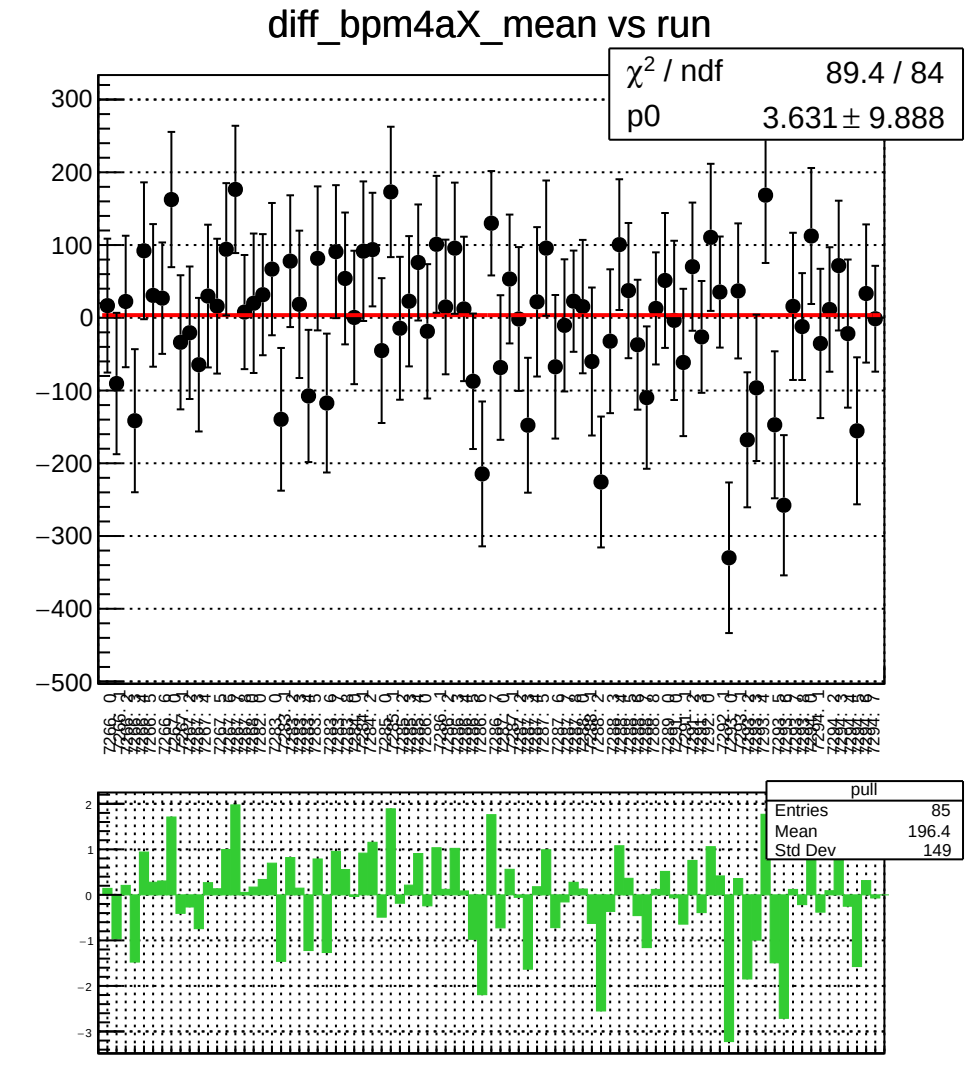
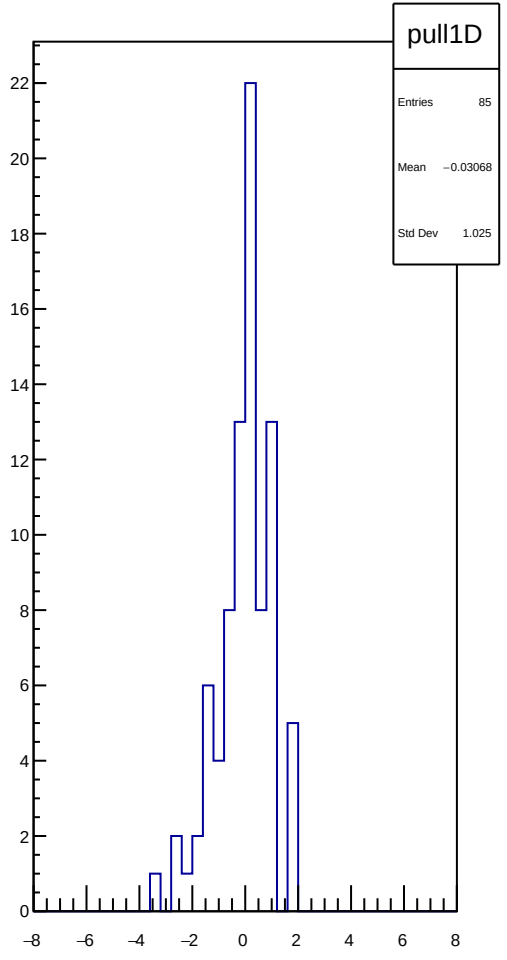
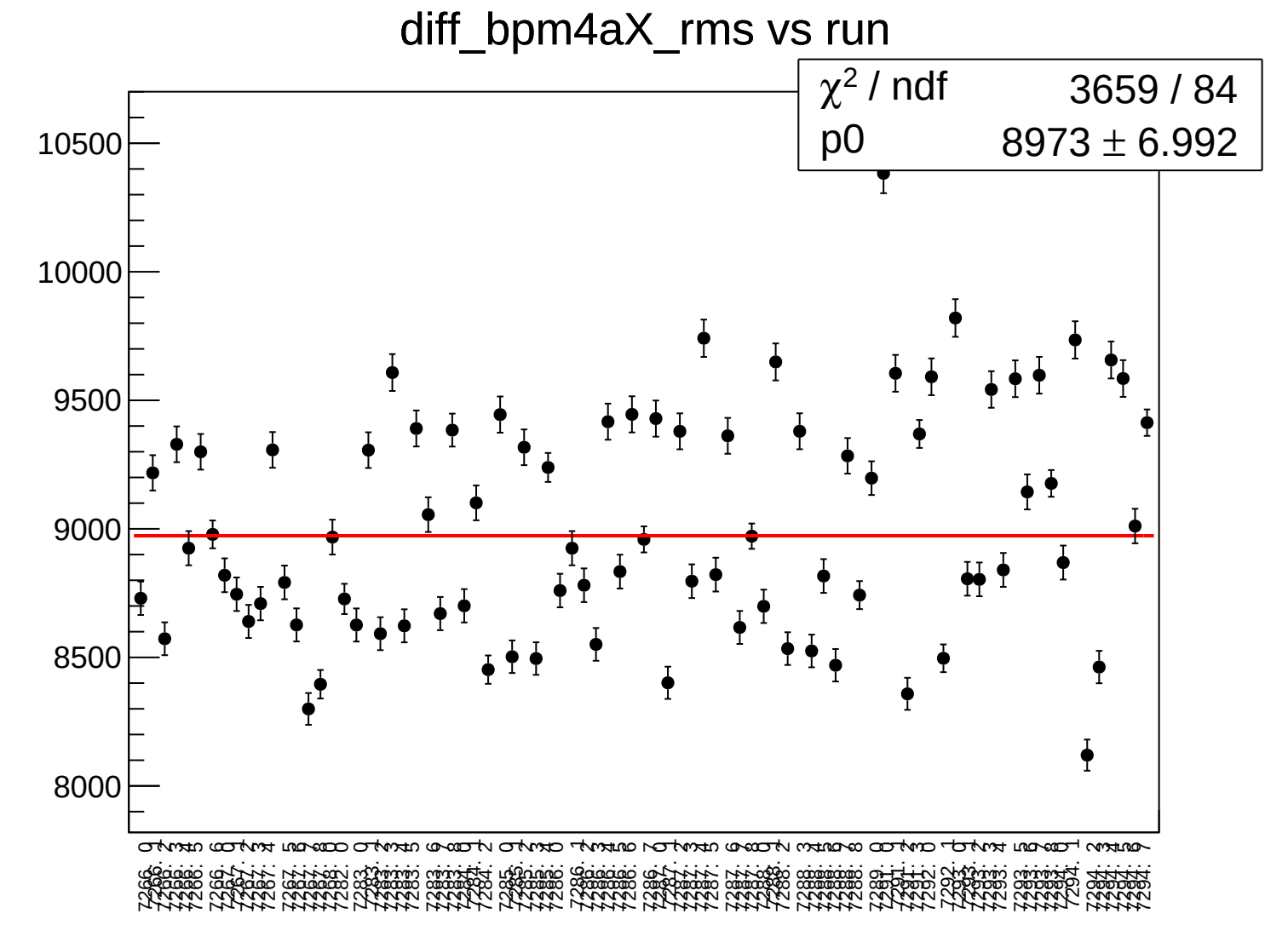
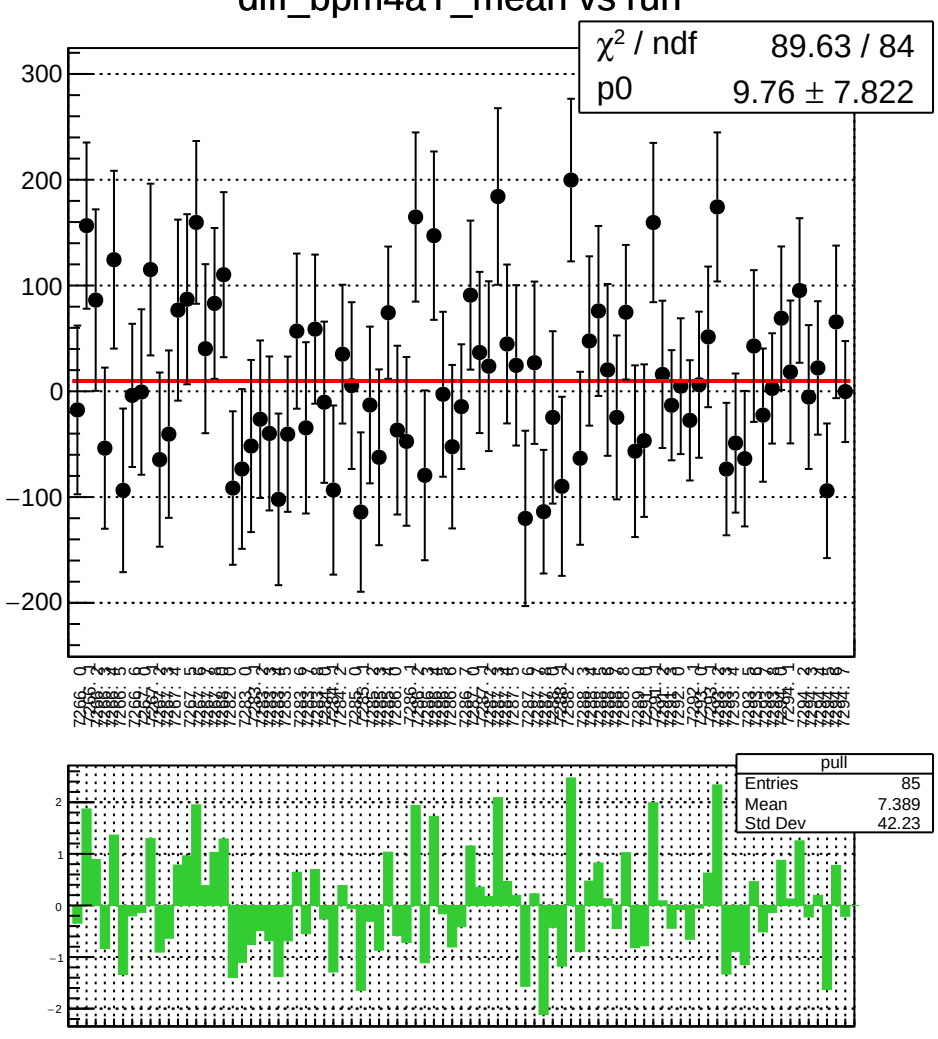
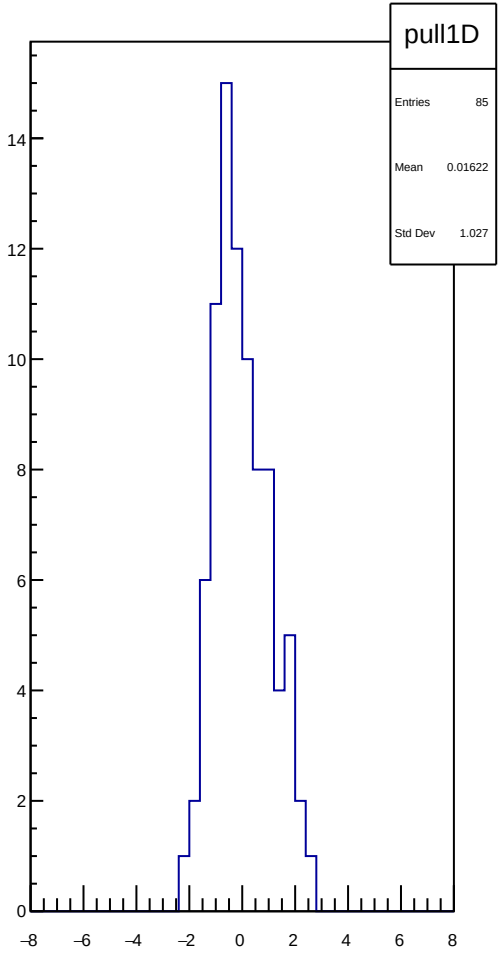
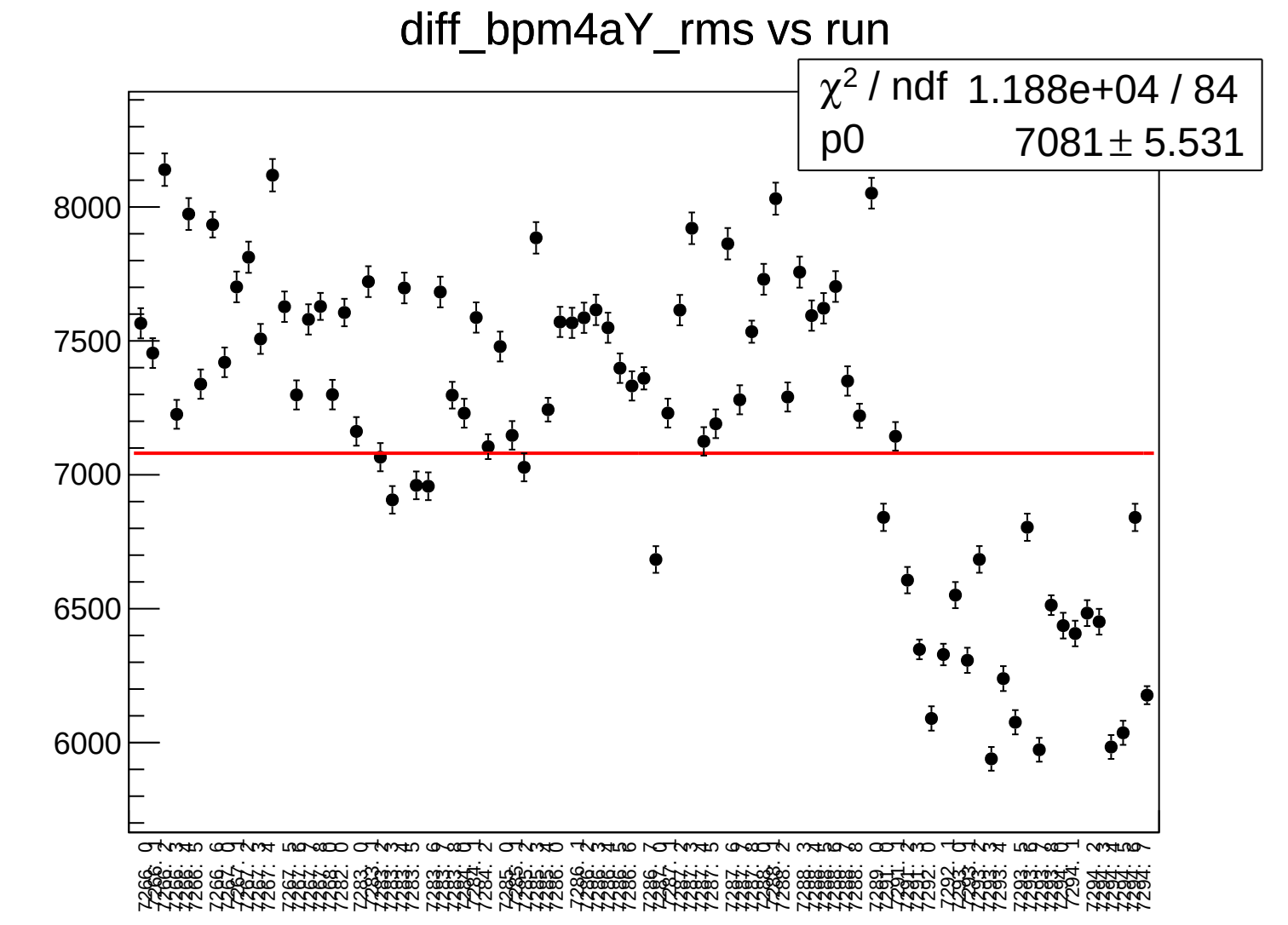

diff_bpm4aX_mean vs run
χ² / ndf 89.4 / 84
p0 3.631 ± 9.888
pull
Entries 85
Mean 196.4
Std Dev 149

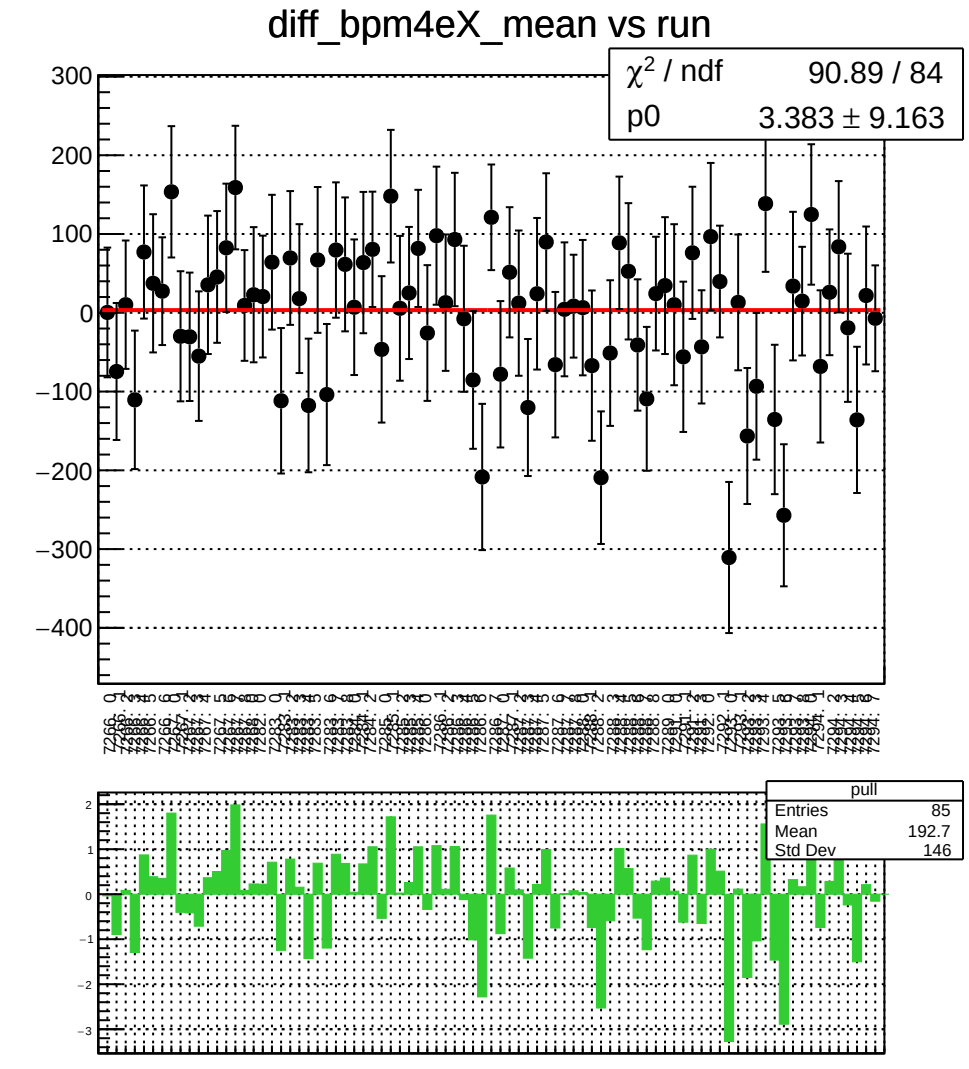

pull1D
Entries 85
Mean −0.03068
Std Dev 1.025

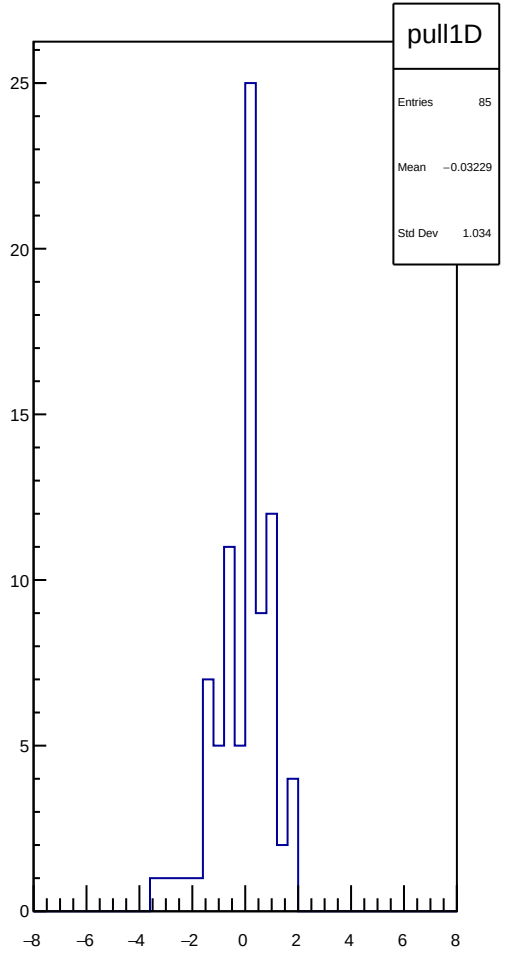

diff_bpm4aX_rms vs run
χ^2 / ndf 3659 / 84
p0 8973 ± 6.992
10500
10000
9500
9000
8500
8000

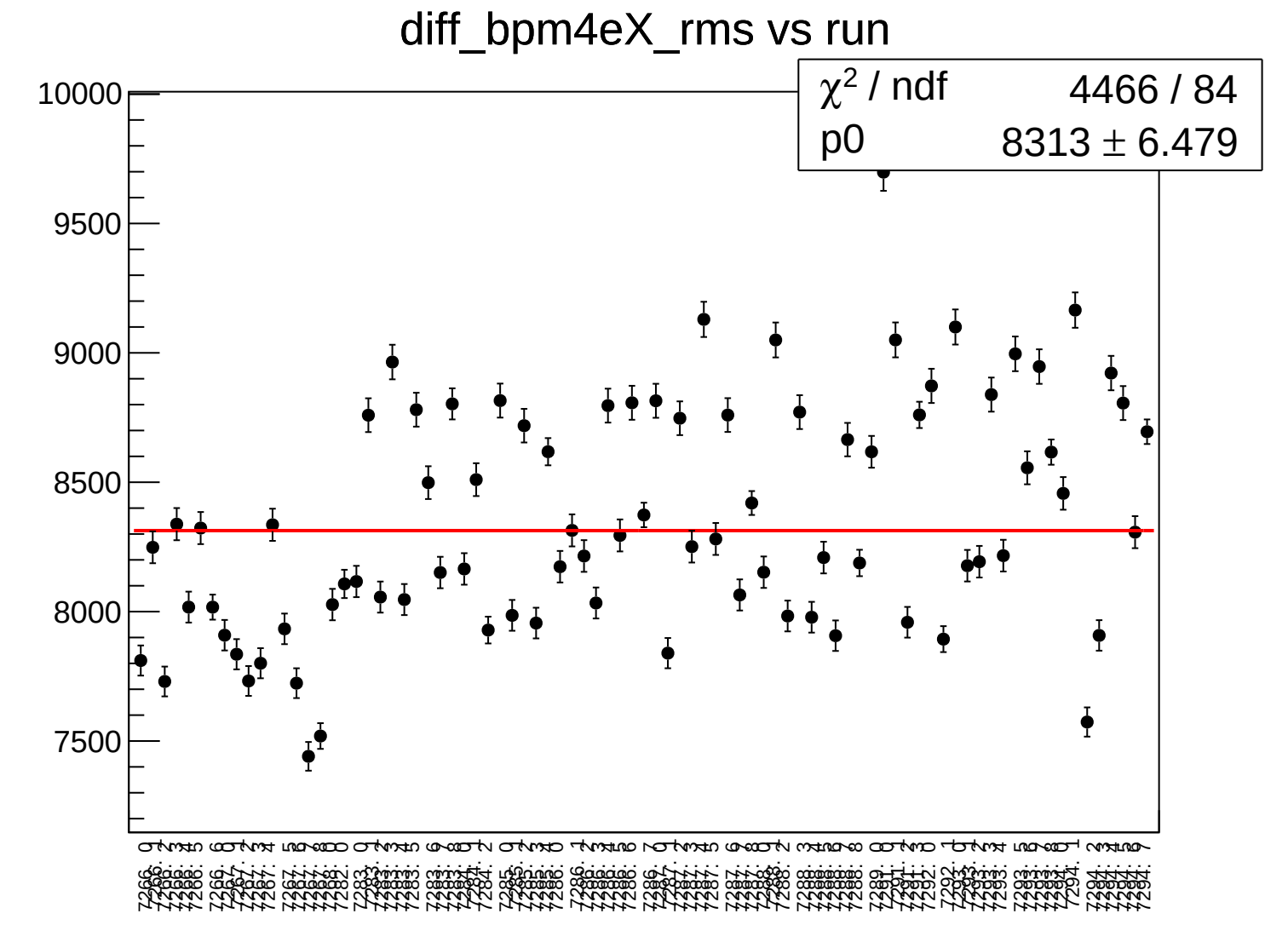

diff_bpm4aY_mean vs run
χ² / ndf 89.63 / 84
p0 9.76 ± 7.822
pull
Entries 85
Mean 7.389
Std Dev 42.23

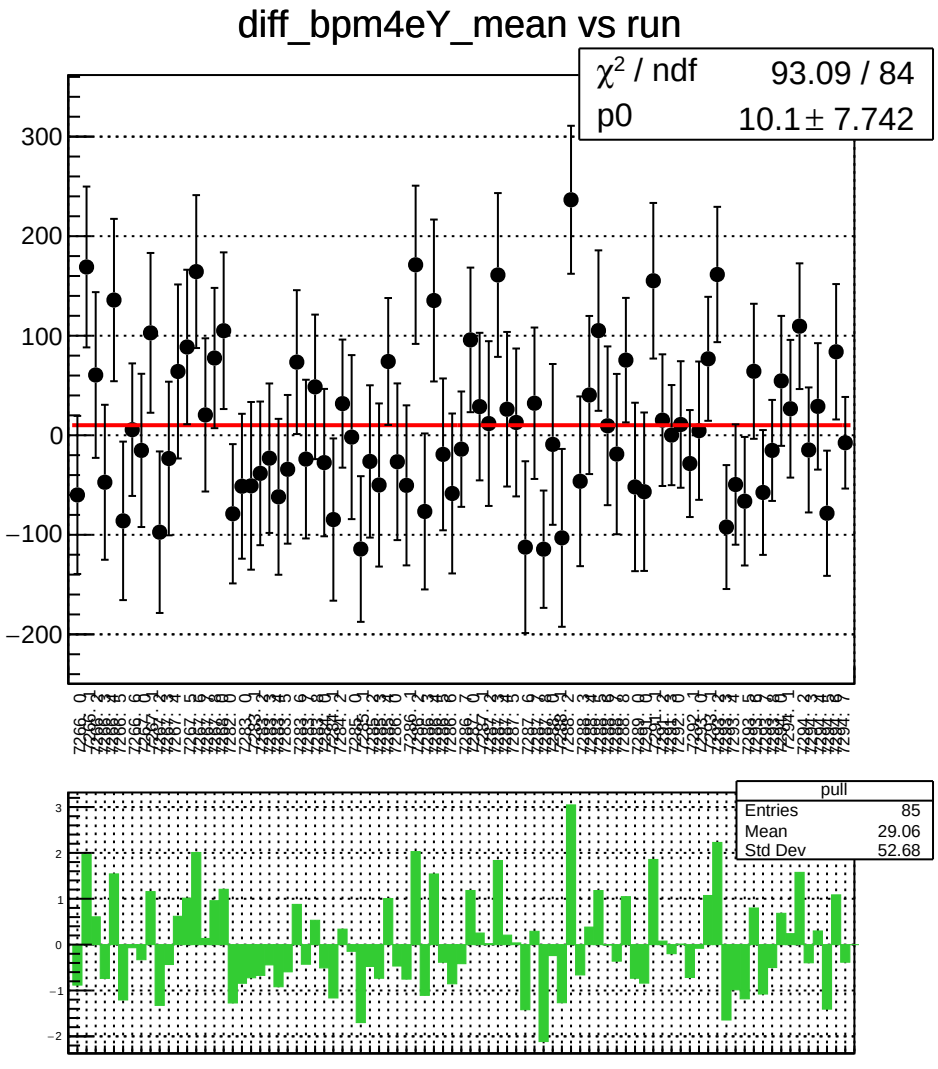

pull1D
Entries 85
Mean 0.01622
Std Dev 1.027

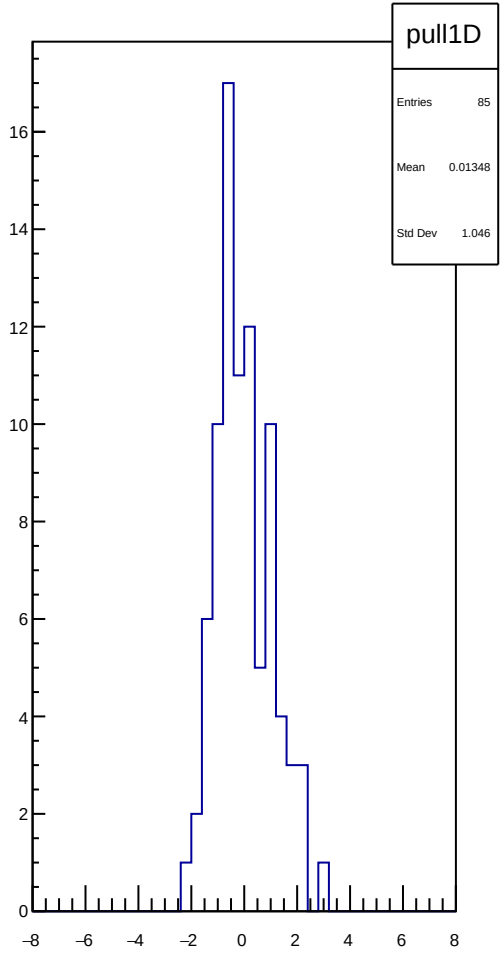

diff_bpm4aY_rms vs run
χ² / ndf 1.188e+04 / 84
p0 7081 ± 5.531
8000
7500
7000
6500
6000

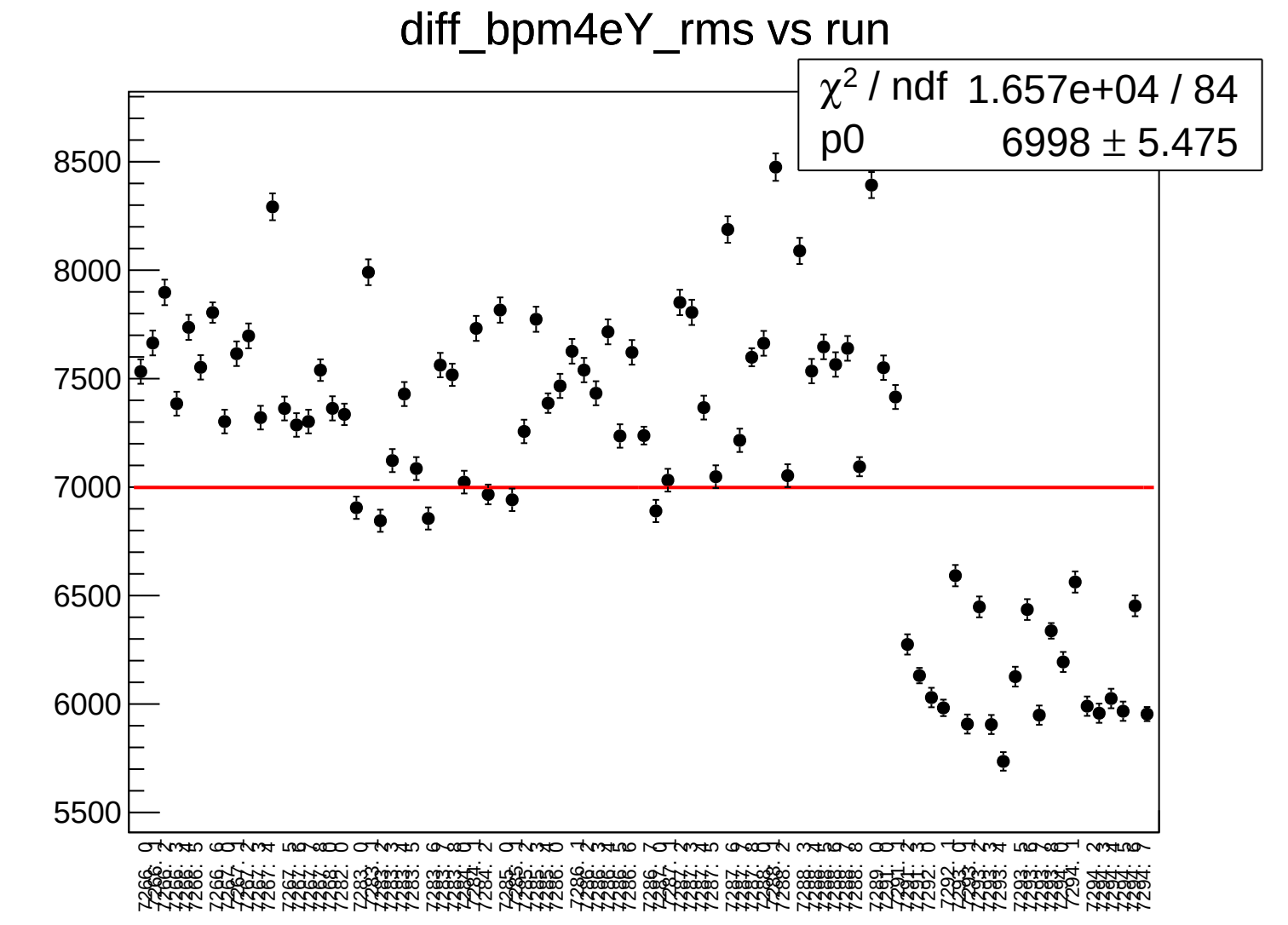

diff_bpm4eX_mean vs run
χ² / ndf 90.89 / 84
p0 3.383 ± 9.163
pull
Entries 85
Mean 192.7
Std Dev 146

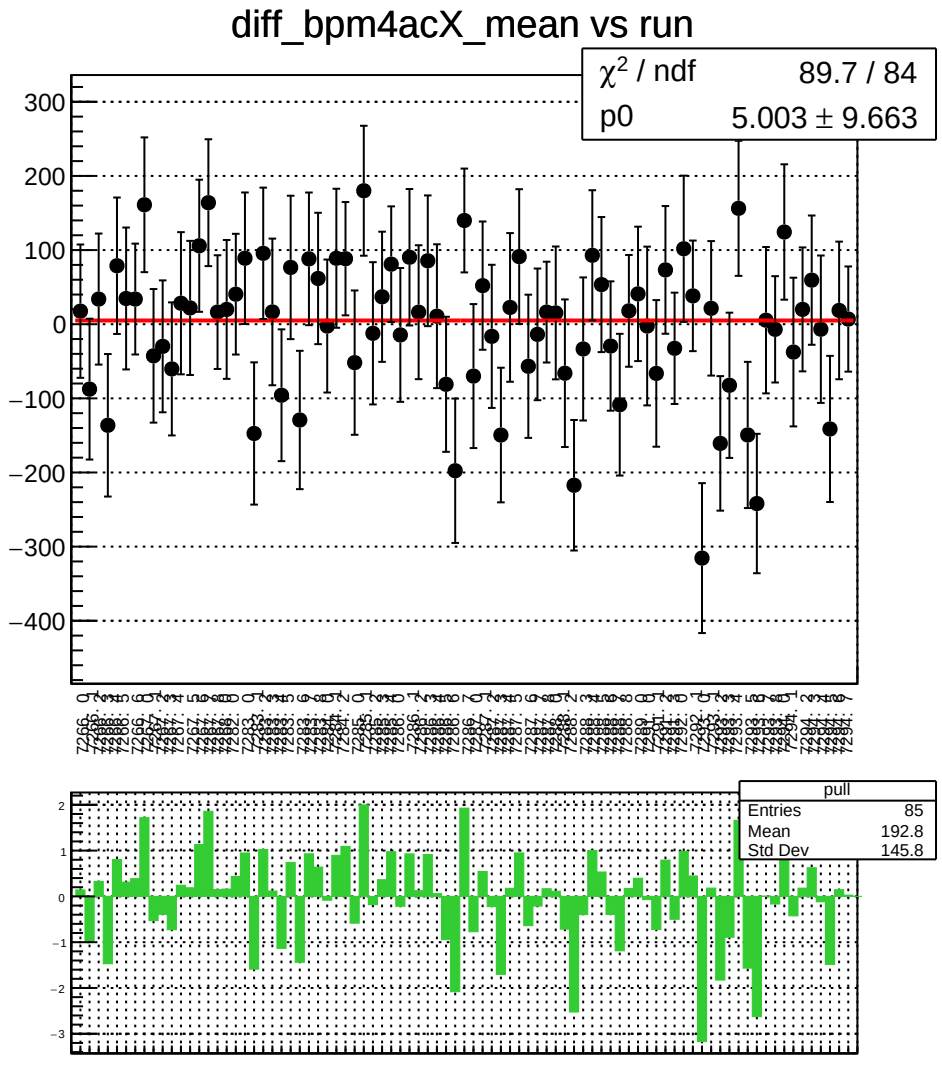

pull1D
Entries 85
Mean −0.03229
Std Dev 1.034

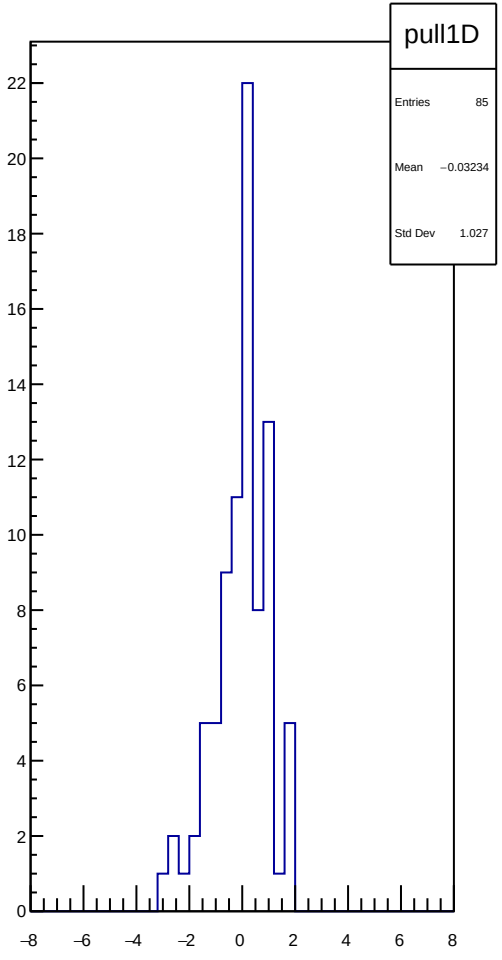

diff_bpm4eX_rms vs run
χ² / ndf 4466 / 84
p0 8313 ± 6.479
10000
9500
9000
8500
8000
7500

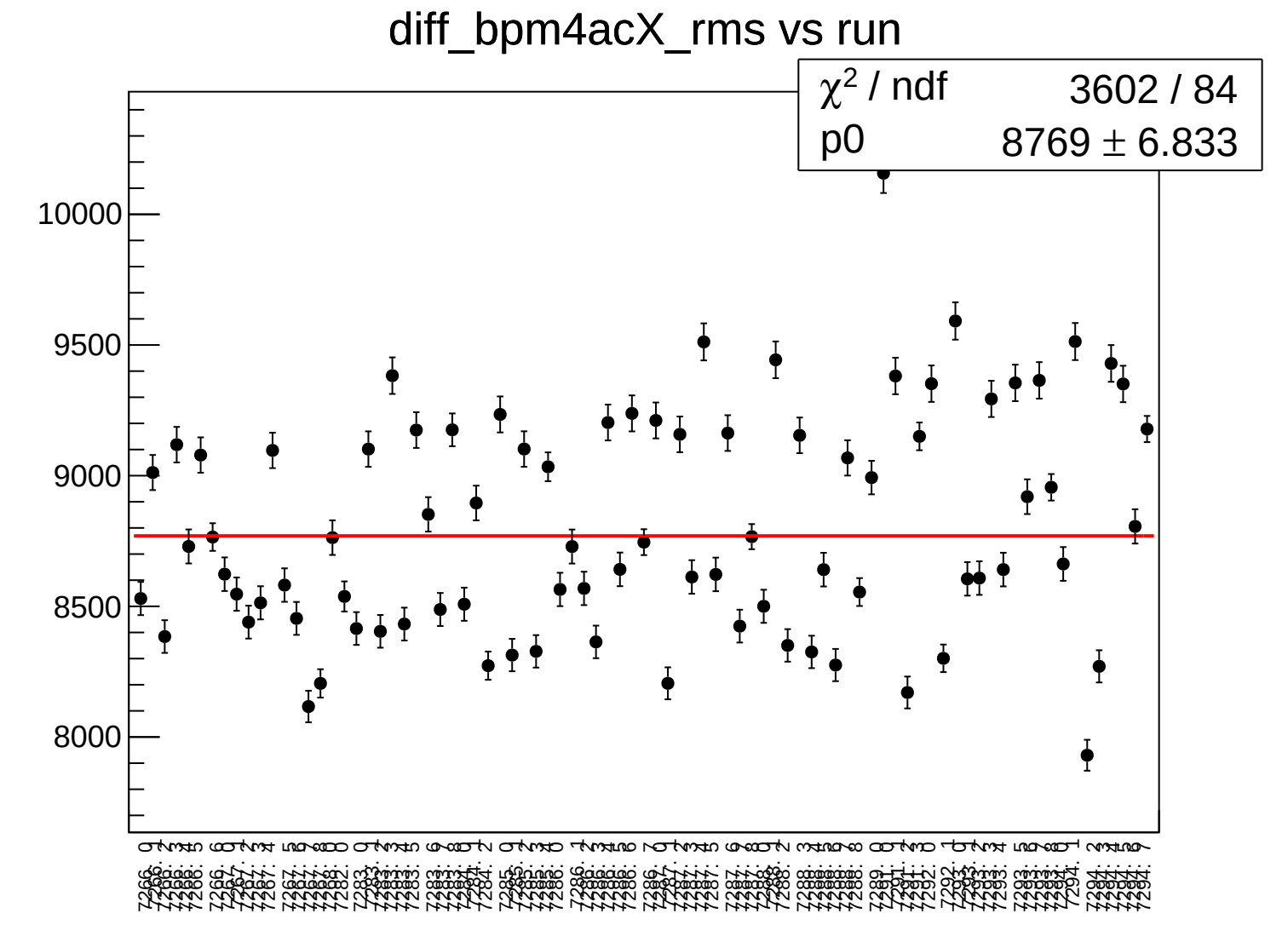

diff_bpm4eY_mean vs run
χ² / ndf 93.09 / 84
p0 10.1 ± 7.742
pull
Entries 85
Mean 29.06
Std Dev 52.68

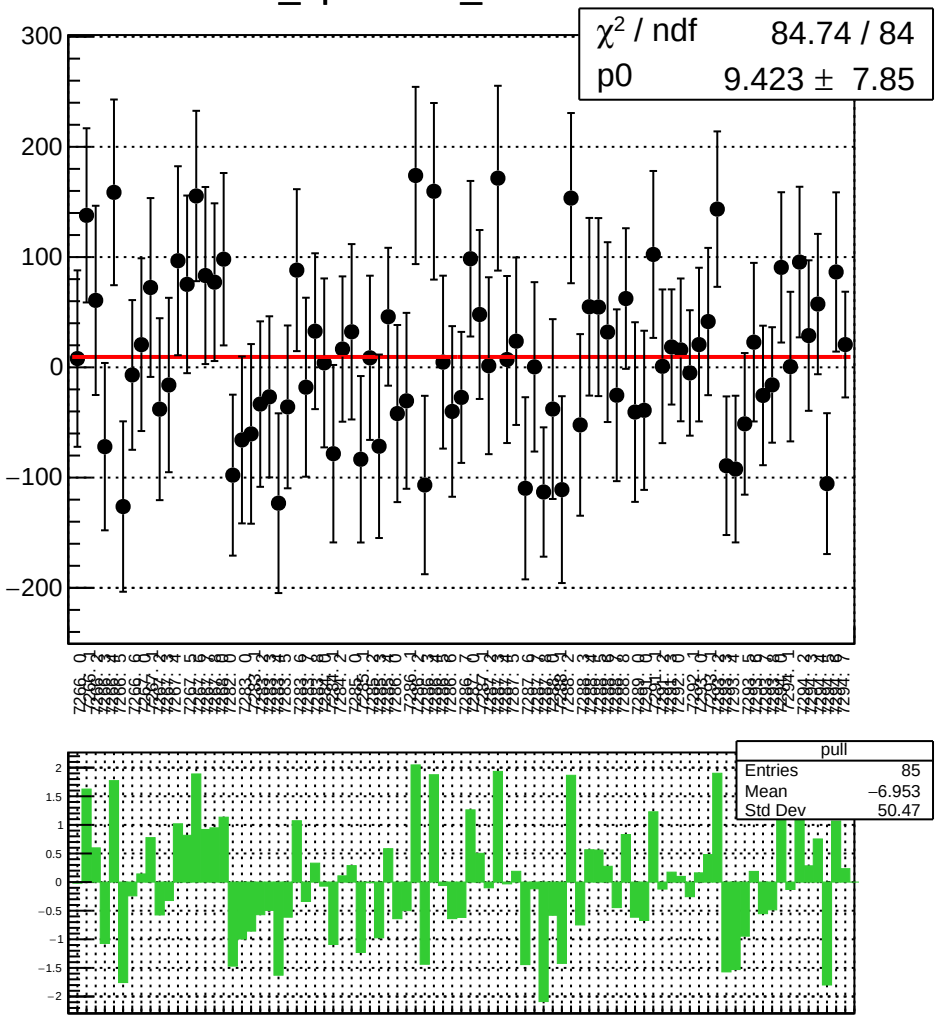

pull1D
Entries 85
Mean 0.01348
Std Dev 1.046

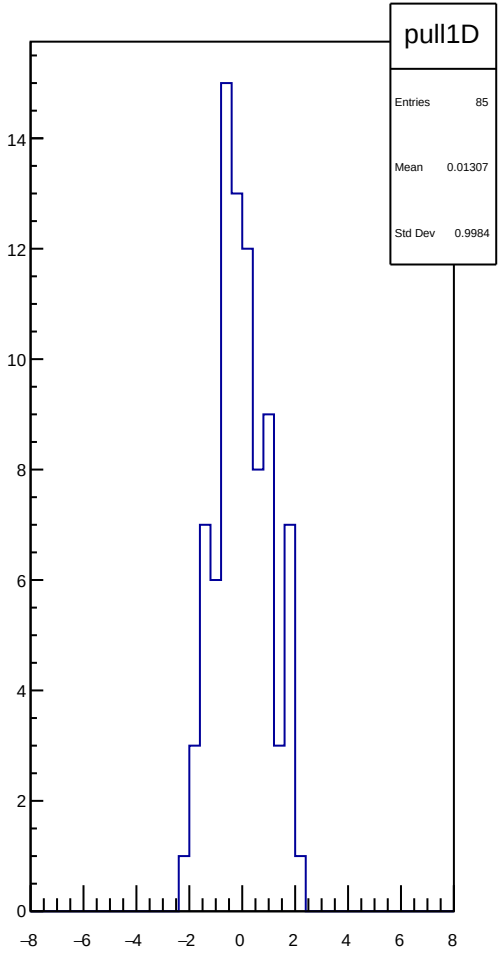

diff_bpm4eY_rms vs run
χ² / ndf 1.657e+04 / 84
p0 6998 ± 5.475
8500
8000
7500
7000
6500
6000
5500

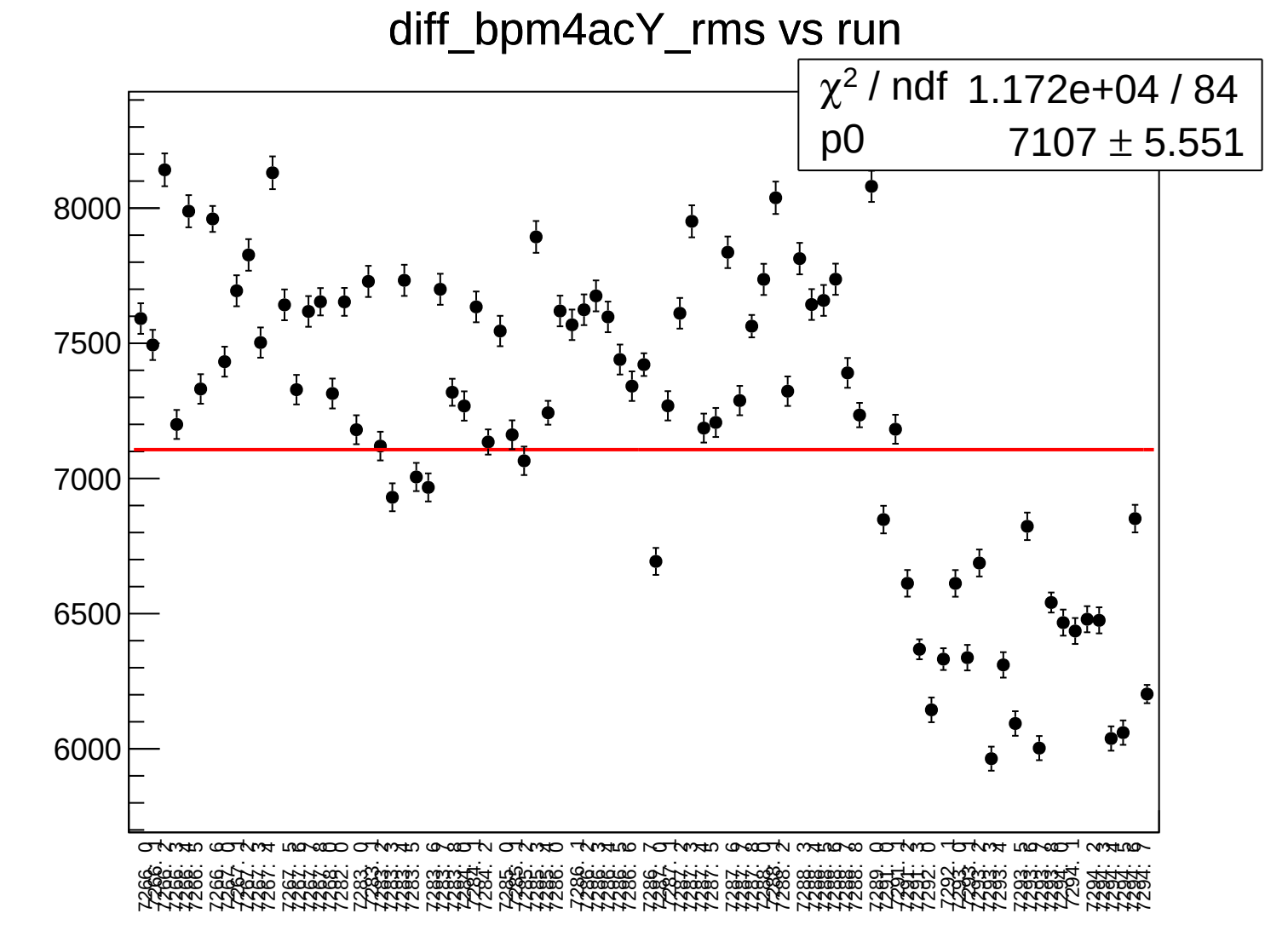

diff_bpm4acX_mean vs run
χ^2 / ndf 89.7 / 84
p0 5.003 ± 9.663
pull
Entries 85
Mean 192.8
Std Dev 145.8

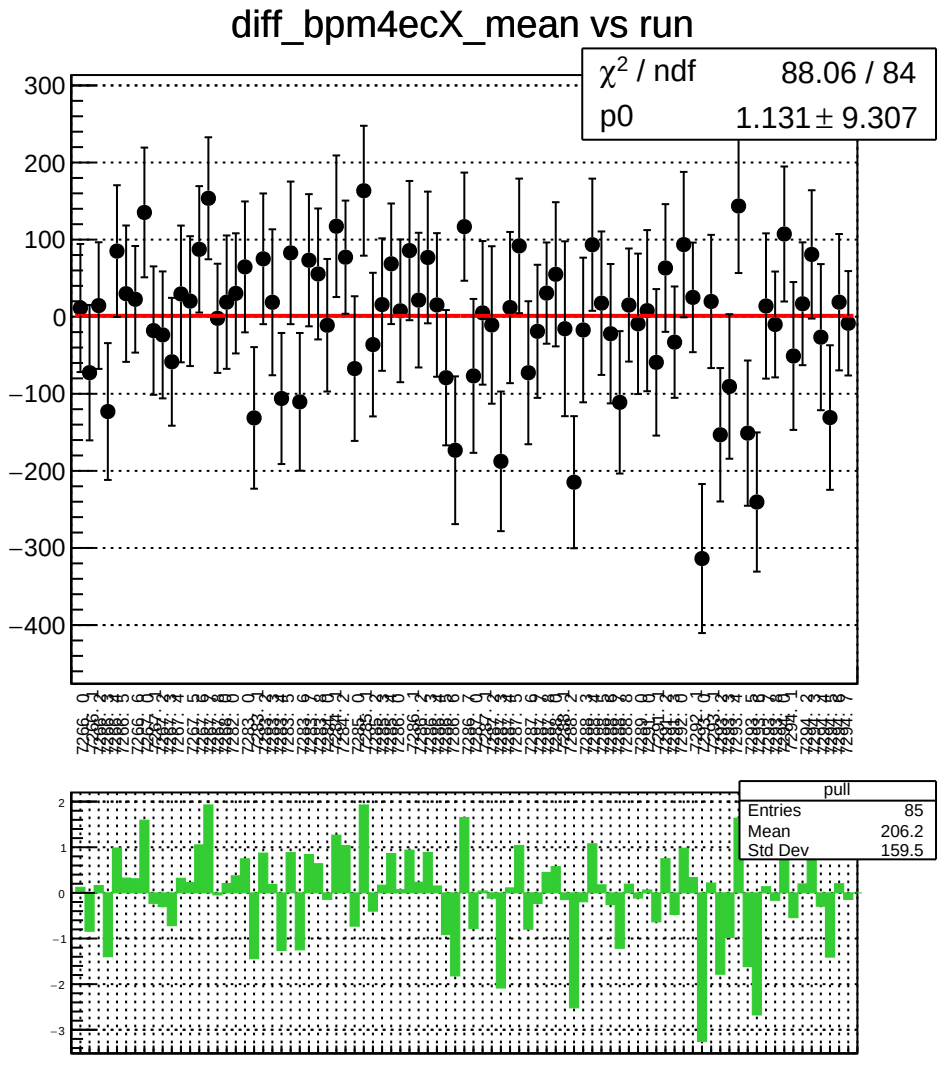

pull1D
Entries 85
Mean −0.03234
Std Dev 1.027

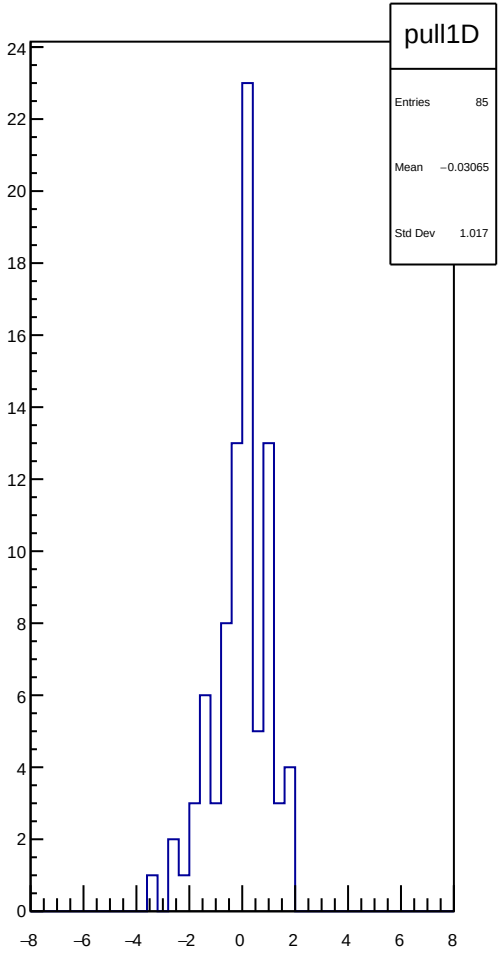

diff_bpm4acX_rms vs run
χ² / ndf 3602 / 84
p0 8769 ± 6.833
10000
9500
9000
8500
8000

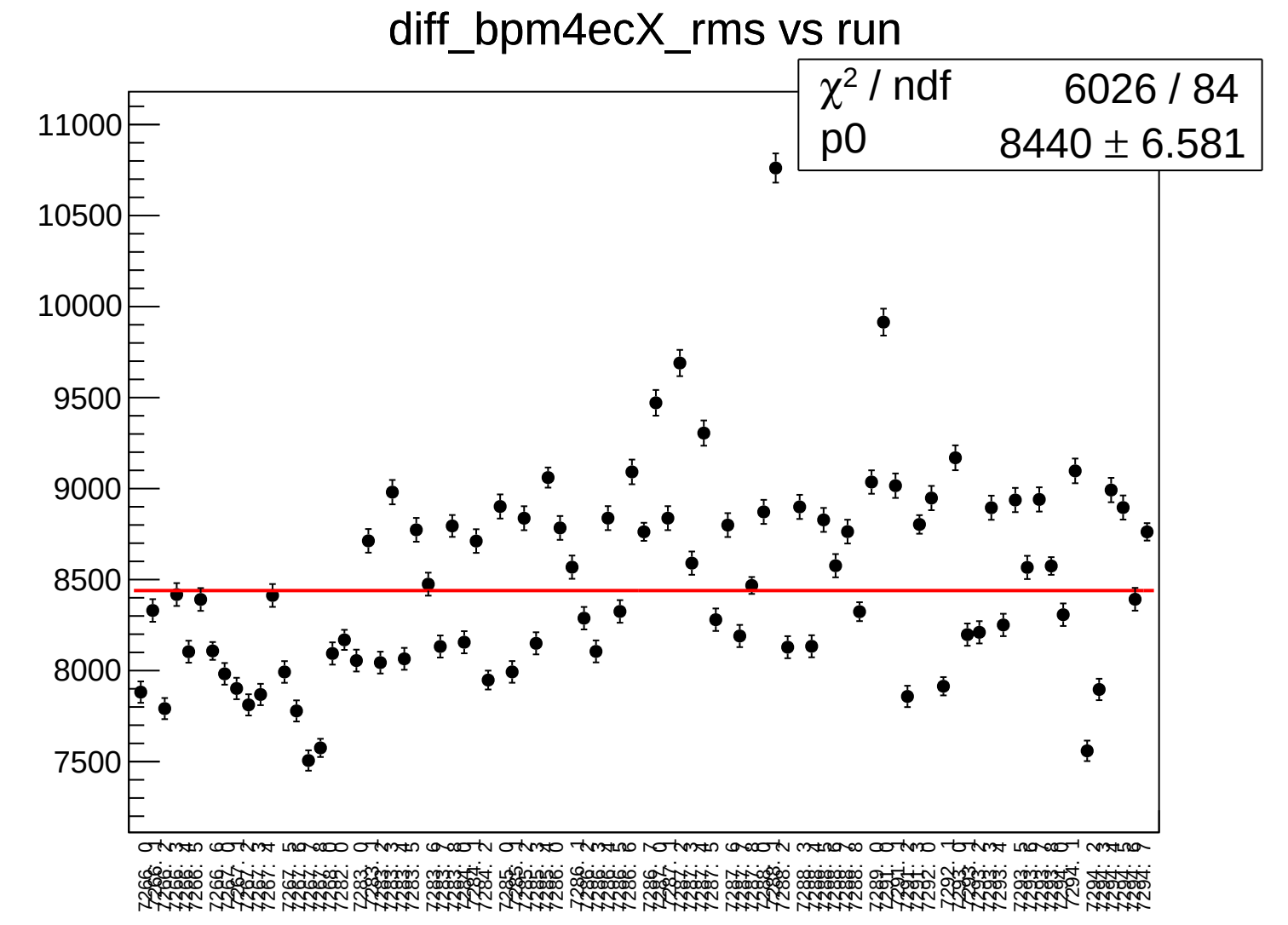

diff_bpm4acY_mean vs run
χ² / ndf 84.74 / 84
p0 9.423 ± 7.85
pull
Entries 85
Mean −6.953
Std Dev 50.47

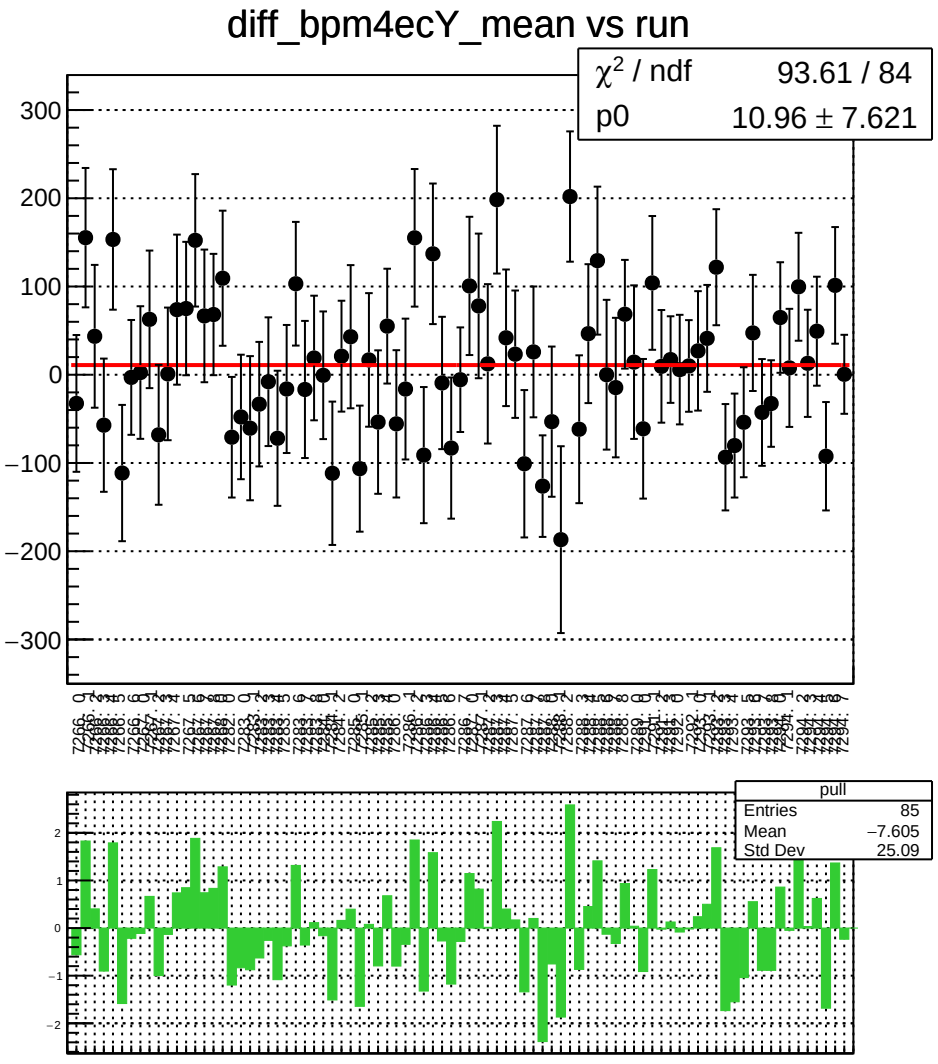

pull1D
Entries 85
Mean 0.01307
Std Dev 0.9984

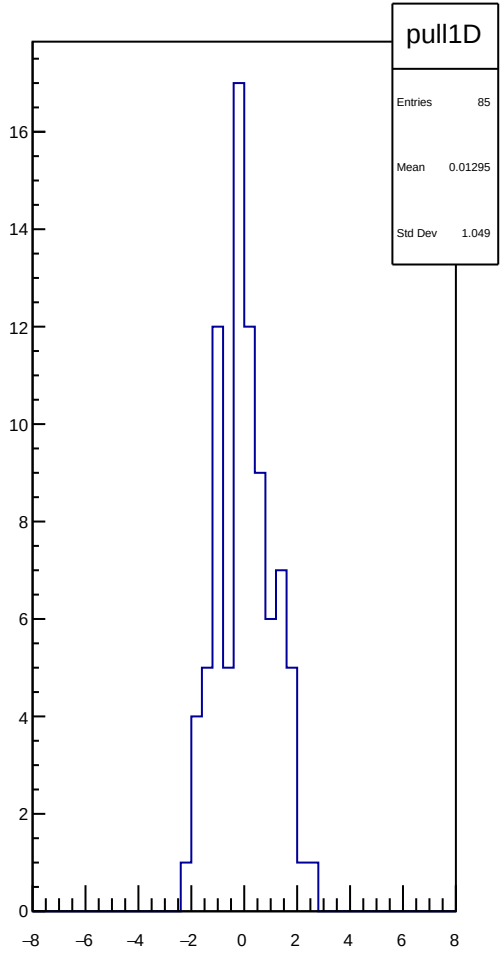

diff_bpm4acY_rms vs run
χ² / ndf 1.172e+04 / 84
p0 7107 ± 5.551
8000
7500
7000
6500
6000

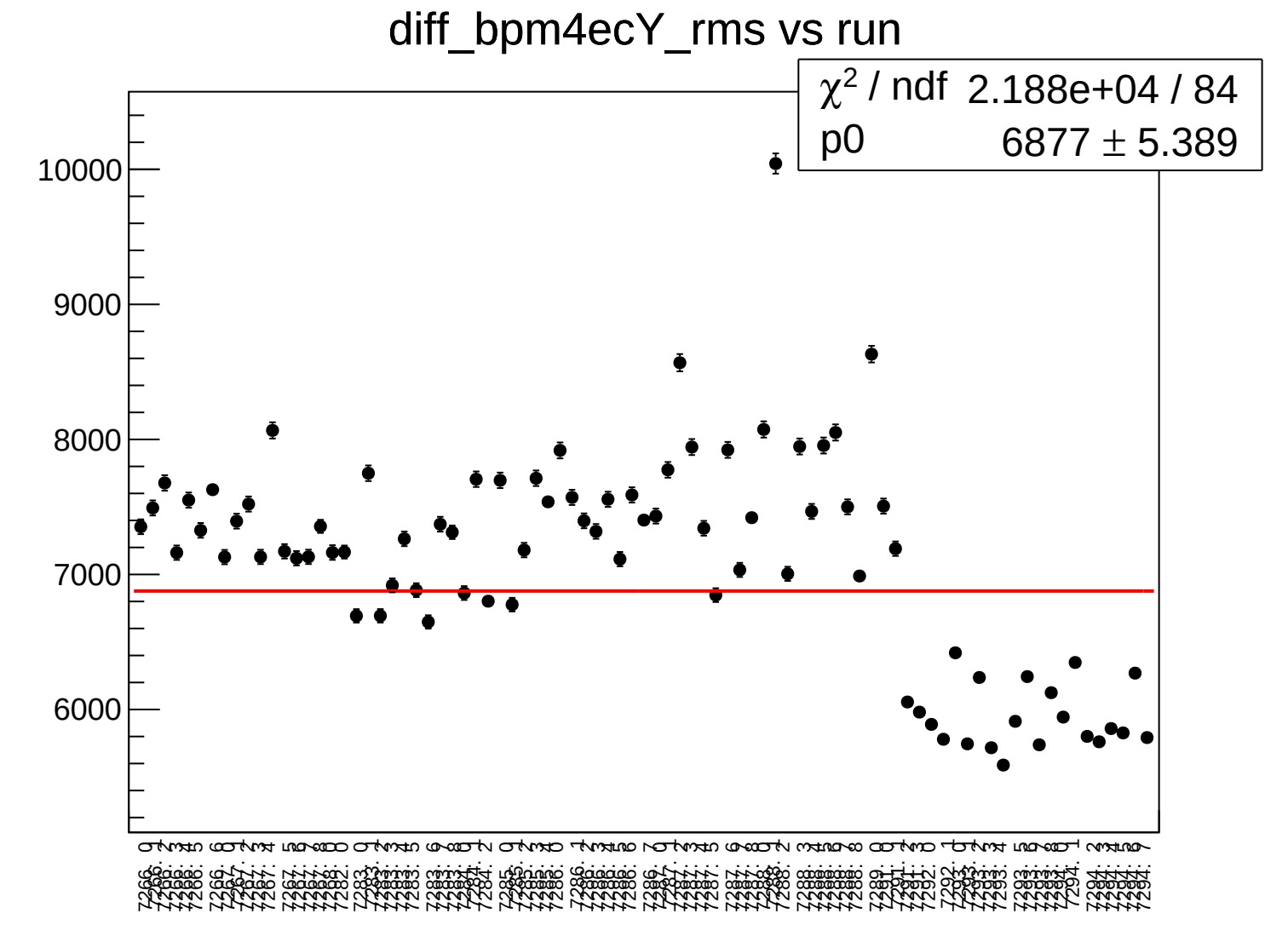

diff_bpm4ecX_mean vs run
χ^2 / ndf 88.06 / 84
p0 1.131 ± 9.307
pull
Entries 85
Mean 206.2
Std Dev 159.5

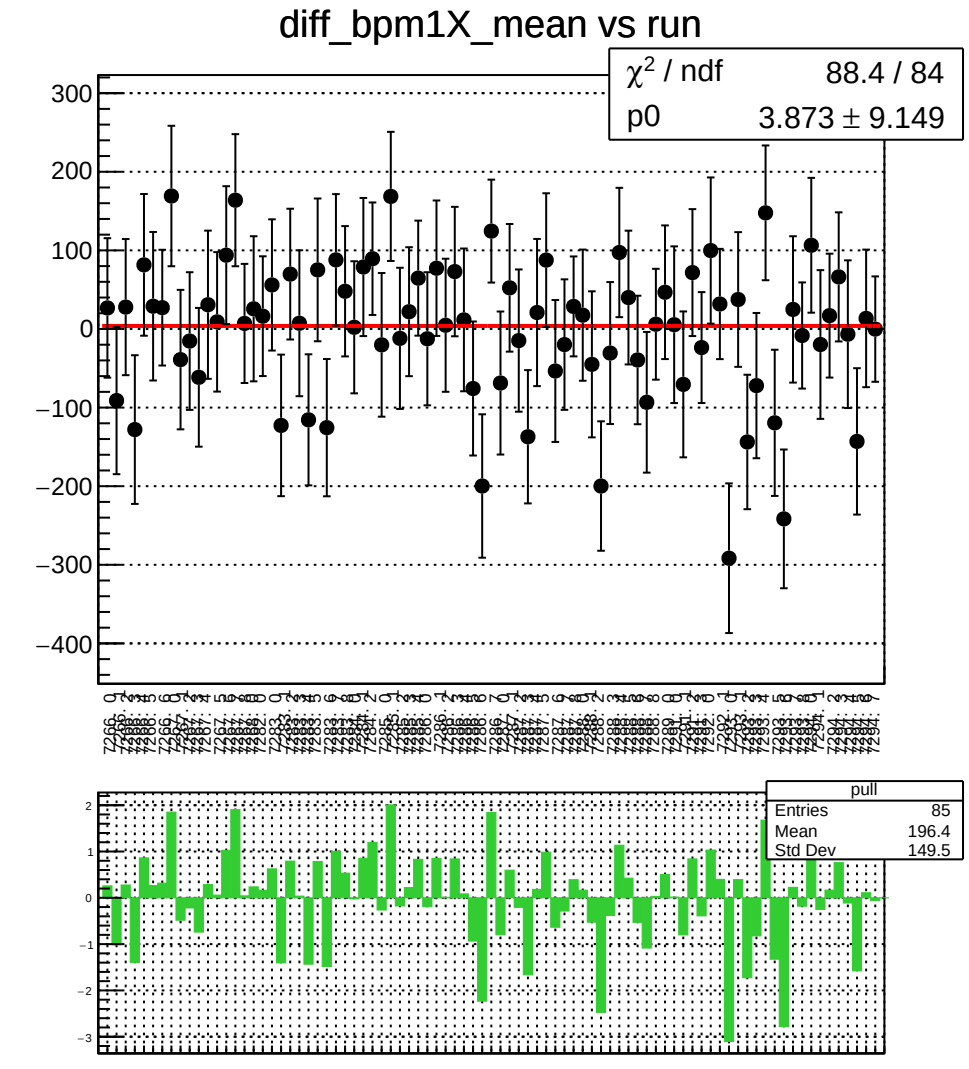

pull1D
Entries 85
Mean −0.03065
Std Dev 1.017

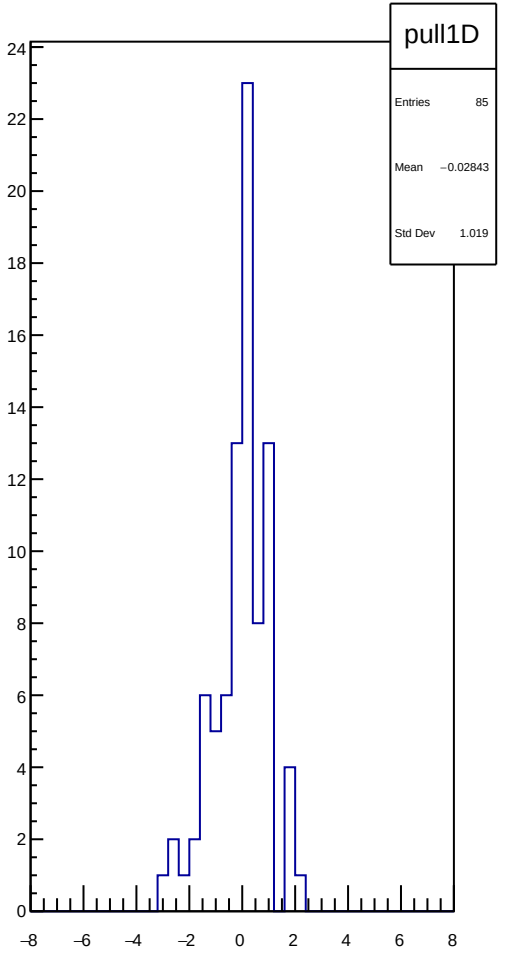

diff_bpm4ecX_rms vs run
χ² / ndf 6026 / 84
p0 8440 ± 6.581
11000
10500
10000
9500
9000
8500
8000
7500

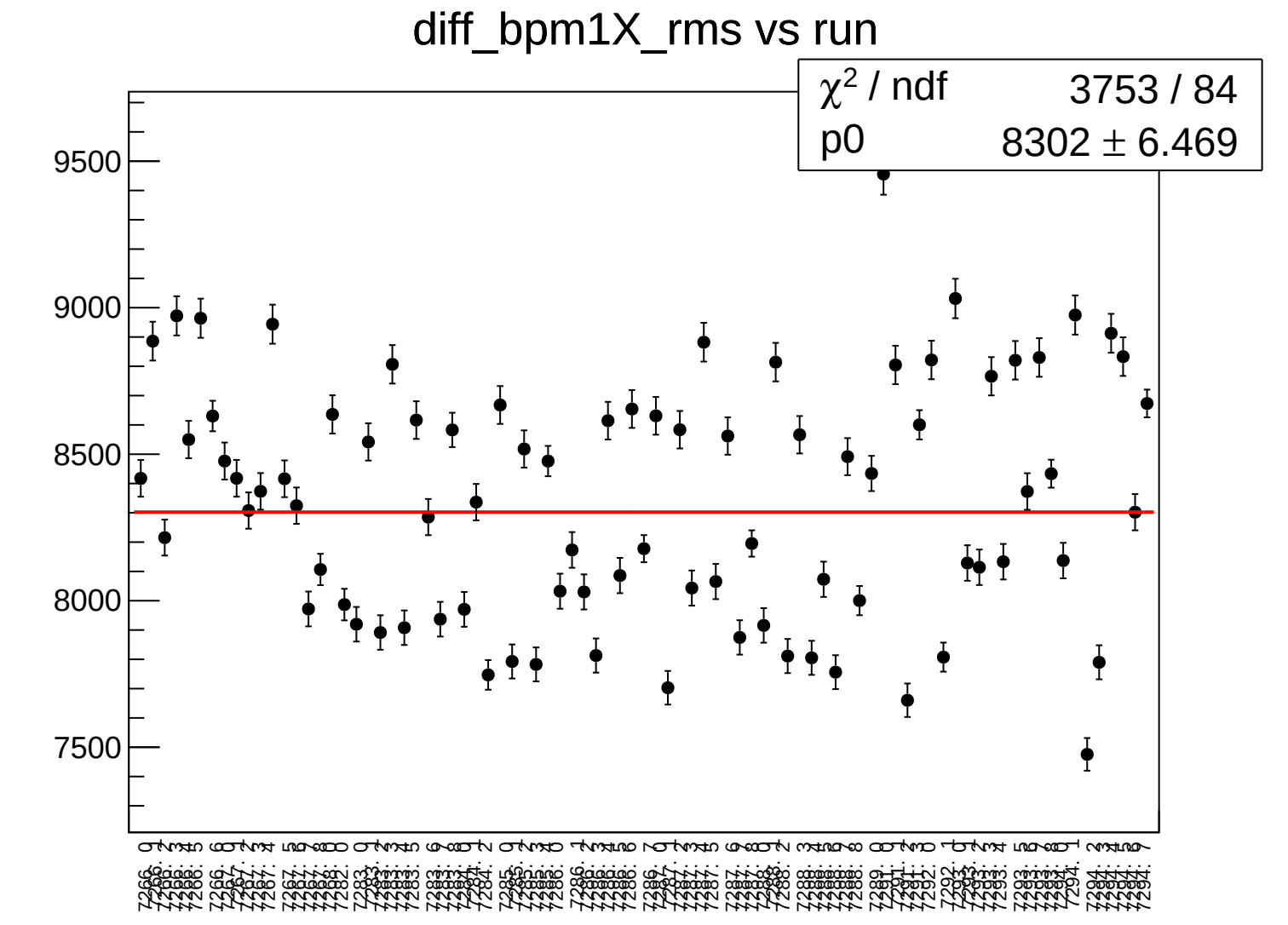

diff_bpm4ecY_mean vs run
χ^2 / ndf 93.61 / 84
p0 10.96 ± 7.621
pull
Entries 85
Mean −7.605
Std Dev 25.09

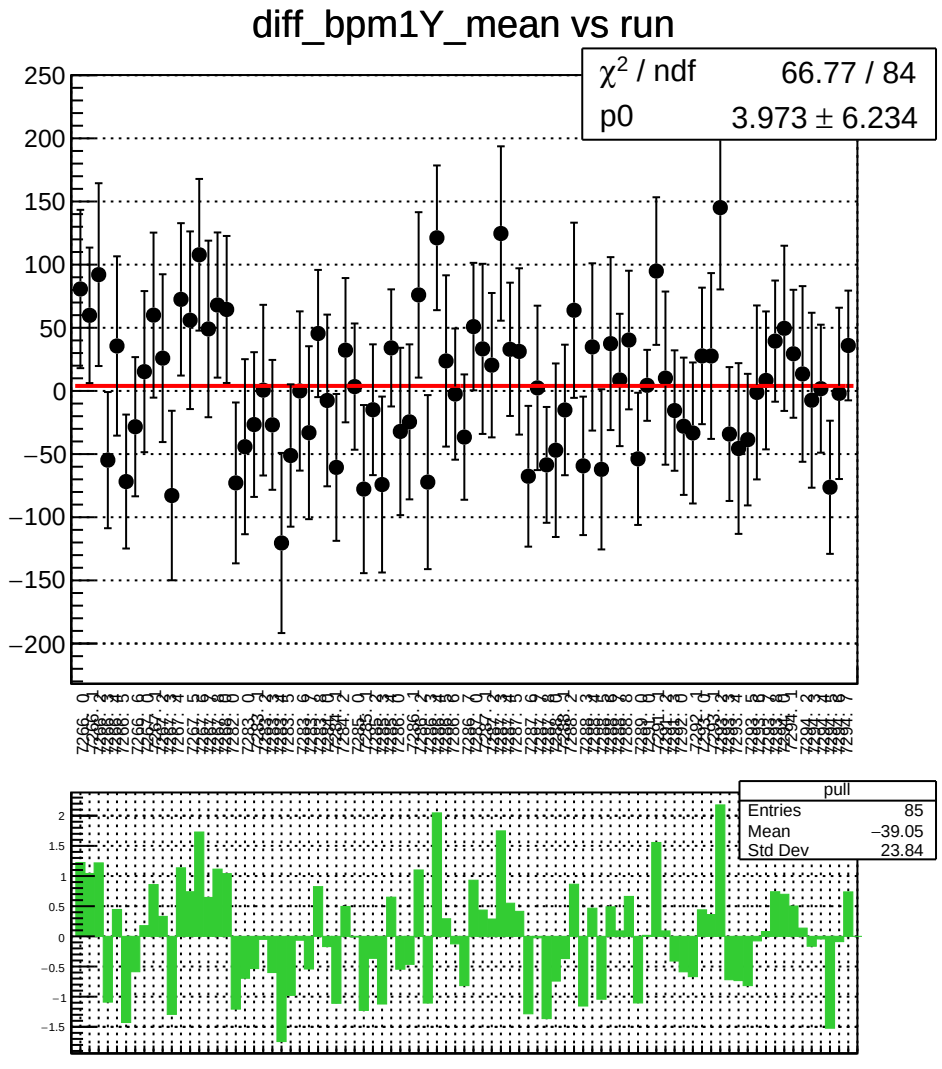

pull1D
Entries 85
Mean 0.01295
Std Dev 1.049

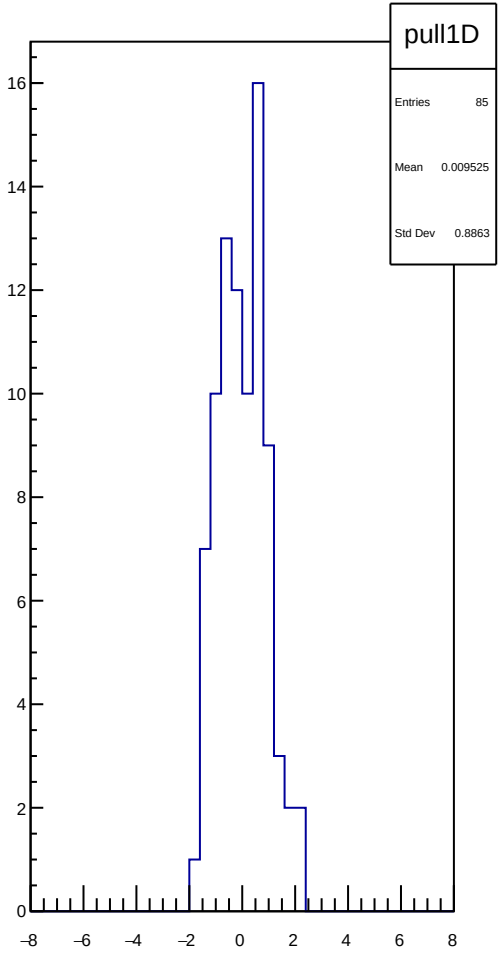

diff_bpm4ecY_rms vs run
χ² / ndf 2.188e+04 / 84
p0 6877 ± 5.389
10000
9000
8000
7000
6000

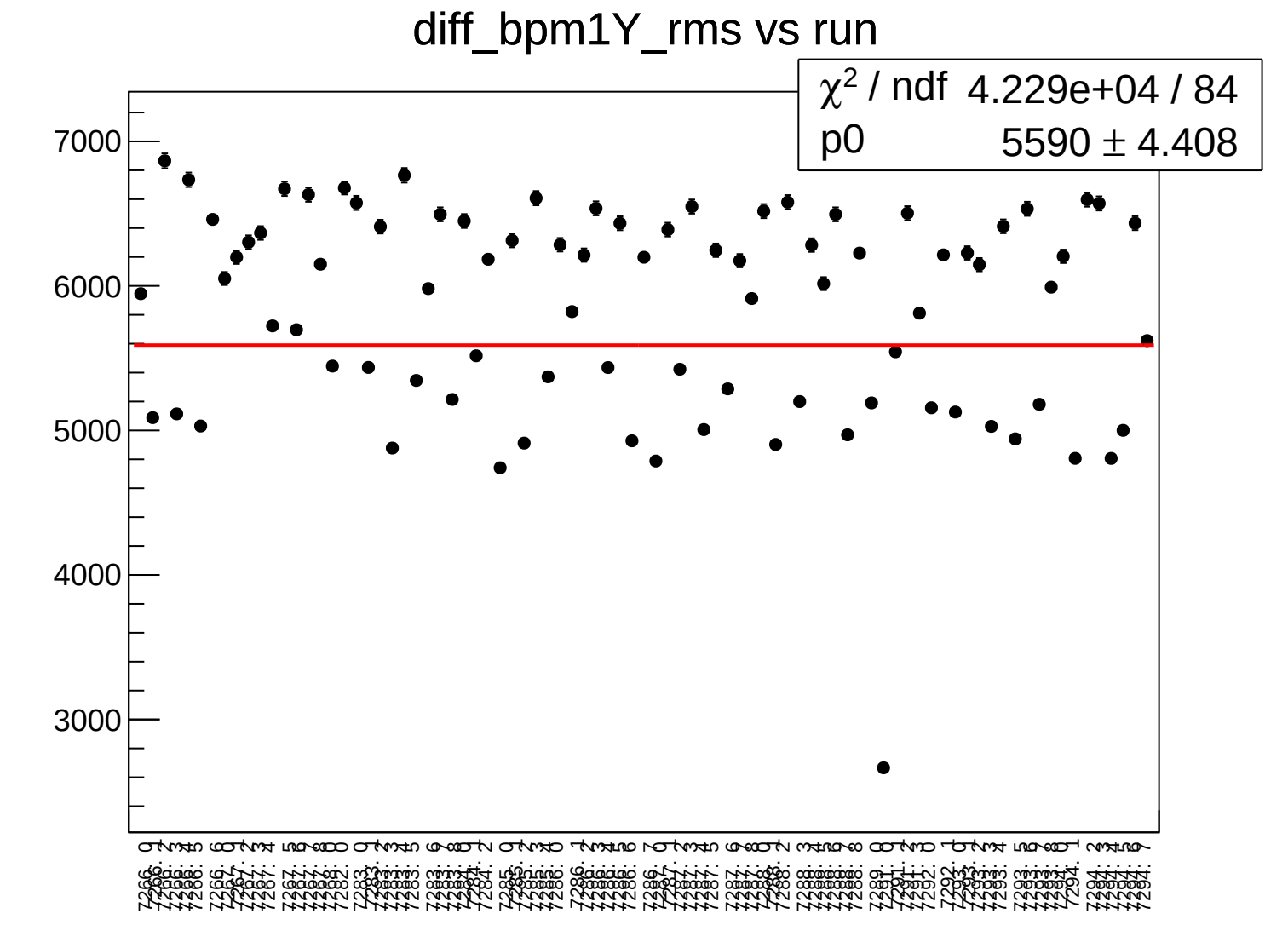

diff_bpm1X_mean vs run
χ² / ndf 88.4 / 84
p0 3.873 ± 9.149
pull
Entries 85
Mean 196.4
Std Dev 149.5

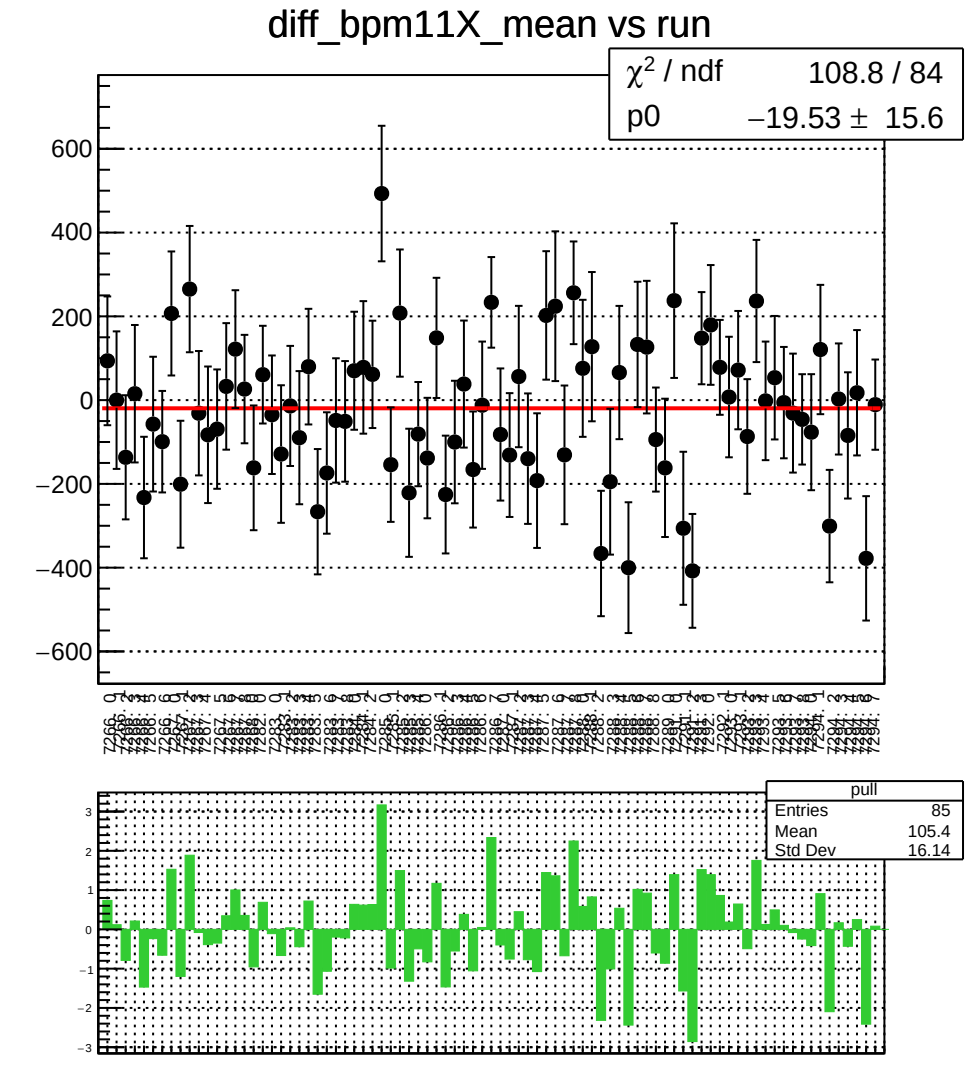

pull1D
Entries 85
Mean −0.02843
Std Dev 1.019

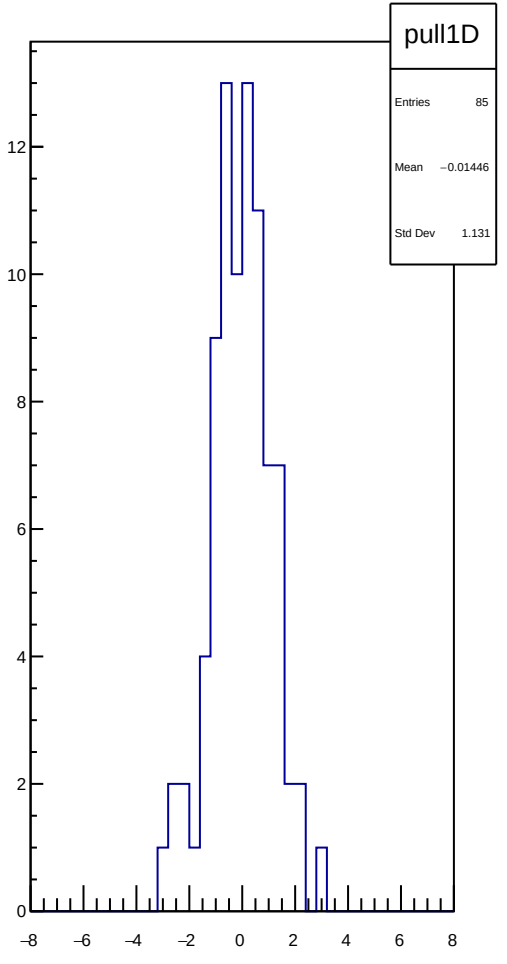

diff_bpm1X_rms vs run
χ^2 / ndf 3753 / 84
p0 8302 ± 6.469
9500
9000
8500
8000
7500

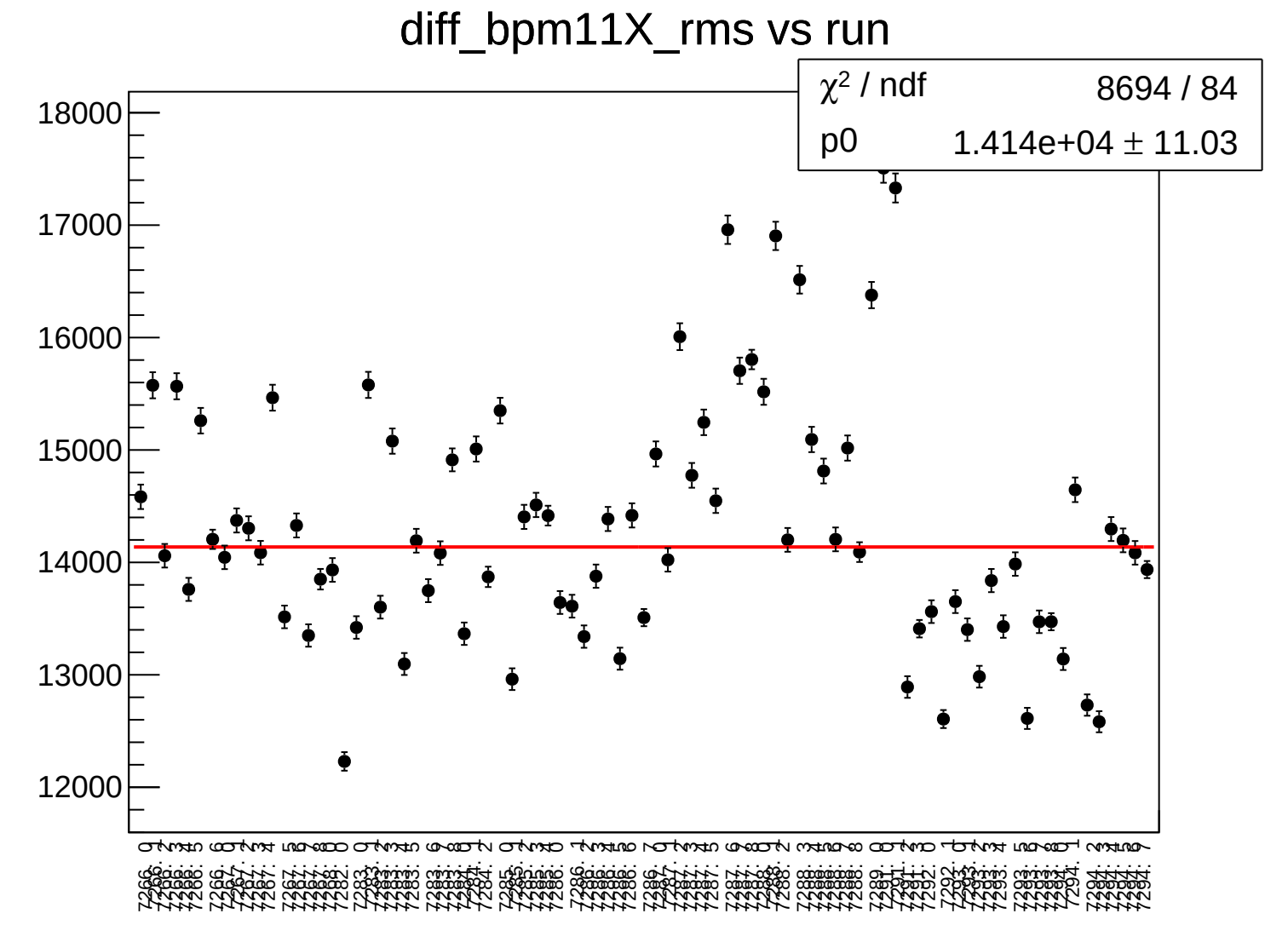

diff_bpm1Y_mean vs run
χ² / ndf 66.77 / 84
p0 3.973 ± 6.234
pull
Entries 85
Mean −39.05
Std Dev 23.84

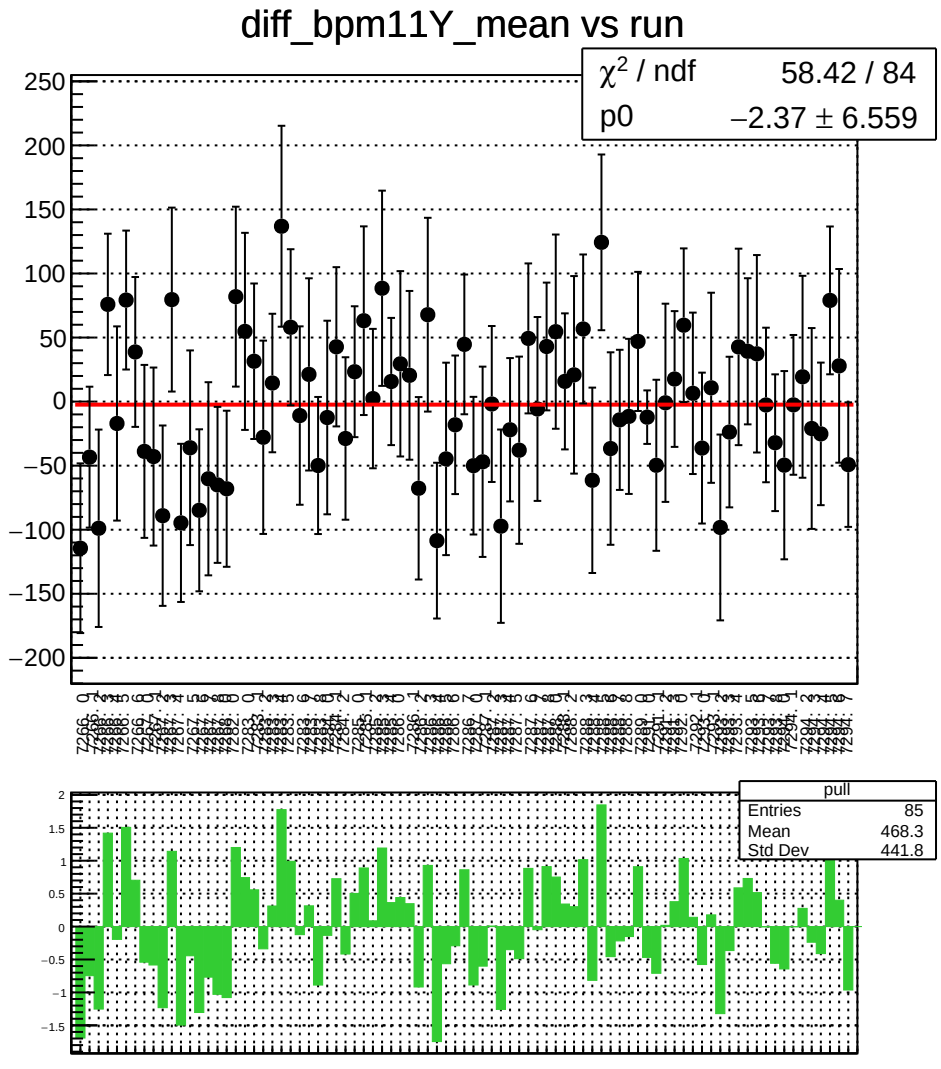

pull1D
Entries 85
Mean 0.009525
Std Dev 0.8863

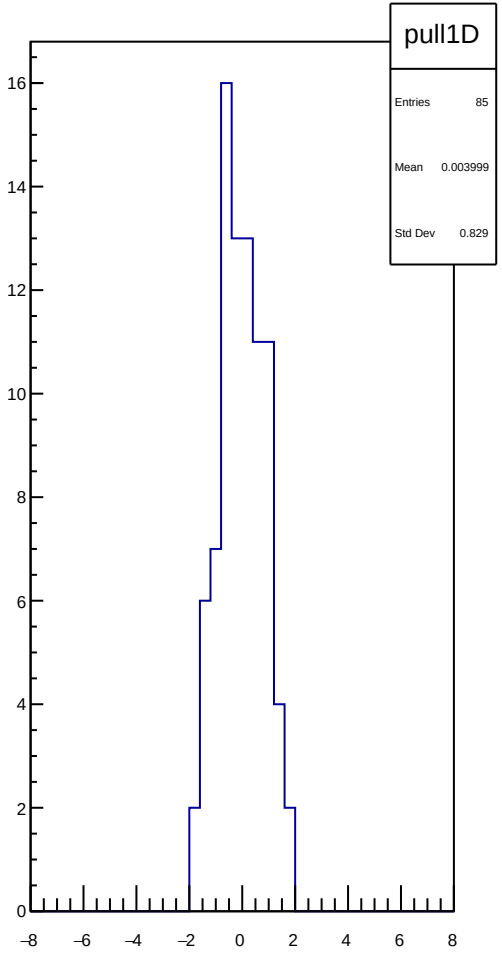

diff_bpm1Y_rms vs run
χ² / ndf 4.229e+04 / 84
p0 5590 ± 4.408
7000
6000
5000
4000
3000

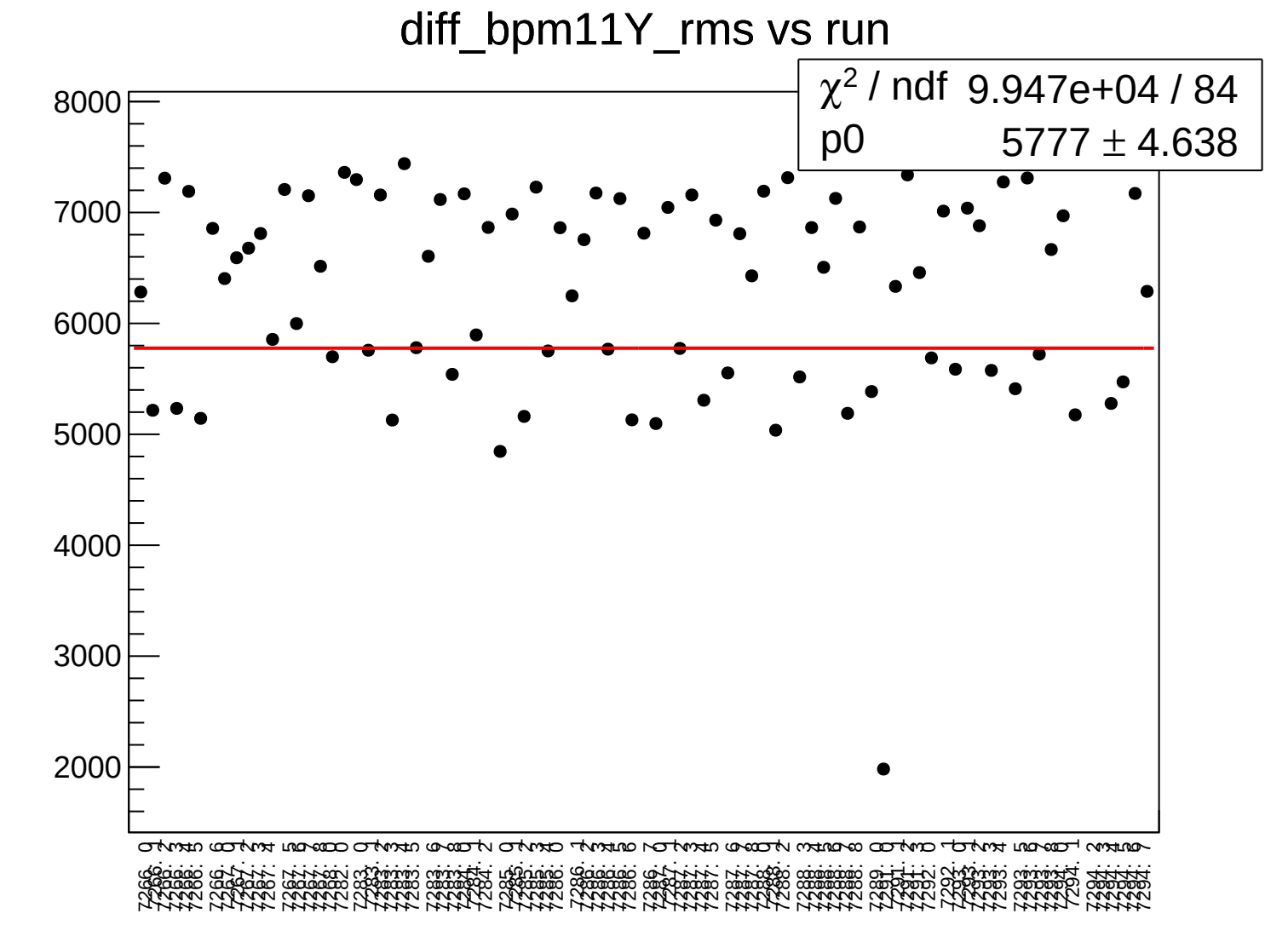

diff_bpm11X_mean vs run
χ² / ndf 108.8 / 84
p0 −19.53 ± 15.6
pull
Entries 85
Mean 105.4
Std Dev 16.14

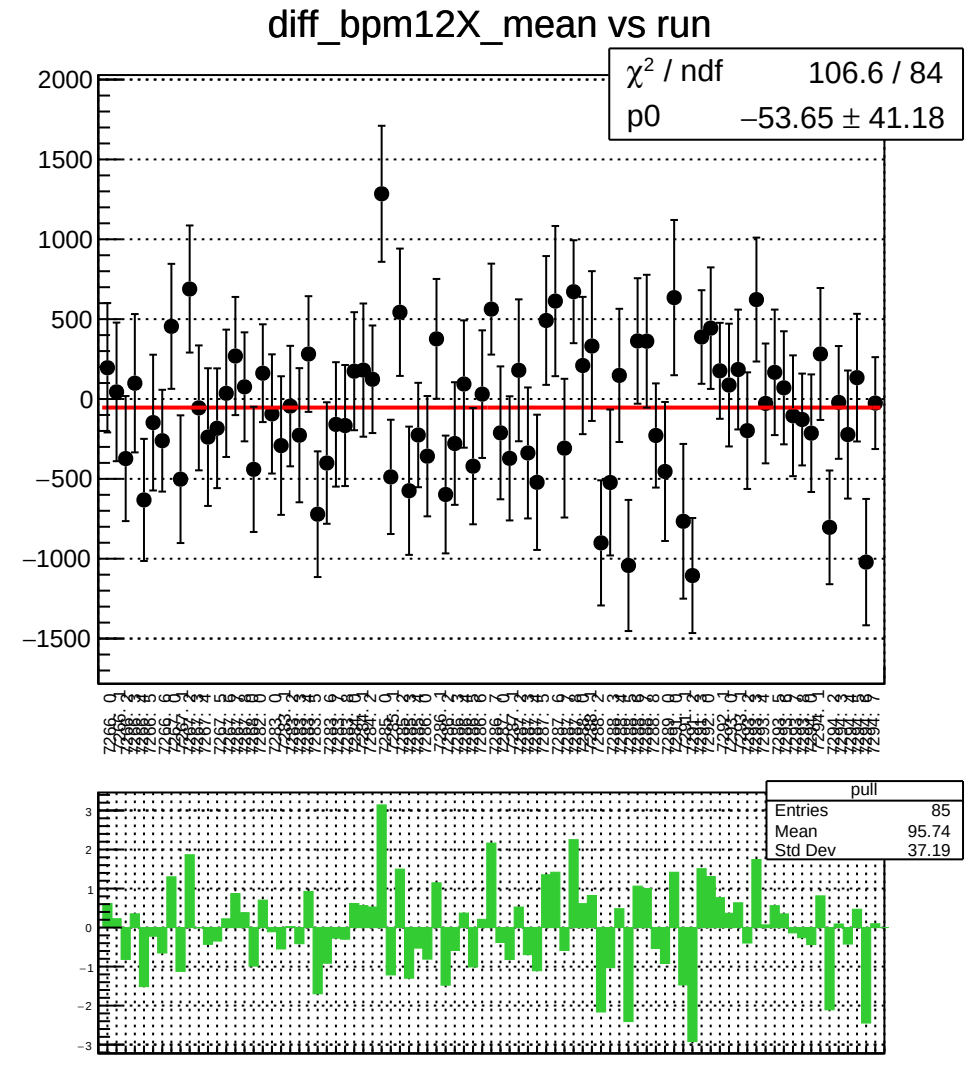

pull1D
Entries 85
Mean −0.01446
Std Dev 1.131

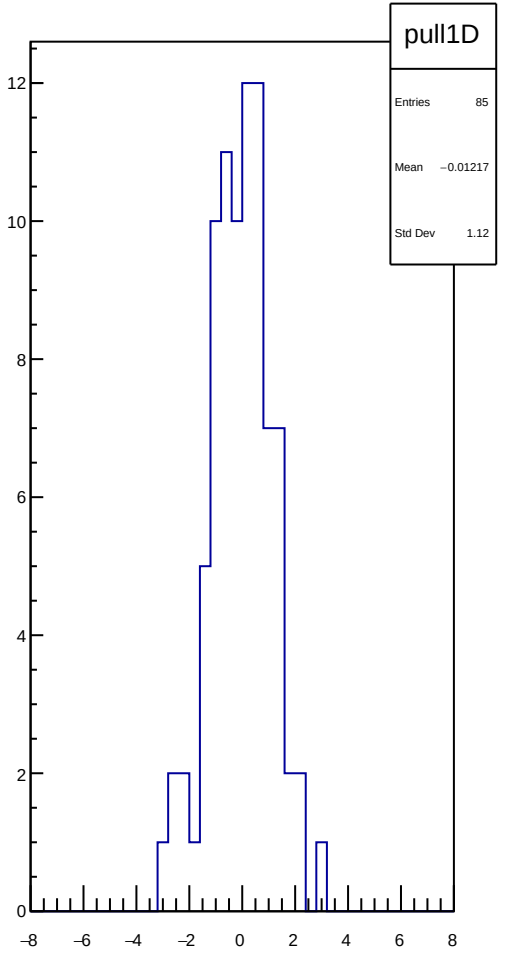

diff_bpm11X_rms vs run
χ² / ndf 8694 / 84
p0 1.414e+04 ± 11.03
18000
17000
16000
15000
14000
13000
12000

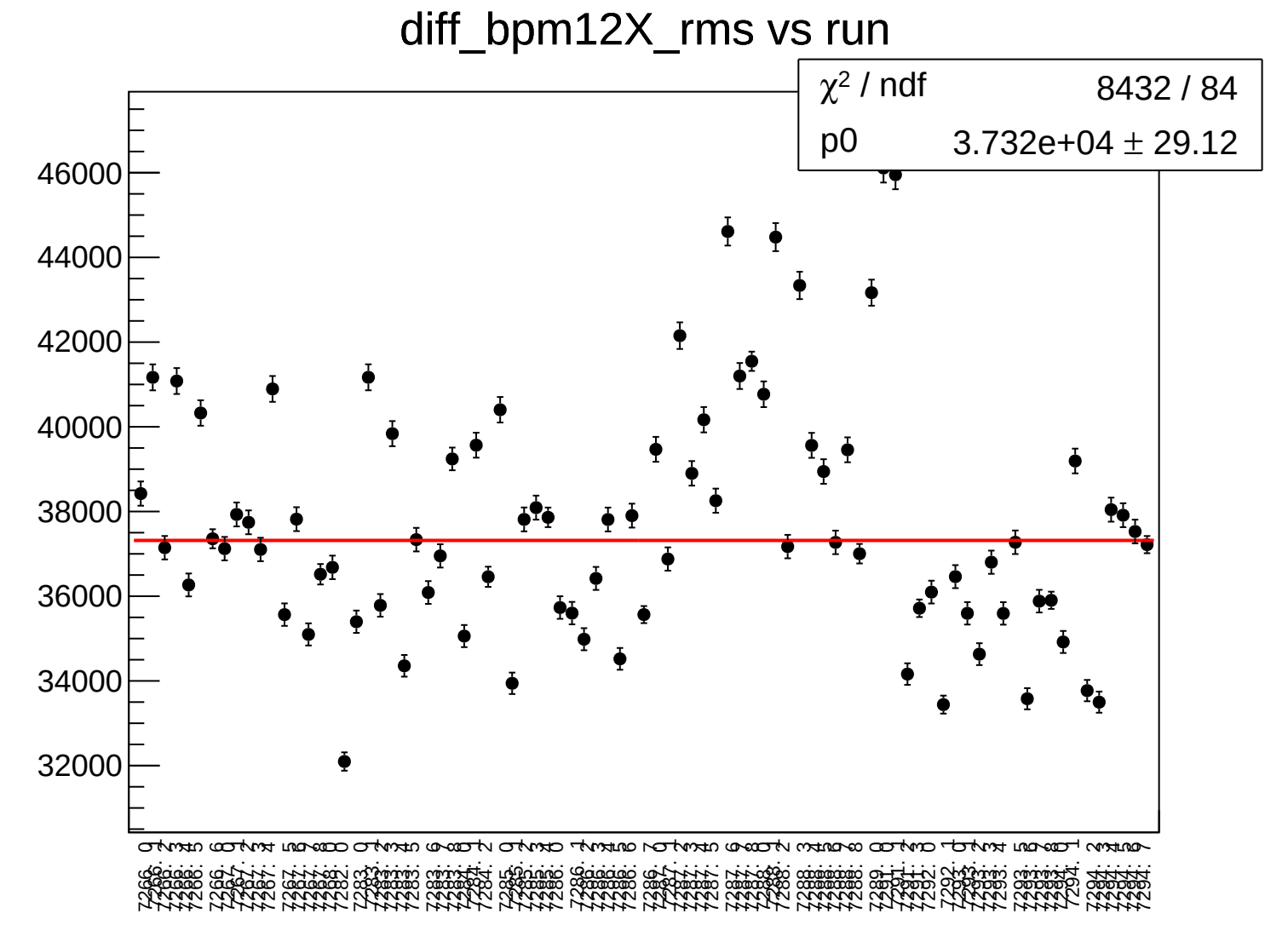

diff_bpm11Y_mean vs run
χ² / ndf 58.42 / 84
p0 −2.37 ± 6.559
pull
Entries 85
Mean 468.3
Std Dev 441.8

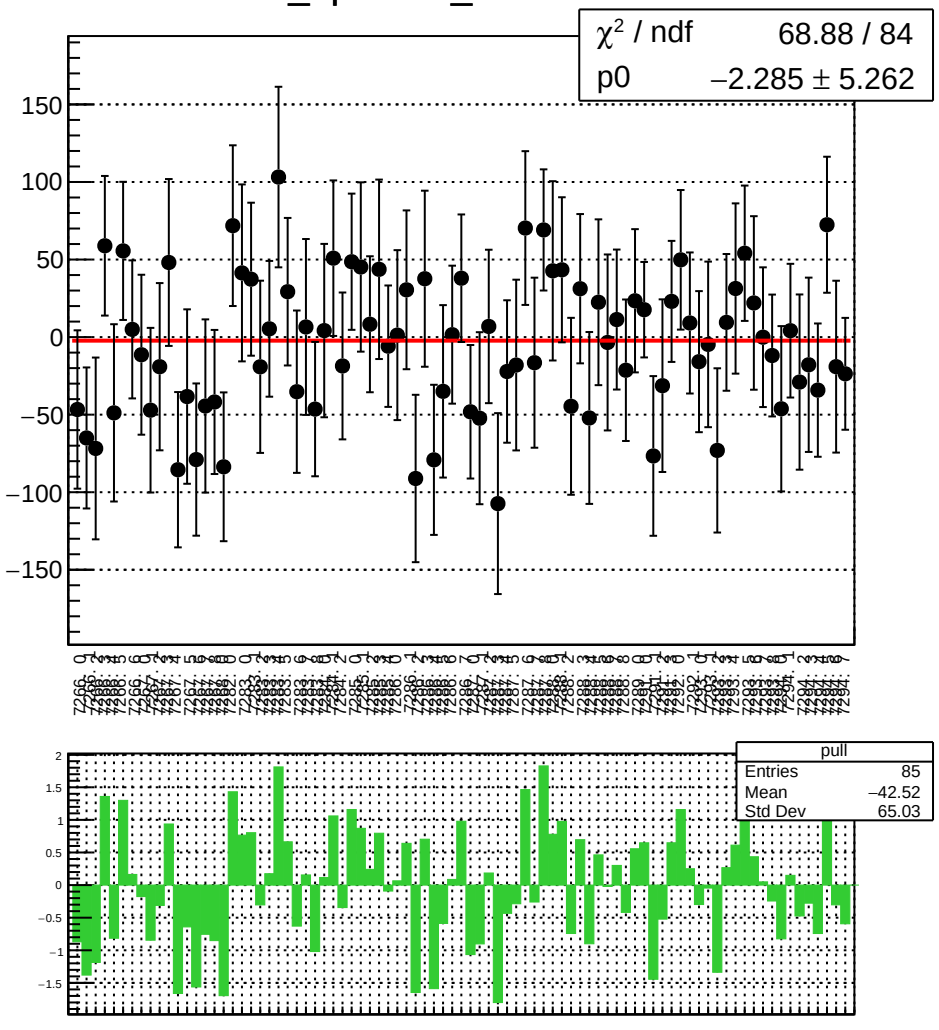

pull1D
Entries 85
Mean 0.003999
Std Dev 0.829

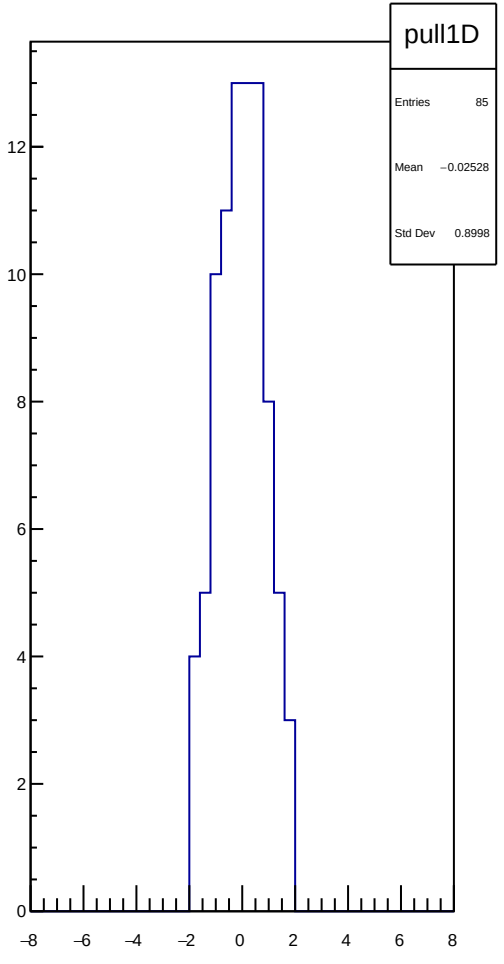

diff_bpm11Y_rms vs run
χ² / ndf 9.947e+04 / 84
p0 5777 ± 4.638
8000
7000
6000
5000
4000
3000
2000

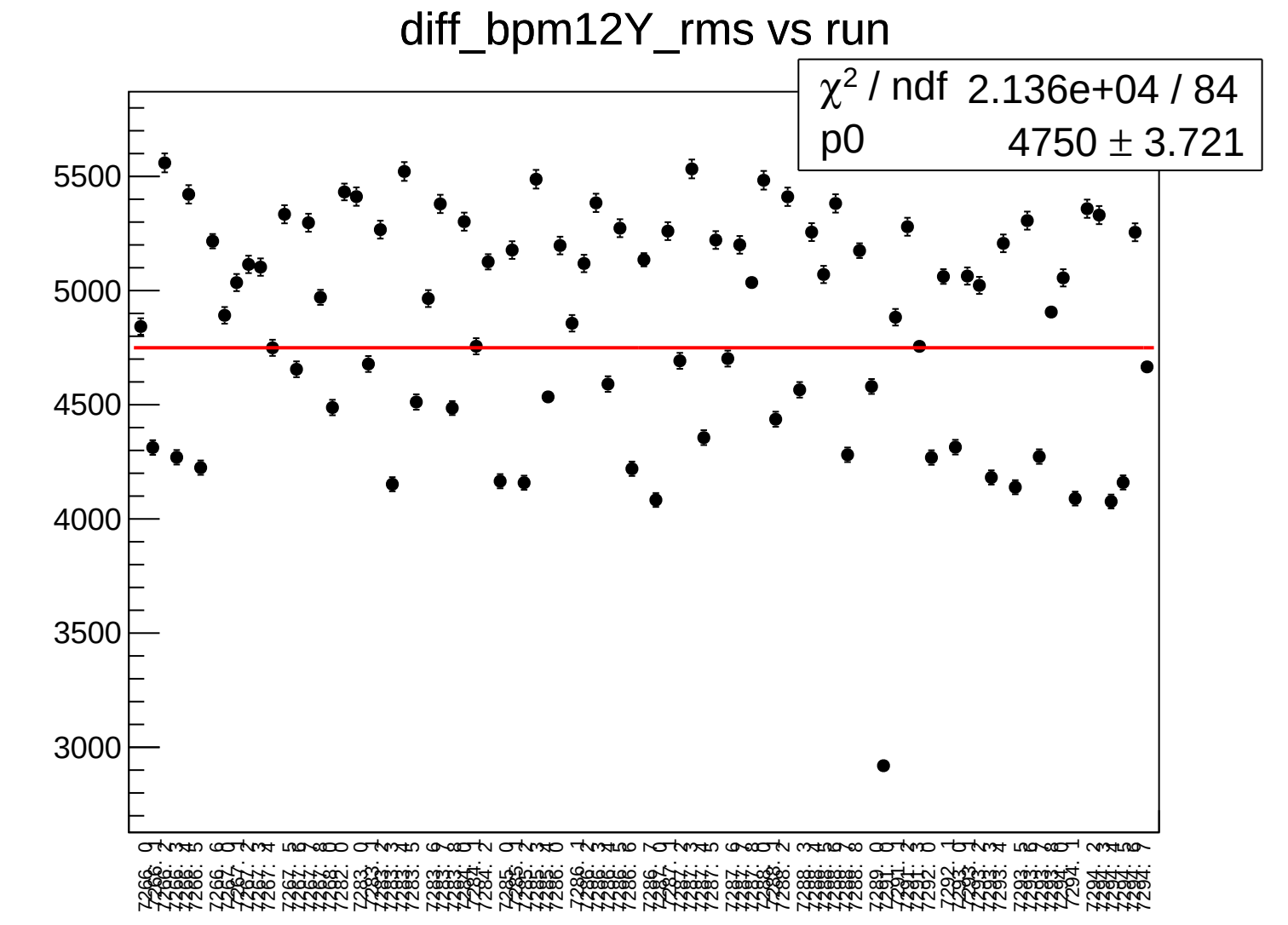

diff_bpm12X_mean vs run
χ² / ndf 106.6 / 84
p0 −53.65 ± 41.18
pull
Entries 85
Mean 95.74
Std Dev 37.19

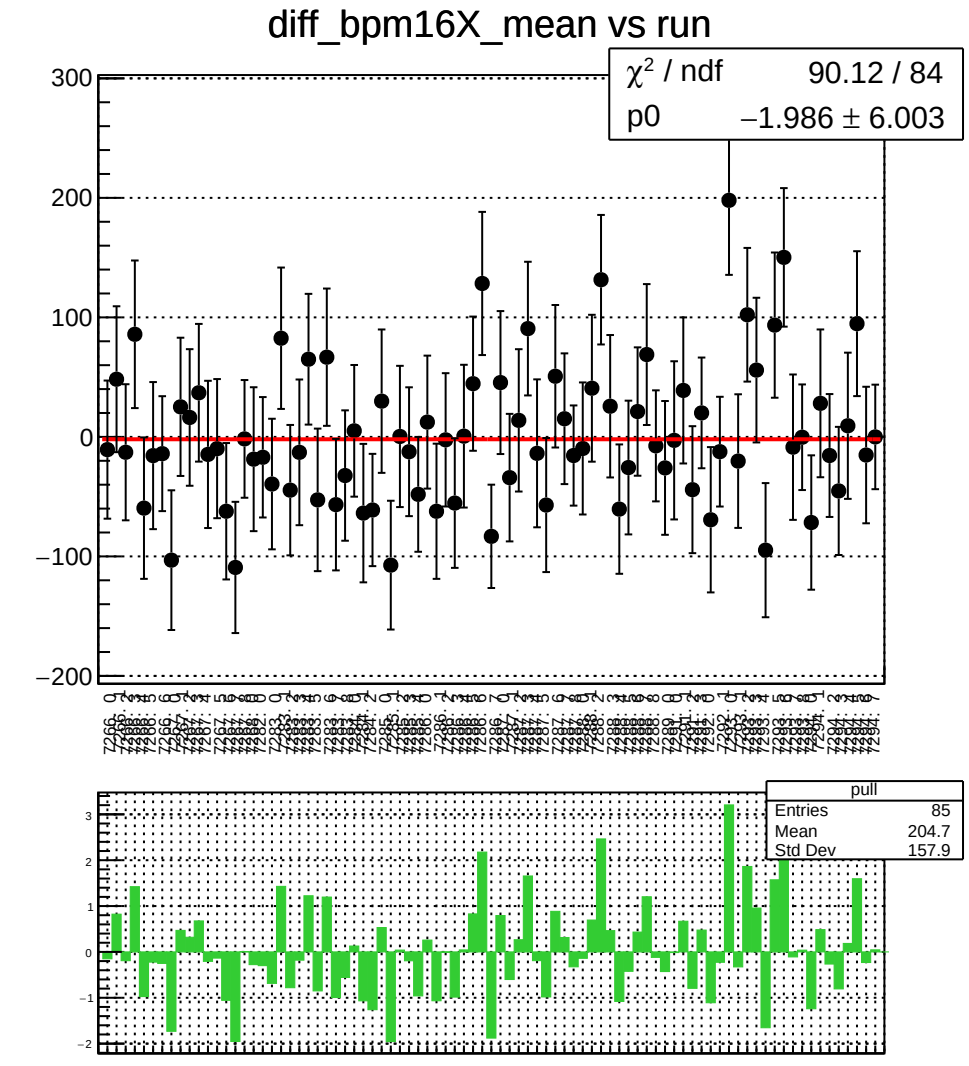

pull1D
Entries 85
Mean −0.01217
Std Dev 1.12

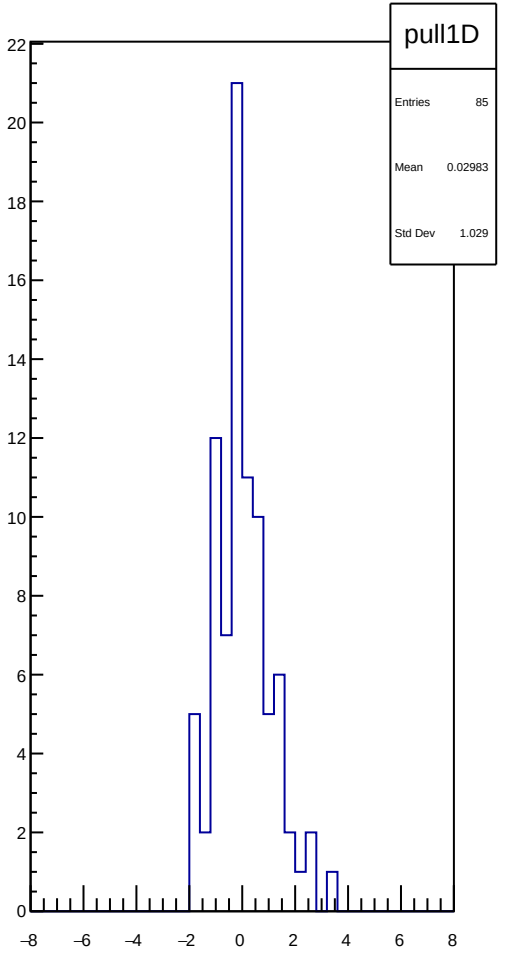

diff_bpm12X_rms vs run
χ² / ndf 8432 / 84
p0 3.732e+04 ± 29.12
46000
44000
42000
40000
38000
36000
34000
32000

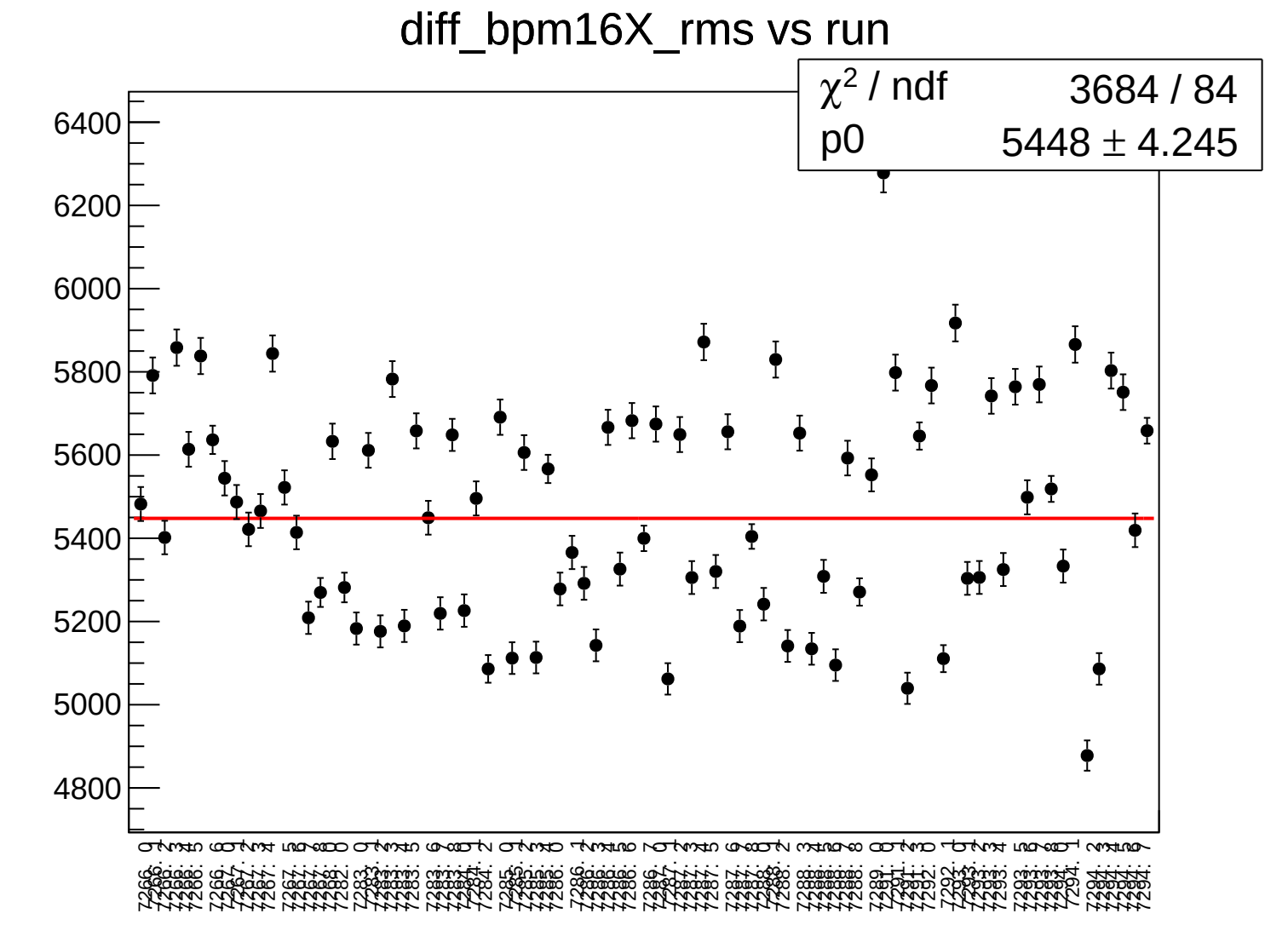

diff_bpm12Y_mean vs run
χ² / ndf 68.88 / 84
p0 −2.285 ± 5.262
pull
Entries 85
Mean −42.52
Std Dev 65.03

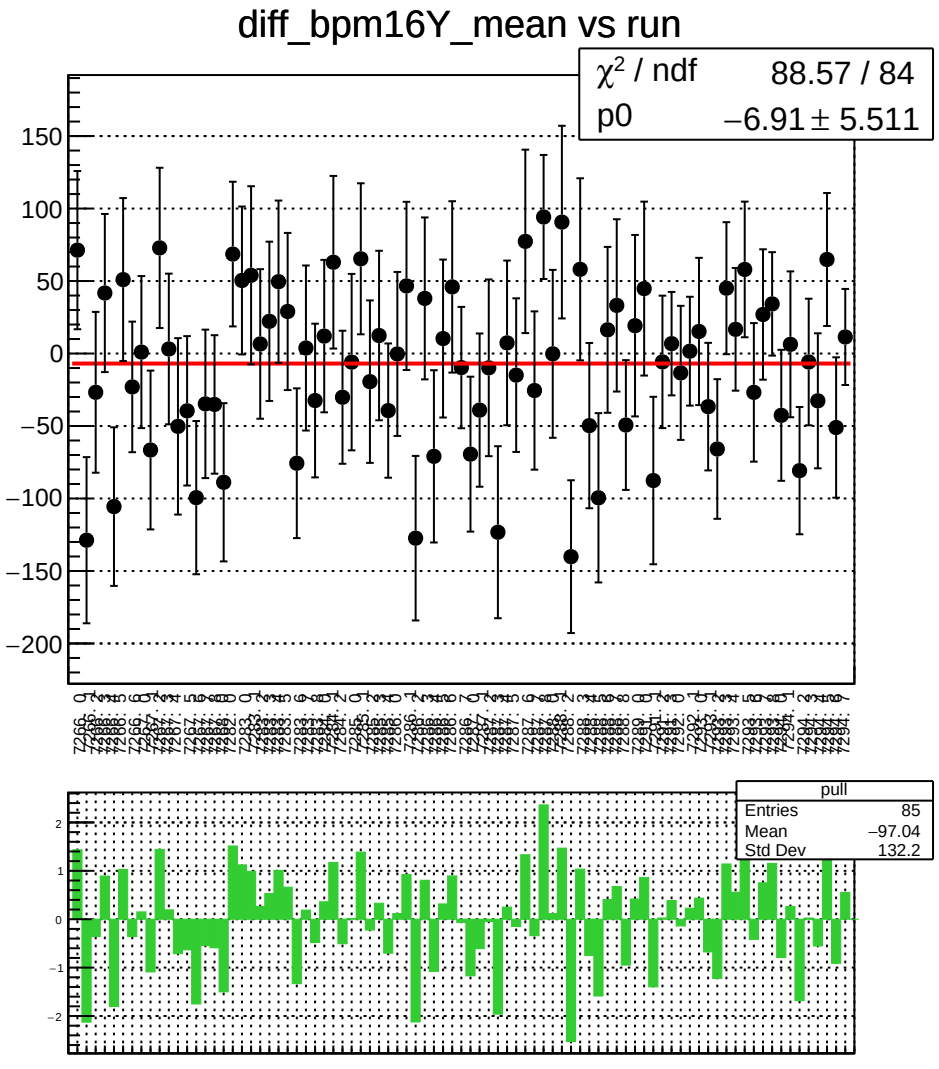

pull1D
Entries 85
Mean −0.02528
Std Dev 0.8998

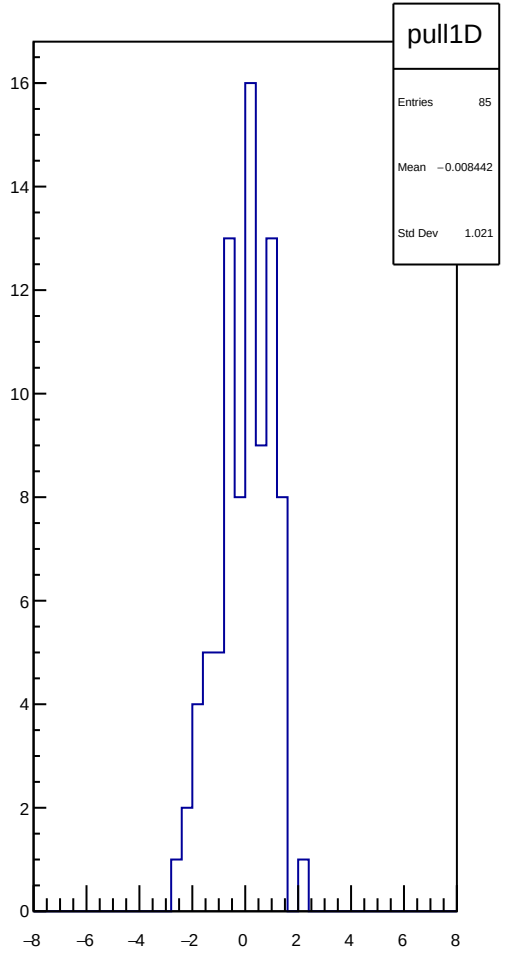

diff_bpm12Y_rms vs run
χ² / ndf 2.136e+04 / 84
p0 4750 ± 3.721
5500
5000
4500
4000
3500
3000

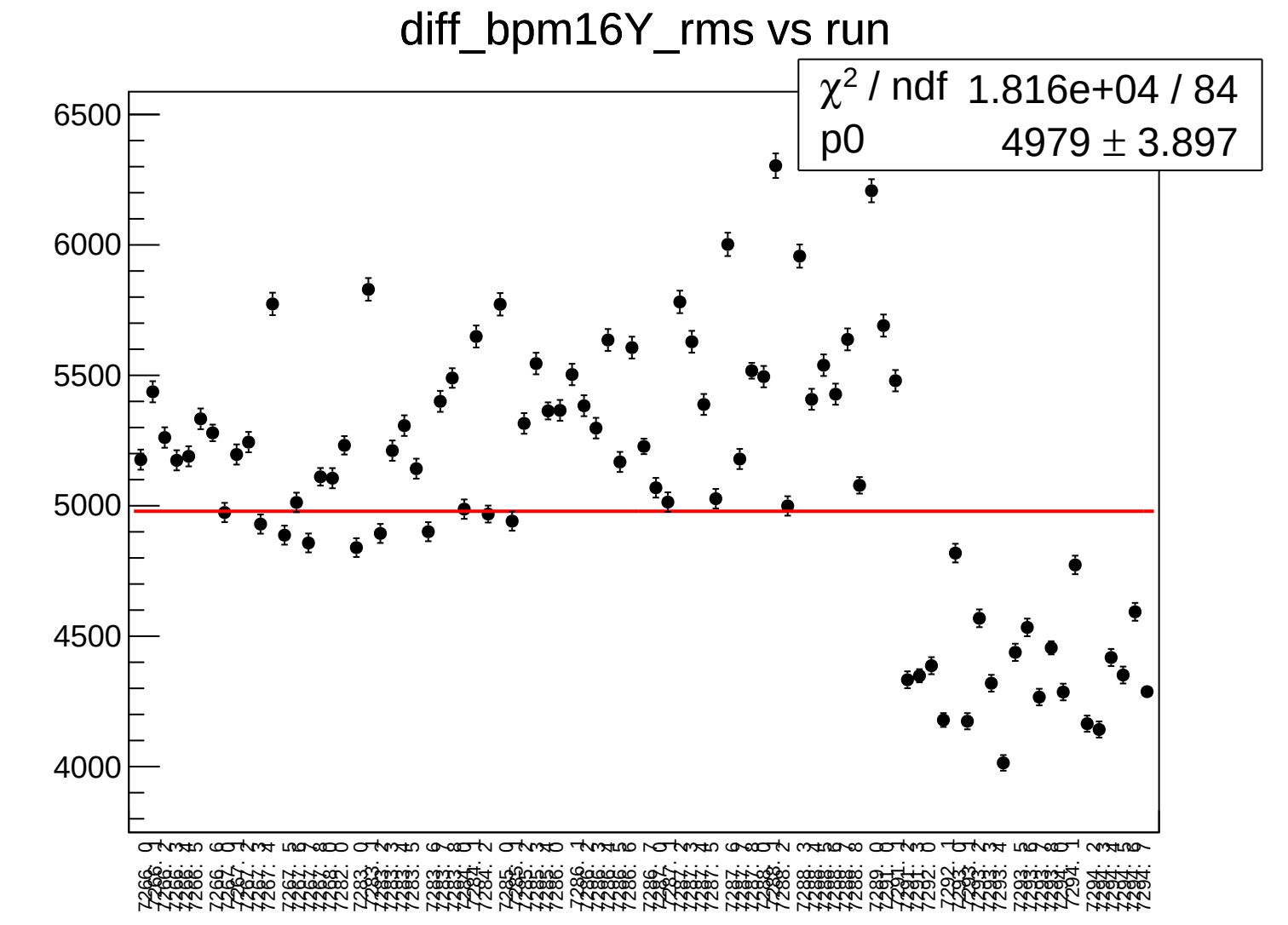

diff_bpm16X_mean vs run
χ² / ndf 90.12 / 84
p0 −1.986 ± 6.003
pull
Entries 85
Mean 204.7
Std Dev 157.9

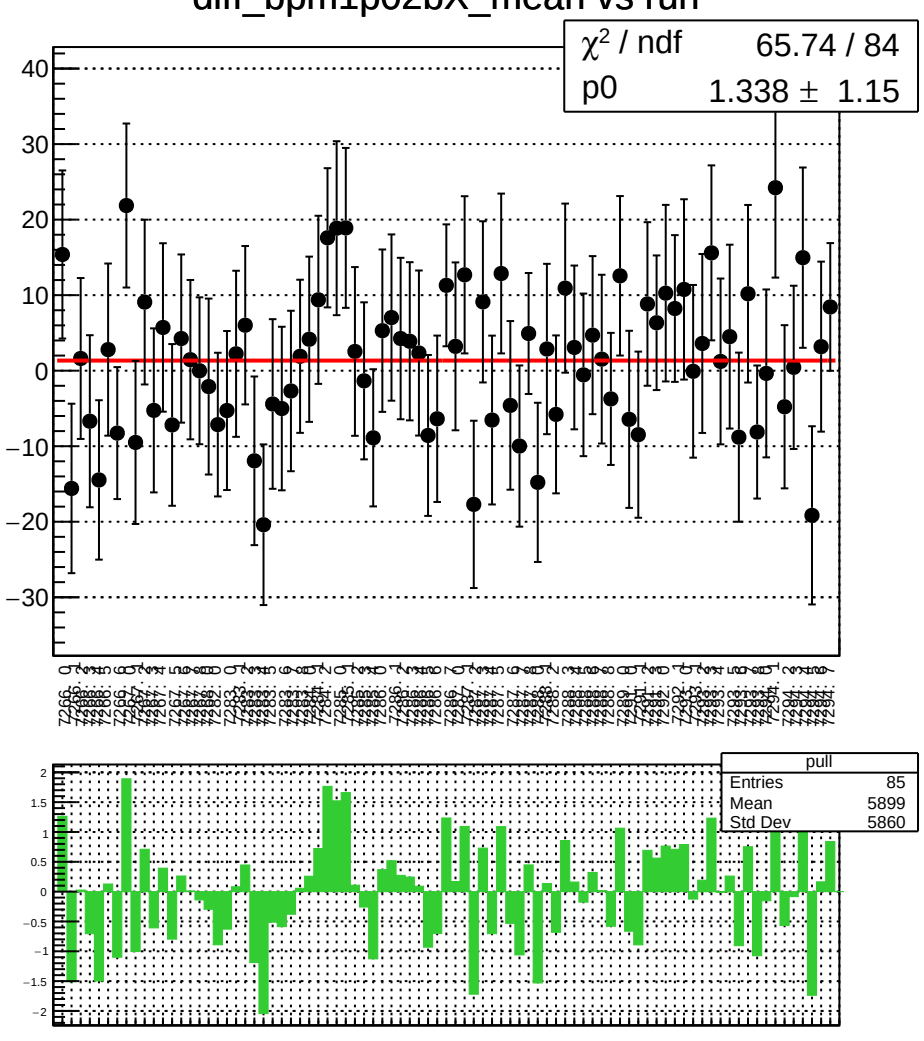

pull1D
Entries 85
Mean 0.02983
Std Dev 1.029

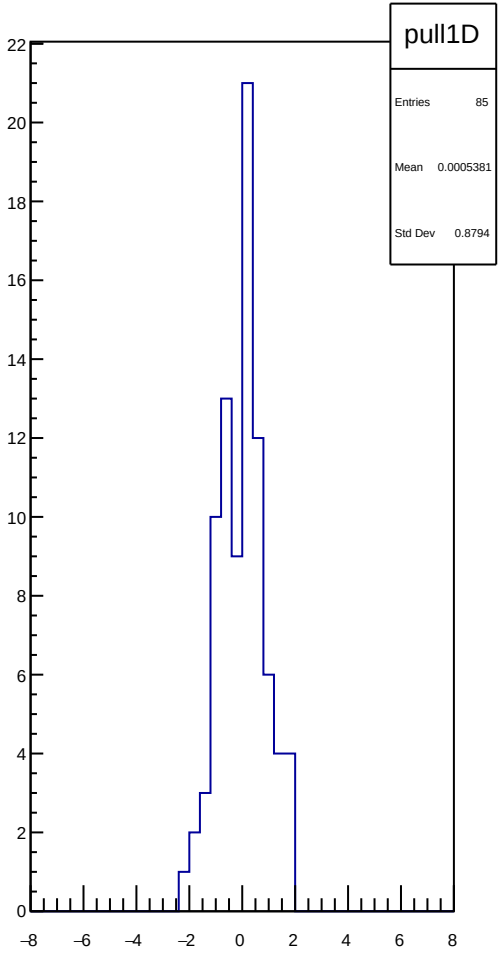

diff_bpm16X_rms vs run
χ² / ndf 3684 / 84
p0 5448 ± 4.245
6400
6200
6000
5800
5600
5400
5200
5000
4800

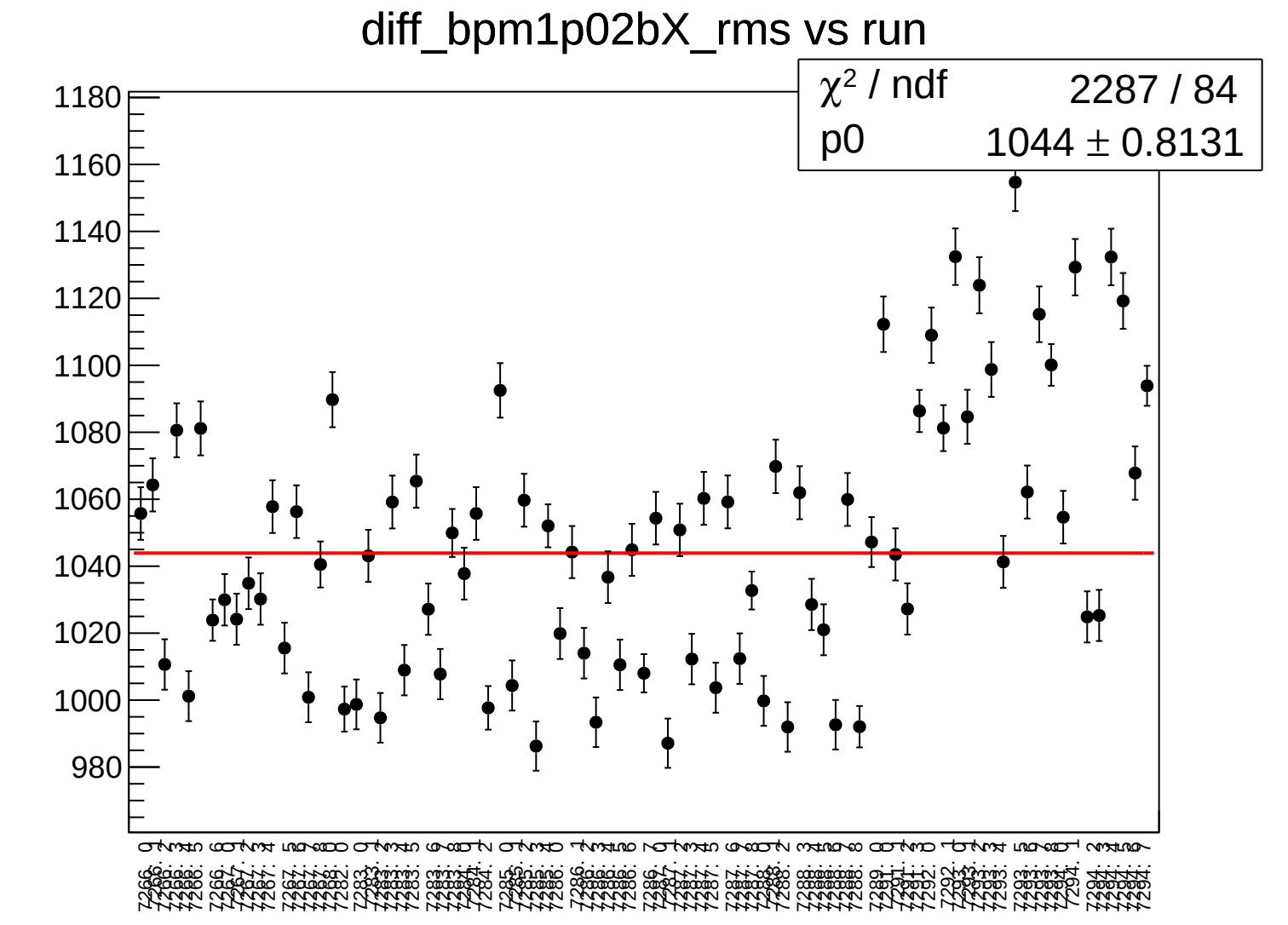

diff_bpm16Y_mean vs run
χ² / ndf 88.57 / 84
p0 −6.91 ± 5.511
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −97.04
Std Dev 132.2
2
1
0
−1
−2

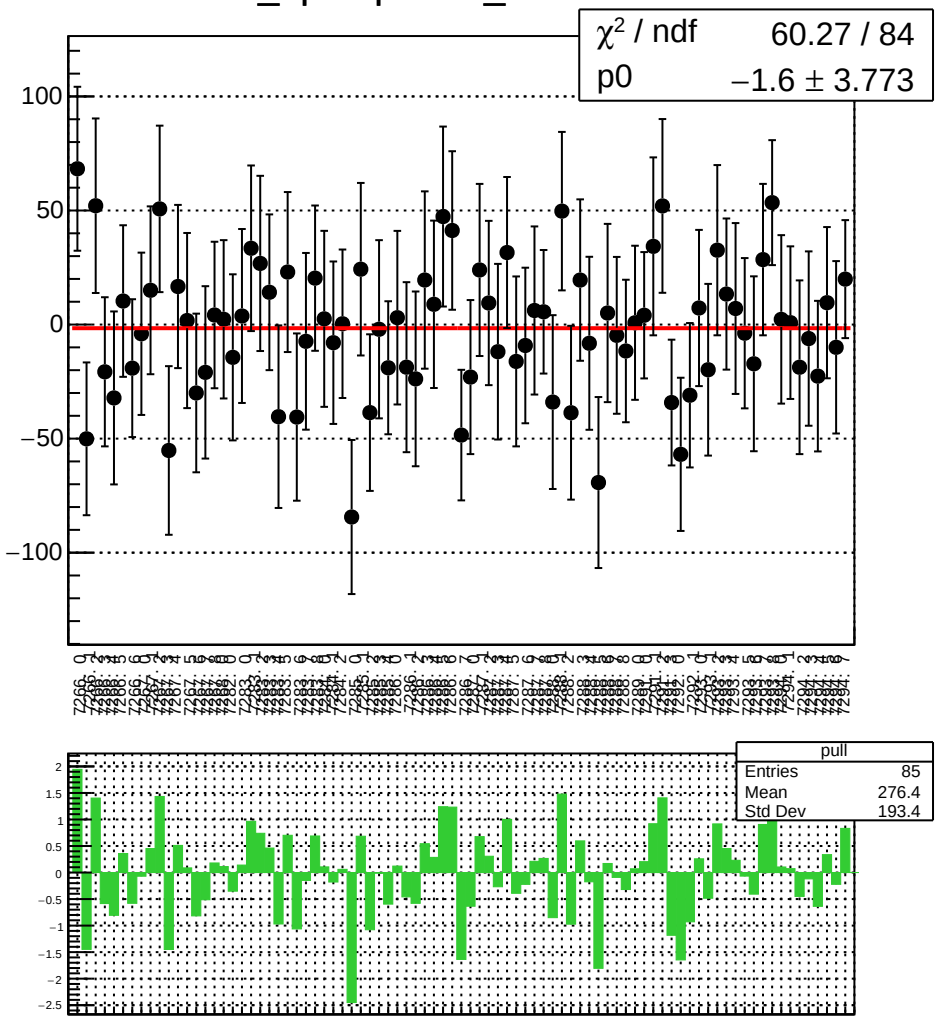

pull1D
Entries 85
Mean −0.008442
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

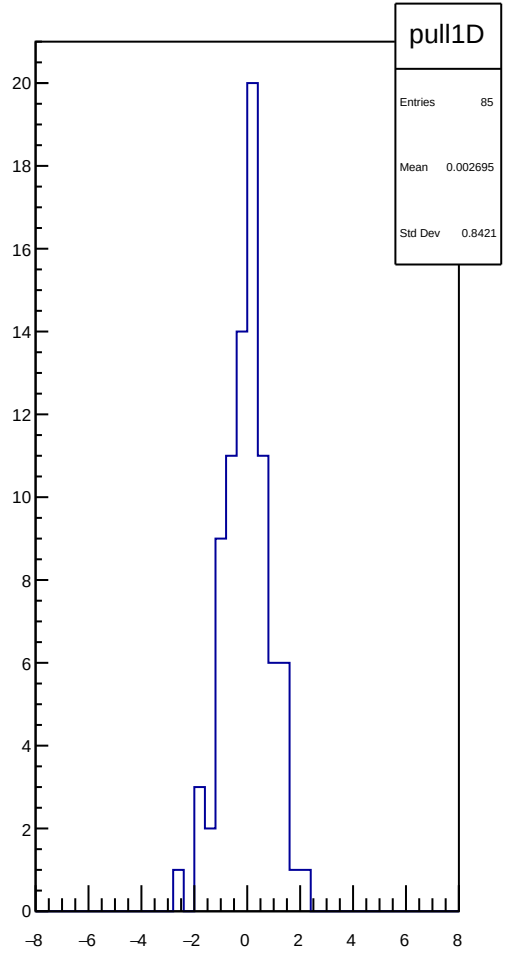

diff_bpm16Y_rms vs run
χ² / ndf 1.816e+04 / 84
p0 4979 ± 3.897
6500
6000
5500
5000
4500
4000

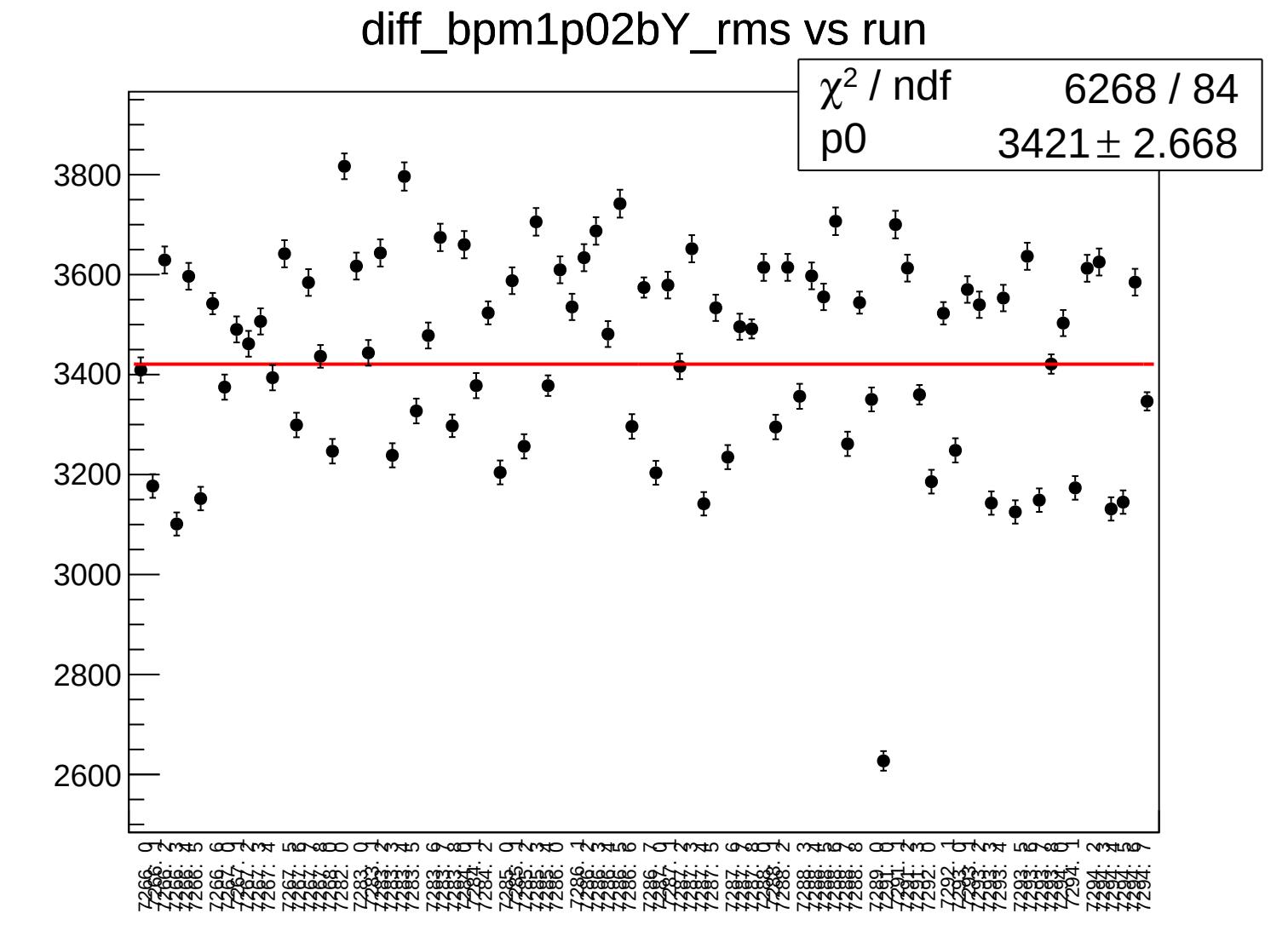

diff_bpm1p02bX_mean vs run
χ² / ndf 65.74 / 84
p0 1.338 ± 1.15
pull
Entries 85
Mean 5899
Std Dev 5860

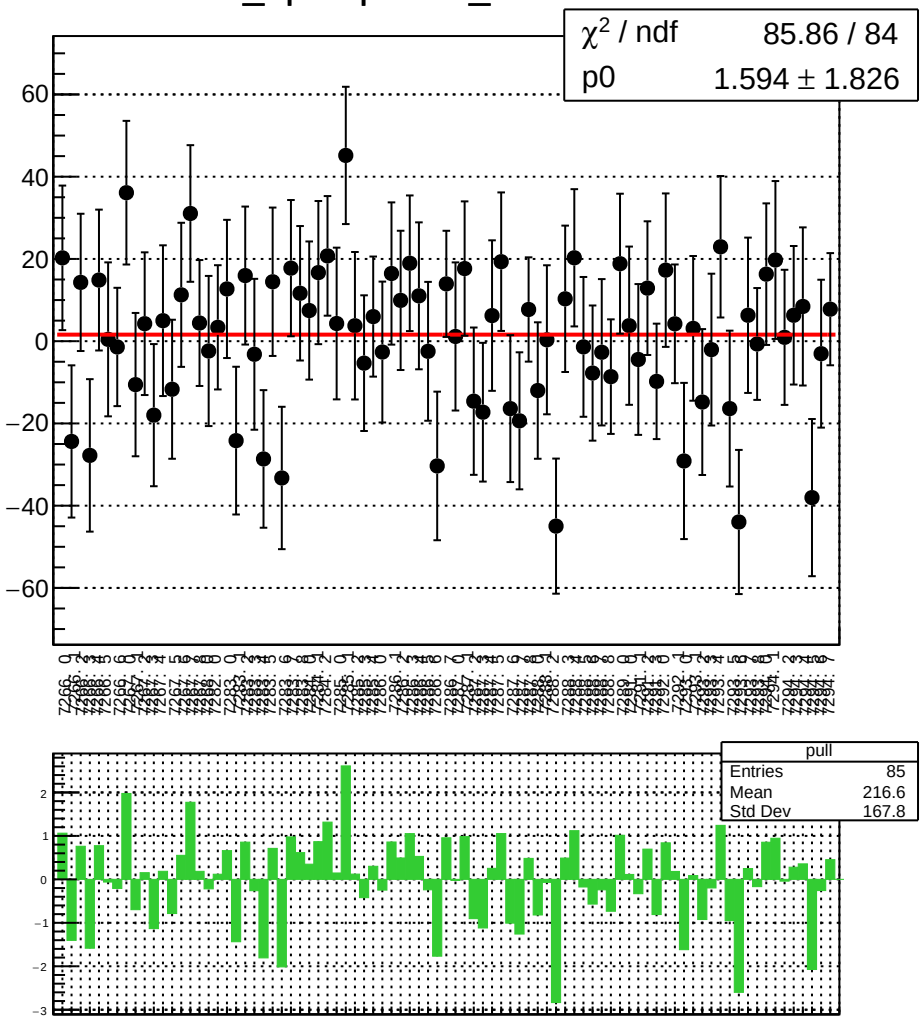

pull1D
Entries 85
Mean 0.0005381
Std Dev 0.8794

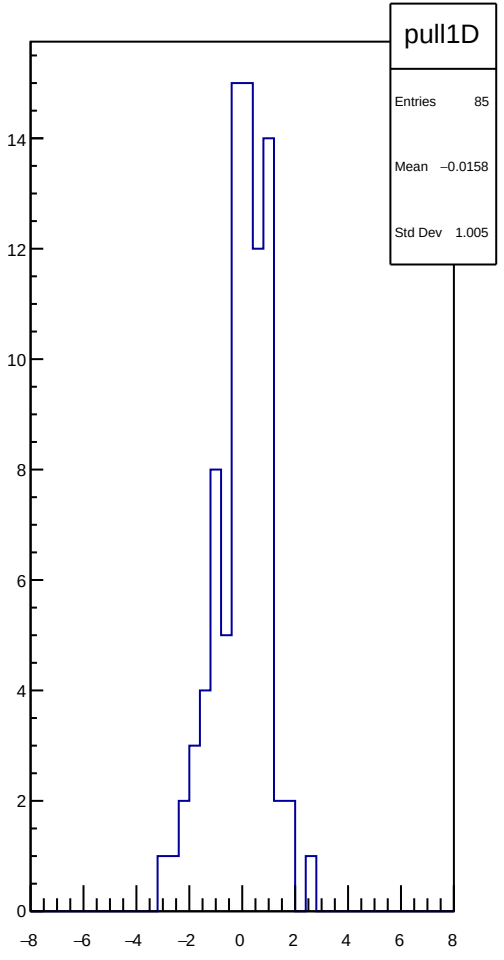

diff_bpm1p02bX_rms vs run
χ² / ndf 2287 / 84
p0 1044 ± 0.8131
1180
1160
1140
1120
1100
1080
1060
1040
1020
1000
980

