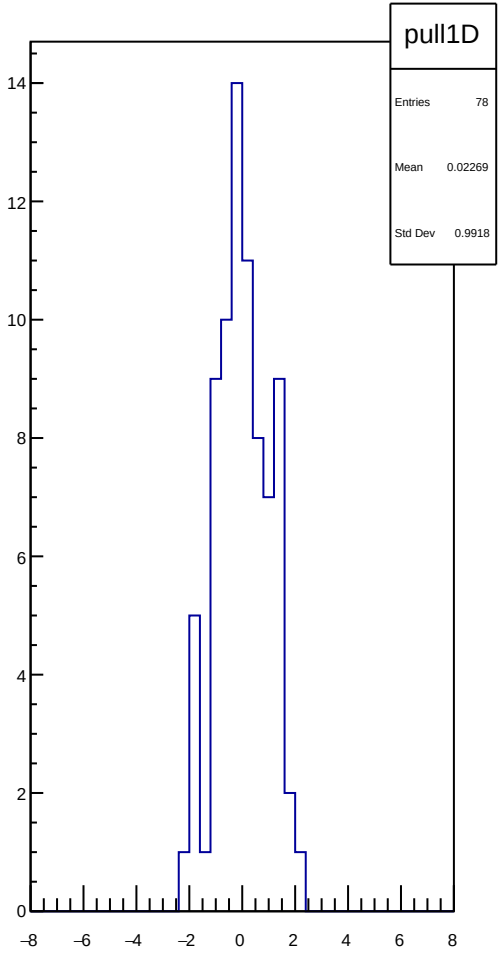

diff_bpm11X_rms vs run
χ² / ndf 1.027e+04 / 77
p0 1.479e+04 ± 12.14
18000
17000
16000
15000
14000
13000

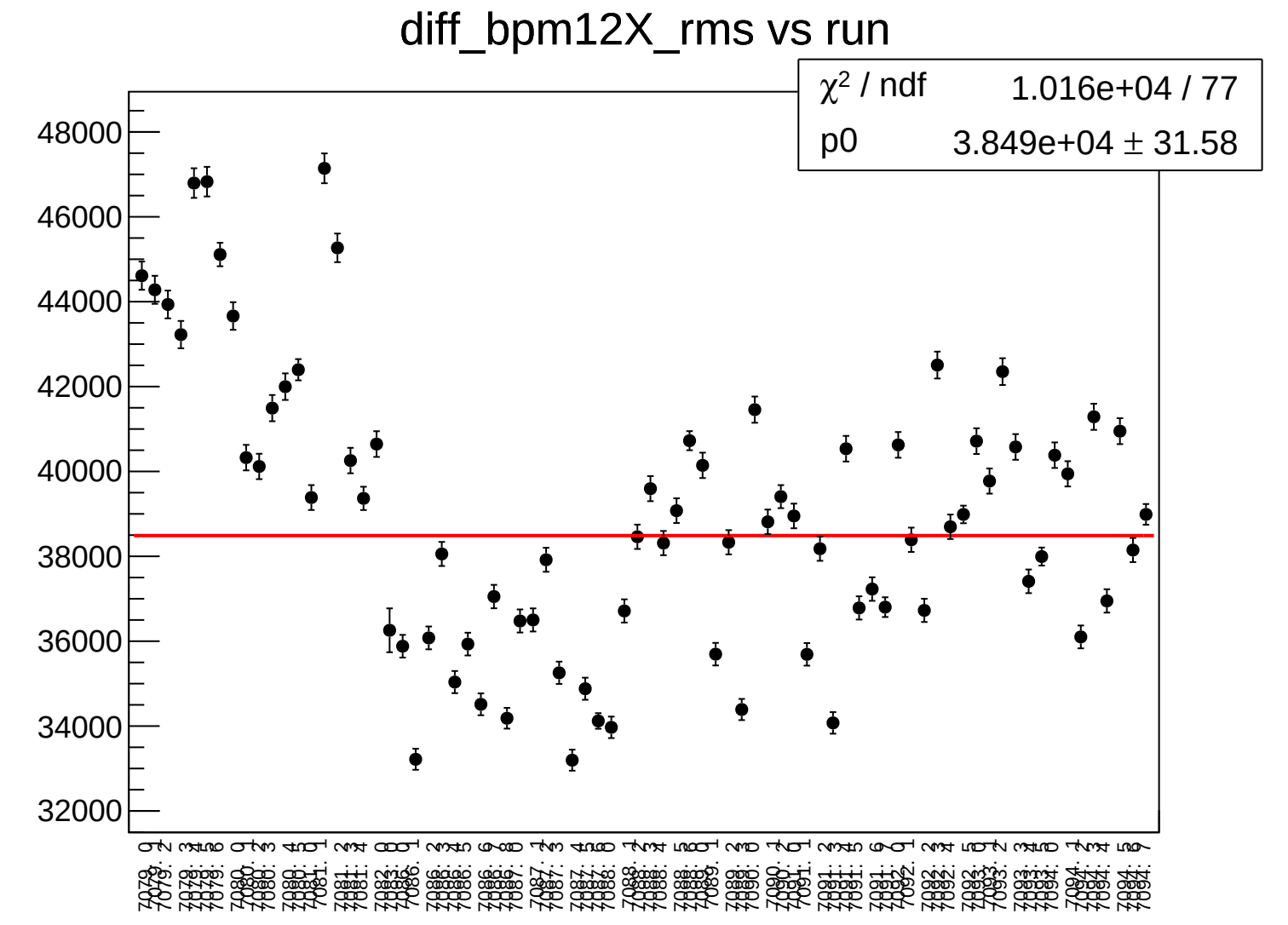

diff_bpm11Y_mean vs run
χ² / ndf 95.42 / 77
p0 6.266 ± 7.378
pull
Entries 78
Mean −982.3
Std Dev 1023

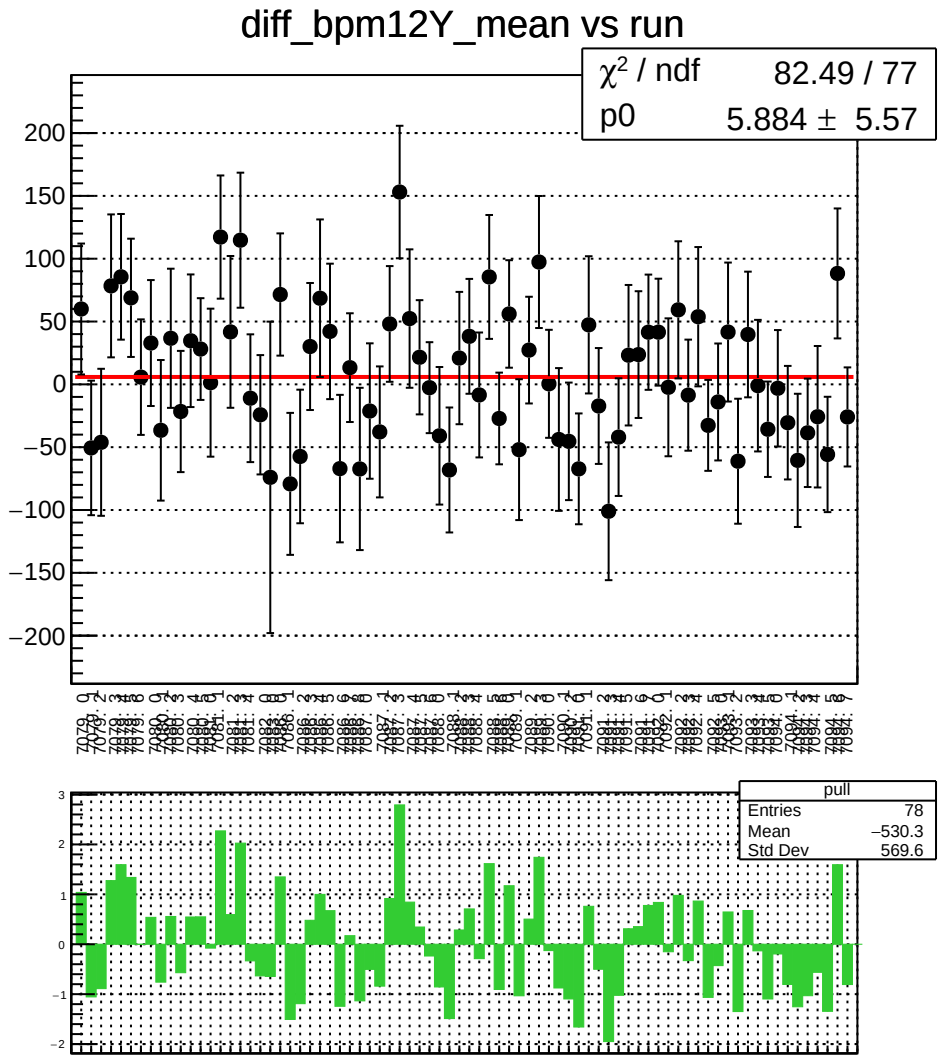

pull1D
Entries 78
Mean 0.004223
Std Dev 1.106

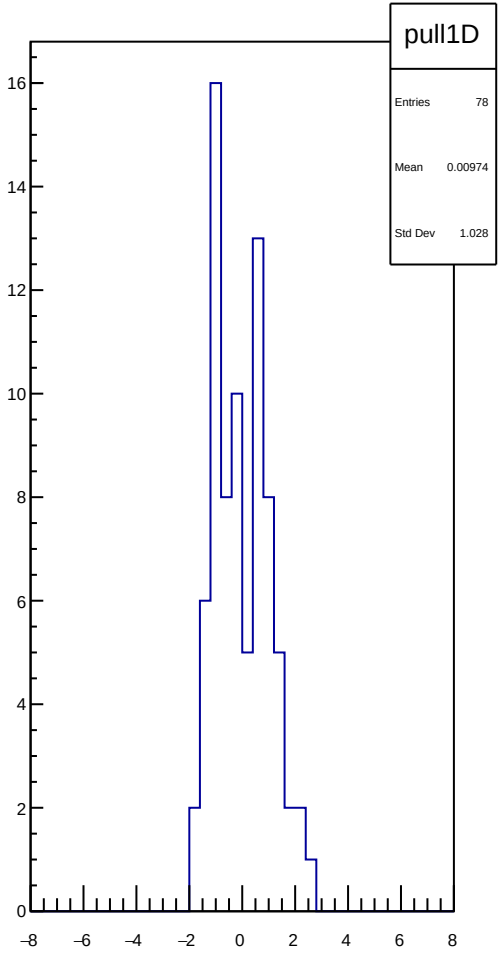

diff_bpm11Y_rms vs run
χ^2 / ndf 2.045e+04 / 77
p0 6336 ± 5.217
9000
8500
8000
7500
7000
6500
6000
5500
5000

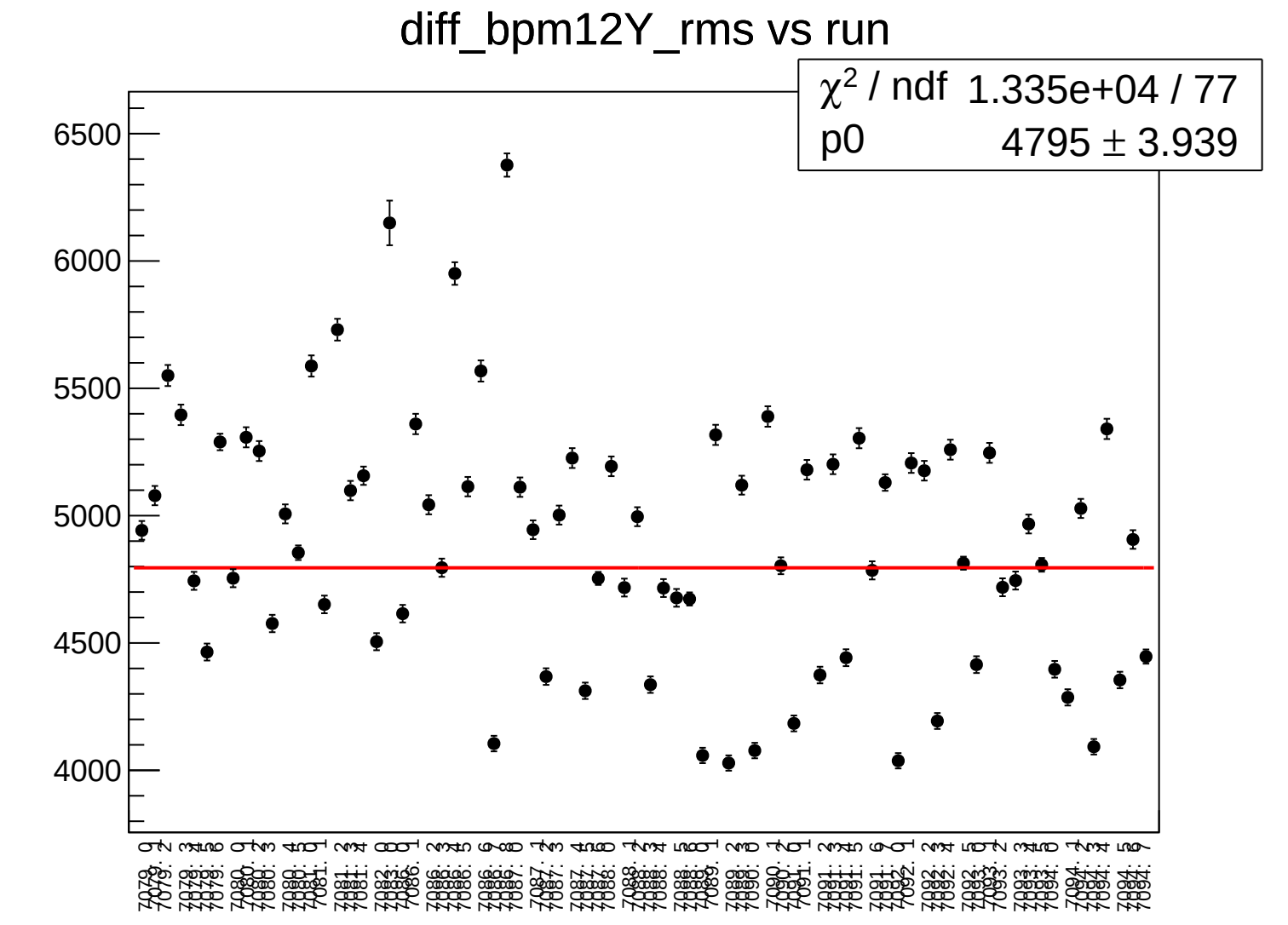

diff_bpm12X_mean vs run
χ² / ndf 76.77 / 77
p0 −8.995 ± 44.66
pull
Entries 78
Mean −87.27
Std Dev 119.5

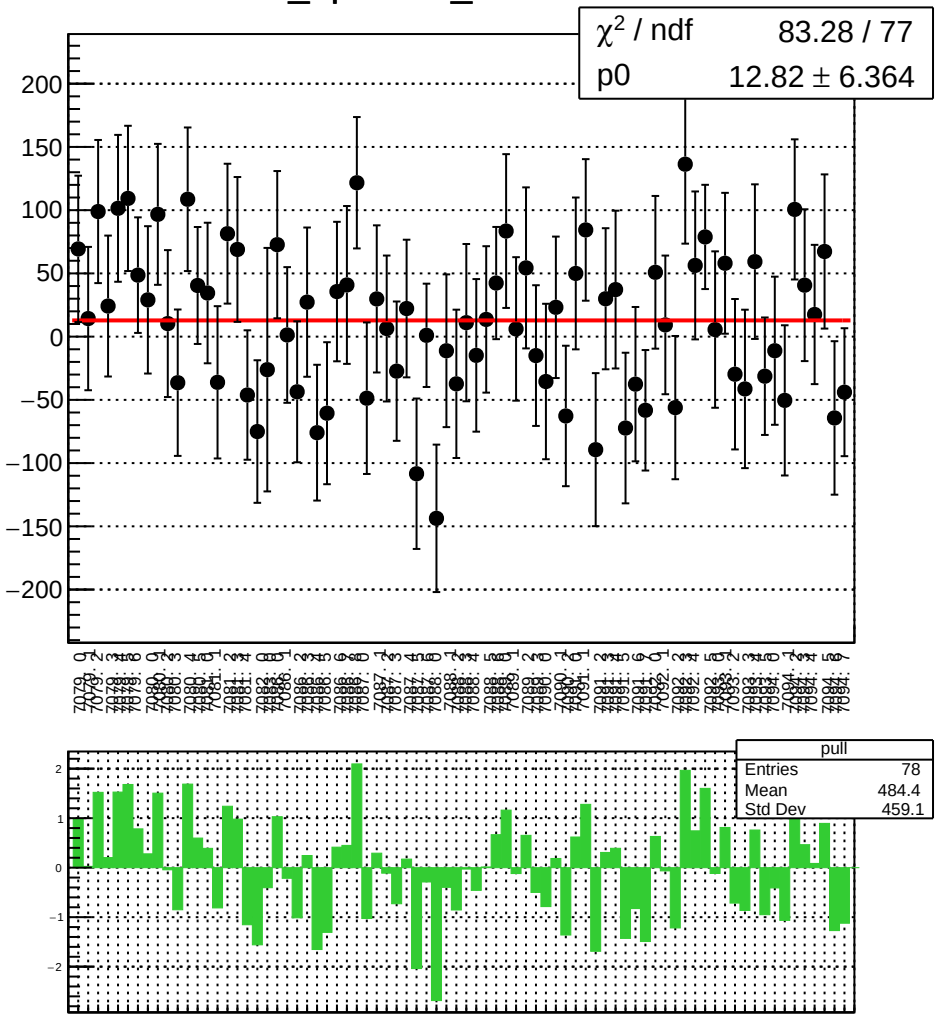

pull1D
Entries 78
Mean 0.02269
Std Dev 0.9918

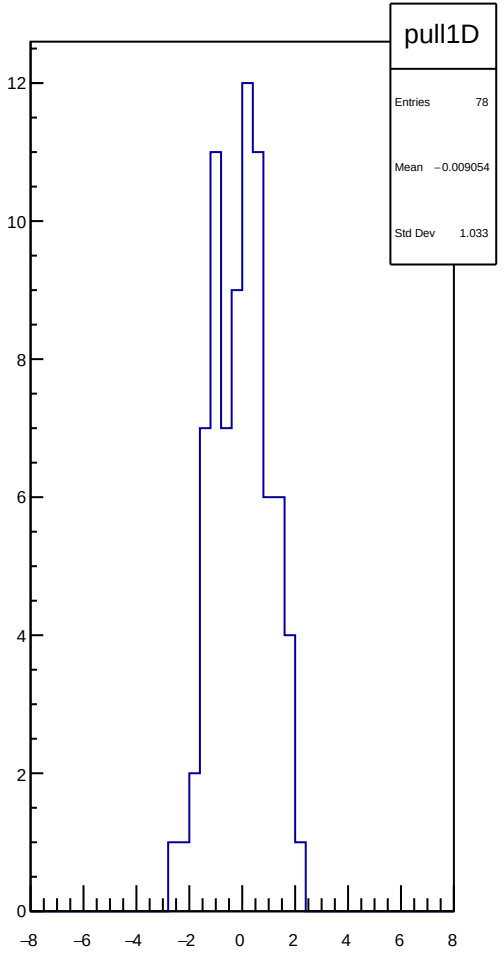

diff_bpm12X_rms vs run
χ² / ndf 1.016e+04 / 77
p0 3.849e+04 ± 31.58
48000
46000
44000
42000
40000
38000
36000
34000
32000

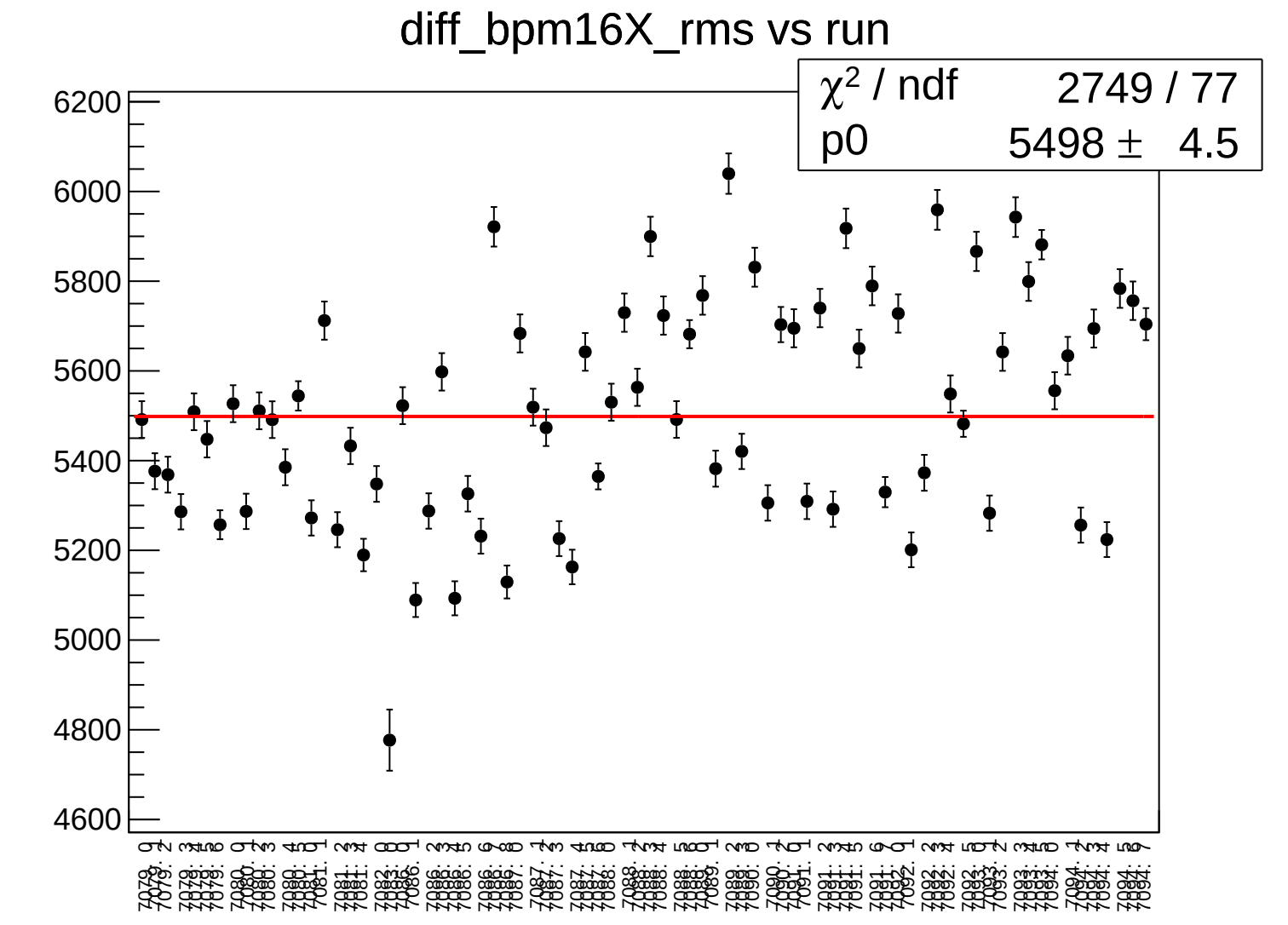

diff_bpm12Y_mean vs run
χ² / ndf 82.49 / 77
p0 5.884 ± 5.57
pull
Entries 78
Mean −530.3
Std Dev 569.6

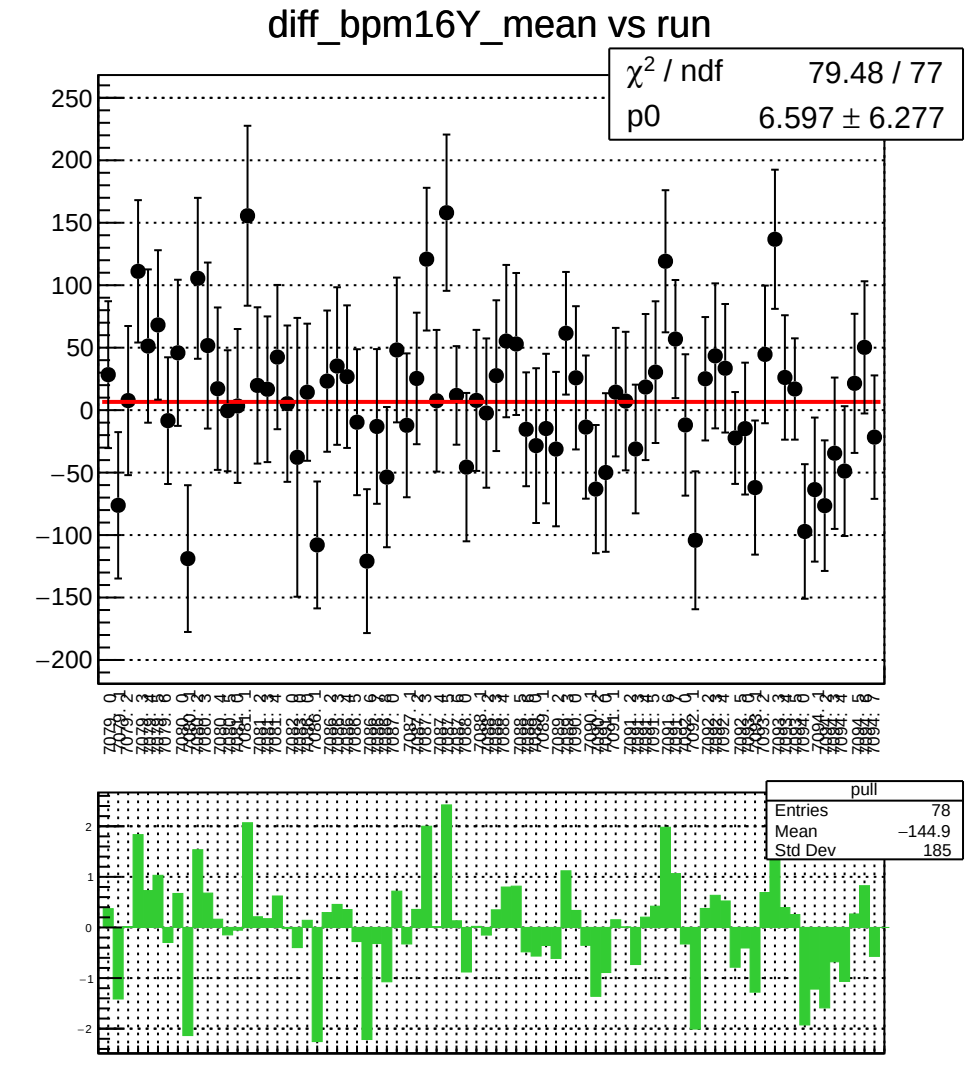

pull1D
Entries 78
Mean 0.00974
Std Dev 1.028

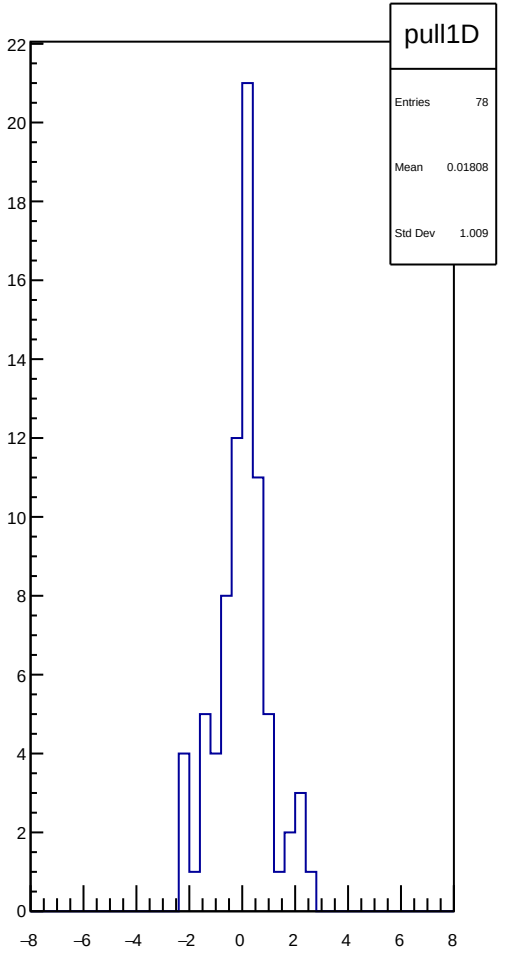

diff_bpm12Y_rms vs run
χ² / ndf 1.335e+04 / 77
p0 4795 ± 3.939
6500
6000
5500
5000
4500
4000

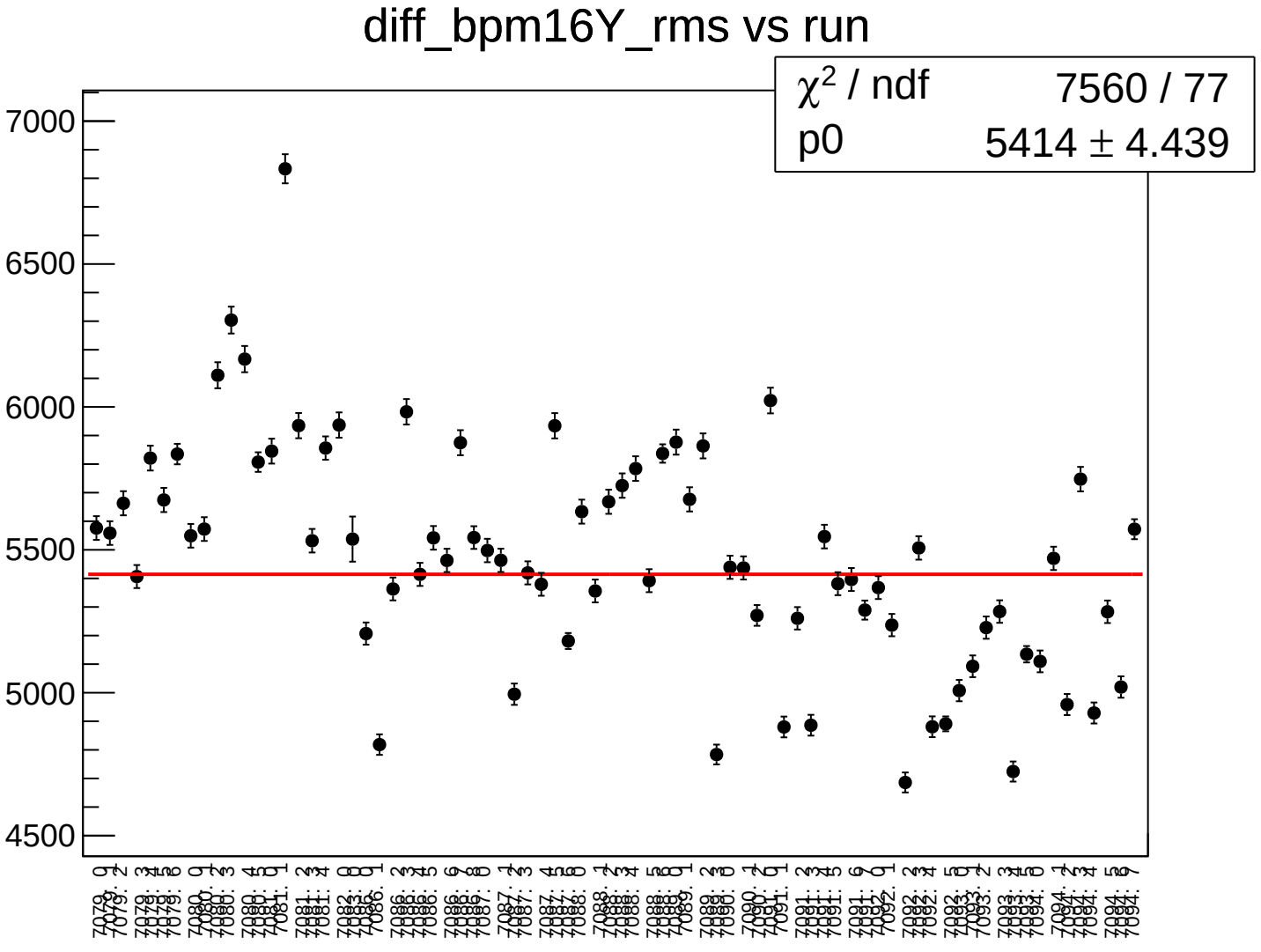

diff_bpm16X_mean vs run
χ² / ndf 83.28 / 77
p0 12.82 ± 6.364
pull
Entries 78
Mean 484.4
Std Dev 459.1

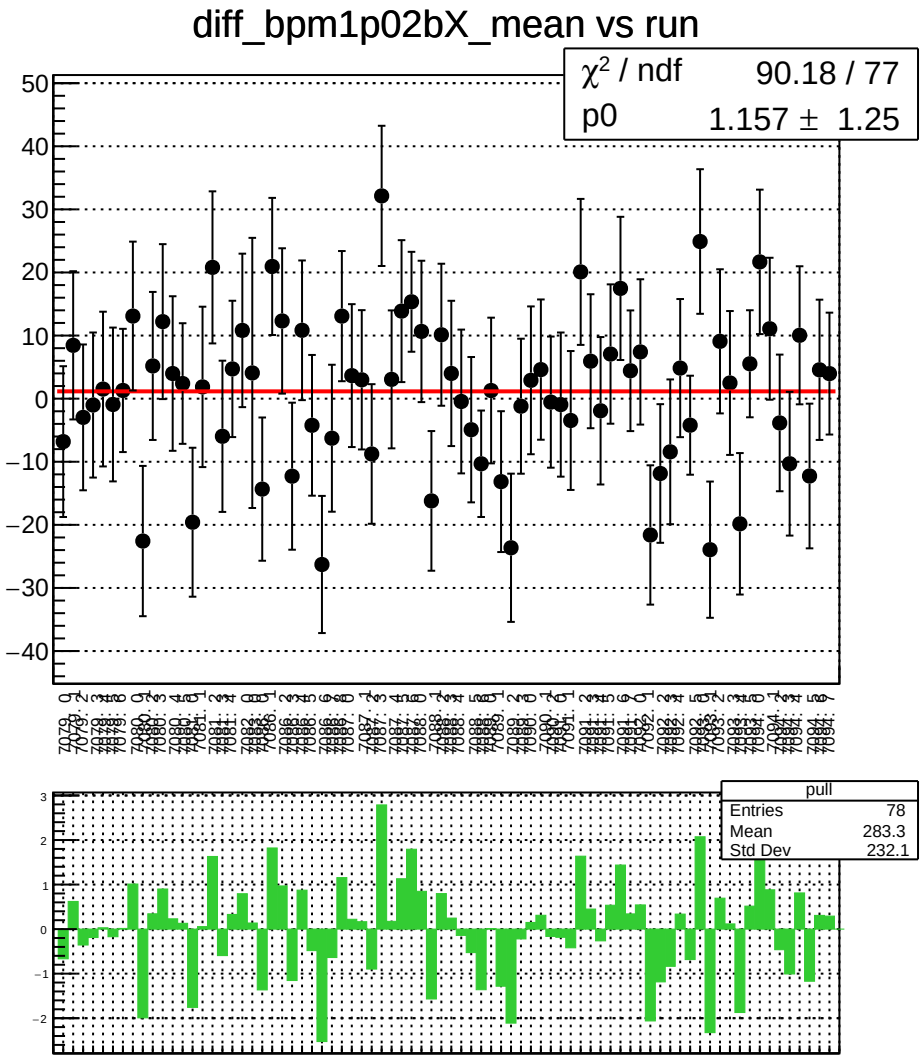

pull1D
Entries 78
Mean −0.009054
Std Dev 1.033

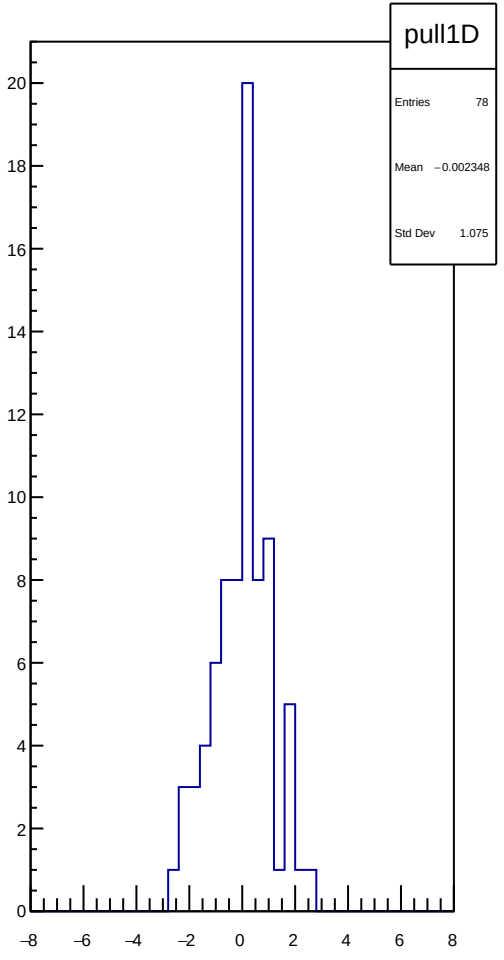

diff_bpm16X_rms vs run
χ² / ndf 2749 / 77
p0 5498 ± 4.5
6200
6000
5800
5600
5400
5200
5000
4800
4600

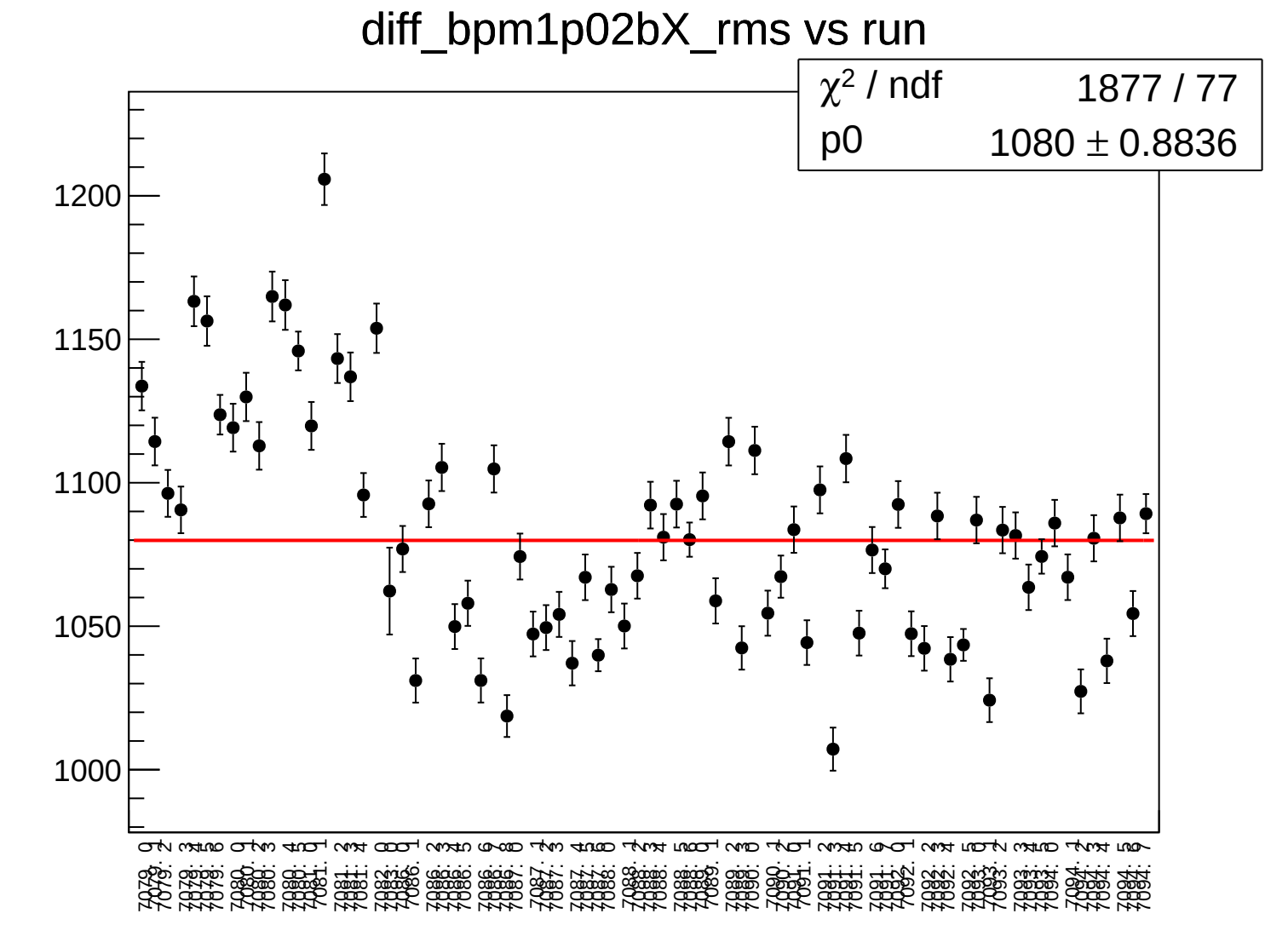

diff_bpm16Y_mean vs run
χ² / ndf 79.48 / 77
p0 6.597 ± 6.277
pull
Entries 78
Mean −144.9
Std Dev 185

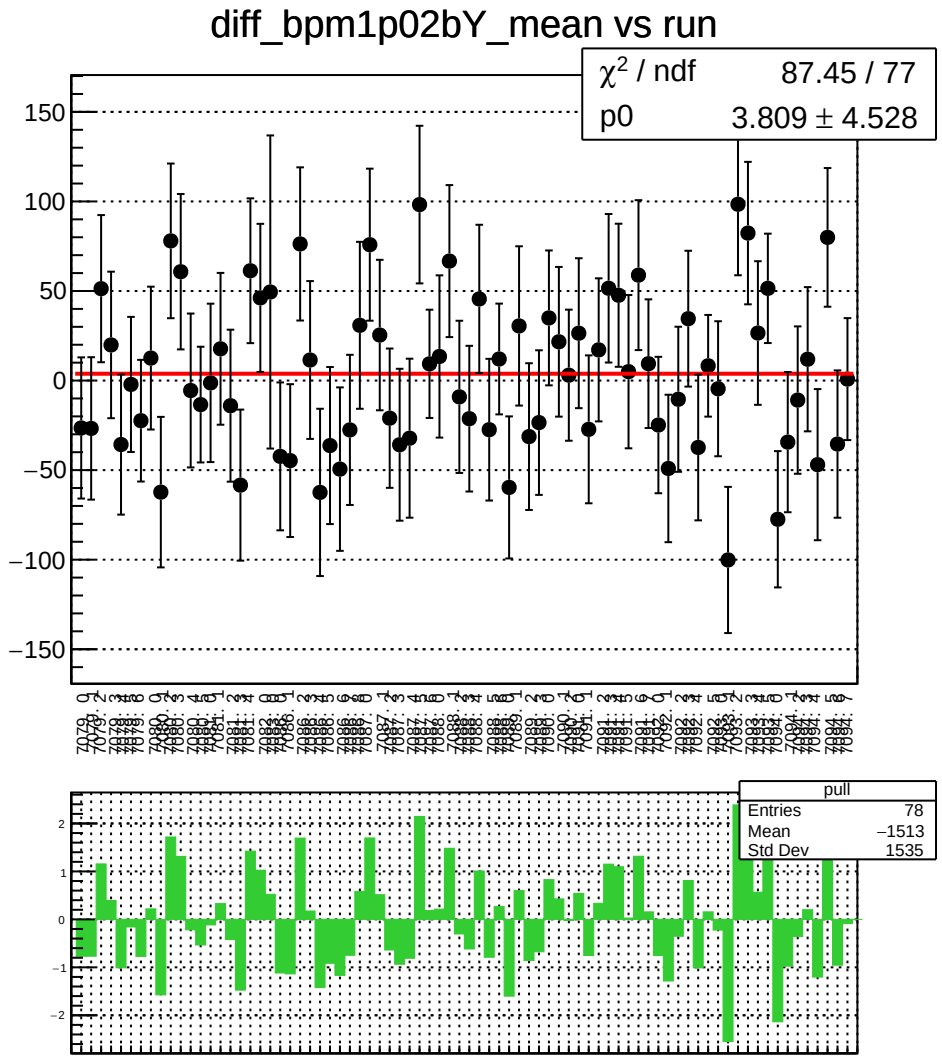

pull1D
Entries 78
Mean 0.01808
Std Dev 1.009

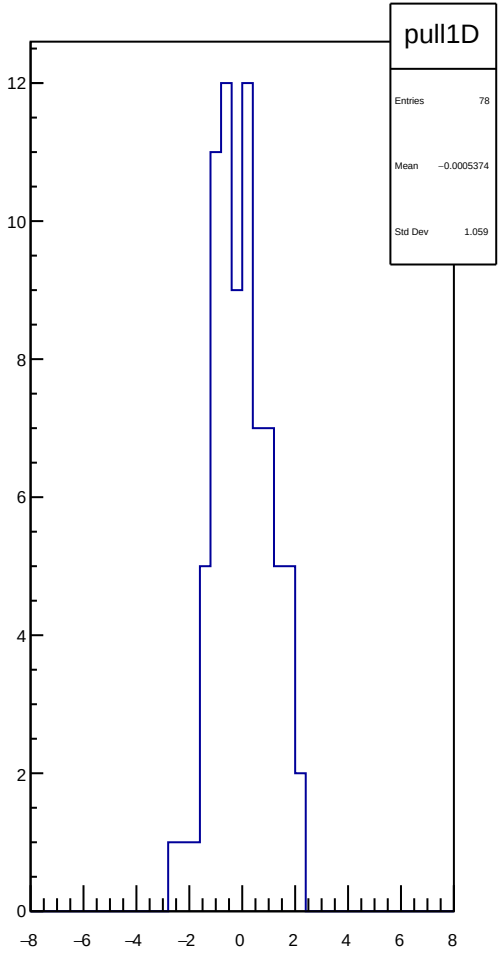

diff_bpm16Y_rms vs run
χ² / ndf 7560 / 77
p0 5414 ± 4.439
7000
6500
6000
5500
5000
4500

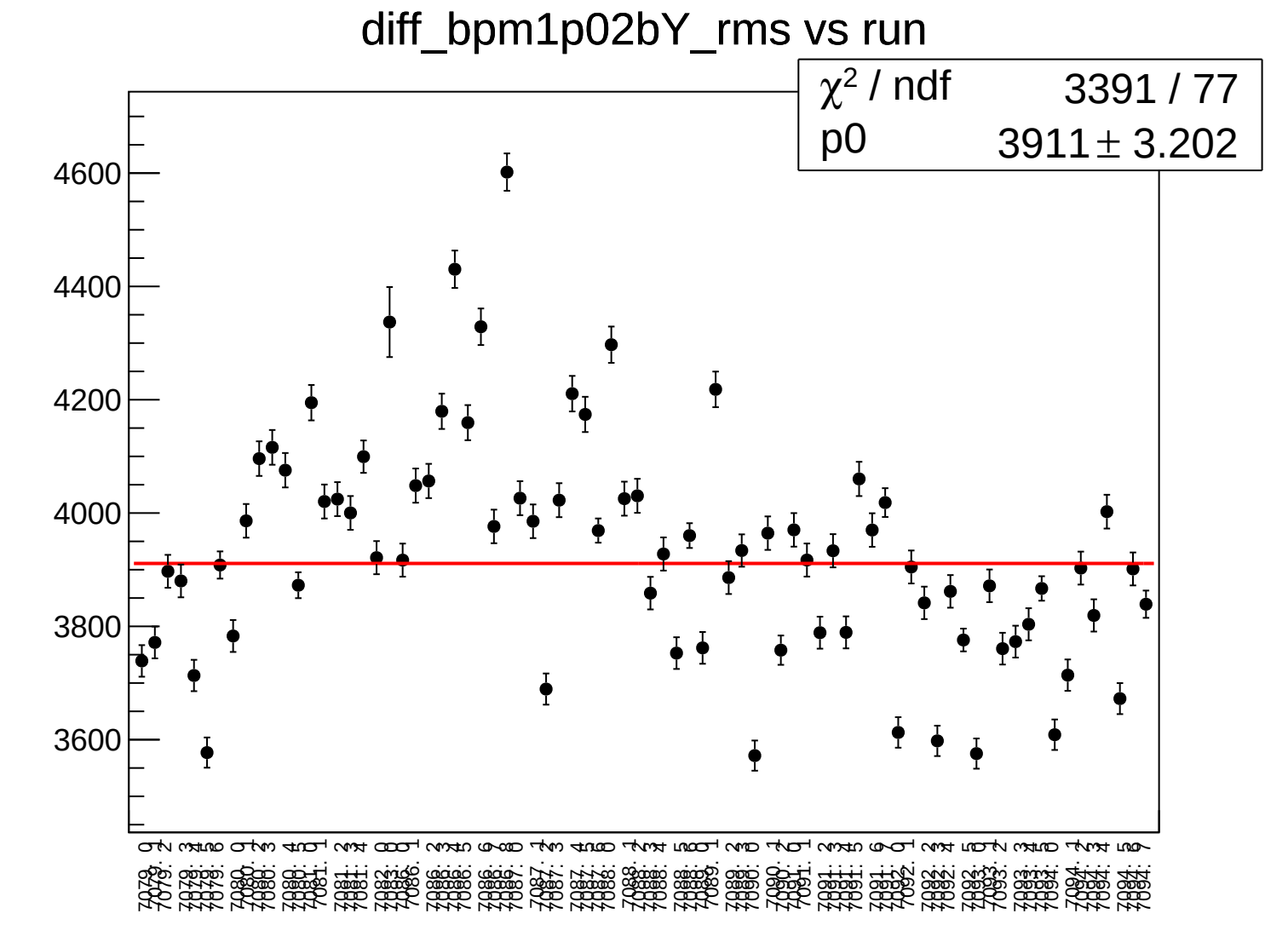

diff_bpm1p02bX_mean vs run
χ² / ndf 90.18 / 77
p0 1.157 ± 1.25
pull
Entries 78
Mean 283.3
Std Dev 232.1

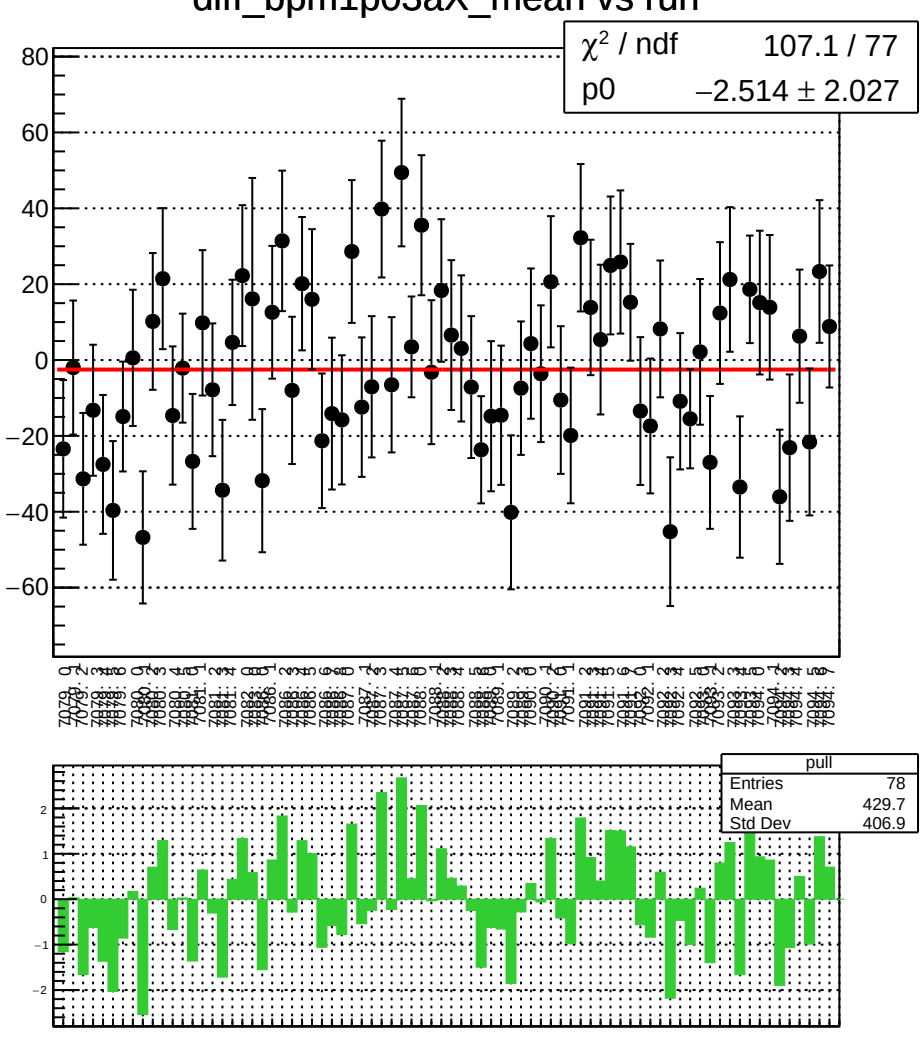

pull1D
Entries 78
Mean −0.002348
Std Dev 1.075

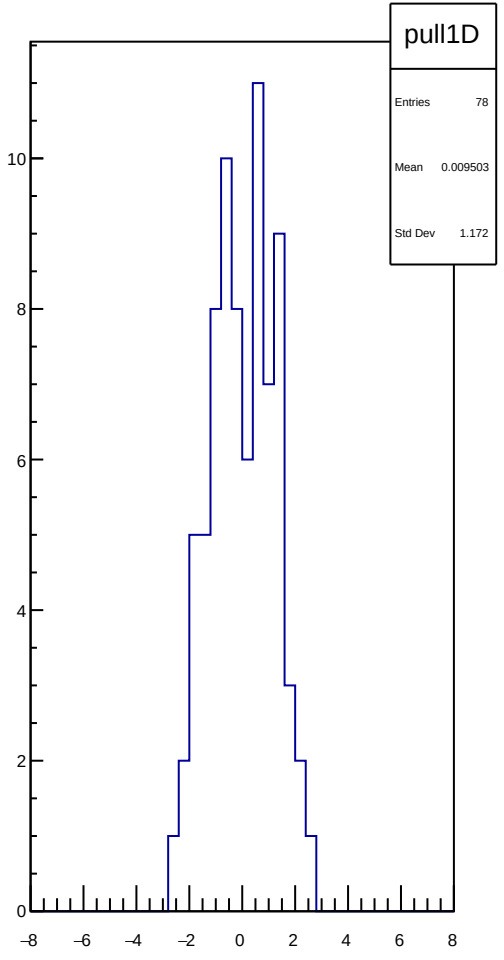

diff_bpm1p02bX_rms vs run
χ² / ndf 1877 / 77
p0 1080 ± 0.8836
1200
1150
1100
1050
1000

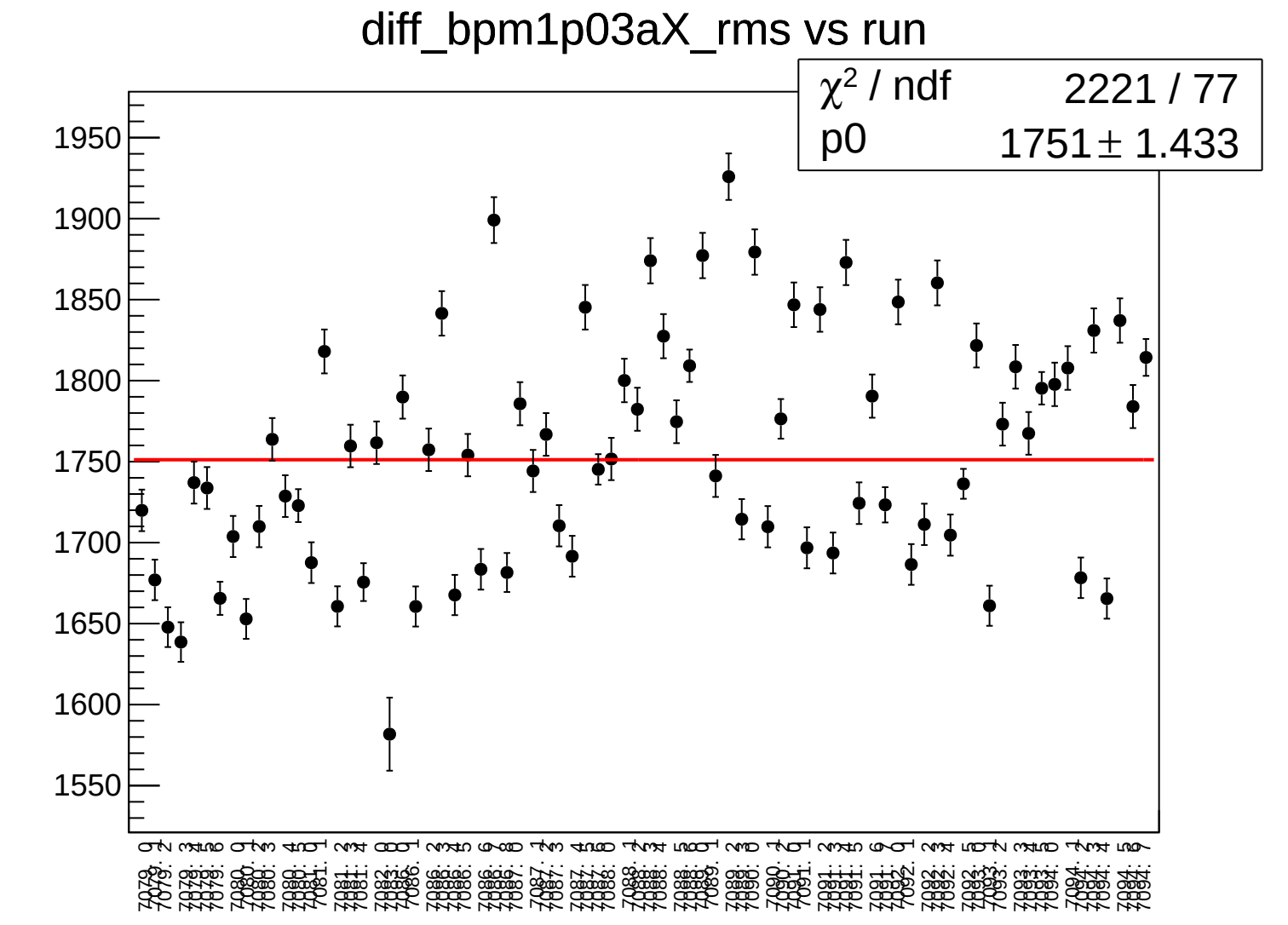

diff_bpm1p02bY_mean vs run
χ^2 / ndf 87.45 / 77
p0 3.809 ± 4.528
150
100
50
0
−50
−100
−150
pull
Entries 78
Mean −1513
Std Dev 1535
2
1
0
−1
−2

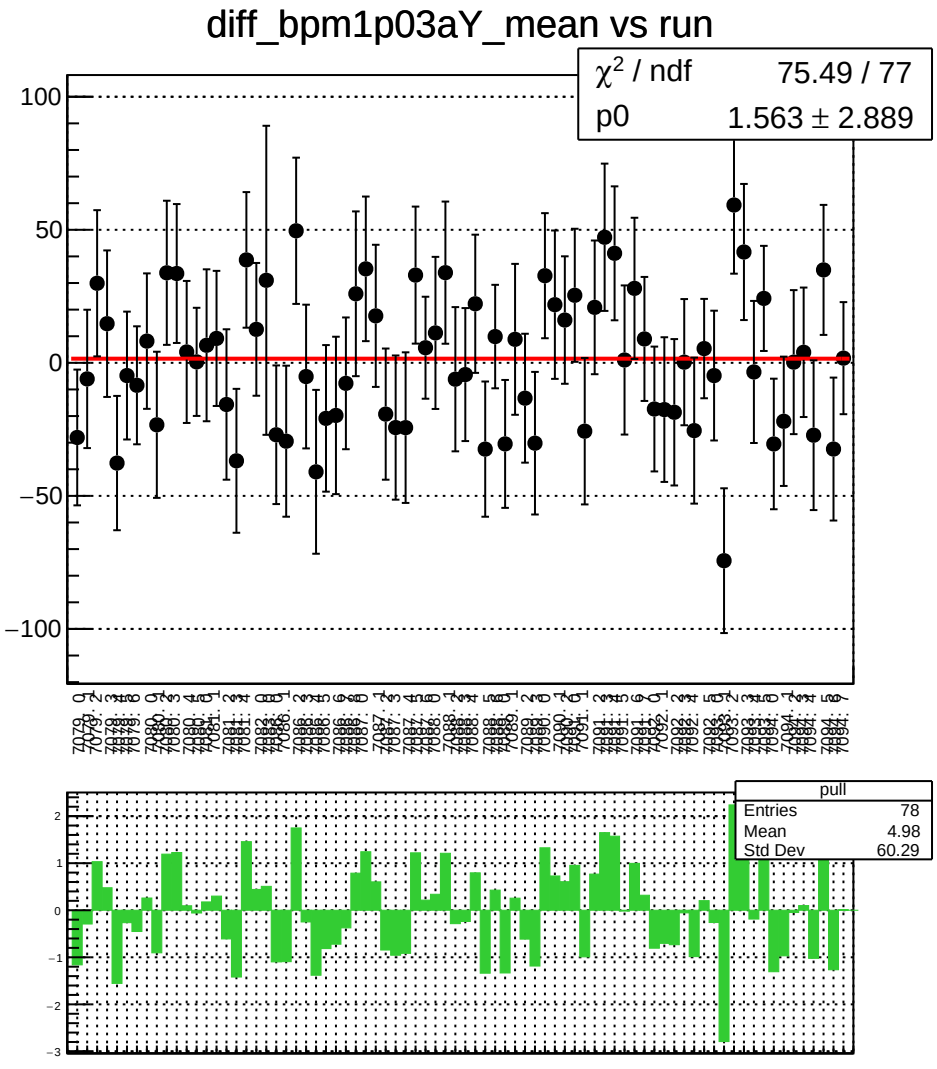

pull1D
Entries 78
Mean −0.0005374
Std Dev 1.059
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

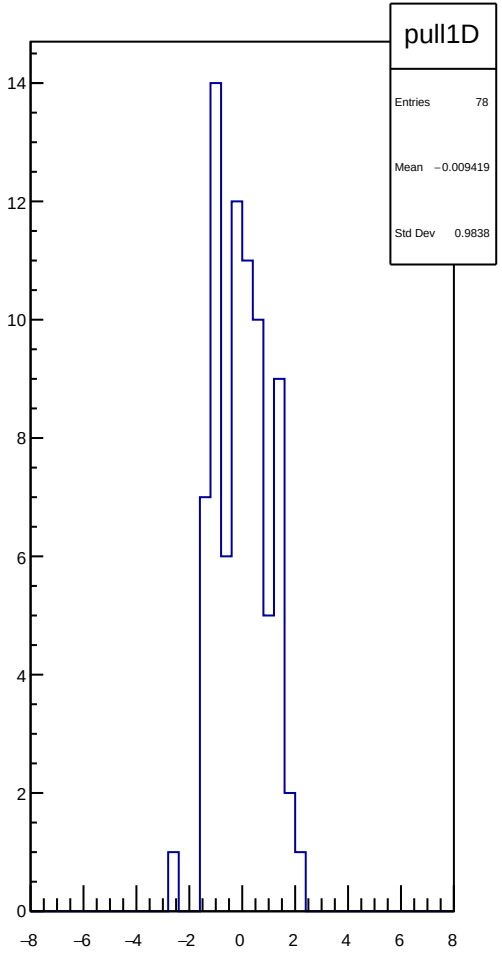

diff_bpm1p02bY_rms vs run
χ² / ndf 3391 / 77
p0 3911 ± 3.202
4600
4400
4200
4000
3800
3600

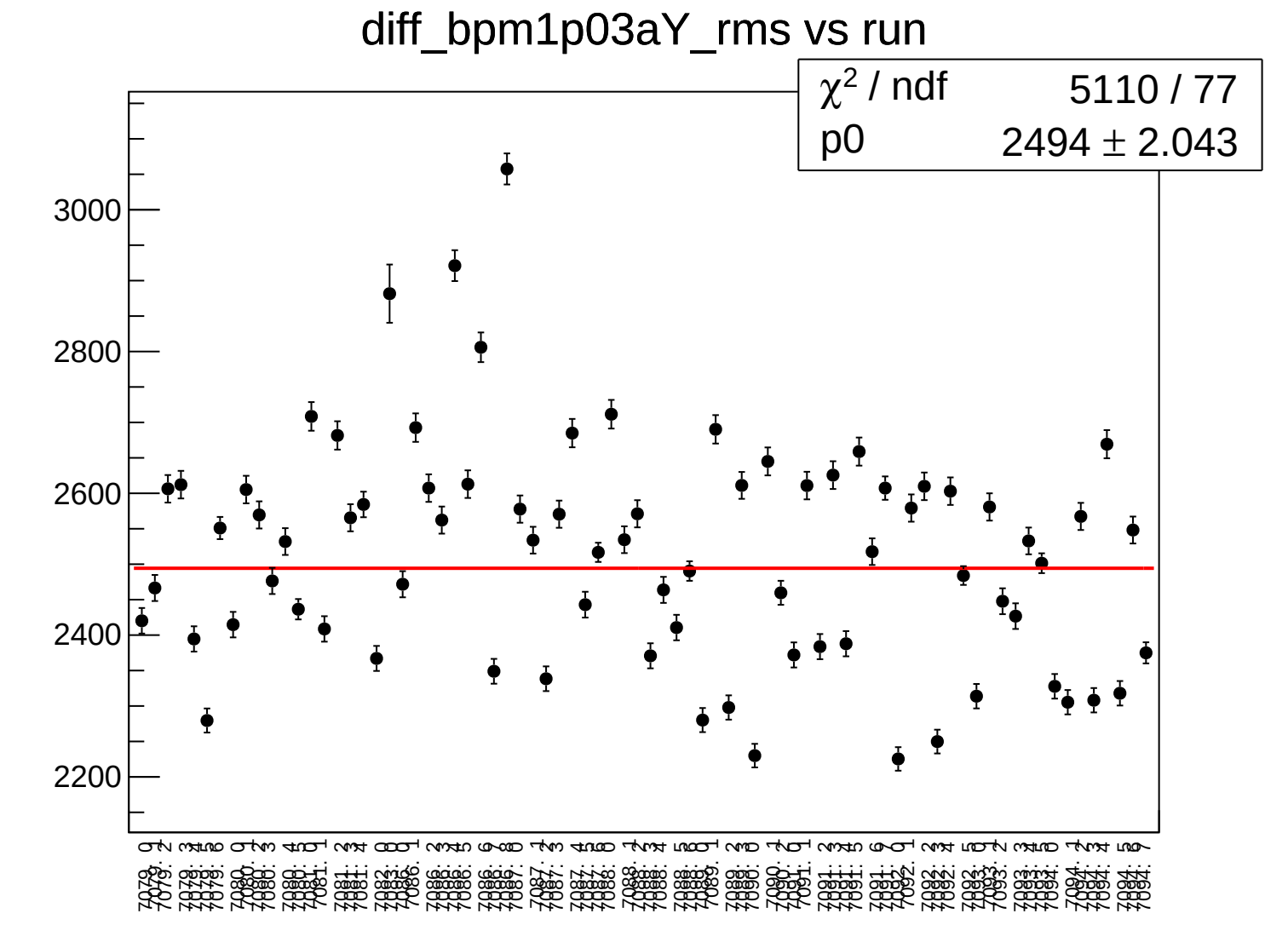

diff_bpm1p03aX_mean vs run
χ² / ndf 107.1 / 77
p0 −2.514 ± 2.027
pull
Entries 78
Mean 429.7
Std Dev 406.9

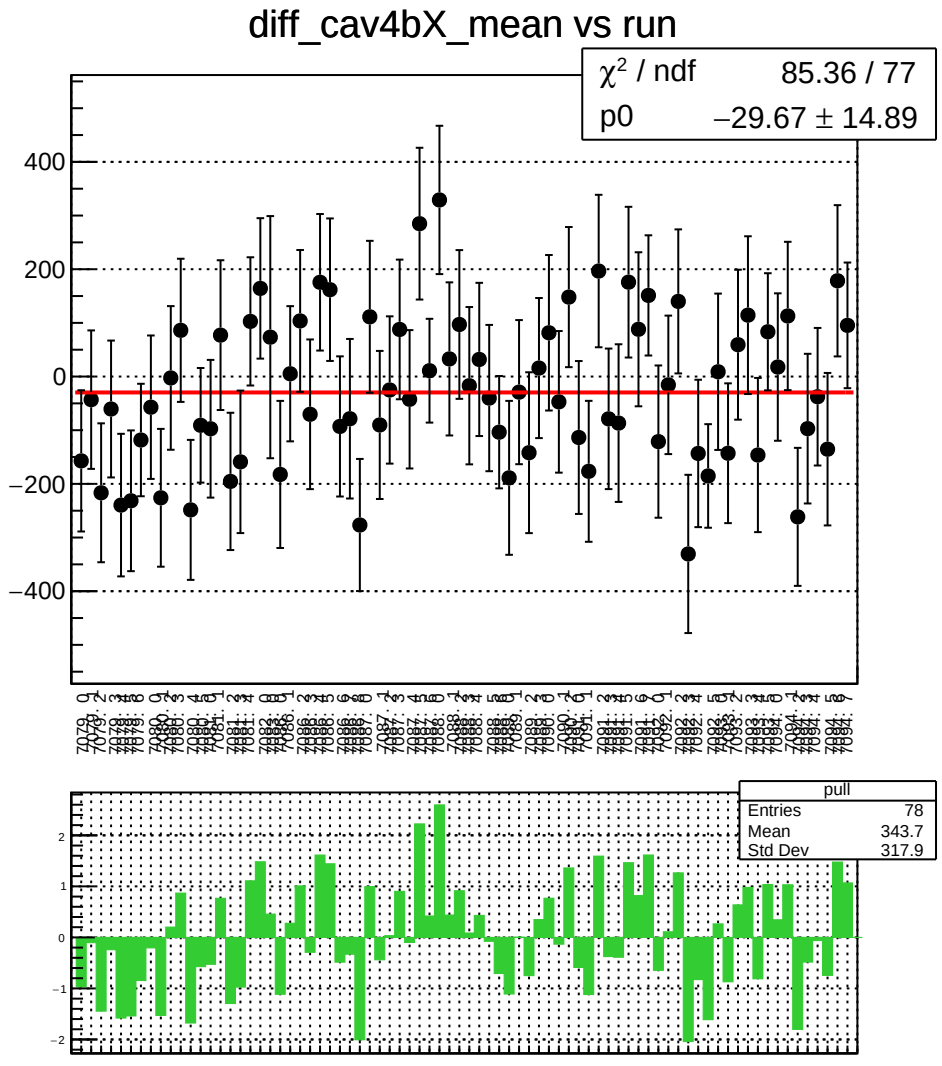

pull1D
Entries 78
Mean 0.009503
Std Dev 1.172

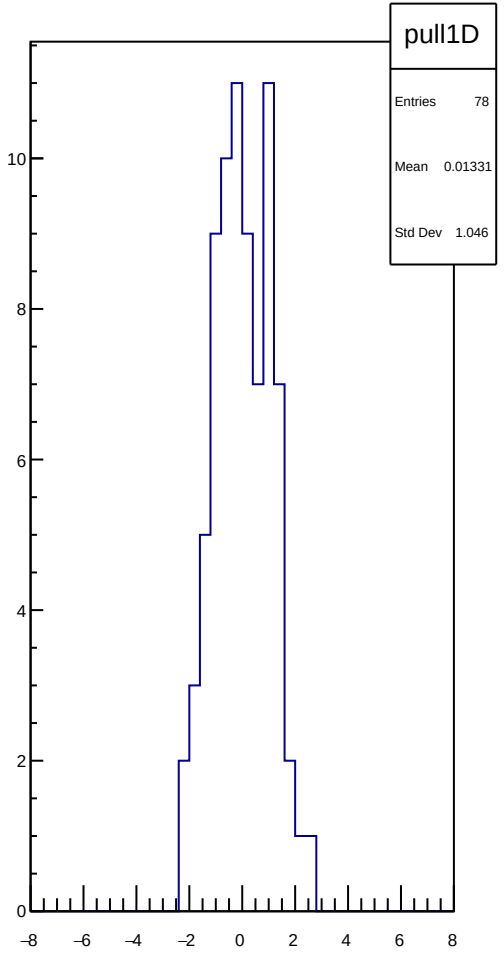

diff_bpm1p03aX_rms vs run
χ² / ndf 2221 / 77
p0 1751 ± 1.433
1950
1900
1850
1800
1750
1700
1650
1600
1550

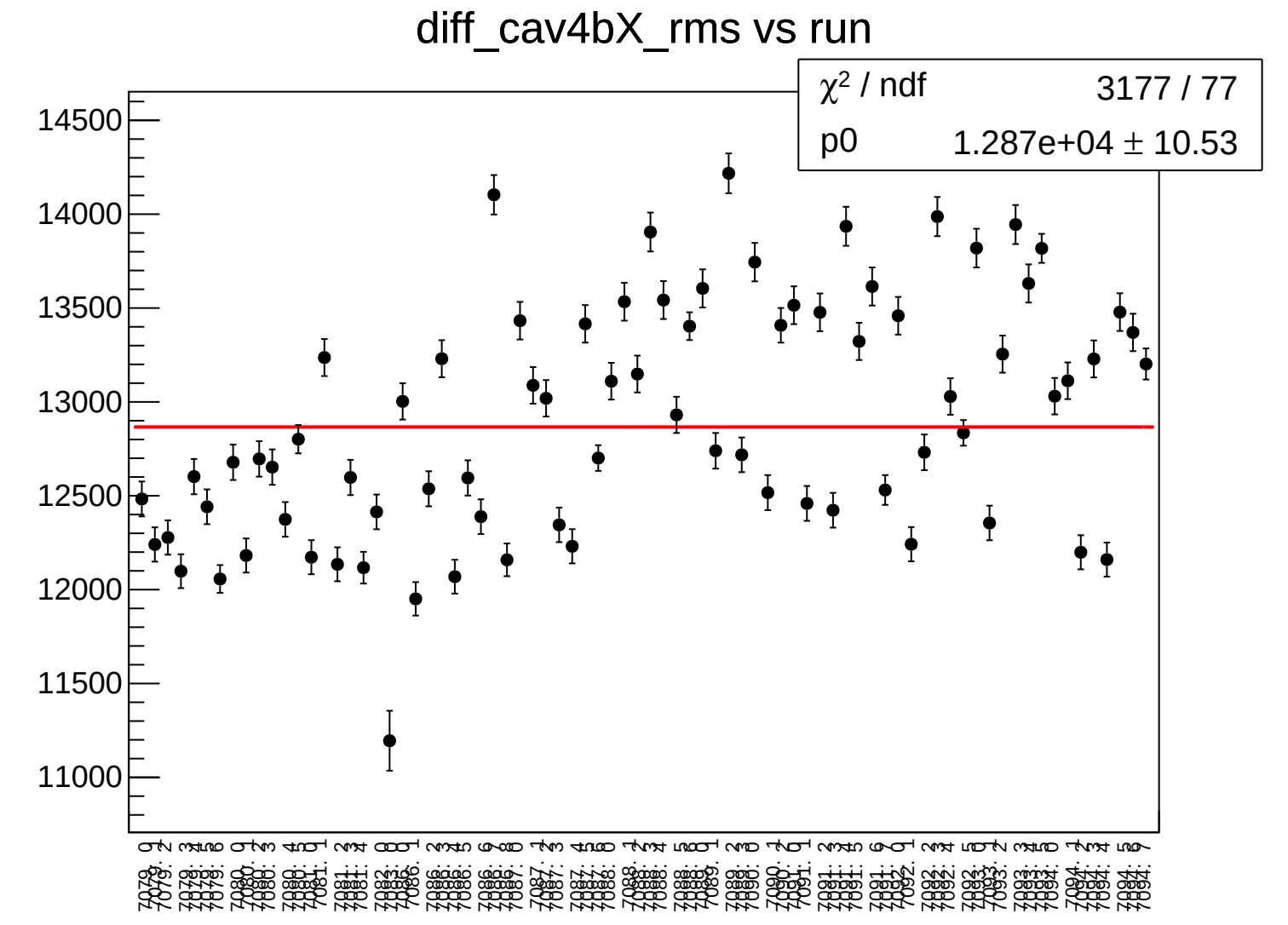

diff_bpm1p03aY_mean vs run
χ² / ndf 75.49 / 77
p0 1.563 ± 2.889
pull
Entries 78
Mean 4.98
Std Dev 60.29

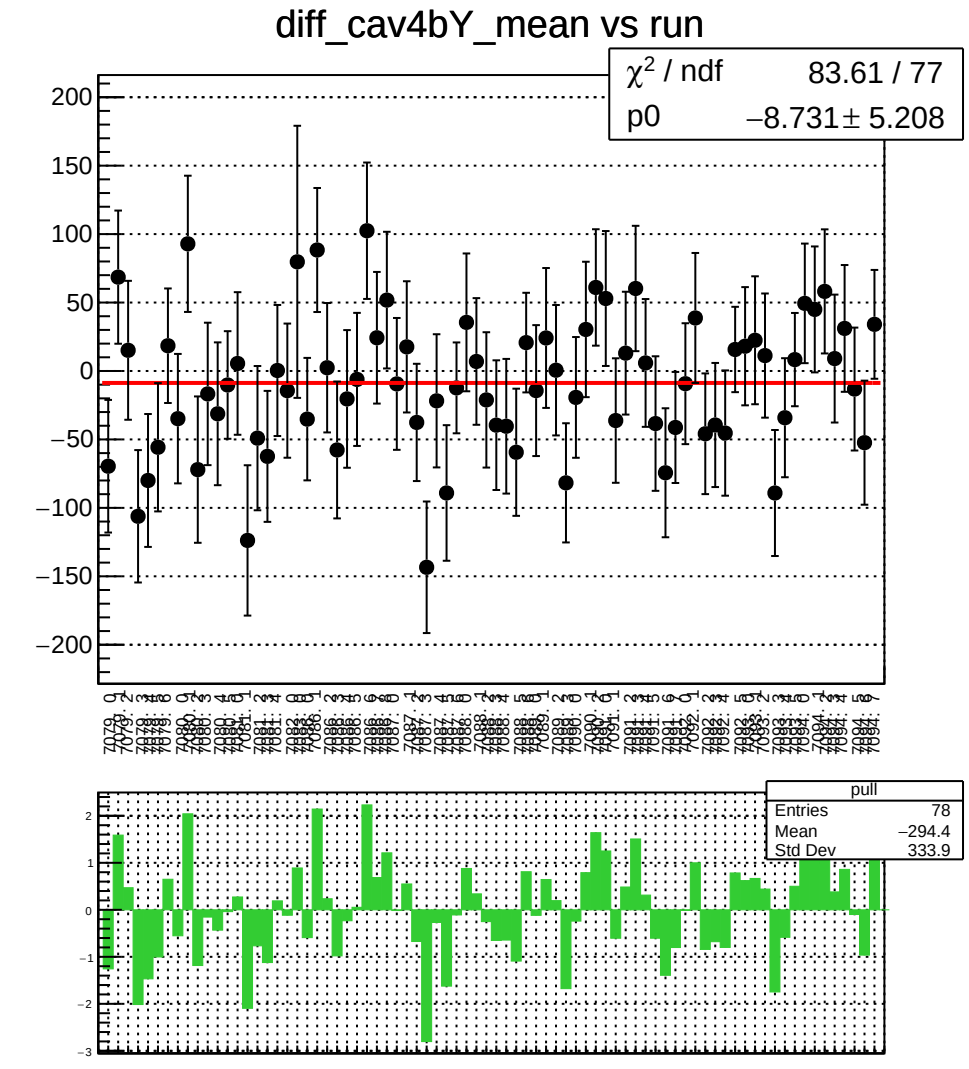

pull1D
Entries 78
Mean −0.009419
Std Dev 0.9838

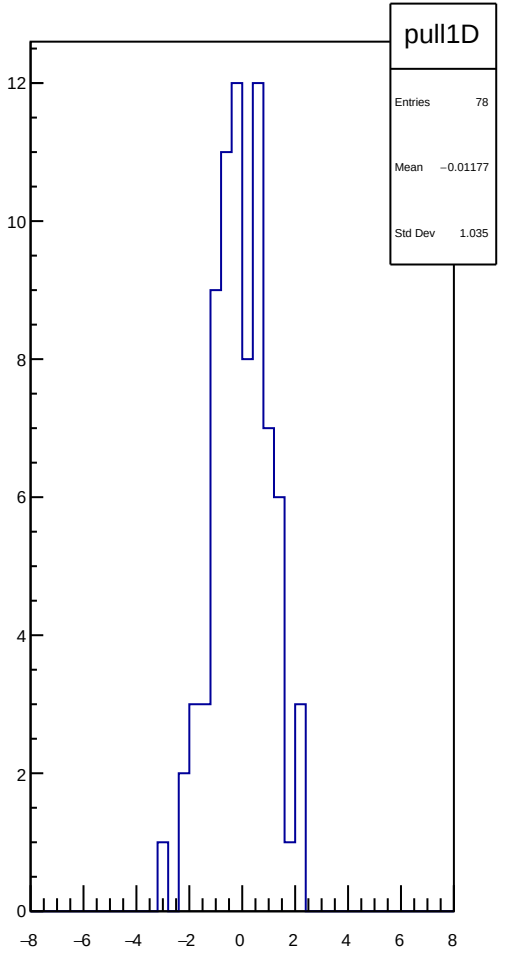

diff_bpm1p03aY_rms vs run
χ² / ndf 5110 / 77
p0 2494 ± 2.043
3000
2800
2600
2400
2200

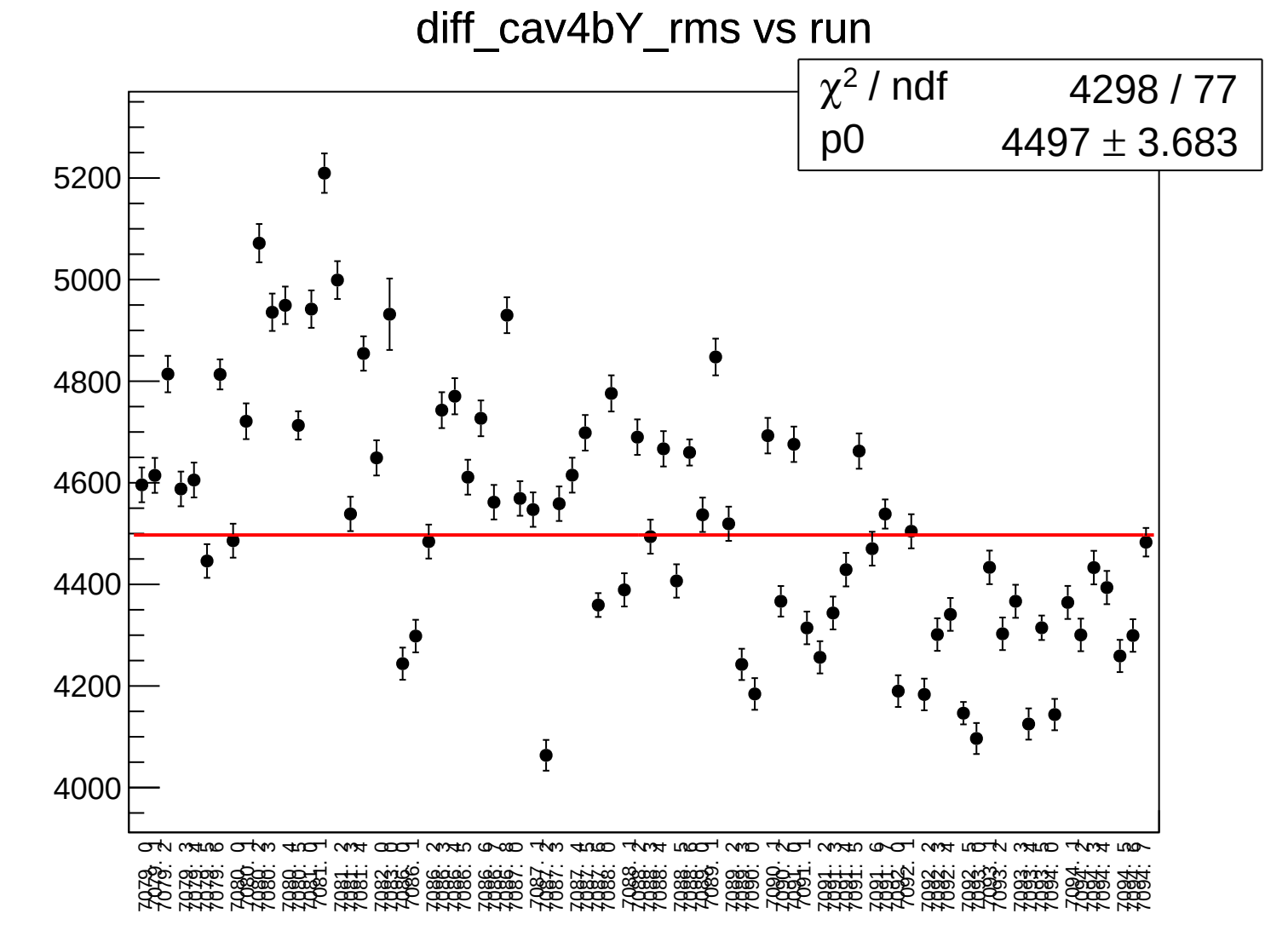

diff_cav4bX_mean vs run
χ² / ndf 85.36 / 77
p0 −29.67 ± 14.89
400
200
0
−200
−400
pull
Entries 78
Mean 343.7
Std Dev 317.9
2
1
0
−1
−2

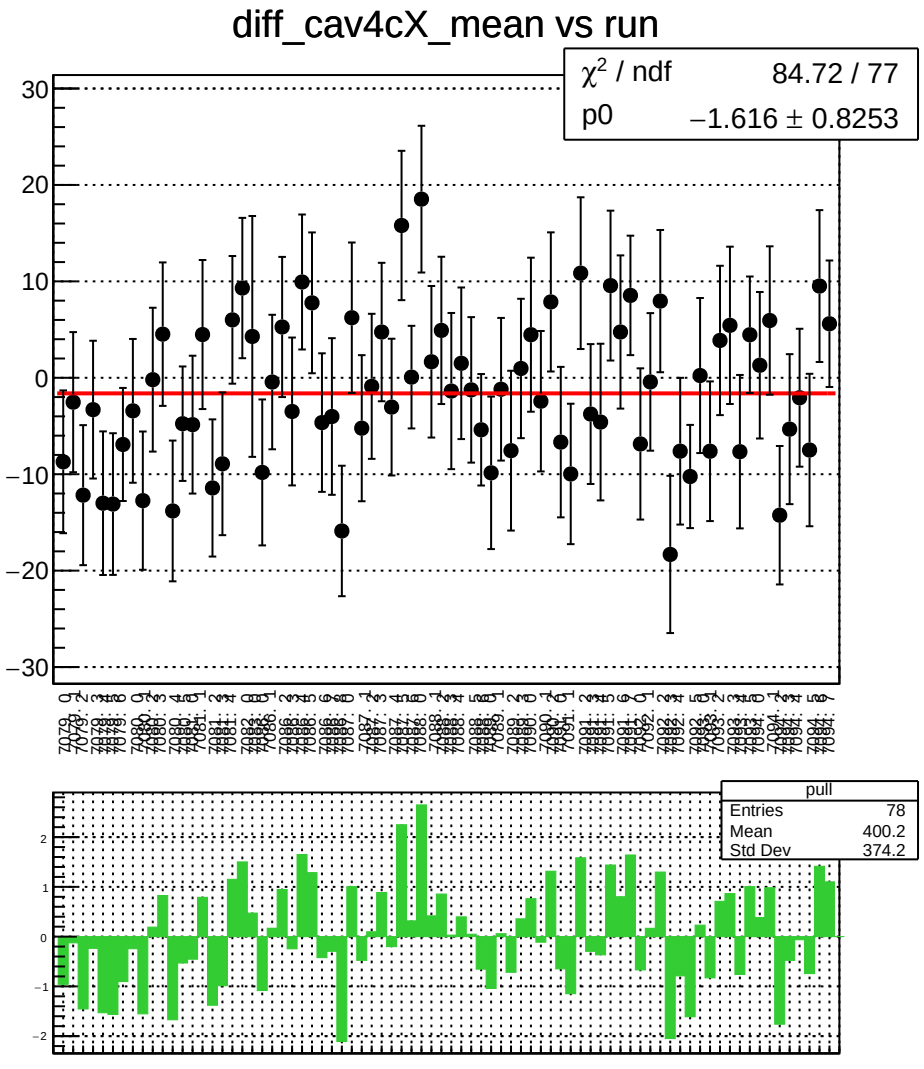

pull1D
Entries 78
Mean 0.01331
Std Dev 1.046
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

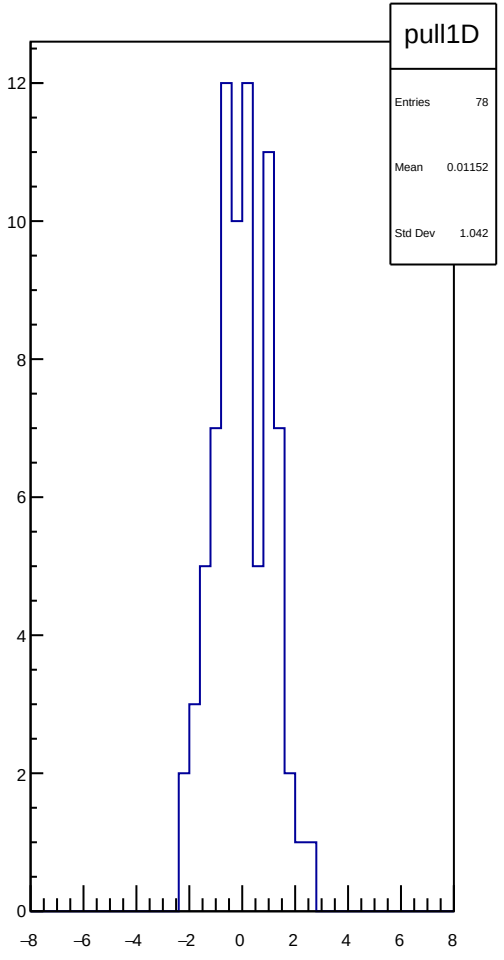

diff_cav4bX_rms vs run
χ² / ndf 3177 / 77
p0 1.287e+04 ± 10.53
14500
14000
13500
13000
12500
12000
11500
11000

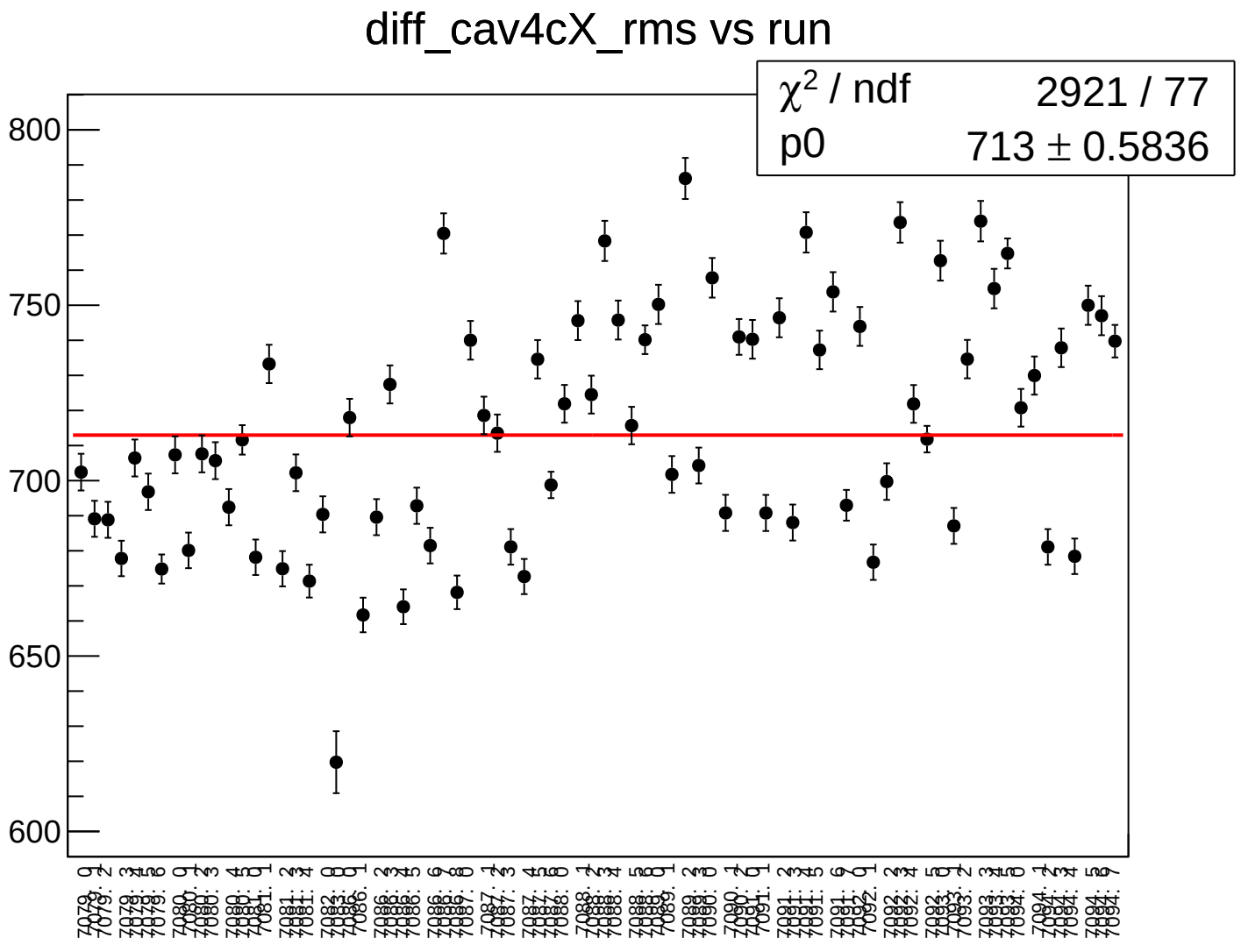

diff_cav4bY_mean vs run
χ² / ndf 83.61 / 77
p0 −8.731 ± 5.208
pull
Entries 78
Mean −294.4
Std Dev 333.9

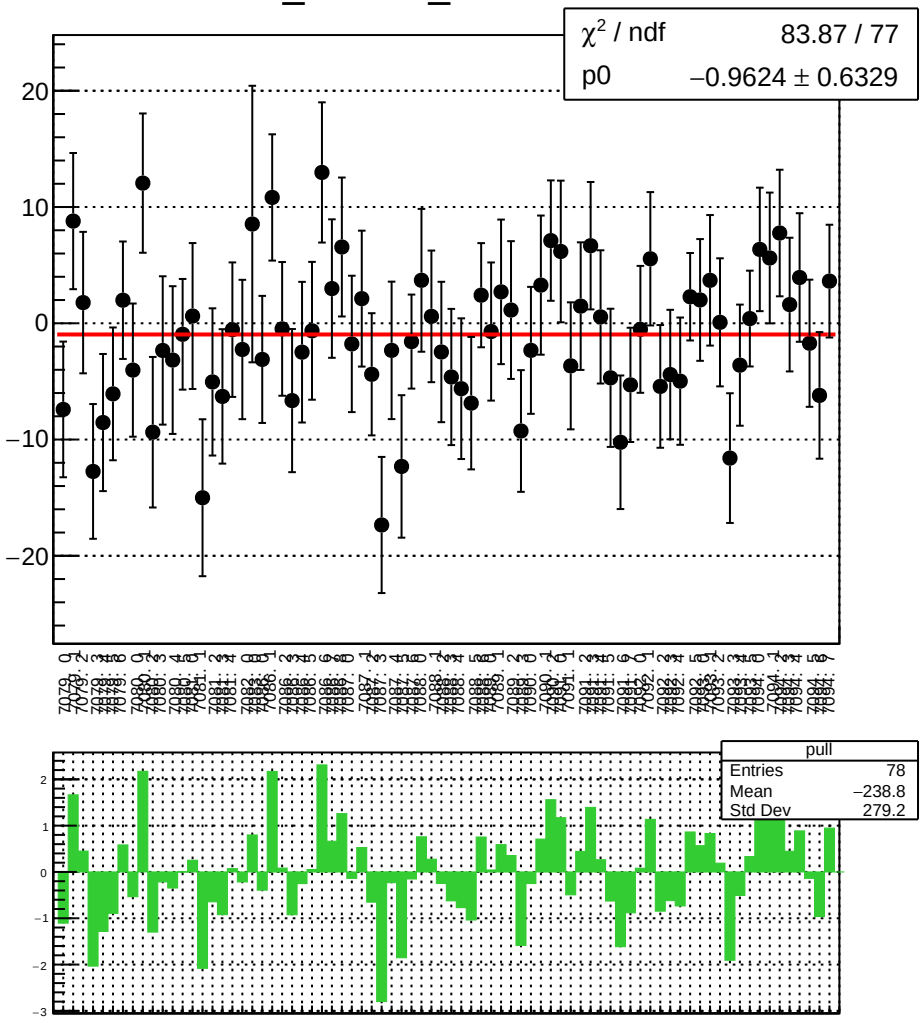

pull1D
Entries 78
Mean −0.01177
Std Dev 1.035

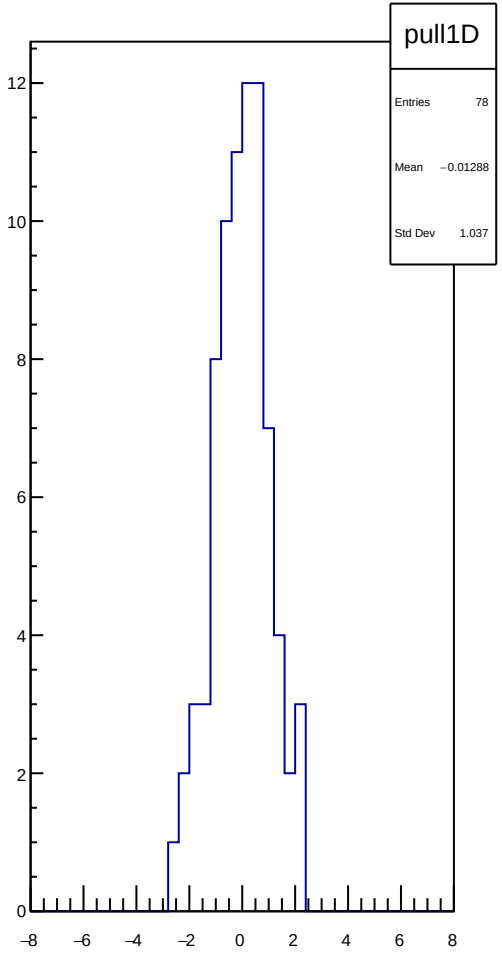

diff_cav4bY_rms vs run
χ² / ndf 4298 / 77
p0 4497 ± 3.683
5200
5000
4800
4600
4400
4200
4000

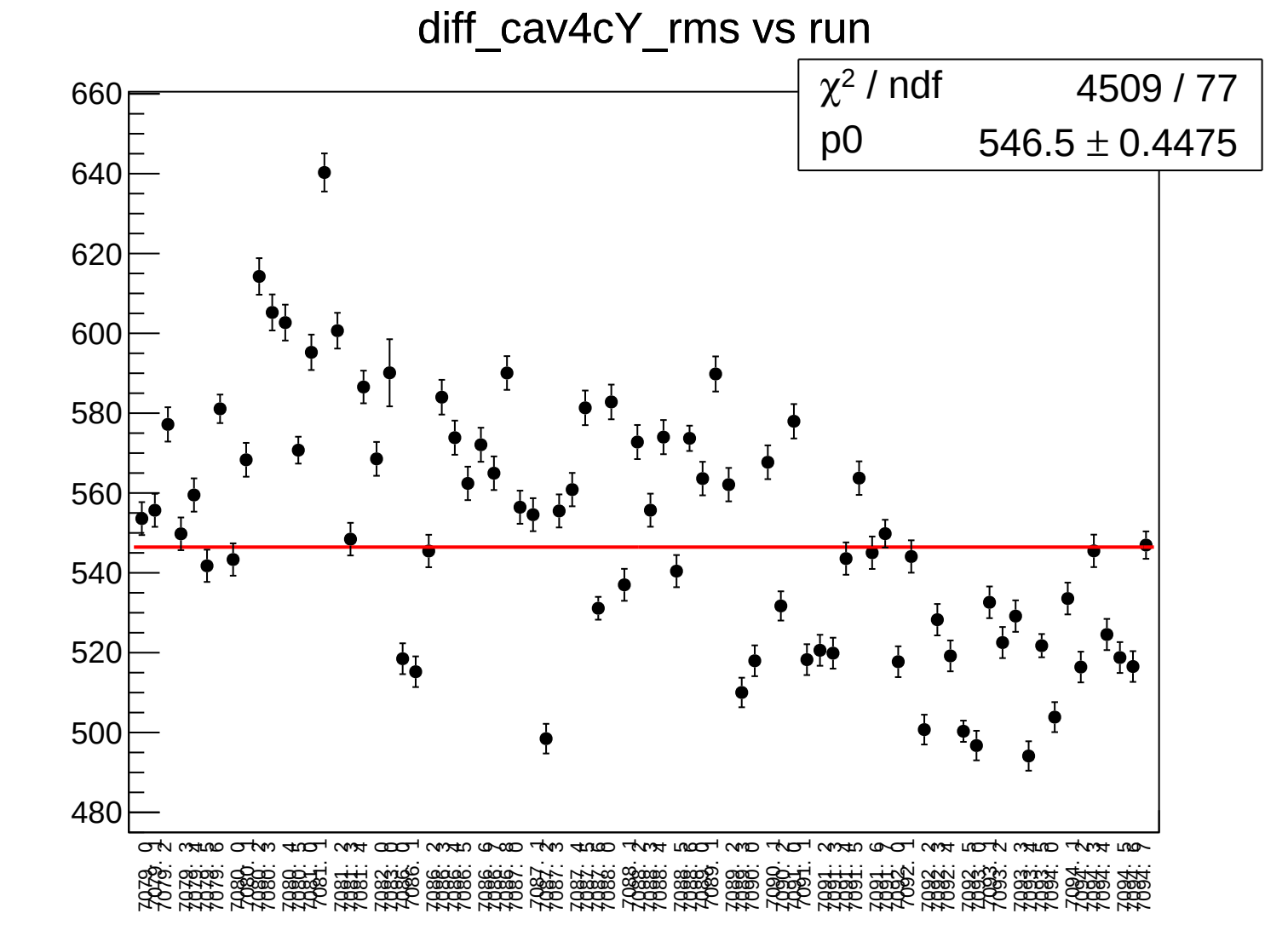

diff_cav4cX_mean vs run
χ² / ndf 84.72 / 77
p0 −1.616 ± 0.8253
pull
Entries 78
Mean 400.2
Std Dev 374.2

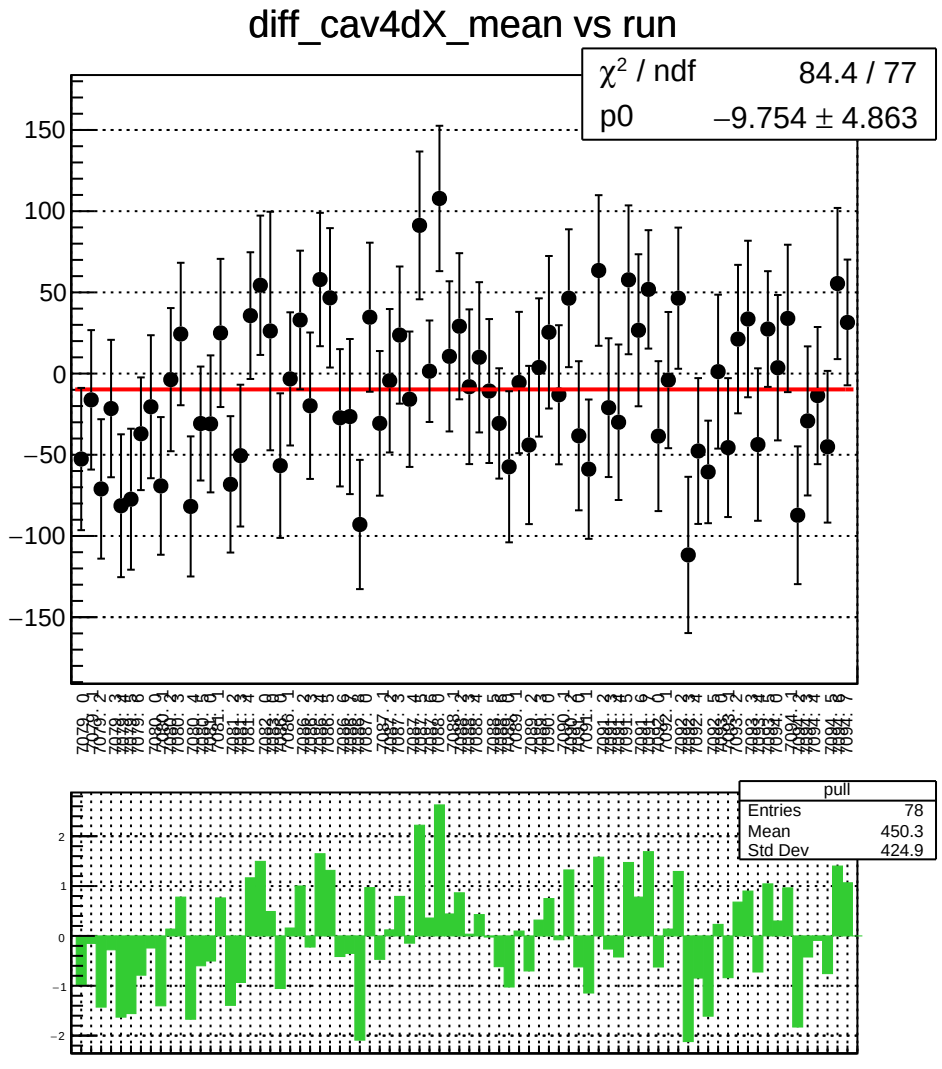

pull1D
Entries 78
Mean 0.01152
Std Dev 1.042

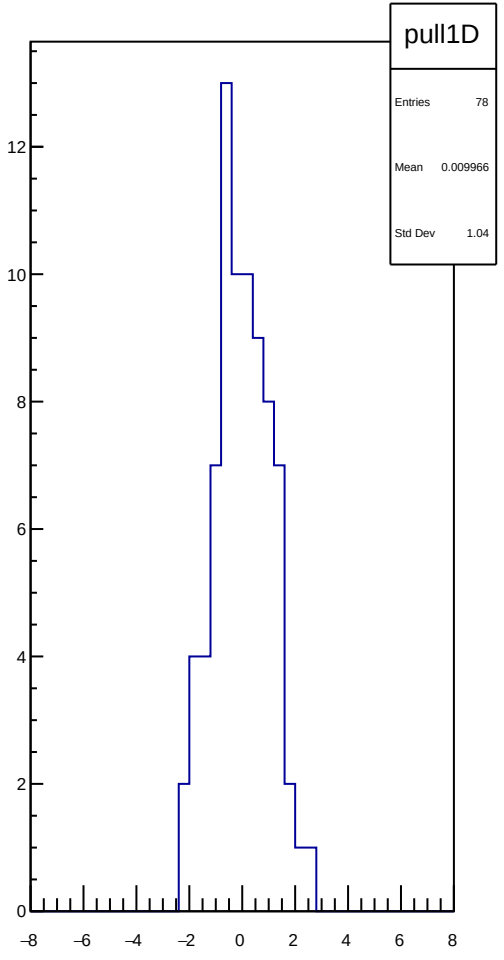

diff_cav4cX_rms vs run
χ² / ndf 2921 / 77
p0 713 ± 0.5836
800
750
700
650
600

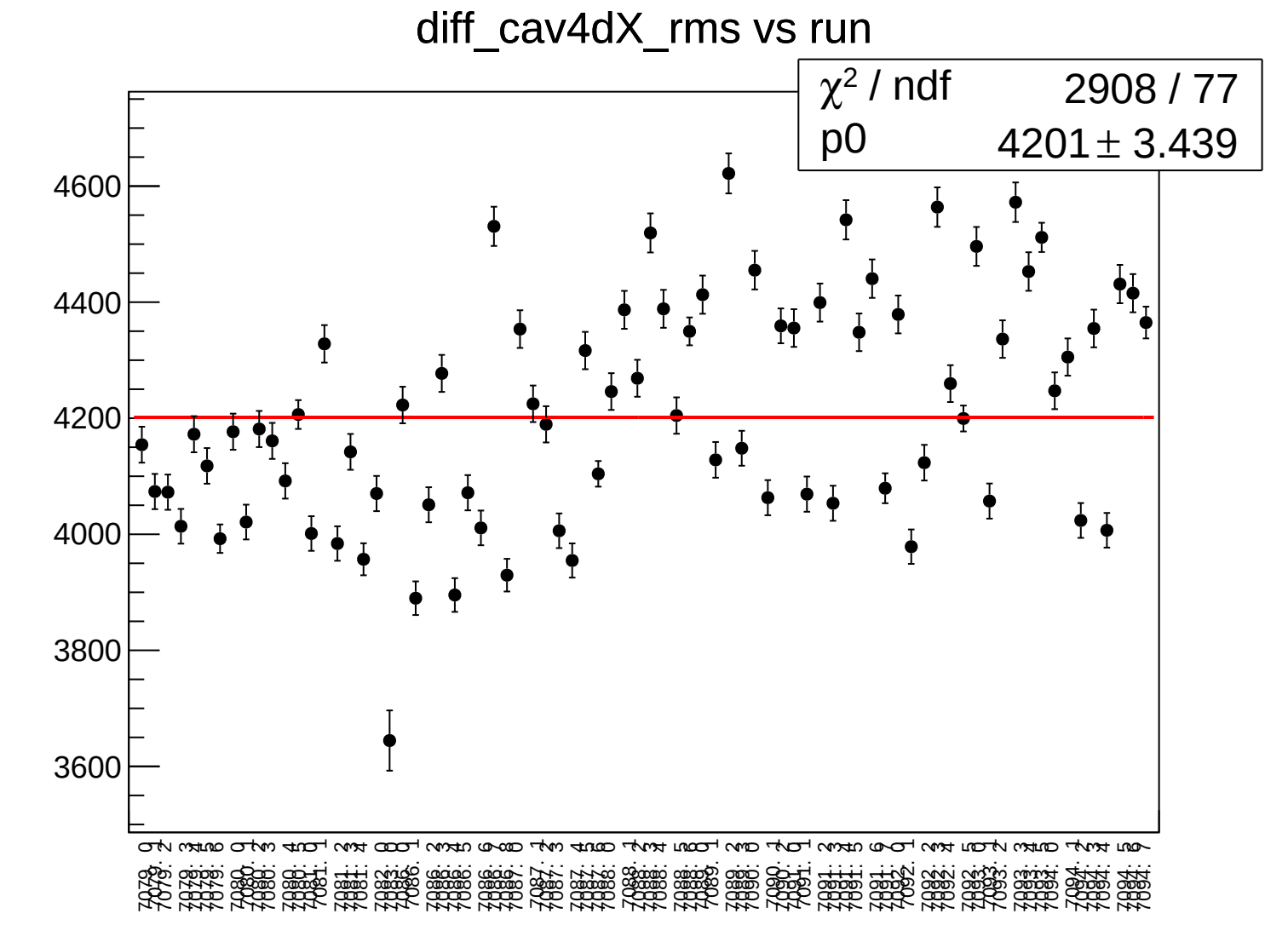

diff_cav4cY_mean vs run
χ² / ndf 83.87 / 77
p0 −0.9624 ± 0.6329
pull
Entries 78
Mean −238.8
Std Dev 279.2

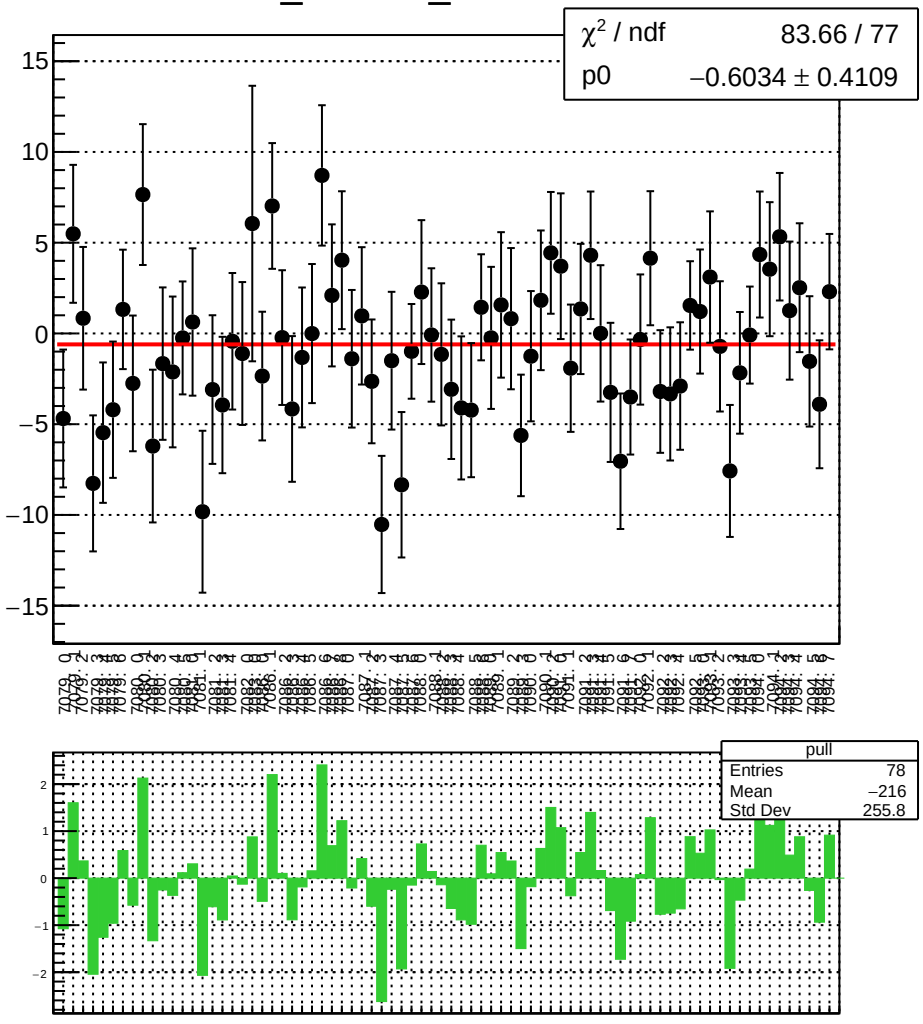

pull1D
Entries 78
Mean −0.01288
Std Dev 1.037

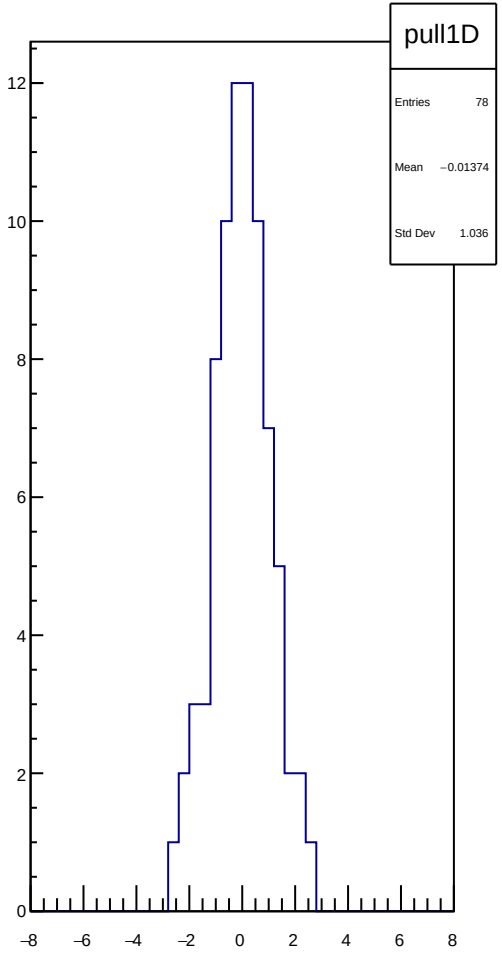

diff_cav4cY_rms vs run
χ² / ndf 4509 / 77
p0 546.5 ± 0.4475
660
640
620
600
580
560
540
520
500
480

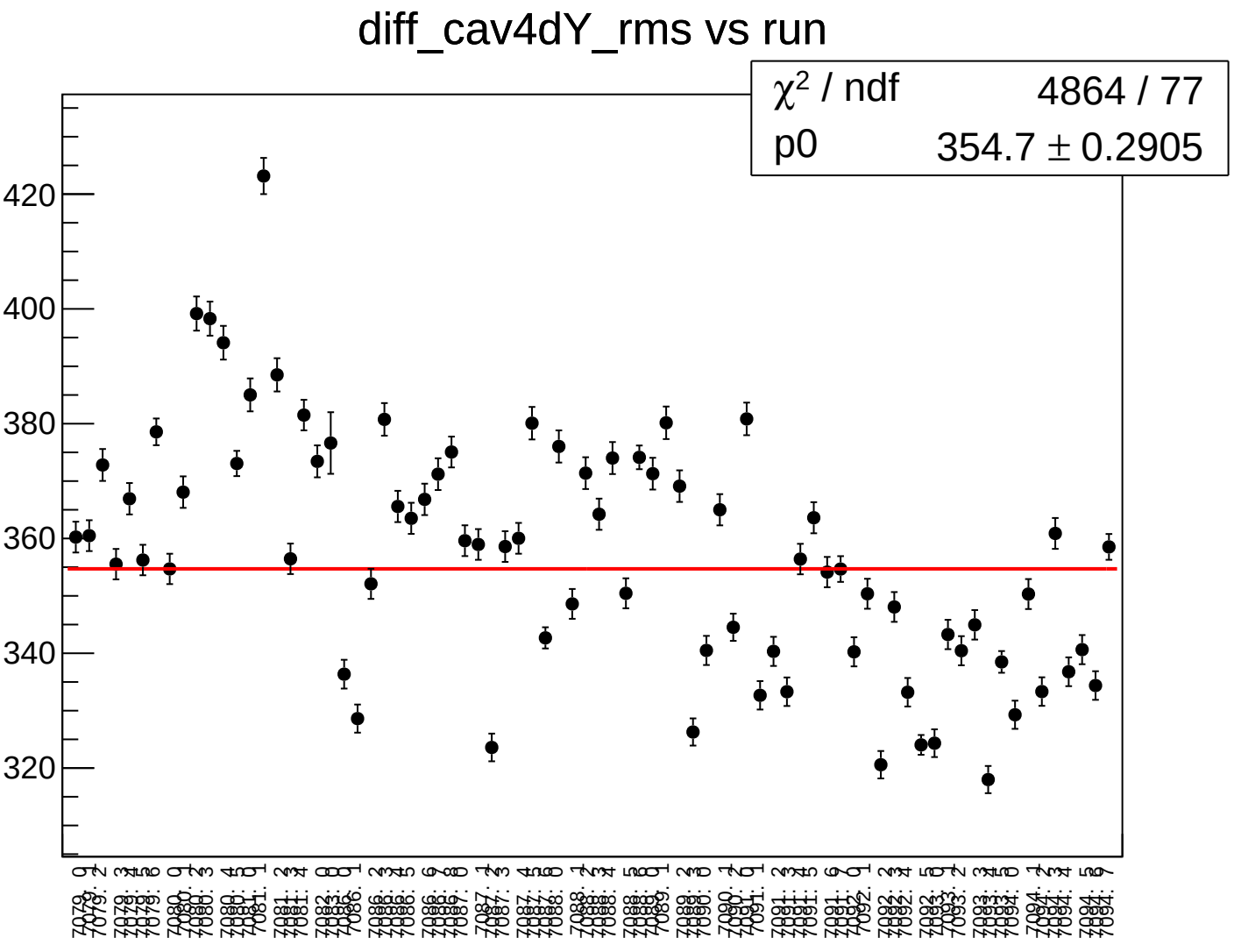

diff_cav4dX_mean vs run
χ² / ndf 84.4 / 77
p0 −9.754 ± 4.863
150
100
50
0
−50
−100
−150
pull
Entries 78
Mean 450.3
Std Dev 424.9
2
1
0
−1
−2

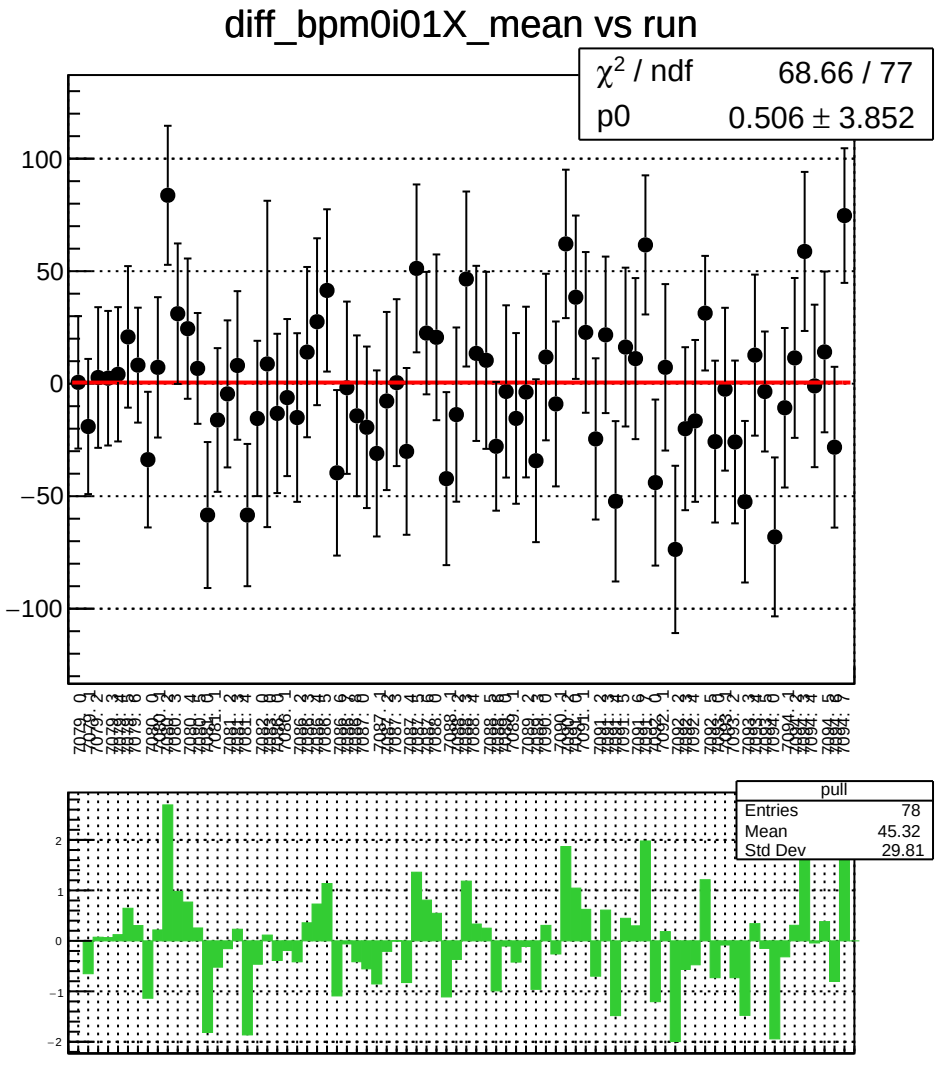

pull1D
Entries 78
Mean 0.009966
Std Dev 1.04
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

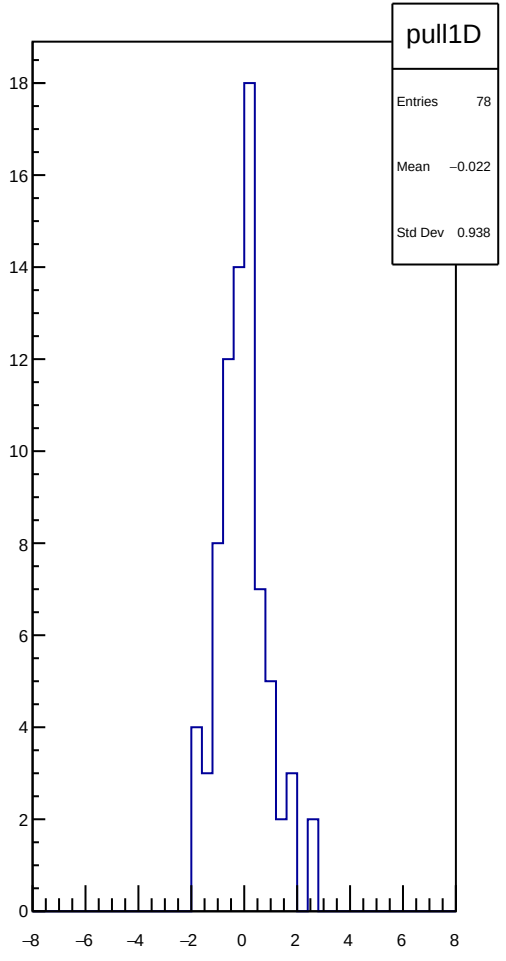

diff_cav4dX_rms vs run
χ² / ndf 2908 / 77
p0 4201 ± 3.439
4600
4400
4200
4000
3800
3600

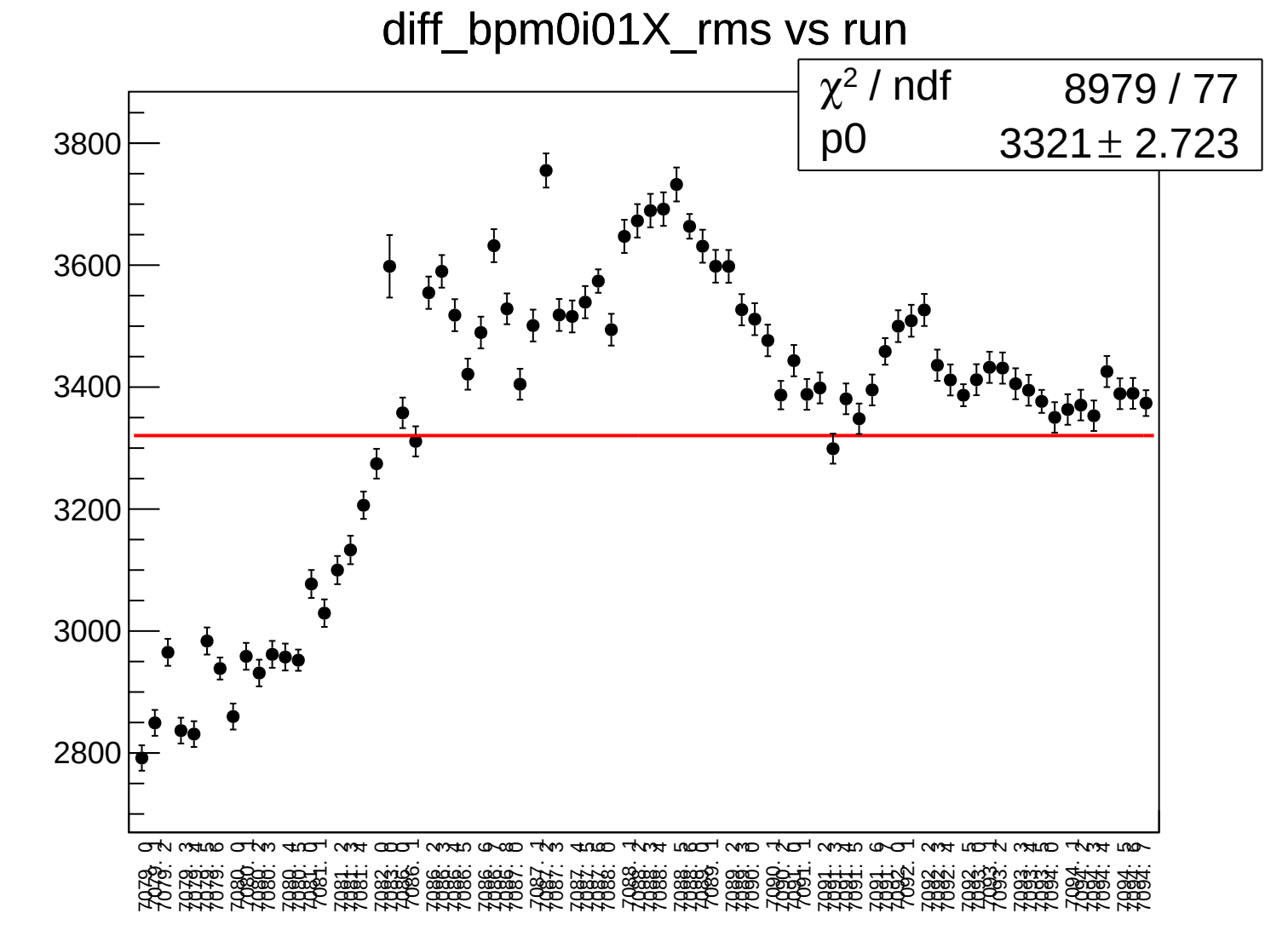

diff_cav4dY_mean vs run
χ² / ndf 83.66 / 77
p0 −0.6034 ± 0.4109
pull
Entries 78
Mean −216
Std Dev 255.8

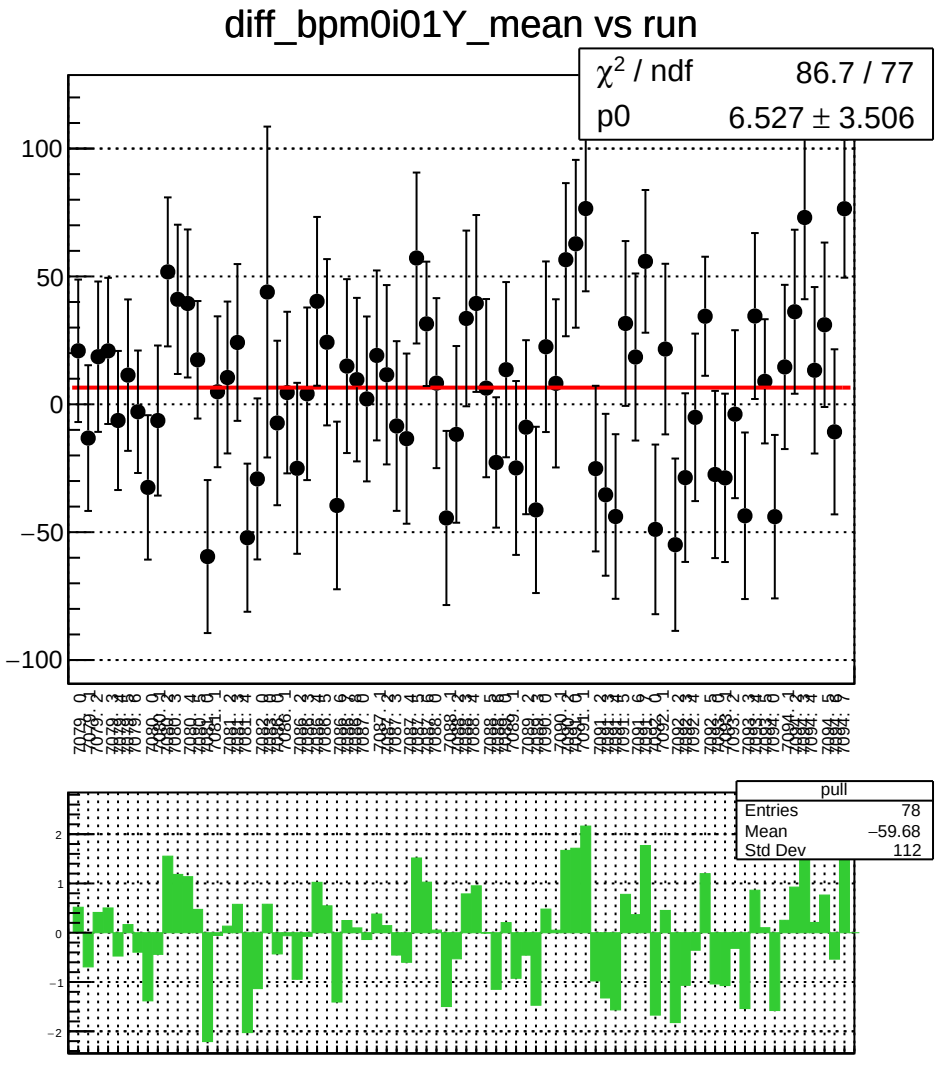

pull1D
Entries 78
Mean −0.01374
Std Dev 1.036

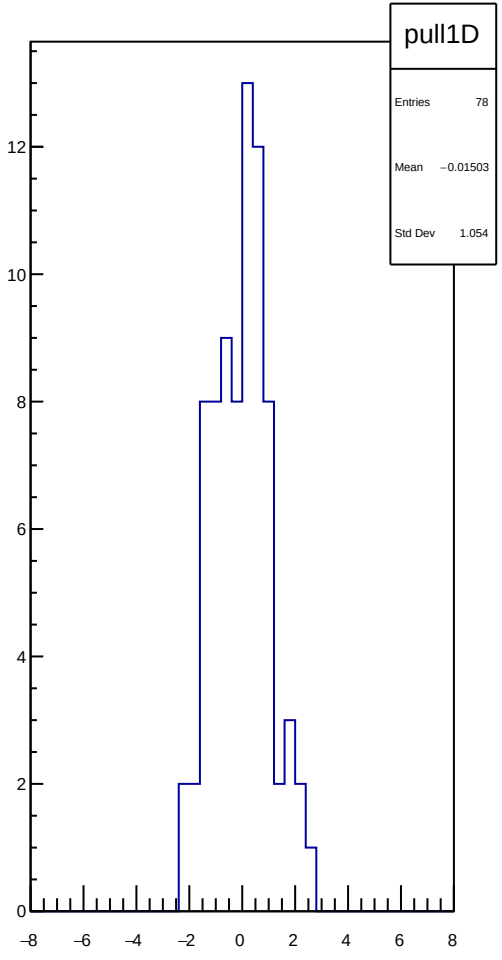

diff_cav4dY_rms vs run
χ² / ndf 4864 / 77
p0 354.7 ± 0.2905
420
400
380
360
340
320

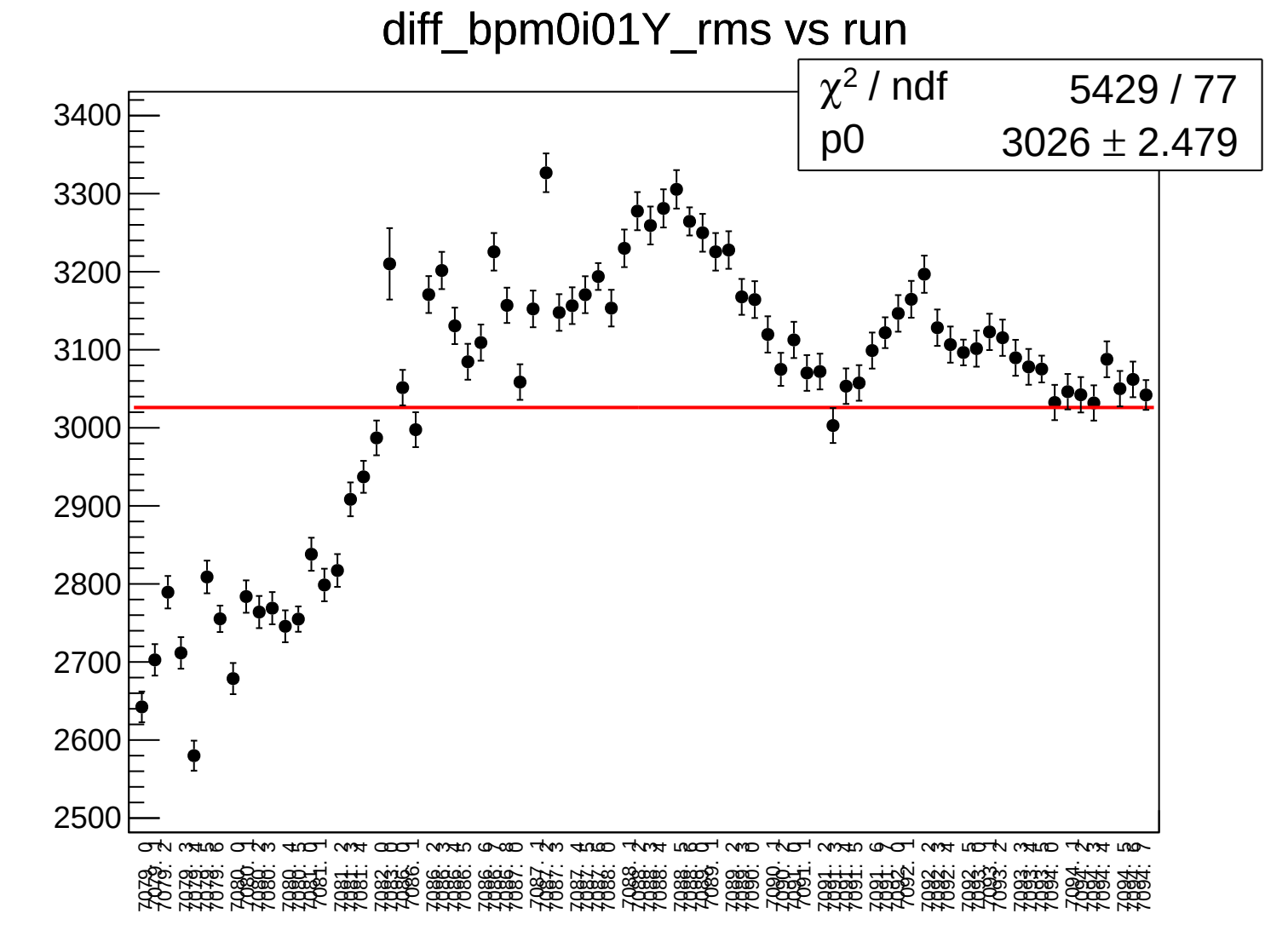

diff_bpm0i01X_mean vs run
χ² / ndf 68.66 / 77
p0 0.506 ± 3.852
100
50
0
−50
−100
pull
Entries 78
Mean 45.32
Std Dev 29.81
2
1
0
−1
−2

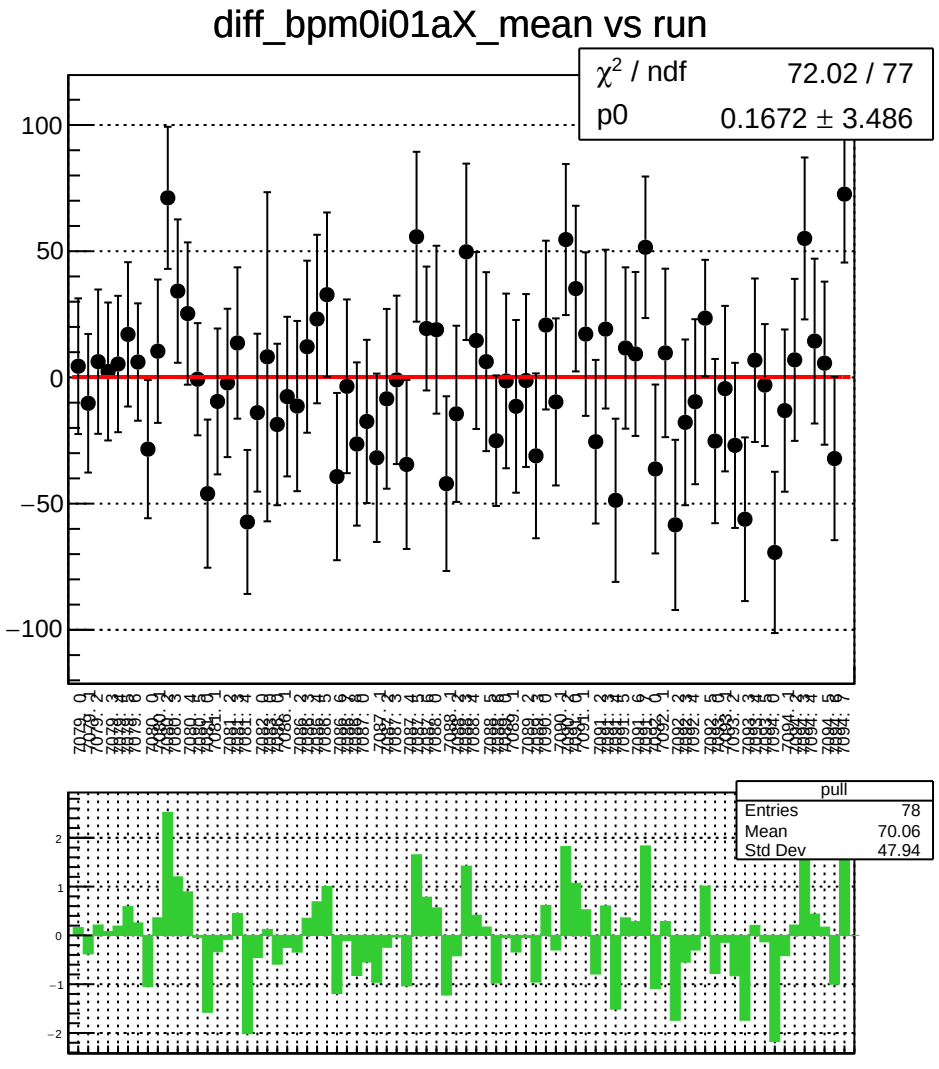

pull1D
Entries 78
Mean −0.022
Std Dev 0.938
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

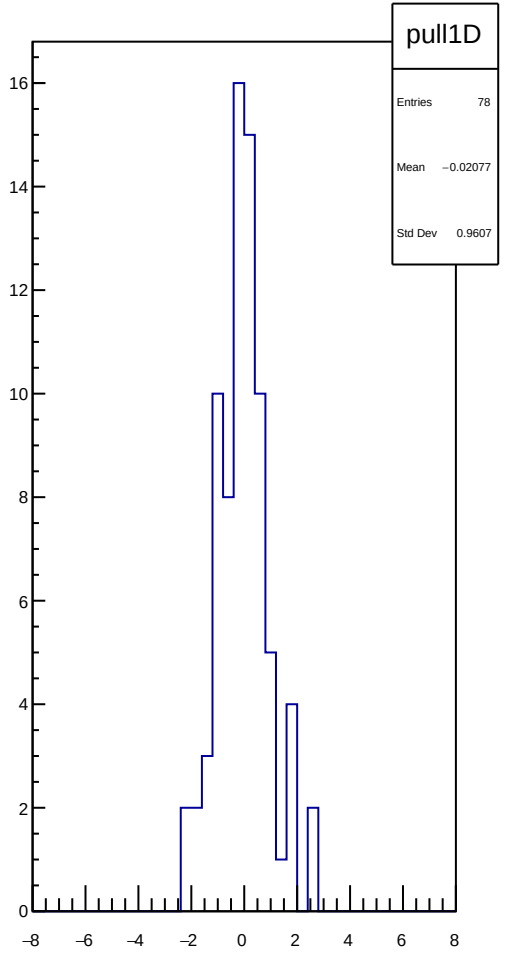

diff_bpm0i01X_rms vs run
χ² / ndf 8979 / 77
p0 3321 ± 2.723
3800
3600
3400
3200
3000
2800

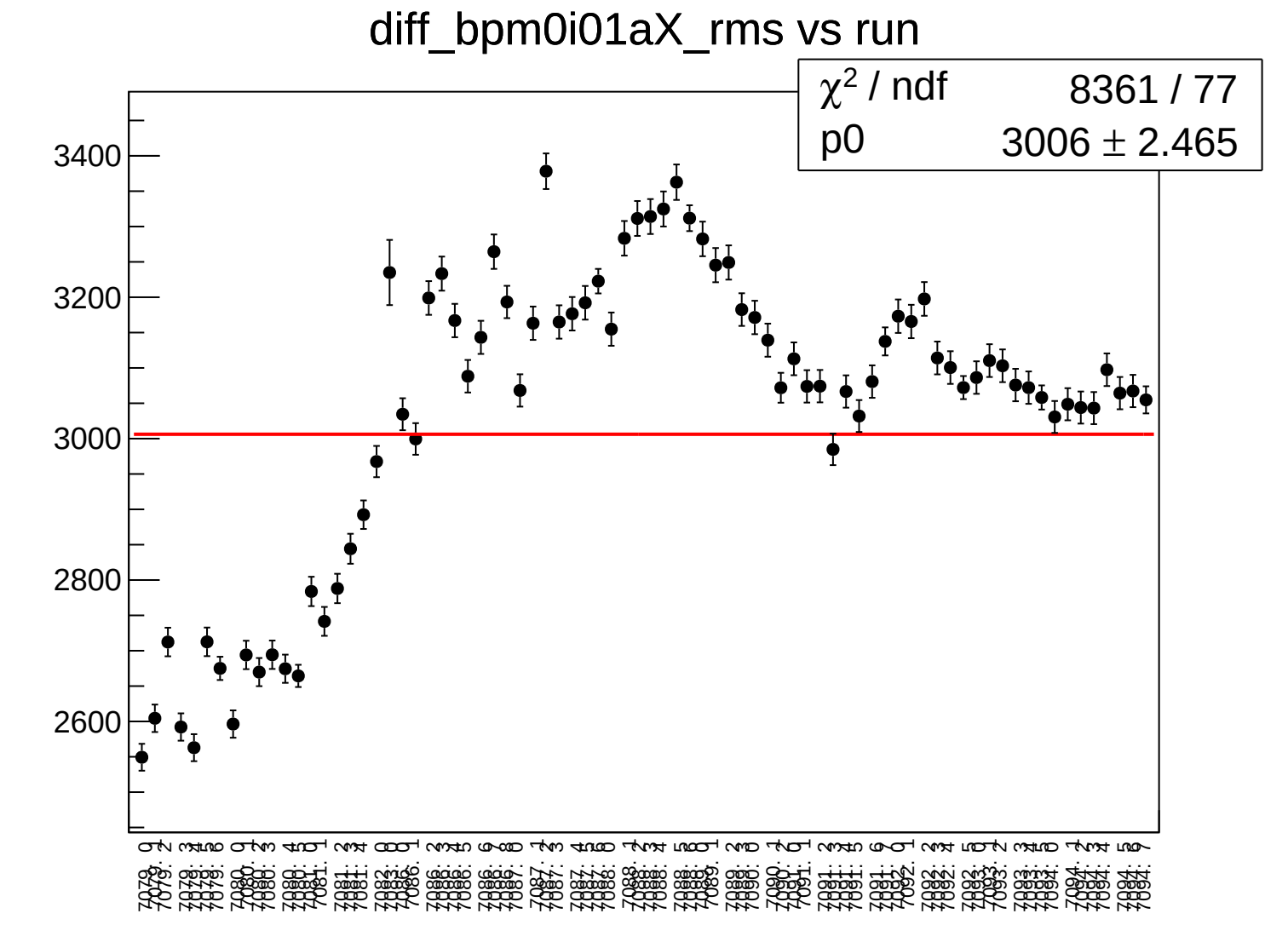

diff_bpm0i01Y_mean vs run
χ² / ndf 86.7 / 77
p0 6.527 ± 3.506
pull
Entries 78
Mean −59.68
Std Dev 112

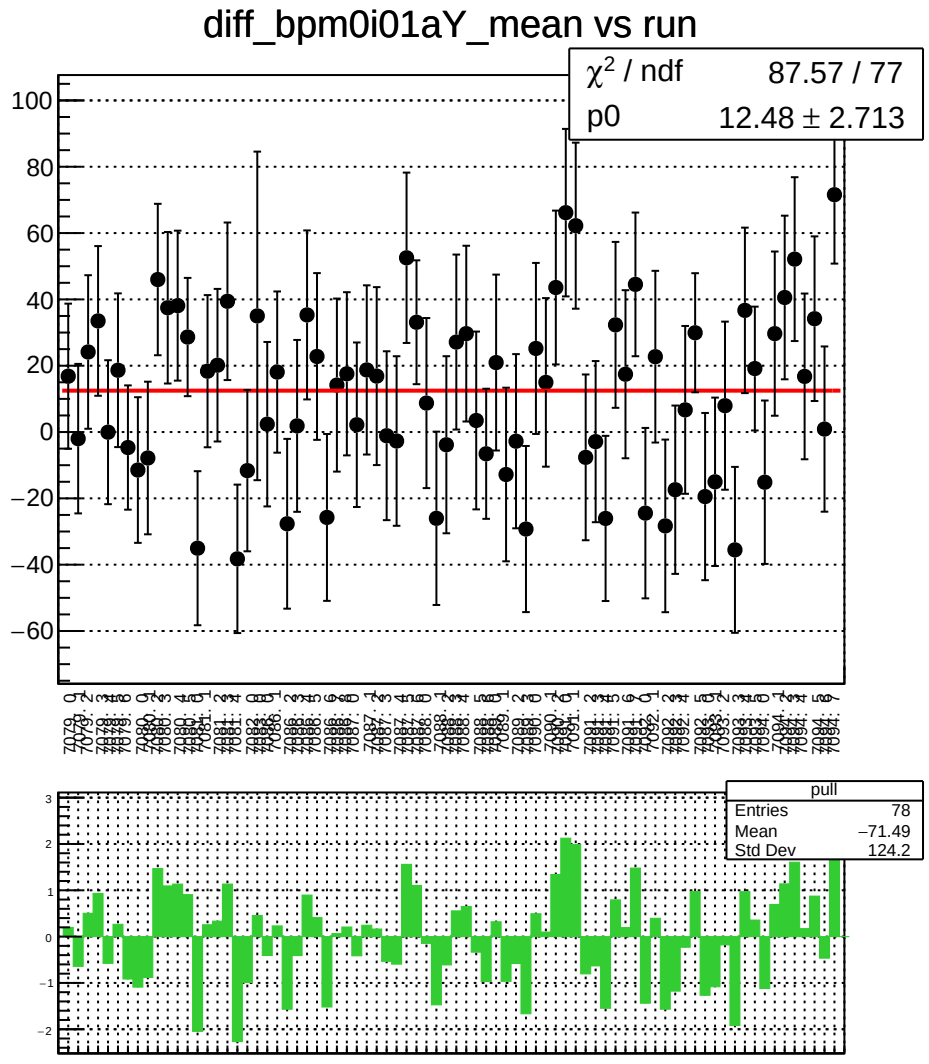

pull1D
Entries 78
Mean −0.01503
Std Dev 1.054

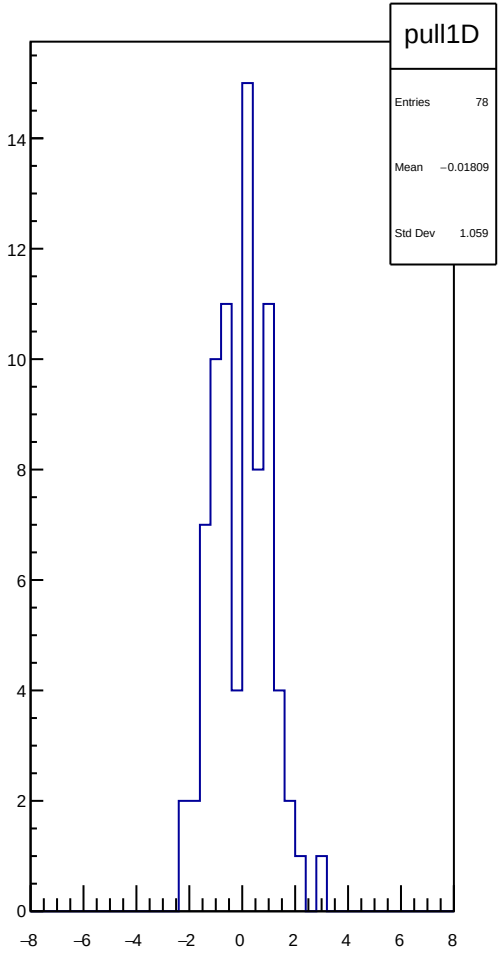

diff_bpm0i01Y_rms vs run
χ² / ndf 5429 / 77
p0 3026 ± 2.479
3400
3300
3200
3100
3000
2900
2800
2700
2600
2500

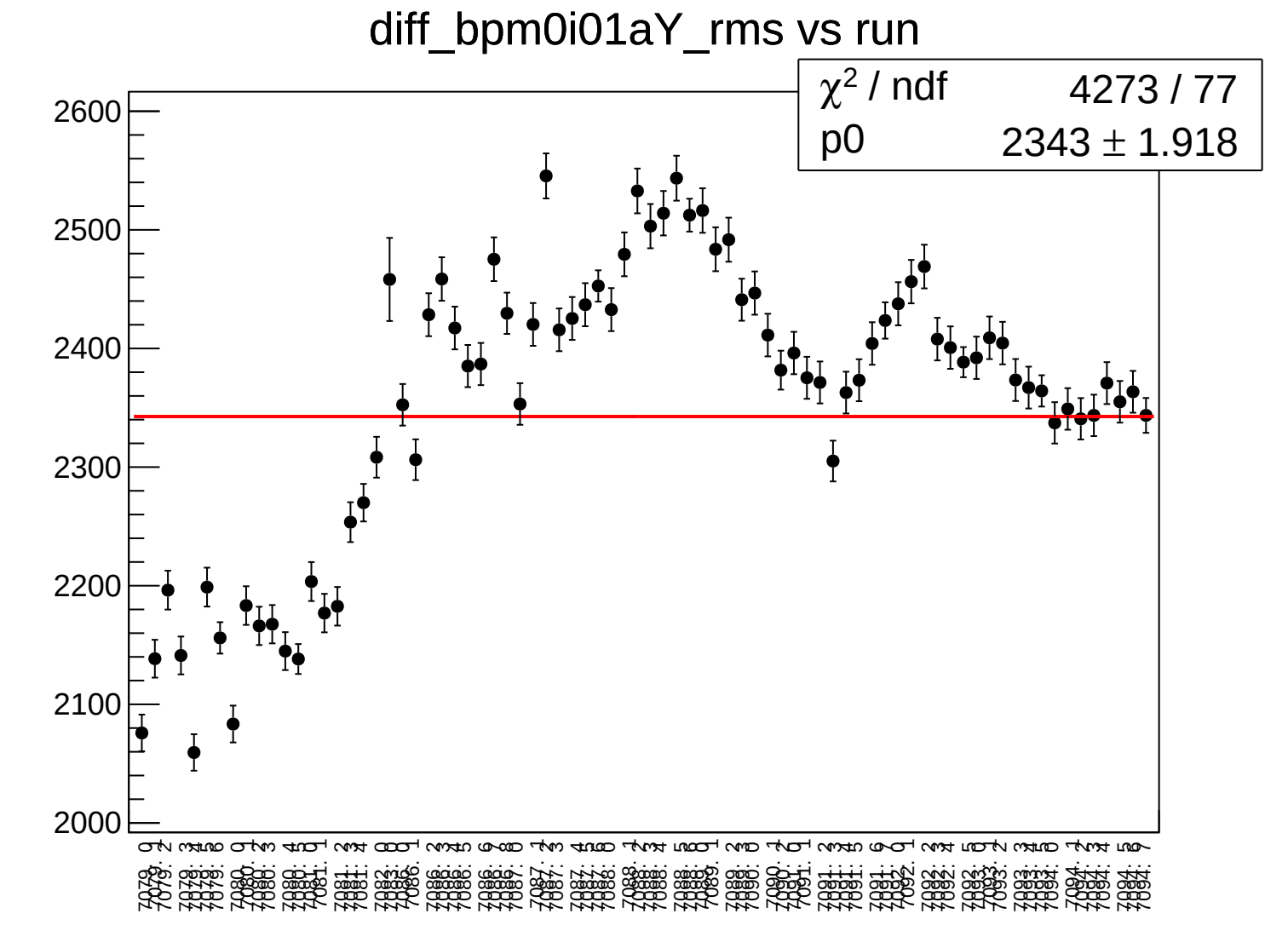

diff_bpm0i01aX_mean vs run
χ² / ndf 72.02 / 77
p0 0.1672 ± 3.486
100
50
0
−50
−100
pull
Entries 78
Mean 70.06
Std Dev 47.94
2
1
0
−1
−2

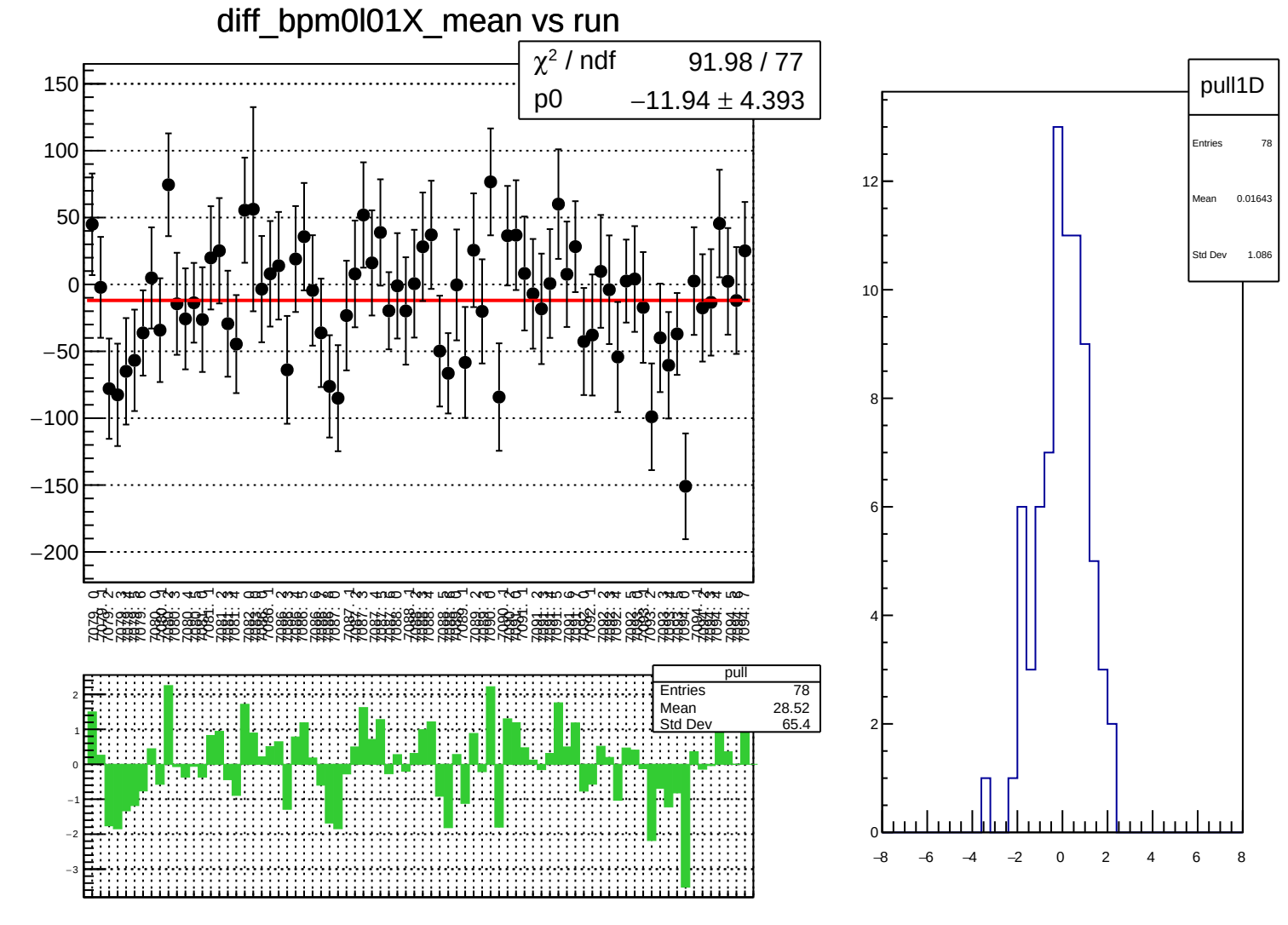

pull1D
Entries 78
Mean −0.02077
Std Dev 0.9607
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

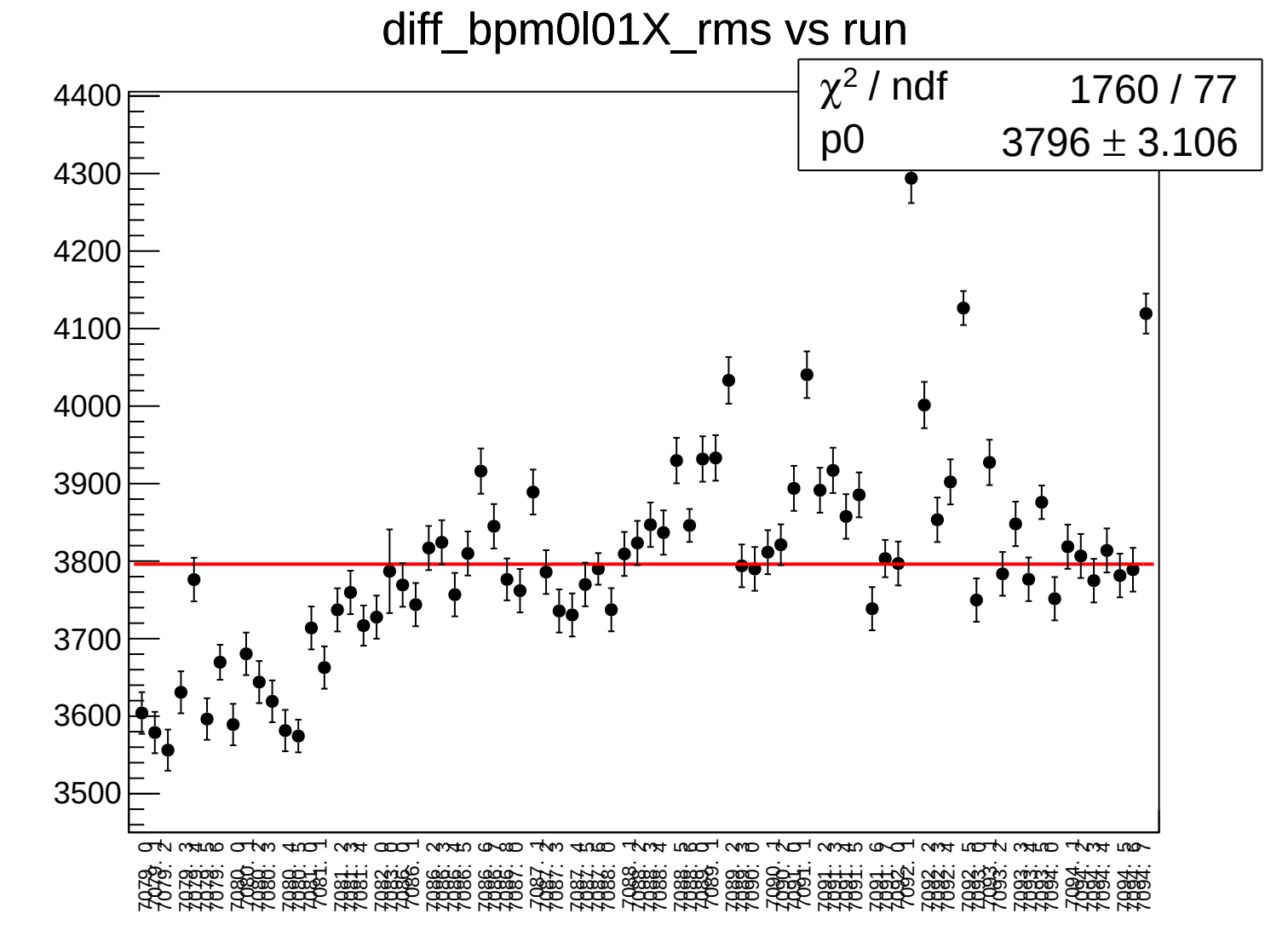

diff_bpm0i01aX_rms vs run
χ² / ndf 8361 / 77
p0 3006 ± 2.465
3400
3200
3000
2800
2600

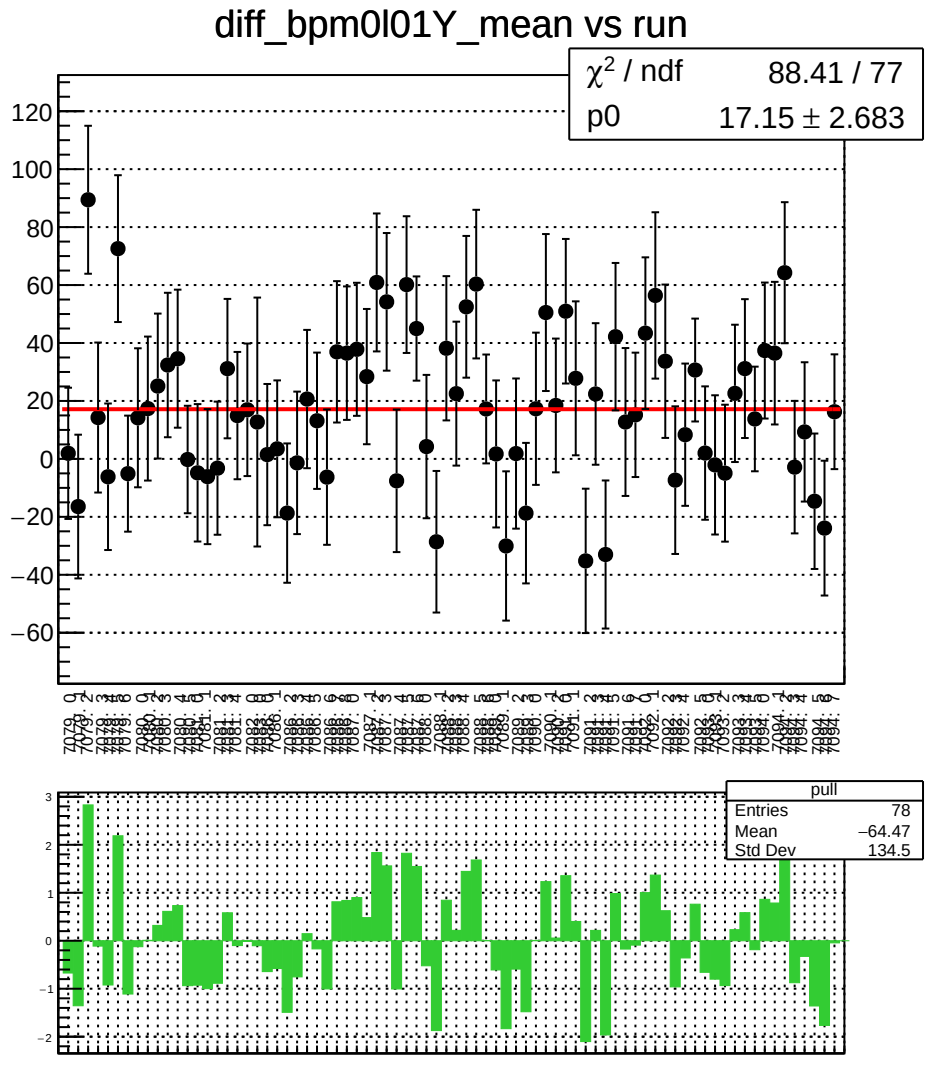

diff_bpm0i01aY_mean vs run
χ² / ndf 87.57 / 77
p0 12.48 ± 2.713
pull
Entries 78
Mean −71.49
Std Dev 124.2

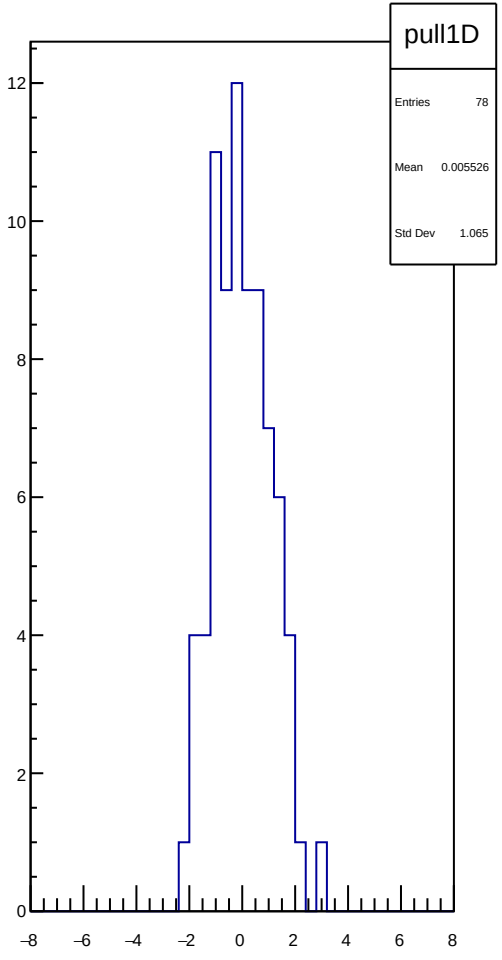

pull1D
Entries 78
Mean −0.01809
Std Dev 1.059

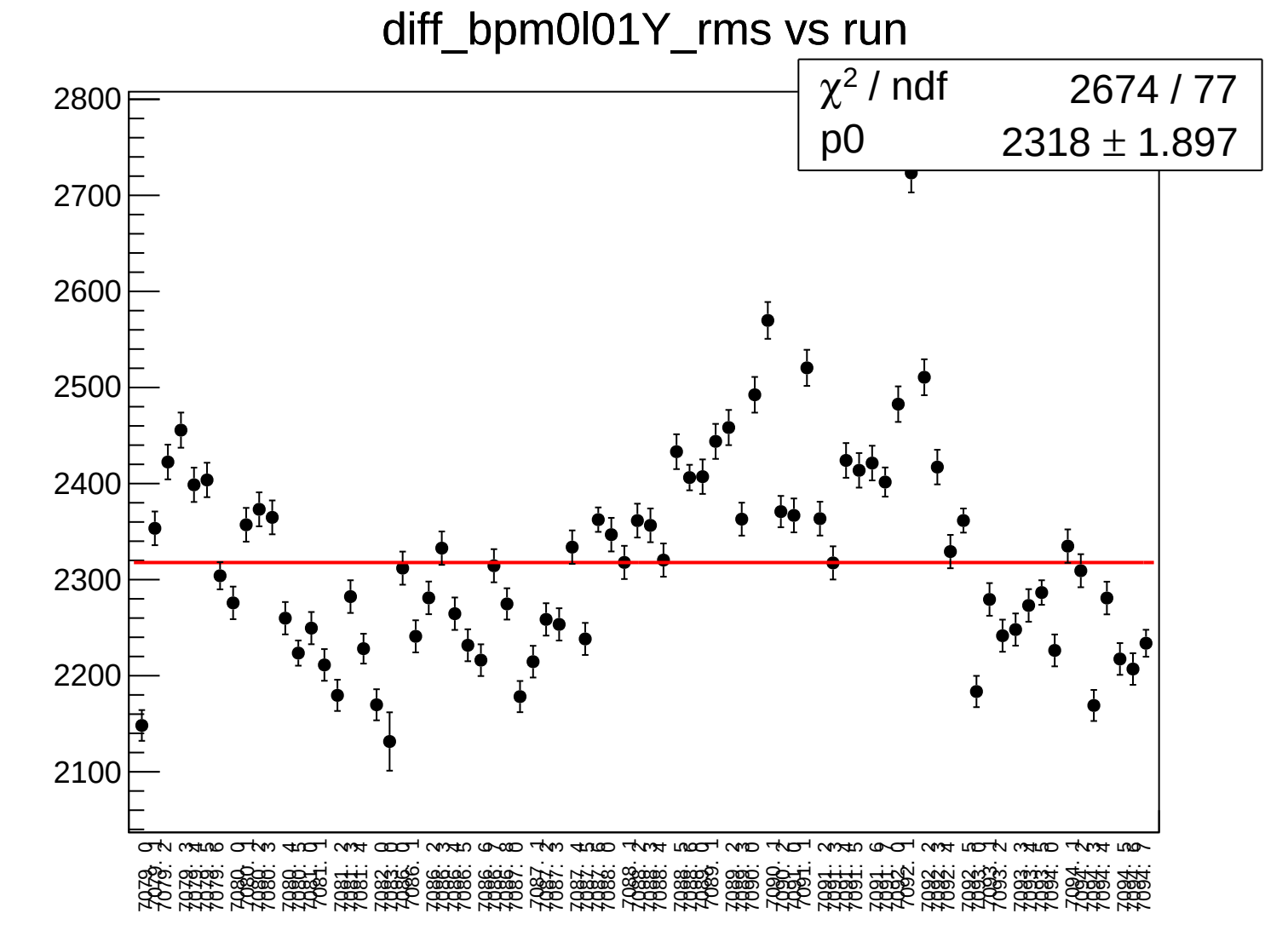

diff_bpm0i01aY_rms vs run
χ² / ndf 4273 / 77
p0 2343 ± 1.918
2600
2500
2400
2300
2200
2100
2000

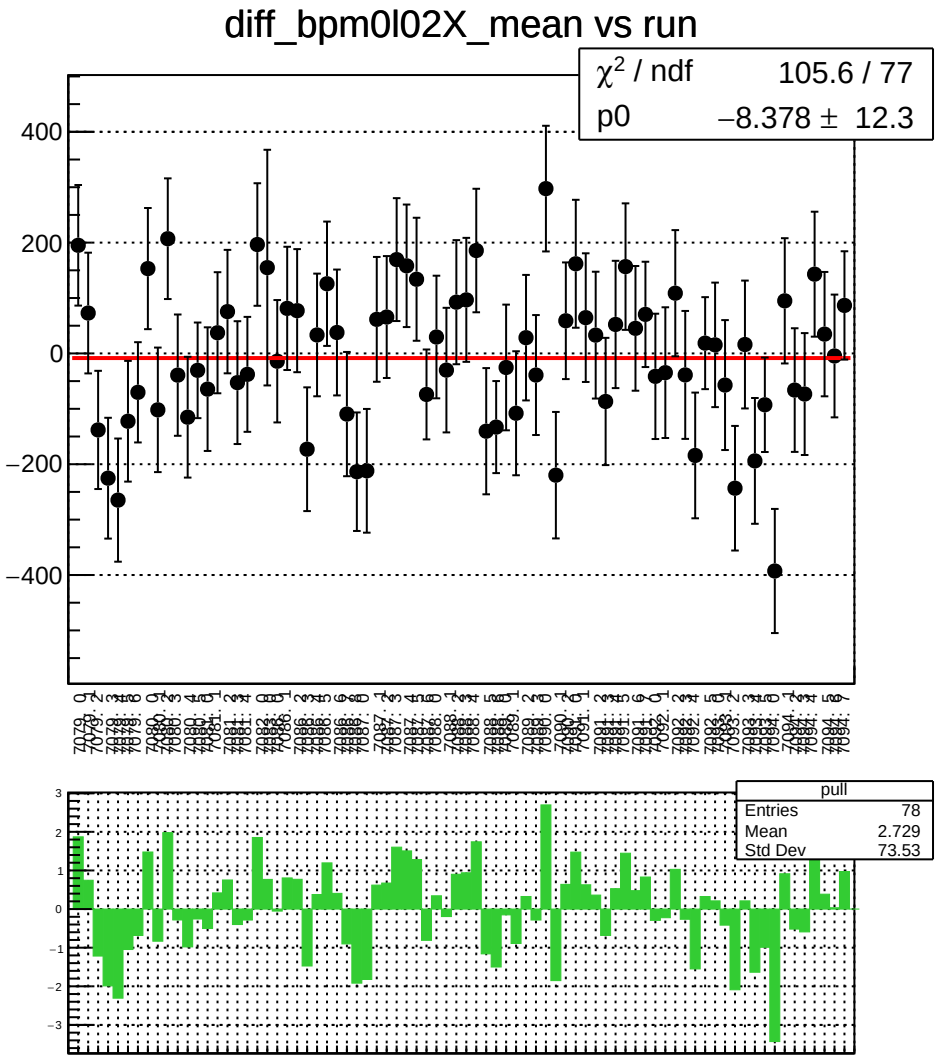

diff_bpm0l01X_mean vs run
χ² / ndf 91.98 / 77
p0 −11.94 ± 4.393
pull
Entries 78
Mean 28.52
Std Dev 65.4
pull1D
Entries 78
Mean 0.01643
Std Dev 1.086

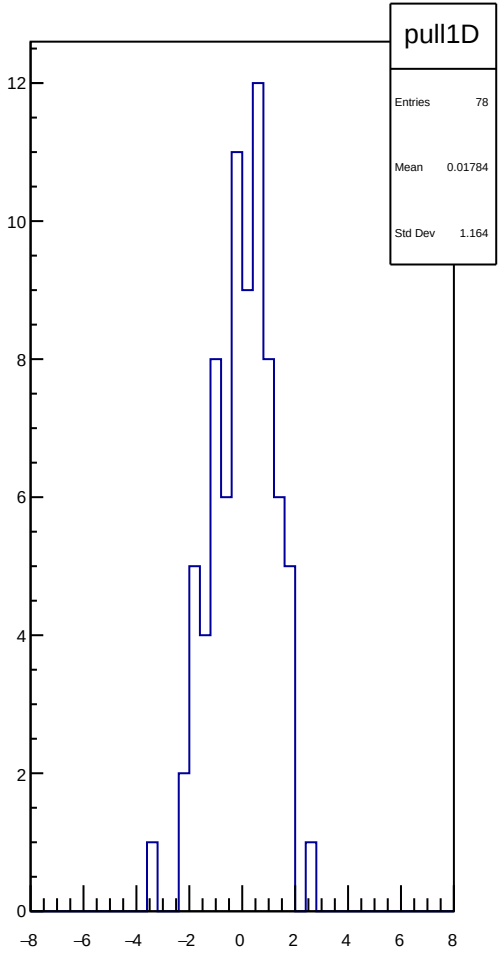

diff_bpm0l01X_rms vs run
χ² / ndf 1760 / 77
p0 3796 ± 3.106
4400
4300
4200
4100
4000
3900
3800
3700
3600
3500

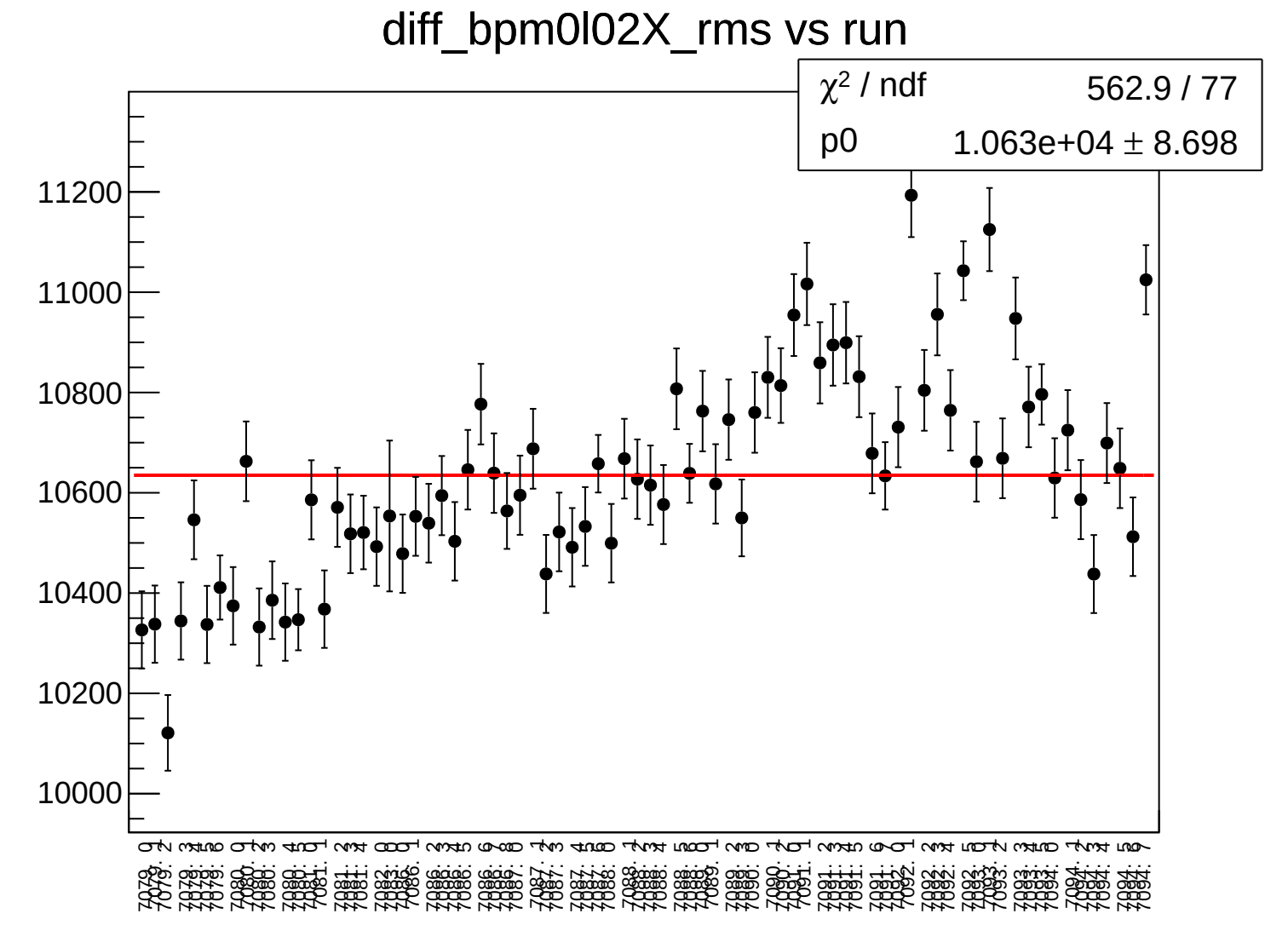

diff_bpm0l01Y_mean vs run
χ^2 / ndf 88.41 / 77
p0 17.15 ± 2.683
pull
Entries 78
Mean −64.47
Std Dev 134.5

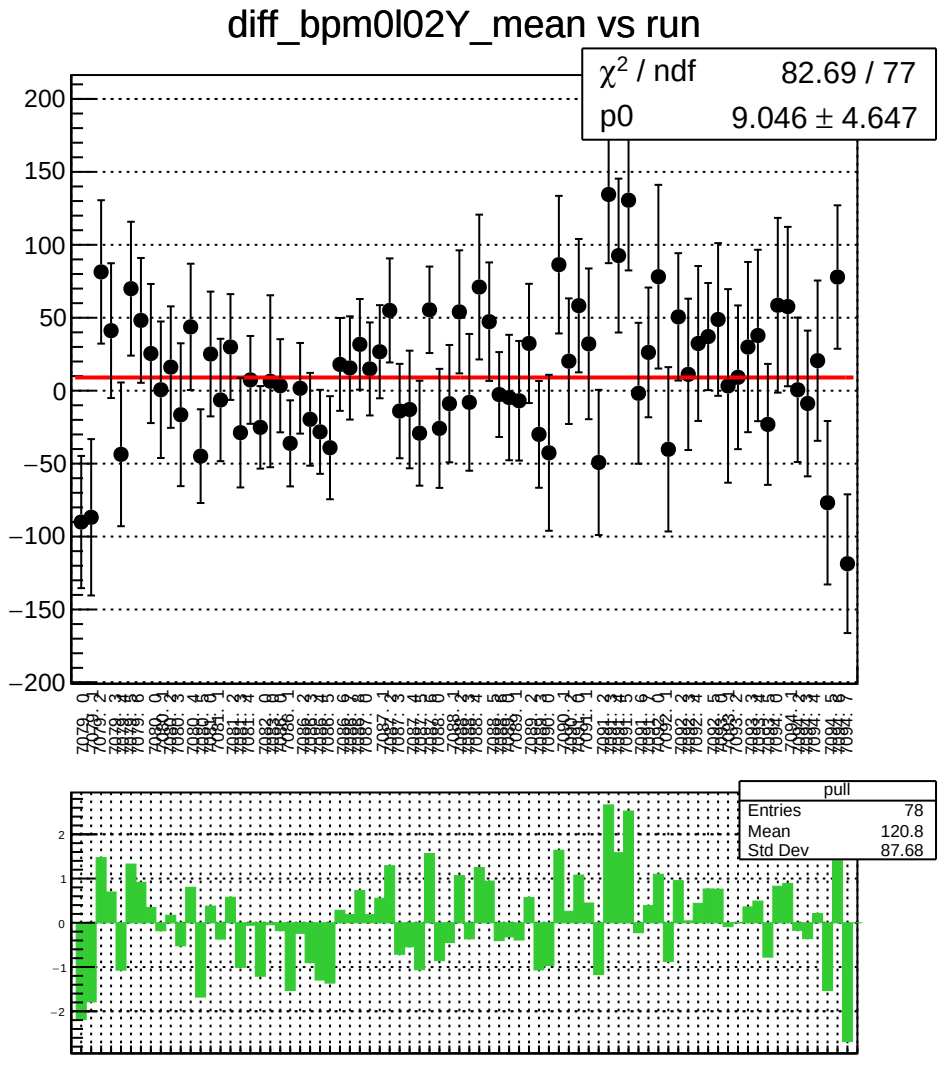

pull1D
Entries 78
Mean 0.005526
Std Dev 1.065

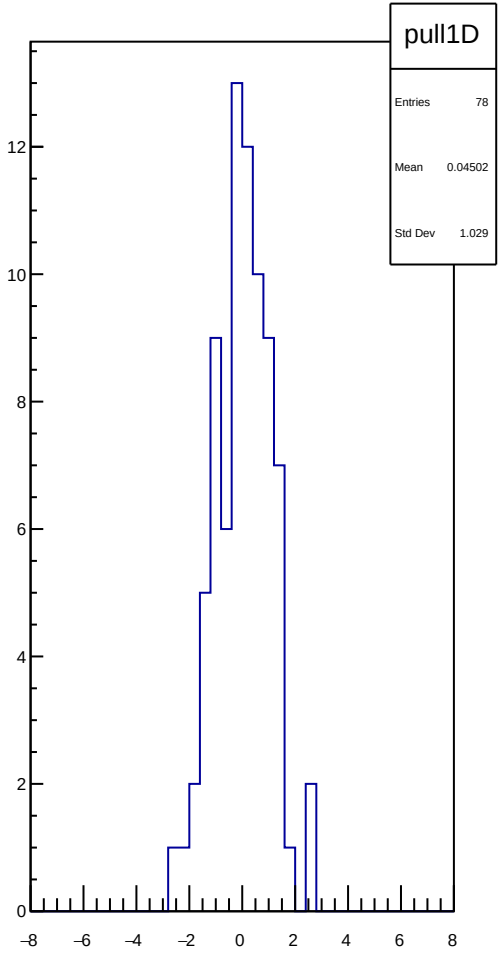

diff_bpm0l01Y_rms vs run
χ² / ndf 2674 / 77
p0 2318 ± 1.897
2800
2700
2600
2500
2400
2300
2200
2100

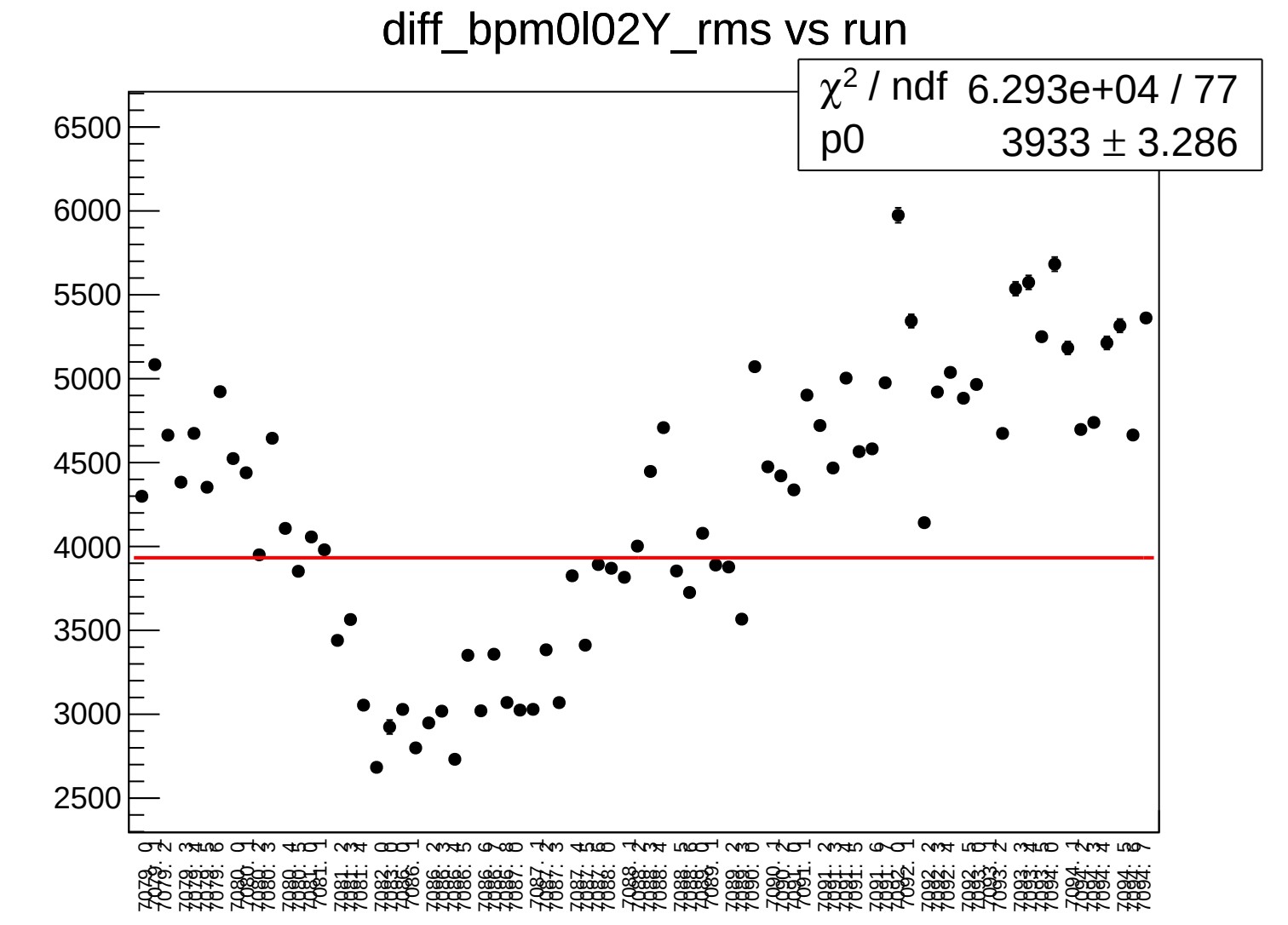

diff_bpm0l02X_mean vs run
χ² / ndf 105.6 / 77
p0 −8.378 ± 12.3
400
200
0
−200
−400
pull
Entries 78
Mean 2.729
Std Dev 73.53
3
2
1
0
−1
−2
−3

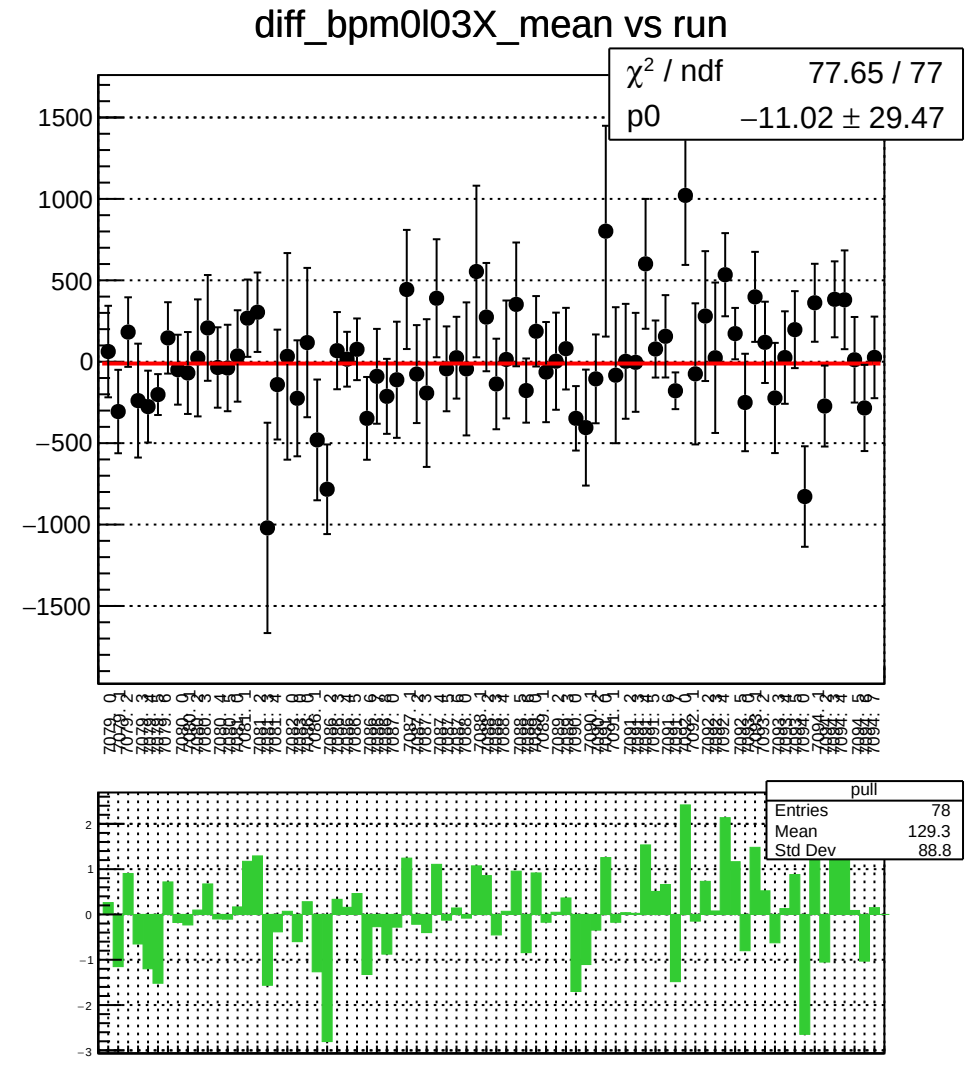

pull1D
Entries 78
Mean 0.01784
Std Dev 1.164
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

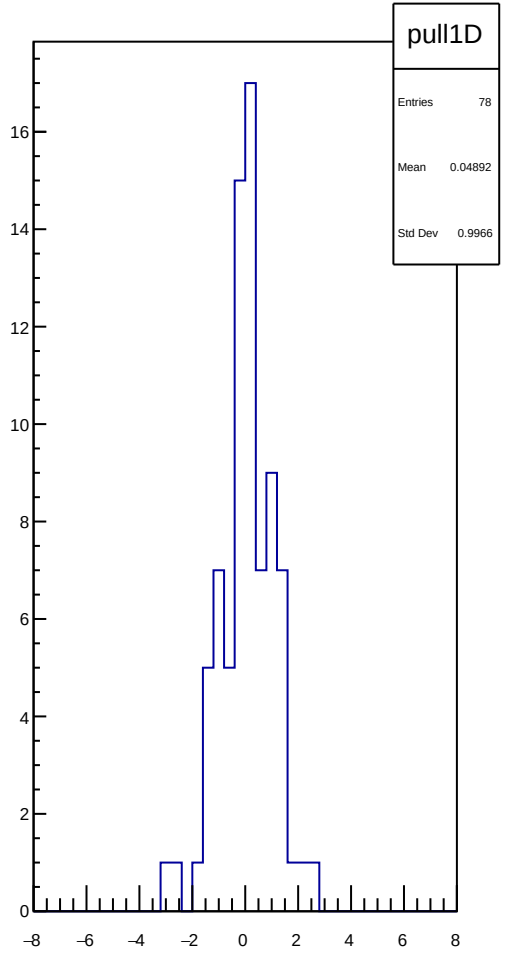

diff_bpm0l02X_rms vs run
χ² / ndf 562.9 / 77
p0 1.063e+04 ± 8.698
11200
11000
10800
10600
10400
10200
10000

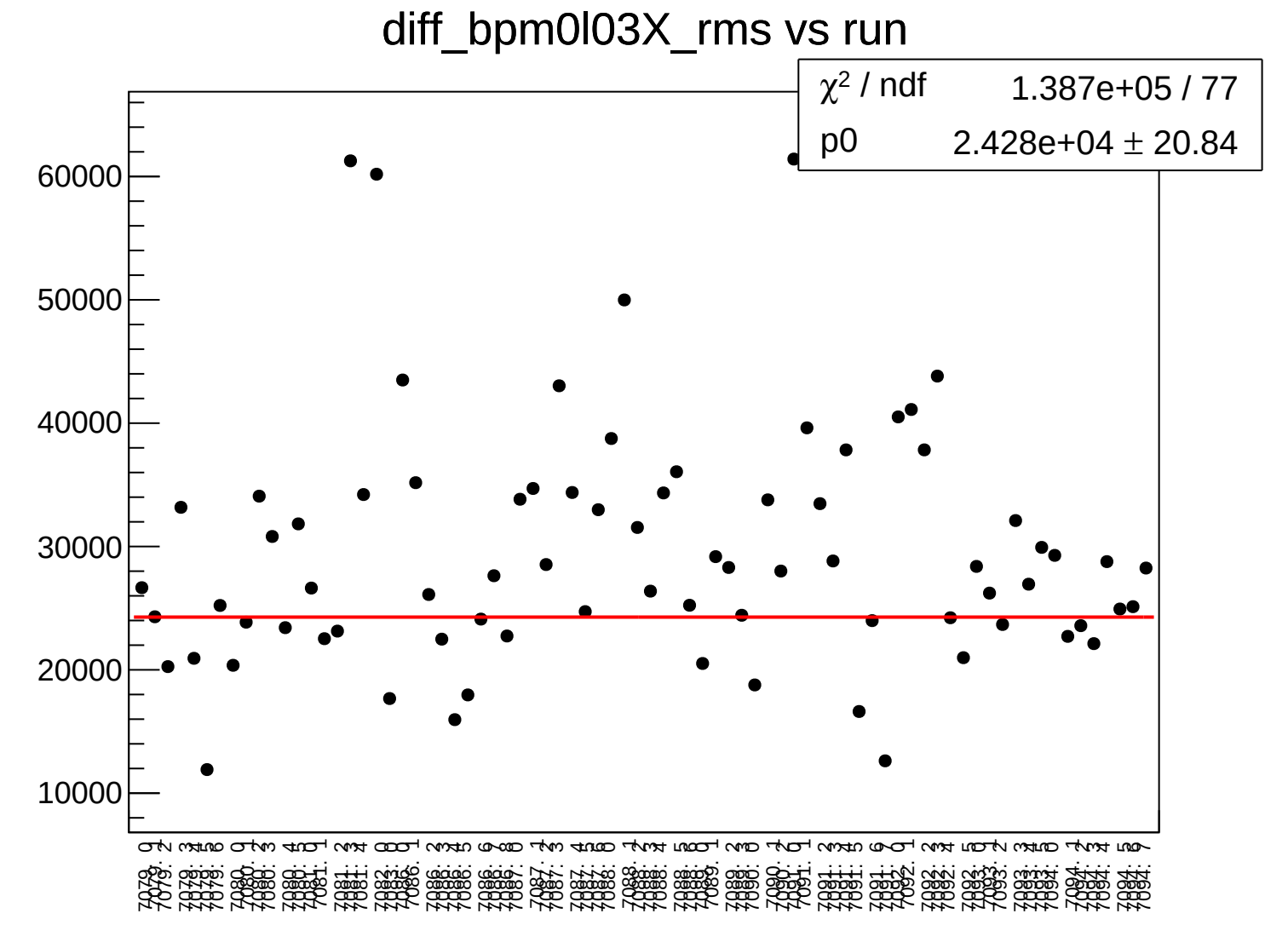

diff_bpm0l02Y_mean vs run
χ² / ndf 82.69 / 77
p0 9.046 ± 4.647
pull
Entries 78
Mean 120.8
Std Dev 87.68

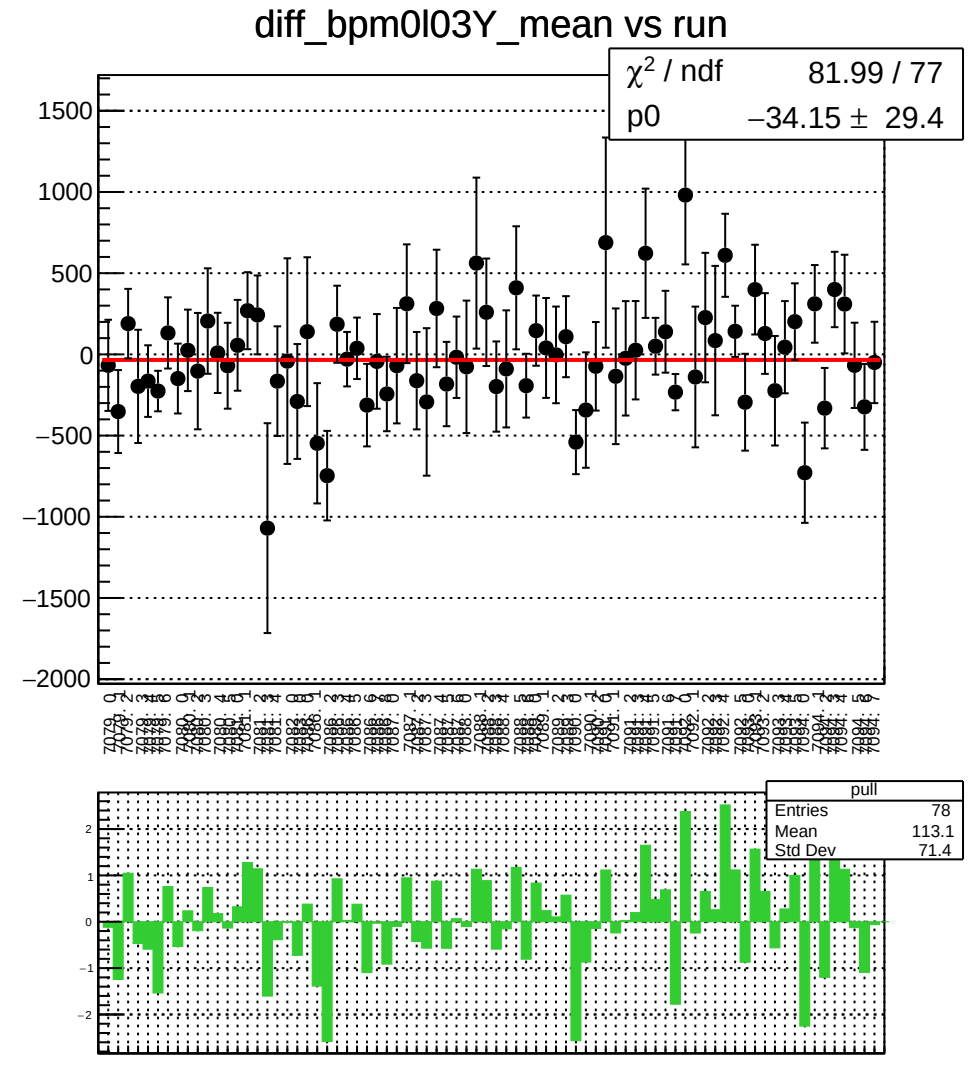

pull1D
Entries 78
Mean 0.04502
Std Dev 1.029

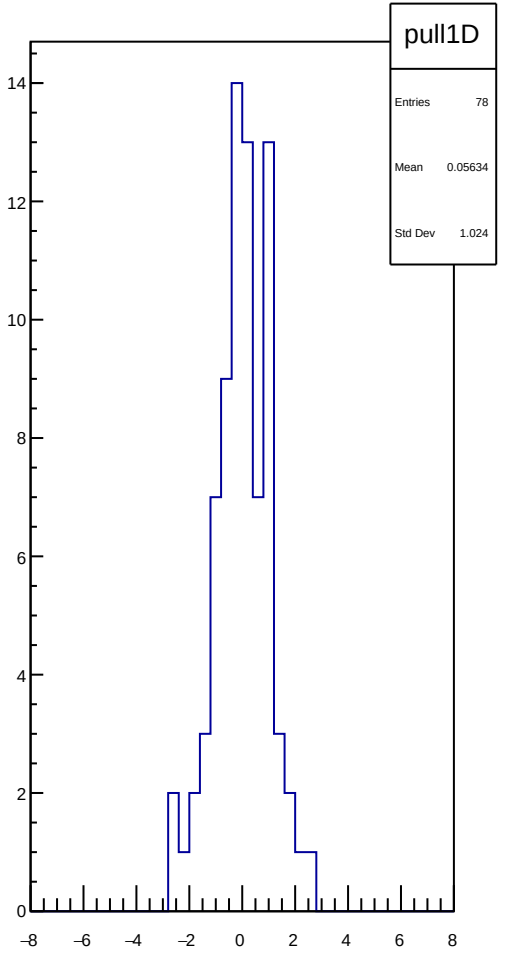

diff_bpm0l02Y_rms vs run
χ² / ndf 6.293e+04 / 77
p0 3933 ± 3.286
6500
6000
5500
5000
4500
4000
3500
3000
2500

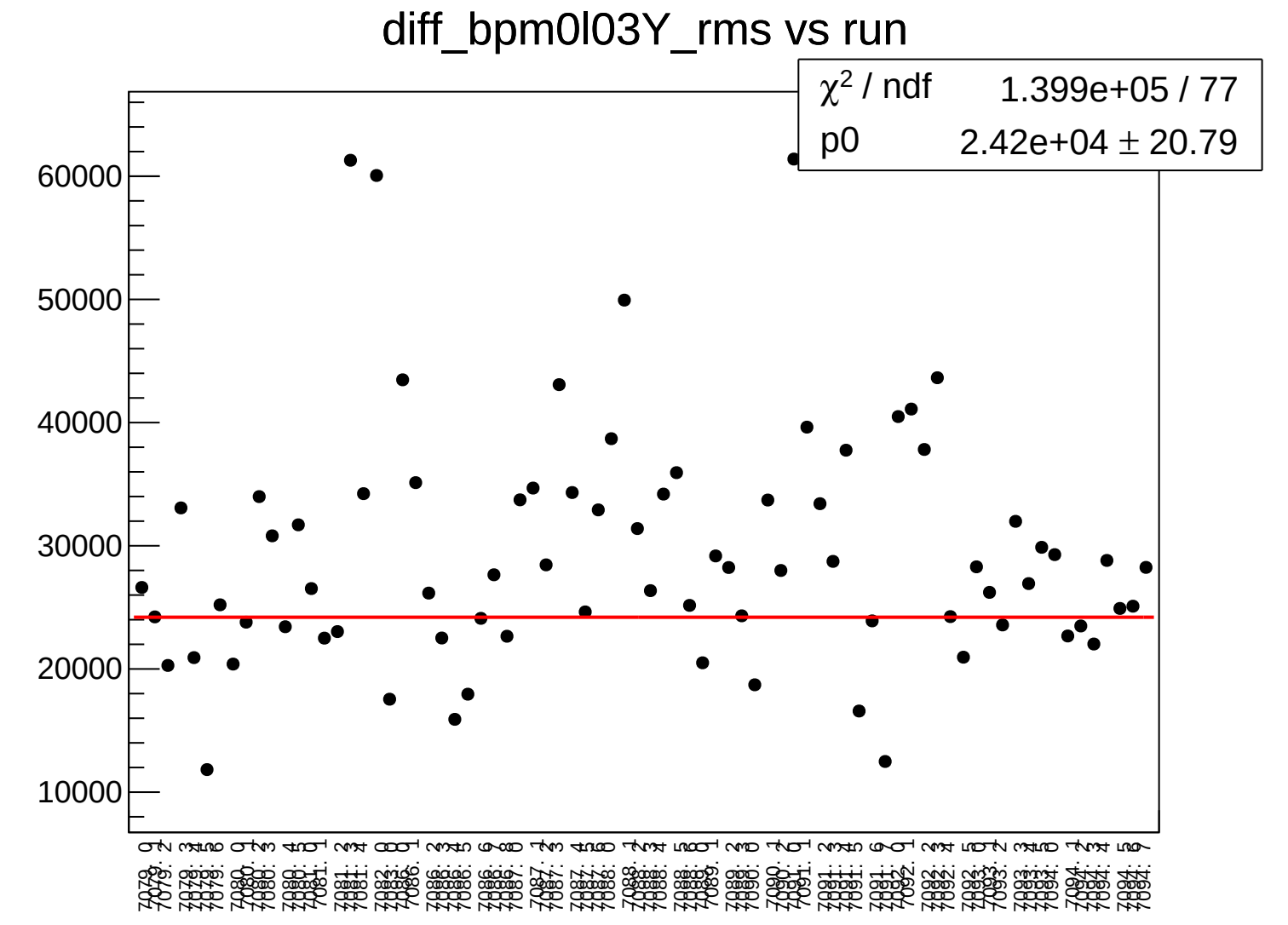

diff_bpm0l03X_mean vs run
χ² / ndf 77.65 / 77
p0 −11.02 ± 29.47
1500
1000
500
0
−500
−1000
−1500
pull
Entries 78
Mean 129.3
Std Dev 88.8
2
1
0
−1
−2
−3

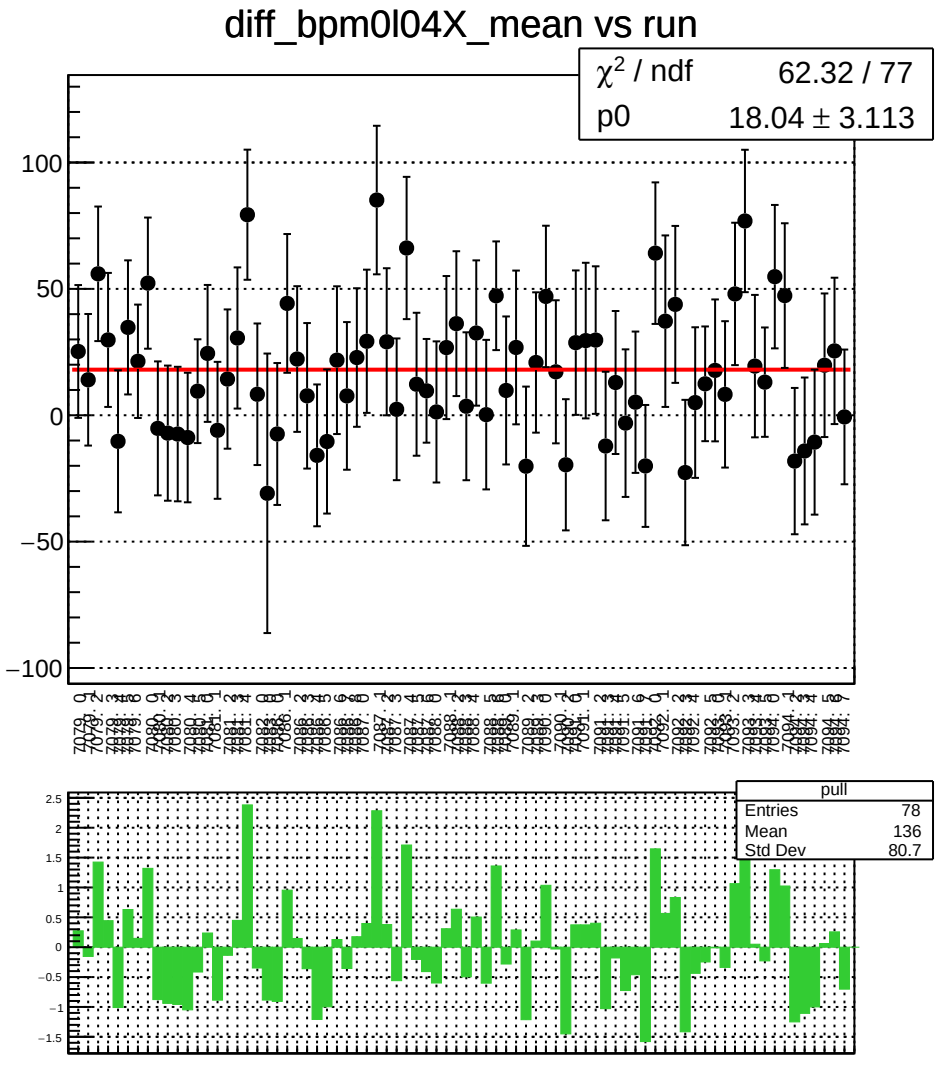

pull1D
Entries 78
Mean 0.04892
Std Dev 0.9966
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

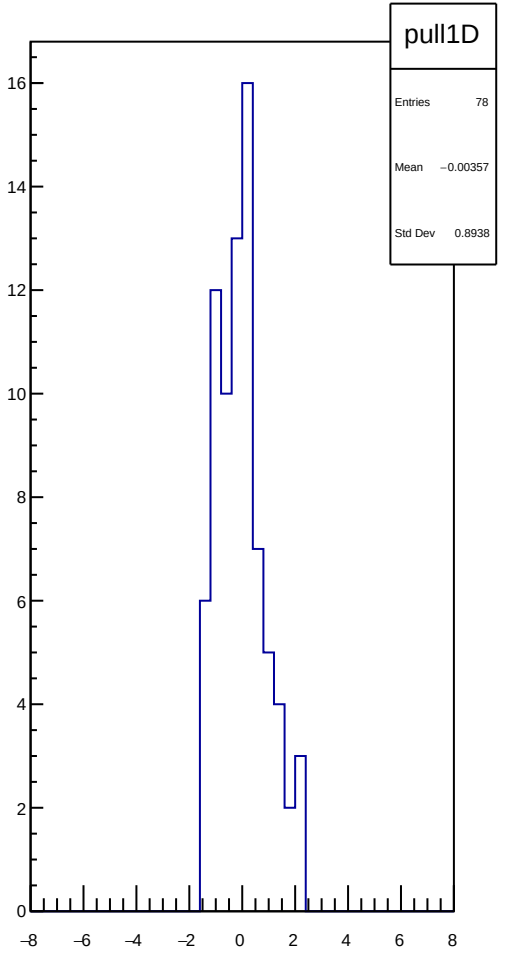

diff_bpm0l03X_rms vs run
χ² / ndf 1.387e+05 / 77
p0 2.428e+04 ± 20.84
60000
50000
40000
30000
20000
10000

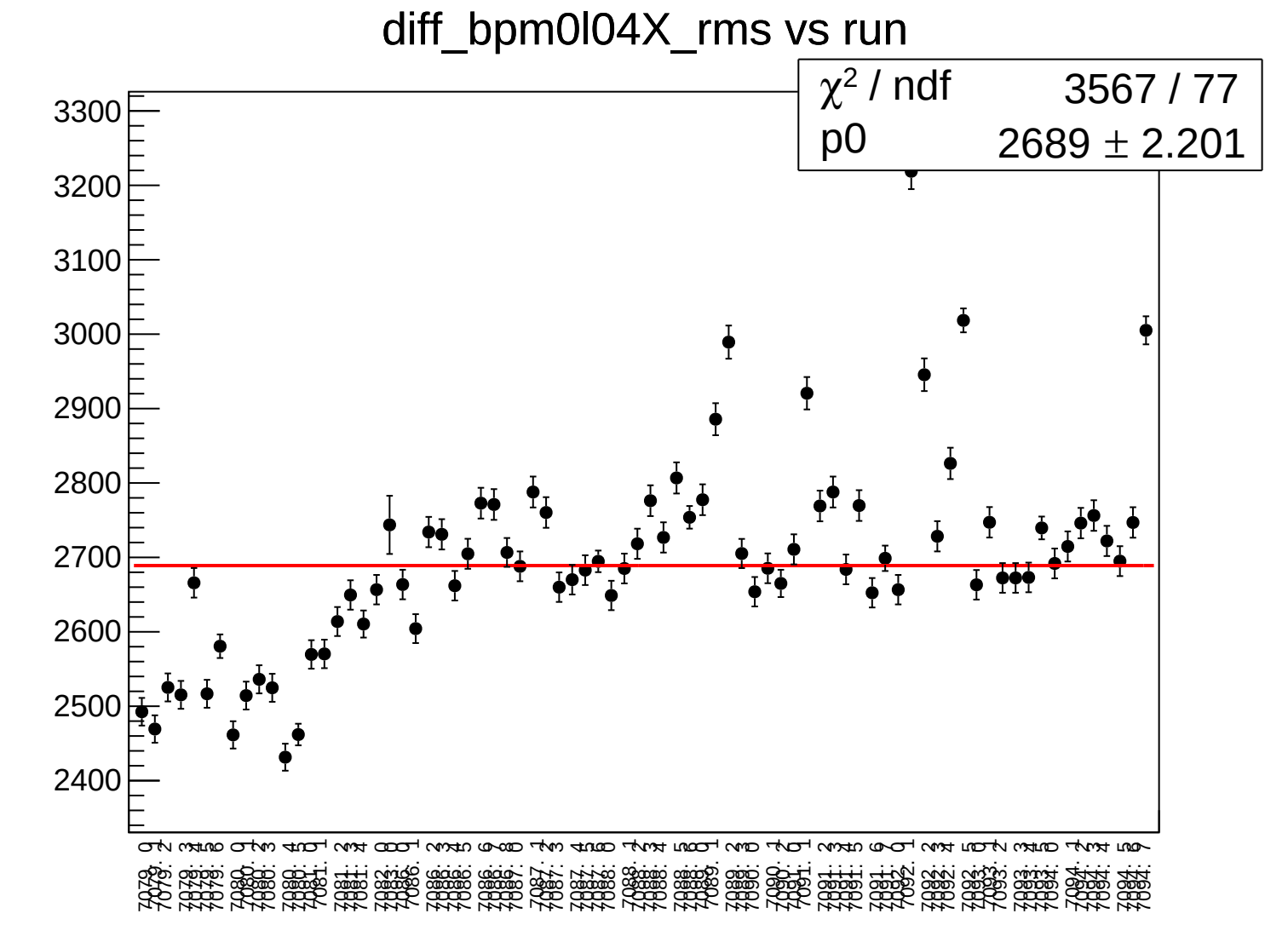

diff_bpm0l03Y_mean vs run
χ² / ndf 81.99 / 77
p0 −34.15 ± 29.4
pull
Entries 78
Mean 113.1
Std Dev 71.4

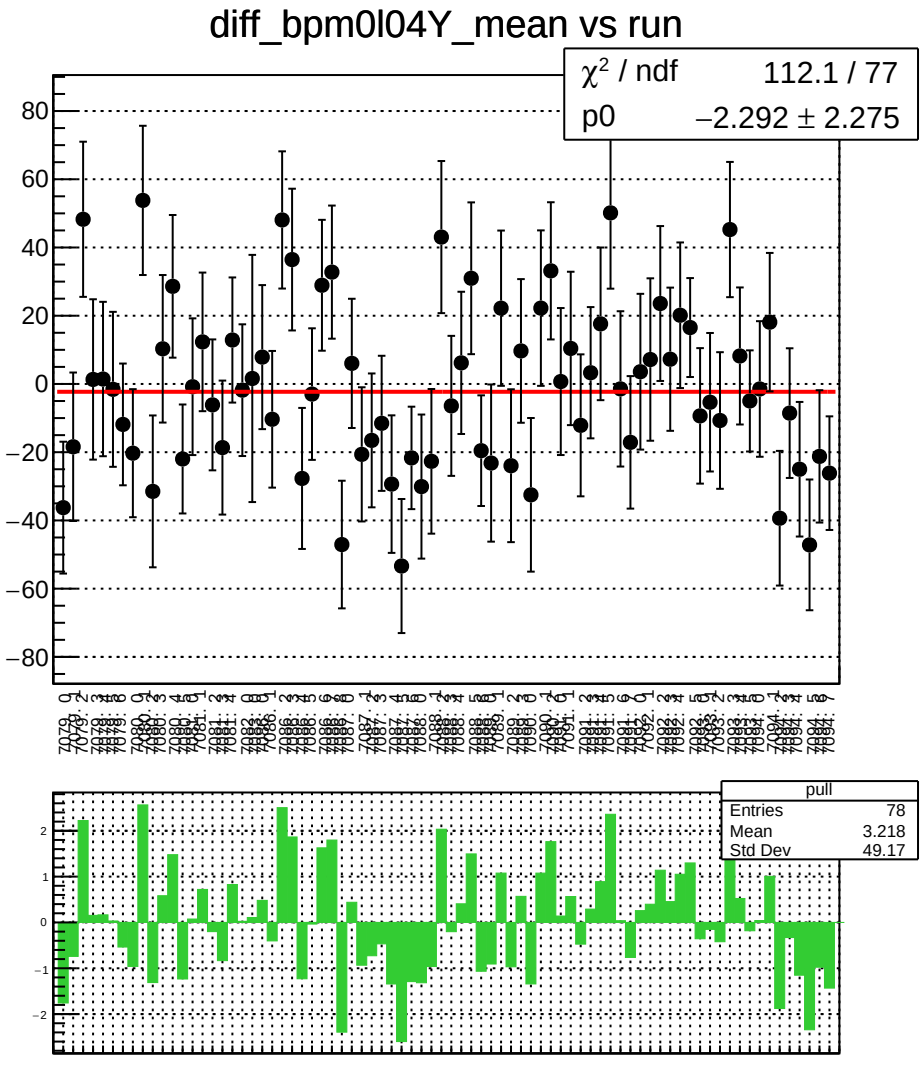

pull1D
Entries 78
Mean 0.05634
Std Dev 1.024

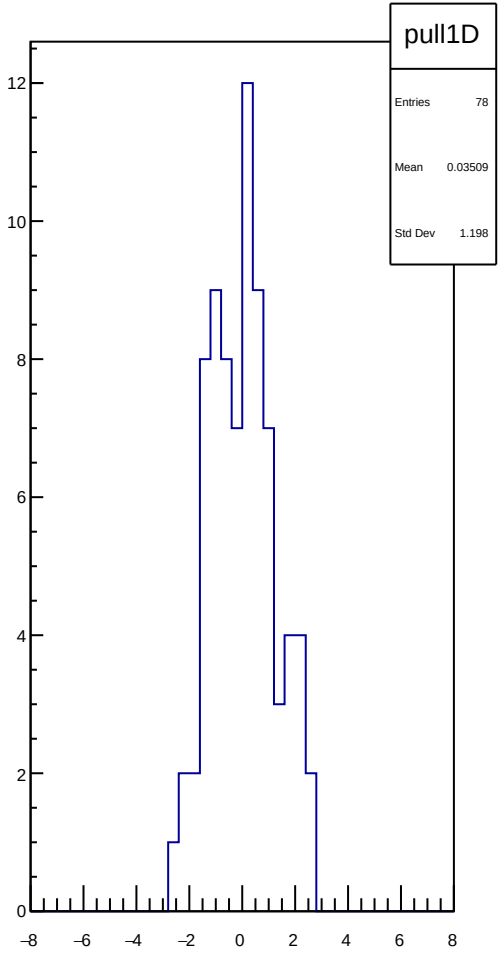

diff_bpm0l03Y_rms vs run
χ² / ndf 1.399e+05 / 77
p0 2.42e+04 ± 20.79
60000
50000
40000
30000
20000
10000

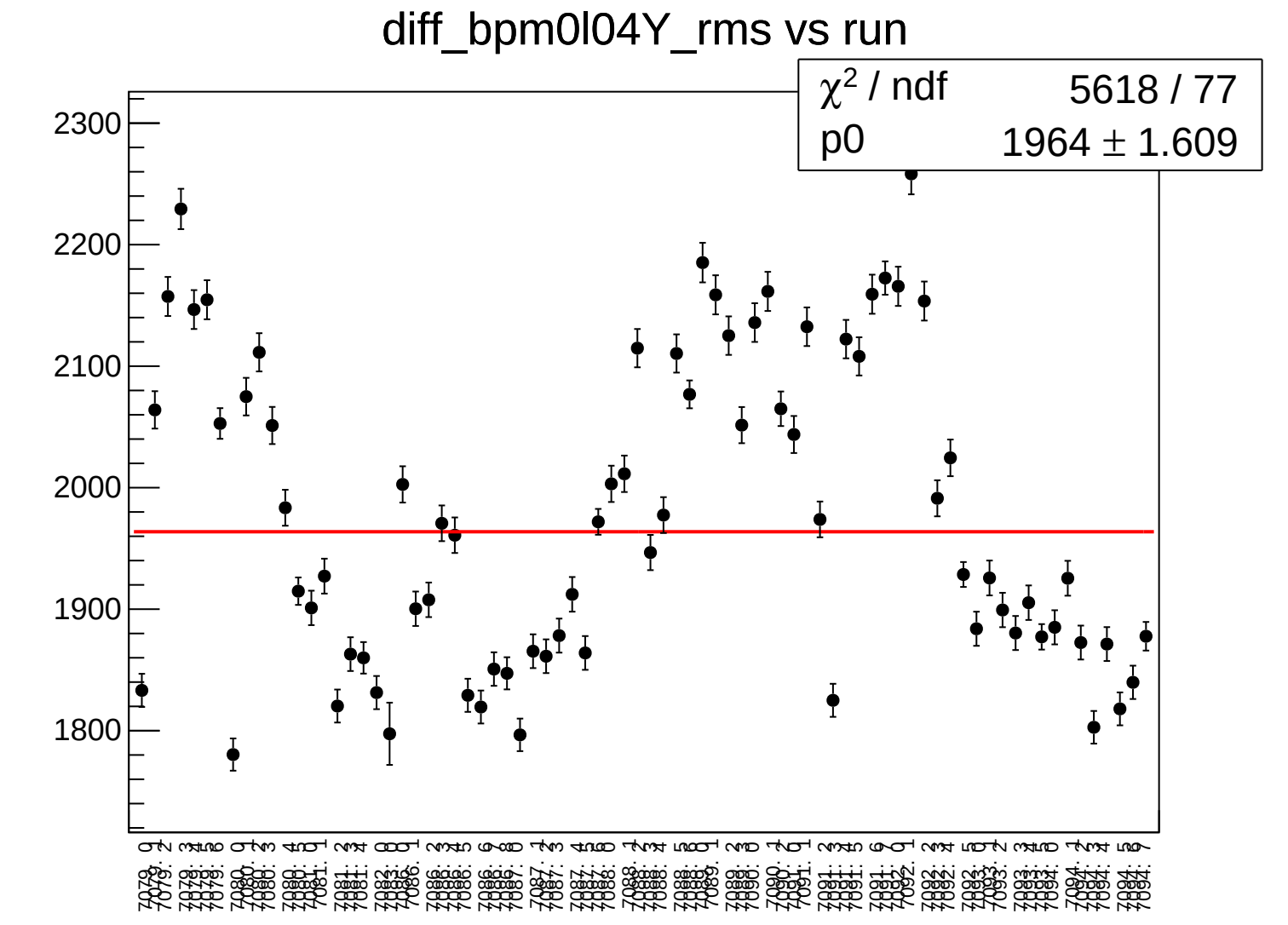

diff_bpm0l04X_mean vs run
χ^2 / ndf 62.32 / 77
p0 18.04 ± 3.113
100
50
0
−50
−100
pull
Entries 78
Mean 136
Std Dev 80.7
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

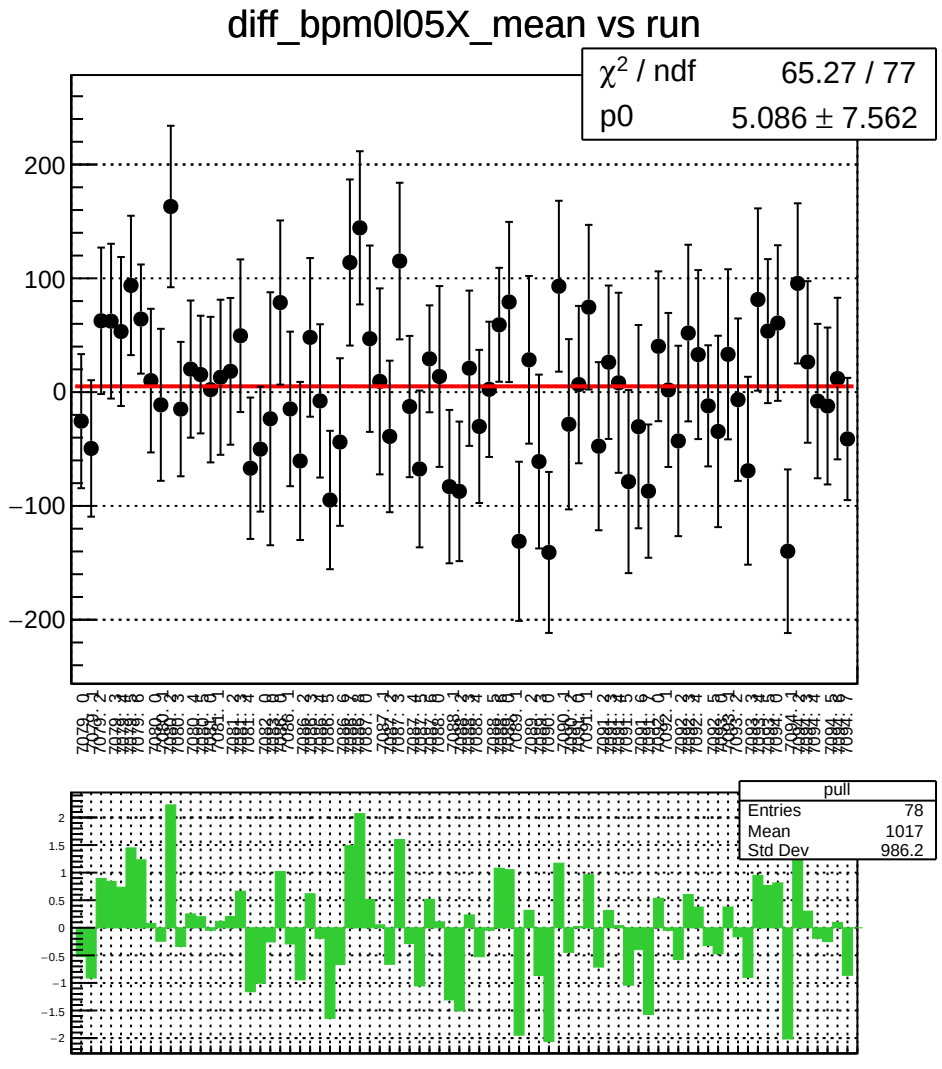

pull1D
Entries 78
Mean −0.00357
Std Dev 0.8938
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

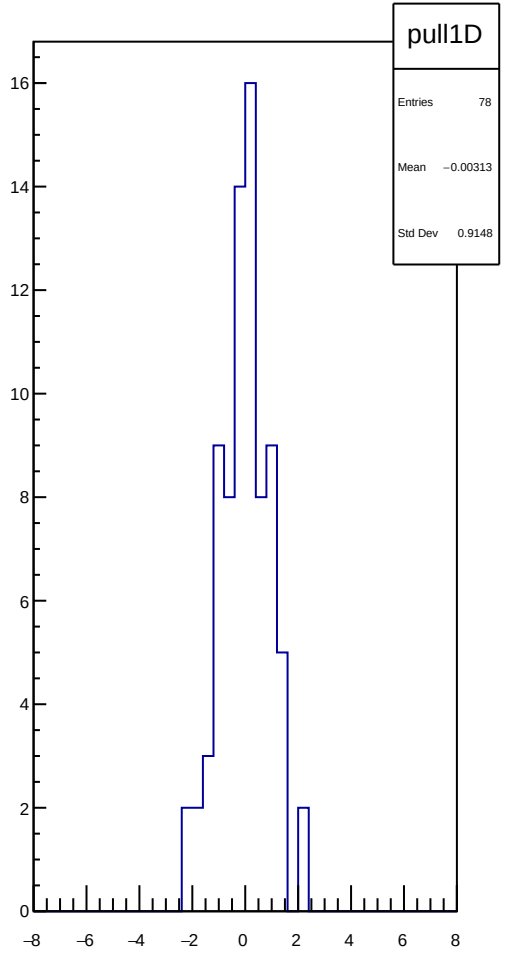

diff_bpm0l04X_rms vs run
χ² / ndf 3567 / 77
p0 2689 ± 2.201
3300
3200
3100
3000
2900
2800
2700
2600
2500
2400

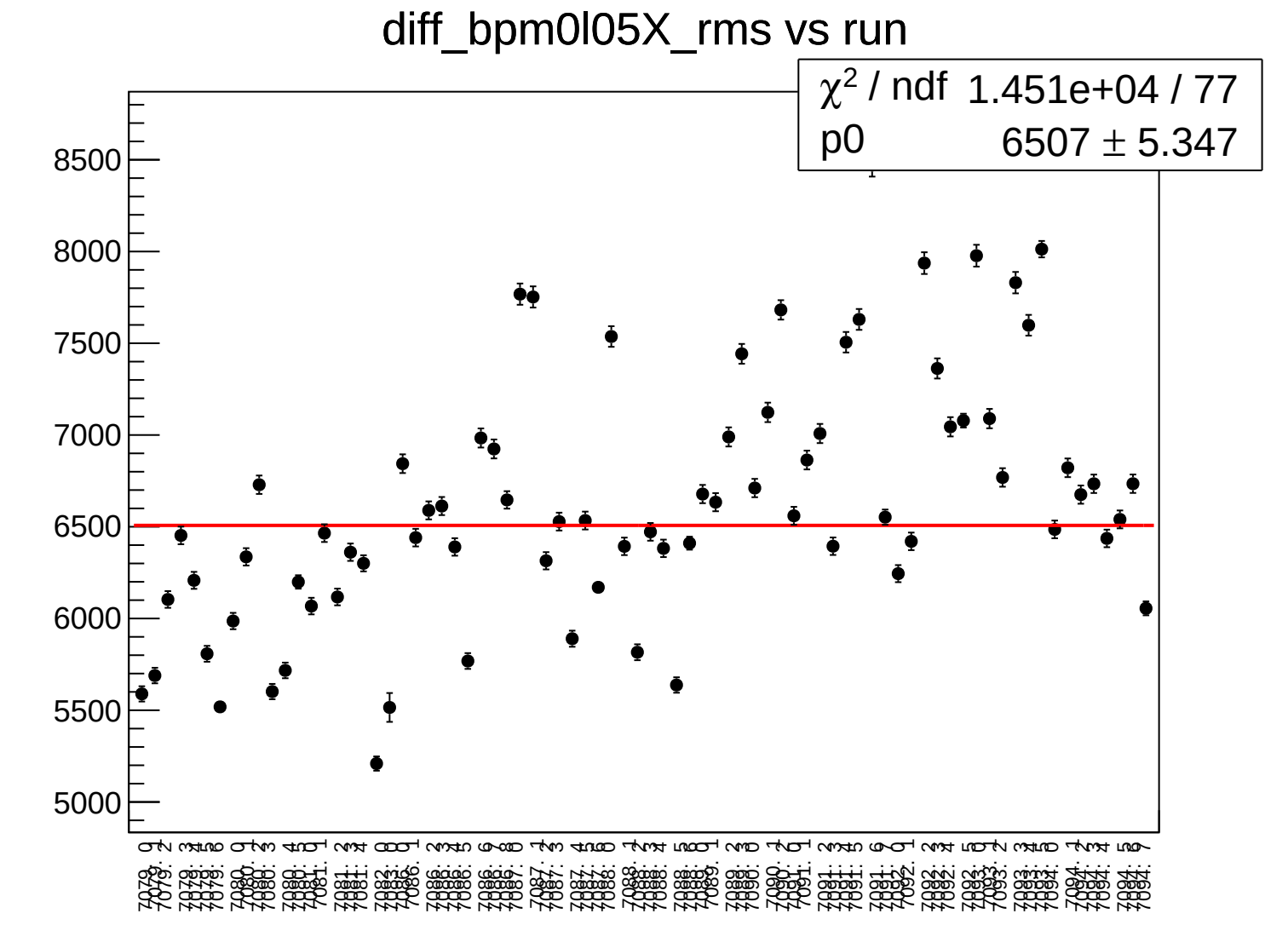

diff_bpm0l04Y_mean vs run
χ² / ndf 112.1 / 77
p0 −2.292 ± 2.275
pull
Entries 78
Mean 3.218
Std Dev 49.17

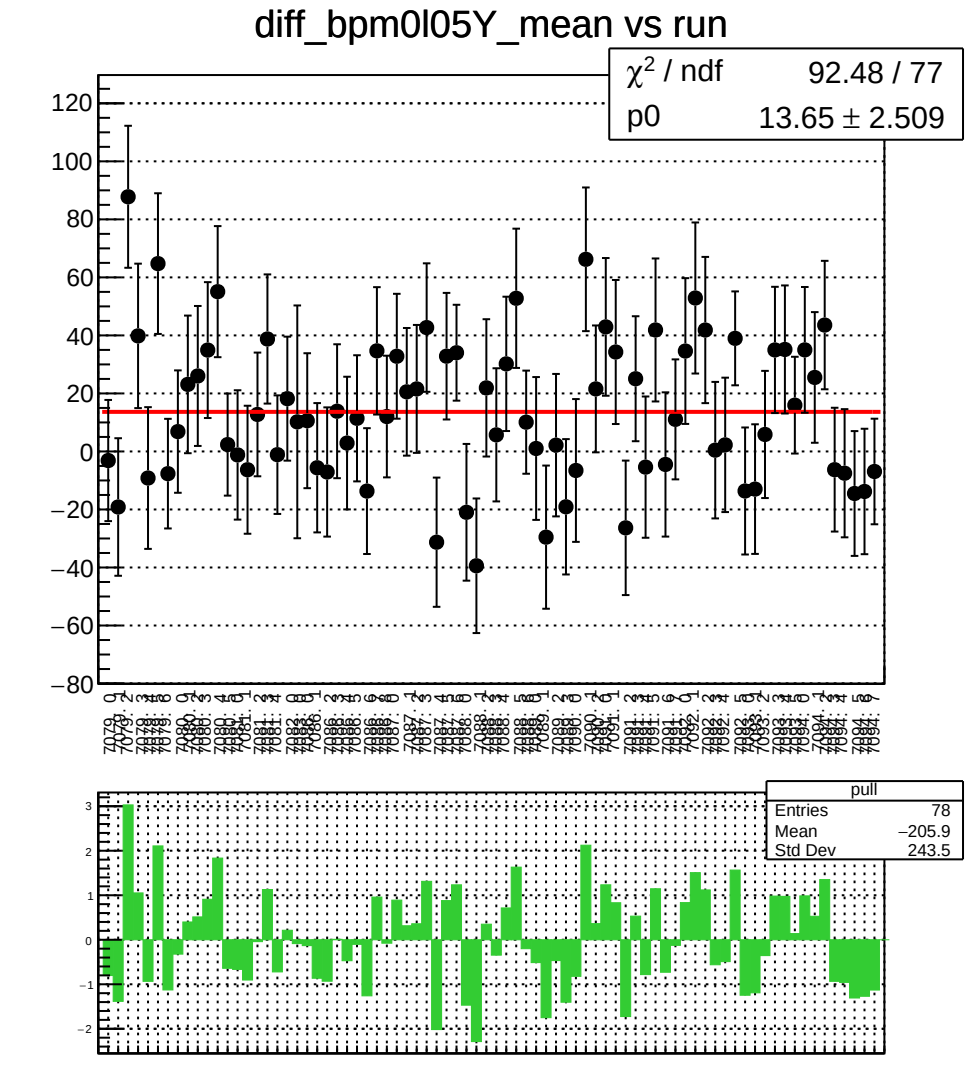

pull1D
Entries 78
Mean 0.03509
Std Dev 1.198

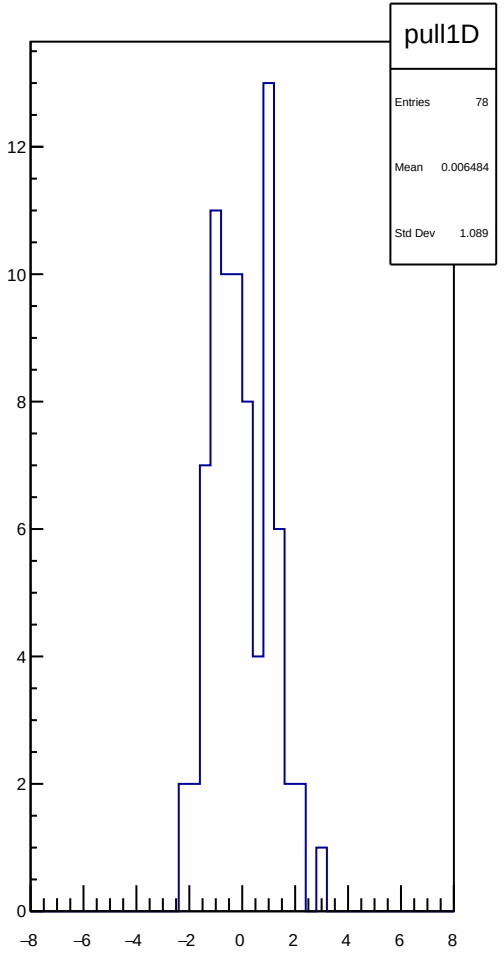

diff_bpm0l04Y_rms vs run
χ² / ndf 5618 / 77
p0 1964 ± 1.609
2300
2200
2100
2000
1900
1800

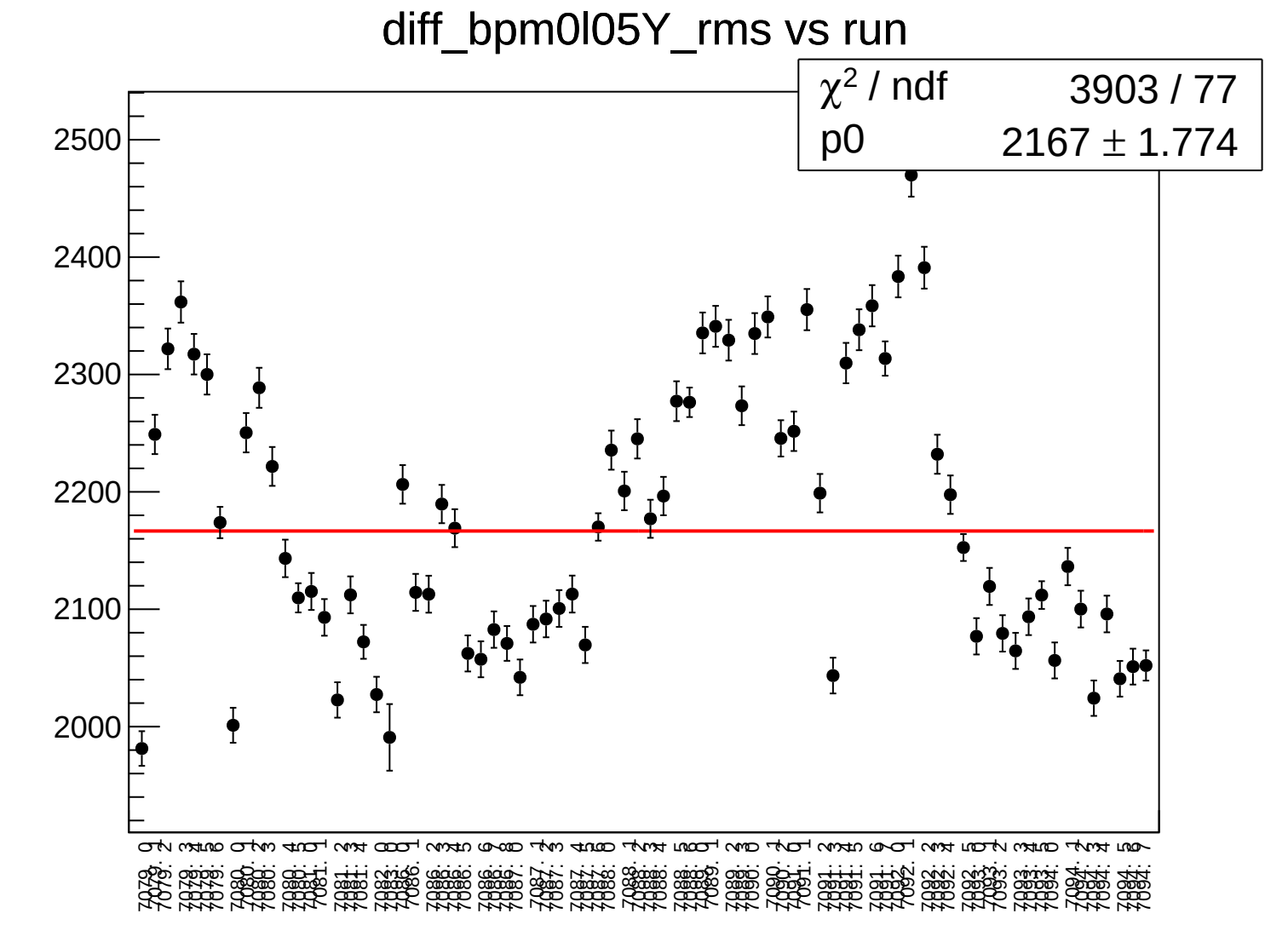

diff_bpm0l05X_mean vs run
χ² / ndf 65.27 / 77
p0 5.086 ± 7.562
200
100
0
−100
−200
pull
Entries 78
Mean 1017
Std Dev 986.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

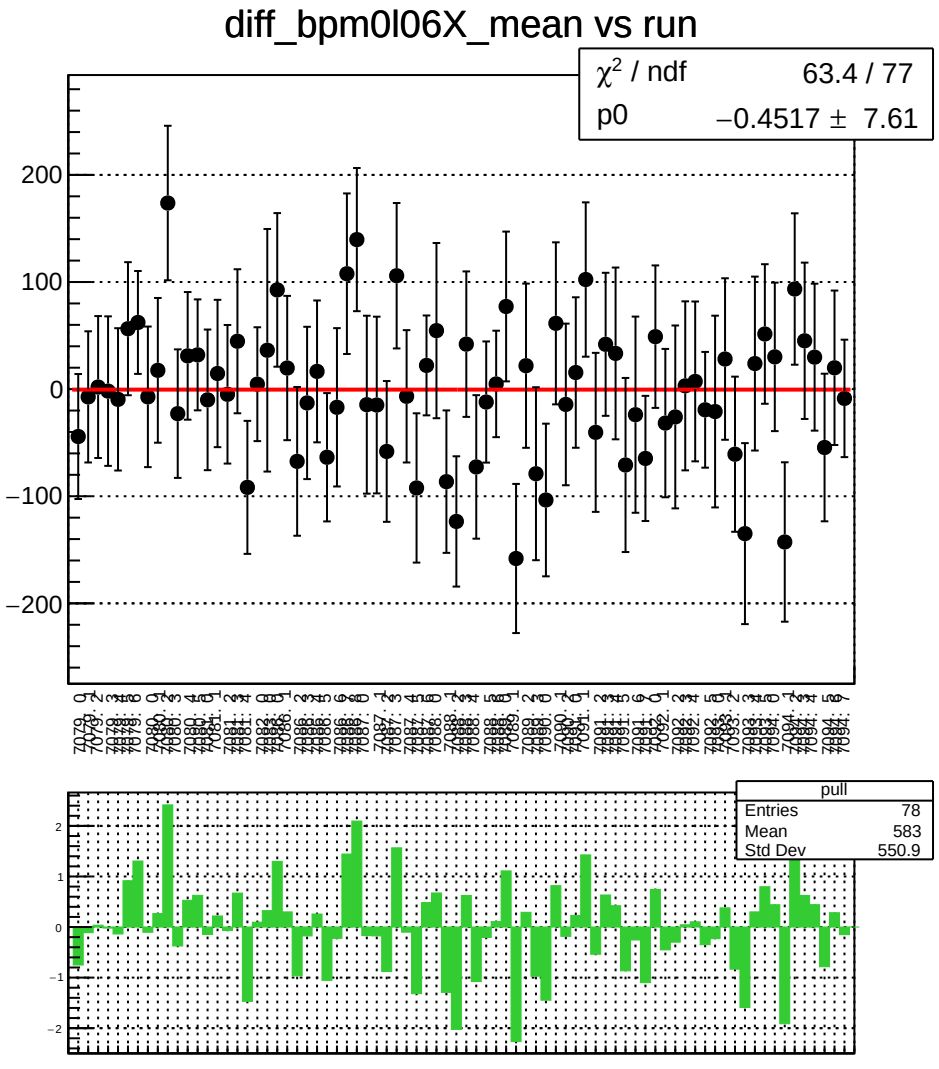

pull1D
Entries 78
Mean −0.00313
Std Dev 0.9148
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

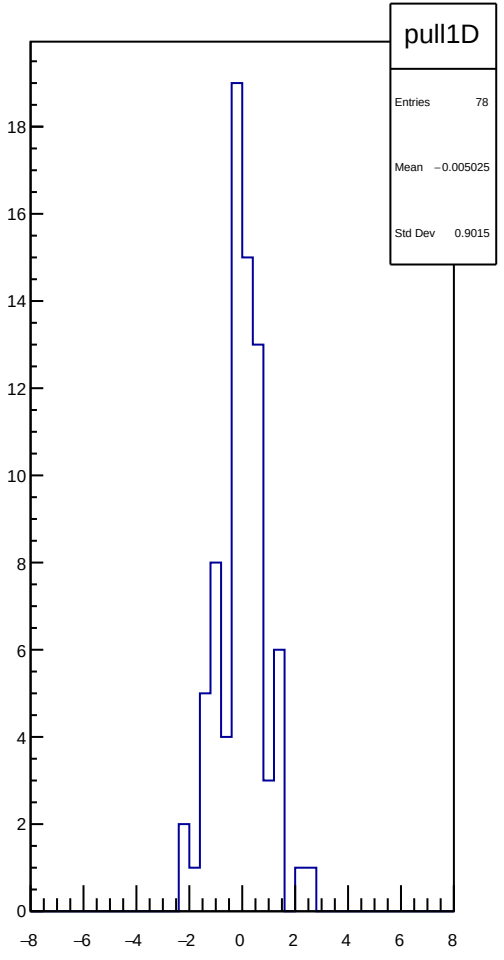

diff_bpm0l05X_rms vs run
χ² / ndf 1.451e+04 / 77
p0 6507 ± 5.347
8500
8000
7500
7000
6500
6000
5500
5000

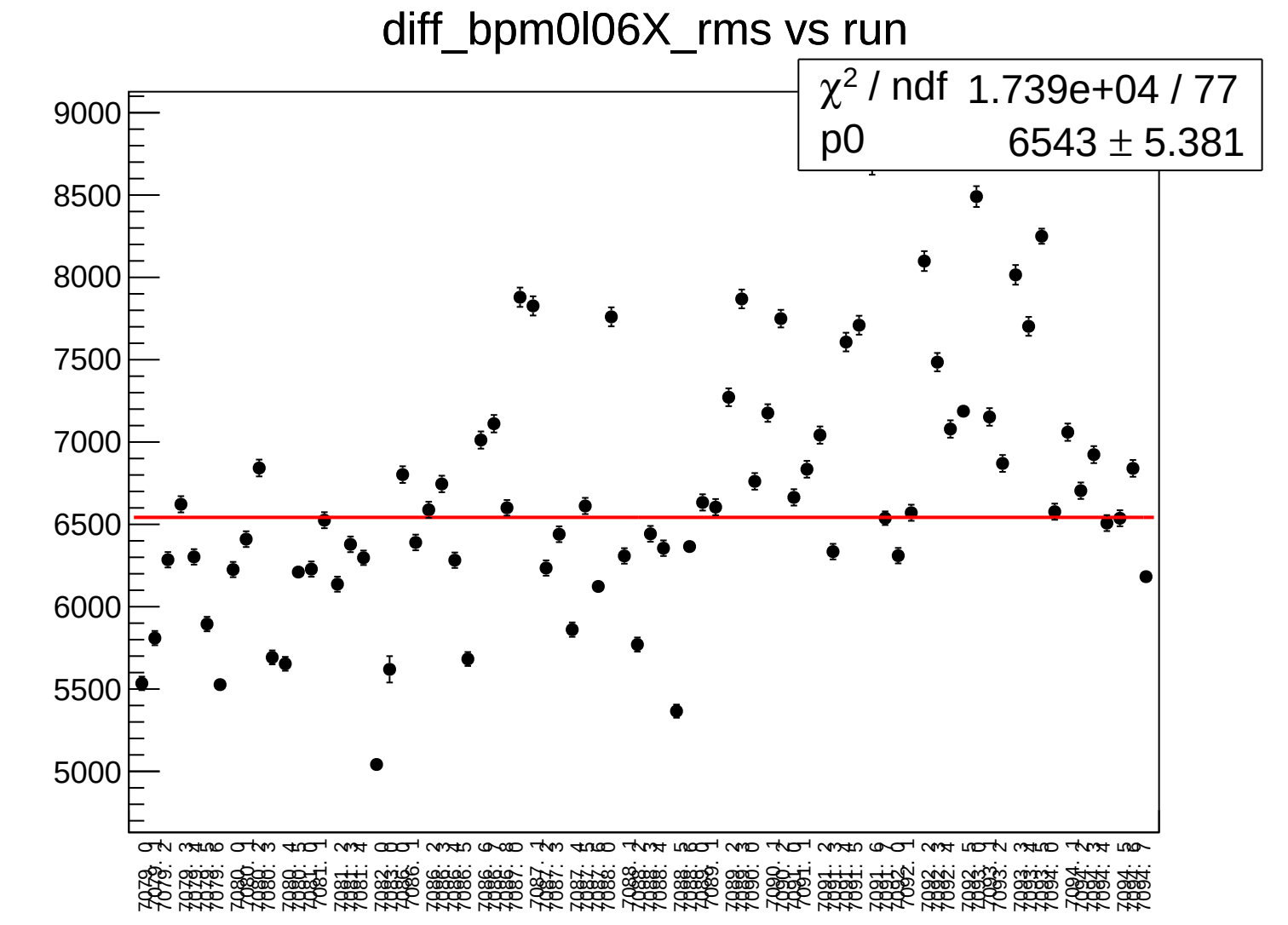

diff_bpm0l05Y_mean vs run
χ² / ndf 92.48 / 77
p0 13.65 ± 2.509
pull
Entries 78
Mean −205.9
Std Dev 243.5