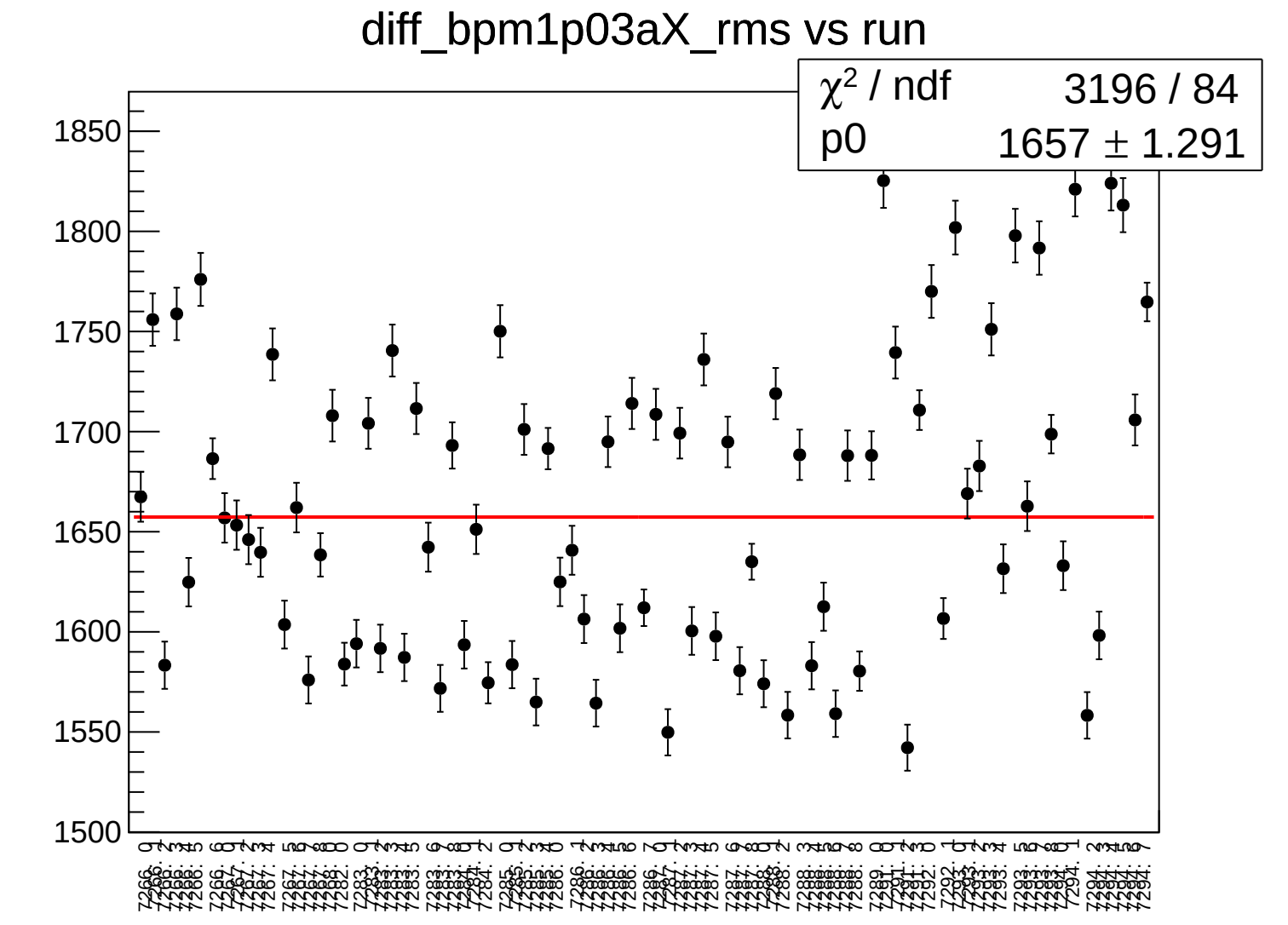

diff_bpm1p02bY_mean vs run
χ² / ndf 60.27 / 84
p0 −1.6 ± 3.773
100
50
0
−50
−100
pull
Entries 85
Mean 276.4
Std Dev 193.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

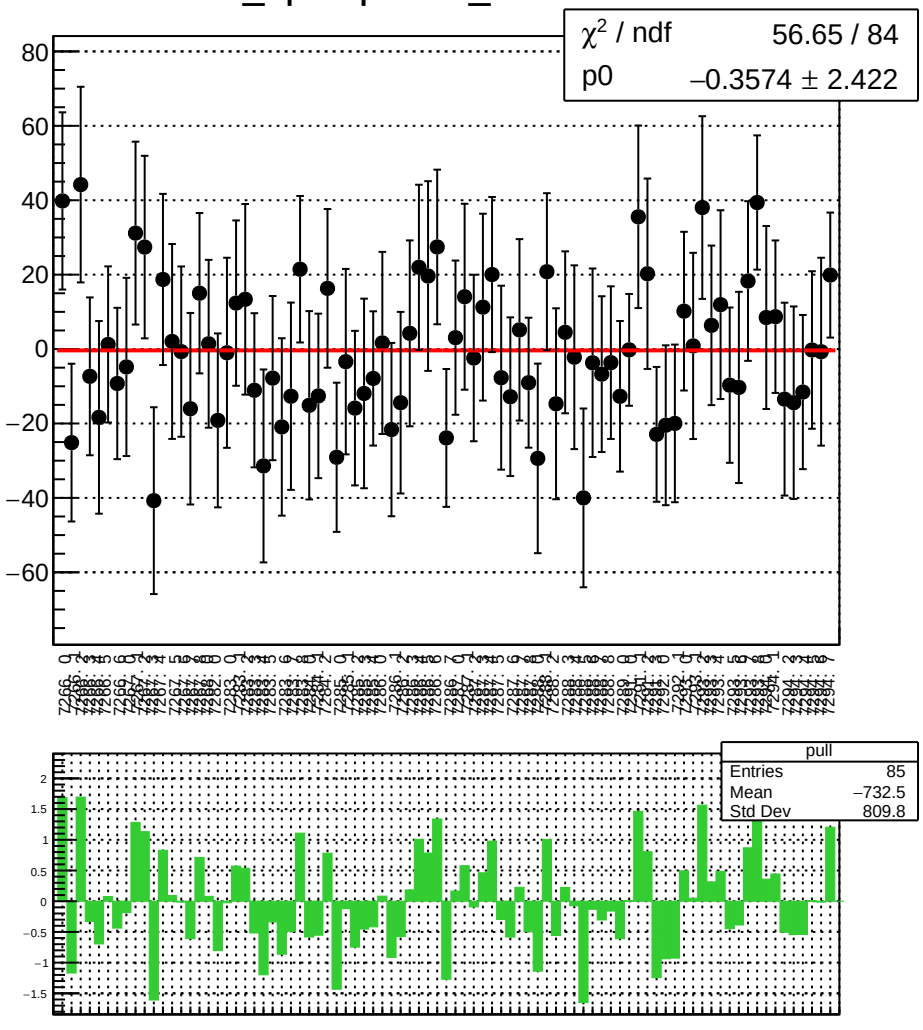

pull1D
Entries 85
Mean 0.002695
Std Dev 0.8421
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

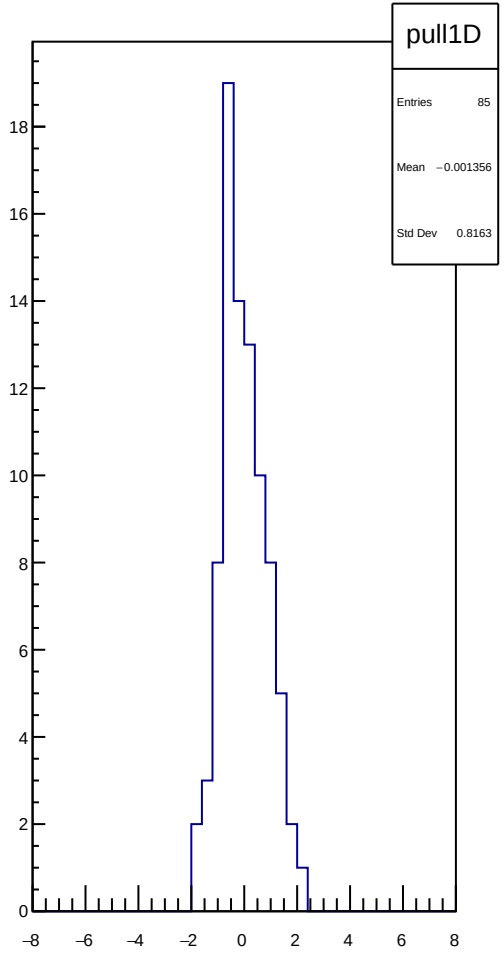

diff_bpm1p02bY_rms vs run
χ² / ndf 6268 / 84
p0 3421 ± 2.668
3800
3600
3400
3200
3000
2800
2600

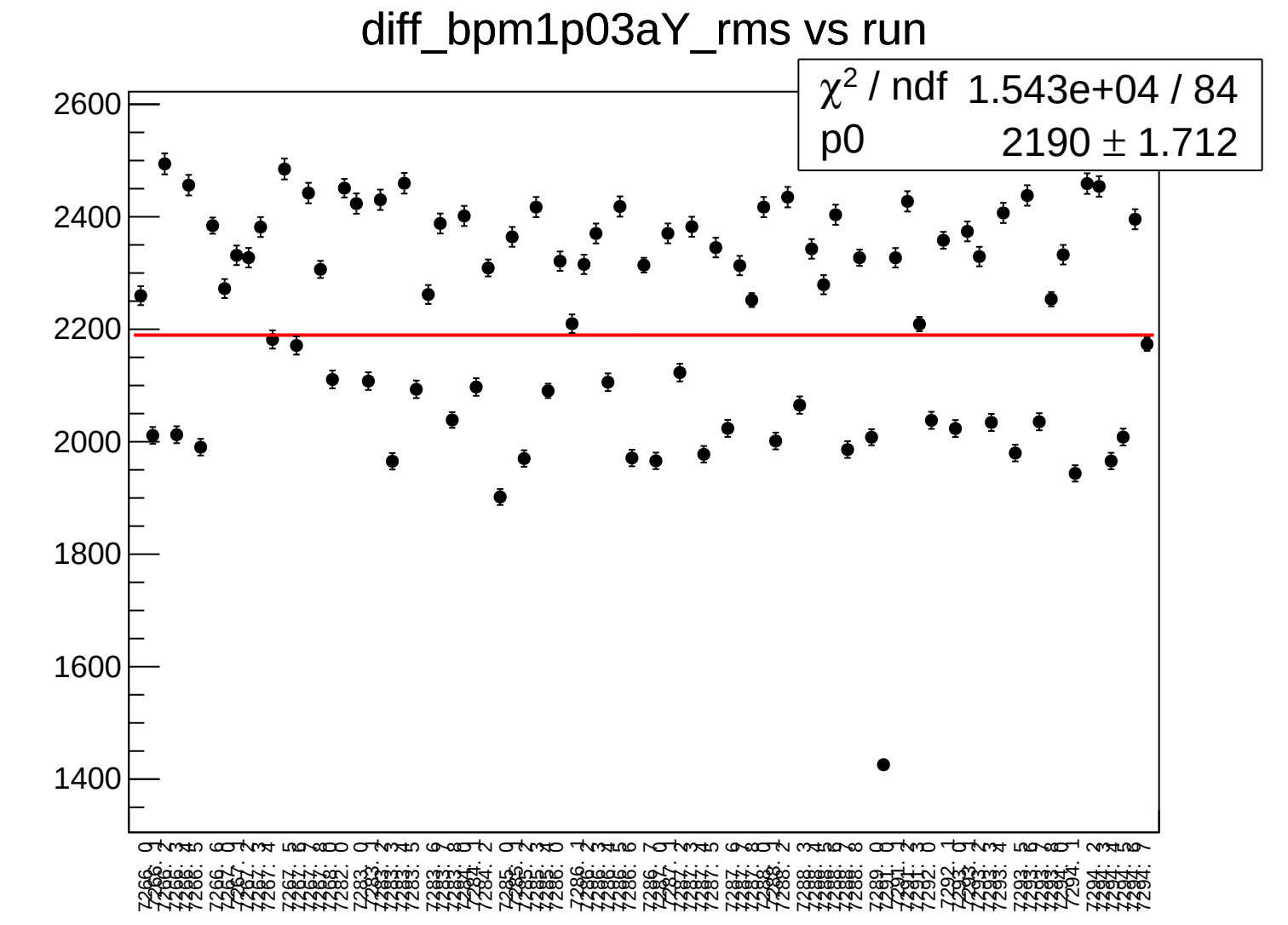

diff_bpm1p03aX_mean vs run
χ² / ndf 85.86 / 84
p0 1.594 ± 1.826
pull
Entries 85
Mean 216.6
Std Dev 167.8

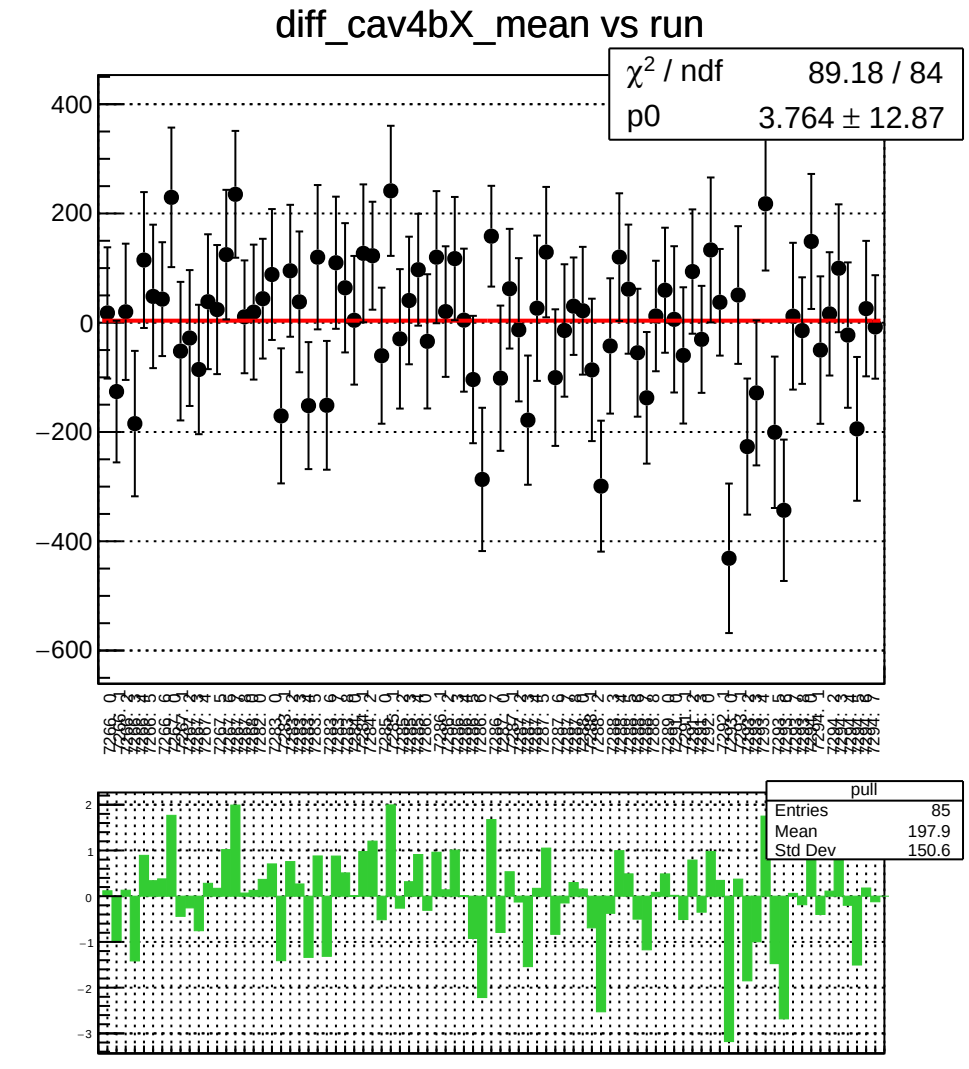

pull1D
Entries 85
Mean −0.0158
Std Dev 1.005

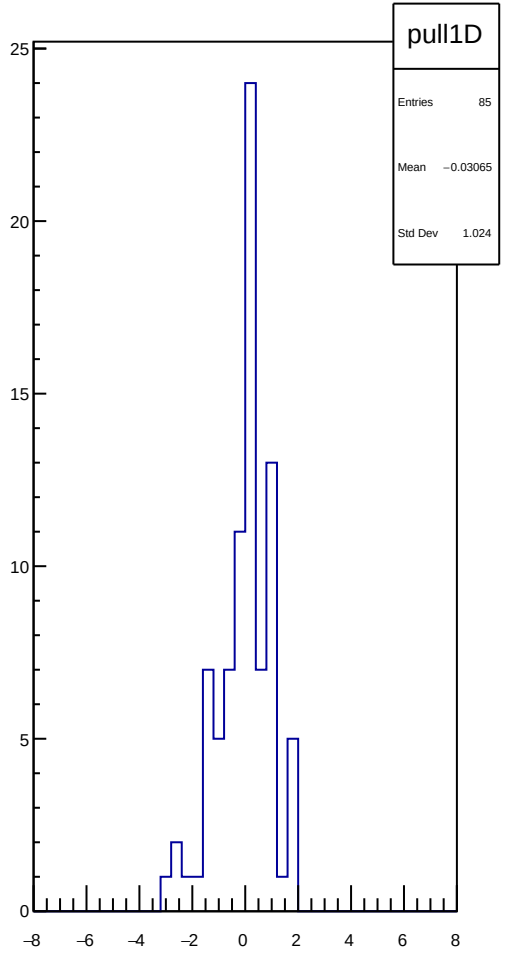

diff_bpm1p03aX_rms vs run
χ² / ndf 3196 / 84
p0 1657 ± 1.291
1850
1800
1750
1700
1650
1600
1550
1500

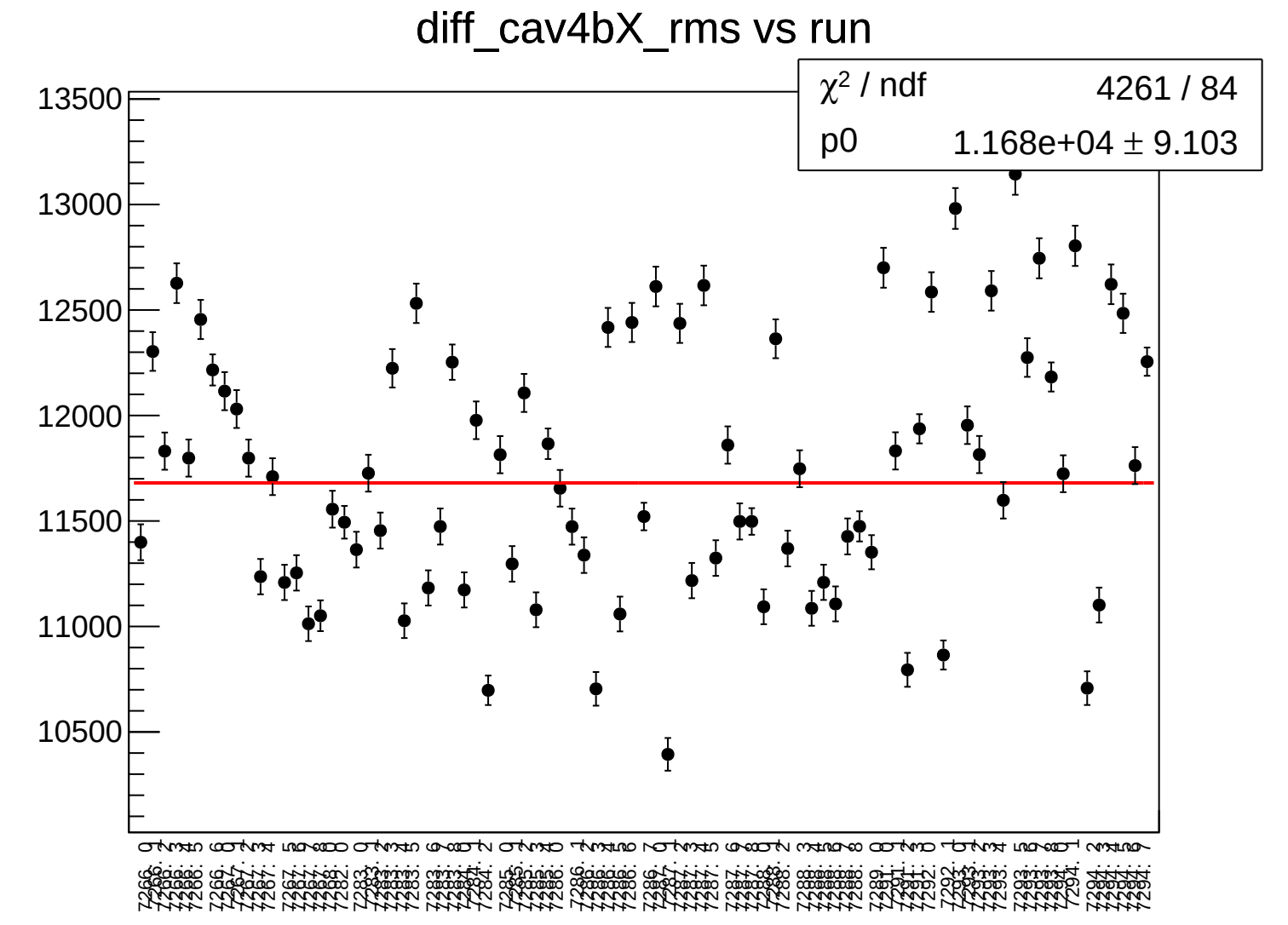

diff_bpm1p03aY_mean vs run
χ² / ndf 56.65 / 84
p0 −0.3574 ± 2.422
pull
Entries 85
Mean −732.5
Std Dev 809.8

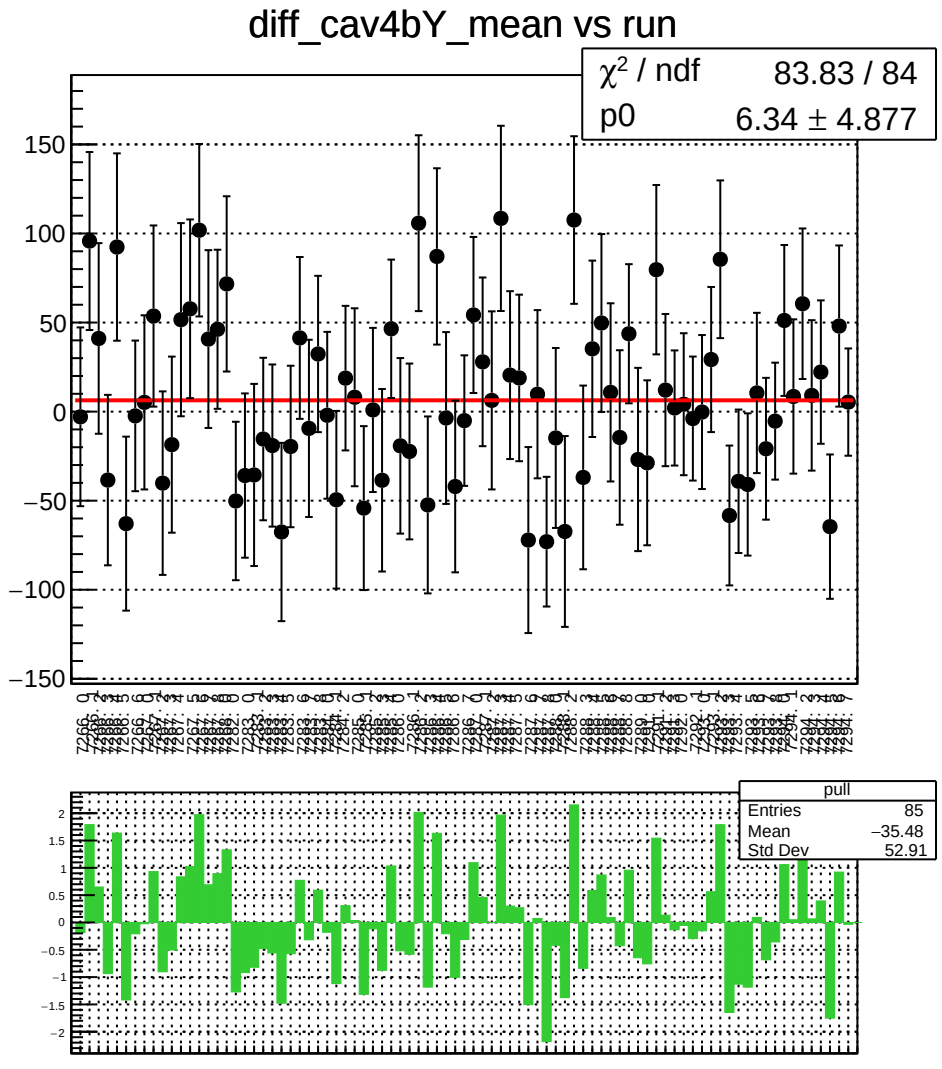

pull1D
Entries 85
Mean −0.001356
Std Dev 0.8163

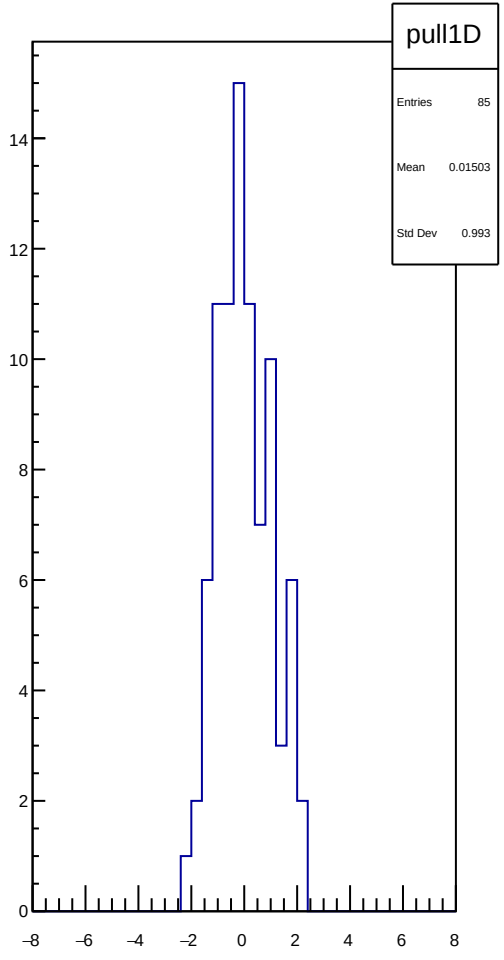

diff_bpm1p03aY_rms vs run
χ² / ndf 1.543e+04 / 84
p0 2190 ± 1.712
2600
2400
2200
2000
1800
1600
1400

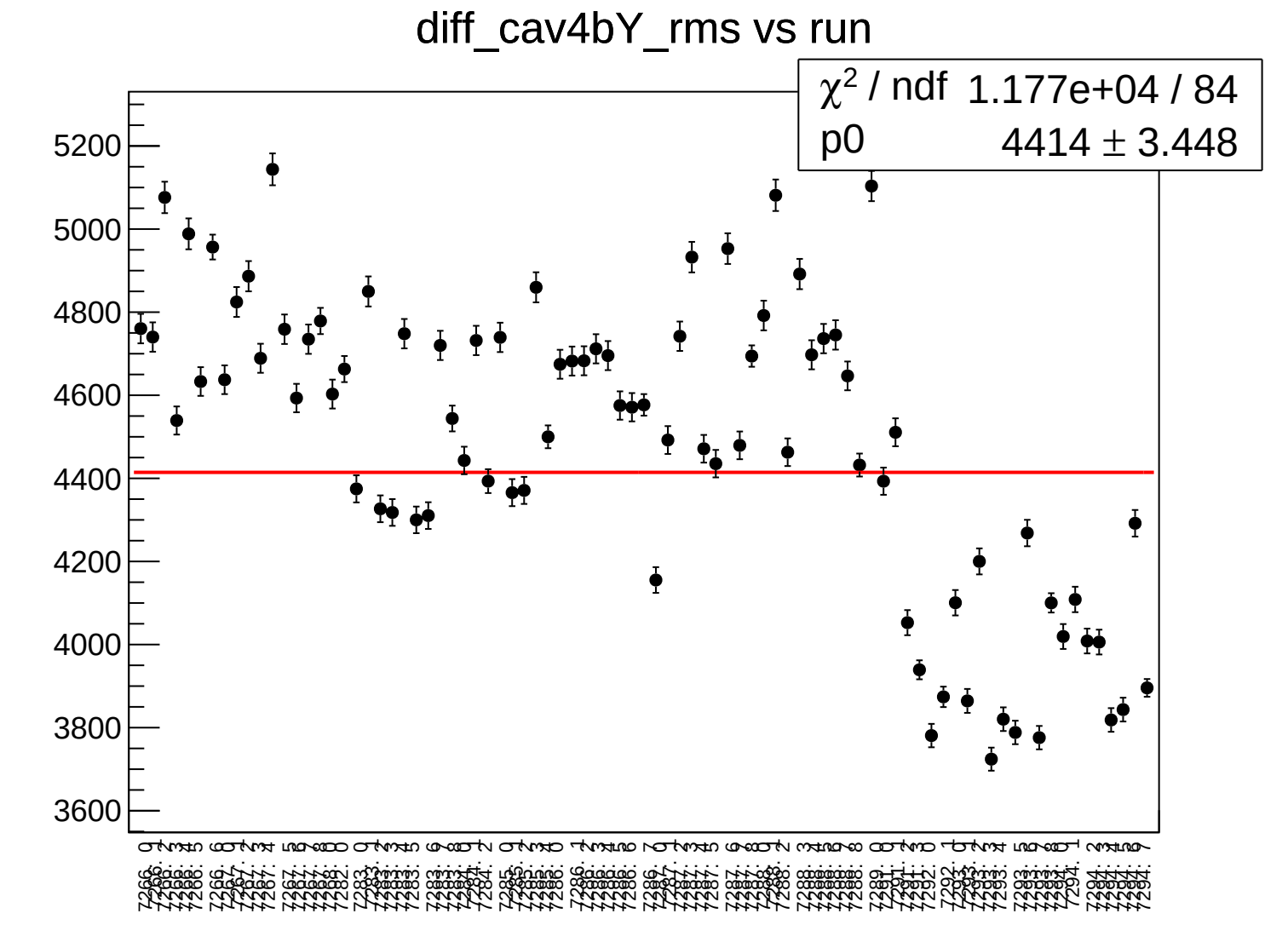

diff_cav4bX_mean vs run
χ² / ndf 89.18 / 84
p0 3.764 ± 12.87
400
200
0
−200
−400
−600
pull
Entries 85
Mean 197.9
Std Dev 150.6
2
1
0
−1
−2
−3

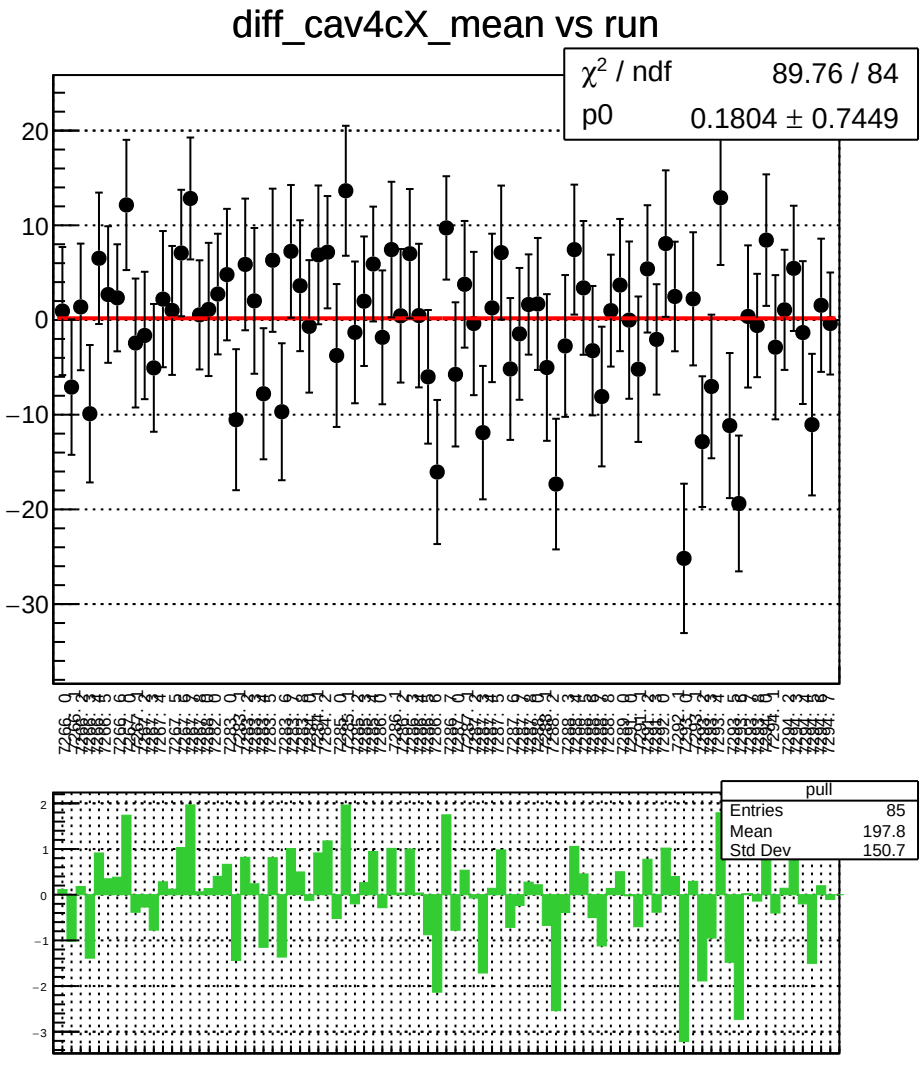

pull1D
Entries 85
Mean −0.03065
Std Dev 1.024
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

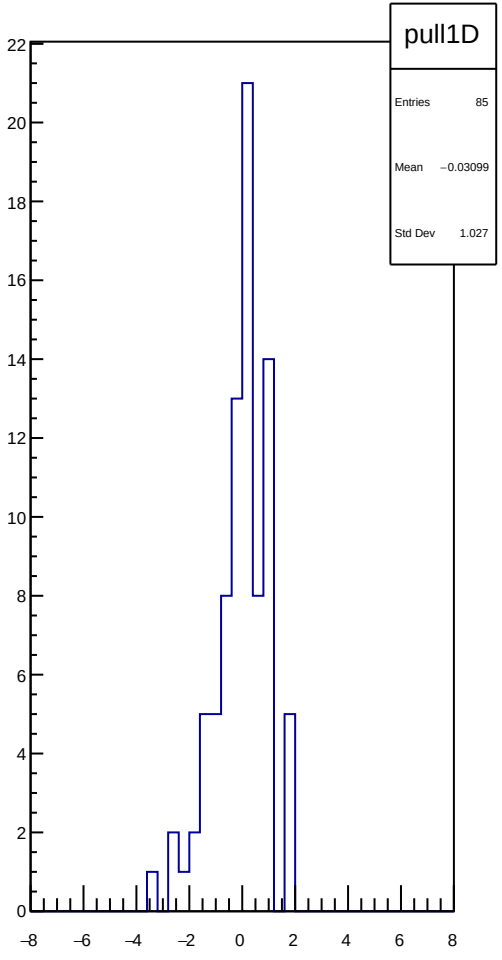

diff_cav4bX_rms vs run
χ² / ndf 4261 / 84
p0 1.168e+04 ± 9.103
13500
13000
12500
12000
11500
11000
10500

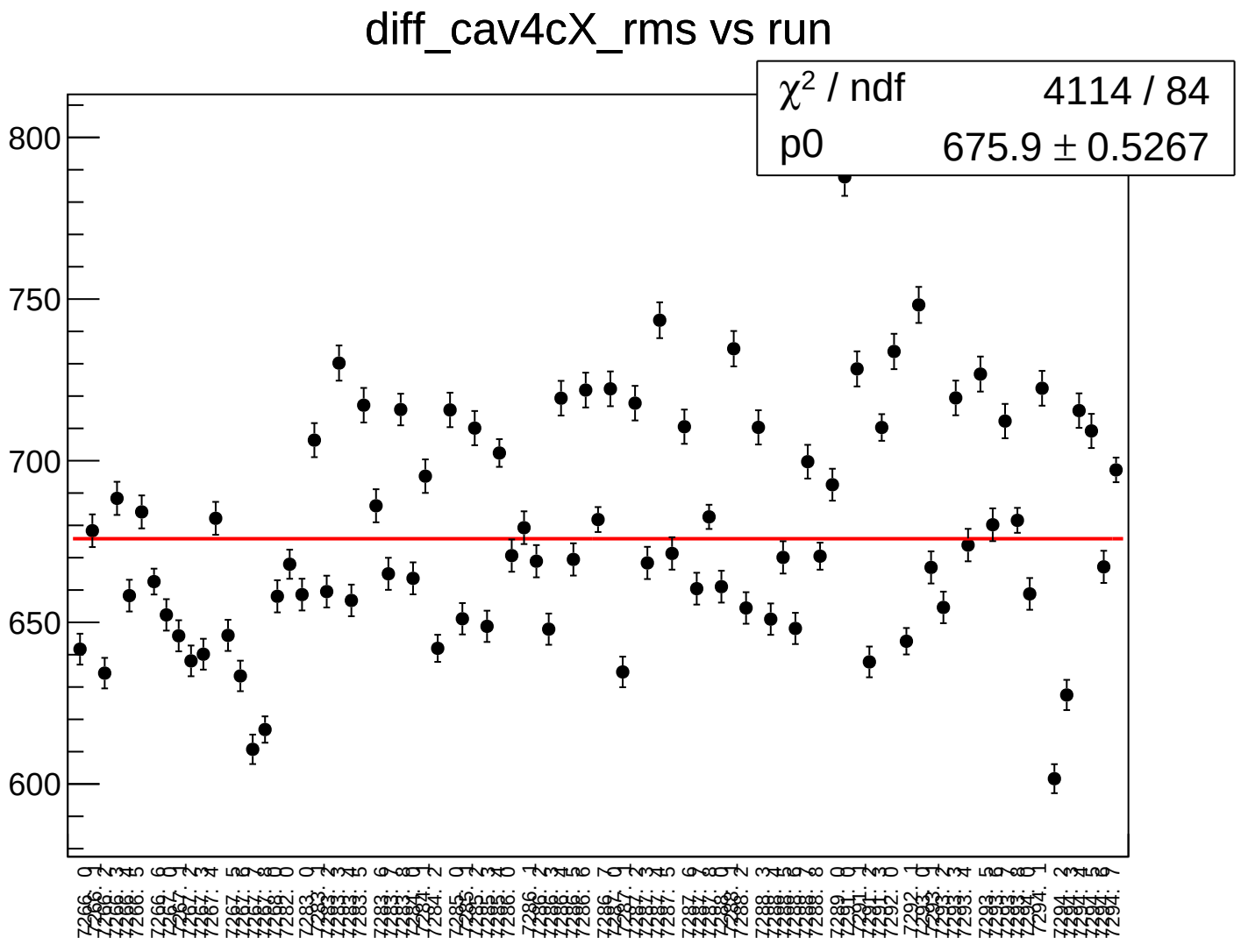

diff_cav4bY_mean vs run
χ^2 / ndf 83.83 / 84
p0 6.34 ± 4.877
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean −35.48
Std Dev 52.91
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

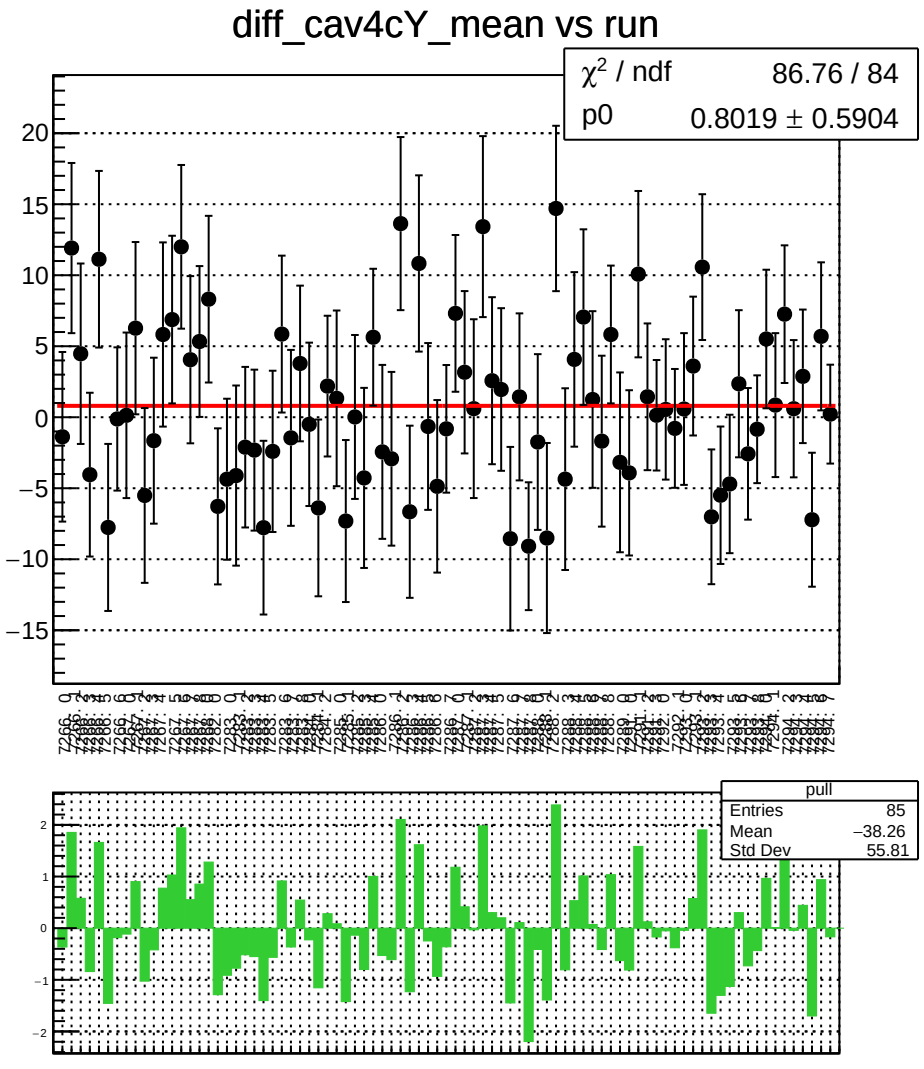

pull1D
Entries 85
Mean 0.01503
Std Dev 0.993
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

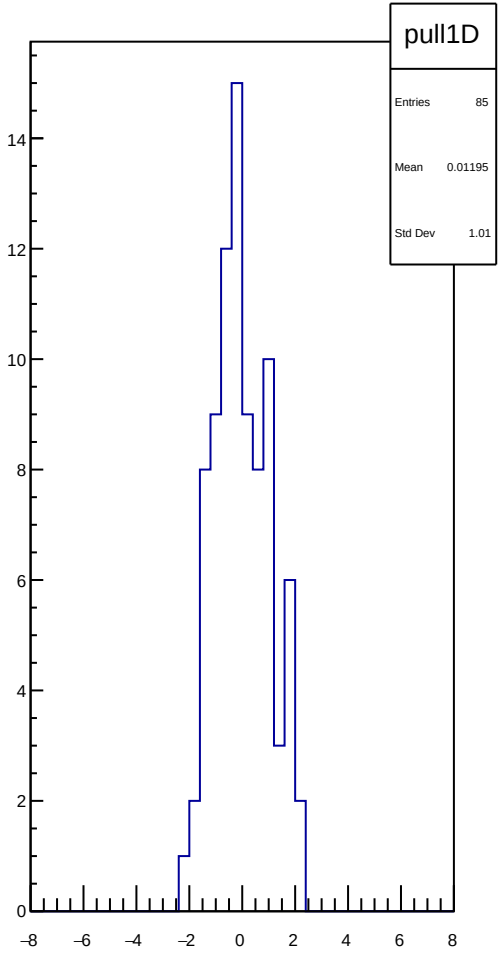

diff_cav4bY_rms vs run
χ² / ndf 1.177e+04 / 84
p0 4414 ± 3.448
5200
5000
4800
4600
4400
4200
4000
3800
3600

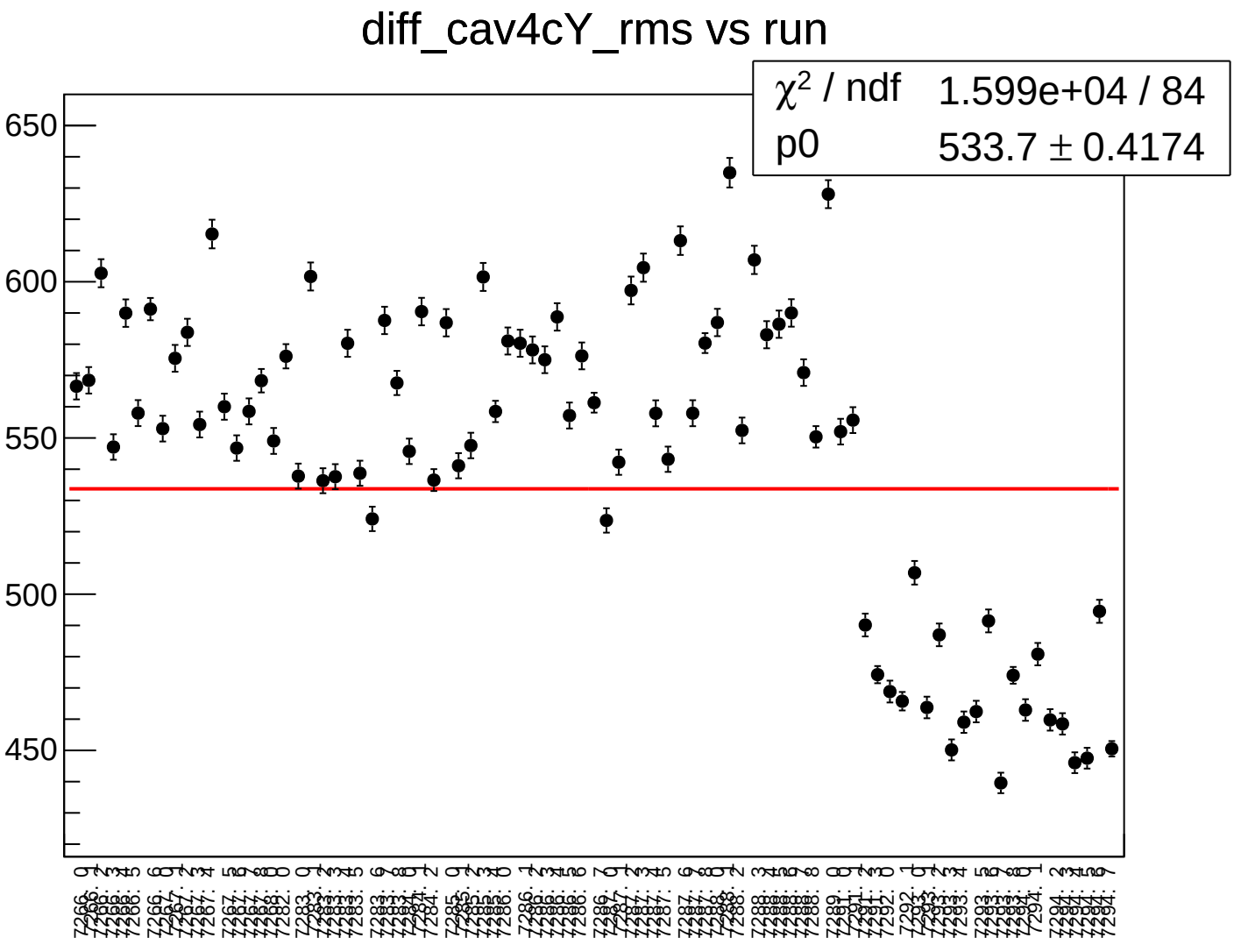

diff_cav4cX_mean vs run
χ² / ndf 89.76 / 84
p0 0.1804 ± 0.7449
pull
Entries 85
Mean 197.8
Std Dev 150.7

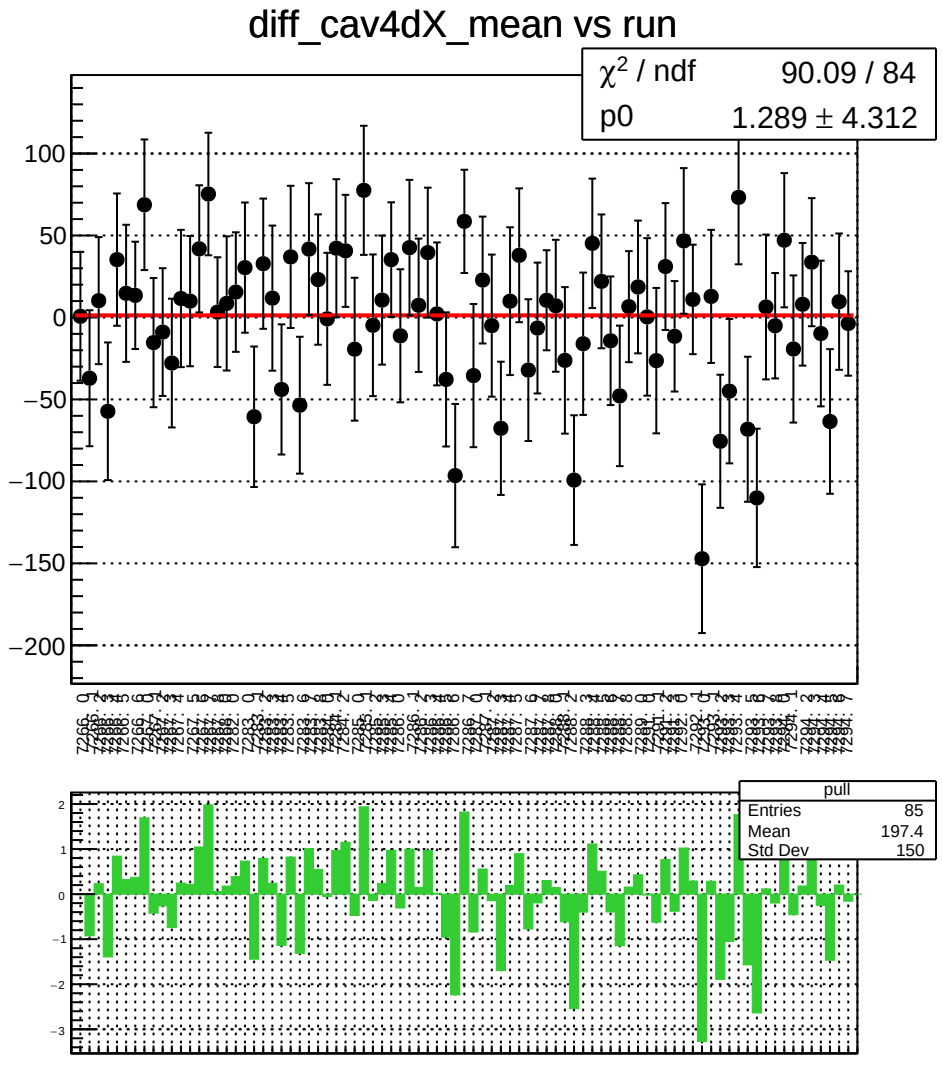

pull1D
Entries 85
Mean −0.03099
Std Dev 1.027

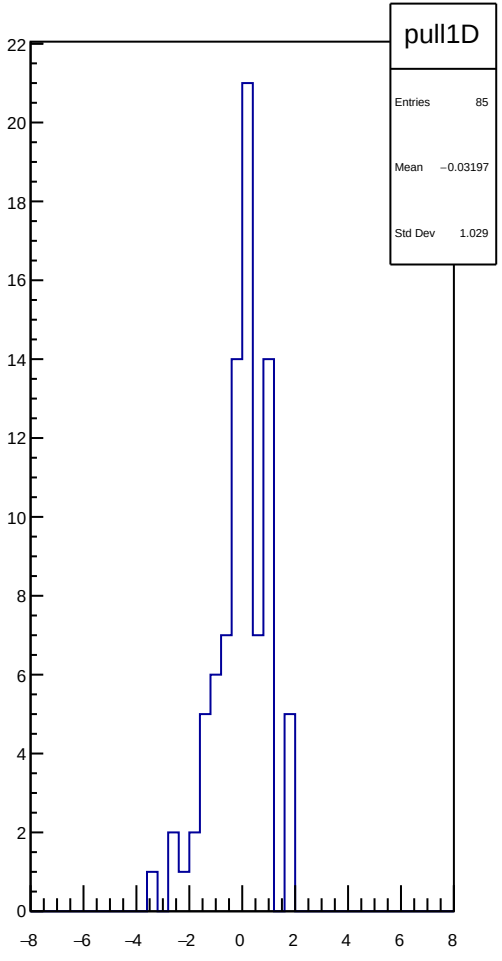

diff_cav4cX_rms vs run
χ² / ndf 4114 / 84
p0 675.9 ± 0.5267
800
750
700
650
600

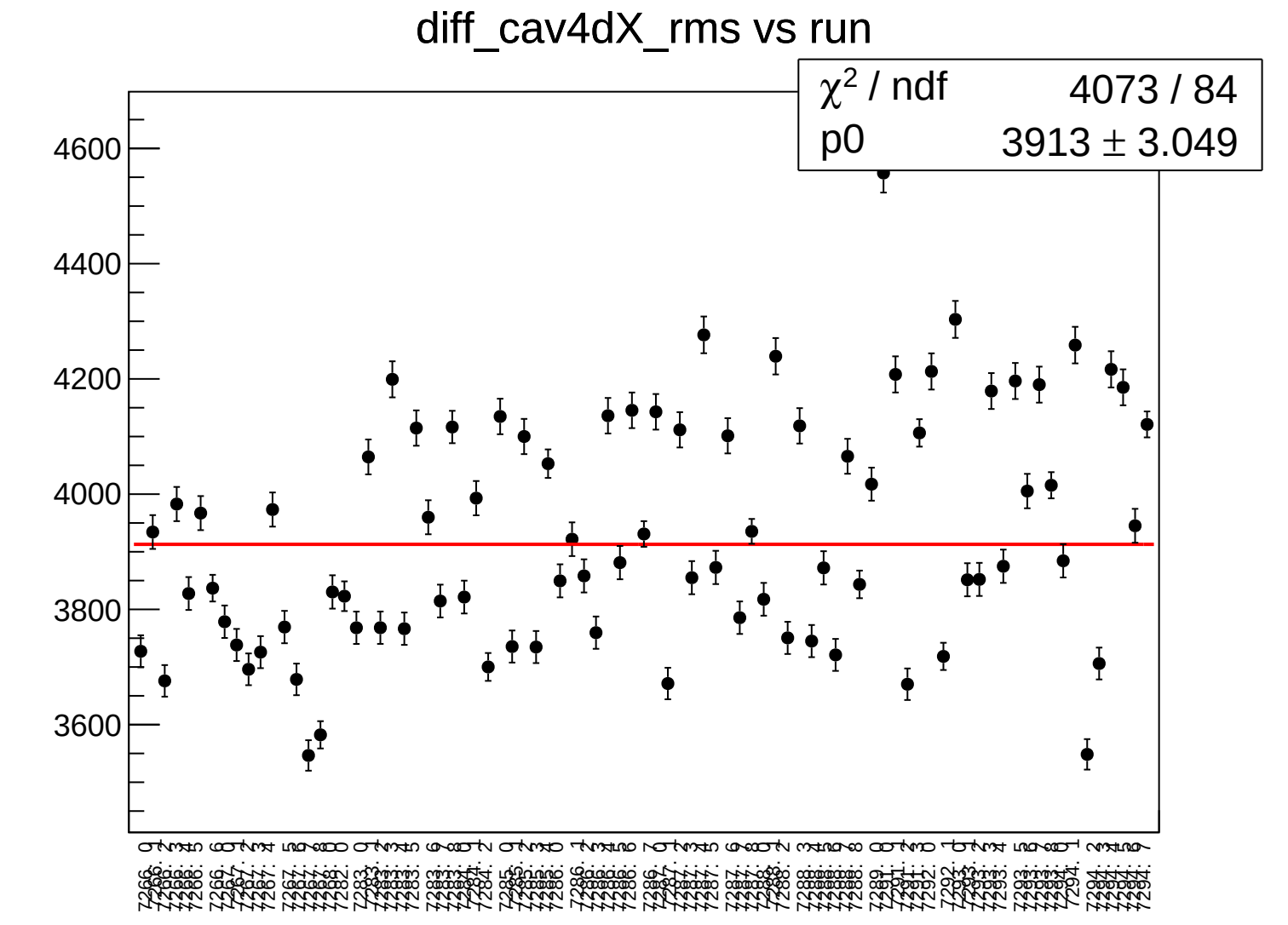

diff_cav4cY_mean vs run
χ^2 / ndf 86.76 / 84
p0 0.8019 ± 0.5904
pull
Entries 85
Mean −38.26
Std Dev 55.81

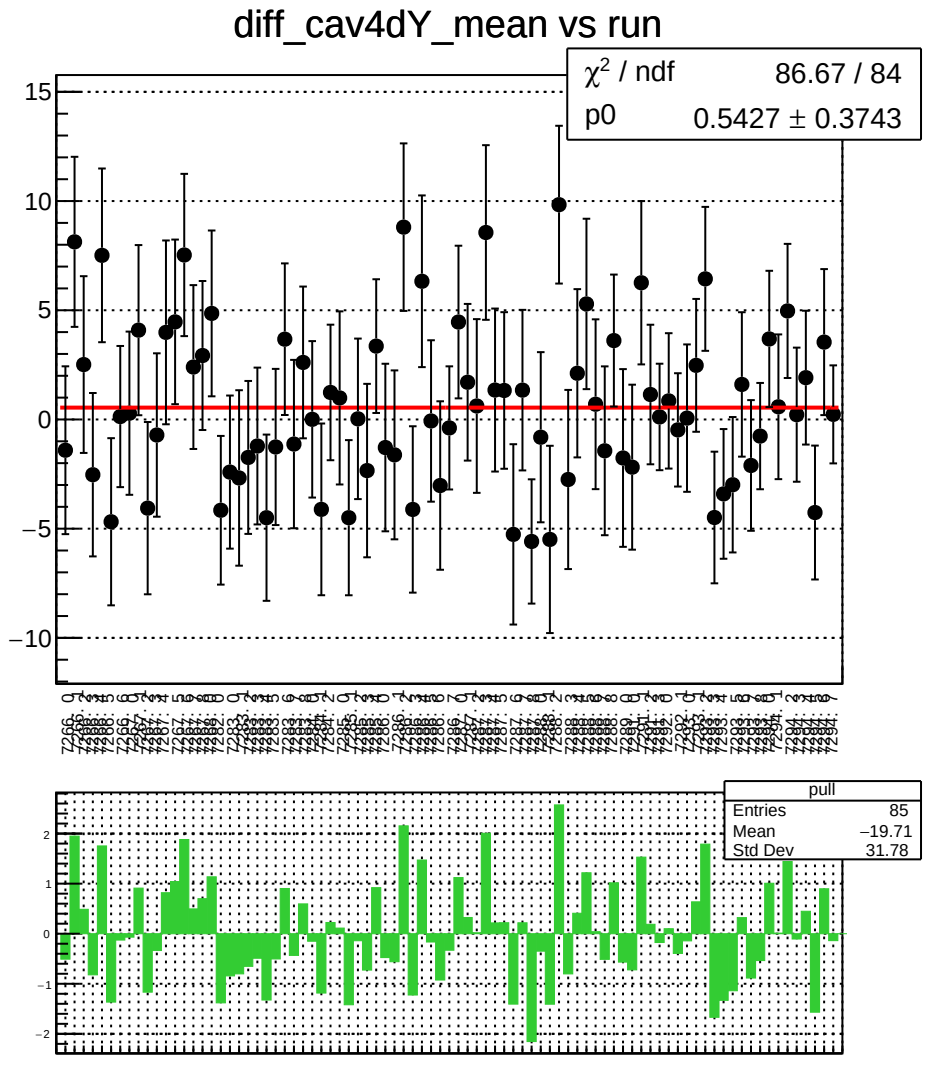

pull1D
Entries 85
Mean 0.01195
Std Dev 1.01

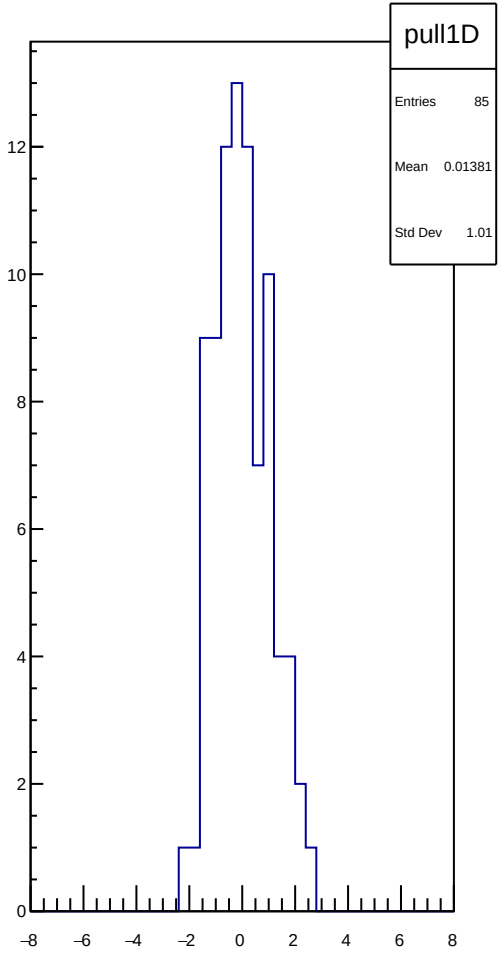

diff_cav4cY_rms vs run
χ² / ndf 1.599e+04 / 84
p0 533.7 ± 0.4174
650
600
550
500
450

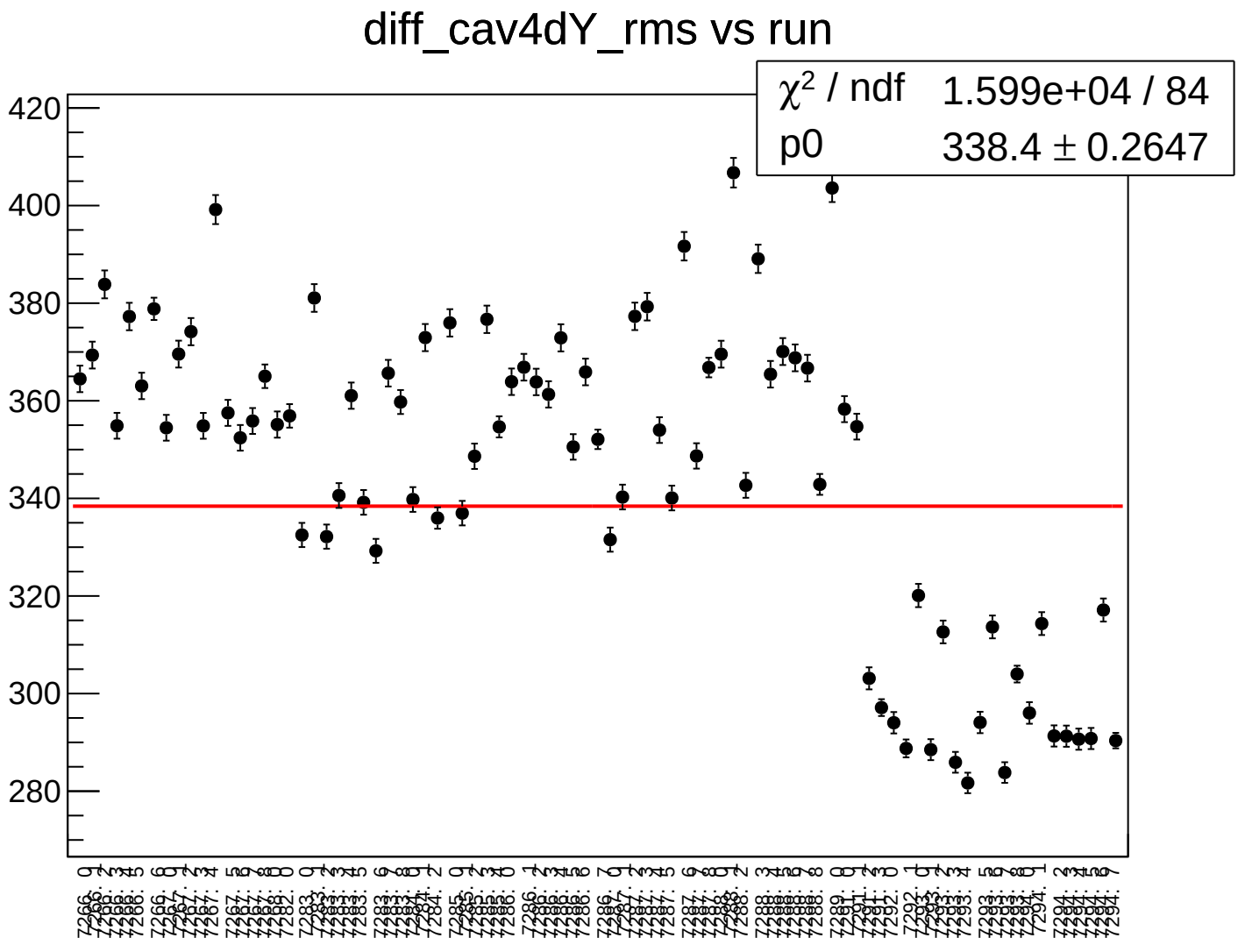

diff_cav4dX_mean vs run
χ^2 / ndf 90.09 / 84
p0 1.289 ± 4.312
pull
Entries 85
Mean 197.4
Std Dev 150

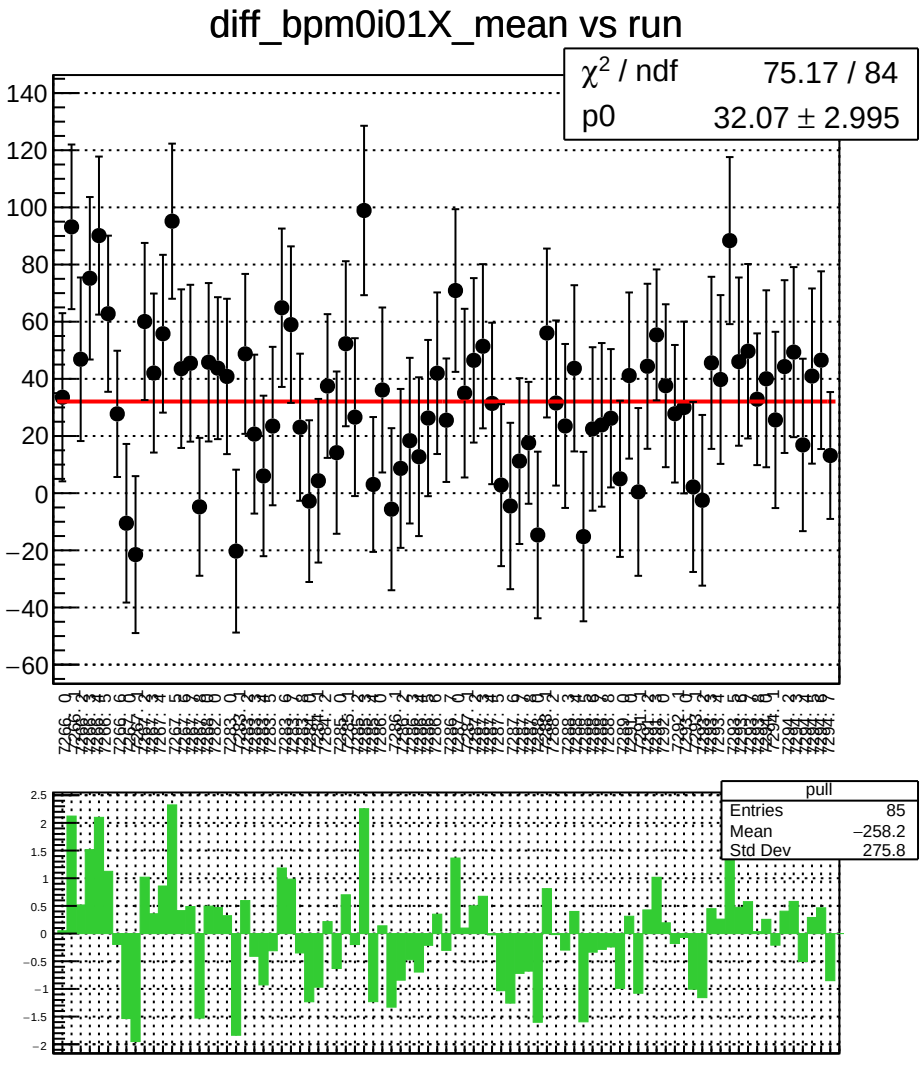

pull1D
Entries 85
Mean −0.03197
Std Dev 1.029

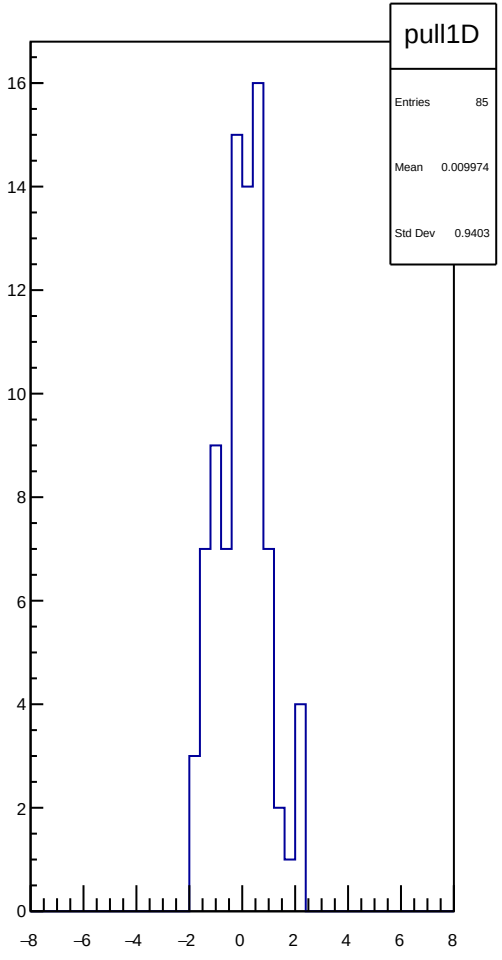

diff_cav4dX_rms vs run
χ² / ndf 4073 / 84
p0 3913 ± 3.049
4600
4400
4200
4000
3800
3600

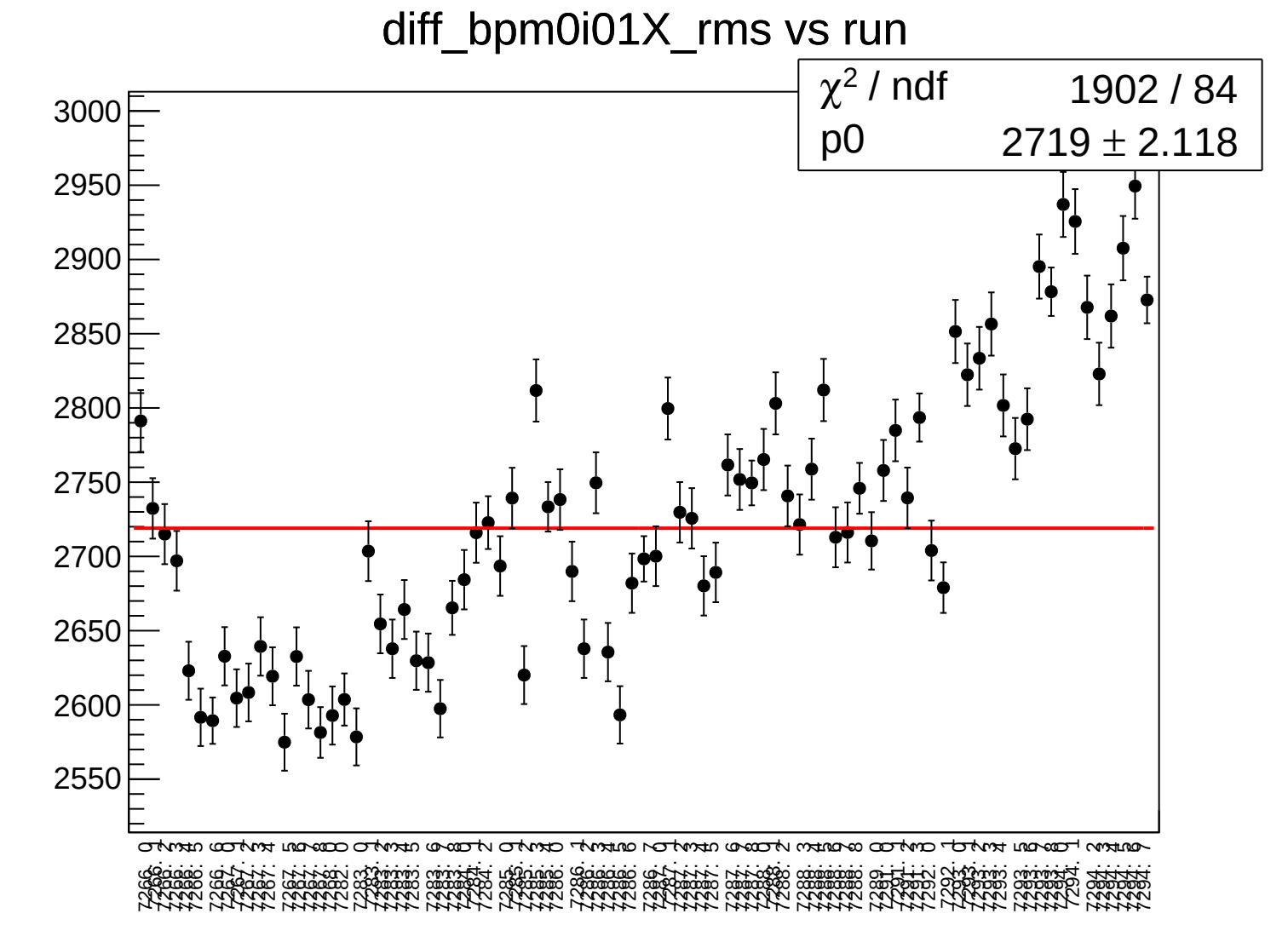

diff_cav4dY_mean vs run
χ^2 / ndf 86.67 / 84
p0 0.5427 ± 0.3743
pull
Entries 85
Mean −19.71
Std Dev 31.78

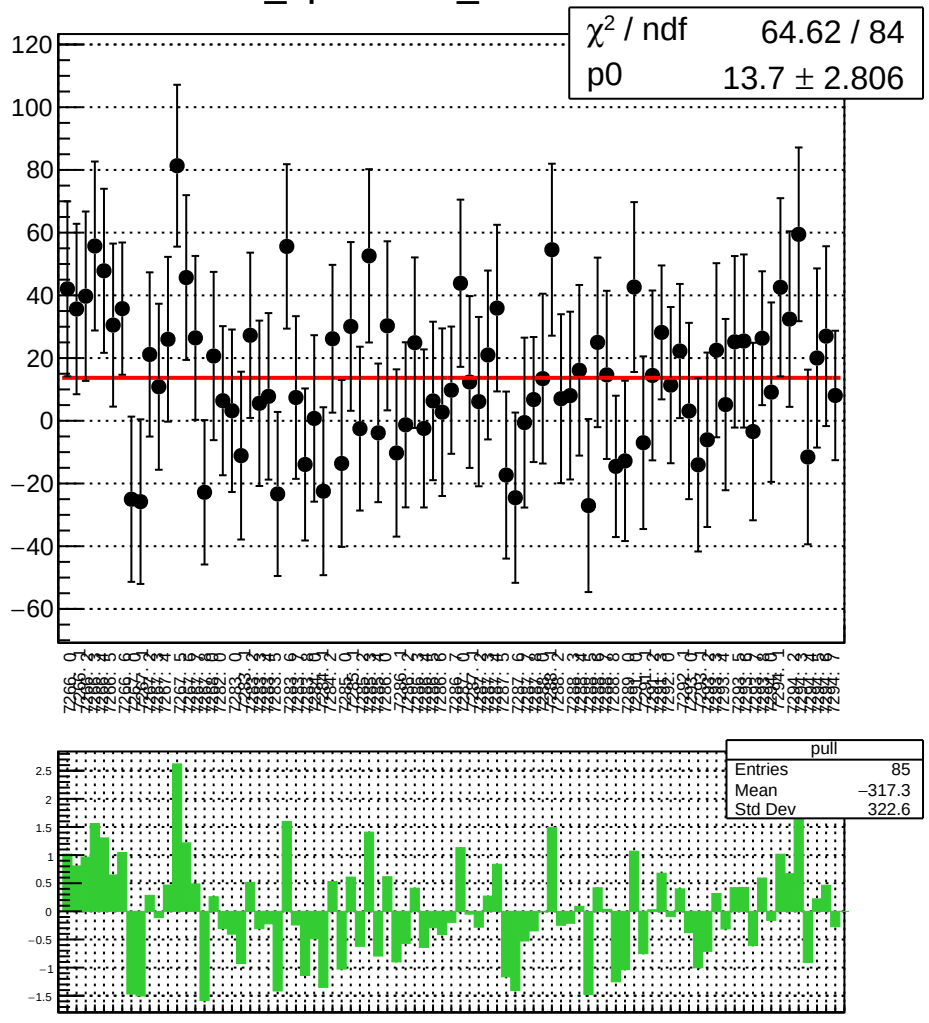

pull1D
Entries 85
Mean 0.01381
Std Dev 1.01

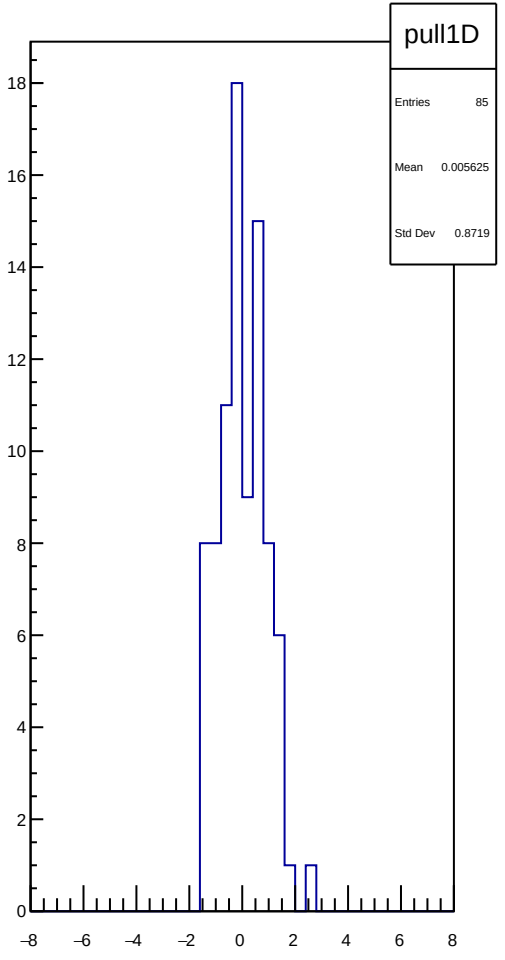

diff_cav4dY_rms vs run
χ² / ndf 1.599e+04 / 84
p0 338.4 ± 0.2647
420
400
380
360
340
320
300
280

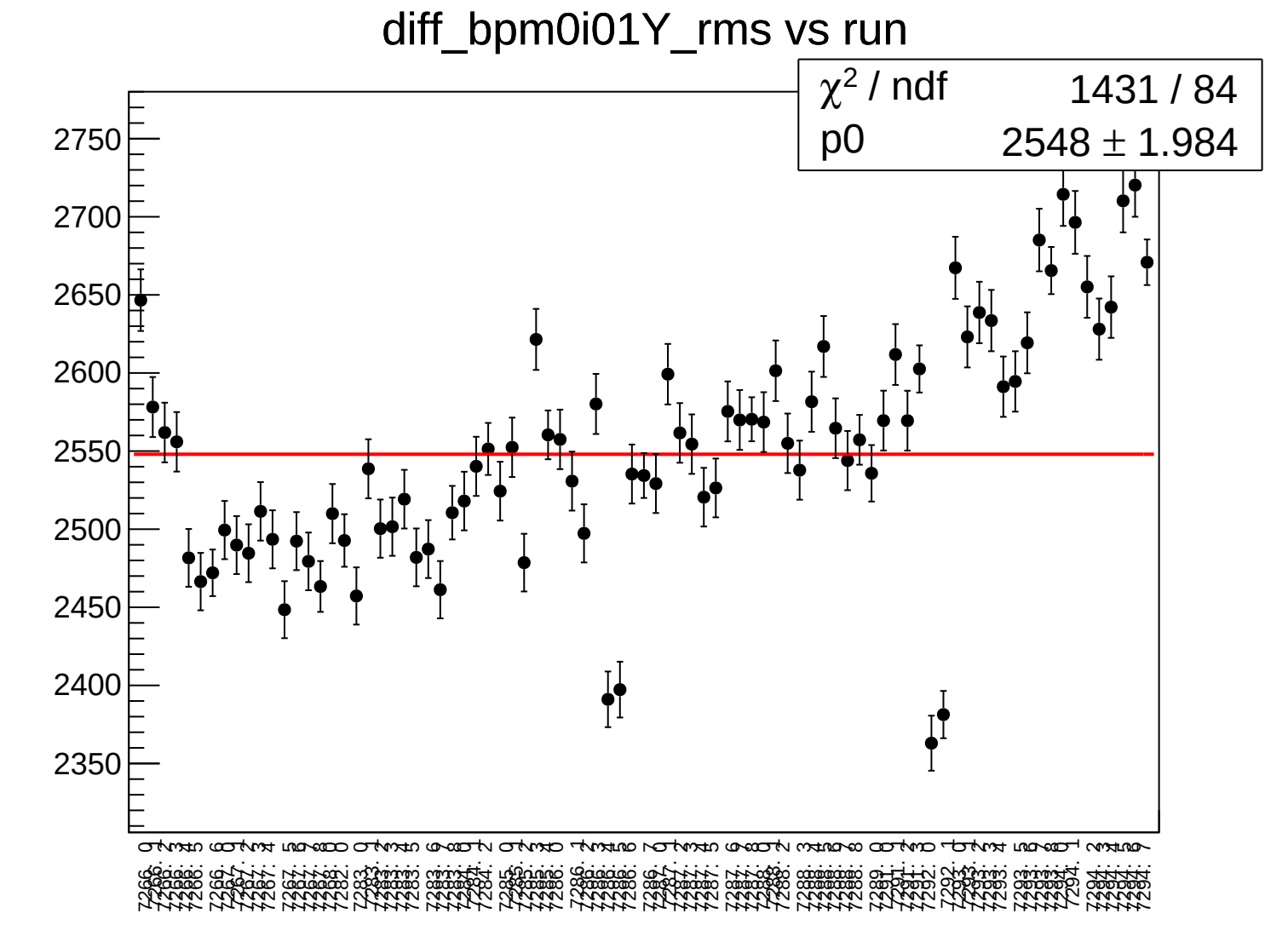

diff_bpm0i01X_mean vs run
χ^2 / ndf 75.17 / 84
p0 32.07 ± 2.995
pull
Entries 85
Mean −258.2
Std Dev 275.8

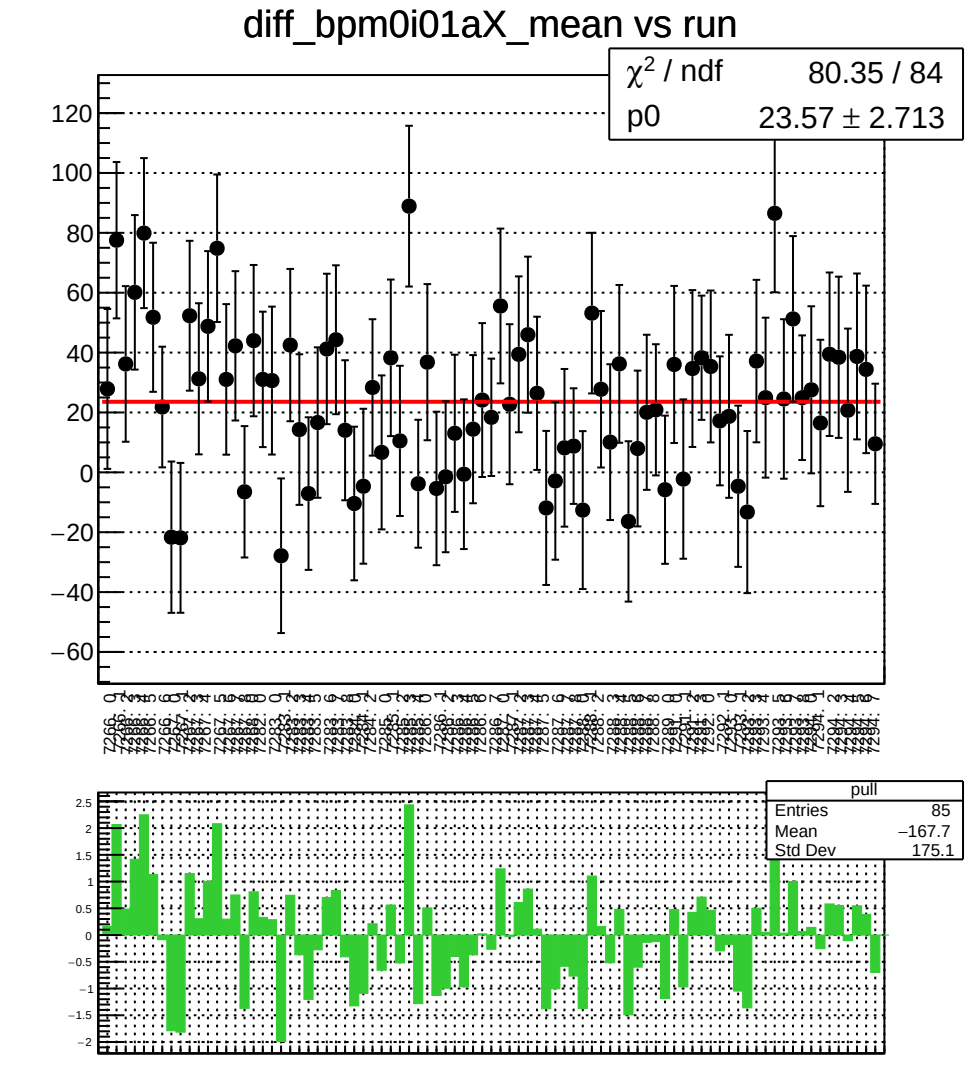

pull1D
Entries 85
Mean 0.009974
Std Dev 0.9403

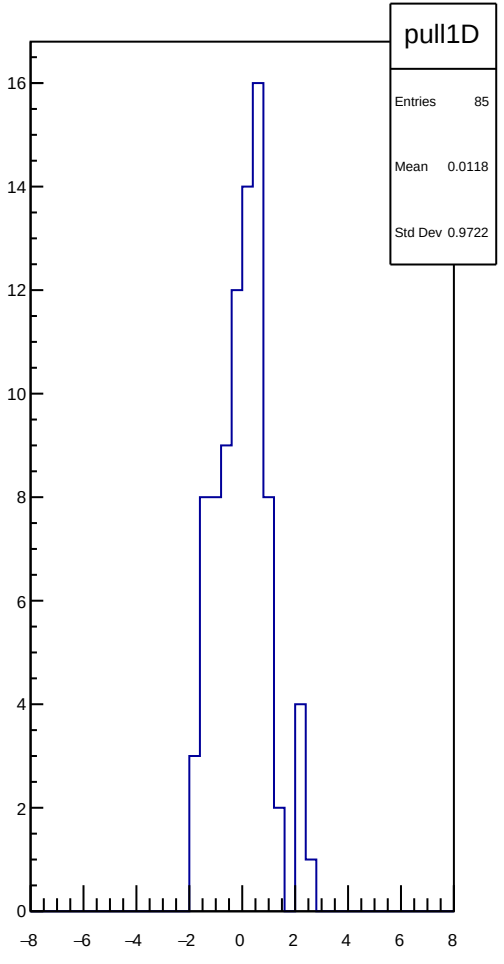

diff_bpm0i01X_rms vs run
χ² / ndf 1902 / 84
p0 2719 ± 2.118
3000
2950
2900
2850
2800
2750
2700
2650
2600
2550

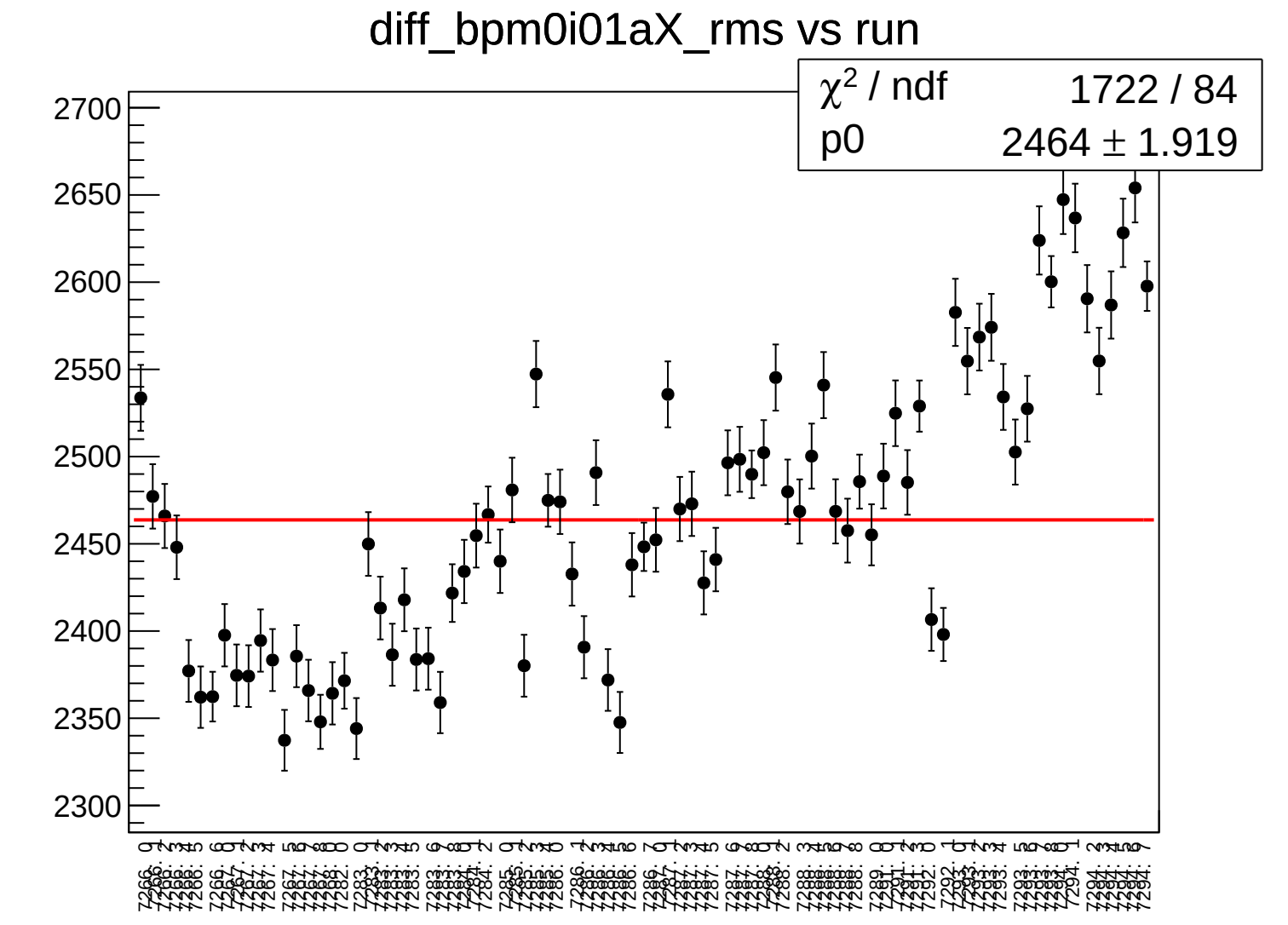

diff_bpm0i01Y_mean vs run
χ² / ndf 64.62 / 84
p0 13.7 ± 2.806
pull
Entries 85
Mean −317.3
Std Dev 322.6

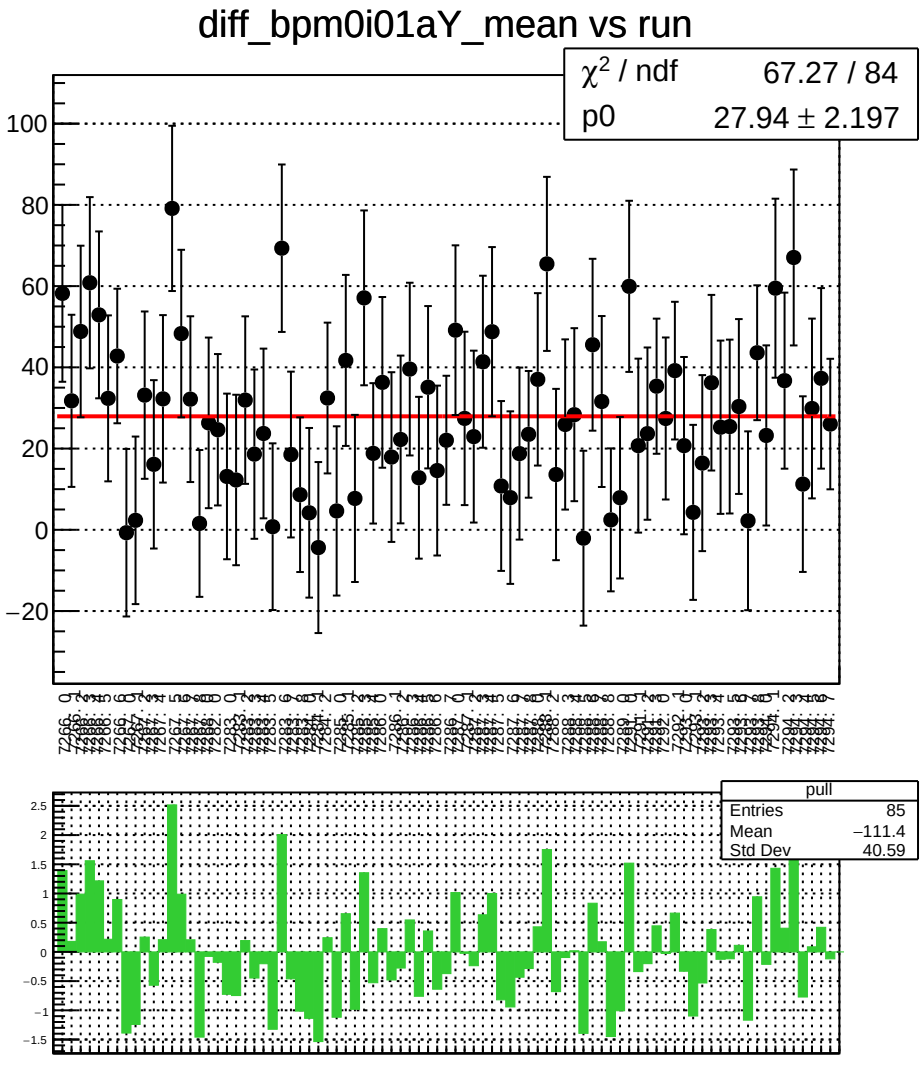

pull1D
Entries 85
Mean 0.005625
Std Dev 0.8719

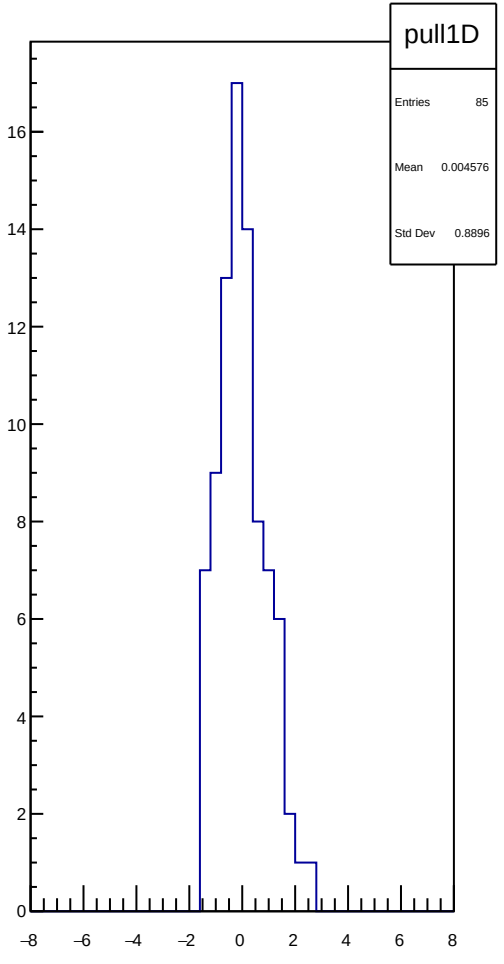

diff_bpm0i01Y_rms vs run
χ² / ndf 1431 / 84
p0 2548 ± 1.984
2750
2700
2650
2600
2550
2500
2450
2400
2350

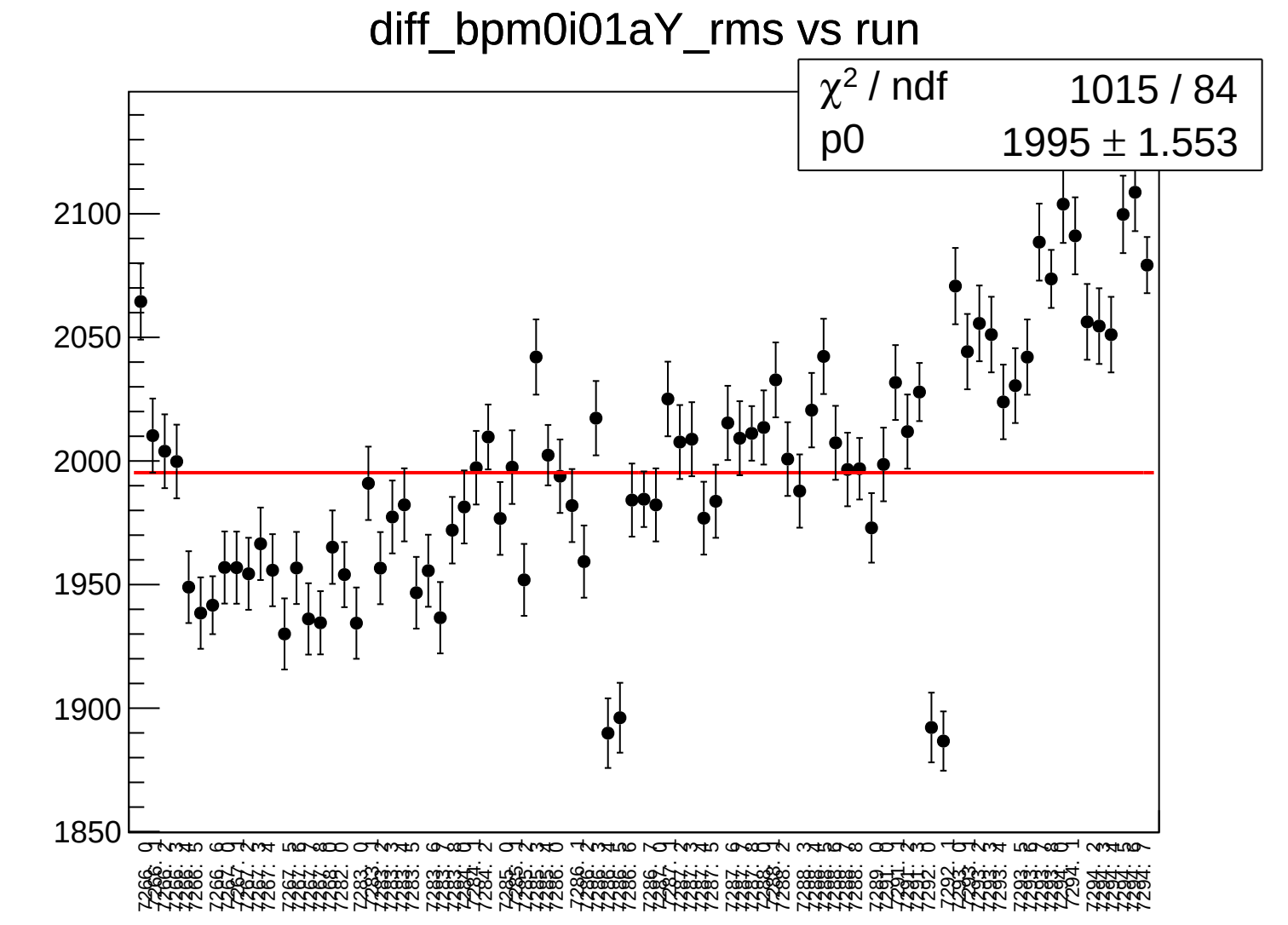

diff_bpm0i01aX_mean vs run
χ² / ndf 80.35 / 84
p0 23.57 ± 2.713
pull
Entries 85
Mean −167.7
Std Dev 175.1

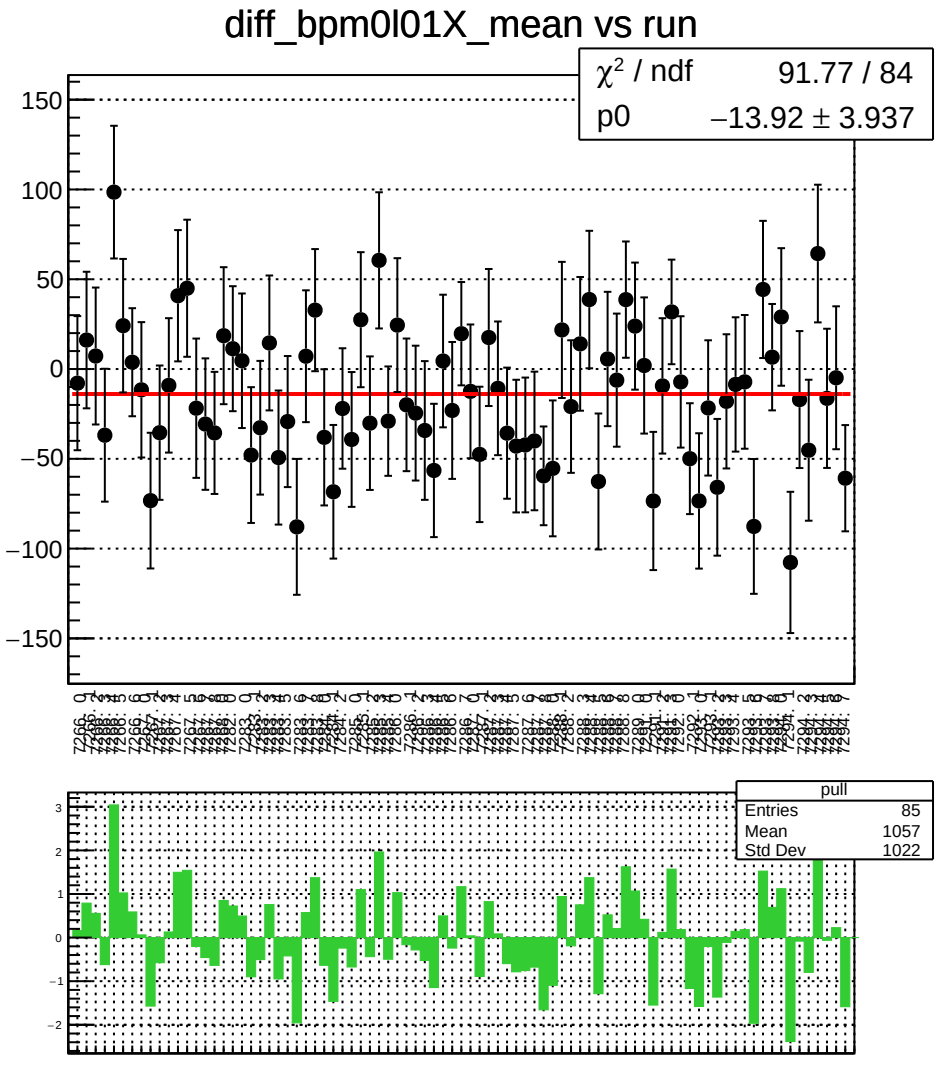

pull1D
Entries 85
Mean 0.0118
Std Dev 0.9722

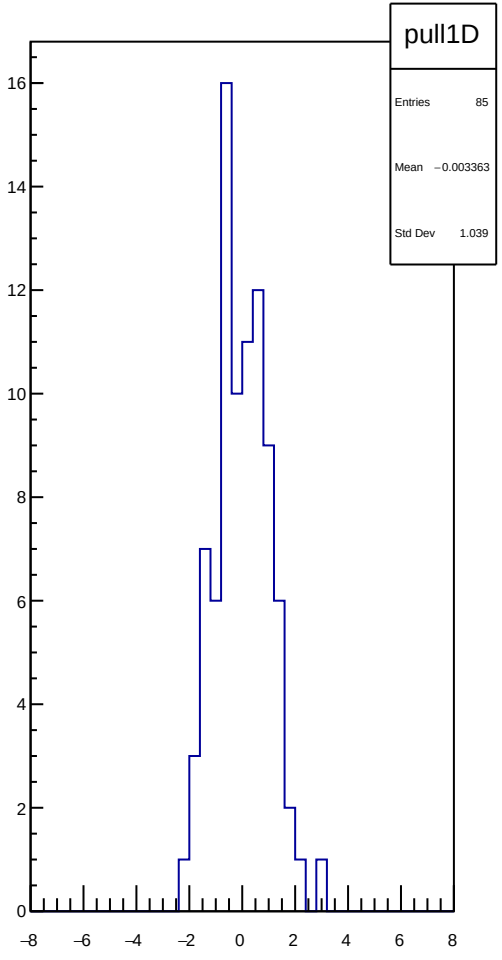

diff_bpm0i01aX_rms vs run
χ^2 / ndf 1722 / 84
p0 2464 ± 1.919
2700
2650
2600
2550
2500
2450
2400
2350
2300

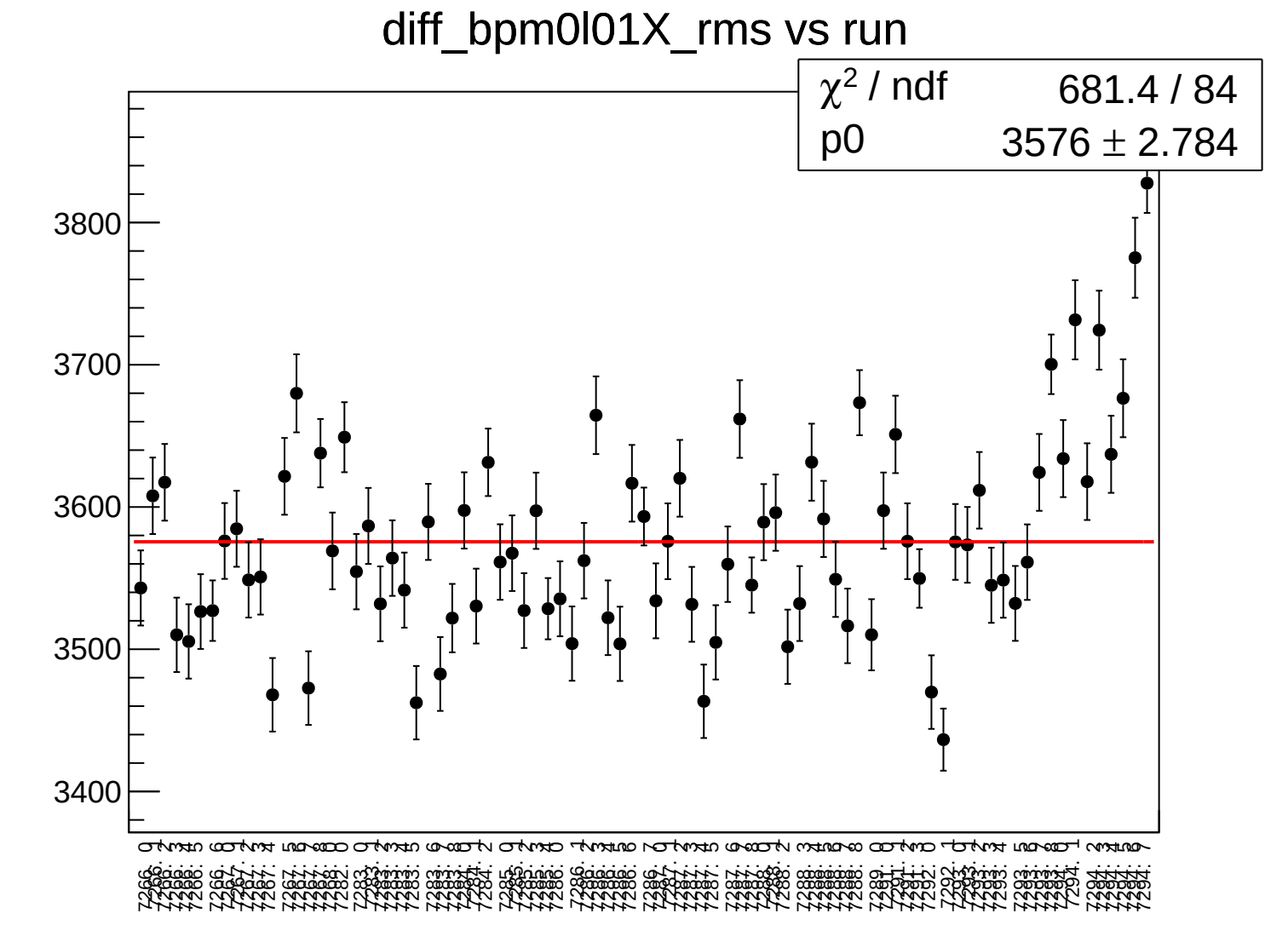

diff_bpm0i01aY_mean vs run
χ^2 / ndf 67.27 / 84
p0 27.94 ± 2.197
pull
Entries 85
Mean −111.4
Std Dev 40.59

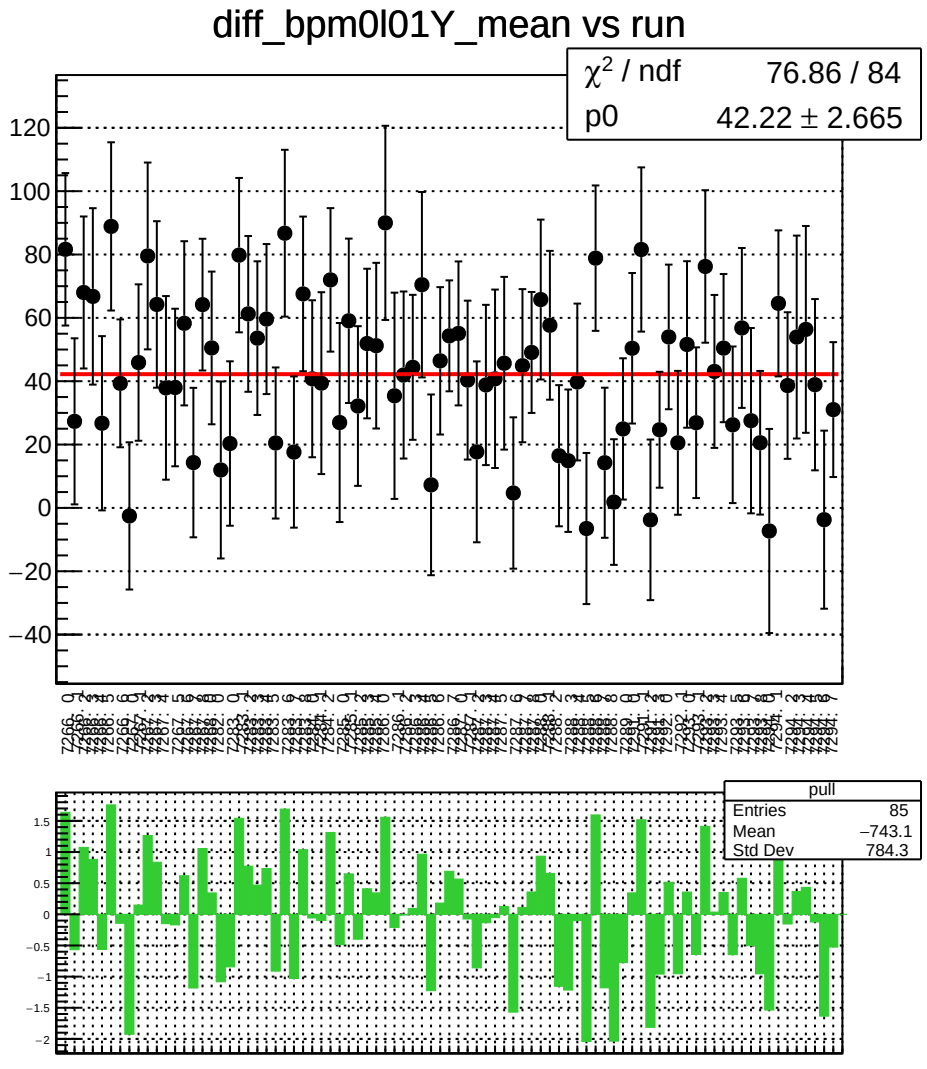

pull1D
Entries 85
Mean 0.004576
Std Dev 0.8896

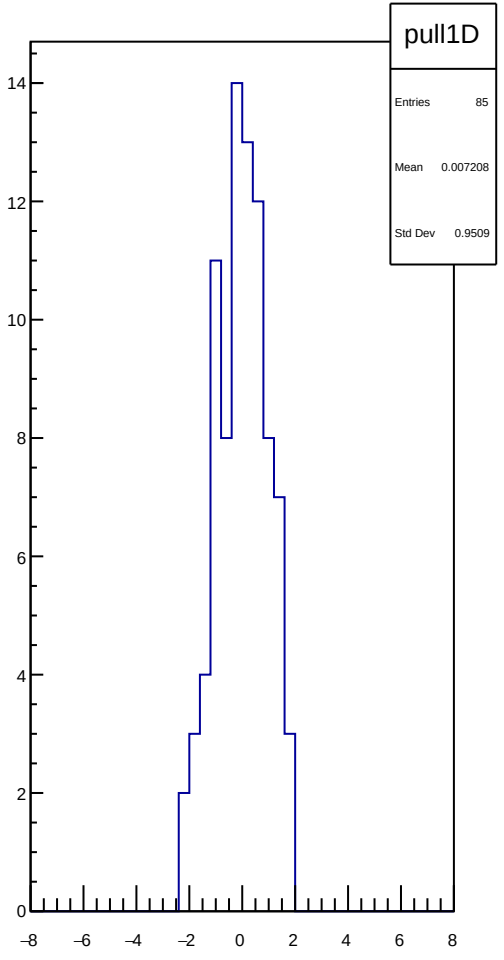

diff_bpm0i01aY_rms vs run
χ^2 / ndf 1015 / 84
p0 1995 ± 1.553
2100
2050
2000
1950
1900
1850

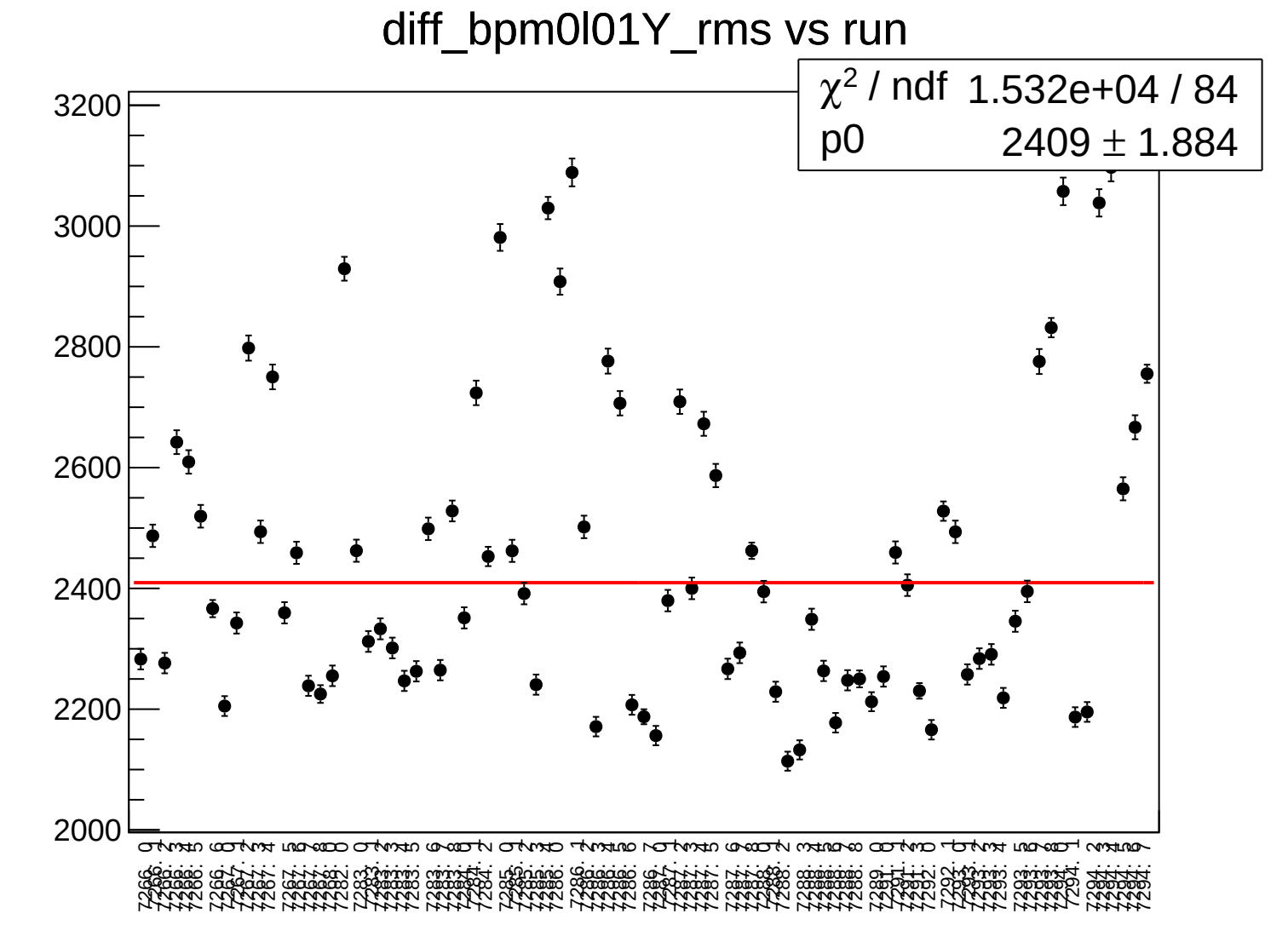

diff_bpm0l01X_mean vs run
χ² / ndf 91.77 / 84
p0 −13.92 ± 3.937
pull
Entries 85
Mean 1057
Std Dev 1022

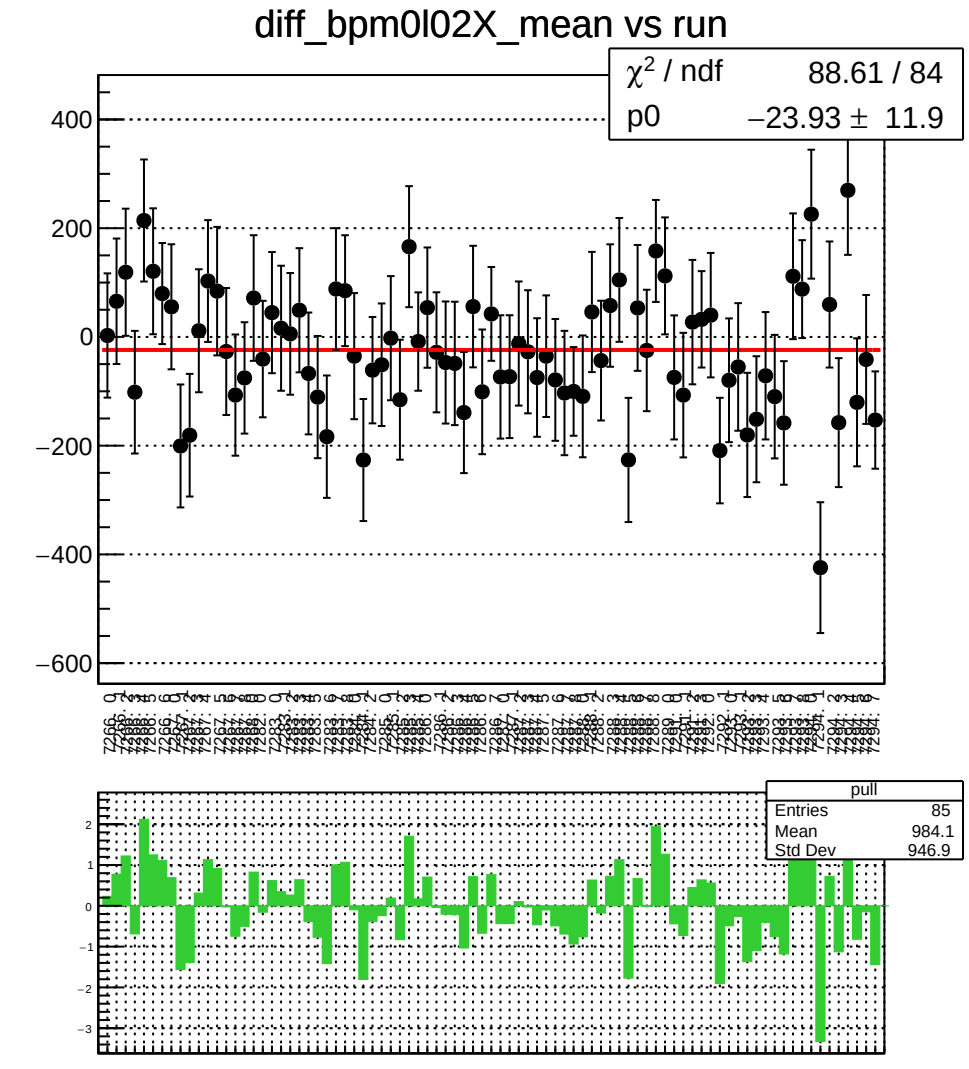

pull1D
Entries 85
Mean −0.003363
Std Dev 1.039

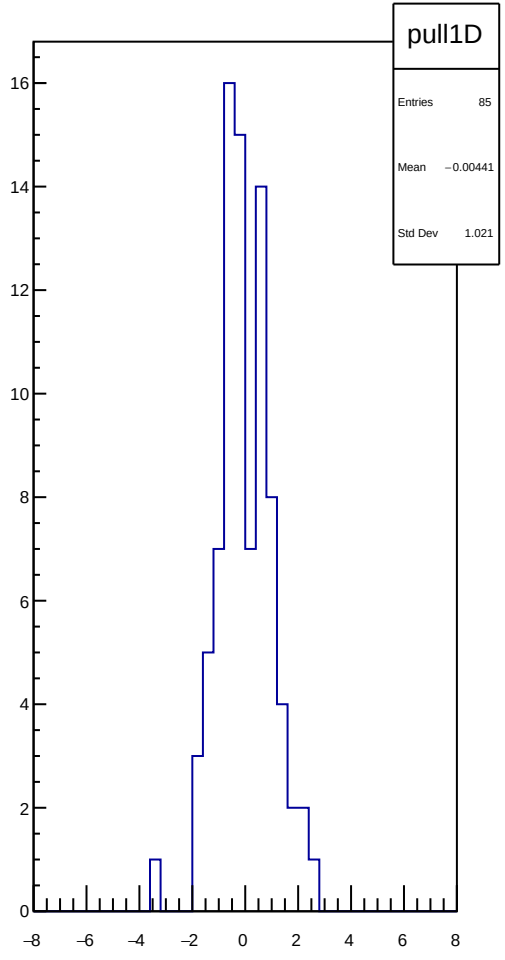

diff_bpm0l01X_rms vs run
χ^2 / ndf 681.4 / 84
p0 3576 ± 2.784
3800
3700
3600
3500
3400

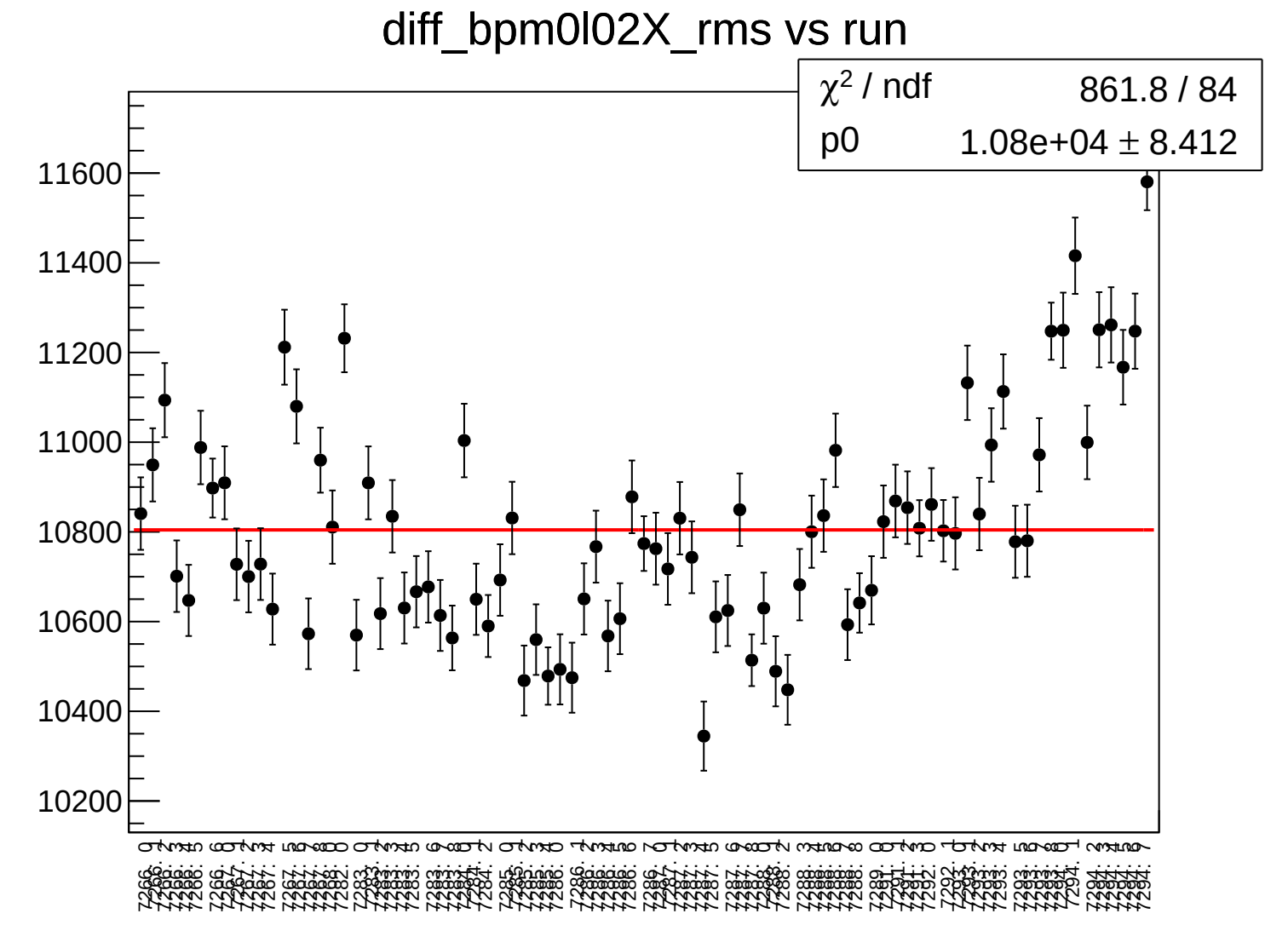

diff_bpm0l01Y_mean vs run
χ^2 / ndf 76.86 / 84
p0 42.22 ± 2.665
pull
Entries 85
Mean −743.1
Std Dev 784.3

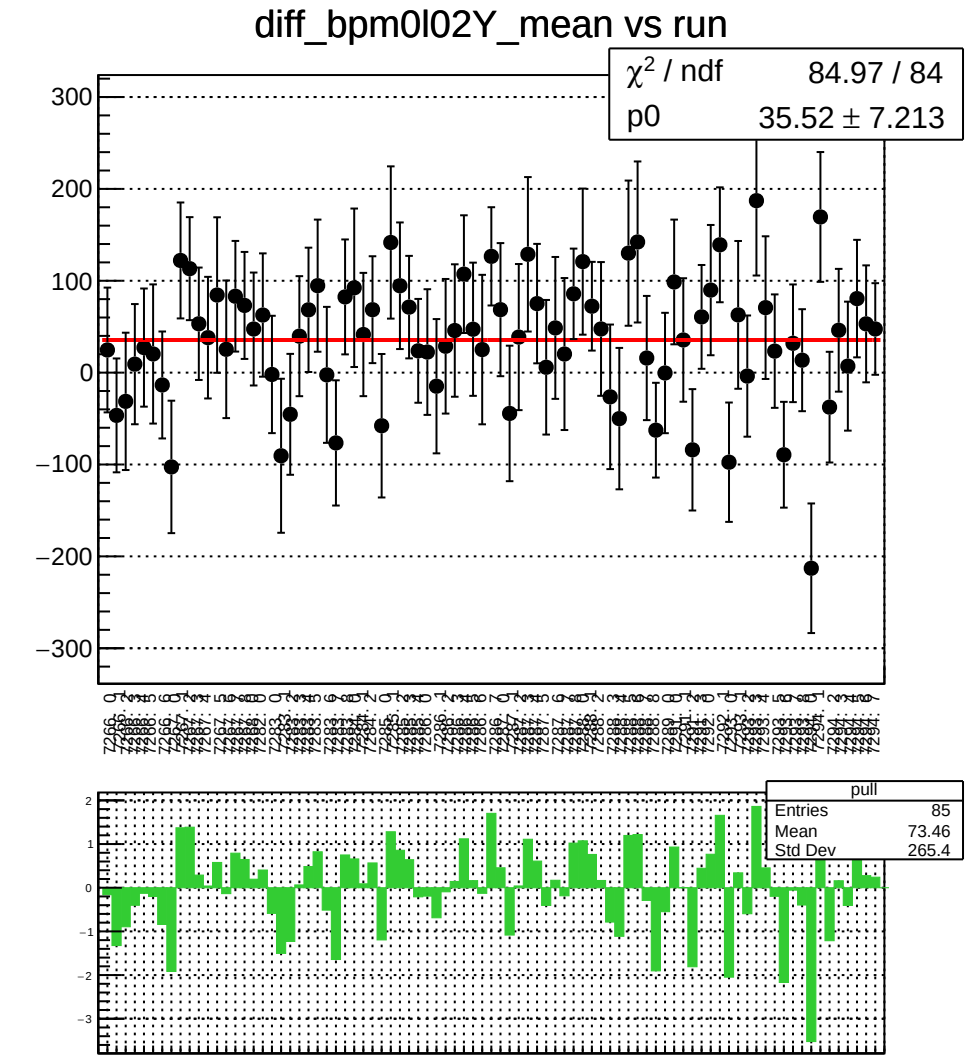

pull1D
Entries 85
Mean 0.007208
Std Dev 0.9509

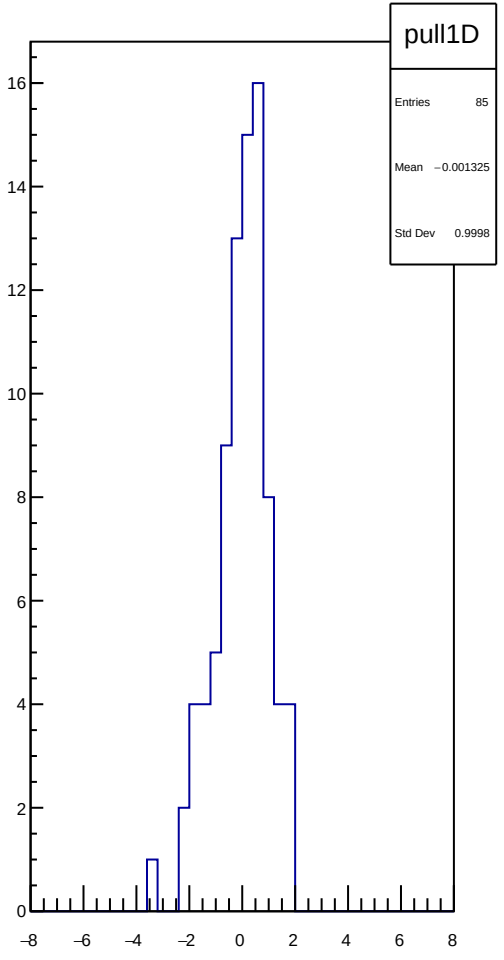

diff_bpm0l01Y_rms vs run
χ² / ndf 1.532e+04 / 84
p0 2409 ± 1.884
3200
3000
2800
2600
2400
2200
2000

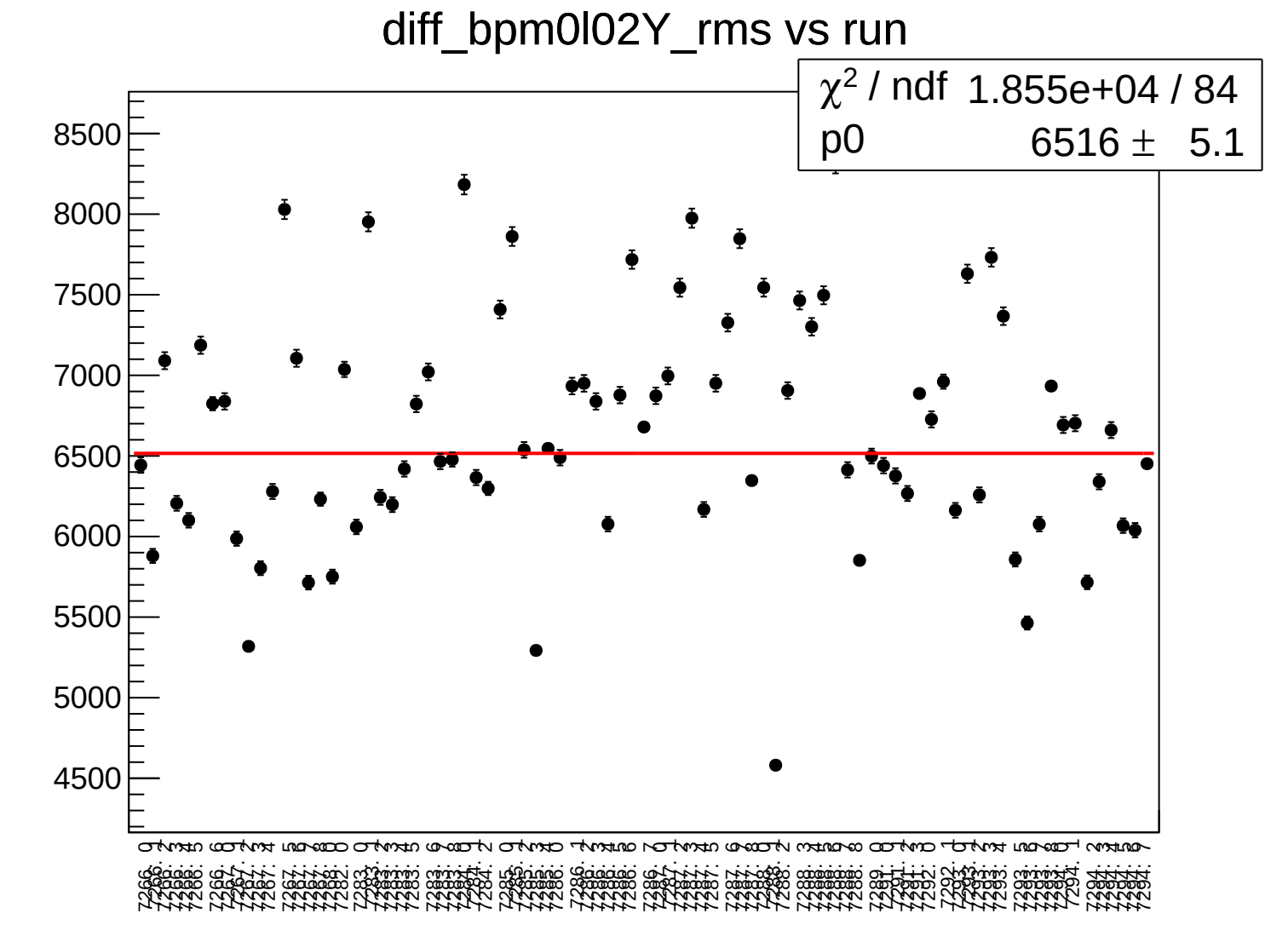

diff_bpm0l02X_mean vs run
χ² / ndf 88.61 / 84
p0 −23.93 ± 11.9
pull
Entries 85
Mean 984.1
Std Dev 946.9

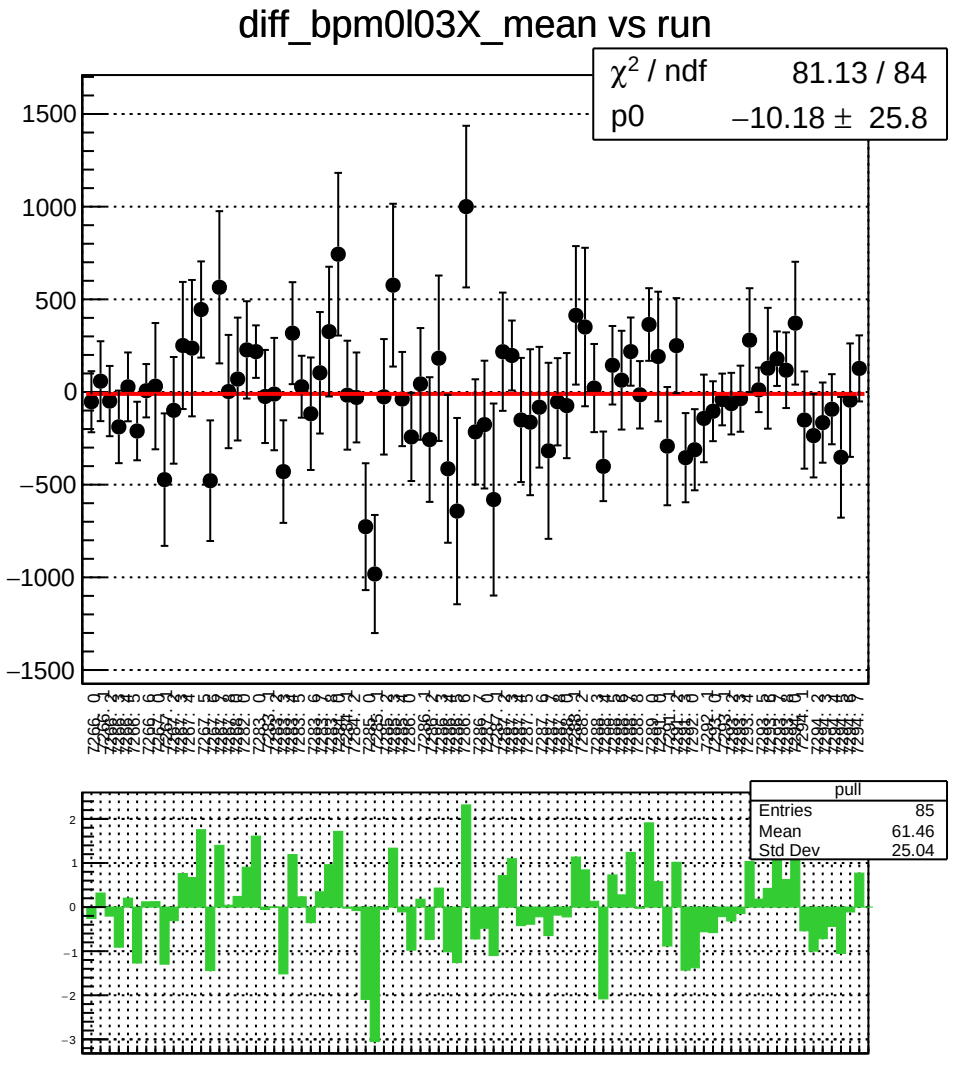

pull1D
Entries 85
Mean −0.00441
Std Dev 1.021

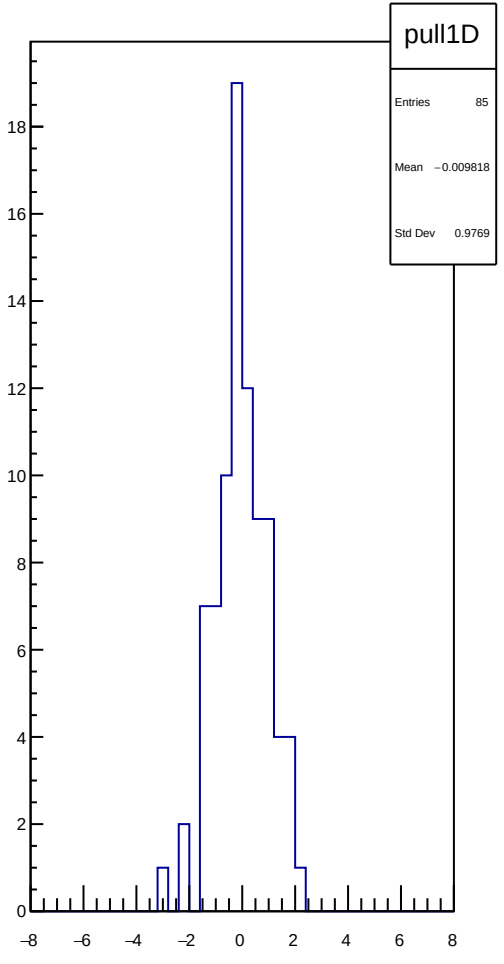

diff_bpm0l02X_rms vs run
χ^2 / ndf 861.8 / 84
p0 1.08e+04 ± 8.412
11600
11400
11200
11000
10800
10600
10400
10200

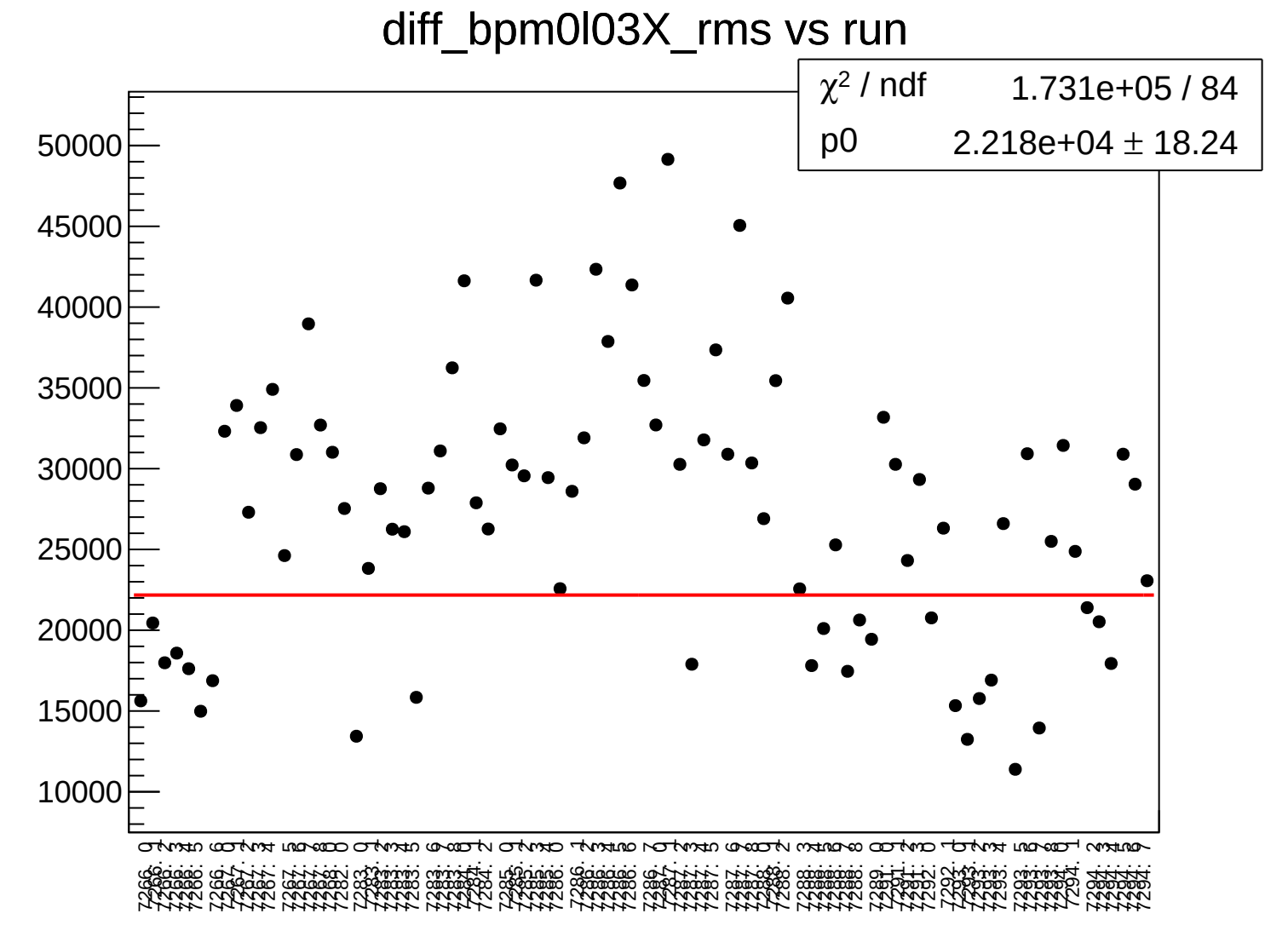

diff_bpm0l02Y_mean vs run
χ² / ndf 84.97 / 84
p0 35.52 ± 7.213
pull
Entries 85
Mean 73.46
Std Dev 265.4

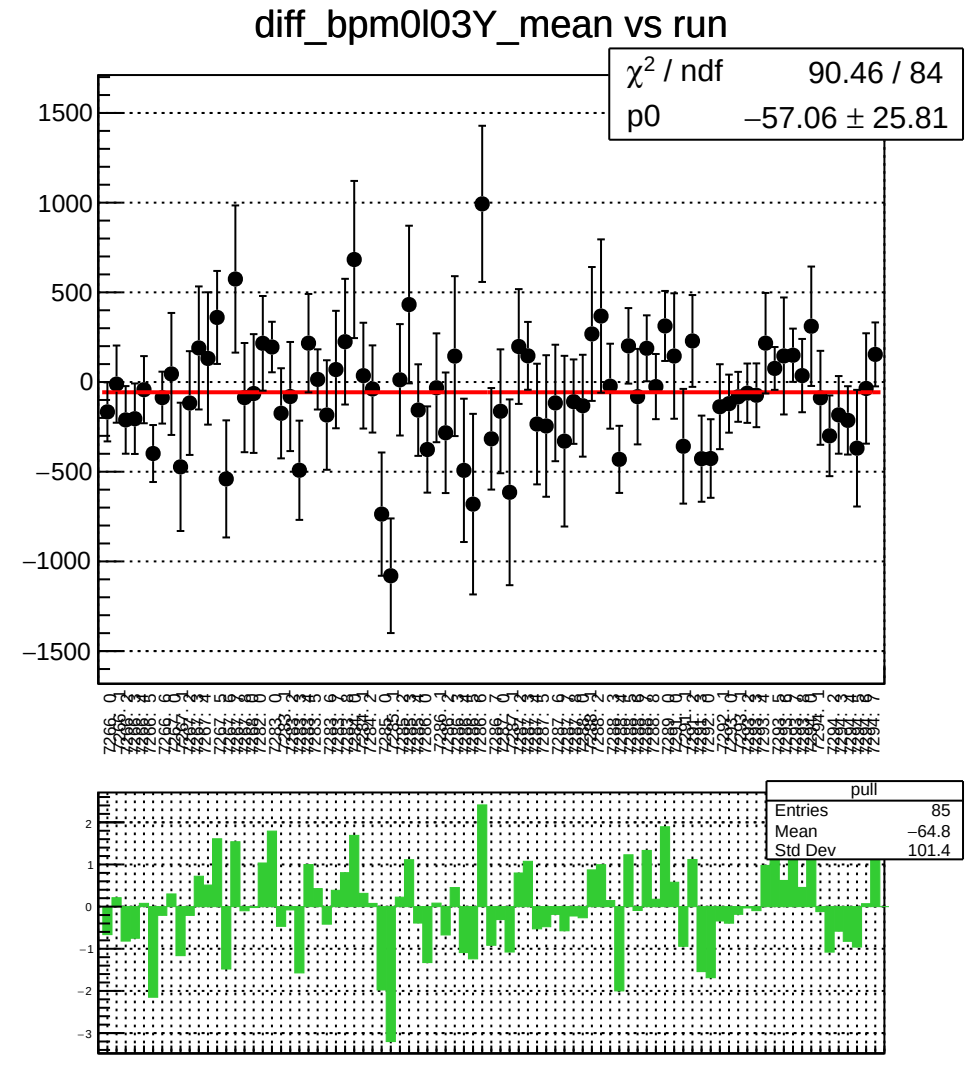

pull1D
Entries 85
Mean −0.001325
Std Dev 0.9998

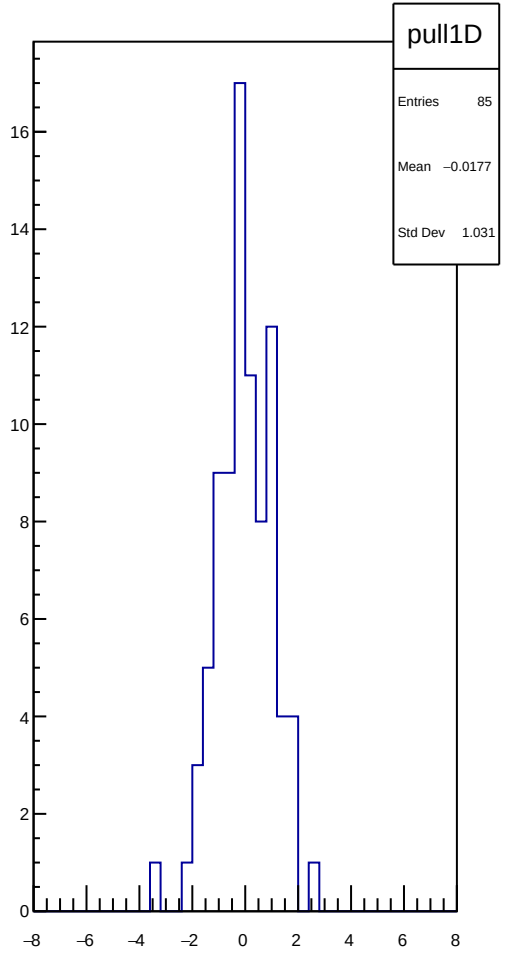

diff_bpm0l02Y_rms vs run
χ² / ndf 1.855e+04 / 84
p0 6516 ± 5.1
8500
8000
7500
7000
6500
6000
5500
5000
4500

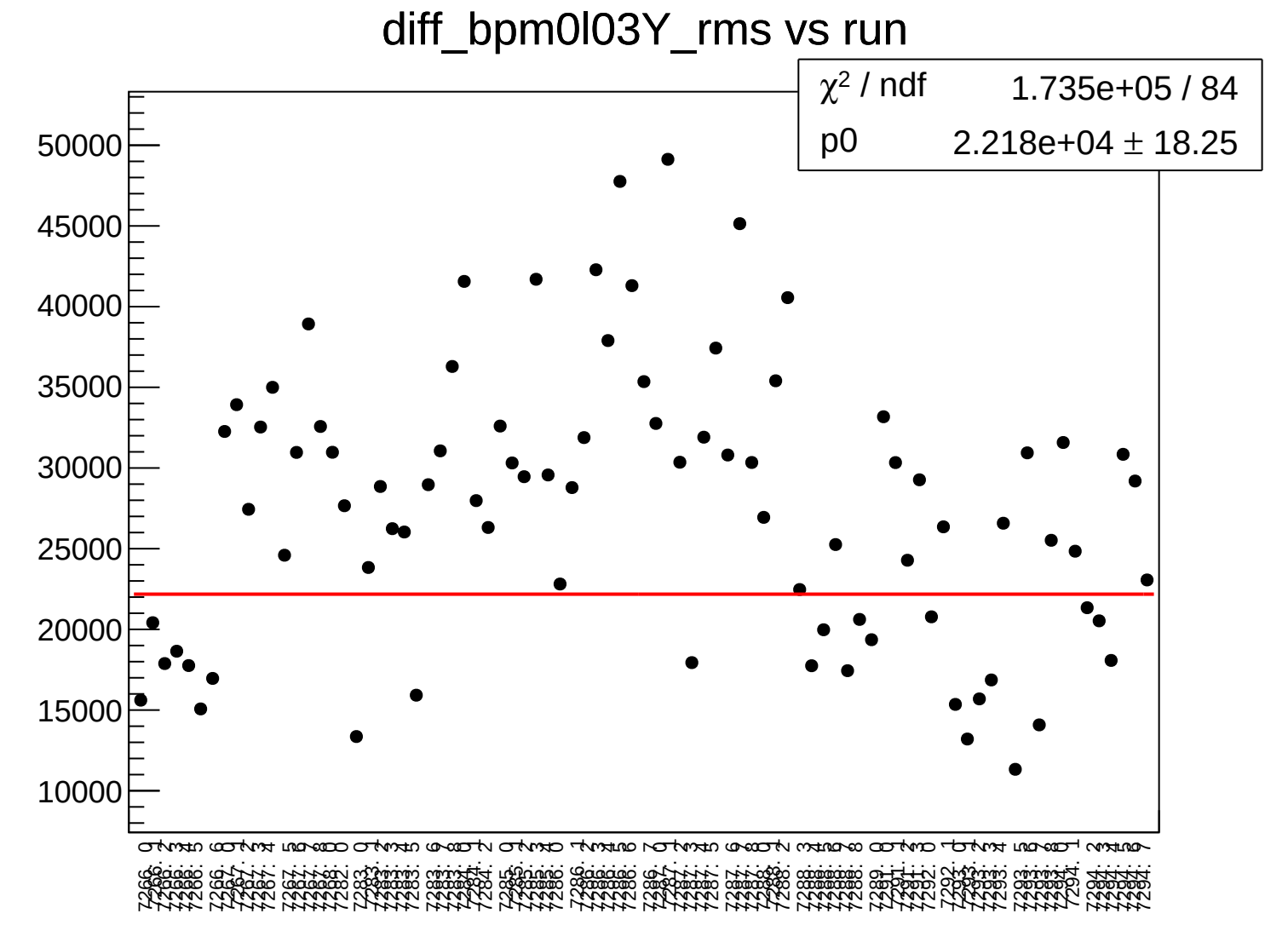

diff_bpm0l03X_mean vs run
χ^2 / ndf 81.13 / 84
p0 −10.18 ± 25.8
pull
Entries 85
Mean 61.46
Std Dev 25.04

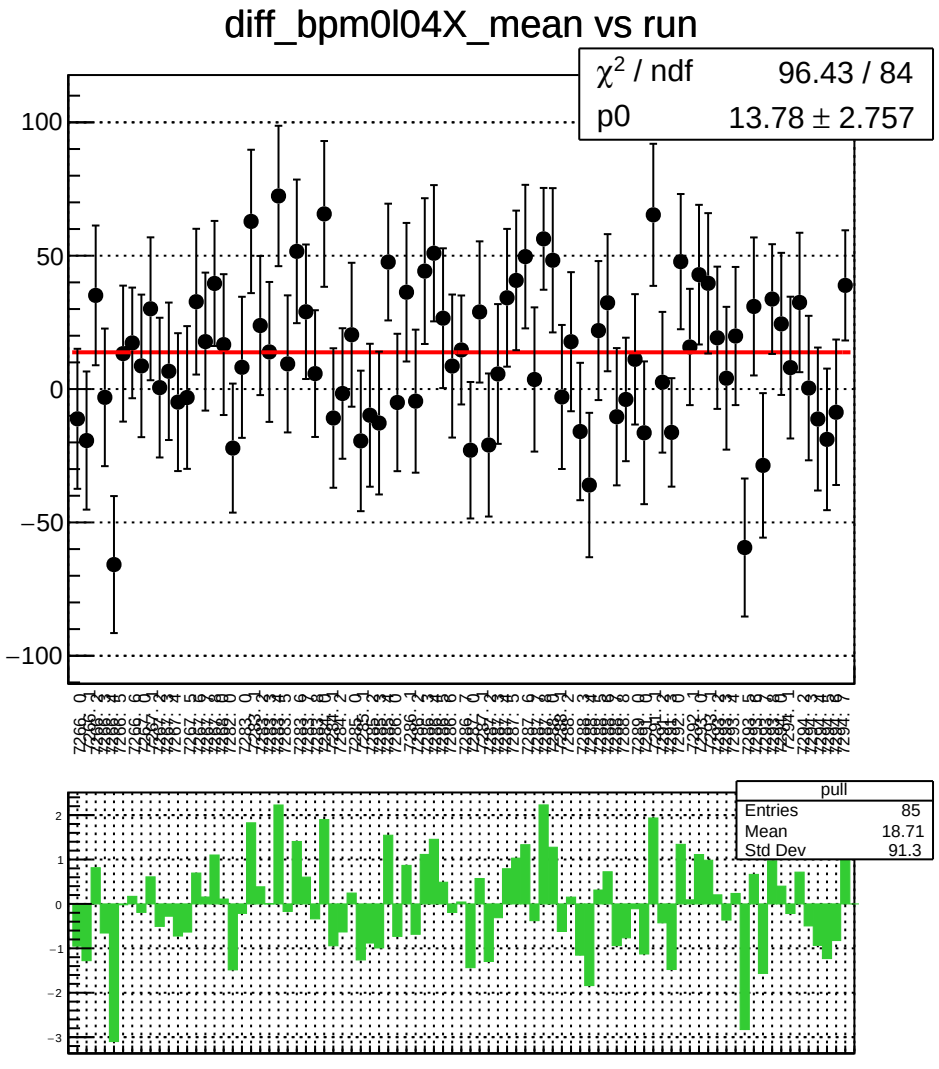

pull1D
Entries 85
Mean −0.009818
Std Dev 0.9769

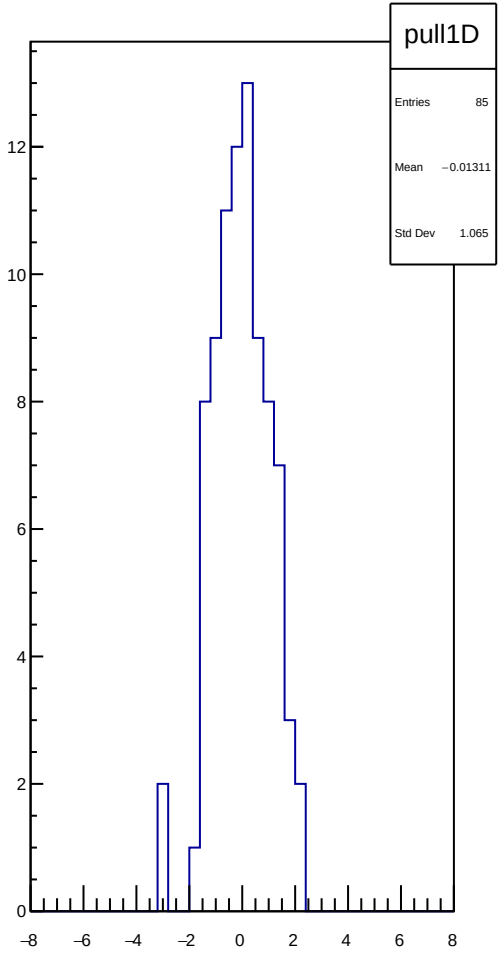

diff_bpm0l03X_rms vs run
χ² / ndf 1.731e+05 / 84
p0 2.218e+04 ± 18.24
50000
45000
40000
35000
30000
25000
20000
15000
10000

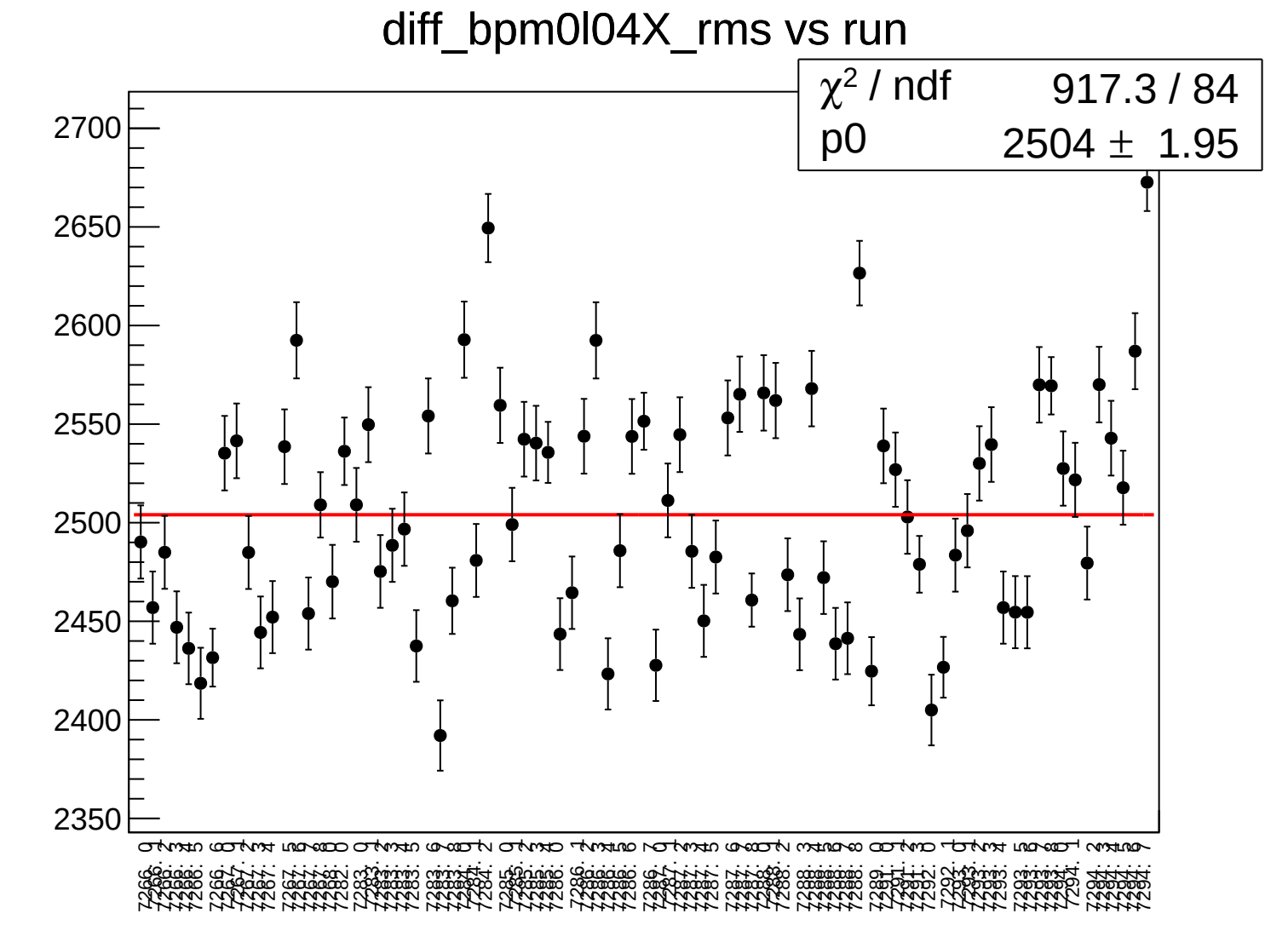

diff_bpm0l03Y_mean vs run
χ² / ndf 90.46 / 84
p0 −57.06 ± 25.81
pull
Entries 85
Mean −64.8
Std Dev 101.4

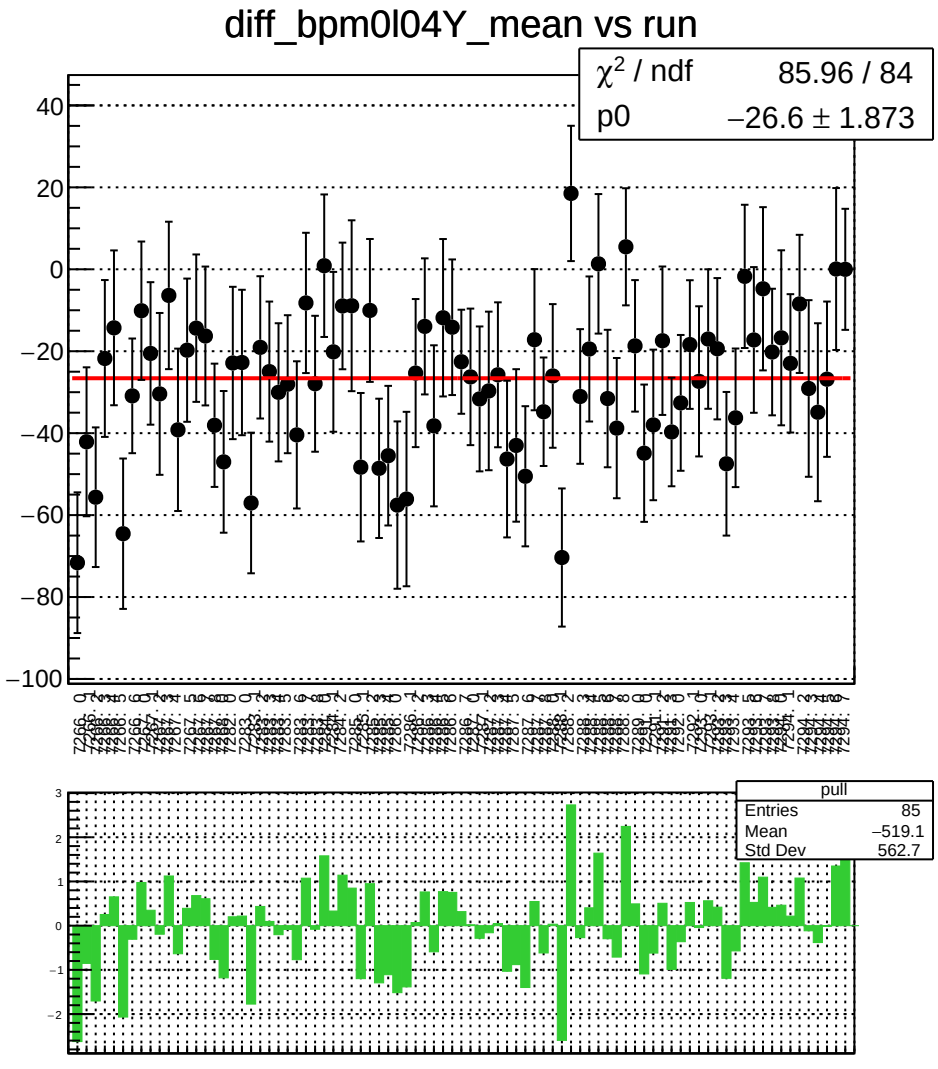

pull1D
Entries 85
Mean −0.0177
Std Dev 1.031

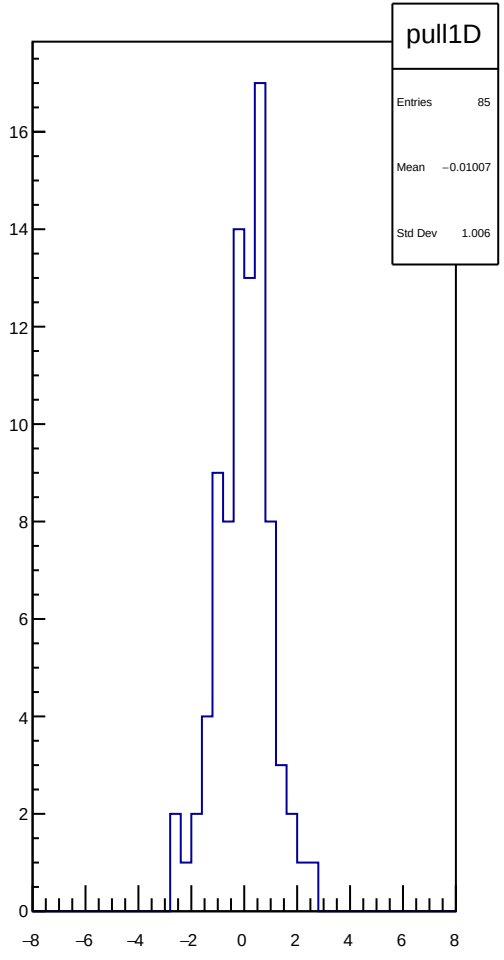

diff_bpm0l03Y_rms vs run
χ² / ndf 1.735e+05 / 84
p0 2.218e+04 ± 18.25
50000
45000
40000
35000
30000
25000
20000
15000
10000

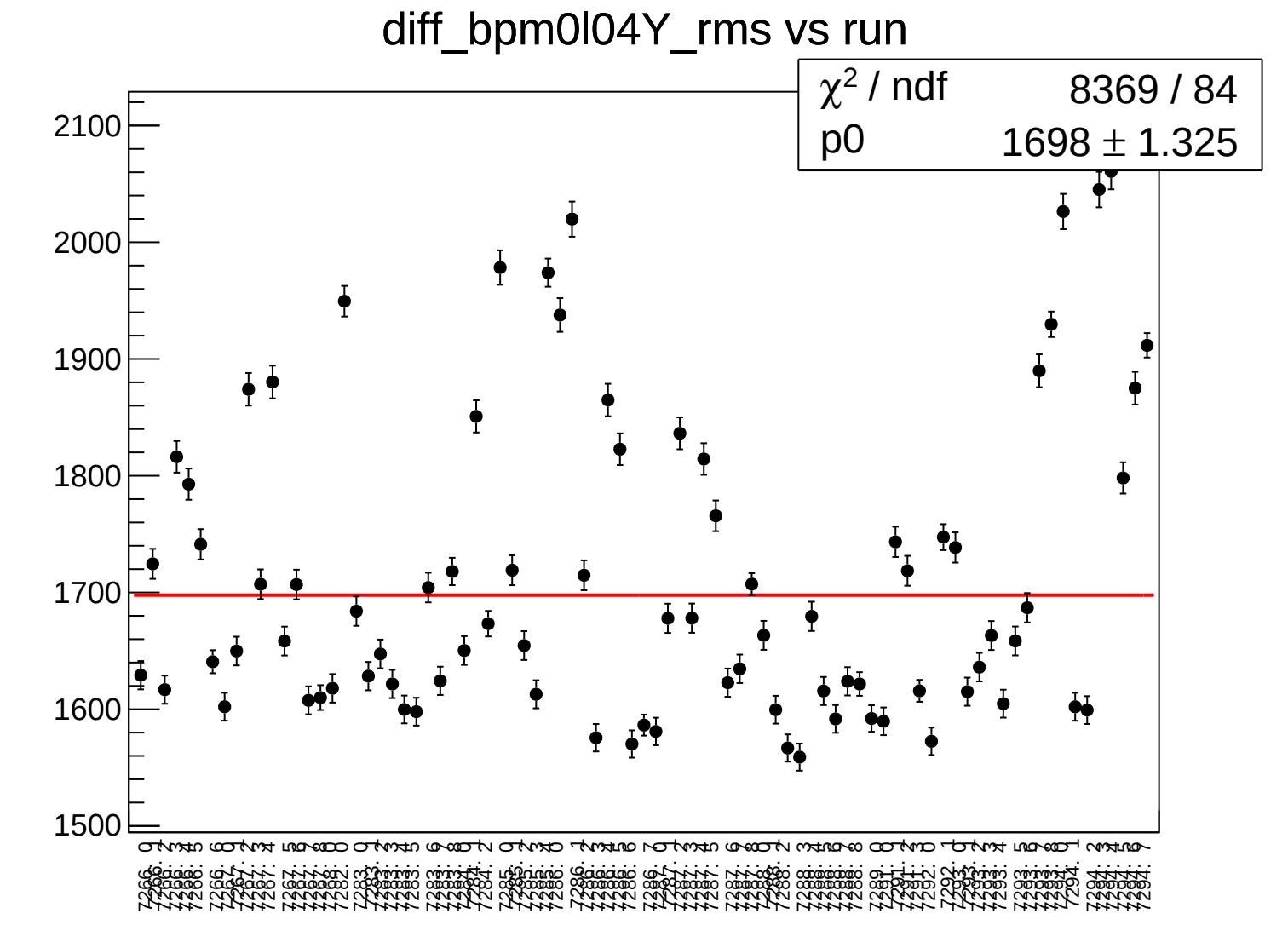

diff_bpm0l04X_mean vs run
χ² / ndf 96.43 / 84
p0 13.78 ± 2.757
pull
Entries 85
Mean 18.71
Std Dev 91.3

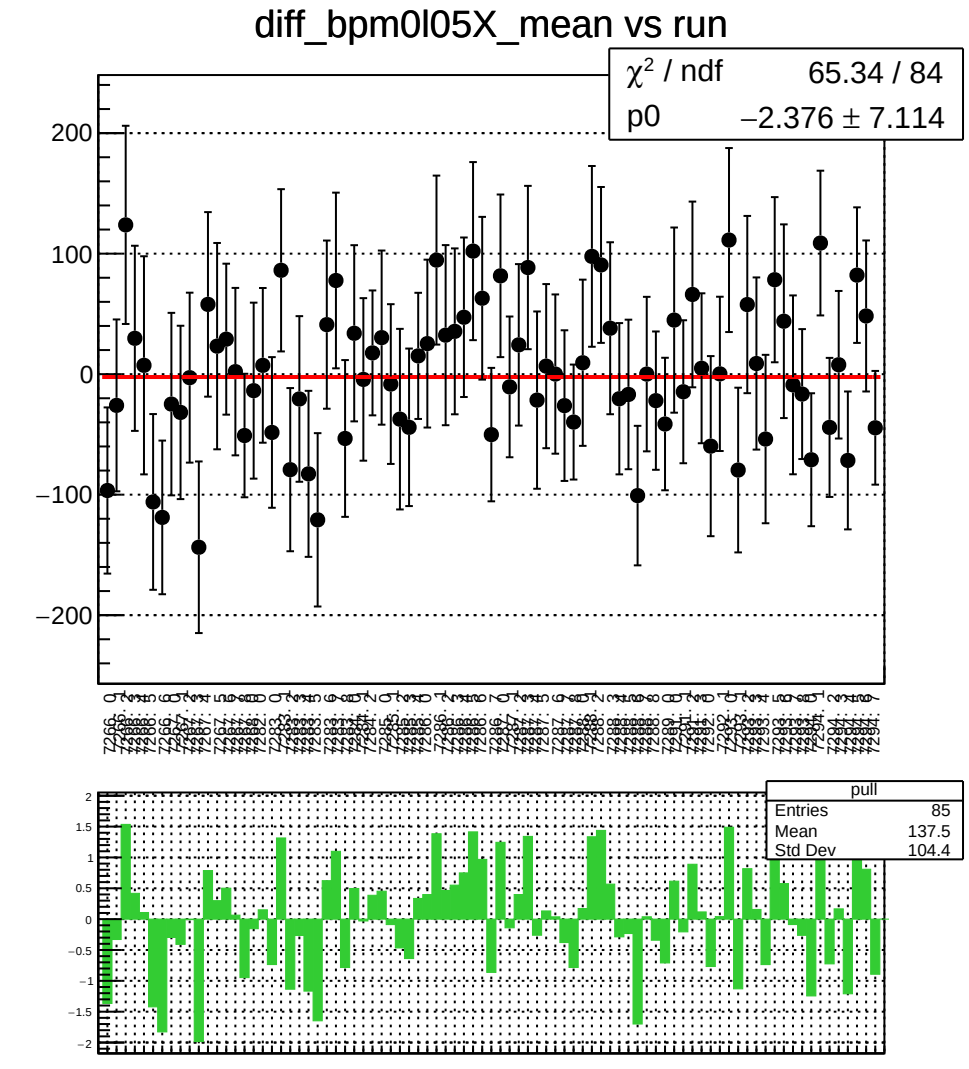

pull1D
Entries 85
Mean −0.01311
Std Dev 1.065

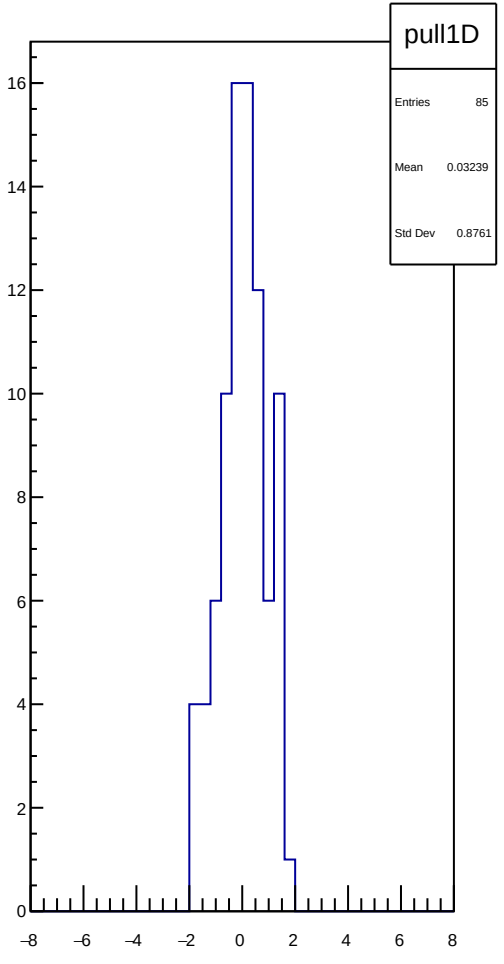

diff_bpm0l04X_rms vs run
χ² / ndf 917.3 / 84
p0 2504 ± 1.95
2700
2650
2600
2550
2500
2450
2400
2350

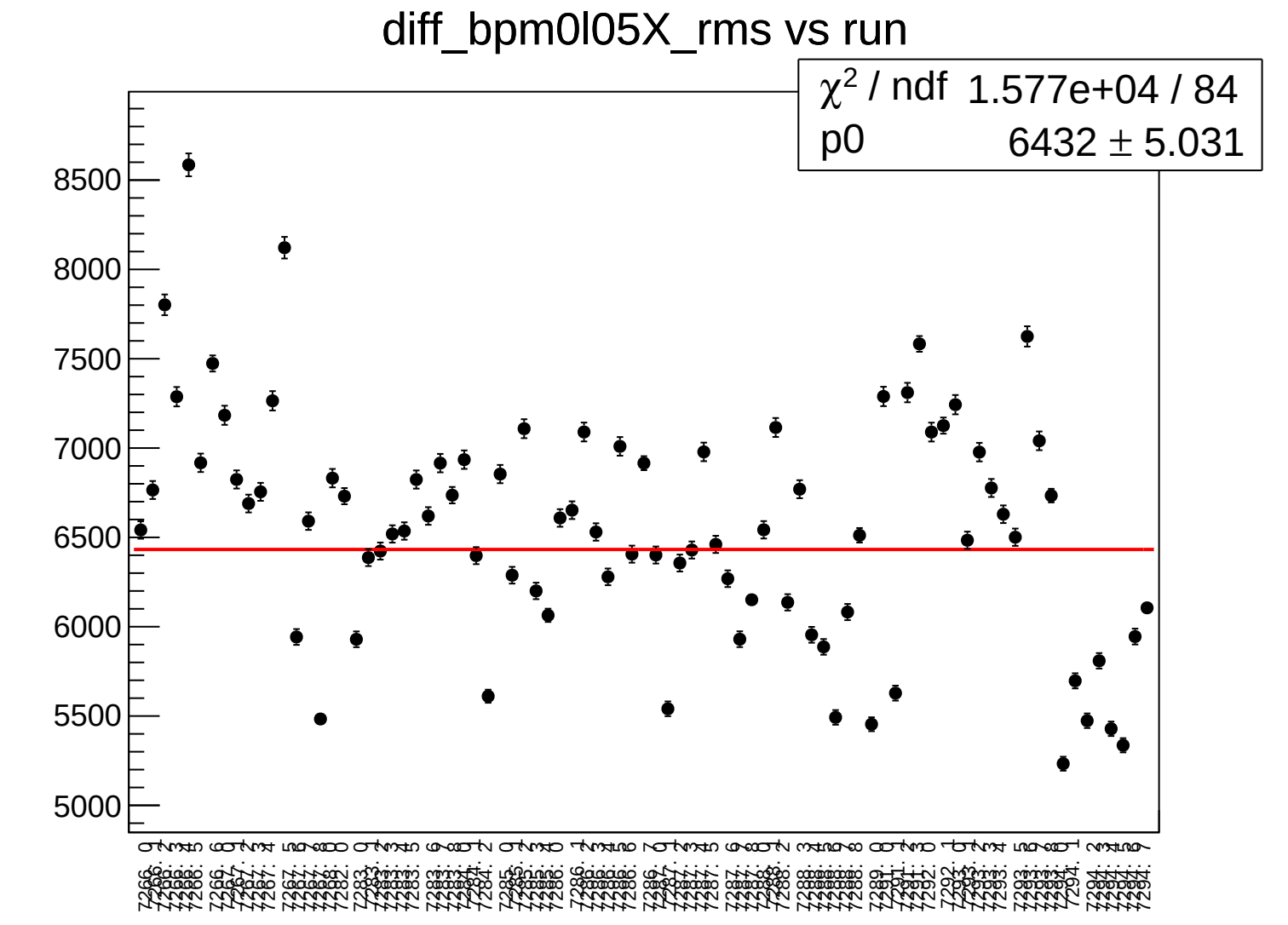

diff_bpm0l04Y_mean vs run
χ² / ndf 85.96 / 84
p0 −26.6 ± 1.873
pull
Entries 85
Mean −519.1
Std Dev 562.7

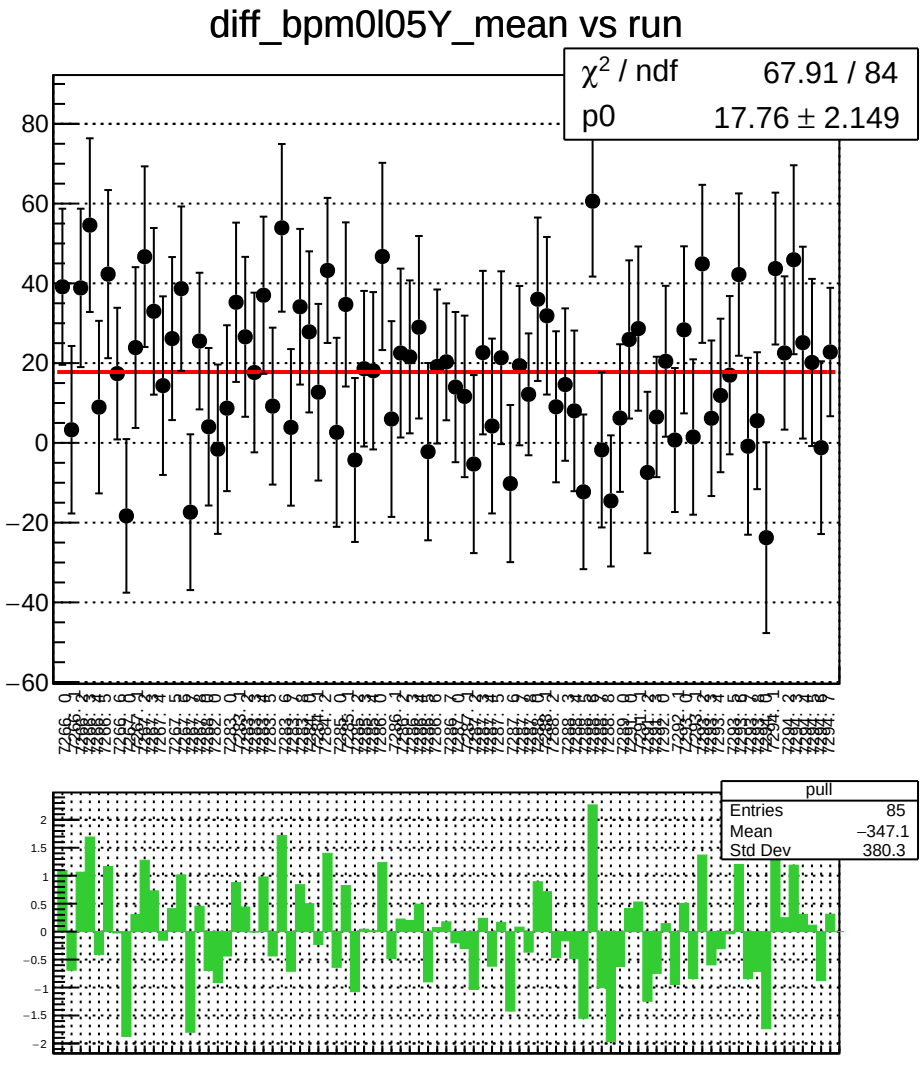

pull1D
Entries 85
Mean −0.01007
Std Dev 1.006

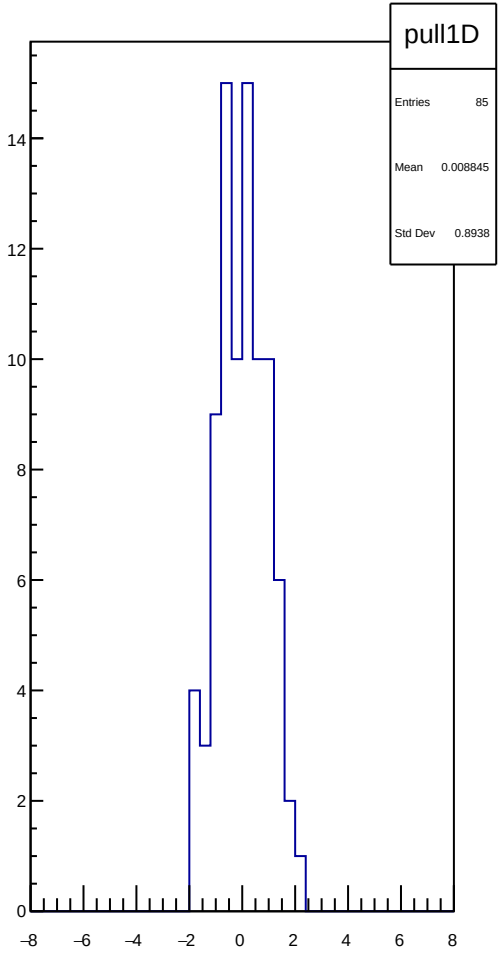

diff_bpm0l04Y_rms vs run
χ² / ndf 8369 / 84
p0 1698 ± 1.325
2100
2000
1900
1800
1700
1600
1500

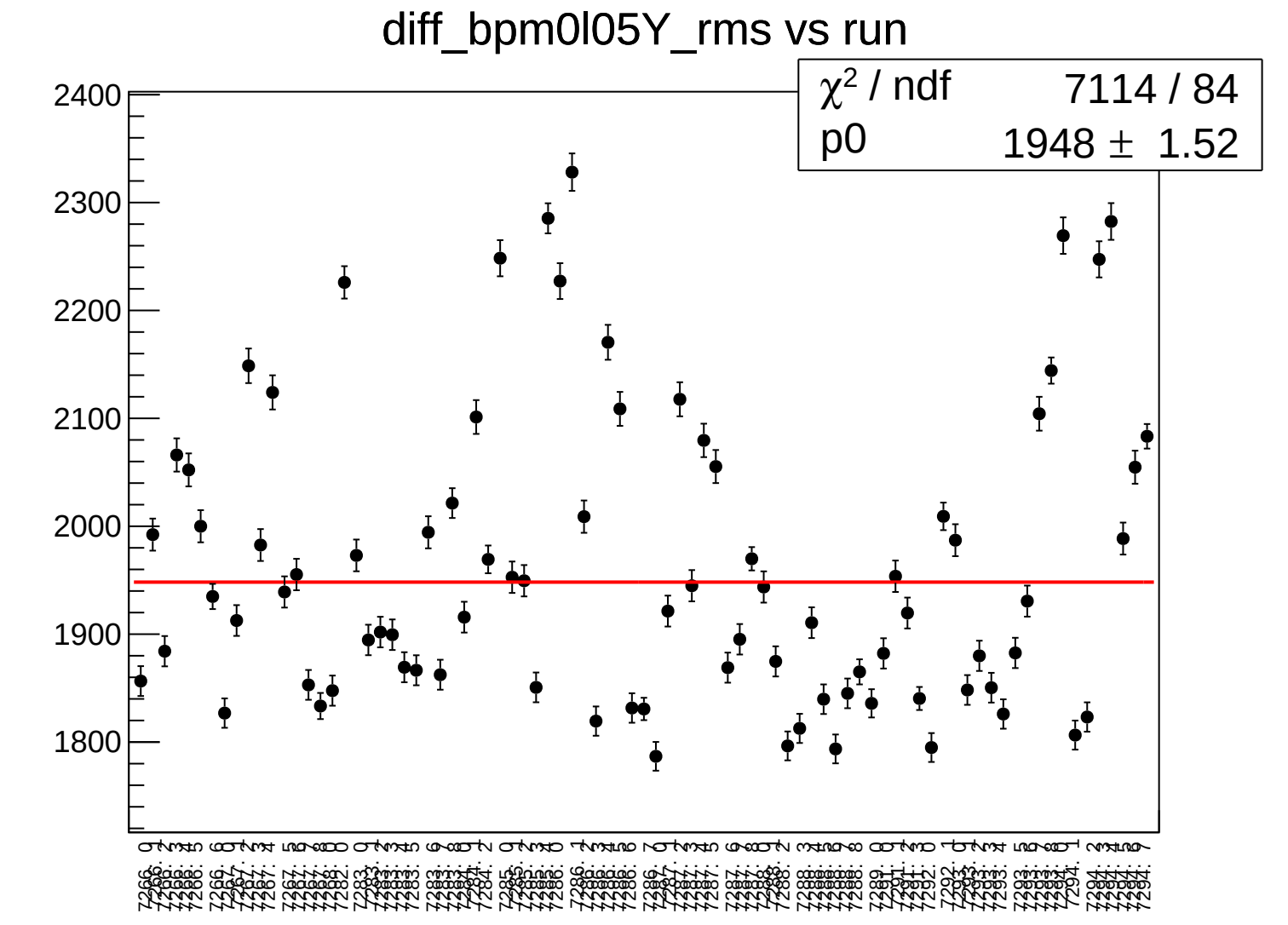

diff_bpm0l05X_mean vs run
χ² / ndf 65.34 / 84
p0 −2.376 ± 7.114
200
100
0
−100
−200
pull
Entries 85
Mean 137.5
Std Dev 104.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

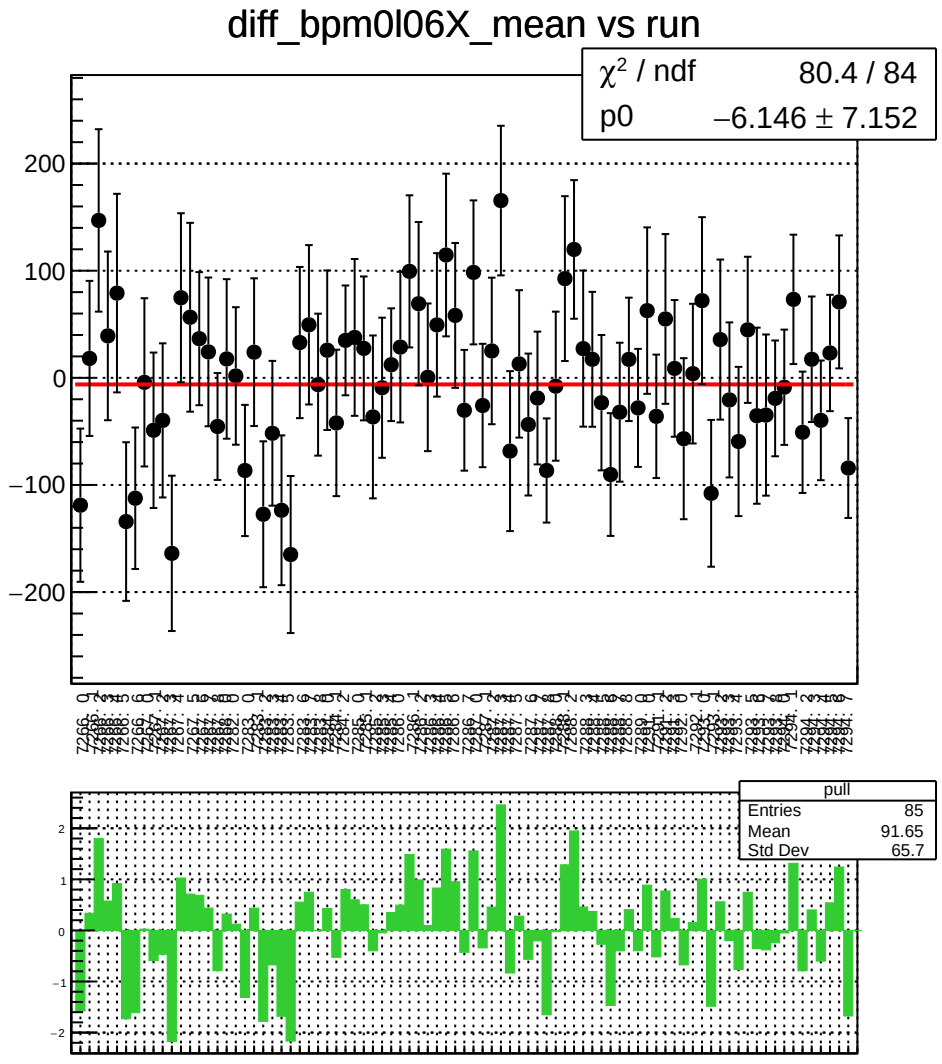

pull1D
Entries 85
Mean 0.03239
Std Dev 0.8761
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

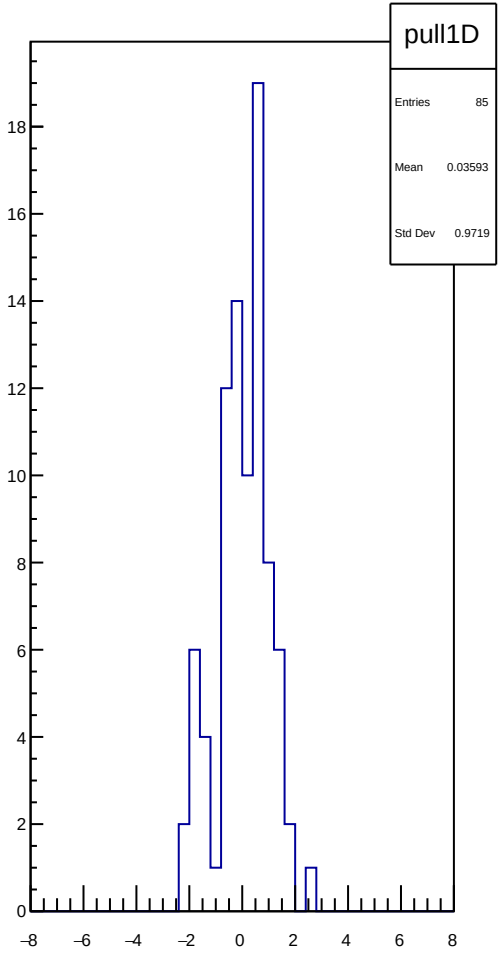

diff_bpm0l05X_rms vs run
χ² / ndf 1.577e+04 / 84
p0 6432 ± 5.031
8500
8000
7500
7000
6500
6000
5500
5000

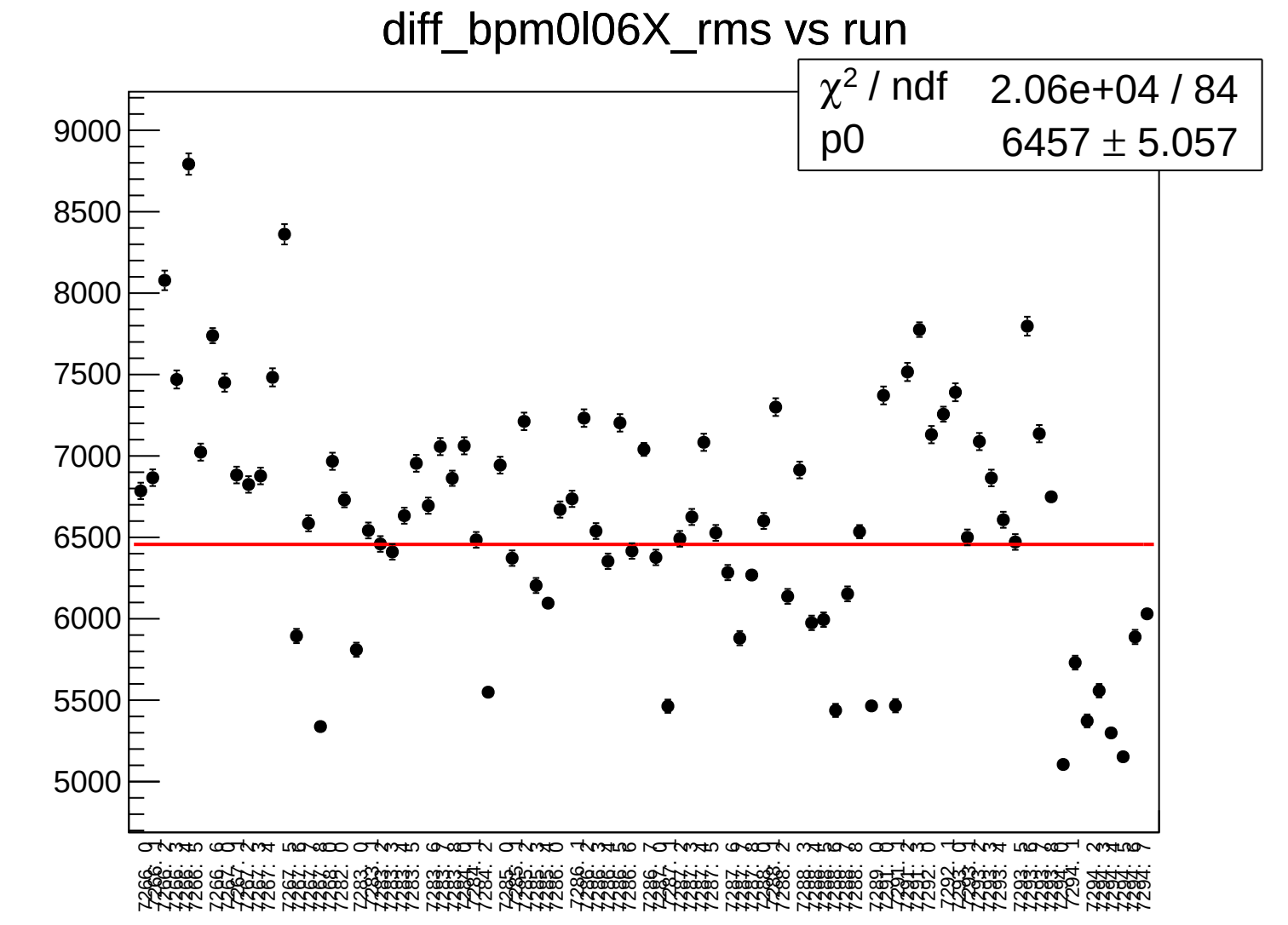

diff_bpm0l05Y_mean vs run
χ^2 / ndf 67.91 / 84
p0 17.76 ± 2.149
pull
Entries 85
Mean −347.1
Std Dev 380.3

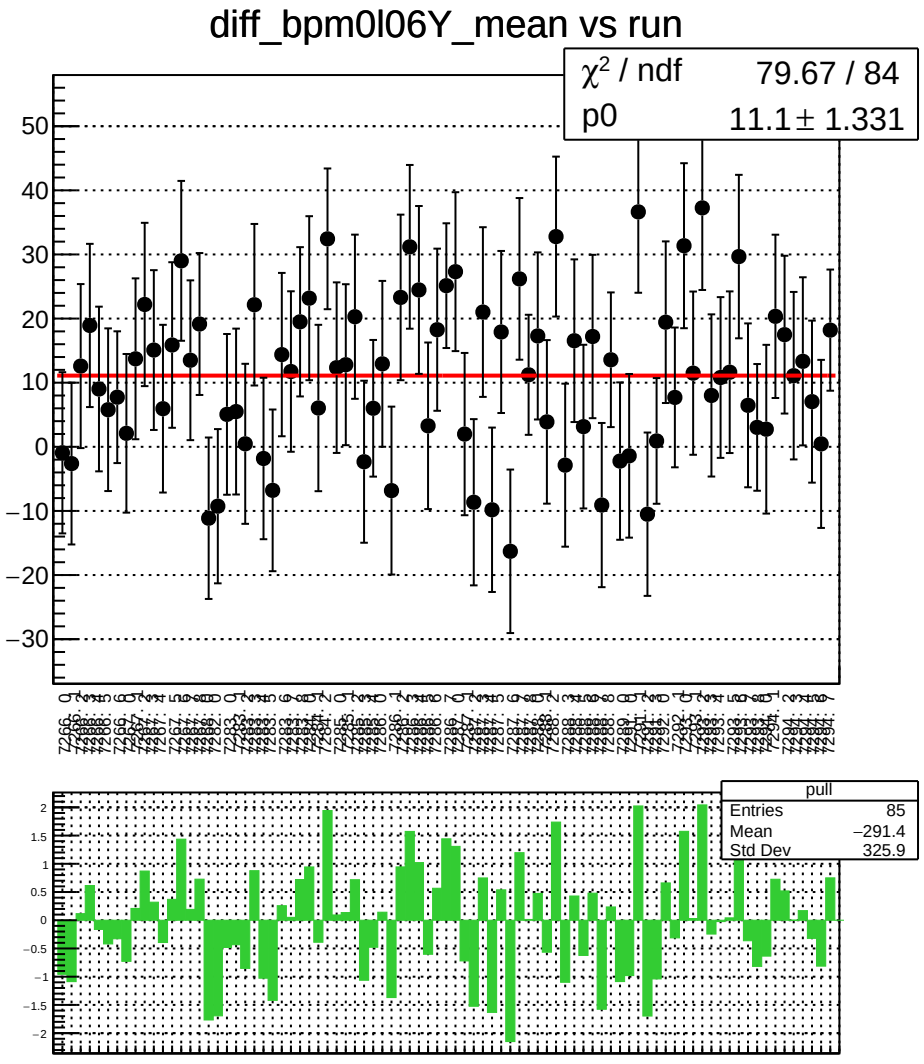

pull1D
Entries 85
Mean 0.008845
Std Dev 0.8938

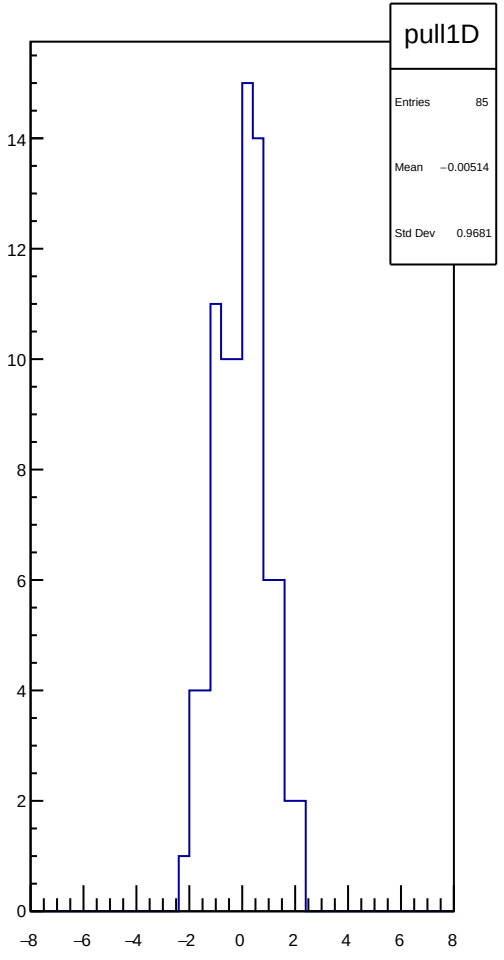

diff_bpm0l05Y_rms vs run
χ² / ndf 7114 / 84
p0 1948 ± 1.52
2400
2300
2200
2100
2000
1900
1800

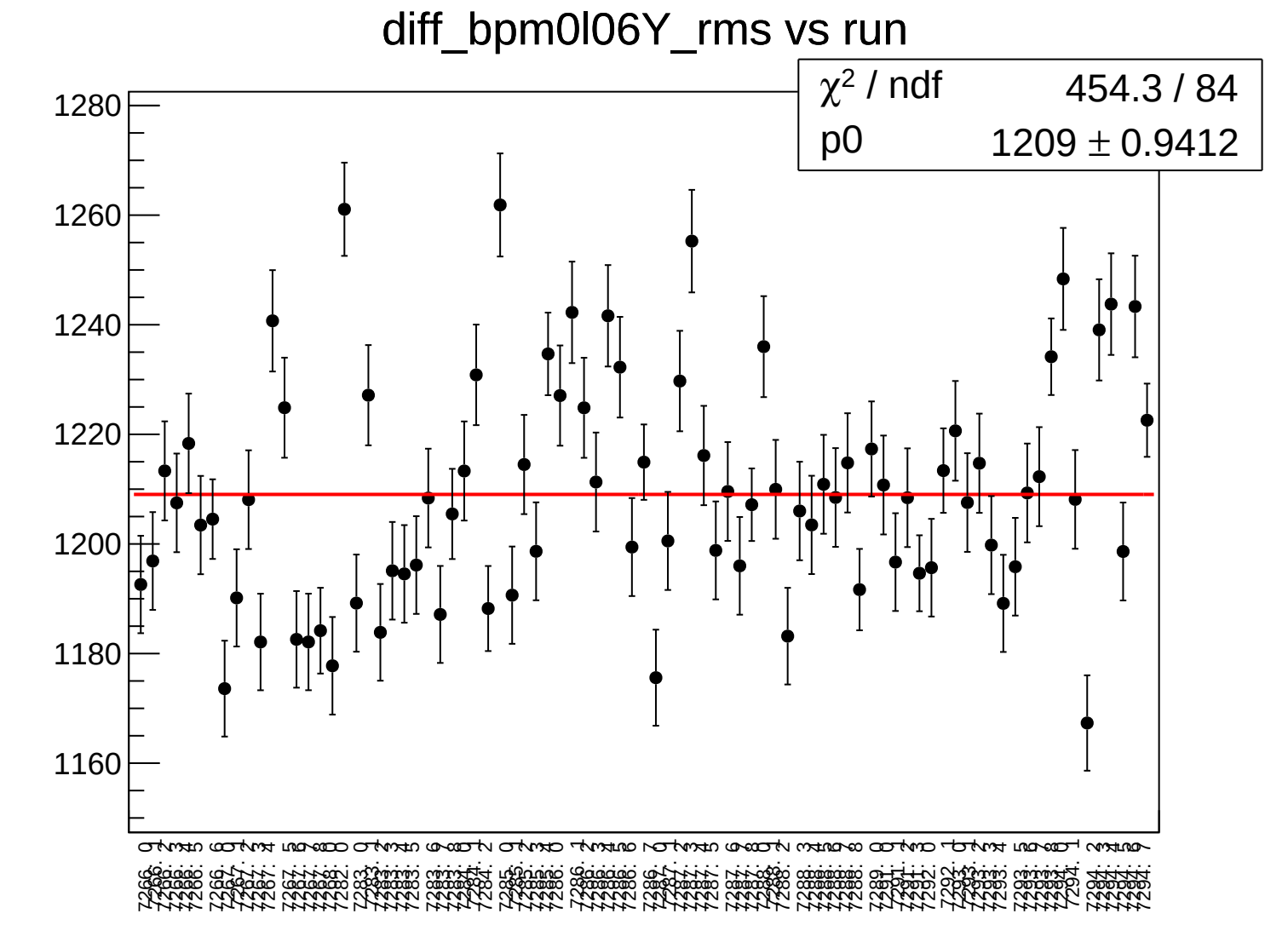

diff_bpm0l06X_mean vs run
χ^2 / ndf 80.4 / 84
p0 −6.146 ± 7.152
200
100
0
−100
−200
pull
Entries 85
Mean 91.65
Std Dev 65.7
2
1
0
−1
−2

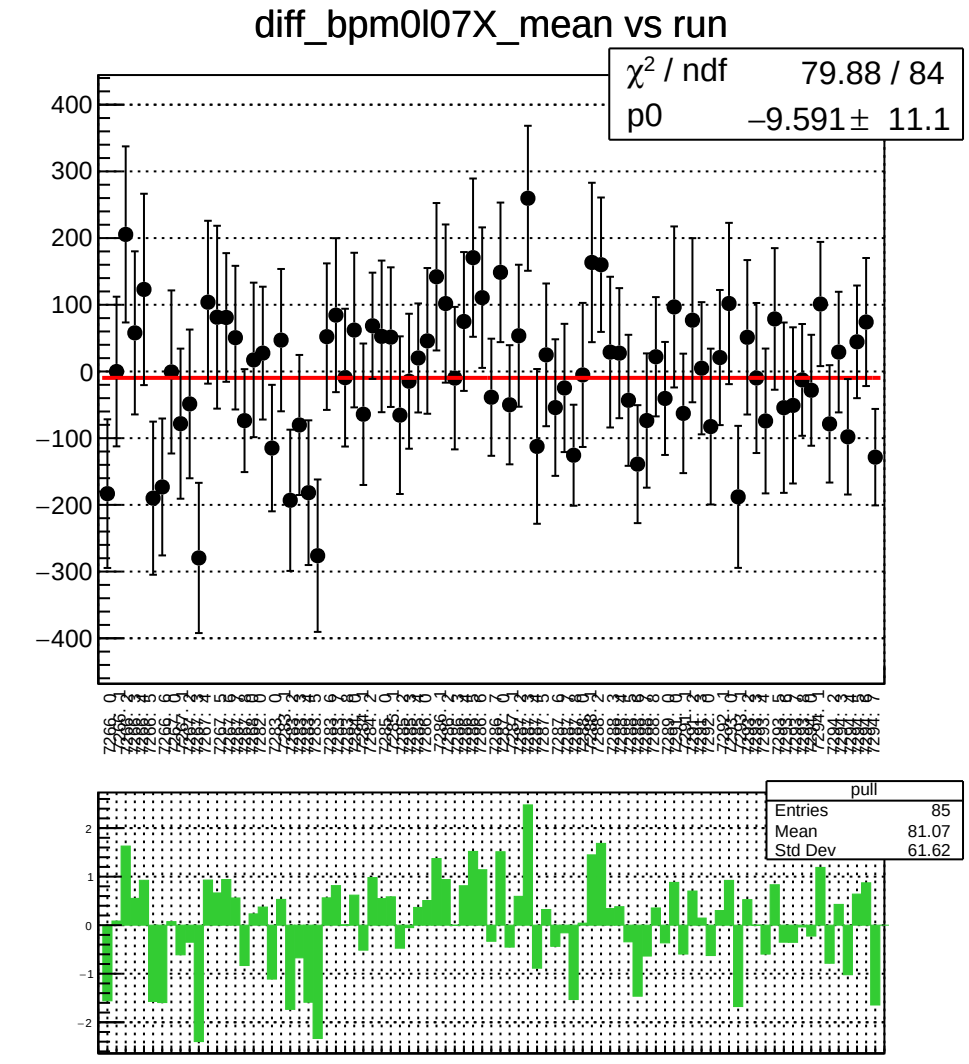

pull1D
Entries 85
Mean 0.03593
Std Dev 0.9719
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

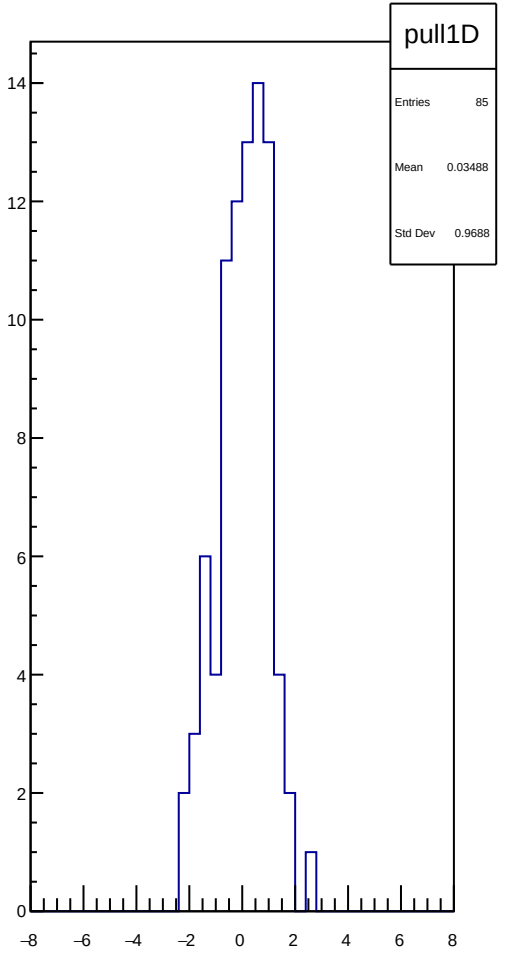

diff_bpm0l06X_rms vs run
χ^2 / ndf 2.06e+04 / 84
p0 6457 ± 5.057
9000
8500
8000
7500
7000
6500
6000
5500
5000

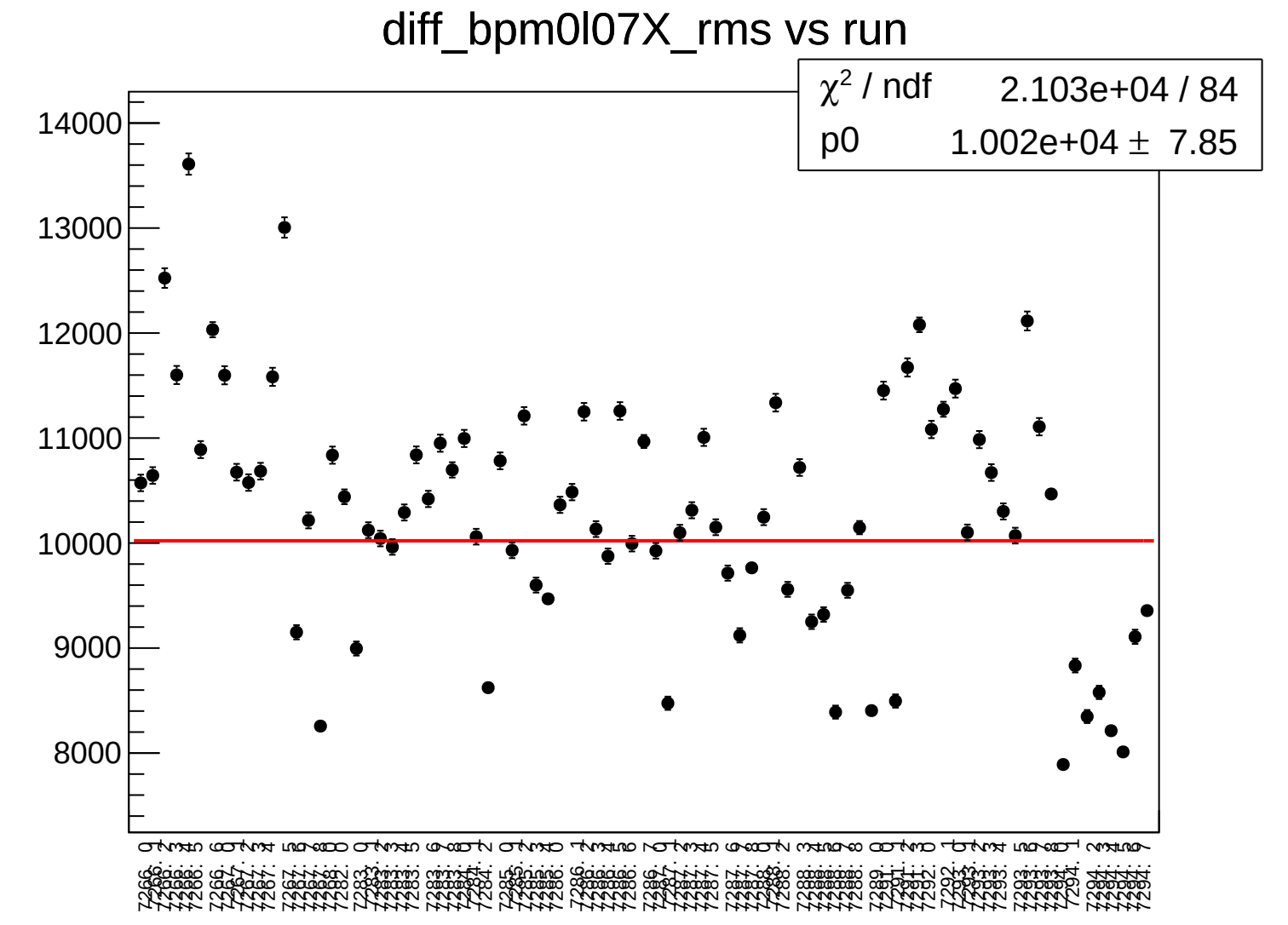

diff_bpm0l06Y_mean vs run
χ² / ndf 79.67 / 84
p0 11.1 ± 1.331
pull
Entries 85
Mean −291.4
Std Dev 325.9

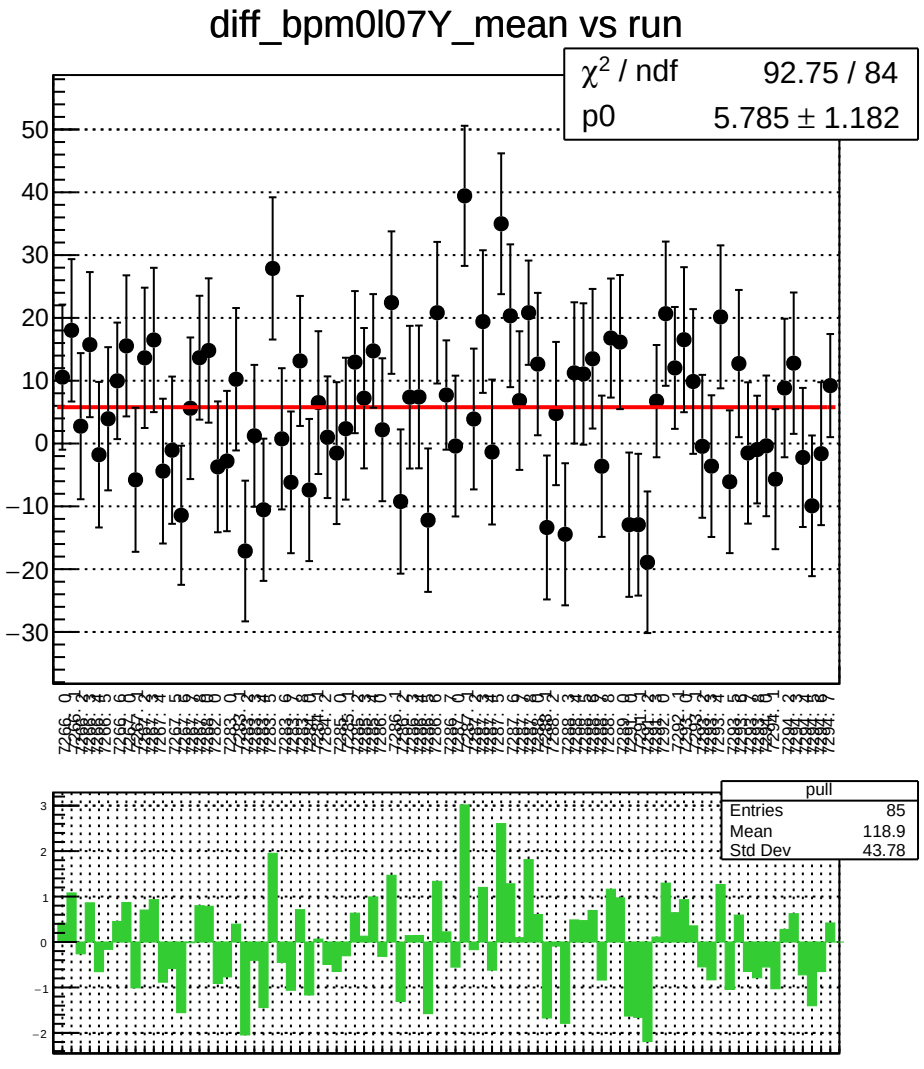

pull1D
Entries 85
Mean −0.00514
Std Dev 0.9681

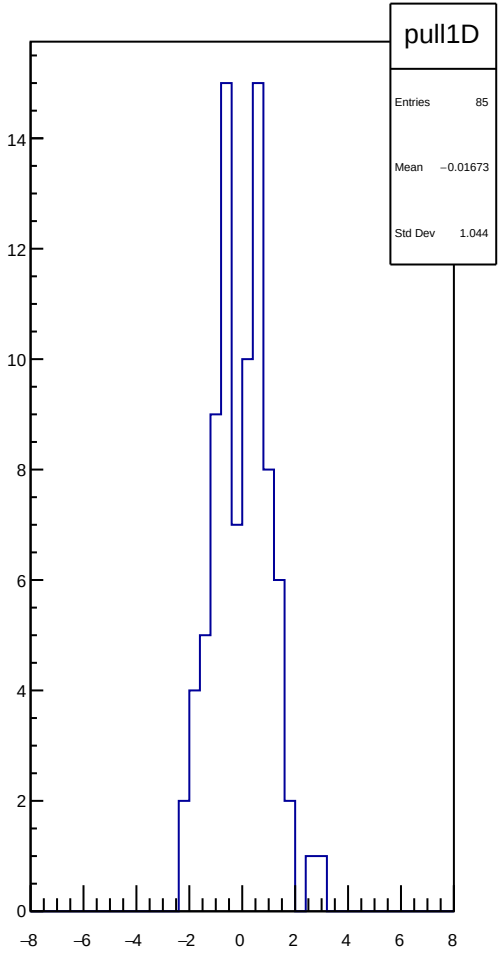

diff_bpm0l06Y_rms vs run
χ² / ndf 454.3 / 84
p0 1209 ± 0.9412
1280
1260
1240
1220
1200
1180
1160

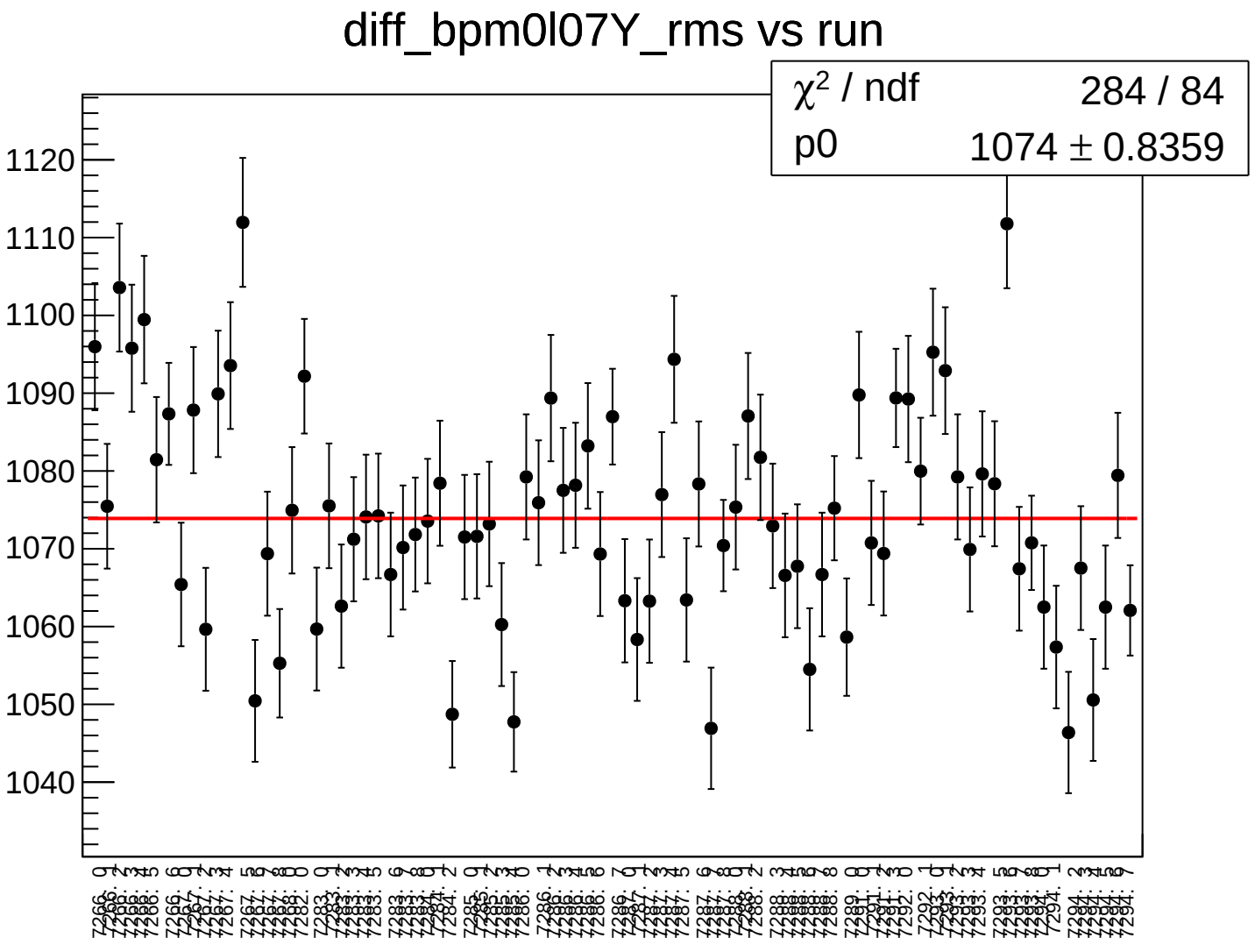

diff_bpm0l07X_mean vs run
χ² / ndf 79.88 / 84
p0 −9.591 ± 11.1
pull
Entries 85
Mean 81.07
Std Dev 61.62

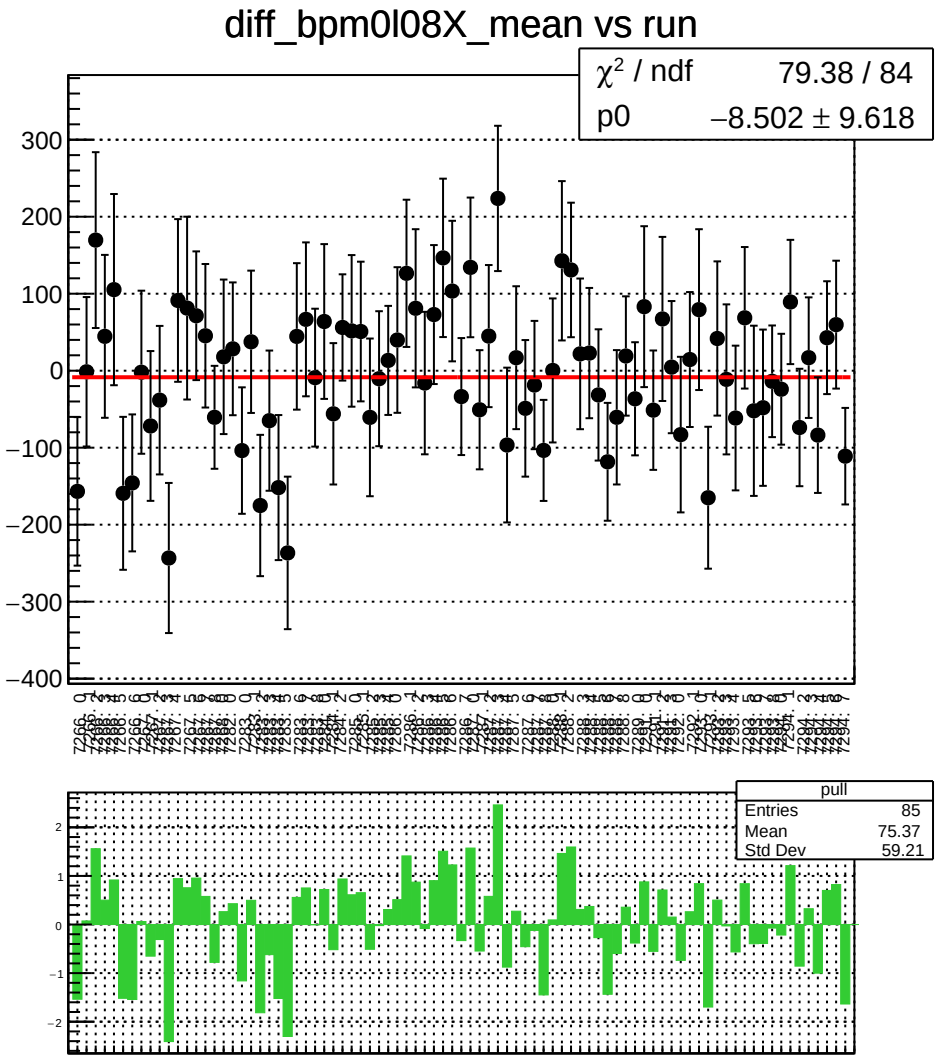

pull1D
Entries 85
Mean 0.03488
Std Dev 0.9688

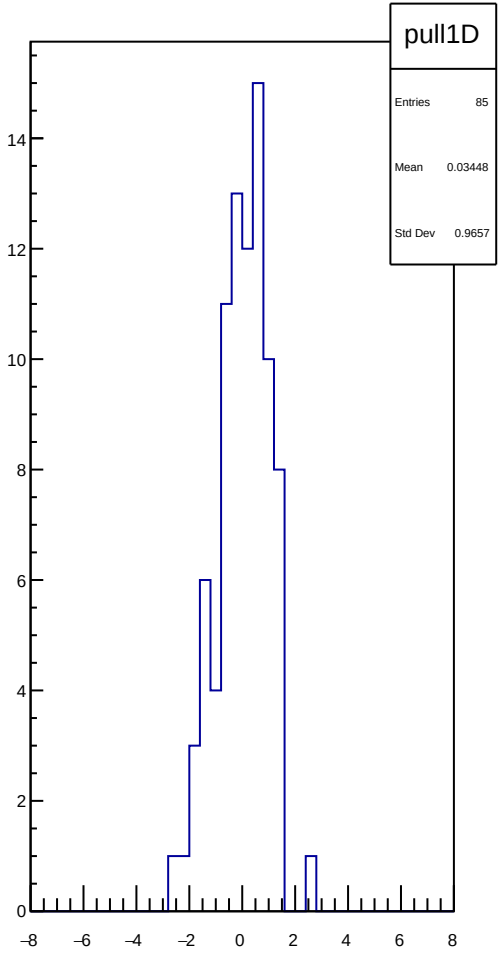

diff_bpm0l07X_rms vs run
χ² / ndf 2.103e+04 / 84
p0 1.002e+04 ± 7.85
14000
13000
12000
11000
10000
9000
8000

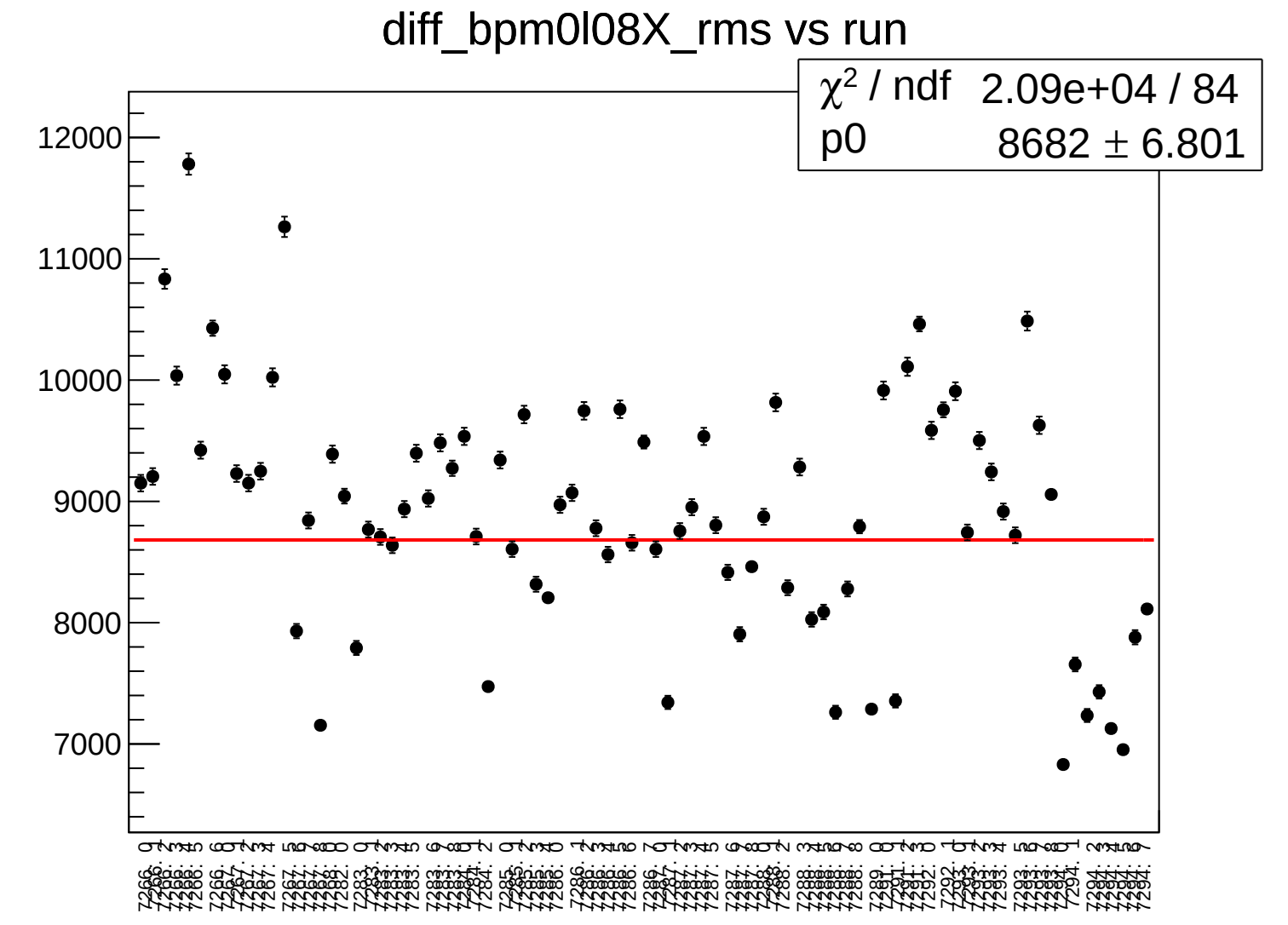

diff_bpm0l07Y_mean vs run
χ² / ndf 92.75 / 84
p0 5.785 ± 1.182
pull
Entries 85
Mean 118.9
Std Dev 43.78

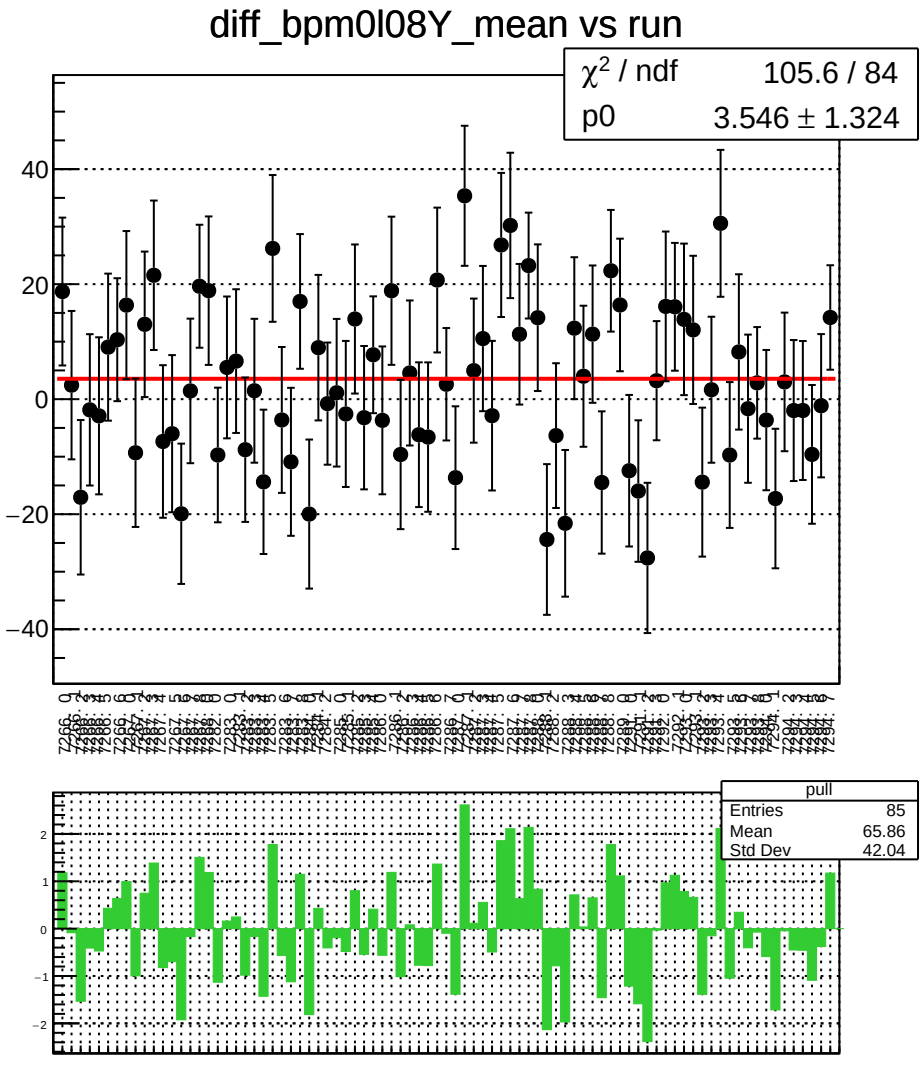

pull1D
Entries 85
Mean −0.01673
Std Dev 1.044

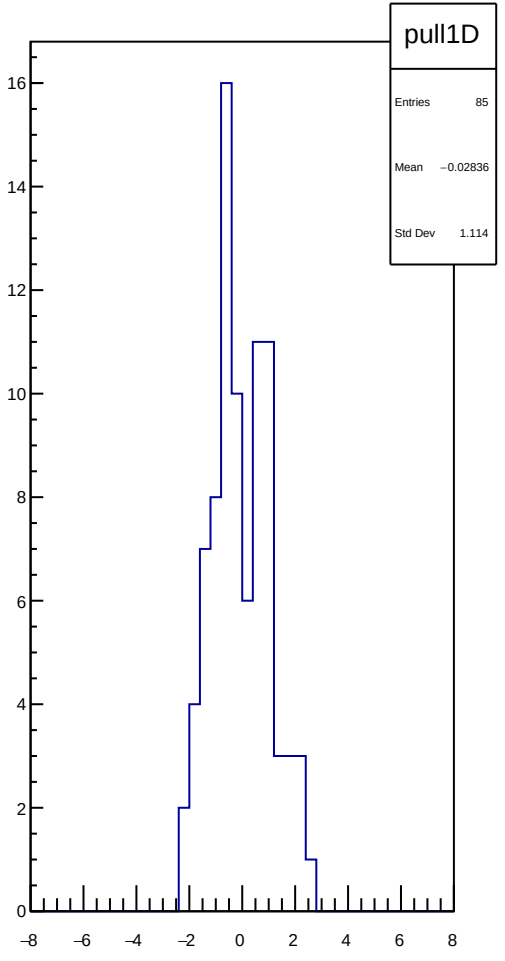

diff_bpm0l07Y_rms vs run
χ² / ndf 284 / 84
p0 1074 ± 0.8359
1120
1110
1100
1090
1080
1070
1060
1050
1040

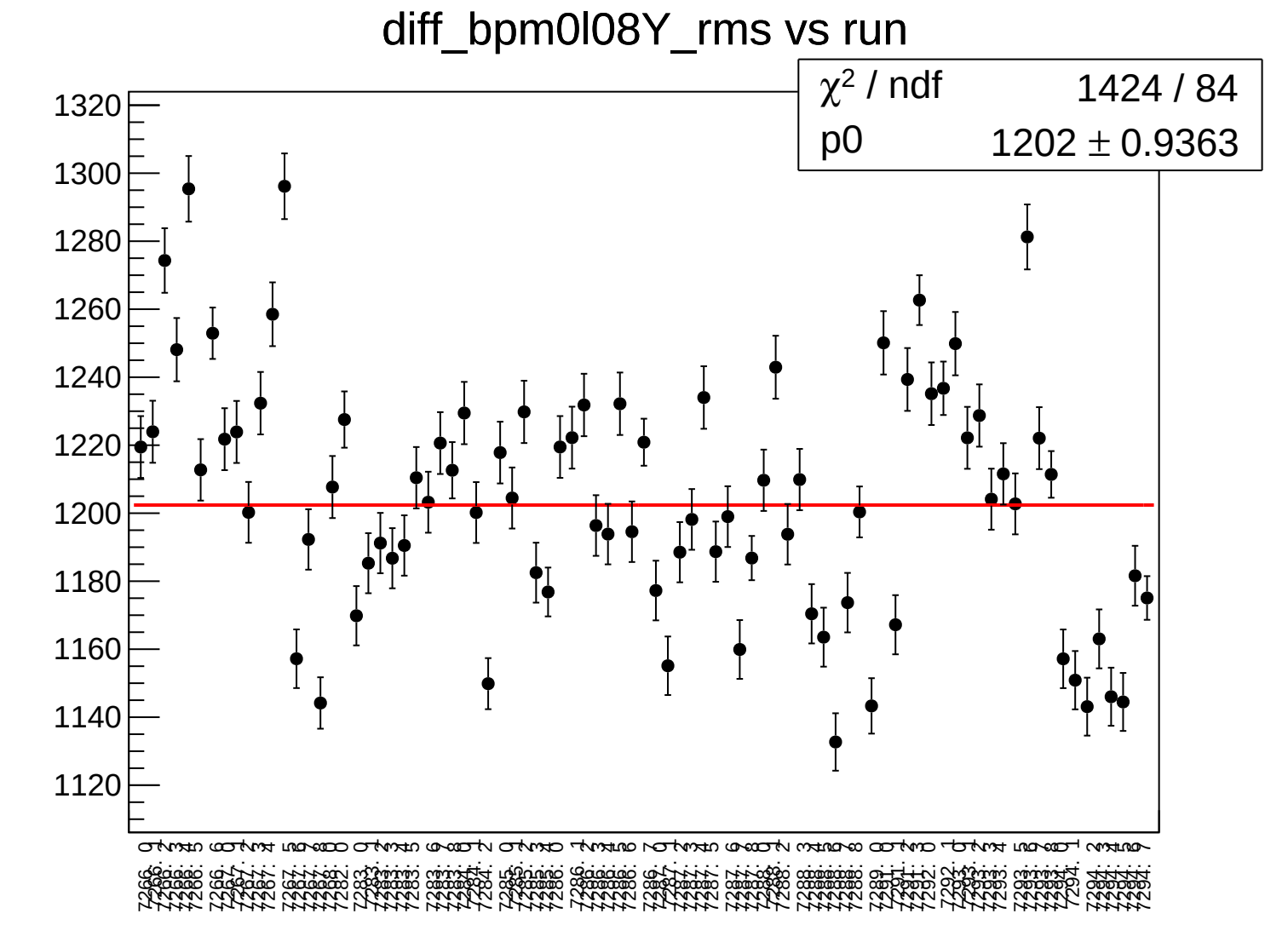

diff_bpm0l08X_mean vs run
χ² / ndf 79.38 / 84
p0 −8.502 ± 9.618
pull
Entries 85
Mean 75.37
Std Dev 59.21

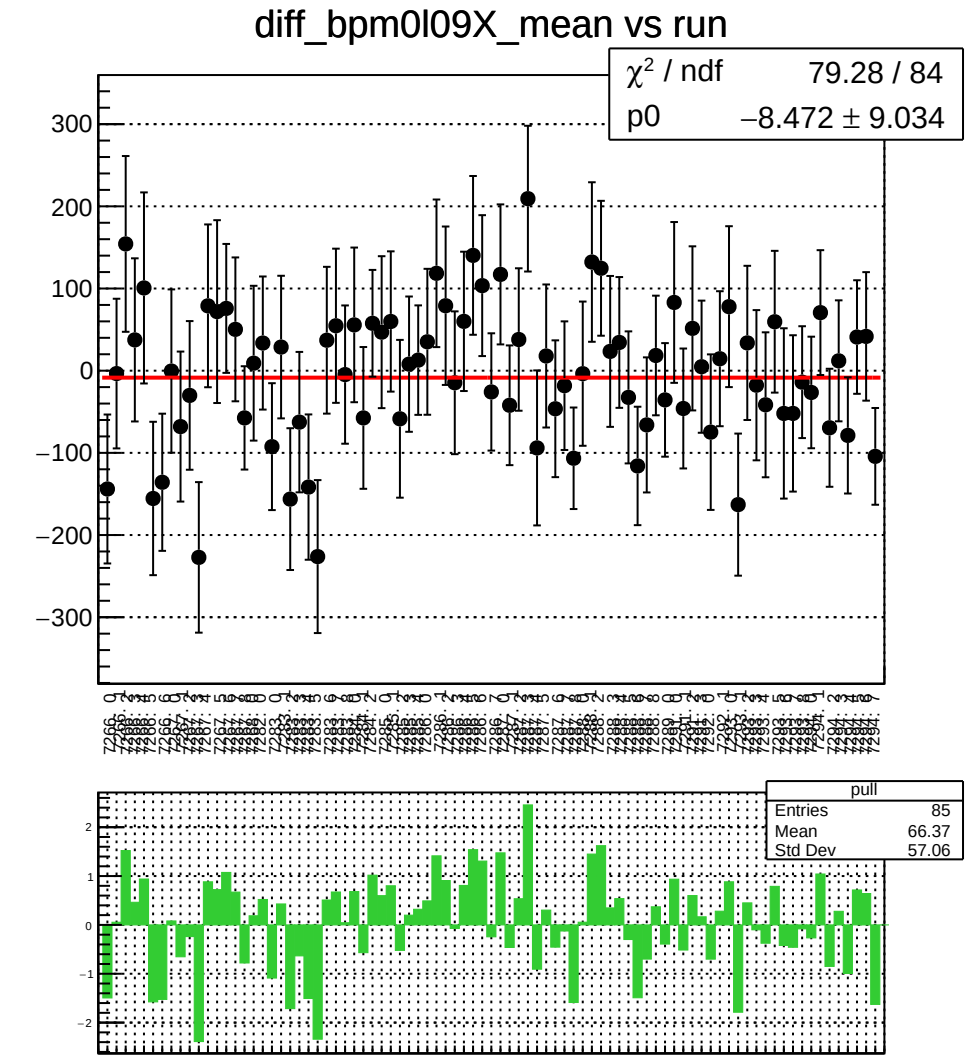

pull1D
Entries 85
Mean 0.03448
Std Dev 0.9657

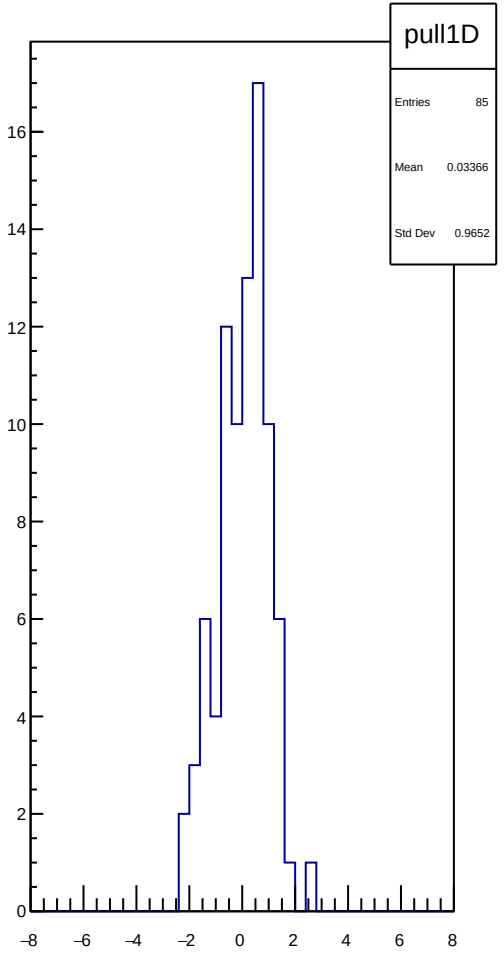

diff_bpm0l08X_rms vs run
χ² / ndf 2.09e+04 / 84
p0 8682 ± 6.801
12000
11000
10000
9000
8000
7000

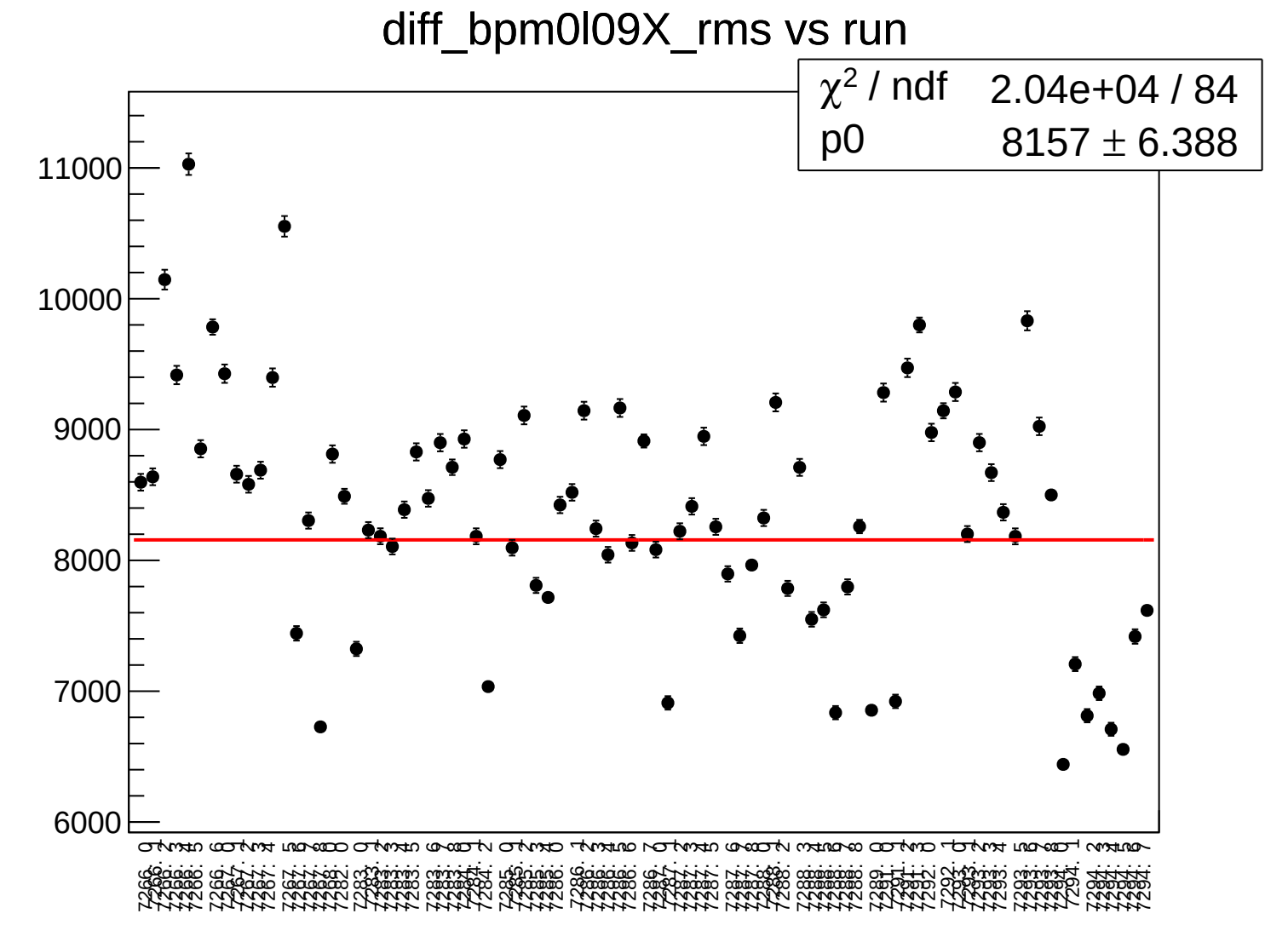

diff_bpm0l08Y_mean vs run
χ^2 / ndf 105.6 / 84
p0 3.546 ± 1.324
pull
Entries 85
Mean 65.86
Std Dev 42.04

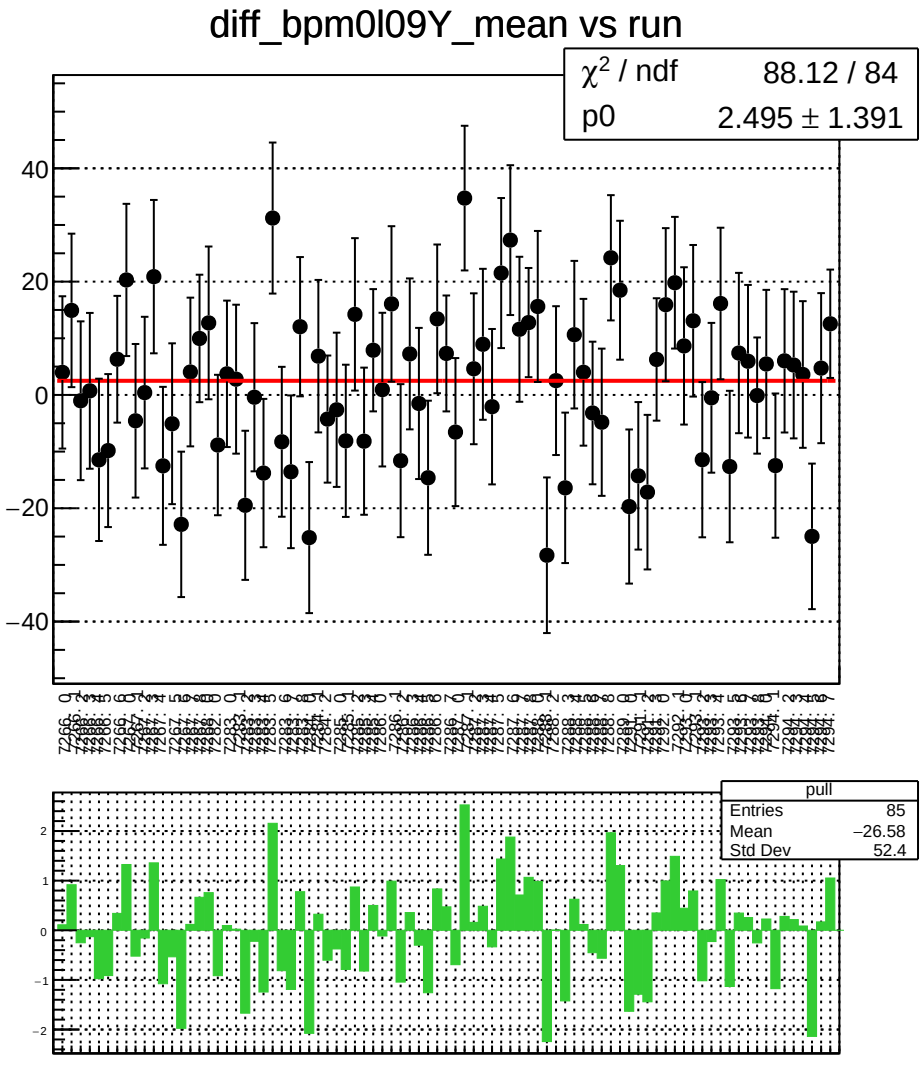

pull1D
Entries 85
Mean −0.02836
Std Dev 1.114

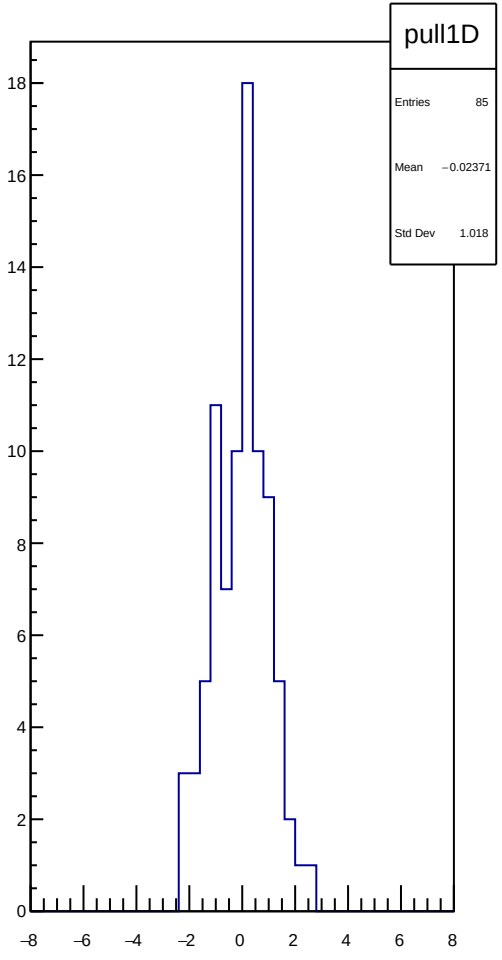

diff_bpm0l08Y_rms vs run
χ² / ndf 1424 / 84
p0 1202 ± 0.9363
1320
1300
1280
1260
1240
1220
1200
1180
1160
1140
1120

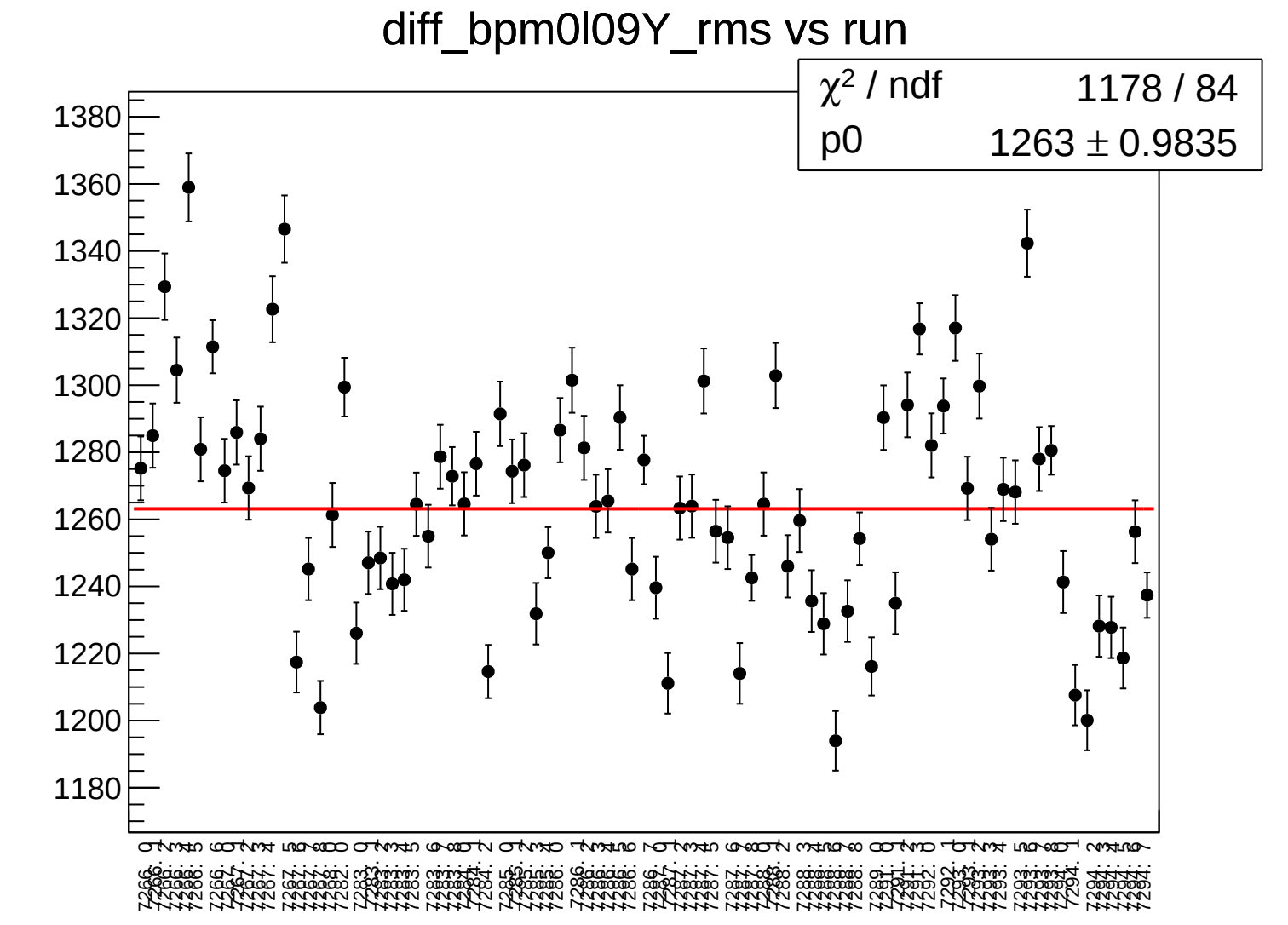

diff_bpm0l09X_mean vs run
χ² / ndf 79.28 / 84
p0 −8.472 ± 9.034
pull
Entries 85
Mean 66.37
Std Dev 57.06

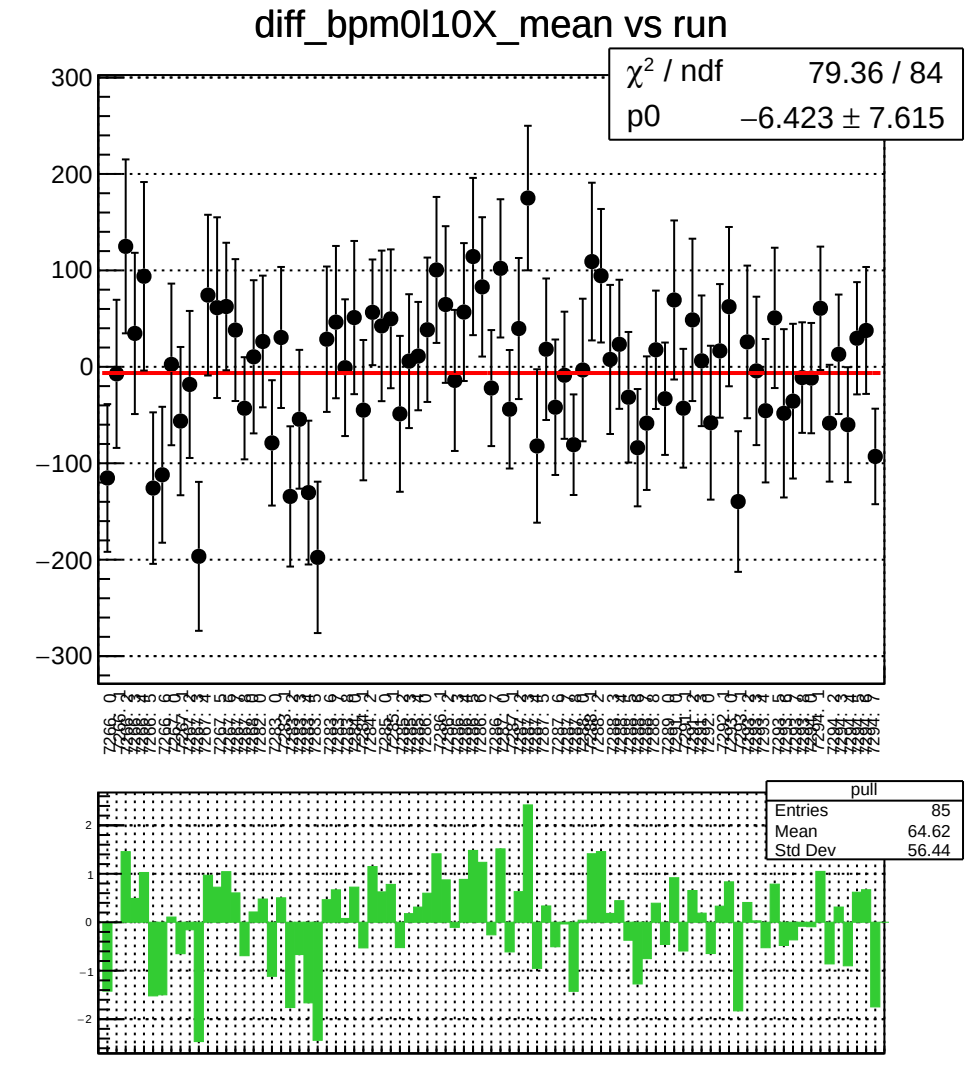

pull1D
Entries 85
Mean 0.03366
Std Dev 0.9652

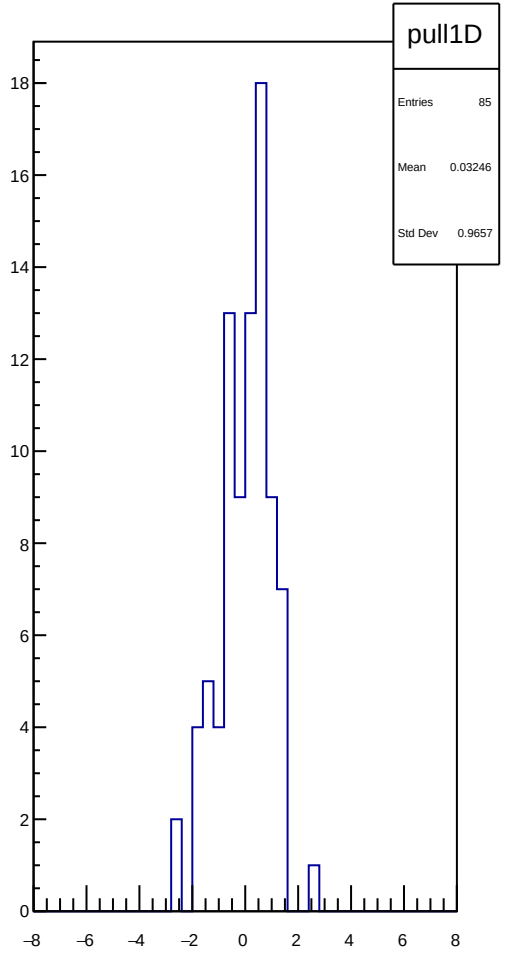

diff_bpm0l09X_rms vs run
χ² / ndf 2.04e+04 / 84
p0 8157 ± 6.388
11000
10000
9000
8000
7000
6000

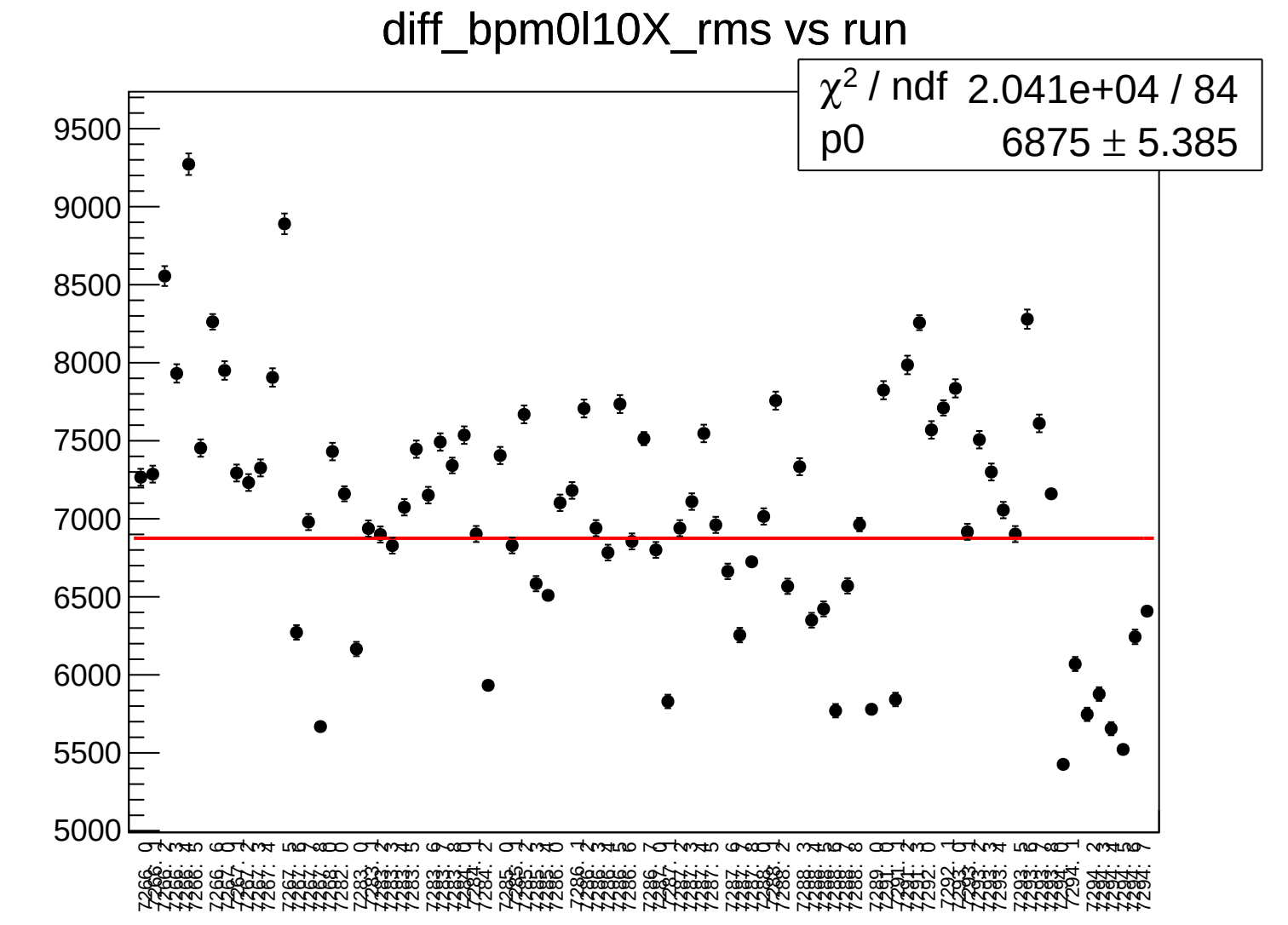

diff_bpm0l09Y_mean vs run
χ² / ndf 88.12 / 84
p0 2.495 ± 1.391
pull
Entries 85
Mean −26.58
Std Dev 52.4

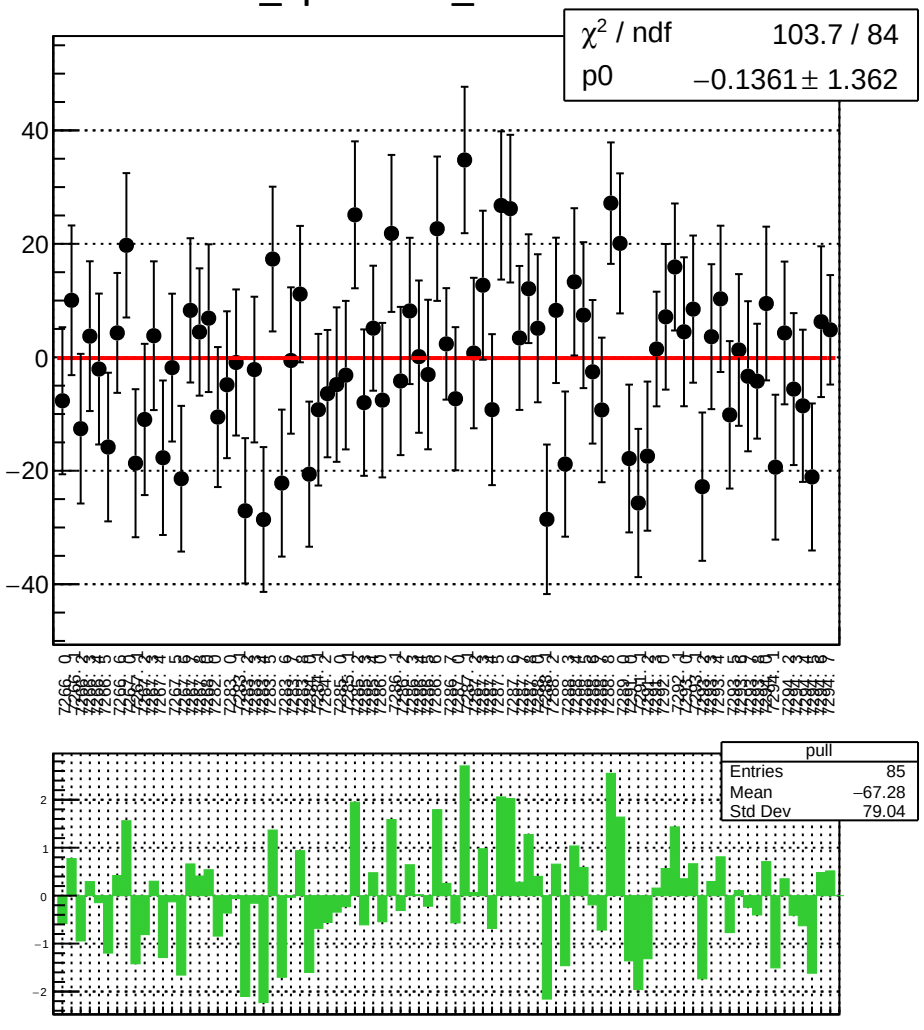

pull1D
Entries 85
Mean −0.02371
Std Dev 1.018

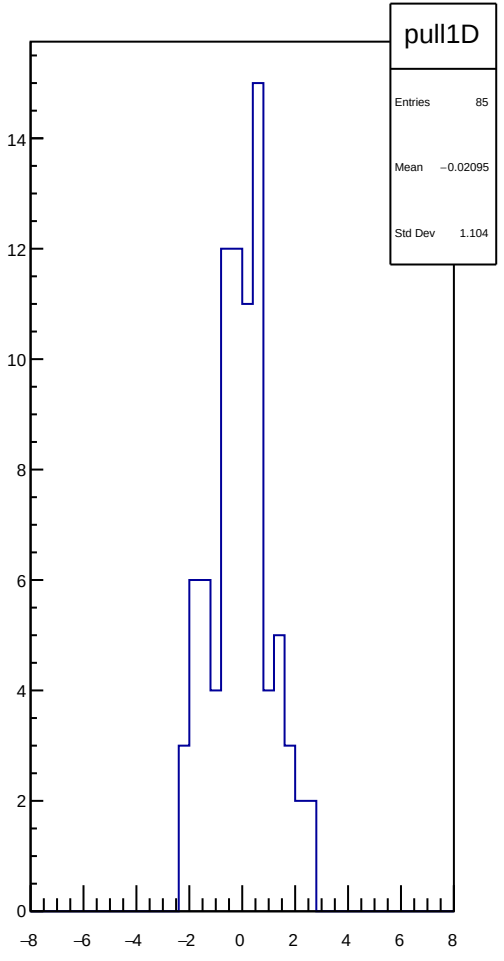

diff_bpm0l09Y_rms vs run
χ² / ndf 1178 / 84
p0 1263 ± 0.9835
1380
1360
1340
1320
1300
1280
1260
1240
1220
1200
1180

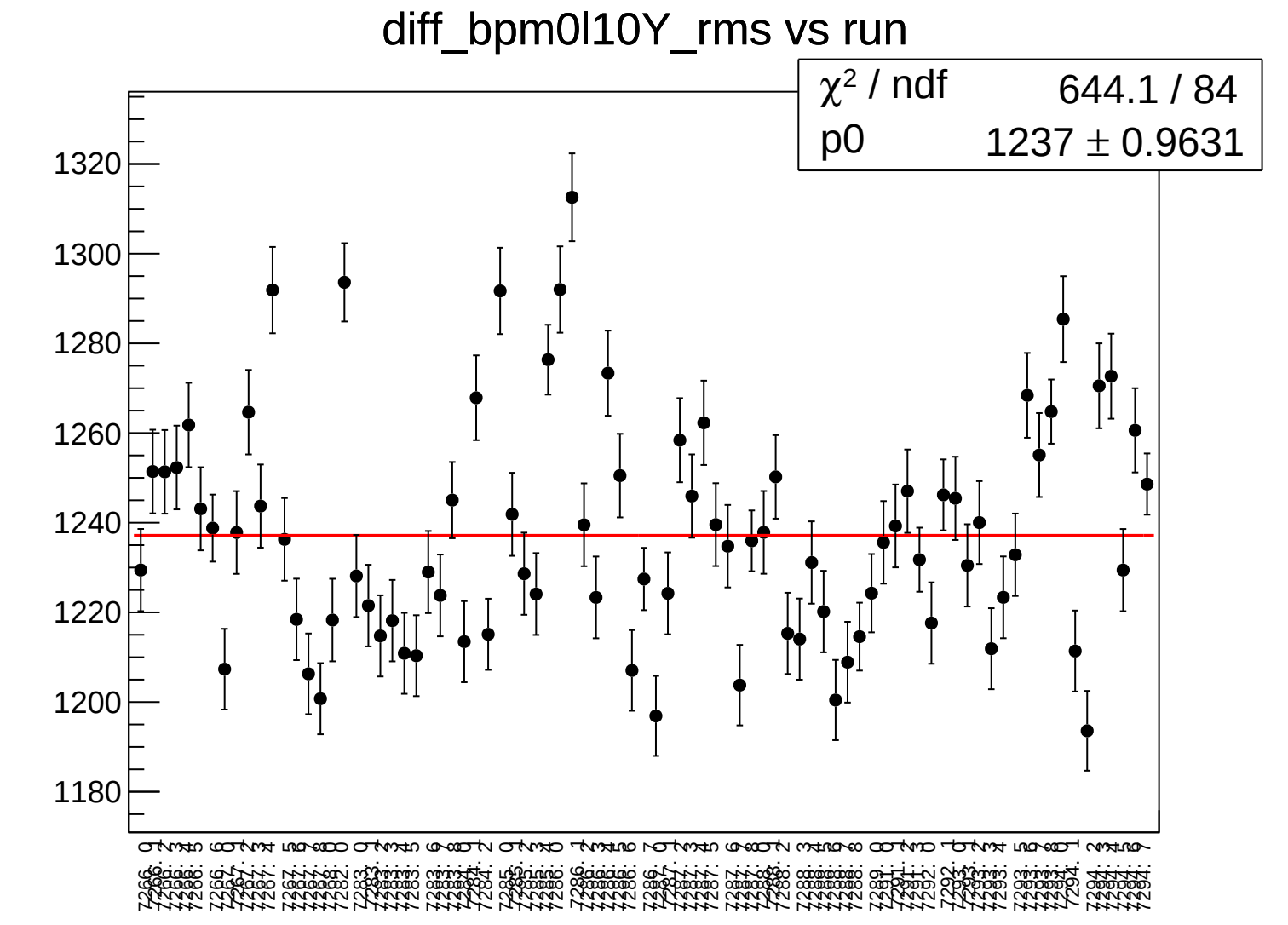

diff_bpm0l10X_mean vs run
χ² / ndf 79.36 / 84
p0 −6.423 ± 7.615
pull
Entries 85
Mean 64.62
Std Dev 56.44

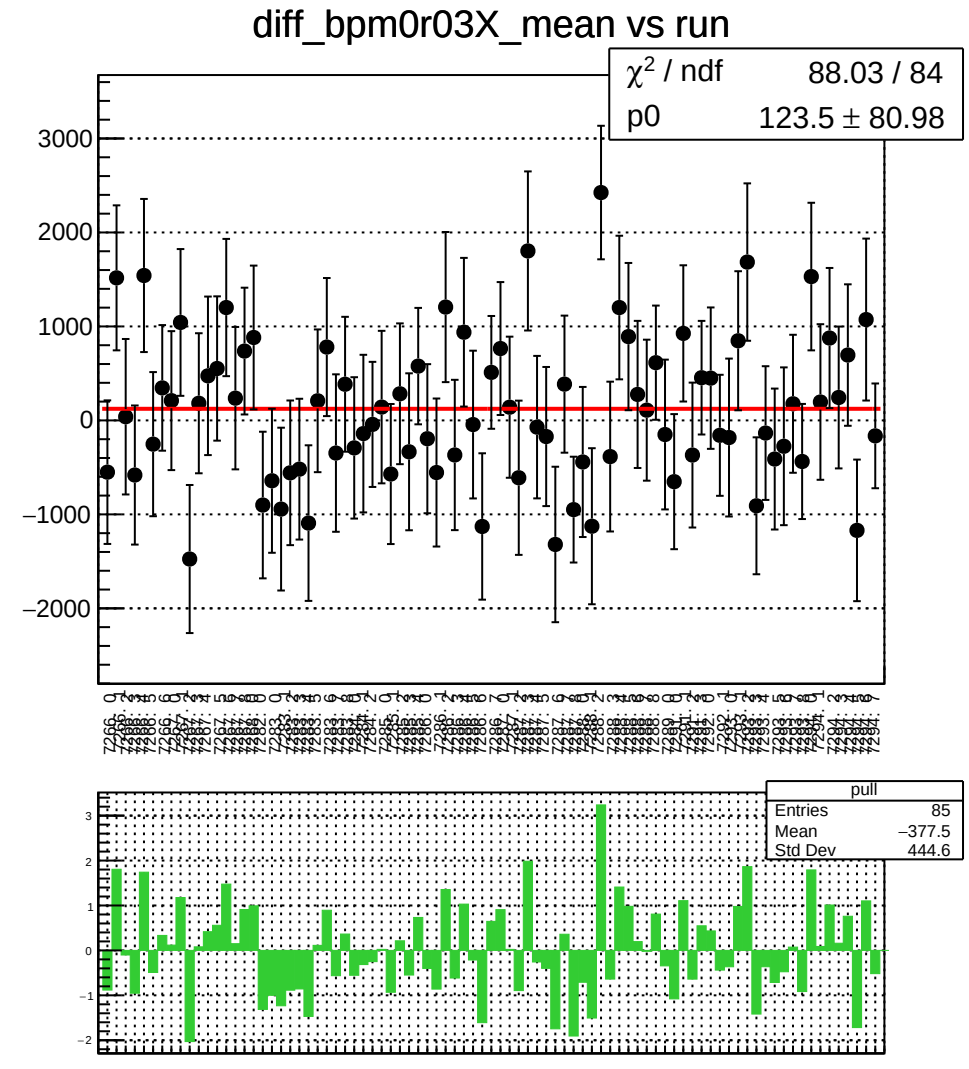

pull1D
Entries 85
Mean 0.03246
Std Dev 0.9657

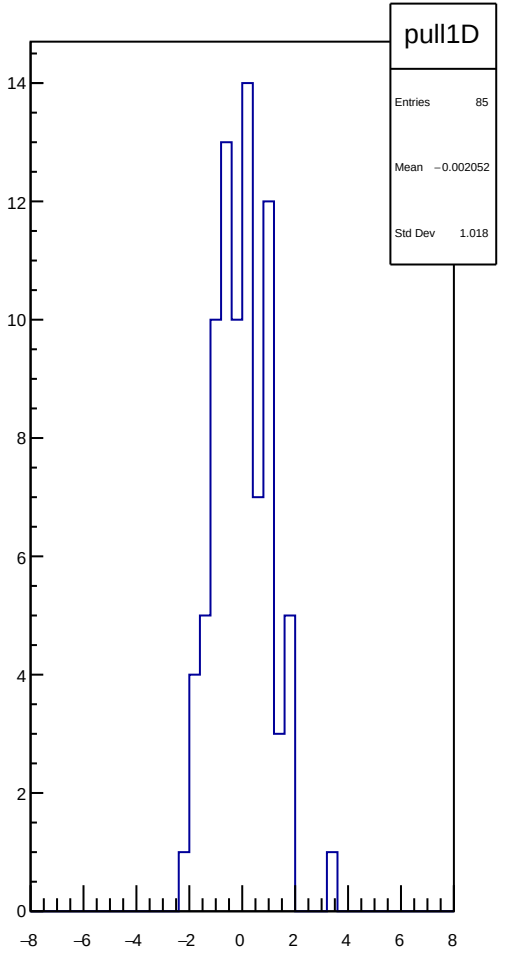

diff_bpm0l10X_rms vs run
χ² / ndf 2.041e+04 / 84
p0 6875 ± 5.385
9500
9000
8500
8000
7500
7000
6500
6000
5500
5000

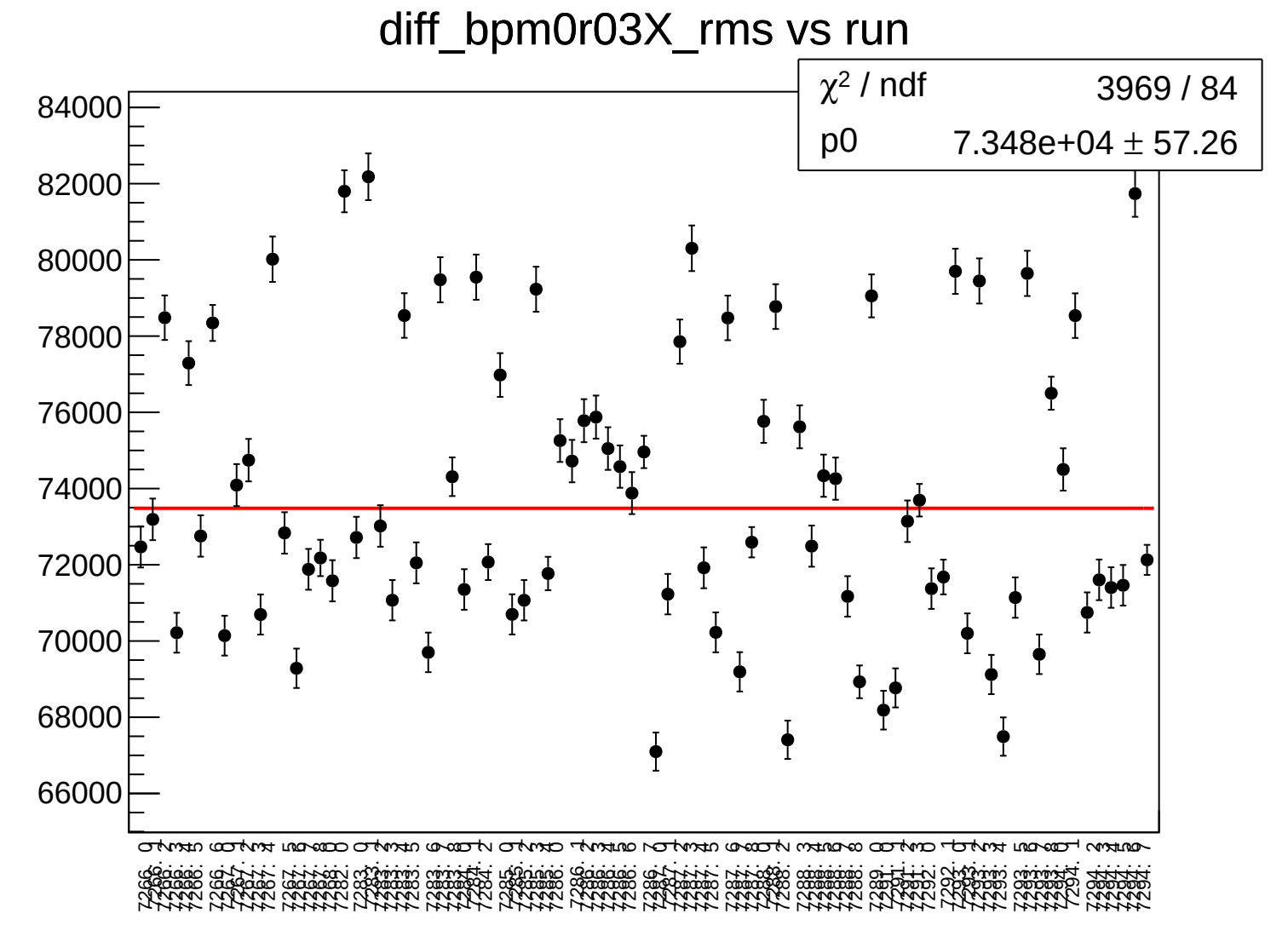

diff_bpm0l10Y_mean vs run
χ² / ndf 103.7 / 84
p0 −0.1361 ± 1.362
pull
Entries 85
Mean −67.28
Std Dev 79.04

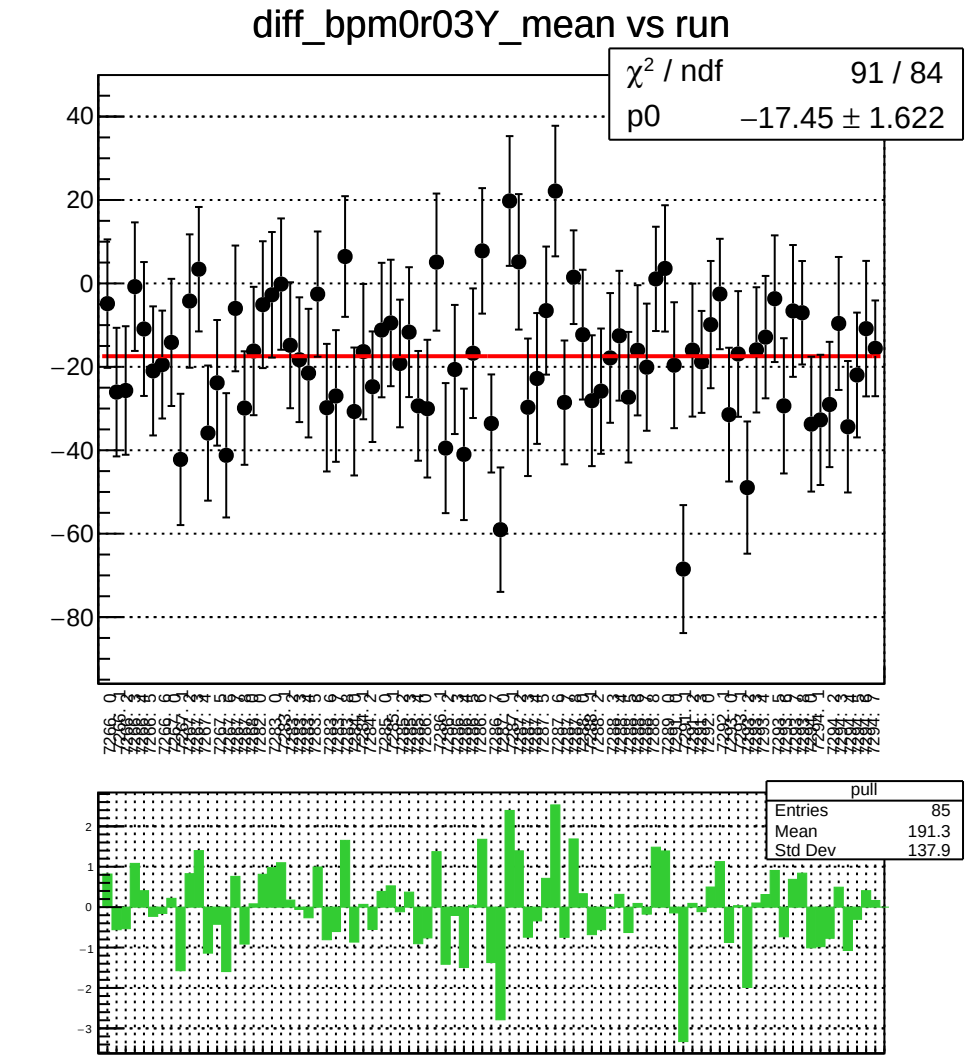

pull1D
Entries 85
Mean −0.02095
Std Dev 1.104

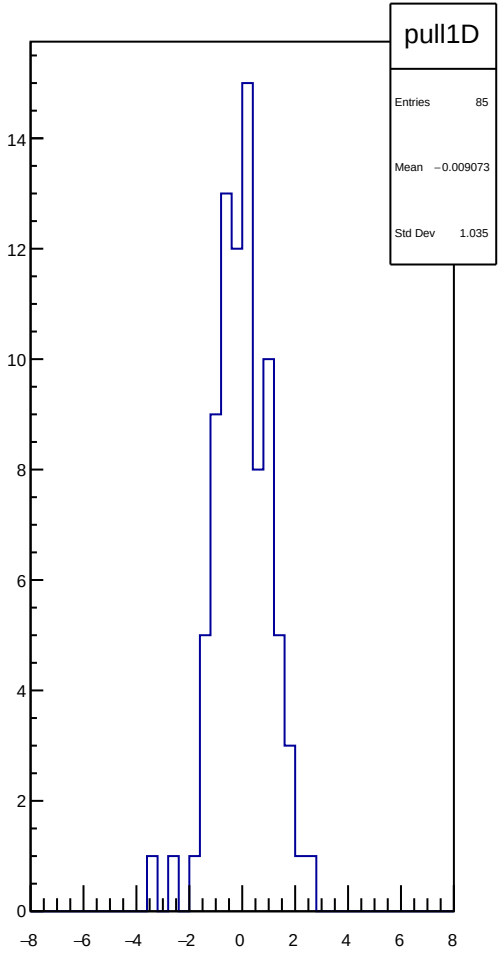

diff_bpm0l10Y_rms vs run
χ² / ndf 644.1 / 84
p0 1237 ± 0.9631
1320
1300
1280
1260
1240
1220
1200
1180

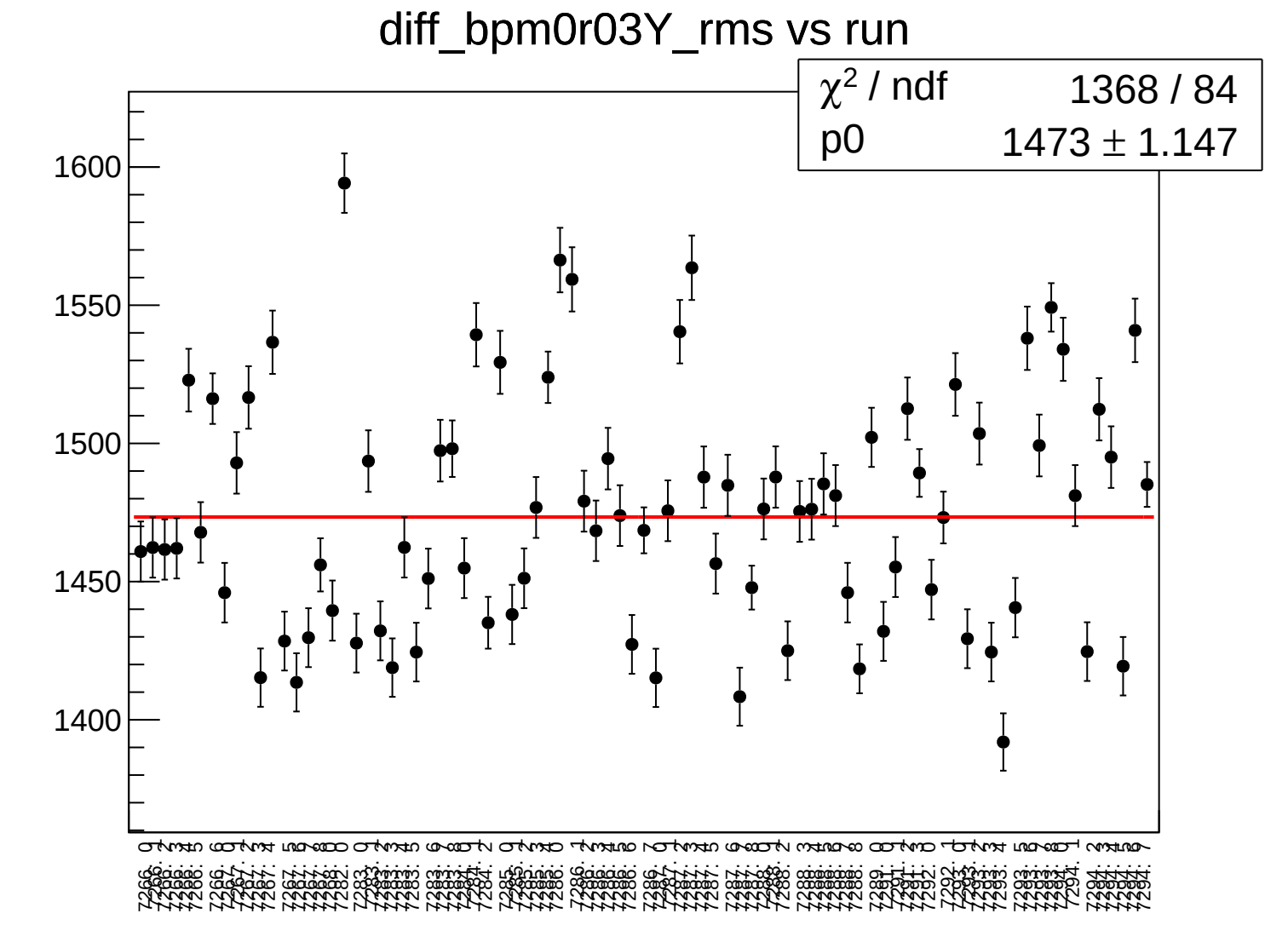

diff_bpm0r03X_mean vs run
χ^2 / ndf 88.03 / 84
p0 123.5 ± 80.98
3000
2000
1000
0
−1000
−2000
pull
Entries 85
Mean −377.5
Std Dev 444.6
3
2
1
0
−1
−2

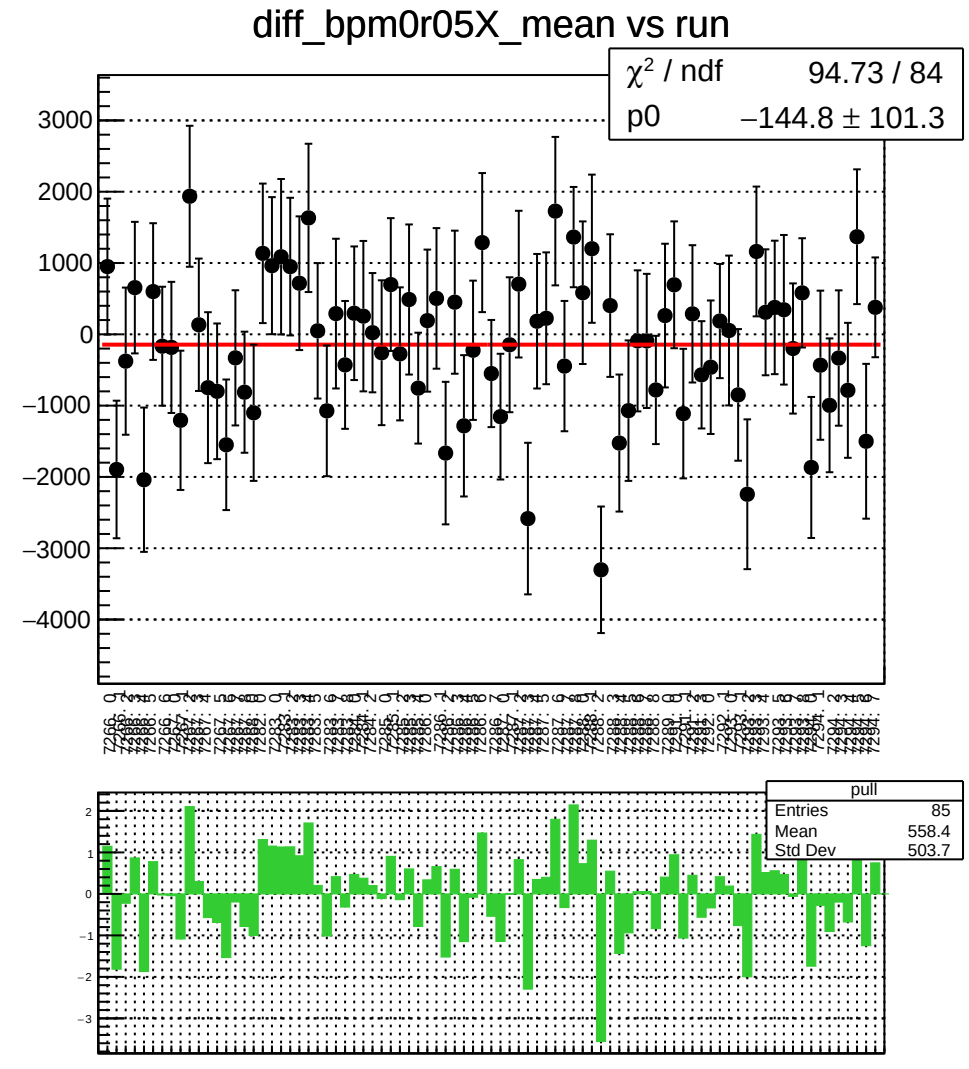

pull1D
Entries 85
Mean −0.002052
Std Dev 1.018
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

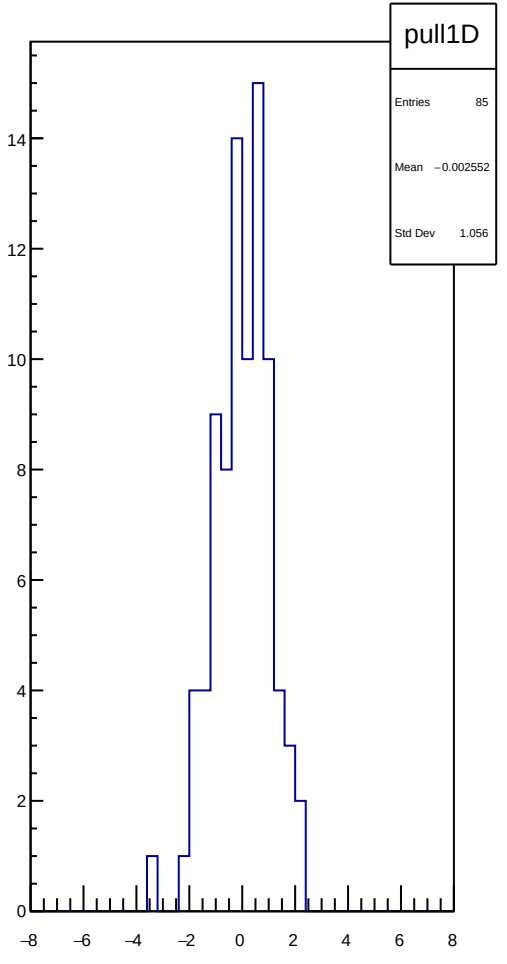

diff_bpm0r03X_rms vs run
χ² / ndf 3969 / 84
p0 7.348e+04 ± 57.26
84000
82000
80000
78000
76000
74000
72000
70000
68000
66000

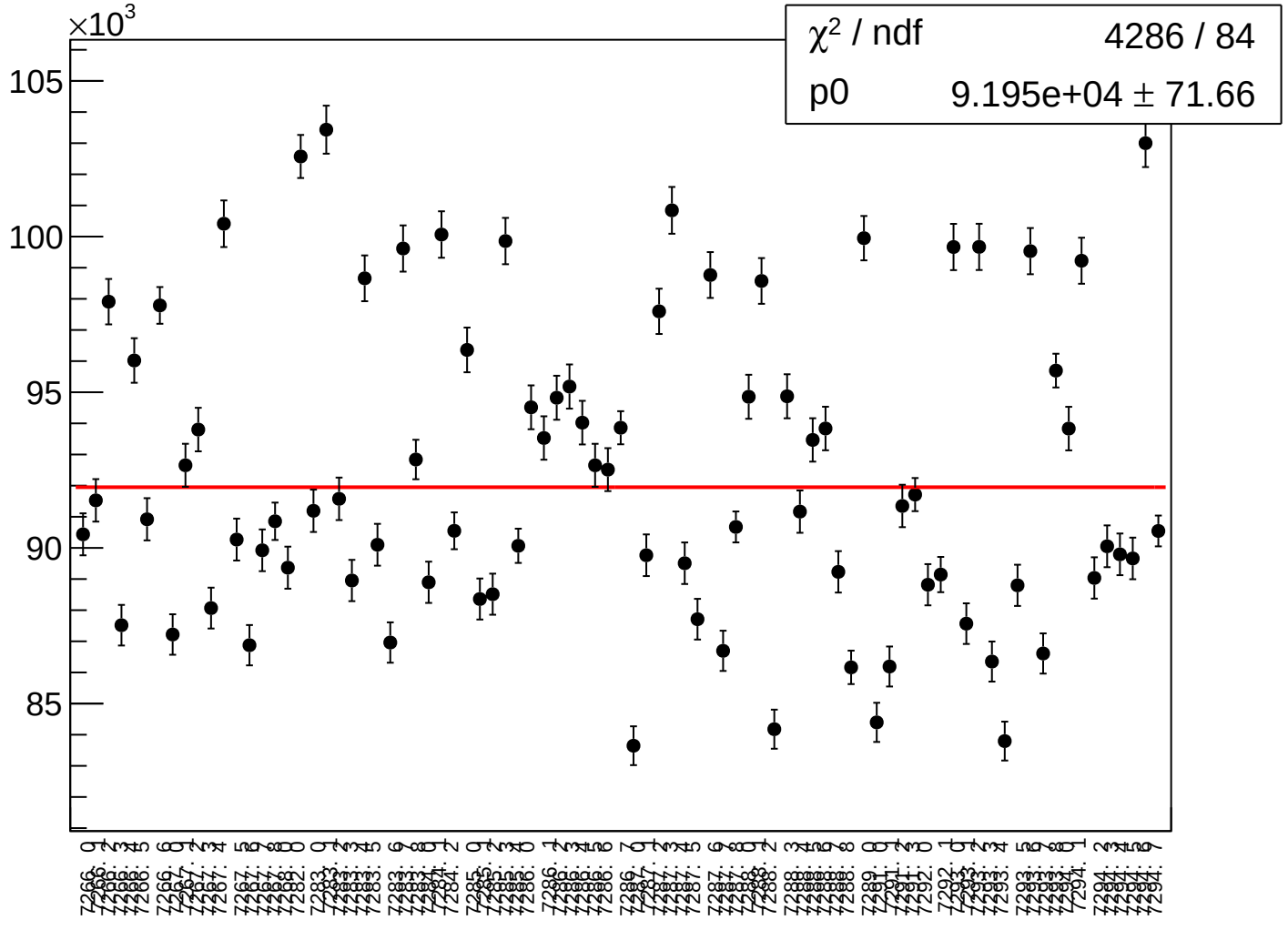

diff_bpm0r03Y_mean vs run
χ² / ndf 91 / 84
p0 −17.45 ± 1.622
pull
Entries 85
Mean 191.3
Std Dev 137.9

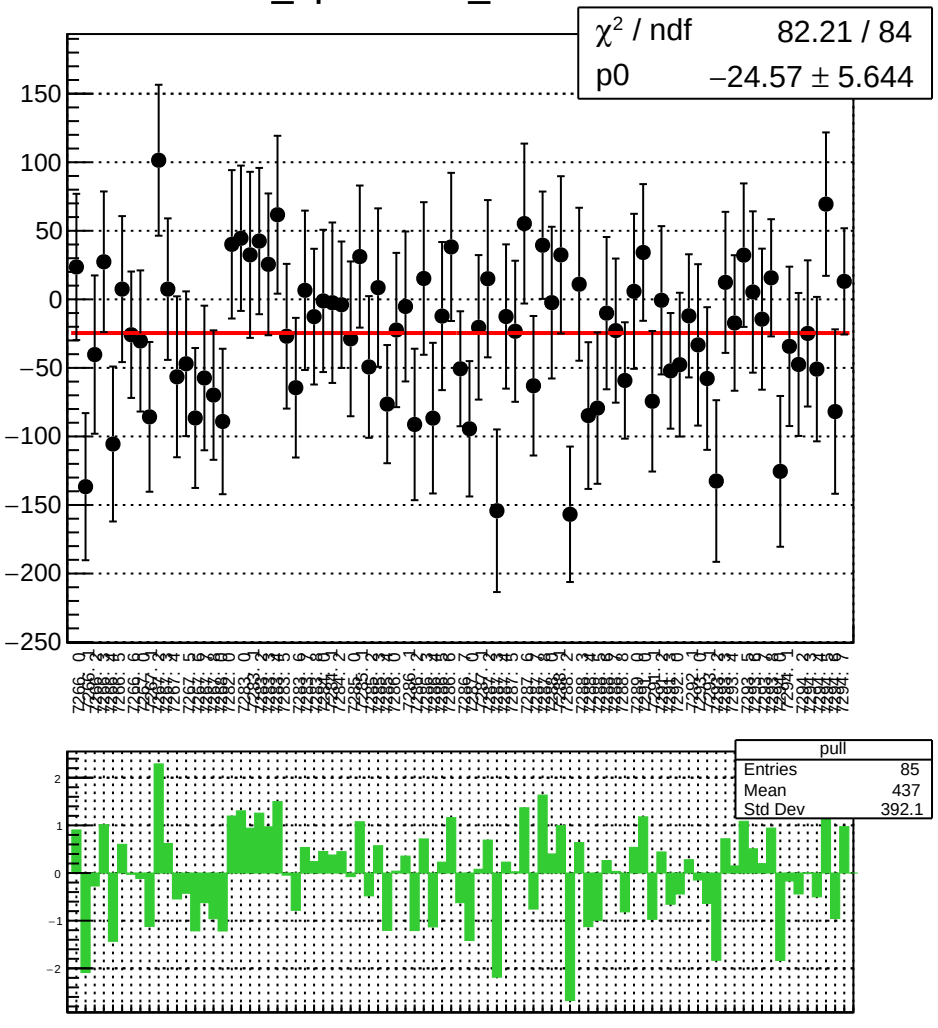

pull1D
Entries 85
Mean −0.009073
Std Dev 1.035

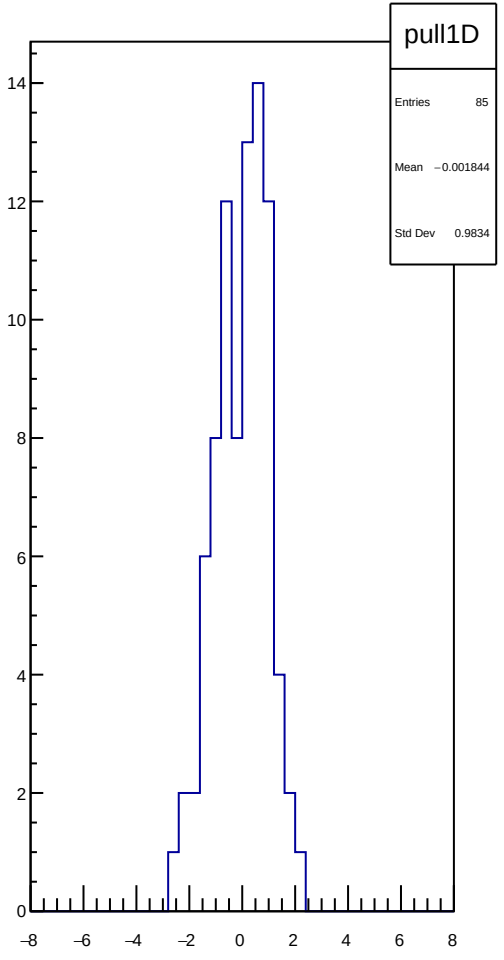

diff_bpm0r03Y_rms vs run
χ² / ndf 1368 / 84
p0 1473 ± 1.147
1600
1550
1500
1450
1400

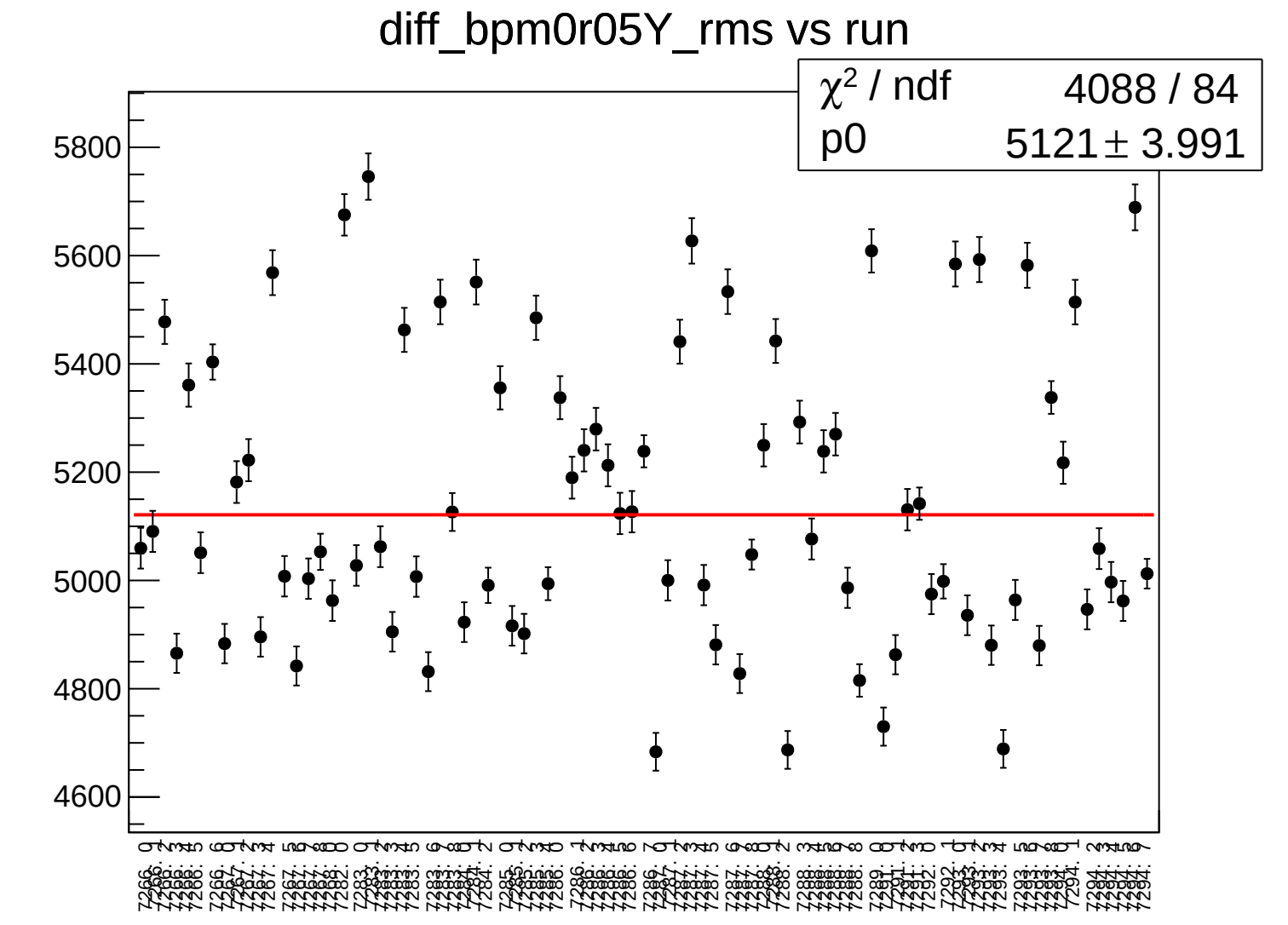

diff_bpm0r05X_mean vs run
χ² / ndf 94.73 / 84
p0 −144.8 ± 101.3
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 85
Mean 558.4
Std Dev 503.7
2
1
0
−1
−2
−3

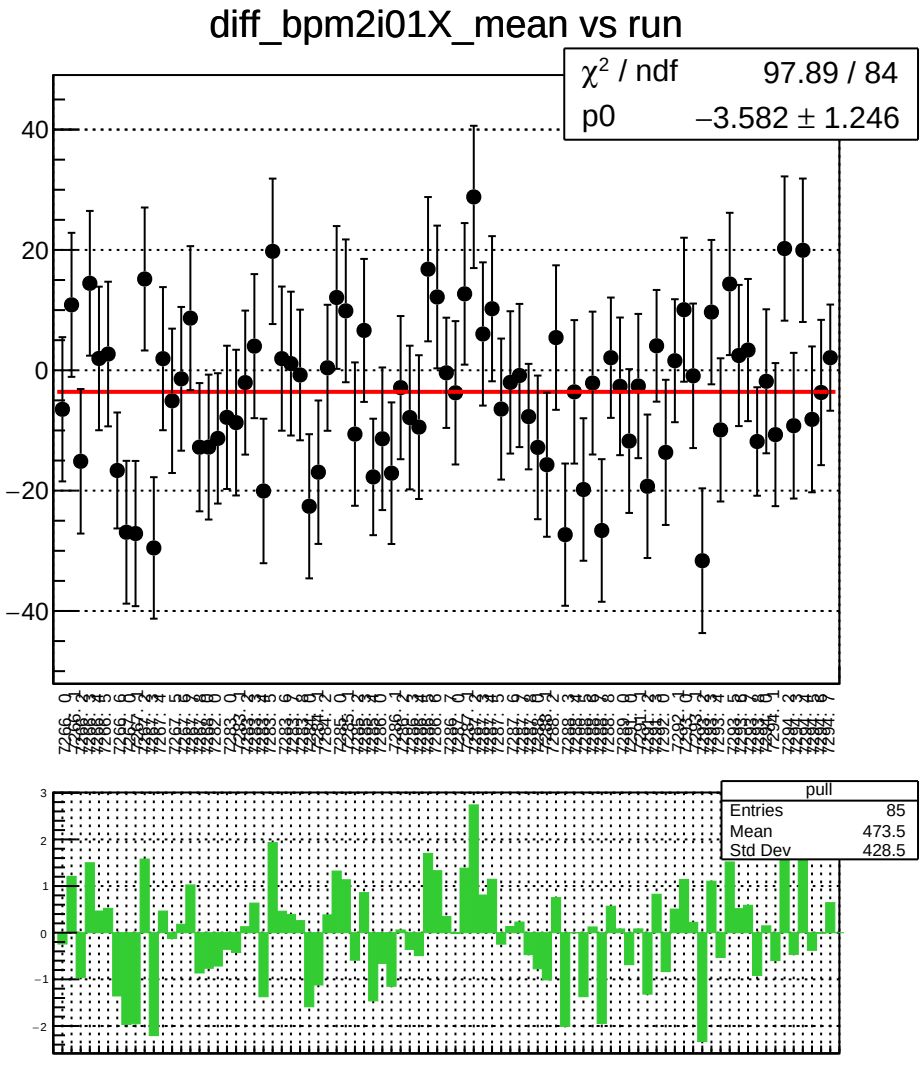

pull1D
Entries 85
Mean −0.002552
Std Dev 1.056
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

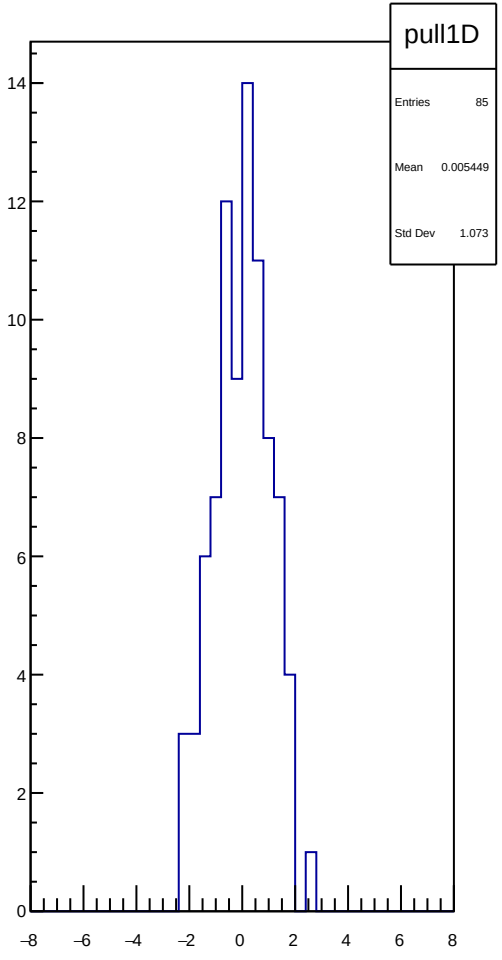

diff_bpm0r05X_rms vs run
×10^3
105
100
95
90
85
χ² / ndf 4286 / 84
p0 9.195e+04 ± 71.66

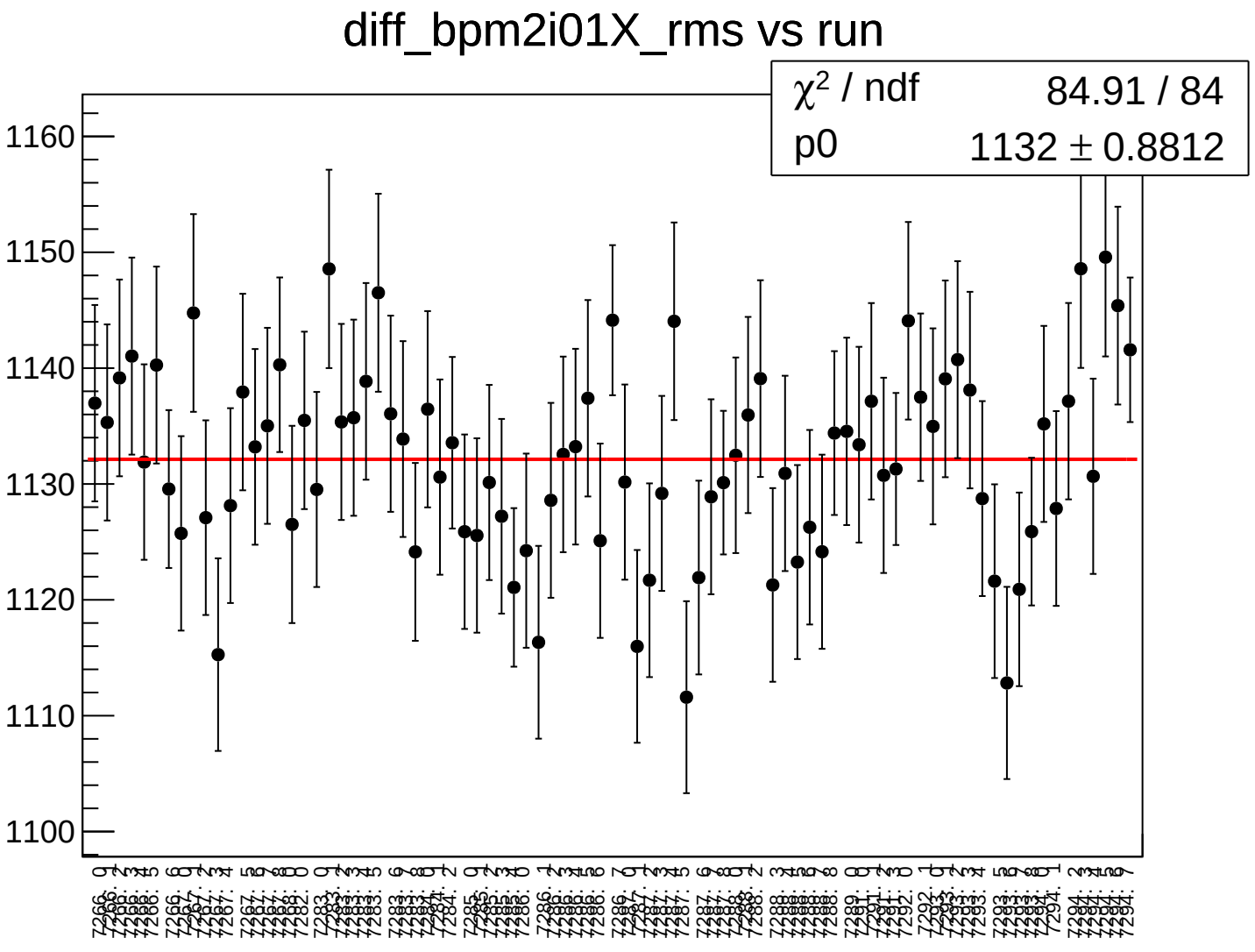

diff_bpm0r05Y_mean vs run
χ² / ndf 82.21 / 84
p0 −24.57 ± 5.644
pull
Entries 85
Mean 437
Std Dev 392.1

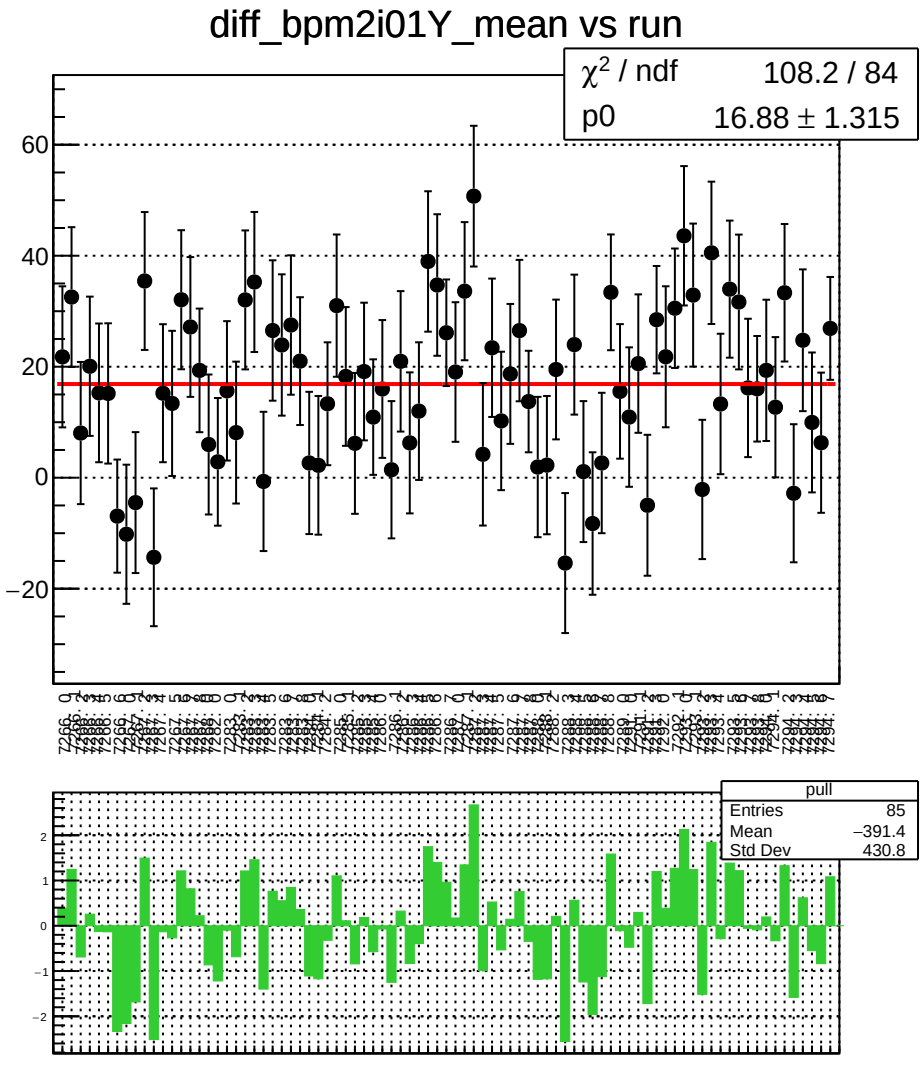

pull1D
Entries 85
Mean −0.001844
Std Dev 0.9834

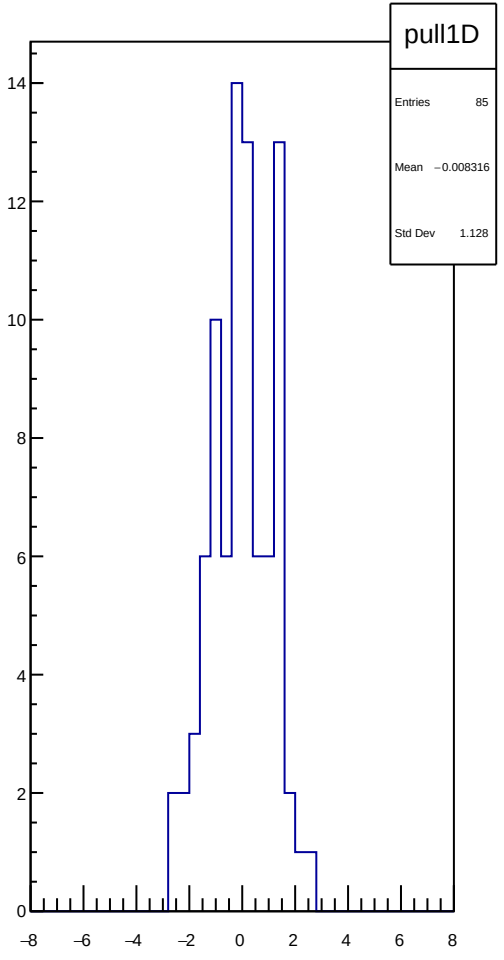

diff_bpm0r05Y_rms vs run
χ^2 / ndf 4088 / 84
p0 5121 ± 3.991
5800
5600
5400
5200
5000
4800
4600

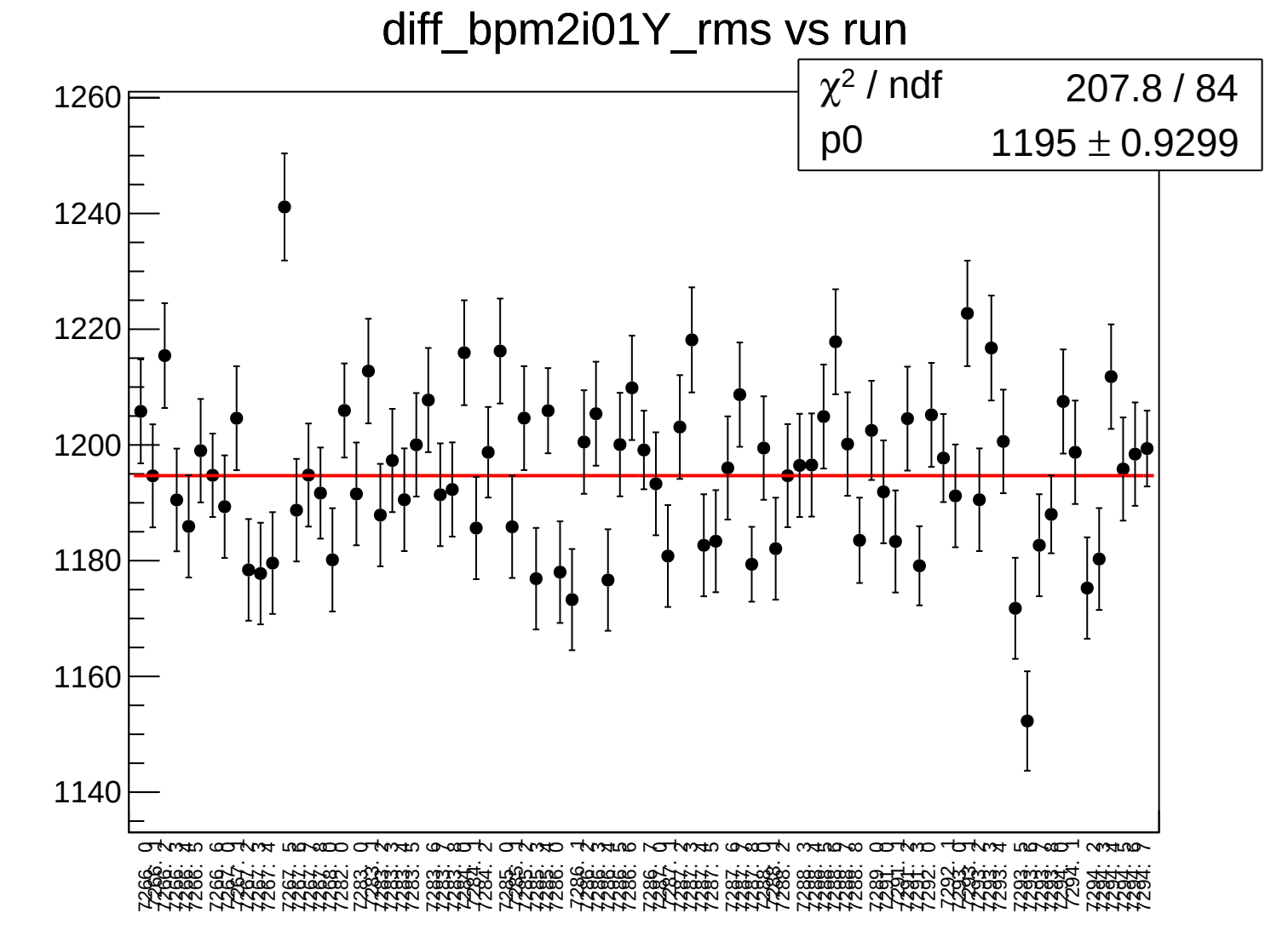

diff_bpm2i01X_mean vs run
χ^2 / ndf 97.89 / 84
p0 −3.582 ± 1.246
40
20
0
−20
−40
pull
Entries 85
Mean 473.5
Std Dev 428.5
3
2
1
0
−1
−2