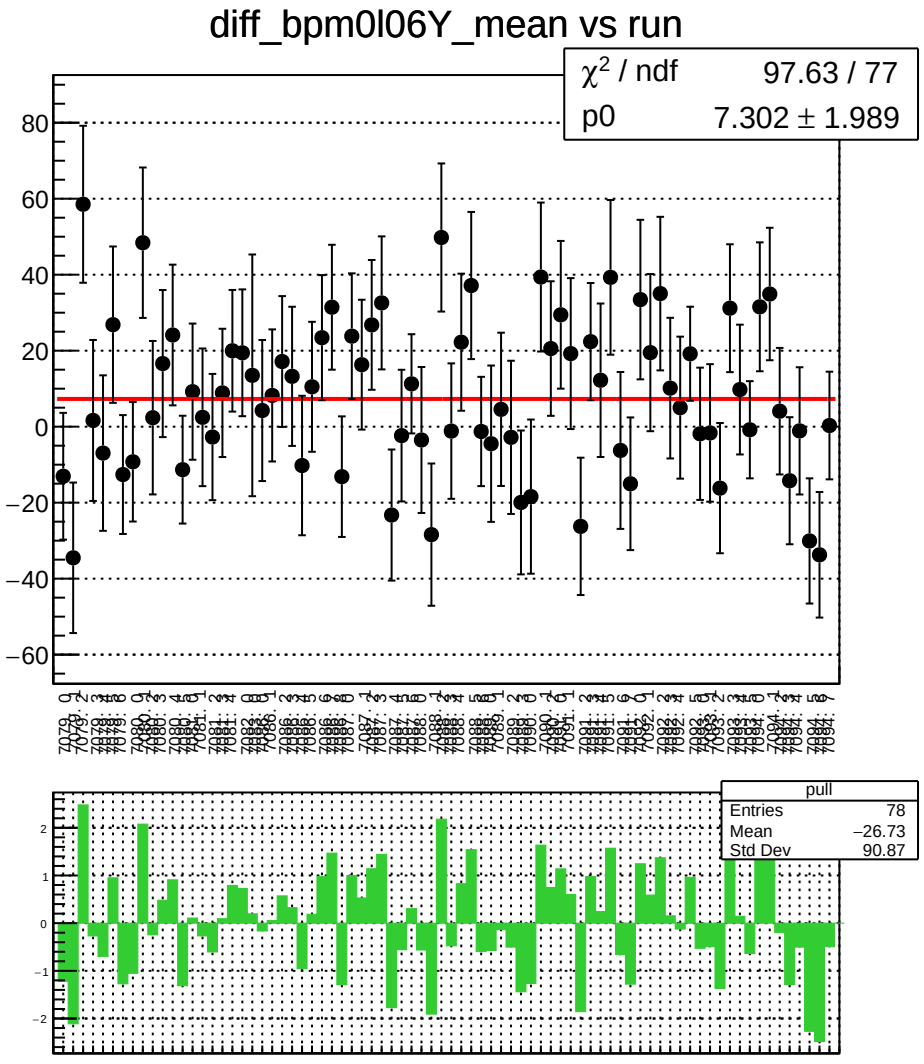

pull1D
Entries 78
Mean 0.006484
Std Dev 1.089

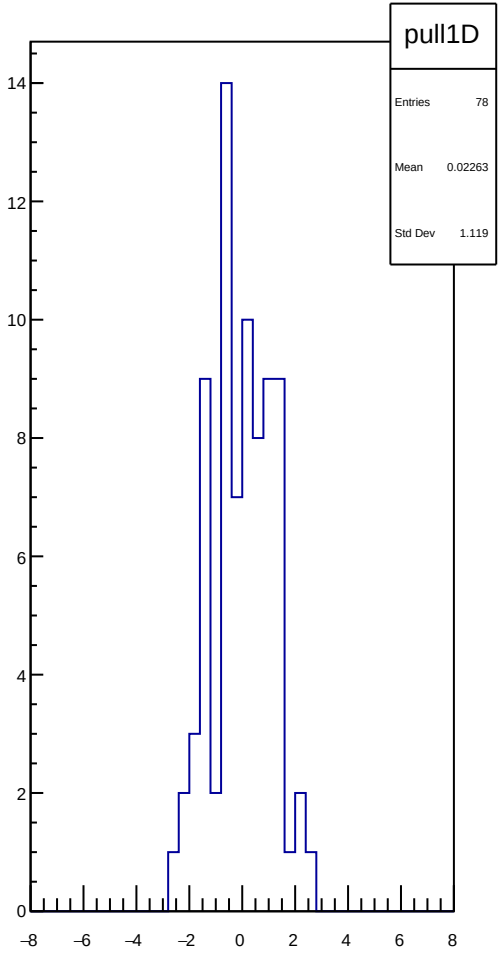

diff_bpm0l05Y_rms vs run
χ² / ndf 3903 / 77
p0 2167 ± 1.774
2500
2400
2300
2200
2100
2000

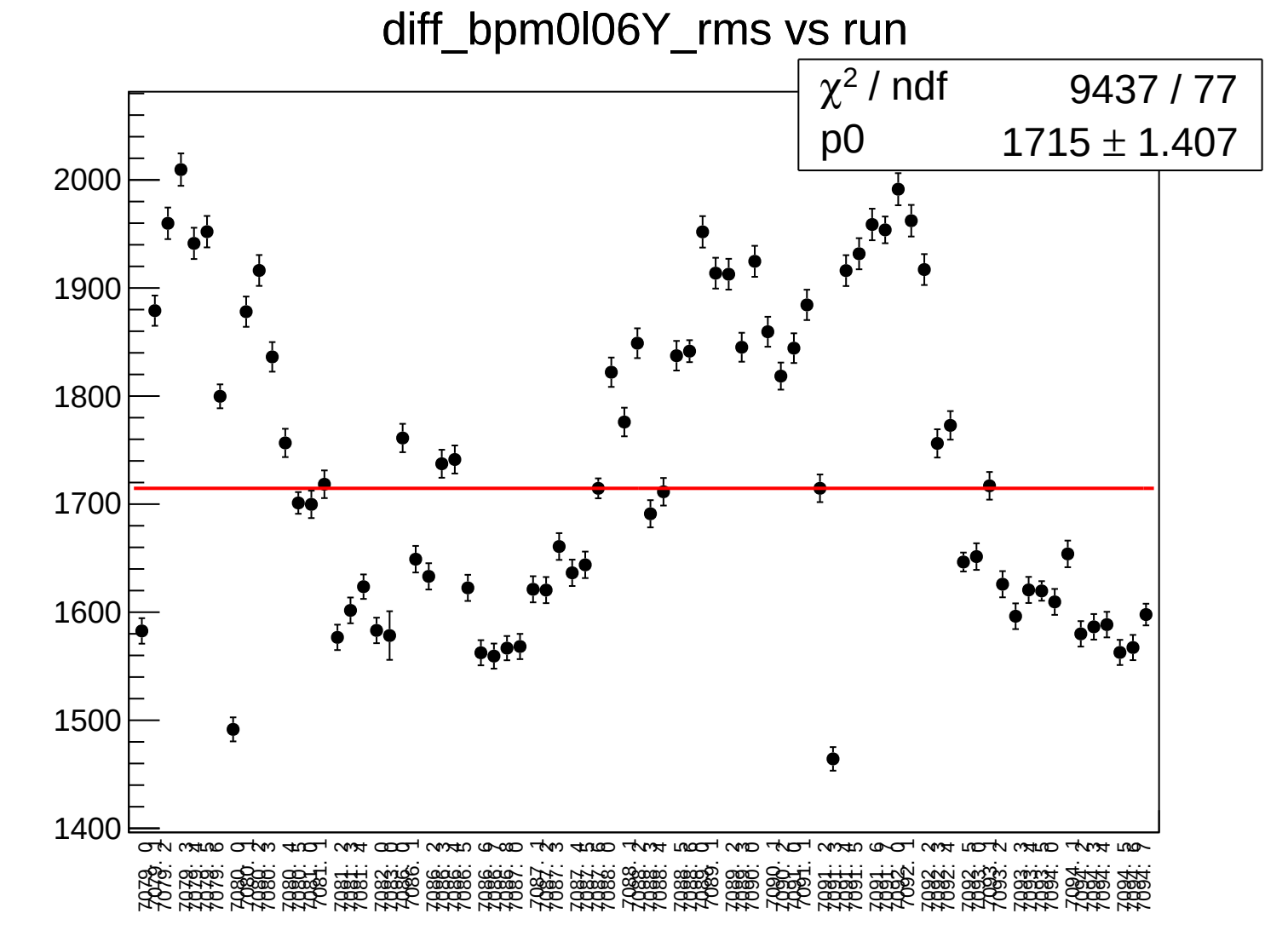

diff_bpm0l06X_mean vs run
χ^2 / ndf 63.4 / 77
p0 −0.4517 ± 7.61
200
100
0
−100
−200
pull
Entries 78
Mean 583
Std Dev 550.9
2
1
0
−1
−2

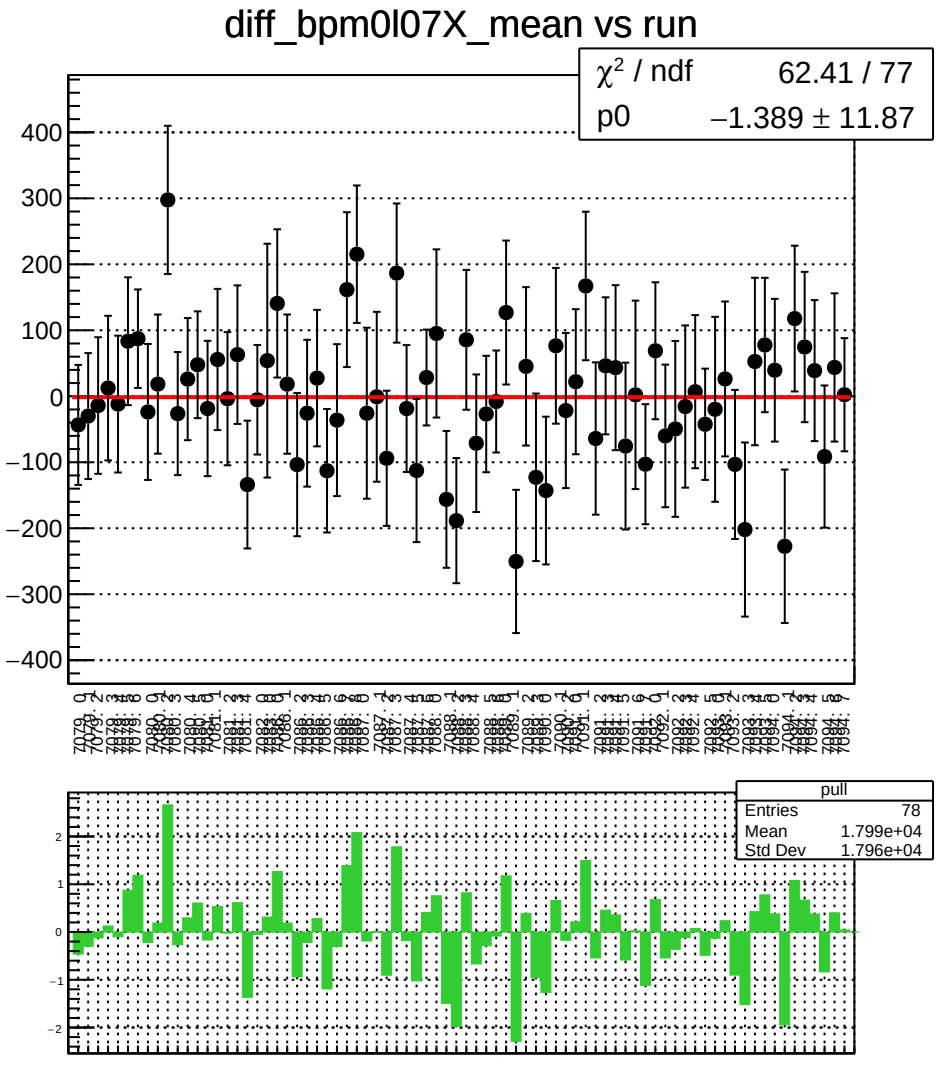

pull1D
Entries 78
Mean −0.005025
Std Dev 0.9015
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

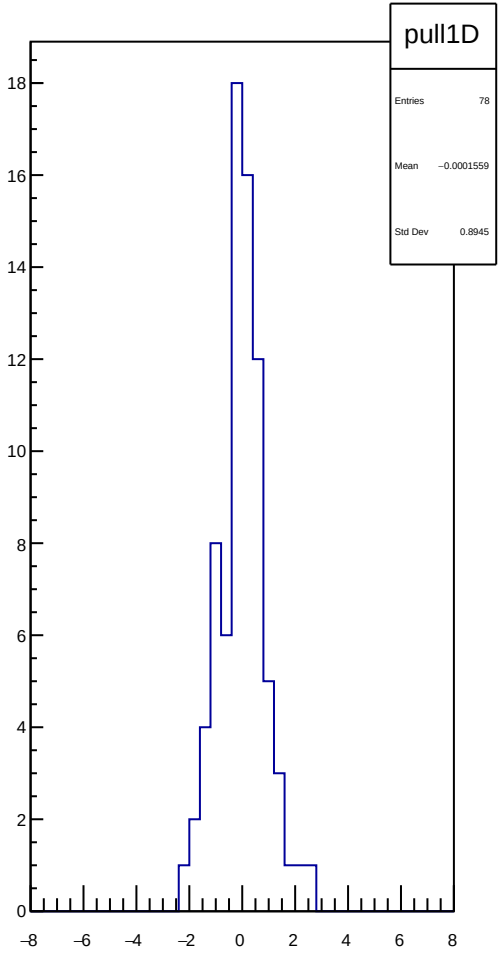

diff_bpm0l06X_rms vs run
χ² / ndf 1.739e+04 / 77
p0 6543 ± 5.381
9000
8500
8000
7500
7000
6500
6000
5500
5000

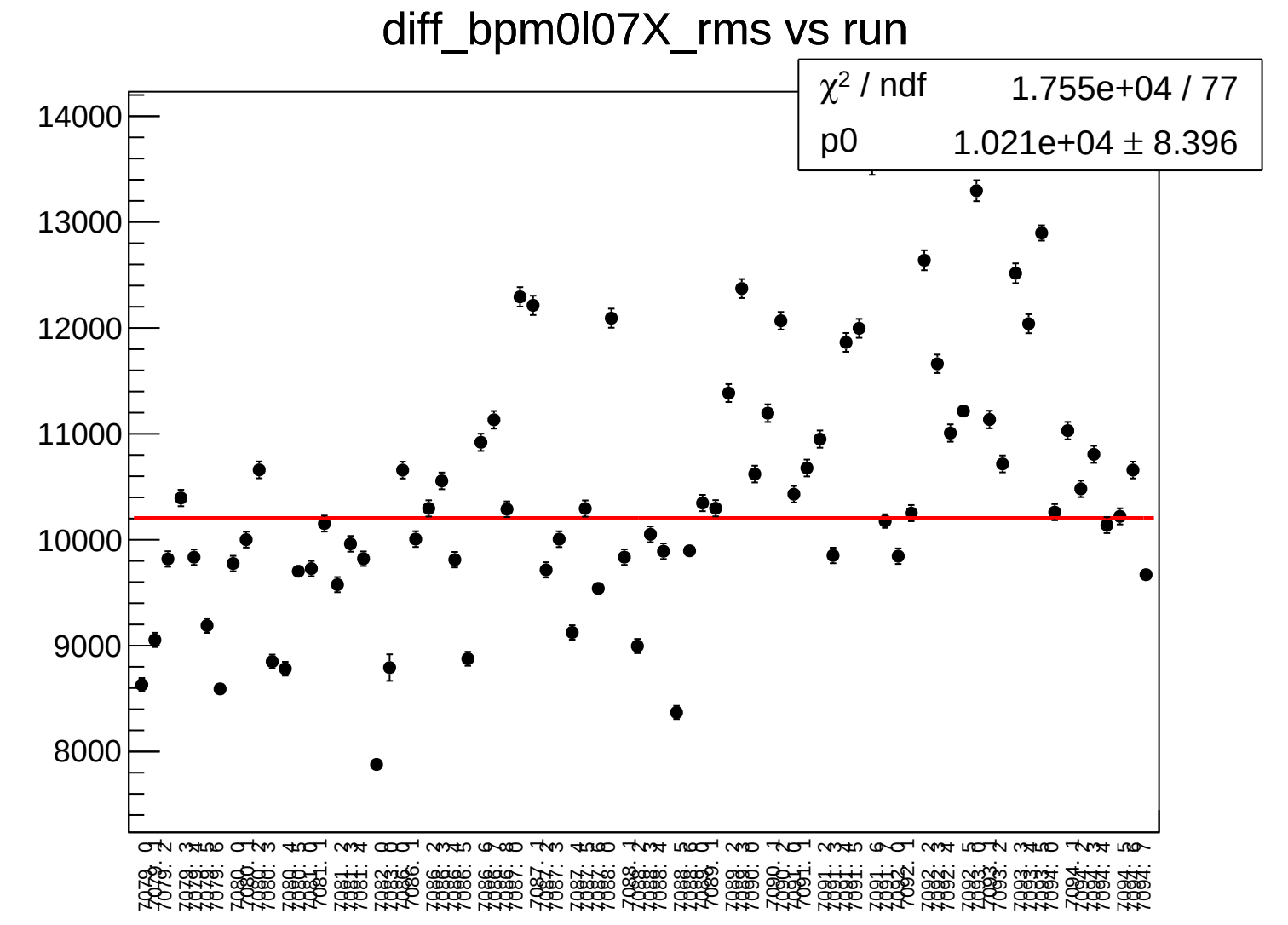

diff_bpm0l06Y_mean vs run
χ² / ndf 97.63 / 77
p0 7.302 ± 1.989
pull
Entries 78
Mean −26.73
Std Dev 90.87

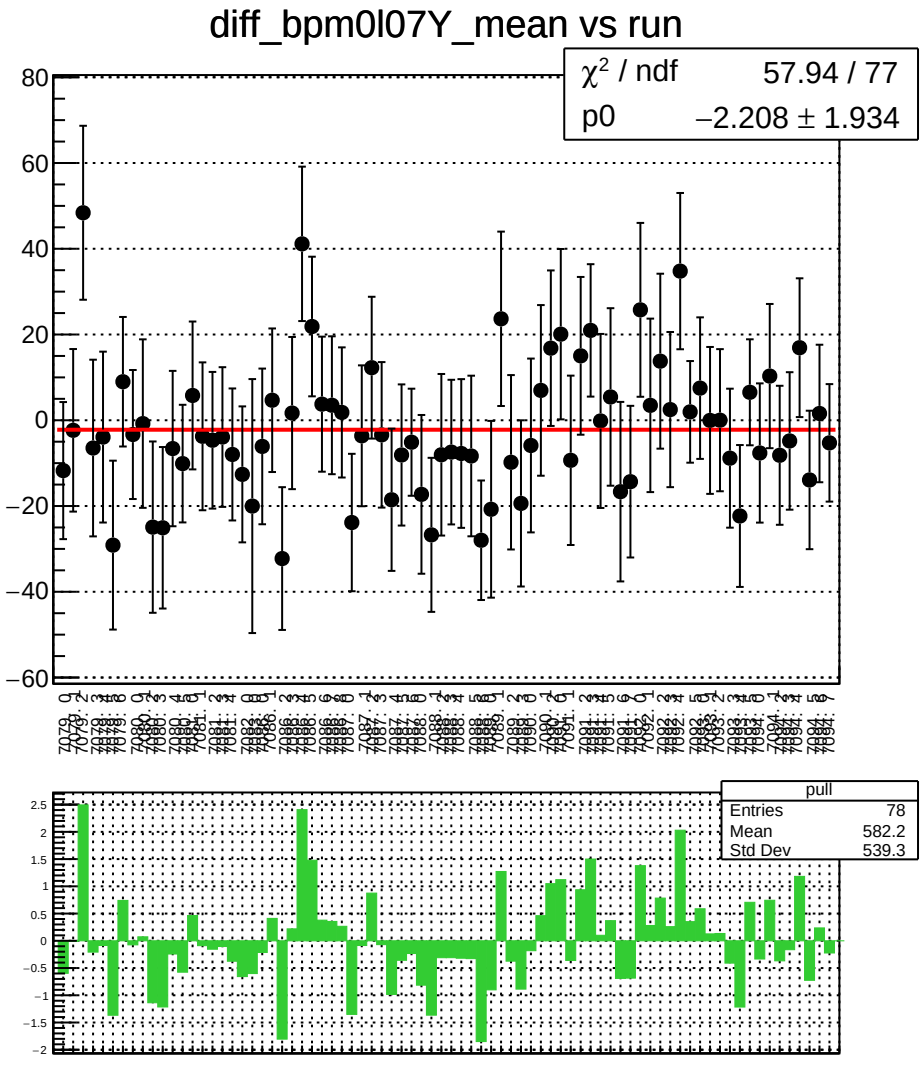

pull1D
Entries 78
Mean 0.02263
Std Dev 1.119

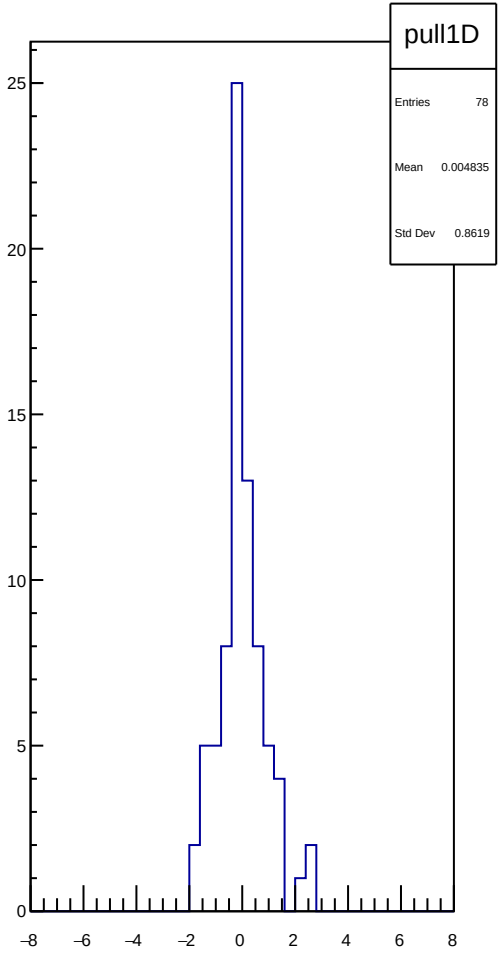

diff_bpm0l06Y_rms vs run
χ² / ndf 9437 / 77
p0 1715 ± 1.407
2000
1900
1800
1700
1600
1500
1400

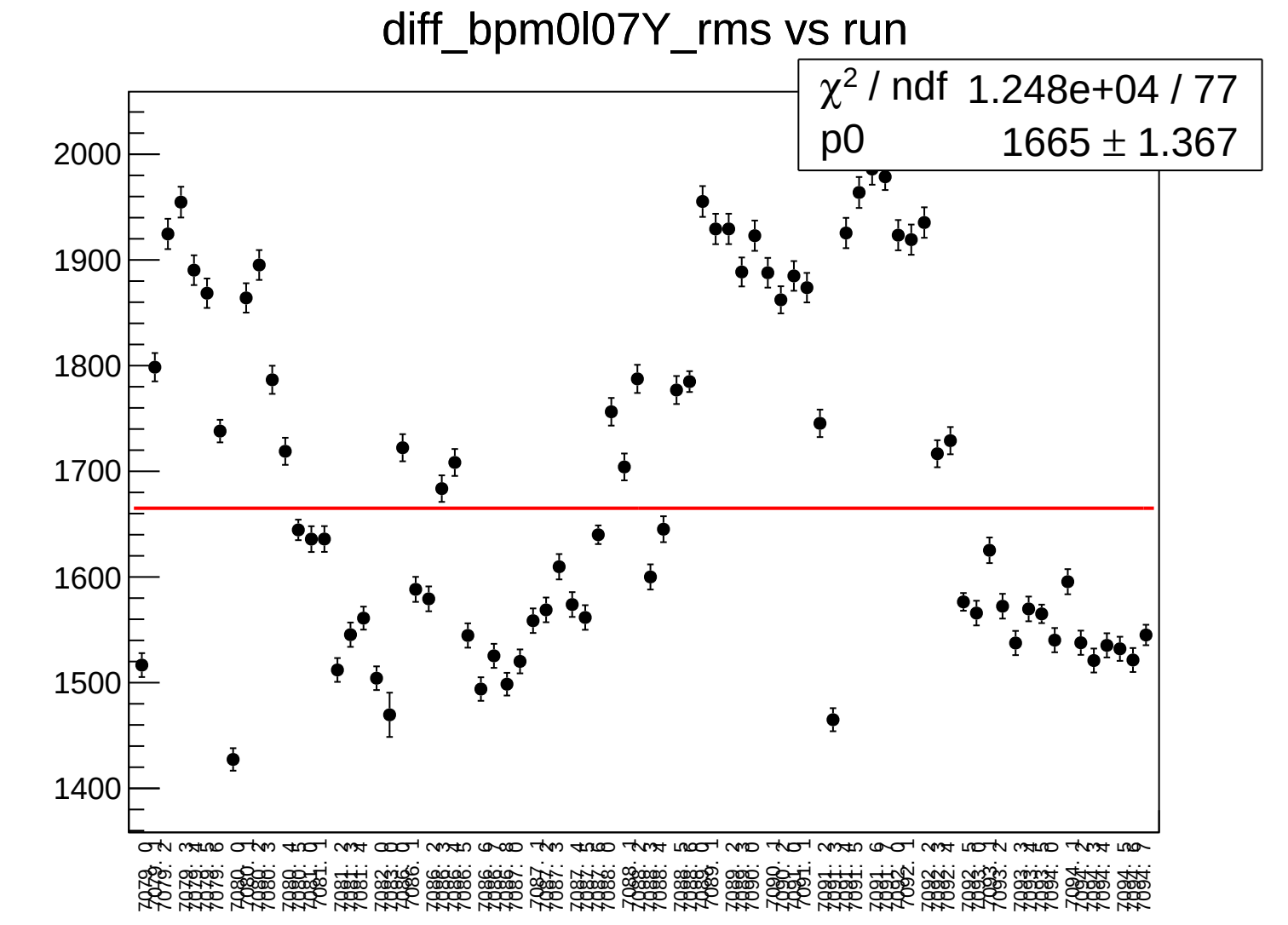

diff_bpm0l07X_mean vs run
χ² / ndf 62.41 / 77
p0 −1.389 ± 11.87
pull
Entries 78
Mean 1.799e+04
Std Dev 1.796e+04

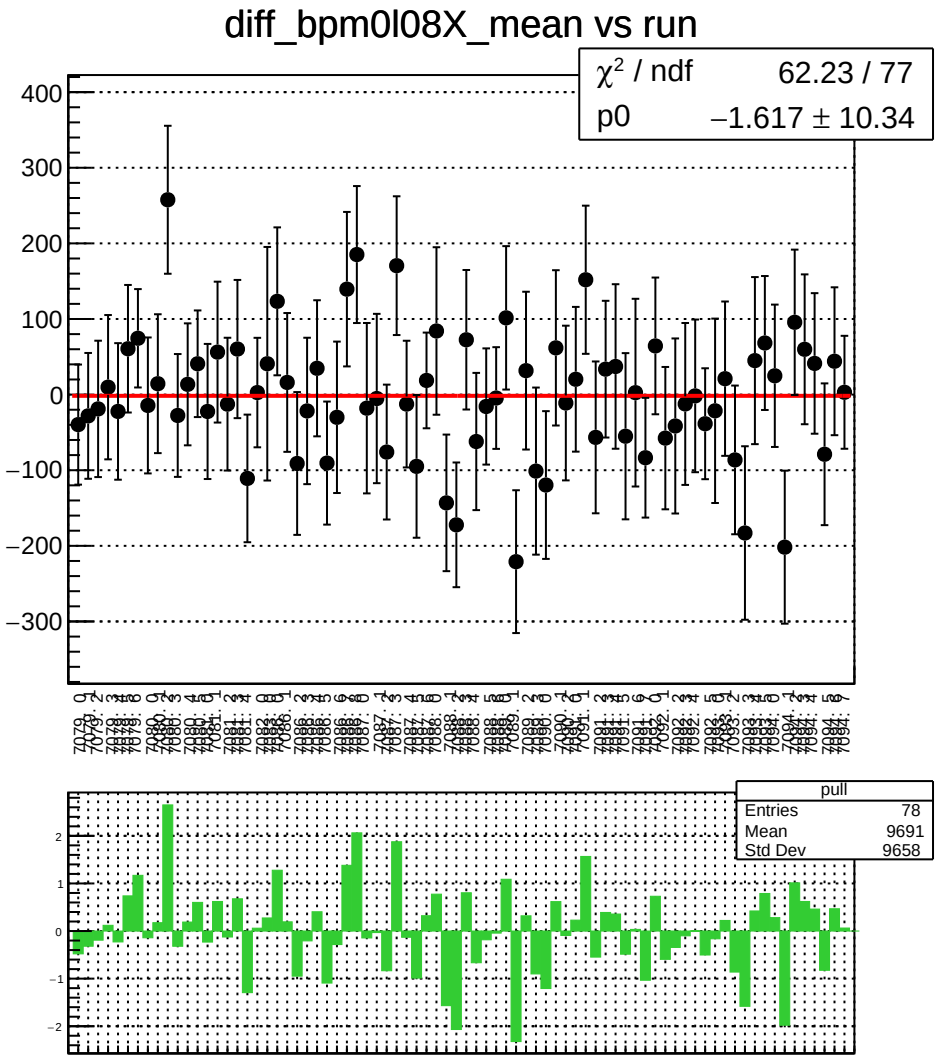

pull1D
Entries 78
Mean −0.0001559
Std Dev 0.8945

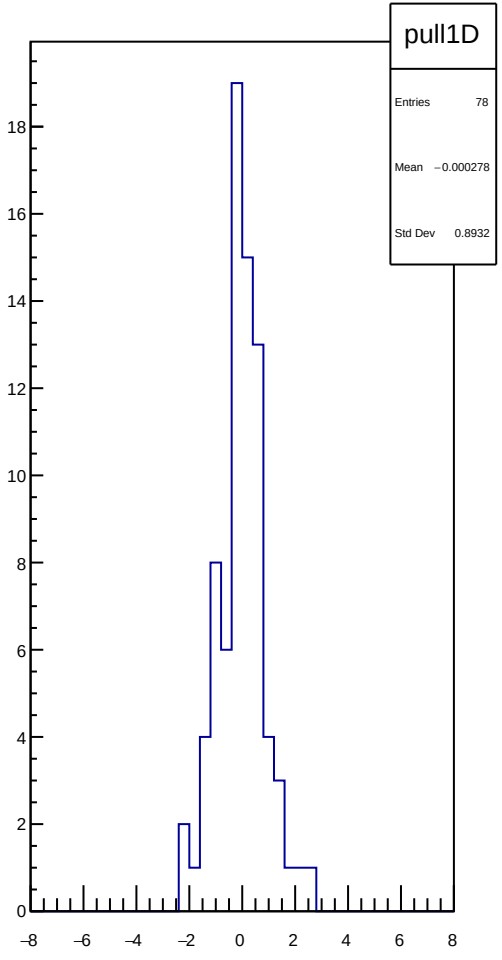

diff_bpm0l07X_rms vs run
χ² / ndf 1.755e+04 / 77
p0 1.021e+04 ± 8.396
14000
13000
12000
11000
10000
9000
8000

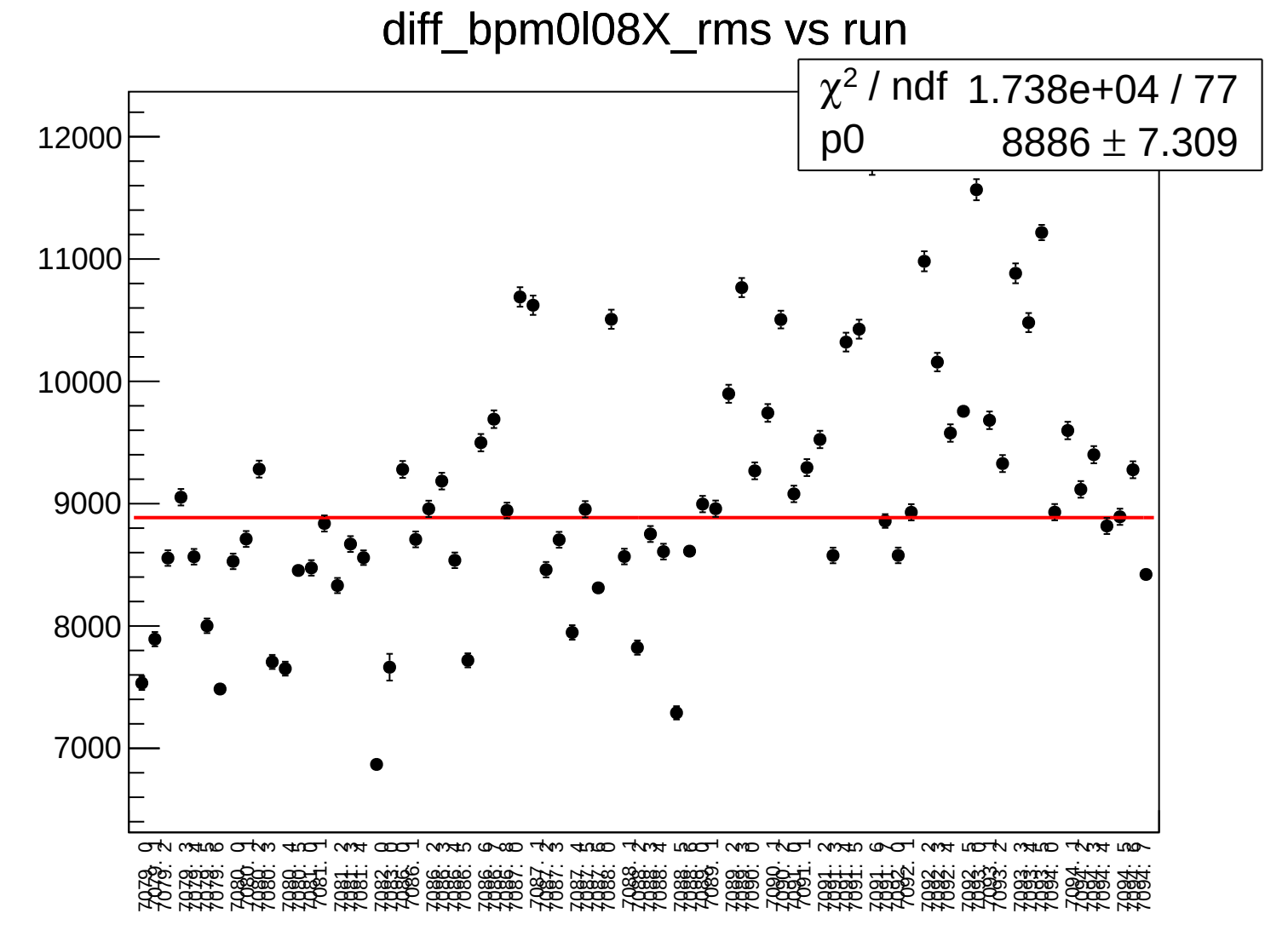

diff_bpm0l07Y_mean vs run
χ² / ndf 57.94 / 77
p0 −2.208 ± 1.934
pull
Entries 78
Mean 582.2
Std Dev 539.3

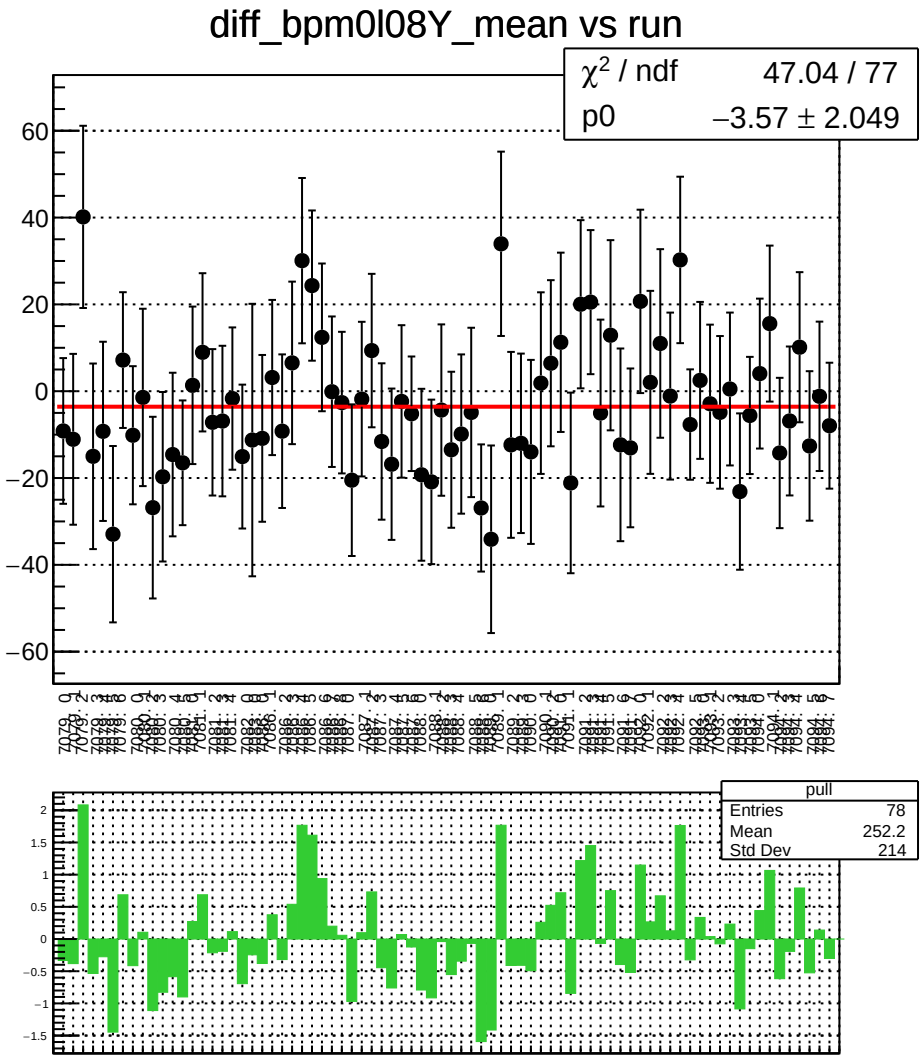

pull1D
Entries 78
Mean 0.004835
Std Dev 0.8619

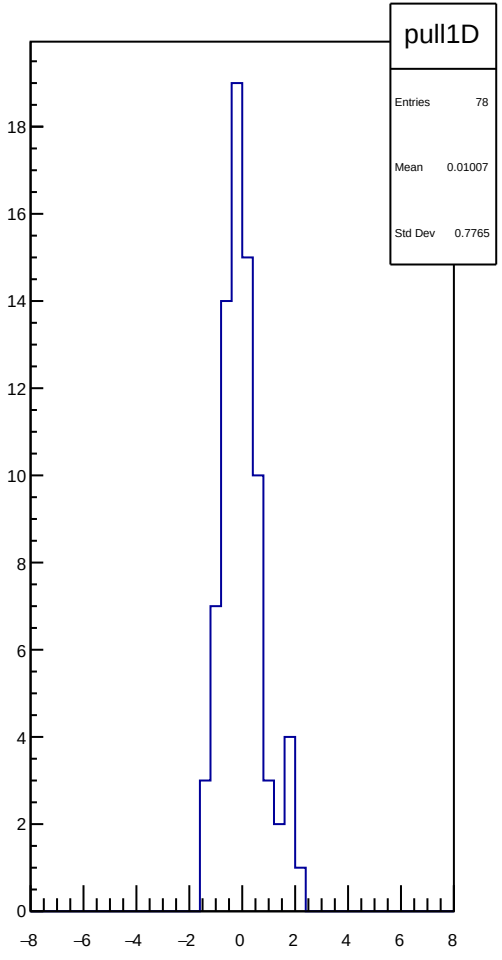

diff_bpm0l07Y_rms vs run
χ² / ndf 1.248e+04 / 77
p0 1665 ± 1.367
2000
1900
1800
1700
1600
1500
1400

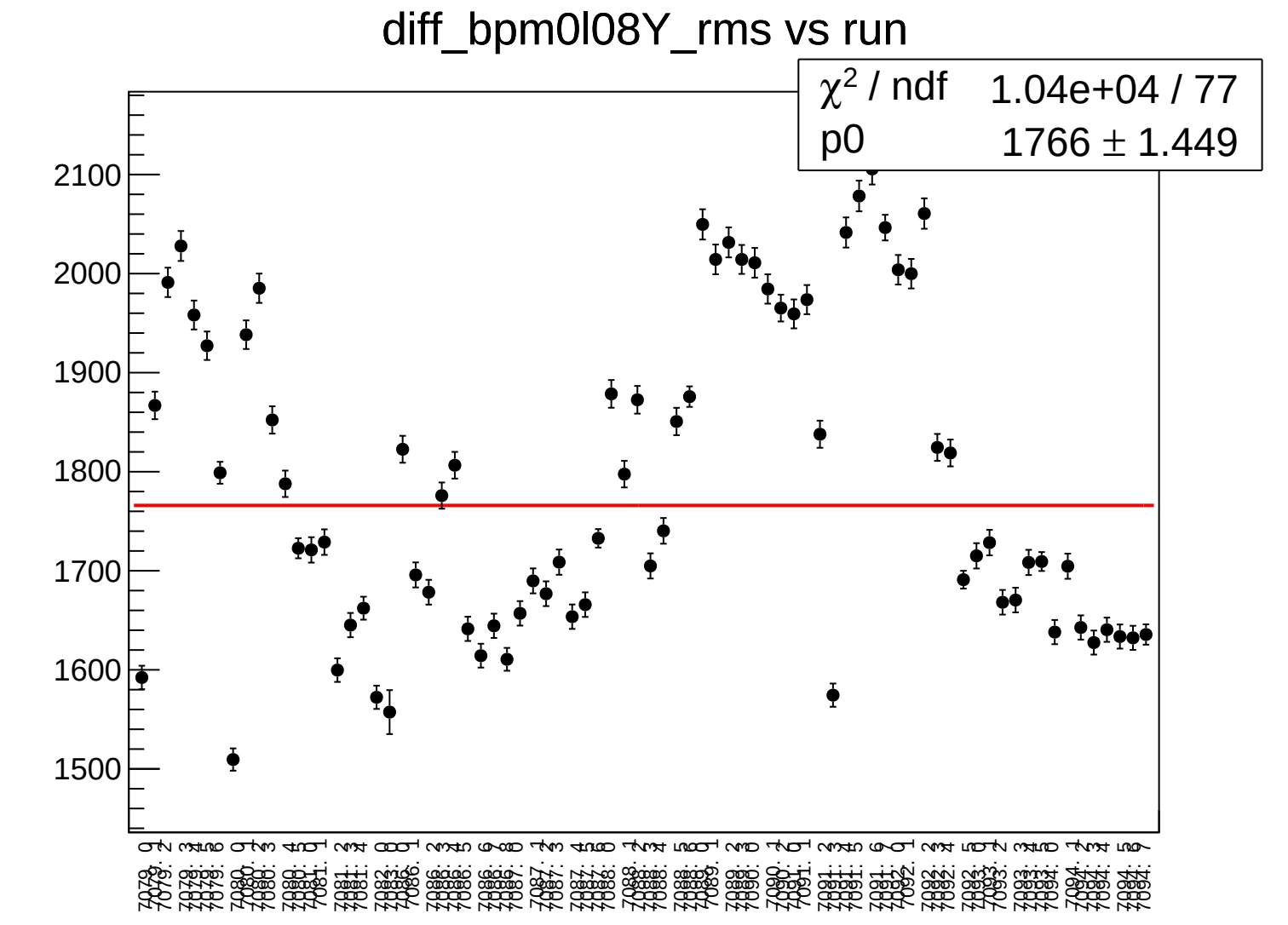

diff_bpm0l08X_mean vs run
χ² / ndf 62.23 / 77
p0 −1.617 ± 10.34
pull
Entries 78
Mean 9691
Std Dev 9658

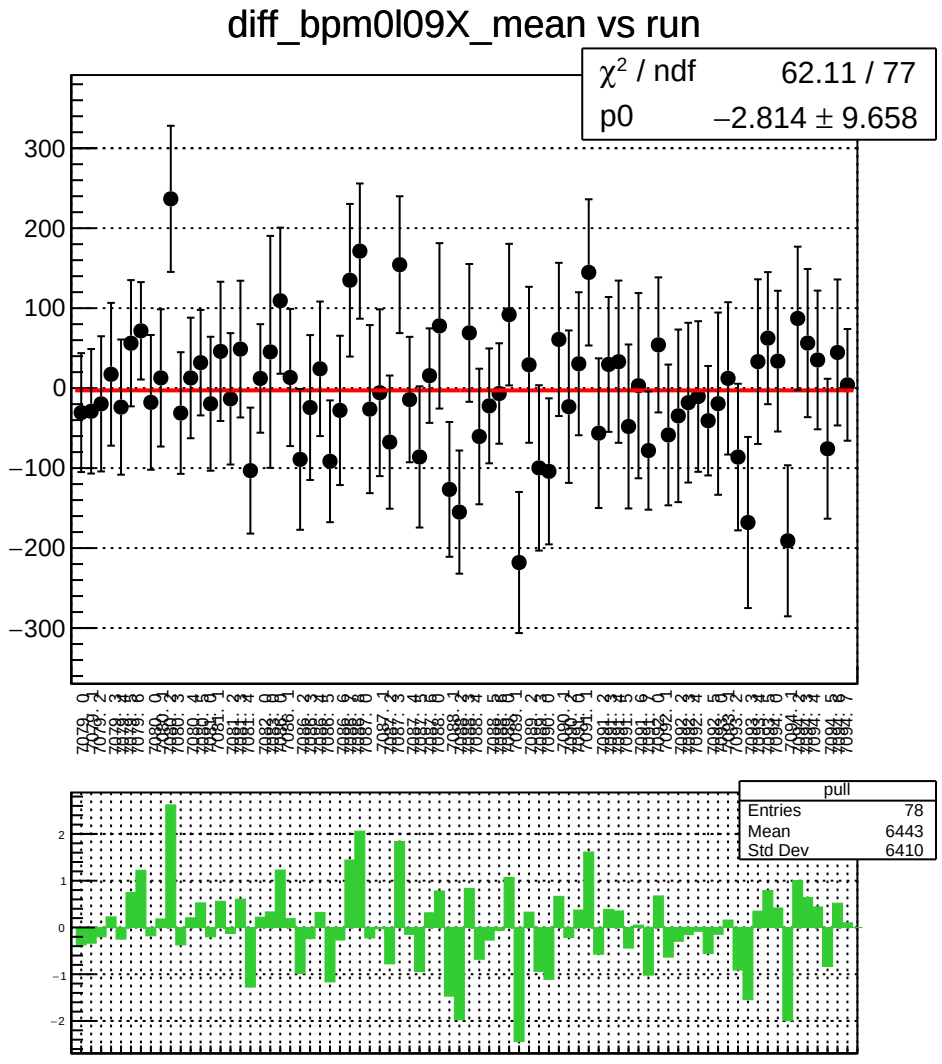

pull1D
Entries 78
Mean −0.000278
Std Dev 0.8932

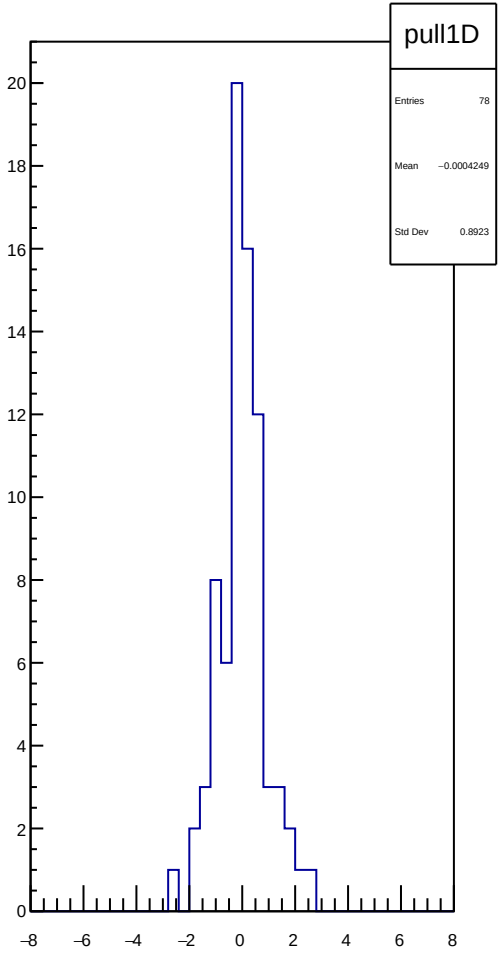

diff_bpm0l08X_rms vs run
χ² / ndf 1.738e+04 / 77
p0 8886 ± 7.309
12000
11000
10000
9000
8000
7000

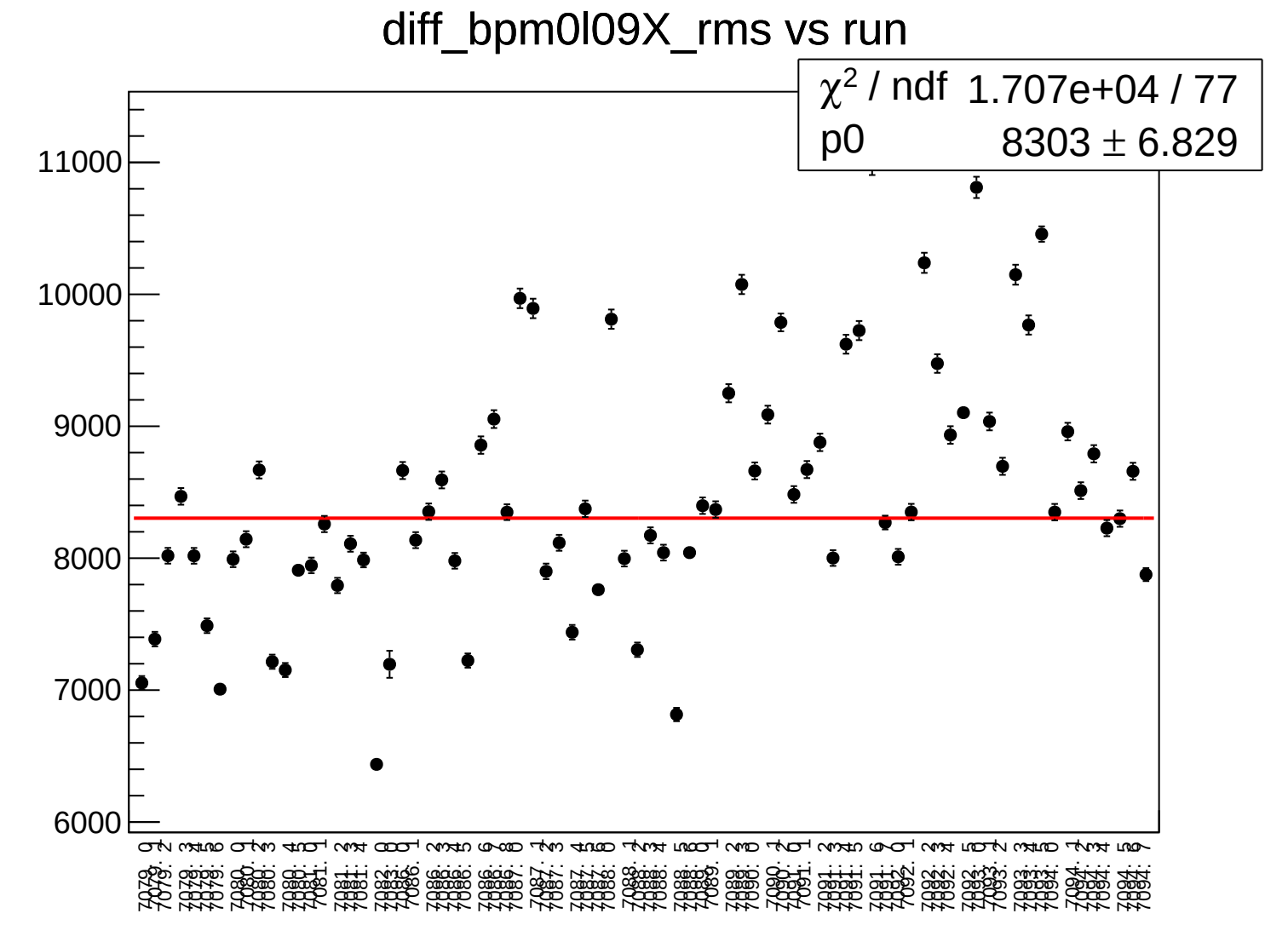

diff_bpm0l08Y_mean vs run
χ^2 / ndf 47.04 / 77
p0 −3.57 ± 2.049
pull
Entries 78
Mean 252.2
Std Dev 214

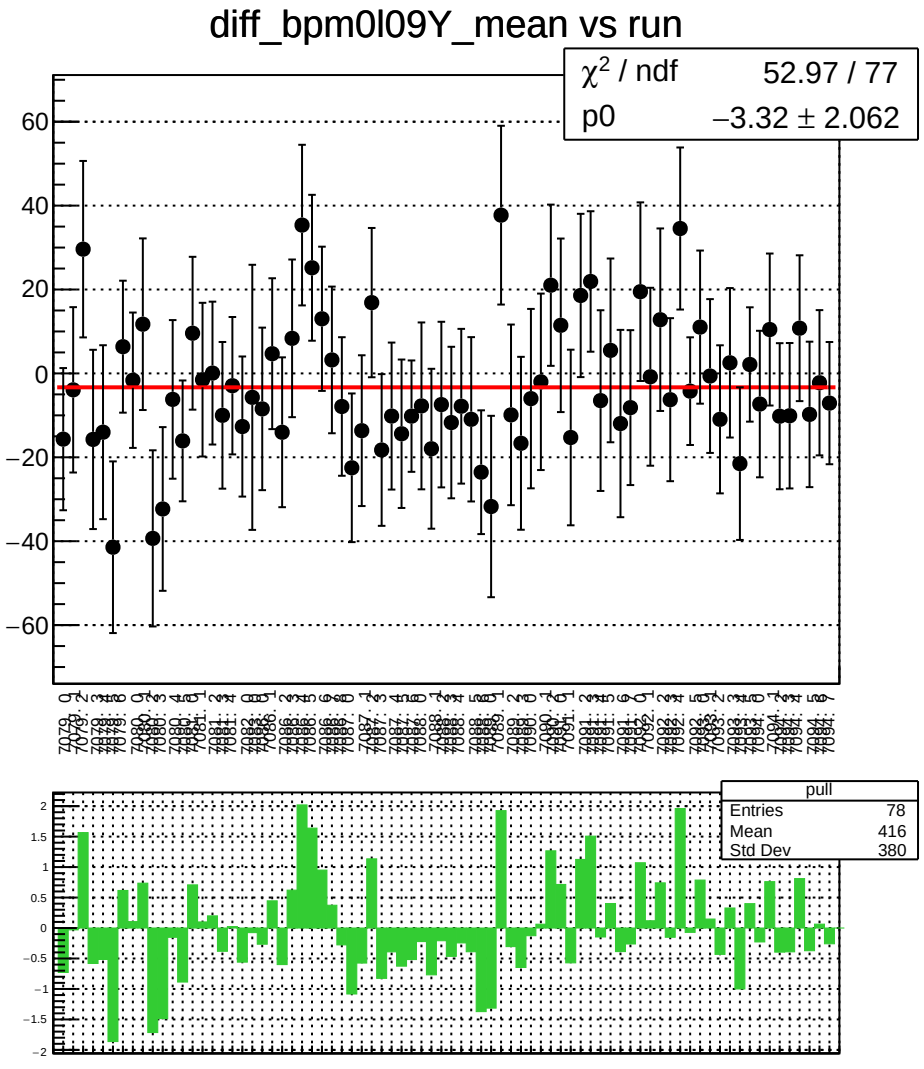

pull1D
Entries 78
Mean 0.01007
Std Dev 0.7765

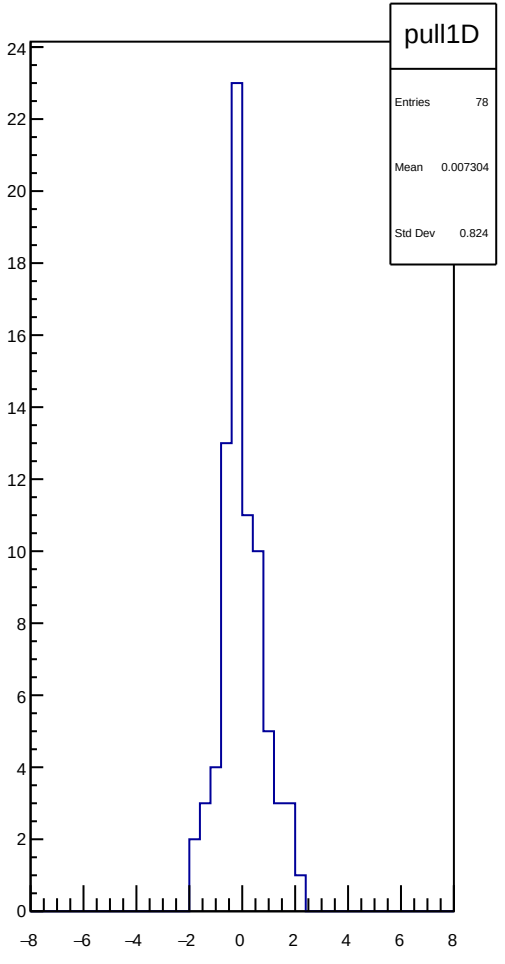

diff_bpm0l08Y_rms vs run
χ² / ndf 1.04e+04 / 77
p0 1766 ± 1.449
2100
2000
1900
1800
1700
1600
1500

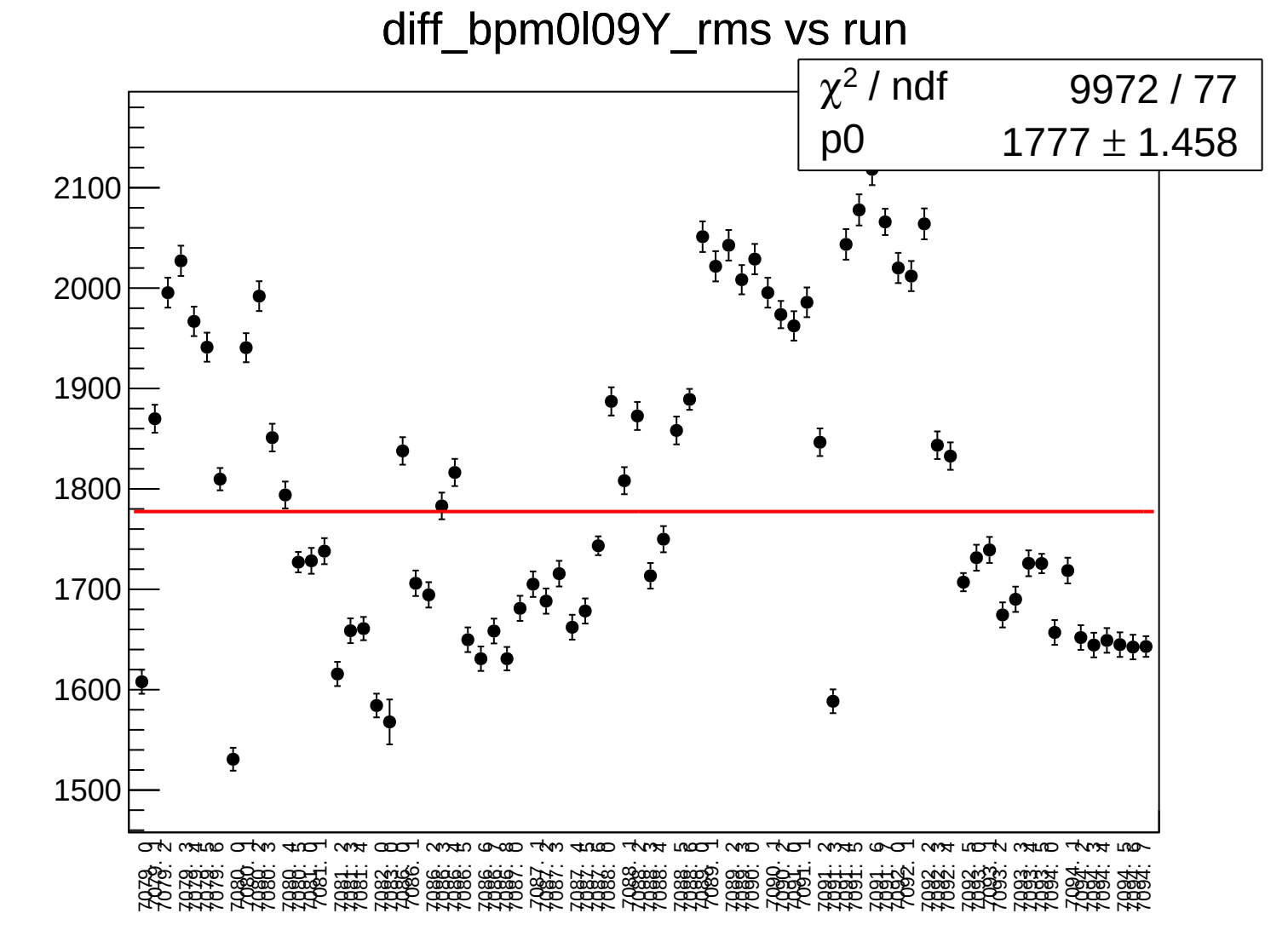

diff_bpm0l09X_mean vs run
χ² / ndf 62.11 / 77
p0 −2.814 ± 9.658
pull
Entries 78
Mean 6443
Std Dev 6410

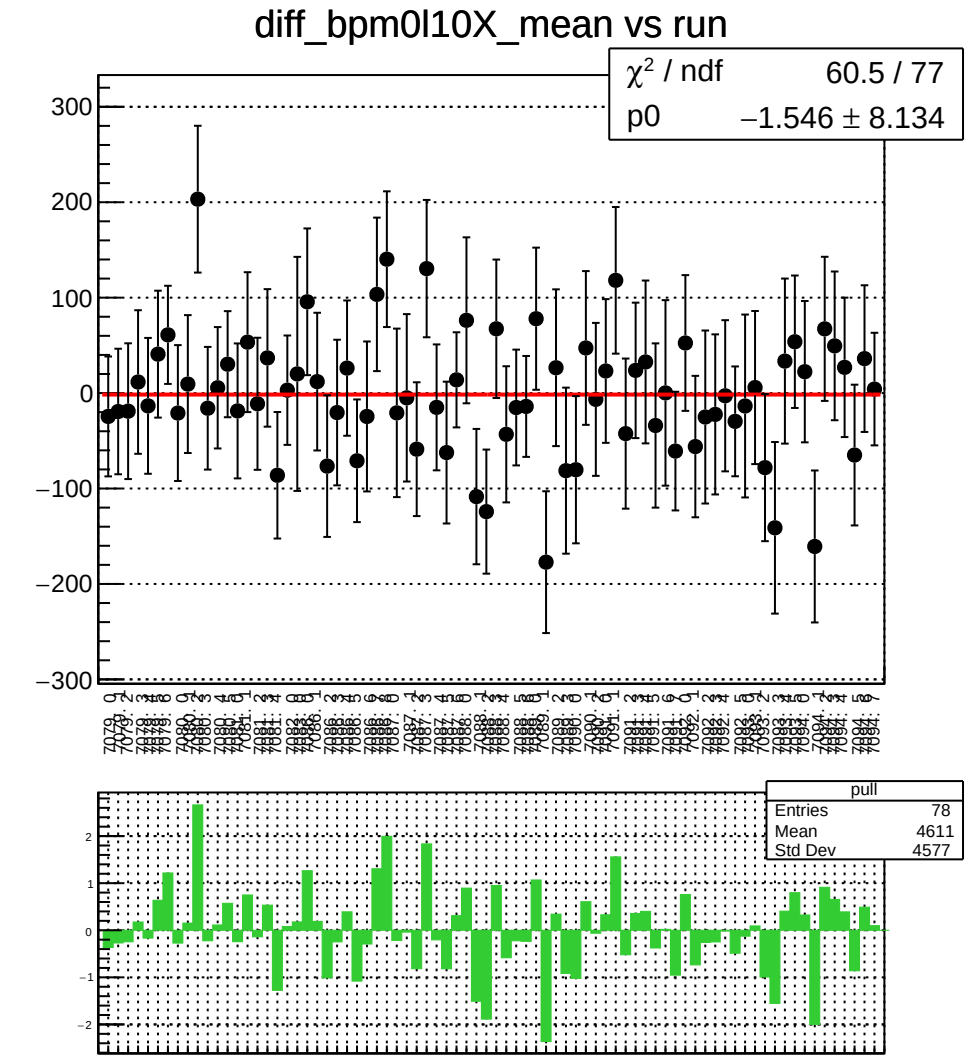

pull1D
Entries 78
Mean −0.0004249
Std Dev 0.8923

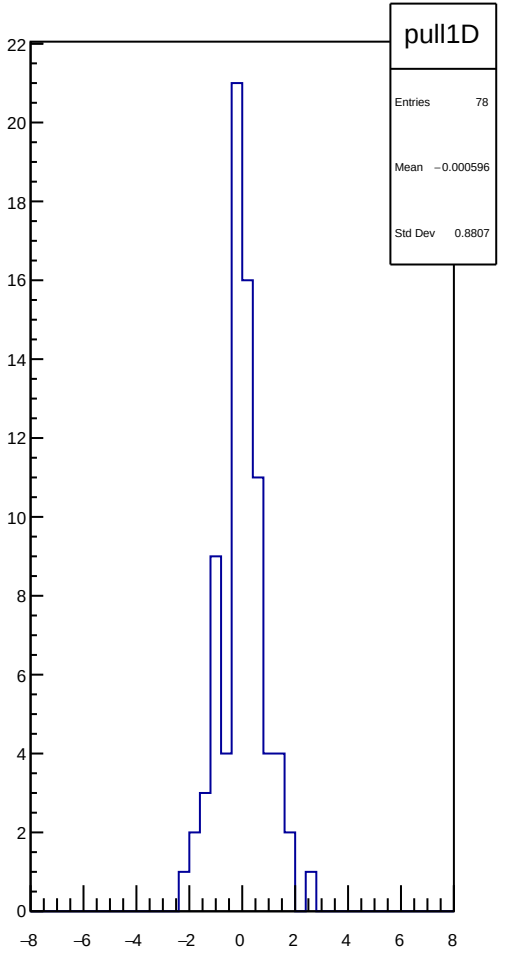

diff_bpm0l09X_rms vs run
χ² / ndf 1.707e+04 / 77
p0 8303 ± 6.829
11000
10000
9000
8000
7000
6000

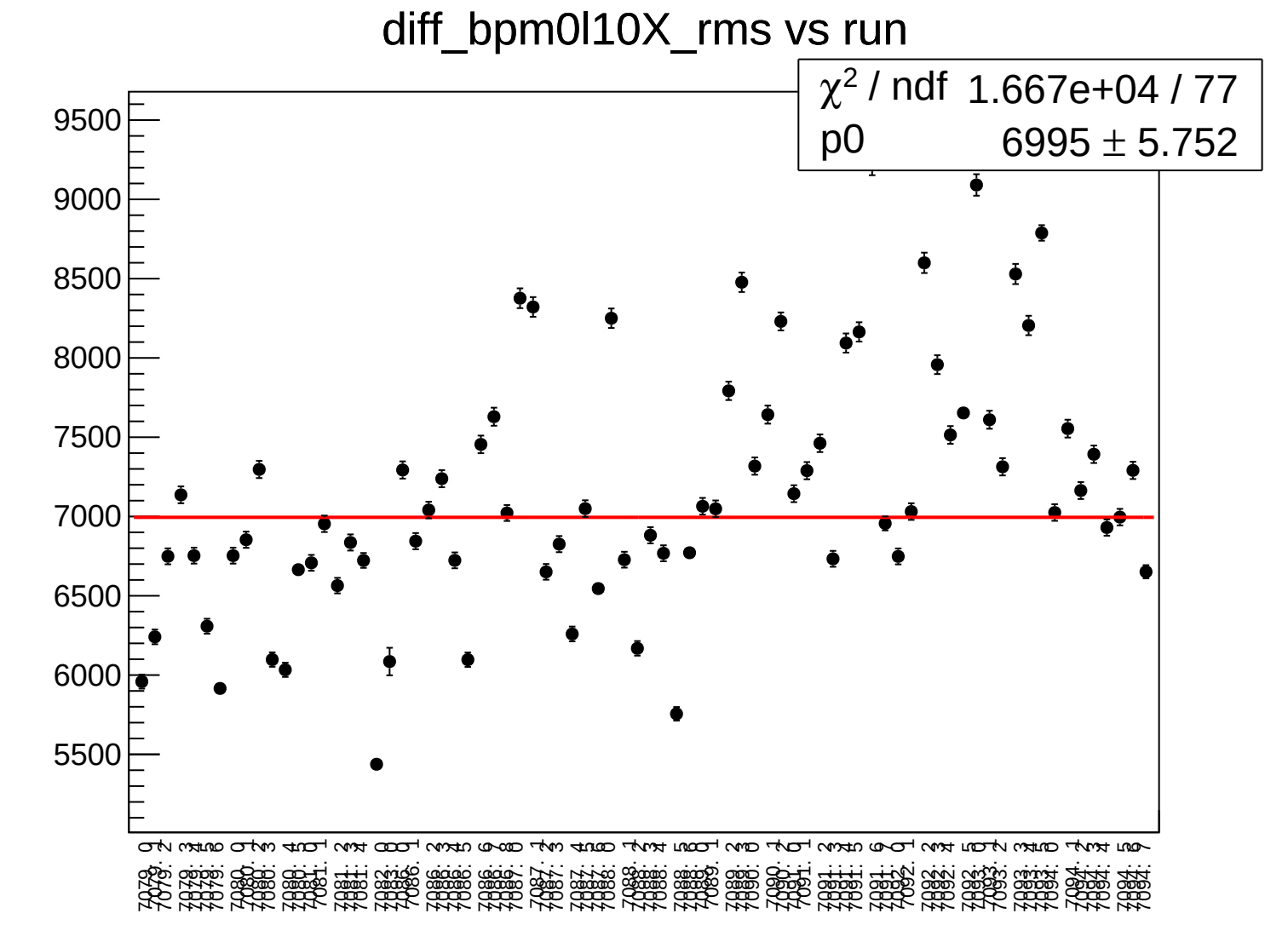

diff_bpm0l09Y_mean vs run
χ² / ndf 52.97 / 77
p0 −3.32 ± 2.062
pull
Entries 78
Mean 416
Std Dev 380

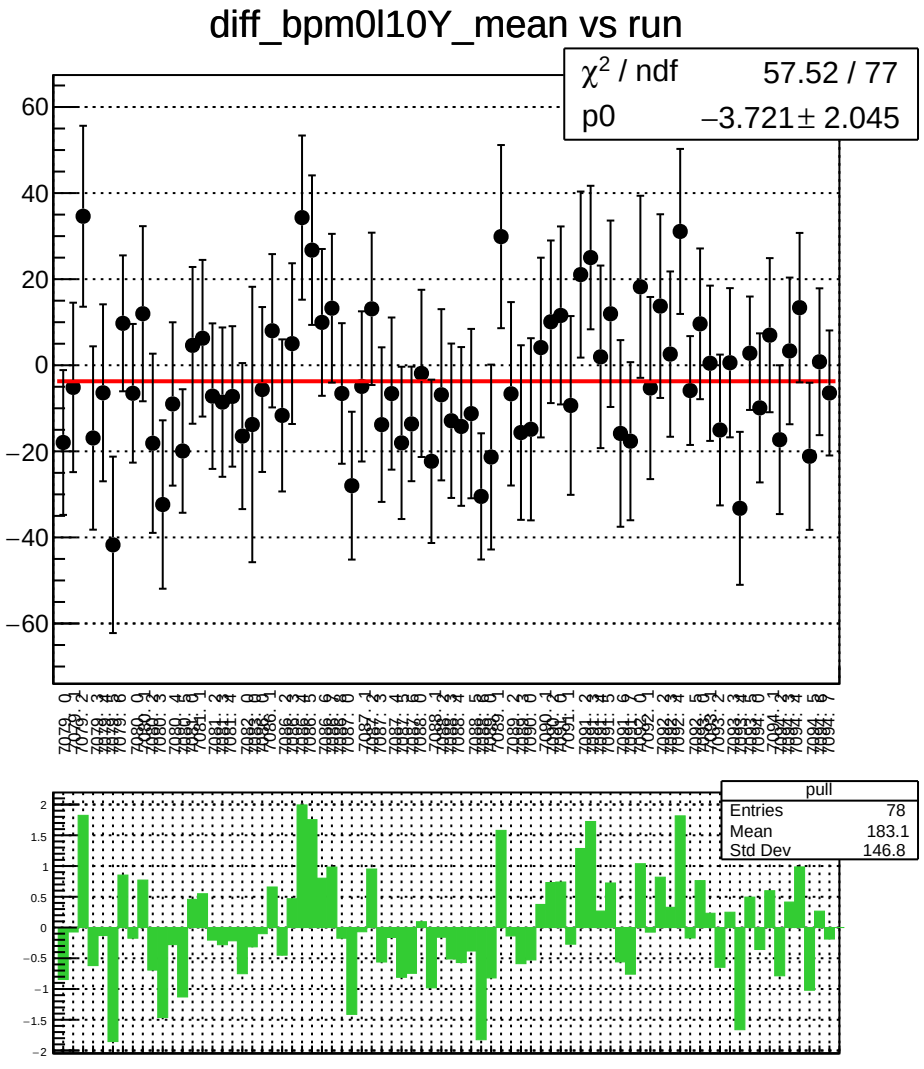

pull1D
Entries 78
Mean 0.007304
Std Dev 0.824

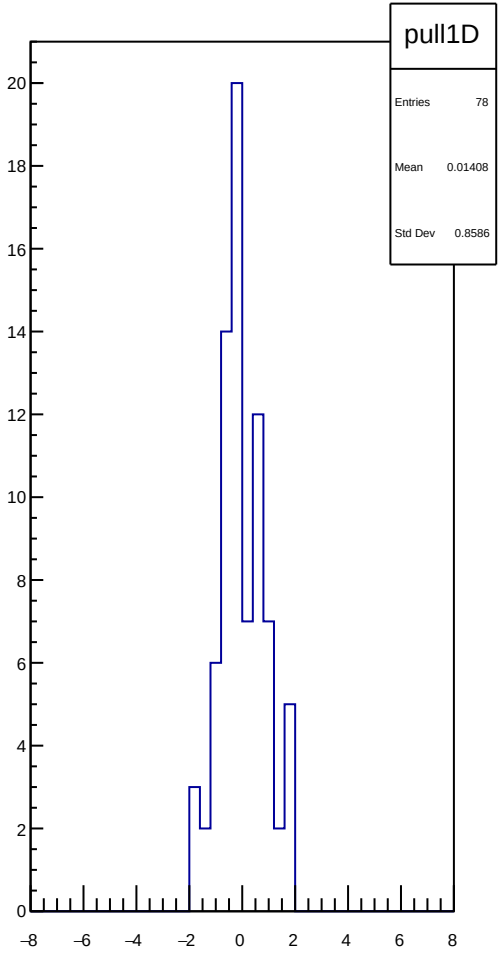

diff_bpm0l09Y_rms vs run
χ² / ndf 9972 / 77
p0 1777 ± 1.458
2100
2000
1900
1800
1700
1600
1500

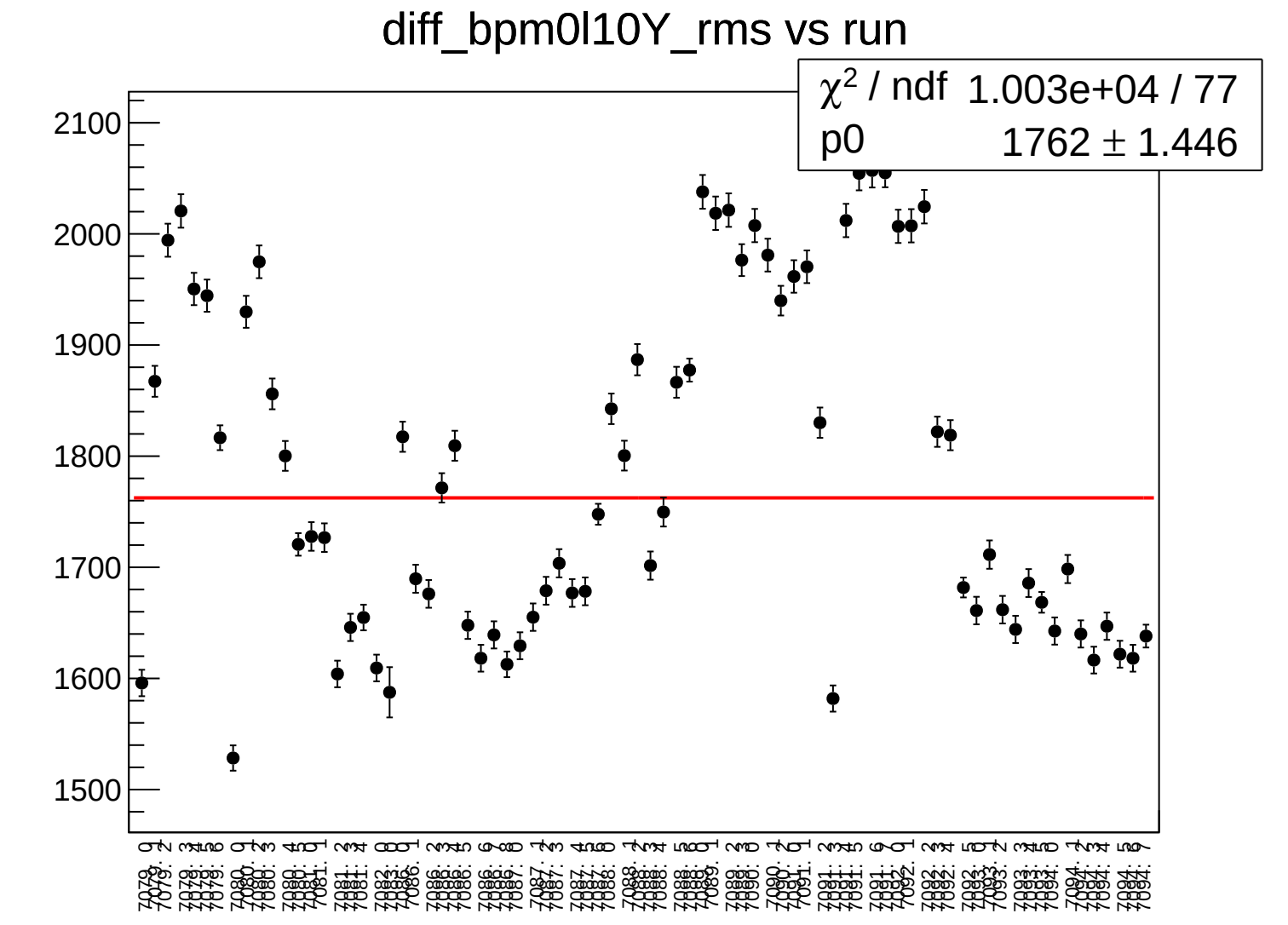

diff_bpm0l10X_mean vs run
χ² / ndf 60.5 / 77
p0 −1.546 ± 8.134
pull
Entries 78
Mean 4611
Std Dev 4577

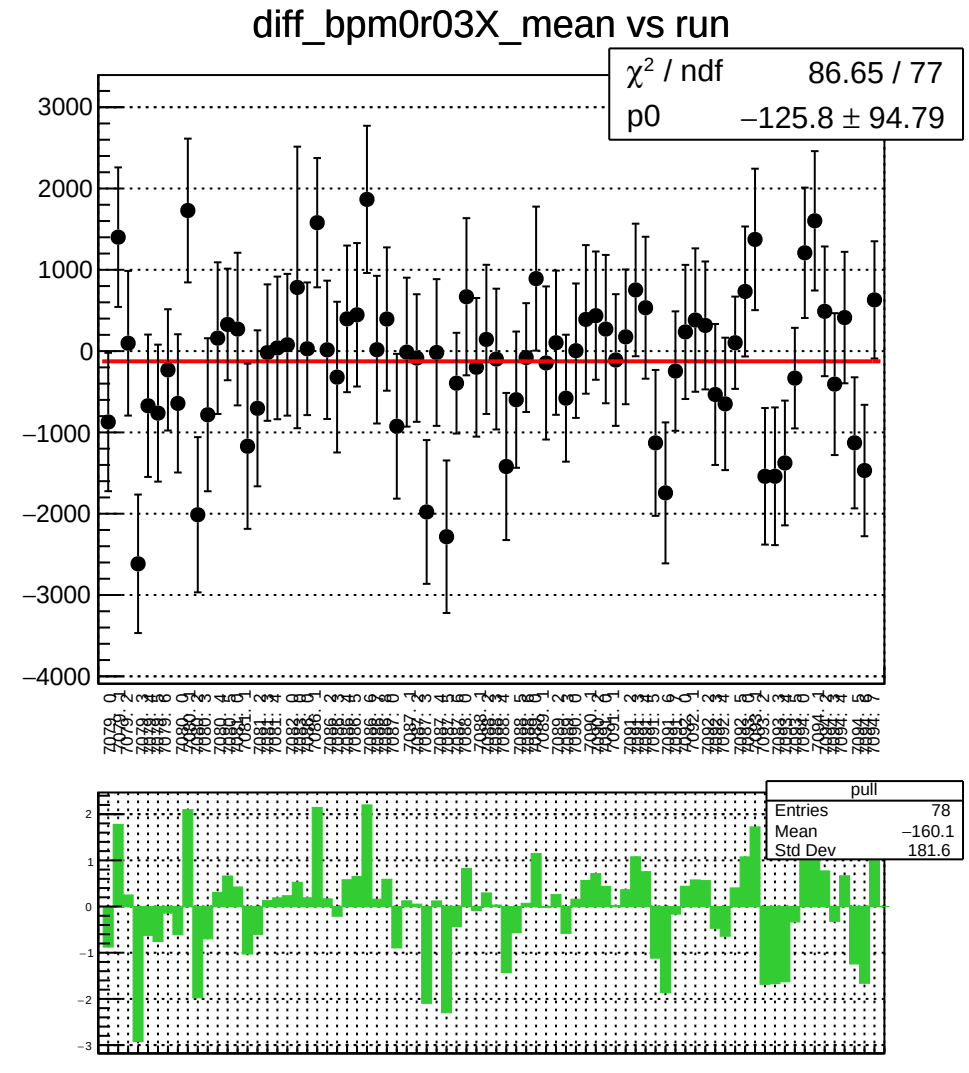

pull1D
Entries 78
Mean −0.000596
Std Dev 0.8807

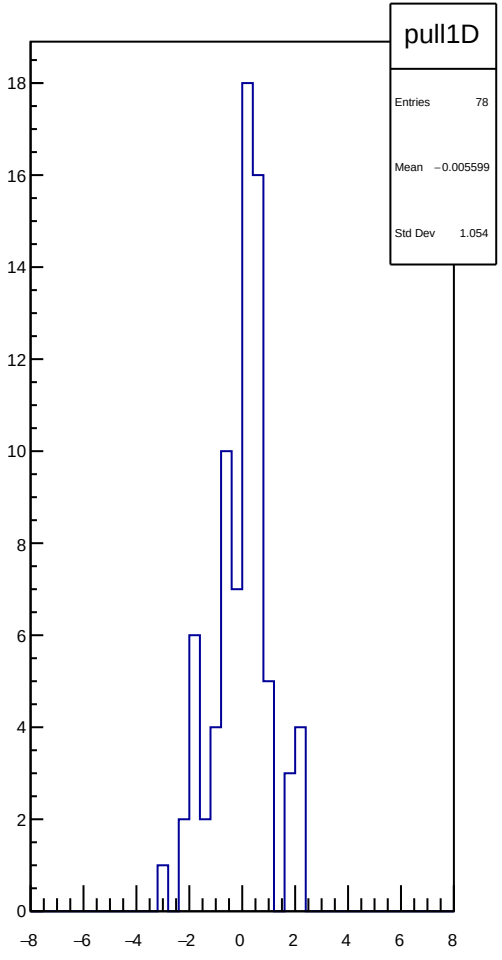

diff_bpm0l10X_rms vs run
χ² / ndf 1.667e+04 / 77
p0 6995 ± 5.752
9500
9000
8500
8000
7500
7000
6500
6000
5500

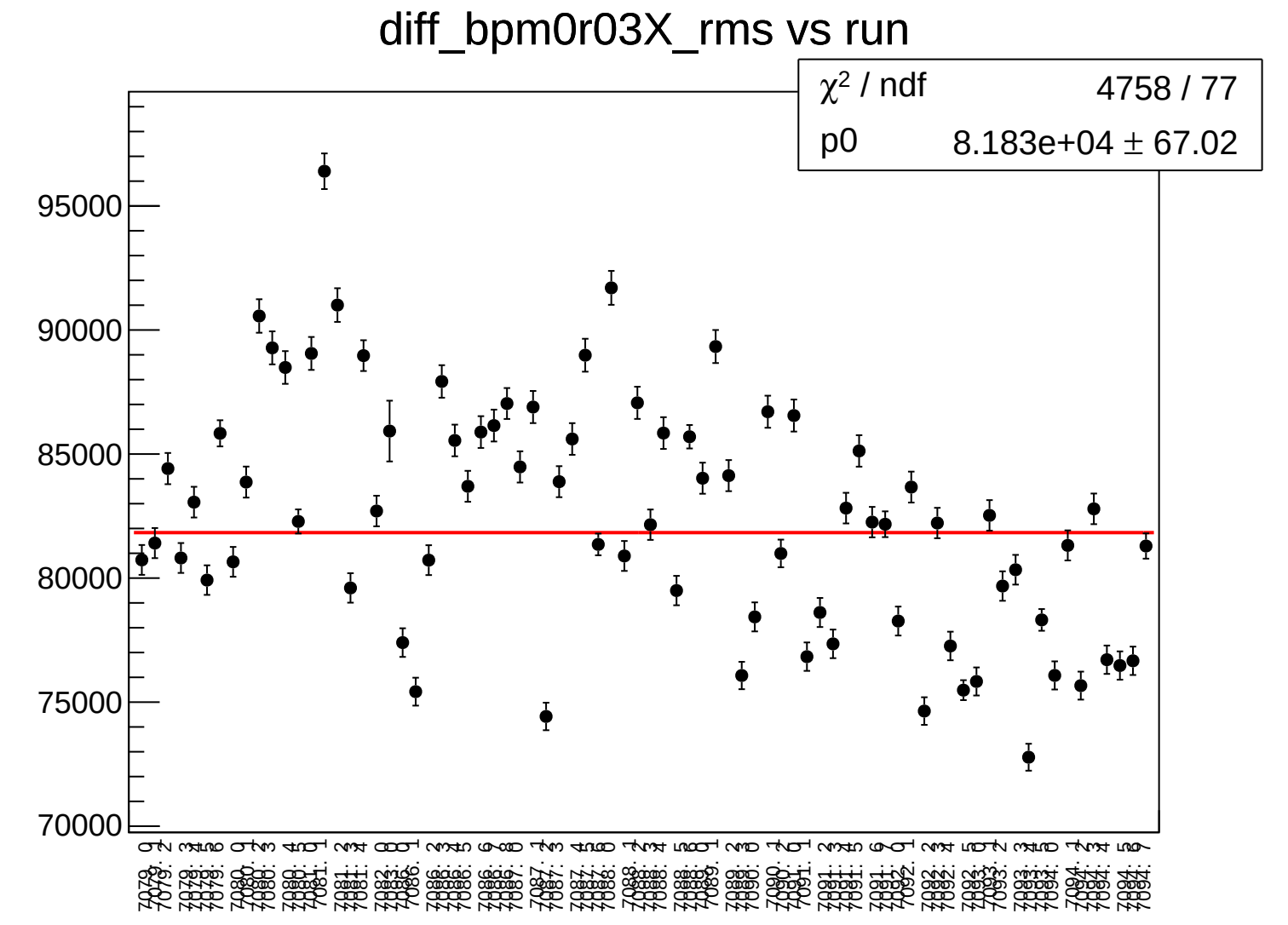

diff_bpm0l10Y_mean vs run
χ² / ndf 57.52 / 77
p0 −3.721 ± 2.045
pull
Entries 78
Mean 183.1
Std Dev 146.8

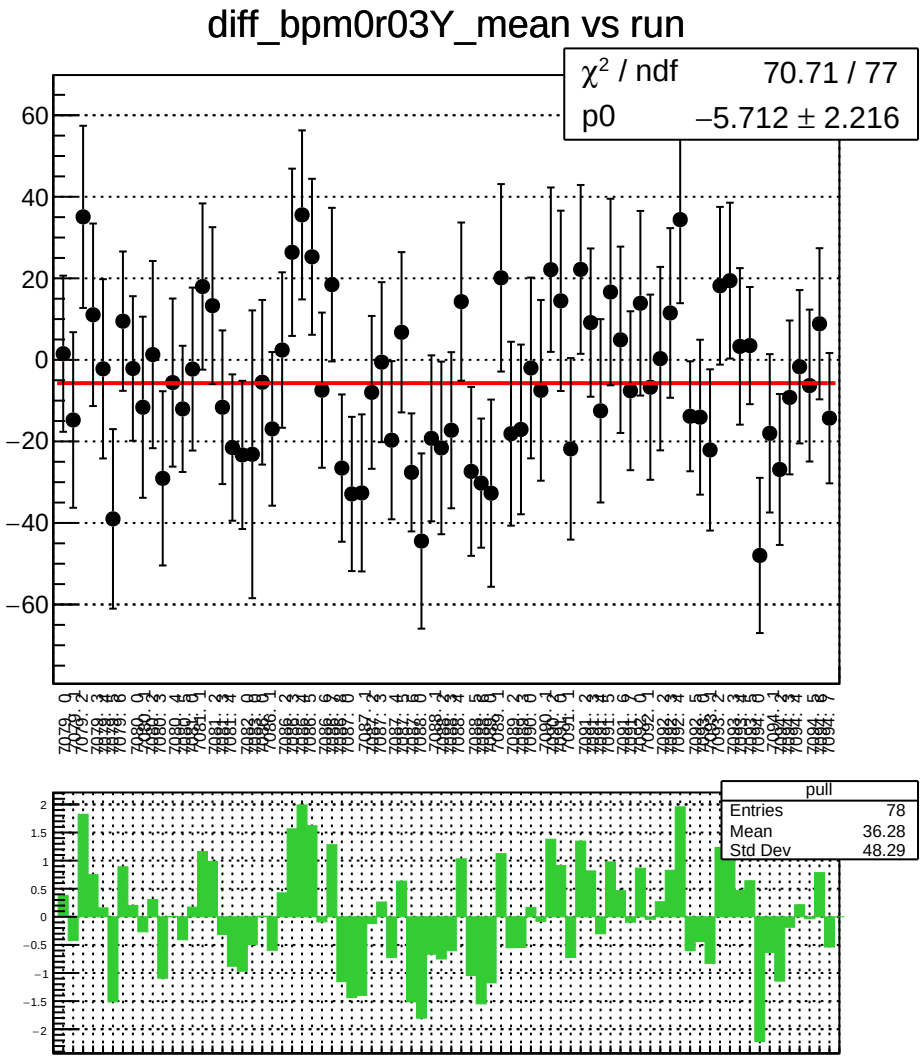

pull1D
Entries 78
Mean 0.01408
Std Dev 0.8586

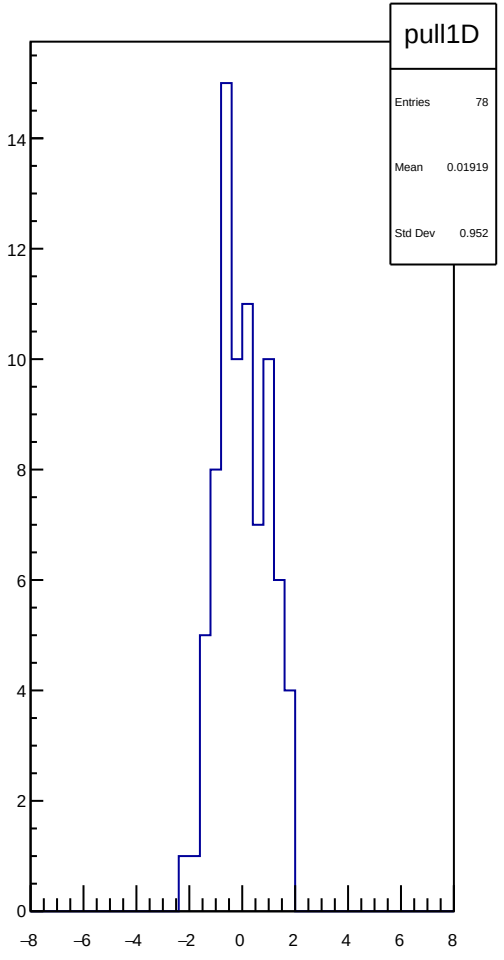

diff_bpm0l10Y_rms vs run
χ² / ndf 1.003e+04 / 77
p0 1762 ± 1.446
2100
2000
1900
1800
1700
1600
1500

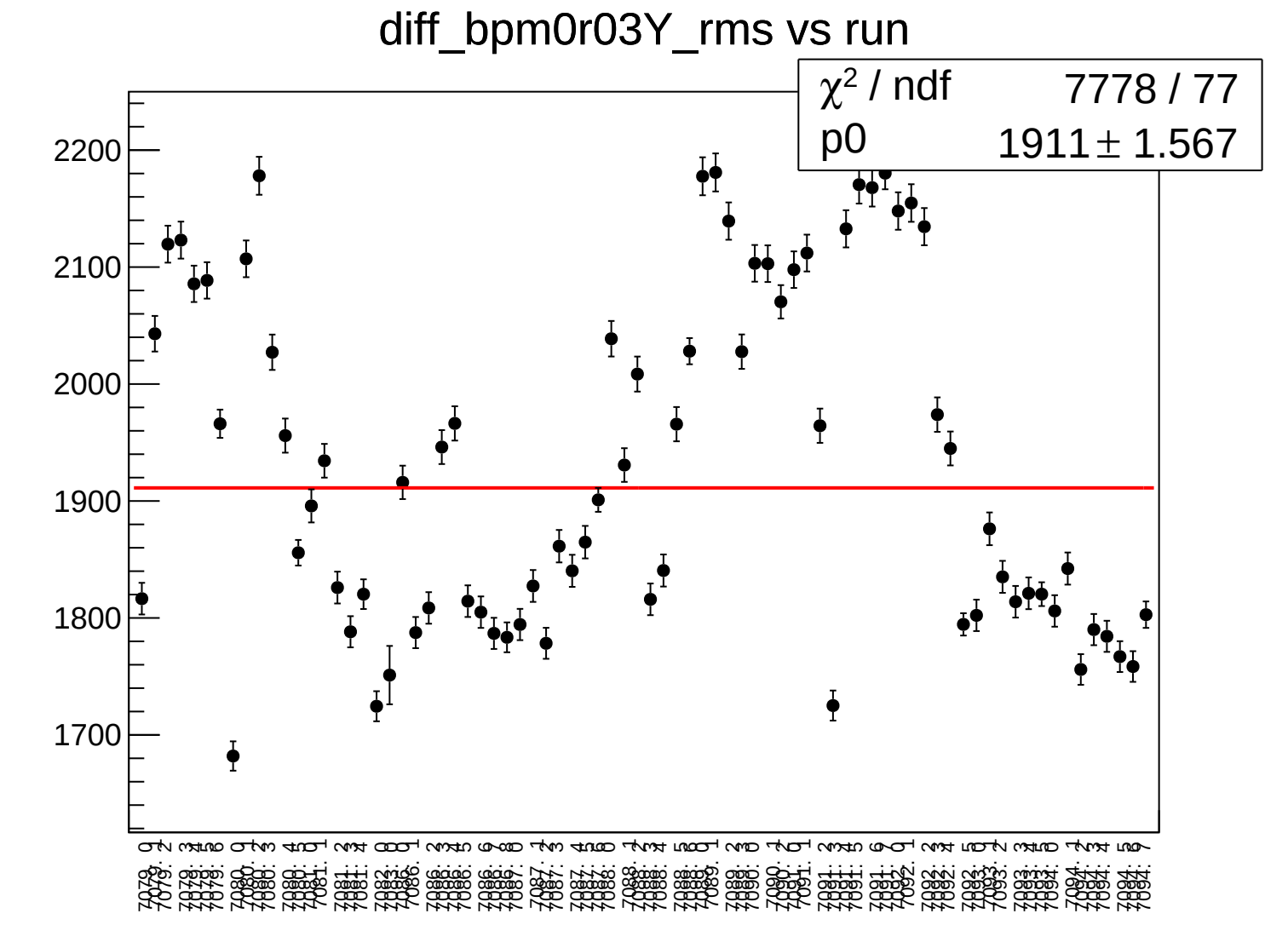

diff_bpm0r03X_mean vs run
χ² / ndf 86.65 / 77
p0 −125.8 ± 94.79
pull
Entries 78
Mean −160.1
Std Dev 181.6

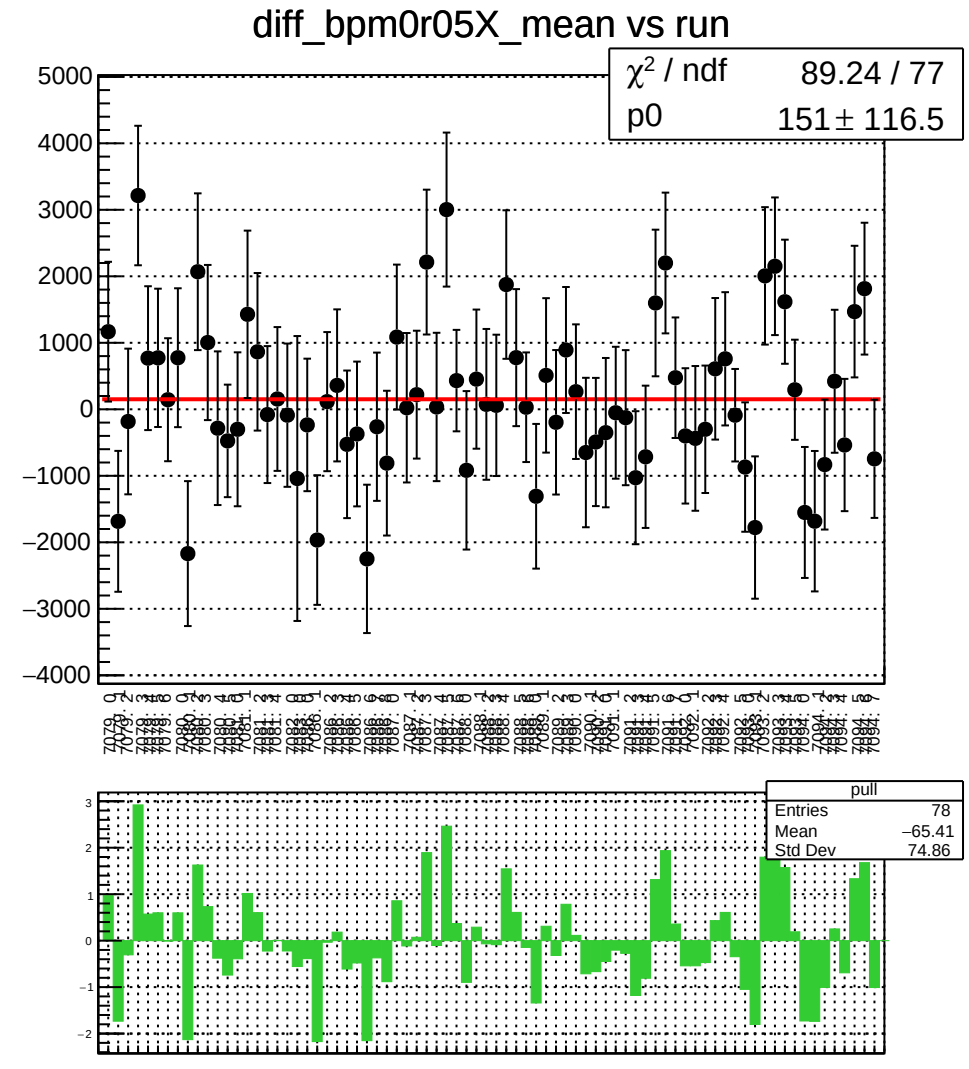

pull1D
Entries 78
Mean −0.005599
Std Dev 1.054

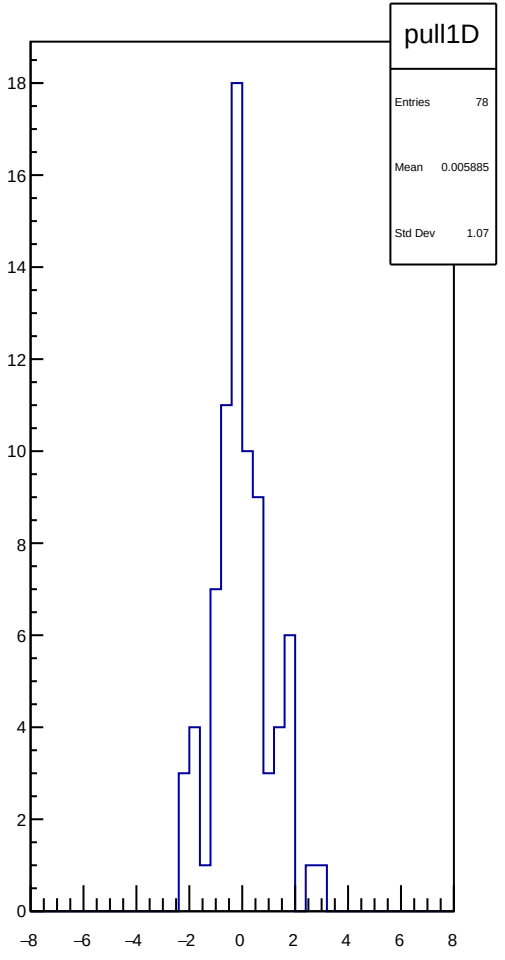

diff_bpm0r03X_rms vs run
χ² / ndf 4758 / 77
p0 8.183e+04 ± 67.02
95000
90000
85000
80000
75000
70000

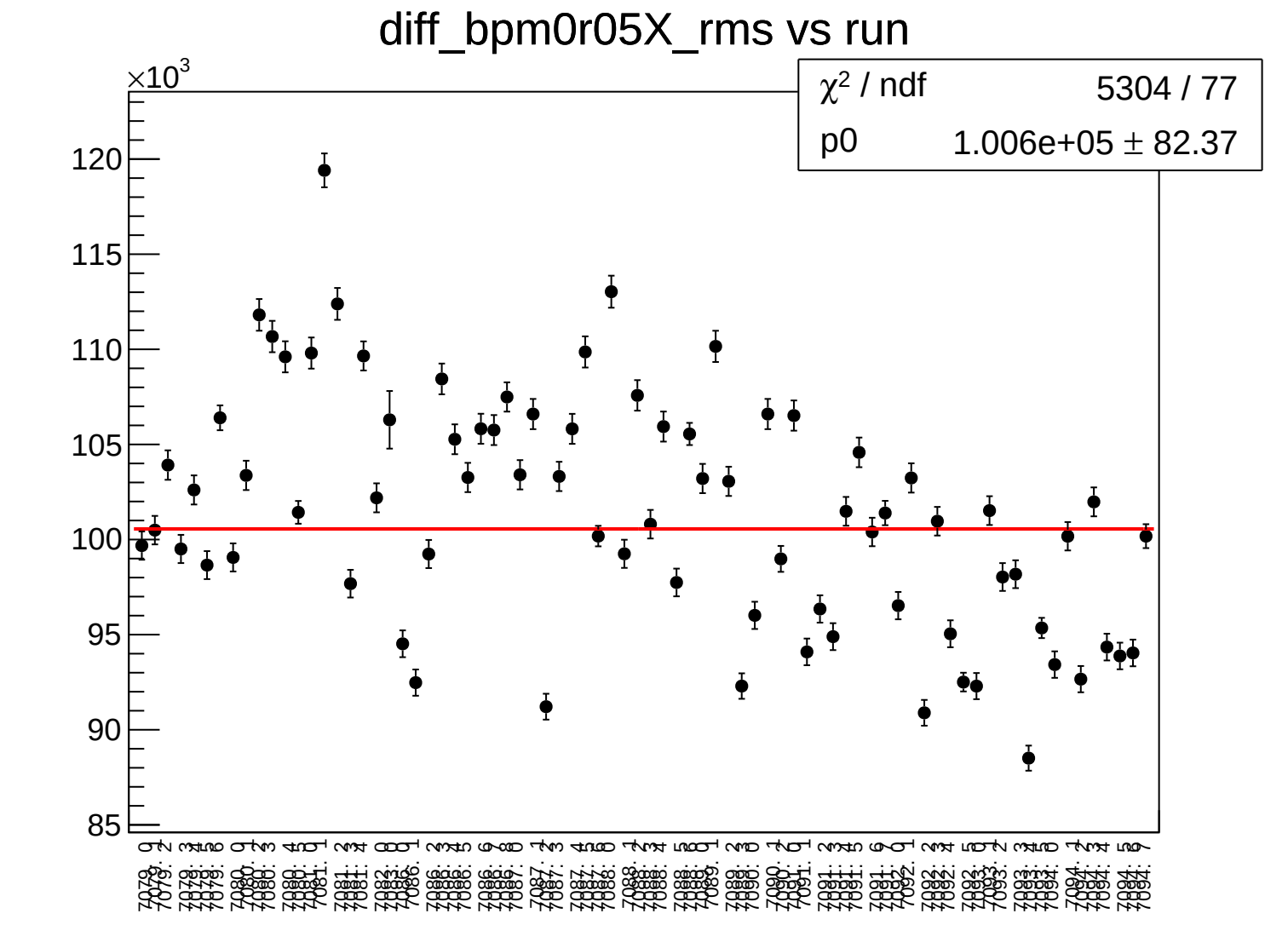

diff_bpm0r03Y_mean vs run
χ² / ndf 70.71 / 77
p0 −5.712 ± 2.216
pull
Entries 78
Mean 36.28
Std Dev 48.29

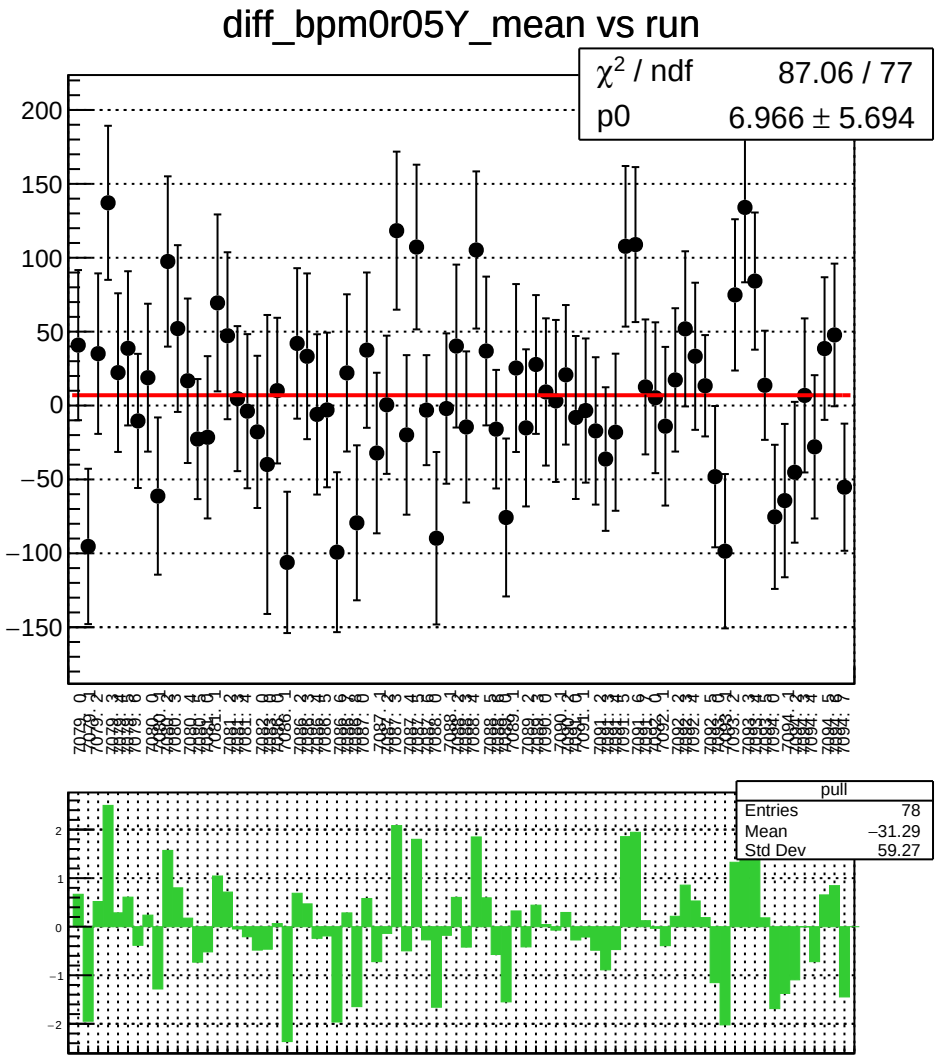

pull1D
Entries 78
Mean 0.01919
Std Dev 0.952

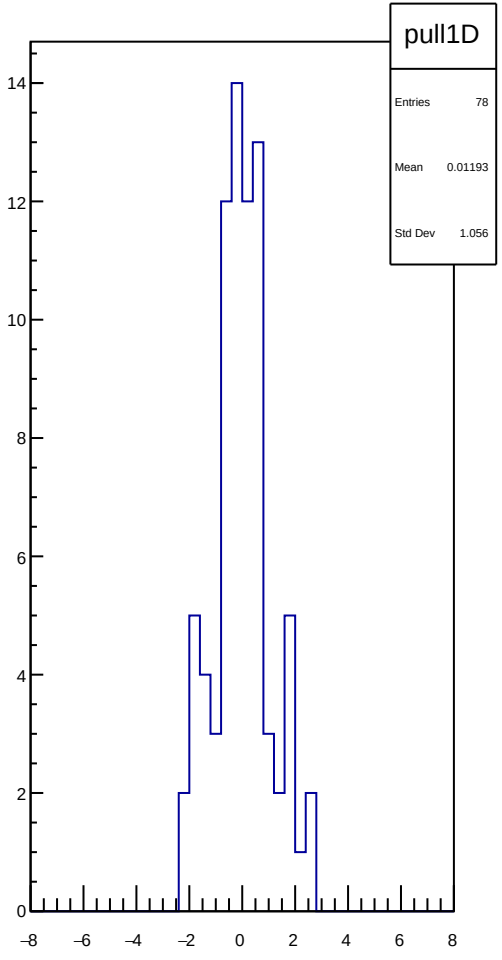

diff_bpm0r03Y_rms vs run
χ² / ndf 7778 / 77
p0 1911 ± 1.567
2200
2100
2000
1900
1800
1700

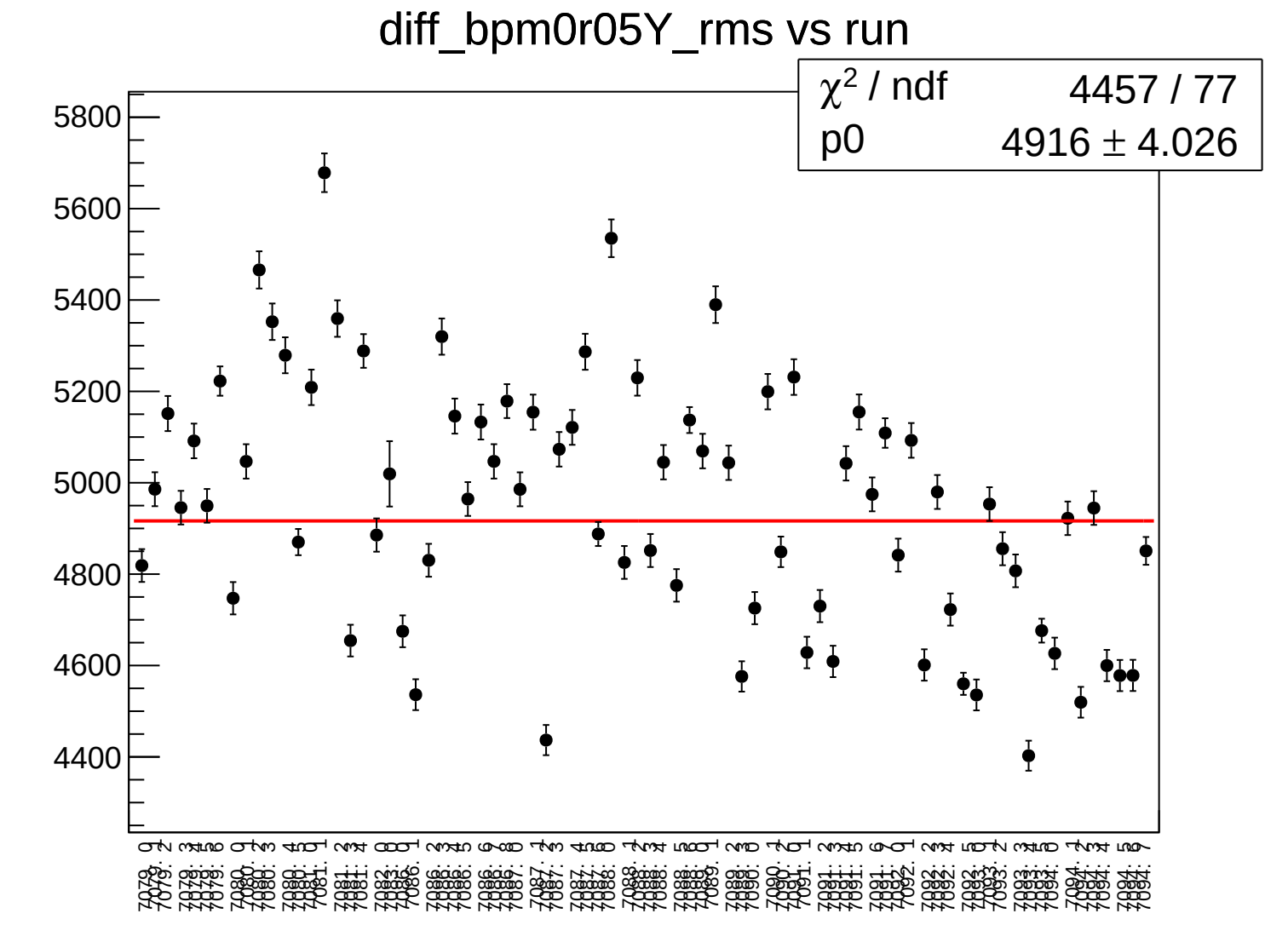

diff_bpm0r05X_mean vs run
χ² / ndf 89.24 / 77
p0 151 ± 116.5
pull
Entries 78
Mean −65.41
Std Dev 74.86

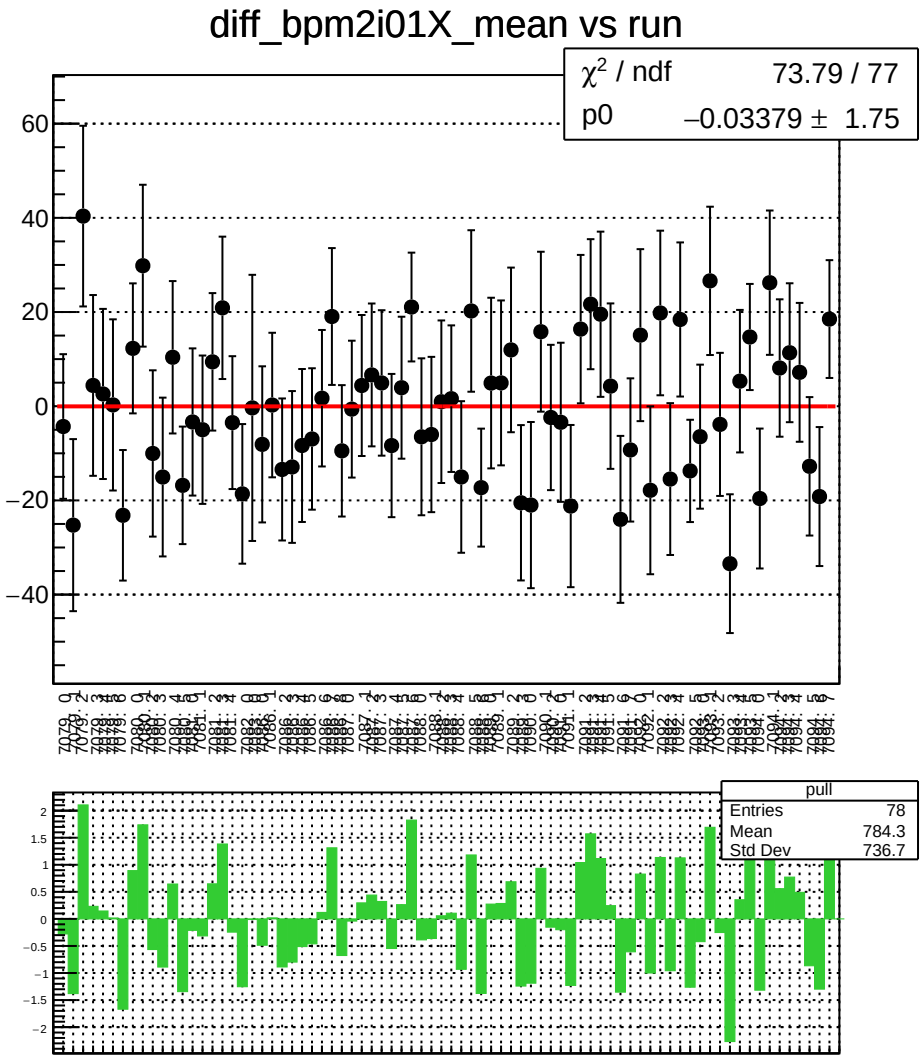

pull1D
Entries 78
Mean 0.005885
Std Dev 1.07

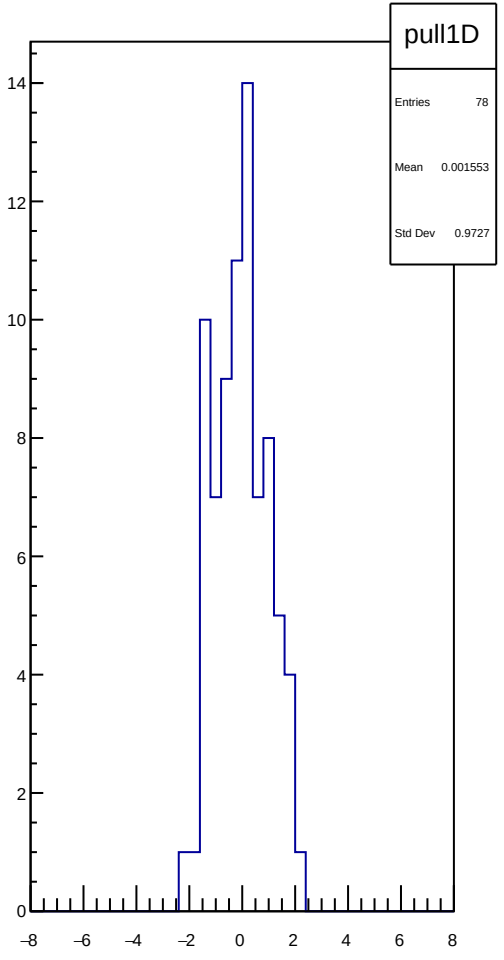

diff_bpm0r05X_rms vs run
×10^3
χ² / ndf 5304 / 77
p0 1.006e+05 ± 82.37
120
115
110
105
100
95
90
85

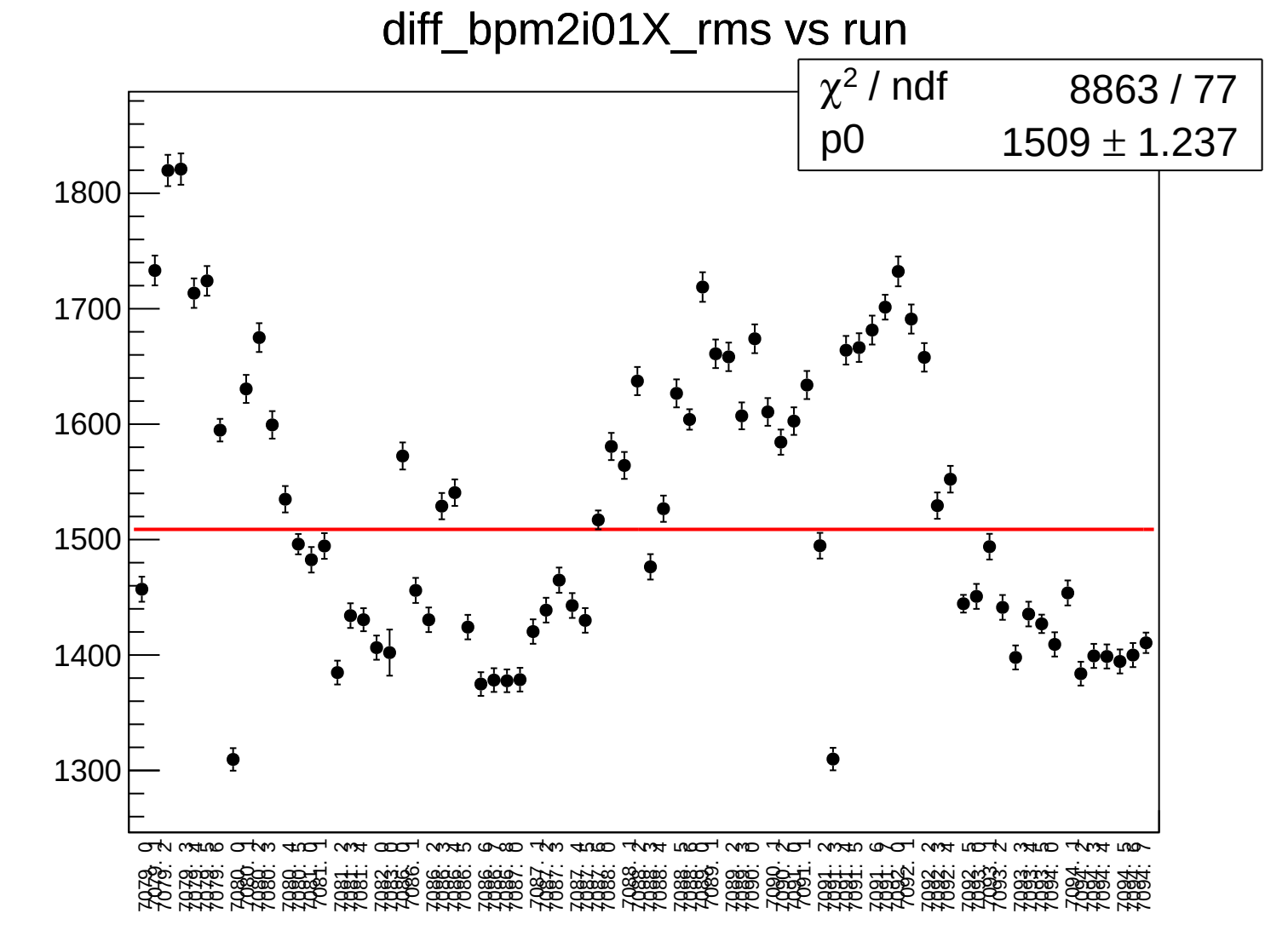

diff_bpm0r05Y_mean vs run
χ² / ndf 87.06 / 77
p0 6.966 ± 5.694
pull
Entries 78
Mean −31.29
Std Dev 59.27

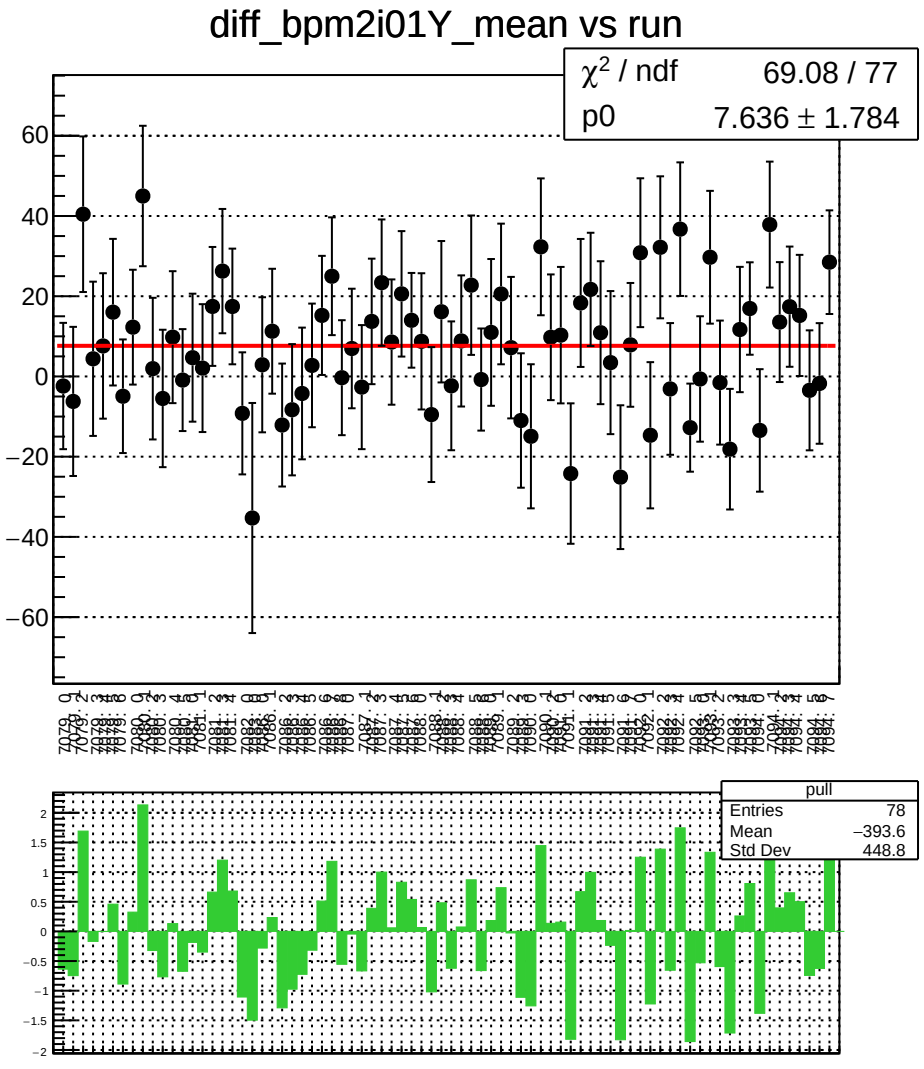

pull1D
Entries 78
Mean 0.01193
Std Dev 1.056

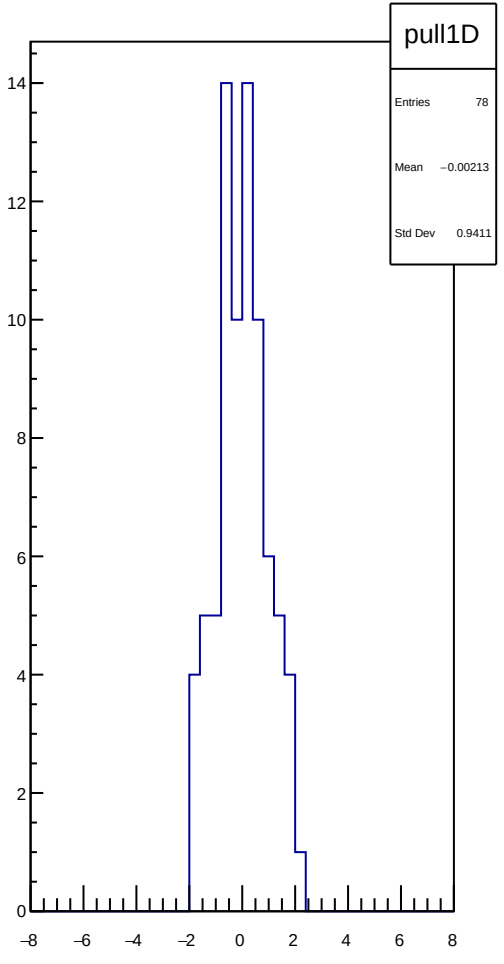

diff_bpm0r05Y_rms vs run
χ² / ndf 4457 / 77
p0 4916 ± 4.026
5800
5600
5400
5200
5000
4800
4600
4400

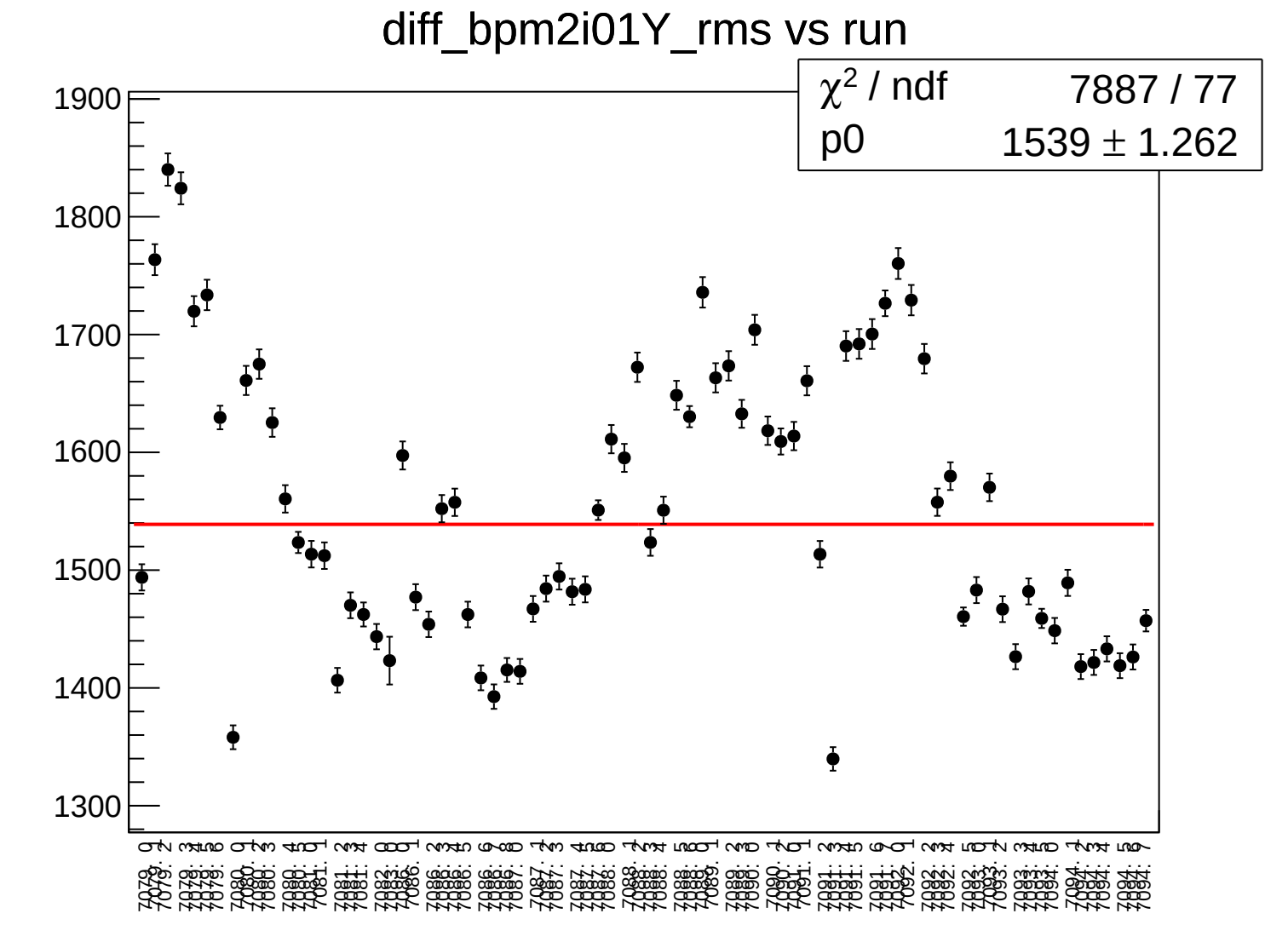

diff_bpm2i01X_mean vs run
χ² / ndf 73.79 / 77
p0 −0.03379 ± 1.75
pull
Entries 78
Mean 784.3
Std Dev 736.7

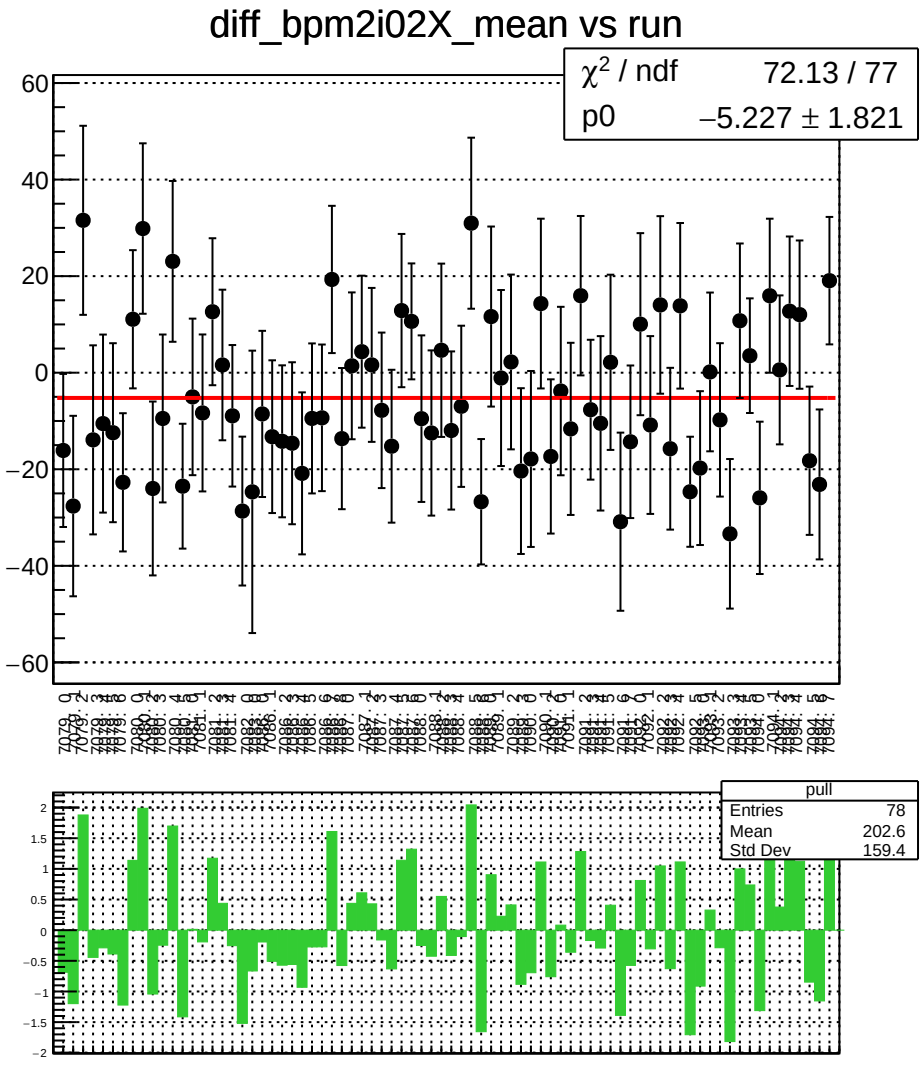

pull1D
Entries 78
Mean 0.001553
Std Dev 0.9727

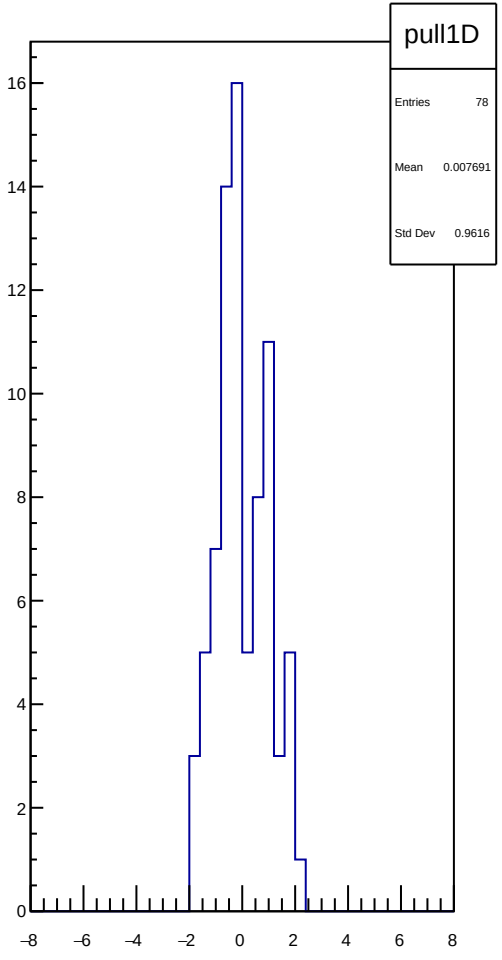

diff_bpm2i01X_rms vs run
χ² / ndf 8863 / 77
p0 1509 ± 1.237
1800
1700
1600
1500
1400
1300

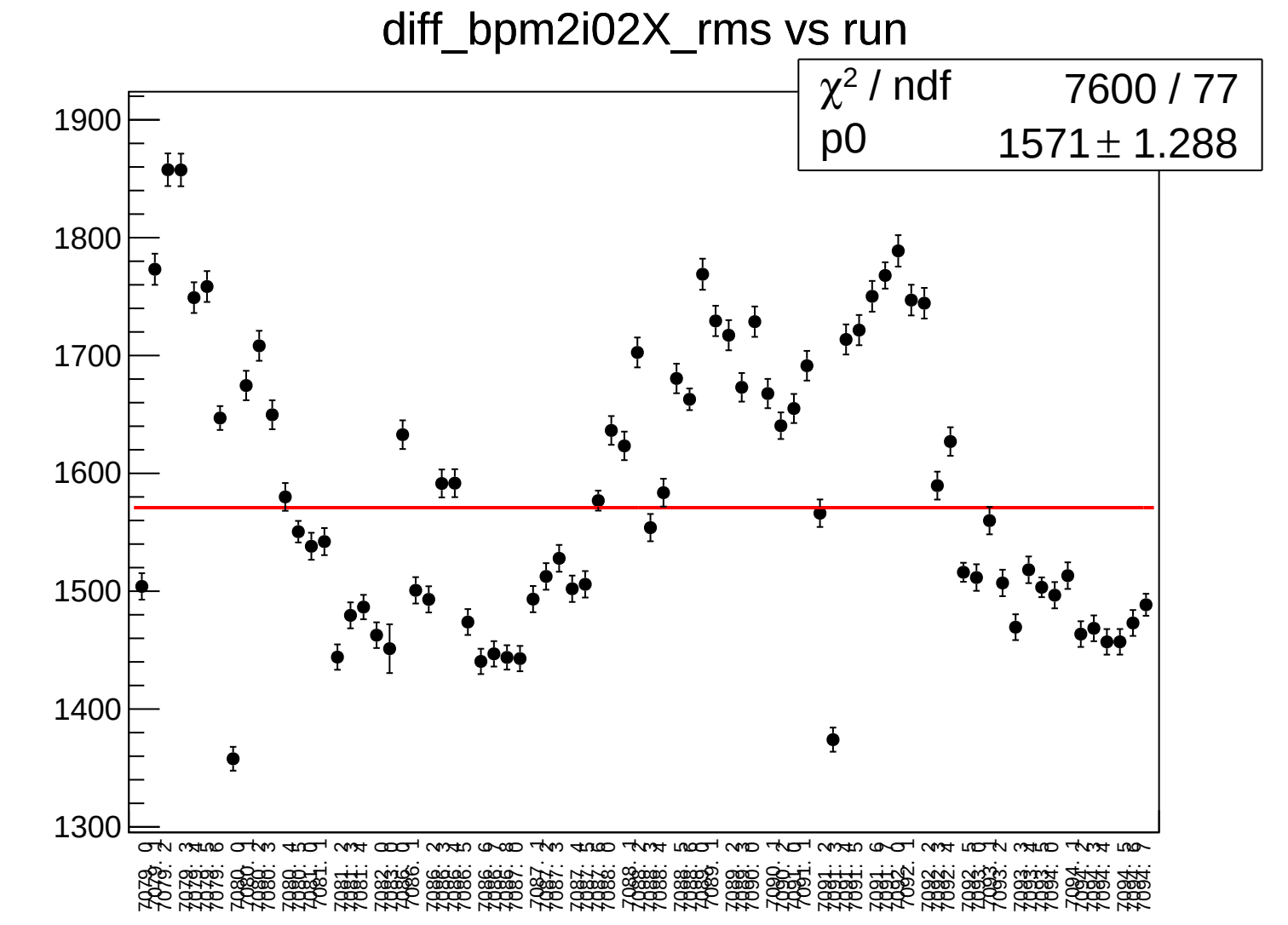

diff_bpm2i01Y_mean vs run
χ² / ndf 69.08 / 77
p0 7.636 ± 1.784
pull
Entries 78
Mean −393.6
Std Dev 448.8

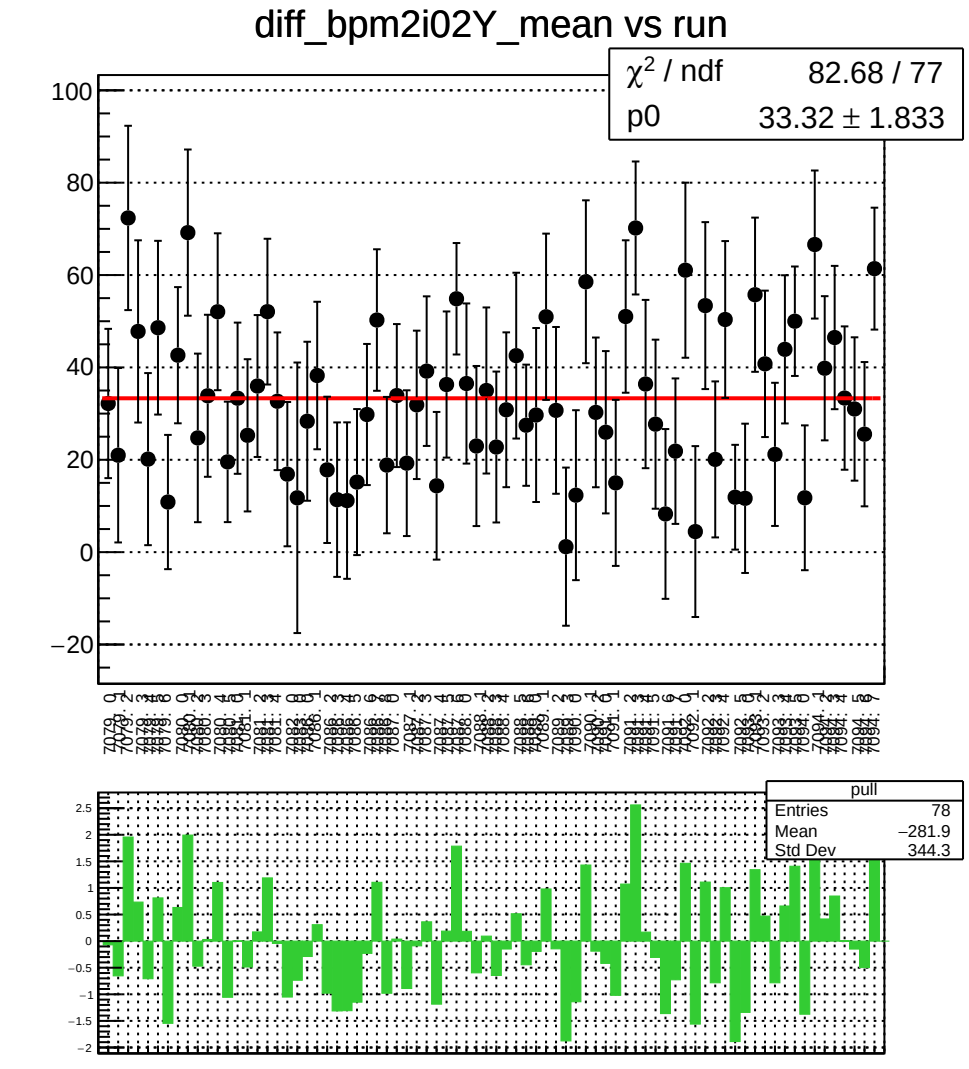

pull1D
Entries 78
Mean −0.00213
Std Dev 0.9411

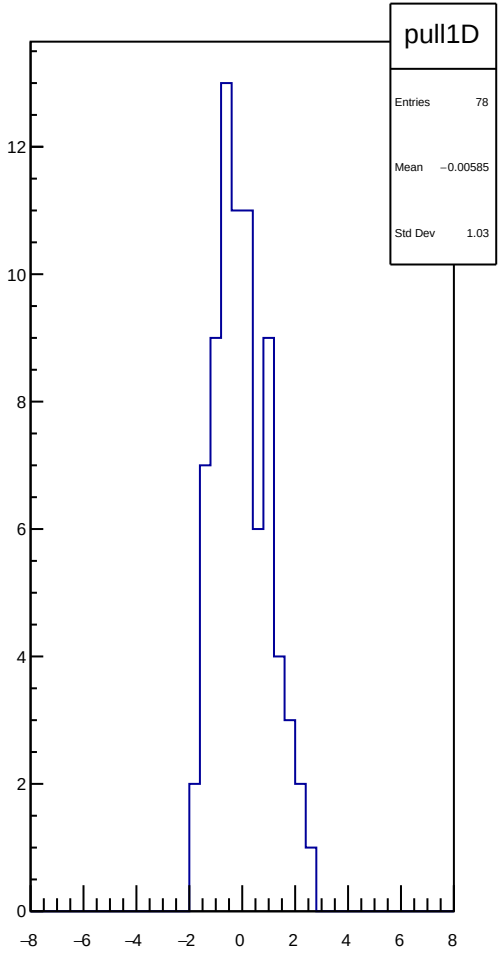

diff_bpm2i01Y_rms vs run
χ² / ndf 7887 / 77
p0 1539 ± 1.262
1900
1800
1700
1600
1500
1400
1300

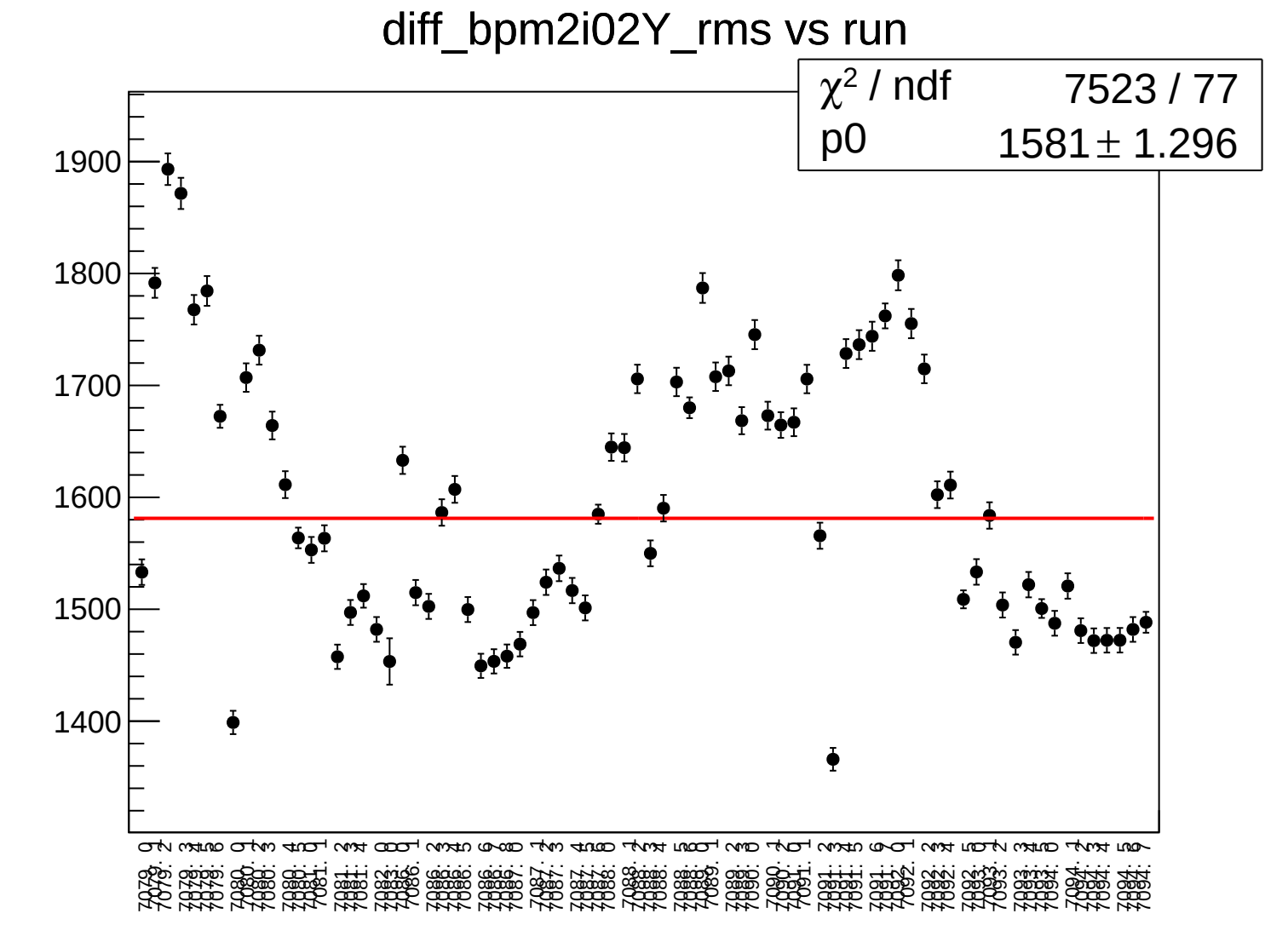

diff_bpm2i02X_mean vs run
χ² / ndf 72.13 / 77
p0 −5.227 ± 1.821
pull
Entries 78
Mean 202.6
Std Dev 159.4

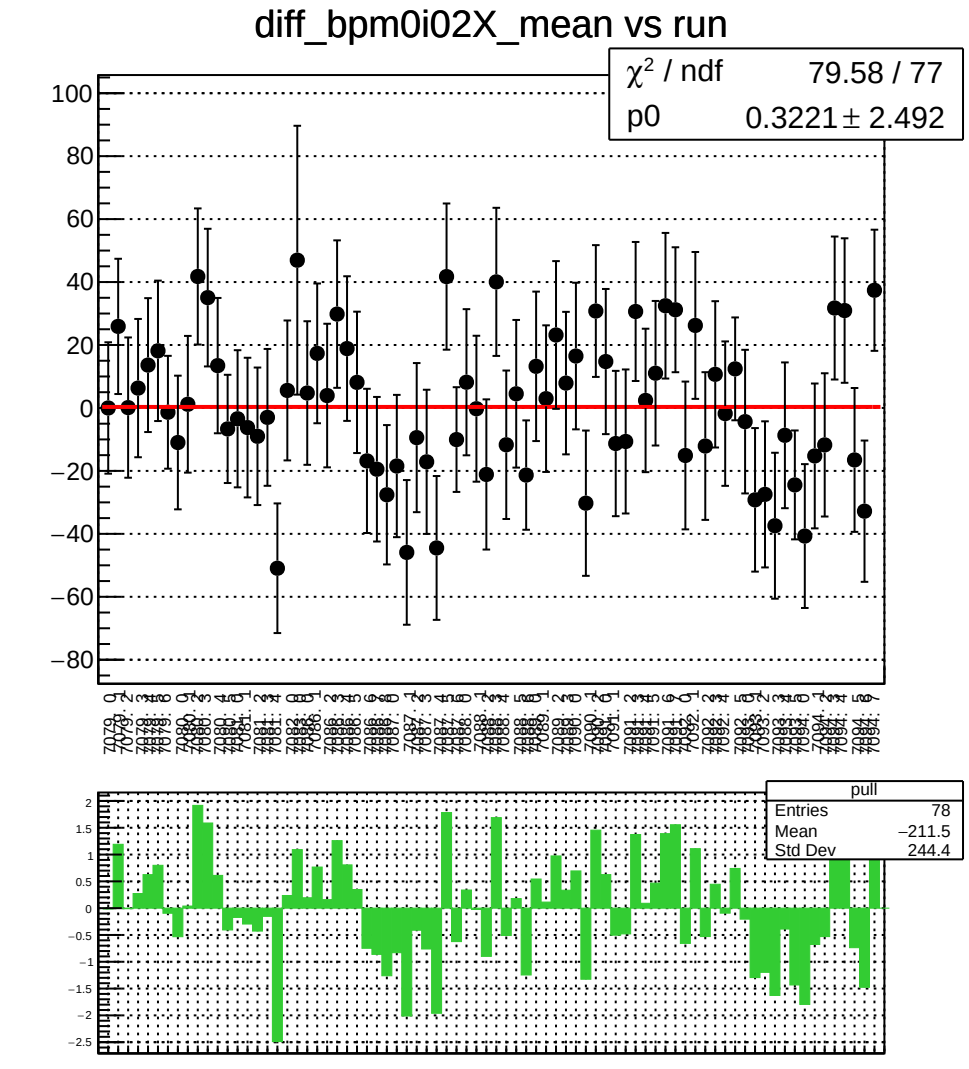

pull1D
Entries 78
Mean 0.007691
Std Dev 0.9616

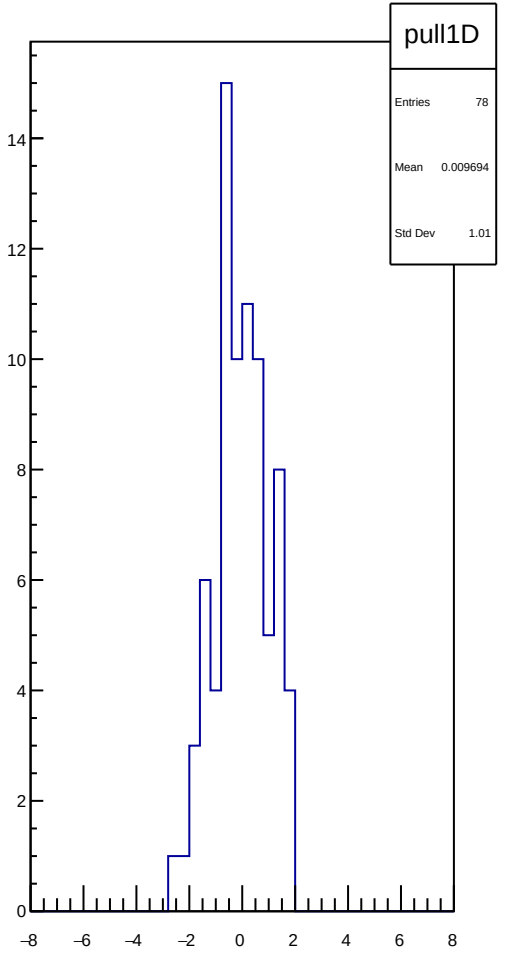

diff_bpm2i02X_rms vs run
χ² / ndf 7600 / 77
p0 1571 ± 1.288
1900
1800
1700
1600
1500
1400
1300

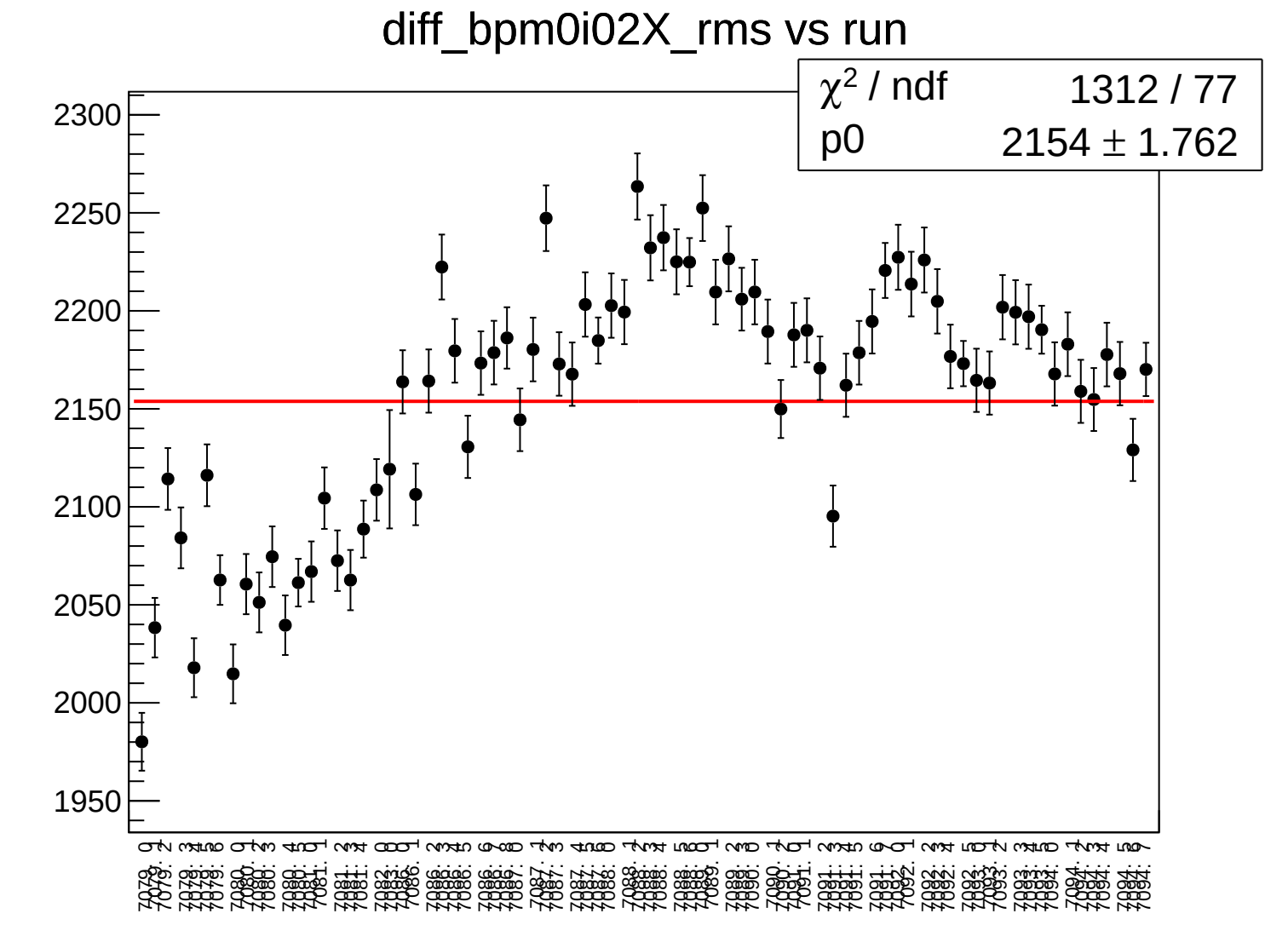

diff_bpm2i02Y_mean vs run
χ^2 / ndf 82.68 / 77
p0 33.32 ± 1.833
pull
Entries 78
Mean −281.9
Std Dev 344.3

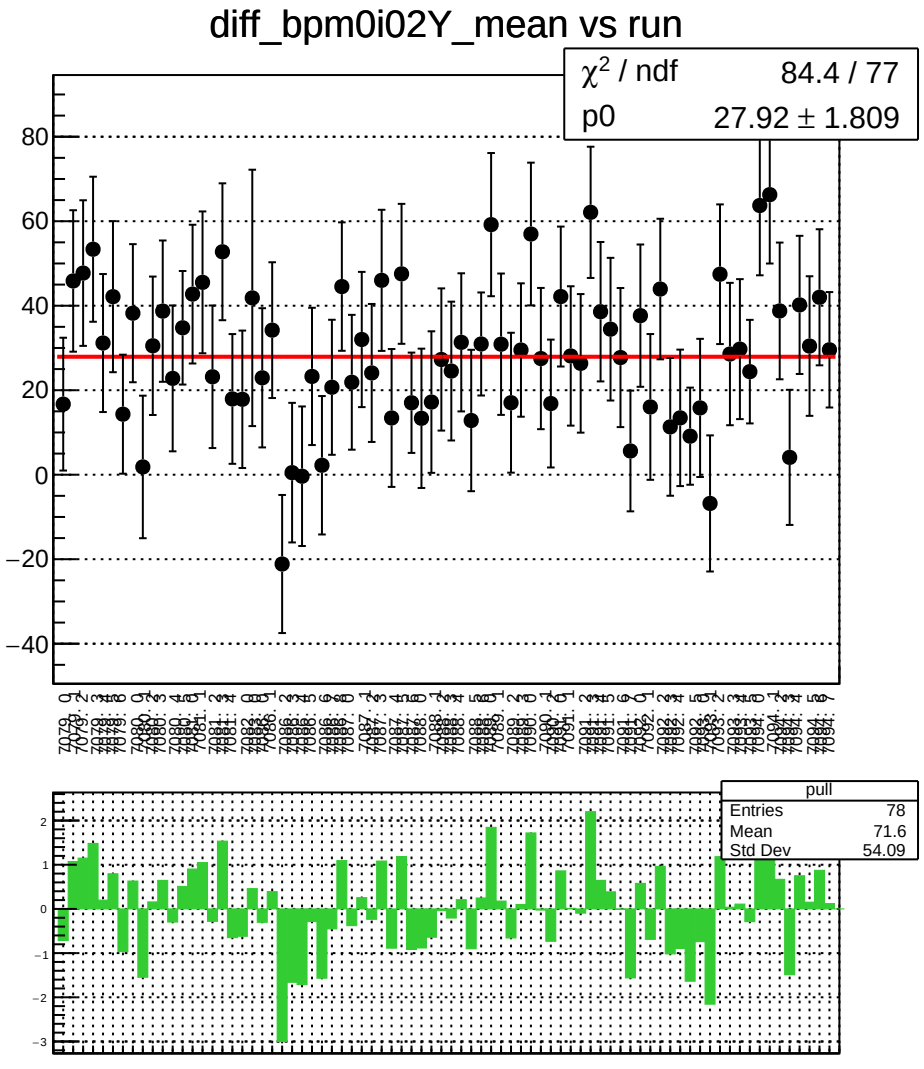

pull1D
Entries 78
Mean −0.00585
Std Dev 1.03

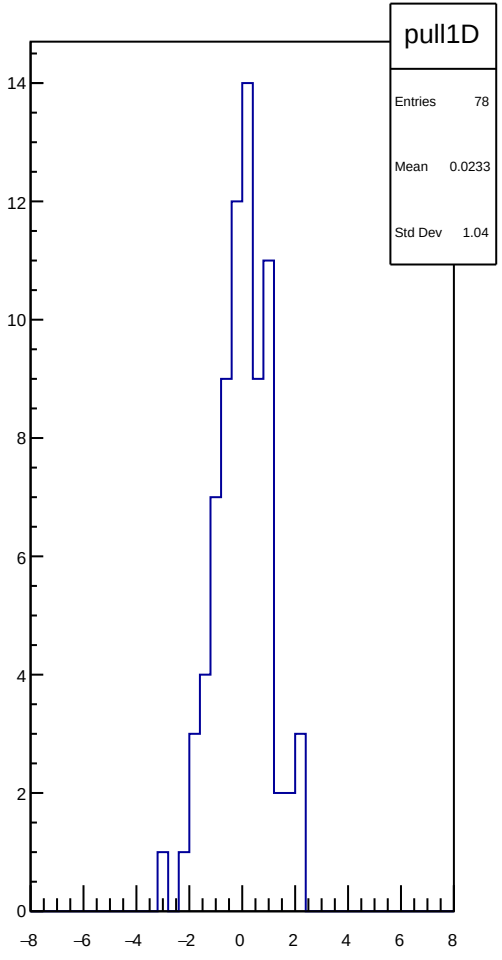

diff_bpm2i02Y_rms vs run
χ² / ndf 7523 / 77
p0 1581 ± 1.296
1900
1800
1700
1600
1500
1400

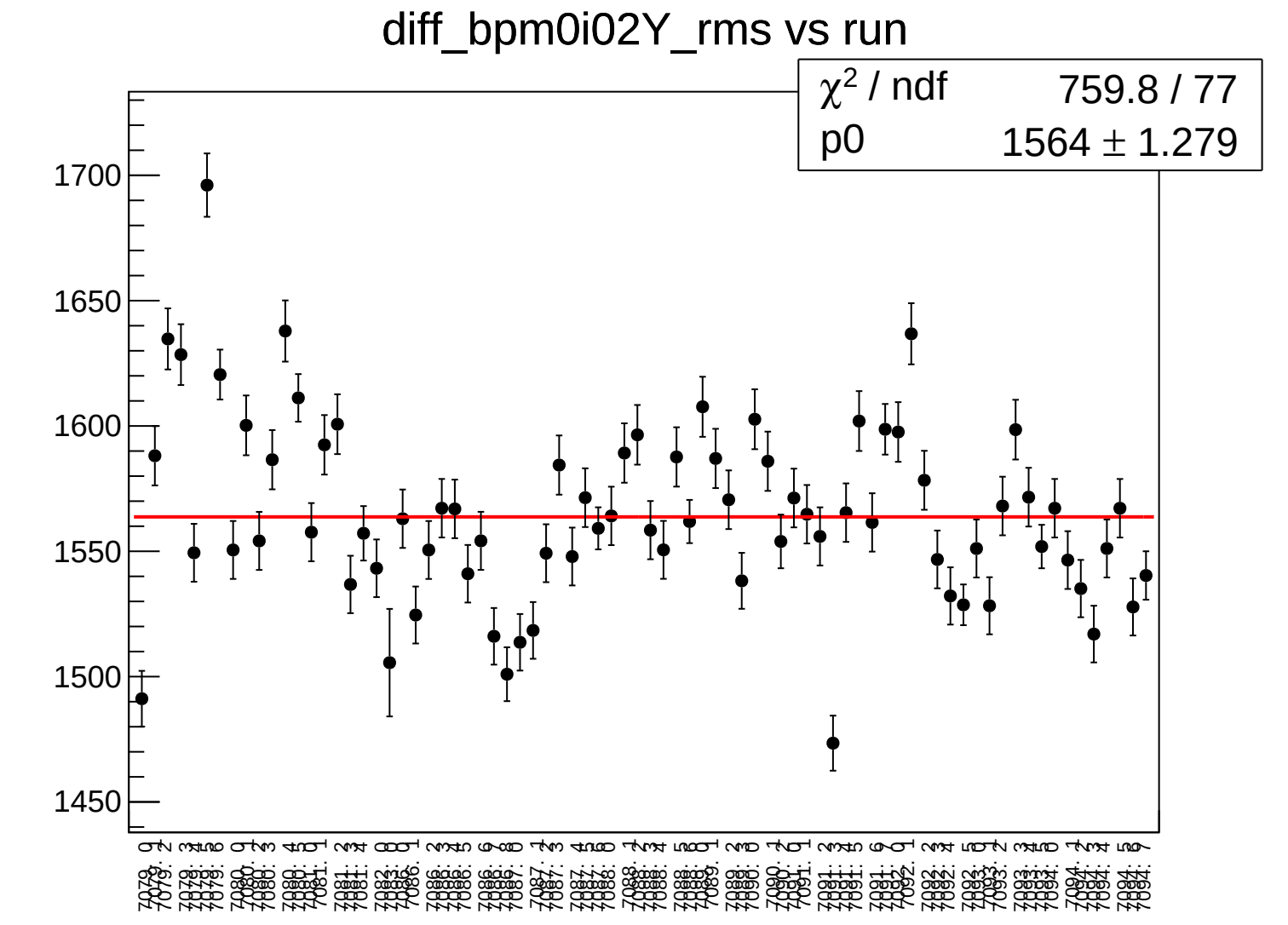

diff_bpm0i02X_mean vs run
χ² / ndf 79.58 / 77
p0 0.3221 ± 2.492
pull
Entries 78
Mean −211.5
Std Dev 244.4

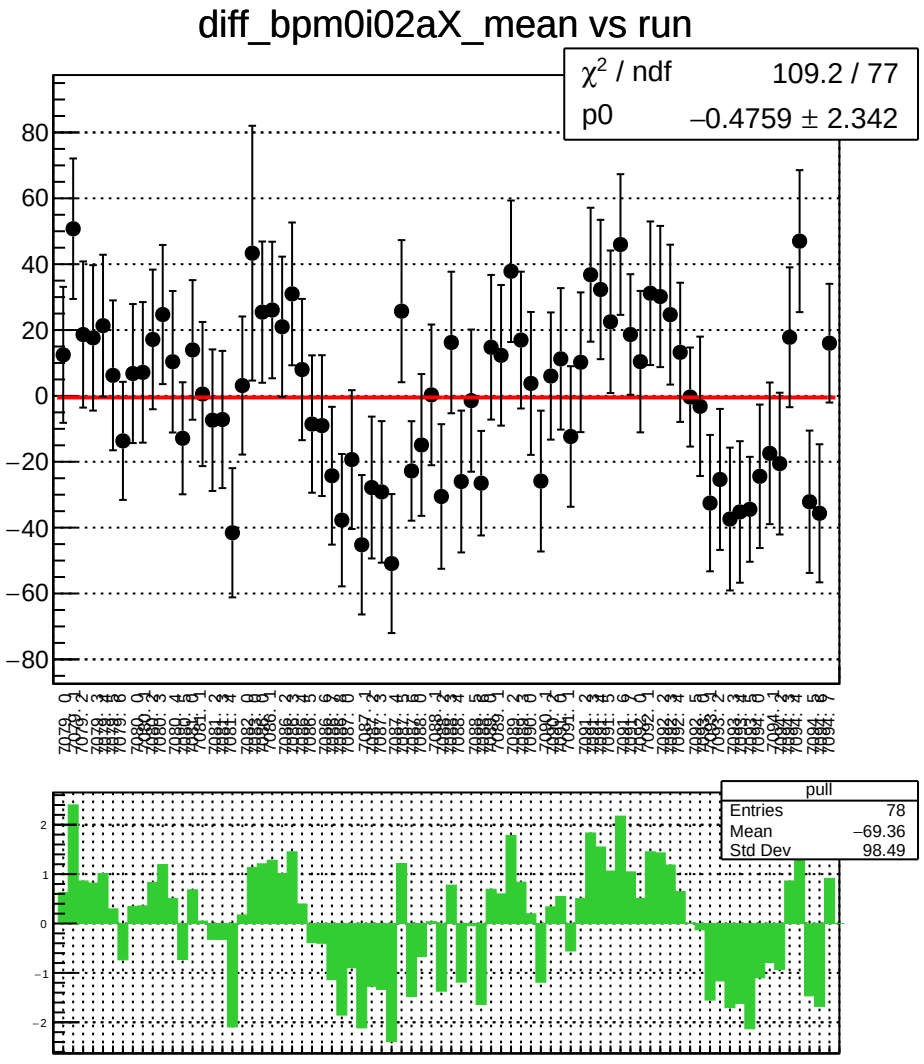

pull1D
Entries 78
Mean 0.009694
Std Dev 1.01

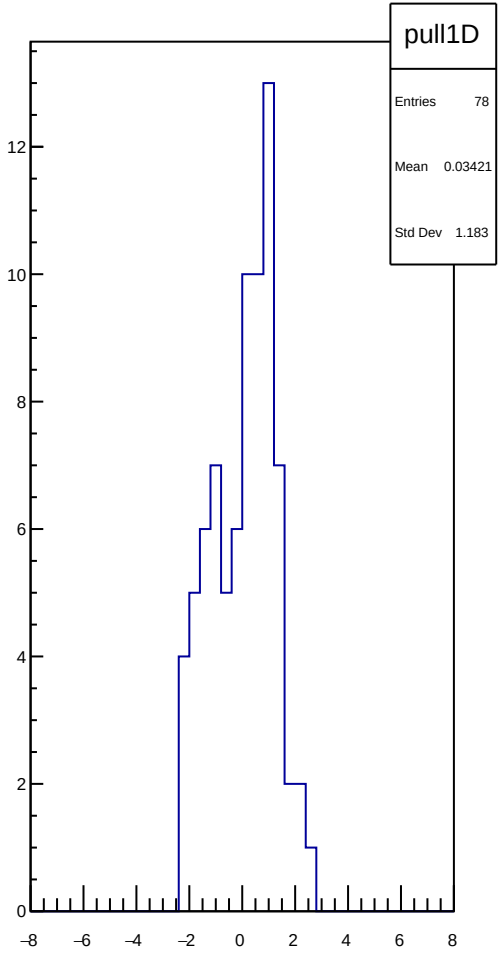

diff_bpm0i02X_rms vs run
χ² / ndf 1312 / 77
p0 2154 ± 1.762
2300
2250
2200
2150
2100
2050
2000
1950

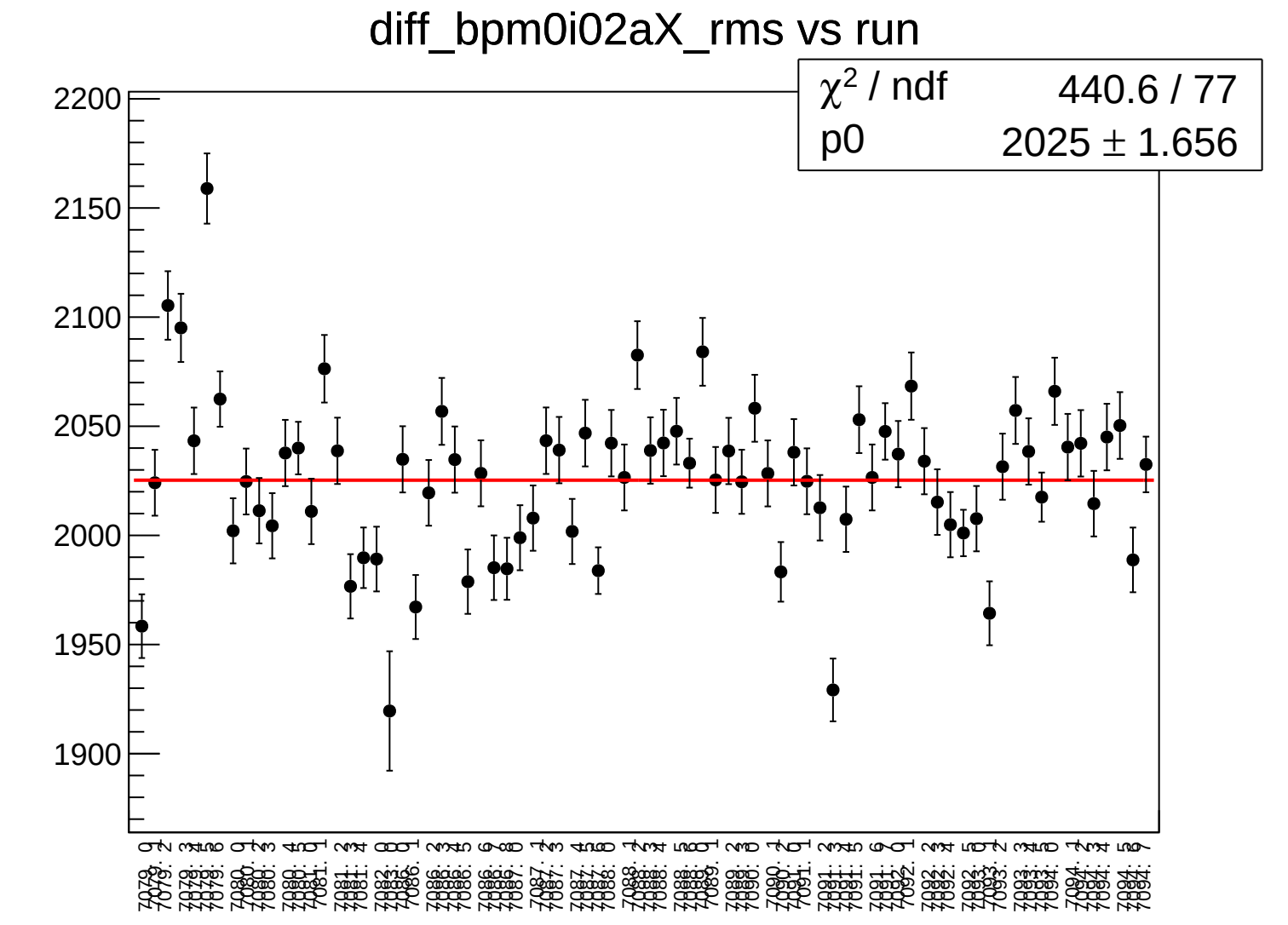

diff_bpm0i02Y_mean vs run
χ² / ndf 84.4 / 77
p0 27.92 ± 1.809
pull
Entries 78
Mean 71.6
Std Dev 54.09

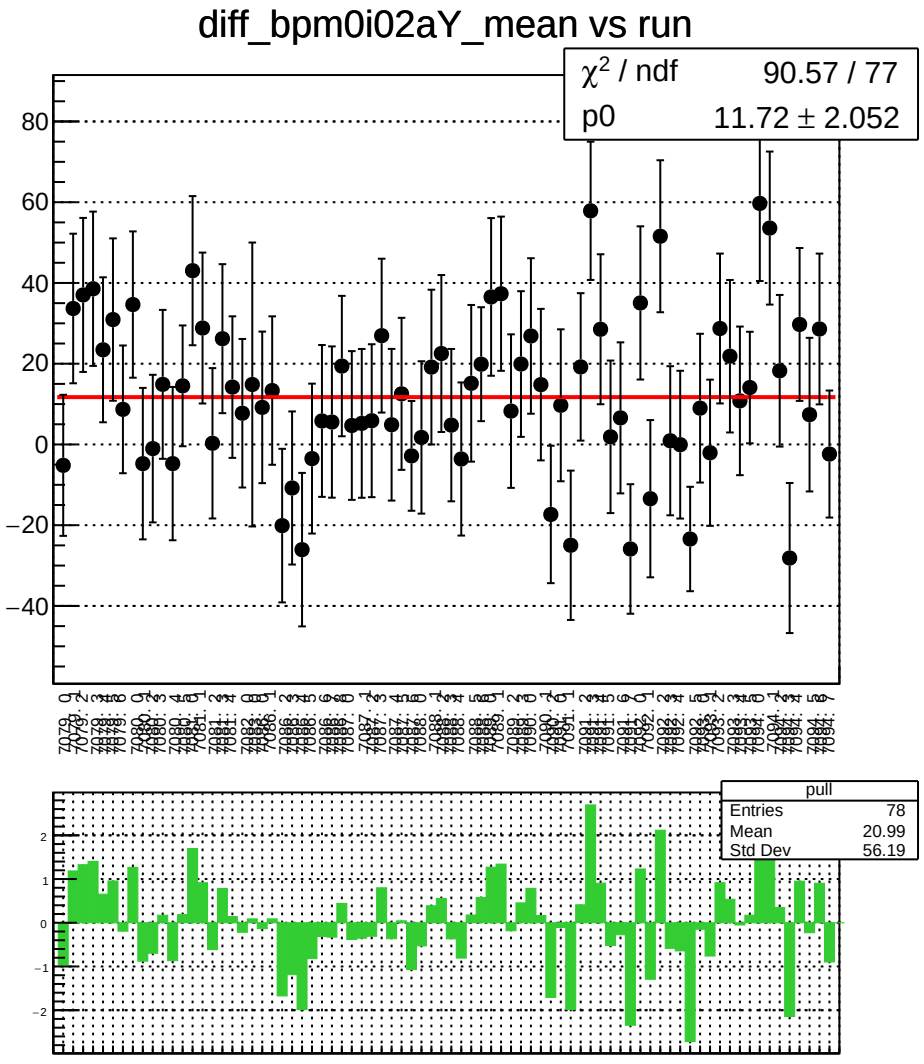

pull1D
Entries 78
Mean 0.0233
Std Dev 1.04

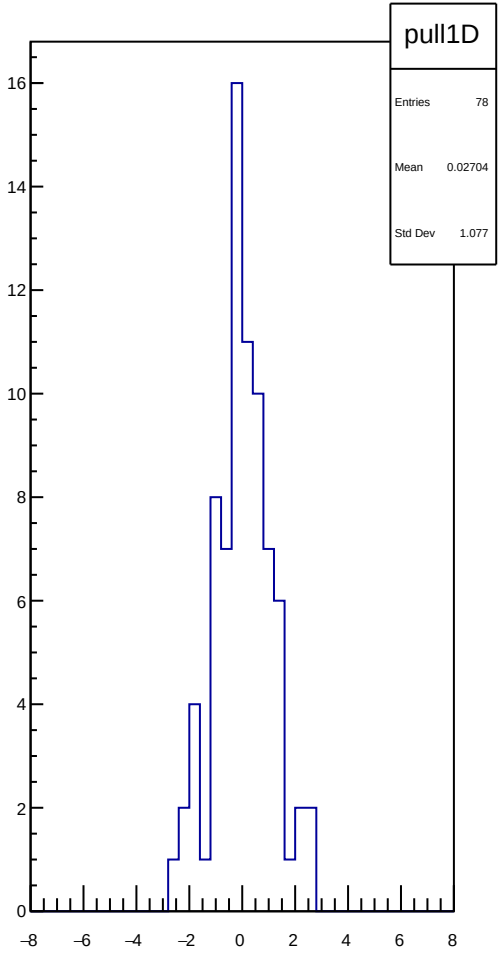

diff_bpm0i02Y_rms vs run
χ² / ndf 759.8 / 77
p0 1564 ± 1.279
1700
1650
1600
1550
1500
1450

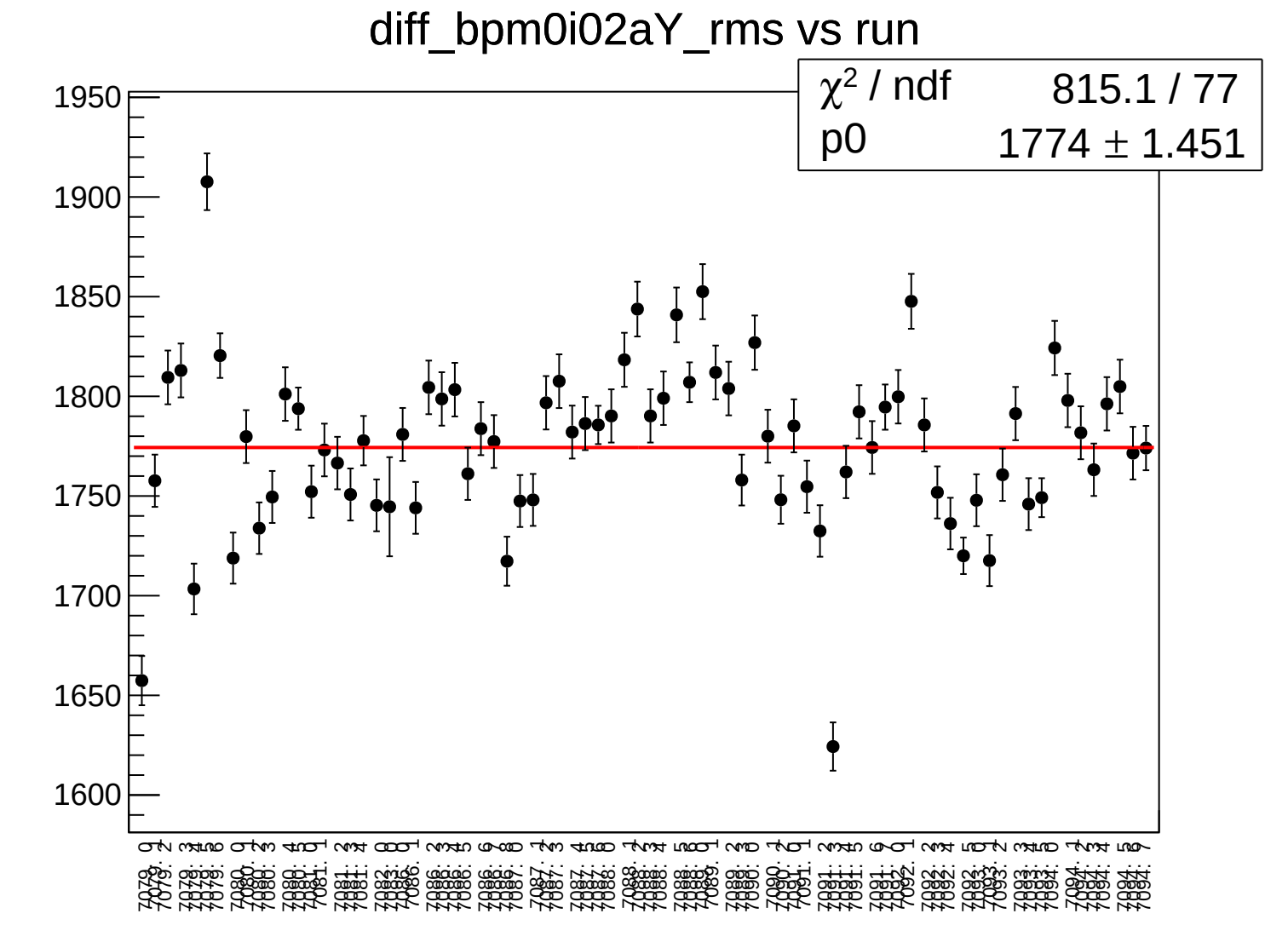

diff_bpm0i02aX_mean vs run
χ² / ndf 109.2 / 77
p0 −0.4759 ± 2.342
pull
Entries 78
Mean −69.36
Std Dev 98.49

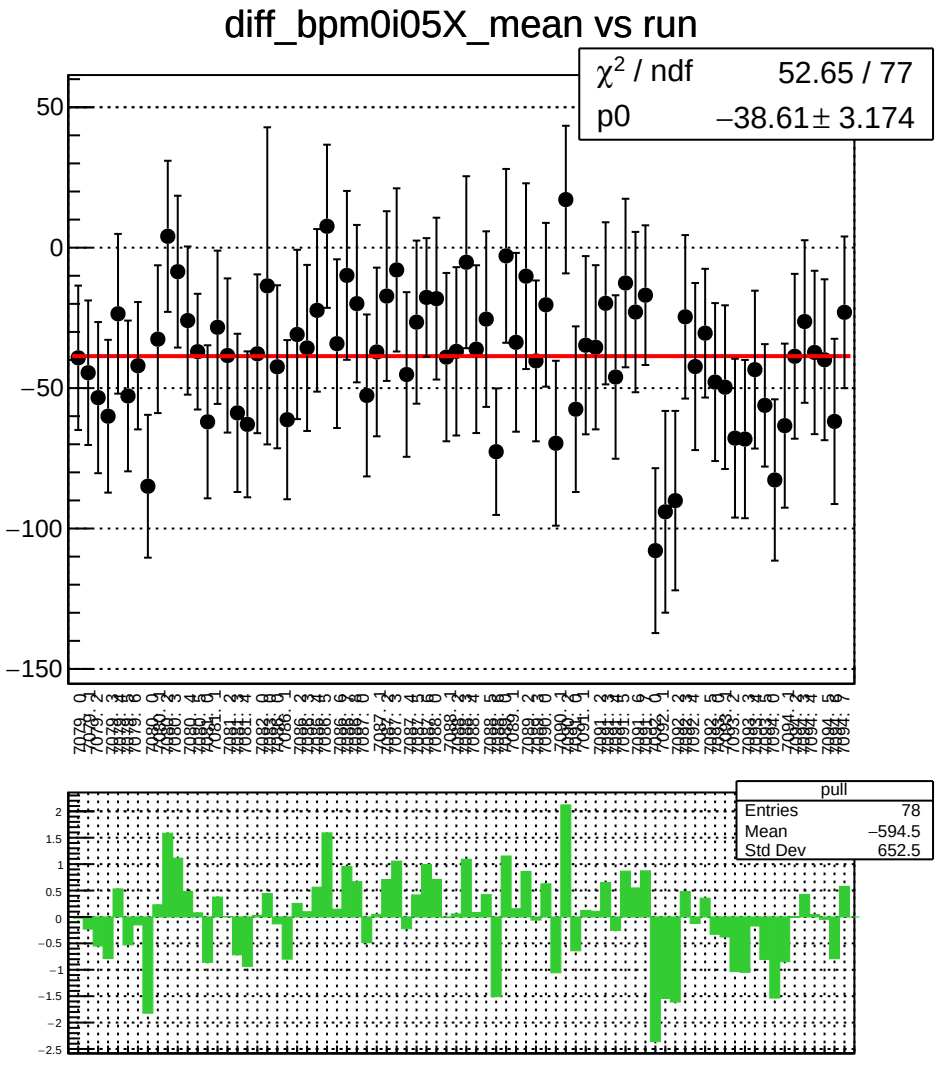

pull1D
Entries 78
Mean 0.03421
Std Dev 1.183

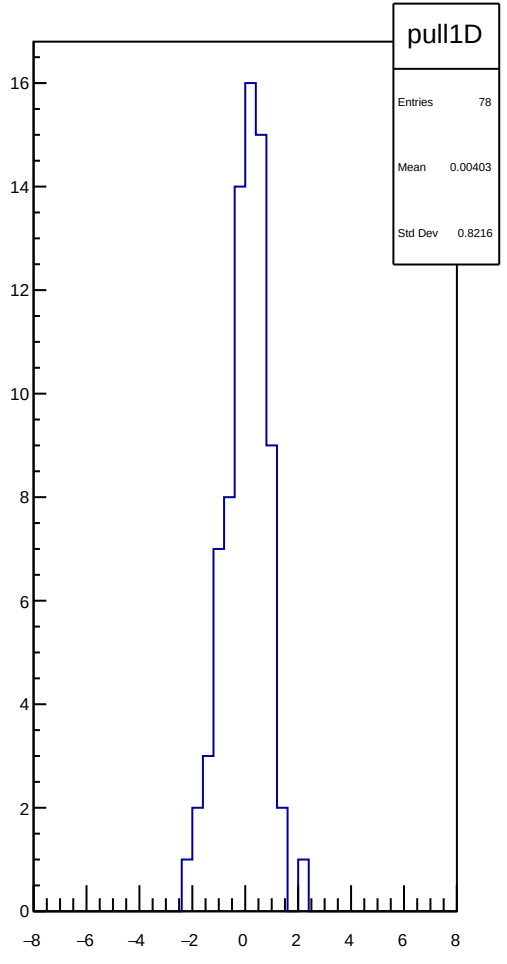

diff_bpm0i02aX_rms vs run
χ² / ndf 440.6 / 77
p0 2025 ± 1.656
2200
2150
2100
2050
2000
1950
1900

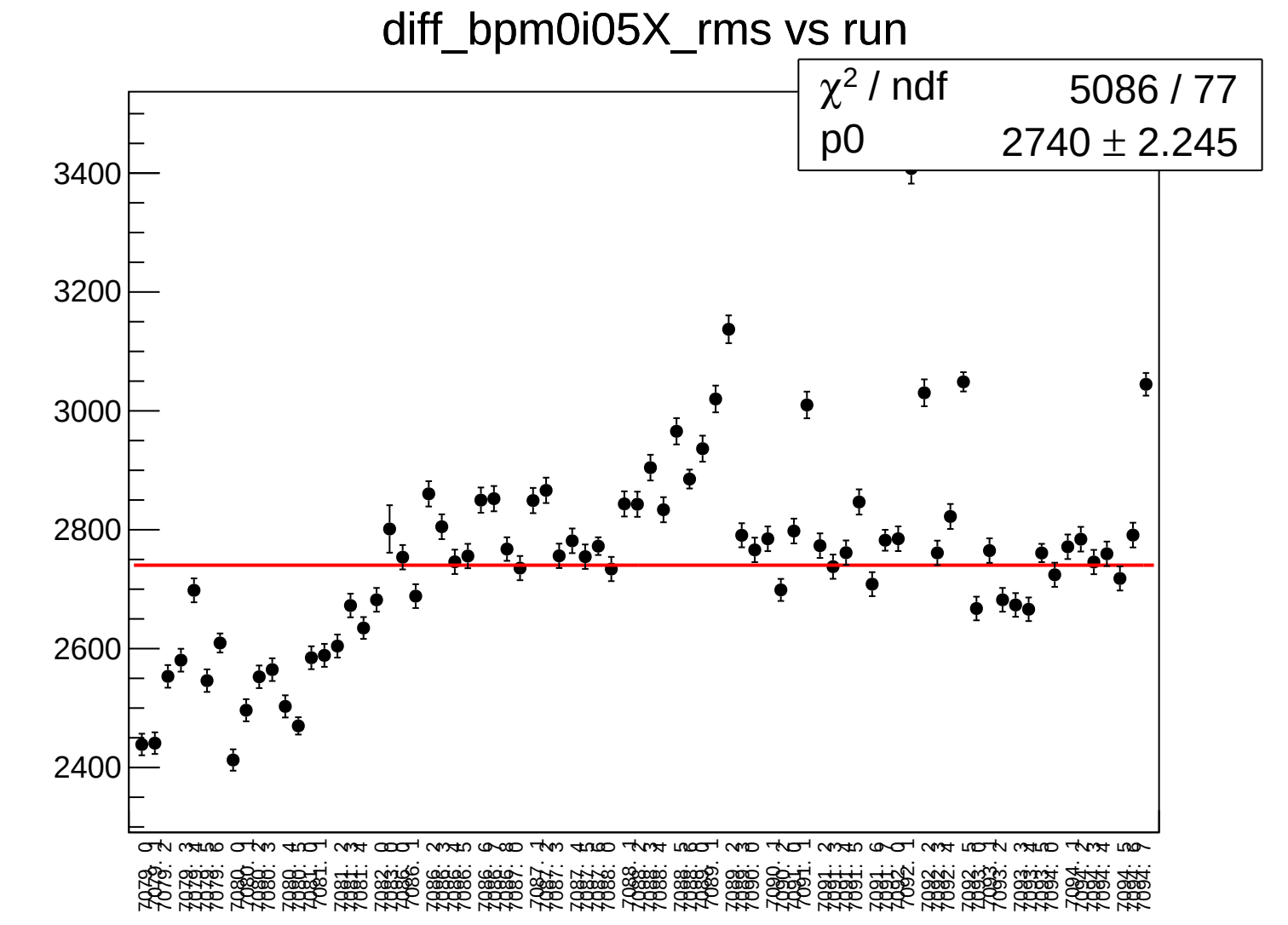

diff_bpm0i02aY_mean vs run
χ² / ndf 90.57 / 77
p0 11.72 ± 2.052
pull
Entries 78
Mean 20.99
Std Dev 56.19

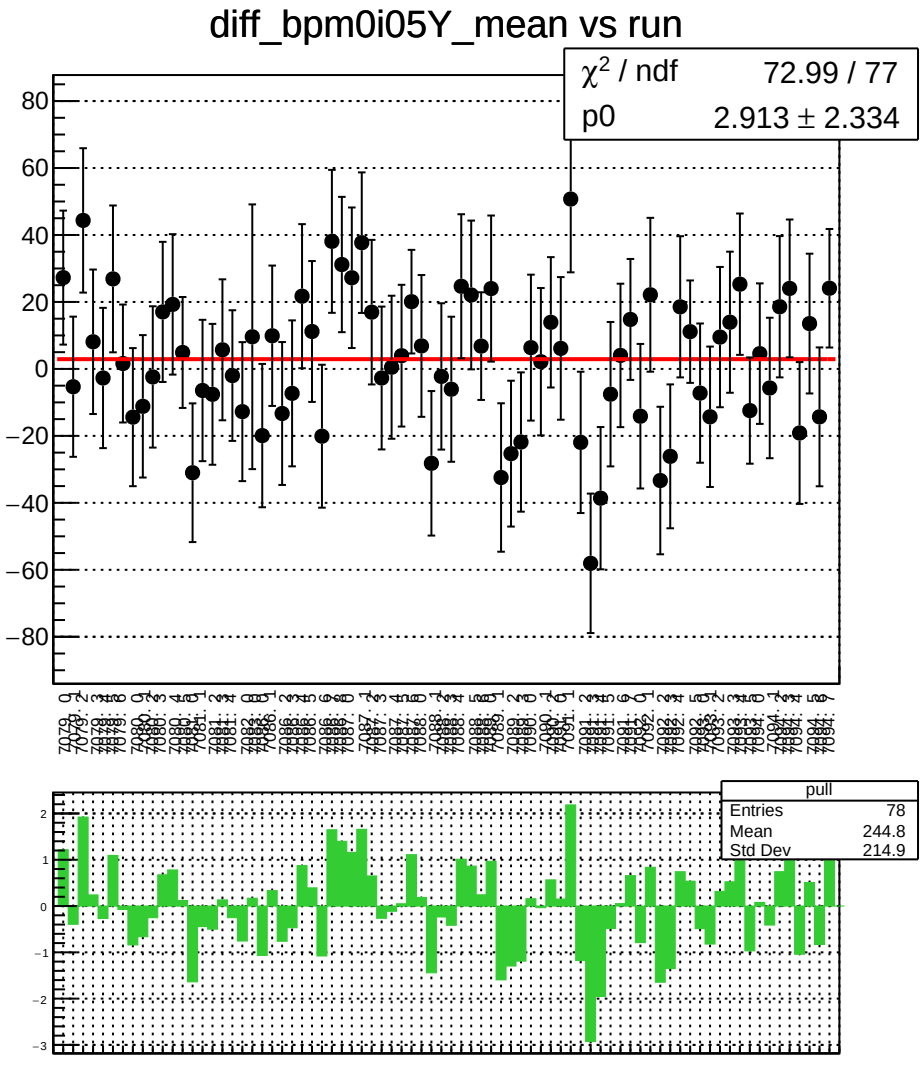

pull1D
Entries 78
Mean 0.02704
Std Dev 1.077

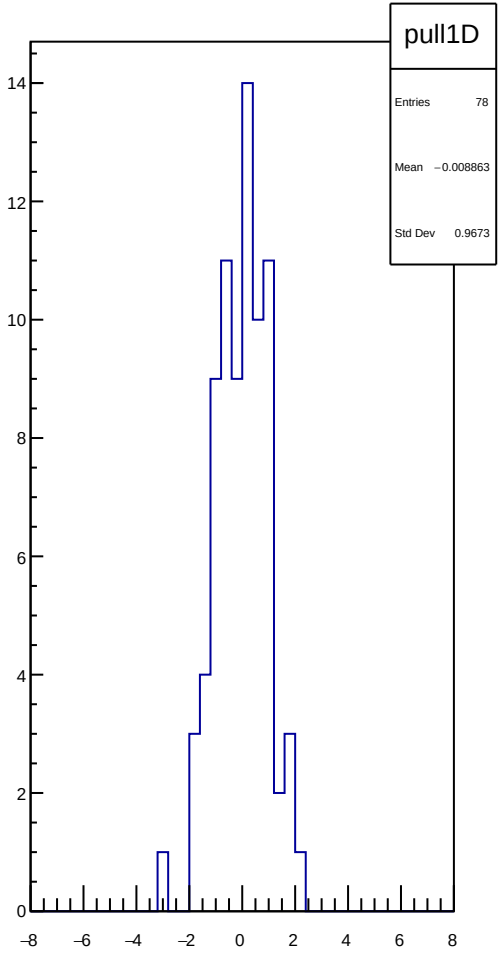

diff_bpm0i02aY_rms vs run
χ² / ndf 815.1 / 77
p0 1774 ± 1.451
1950
1900
1850
1800
1750
1700
1650
1600

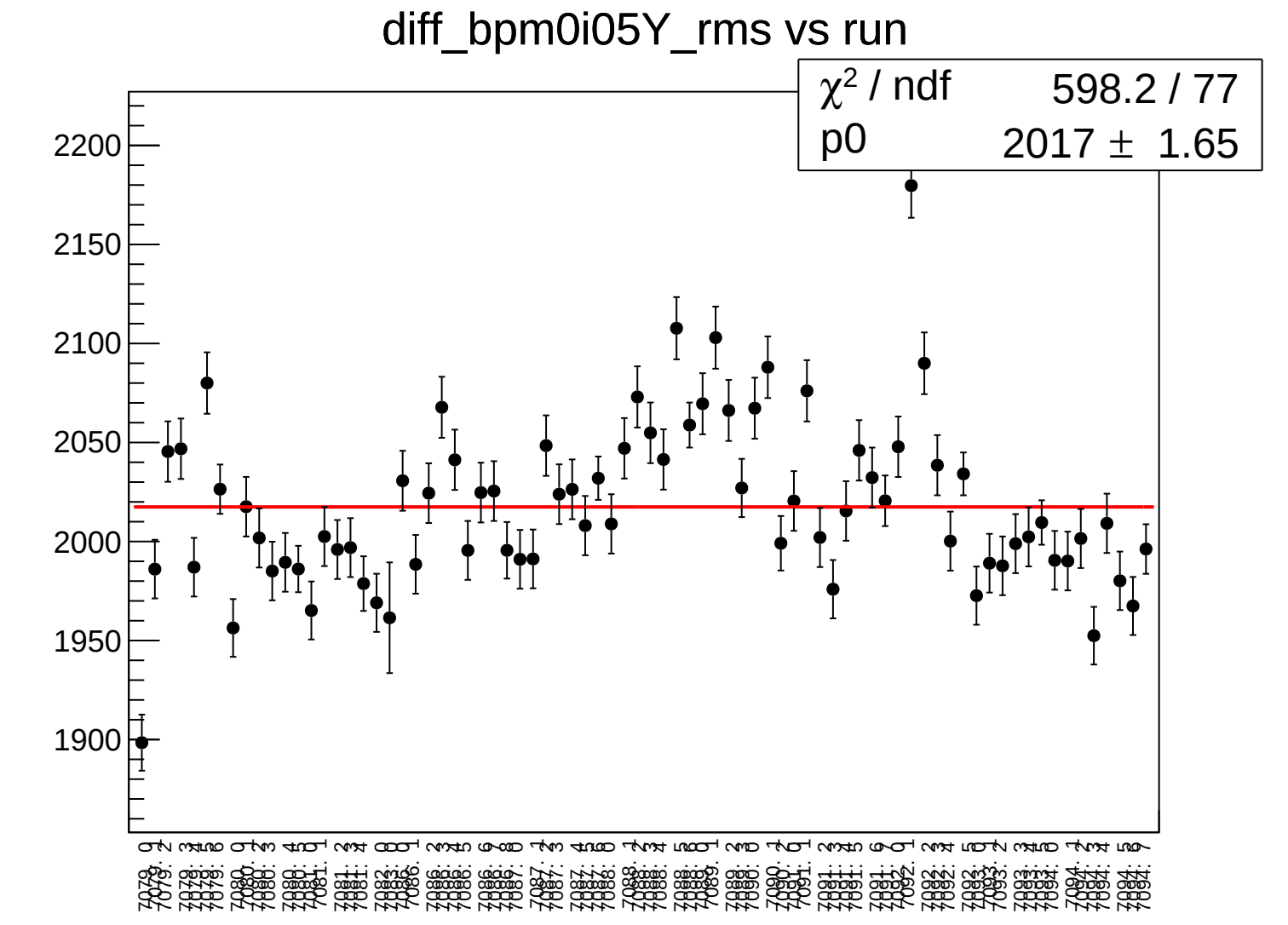

diff_bpm0i05X_mean vs run
χ^2 / ndf 52.65 / 77
p0 −38.61 ± 3.174
50
0
−50
−100
−150
pull
Entries 78
Mean −594.5
Std Dev 652.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

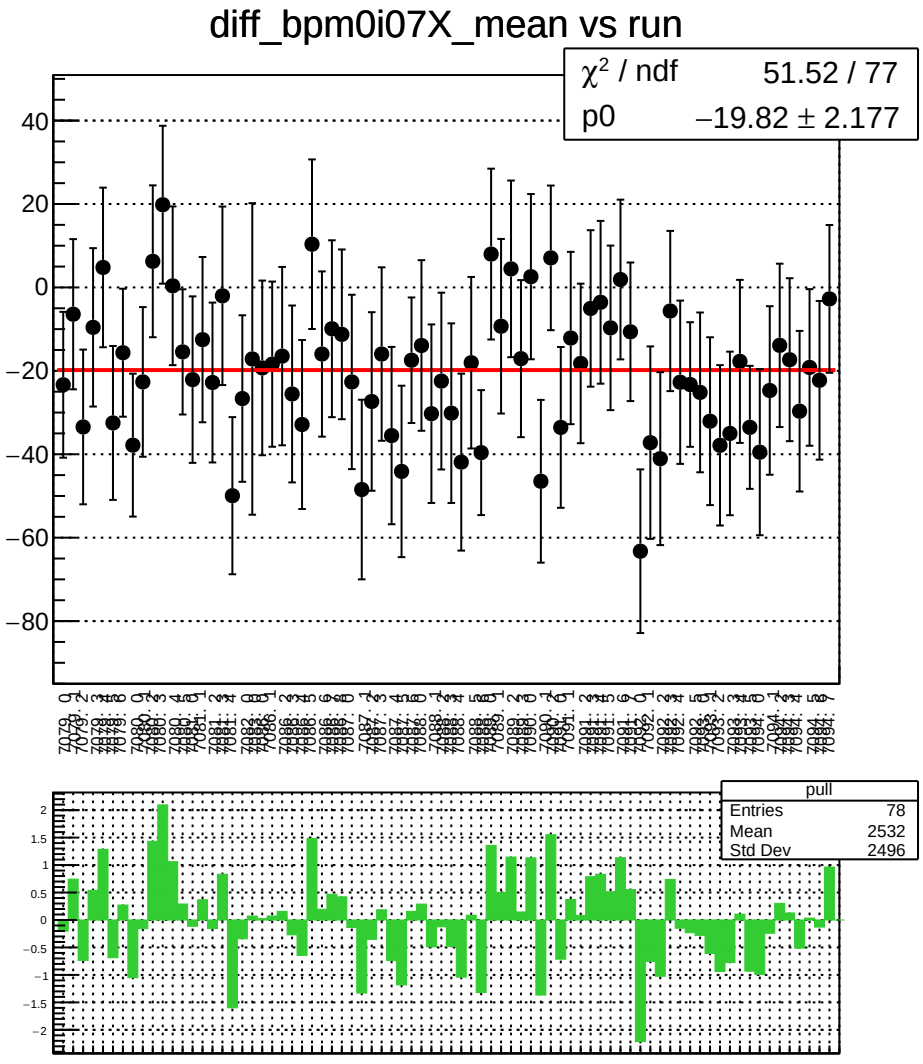

pull1D
Entries 78
Mean 0.00403
Std Dev 0.8216
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

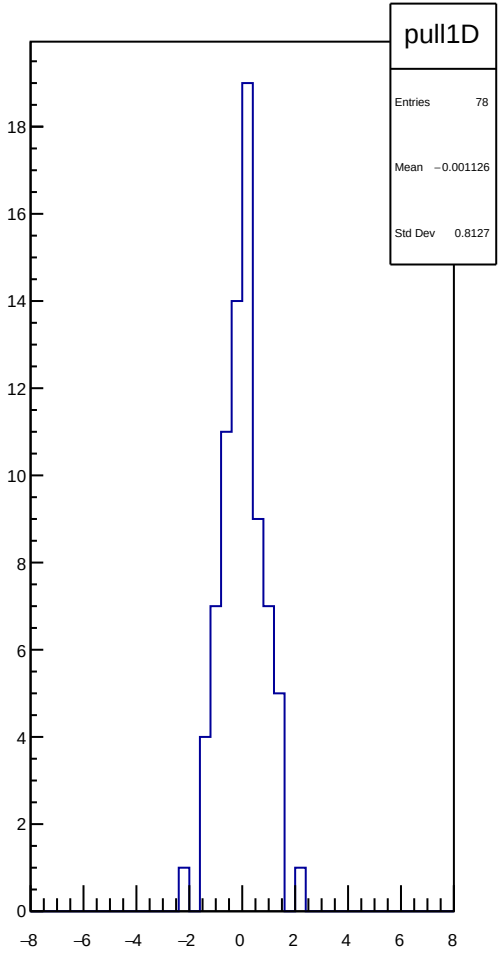

diff_bpm0i05X_rms vs run
χ² / ndf 5086 / 77
p0 2740 ± 2.245
3400
3200
3000
2800
2600
2400

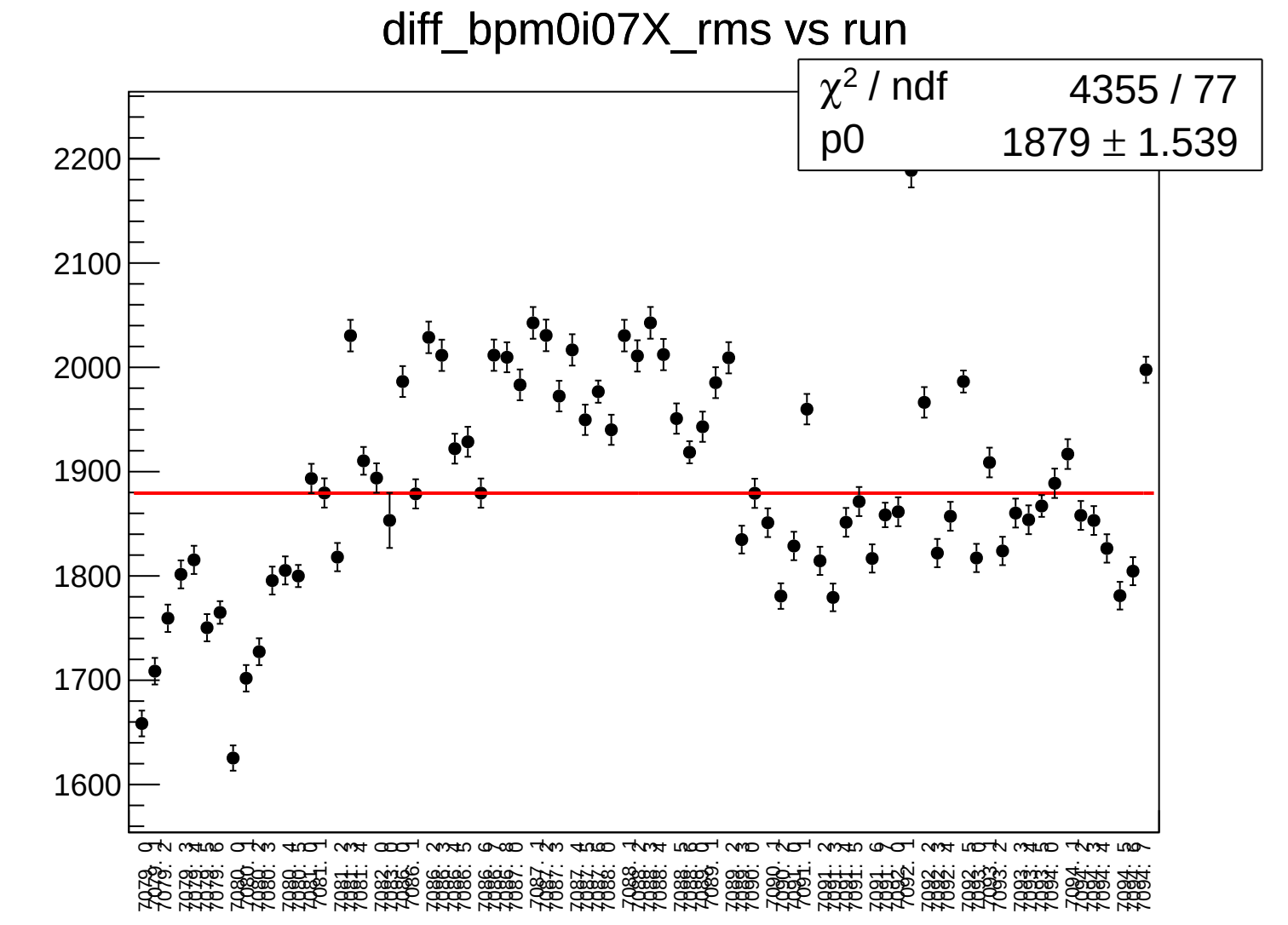

diff_bpm0i05Y_mean vs run
χ² / ndf 72.99 / 77
p0 2.913 ± 2.334
pull
Entries 78
Mean 244.8
Std Dev 214.9

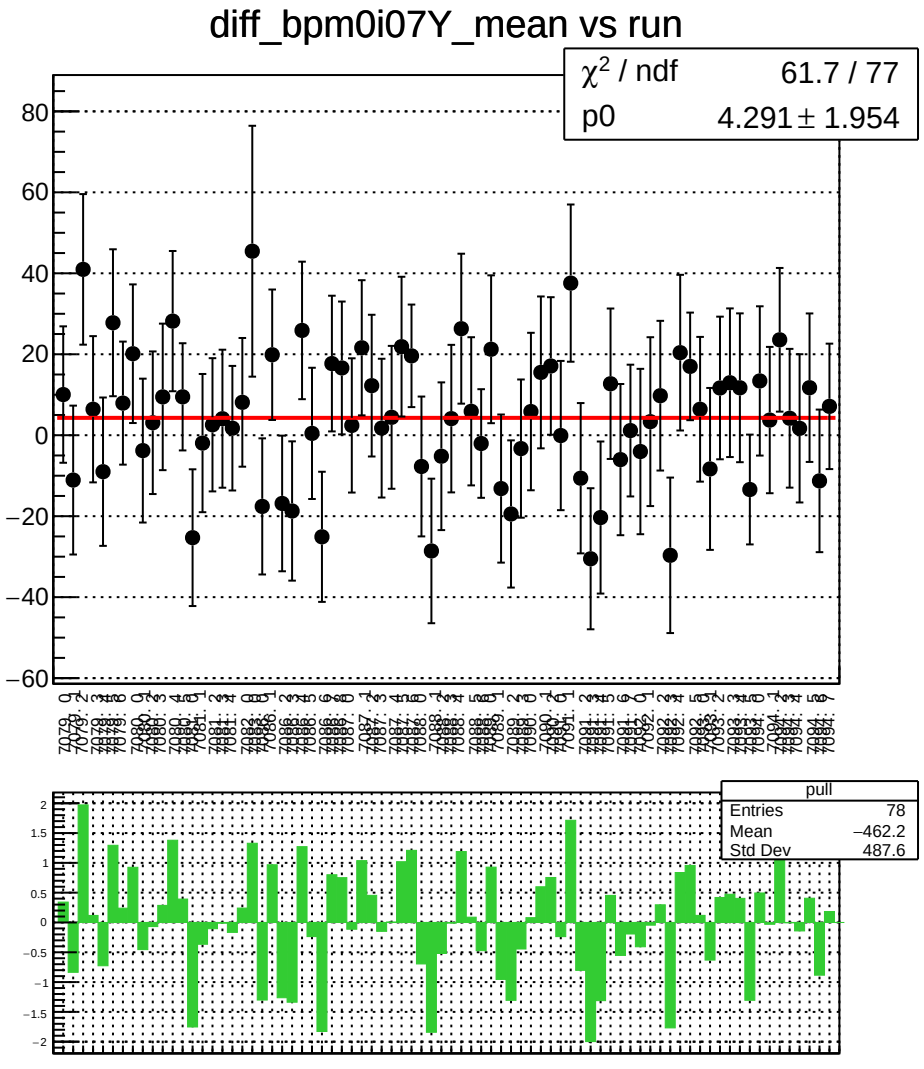

pull1D
Entries 78
Mean −0.008863
Std Dev 0.9673

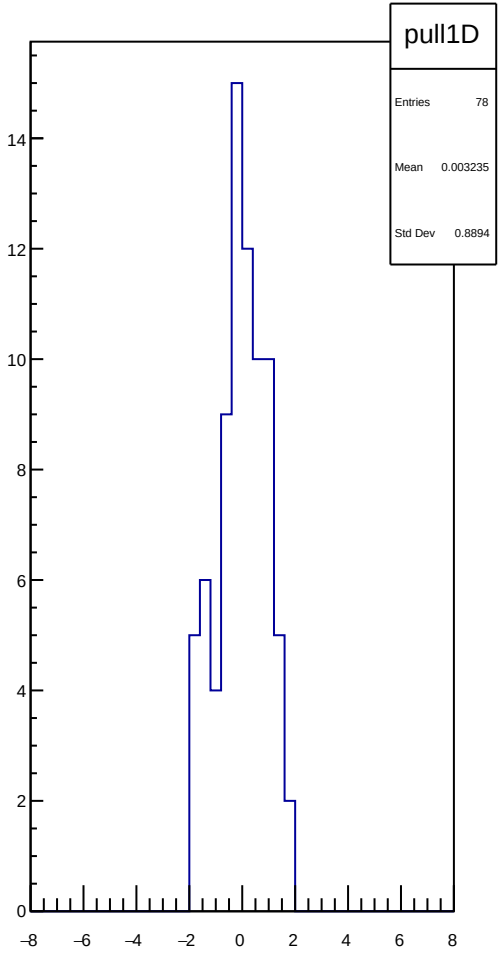

diff_bpm0i05Y_rms vs run
χ² / ndf 598.2 / 77
p0 2017 ± 1.65
2200
2150
2100
2050
2000
1950
1900

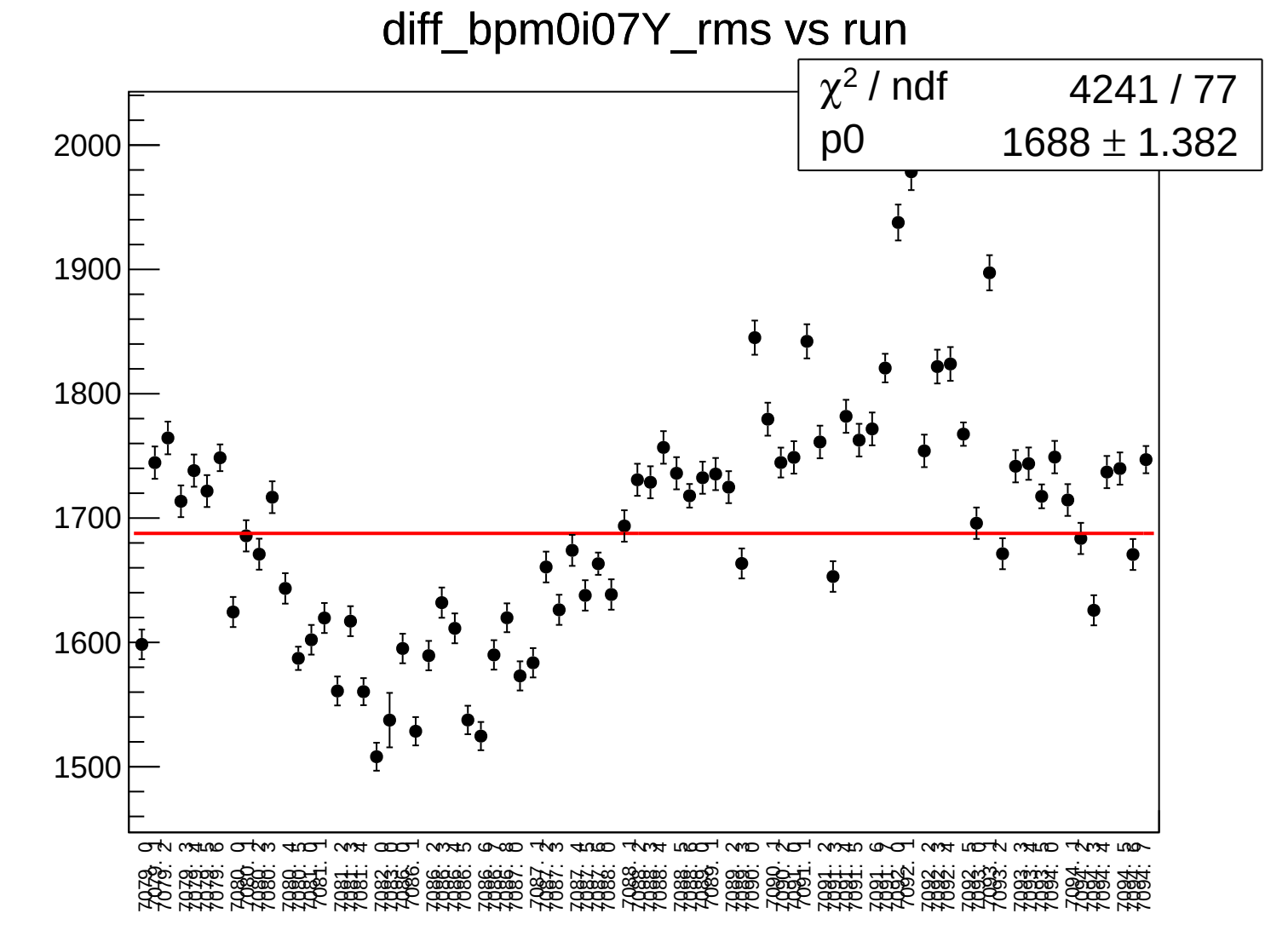

diff_bpm0i07X_mean vs run
χ² / ndf 51.52 / 77
p0 −19.82 ± 2.177
pull
Entries 78
Mean 2532
Std Dev 2496

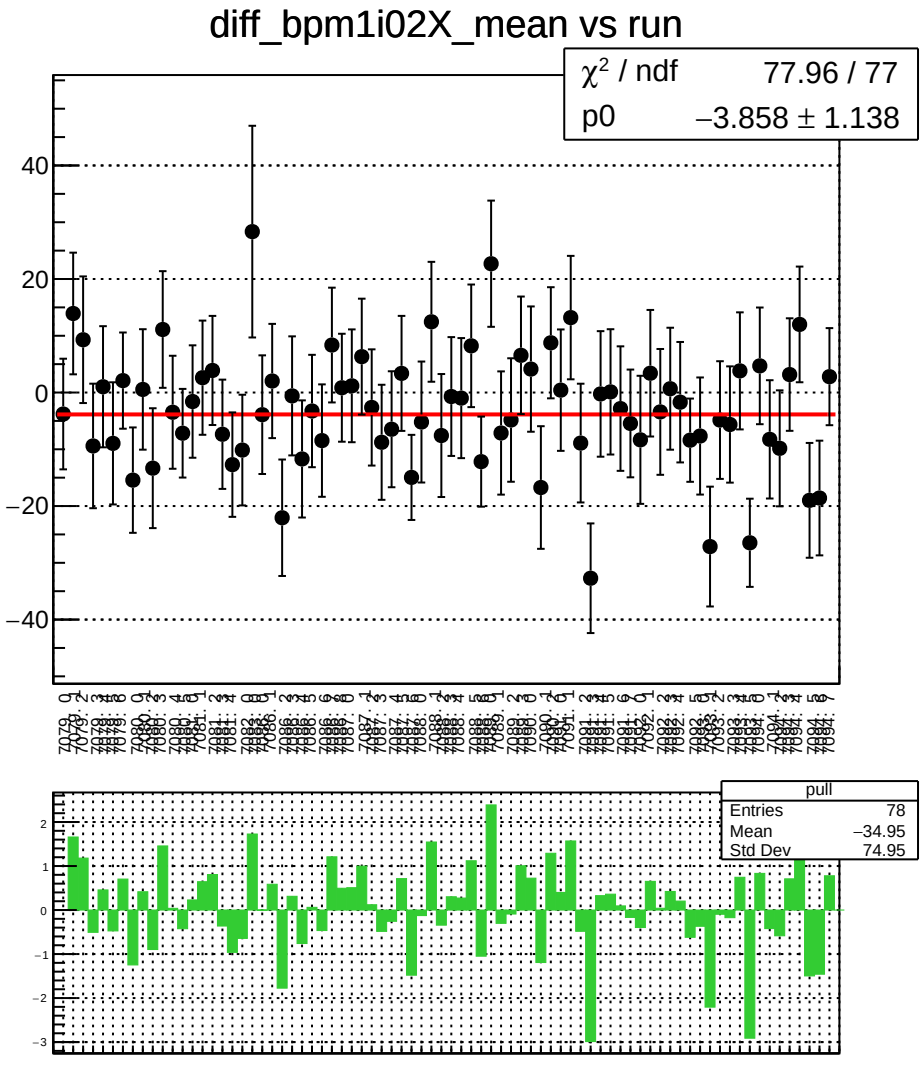

pull1D
Entries 78
Mean −0.001126
Std Dev 0.8127

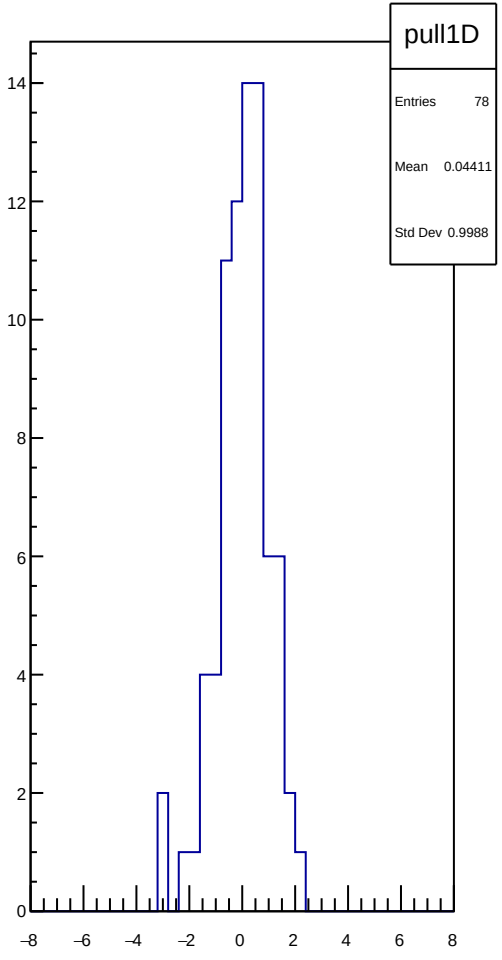

diff_bpm0i07X_rms vs run
χ² / ndf 4355 / 77
p0 1879 ± 1.539
2200
2100
2000
1900
1800
1700
1600

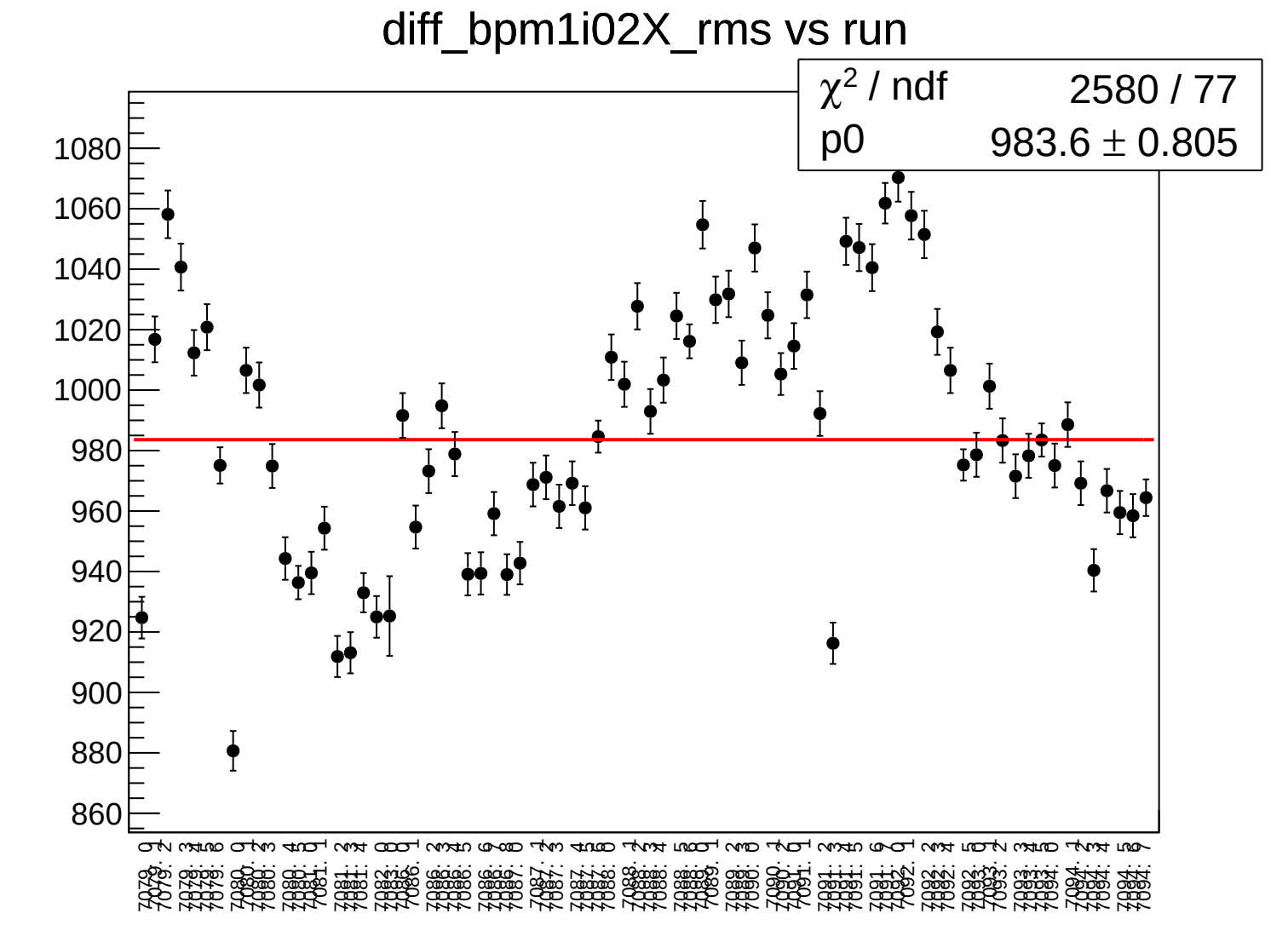

diff_bpm0i07Y_mean vs run
χ² / ndf 61.7 / 77
p0 4.291 ± 1.954
pull
Entries 78
Mean −462.2
Std Dev 487.6

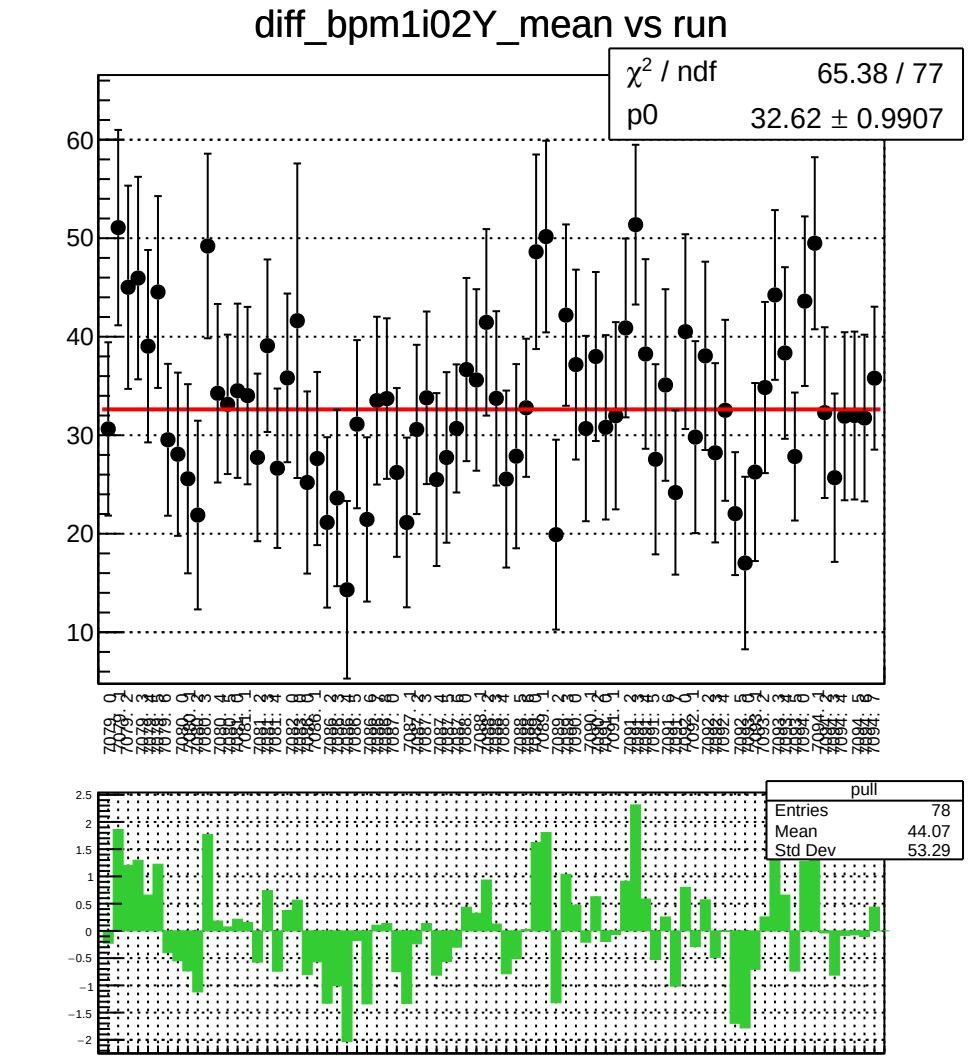

pull1D
Entries 78
Mean 0.003235
Std Dev 0.8894

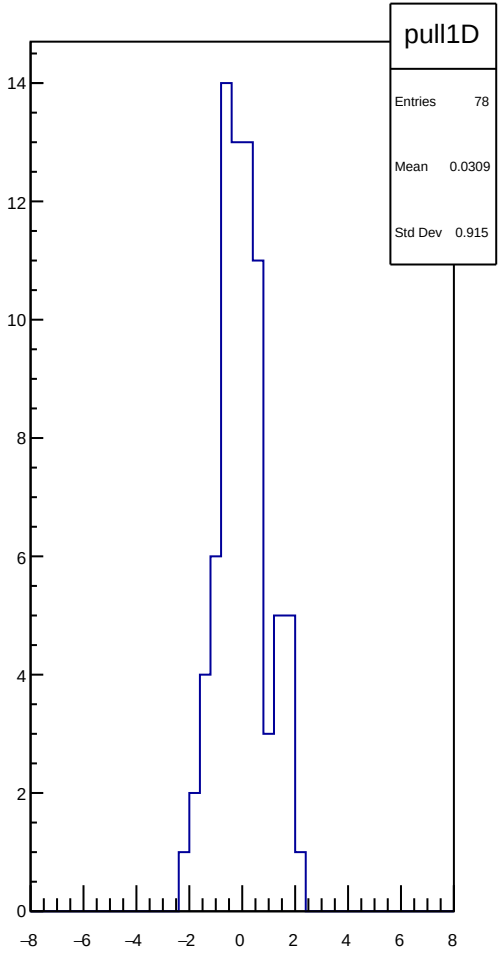

diff_bpm0i07Y_rms vs run
χ² / ndf 4241 / 77
p0 1688 ± 1.382
2000
1900
1800
1700
1600
1500

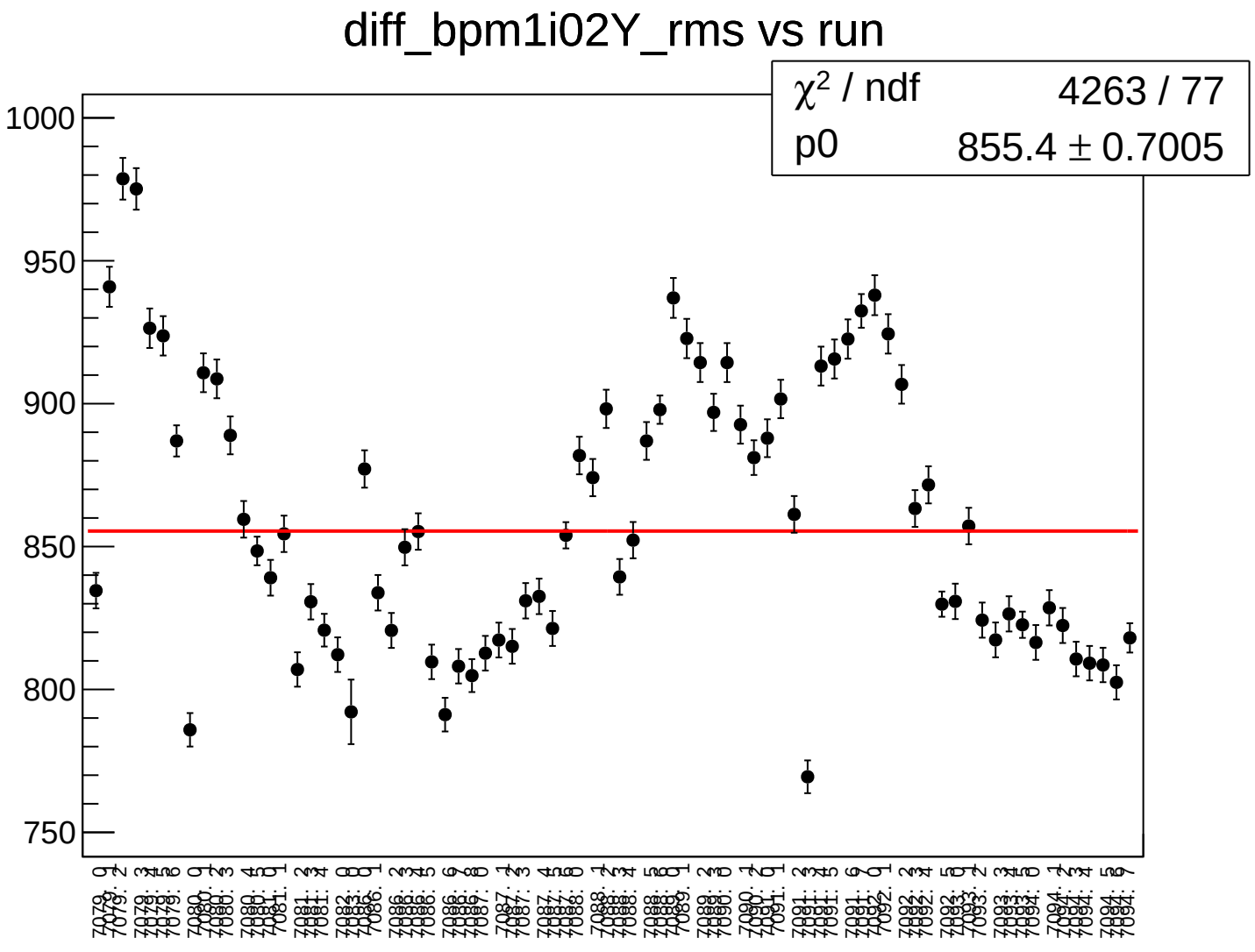

diff_bpm1i02X_mean vs run
χ² / ndf 77.96 / 77
p0 −3.858 ± 1.138
pull
Entries 78
Mean −34.95
Std Dev 74.95

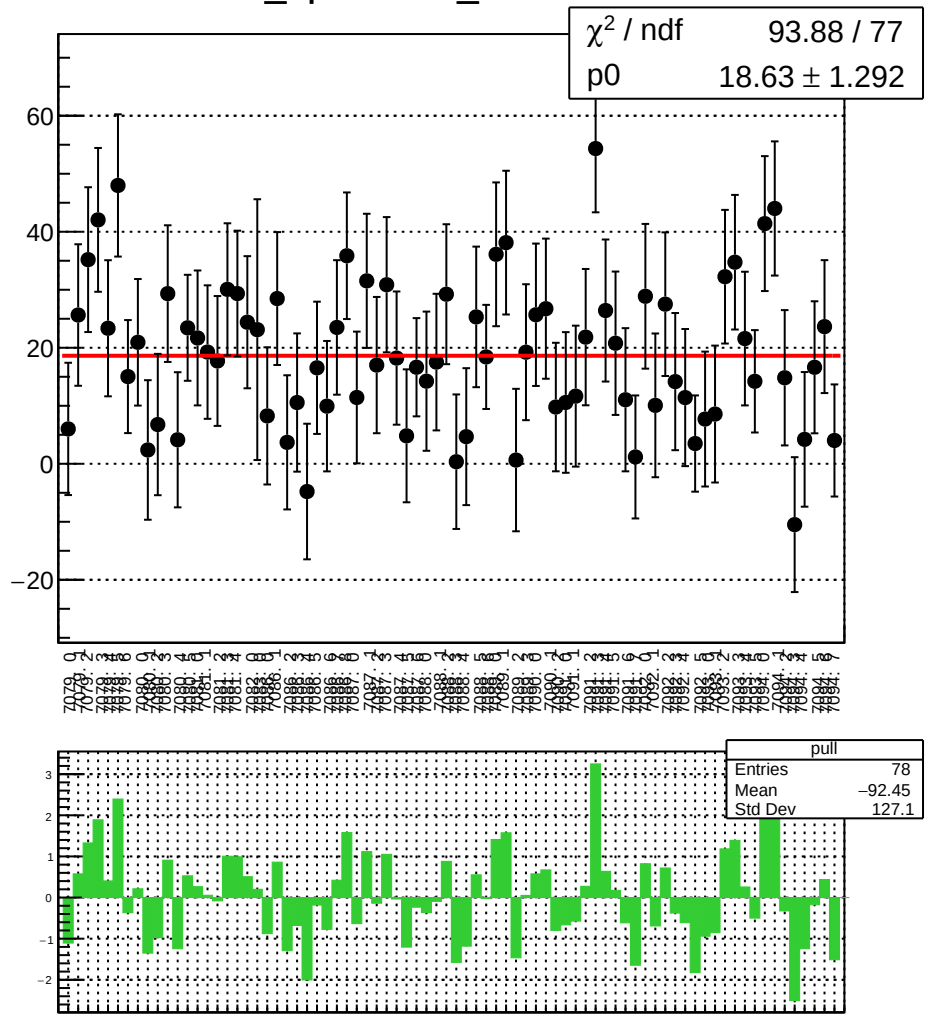

pull1D
Entries 78
Mean 0.04411
Std Dev 0.9988

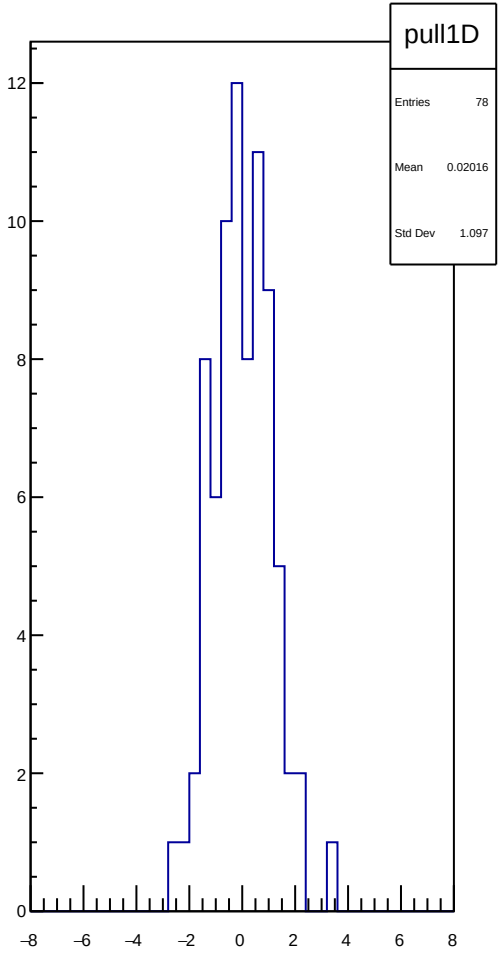

diff_bpm1i02X_rms vs run
χ² / ndf 2580 / 77
p0 983.6 ± 0.805
1080
1060
1040
1020
1000
980
960
940
920
900
880
860

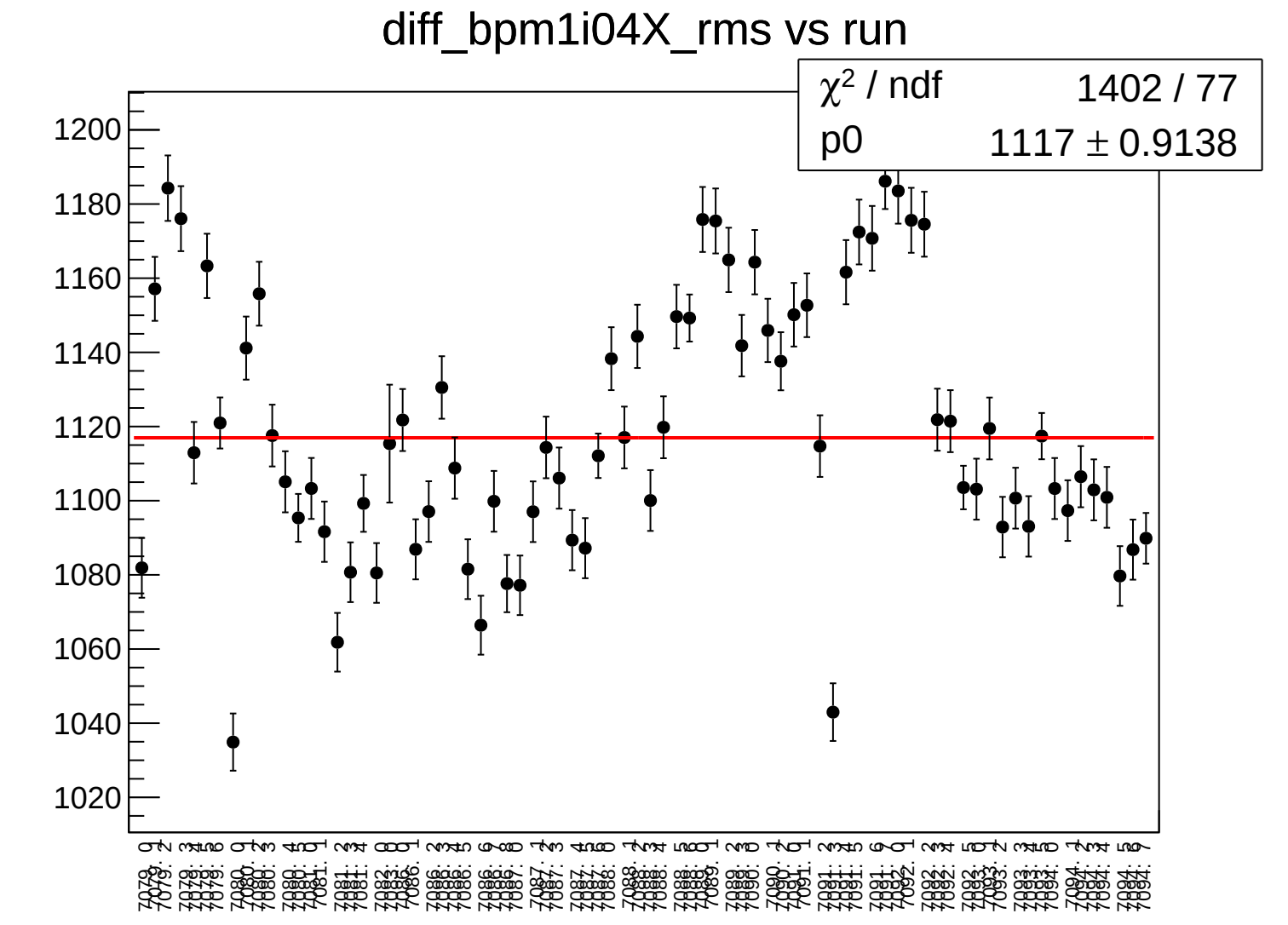

diff_bpm1i02Y_mean vs run
χ² / ndf 65.38 / 77
p0 32.62 ± 0.9907
pull
Entries 78
Mean 44.07
Std Dev 53.29

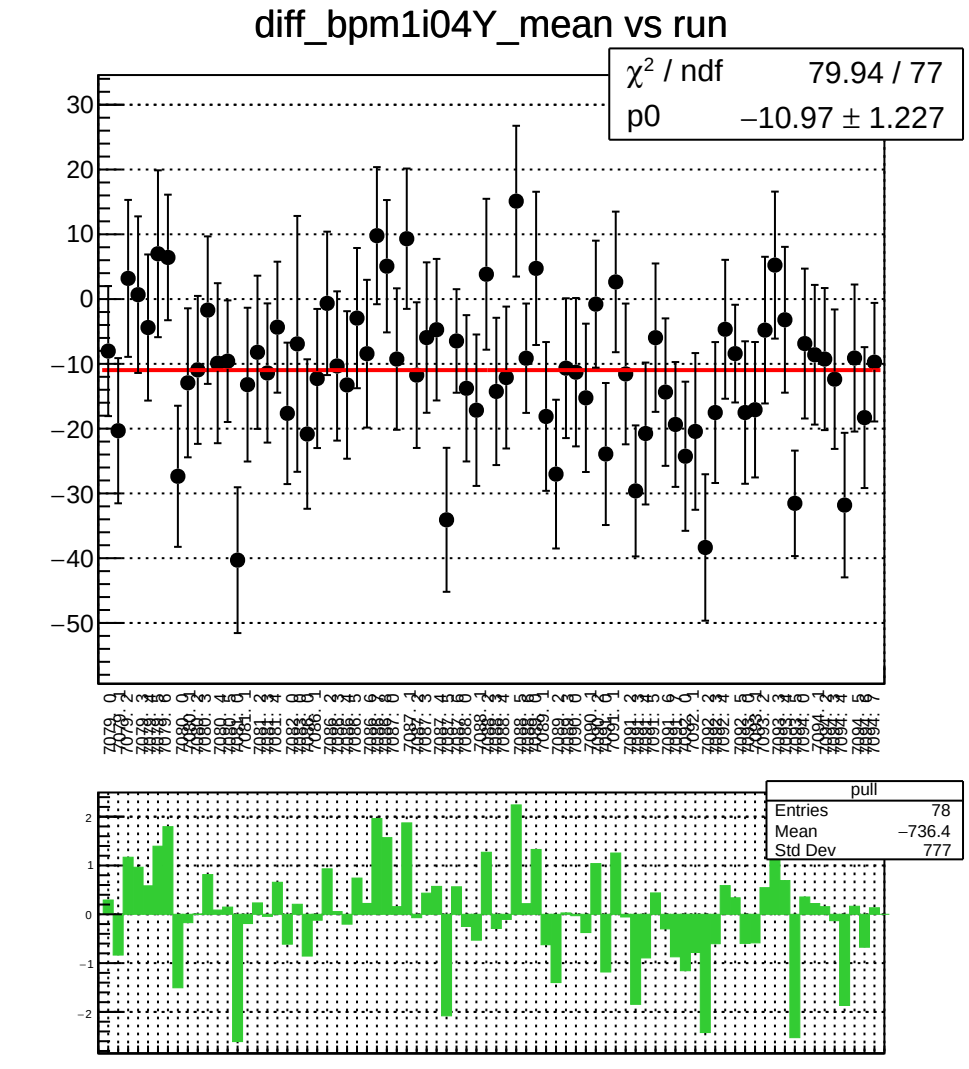

pull1D
Entries 78
Mean 0.0309
Std Dev 0.915

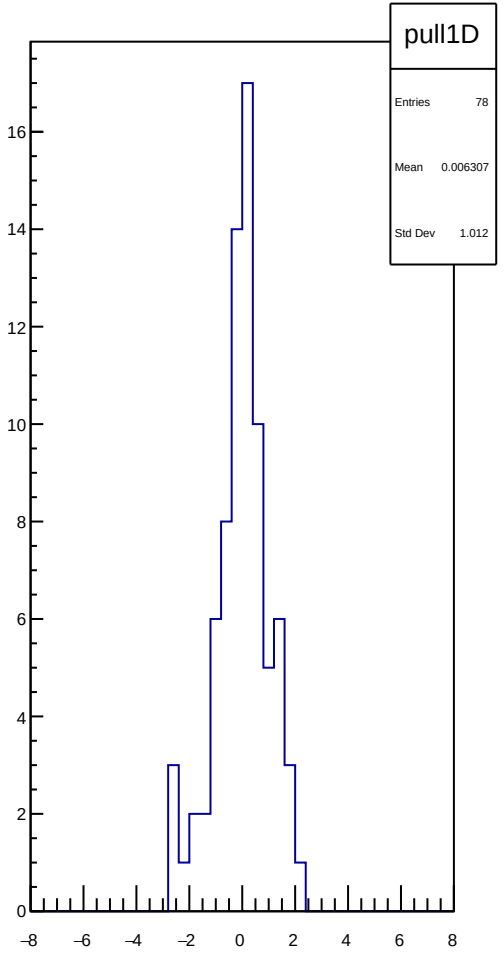

diff_bpm1i02Y_rms vs run
χ² / ndf 4263 / 77
p0 855.4 ± 0.7005
1000
950
900
850
800
750