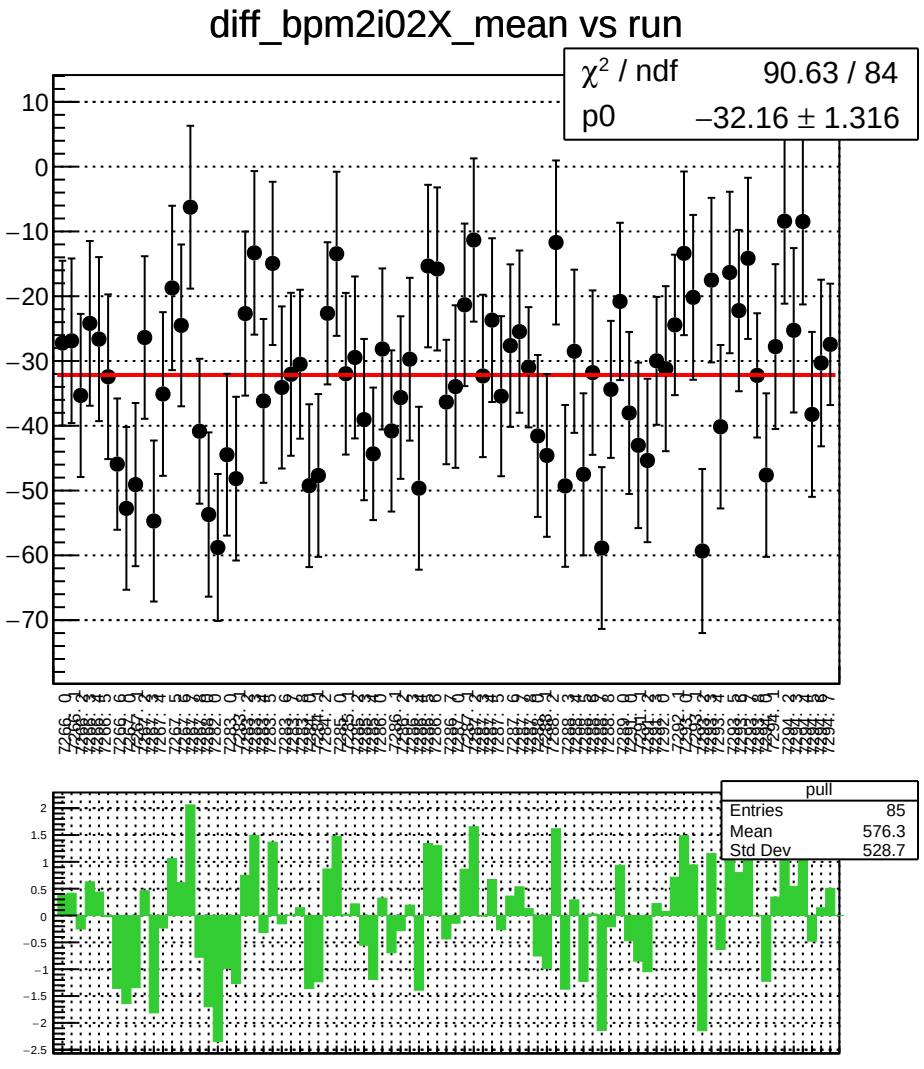

pull1D
Entries 85
Mean 0.005449
Std Dev 1.073
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

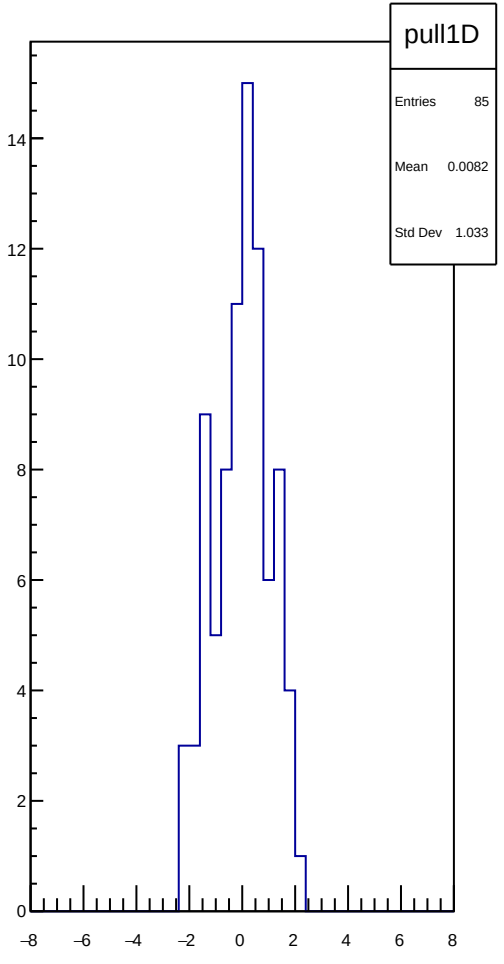

diff_bpm2i01X_rms vs run
χ² / ndf 84.91 / 84
p0 1132 ± 0.8812
1160
1150
1140
1130
1120
1110
1100

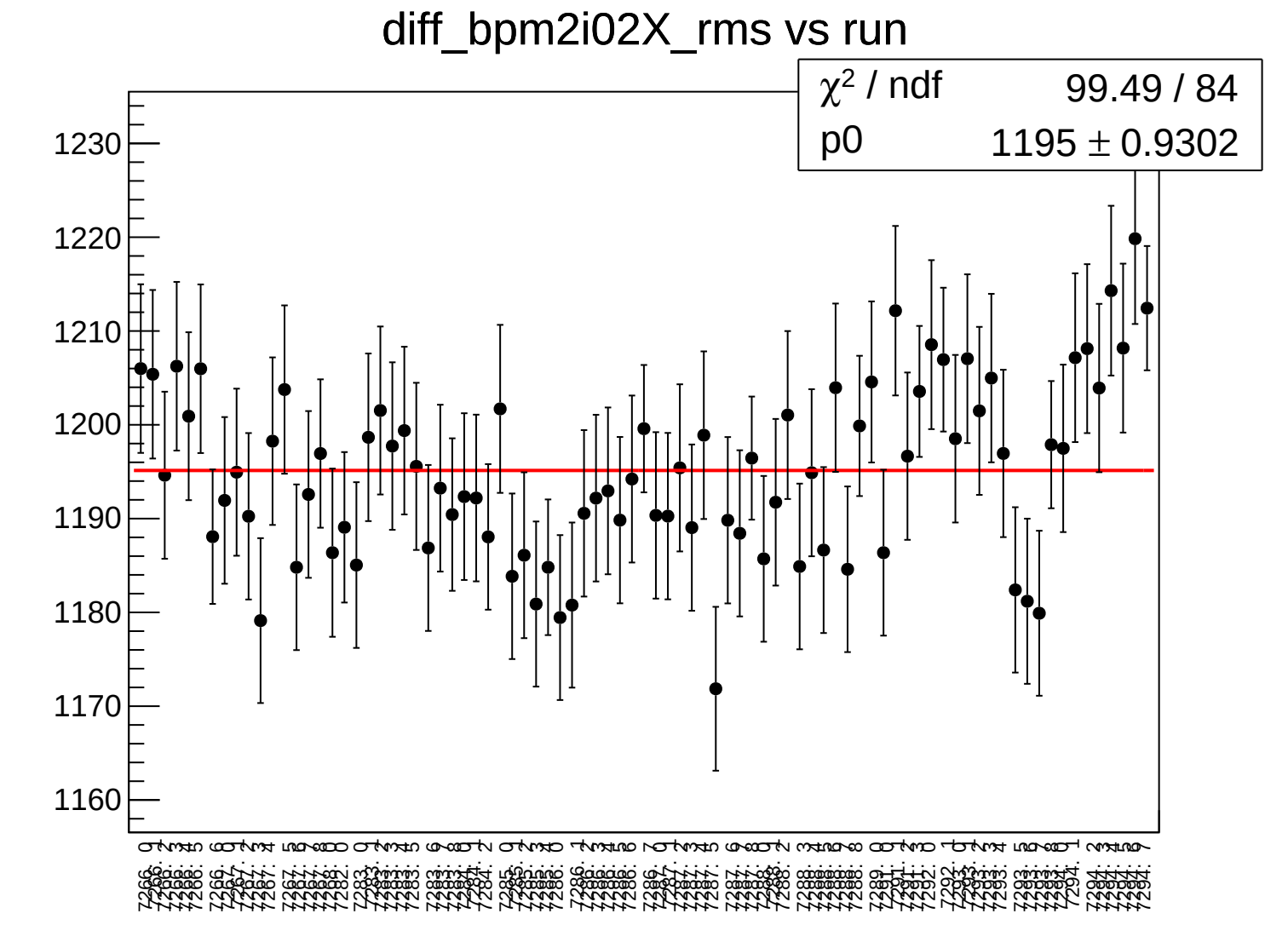

diff_bpm2i01Y_mean vs run
χ^2 / ndf 108.2 / 84
p0 16.88 ± 1.315
pull
Entries 85
Mean −391.4
Std Dev 430.8

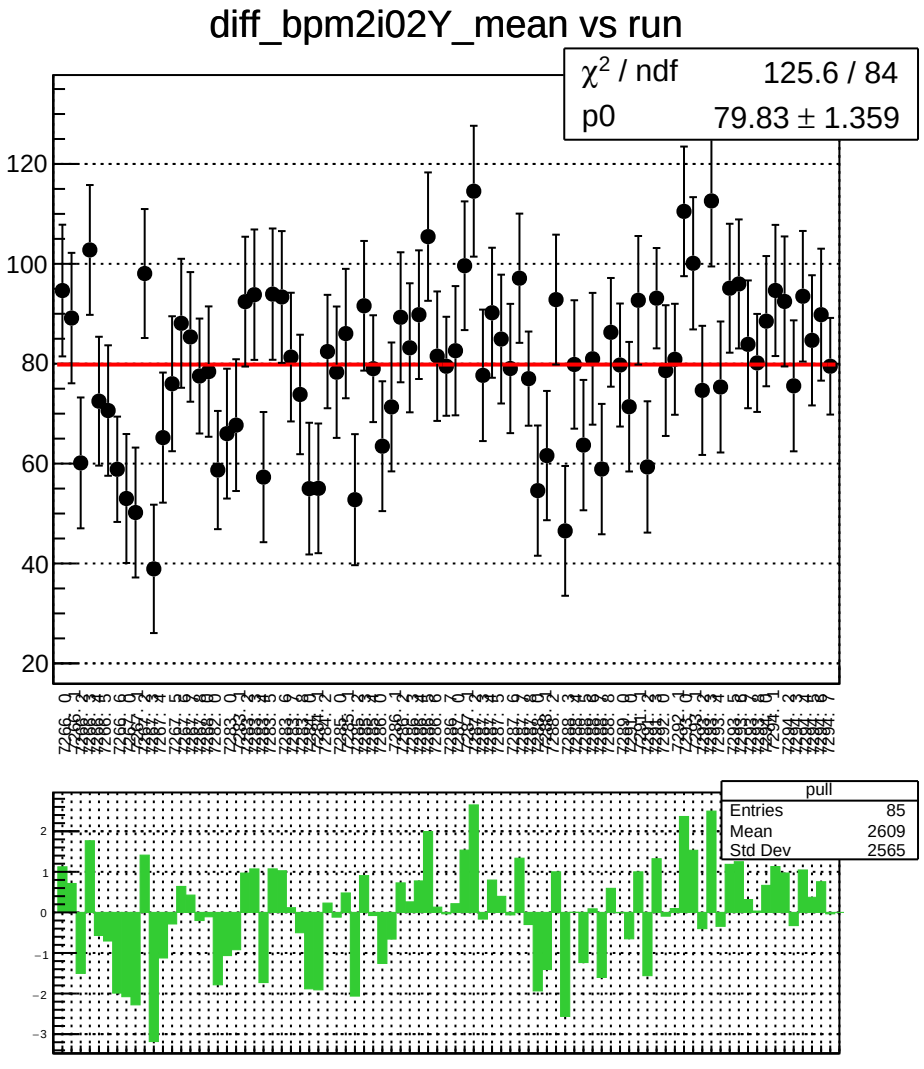

pull1D
Entries 85
Mean −0.008316
Std Dev 1.128

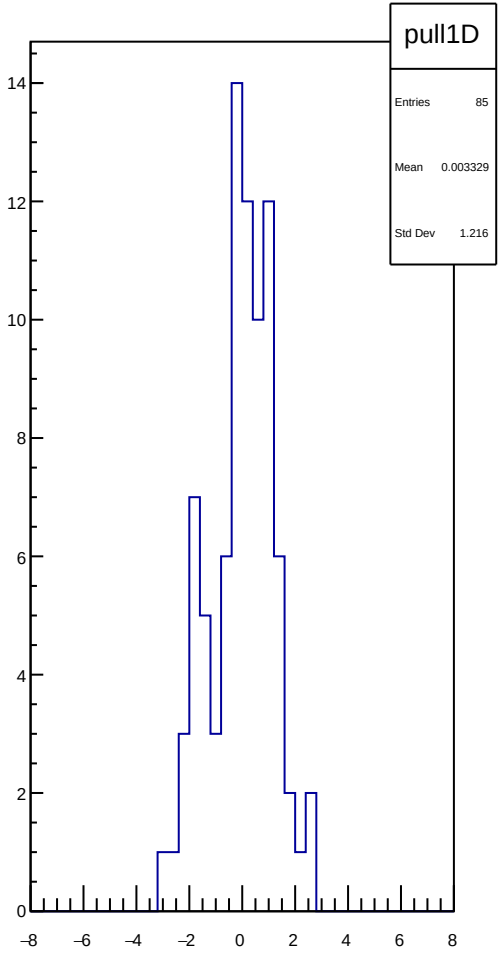

diff_bpm2i01Y_rms vs run
χ² / ndf 207.8 / 84
p0 1195 ± 0.9299
1260
1240
1220
1200
1180
1160
1140

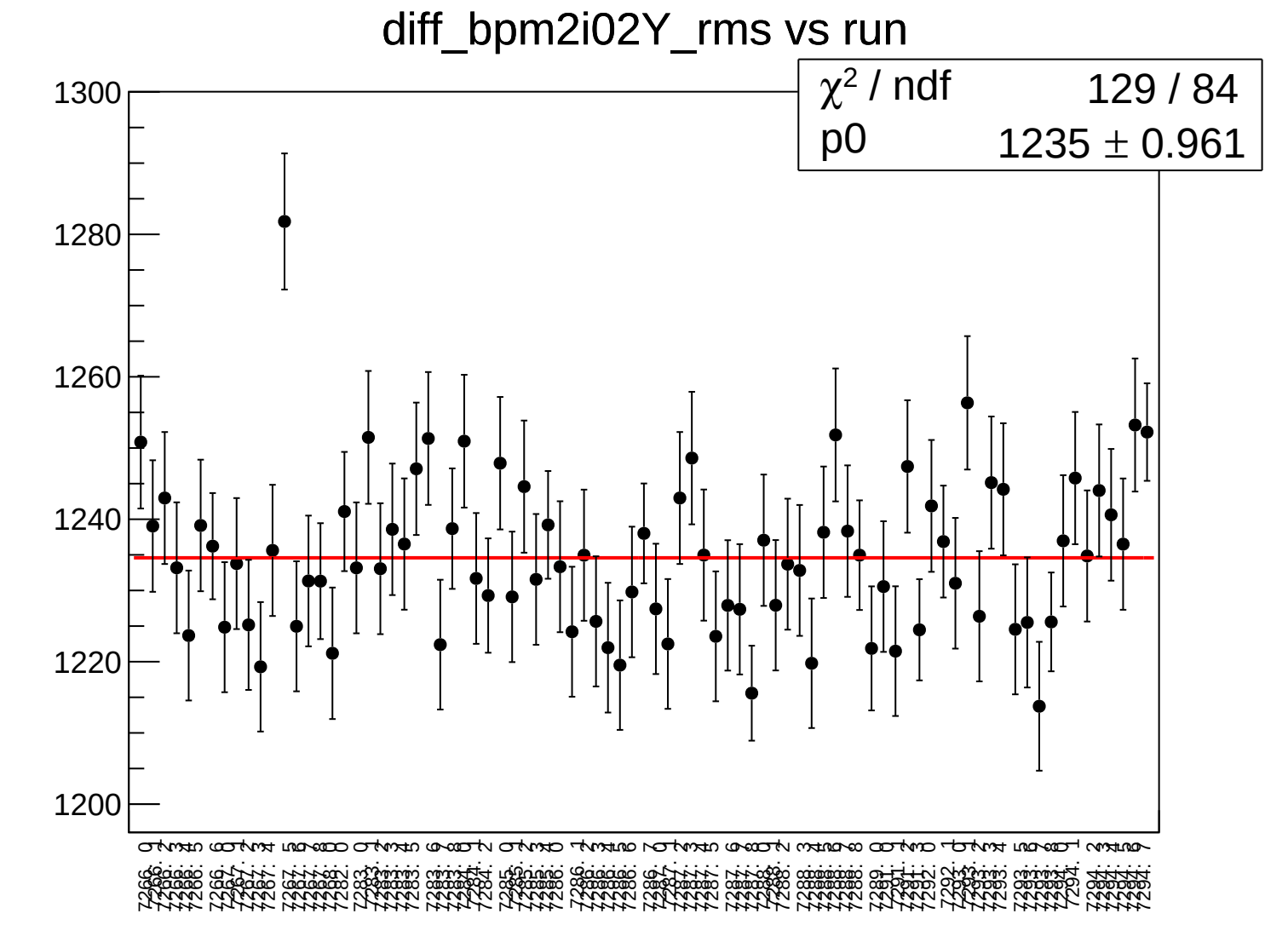

diff_bpm2i02X_mean vs run
χ^2 / ndf 90.63 / 84
p0 −32.16 ± 1.316
pull
Entries 85
Mean 576.3
Std Dev 528.7

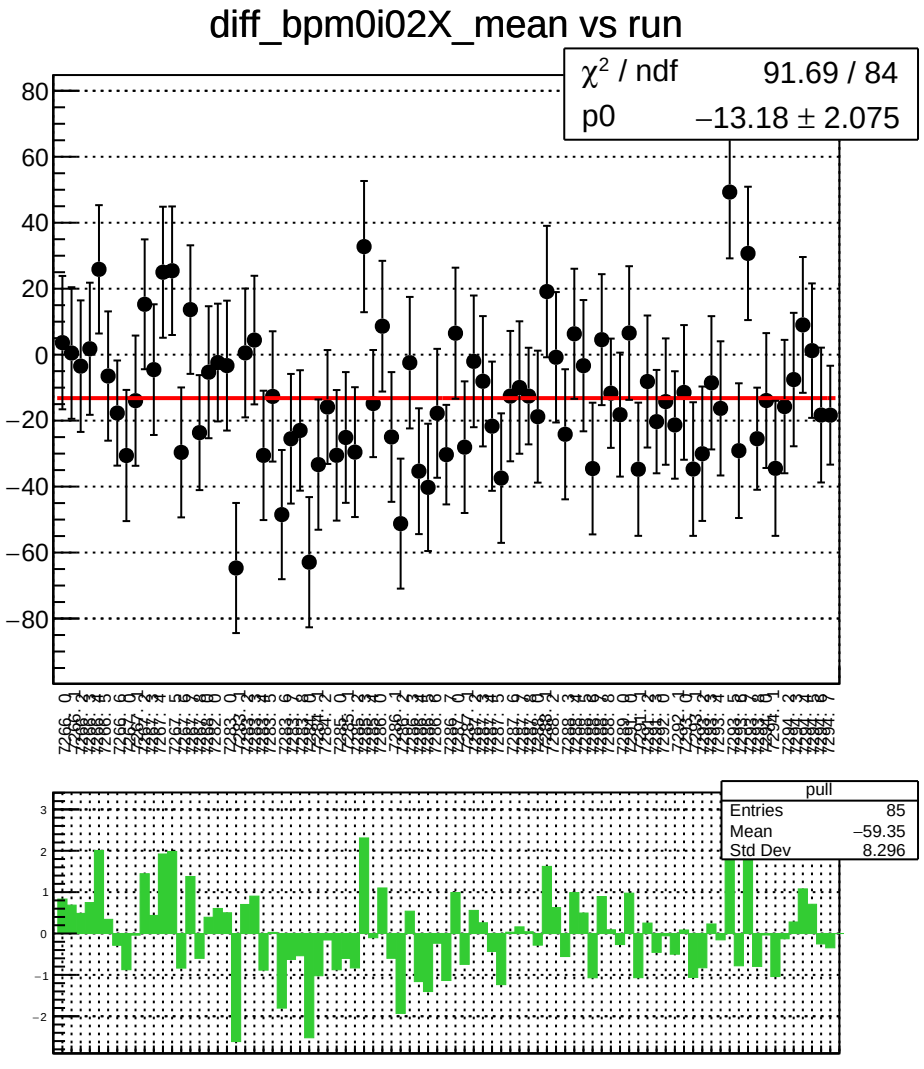

pull1D
Entries 85
Mean 0.0082
Std Dev 1.033

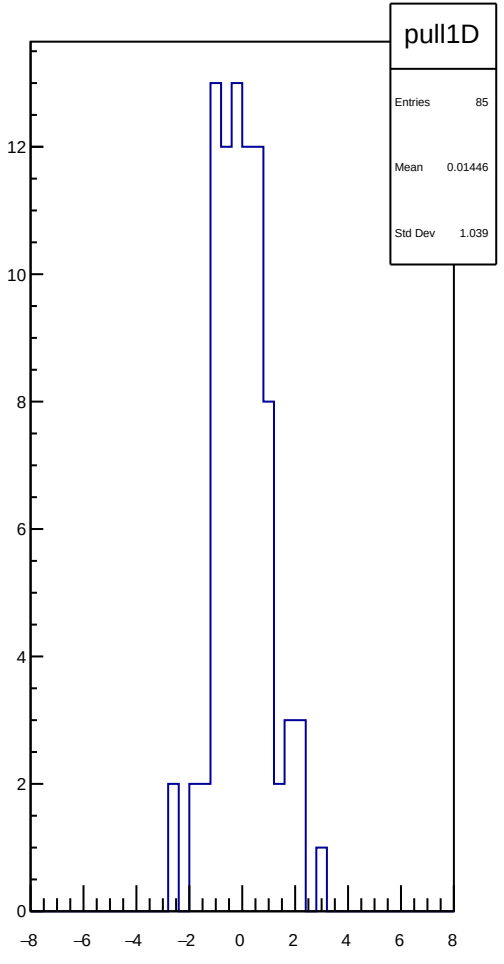

diff_bpm2i02X_rms vs run
χ² / ndf 99.49 / 84
p0 1195 ± 0.9302
1230
1220
1210
1200
1190
1180
1170
1160

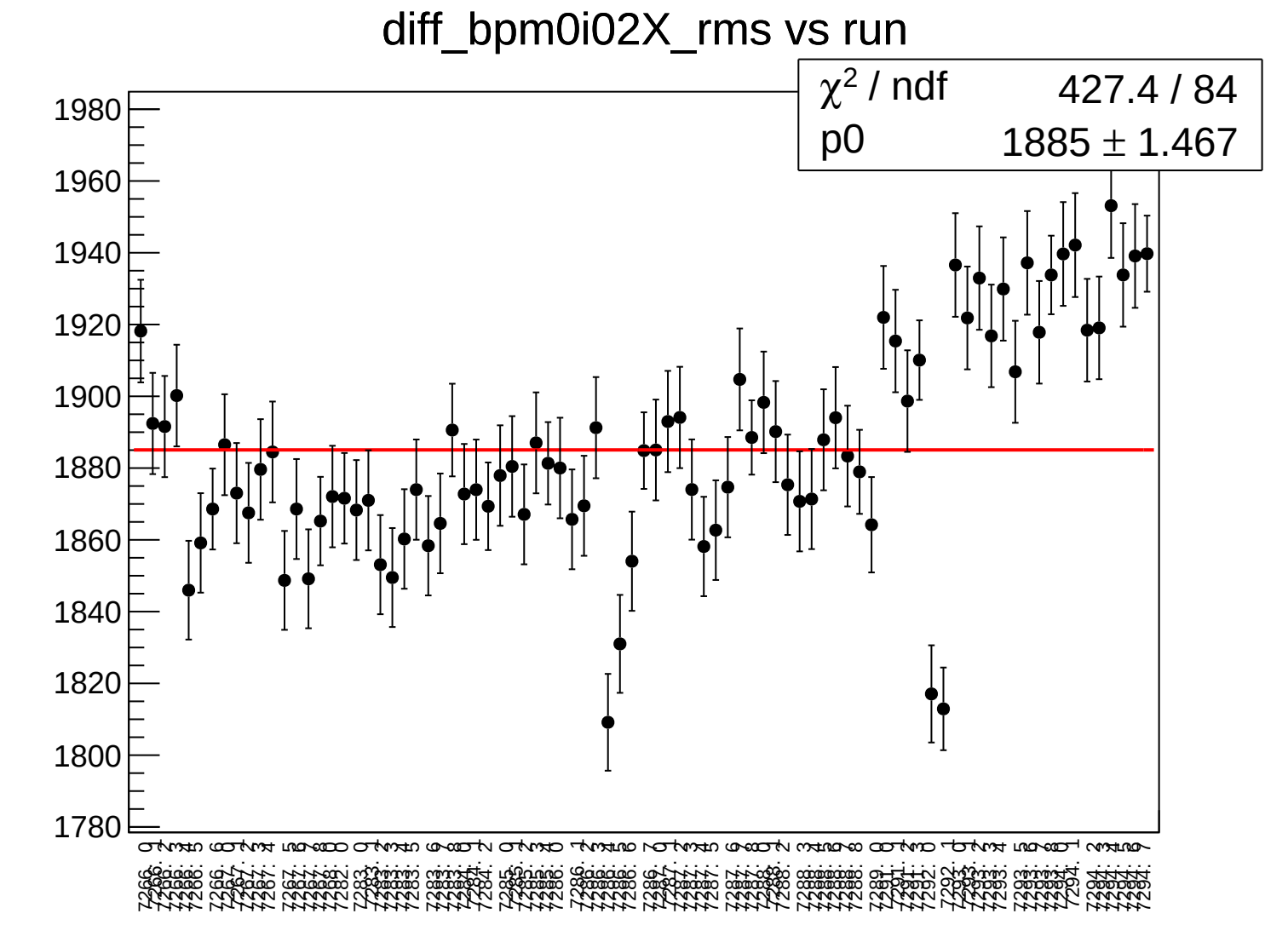

diff_bpm2i02Y_mean vs run
χ^2 / ndf 125.6 / 84
p0 79.83 ± 1.359
pull
Entries 85
Mean 2609
Std Dev 2565

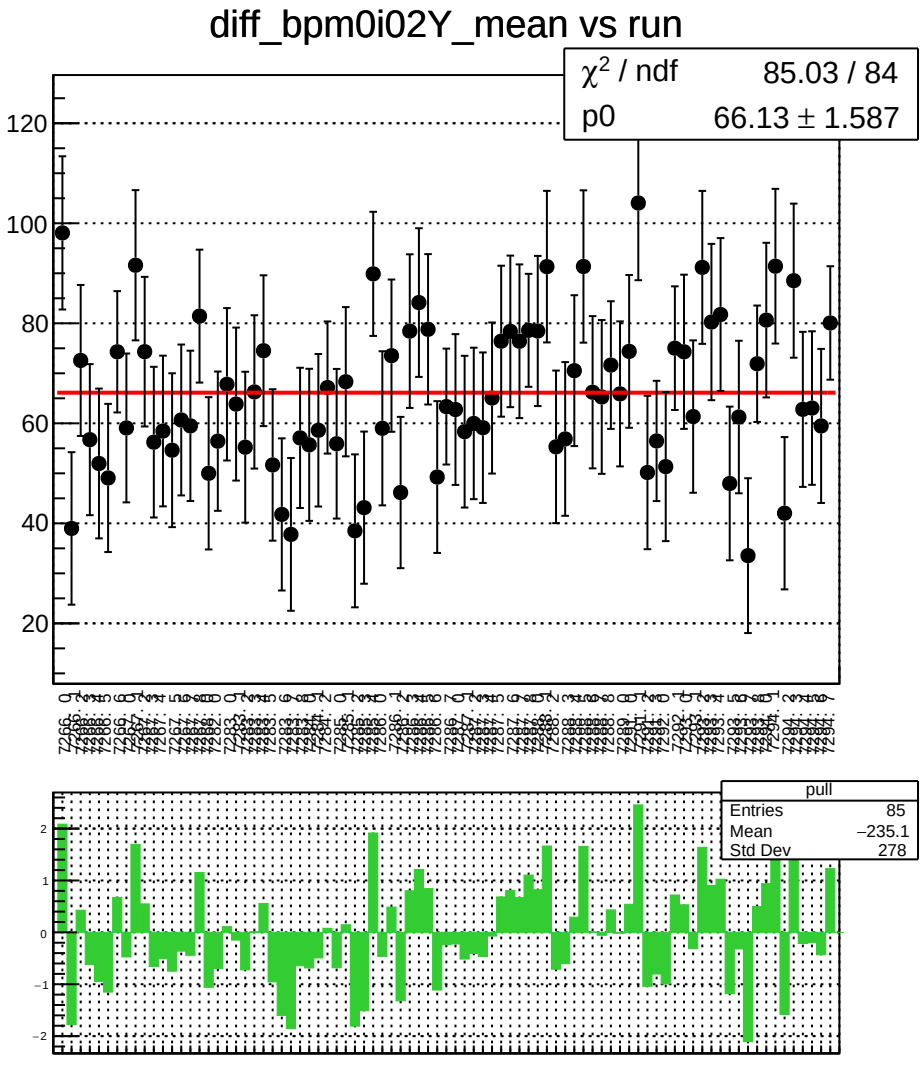

pull1D
Entries 85
Mean 0.003329
Std Dev 1.216

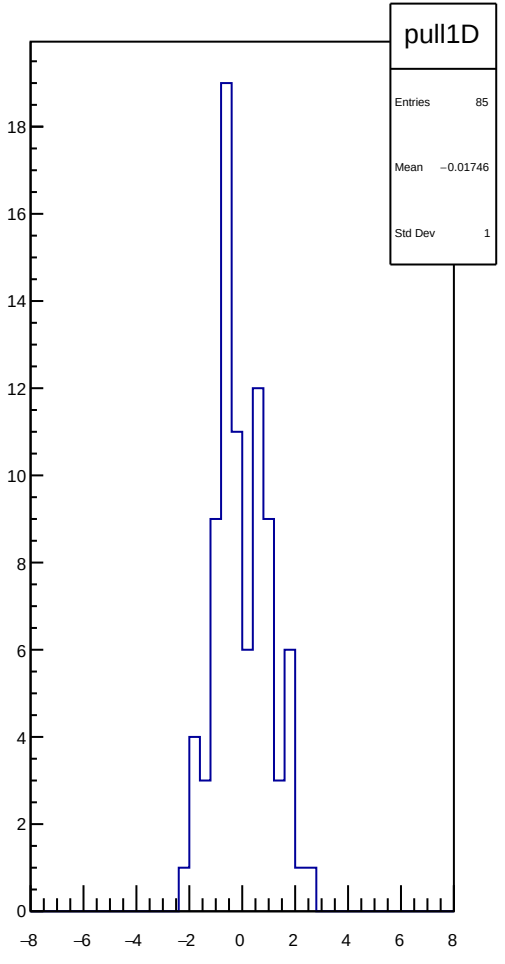

diff_bpm2i02Y_rms vs run
χ² / ndf 129 / 84
p0 1235 ± 0.961
1300
1280
1260
1240
1220
1200

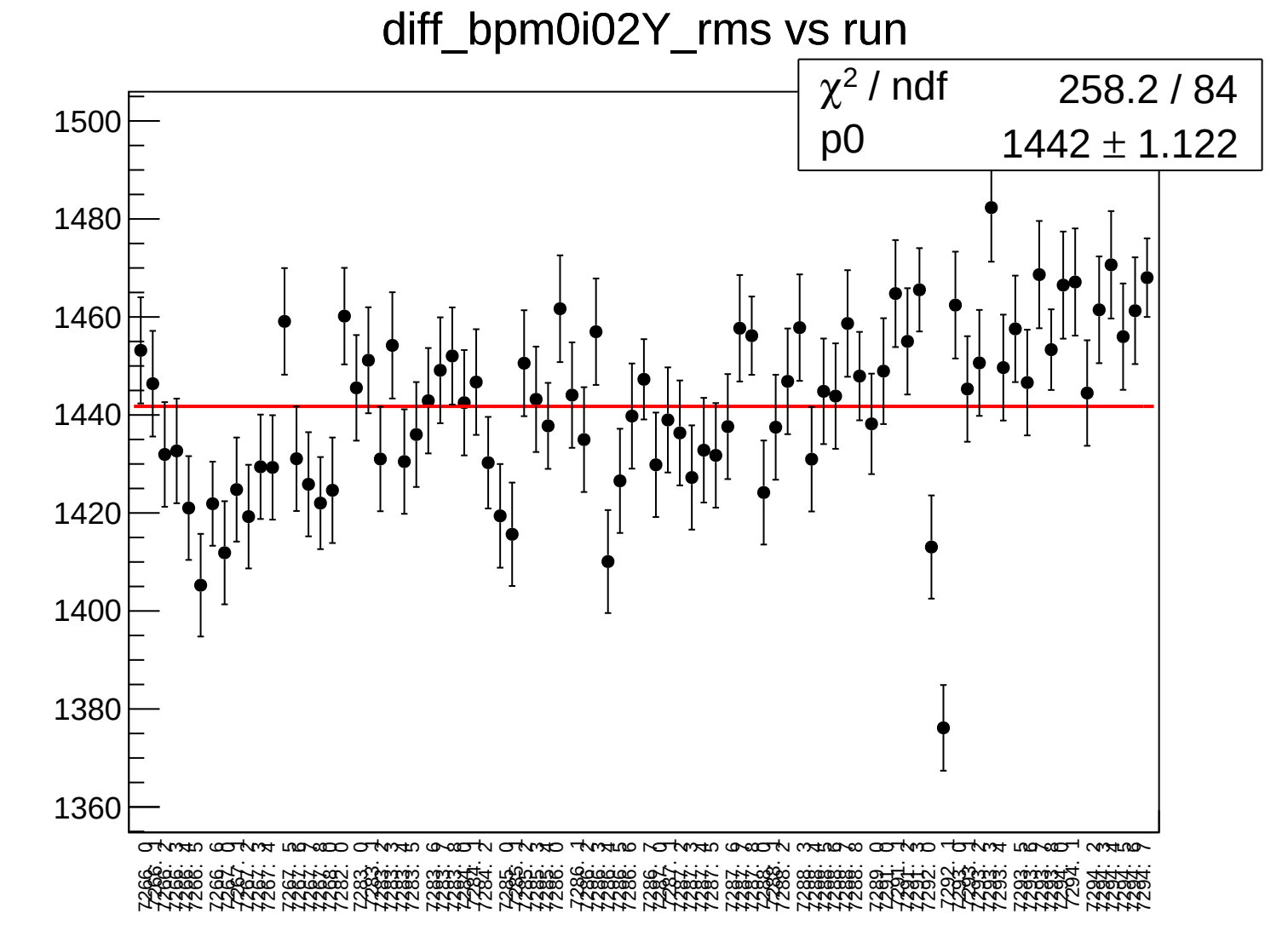

diff_bpm0i02X_mean vs run
χ² / ndf 91.69 / 84
p0 −13.18 ± 2.075
pull
Entries 85
Mean −59.35
Std Dev 8.296

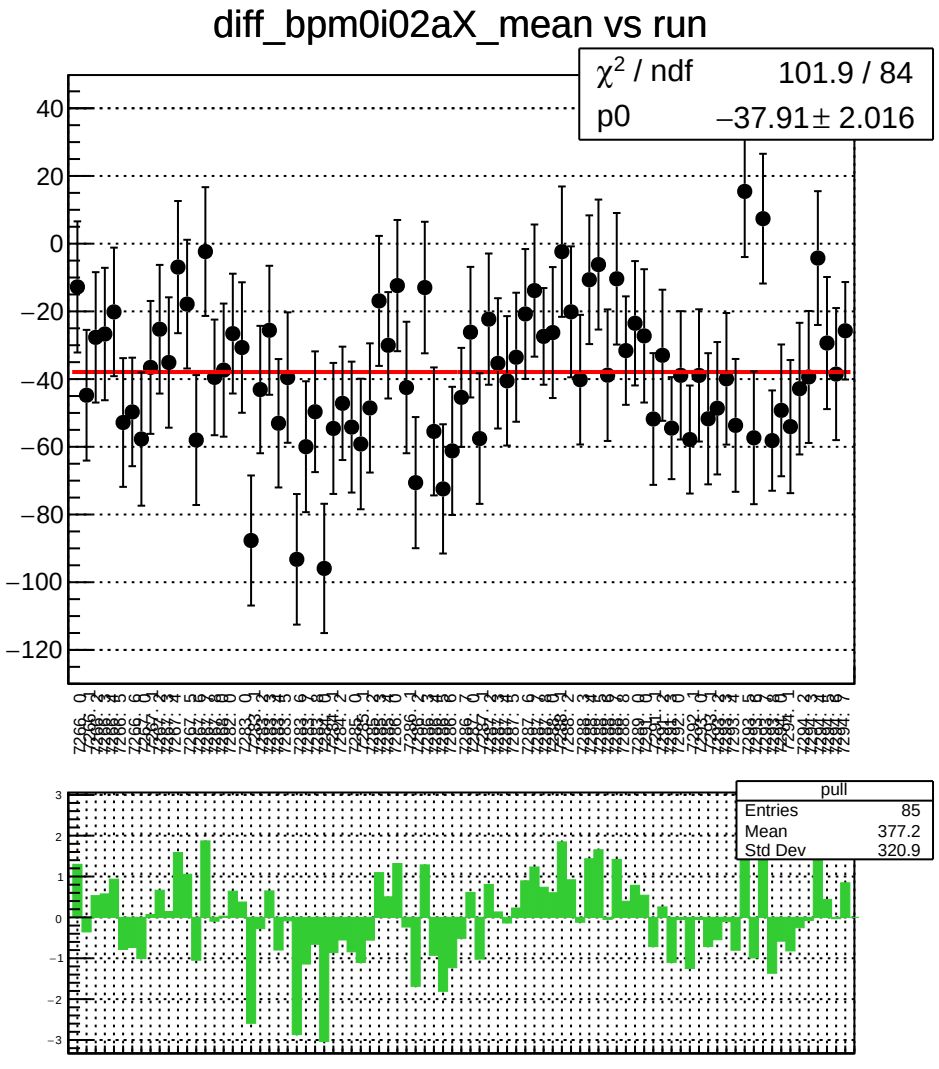

pull1D
Entries 85
Mean 0.01446
Std Dev 1.039

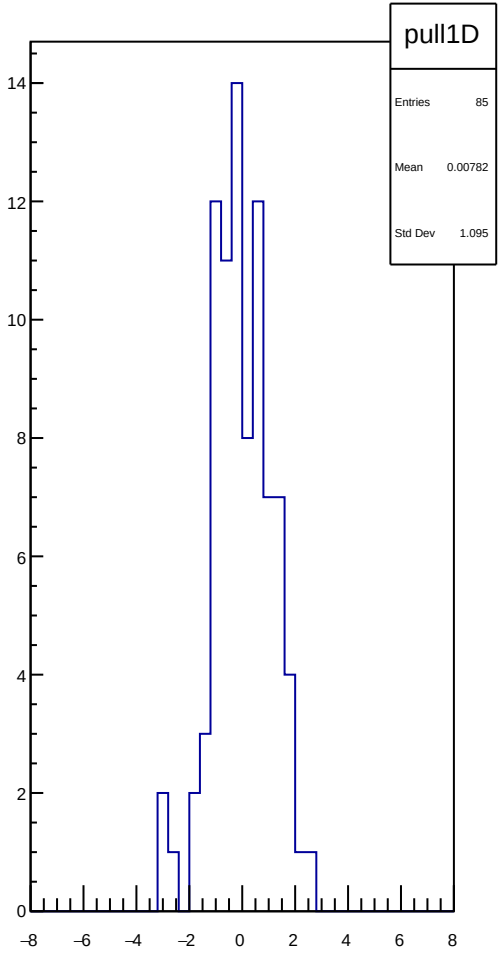

diff_bpm0i02X_rms vs run
χ² / ndf 427.4 / 84
p0 1885 ± 1.467
1980
1960
1940
1920
1900
1880
1860
1840
1820
1800
1780

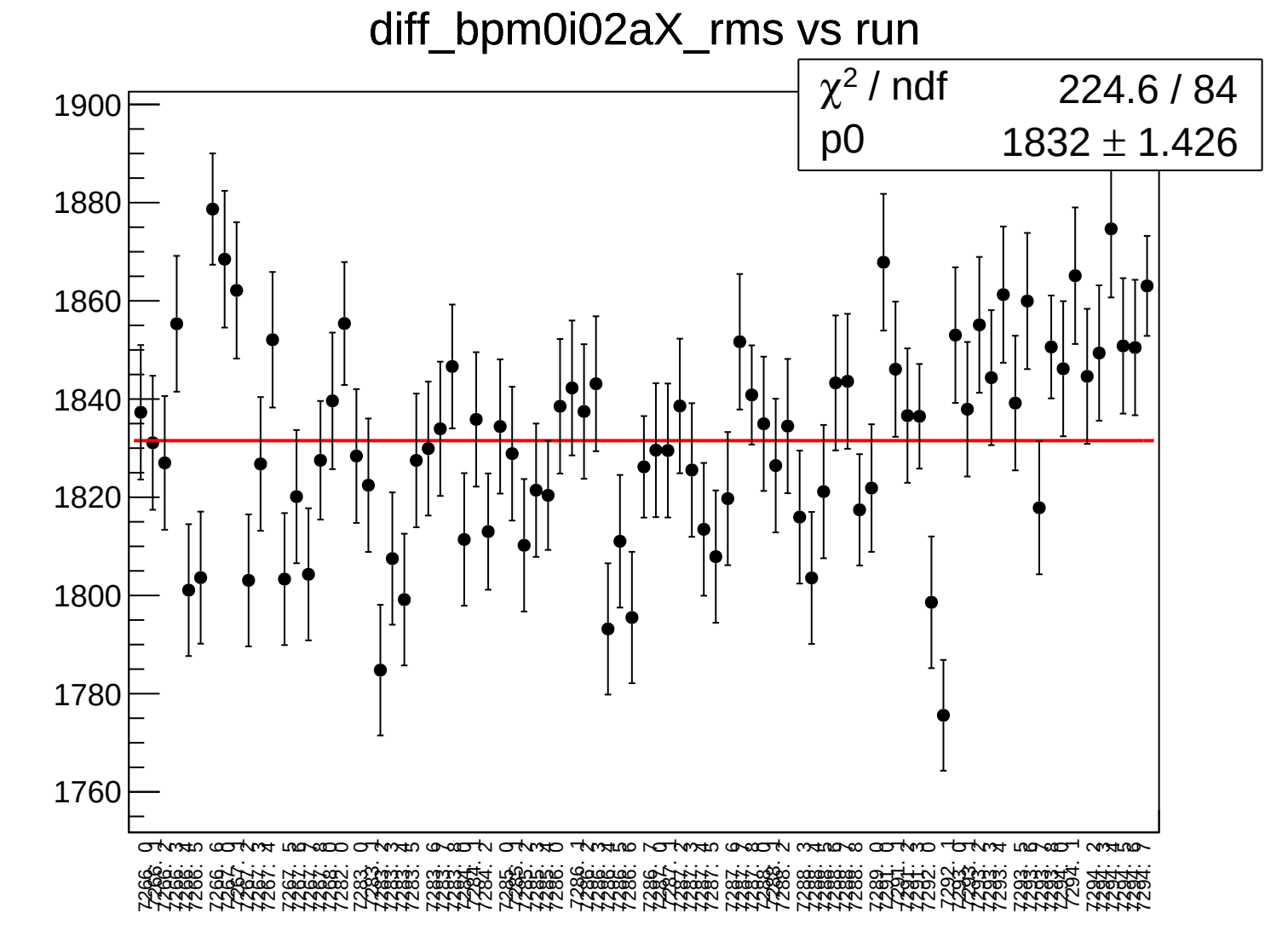

diff_bpm0i02Y_mean vs run
χ^2 / ndf 85.03 / 84
p0 66.13 ± 1.587
pull
Entries 85
Mean −235.1
Std Dev 278

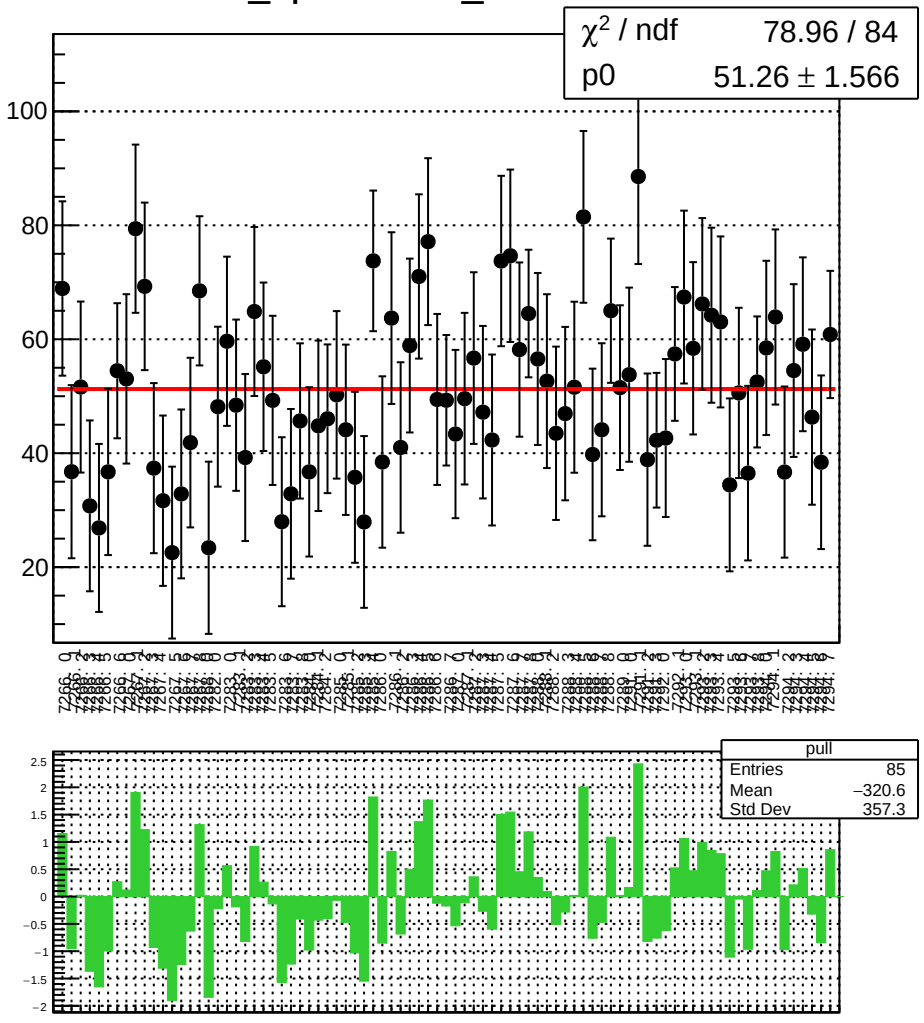

pull1D
Entries 85
Mean −0.01746
Std Dev 1

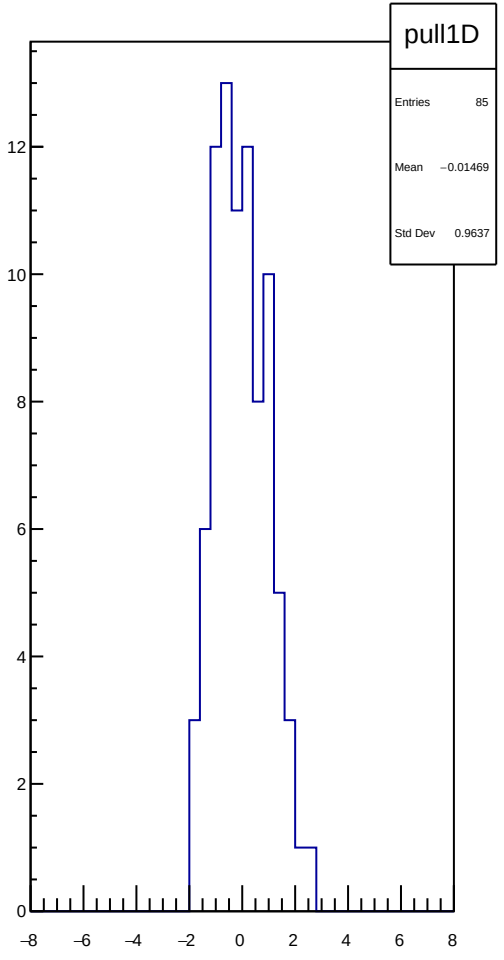

diff_bpm0i02Y_rms vs run
χ² / ndf 258.2 / 84
p0 1442 ± 1.122
1500
1480
1460
1440
1420
1400
1380
1360

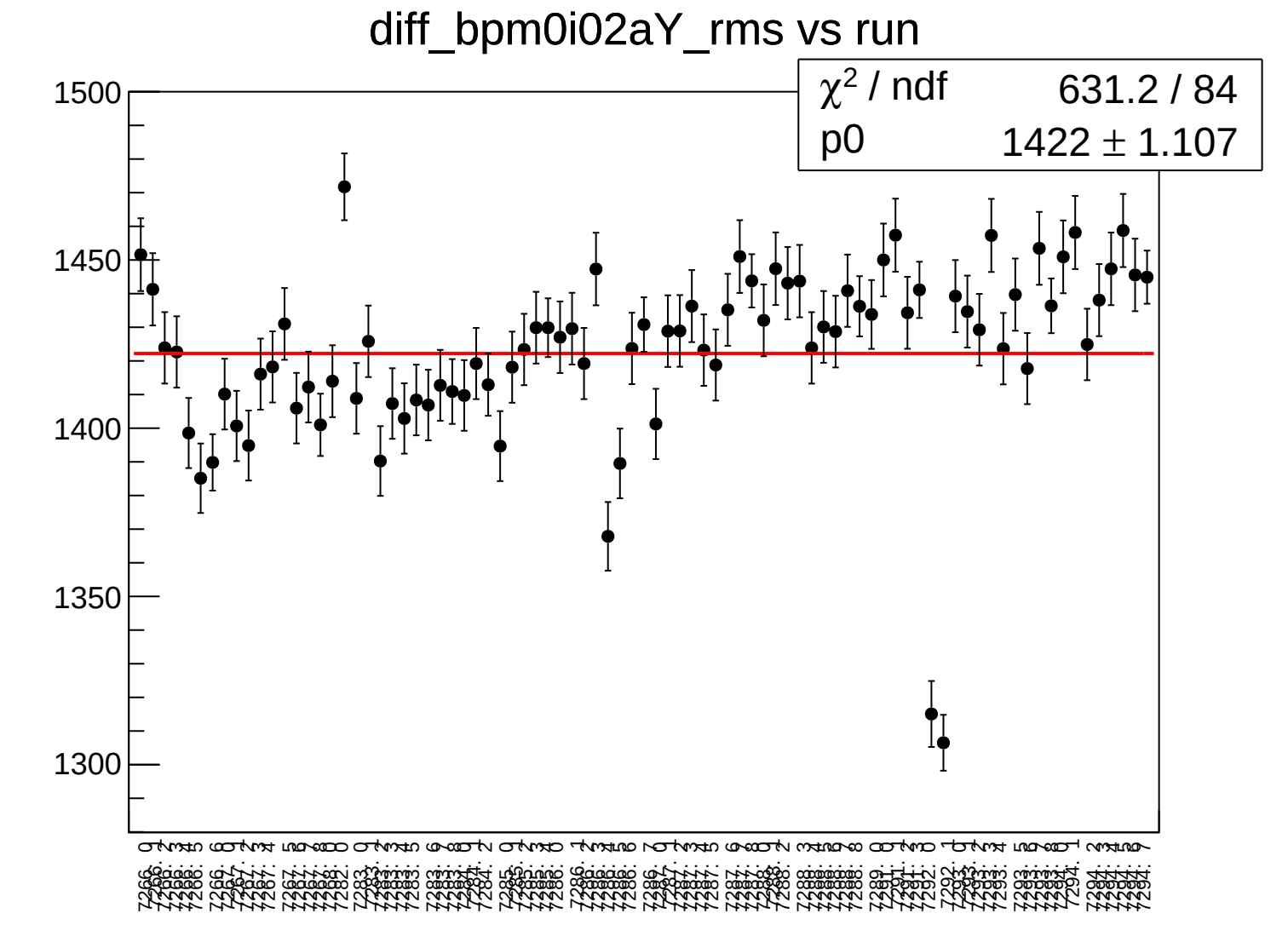

diff_bpm0i02aX_mean vs run
χ^2 / ndf 101.9 / 84
p0 −37.91± 2.016
pull
Entries 85
Mean 377.2
Std Dev 320.9

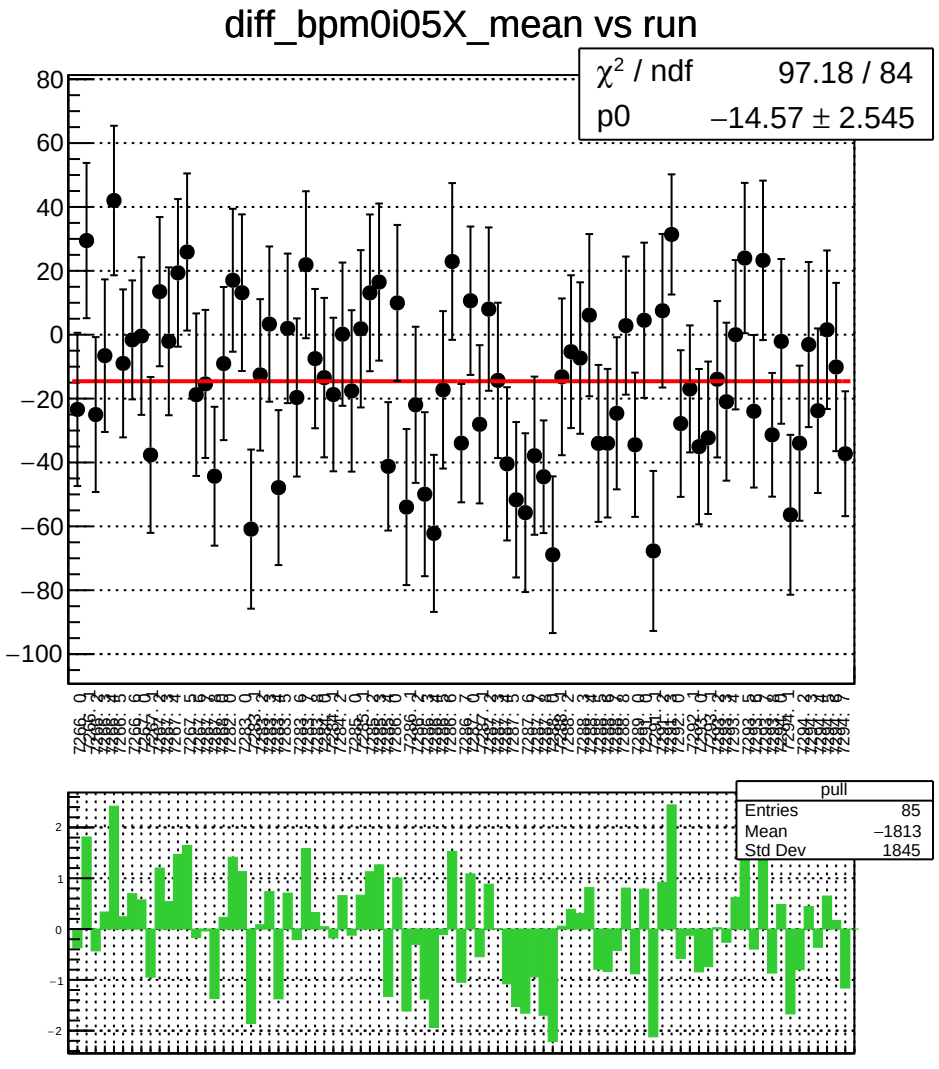

pull1D
Entries 85
Mean 0.00782
Std Dev 1.095

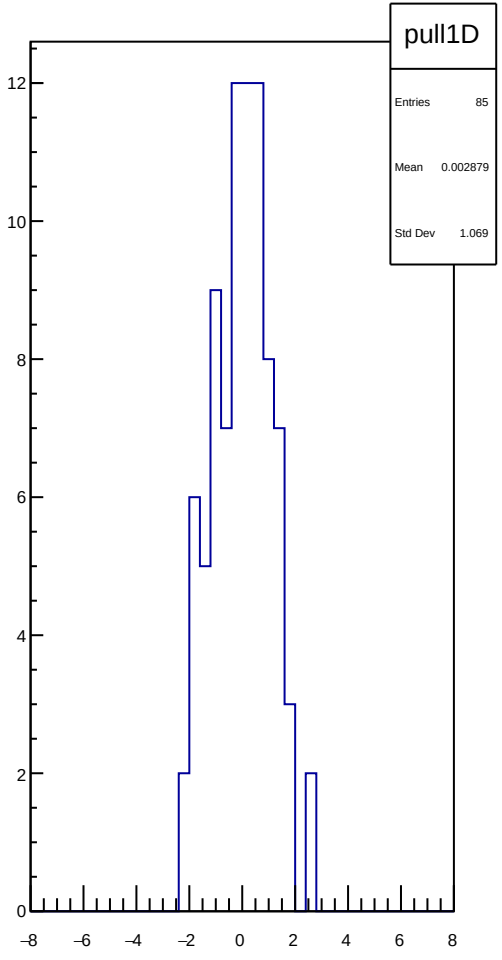

diff_bpm0i02aX_rms vs run
χ² / ndf 224.6 / 84
p0 1832 ± 1.426
1900
1880
1860
1840
1820
1800
1780
1760

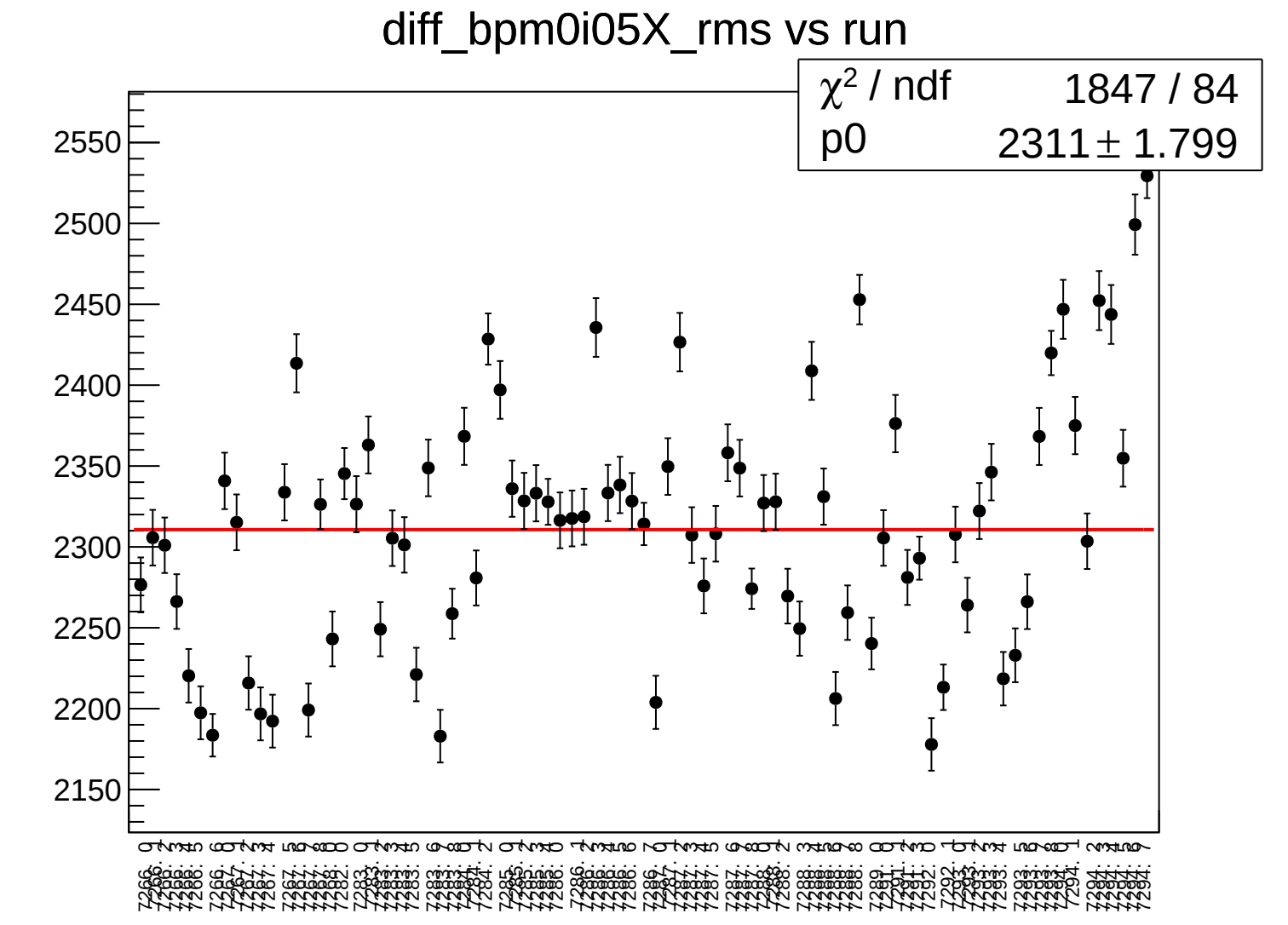

diff_bpm0i02aY_mean vs run
χ^2 / ndf 78.96 / 84
p0 51.26 ± 1.566
pull
Entries 85
Mean −320.6
Std Dev 357.3

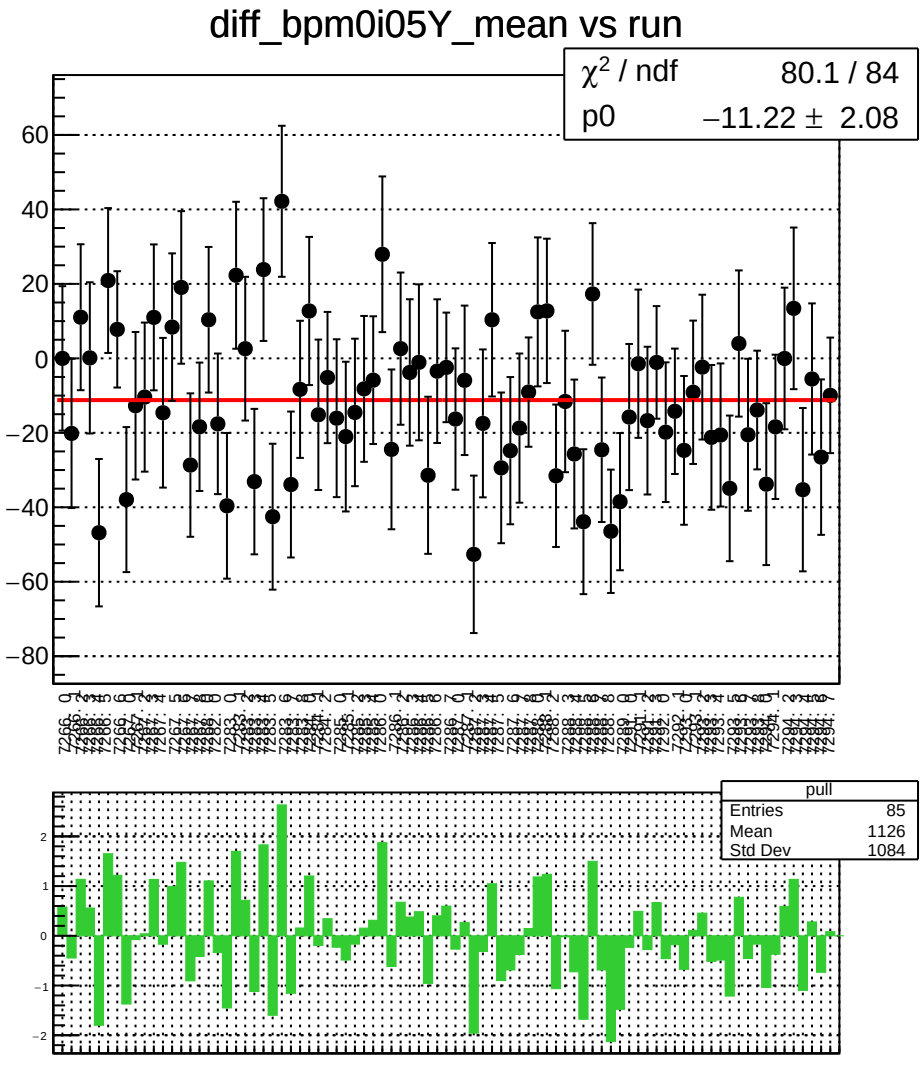

pull1D
Entries 85
Mean −0.01469
Std Dev 0.9637

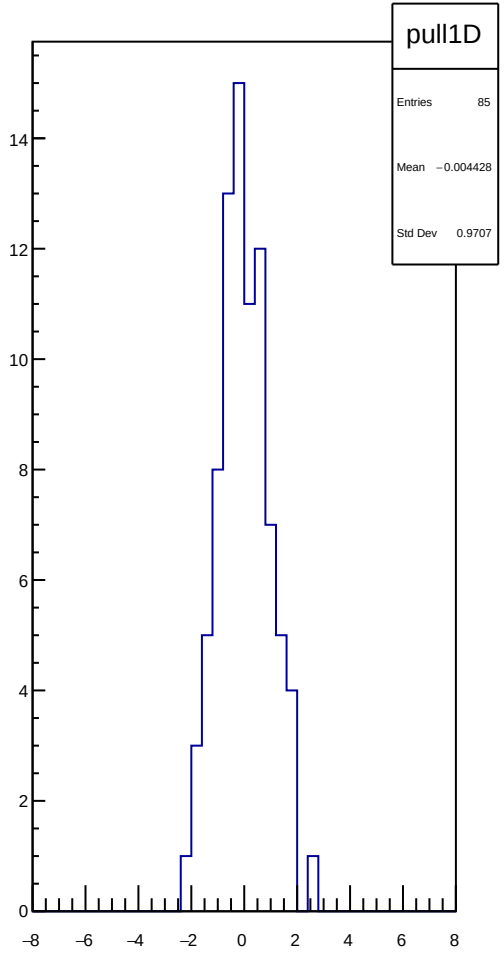

diff_bpm0i02aY_rms vs run
χ² / ndf 631.2 / 84
p0 1422 ± 1.107
1500
1450
1400
1350
1300

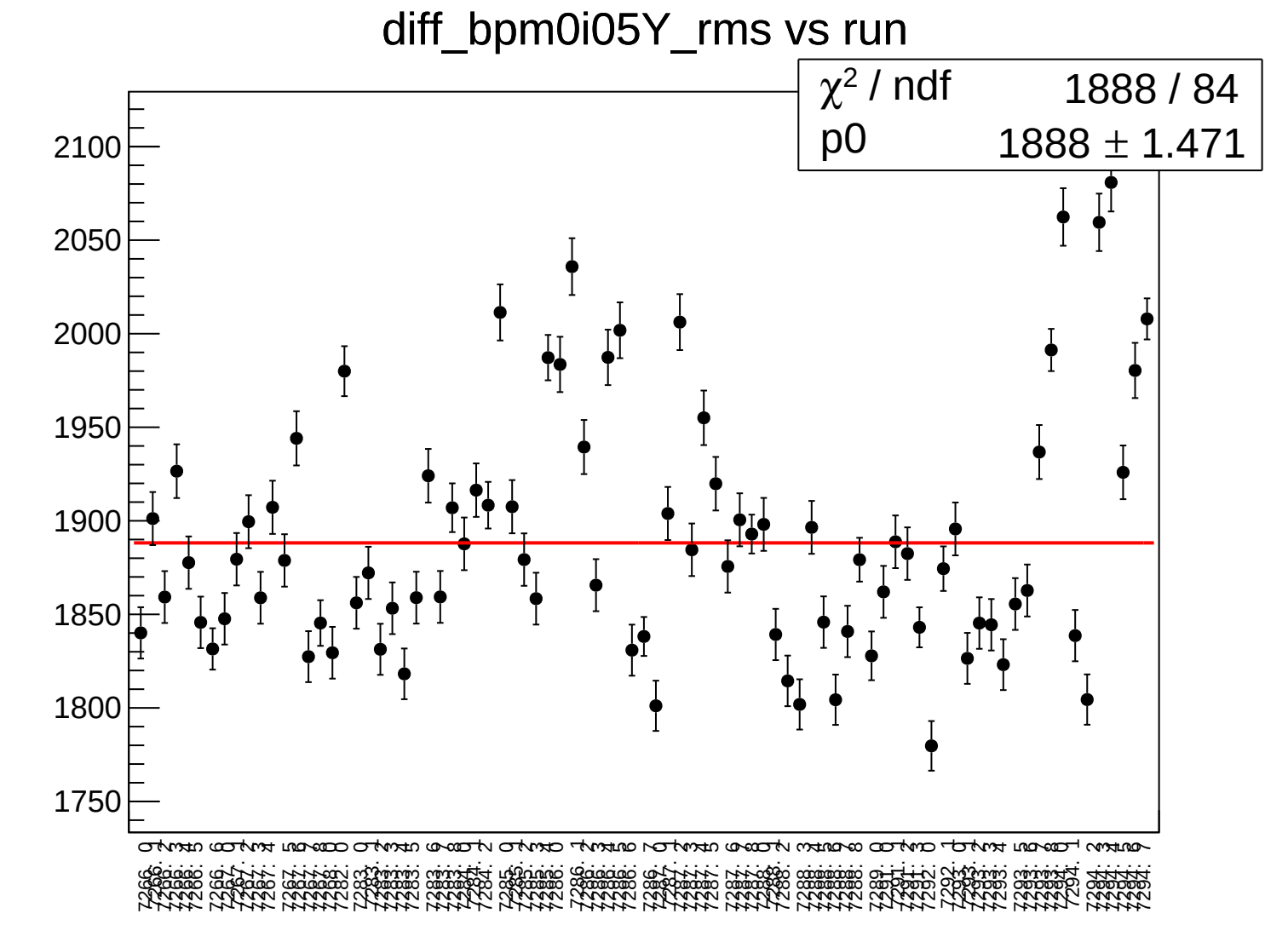

diff_bpm0i05X_mean vs run
χ² / ndf 97.18 / 84
p0 −14.57 ± 2.545
pull
Entries 85
Mean −1813
Std Dev 1845

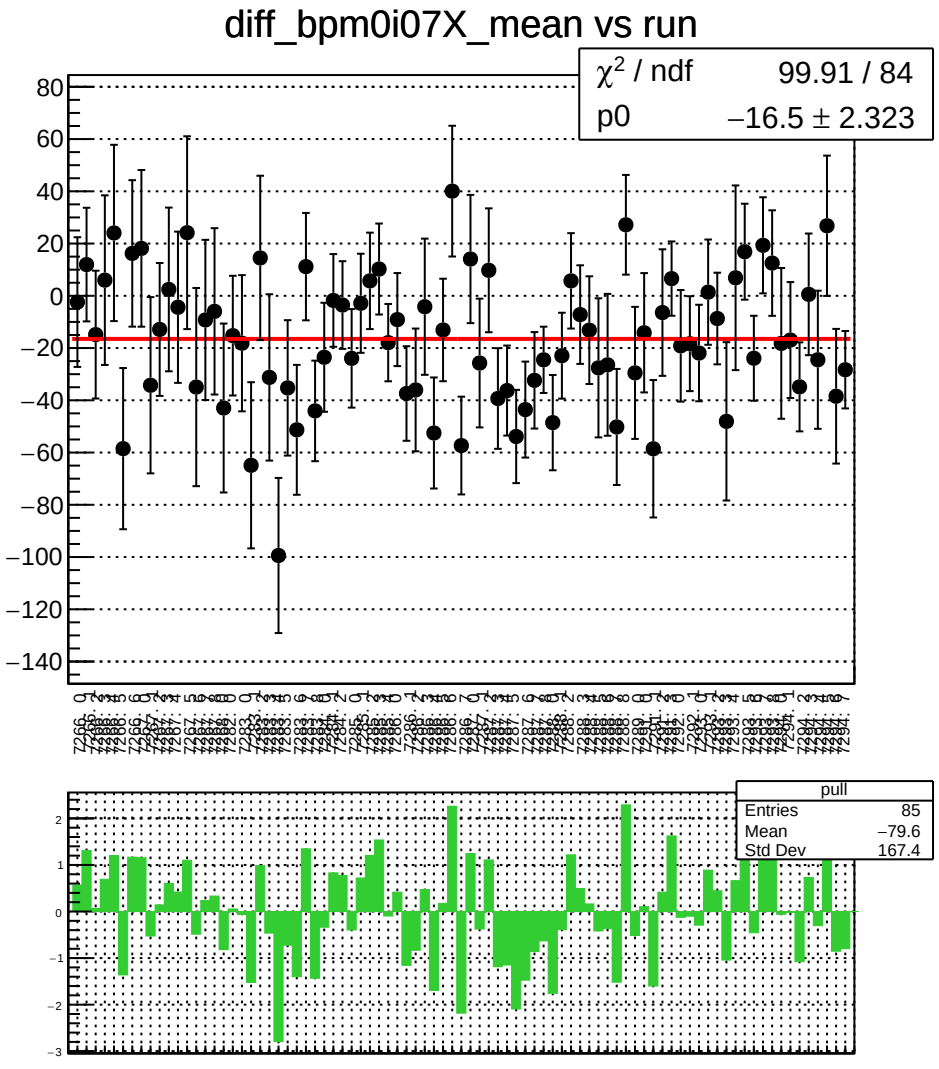

pull1D
Entries 85
Mean 0.002879
Std Dev 1.069

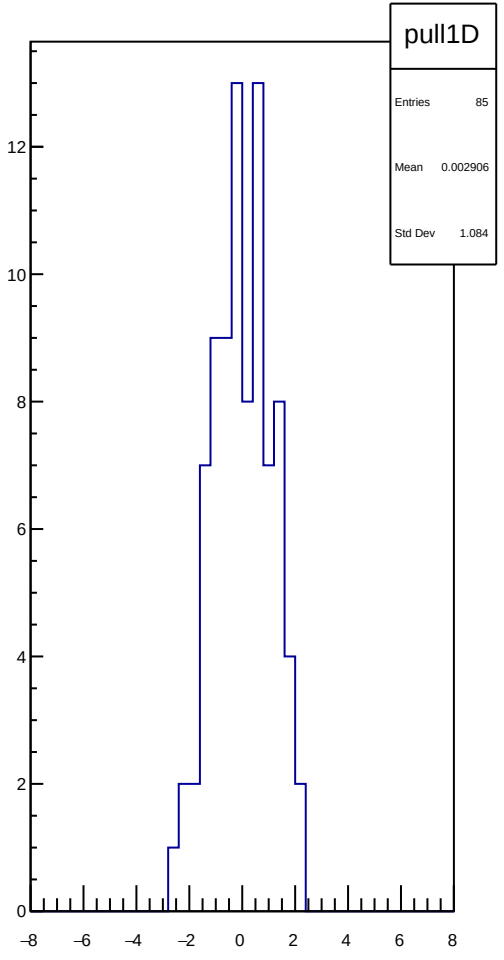

diff_bpm0i05X_rms vs run
χ² / ndf 1847 / 84
p0 2311 ± 1.799
2550
2500
2450
2400
2350
2300
2250
2200
2150

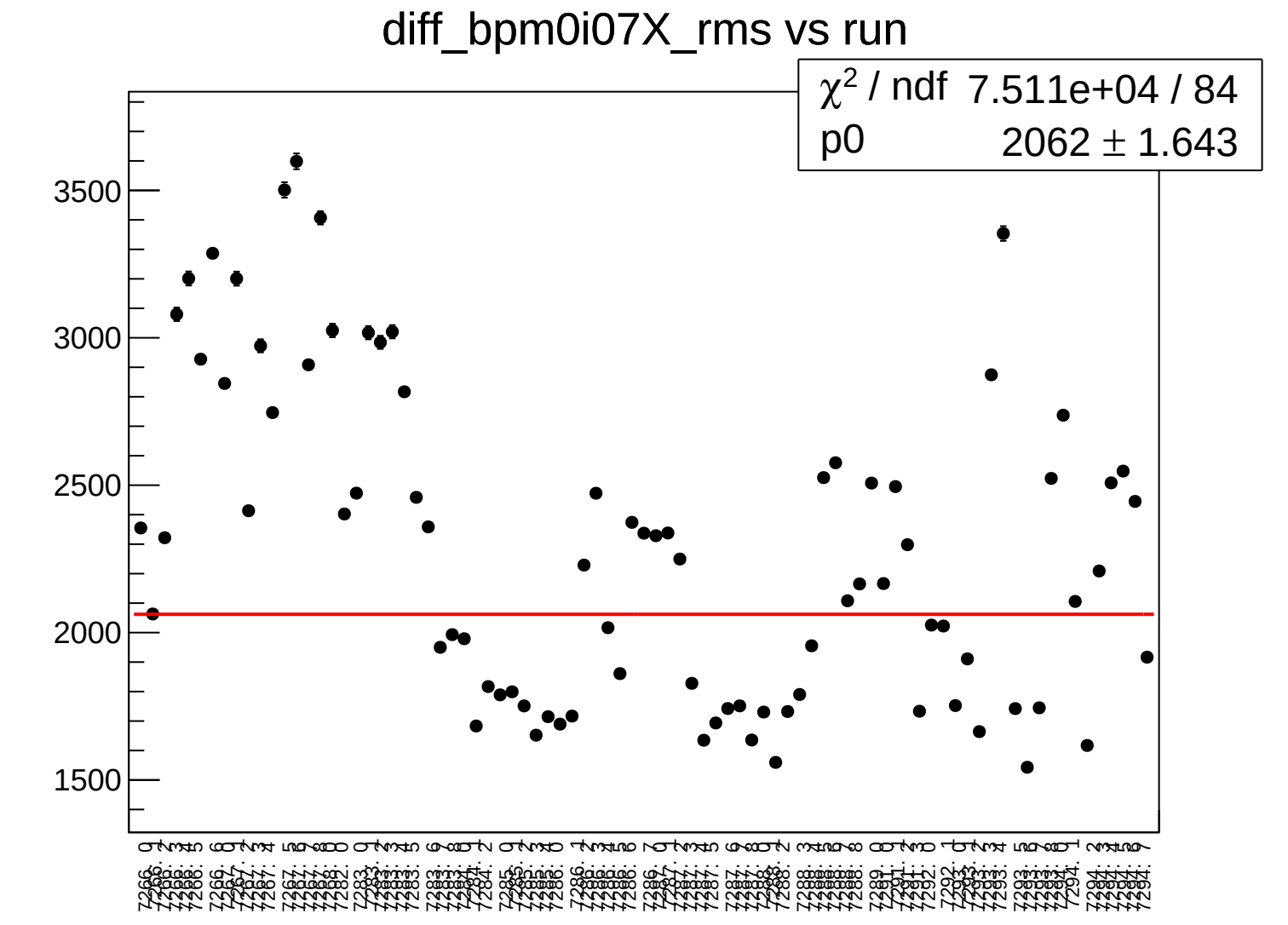

diff_bpm0i05Y_mean vs run
χ² / ndf 80.1 / 84
p0 −11.22 ± 2.08
pull
Entries 85
Mean 1126
Std Dev 1084

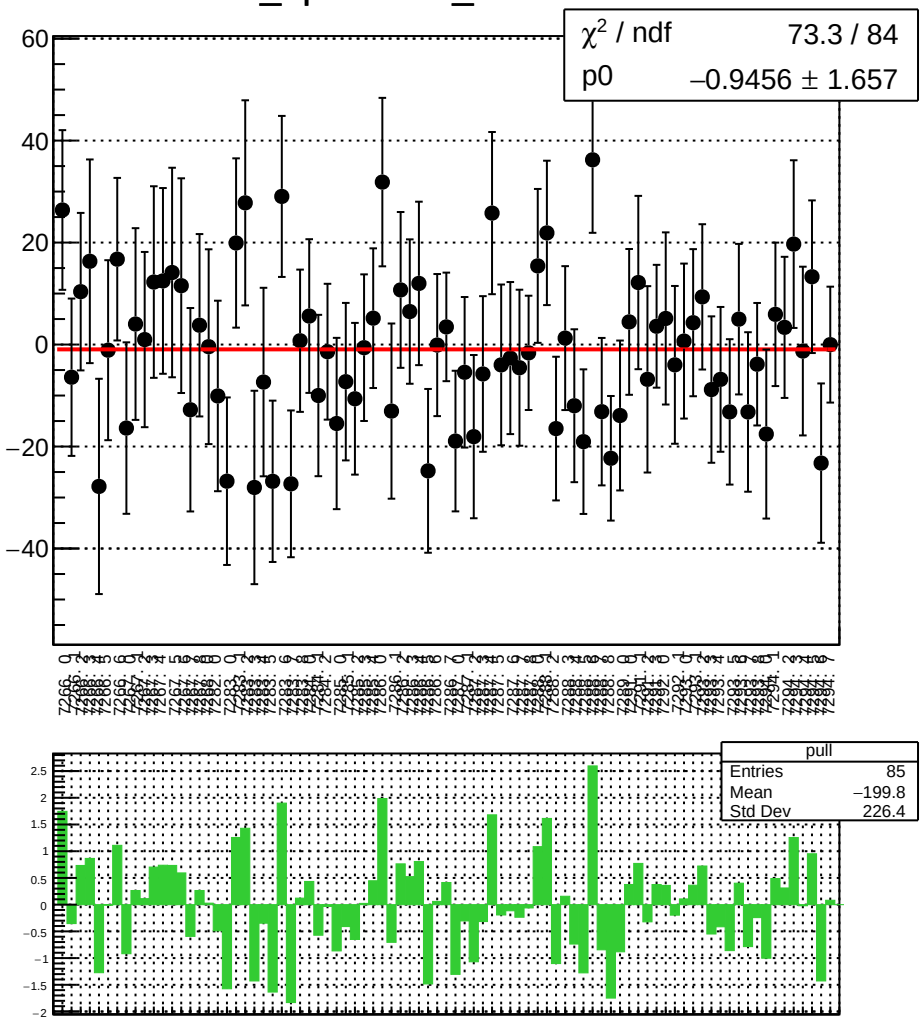

pull1D
Entries 85
Mean −0.004428
Std Dev 0.9707

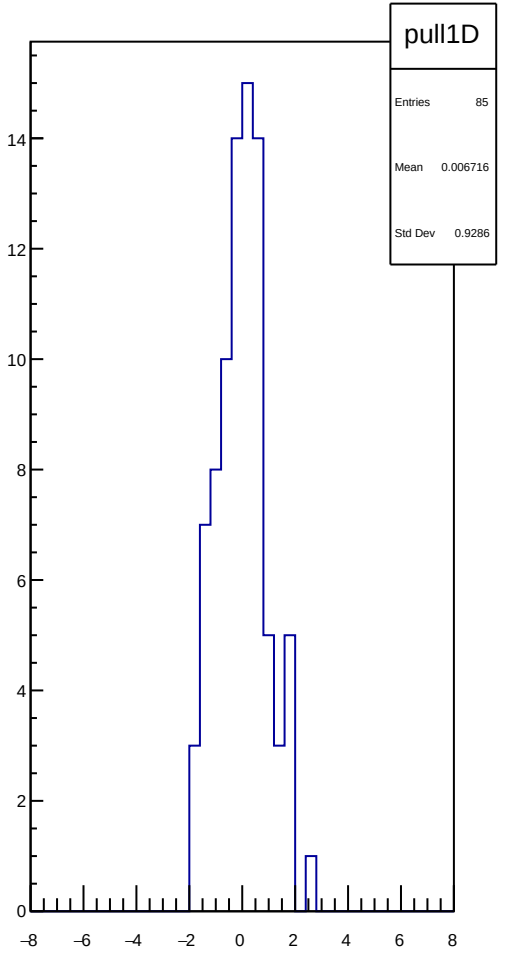

diff_bpm0i05Y_rms vs run
χ² / ndf 1888 / 84
p0 1888 ± 1.471
2100
2050
2000
1950
1900
1850
1800
1750

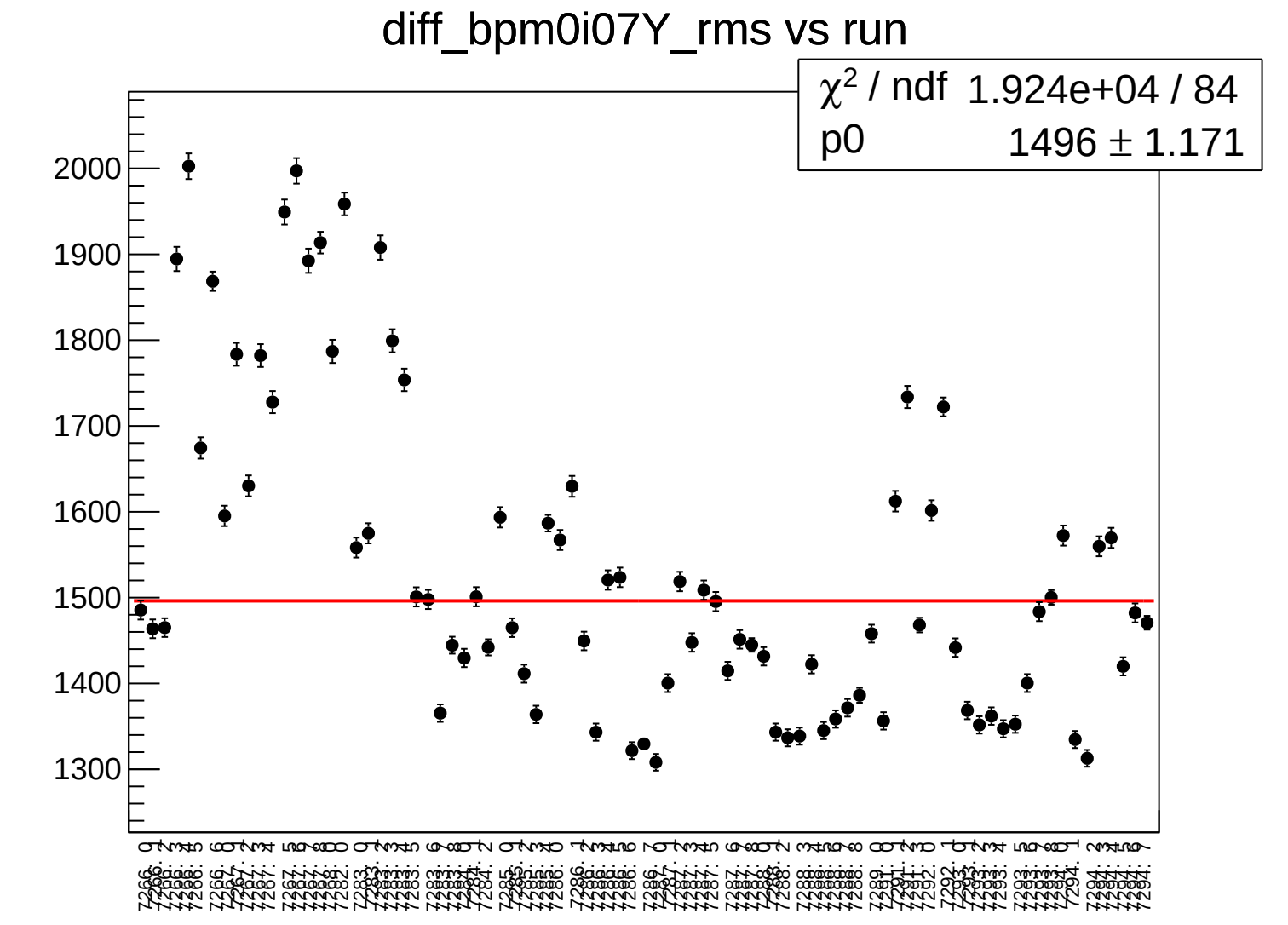

diff_bpm0i07X_mean vs run
χ² / ndf 99.91 / 84
p0 −16.5 ± 2.323
pull
Entries 85
Mean −79.6
Std Dev 167.4

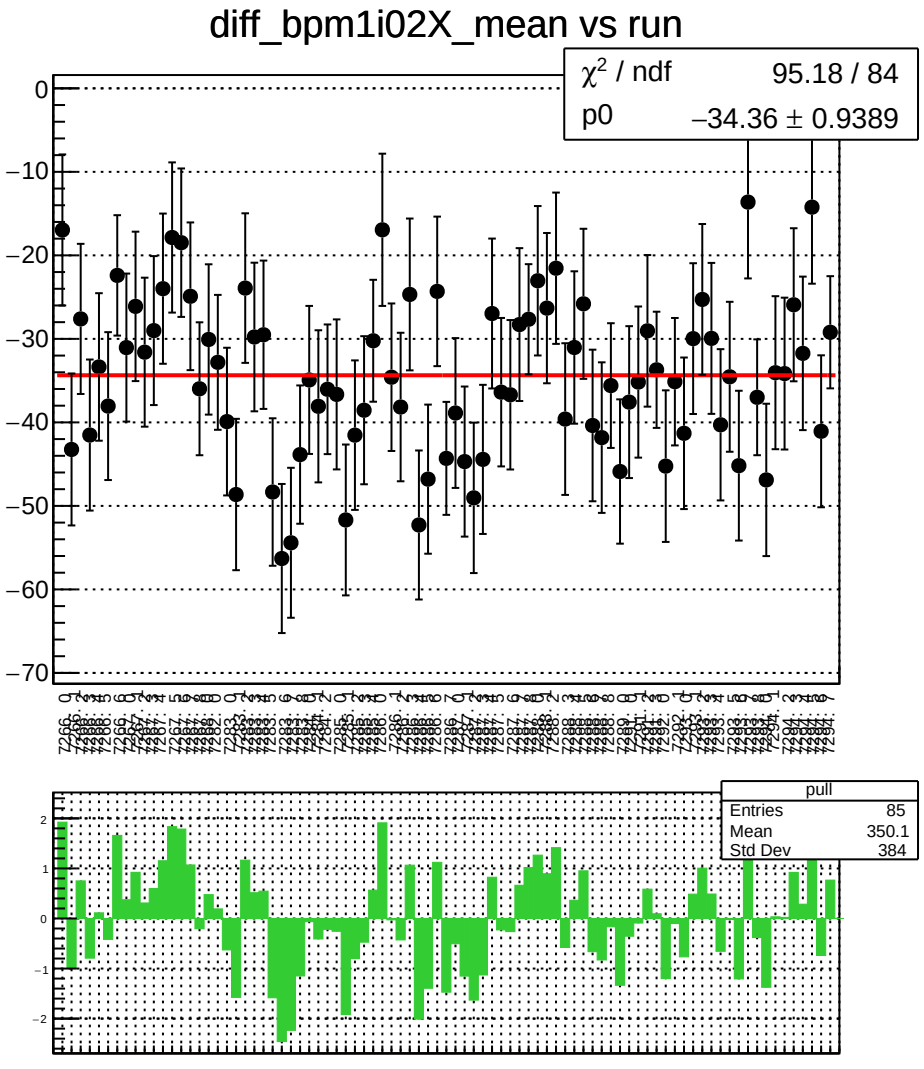

pull1D
Entries 85
Mean 0.002906
Std Dev 1.084

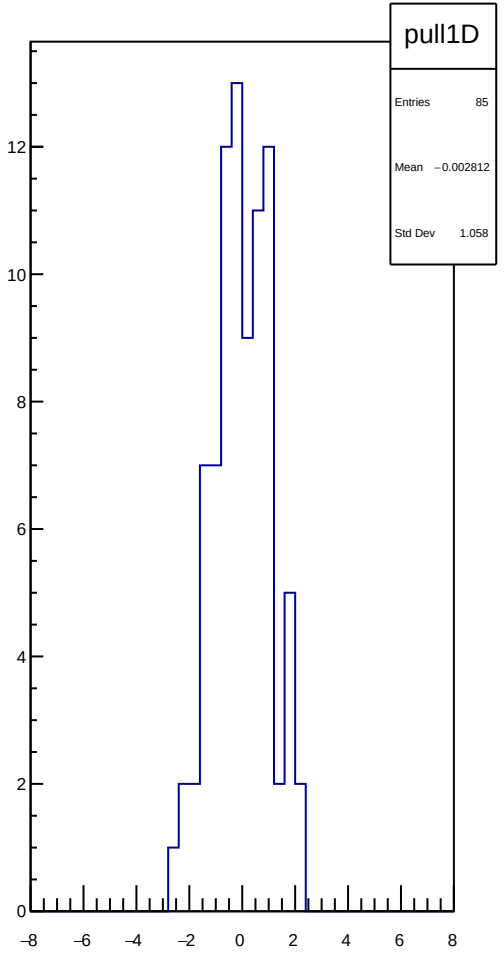

diff_bpm0i07X_rms vs run
χ² / ndf 7.511e+04 / 84
p0 2062 ± 1.643
3500
3000
2500
2000
1500

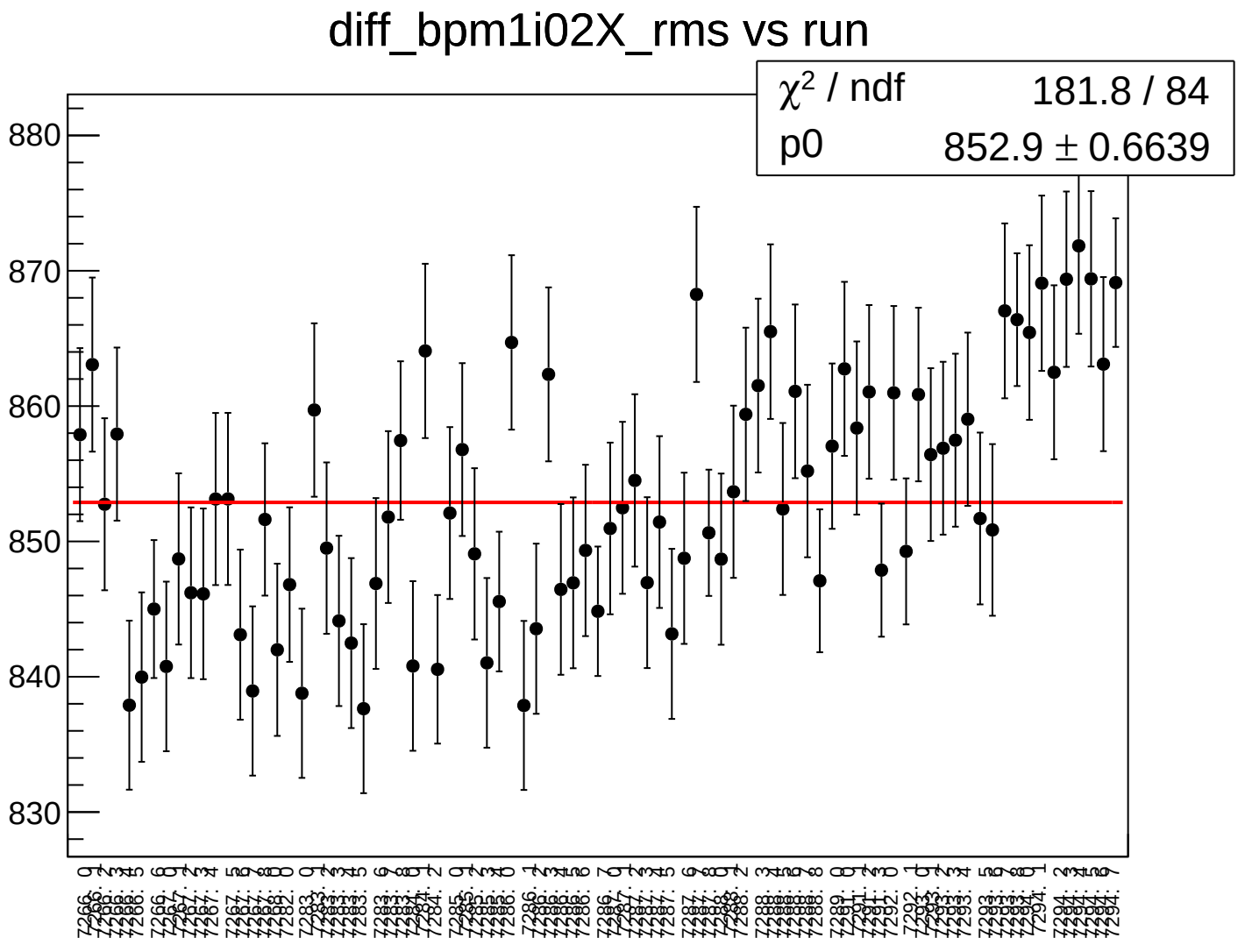

diff_bpm0i07Y_mean vs run
χ² / ndf 73.3 / 84
p0 −0.9456 ± 1.657
pull
Entries 85
Mean −199.8
Std Dev 226.4

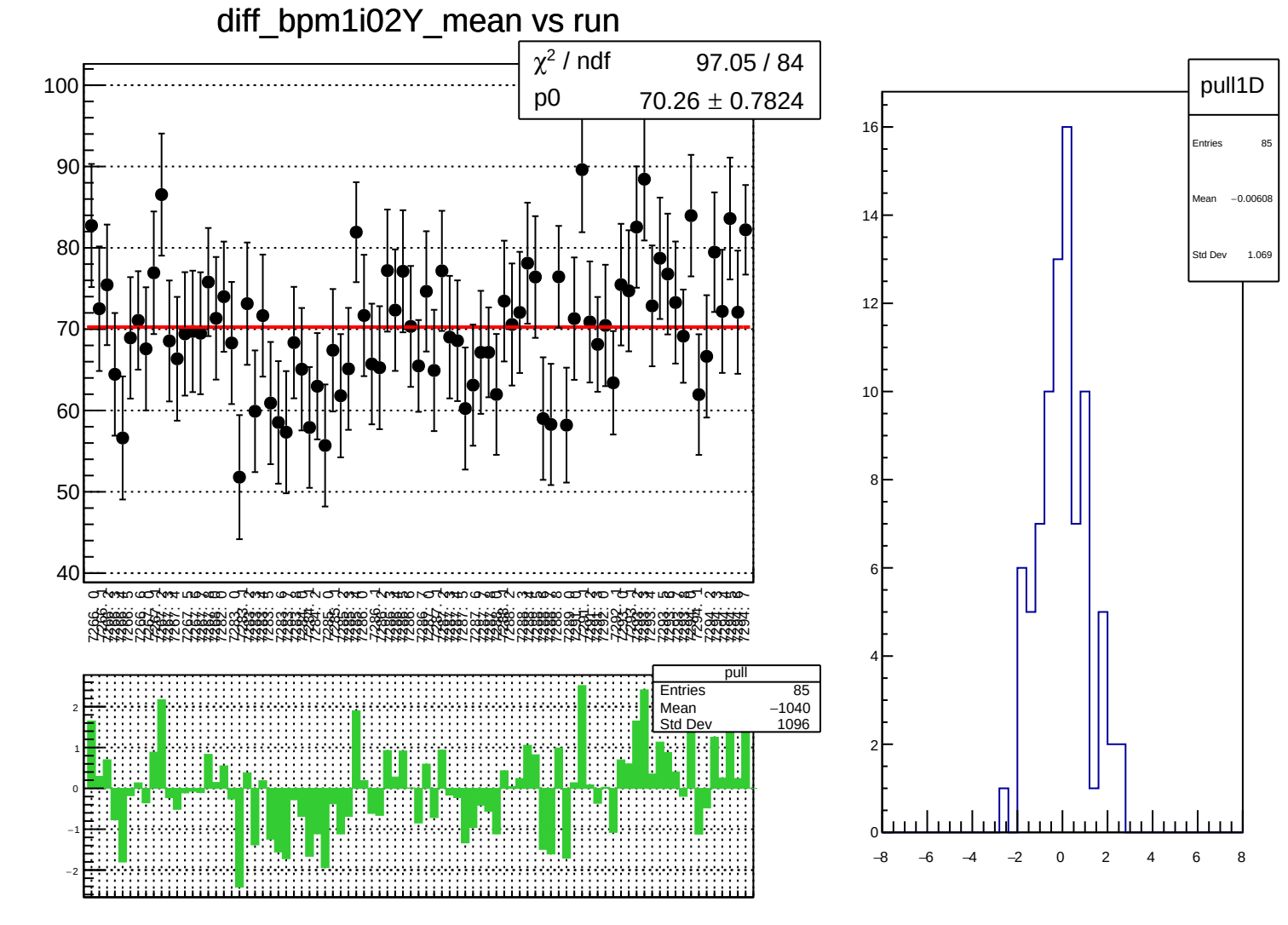

pull1D
Entries 85
Mean 0.006716
Std Dev 0.9286

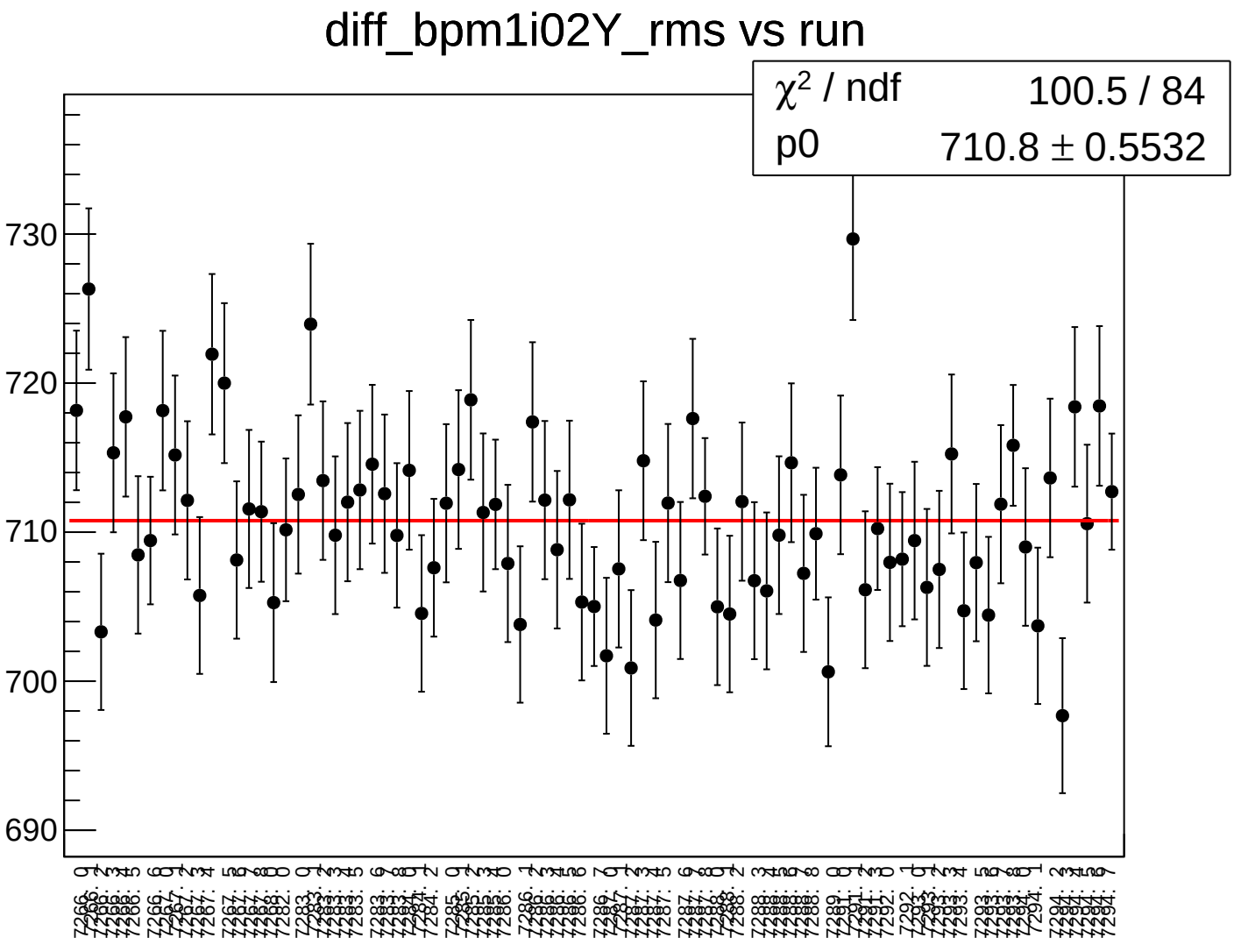

diff_bpm0i07Y_rms vs run
χ² / ndf 1.924e+04 / 84
p0 1496 ± 1.171
2000
1900
1800
1700
1600
1500
1400
1300

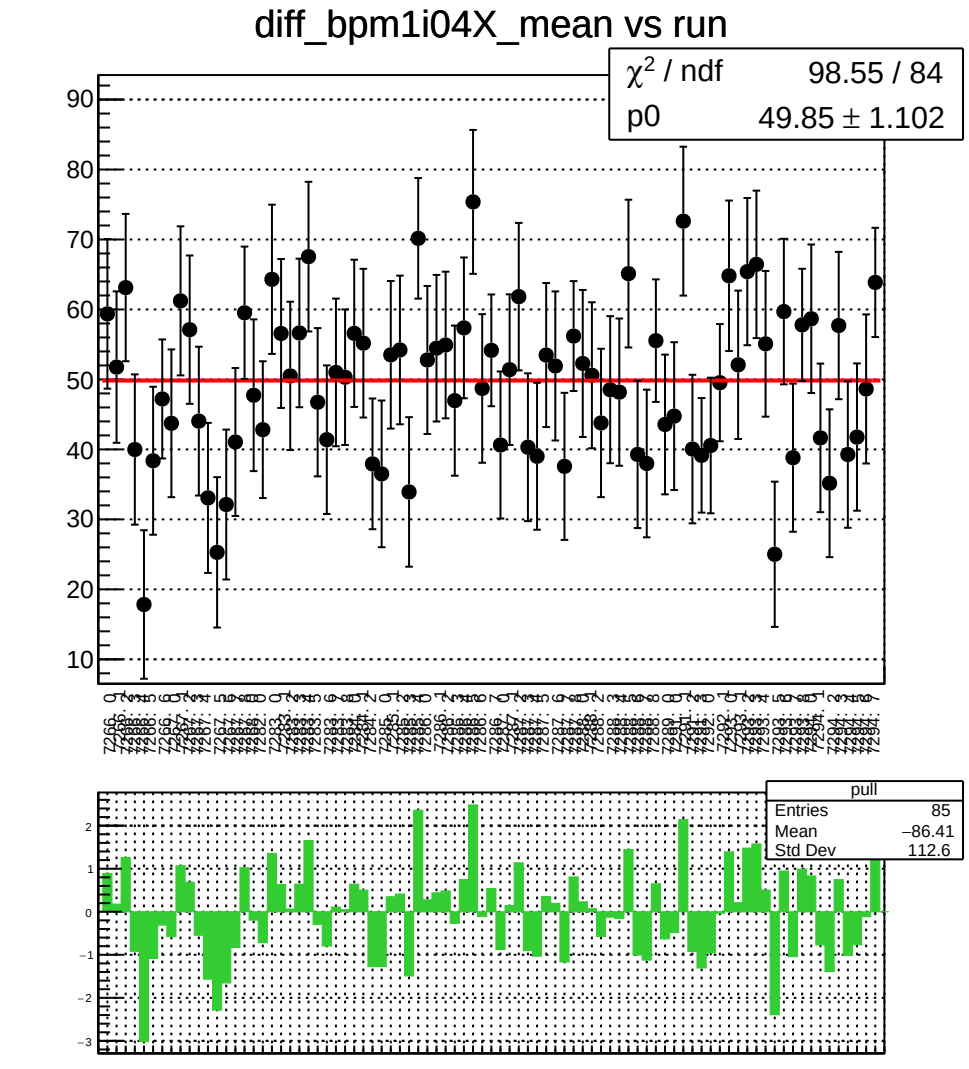

diff_bpm1i02X_mean vs run
χ² / ndf 95.18 / 84
p0 −34.36 ± 0.9389
pull
Entries 85
Mean 350.1
Std Dev 384

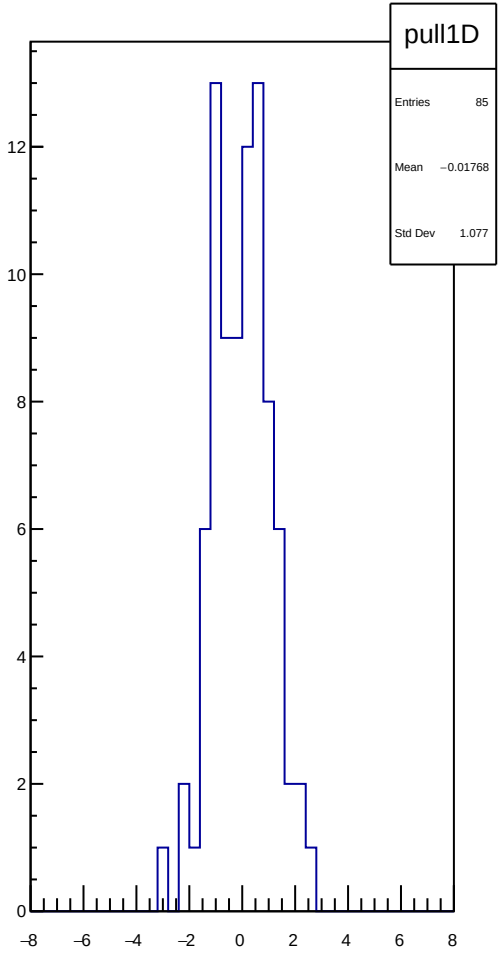

pull1D
Entries 85
Mean −0.002812
Std Dev 1.058

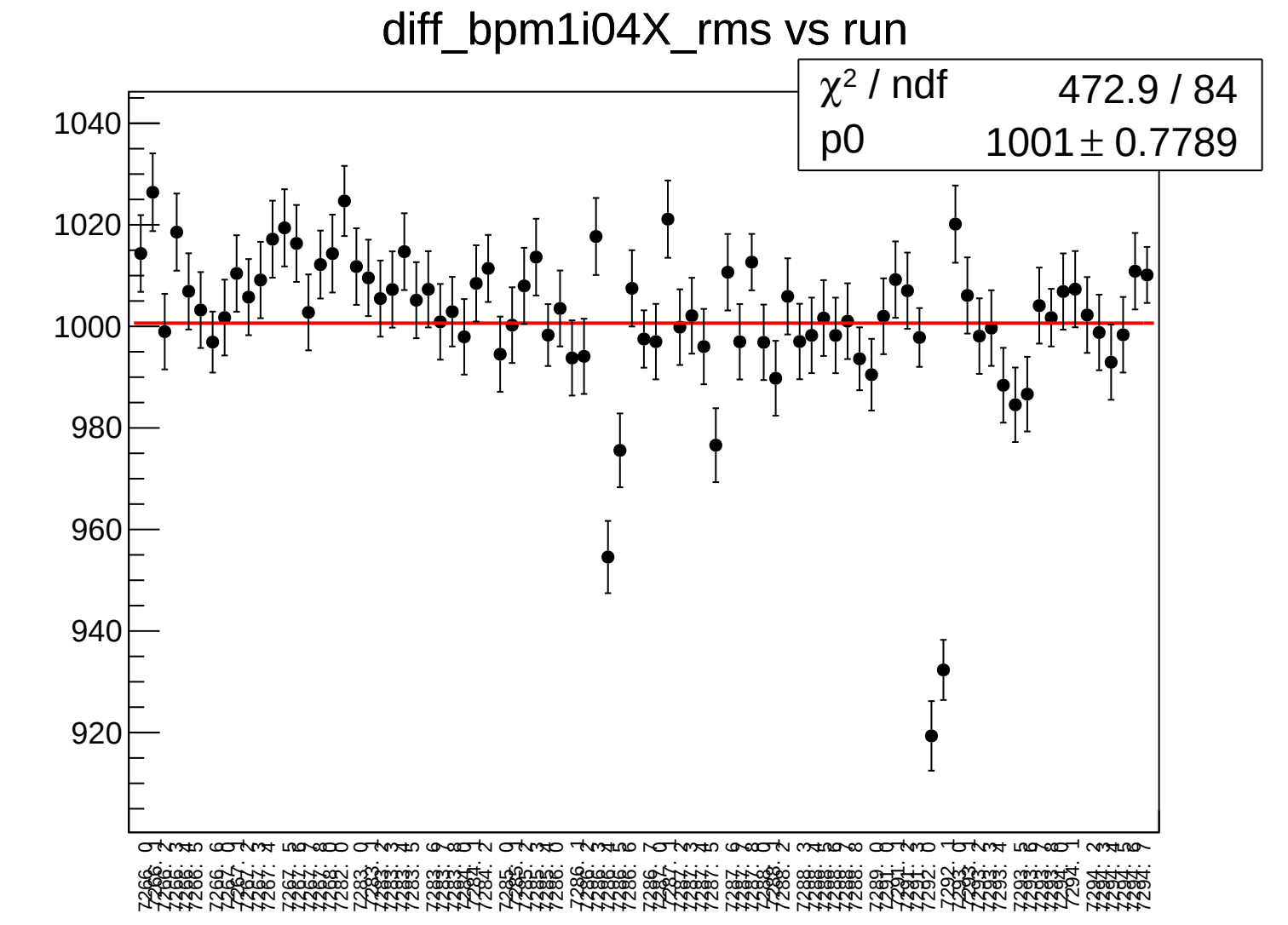

diff_bpm1i02X_rms vs run
χ^2 / ndf 181.8 / 84
p0 852.9 ± 0.6639
880
870
860
850
840
830

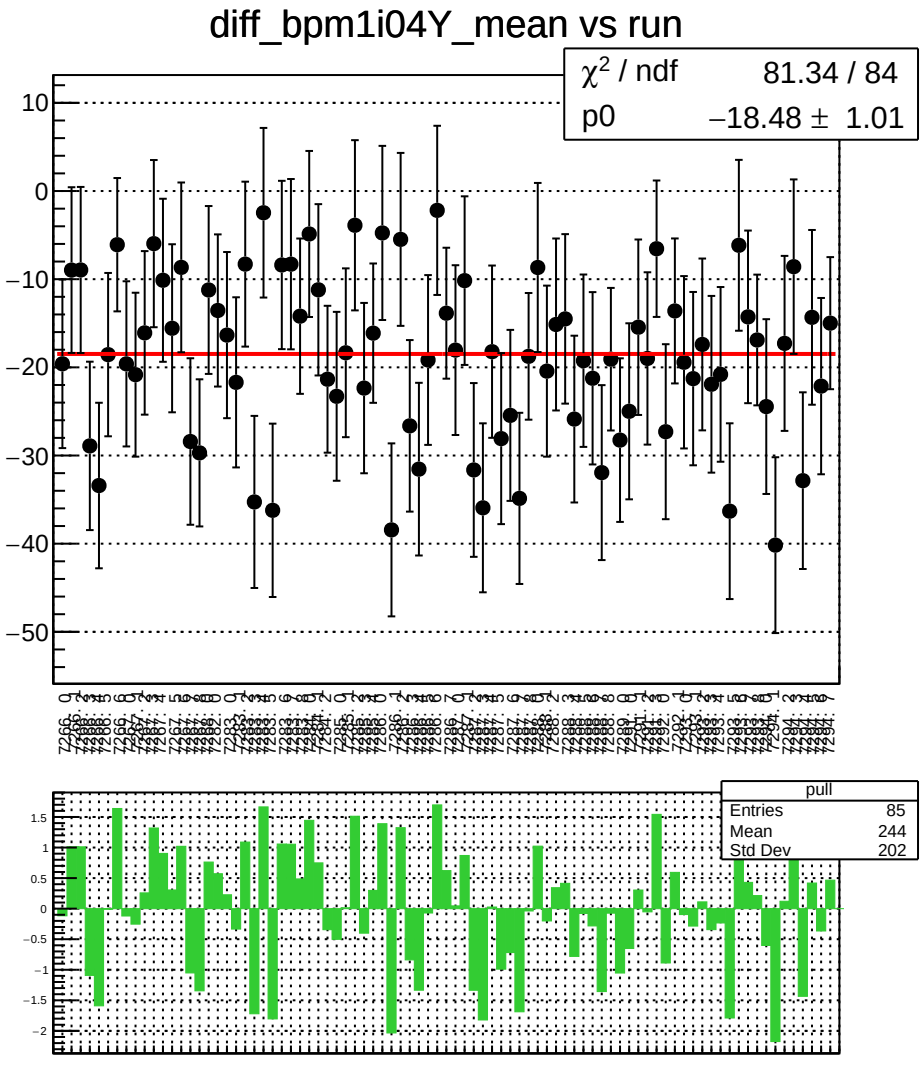

diff_bpm1i02Y_mean vs run
χ² / ndf 97.05 / 84
p0 70.26 ± 0.7824
pull
Entries 85
Mean −1040
Std Dev 1096
pull1D
Entries 85
Mean −0.00608
Std Dev 1.069

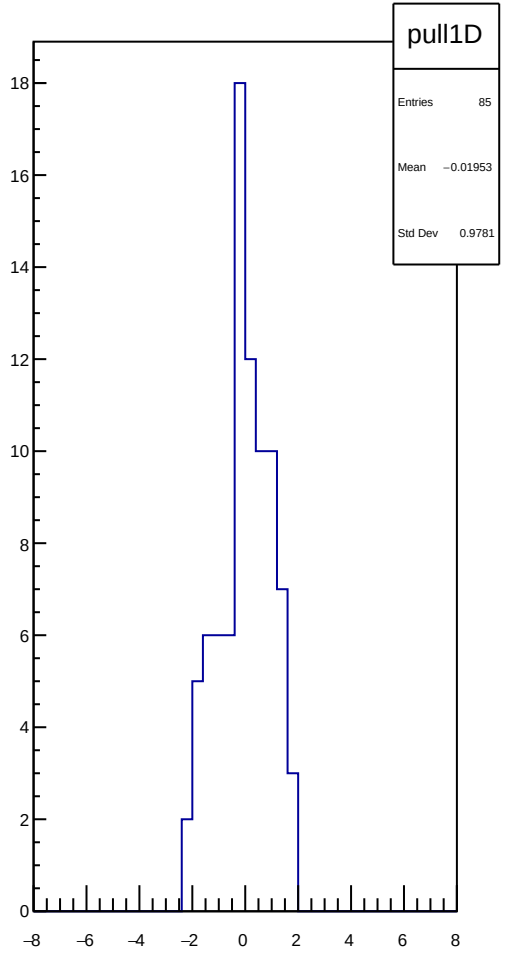

diff_bpm1i02Y_rms vs run
χ² / ndf 100.5 / 84
p0 710.8 ± 0.5532
730
720
710
700
690

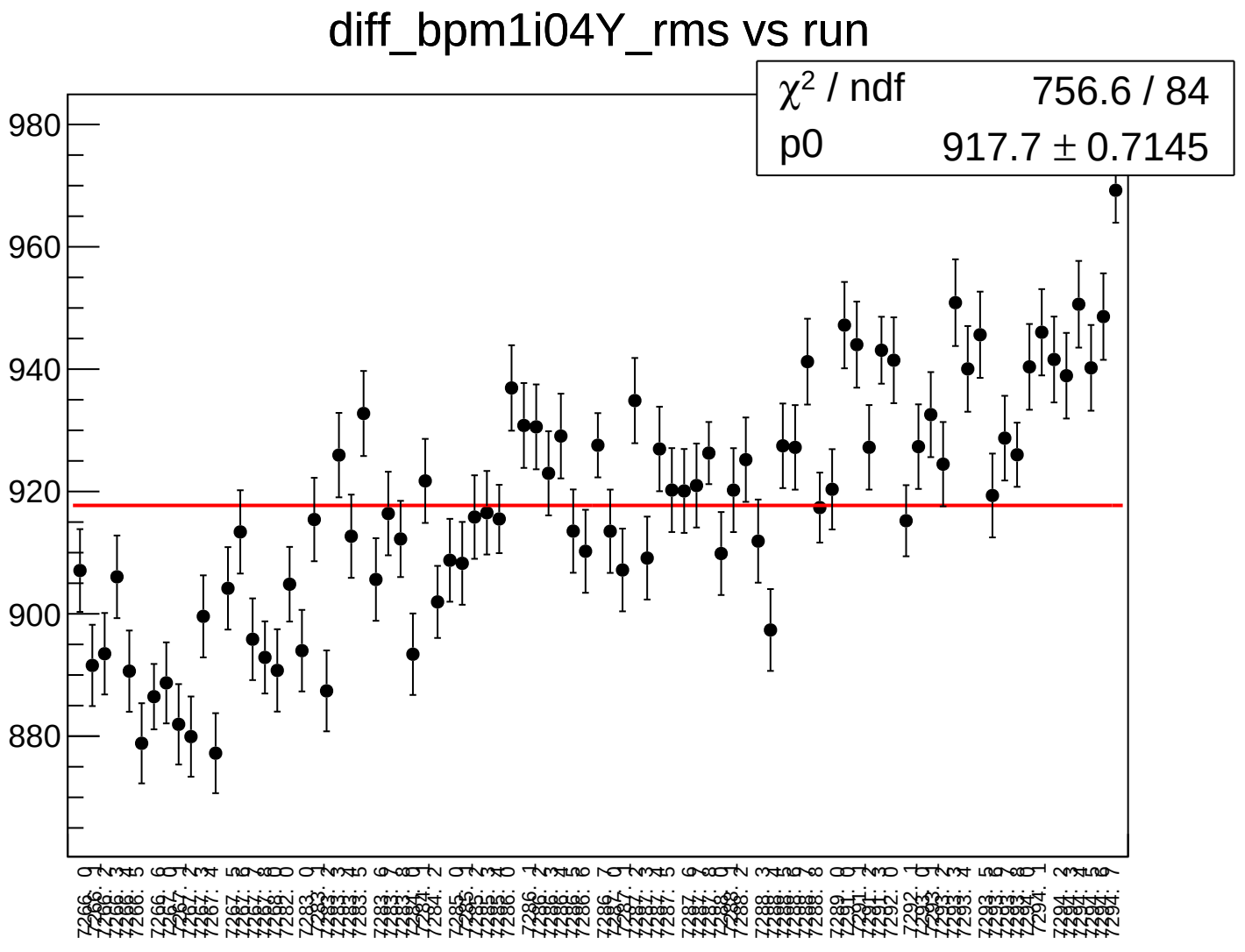

diff_bpm1i04X_mean vs run
χ^2 / ndf 98.55 / 84
p0 49.85 ± 1.102
pull
Entries 85
Mean −86.41
Std Dev 112.6

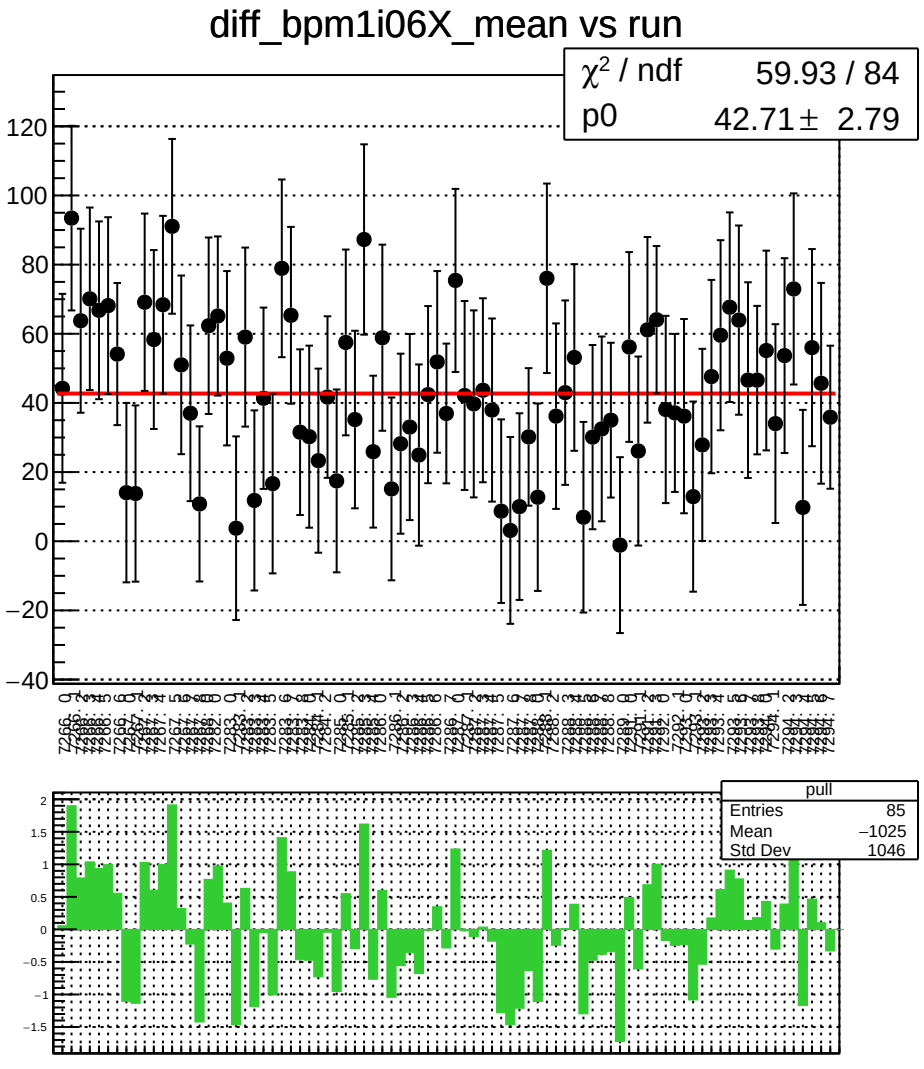

pull1D
Entries 85
Mean −0.01768
Std Dev 1.077

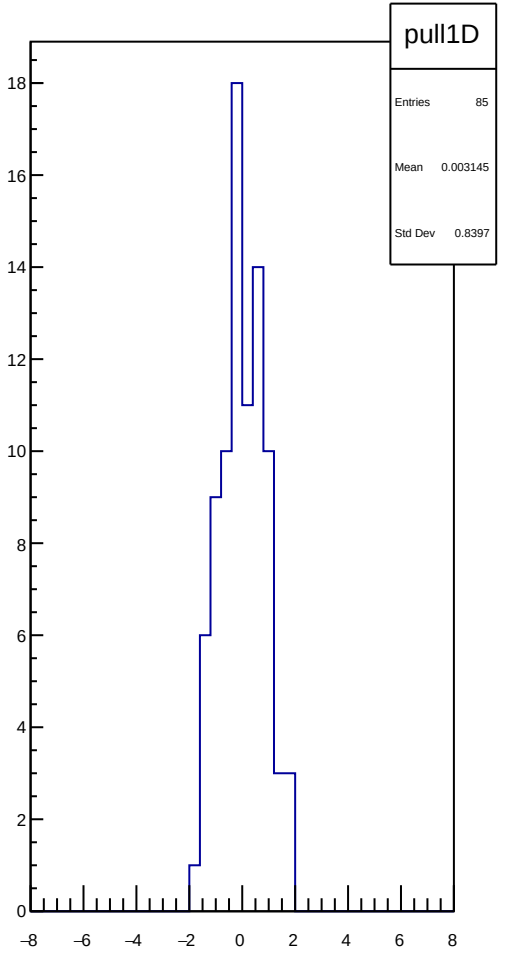

diff_bpm1i04X_rms vs run
χ² / ndf 472.9 / 84
p0 1001 ± 0.7789
1040
1020
1000
980
960
940
920

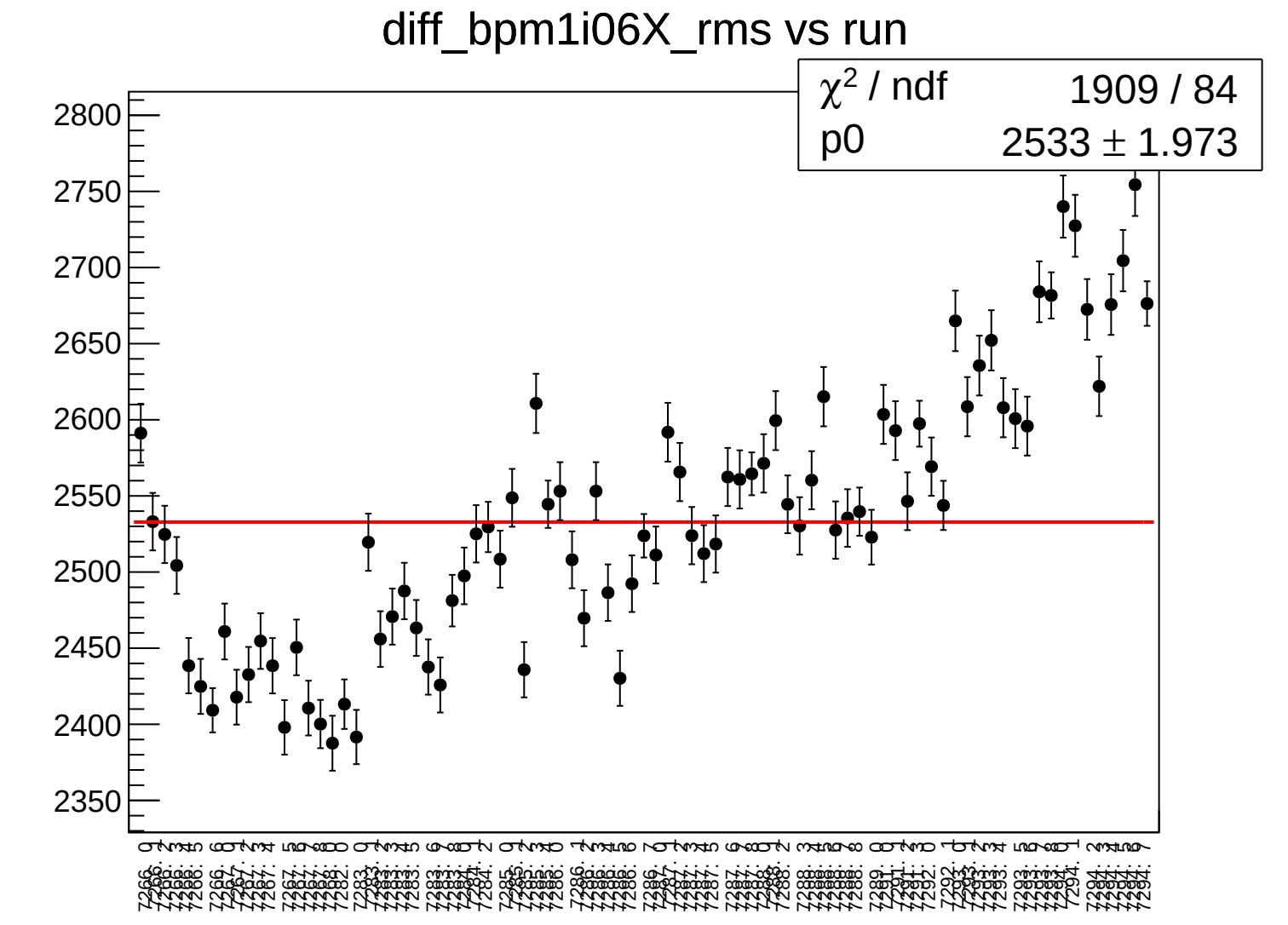

diff_bpm1i04Y_mean vs run
χ^2 / ndf 81.34 / 84
p0 −18.48 ± 1.01
pull
Entries 85
Mean 244
Std Dev 202

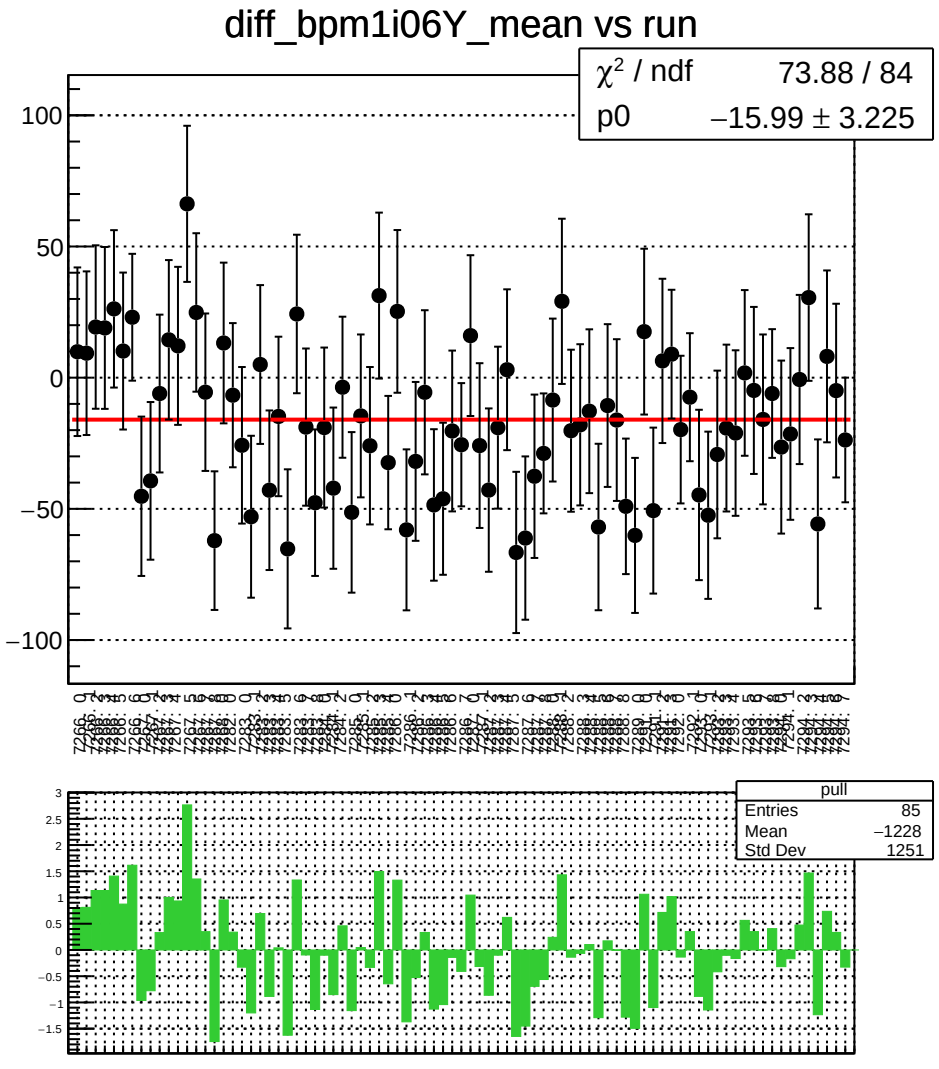

pull1D
Entries 85
Mean −0.01953
Std Dev 0.9781

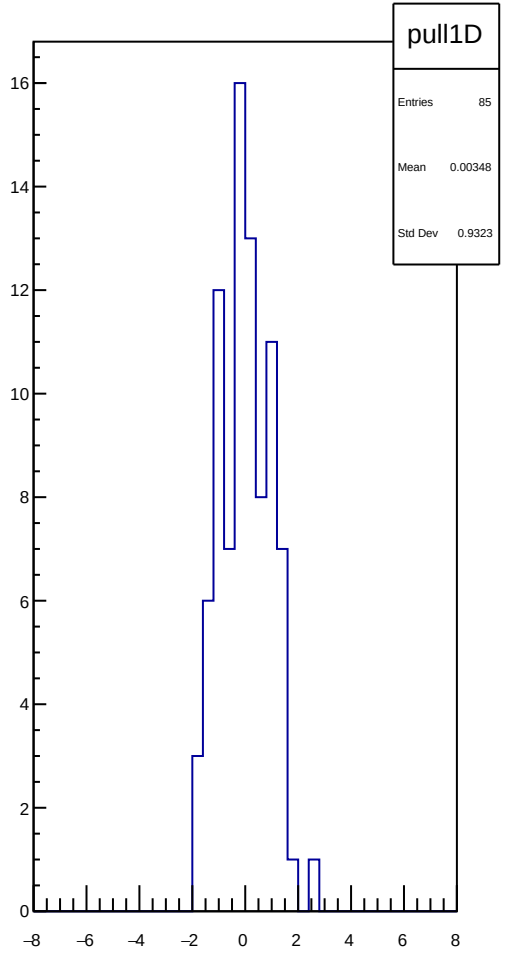

diff_bpm1i04Y_rms vs run
χ² / ndf 756.6 / 84
p0 917.7 ± 0.7145
980
960
940
920
900
880

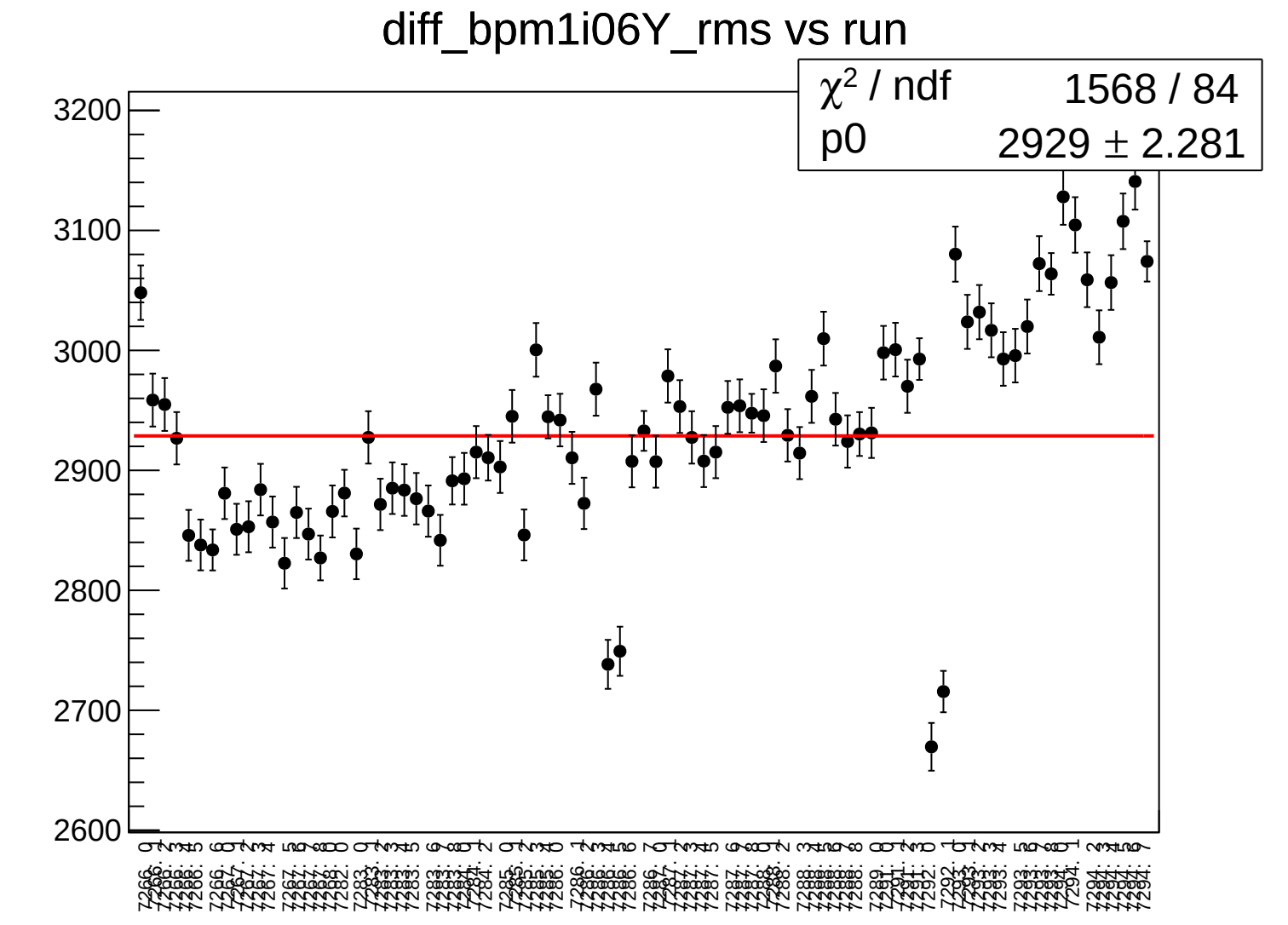

diff_bpm1i06X_mean vs run
χ² / ndf 59.93 / 84
p0 42.71 ± 2.79
pull
Entries 85
Mean −1025
Std Dev 1046

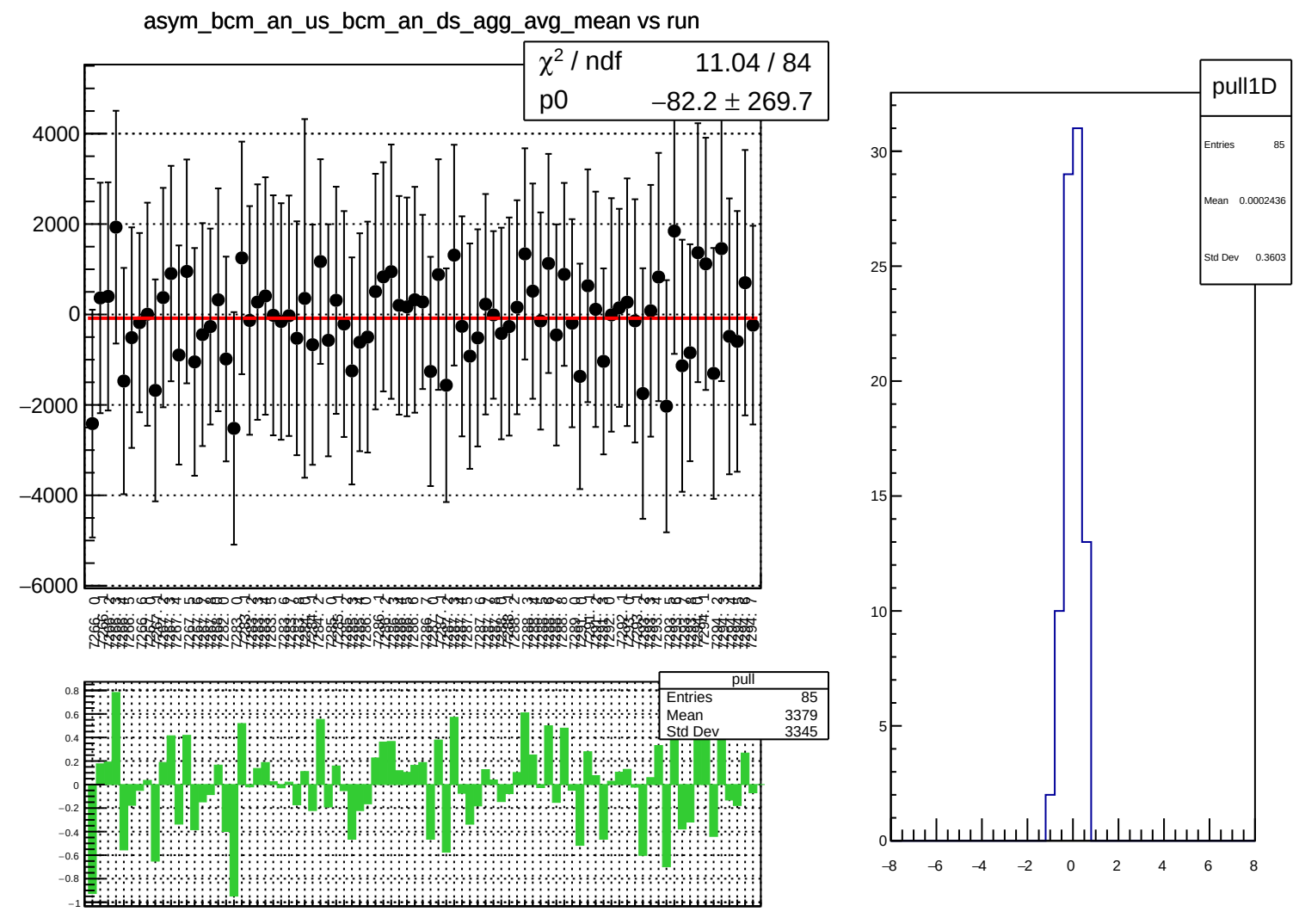

pull1D
Entries 85
Mean 0.003145
Std Dev 0.8397

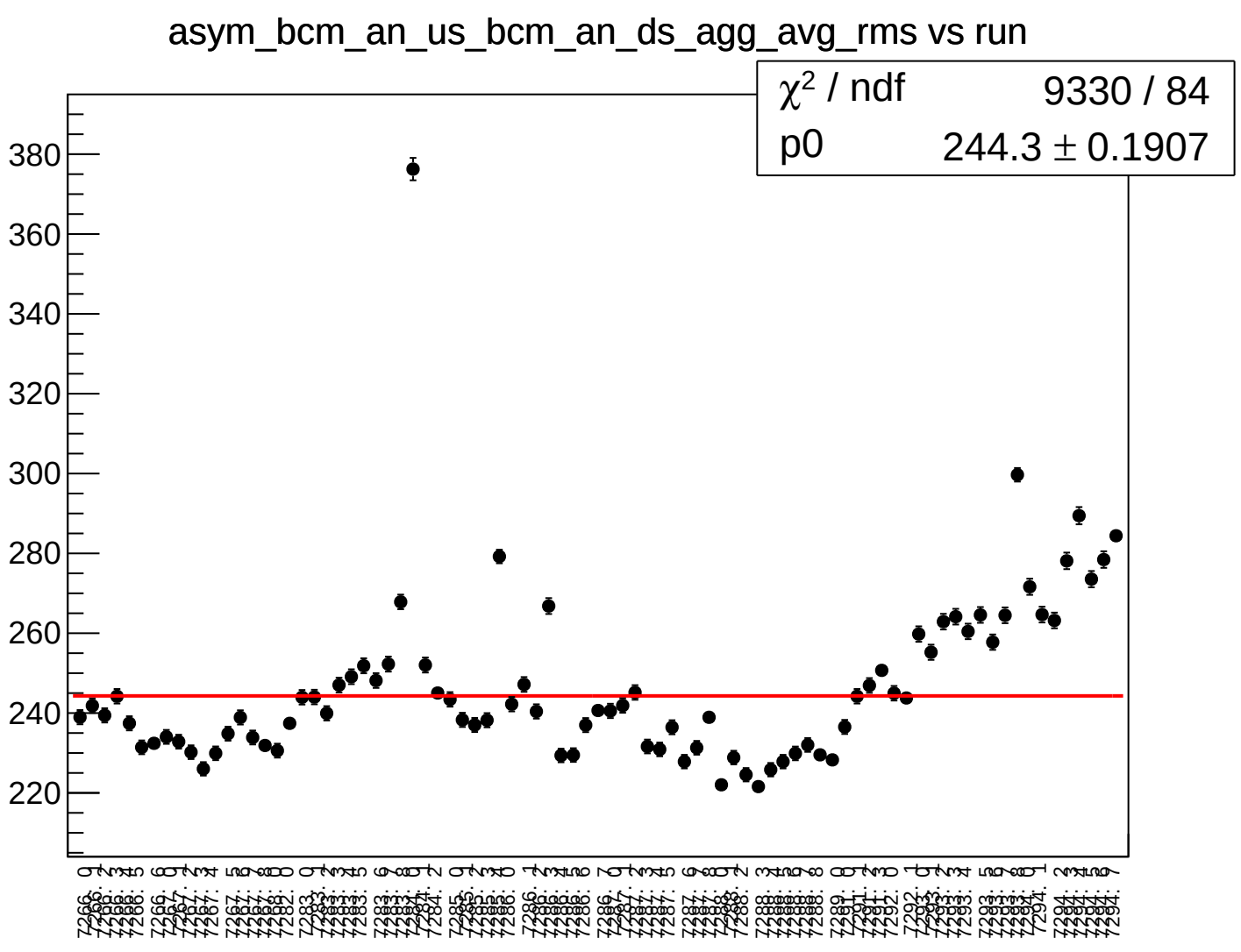

diff_bpm1i06X_rms vs run
χ^2 / ndf 1909 / 84
p0 2533 ± 1.973
2800
2750
2700
2650
2600
2550
2500
2450
2400
2350

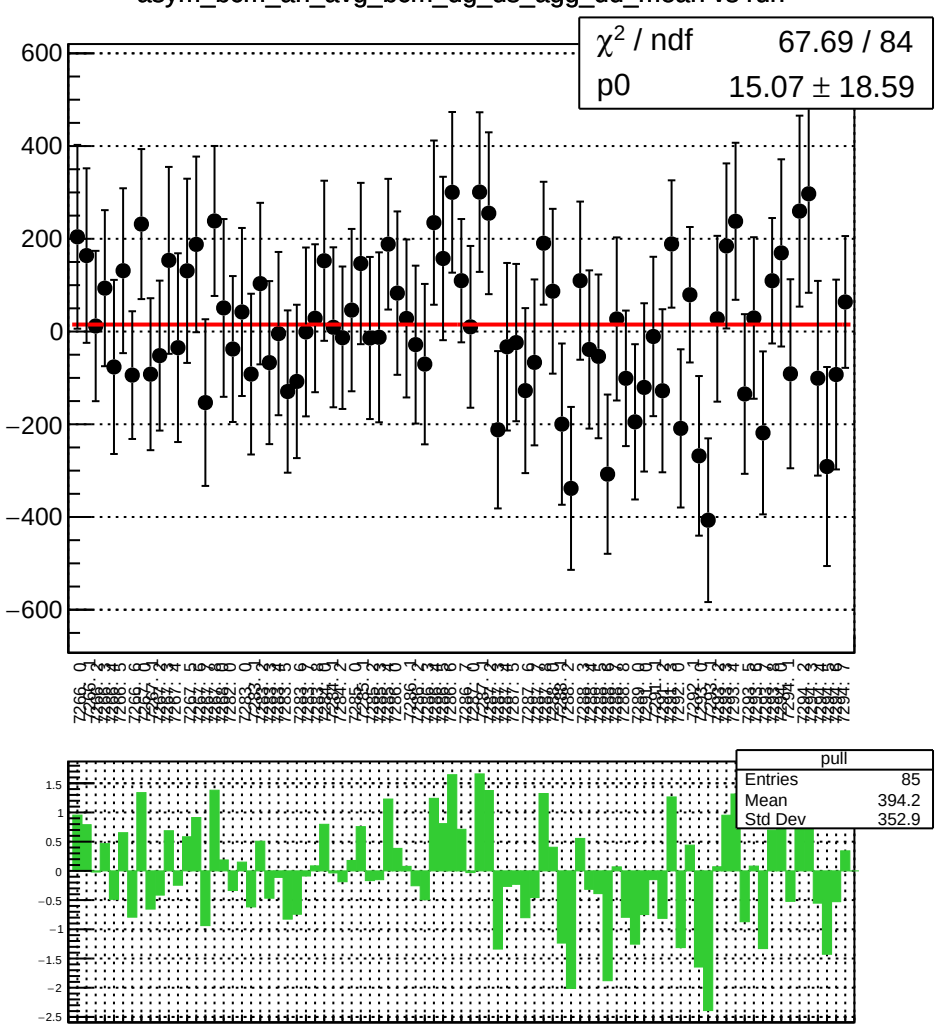

diff_bpm1i06Y_mean vs run
χ^2 / ndf 73.88 / 84
p0 −15.99 ± 3.225
100
50
0
−50
−100
pull
Entries 85
Mean −1228
Std Dev 1251
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

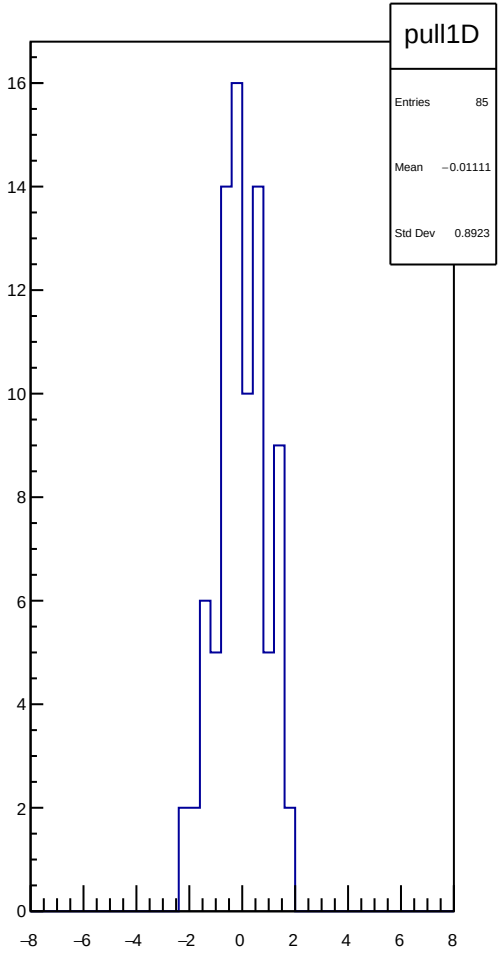

pull1D
Entries 85
Mean 0.00348
Std Dev 0.9323
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

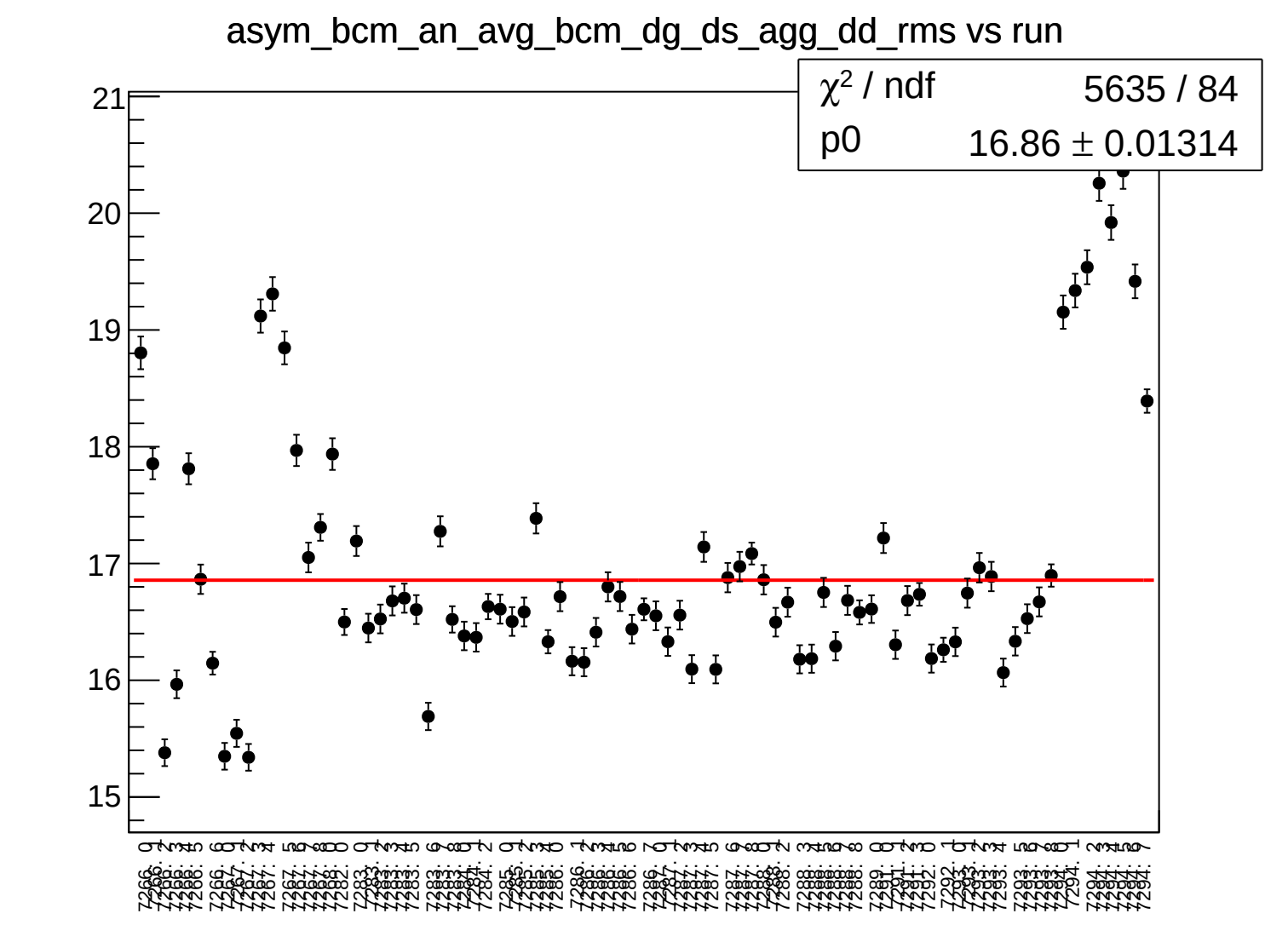

diff_bpm1i06Y_rms vs run
χ² / ndf 1568 / 84
p0 2929 ± 2.281
3200
3100
3000
2900
2800
2700
2600

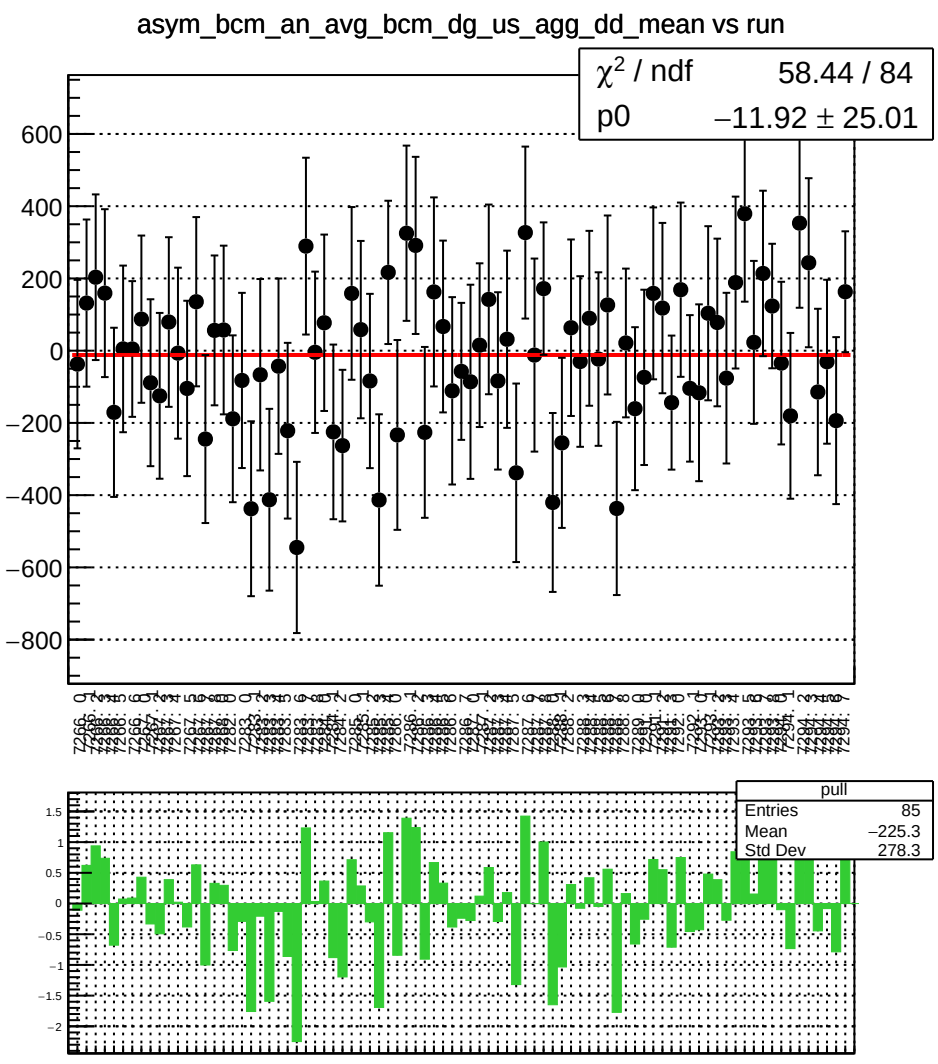

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.04 / 84
p0 −82.2 ± 269.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 3379
Std Dev 3345
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean 0.0002436
Std Dev 0.3603
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

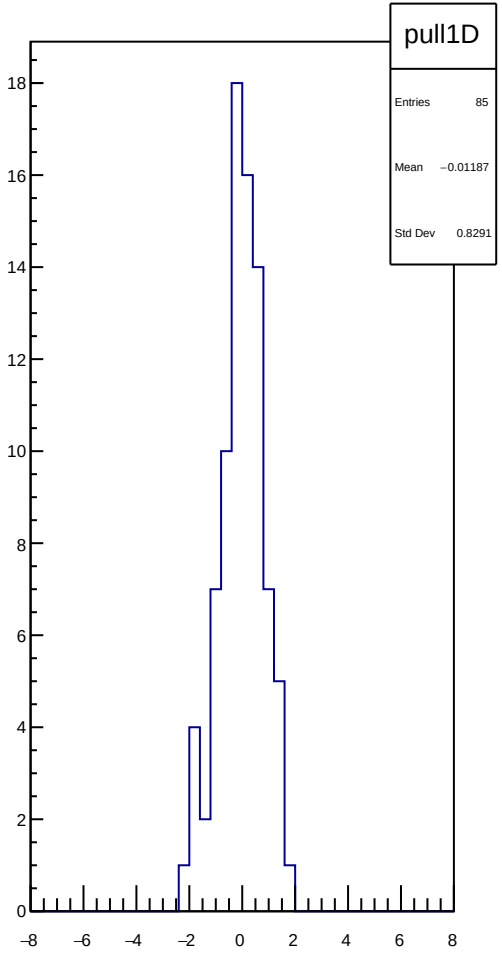

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 9330 / 84
p0 244.3 ± 0.1907
380
360
340
320
300
280
260
240
220