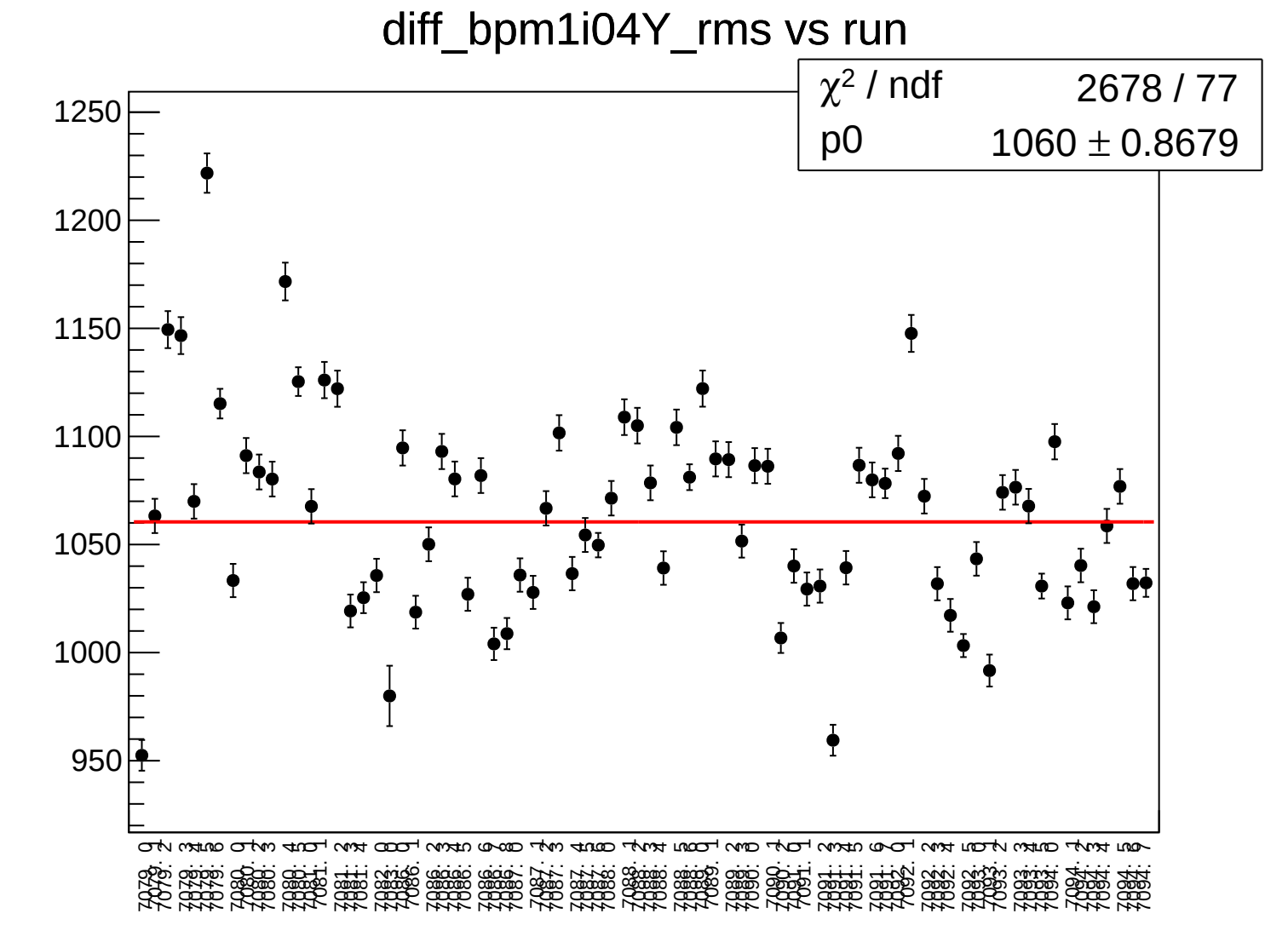

diff_bpm1i04X_mean vs run
χ^2 / ndf 93.88 / 77
p0 18.63 ± 1.292
pull
Entries 78
Mean −92.45
Std Dev 127.1

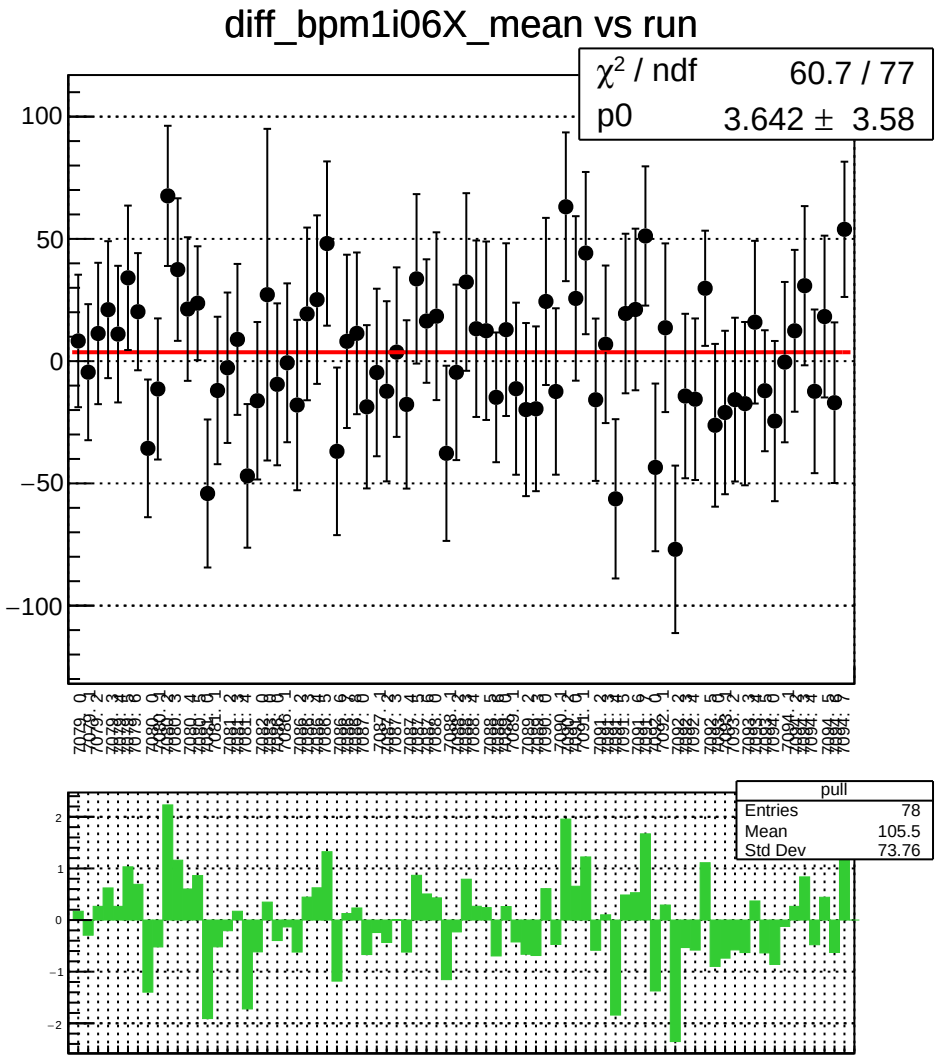

pull1D
Entries 78
Mean 0.02016
Std Dev 1.097

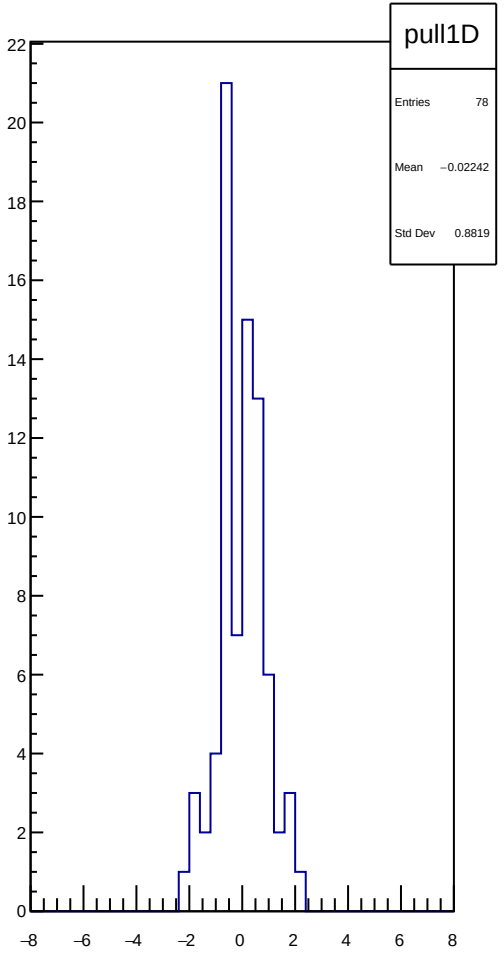

diff_bpm1i04X_rms vs run
χ² / ndf 1402 / 77
p0 1117 ± 0.9138
1200
1180
1160
1140
1120
1100
1080
1060
1040
1020

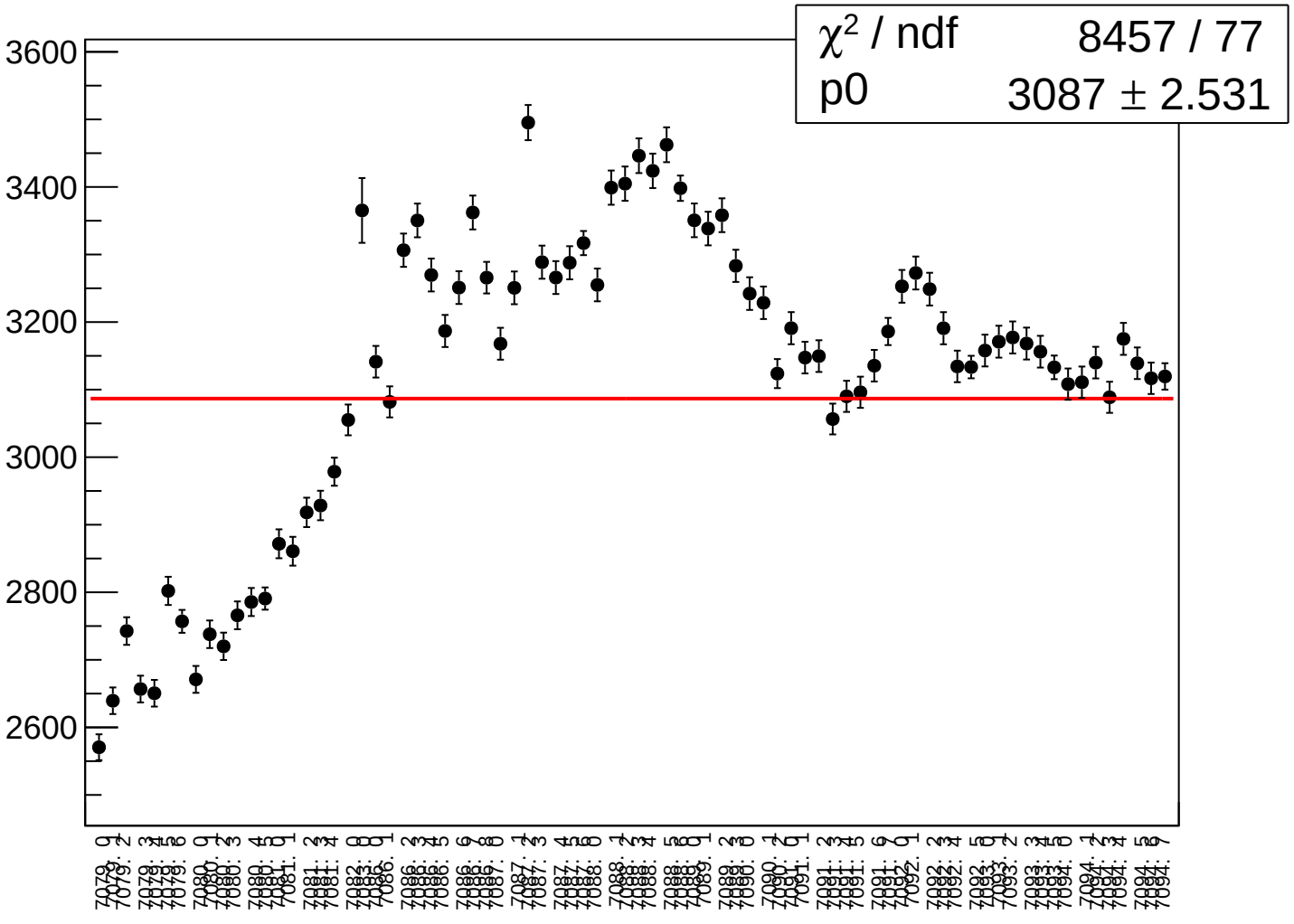

diff_bpm1i04Y_mean vs run
χ² / ndf 79.94 / 77
p0 −10.97 ± 1.227
pull
Entries 78
Mean −736.4
Std Dev 777

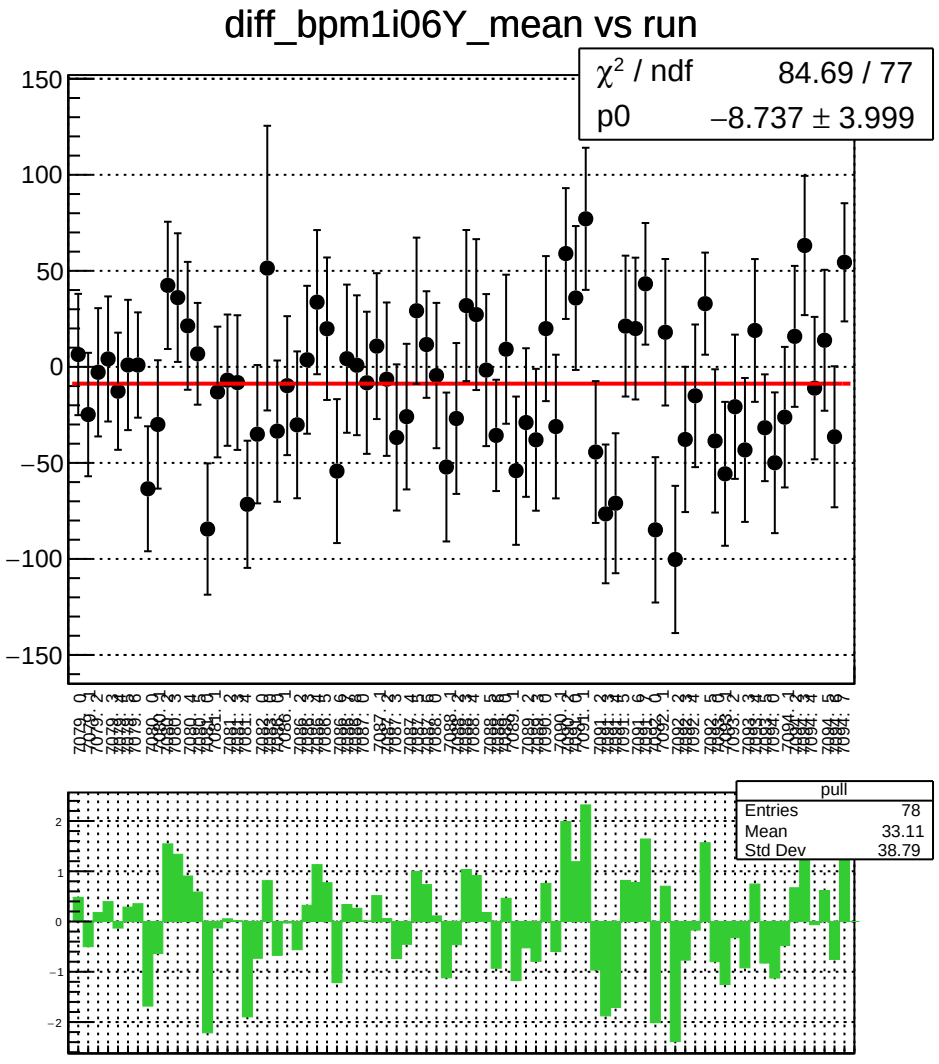

pull1D
Entries 78
Mean 0.006307
Std Dev 1.012

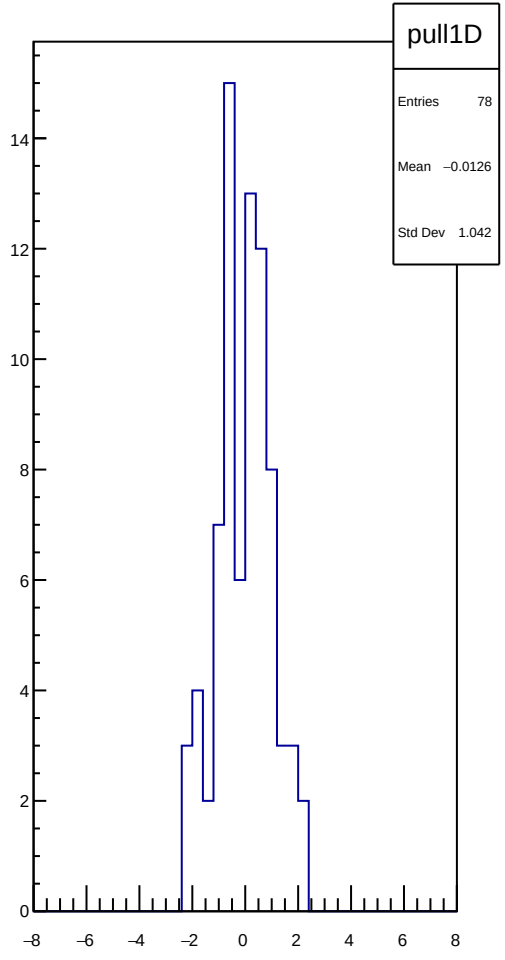

diff_bpm1i04Y_rms vs run
χ² / ndf 2678 / 77
p0 1060 ± 0.8679
1250
1200
1150
1100
1050
1000
950

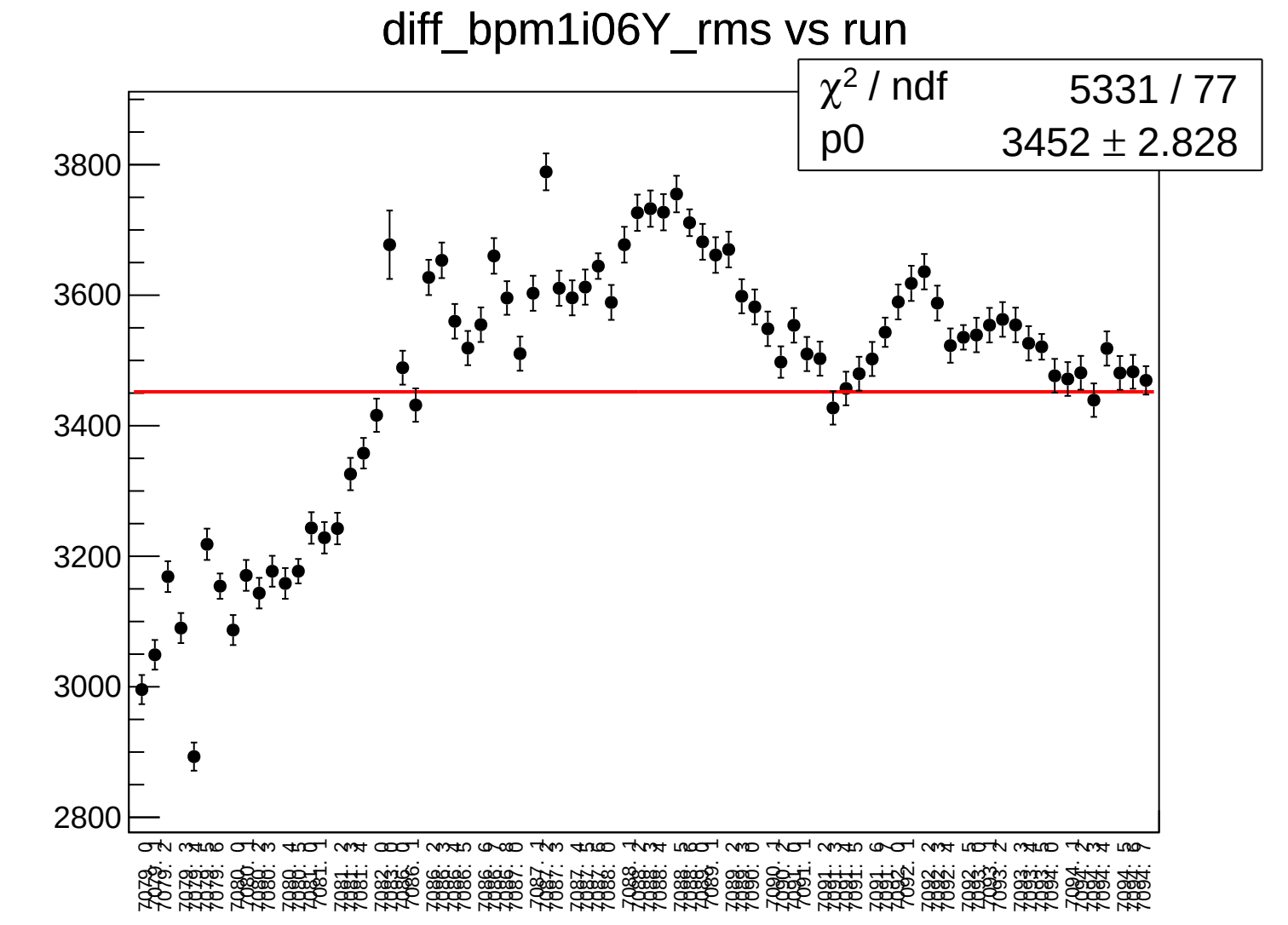

diff_bpm1i06X_mean vs run
χ² / ndf 60.7 / 77
p0 3.642 ± 3.58
100
50
0
−50
−100
pull
Entries 78
Mean 105.5
Std Dev 73.76
2
1
0
−1
−2

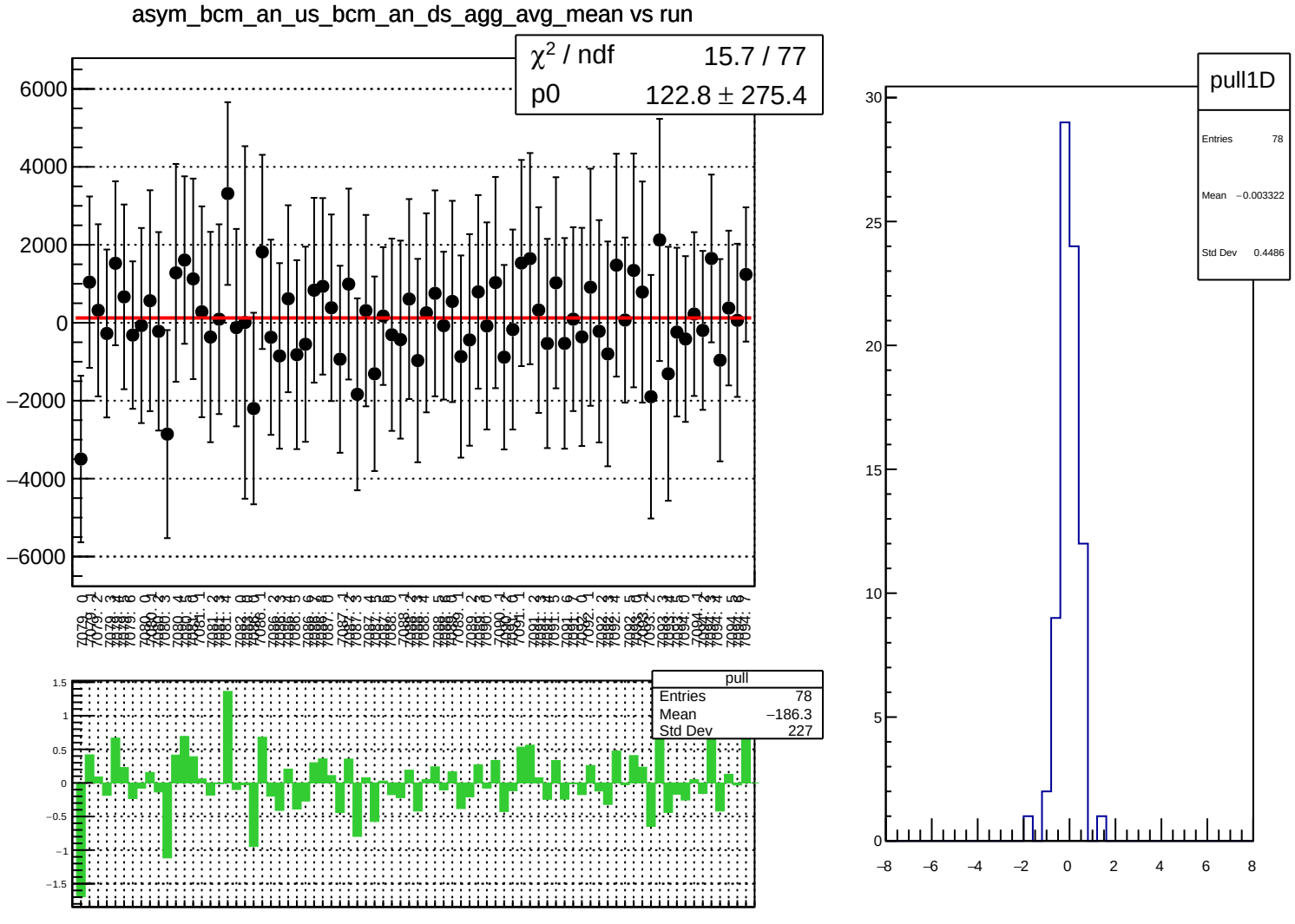

pull1D
Entries 78
Mean −0.02242
Std Dev 0.8819
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

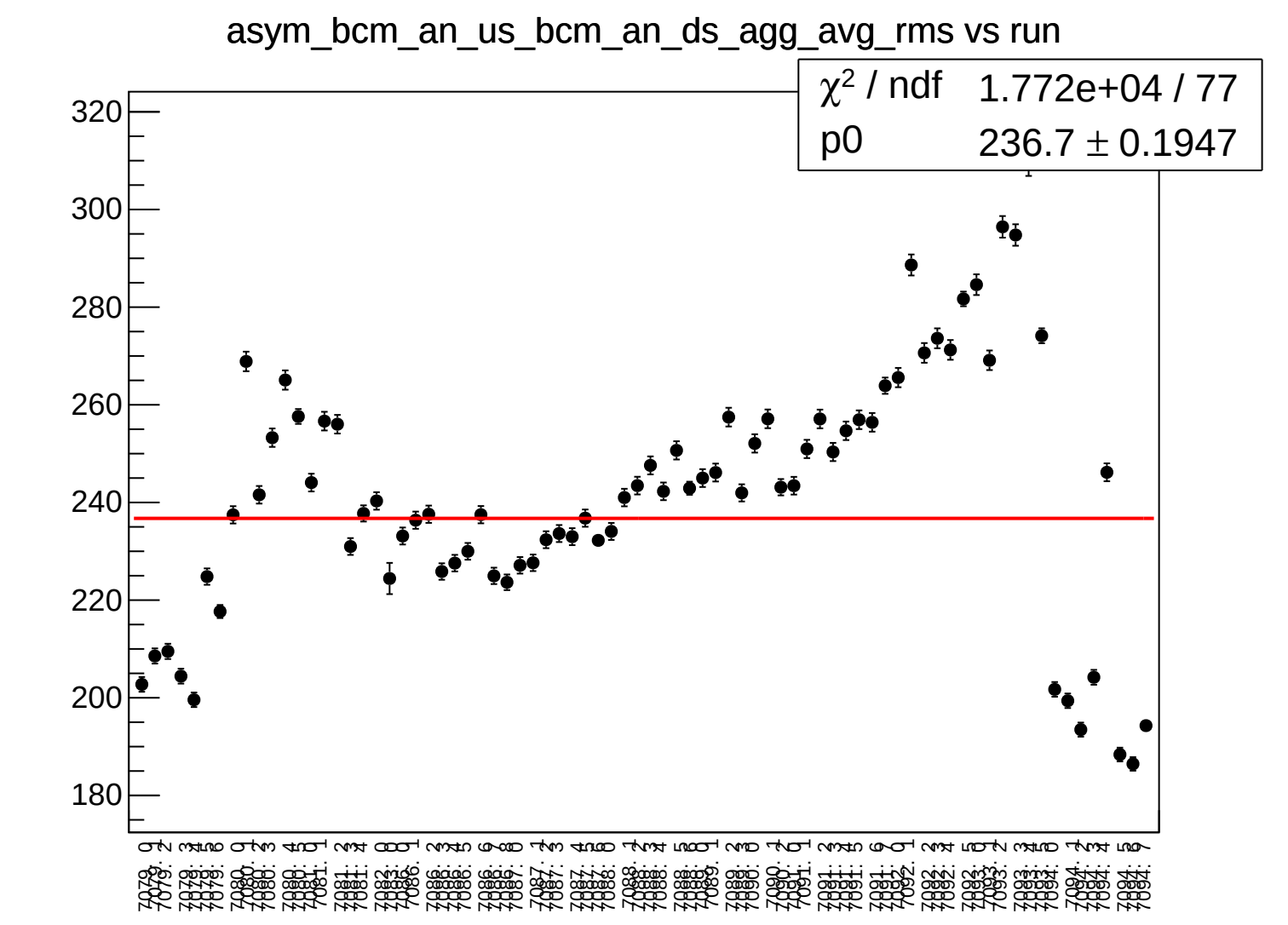

diff_bpm1i06X_rms vs run
χ² / ndf 8457 / 77
p0 3087 ± 2.531
3600
3400
3200
3000
2800
2600

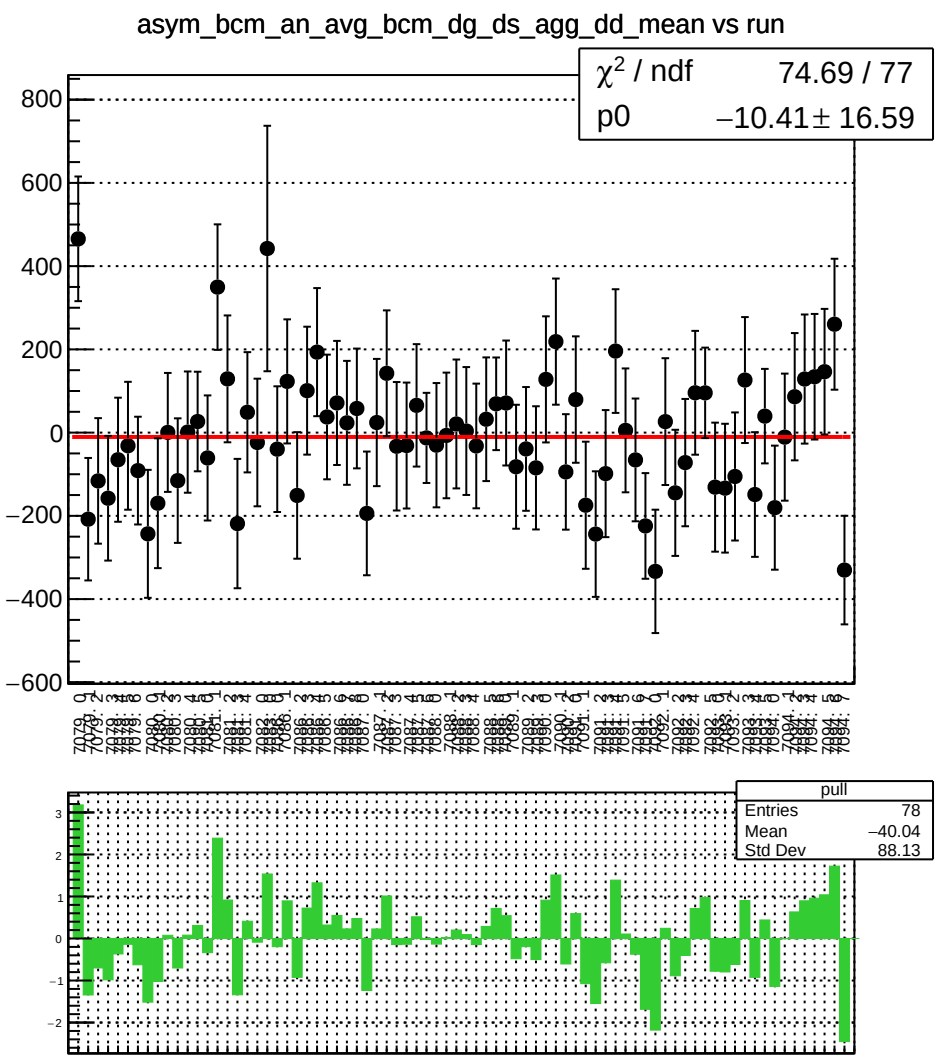

diff_bpm1i06Y_mean vs run
χ² / ndf 84.69 / 77
p0 −8.737 ± 3.999
150
100
50
0
−50
−100
−150
pull
Entries 78
Mean 33.11
Std Dev 38.79
2
1
0
−1
−2

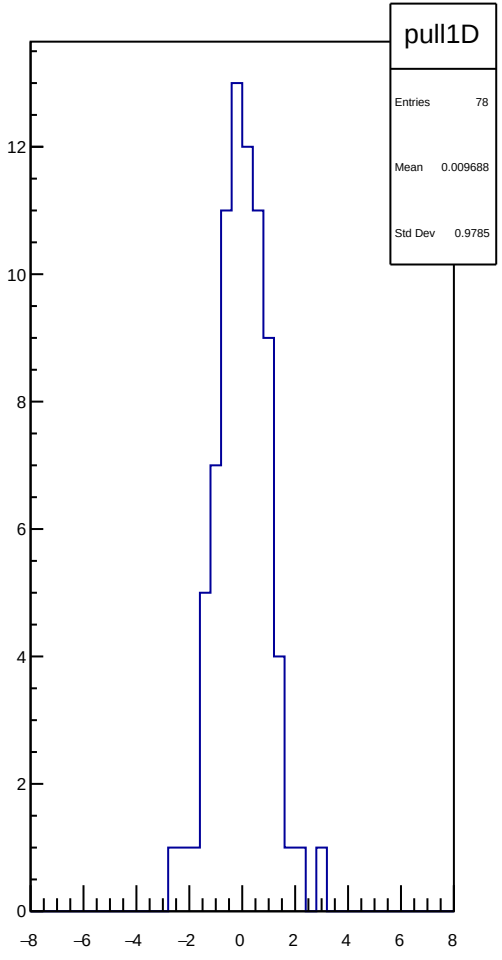

pull1D
Entries 78
Mean −0.0126
Std Dev 1.042
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

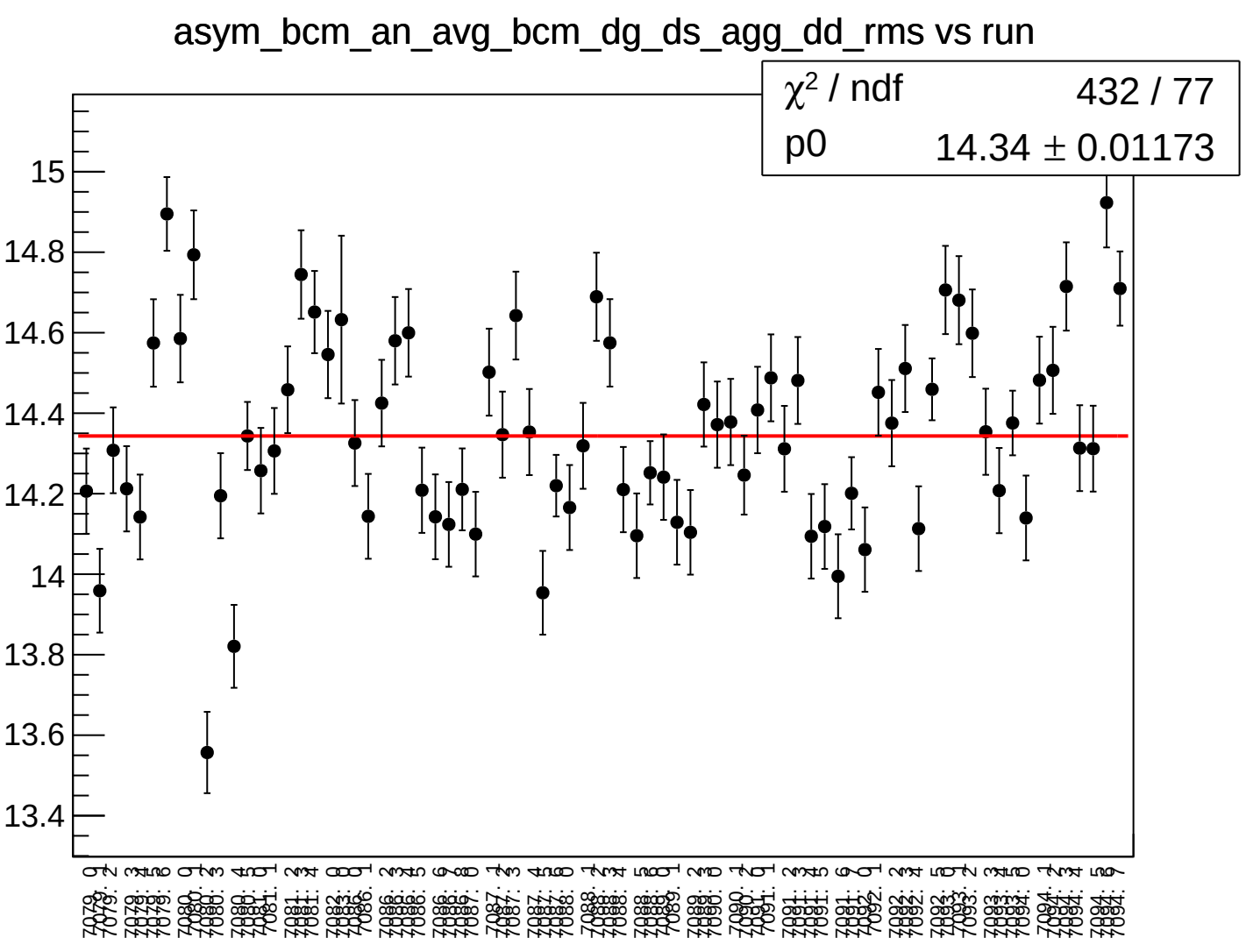

diff_bpm1i06Y_rms vs run
χ^2 / ndf 5331 / 77
p0 3452 ± 2.828
3800
3600
3400
3200
3000
2800

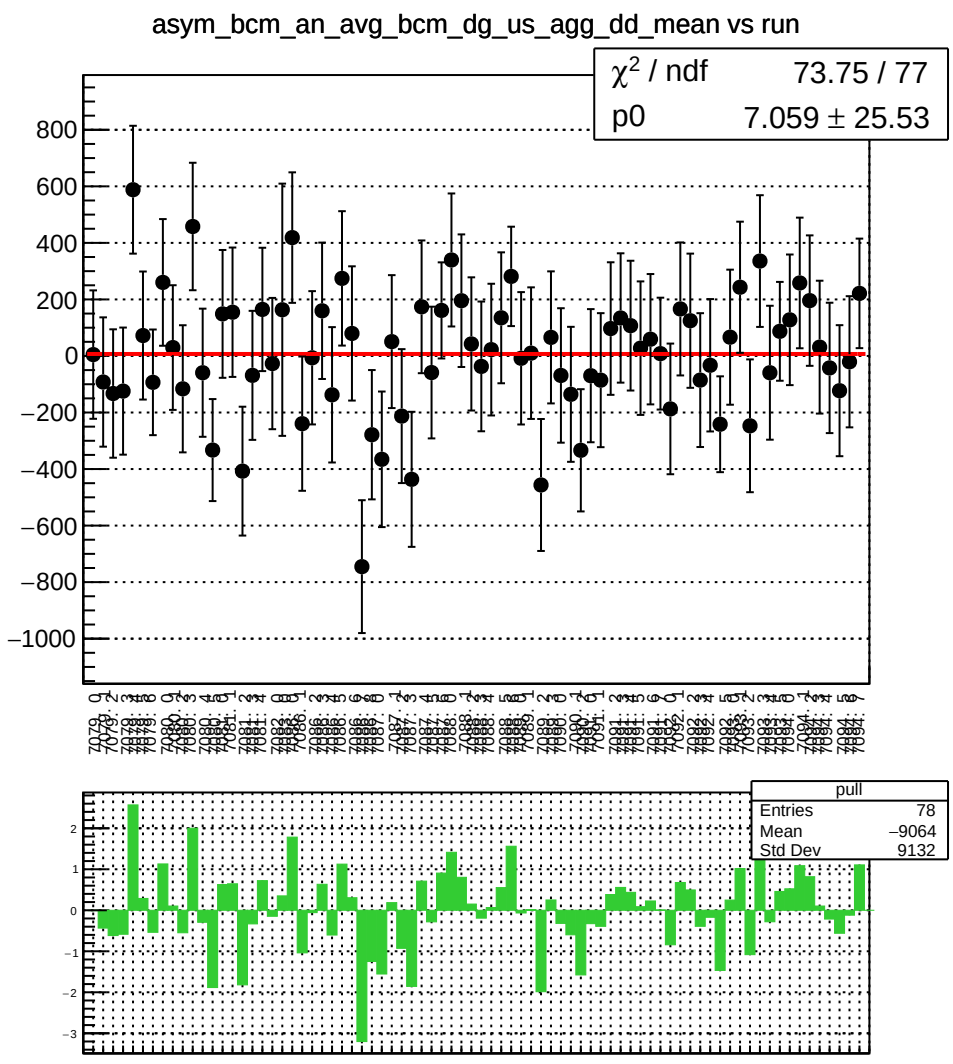

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.7 / 77
p0 122.8 ± 275.4
pull
Entries 78
Mean −186.3
Std Dev 227
pull1D
Entries 78
Mean −0.003322
Std Dev 0.4486

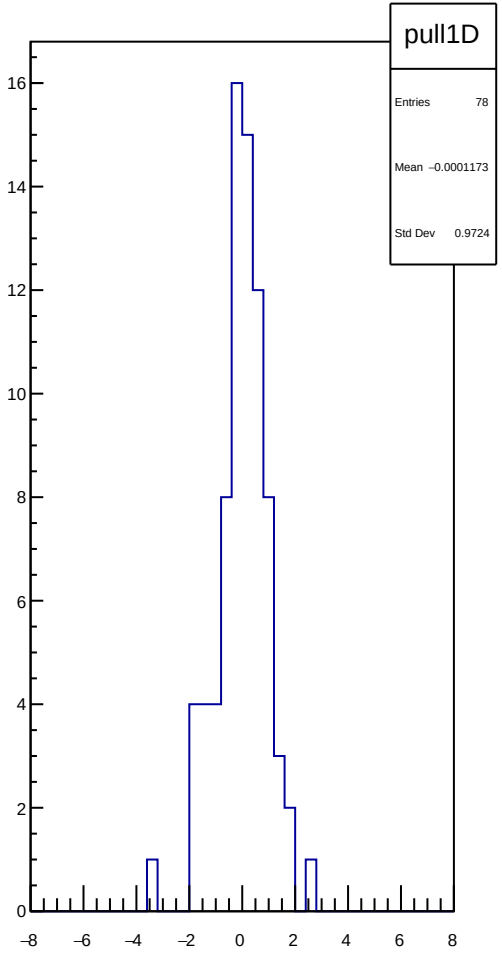

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.772e+04 / 77
p0 236.7 ± 0.1947
320
300
280
260
240
220
200
180

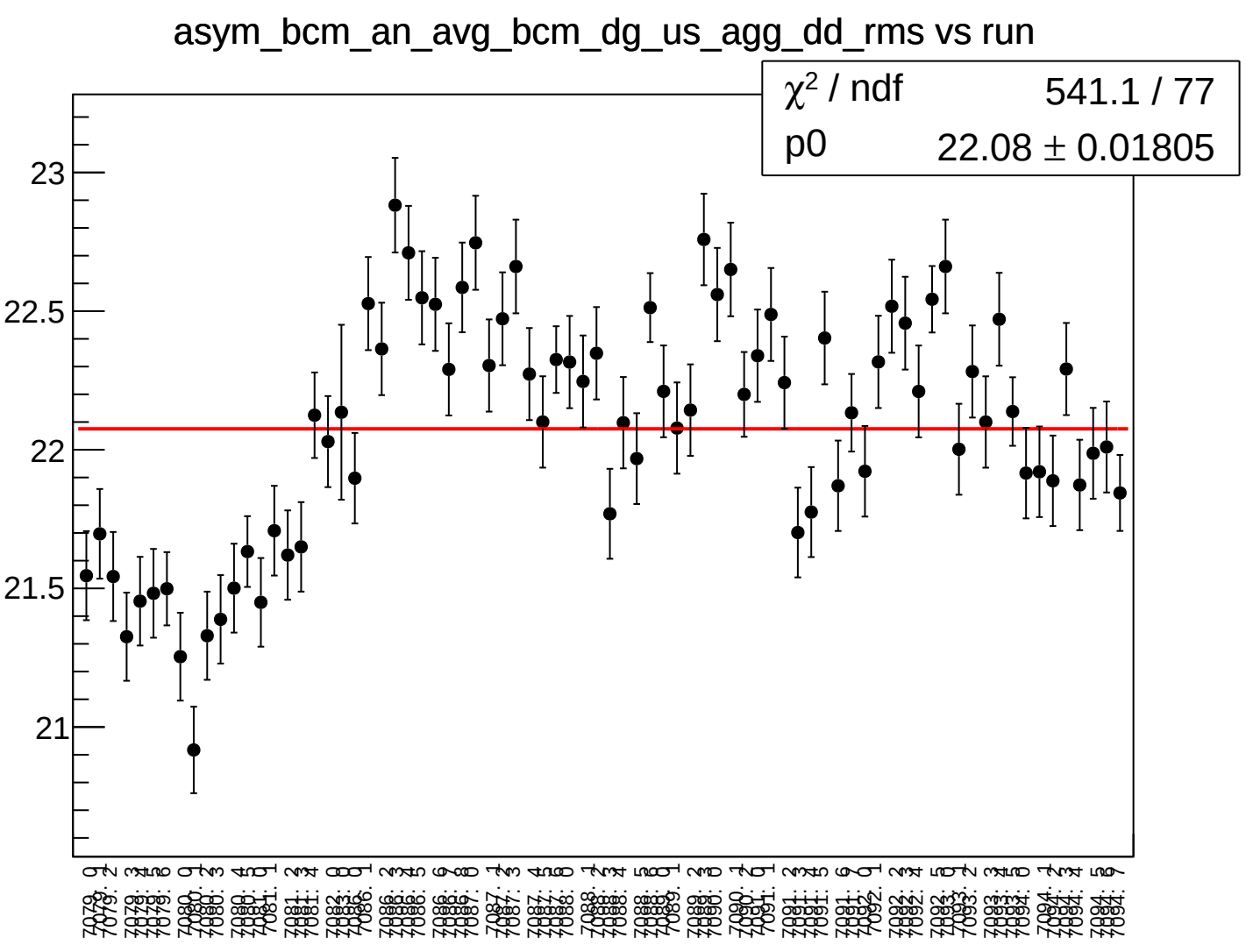

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 74.69 / 77
p0 −10.41 ± 16.59
pull
Entries 78
Mean −40.04
Std Dev 88.13

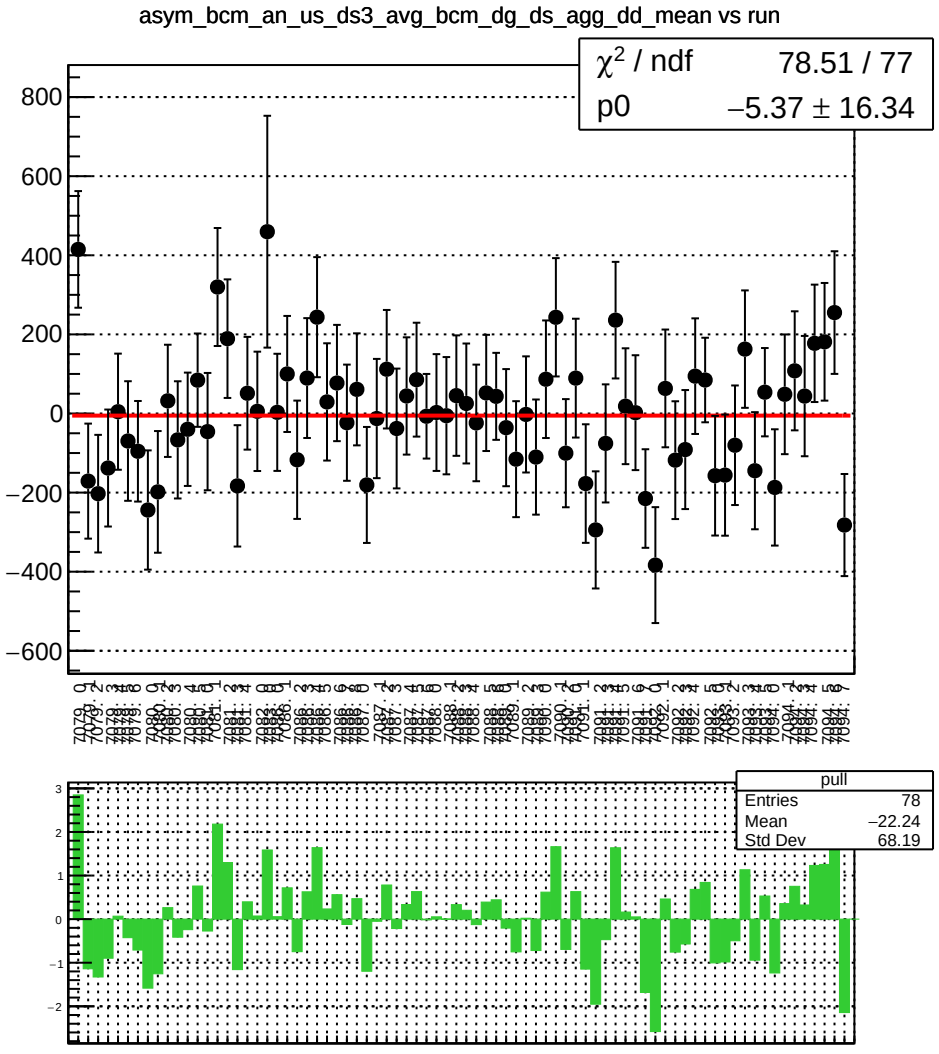

pull1D
Entries 78
Mean 0.009688
Std Dev 0.9785

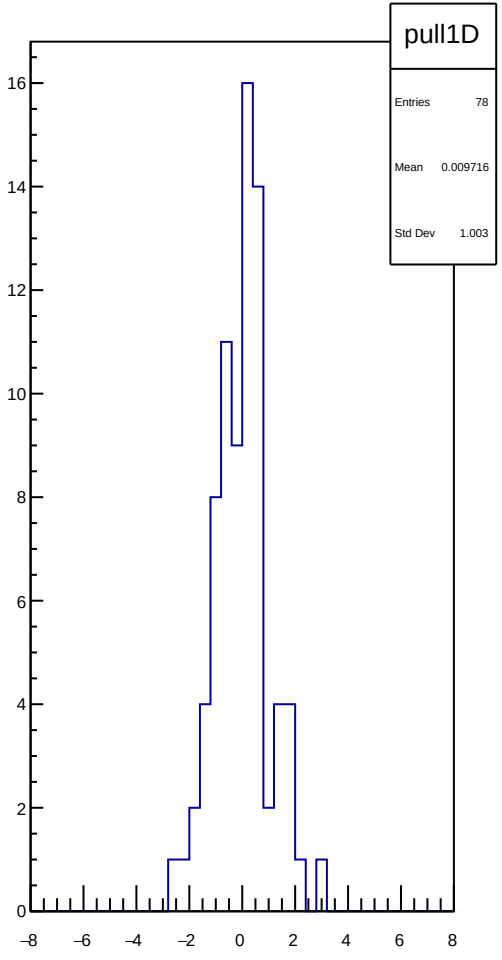

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 432 / 77
p0 14.34 ± 0.01173
15
14.8
14.6
14.4
14.2
14
13.8
13.6
13.4

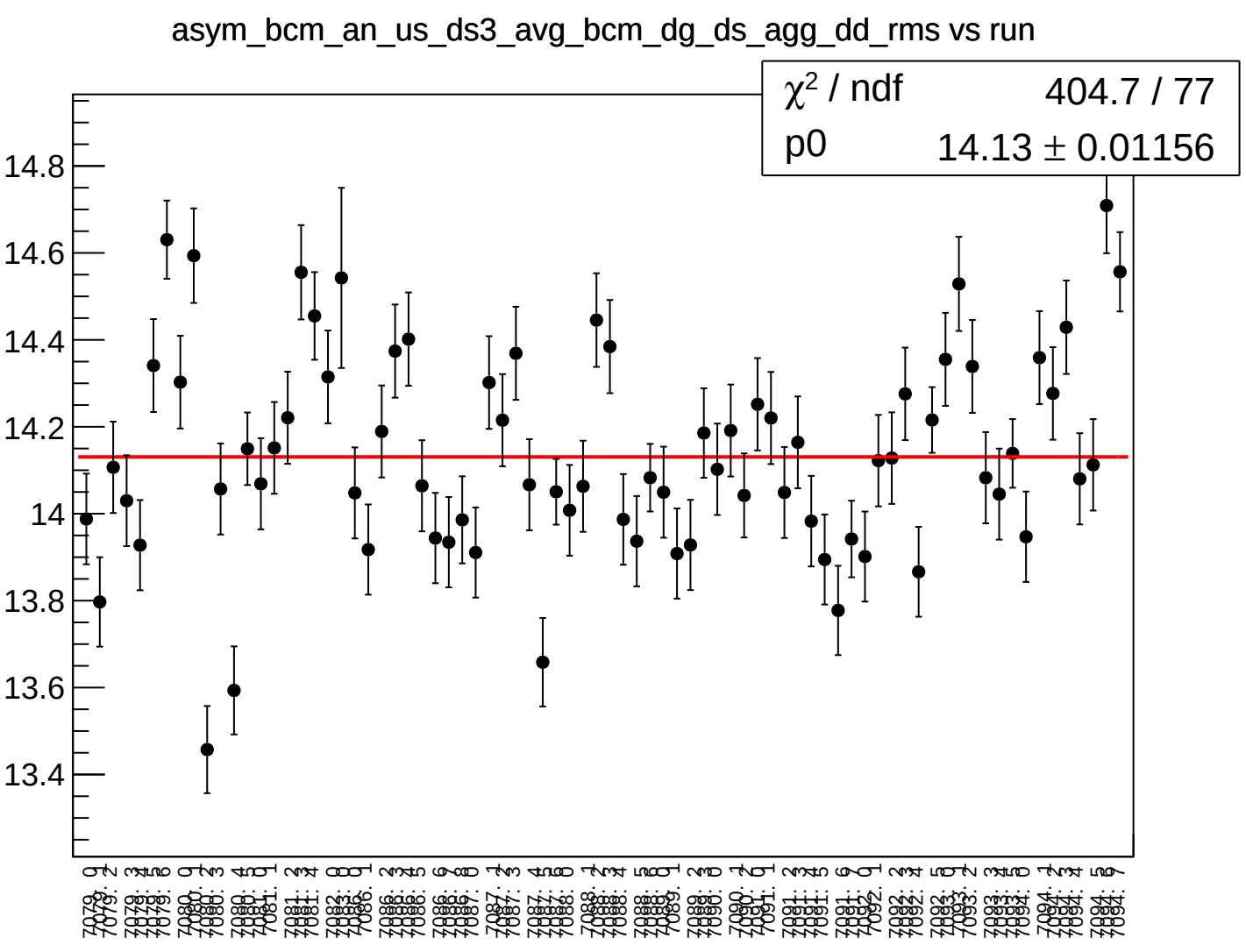

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 73.75 / 77
p0 7.059 ± 25.53
pull
Entries 78
Mean −9064
Std Dev 9132

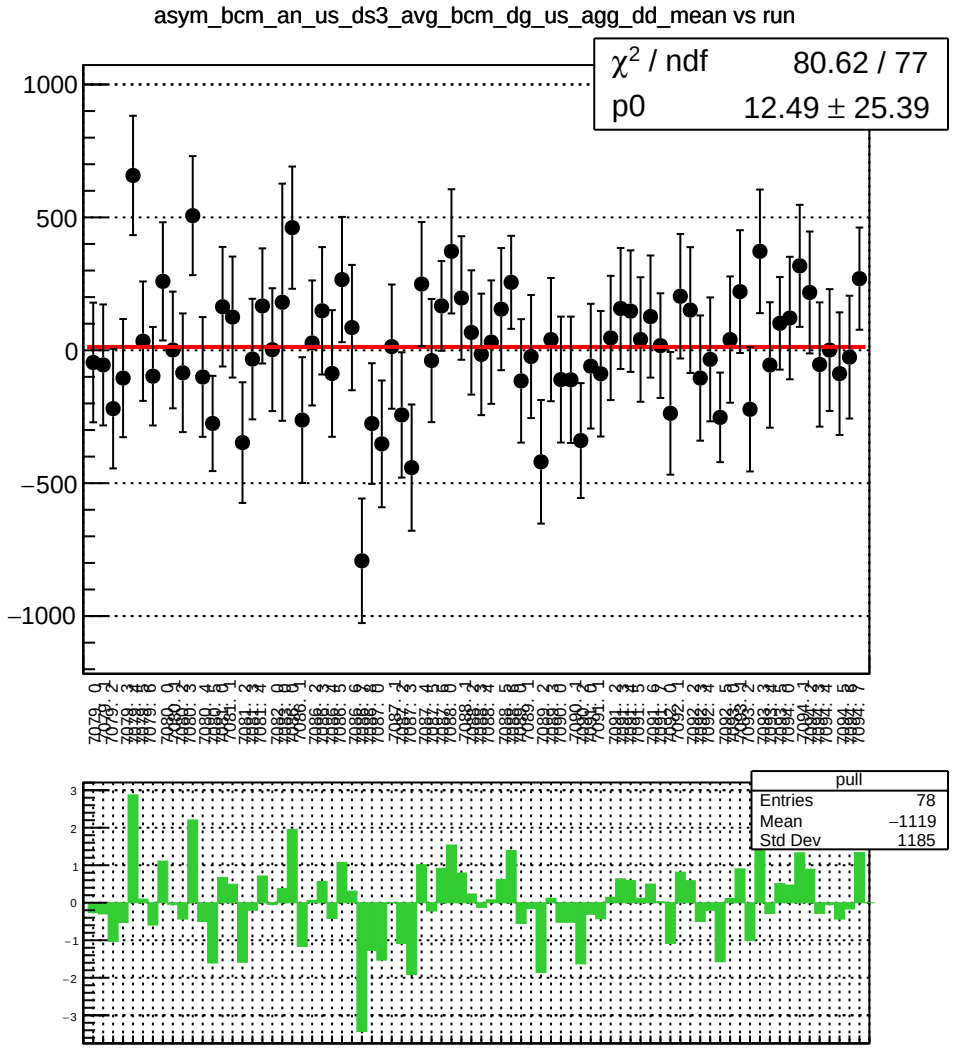

pull1D
Entries 78
Mean −0.0001173
Std Dev 0.9724

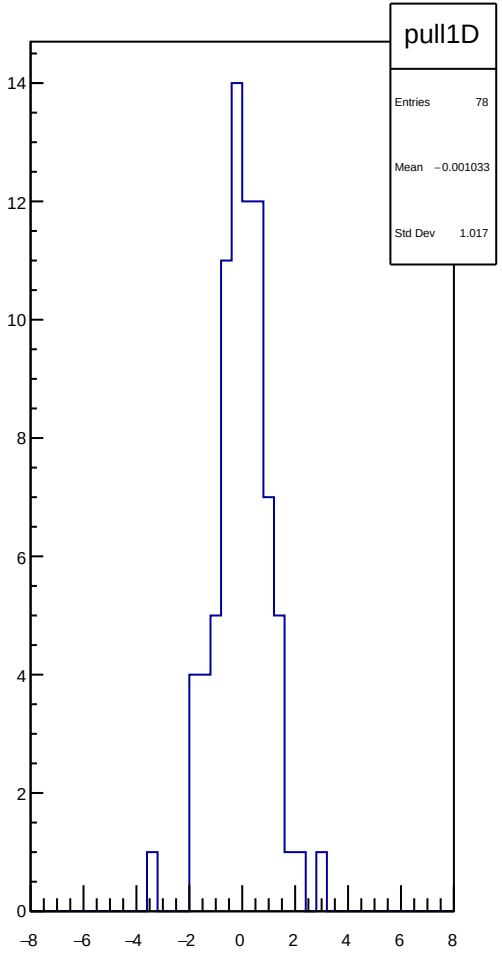

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 541.1 / 77
p0 22.08 ± 0.01805
23
22.5
22
21.5
21

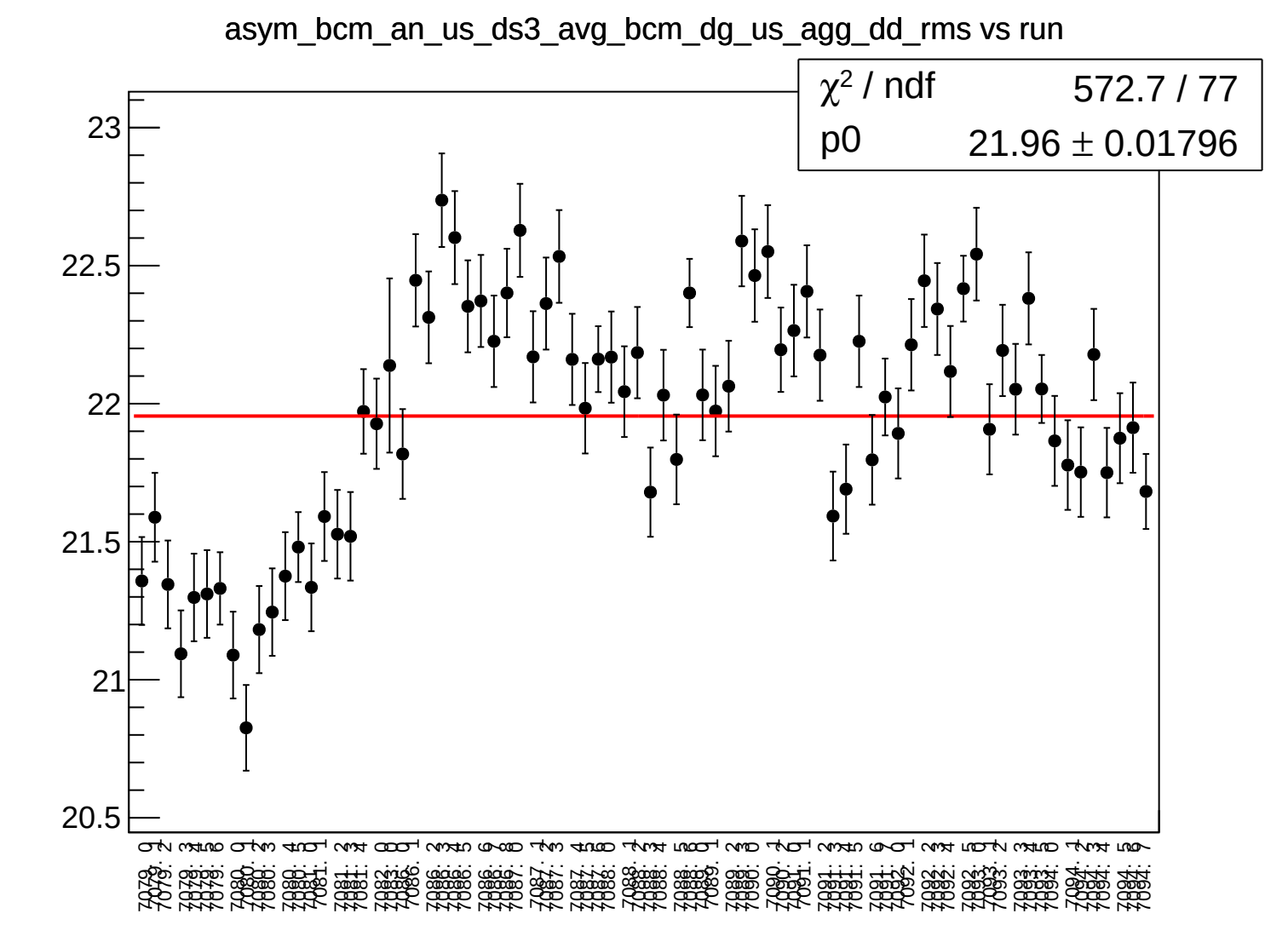

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 78.51 / 77
p0 −5.37 ± 16.34
pull
Entries 78
Mean −22.24
Std Dev 68.19

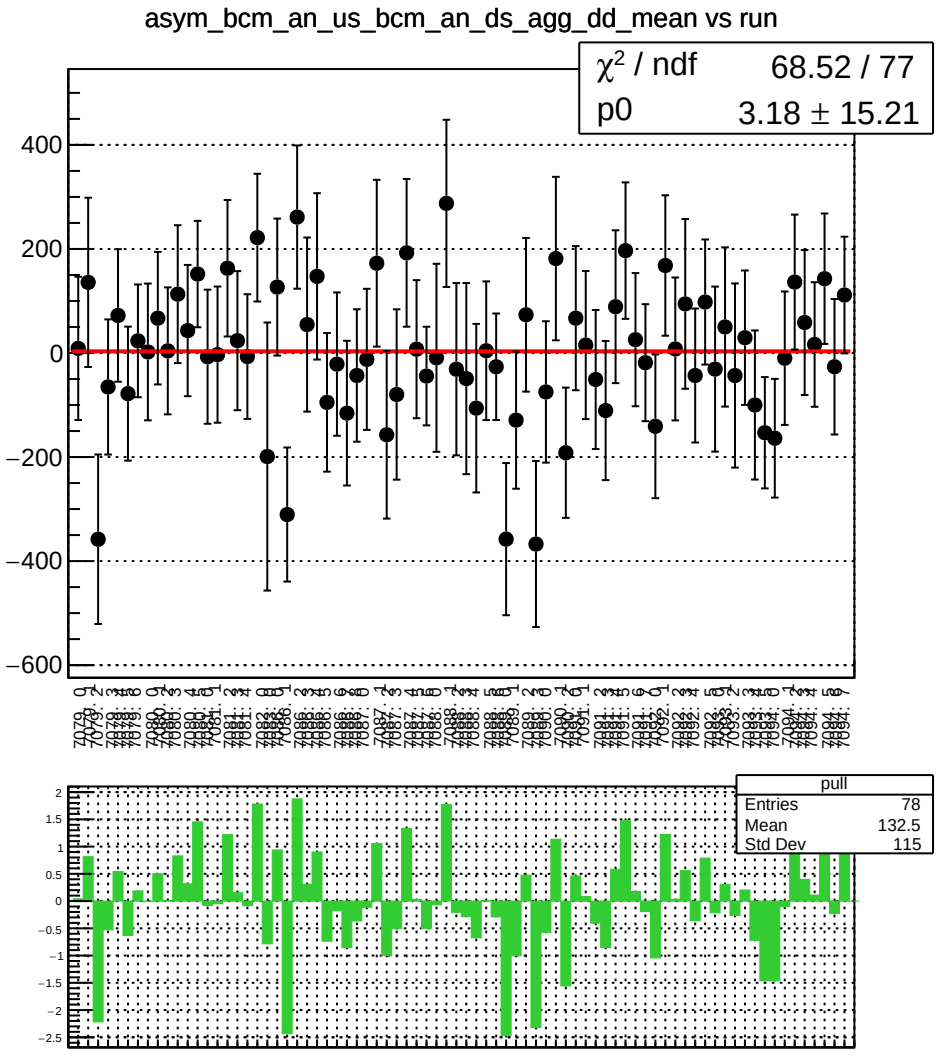

pull1D
Entries 78
Mean 0.009716
Std Dev 1.003

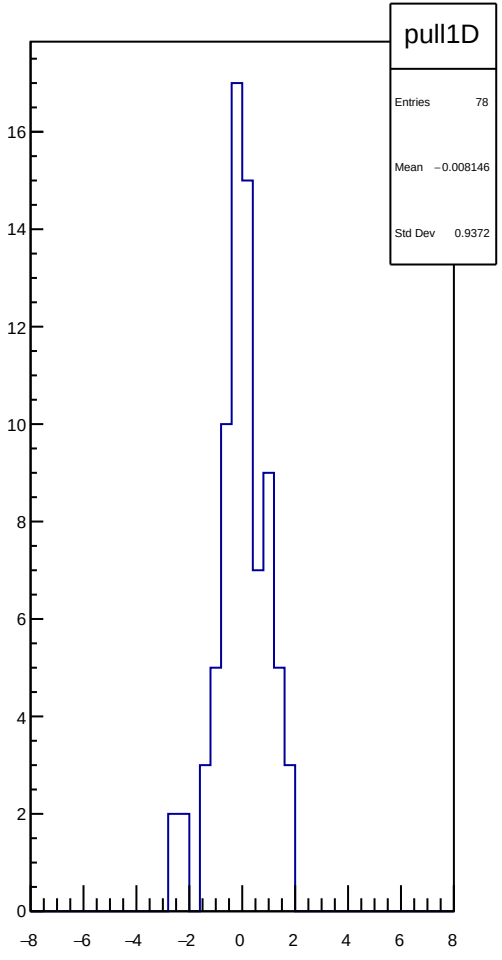

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 404.7 / 77
p0 14.13 ± 0.01156
14.8
14.6
14.4
14.2
14
13.8
13.6
13.4

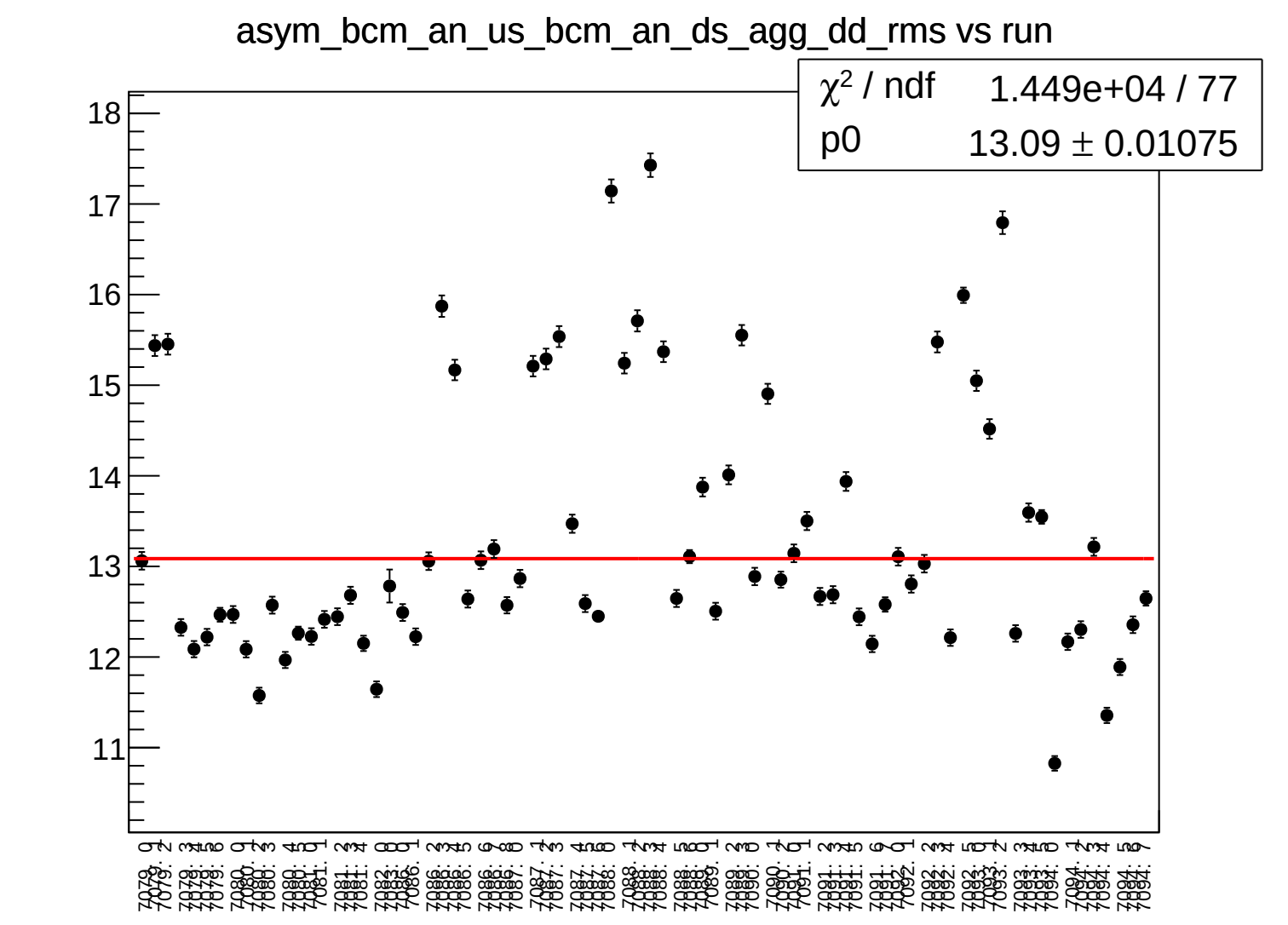

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 80.62 / 77
p0 12.49 ± 25.39
1000
500
0
−500
−1000
pull
Entries 78
Mean −1119
Std Dev 1185
3
2
1
0
−1
−2
−3

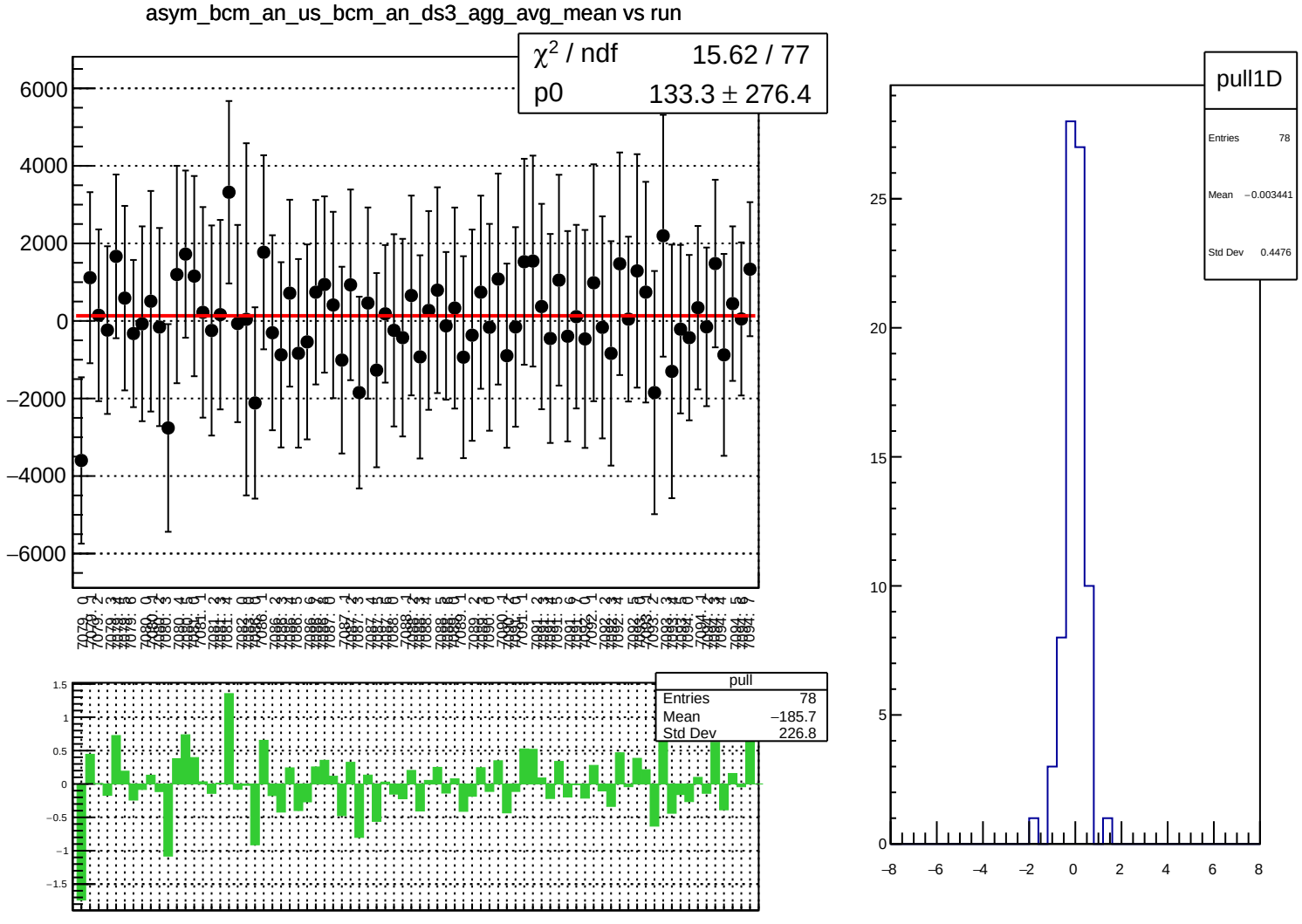

pull1D
Entries 78
Mean −0.001033
Std Dev 1.017
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

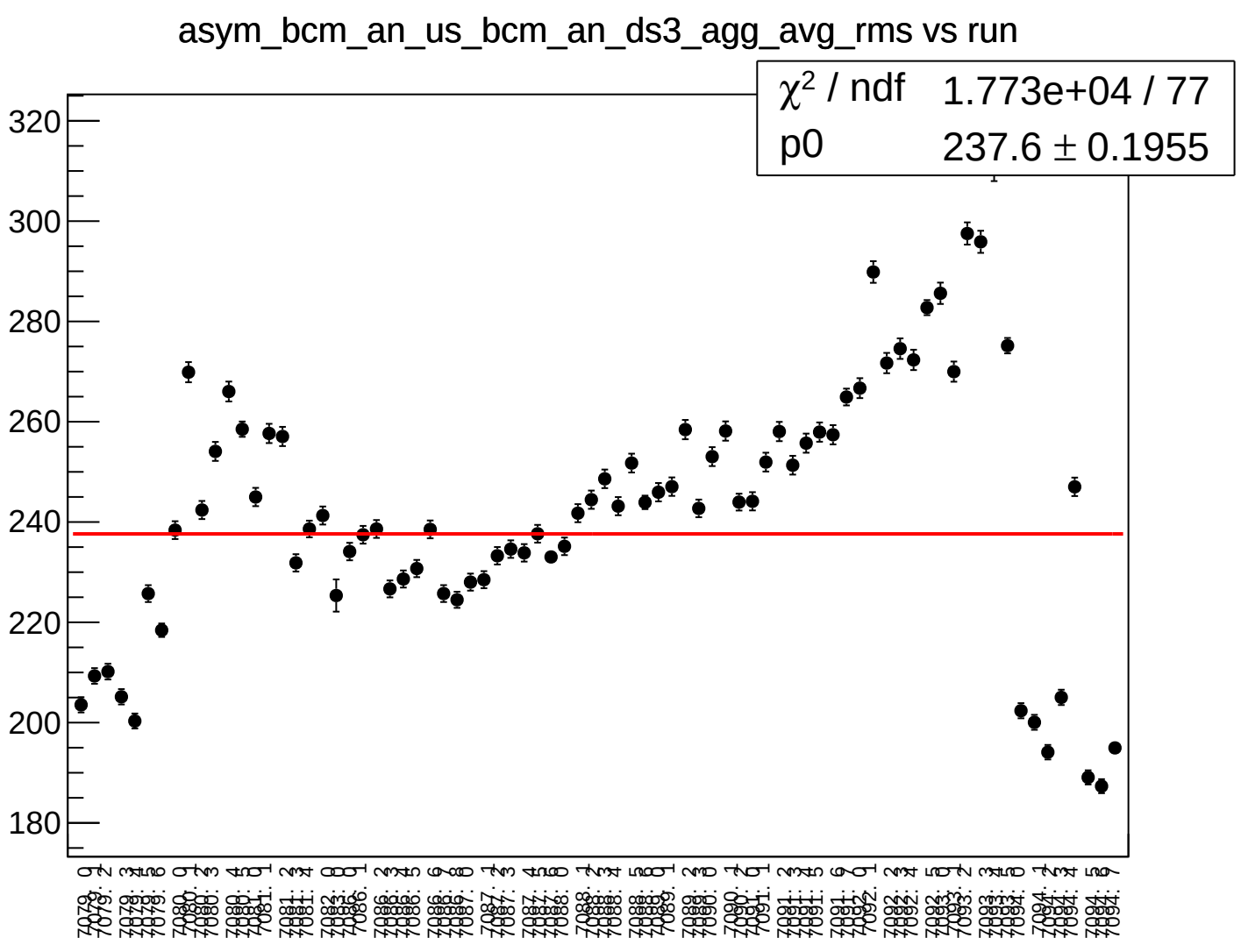

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 572.7 / 77
p0 21.96 ± 0.01796
23
22.5
22
21.5
21
20.5

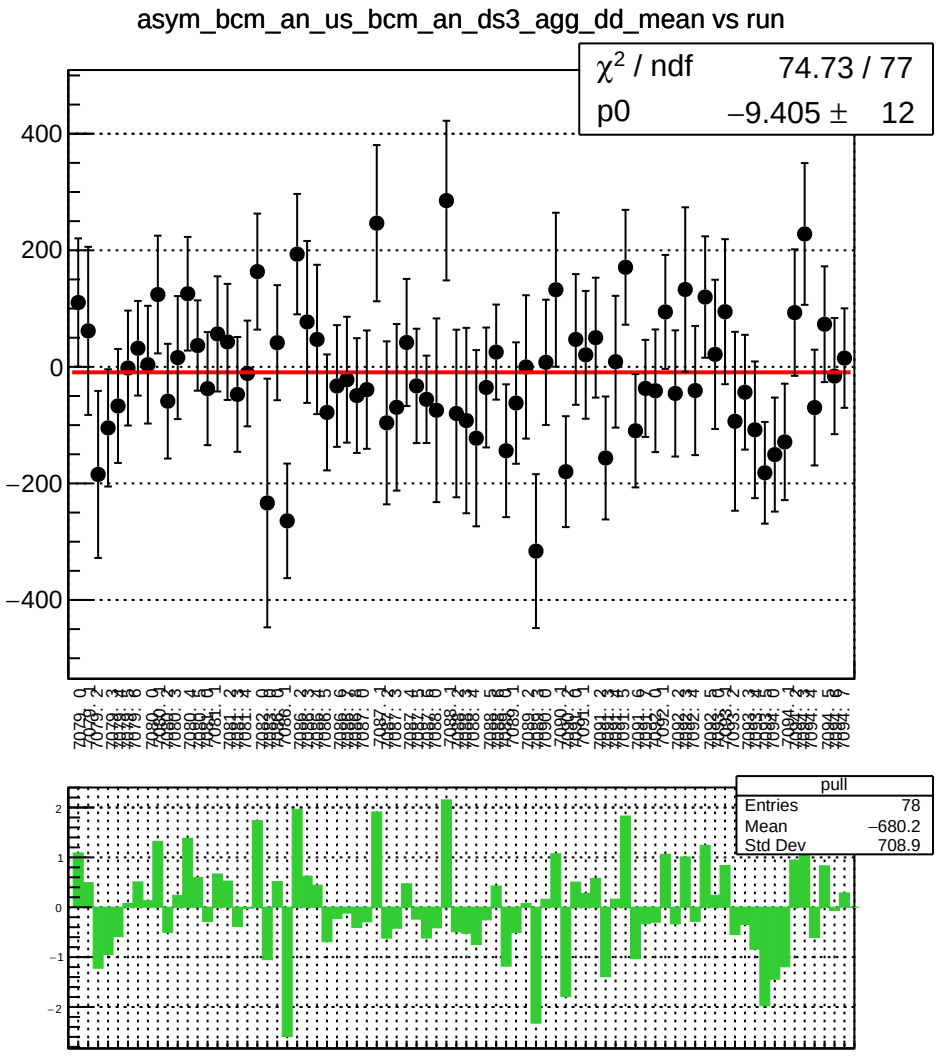

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.52 / 77
p0 3.18 ± 15.21
pull
Entries 78
Mean 132.5
Std Dev 115

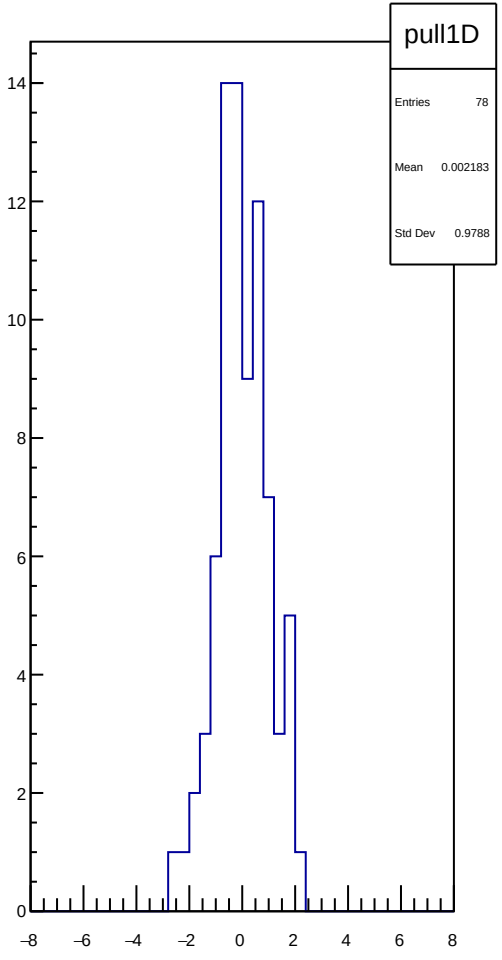

pull1D
Entries 78
Mean −0.008146
Std Dev 0.9372

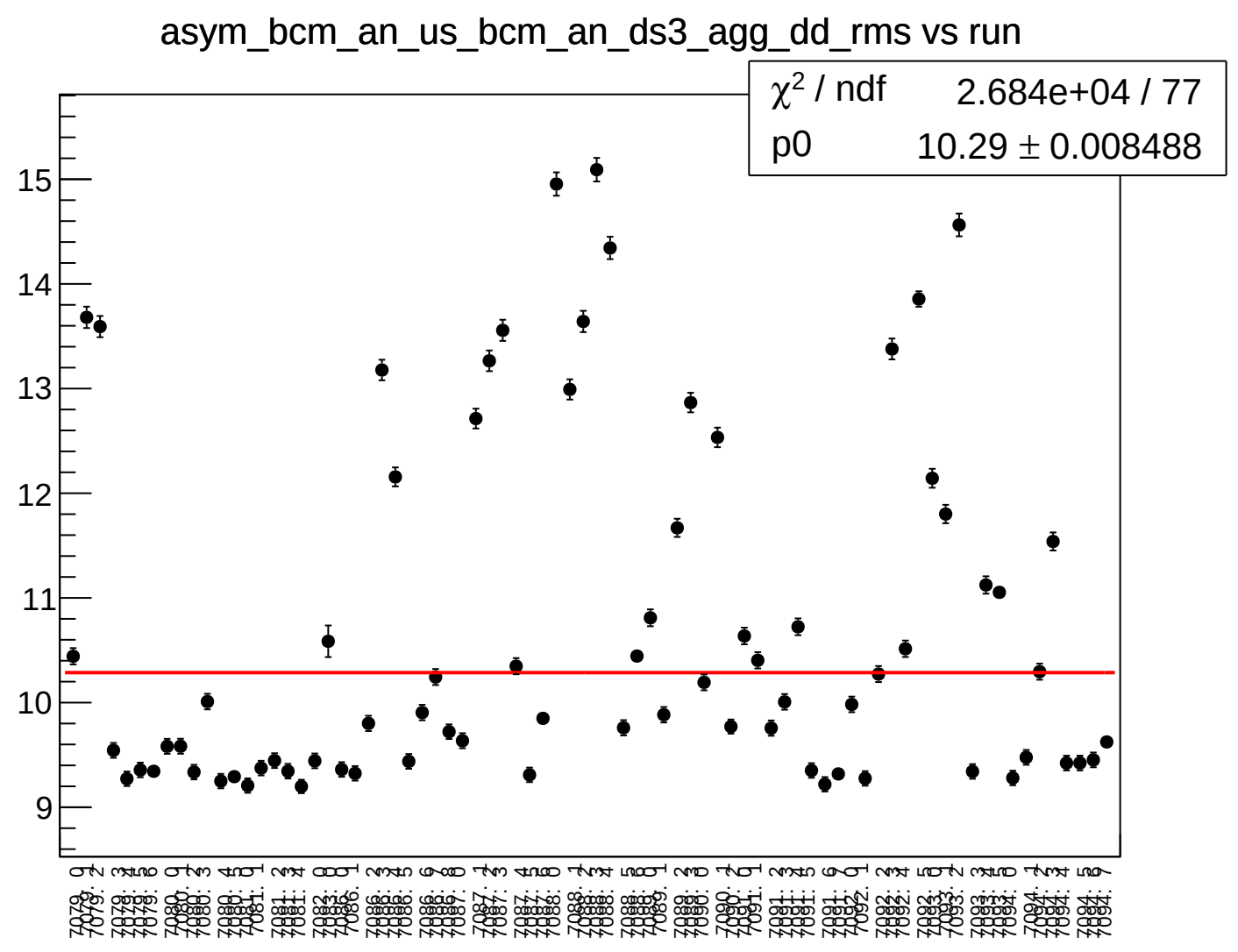

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.449e+04 / 77
p0 13.09 ± 0.01075
18
17
16
15
14
13
12
11

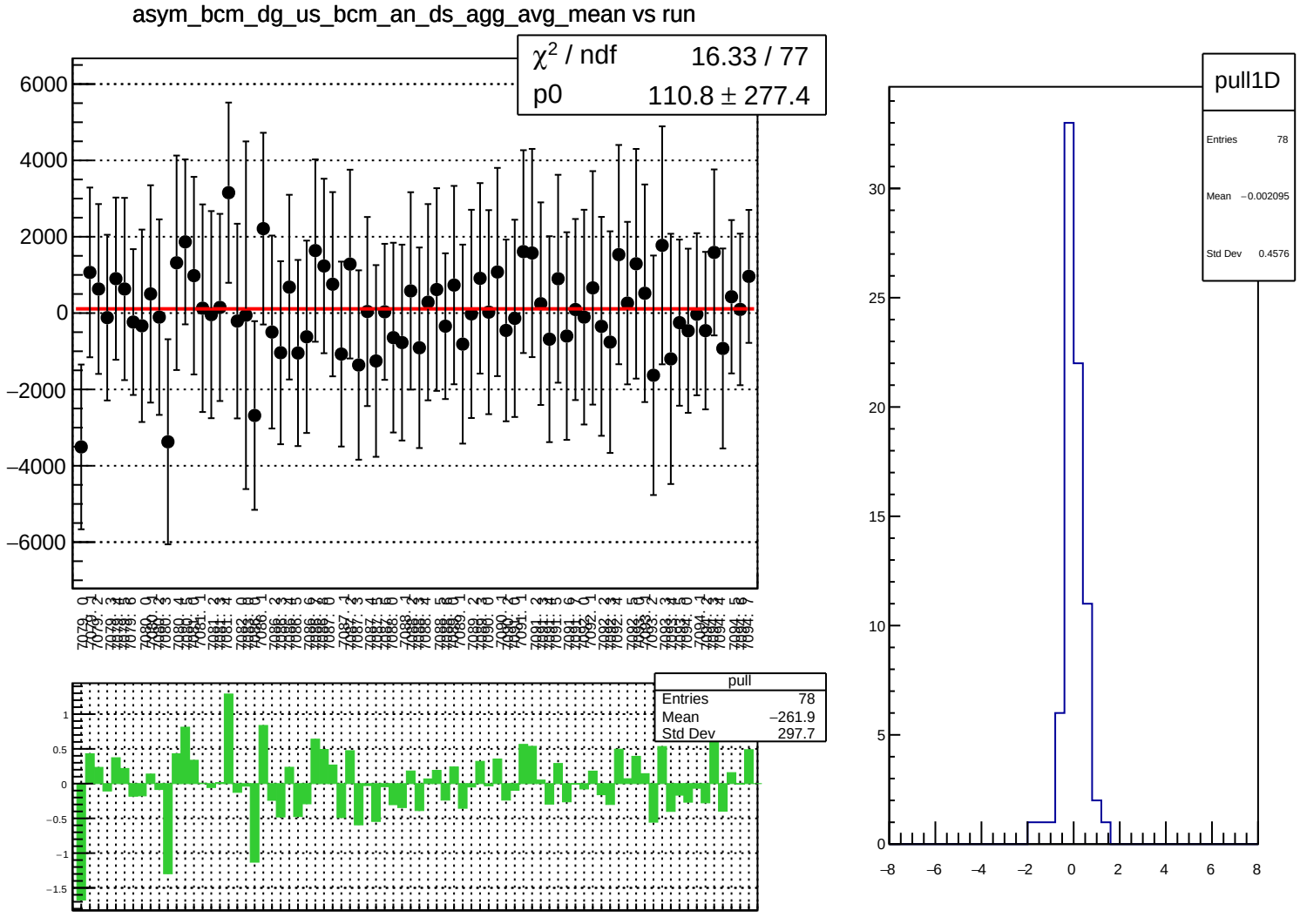

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 15.62 / 77
p0 133.3 ± 276.4
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −185.7
Std Dev 226.8
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 78
Mean −0.003441
Std Dev 0.4476
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

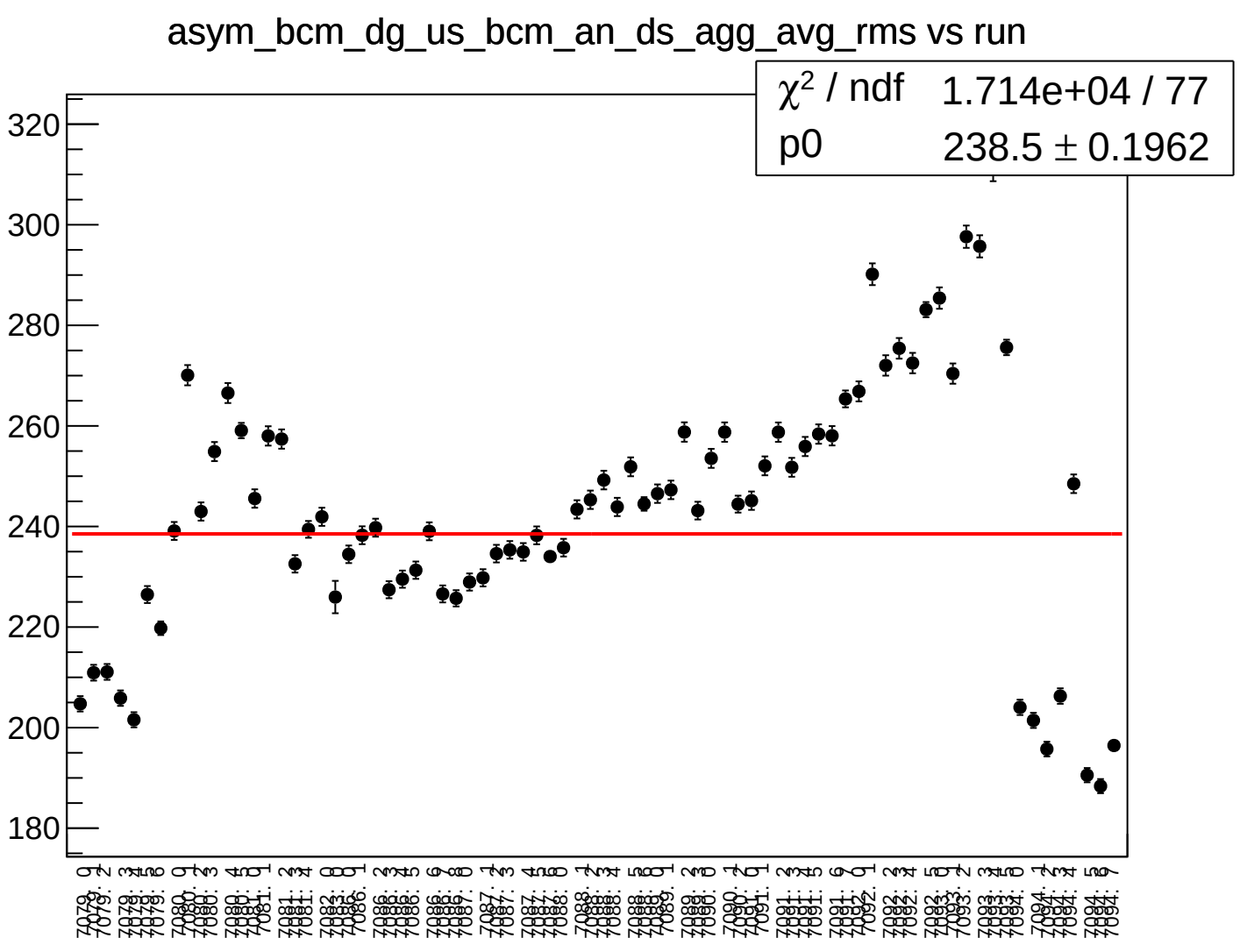

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.773e+04 / 77
p0 237.6 ± 0.1955
320
300
280
260
240
220
200
180

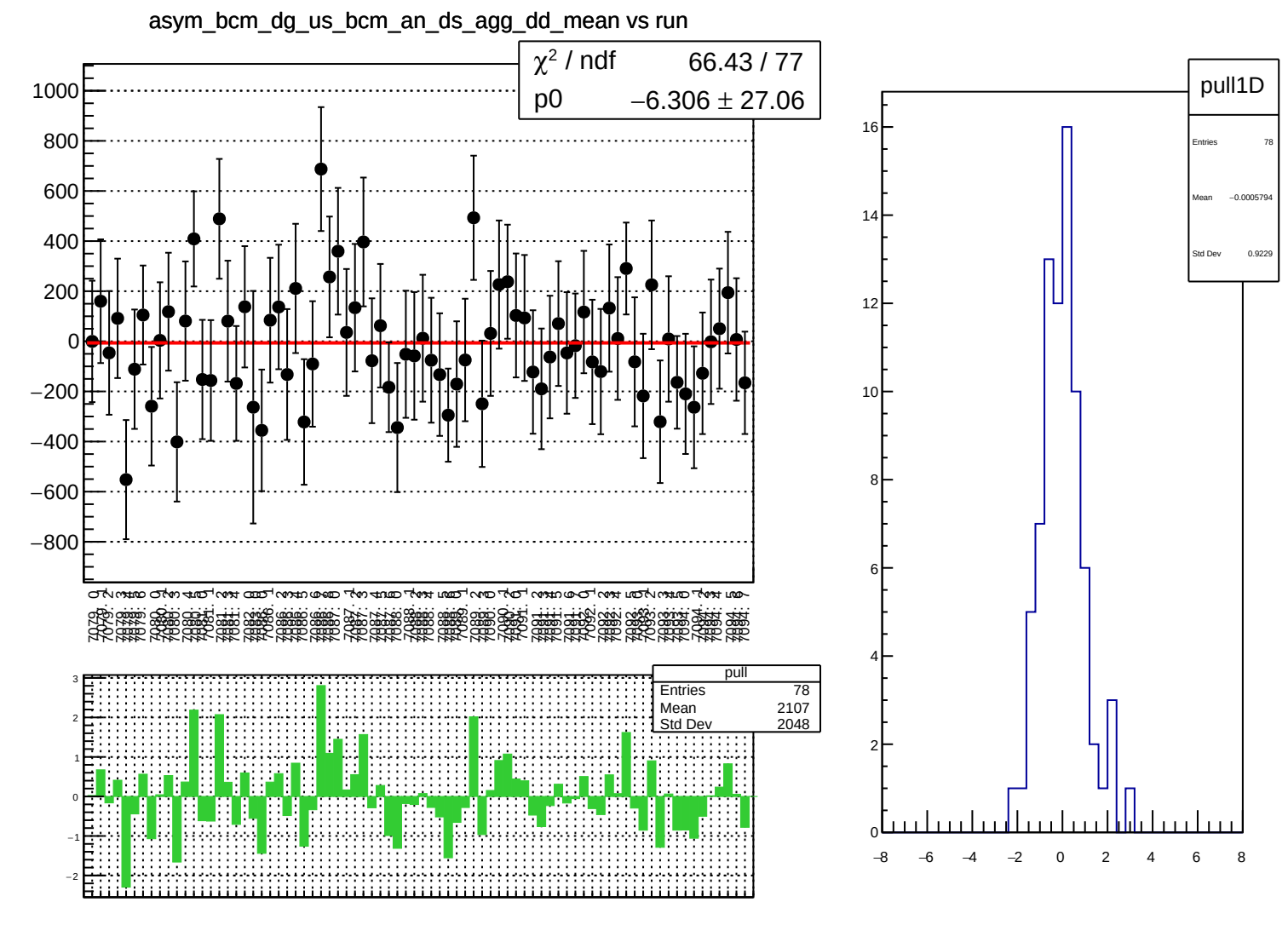

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 74.73 / 77
p0 −9.405 ± 12
400
200
0
−200
−400
pull
Entries 78
Mean −680.2
Std Dev 708.9
2
1
0
−1
−2

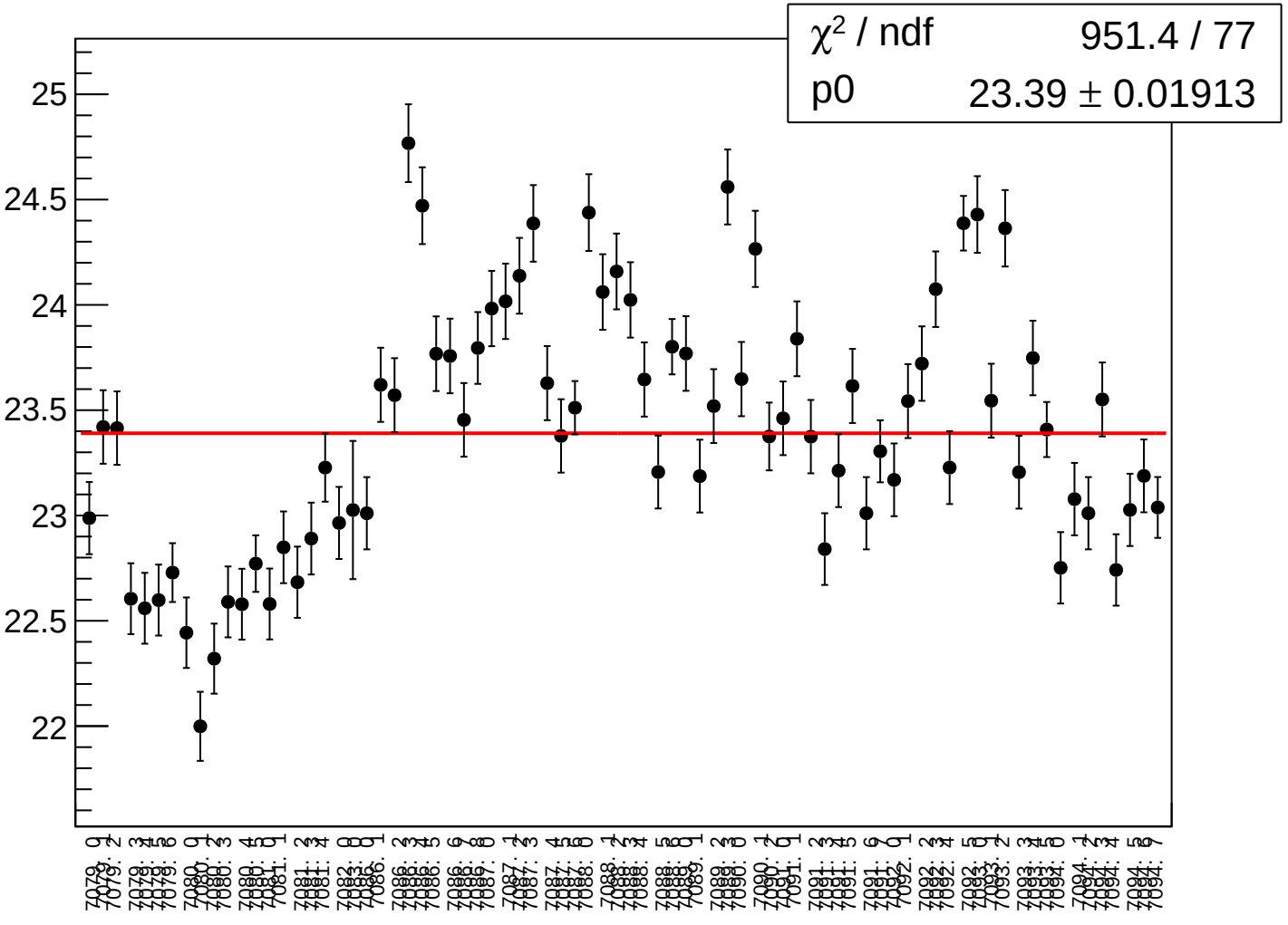

pull1D
Entries 78
Mean 0.002183
Std Dev 0.9788
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

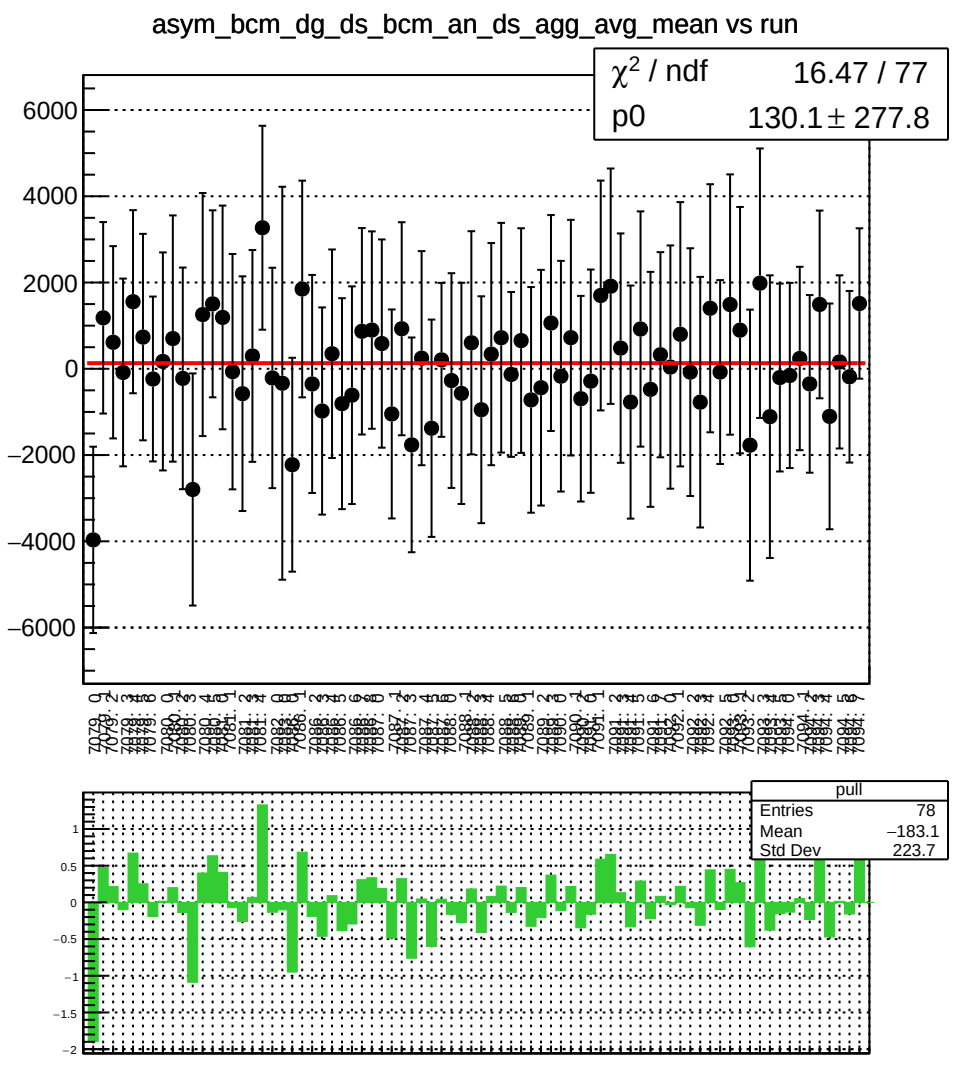

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.684e+04 / 77
p0 10.29 ± 0.008488
15
14
13
12
11
10
9

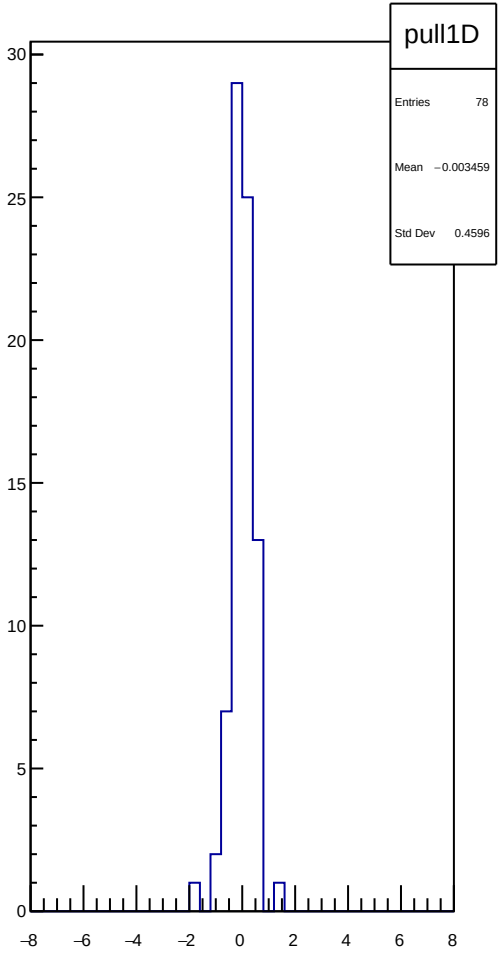

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.33 / 77
p0 110.8 ± 277.4
pull
Entries 78
Mean −261.9
Std Dev 297.7
pull1D
Entries 78
Mean −0.002095
Std Dev 0.4576

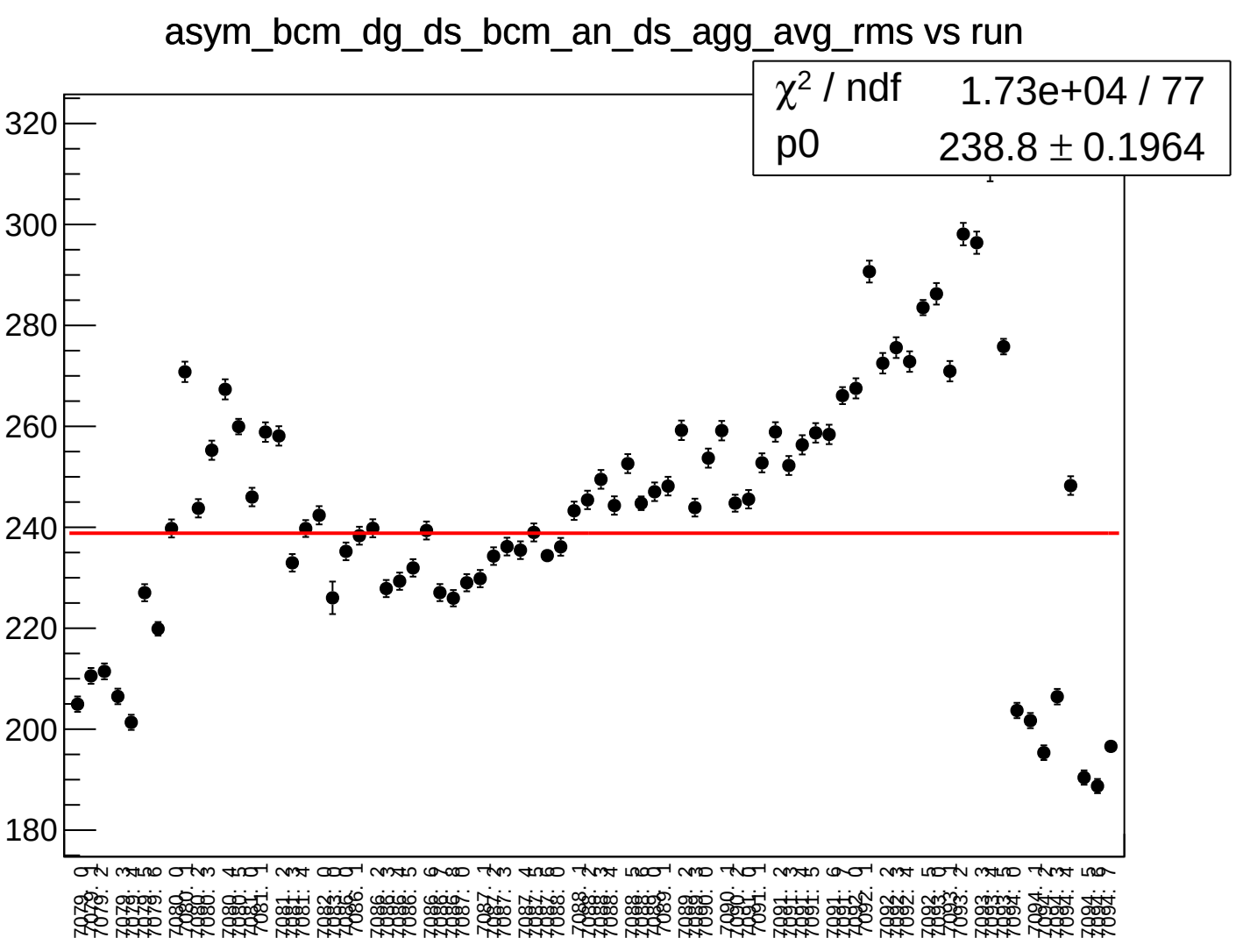

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.714e+04 / 77
p0 238.5 ± 0.1962
320
300
280
260
240
220
200
180

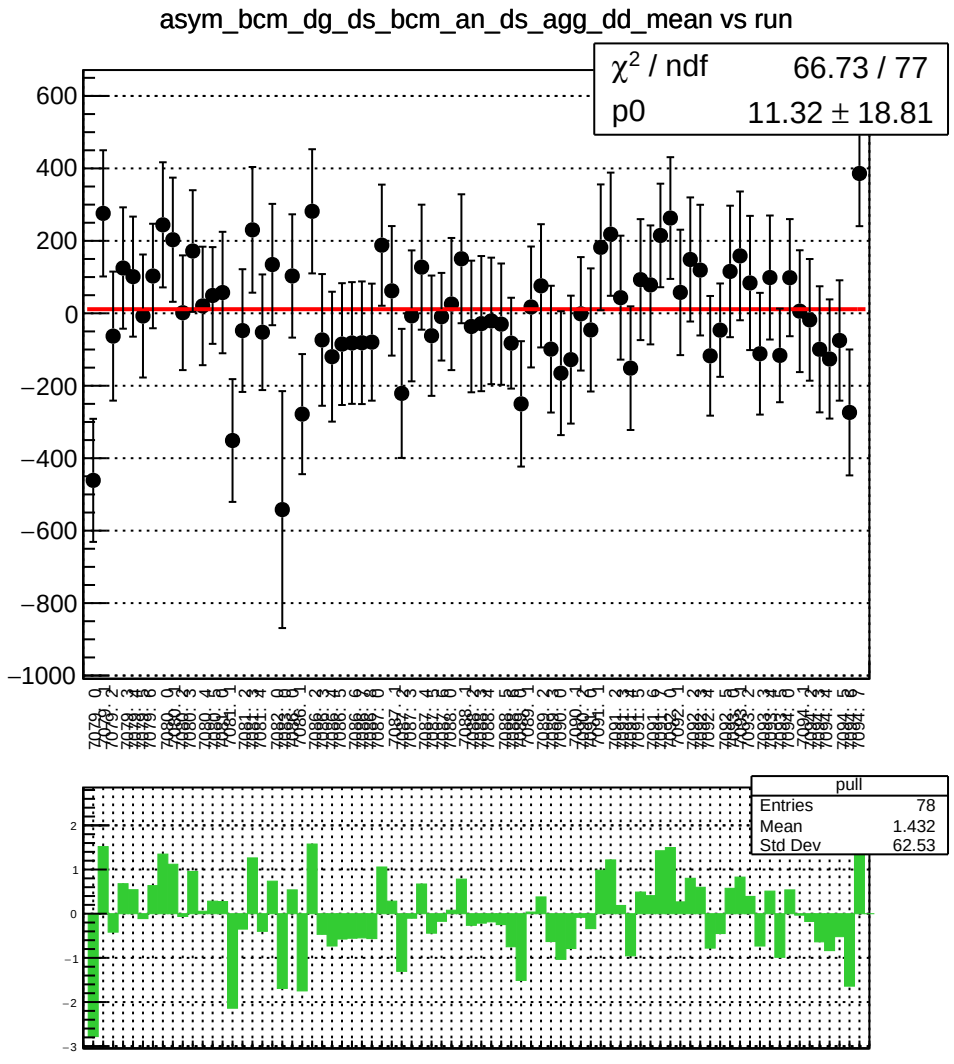

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 66.43 / 77
p0 −6.306 ± 27.06
pull
Entries 78
Mean 2107
Std Dev 2048
pull1D
Entries 78
Mean −0.0005794
Std Dev 0.9229

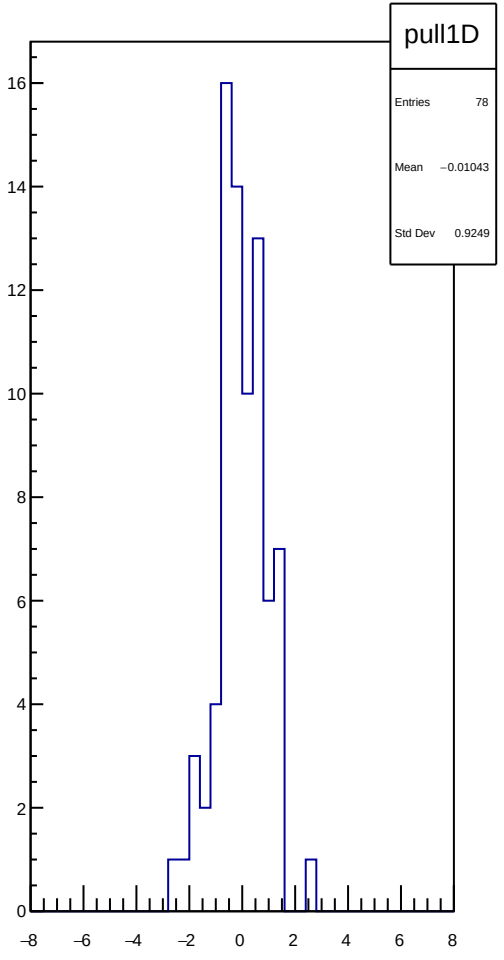

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 951.4 / 77
p0 23.39 ± 0.01913
25
24.5
24
23.5
23
22.5
22

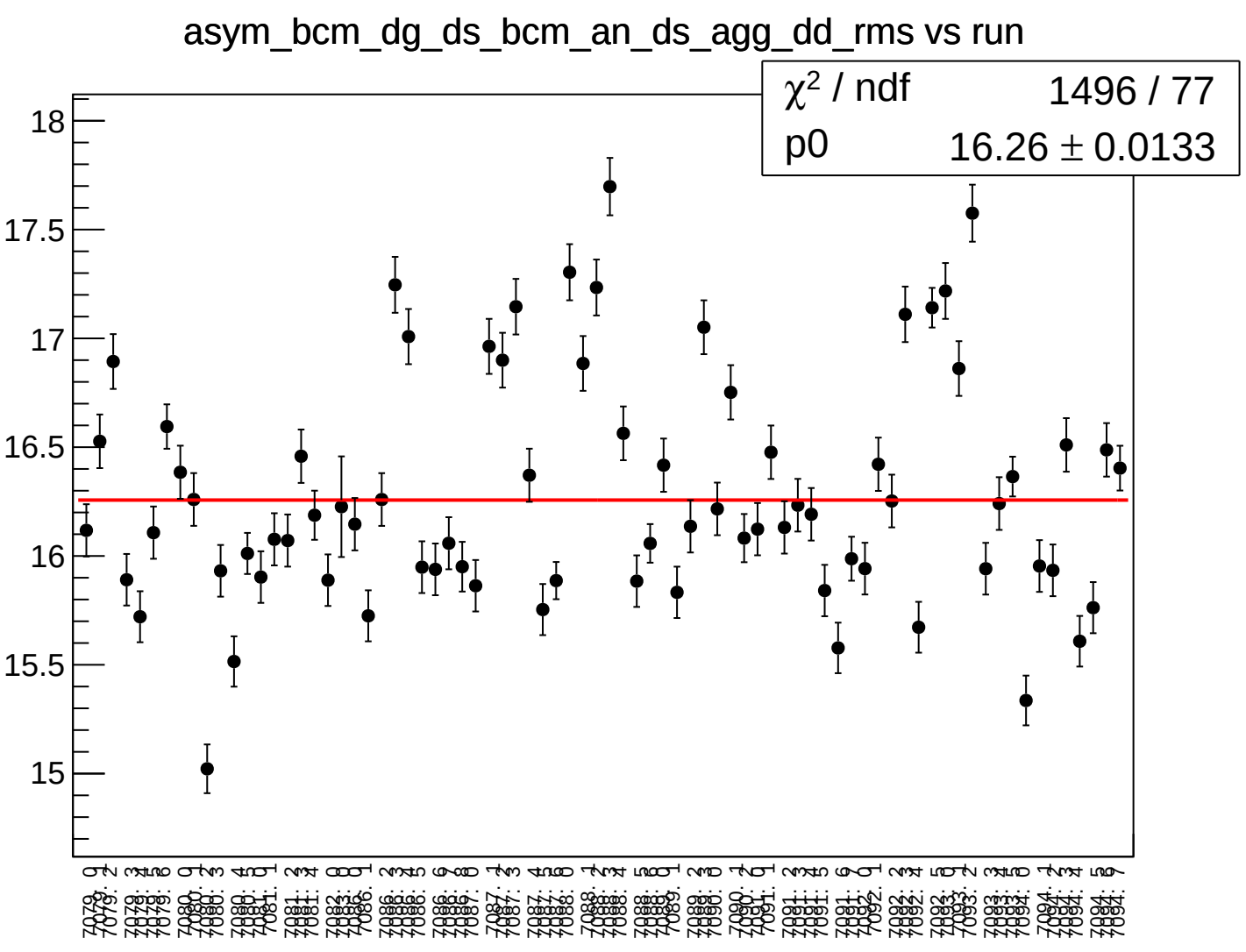

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.47 / 77
p0 130.1 ± 277.8
pull
Entries 78
Mean −183.1
Std Dev 223.7

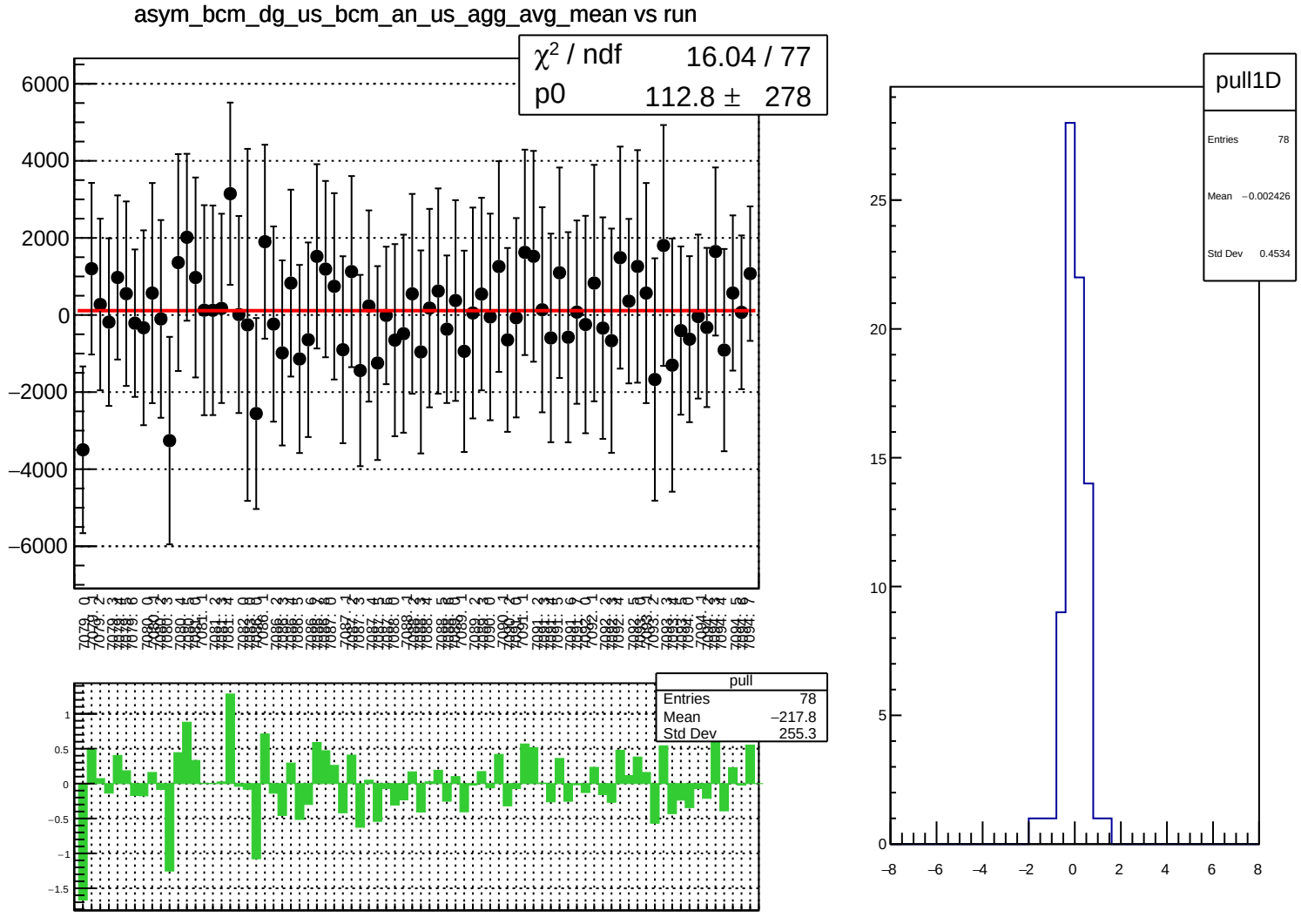

pull1D
Entries 78
Mean −0.003459
Std Dev 0.4596

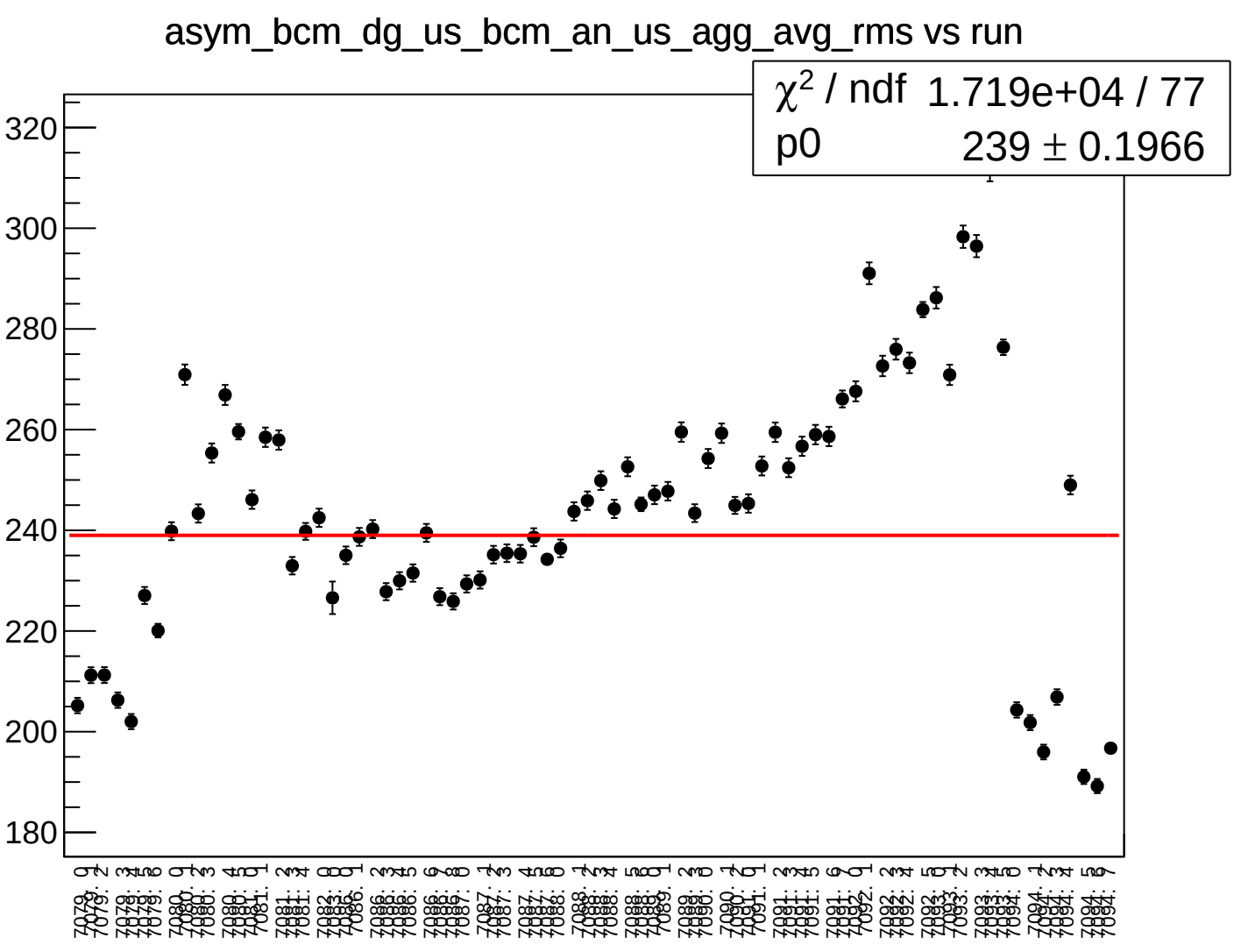

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.73e+04 / 77
p0 238.8 ± 0.1964
320
300
280
260
240
220
200
180

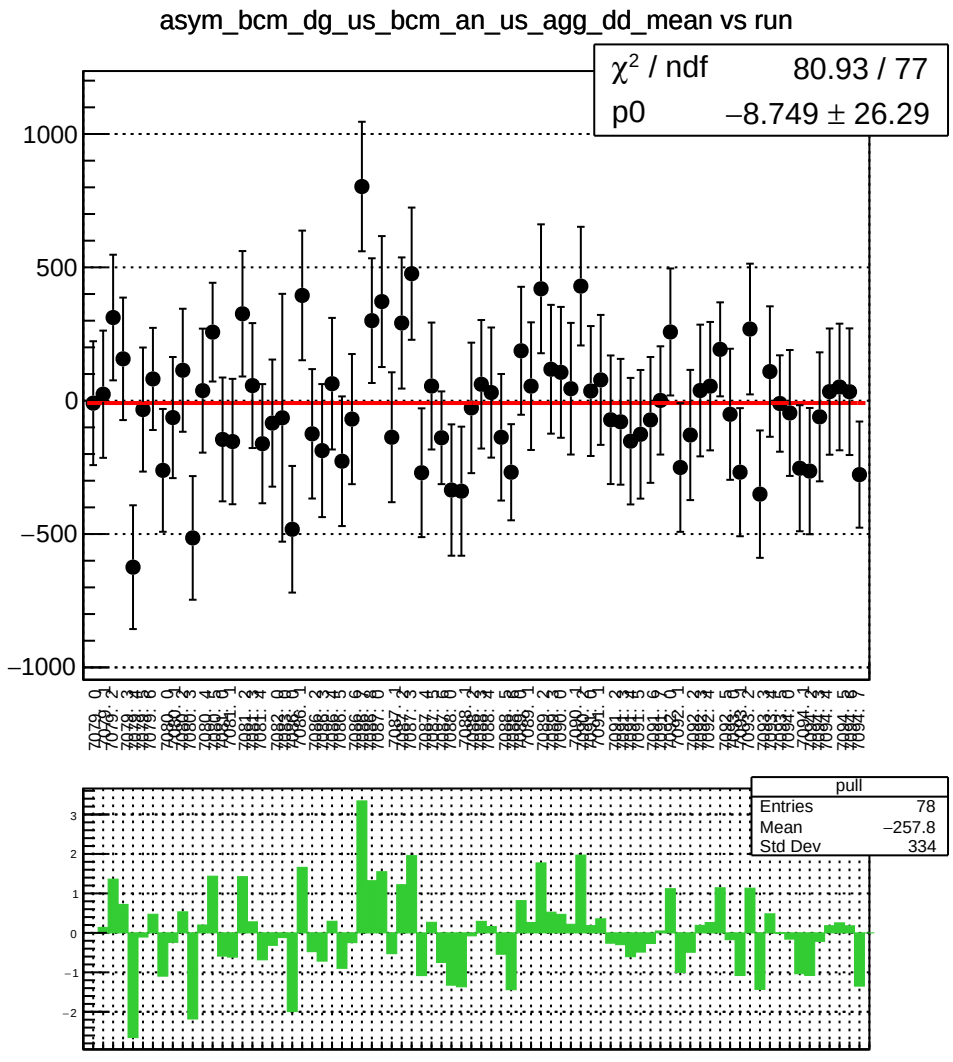

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 66.73 / 77
p0 11.32 ± 18.81
pull
Entries 78
Mean 1.432
Std Dev 62.53

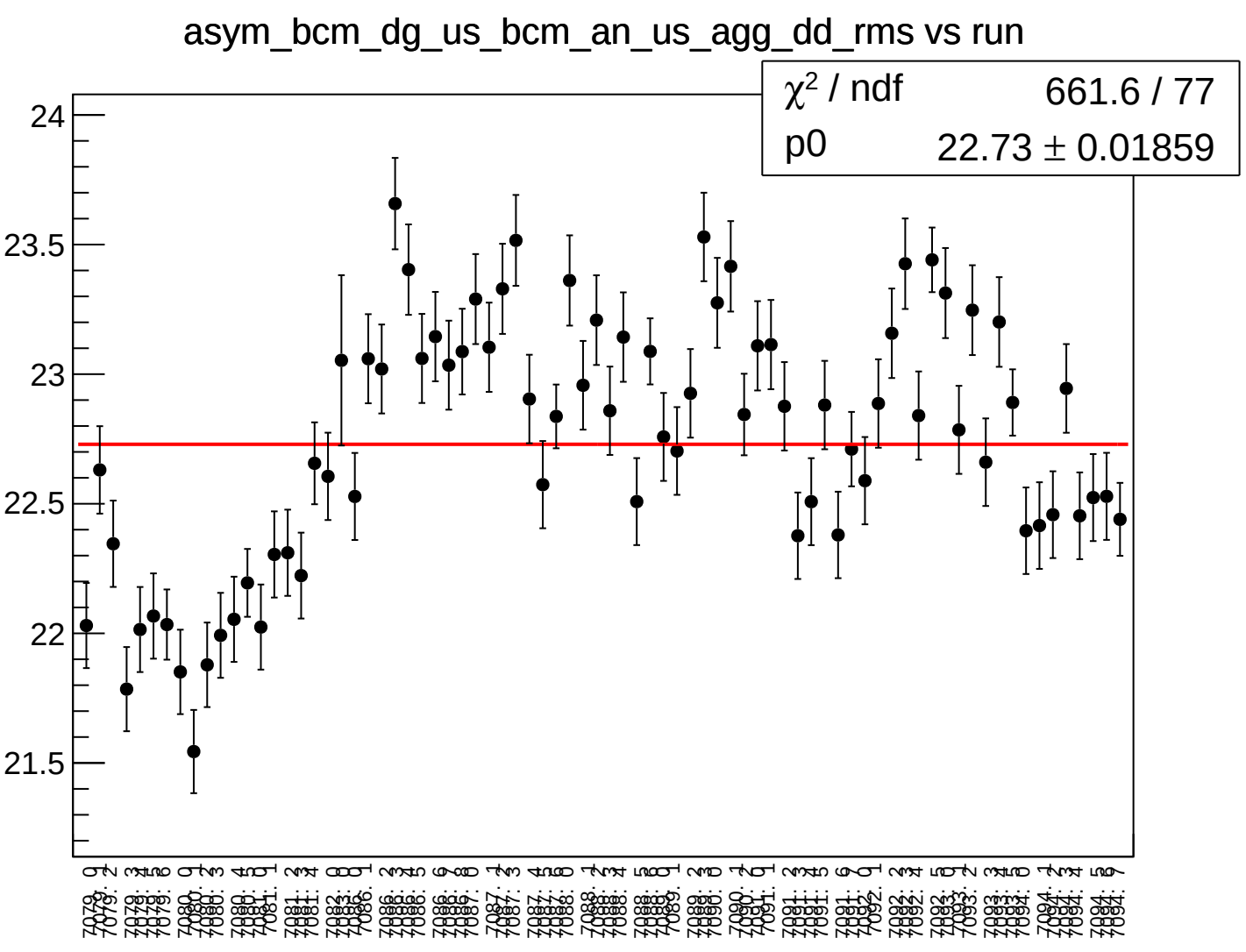

pull1D
Entries 78
Mean −0.01043
Std Dev 0.9249

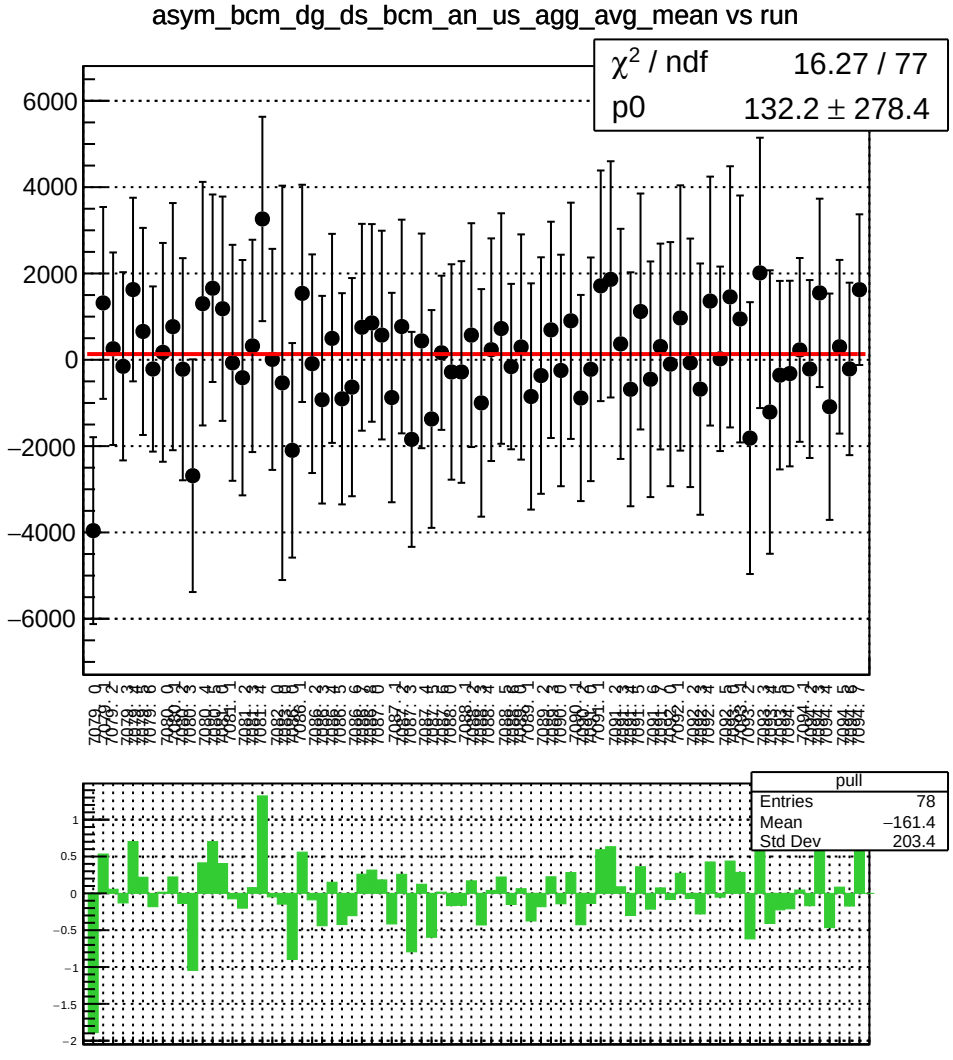

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1496 / 77
p0 16.26 ± 0.0133
18
17.5
17
16.5
16
15.5
15

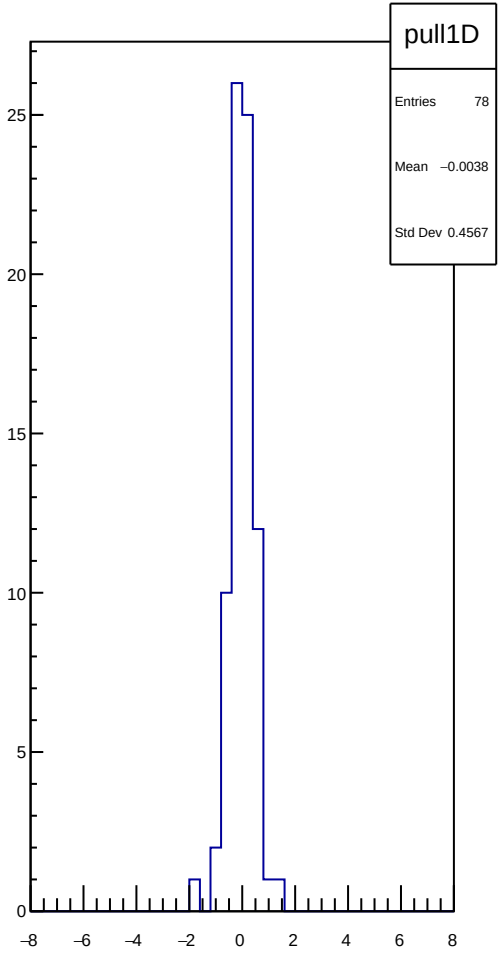

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.04 / 77
p0 112.8 ± 278
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −217.8
Std Dev 255.3
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 78
Mean −0.002426
Std Dev 0.4534
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

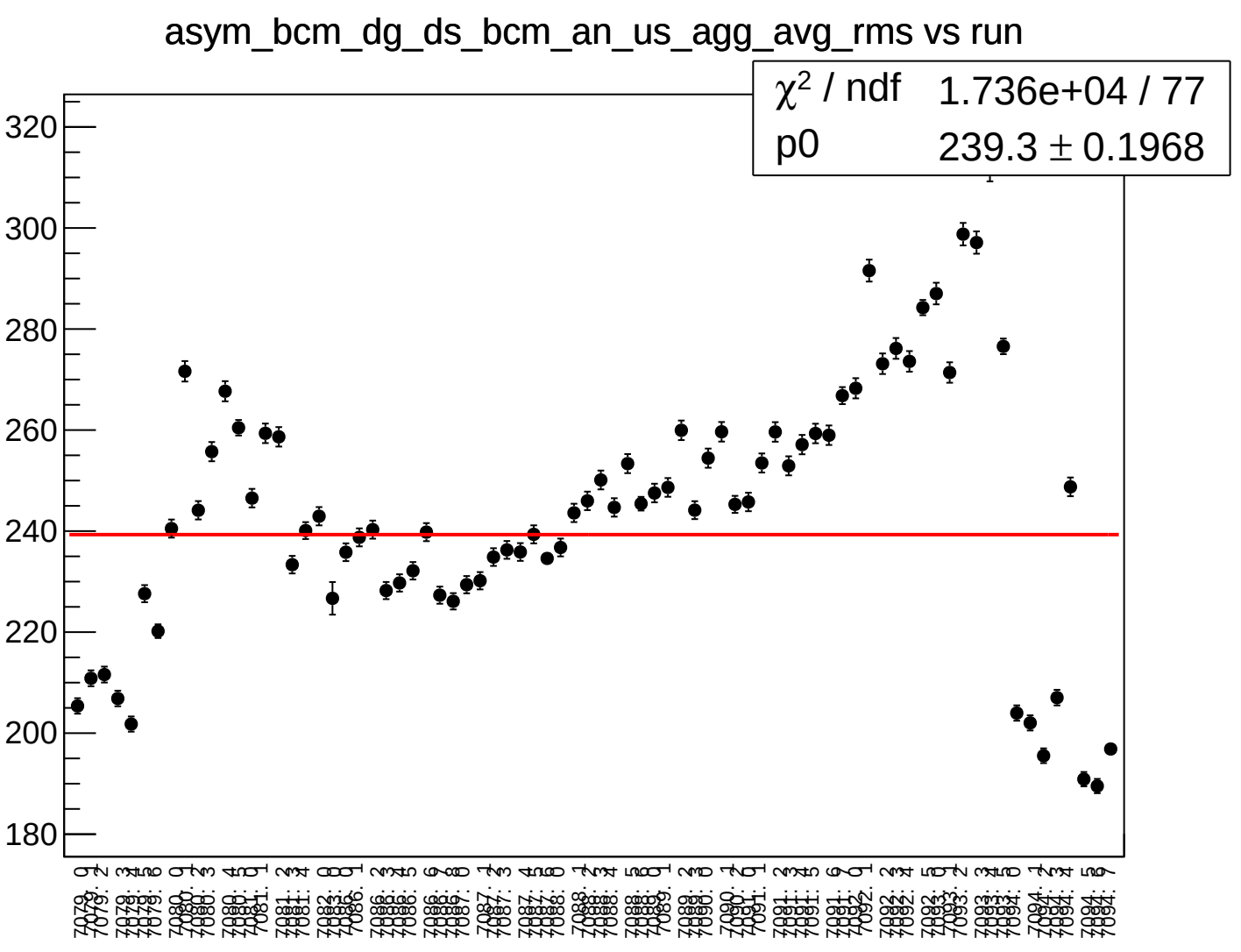

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.719e+04 / 77
p0 239 ± 0.1966
320
300
280
260
240
220
200
180

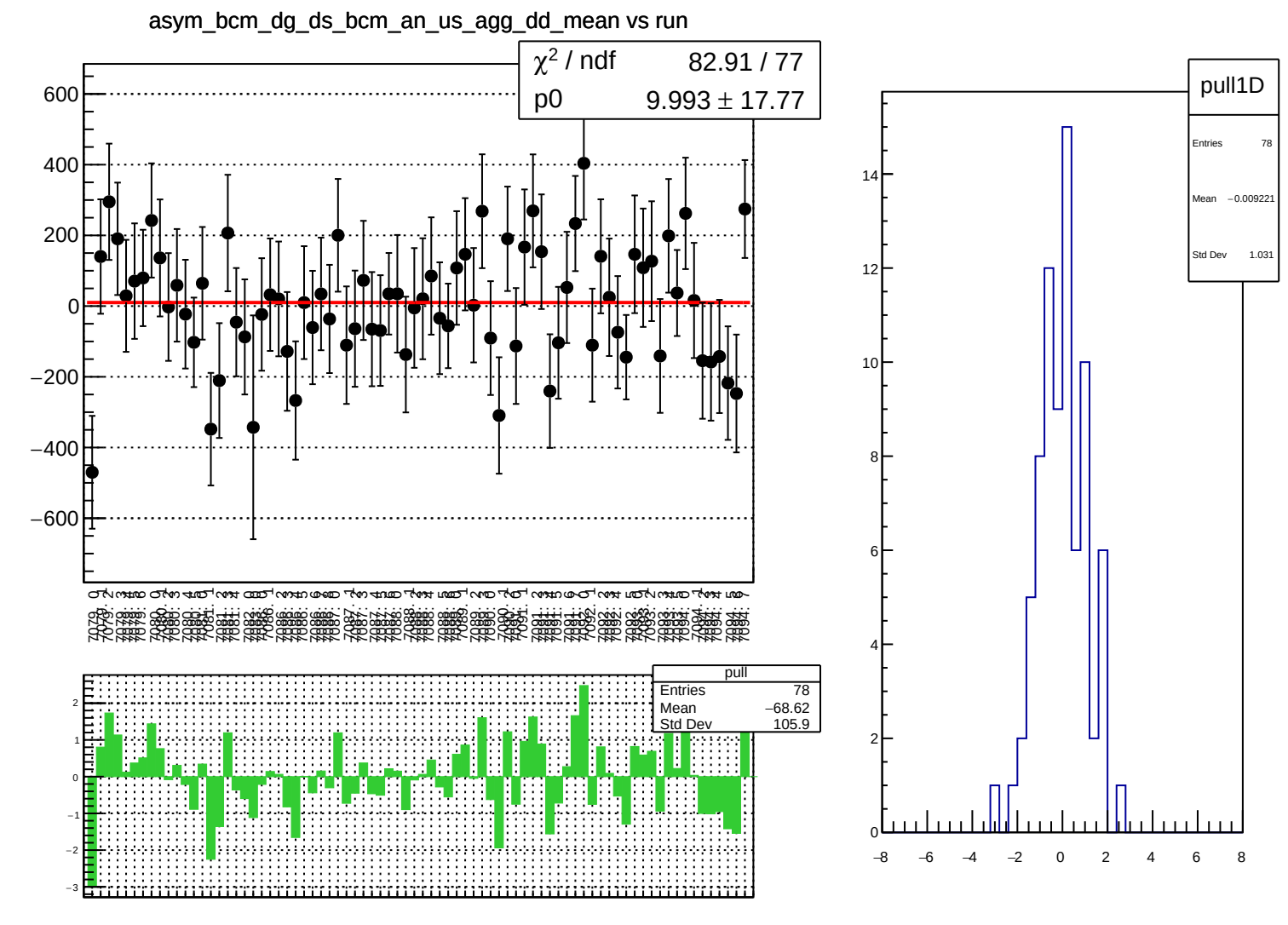

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 80.93 / 77
p0 −8.749 ± 26.29
1000
500
0
−500
−1000
pull
Entries 78
Mean −257.8
Std Dev 334
3
2
1
0
−1
−2
pull1D
Entries 78
Mean 0.002954
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

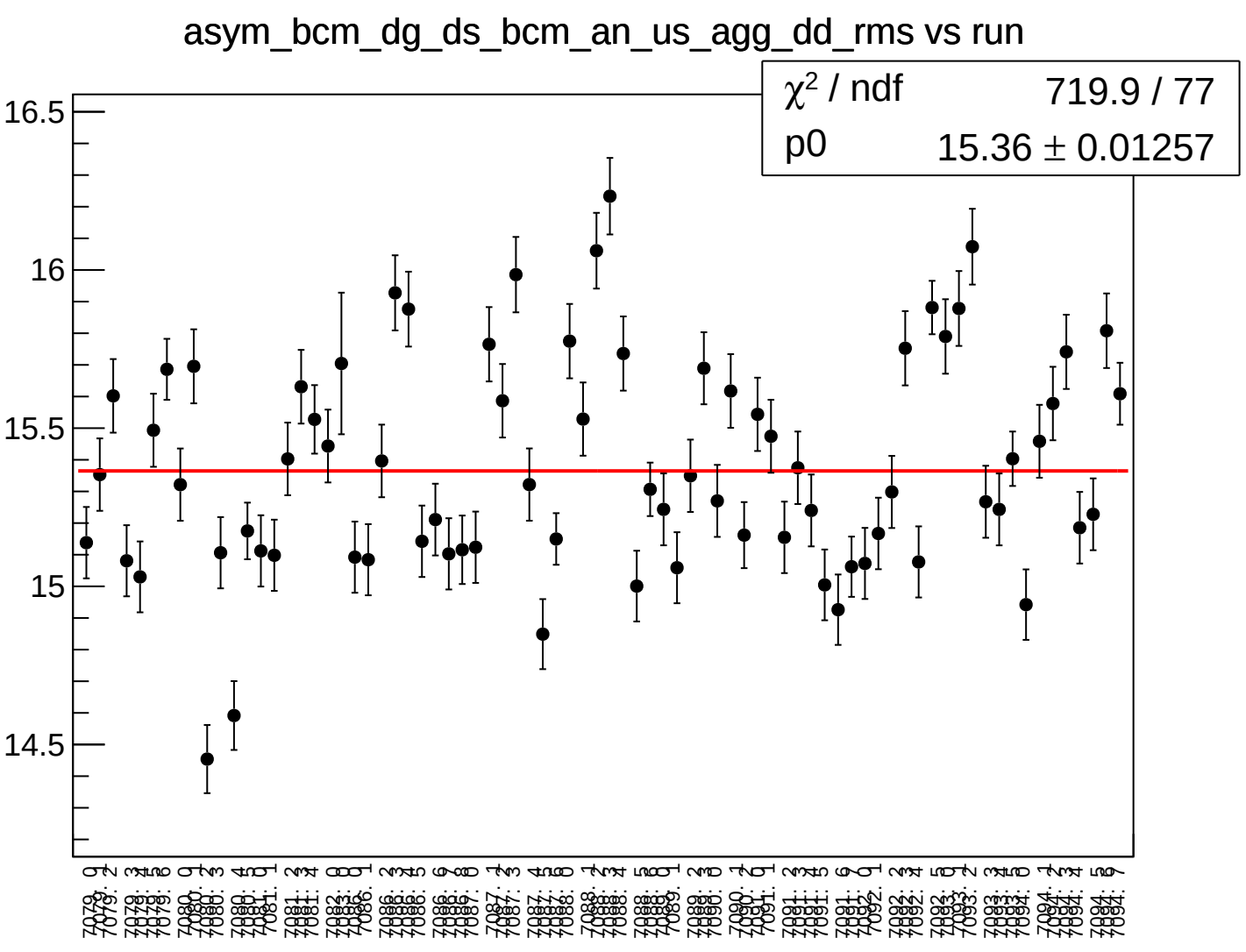

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 661.6 / 77
p0 22.73 ± 0.01859
24
23.5
23
22.5
22
21.5

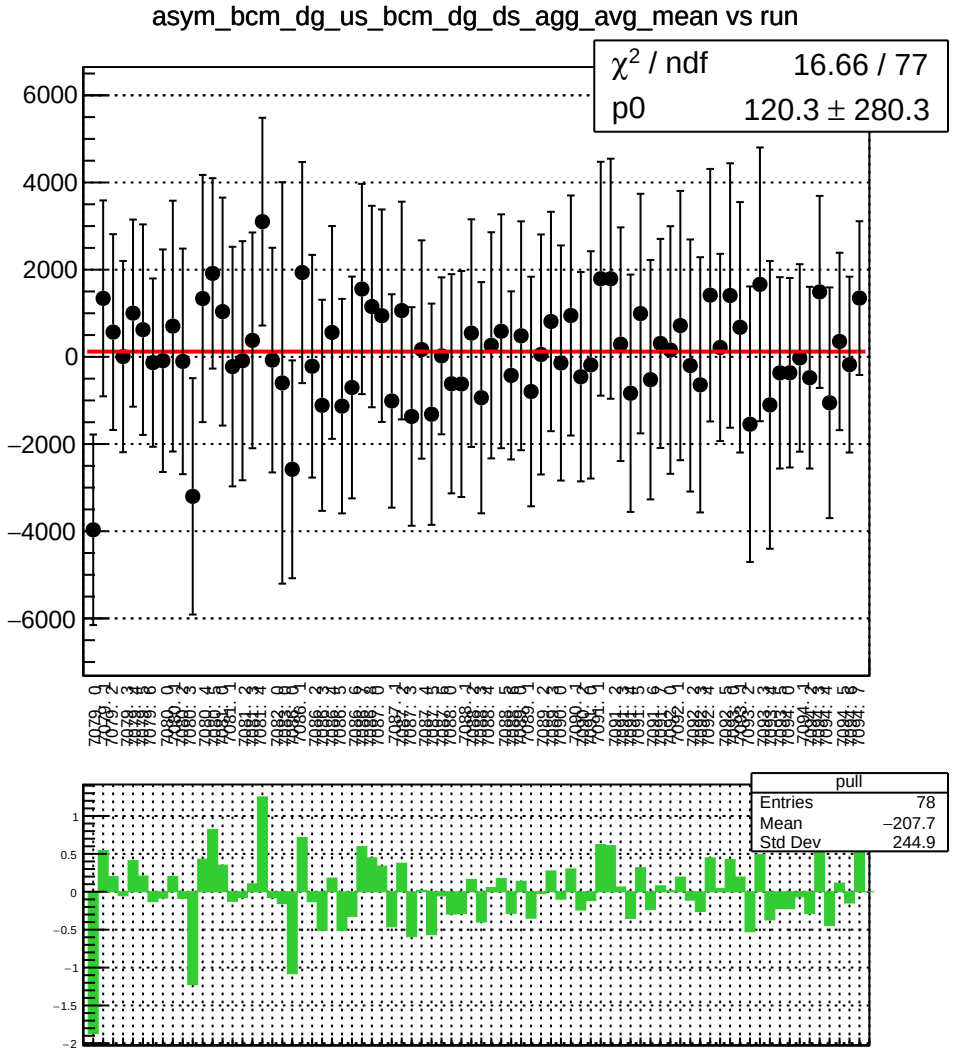

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.27 / 77
p0 132.2 ± 278.4
pull
Entries 78
Mean −161.4
Std Dev 203.4

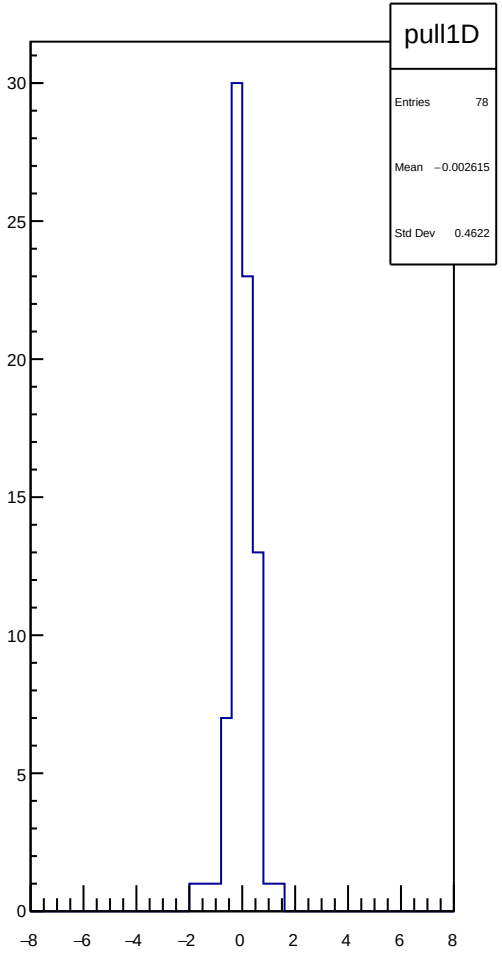

pull1D
Entries 78
Mean −0.0038
Std Dev 0.4567

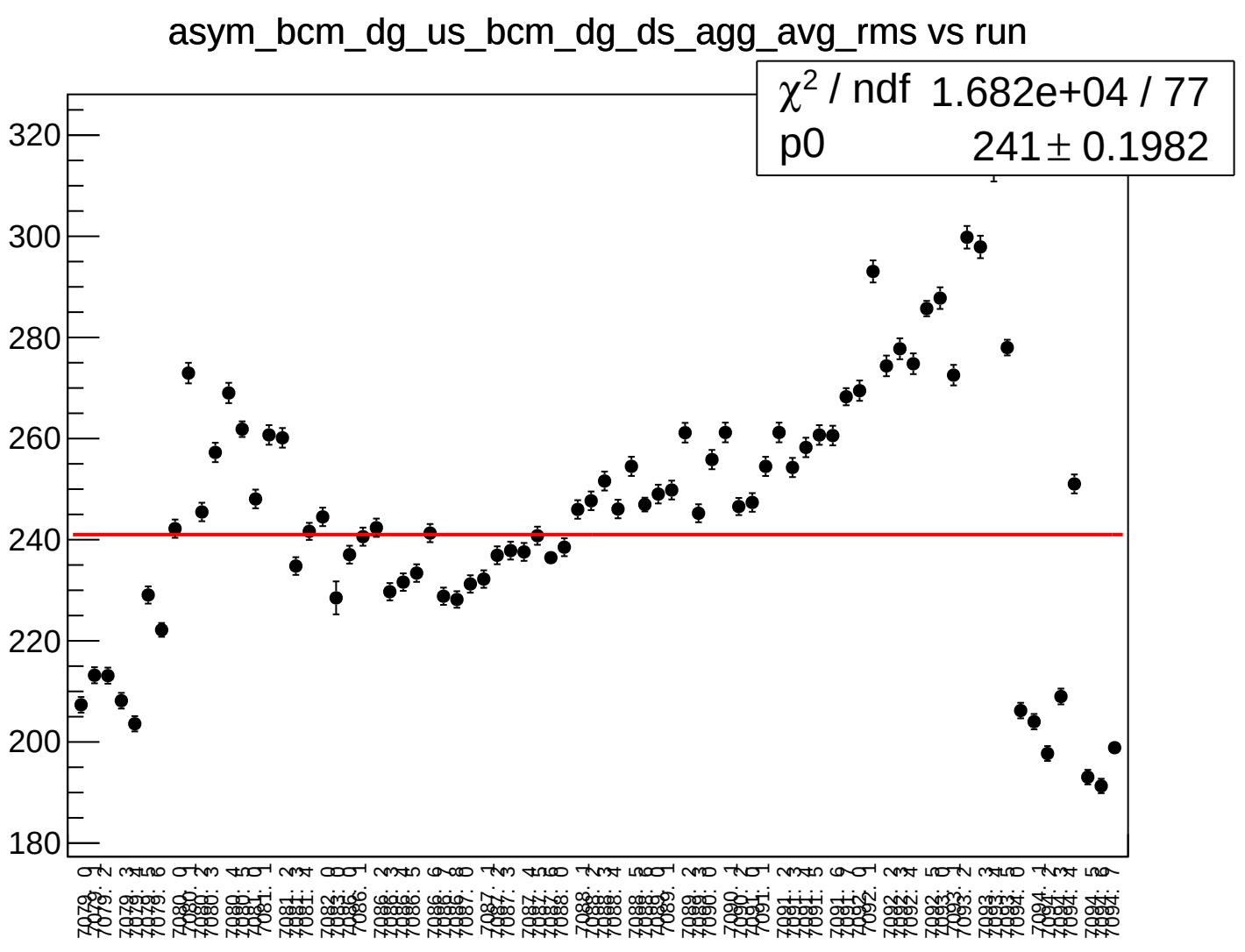

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.736e+04 / 77
p0 239.3 ± 0.1968
320
300
280
260
240
220
200
180

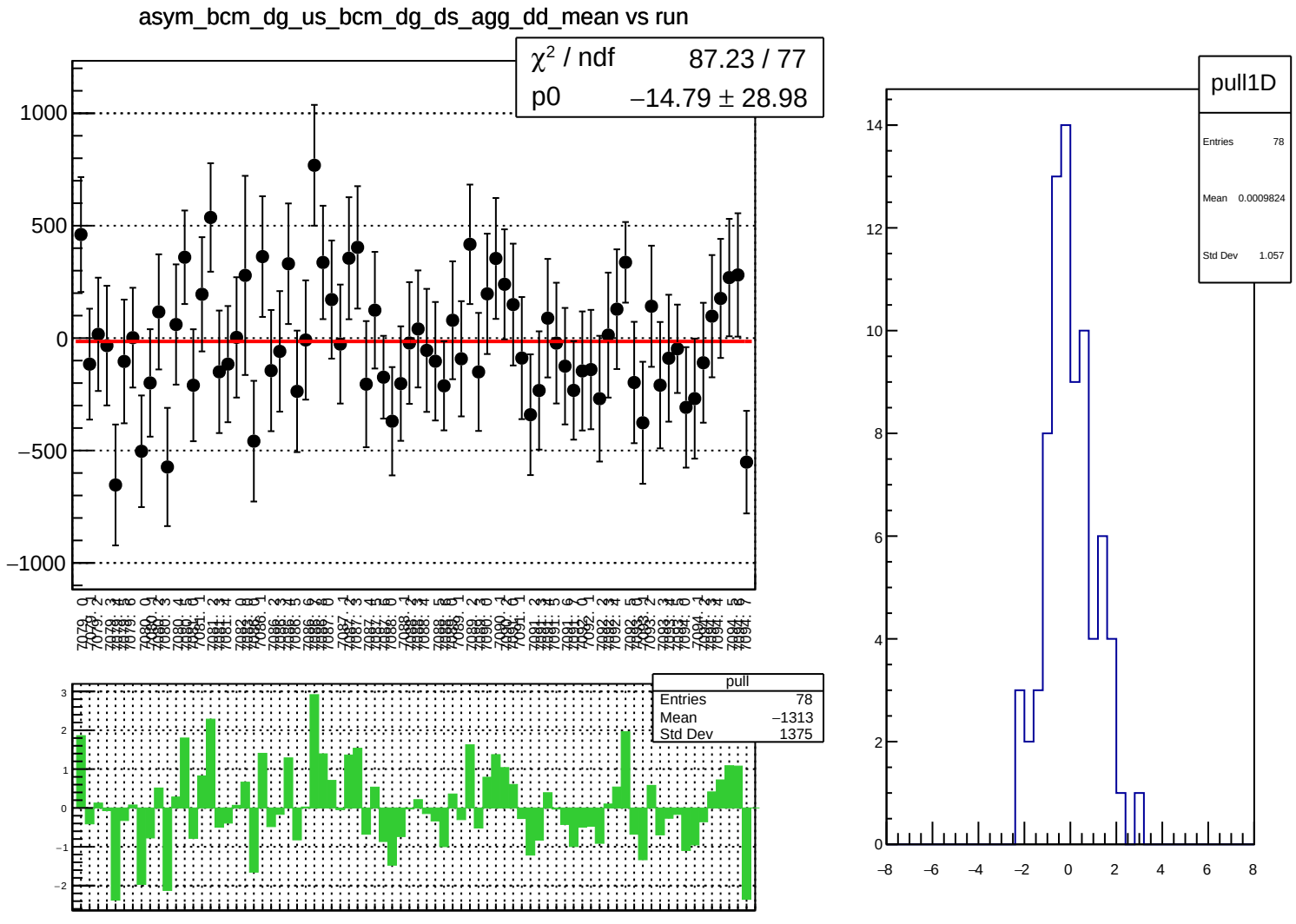

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.91 / 77
p0 9.993 ± 17.77
pull
Entries 78
Mean −68.62
Std Dev 105.9
pull1D
Entries 78
Mean −0.009221
Std Dev 1.031

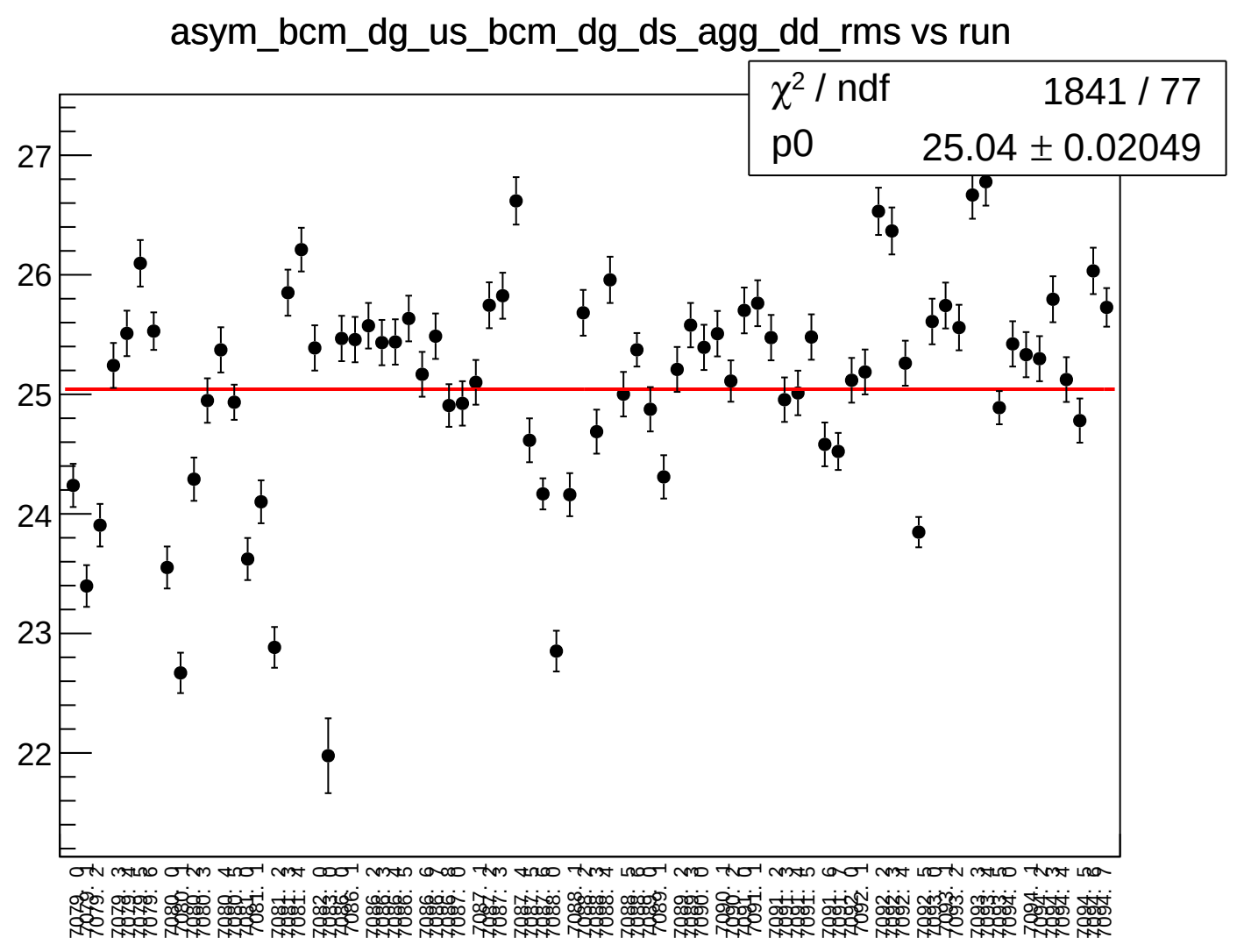

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 719.9 / 77
p0 15.36 ± 0.01257
16.5
16
15.5
15
14.5

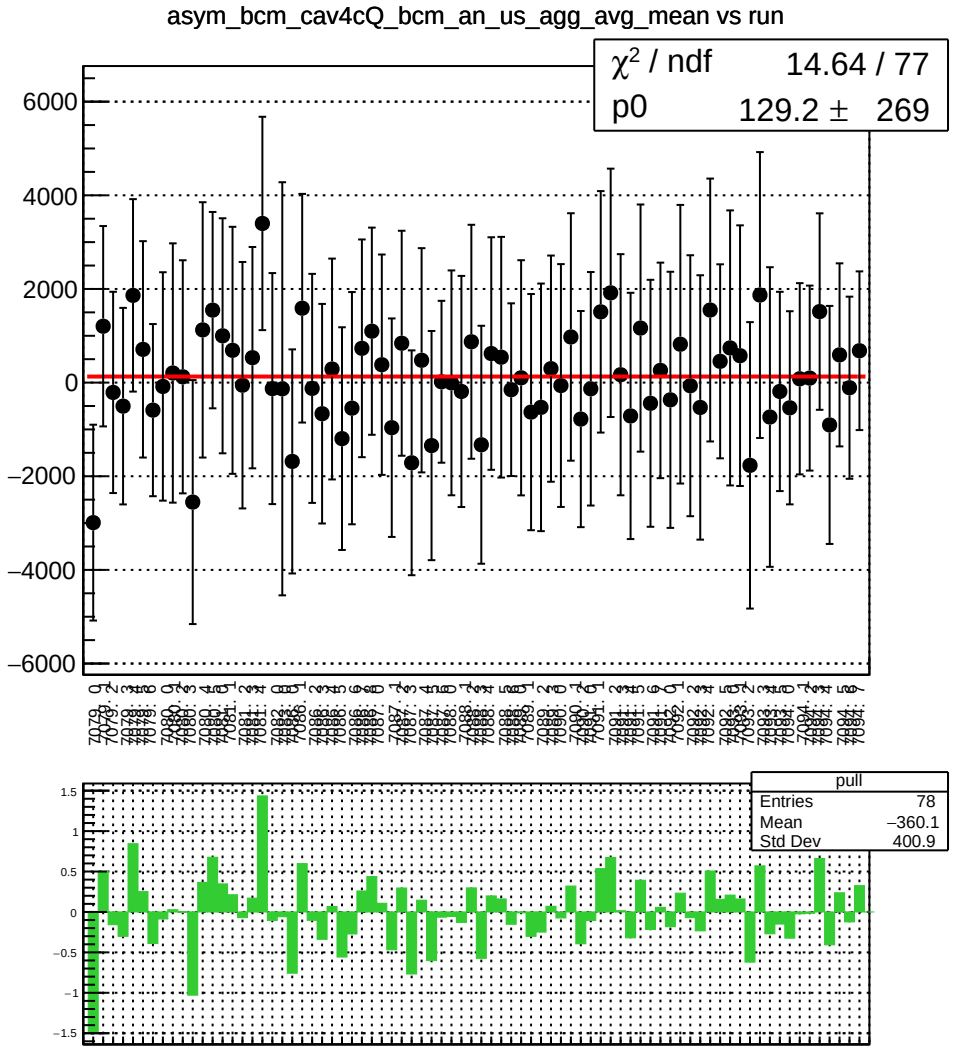

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 16.66 / 77
p0 120.3 ± 280.3
pull
Entries 78
Mean −207.7
Std Dev 244.9

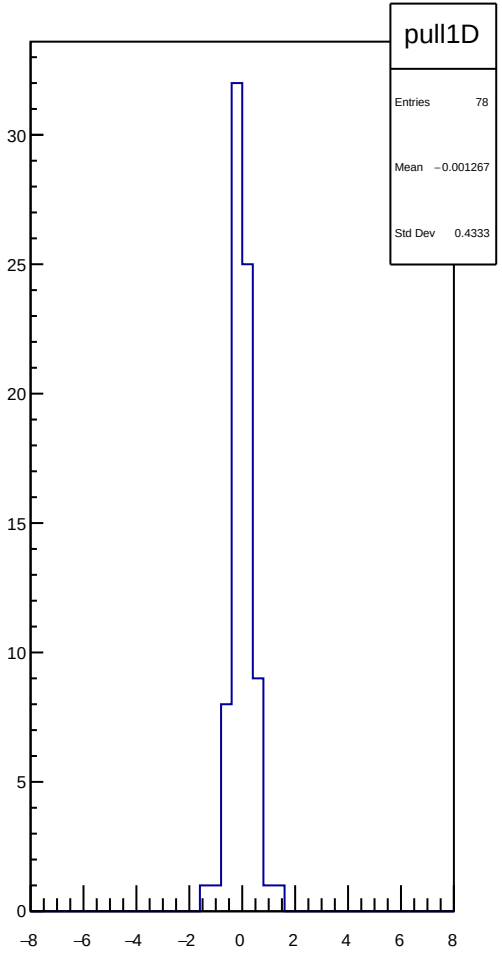

pull1D
Entries 78
Mean −0.002615
Std Dev 0.4622

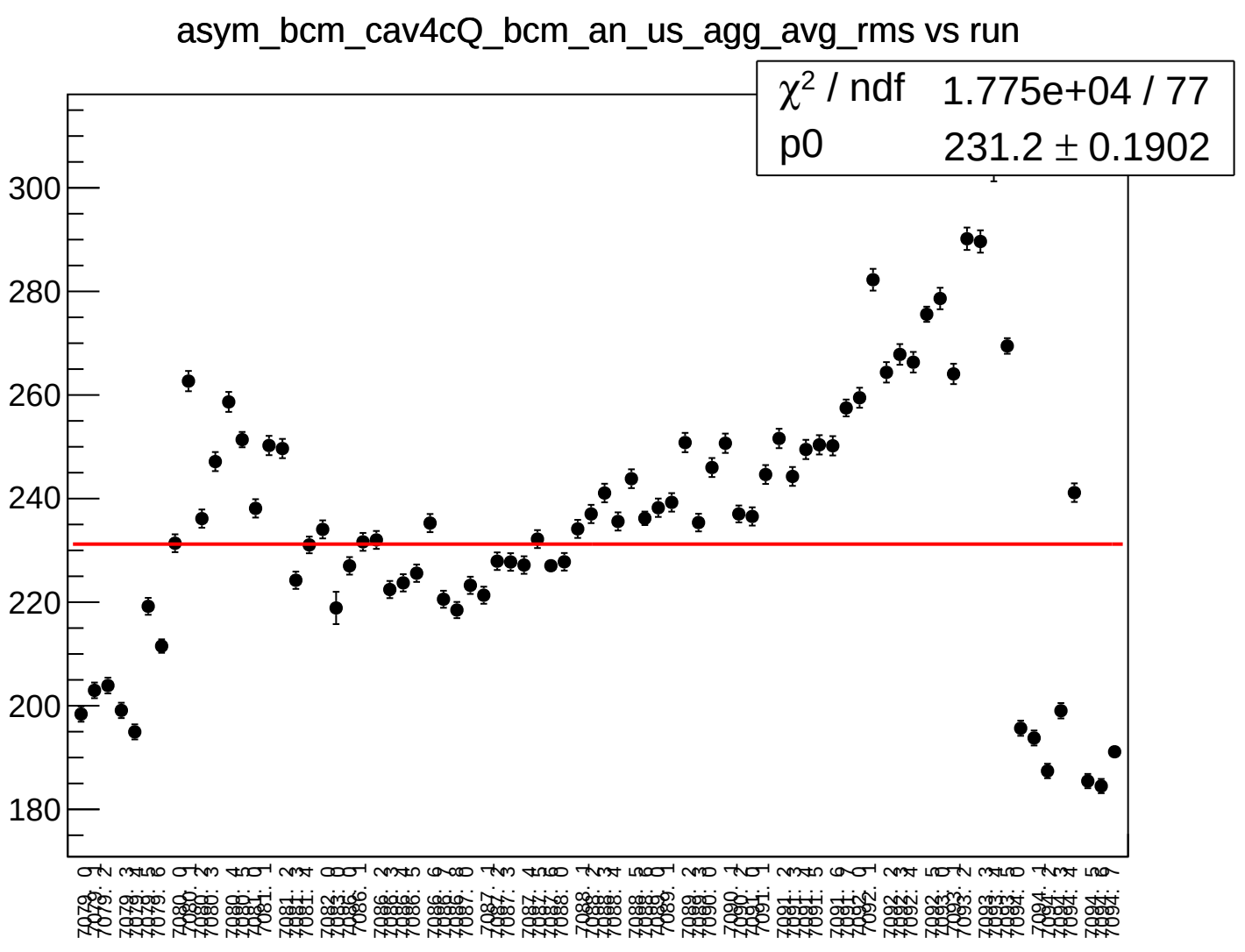

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.682e+04 / 77
p0 241 ± 0.1982
320
300
280
260
240
220
200
180

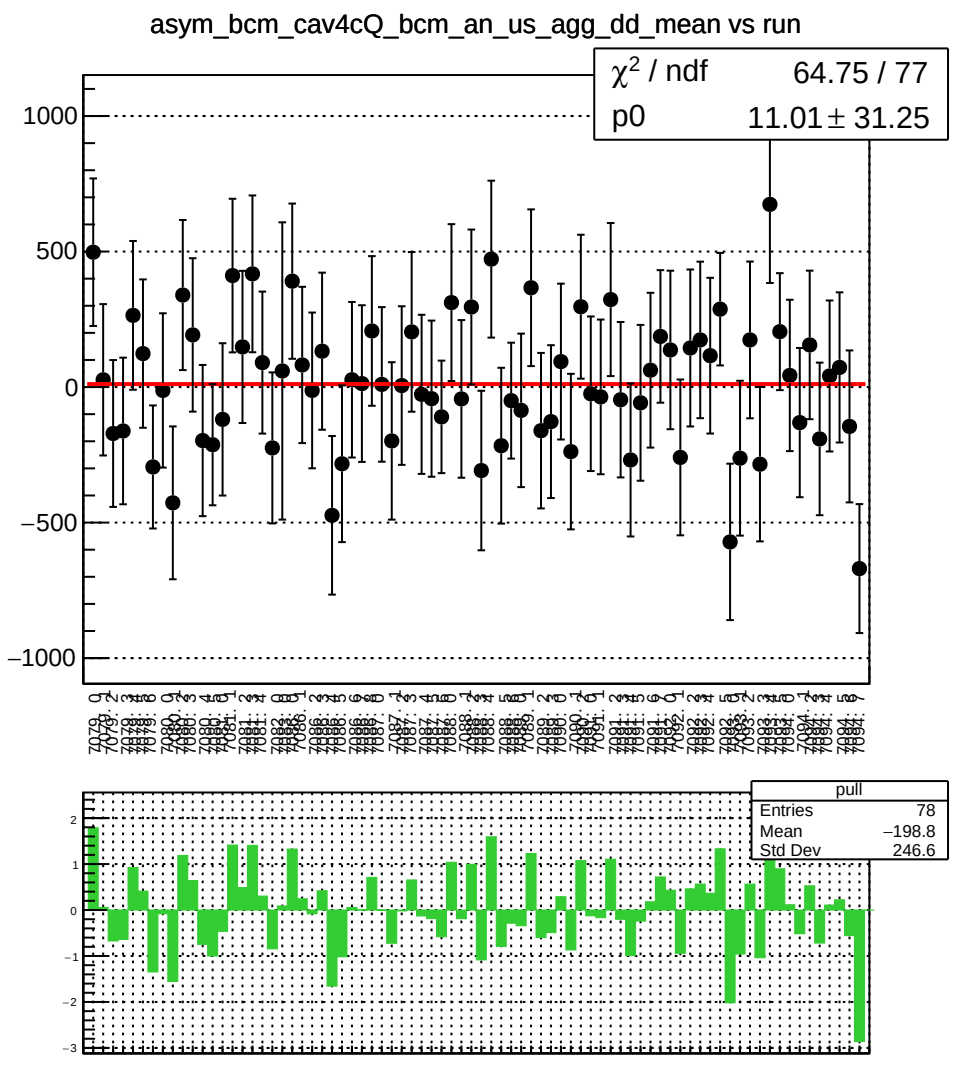

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 87.23 / 77
p0 −14.79 ± 28.98
1000
500
0
−500
−1000
pull
Entries 78
Mean −1313
Std Dev 1375
3
2
1
0
−1
−2
pull1D
Entries 78
Mean 0.0009824
Std Dev 1.057
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

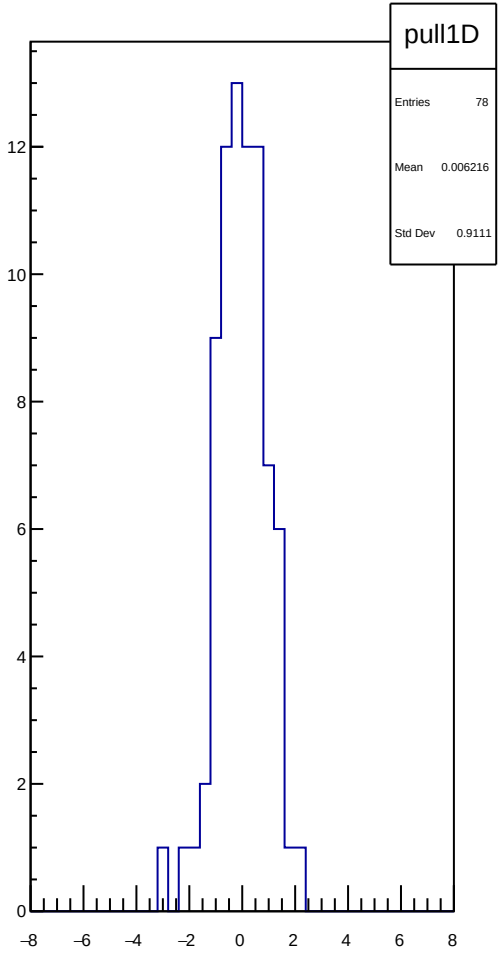

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1841 / 77
p0 25.04 ± 0.02049
27
26
25
24
23
22

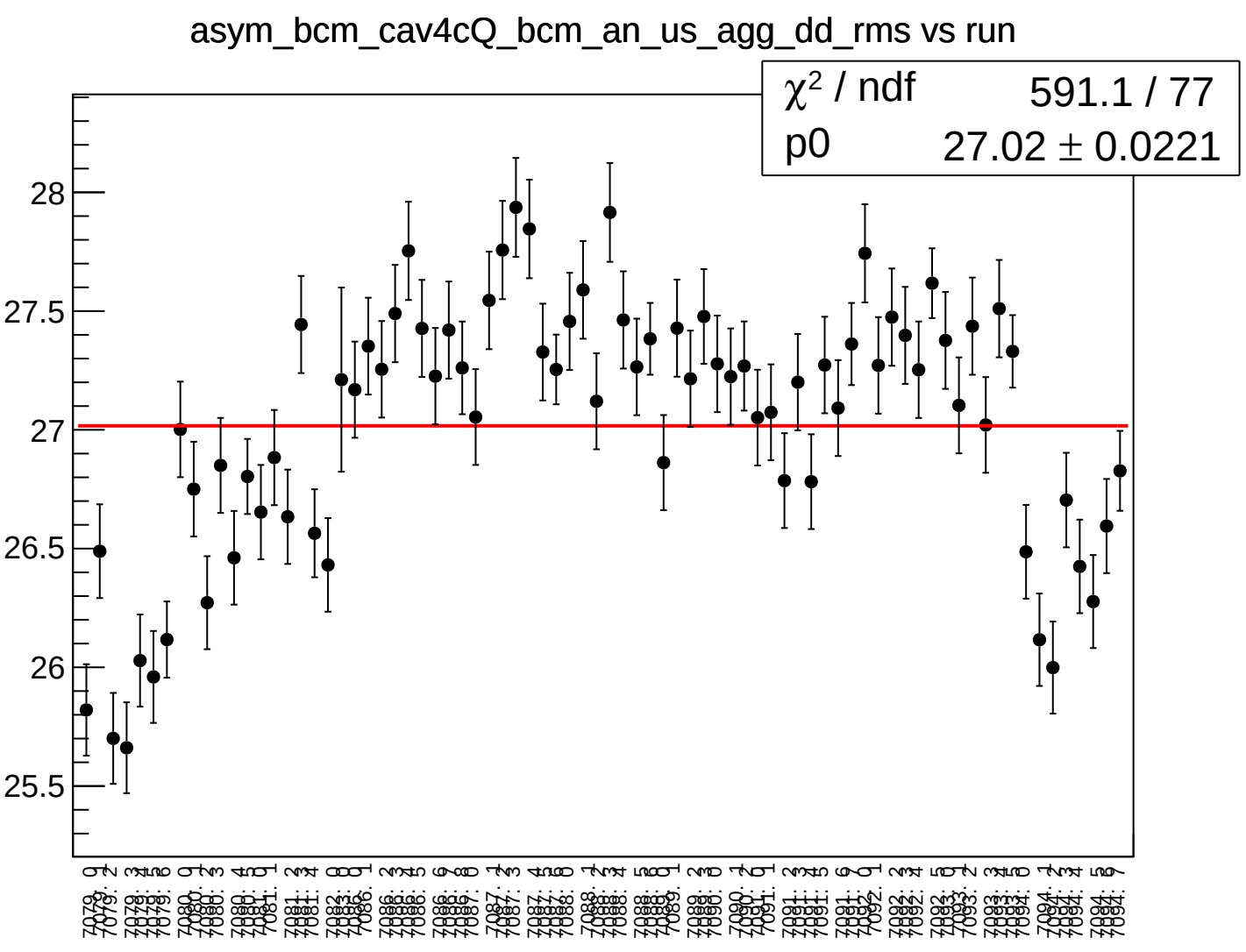

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.64 / 77
p0 129.2 ± 269
pull
Entries 78
Mean −360.1
Std Dev 400.9

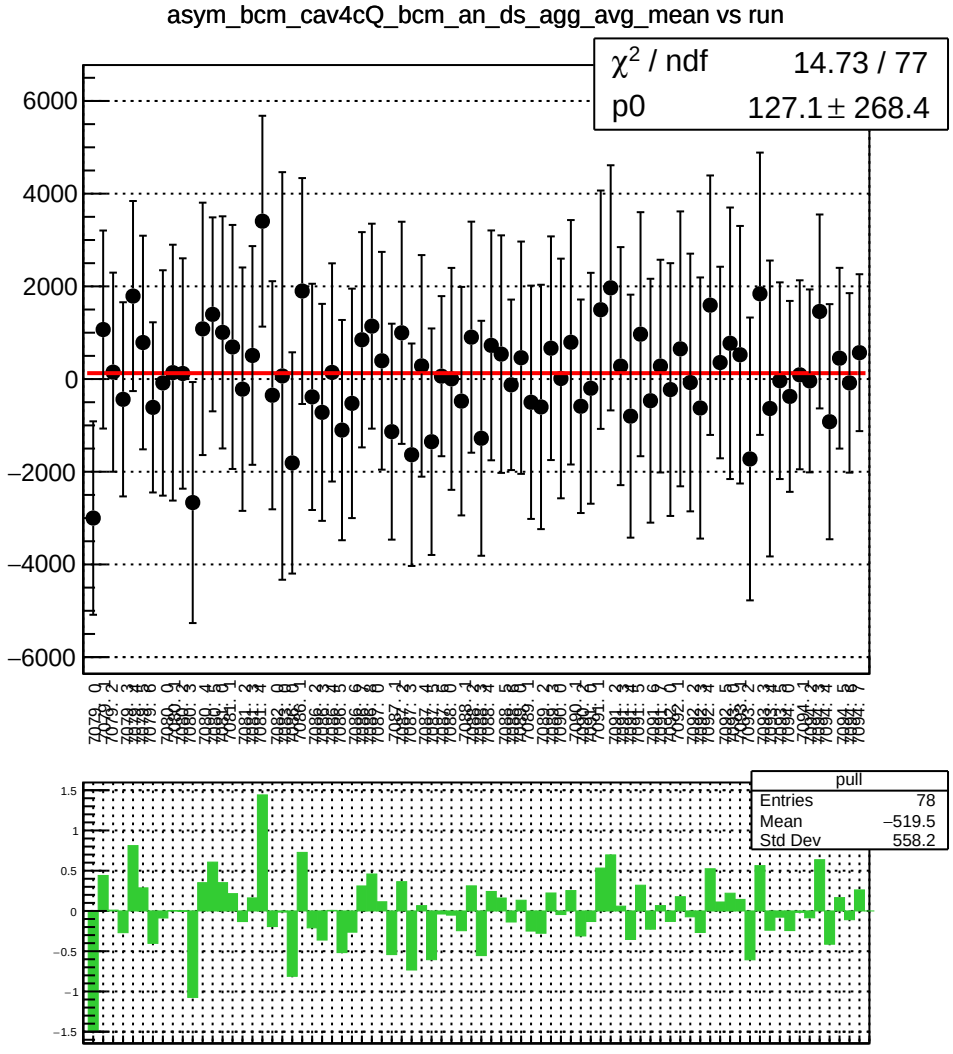

pull1D
Entries 78
Mean −0.001267
Std Dev 0.4333

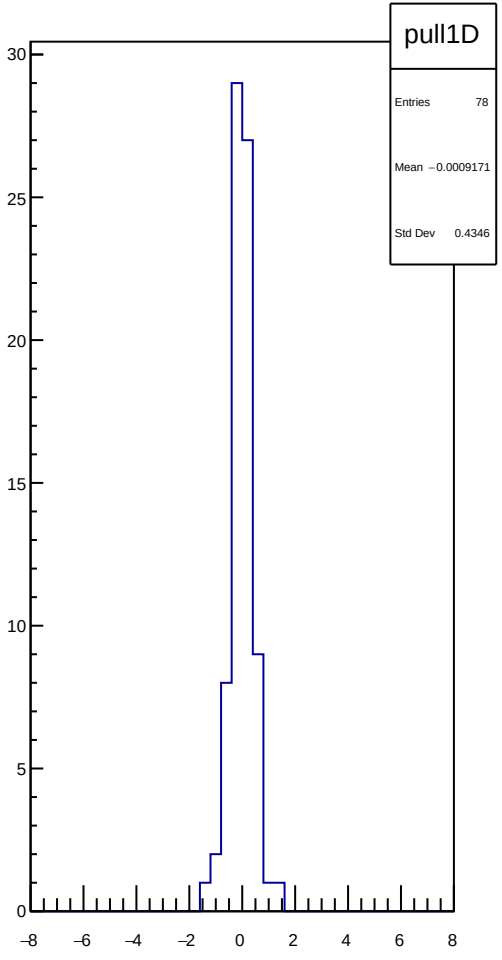

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.775e+04 / 77
p0 231.2 ± 0.1902
300
280
260
240
220
200
180

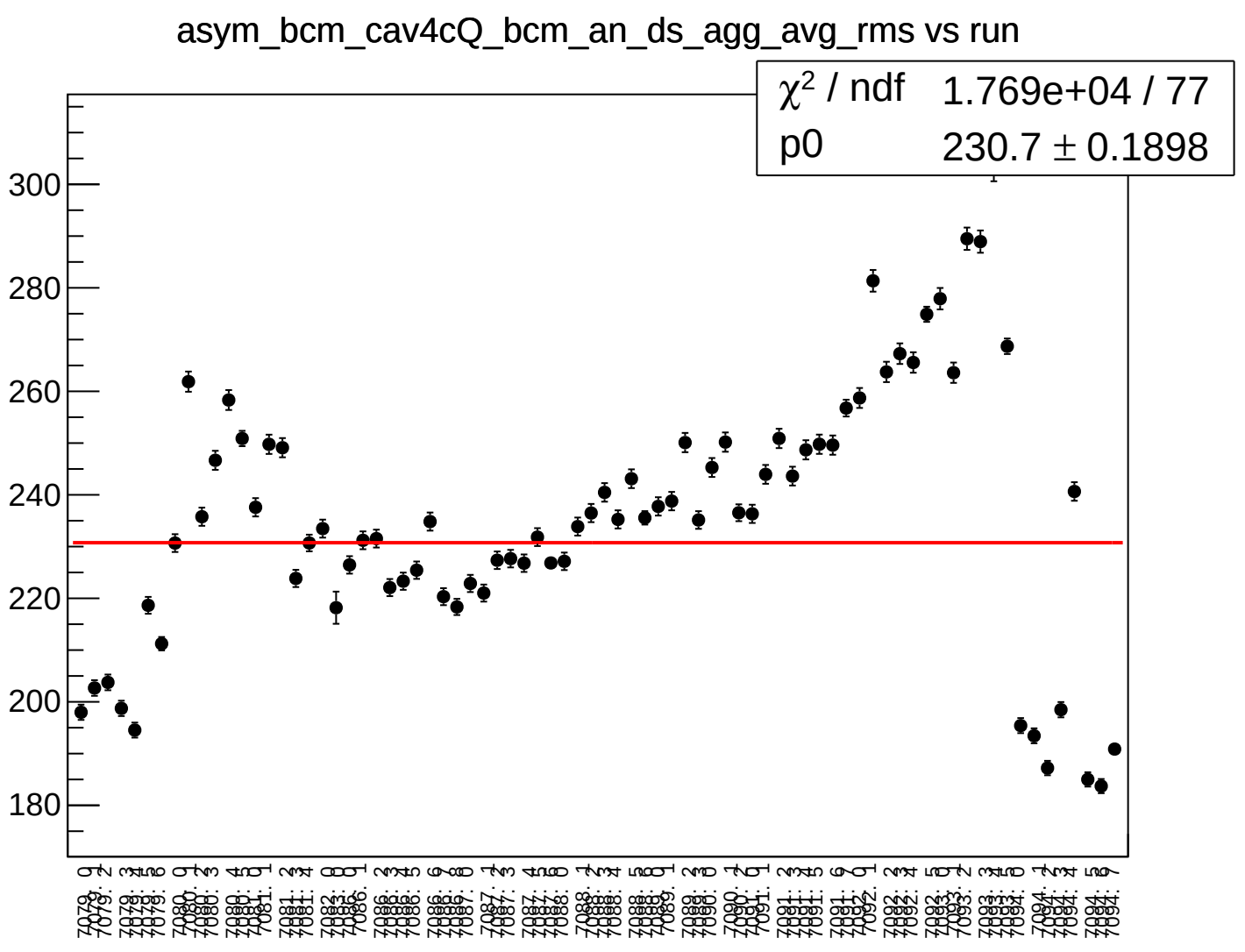

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 64.75 / 77
p0 11.01 ± 31.25
1000
500
0
−500
−1000
pull
Entries 78
Mean −198.8
Std Dev 246.6
2
1
0
−1
−2
−3

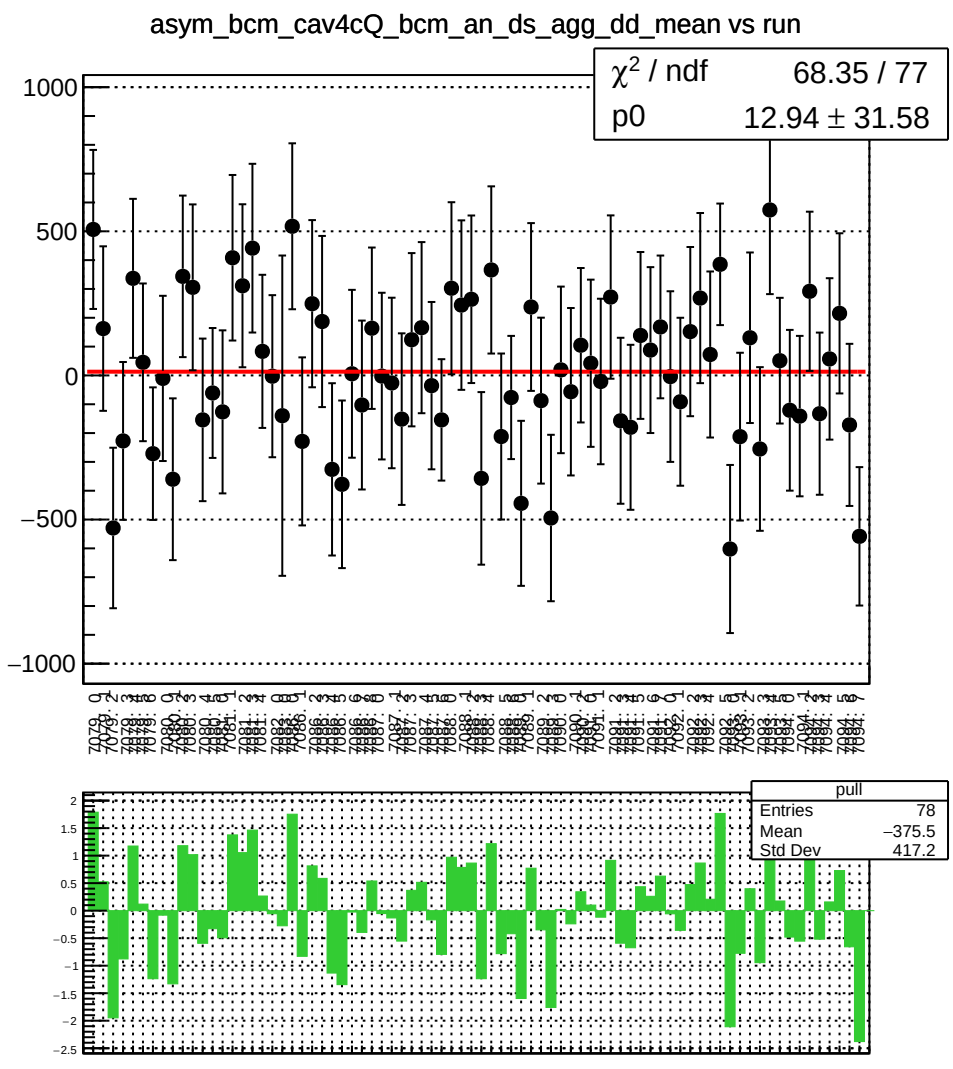

pull1D
Entries 78
Mean 0.006216
Std Dev 0.9111
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

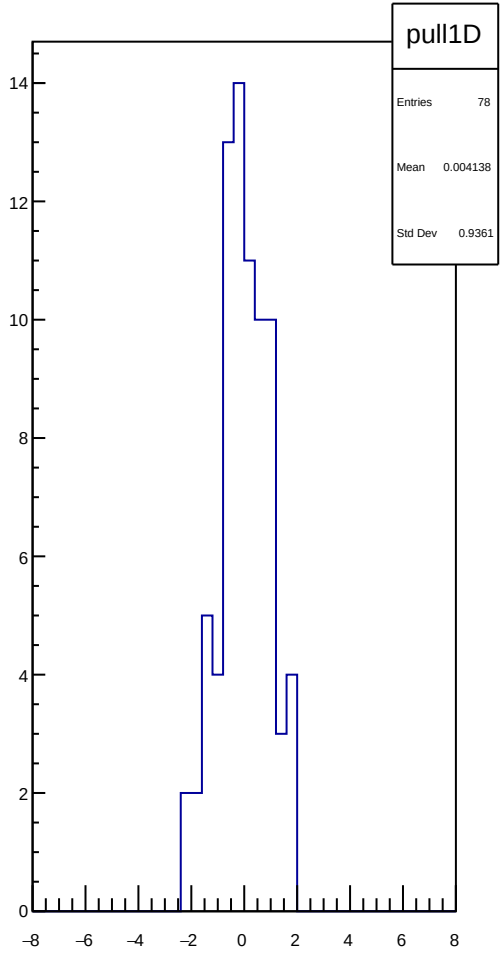

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 591.1 / 77
p0 27.02 ± 0.0221
28
27.5
27
26.5
26
25.5

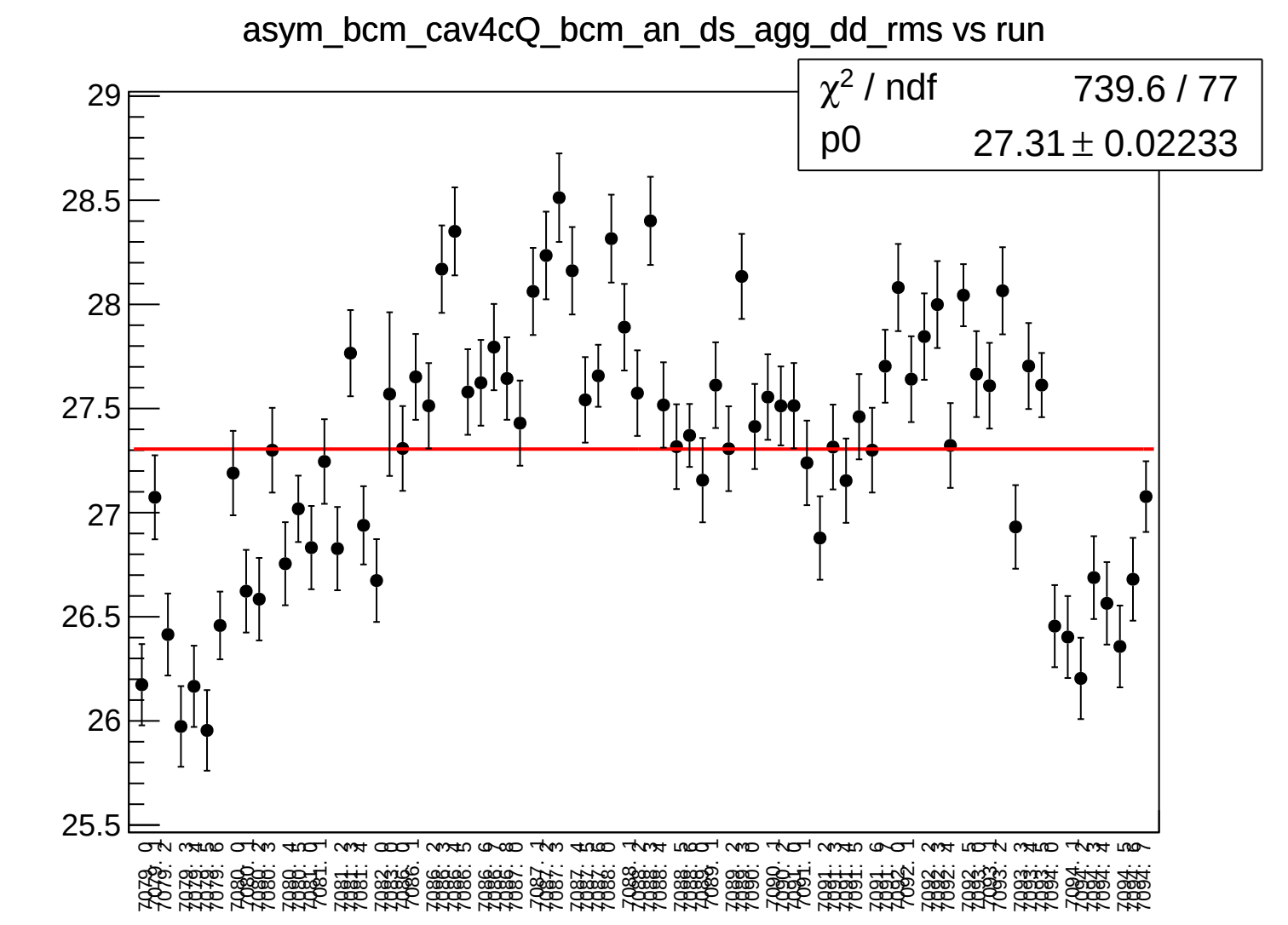

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.73 / 77
p0 127.1 ± 268.4
pull
Entries 78
Mean −519.5
Std Dev 558.2

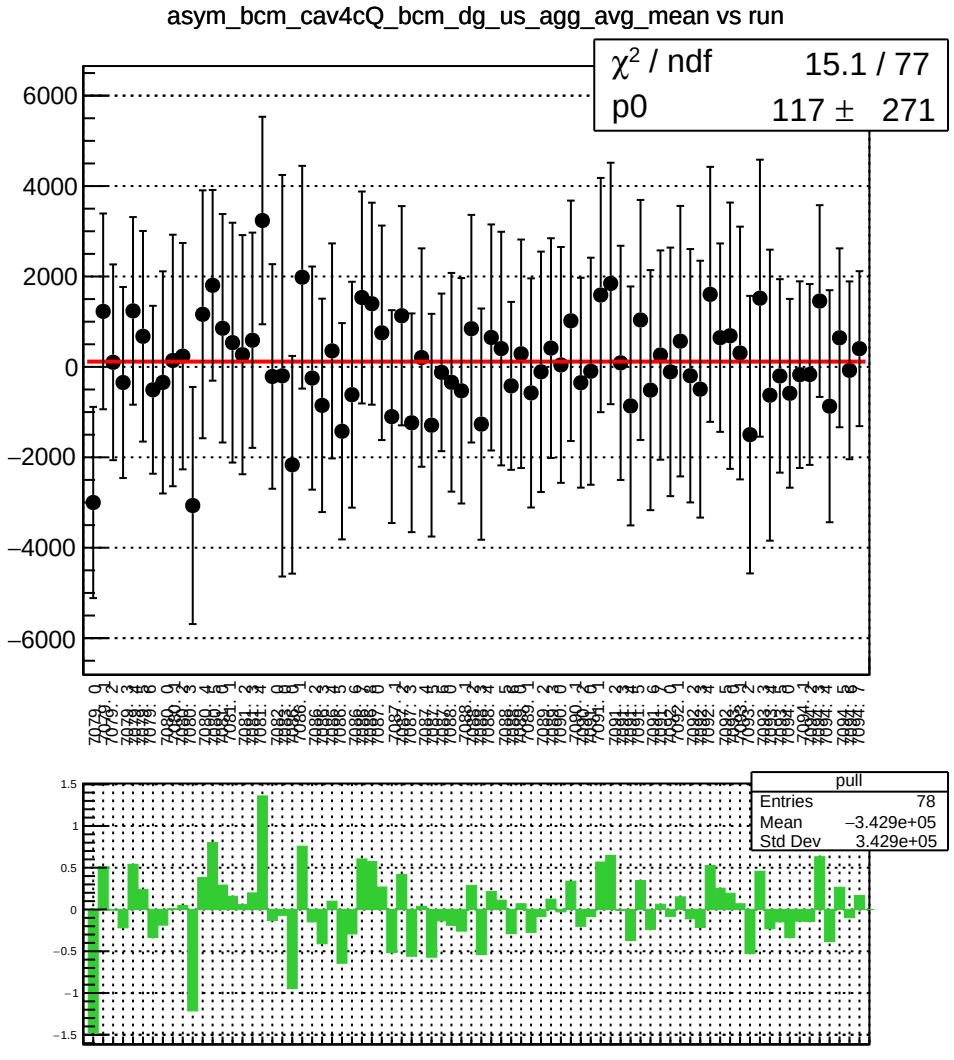

pull1D
Entries 78
Mean −0.0009171
Std Dev 0.4346

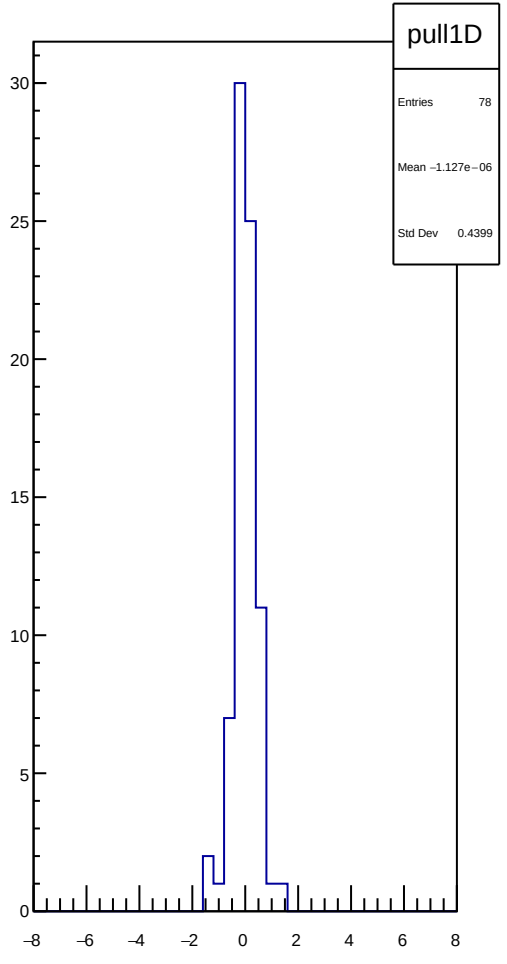

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.769e+04 / 77
p0 230.7 ± 0.1898
300
280
260
240
220
200
180

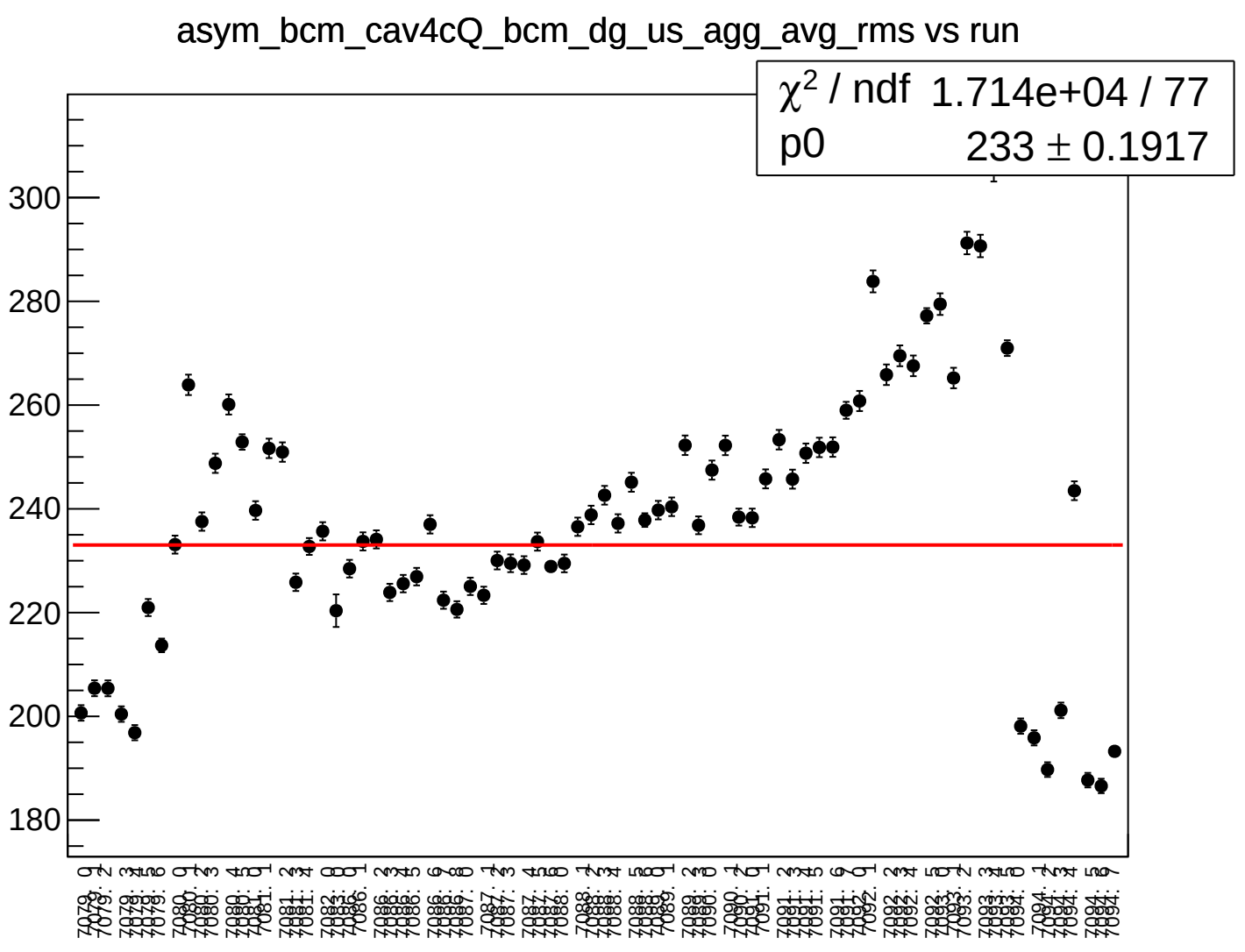

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.35 / 77
p0 12.94 ± 31.58
1000
500
0
−500
−1000
pull
Entries 78
Mean −375.5
Std Dev 417.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

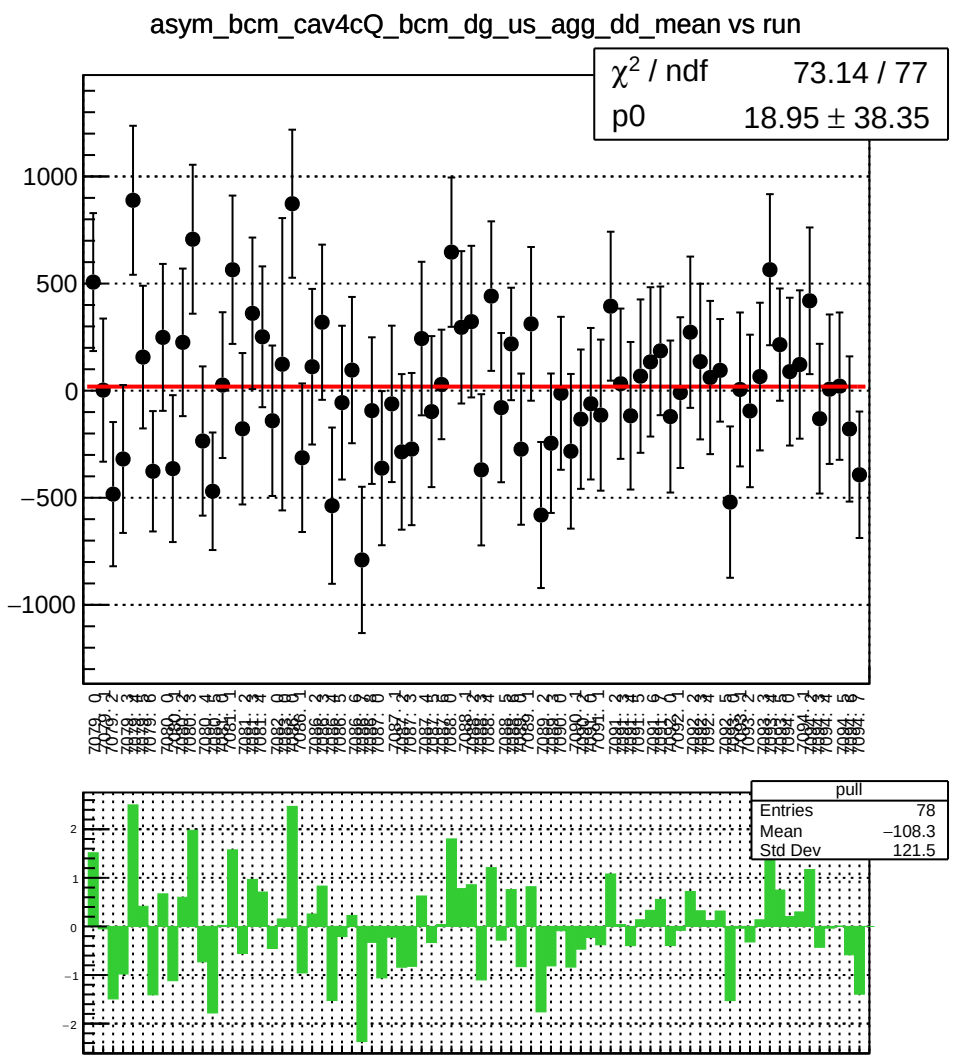

pull1D
Entries 78
Mean 0.004138
Std Dev 0.9361
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

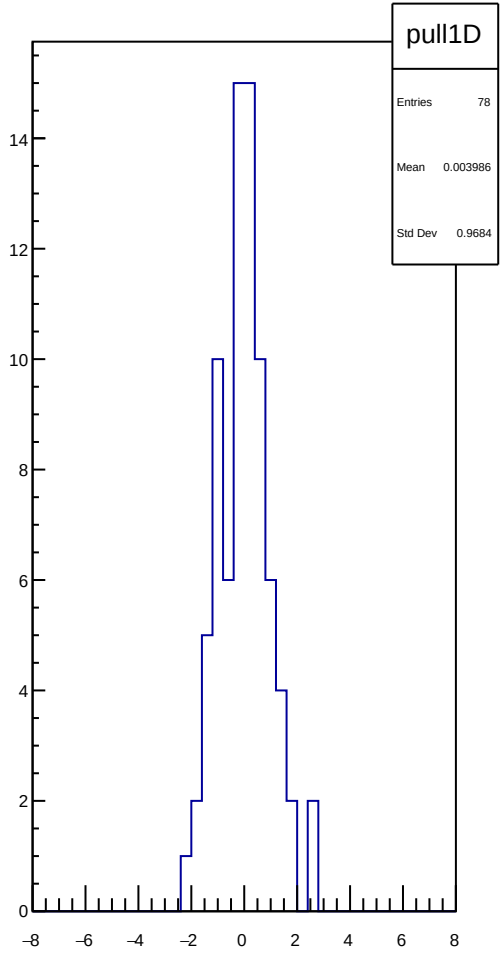

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 739.6 / 77
p0 27.31 ± 0.02233
29
28.5
28
27.5
27
26.5
26
25.5

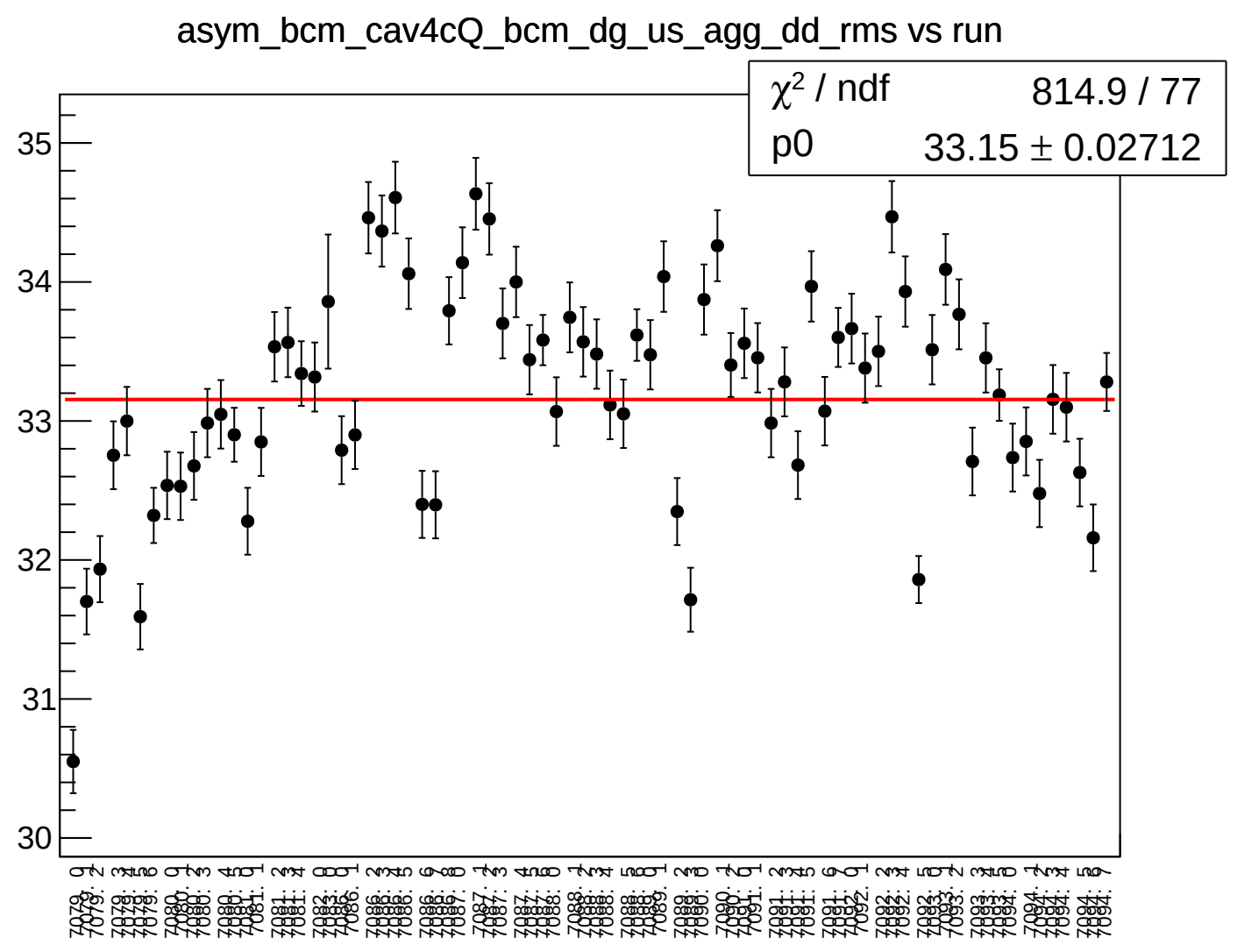

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 15.1 / 77
p0 117 ± 271
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −3.429e+05
Std Dev 3.429e+05
1.5
1
0.5
0
−0.5
−1
−1.5

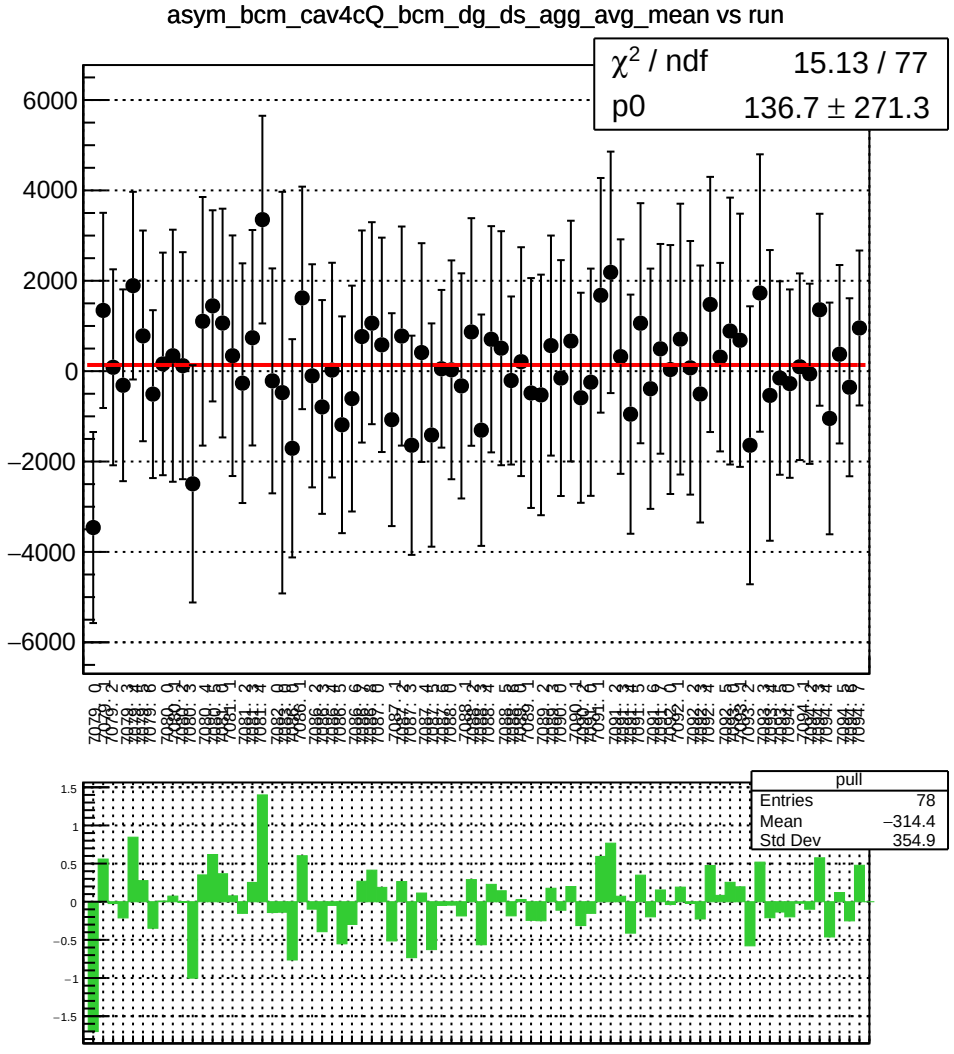

pull1D
Entries 78
Mean −1.127e−06
Std Dev 0.4399
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

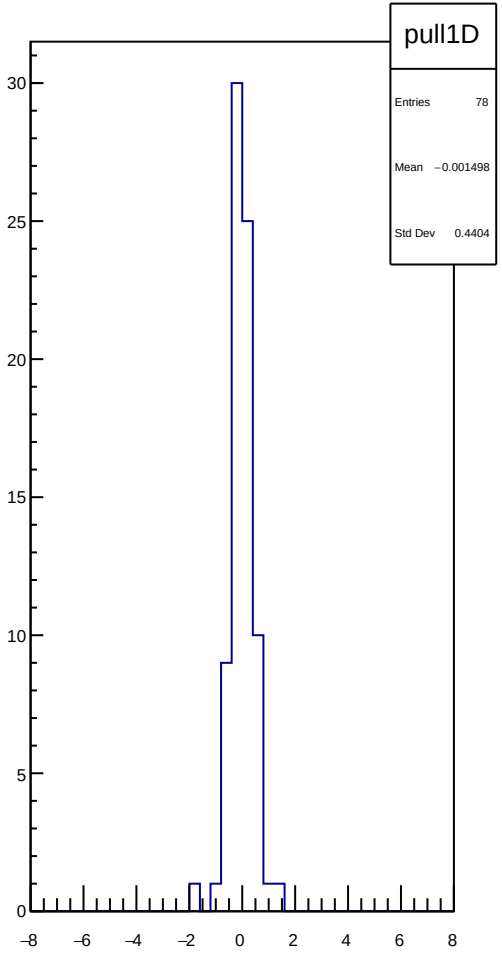

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.714e+04 / 77
p0 233 ± 0.1917
300
280
260
240
220
200
180

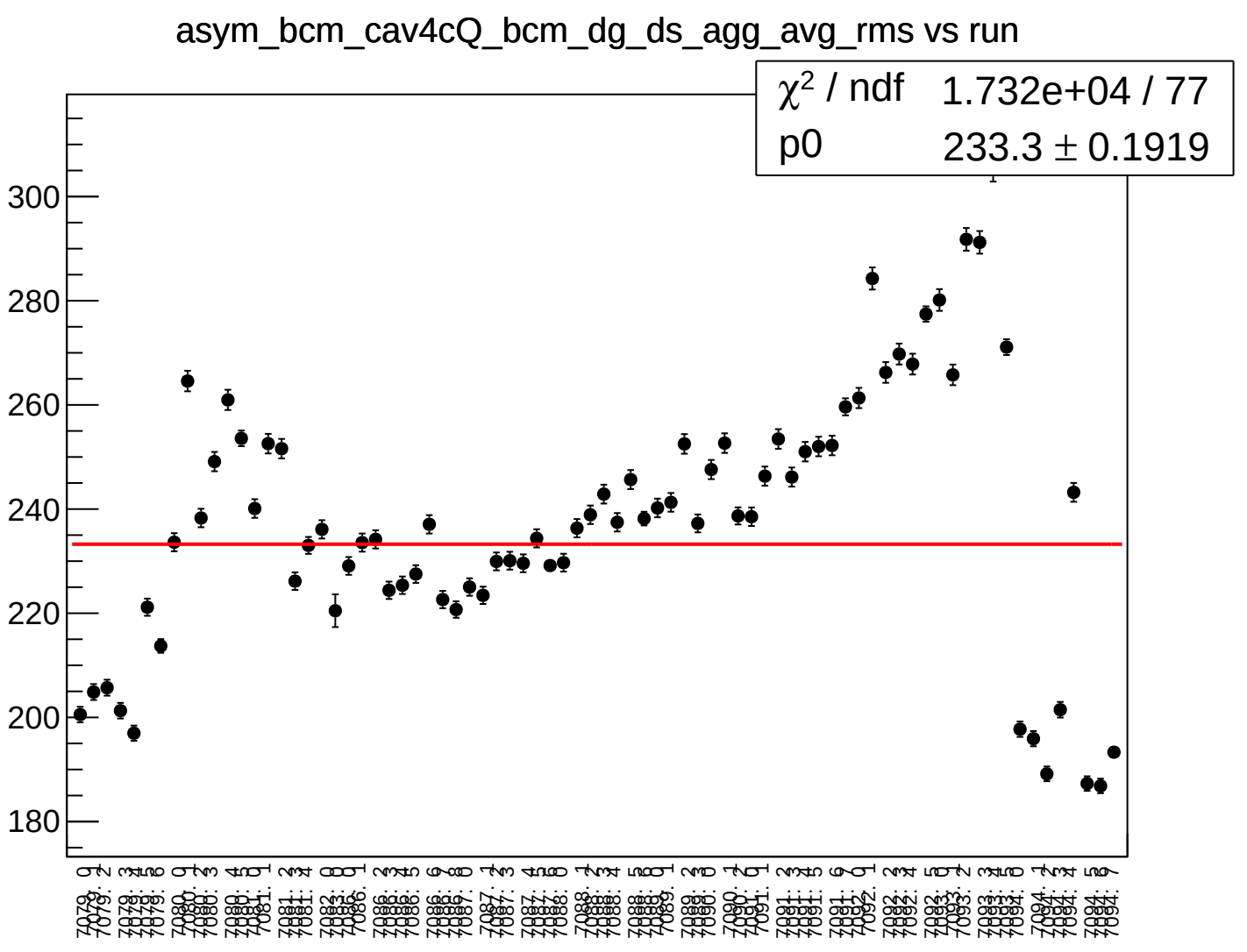

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 73.14 / 77
p0 18.95 ± 38.35
1000
500
0
−500
−1000
pull
Entries 78
Mean −108.3
Std Dev 121.5
2
1
0
−1
−2

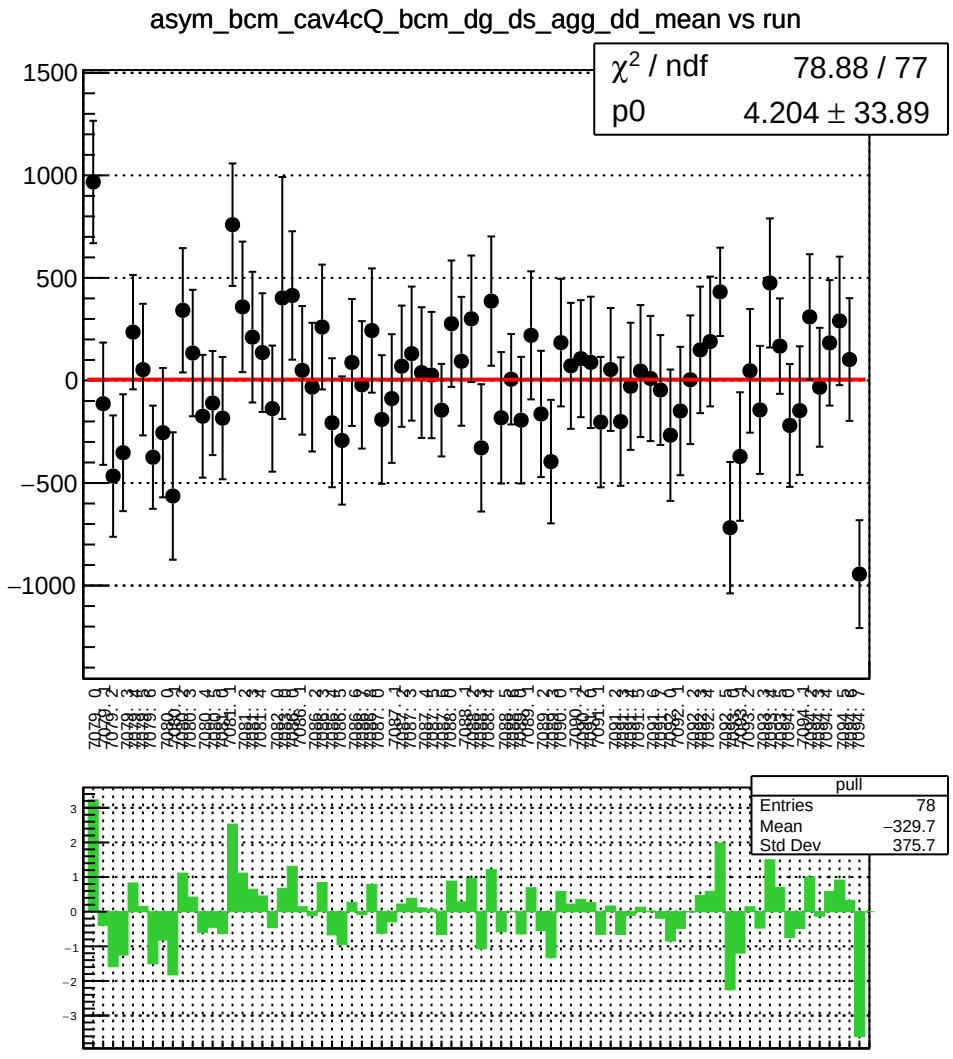

pull1D
Entries 78
Mean 0.003986
Std Dev 0.9684
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

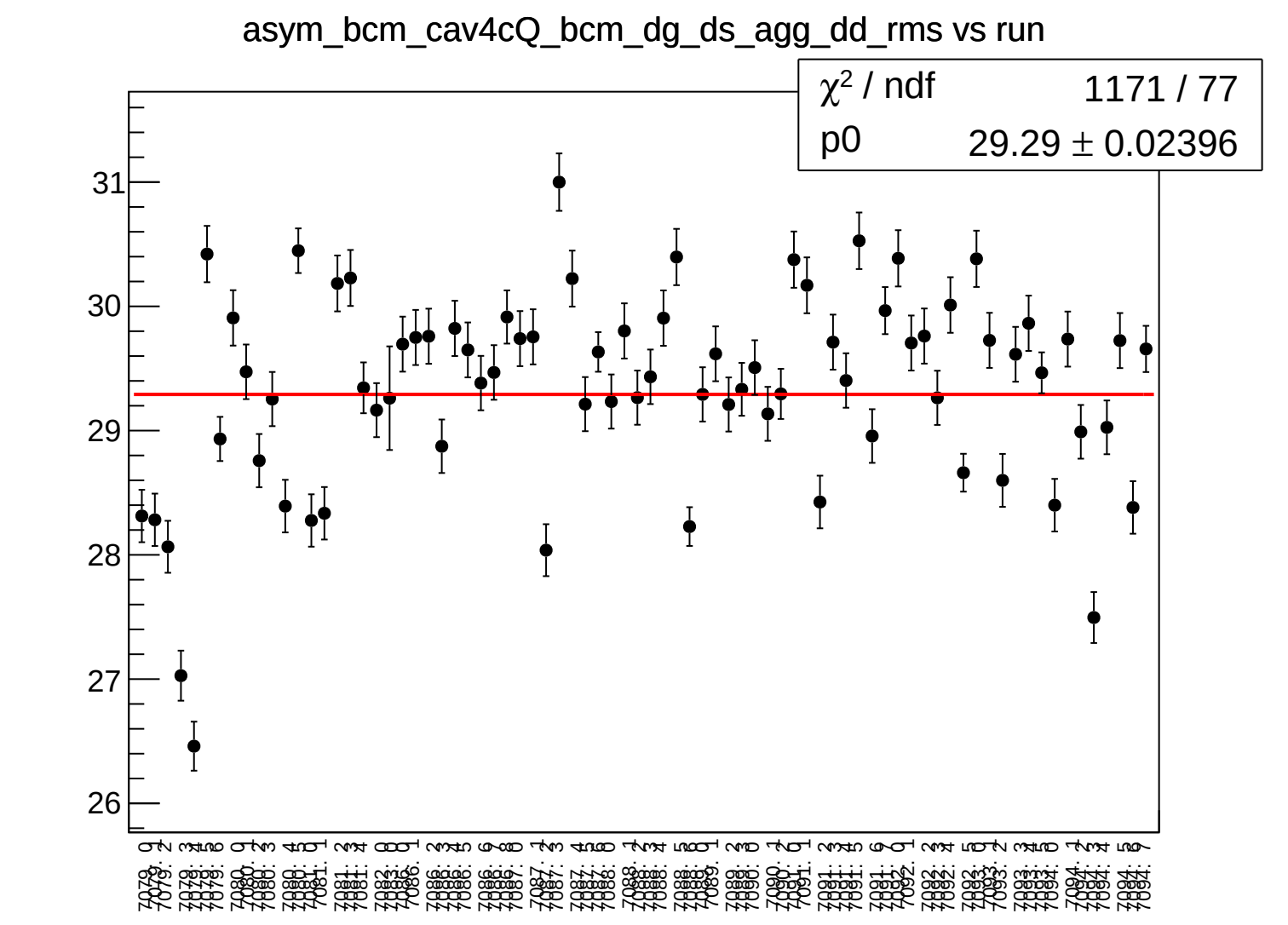

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 814.9 / 77
p0 33.15 ± 0.02712
35
34
33
32
31
30

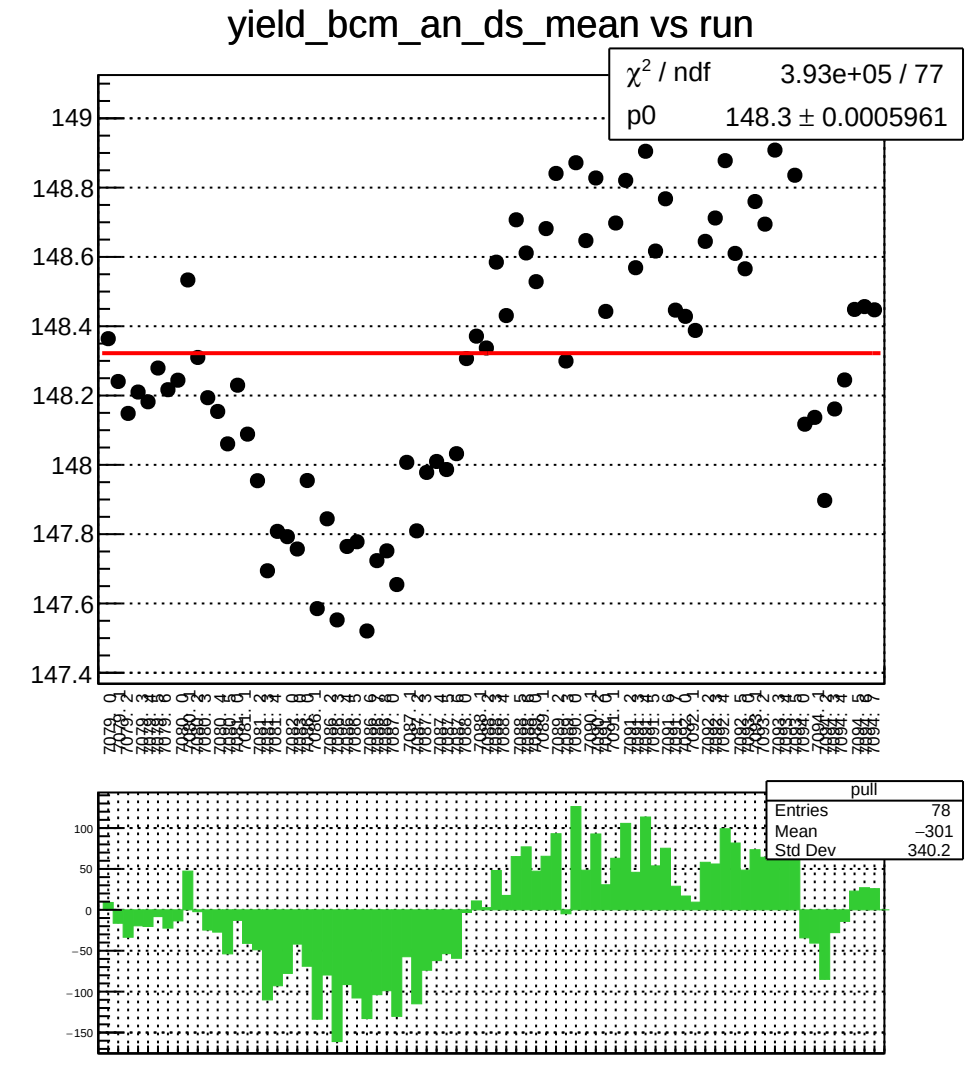

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.13 / 77
p0 136.7 ± 271.3
pull
Entries 78
Mean −314.4
Std Dev 354.9

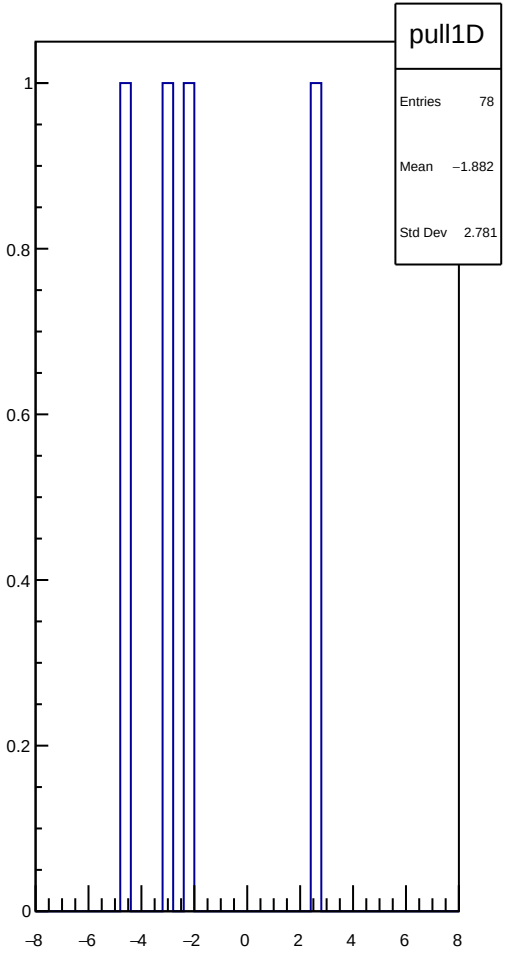

pull1D
Entries 78
Mean −0.001498
Std Dev 0.4404

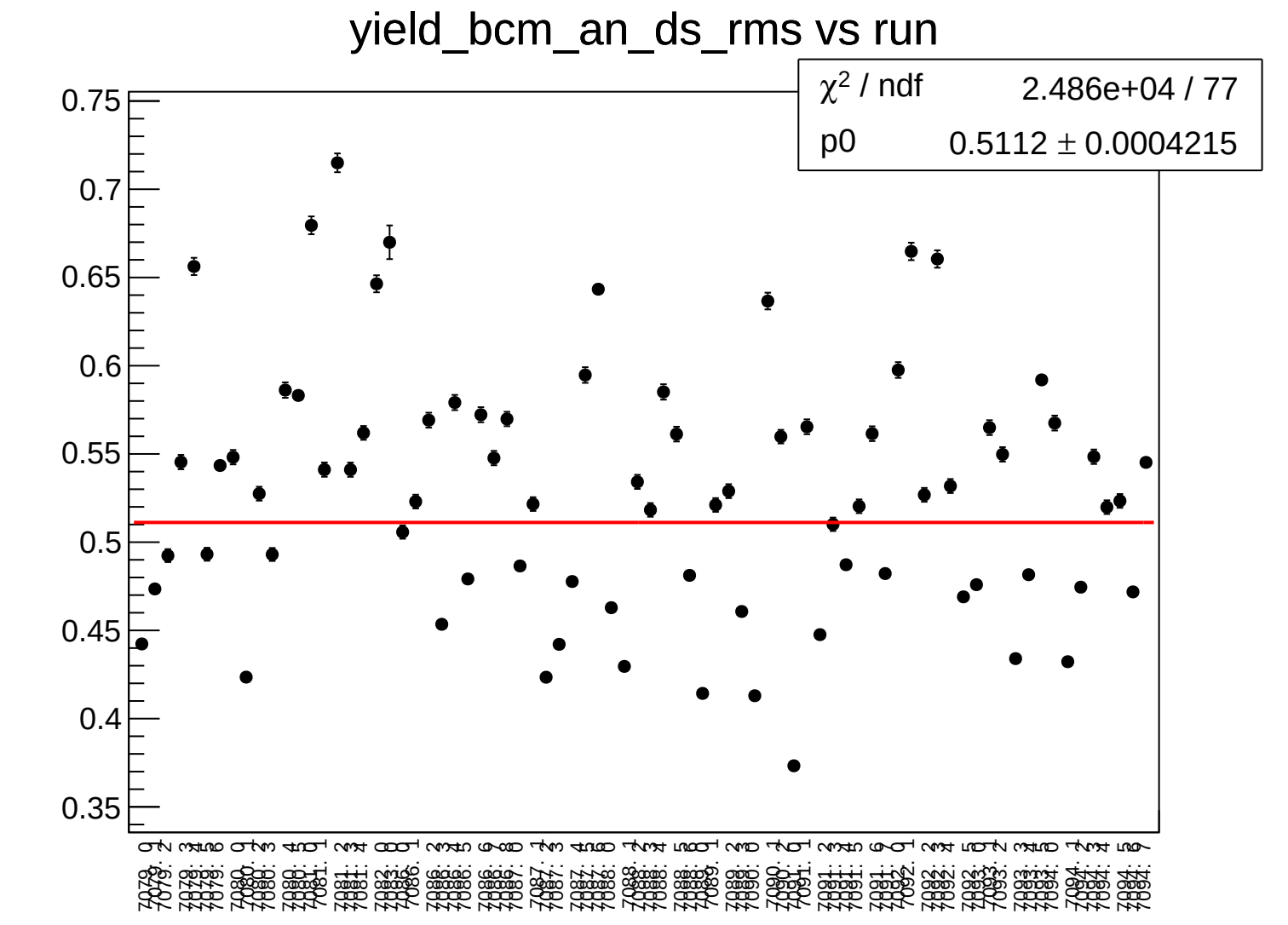

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.732e+04 / 77
p0 233.3 ± 0.1919
300
280
260
240
220
200
180

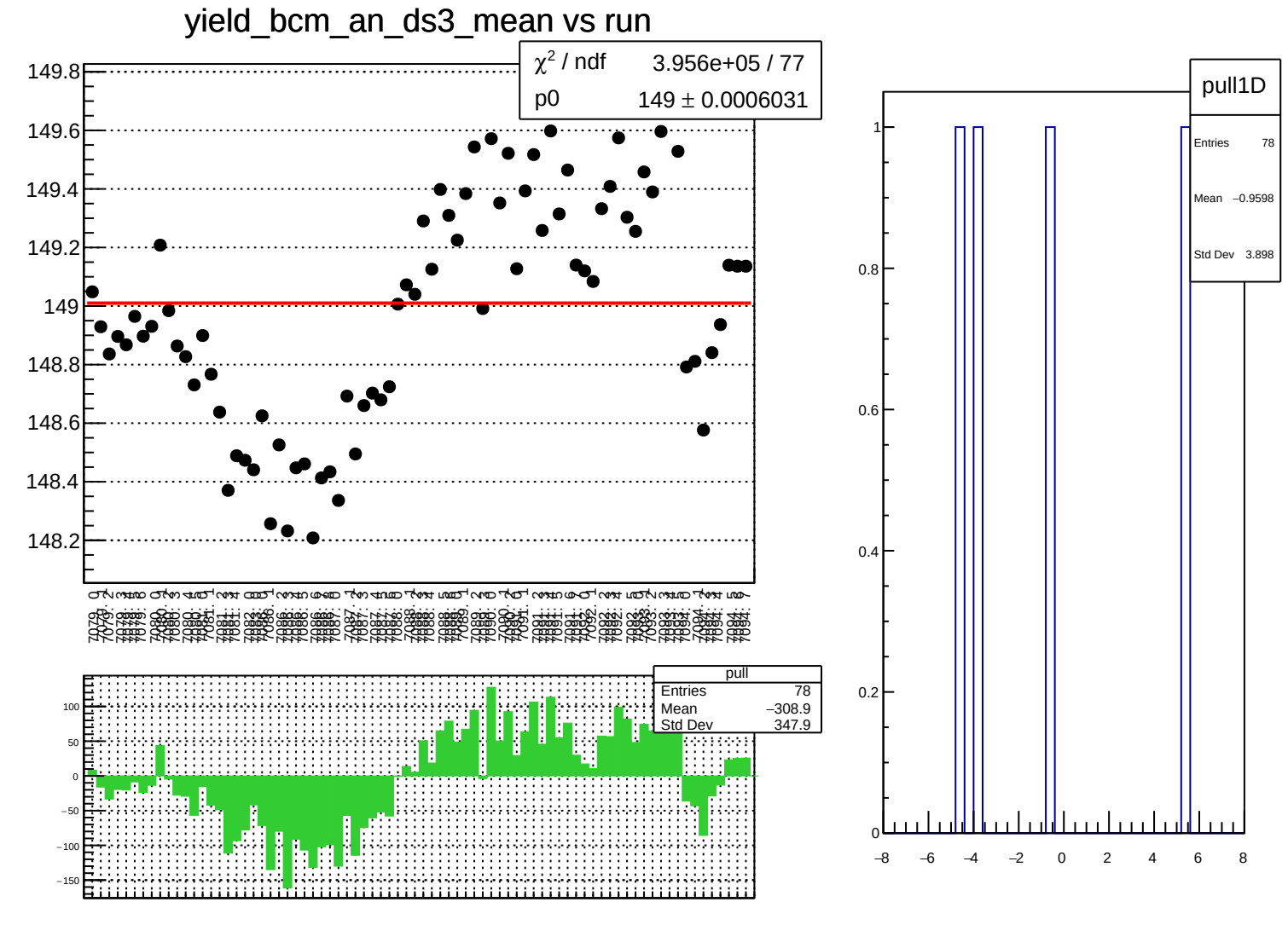

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 78.88 / 77
p0 4.204 ± 33.89
1500
1000
500
0
−500
−1000
pull
Entries 78
Mean −329.7
Std Dev 375.7
pull1D
Entries 78
Mean 0.004763
Std Dev 1.006