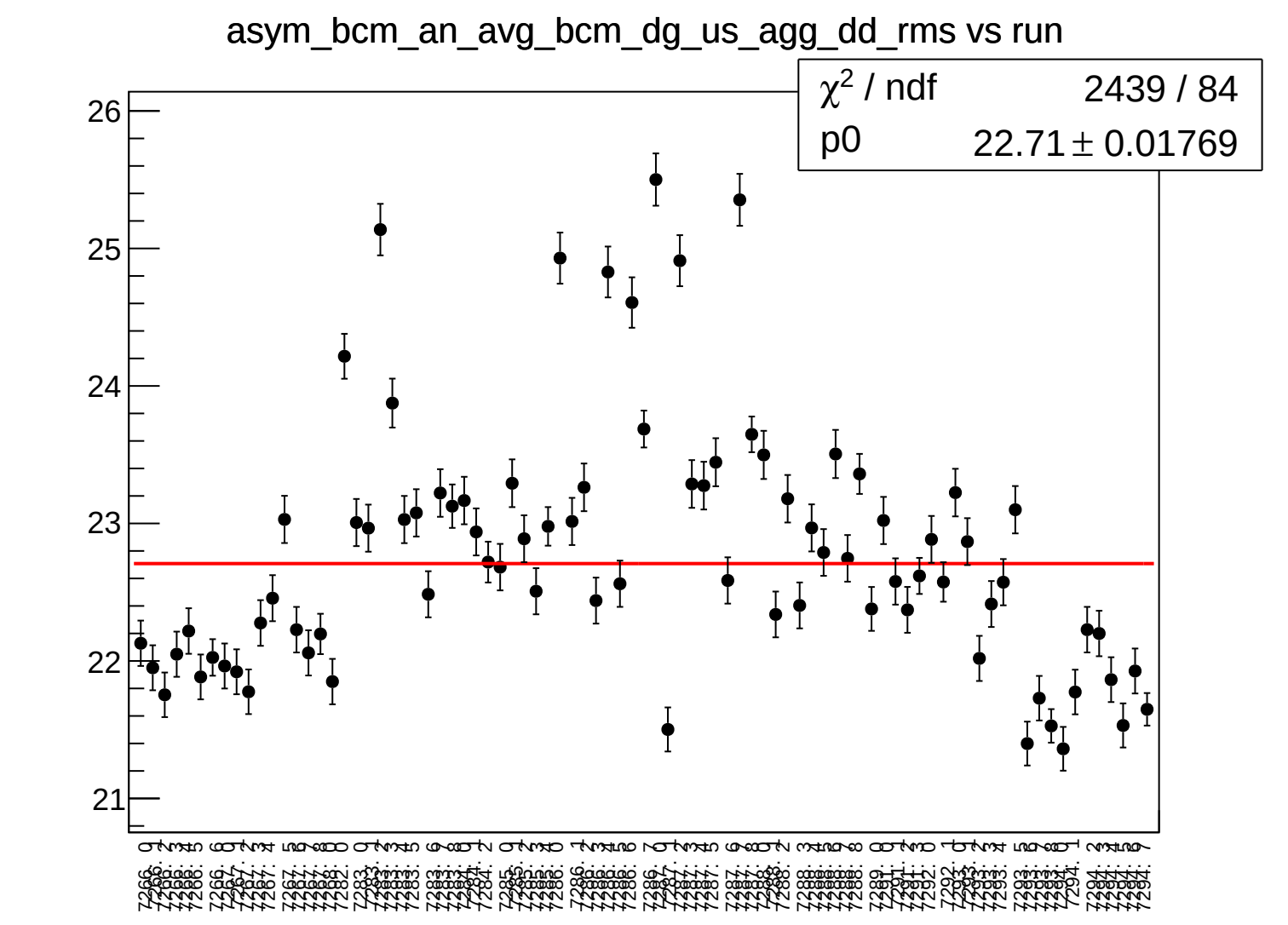

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 67.69 / 84
p0 15.07 ± 18.59
pull
Entries 85
Mean 394.2
Std Dev 352.9

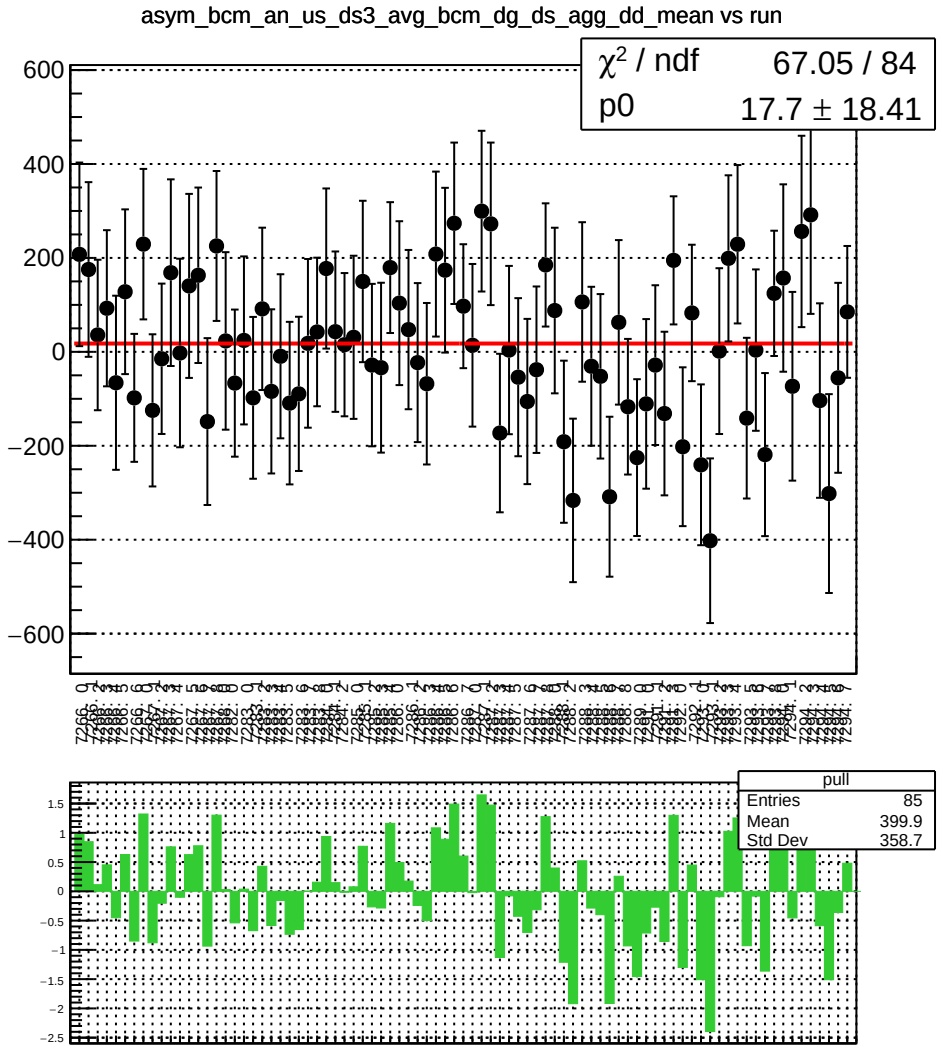

pull1D
Entries 85
Mean −0.01111
Std Dev 0.8923

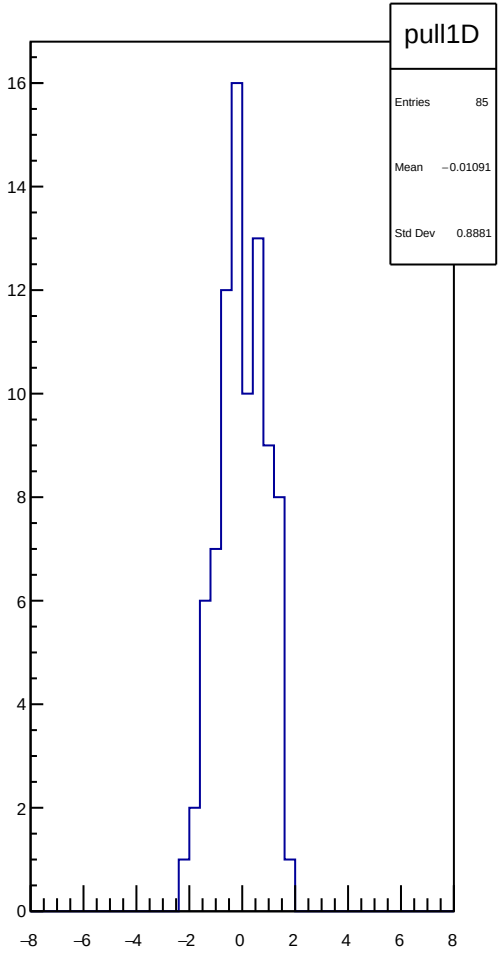

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 5635 / 84
p0 16.86 ± 0.01314
21
20
19
18
17
16
15

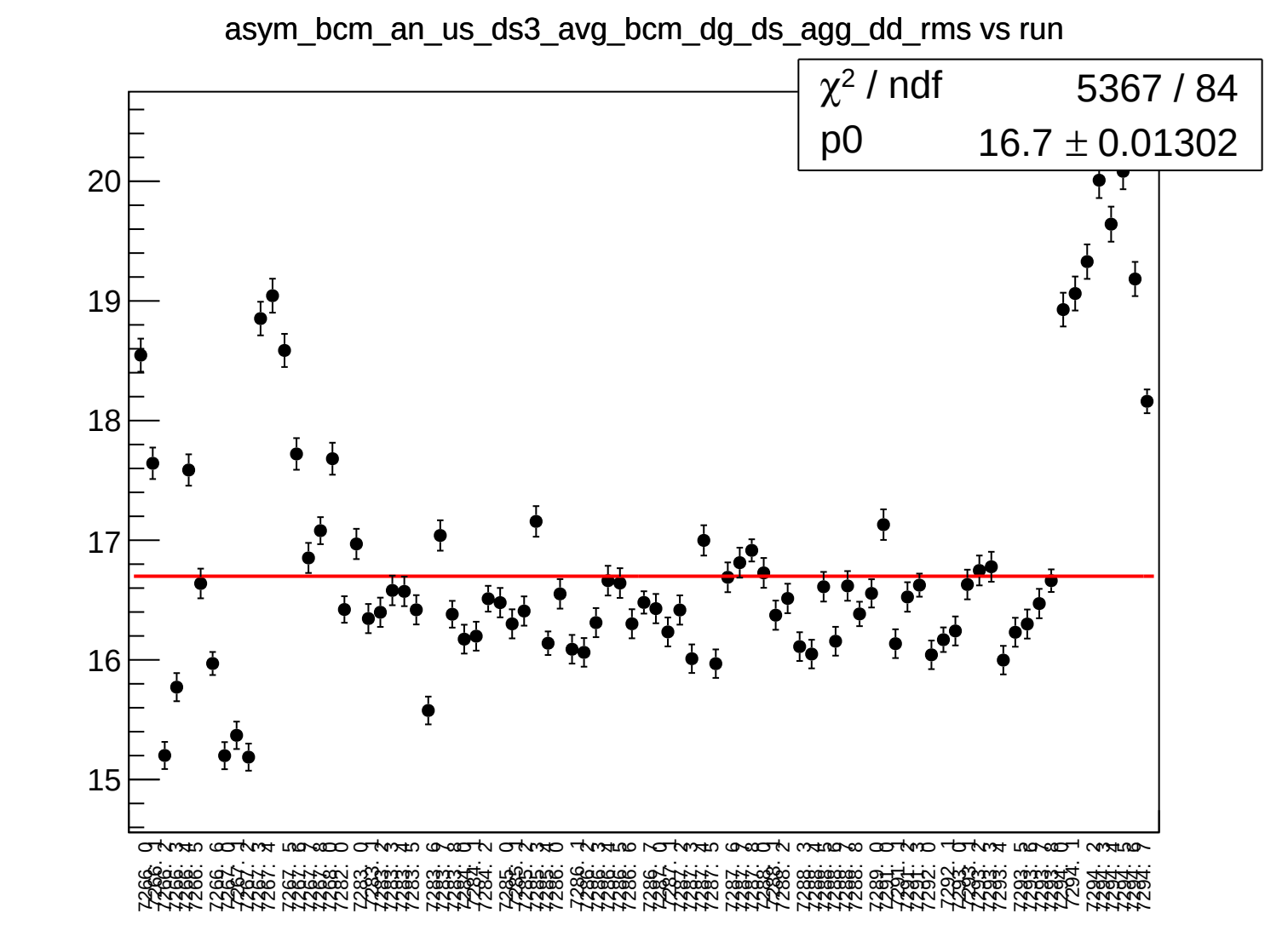

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 58.44 / 84
p0 −11.92 ± 25.01
pull
Entries 85
Mean −225.3
Std Dev 278.3

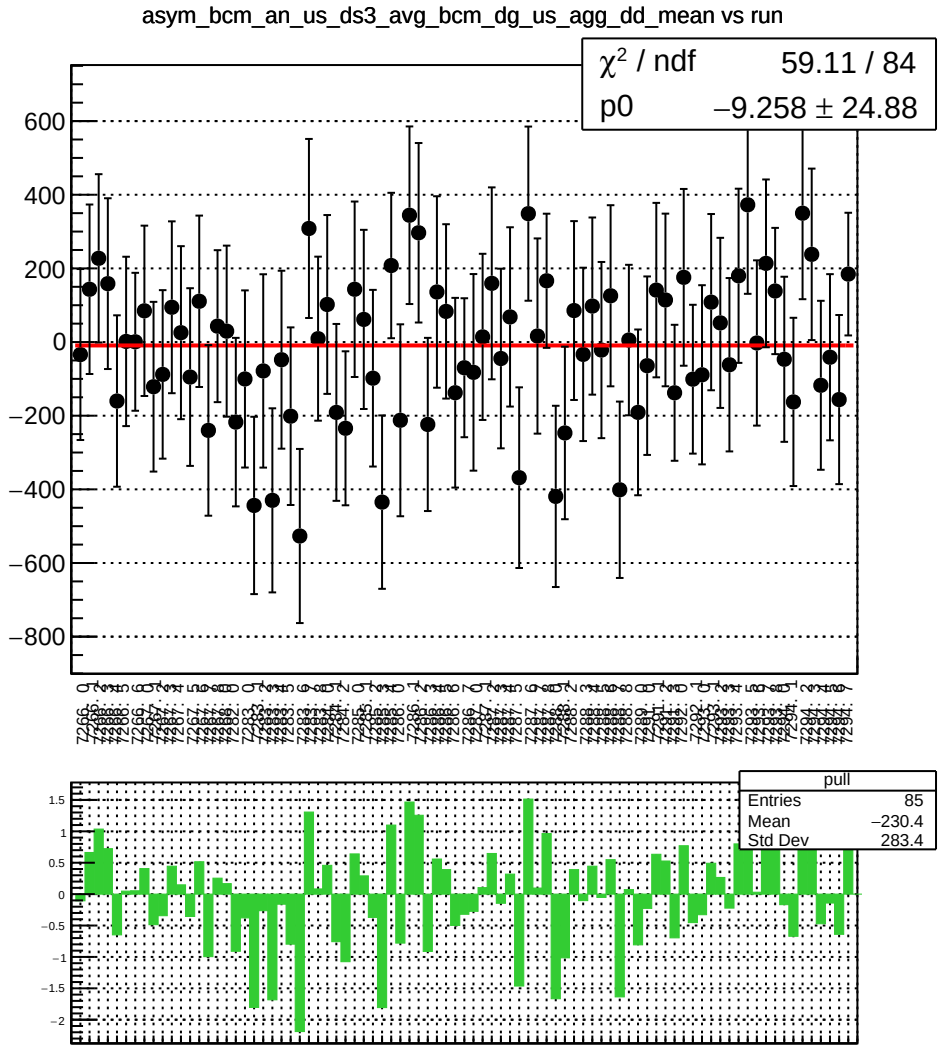

pull1D
Entries 85
Mean −0.01187
Std Dev 0.8291

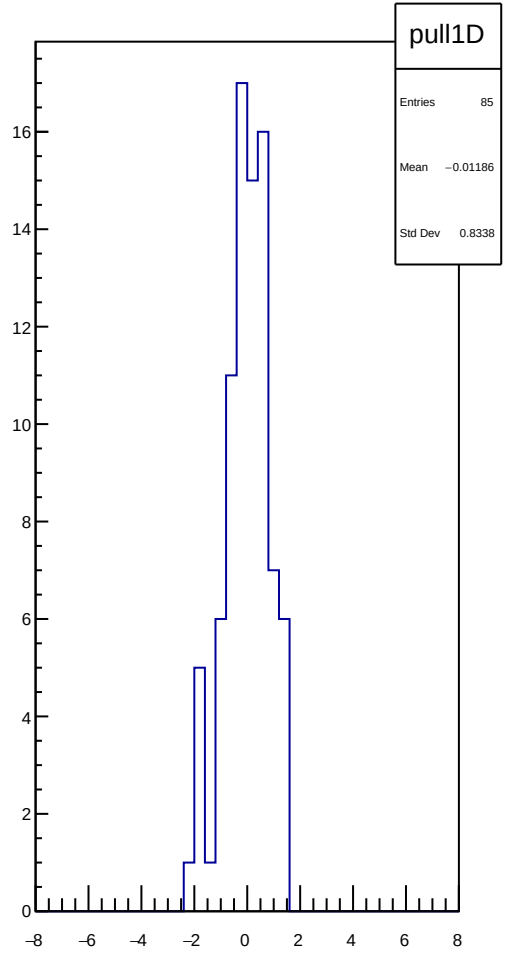

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2439 / 84
p0 22.71 ± 0.01769
26
25
24
23
22
21

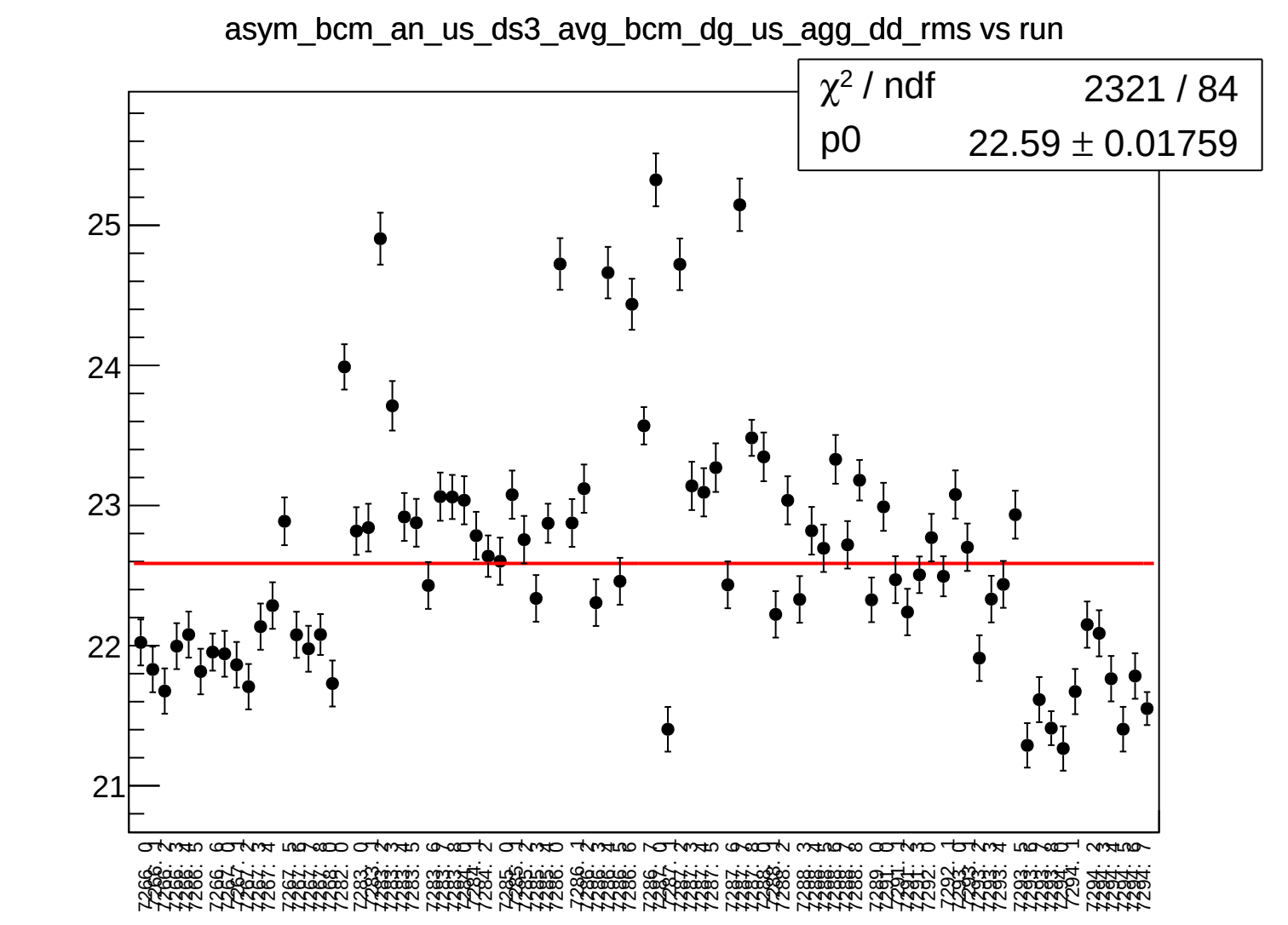

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 67.05 / 84
p0 17.7 ± 18.41
pull
Entries 85
Mean 399.9
Std Dev 358.7

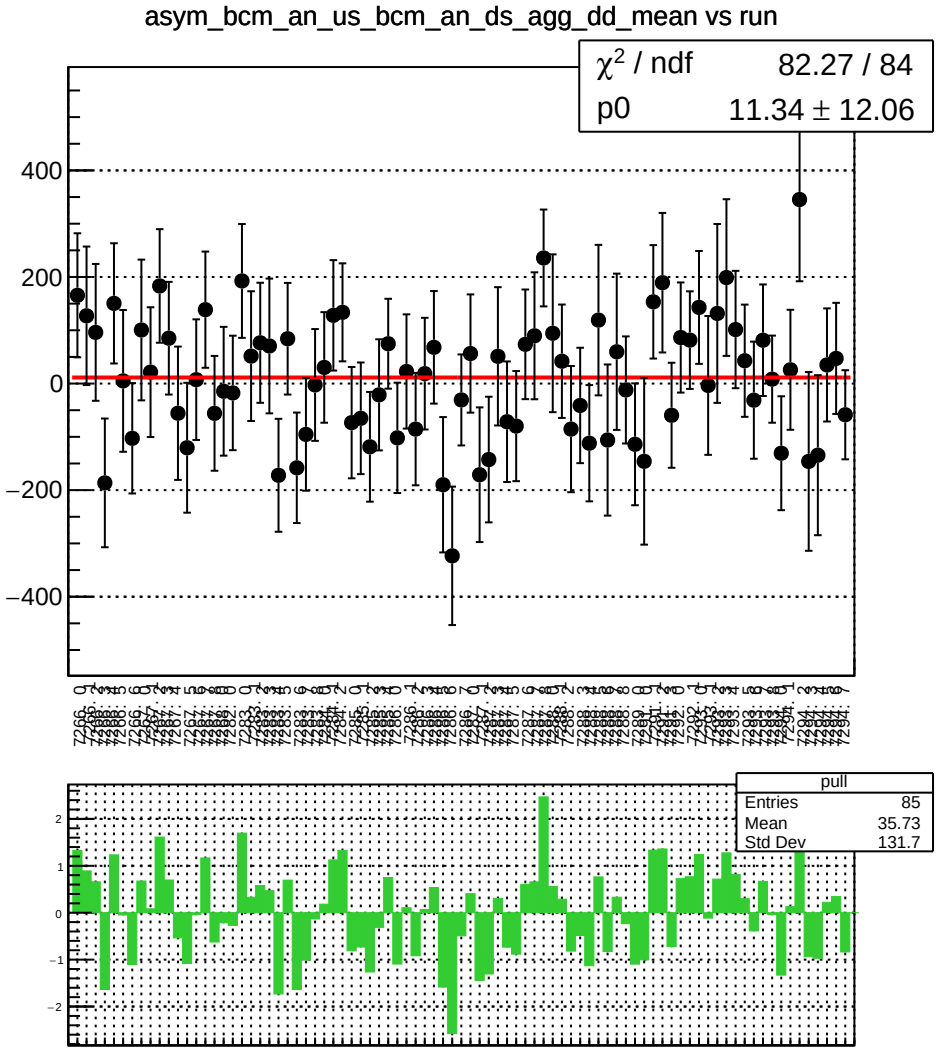

pull1D
Entries 85
Mean −0.01091
Std Dev 0.8881

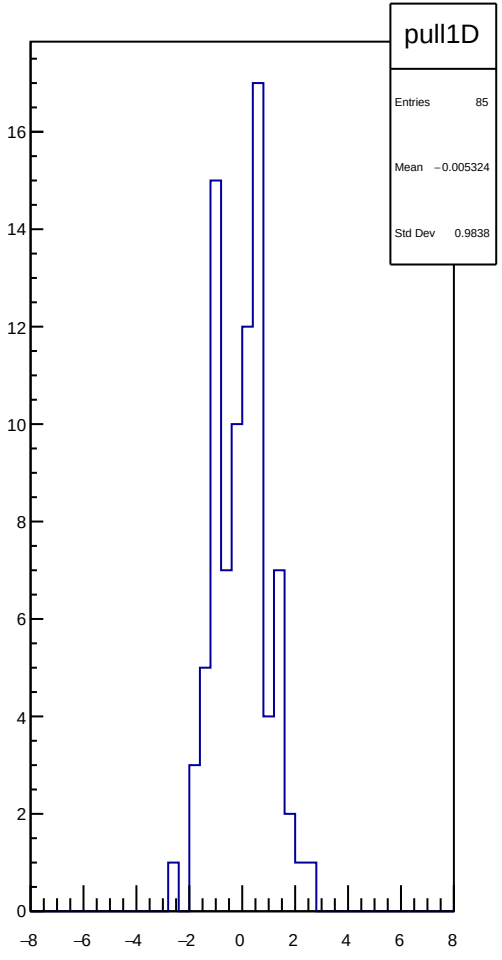

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 5367 / 84
p0 16.7 ± 0.01302
20
19
18
17
16
15

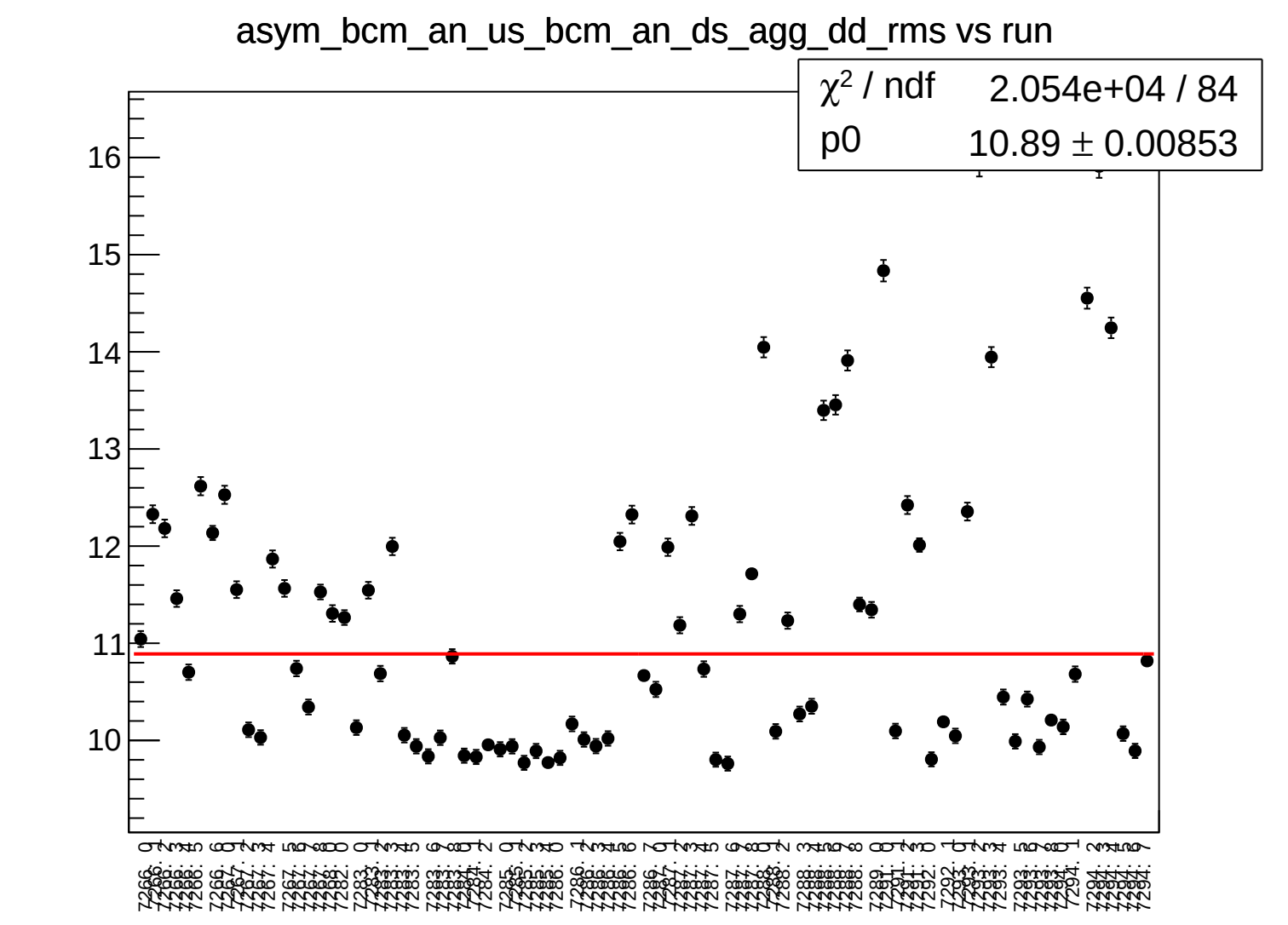

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 59.11 / 84
p0 −9.258 ± 24.88
pull
Entries 85
Mean −230.4
Std Dev 283.4

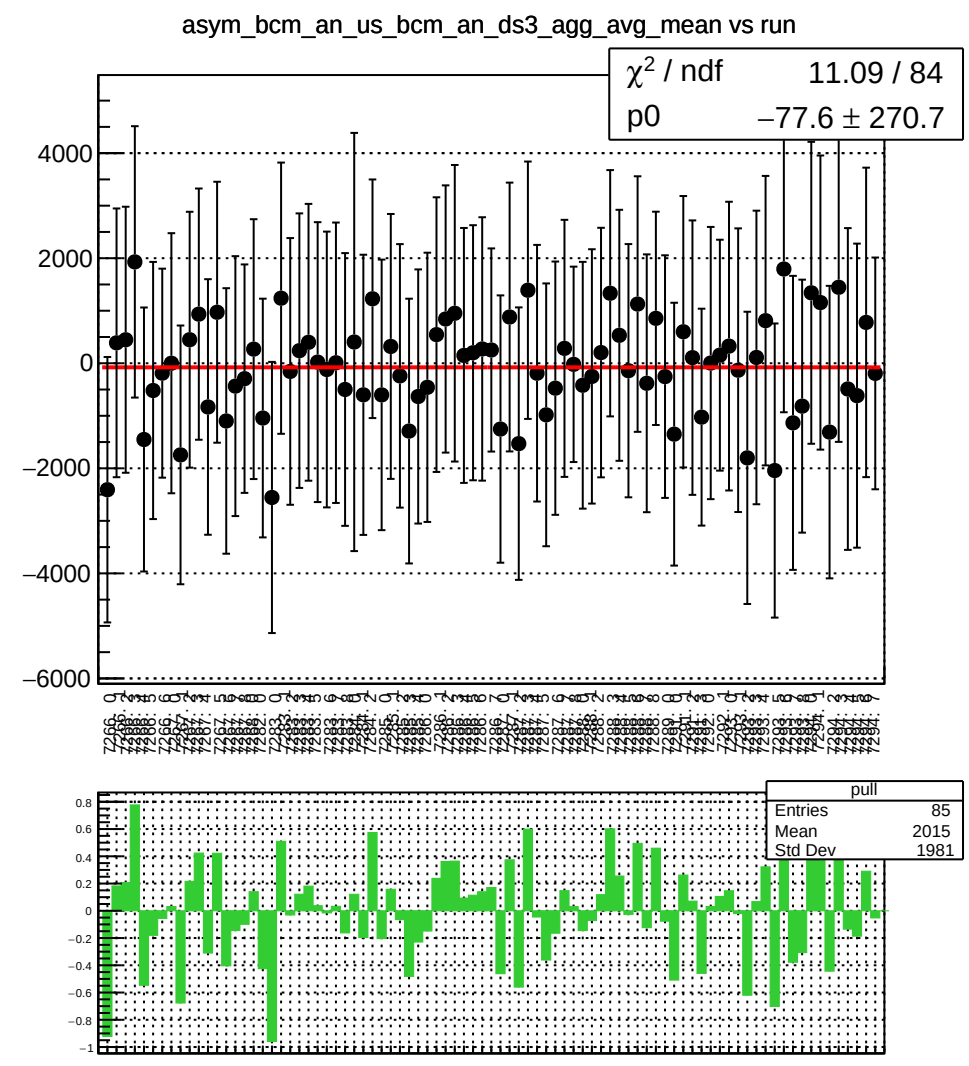

pull1D
Entries 85
Mean −0.01186
Std Dev 0.8338

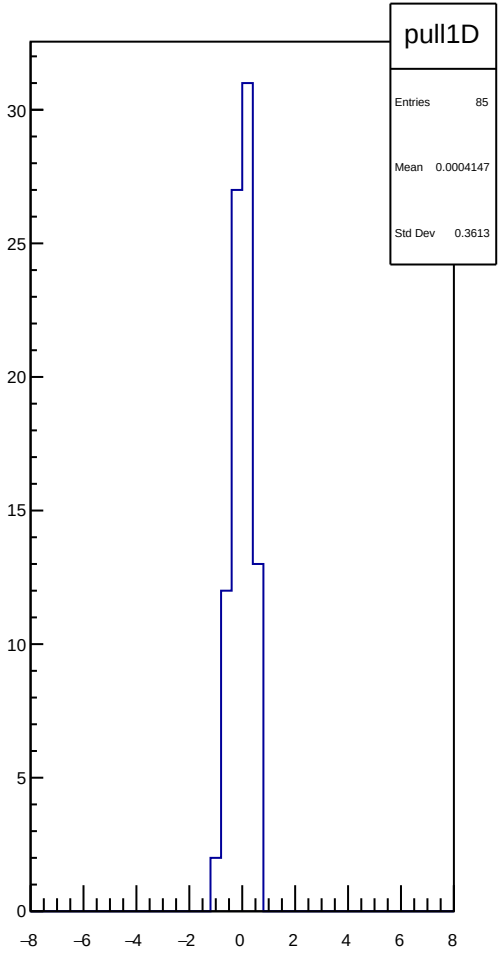

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2321 / 84
p0 22.59 ± 0.01759
25
24
23
22
21

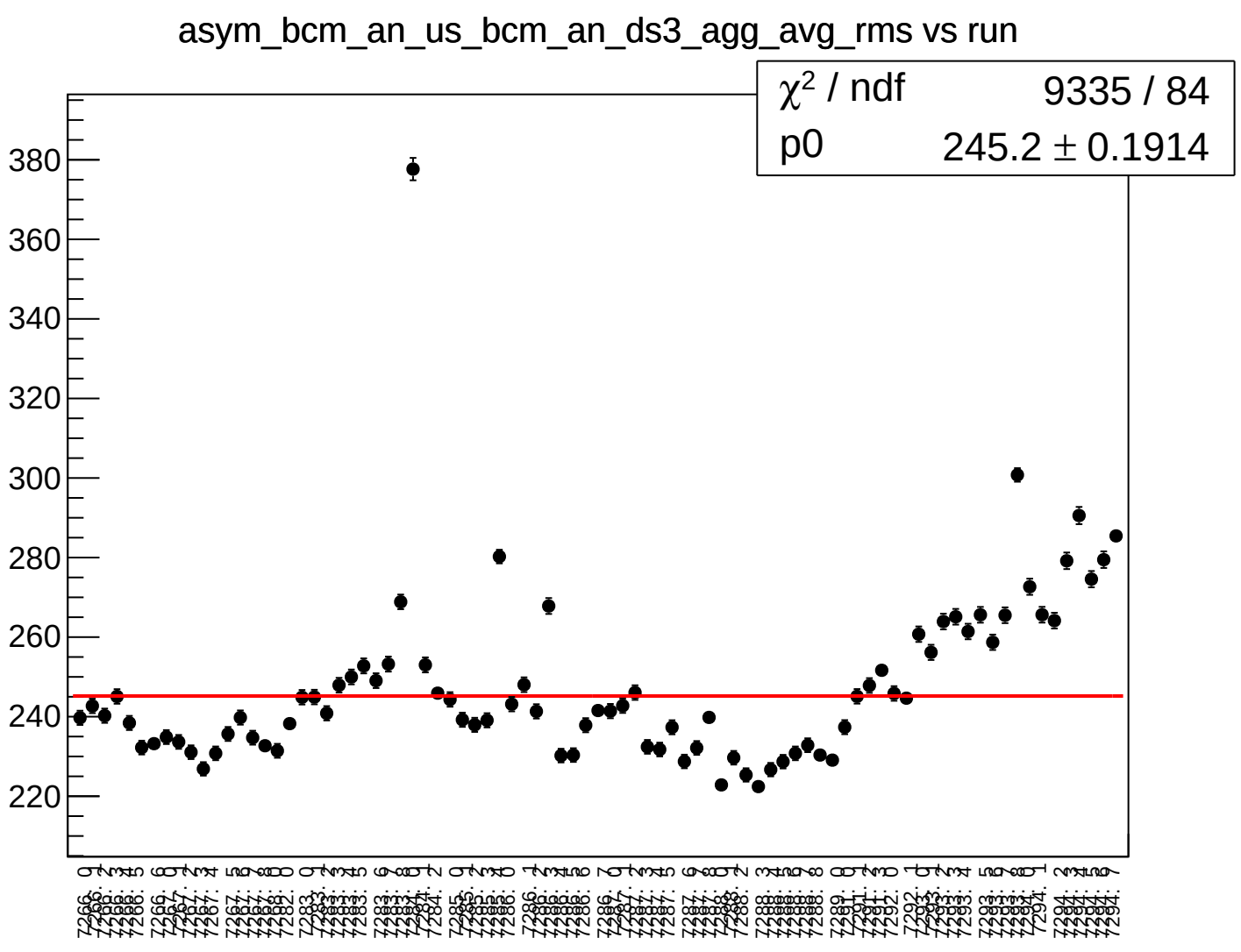

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.27 / 84
p0 11.34 ± 12.06
pull
Entries 85
Mean 35.73
Std Dev 131.7

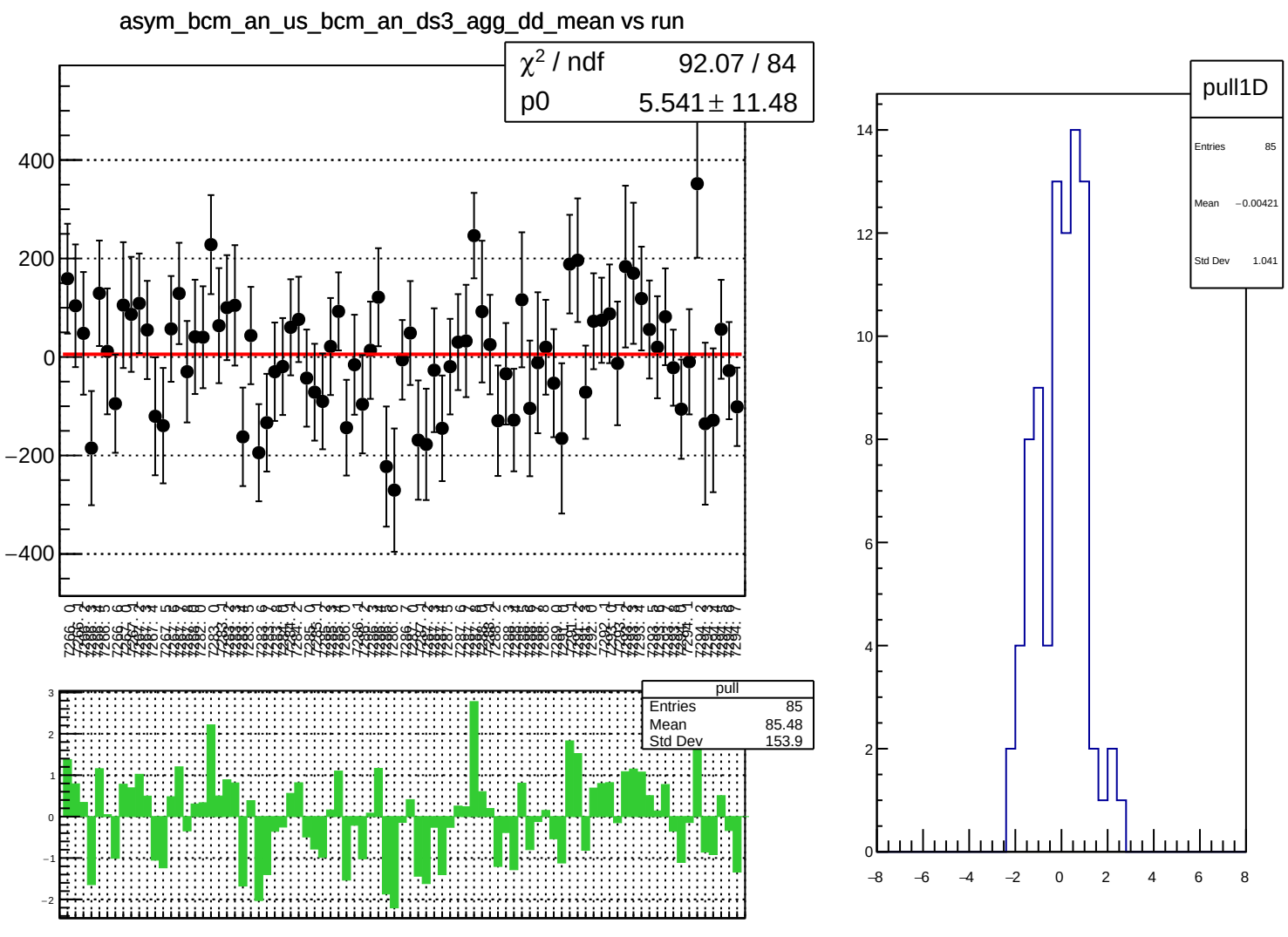

pull1D
Entries 85
Mean −0.005324
Std Dev 0.9838

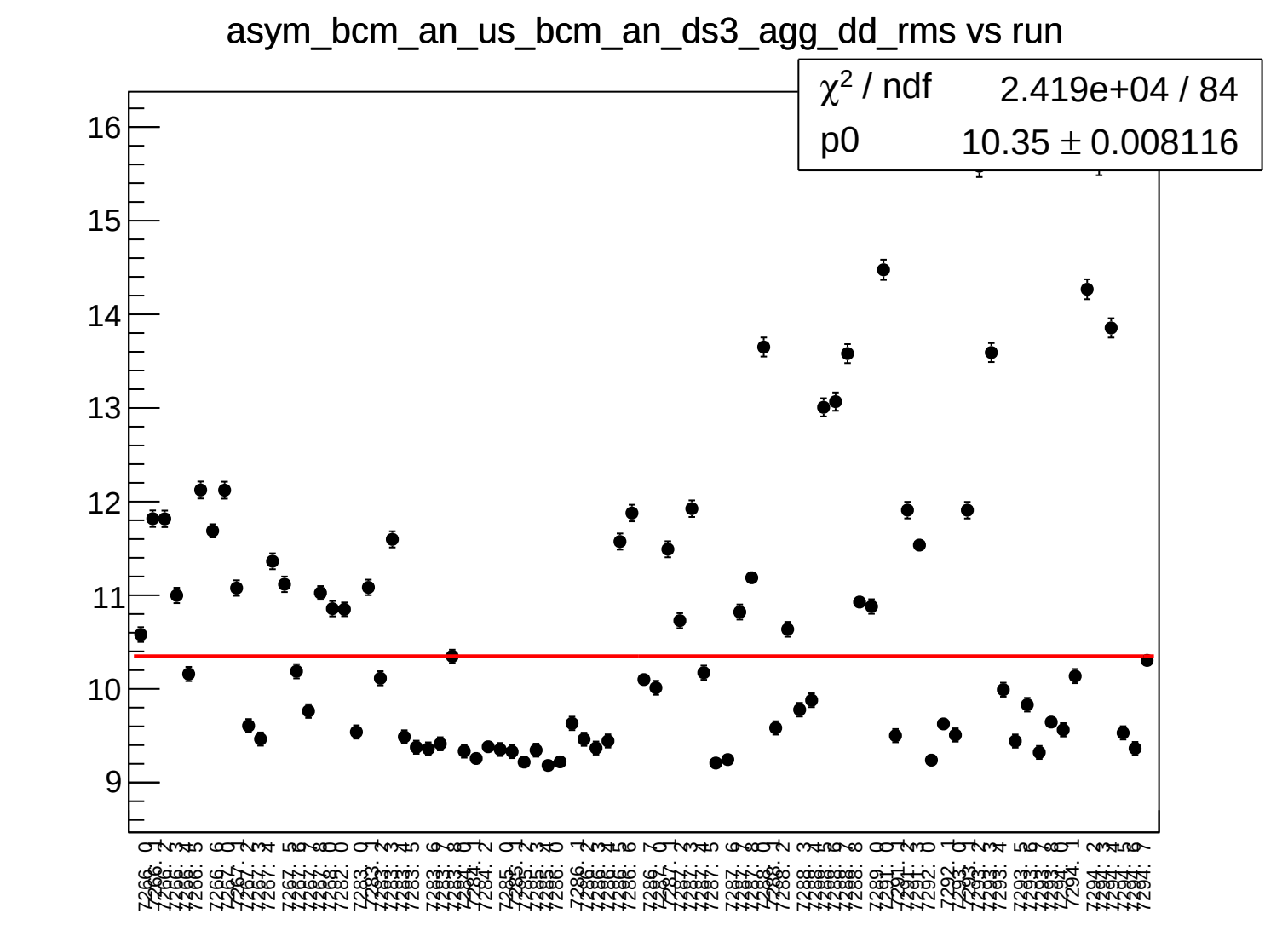

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.054e+04 / 84
p0 10.89 ± 0.00853
16
15
14
13
12
11
10

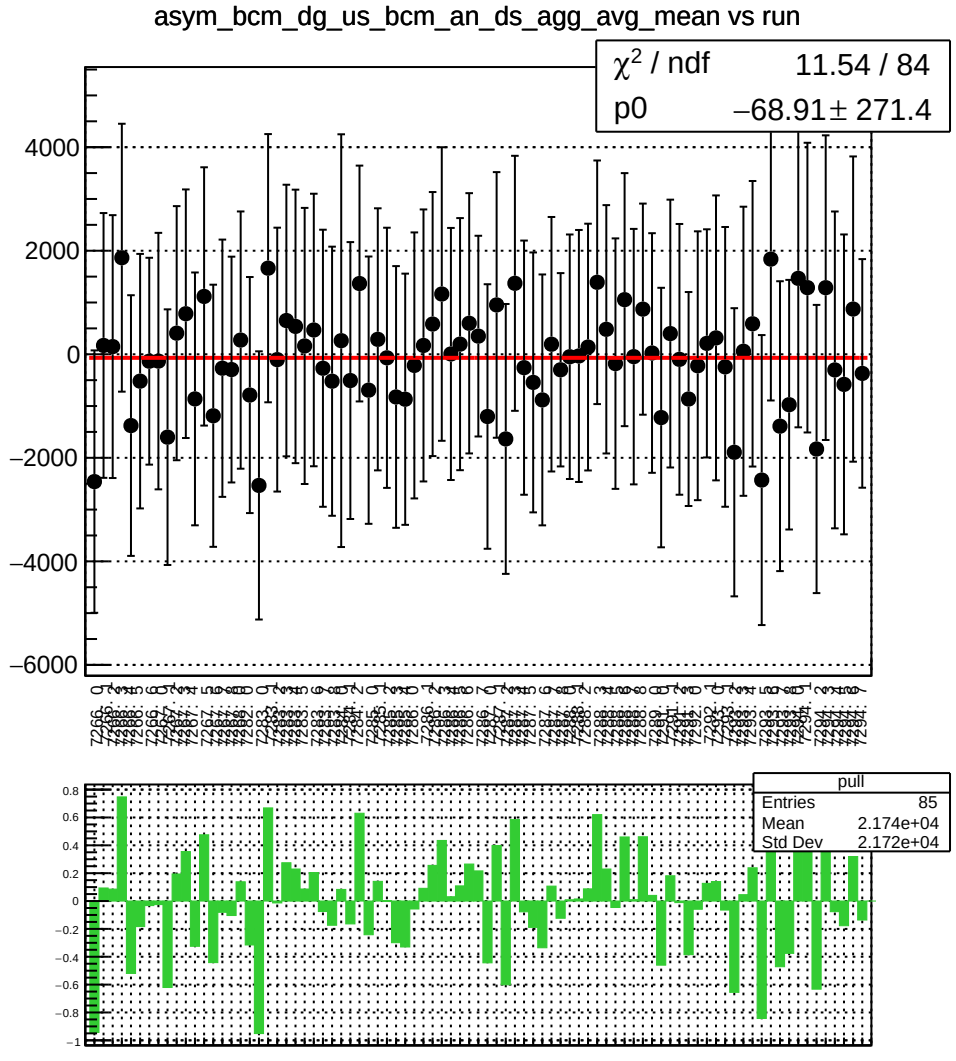

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 11.09 / 84
p0 −77.6 ± 270.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 2015
Std Dev 1981
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

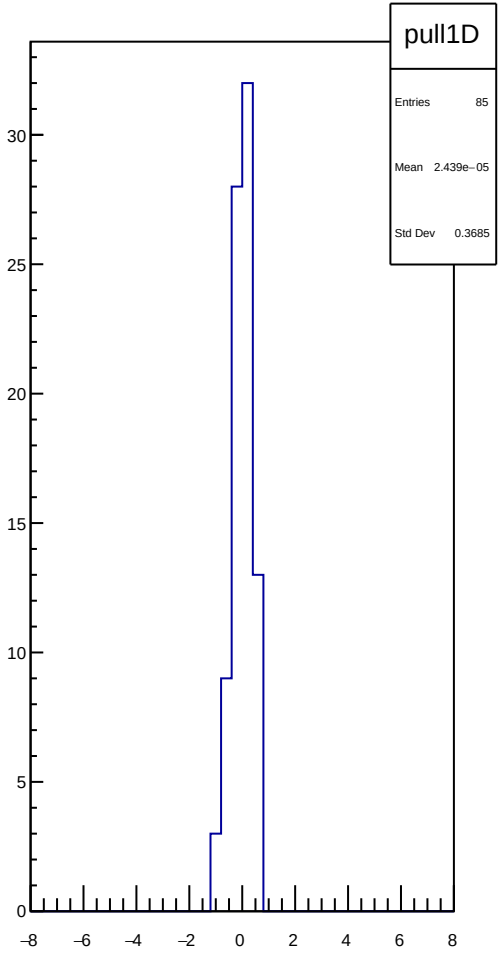

pull1D
Entries 85
Mean 0.0004147
Std Dev 0.3613
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

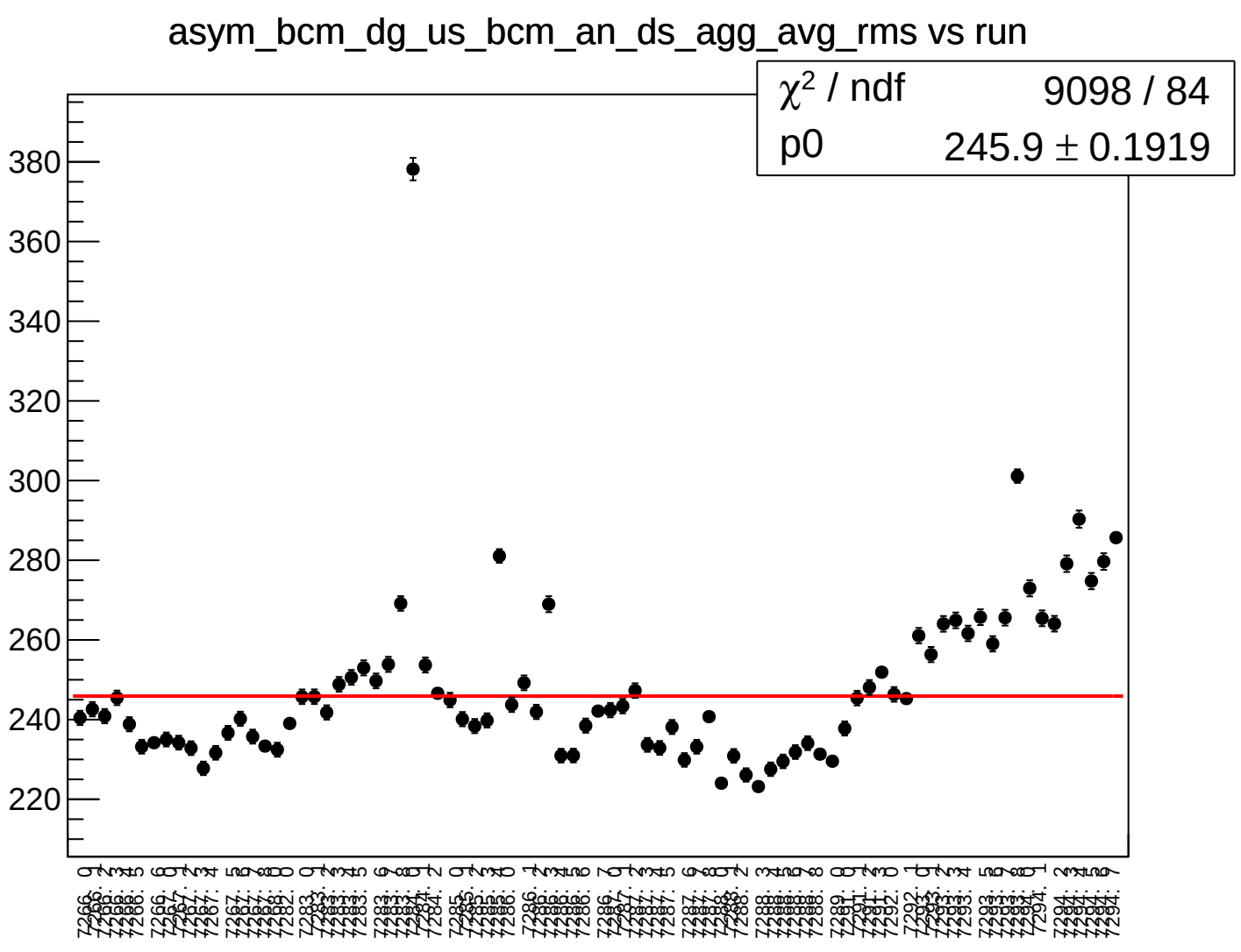

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 9335 / 84
p0 245.2 ± 0.1914
380
360
340
320
300
280
260
240
220

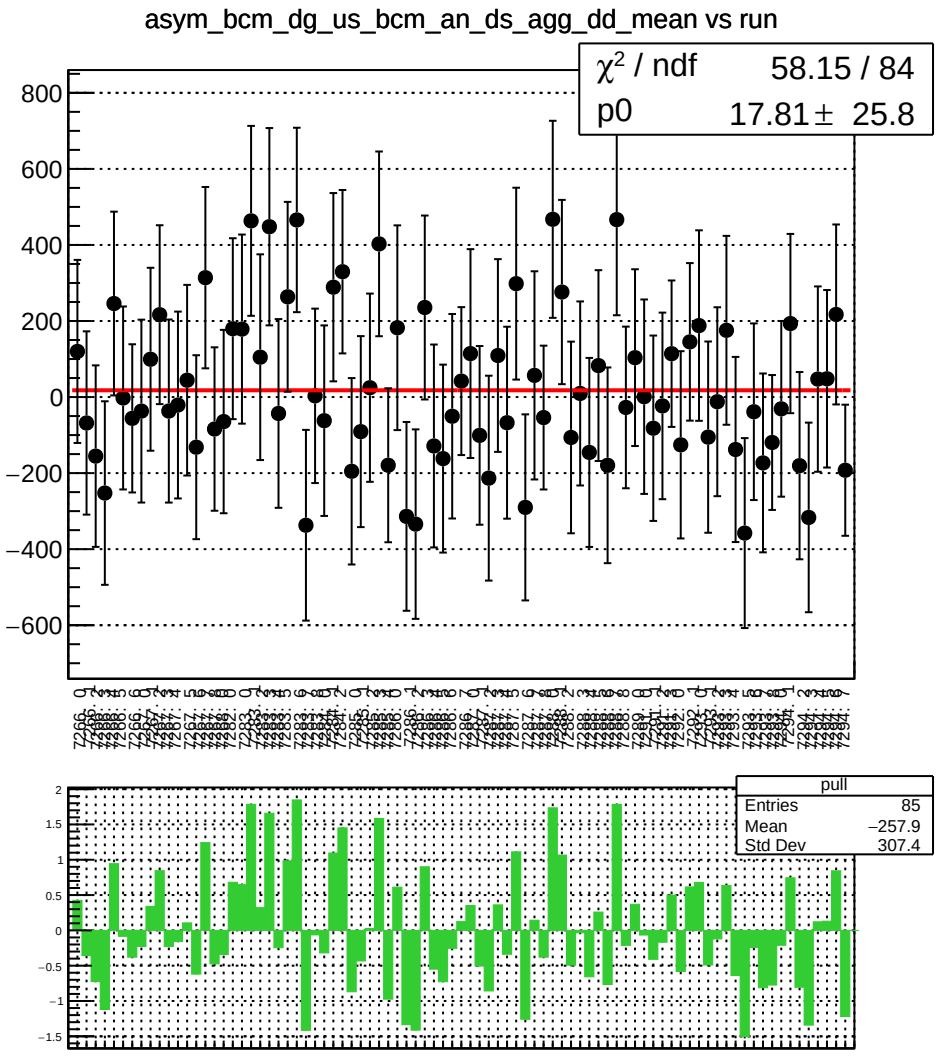

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 92.07 / 84
p0 5.541 ± 11.48
400
200
0
−200
−400
pull
Entries 85
Mean 85.48
Std Dev 153.9
3
2
1
0
−1
−2
pull1D
Entries 85
Mean −0.00421
Std Dev 1.041
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

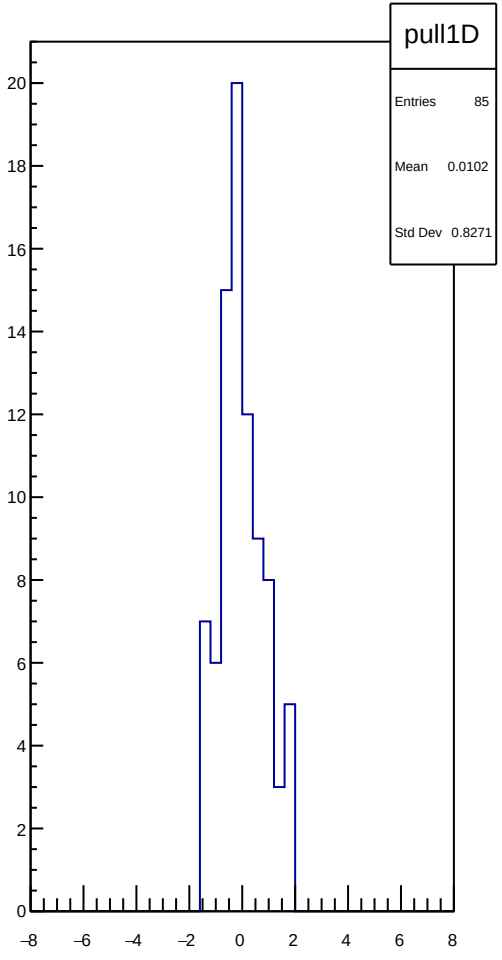

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2.419e+04 / 84
p0 10.35 ± 0.008116
16
15
14
13
12
11
10
9

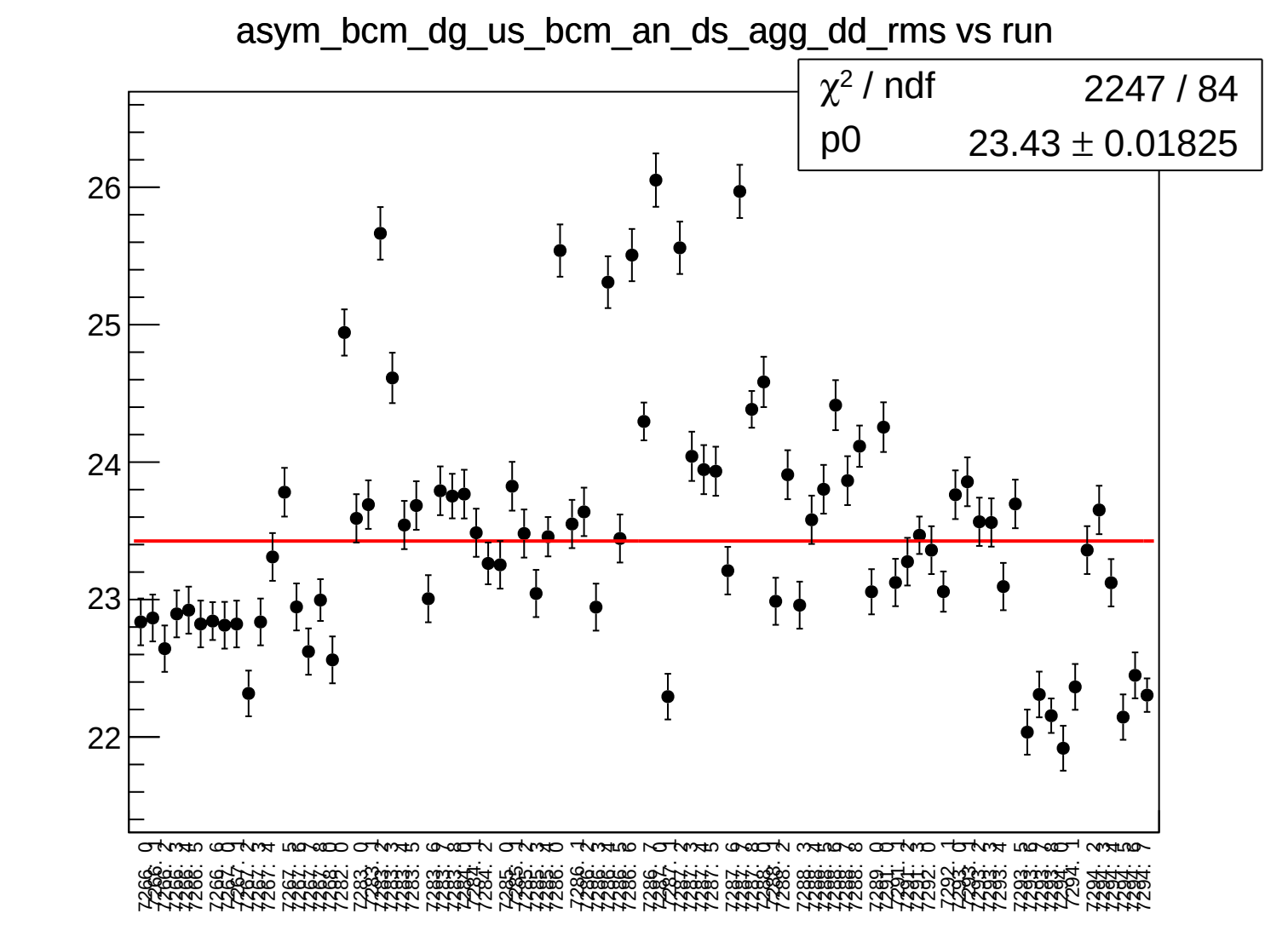

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.54 / 84
p0 −68.91 ± 271.4
pull
Entries 85
Mean 2.174e+04
Std Dev 2.172e+04

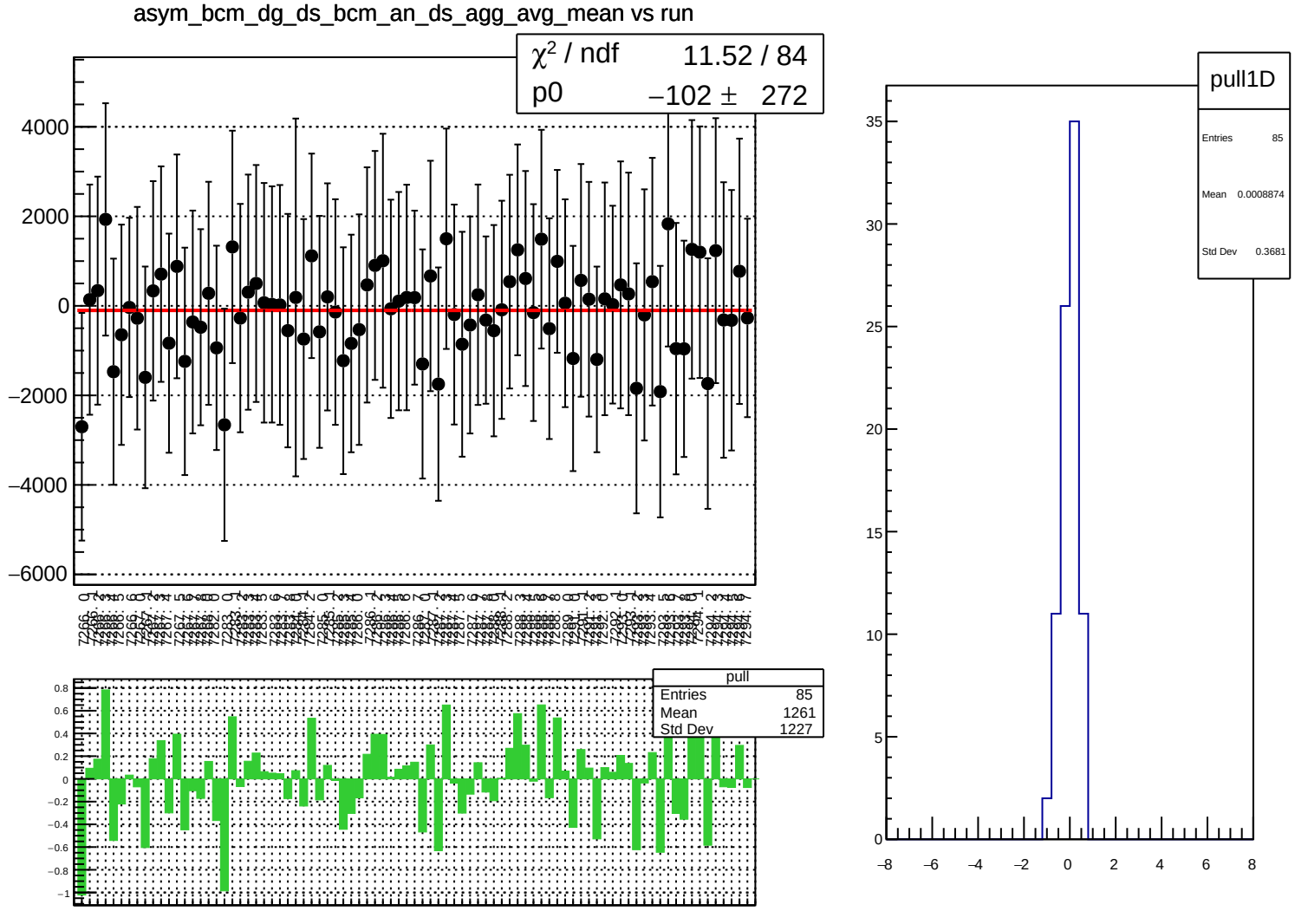

pull1D
Entries 85
Mean 2.439e−05
Std Dev 0.3685

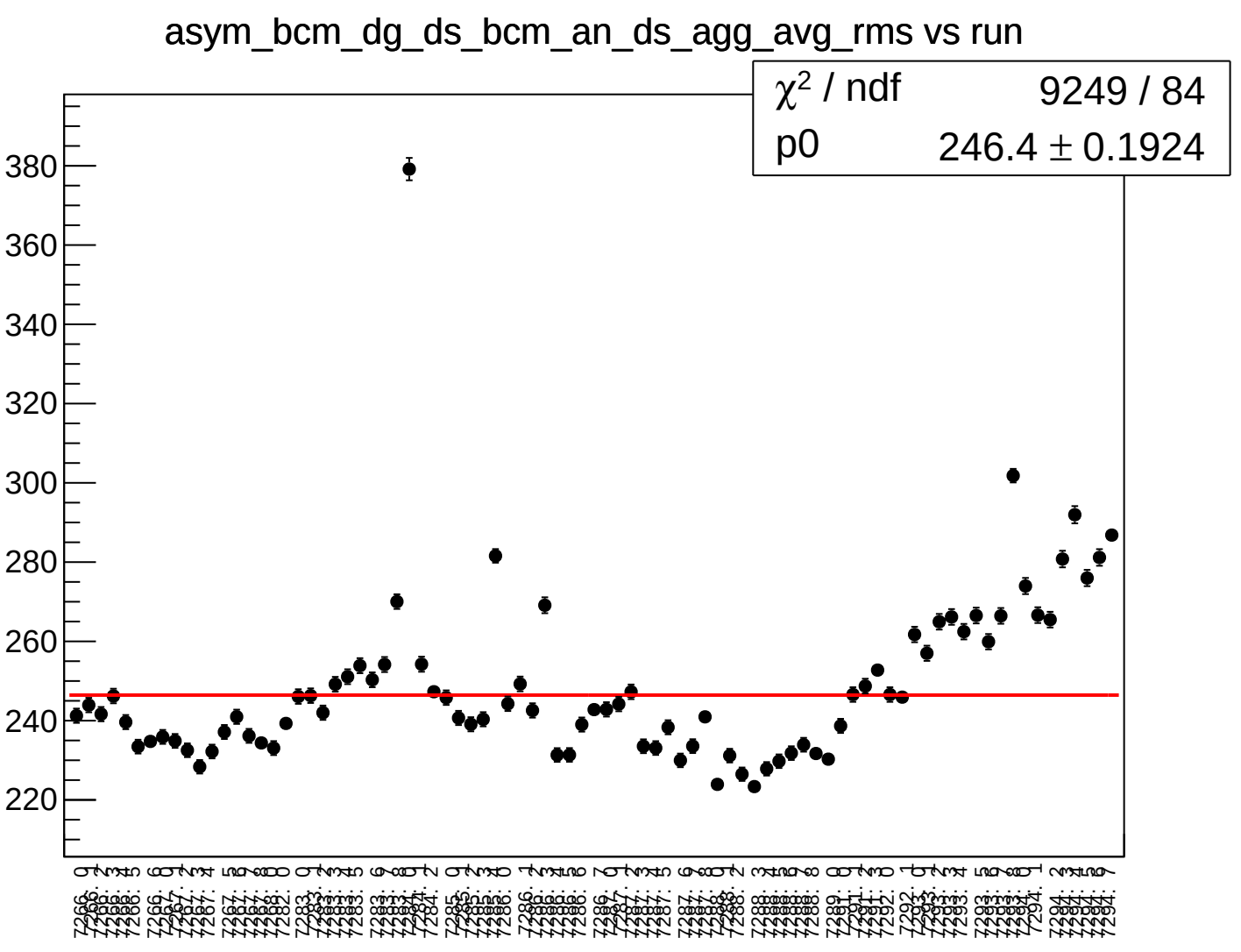

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 9098 / 84
p0 245.9 ± 0.1919
380
360
340
320
300
280
260
240
220

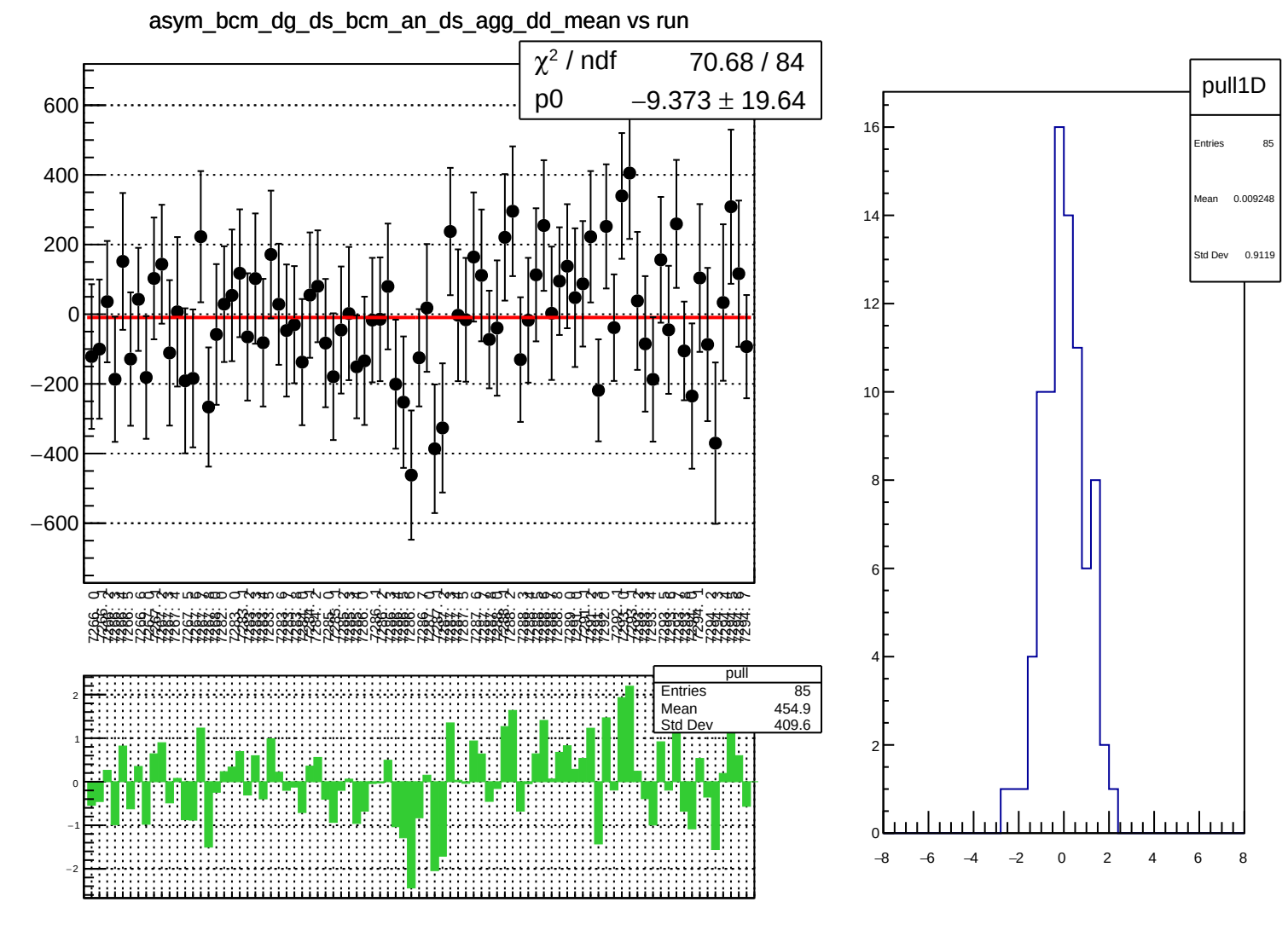

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 58.15 / 84
p0 17.81 ± 25.8
pull
Entries 85
Mean −257.9
Std Dev 307.4

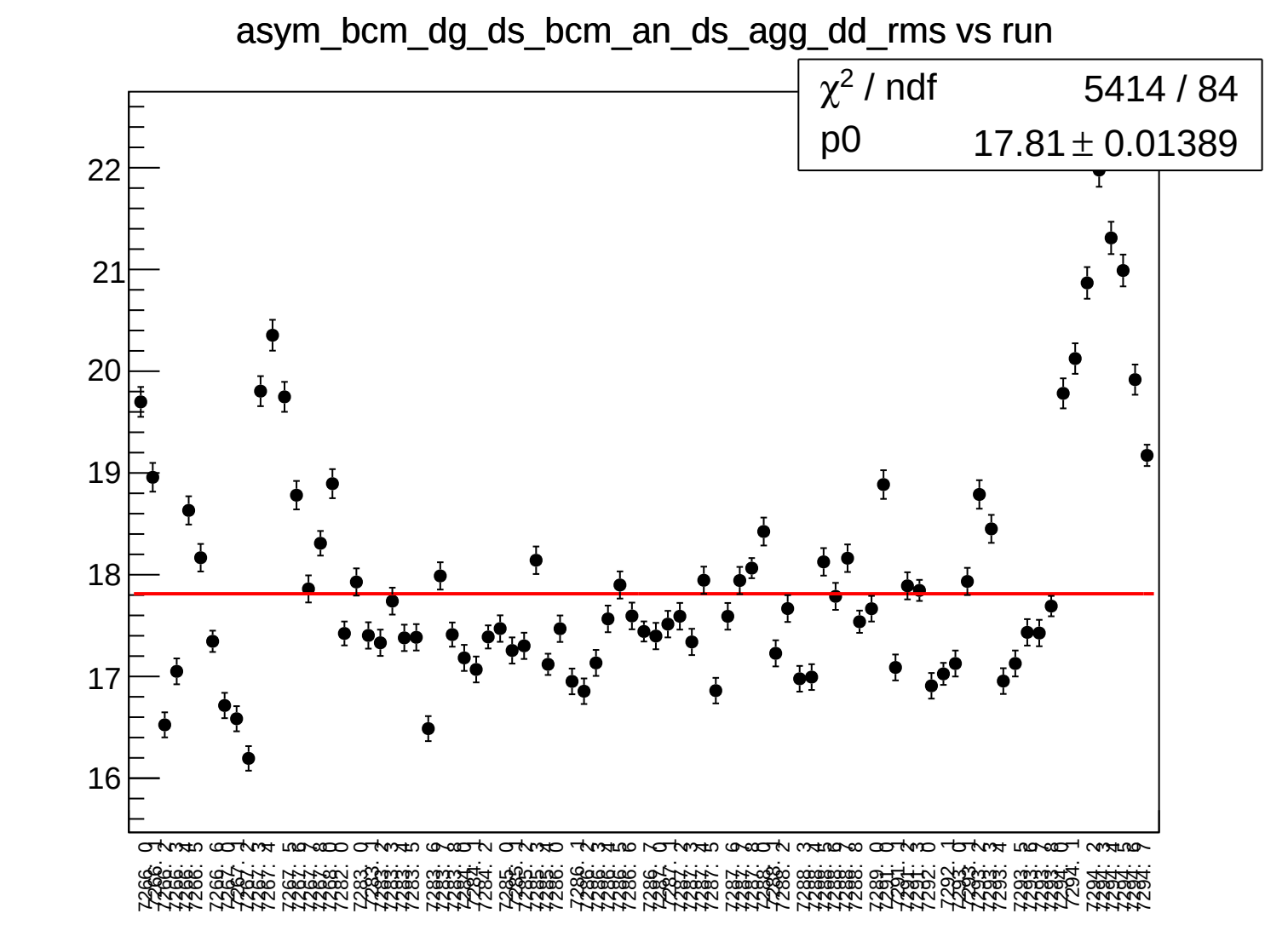

pull1D
Entries 85
Mean 0.0102
Std Dev 0.8271

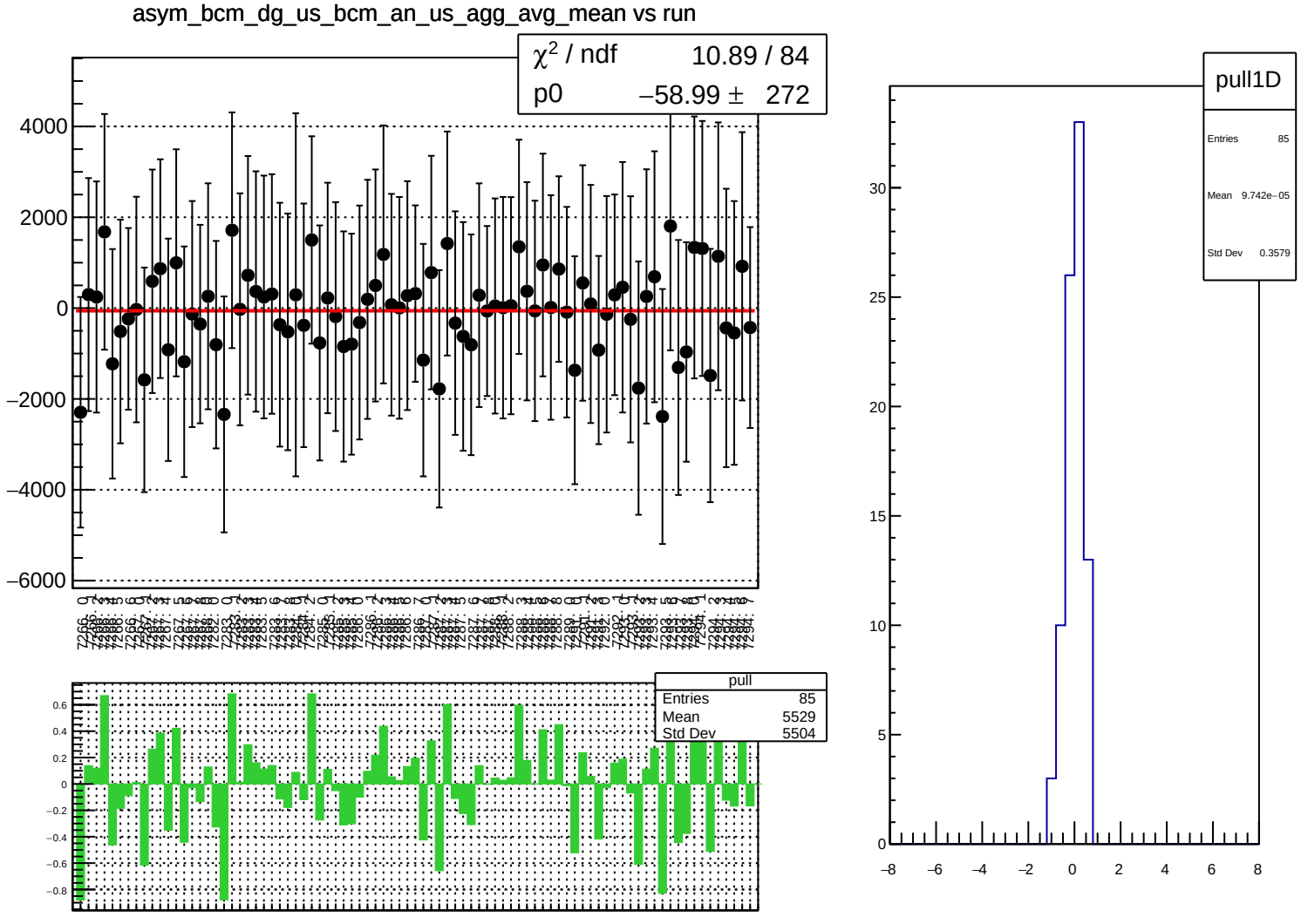

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2247 / 84
p0 23.43 ± 0.01825
26
25
24
23
22

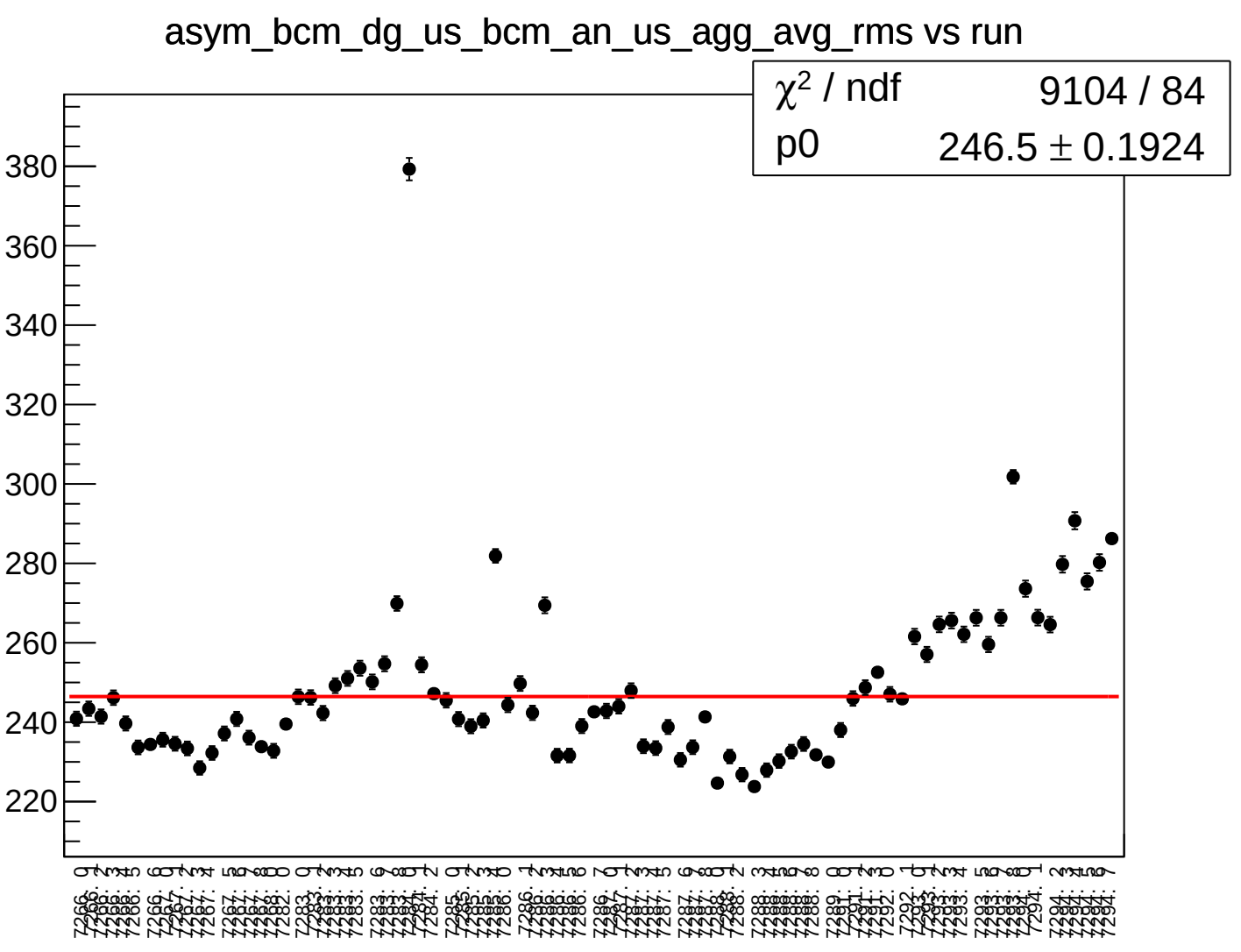

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.52 / 84
p0 −102 ± 272
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 1261
Std Dev 1227
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean 0.0008874
Std Dev 0.3681
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

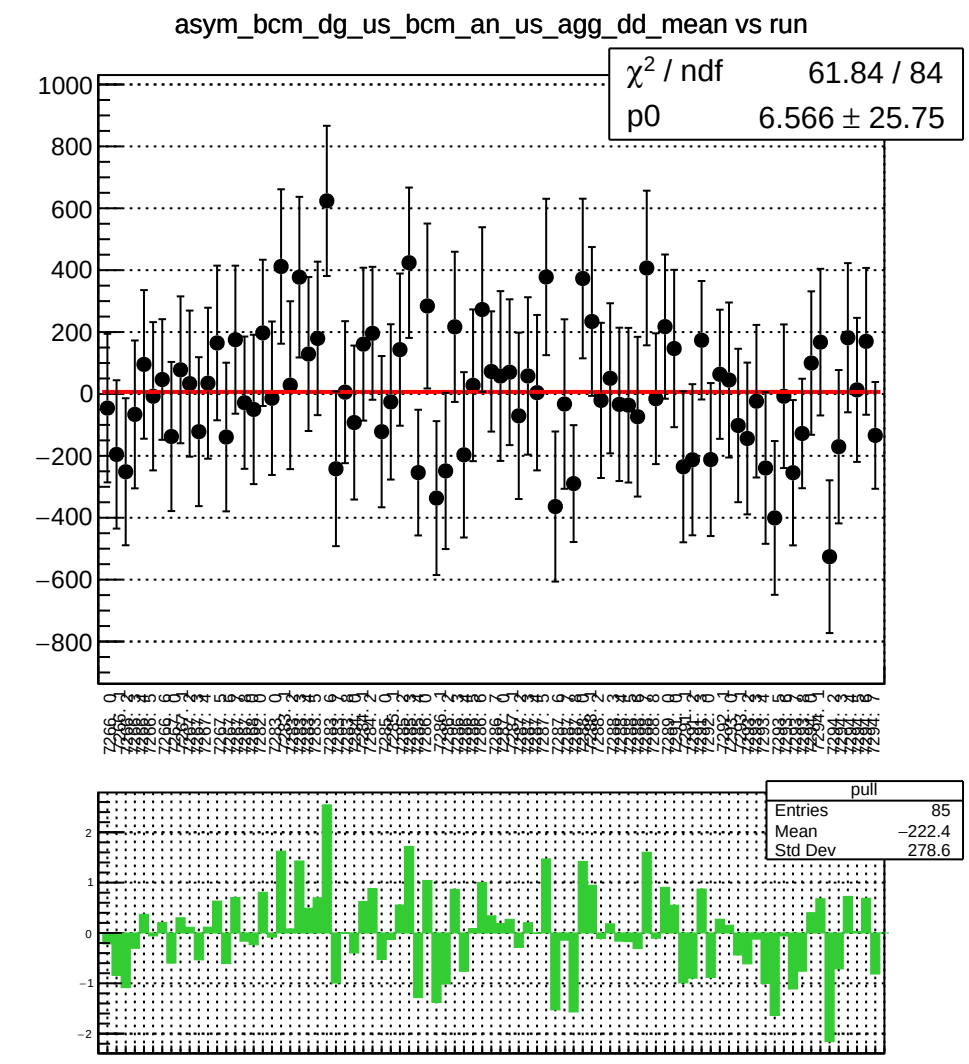

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 9249 / 84
p0 246.4 ± 0.1924
380
360
340
320
300
280
260
240
220

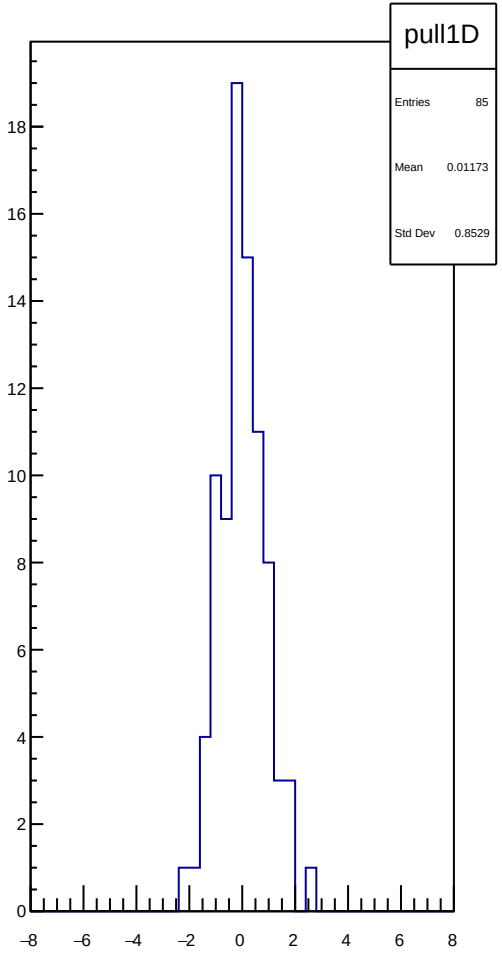

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 70.68 / 84
p0 −9.373 ± 19.64
pull
Entries 85
Mean 454.9
Std Dev 409.6
pull1D
Entries 85
Mean 0.009248
Std Dev 0.9119

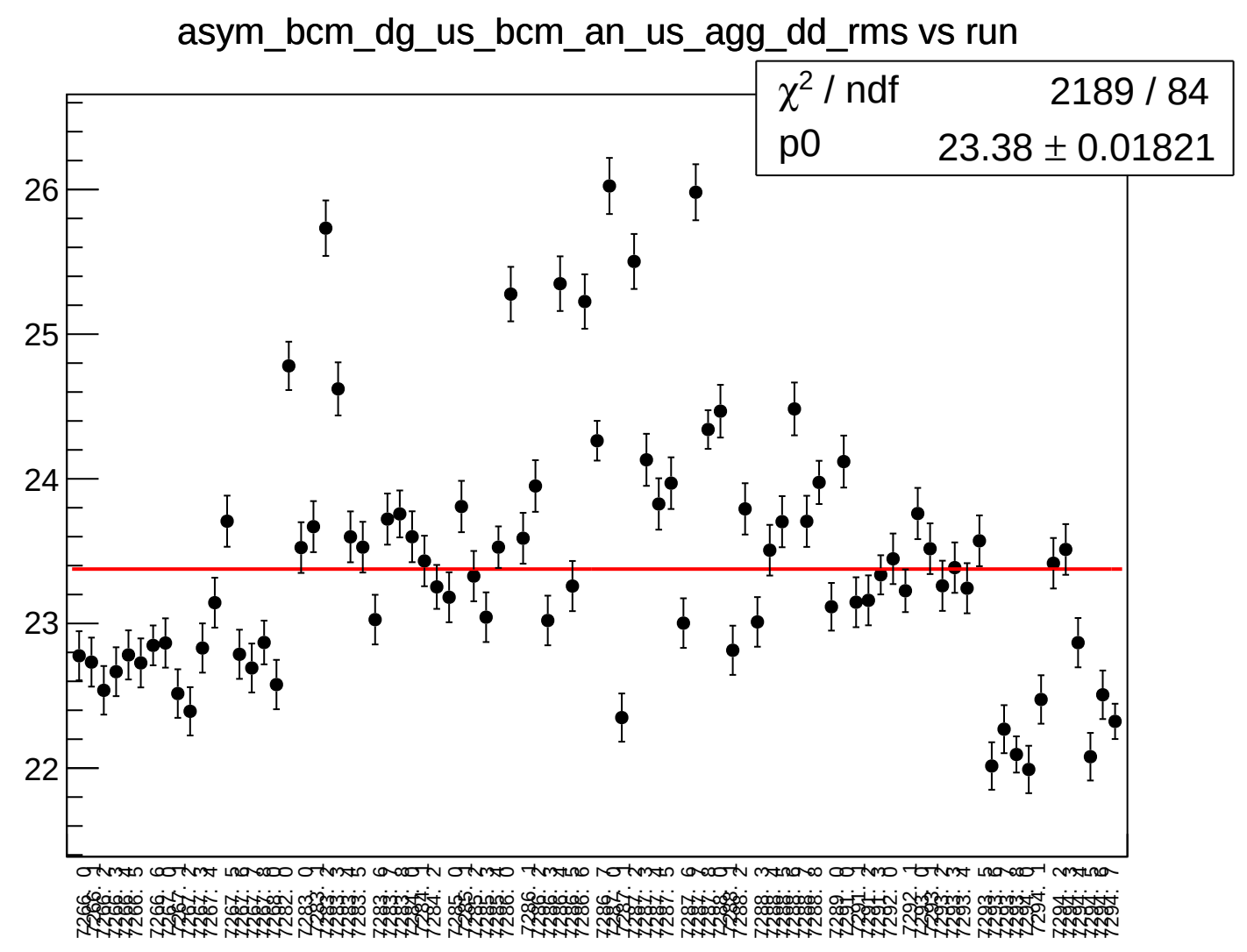

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5414 / 84
p0 17.81 ± 0.01389
22
21
20
19
18
17
16

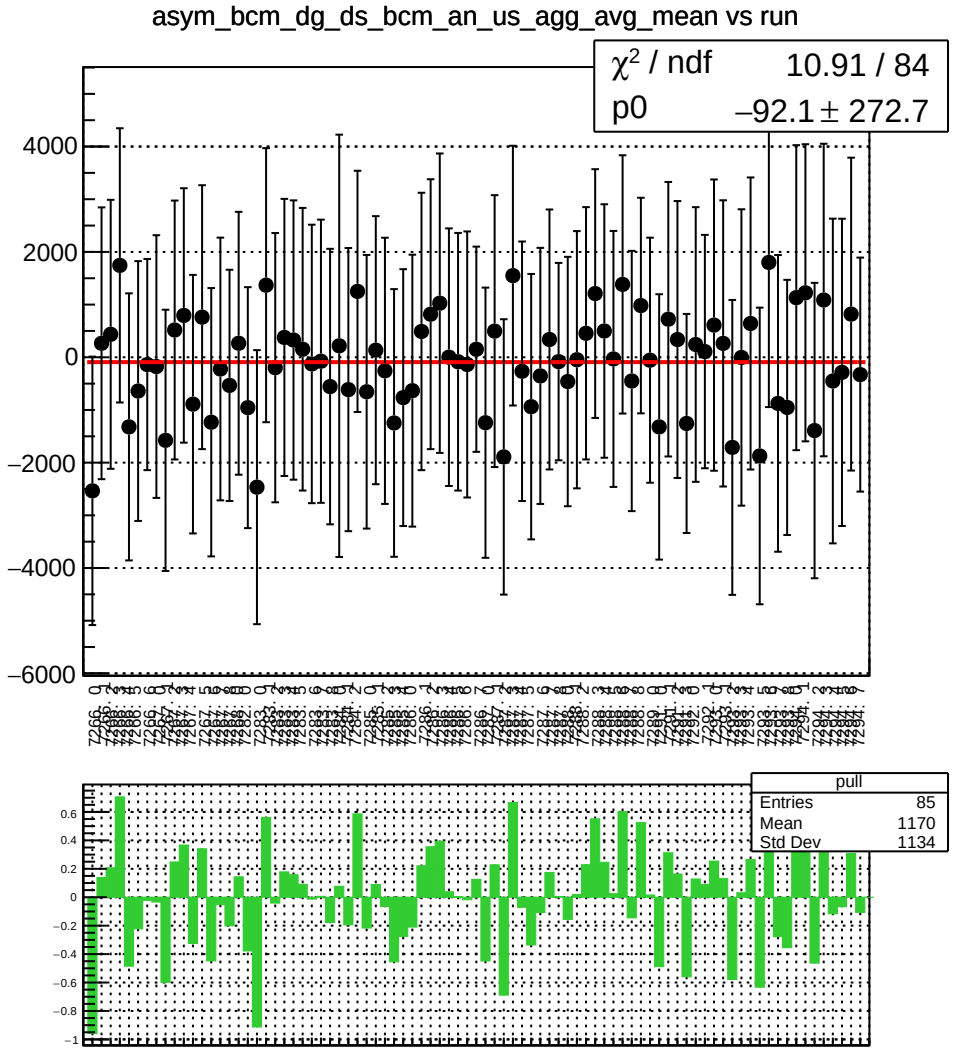

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 10.89 / 84
p0 −58.99 ± 272
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 5529
Std Dev 5504
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean 9.742e−05
Std Dev 0.3579
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

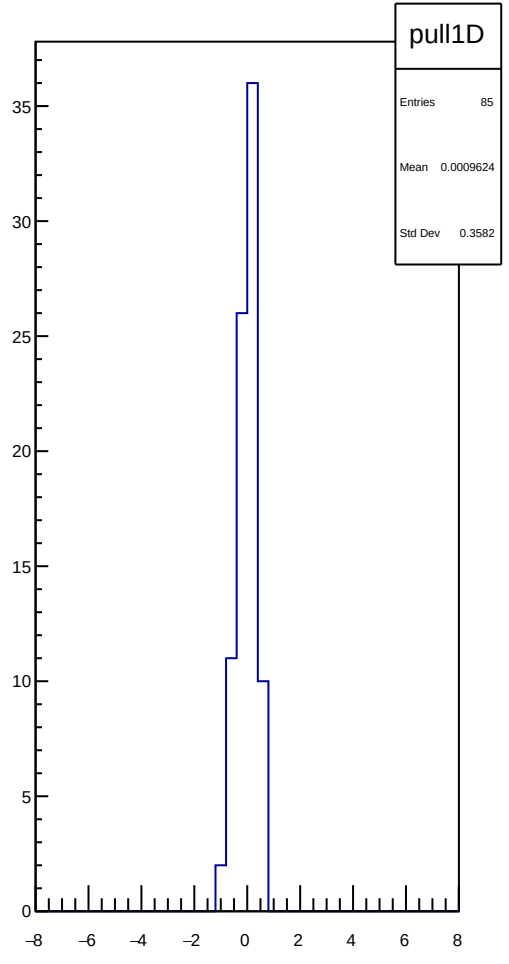

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 9104 / 84
p0 246.5 ± 0.1924
380
360
340
320
300
280
260
240
220

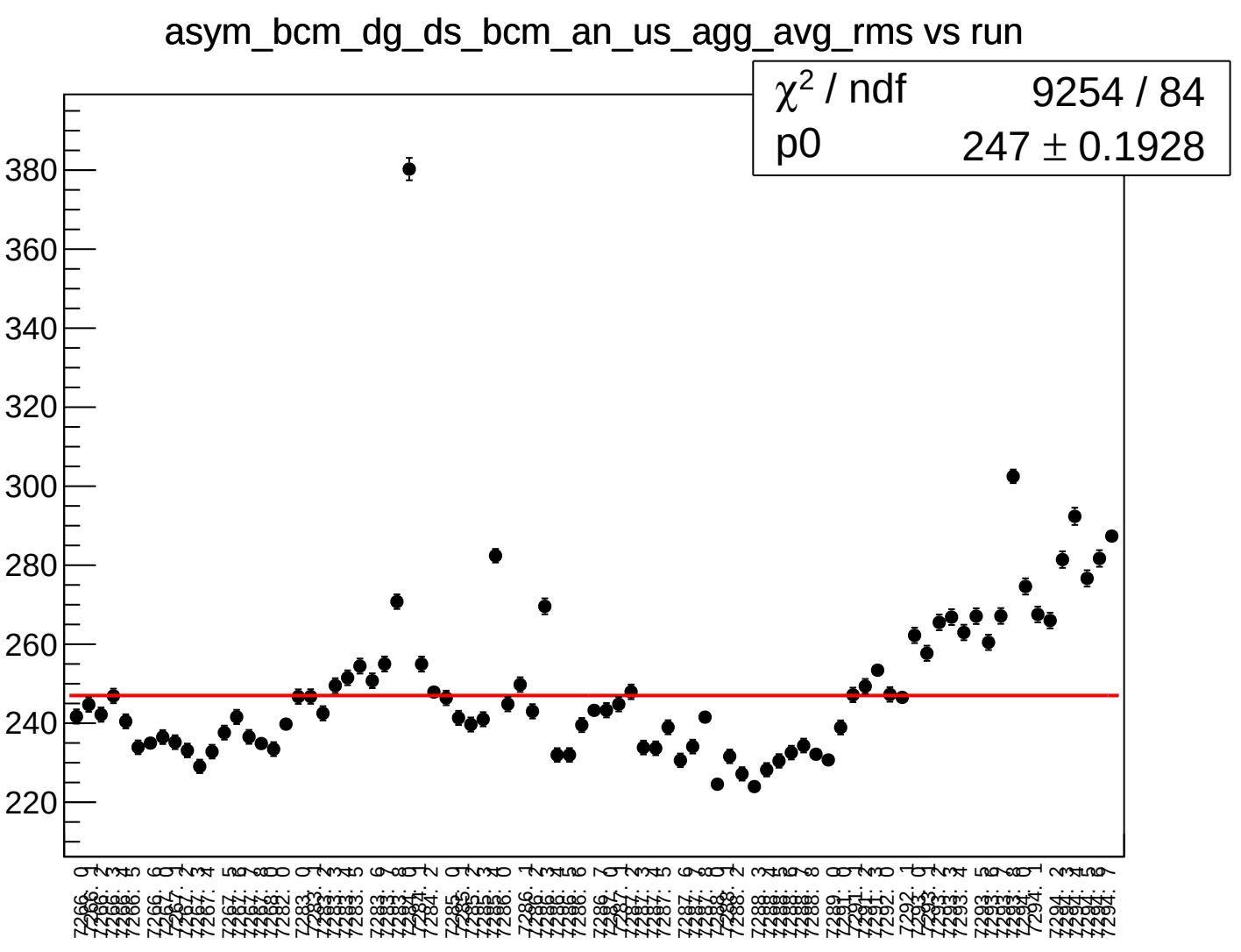

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 61.84 / 84
p0 6.566 ± 25.75
pull
Entries 85
Mean −222.4
Std Dev 278.6

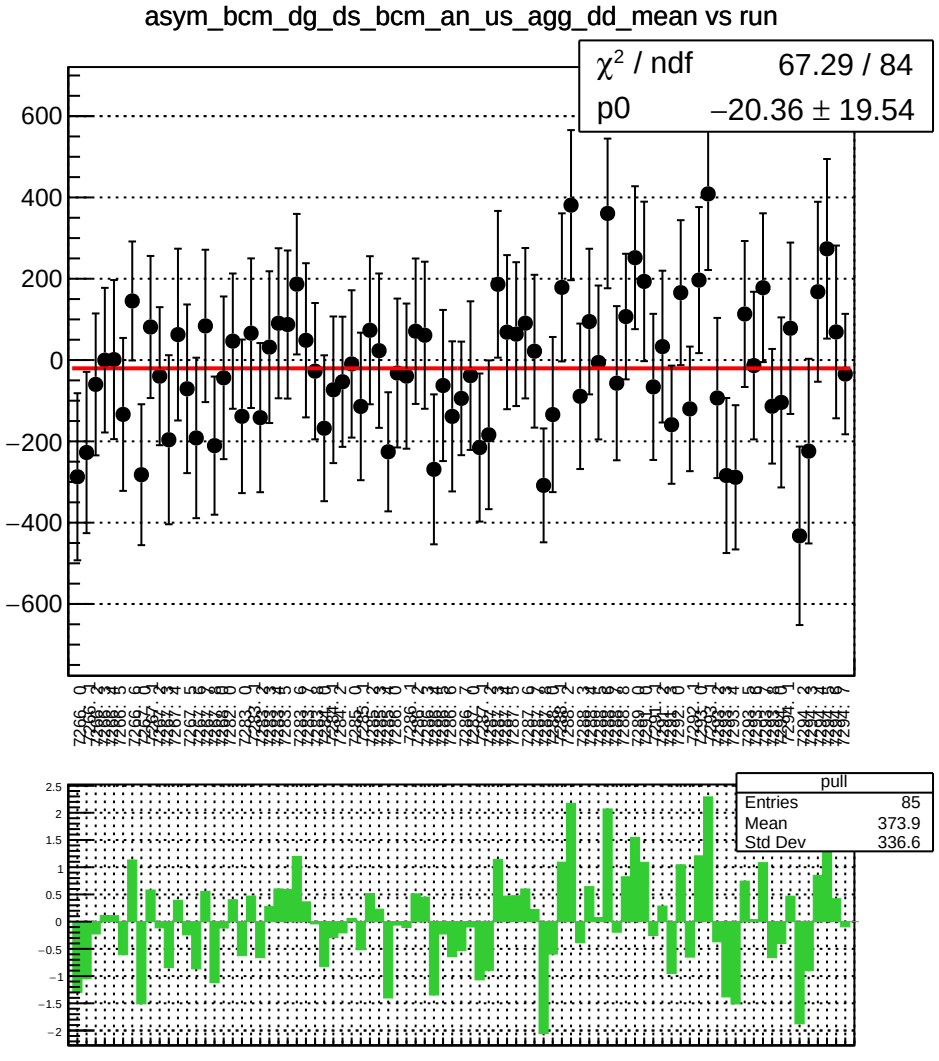

pull1D
Entries 85
Mean 0.01173
Std Dev 0.8529

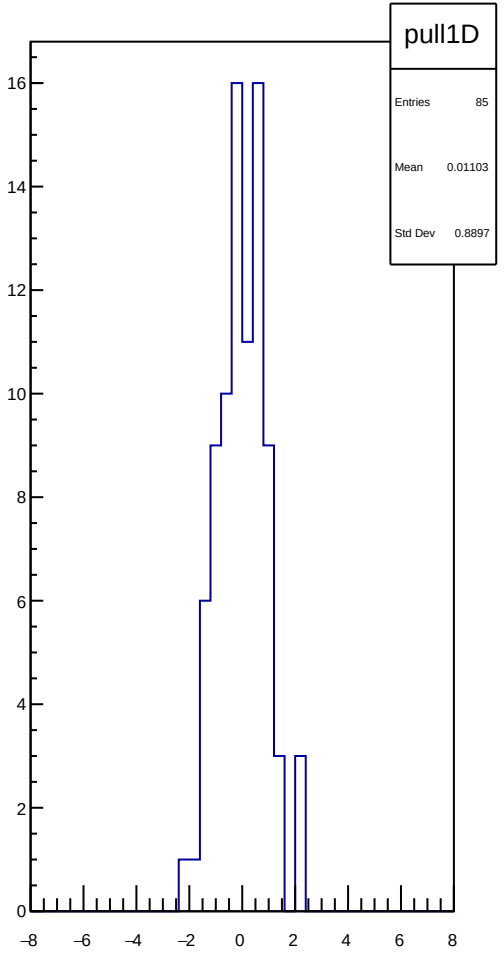

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2189 / 84
p0 23.38 ± 0.01821
26
25
24
23
22

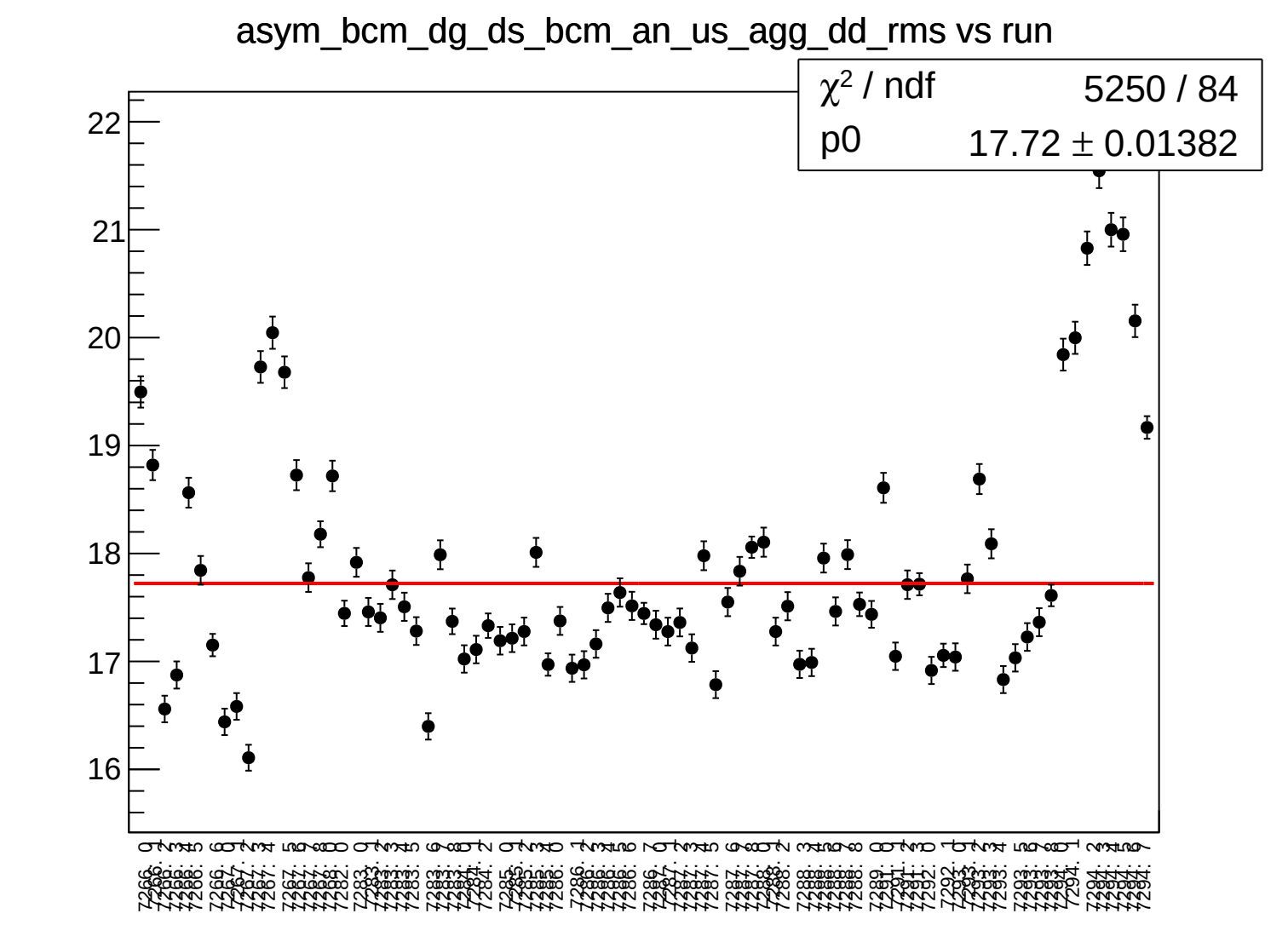

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 10.91 / 84
p0 −92.1 ± 272.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 1170
Std Dev 1134
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

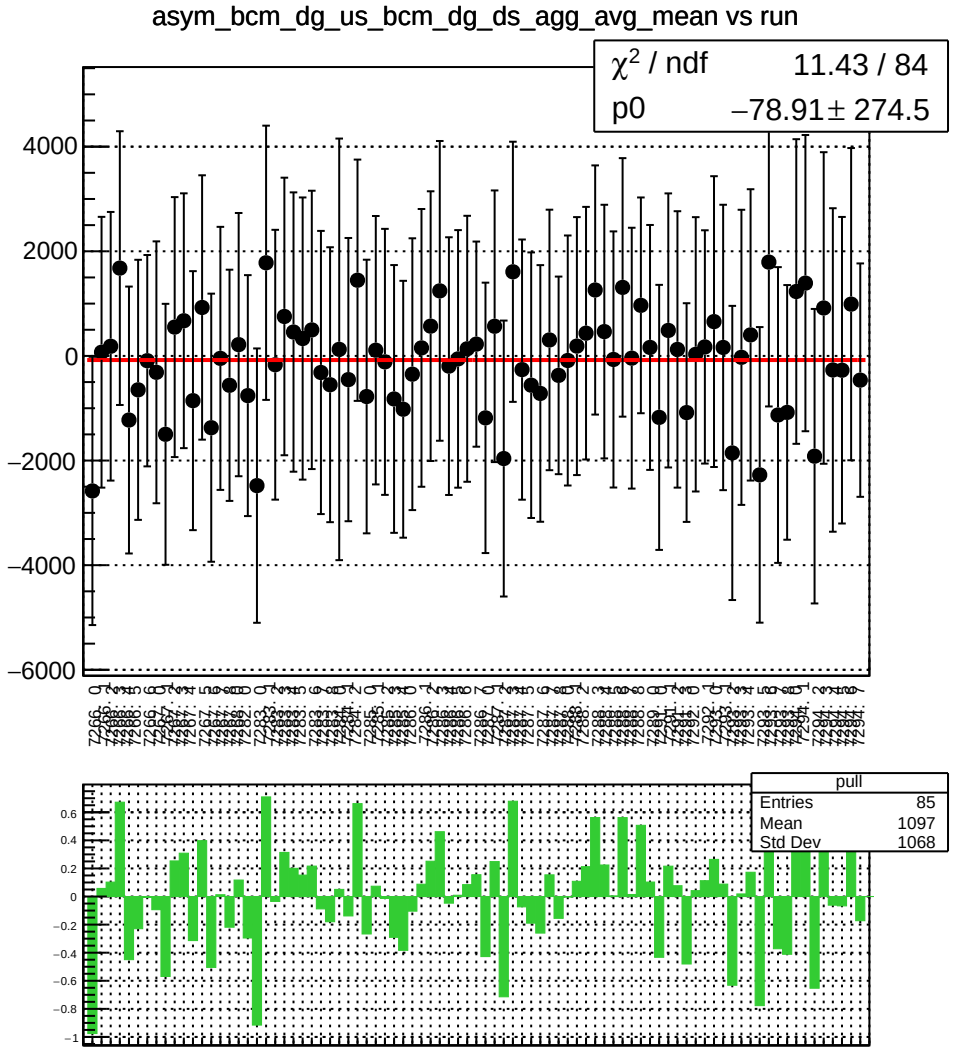

pull1D
Entries 85
Mean 0.0009624
Std Dev 0.3582
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

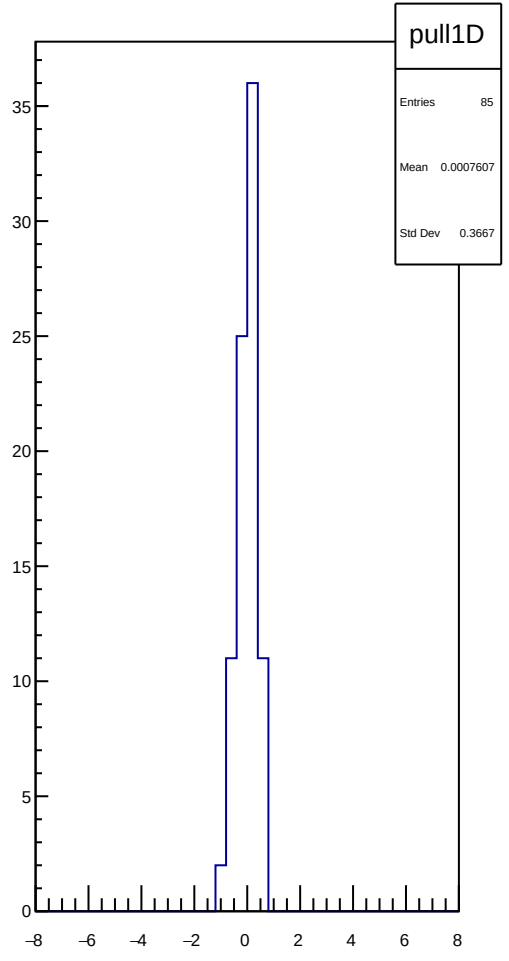

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 9254 / 84
p0 247 ± 0.1928
380
360
340
320
300
280
260
240
220

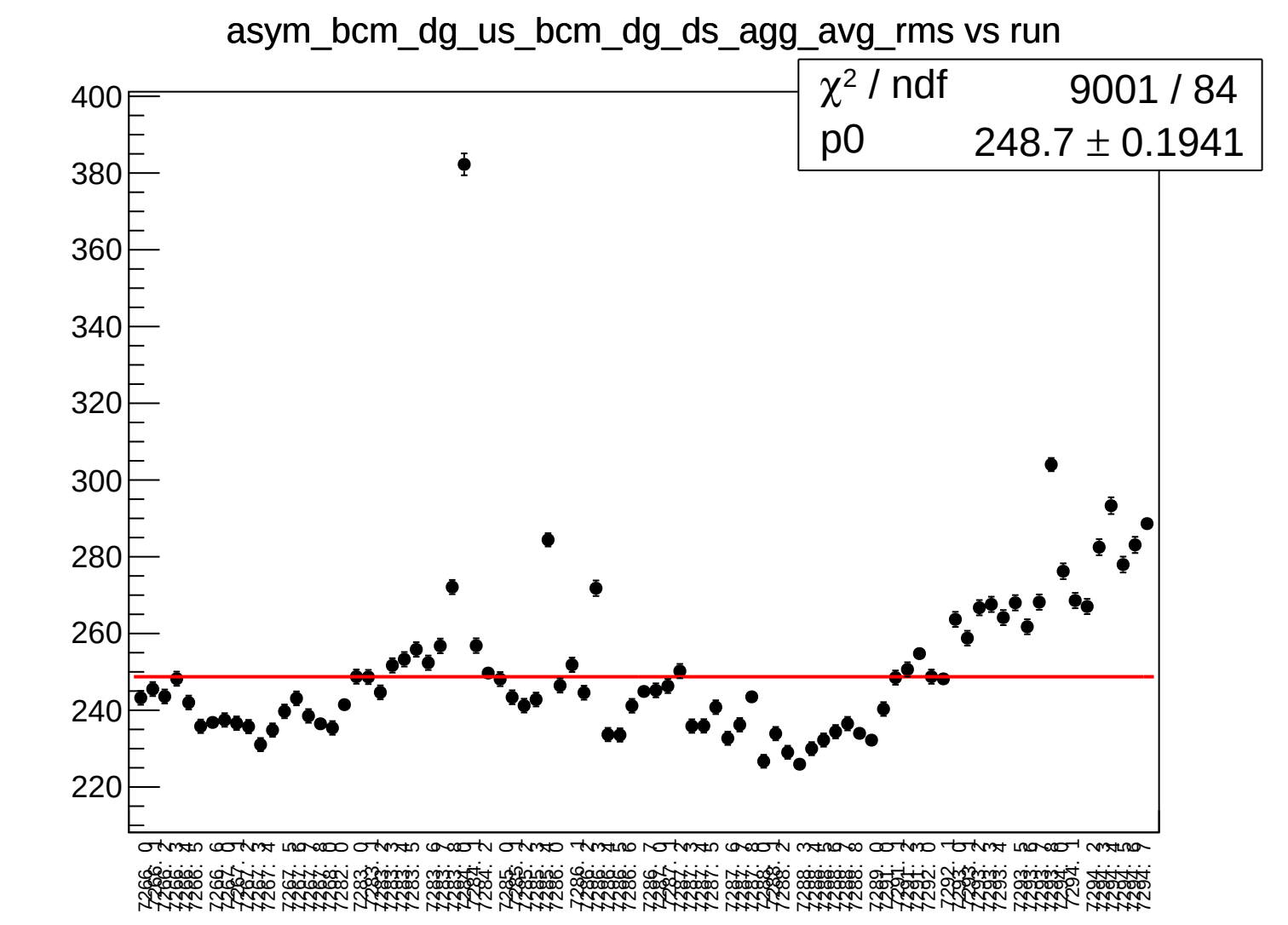

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 67.29 / 84
p0 −20.36 ± 19.54
pull
Entries 85
Mean 373.9
Std Dev 336.6

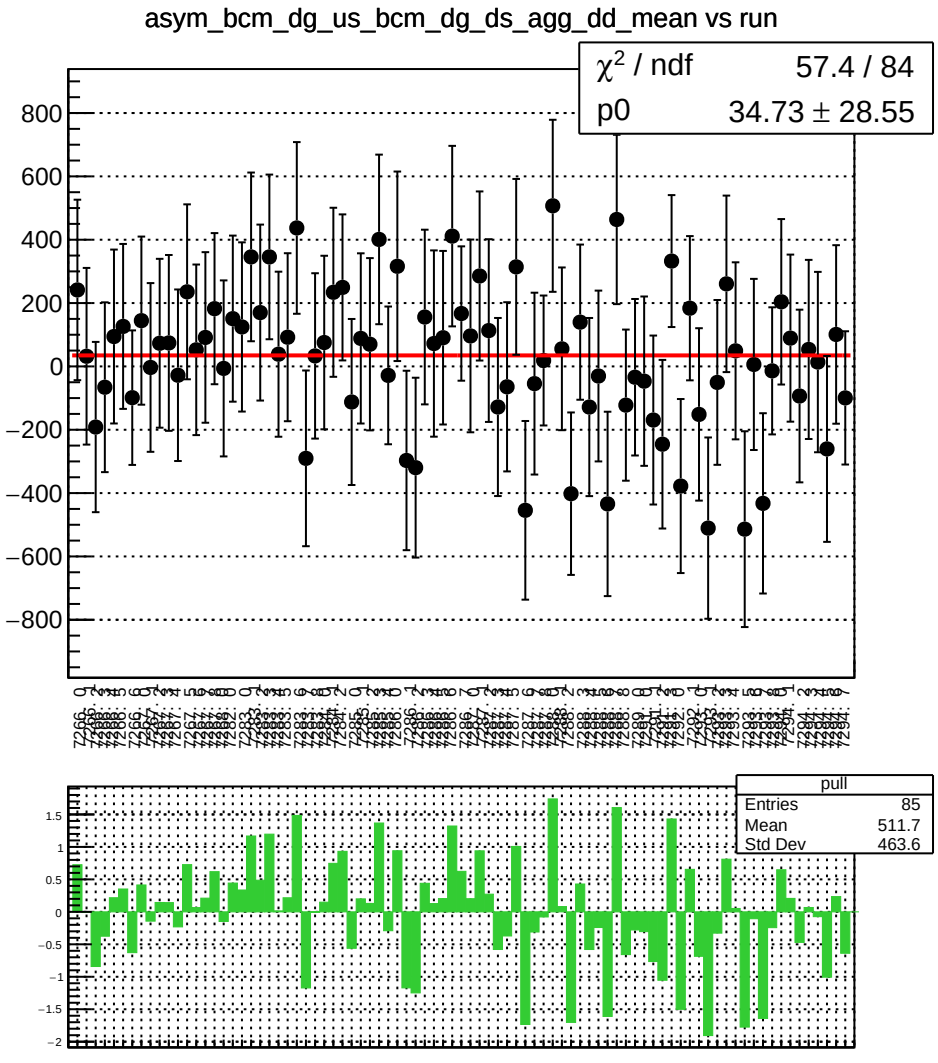

pull1D
Entries 85
Mean 0.01103
Std Dev 0.8897

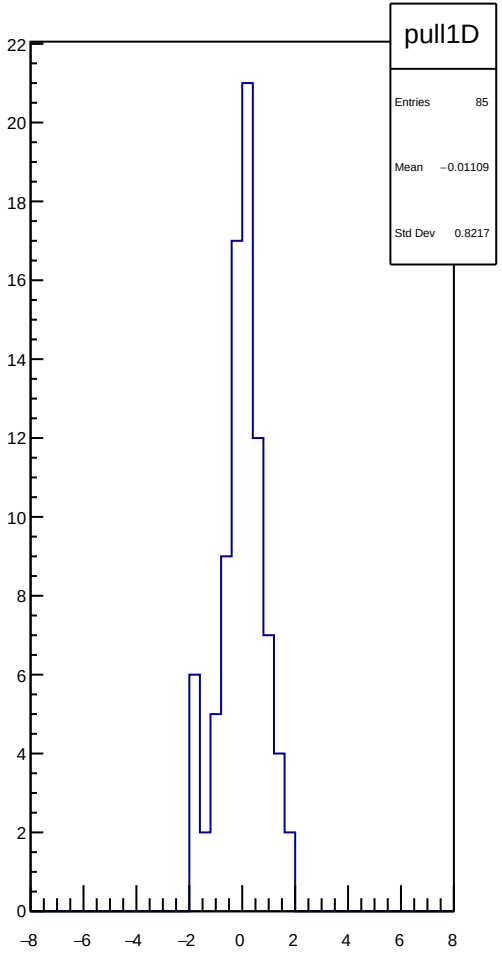

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5250 / 84
p0 17.72 ± 0.01382
22
21
20
19
18
17
16

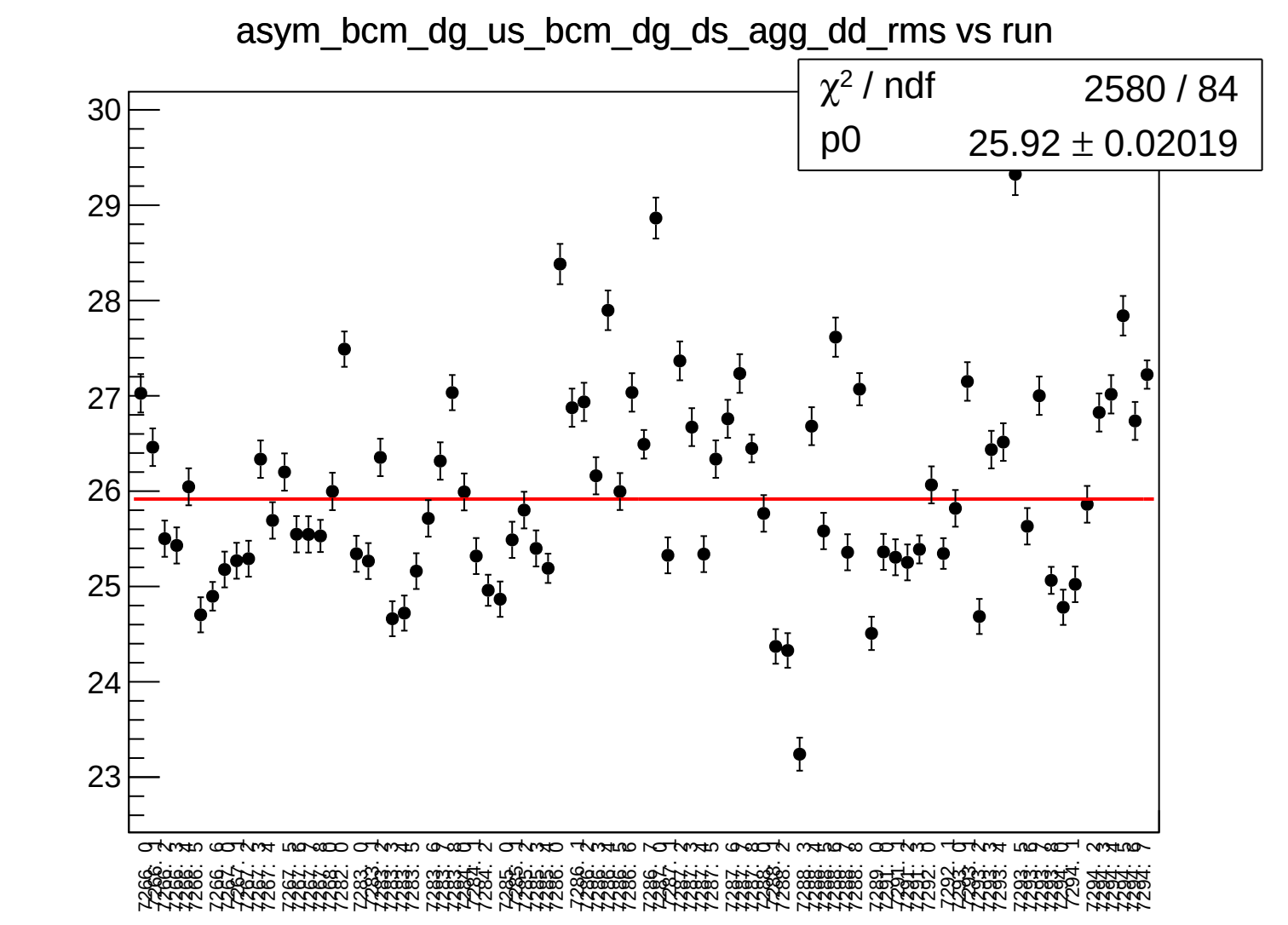

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 11.43 / 84
p0 −78.91 ± 274.5
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 1097
Std Dev 1068
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

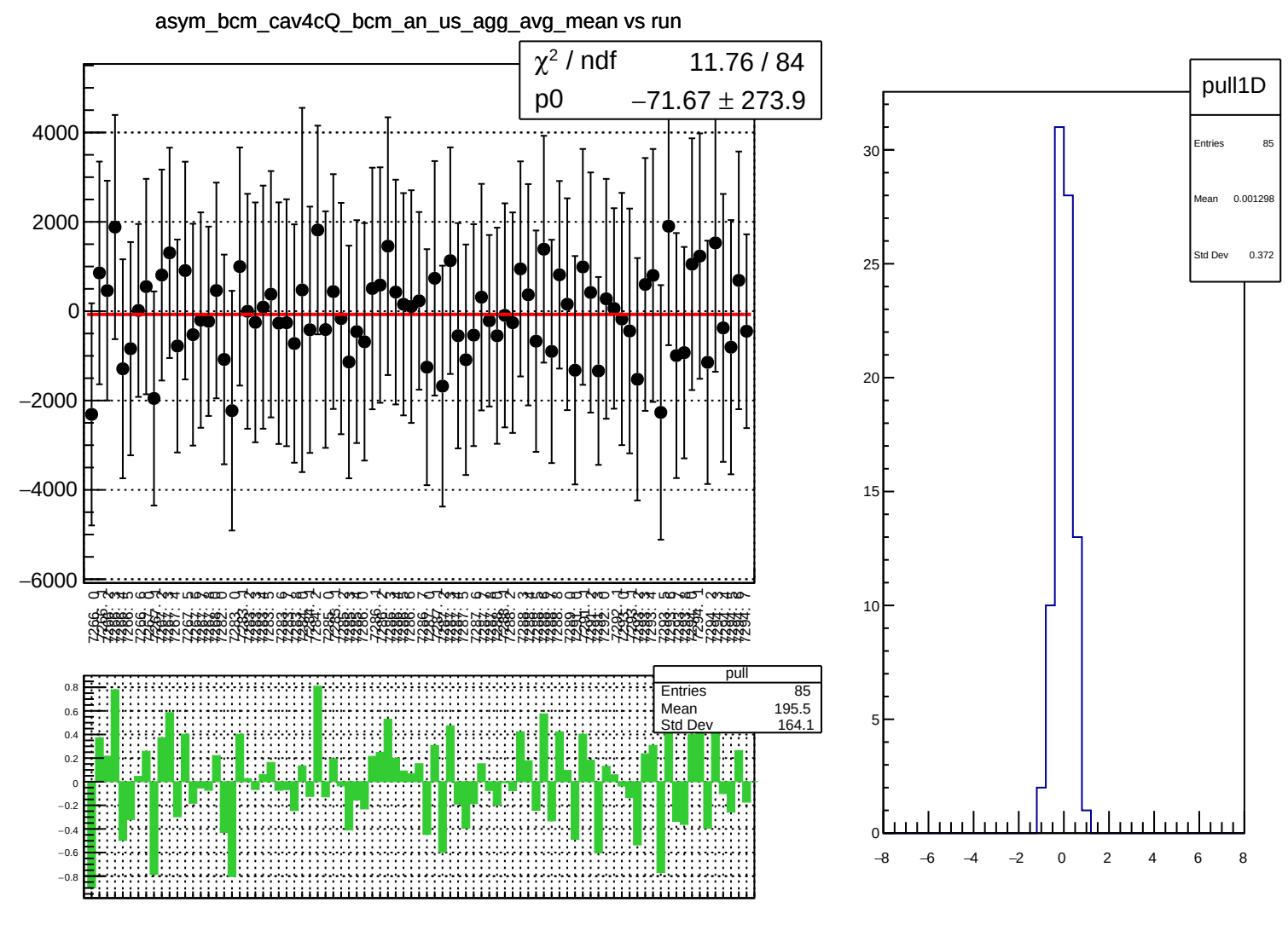

pull1D
Entries 85
Mean 0.0007607
Std Dev 0.3667
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

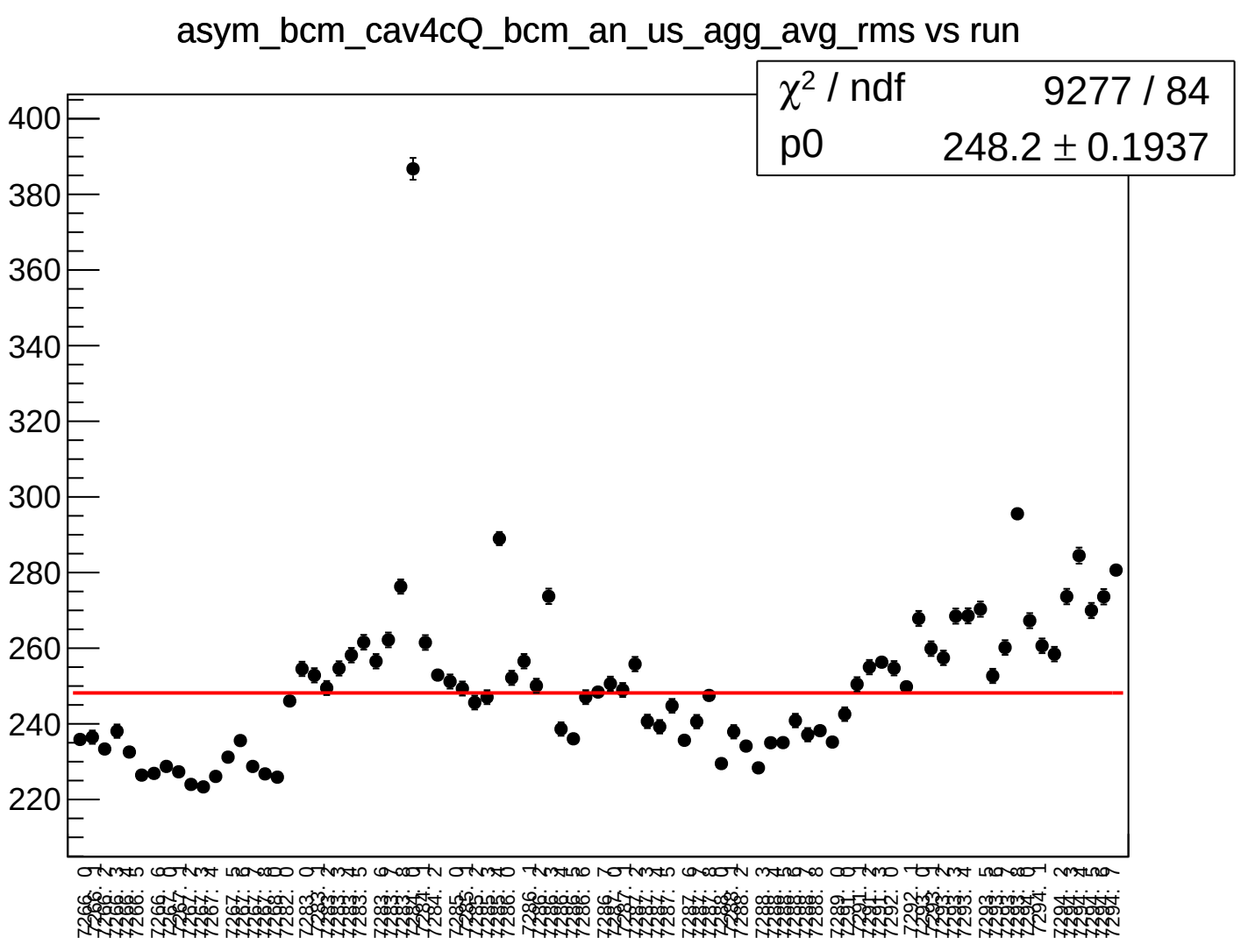

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 9001 / 84
p0 248.7 ± 0.1941
400
380
360
340
320
300
280
260
240
220

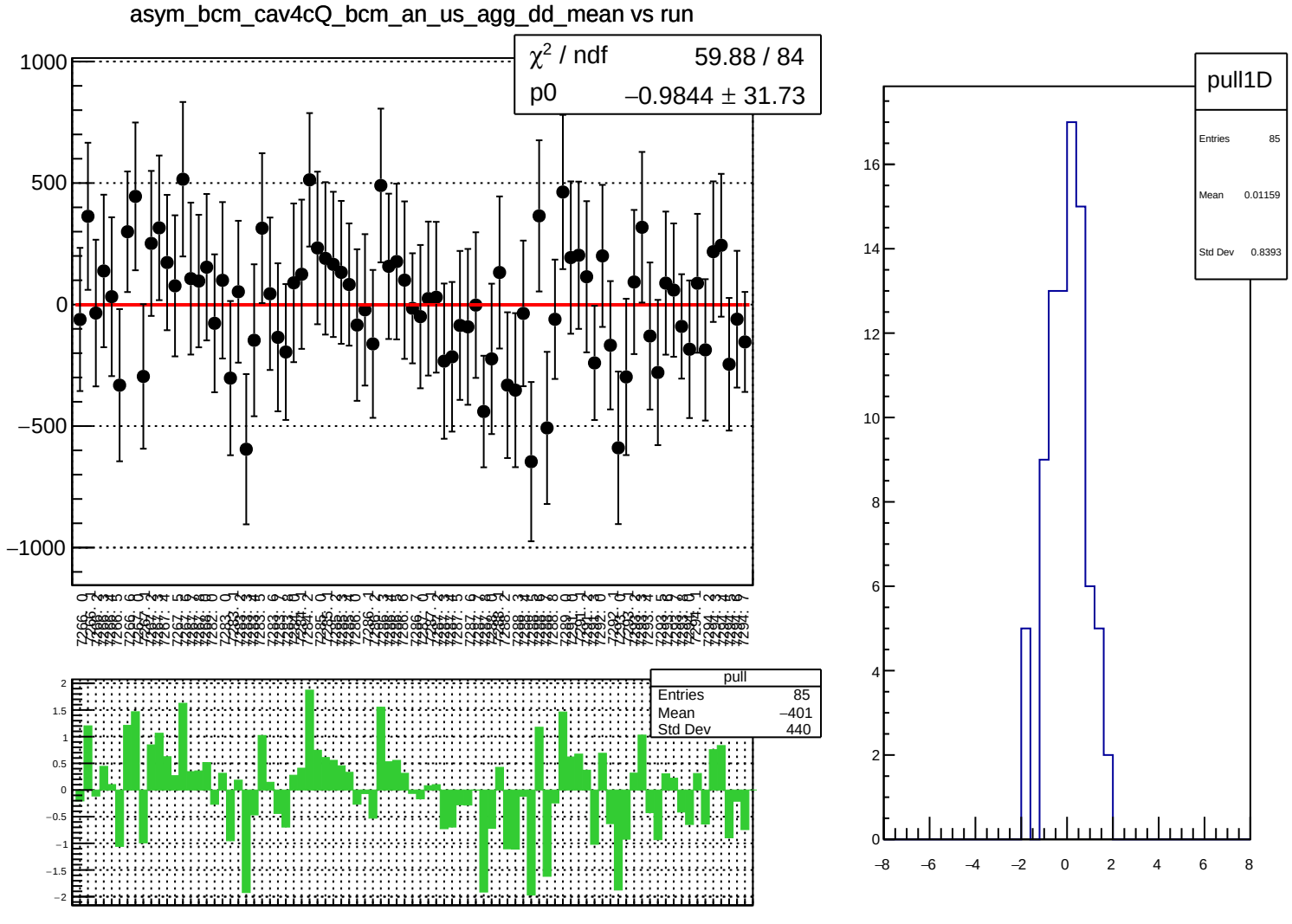

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 57.4 / 84
p0 34.73 ± 28.55
pull
Entries 85
Mean 511.7
Std Dev 463.6

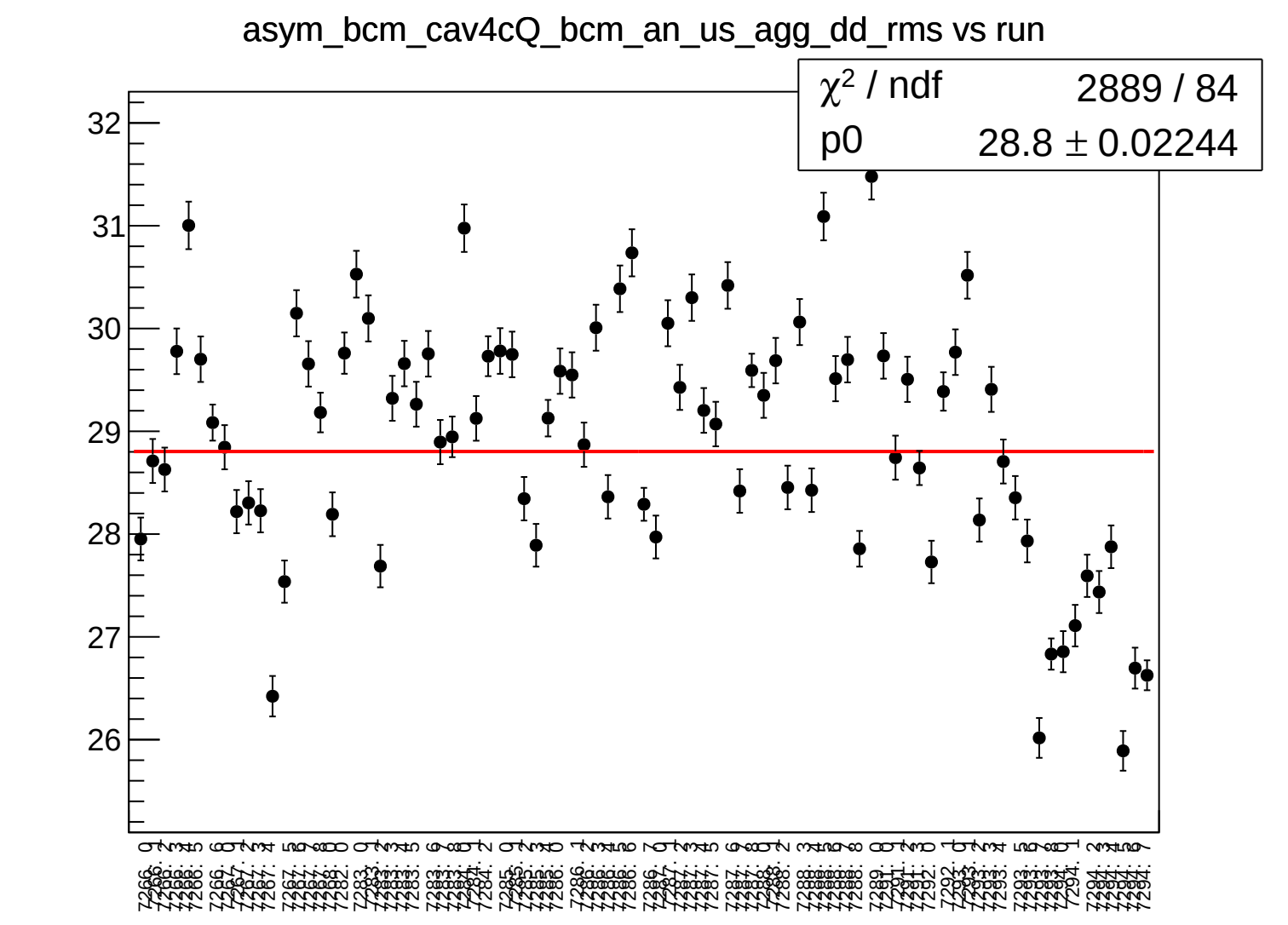

pull1D
Entries 85
Mean −0.01109
Std Dev 0.8217

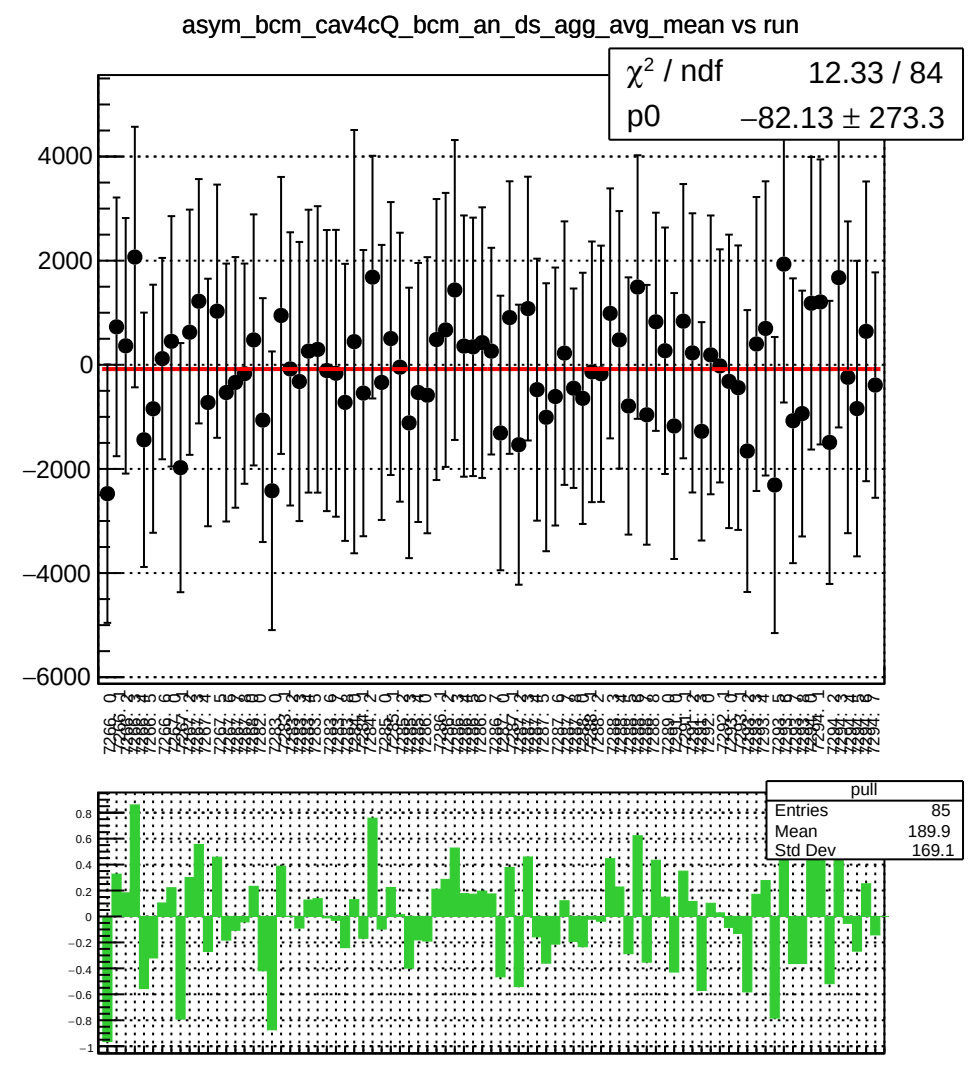

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2580 / 84
p0 25.92 ± 0.02019
30
29
28
27
26
25
24
23

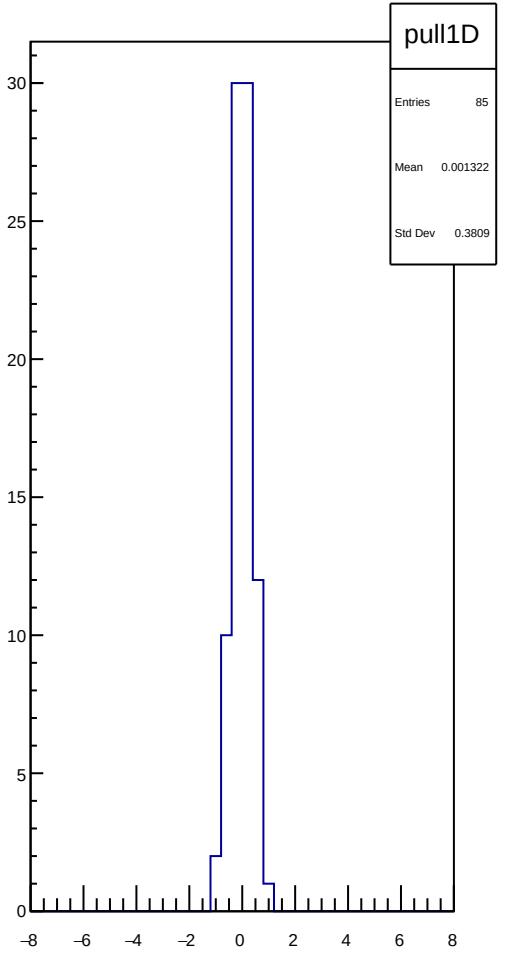

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 11.76 / 84
p0 −71.67 ± 273.9
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 195.5
Std Dev 164.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 85
Mean 0.001298
Std Dev 0.372
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

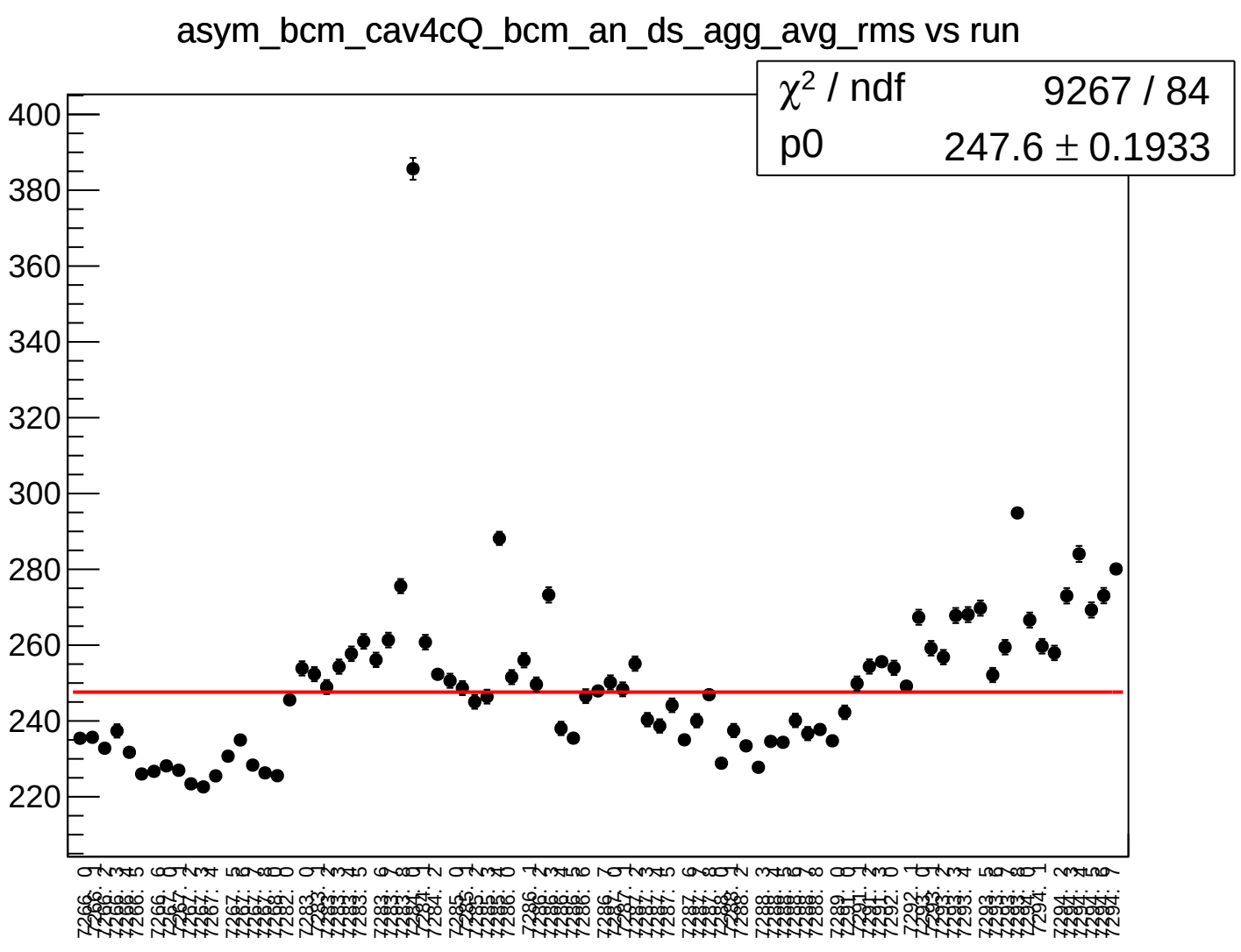

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 9277 / 84
p0 248.2 ± 0.1937
400
380
360
340
320
300
280
260
240
220

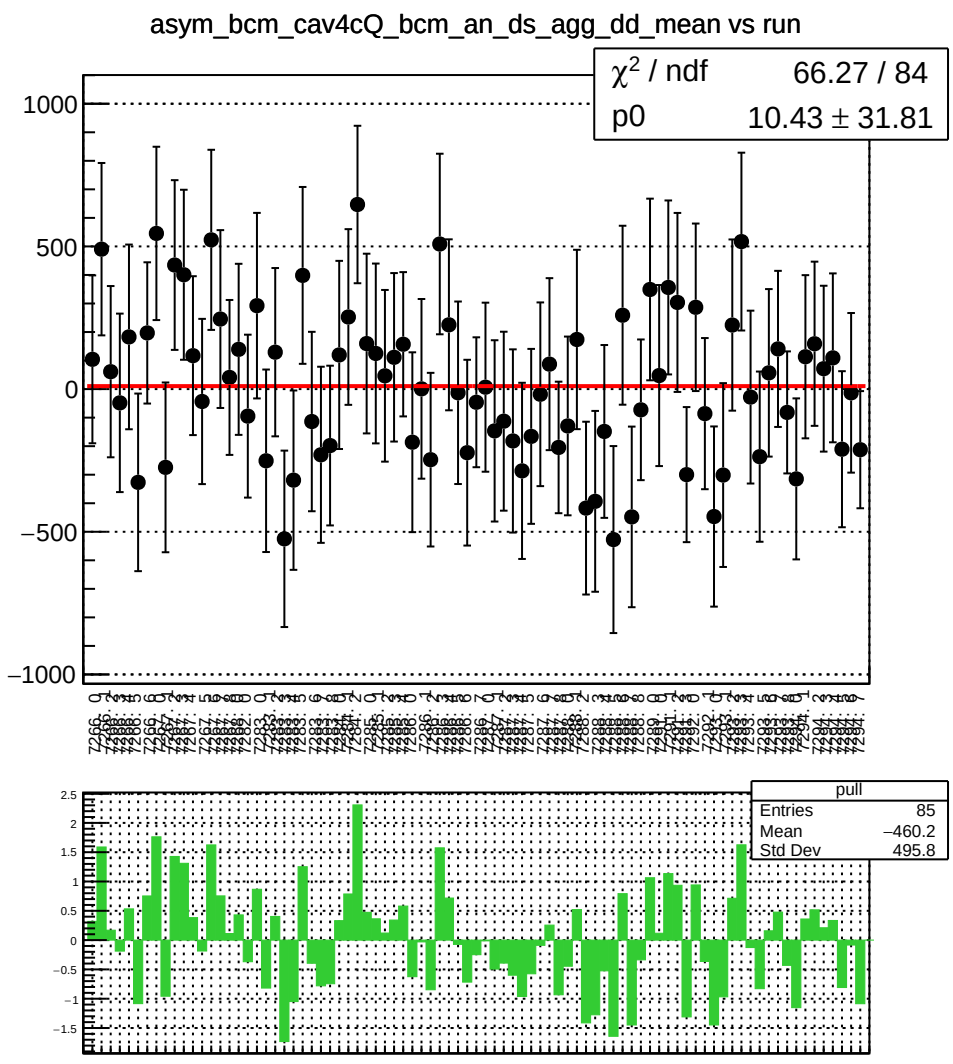

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 59.88 / 84
p0 −0.9844 ± 31.73
pull
Entries 85
Mean −401
Std Dev 440
pull1D
Entries 85
Mean 0.01159
Std Dev 0.8393

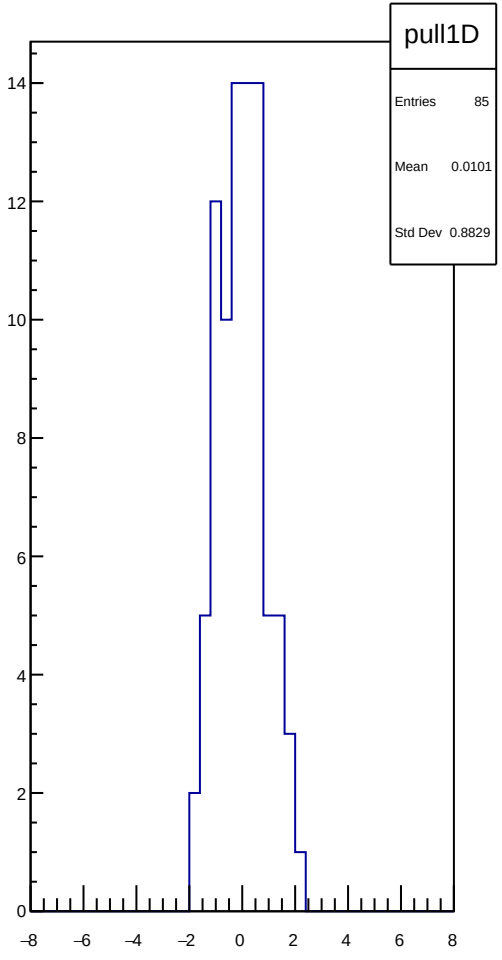

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2889 / 84
p0 28.8 ± 0.02244
32
31
30
29
28
27
26

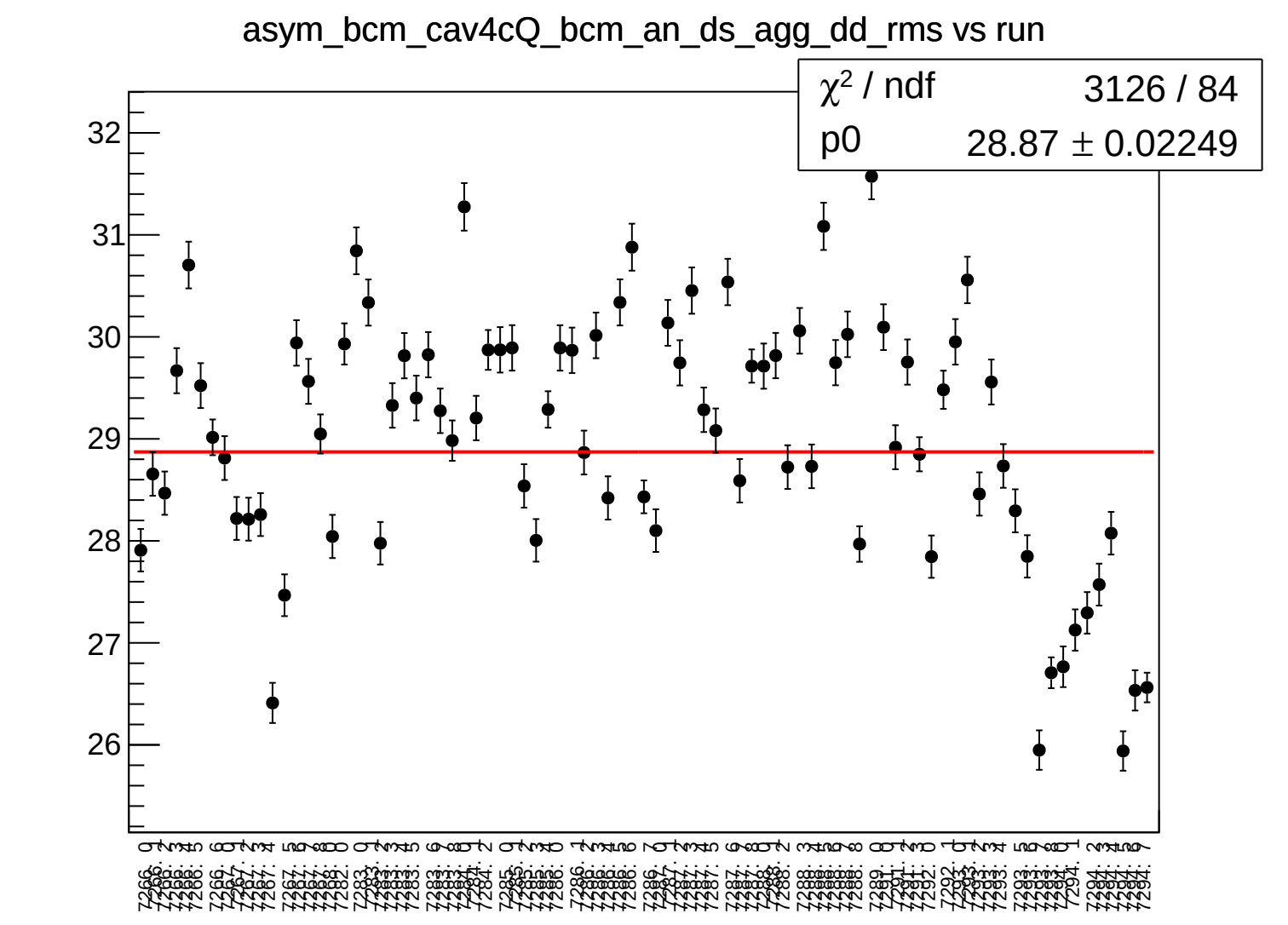

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 12.33 / 84
p0 −82.13 ± 273.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 189.9
Std Dev 169.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

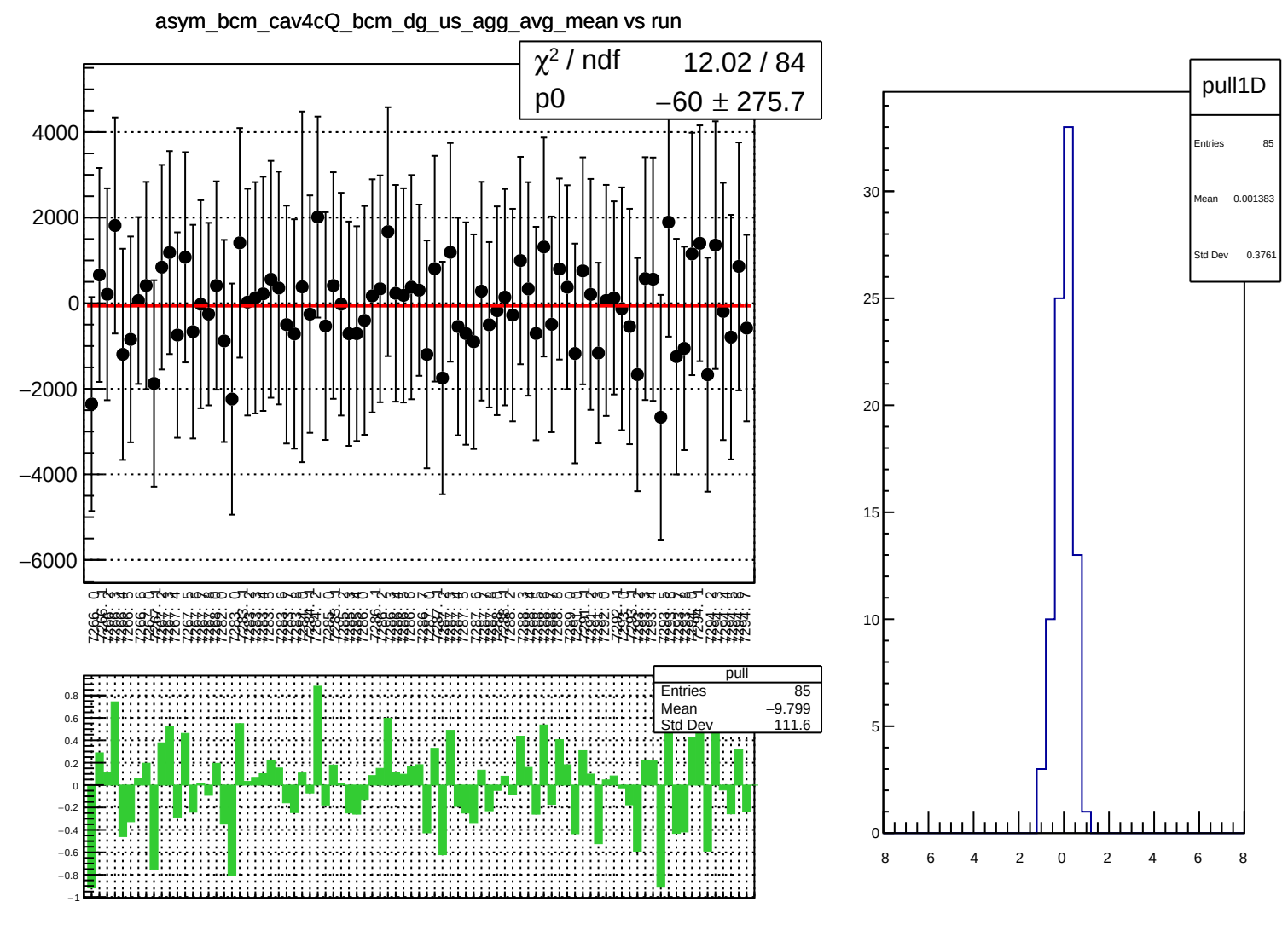

pull1D
Entries 85
Mean 0.001322
Std Dev 0.3809
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