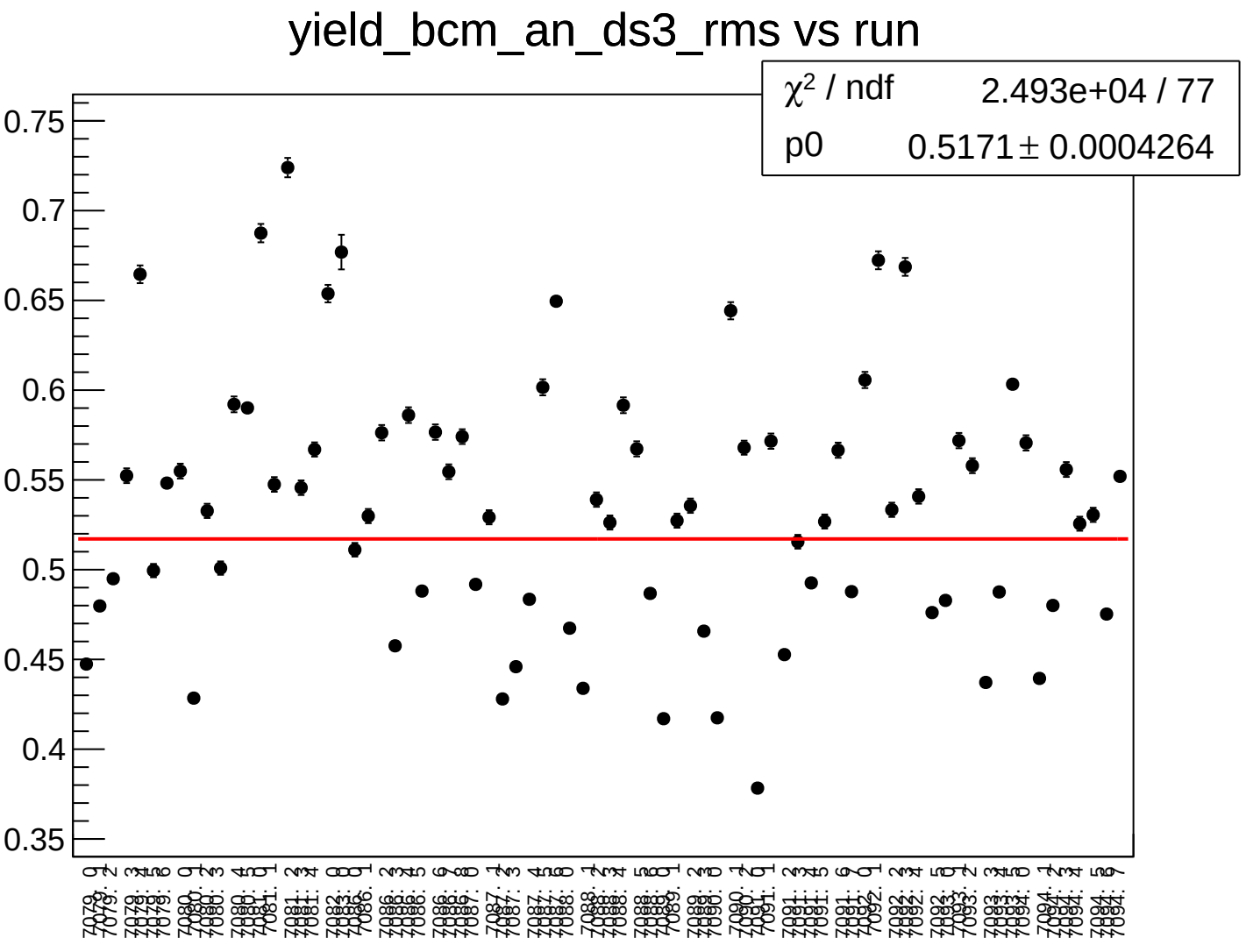

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1171 / 77
p0 29.29 ± 0.02396
31
30
29
28
27
26

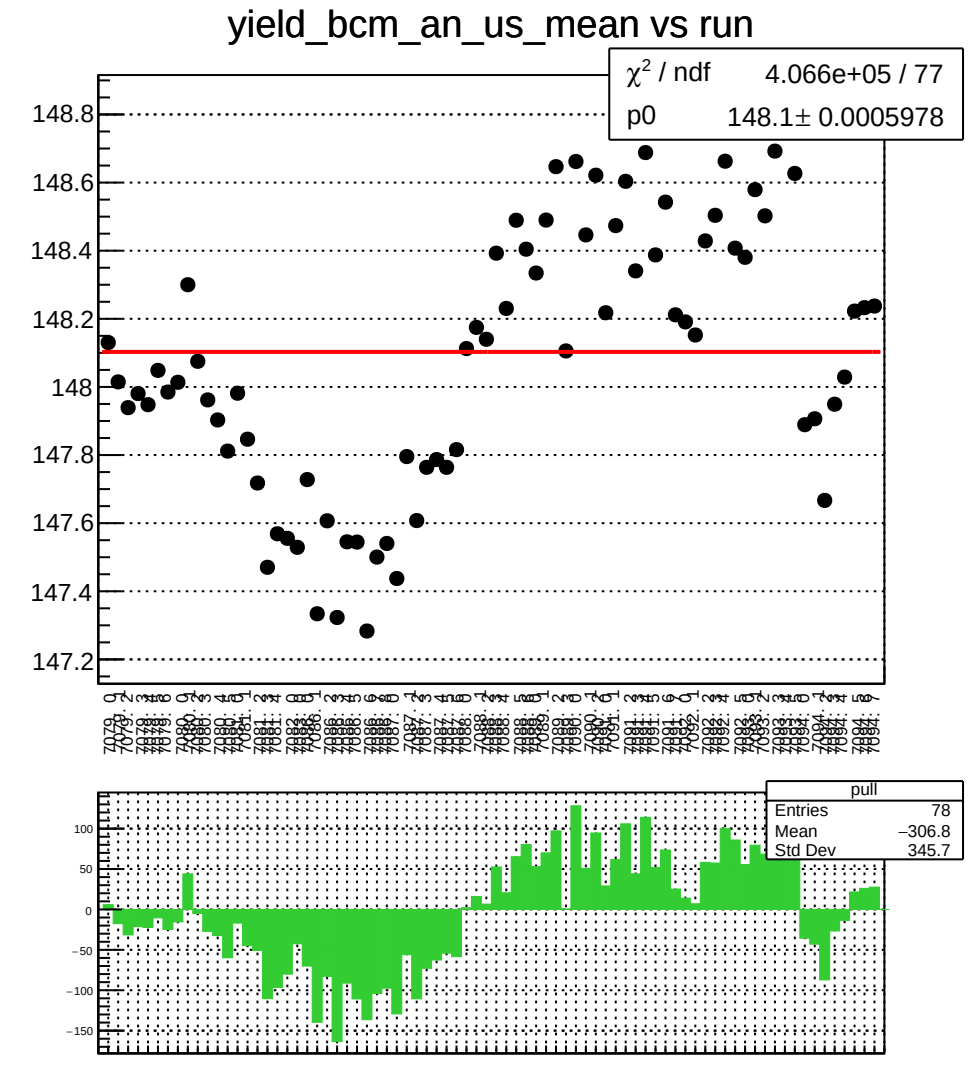

yield_bcm_an_ds_mean vs run
χ² / ndf 3.93e+05 / 77
p0 148.3 ± 0.0005961
149
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
pull
Entries 78
Mean −301
Std Dev 340.2
100
50
0
−50
−100
−150

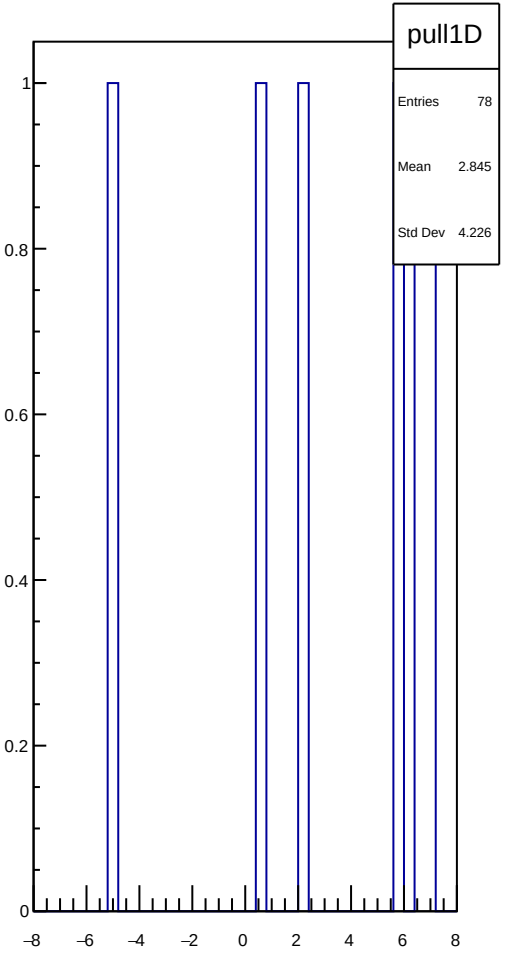

pull1D
Entries 78
Mean −1.882
Std Dev 2.781
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

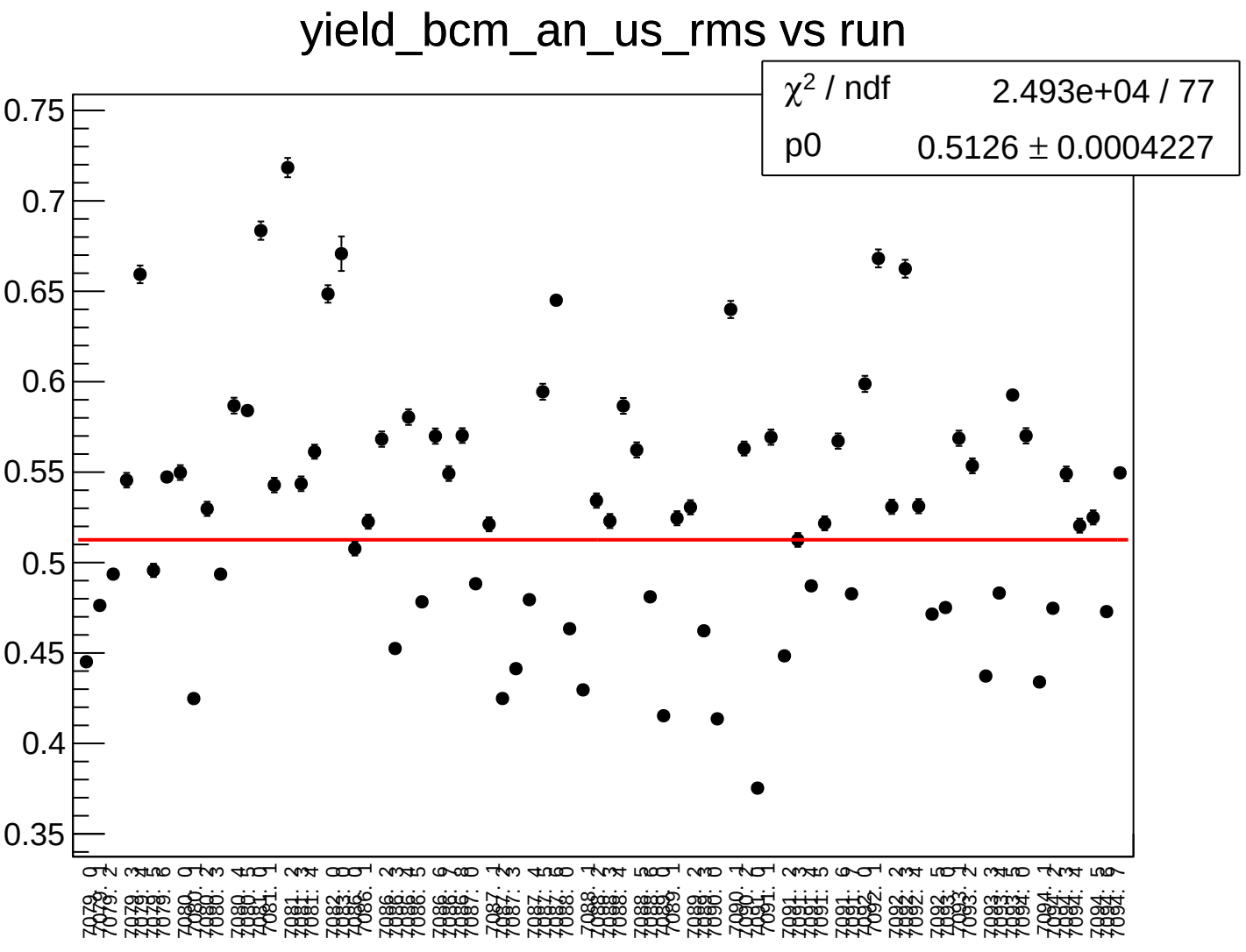

yield_bcm_an_ds_rms vs run
χ² / ndf 2.486e+04 / 77
p0 0.5112 ± 0.0004215
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

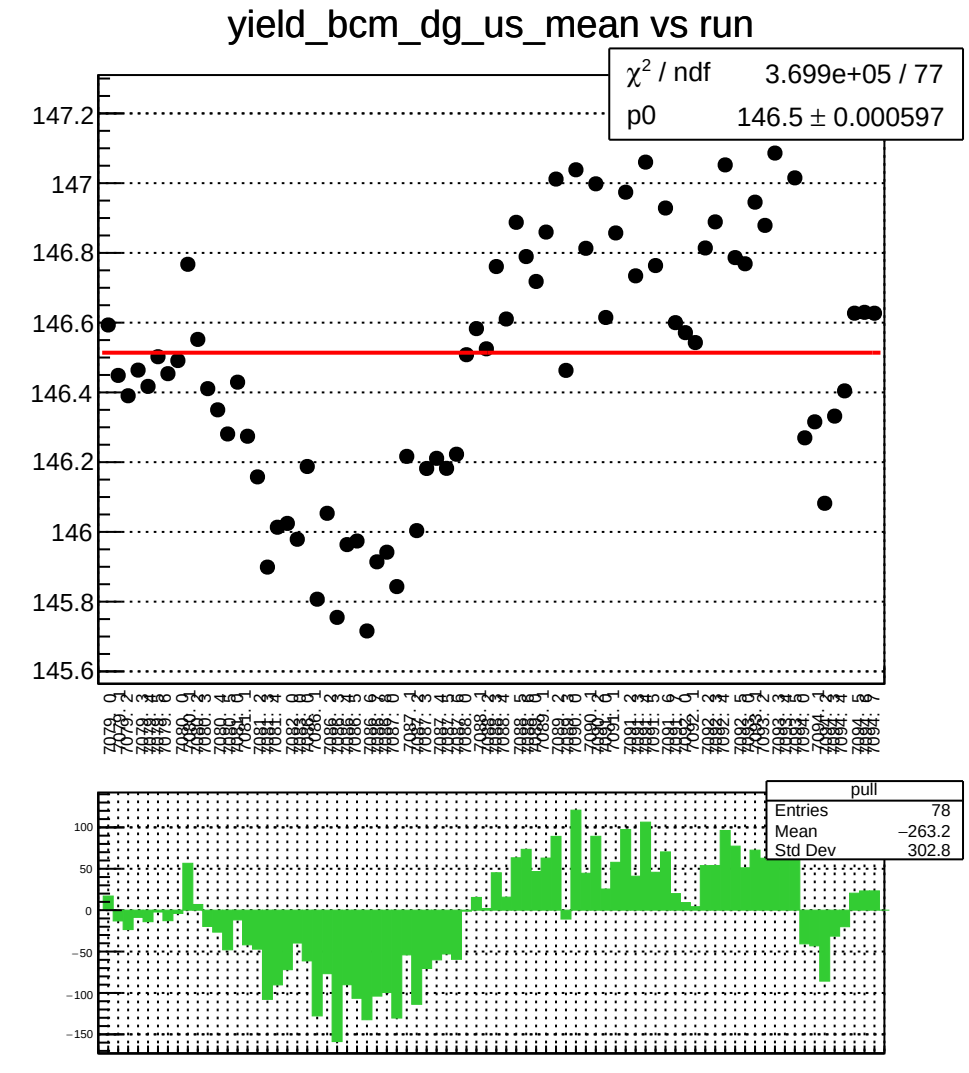

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.956e+05 / 77
p0 149 ± 0.0006031
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
148.2
pull
Entries 78
Mean −308.9
Std Dev 347.9
100
50
0
−50
−100
−150
pull1D
Entries 78
Mean −0.9598
Std Dev 3.898
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

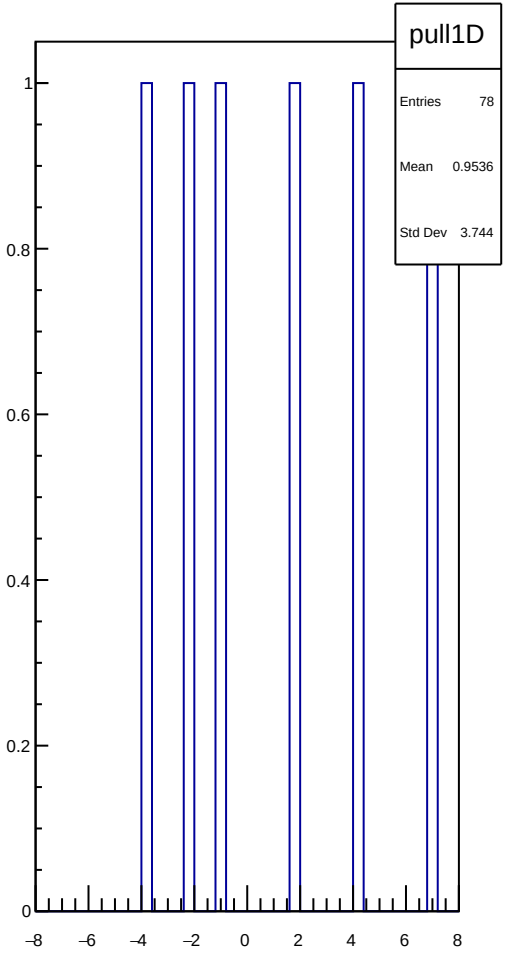

yield_bcm_an_ds3_rms vs run
χ² / ndf 2.493e+04 / 77
p0 0.5171 ± 0.0004264
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

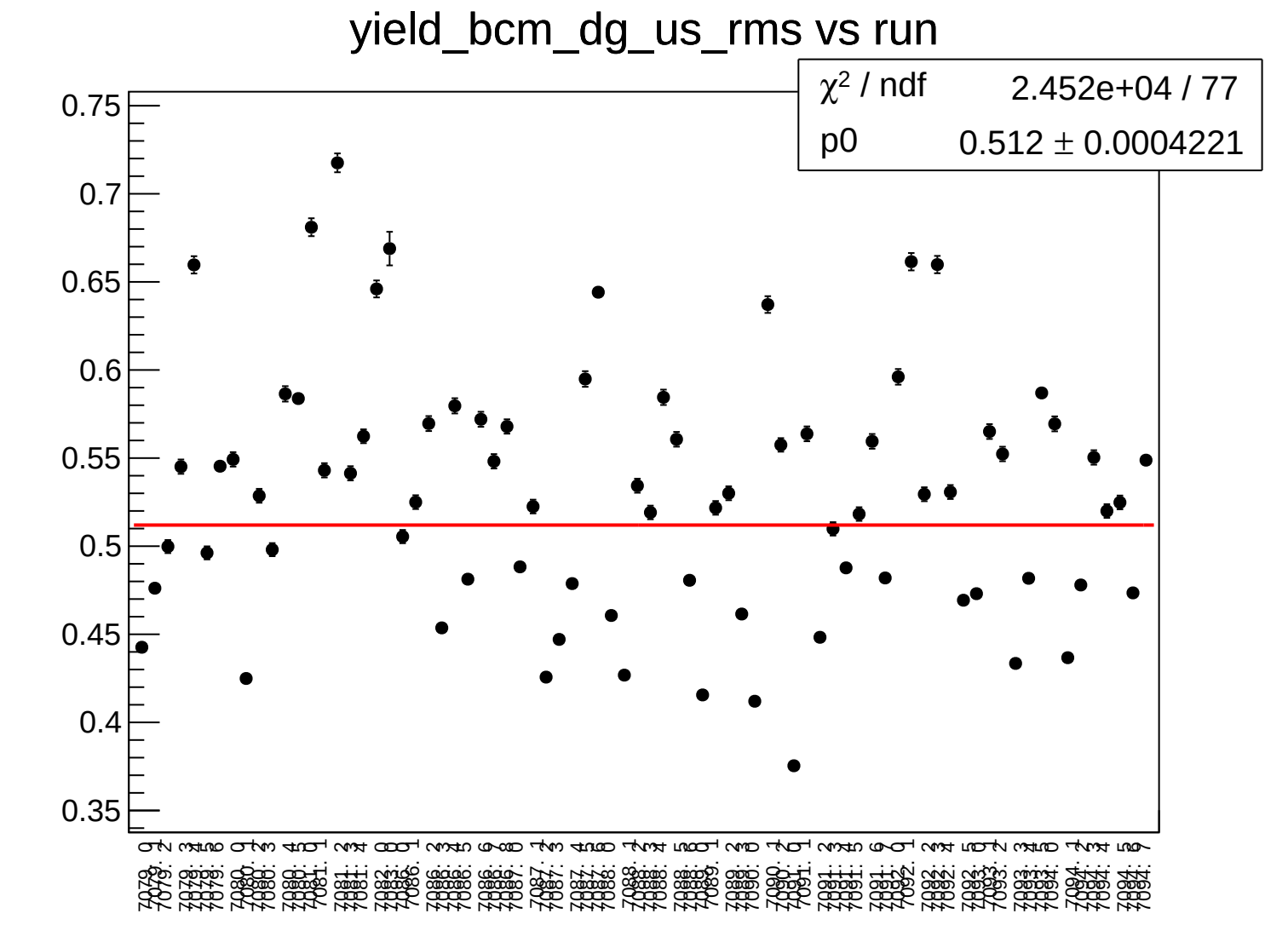

yield_bcm_an_us_mean vs run
χ² / ndf 4.066e+05 / 77
p0 148.1± 0.0005978
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 78
Mean −306.8
Std Dev 345.7
100
50
0
−50
−100
−150

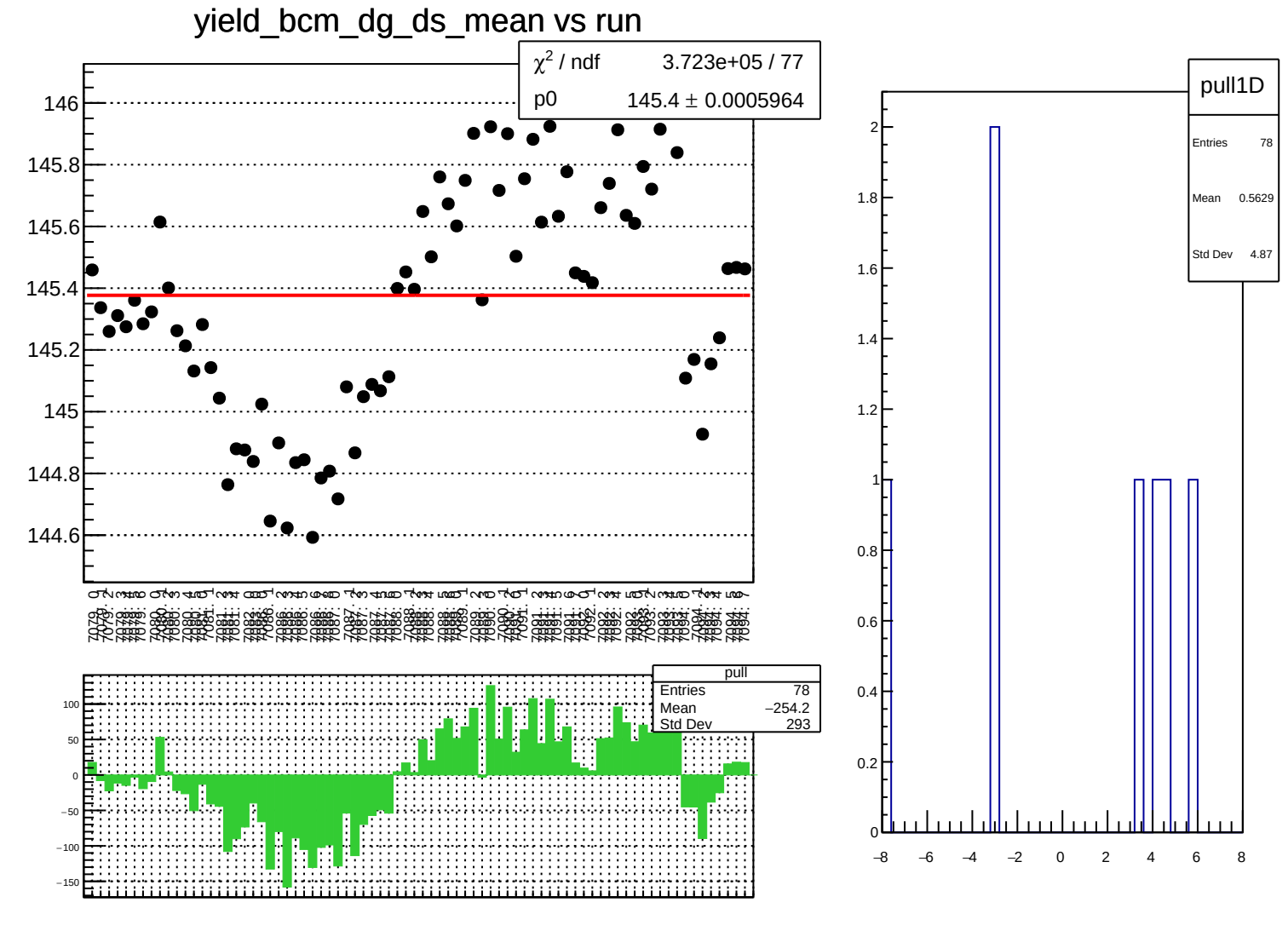

pull1D
Entries 78
Mean 2.845
Std Dev 4.226
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

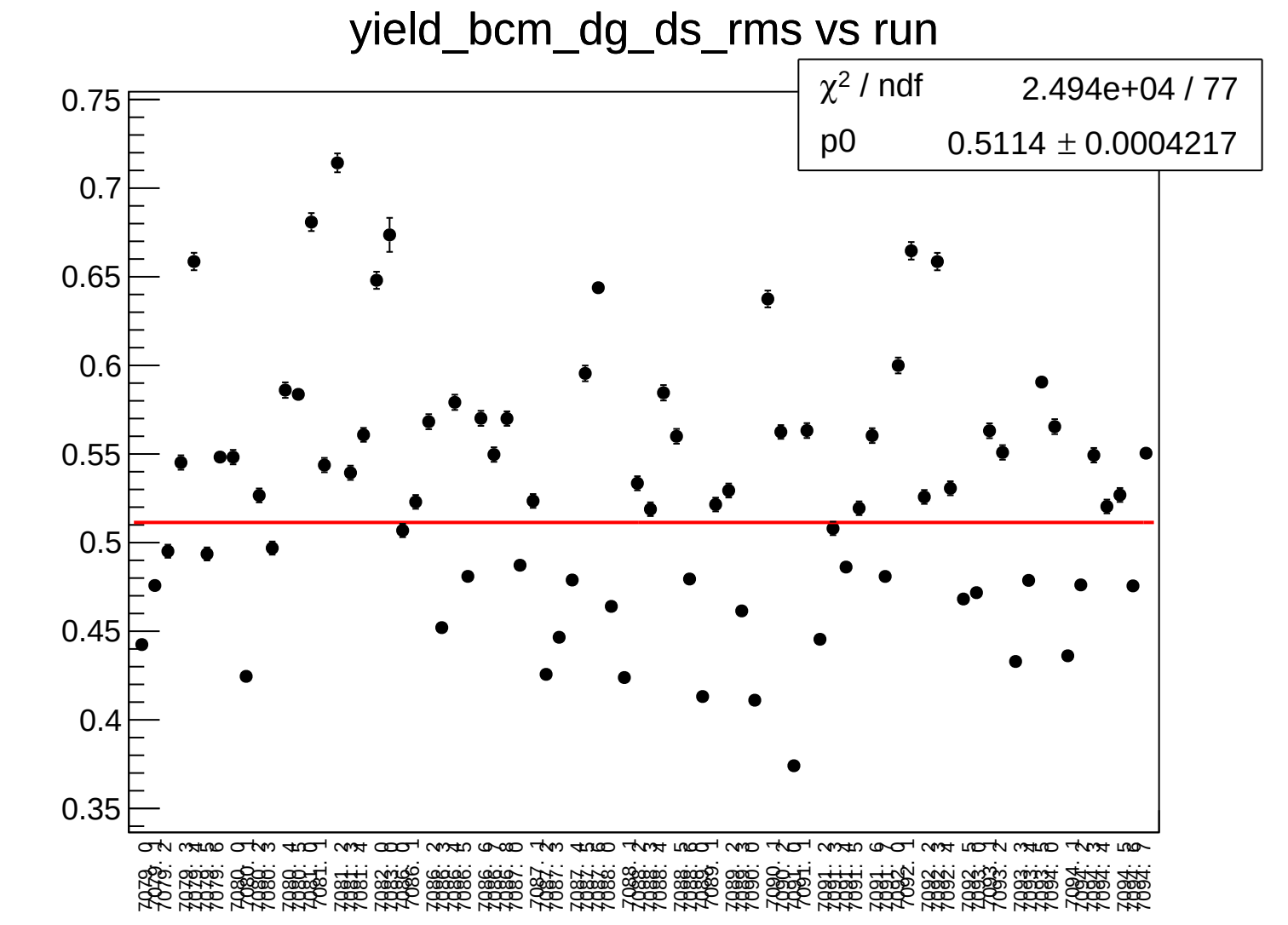

yield_bcm_an_us_rms vs run
χ² / ndf 2.493e+04 / 77
p0 0.5126 ± 0.0004227
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

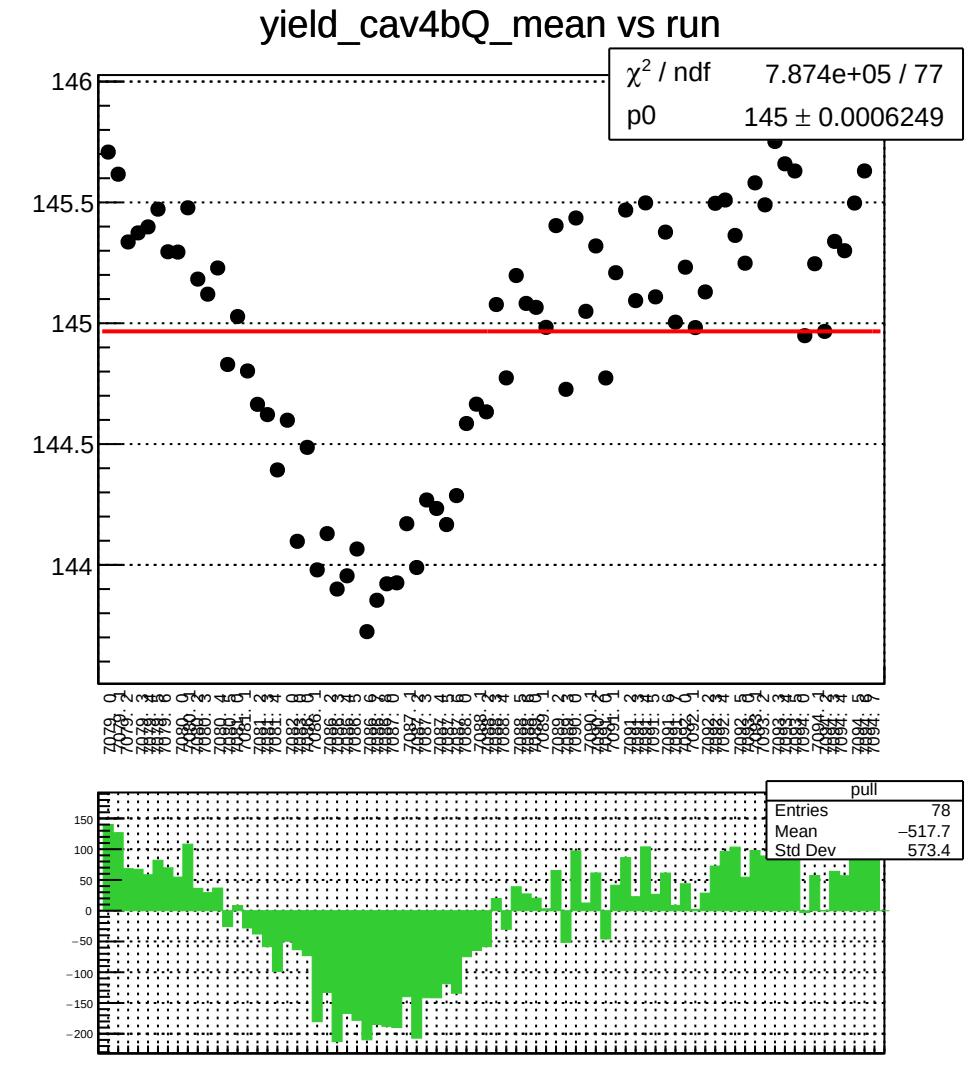

yield_bcm_dg_us_mean vs run
χ² / ndf 3.699e+05 / 77
p0 146.5 ± 0.000597
147.2
147
146.8
146.6
146.4
146.2
146
145.8
145.6
pull
Entries 78
Mean −263.2
Std Dev 302.8
100
50
0
−50
−100
−150

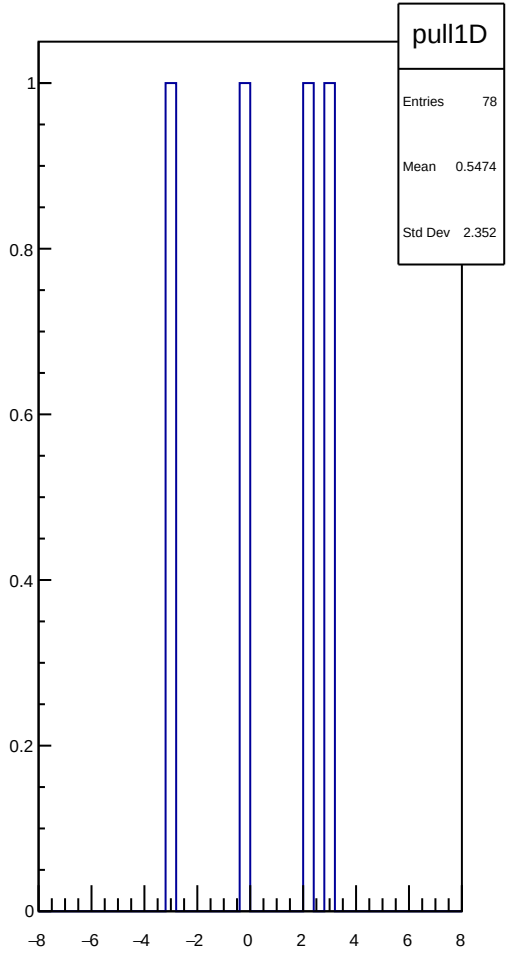

pull1D
Entries 78
Mean 0.9536
Std Dev 3.744
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

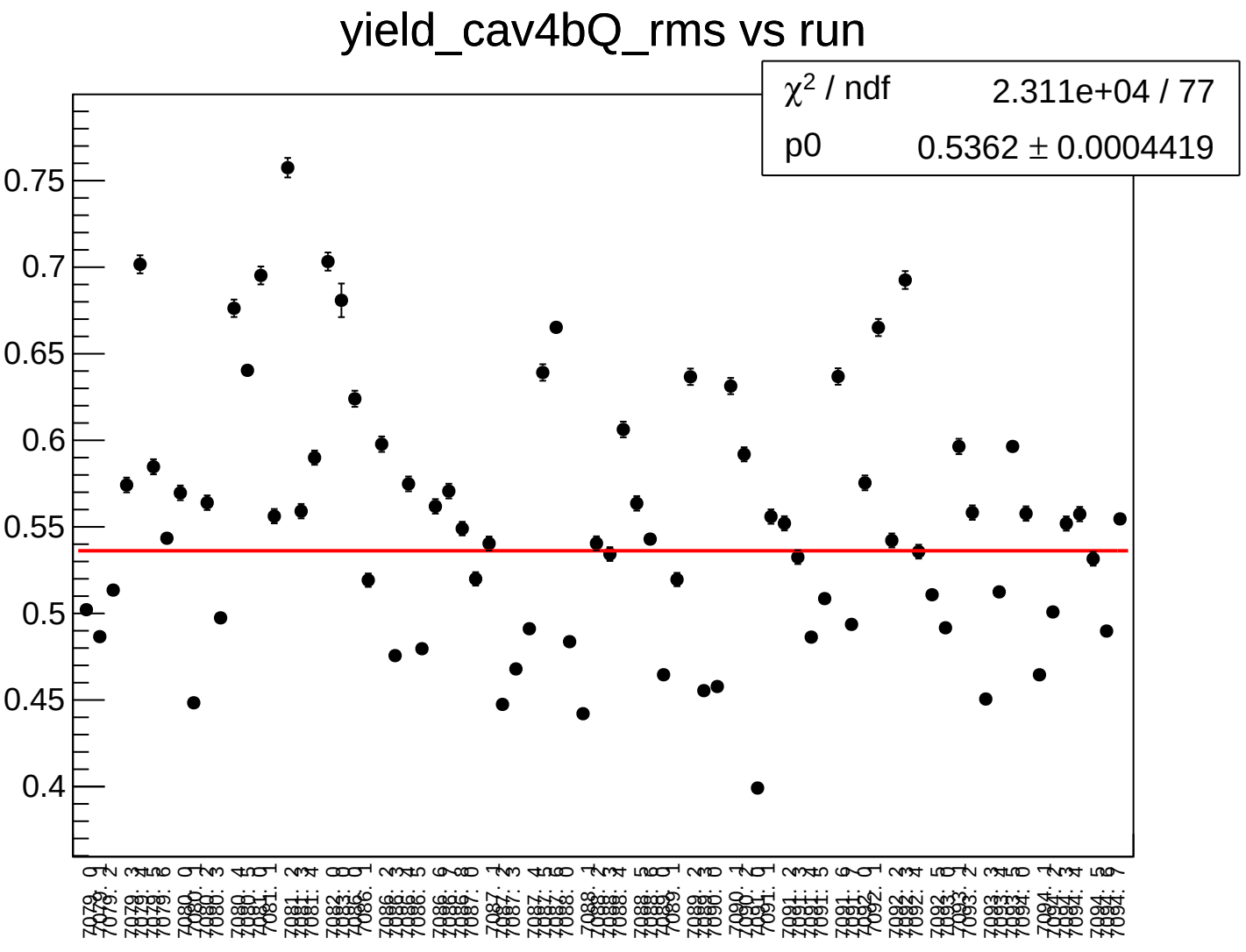

yield_bcm_dg_us_rms vs run
χ² / ndf 2.452e+04 / 77
p0 0.512 ± 0.0004221
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

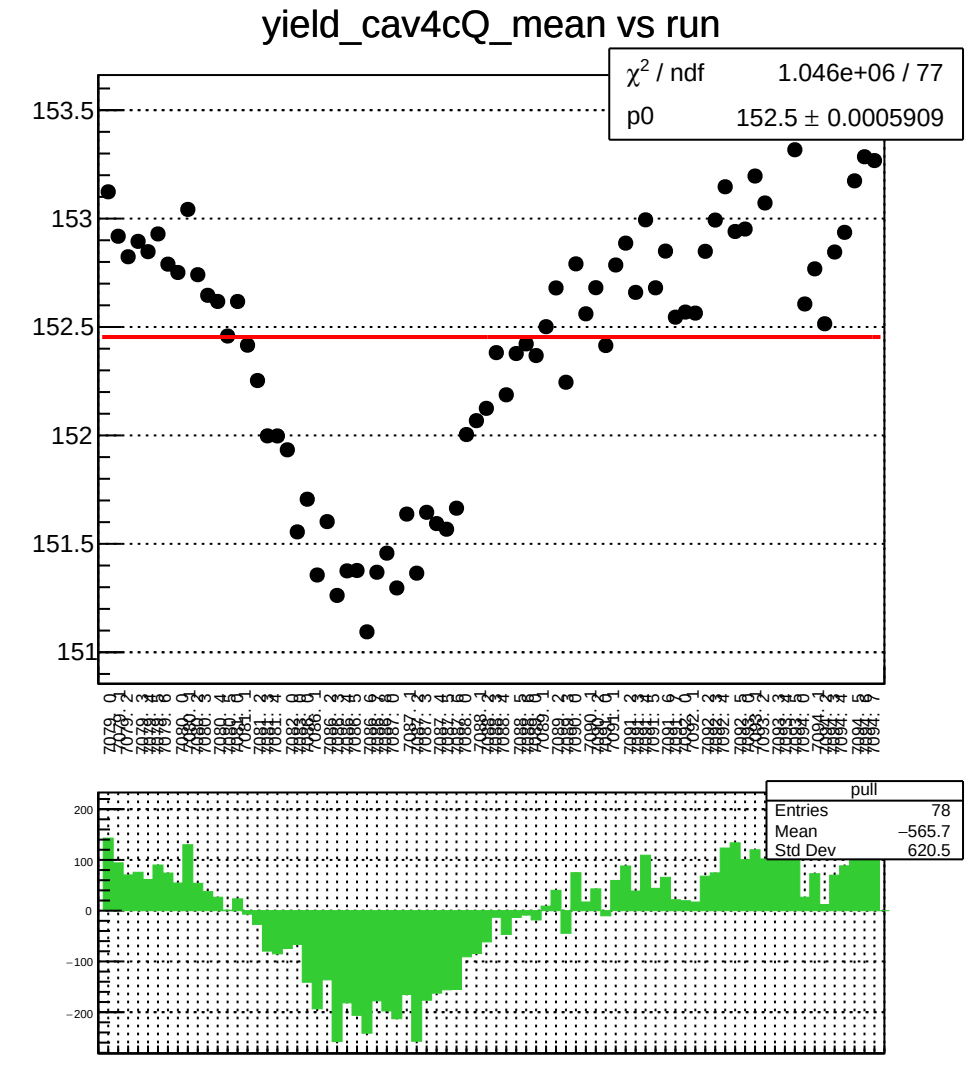

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.723e+05 / 77
p0 145.4 ± 0.0005964
146
145.8
145.6
145.4
145.2
145
144.8
144.6
pull
Entries 78
Mean −254.2
Std Dev 293
100
50
0
−50
−100
−150
pull1D
Entries 78
Mean 0.5629
Std Dev 4.87
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

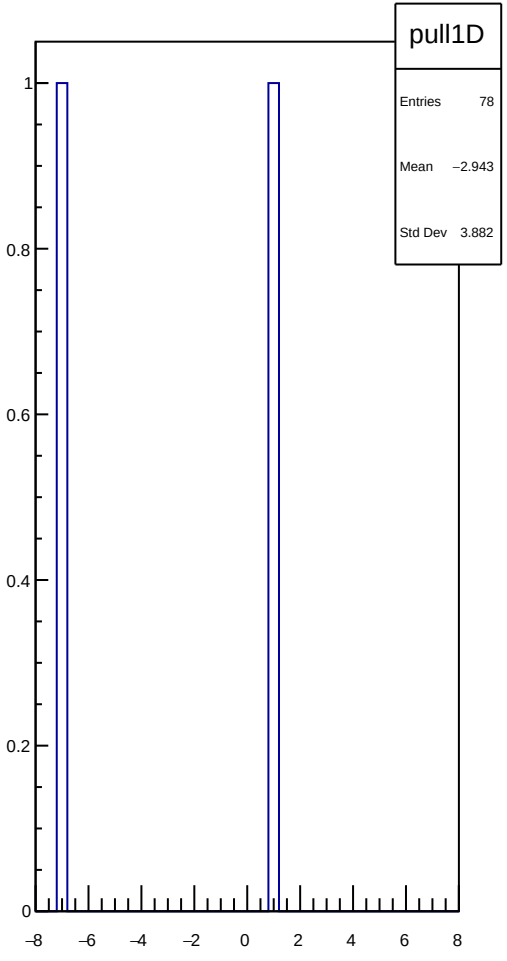

yield_bcm_dg_ds_rms vs run
χ² / ndf 2.494e+04 / 77
p0 0.5114 ± 0.0004217
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

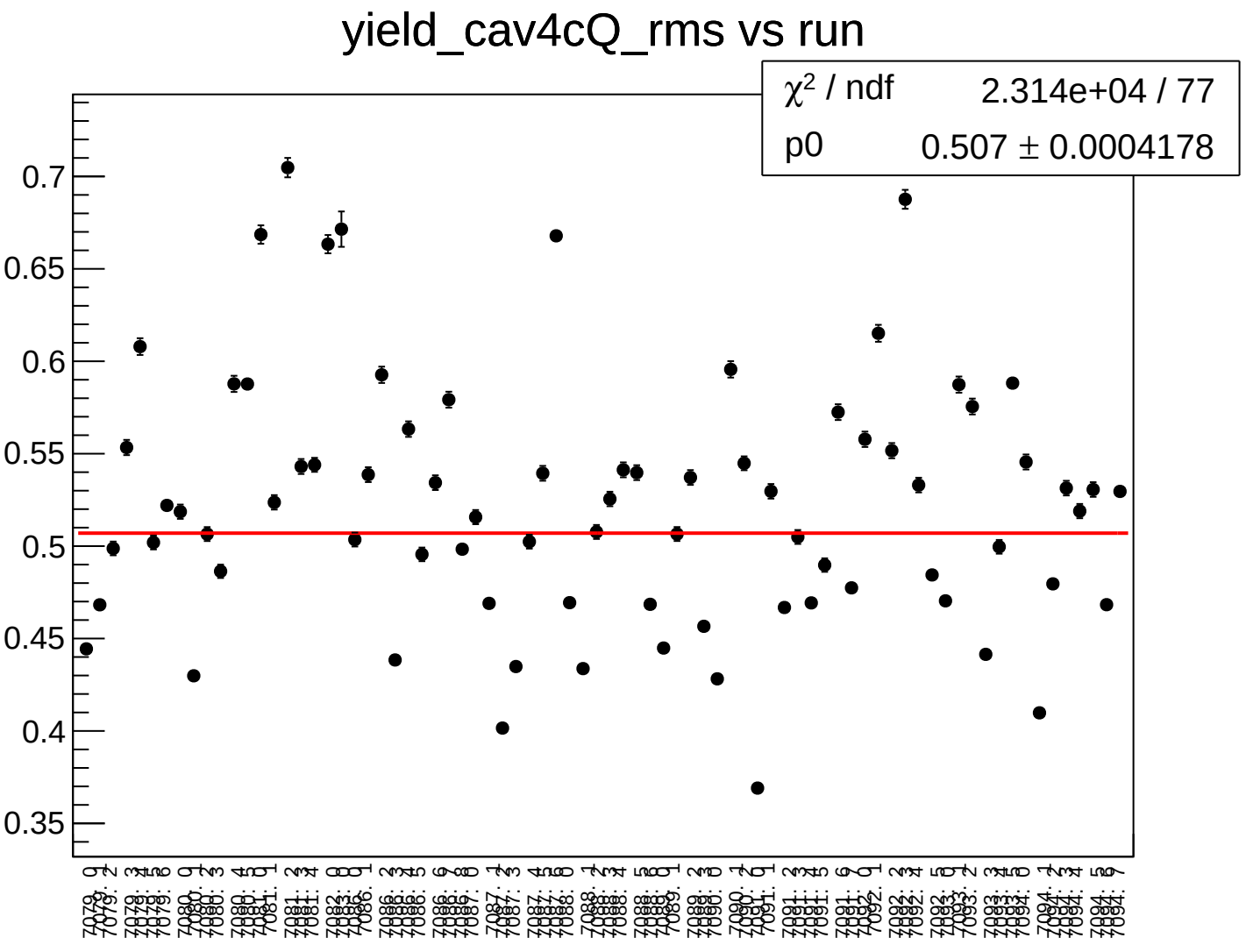

yield_cav4bQ_mean vs run
χ² / ndf 7.874e+05 / 77
p0 145 ± 0.0006249
146
145.5
145
144.5
144
pull
Entries 78
Mean −517.7
Std Dev 573.4
150
100
50
0
−50
−100
−150
−200

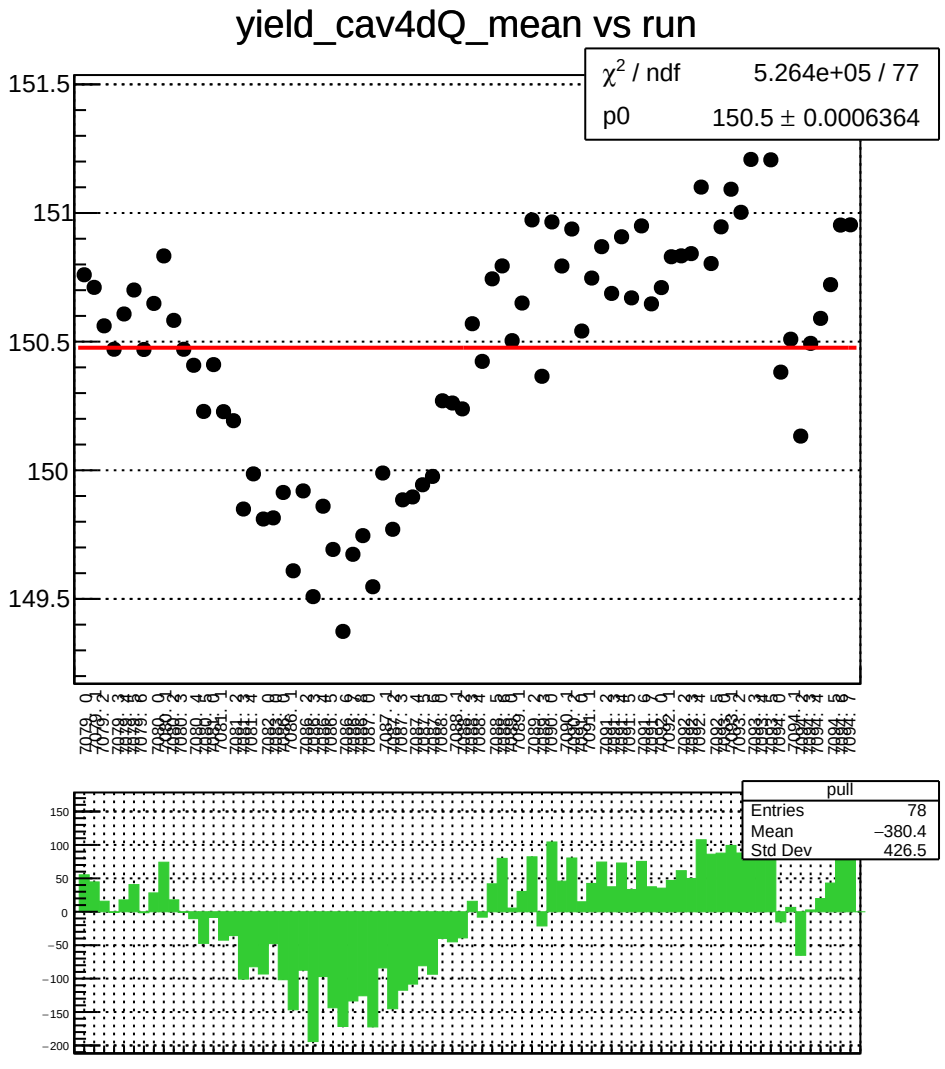

pull1D
Entries 78
Mean 0.5474
Std Dev 2.352
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

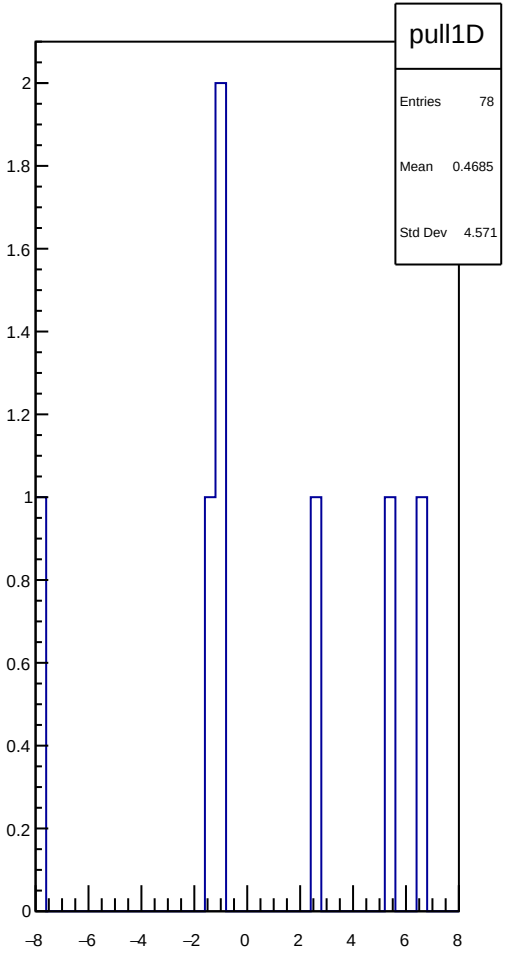

yield_cav4bQ_rms vs run
χ² / ndf 2.311e+04 / 77
p0 0.5362 ± 0.0004419
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

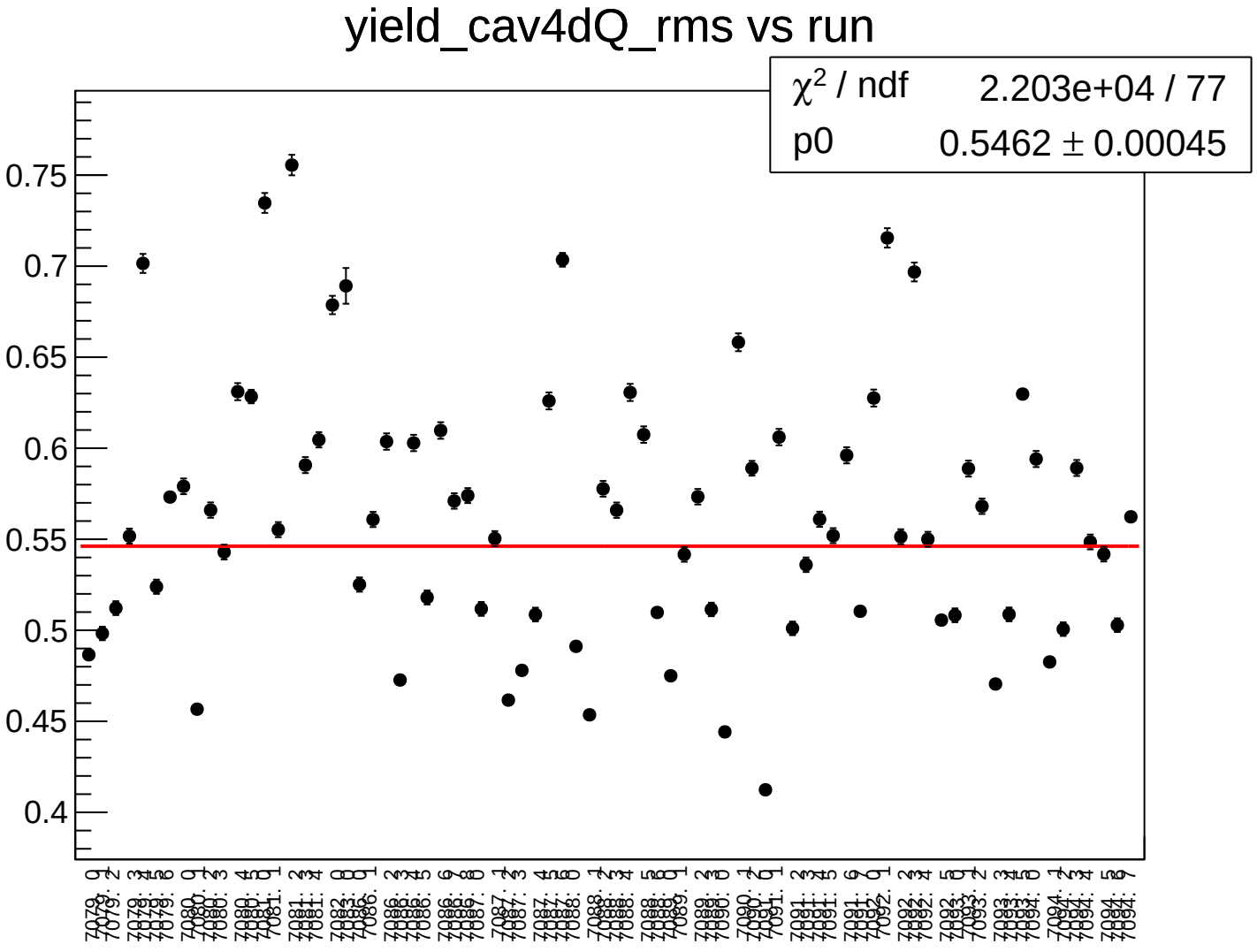

yield_cav4cQ_mean vs run
χ² / ndf 1.046e+06 / 77
p0 152.5 ± 0.0005909
153.5
153
152.5
152
151.5
151
pull
Entries 78
Mean −565.7
Std Dev 620.5
200
100
0
−100
−200

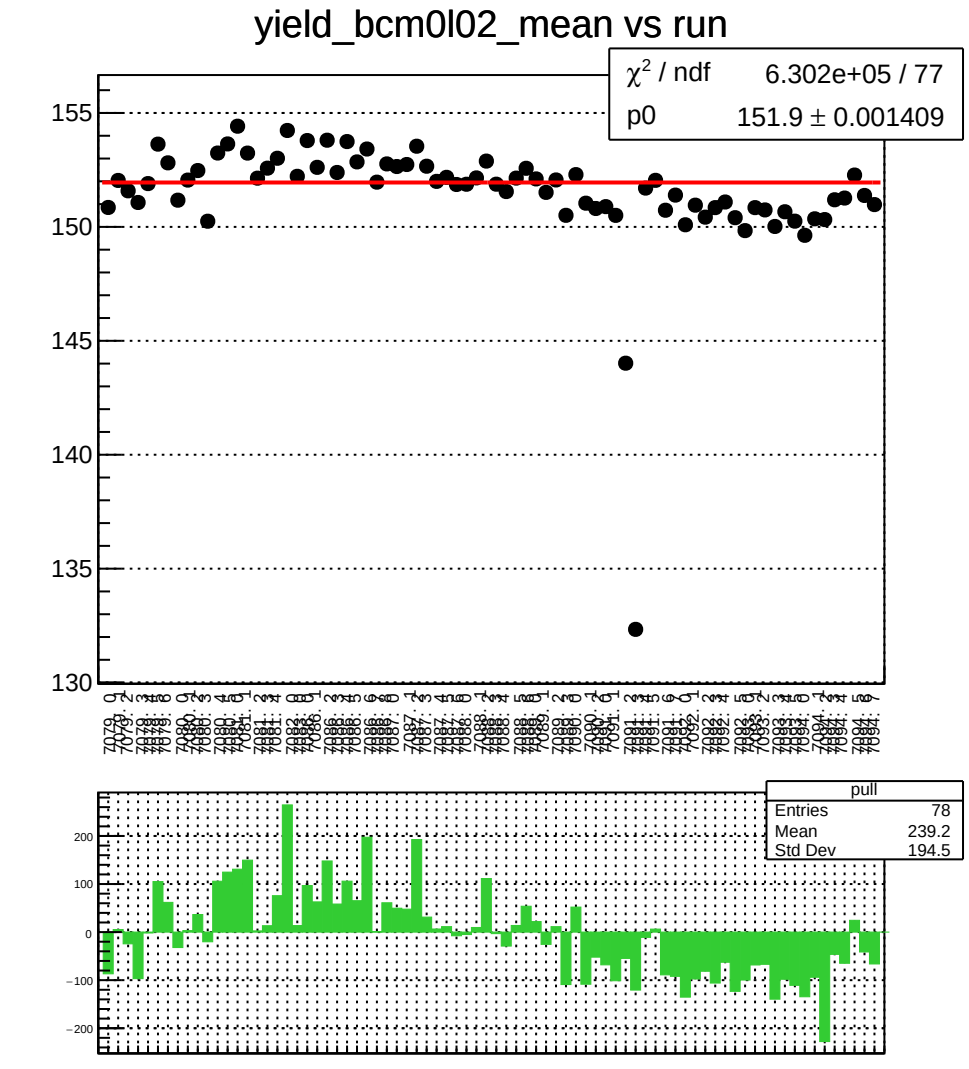

pull1D
Entries 78
Mean −2.943
Std Dev 3.882
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

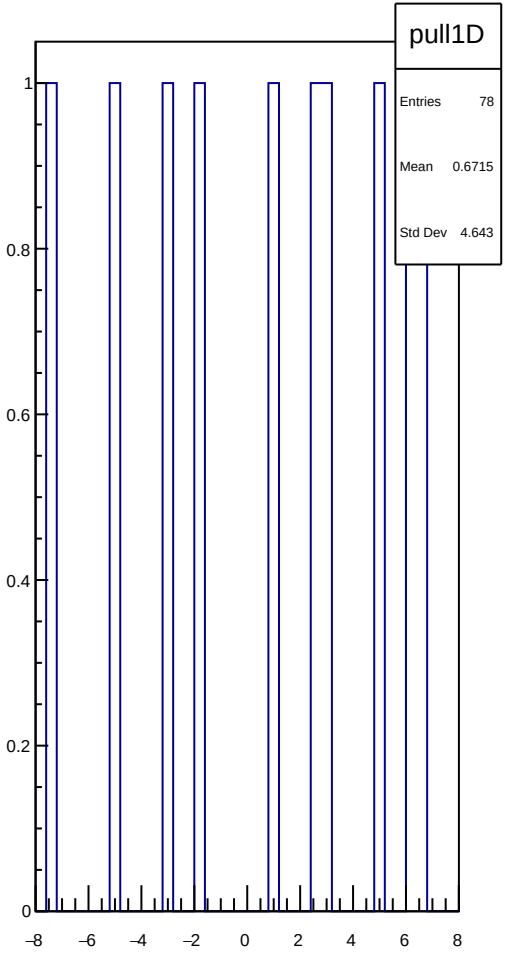

yield_cav4cQ_rms vs run
χ² / ndf 2.314e+04 / 77
p0 0.507 ± 0.0004178
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

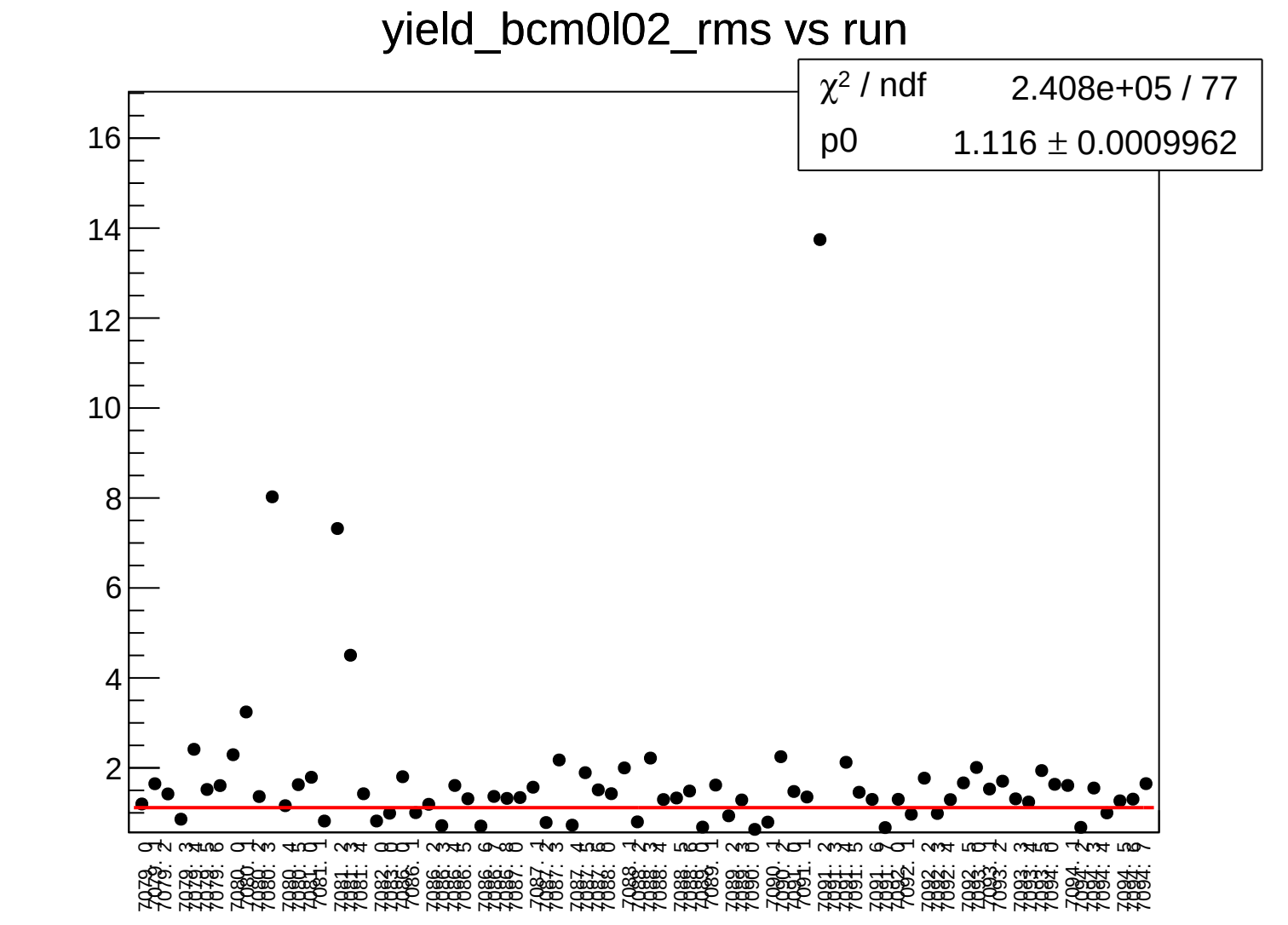

yield_cav4dQ_mean vs run
χ² / ndf 5.264e+05 / 77
p0 150.5 ± 0.0006364
151.5
151
150.5
150
149.5
pull
Entries 78
Mean −380.4
Std Dev 426.5
150
100
50
0
−50
−100
−150
−200

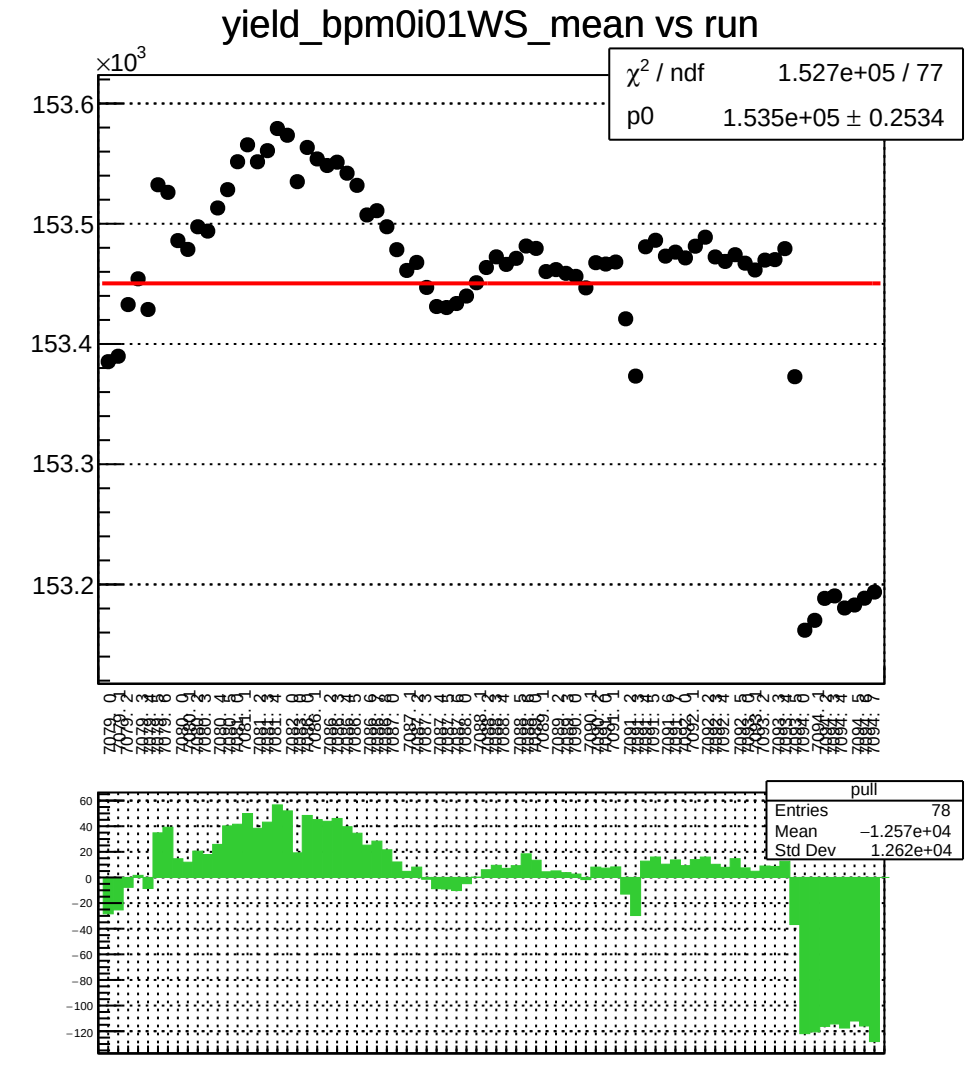

pull1D
Entries 78
Mean 0.4685
Std Dev 4.571
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

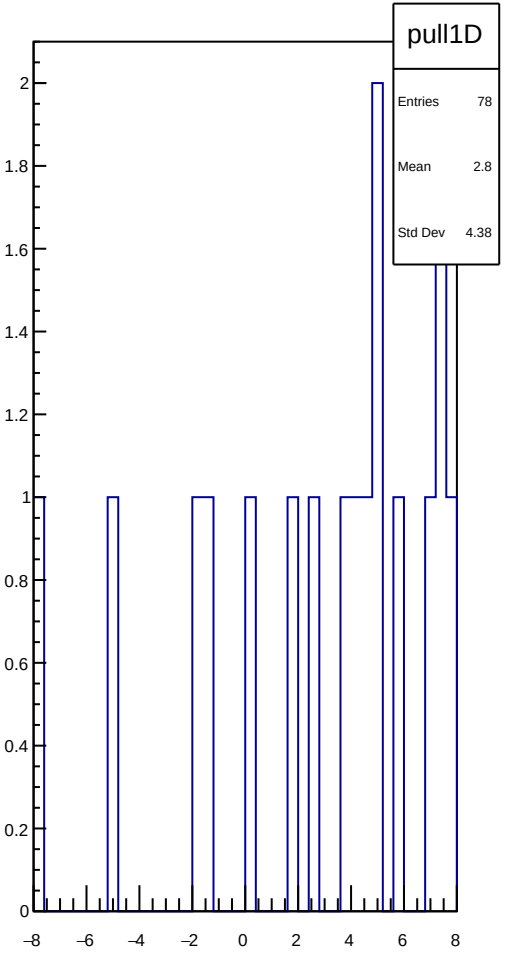

yield_cav4dQ_rms vs run
χ² / ndf 2.203e+04 / 77
p0 0.5462 ± 0.00045
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

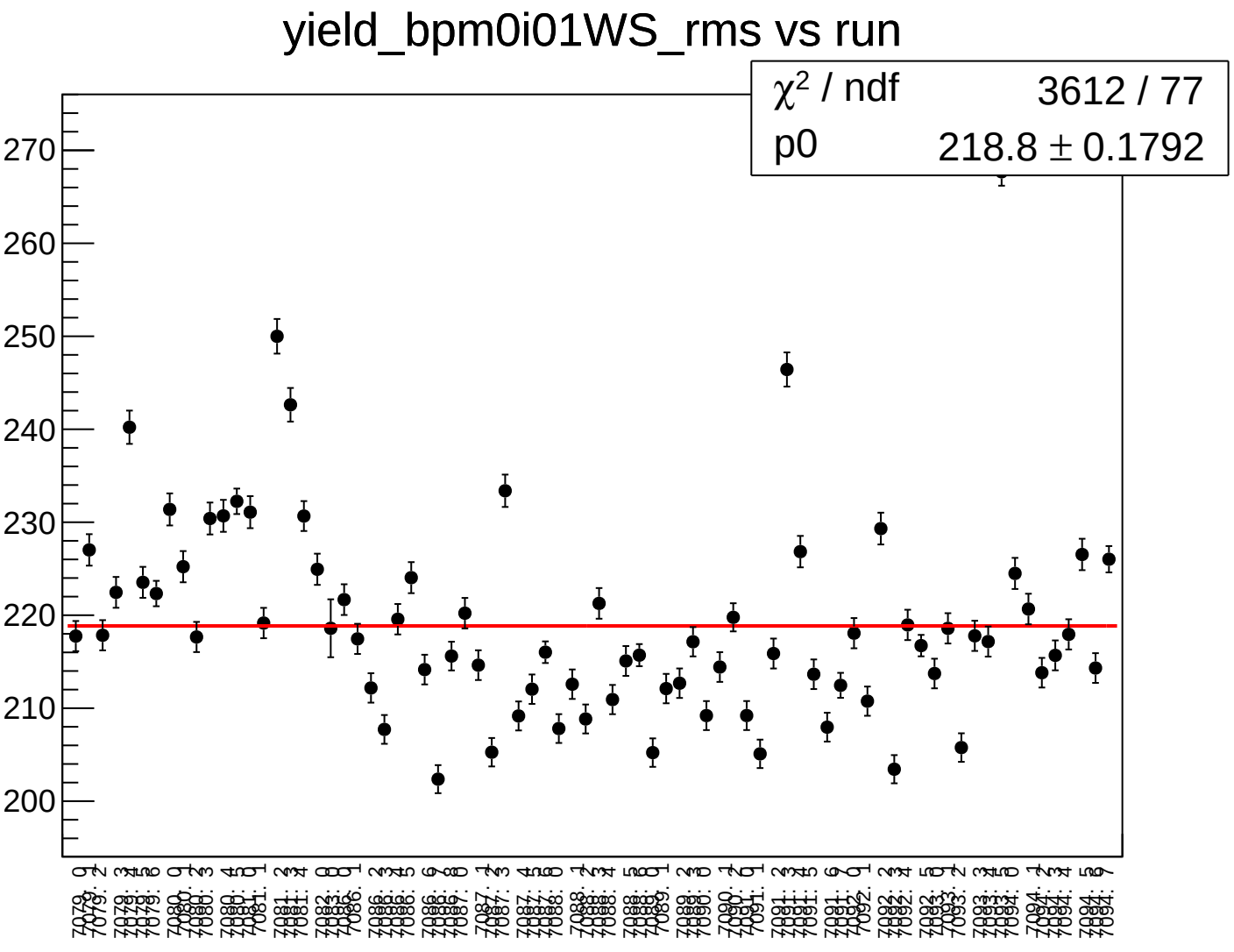

yield_bcm0l02_mean vs run
χ^2 / ndf 6.302e+05 / 77
p0 151.9 ± 0.001409
155
150
145
140
135
130
pull
Entries 78
Mean 239.2
Std Dev 194.5
200
100
0
−100
−200

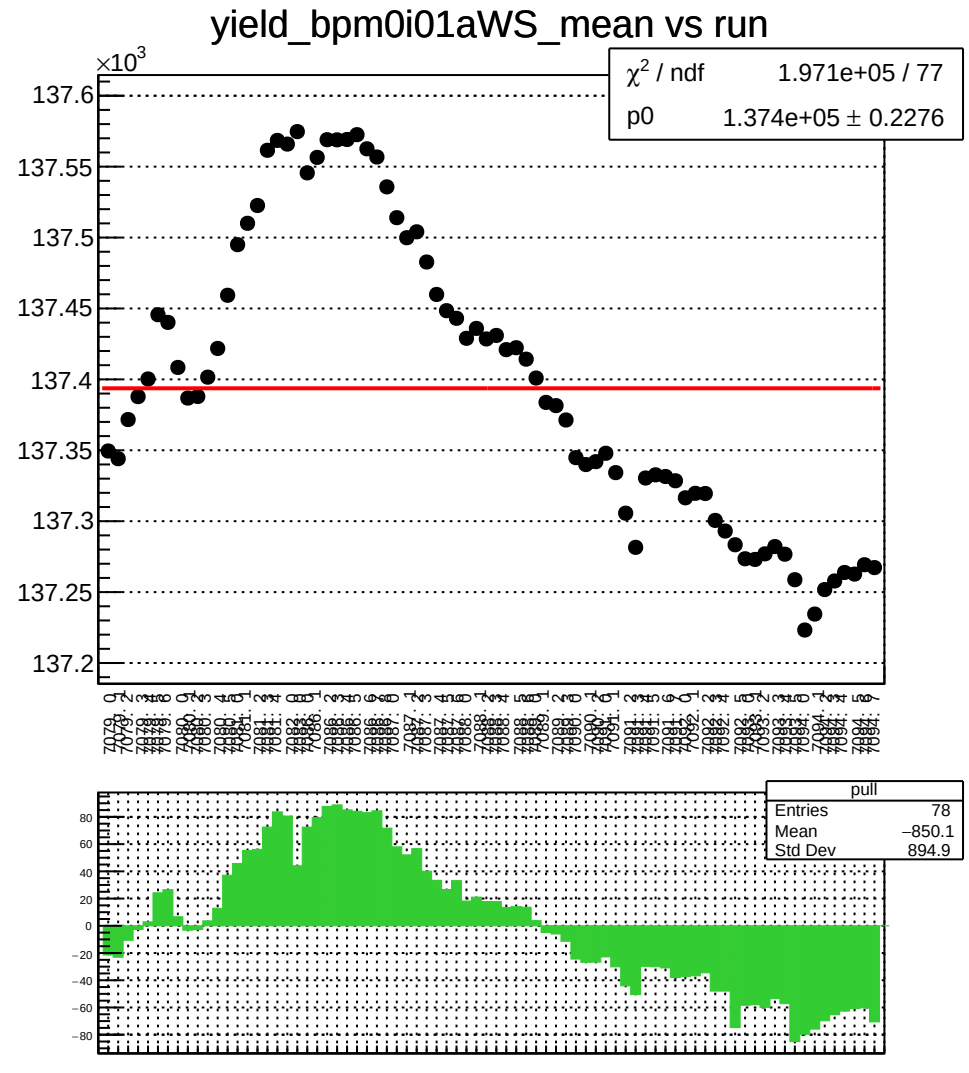

pull1D
Entries 78
Mean 0.6715
Std Dev 4.643
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

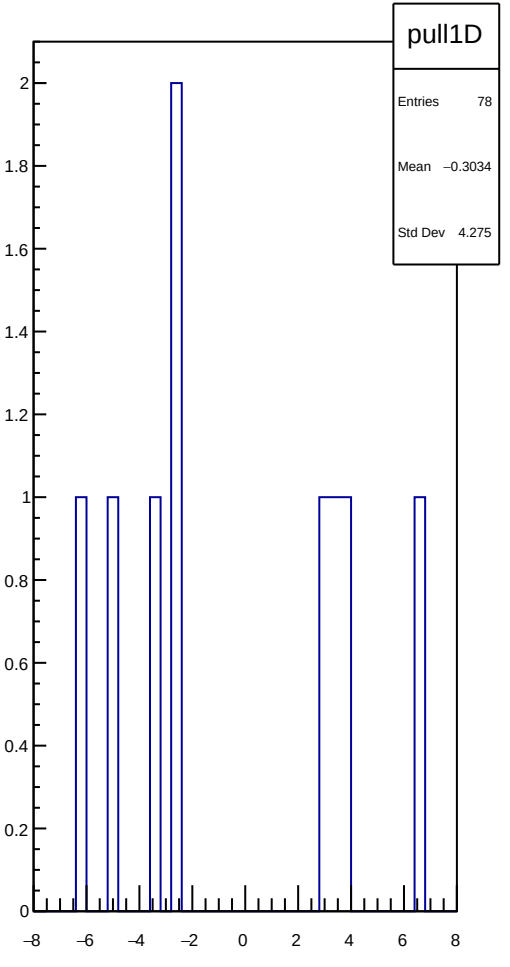

yield_bcm0l02_rms vs run
χ² / ndf 2.408e+05 / 77
p0 1.116 ± 0.0009962
16
14
12
10
8
6
4
2

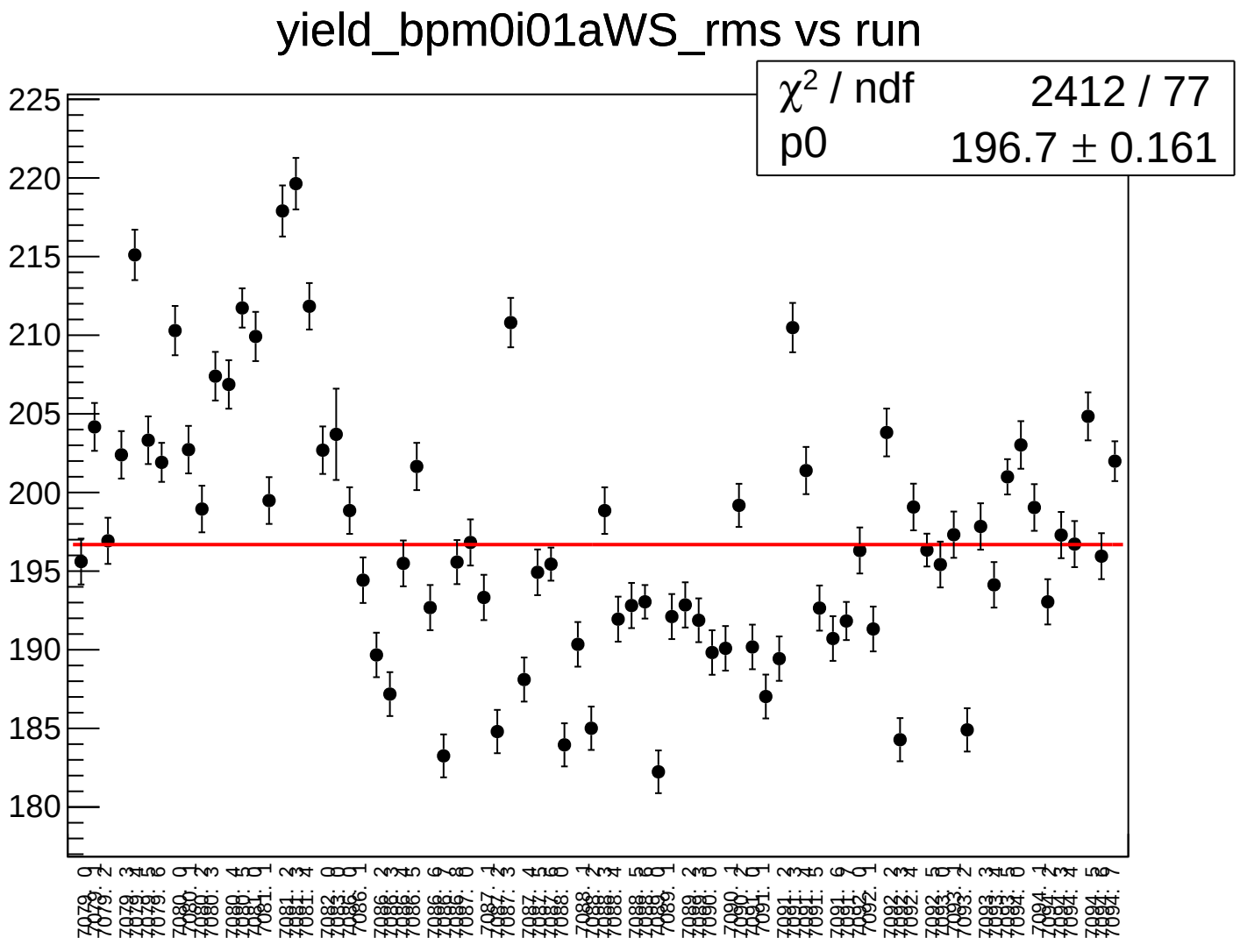

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 1.527e+05 / 77
p0 1.535e+05 ± 0.2534
153.6
153.5
153.4
153.3
153.2
pull
Entries 78
Mean −1.257e+04
Std Dev 1.262e+04

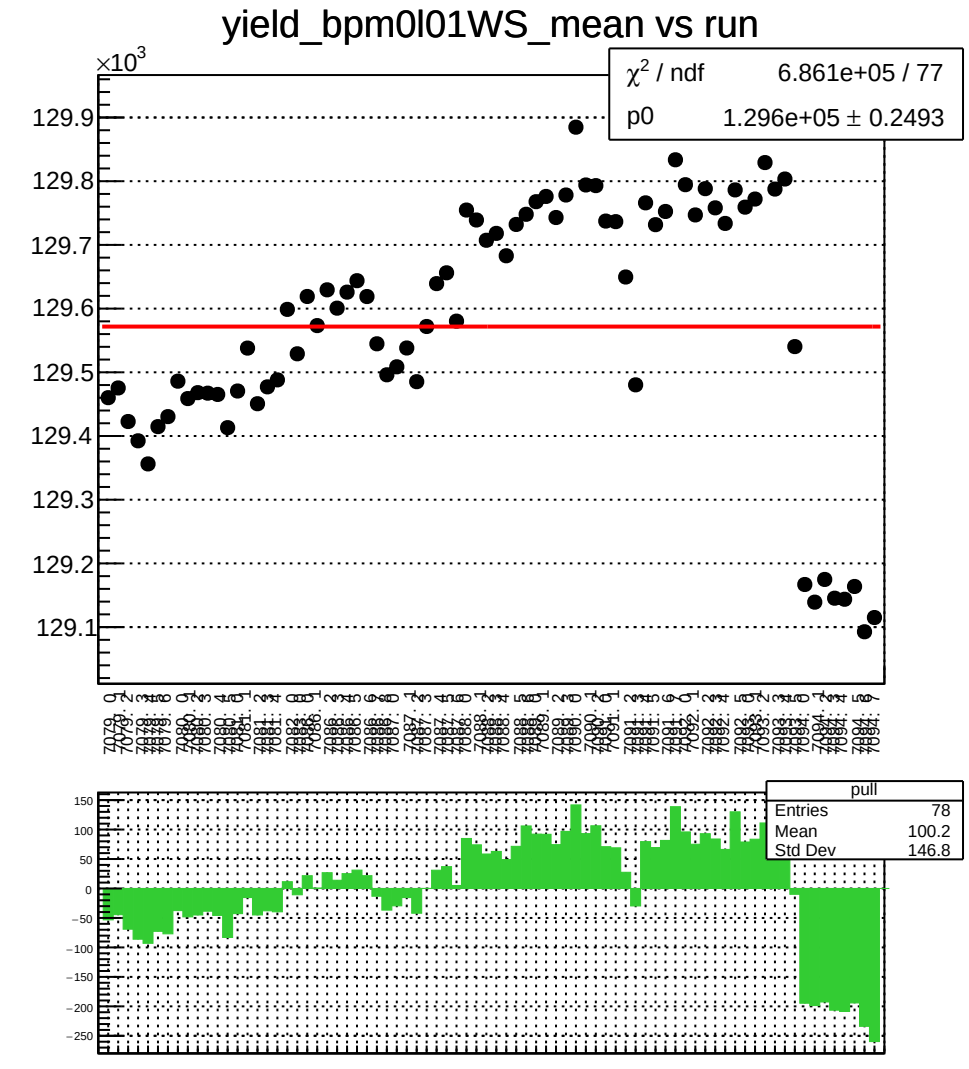

pull1D
Entries 78
Mean 2.8
Std Dev 4.38

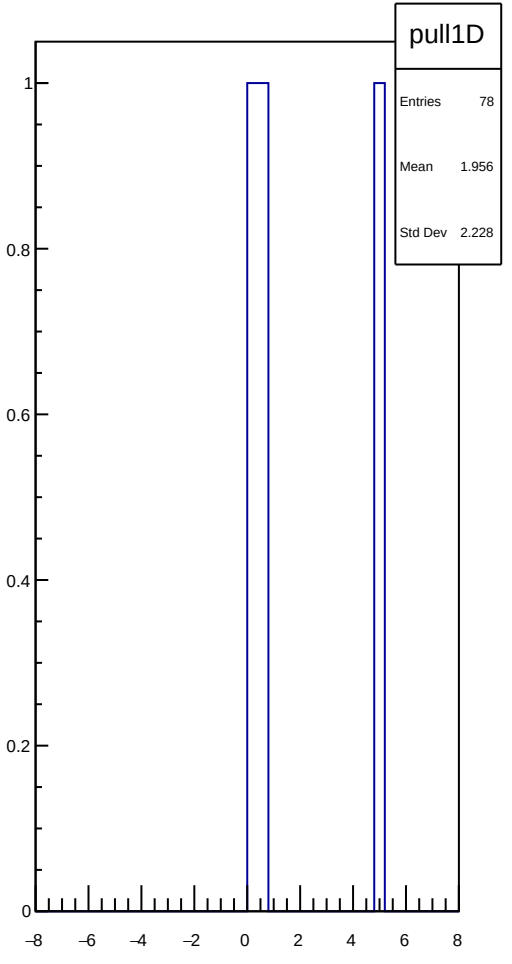

yield_bpm0i01WS_rms vs run
χ² / ndf 3612 / 77
p0 218.8 ± 0.1792
270
260
250
240
230
220
210
200

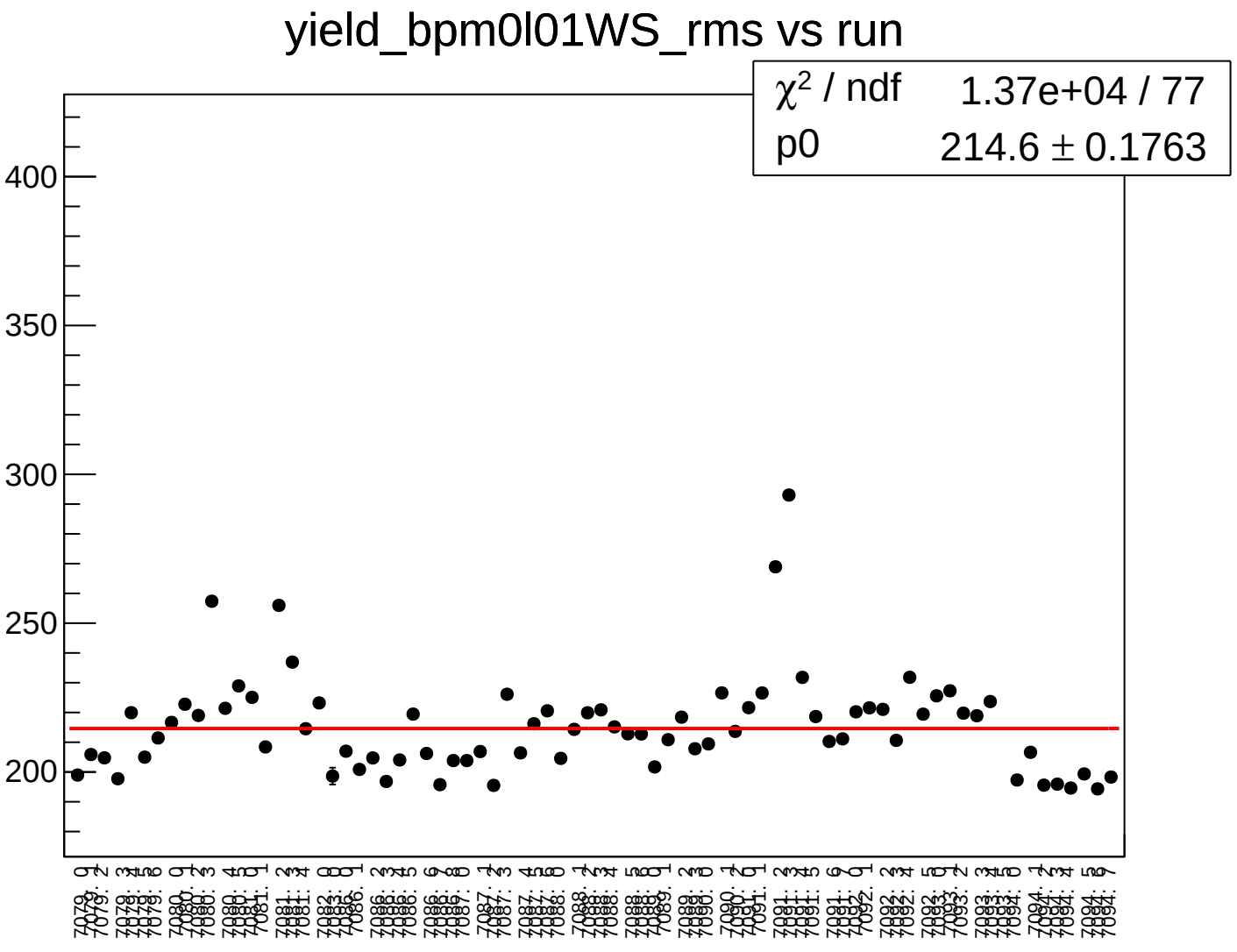

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 1.971e+05 / 77
p0 1.374e+05 ± 0.2276
137.6
137.55
137.5
137.45
137.4
137.35
137.3
137.25
137.2
pull
Entries 78
Mean −850.1
Std Dev 894.9
80
60
40
20
0
−20
−40
−60
−80

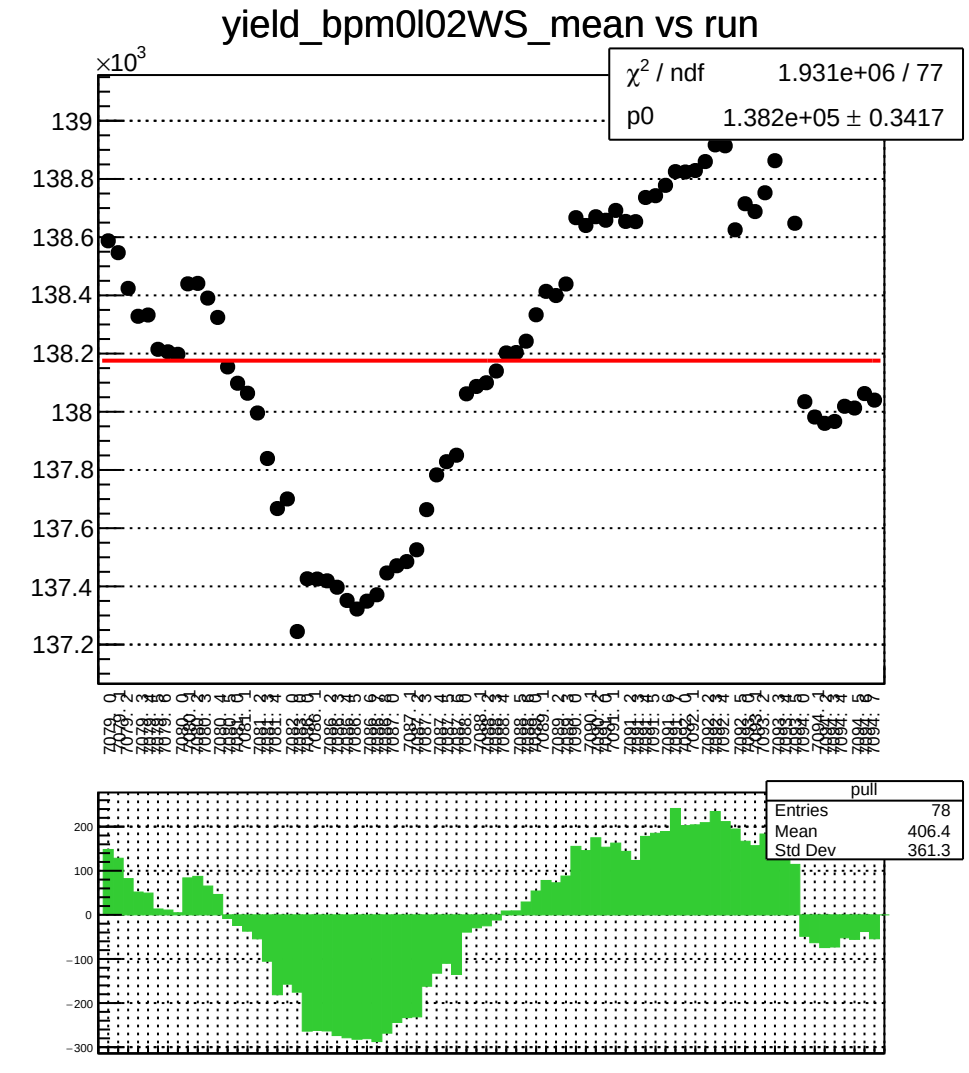

pull1D
Entries 78
Mean −0.3034
Std Dev 4.275
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

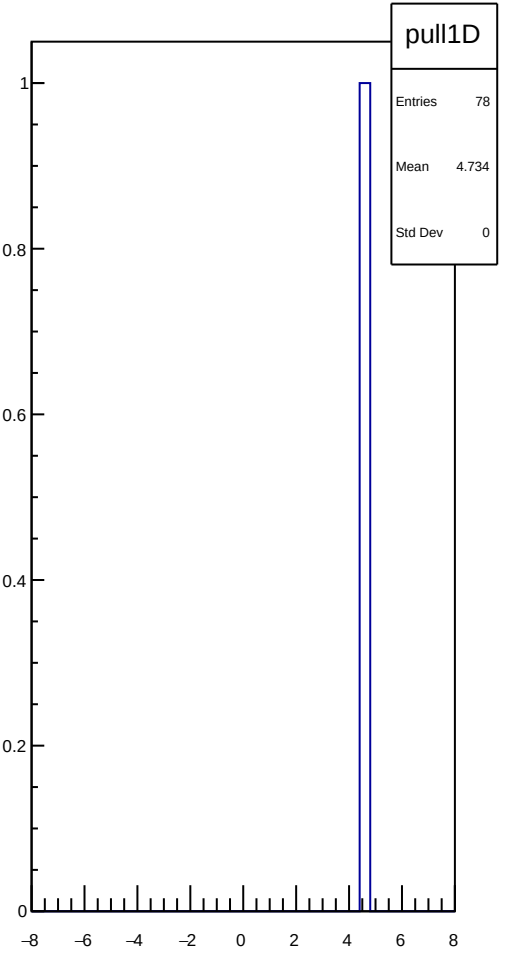

yield_bpm0i01aWS_rms vs run
χ² / ndf 2412 / 77
p0 196.7 ± 0.161
225
220
215
210
205
200
195
190
185
180

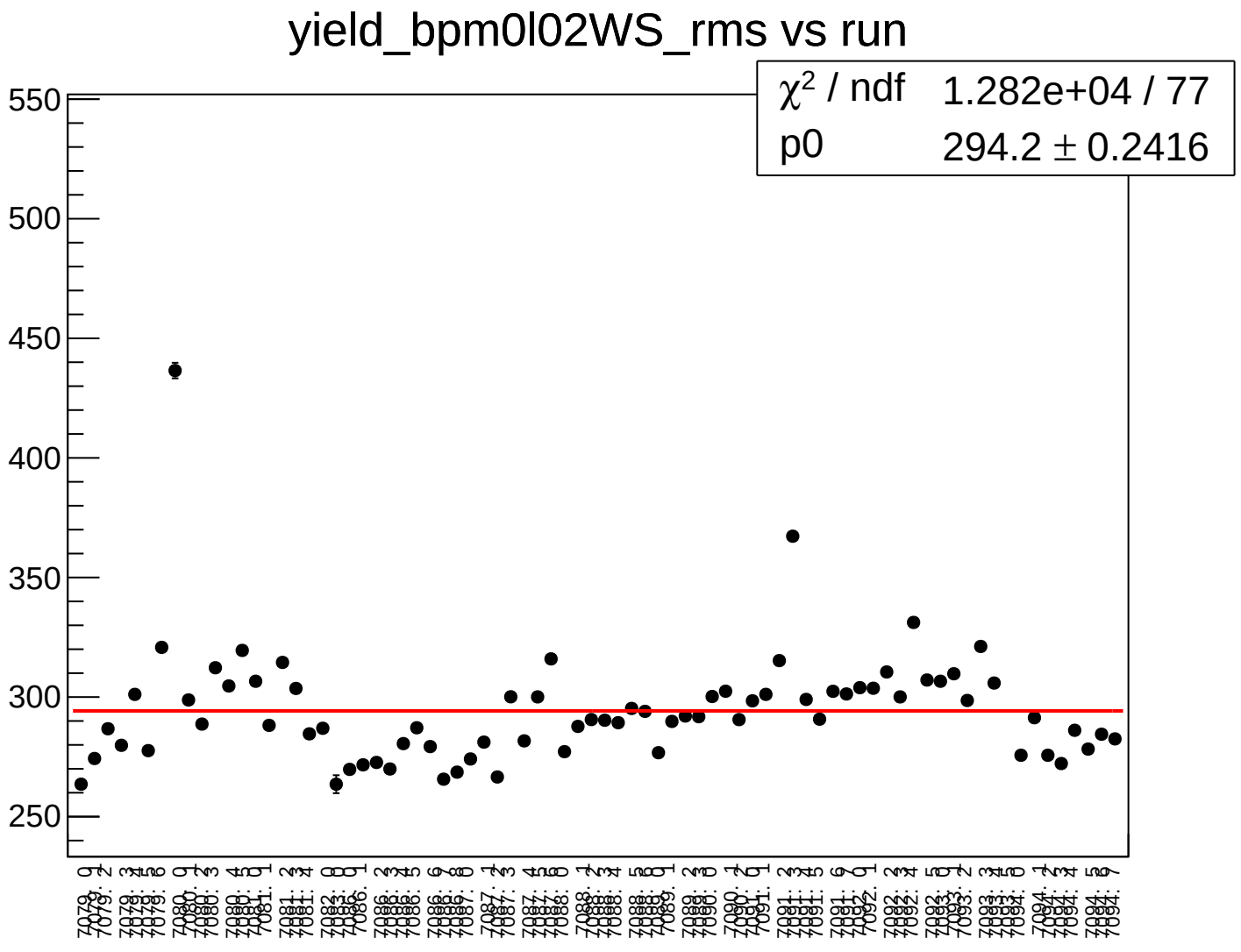

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 6.861e+05 / 77
p0 1.296e+05 ± 0.2493
129.9
129.8
129.7
129.6
129.5
129.4
129.3
129.2
129.1
pull
Entries 78
Mean 100.2
Std Dev 146.8
150
100
50
0
−50
−100
−150
−200
−250

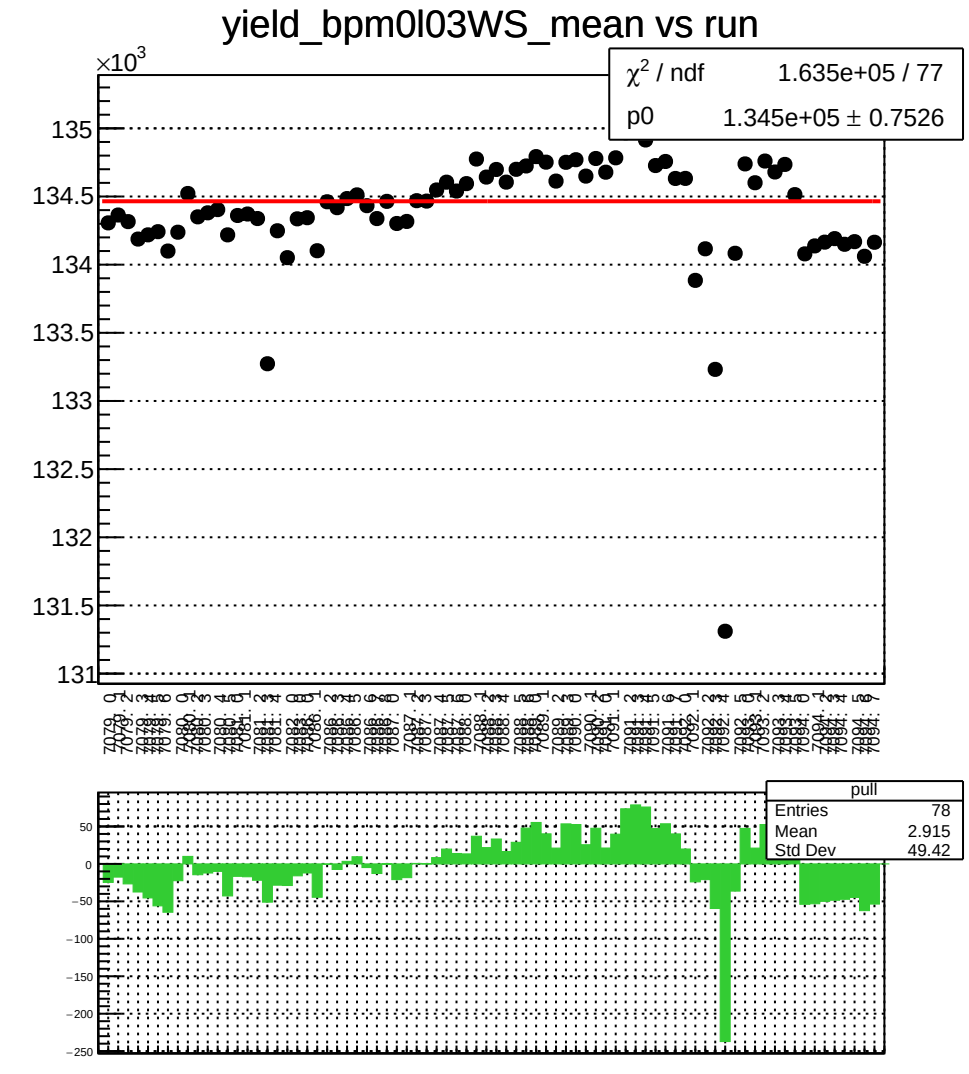

pull1D
Entries 78
Mean 1.956
Std Dev 2.228
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

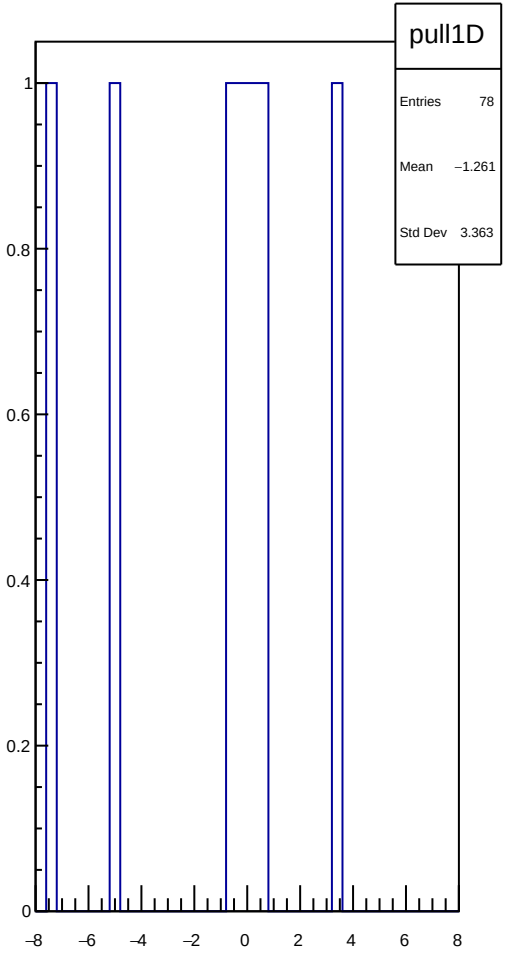

yield_bpm0l01WS_rms vs run
χ² / ndf 1.37e+04 / 77
p0 214.6 ± 0.1763
400
350
300
250
200

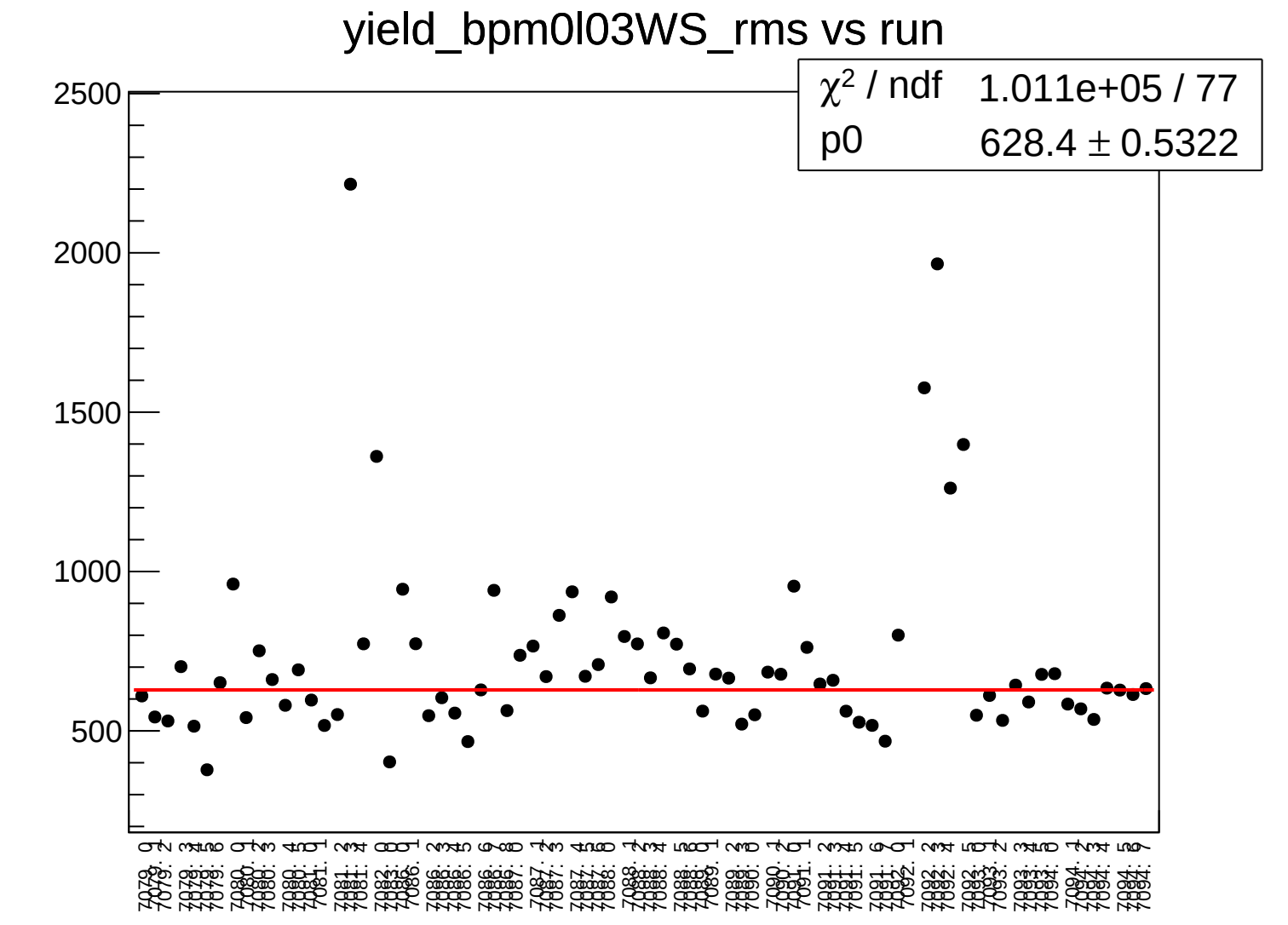

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 1.931e+06 / 77
p0 1.382e+05 ± 0.3417
pull
Entries 78
Mean 406.4
Std Dev 361.3

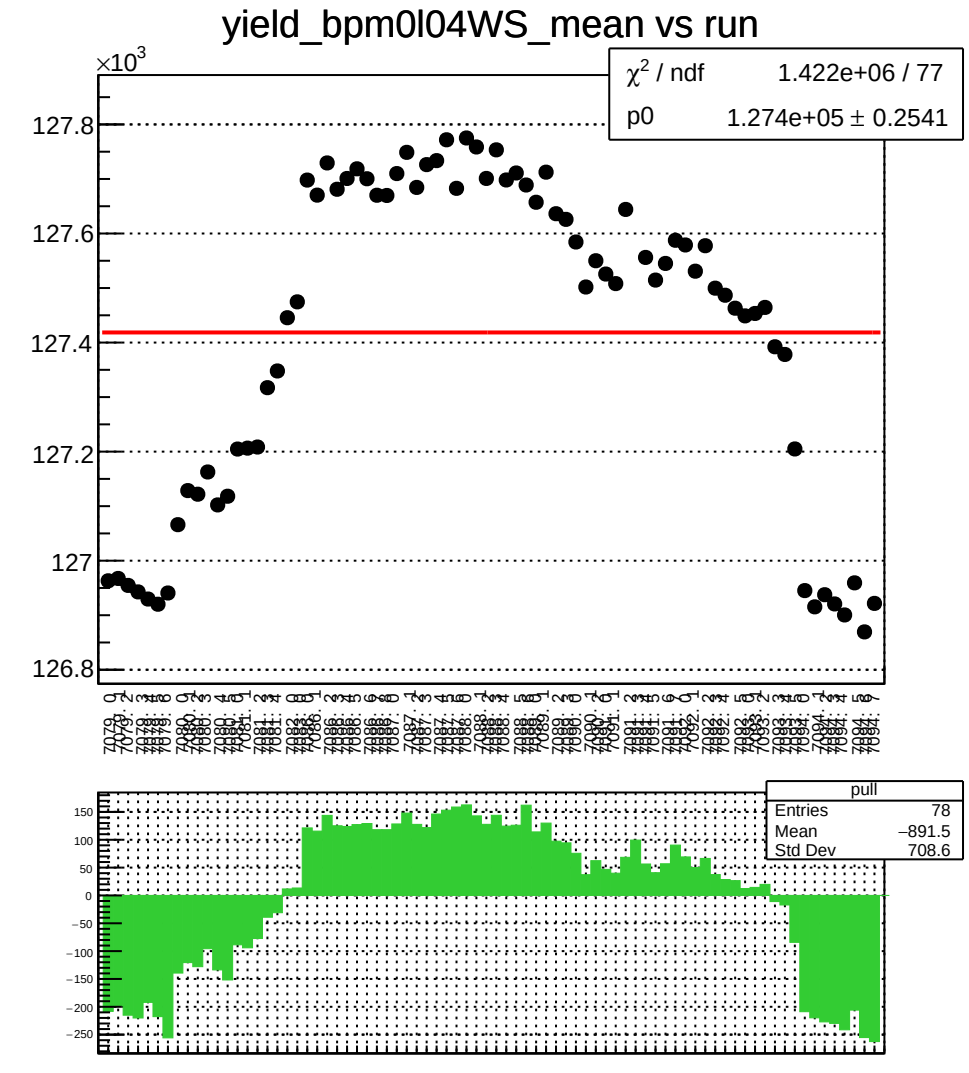

pull1D
Entries 78
Mean 4.734
Std Dev 0

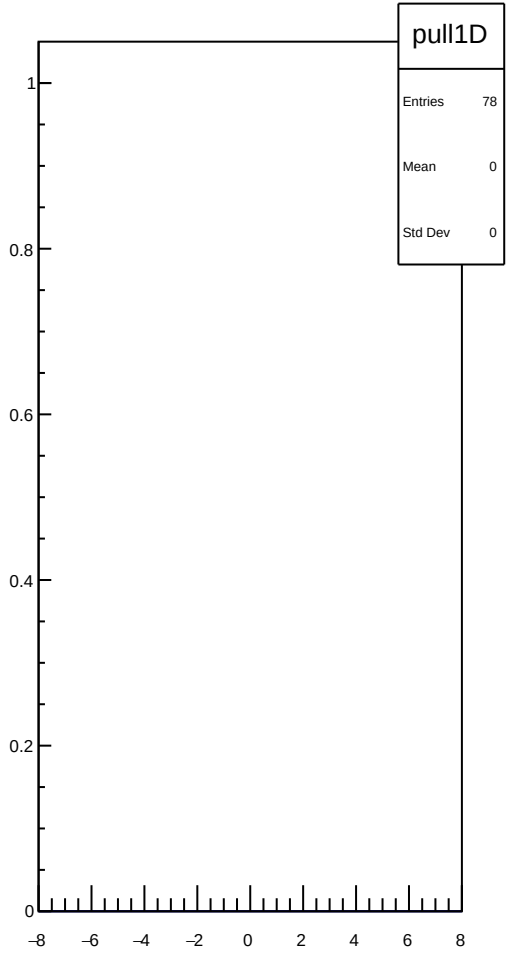

yield_bpm0l02WS_rms vs run
χ² / ndf 1.282e+04 / 77
p0 294.2 ± 0.2416
550
500
450
400
350
300
250

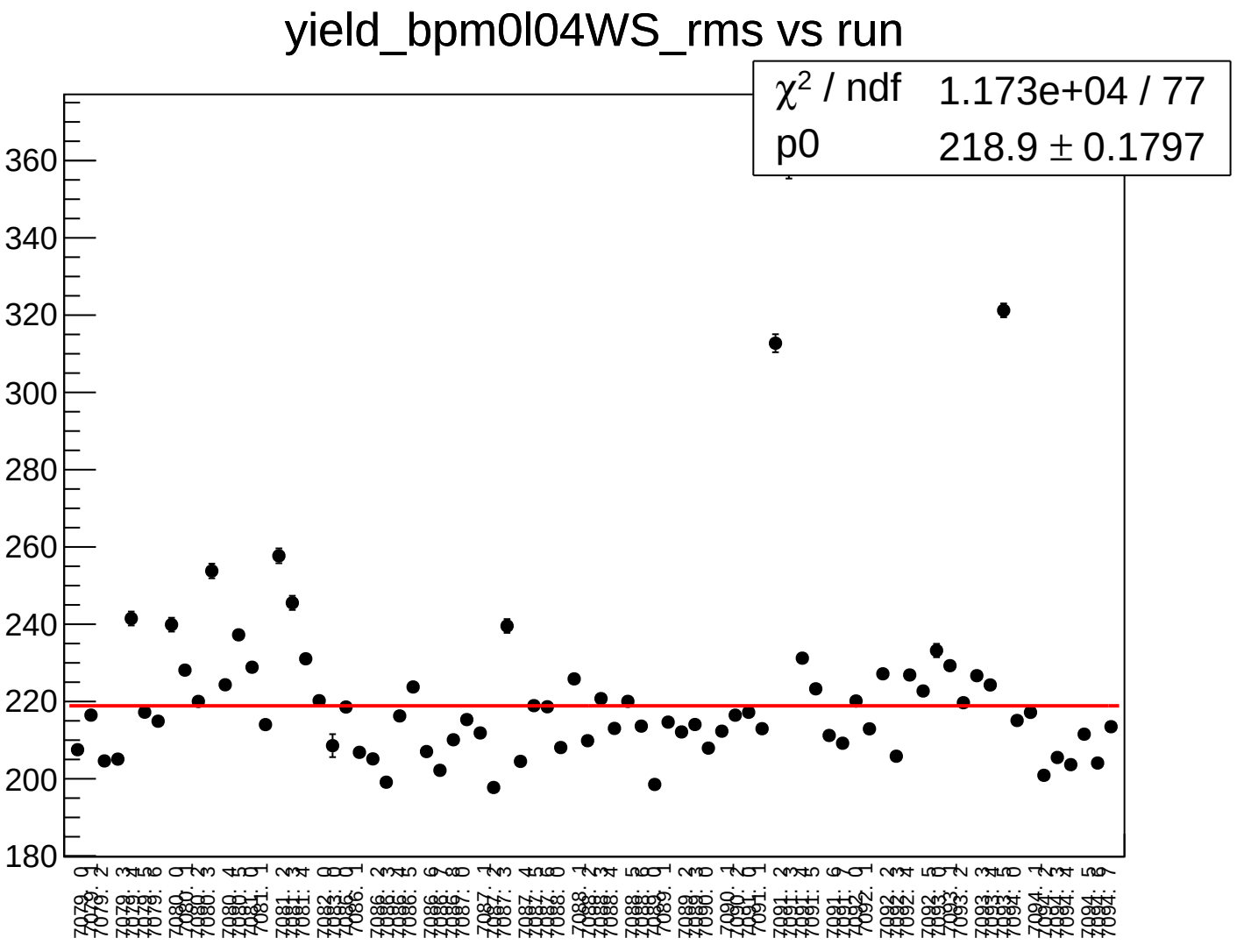

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 1.635e+05 / 77
p0 1.345e+05 ± 0.7526
135
134.5
134
133.5
133
132.5
132
131.5
131
pull
Entries 78
Mean 2.915
Std Dev 49.42
50
0
−50
−100
−150
−200
−250

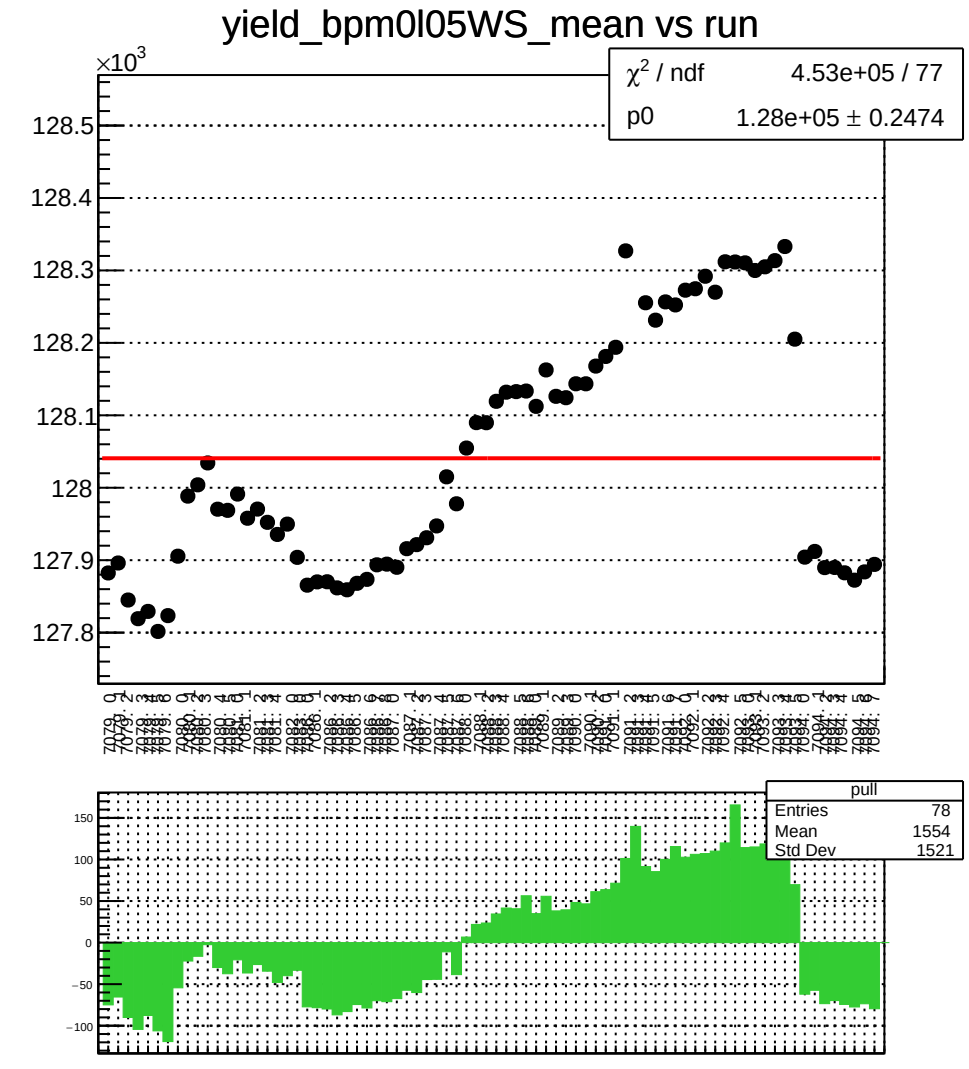

pull1D
Entries 78
Mean −1.261
Std Dev 3.363
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

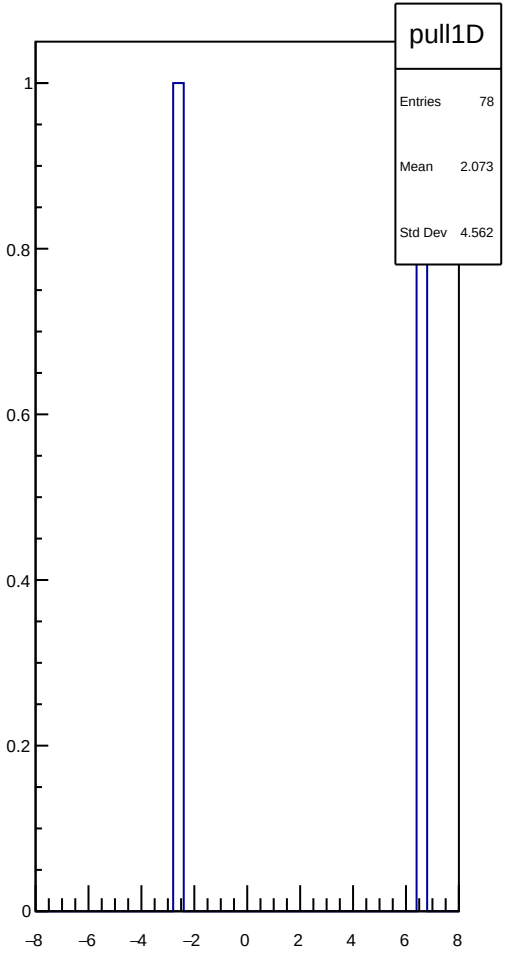

yield_bpm0l03WS_rms vs run
χ² / ndf 1.011e+05 / 77
p0 628.4 ± 0.5322
2500
2000
1500
1000
500

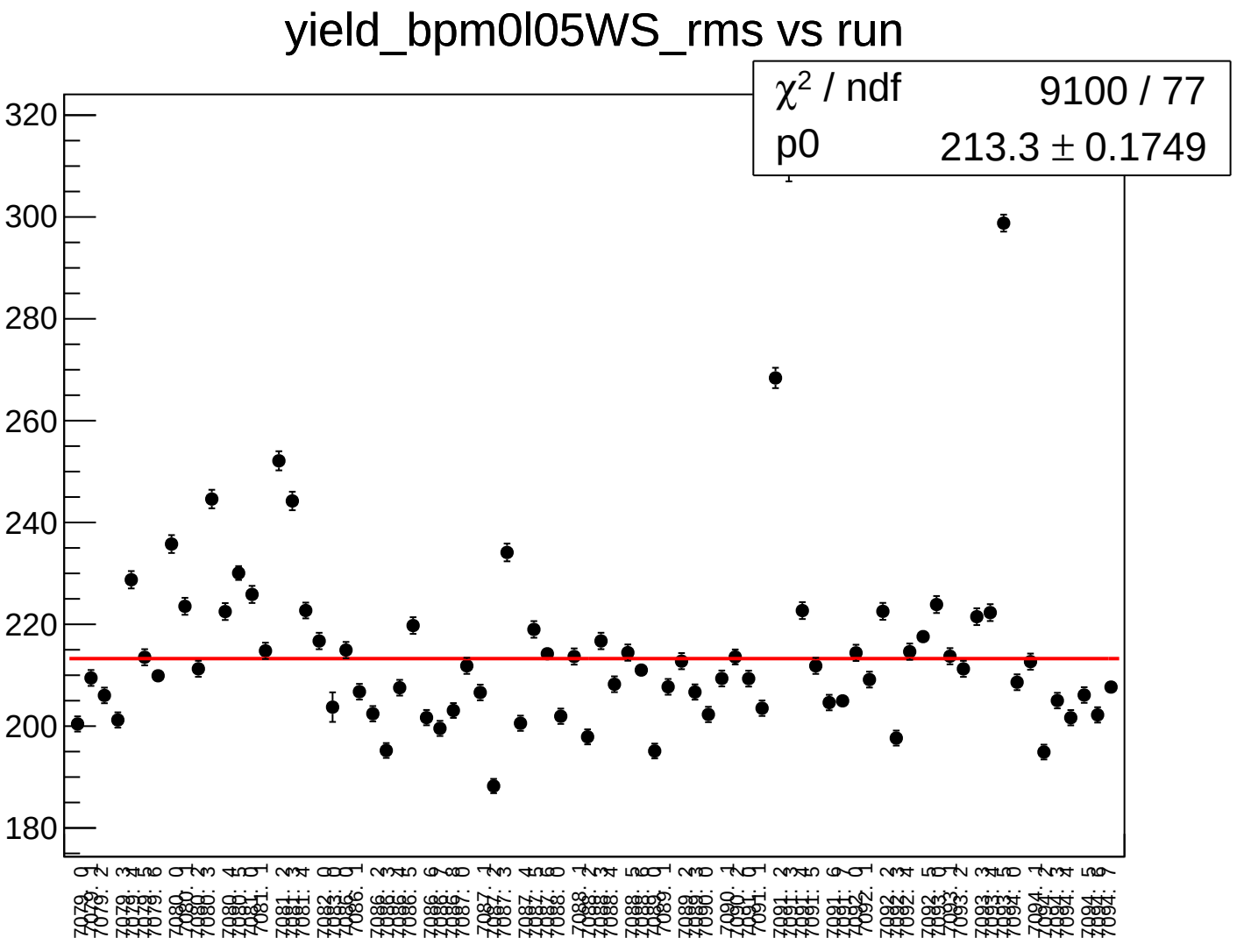

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 1.422e+06 / 77
p0 1.274e+05 ± 0.2541
127.8
127.6
127.4
127.2
127
126.8
pull
Entries 78
Mean −891.5
Std Dev 708.6
150
100
50
0
−50
−100
−150
−200
−250

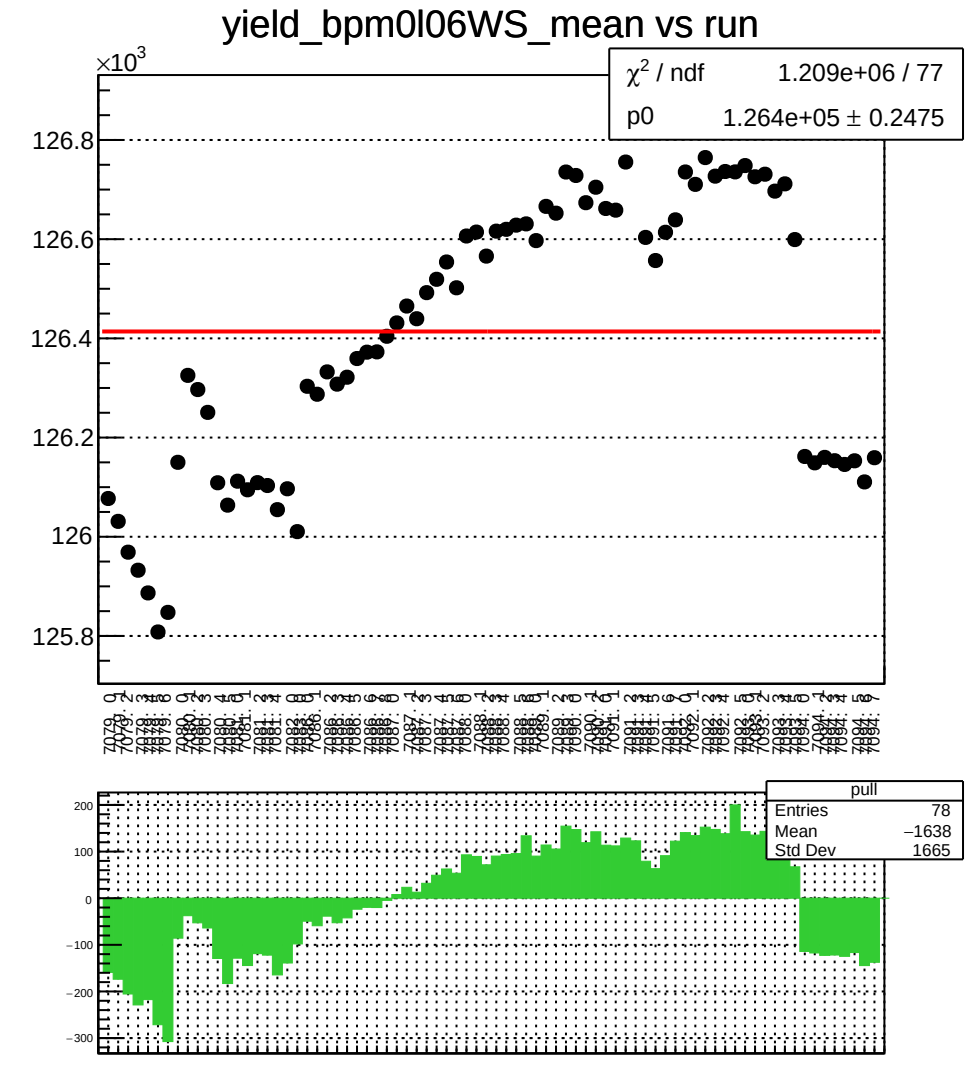

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

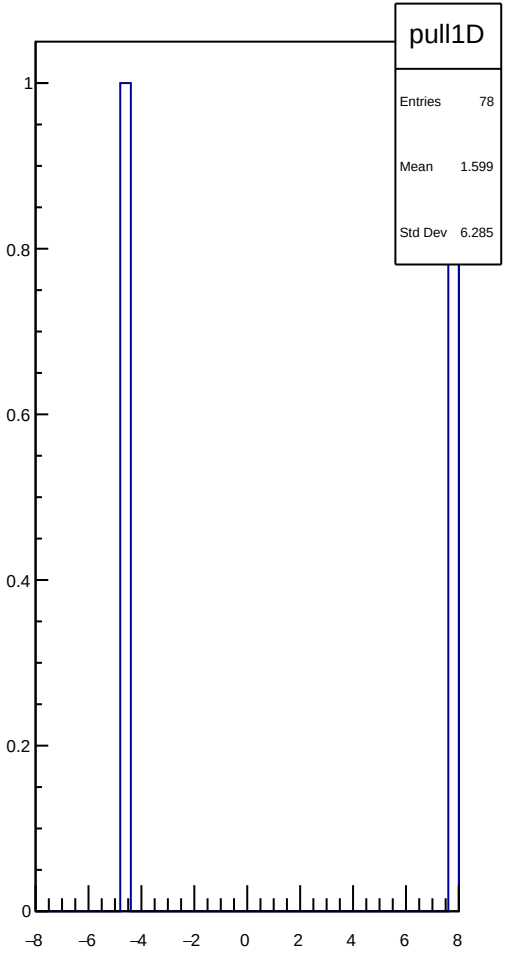

yield_bpm0l04WS_rms vs run
χ² / ndf 1.173e+04 / 77
p0 218.9 ± 0.1797
360
340
320
300
280
260
240
220
200
180

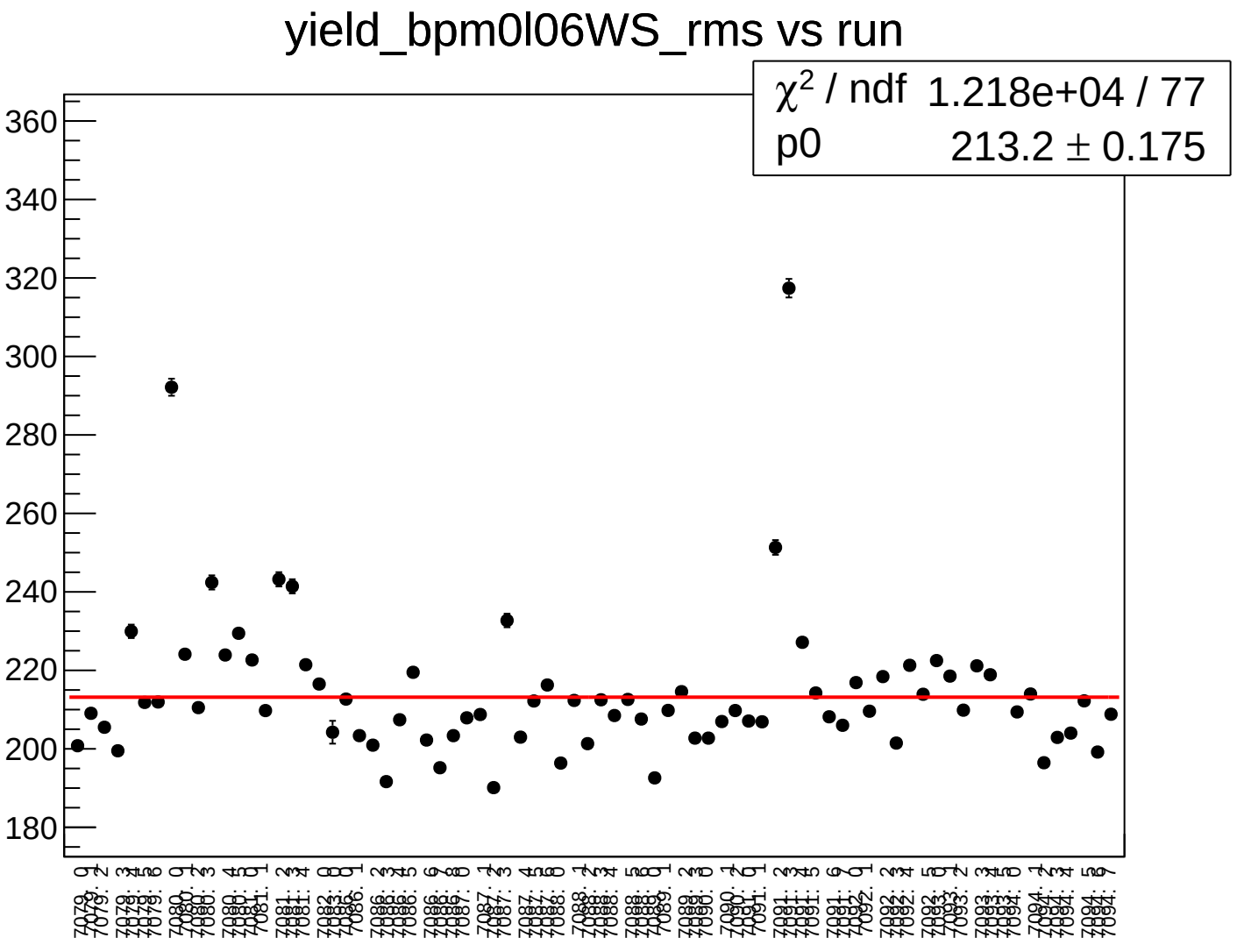

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 4.53e+05 / 77
p0 1.28e+05 ± 0.2474
128.5
128.4
128.3
128.2
128.1
128
127.9
127.8
pull
Entries 78
Mean 1554
Std Dev 1521
150
100
50
0
−50
−100

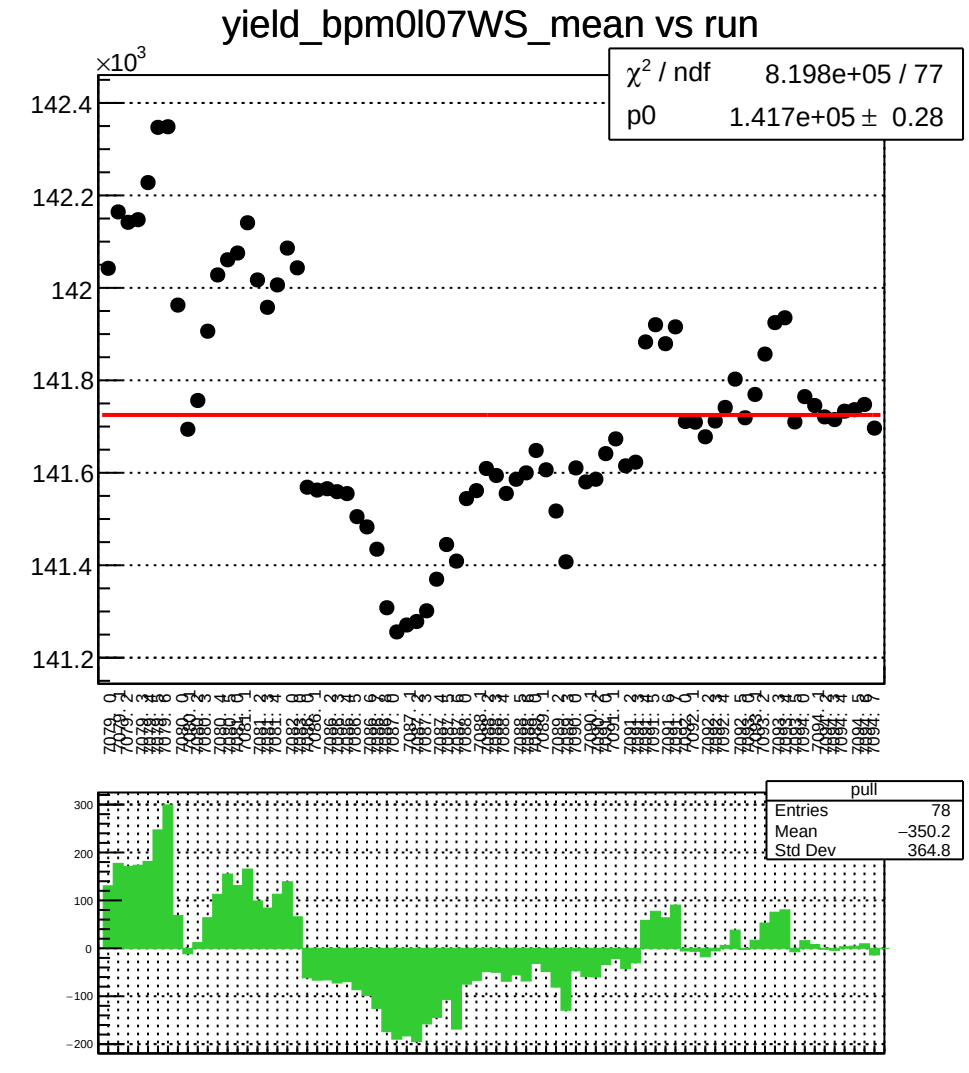

pull1D
Entries 78
Mean 2.073
Std Dev 4.562
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

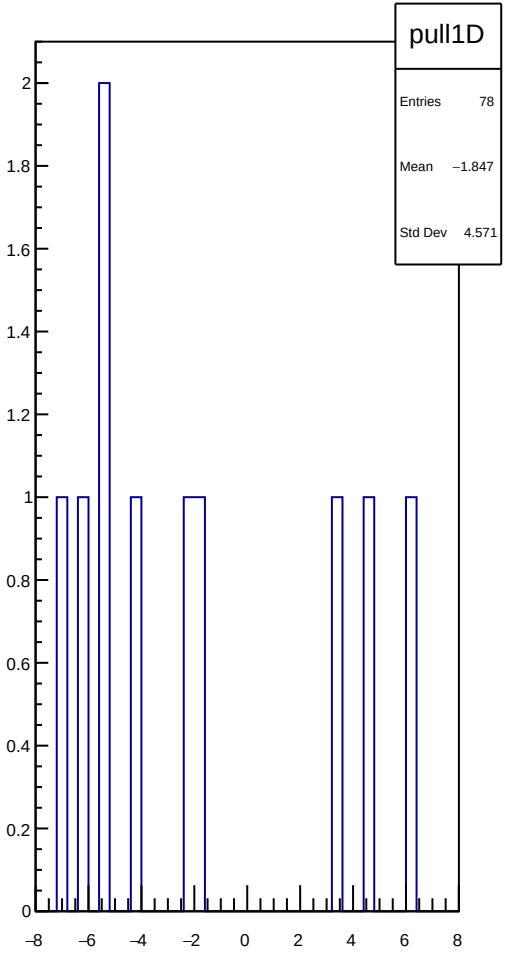

yield_bpm0l05WS_rms vs run
χ² / ndf 9100 / 77
p0 213.3 ± 0.1749
320
300
280
260
240
220
200
180

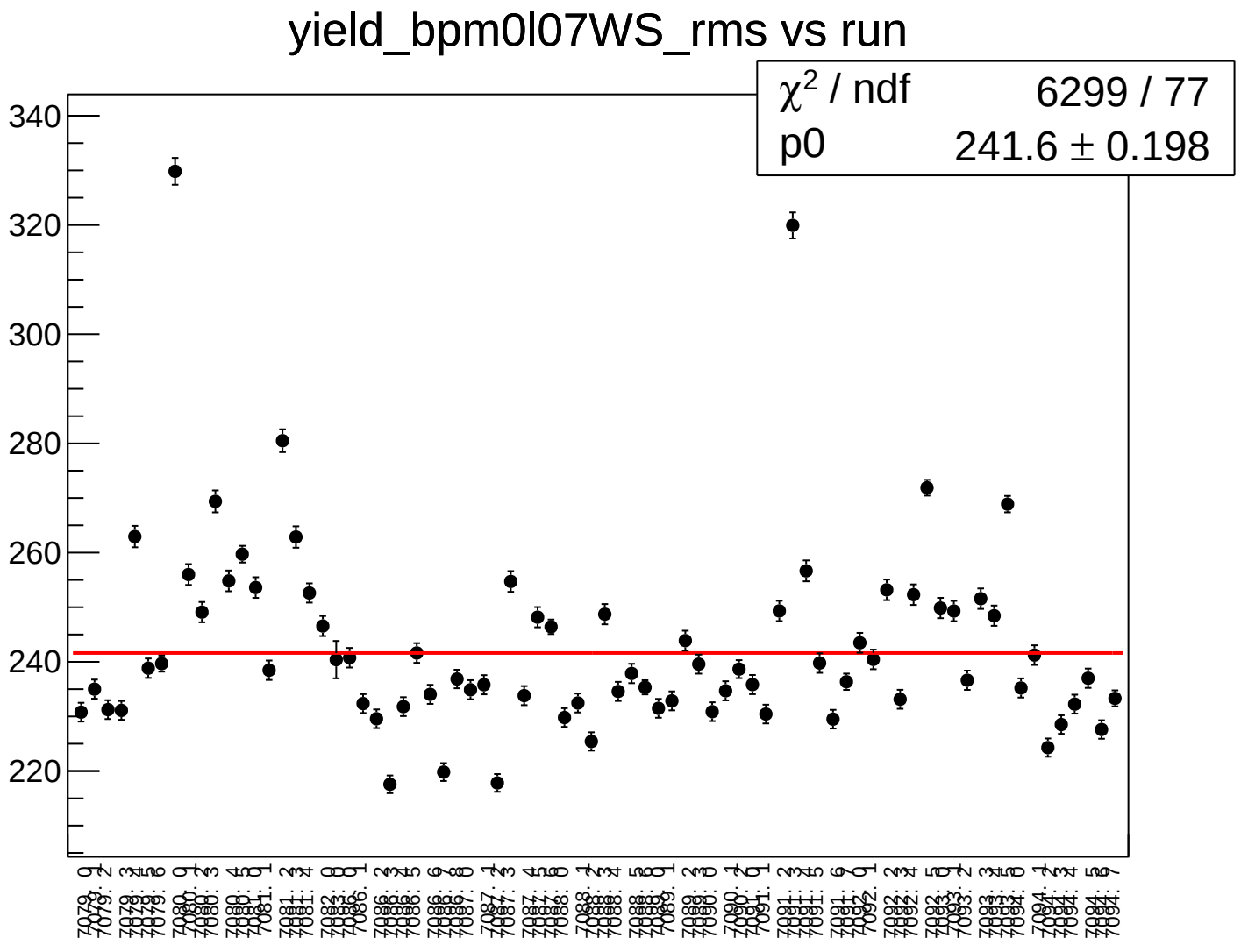

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 1.209e+06 / 77
p0 1.264e+05 ± 0.2475
126.8
126.6
126.4
126.2
126
125.8
pull
Entries 78
Mean −1638
Std Dev 1665
200
100
0
−100
−200
−300

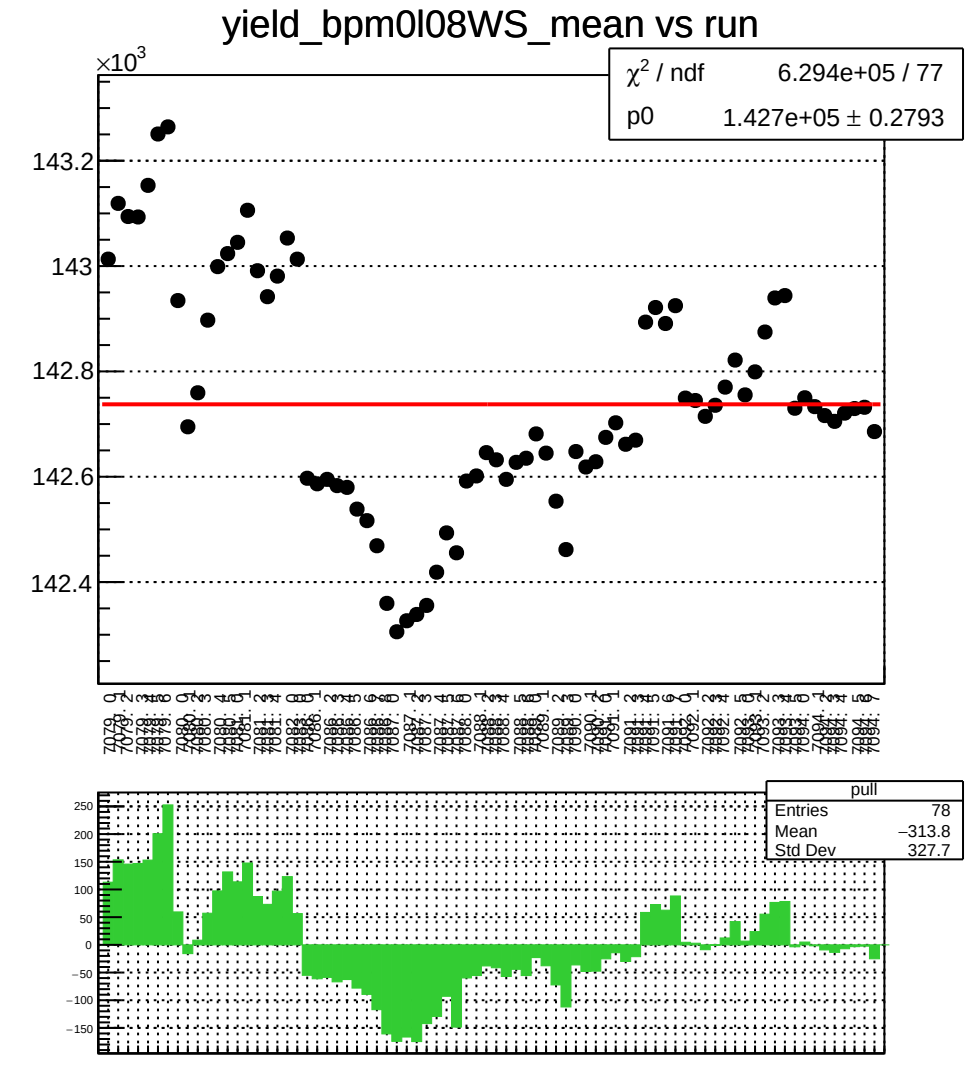

pull1D
Entries 78
Mean 1.599
Std Dev 6.285
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

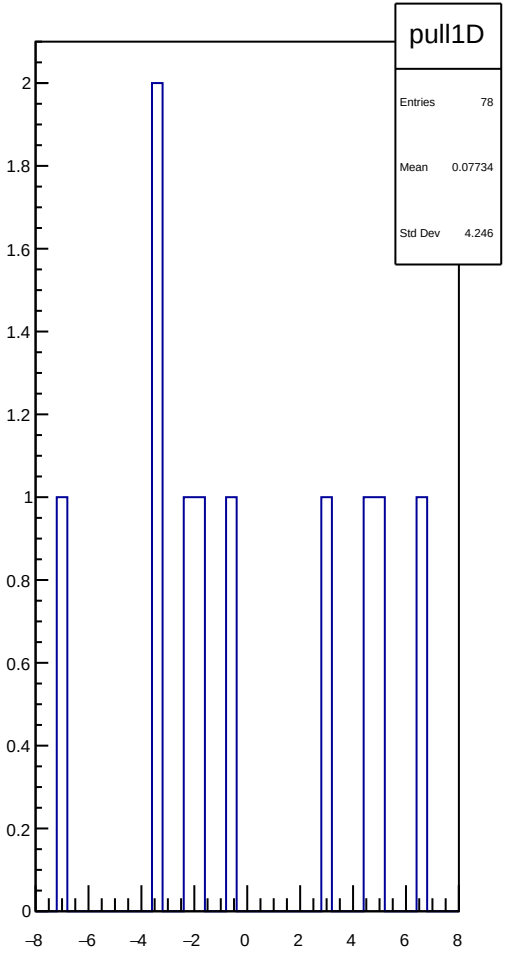

yield_bpm0l06WS_rms vs run
χ² / ndf 1.218e+04 / 77
p0 213.2 ± 0.175
360
340
320
300
280
260
240
220
200
180

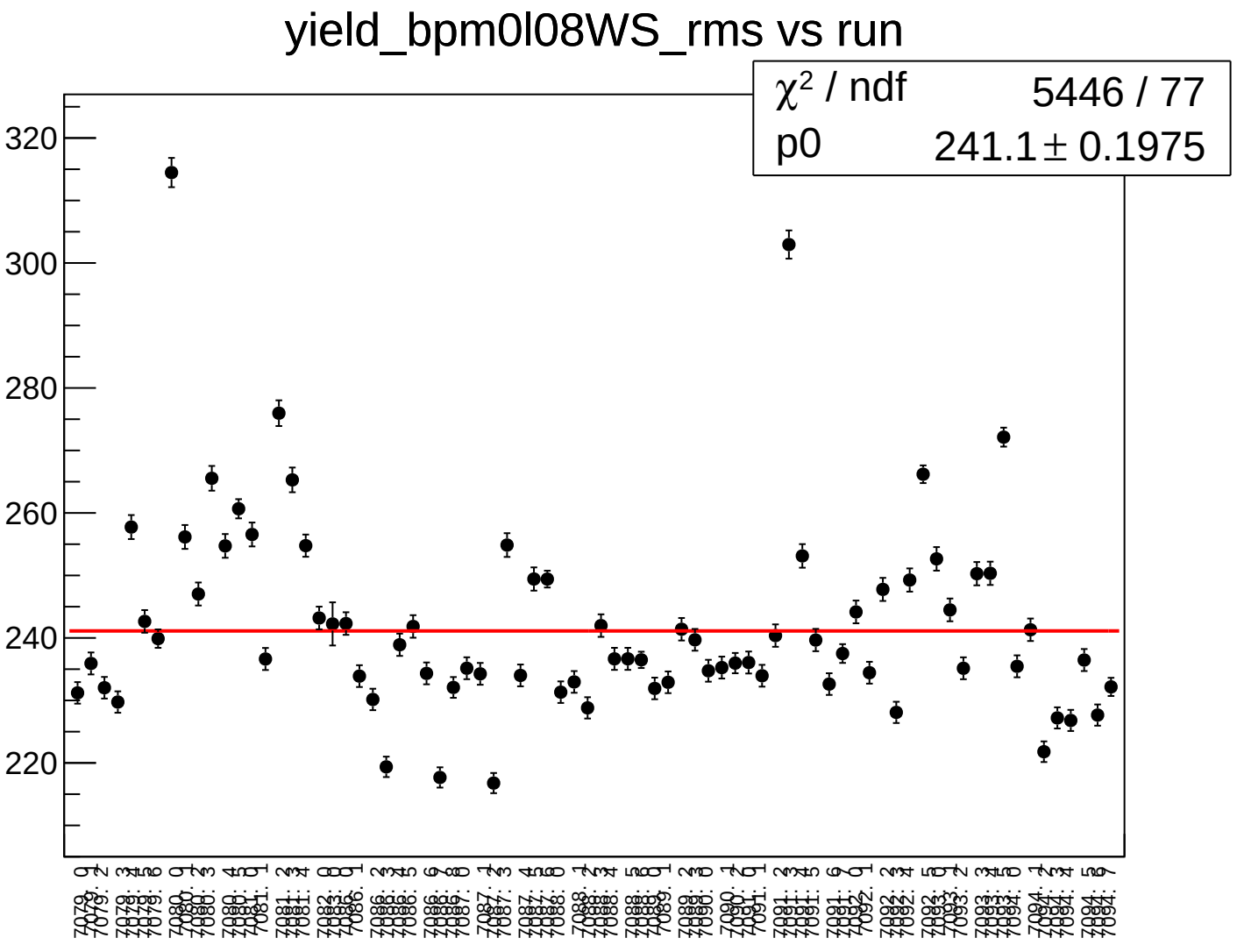

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 8.198e+05 / 77
p0 1.417e+05 ± 0.28
142.4
142.2
142
141.8
141.6
141.4
141.2
pull
Entries 78
Mean −350.2
Std Dev 364.8
300
200
100
0
−100
−200

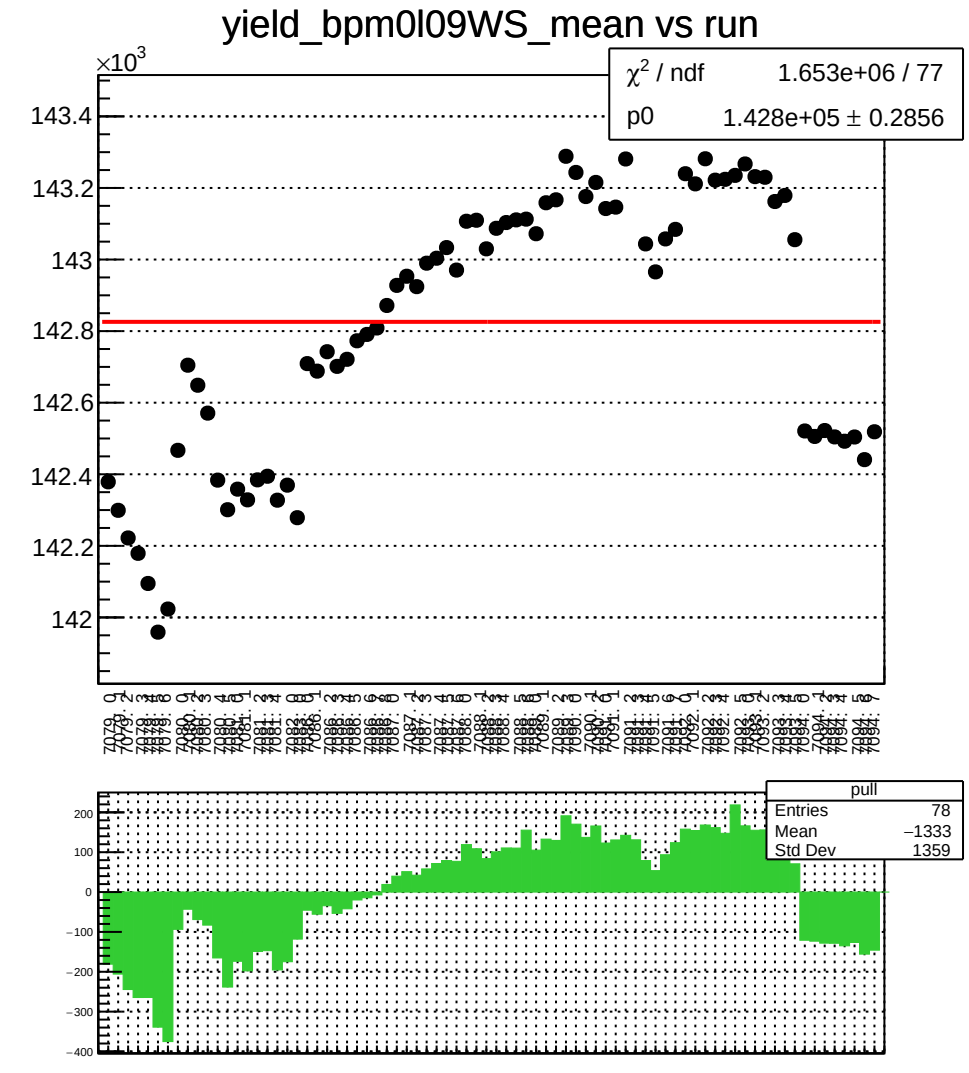

pull1D
Entries 78
Mean −1.847
Std Dev 4.571
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

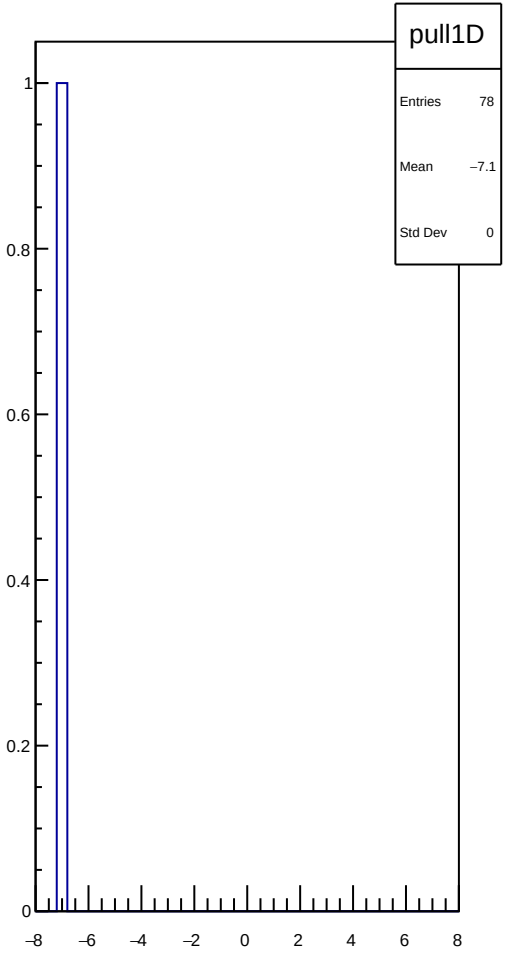

yield_bpm0l07WS_rms vs run
χ² / ndf 6299 / 77
p0 241.6 ± 0.198
340
320
300
280
260
240
220

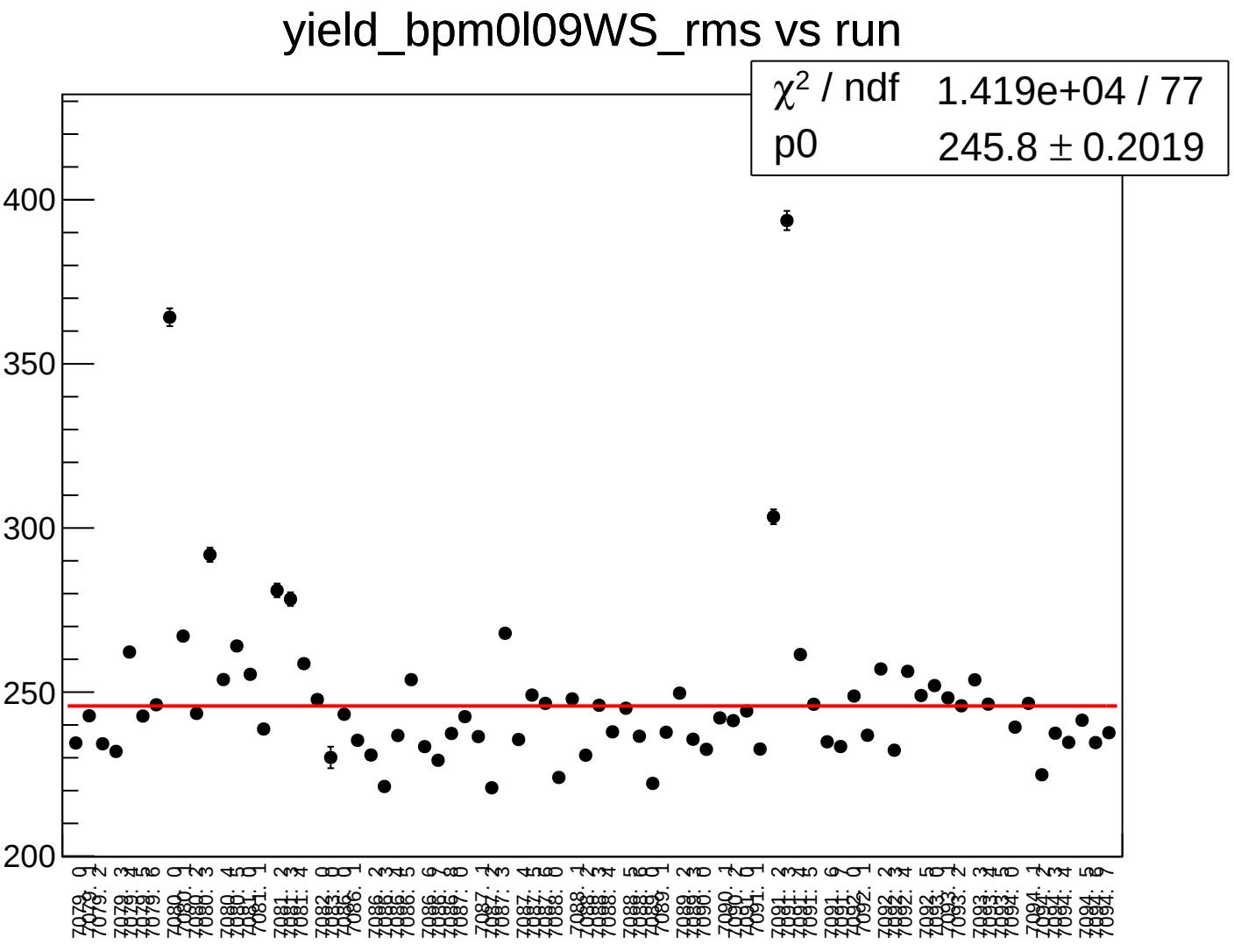

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 6.294e+05 / 77
p0 1.427e+05 ± 0.2793
143.2
143
142.8
142.6
142.4
pull
Entries 78
Mean −313.8
Std Dev 327.7
250
200
150
100
50
0
−50
−100
−150

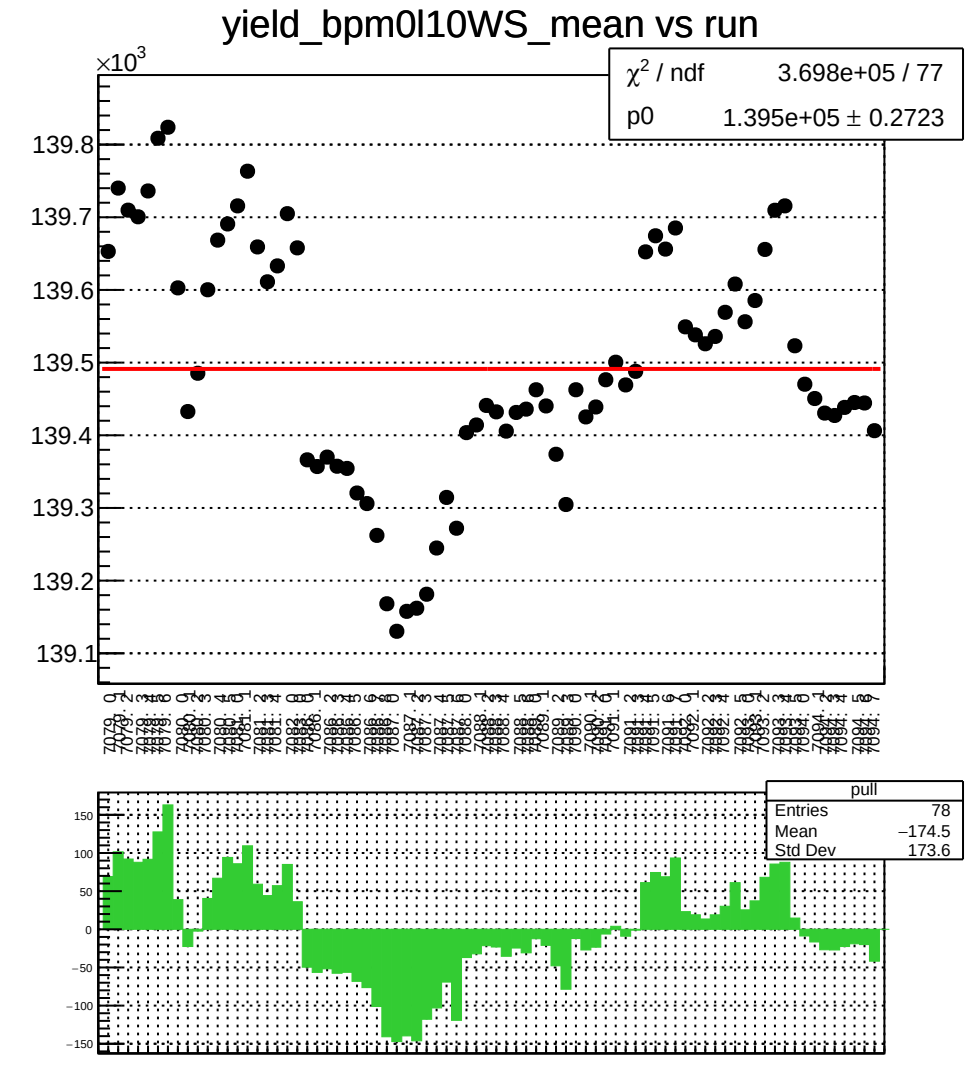

pull1D
Entries 78
Mean 0.07734
Std Dev 4.246
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

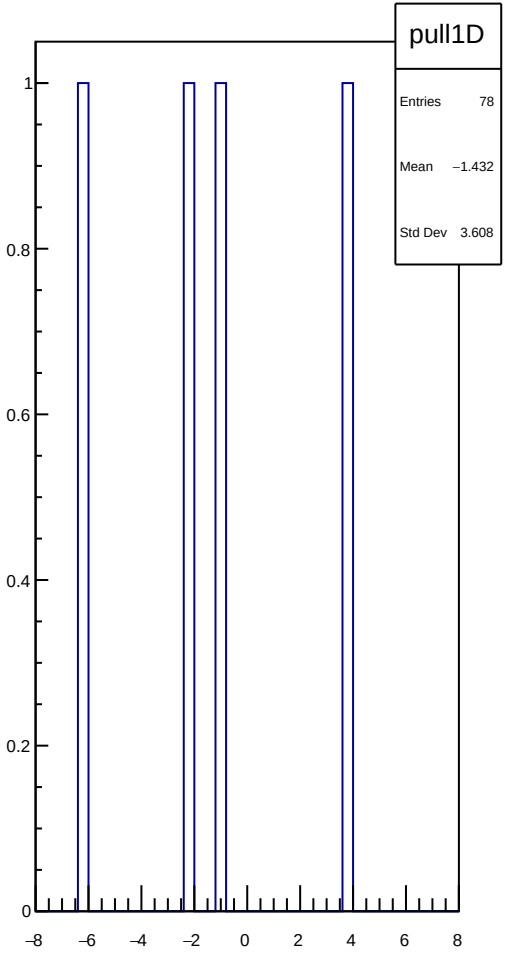

yield_bpm0l08WS_rms vs run
χ² / ndf 5446 / 77
p0 241.1 ± 0.1975
320
300
280
260
240
220

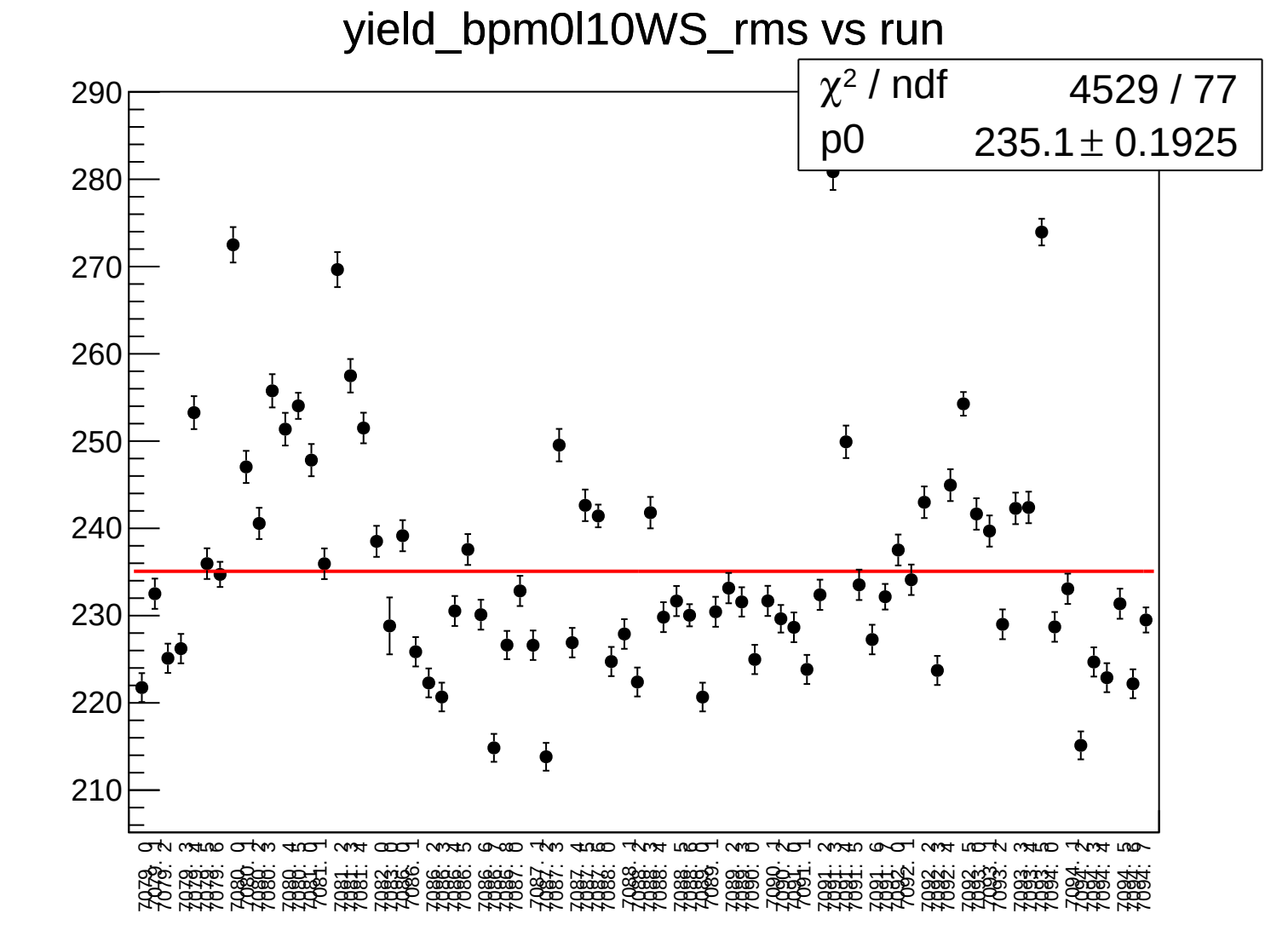

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 1.653e+06 / 77
p0 1.428e+05 ± 0.2856
143.4
143.2
143
142.8
142.6
142.4
142.2
142
pull
Entries 78
Mean −1333
Std Dev 1359
200
100
0
−100
−200
−300
−400

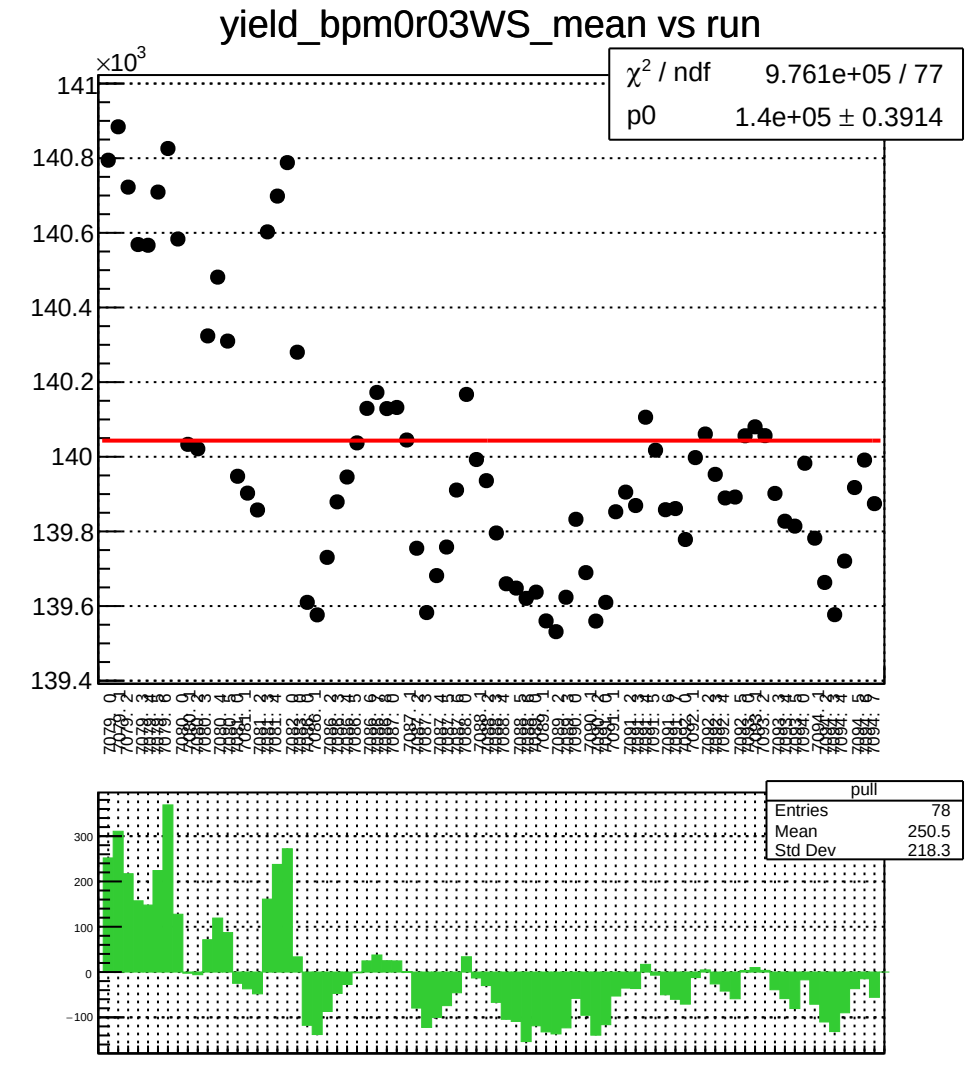

pull1D
Entries 78
Mean −7.1
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

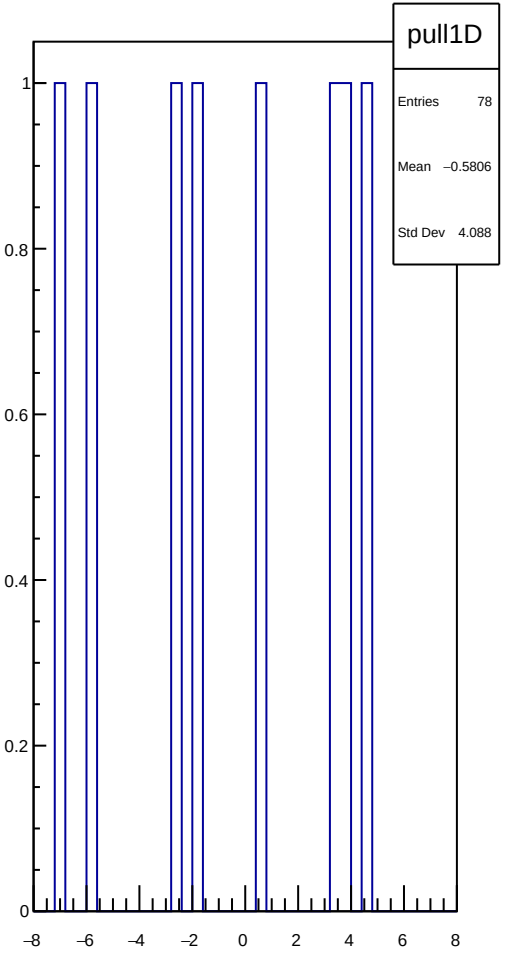

yield_bpm0l09WS_rms vs run
χ² / ndf 1.419e+04 / 77
p0 245.8 ± 0.2019
400
350
300
250
200

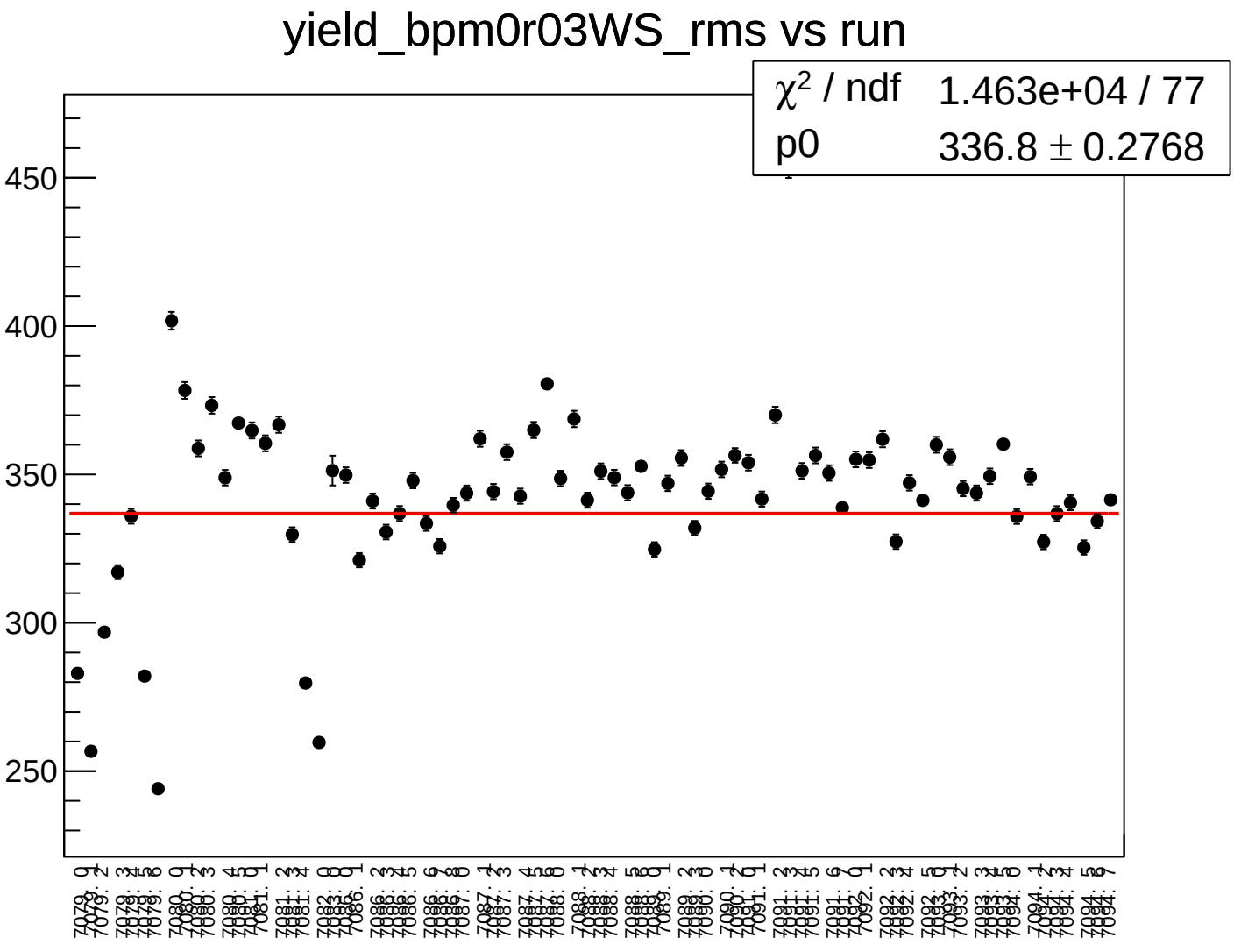

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 3.698e+05 / 77
p0 1.395e+05 ± 0.2723
139.8
139.7
139.6
139.5
139.4
139.3
139.2
139.1
pull
Entries 78
Mean −174.5
Std Dev 173.6
150
100
50
0
−50
−100
−150

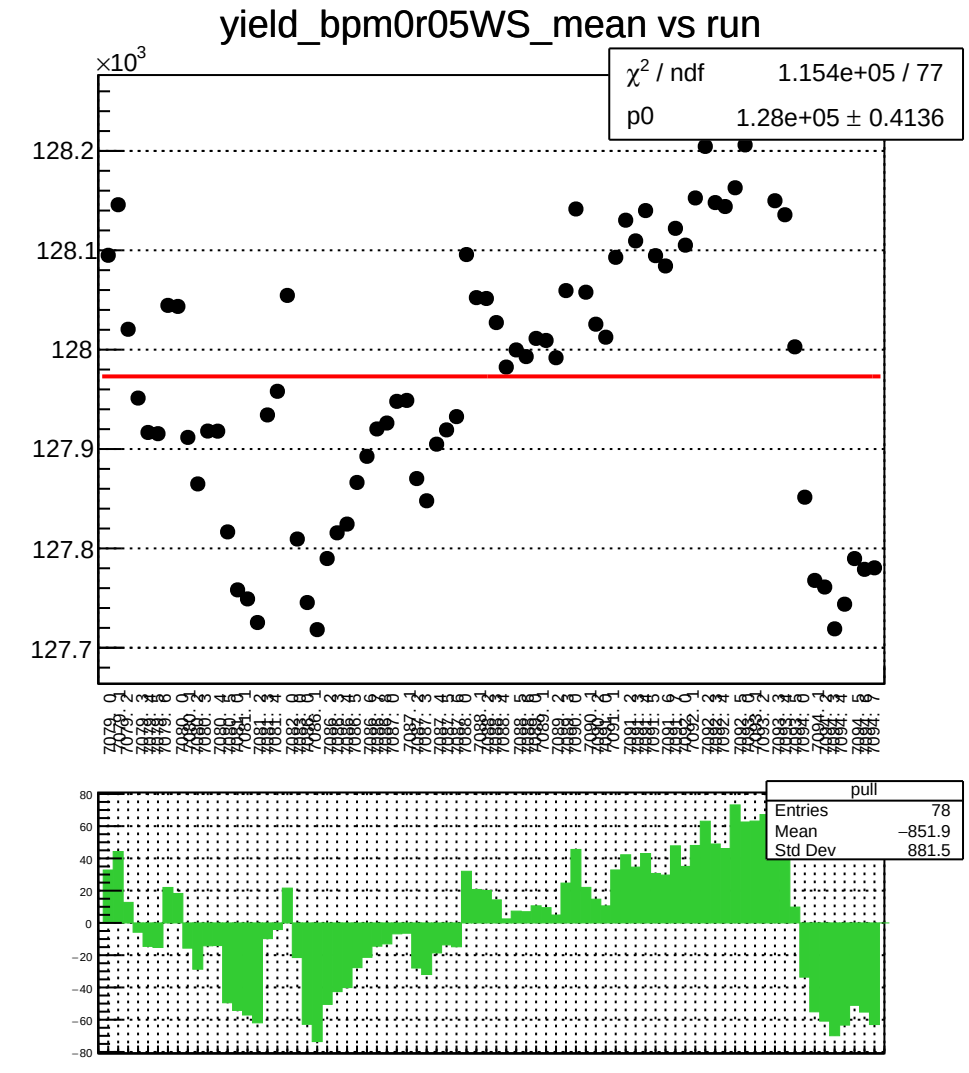

pull1D
Entries 78
Mean −1.432
Std Dev 3.608
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

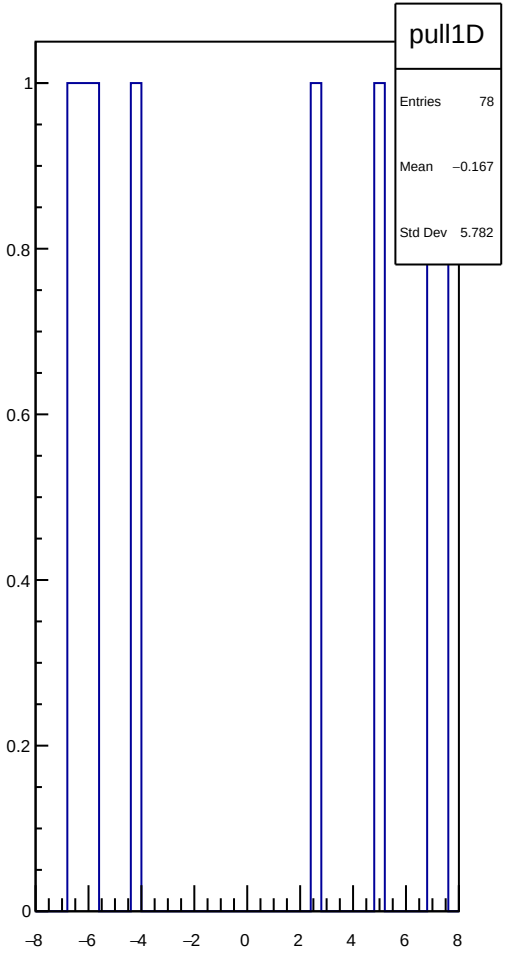

yield_bpm0l10WS_rms vs run
χ² / ndf 4529 / 77
p0 235.1 ± 0.1925
290
280
270
260
250
240
230
220
210

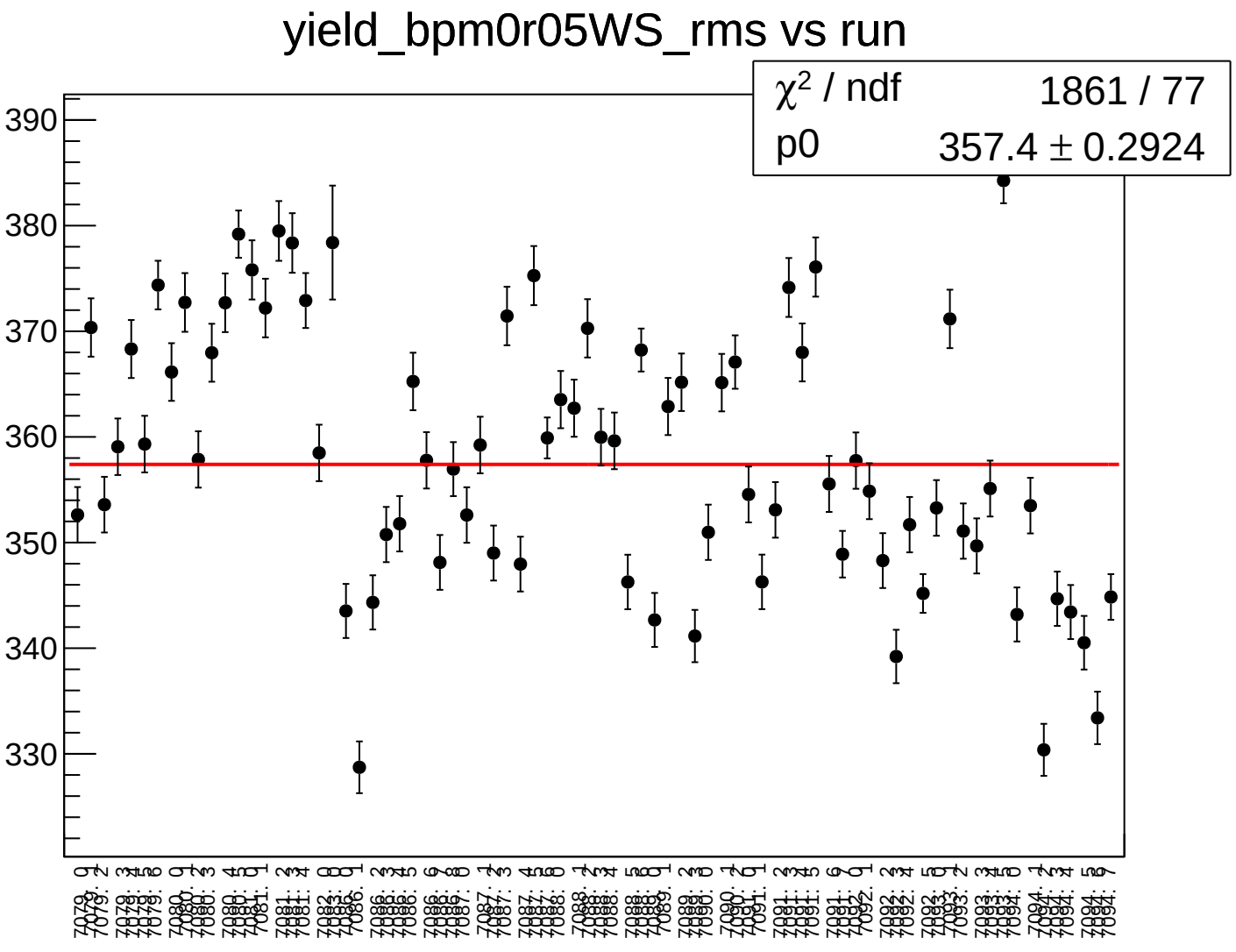

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 9.761e+05 / 77
p0 1.4e+05 ± 0.3914
141
140.8
140.6
140.4
140.2
140
139.8
139.6
139.4
pull
Entries 78
Mean 250.5
Std Dev 218.3
300
200
100
0
−100

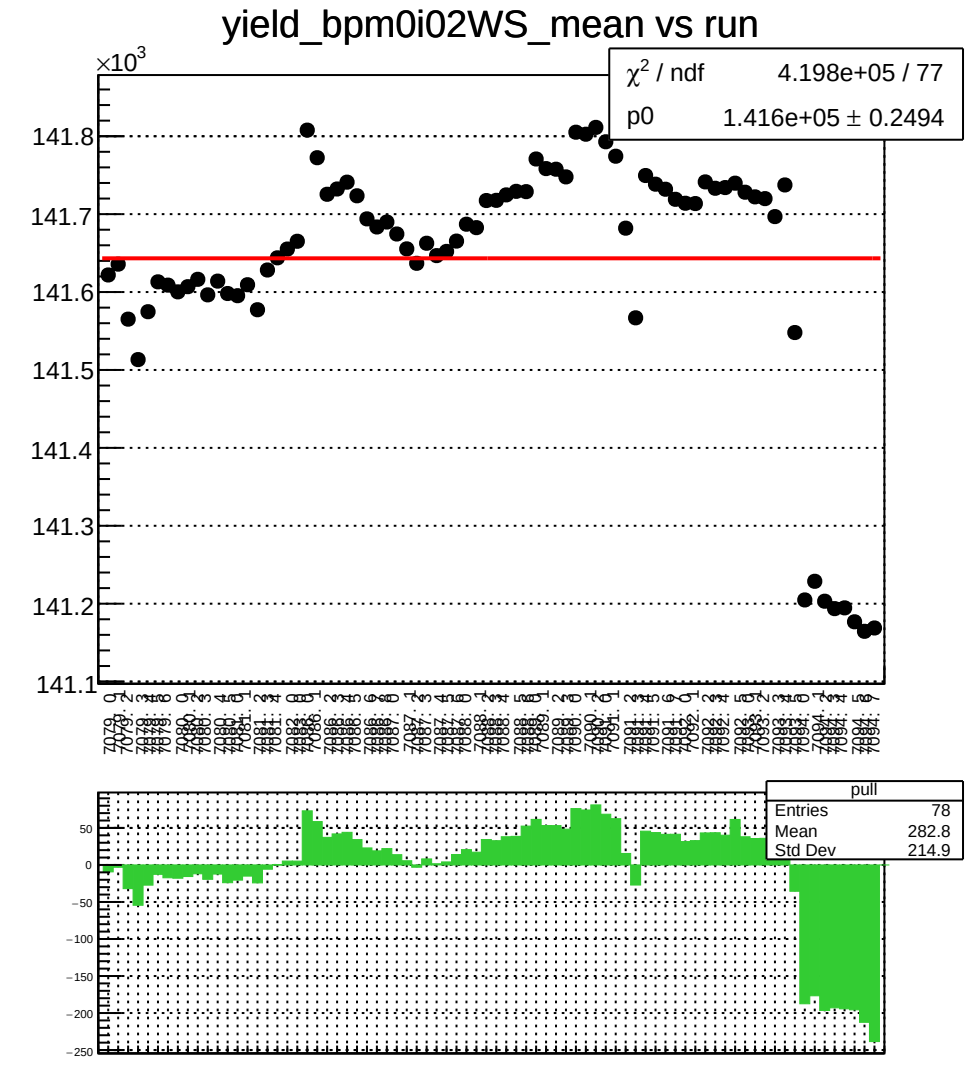

pull1D
Entries 78
Mean −0.5806
Std Dev 4.088
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

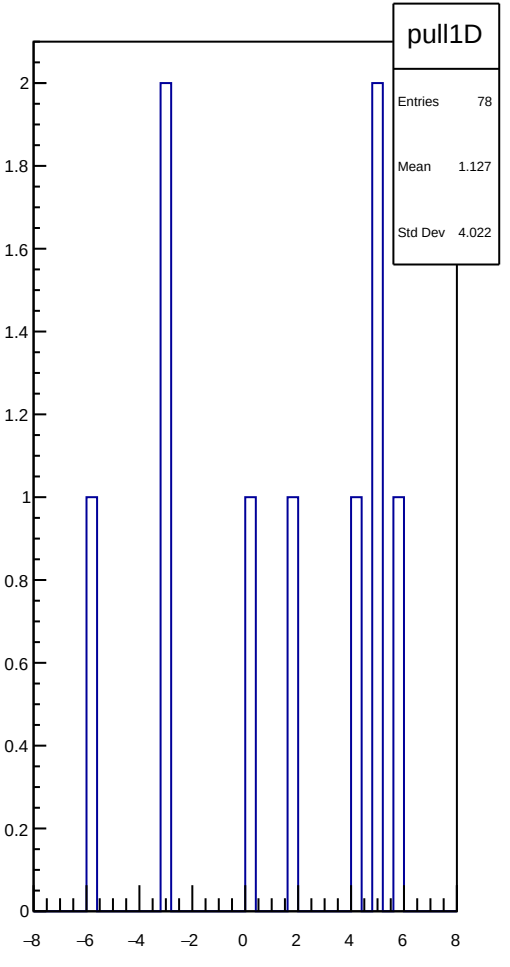

yield_bpm0r03WS_rms vs run
χ² / ndf 1.463e+04 / 77
p0 336.8 ± 0.2768
450
400
350
300
250

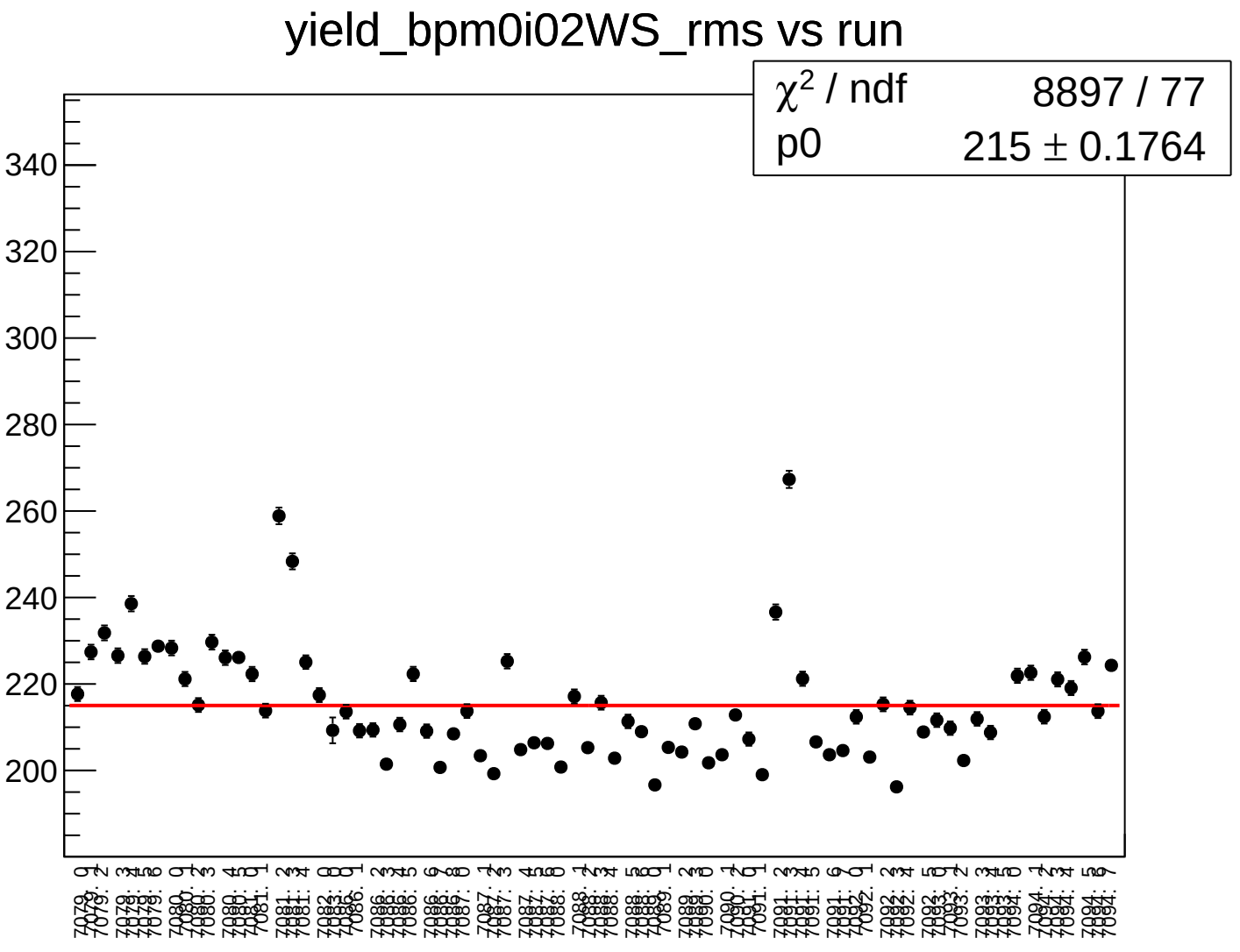

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 1.154e+05 / 77
p0 1.28e+05 ± 0.4136
128.2
128.1
128
127.9
127.8
127.7
pull
Entries 78
Mean −851.9
Std Dev 881.5
80
60
40
20
0
−20
−40
−60
−80

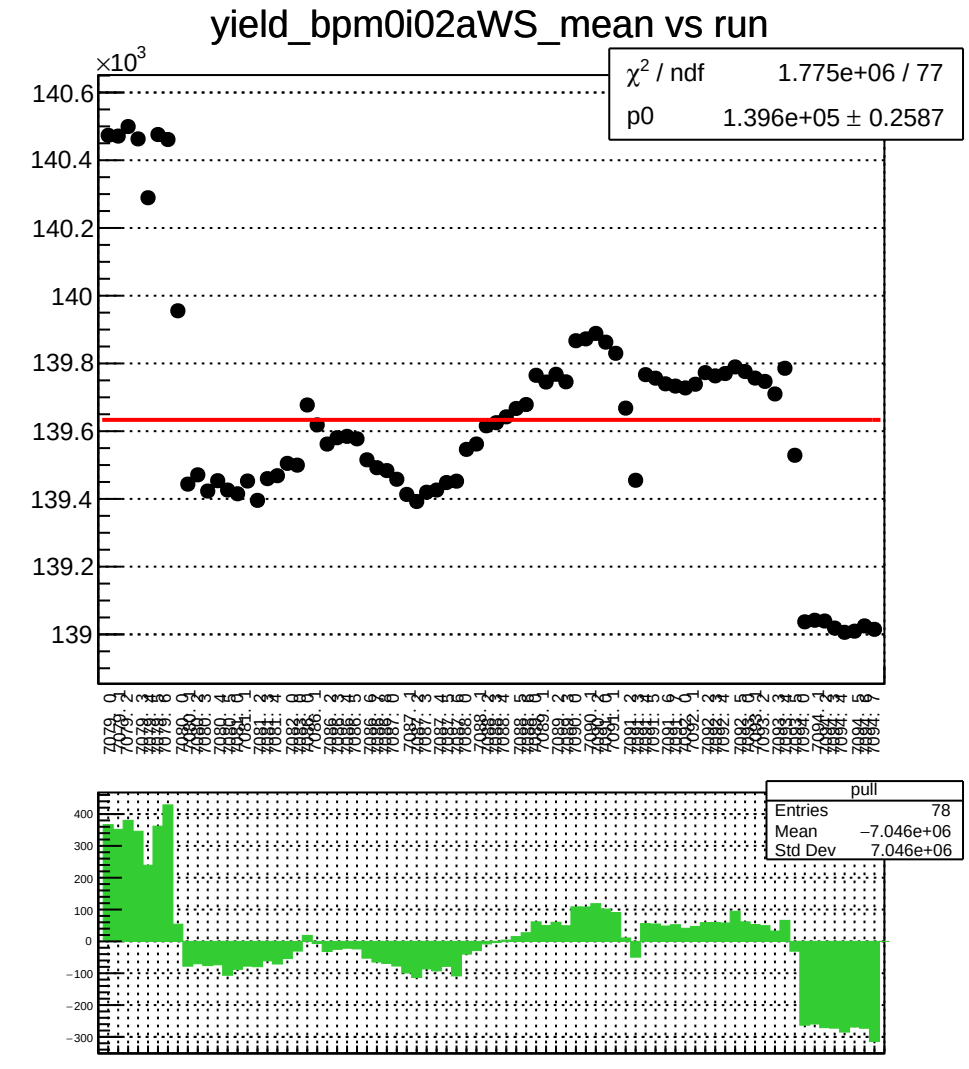

pull1D
Entries 78
Mean −0.167
Std Dev 5.782
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

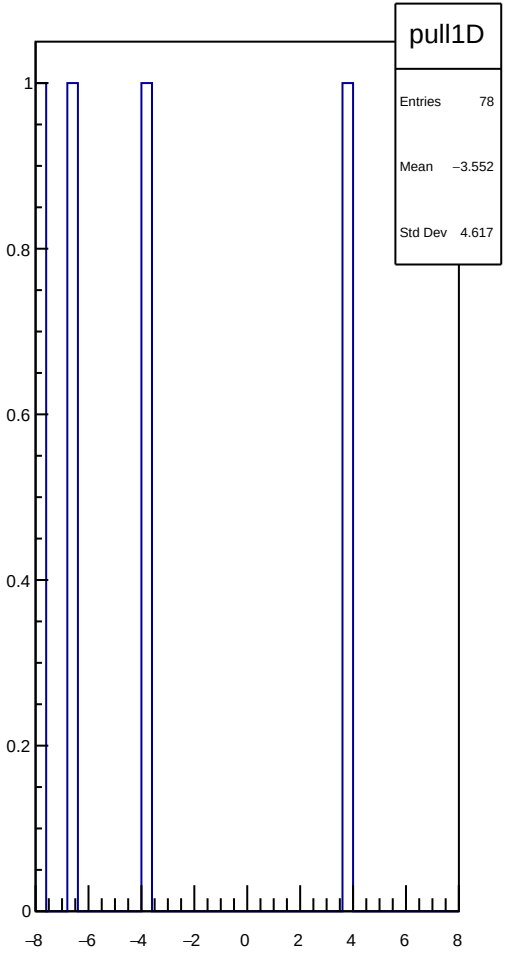

yield_bpm0r05WS_rms vs run
χ² / ndf 1861 / 77
p0 357.4 ± 0.2924
390
380
370
360
350
340
330

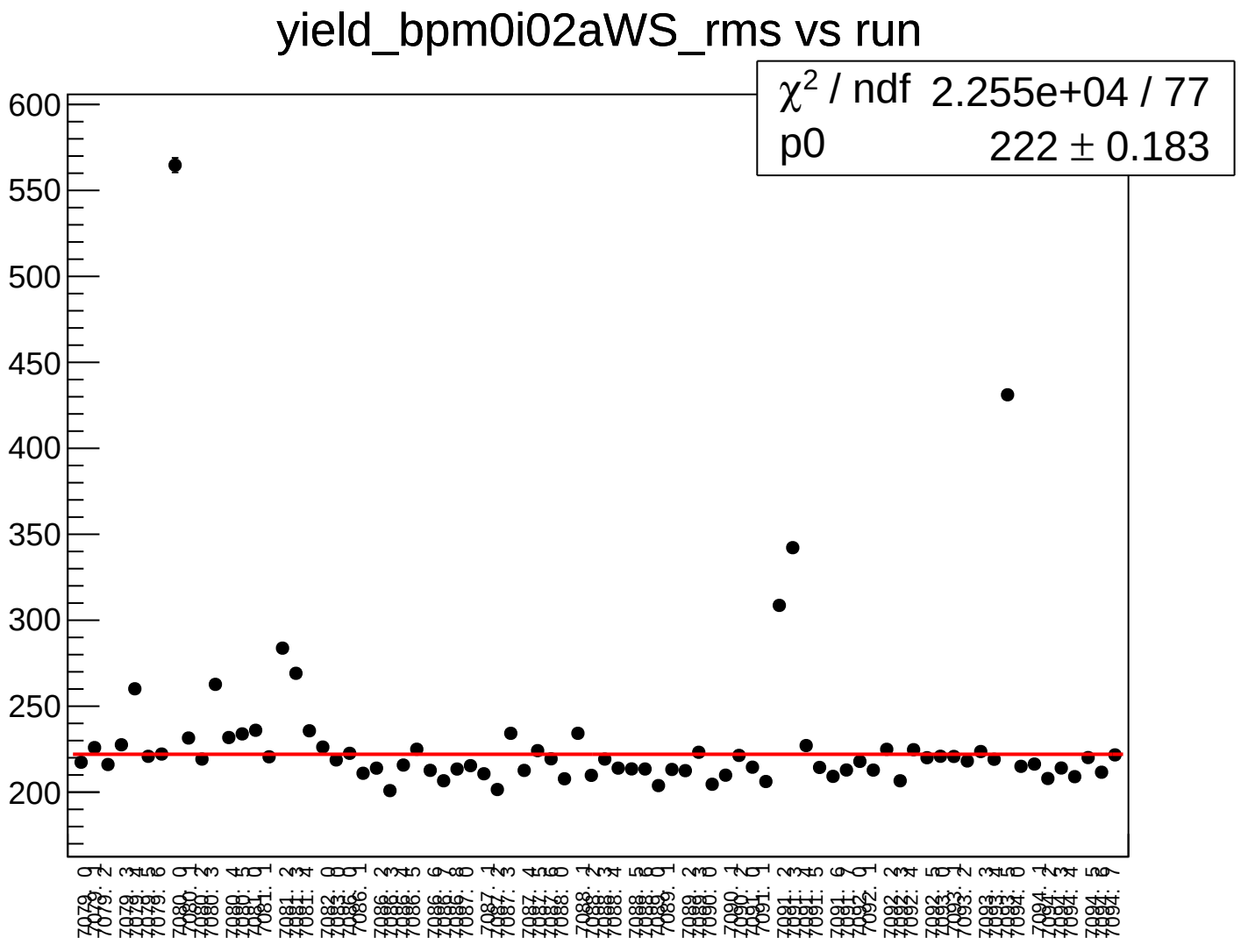

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 4.198e+05 / 77
p0 1.416e+05 ± 0.2494
141.8
141.7
141.6
141.5
141.4
141.3
141.2
141.1
pull
Entries 78
Mean 282.8
Std Dev 214.9
50
0
−50
−100
−150
−200
−250

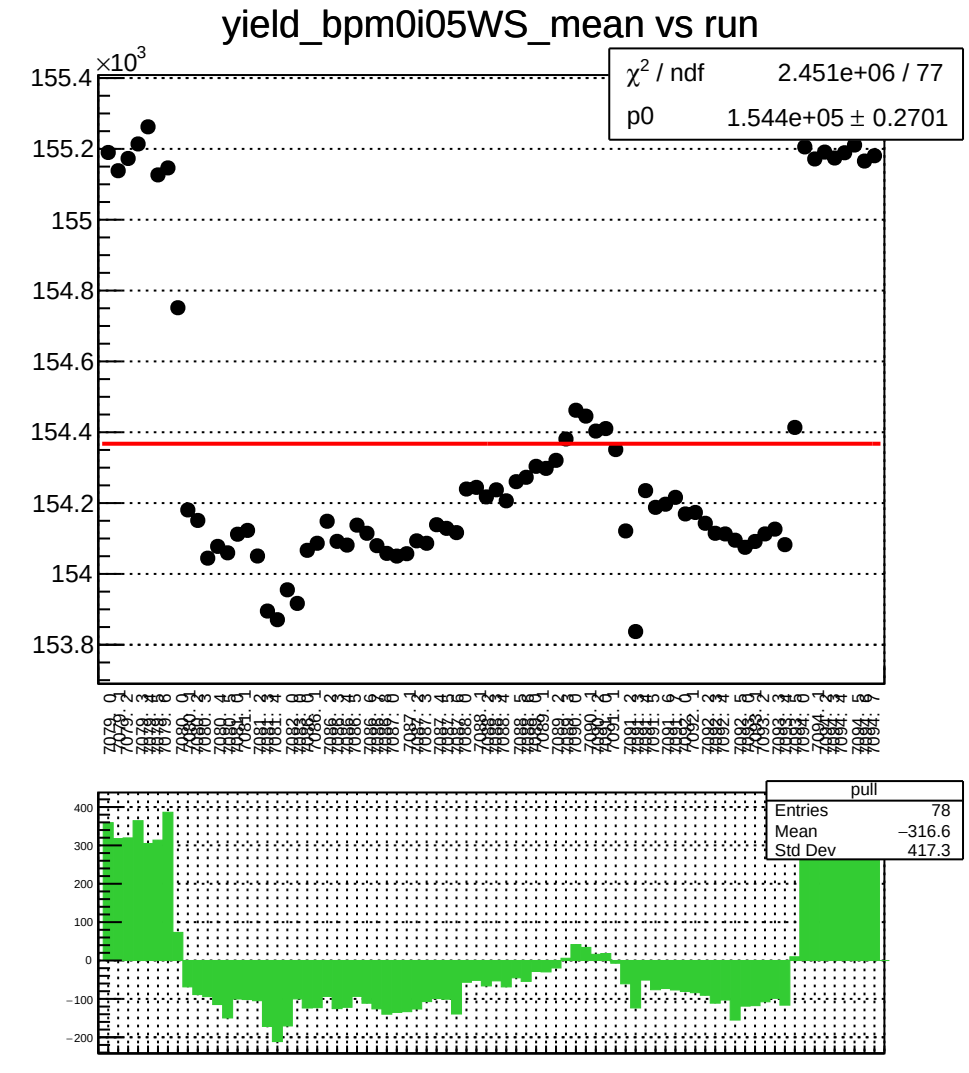

pull1D
Entries 78
Mean 1.127
Std Dev 4.022
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

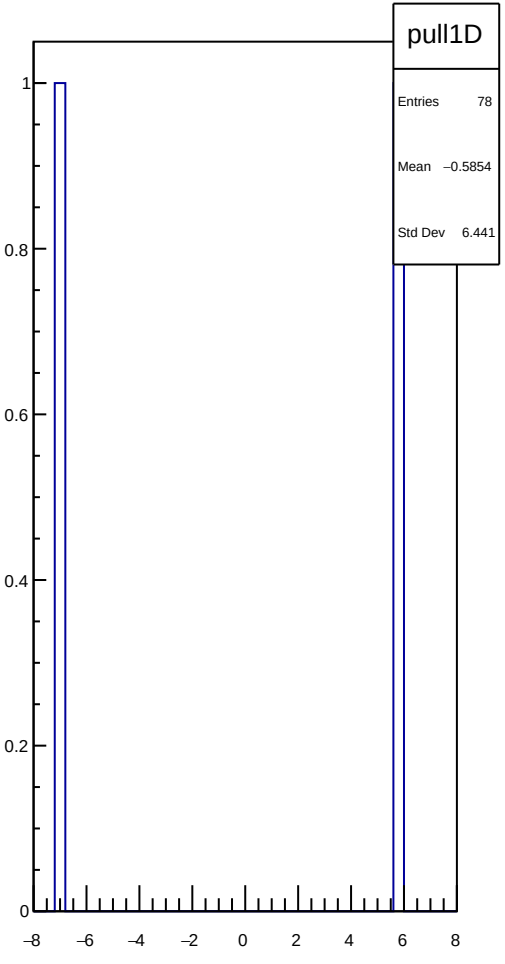

yield_bpm0i02WS_rms vs run
χ² / ndf 8897 / 77
p0 215 ± 0.1764
340
320
300
280
260
240
220
200

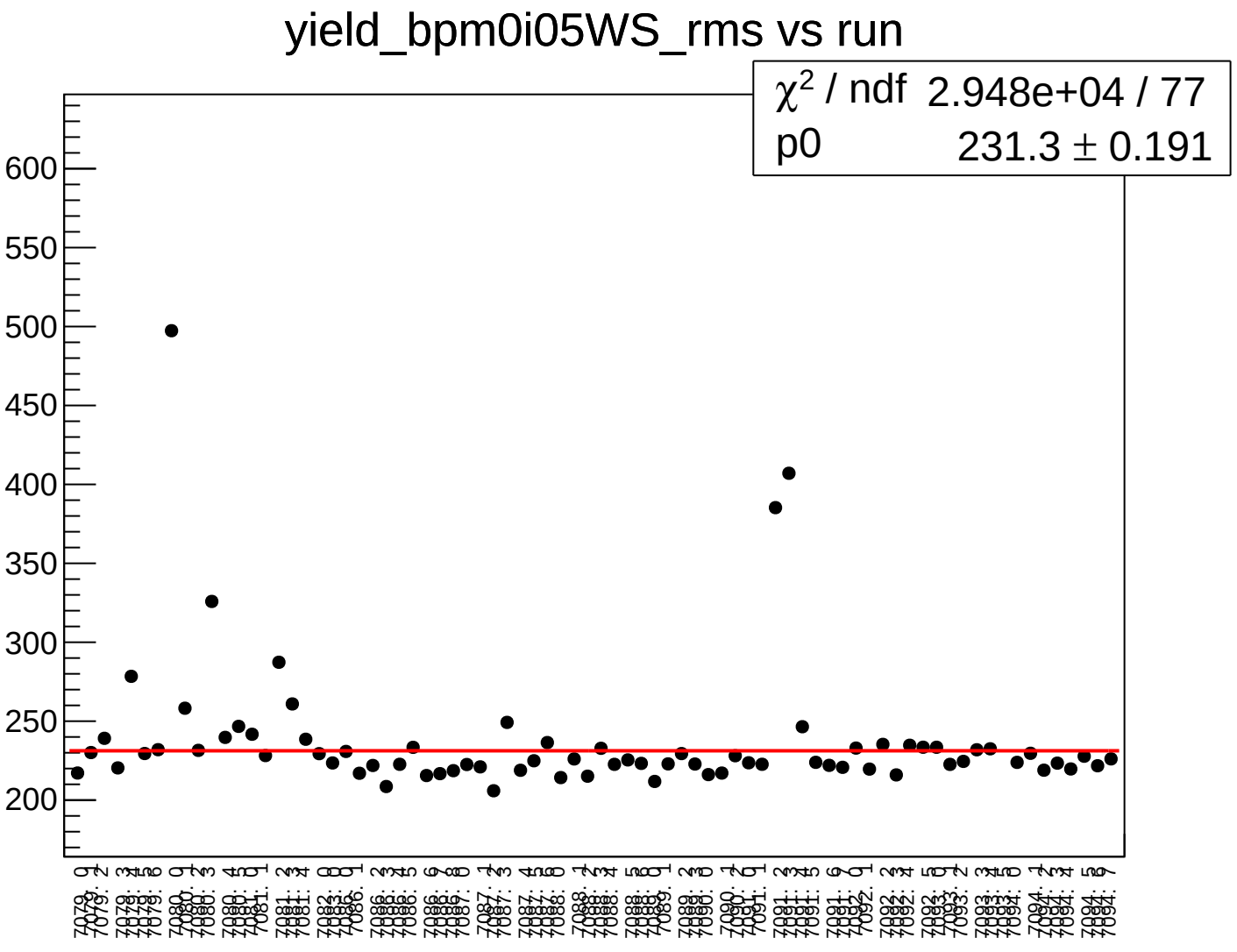

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 1.775e+06 / 77
p0 1.396e+05 ± 0.2587
140.6
140.4
140.2
140
139.8
139.6
139.4
139.2
139
pull
Entries 78
Mean −7.046e+06
Std Dev 7.046e+06
400
300
200
100
0
−100
−200
−300

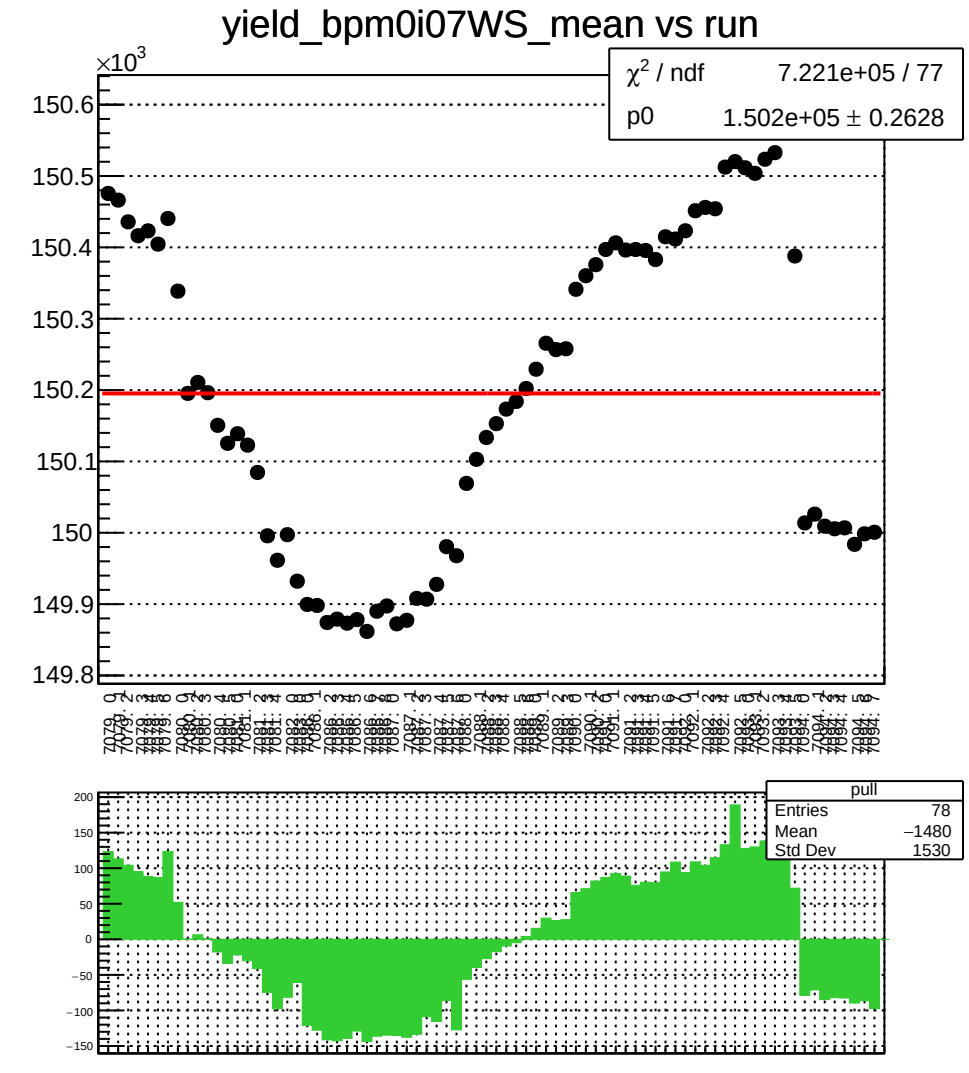

pull1D
Entries 78
Mean −3.552
Std Dev 4.617
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

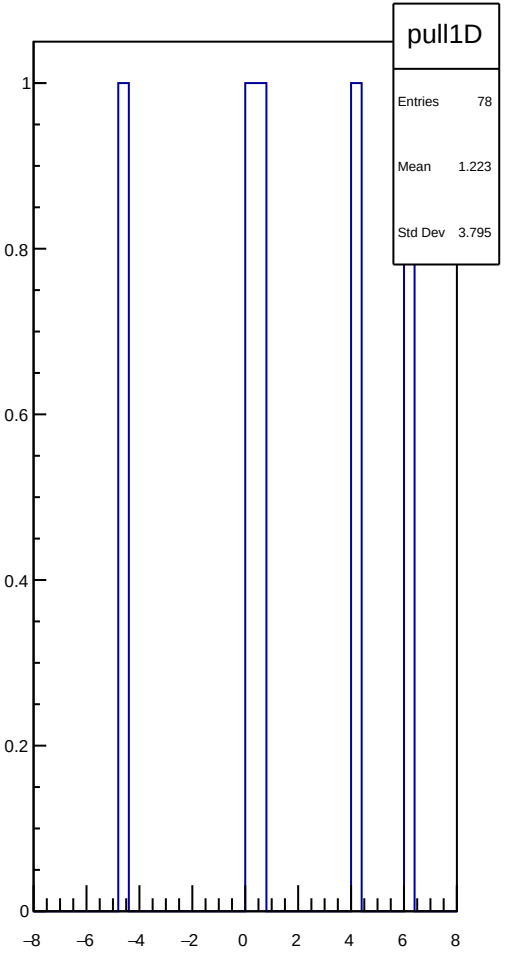

yield_bpm0i02aWS_rms vs run
χ² / ndf 2.255e+04 / 77
p0 222 ± 0.183
600
550
500
450
400
350
300
250
200

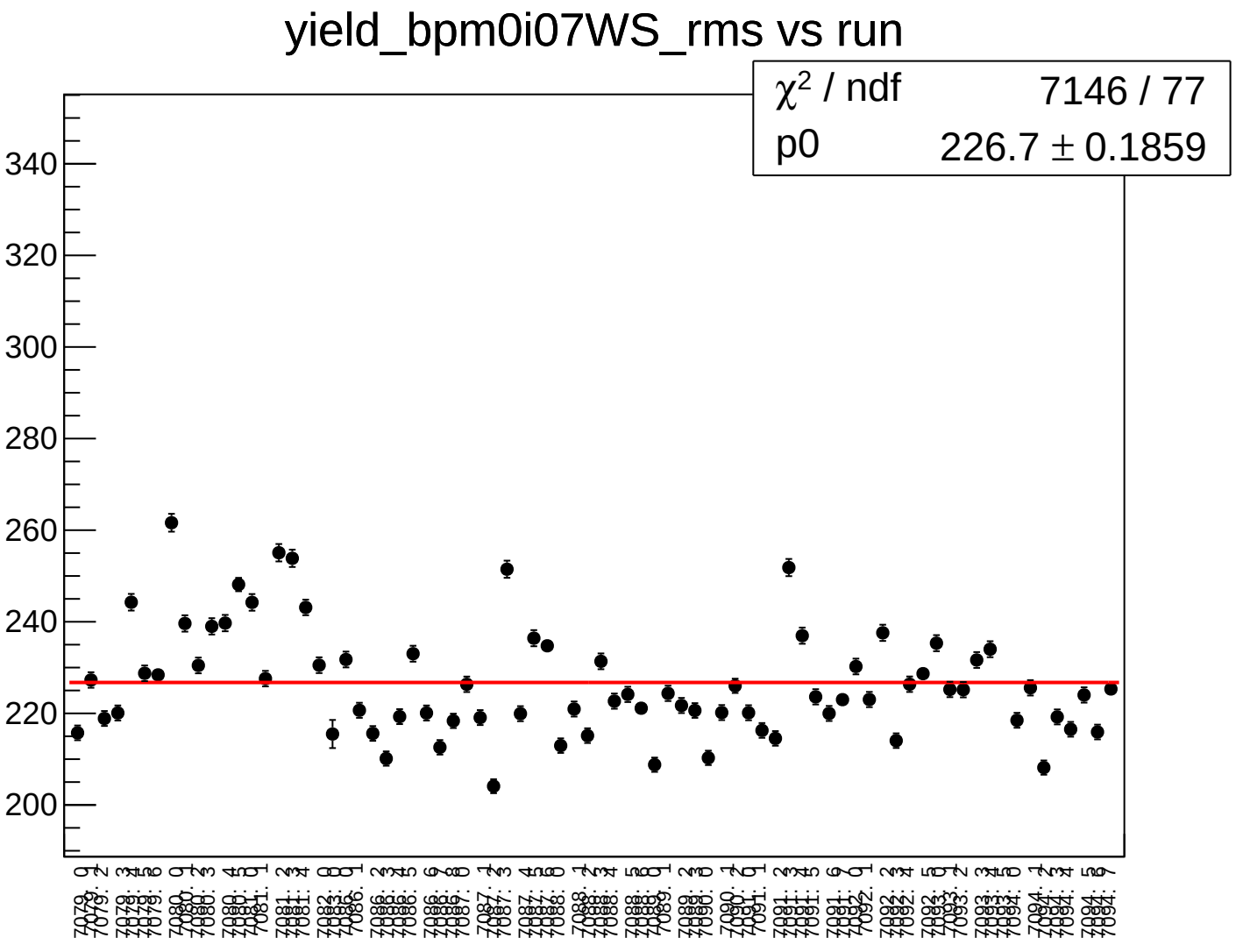

yield_bpm0i05WS_mean vs run
χ² / ndf 2.451e+06 / 77
p0 1.544e+05 ± 0.2701
×10³
155.4
155.2
155
154.8
154.6
154.4
154.2
154
153.8
pull
Entries 78
Mean −316.6
Std Dev 417.3
400
300
200
100
0
−100
−200

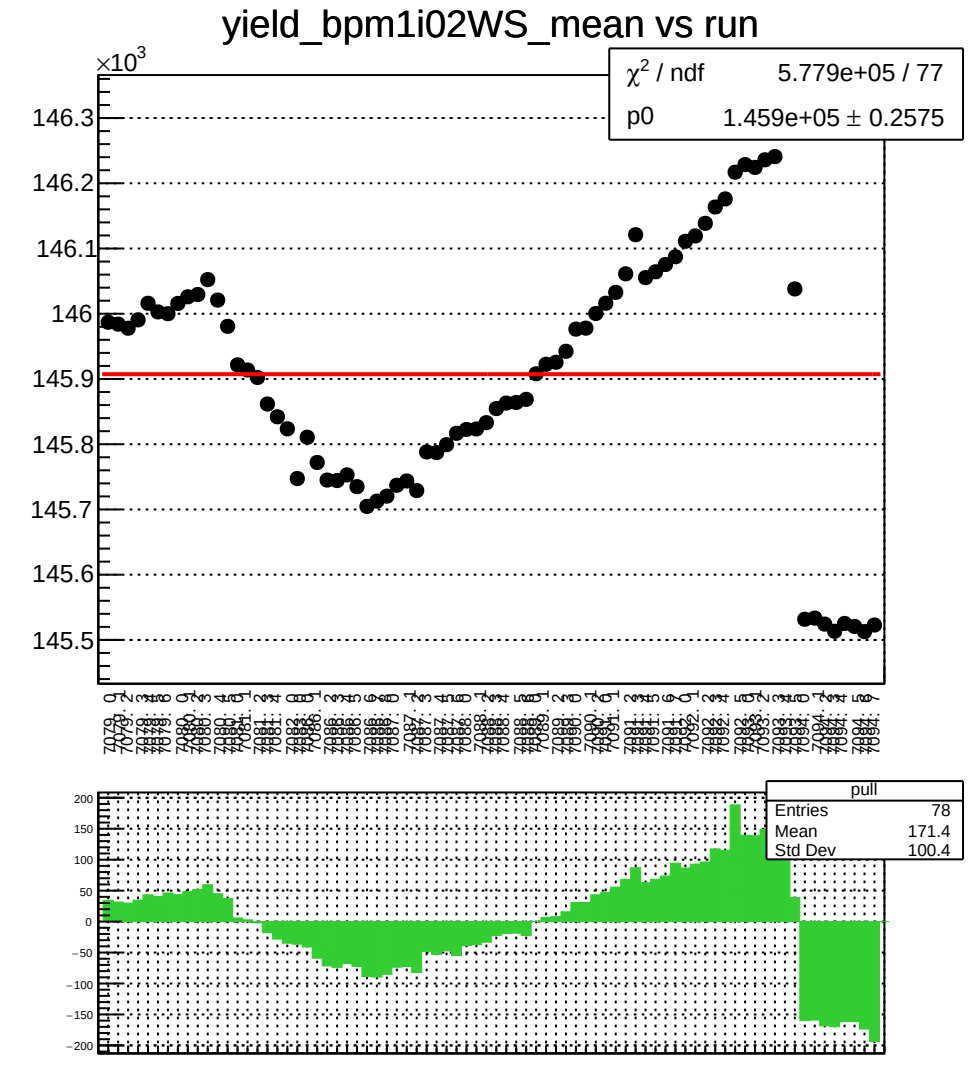

pull1D
Entries 78
Mean −0.5854
Std Dev 6.441
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

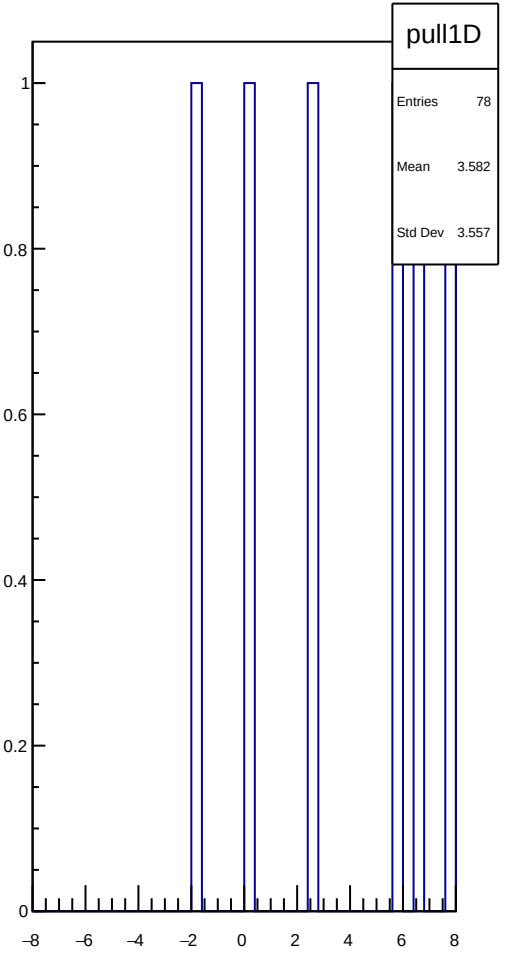

yield_bpm0i05WS_rms vs run
χ² / ndf 2.948e+04 / 77
p0 231.3 ± 0.191
600
550
500
450
400
350
300
250
200

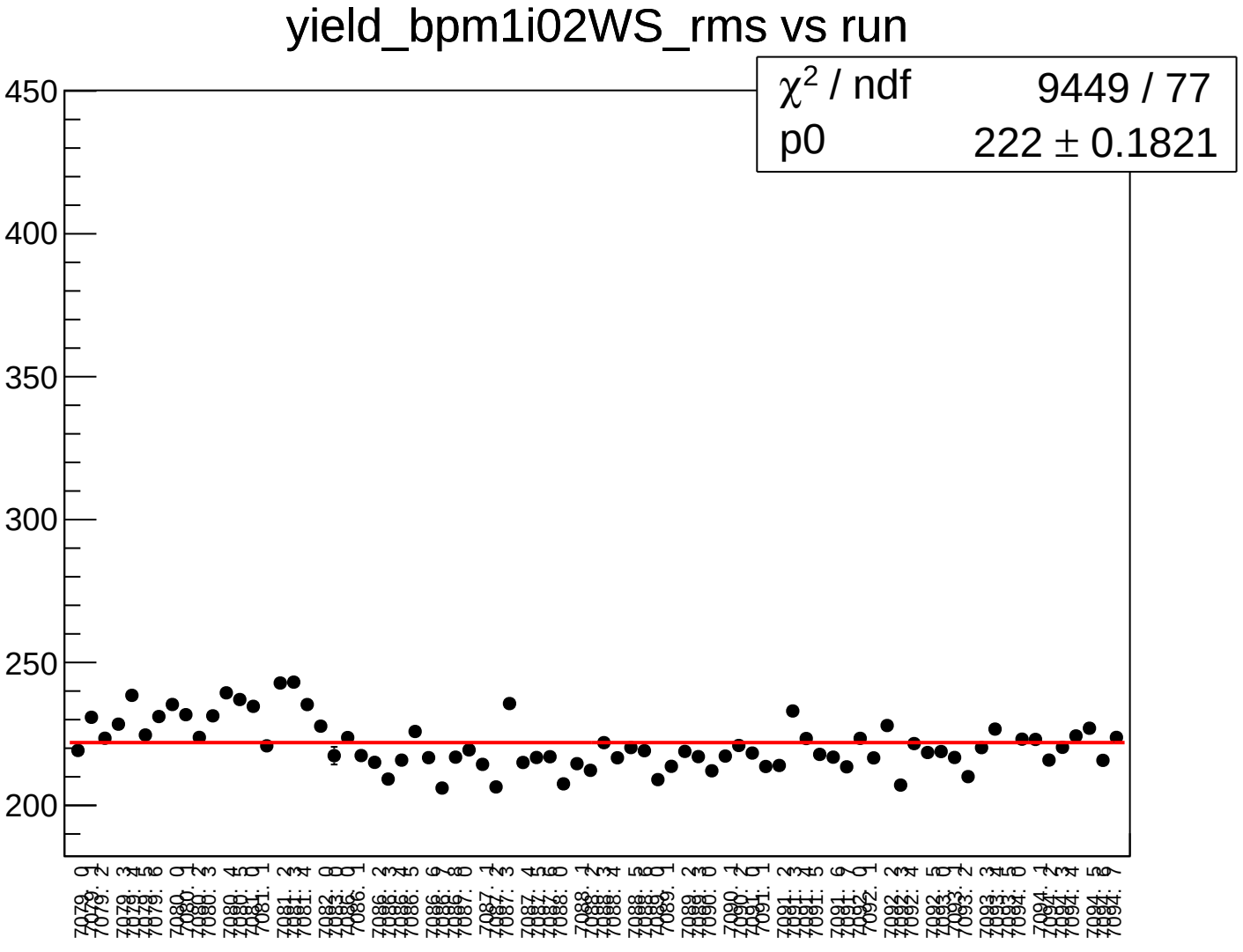

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 7.221e+05 / 77
p0 1.502e+05 ± 0.2628
150.6
150.5
150.4
150.3
150.2
150.1
150
149.9
149.8
pull
Entries 78
Mean −1480
Std Dev 1530
200
150
100
50
0
−50
−100
−150

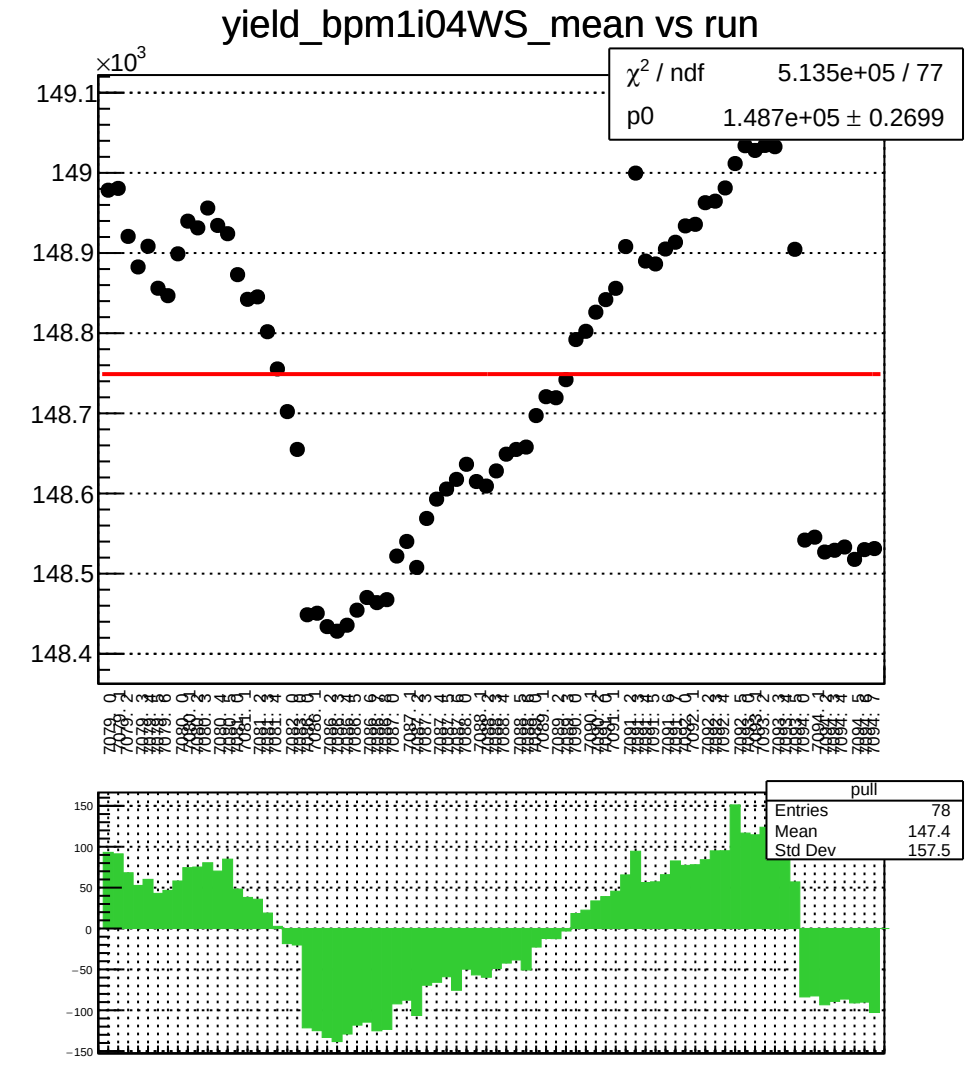

pull1D
Entries 78
Mean 1.223
Std Dev 3.795
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

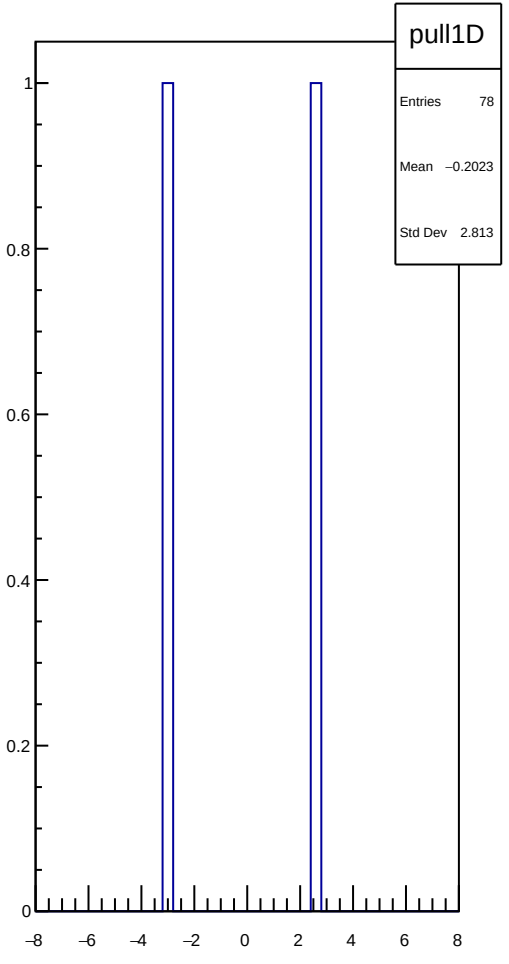

yield_bpm0i07WS_rms vs run
χ² / ndf 7146 / 77
p0 226.7 ± 0.1859
340
320
300
280
260
240
220
200

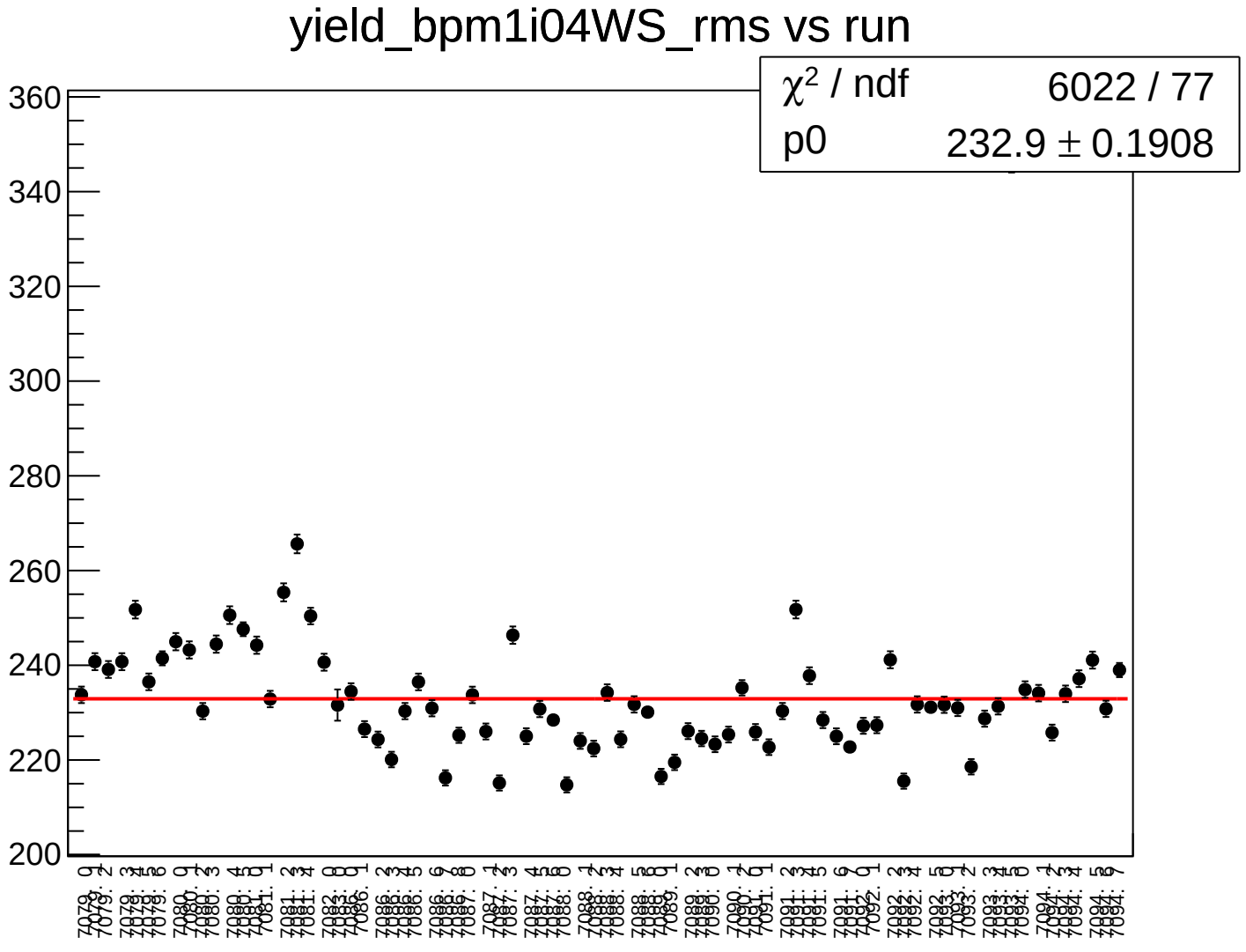

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 5.779e+05 / 77
p0 1.459e+05 ± 0.2575
146.3
146.2
146.1
146
145.9
145.8
145.7
145.6
145.5
pull
Entries 78
Mean 171.4
Std Dev 100.4
200
150
100
50
0
−50
−100
−150
−200

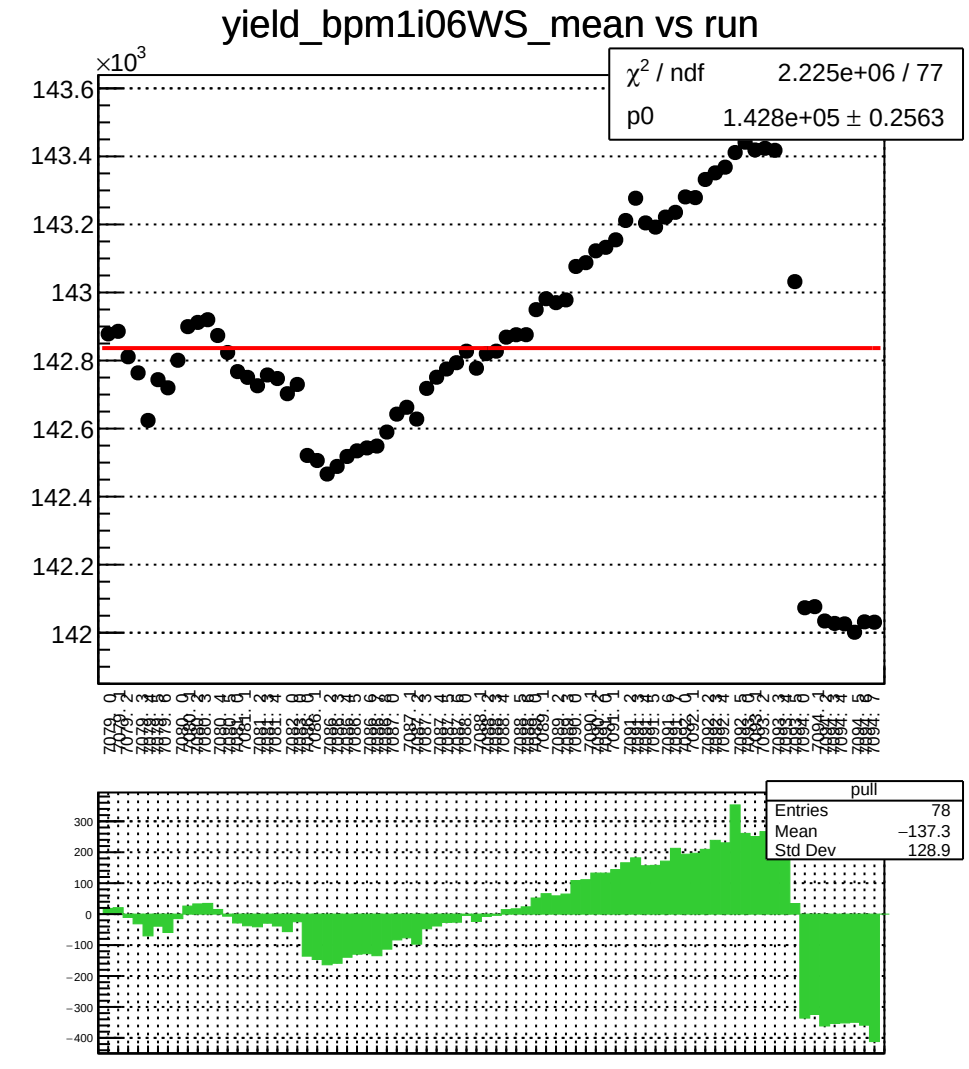

pull1D
Entries 78
Mean 3.582
Std Dev 3.557
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

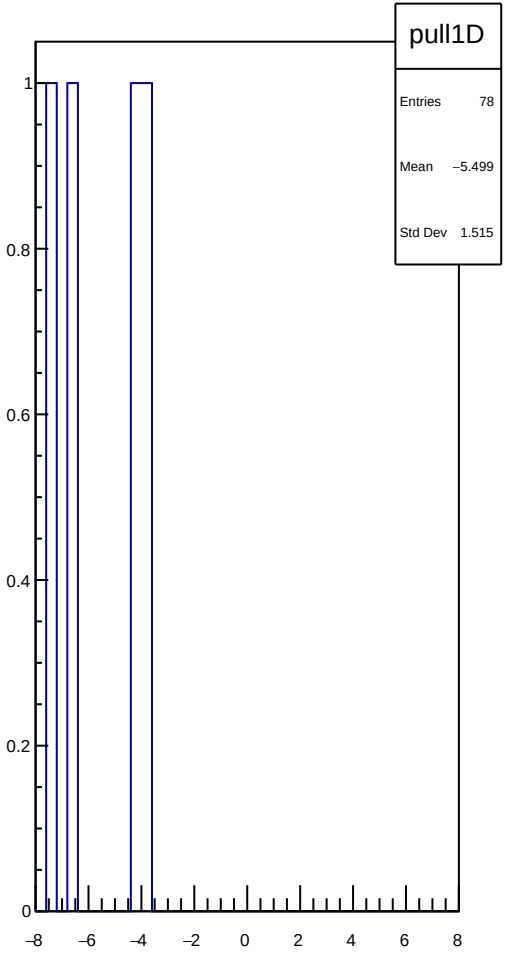

yield_bpm1i02WS_rms vs run
χ^2 / ndf 9449 / 77
p0 222 ± 0.1821
450
400
350
300
250
200

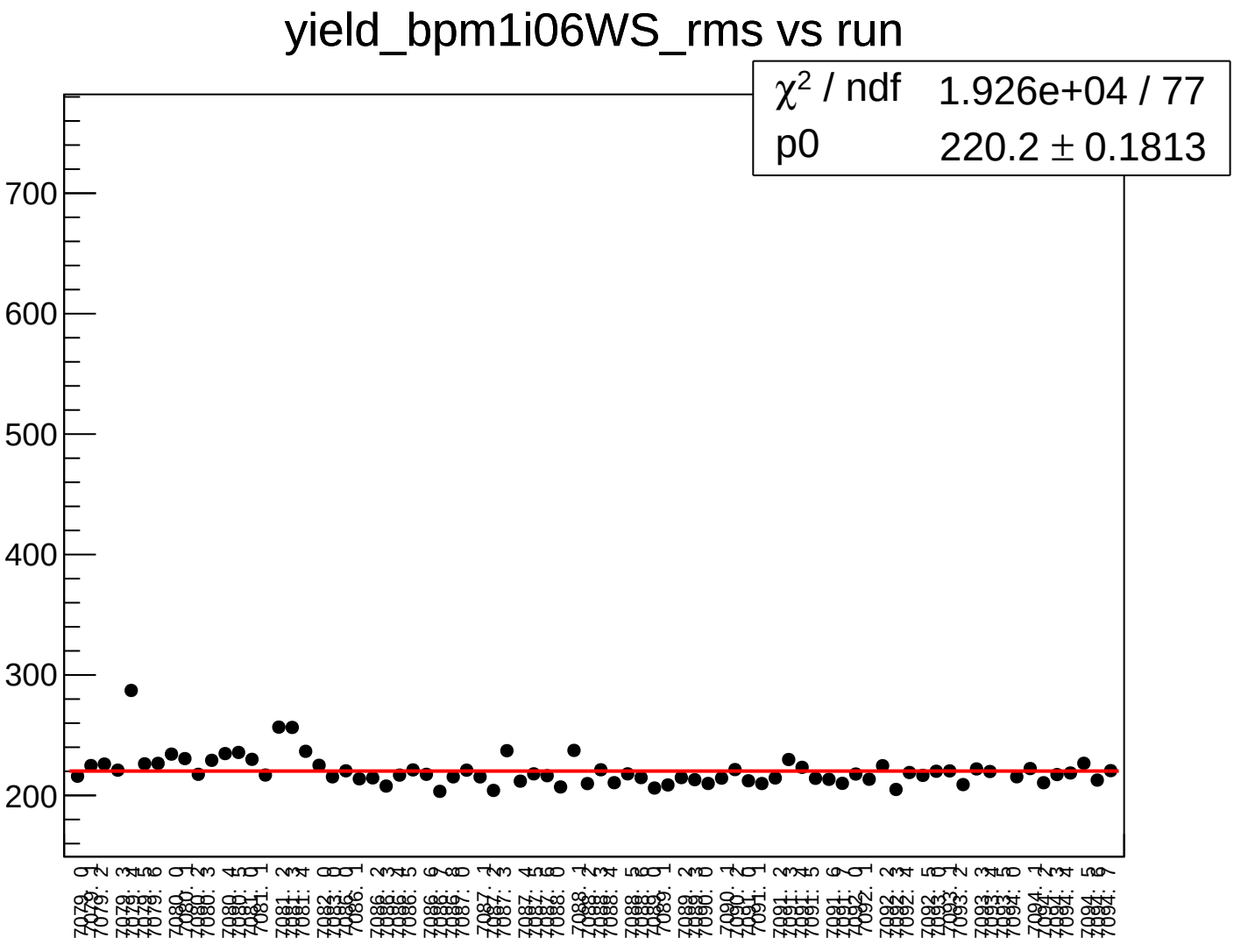

yield_bpm1i04WS_mean vs run
×10^3
149.1
149
148.9
148.8
148.7
148.6
148.5
148.4
χ² / ndf 5.135e+05 / 77
p0 1.487e+05 ± 0.2699
pull
Entries 78
Mean 147.4
Std Dev 157.5
150
100
50
0
−50
−100
−150

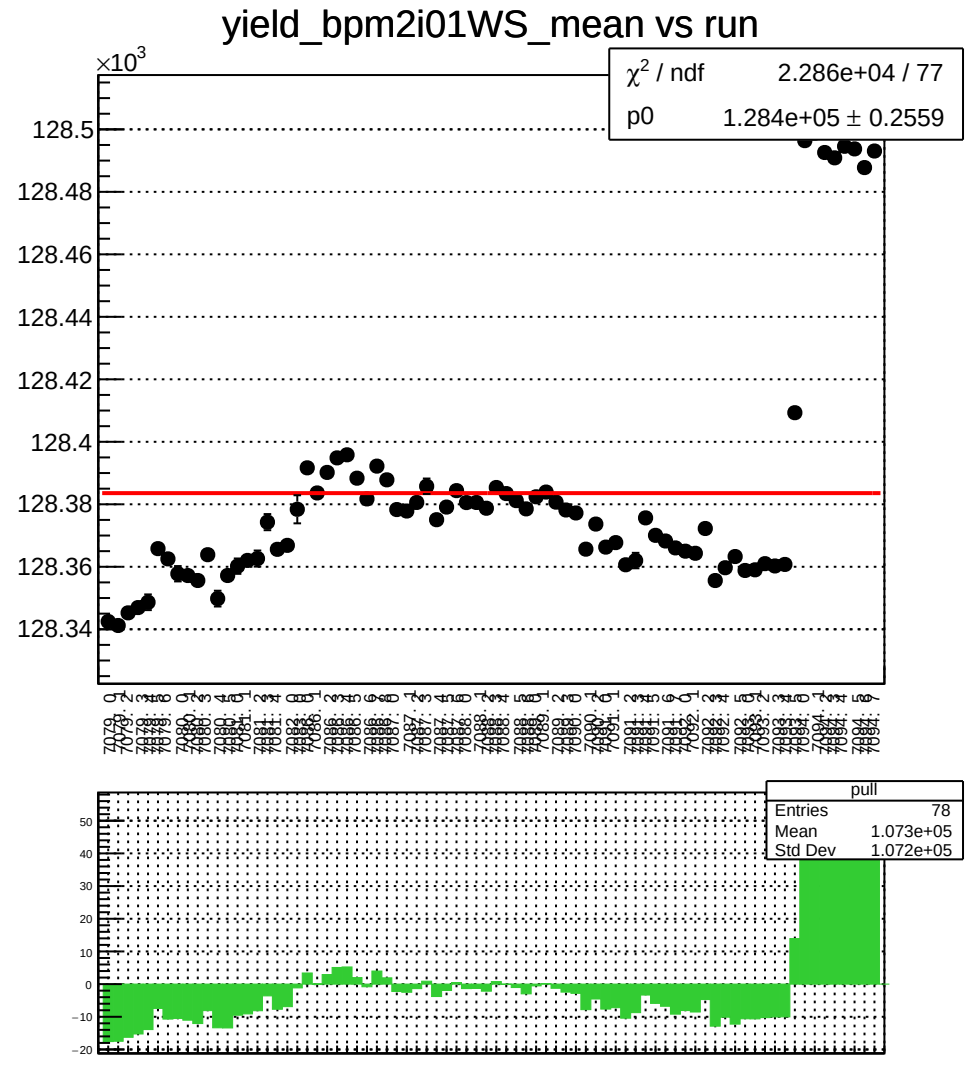

pull1D
Entries 78
Mean −0.2023
Std Dev 2.813
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

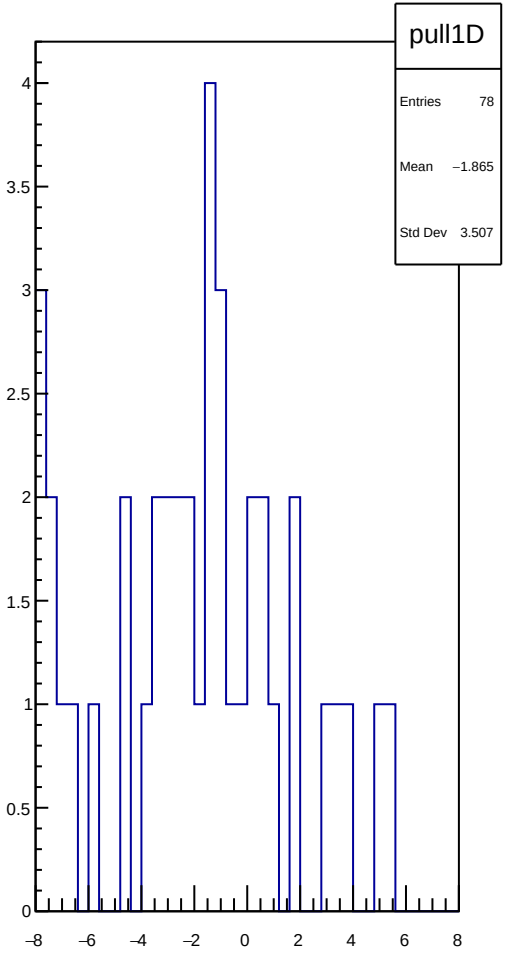

yield_bpm1i04WS_rms vs run
χ² / ndf 6022 / 77
p0 232.9 ± 0.1908
360
340
320
300
280
260
240
220
200

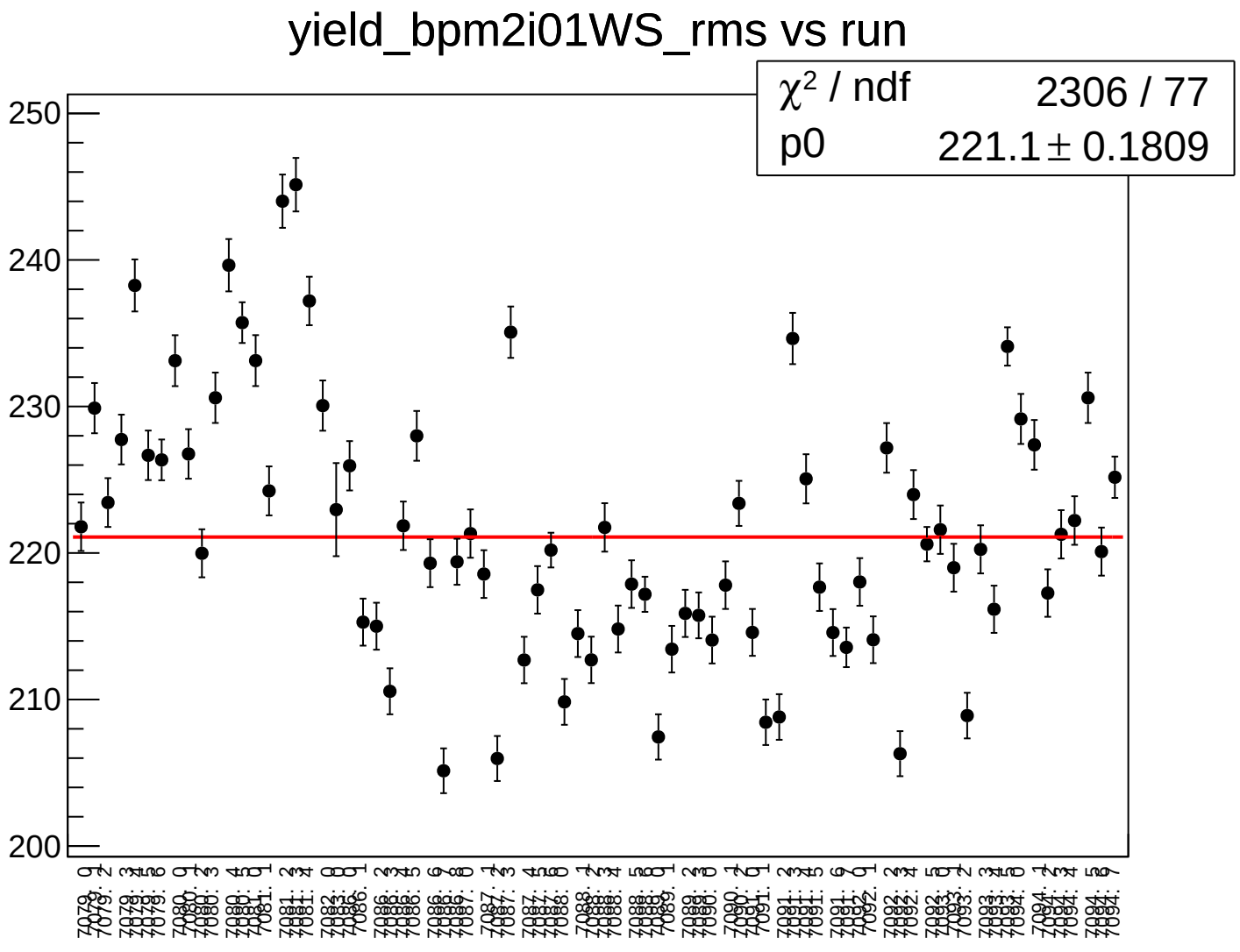

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 2.225e+06 / 77
p0 1.428e+05 ± 0.2563
143.6
143.4
143.2
143
142.8
142.6
142.4
142.2
142
pull
Entries 78
Mean −137.3
Std Dev 128.9
300
200
100
0
−100
−200
−300
−400

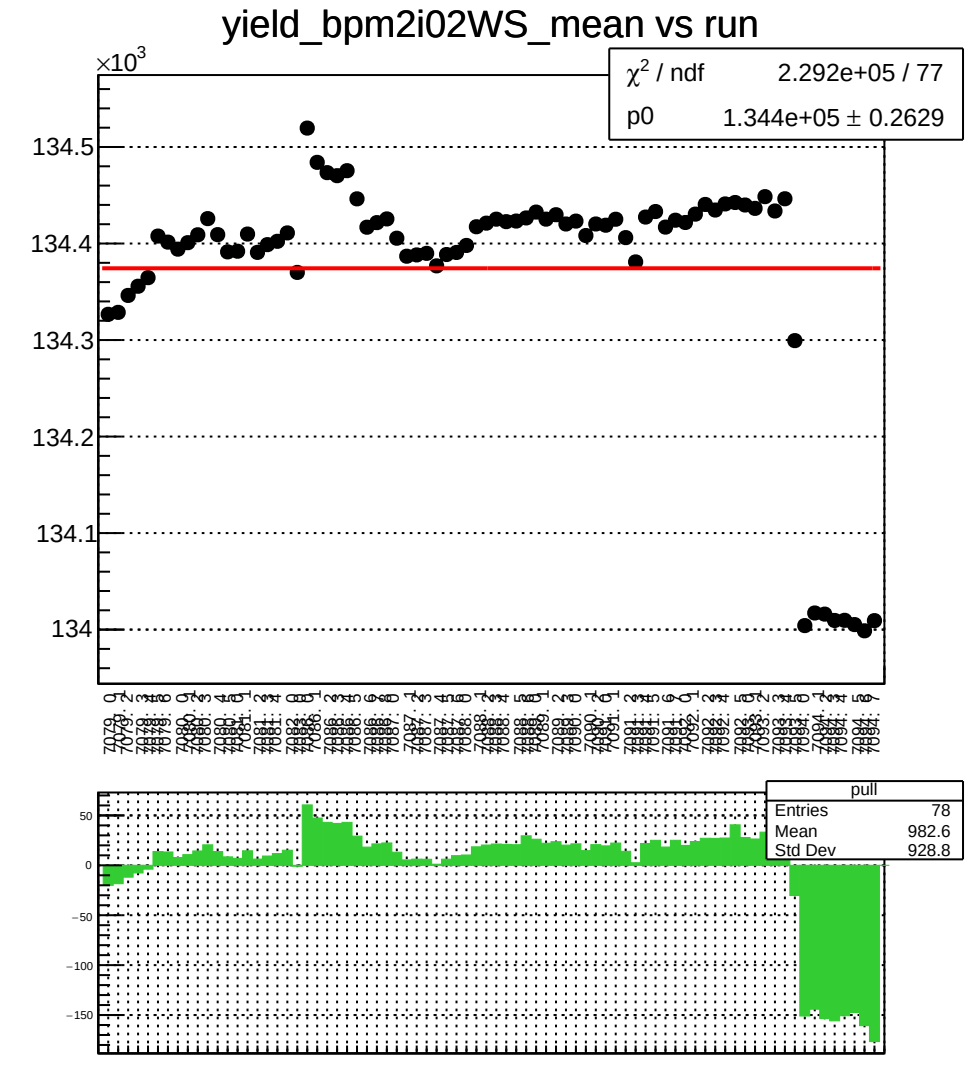

pull1D
Entries 78
Mean −5.499
Std Dev 1.515
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

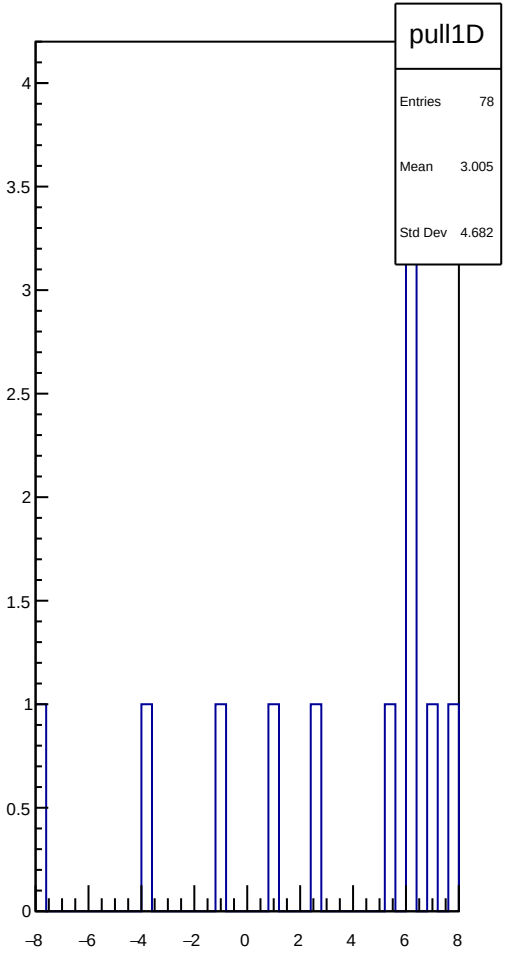

yield_bpm1i06WS_rms vs run
χ² / ndf 1.926e+04 / 77
p0 220.2 ± 0.1813
700
600
500
400
300
200

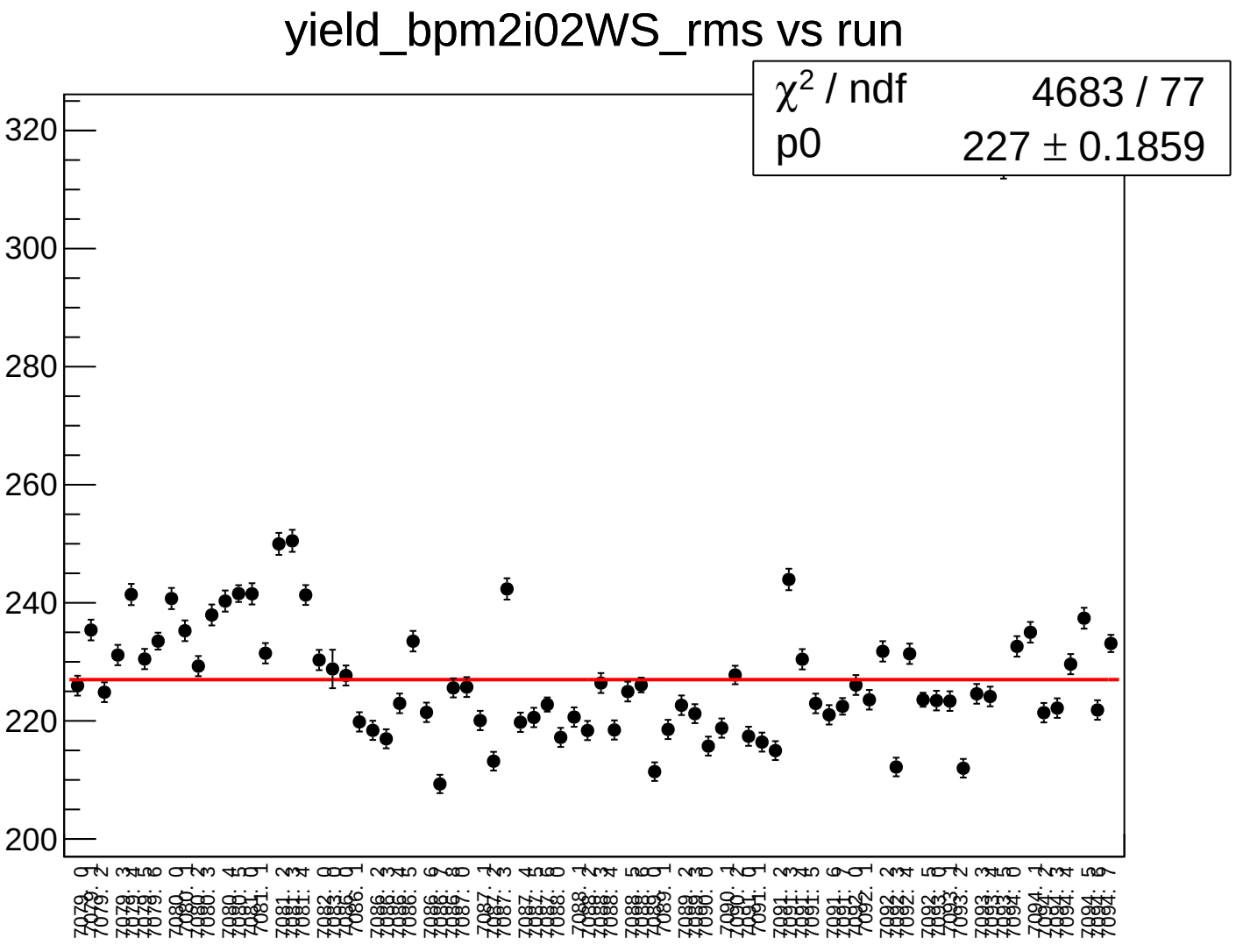

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 2.286e+04 / 77
p0 1.284e+05 ± 0.2559
128.5
128.48
128.46
128.44
128.42
128.4
128.38
128.36
128.34
pull
Entries 78
Mean 1.073e+05
Std Dev 1.072e+05
50
40
30
20
10
0
−10
−20

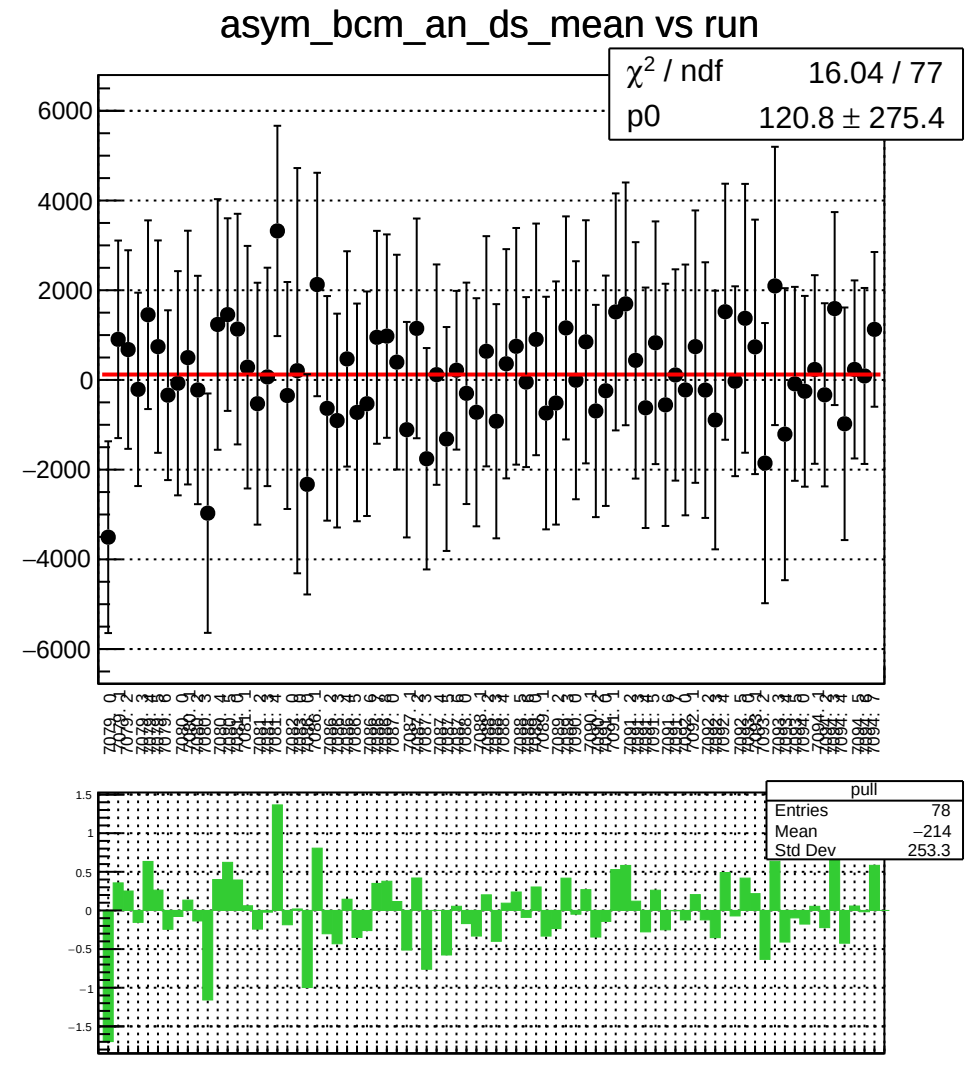

pull1D
Entries 78
Mean −1.865
Std Dev 3.507
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

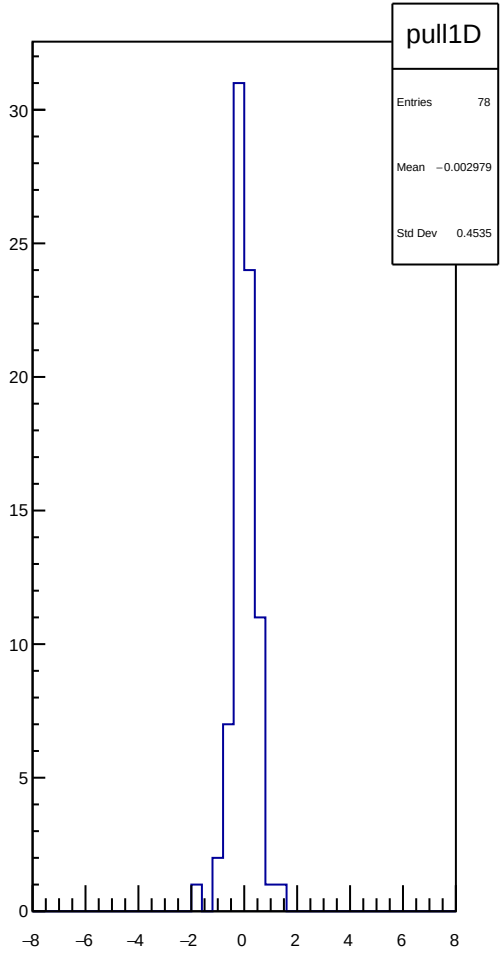

yield_bpm2i01WS_rms vs run
χ² / ndf 2306 / 77
p0 221.1 ± 0.1809
250
240
230
220
210
200

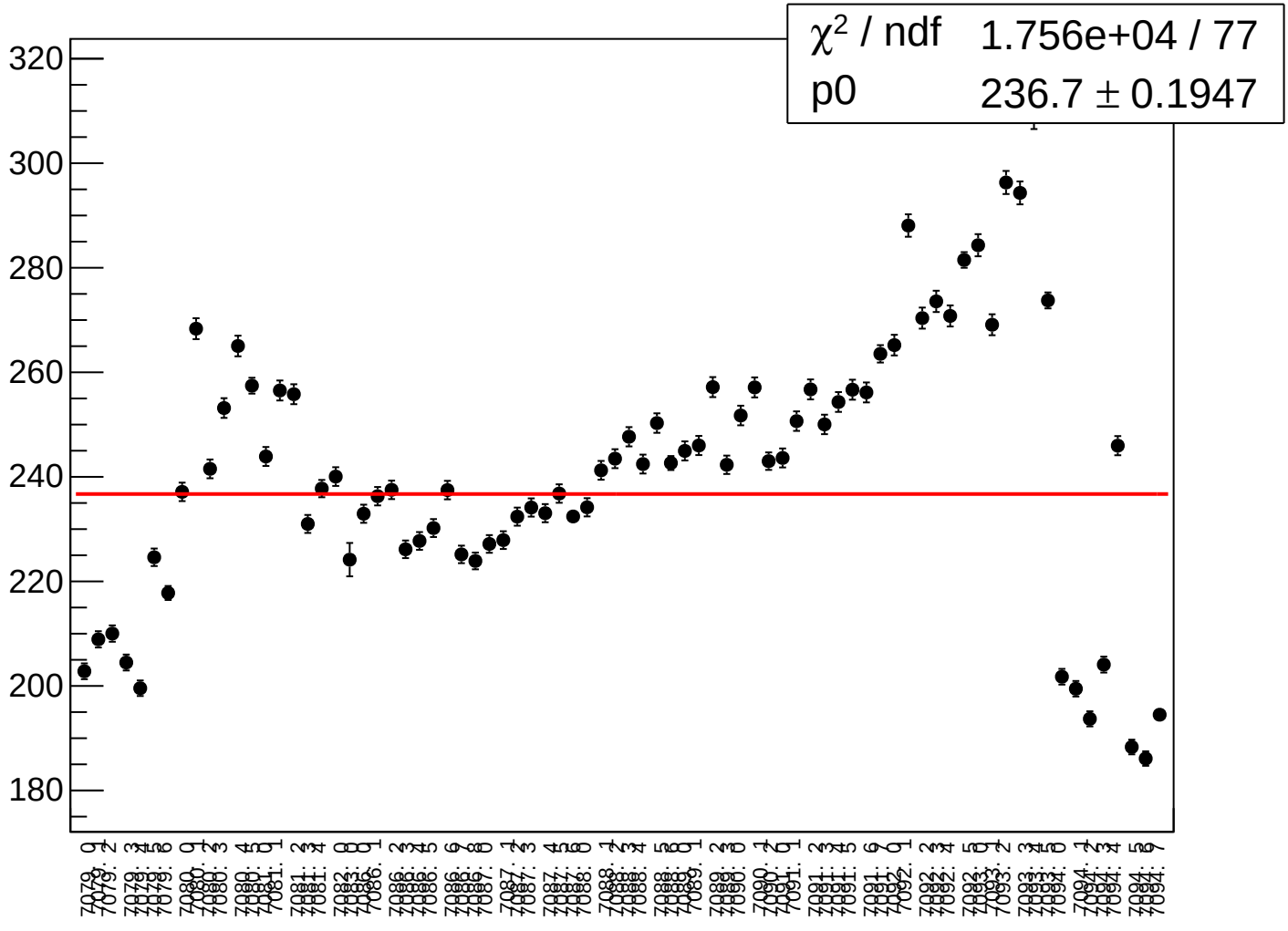

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 2.292e+05 / 77
p0 1.344e+05 ± 0.2629
134.5
134.4
134.3
134.2
134.1
134
pull
Entries 78
Mean 982.6
Std Dev 928.8
50
0
−50
−100
−150

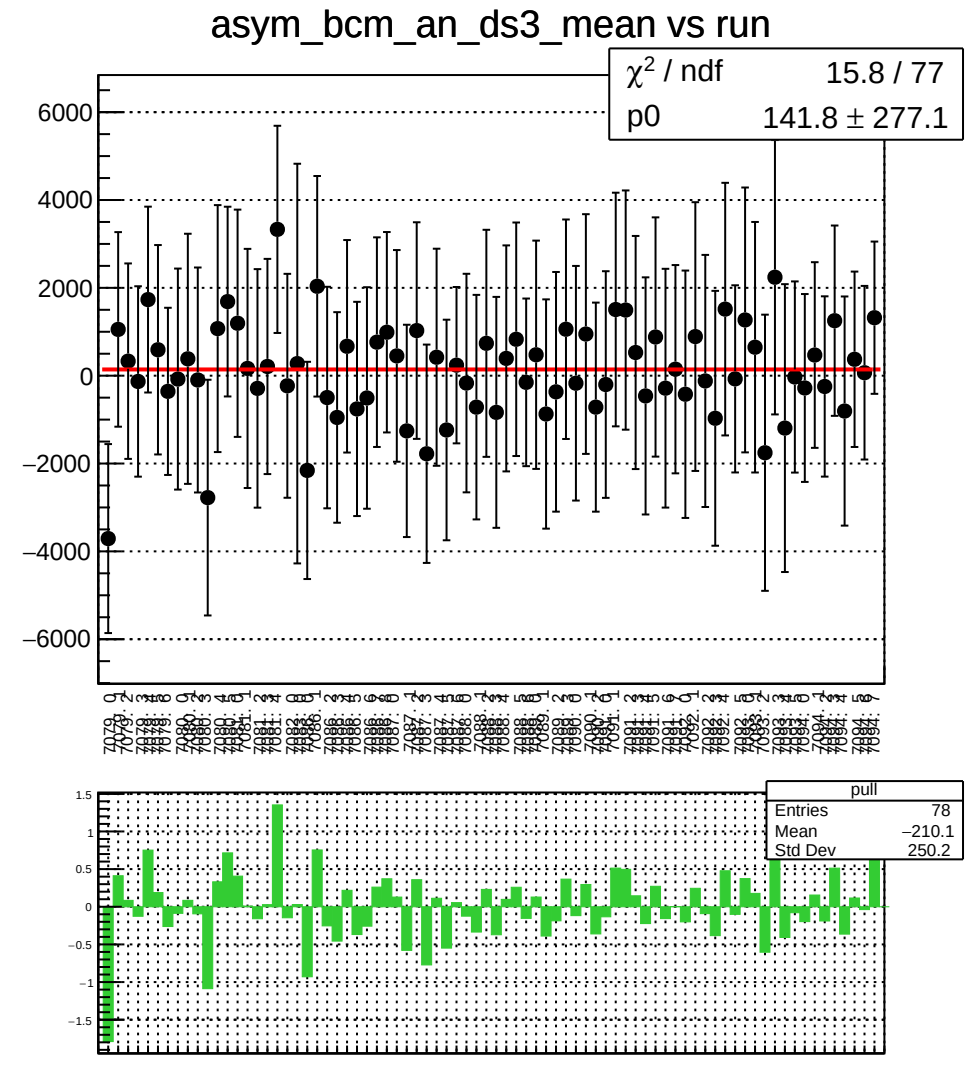

pull1D
Entries 78
Mean 3.005
Std Dev 4.682
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

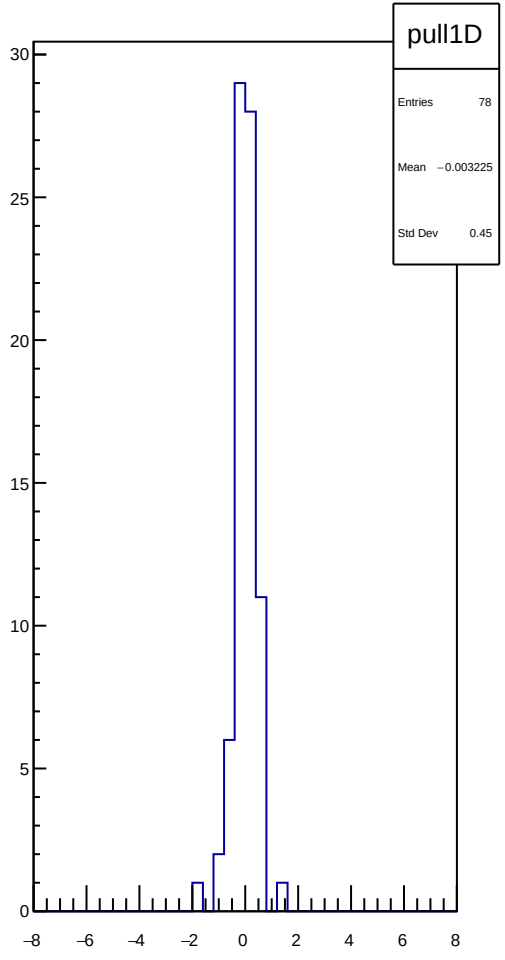

yield_bpm2i02WS_rms vs run
χ² / ndf 4683 / 77
p0 227 ± 0.1859
320
300
280
260
240
220
200

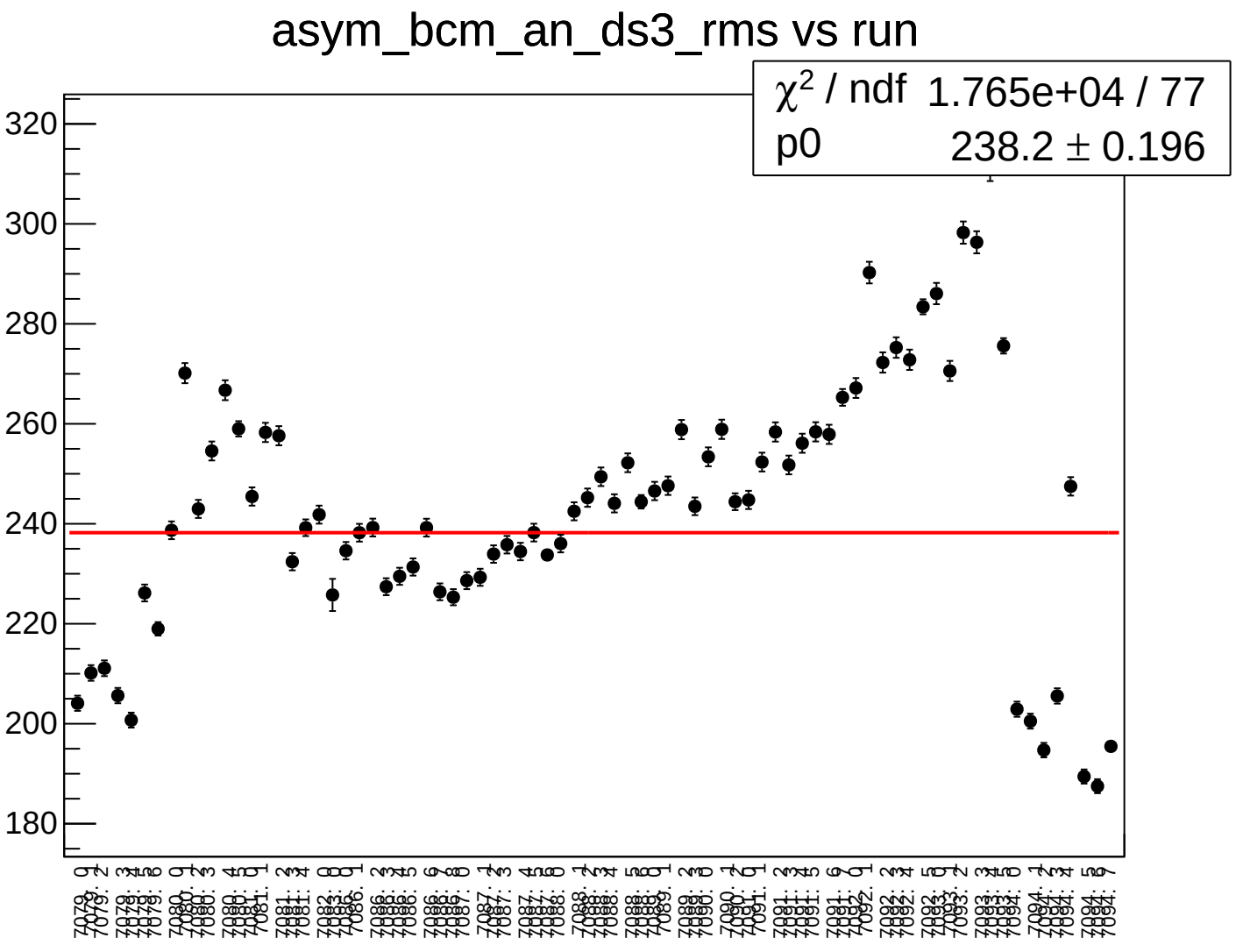

asym_bcm_an_ds_mean vs run
χ² / ndf 16.04 / 77
p0 120.8 ± 275.4
pull
Entries 78
Mean −214
Std Dev 253.3

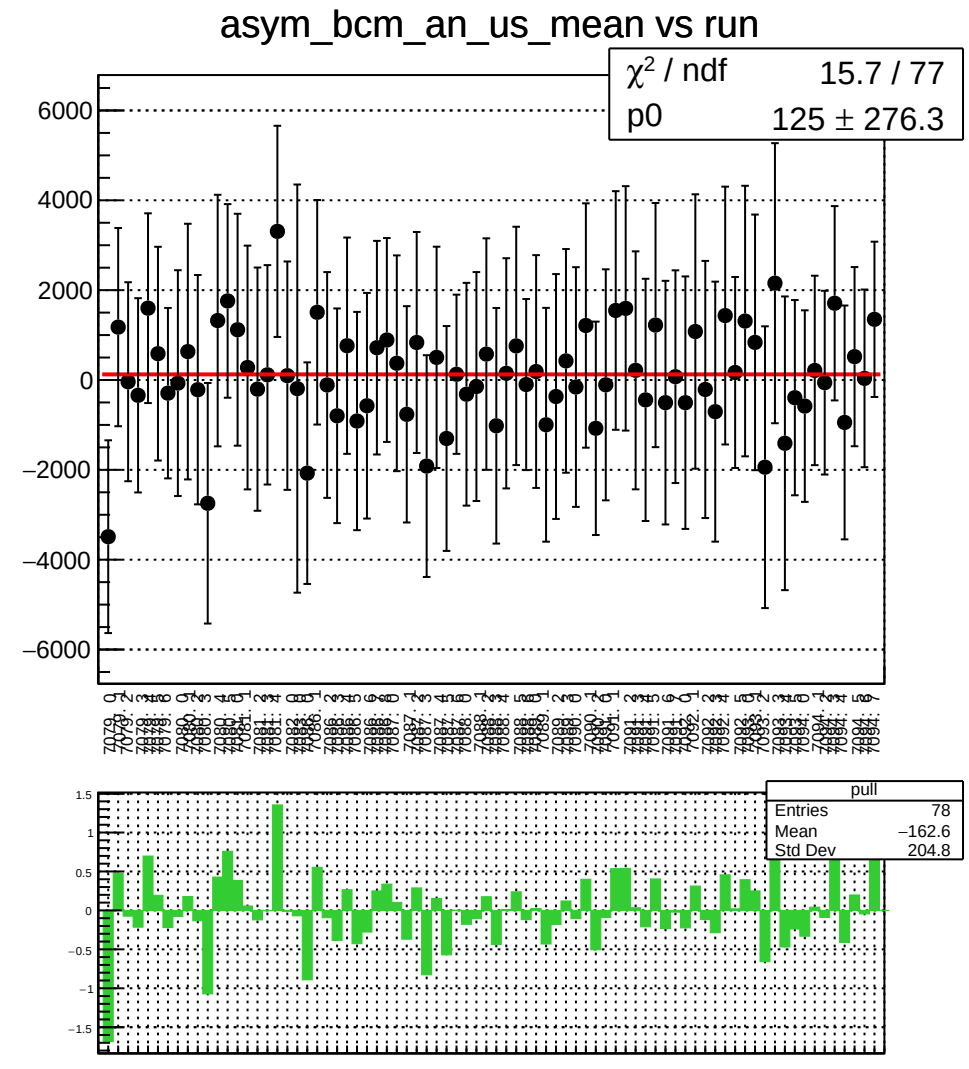

pull1D
Entries 78
Mean −0.002979
Std Dev 0.4535

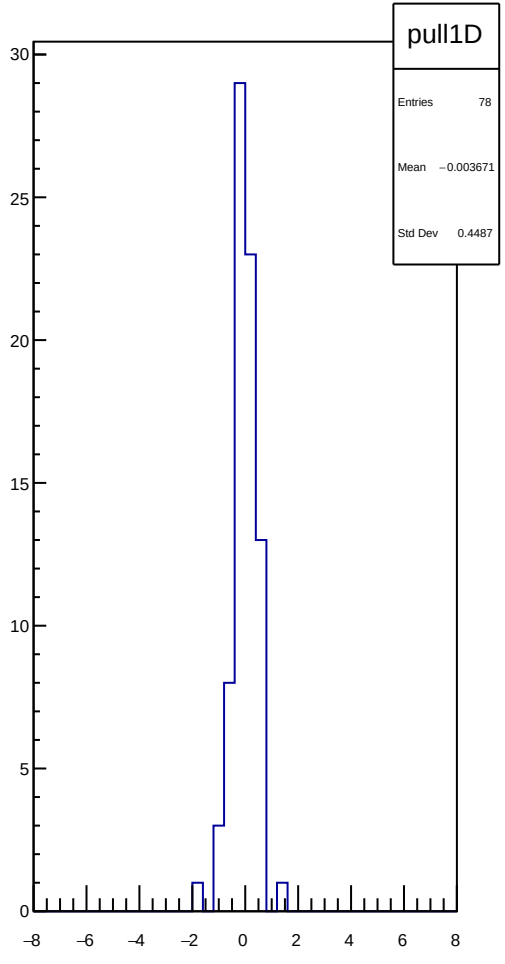

asym_bcm_an_ds_rms vs run
χ² / ndf 1.756e+04 / 77
p0 236.7 ± 0.1947
320
300
280
260
240
220
200
180

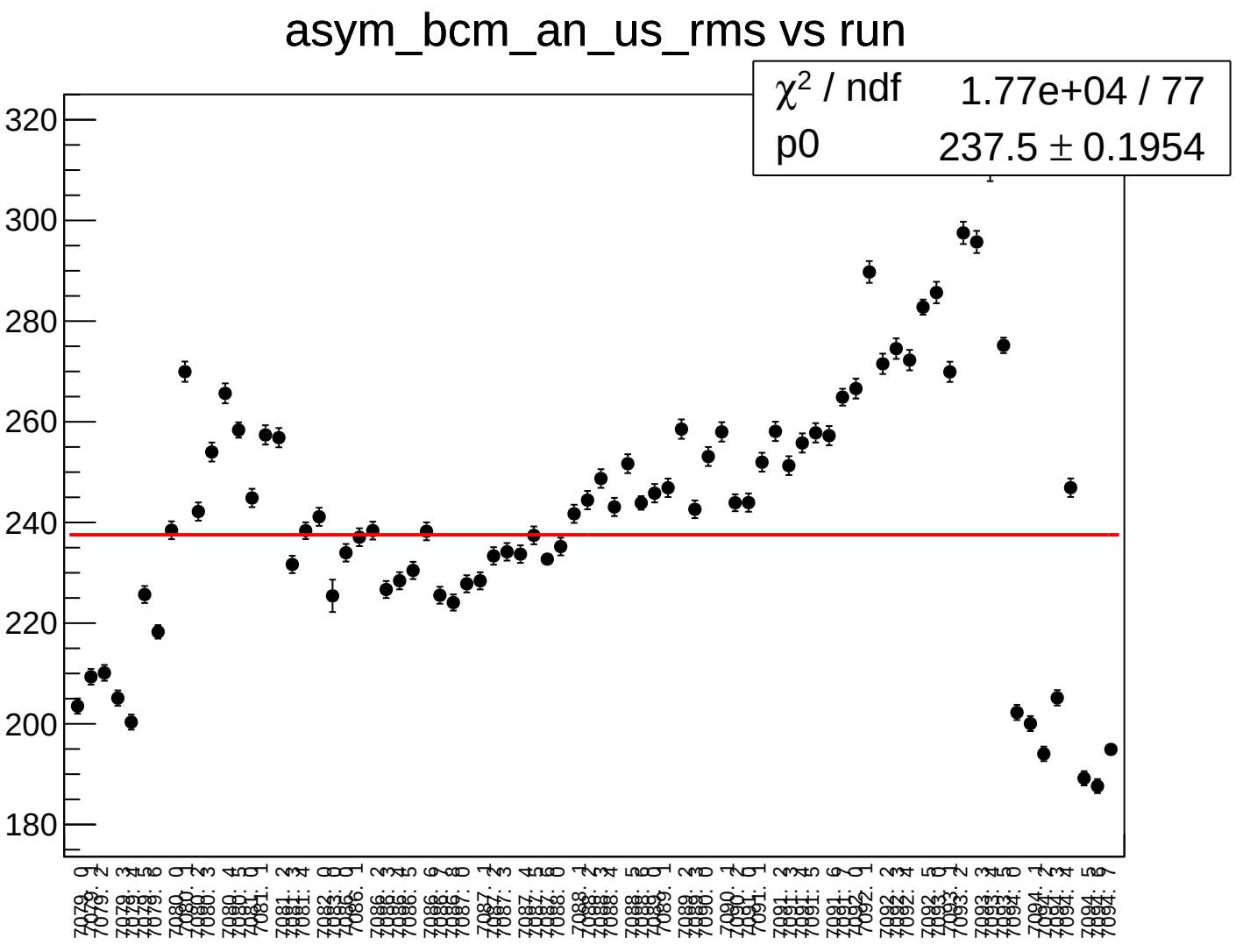

asym_bcm_an_ds3_mean vs run
χ² / ndf 15.8 / 77
p0 141.8 ± 277.1
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −210.1
Std Dev 250.2
1.5
1
0.5
0
−0.5
−1
−1.5

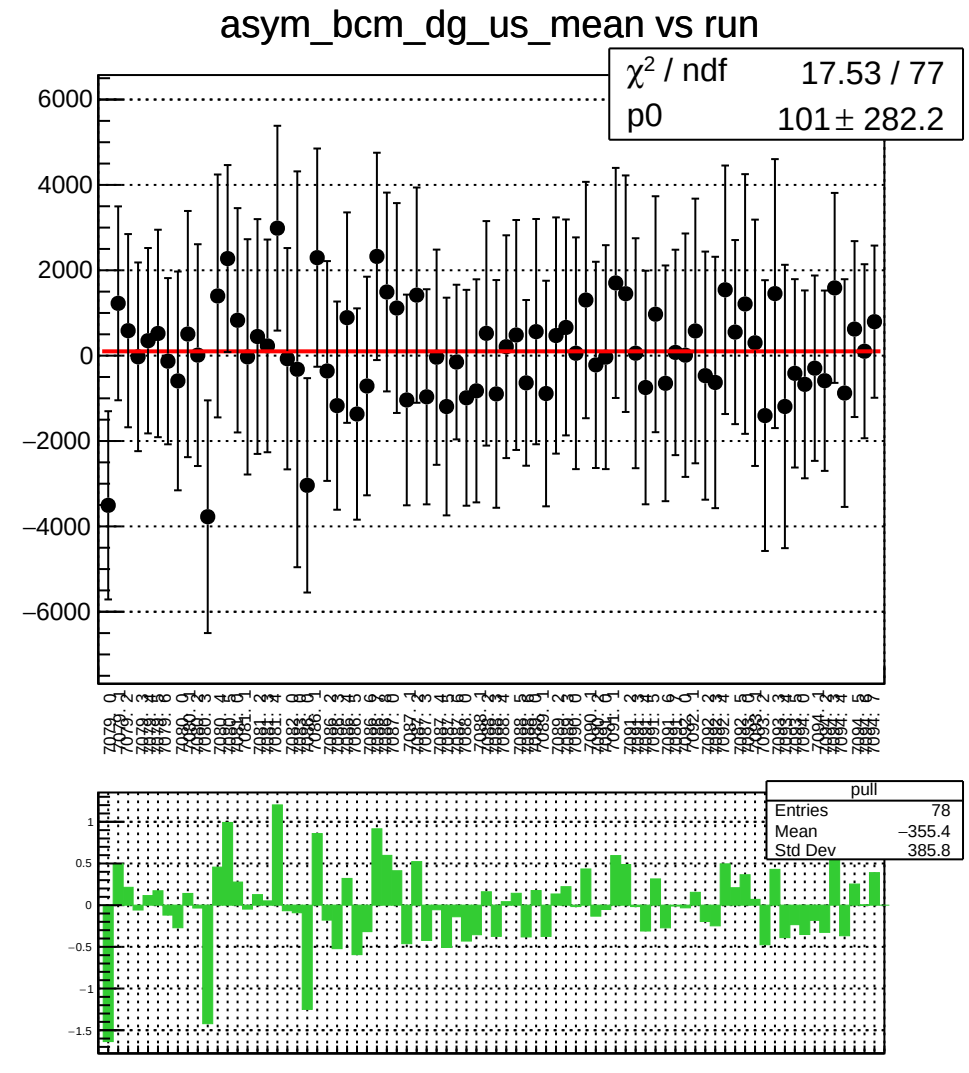

pull1D
Entries 78
Mean −0.003225
Std Dev 0.45
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

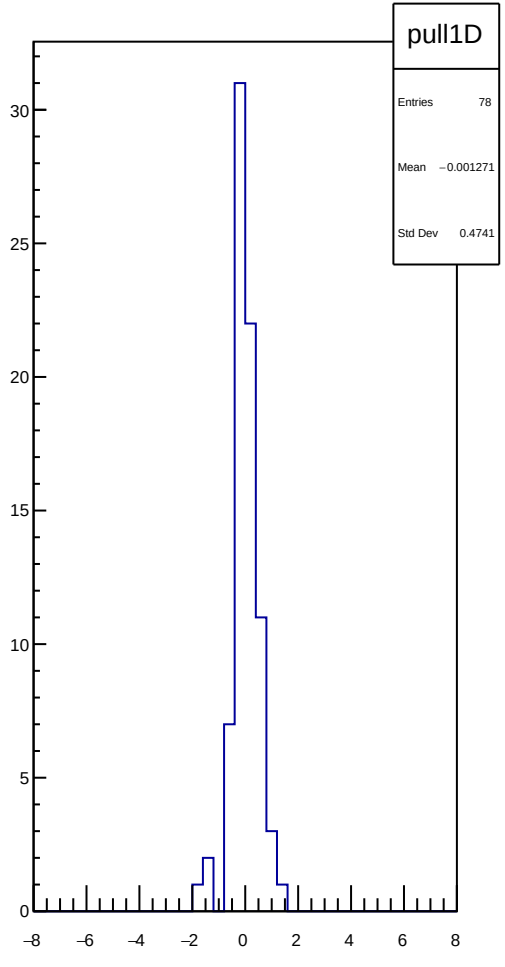

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 1.765e+04 / 77
p0 238.2 ± 0.196
320
300
280
260
240
220
200
180

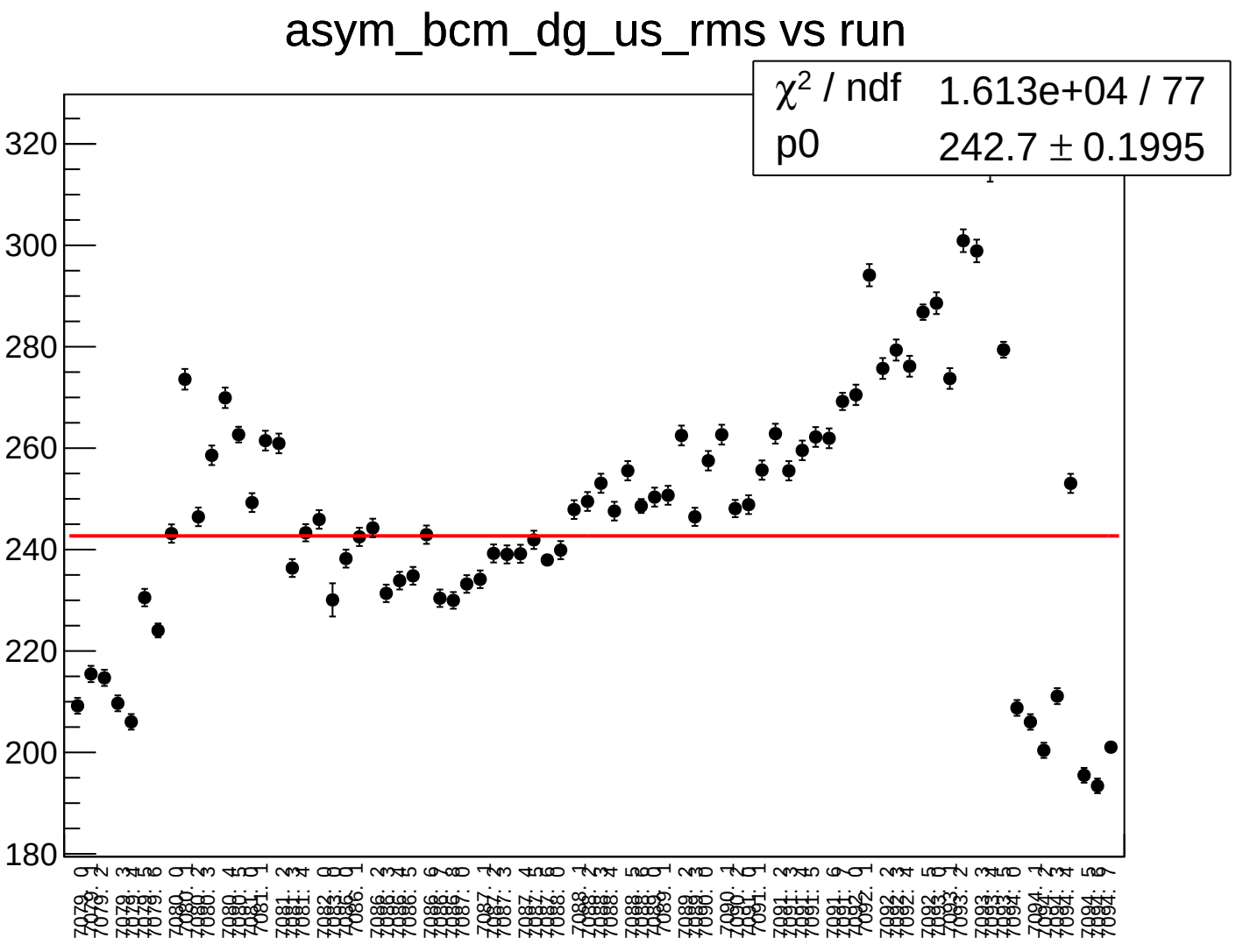

asym_bcm_an_us_mean vs run
χ² / ndf 15.7 / 77
p0 125 ± 276.3
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −162.6
Std Dev 204.8
1.5
1
0.5
0
−0.5
−1
−1.5

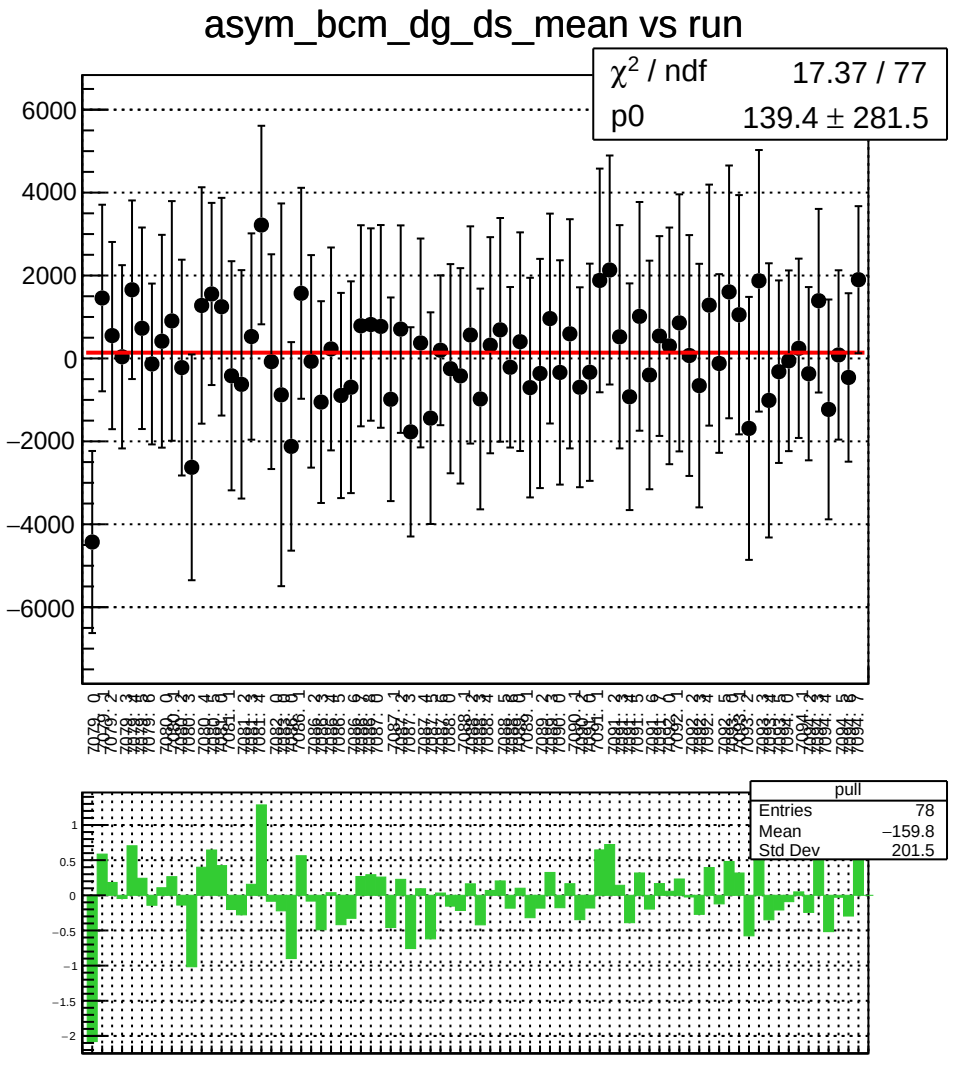

pull1D
Entries 78
Mean −0.003671
Std Dev 0.4487
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

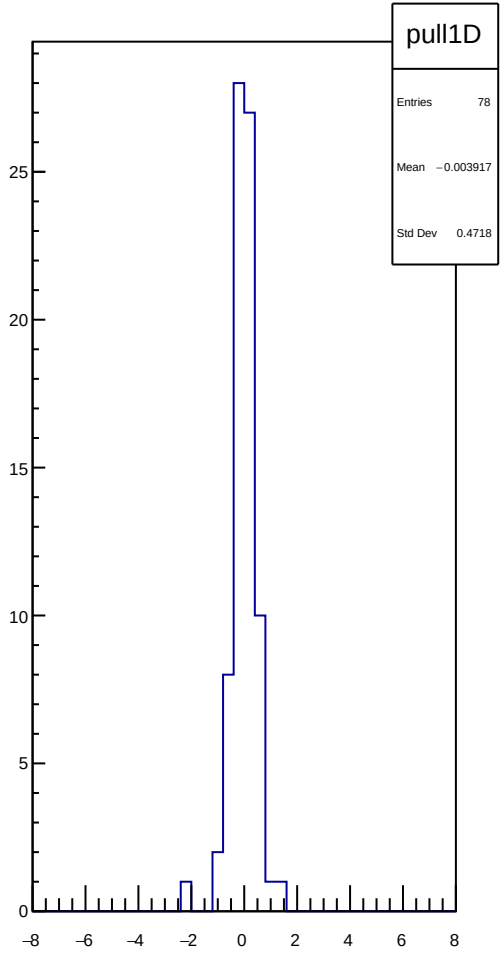

asym_bcm_an_us_rms vs run
χ² / ndf 1.77e+04 / 77
p0 237.5 ± 0.1954
320
300
280
260
240
220
200
180

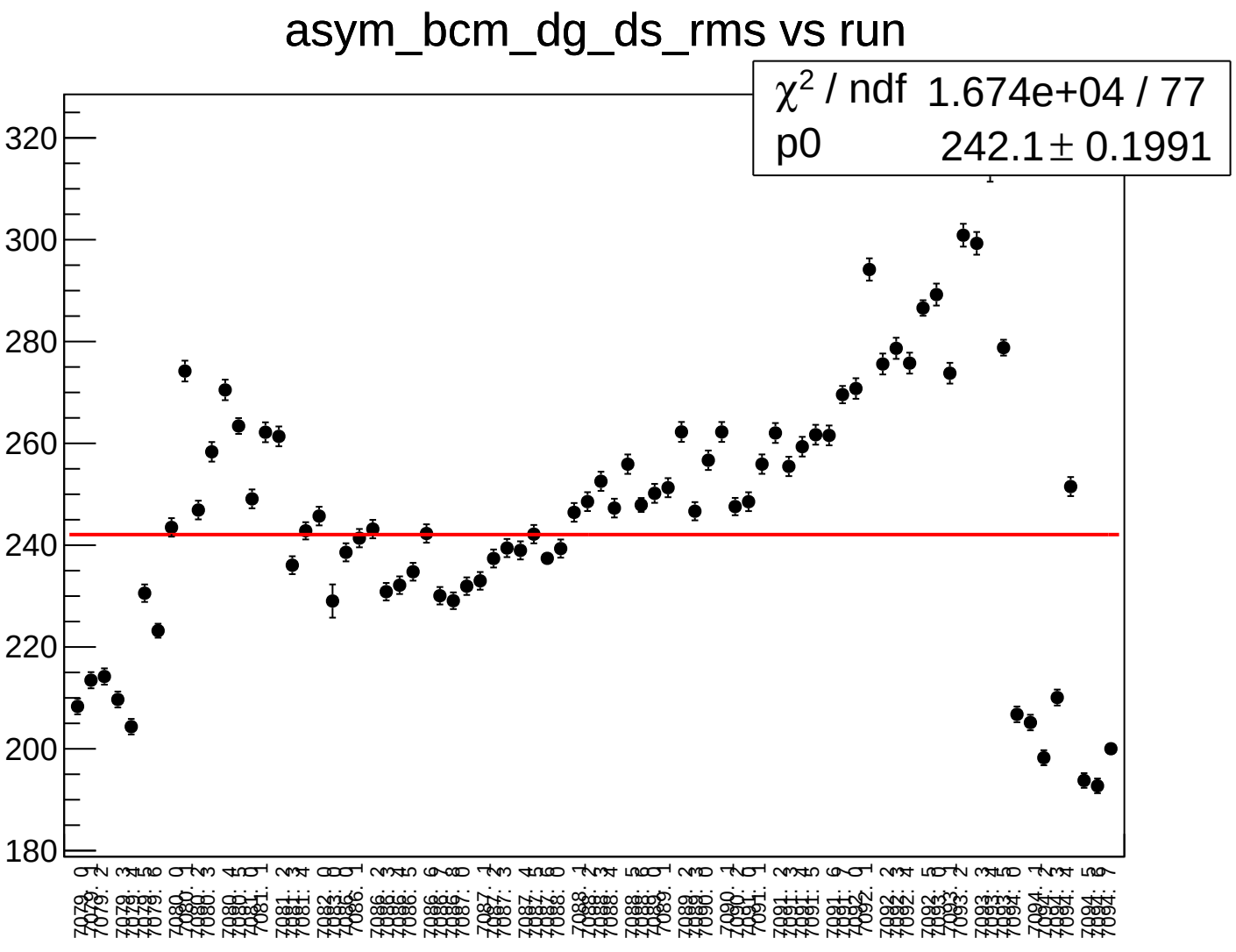

asym_bcm_dg_us_mean vs run
χ² / ndf 17.53 / 77
p0 101 ± 282.2
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −355.4
Std Dev 385.8
1
0.5
0
−0.5
−1
−1.5

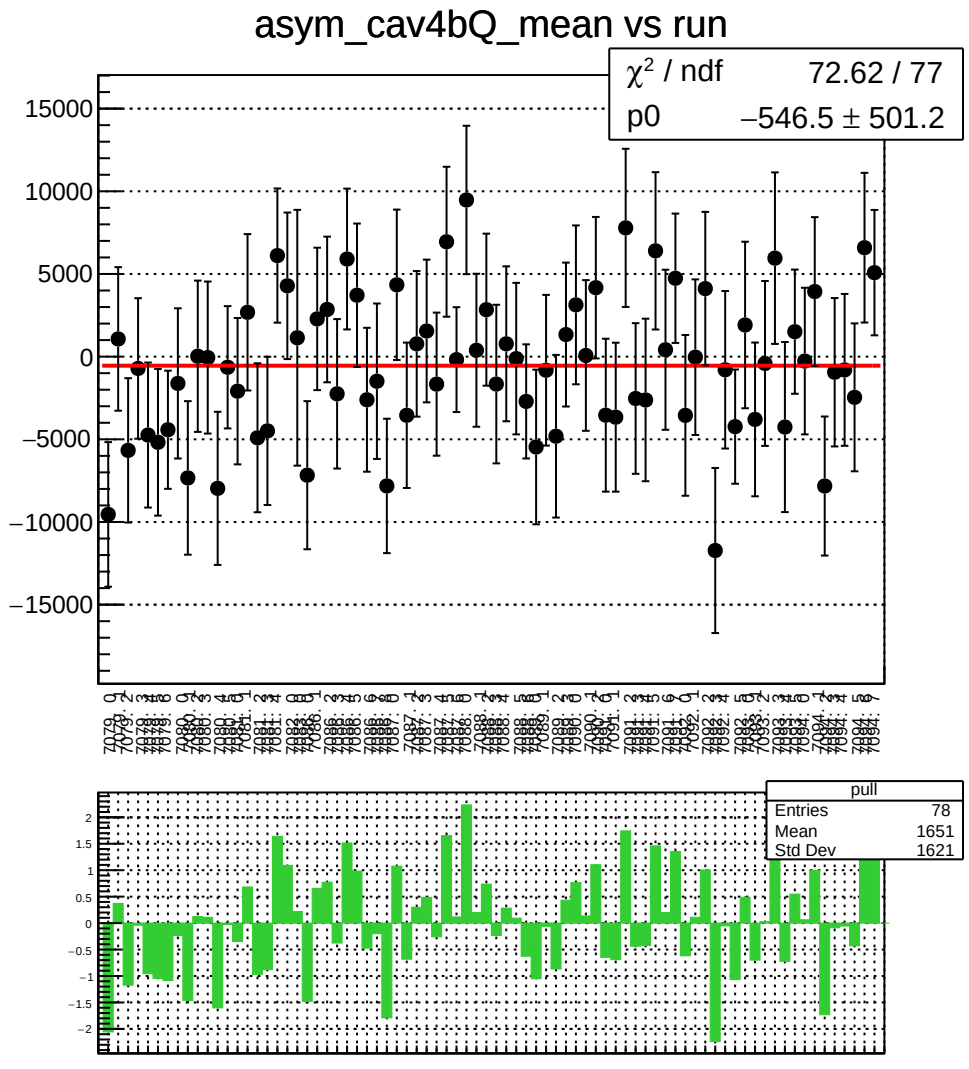

pull1D
Entries 78
Mean −0.001271
Std Dev 0.4741
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

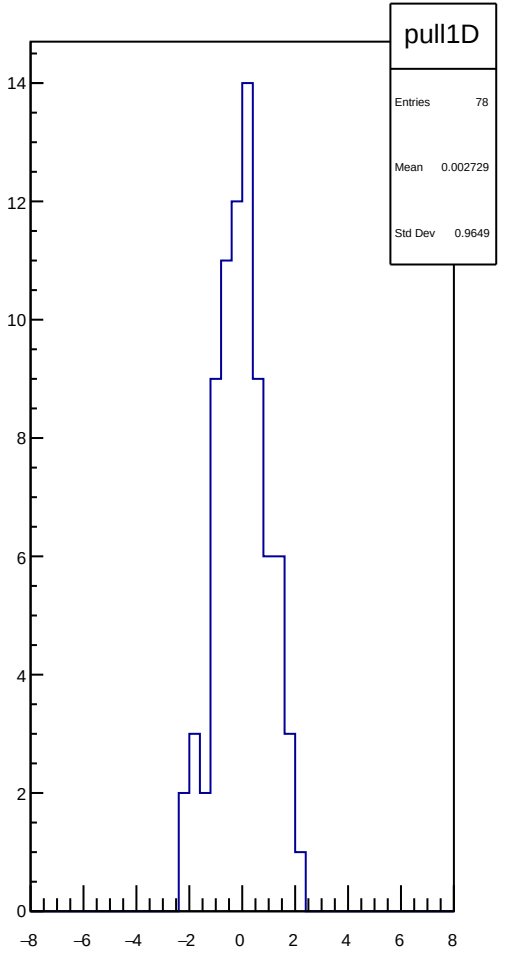

asym_bcm_dg_us_rms vs run
χ² / ndf 1.613e+04 / 77
p0 242.7 ± 0.1995
320
300
280
260
240
220
200
180

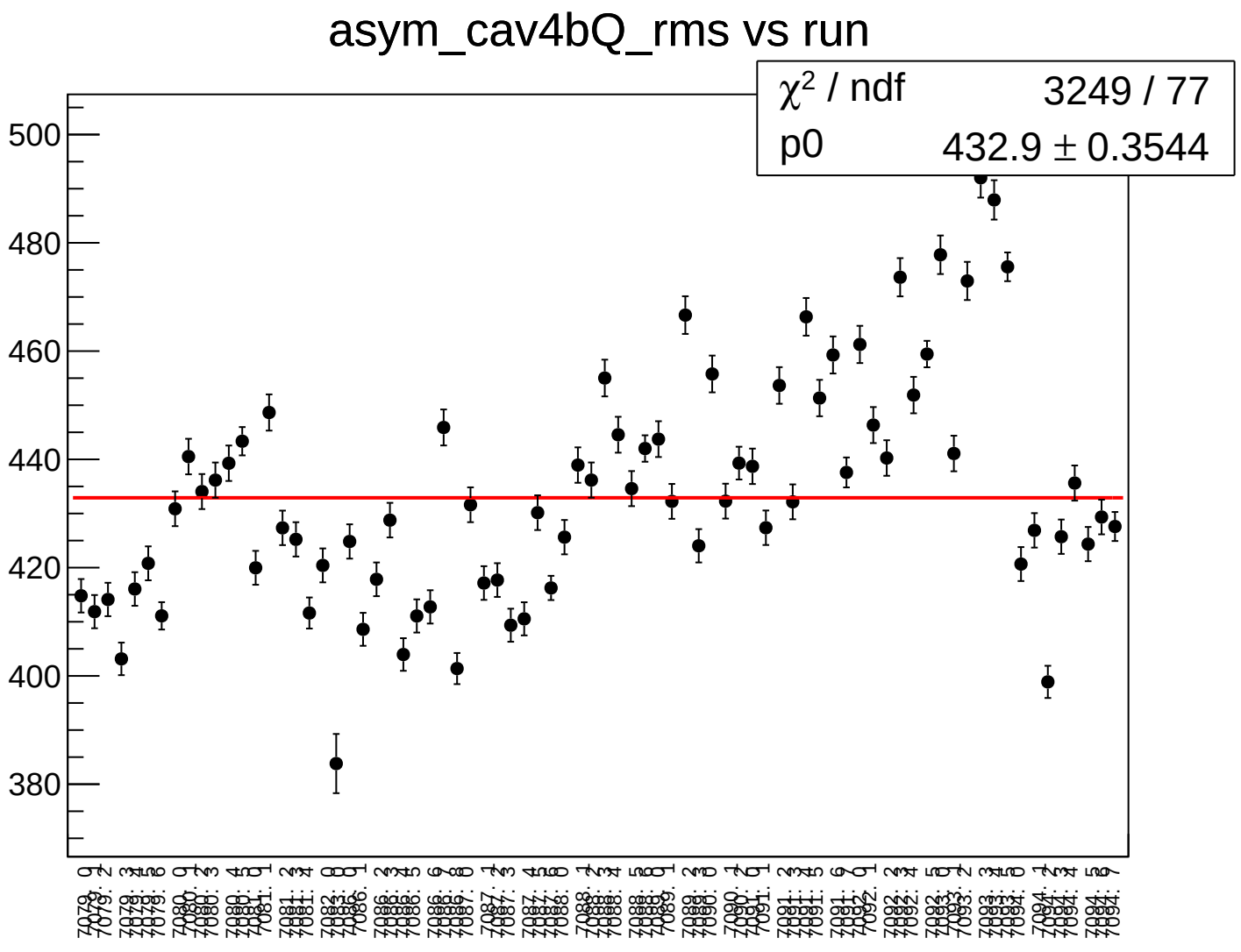

asym_bcm_dg_ds_mean vs run
χ² / ndf 17.37 / 77
p0 139.4 ± 281.5
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 78
Mean −159.8
Std Dev 201.5
1
0.5
0
−0.5
−1
−1.5
−2

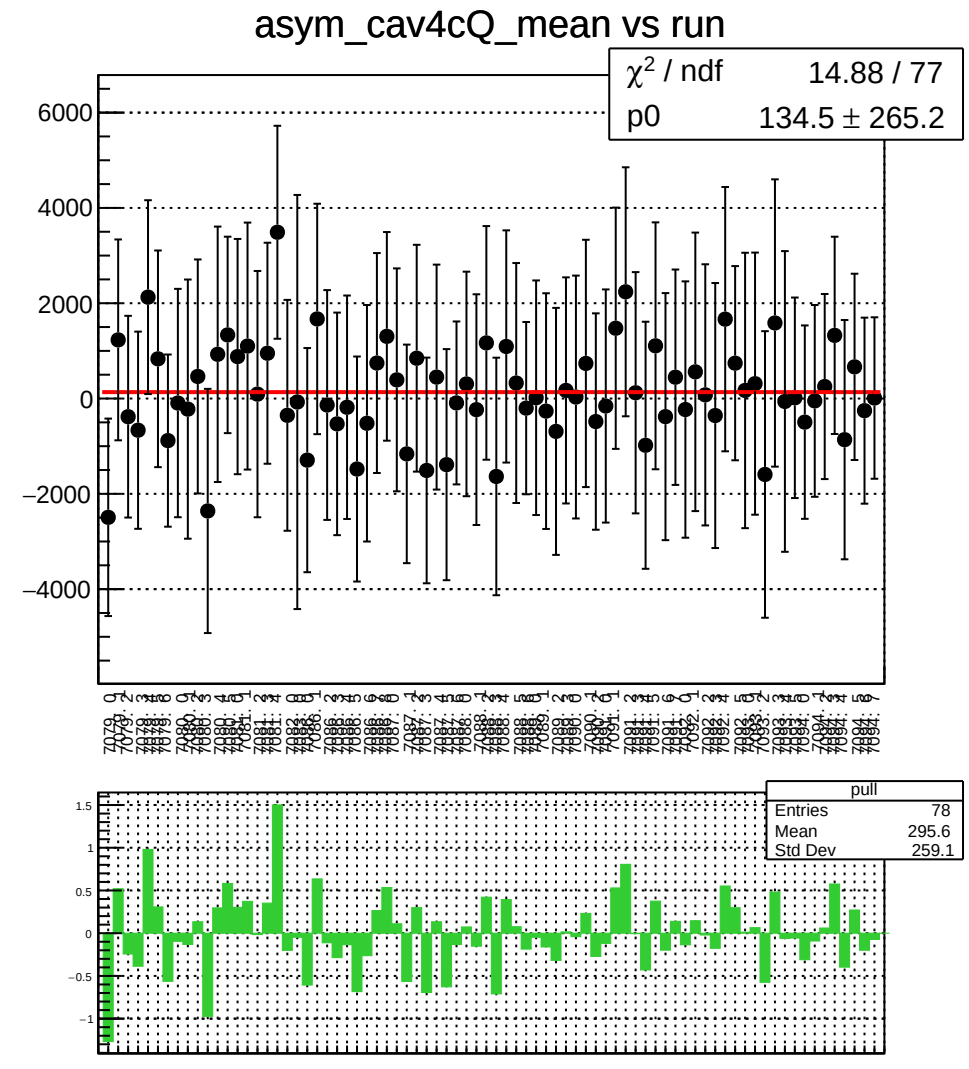

pull1D
Entries 78
Mean −0.003917
Std Dev 0.4718
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

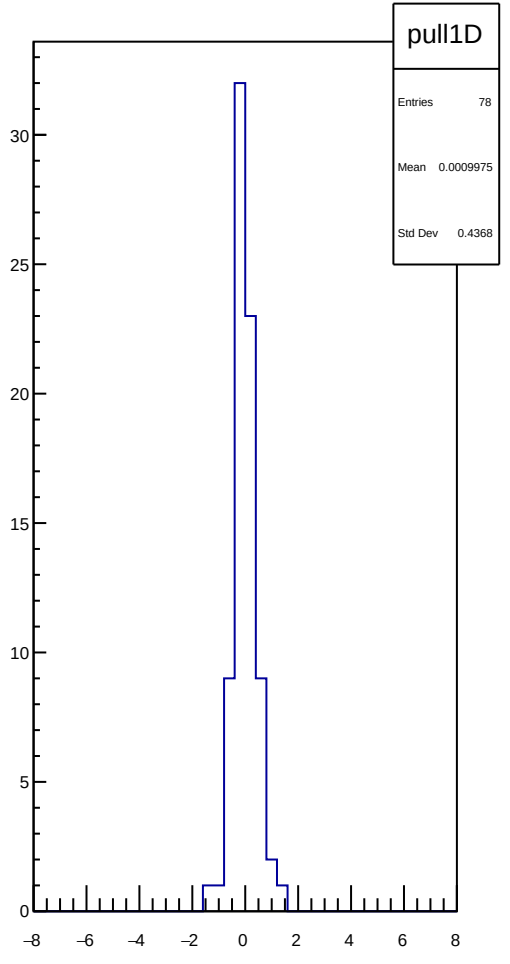

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.674e+04 / 77
p0 242.1 ± 0.1991
320
300
280
260
240
220
200
180

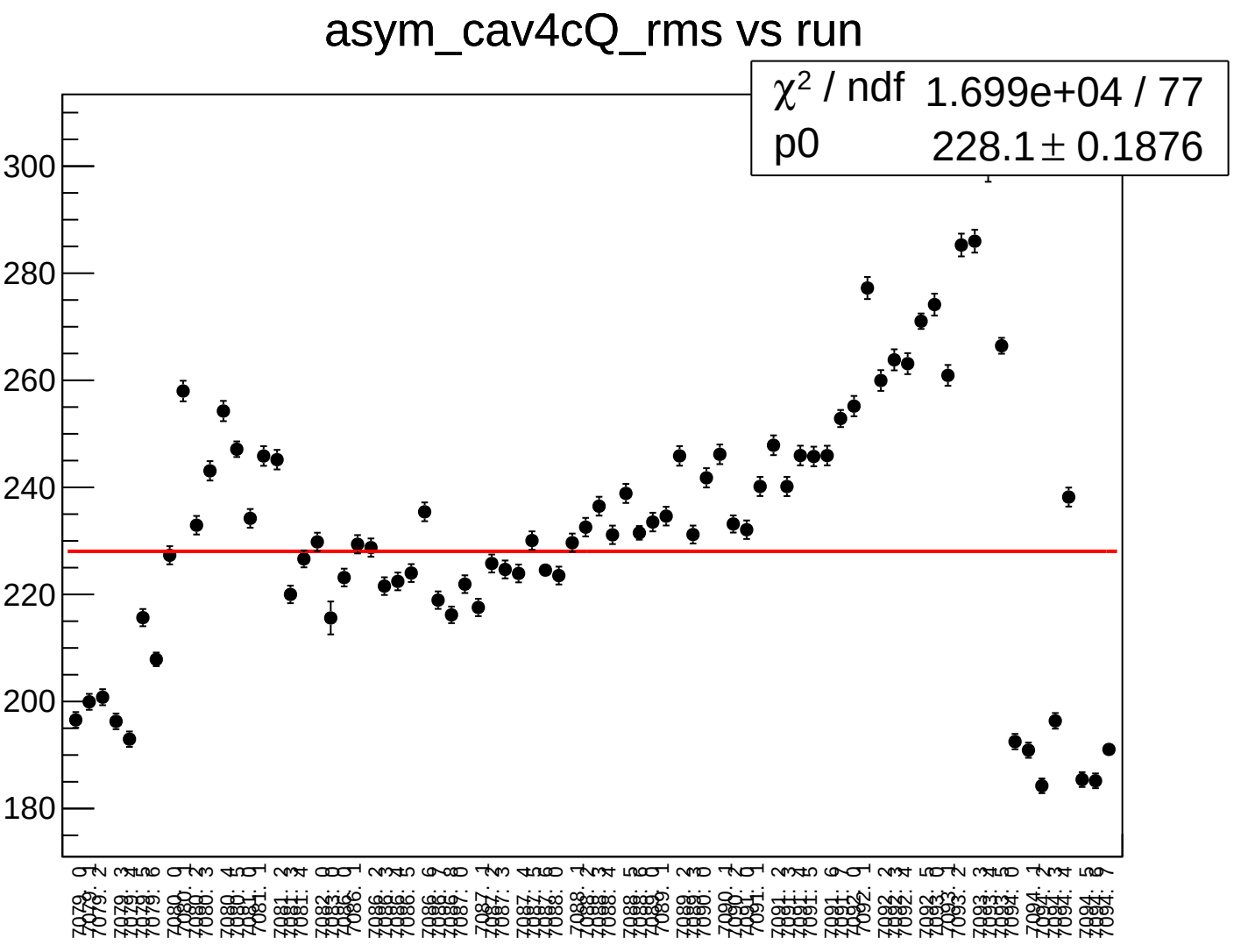

asym_cav4bQ_mean vs run
χ² / ndf 72.62 / 77
p0 −546.5 ± 501.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 78
Mean 1651
Std Dev 1621
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

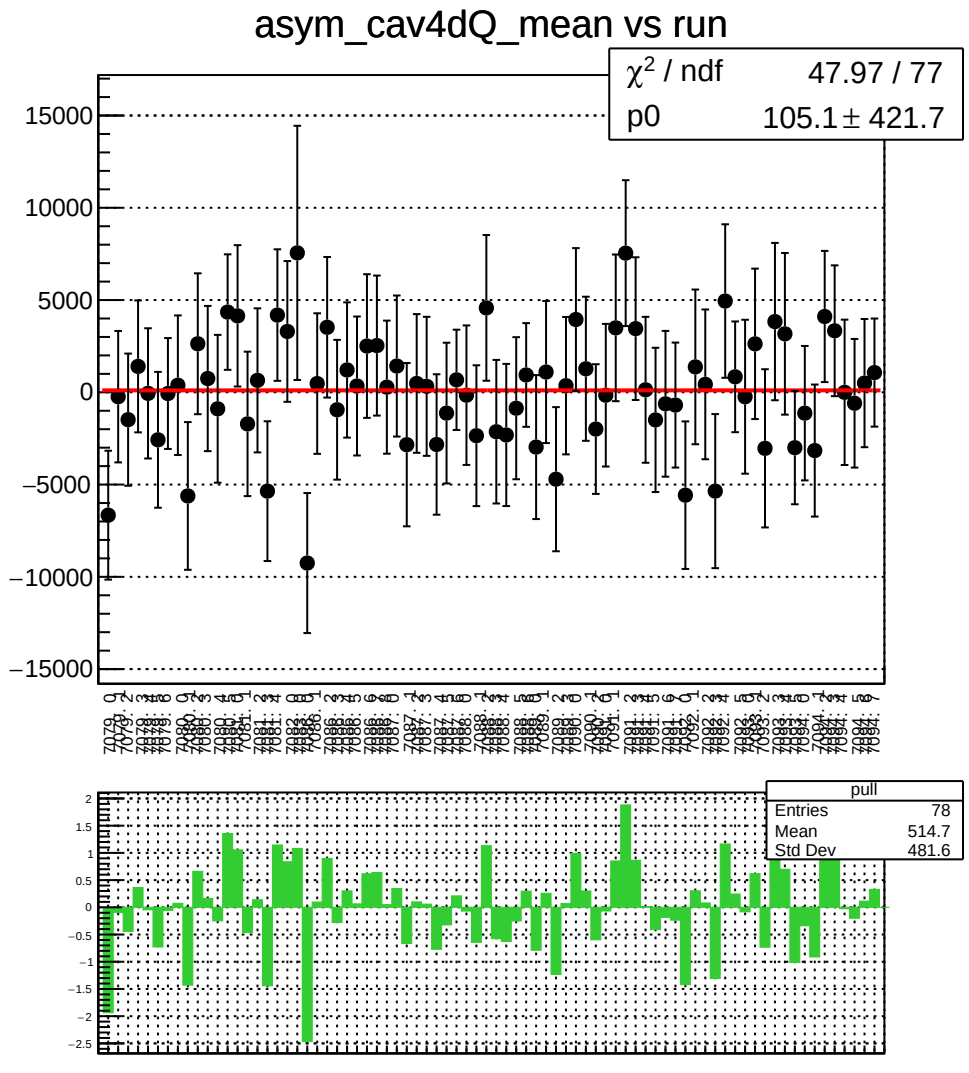

pull1D
Entries 78
Mean 0.002729
Std Dev 0.9649
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

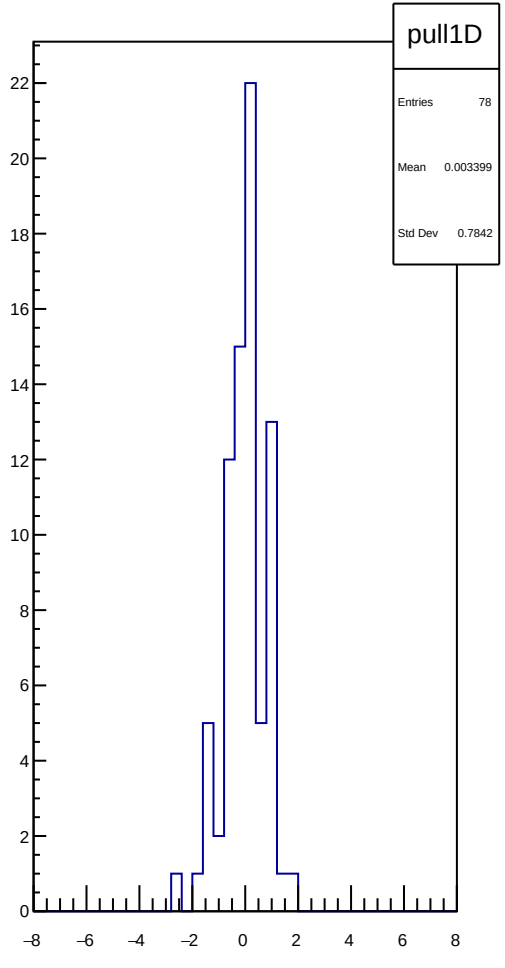

asym_cav4bQ_rms vs run
χ² / ndf 3249 / 77
p0 432.9 ± 0.3544
500
480
460
440
420
400
380

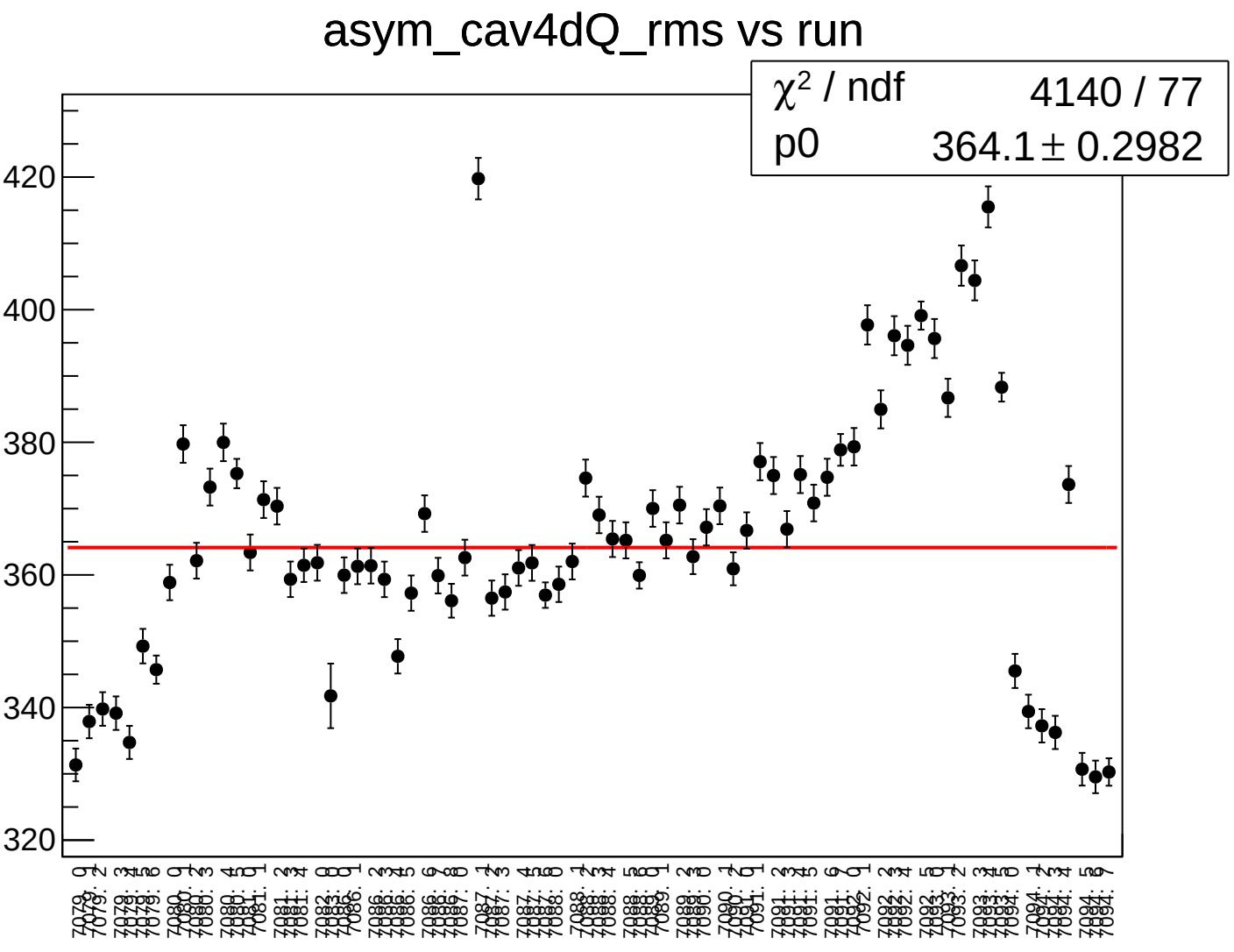

asym_cav4cQ_mean vs run
χ² / ndf 14.88 / 77
p0 134.5 ± 265.2
6000
4000
2000
0
−2000
−4000
pull
Entries 78
Mean 295.6
Std Dev 259.1
1.5
1
0.5
0
−0.5
−1

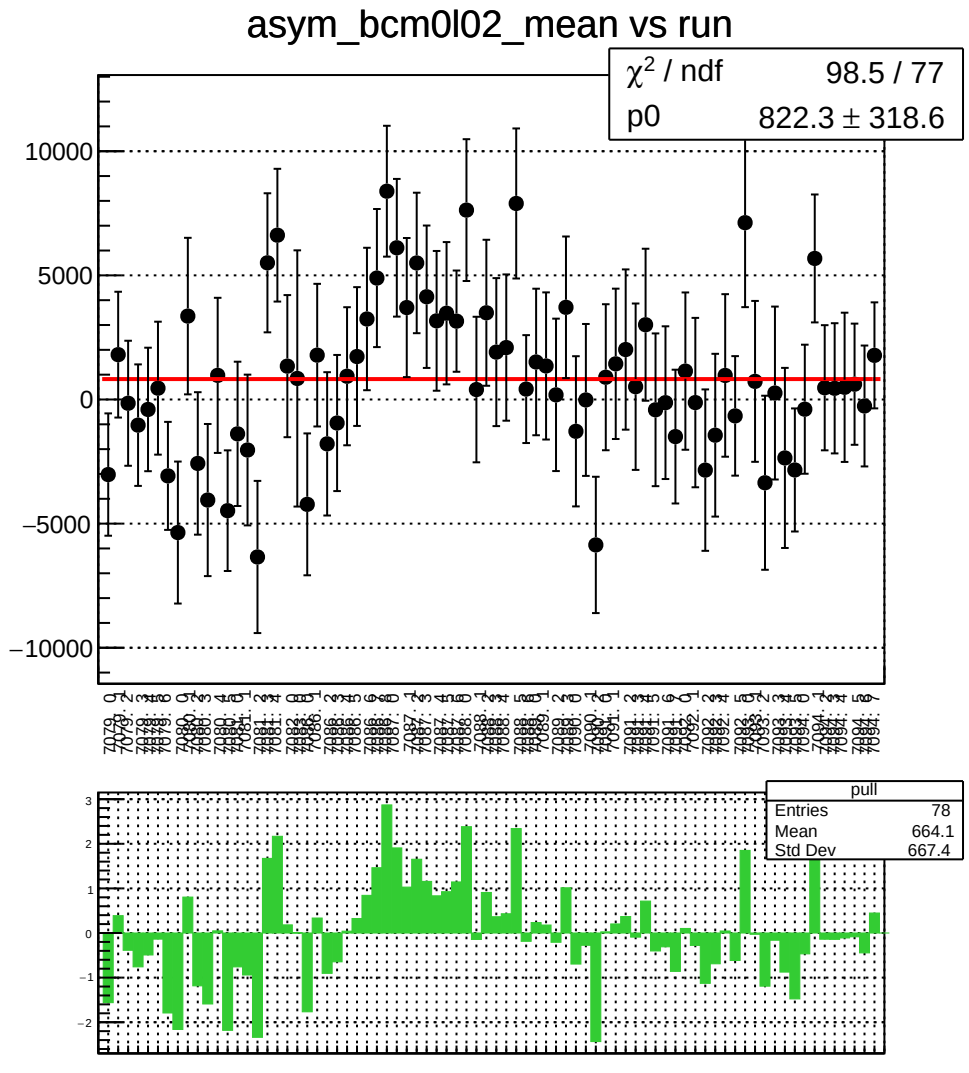

pull1D
Entries 78
Mean 0.0009975
Std Dev 0.4368
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

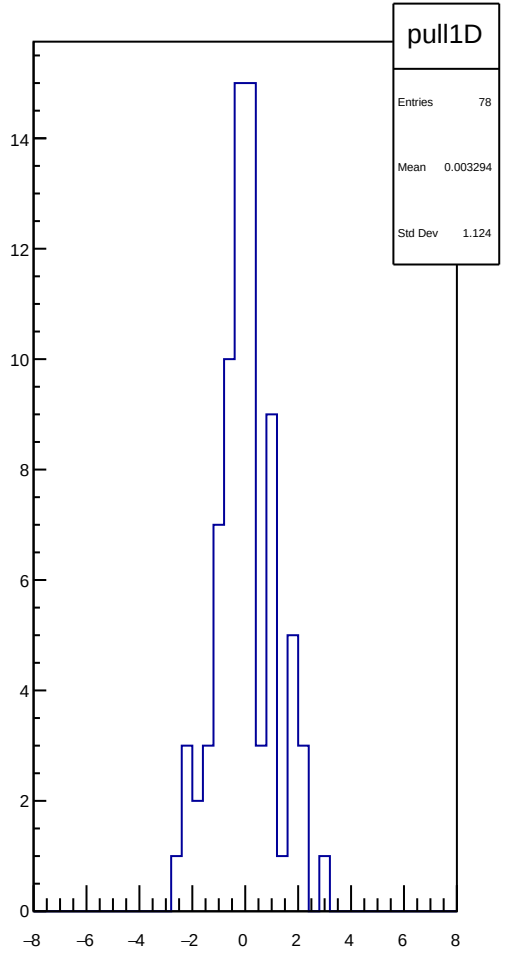

asym_cav4cQ_rms vs run
χ² / ndf 1.699e+04 / 77
p0 228.1 ± 0.1876
300
280
260
240
220
200
180

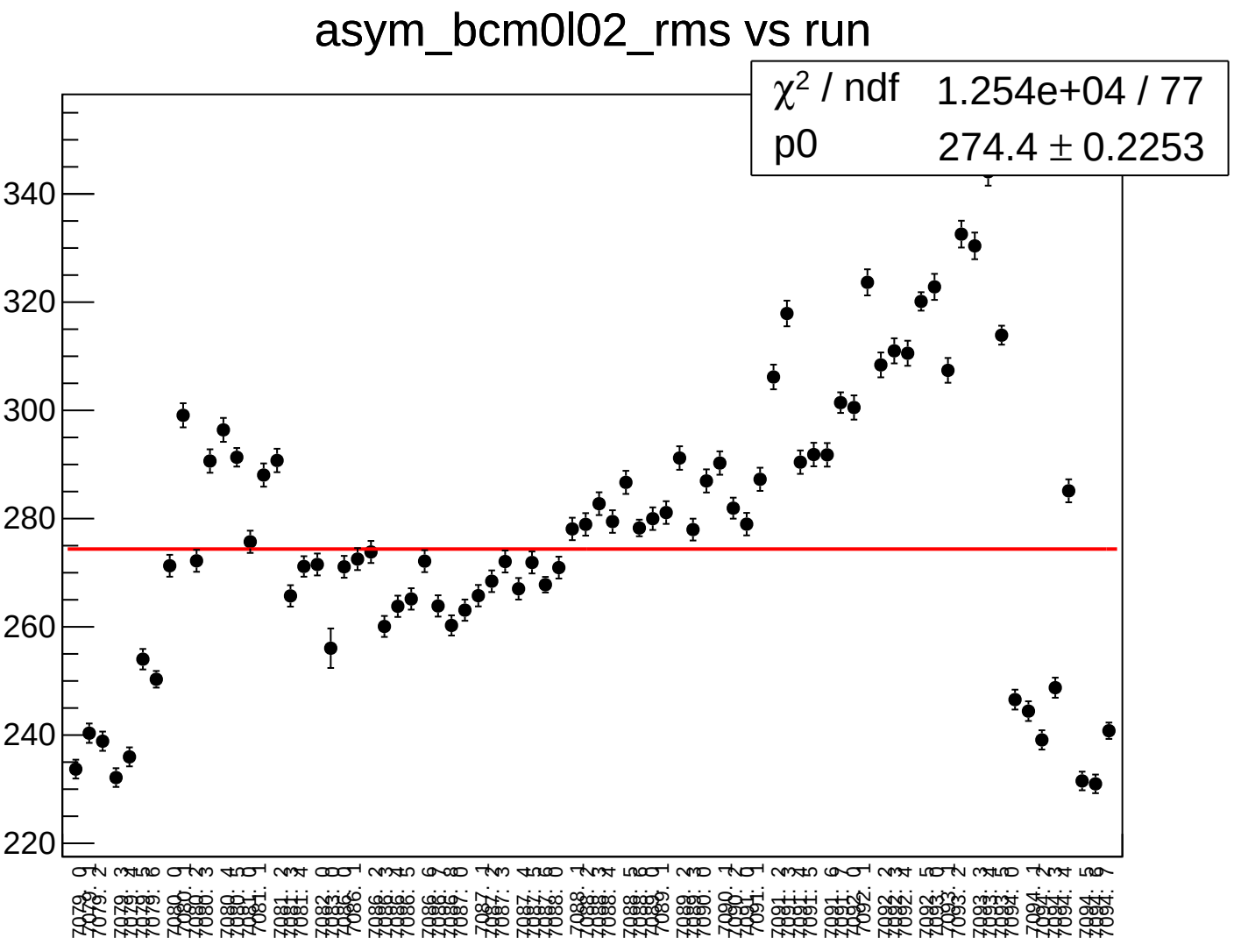

asym_cav4dQ_mean vs run
χ² / ndf 47.97 / 77
p0 105.1 ± 421.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 78
Mean 514.7
Std Dev 481.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

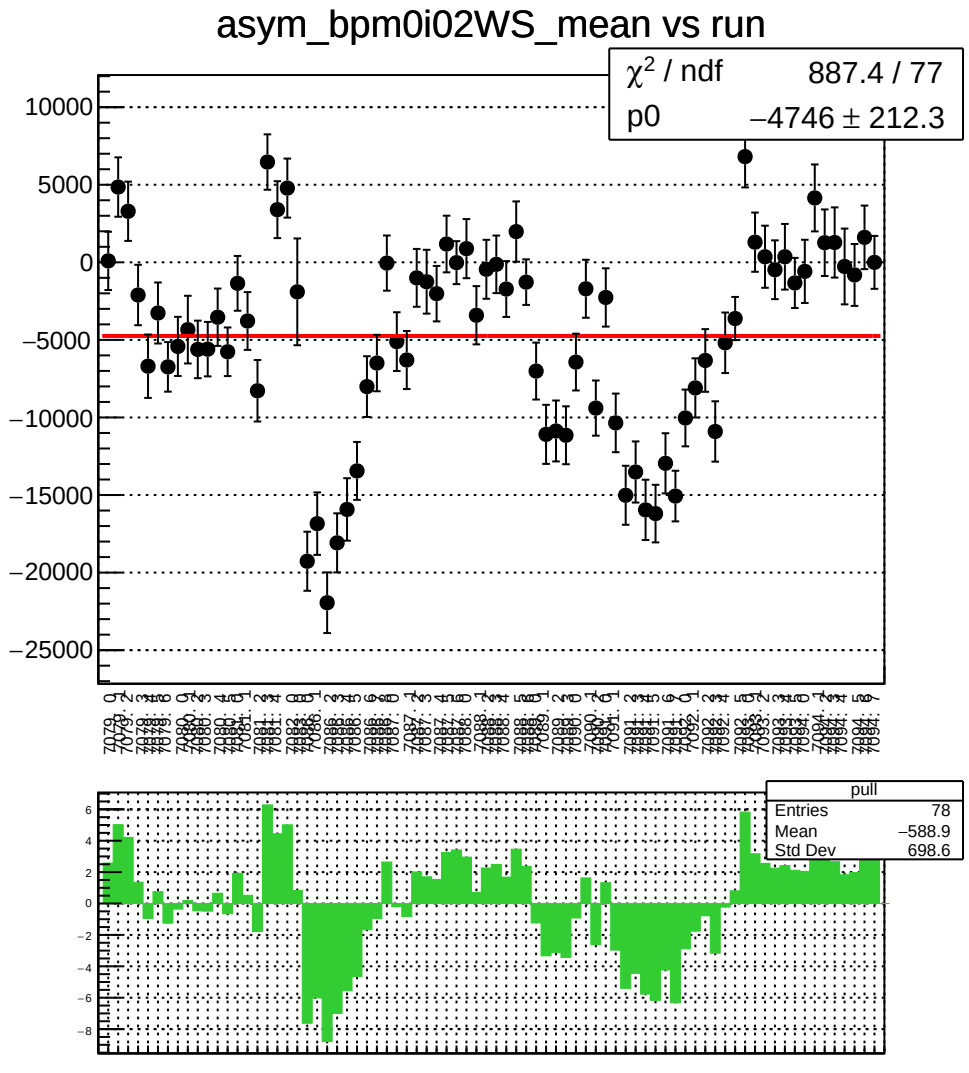

pull1D
Entries 78
Mean 0.003399
Std Dev 0.7842
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

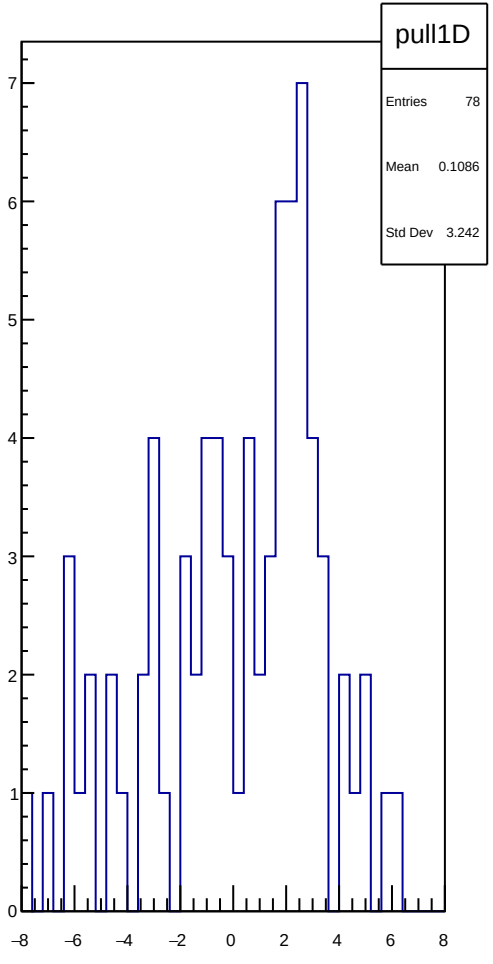

asym_cav4dQ_rms vs run
χ² / ndf 4140 / 77
p0 364.1 ± 0.2982
420
400
380
360
340
320

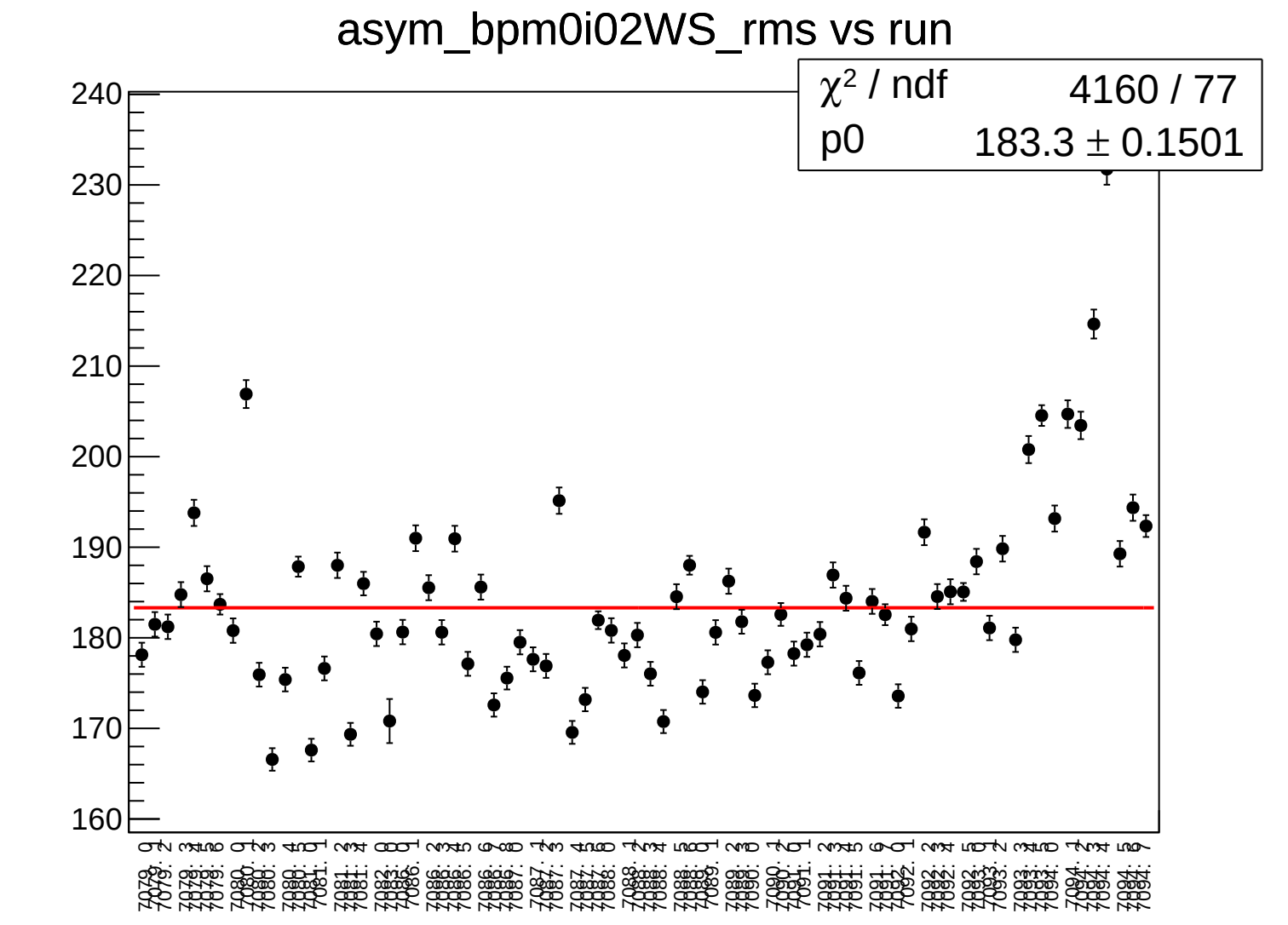

asym_bcm0l02_mean vs run
χ² / ndf 98.5 / 77
p0 822.3 ± 318.6
10000
5000
0
−5000
−10000
pull
Entries 78
Mean 664.1
Std Dev 667.4
3
2
1
0
−1
−2

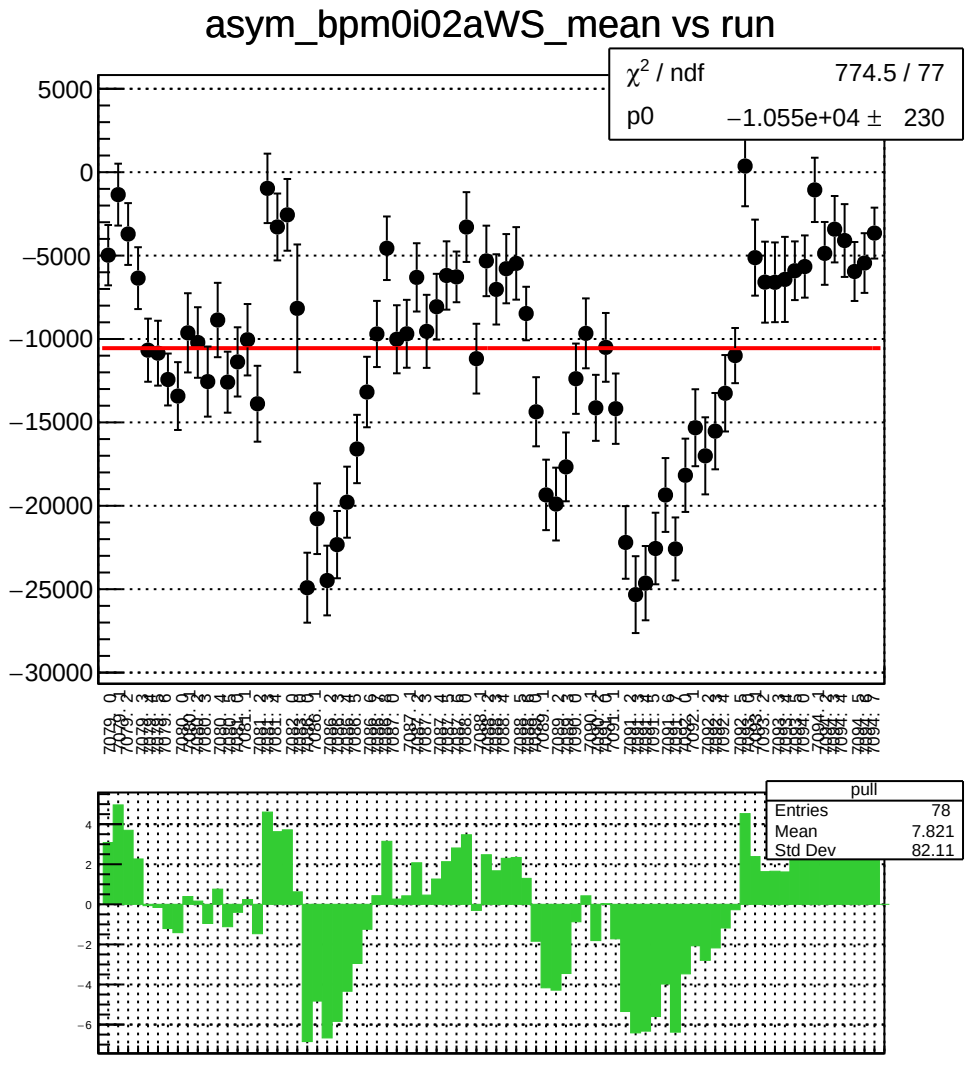

pull1D
Entries 78
Mean 0.003294
Std Dev 1.124
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

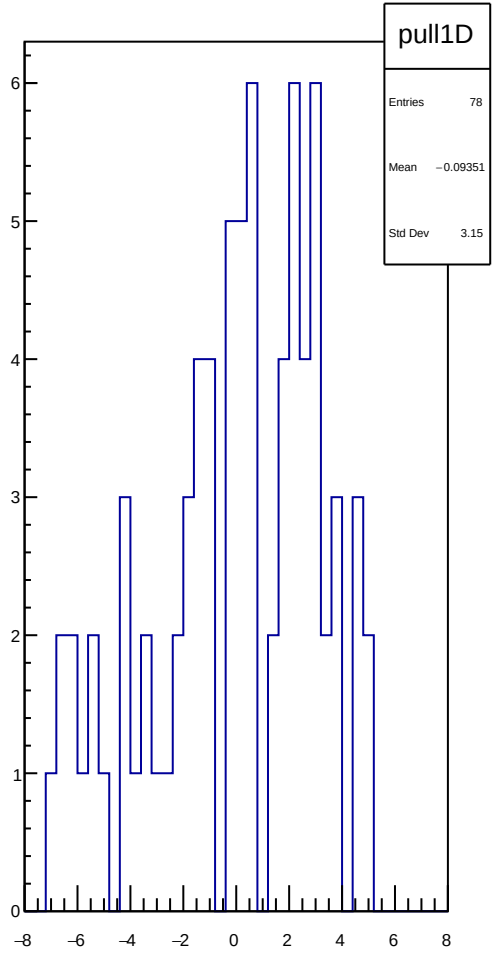

asym_bcm0l02_rms vs run
χ² / ndf 1.254e+04 / 77
p0 274.4 ± 0.2253
340
320
300
280
260
240
220

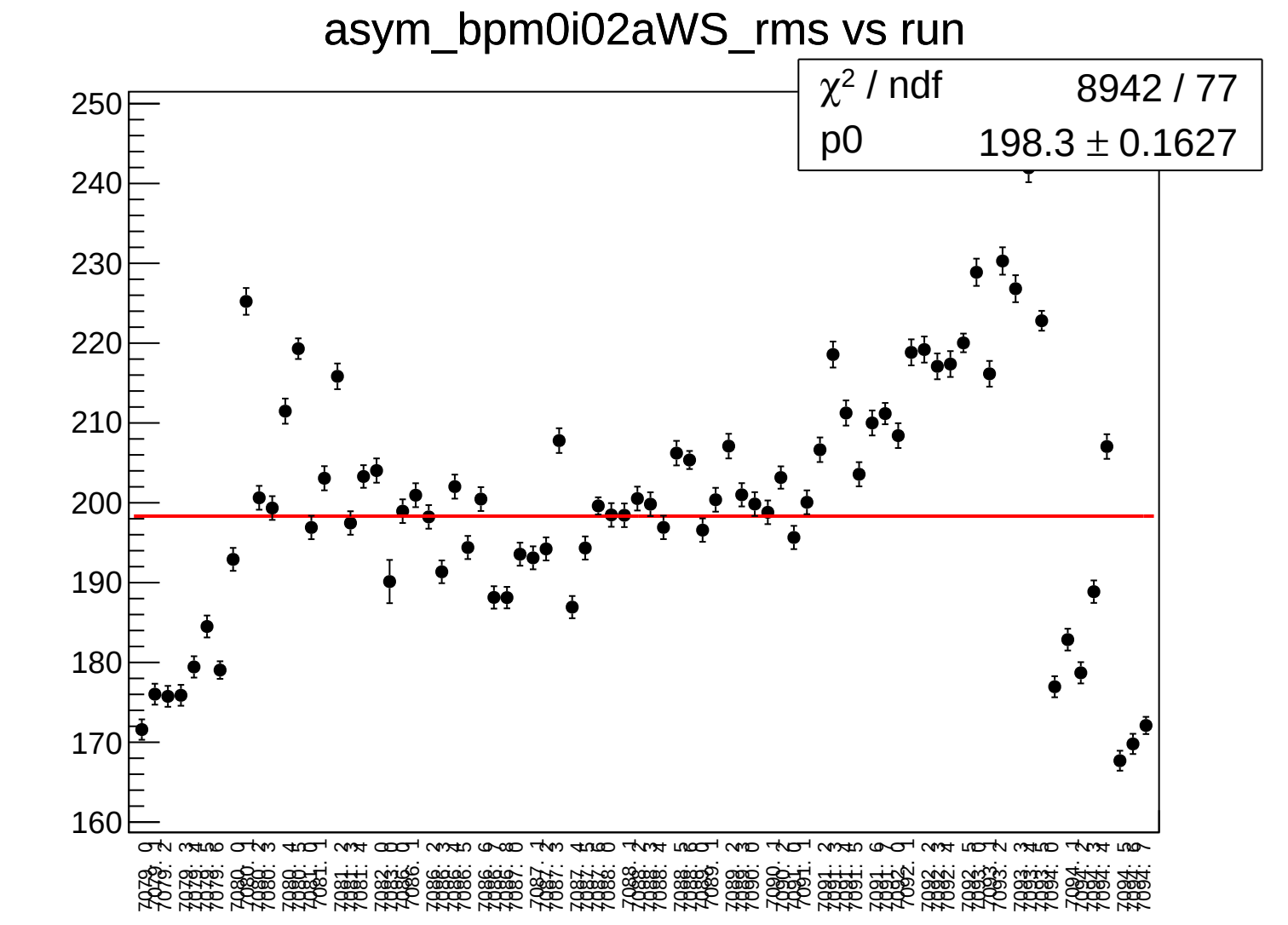

asym_bpm0i02WS_mean vs run
χ² / ndf 887.4 / 77
p0 −4746 ± 212.3
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 78
Mean −588.9
Std Dev 698.6
6
4
2
0
−2
−4
−6
−8

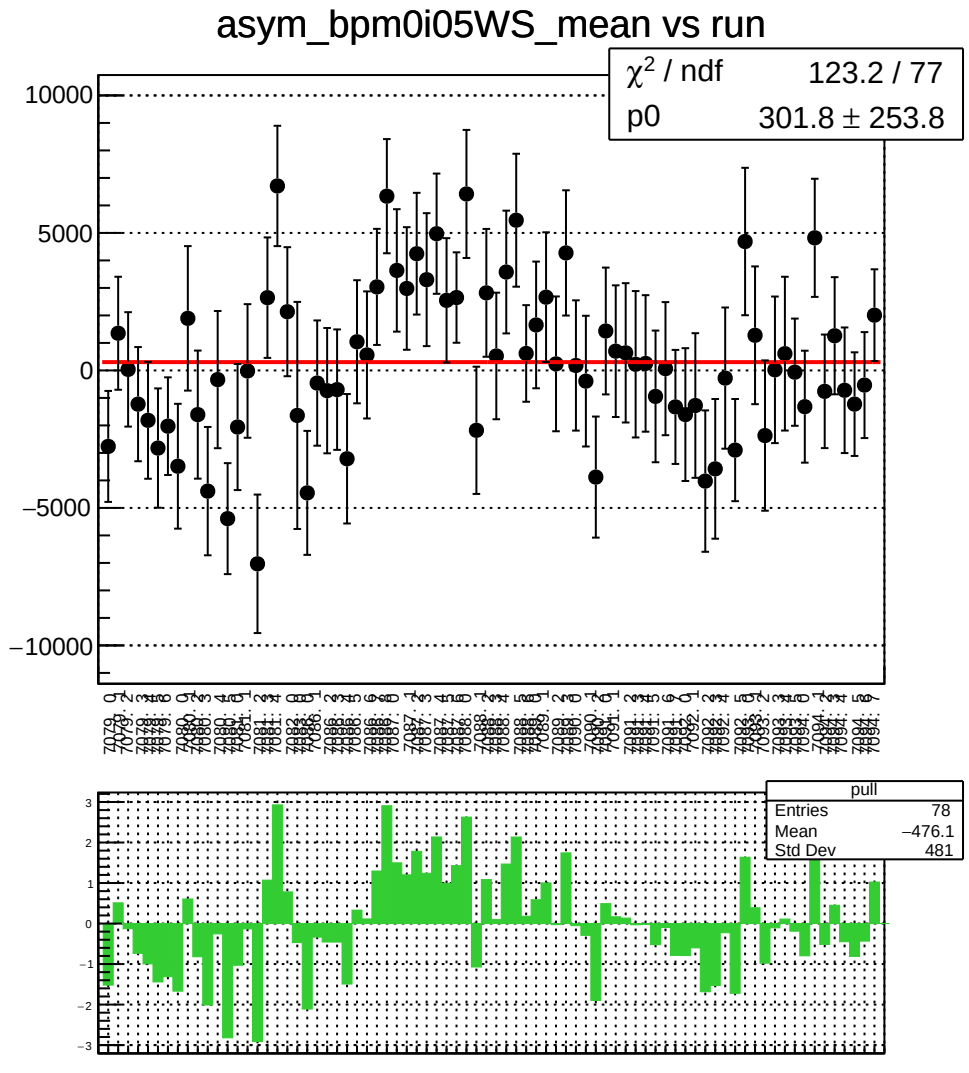

pull1D
Entries 78
Mean 0.1086
Std Dev 3.242
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

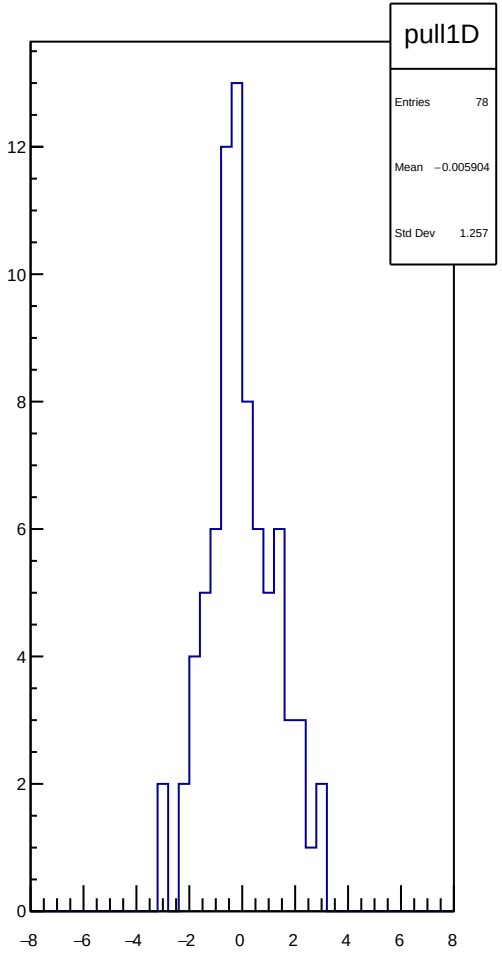

asym_bpm0i02WS_rms vs run
χ² / ndf 4160 / 77
p0 183.3 ± 0.1501
240
230
220
210
200
190
180
170
160

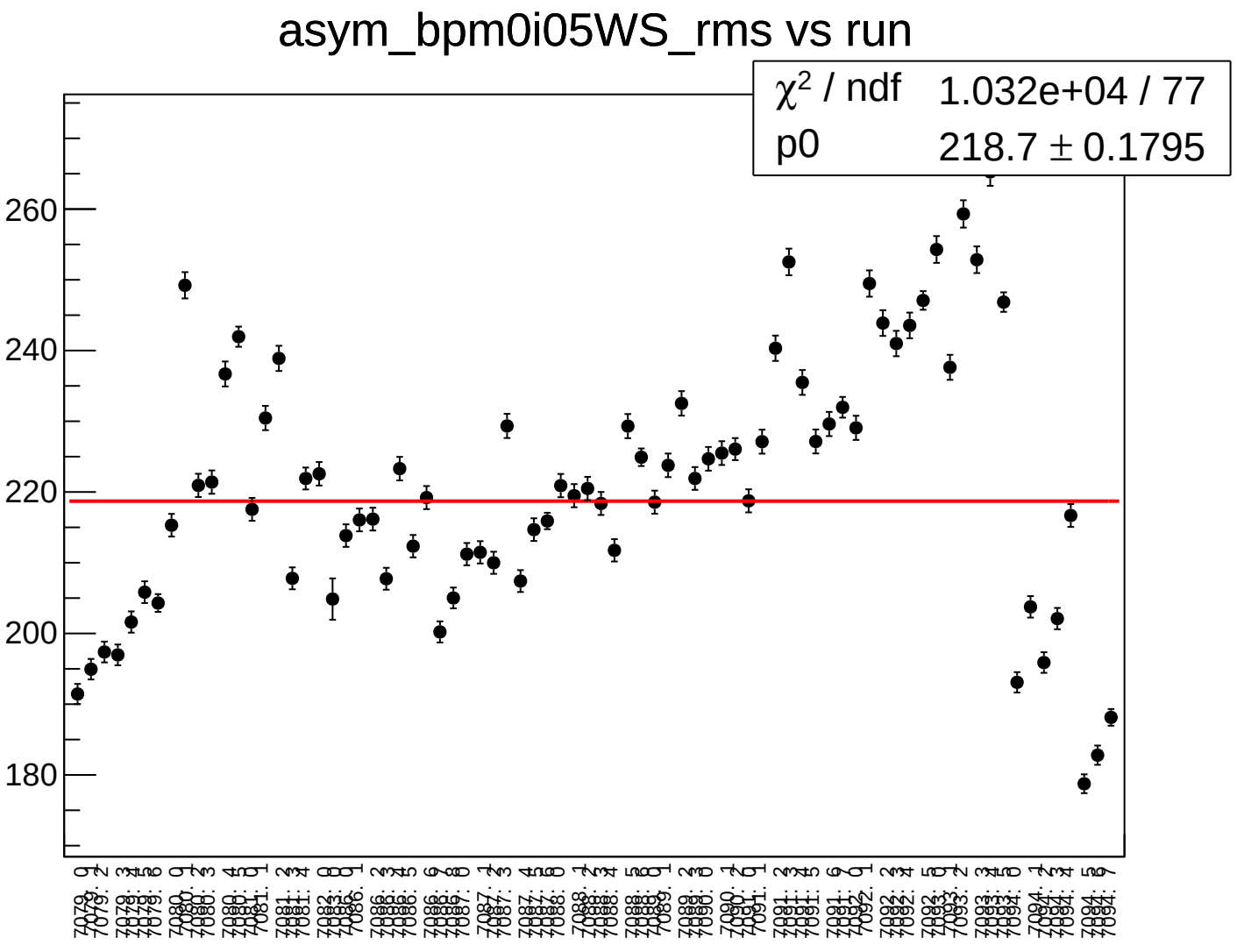

asym_bpm0i02aWS_mean vs run
χ² / ndf 774.5 / 77
p0 −1.055e+04 ± 230
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 78
Mean 7.821
Std Dev 82.11
4
2
0
−2
−4
−6

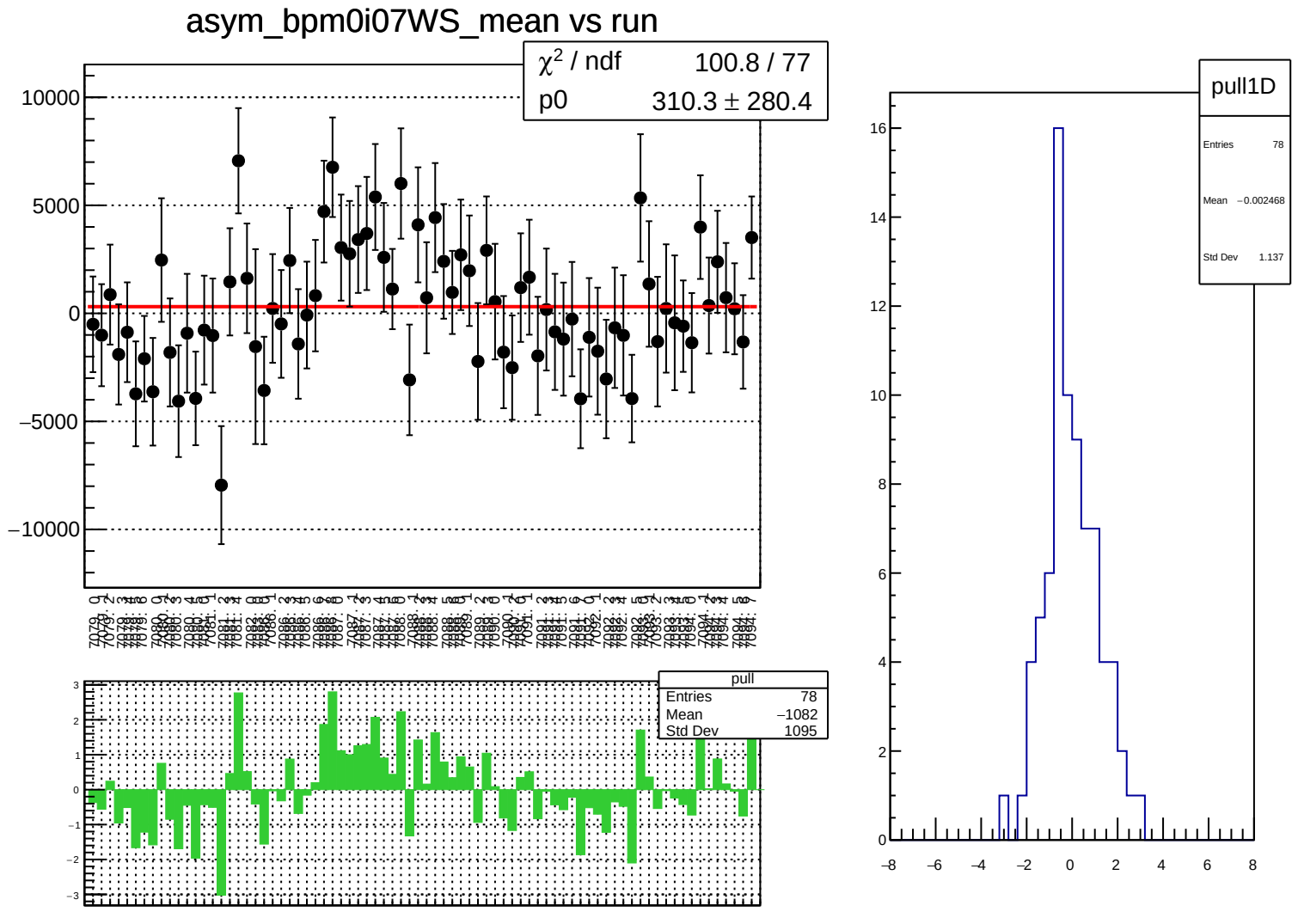

pull1D
Entries 78
Mean −0.09351
Std Dev 3.15
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

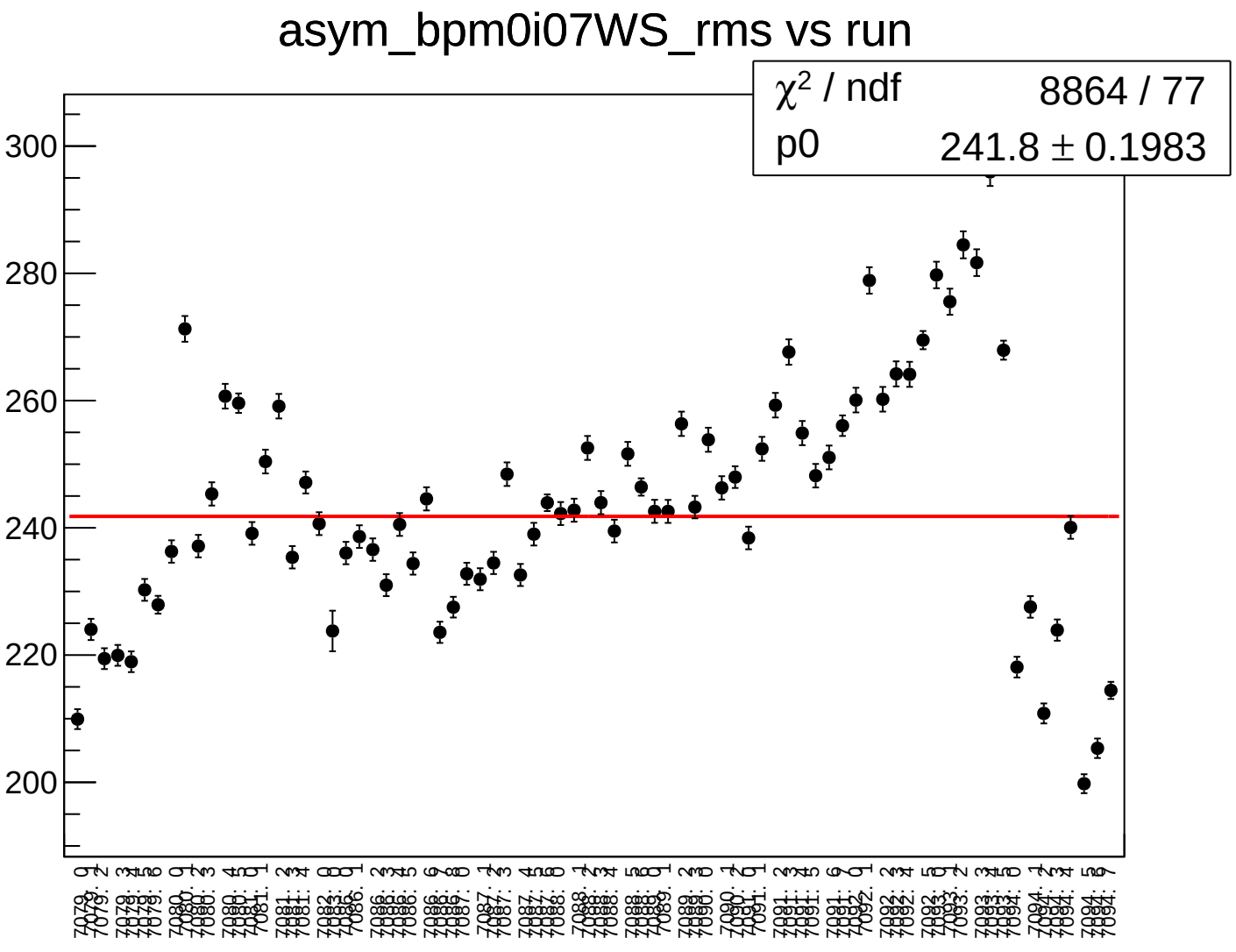

asym_bpm0i02aWS_rms vs run
χ² / ndf 8942 / 77
p0 198.3 ± 0.1627
250
240
230
220
210
200
190
180
170
160

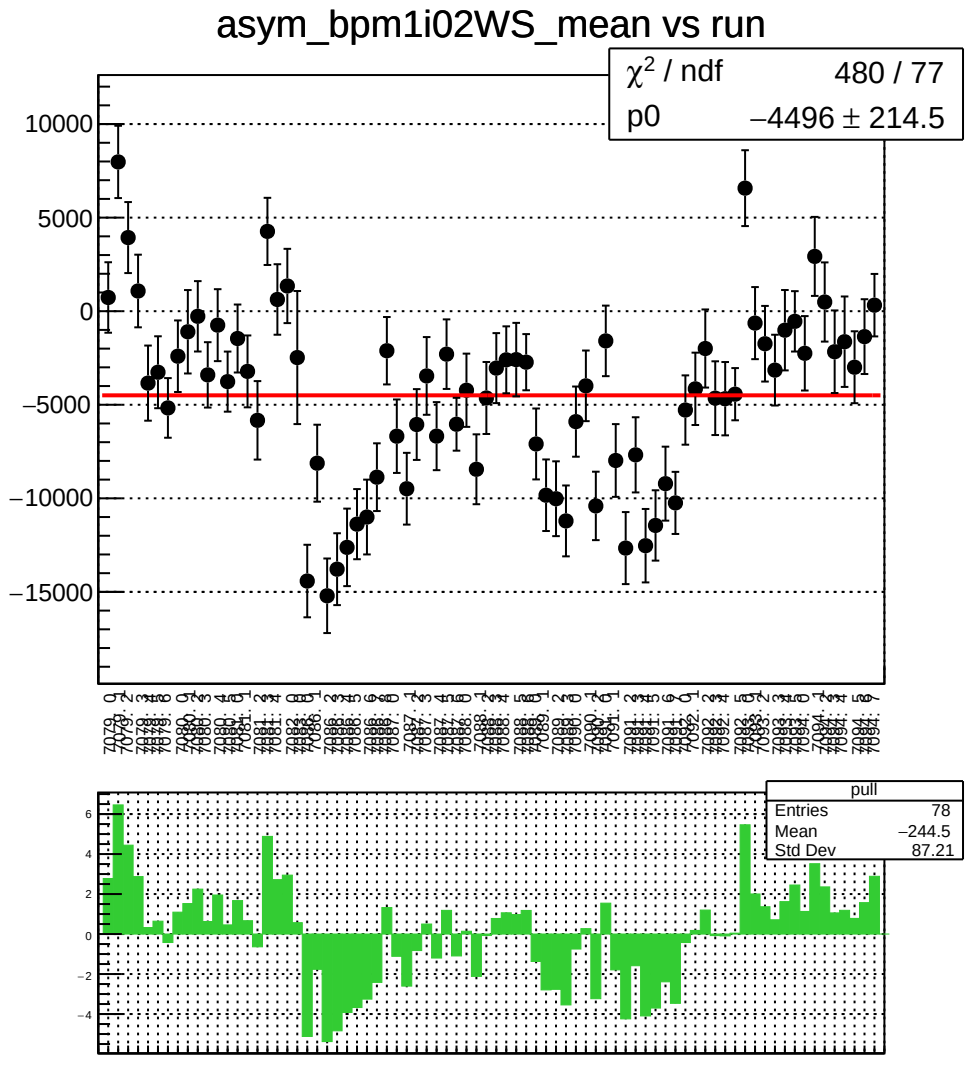

asym_bpm0i05WS_mean vs run
χ² / ndf 123.2 / 77
p0 301.8 ± 253.8
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −476.1
Std Dev 481
3
2
1
0
−1
−2
−3

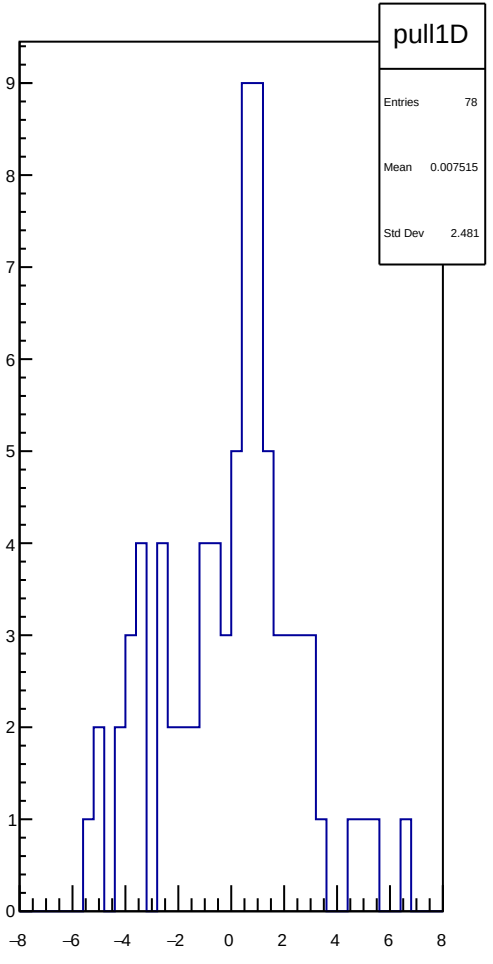

pull1D
Entries 78
Mean −0.005904
Std Dev 1.257
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

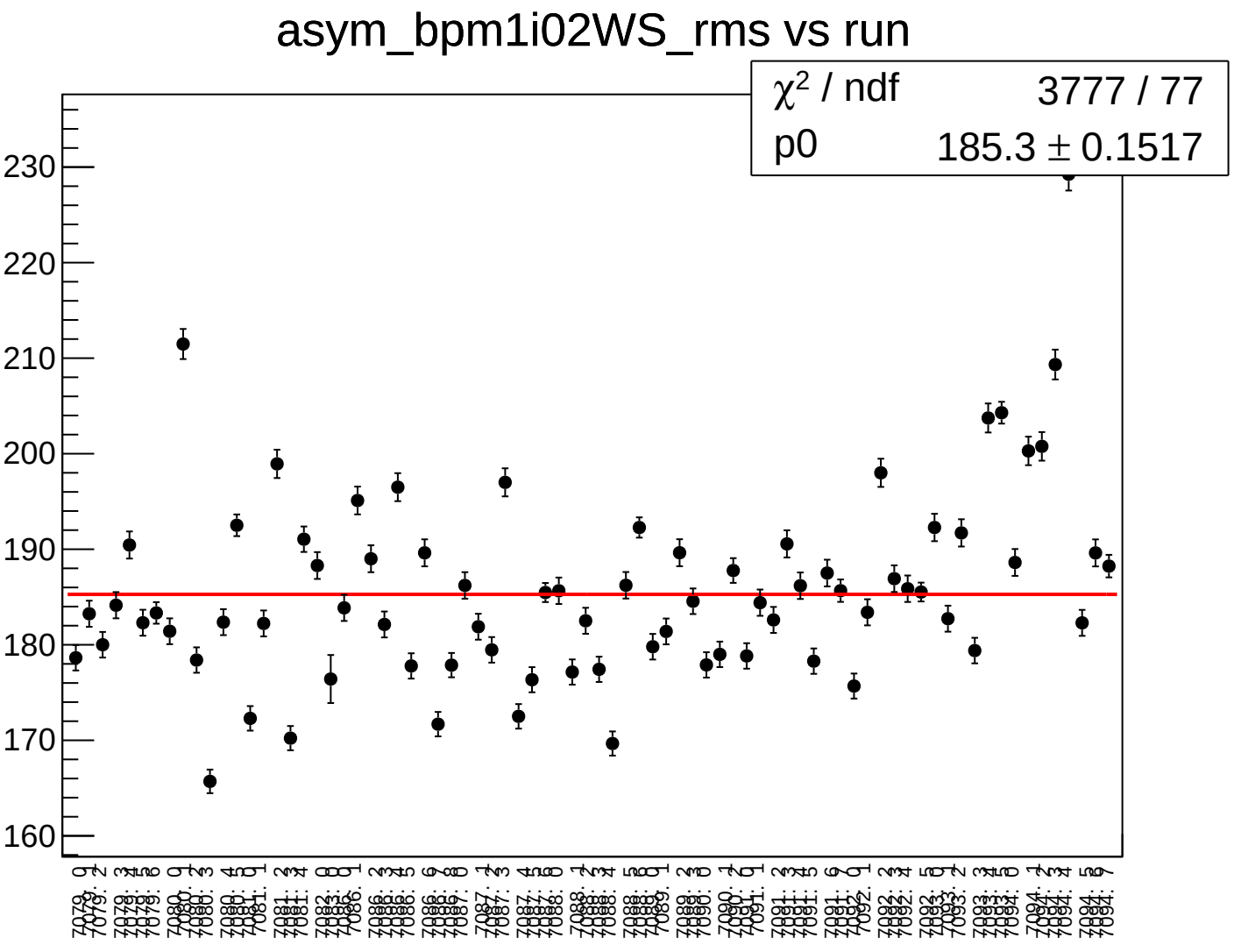

asym_bpm0i05WS_rms vs run
χ² / ndf 1.032e+04 / 77
p0 218.7 ± 0.1795
260
240
220
200
180

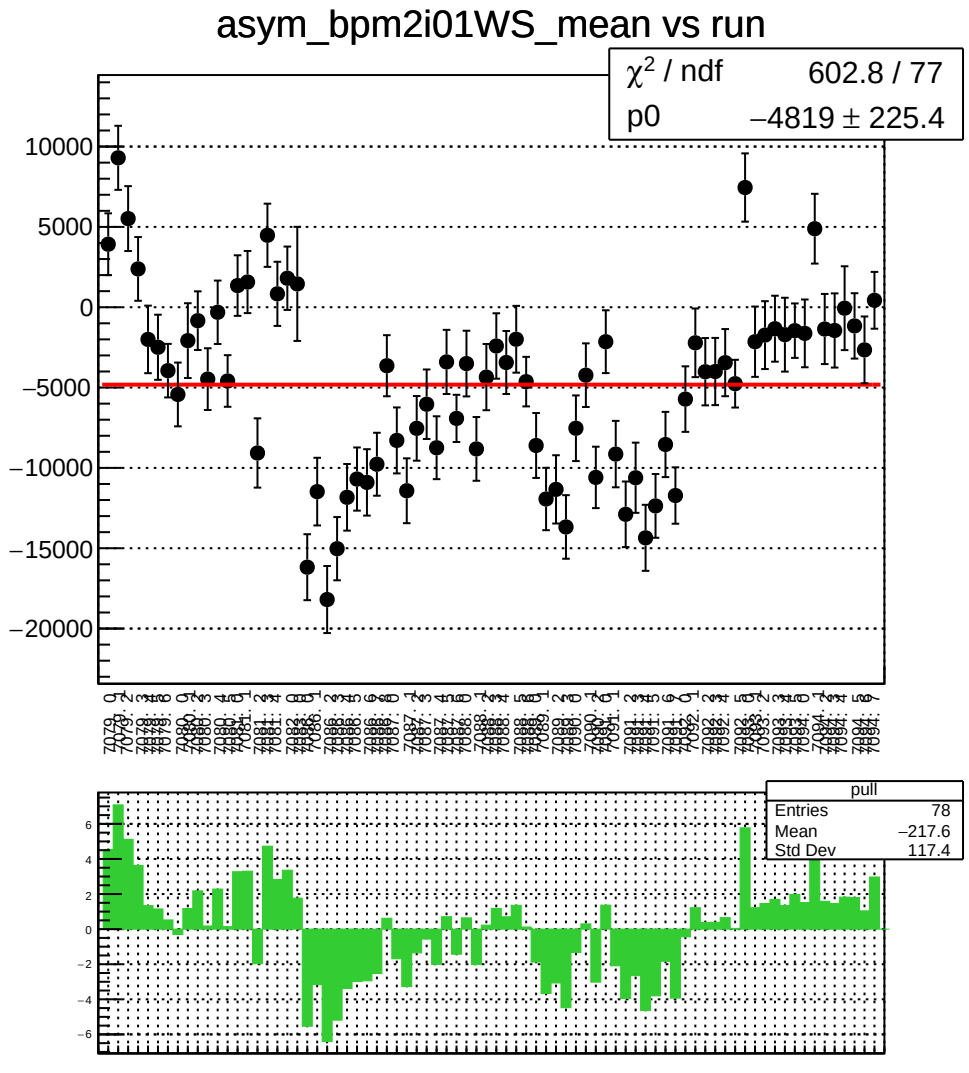

asym_bpm0i07WS_mean vs run
χ² / ndf 100.8 / 77
p0 310.3 ± 280.4
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −1082
Std Dev 1095
3
2
1
0
−1
−2
−3
pull1D
Entries 78
Mean −0.002468
Std Dev 1.137
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

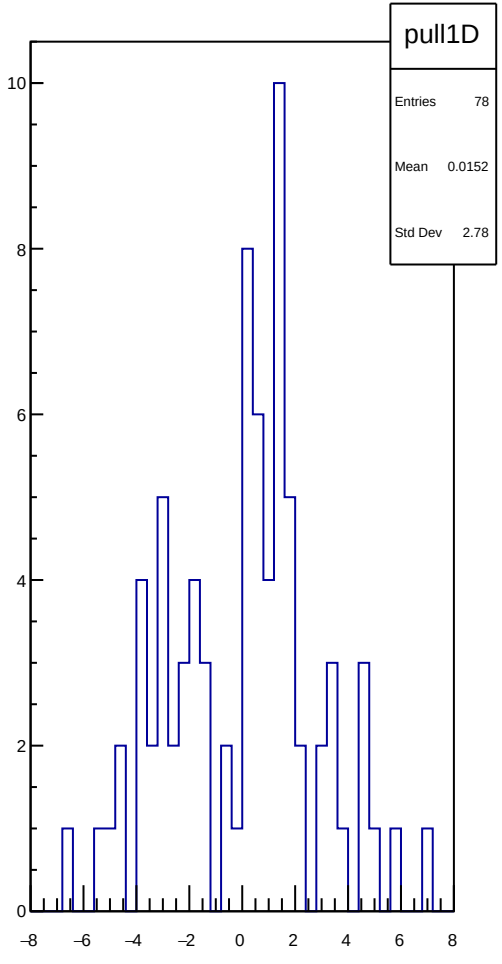

asym_bpm0i07WS_rms vs run
χ² / ndf 8864 / 77
p0 241.8 ± 0.1983
300
280
260
240
220
200

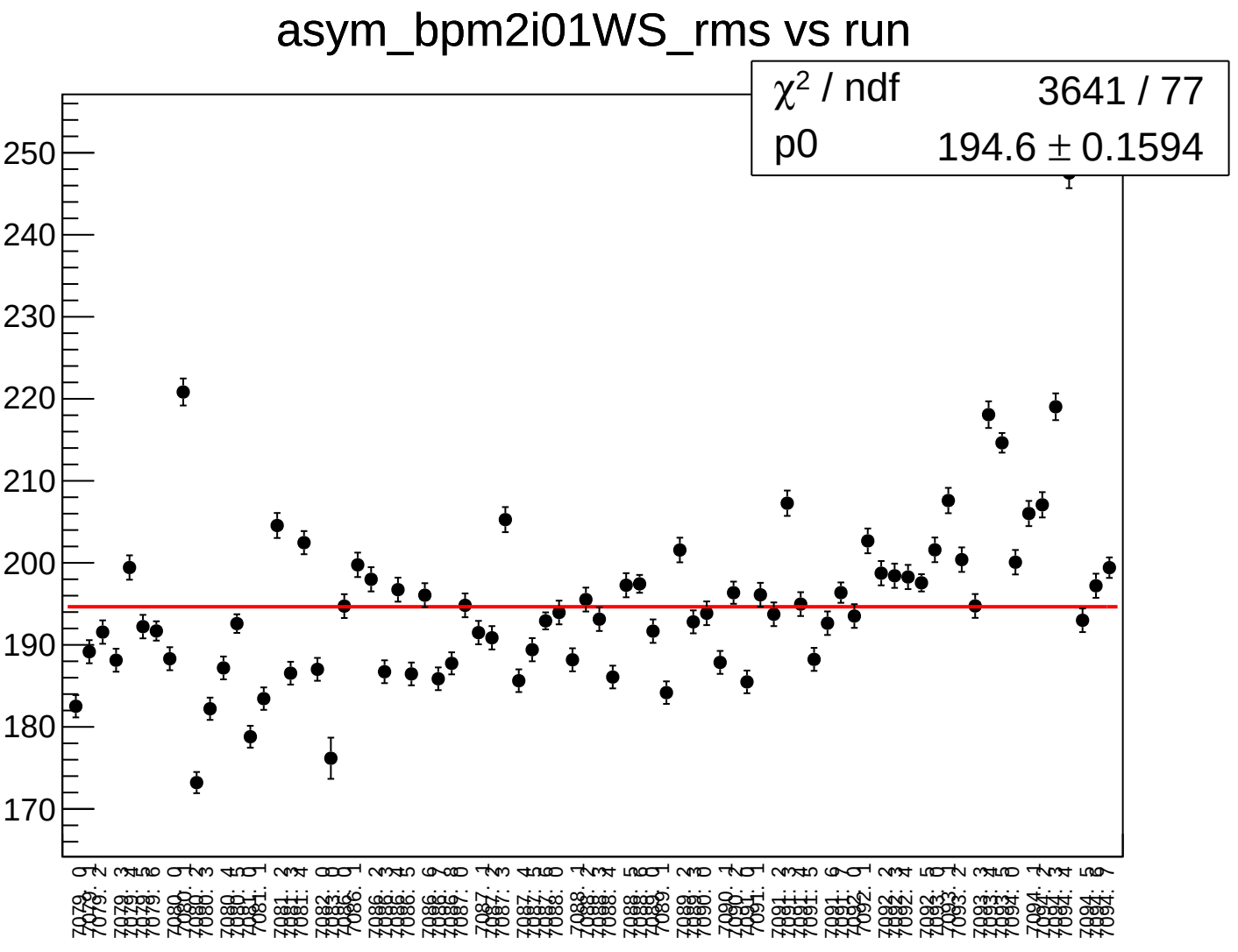

asym_bpm1i02WS_mean vs run
χ² / ndf 480 / 77
p0 −4496 ± 214.5
10000
5000
0
−5000
−10000
−15000
pull
Entries 78
Mean −244.5
Std Dev 87.21
6
4
2
0
−2
−4

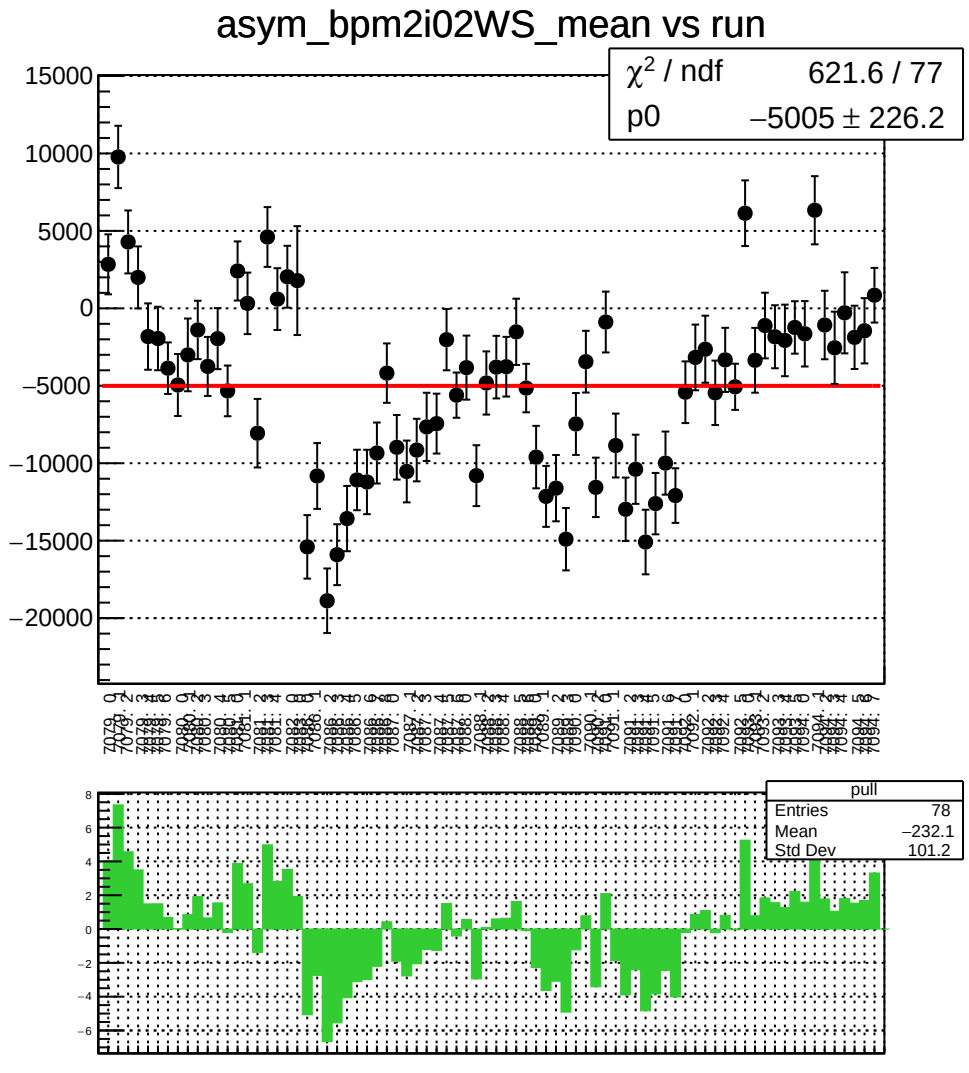

pull1D
Entries 78
Mean 0.007515
Std Dev 2.481
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

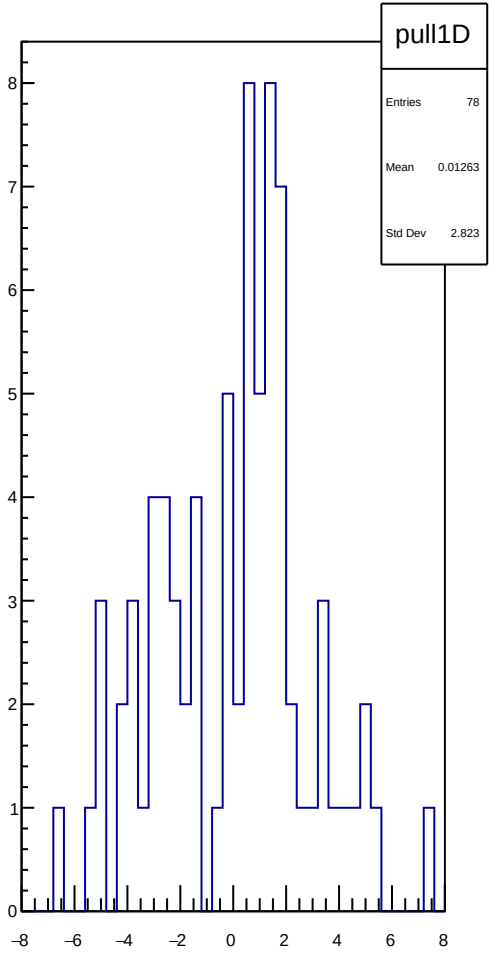

asym_bpm1i02WS_rms vs run
χ² / ndf 3777 / 77
p0 185.3 ± 0.1517
230
220
210
200
190
180
170
160

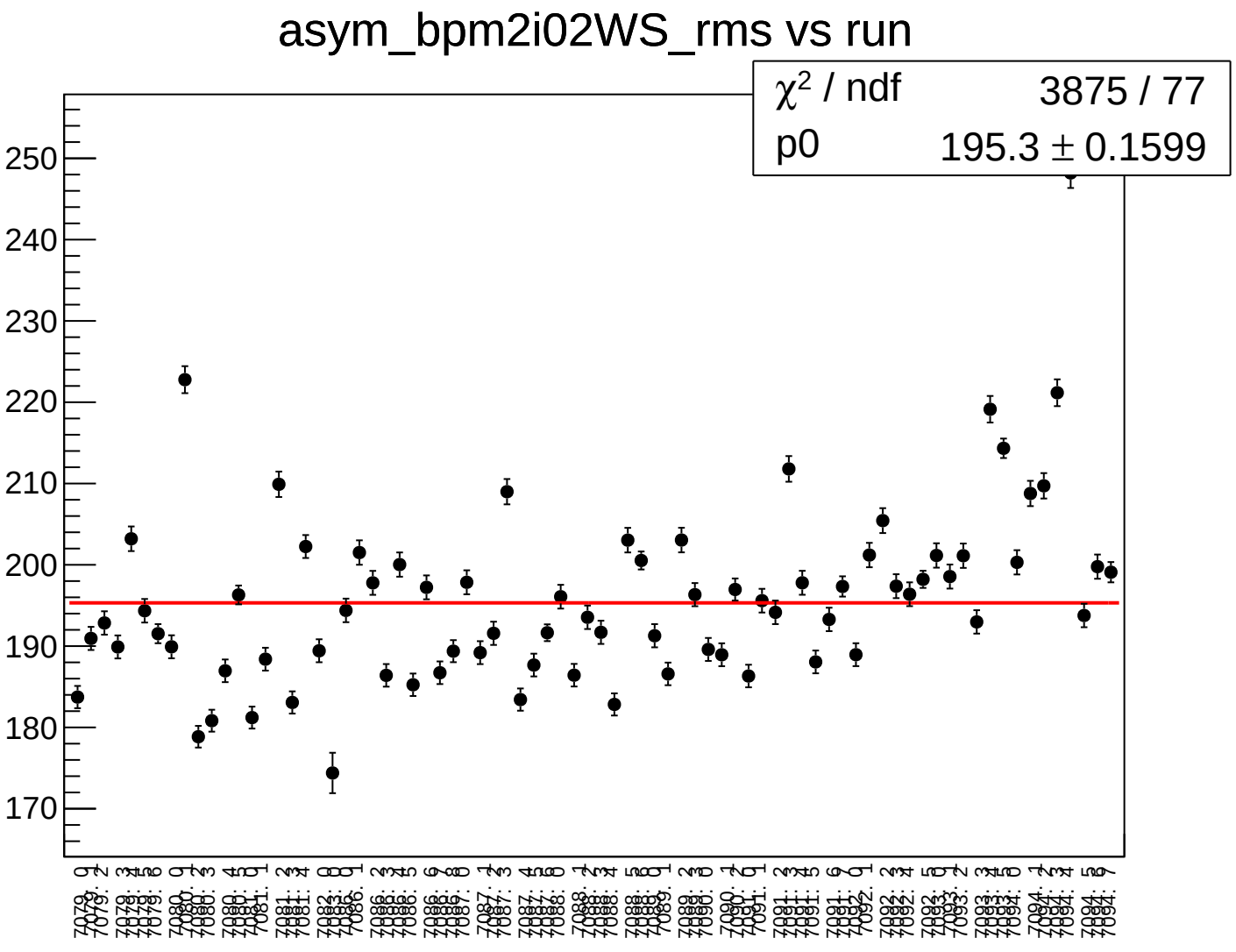

asym_bpm2i01WS_mean vs run
χ² / ndf 602.8 / 77
p0 −4819 ± 225.4
pull
Entries 78
Mean −217.6
Std Dev 117.4

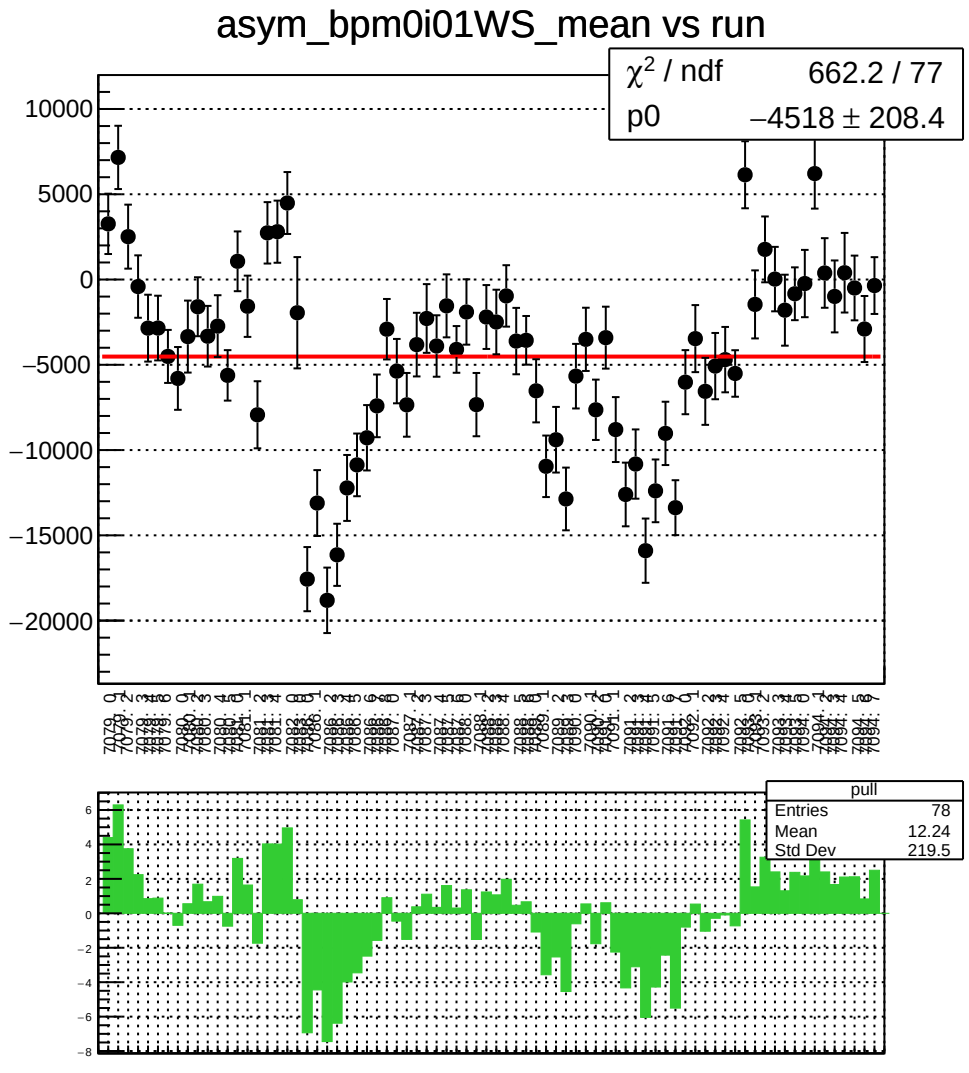

pull1D
Entries 78
Mean 0.0152
Std Dev 2.78

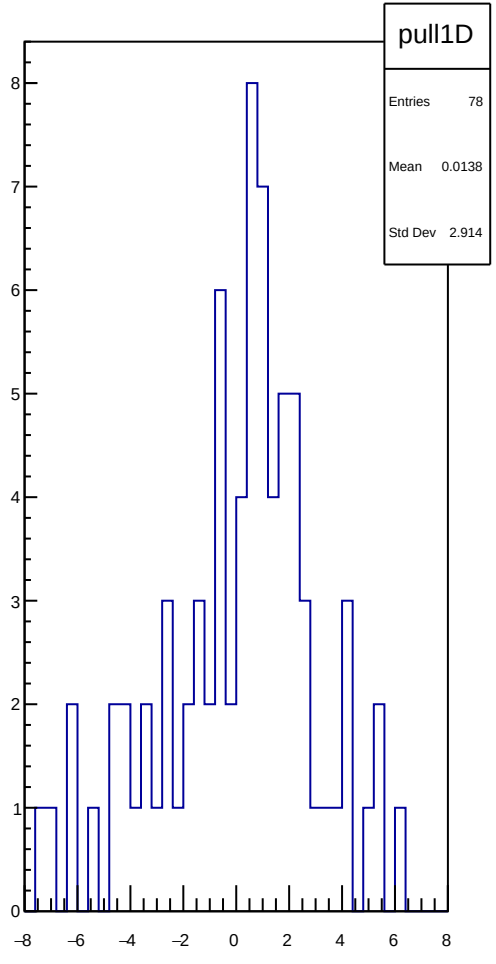

asym_bpm2i01WS_rms vs run
χ² / ndf 3641 / 77
p0 194.6 ± 0.1594
250
240
230
220
210
200
190
180
170

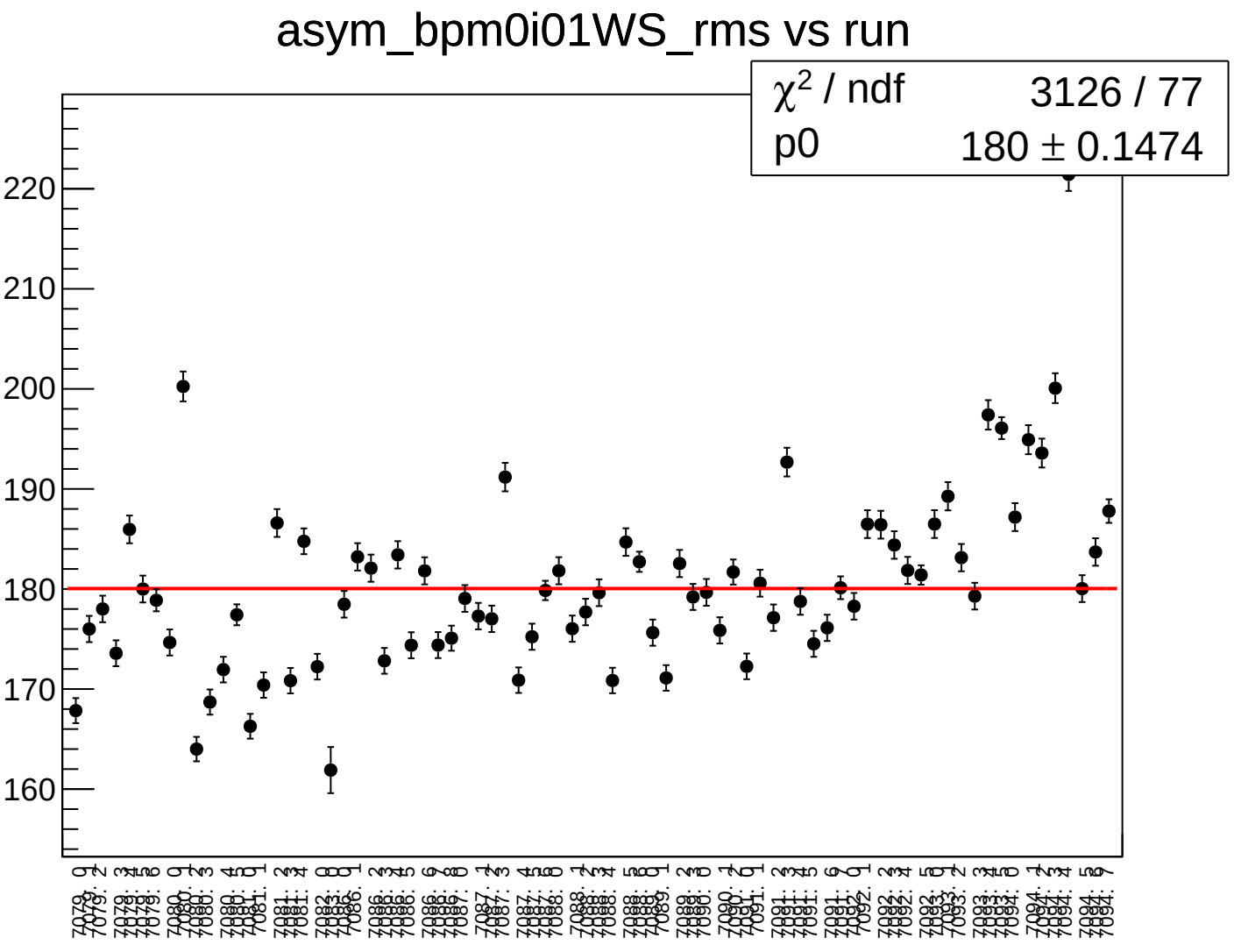

asym_bpm2i02WS_mean vs run
χ² / ndf 621.6 / 77
p0 −5005 ± 226.2
pull
Entries 78
Mean −232.1
Std Dev 101.2

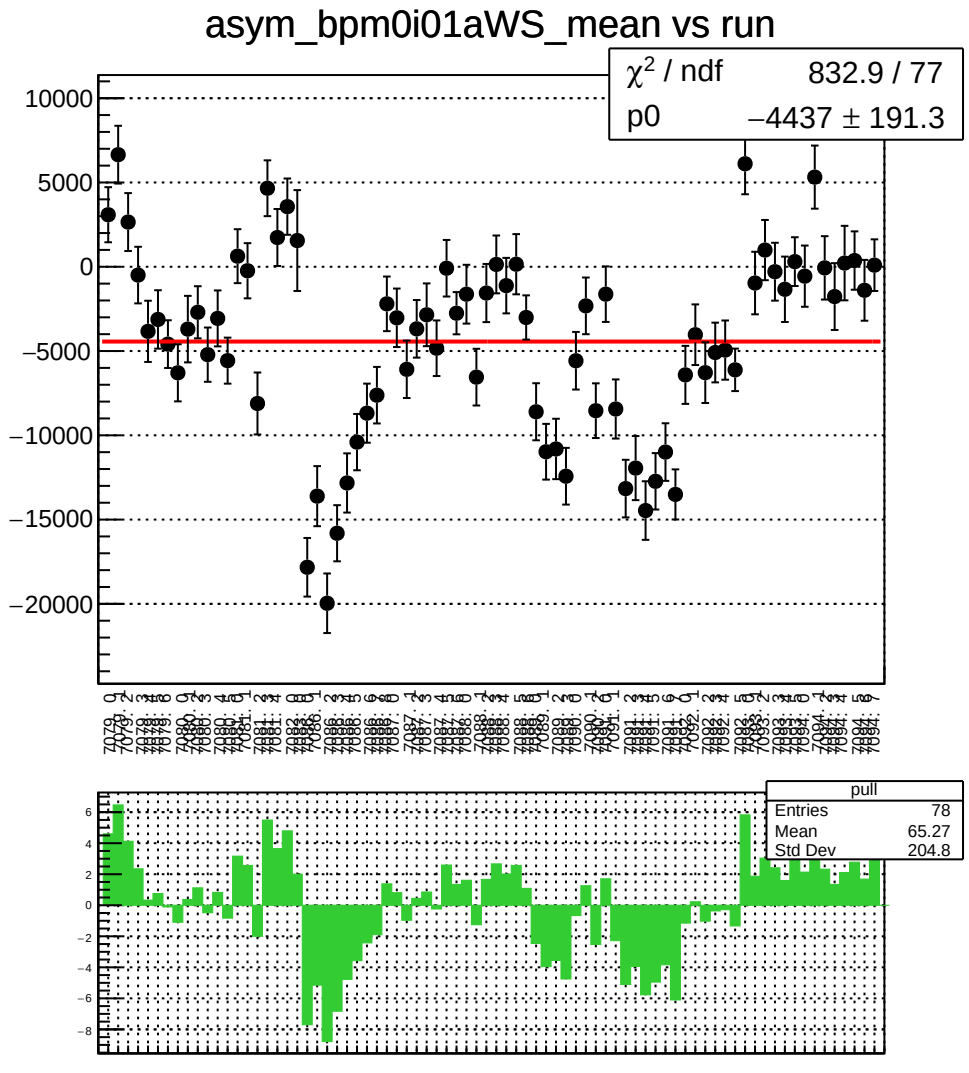

pull1D
Entries 78
Mean 0.01263
Std Dev 2.823

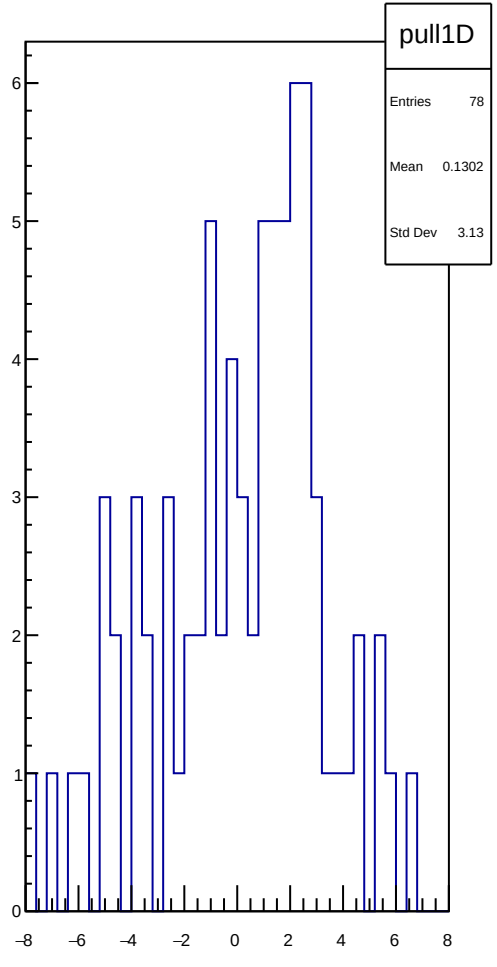

asym_bpm2i02WS_rms vs run
χ² / ndf 3875 / 77
p0 195.3 ± 0.1599
250
240
230
220
210
200
190
180
170

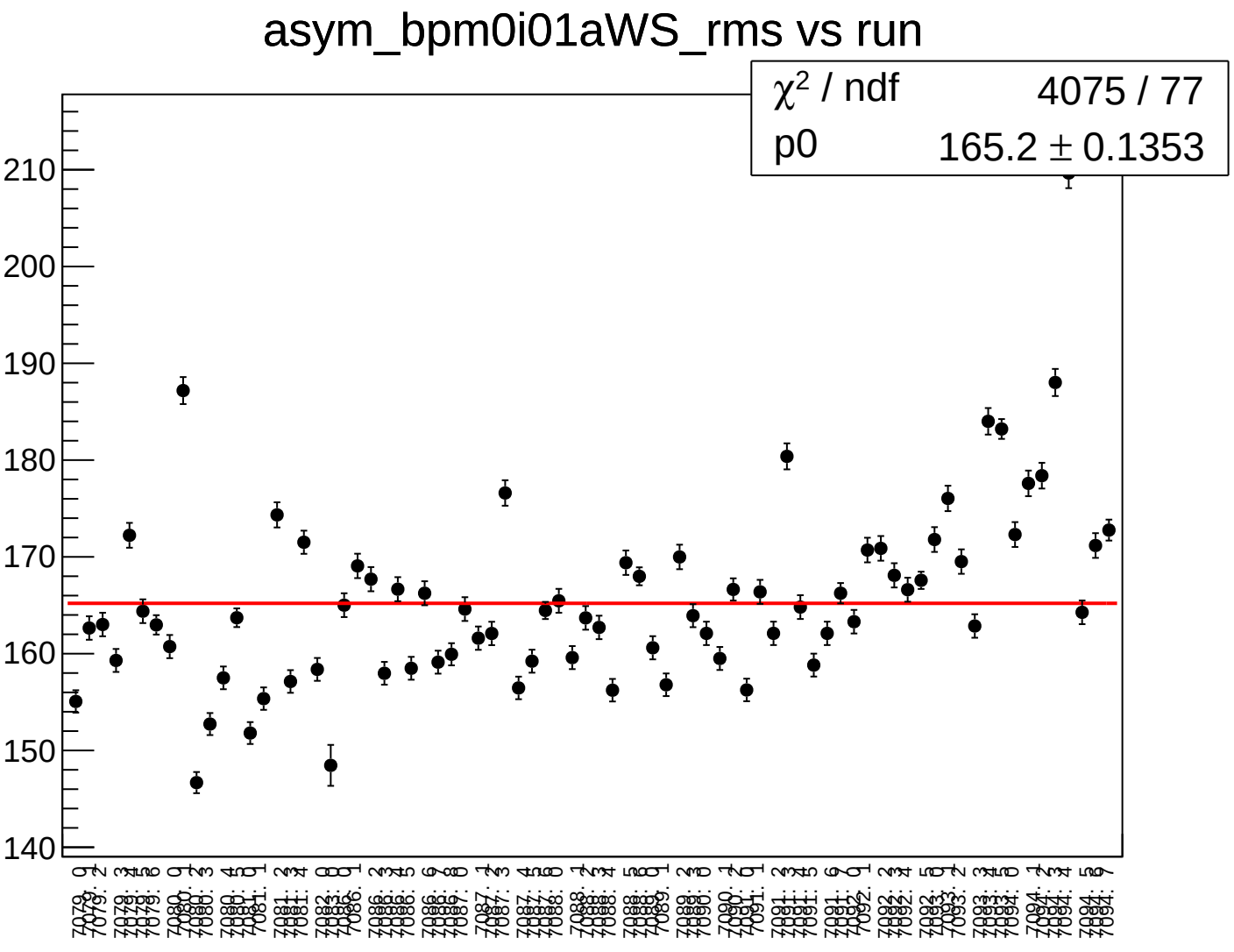

asym_bpm0i01WS_mean vs run
χ² / ndf 662.2 / 77
p0 −4518 ± 208.4
pull
Entries 78
Mean 12.24
Std Dev 219.5

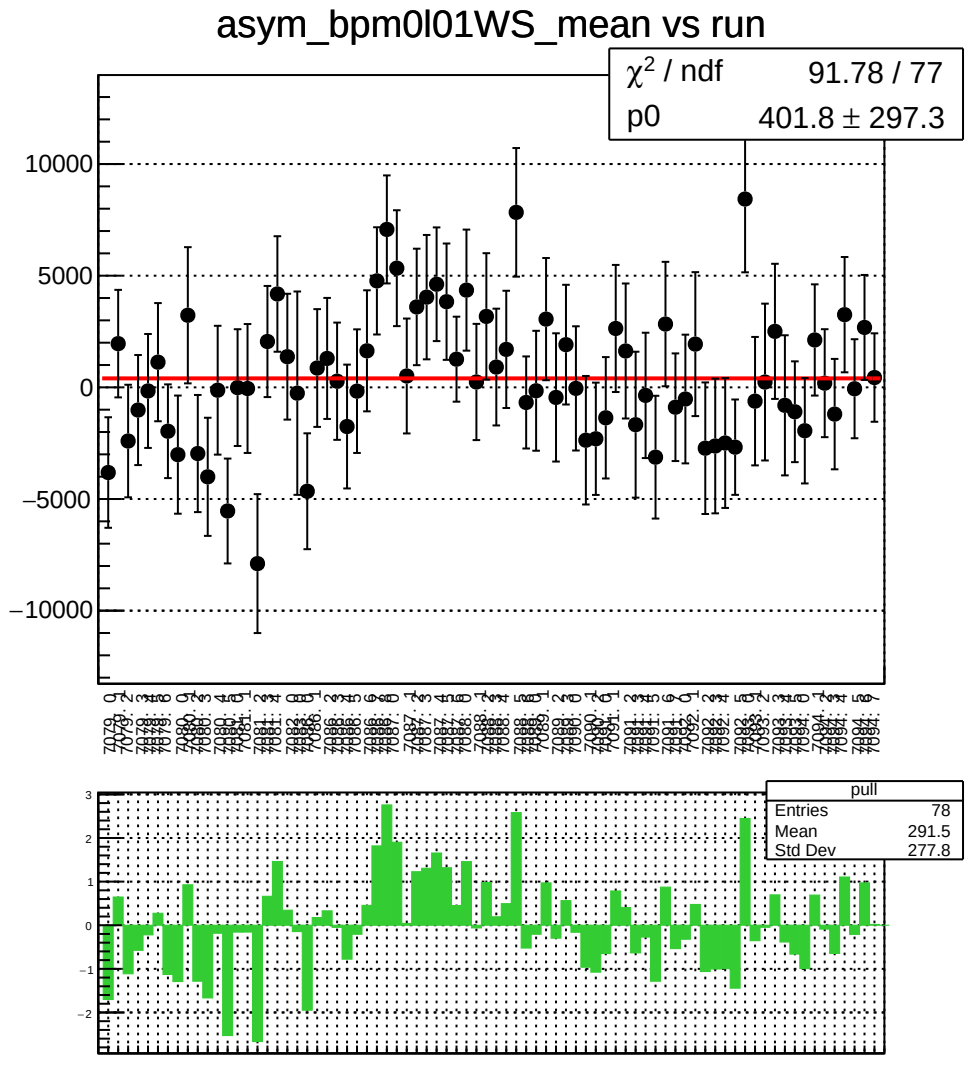

pull1D
Entries 78
Mean 0.0138
Std Dev 2.914

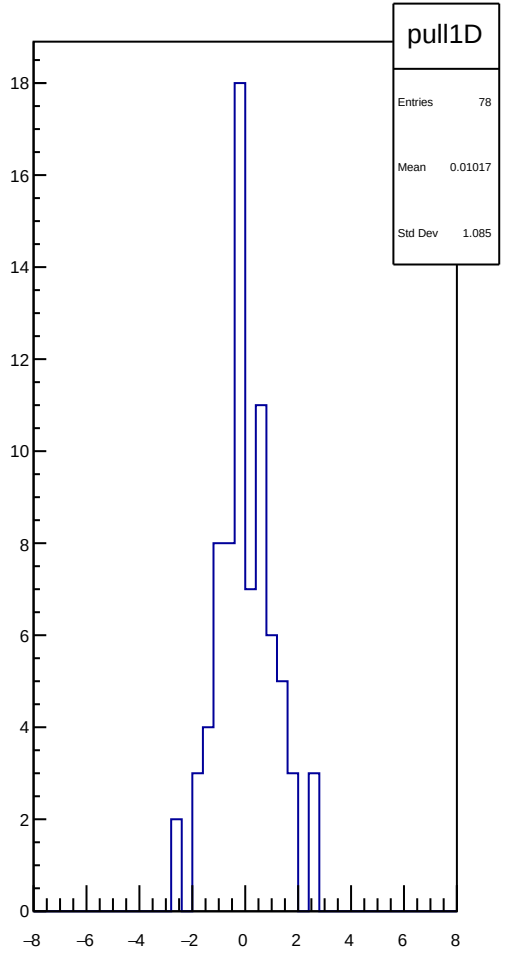

asym_bpm0i01WS_rms vs run
χ^2 / ndf 3126 / 77
p0 180 ± 0.1474
220
210
200
190
180
170
160

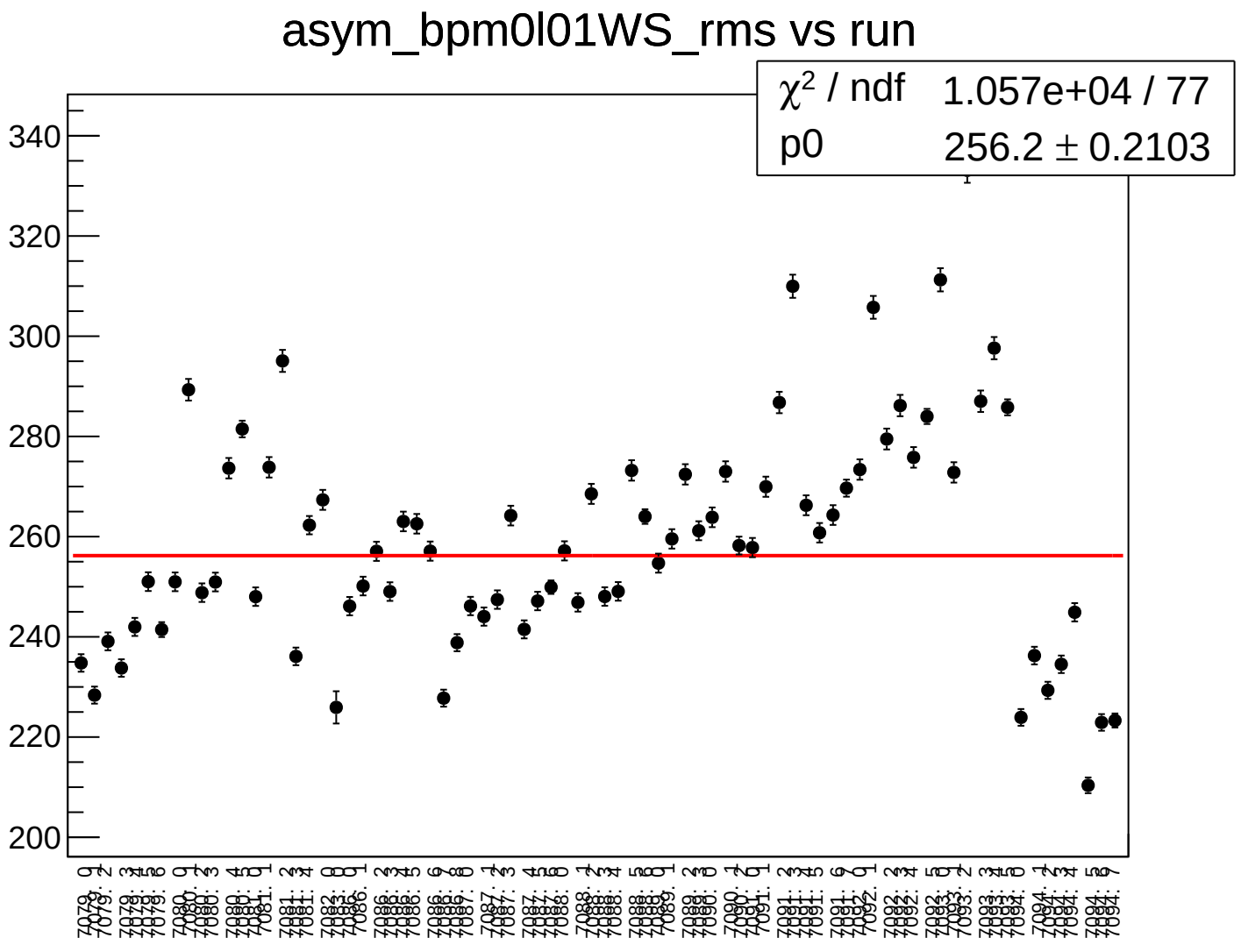

asym_bpm0i01aWS_mean vs run
χ² / ndf 832.9 / 77
p0 −4437 ± 191.3
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 78
Mean 65.27
Std Dev 204.8

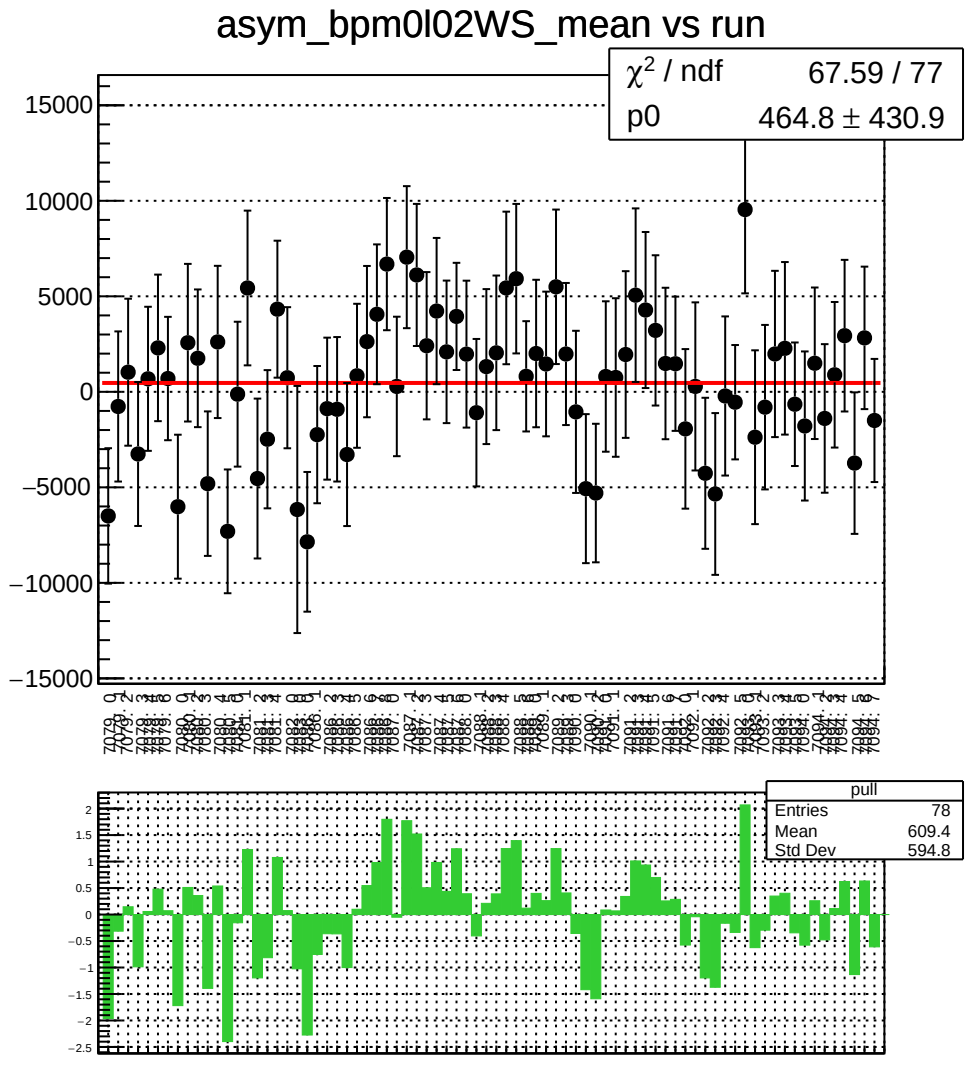

pull1D
Entries 78
Mean 0.1302
Std Dev 3.13

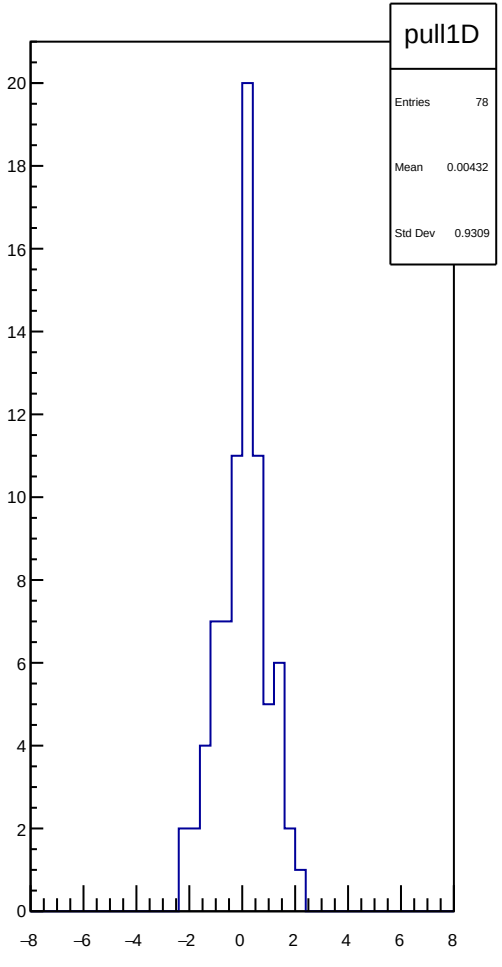

asym_bpm0i01aWS_rms vs run
χ² / ndf 4075 / 77
p0 165.2 ± 0.1353
210
200
190
180
170
160
150
140

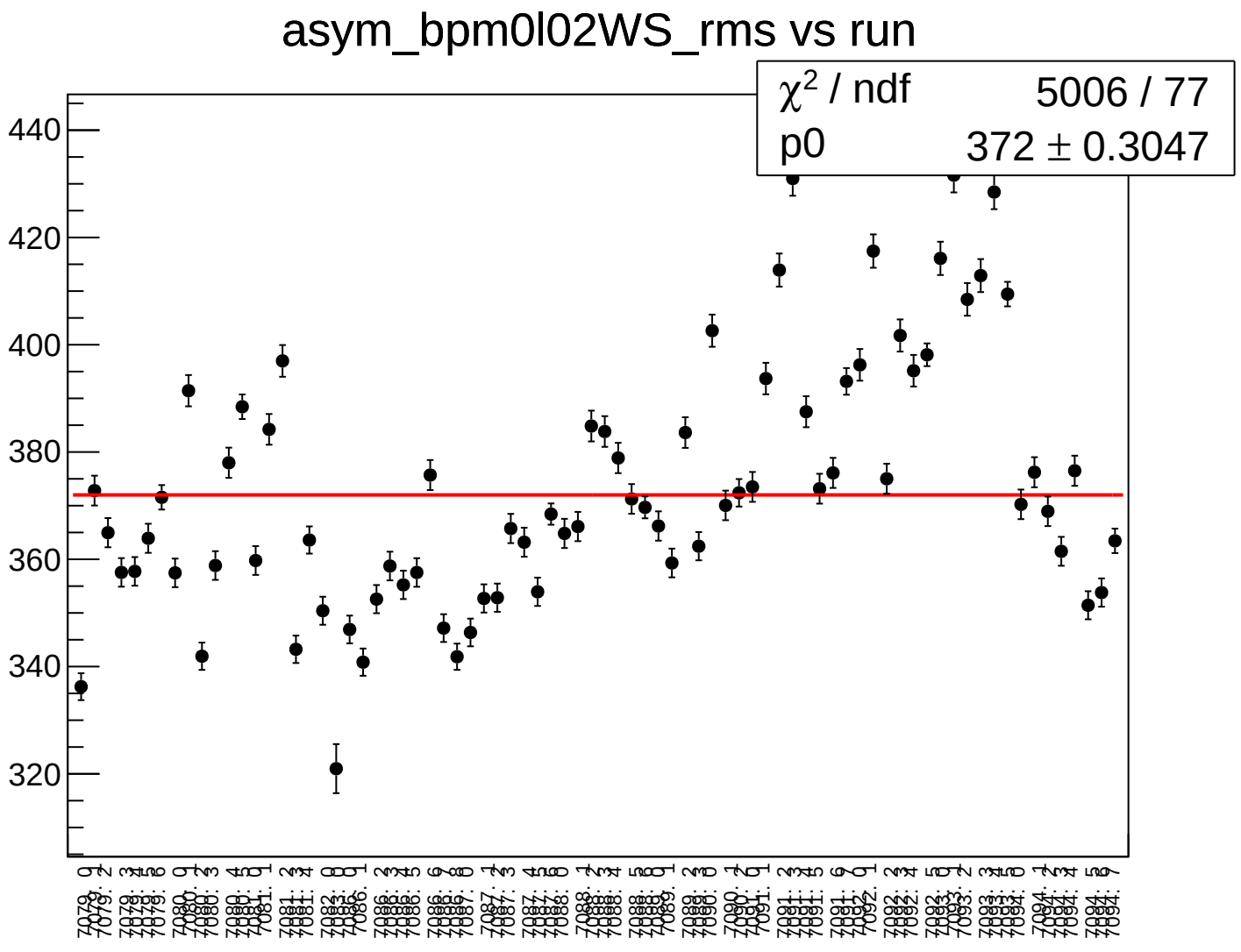

asym_bpm0l01WS_mean vs run
χ² / ndf 91.78 / 77
p0 401.8 ± 297.3
10000
5000
0
−5000
−10000
pull
Entries 78
Mean 291.5
Std Dev 277.8
3
2
1
0
−1
−2

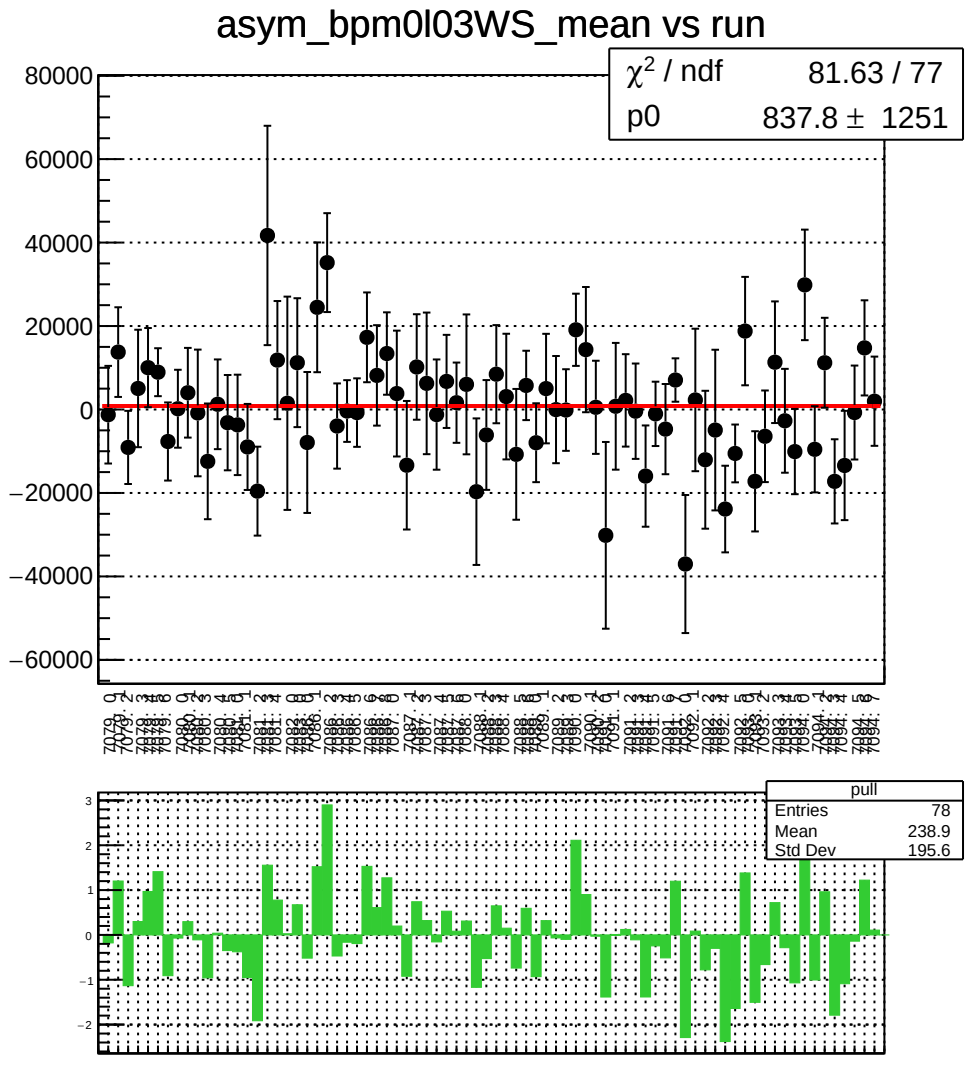

pull1D
Entries 78
Mean 0.01017
Std Dev 1.085
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

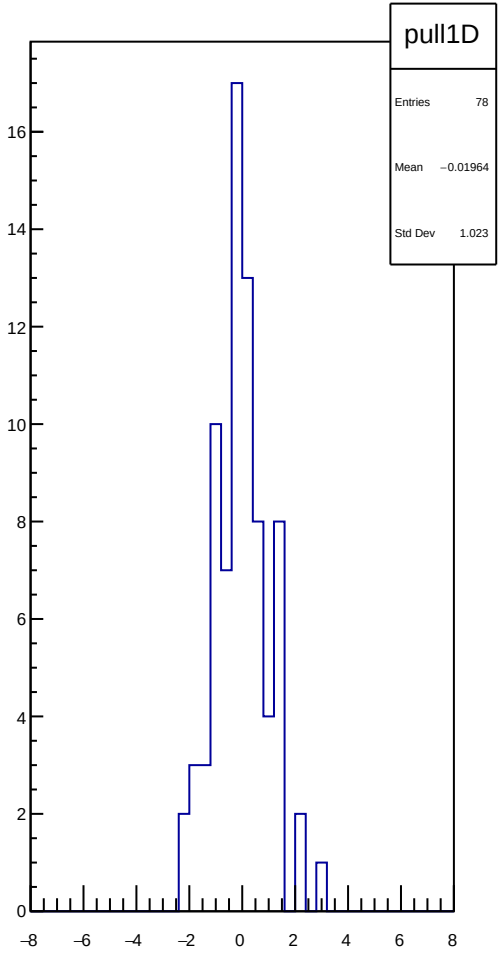

asym_bpm0l01WS_rms vs run
χ² / ndf 1.057e+04 / 77
p0 256.2 ± 0.2103
340
320
300
280
260
240
220
200

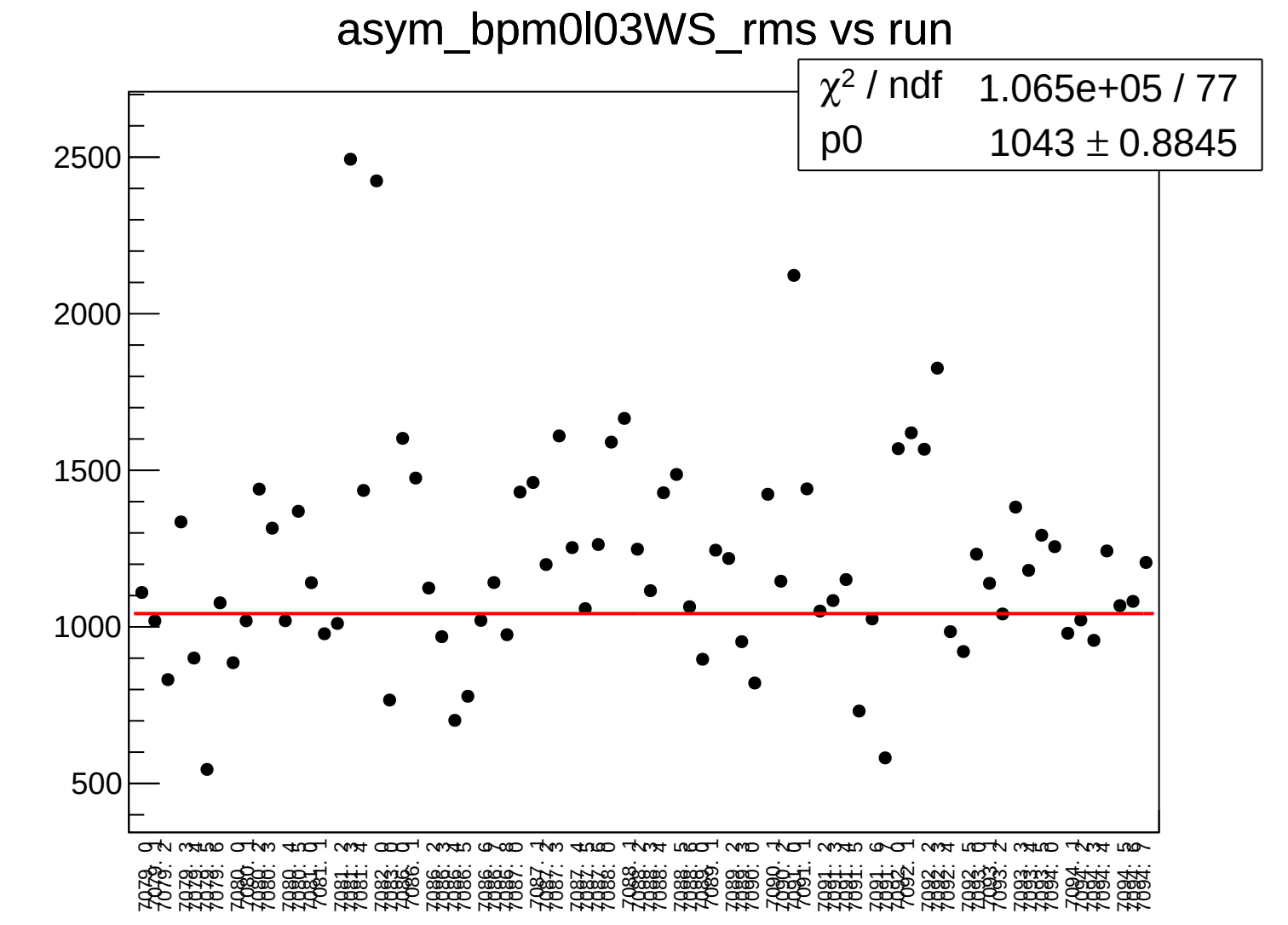

asym_bpm0l02WS_mean vs run
χ^2 / ndf 67.59 / 77
p0 464.8 ± 430.9
pull
Entries 78
Mean 609.4
Std Dev 594.8

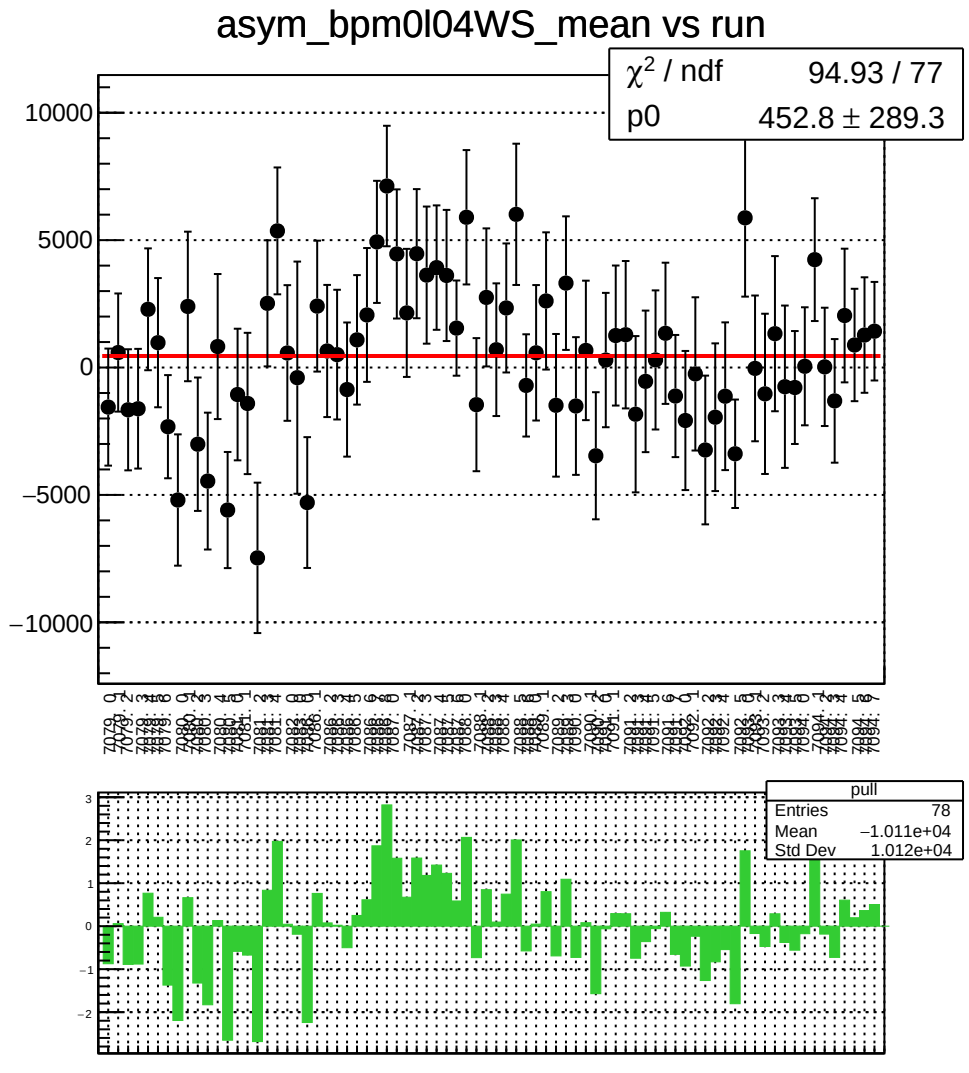

pull1D
Entries 78
Mean 0.00432
Std Dev 0.9309

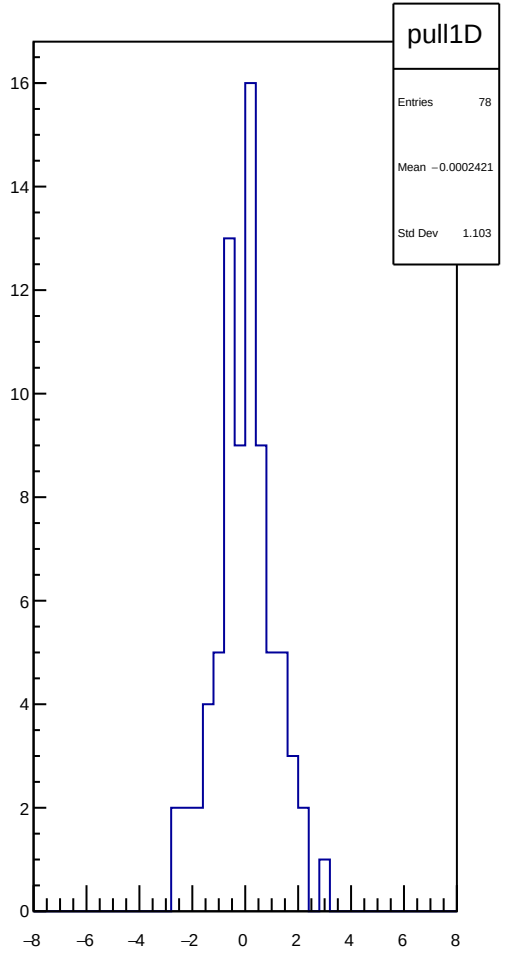

asym_bpm0l02WS_rms vs run
χ^2 / ndf 5006 / 77
p0 372 ± 0.3047
440
420
400
380
360
340
320


asym_bpm0l03WS_mean vs run
χ^2 / ndf 81.63 / 77
p0 837.8 ± 1251
pull
Entries 78
Mean 238.9
Std Dev 195.6


pull1D
Entries 78
Mean −0.01964
Std Dev 1.023


asym_bpm0l03WS_rms vs run
χ² / ndf 1.065e+05 / 77
p0 1043 ± 0.8845
2500
2000
1500
1000
500


asym_bpm0l04WS_mean vs run
χ^2 / ndf 94.93 / 77
p0 452.8 ± 289.3
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −1.011e+04
Std Dev 1.012e+04
3
2
1
0
−1
−2


pull1D
Entries 78
Mean −0.0002421
Std Dev 1.103
16
14
12
10
8
6
4
2
0
−8
−6
−4
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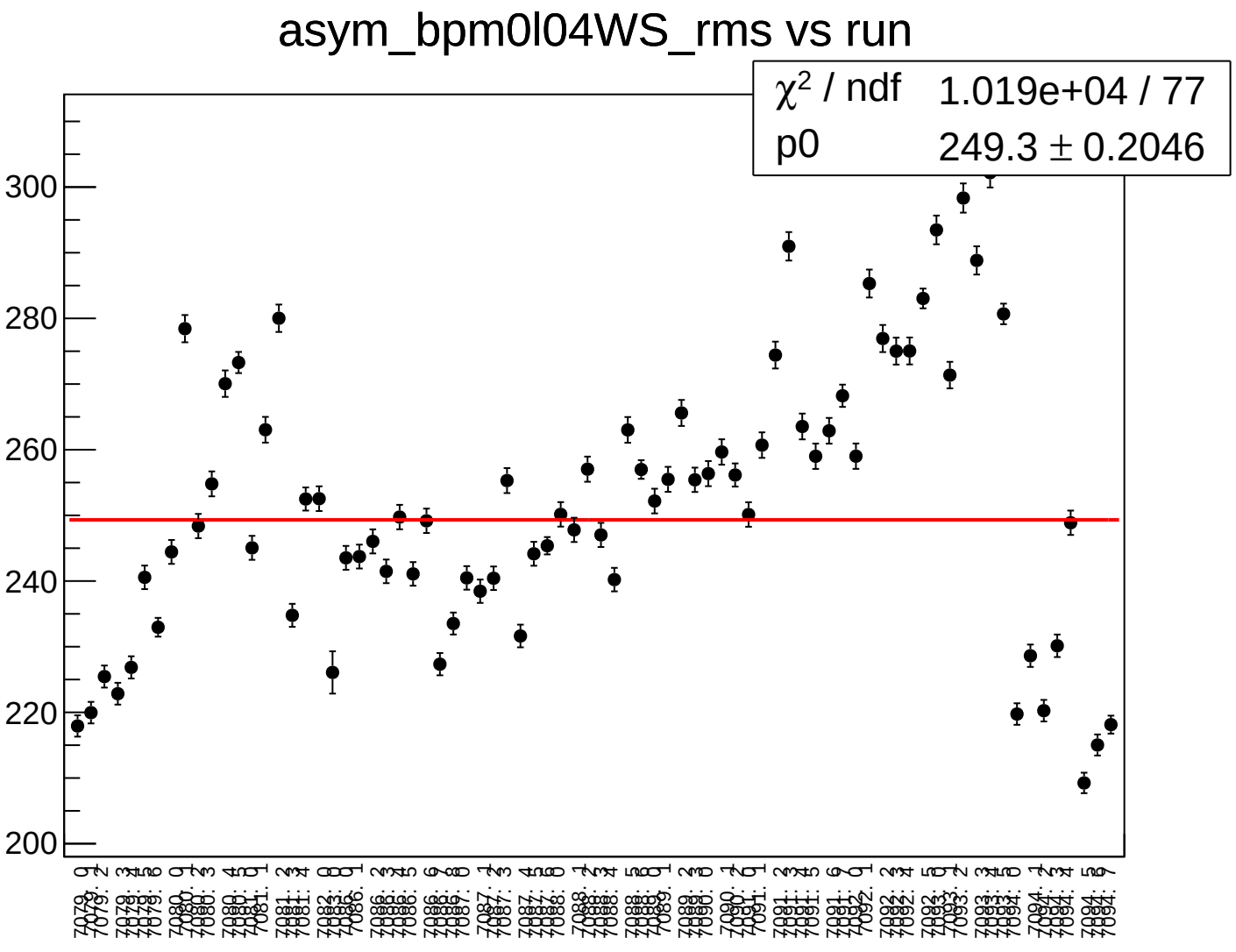
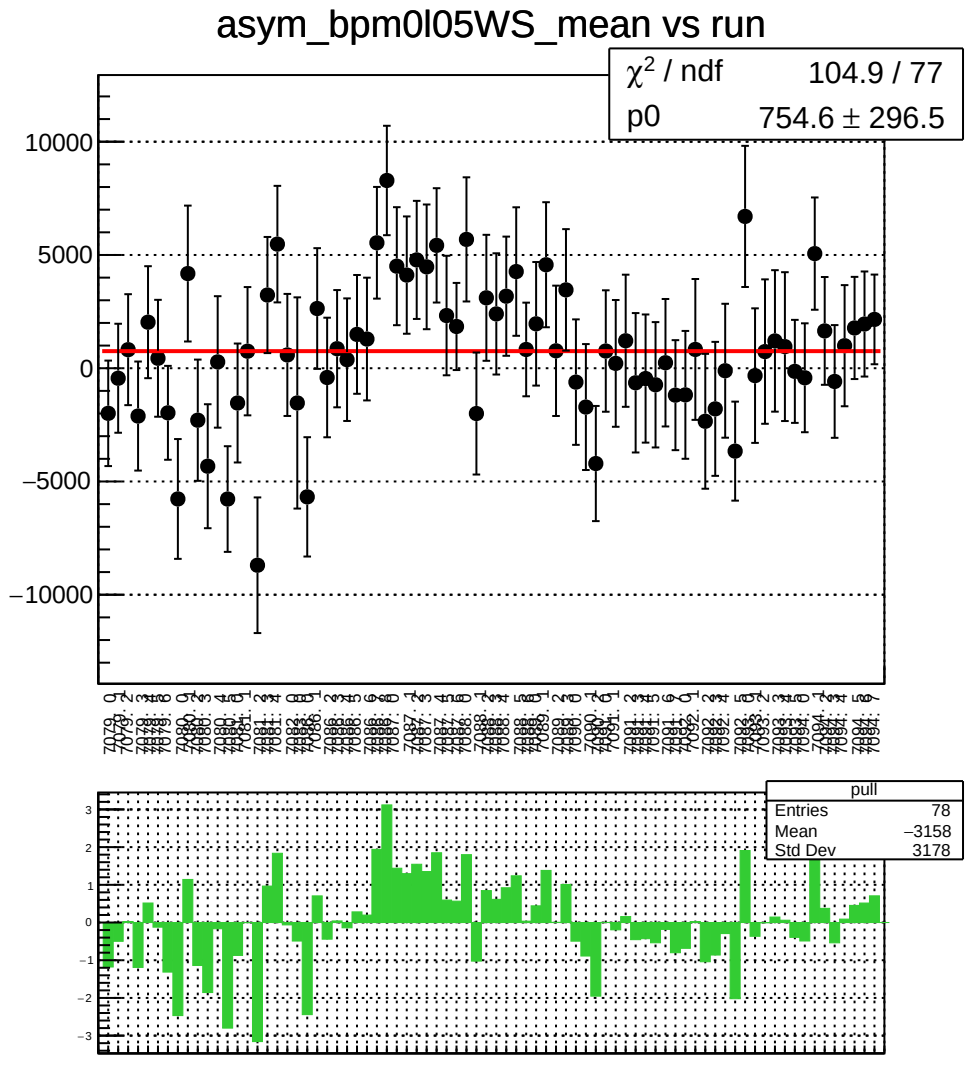
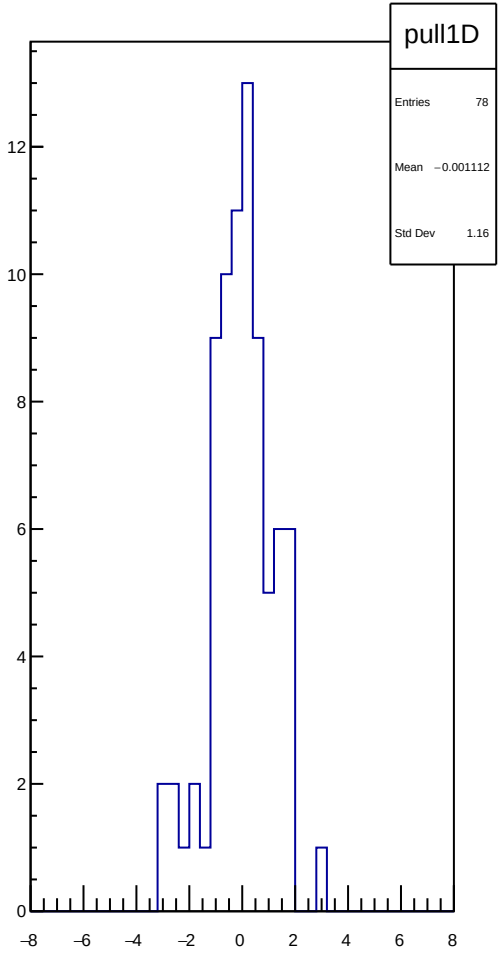
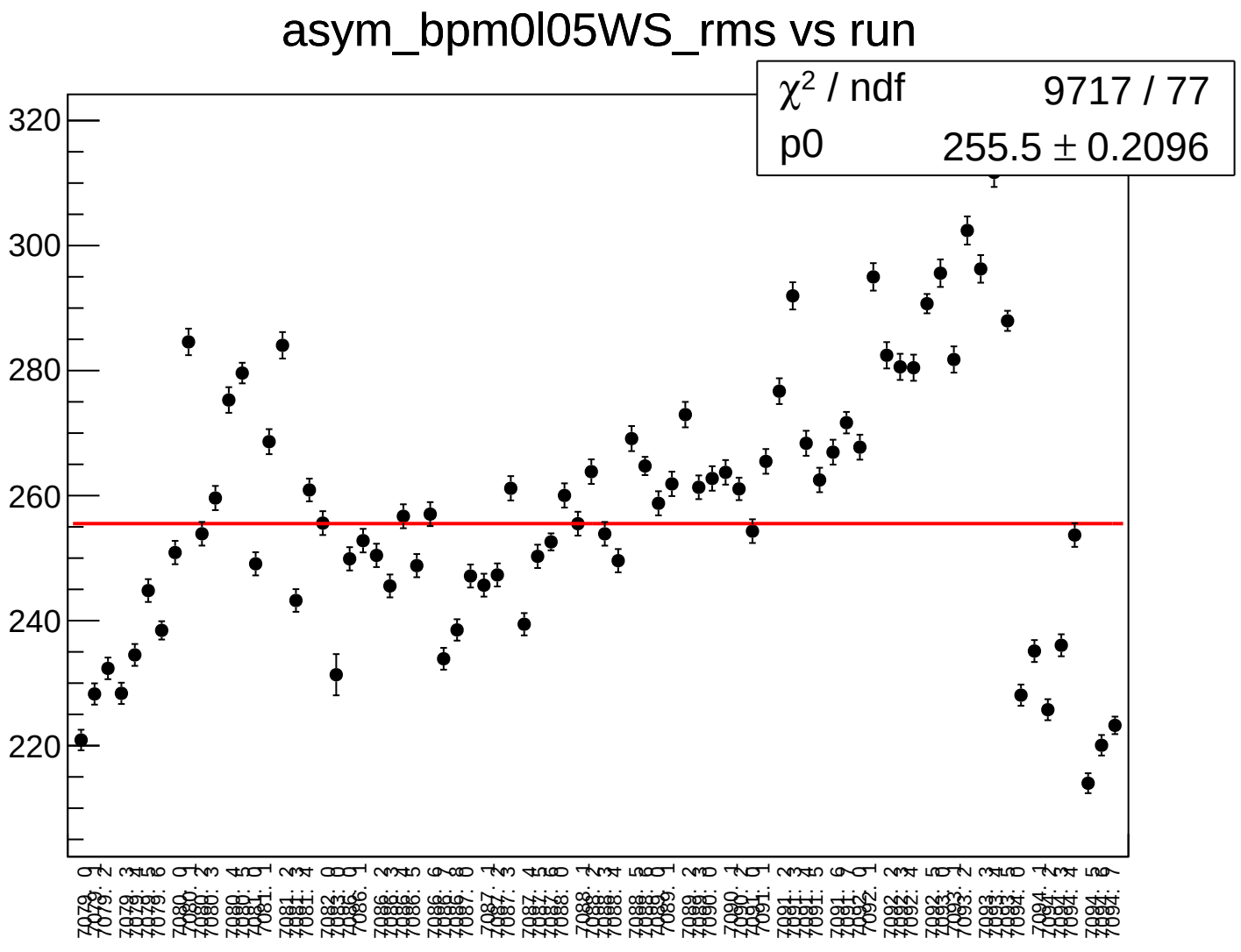
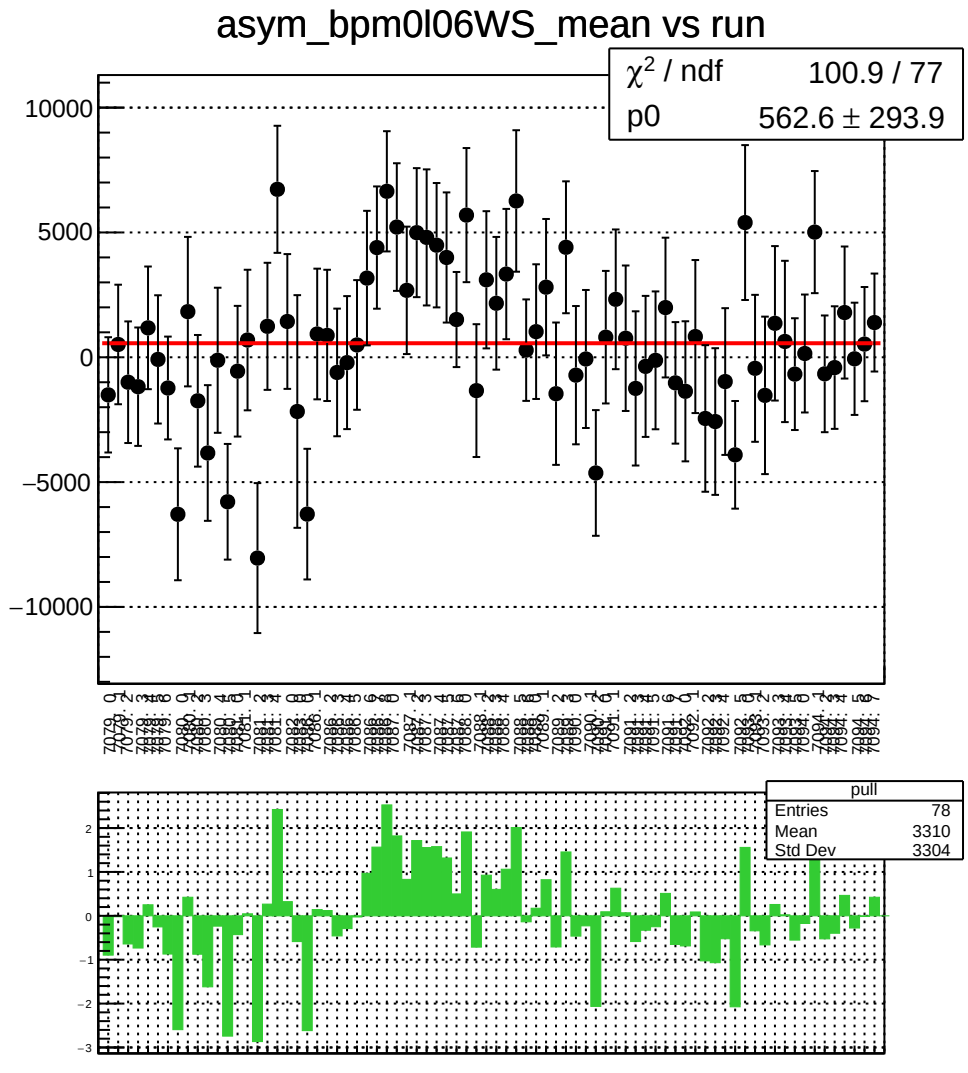
0
2
4
6
8

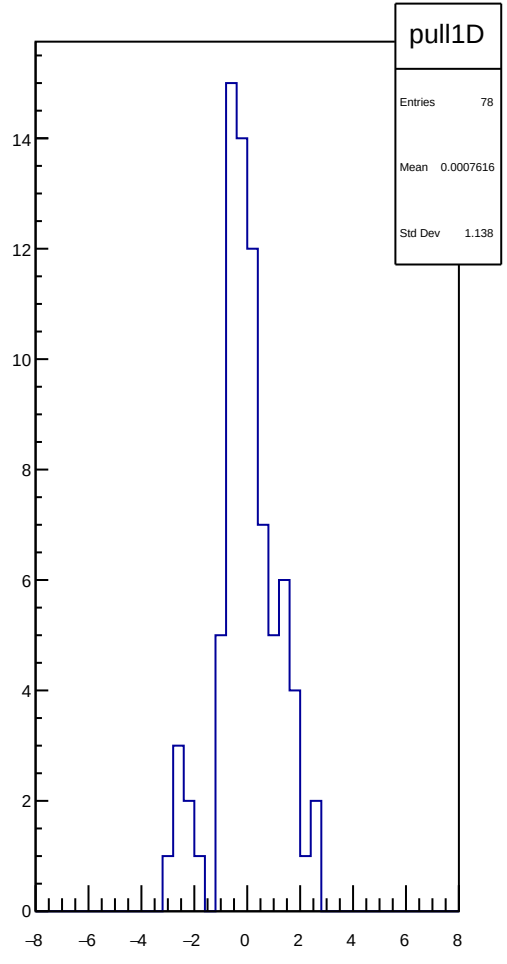

asym_bpm0l04WS_rms vs run
χ² / ndf 1.019e+04 / 77
p0 249.3 ± 0.2046
300
280
260
240
220
200

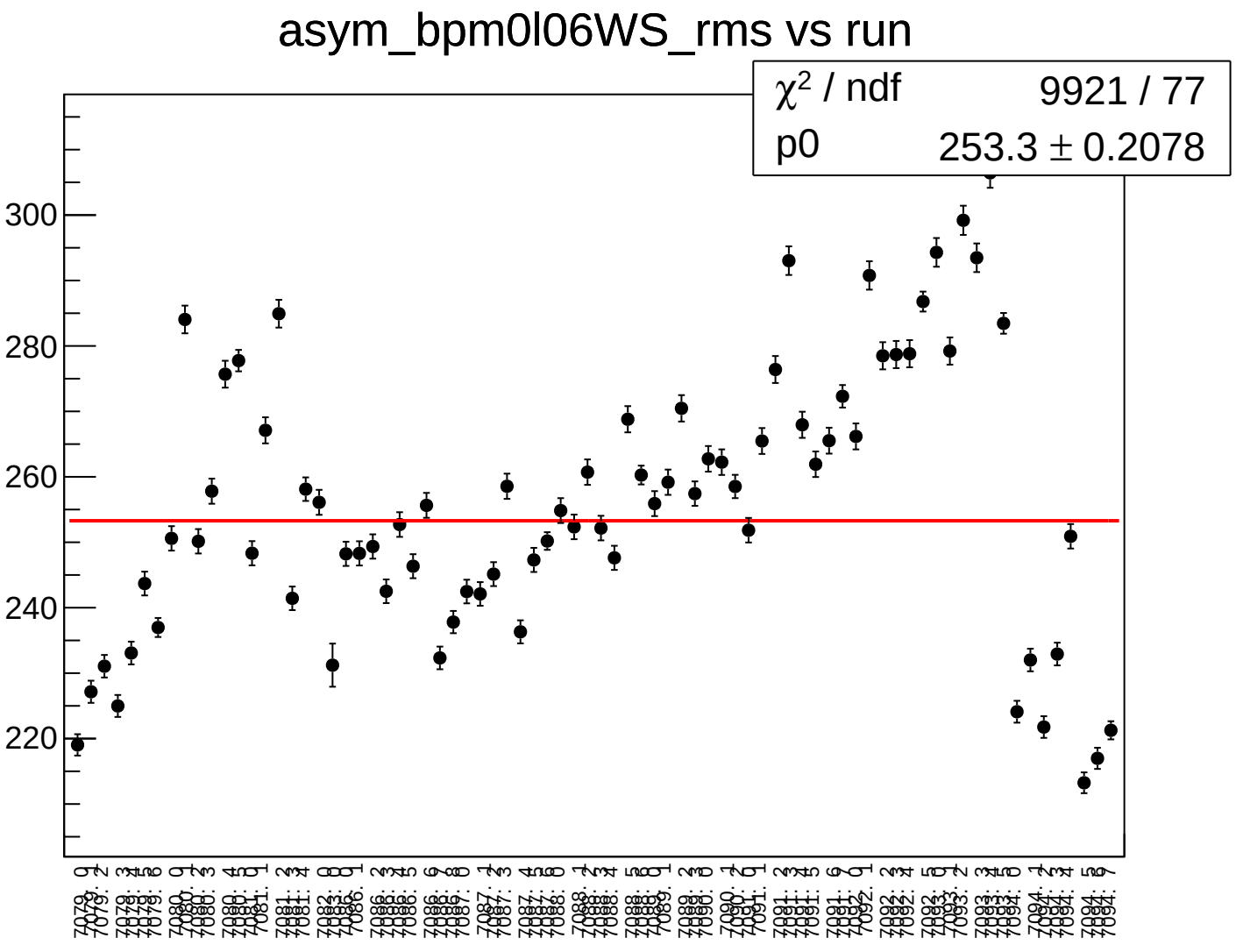

asym_bpm0l05WS_mean vs run
χ² / ndf 104.9 / 77
p0 754.6 ± 296.5
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −3158
Std Dev 3178
3
2
1
0
−1
−2
−3

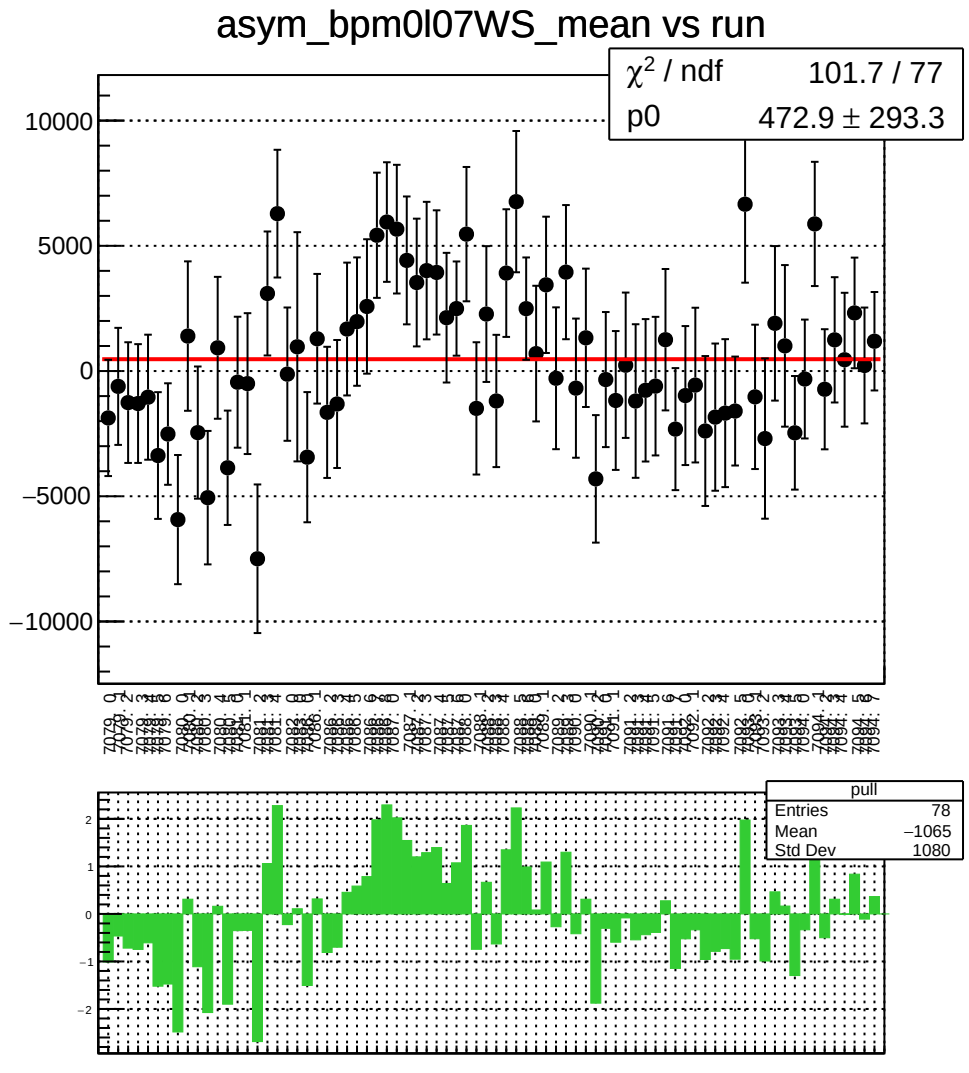

pull1D
Entries 78
Mean −0.001112
Std Dev 1.16
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

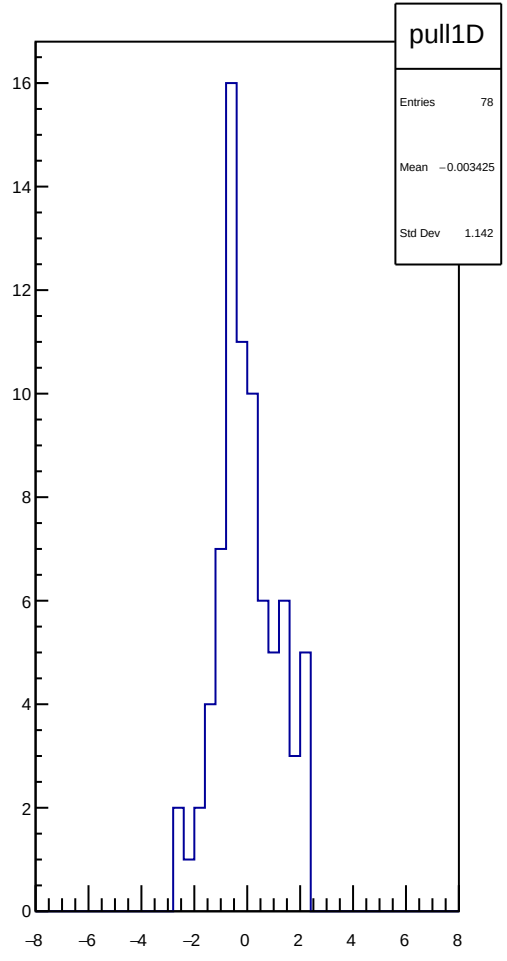

asym_bpm0l05WS_rms vs run
χ² / ndf 9717 / 77
p0 255.5 ± 0.2096
320
300
280
260
240
220

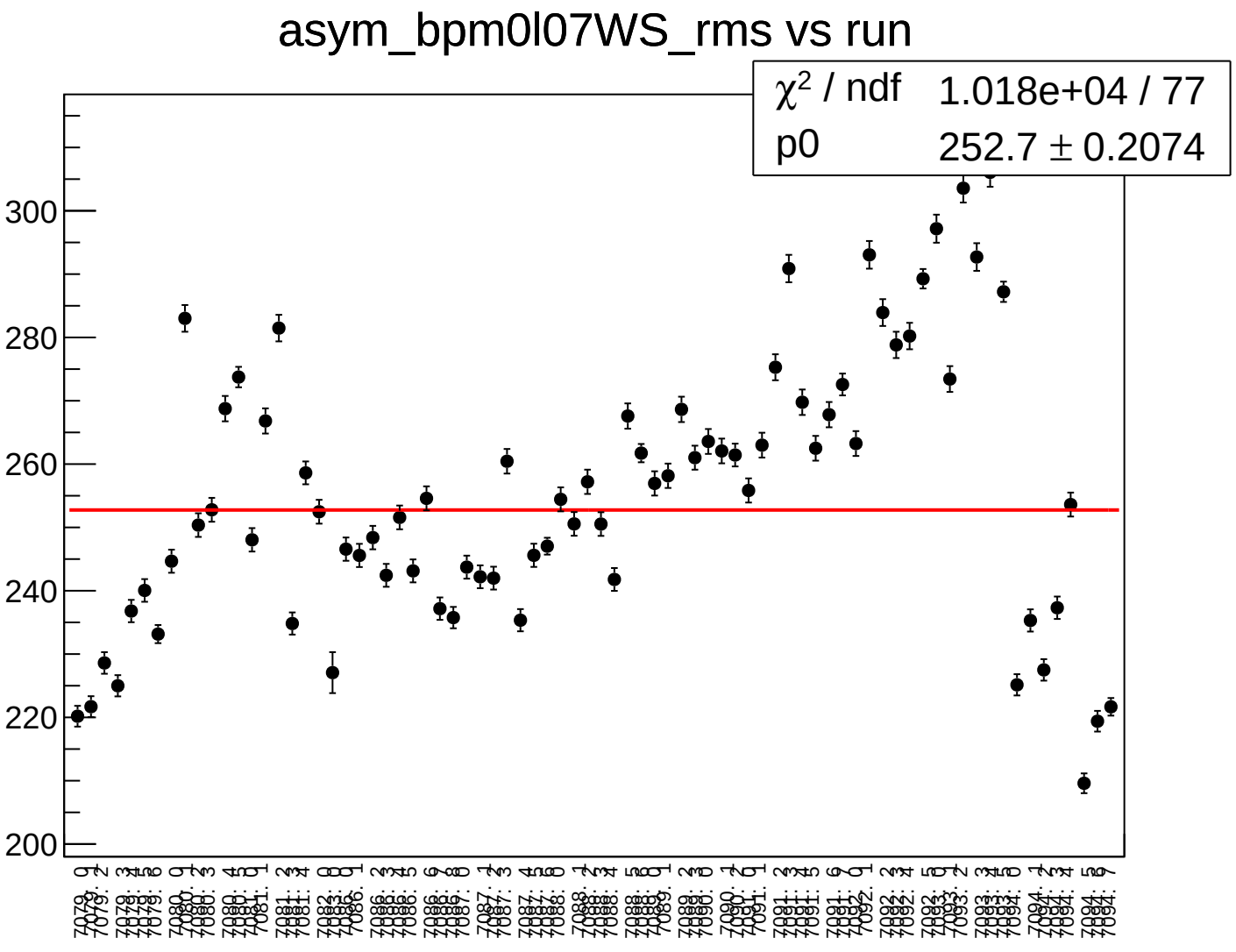

asym_bpm0l06WS_mean vs run
χ² / ndf 100.9 / 77
p0 562.6 ± 293.9
10000
5000
0
−5000
−10000
pull
Entries 78
Mean 3310
Std Dev 3304
2
1
0
−1
−2
−3

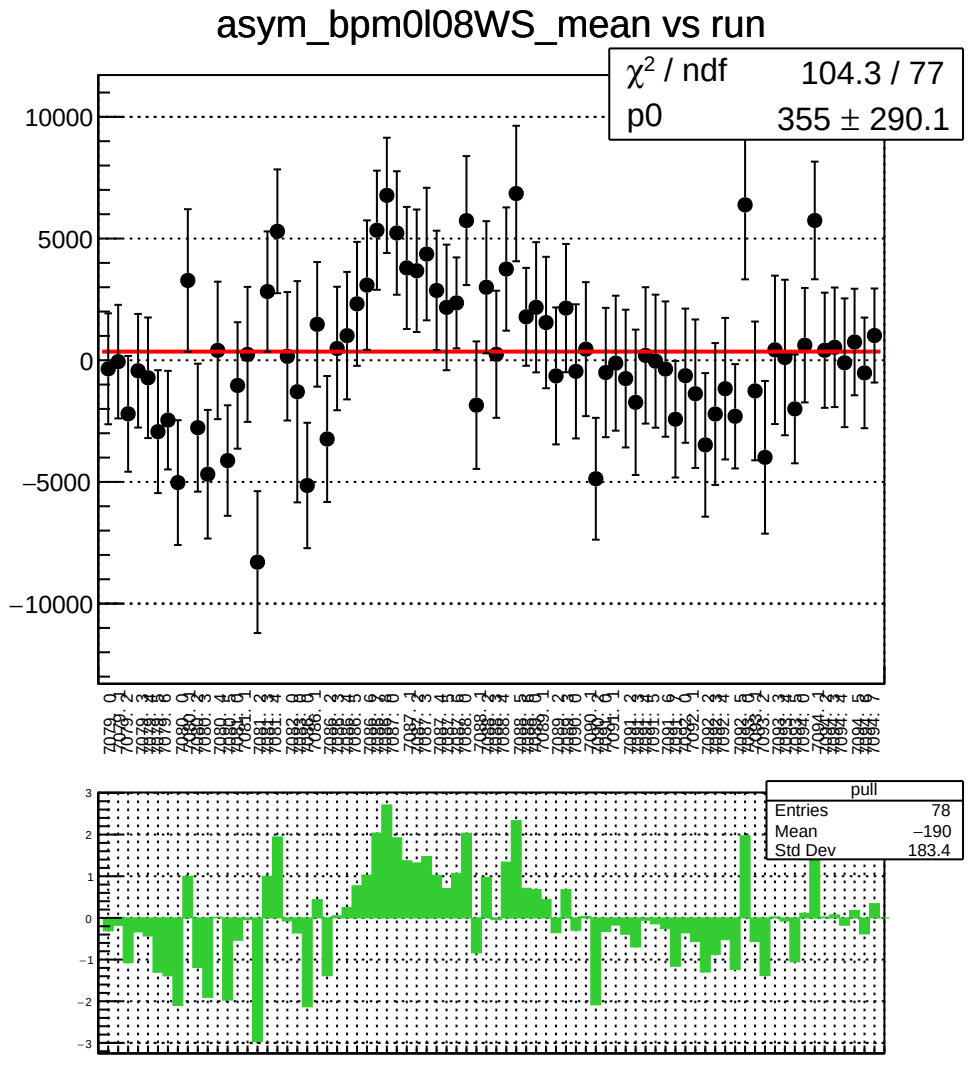

pull1D
Entries 78
Mean 0.0007616
Std Dev 1.138
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

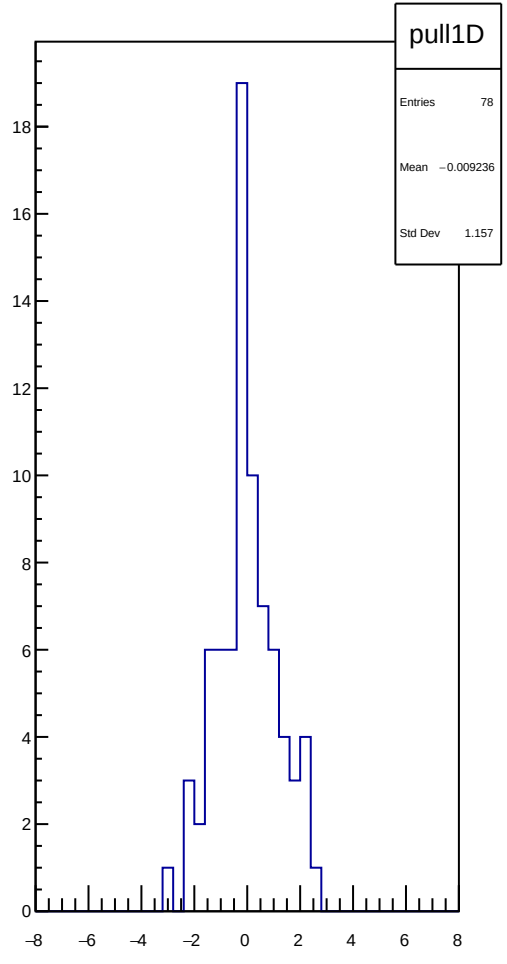

asym_bpm0l06WS_rms vs run
χ² / ndf 9921 / 77
p0 253.3 ± 0.2078
300
280
260
240
220