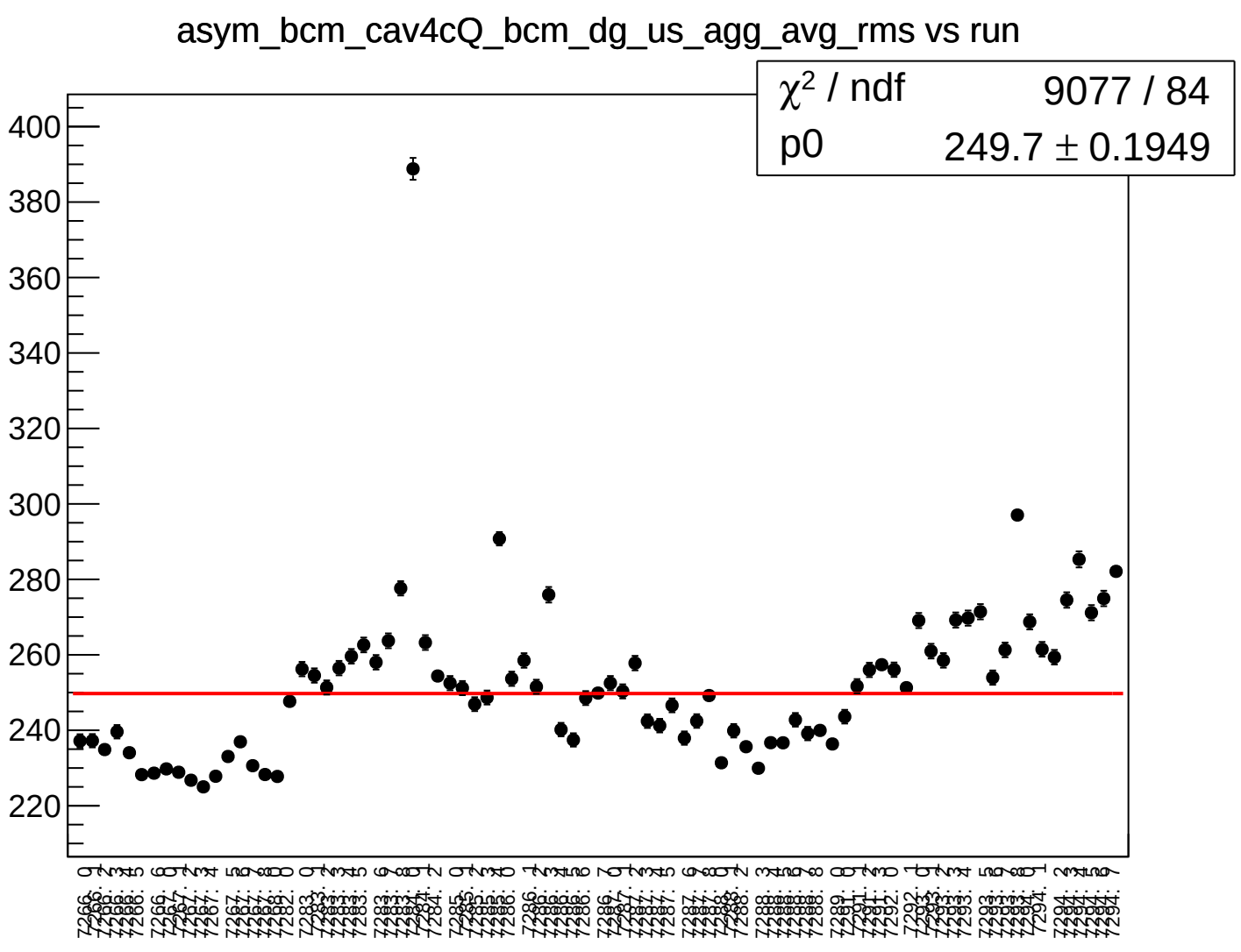

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 9267 / 84
p0 247.6 ± 0.1933
400
380
360
340
320
300
280
260
240
220

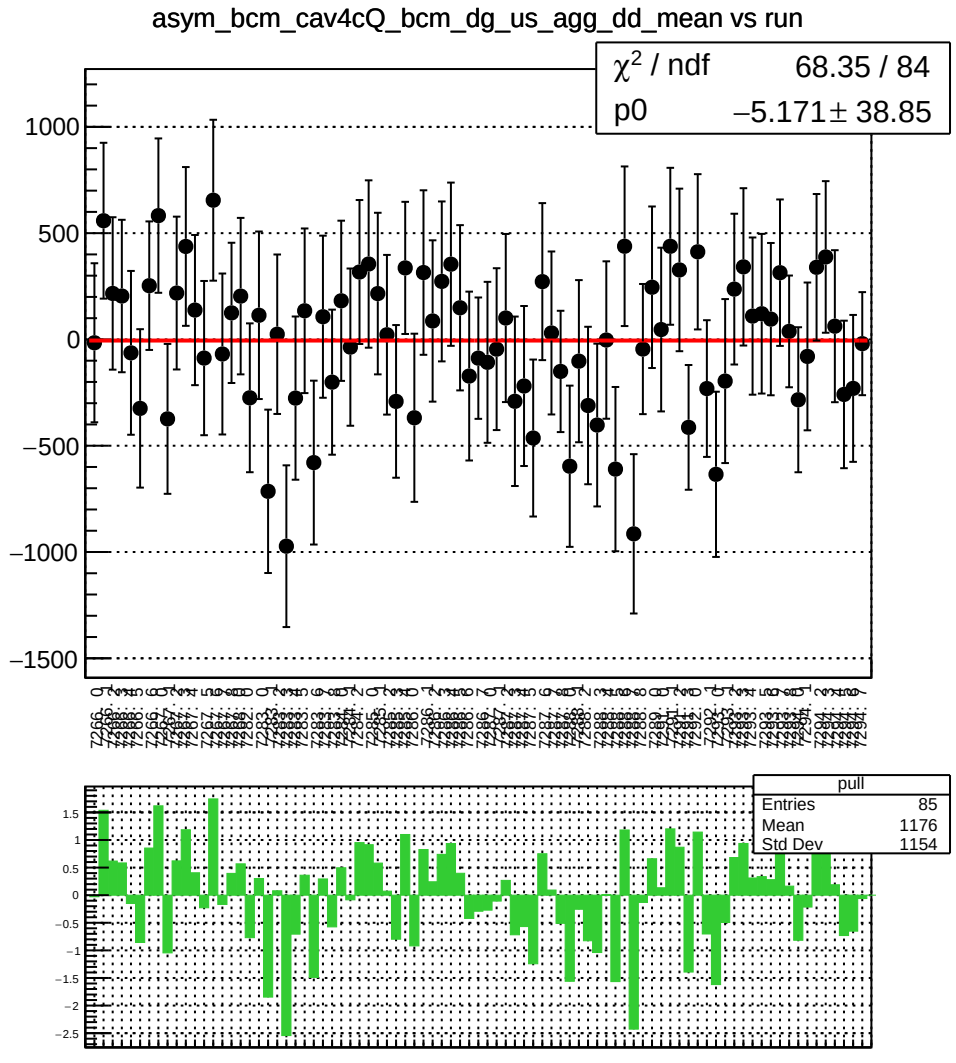

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 66.27 / 84
p0 10.43 ± 31.81
1000
500
0
−500
−1000
pull
Entries 85
Mean −460.2
Std Dev 495.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

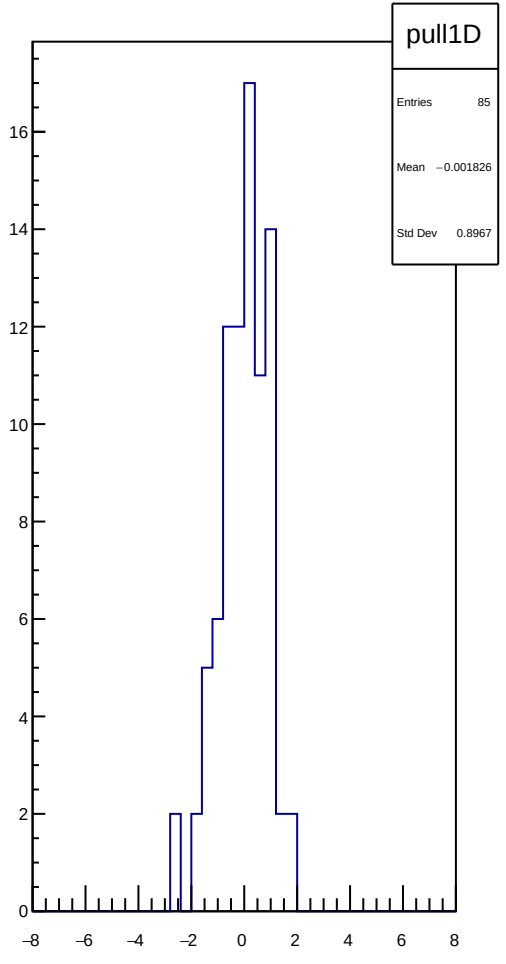

pull1D
Entries 85
Mean 0.0101
Std Dev 0.8829
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

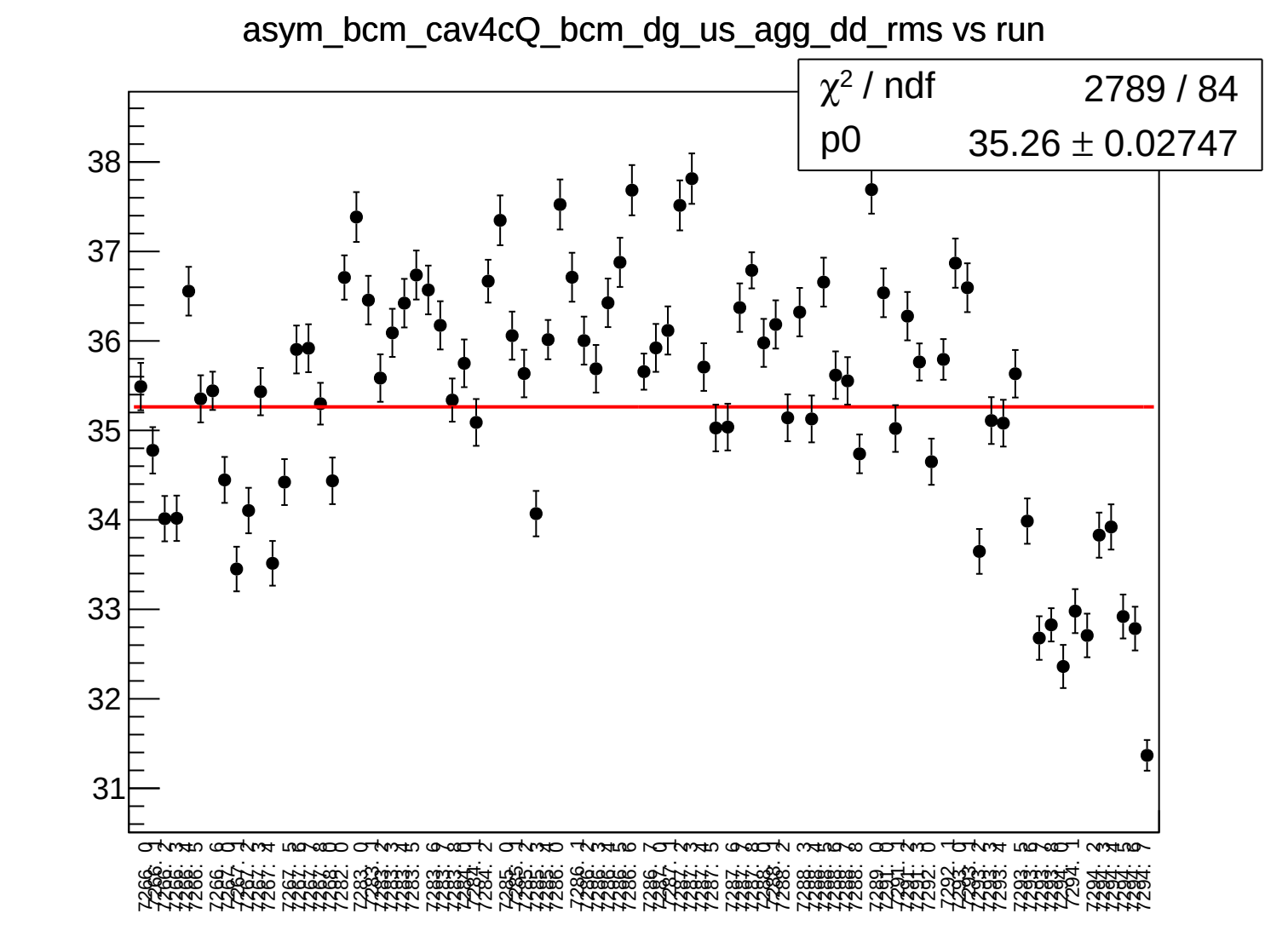

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3126 / 84
p0 28.87 ± 0.02249
32
31
30
29
28
27
26

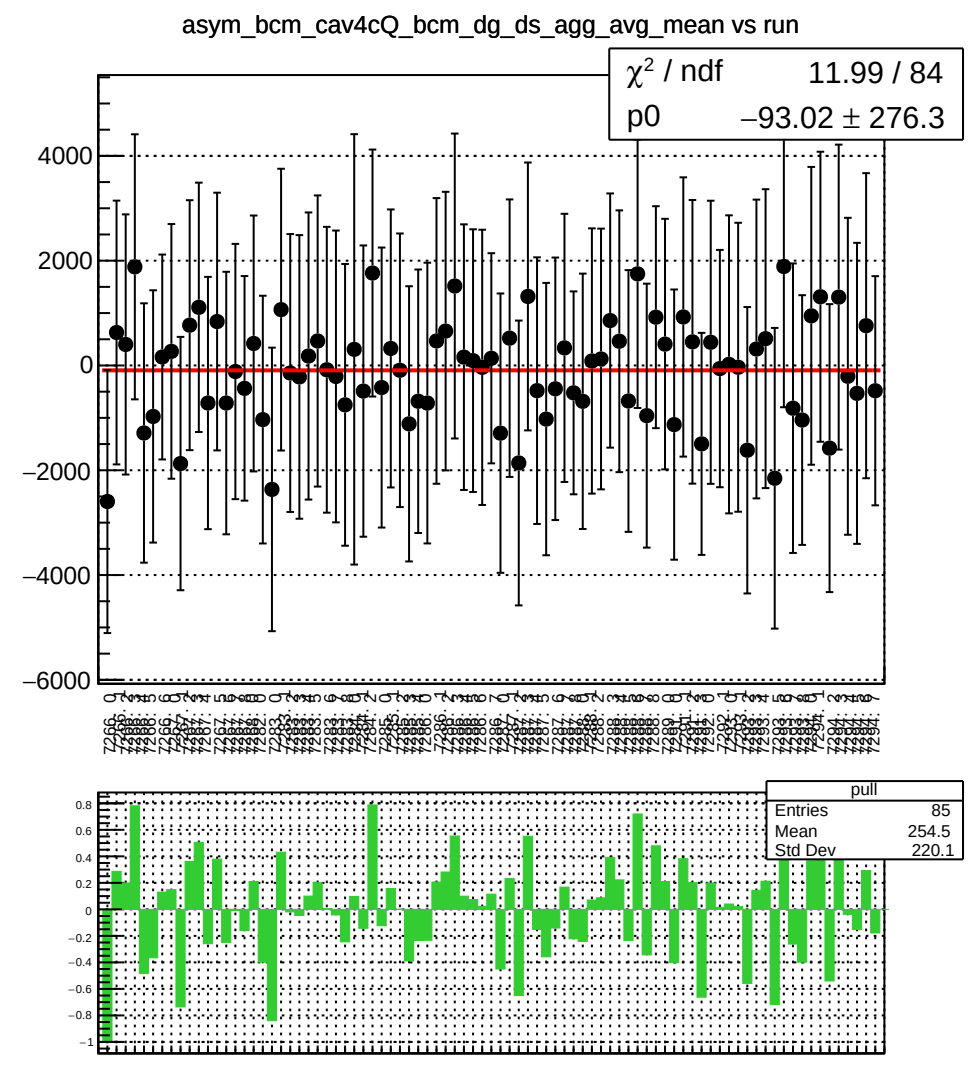

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 12.02 / 84
p0 −60 ± 275.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −9.799
Std Dev 111.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 85
Mean 0.001383
Std Dev 0.3761
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

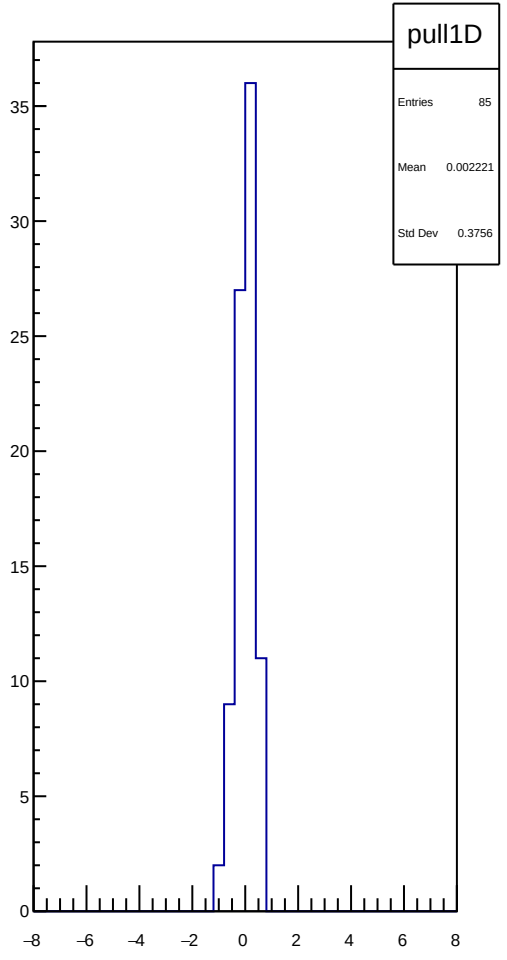

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 9077 / 84
p0 249.7 ± 0.1949
400
380
360
340
320
300
280
260
240
220

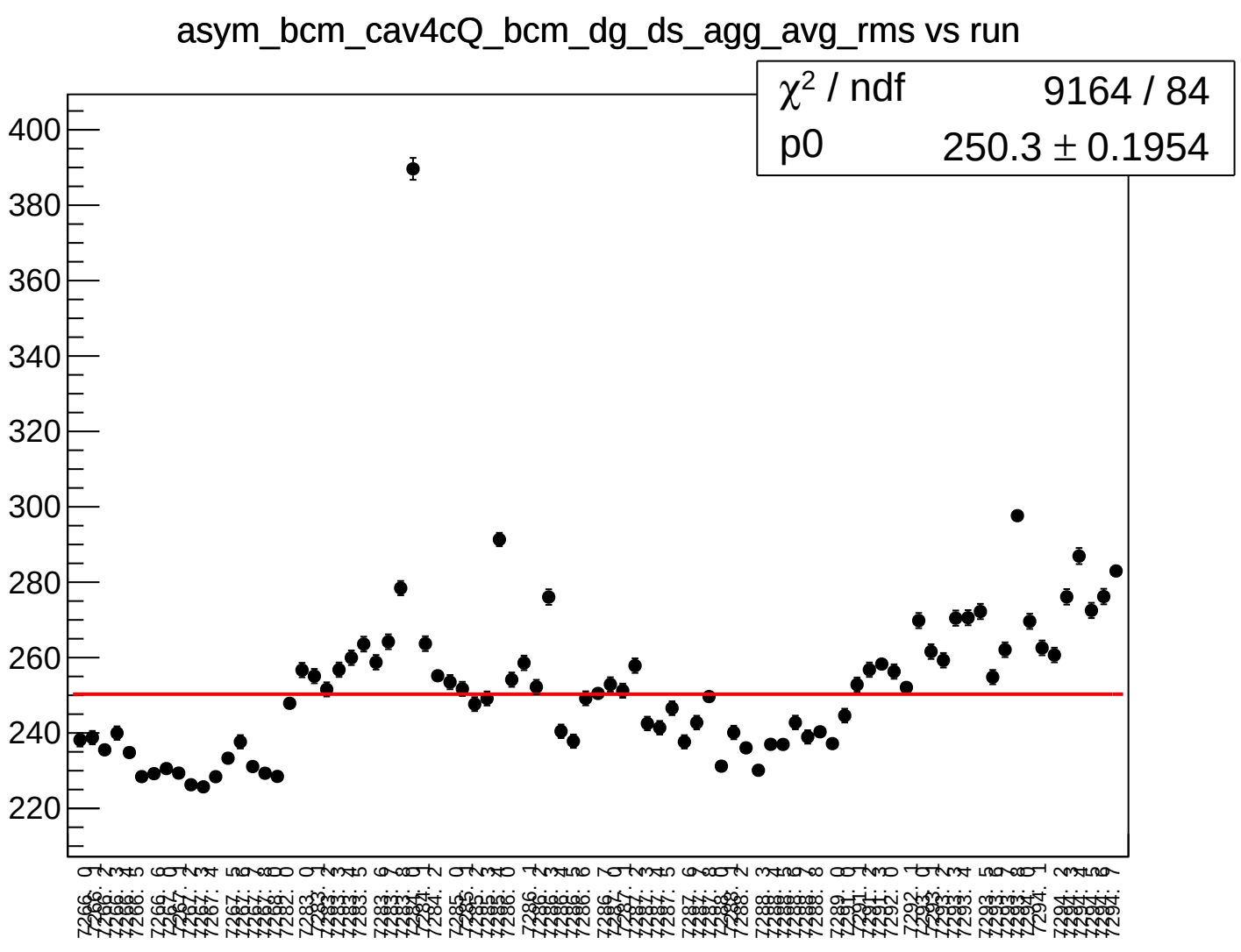

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 68.35 / 84
p0 −5.171 ± 38.85
pull
Entries 85
Mean 1176
Std Dev 1154

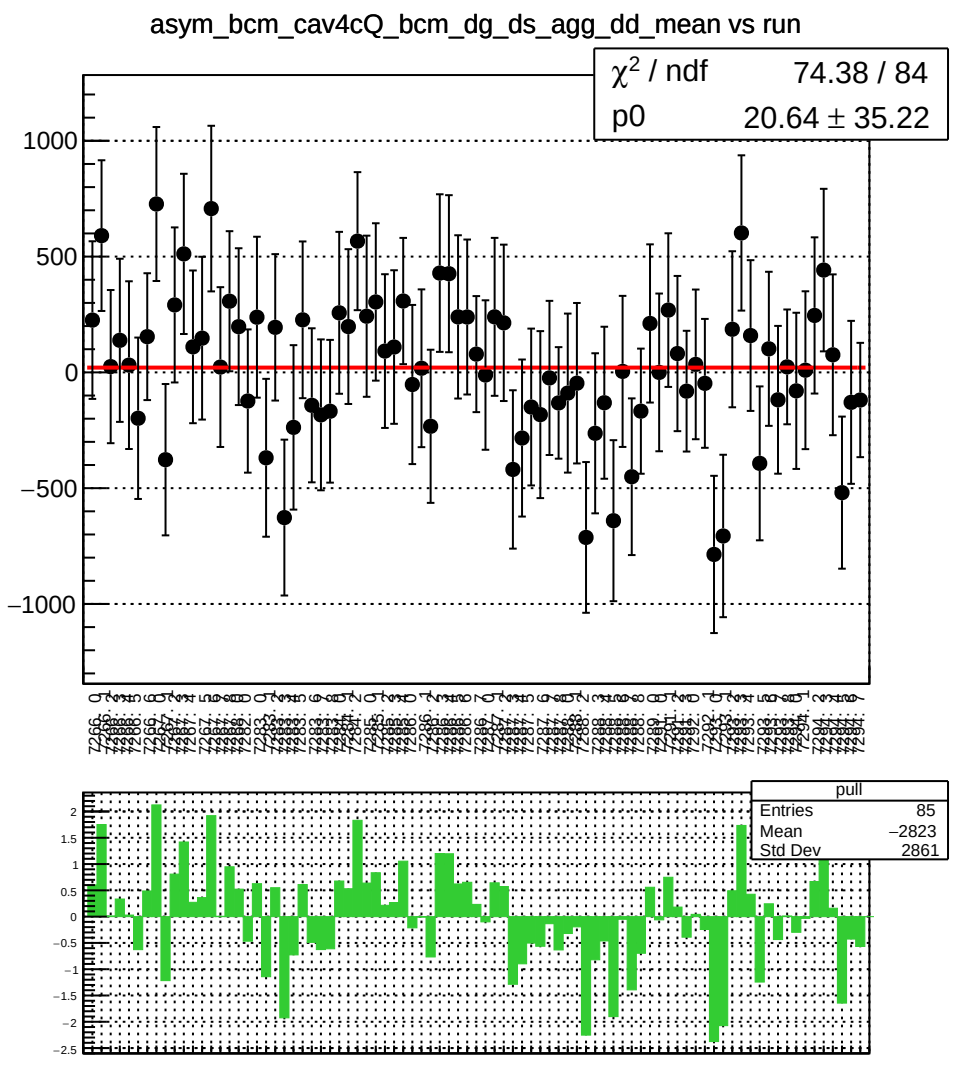

pull1D
Entries 85
Mean −0.001826
Std Dev 0.8967

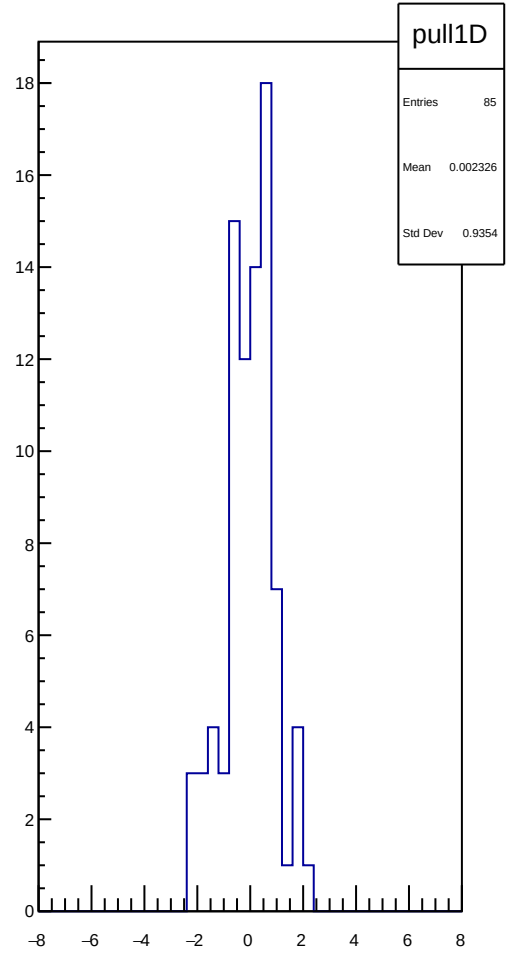

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2789 / 84
p0 35.26 ± 0.02747
38
37
36
35
34
33
32
31

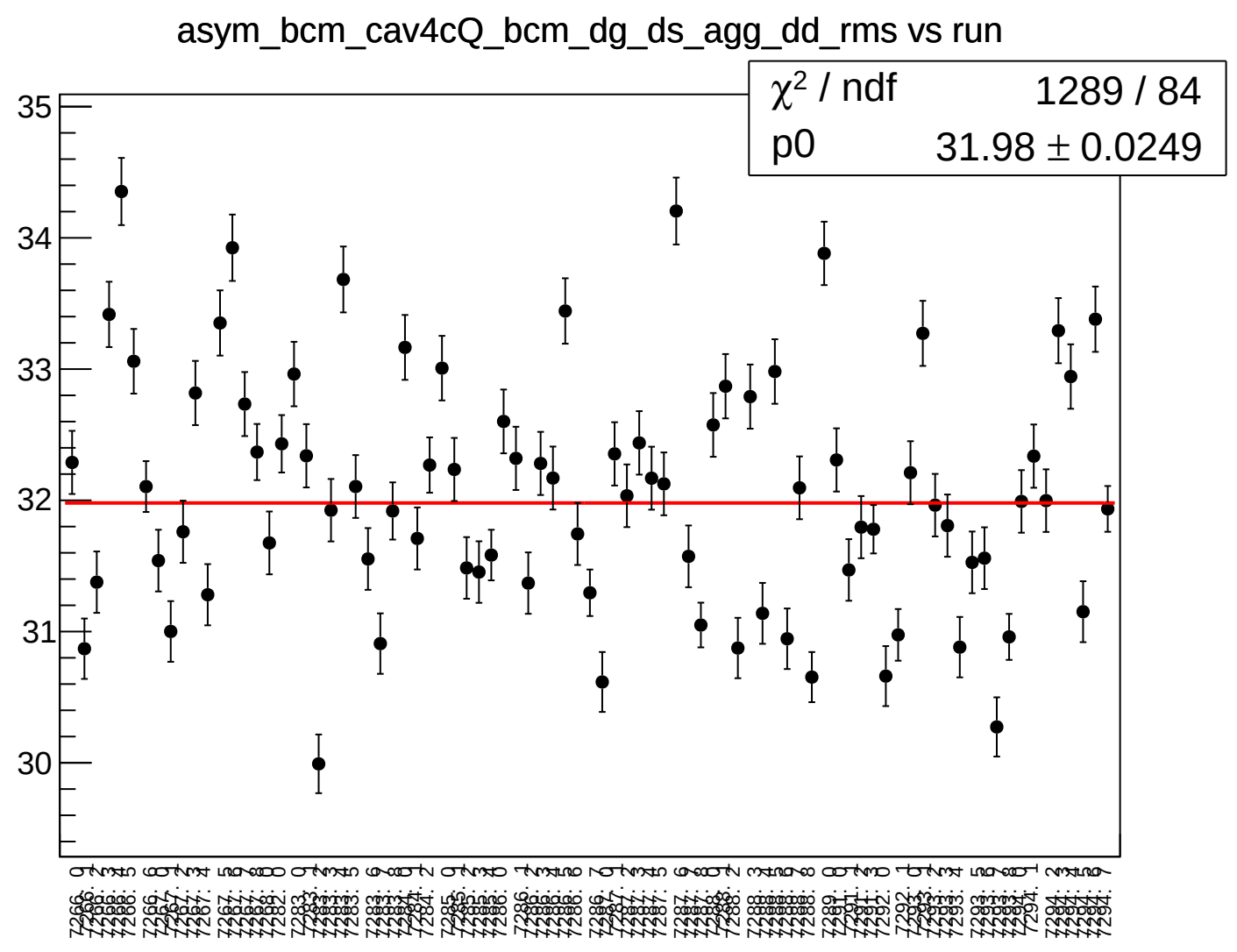

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 11.99 / 84
p0 −93.02 ± 276.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 254.5
Std Dev 220.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

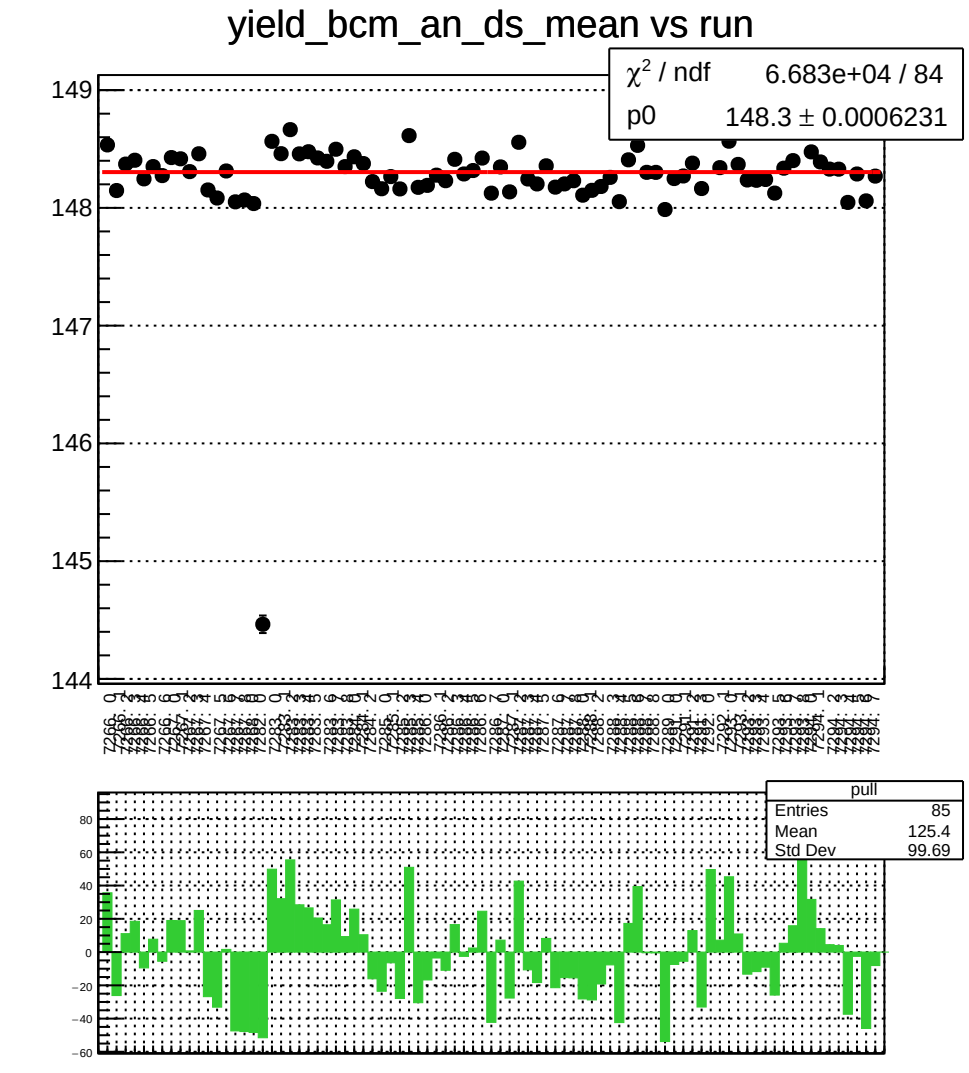

pull1D
Entries 85
Mean 0.002221
Std Dev 0.3756
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

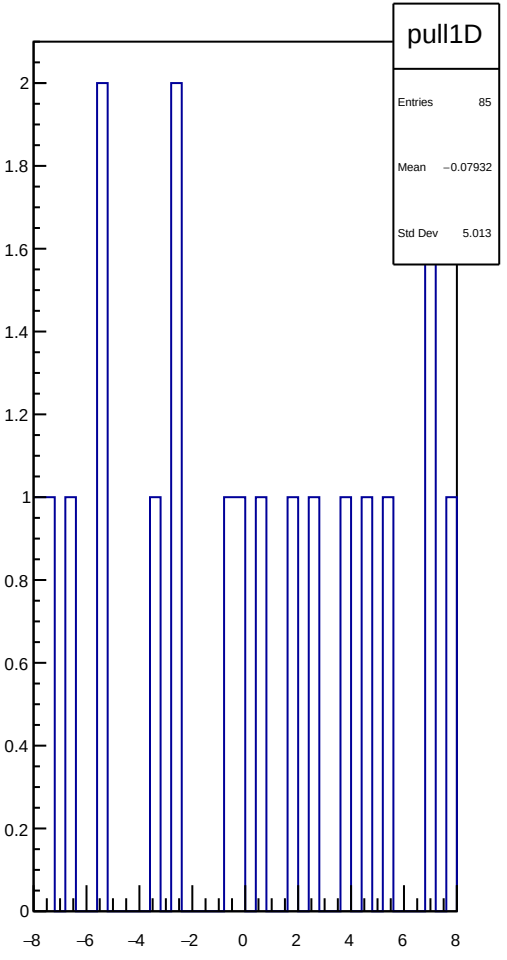

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 9164 / 84
p0 250.3 ± 0.1954
400
380
360
340
320
300
280
260
240
220

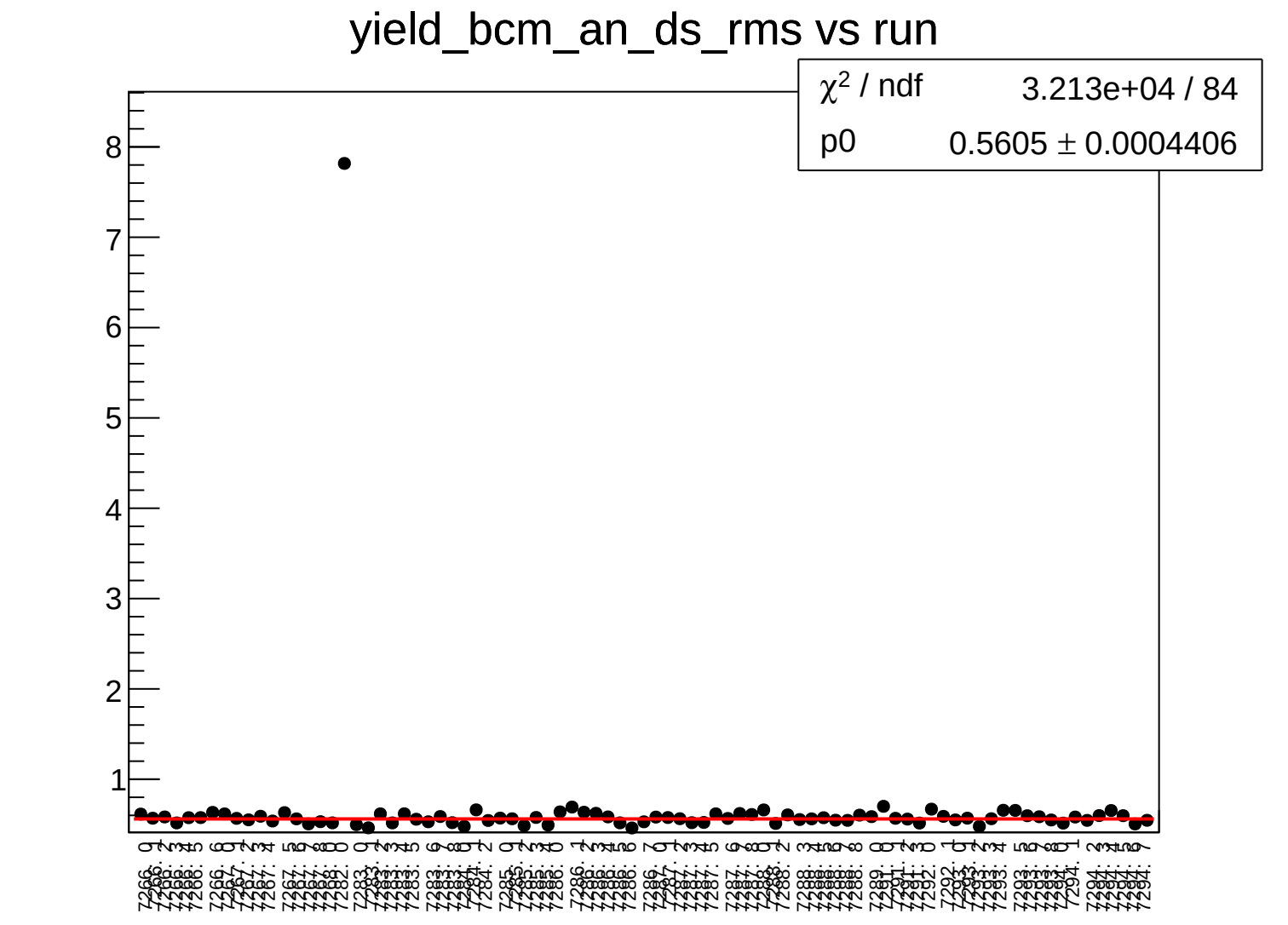

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 74.38 / 84
p0 20.64 ± 35.22
1000
500
0
−500
−1000
pull
Entries 85
Mean −2823
Std Dev 2861
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

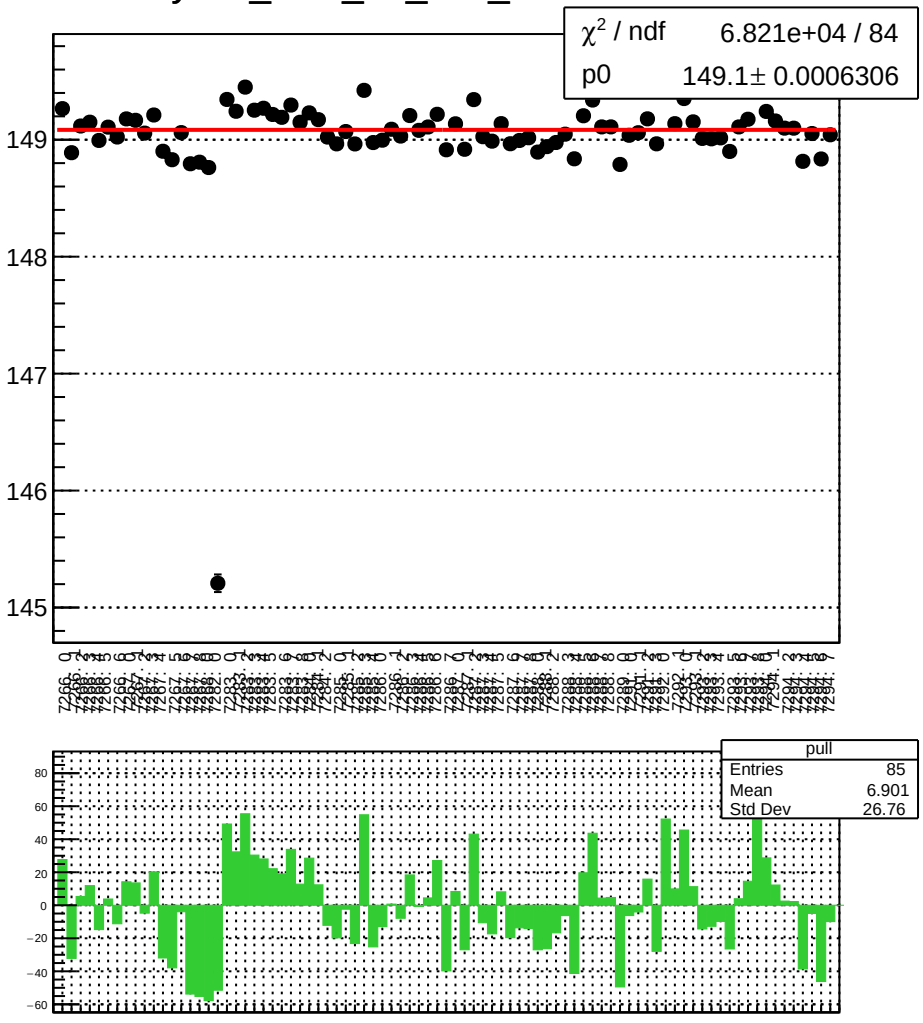

pull1D
Entries 85
Mean 0.002326
Std Dev 0.9354
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

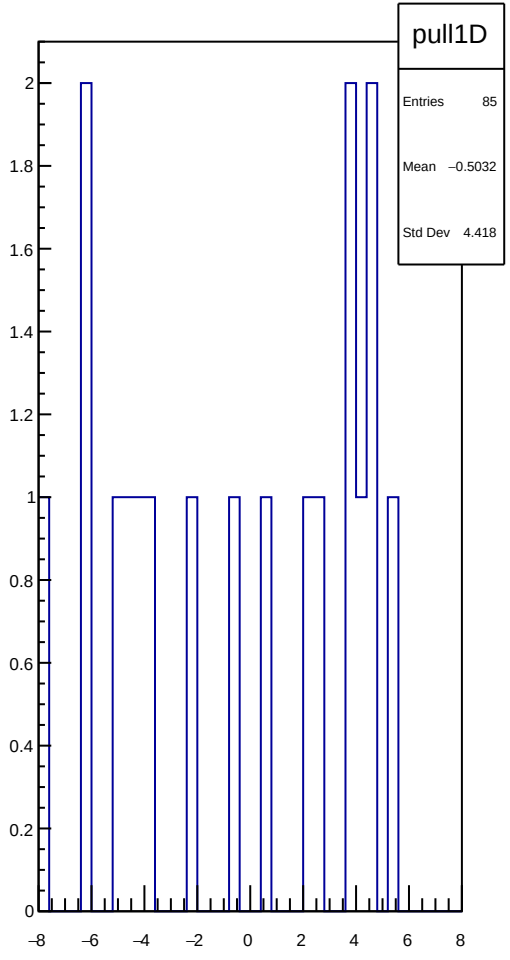

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1289 / 84
p0 31.98 ± 0.0249
35
34
33
32
31
30

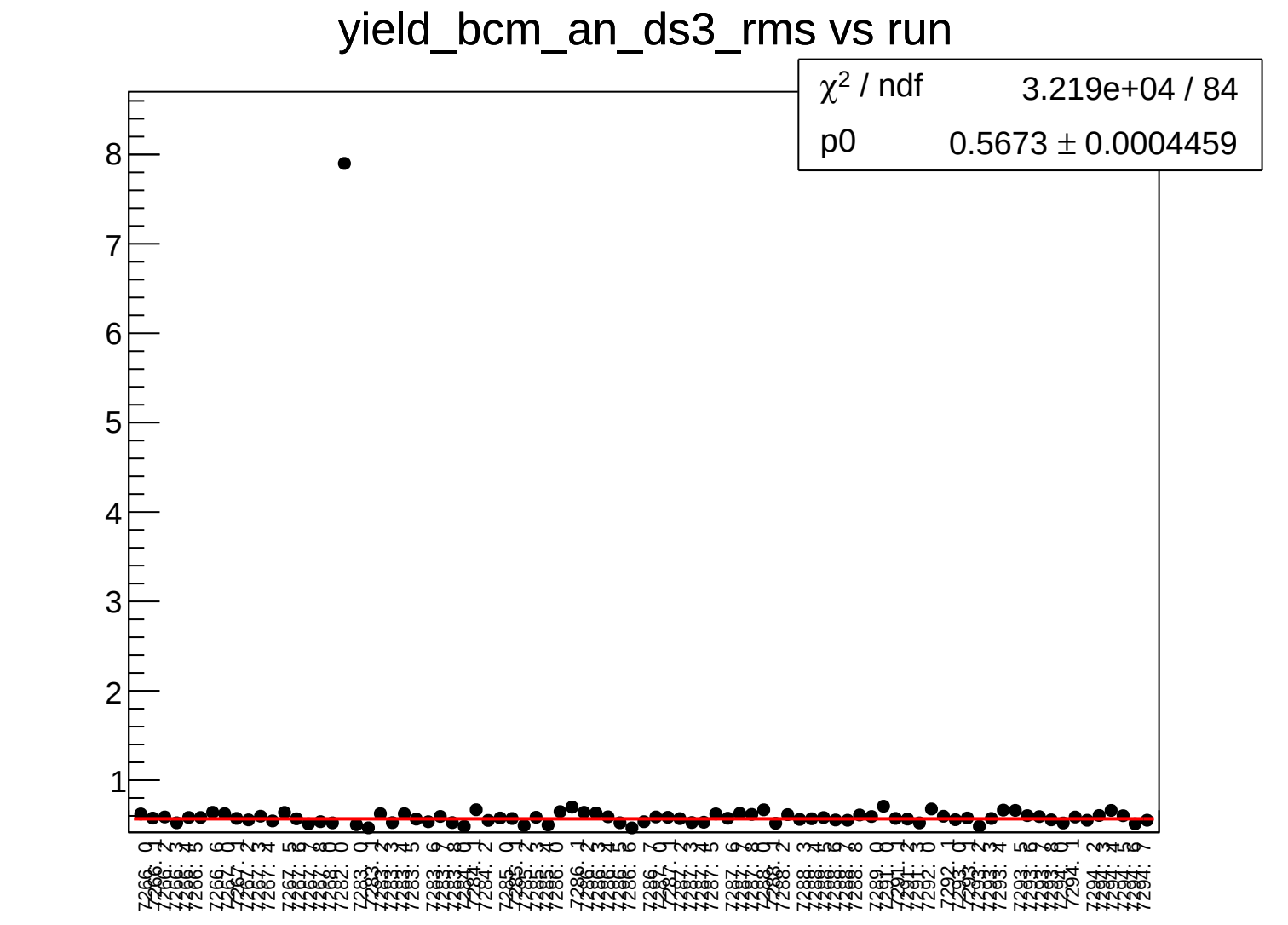

yield_bcm_an_ds_mean vs run
χ² / ndf 6.683e+04 / 84
p0 148.3 ± 0.0006231
149
148
147
146
145
144
pull
Entries 85
Mean 125.4
Std Dev 99.69
80
60
40
20
0
−20
−40
−60

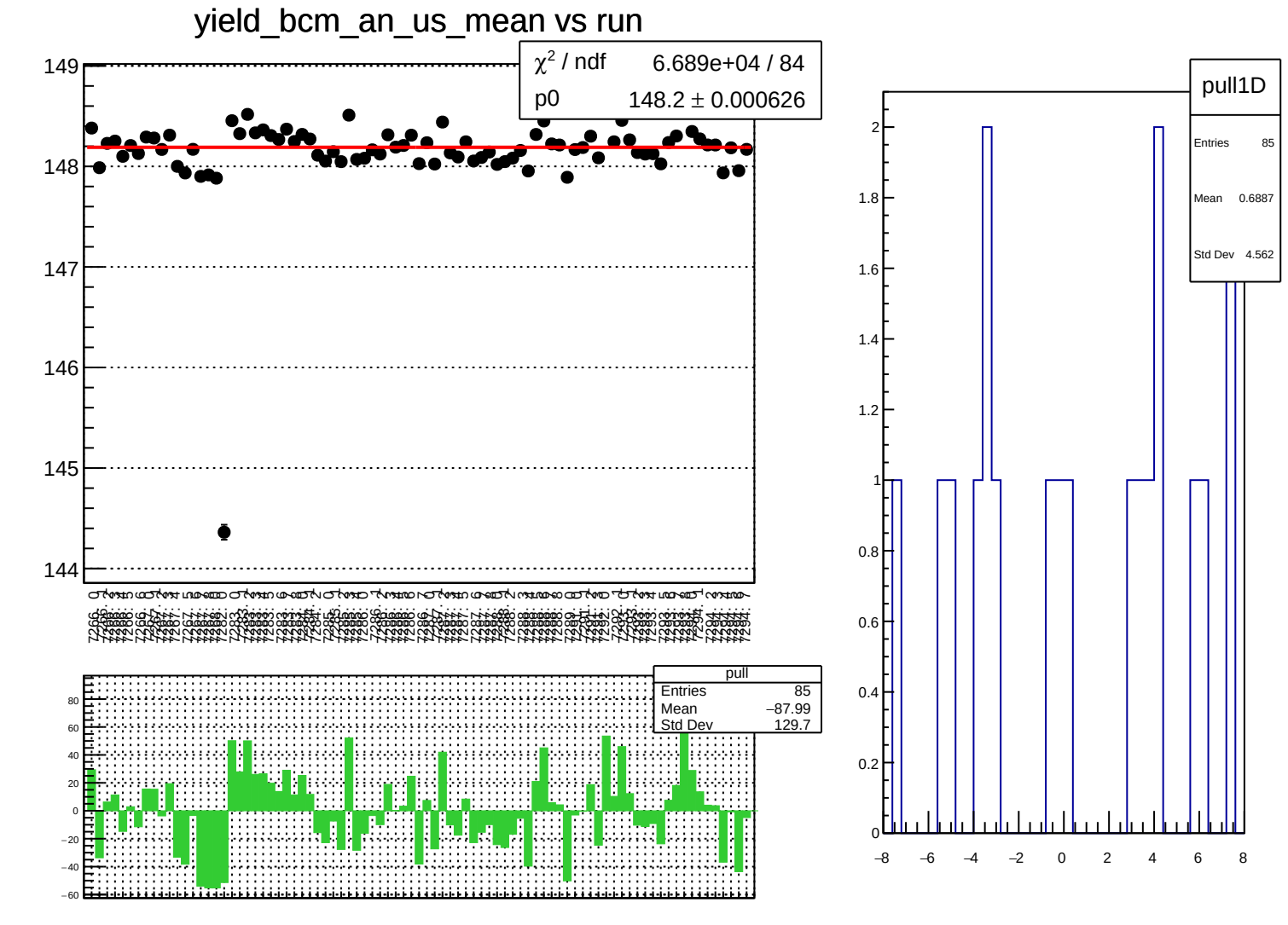

pull1D
Entries 85
Mean −0.07932
Std Dev 5.013
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

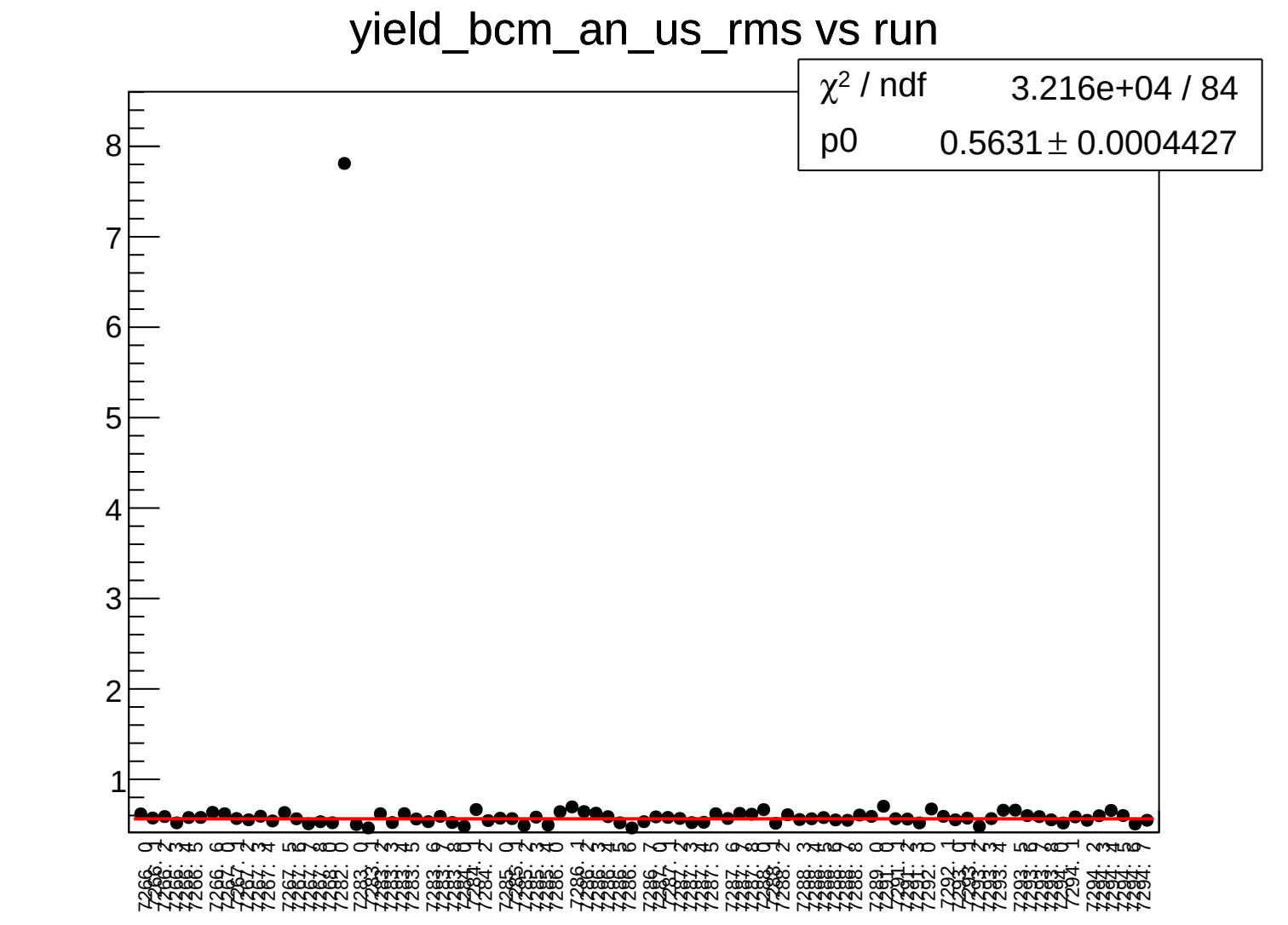

yield_bcm_an_ds_rms vs run
χ² / ndf 3.213e+04 / 84
p0 0.5605 ± 0.0004406
8
7
6
5
4
3
2
1

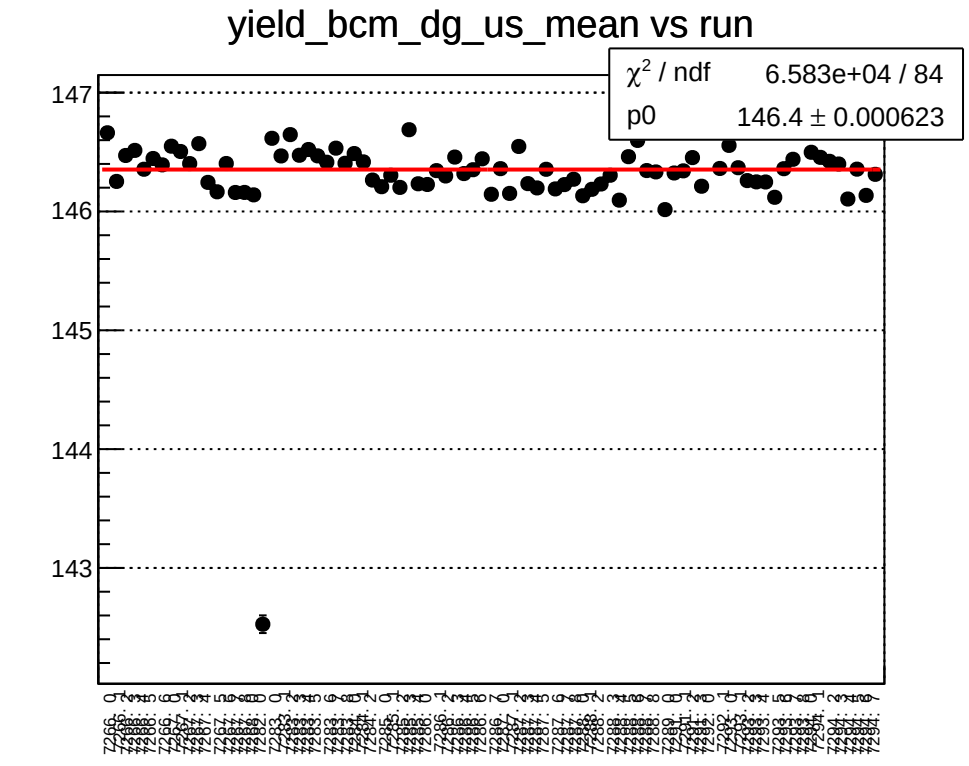

yield_bcm_an_ds3_mean vs run
χ² / ndf 6.821e+04 / 84
p0 149.1± 0.0006306
149
148
147
146
145
pull
Entries 85
Mean 6.901
Std Dev 26.76
80
60
40
20
0
−20
−40
−60

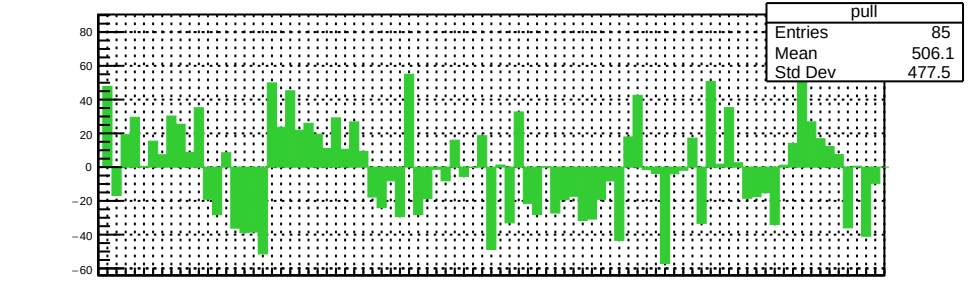

pull1D
Entries 85
Mean −0.5032
Std Dev 4.418
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

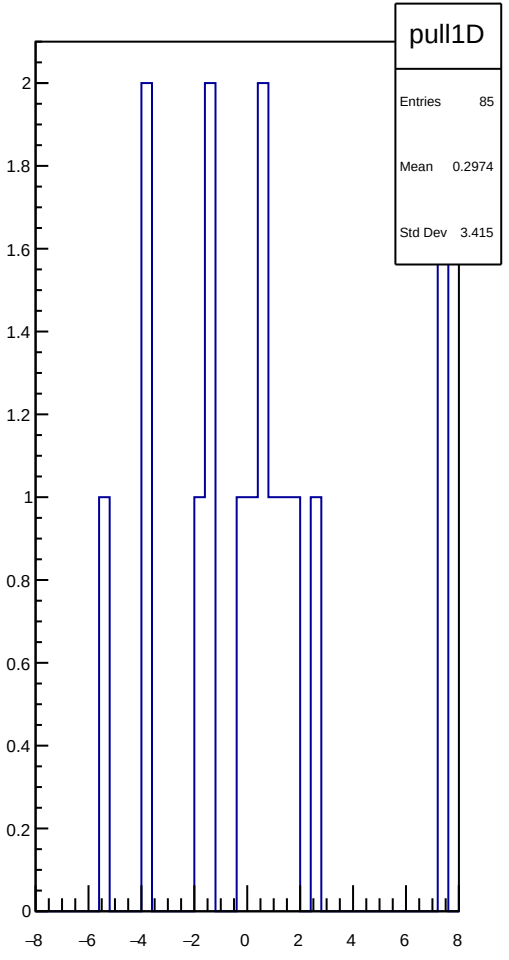

yield_bcm_an_ds3_rms vs run
χ2 / ndf 3.219e+04 / 84
p0 0.5673 ± 0.0004459
8
7
6
5
4
3
2
1

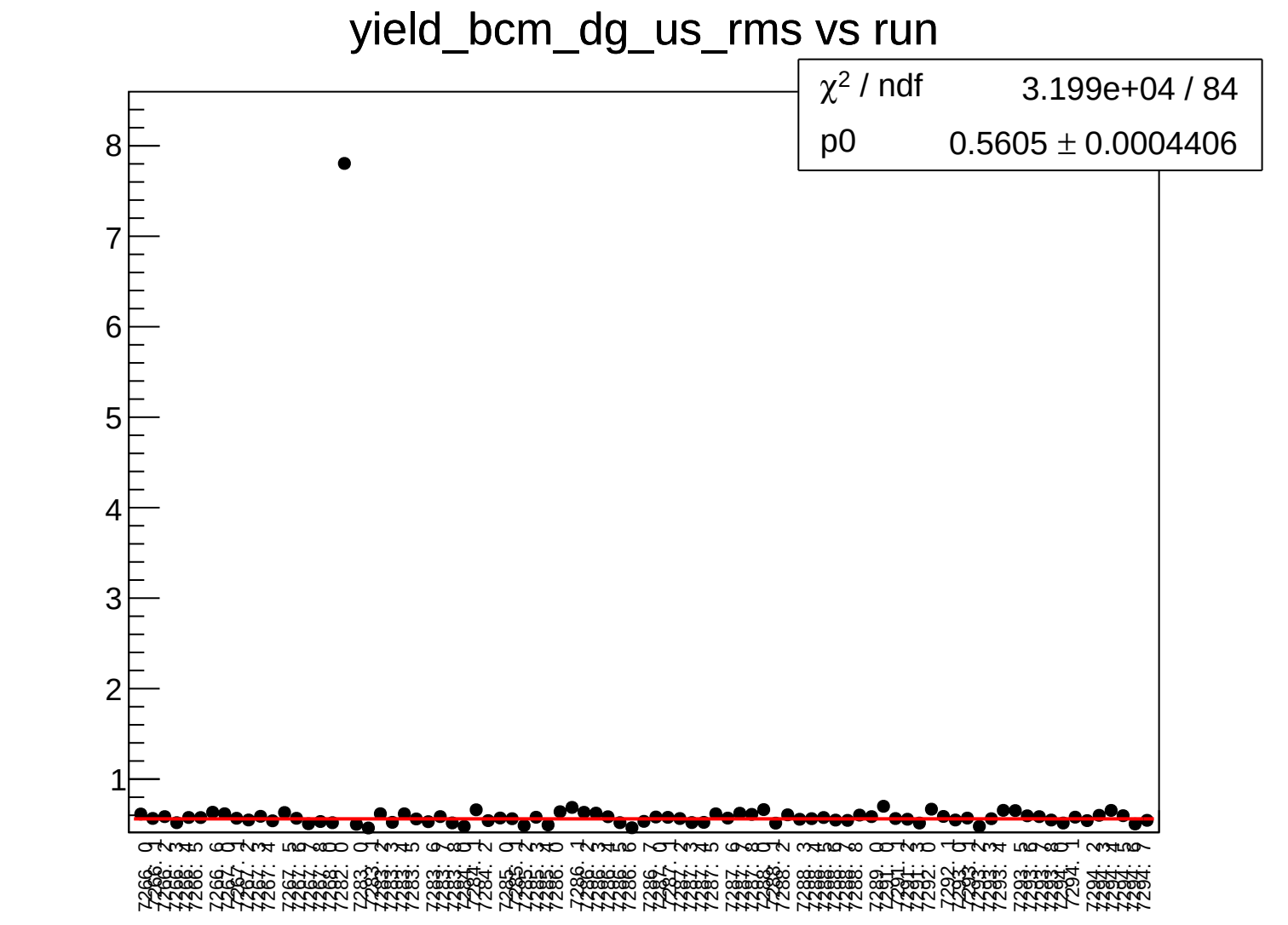

yield_bcm_an_us_mean vs run
χ² / ndf 6.689e+04 / 84
p0 148.2 ± 0.000626
149
148
147
146
145
144
pull
Entries 85
Mean −87.99
Std Dev 129.7
80
60
40
20
0
−20
−40
−60
pull1D
Entries 85
Mean 0.6887
Std Dev 4.562
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

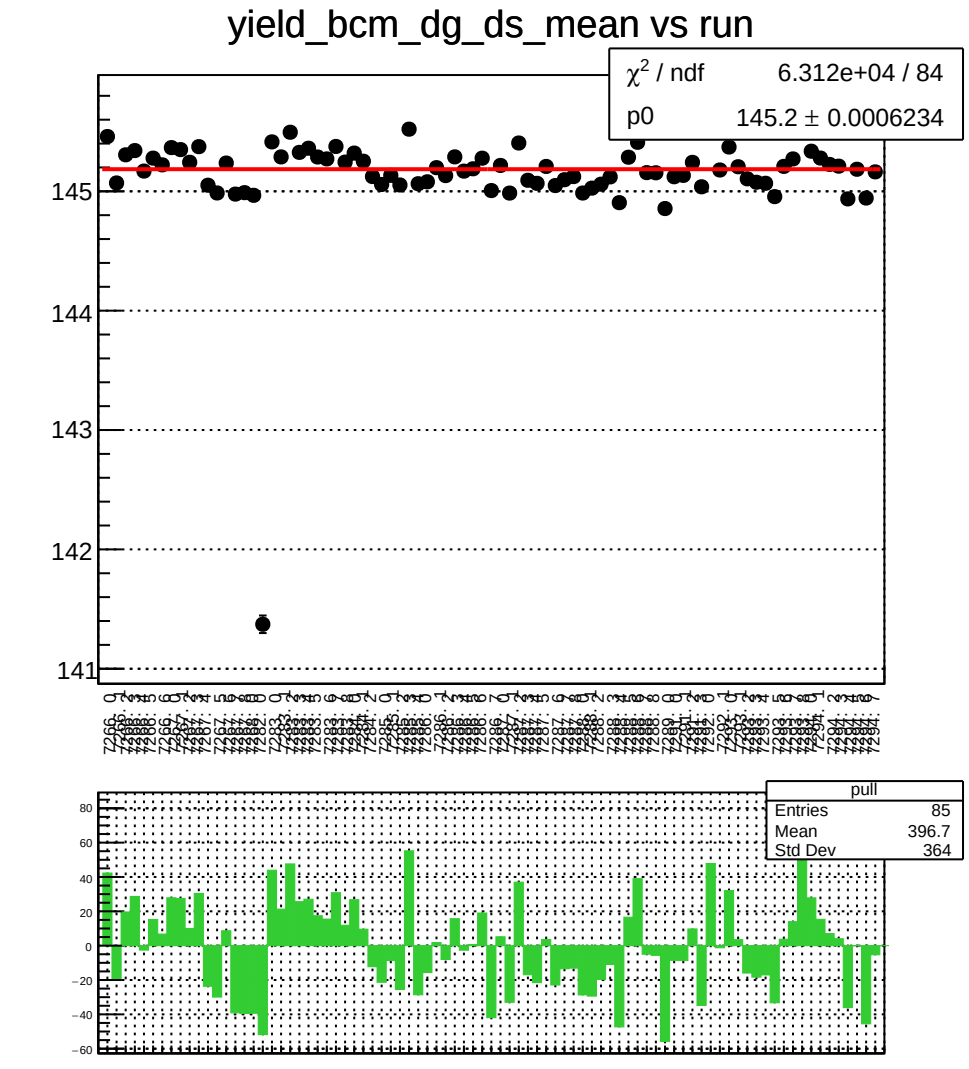

yield_bcm_an_us_rms vs run
χ^2 / ndf 3.216e+04 / 84
p0 0.5631 ± 0.0004427
8
7
6
5
4
3
2
1

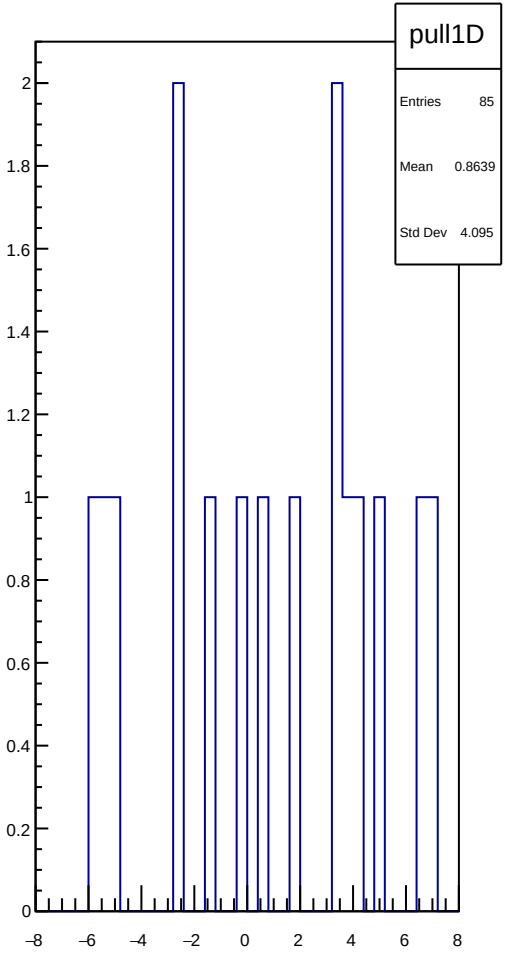

yield_bcm_dg_us_mean vs run
χ² / ndf 6.583e+04 / 84
p0 146.4 ± 0.000623
147
146
145
144
143

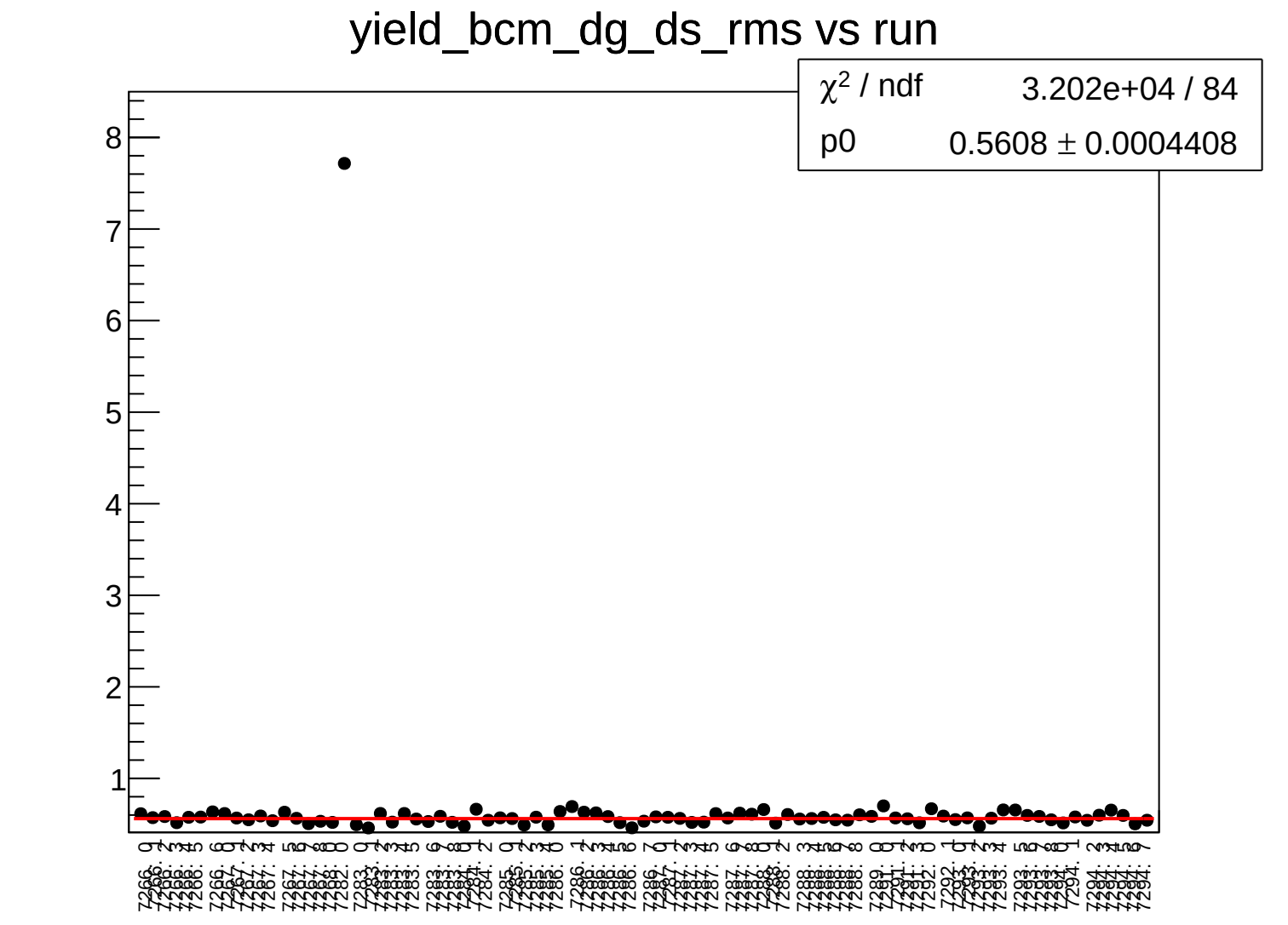

pull
Entries 85
Mean 506.1
Std Dev 477.5
80
60
40
20
0
−20
−40
−60

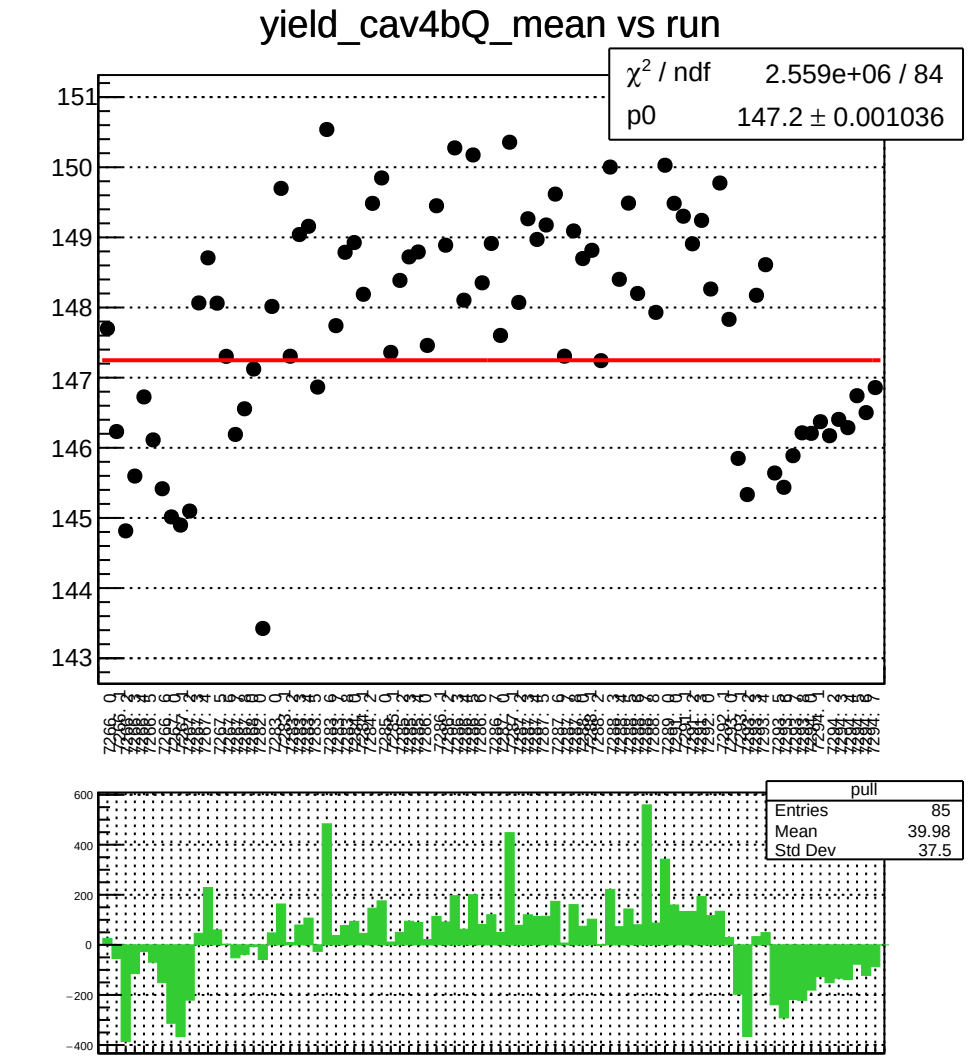

pull1D
Entries 85
Mean 0.2974
Std Dev 3.415
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

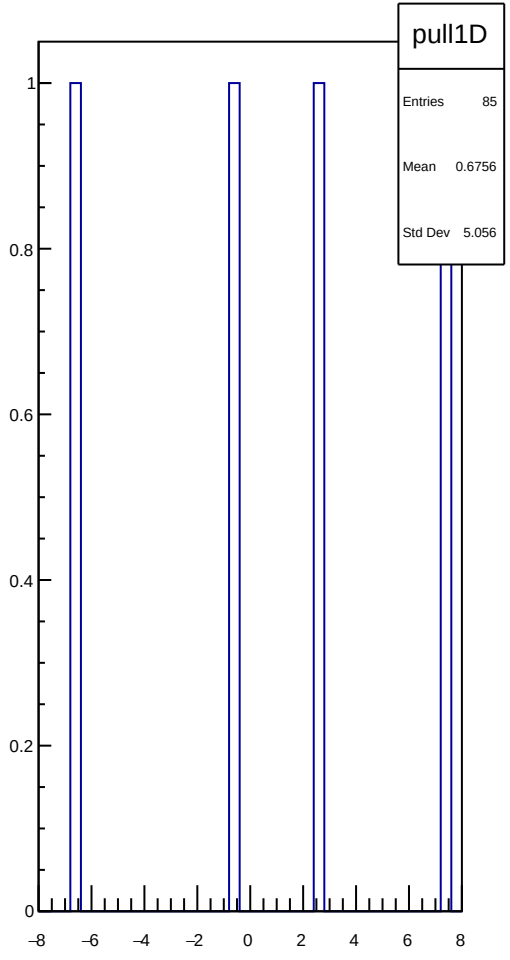

yield_bcm_dg_us_rms vs run
χ² / ndf 3.199e+04 / 84
p0 0.5605 ± 0.0004406
8
7
6
5
4
3
2
1

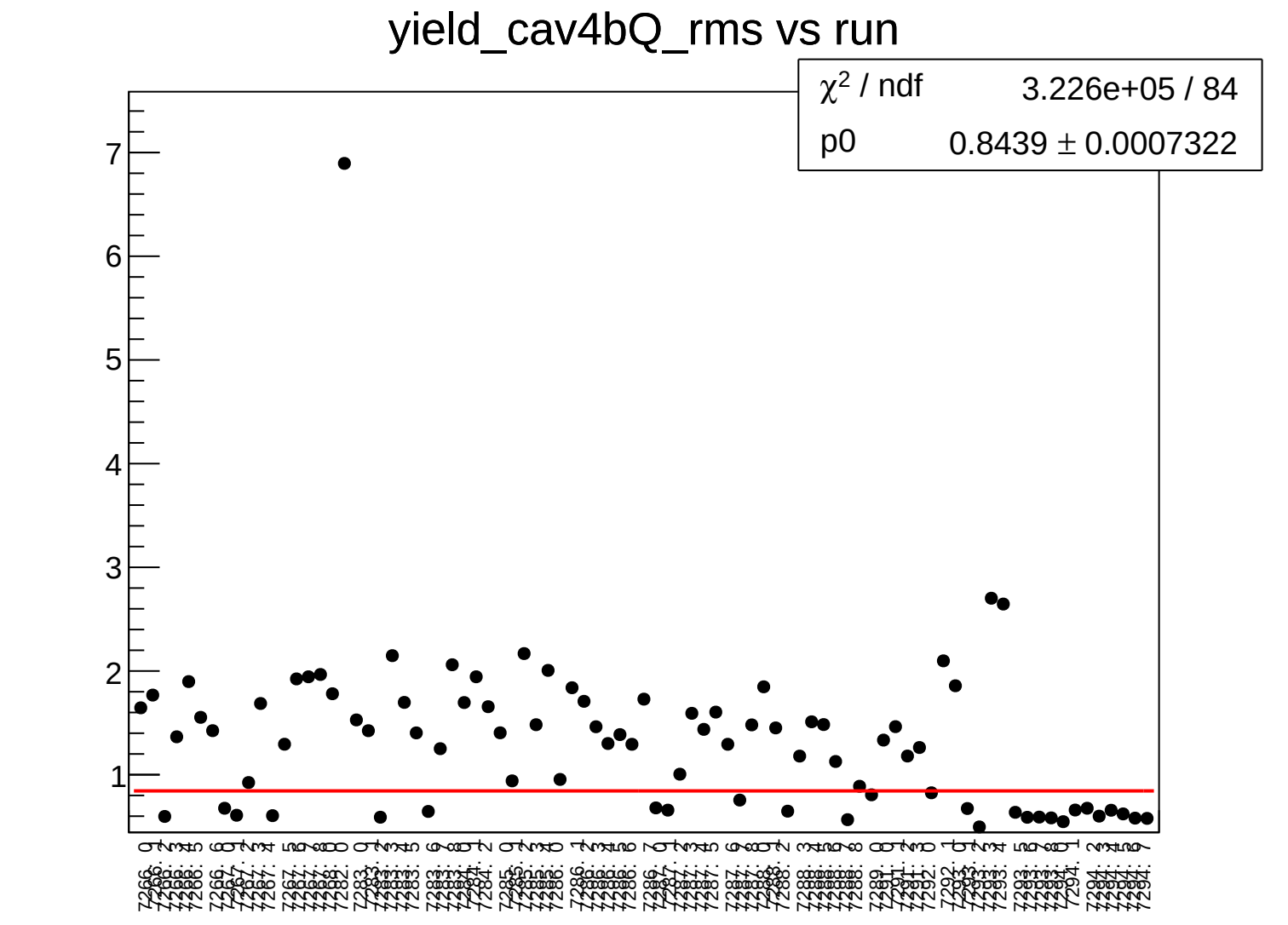

yield_bcm_dg_ds_mean vs run
χ² / ndf 6.312e+04 / 84
p0 145.2 ± 0.0006234
145
144
143
142
141
pull
Entries 85
Mean 396.7
Std Dev 364
80
60
40
20
0
−20
−40
−60

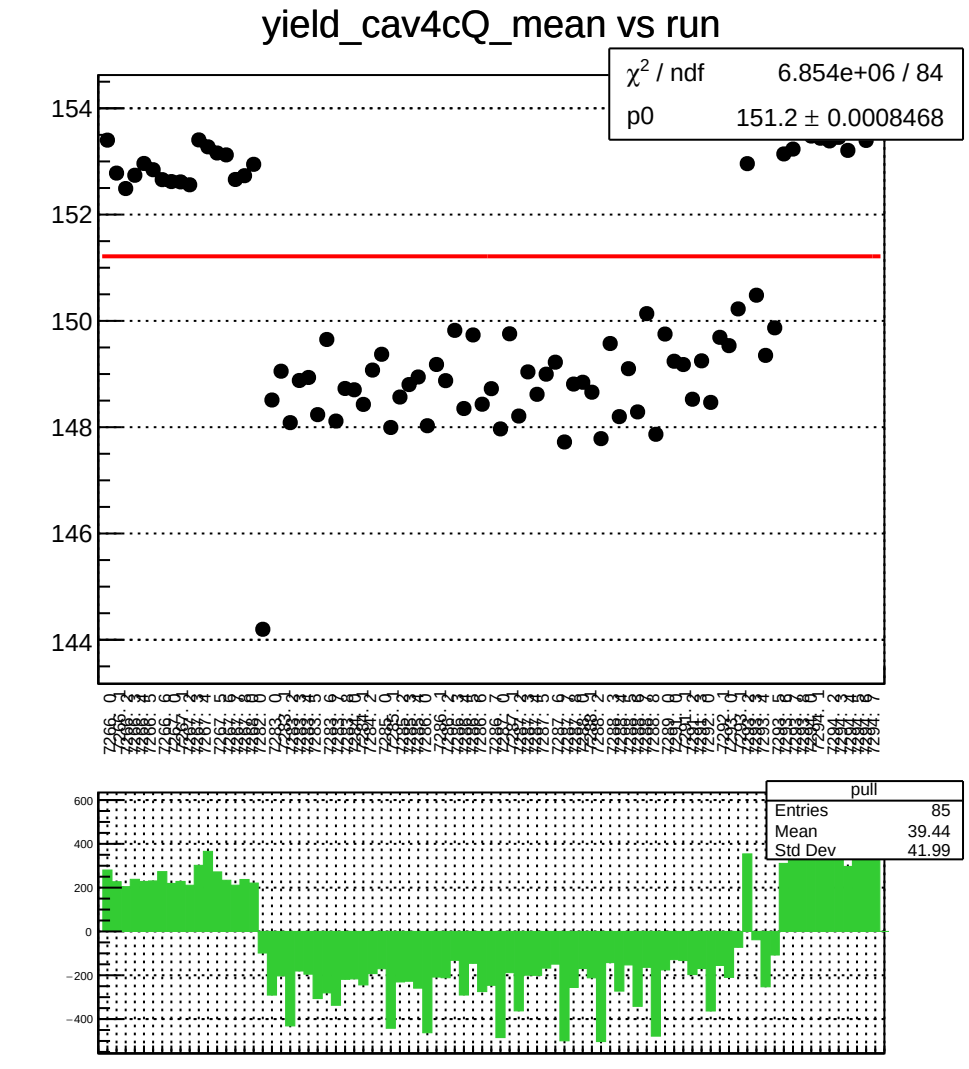

pull1D
Entries 85
Mean 0.8639
Std Dev 4.095
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

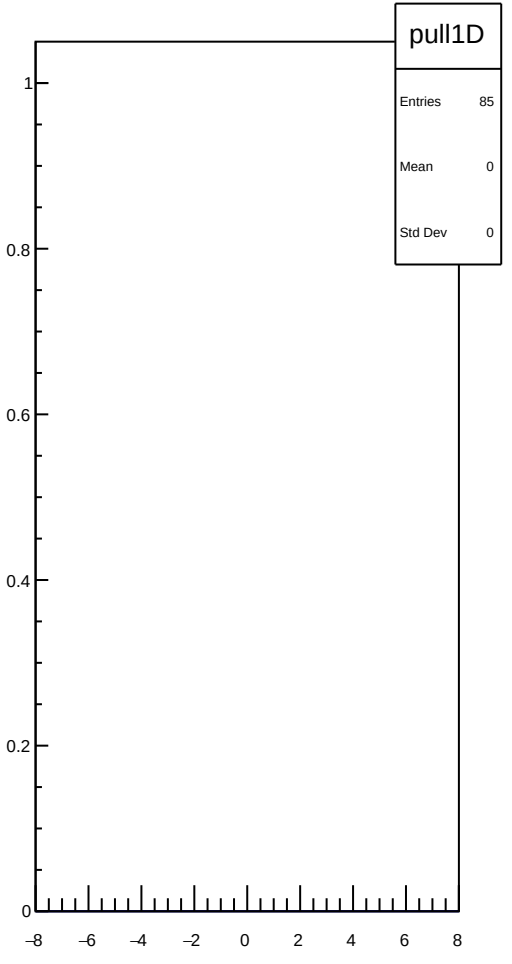

yield_bcm_dg_ds_rms vs run
χ² / ndf 3.202e+04 / 84
p0 0.5608 ± 0.0004408
8
7
6
5
4
3
2
1

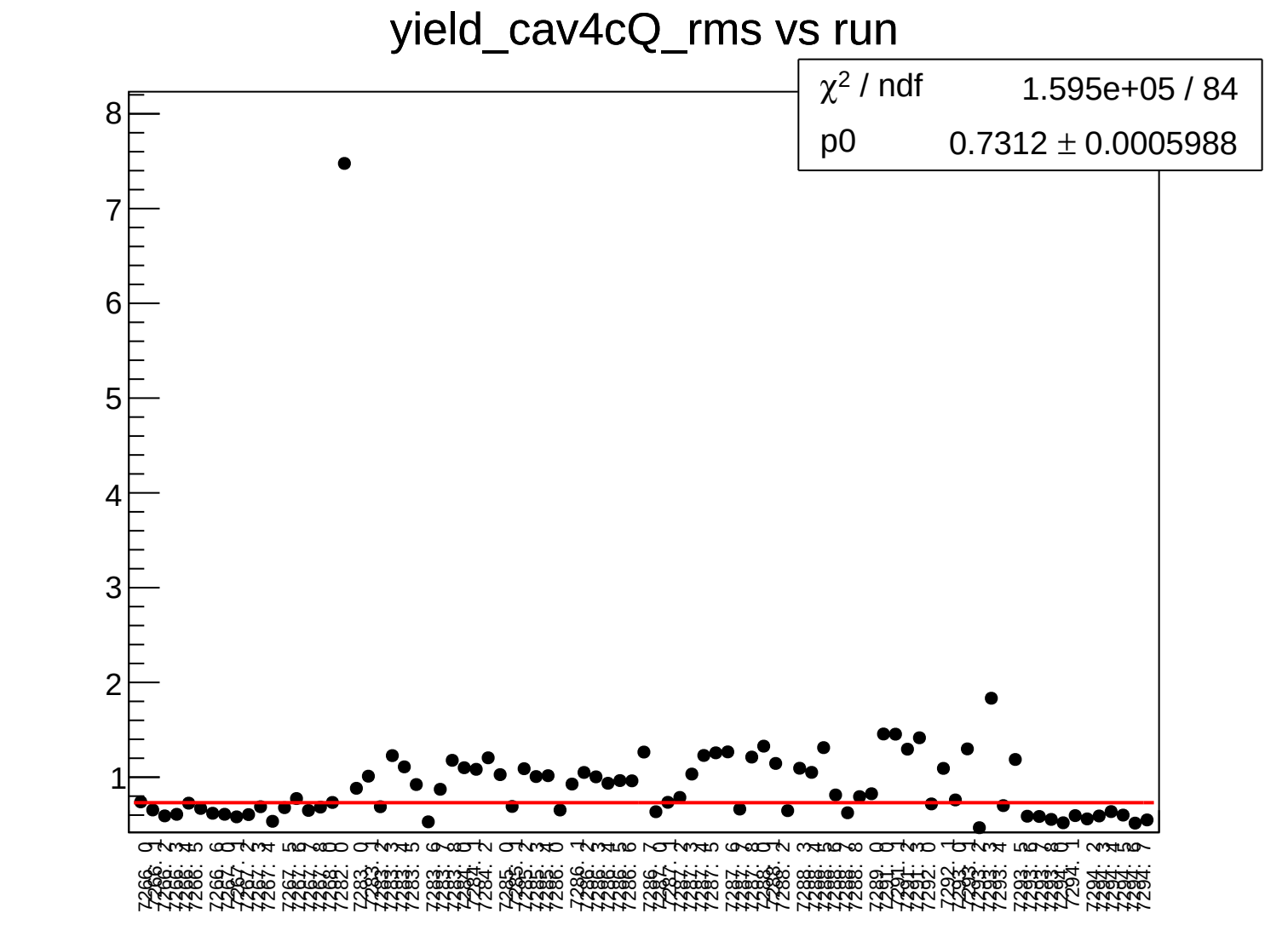

yield_cav4bQ_mean vs run
χ² / ndf 2.559e+06 / 84
p0 147.2 ± 0.001036
151
150
149
148
147
146
145
144
143
pull
Entries 85
Mean 39.98
Std Dev 37.5
600
400
200
0
−200
−400

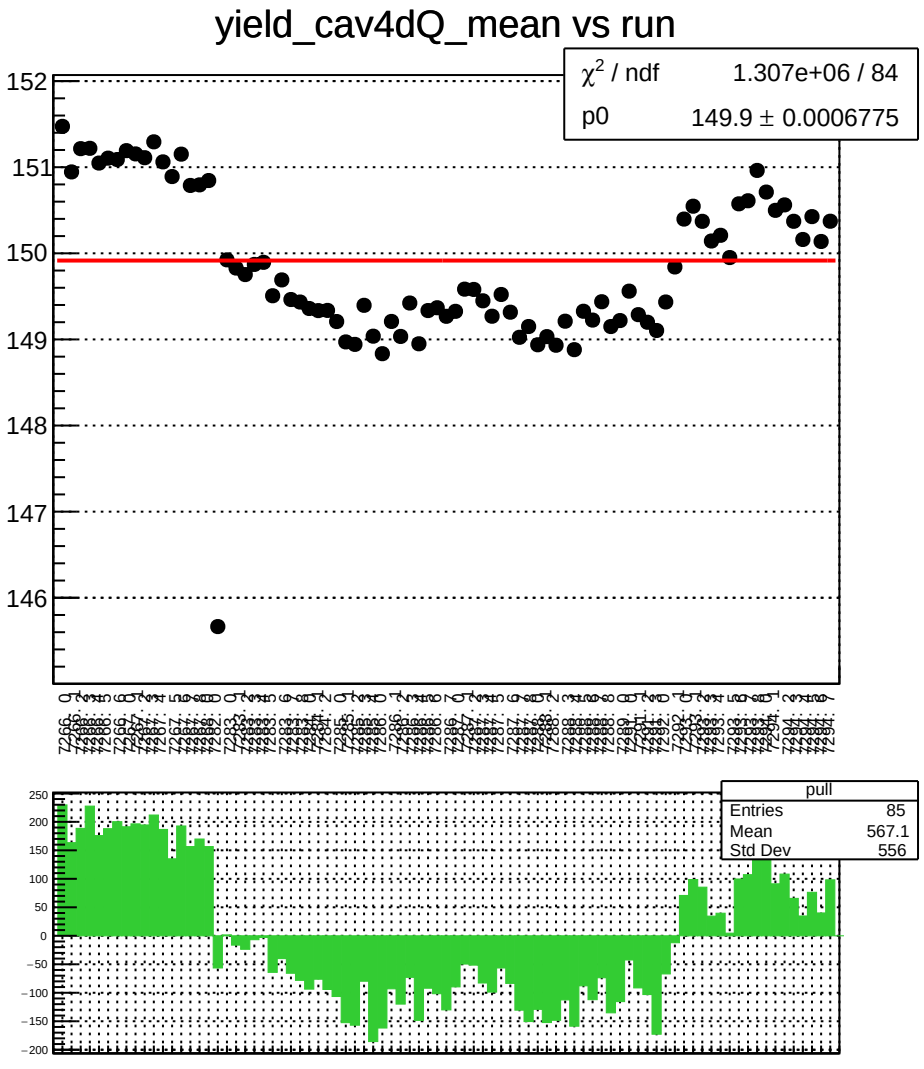

pull1D
Entries 85
Mean 0.6756
Std Dev 5.056
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

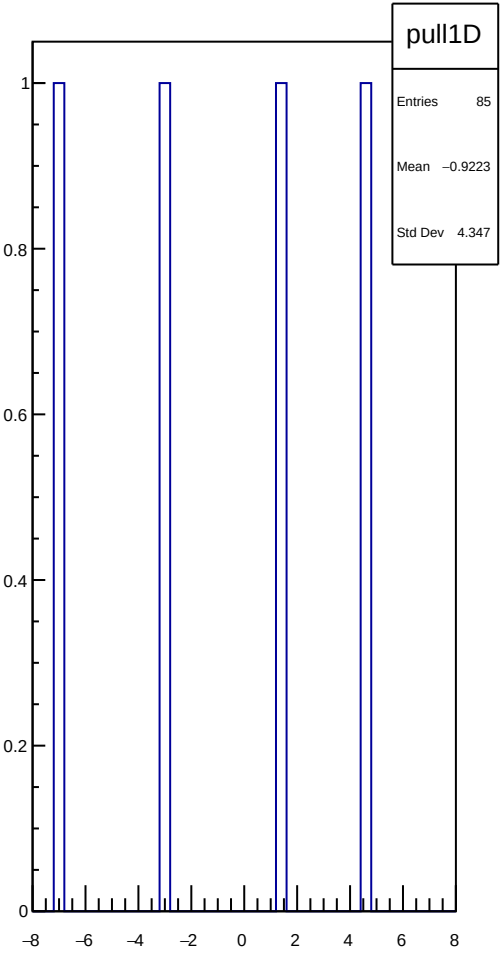

yield_cav4bQ_rms vs run
χ² / ndf 3.226e+05 / 84
p0 0.8439 ± 0.0007322
7
6
5
4
3
2
1

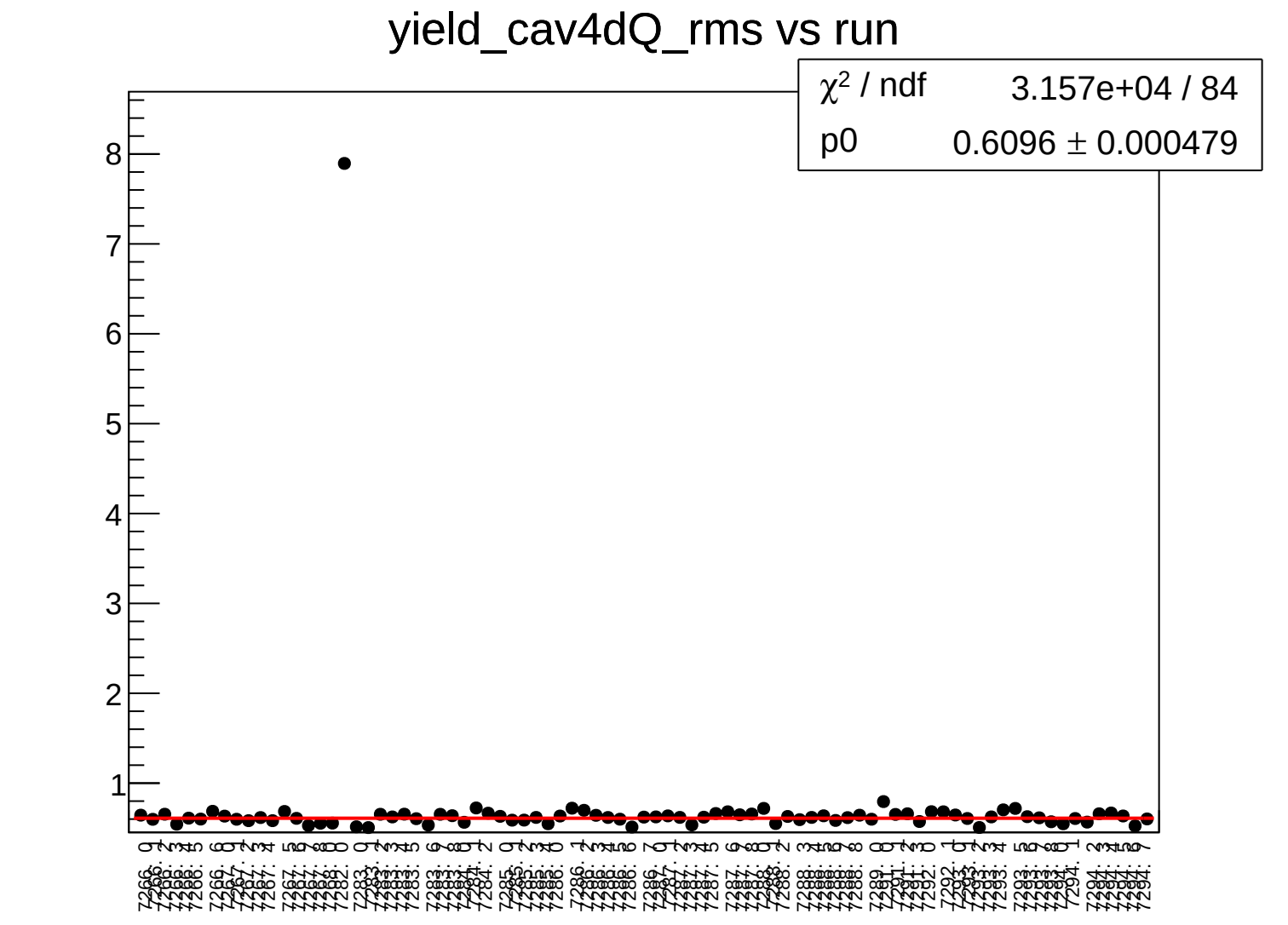

yield_cav4cQ_mean vs run
χ² / ndf 6.854e+06 / 84
p0 151.2 ± 0.0008468
154
152
150
148
146
144
pull
Entries 85
Mean 39.44
Std Dev 41.99
600
400
200
0
−200
−400

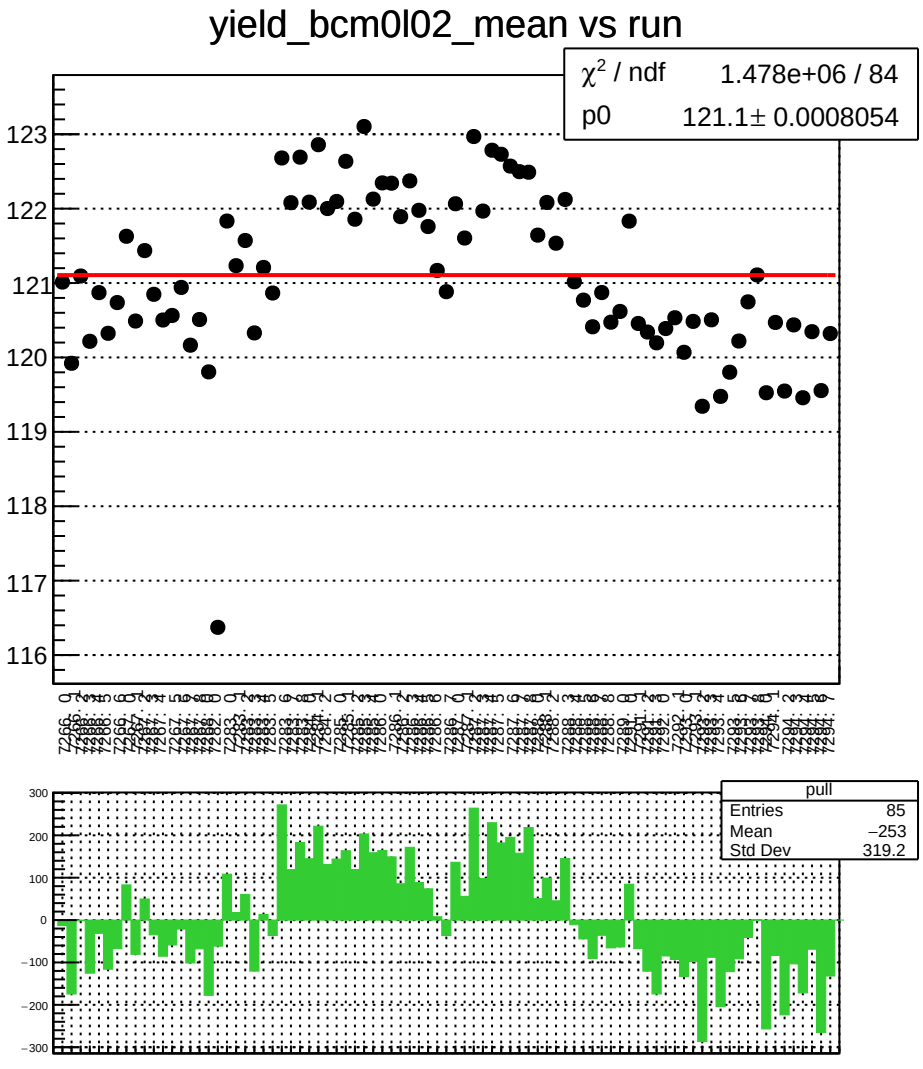

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

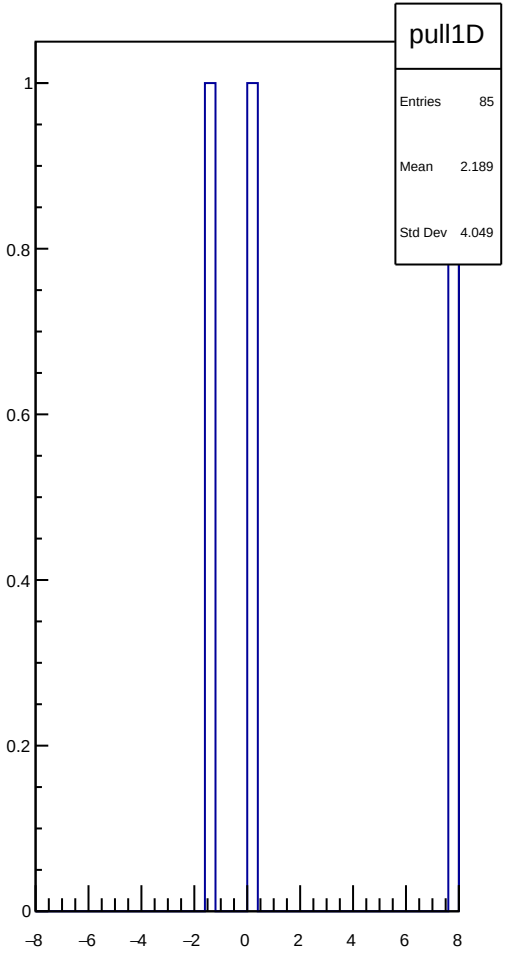

yield_cav4cQ_rms vs run
χ² / ndf 1.595e+05 / 84
p0 0.7312 ± 0.0005988
8
7
6
5
4
3
2
1

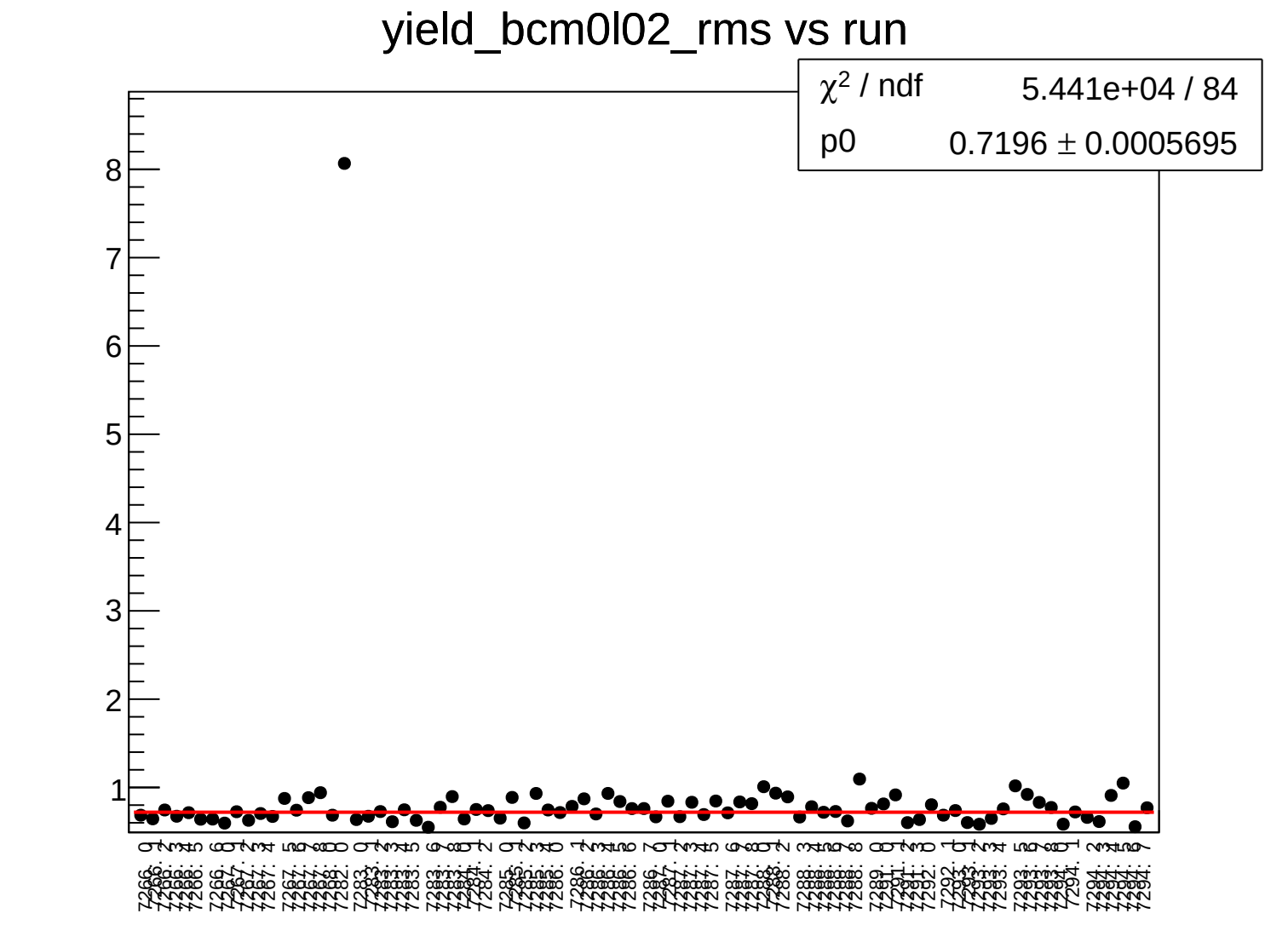

yield_cav4dQ_mean vs run
χ² / ndf 1.307e+06 / 84
p0 149.9 ± 0.0006775
pull
Entries 85
Mean 567.1
Std Dev 556

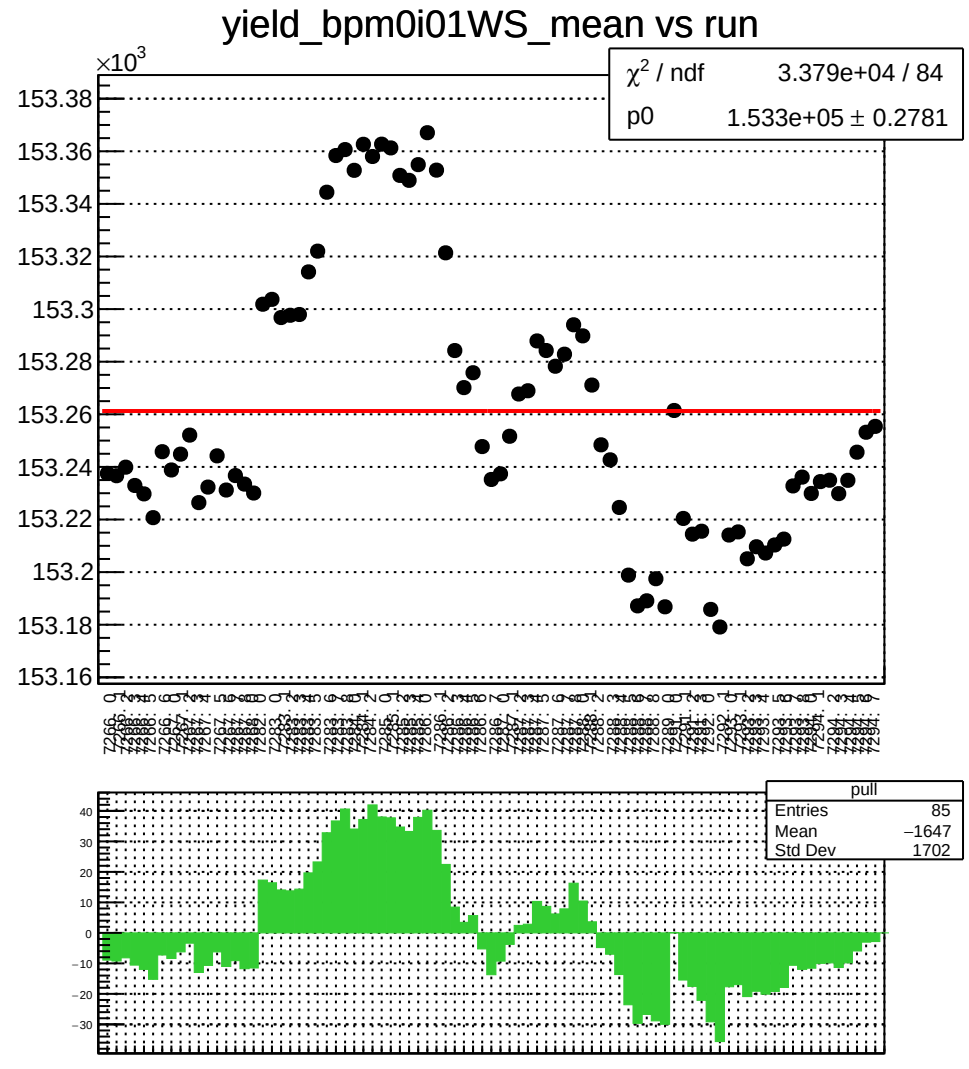

pull1D
Entries 85
Mean −0.9223
Std Dev 4.347

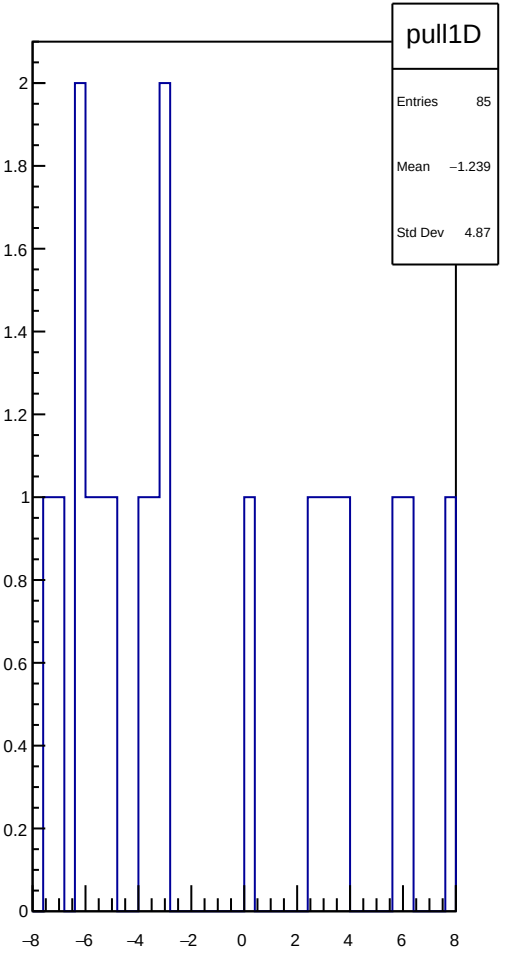

yield_cav4dQ_rms vs run
χ² / ndf 3.157e+04 / 84
p0 0.6096 ± 0.000479
8
7
6
5
4
3
2
1

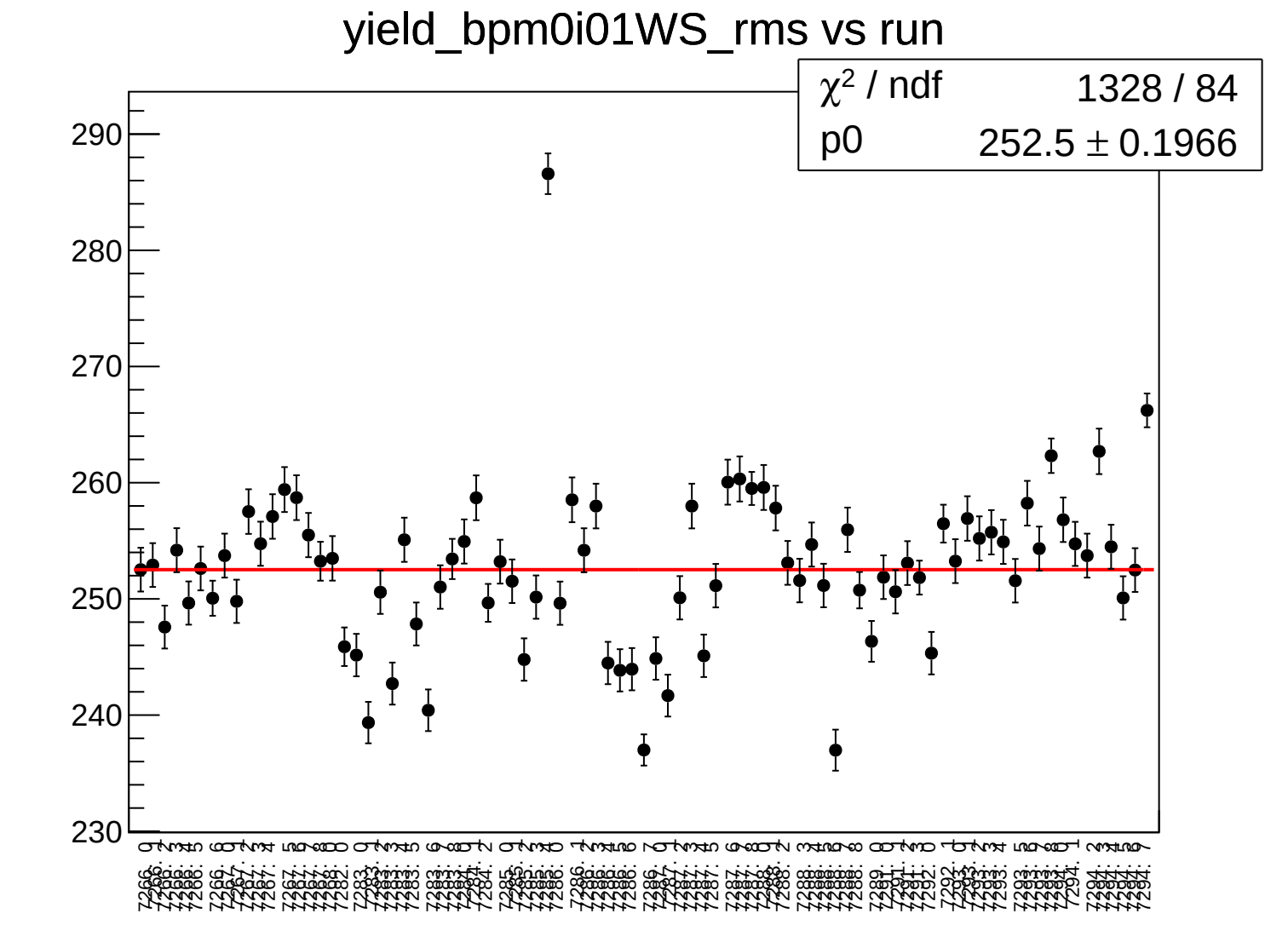

yield_bcm0l02_mean vs run
χ² / ndf 1.478e+06 / 84
p0 121.1± 0.0008054
123
122
121
120
119
118
117
116
pull
Entries 85
Mean −253
Std Dev 319.2
300
200
100
0
−100
−200
−300

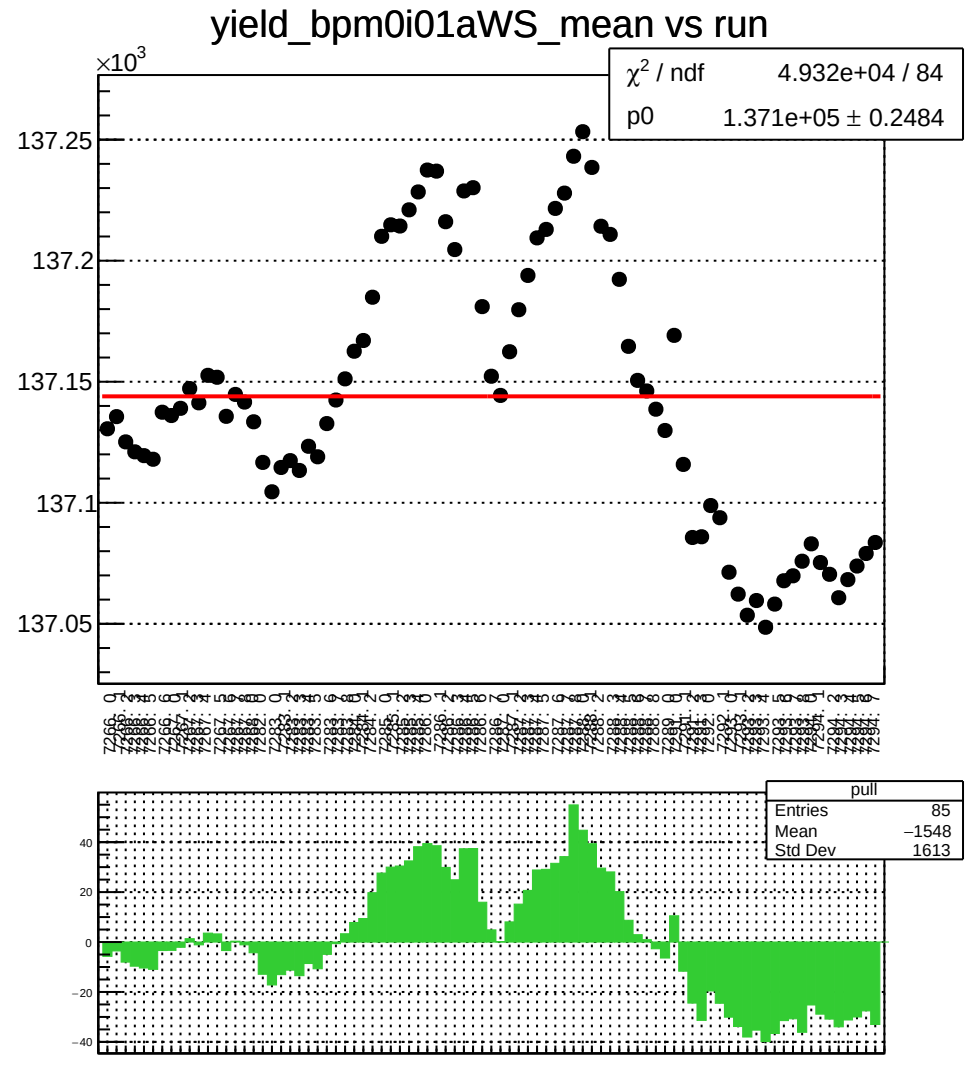

pull1D
Entries 85
Mean 2.189
Std Dev 4.049
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

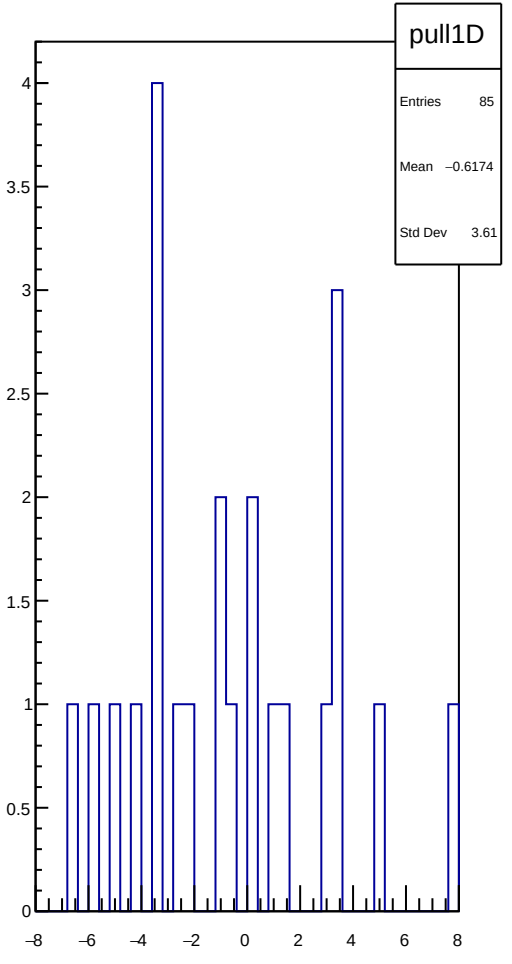

yield_bcm0l02_rms vs run
χ² / ndf 5.441e+04 / 84
p0 0.7196 ± 0.0005695
8
7
6
5
4
3
2
1

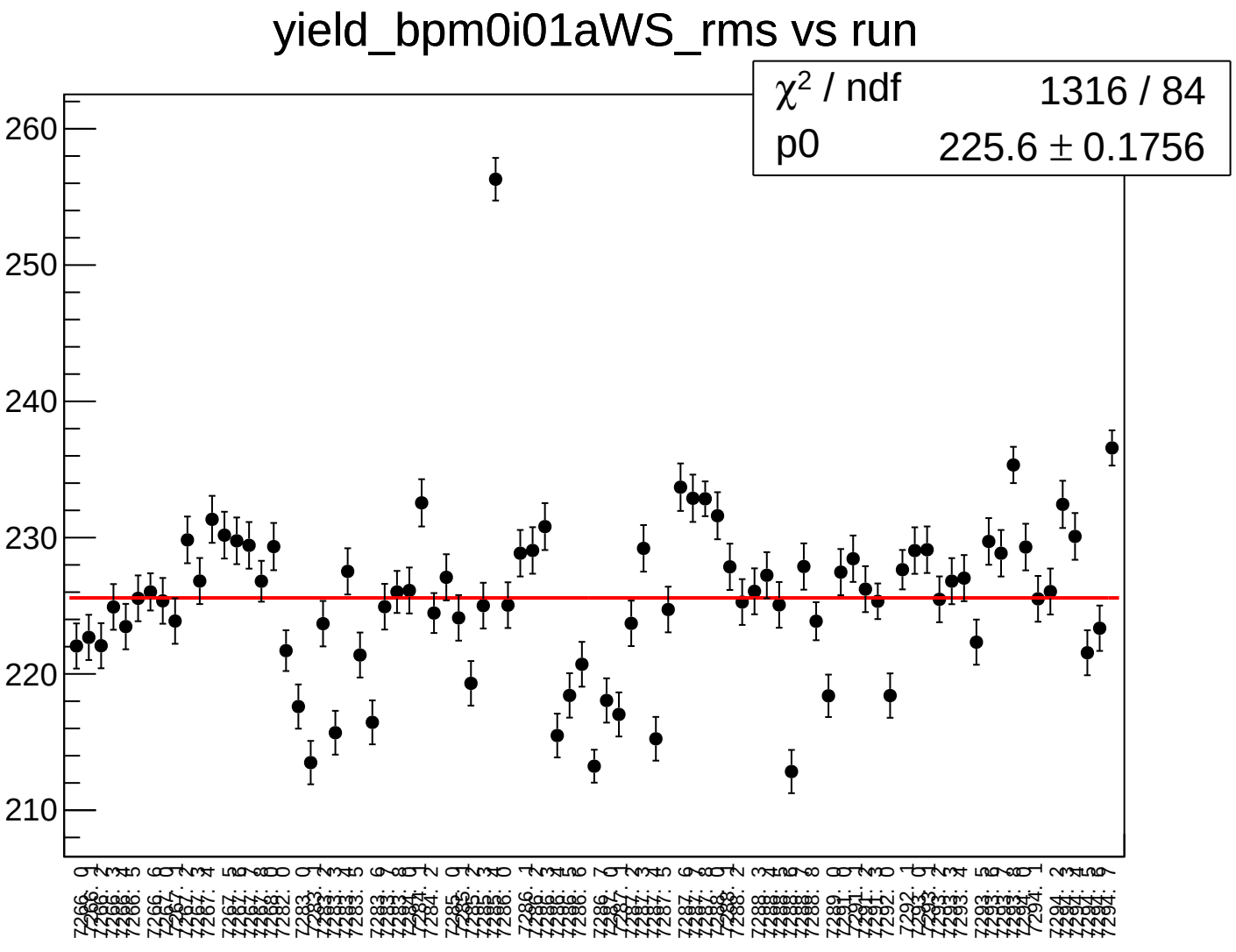

yield_bpm0i01WS_mean vs run
×10^3
χ^2 / ndf 3.379e+04 / 84
p0 1.533e+05 ± 0.2781
153.38
153.36
153.34
153.32
153.3
153.28
153.26
153.24
153.22
153.2
153.18
153.16
pull
Entries 85
Mean −1647
Std Dev 1702
40
30
20
10
0
−10
−20
−30

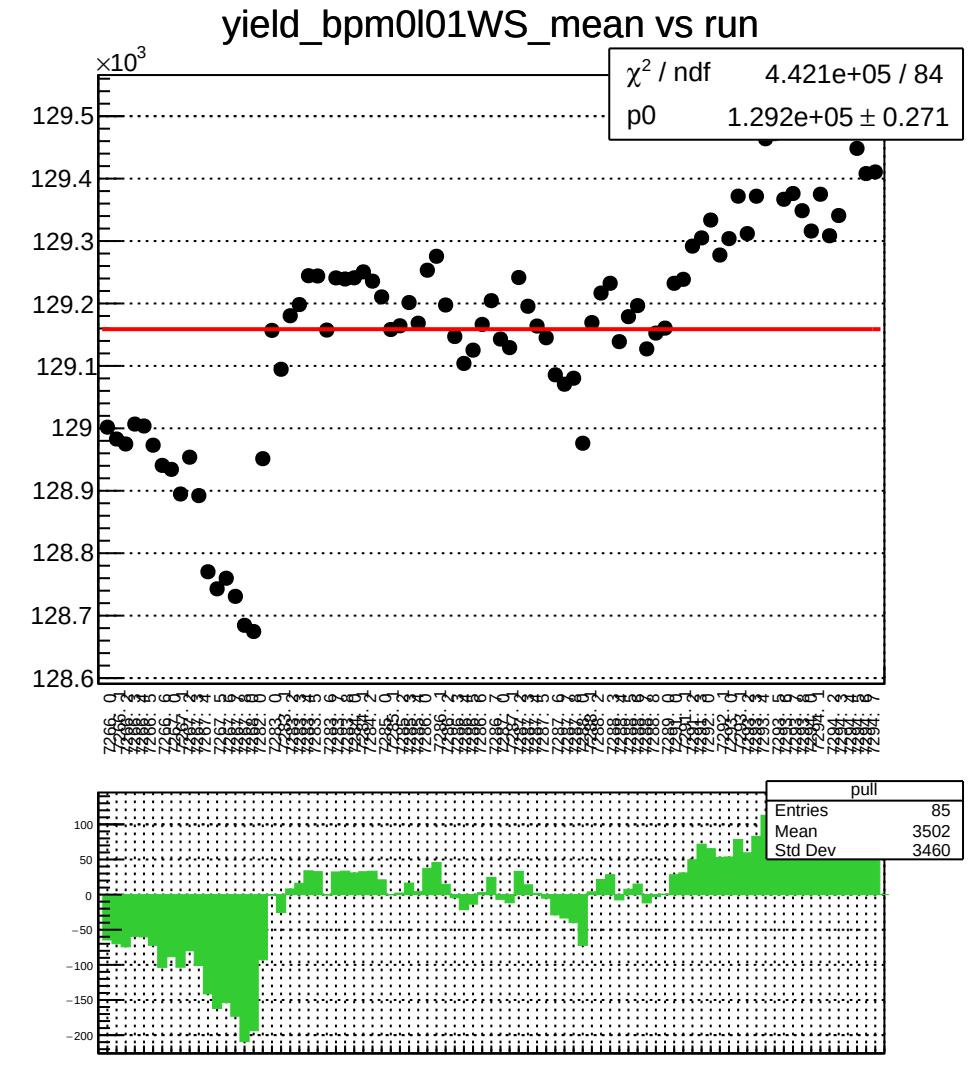

pull1D
Entries 85
Mean −1.239
Std Dev 4.87
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

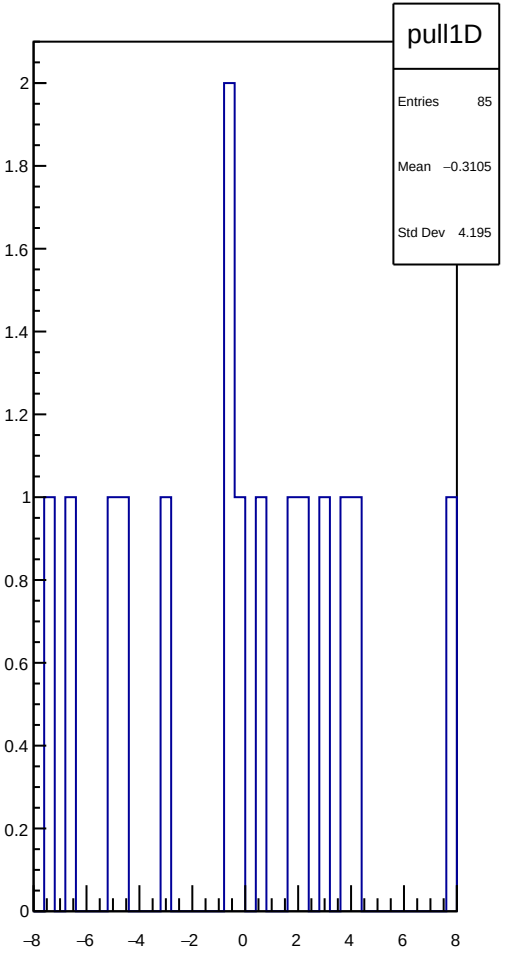

yield_bpm0i01WS_rms vs run
χ² / ndf 1328 / 84
p0 252.5 ± 0.1966
290
280
270
260
250
240
230

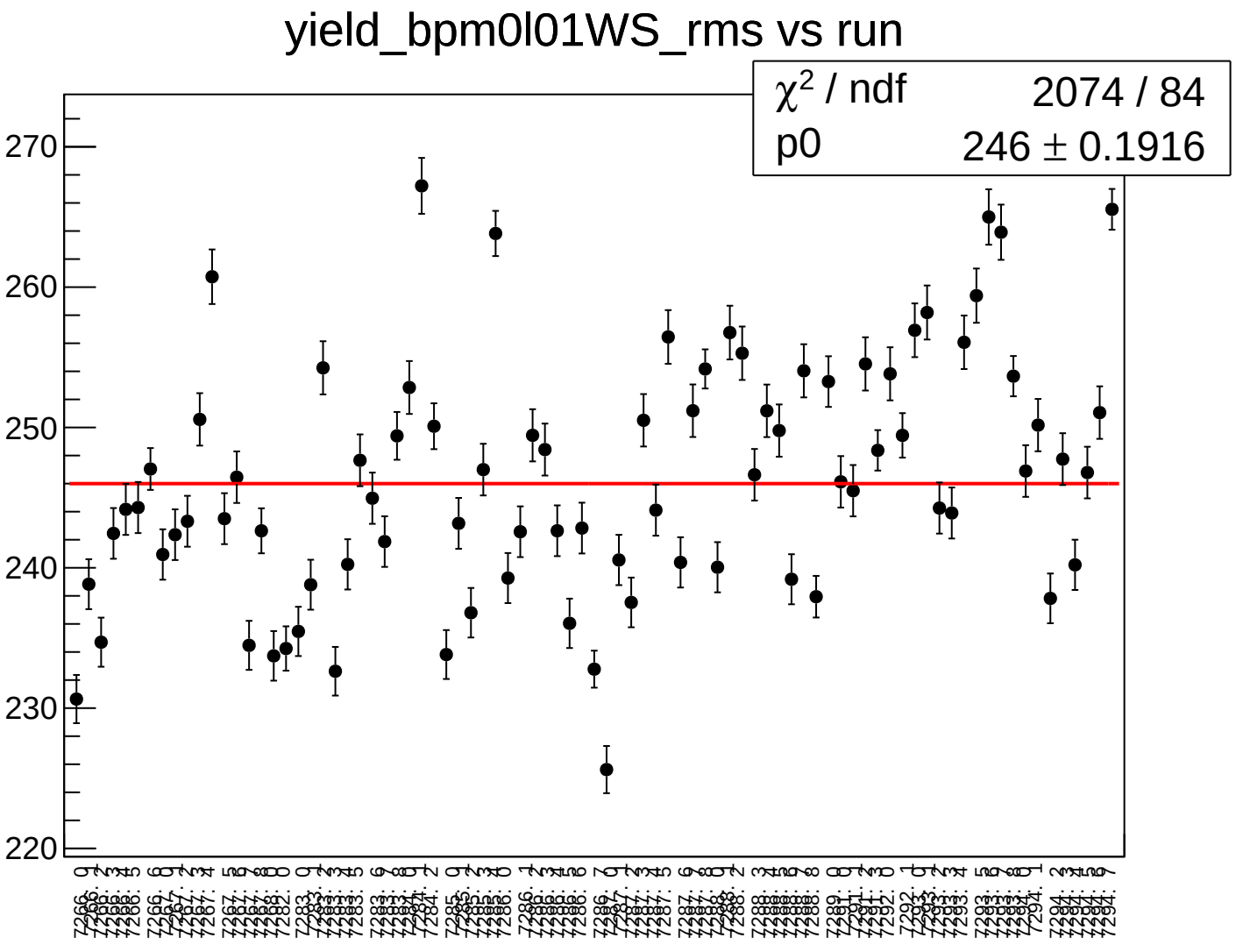

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 4.932e+04 / 84
p0 1.371e+05 ± 0.2484
137.25
137.2
137.15
137.1
137.05
pull
Entries 85
Mean −1548
Std Dev 1613
40
20
0
−20
−40

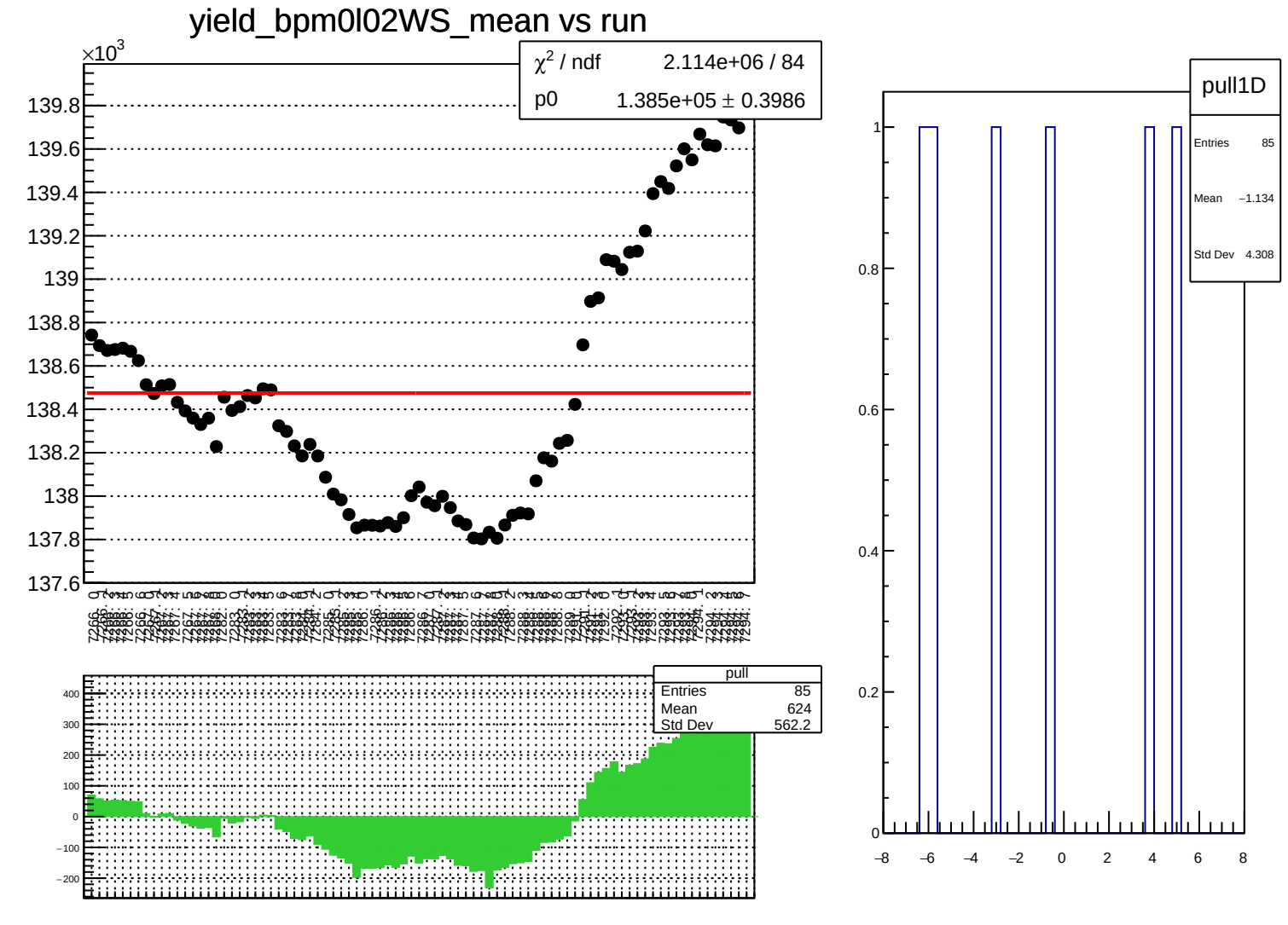

pull1D
Entries 85
Mean −0.6174
Std Dev 3.61
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

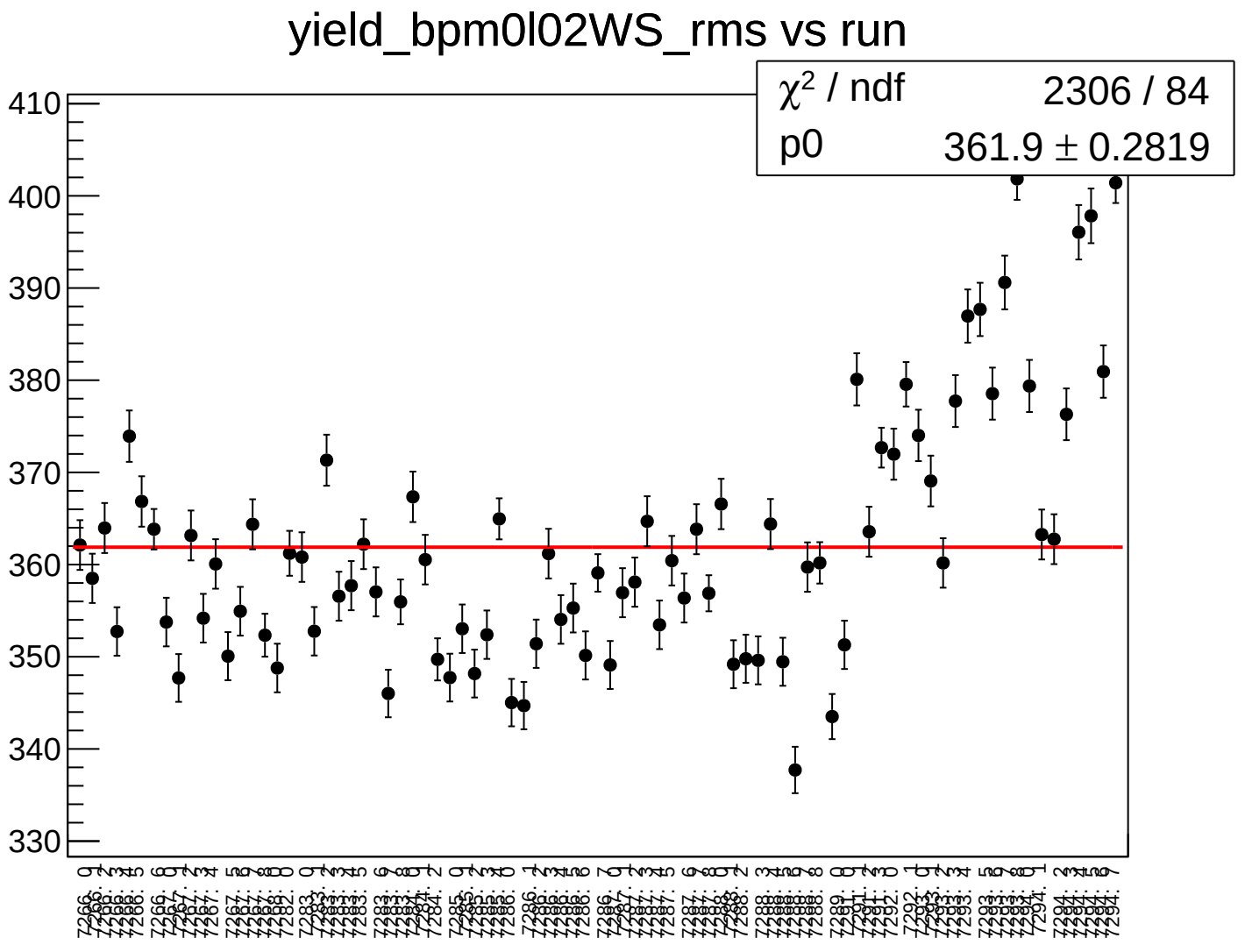

yield_bpm0i01aWS_rms vs run
χ² / ndf 1316 / 84
p0 225.6 ± 0.1756
260
250
240
230
220
210

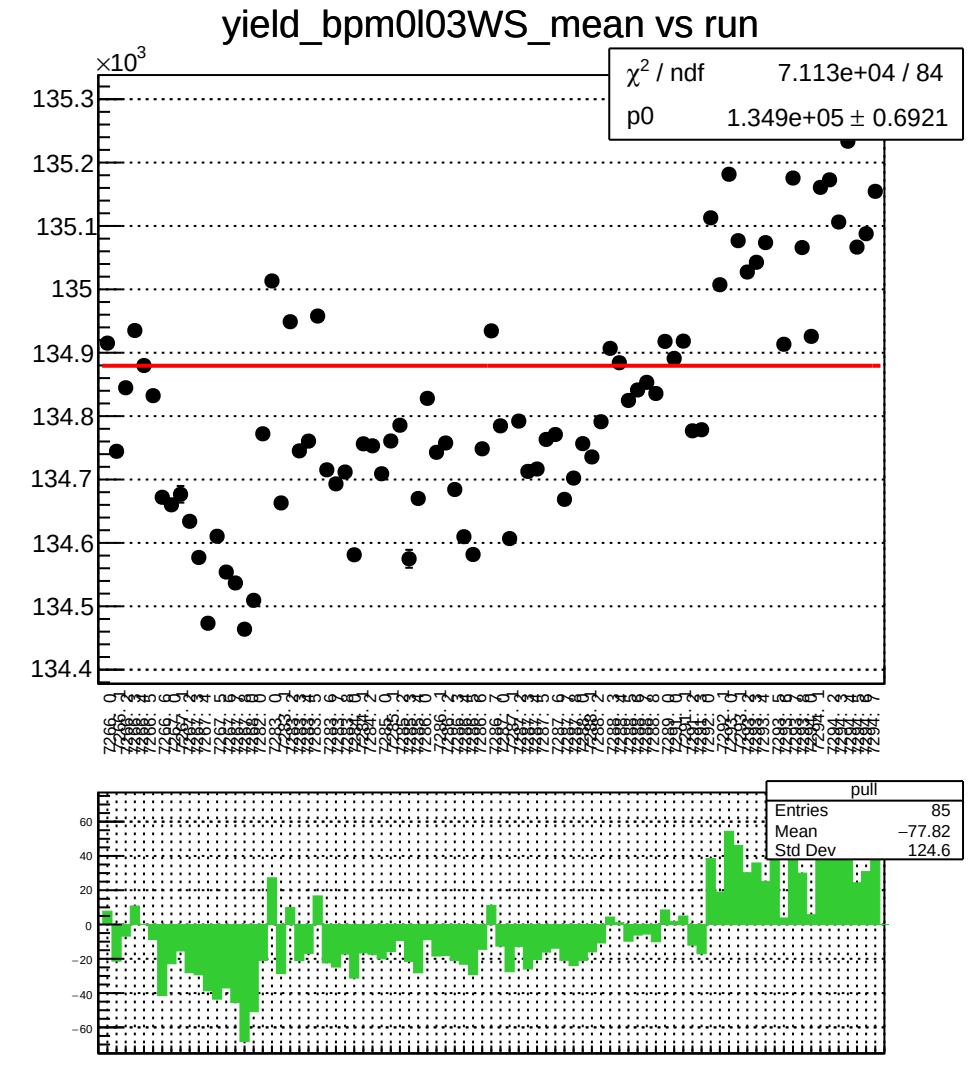

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 4.421e+05 / 84
p0 1.292e+05 ± 0.271
129.5
129.4
129.3
129.2
129.1
129
128.9
128.8
128.7
128.6
pull
Entries 85
Mean 3502
Std Dev 3460
100
50
0
−50
−100
−150
−200

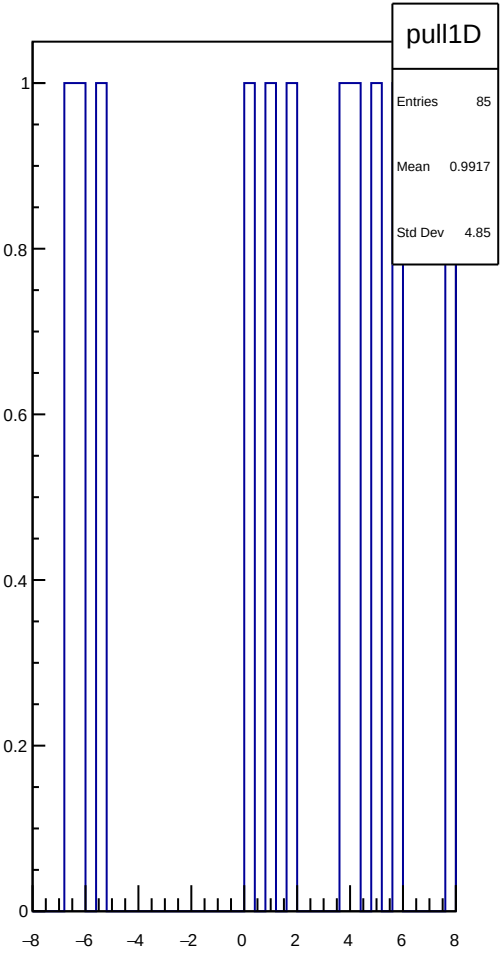

pull1D
Entries 85
Mean −0.3105
Std Dev 4.195
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

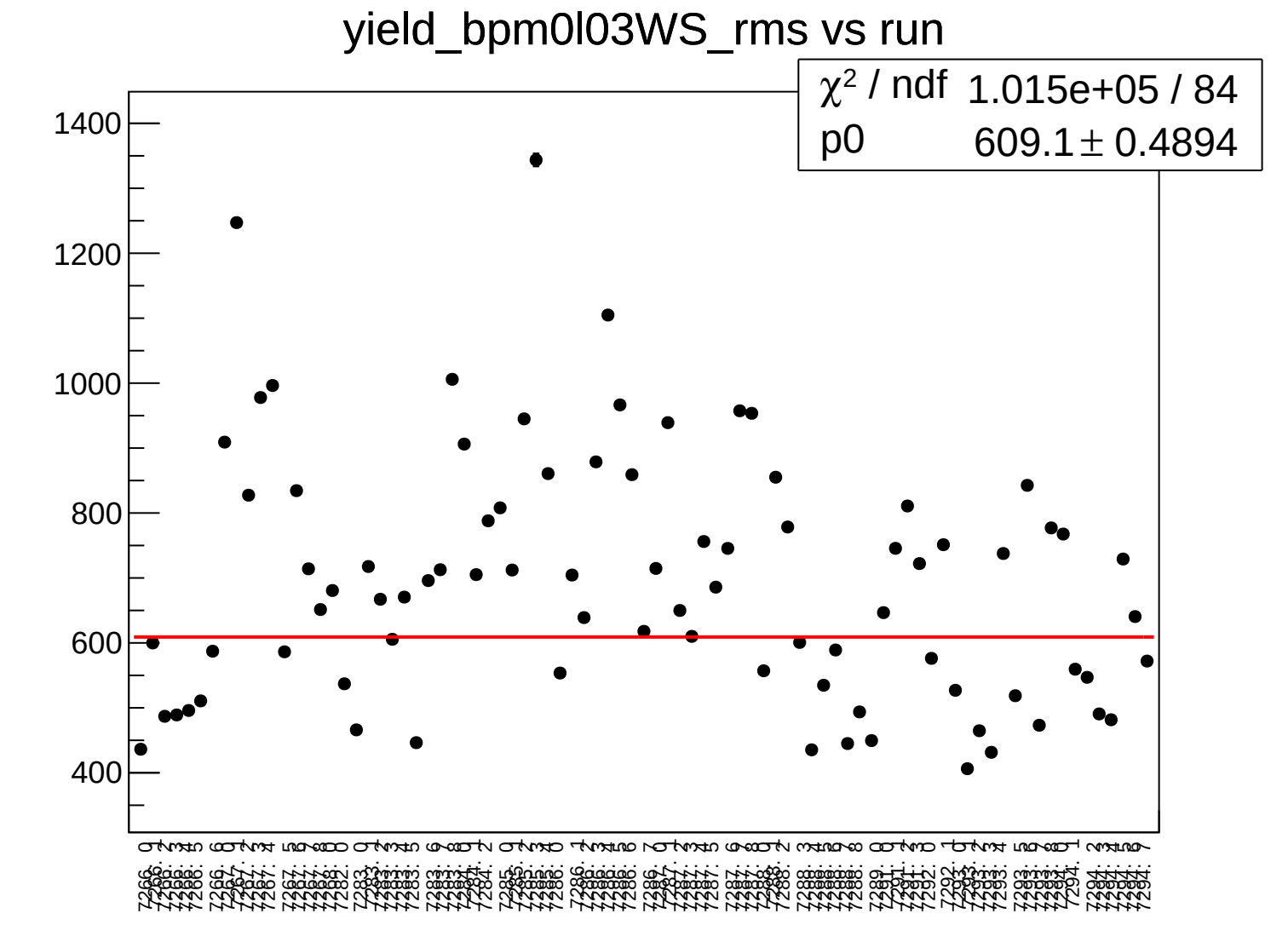

yield_bpm0l01WS_rms vs run
χ² / ndf 2074 / 84
p0 246 ± 0.1916
270
260
250
240
230
220

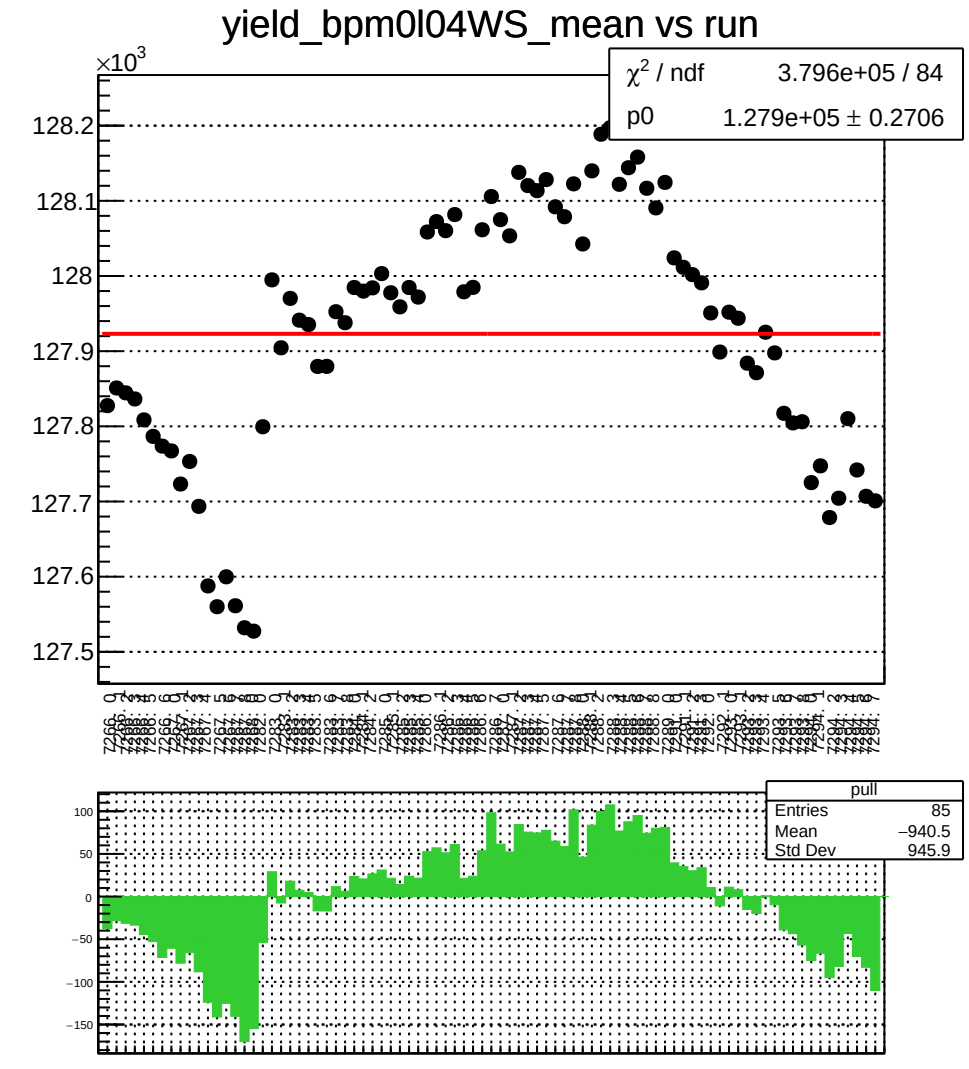

yield_bpm0l02WS_mean vs run
×10^3
χ^2 / ndf 2.114e+06 / 84
p0 1.385e+05 ± 0.3986
139.8
139.6
139.4
139.2
139
138.8
138.6
138.4
138.2
138
137.8
137.6
pull
Entries 85
Mean 624
Std Dev 562.2
400
300
200
100
0
−100
−200
pull1D
Entries 85
Mean −1.134
Std Dev 4.308
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

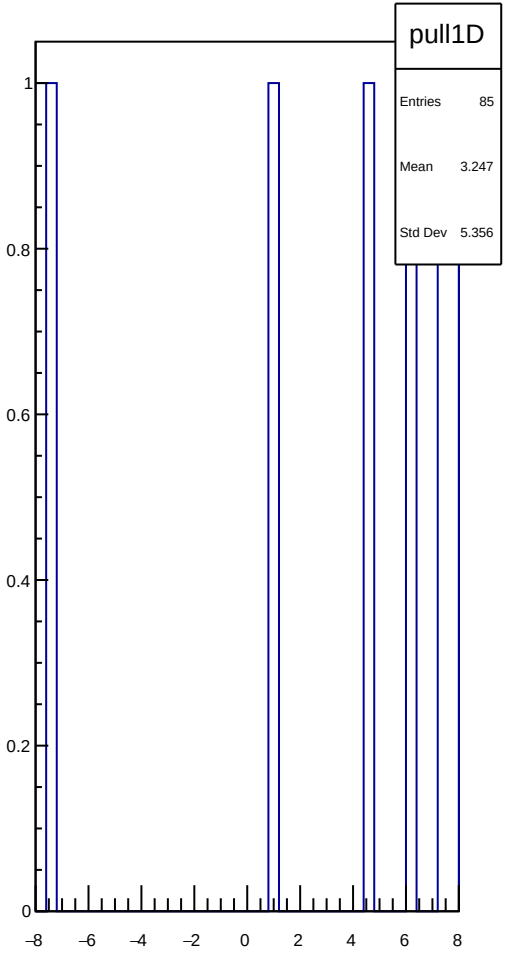

yield_bpm0l02WS_rms vs run
χ² / ndf 2306 / 84
p0 361.9 ± 0.2819
410
400
390
380
370
360
350
340
330

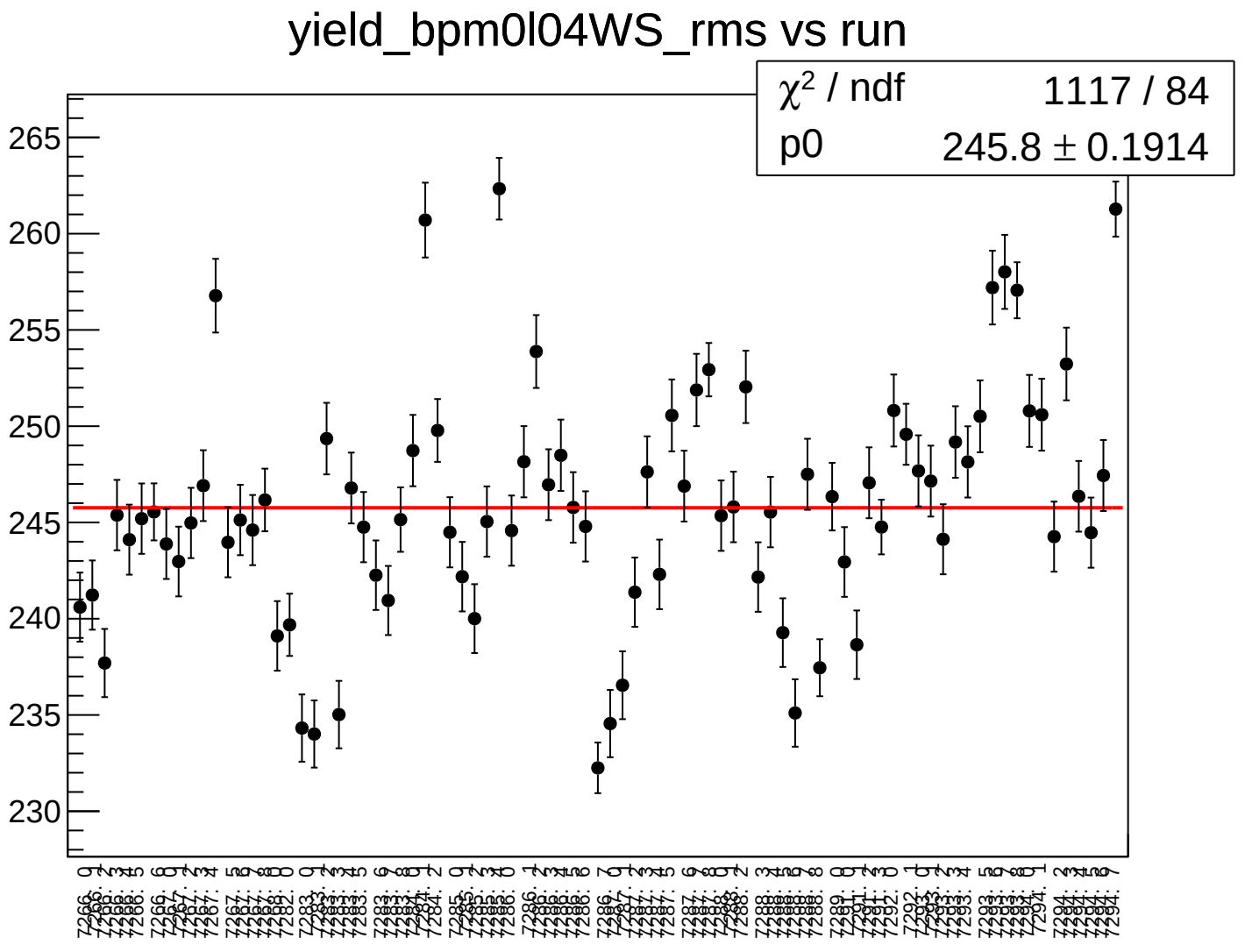

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 7.113e+04 / 84
p0 1.349e+05 ± 0.6921
135.3
135.2
135.1
135
134.9
134.8
134.7
134.6
134.5
134.4
pull
Entries 85
Mean −77.82
Std Dev 124.6
60
40
20
0
−20
−40
−60

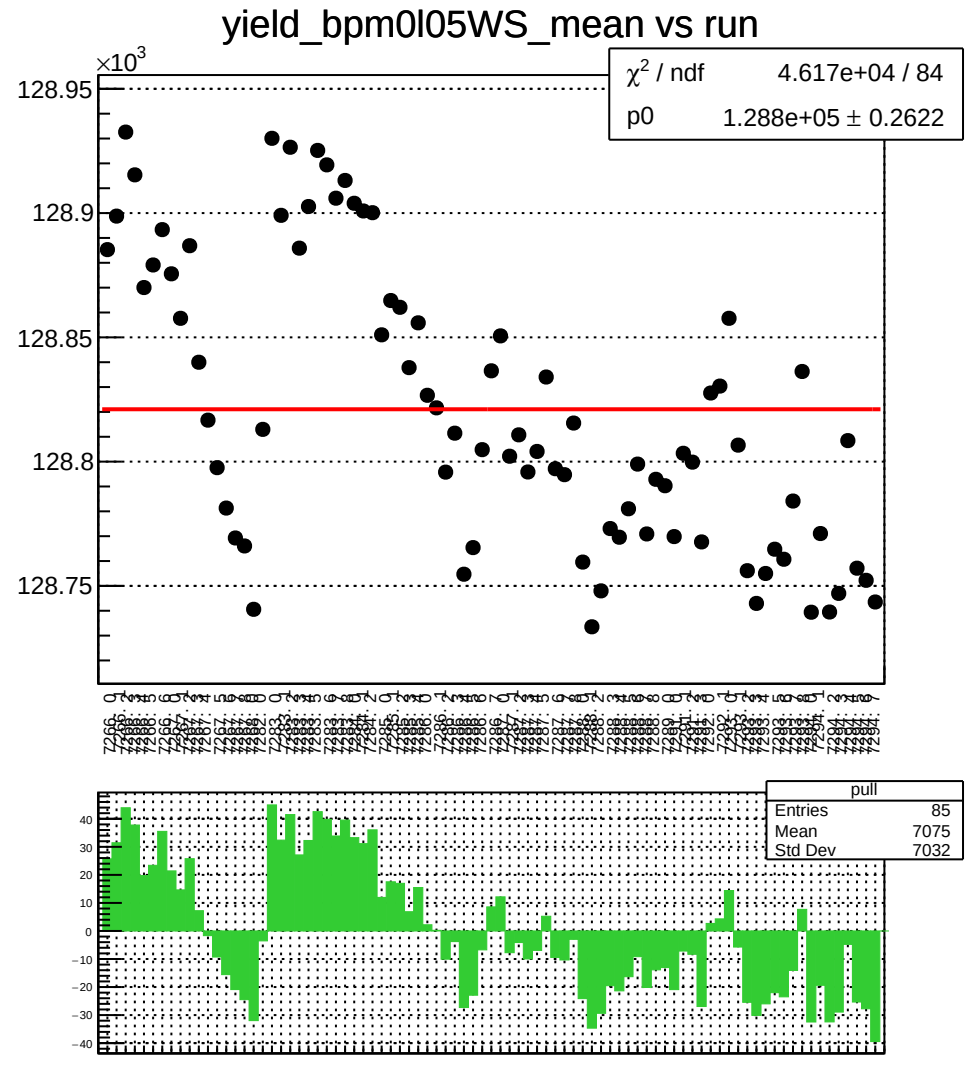

pull1D
Entries 85
Mean 0.9917
Std Dev 4.85
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

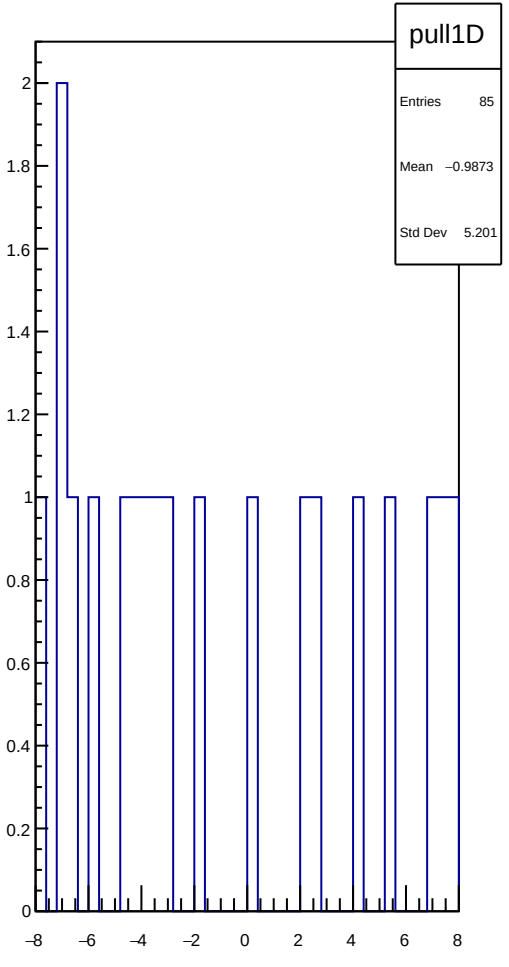

yield_bpm0l03WS_rms vs run
χ² / ndf 1.015e+05 / 84
p0 609.1 ± 0.4894
1400
1200
1000
800
600
400

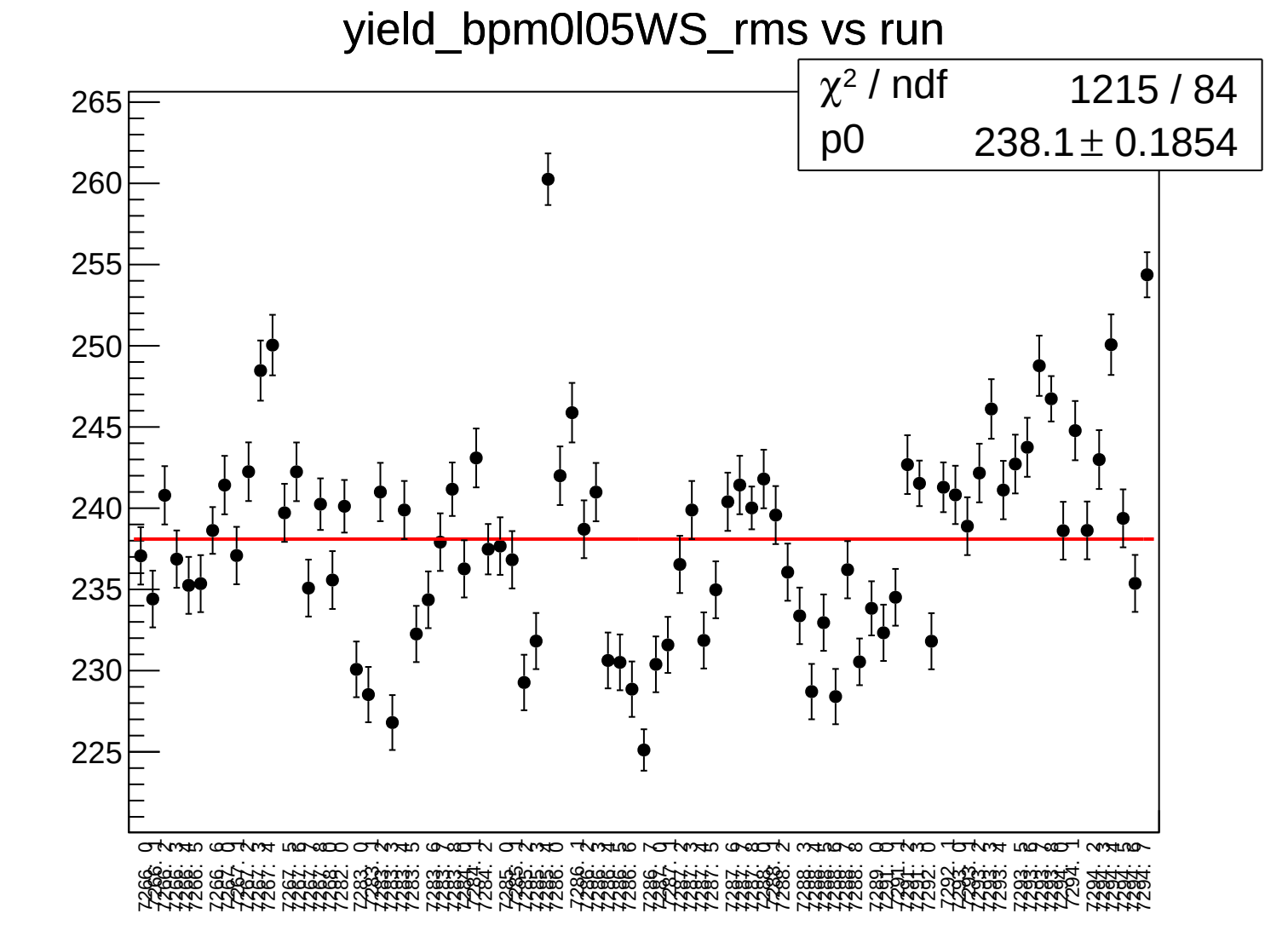

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 3.796e+05 / 84
p0 1.279e+05 ± 0.2706
128.2
128.1
128
127.9
127.8
127.7
127.6
127.5
pull
Entries 85
Mean −940.5
Std Dev 945.9
100
50
0
−50
−100
−150

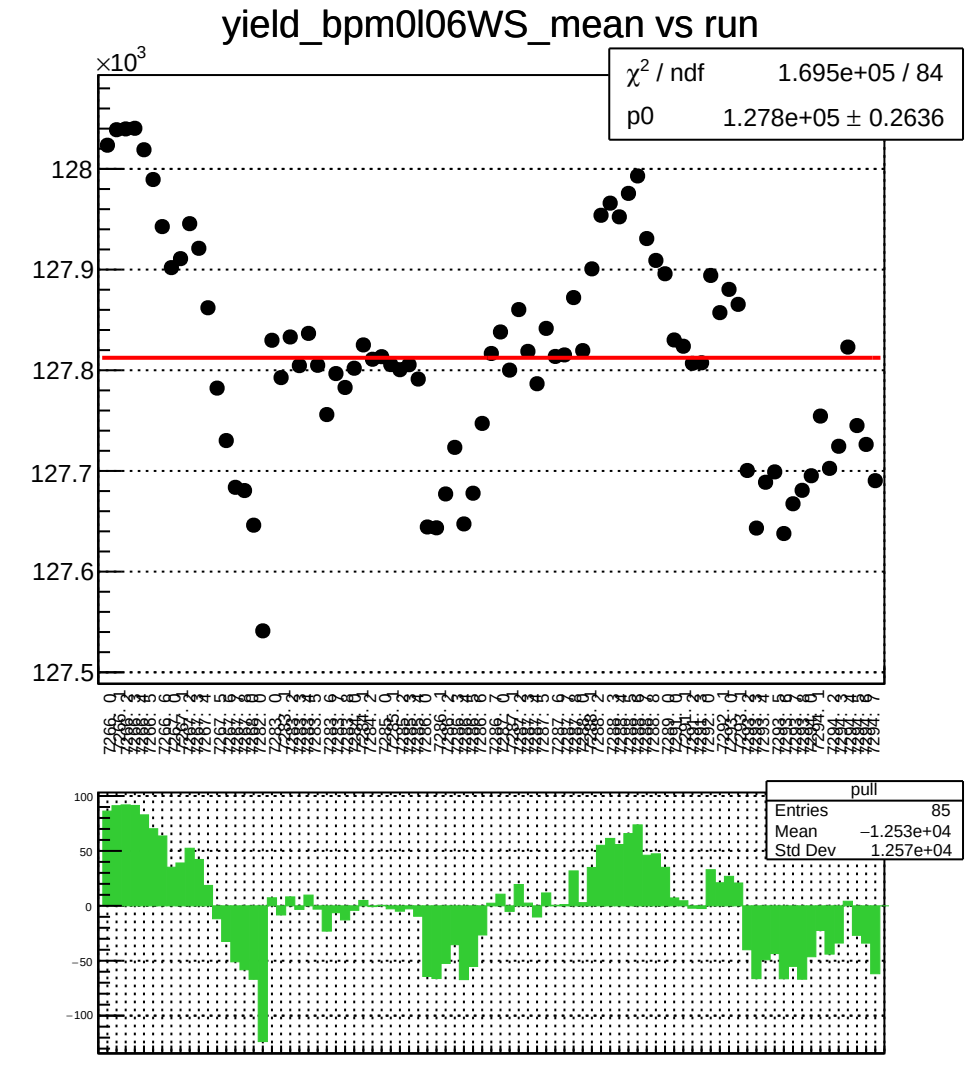

pull1D
Entries 85
Mean 3.247
Std Dev 5.356
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

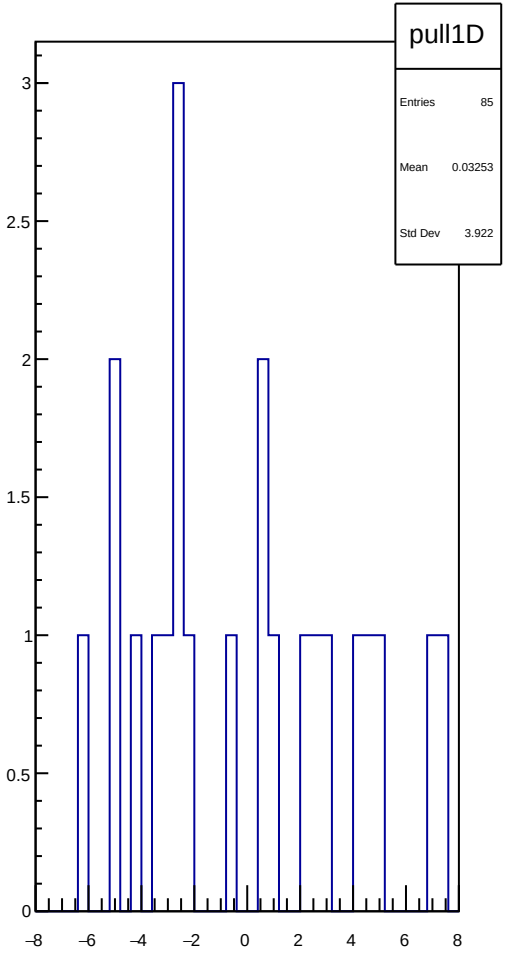

yield_bpm0l04WS_rms vs run
χ² / ndf 1117 / 84
p0 245.8 ± 0.1914
265
260
255
250
245
240
235
230

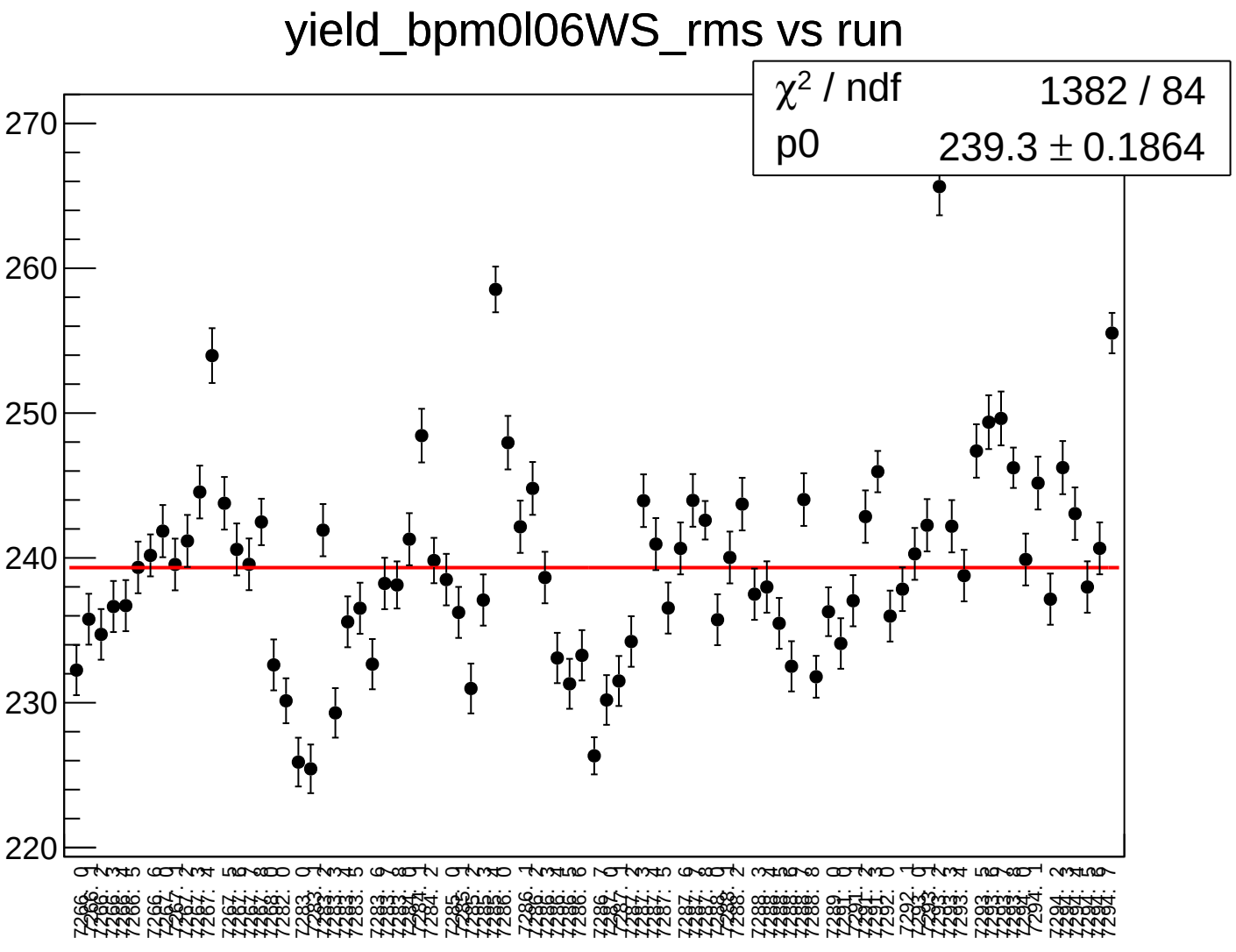

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 4.617e+04 / 84
p0 1.288e+05 ± 0.2622
128.95
128.9
128.85
128.8
128.75
pull
Entries 85
Mean 7075
Std Dev 7032
40
30
20
10
0
−10
−20
−30
−40

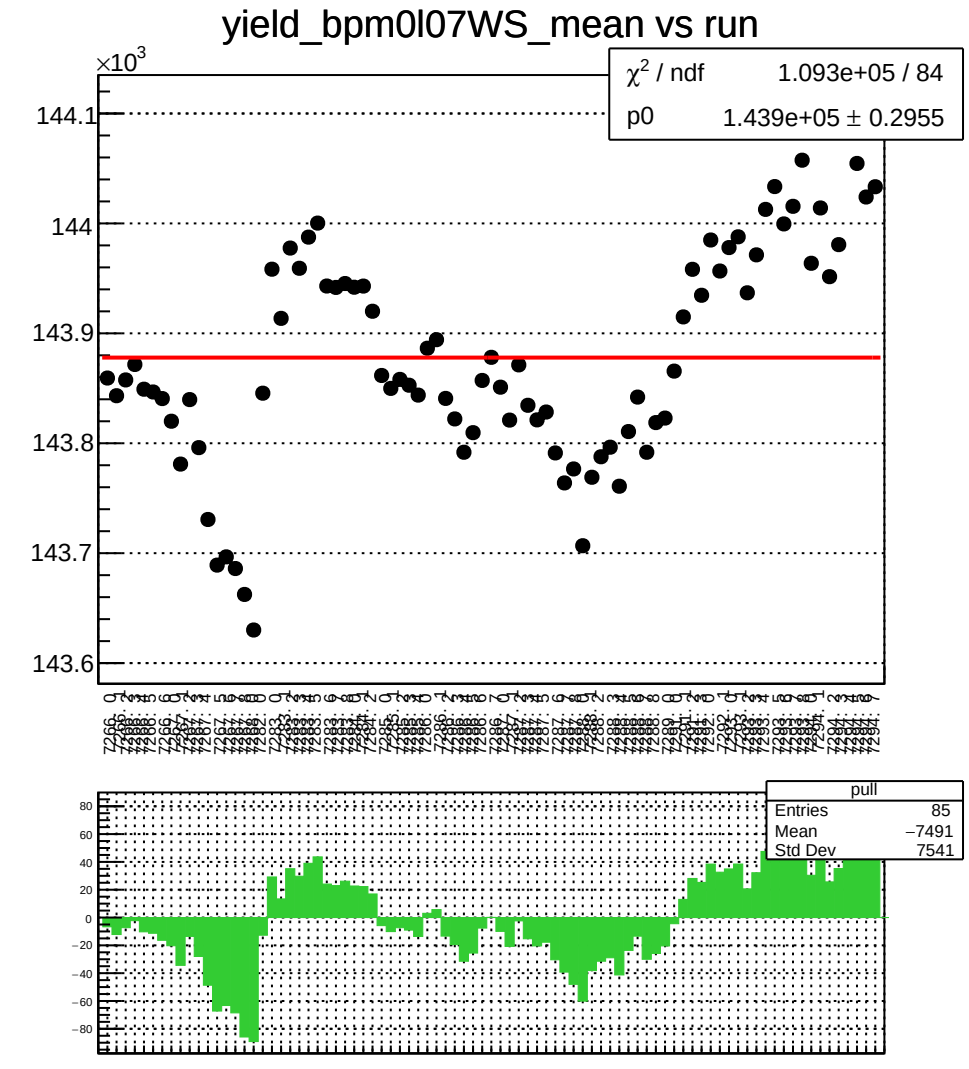

pull1D
Entries 85
Mean −0.9873
Std Dev 5.201
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

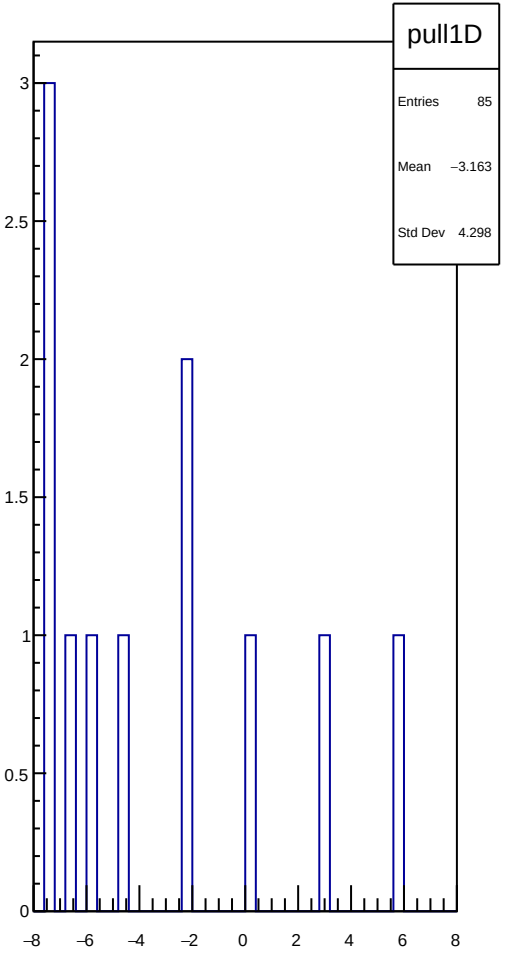

yield_bpm0l05WS_rms vs run
χ² / ndf 1215 / 84
p0 238.1 ± 0.1854
265
260
255
250
245
240
235
230
225

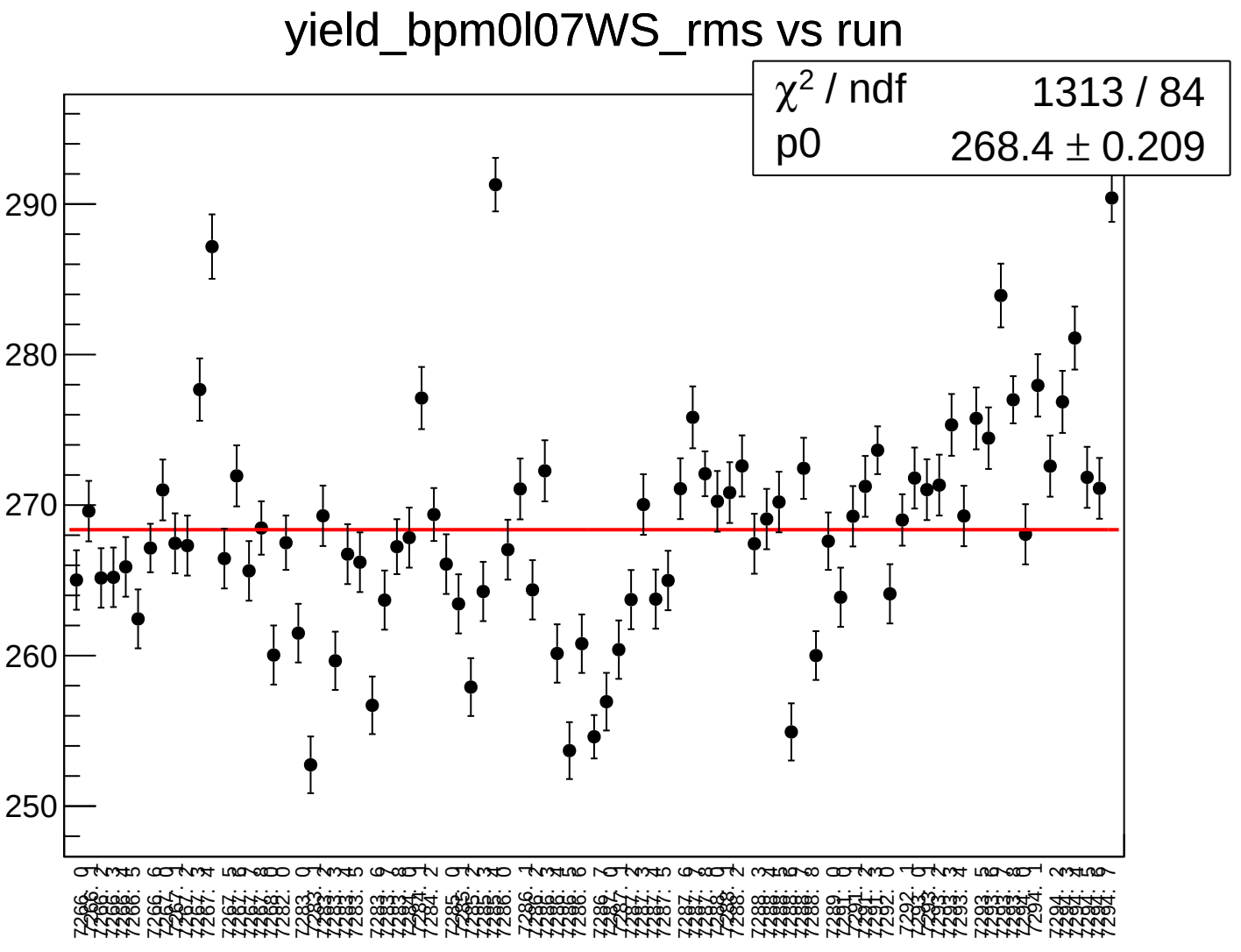

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 1.695e+05 / 84
p0 1.278e+05 ± 0.2636
128
127.9
127.8
127.7
127.6
127.5
pull
Entries 85
Mean −1.253e+04
Std Dev 1.257e+04
100
50
0
−50
−100

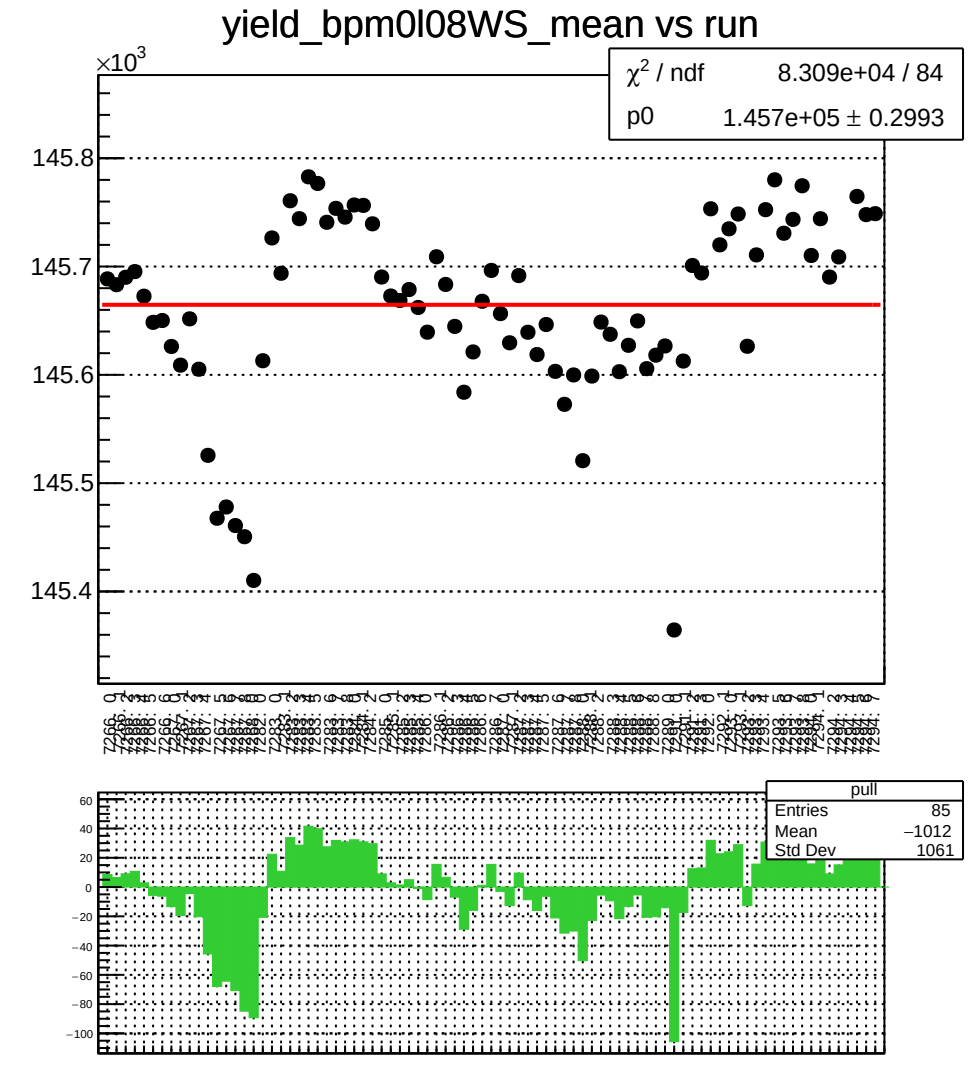

pull1D
Entries 85
Mean 0.03253
Std Dev 3.922
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

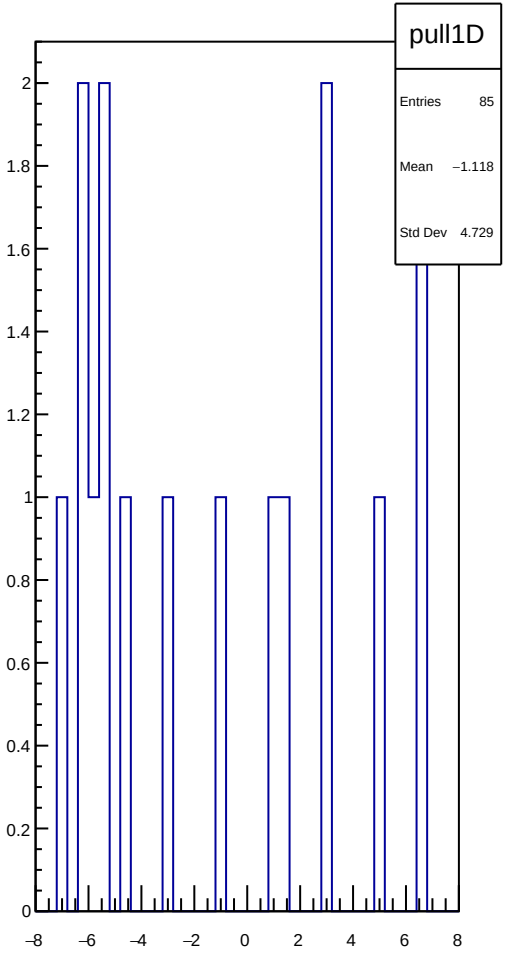

yield_bpm0l06WS_rms vs run
χ² / ndf 1382 / 84
p0 239.3 ± 0.1864
270
260
250
240
230
220

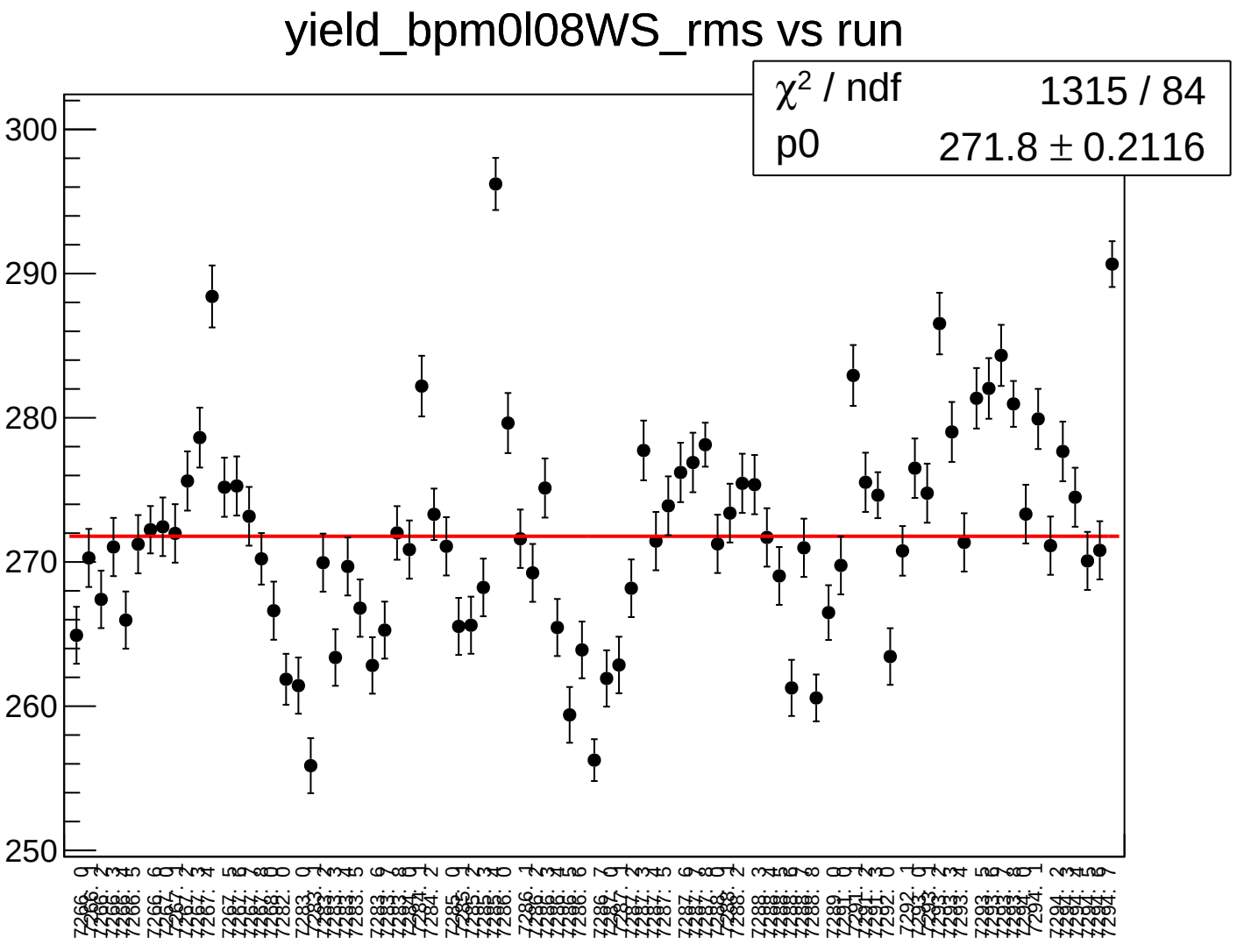

yield_bpm0l07WS_mean vs run
×10^3
144.1
144
143.9
143.8
143.7
143.6
χ² / ndf 1.093e+05 / 84
p0 1.439e+05 ± 0.2955
pull
Entries 85
Mean −7491
Std Dev 7541
80
60
40
20
0
−20
−40
−60
−80

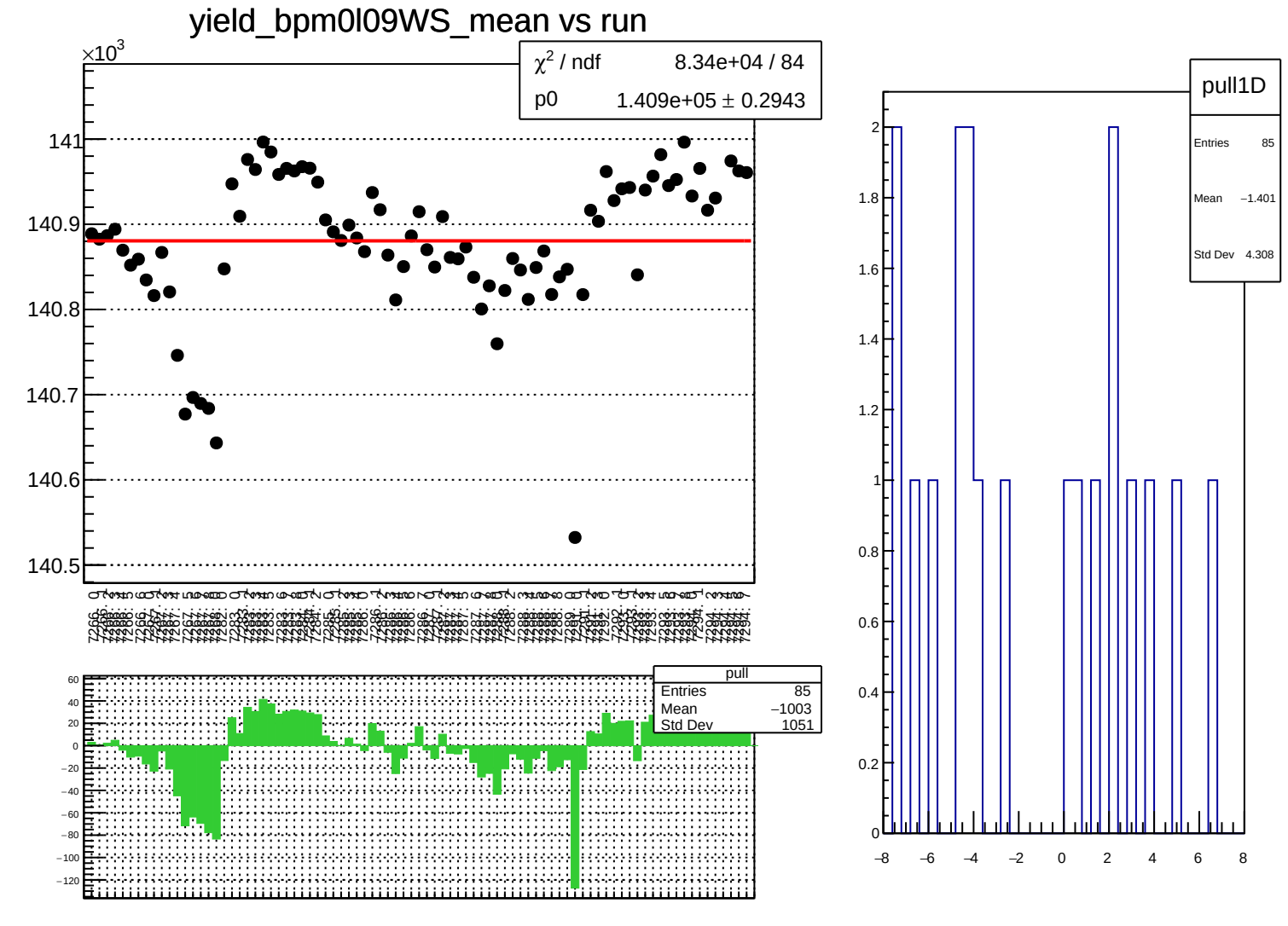

pull1D
Entries 85
Mean −3.163
Std Dev 4.298
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

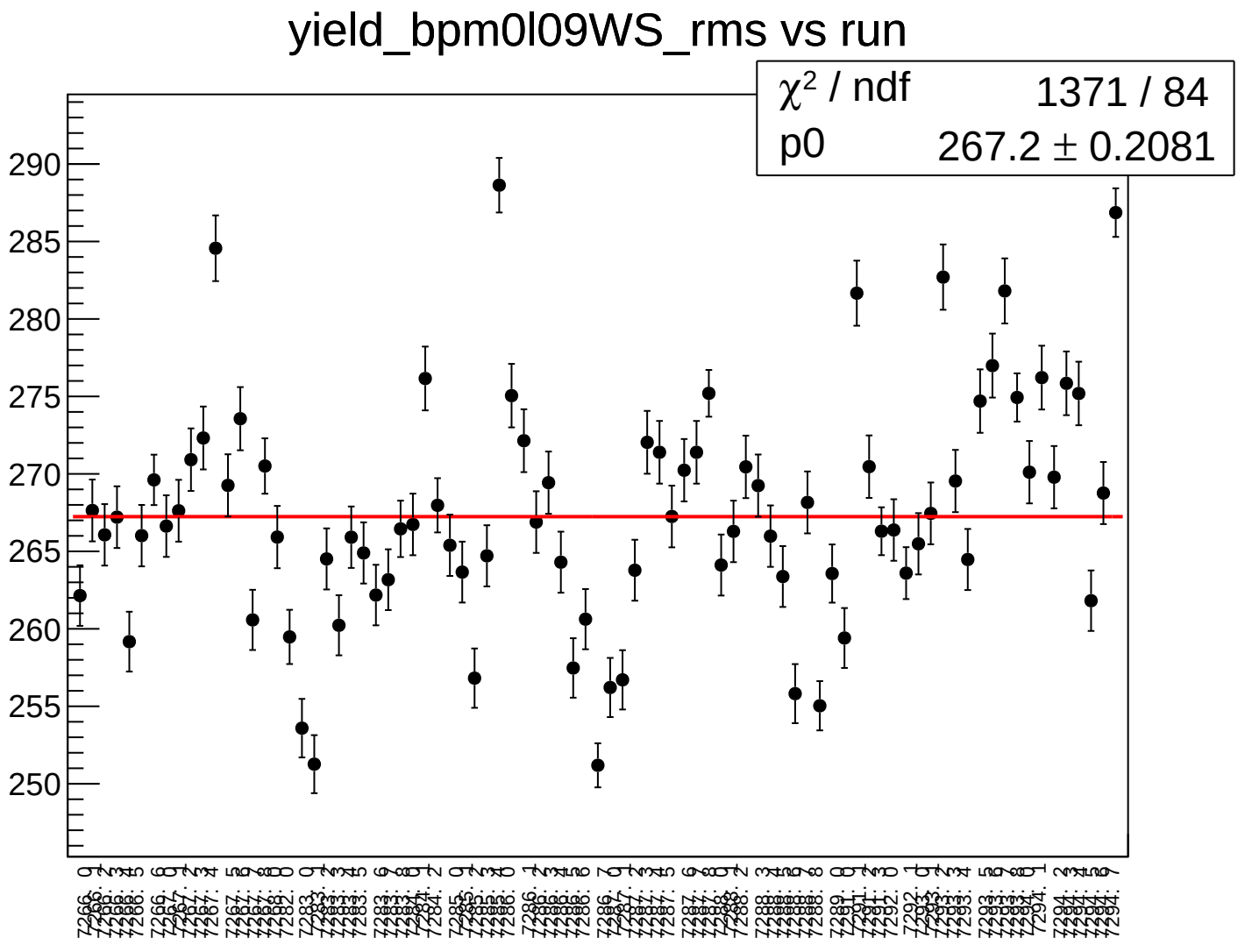

yield_bpm0l07WS_rms vs run
χ² / ndf 1313 / 84
p0 268.4 ± 0.209
290
280
270
260
250

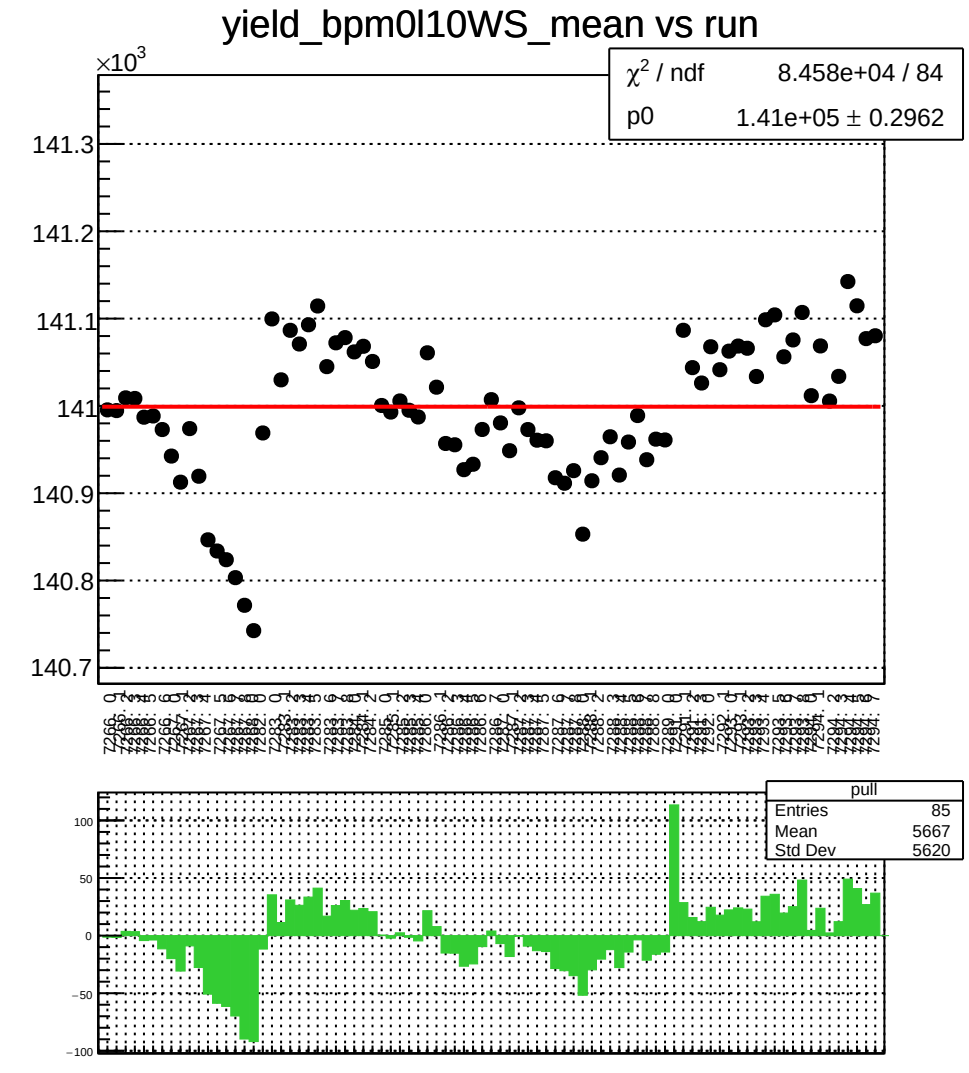

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 8.309e+04 / 84
p0 1.457e+05 ± 0.2993
145.8
145.7
145.6
145.5
145.4
pull
Entries 85
Mean −1012
Std Dev 1061
60
40
20
0
−20
−40
−60
−80
−100

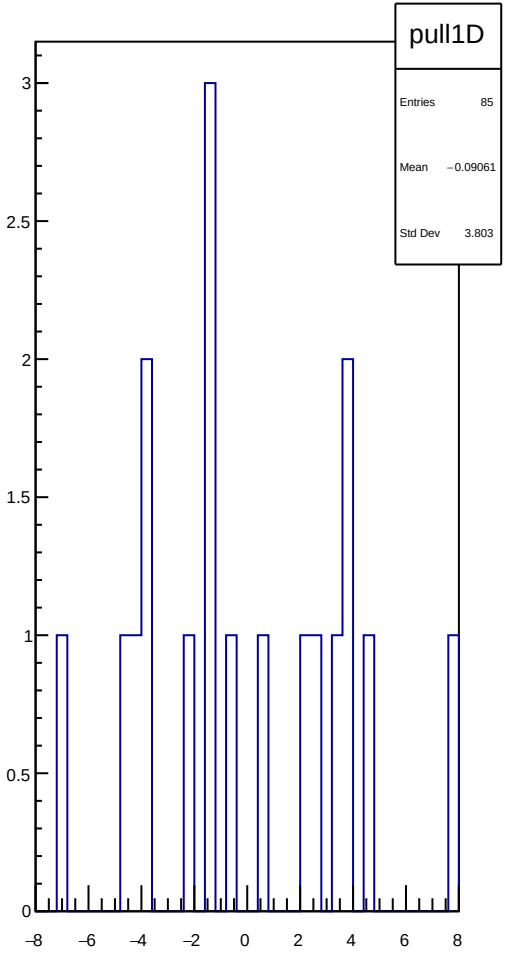

pull1D
Entries 85
Mean −1.118
Std Dev 4.729
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

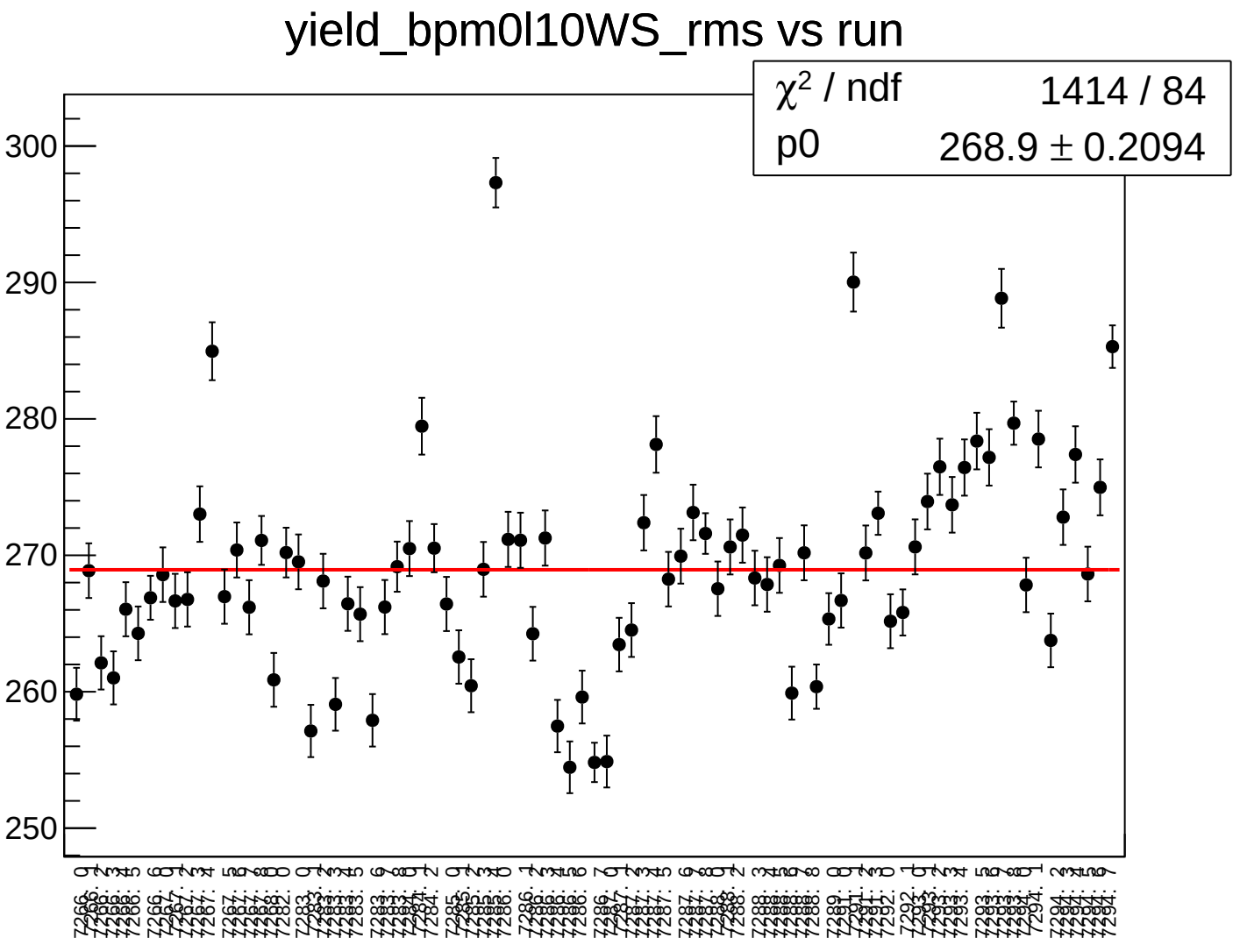

yield_bpm0l08WS_rms vs run
χ² / ndf 1315 / 84
p0 271.8 ± 0.2116
300
290
280
270
260
250

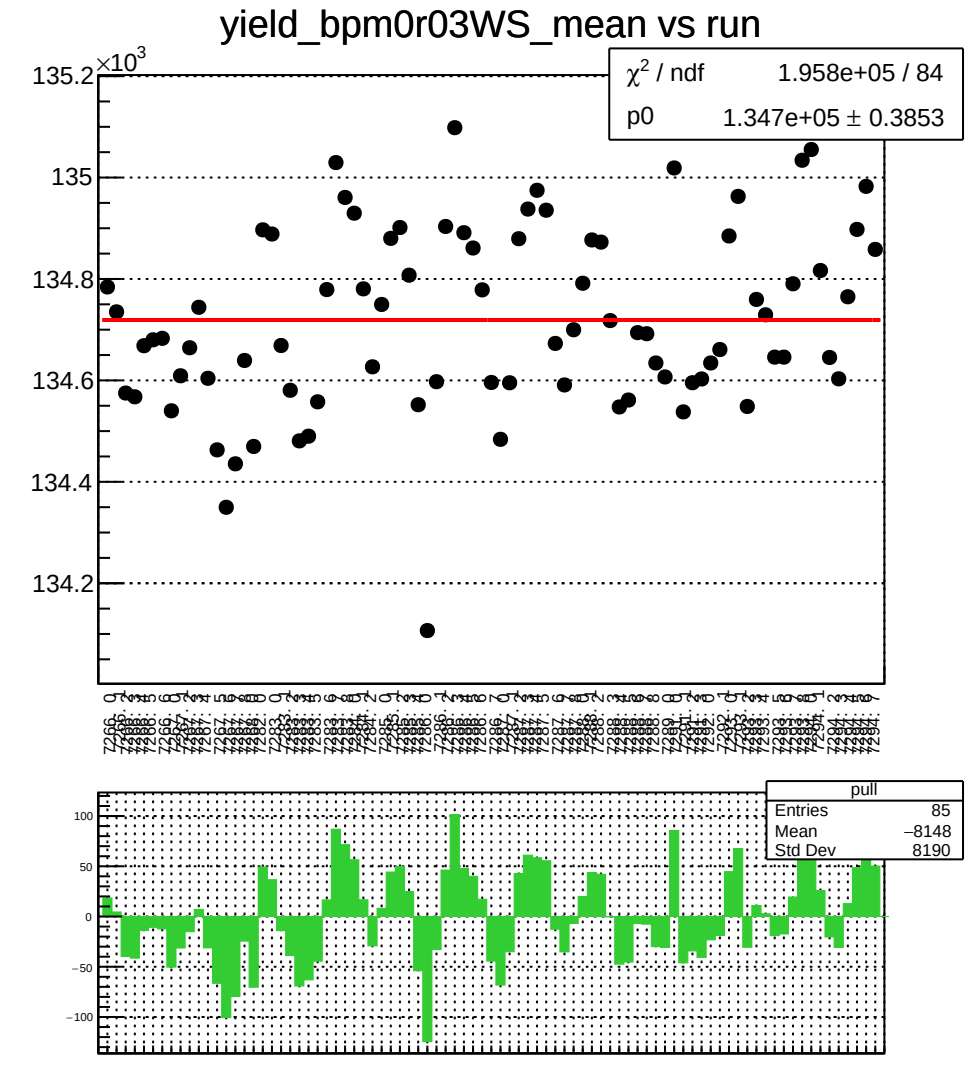

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 8.34e+04 / 84
p0 1.409e+05 ± 0.2943
141
140.9
140.8
140.7
140.6
140.5
pull
Entries 85
Mean −1003
Std Dev 1051
60
40
20
0
−20
−40
−60
−80
−100
−120
pull1D
Entries 85
Mean −1.401
Std Dev 4.308
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

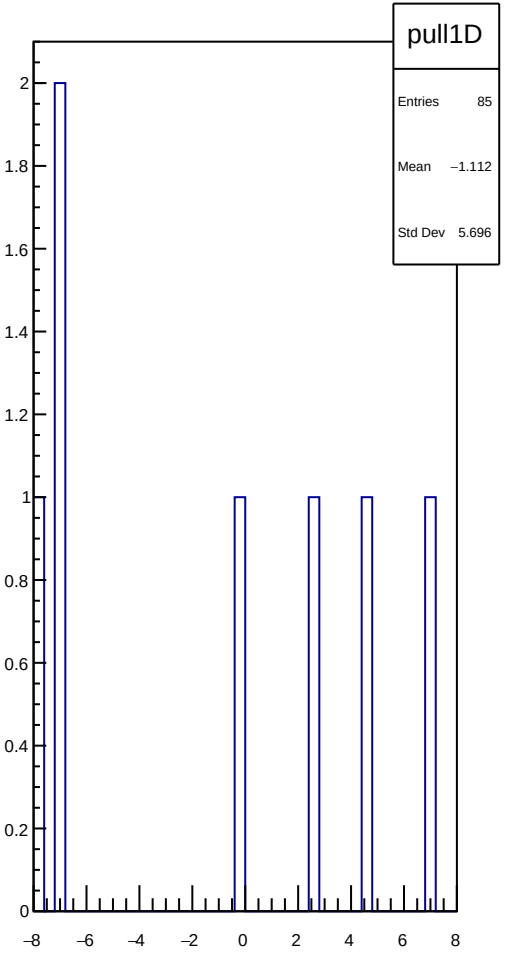

yield_bpm0l09WS_rms vs run
χ² / ndf 1371 / 84
p0 267.2 ± 0.2081
290
285
280
275
270
265
260
255
250

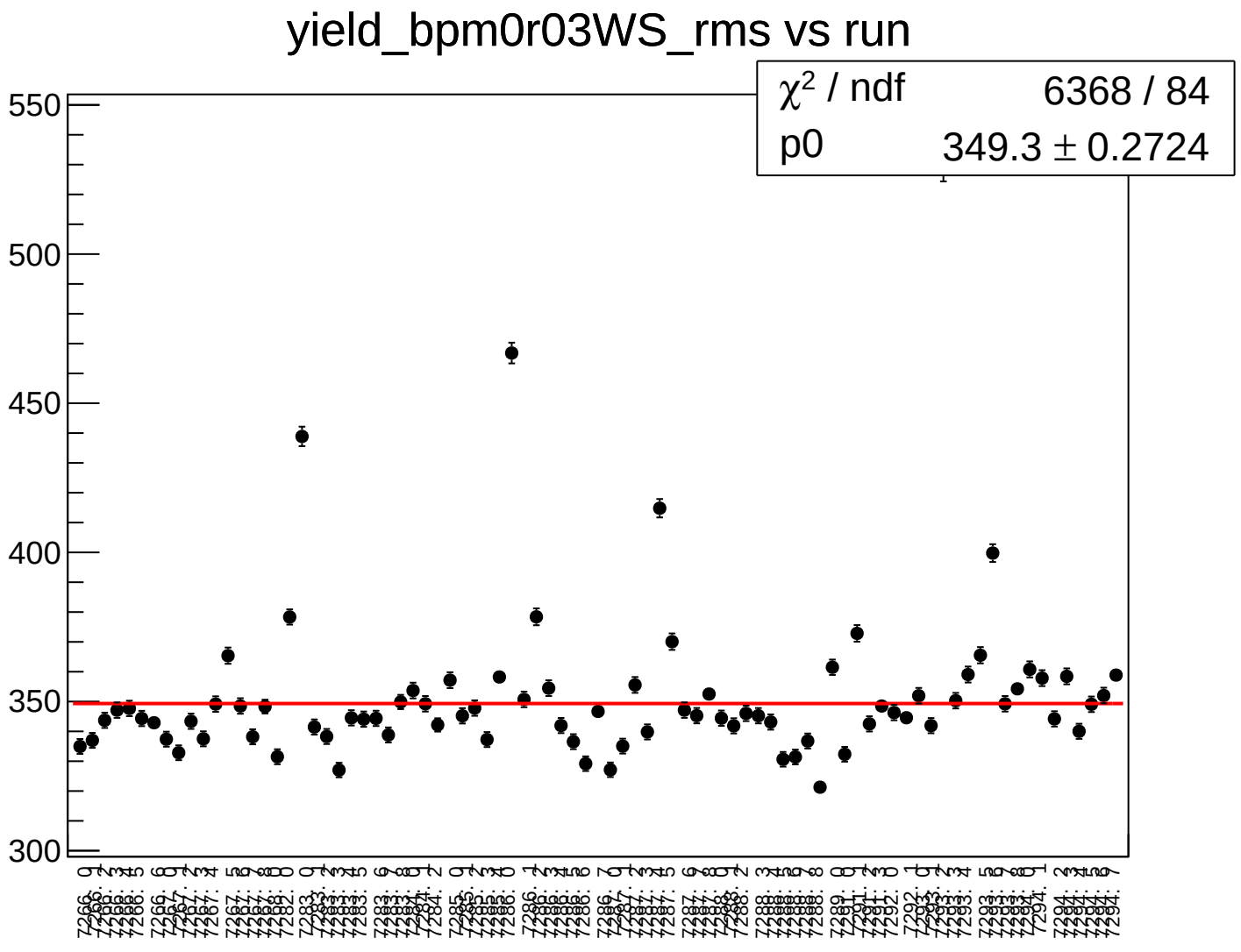

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 8.458e+04 / 84
p0 1.41e+05 ± 0.2962
141.3
141.2
141.1
141
140.9
140.8
140.7
pull
Entries 85
Mean 5667
Std Dev 5620
100
50
0
−50
−100

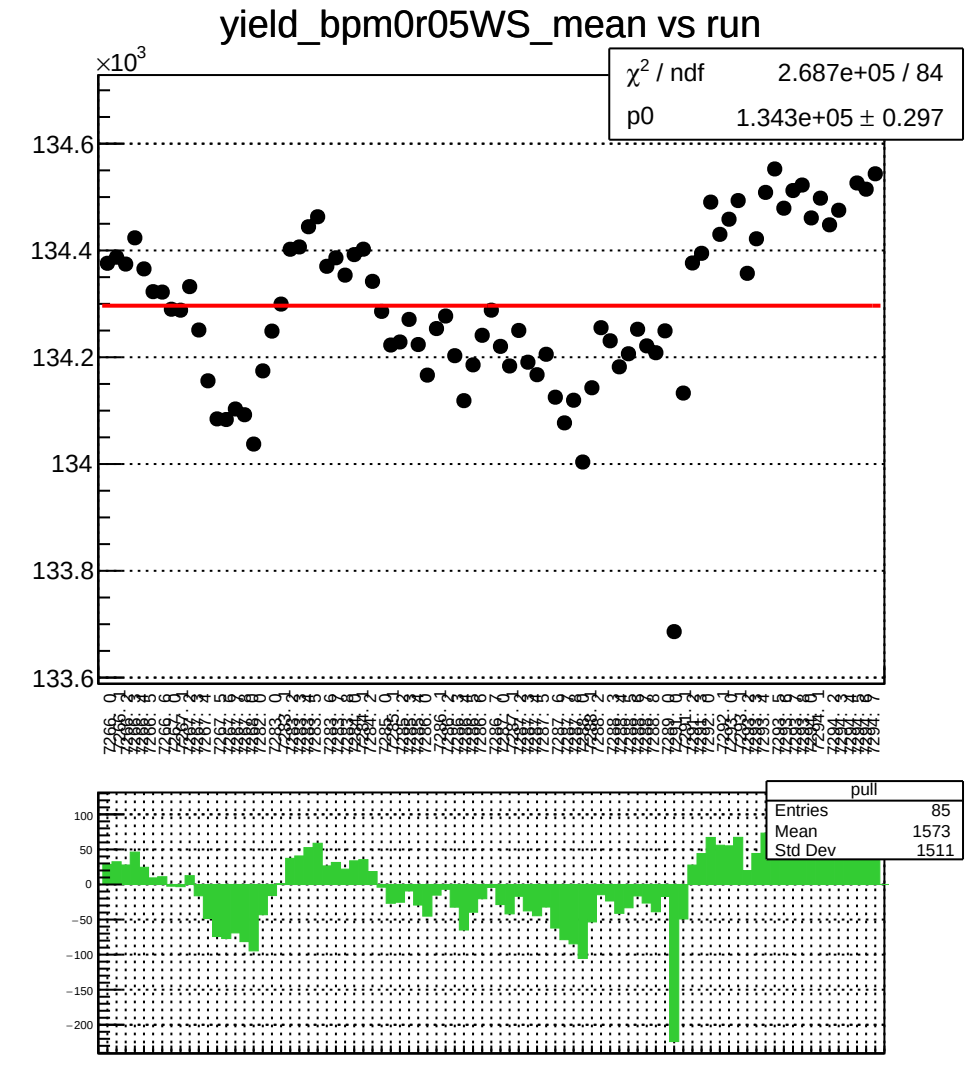

pull1D
Entries 85
Mean −0.09061
Std Dev 3.803
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

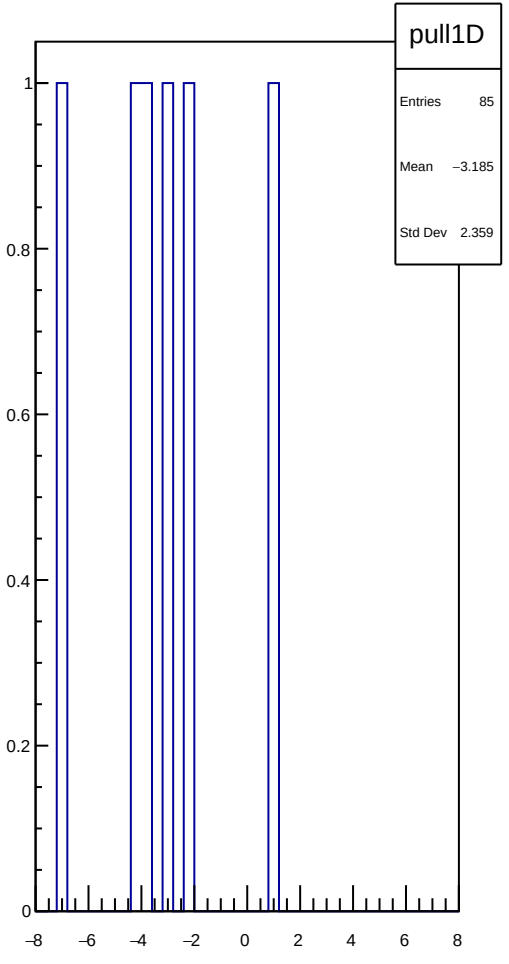

yield_bpm0l10WS_rms vs run
χ² / ndf 1414 / 84
p0 268.9 ± 0.2094
300
290
280
270
260
250

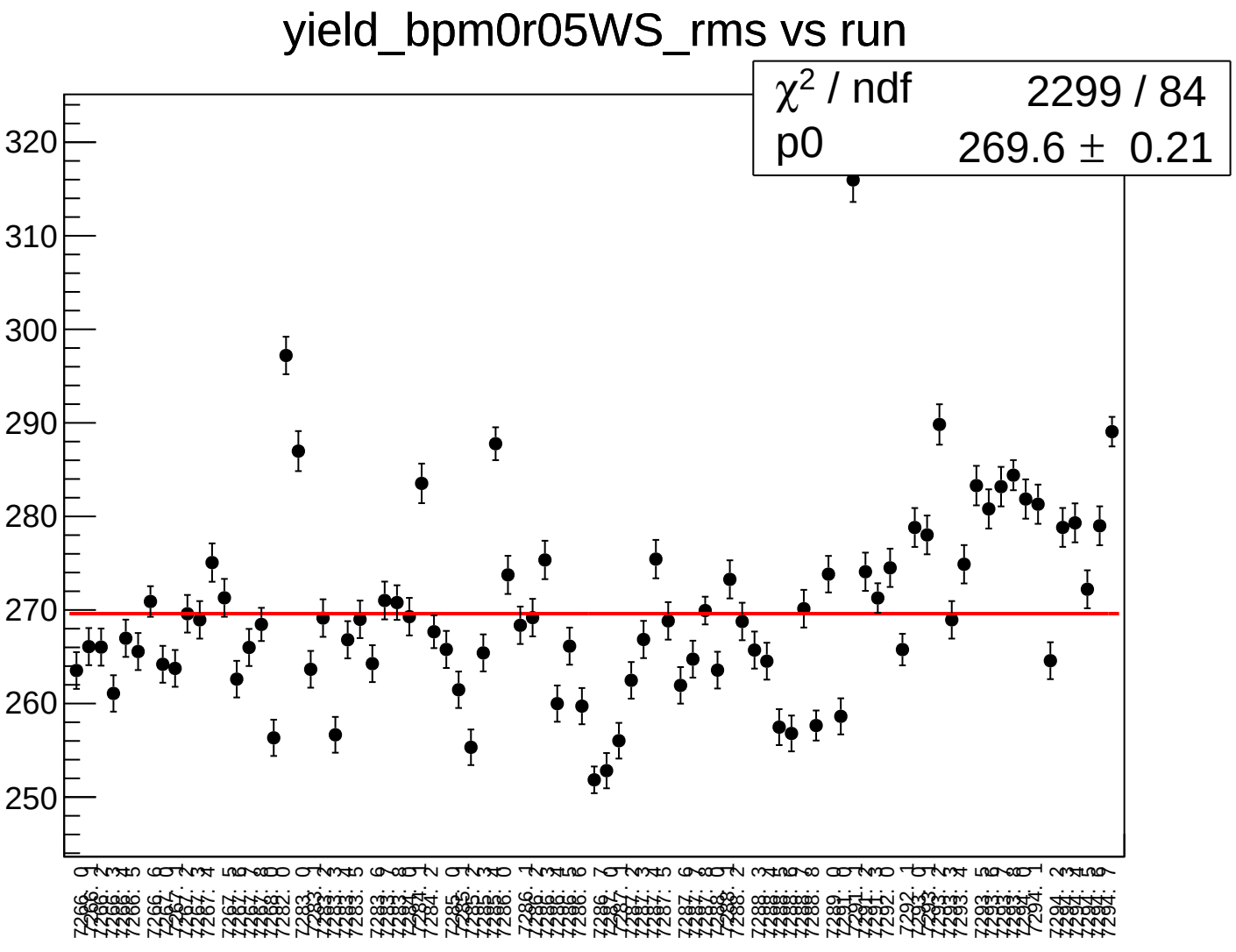

yield_bpm0r03WS_mean vs run
χ² / ndf 1.958e+05 / 84
p0 1.347e+05 ± 0.3853
×10³
135.2
135
134.8
134.6
134.4
134.2
pull
Entries 85
Mean −8148
Std Dev 8190
100
50
0
−50
−100

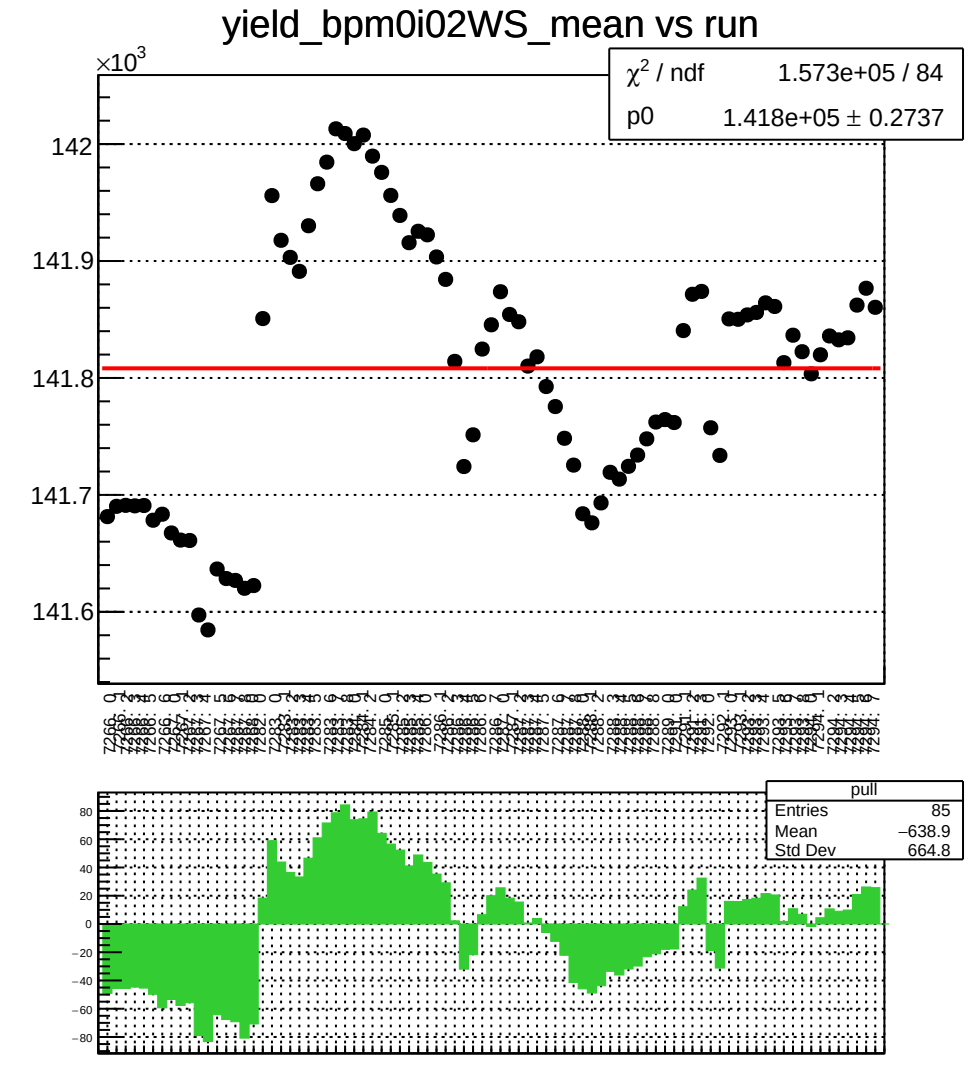

pull1D
Entries 85
Mean −1.112
Std Dev 5.696
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

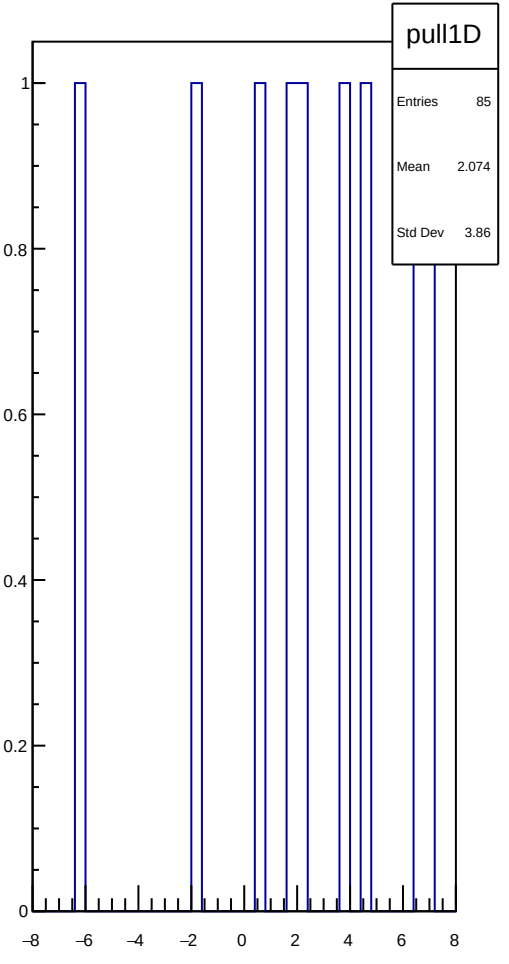

yield_bpm0r03WS_rms vs run
χ² / ndf 6368 / 84
p0 349.3 ± 0.2724
550
500
450
400
350
300

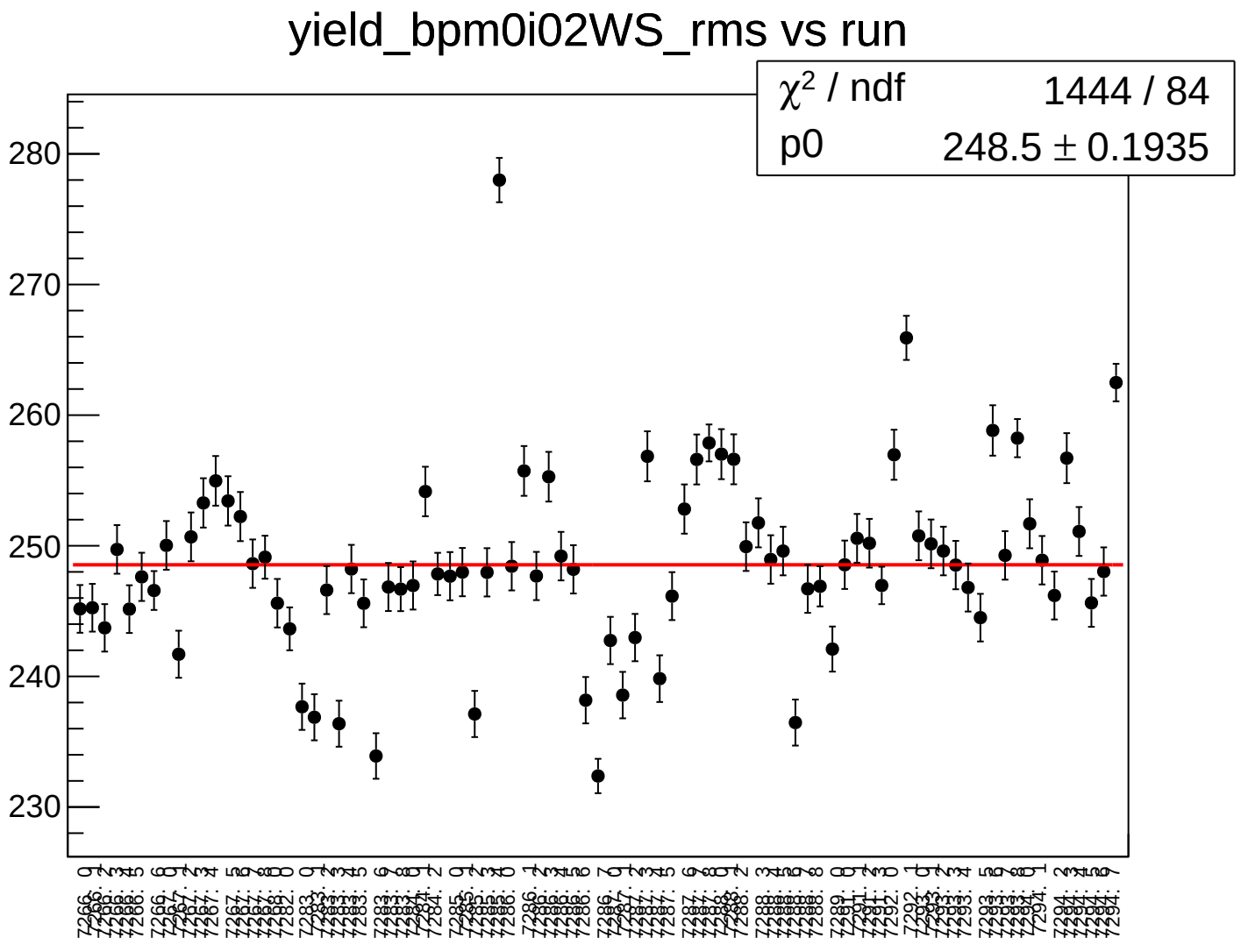

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 2.687e+05 / 84
p0 1.343e+05 ± 0.297
134.6
134.4
134.2
134
133.8
133.6
pull
Entries 85
Mean 1573
Std Dev 1511
100
50
0
−50
−100
−150
−200

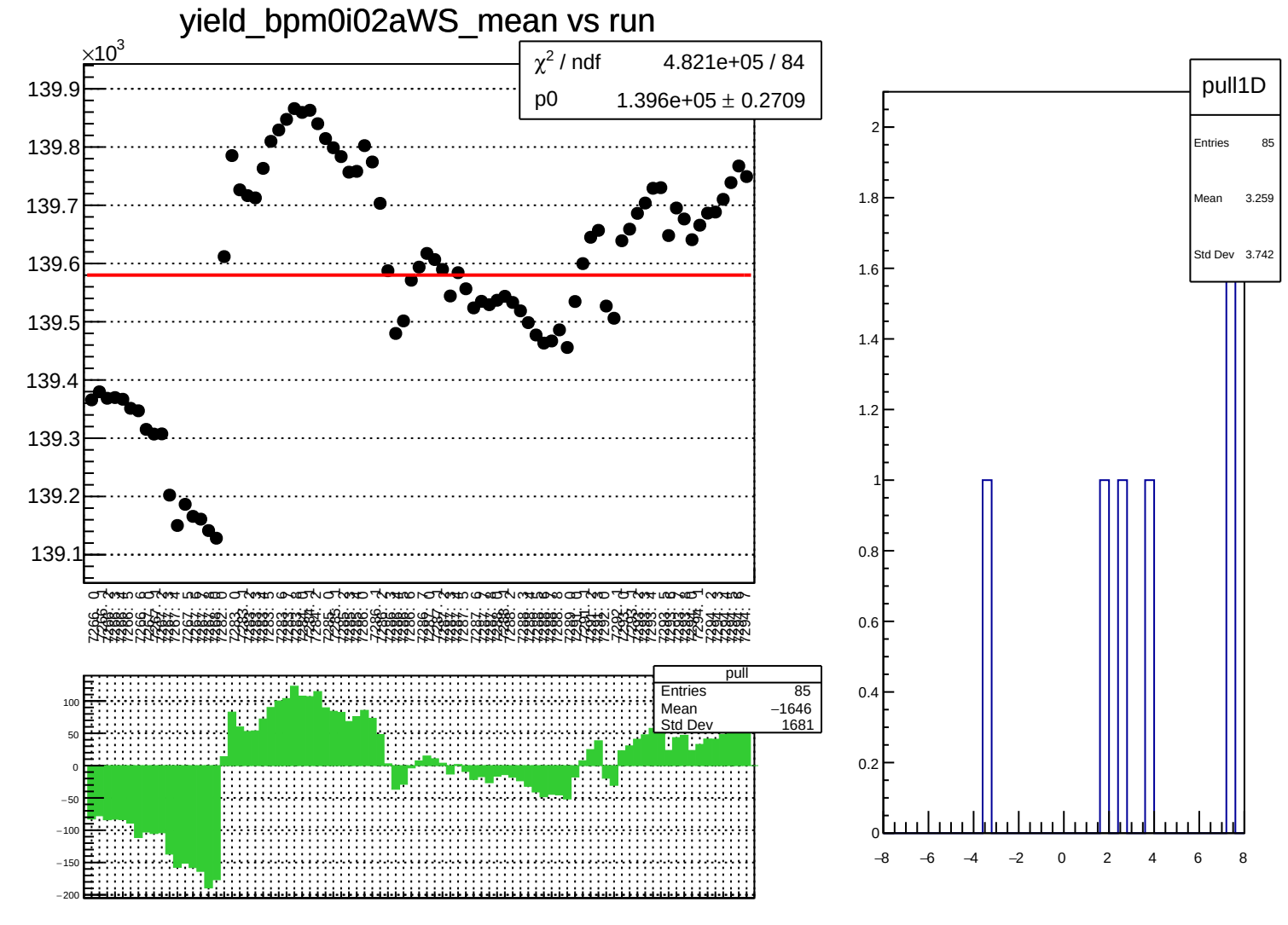

pull1D
Entries 85
Mean −3.185
Std Dev 2.359
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

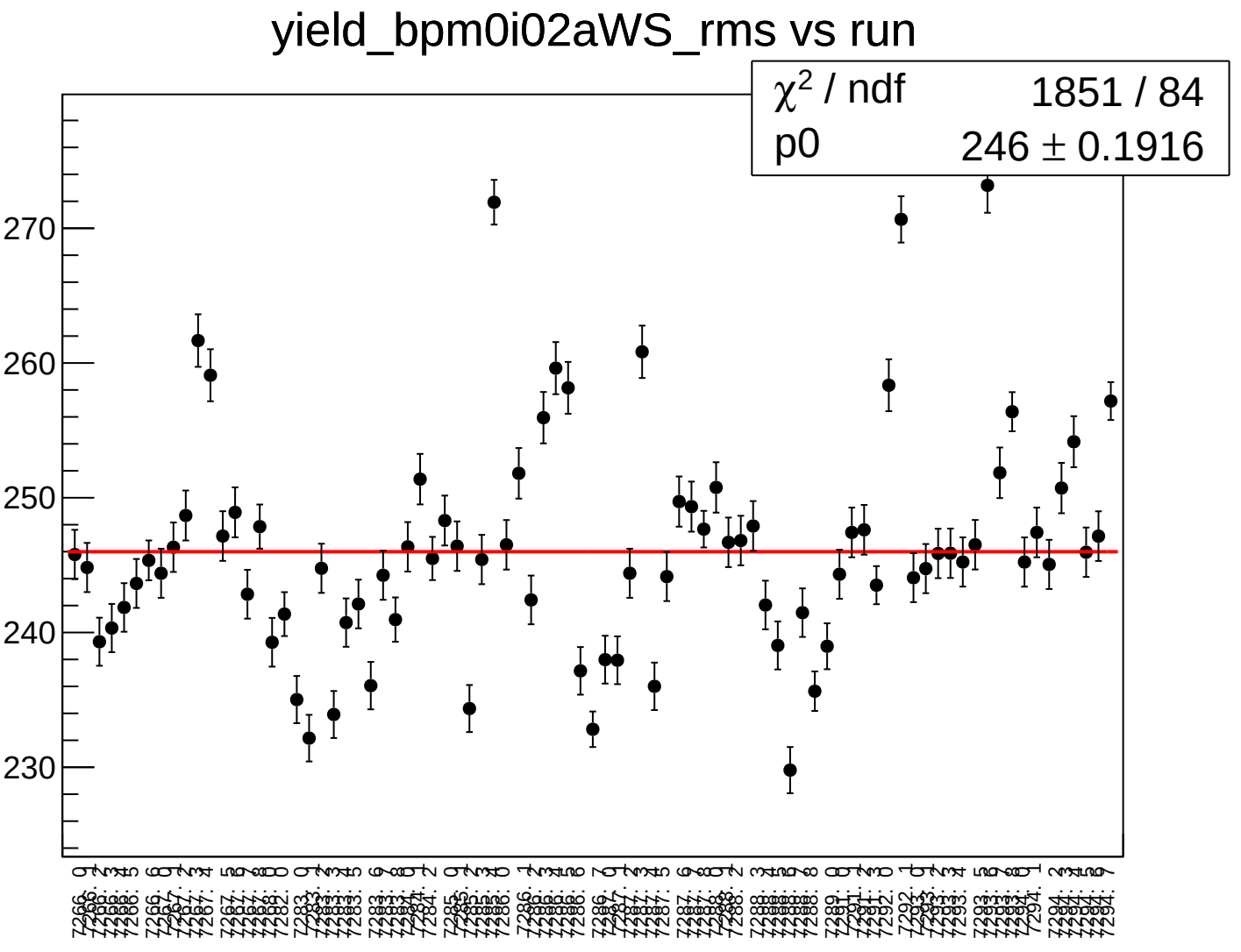

yield_bpm0r05WS_rms vs run
χ² / ndf 2299 / 84
p0 269.6 ± 0.21
320
310
300
290
280
270
260
250

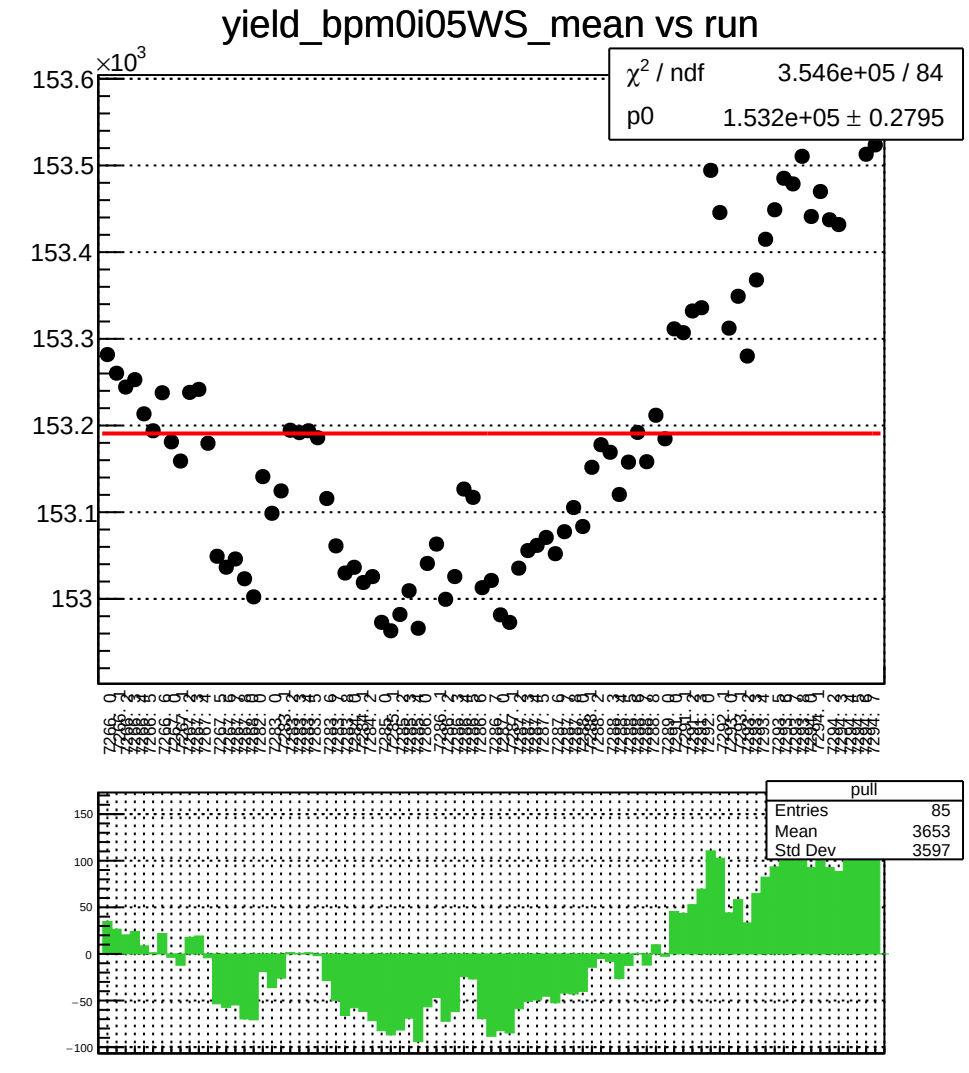

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 1.573e+05 / 84
p0 1.418e+05 ± 0.2737
142
141.9
141.8
141.7
141.6
pull
Entries 85
Mean −638.9
Std Dev 664.8
80
60
40
20
0
−20
−40
−60
−80

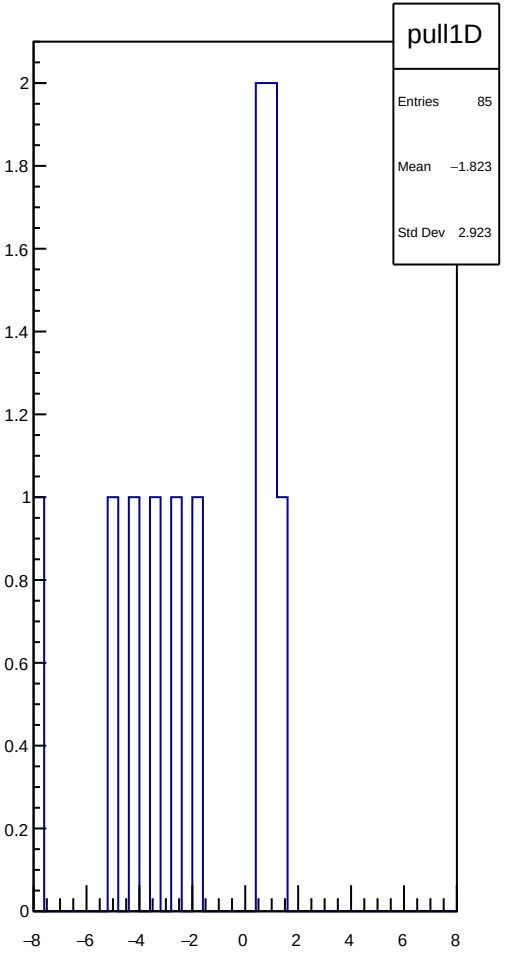

pull1D
Entries 85
Mean 2.074
Std Dev 3.86
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

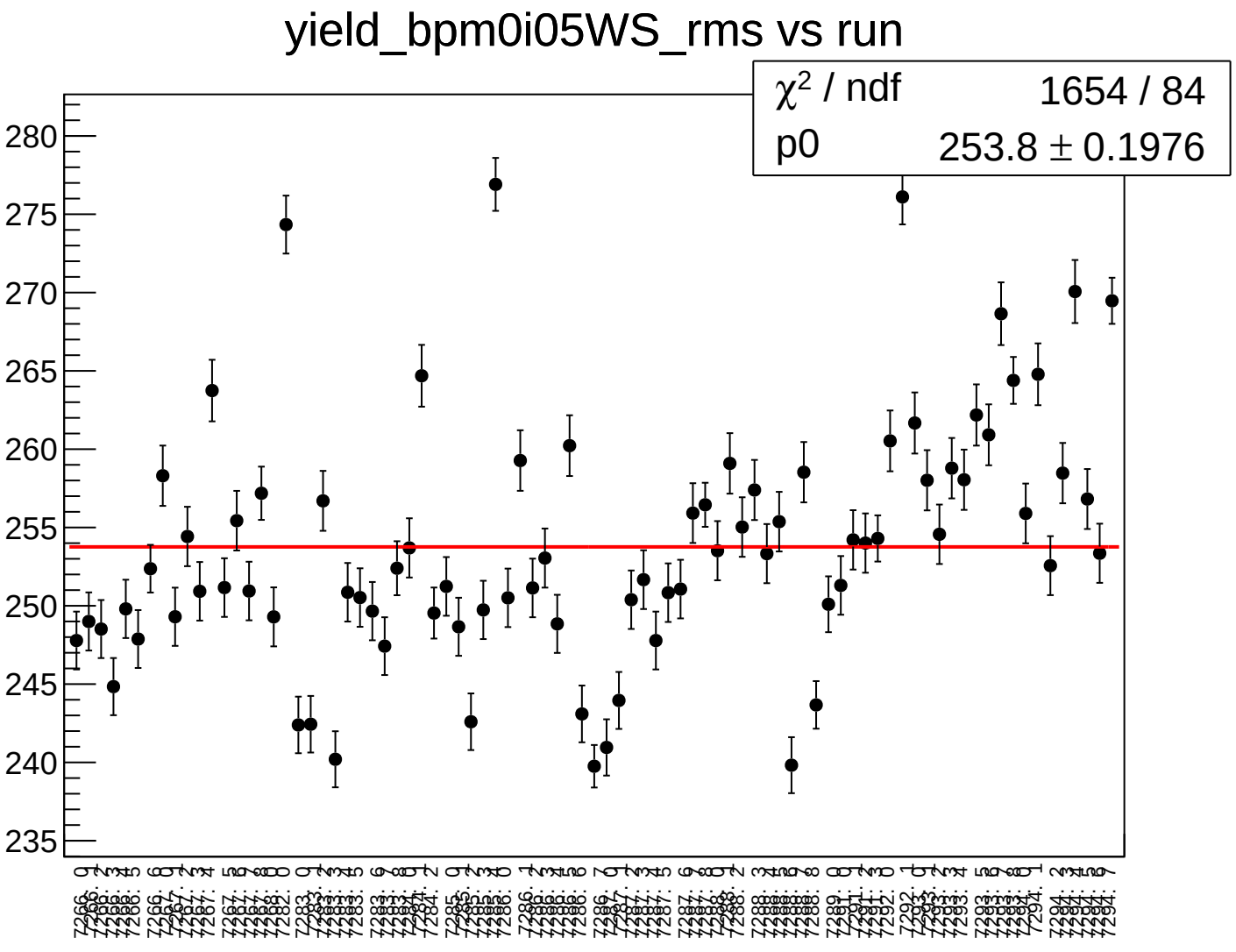

yield_bpm0i02WS_rms vs run
χ² / ndf 1444 / 84
p0 248.5 ± 0.1935
280
270
260
250
240
230

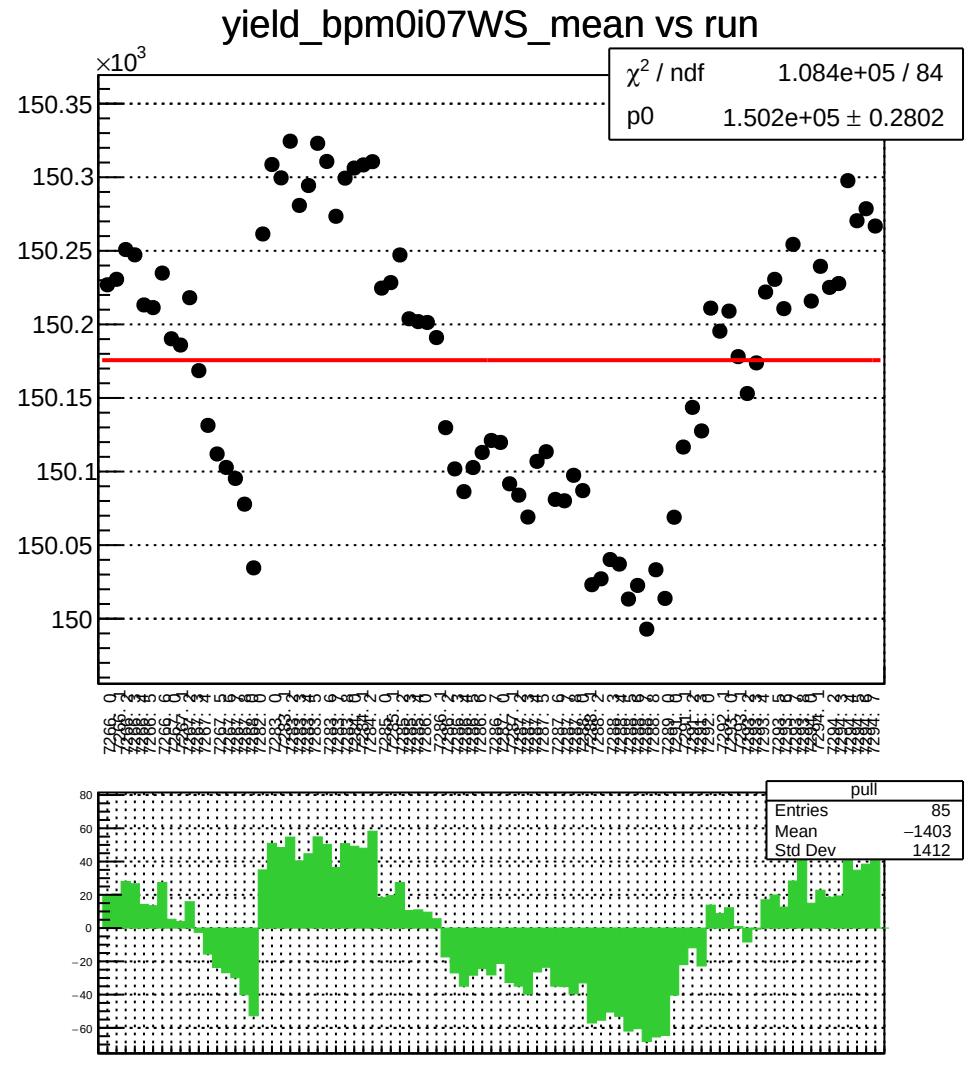

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 4.821e+05 / 84
p0 1.396e+05 ± 0.2709
139.9
139.8
139.7
139.6
139.5
139.4
139.3
139.2
139.1
pull
Entries 85
Mean −1646
Std Dev 1681
100
50
0
−50
−100
−150
−200
pull1D
Entries 85
Mean 3.259
Std Dev 3.742
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

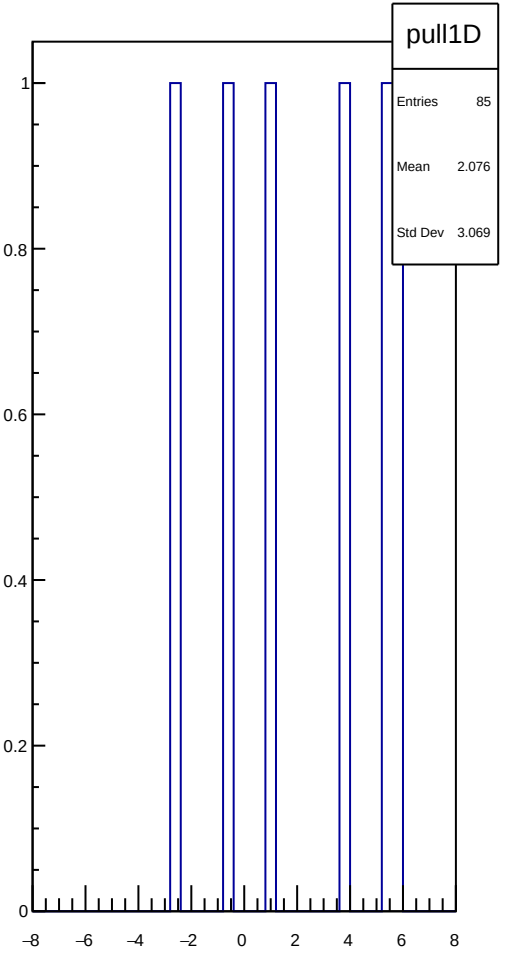

yield_bpm0i02aWS_rms vs run
χ² / ndf 1851 / 84
p0 246 ± 0.1916
270
260
250
240
230

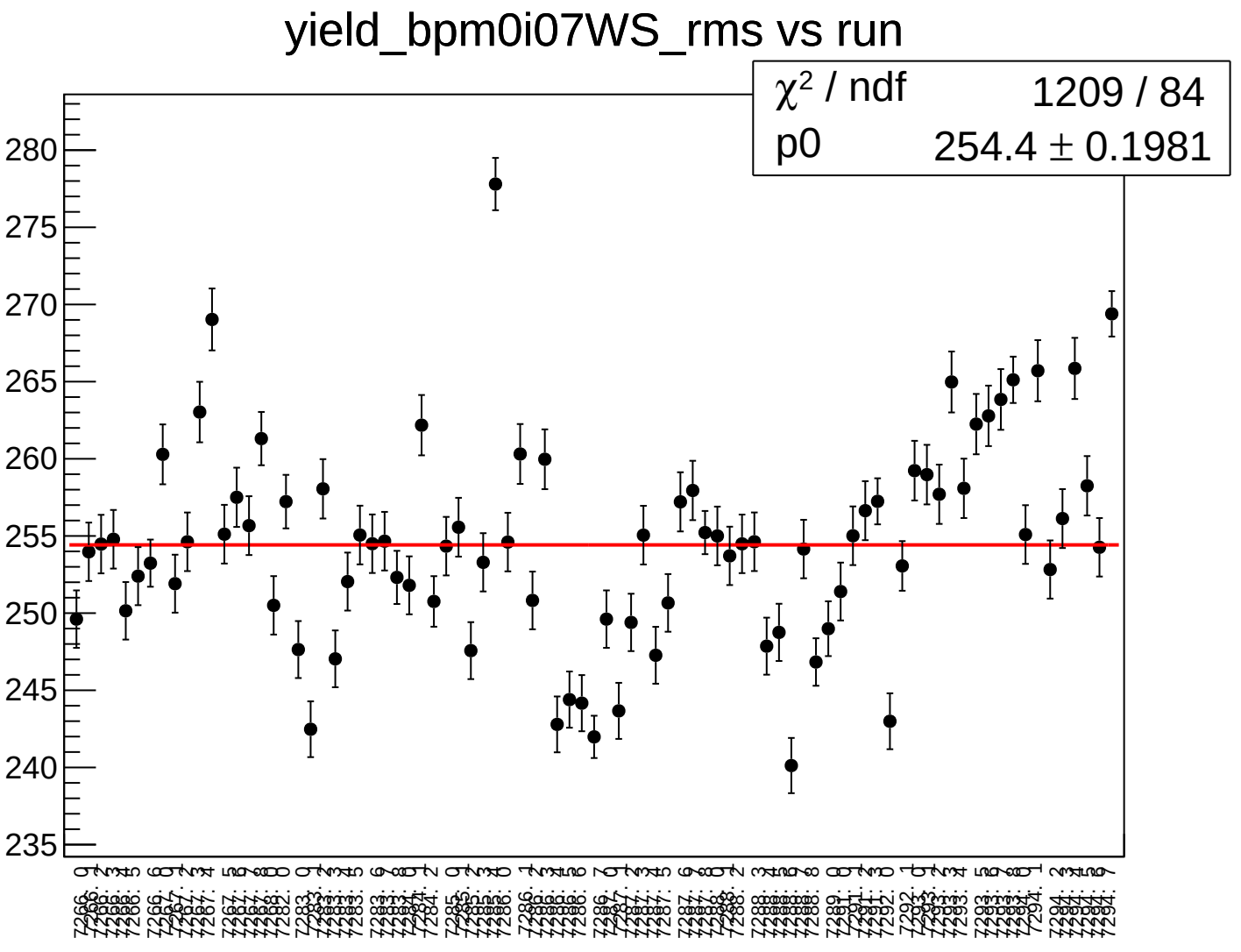

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 3.546e+05 / 84
p0 1.532e+05 ± 0.2795
153.6
153.5
153.4
153.3
153.2
153.1
153
pull
Entries 85
Mean 3653
Std Dev 3597
150
100
50
0
−50
−100

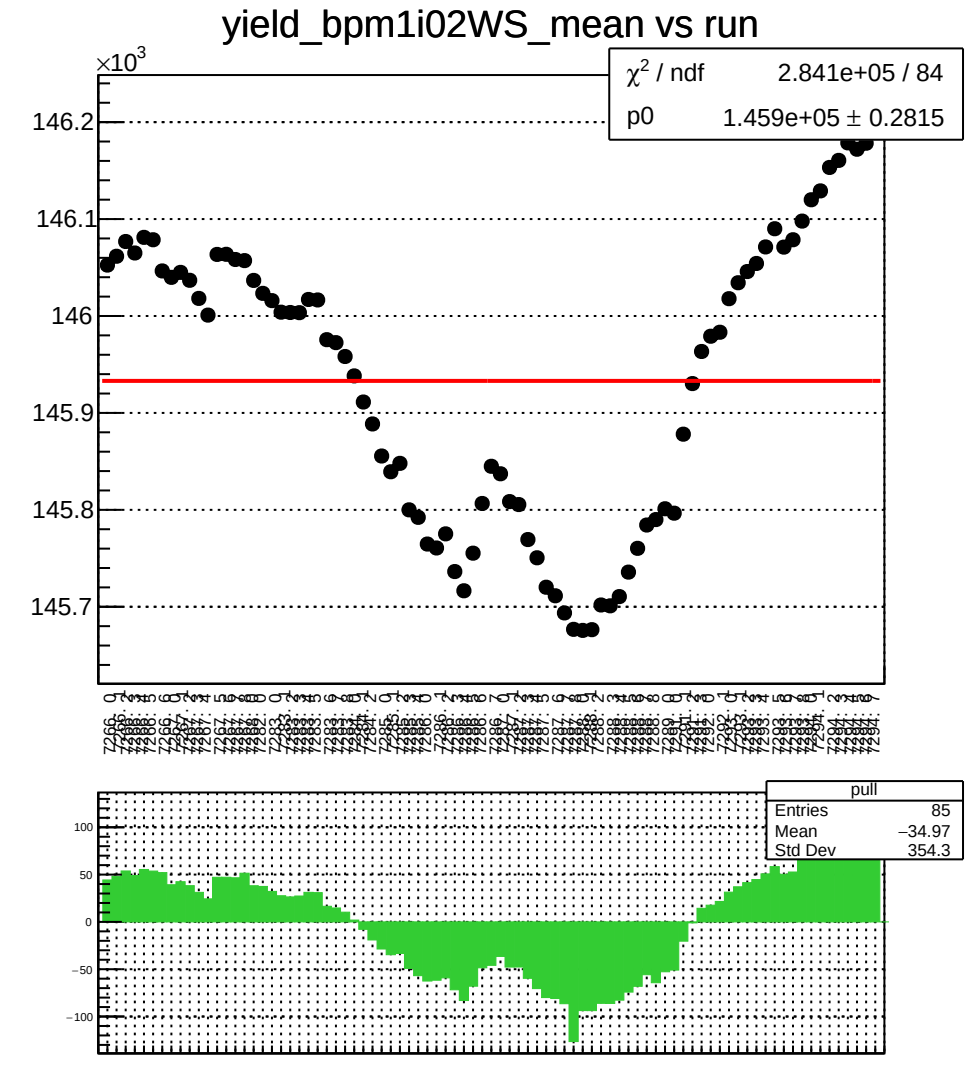

pull1D
Entries 85
Mean −1.823
Std Dev 2.923
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

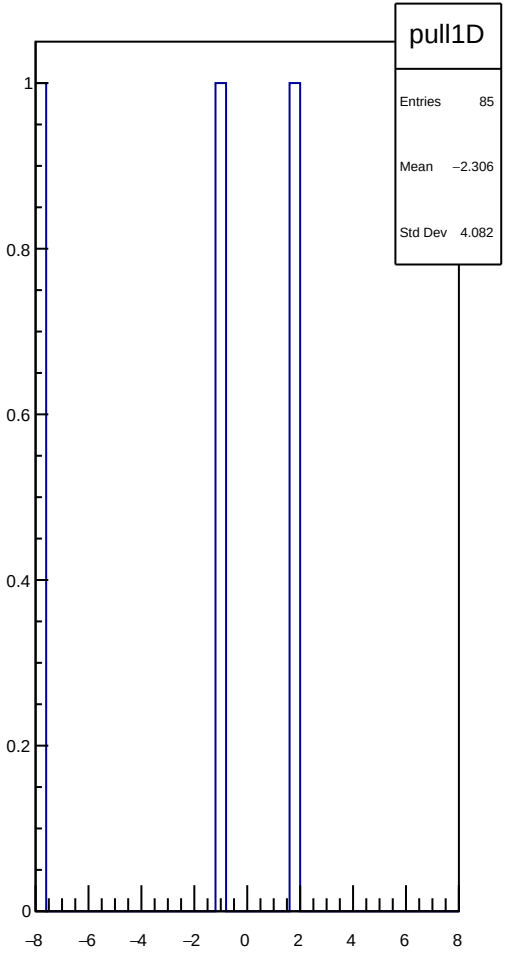

yield_bpm0i05WS_rms vs run
χ² / ndf 1654 / 84
p0 253.8 ± 0.1976
280
275
270
265
260
255
250
245
240
235

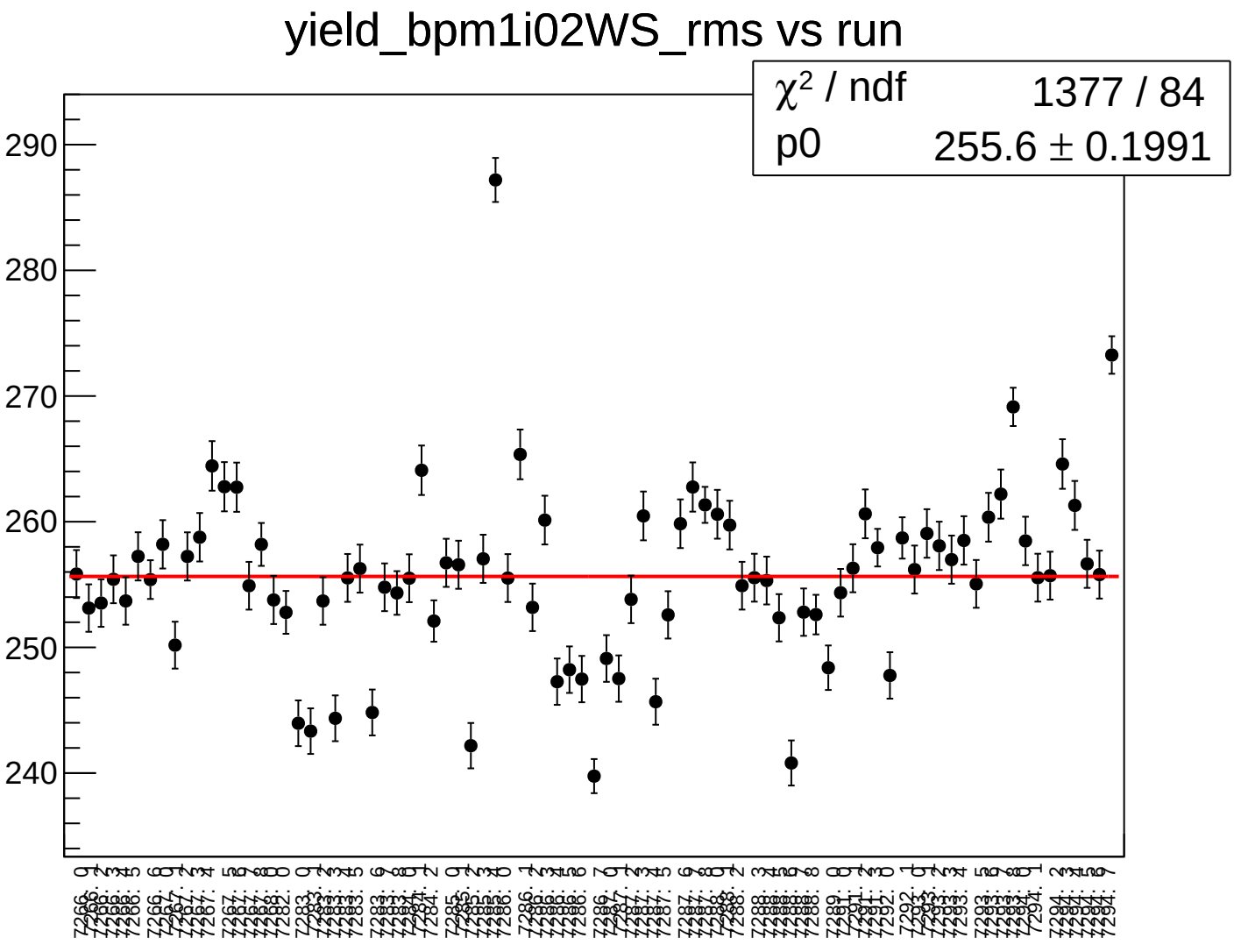

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 1.084e+05 / 84
p0 1.502e+05 ± 0.2802
150.35
150.3
150.25
150.2
150.15
150.1
150.05
150
pull
Entries 85
Mean −1403
Std Dev 1412
80
60
40
20
0
−20
−40
−60

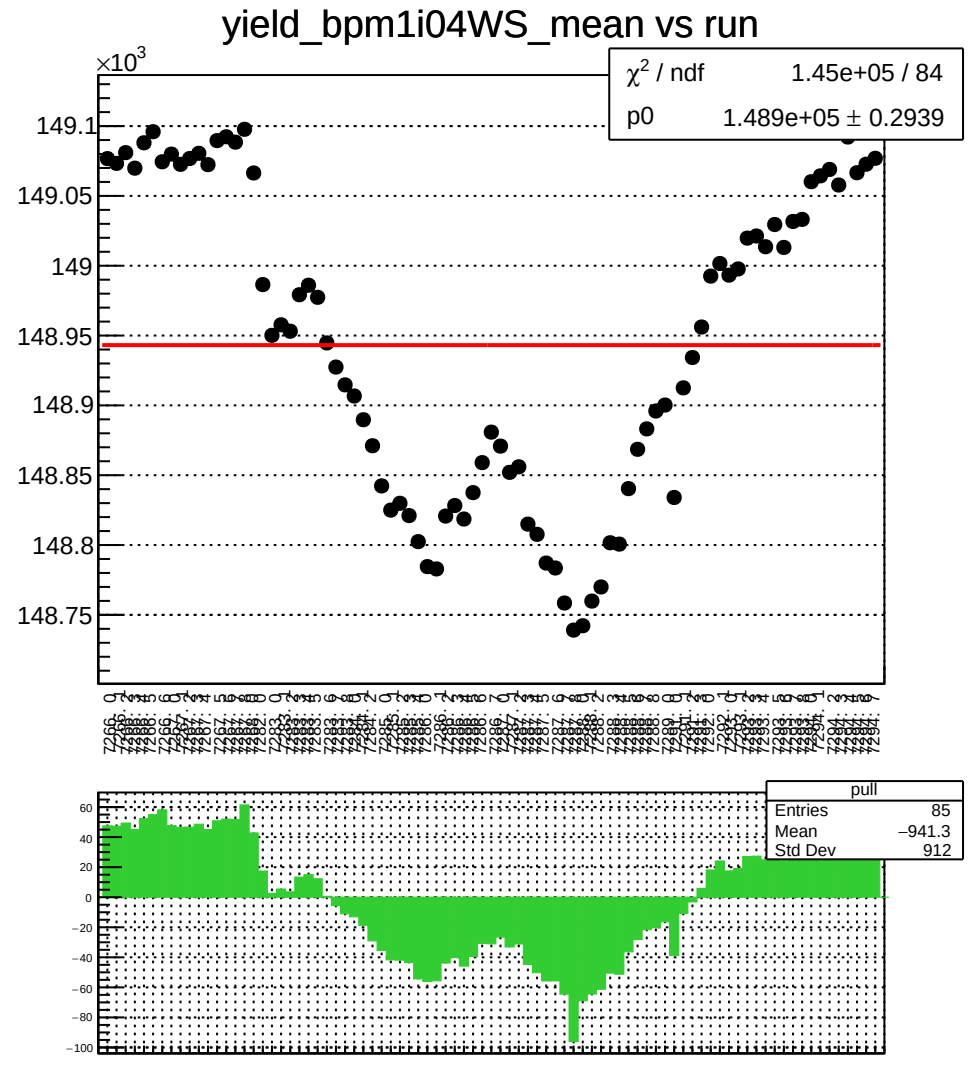

pull1D
Entries 85
Mean 2.076
Std Dev 3.069
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

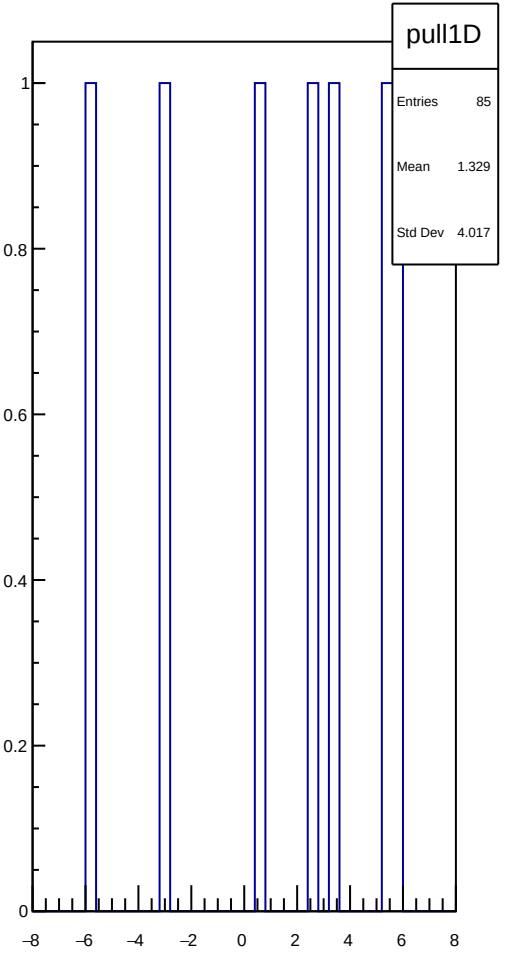

yield_bpm0i07WS_rms vs run
χ² / ndf 1209 / 84
p0 254.4 ± 0.1981
280
275
270
265
260
255
250
245
240
235

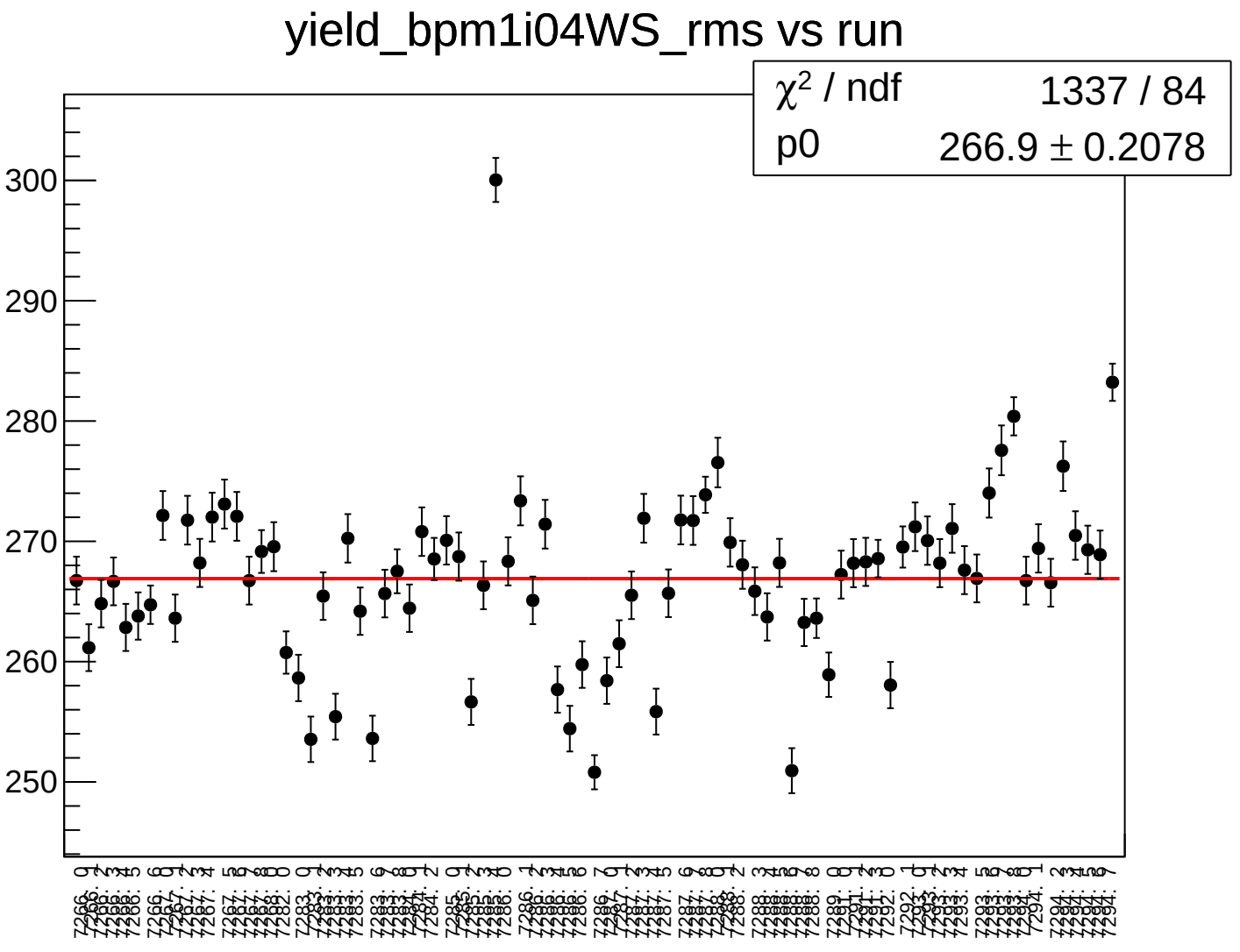

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 2.841e+05 / 84
p0 1.459e+05 ± 0.2815
146.2
146.1
146
145.9
145.8
145.7
pull
Entries 85
Mean −34.97
Std Dev 354.3
100
50
0
−50
−100

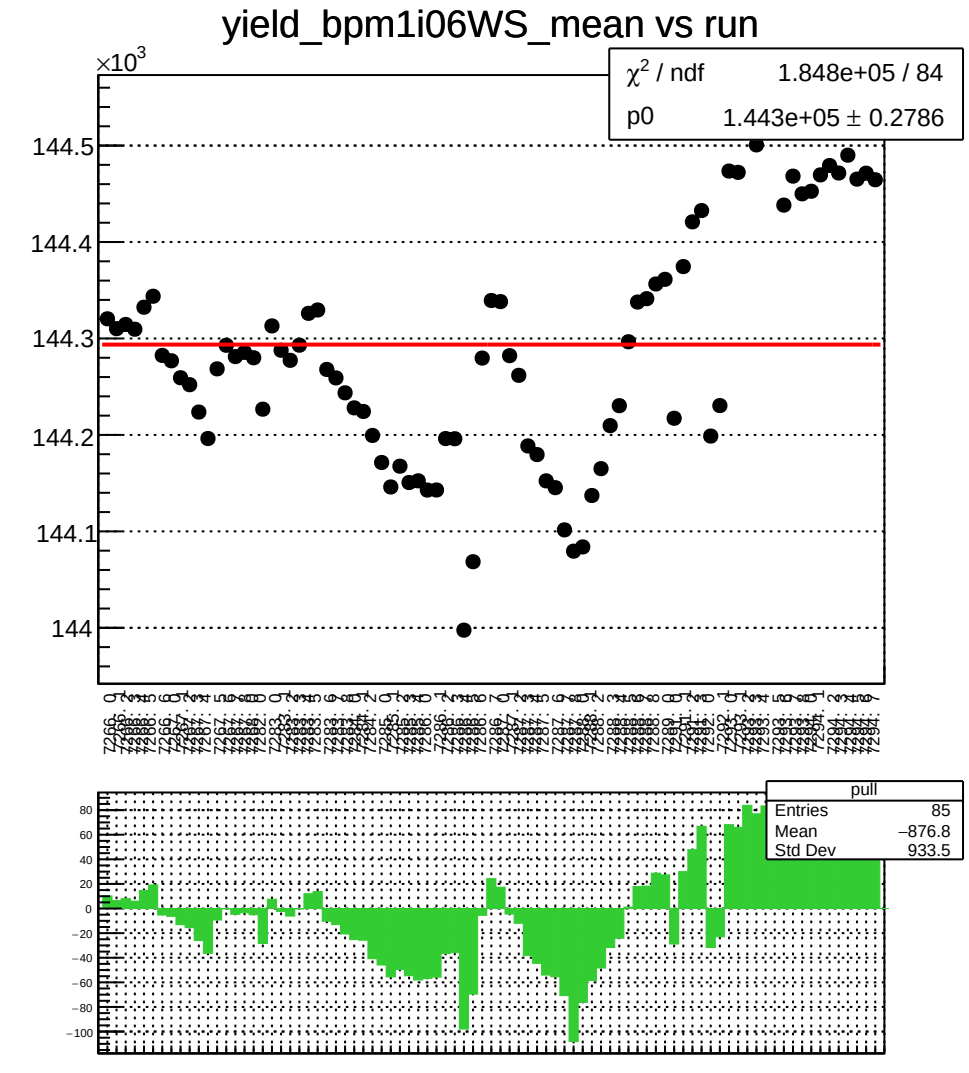

pull1D
Entries 85
Mean −2.306
Std Dev 4.082
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

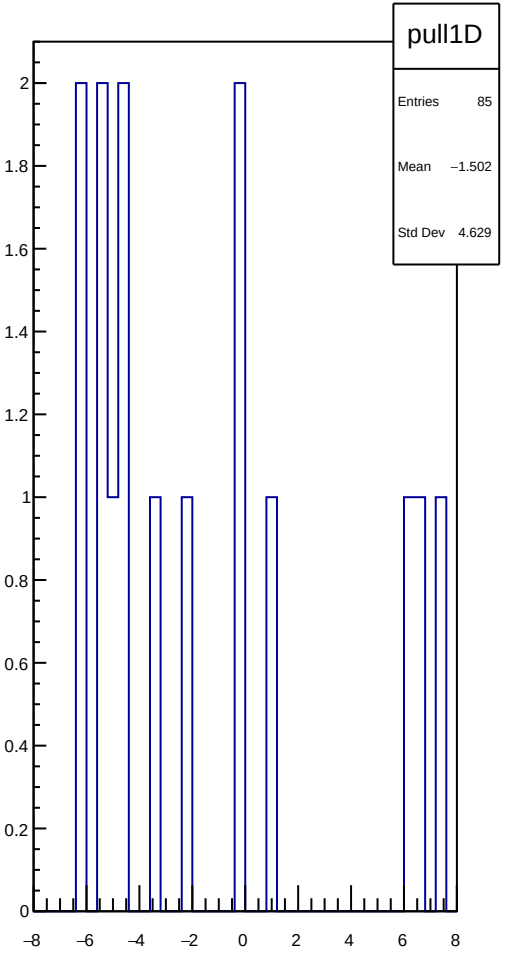

yield_bpm1i02WS_rms vs run
χ² / ndf 1377 / 84
p0 255.6 ± 0.1991
290
280
270
260
250
240

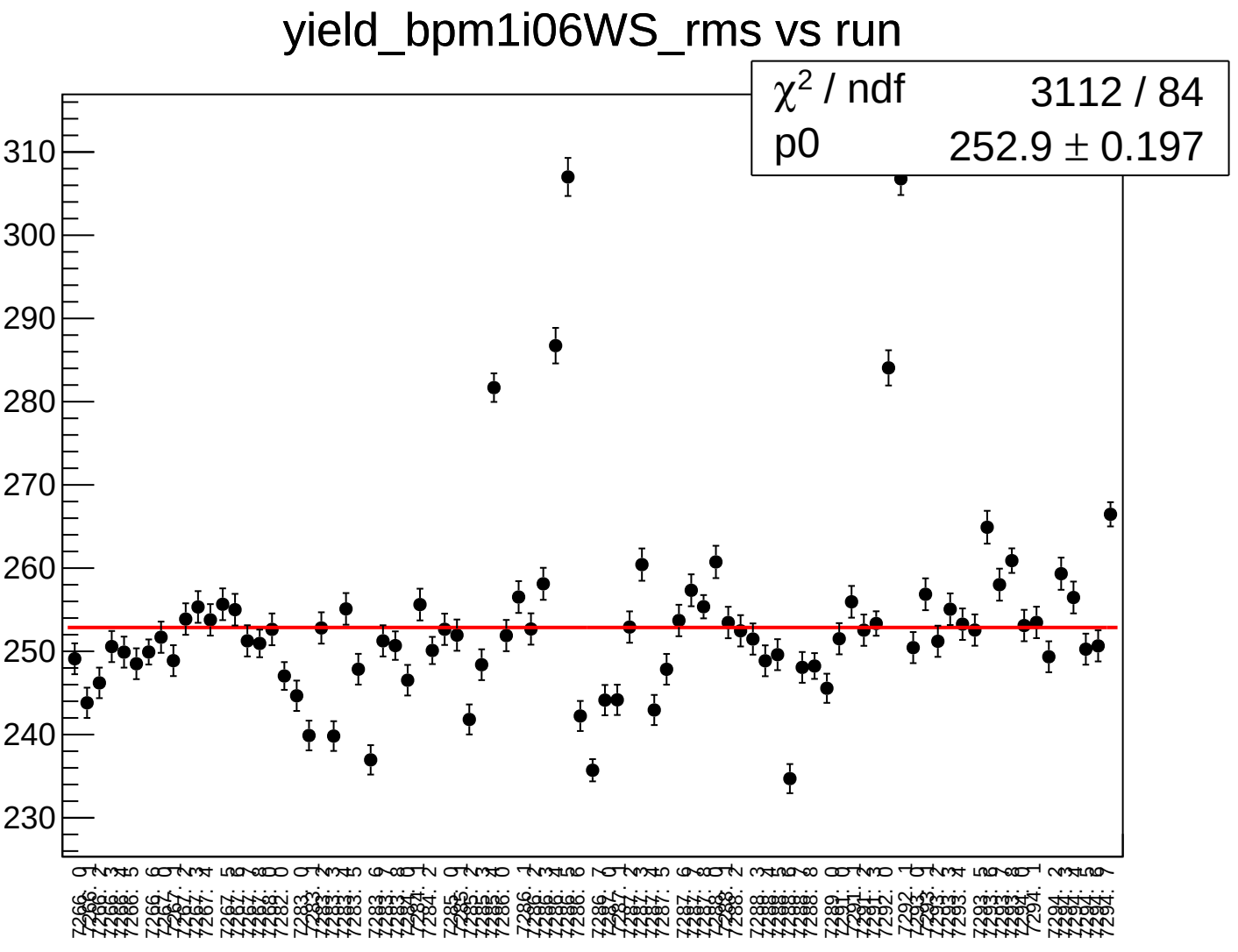

yield_bpm1i04WS_mean vs run
×10^3
χ^2 / ndf 1.45e+05 / 84
p0 1.489e+05 ± 0.2939
149.1
149.05
149
148.95
148.9
148.85
148.8
148.75
pull
Entries 85
Mean −941.3
Std Dev 912
60
40
20
0
−20
−40
−60
−80
−100

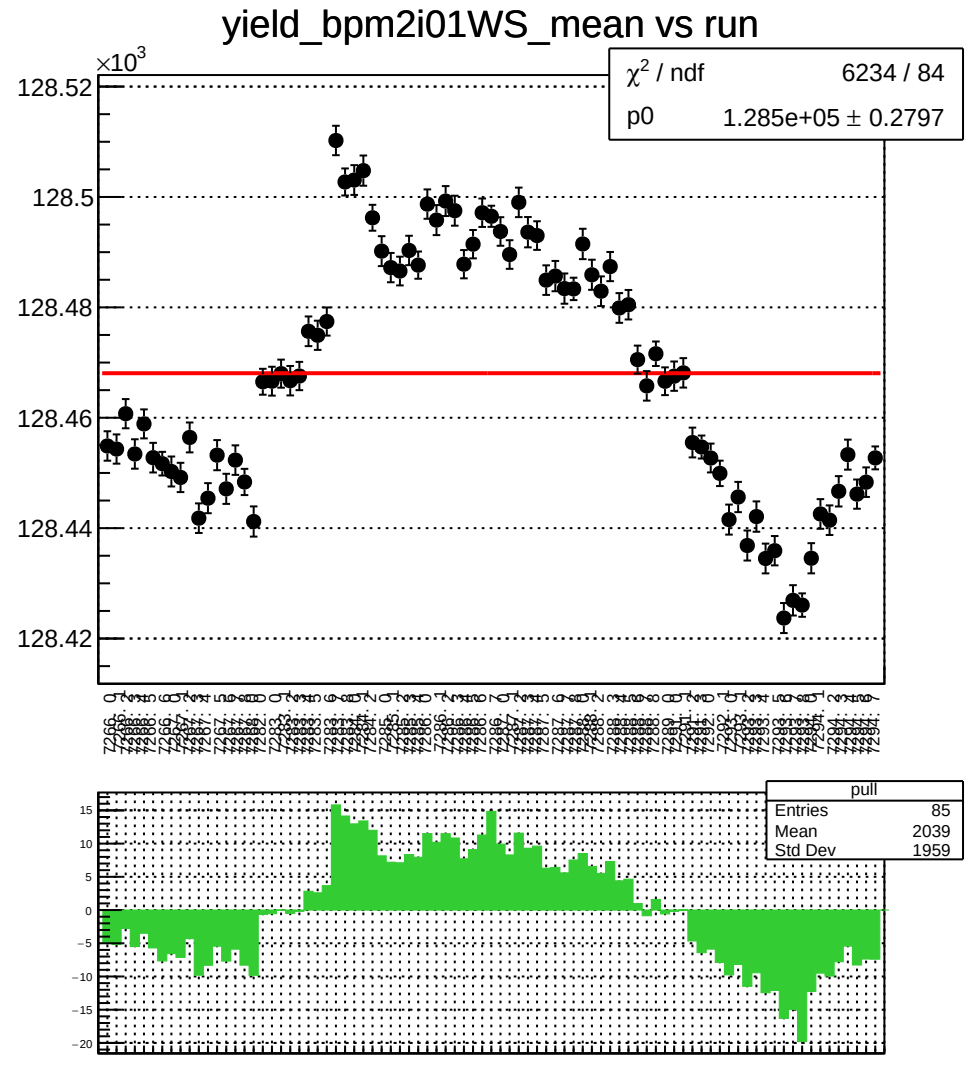

pull1D
Entries 85
Mean 1.329
Std Dev 4.017
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

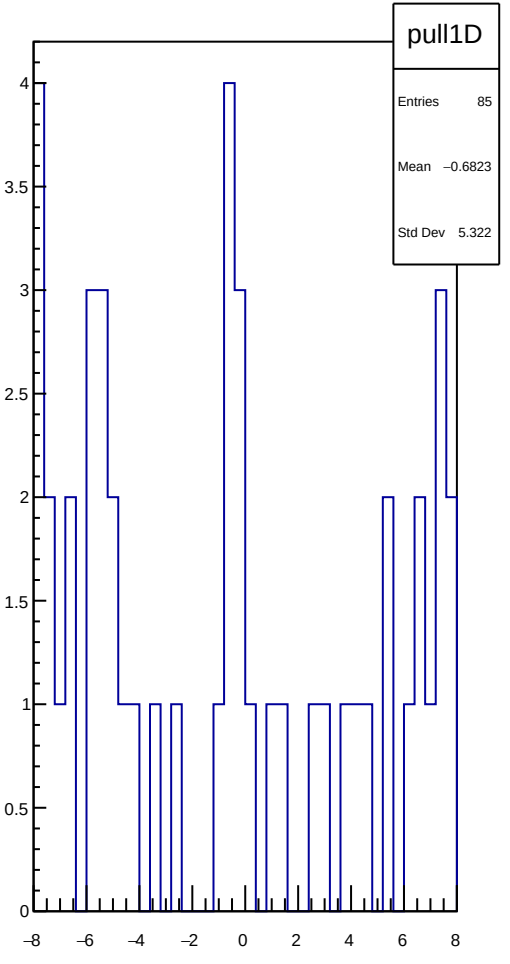

yield_bpm1i04WS_rms vs run
χ² / ndf 1337 / 84
p0 266.9 ± 0.2078
300
290
280
270
260
250

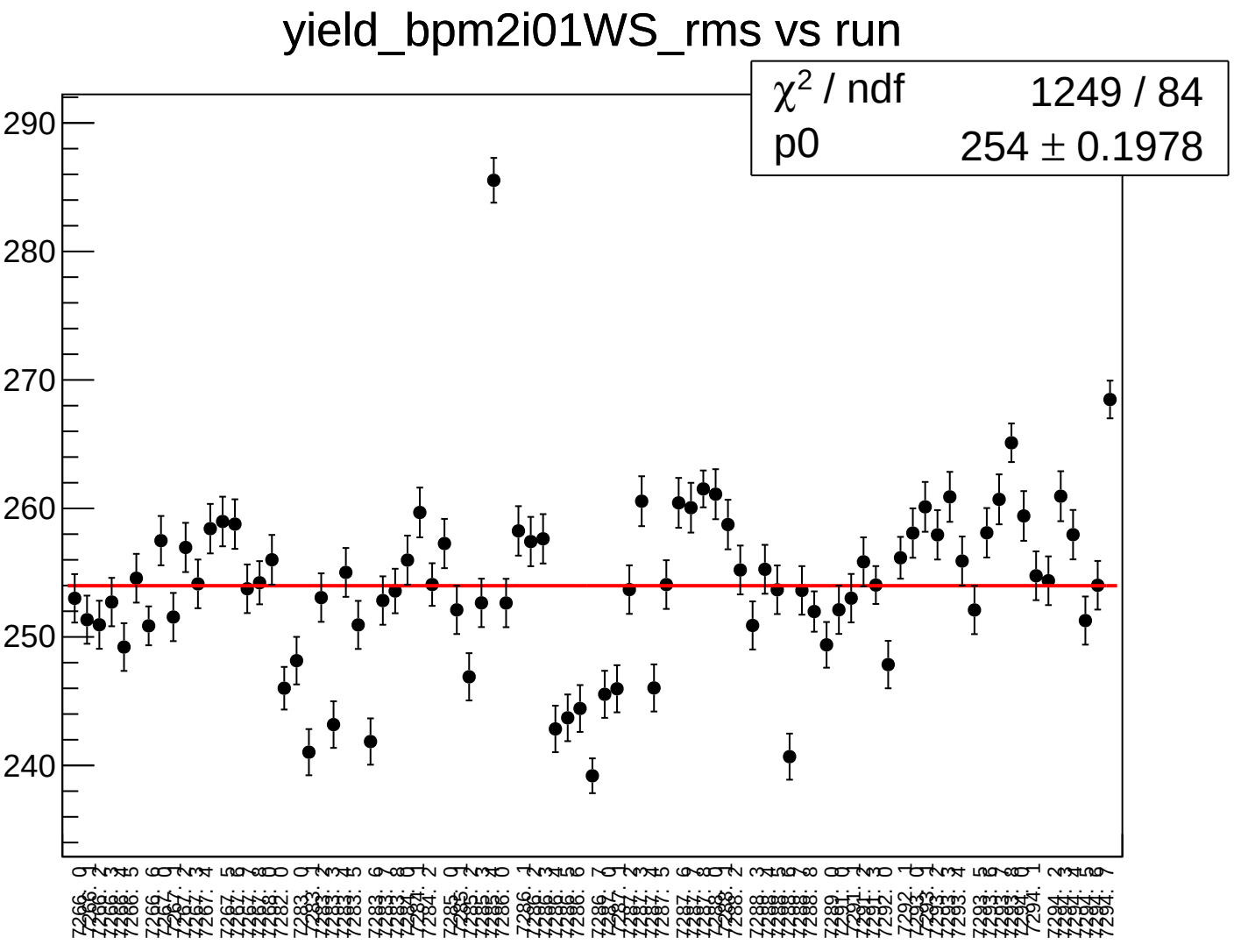

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 1.848e+05 / 84
p0 1.443e+05 ± 0.2786
144.5
144.4
144.3
144.2
144.1
144
pull
Entries 85
Mean −876.8
Std Dev 933.5
80
60
40
20
0
−20
−40
−60
−80
−100

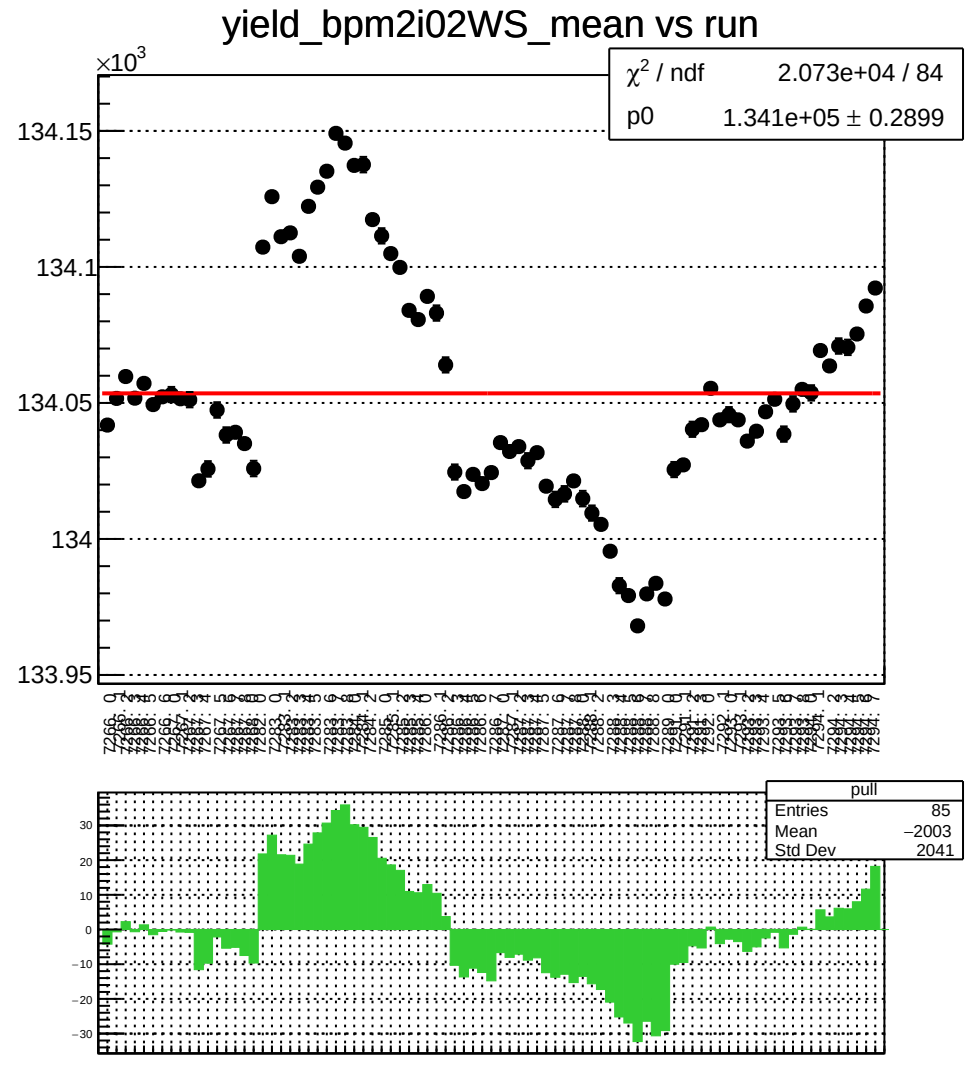

pull1D
Entries 85
Mean −1.502
Std Dev 4.629
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

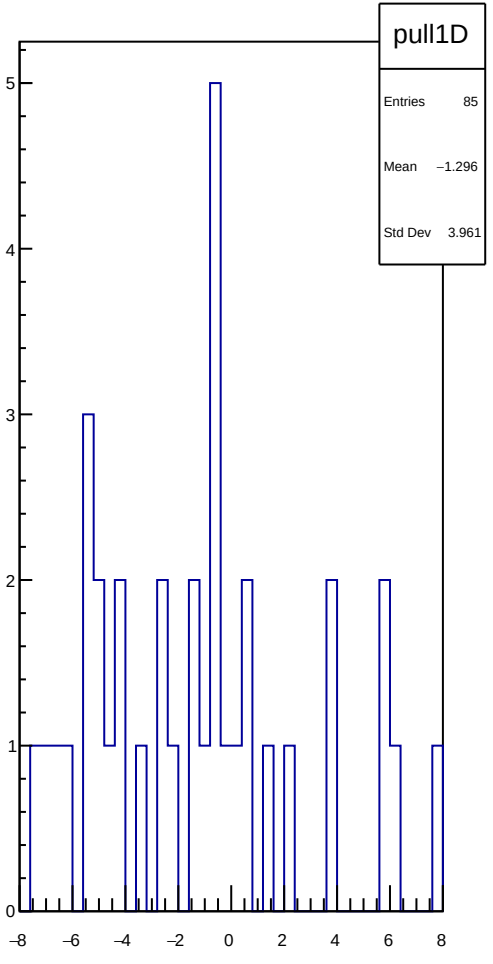

yield_bpm1i06WS_rms vs run
χ² / ndf 3112 / 84
p0 252.9 ± 0.197
310
300
290
280
270
260
250
240
230

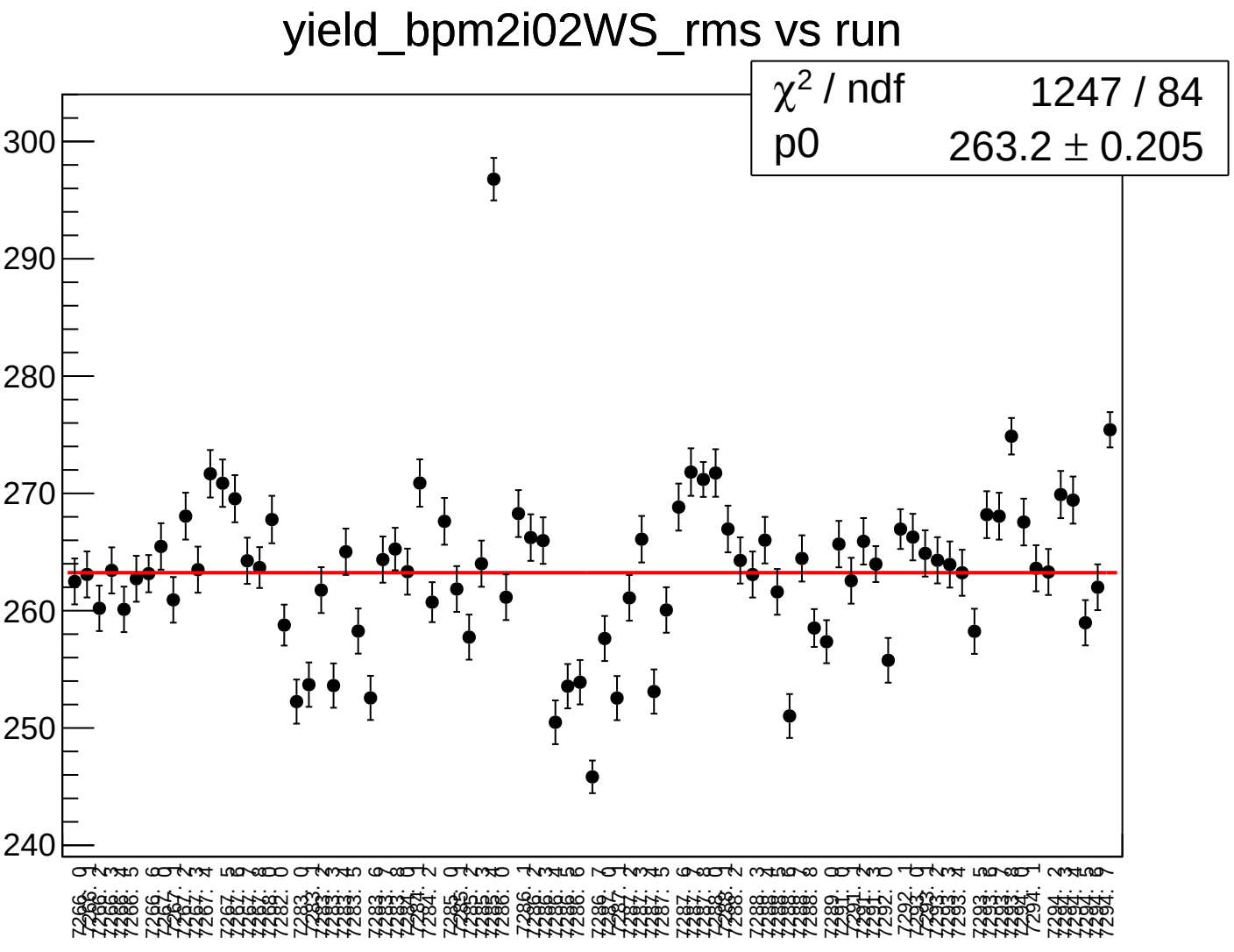

yield_bpm2i01WS_mean vs run
×10^3
128.52
128.5
128.48
128.46
128.44
128.42
χ² / ndf 6234 / 84
p0 1.285e+05 ± 0.2797
pull
Entries 85
Mean 2039
Std Dev 1959
15
10
5
0
−5
−10
−15
−20

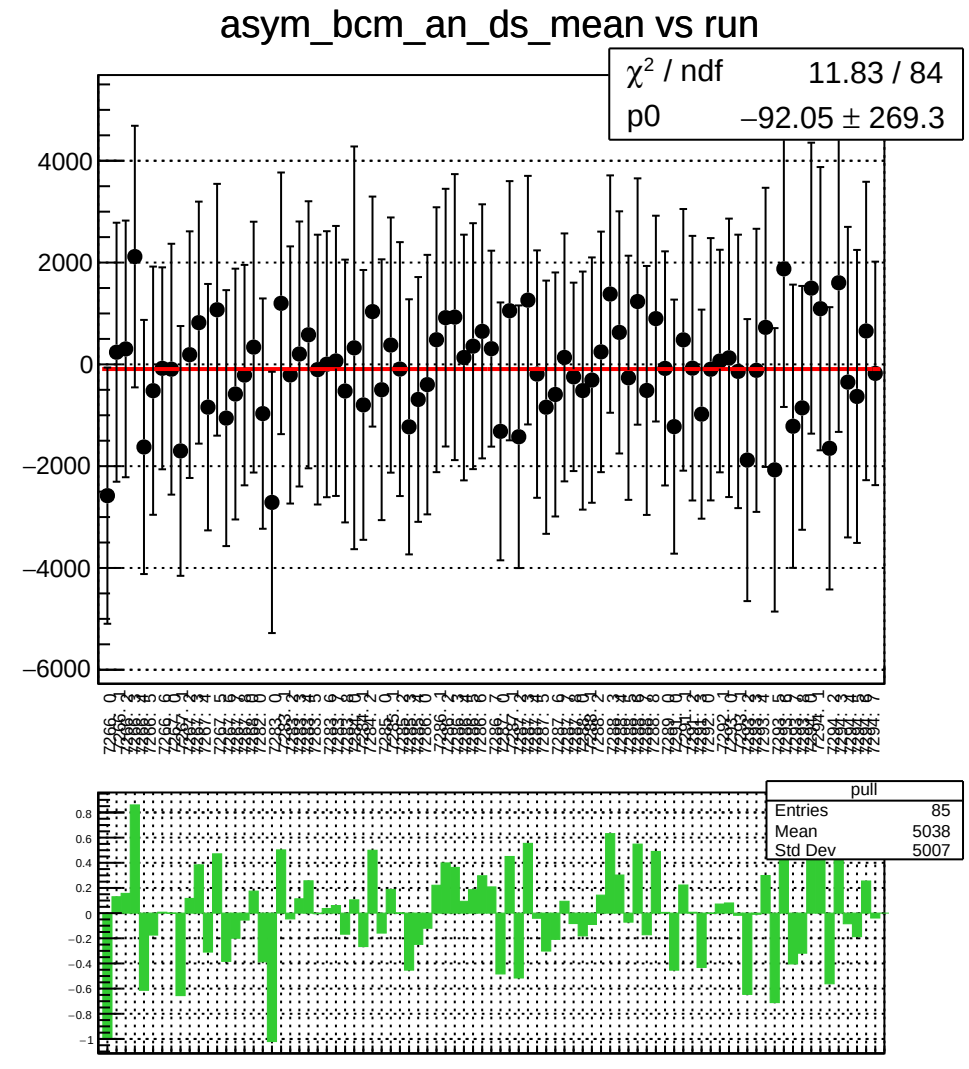

pull1D
Entries 85
Mean −0.6823
Std Dev 5.322
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

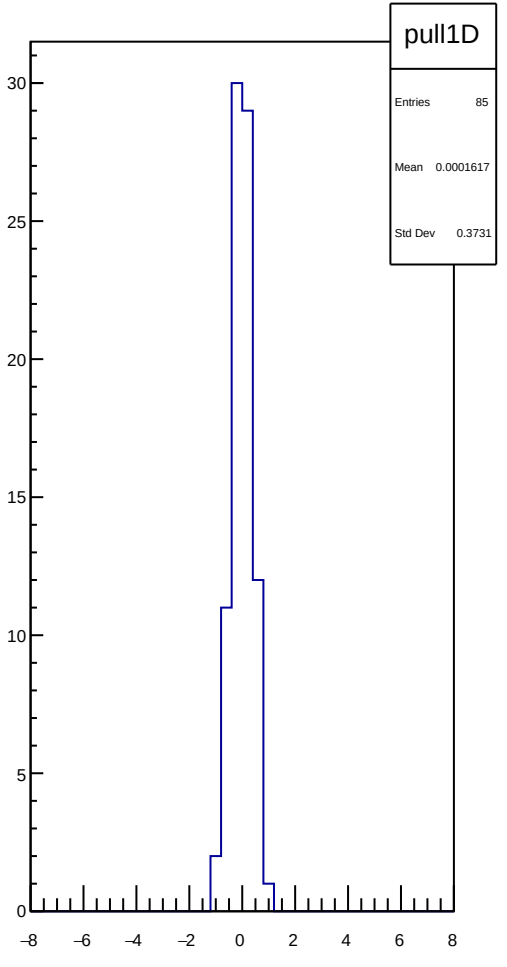

yield_bpm2i01WS_rms vs run
χ² / ndf 1249 / 84
p0 254 ± 0.1978
290
280
270
260
250
240

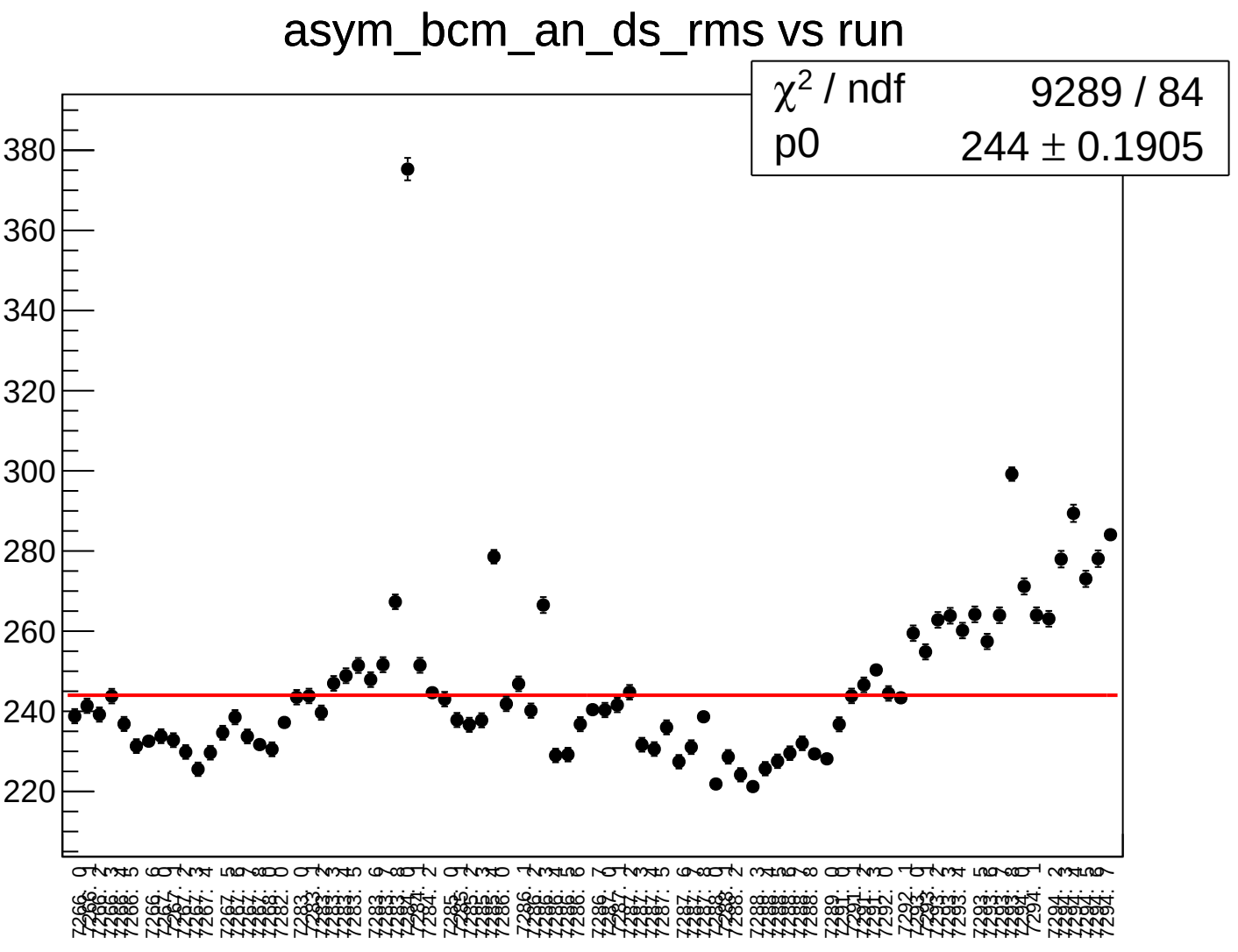

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 2.073e+04 / 84
p0 1.341e+05 ± 0.2899
134.15
134.1
134.05
134
133.95
pull
Entries 85
Mean −2003
Std Dev 2041
30
20
10
0
−10
−20
−30

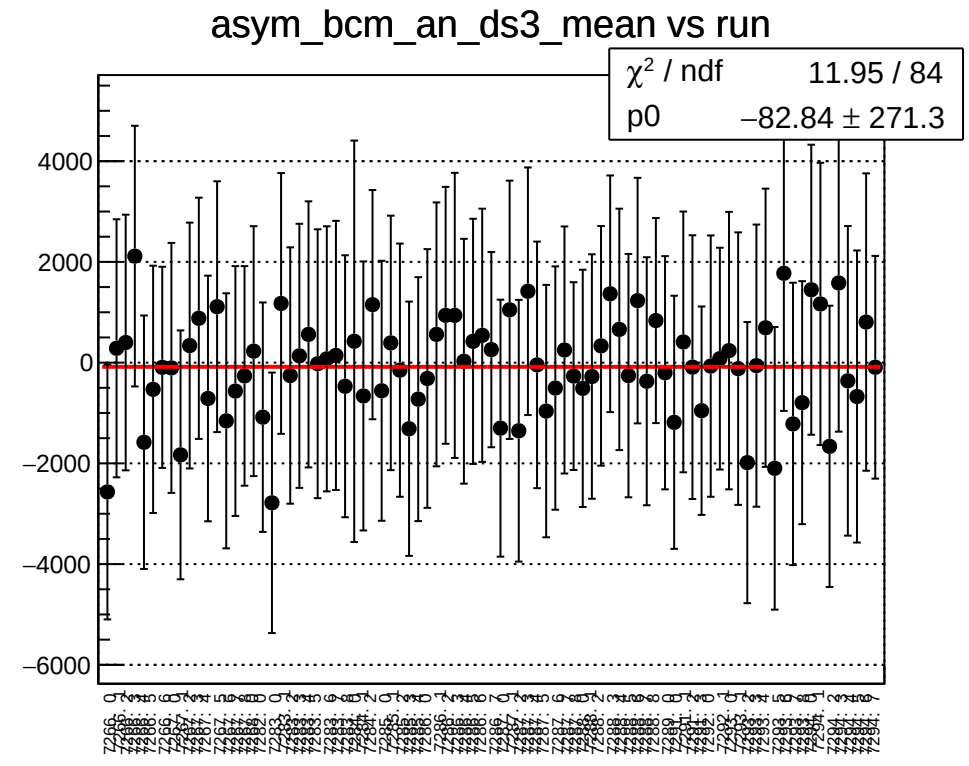

pull1D
Entries 85
Mean −1.296
Std Dev 3.961
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

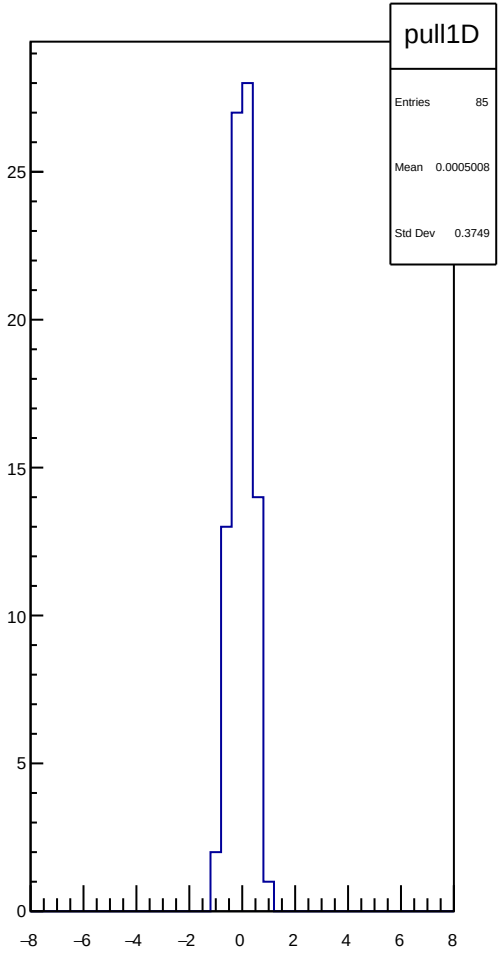

yield_bpm2i02WS_rms vs run
χ² / ndf 1247 / 84
p0 263.2 ± 0.205
300
290
280
270
260
250
240