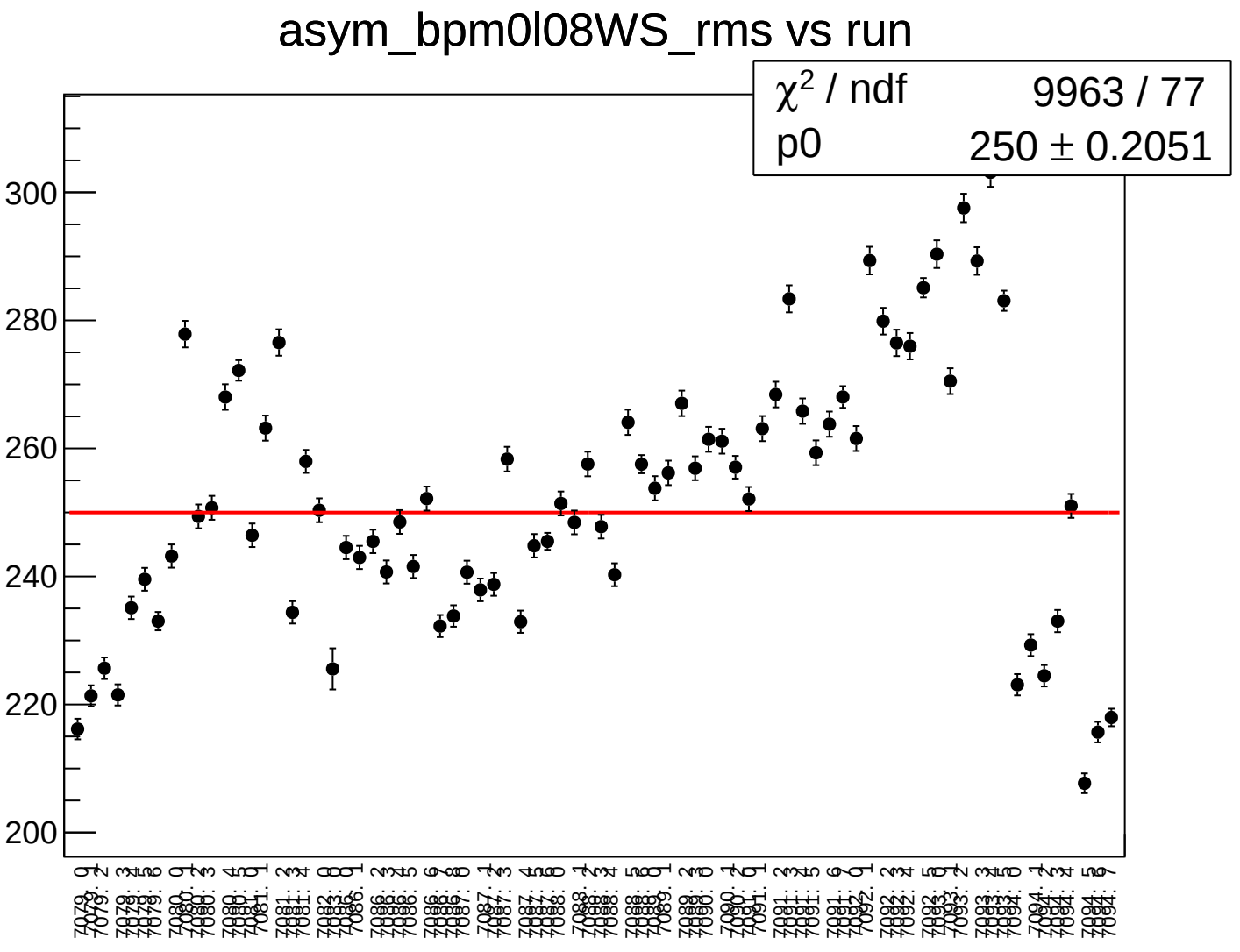

asym_bpm0l07WS_mean vs run
χ² / ndf 101.7 / 77
p0 472.9 ± 293.3
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −1065
Std Dev 1080
2
1
0
−1
−2

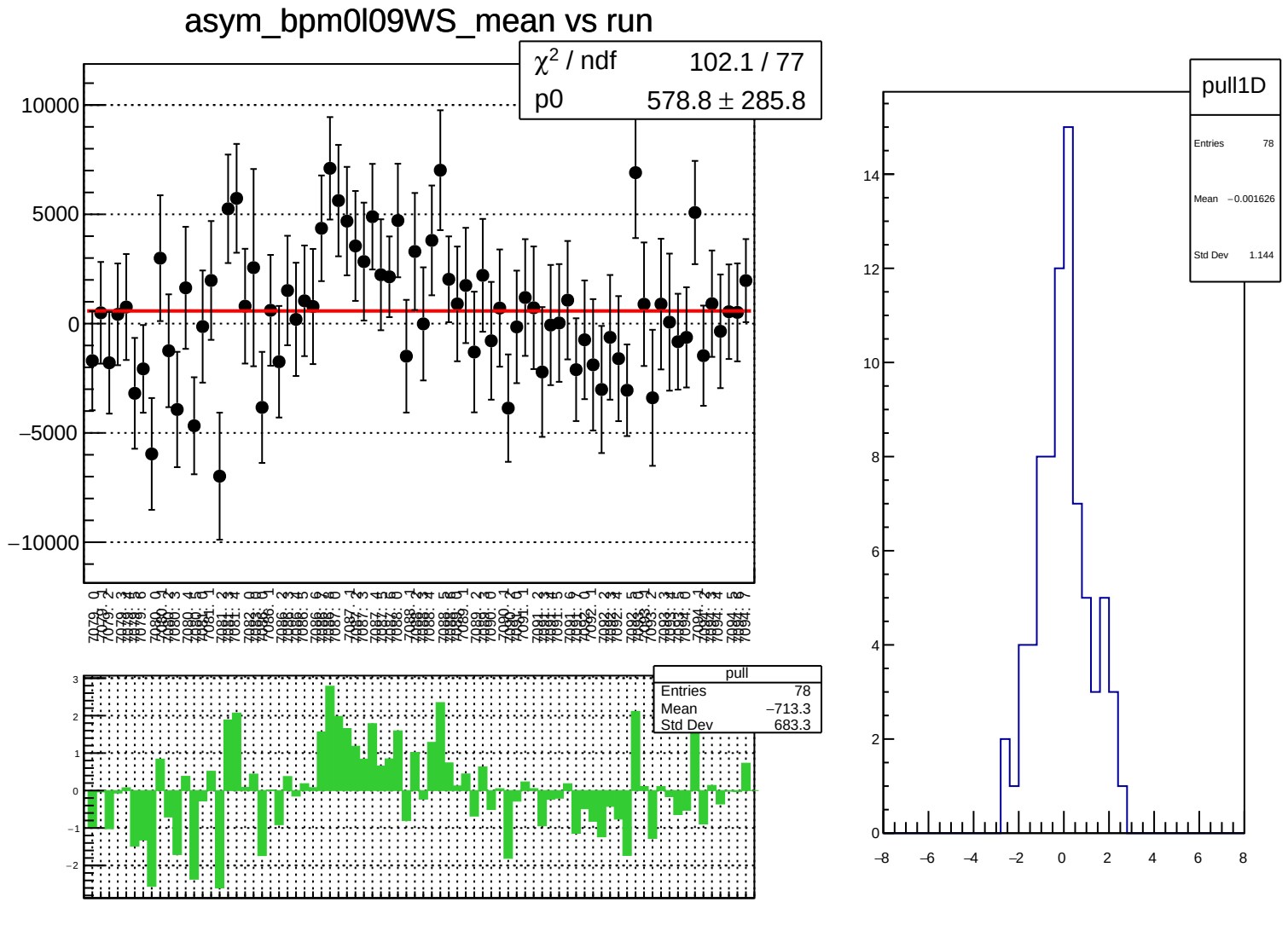

pull1D
Entries 78
Mean −0.003425
Std Dev 1.142
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

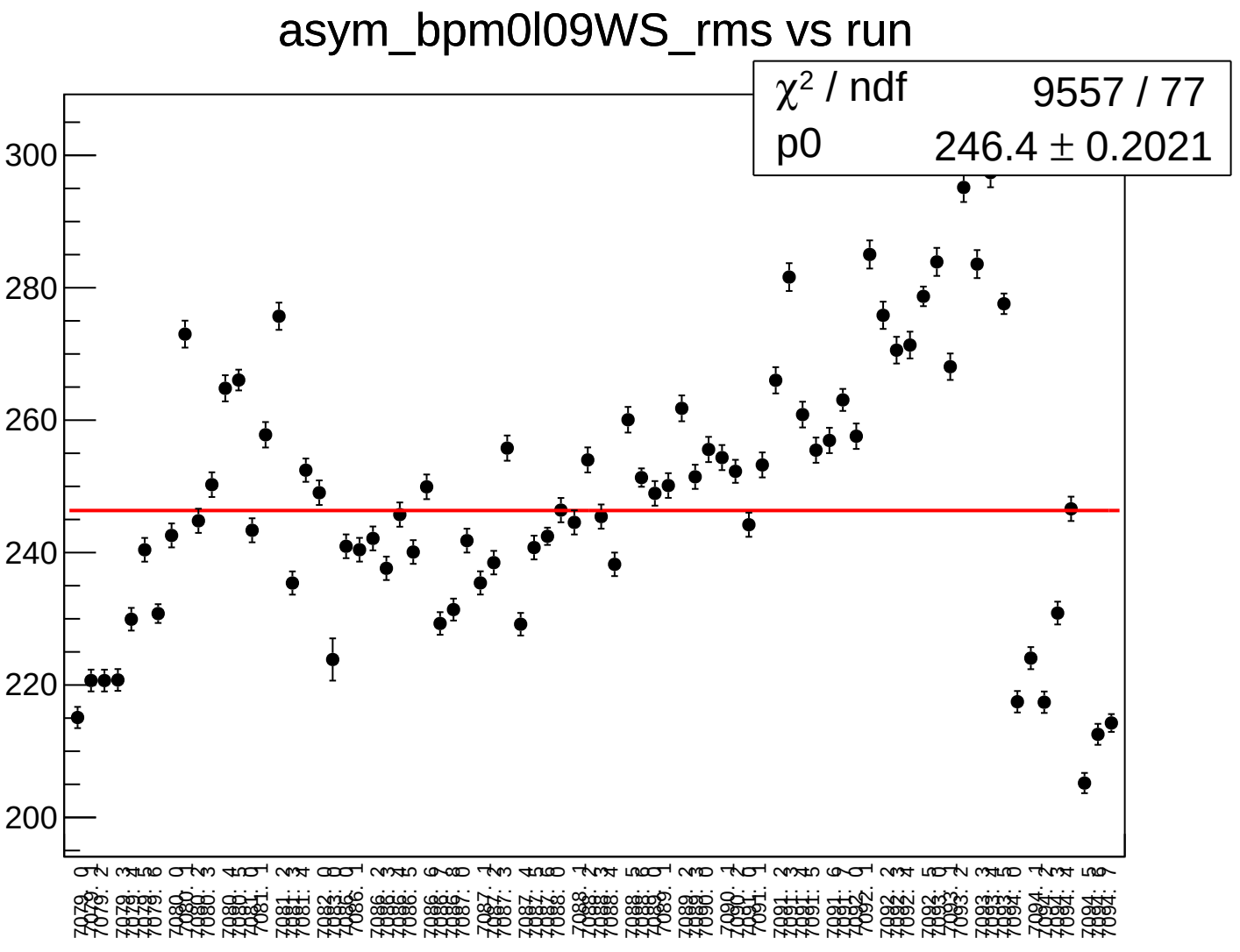

asym_bpm0l07WS_rms vs run
χ² / ndf 1.018e+04 / 77
p0 252.7 ± 0.2074
300
280
260
240
220
200

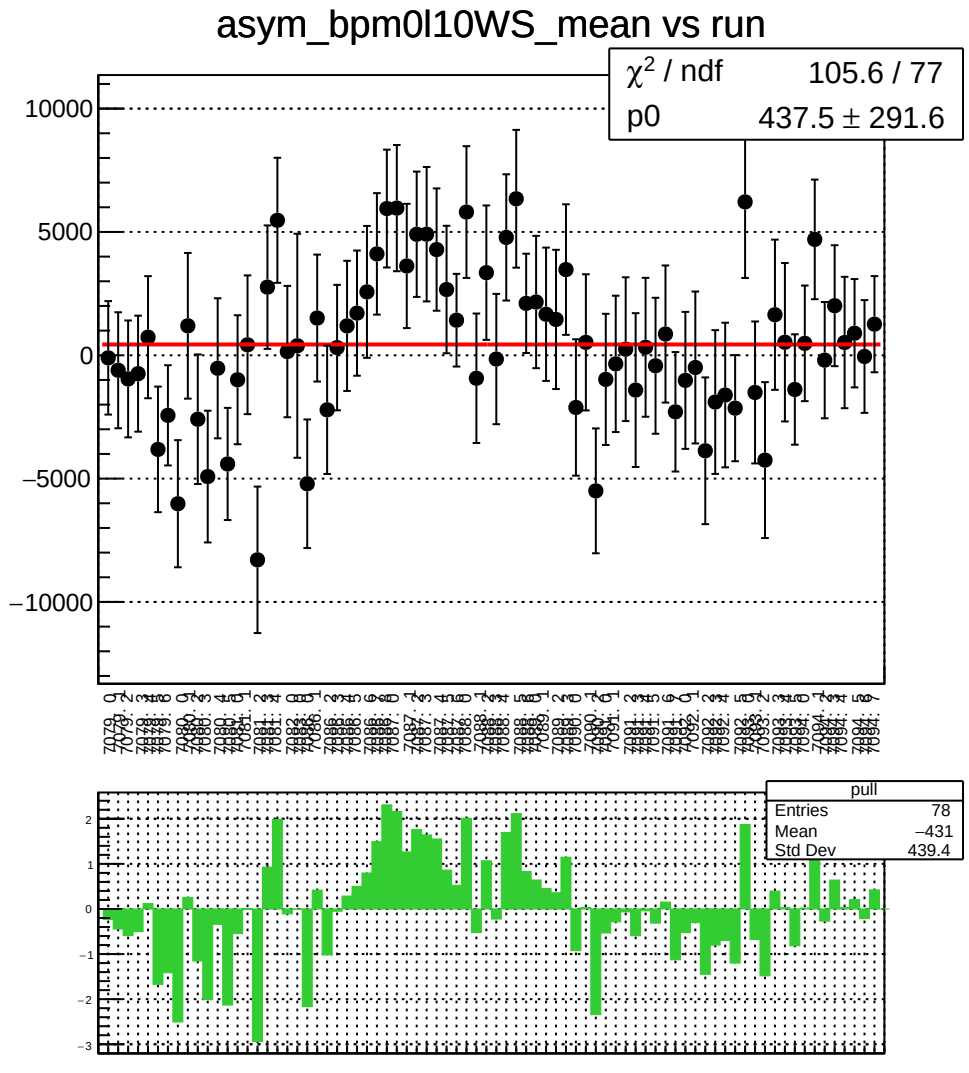

asym_bpm0l08WS_mean vs run
χ^2 / ndf 104.3 / 77
p0 355 ± 290.1
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −190
Std Dev 183.4
3
2
1
0
−1
−2
−3

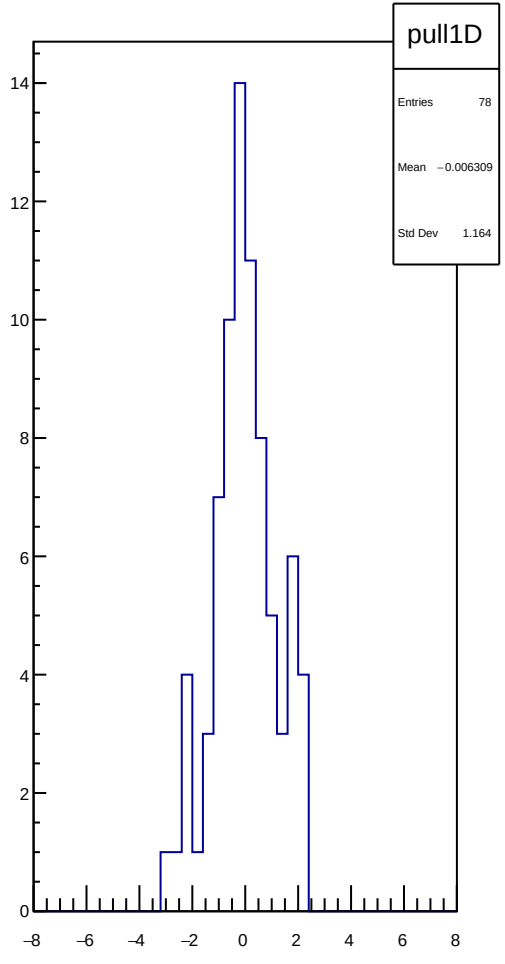

pull1D
Entries 78
Mean −0.009236
Std Dev 1.157
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

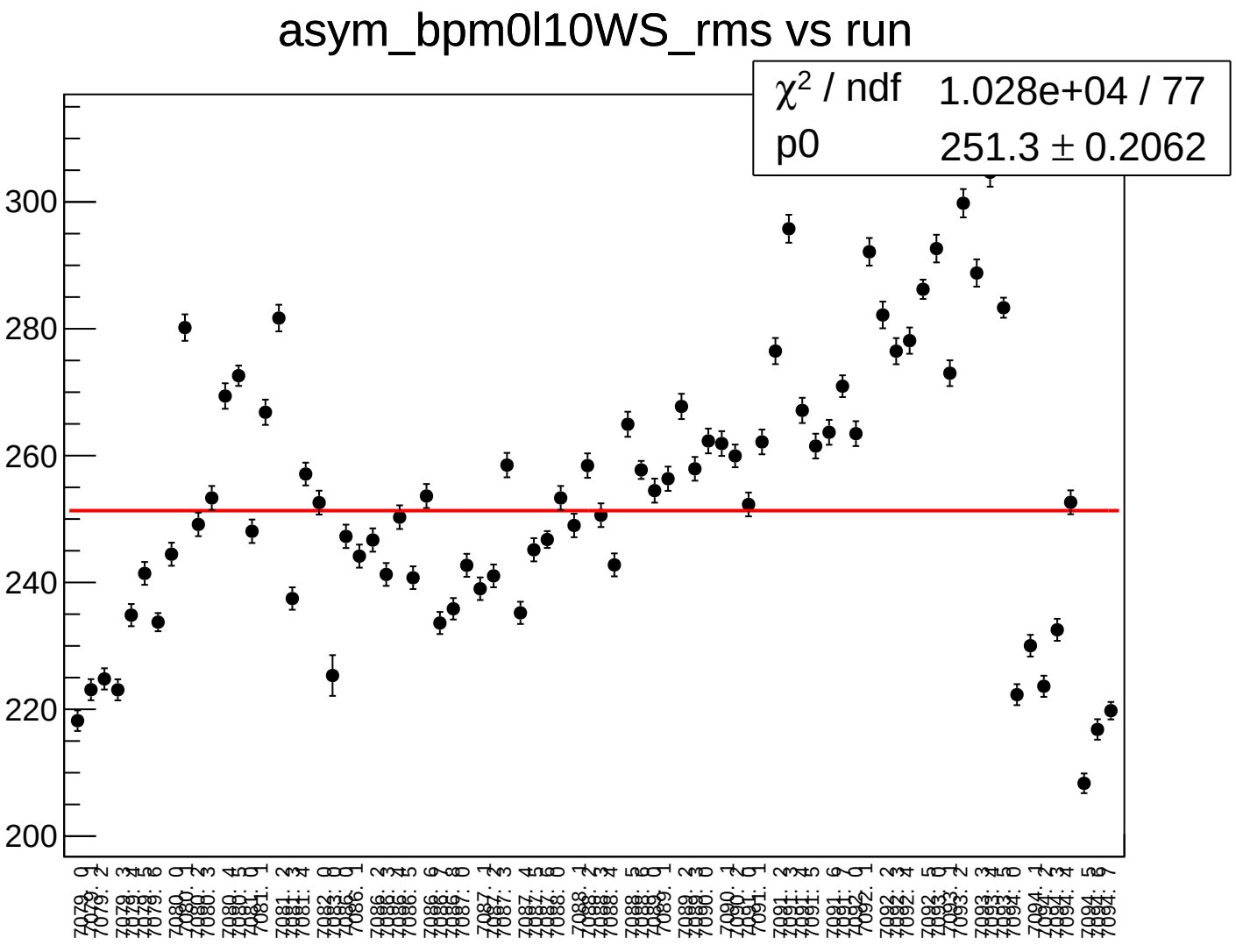

asym_bpm0l08WS_rms vs run
χ² / ndf 9963 / 77
p0 250 ± 0.2051
300
280
260
240
220
200

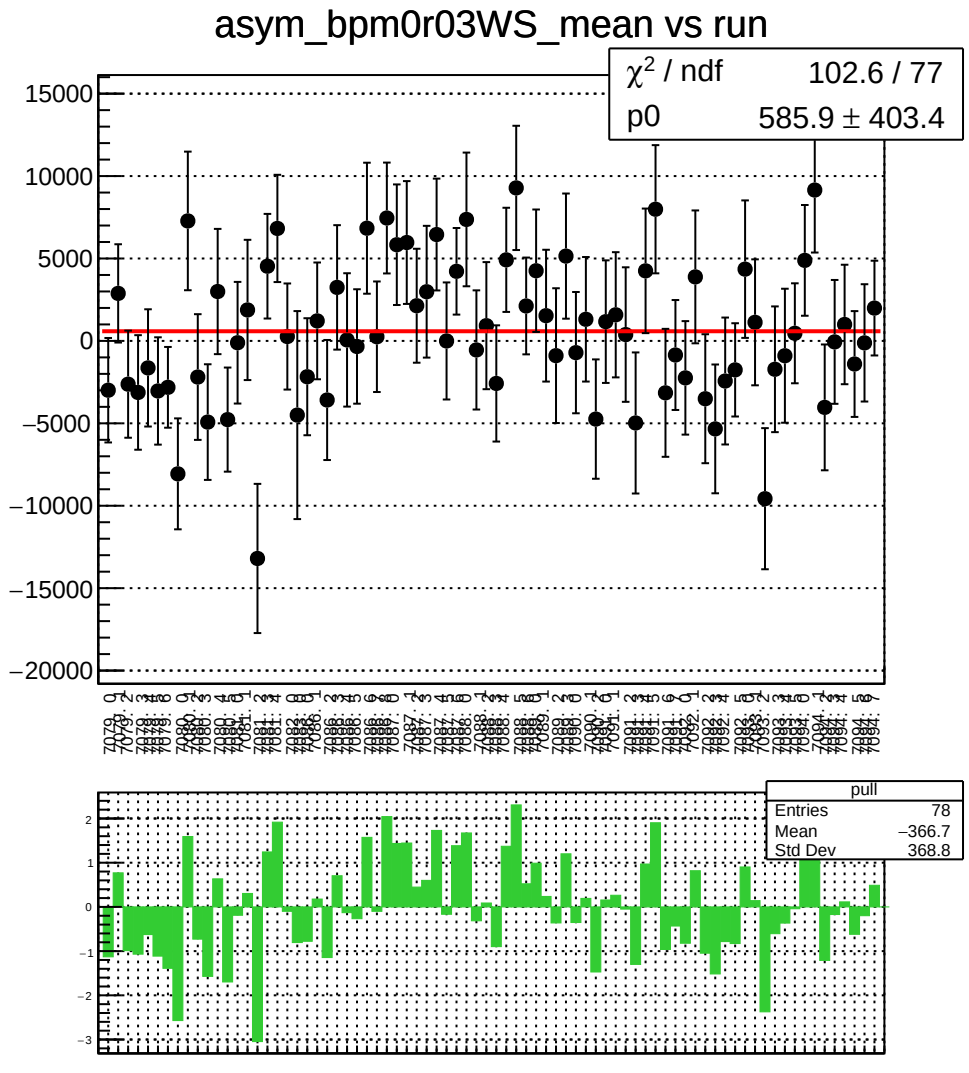

asym_bpm0l09WS_mean vs run
χ² / ndf 102.1 / 77
p0 578.8 ± 285.8
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −713.3
Std Dev 683.3
3
2
1
0
−1
−2
pull1D
Entries 78
Mean −0.001626
Std Dev 1.144
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

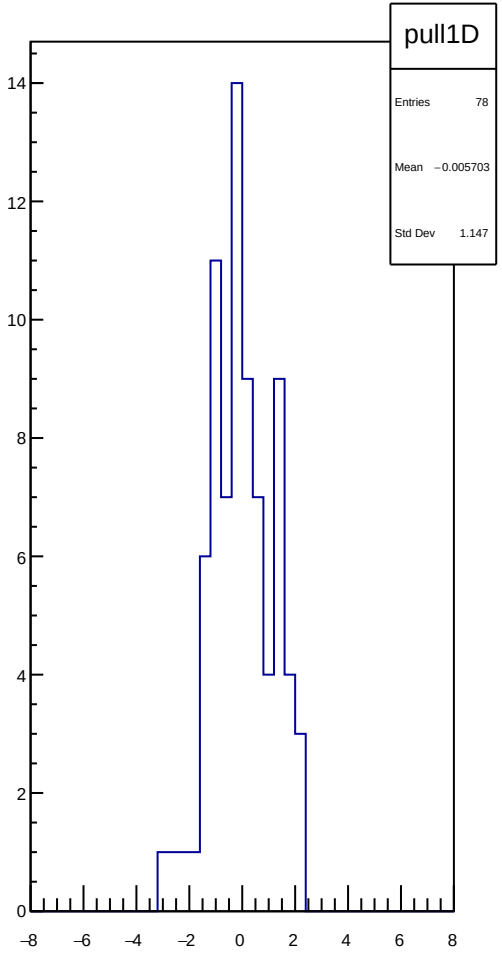

asym_bpm0l09WS_rms vs run
χ² / ndf 9557 / 77
p0 246.4 ± 0.2021
300
280
260
240
220
200

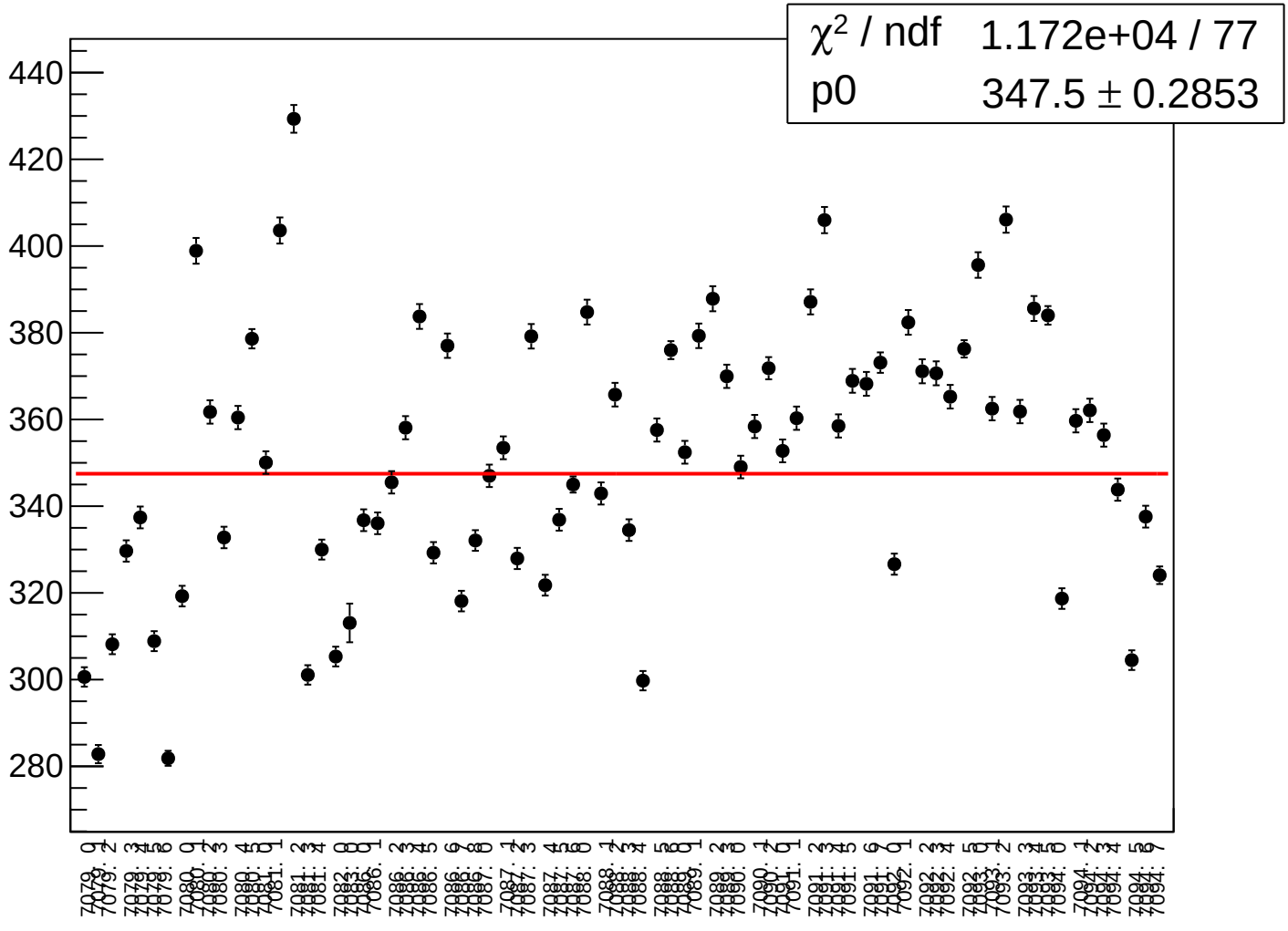

asym_bpm0l10WS_mean vs run
χ² / ndf 105.6 / 77
p0 437.5 ± 291.6
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −431
Std Dev 439.4
2
1
0
−1
−2
−3

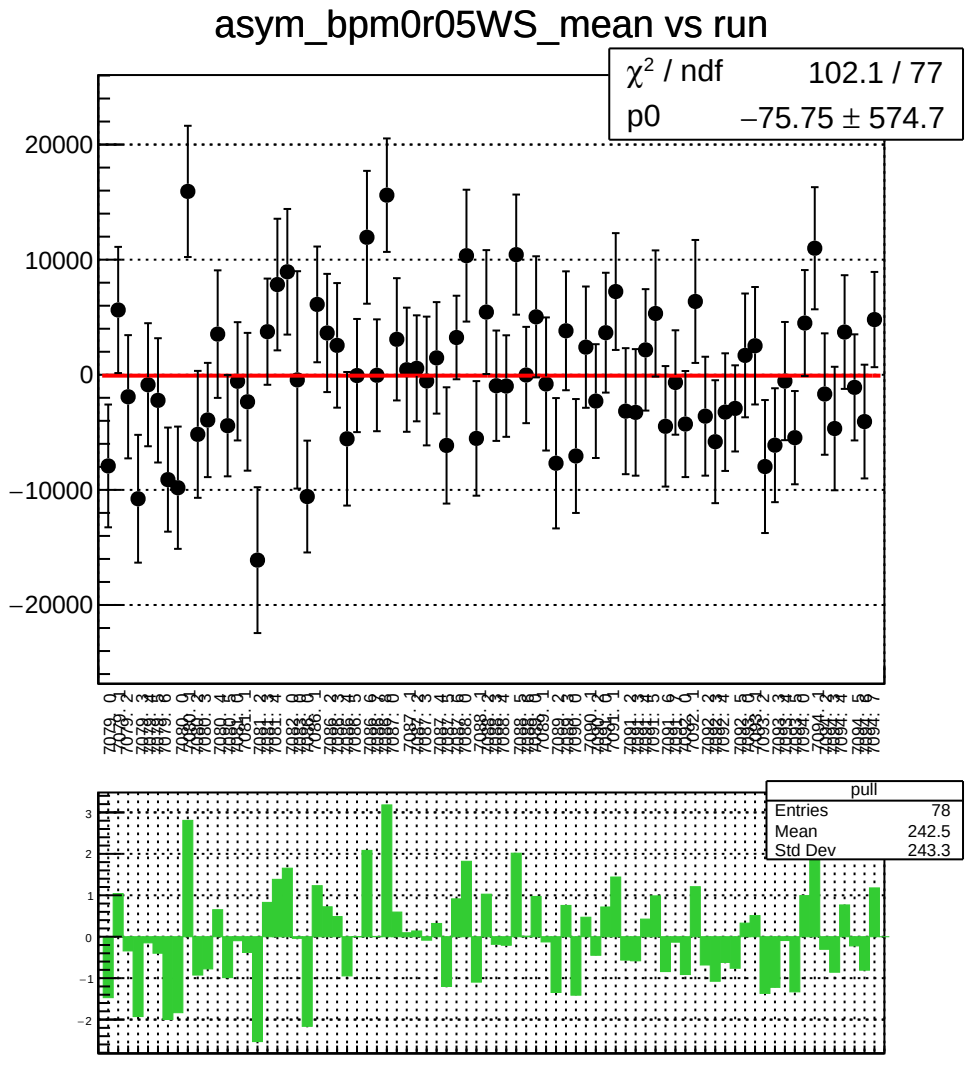

pull1D
Entries 78
Mean −0.006309
Std Dev 1.164
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

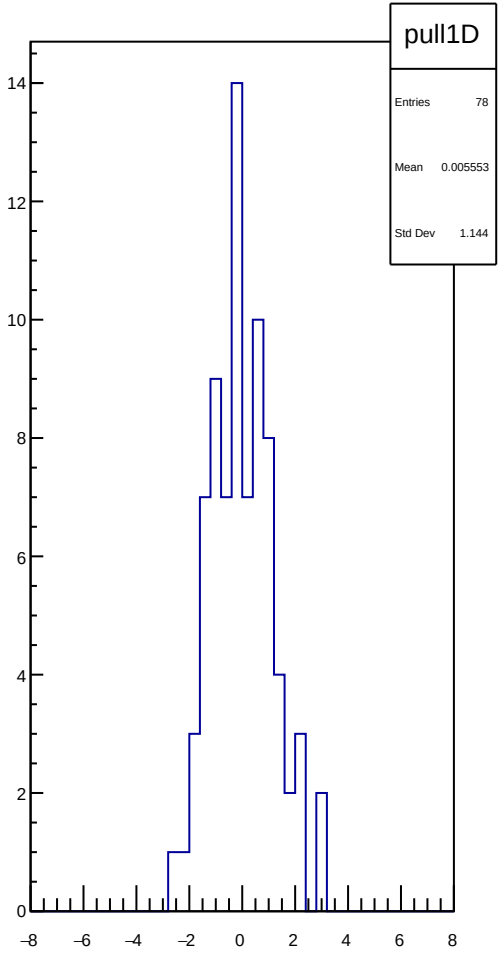

asym_bpm0l10WS_rms vs run
χ² / ndf 1.028e+04 / 77
p0 251.3 ± 0.2062
300
280
260
240
220
200

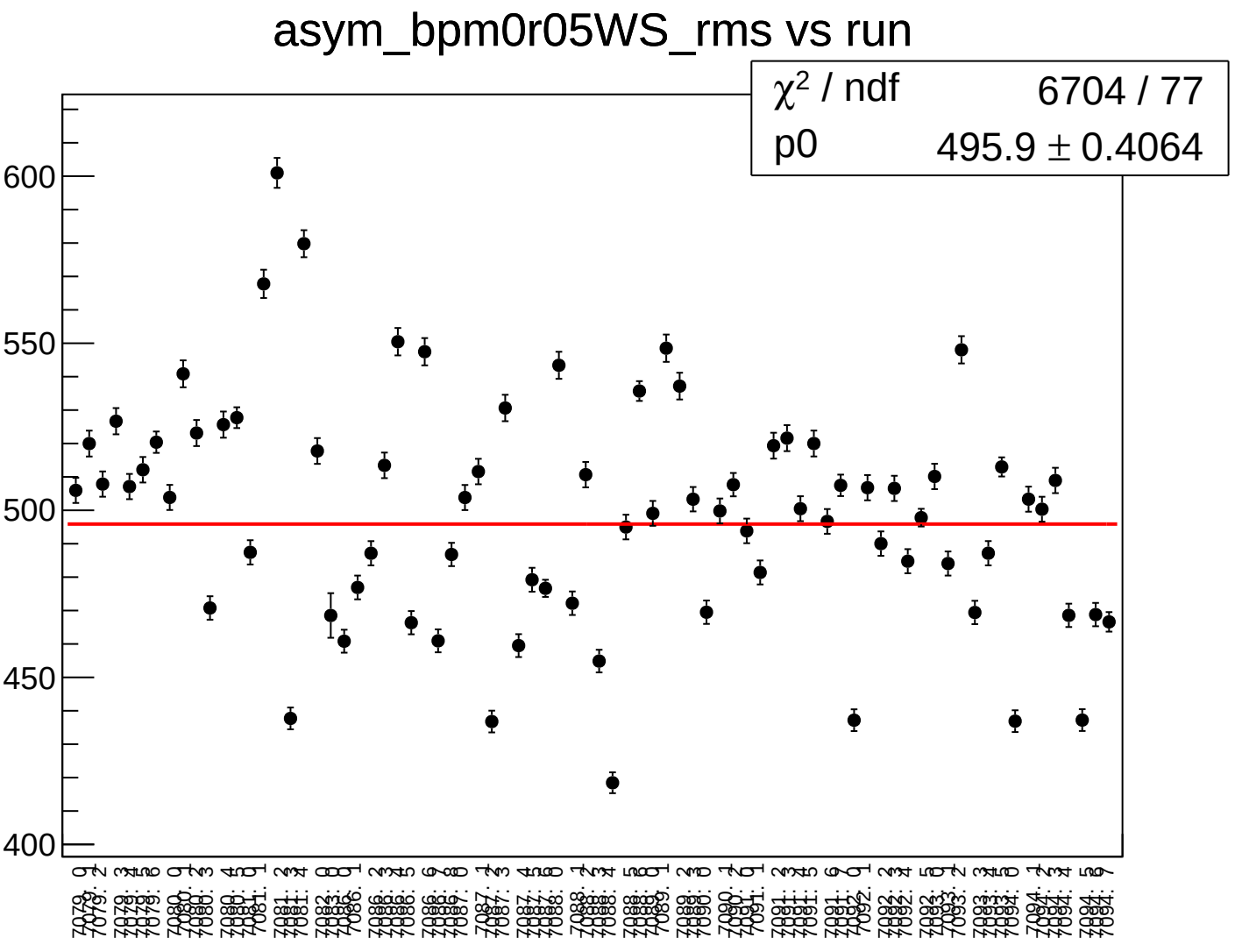

asym_bpm0r03WS_mean vs run
χ^2 / ndf 102.6 / 77
p0 585.9 ± 403.4
pull
Entries 78
Mean −366.7
Std Dev 368.8

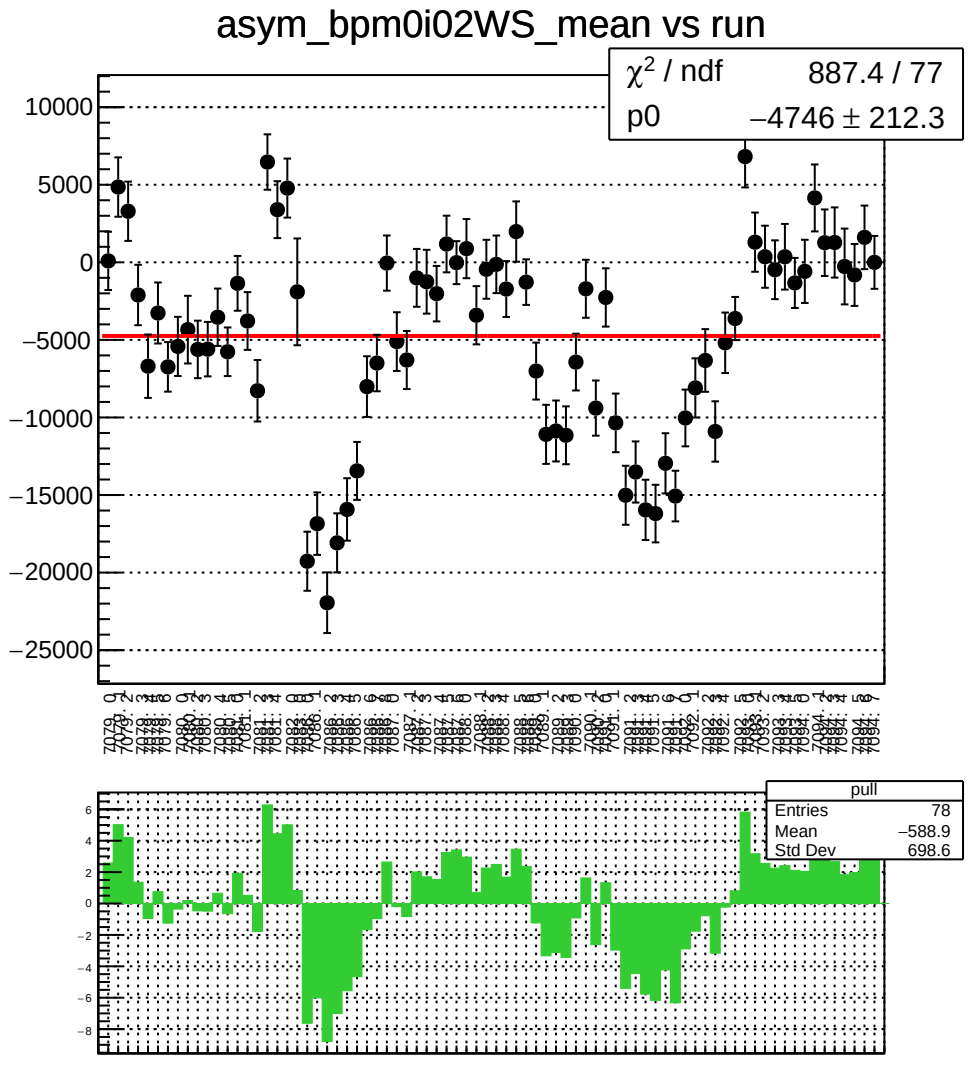

pull1D
Entries 78
Mean −0.005703
Std Dev 1.147

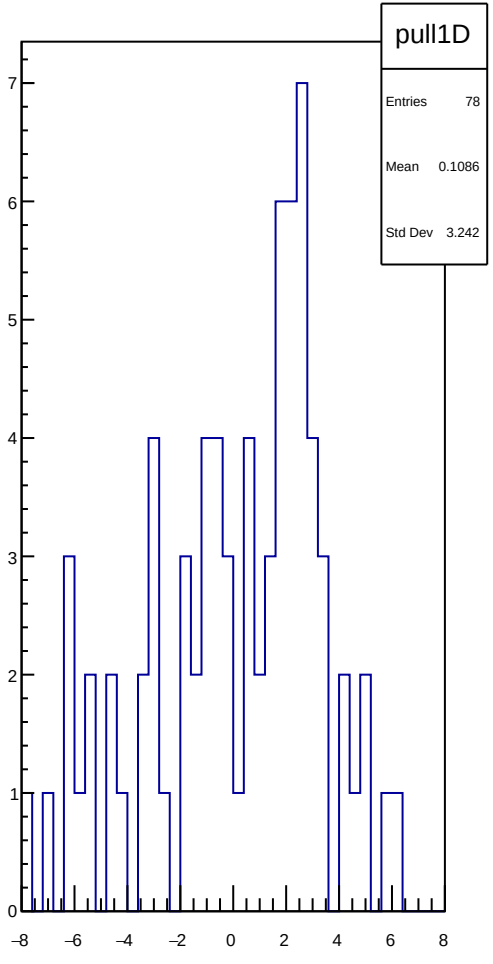

asym_bpm0r03WS_rms vs run
χ^2 / ndf 1.172e+04 / 77
p0 347.5 ± 0.2853
440
420
400
380
360
340
320
300
280

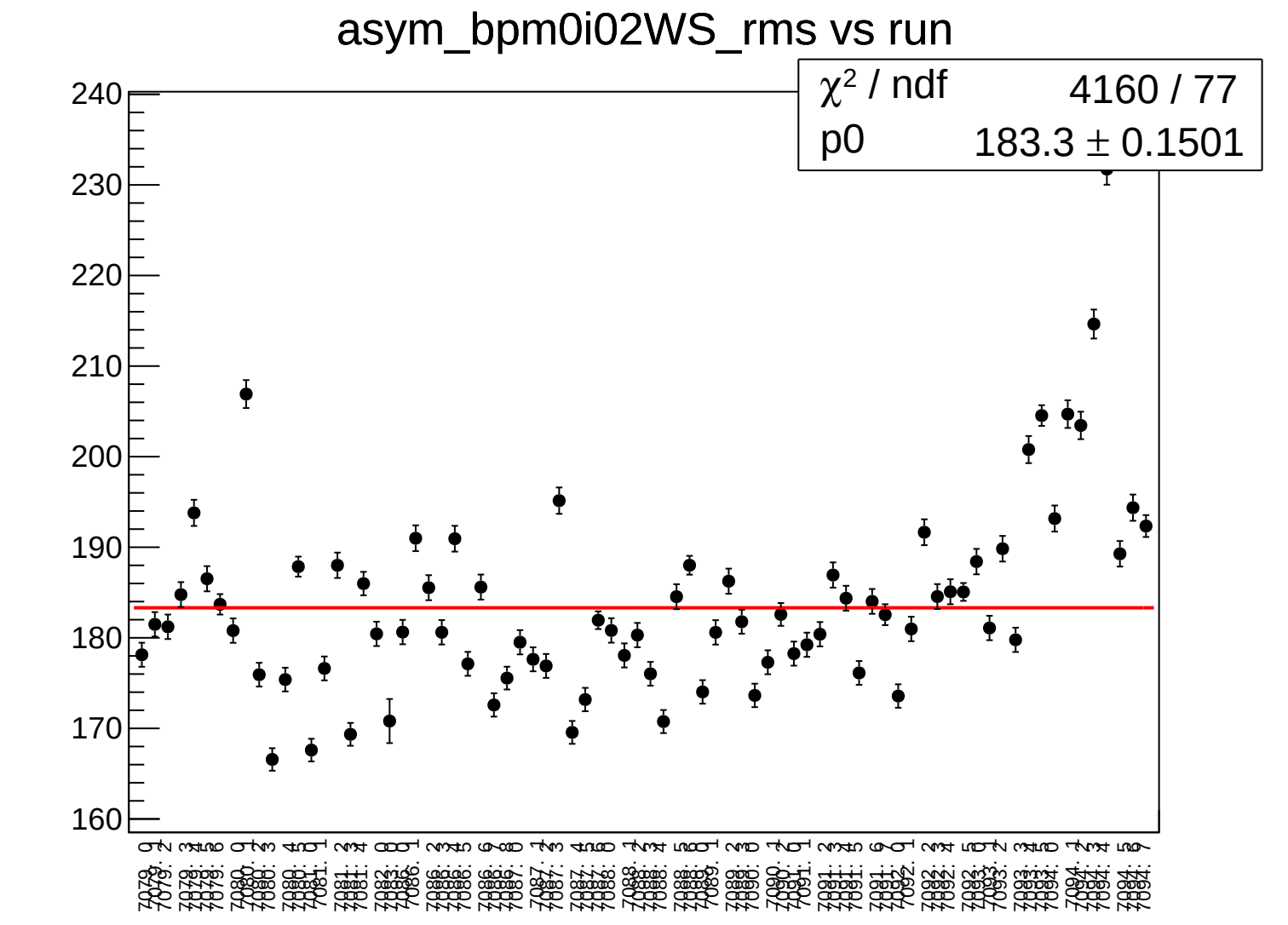

asym_bpm0r05WS_mean vs run
χ² / ndf 102.1 / 77
p0 −75.75 ± 574.7
20000
10000
0
−10000
−20000
pull
Entries 78
Mean 242.5
Std Dev 243.3
3
2
1
0
−1
−2

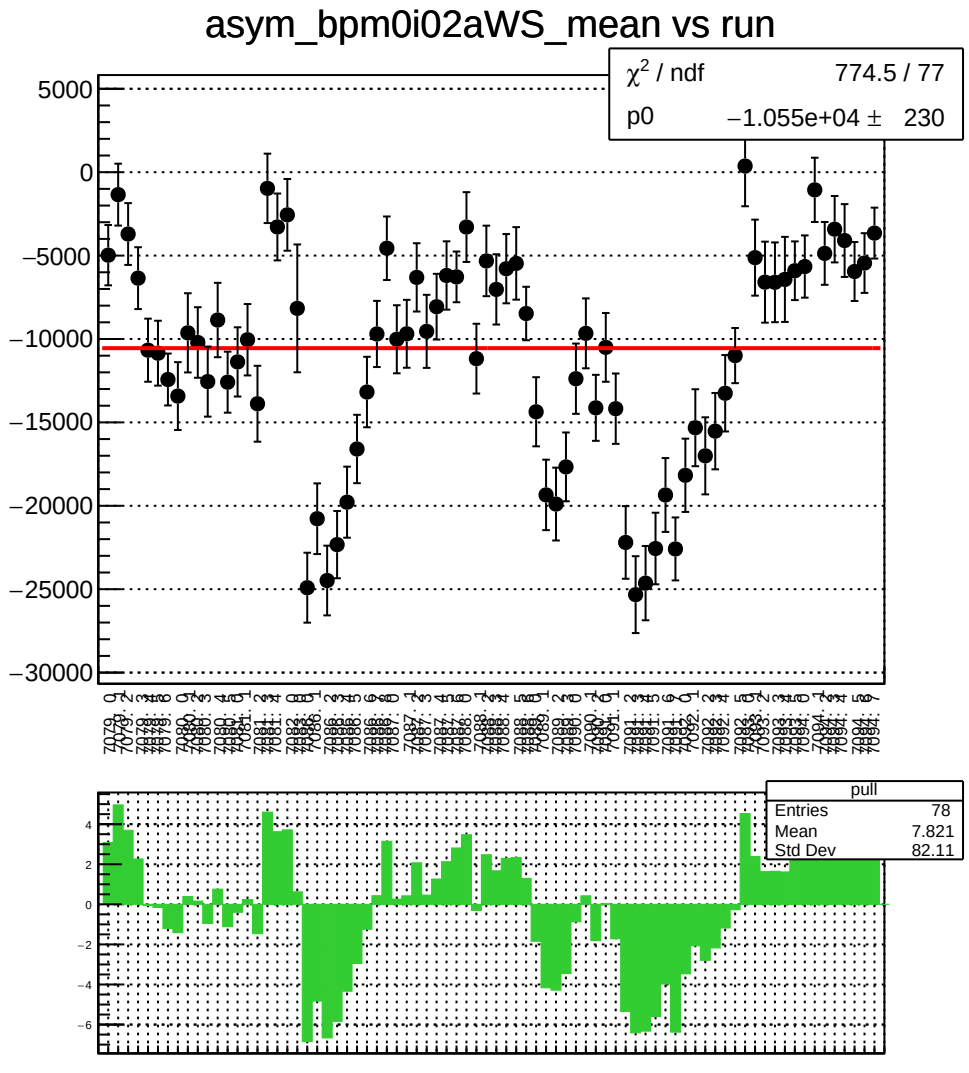

pull1D
Entries 78
Mean 0.005553
Std Dev 1.144
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

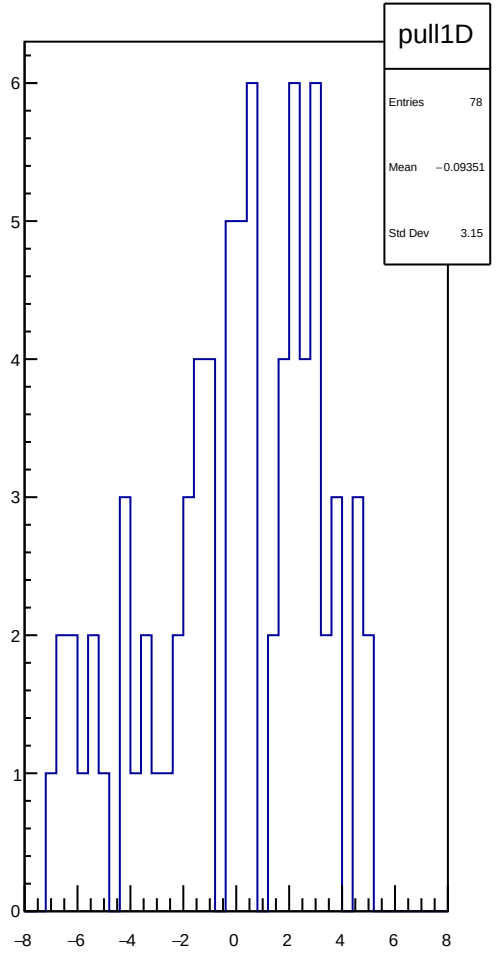

asym_bpm0r05WS_rms vs run
χ² / ndf 6704 / 77
p0 495.9 ± 0.4064
600
550
500
450
400

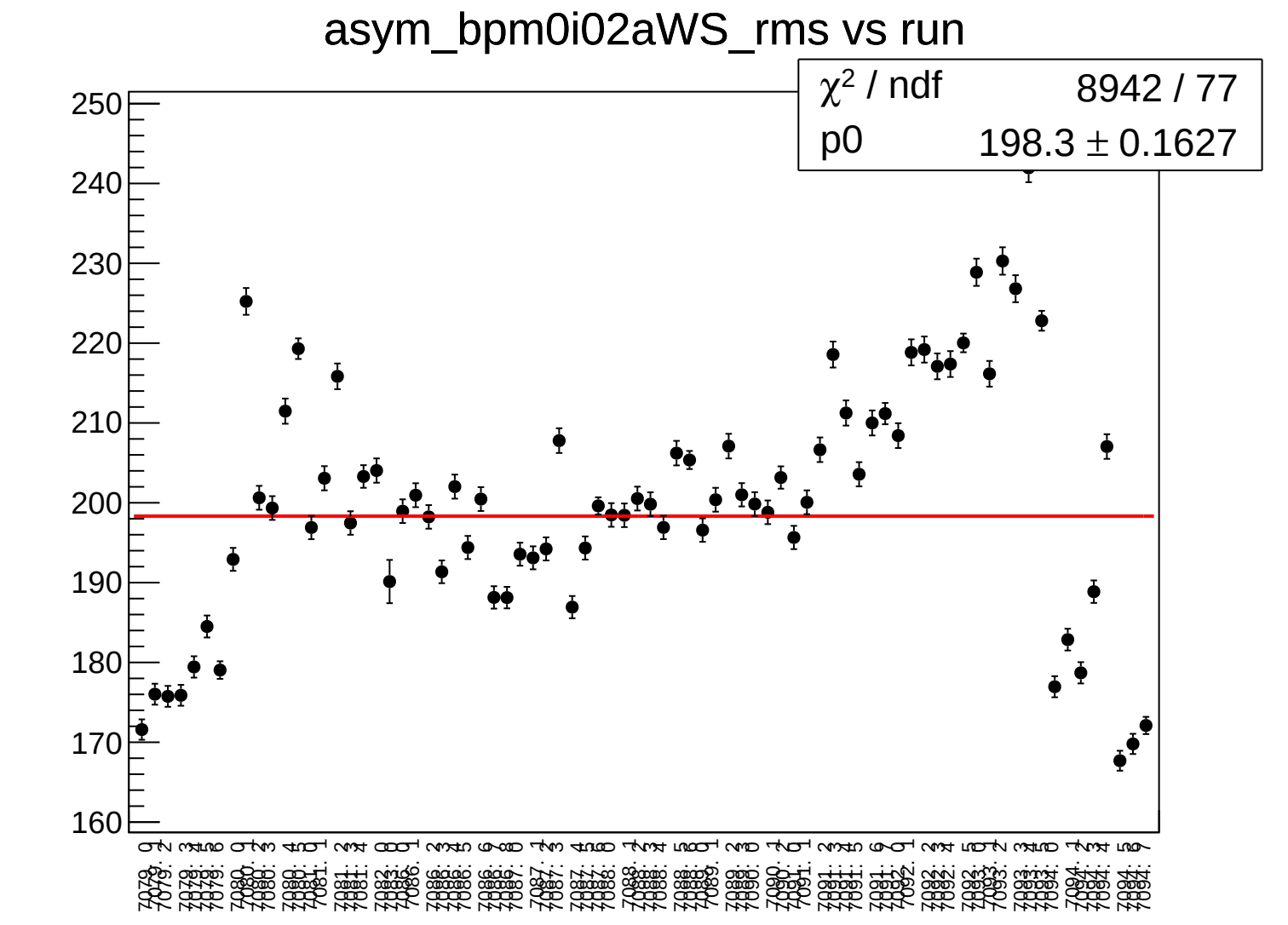

asym_bpm0i02WS_mean vs run
χ² / ndf 887.4 / 77
p0 −4746 ± 212.3
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 78
Mean −588.9
Std Dev 698.6
6
4
2
0
−2
−4
−6
−8

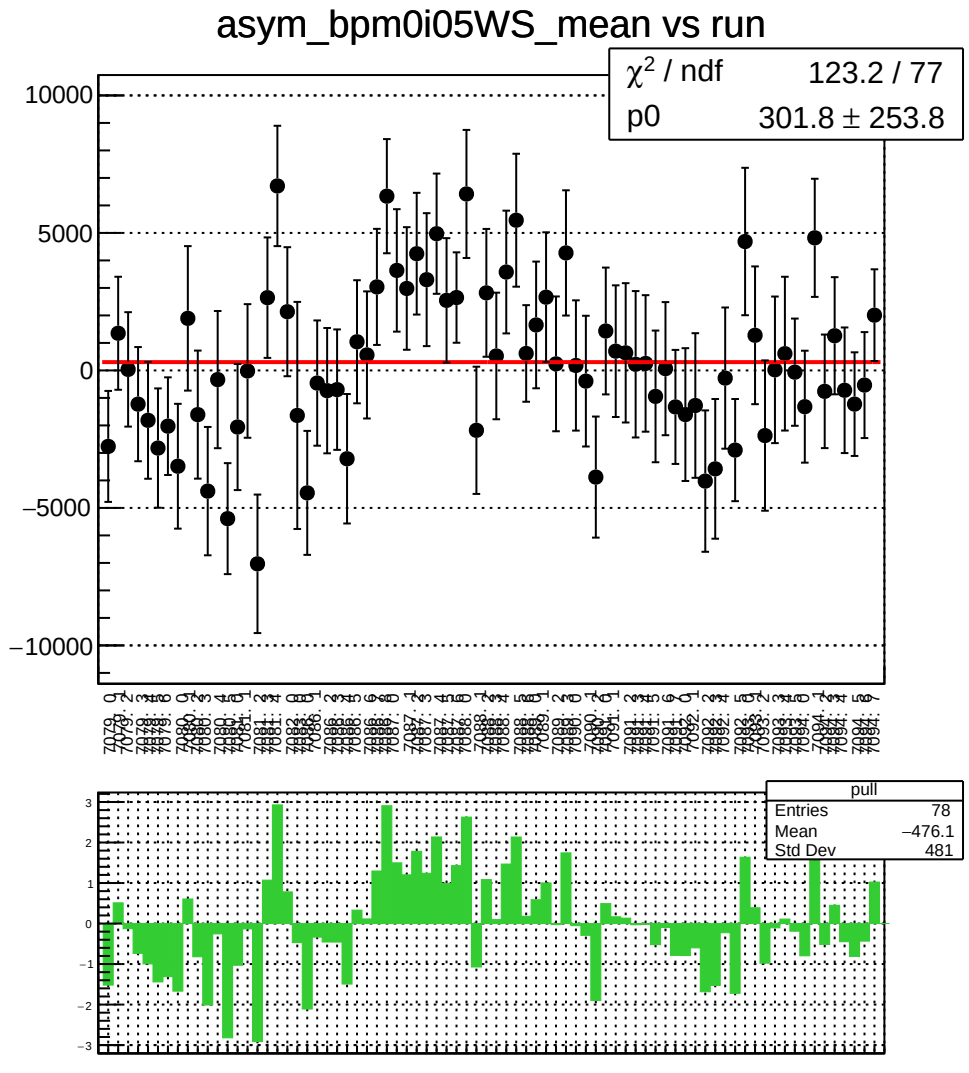

pull1D
Entries 78
Mean 0.1086
Std Dev 3.242
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

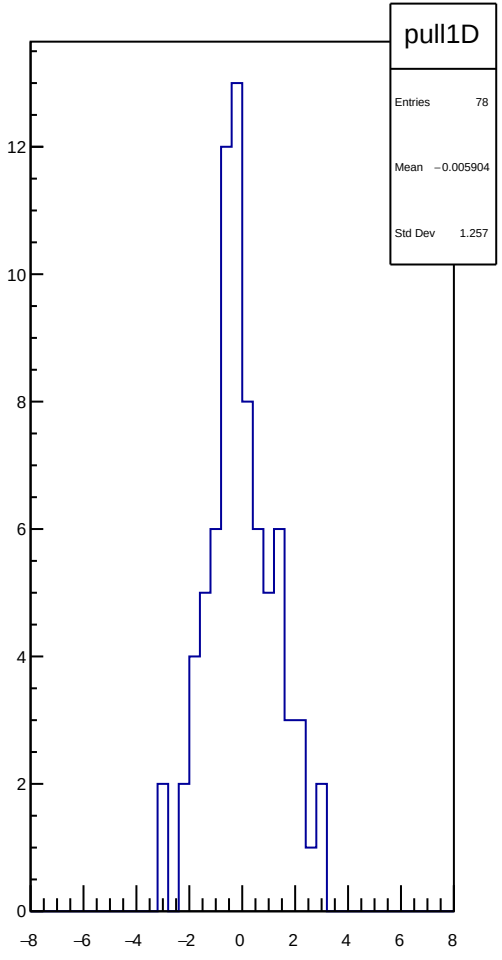

asym_bpm0i02WS_rms vs run
χ² / ndf 4160 / 77
p0 183.3 ± 0.1501
240
230
220
210
200
190
180
170
160

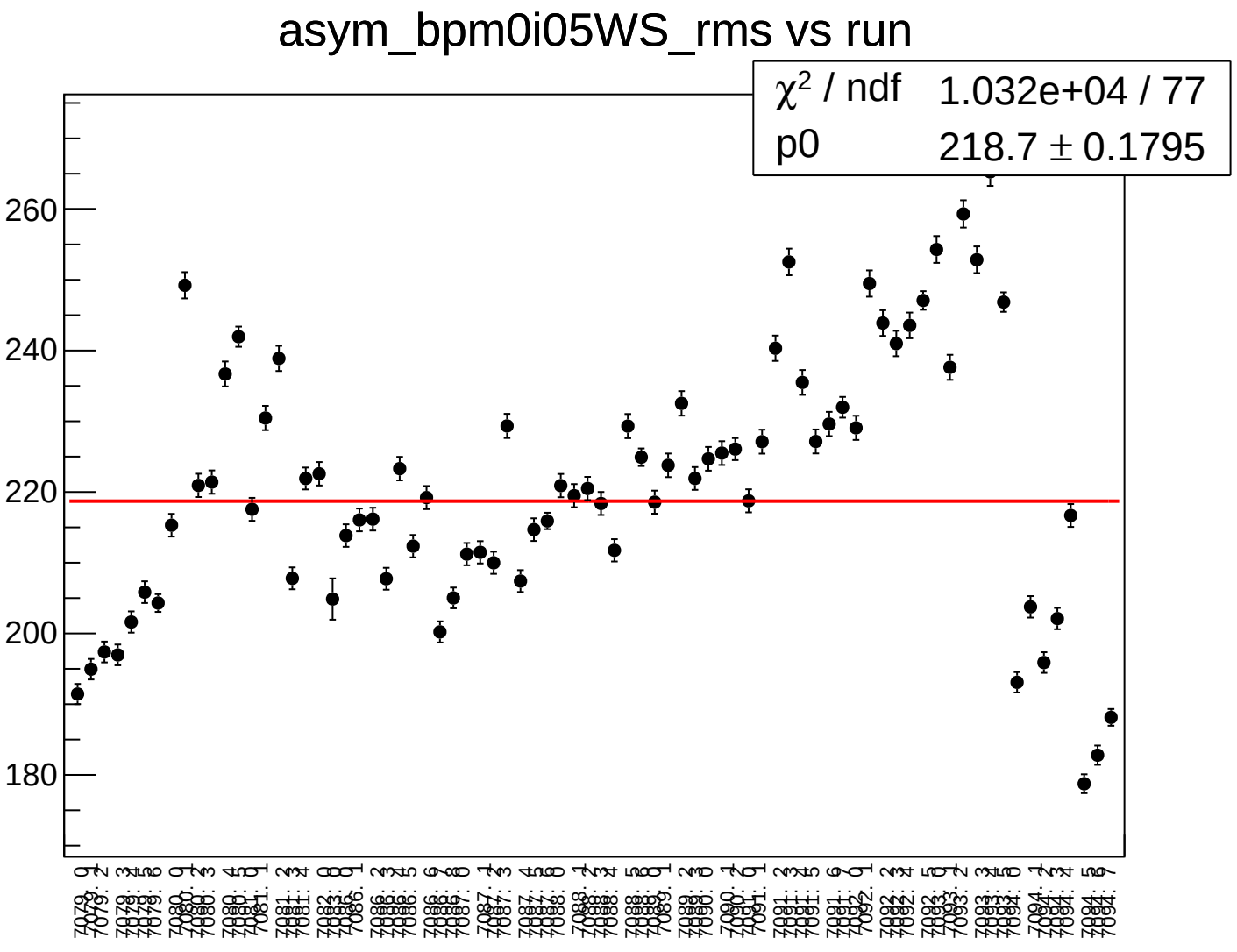

asym_bpm0i02aWS_mean vs run
χ² / ndf 774.5 / 77
p0 −1.055e+04 ± 230
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
pull
Entries 78
Mean 7.821
Std Dev 82.11
4
2
0
−2
−4
−6

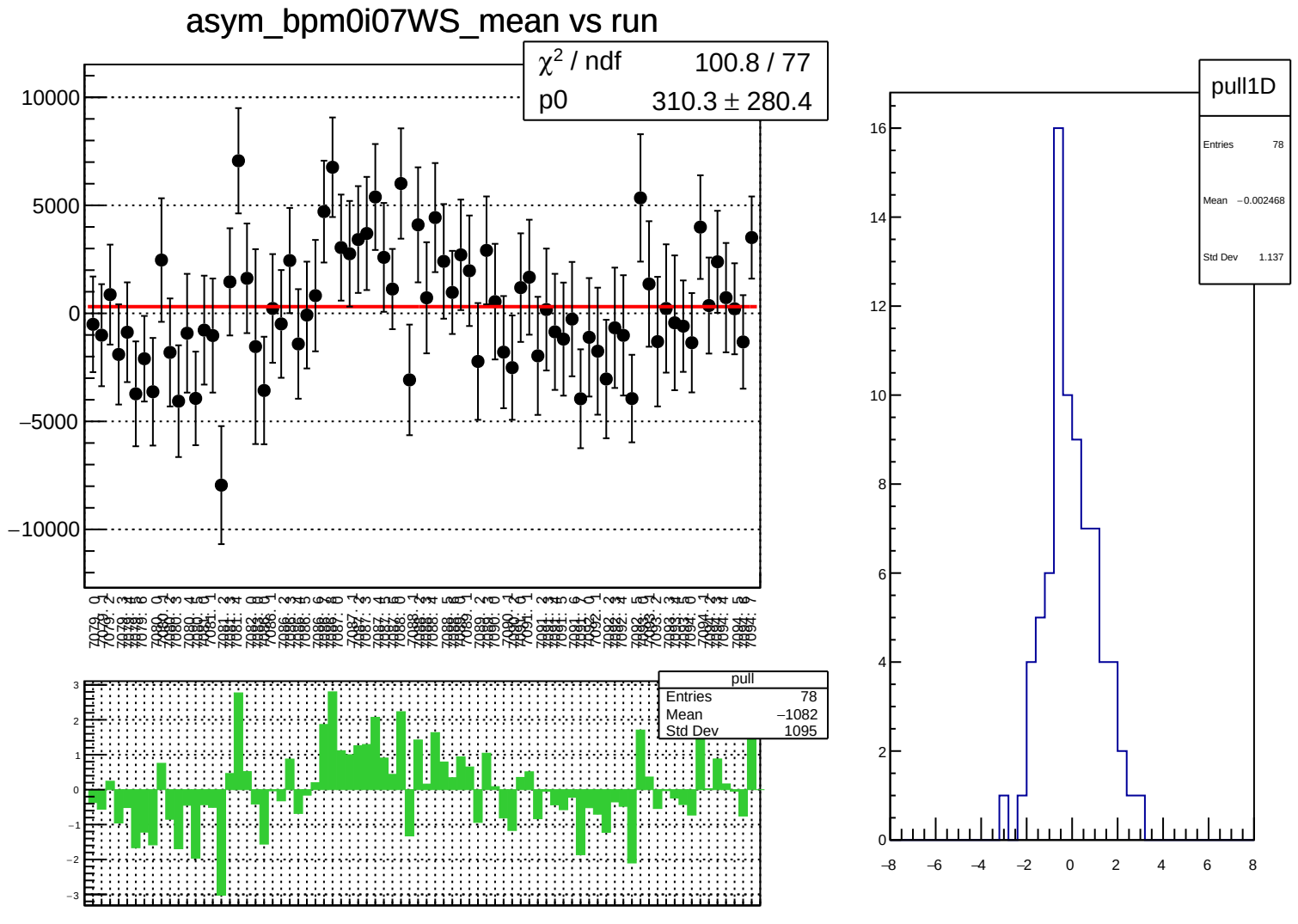

pull1D
Entries 78
Mean −0.09351
Std Dev 3.15
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

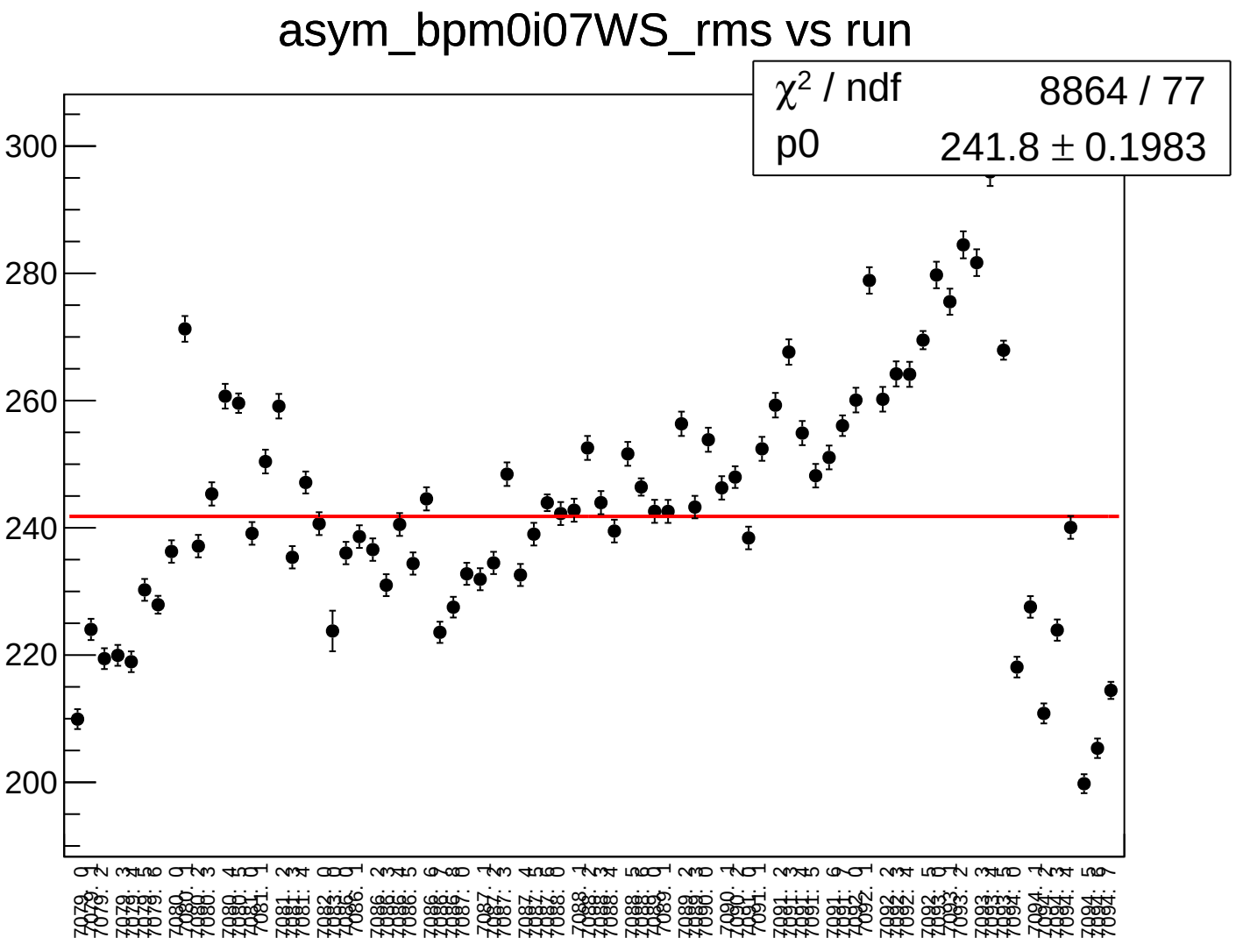

asym_bpm0i02aWS_rms vs run
χ² / ndf 8942 / 77
p0 198.3 ± 0.1627
250
240
230
220
210
200
190
180
170
160

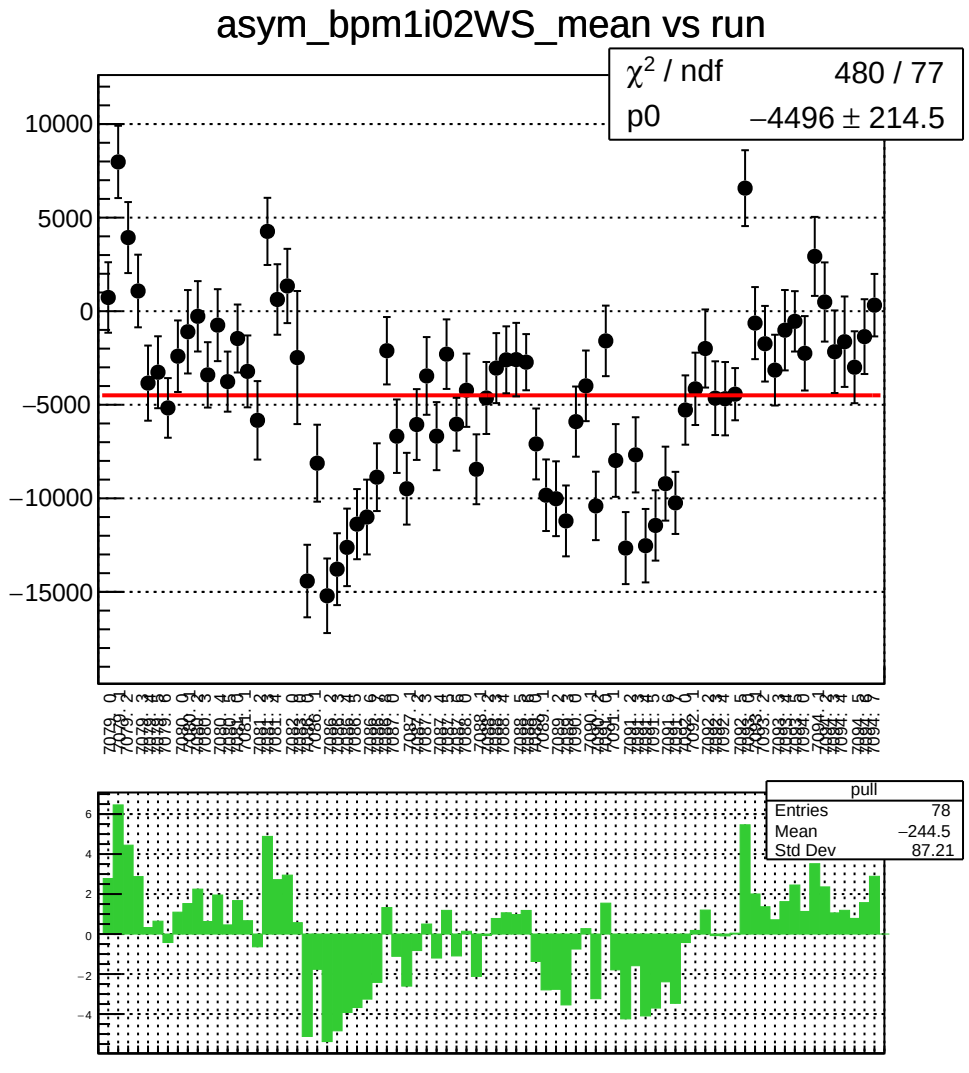

asym_bpm0i05WS_mean vs run
χ² / ndf 123.2 / 77
p0 301.8 ± 253.8
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −476.1
Std Dev 481
3
2
1
0
−1
−2
−3

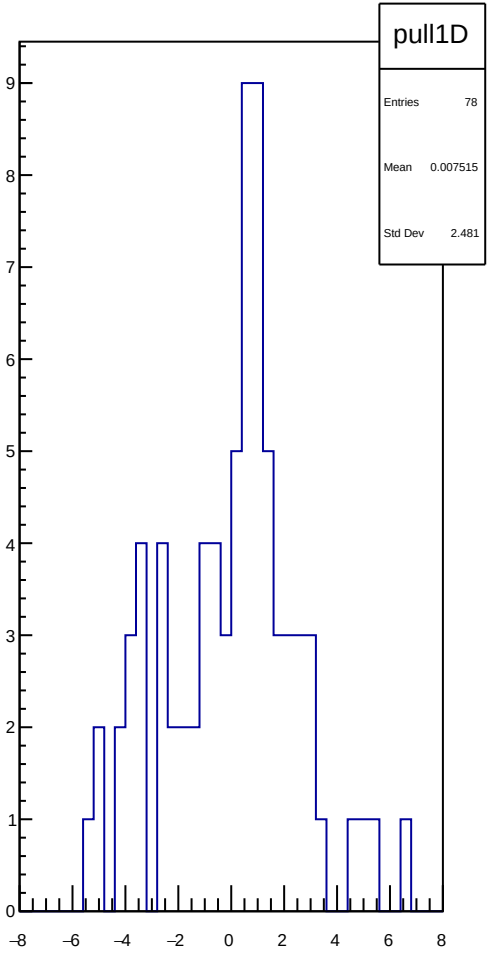

pull1D
Entries 78
Mean −0.005904
Std Dev 1.257
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

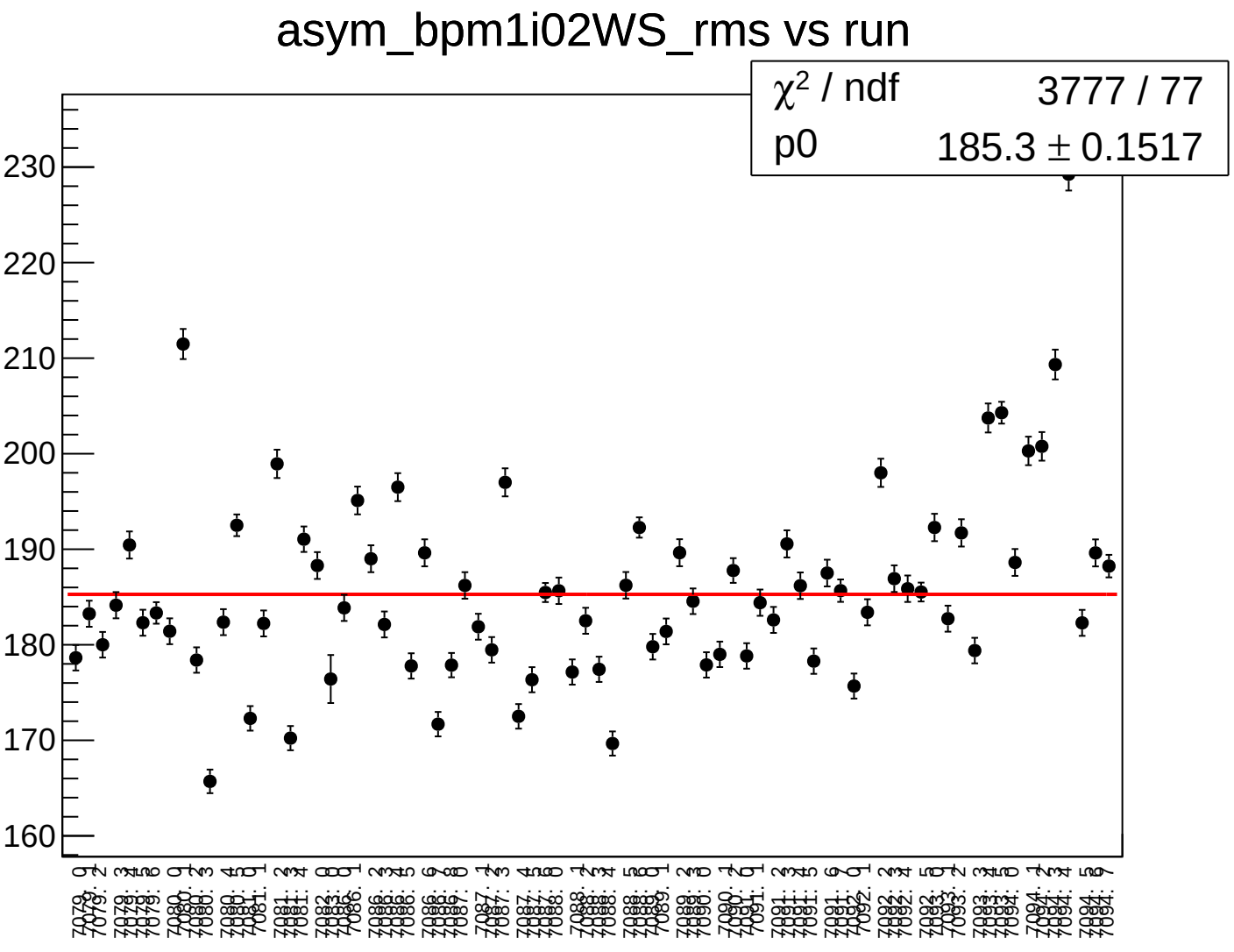

asym_bpm0i05WS_rms vs run
χ² / ndf 1.032e+04 / 77
p0 218.7 ± 0.1795
260
240
220
200
180

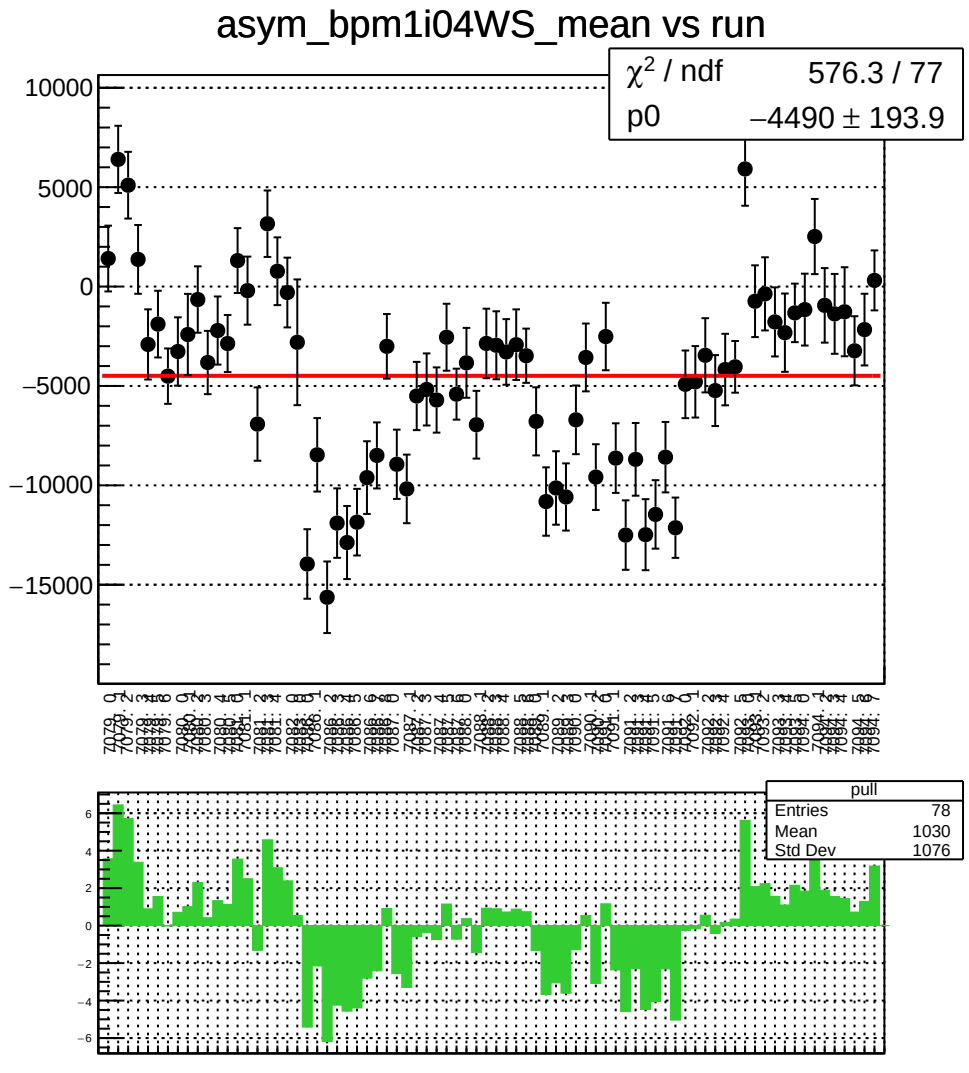

asym_bpm0i07WS_mean vs run
χ² / ndf 100.8 / 77
p0 310.3 ± 280.4
10000
5000
0
−5000
−10000
pull
Entries 78
Mean −1082
Std Dev 1095
3
2
1
0
−1
−2
−3
pull1D
Entries 78
Mean −0.002468
Std Dev 1.137
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

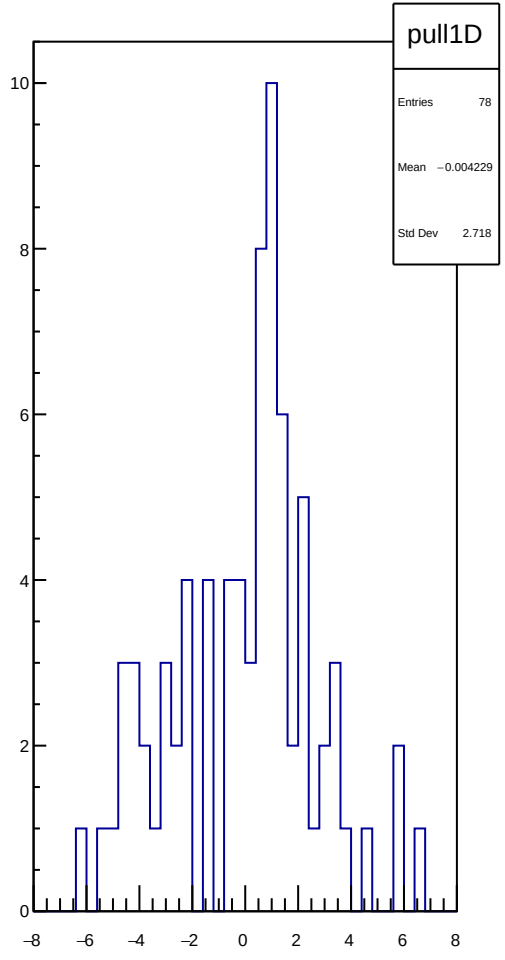

asym_bpm0i07WS_rms vs run
χ² / ndf 8864 / 77
p0 241.8 ± 0.1983
300
280
260
240
220
200

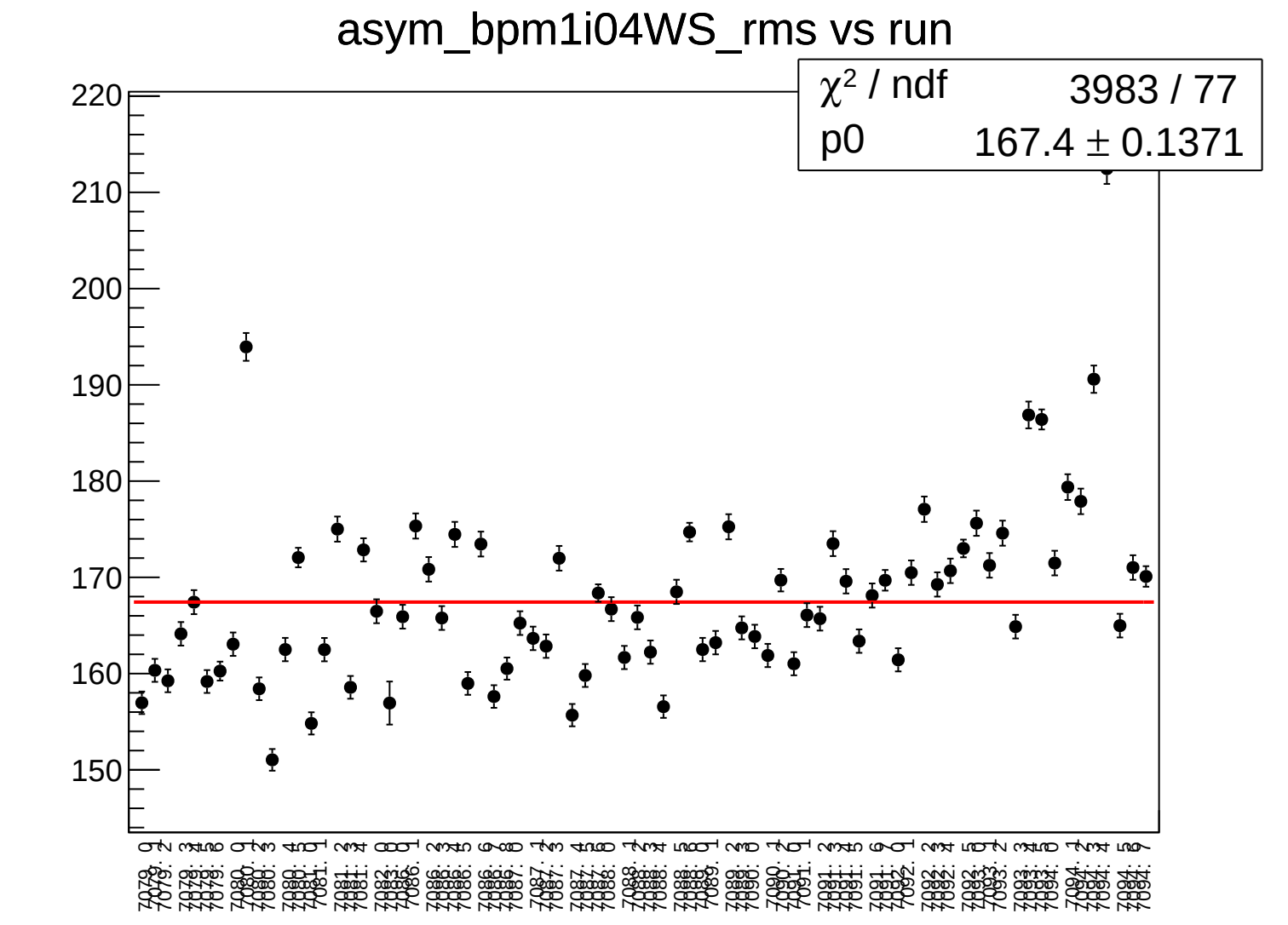

asym_bpm1i02WS_mean vs run
χ² / ndf 480 / 77
p0 −4496 ± 214.5
10000
5000
0
−5000
−10000
−15000
pull
Entries 78
Mean −244.5
Std Dev 87.21
6
4
2
0
−2
−4

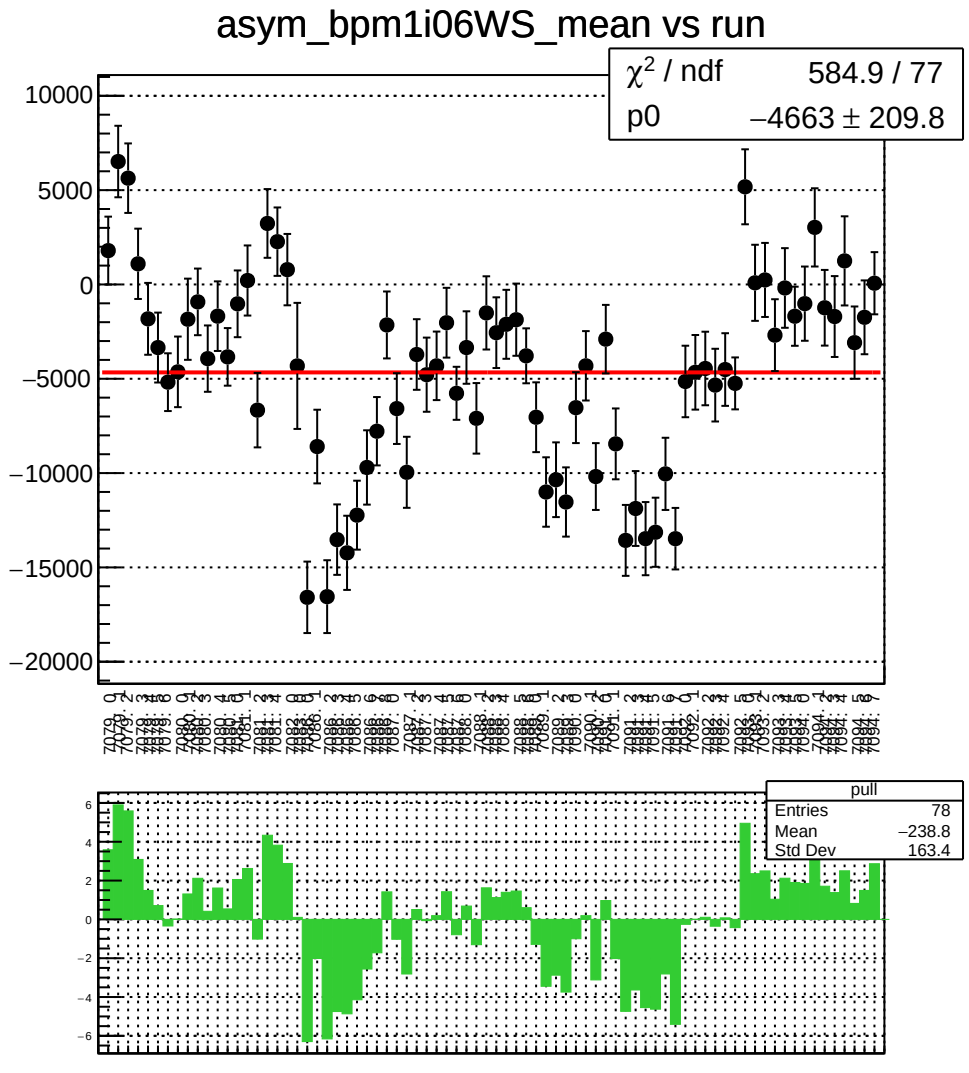

pull1D
Entries 78
Mean 0.007515
Std Dev 2.481
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

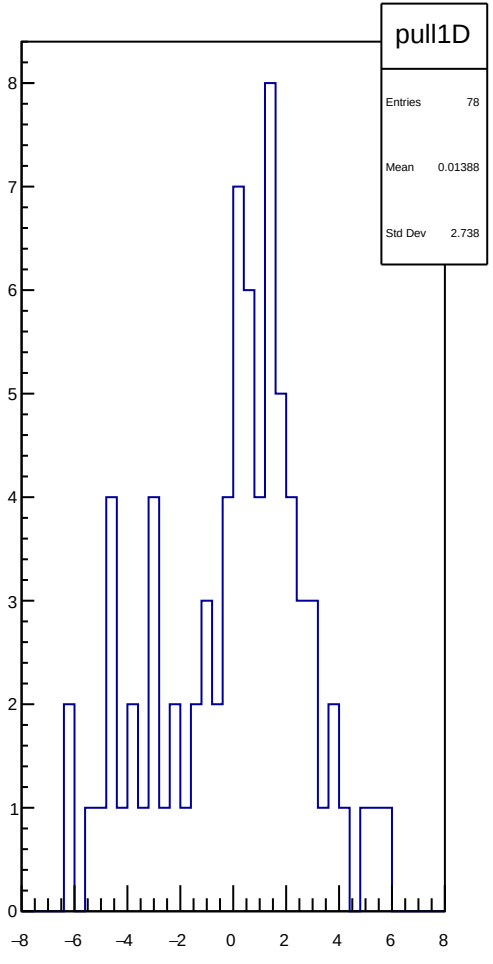

asym_bpm1i02WS_rms vs run
χ² / ndf 3777 / 77
p0 185.3 ± 0.1517
230
220
210
200
190
180
170
160

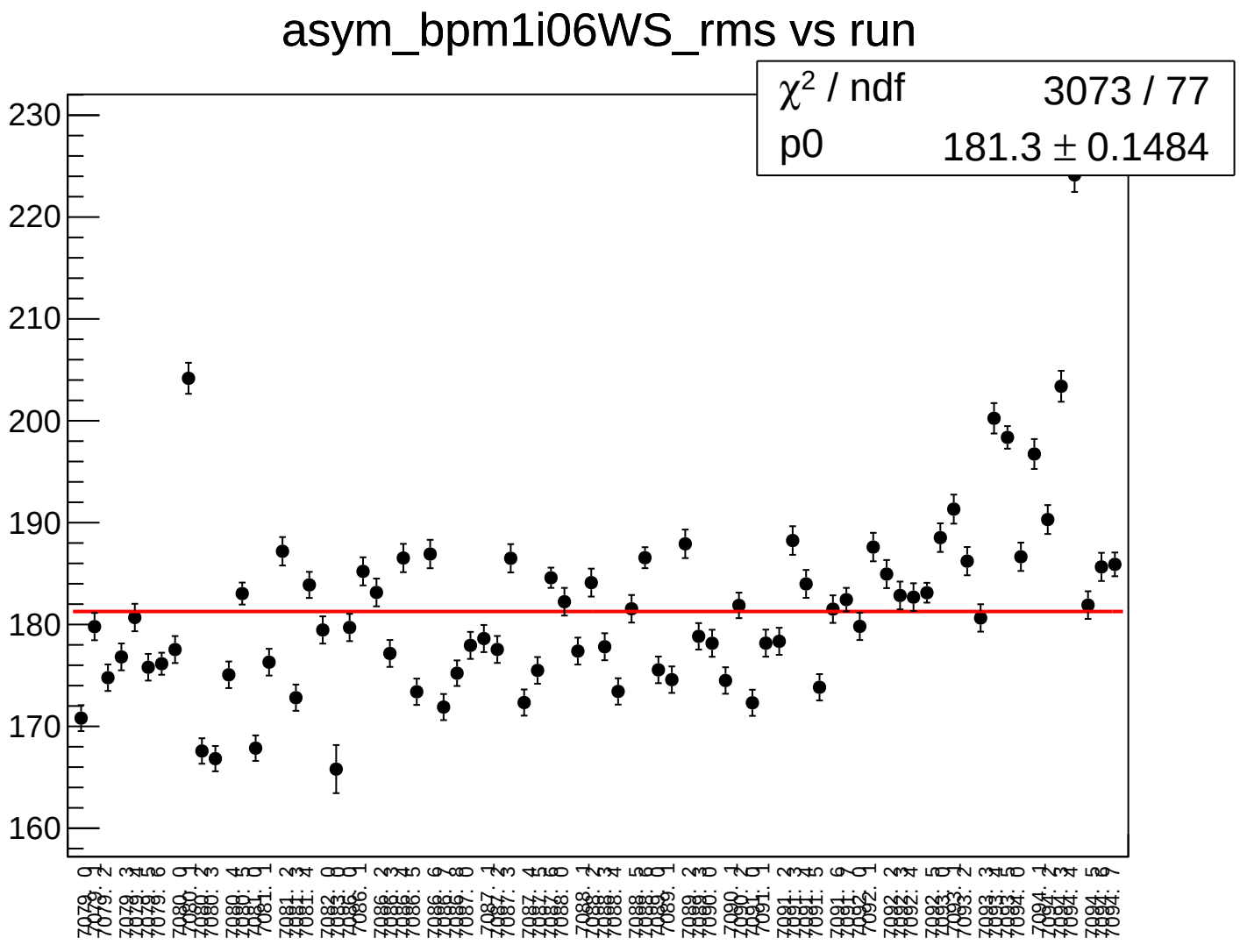

asym_bpm1i04WS_mean vs run
χ² / ndf 576.3 / 77
p0 −4490 ± 193.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 78
Mean 1030
Std Dev 1076
6
4
2
0
−2
−4
−6

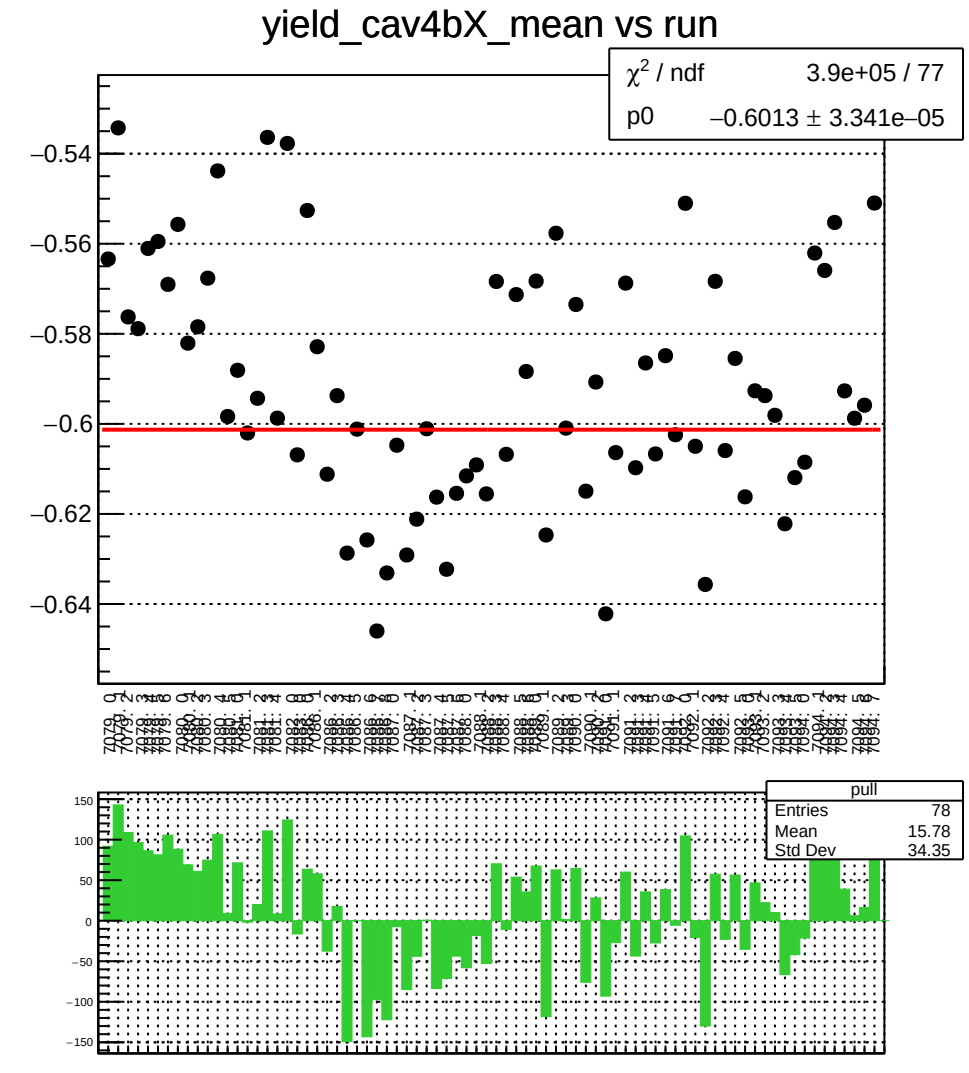

pull1D
Entries 78
Mean −0.004229
Std Dev 2.718
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

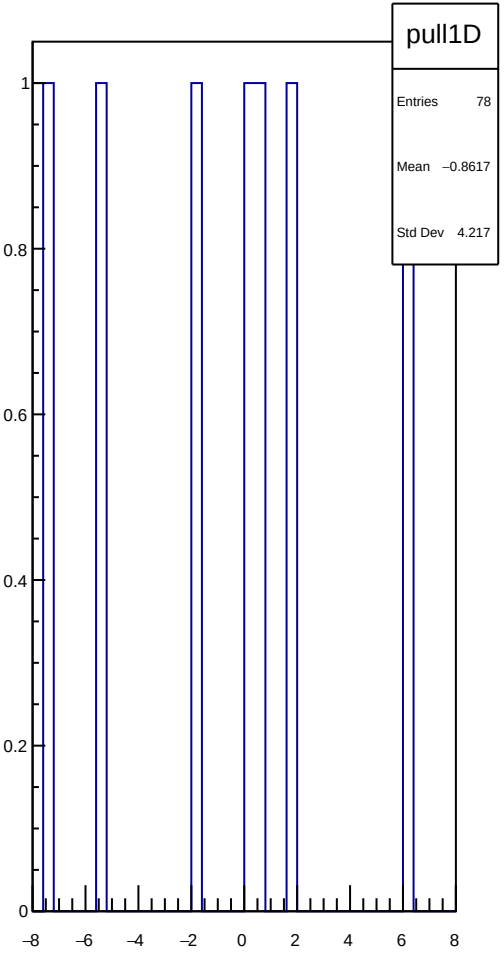

asym_bpm1i04WS_rms vs run
χ² / ndf 3983 / 77
p0 167.4 ± 0.1371
220
210
200
190
180
170
160
150

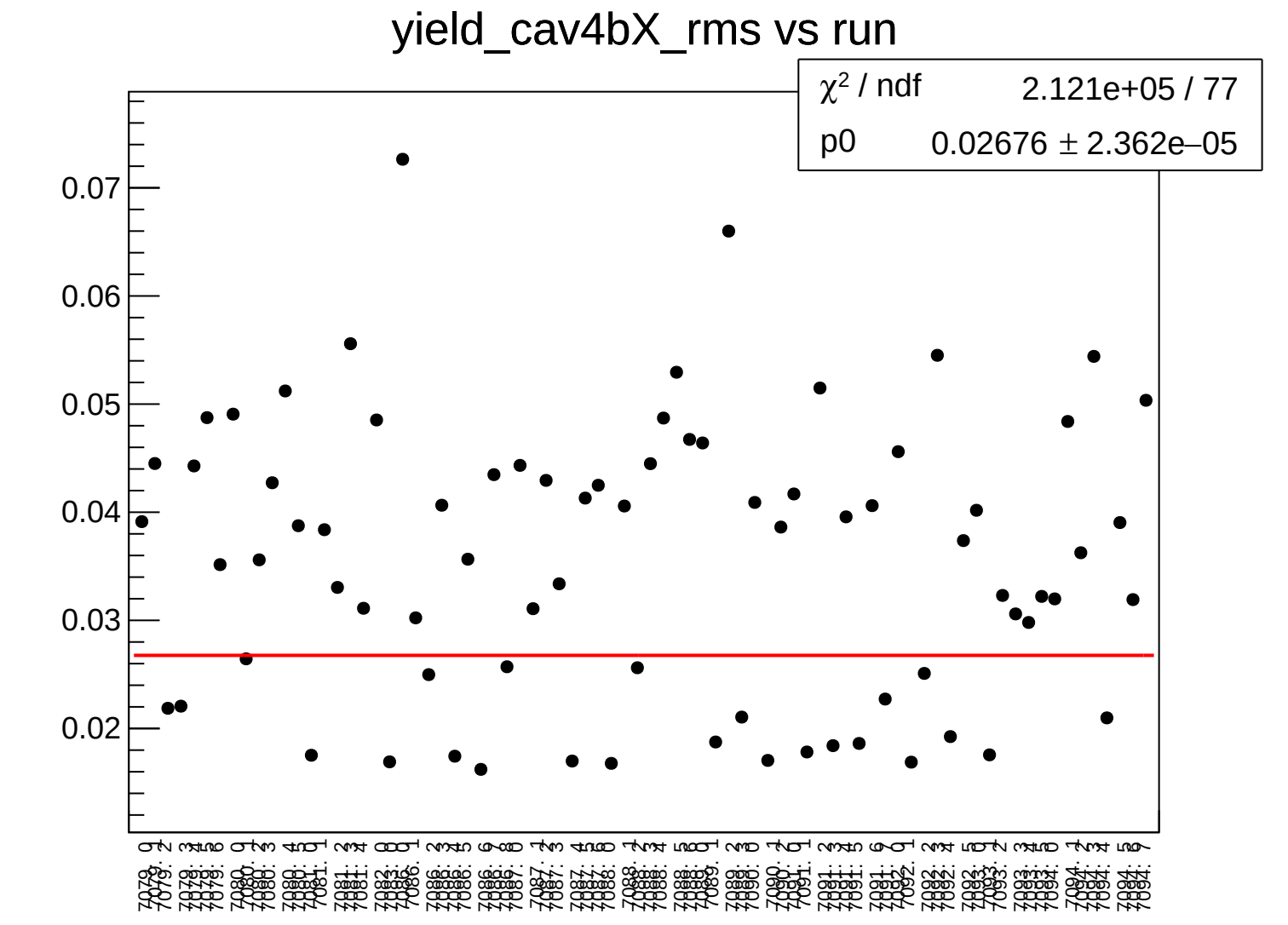

asym_bpm1i06WS_mean vs run
χ² / ndf 584.9 / 77
p0 −4663 ± 209.8
pull
Entries 78
Mean −238.8
Std Dev 163.4

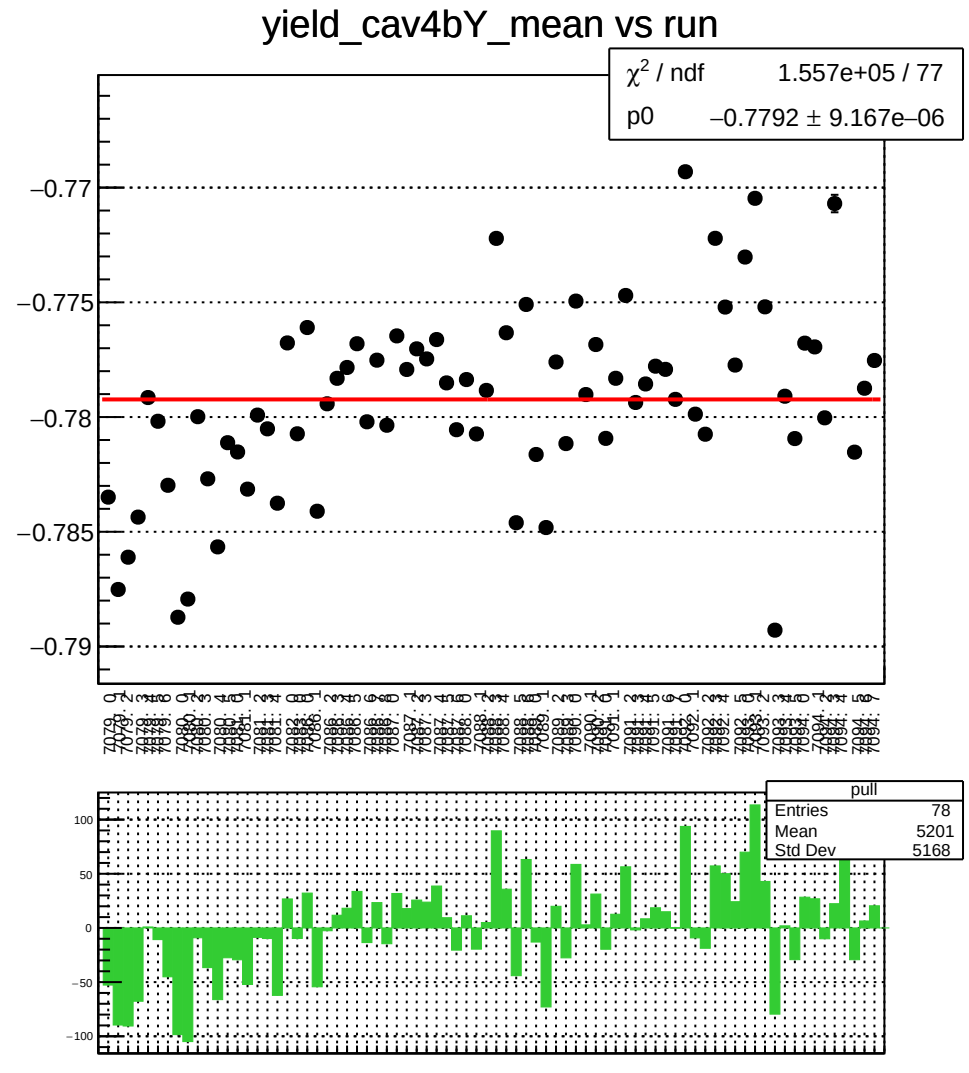

pull1D
Entries 78
Mean 0.01388
Std Dev 2.738

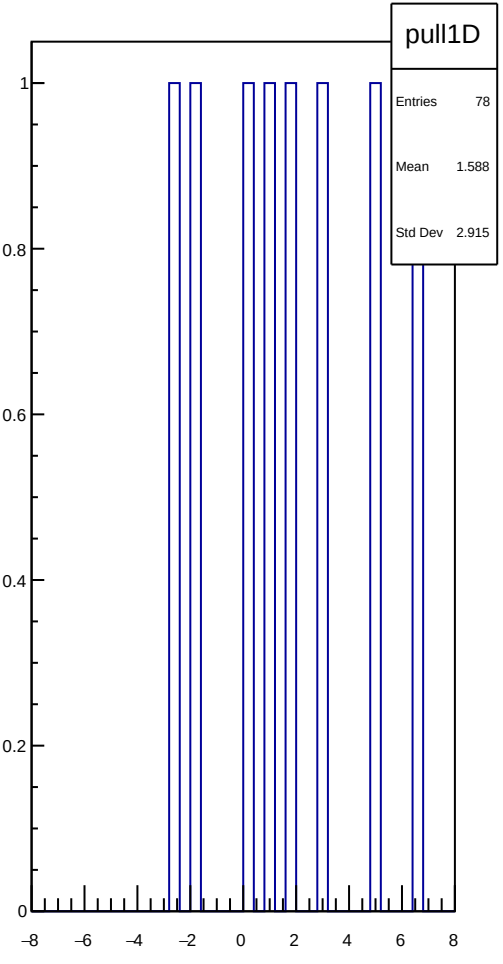

asym_bpm1i06WS_rms vs run
χ² / ndf 3073 / 77
p0 181.3 ± 0.1484
230
220
210
200
190
180
170
160

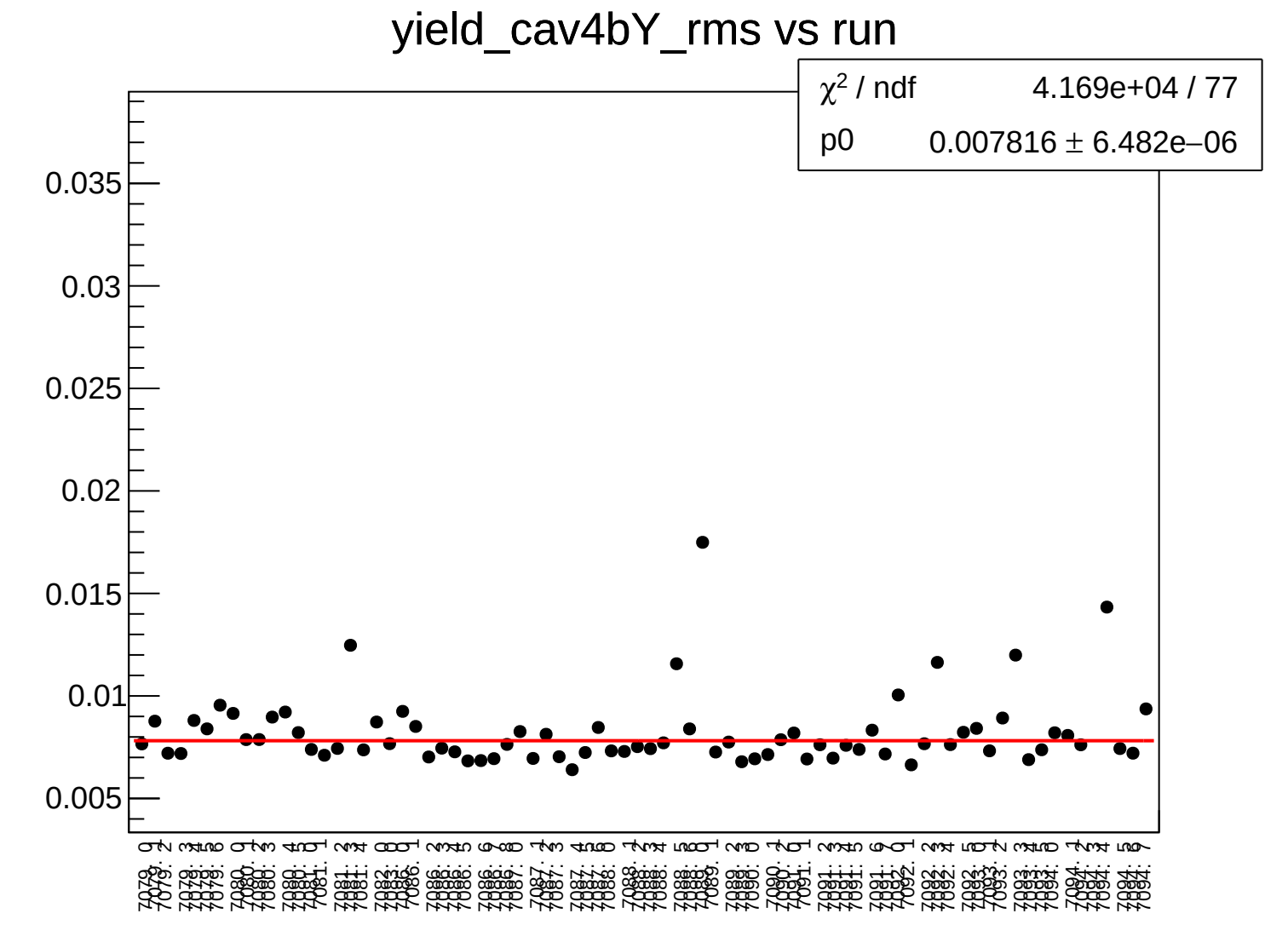

yield_cav4bX_mean vs run
χ² / ndf 3.9e+05 / 77
p0 −0.6013 ± 3.341e−05
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
pull
Entries 78
Mean 15.78
Std Dev 34.35
150
100
50
0
−50
−100
−150

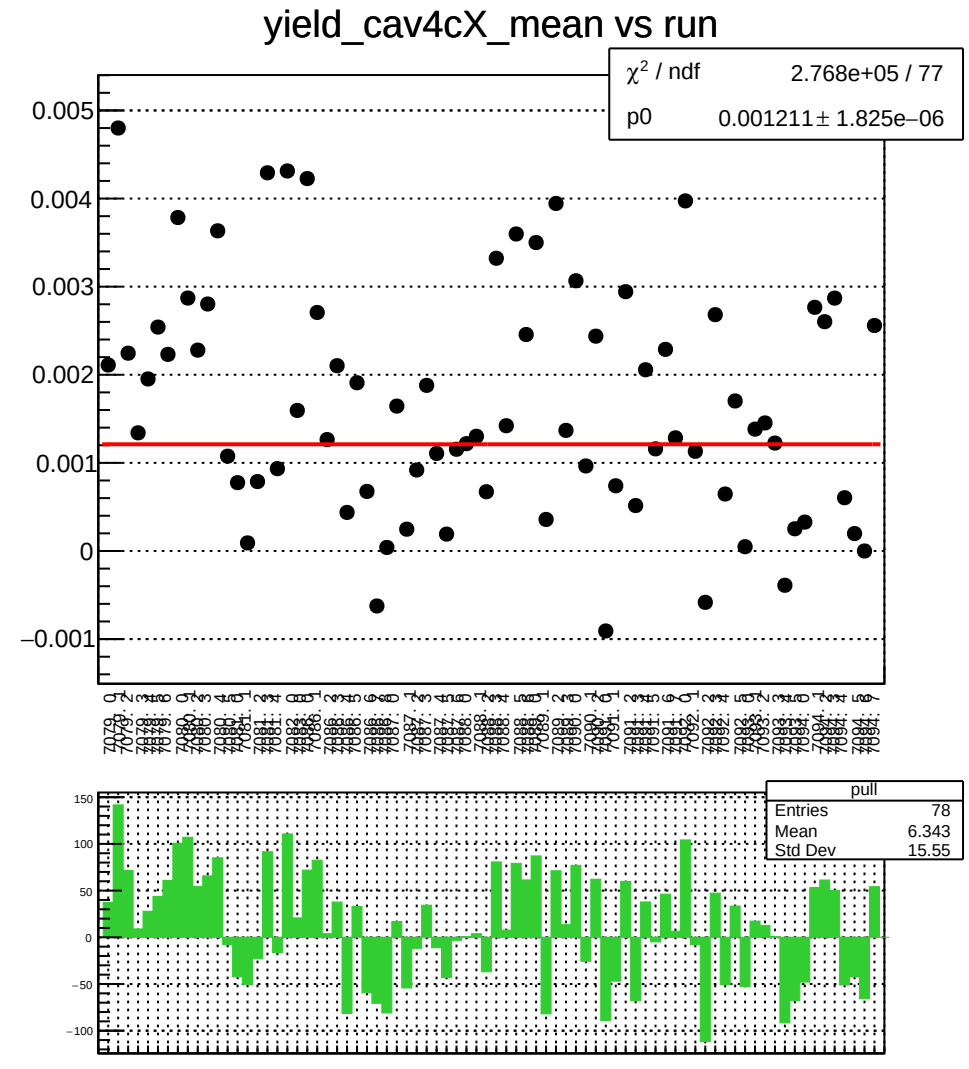

pull1D
Entries 78
Mean −0.8617
Std Dev 4.217
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

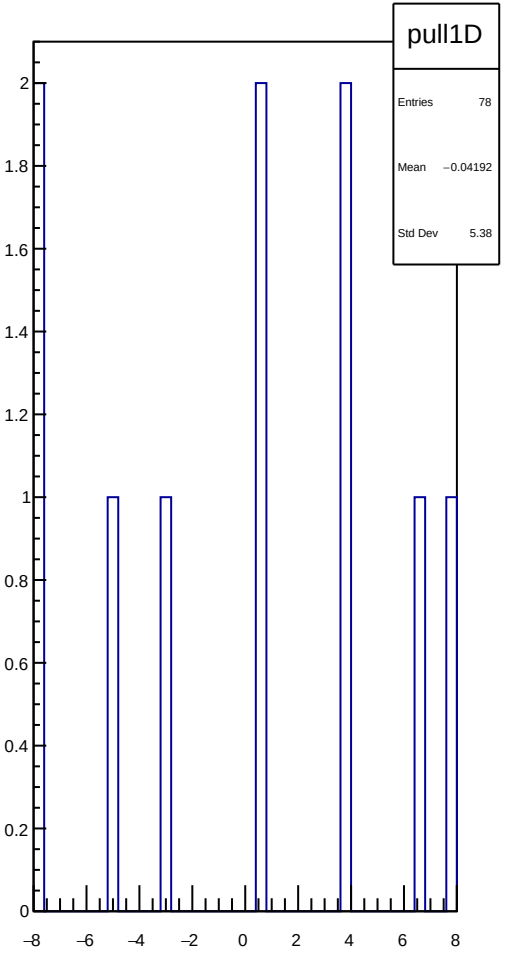

yield_cav4bX_rms vs run
χ² / ndf 2.121e+05 / 77
p0 0.02676 ± 2.362e−05
0.07
0.06
0.05
0.04
0.03
0.02

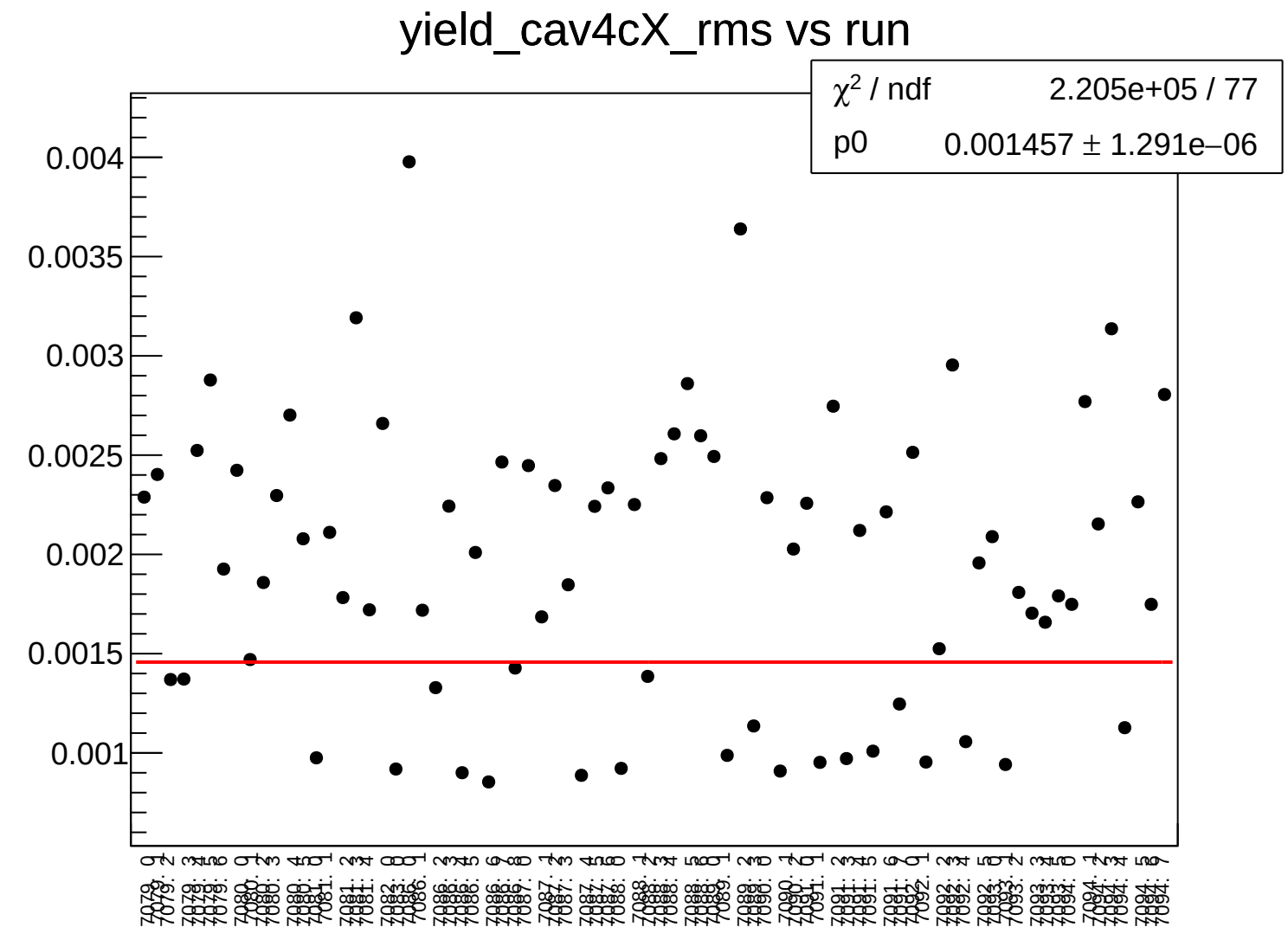

yield_cav4bY_mean vs run
χ² / ndf 1.557e+05 / 77
p0 −0.7792 ± 9.167e−06
−0.77
−0.775
−0.78
−0.785
−0.79
pull
Entries 78
Mean 5201
Std Dev 5168
100
50
0
−50
−100

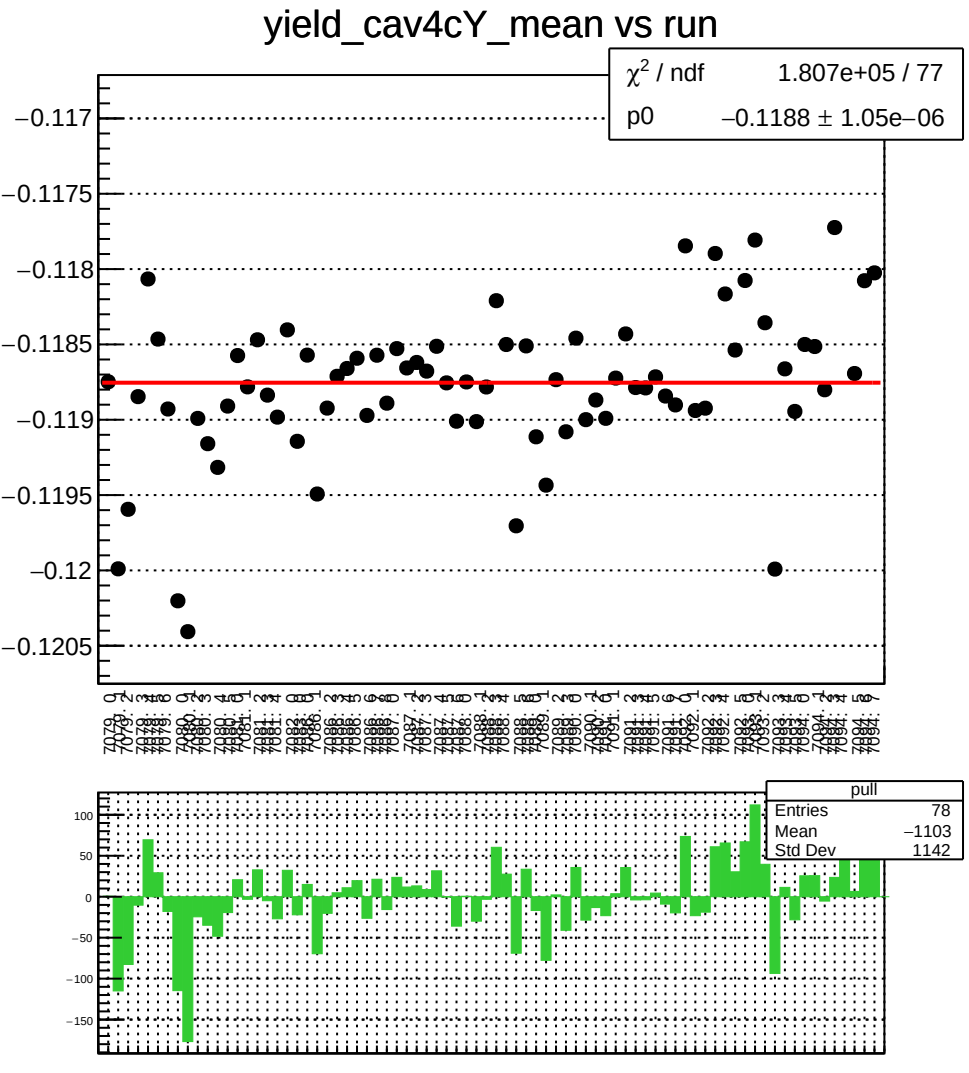

pull1D
Entries 78
Mean 1.588
Std Dev 2.915
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

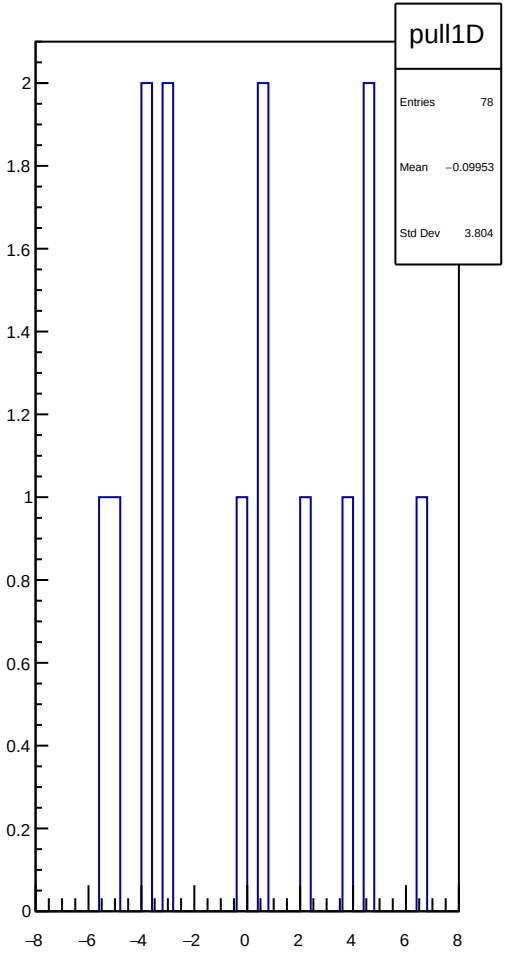

yield_cav4bY_rms vs run
χ² / ndf 4.169e+04 / 77
p0 0.007816 ± 6.482e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

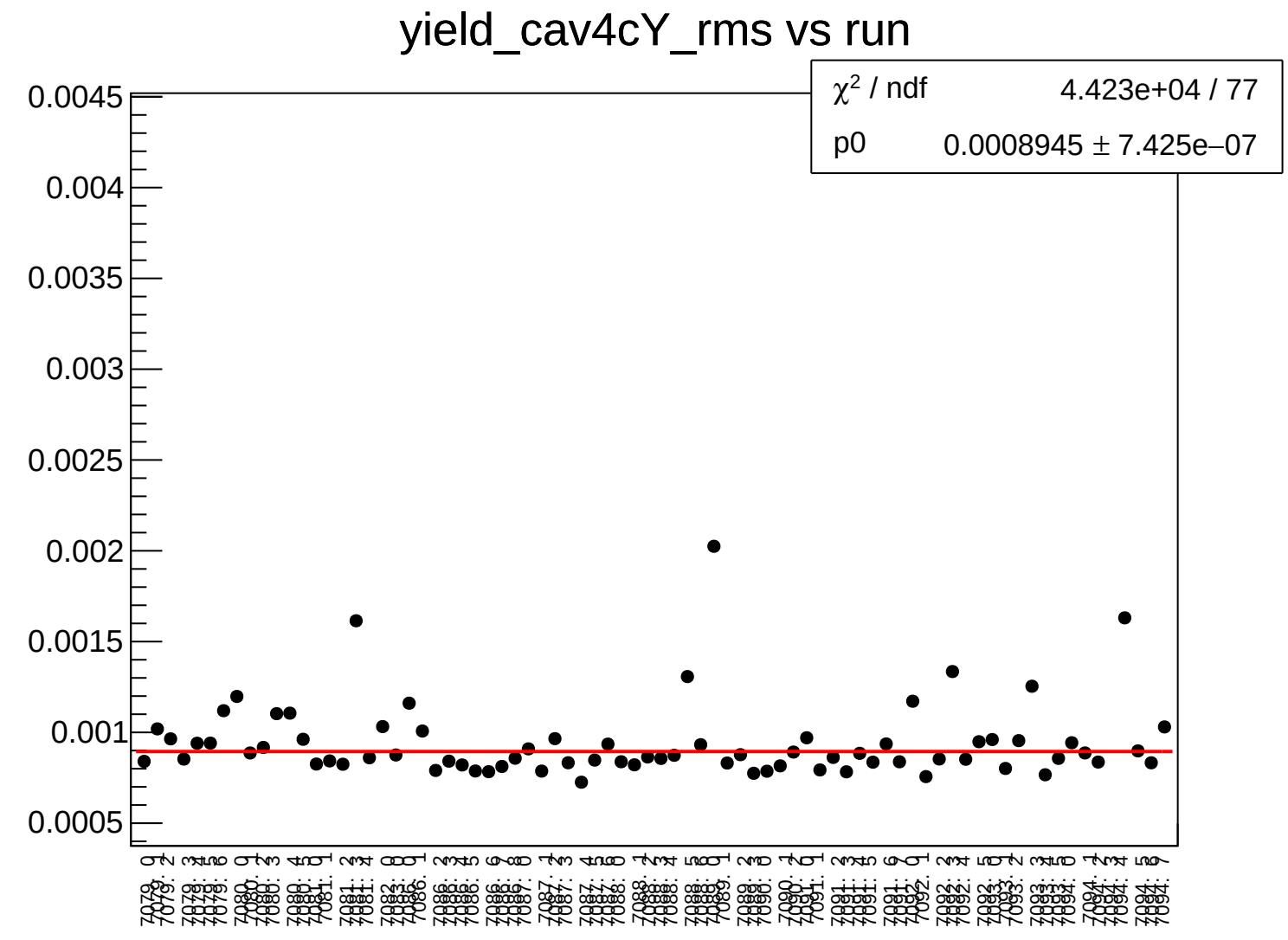

yield_cav4cX_mean vs run
χ² / ndf 2.768e+05 / 77
p0 0.001211 ± 1.825e−06
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 78
Mean 6.343
Std Dev 15.55
150
100
50
0
−50
−100

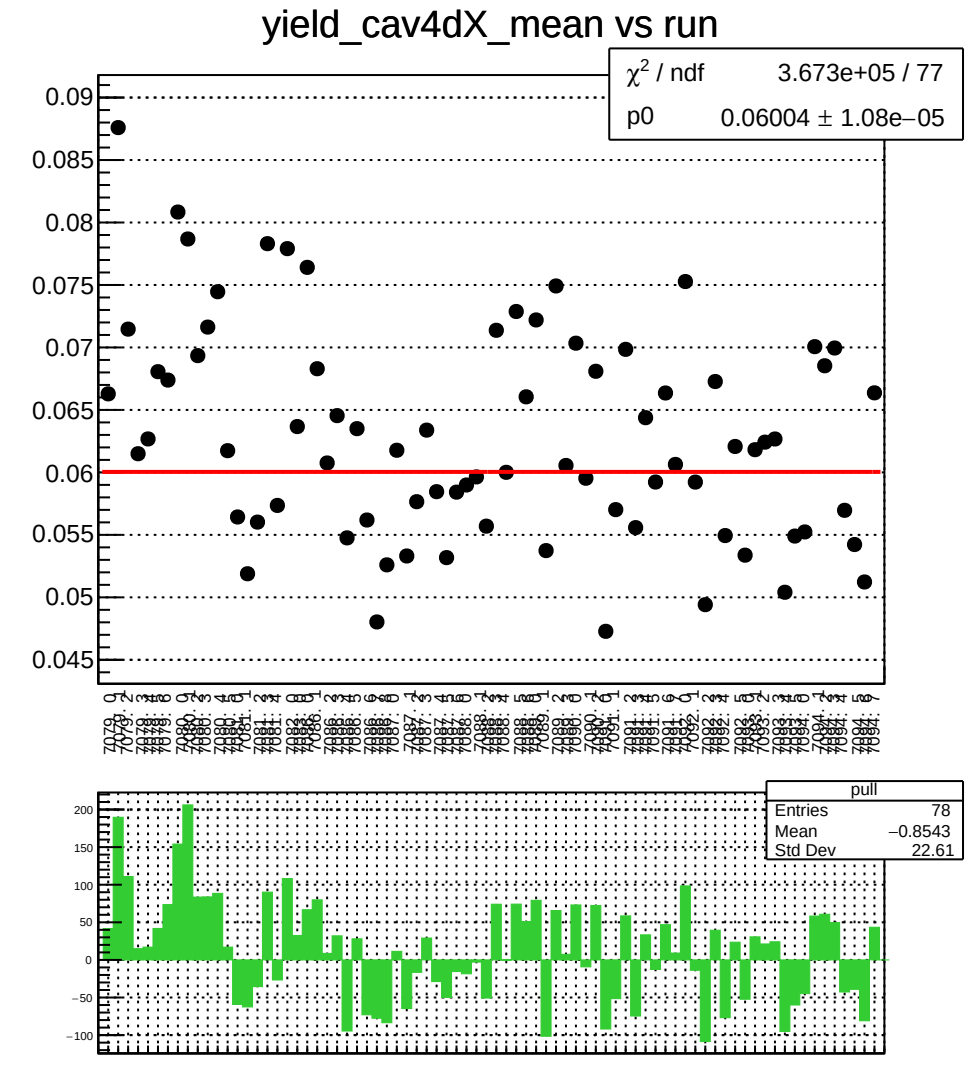

pull1D
Entries 78
Mean −0.04192
Std Dev 5.38
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

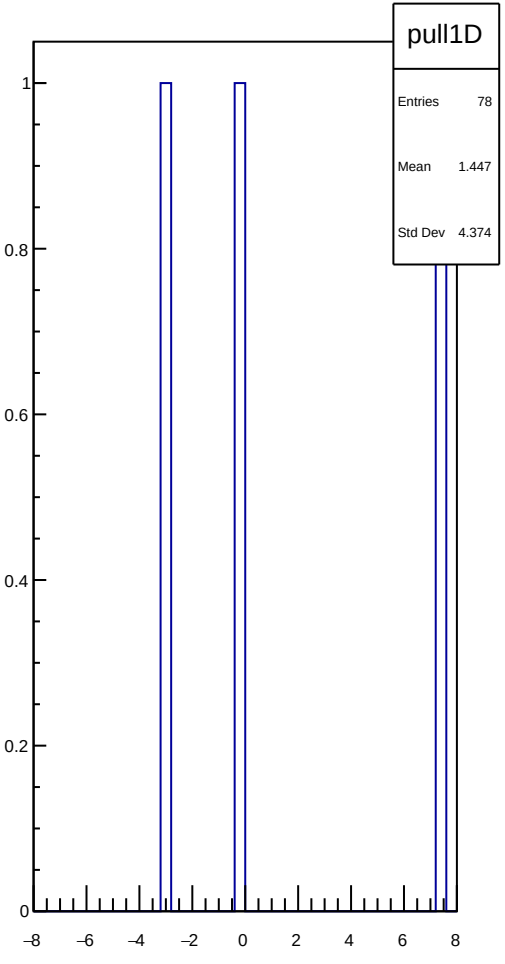

yield_cav4cX_rms vs run
χ² / ndf 2.205e+05 / 77
p0 0.001457 ± 1.291e−06
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

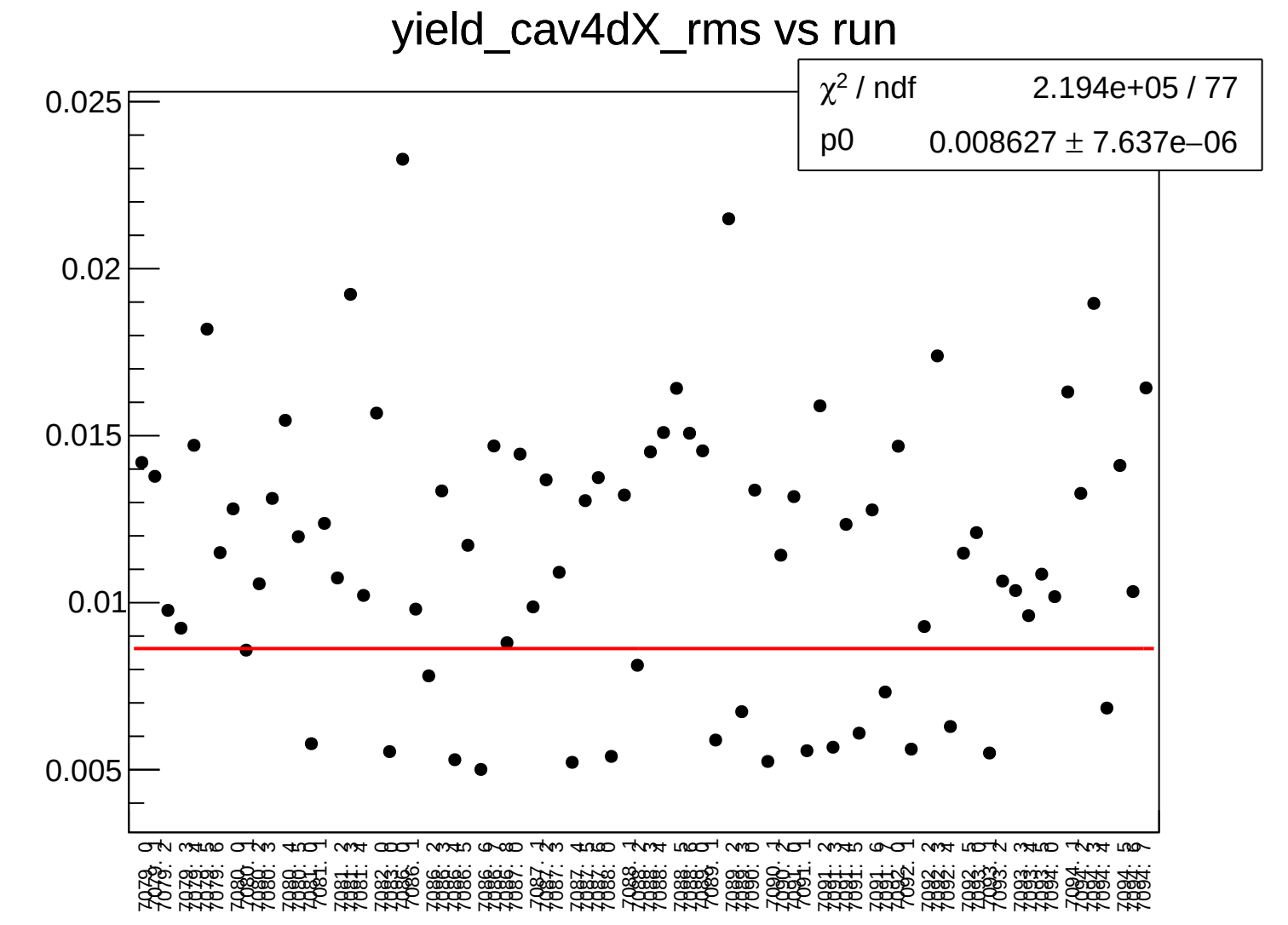

yield_cav4cY_mean vs run
χ² / ndf 1.807e+05 / 77
p0 −0.1188 ± 1.05e−06
−0.117
−0.1175
−0.118
−0.1185
−0.119
−0.1195
−0.12
−0.1205
pull
Entries 78
Mean −1103
Std Dev 1142
100
50
0
−50
−100
−150

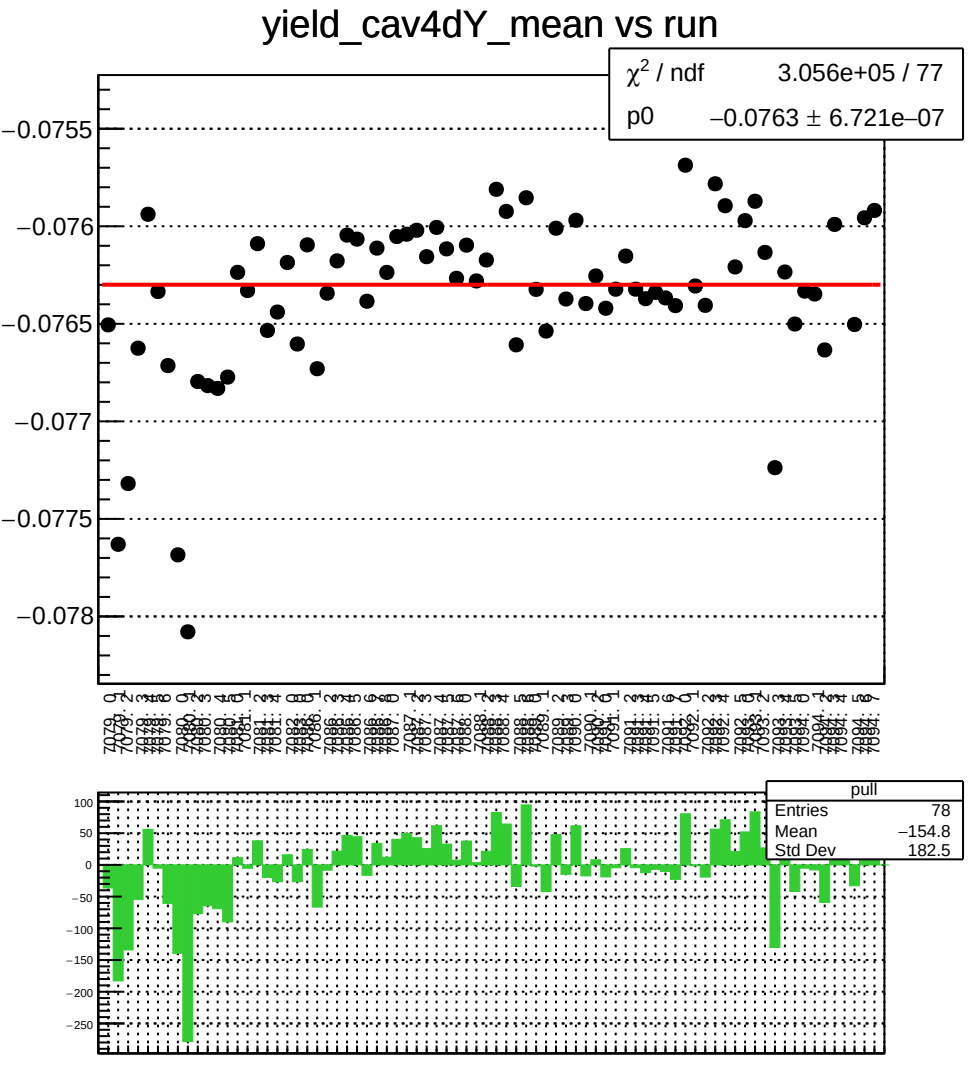

pull1D
Entries 78
Mean −0.09953
Std Dev 3.804
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

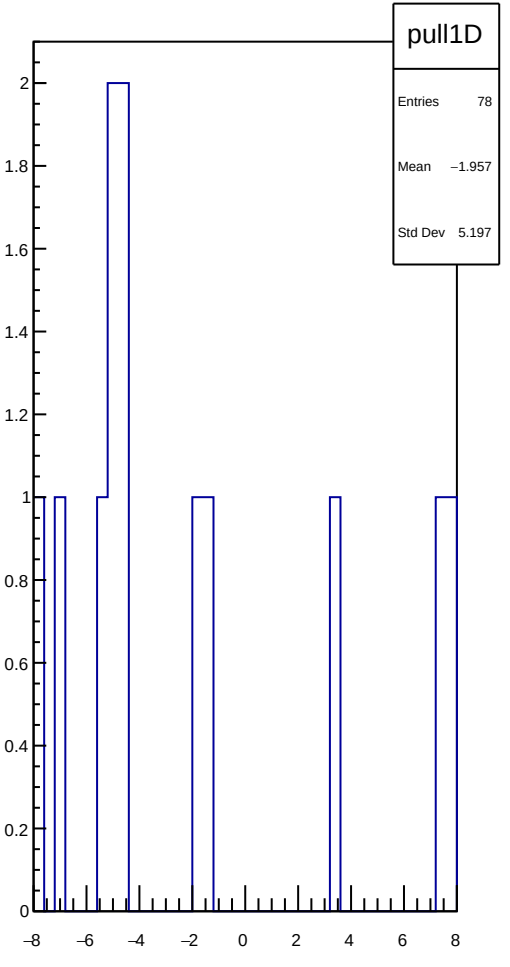

yield_cav4cY_rms vs run
χ² / ndf 4.423e+04 / 77
p0 0.0008945 ± 7.425e−07
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005

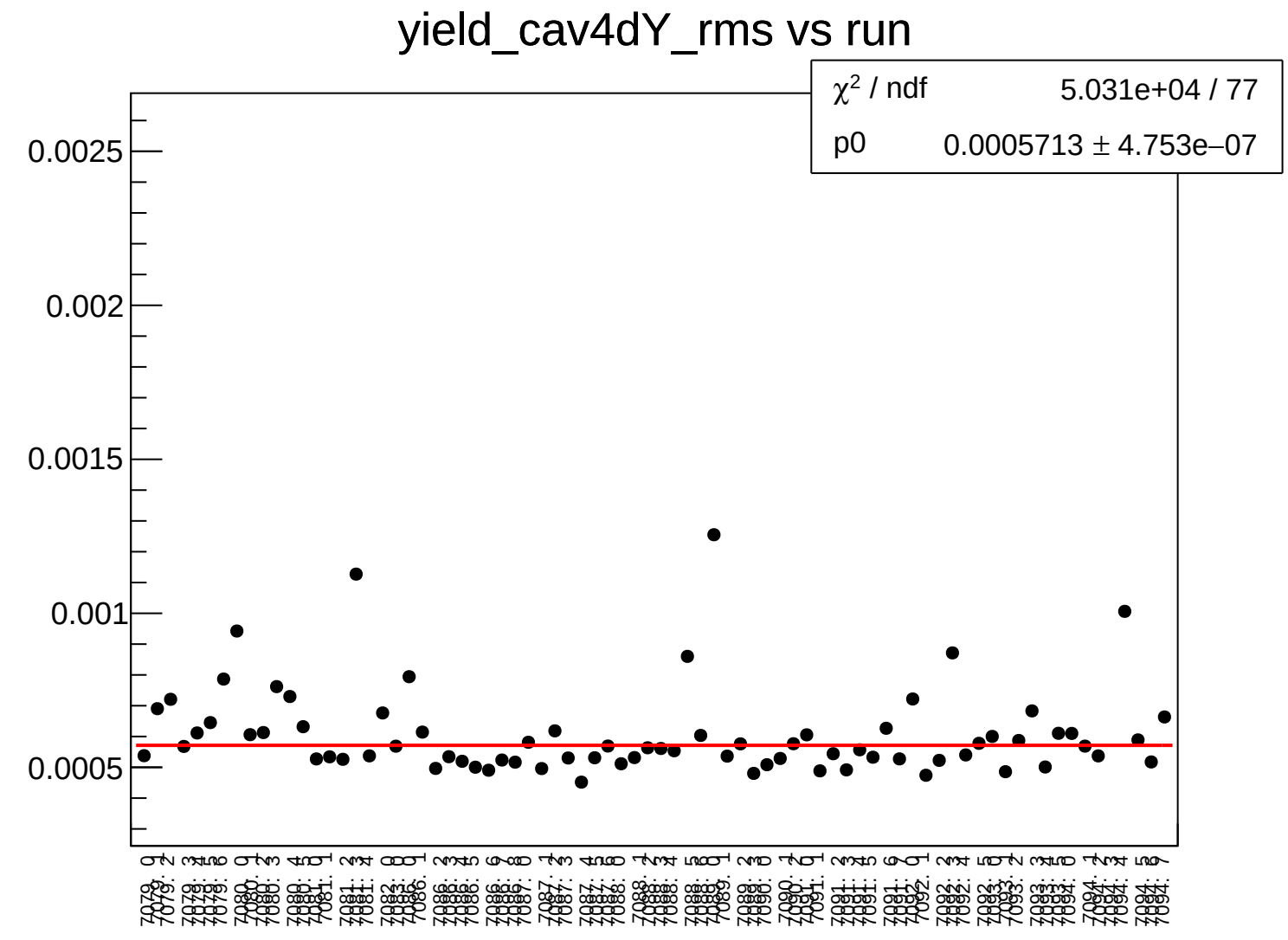

yield_cav4dX_mean vs run
χ² / ndf 3.673e+05 / 77
p0 0.06004 ± 1.08e−05
pull
Entries 78
Mean −0.8543
Std Dev 22.61

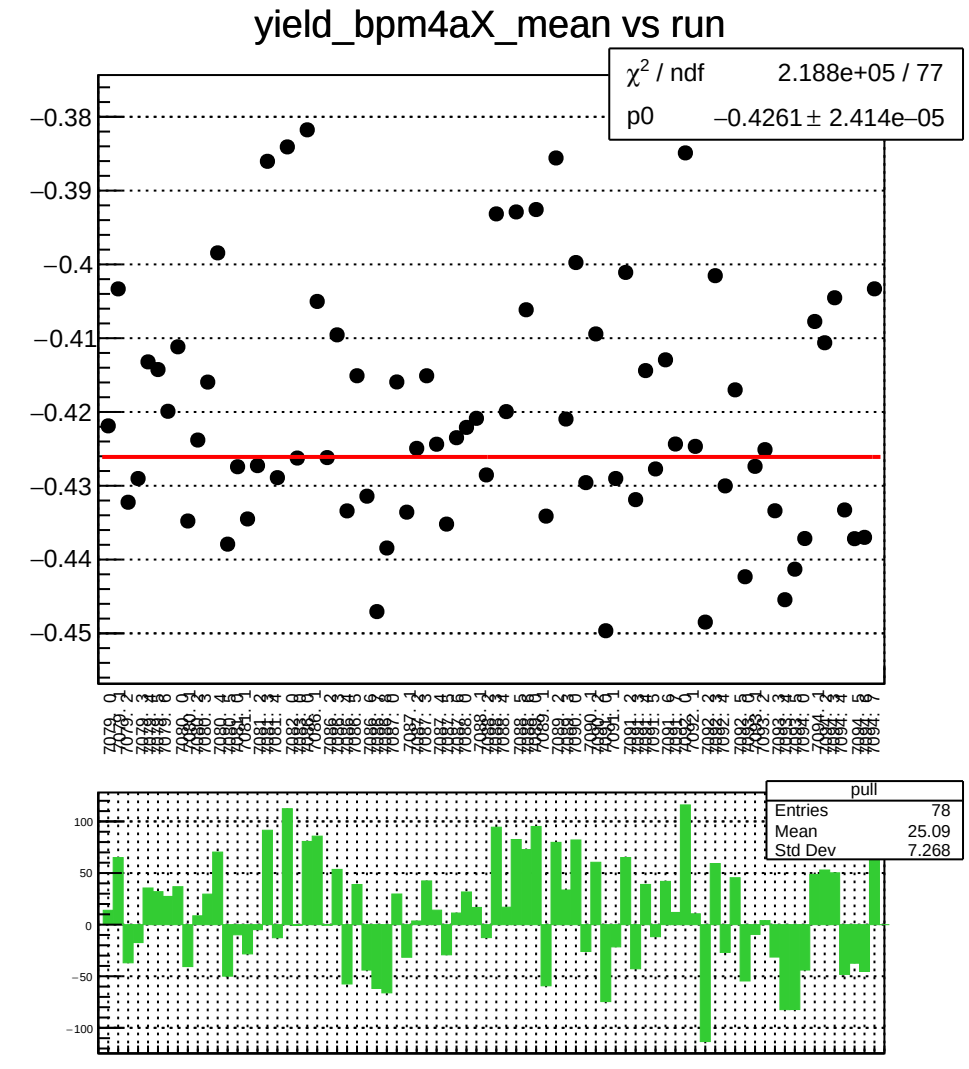

pull1D
Entries 78
Mean 1.447
Std Dev 4.374

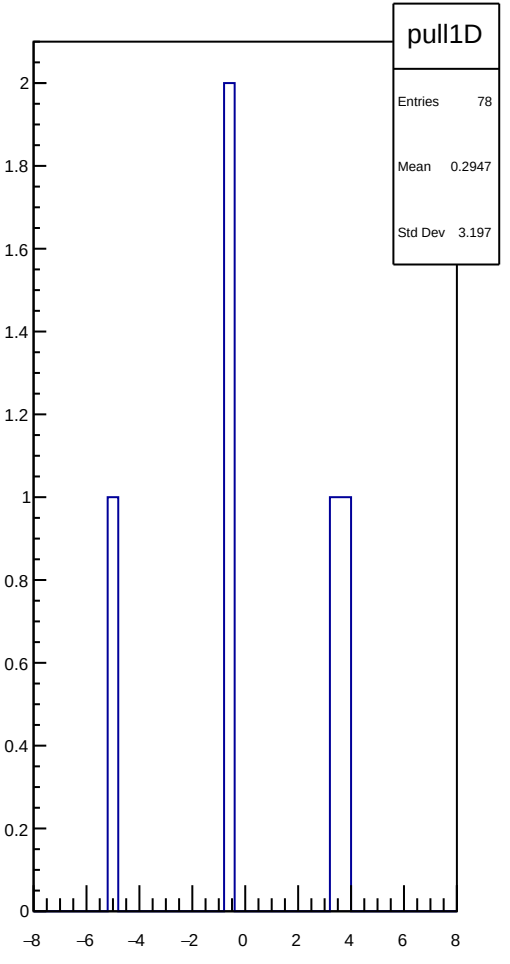

yield_cav4dX_rms vs run
χ² / ndf 2.194e+05 / 77
p0 0.008627 ± 7.637e−06
0.025
0.02
0.015
0.01
0.005

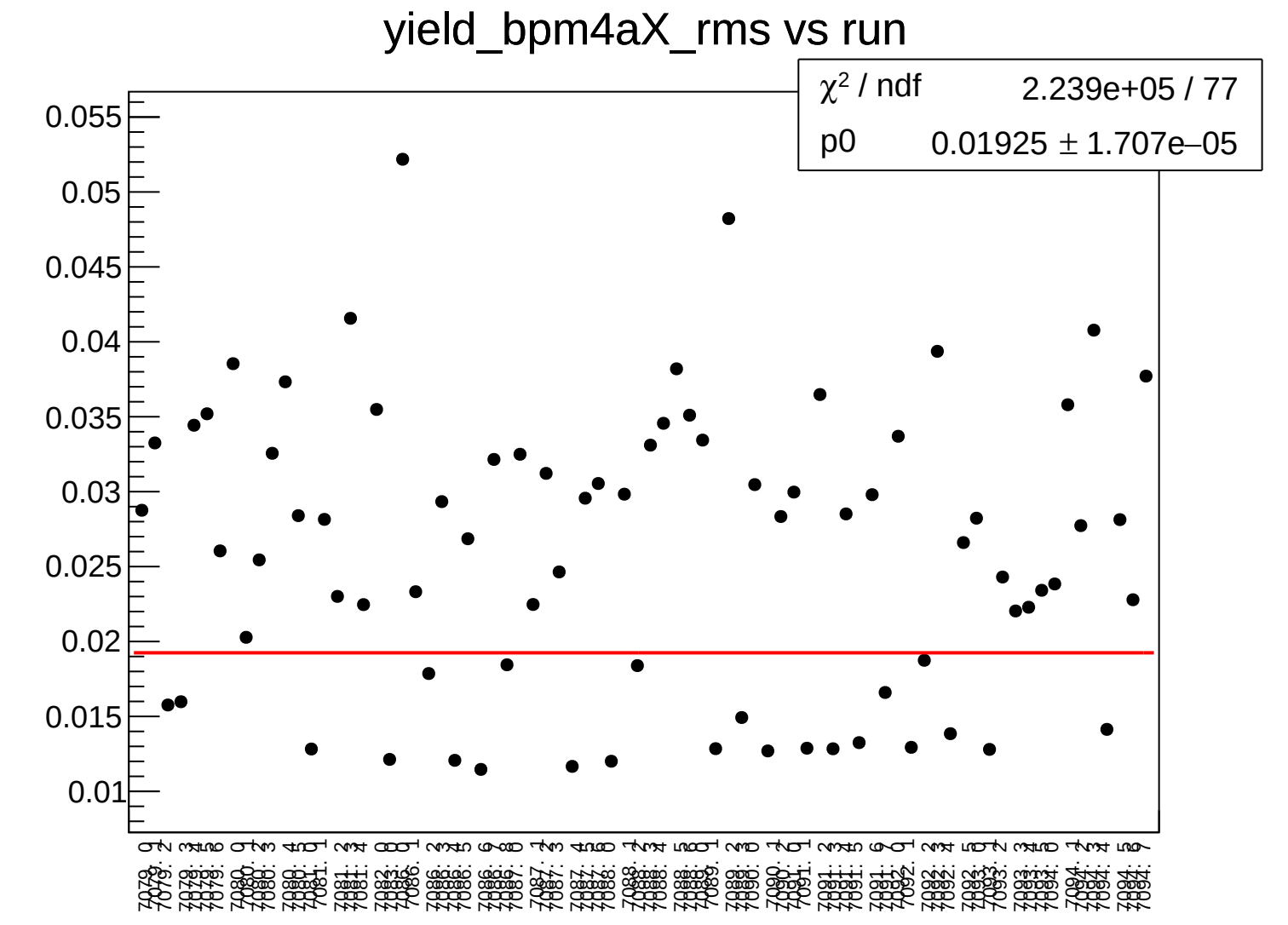

yield_cav4dY_mean vs run
χ² / ndf 3.056e+05 / 77
p0 −0.0763 ± 6.721e−07
−0.0755
−0.076
−0.0765
−0.077
−0.0775
−0.078
pull
Entries 78
Mean −154.8
Std Dev 182.5
100
50
0
−50
−100
−150
−200
−250

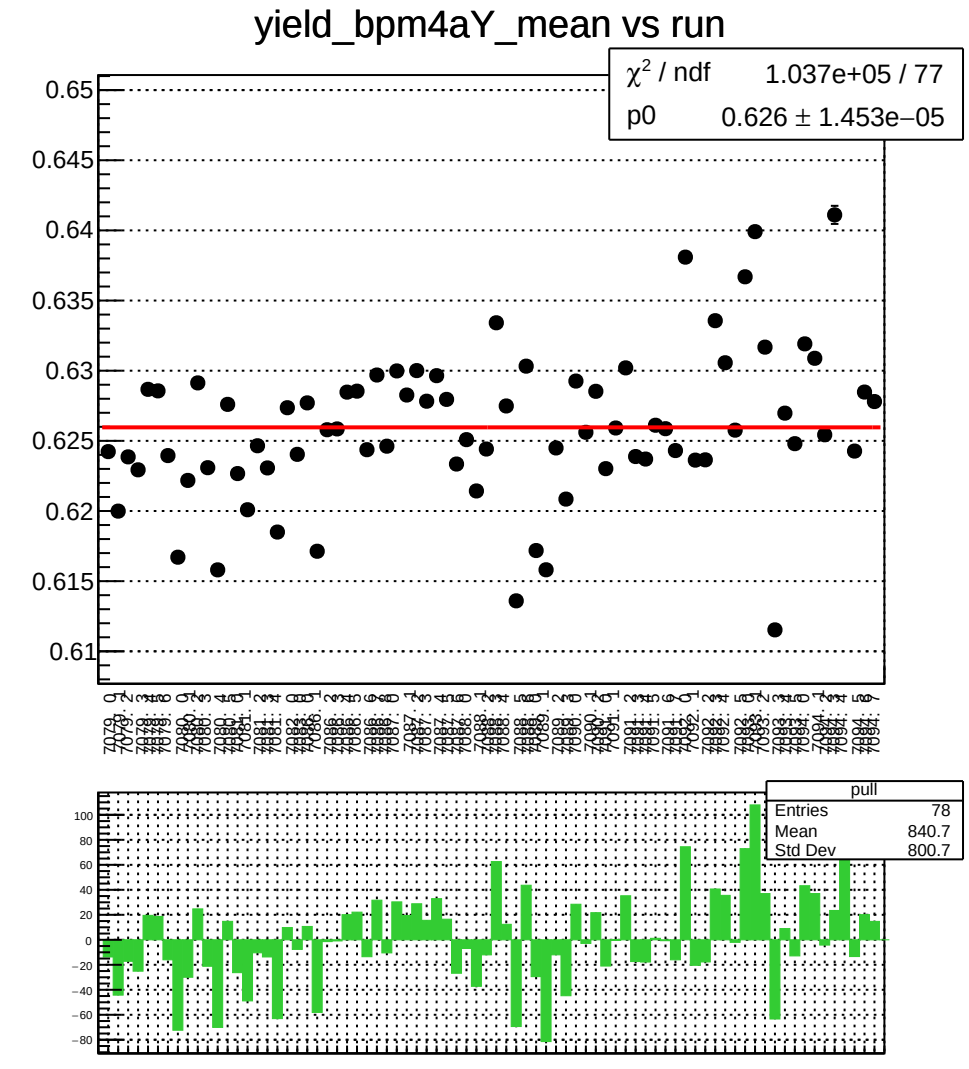

pull1D
Entries 78
Mean −1.957
Std Dev 5.197
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

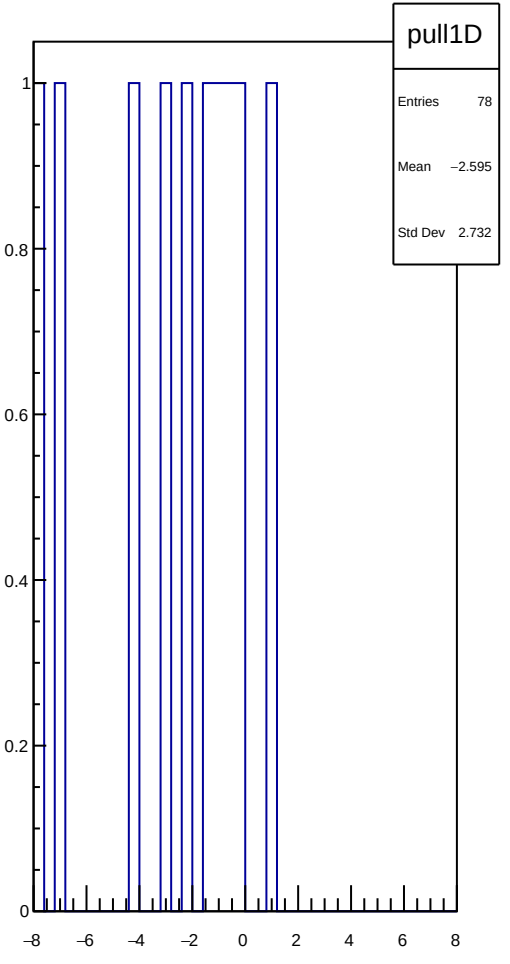

yield_cav4dY_rms vs run
χ² / ndf 5.031e+04 / 77
p0 0.0005713 ± 4.753e−07
0.0025
0.002
0.0015
0.001
0.0005

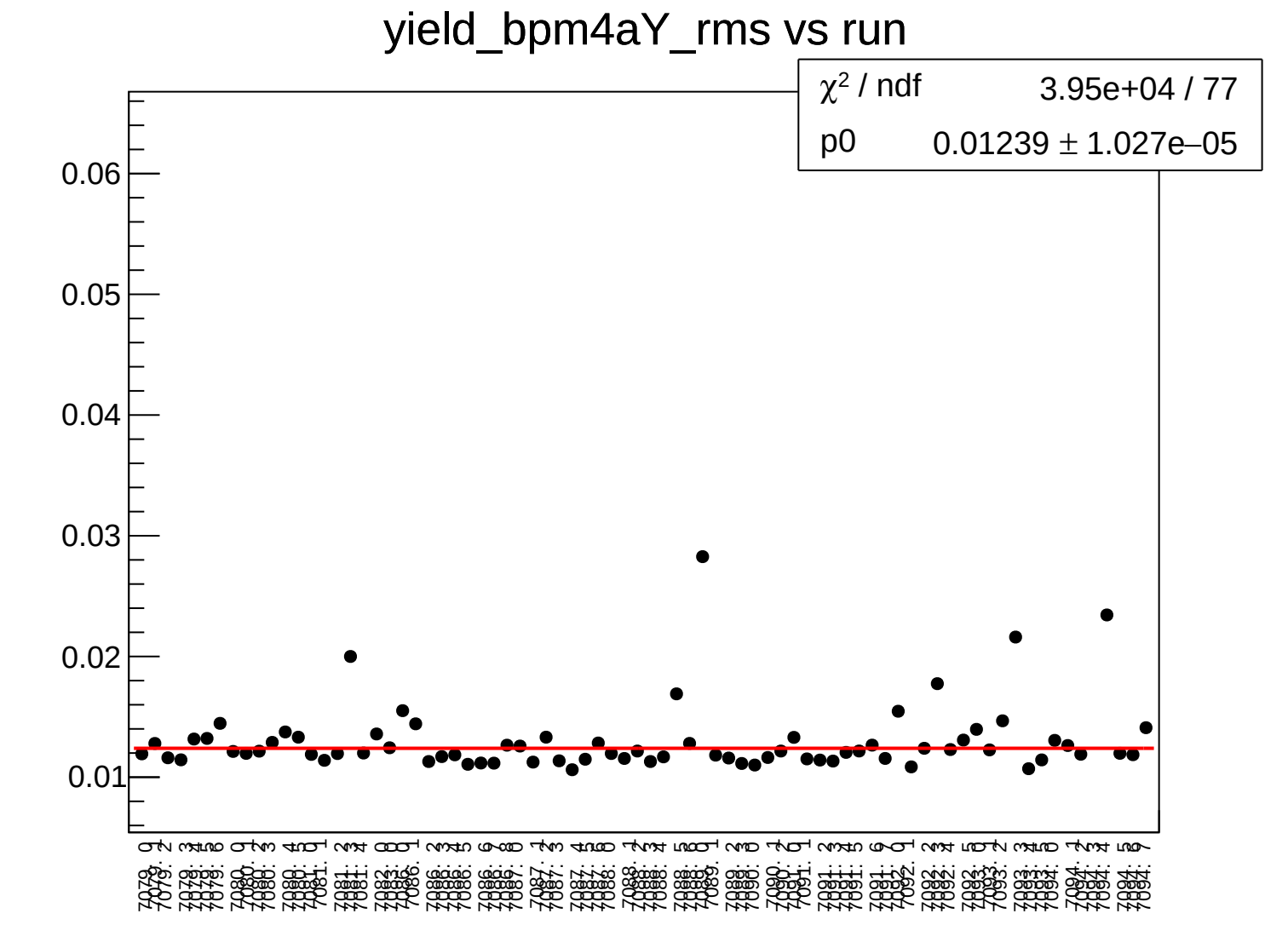

yield_bpm4aX_mean vs run
χ² / ndf 2.188e+05 / 77
p0 −0.4261 ± 2.414e−05
−0.38
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
pull
Entries 78
Mean 25.09
Std Dev 7.268
100
50
0
−50
−100

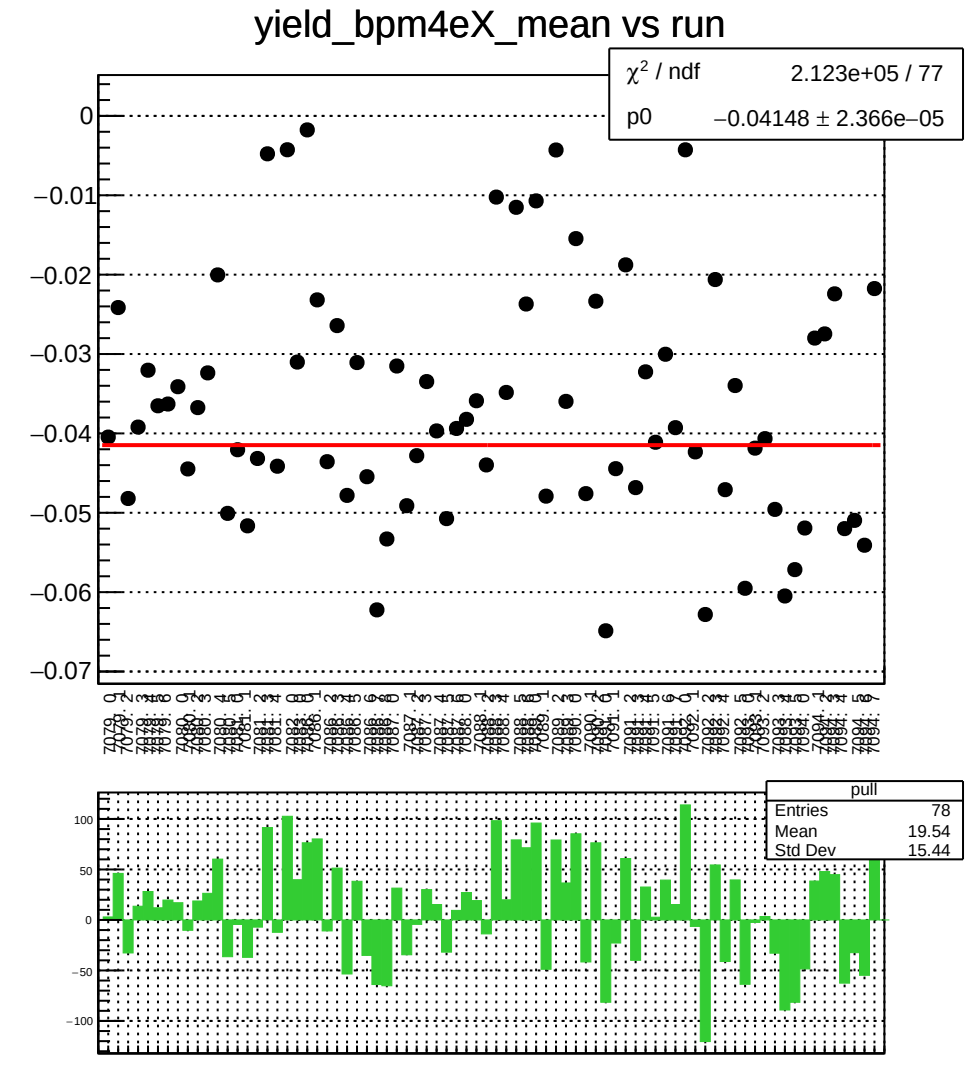

pull1D
Entries 78
Mean 0.2947
Std Dev 3.197
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

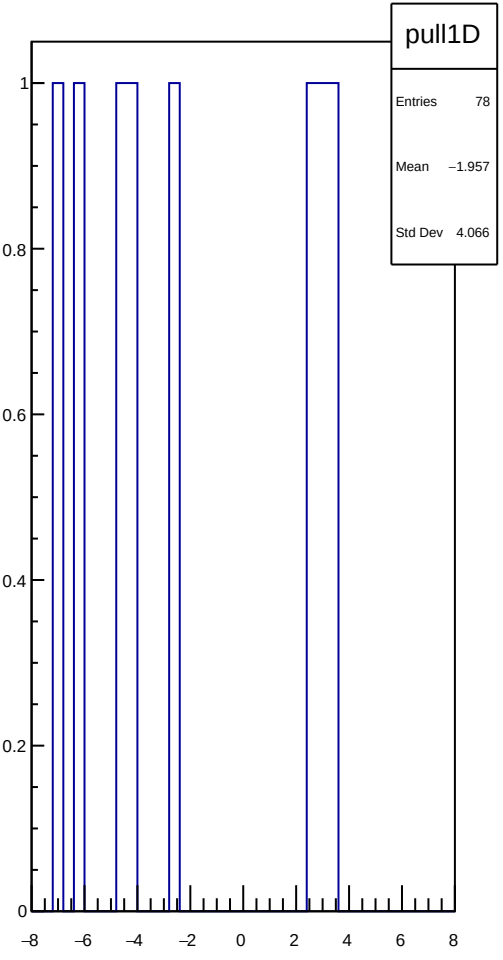

yield_bpm4aX_rms vs run
χ² / ndf 2.239e+05 / 77
p0 0.01925 ± 1.707e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

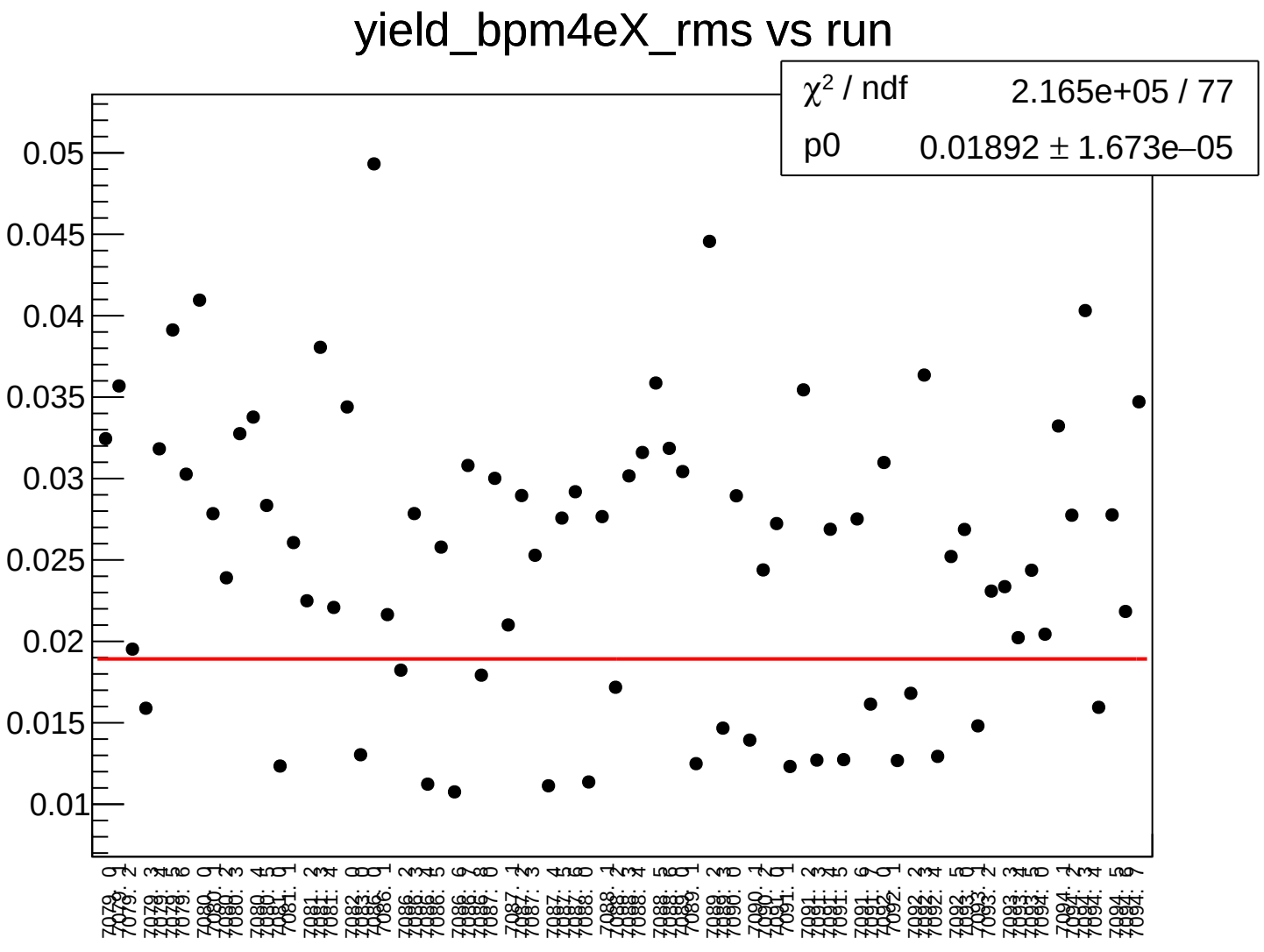

yield_bpm4aY_mean vs run
χ² / ndf 1.037e+05 / 77
p0 0.626 ± 1.453e−05
0.65
0.645
0.64
0.635
0.63
0.625
0.62
0.615
0.61
pull
Entries 78
Mean 840.7
Std Dev 800.7
100
80
60
40
20
0
−20
−40
−60
−80

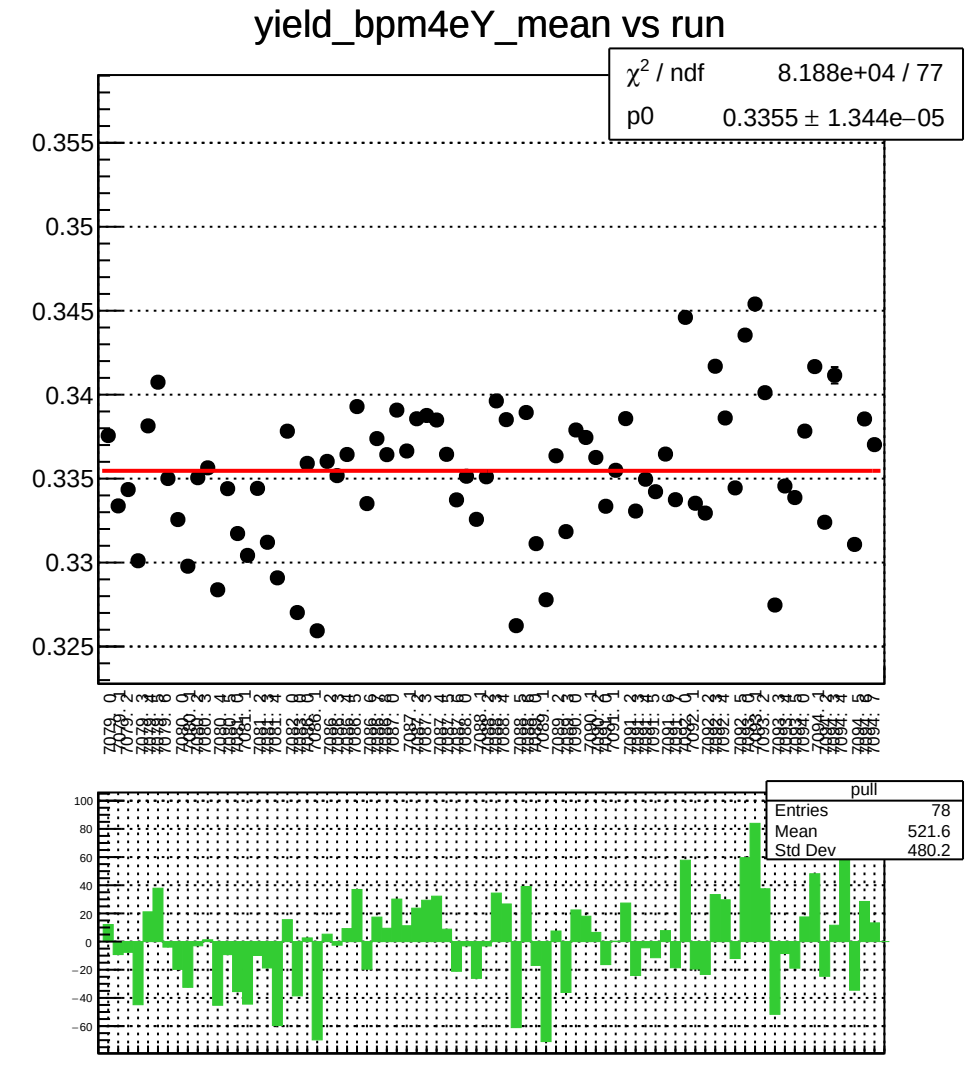

pull1D
Entries 78
Mean −2.595
Std Dev 2.732
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

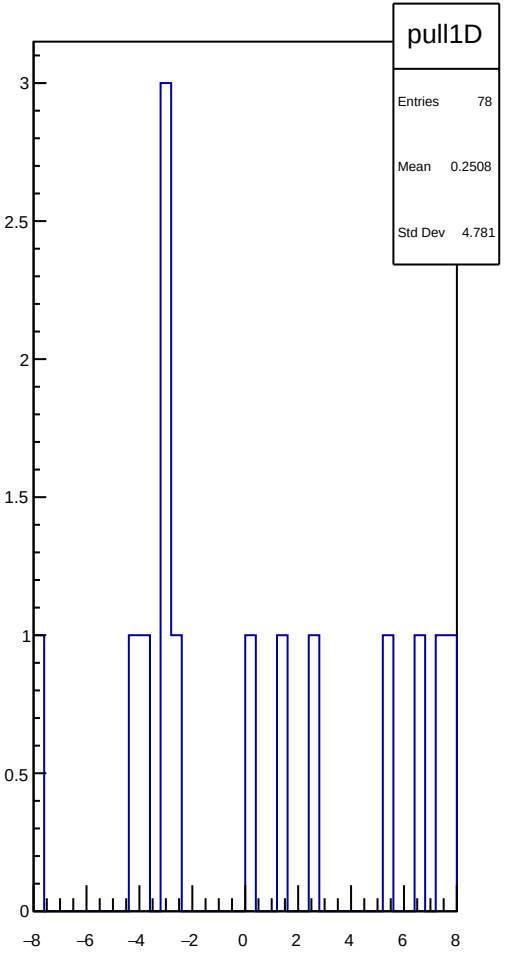

yield_bpm4aY_rms vs run
χ² / ndf 3.95e+04 / 77
p0 0.01239 ± 1.027e–05
0.06
0.05
0.04
0.03
0.02
0.01

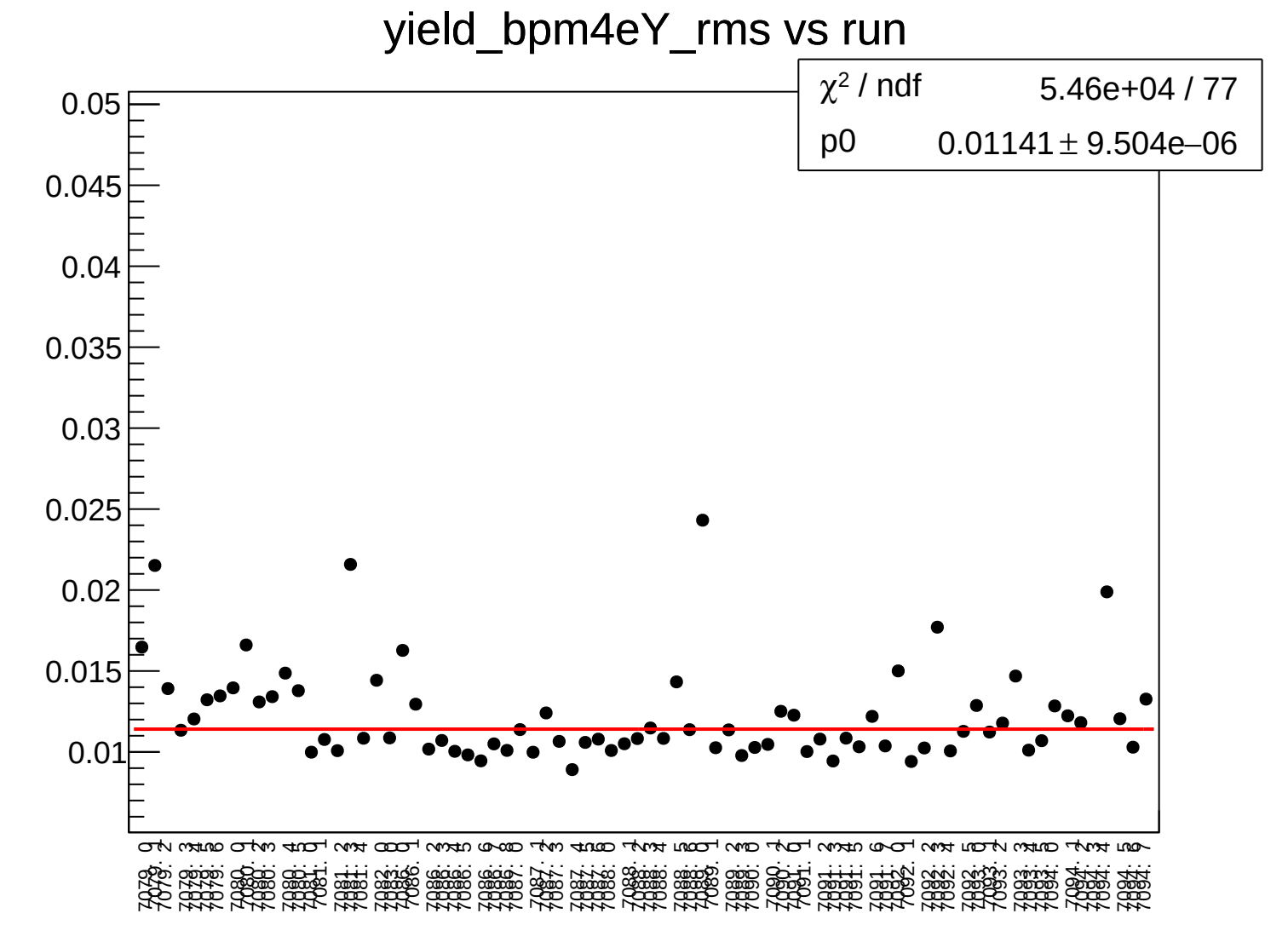

yield_bpm4eX_mean vs run
χ² / ndf 2.123e+05 / 77
p0 −0.04148 ± 2.366e−05
pull
Entries 78
Mean 19.54
Std Dev 15.44

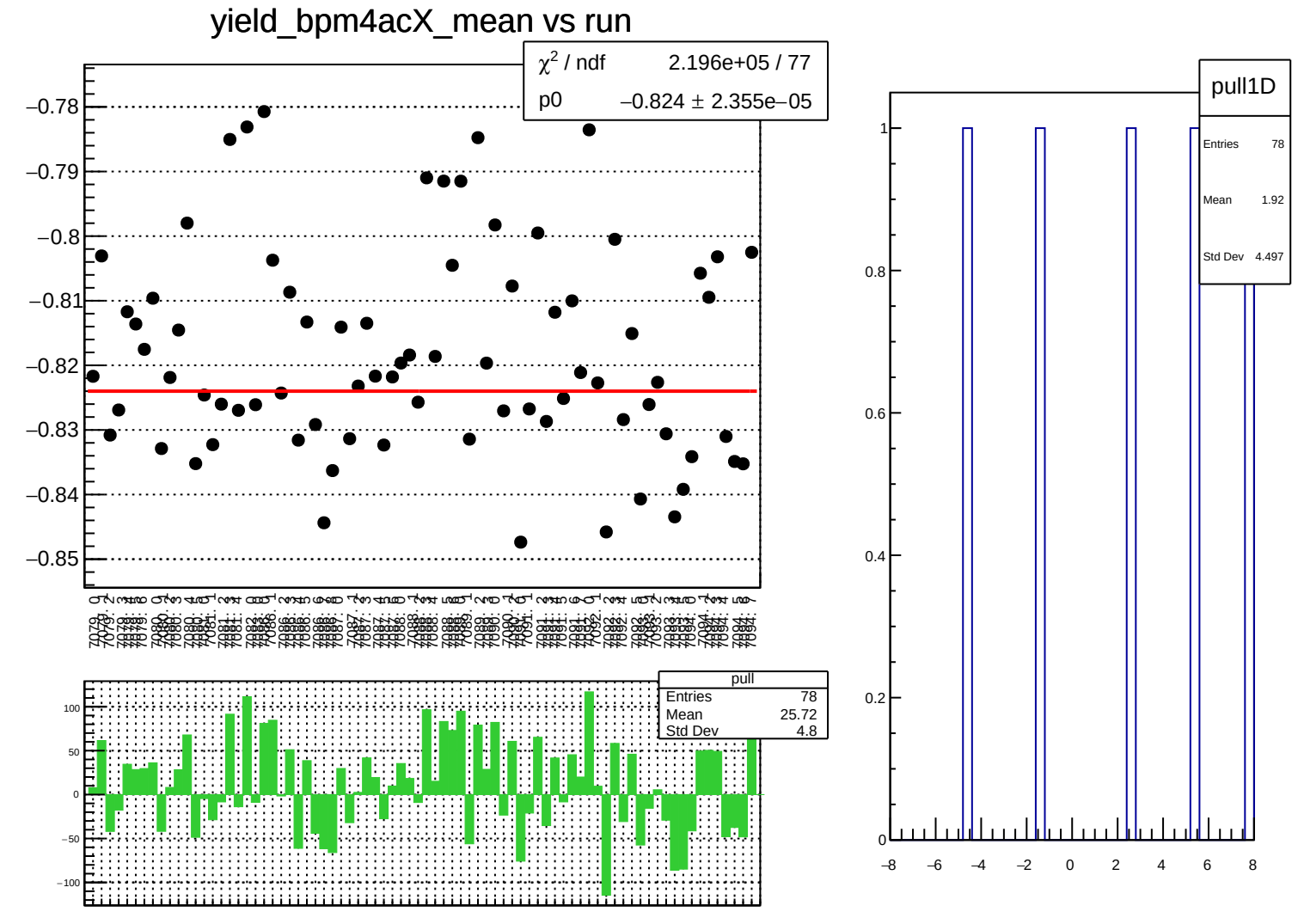

pull1D
Entries 78
Mean −1.957
Std Dev 4.066

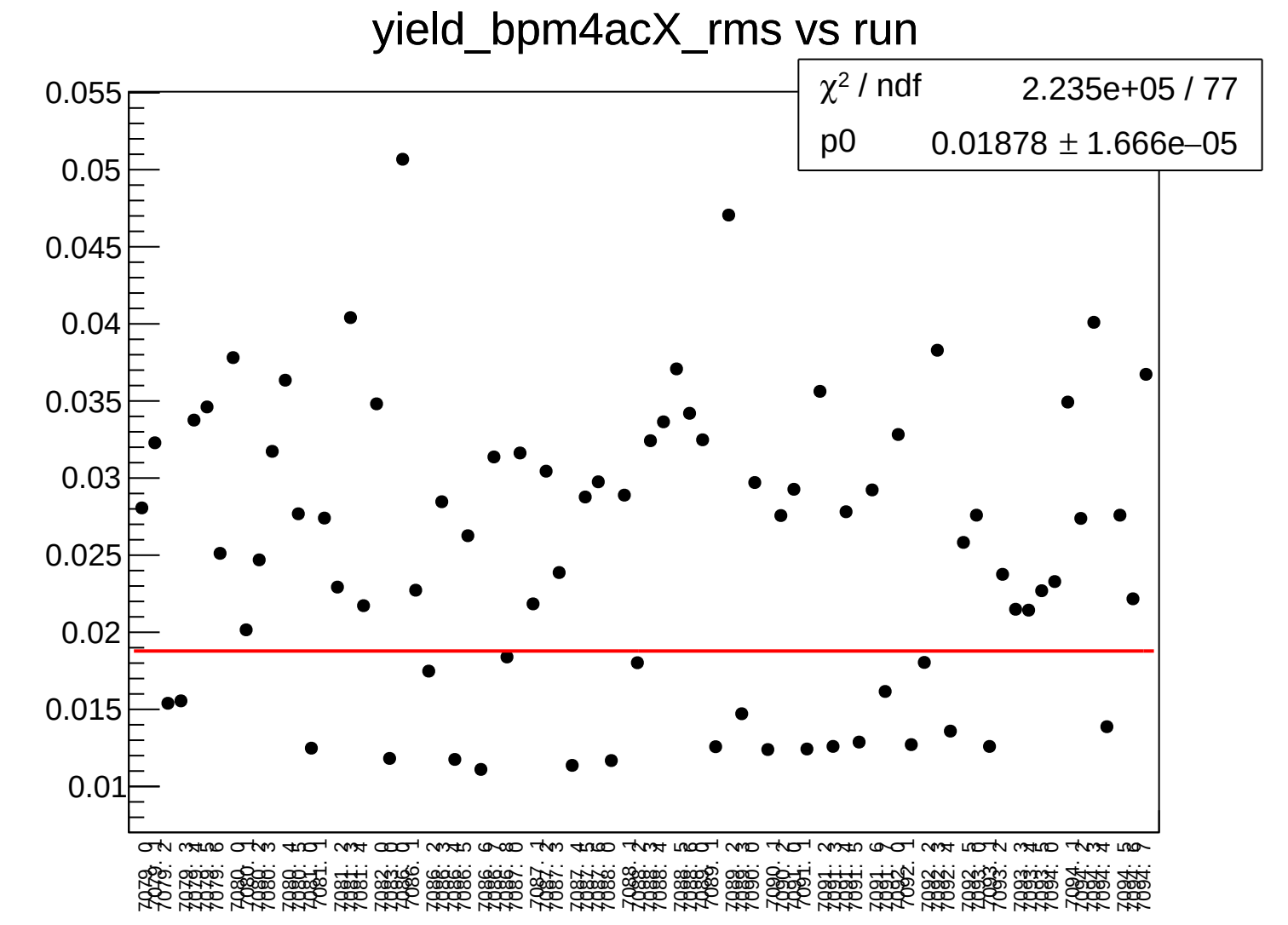

yield_bpm4eX_rms vs run
χ² / ndf 2.165e+05 / 77
p0 0.01892 ± 1.673e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

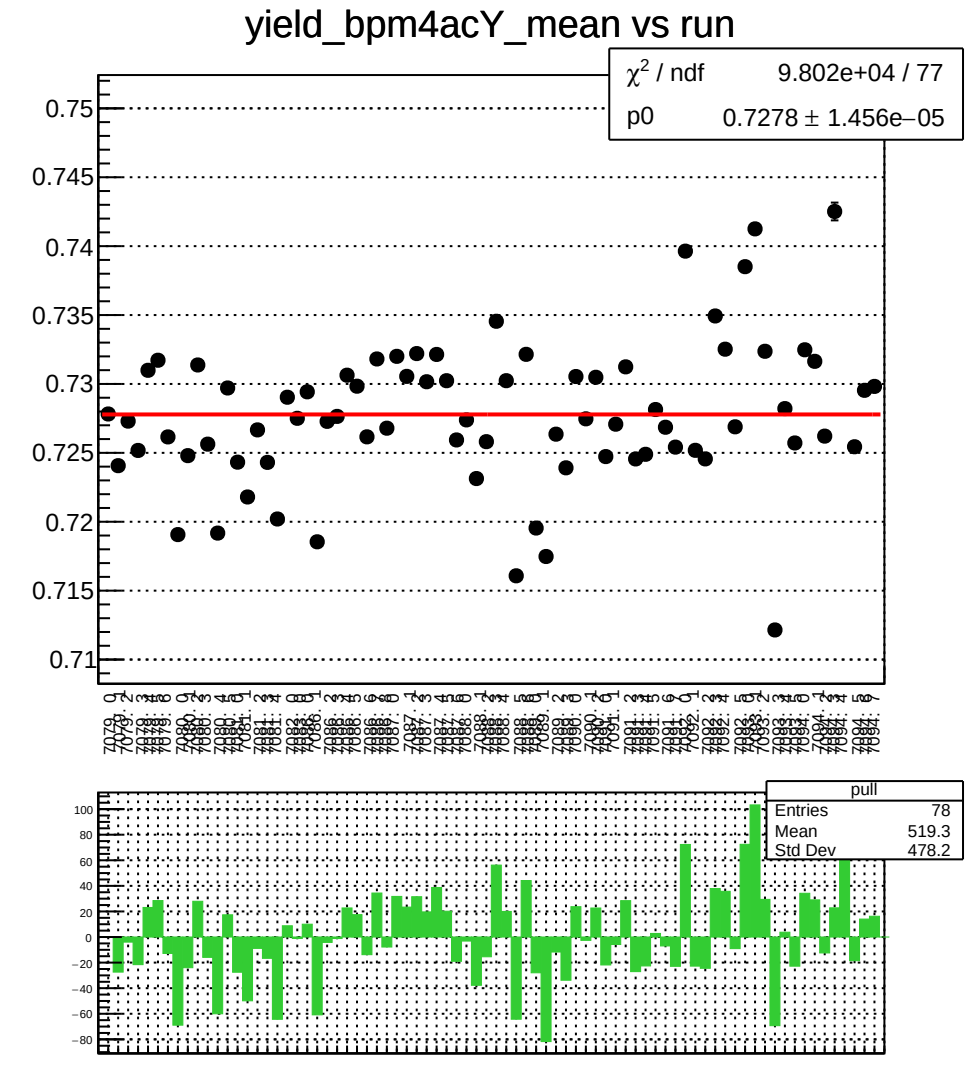

yield_bpm4eY_mean vs run
χ² / ndf 8.188e+04 / 77
p0 0.3355 ± 1.344e−05
0.355
0.35
0.345
0.34
0.335
0.33
0.325
pull
Entries 78
Mean 521.6
Std Dev 480.2
100
80
60
40
20
0
−20
−40
−60

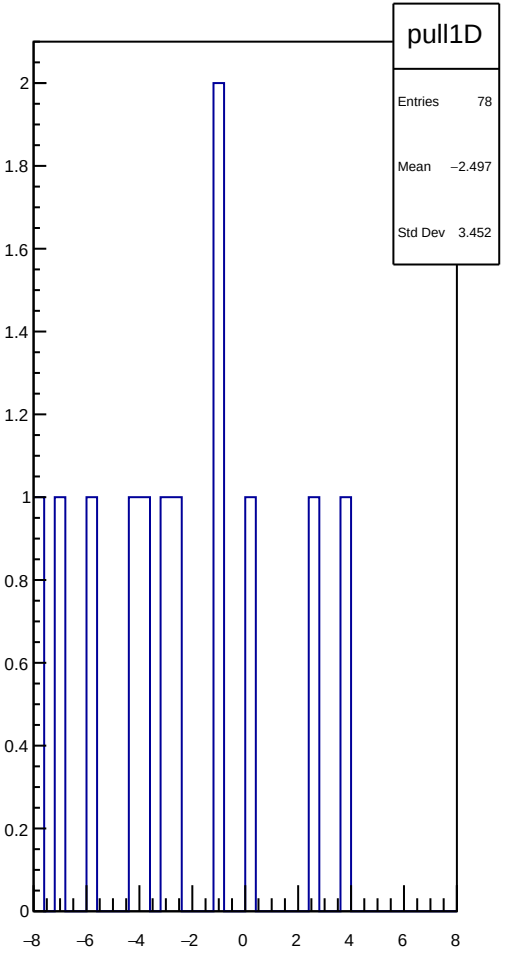

pull1D
Entries 78
Mean 0.2508
Std Dev 4.781
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

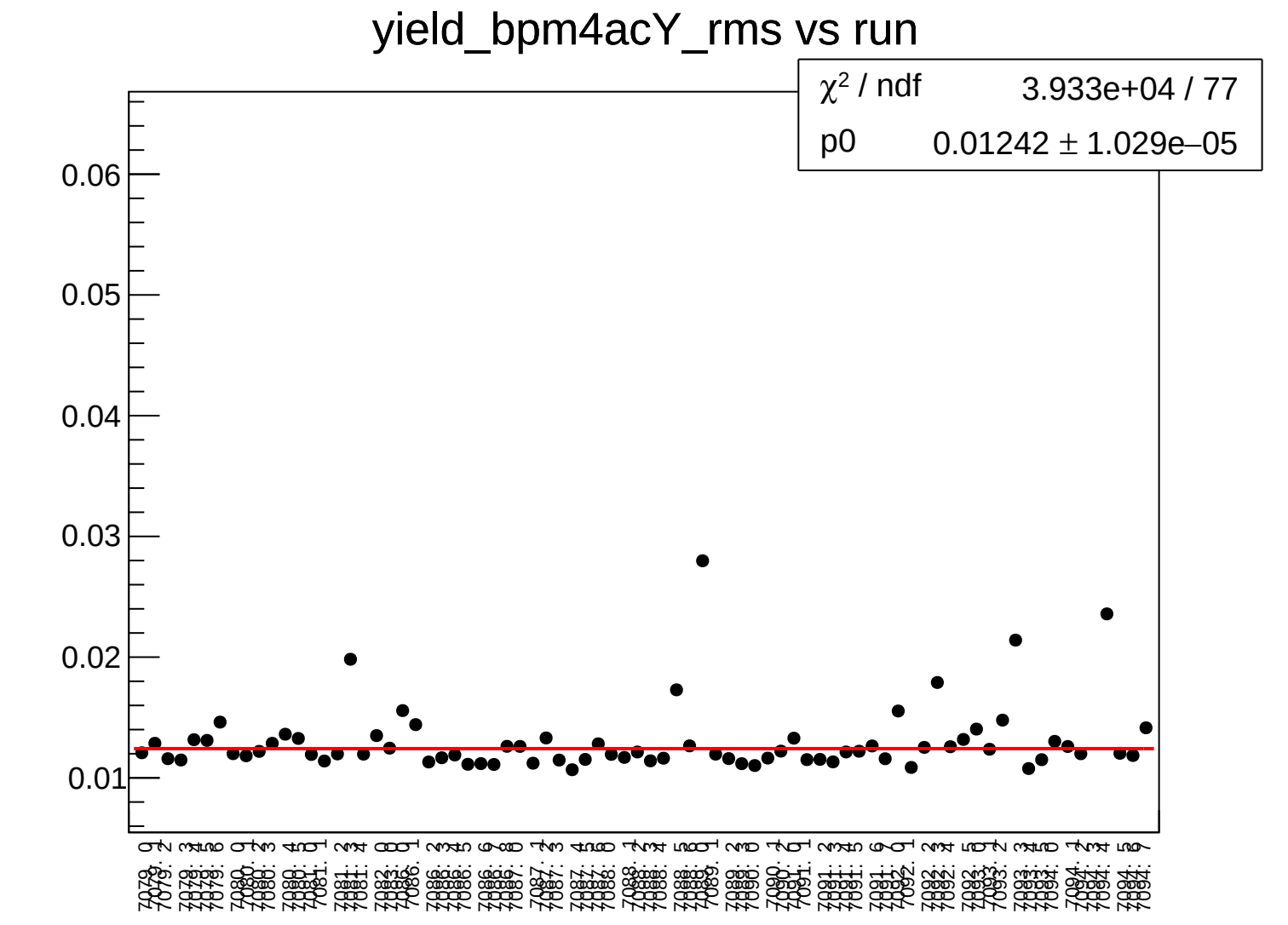

yield_bpm4eY_rms vs run
χ² / ndf 5.46e+04 / 77
p0 0.01141 ± 9.504e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

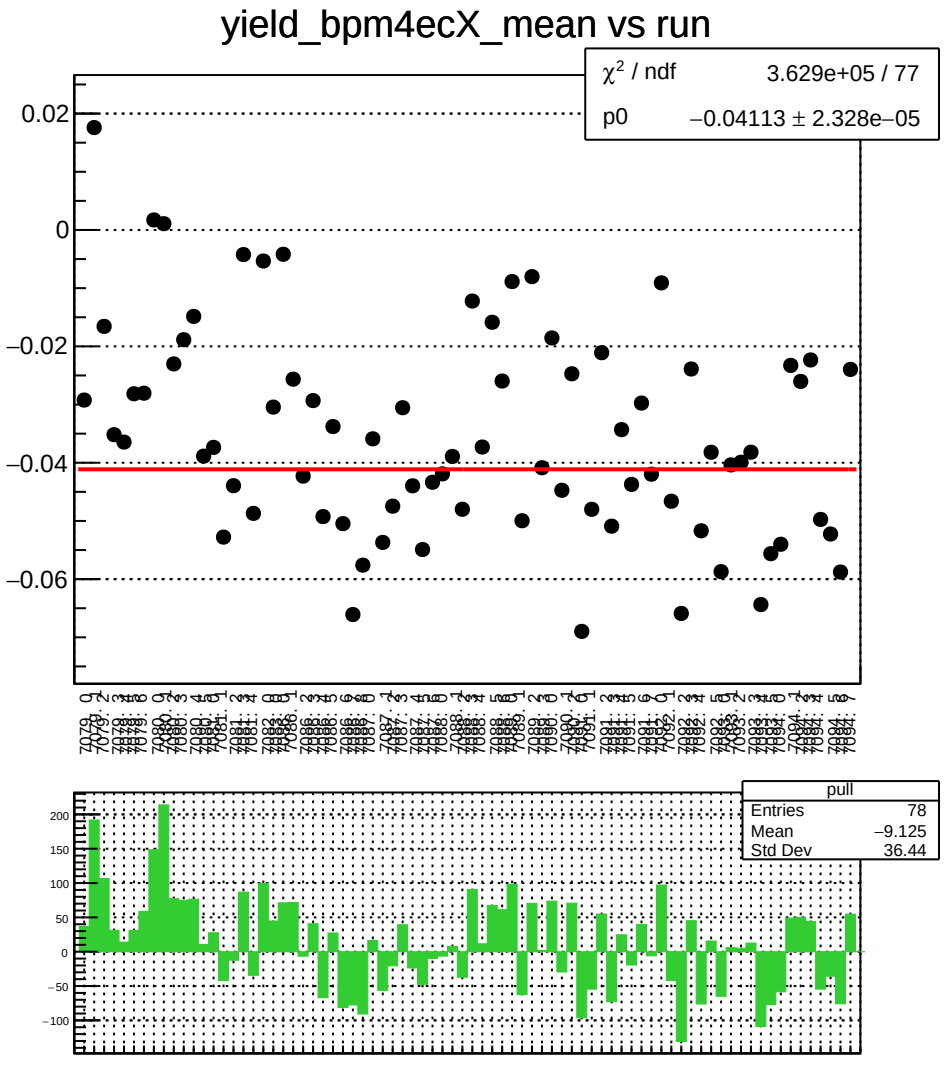

yield_bpm4acX_mean vs run
χ² / ndf 2.196e+05 / 77
p0 −0.824 ± 2.355e−05
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
−0.84
−0.85
pull
Entries 78
Mean 25.72
Std Dev 4.8
100
50
0
−50
−100
pull1D
Entries 78
Mean 1.92
Std Dev 4.497
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

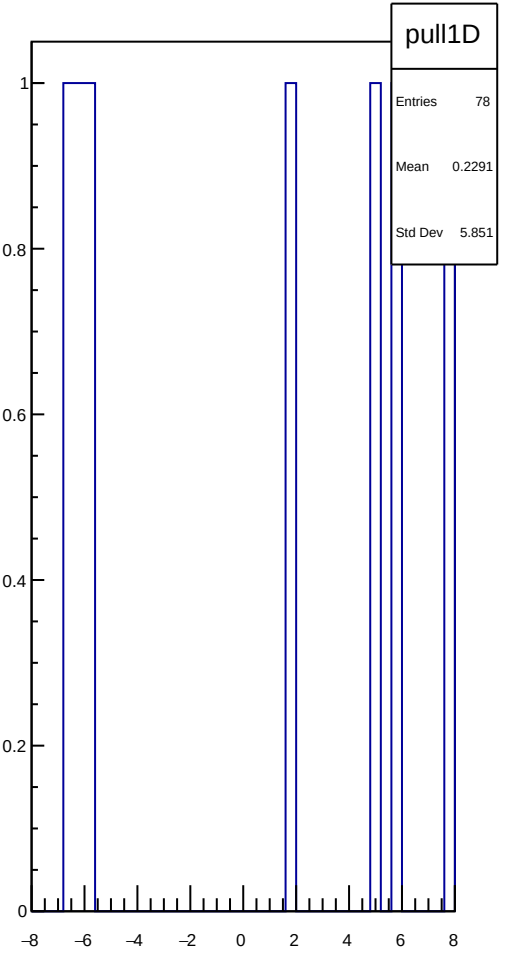

yield_bpm4acX_rms vs run
χ² / ndf 2.235e+05 / 77
p0 0.01878 ± 1.666e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

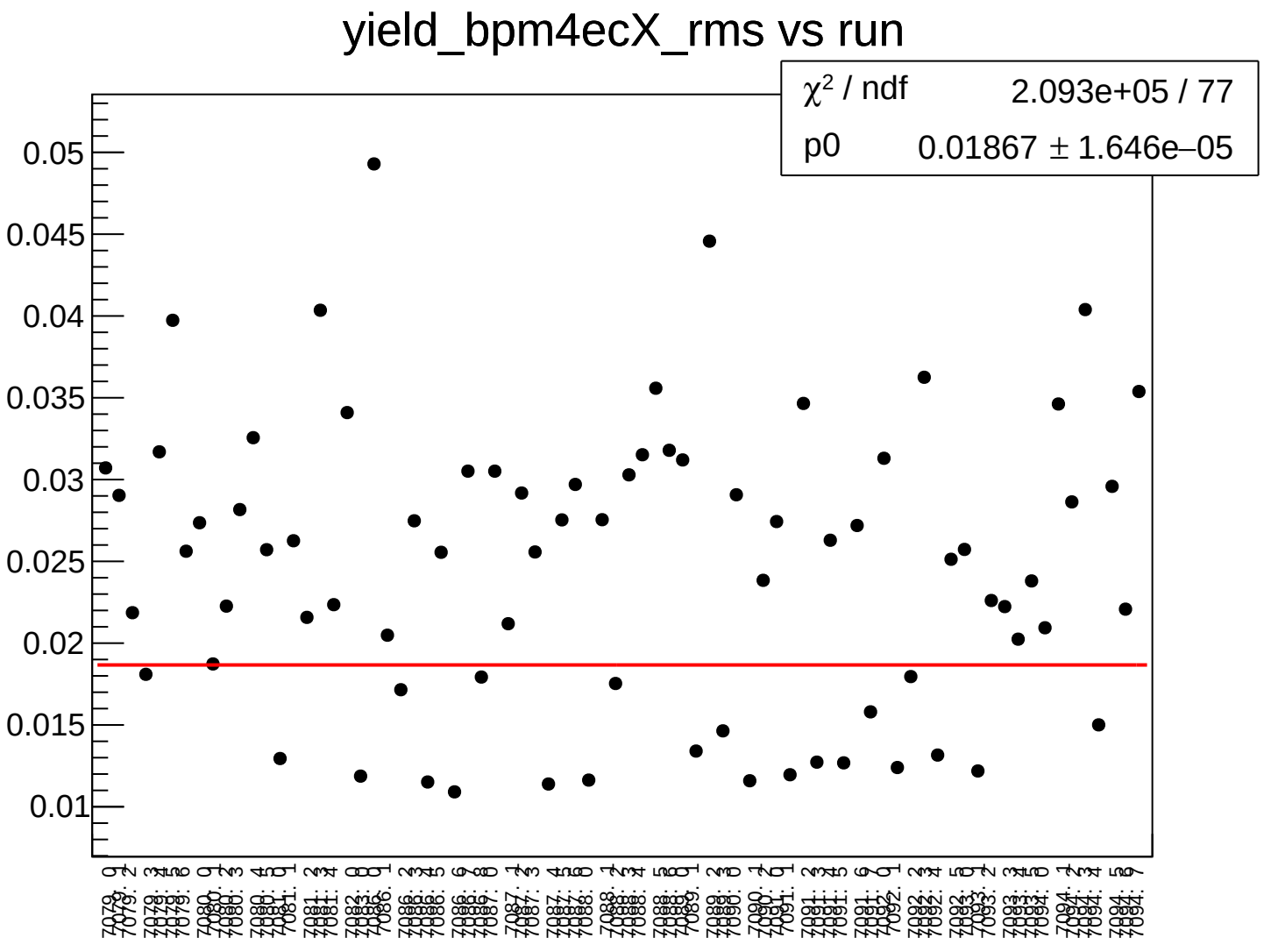

yield_bpm4acY_mean vs run
χ² / ndf 9.802e+04 / 77
p0 0.7278 ± 1.456e−05
0.75
0.745
0.74
0.735
0.73
0.725
0.72
0.715
0.71
pull
Entries 78
Mean 519.3
Std Dev 478.2
100
80
60
40
20
0
−20
−40
−60
−80

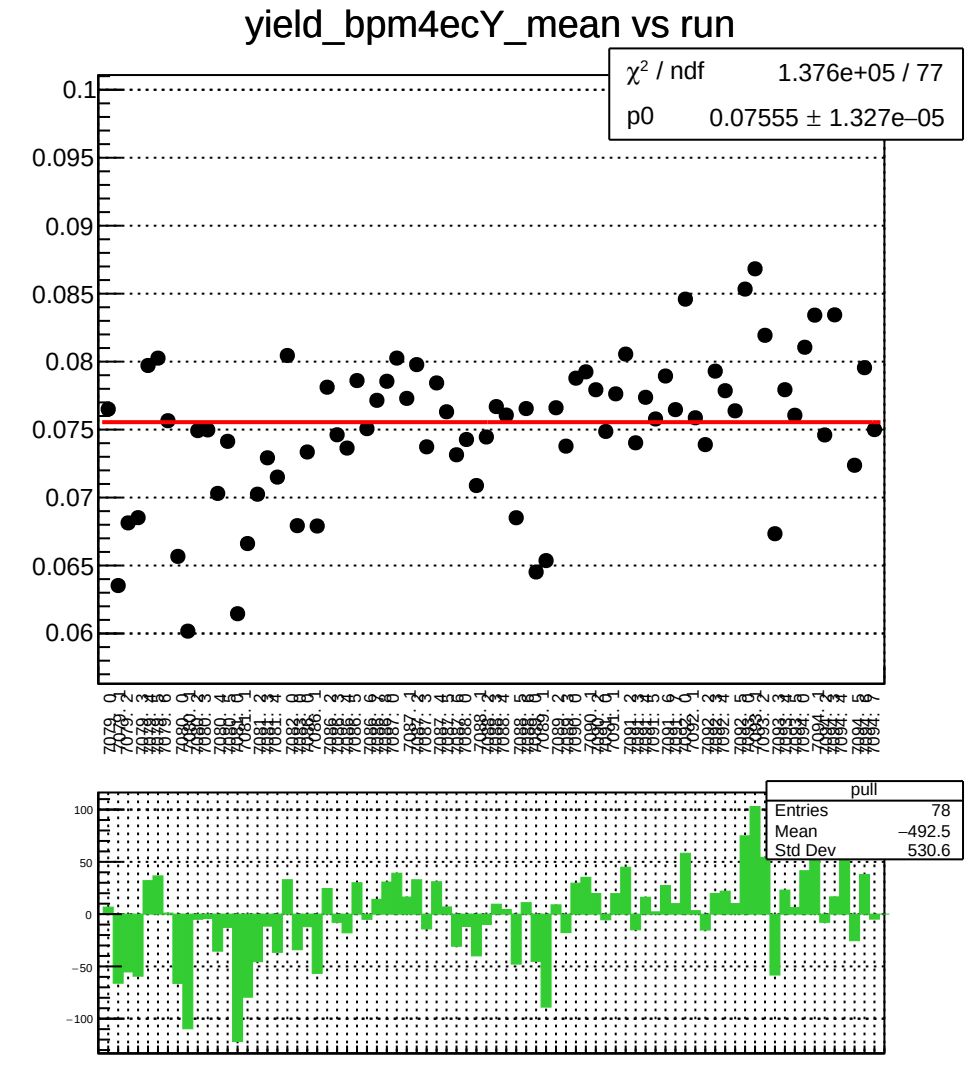

pull1D
Entries 78
Mean −2.497
Std Dev 3.452
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

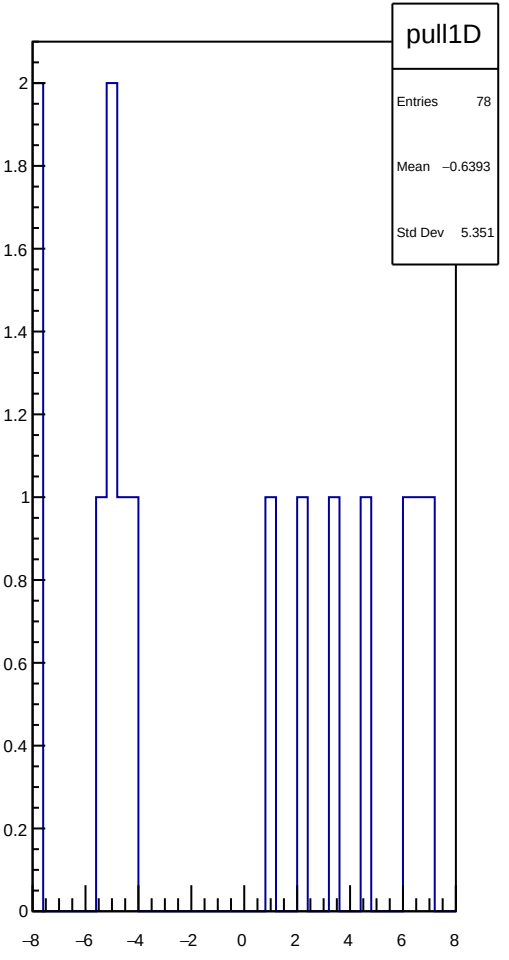

yield_bpm4acY_rms vs run
χ² / ndf 3.933e+04 / 77
p0 0.01242 ± 1.029e−05
0.06
0.05
0.04
0.03
0.02
0.01

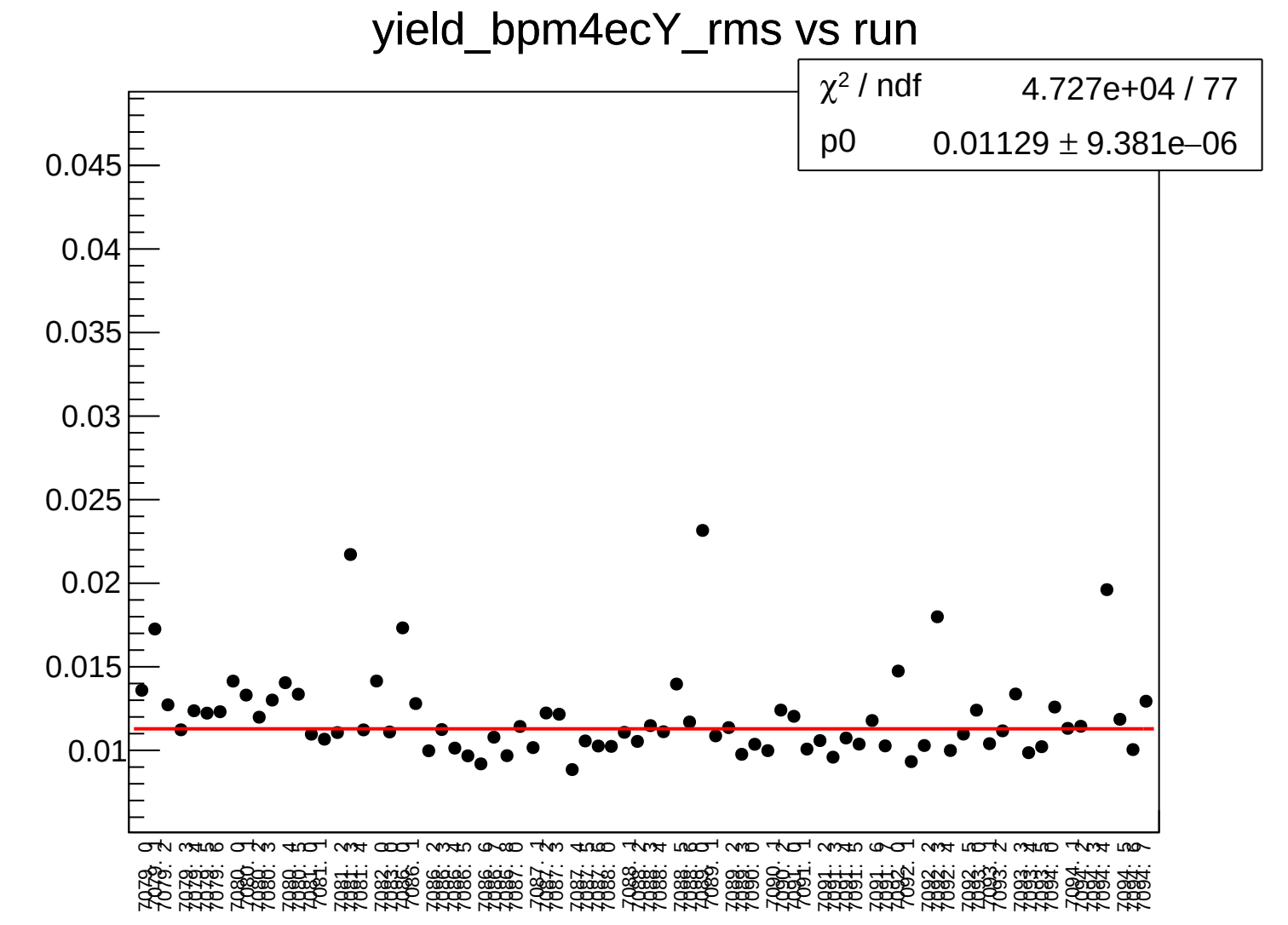

yield_bpm4ecX_mean vs run
χ² / ndf 3.629e+05 / 77
p0 −0.04113 ± 2.328e−05
0.02
0
−0.02
−0.04
−0.06
pull
Entries 78
Mean −9.125
Std Dev 36.44
200
150
100
50
0
−50
−100

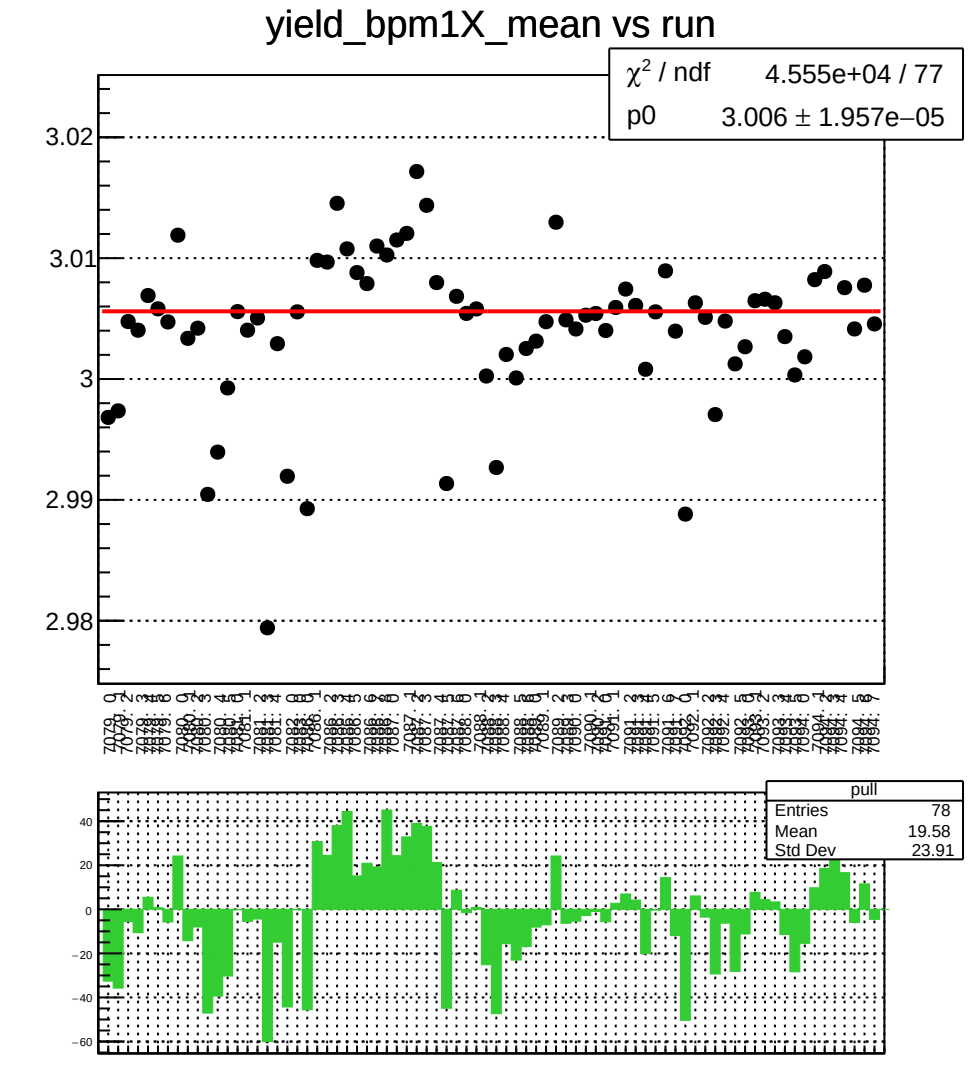

pull1D
Entries 78
Mean 0.2291
Std Dev 5.851
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

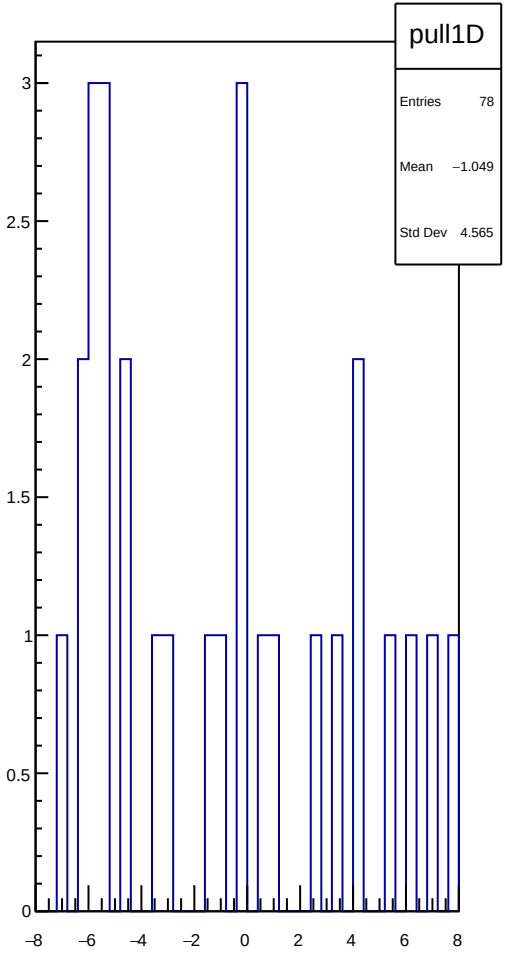

yield_bpm4ecX_rms vs run
χ² / ndf 2.093e+05 / 77
p0 0.01867 ± 1.646e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

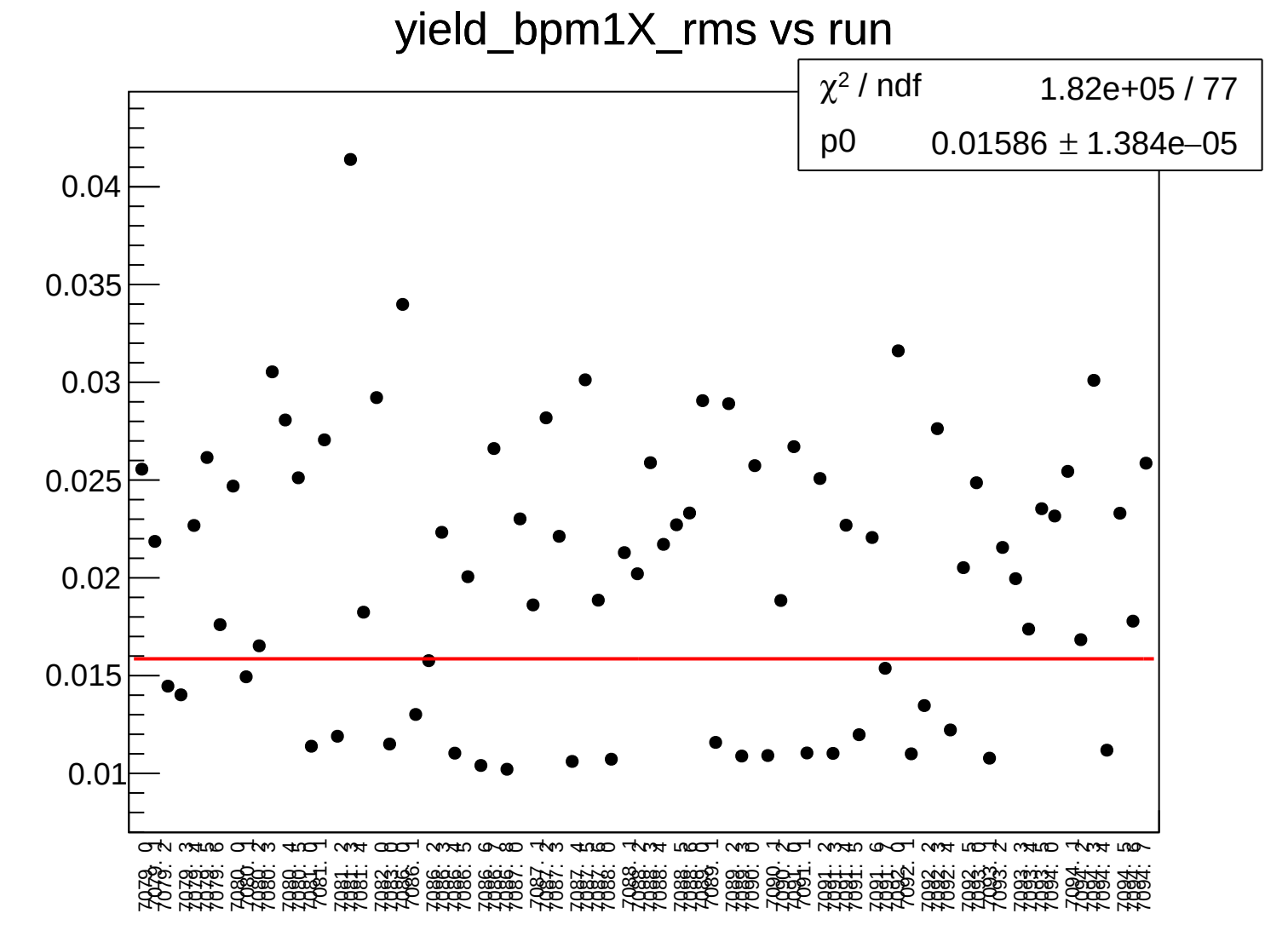

yield_bpm4ecY_mean vs run
χ² / ndf 1.376e+05 / 77
p0 0.07555 ± 1.327e−05
pull
Entries 78
Mean −492.5
Std Dev 530.6

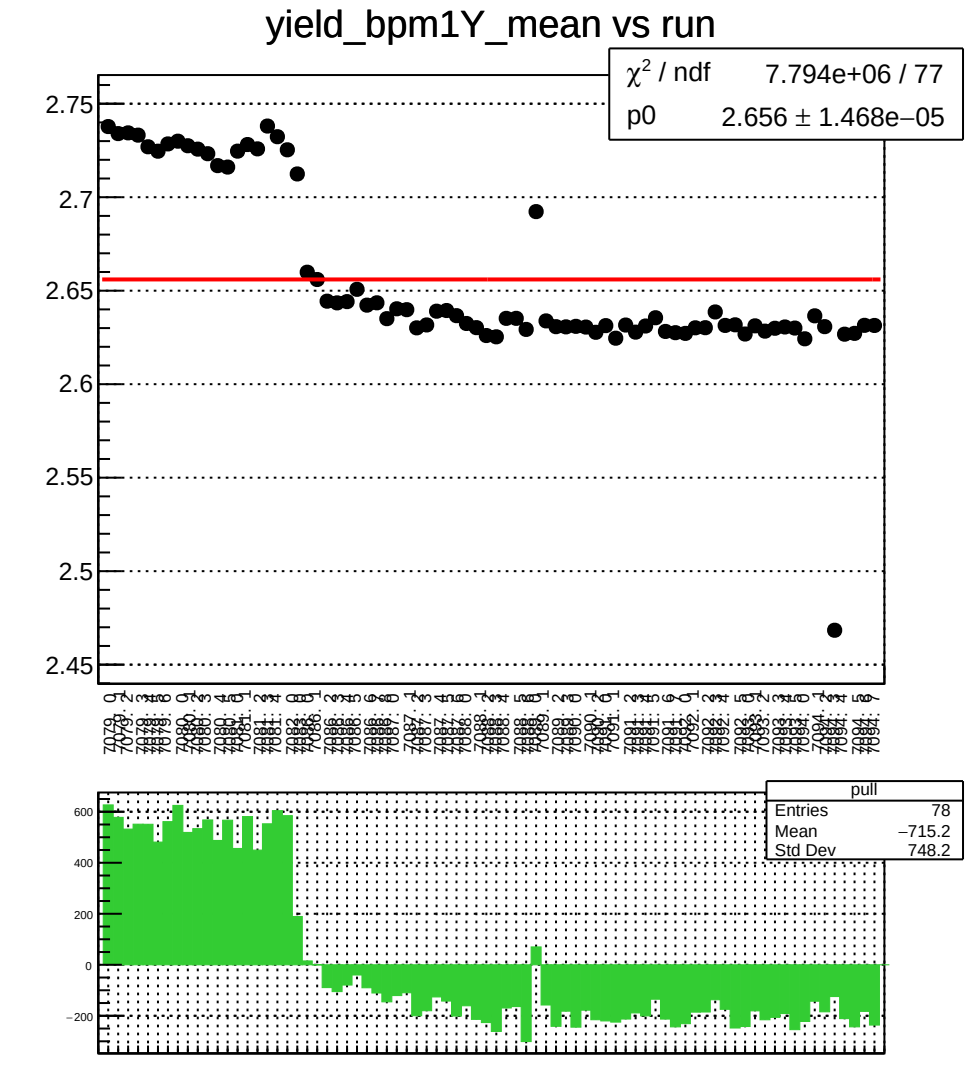

pull1D
Entries 78
Mean −0.6393
Std Dev 5.351

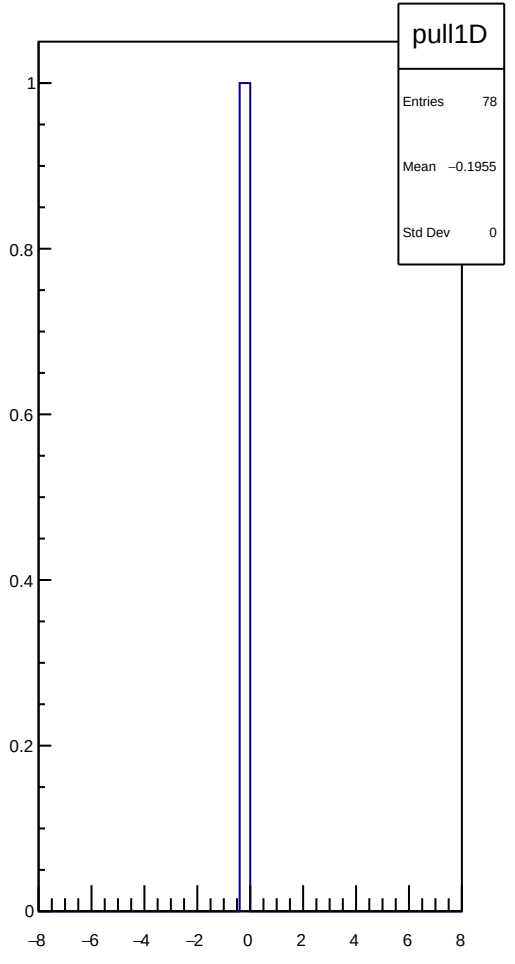

yield_bpm4ecY_rms vs run
χ² / ndf 4.727e+04 / 77
p0 0.01129 ± 9.381e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

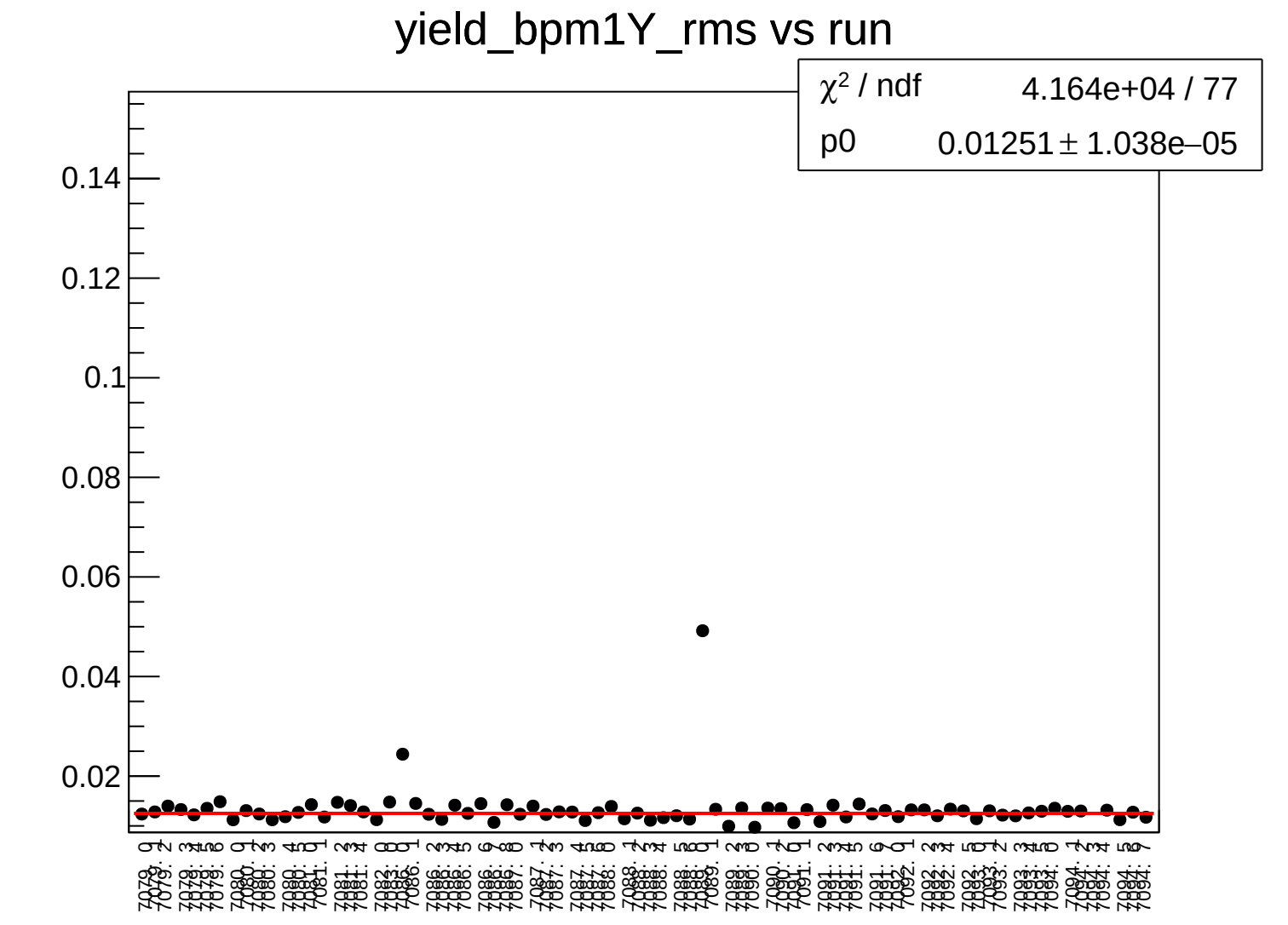

yield_bpm1X_mean vs run
χ² / ndf 4.555e+04 / 77
p0 3.006 ± 1.957e−05
3.02
3.01
3
2.99
2.98
pull
Entries 78
Mean 19.58
Std Dev 23.91
40
20
0
−20
−40
−60

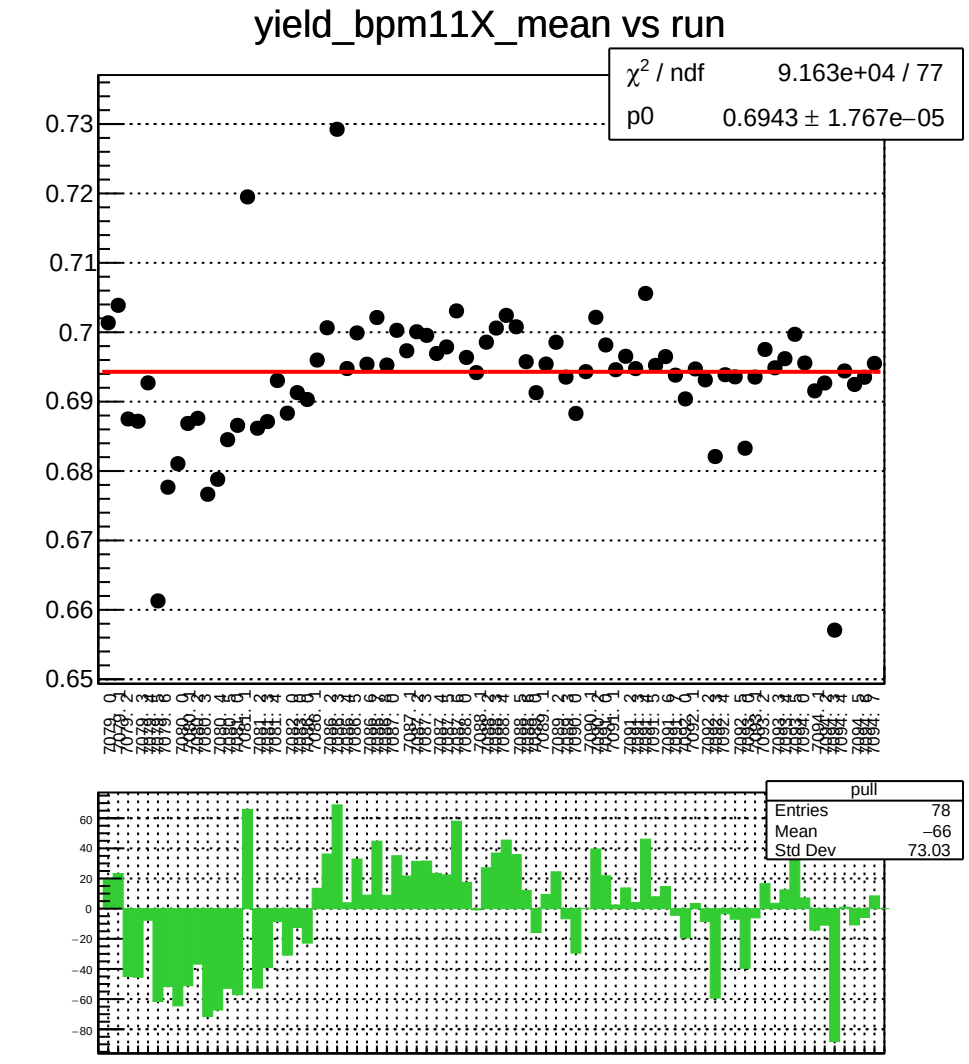

pull1D
Entries 78
Mean −1.049
Std Dev 4.565
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

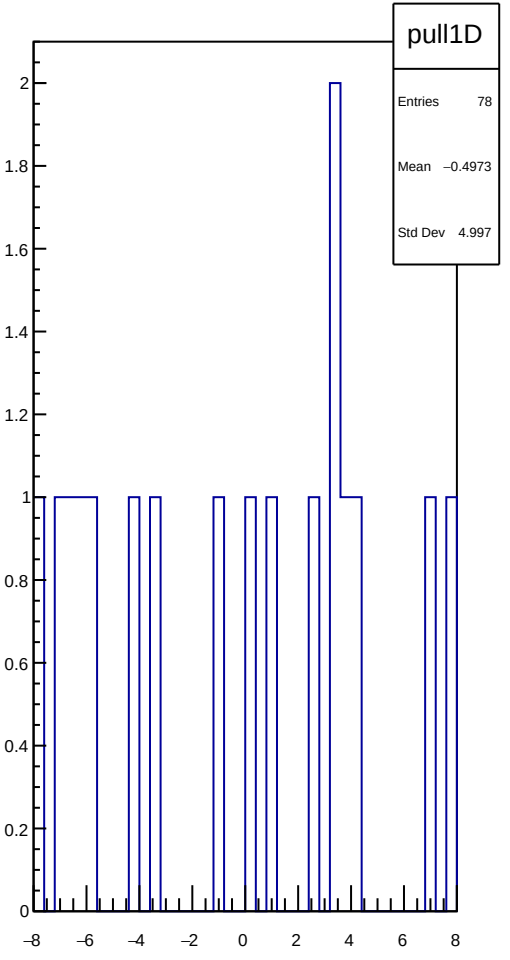

yield_bpm1X_rms vs run
χ² / ndf 1.82e+05 / 77
p0 0.01586 ± 1.384e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

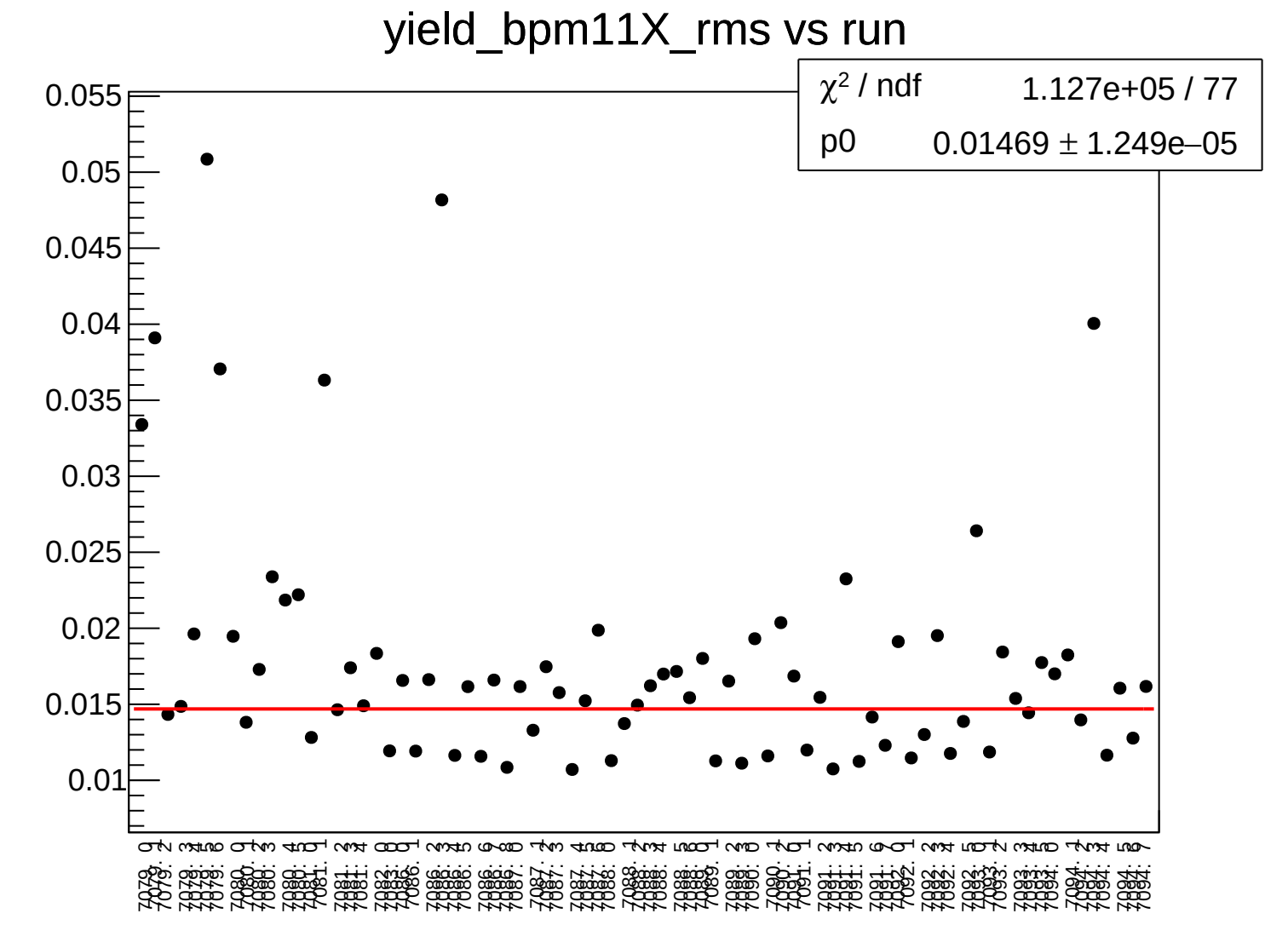

yield_bpm1Y_mean vs run
χ² / ndf 7.794e+06 / 77
p0 2.656 ± 1.468e−05
2.75
2.7
2.65
2.6
2.55
2.5
2.45
pull
Entries 78
Mean −715.2
Std Dev 748.2
600
400
200
0
−200

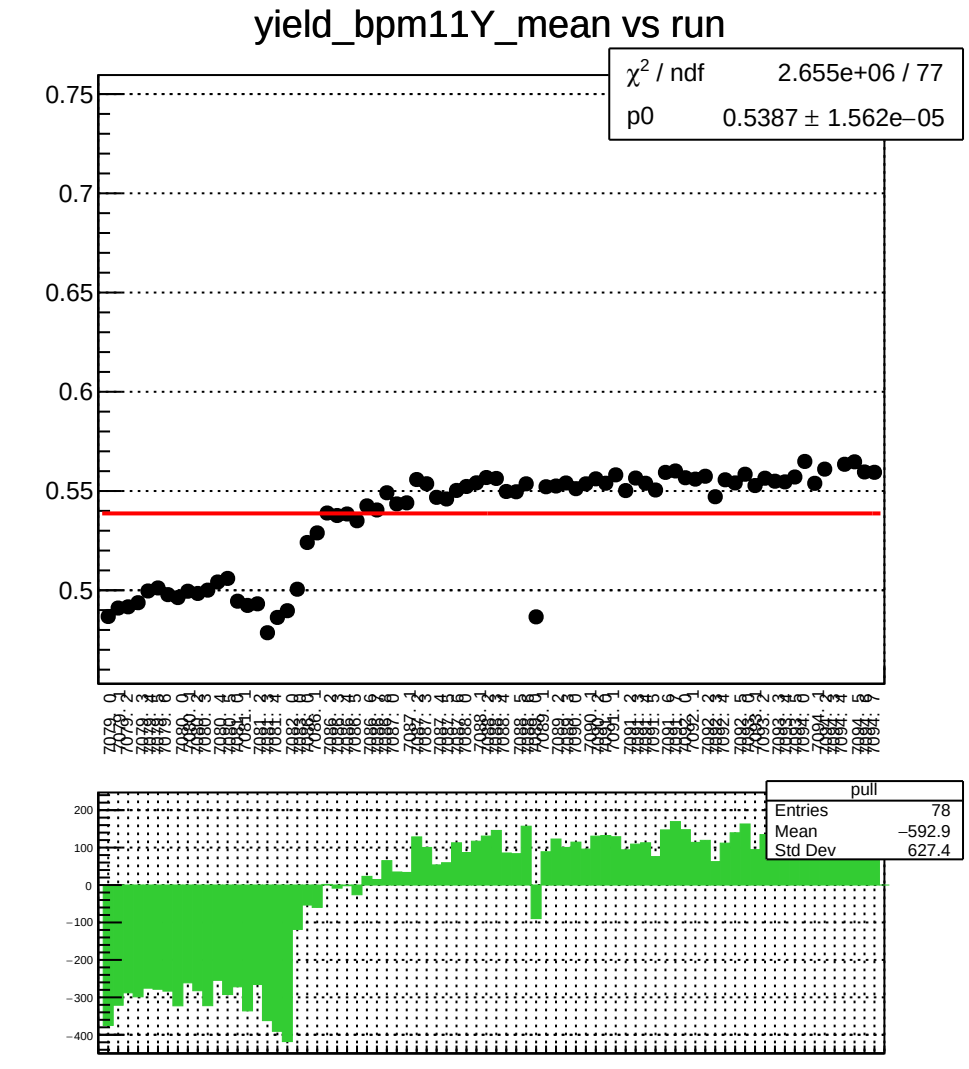

pull1D
Entries 78
Mean −0.1955
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

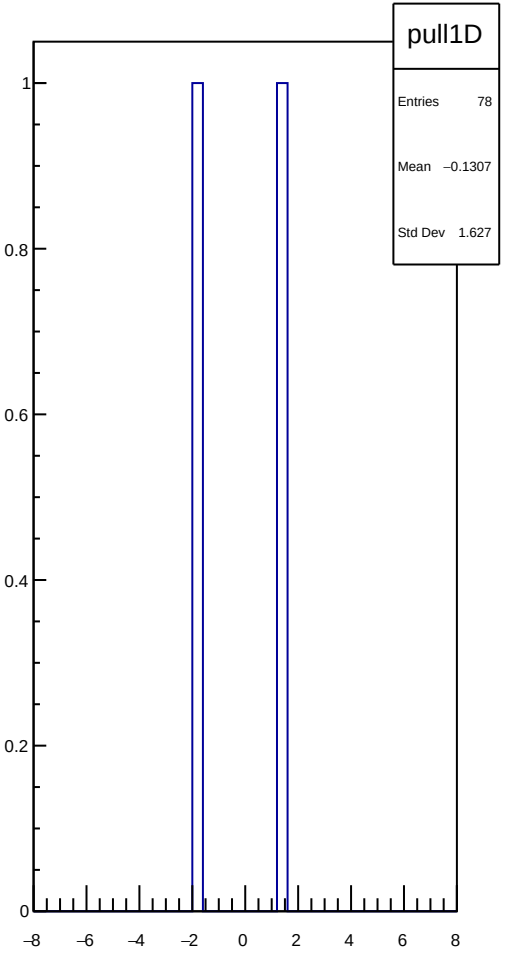

yield_bpm1Y_rms vs run
χ^2 / ndf 4.164e+04 / 77
p0 0.01251 ± 1.038e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

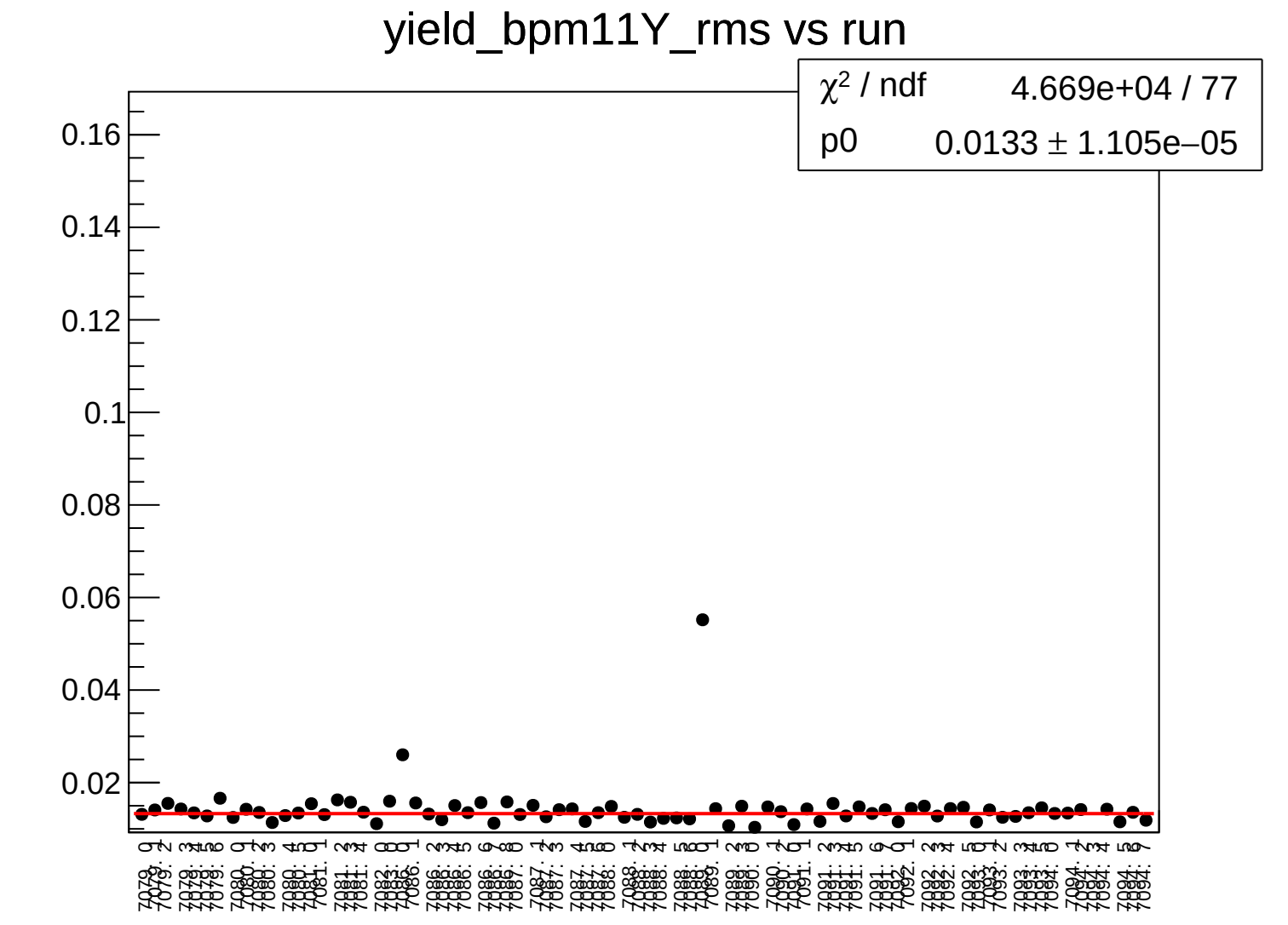

yield_bpm11X_mean vs run
χ² / ndf 9.163e+04 / 77
p0 0.6943 ± 1.767e−05
0.73
0.72
0.71
0.7
0.69
0.68
0.67
0.66
0.65
pull
Entries 78
Mean −66
Std Dev 73.03
60
40
20
0
−20
−40
−60
−80

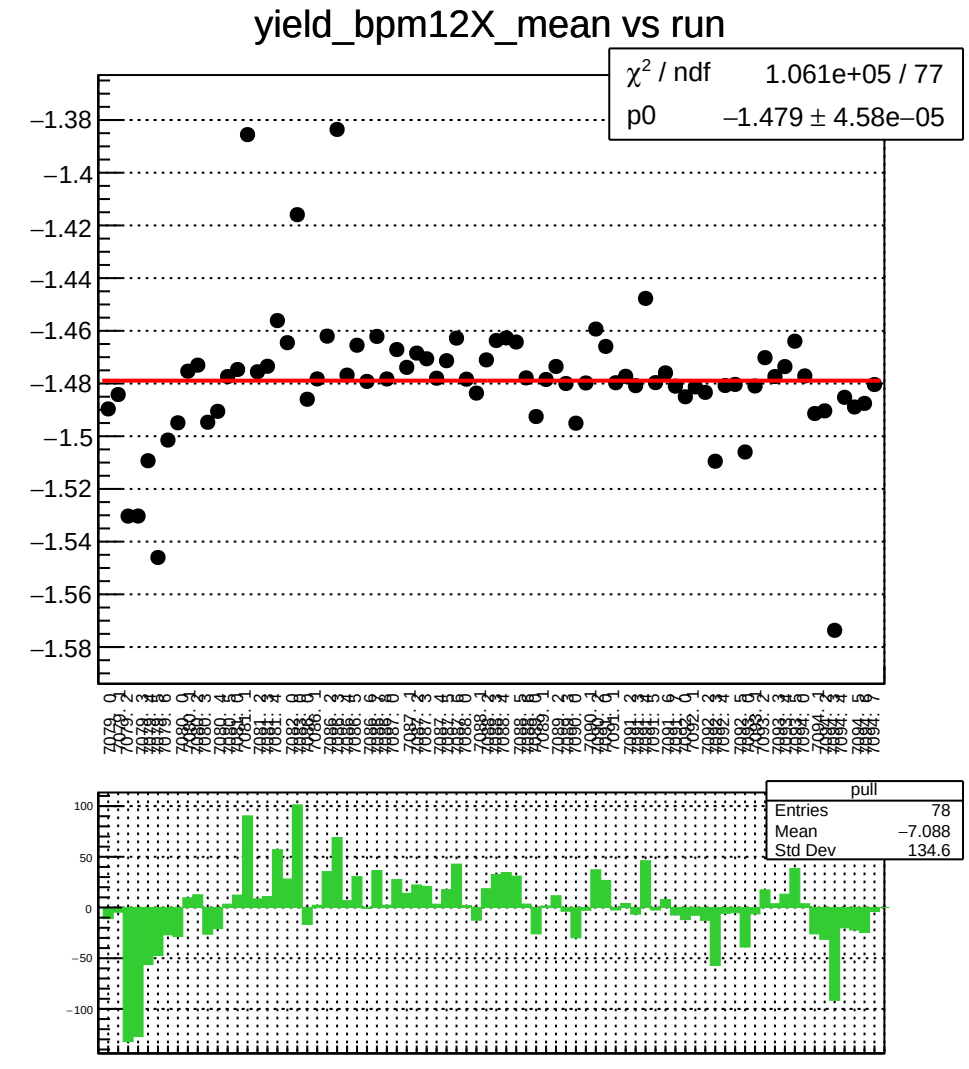

pull1D
Entries 78
Mean −0.4973
Std Dev 4.997
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

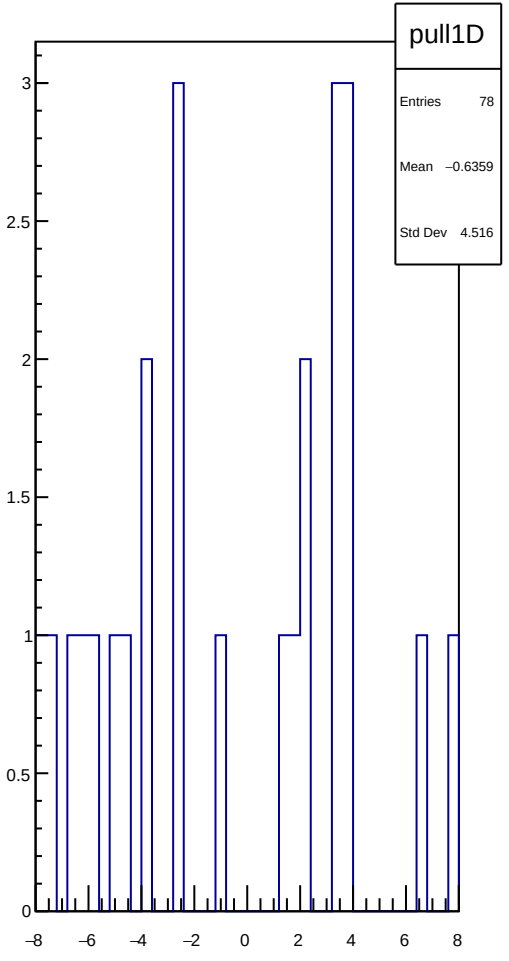

yield_bpm11X_rms vs run
χ² / ndf 1.127e+05 / 77
p0 0.01469 ± 1.249e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

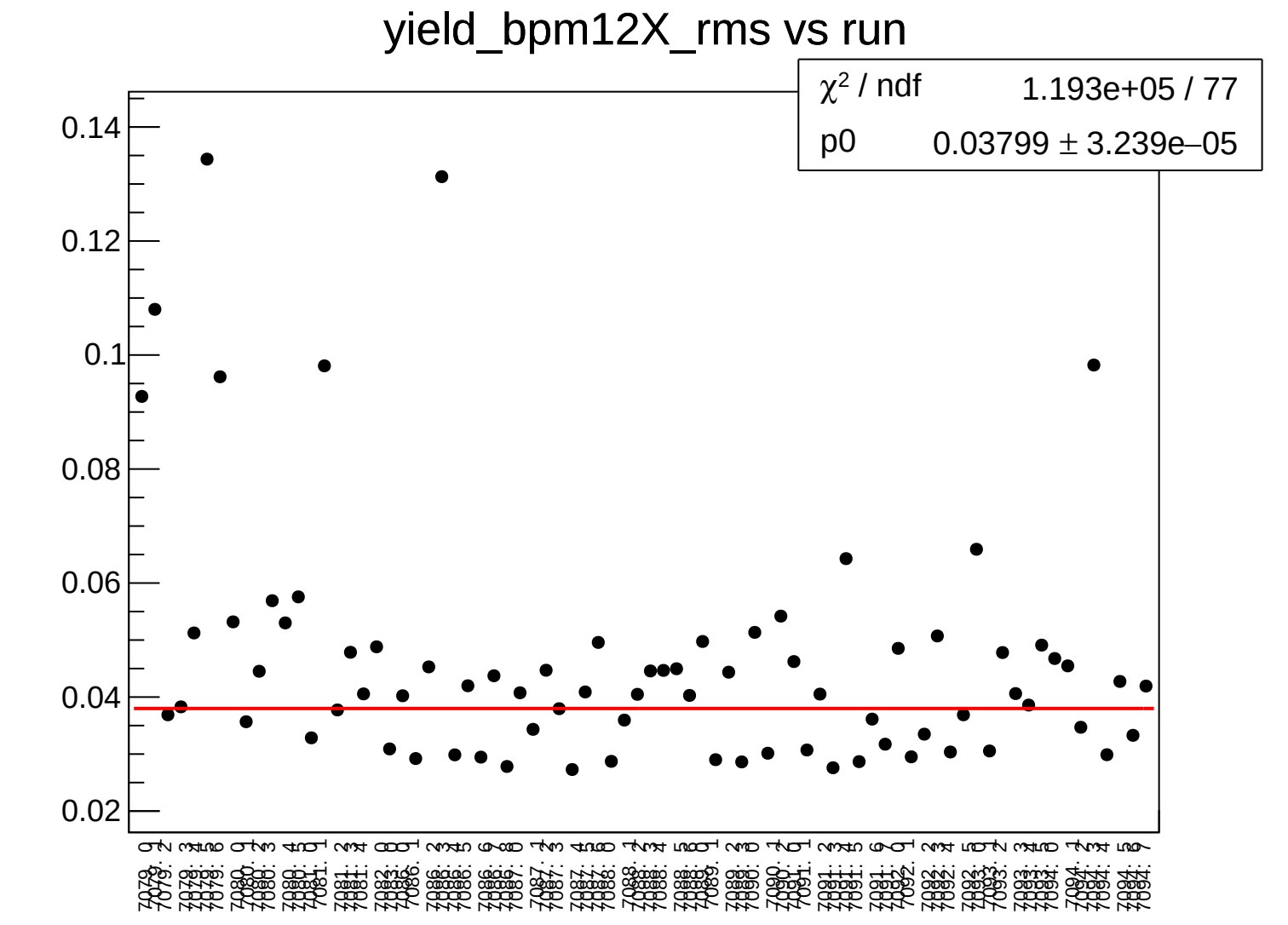

yield_bpm11Y_mean vs run
χ² / ndf 2.655e+06 / 77
p0 0.5387 ± 1.562e−05
0.75
0.7
0.65
0.6
0.55
0.5
pull
Entries 78
Mean −592.9
Std Dev 627.4
200
100
0
−100
−200
−300
−400

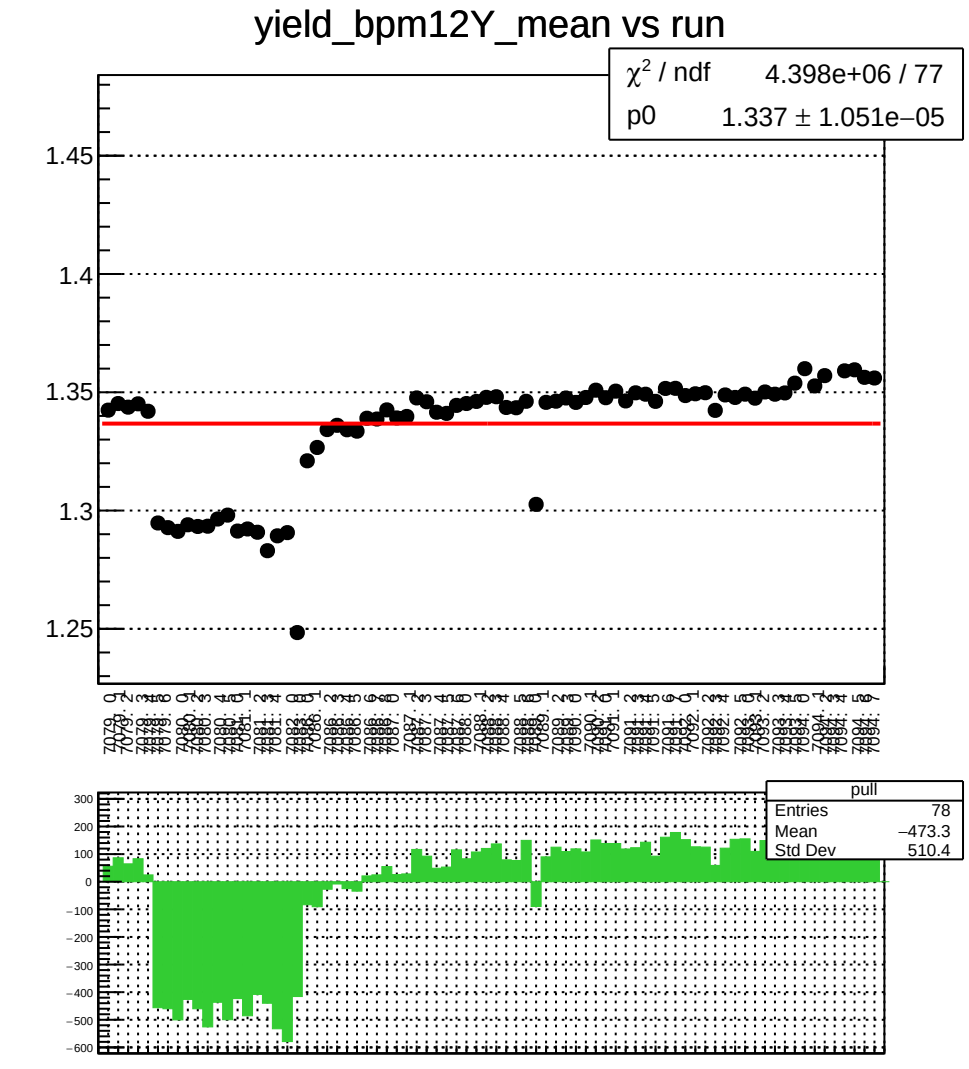

pull1D
Entries 78
Mean −0.1307
Std Dev 1.627
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

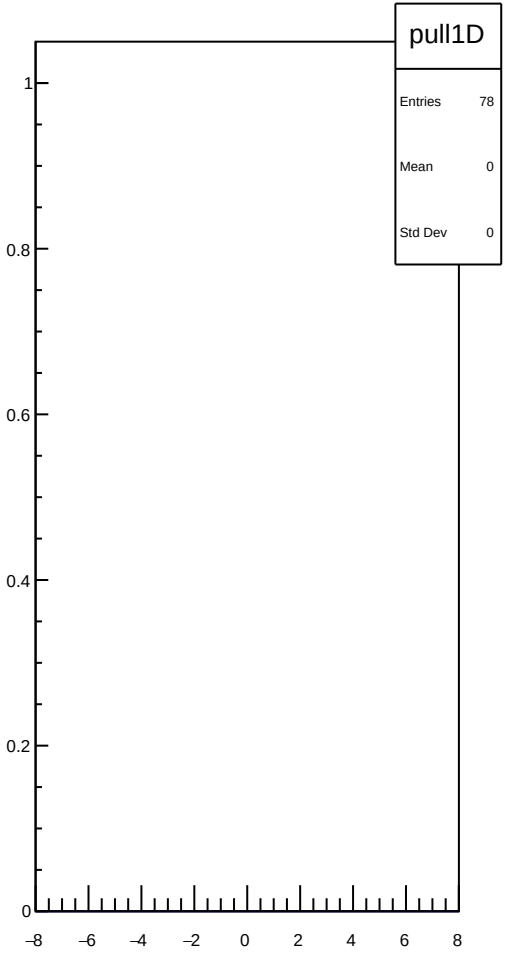

yield_bpm11Y_rms vs run
χ² / ndf 4.669e+04 / 77
p0 0.0133 ± 1.105e−05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

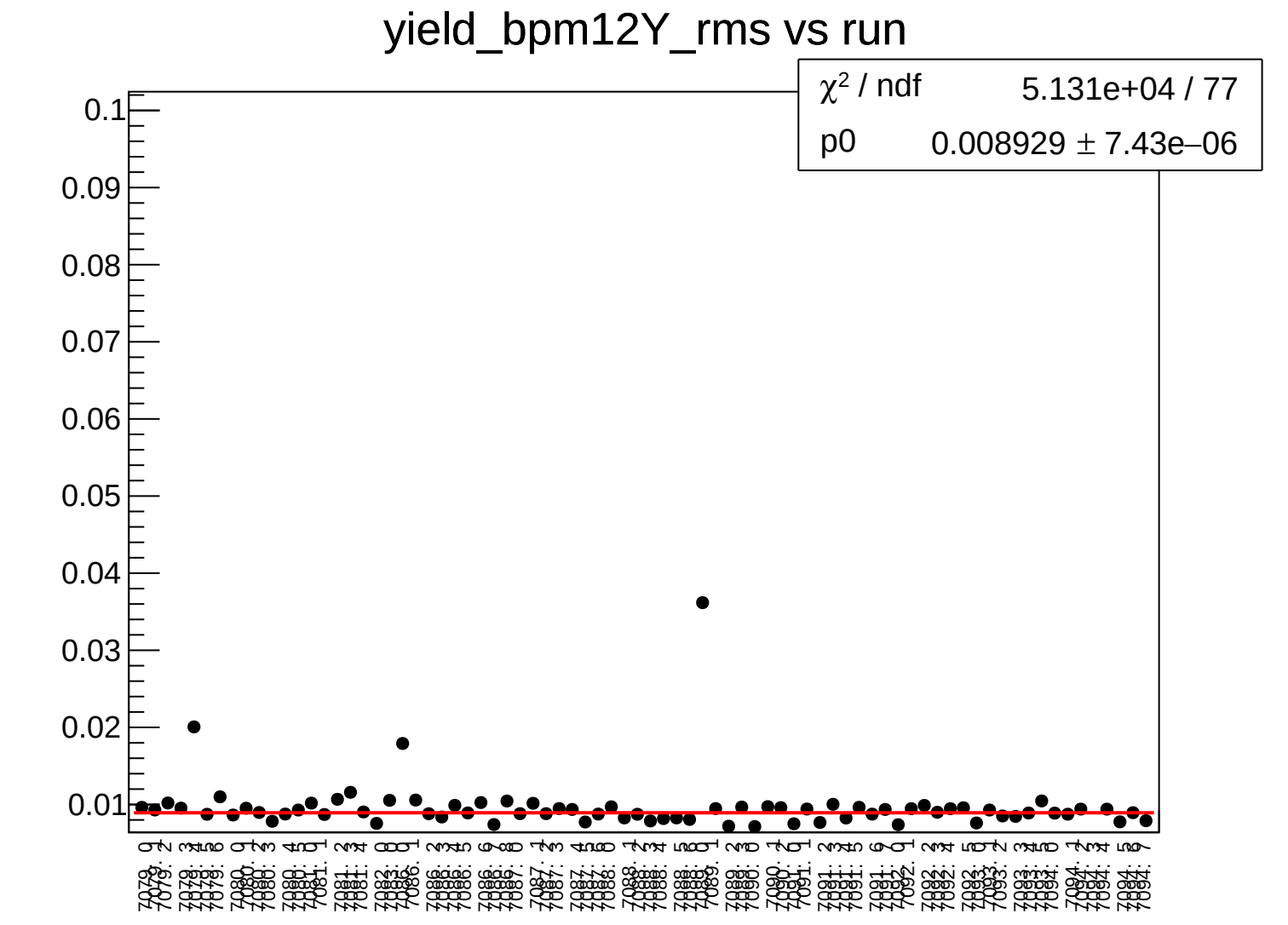

yield_bpm12X_mean vs run
χ² / ndf 1.061e+05 / 77
p0 −1.479 ± 4.58e−05
−1.38
−1.4
−1.42
−1.44
−1.46
−1.48
−1.5
−1.52
−1.54
−1.56
−1.58
pull
Entries 78
Mean −7.088
Std Dev 134.6
100
50
0
−50
−100

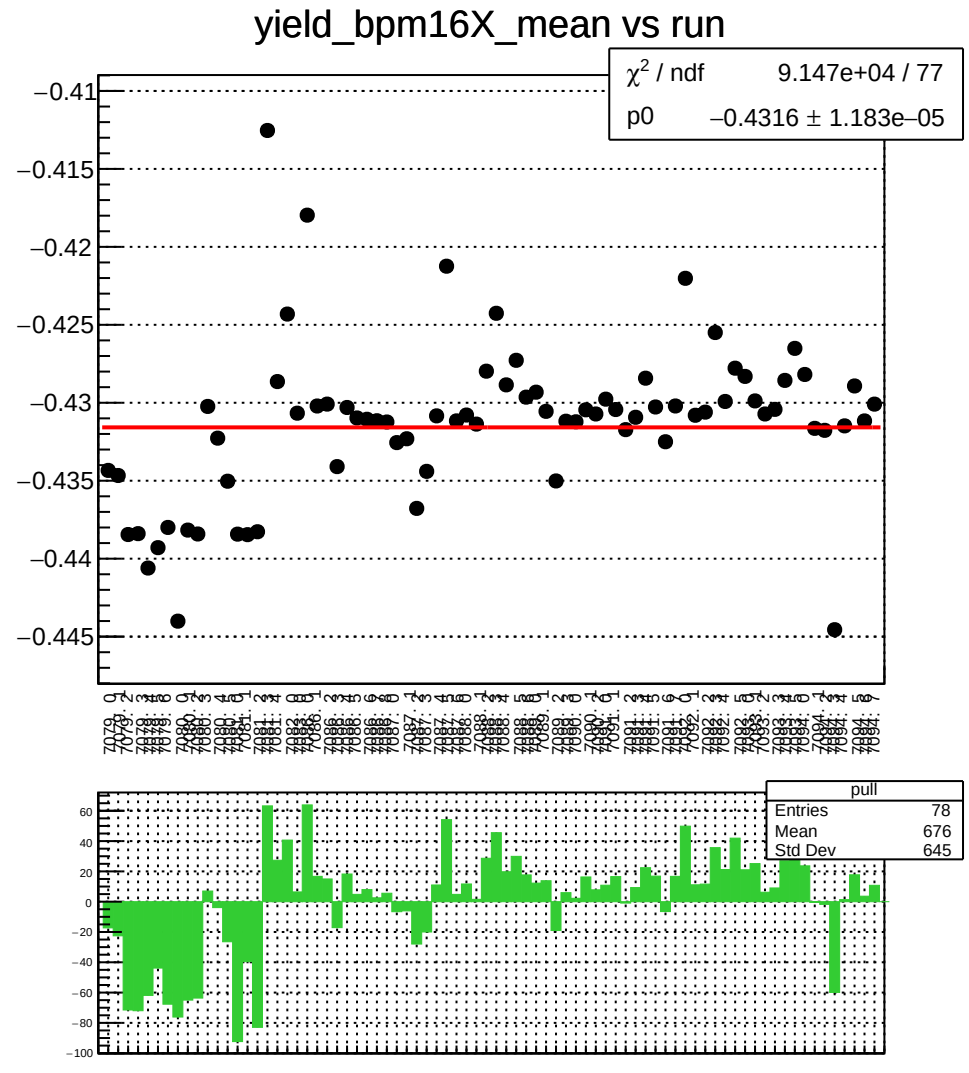

pull1D
Entries 78
Mean −0.6359
Std Dev 4.516
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

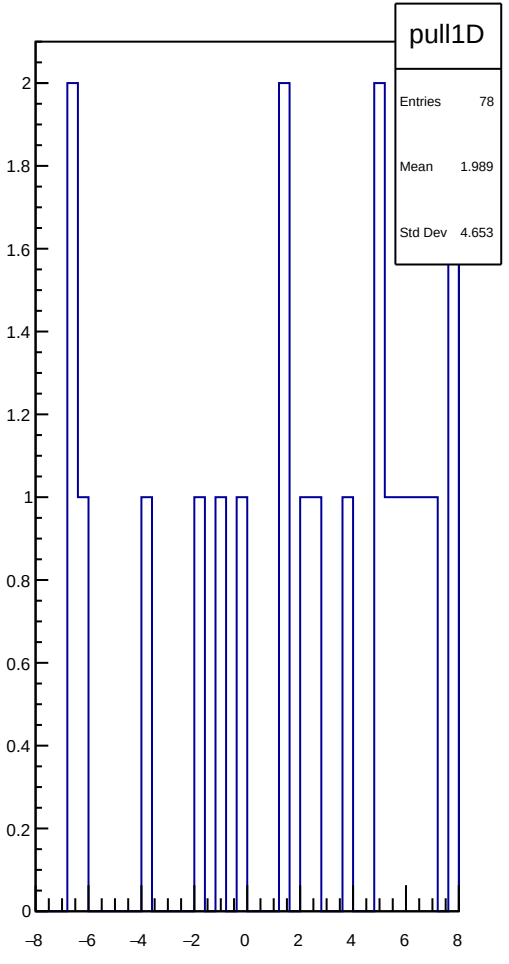

yield_bpm12X_rms vs run
χ² / ndf 1.193e+05 / 77
p0 0.03799 ± 3.239e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

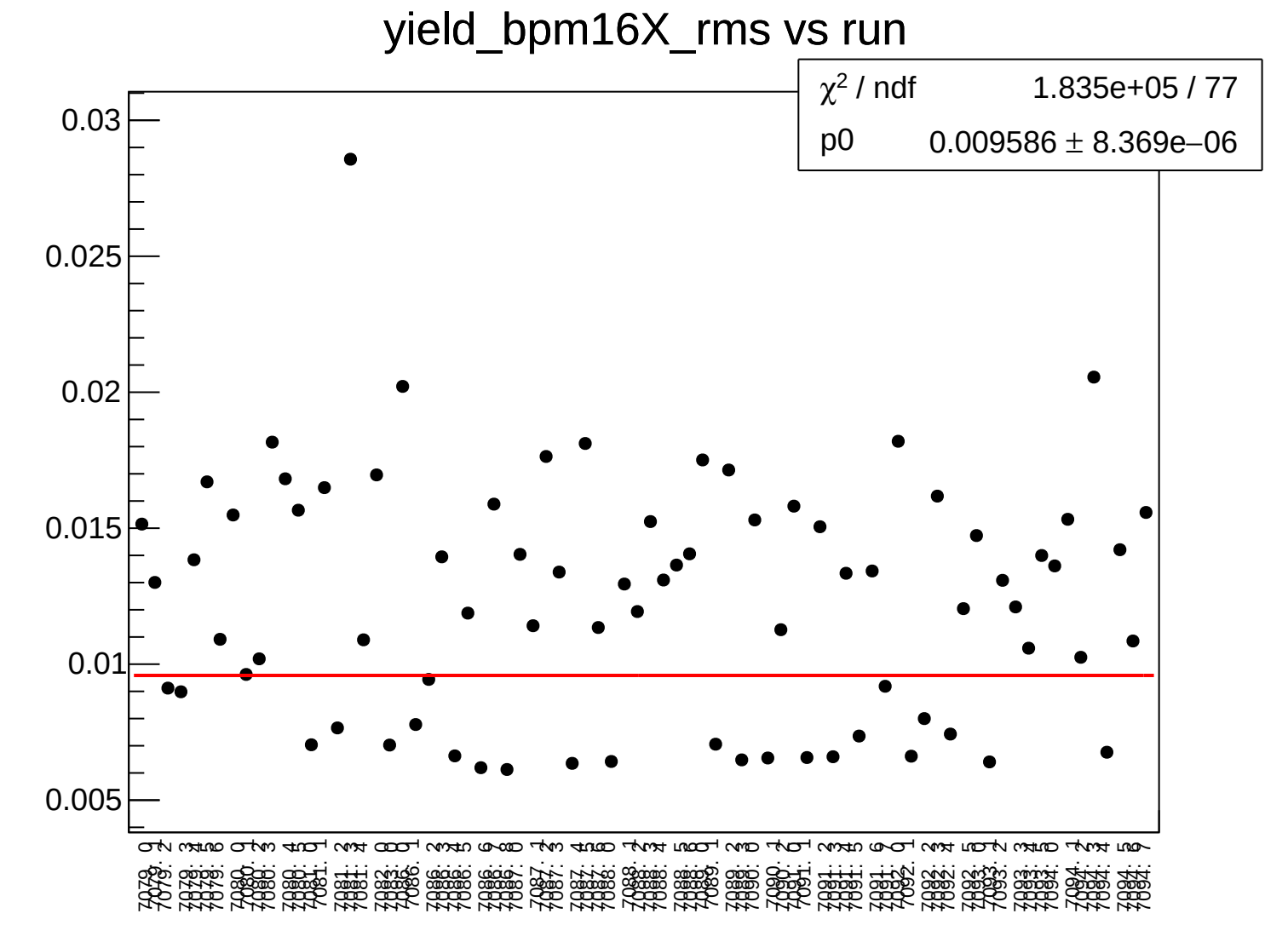

yield_bpm12Y_mean vs run
χ² / ndf 4.398e+06 / 77
p0 1.337 ± 1.051e−05
1.45
1.4
1.35
1.3
1.25
pull
Entries 78
Mean −473.3
Std Dev 510.4
300
200
100
0
−100
−200
−300
−400
−500
−600

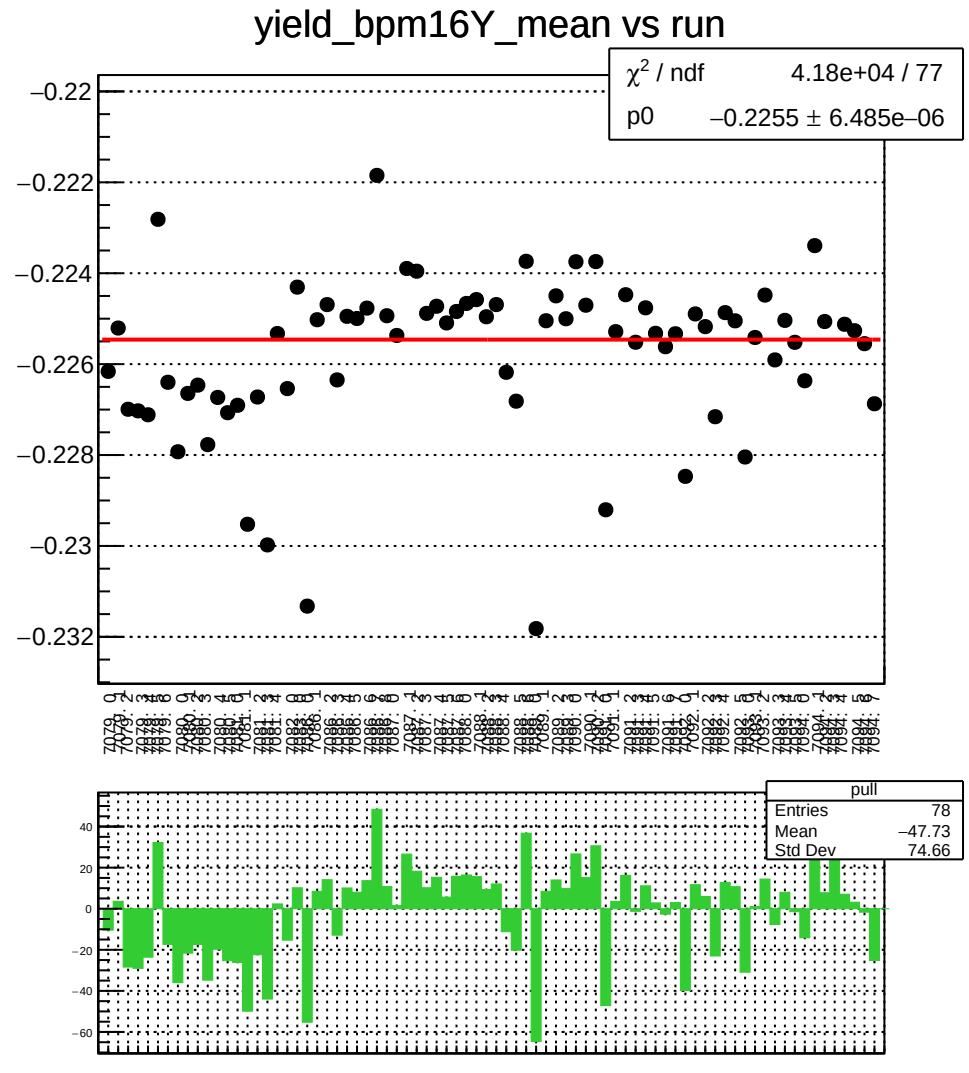

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

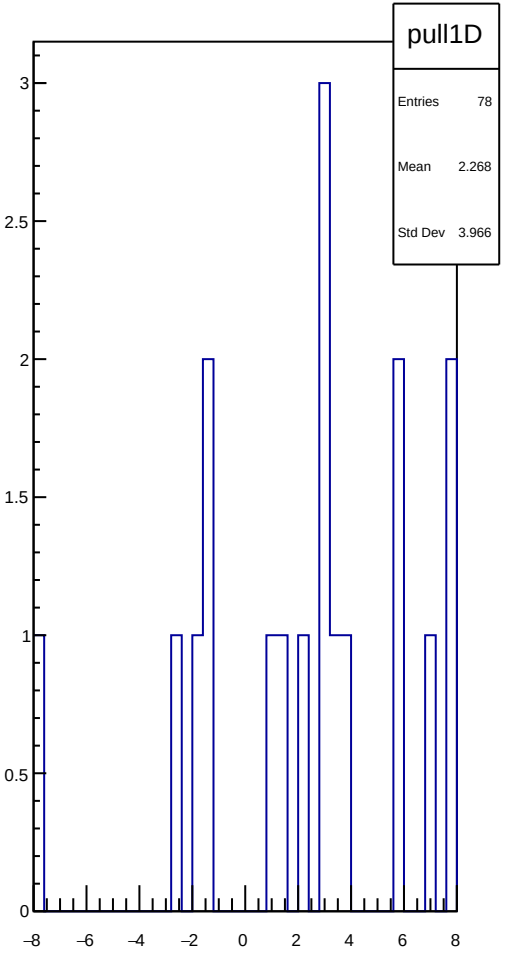

yield_bpm12Y_rms vs run
χ² / ndf 5.131e+04 / 77
p0 0.008929 ± 7.43e−06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

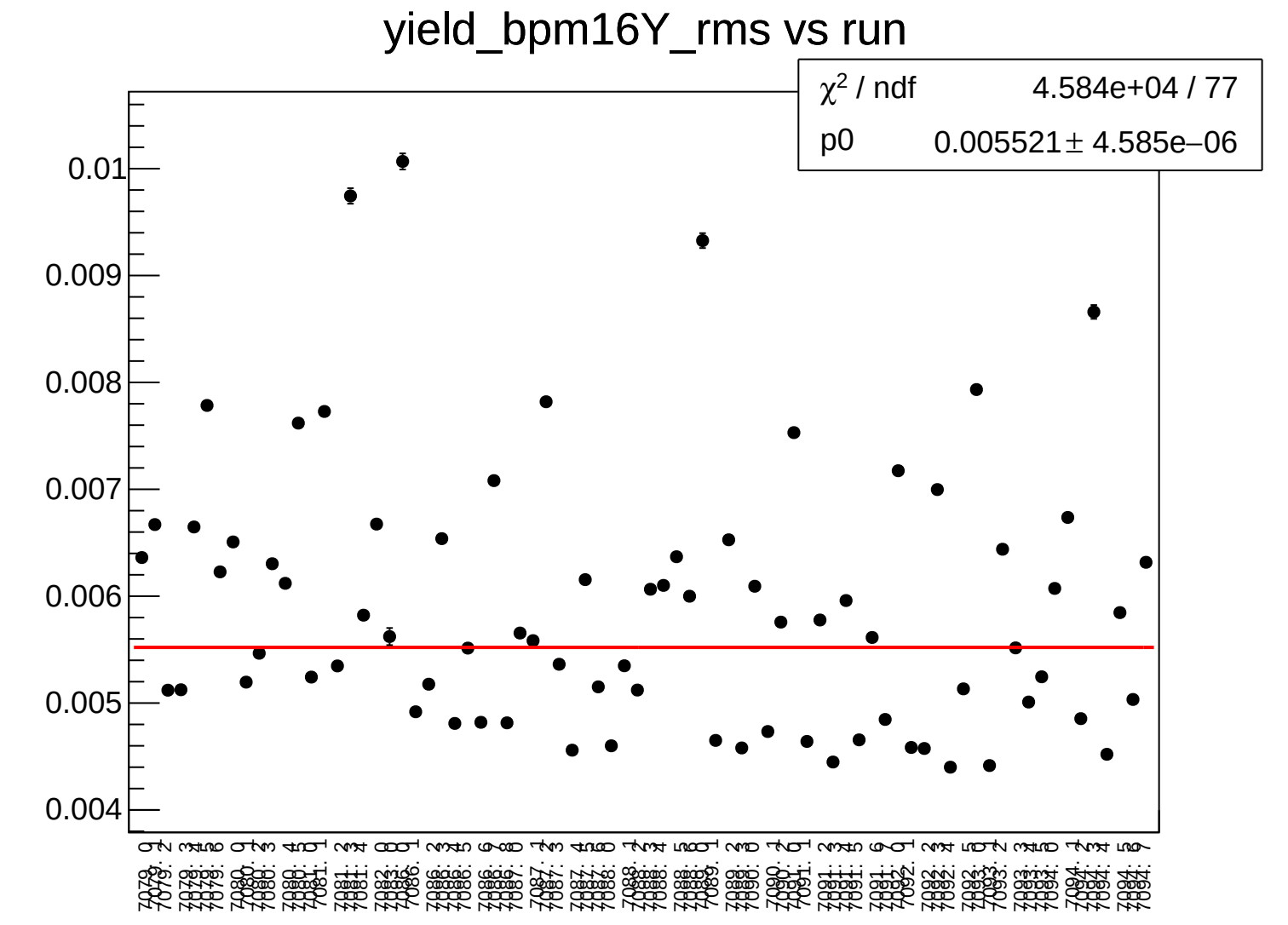

yield_bpm16X_mean vs run
χ² / ndf 9.147e+04 / 77
p0 −0.4316 ± 1.183e−05
−0.41
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
pull
Entries 78
Mean 676
Std Dev 645
60
40
20
0
−20
−40
−60
−80
−100

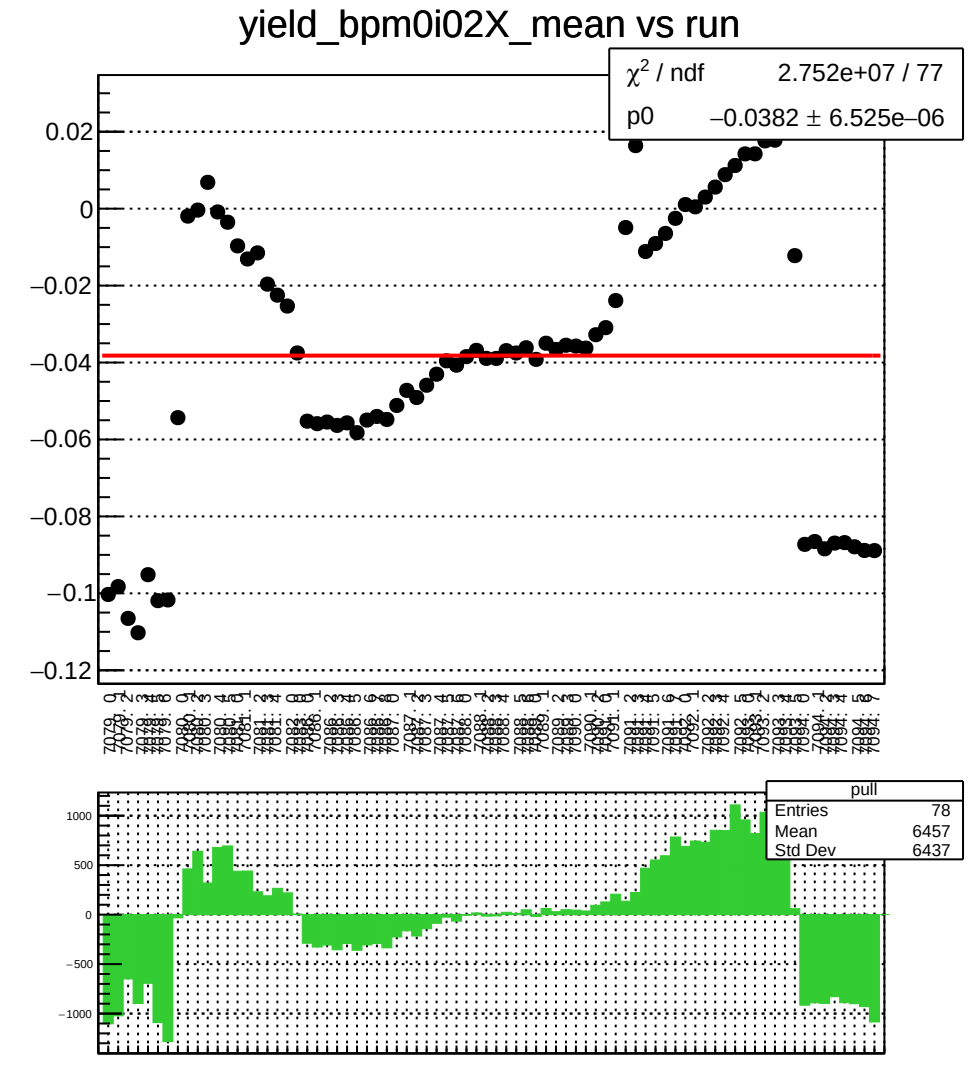

pull1D
Entries 78
Mean 1.989
Std Dev 4.653
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

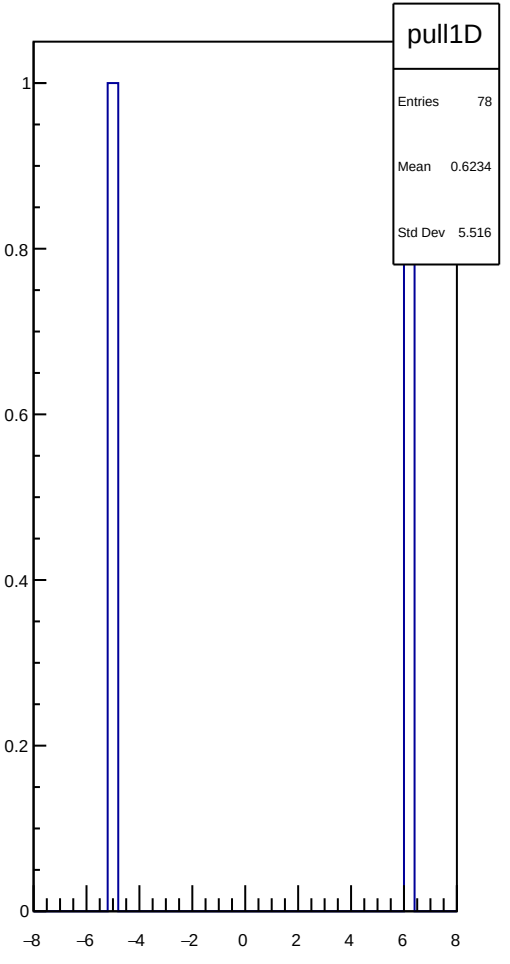

yield_bpm16X_rms vs run
χ² / ndf 1.835e+05 / 77
p0 0.009586 ± 8.369e−06
0.03
0.025
0.02
0.015
0.01
0.005

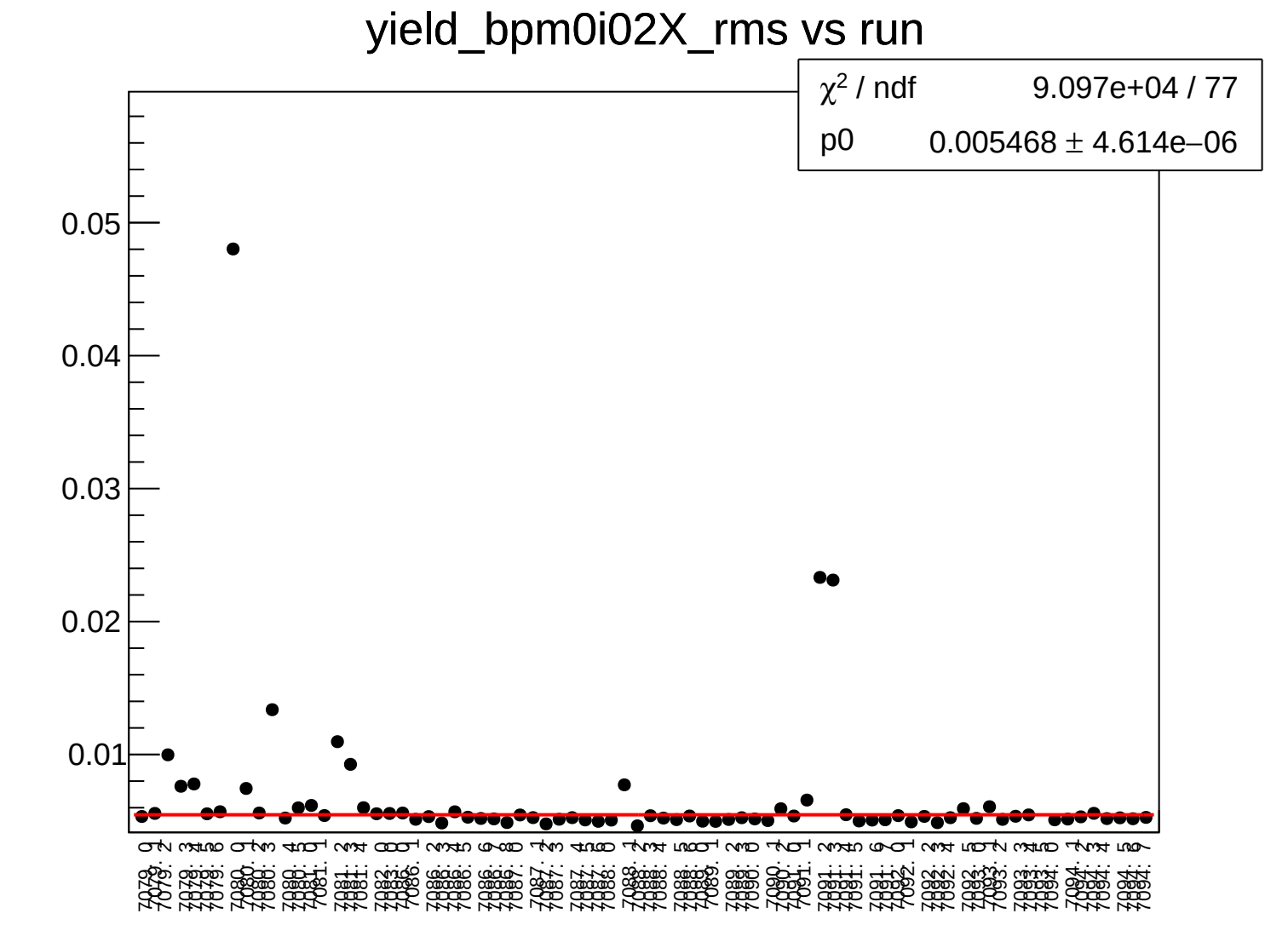

yield_bpm16Y_mean vs run
χ² / ndf 4.18e+04 / 77
p0 −0.2255 ± 6.485e−06
−0.22
−0.222
−0.224
−0.226
−0.228
−0.23
−0.232
pull
Entries 78
Mean −47.73
Std Dev 74.66
40
20
0
−20
−40
−60

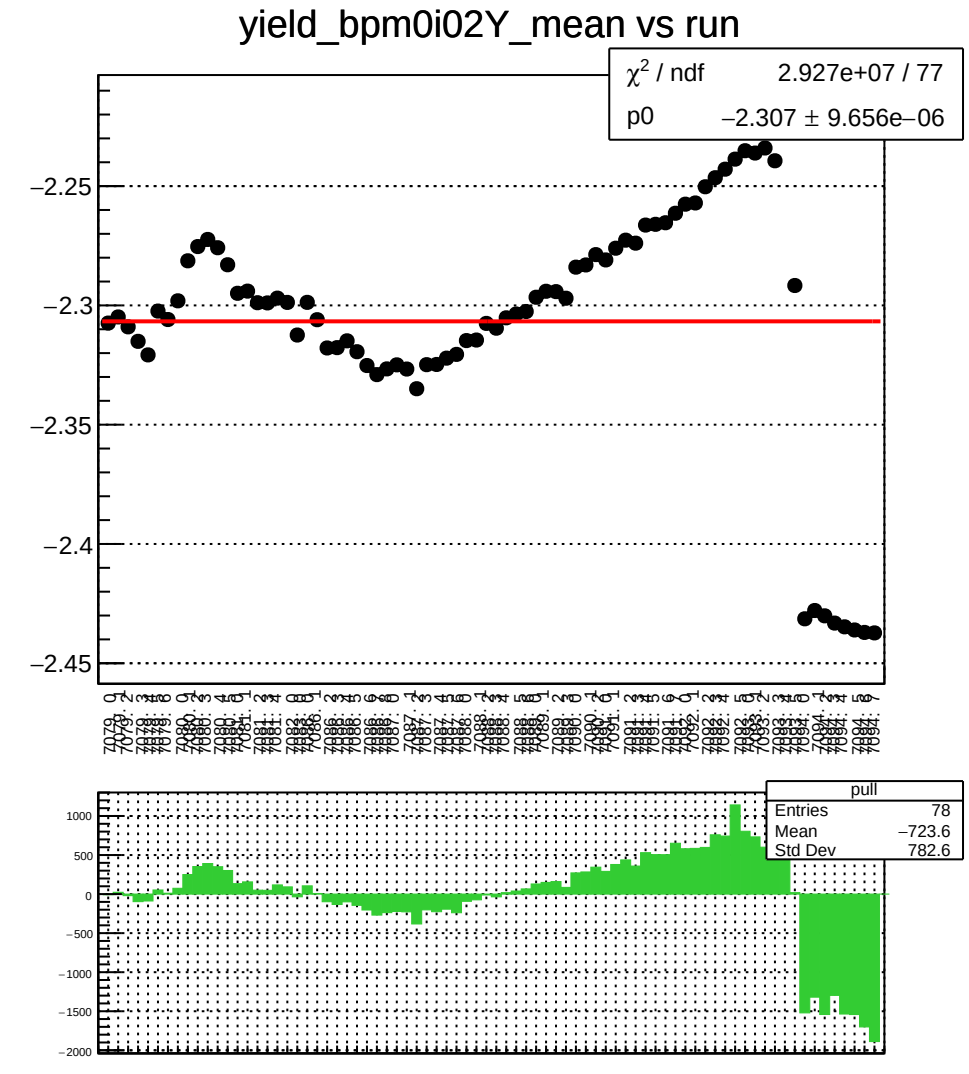

pull1D
Entries 78
Mean 2.268
Std Dev 3.966
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

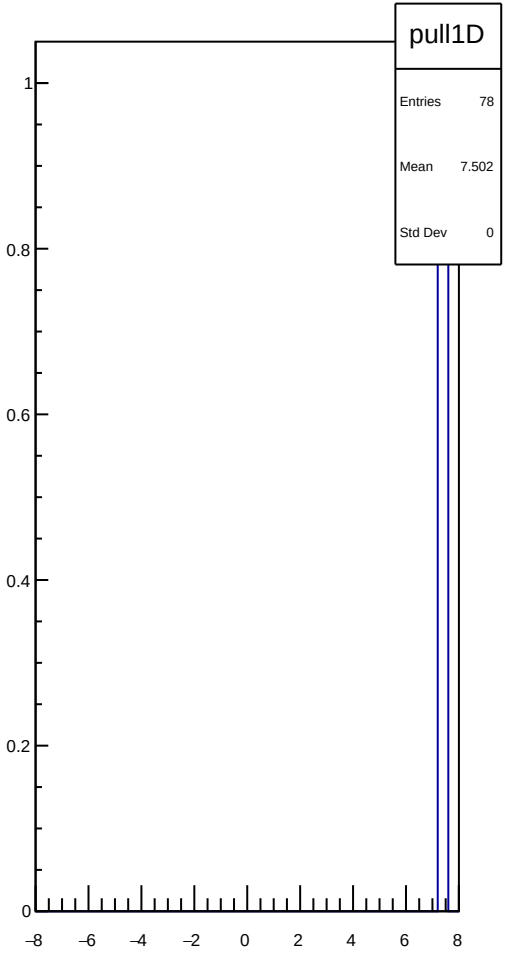

yield_bpm16Y_rms vs run
χ^2 / ndf 4.584e+04 / 77
p0 0.005521 ± 4.585e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004

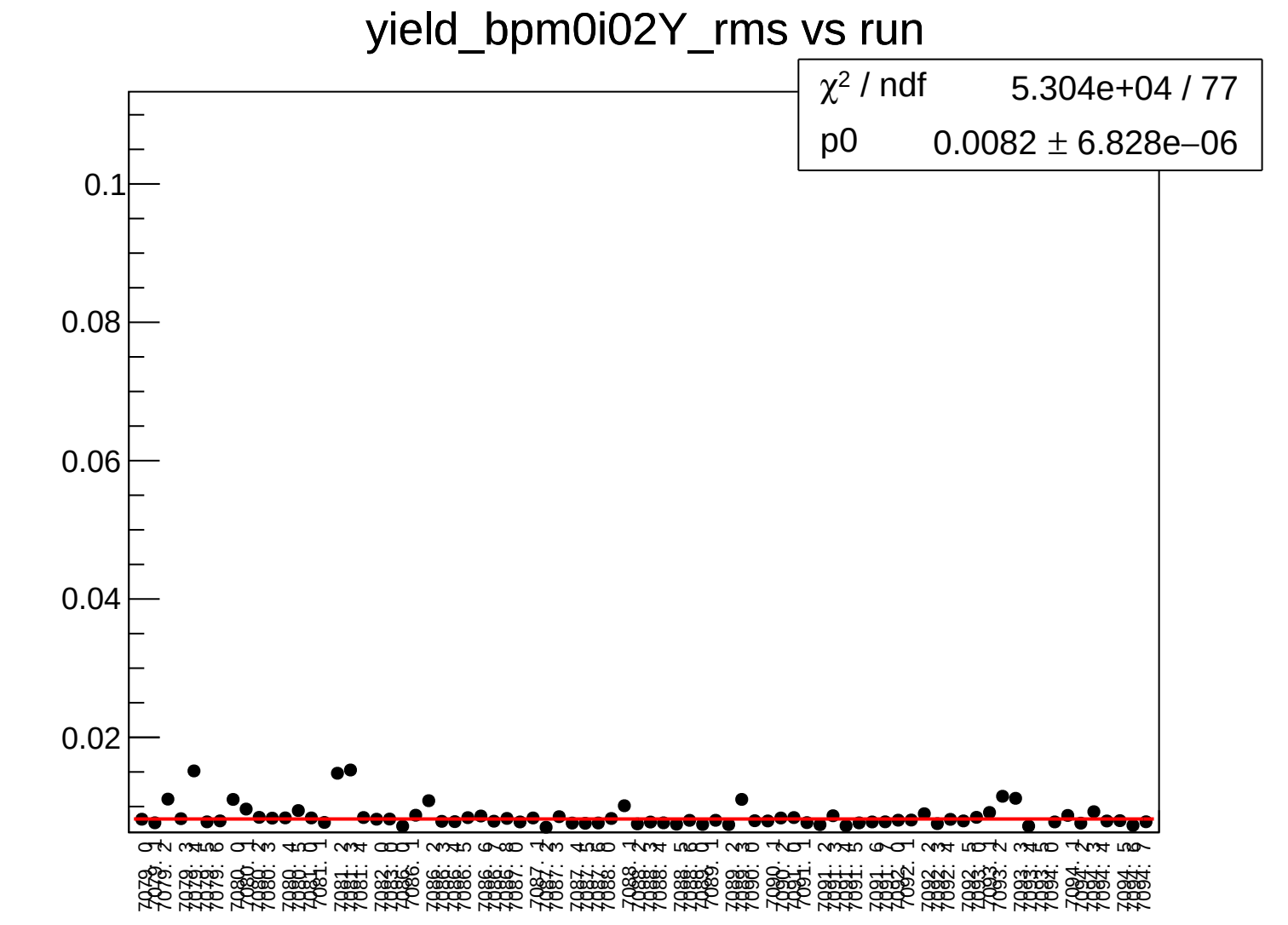

yield_bpm0i02X_mean vs run
χ² / ndf 2.752e+07 / 77
p0 −0.0382 ± 6.525e−06
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
pull
Entries 78
Mean 6457
Std Dev 6437
1000
500
0
−500
−1000

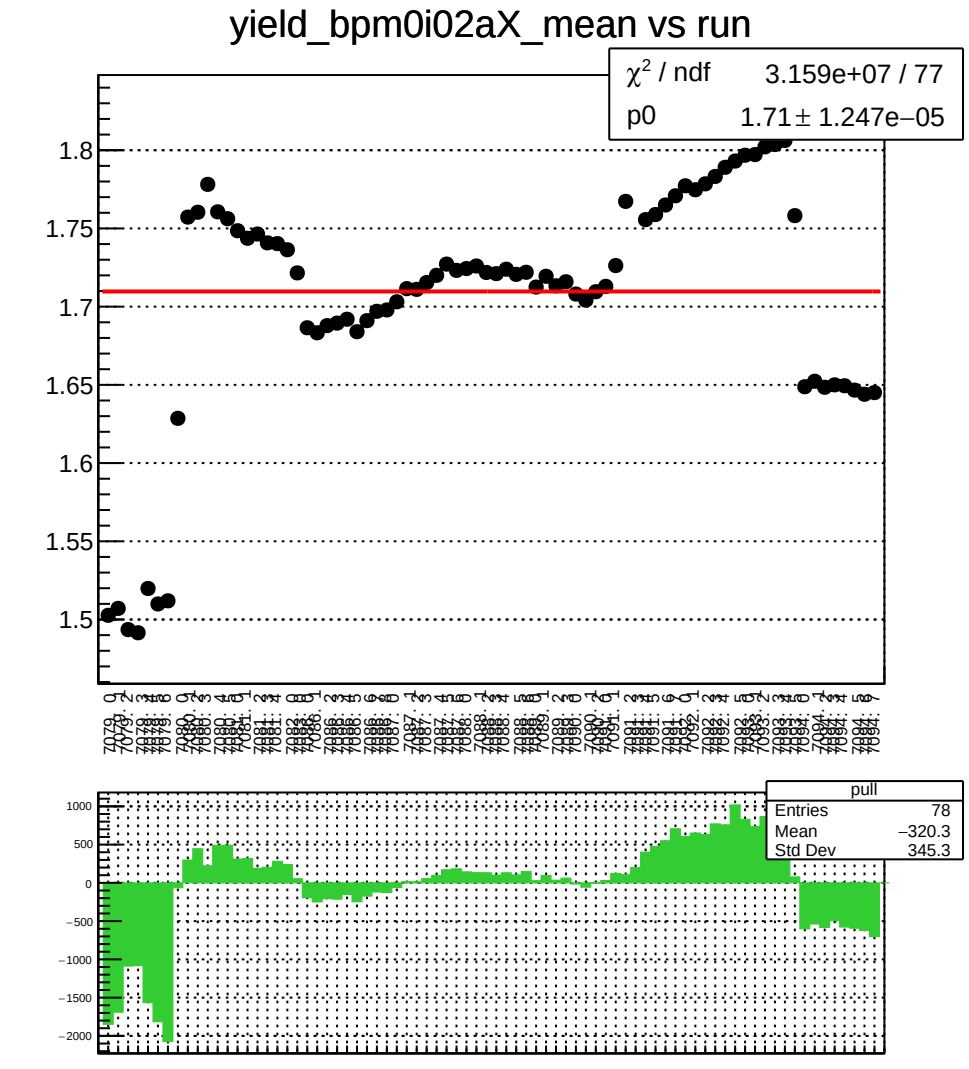

pull1D
Entries 78
Mean 0.6234
Std Dev 5.516
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

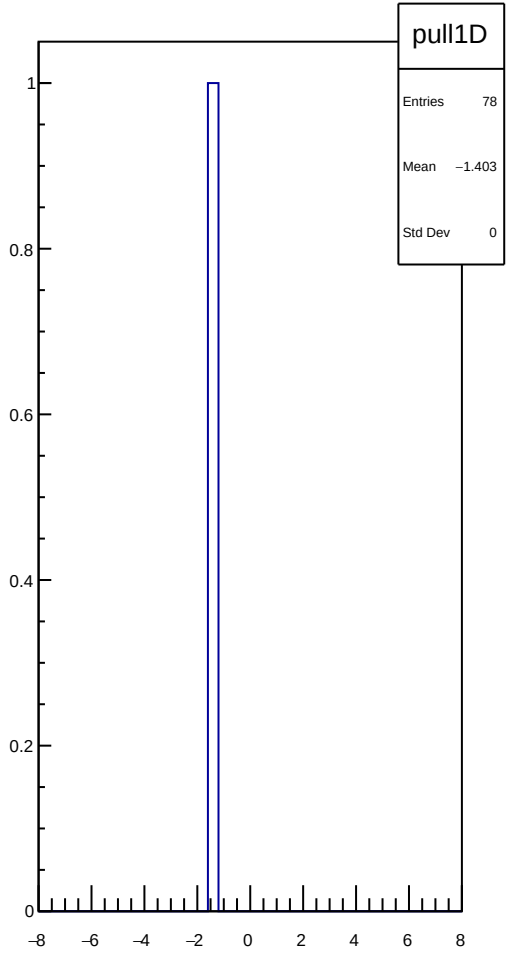

yield_bpm0i02X_rms vs run
χ^2 / ndf 9.097e+04 / 77
p0 0.005468 ± 4.614e−06
0.05
0.04
0.03
0.02
0.01

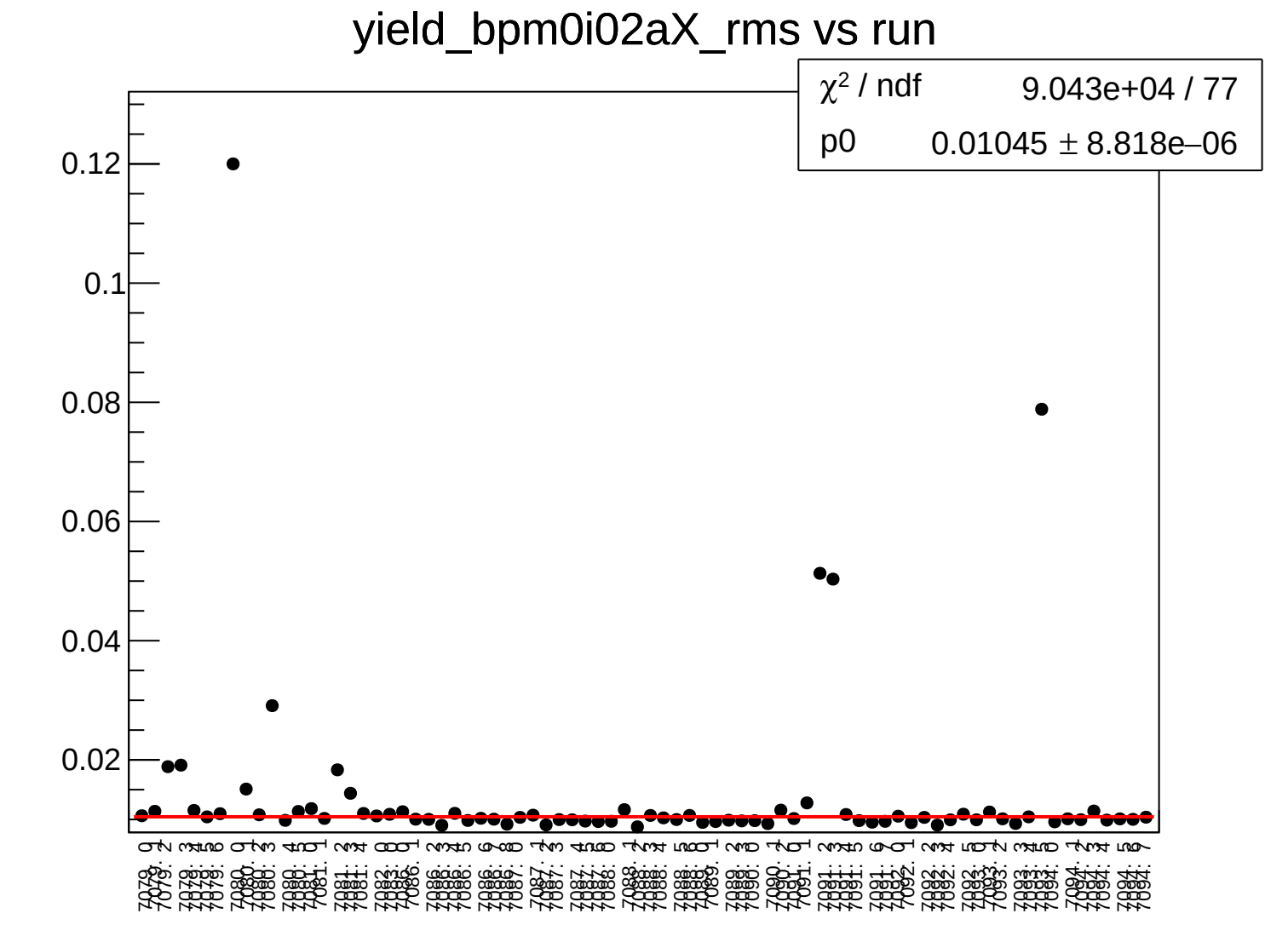

yield_bpm0i02Y_mean vs run
χ² / ndf 2.927e+07 / 77
p0 −2.307 ± 9.656e−06
−2.25
−2.3
−2.35
−2.4
−2.45
pull
Entries 78
Mean −723.6
Std Dev 782.6
1000
500
0
−500
−1000
−1500
−2000

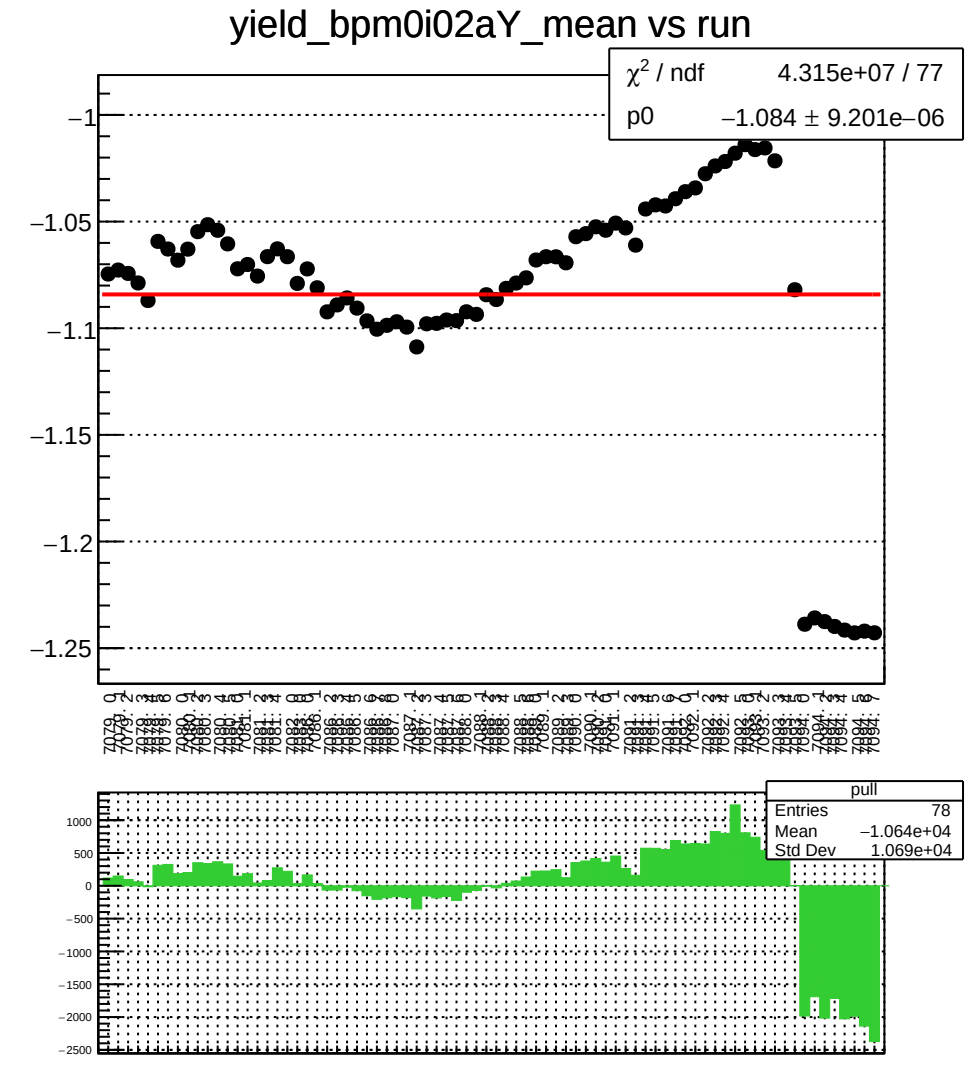

pull1D
Entries 78
Mean 7.502
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

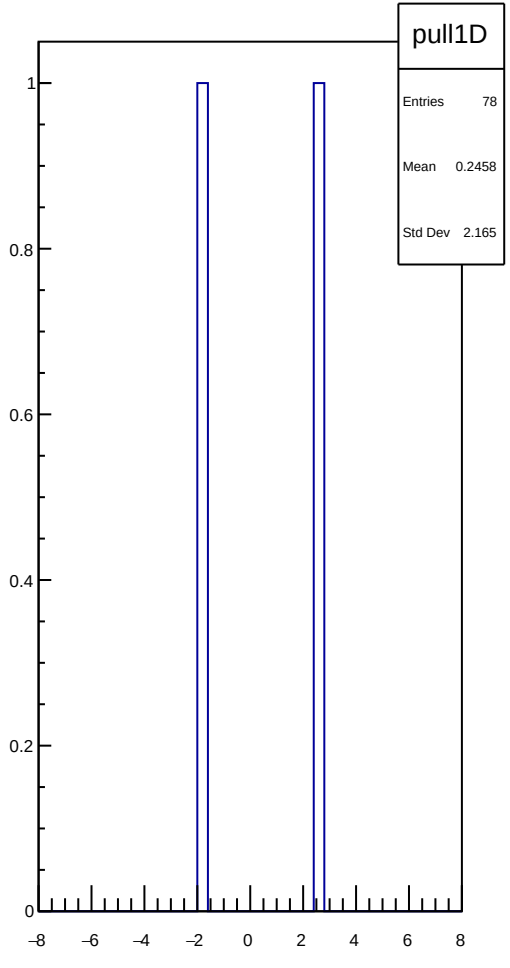

yield_bpm0i02Y_rms vs run
χ² / ndf 5.304e+04 / 77
p0 0.0082 ± 6.828e−06
0.1
0.08
0.06
0.04
0.02

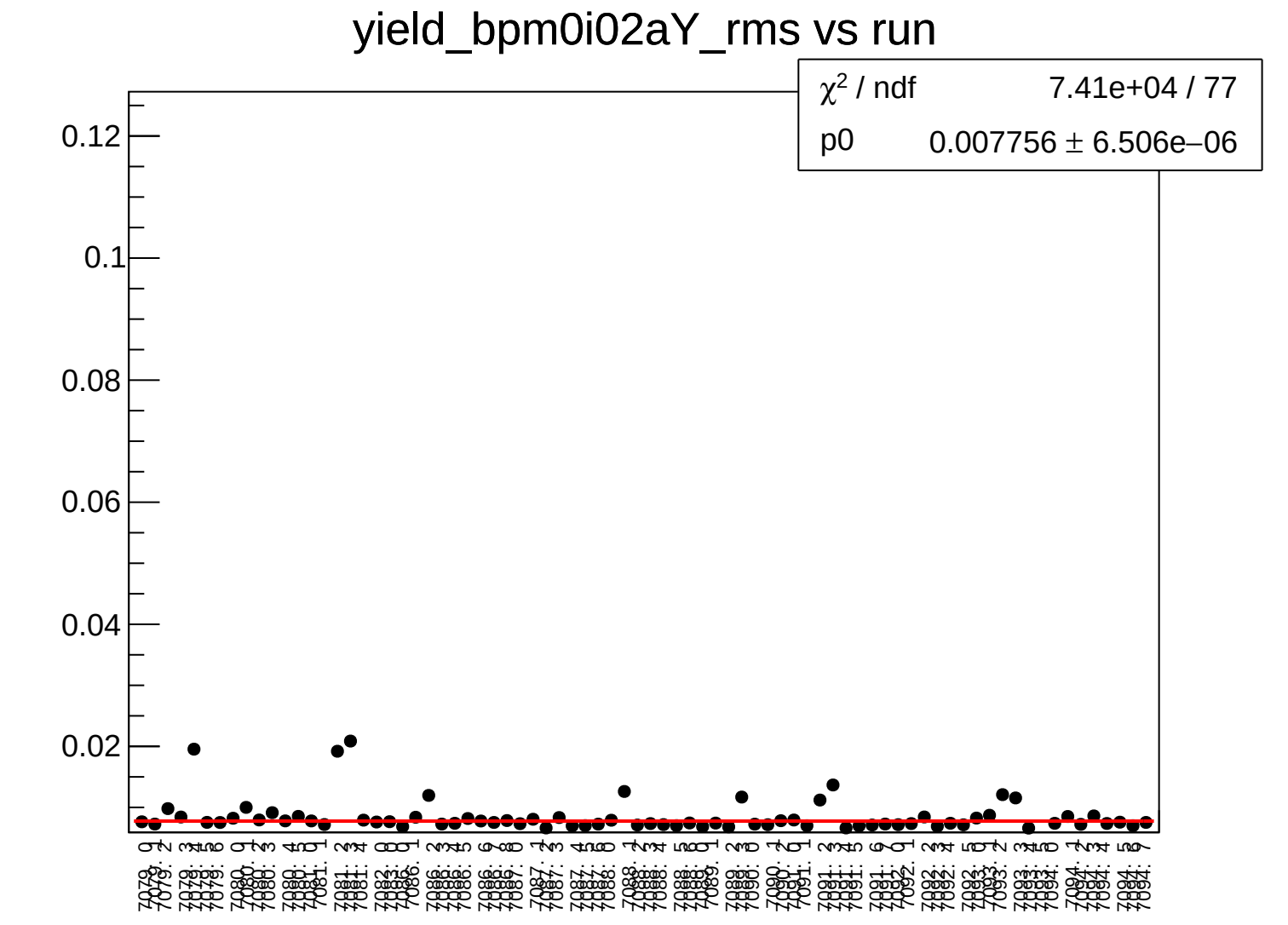

yield_bpm0i02aX_mean vs run
χ² / ndf 3.159e+07 / 77
p0 1.71 ± 1.247e−05
1.8
1.75
1.7
1.65
1.6
1.55
1.5
pull
Entries 78
Mean −320.3
Std Dev 345.3
1000
500
0
−500
−1000
−1500
−2000

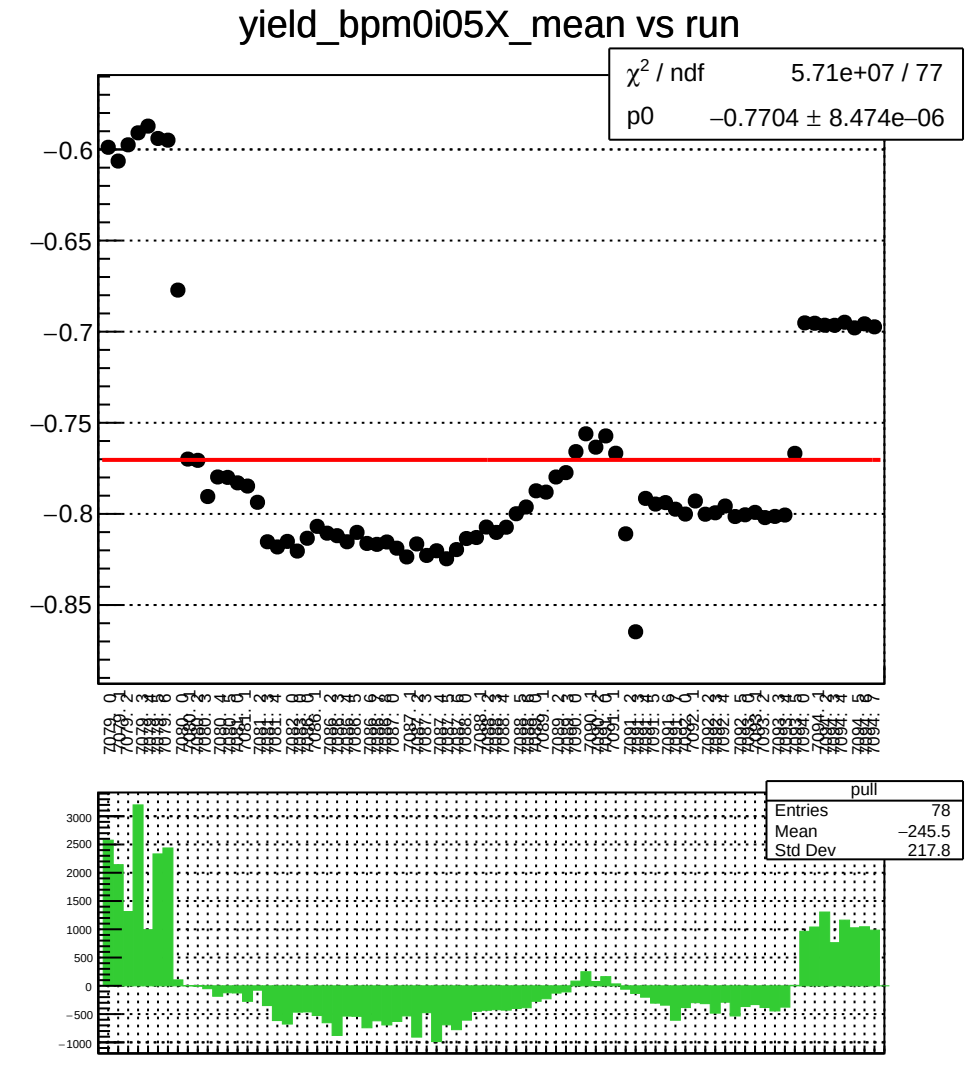

pull1D
Entries 78
Mean −1.403
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

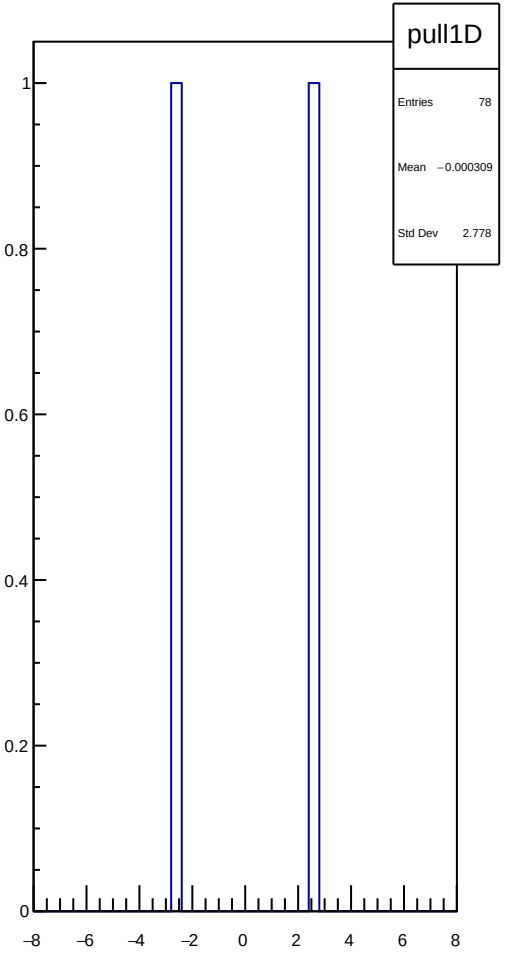

yield_bpm0i02aX_rms vs run
χ² / ndf 9.043e+04 / 77
p0 0.01045 ± 8.818e–06
0.12
0.1
0.08
0.06
0.04
0.02

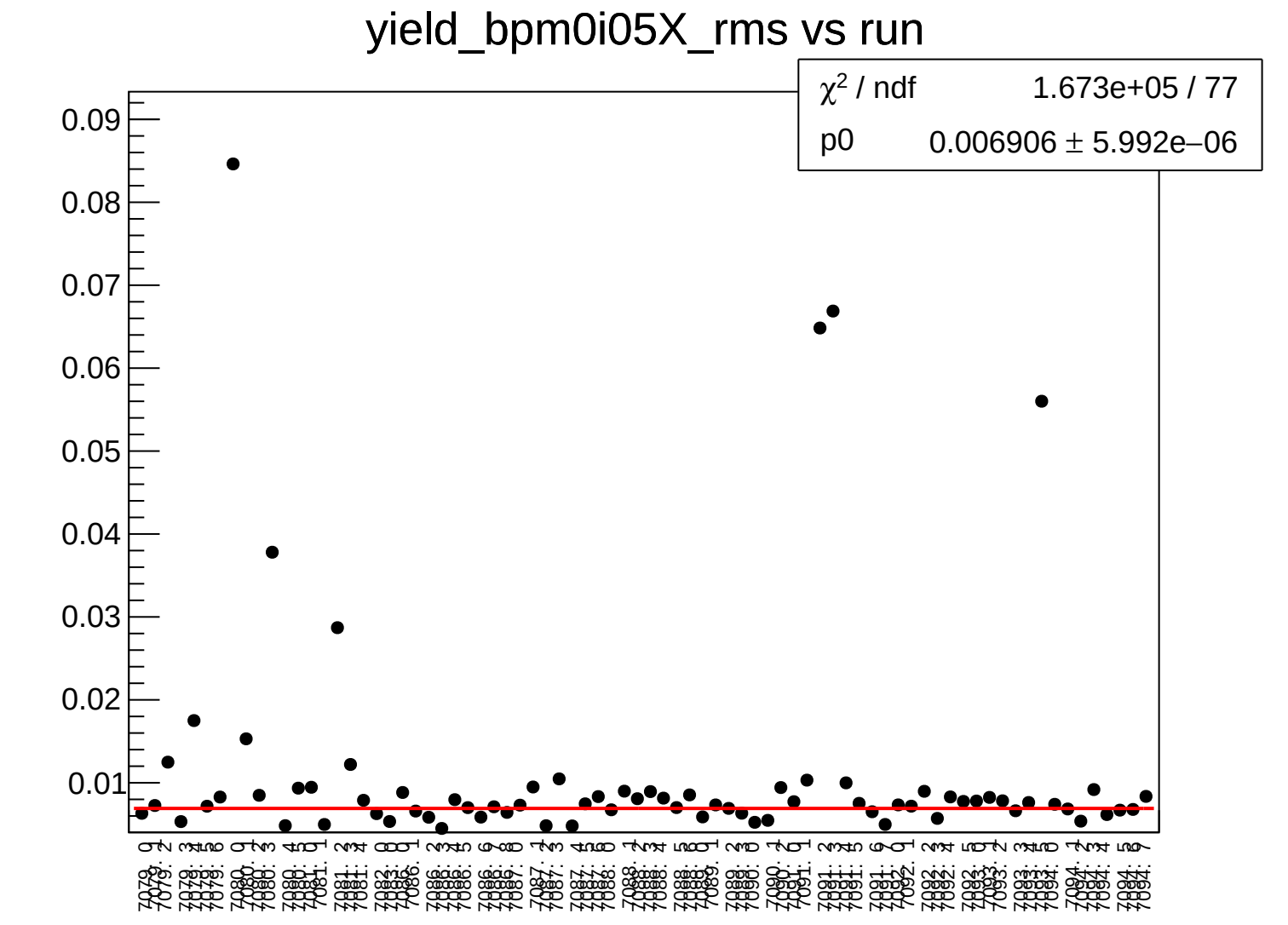

yield_bpm0i02aY_mean vs run
χ² / ndf 4.315e+07 / 77
p0 −1.084 ± 9.201e−06
pull
Entries 78
Mean −1.064e+04
Std Dev 1.069e+04

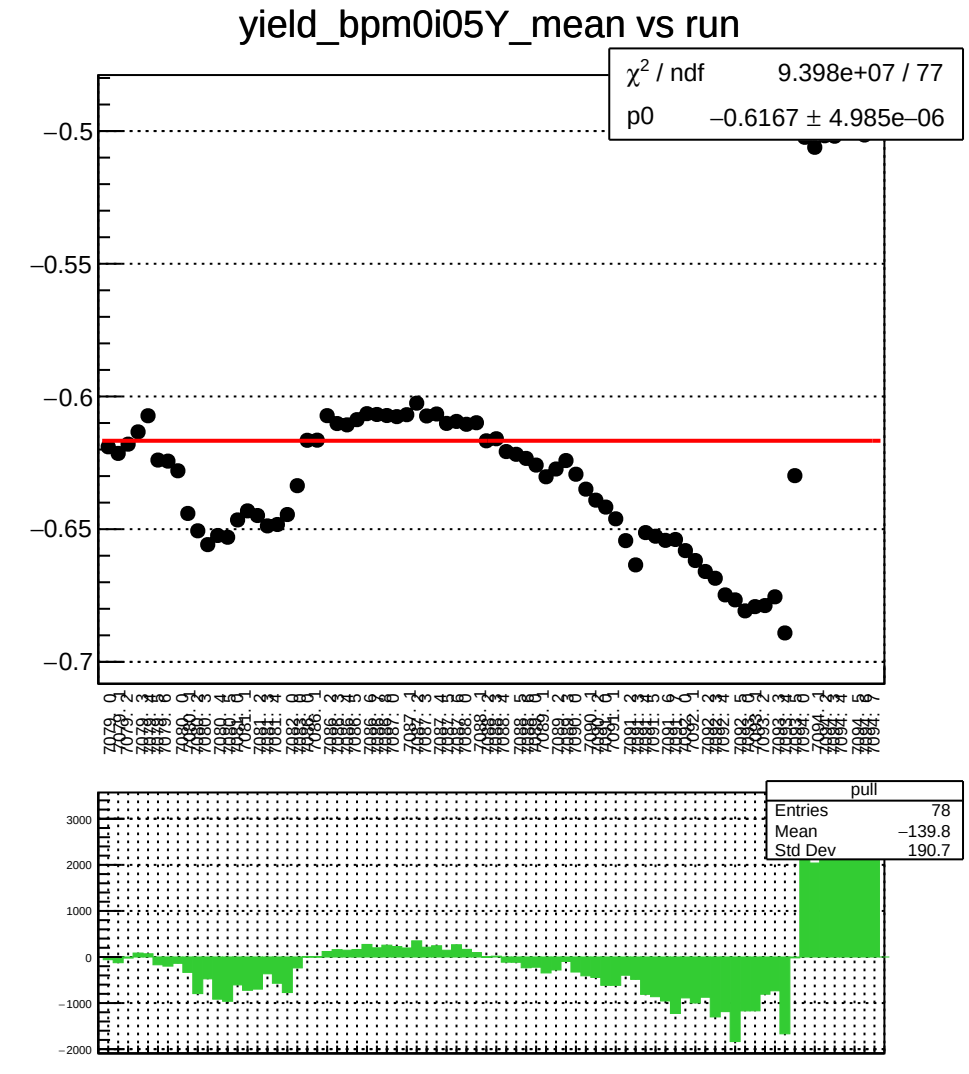

pull1D
Entries 78
Mean 0.2458
Std Dev 2.165

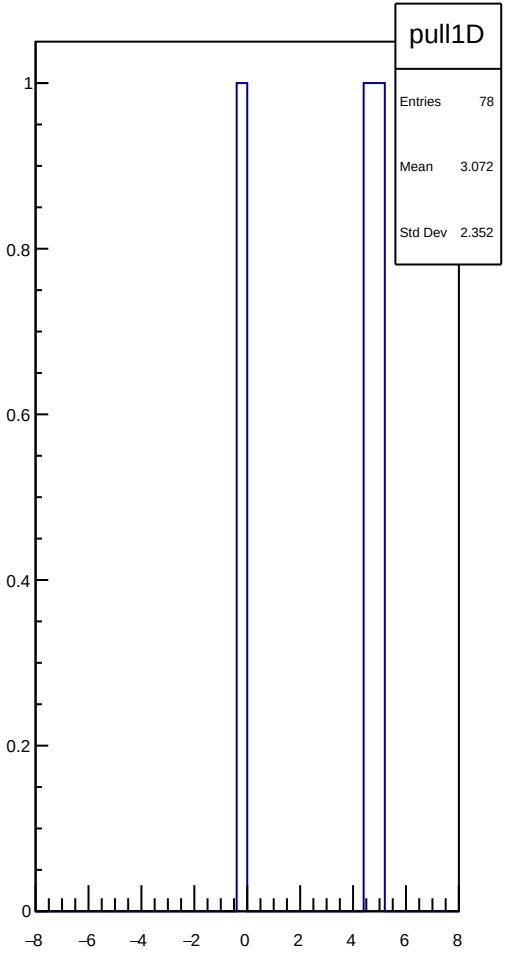

yield_bpm0i02aY_rms vs run
χ² / ndf 7.41e+04 / 77
p0 0.007756 ± 6.506e−06
0.12
0.1
0.08
0.06
0.04
0.02

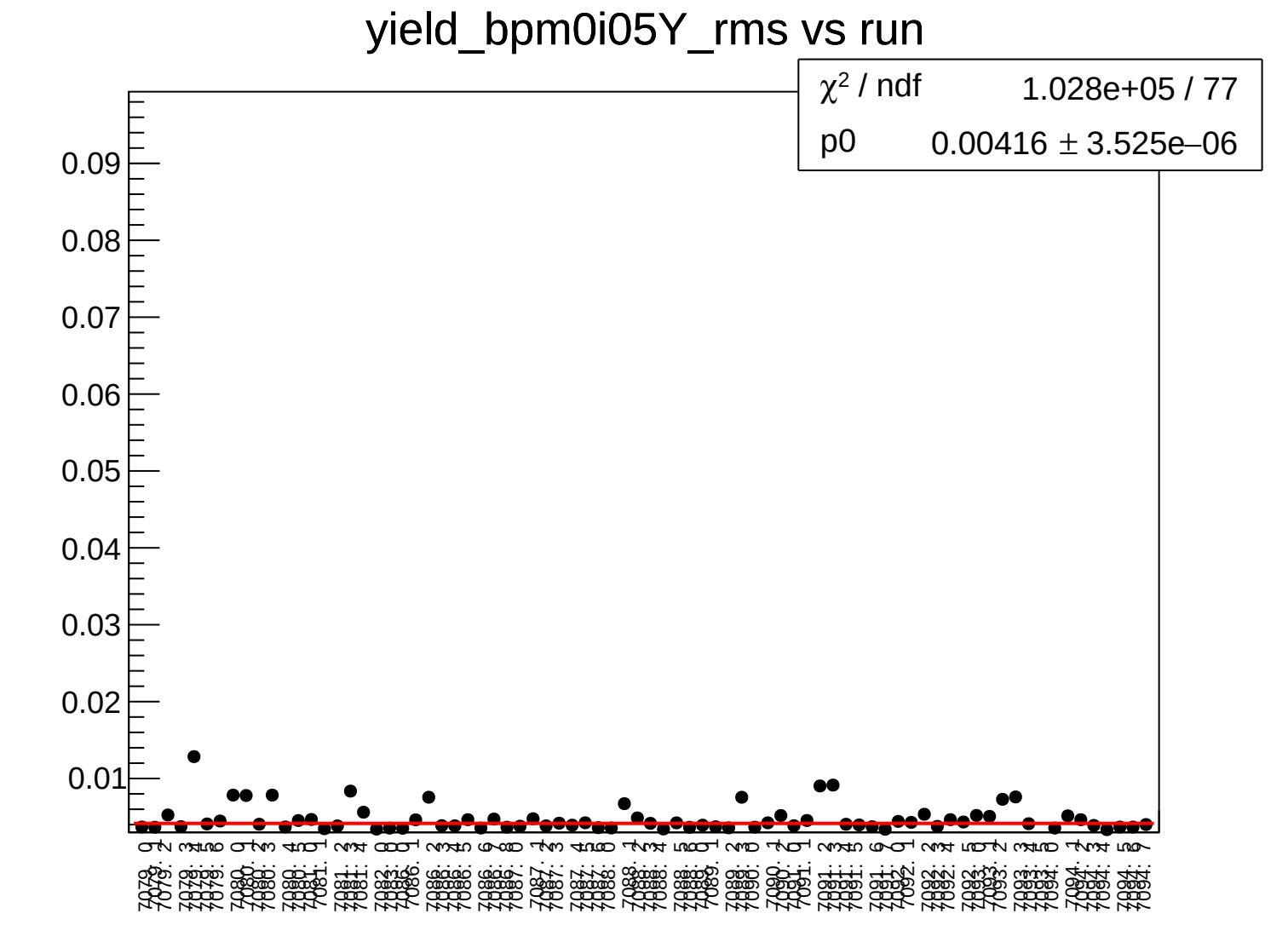

yield_bpm0i05X_mean vs run
χ² / ndf 5.71e+07 / 77
p0 −0.7704 ± 8.474e−06
−0.6
−0.65
−0.7
−0.75
−0.8
−0.85
pull
Entries 78
Mean −245.5
Std Dev 217.8
3000
2500
2000
1500
1000
500
0
−500
−1000

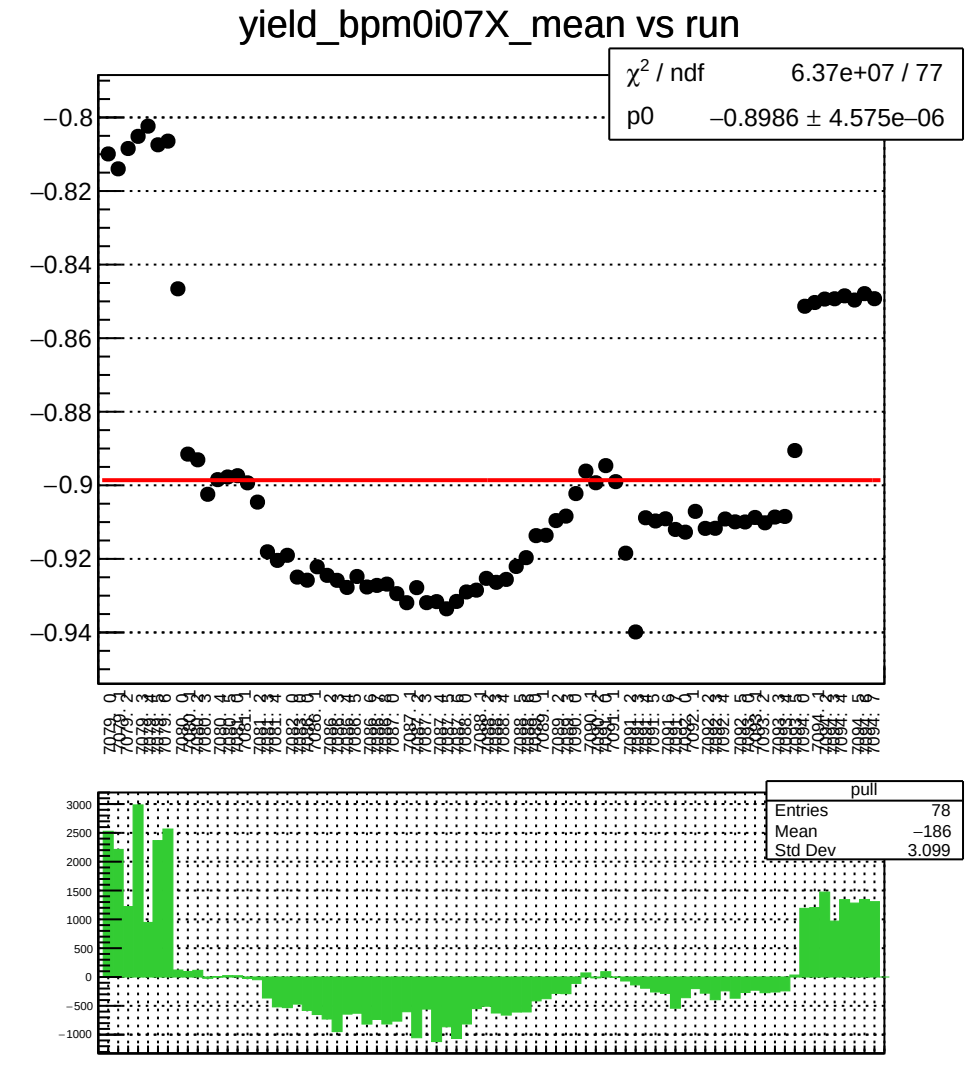

pull1D
Entries 78
Mean −0.000309
Std Dev 2.778
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

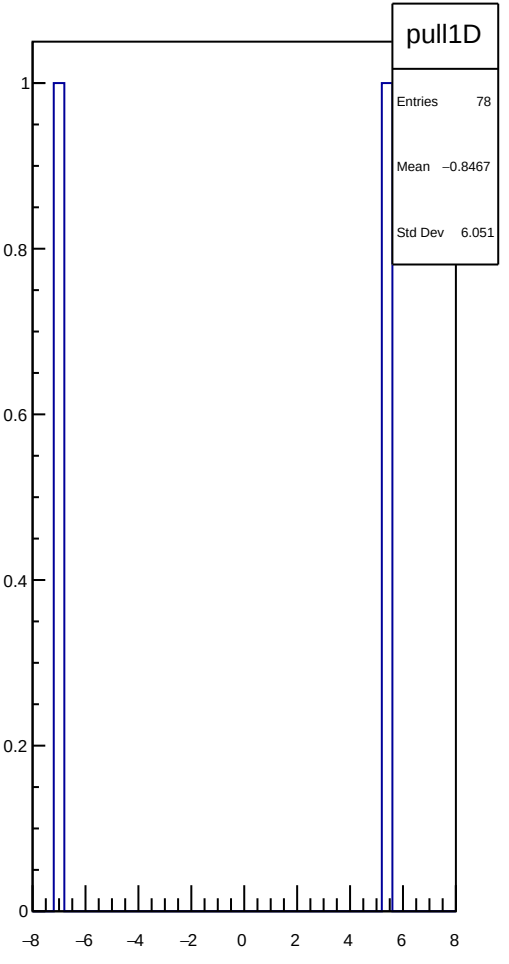

yield_bpm0i05X_rms vs run
χ² / ndf 1.673e+05 / 77
p0 0.006906 ± 5.992e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

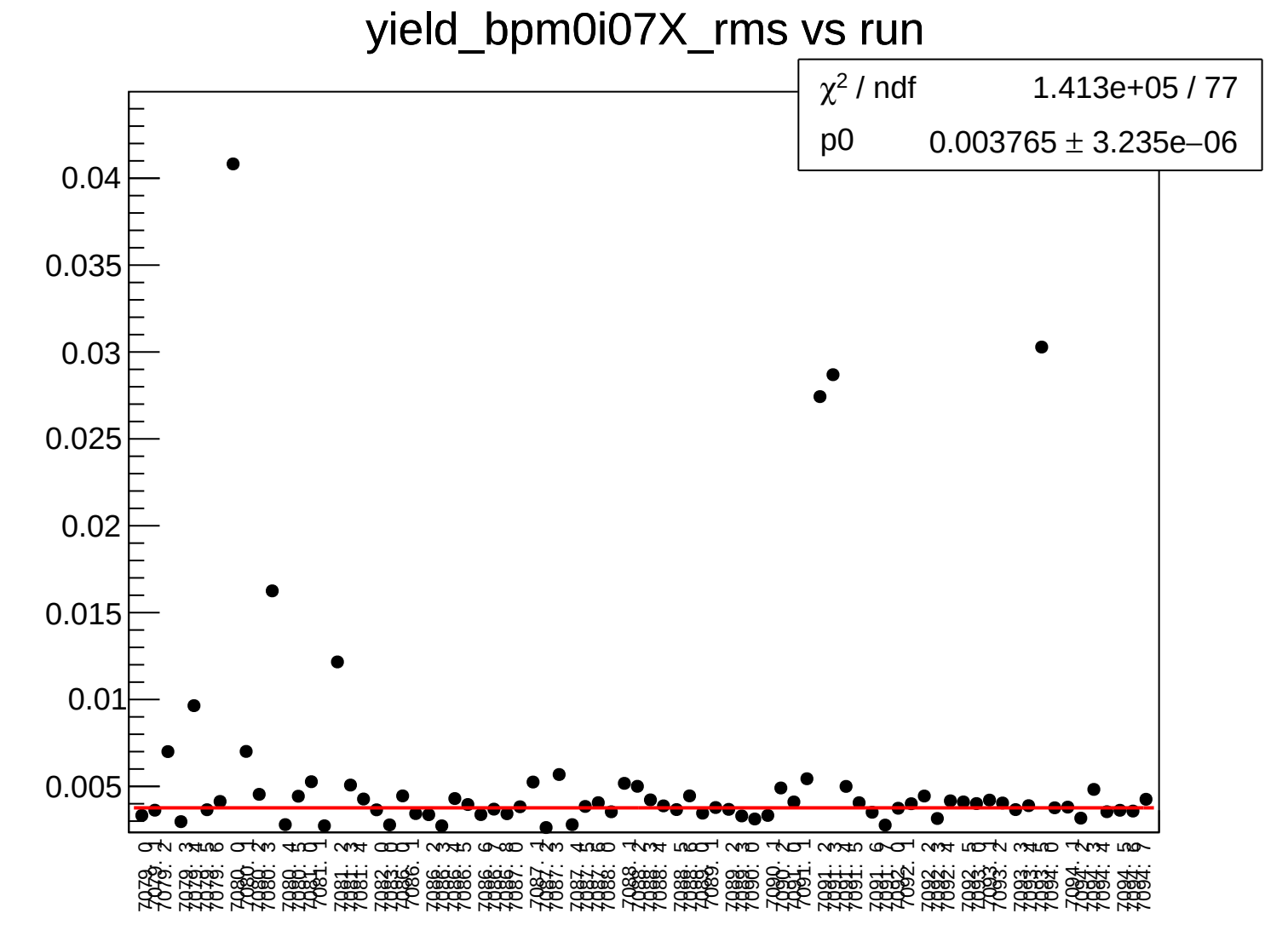

yield_bpm0i05Y_mean vs run
χ² / ndf 9.398e+07 / 77
p0 −0.6167 ± 4.985e−06
−0.5
−0.55
−0.6
−0.65
−0.7
pull
Entries 78
Mean −139.8
Std Dev 190.7
3000
2000
1000
0
−1000
−2000

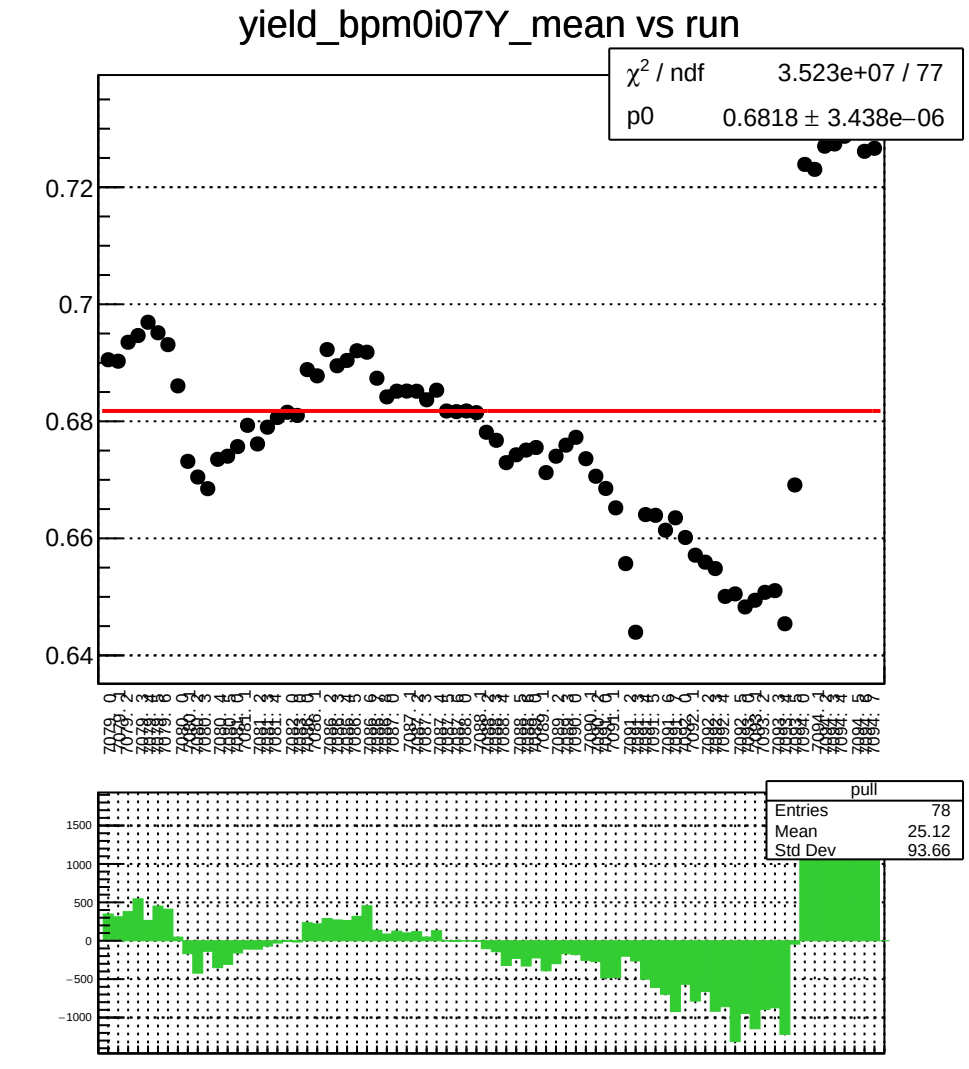

pull1D
Entries 78
Mean 3.072
Std Dev 2.352
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

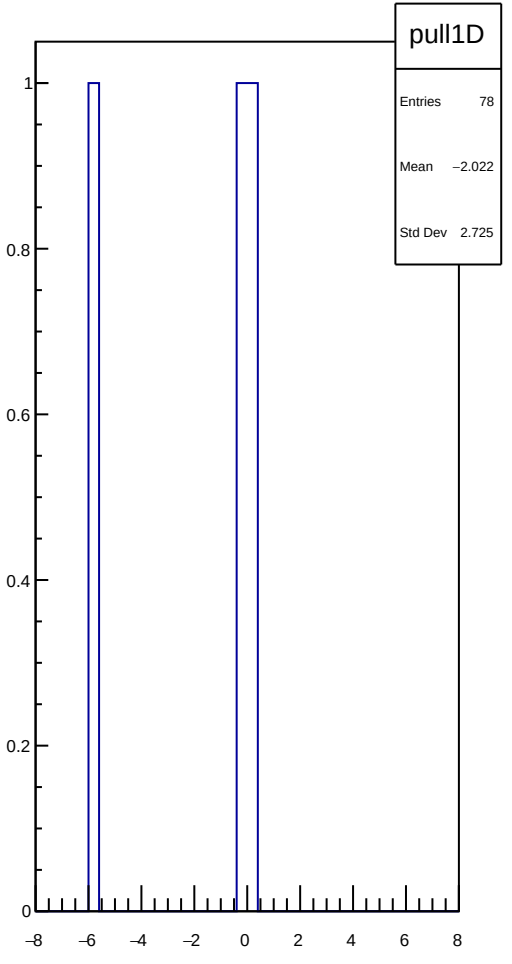

yield_bpm0i05Y_rms vs run
χ² / ndf 1.028e+05 / 77
p0 0.00416 ± 3.525e–06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

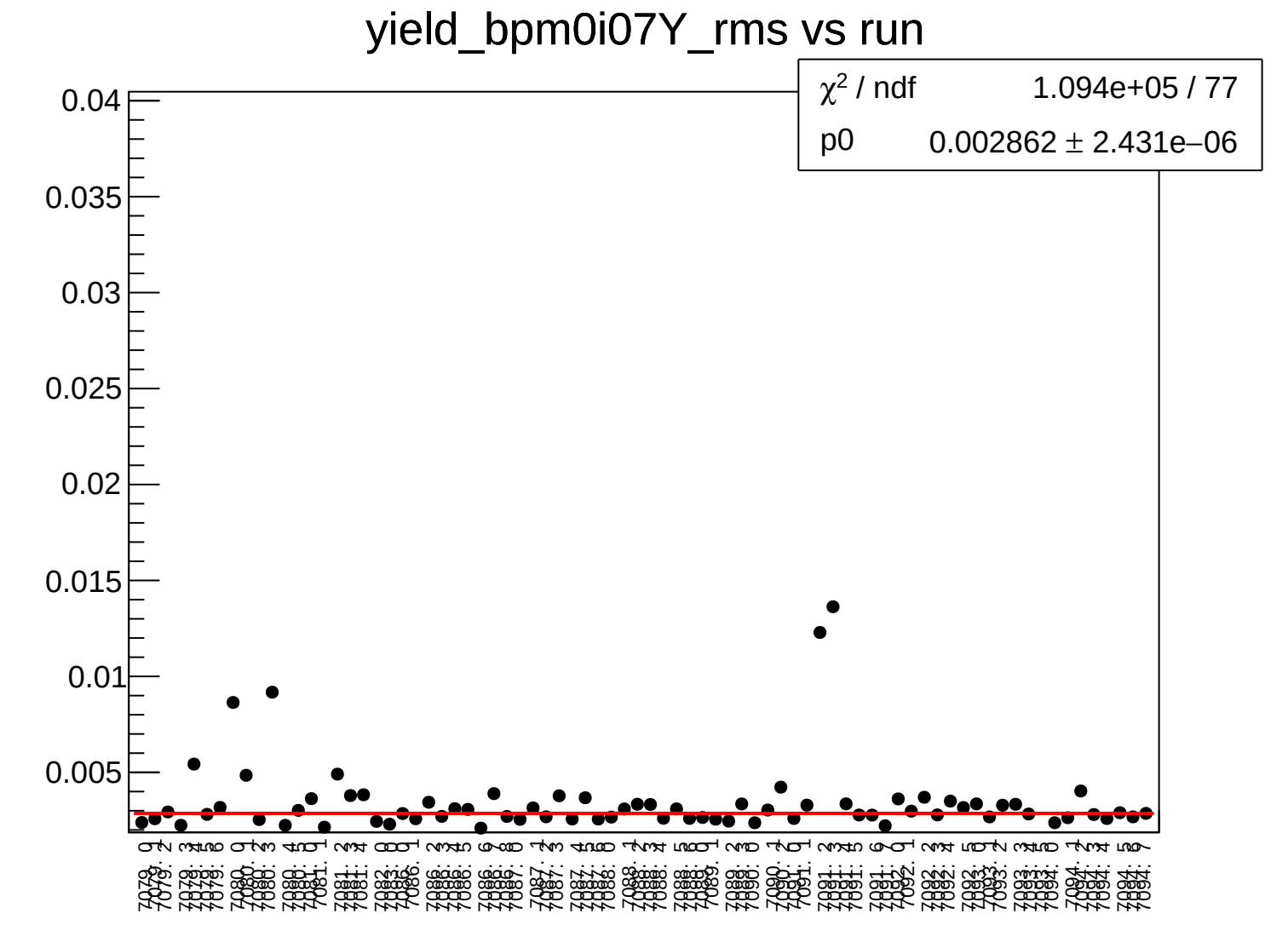

yield_bpm0i07X_mean vs run
χ² / ndf 6.37e+07 / 77
p0 −0.8986 ± 4.575e−06
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 78
Mean −186
Std Dev 3.099
3000
2500
2000
1500
1000
500
0
−500
−1000

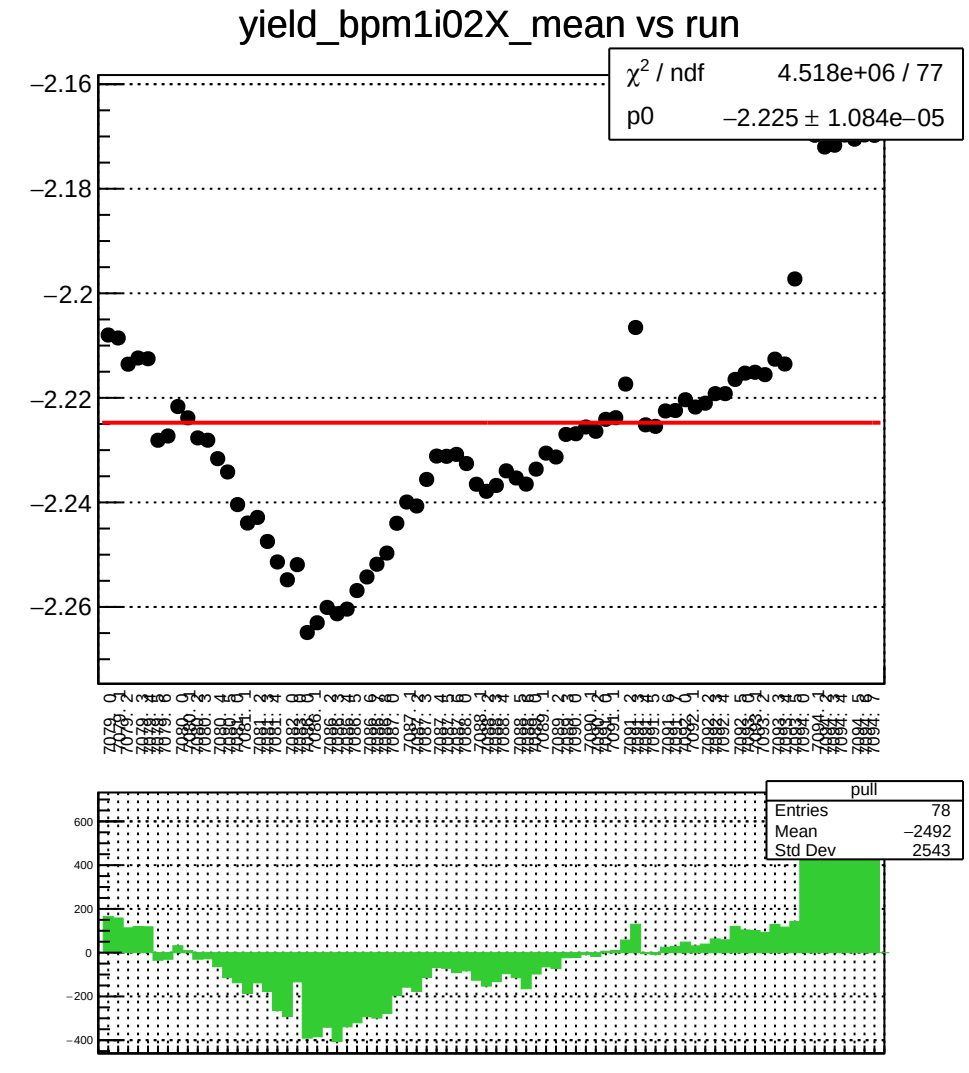

pull1D
Entries 78
Mean −0.8467
Std Dev 6.051
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

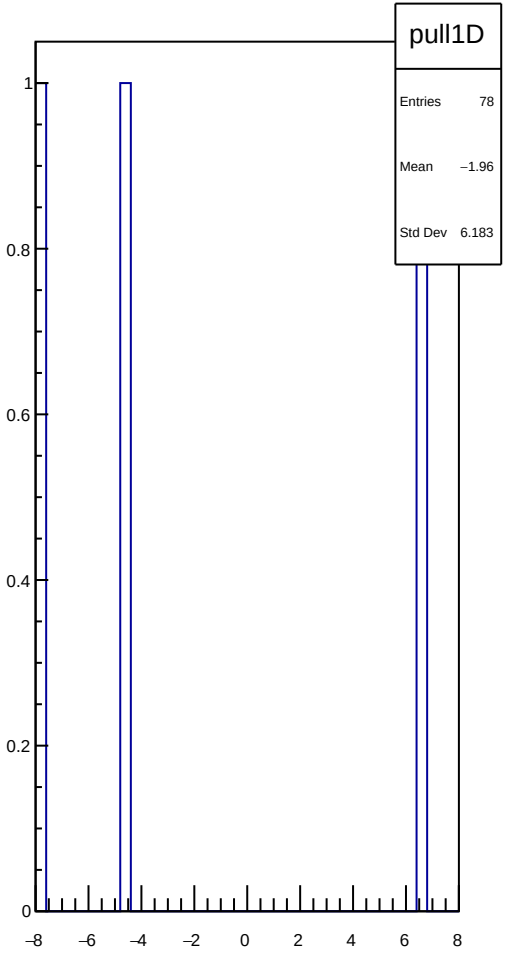

yield_bpm0i07X_rms vs run
χ² / ndf 1.413e+05 / 77
p0 0.003765 ± 3.235e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

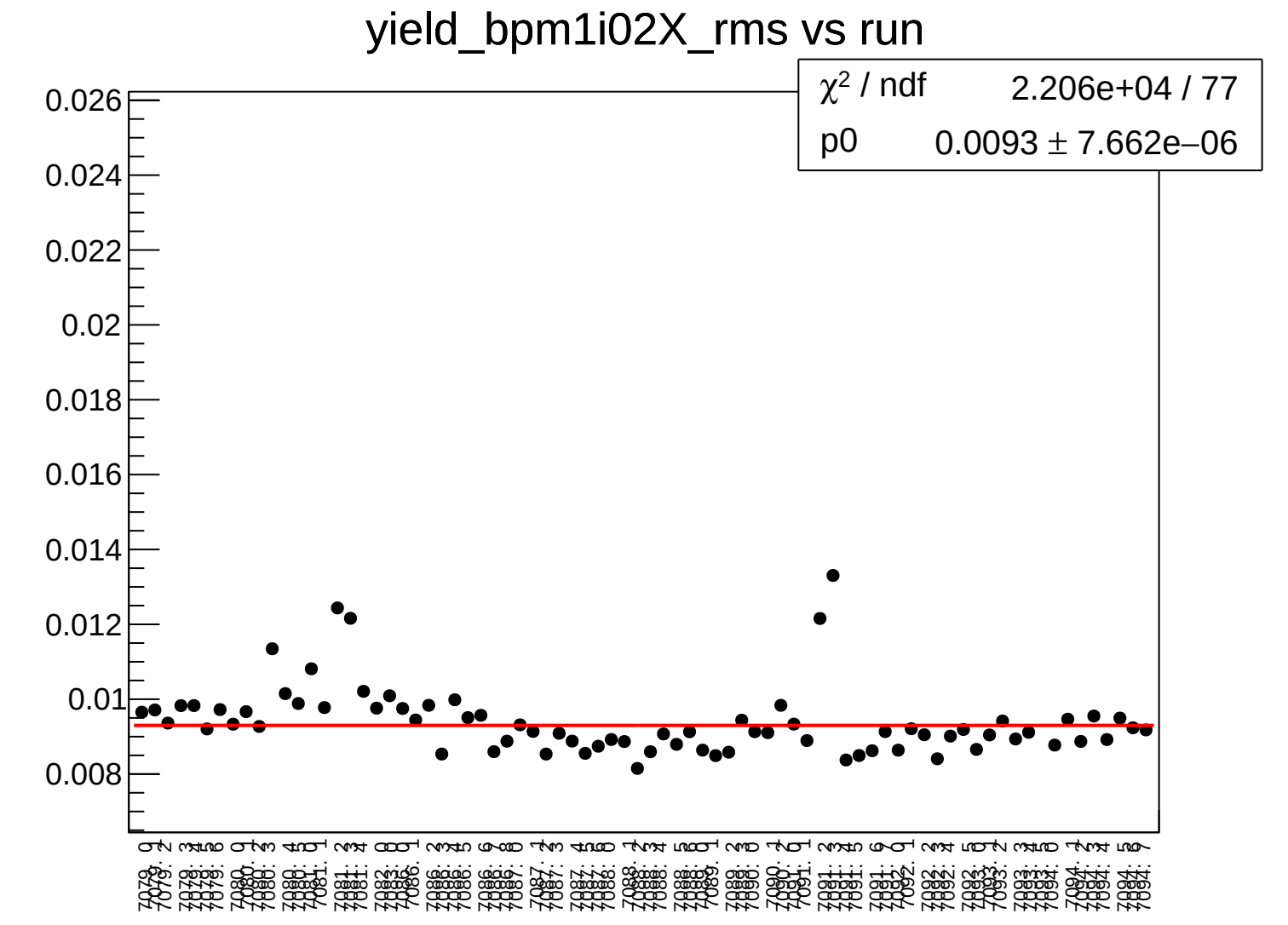

yield_bpm0i07Y_mean vs run
χ² / ndf 3.523e+07 / 77
p0 0.6818 ± 3.438e−06
0.72
0.7
0.68
0.66
0.64
pull
Entries 78
Mean 25.12
Std Dev 93.66
1500
1000
500
0
−500
−1000

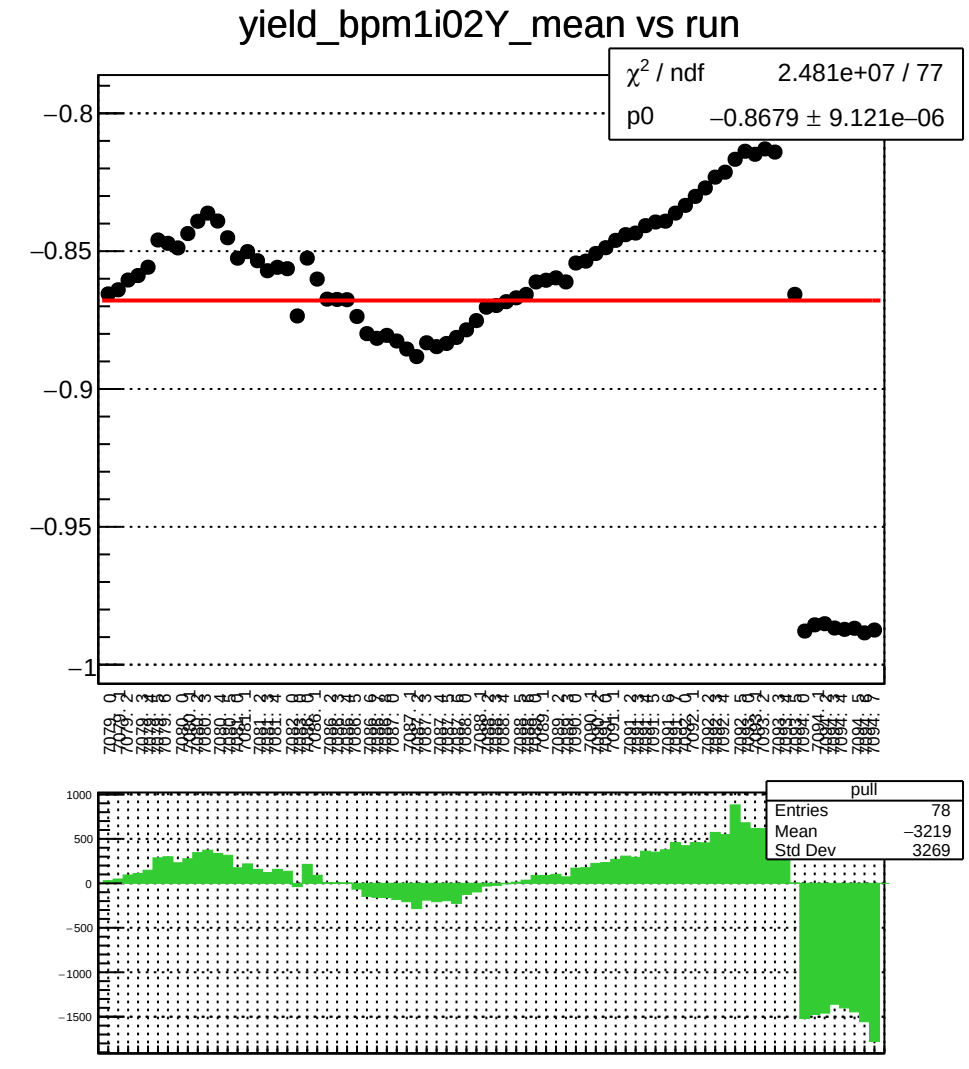

pull1D
Entries 78
Mean −2.022
Std Dev 2.725
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

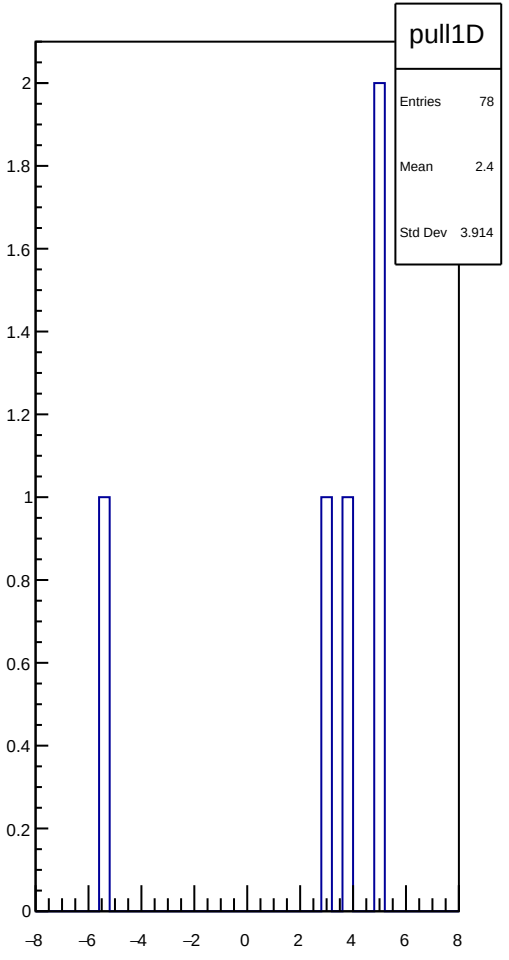

yield_bpm0i07Y_rms vs run
χ² / ndf 1.094e+05 / 77
p0 0.002862 ± 2.431e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

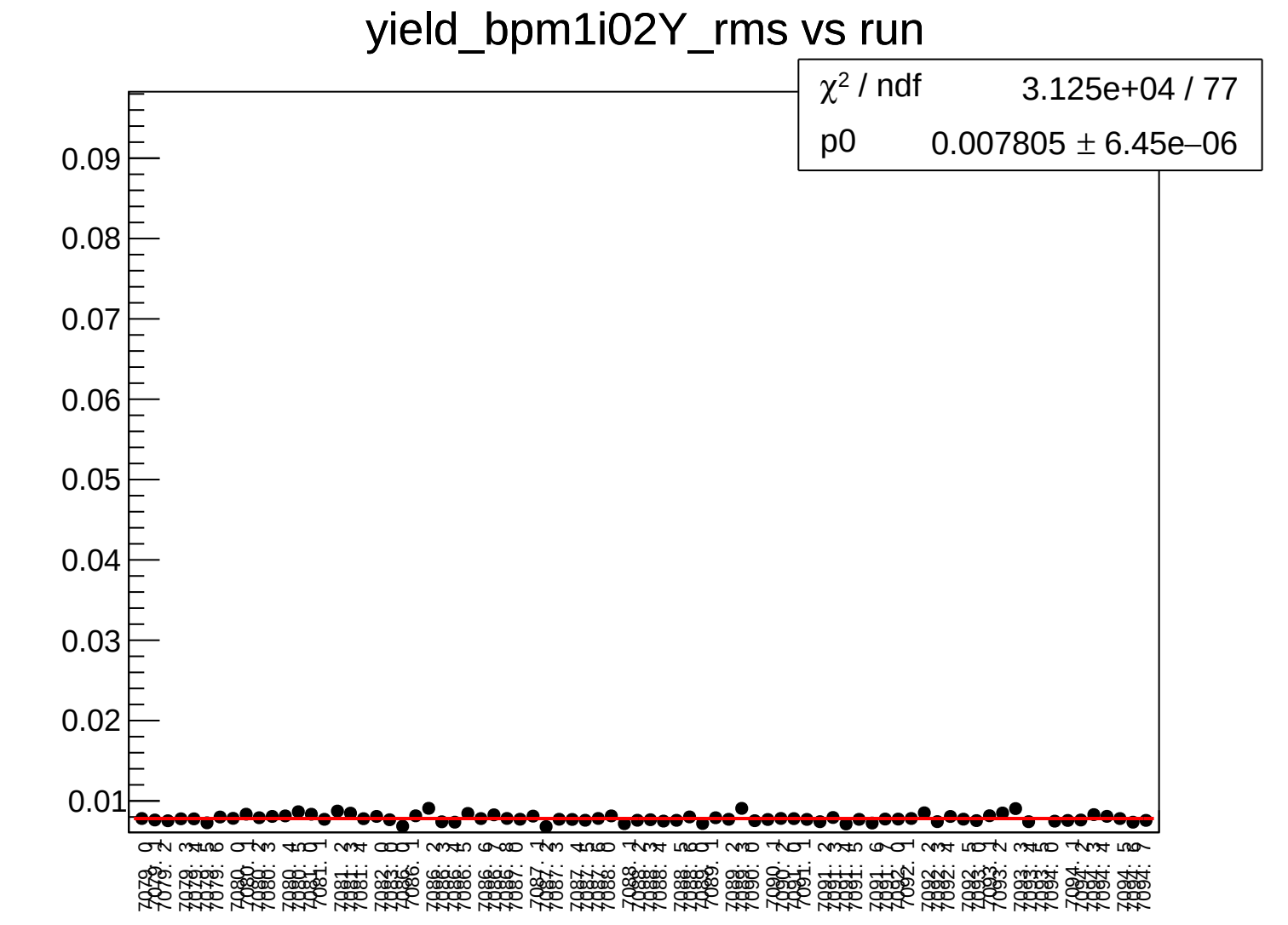

yield_bpm1i02X_mean vs run
χ² / ndf 4.518e+06 / 77
p0 −2.225 ± 1.084e−05
−2.16
−2.18
−2.2
−2.22
−2.24
−2.26
pull
Entries 78
Mean −2492
Std Dev 2543
600
400
200
0
−200
−400

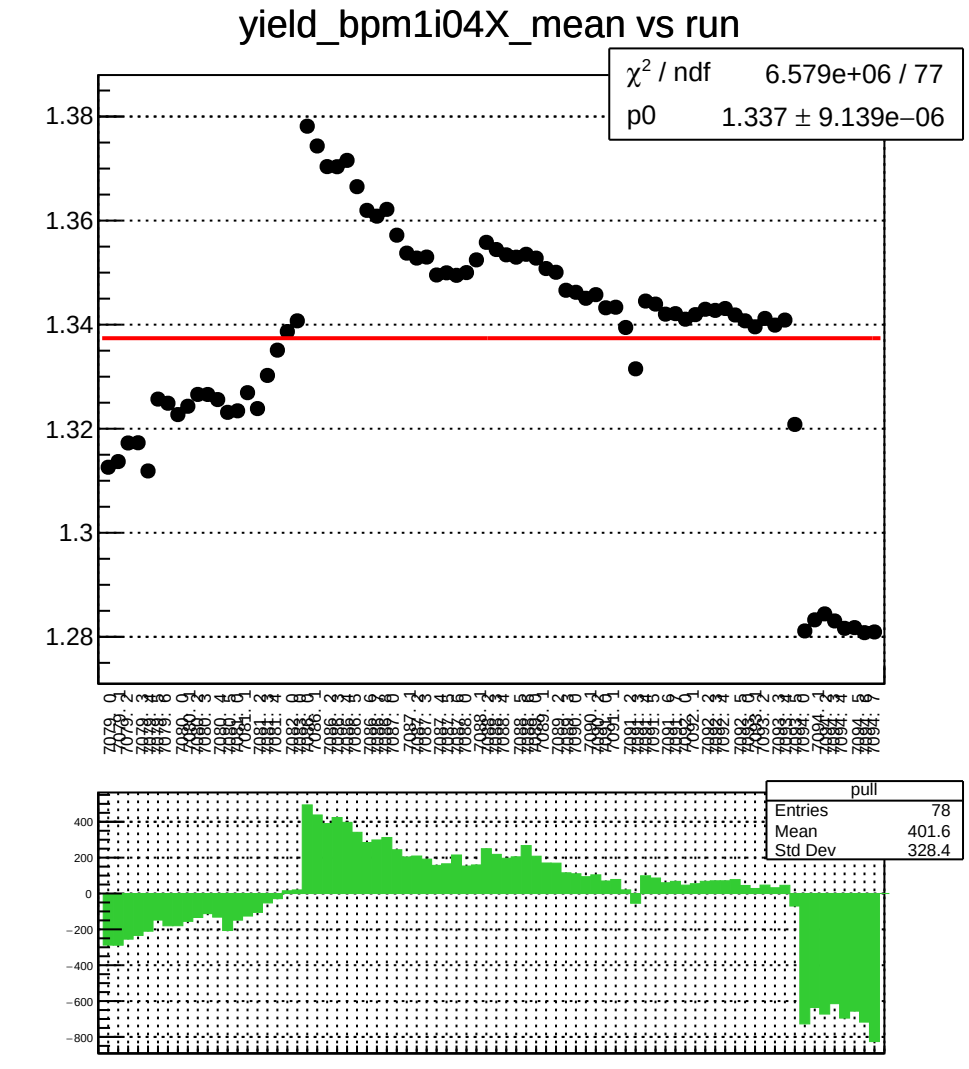

pull1D
Entries 78
Mean −1.96
Std Dev 6.183
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

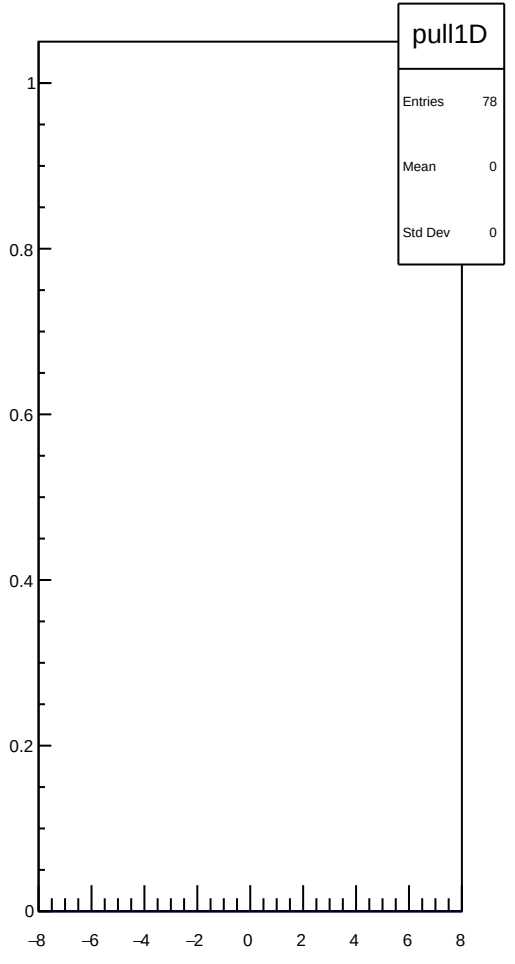

yield_bpm1i02X_rms vs run
χ² / ndf 2.206e+04 / 77
p0 0.0093 ± 7.662e−06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

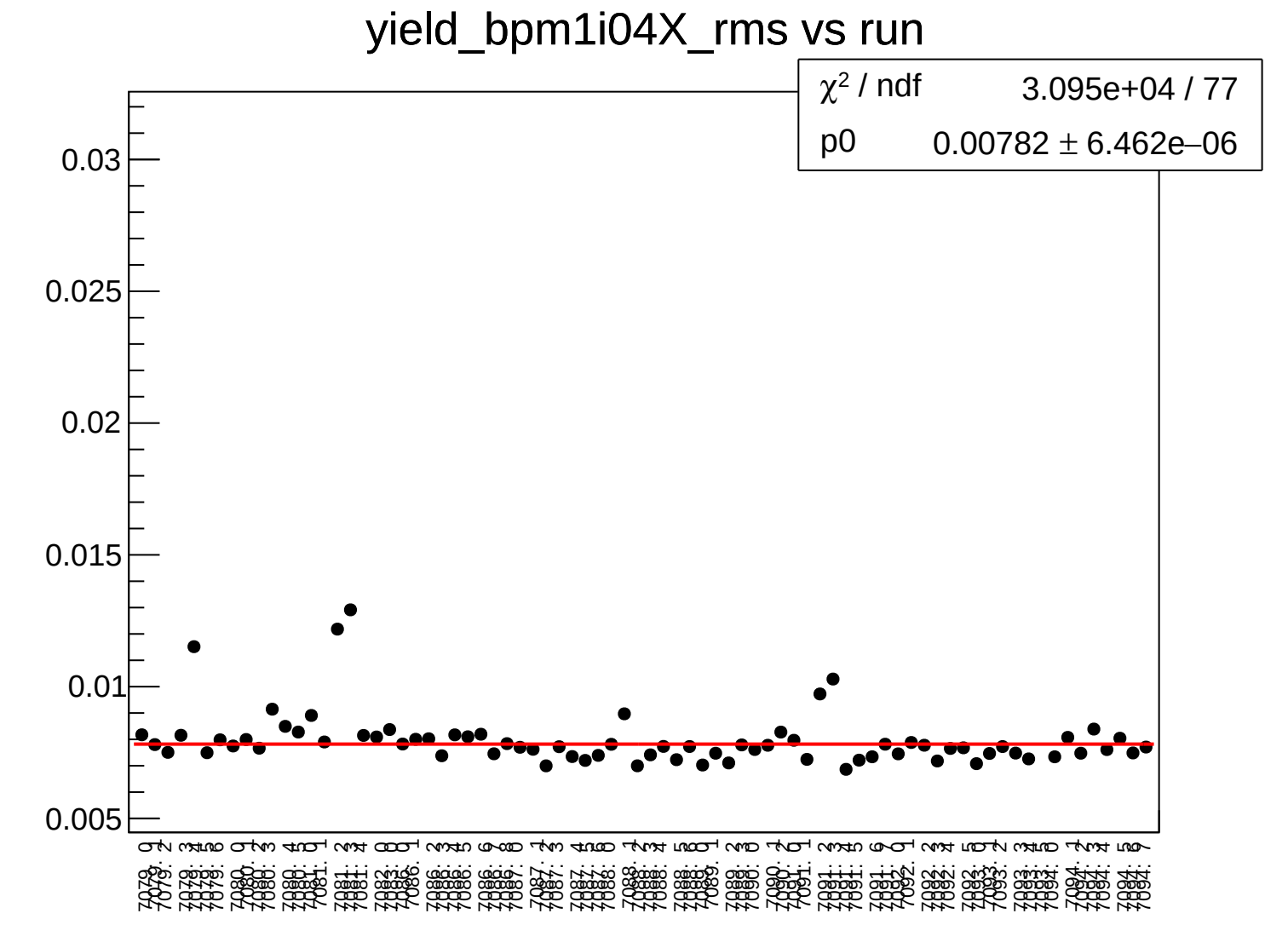

yield_bpm1i02Y_mean vs run
χ² / ndf 2.481e+07 / 77
p0 −0.8679 ± 9.121e−06
−0.8
−0.85
−0.9
−0.95
−1
pull
Entries 78
Mean −3219
Std Dev 3269
1000
500
0
−500
−1000
−1500

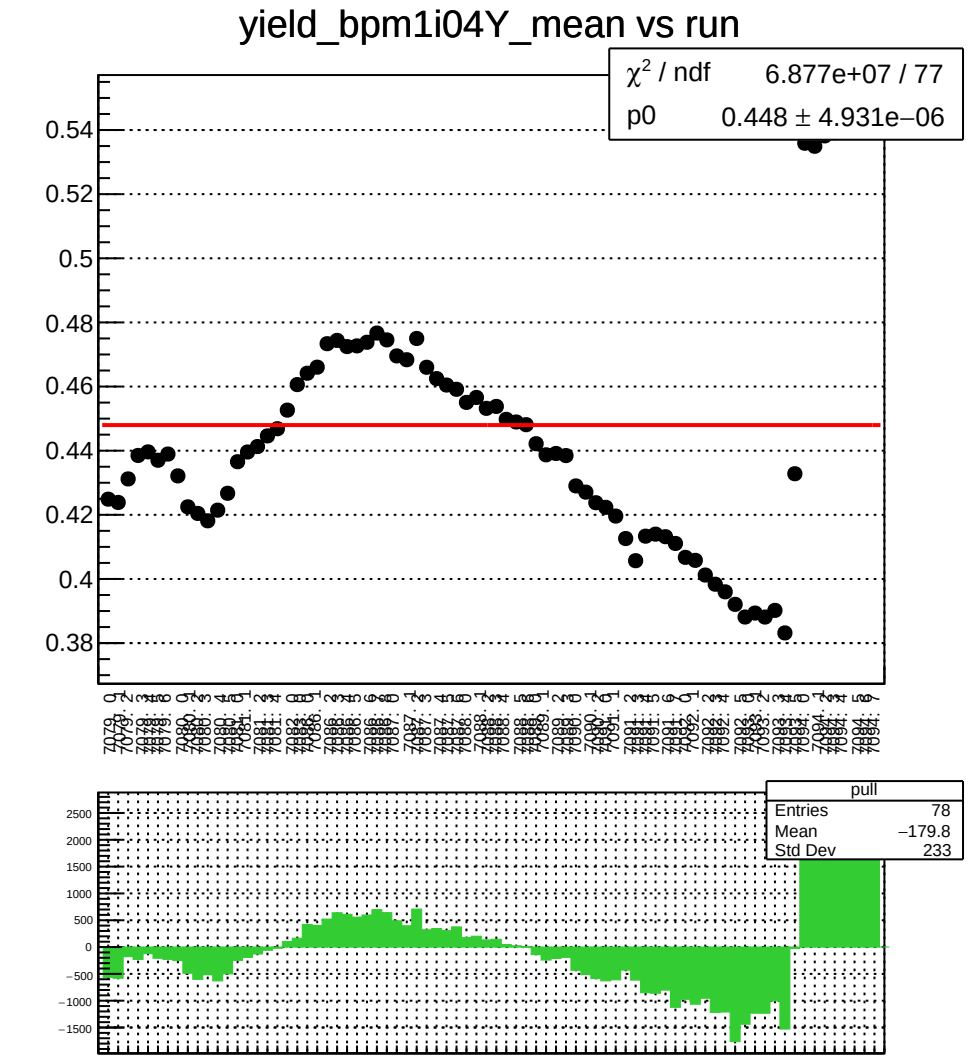

pull1D
Entries 78
Mean 2.4
Std Dev 3.914
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

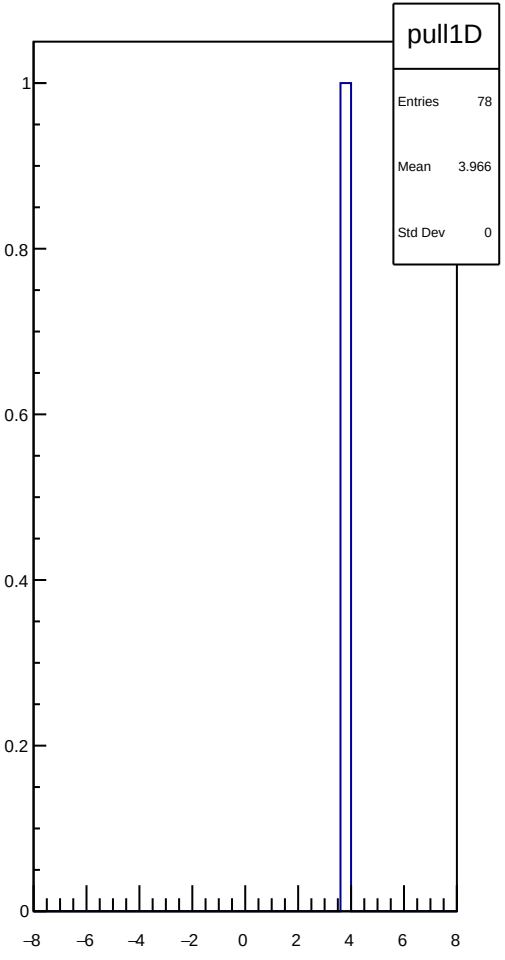

yield_bpm1i02Y_rms vs run
χ² / ndf 3.125e+04 / 77
p0 0.007805 ± 6.45e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

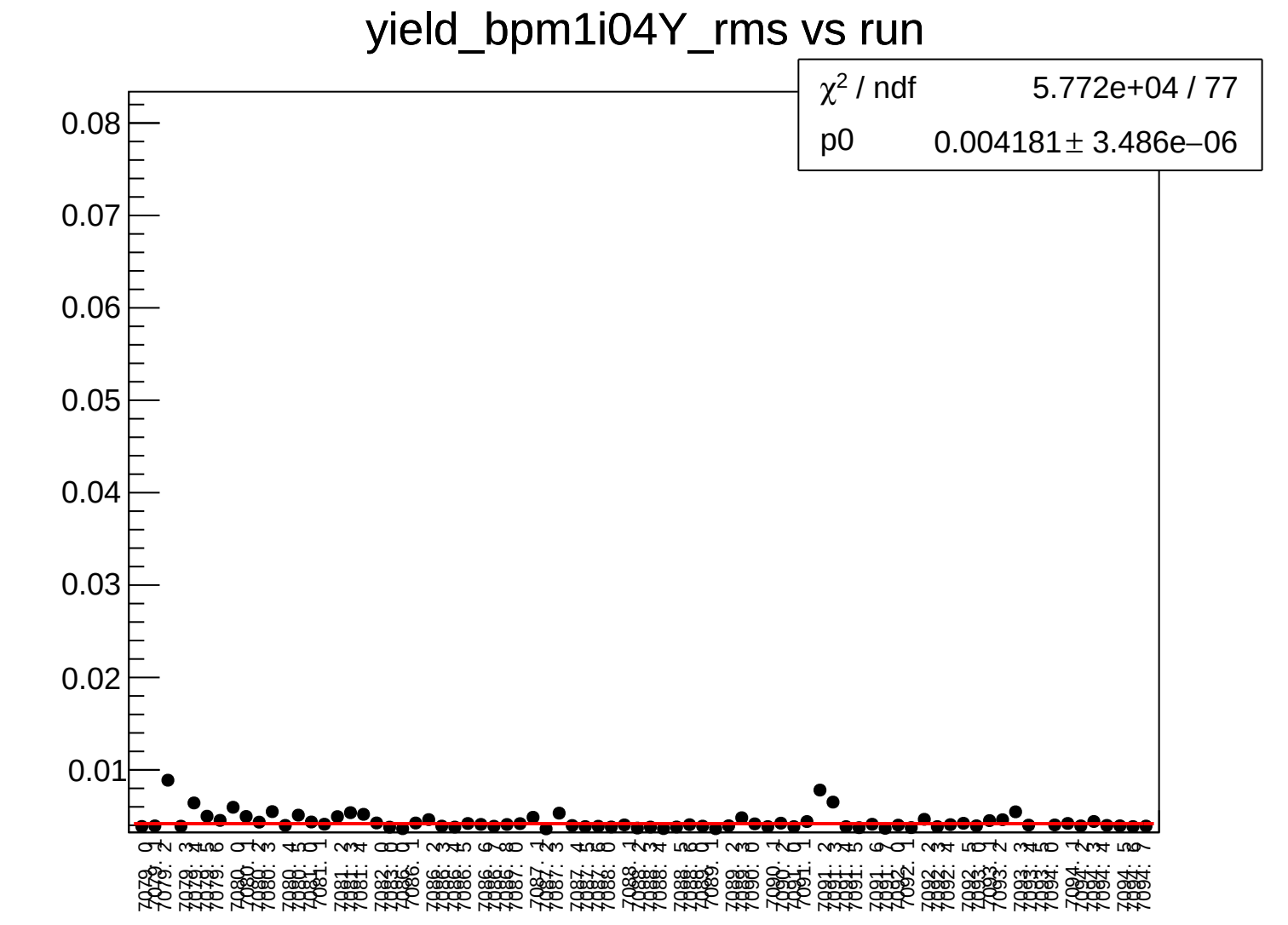

yield_bpm1i04X_mean vs run
χ² / ndf 6.579e+06 / 77
p0 1.337 ± 9.139e−06
1.38
1.36
1.34
1.32
1.3
1.28
pull
Entries 78
Mean 401.6
Std Dev 328.4
400
200
0
−200
−400
−600
−800

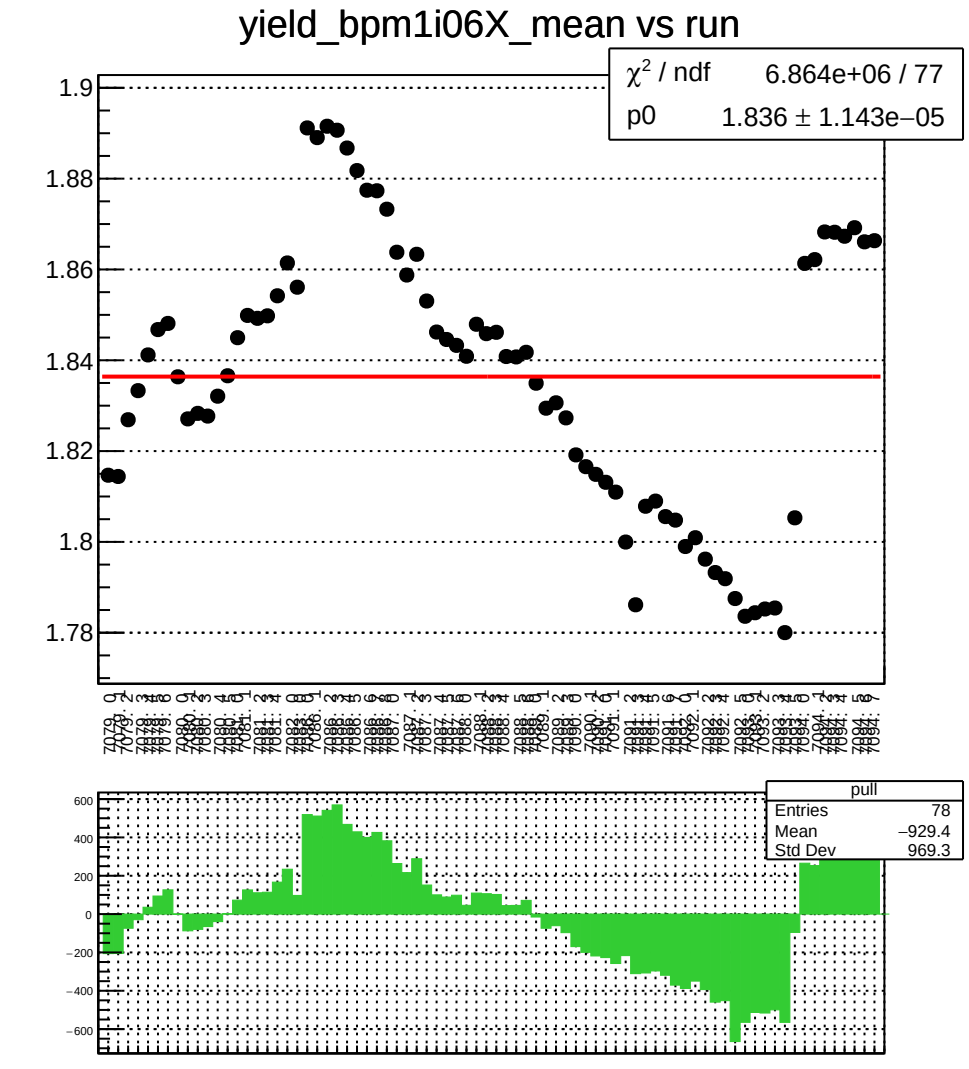

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

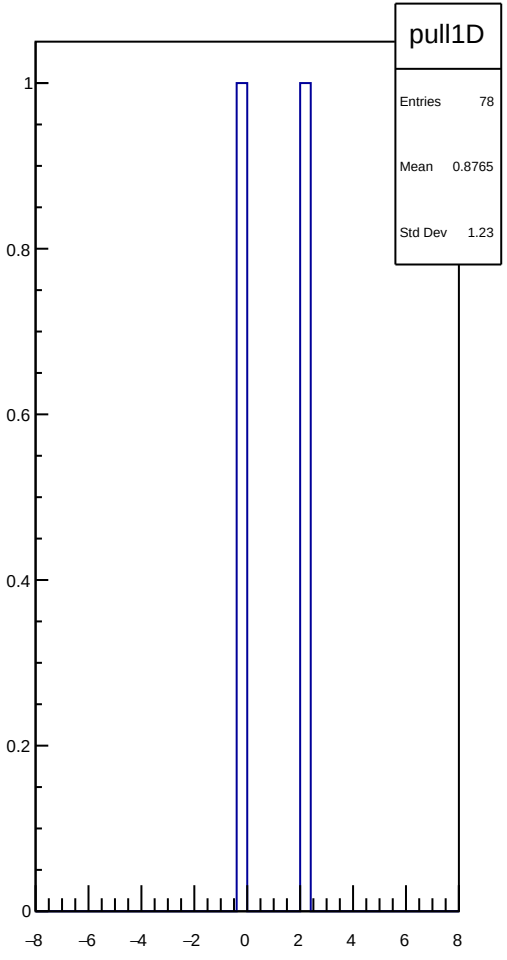

yield_bpm1i04X_rms vs run
χ² / ndf 3.095e+04 / 77
p0 0.00782 ± 6.462e–06
0.03
0.025
0.02
0.015
0.01
0.005

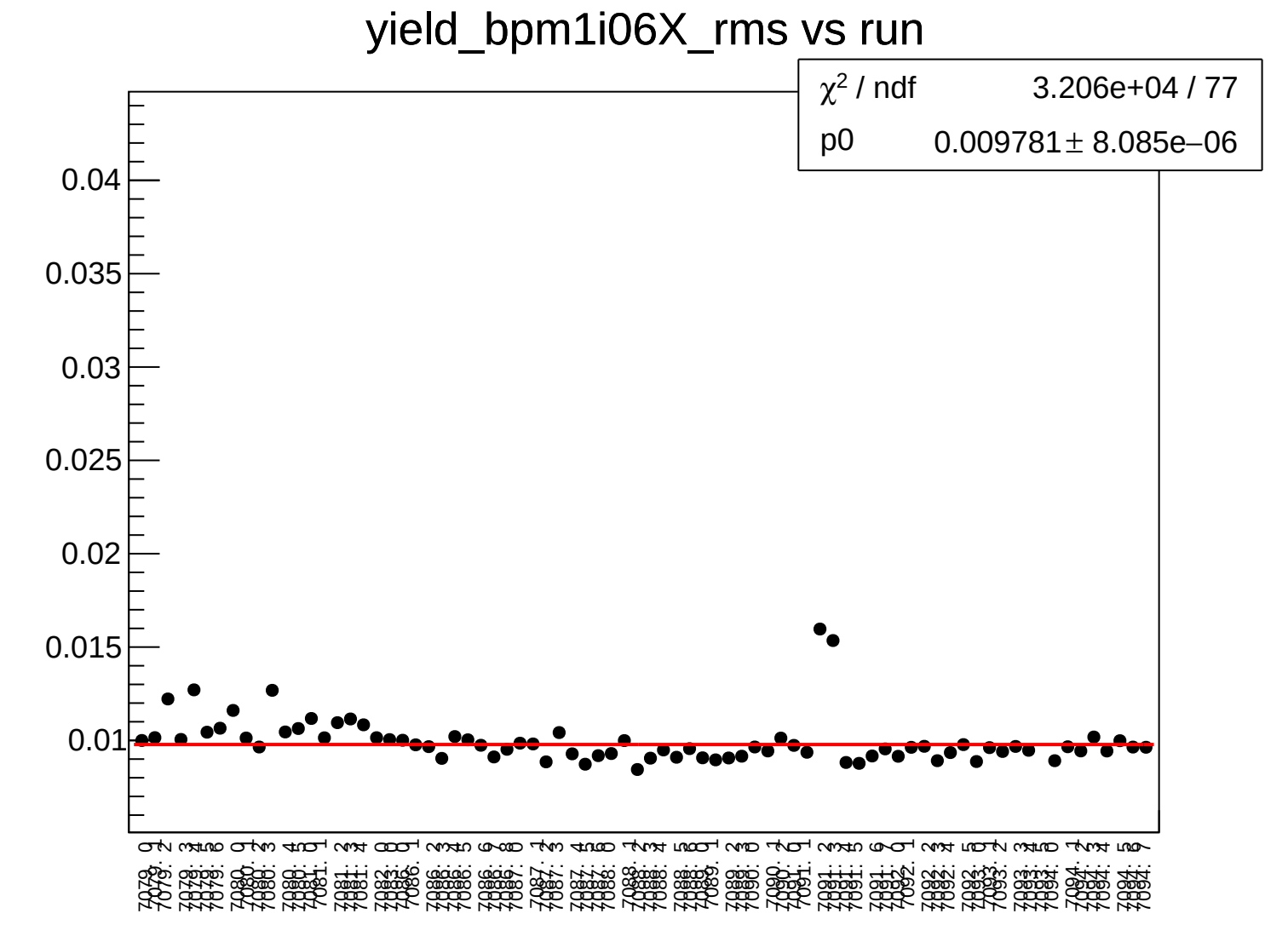

yield_bpm1i04Y_mean vs run
χ² / ndf 6.877e+07 / 77
p0 0.448 ± 4.931e−06
pull
Entries 78
Mean −179.8
Std Dev 233

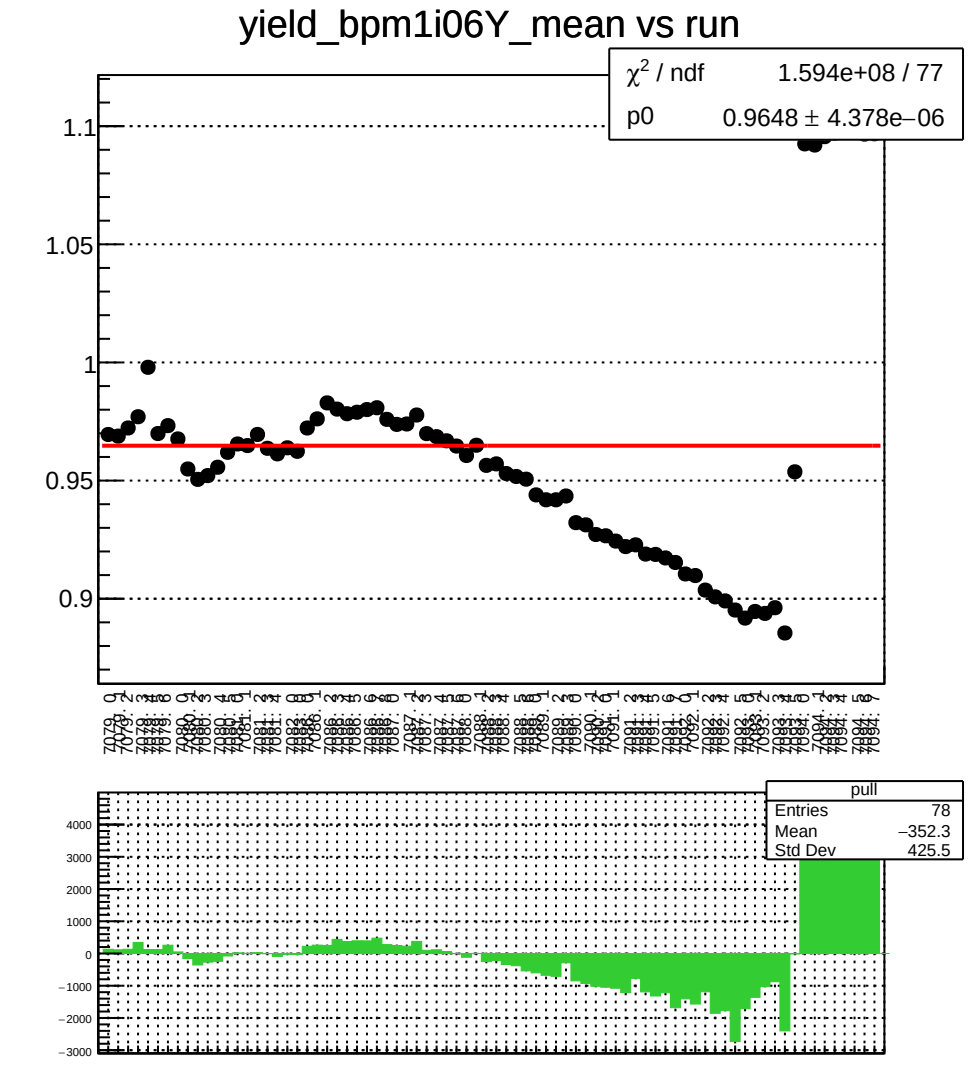

pull1D
Entries 78
Mean 3.966
Std Dev 0

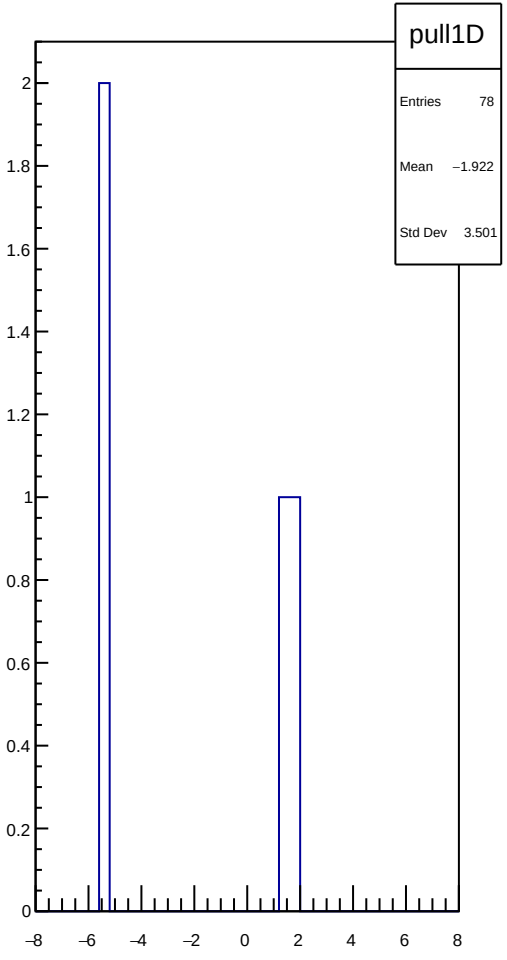

yield_bpm1i04Y_rms vs run
χ^2 / ndf 5.772e+04 / 77
p0 0.004181 ± 3.486e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

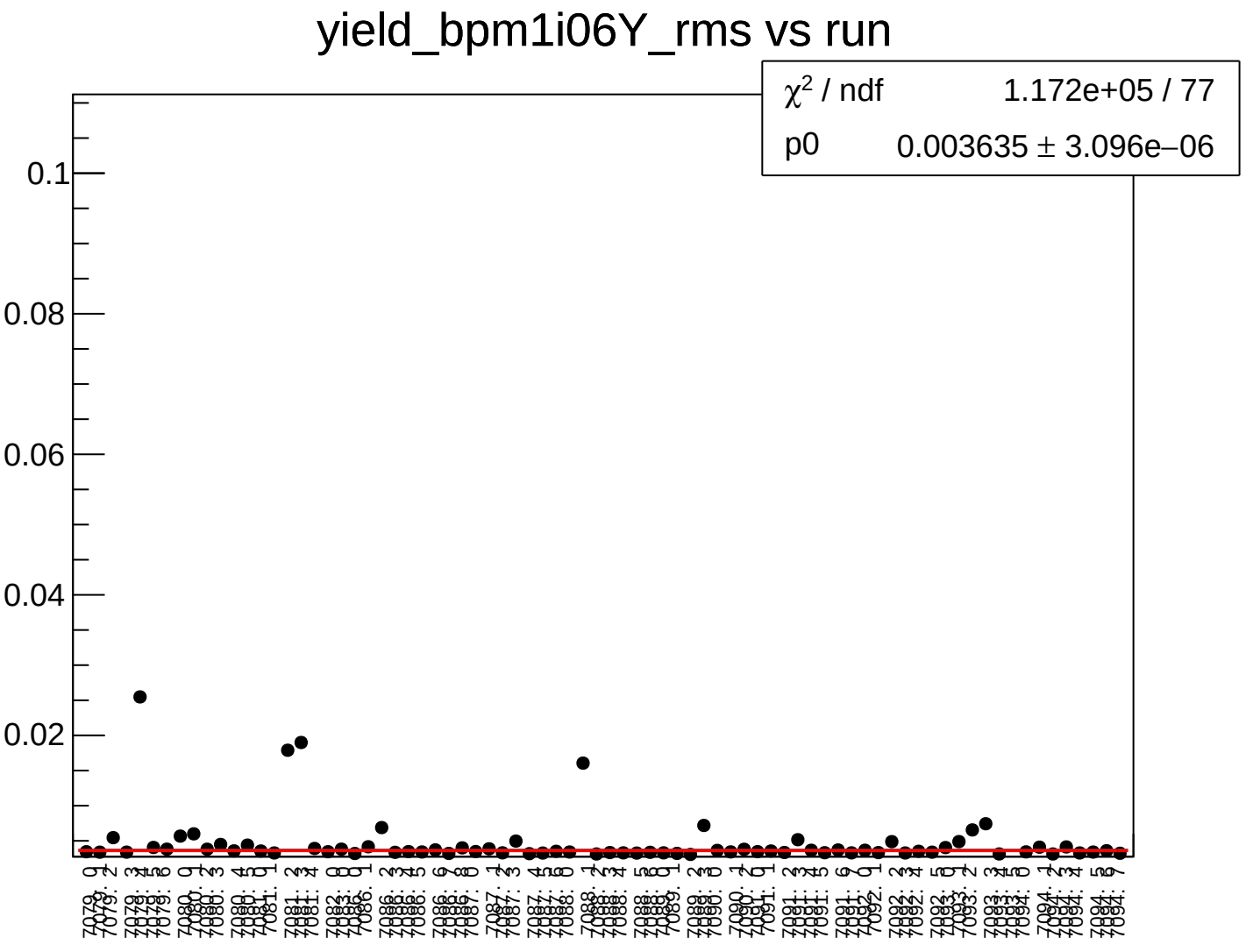

yield_bpm1i06X_mean vs run
χ² / ndf 6.864e+06 / 77
p0 1.836 ± 1.143e−05
1.9
1.88
1.86
1.84
1.82
1.8
1.78
pull
Entries 78
Mean −929.4
Std Dev 969.3
600
400
200
0
−200
−400
−600

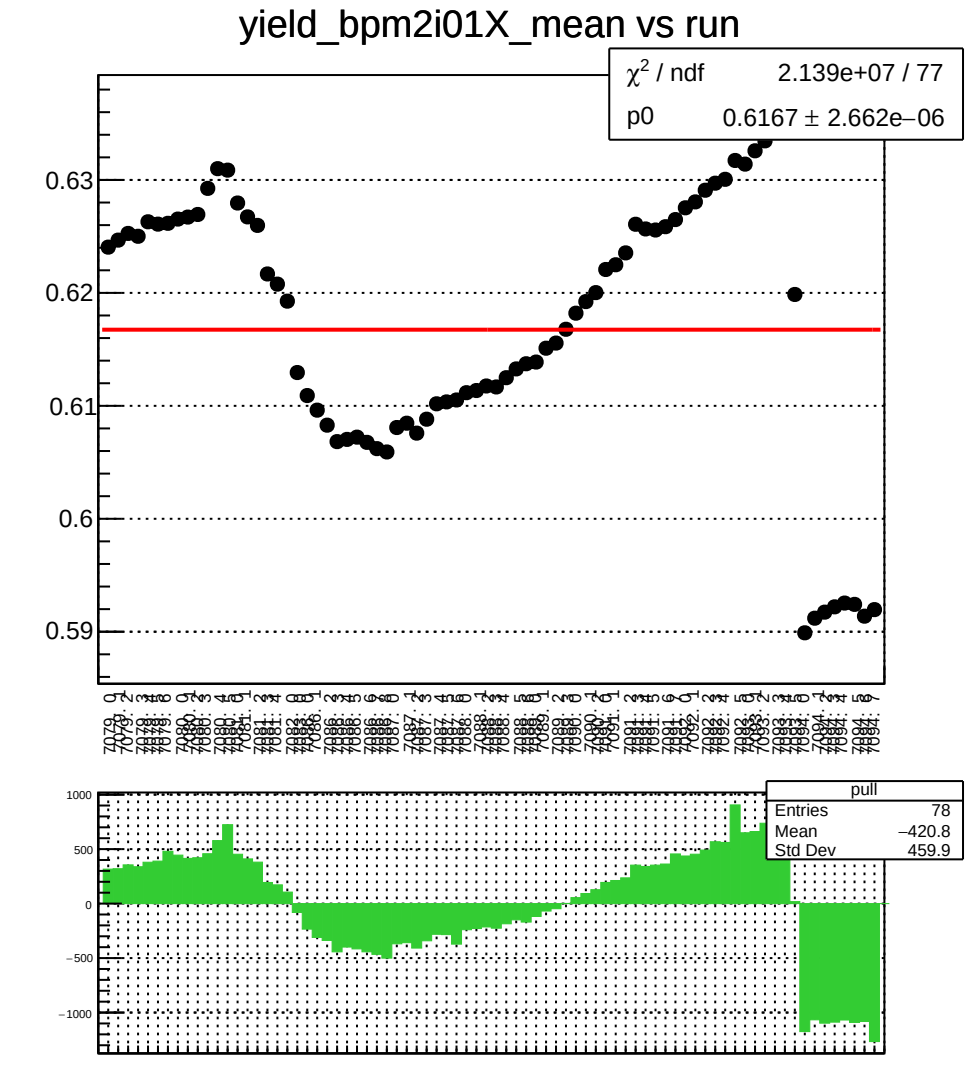

pull1D
Entries 78
Mean 0.8765
Std Dev 1.23
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

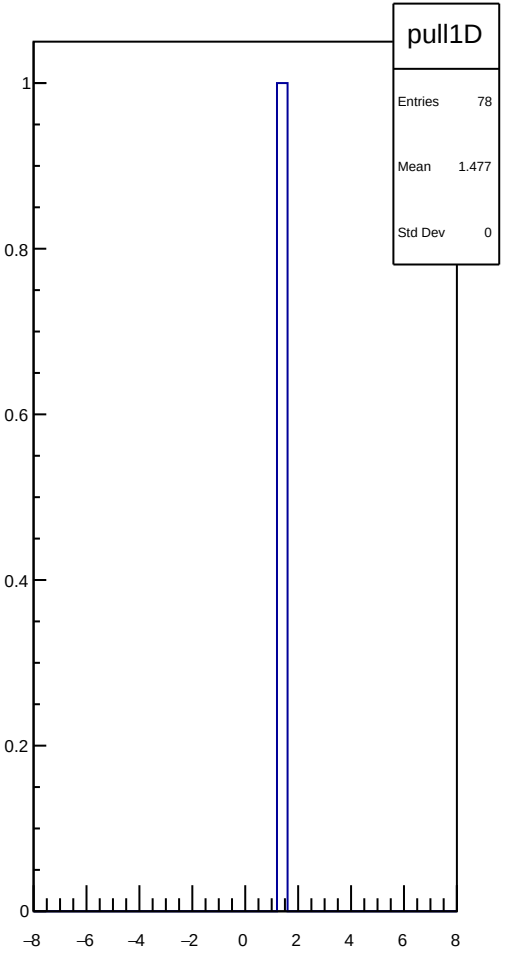

yield_bpm1i06X_rms vs run
χ² / ndf 3.206e+04 / 77
p0 0.009781 ± 8.085e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

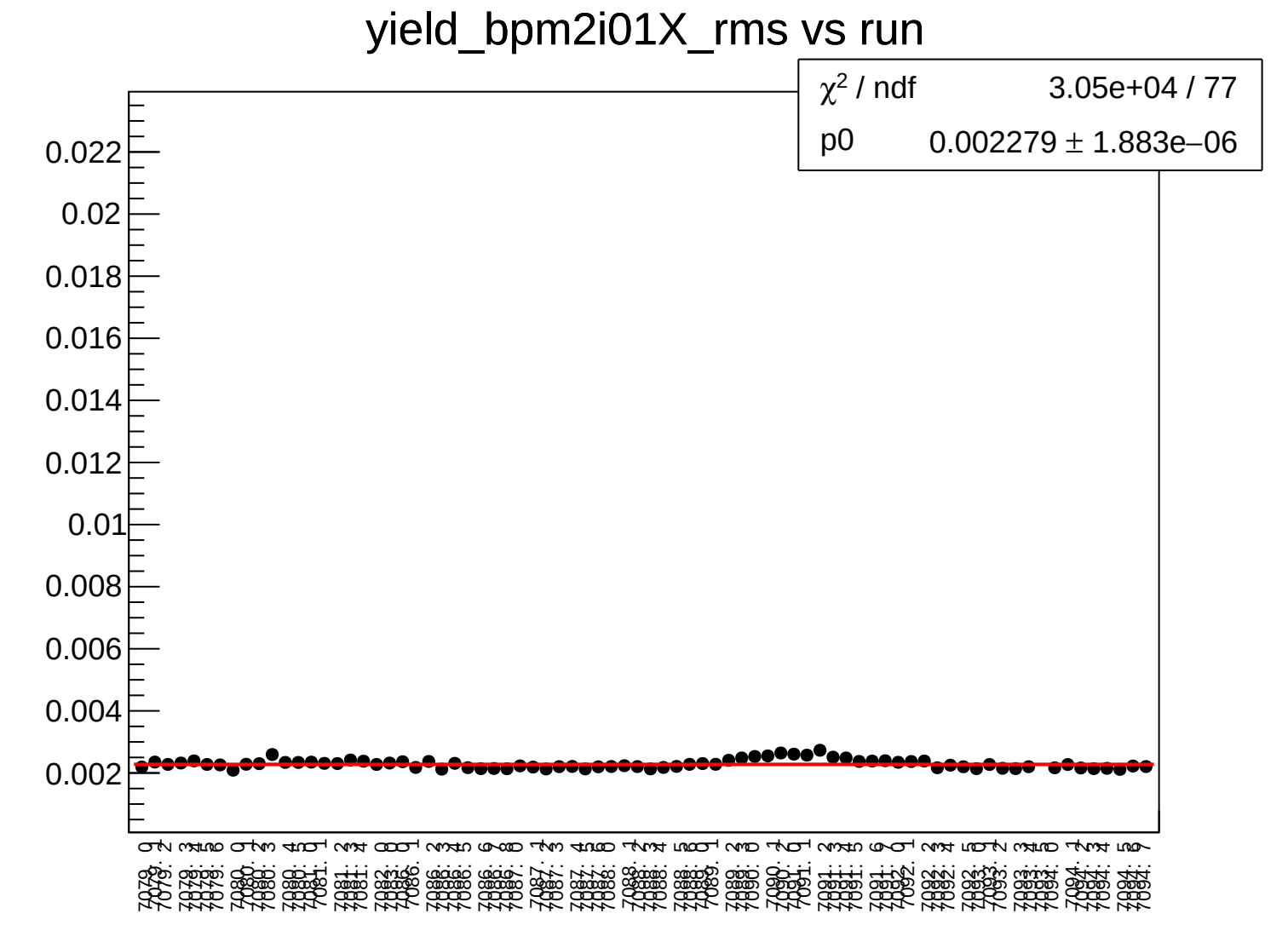

yield_bpm1i06Y_mean vs run
χ² / ndf 1.594e+08 / 77
p0 0.9648 ± 4.378e−06
1.1
1.05
1
0.95
0.9
pull
Entries 78
Mean −352.3
Std Dev 425.5
4000
3000
2000
1000
0
−1000
−2000
−3000

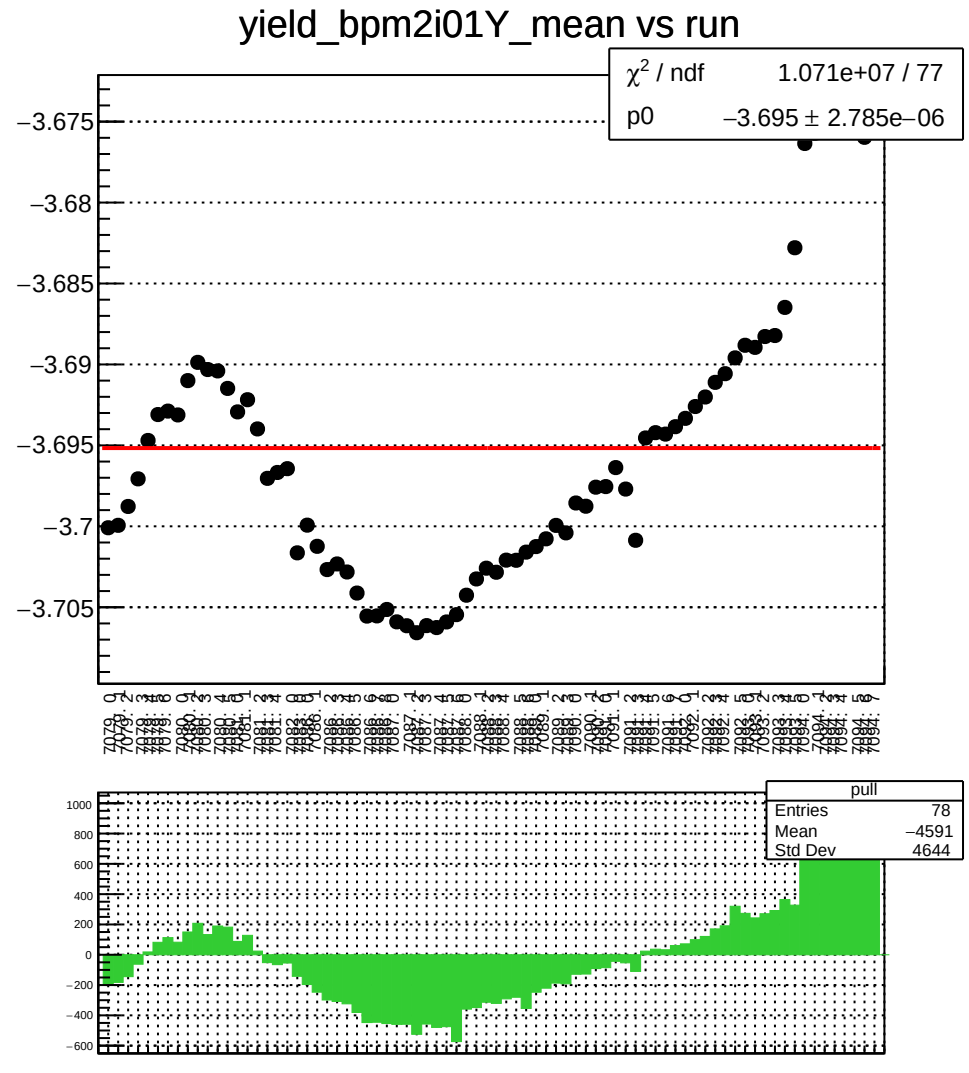

pull1D
Entries 78
Mean −1.922
Std Dev 3.501
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

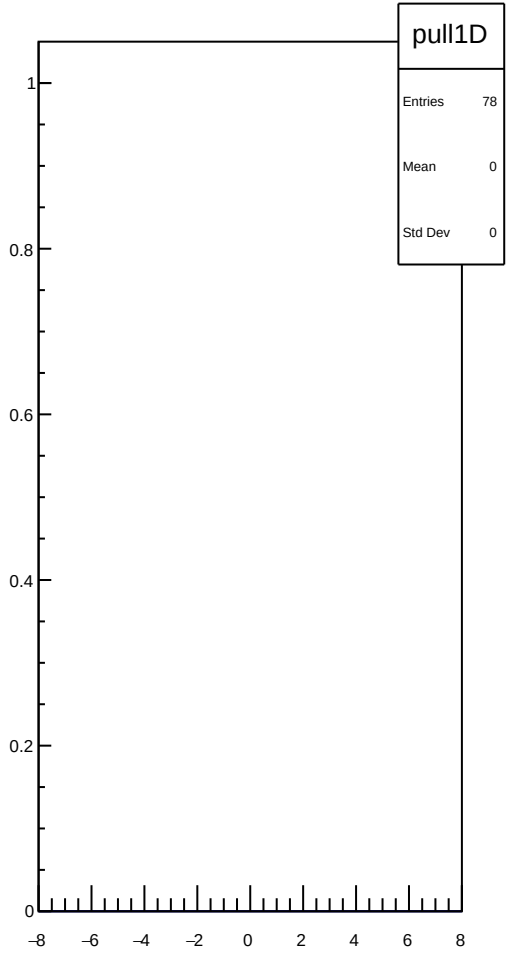

yield_bpm1i06Y_rms vs run
χ² / ndf 1.172e+05 / 77
p0 0.003635 ± 3.096e−06
0.1
0.08
0.06
0.04
0.02

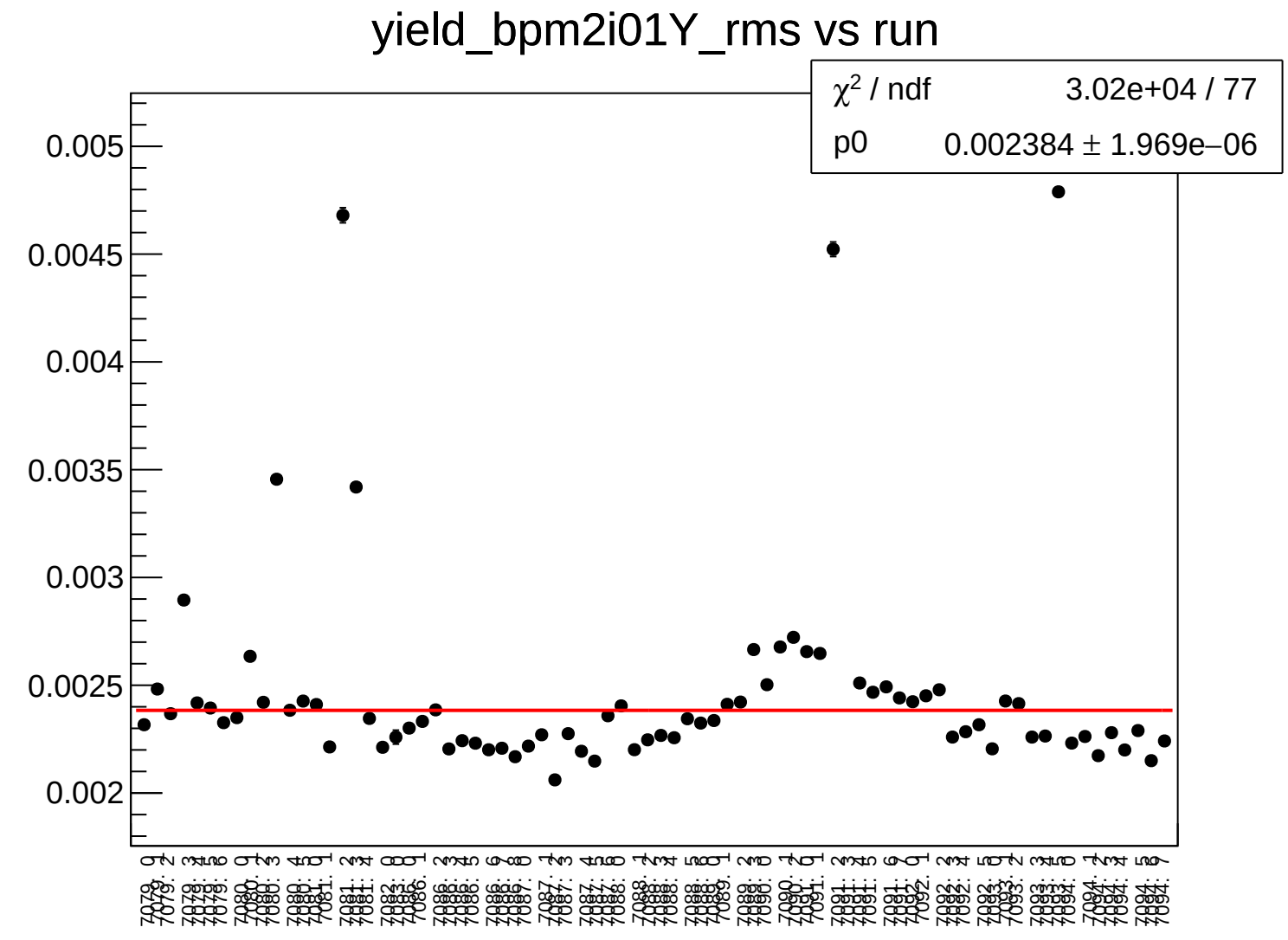

yield_bpm2i01X_mean vs run
χ² / ndf 2.139e+07 / 77
p0 0.6167 ± 2.662e−06
0.63
0.62
0.61
0.6
0.59
pull
Entries 78
Mean −420.8
Std Dev 459.9
1000
500
0
−500
−1000

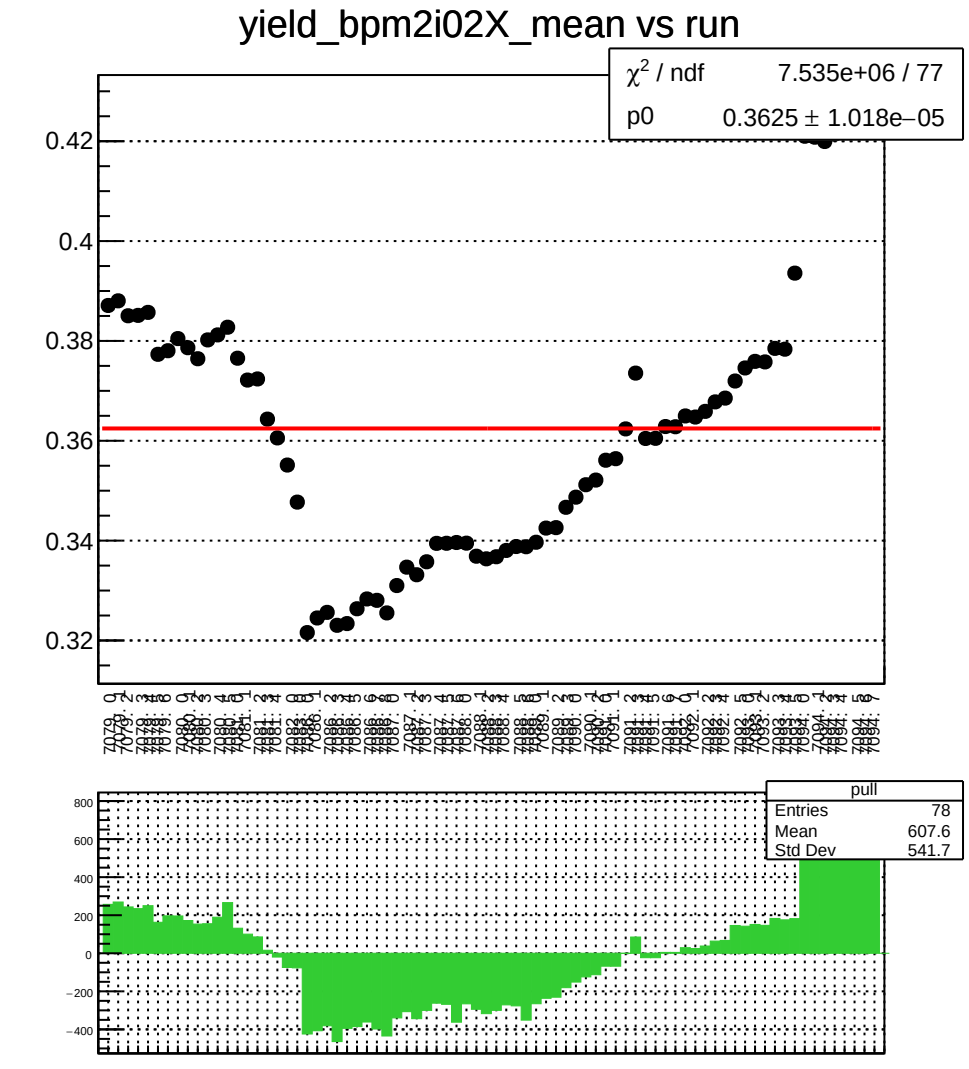

pull1D
Entries 78
Mean 1.477
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

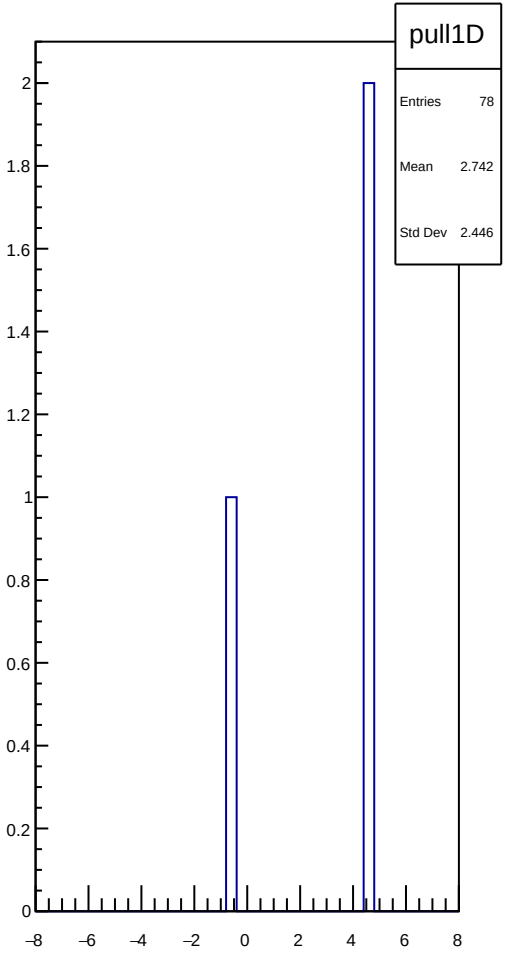

yield_bpm2i01X_rms vs run
χ² / ndf 3.05e+04 / 77
p0 0.002279 ± 1.883e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

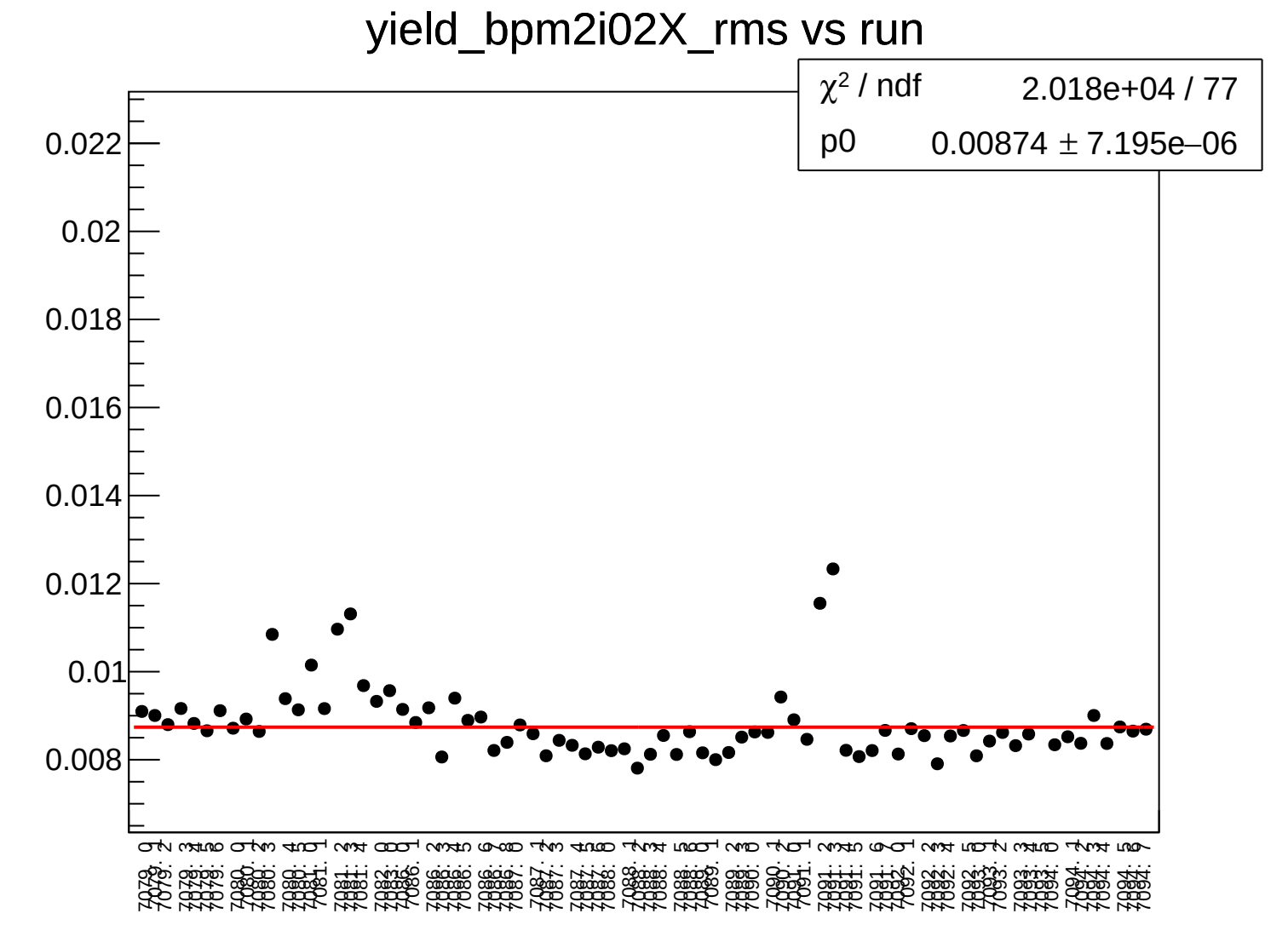

yield_bpm2i01Y_mean vs run
χ² / ndf 1.071e+07 / 77
p0 −3.695 ± 2.785e−06
−3.675
−3.68
−3.685
−3.69
−3.695
−3.7
−3.705
pull
Entries 78
Mean −4591
Std Dev 4644
1000
800
600
400
200
0
−200
−400
−600

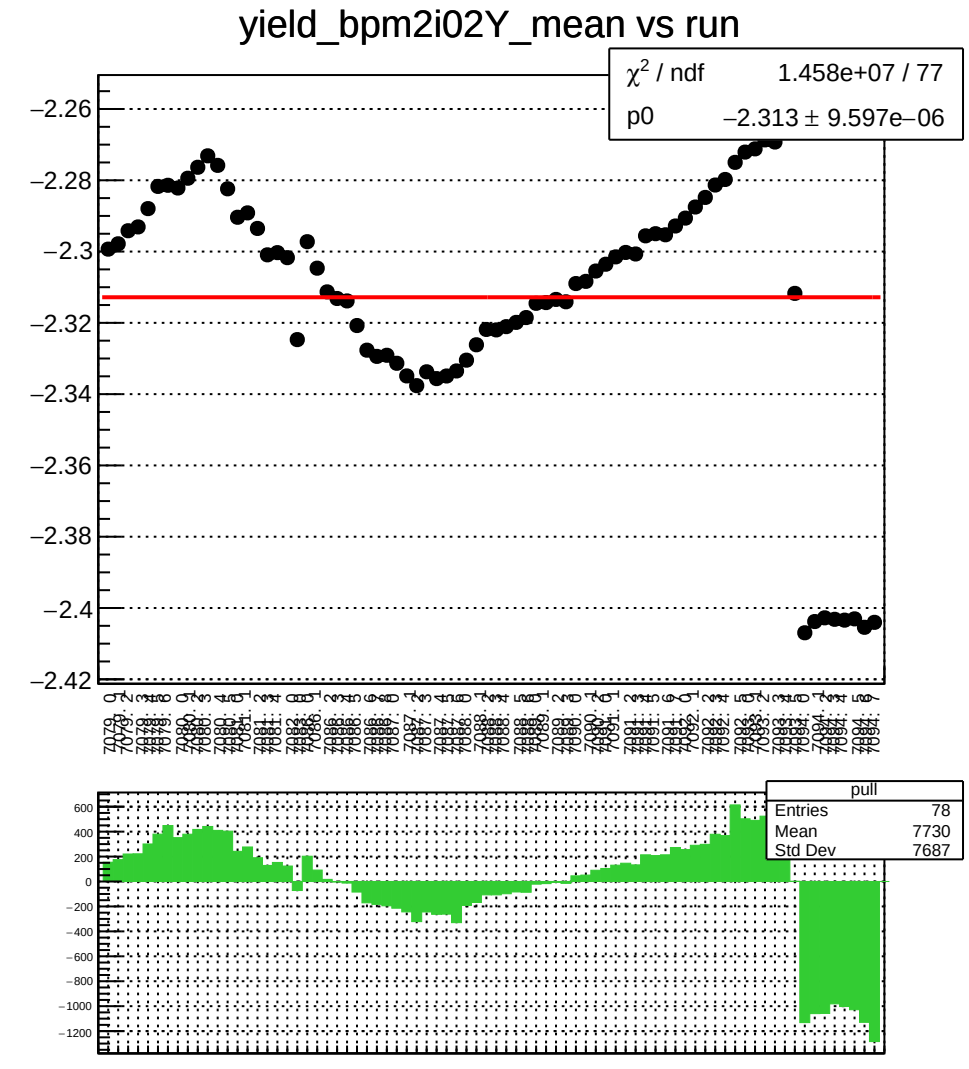

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

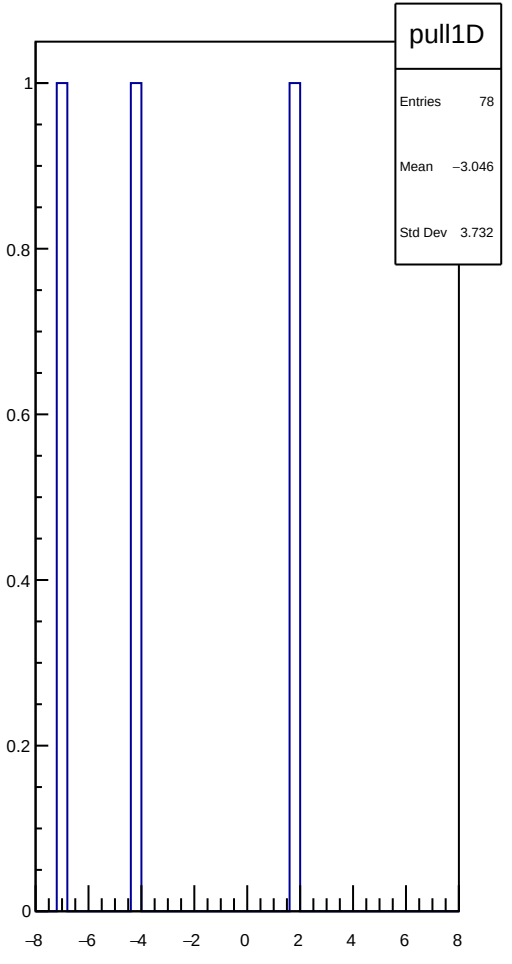

yield_bpm2i01Y_rms vs run
χ² / ndf 3.02e+04 / 77
p0 0.002384 ± 1.969e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

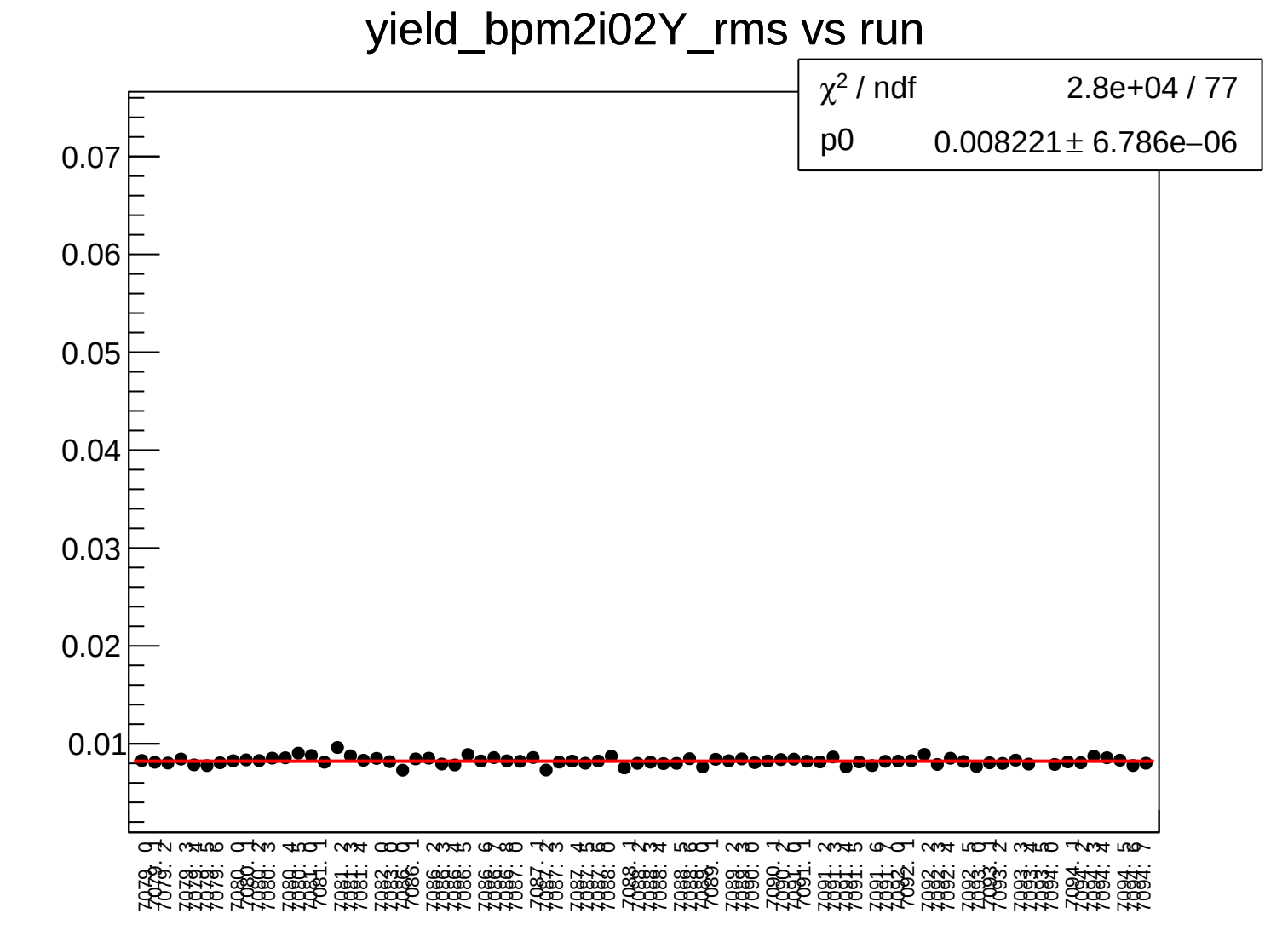

yield_bpm2i02X_mean vs run
χ² / ndf 7.535e+06 / 77
p0 0.3625 ± 1.018e−05
0.42
0.4
0.38
0.36
0.34
0.32
pull
Entries 78
Mean 607.6
Std Dev 541.7
800
600
400
200
0
−200
−400

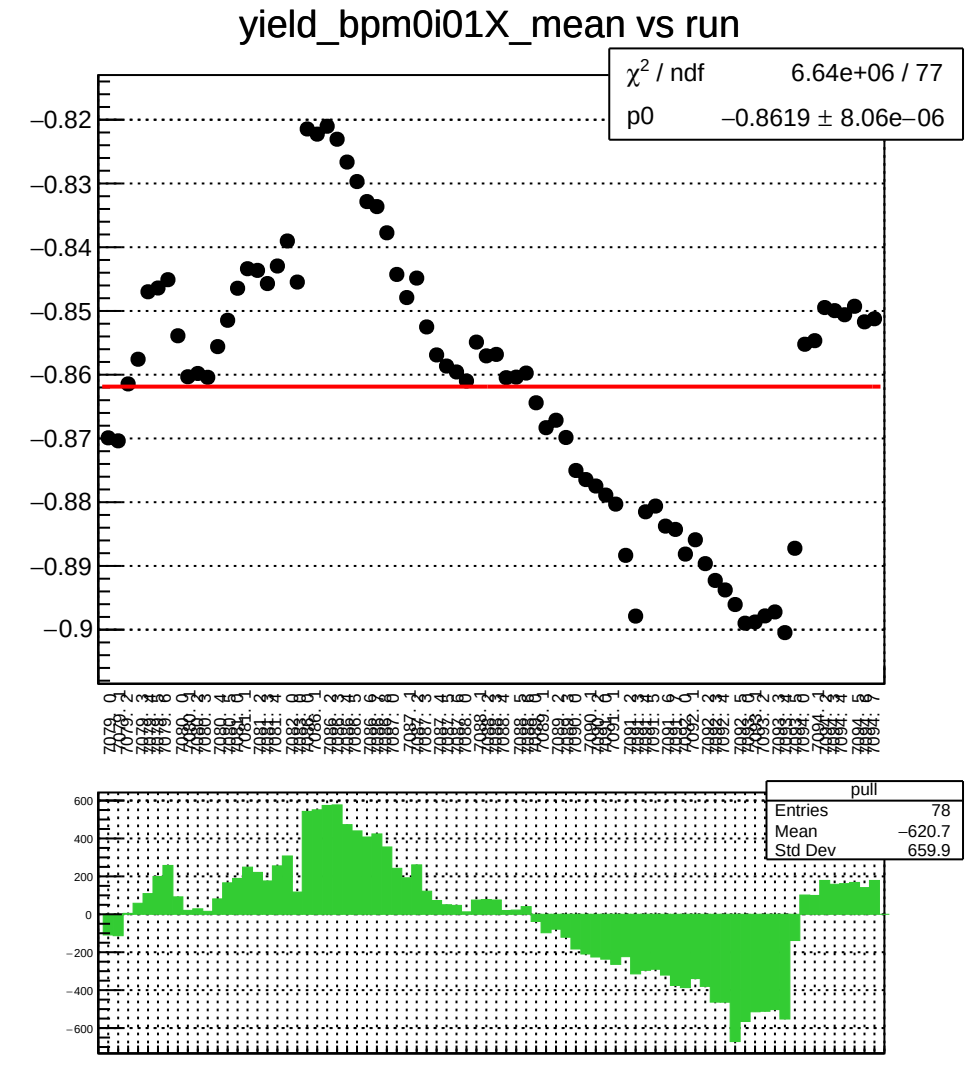

pull1D
Entries 78
Mean 2.742
Std Dev 2.446
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

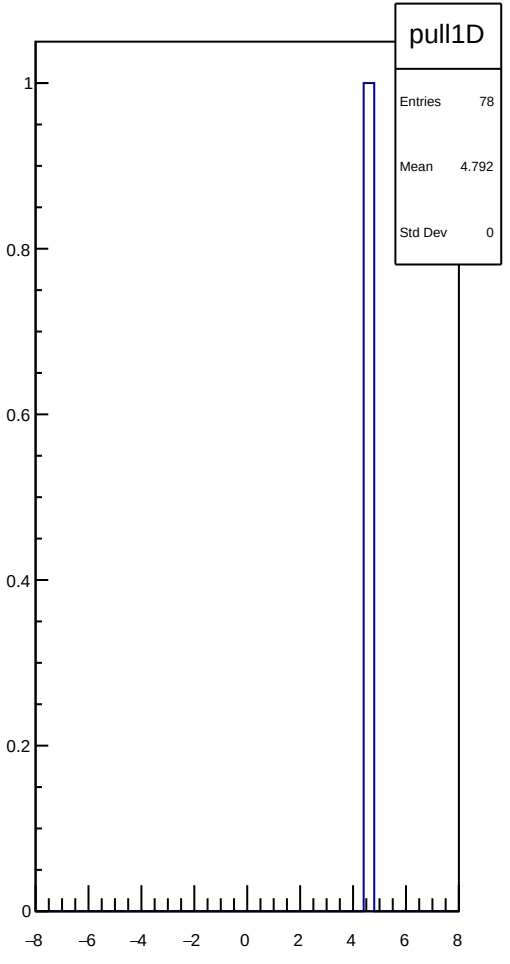

yield_bpm2i02X_rms vs run
χ² / ndf 2.018e+04 / 77
p0 0.00874 ± 7.195e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

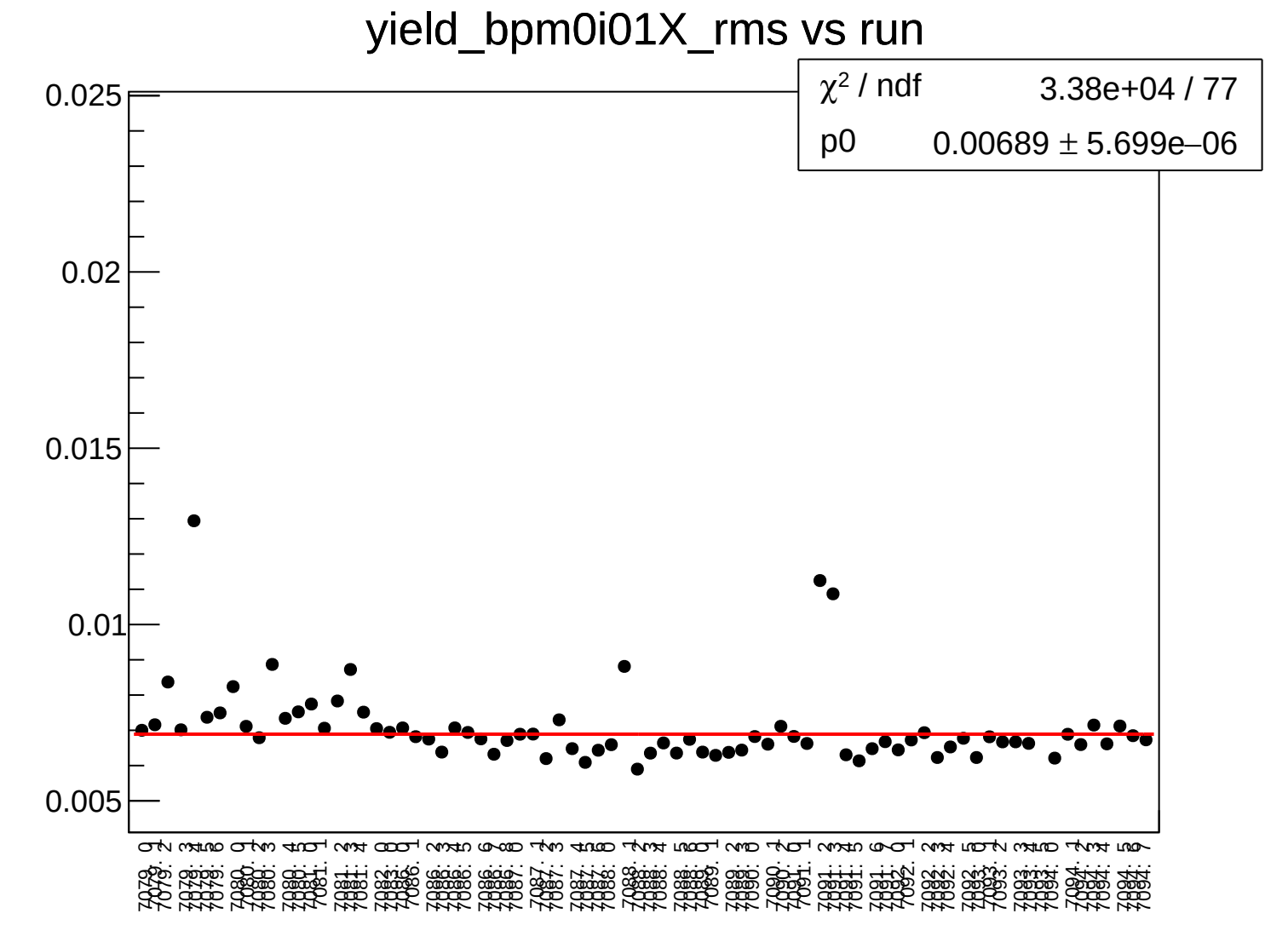

yield_bpm2i02Y_mean vs run
χ² / ndf 1.458e+07 / 77
p0 −2.313 ± 9.597e−06
−2.26
−2.28
−2.3
−2.32
−2.34
−2.36
−2.38
−2.4
−2.42
pull
Entries 78
Mean 7730
Std Dev 7687
600
400
200
0
−200
−400
−600
−800
−1000
−1200

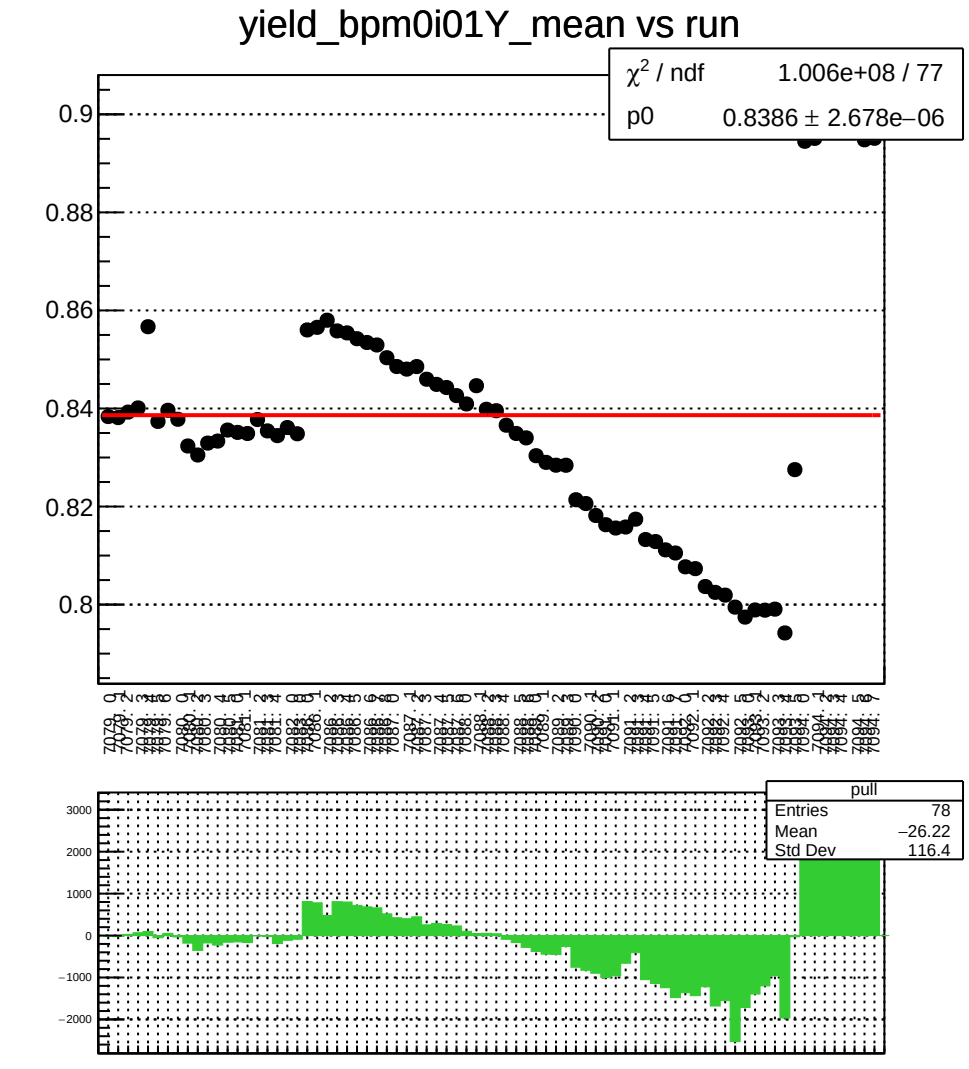

pull1D
Entries 78
Mean −3.046
Std Dev 3.732
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

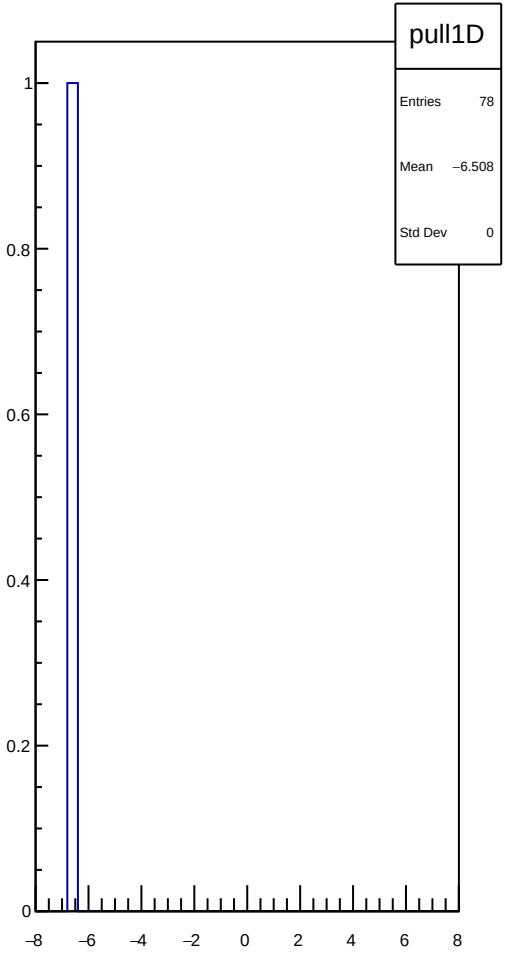

yield_bpm2i02Y_rms vs run
χ² / ndf 2.8e+04 / 77
p0 0.008221 ± 6.786e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

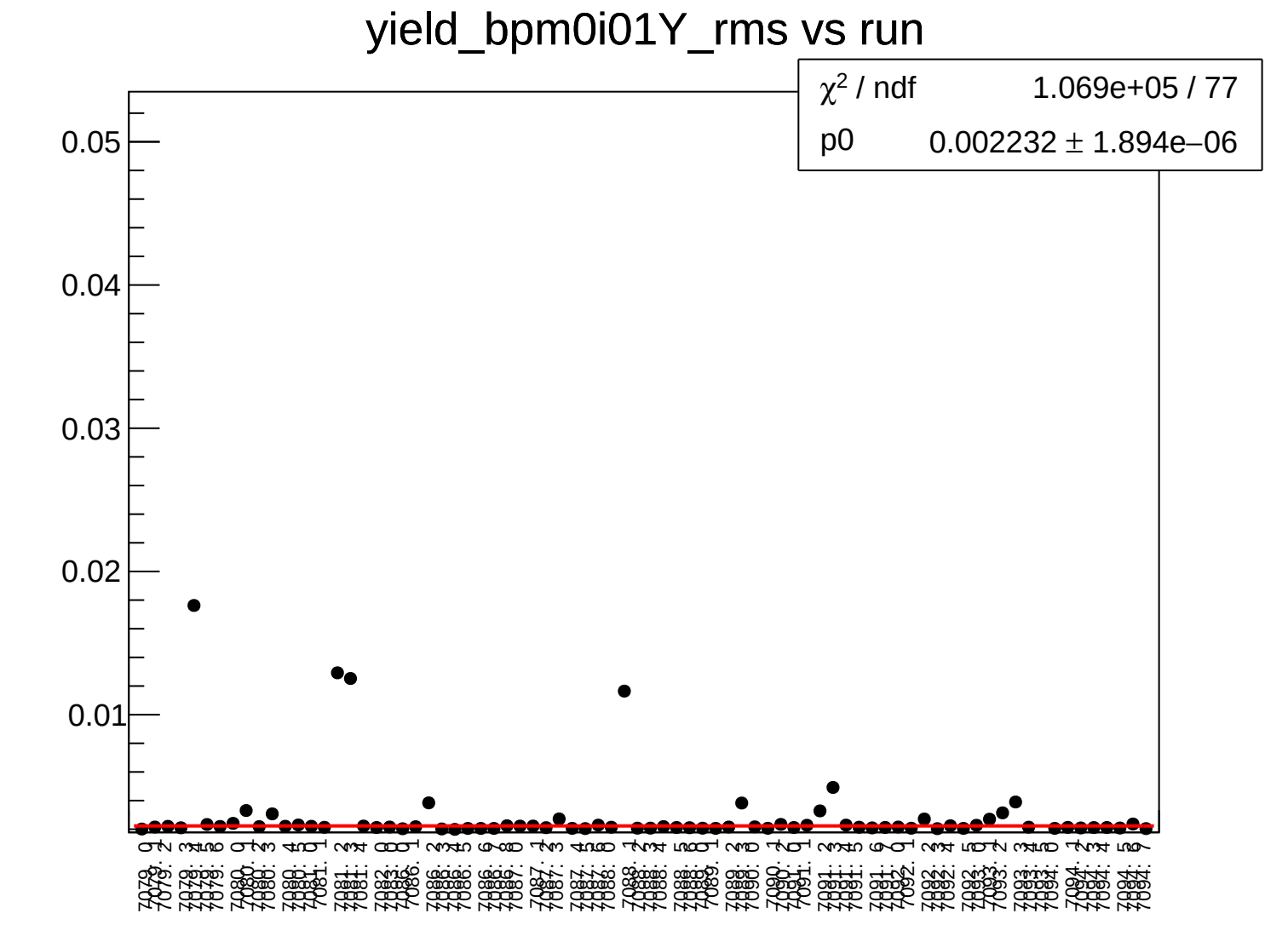

yield_bpm0i01X_mean vs run
χ² / ndf 6.64e+06 / 77
p0 −0.8619 ± 8.06e−06
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
−0.89
−0.9
pull
Entries 78
Mean −620.7
Std Dev 659.9
600
400
200
0
−200
−400
−600

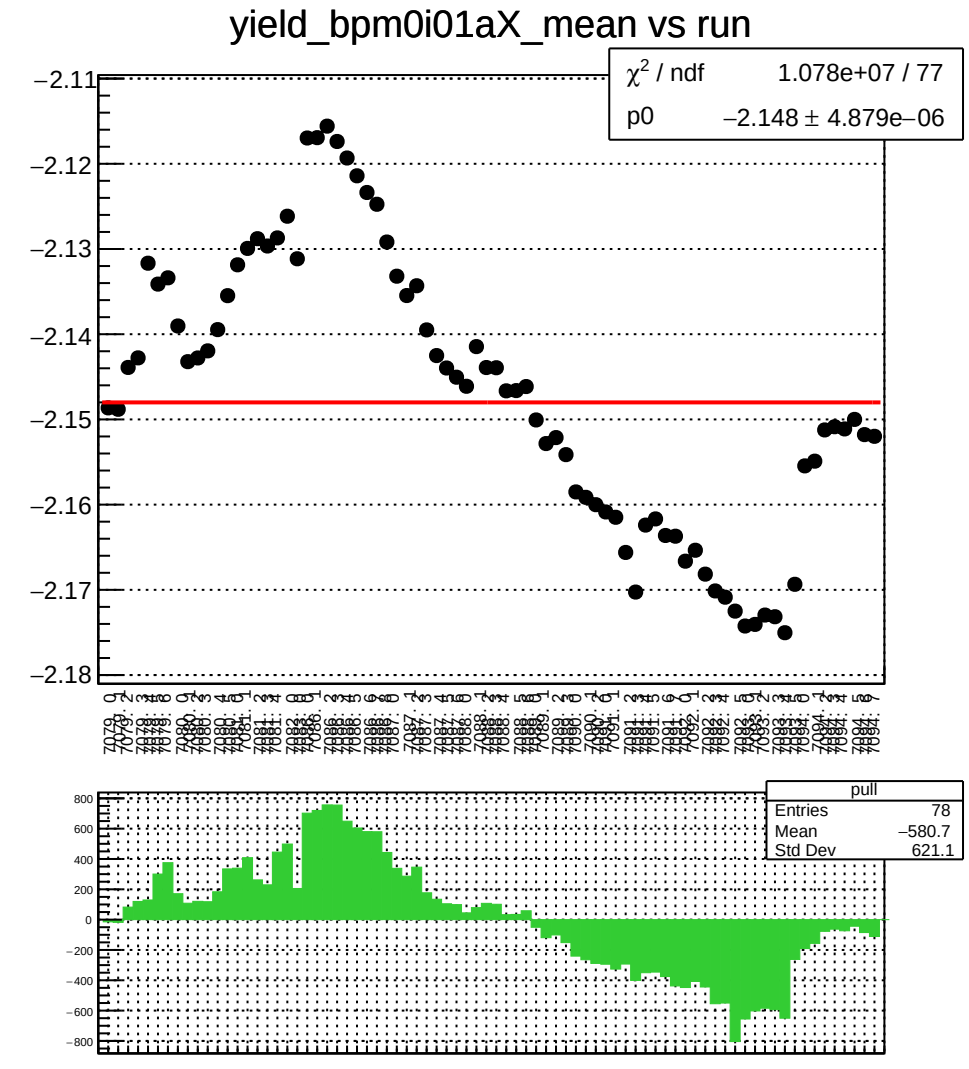

pull1D
Entries 78
Mean 4.792
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

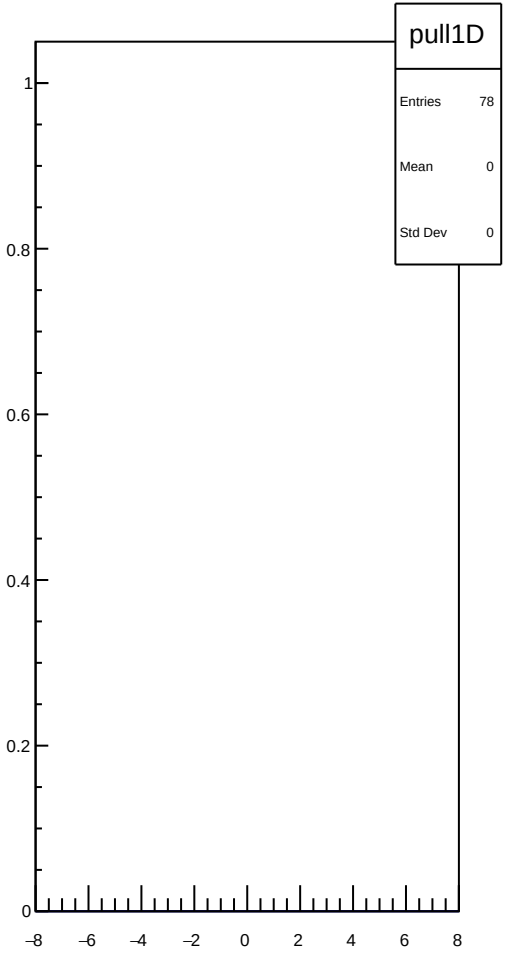

yield_bpm0i01X_rms vs run
χ² / ndf 3.38e+04 / 77
p0 0.00689 ± 5.699e–06
0.025
0.02
0.015
0.01
0.005

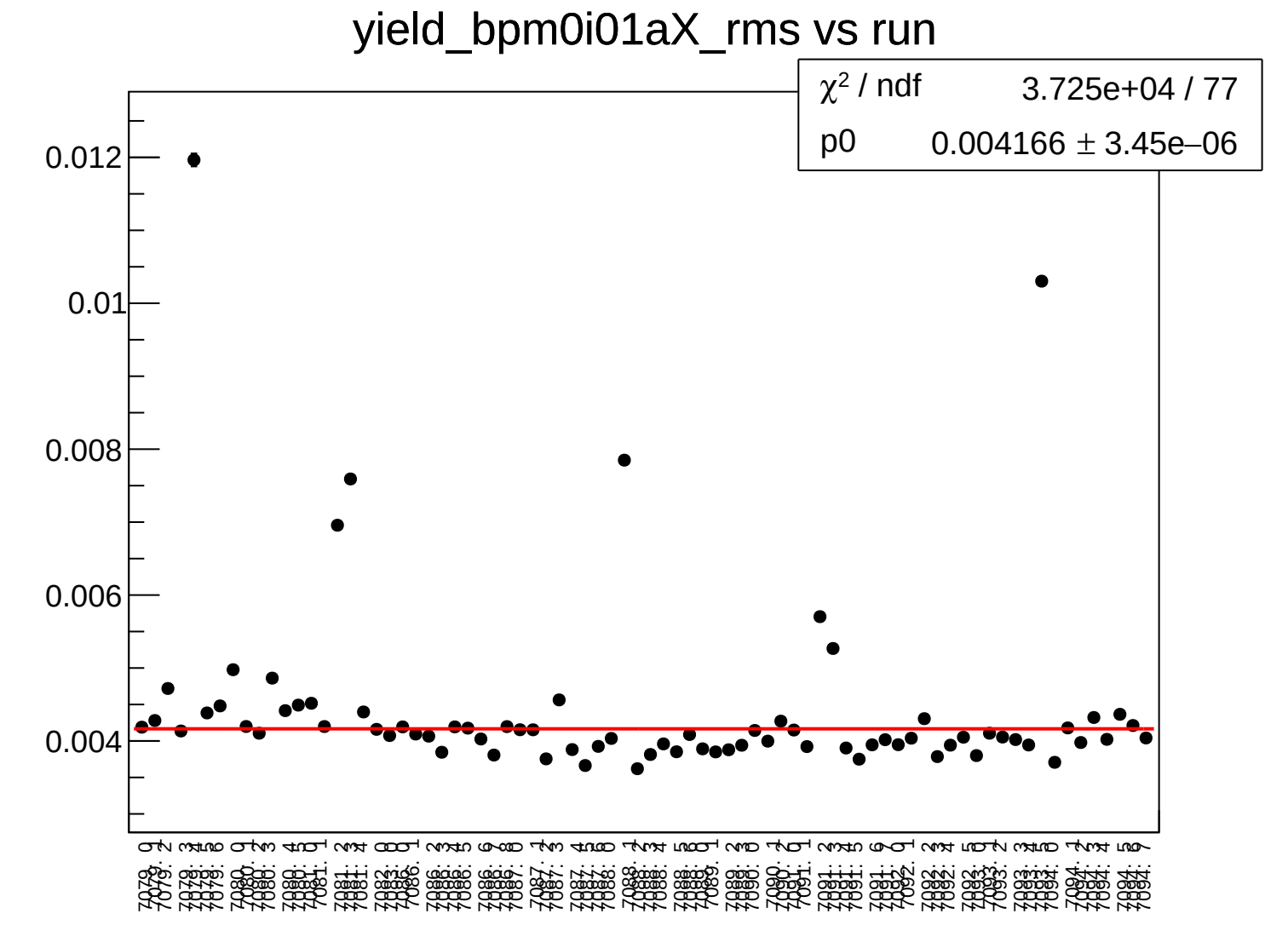

yield_bpm0i01Y_mean vs run
χ² / ndf 1.006e+08 / 77
p0 0.8386 ± 2.678e−06
0.9
0.88
0.86
0.84
0.82
0.8
pull
Entries 78
Mean −26.22
Std Dev 116.4
3000
2000
1000
0
−1000
−2000

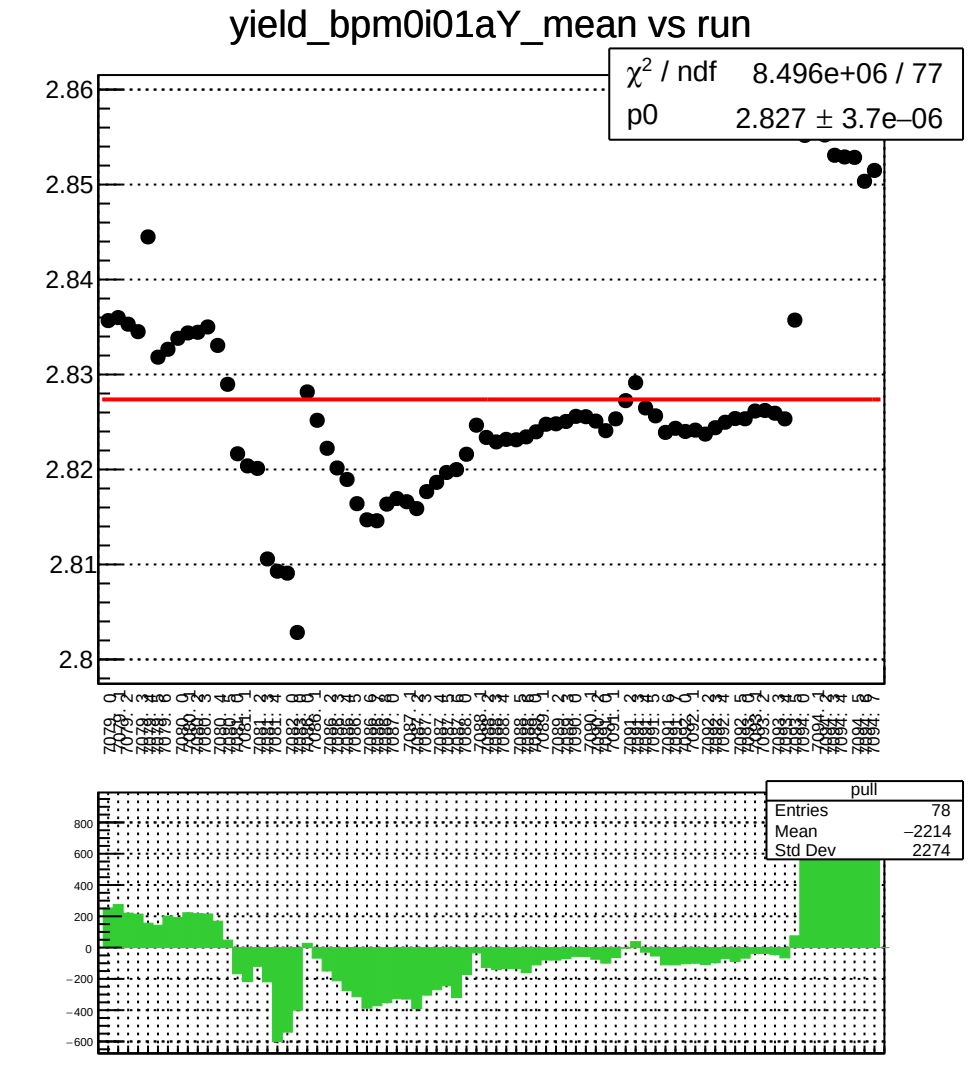

pull1D
Entries 78
Mean −6.508
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

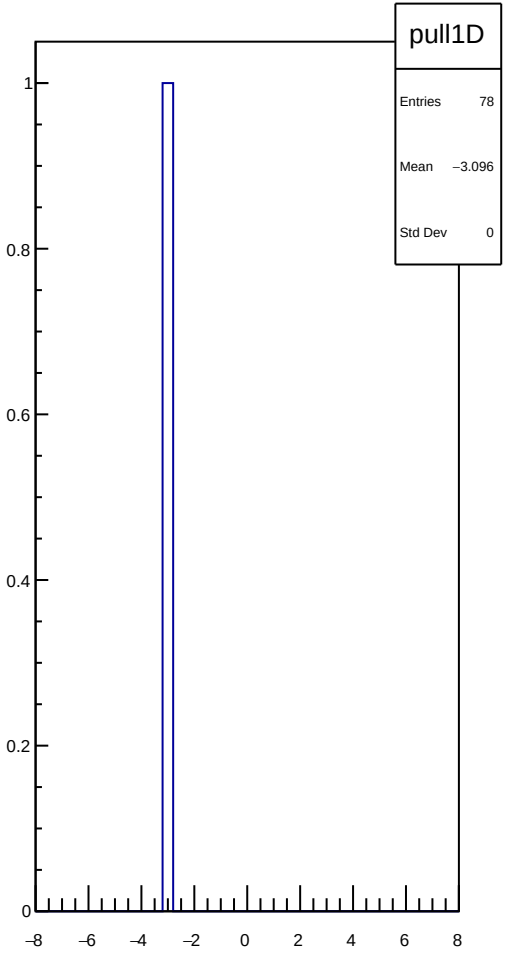

yield_bpm0i01Y_rms vs run
χ² / ndf 1.069e+05 / 77
p0 0.002232 ± 1.894e−06
0.05
0.04
0.03
0.02
0.01

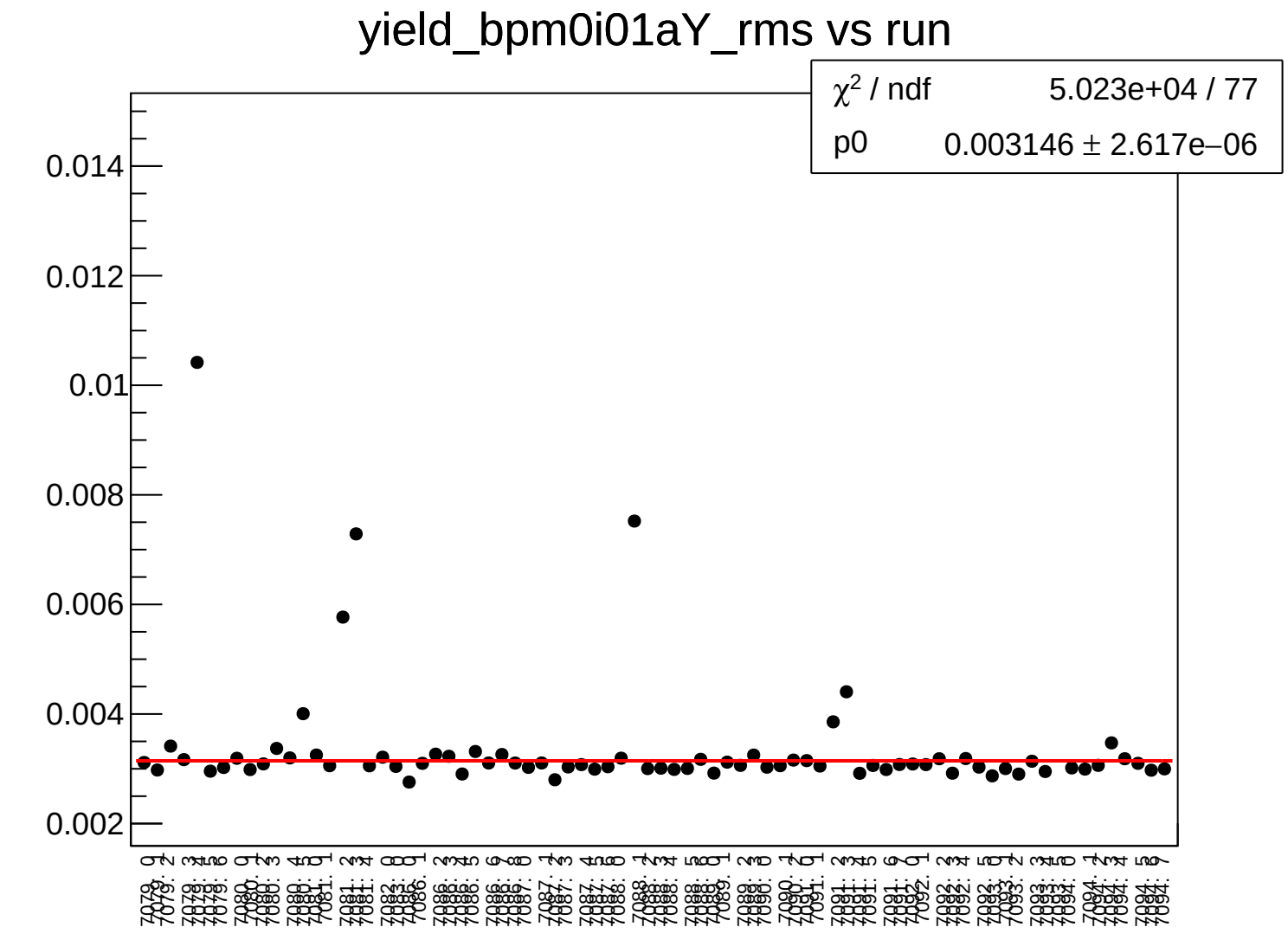

yield_bpm0i01aX_mean vs run
χ² / ndf 1.078e+07 / 77
p0 −2.148 ± 4.879e−06
−2.11
−2.12
−2.13
−2.14
−2.15
−2.16
−2.17
−2.18
pull
Entries 78
Mean −580.7
Std Dev 621.1
800
600
400
200
0
−200
−400
−600
−800

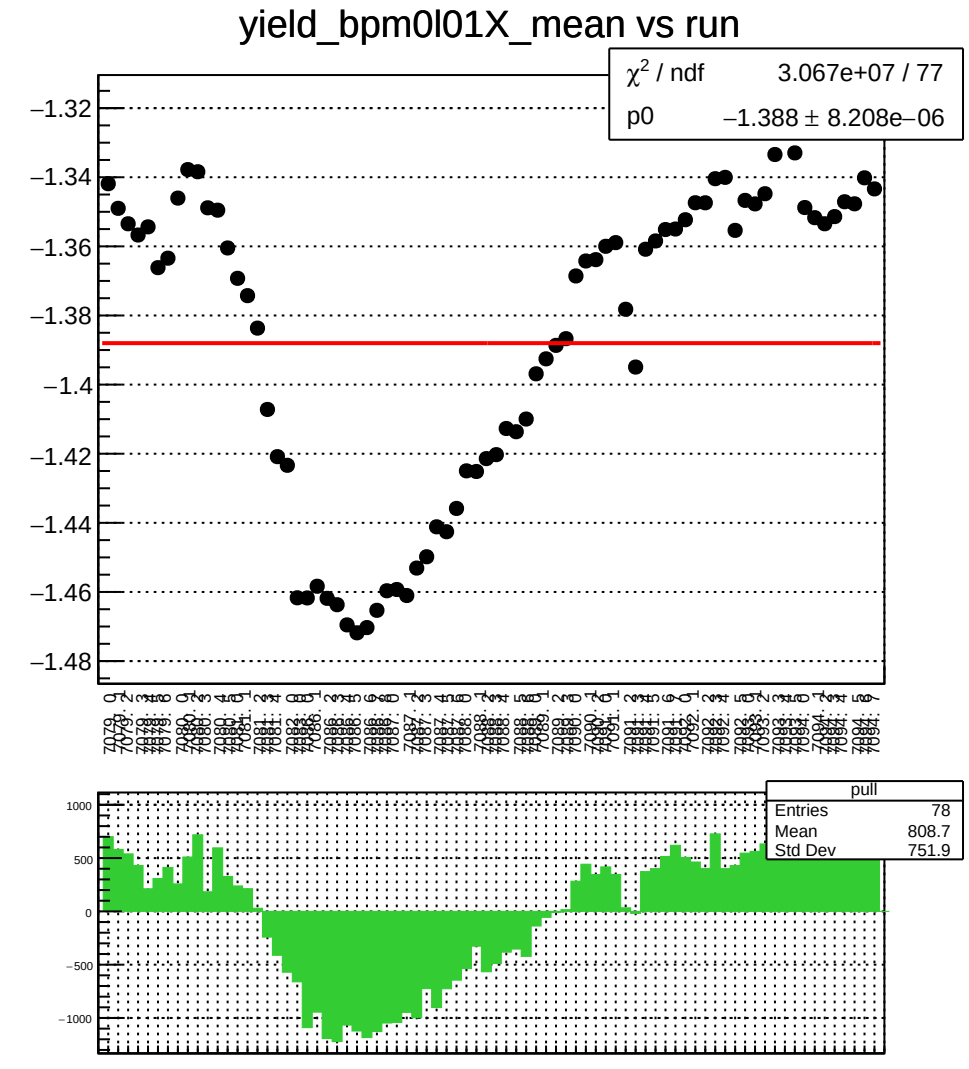

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

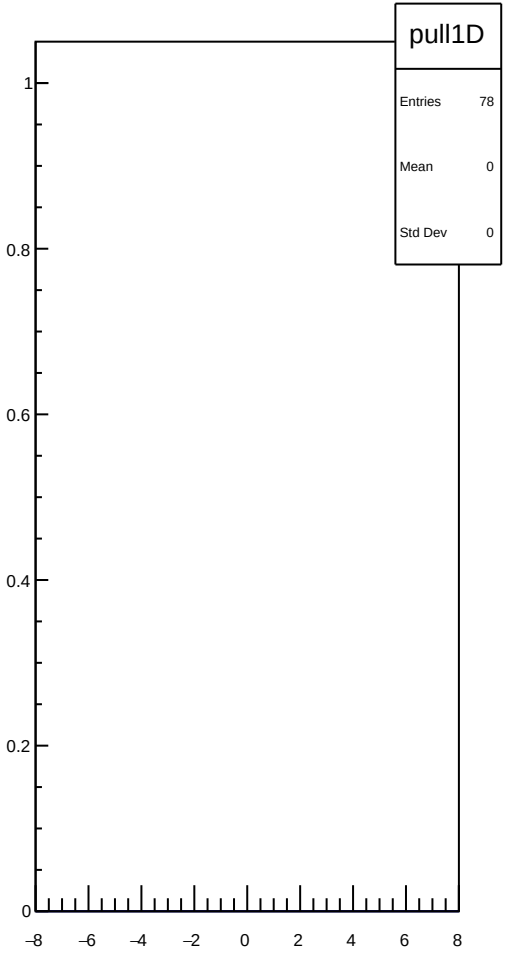

yield_bpm0i01aX_rms vs run
χ² / ndf 3.725e+04 / 77
p0 0.004166 ± 3.45e–06
0.012
0.01
0.008
0.006
0.004

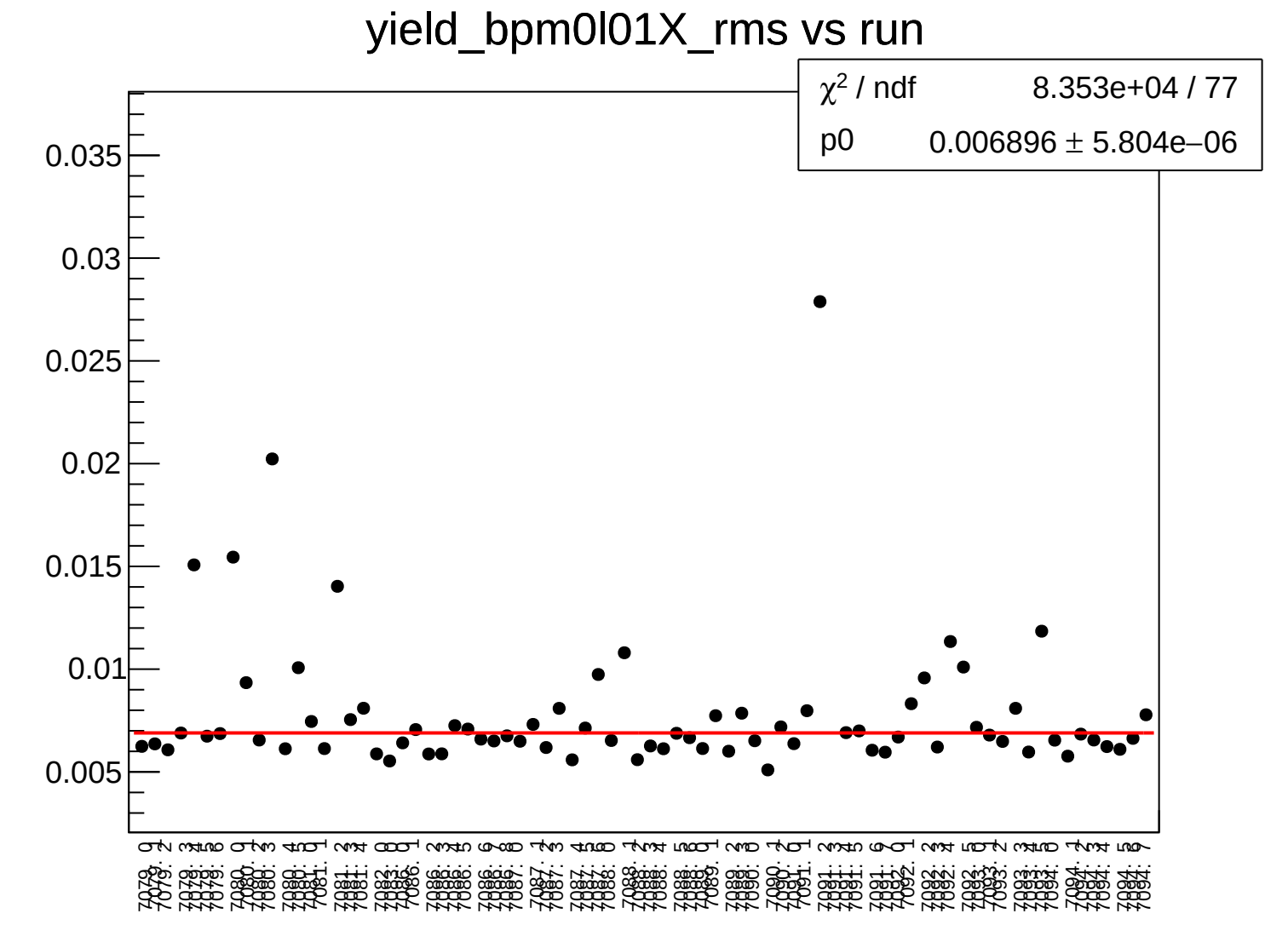

yield_bpm0i01aY_mean vs run
χ² / ndf 8.496e+06 / 77
p0 2.827 ± 3.7e–06
2.86
2.85
2.84
2.83
2.82
2.81
2.8
pull
Entries 78
Mean −2214
Std Dev 2274
800
600
400
200
0
−200
−400
−600

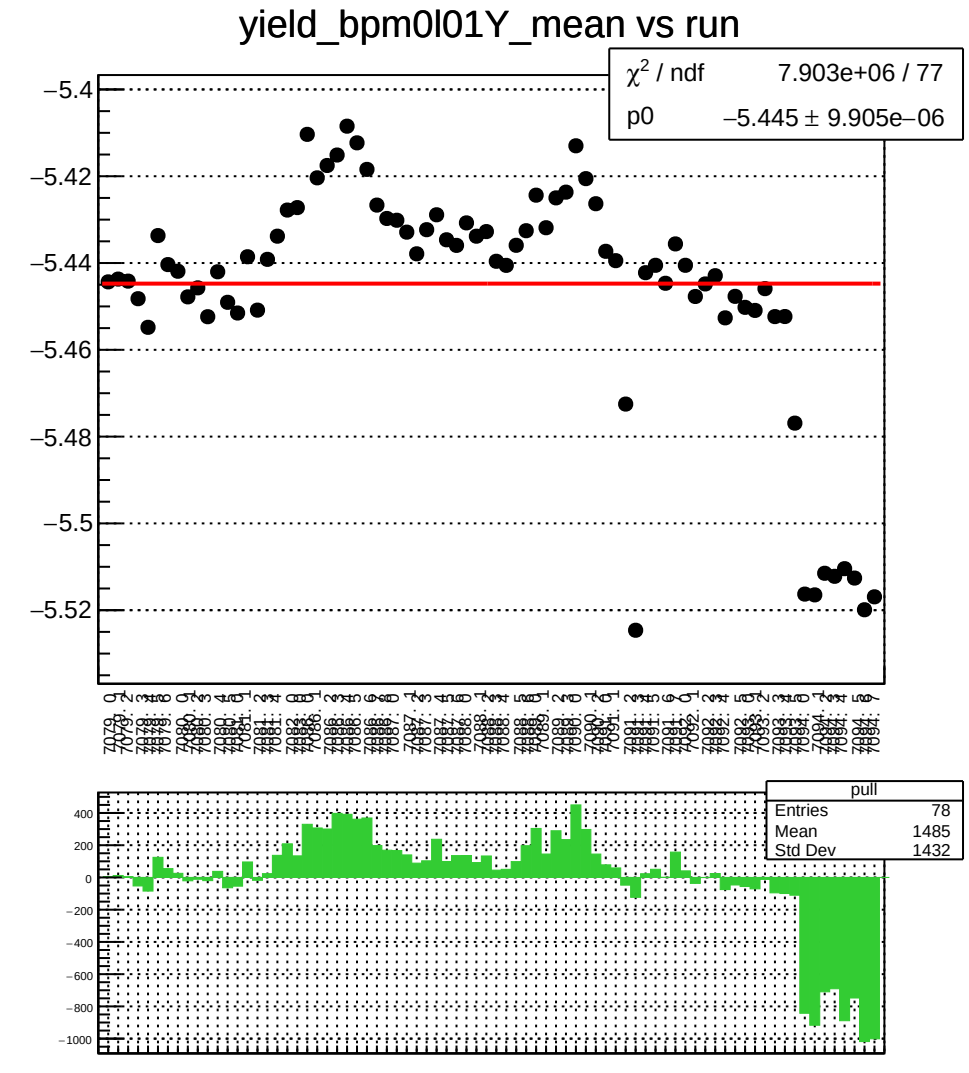

pull1D
Entries 78
Mean −3.096
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

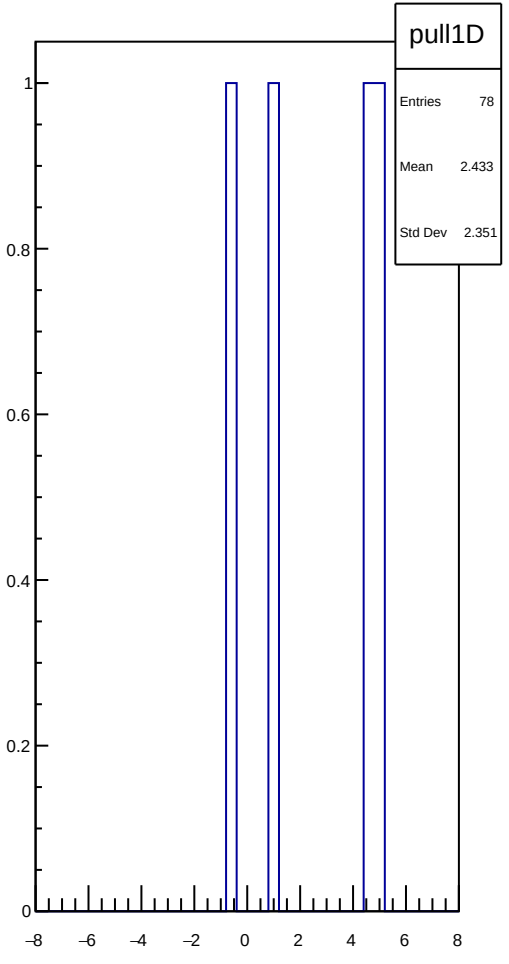

yield_bpm0i01aY_rms vs run
χ² / ndf 5.023e+04 / 77
p0 0.003146 ± 2.617e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

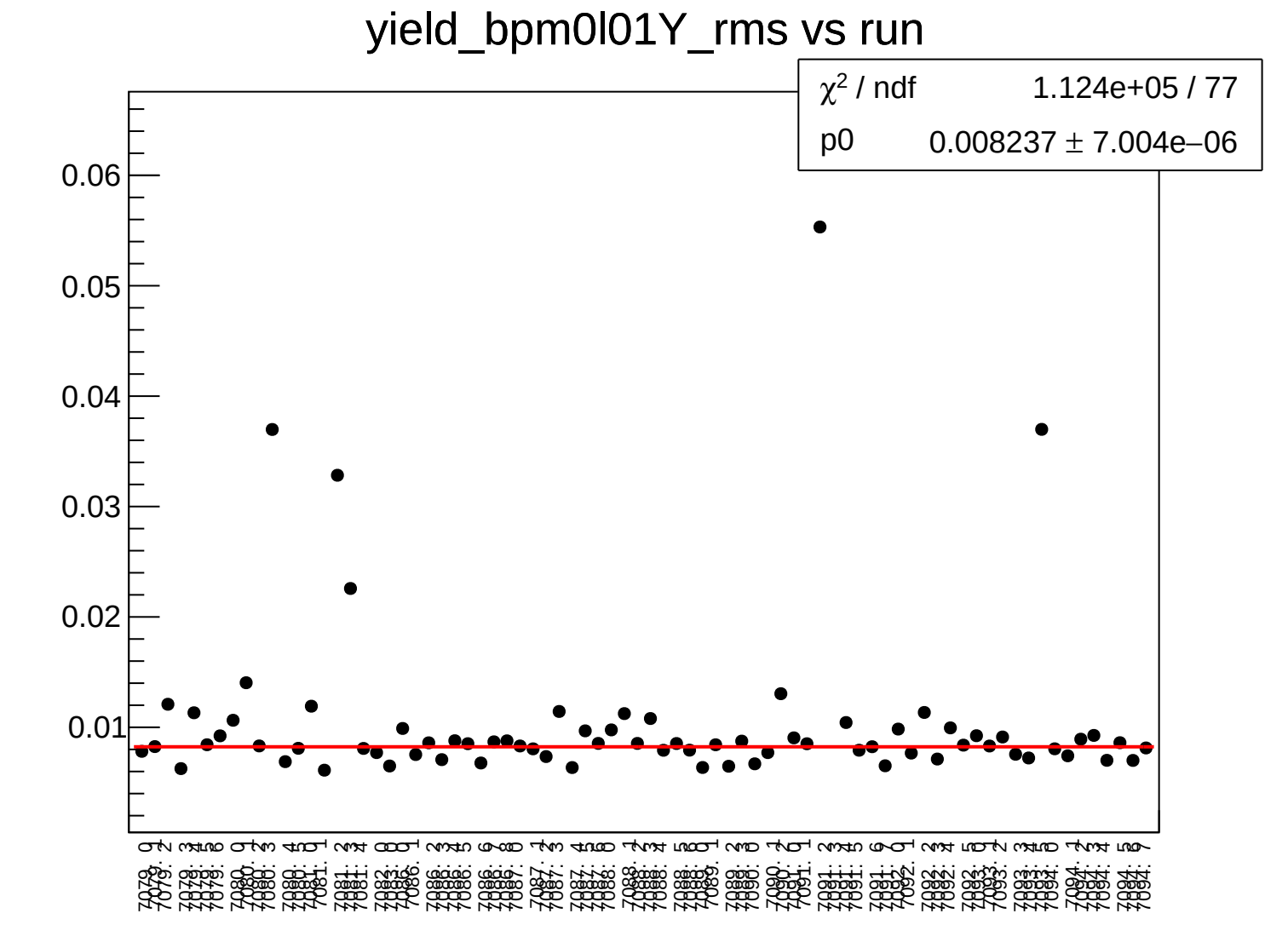

yield_bpm0l01X_mean vs run
χ² / ndf 3.067e+07 / 77
p0 −1.388 ± 8.208e−06
−1.32
−1.34
−1.36
−1.38
−1.4
−1.42
−1.44
−1.46
−1.48
pull
Entries 78
Mean 808.7
Std Dev 751.9
1000
500
0
−500
−1000

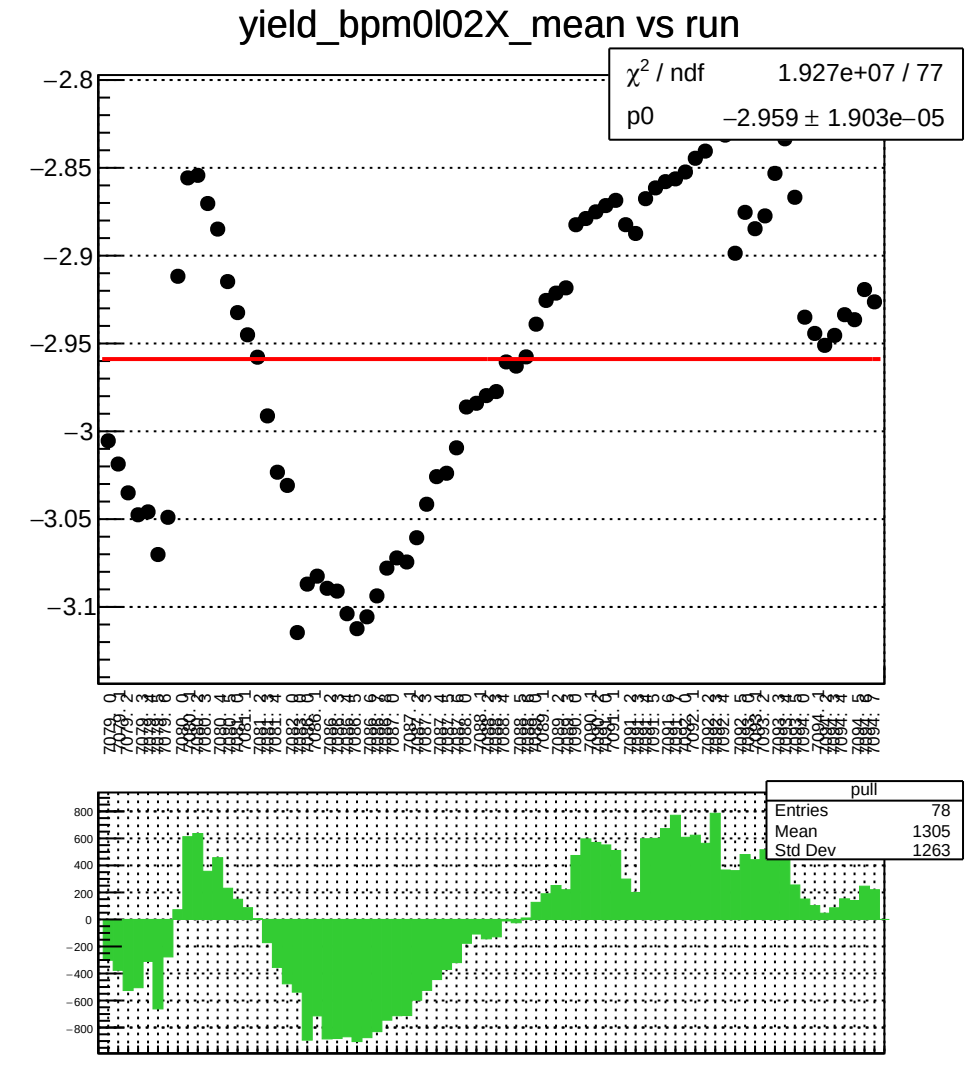

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

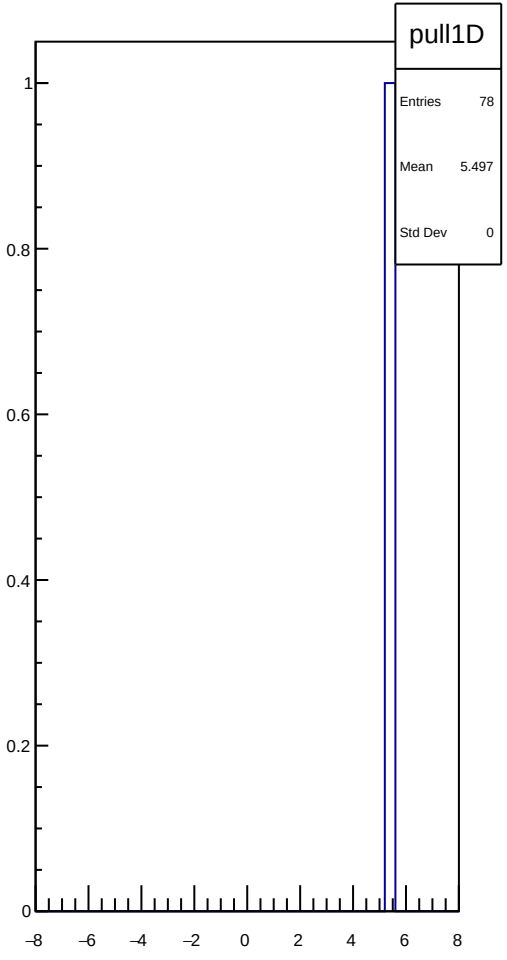

yield_bpm0l01X_rms vs run
χ² / ndf 8.353e+04 / 77
p0 0.006896 ± 5.804e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

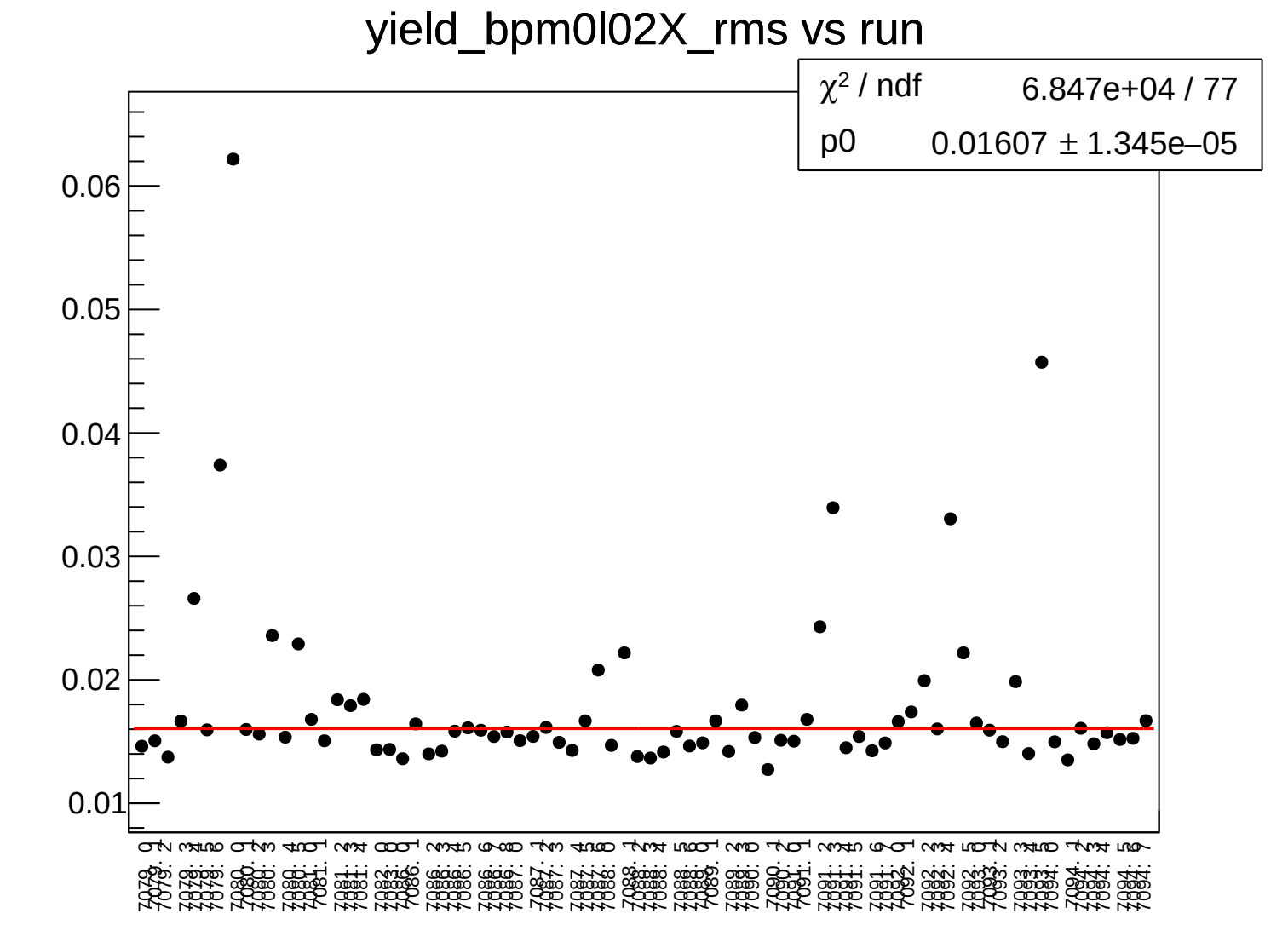

yield_bpm0l01Y_mean vs run
χ² / ndf 7.903e+06 / 77
p0 −5.445 ± 9.905e−06
−5.4
−5.42
−5.44
−5.46
−5.48
−5.5
−5.52
pull
Entries 78
Mean 1485
Std Dev 1432
400
200
0
−200
−400
−600
−800
−1000

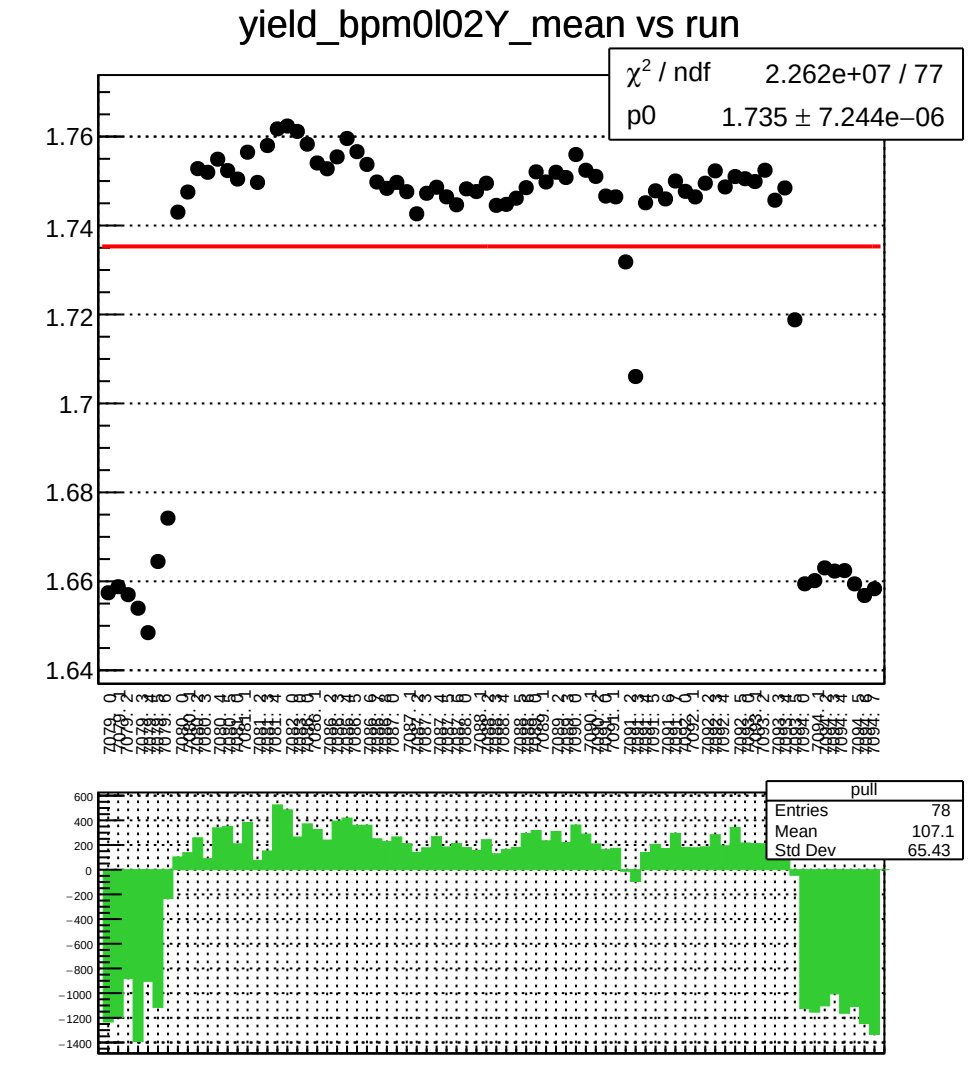

pull1D
Entries 78
Mean 2.433
Std Dev 2.351
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

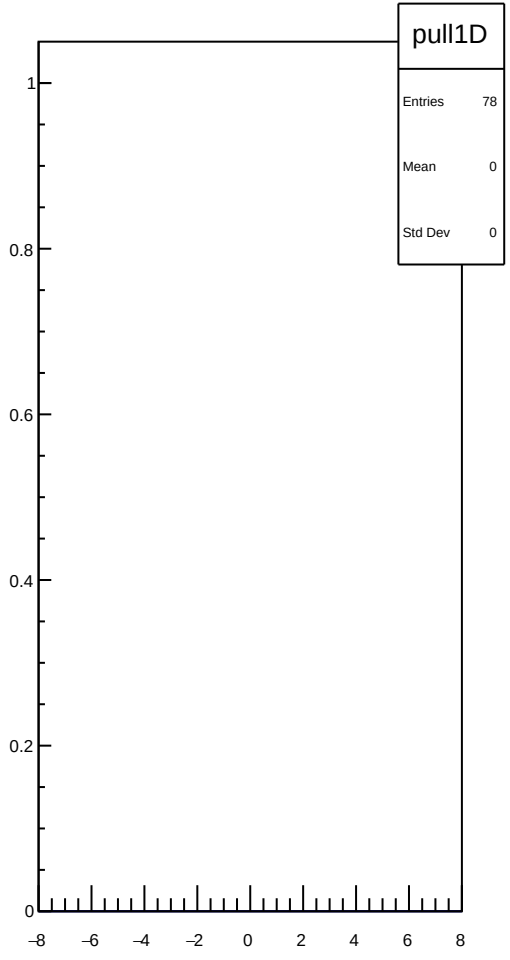

yield_bpm0l01Y_rms vs run
χ² / ndf 1.124e+05 / 77
p0 0.008237 ± 7.004e−06
0.06
0.05
0.04
0.03
0.02
0.01

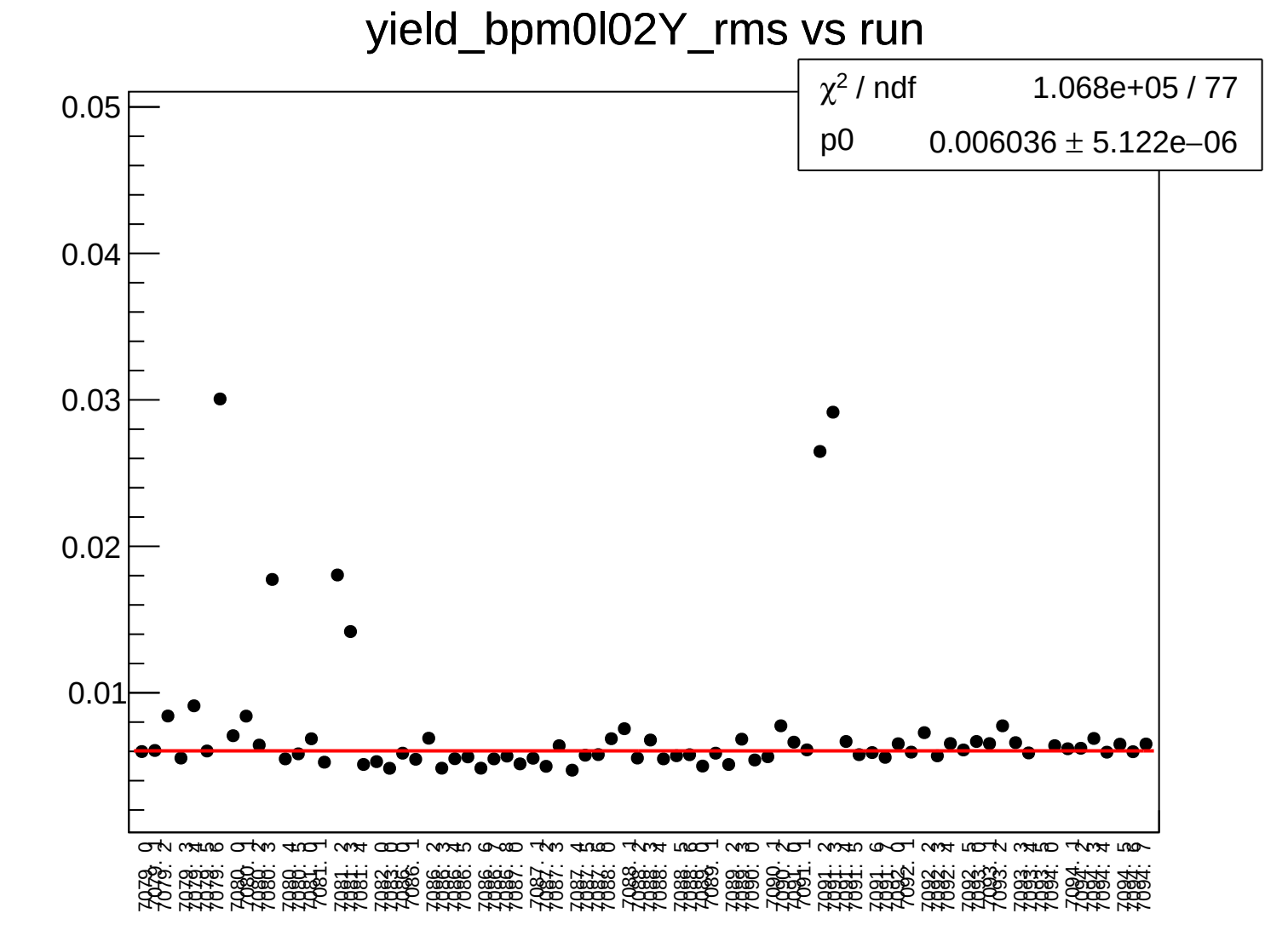

yield_bpm0l02X_mean vs run
χ² / ndf 1.927e+07 / 77
p0 −2.959 ± 1.903e−05
−2.8
−2.85
−2.9
−2.95
−3
−3.05
−3.1
pull
Entries 78
Mean 1305
Std Dev 1263
800
600
400
200
0
−200
−400
−600
−800

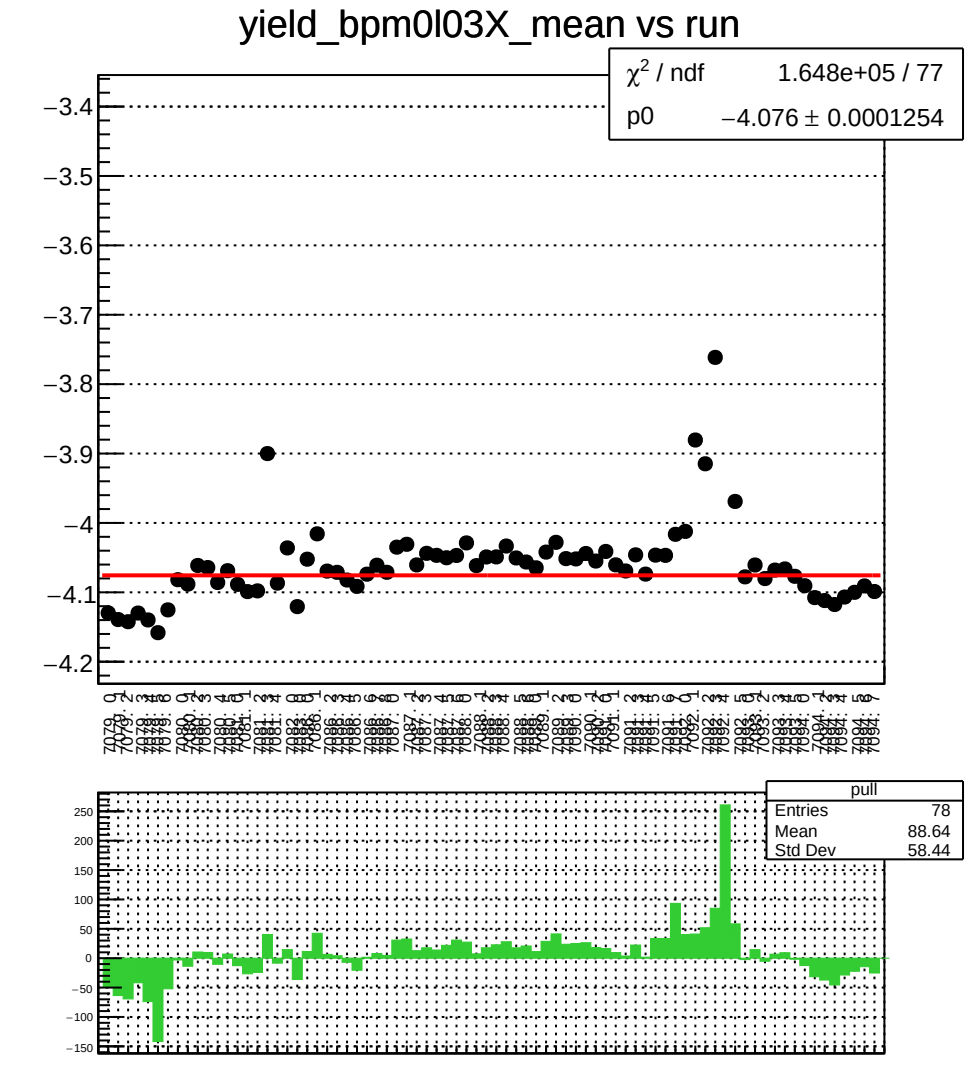

pull1D
Entries 78
Mean 5.497
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

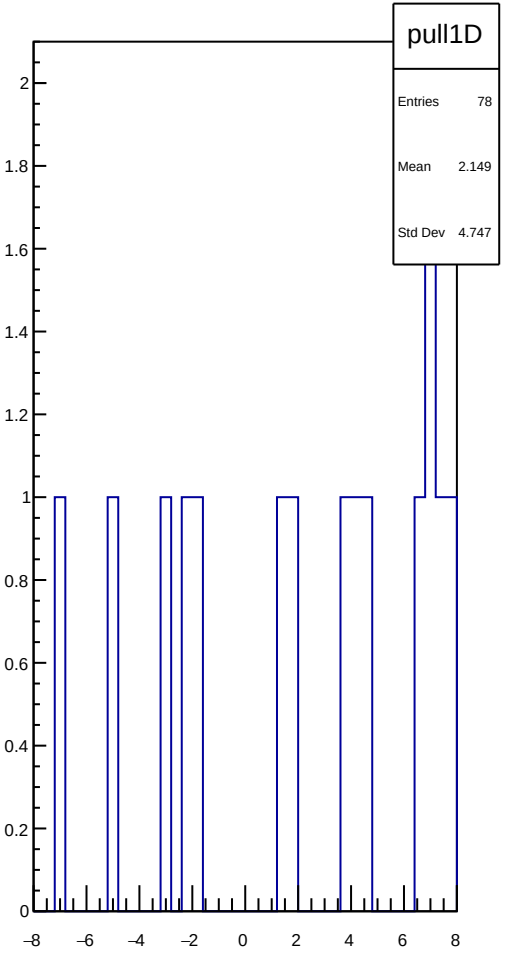

yield_bpm0l02X_rms vs run
χ² / ndf 6.847e+04 / 77
p0 0.01607 ± 1.345e−05
0.06
0.05
0.04
0.03
0.02
0.01

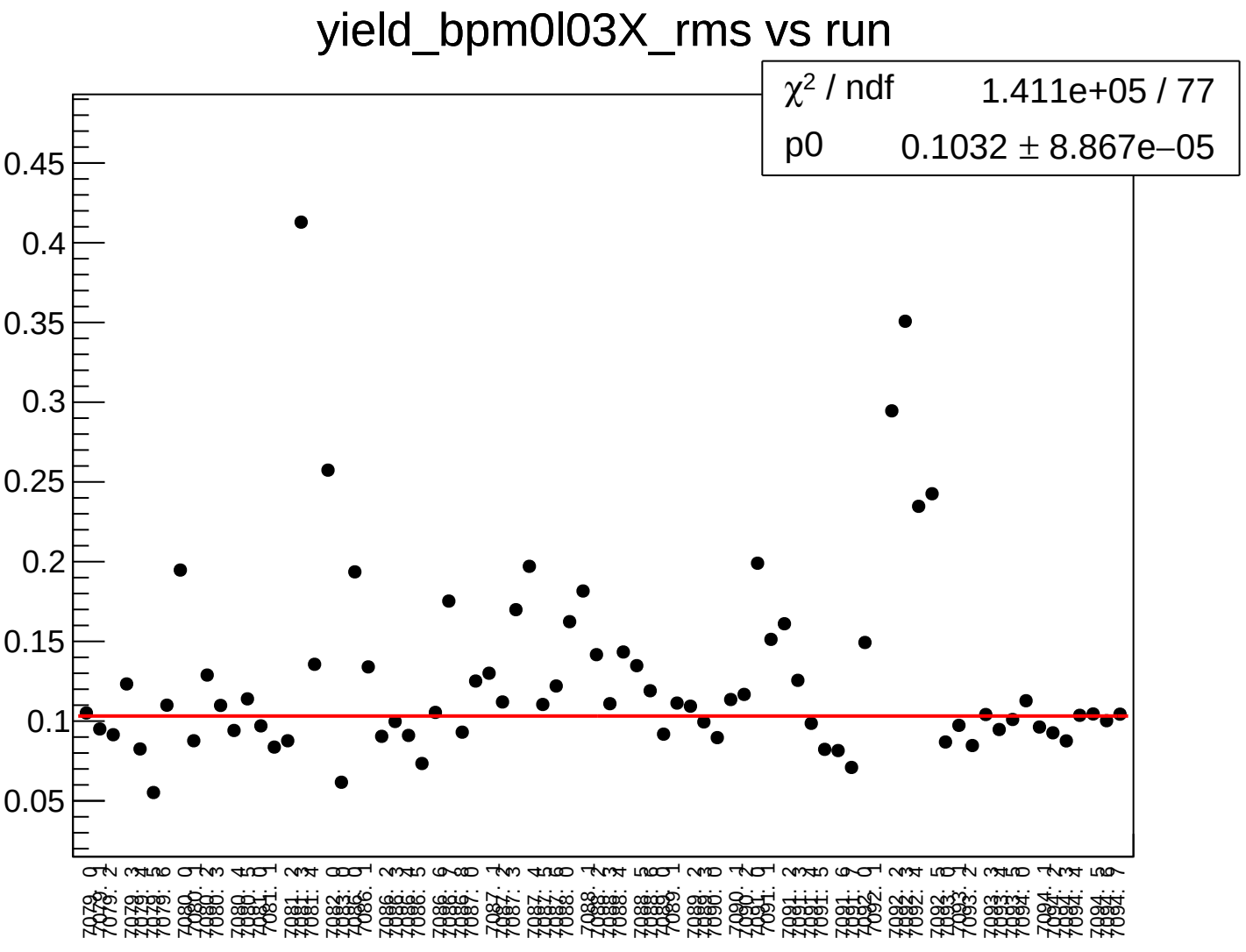

yield_bpm0l02Y_mean vs run
χ² / ndf 2.262e+07 / 77
p0 1.735 ± 7.244e−06
1.76
1.74
1.72
1.7
1.68
1.66
1.64
pull
Entries 78
Mean 107.1
Std Dev 65.43
600
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400

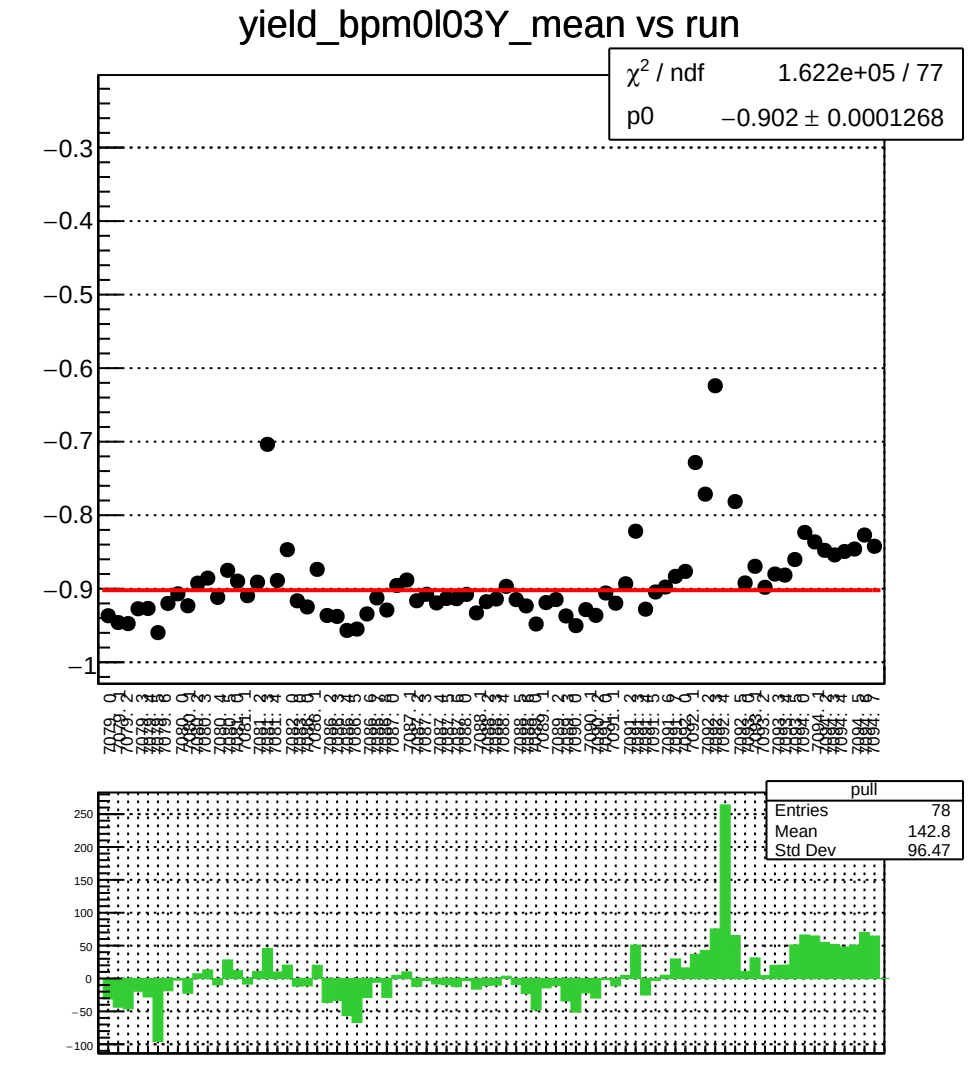

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

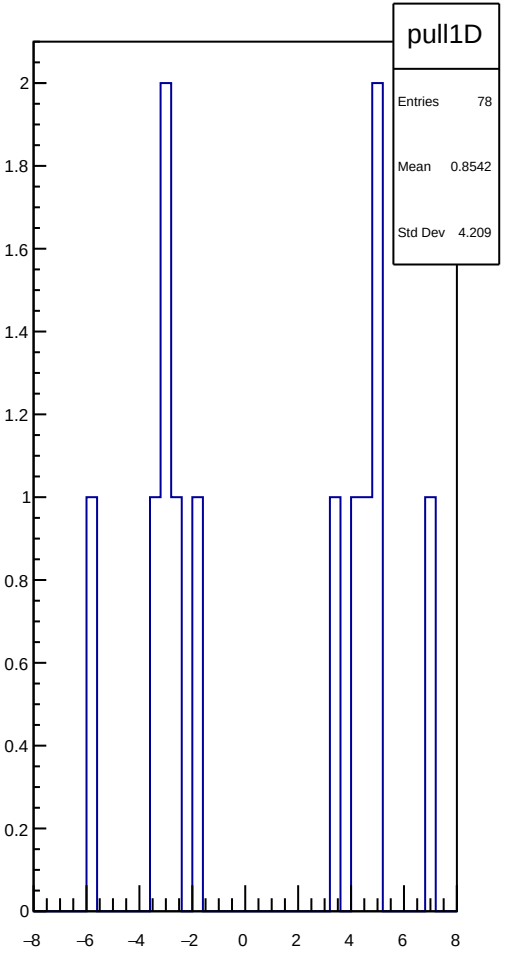

yield_bpm0l02Y_rms vs run
χ² / ndf 1.068e+05 / 77
p0 0.006036 ± 5.122e−06
0.05
0.04
0.03
0.02
0.01

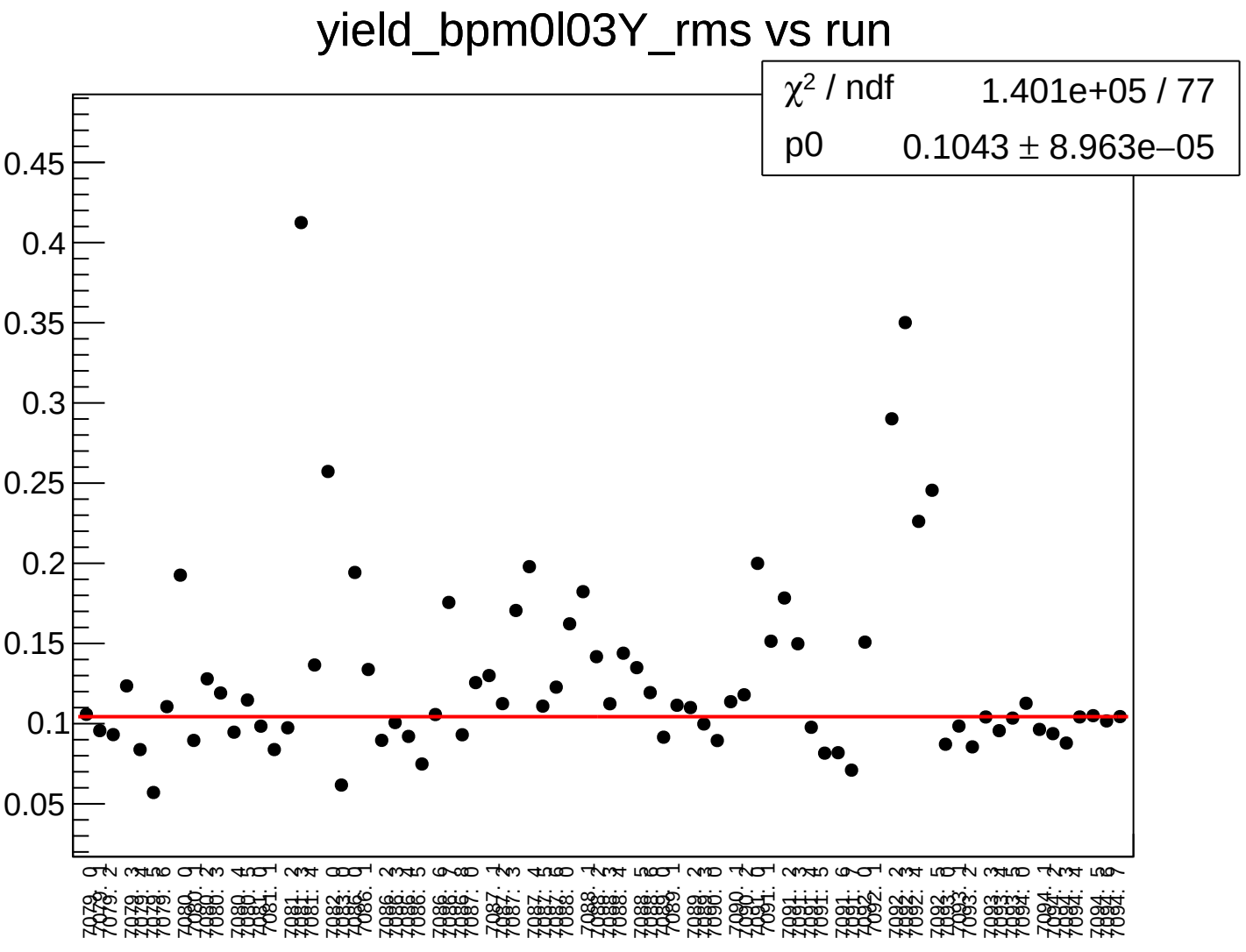

yield_bpm0l03X_mean vs run
χ² / ndf 1.648e+05 / 77
p0 −4.076 ± 0.0001254
pull
Entries 78
Mean 88.64
Std Dev 58.44

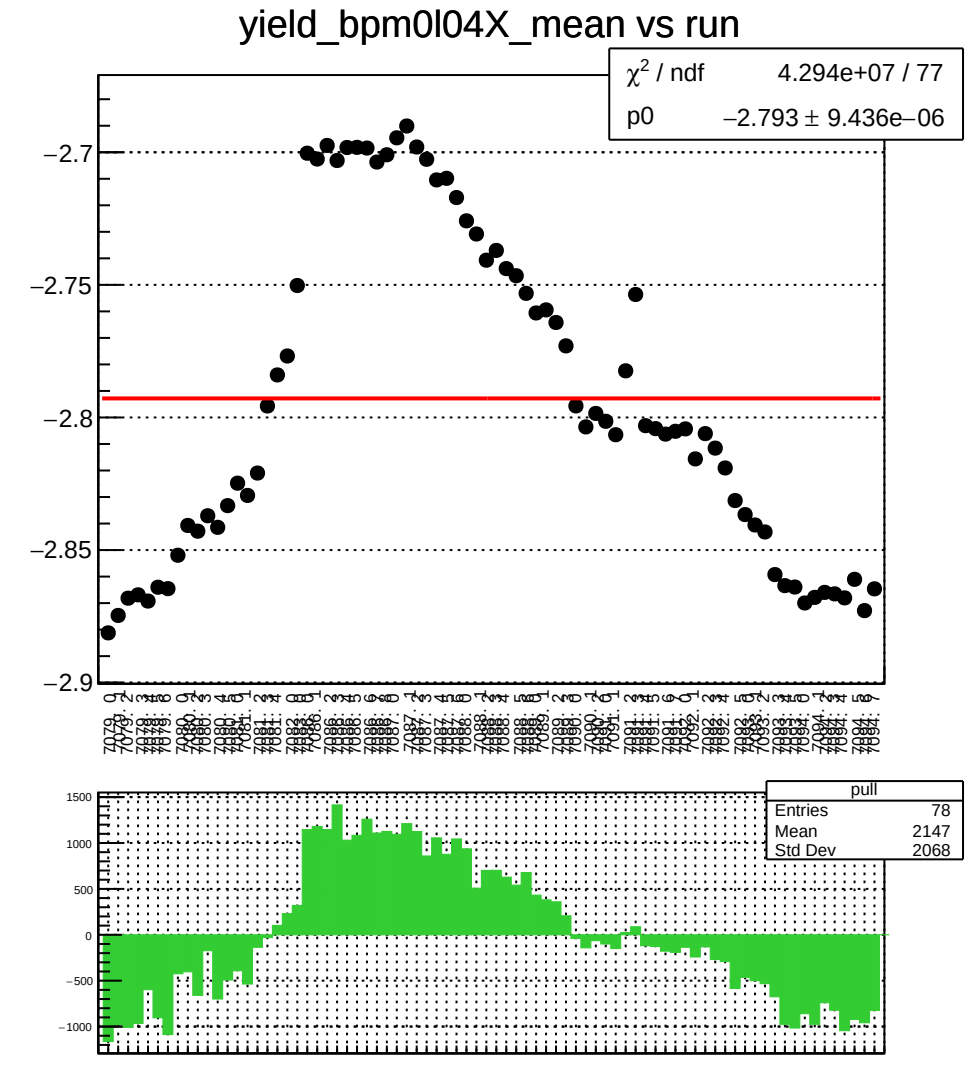

pull1D
Entries 78
Mean 2.149
Std Dev 4.747

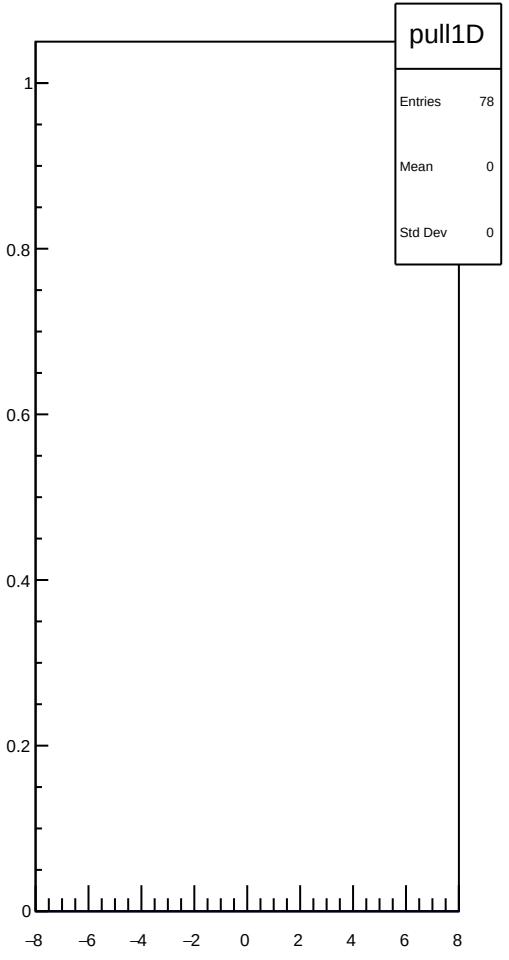

yield_bpm0l03X_rms vs run
χ² / ndf 1.411e+05 / 77
p0 0.1032 ± 8.867e−05
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

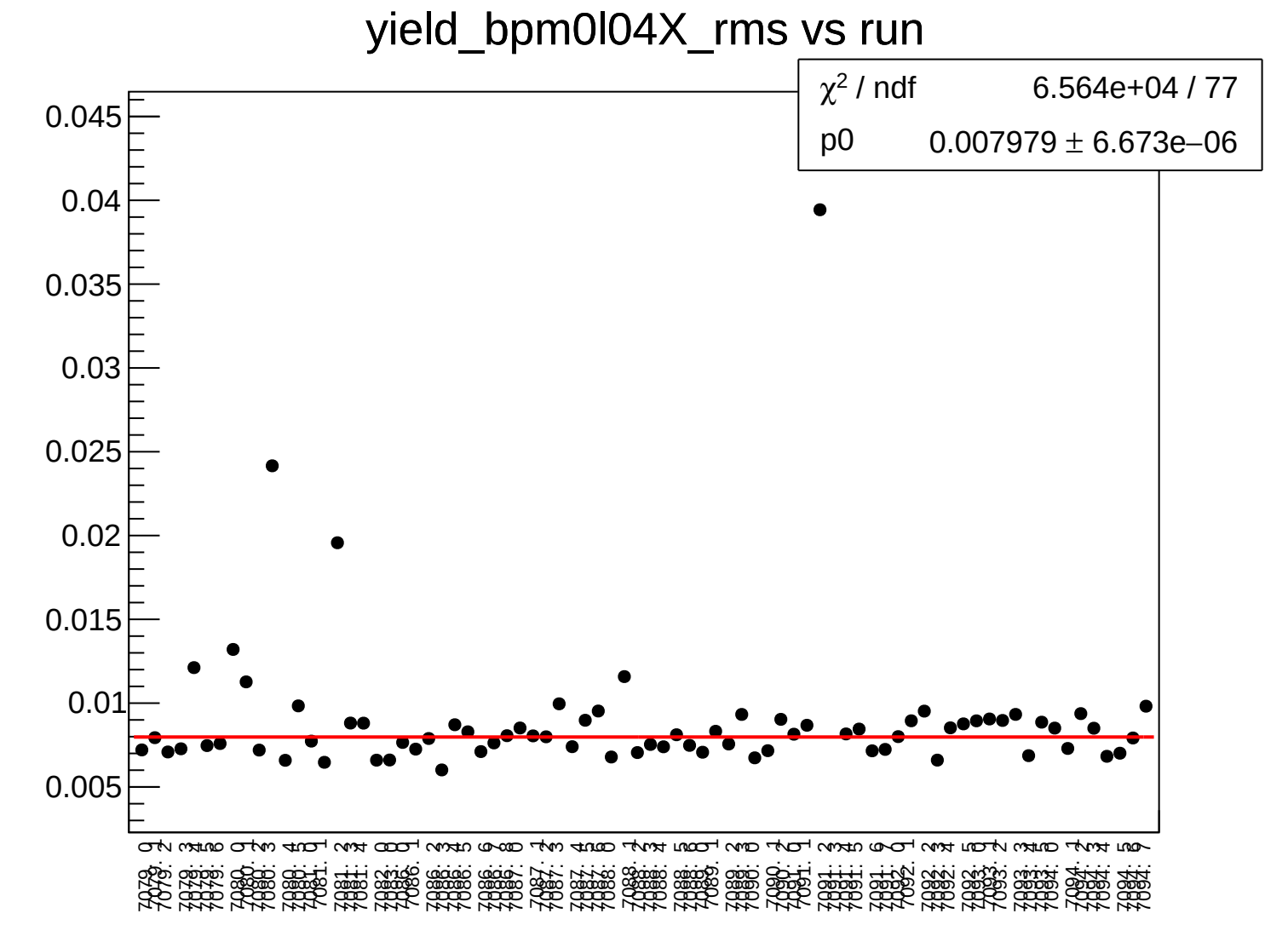

yield_bpm0l03Y_mean vs run
χ² / ndf 1.622e+05 / 77
p0 −0.902 ± 0.0001268
pull
Entries 78
Mean 142.8
Std Dev 96.47

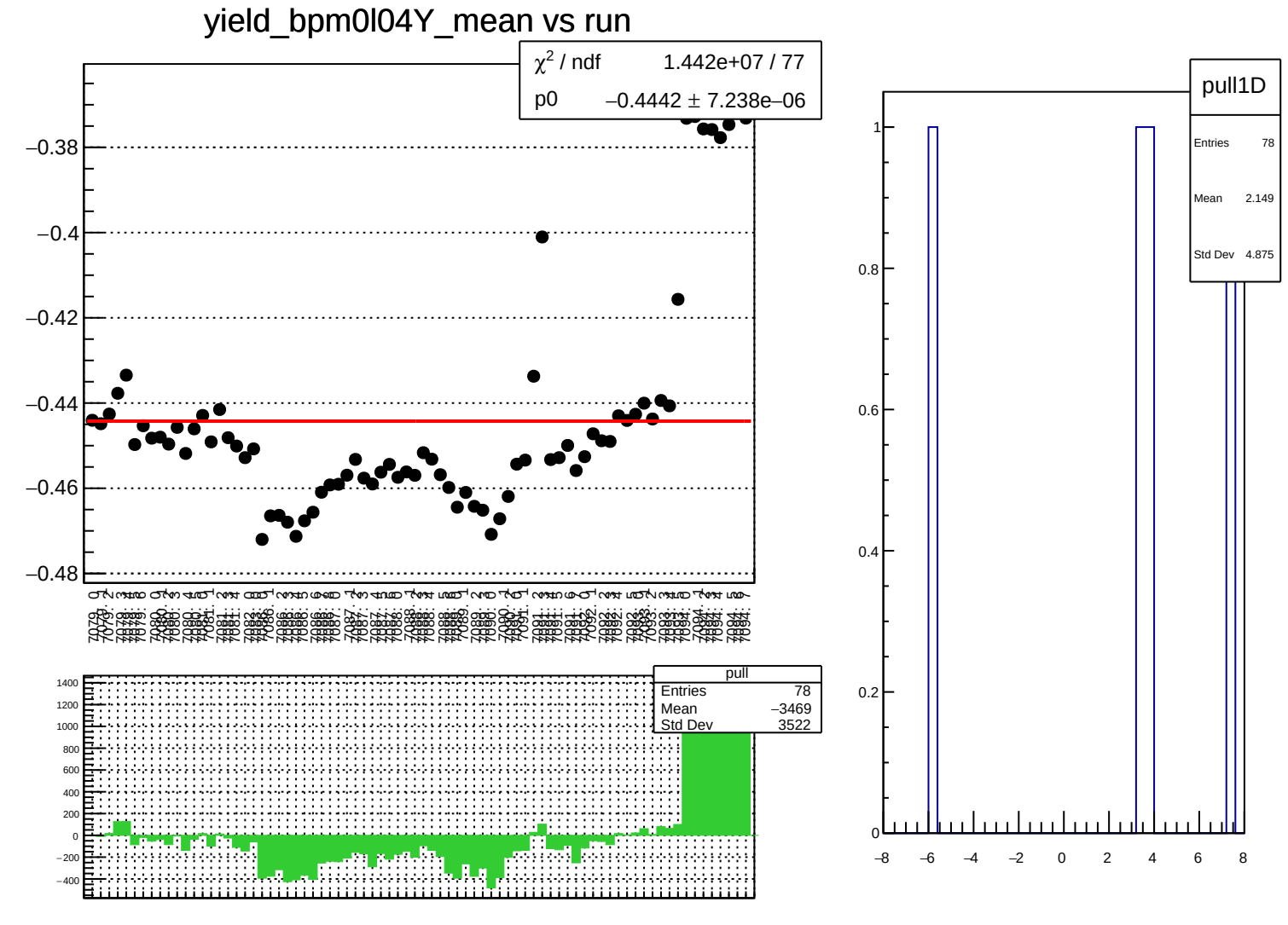

pull1D
Entries 78
Mean 0.8542
Std Dev 4.209

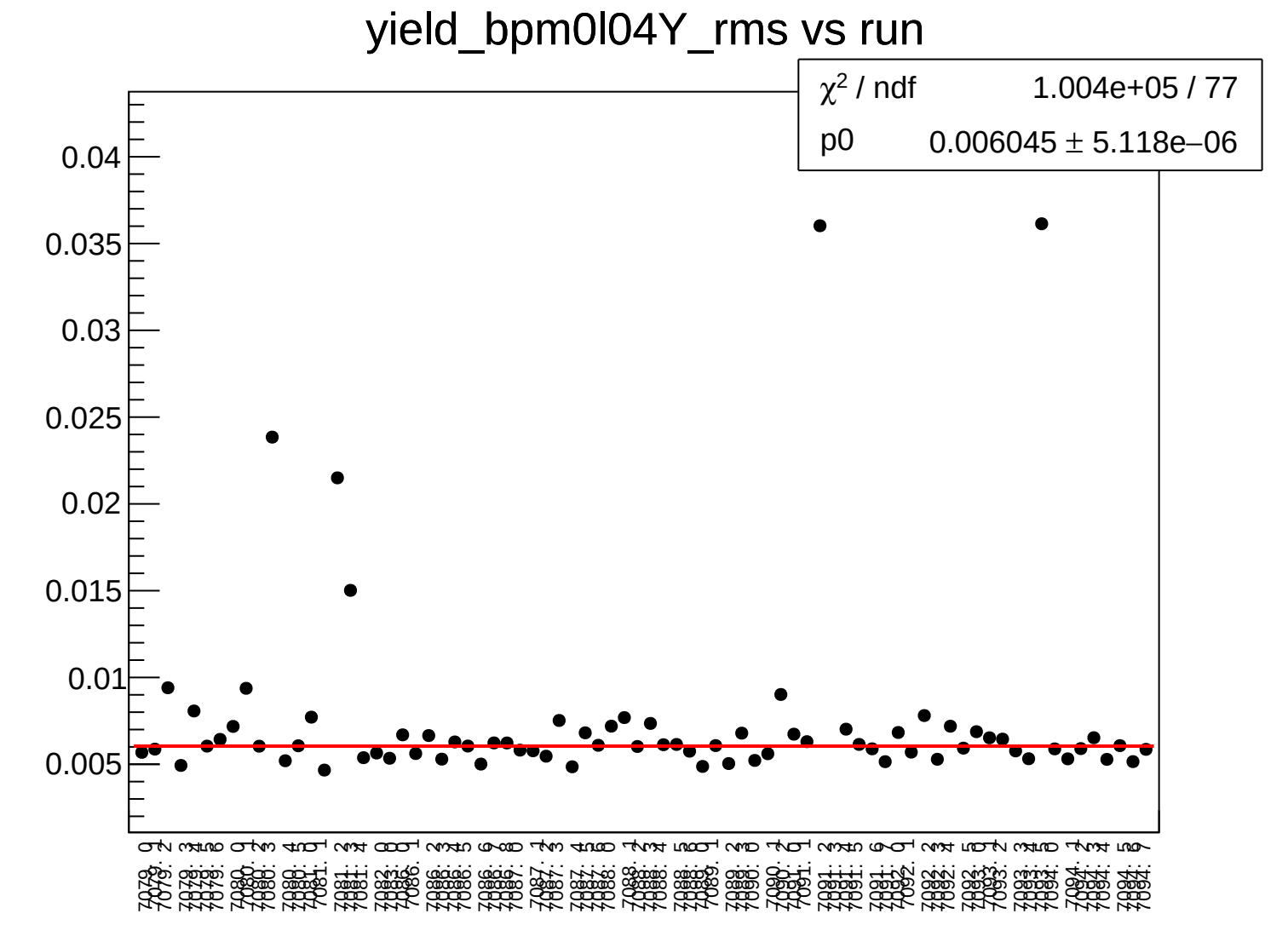

yield_bpm0l03Y_rms vs run
χ² / ndf 1.401e+05 / 77
p0 0.1043 ± 8.963e−05
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

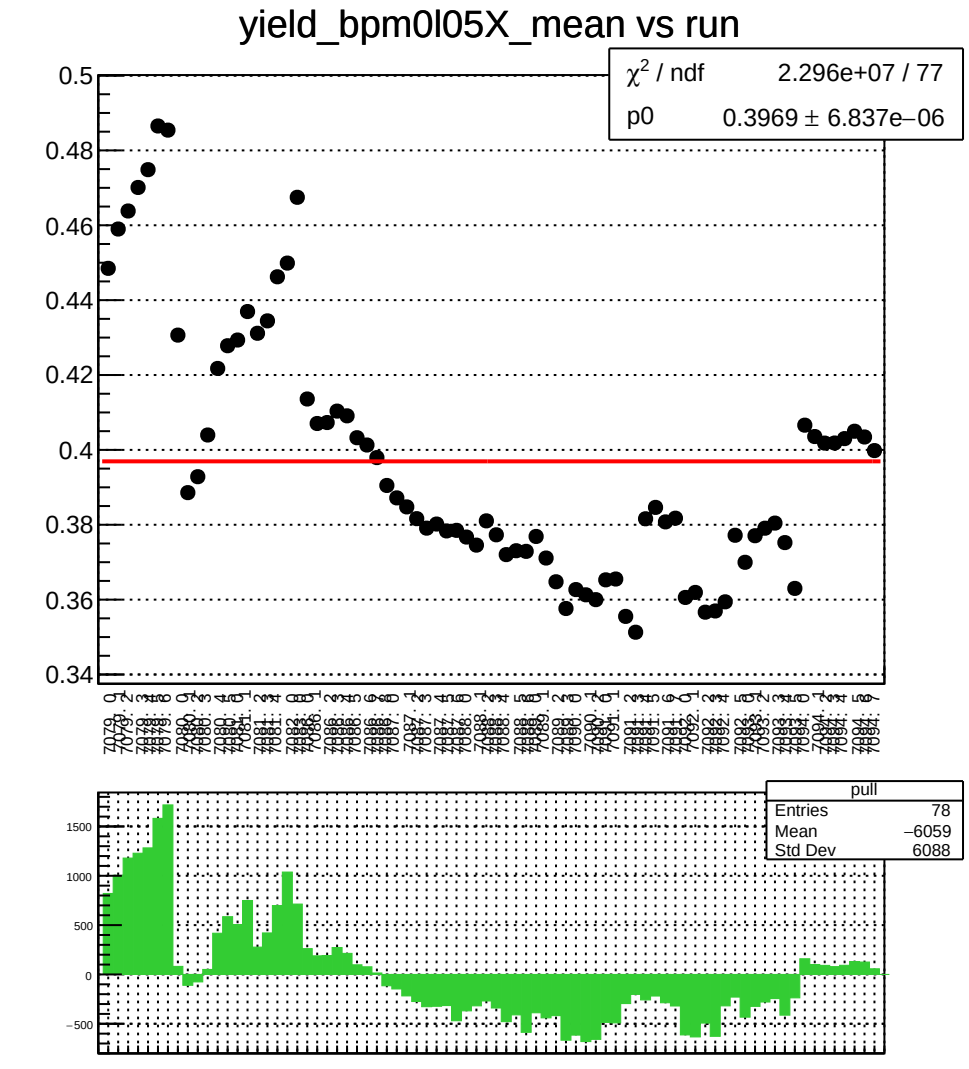

yield_bpm0l04X_mean vs run
χ² / ndf 4.294e+07 / 77
p0 −2.793 ± 9.436e−06
−2.7
−2.75
−2.8
−2.85
−2.9
pull
Entries 78
Mean 2147
Std Dev 2068
1500
1000
500
0
−500
−1000

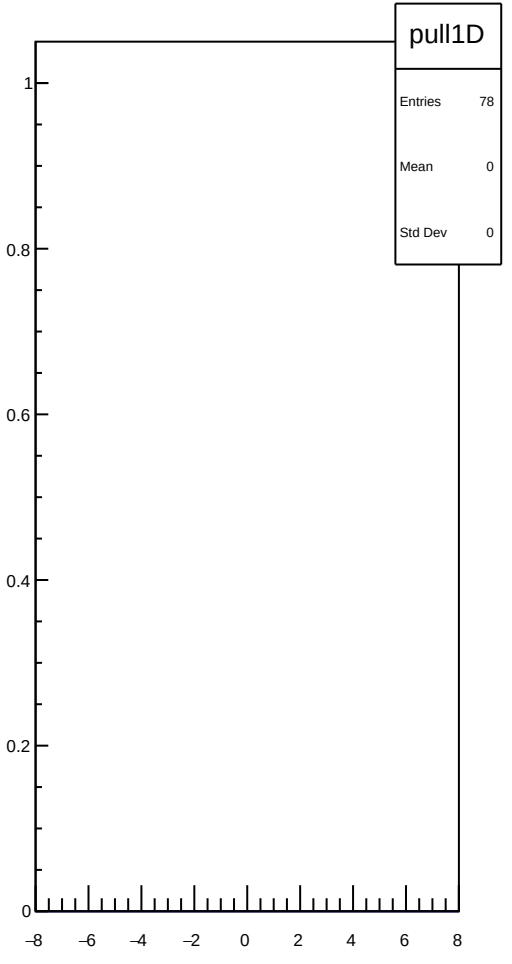

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

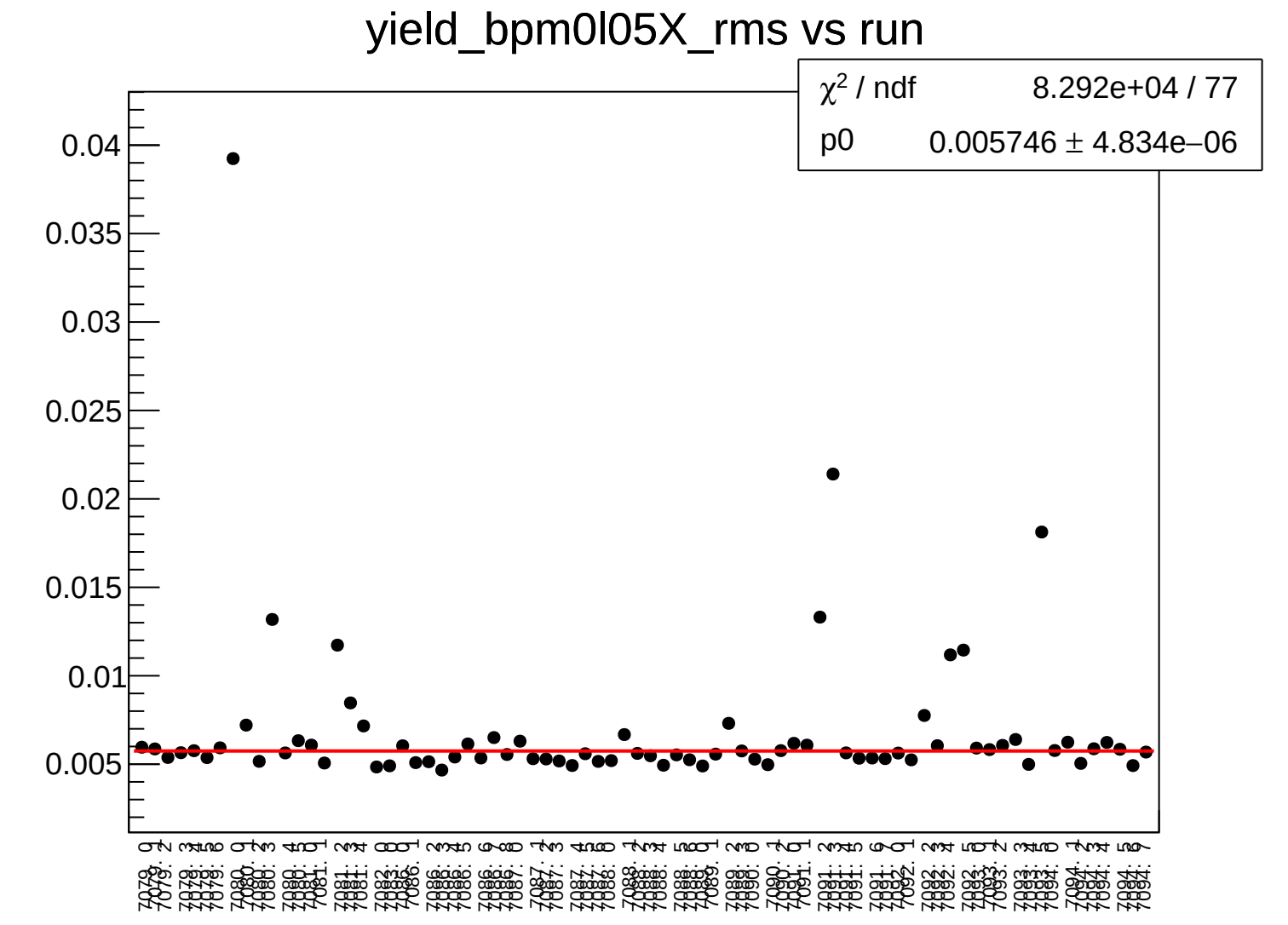

yield_bpm0l04X_rms vs run
χ² / ndf 6.564e+04 / 77
p0 0.007979 ± 6.673e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

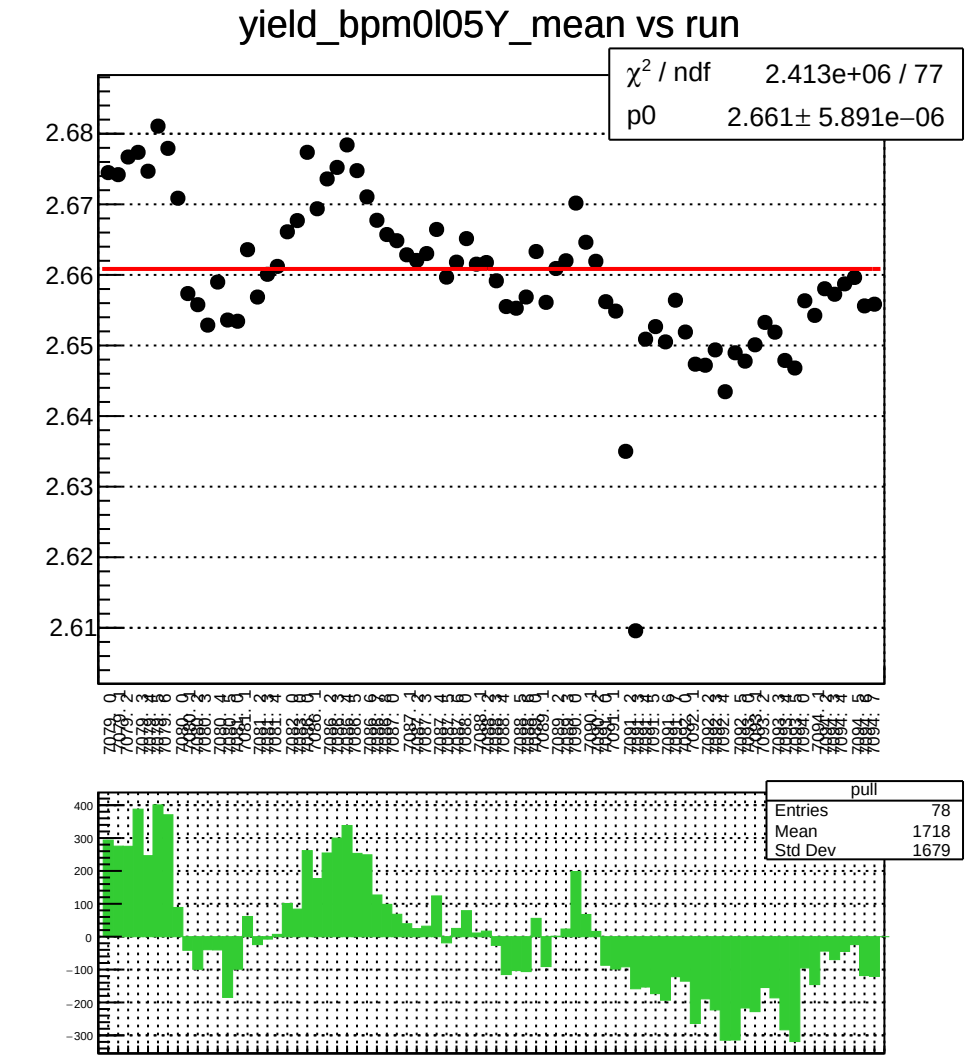

yield_bpm0l04Y_mean vs run
χ² / ndf 1.442e+07 / 77
p0 −0.4442 ± 7.238e−06
−0.38
−0.4
−0.42
−0.44
−0.46
−0.48
pull
Entries 78
Mean −3469
Std Dev 3522
1400
1200
1000
800
600
400
200
0
−200
−400
pull1D
Entries 78
Mean 2.149
Std Dev 4.875
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

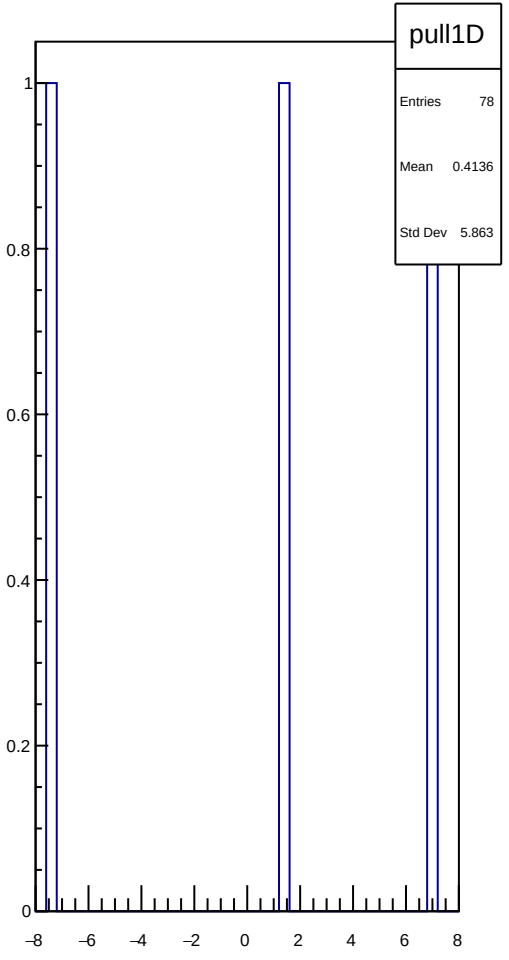

yield_bpm0l04Y_rms vs run
χ² / ndf 1.004e+05 / 77
p0 0.006045 ± 5.118e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

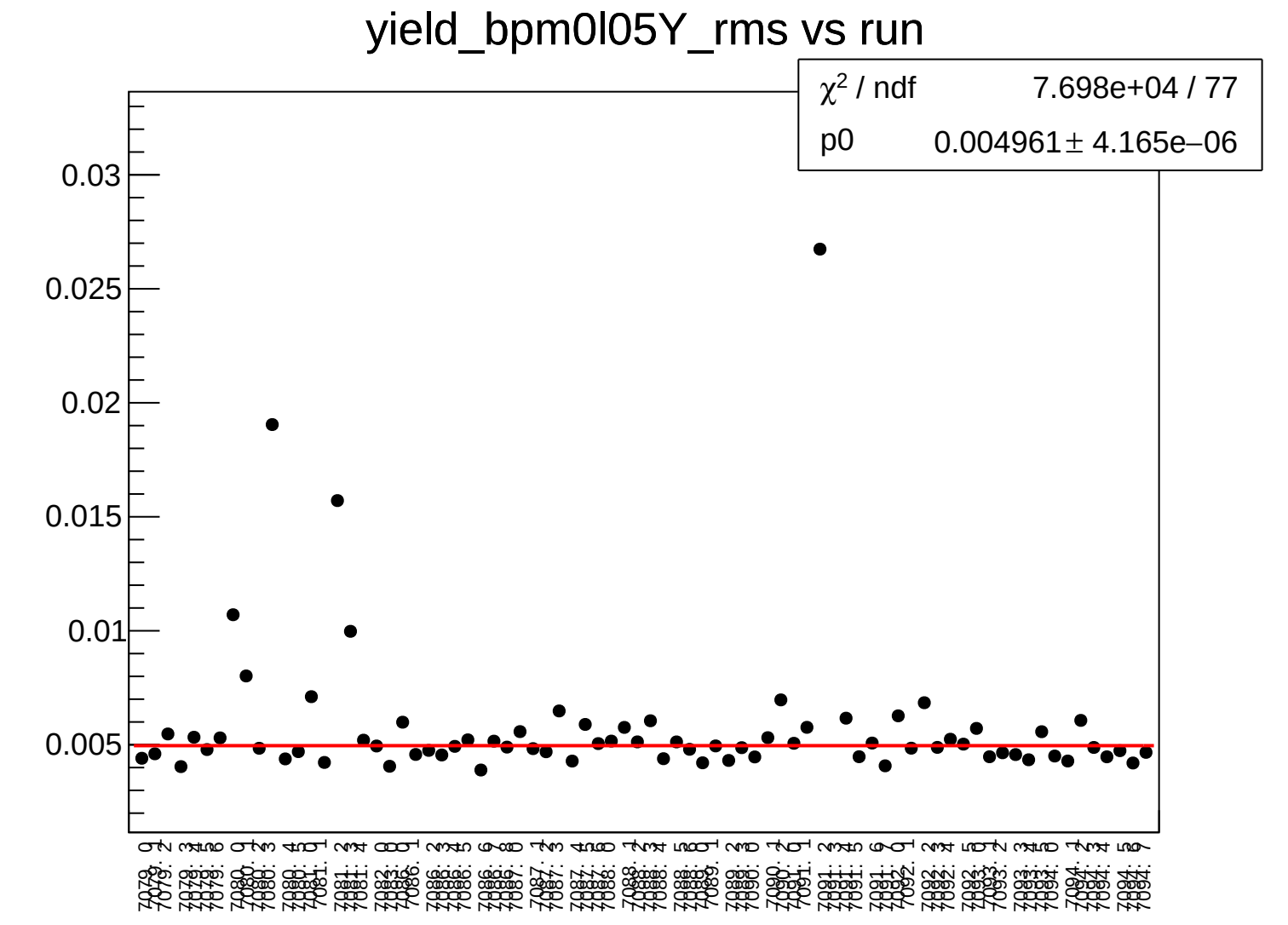

yield_bpm0l05X_mean vs run
χ² / ndf 2.296e+07 / 77
p0 0.3969 ± 6.837e−06
0.5
0.48
0.46
0.44
0.42
0.4
0.38
0.36
0.34
pull
Entries 78
Mean −6059
Std Dev 6088
1500
1000
500
0
−500

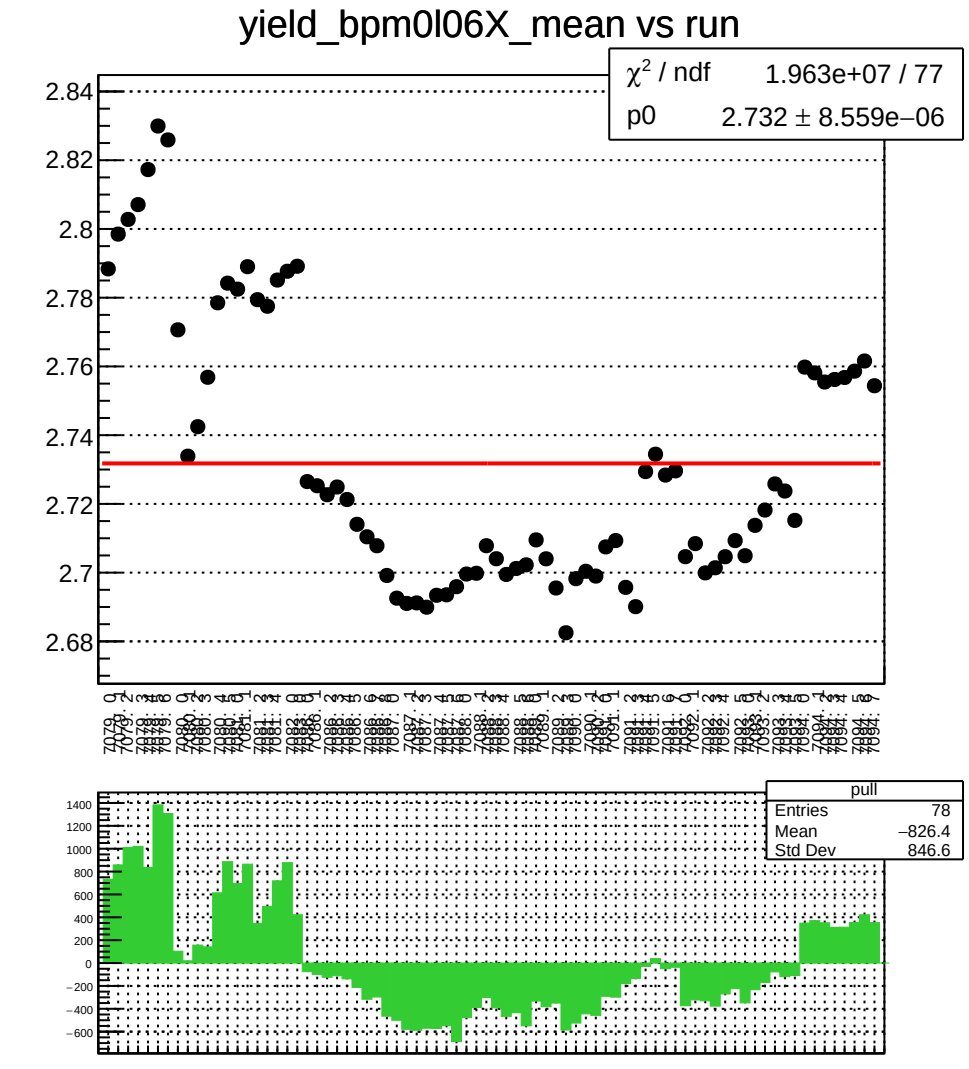

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

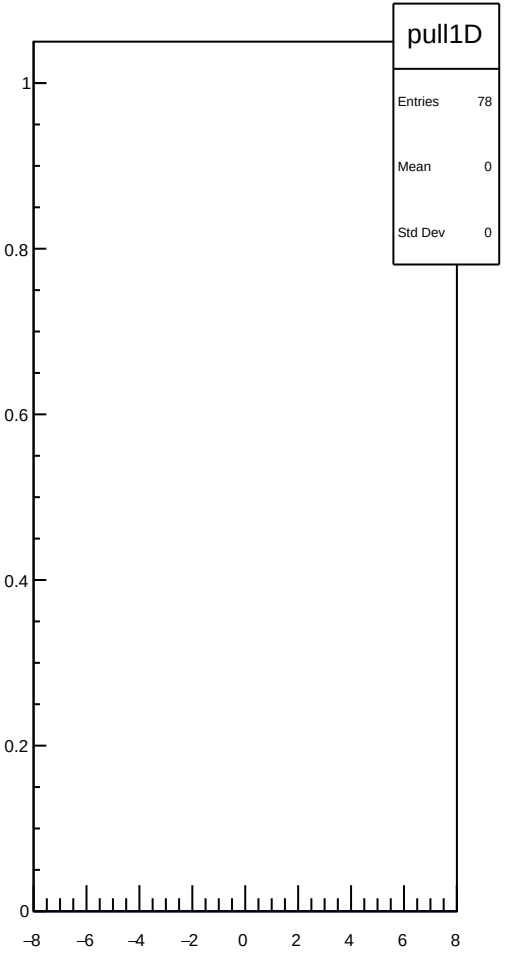

yield_bpm0l05X_rms vs run
χ² / ndf 8.292e+04 / 77
p0 0.005746 ± 4.834e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

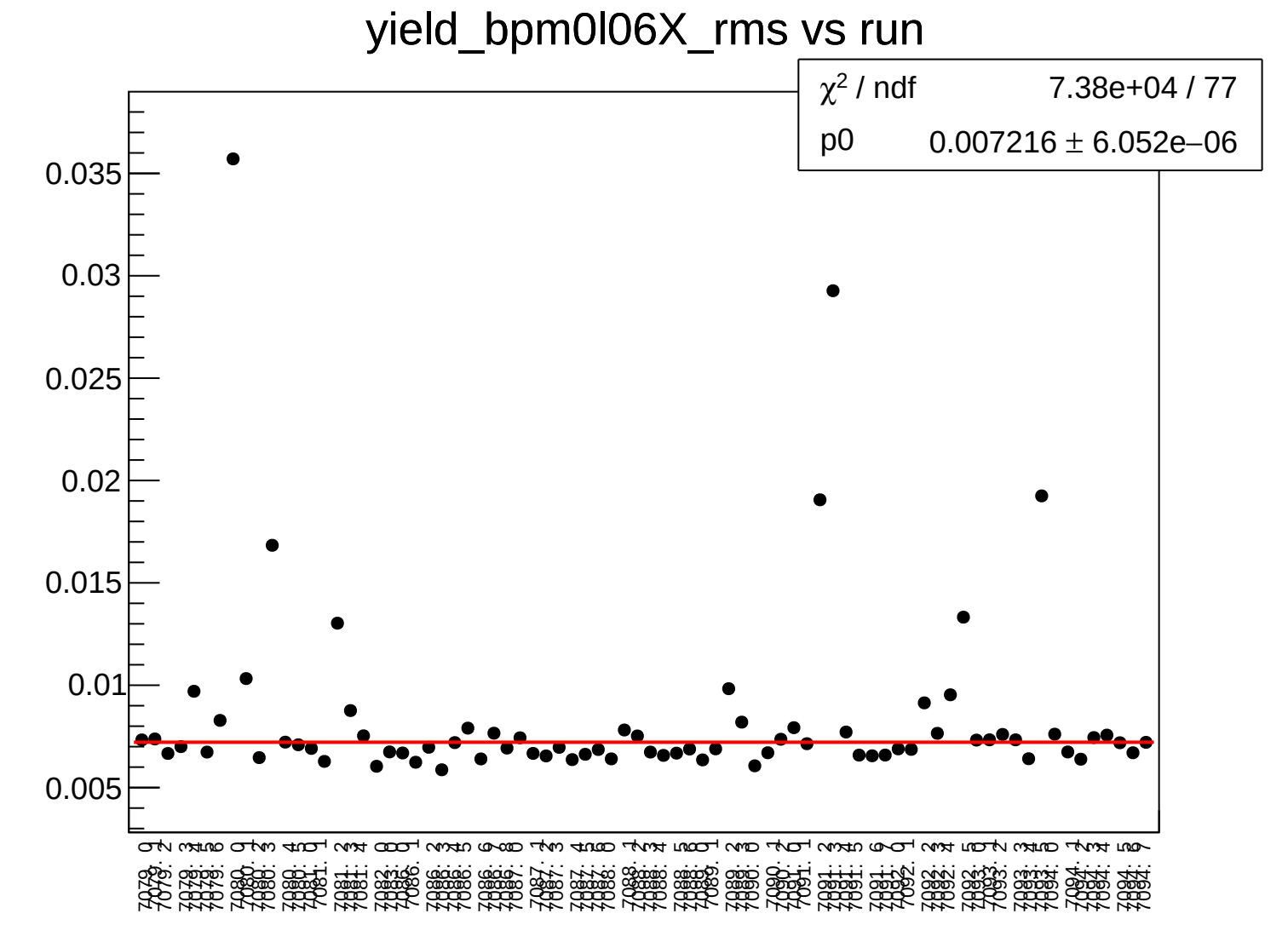

yield_bpm0l05Y_mean vs run
χ² / ndf 2.413e+06 / 77
p0 2.661± 5.891e−06
2.68
2.67
2.66
2.65
2.64
2.63
2.62
2.61
pull
Entries 78
Mean 1718
Std Dev 1679
400
300
200
100
0
−100
−200
−300

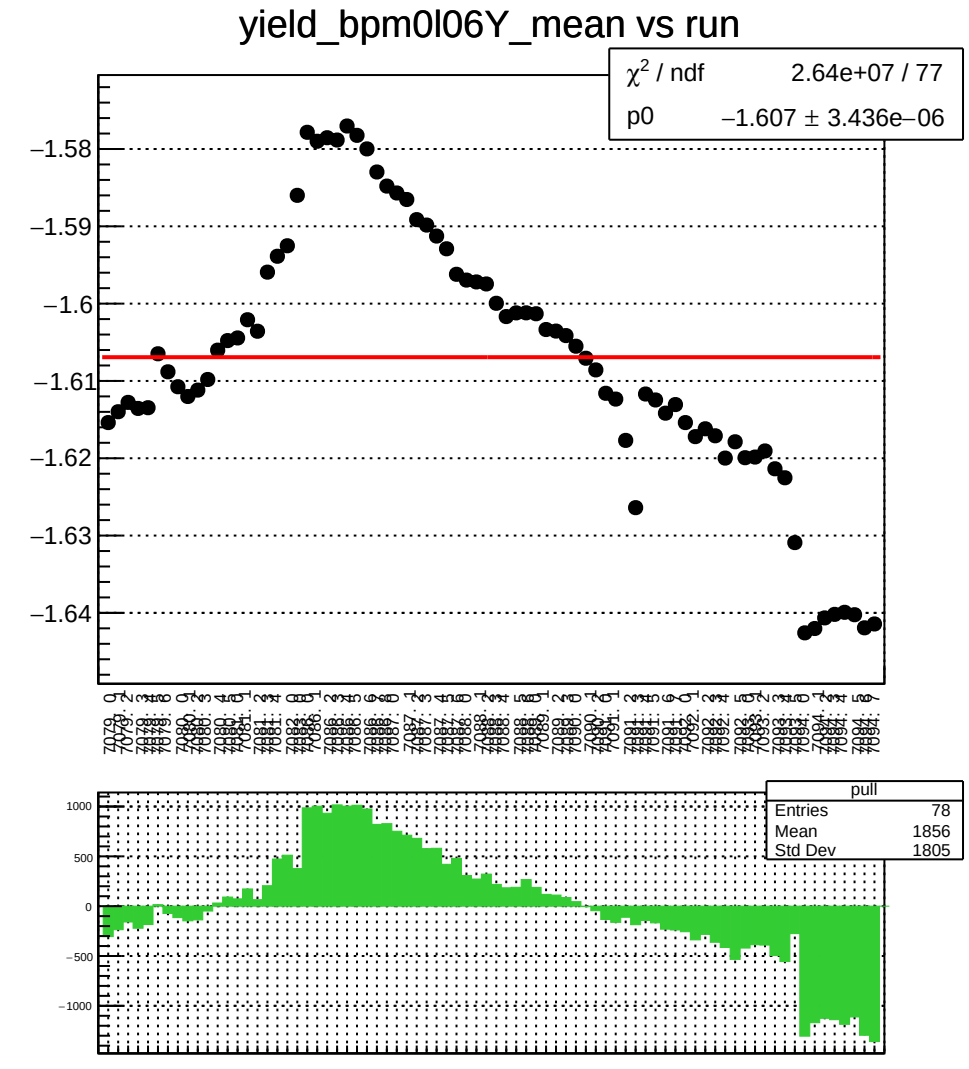

pull1D
Entries 78
Mean 0.4136
Std Dev 5.863
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

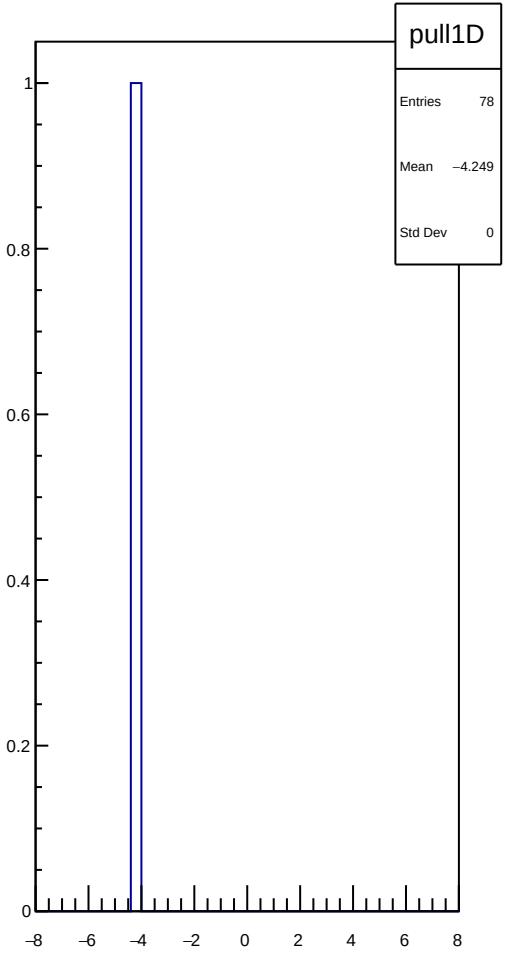

yield_bpm0l05Y_rms vs run
χ² / ndf 7.698e+04 / 77
p0 0.004961 ± 4.165e−06
0.03
0.025
0.02
0.015
0.01
0.005

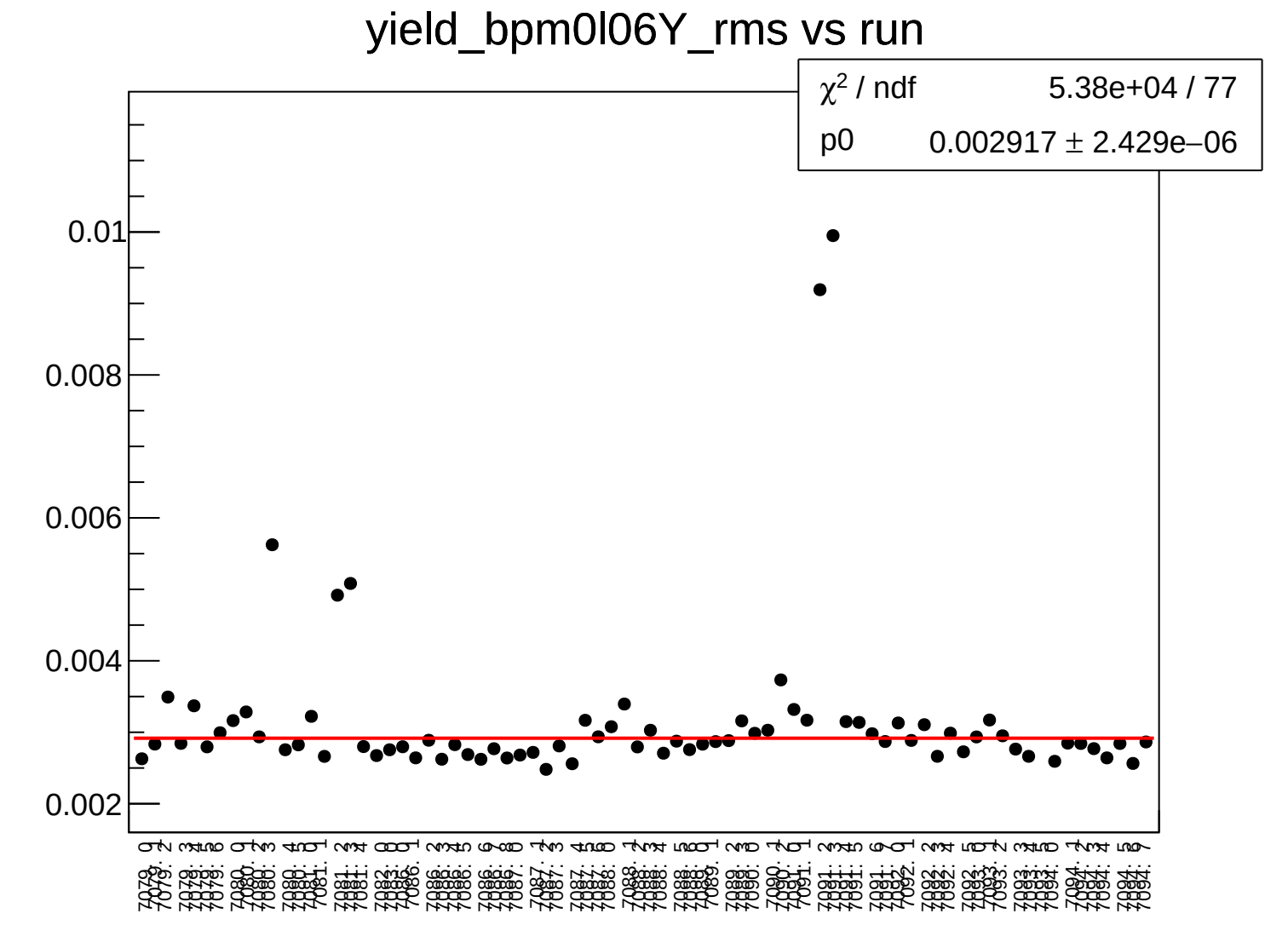

yield_bpm0l06X_mean vs run
χ² / ndf 1.963e+07 / 77
p0 2.732 ± 8.559e−06
2.84
2.82
2.8
2.78
2.76
2.74
2.72
2.7
2.68
pull
Entries 78
Mean −826.4
Std Dev 846.6
1400
1200
1000
800
600
400
200
0
−200
−400
−600

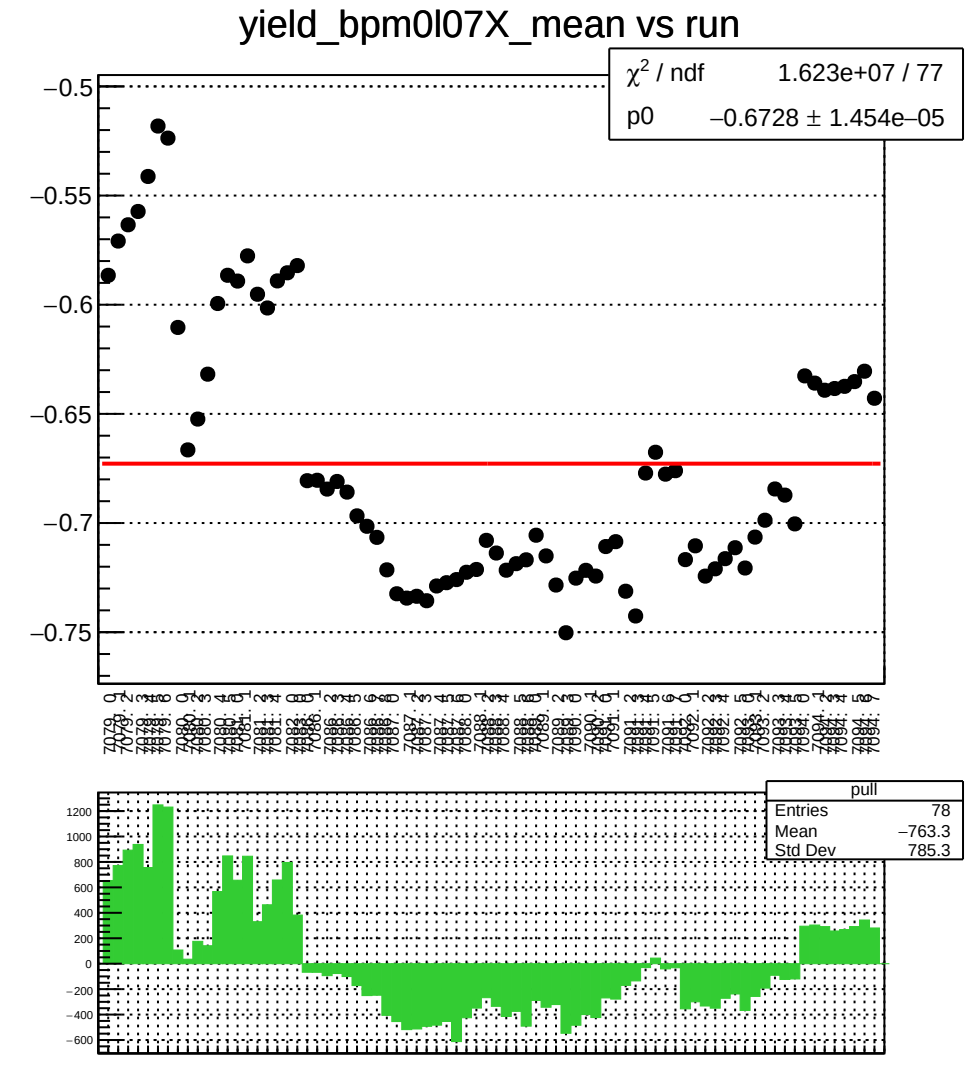

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

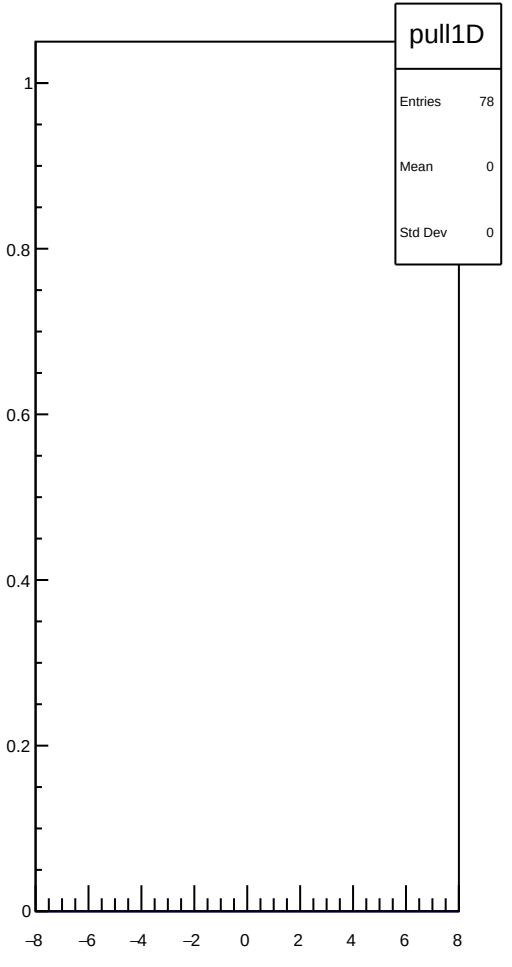

yield_bpm0l06X_rms vs run
χ² / ndf 7.38e+04 / 77
p0 0.007216 ± 6.052e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

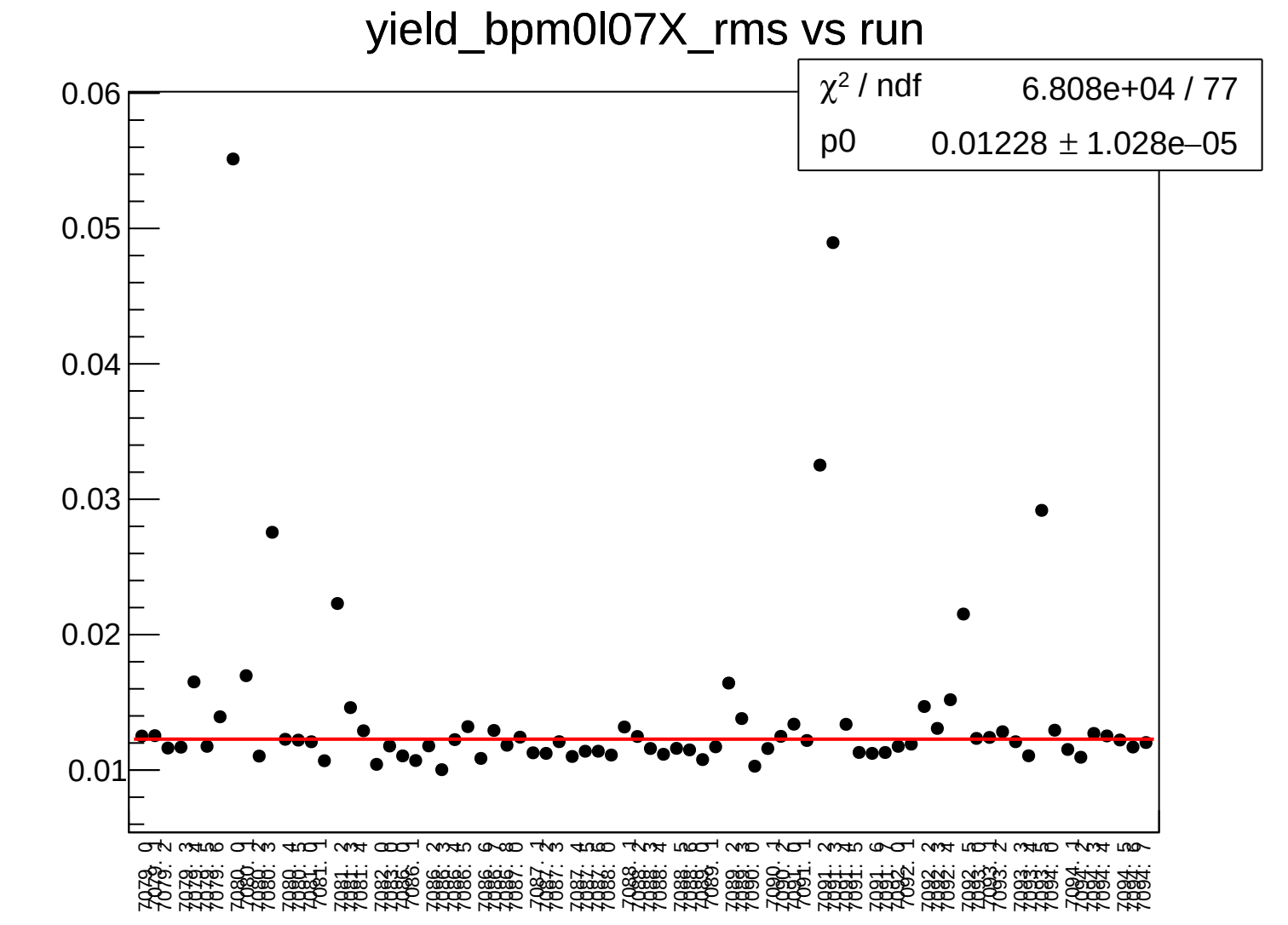

yield_bpm0l06Y_mean vs run
χ² / ndf 2.64e+07 / 77
p0 −1.607 ± 3.436e−06
−1.58
−1.59
−1.6
−1.61
−1.62
−1.63
−1.64
pull
Entries 78
Mean 1856
Std Dev 1805
1000
500
0
−500
−1000

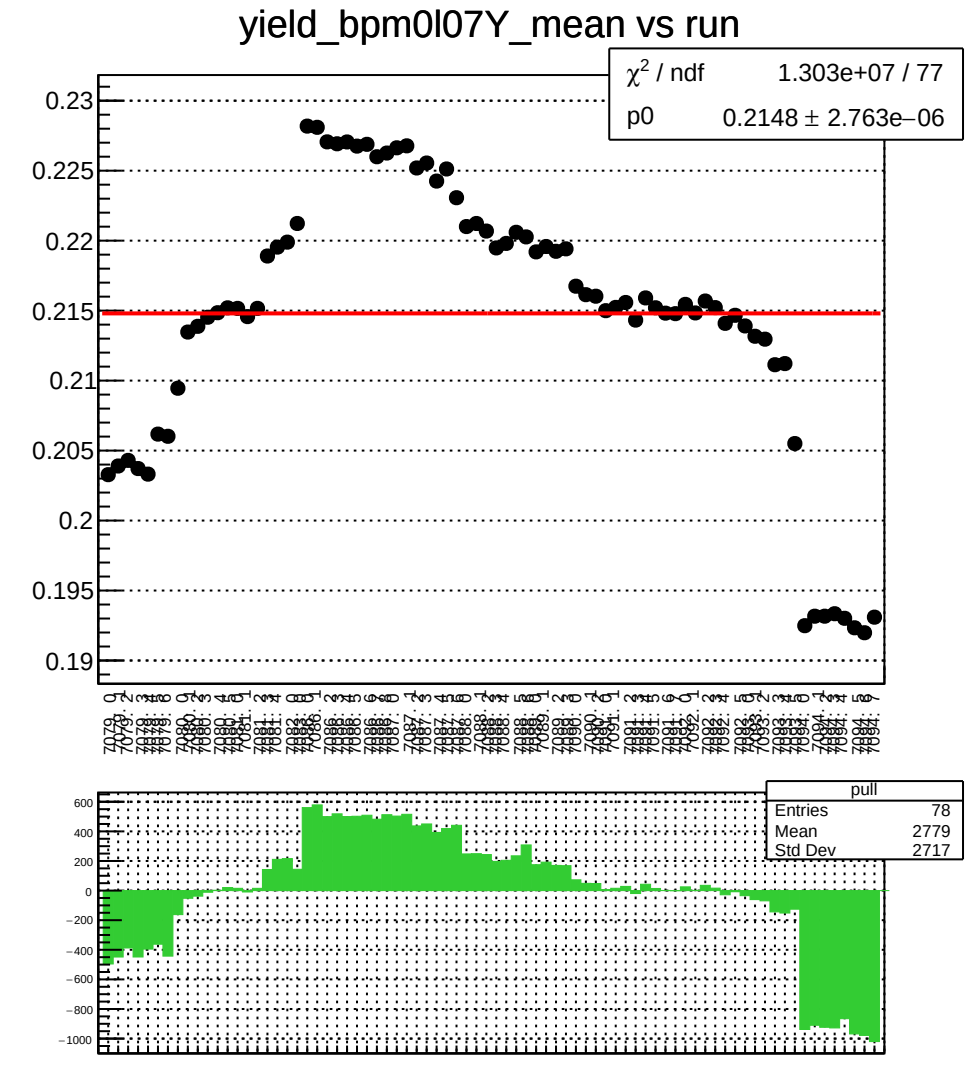

pull1D
Entries 78
Mean −4.249
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

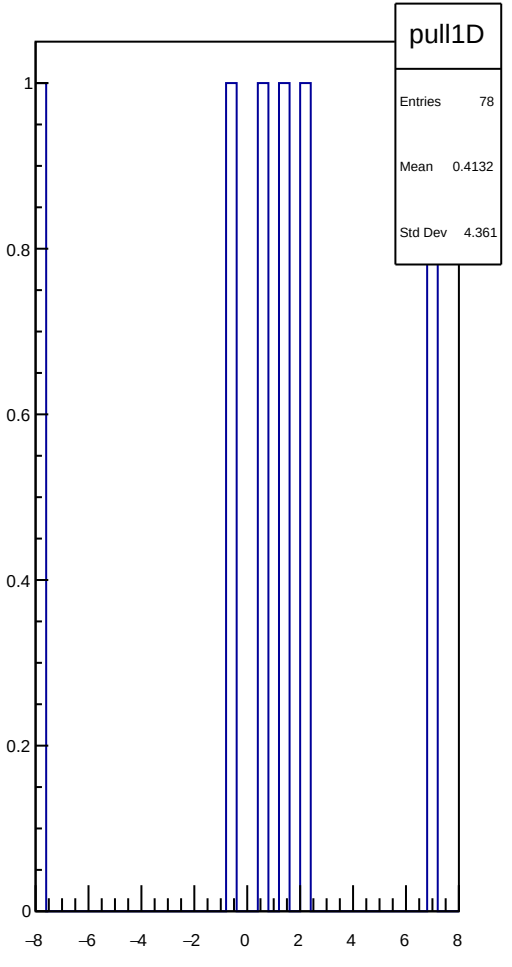

yield_bpm0l06Y_rms vs run
χ² / ndf 5.38e+04 / 77
p0 0.002917 ± 2.429e−06
0.01
0.008
0.006
0.004
0.002

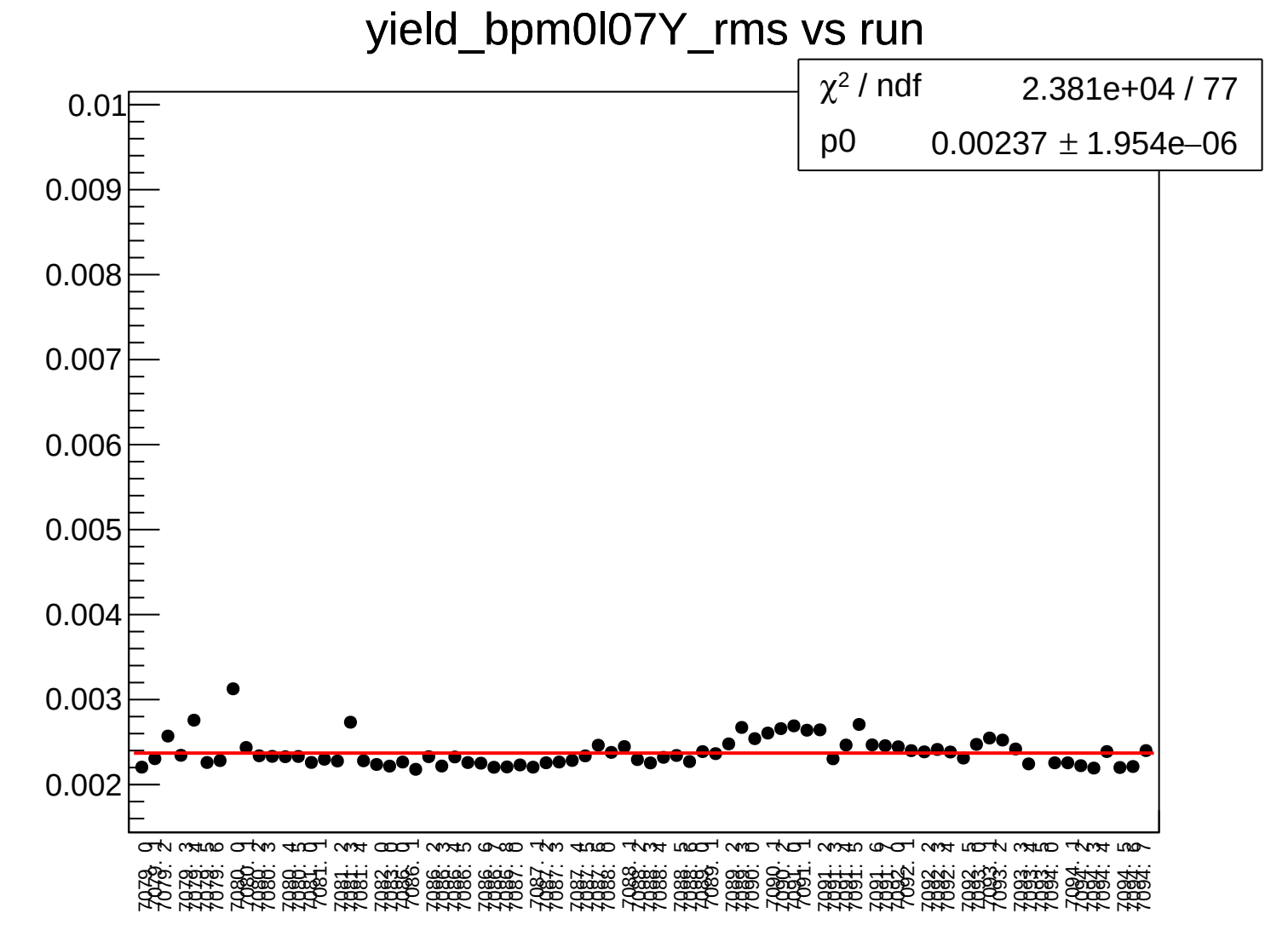

yield_bpm0l07X_mean vs run
χ² / ndf 1.623e+07 / 77
p0 −0.6728 ± 1.454e−05
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 78
Mean −763.3
Std Dev 785.3
1200
1000
800
600
400
200
0
−200
−400
−600

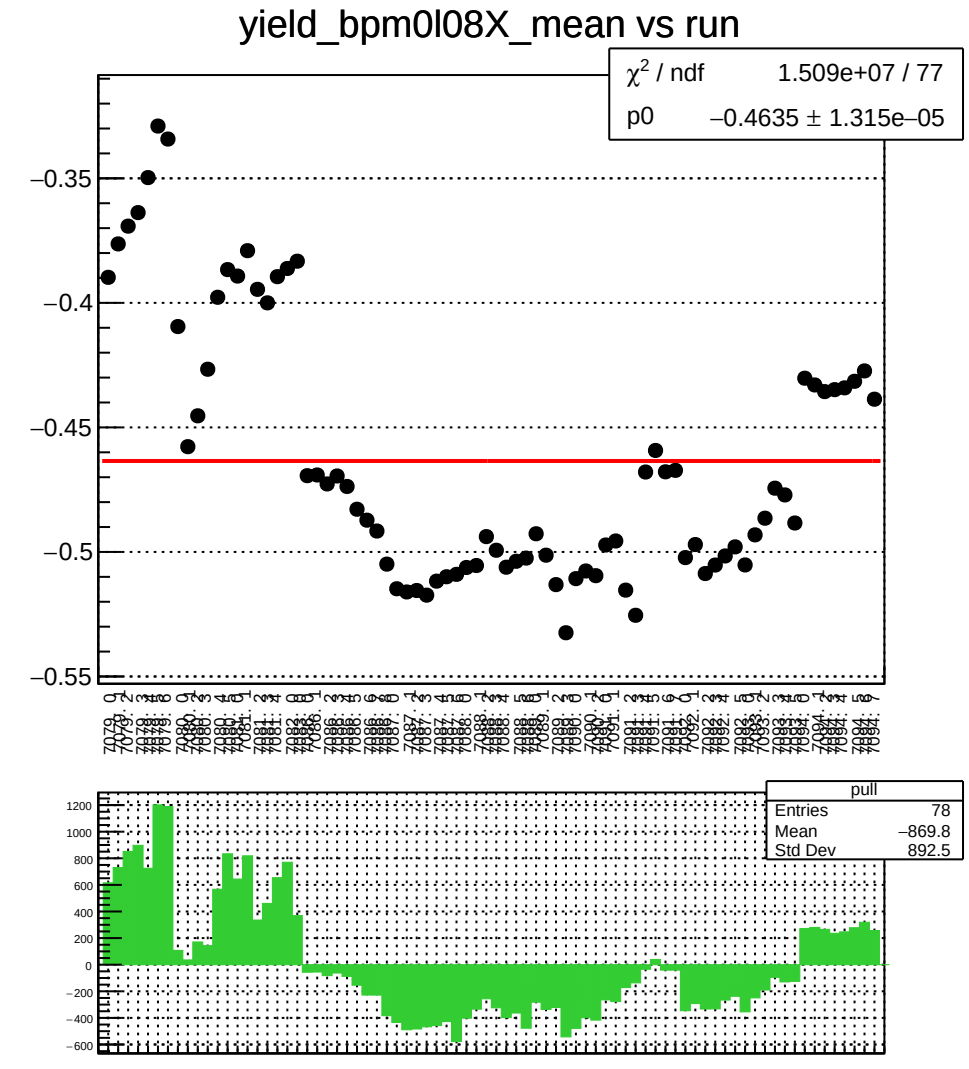

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

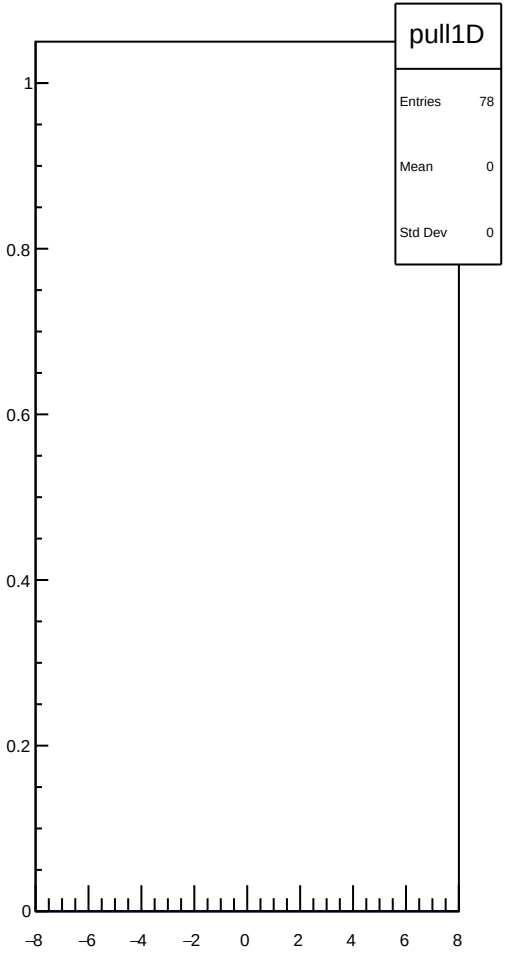

yield_bpm0l07X_rms vs run
χ² / ndf 6.808e+04 / 77
p0 0.01228 ± 1.028e–05
0.06
0.05
0.04
0.03
0.02
0.01

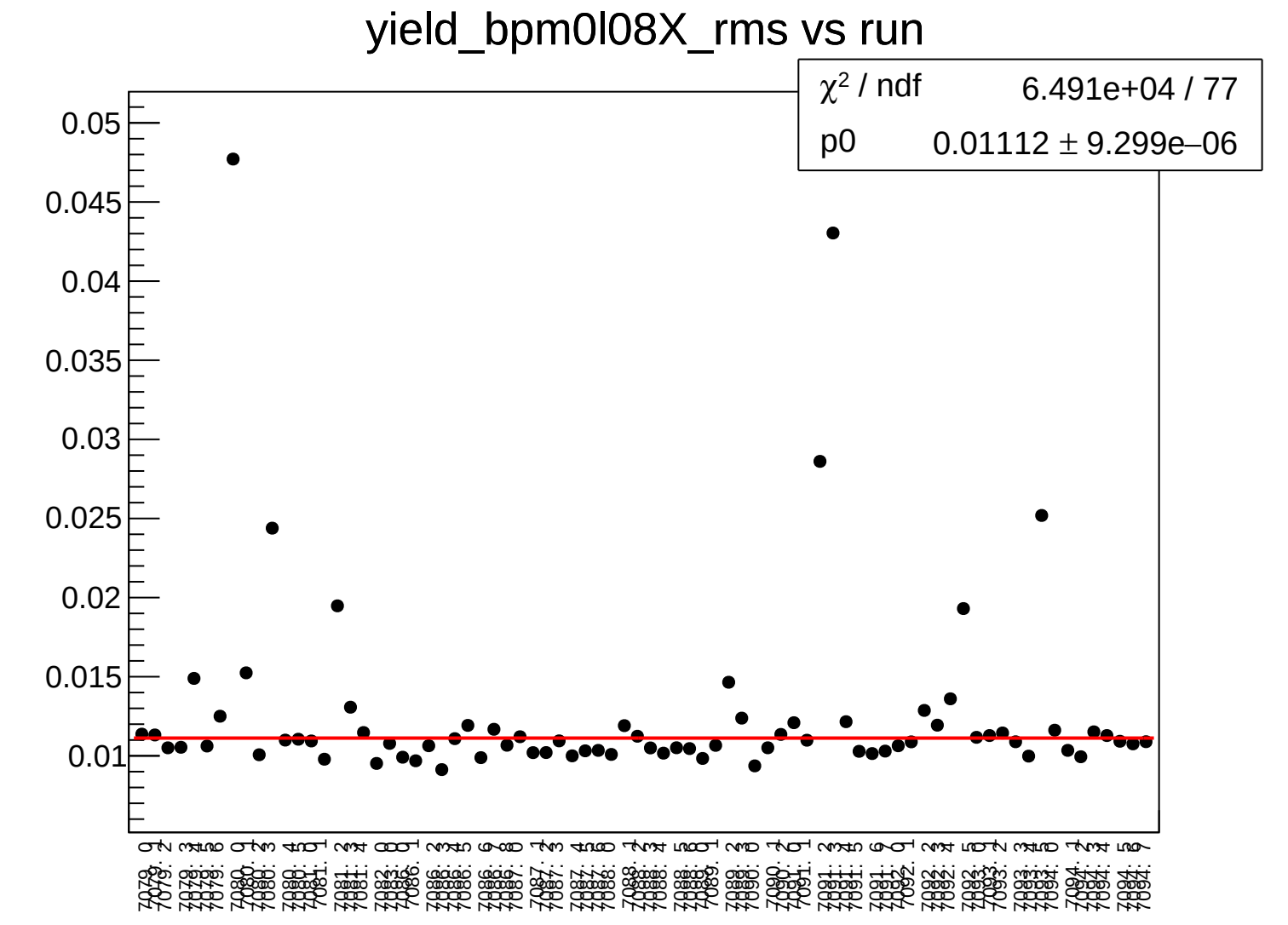

yield_bpm0l07Y_mean vs run
χ² / ndf 1.303e+07 / 77
p0 0.2148 ± 2.763e−06
0.23
0.225
0.22
0.215
0.21
0.205
0.2
0.195
0.19
pull
Entries 78
Mean 2779
Std Dev 2717
600
400
200
0
−200
−400
−600
−800
−1000

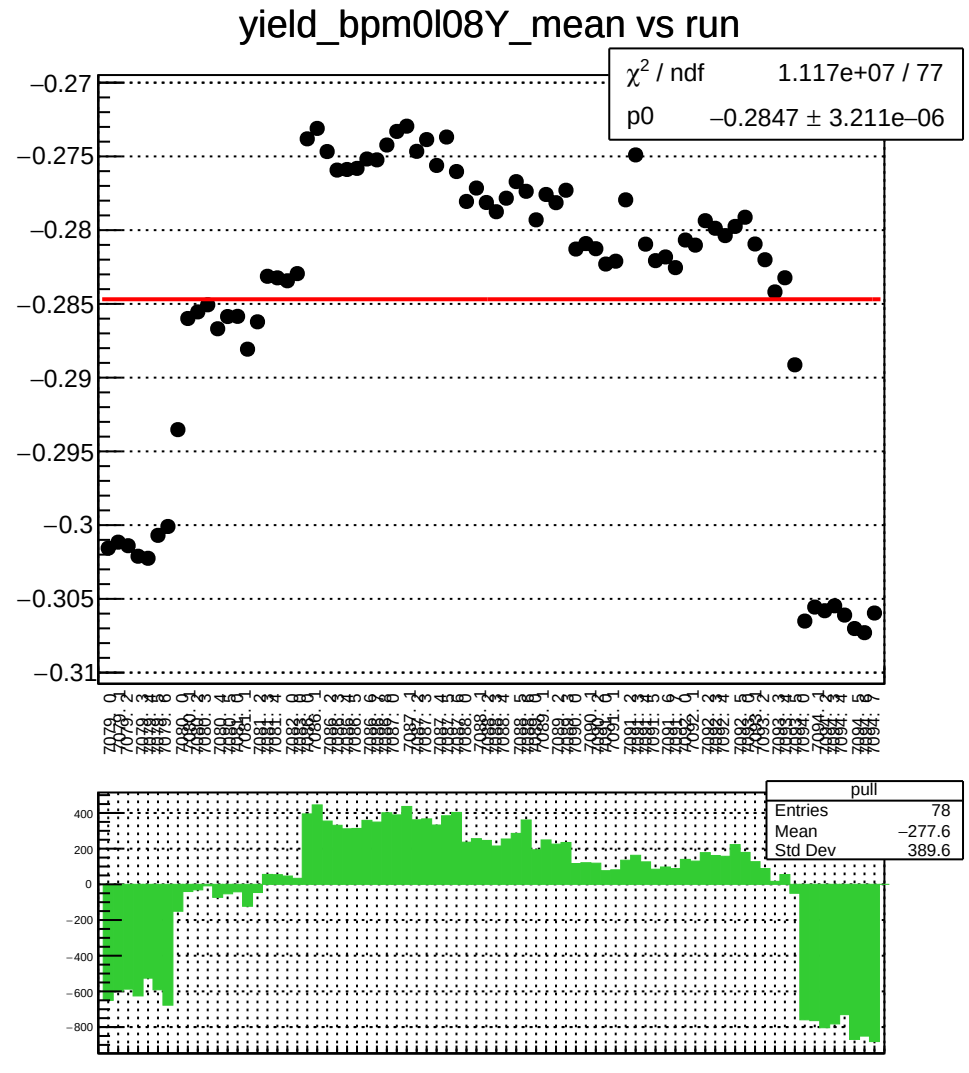

pull1D
Entries 78
Mean 0.4132
Std Dev 4.361
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

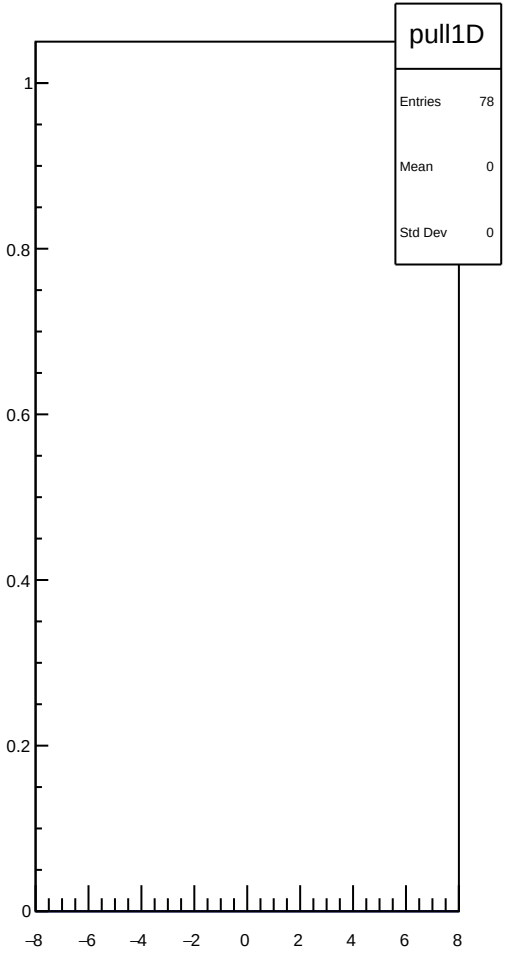

yield_bpm0l07Y_rms vs run
χ² / ndf 2.381e+04 / 77
p0 0.00237 ± 1.954e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

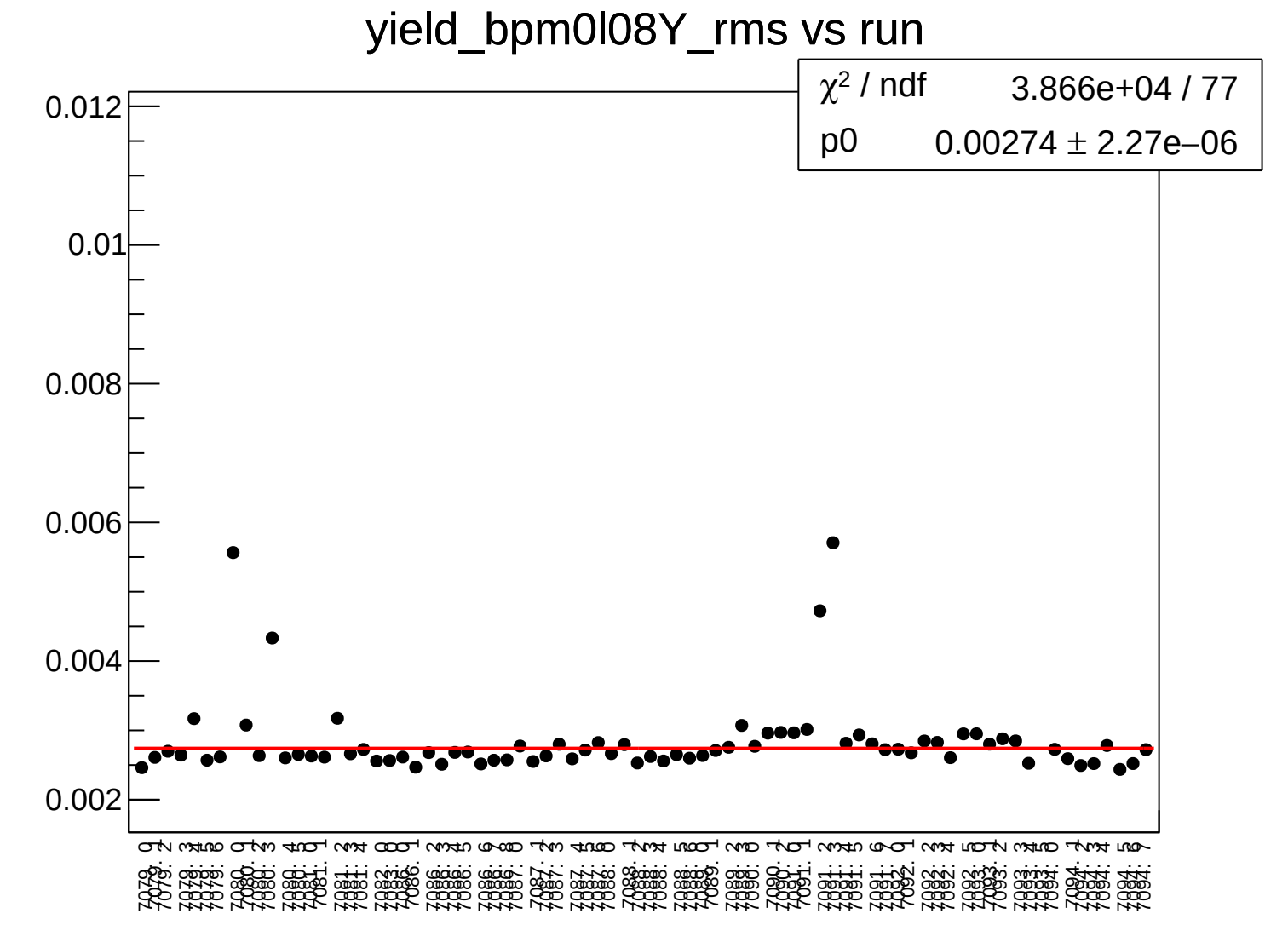

yield_bpm0l08X_mean vs run
χ² / ndf 1.509e+07 / 77
p0 −0.4635 ± 1.315e−05
−0.35
−0.4
−0.45
−0.5
−0.55
pull
Entries 78
Mean −869.8
Std Dev 892.5
1200
1000
800
600
400
200
0
−200
−400
−600

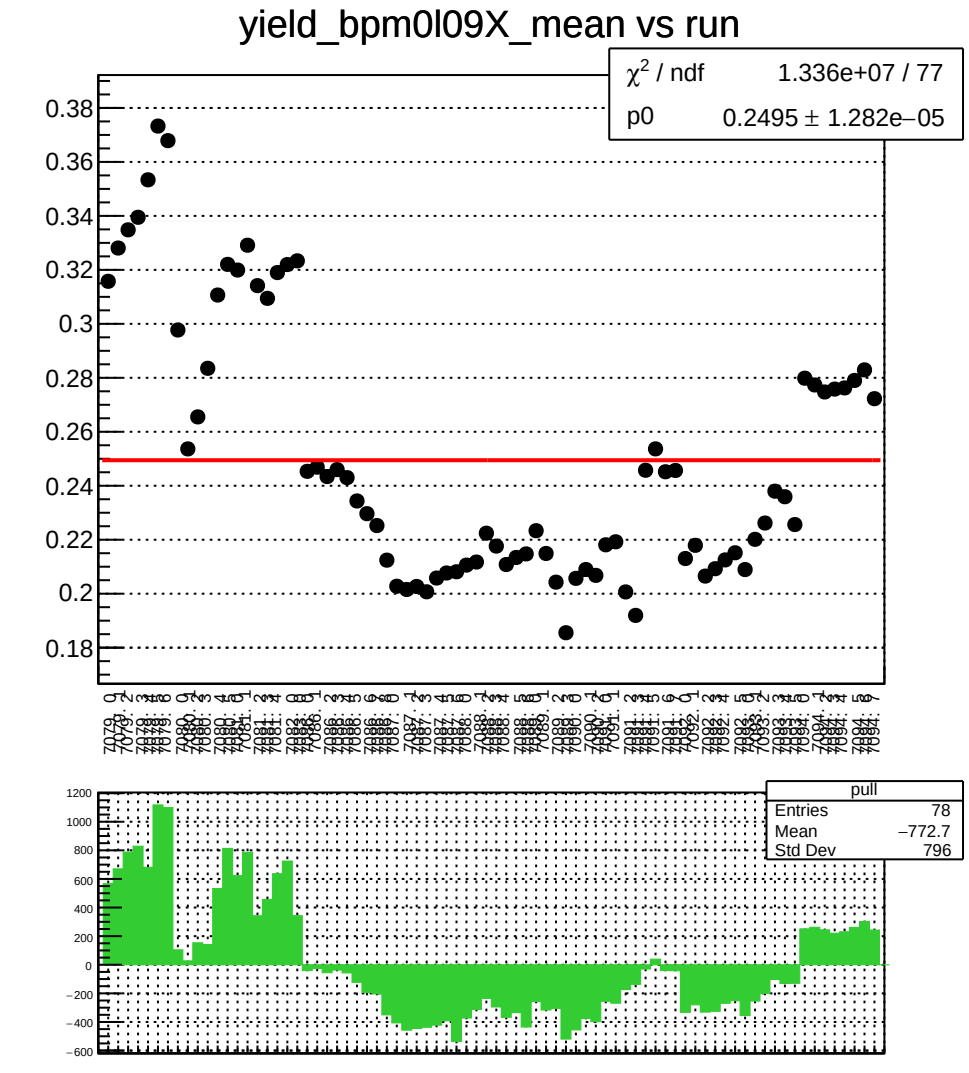

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

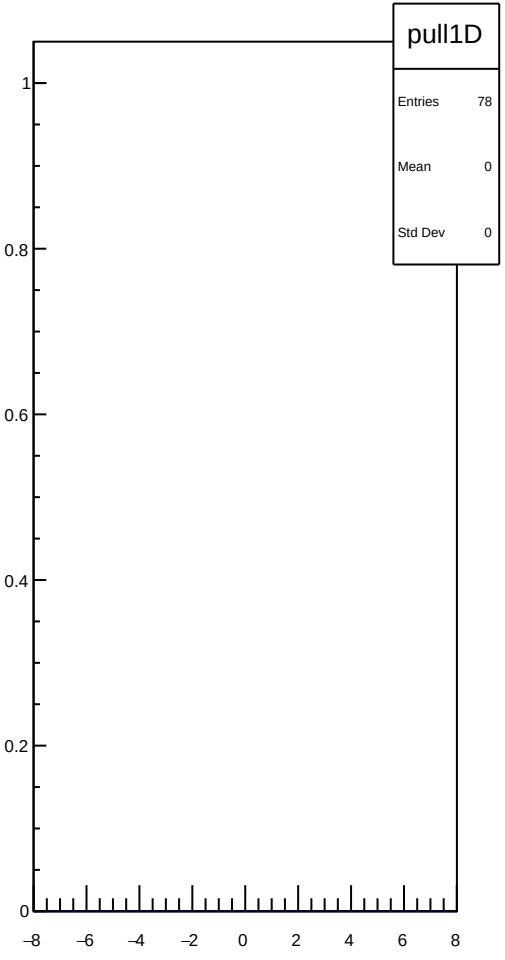

yield_bpm0l08X_rms vs run
χ² / ndf 6.491e+04 / 77
p0 0.01112 ± 9.299e–06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

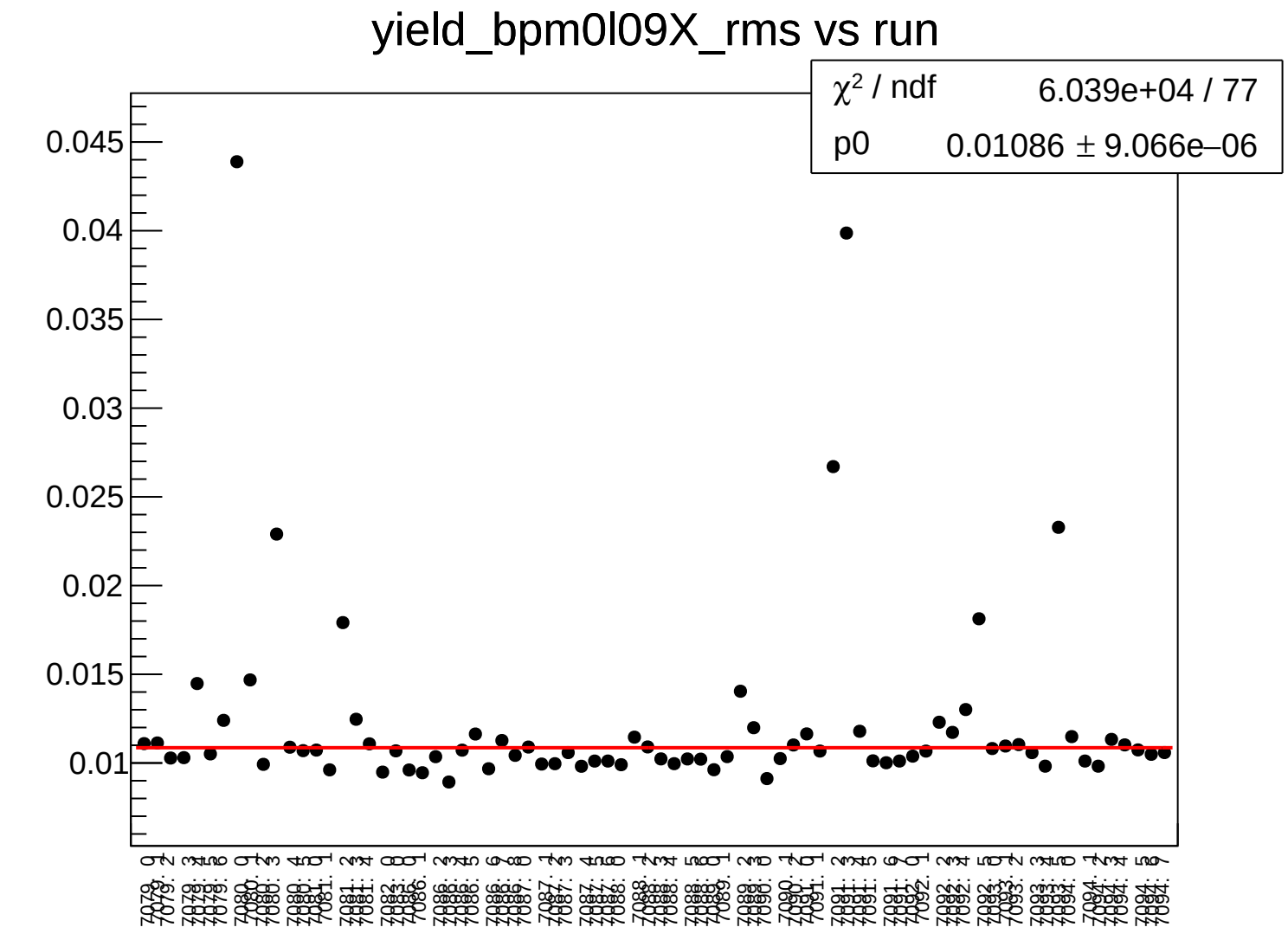

yield_bpm0l08Y_mean vs run
χ² / ndf 1.117e+07 / 77
p0 −0.2847 ± 3.211e−06
−0.27
−0.275
−0.28
−0.285
−0.29
−0.295
−0.3
−0.305
−0.31
pull
Entries 78
Mean −277.6
Std Dev 389.6
400
200
0
−200
−400
−600
−800

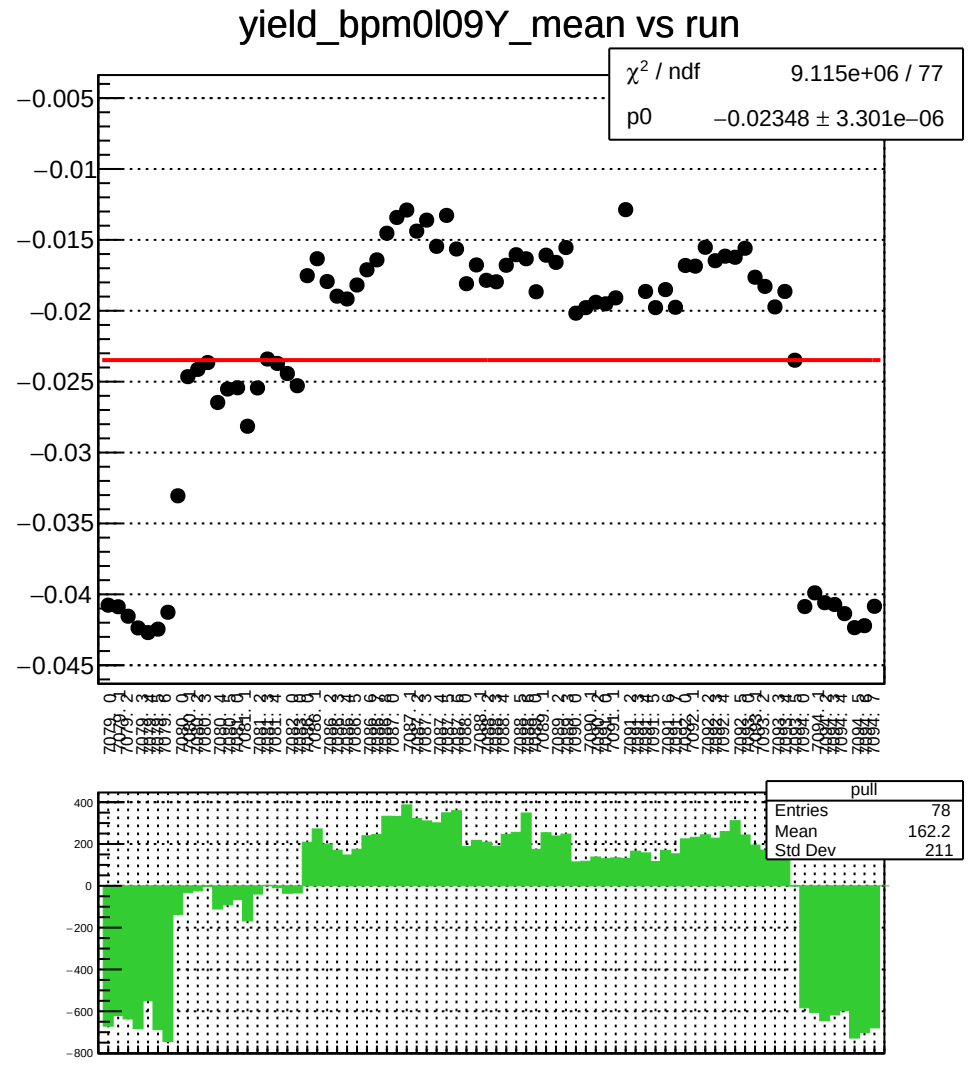

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

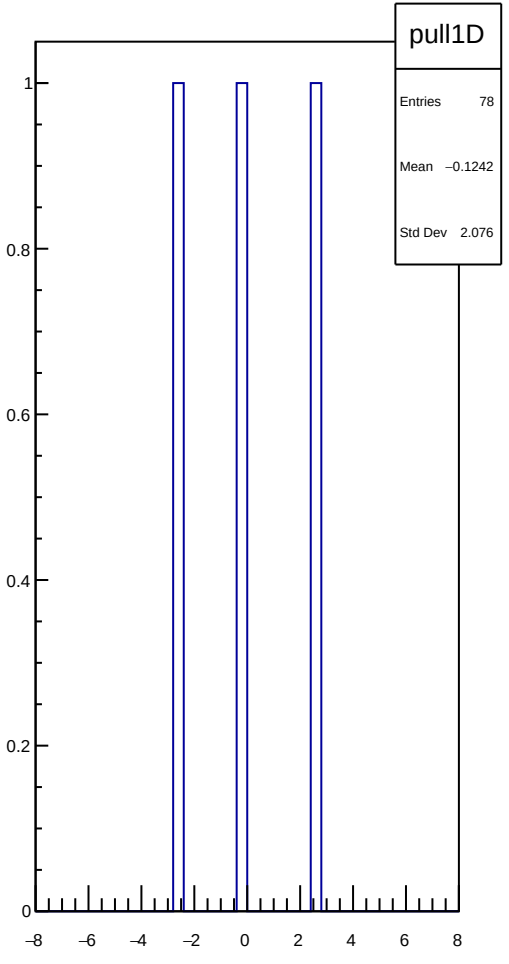

yield_bpm0l08Y_rms vs run
χ² / ndf 3.866e+04 / 77
p0 0.00274 ± 2.27e−06
0.012
0.01
0.008
0.006
0.004
0.002

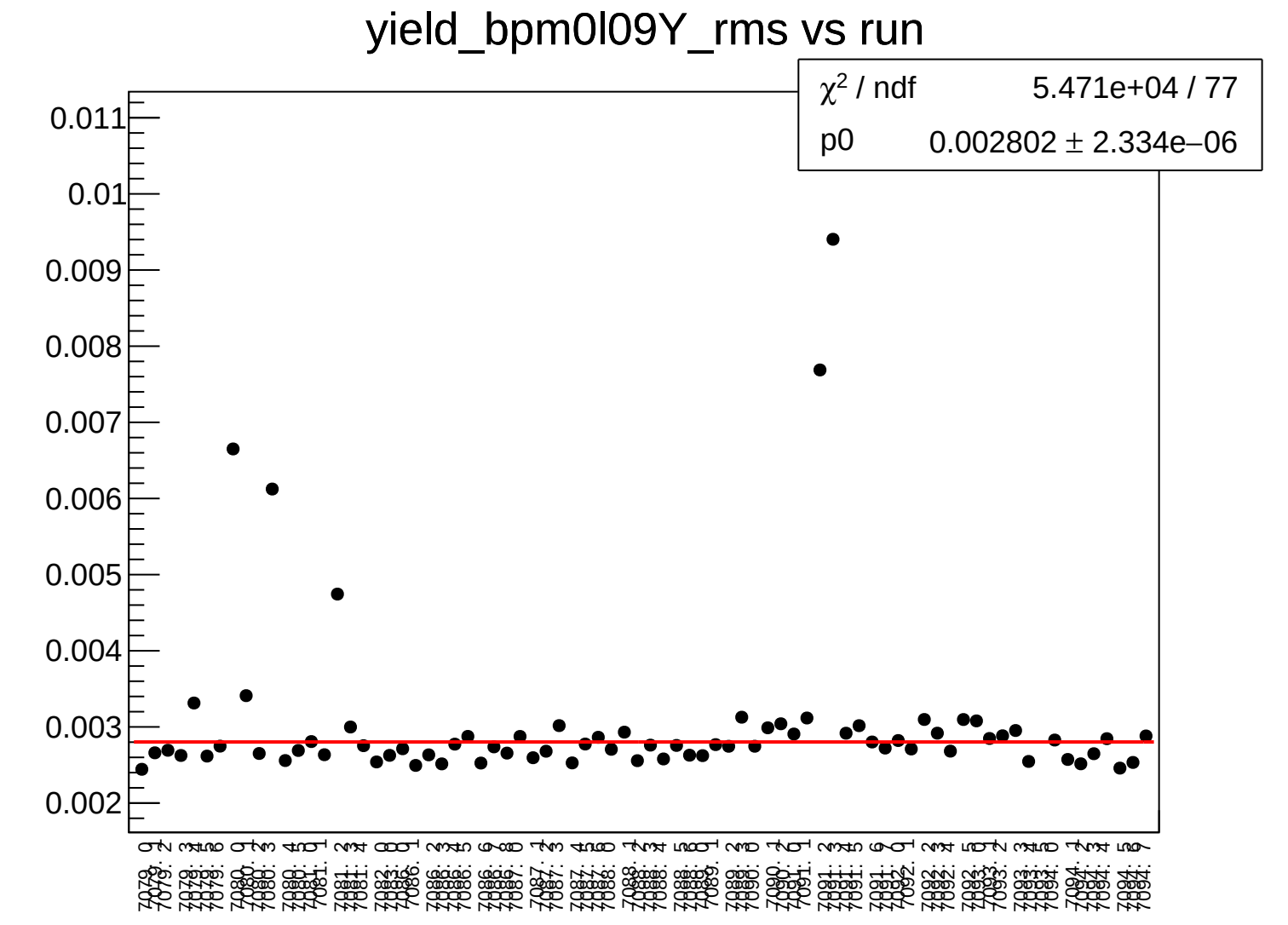

yield_bpm0l09X_mean vs run
χ² / ndf 1.336e+07 / 77
p0 0.2495 ± 1.282e−05
pull
Entries 78
Mean −772.7
Std Dev 796

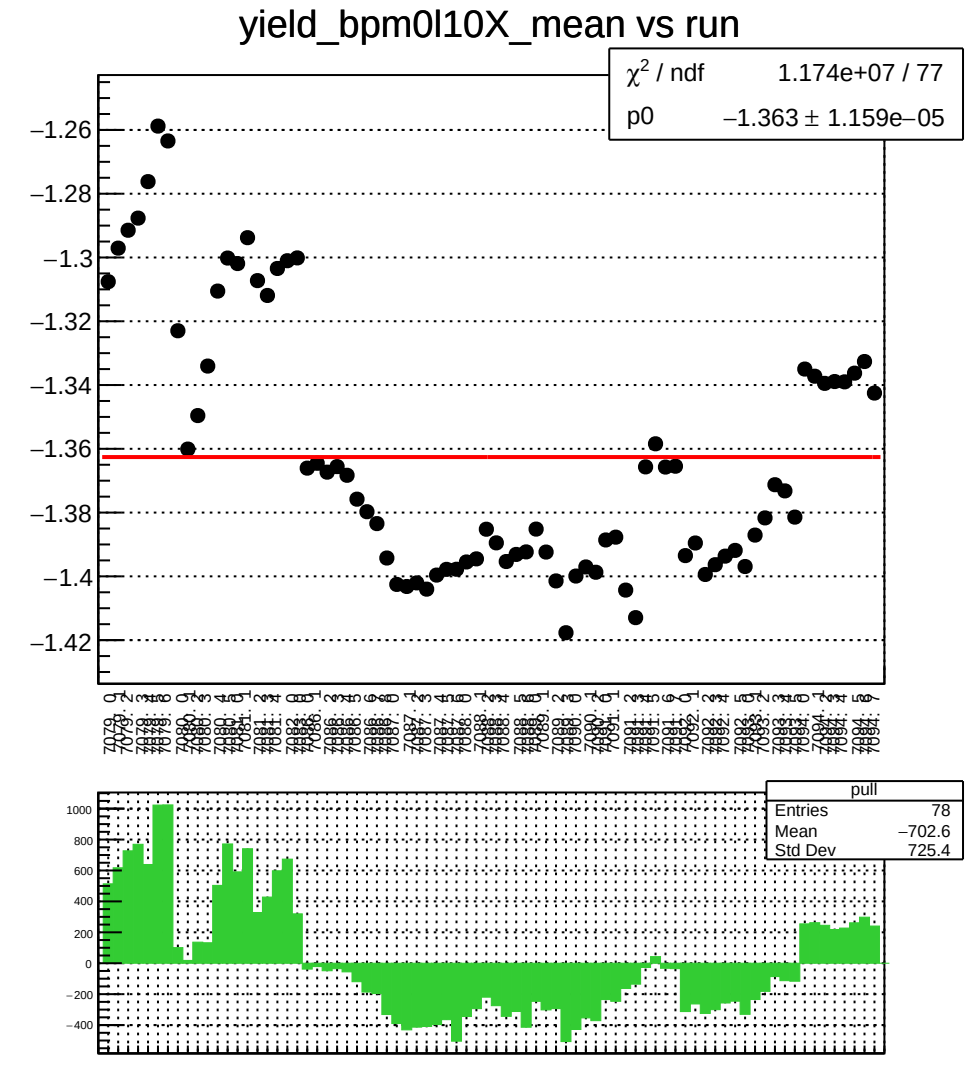

pull1D
Entries 78
Mean 0
Std Dev 0

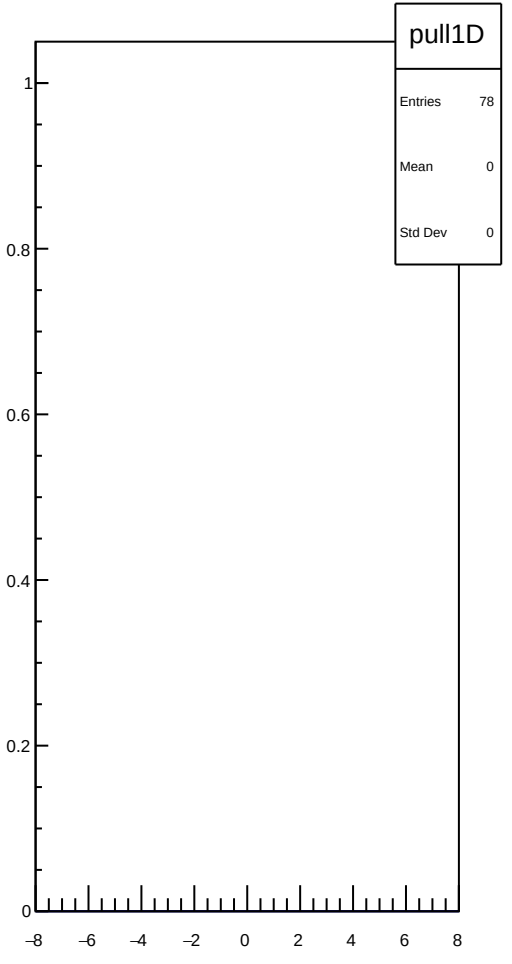

yield_bpm0l09X_rms vs run
χ² / ndf 6.039e+04 / 77
p0 0.01086 ± 9.066e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

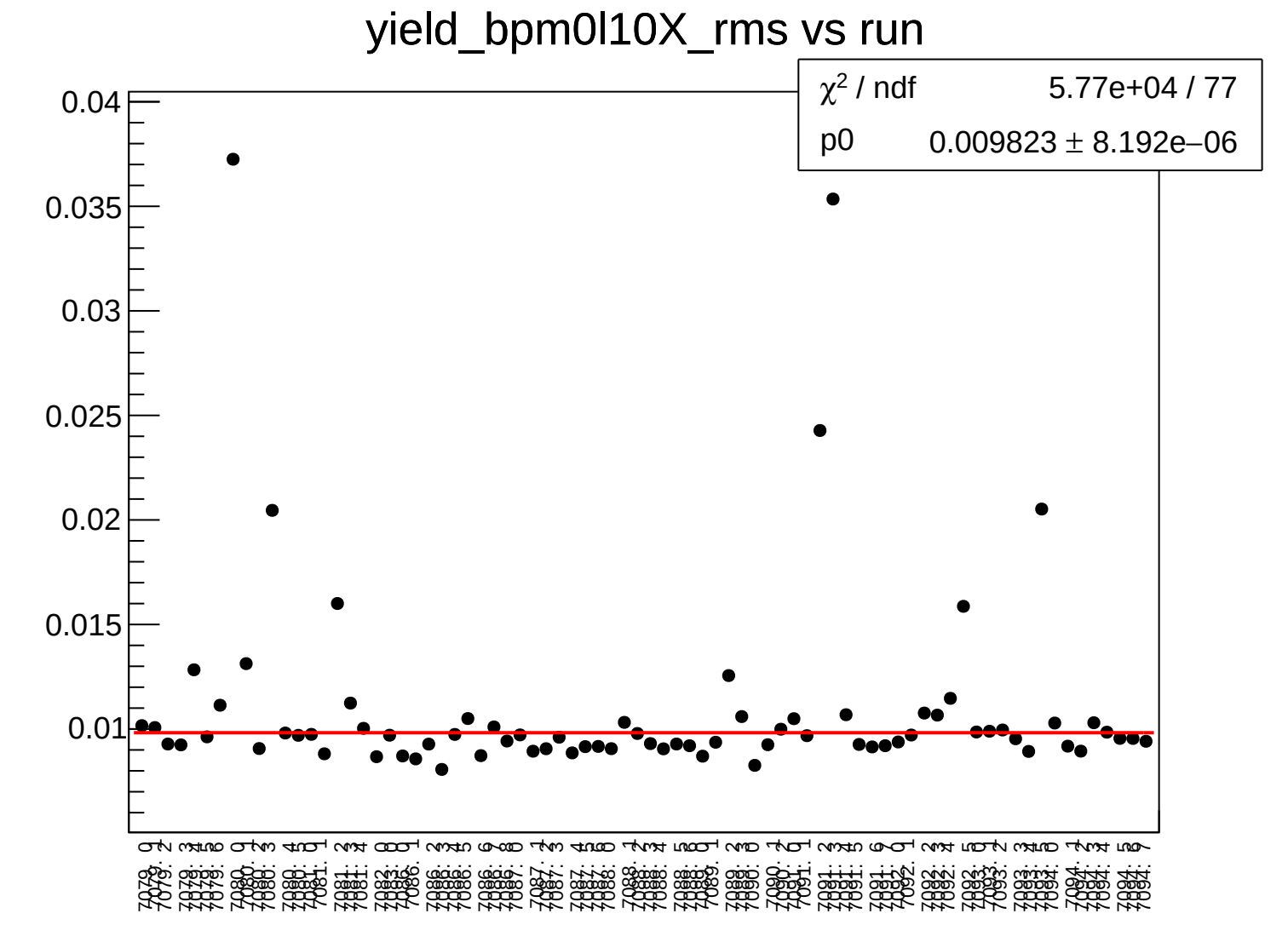

yield_bpm0l09Y_mean vs run
χ² / ndf 9.115e+06 / 77
p0 −0.02348 ± 3.301e−06
−0.005
−0.01
−0.015
−0.02
−0.025
−0.03
−0.035
−0.04
−0.045
pull
Entries 78
Mean 162.2
Std Dev 211
400
200
0
−200
−400
−600
−800

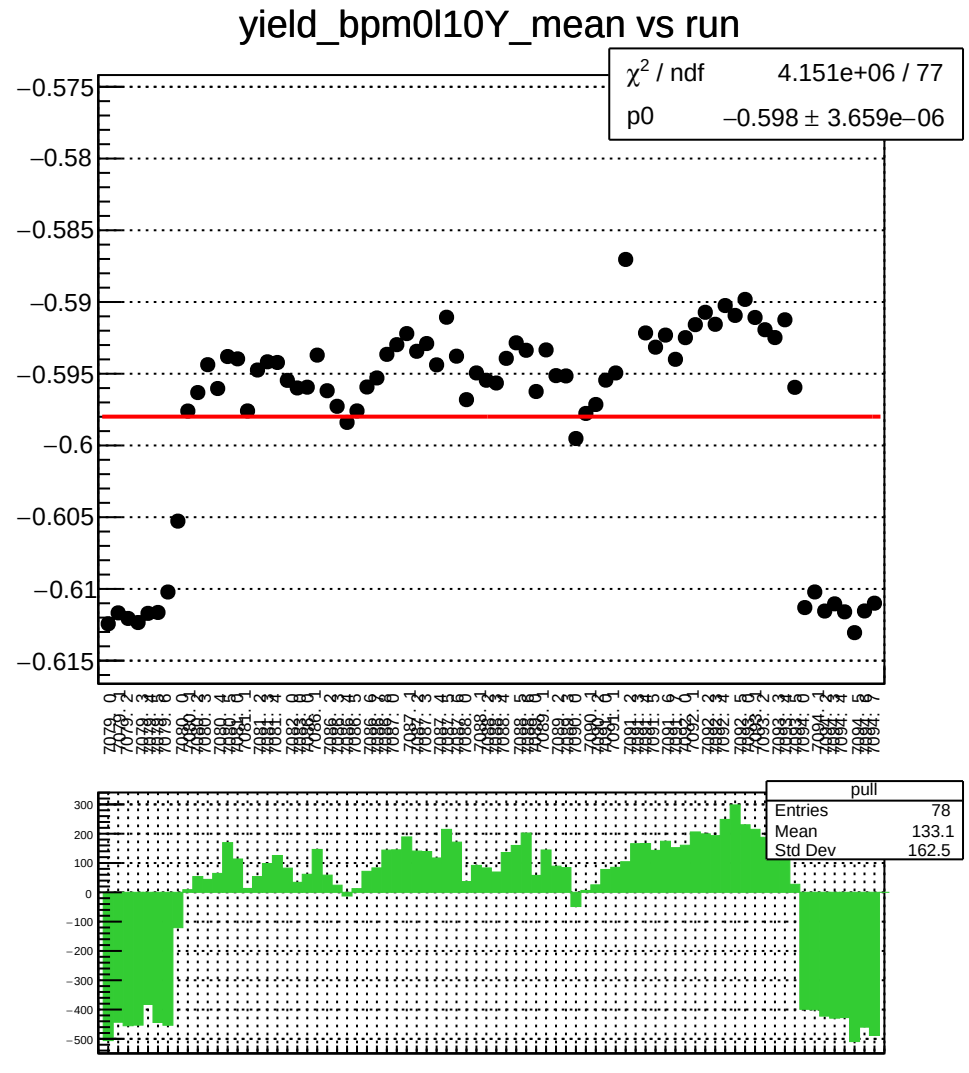

pull1D
Entries 78
Mean −0.1242
Std Dev 2.076
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

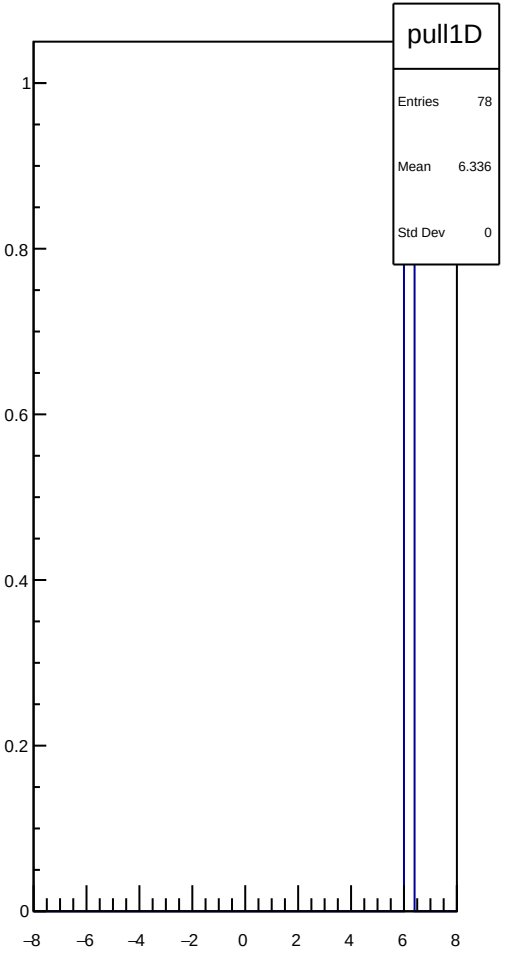

yield_bpm0l09Y_rms vs run
χ² / ndf 5.471e+04 / 77
p0 0.002802 ± 2.334e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

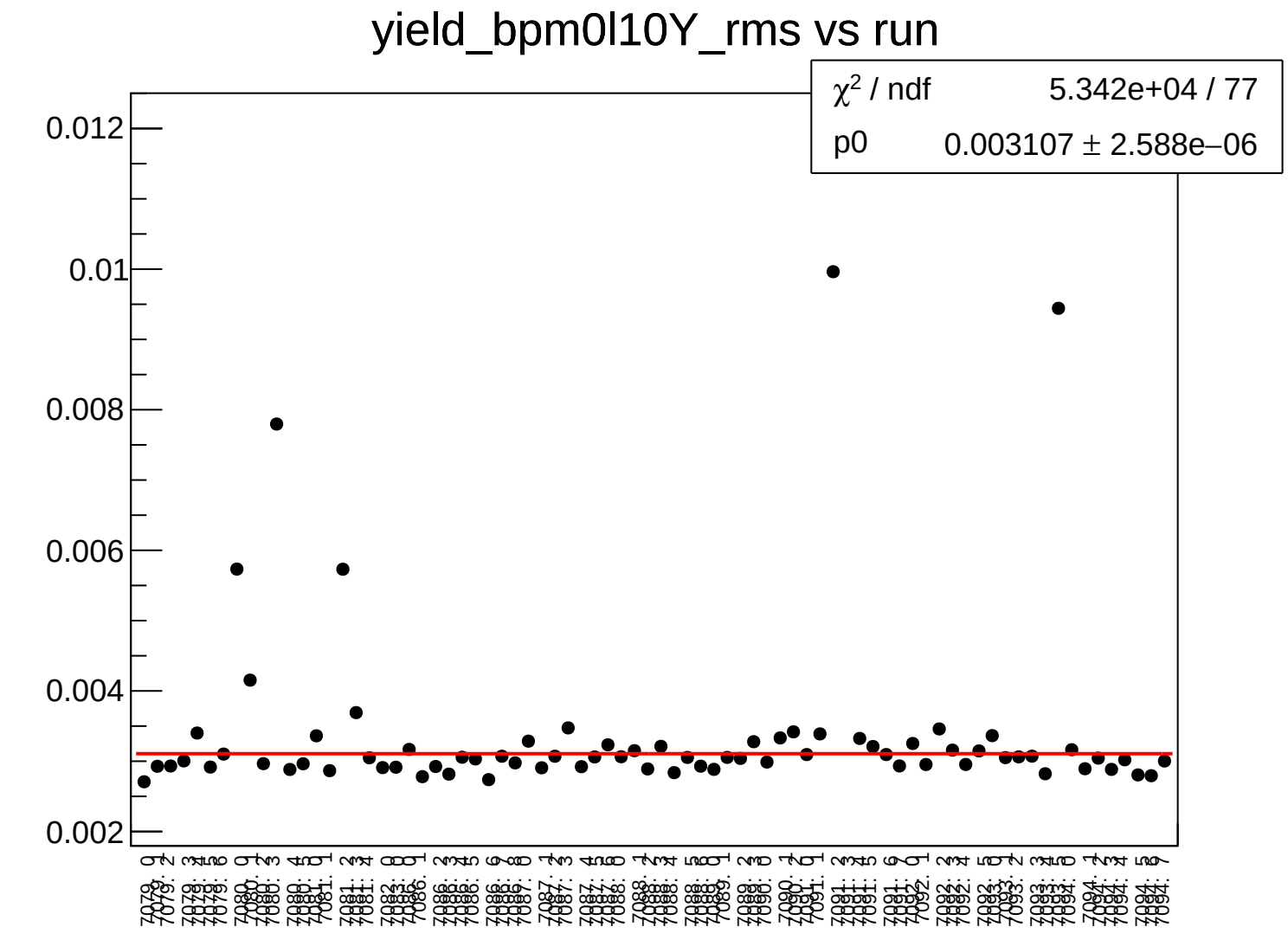

yield_bpm0l10X_mean vs run
χ² / ndf 1.174e+07 / 77
p0 −1.363 ± 1.159e−05
−1.26
−1.28
−1.3
−1.32
−1.34
−1.36
−1.38
−1.4
−1.42
pull
Entries 78
Mean −702.6
Std Dev 725.4
1000
800
600
400
200
0
−200
−400

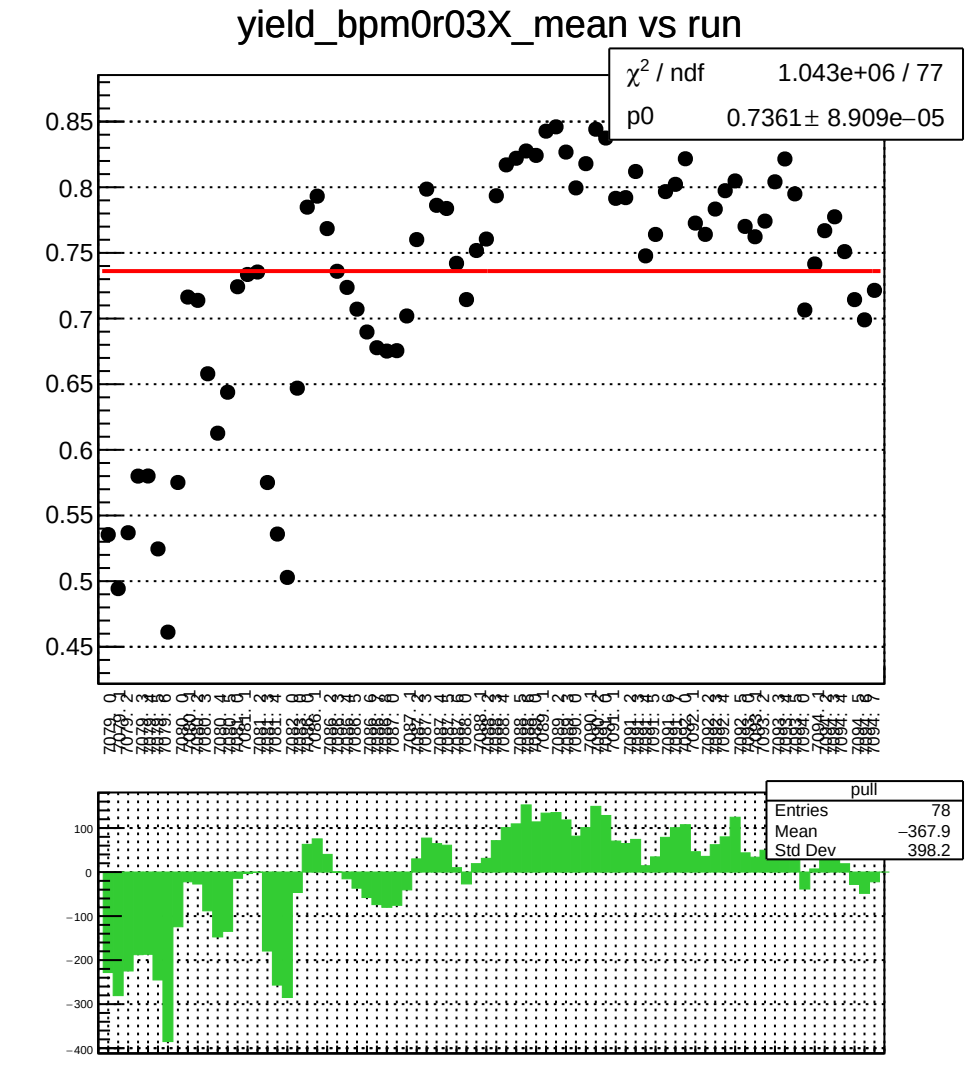

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

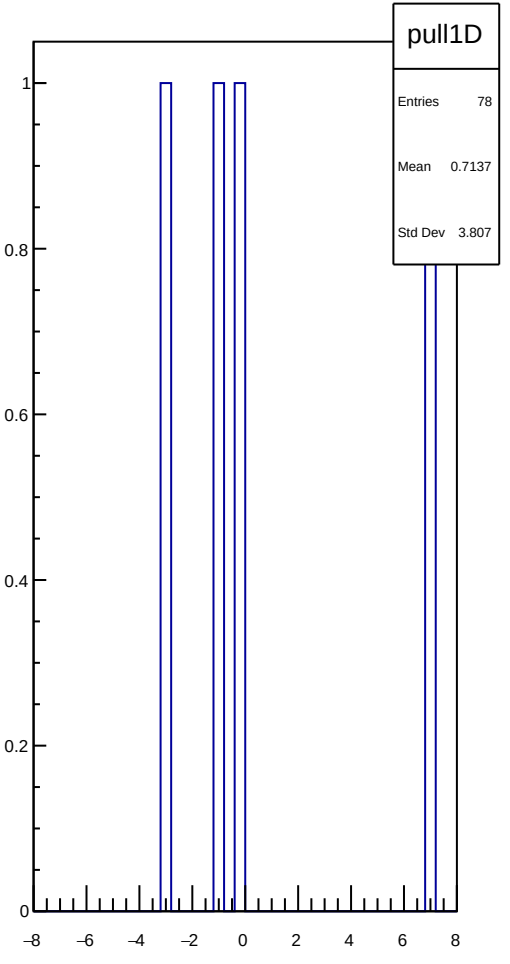

yield_bpm0l10X_rms vs run
χ² / ndf 5.77e+04 / 77
p0 0.009823 ± 8.192e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

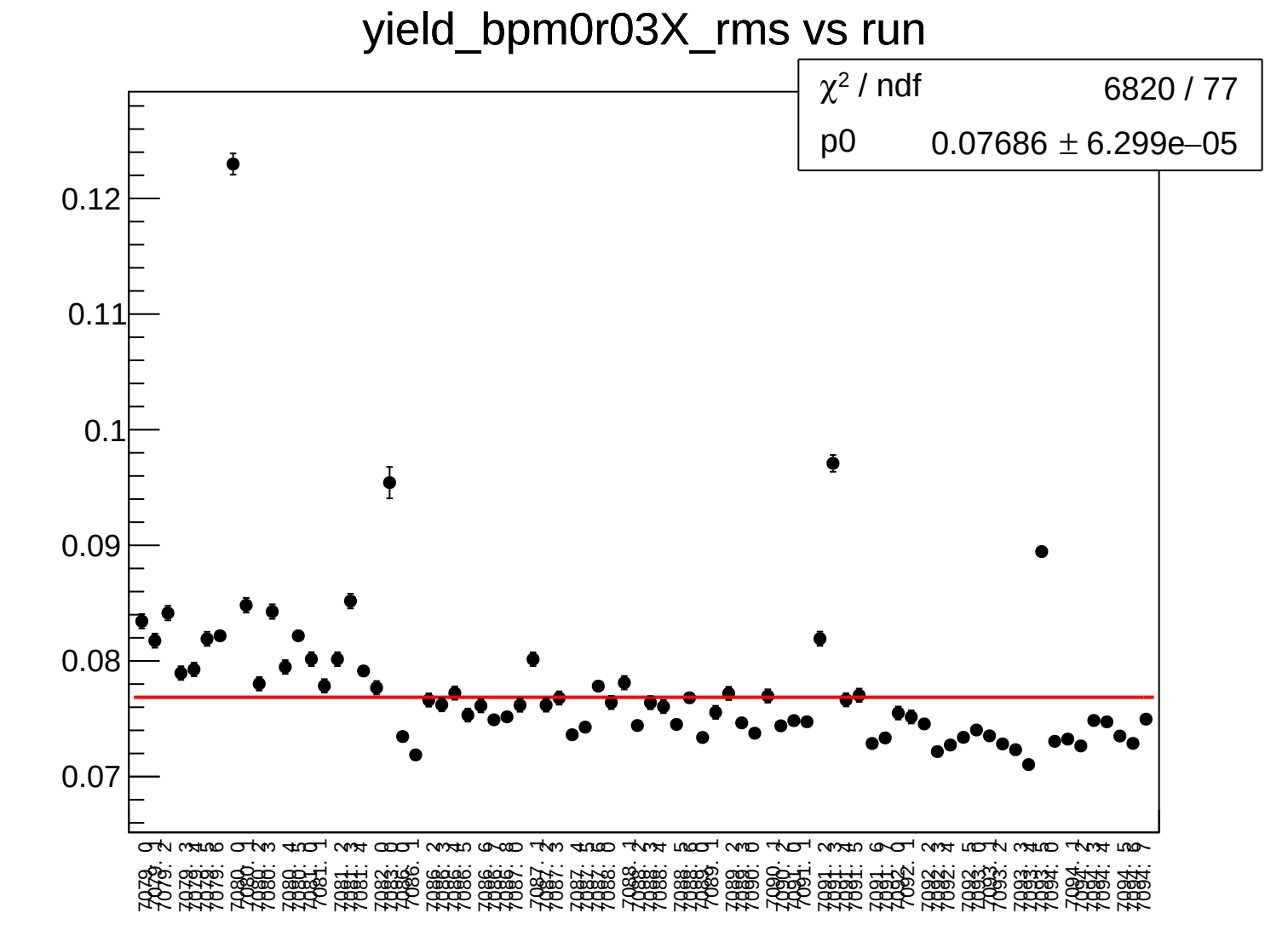

yield_bpm0l10Y_mean vs run
χ² / ndf 4.151e+06 / 77
p0 −0.598 ± 3.659e−06
−0.575
−0.58
−0.585
−0.59
−0.595
−0.6
−0.605
−0.61
−0.615
pull
Entries 78
Mean 133.1
Std Dev 162.5
300
200
100
0
−100
−200
−300
−400
−500

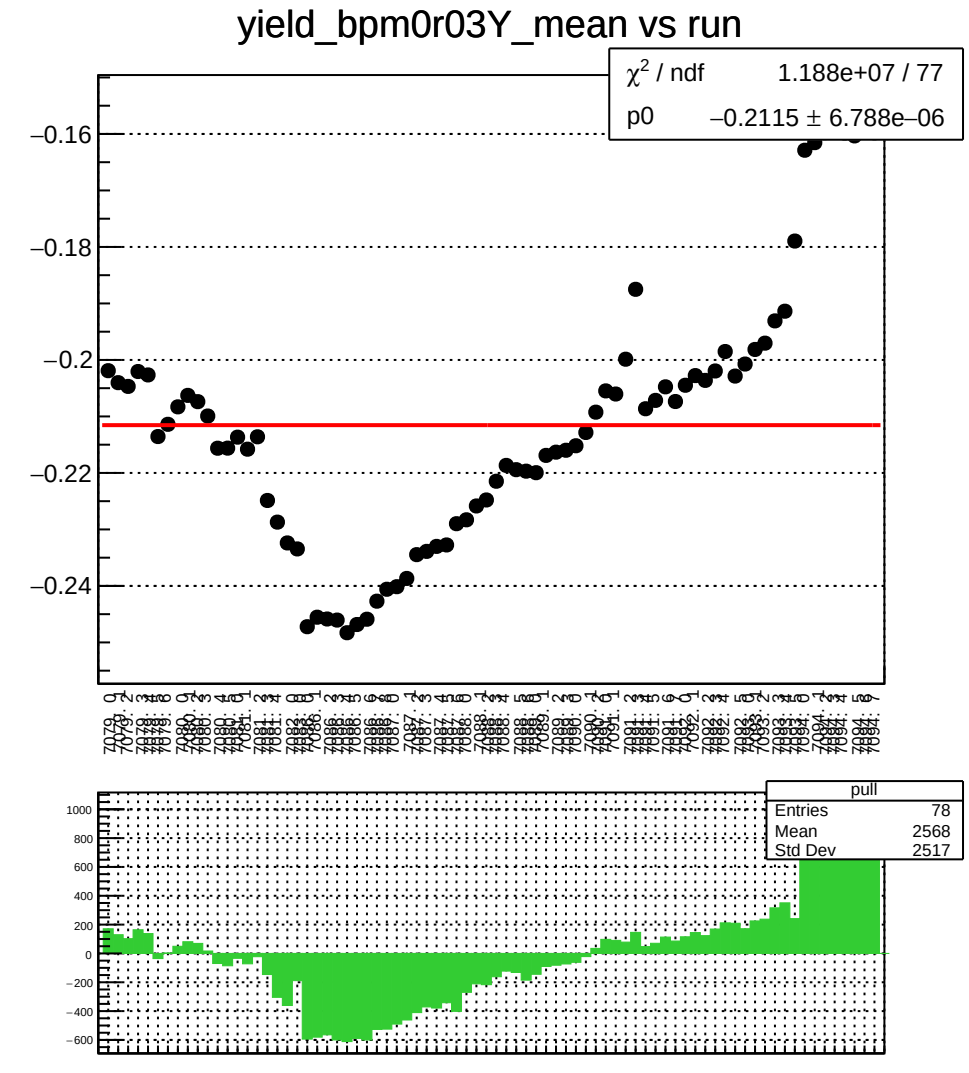

pull1D
Entries 78
Mean 6.336
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

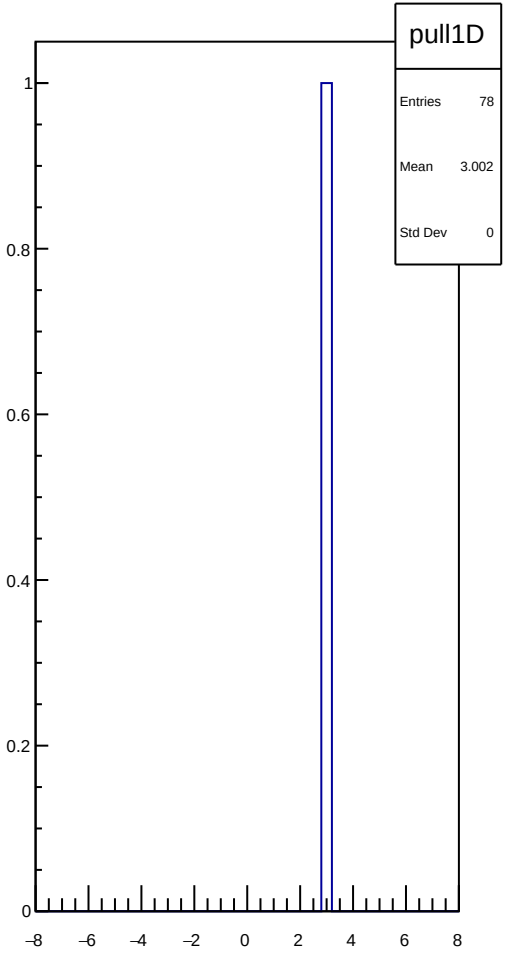

yield_bpm0l10Y_rms vs run
χ² / ndf 5.342e+04 / 77
p0 0.003107 ± 2.588e−06
0.012
0.01
0.008
0.006
0.004
0.002

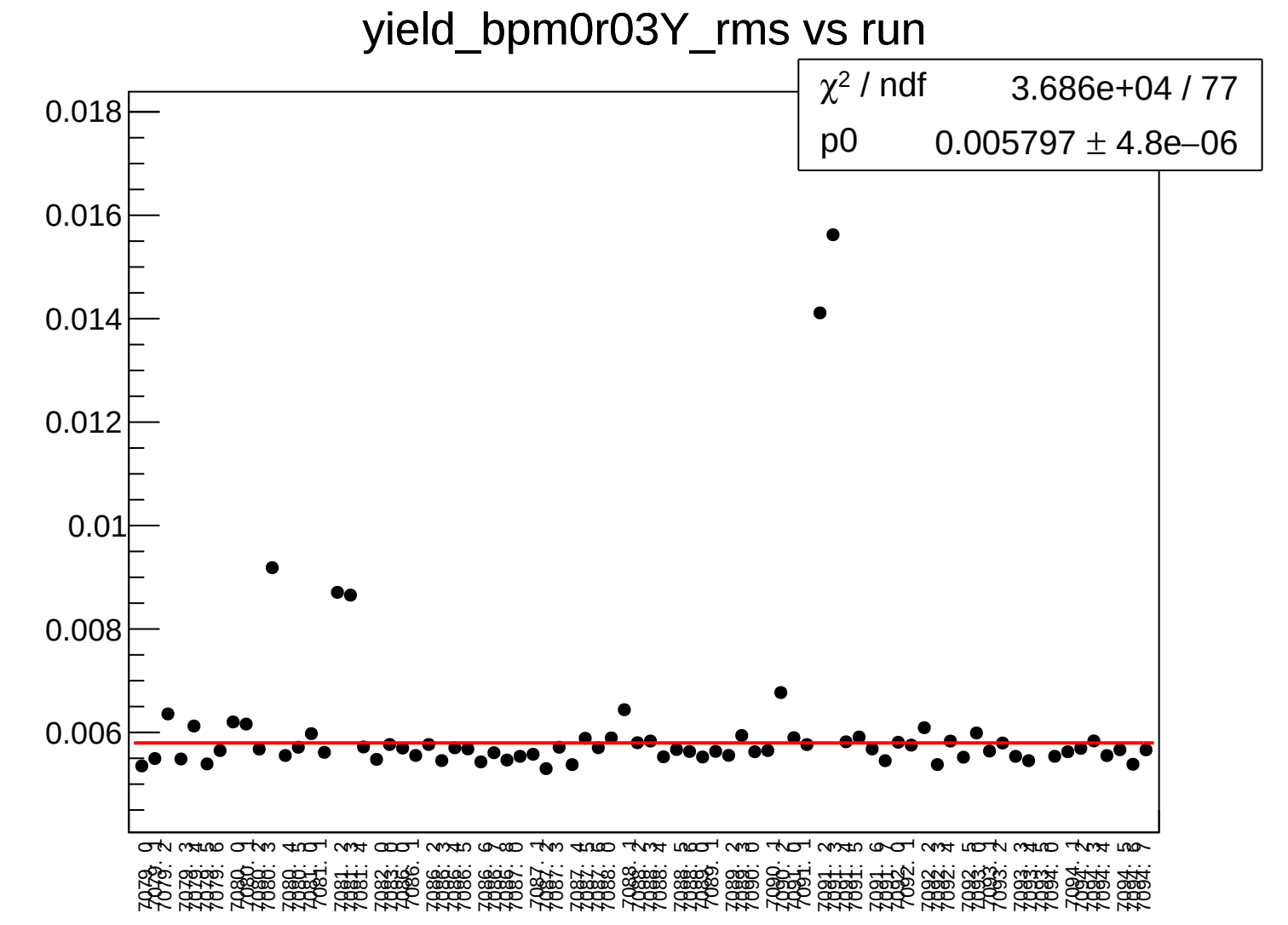

yield_bpm0r03X_mean vs run
χ² / ndf 1.043e+06 / 77
p0 0.7361 ± 8.909e−05
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
pull
Entries 78
Mean −367.9
Std Dev 398.2
100
0
−100
−200
−300
−400

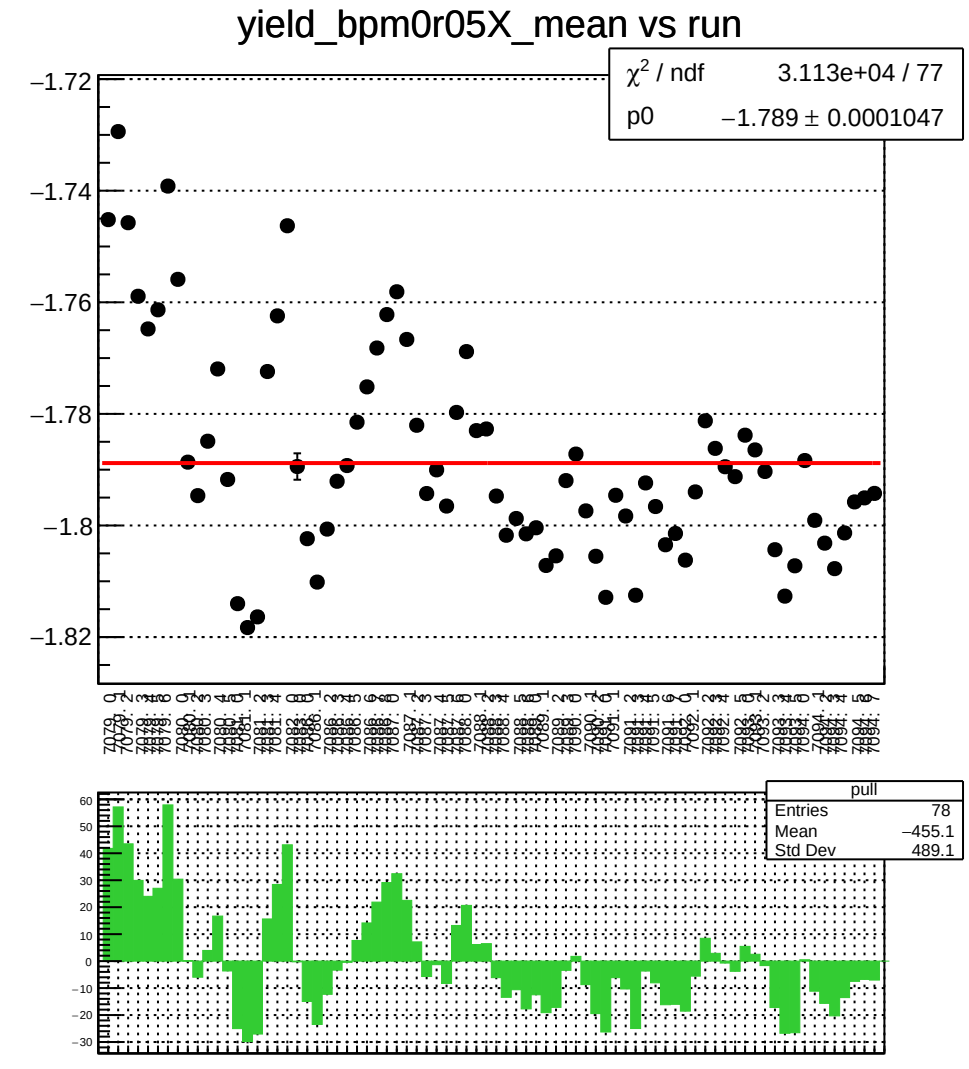

pull1D
Entries 78
Mean 0.7137
Std Dev 3.807
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

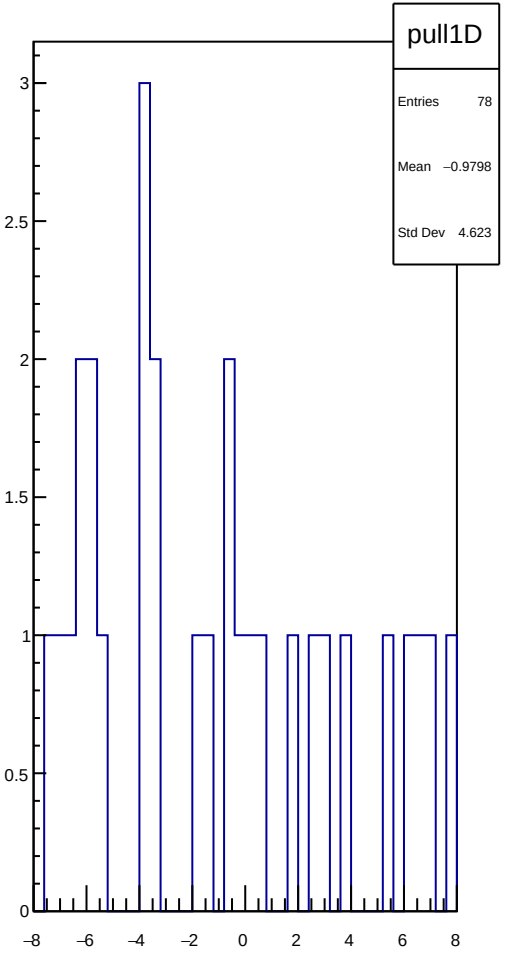

yield_bpm0r03X_rms vs run
χ² / ndf 6820 / 77
p0 0.07686 ± 6.299e–05
0.12
0.11
0.1
0.09
0.08
0.07

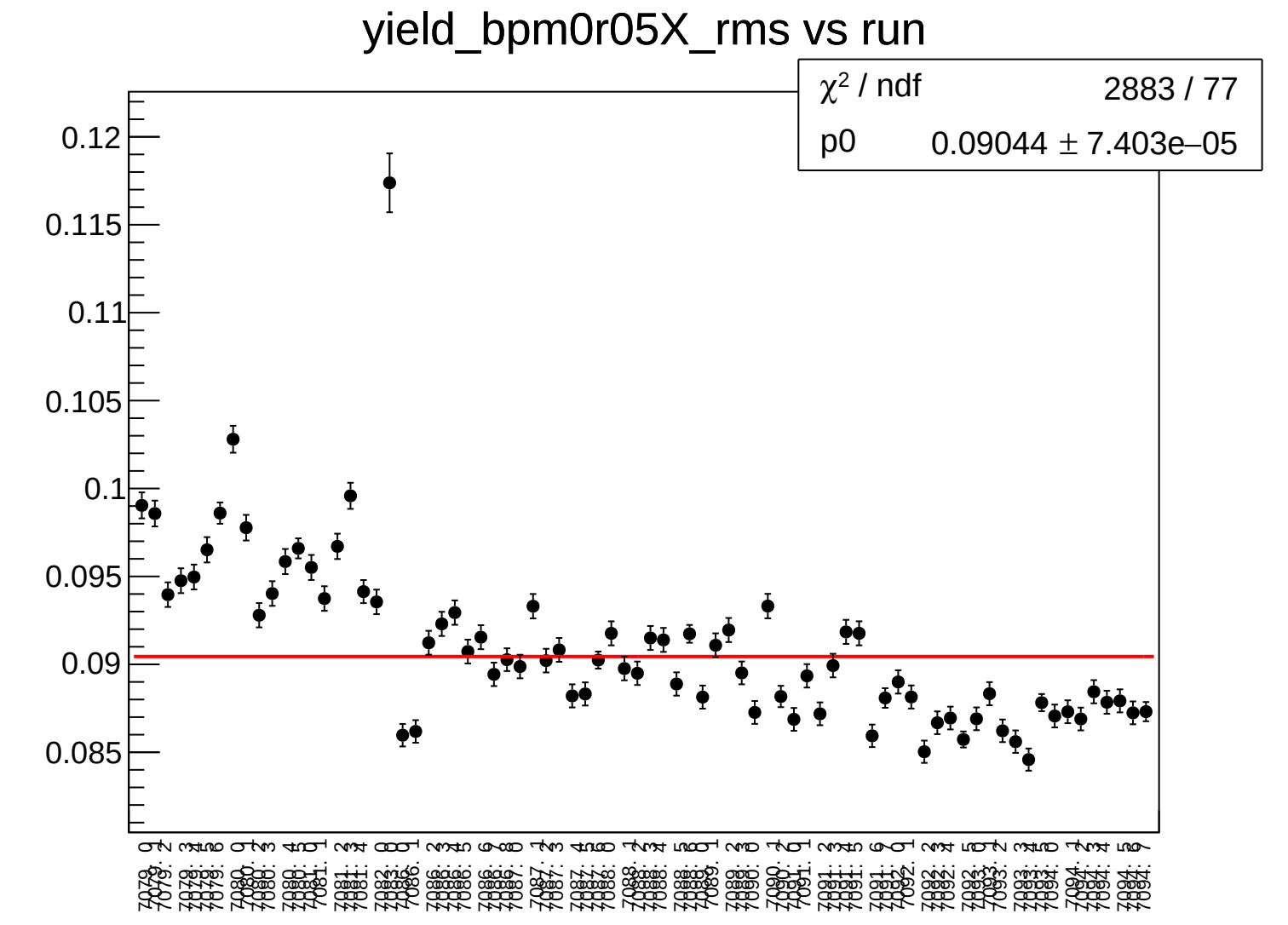

yield_bpm0r03Y_mean vs run
χ² / ndf 1.188e+07 / 77
p0 −0.2115 ± 6.788e−06
−0.16
−0.18
−0.2
−0.22
−0.24
pull
Entries 78
Mean 2568
Std Dev 2517
1000
800
600
400
200
0
−200
−400
−600

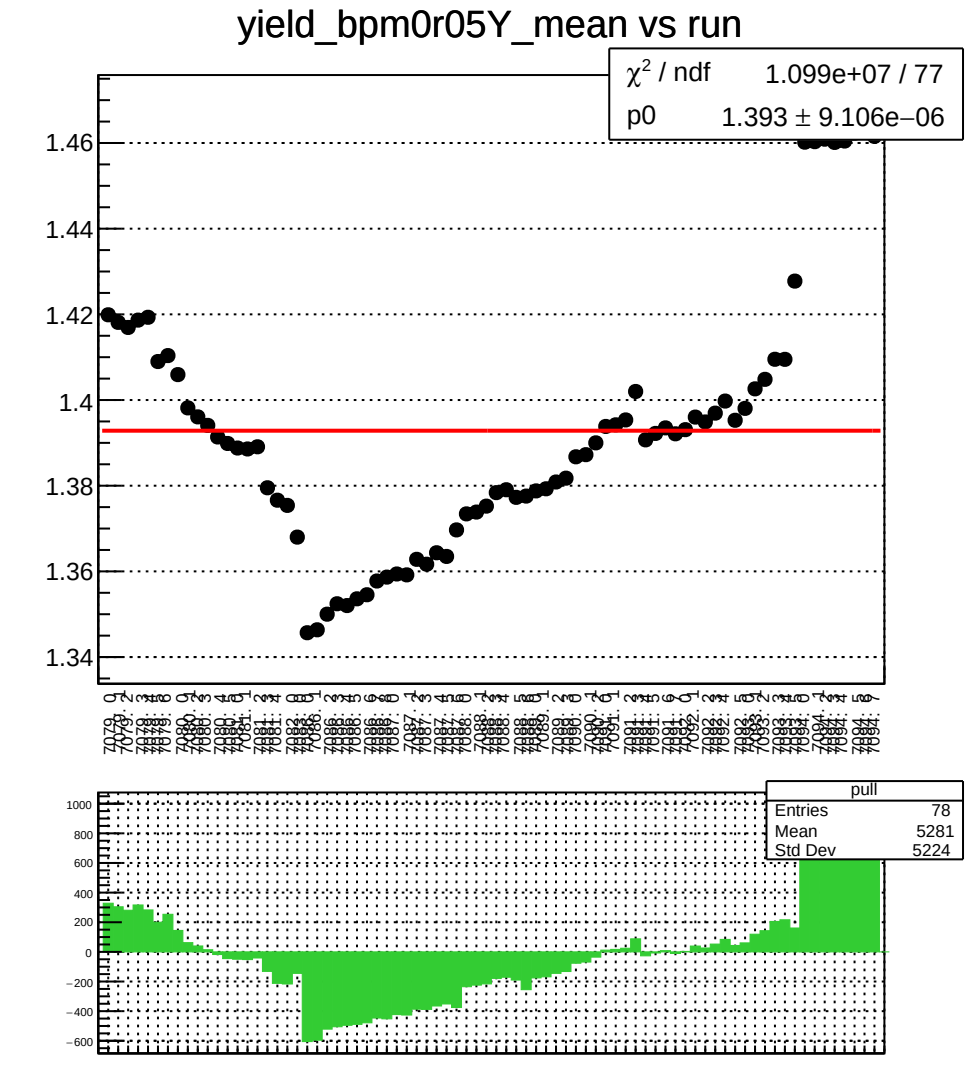

pull1D
Entries 78
Mean 3.002
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

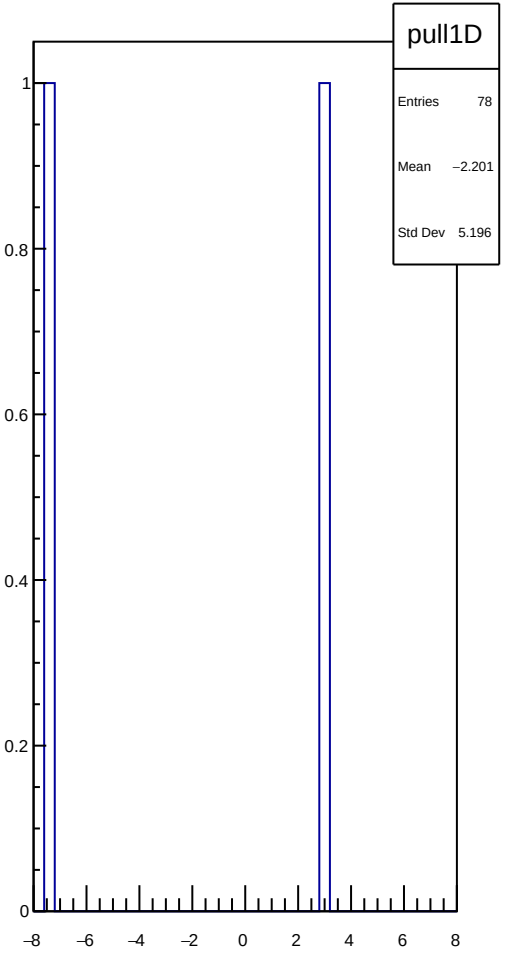

yield_bpm0r03Y_rms vs run
χ² / ndf 3.686e+04 / 77
p0 0.005797 ± 4.8e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

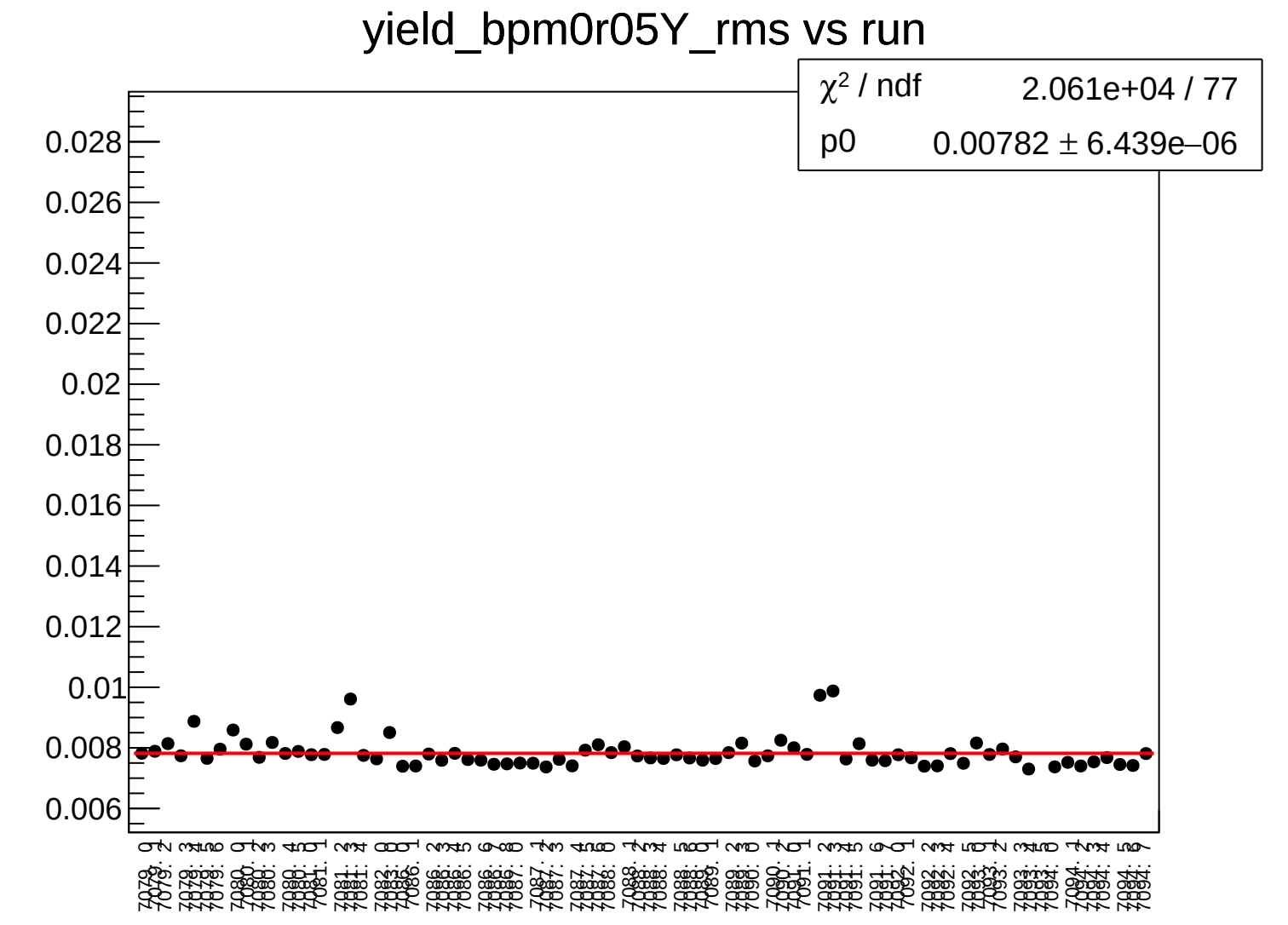

yield_bpm0r05X_mean vs run
χ² / ndf 3.113e+04 / 77
p0 −1.789 ± 0.0001047
−1.72
−1.74
−1.76
−1.78
−1.8
−1.82
pull
Entries 78
Mean −455.1
Std Dev 489.1
60
50
40
30
20
10
0
−10
−20
−30

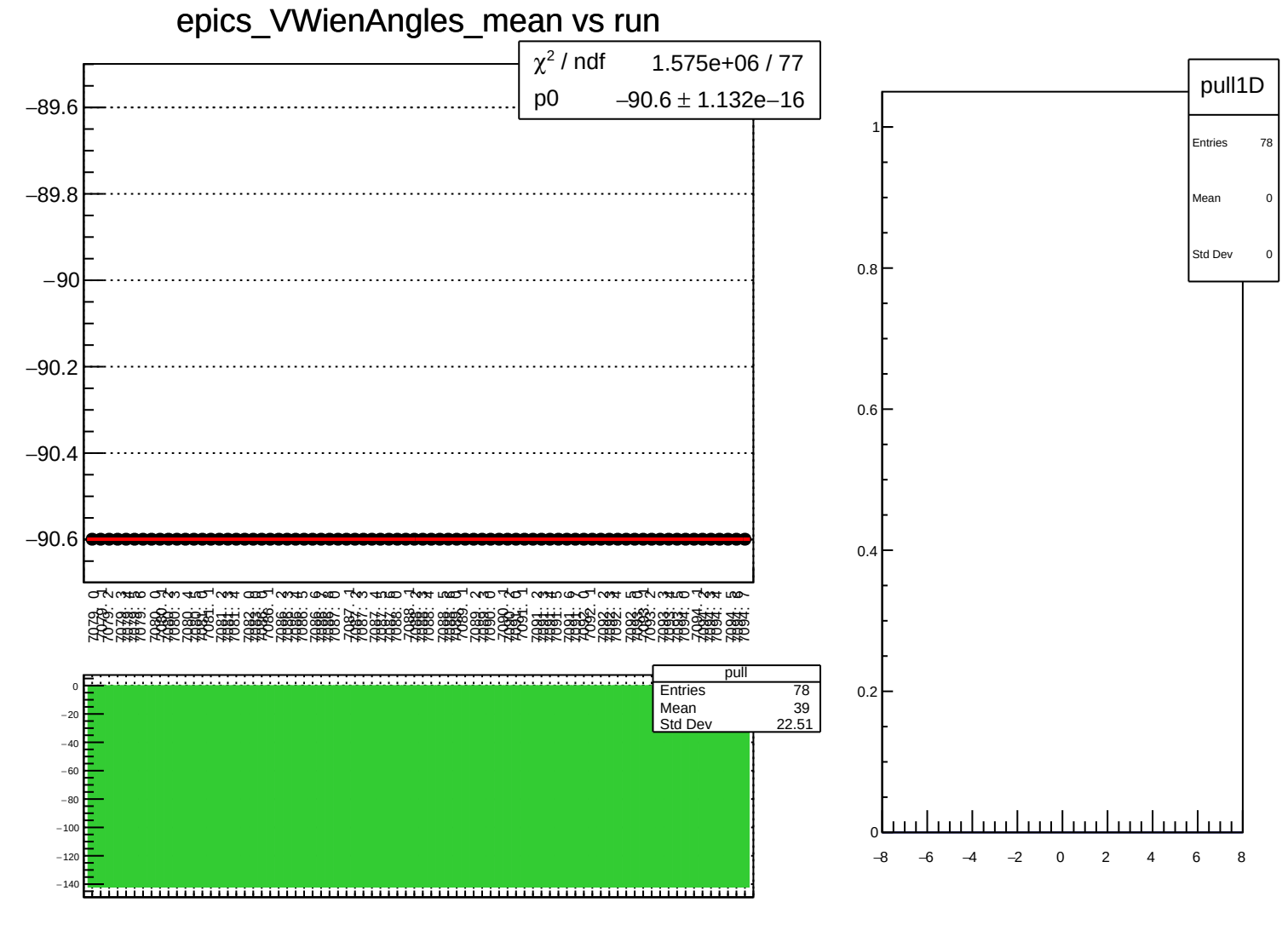

pull1D
Entries 78
Mean −0.9798
Std Dev 4.623
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

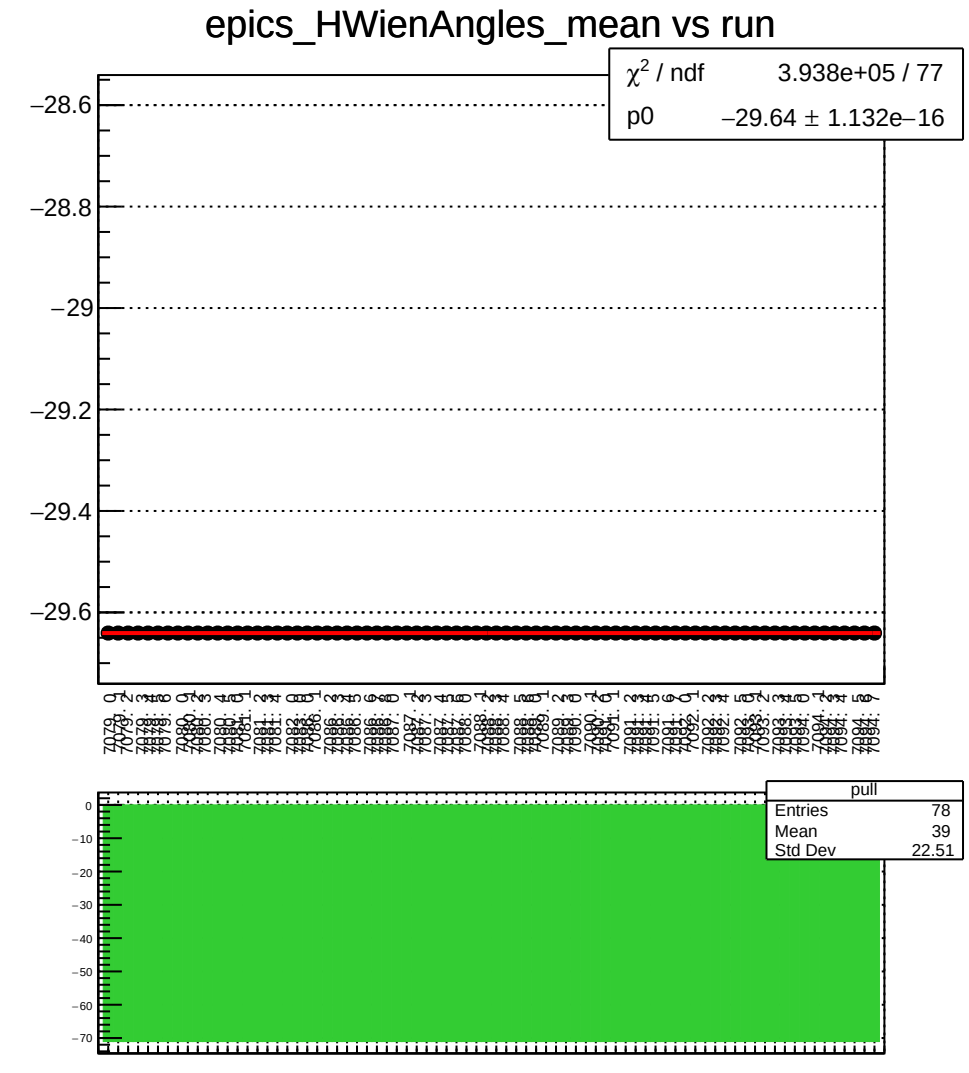

yield_bpm0r05X_rms vs run
χ² / ndf 2883 / 77
p0 0.09044 ± 7.403e–05
0.12
0.115
0.11
0.105
0.1
0.095
0.09
0.085

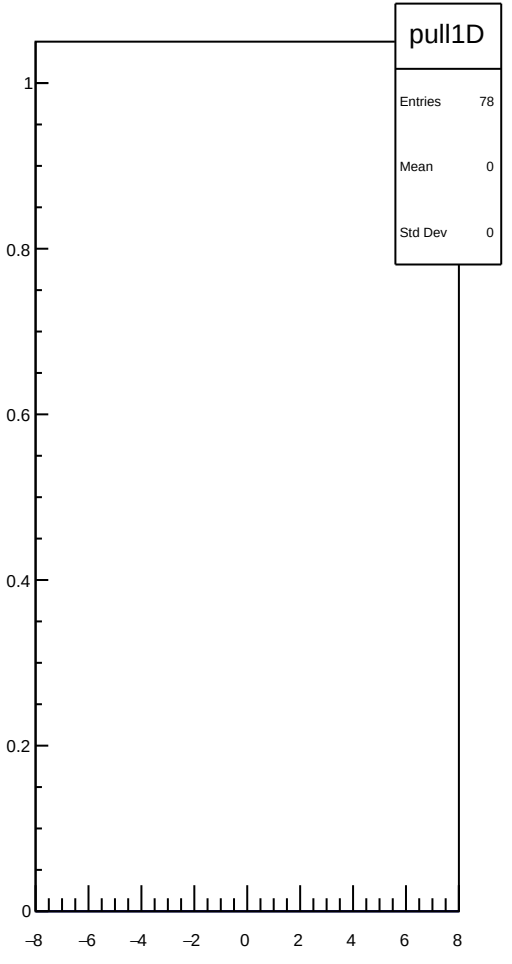

yield_bpm0r05Y_mean vs run
χ² / ndf 1.099e+07 / 77
p0 1.393 ± 9.106e−06
1.46
1.44
1.42
1.4
1.38
1.36
1.34
pull
Entries 78
Mean 5281
Std Dev 5224
1000
800
600
400
200
0
−200
−400
−600

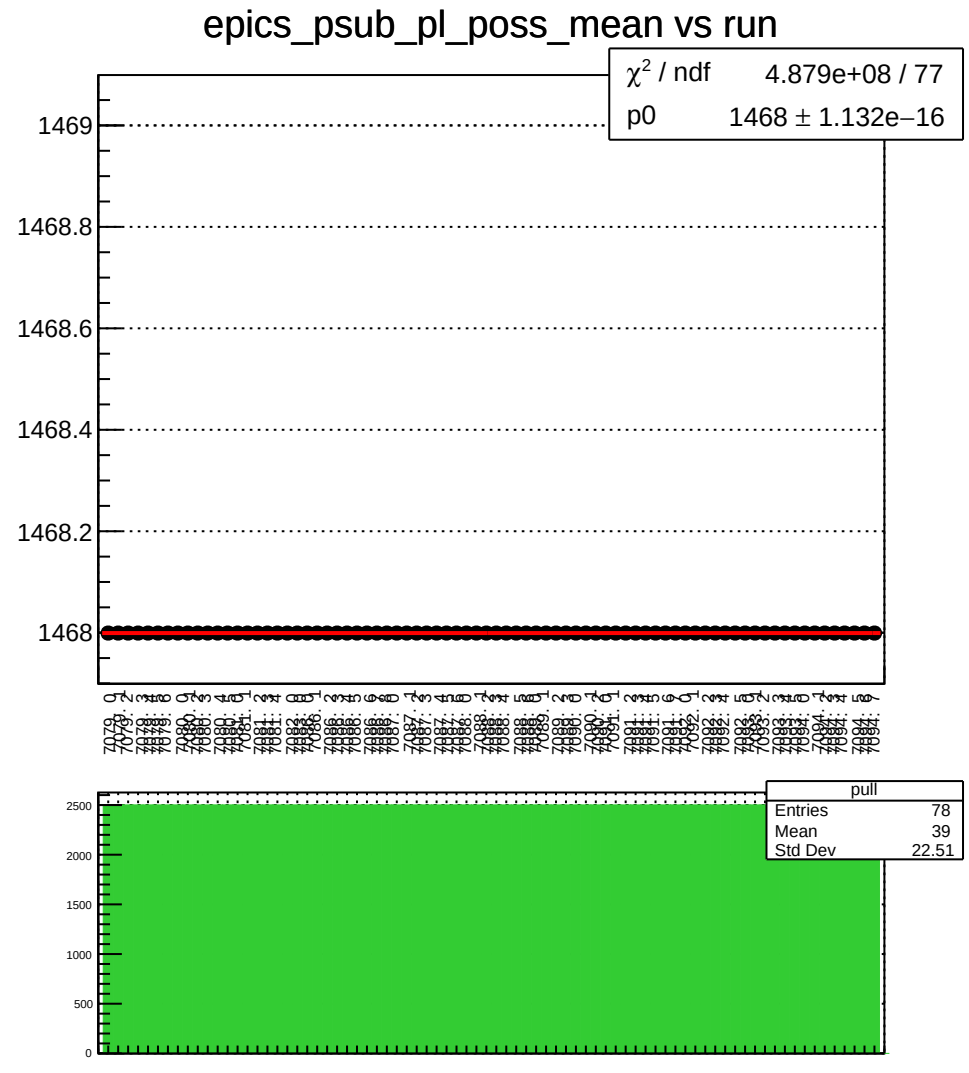

pull1D
Entries 78
Mean −2.201
Std Dev 5.196
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

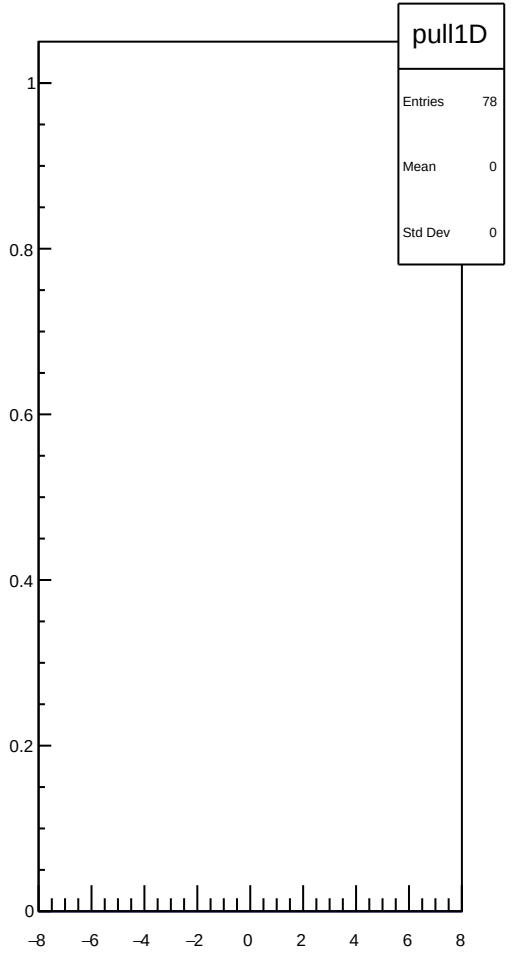

yield_bpm0r05Y_rms vs run
χ² / ndf 2.061e+04 / 77
p0 0.00782 ± 6.439e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

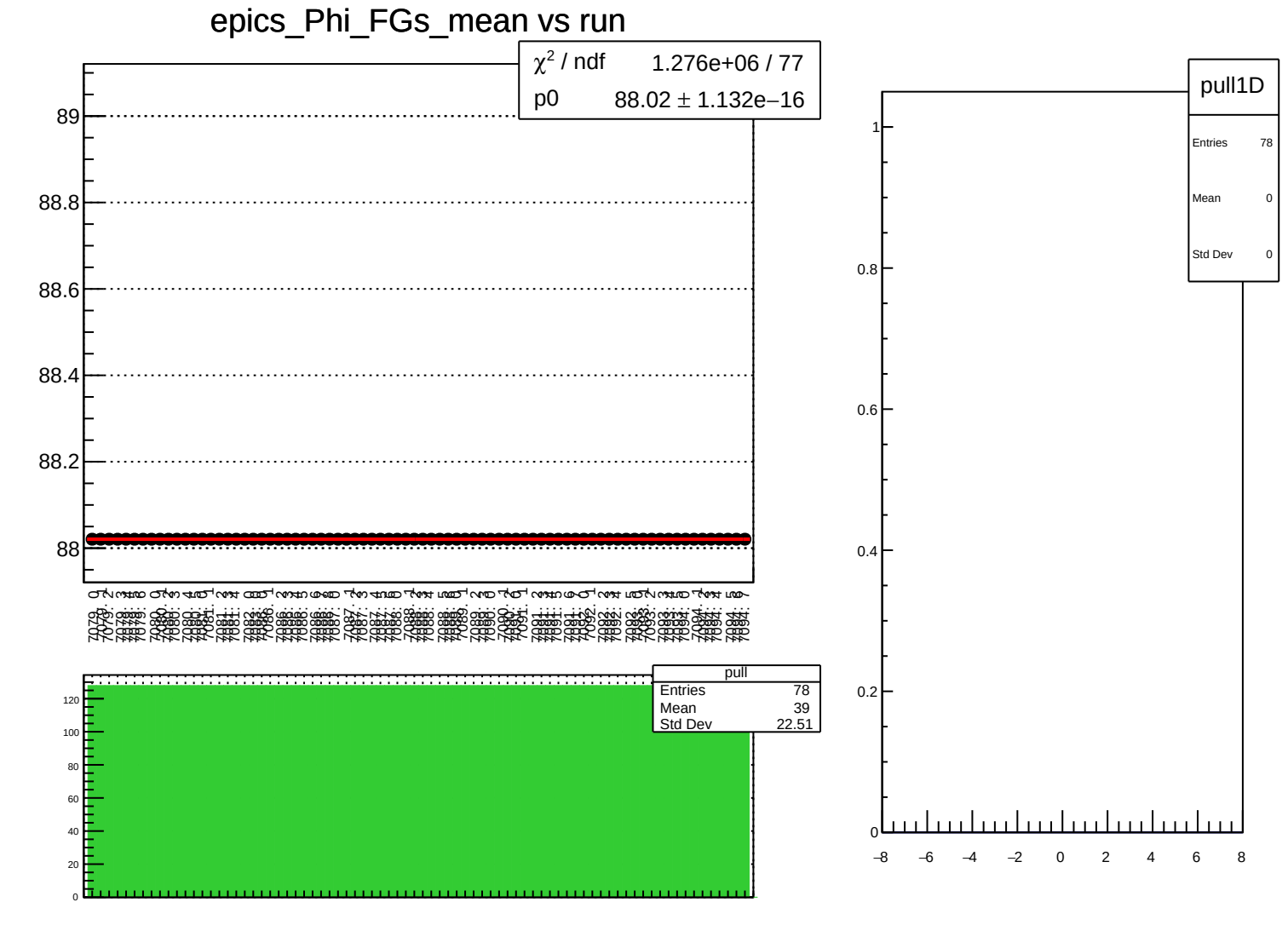

epics_VWienAngles_mean vs run
χ² / ndf 1.575e+06 / 77
p0 −90.6 ± 1.132e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 78
Mean 39
Std Dev 22.51
0
−20
−40
−60
−80
−100
−120
−140
pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

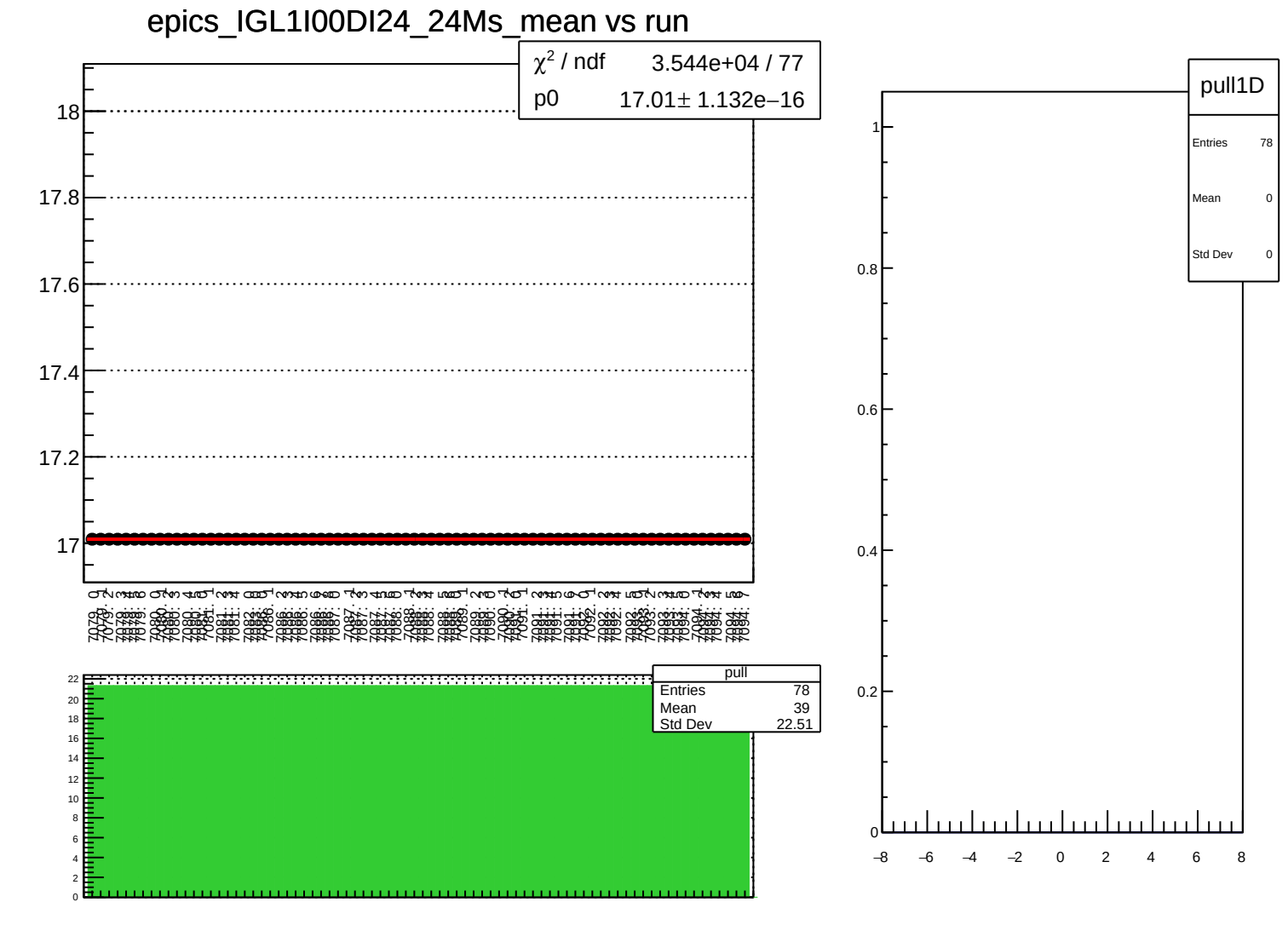

epics_HWienAngles_mean vs run
χ² / ndf 3.938e+05 / 77
p0 −29.64 ± 1.132e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 78
Mean 39
Std Dev 22.51
0
−10
−20
−30
−40
−50
−60
−70

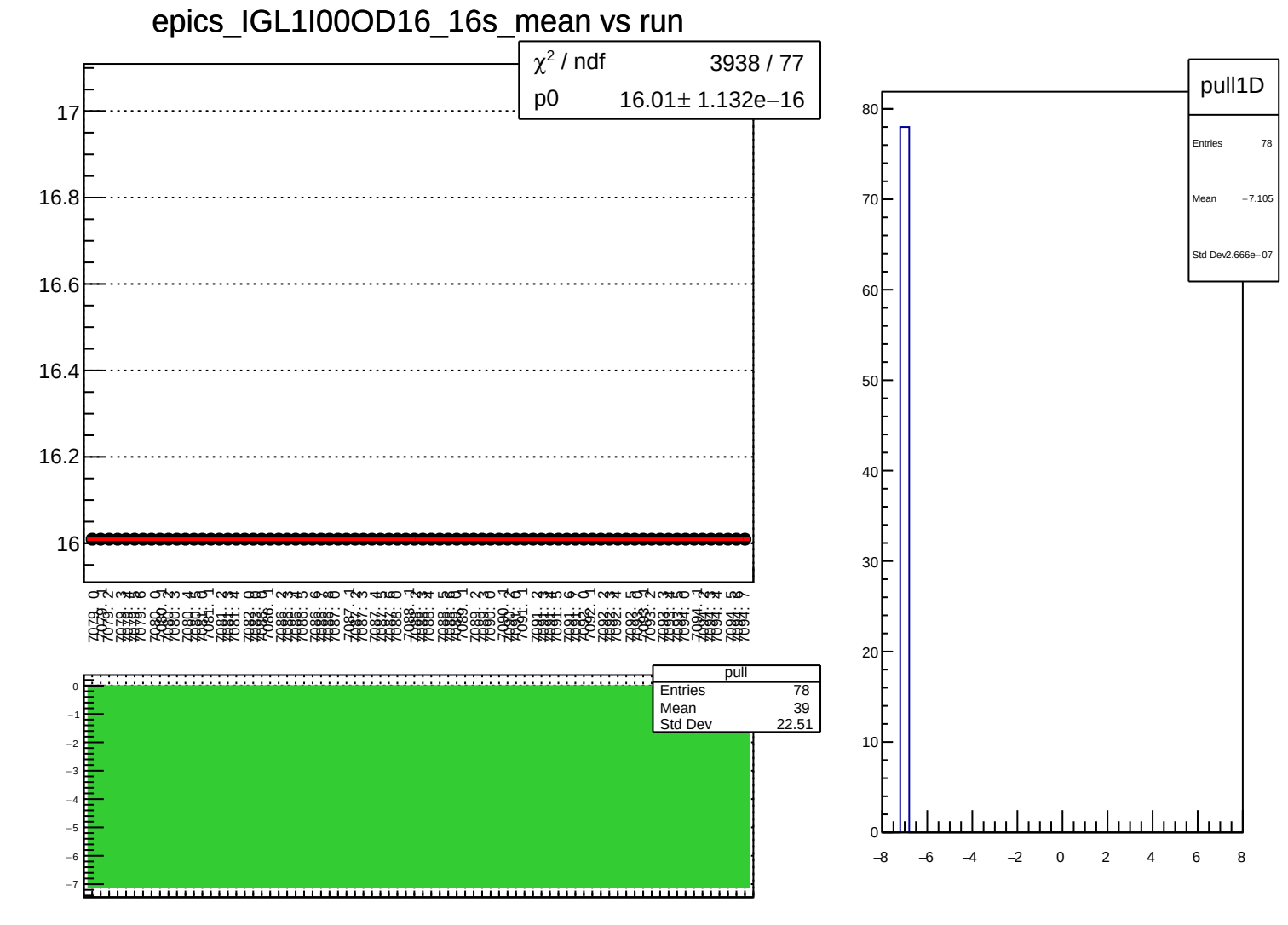

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

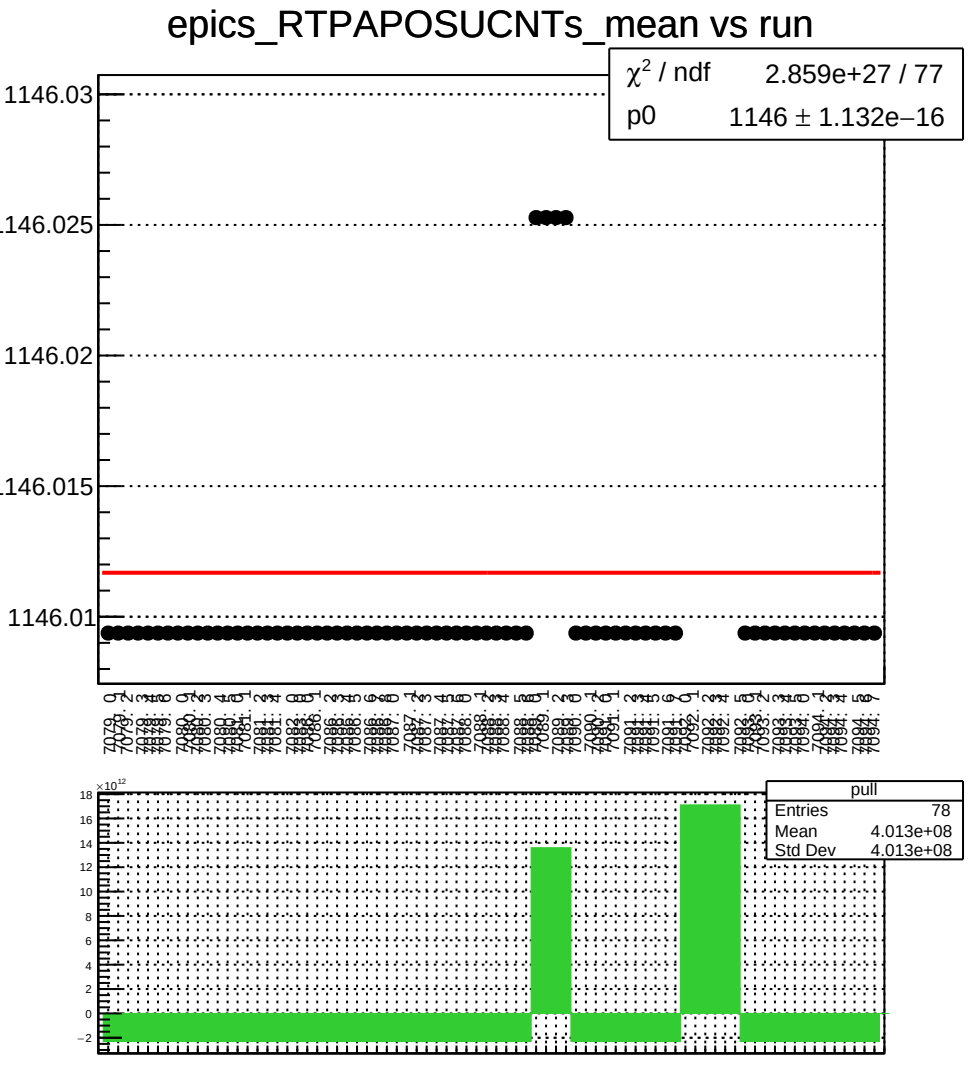

epics_psub_pl_poss_mean vs run
χ² / ndf 4.879e+08 / 77
p0 1468 ± 1.132e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 78
Mean 39
Std Dev 22.51
2500
2000
1500
1000
500
0

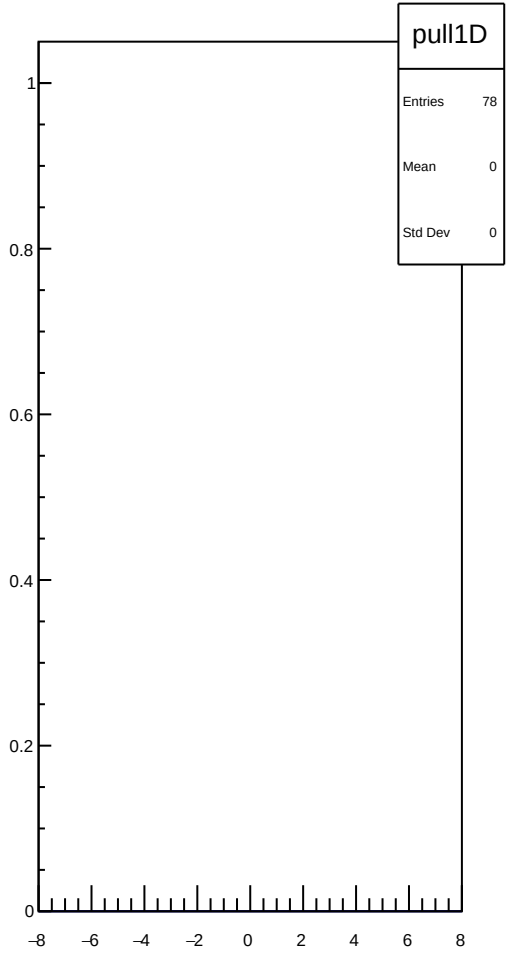

pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

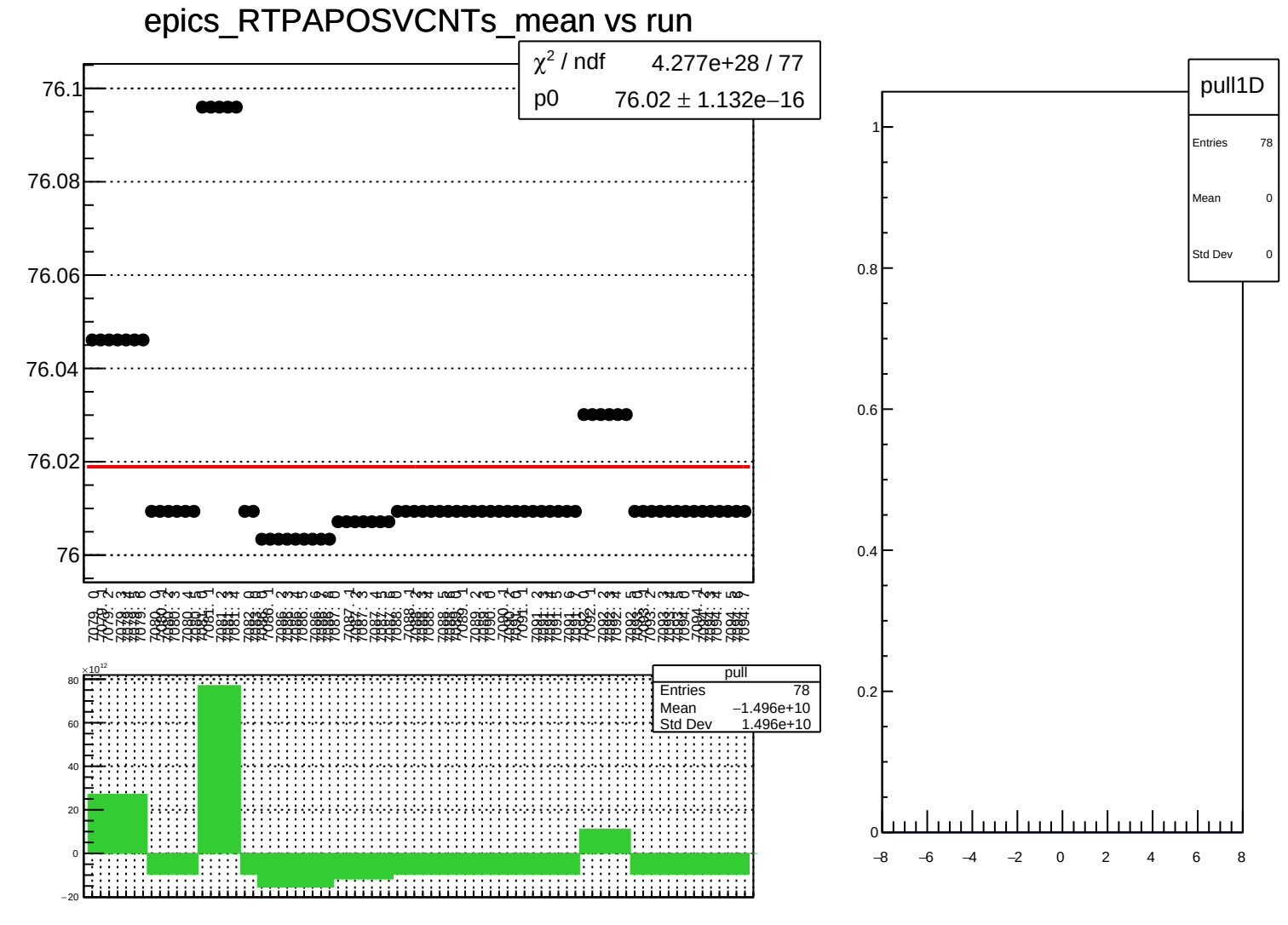

epics_Phi_FGs_mean vs run
χ² / ndf 1.276e+06 / 77
p0 88.02 ± 1.132e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 78
Mean 39
Std Dev 22.51
120
100
80
60
40
20
0
pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 3.544e+04 / 77
p0 17.01± 1.132e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 78
Mean 39
Std Dev 22.51
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 78
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 3938 / 77
p0 16.01± 1.132e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 78
Mean 39
Std Dev 22.51
0
−1
−2
−3
−4
−5
−6
−7
pull1D
Entries 78
Mean −7.105
Std Dev 2.666e−07
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 2.859e+27 / 77
p0 1146 ± 1.132e−16
1146.03
1146.025
1146.02
1146.015
1146.01
pull
Entries 78
Mean 4.013e+08
Std Dev 4.013e+08
×10¹²


pull1D
Entries 78
Mean 0
Std Dev 0


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 4.277e+28 / 77
p0 76.02 ± 1.132e−16
76.1
76.08
76.06
76.04
76.02
76
pull
Entries 78
Mean −1.496e+10
Std Dev 1.496e+10
×10¹²
80
60
40
20
0
−20
pull1D
Entries 78
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8