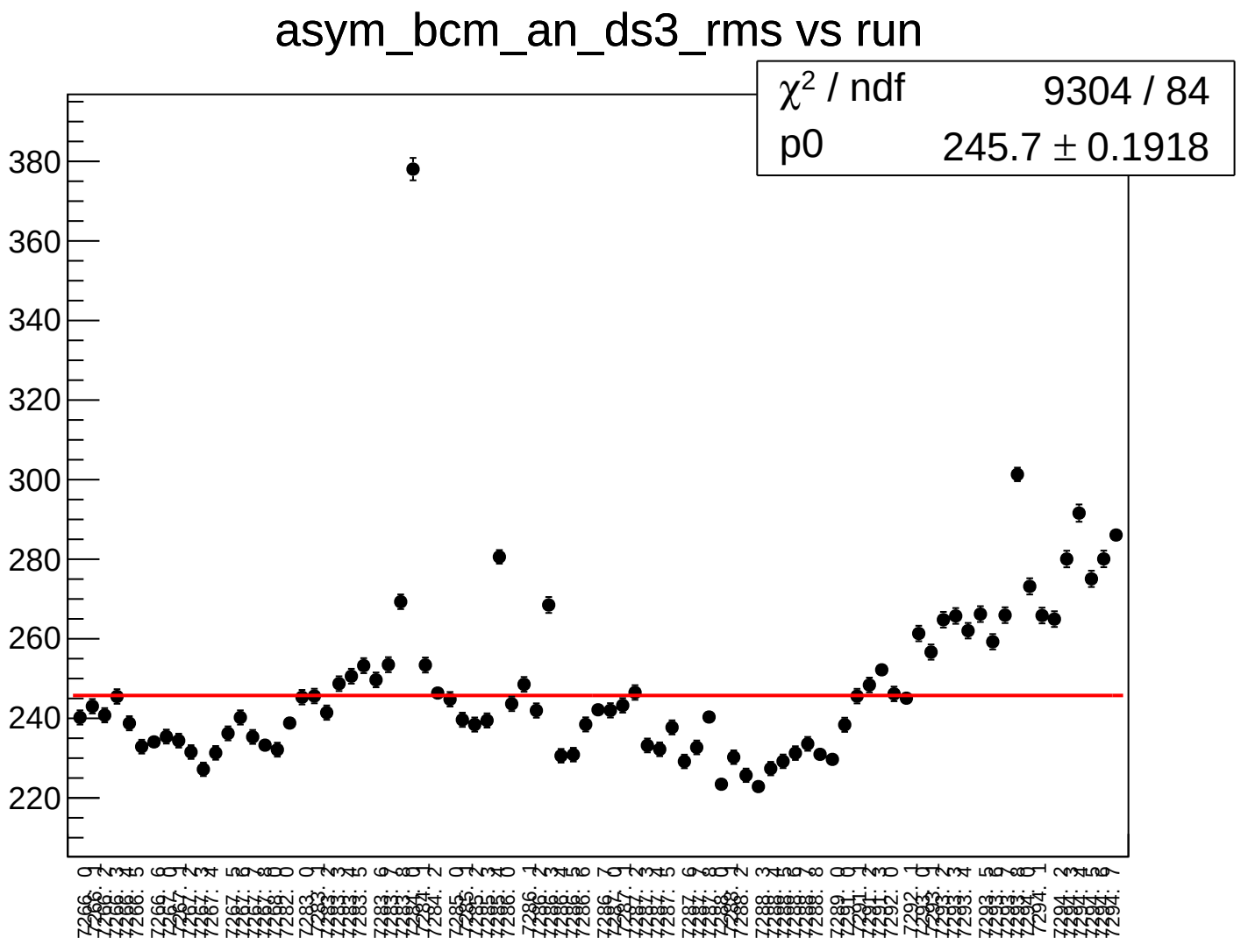

asym_bcm_an_ds_mean vs run
χ² / ndf 11.83 / 84
p0 −92.05 ± 269.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 5038
Std Dev 5007
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

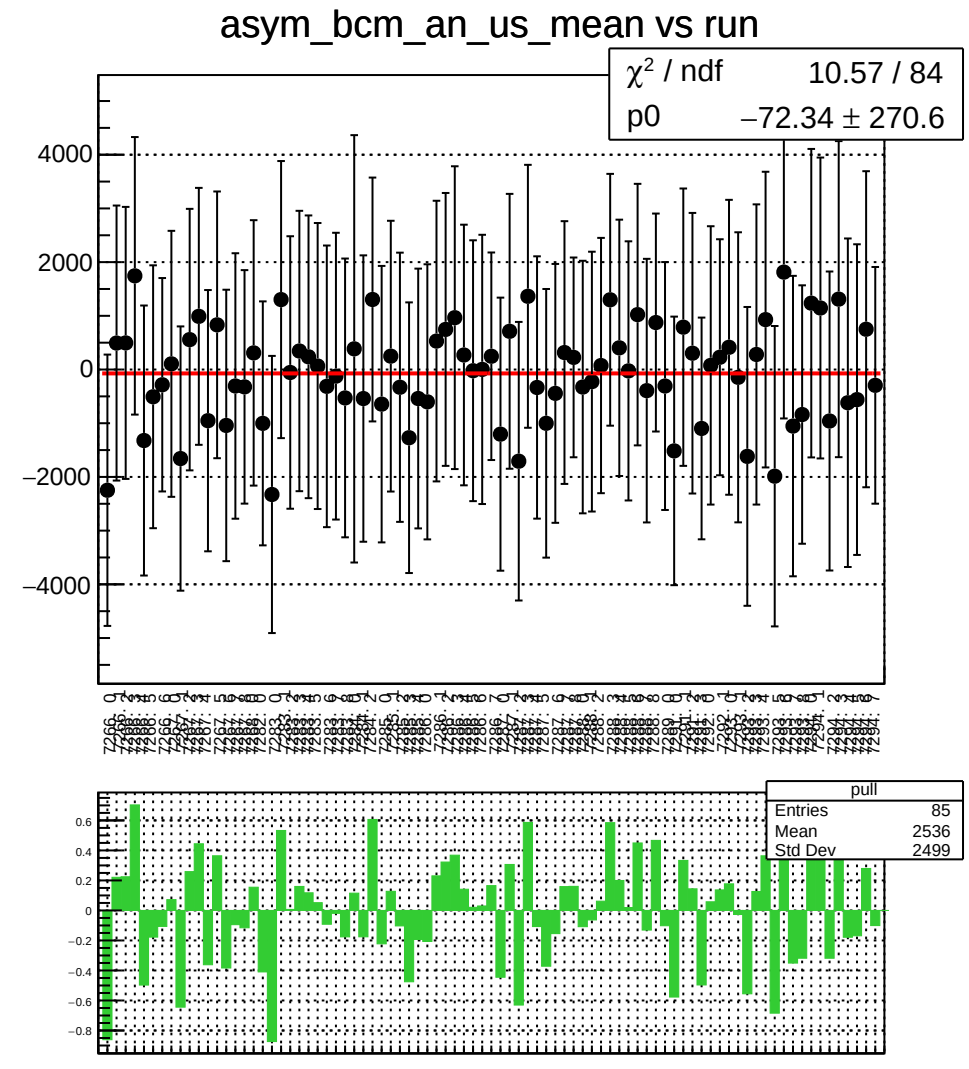

pull1D
Entries 85
Mean 0.0001617
Std Dev 0.3731
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

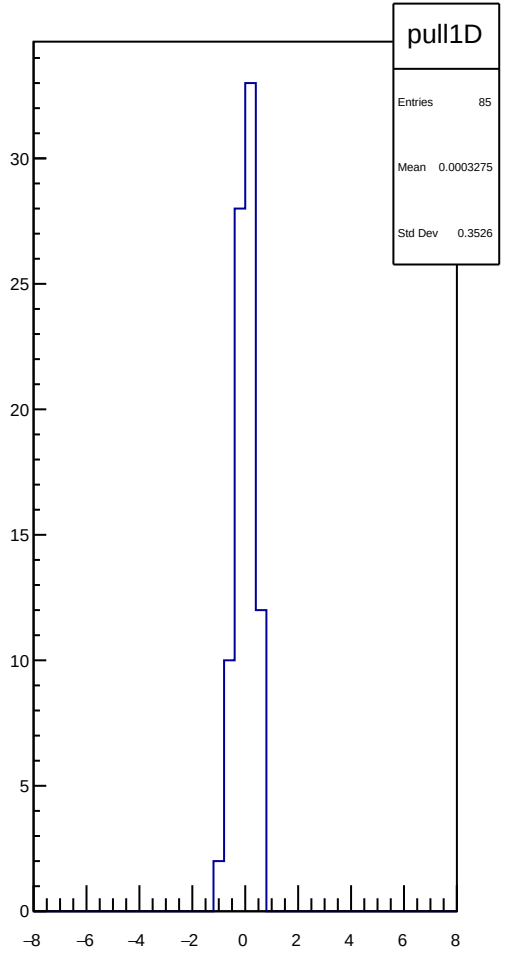

asym_bcm_an_ds_rms vs run
χ^2 / ndf 9289 / 84
p0 244 ± 0.1905
380
360
340
320
300
280
260
240
220

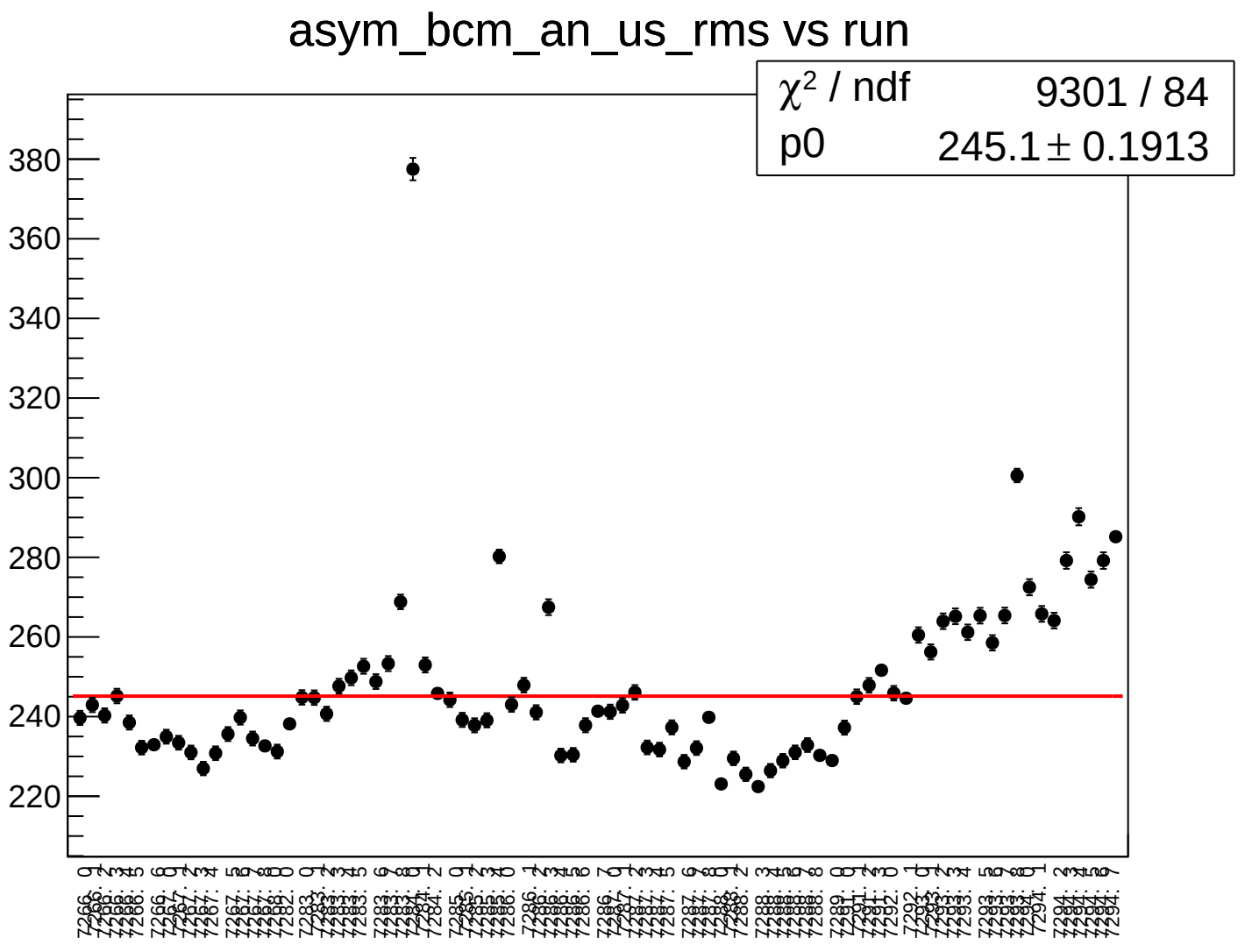

asym_bcm_an_ds3_mean vs run
χ² / ndf 11.95 / 84
p0 −82.84 ± 271.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 1676
Std Dev 1645
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

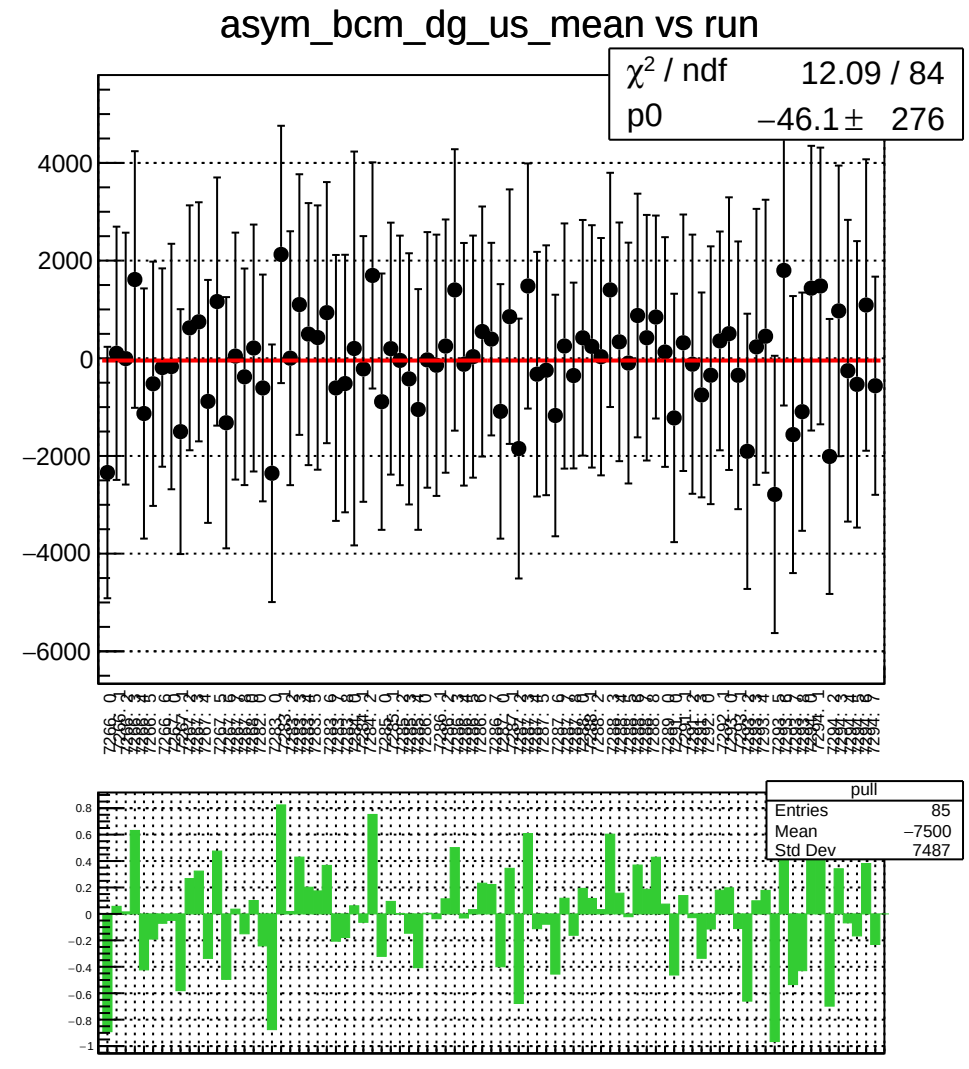

pull1D
Entries 85
Mean 0.0005008
Std Dev 0.3749
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

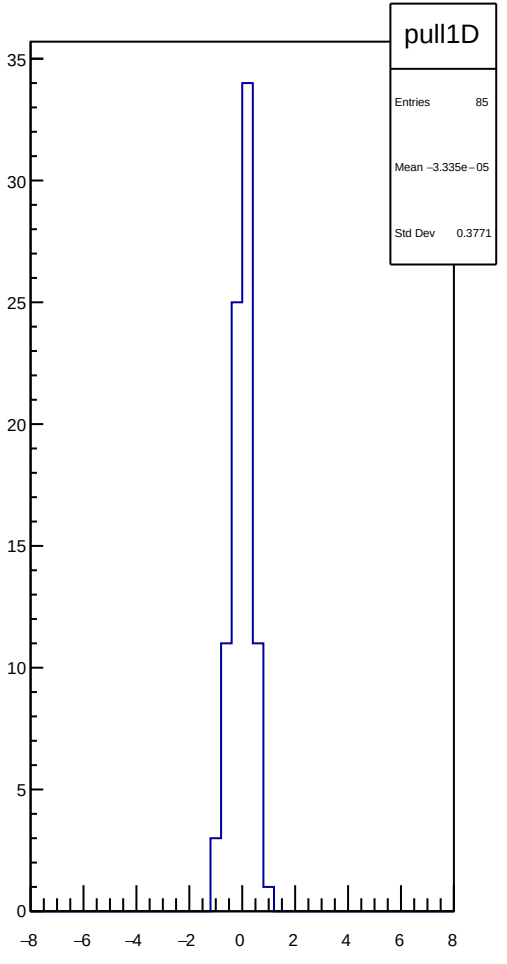

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 9304 / 84
p0 245.7 ± 0.1918
380
360
340
320
300
280
260
240
220

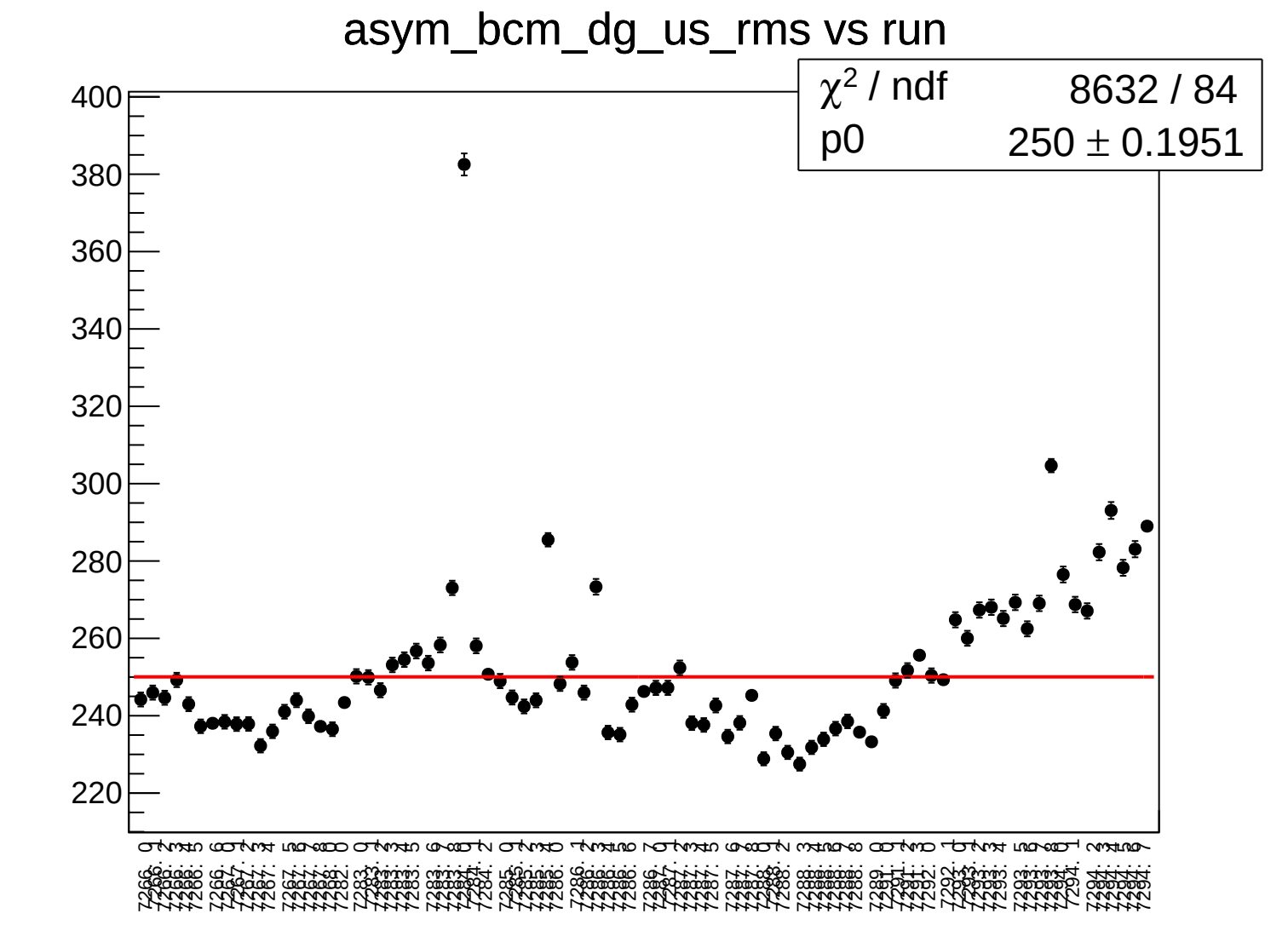

asym_bcm_an_us_mean vs run
χ² / ndf 10.57 / 84
p0 −72.34 ± 270.6
4000
2000
0
−2000
−4000
pull
Entries 85
Mean 2536
Std Dev 2499
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

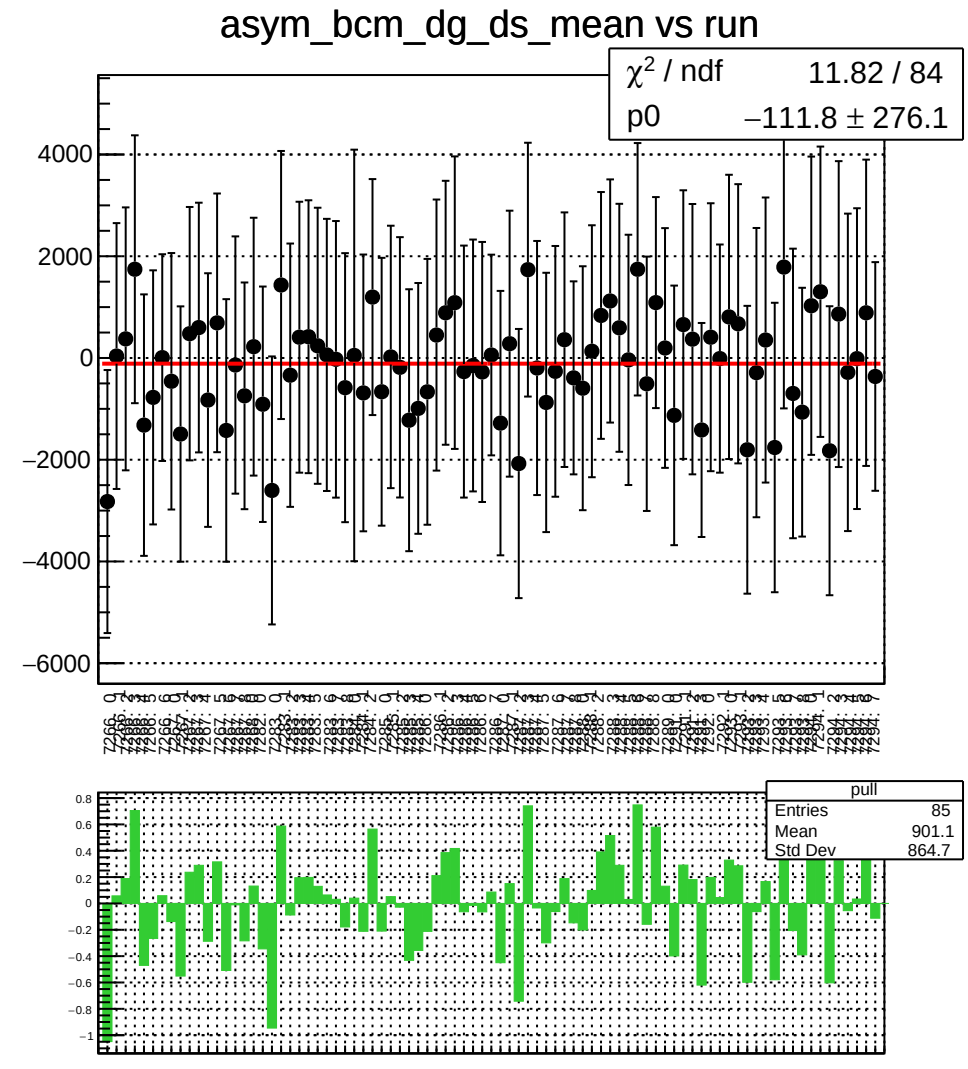

pull1D
Entries 85
Mean 0.0003275
Std Dev 0.3526
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

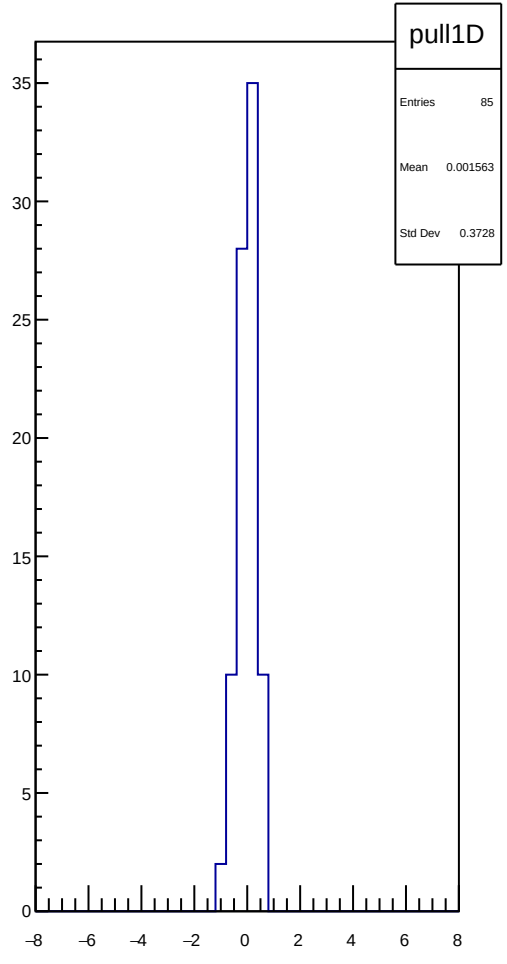

asym_bcm_an_us_rms vs run
χ² / ndf 9301 / 84
p0 245.1 ± 0.1913
380
360
340
320
300
280
260
240
220

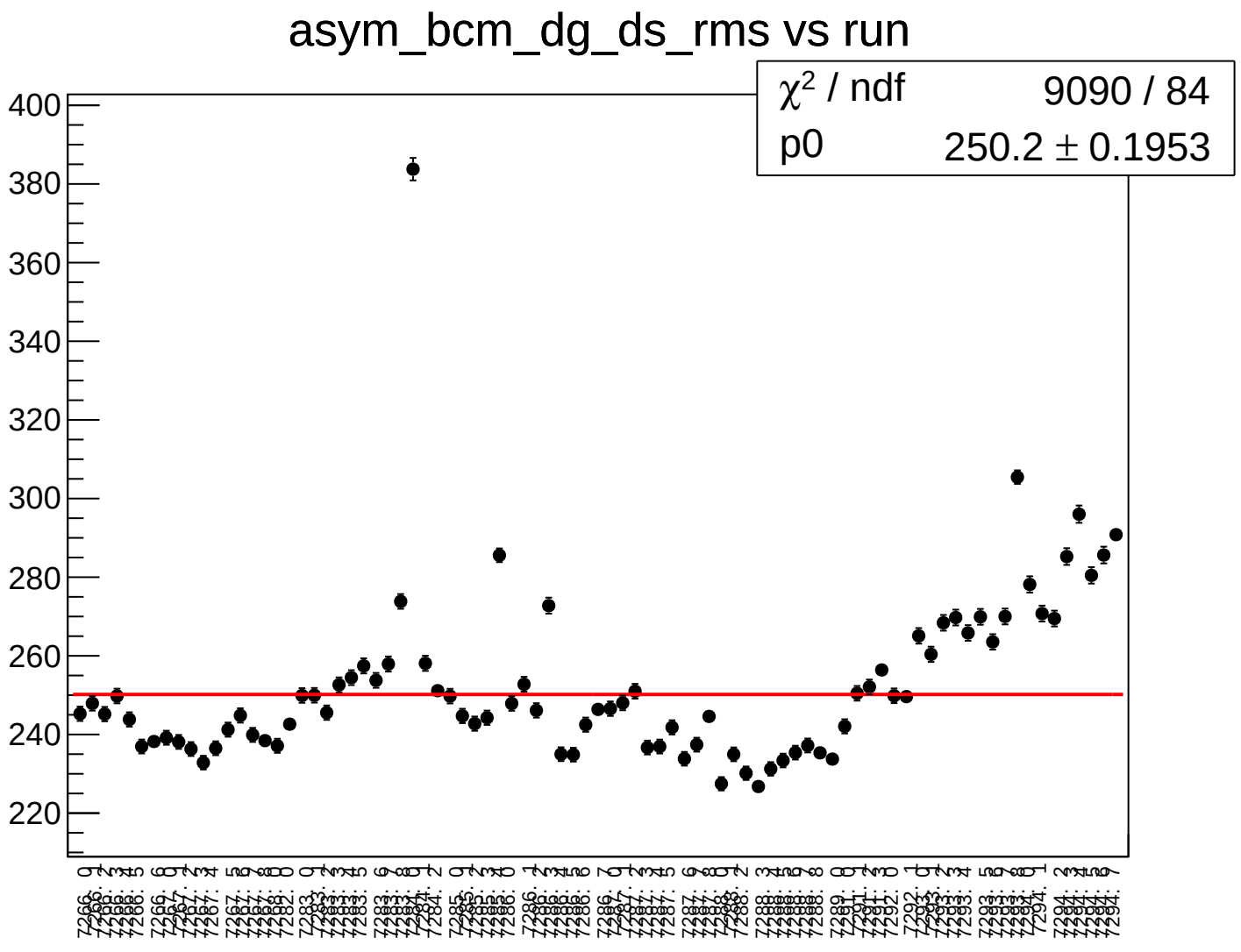

asym_bcm_dg_us_mean vs run
χ² / ndf 12.09 / 84
p0 −46.1 ± 276
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean −7500
Std Dev 7487
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

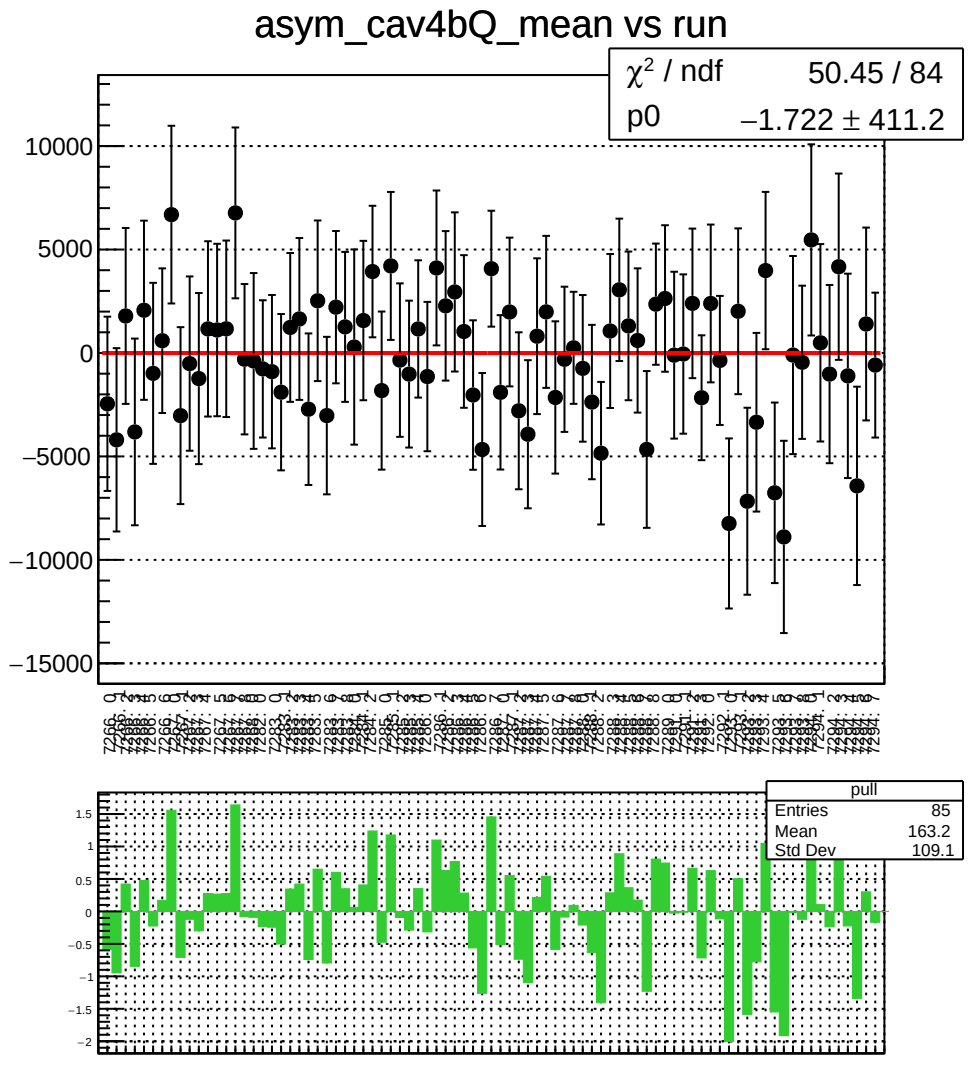

pull1D
Entries 85
Mean −3.335e−05
Std Dev 0.3771
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

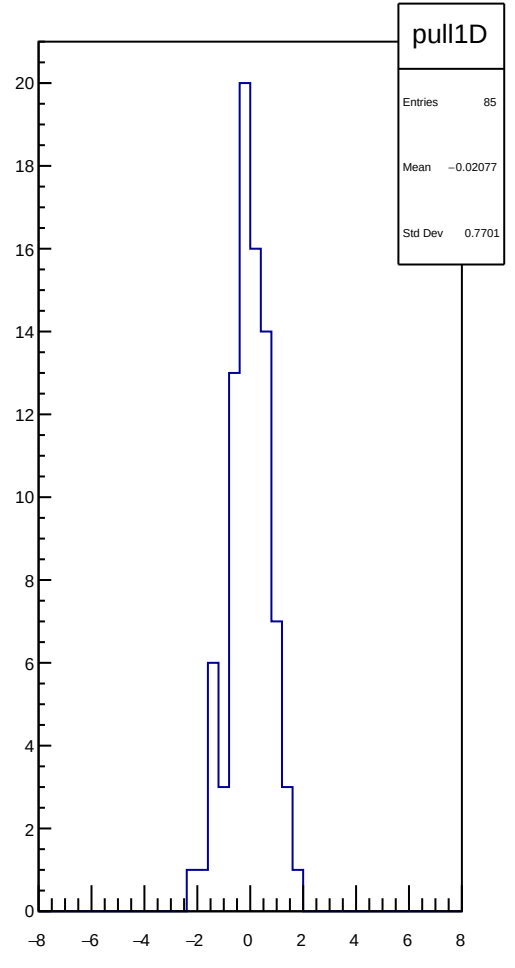

asym_bcm_dg_us_rms vs run
χ² / ndf 8632 / 84
p0 250 ± 0.1951
400
380
360
340
320
300
280
260
240
220

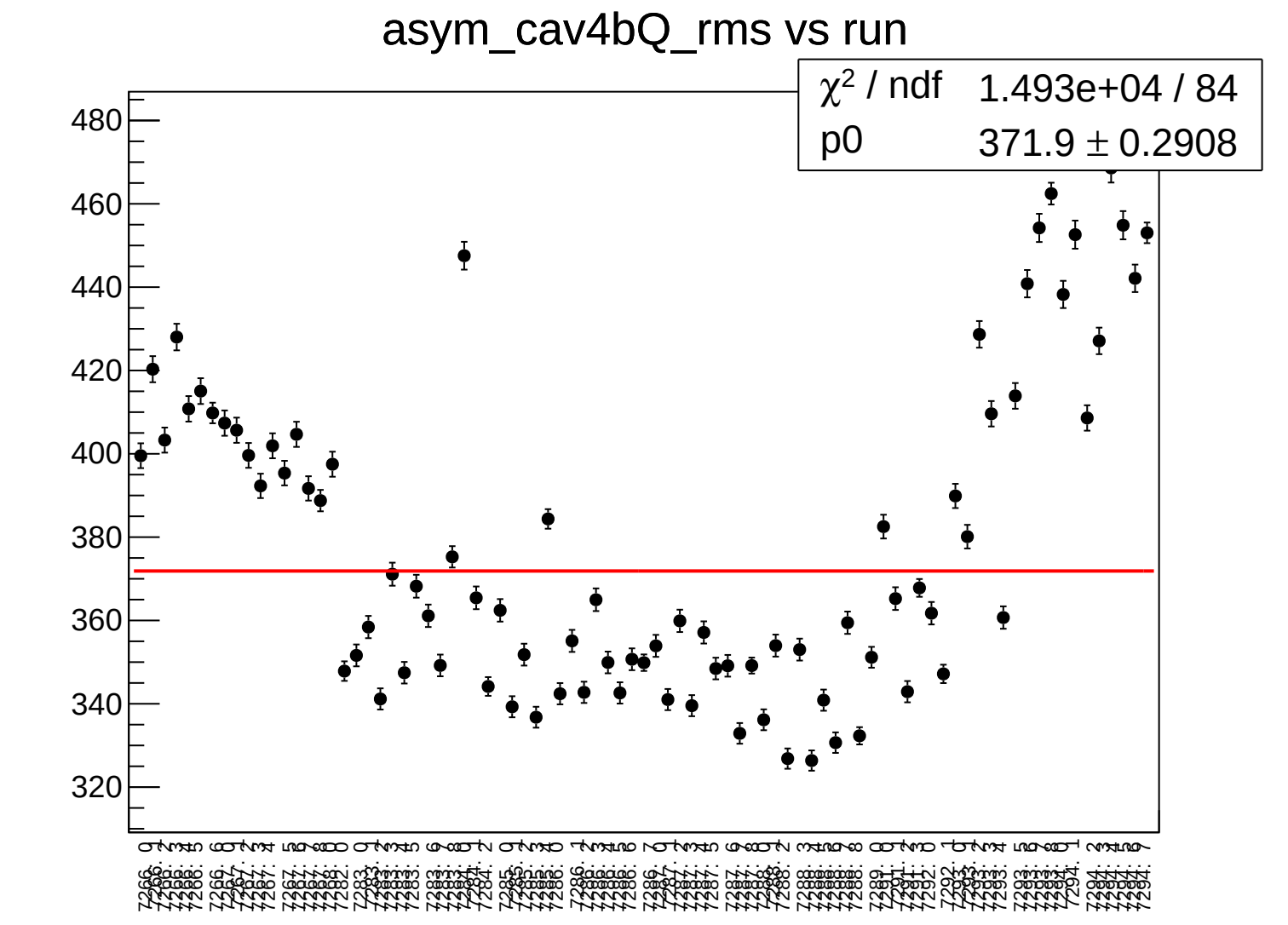

asym_bcm_dg_ds_mean vs run
χ² / ndf 11.82 / 84
p0 −111.8 ± 276.1
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 901.1
Std Dev 864.7
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

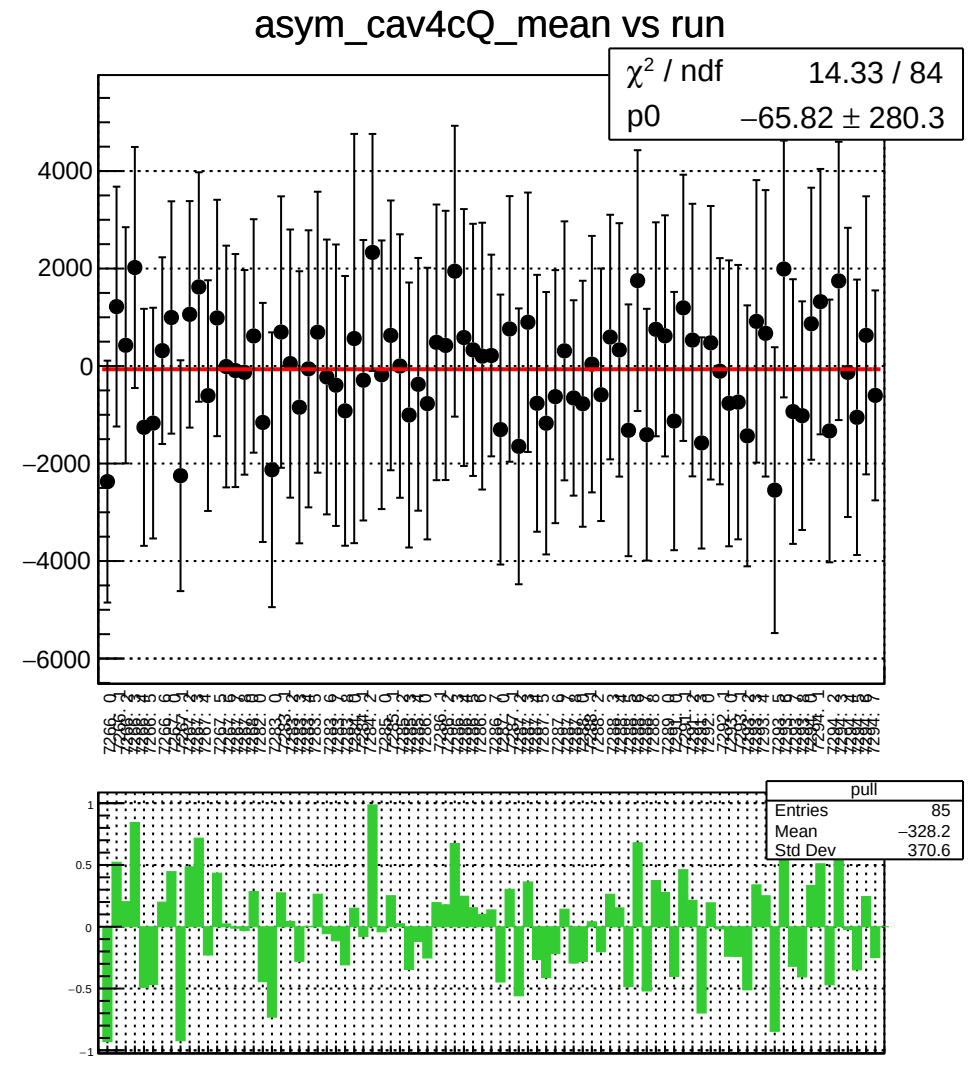

pull1D
Entries 85
Mean 0.001563
Std Dev 0.3728
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

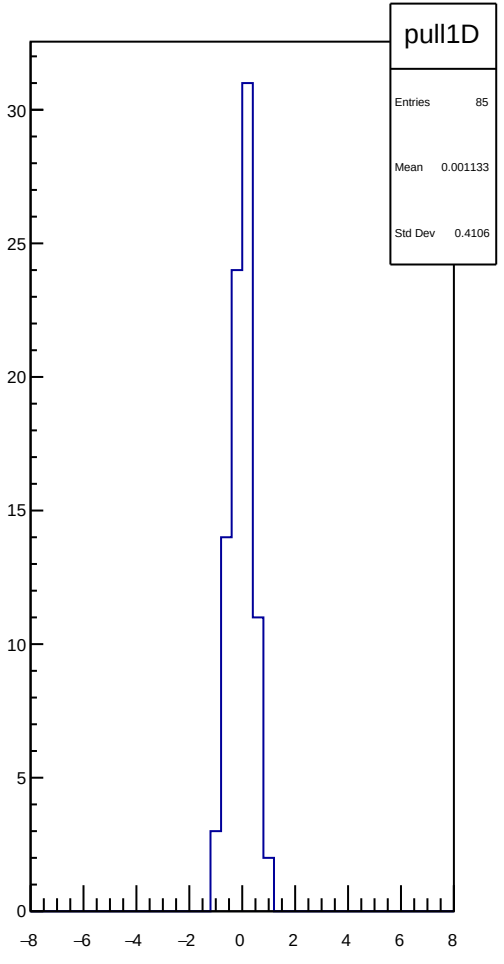

asym_bcm_dg_ds_rms vs run
χ² / ndf 9090 / 84
p0 250.2 ± 0.1953
400
380
360
340
320
300
280
260
240
220

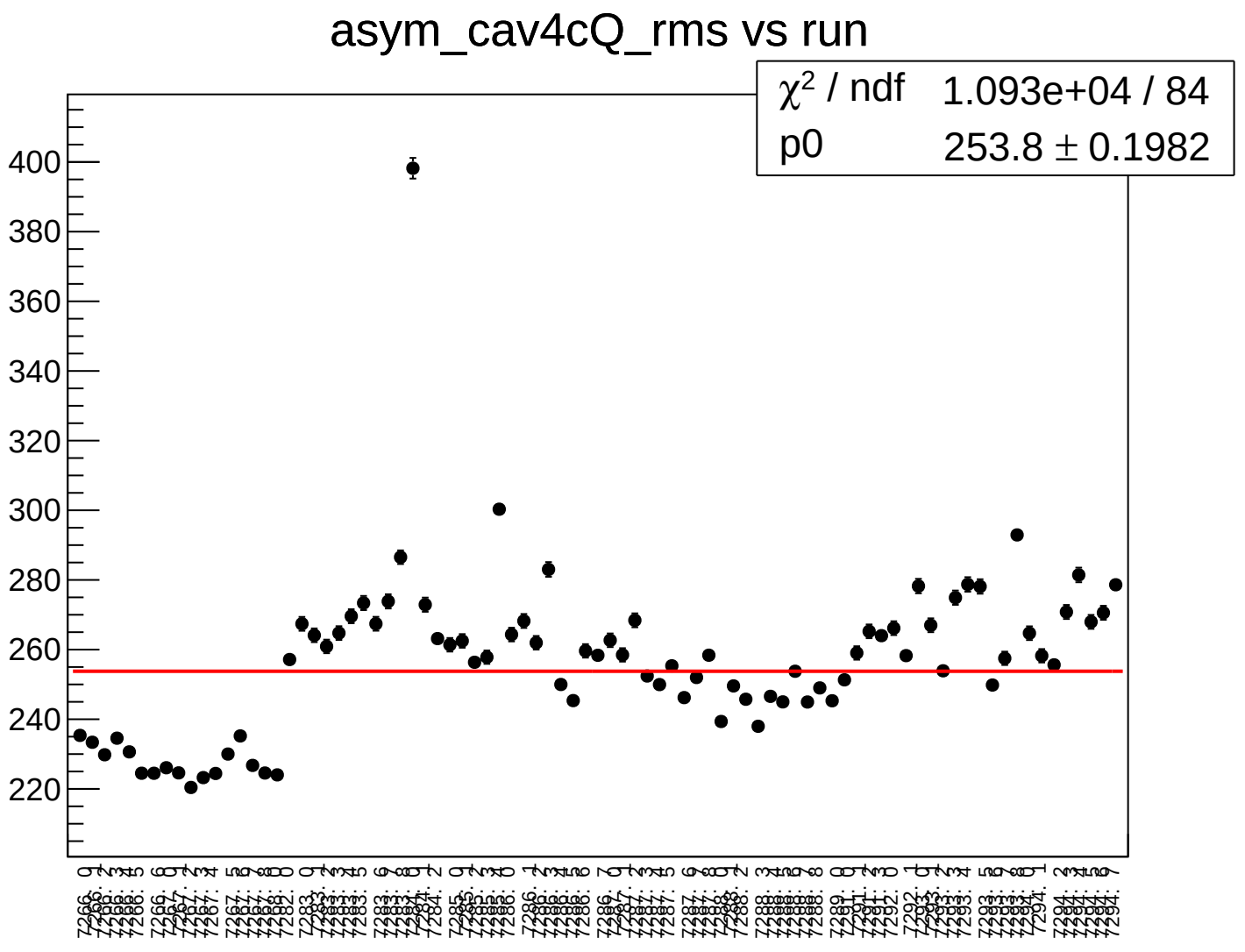

asym_cav4bQ_mean vs run
χ² / ndf 50.45 / 84
p0 −1.722 ± 411.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 163.2
Std Dev 109.1
1.5
1
0.5
0
−0.5
−1
−1.5
−2

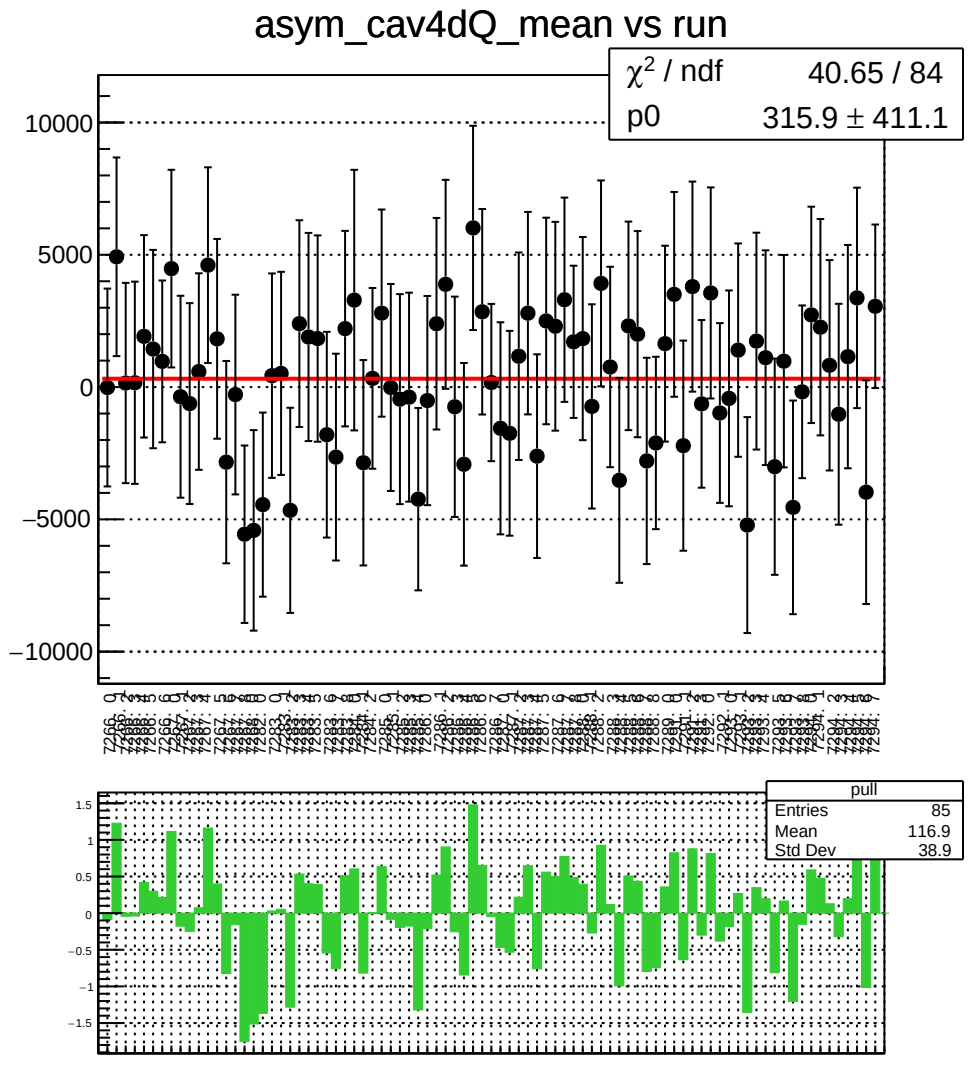

pull1D
Entries 85
Mean −0.02077
Std Dev 0.7701
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

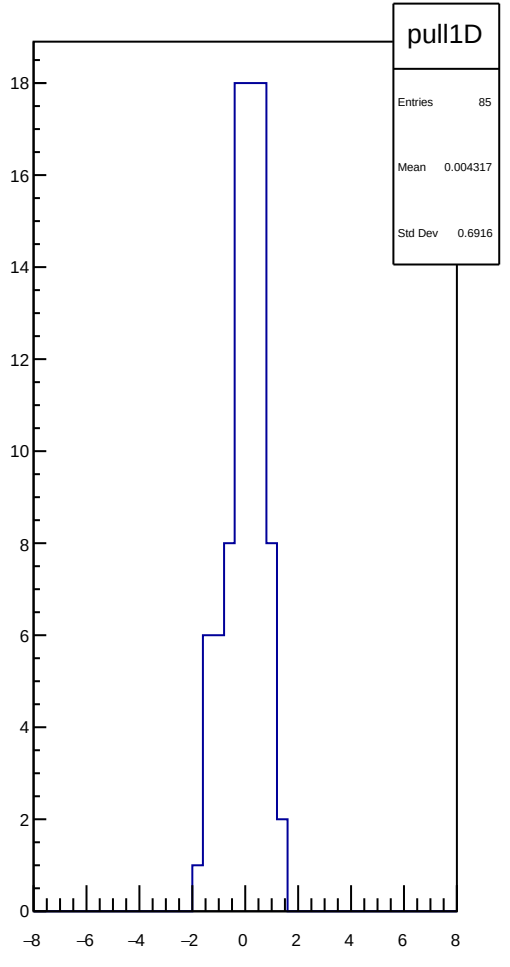

asym_cav4bQ_rms vs run
χ² / ndf 1.493e+04 / 84
p0 371.9 ± 0.2908
480
460
440
420
400
380
360
340
320

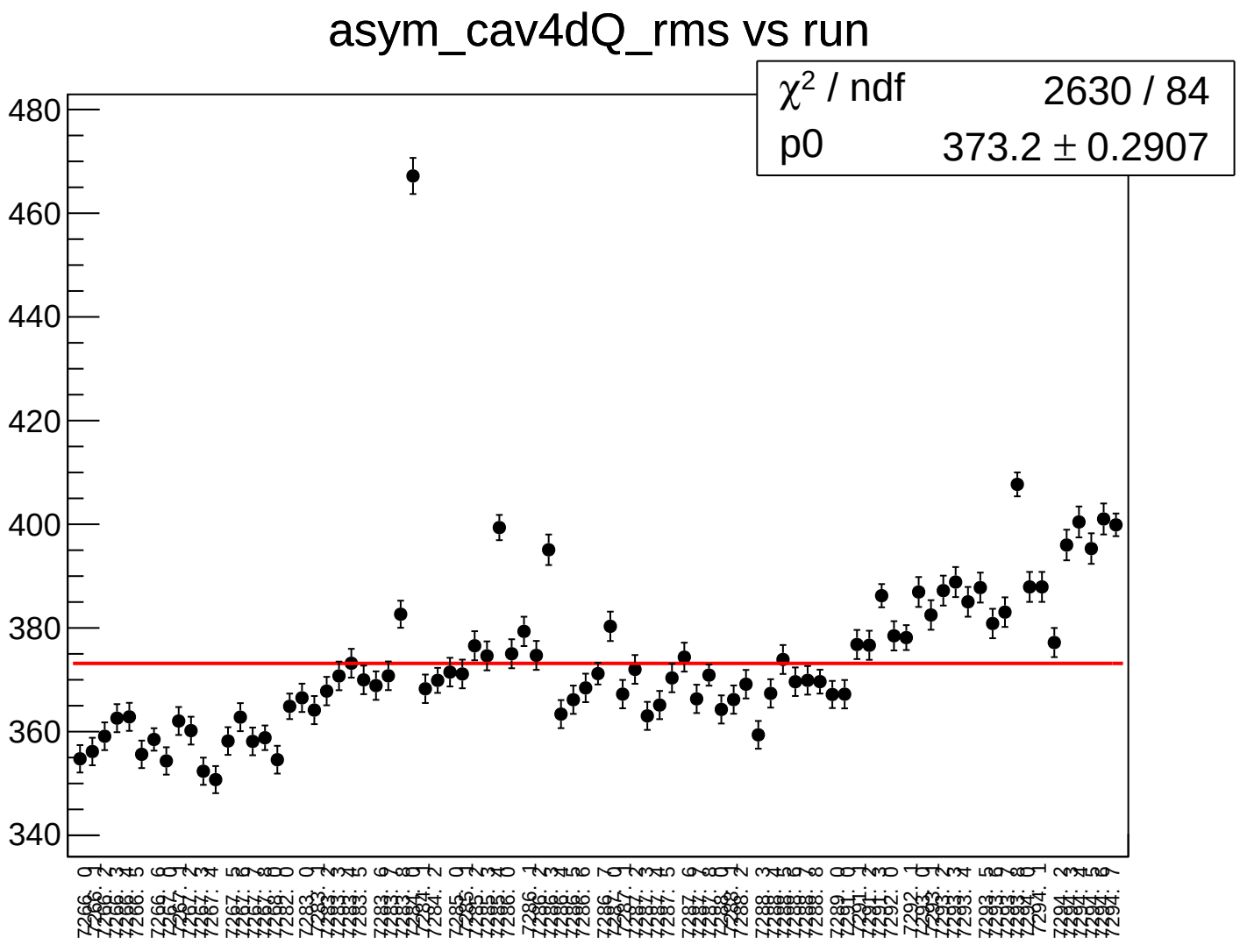

asym_cav4cQ_mean vs run
χ² / ndf 14.33 / 84
p0 −65.82 ± 280.3
pull
Entries 85
Mean −328.2
Std Dev 370.6

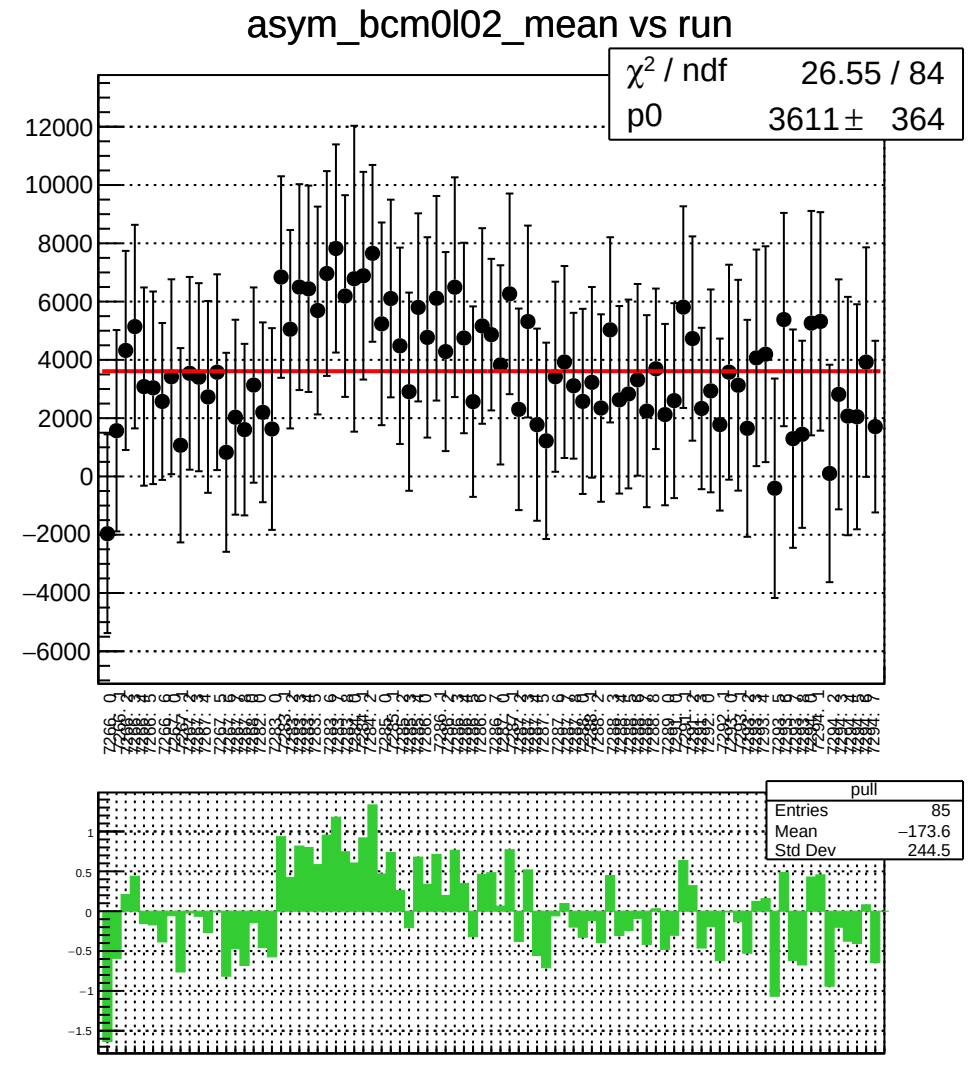

pull1D
Entries 85
Mean 0.001133
Std Dev 0.4106

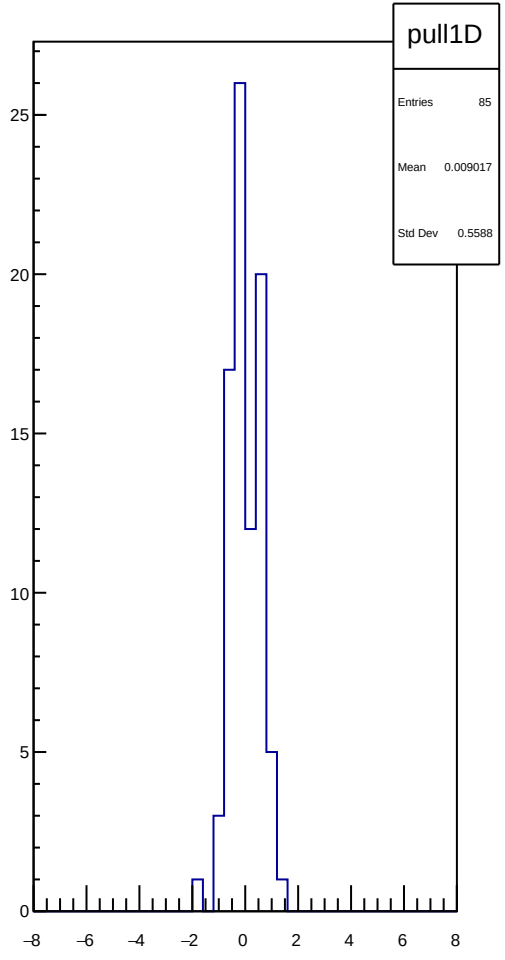

asym_cav4cQ_rms vs run
χ² / ndf 1.093e+04 / 84
p0 253.8 ± 0.1982
400
380
360
340
320
300
280
260
240
220

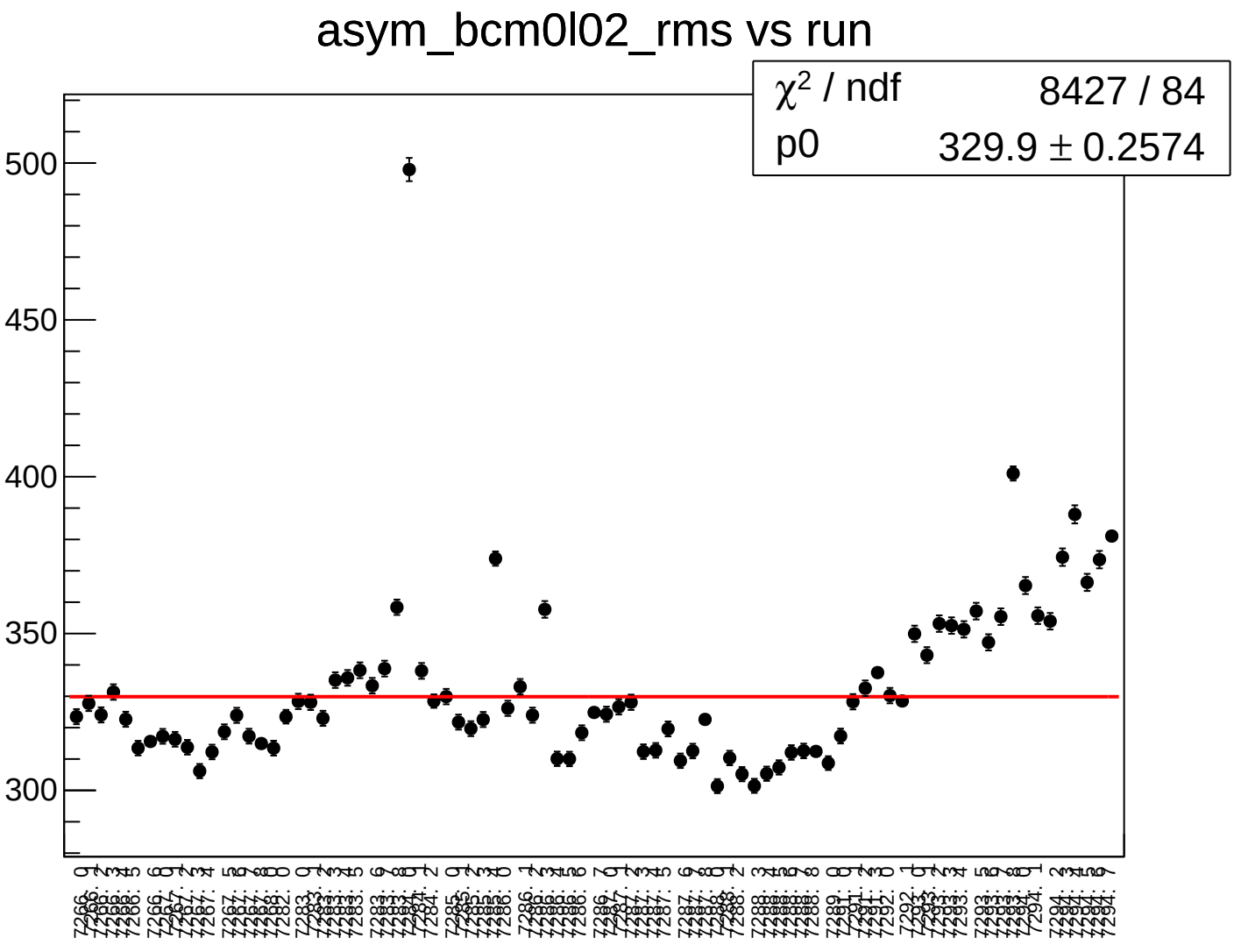

asym_cav4dQ_mean vs run
χ² / ndf 40.65 / 84
p0 315.9 ± 411.1
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 116.9
Std Dev 38.9
1.5
1
0.5
0
−0.5
−1
−1.5

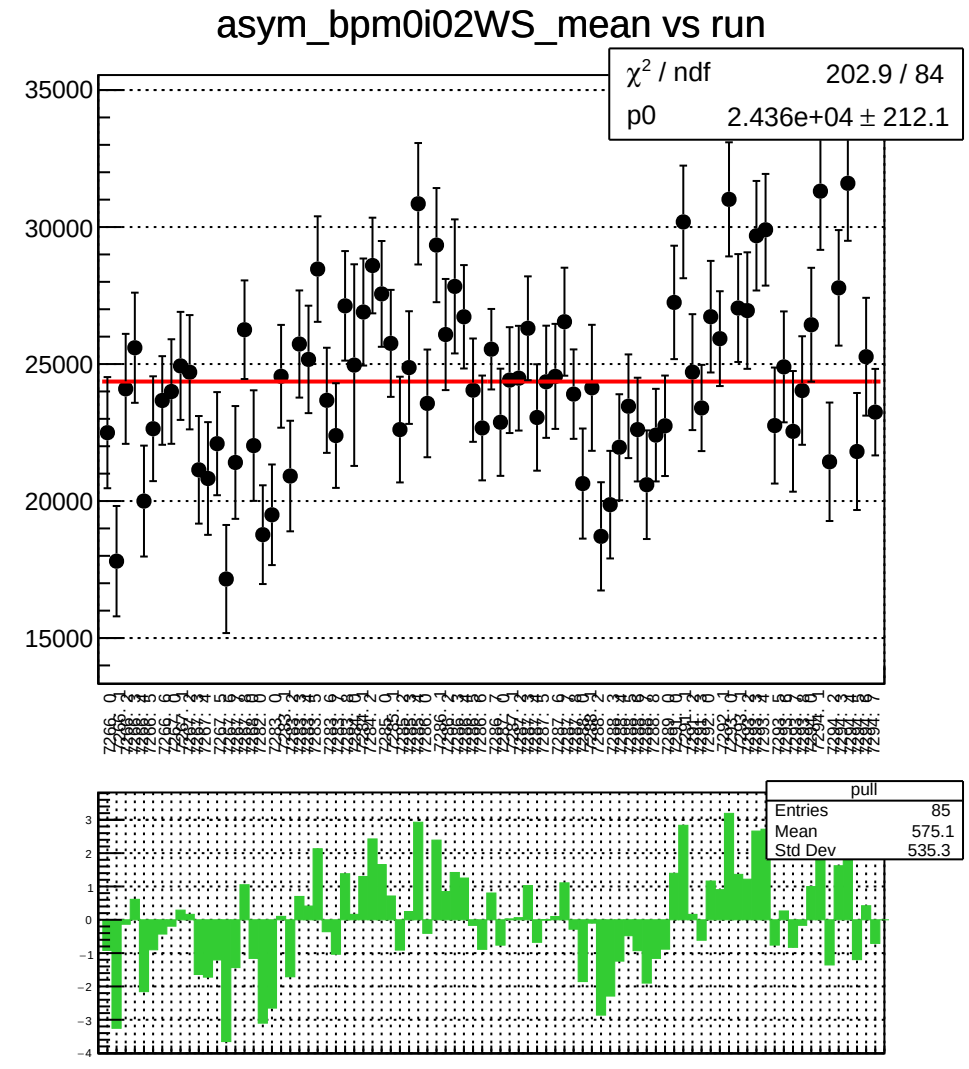

pull1D
Entries 85
Mean 0.004317
Std Dev 0.6916
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

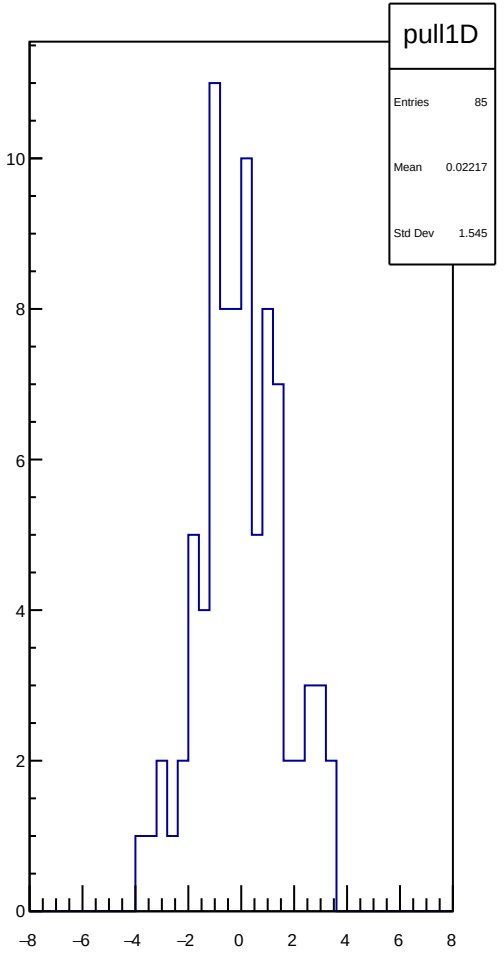

asym_cav4dQ_rms vs run
χ² / ndf 2630 / 84
p0 373.2 ± 0.2907
480
460
440
420
400
380
360
340

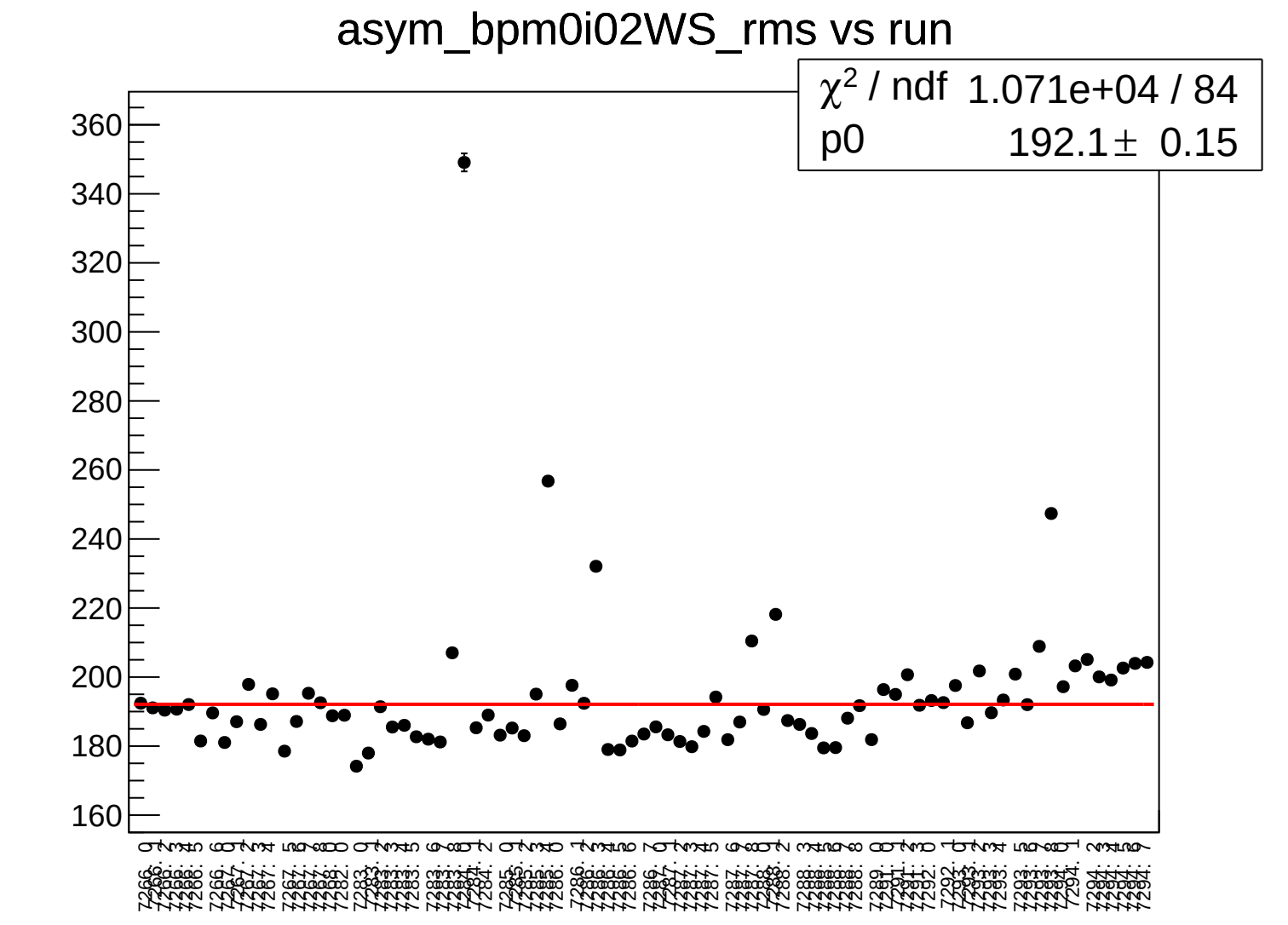

asym_bcm0l02_mean vs run
χ² / ndf 26.55 / 84
p0 3611 ± 364
pull
Entries 85
Mean −173.6
Std Dev 244.5

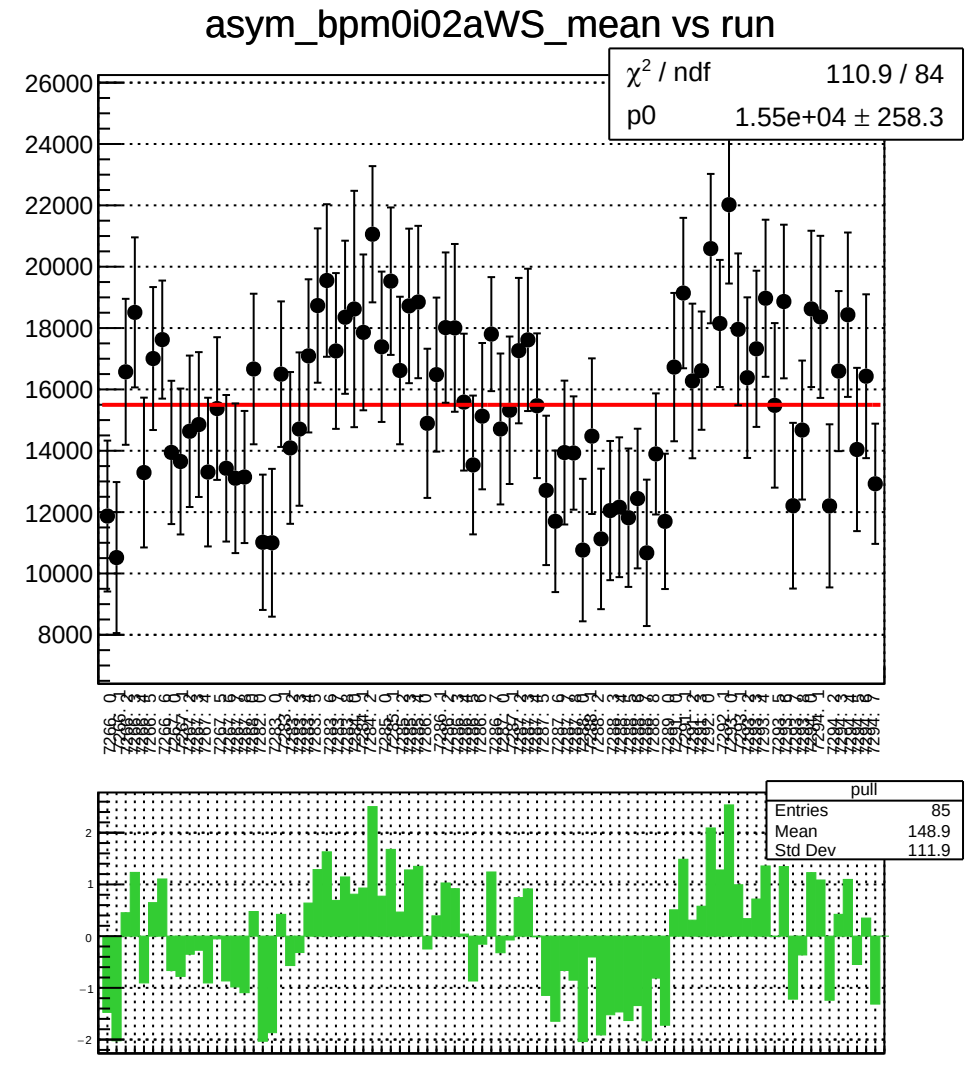

pull1D
Entries 85
Mean 0.009017
Std Dev 0.5588

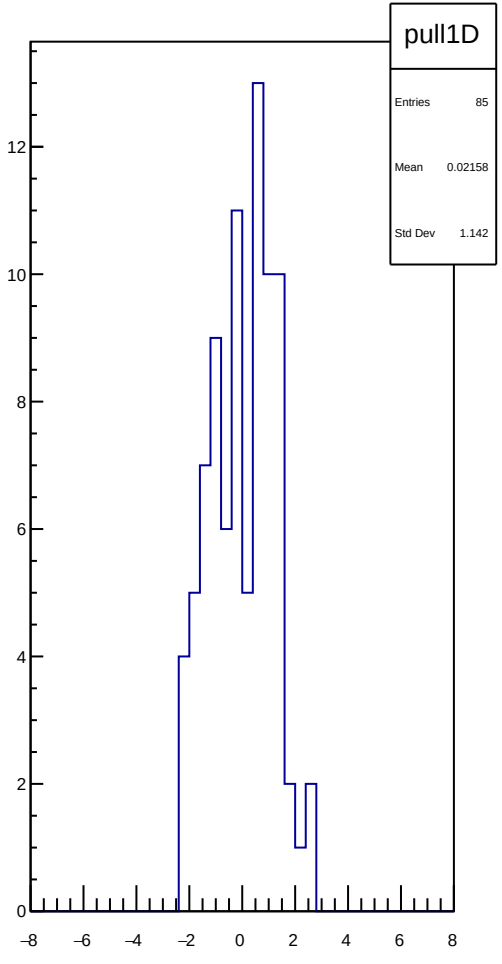

asym_bcm0l02_rms vs run
χ² / ndf 8427 / 84
p0 329.9 ± 0.2574
500
450
400
350
300

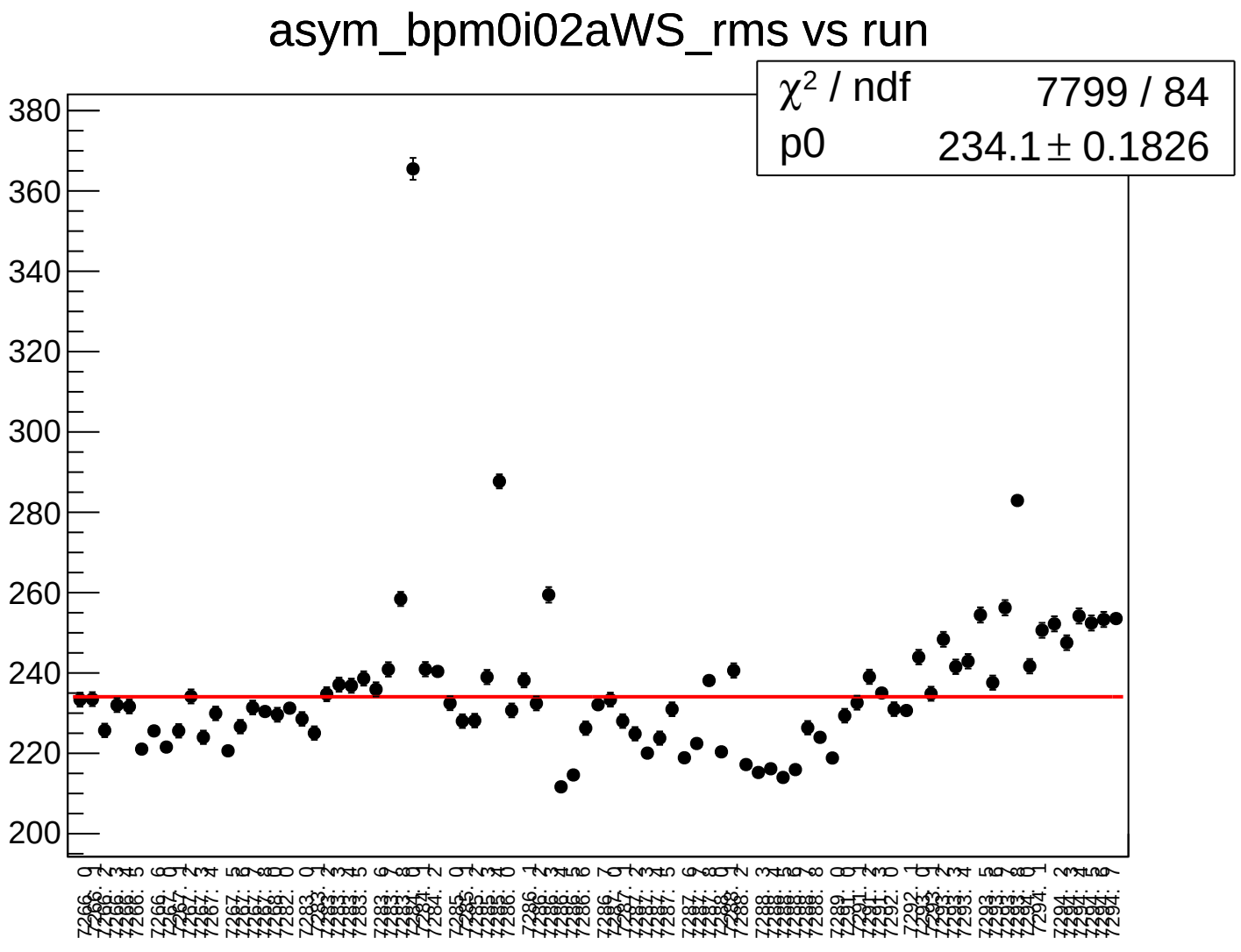

asym_bpm0i02WS_mean vs run
χ² / ndf 202.9 / 84
p0 2.436e+04 ± 212.1
pull
Entries 85
Mean 575.1
Std Dev 535.3

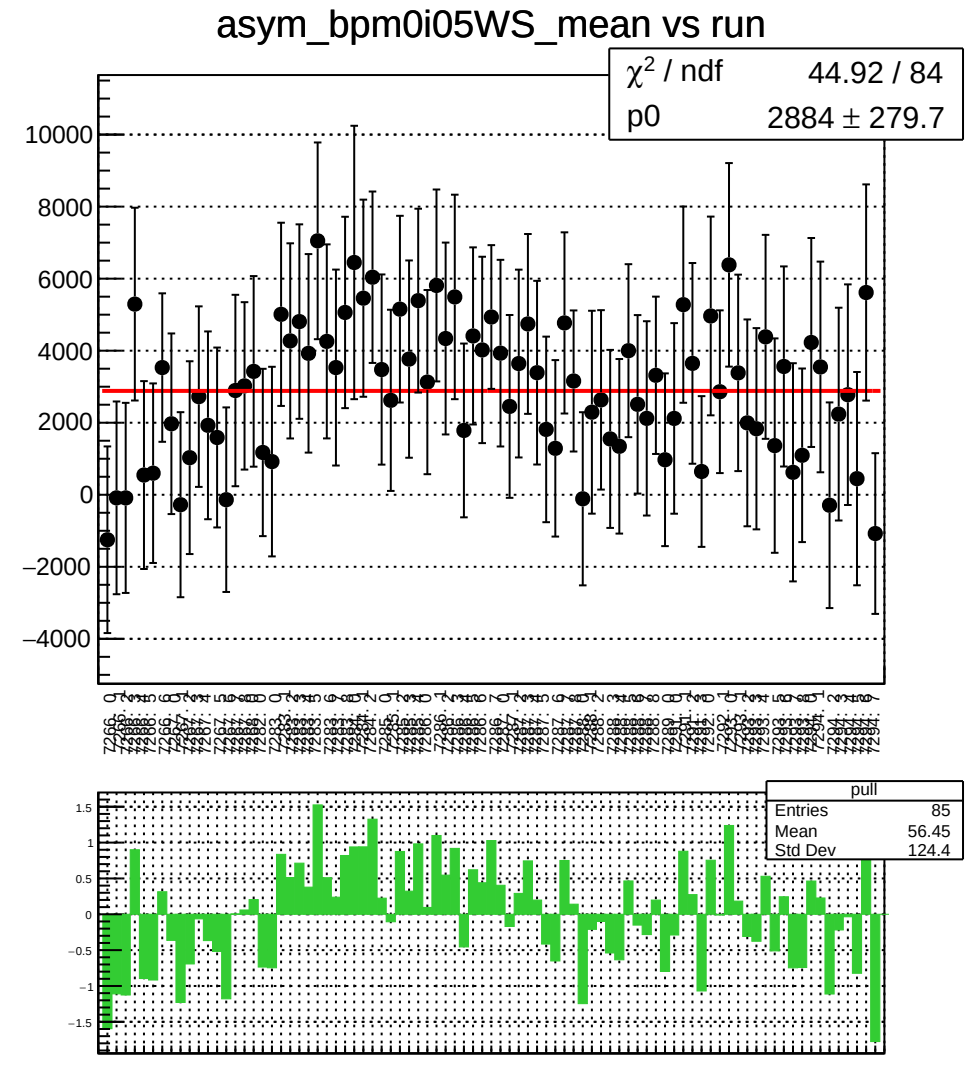

pull1D
Entries 85
Mean 0.02217
Std Dev 1.545

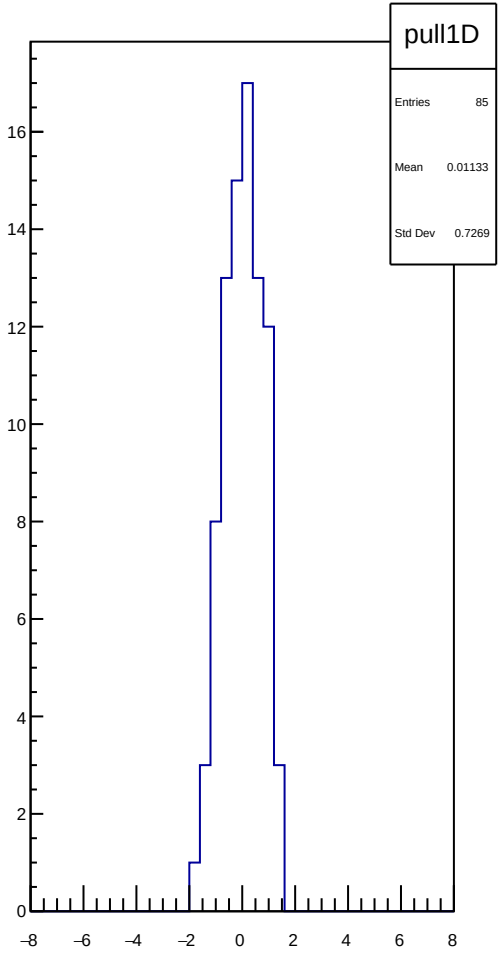

asym_bpm0i02WS_rms vs run
χ^2 / ndf 1.071e+04 / 84
p0 192.1 ± 0.15
360
340
320
300
280
260
240
220
200
180
160

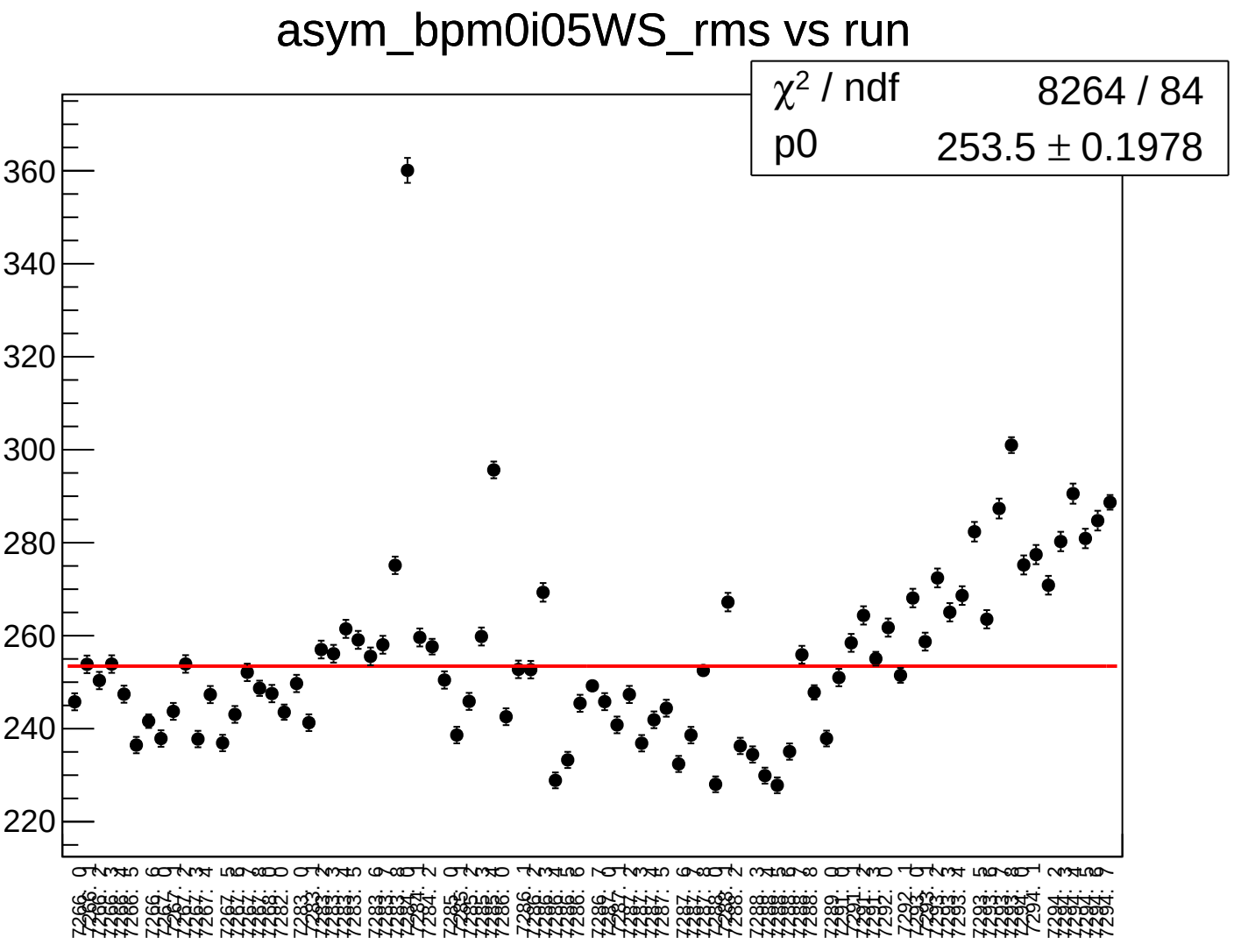

asym_bpm0i02aWS_mean vs run
χ² / ndf 110.9 / 84
p0 1.55e+04 ± 258.3
pull
Entries 85
Mean 148.9
Std Dev 111.9

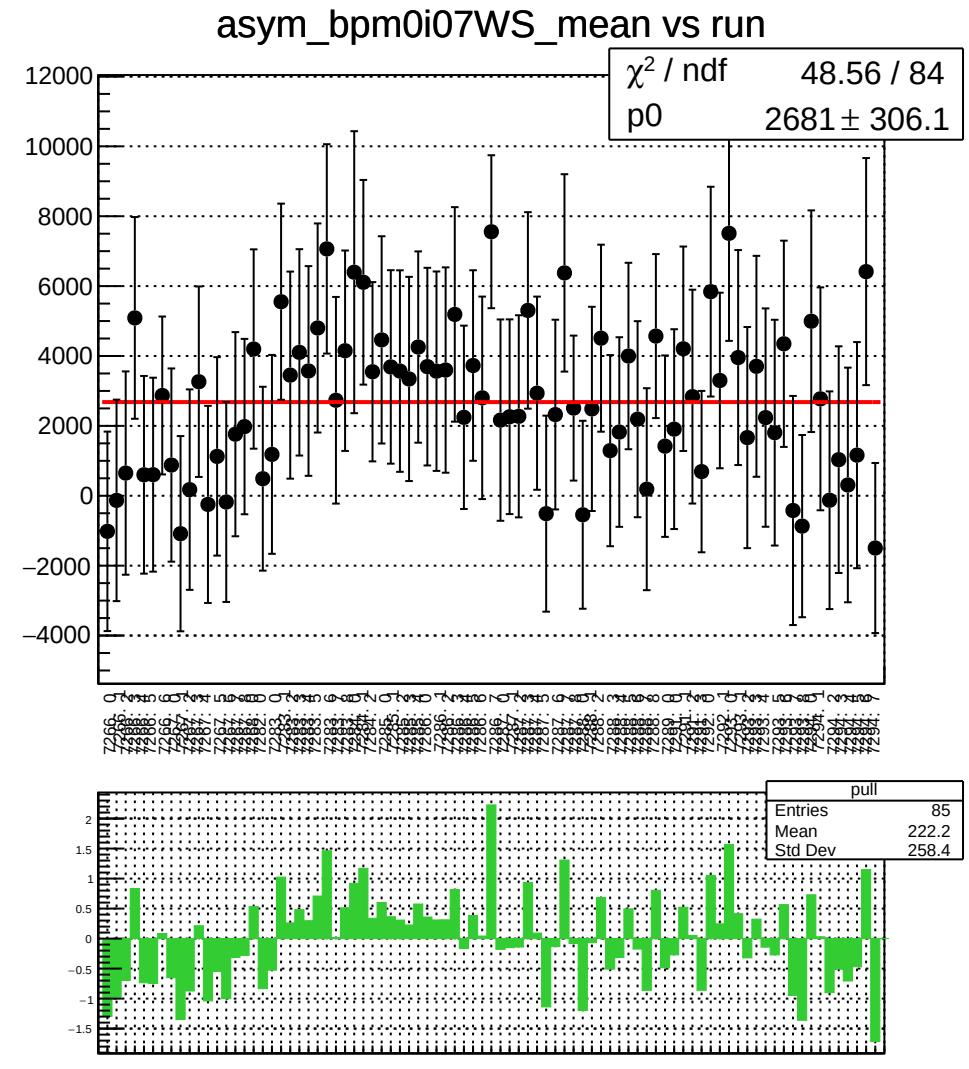

pull1D
Entries 85
Mean 0.02158
Std Dev 1.142

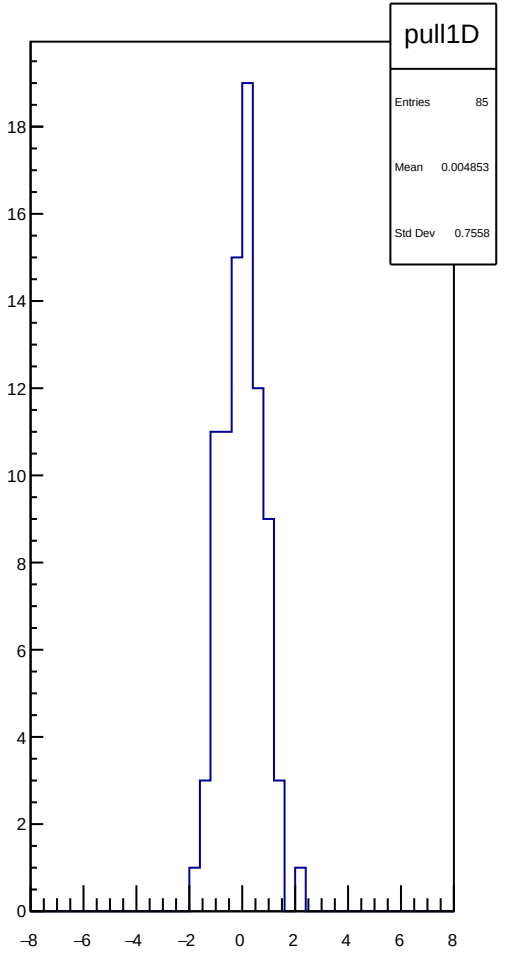

asym_bpm0i02aWS_rms vs run
χ² / ndf 7799 / 84
p0 234.1 ± 0.1826
380
360
340
320
300
280
260
240
220
200

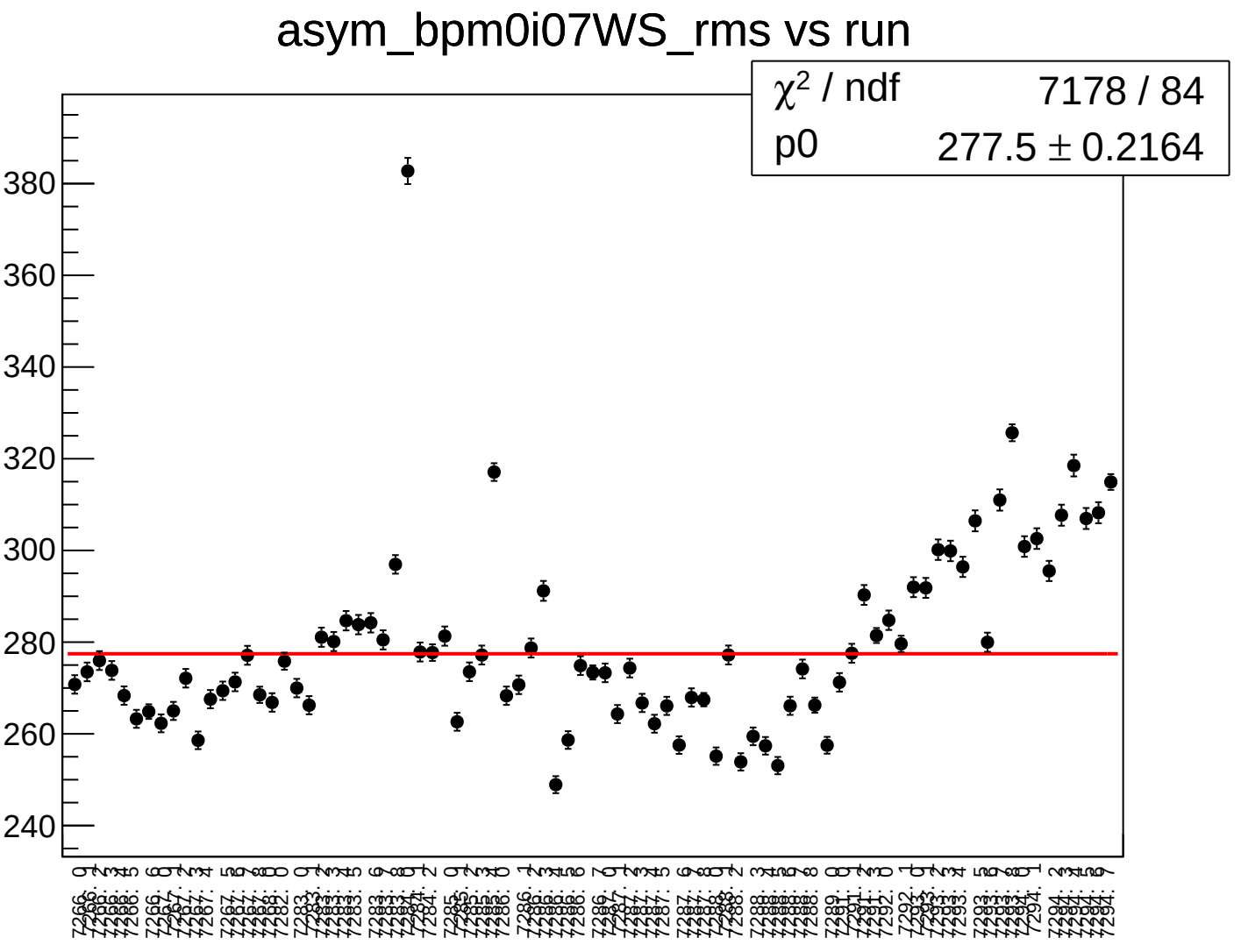

asym_bpm0i05WS_mean vs run
χ² / ndf 44.92 / 84
p0 2884 ± 279.7
pull
Entries 85
Mean 56.45
Std Dev 124.4

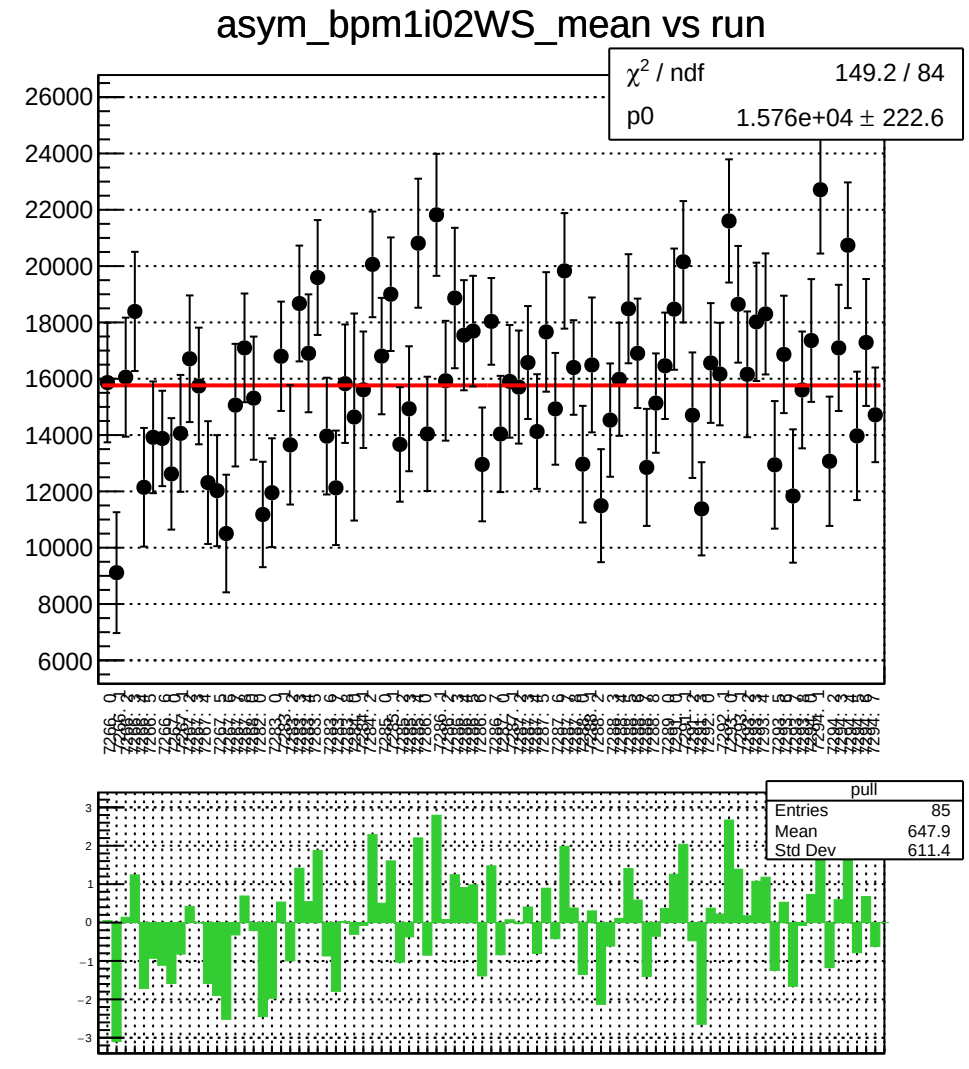

pull1D
Entries 85
Mean 0.01133
Std Dev 0.7269

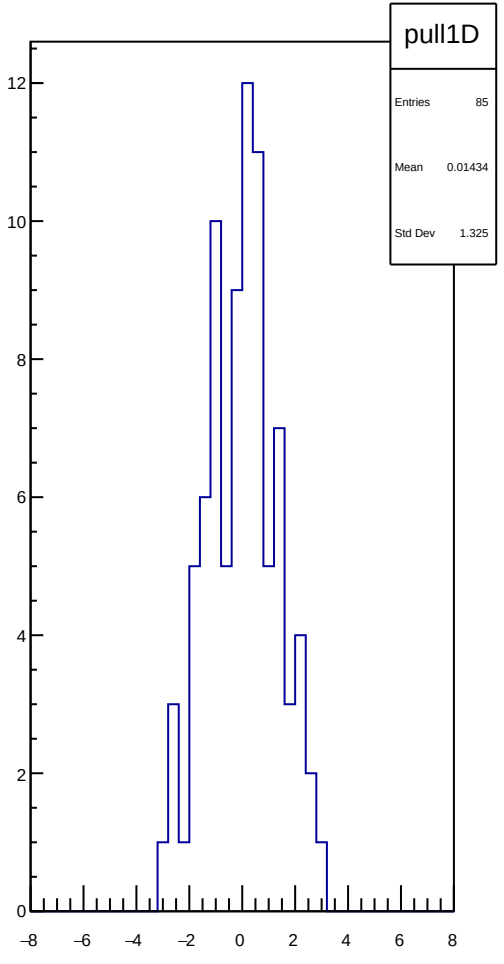

asym_bpm0i05WS_rms vs run
χ² / ndf 8264 / 84
p0 253.5 ± 0.1978
360
340
320
300
280
260
240
220

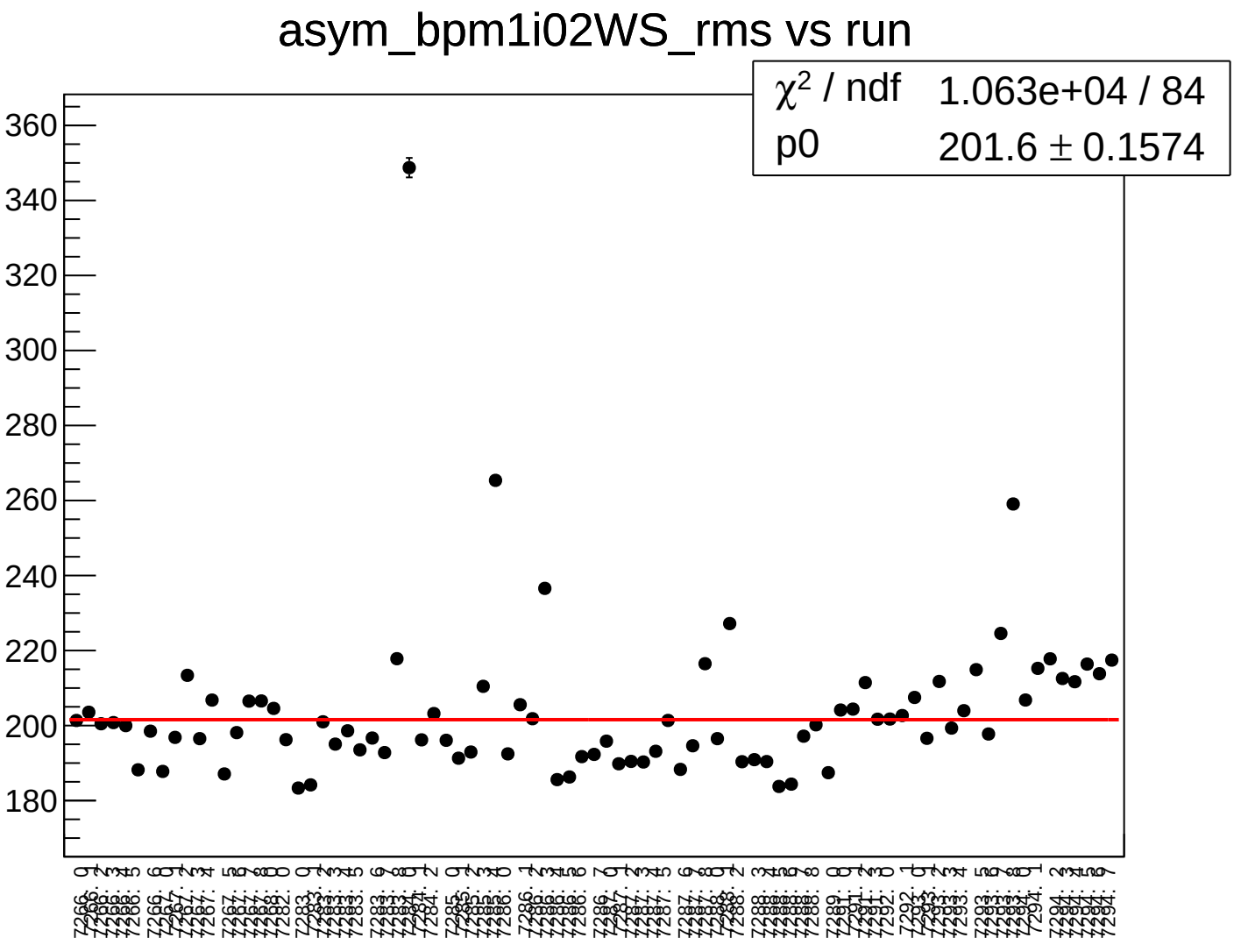

asym_bpm0i07WS_mean vs run
χ² / ndf 48.56 / 84
p0 2681 ± 306.1
pull
Entries 85
Mean 222.2
Std Dev 258.4

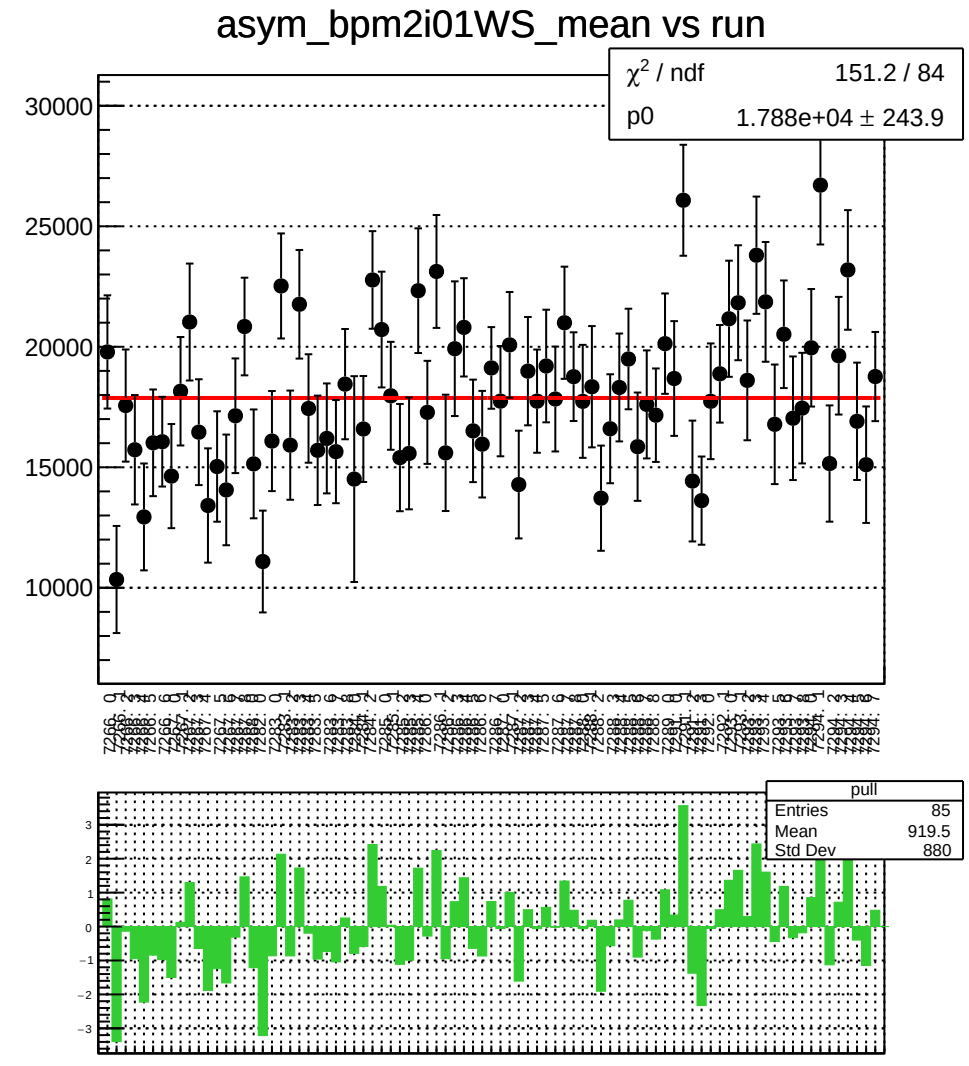

pull1D
Entries 85
Mean 0.004853
Std Dev 0.7558

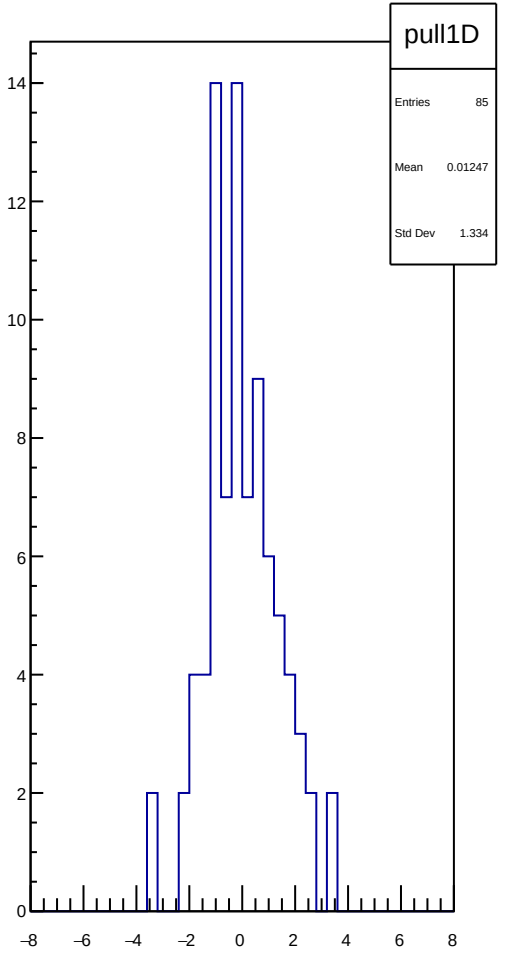

asym_bpm0i07WS_rms vs run
χ² / ndf 7178 / 84
p0 277.5 ± 0.2164
380
360
340
320
300
280
260
240

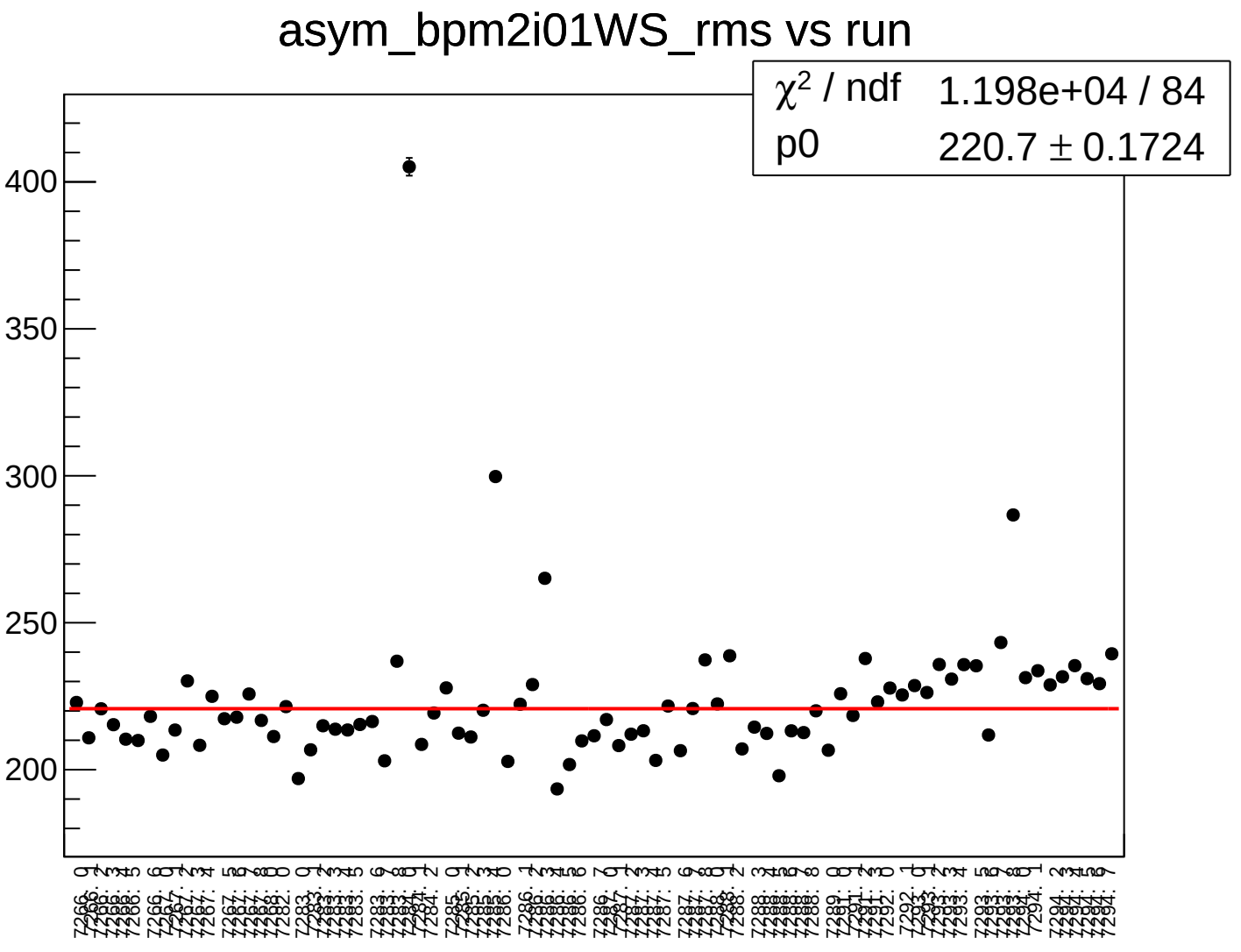

asym_bpm1i02WS_mean vs run
χ² / ndf 149.2 / 84
p0 1.576e+04 ± 222.6
pull
Entries 85
Mean 647.9
Std Dev 611.4

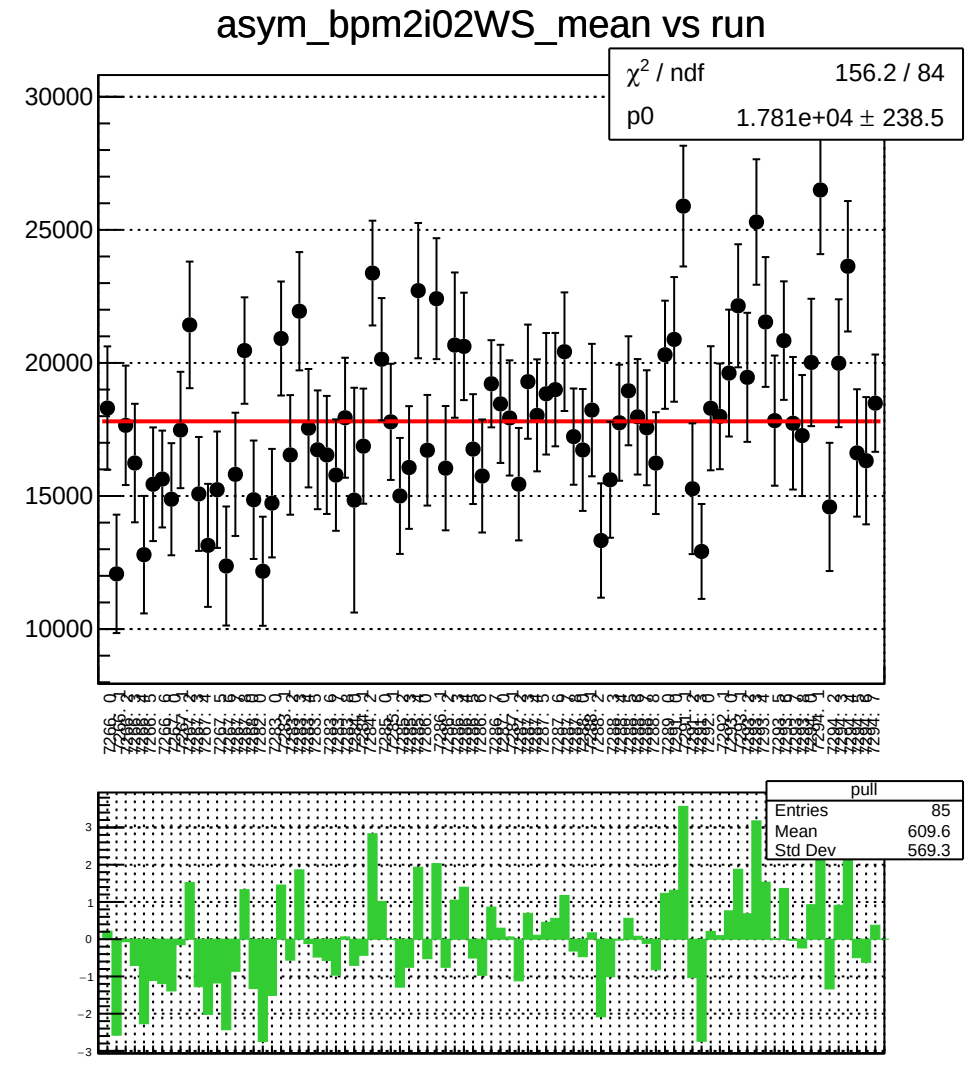

pull1D
Entries 85
Mean 0.01434
Std Dev 1.325

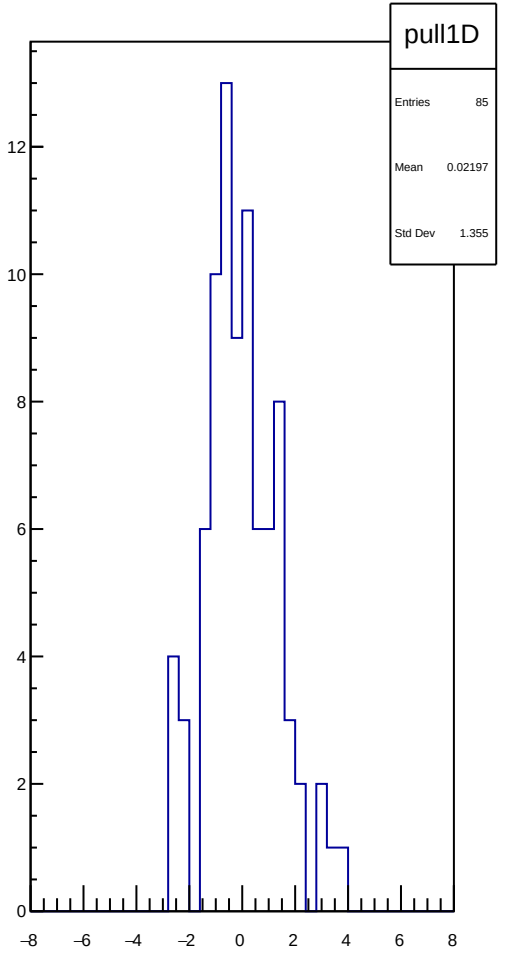

asym_bpm1i02WS_rms vs run
χ² / ndf 1.063e+04 / 84
p0 201.6 ± 0.1574
360
340
320
300
280
260
240
220
200
180

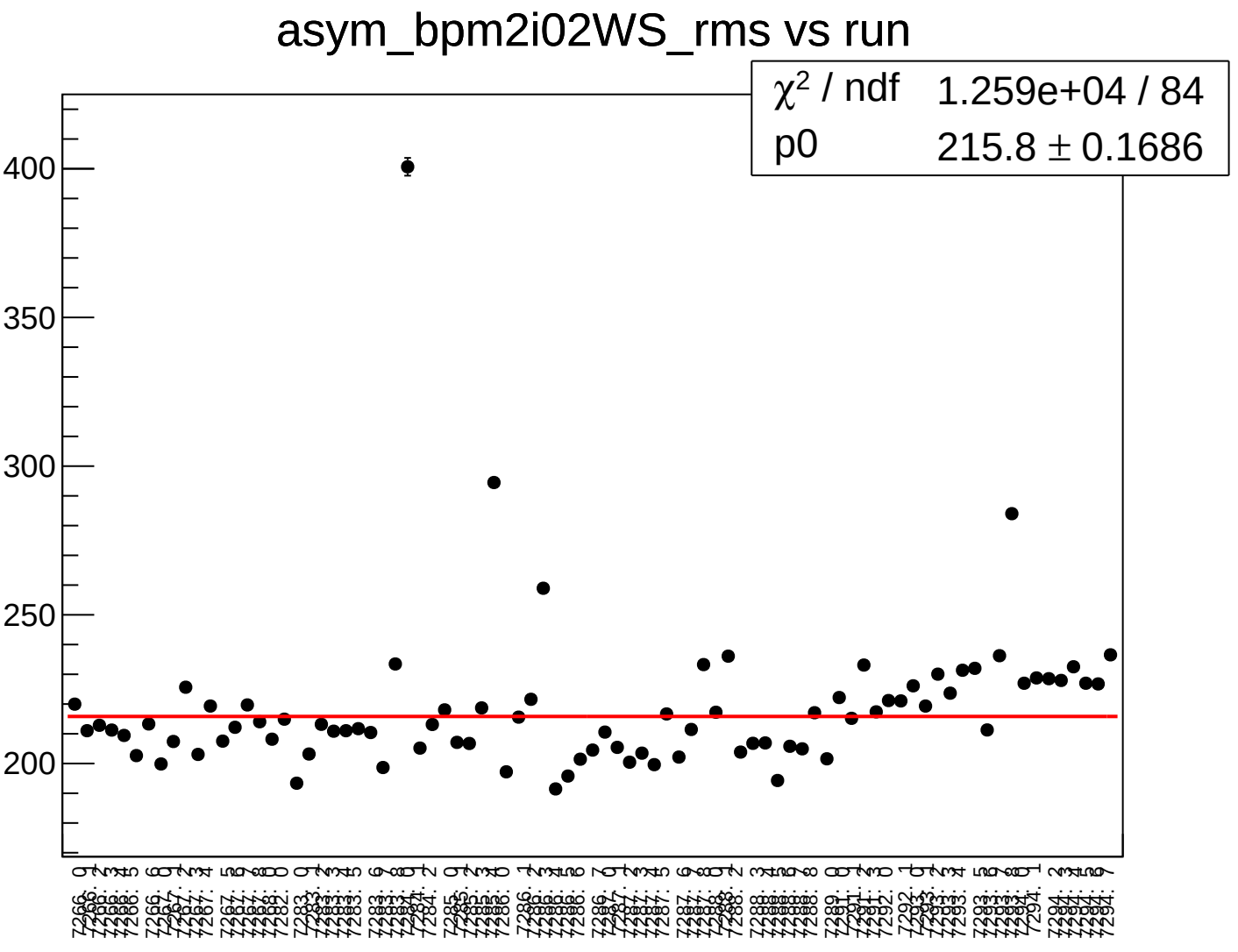

asym_bpm2i01WS_mean vs run
χ² / ndf 151.2 / 84
p0 1.788e+04 ± 243.9
30000
25000
20000
15000
10000
pull
Entries 85
Mean 919.5
Std Dev 880
3
2
1
0
−1
−2
−3

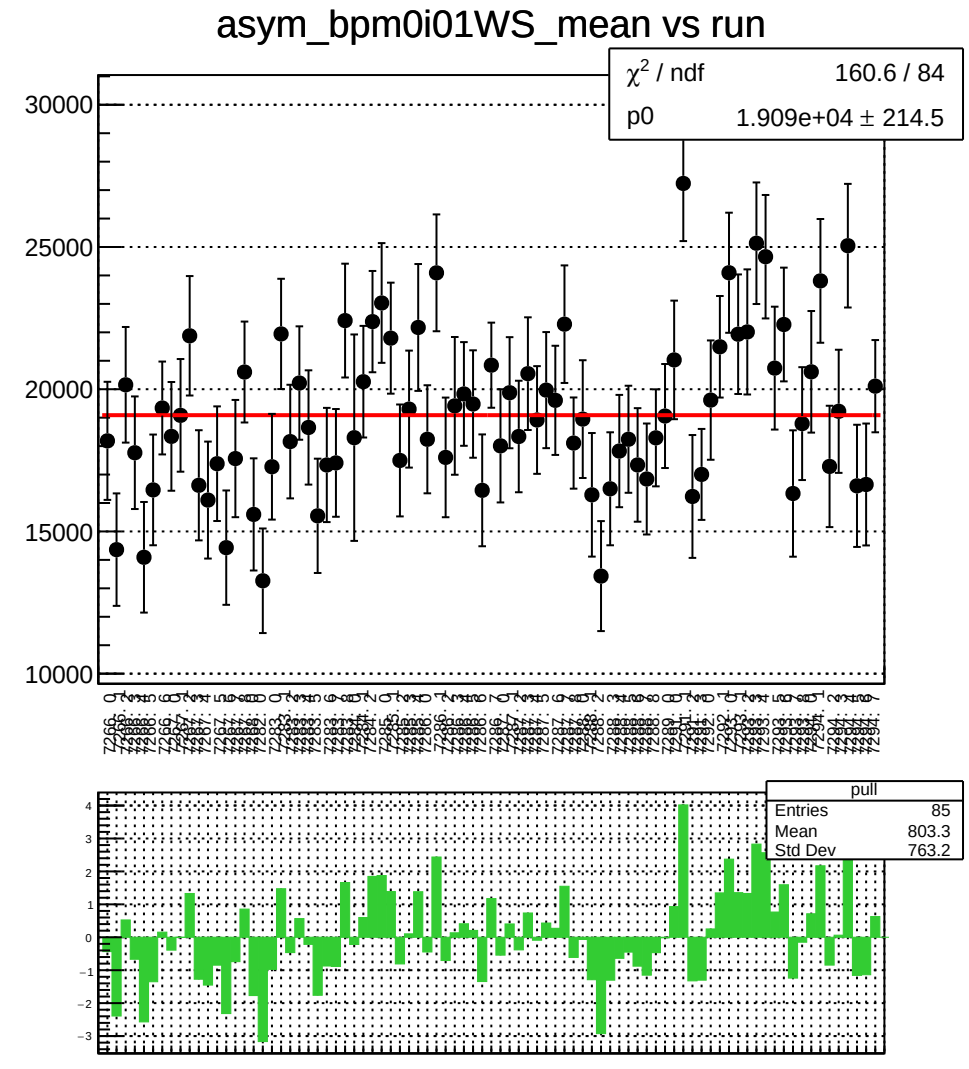

pull1D
Entries 85
Mean 0.01247
Std Dev 1.334
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

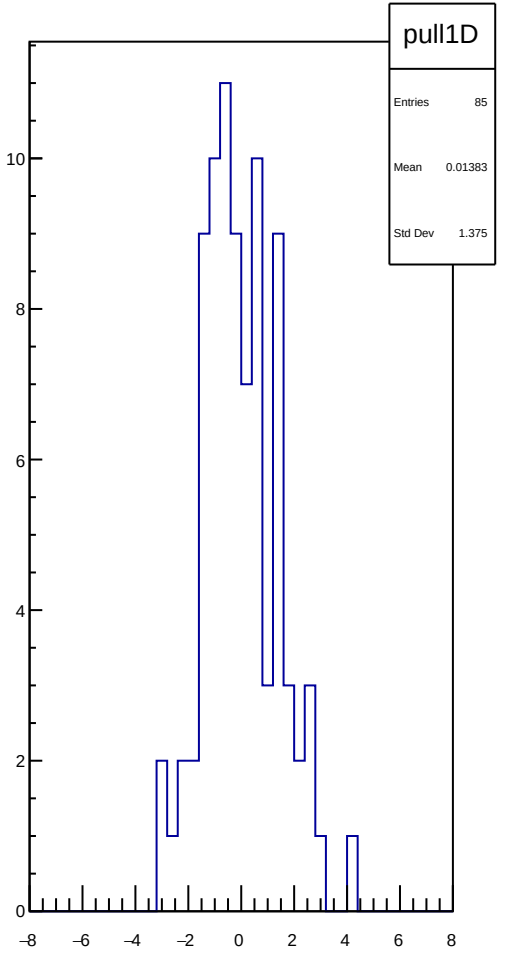

asym_bpm2i01WS_rms vs run
χ² / ndf 1.198e+04 / 84
p0 220.7 ± 0.1724
400
350
300
250
200

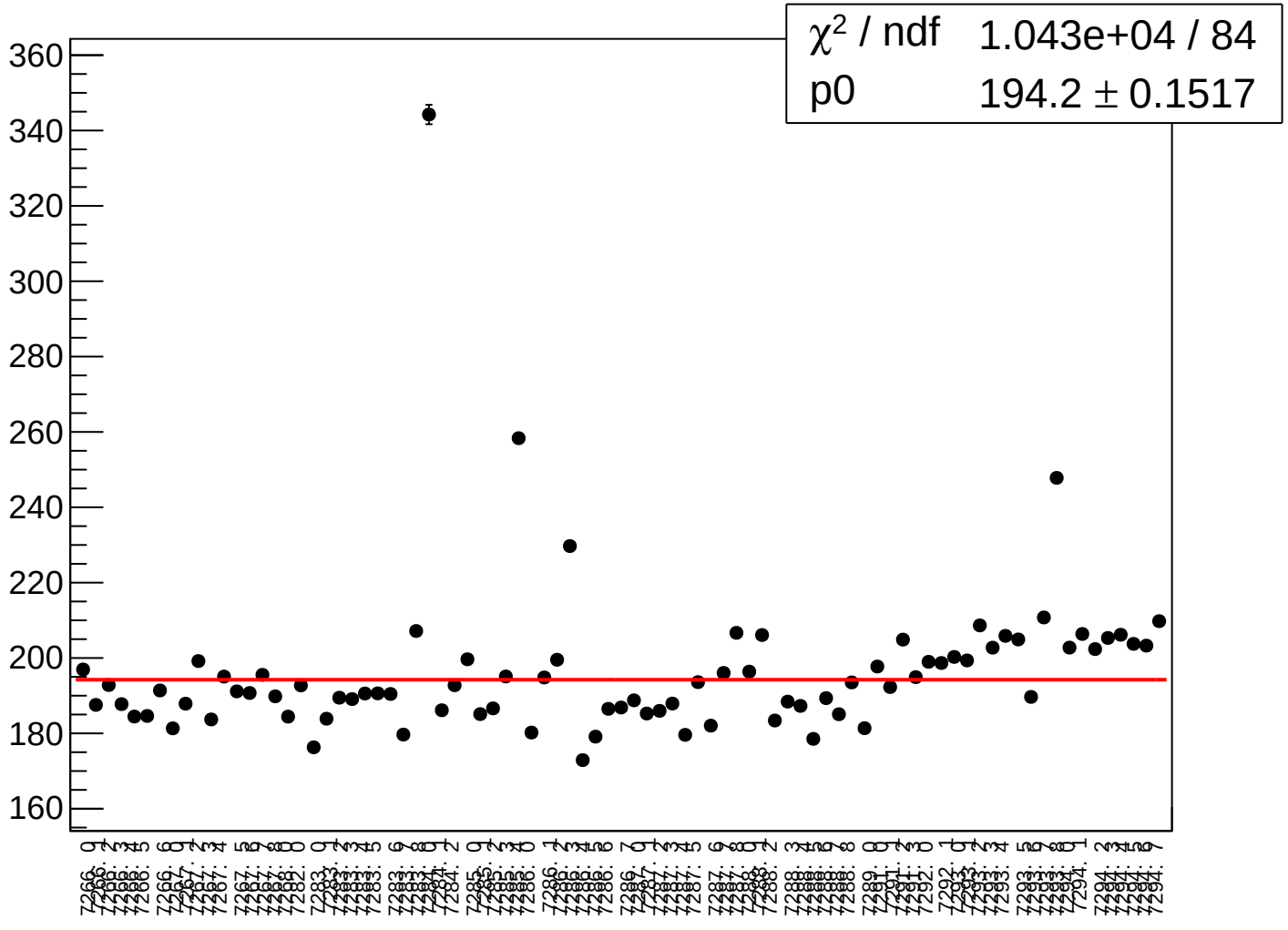

asym_bpm2i02WS_mean vs run
χ² / ndf 156.2 / 84
p0 1.781e+04 ± 238.5
pull
Entries 85
Mean 609.6
Std Dev 569.3

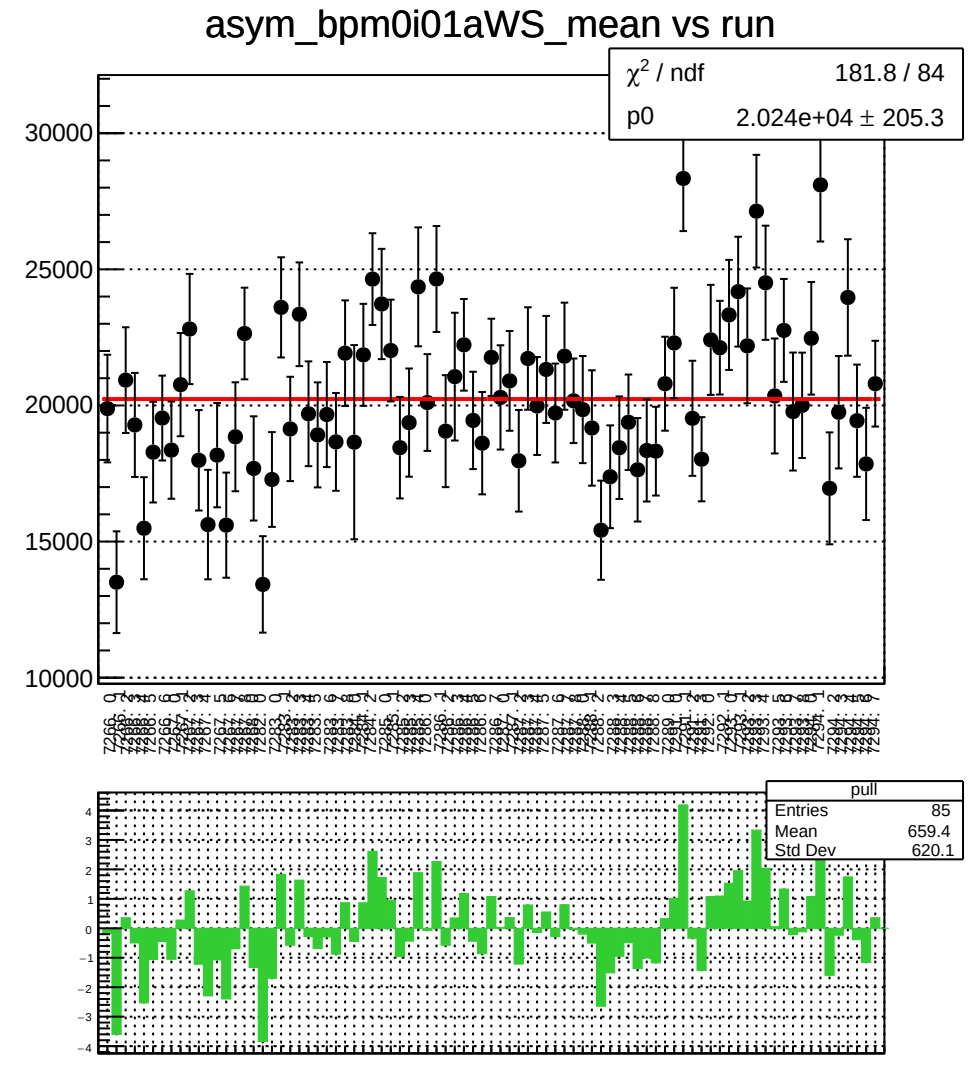

pull1D
Entries 85
Mean 0.02197
Std Dev 1.355

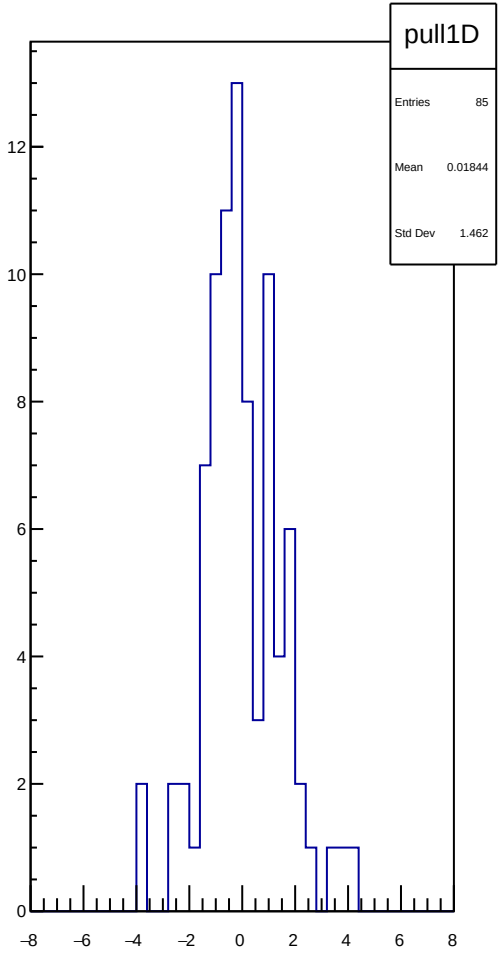

asym_bpm2i02WS_rms vs run
χ² / ndf 1.259e+04 / 84
p0 215.8 ± 0.1686
400
350
300
250
200

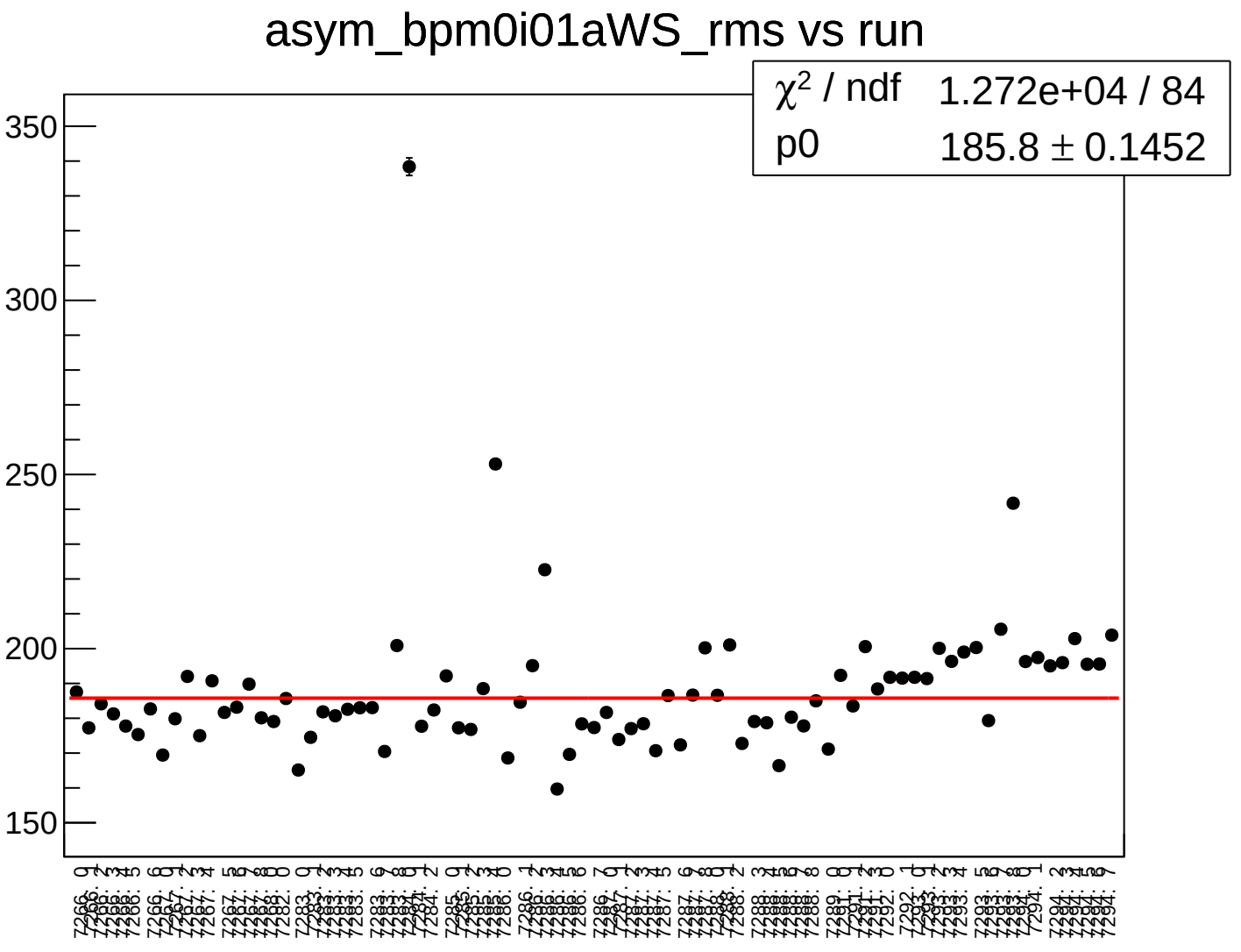

asym_bpm0i01WS_mean vs run
χ² / ndf 160.6 / 84
p0 1.909e+04 ± 214.5
30000
25000
20000
15000
10000
pull
Entries 85
Mean 803.3
Std Dev 763.2
4
3
2
1
0
−1
−2
−3

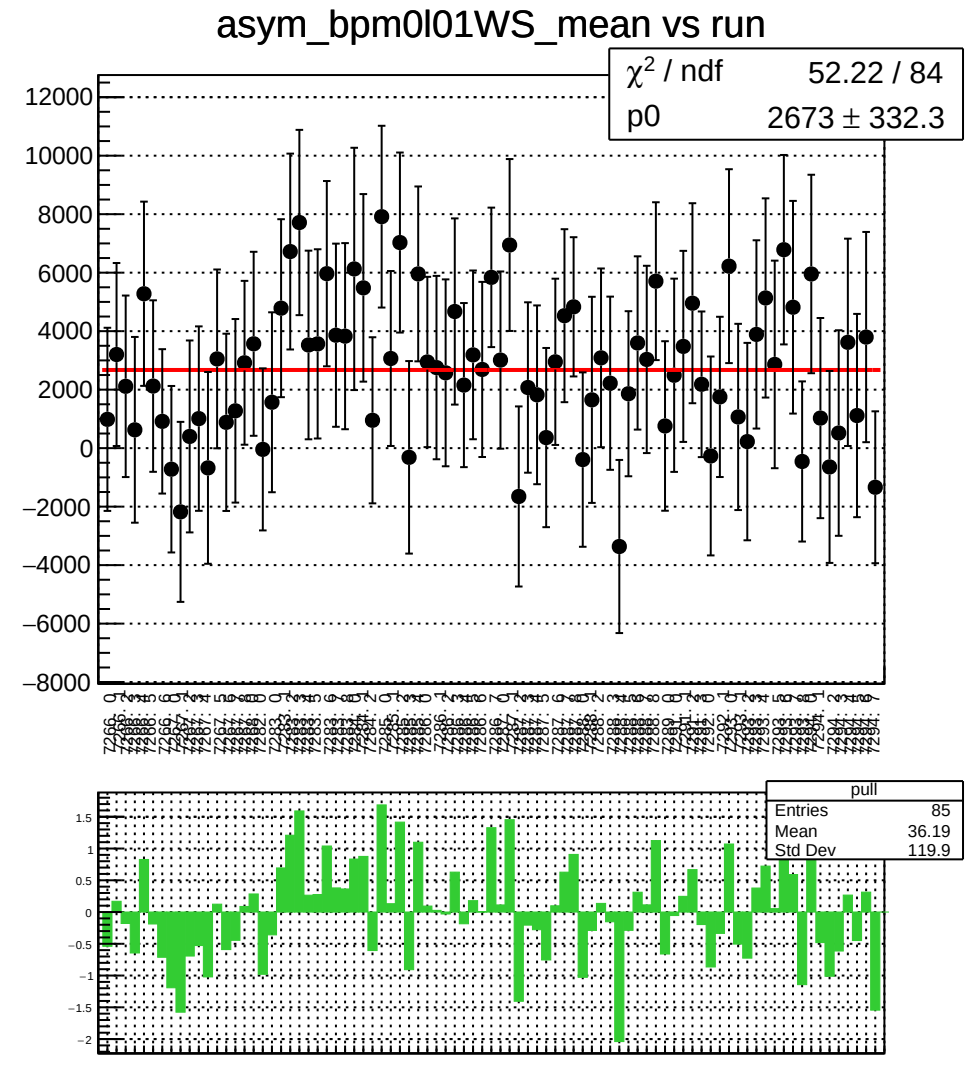

pull1D
Entries 85
Mean 0.01383
Std Dev 1.375
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

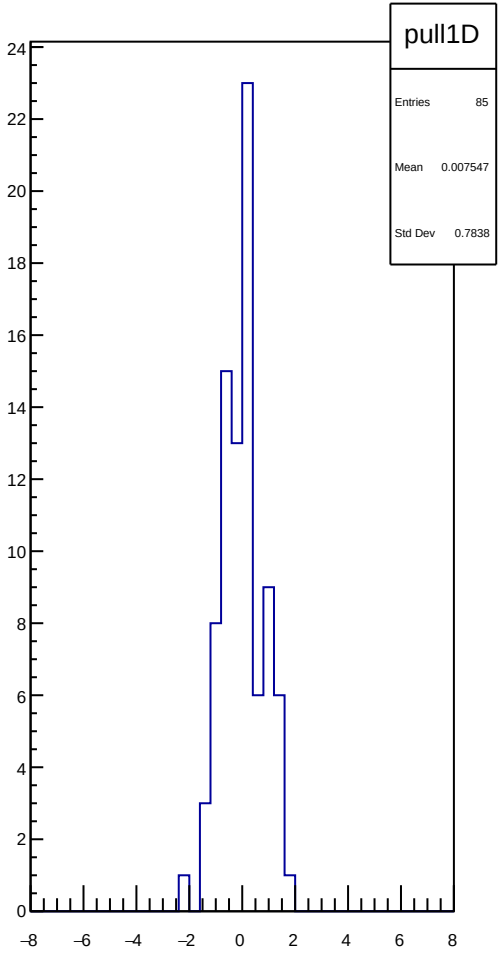

asym_bpm0i01WS_rms vs run
χ² / ndf 1.043e+04 / 84
p0 194.2 ± 0.1517
360
340
320
300
280
260
240
220
200
180
160

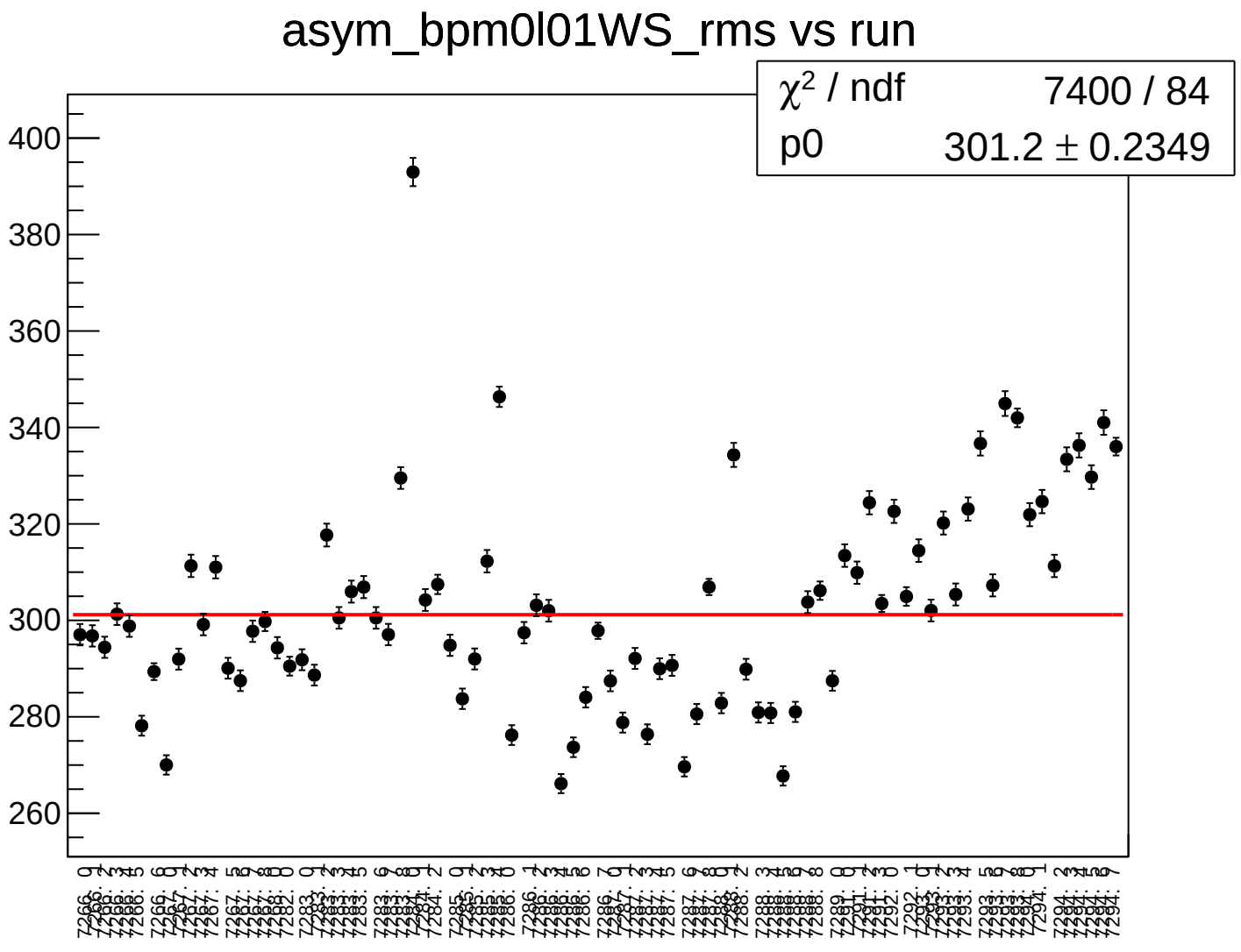

asym_bpm0i01aWS_mean vs run
χ² / ndf 181.8 / 84
p0 2.024e+04 ± 205.3
30000
25000
20000
15000
10000
pull
Entries 85
Mean 659.4
Std Dev 620.1
4
3
2
1
0
−1
−2
−3
−4

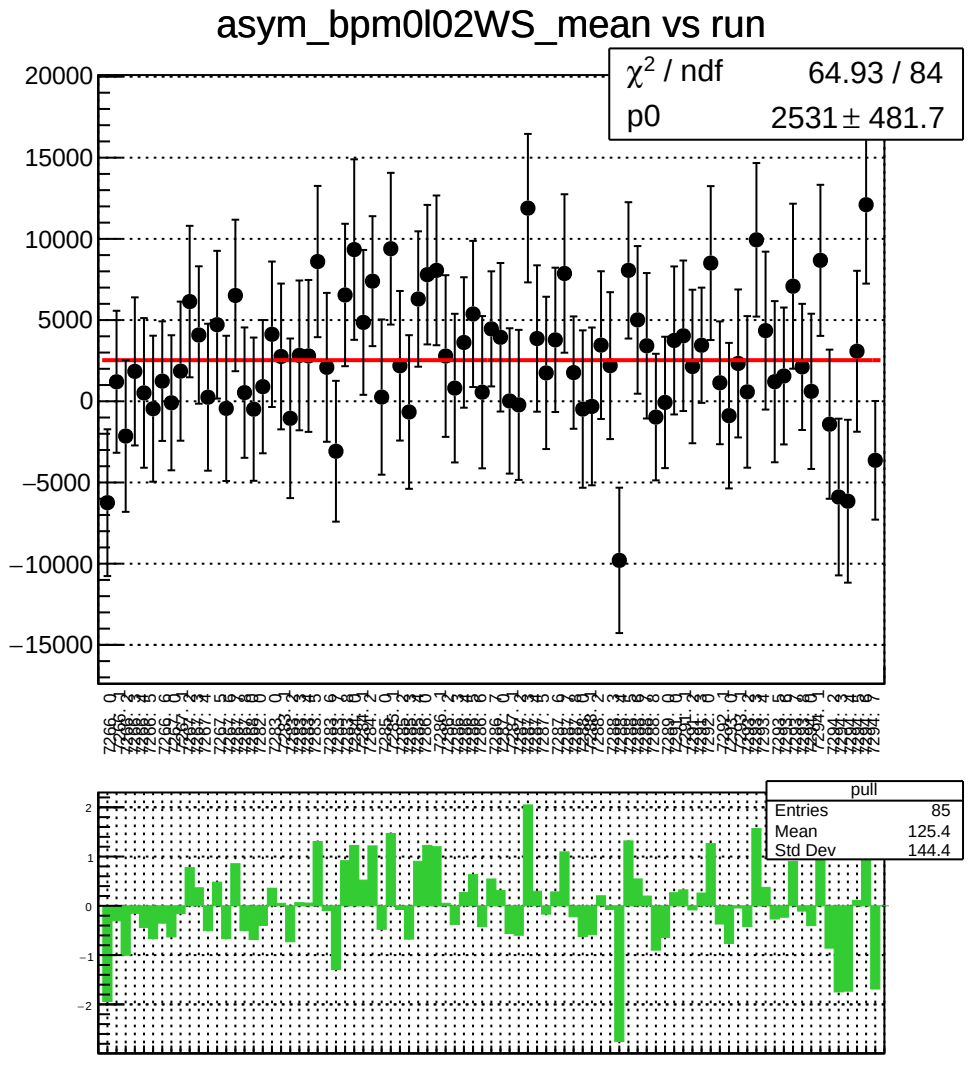

pull1D
Entries 85
Mean 0.01844
Std Dev 1.462
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

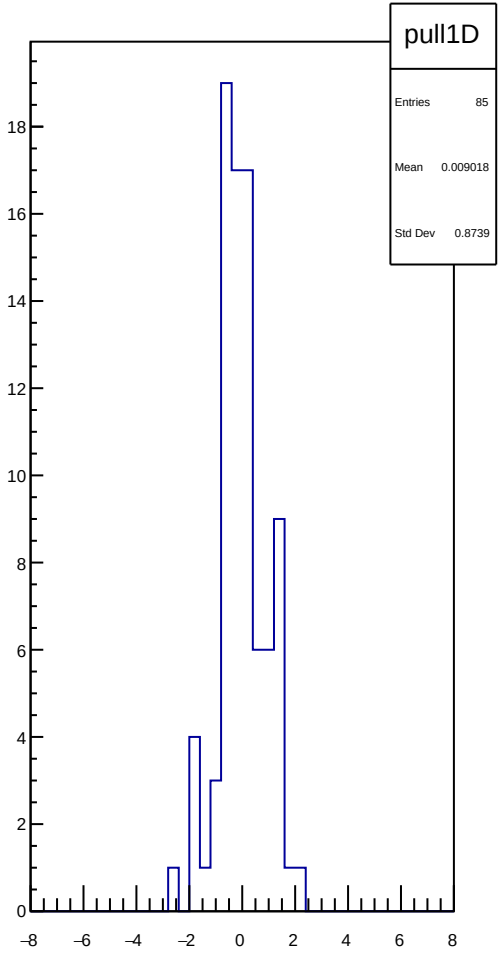

asym_bpm0i01aWS_rms vs run
χ² / ndf 1.272e+04 / 84
p0 185.8 ± 0.1452
350
300
250
200
150

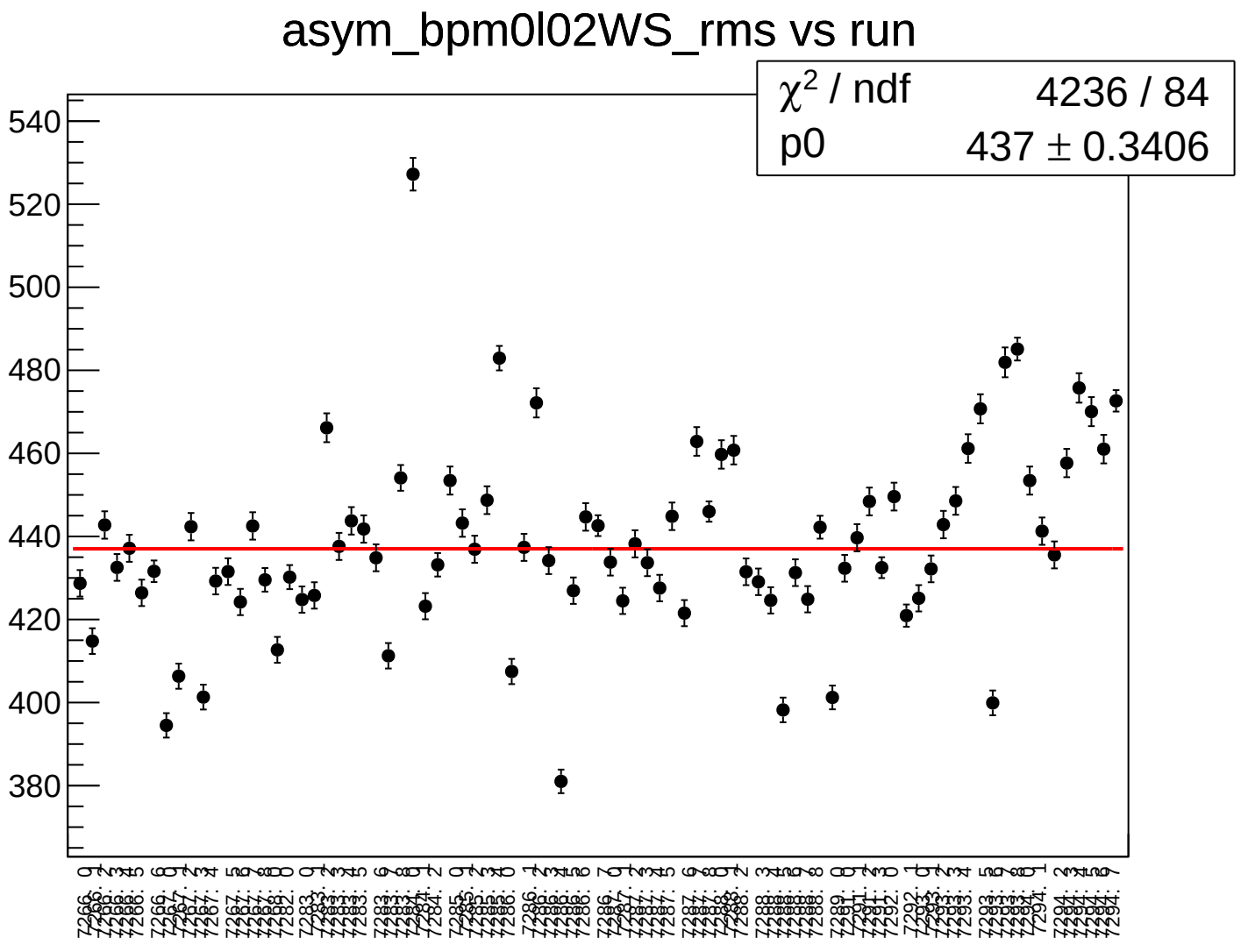

asym_bpm0l01WS_mean vs run
χ² / ndf 52.22 / 84
p0 2673 ± 332.3
pull
Entries 85
Mean 36.19
Std Dev 119.9

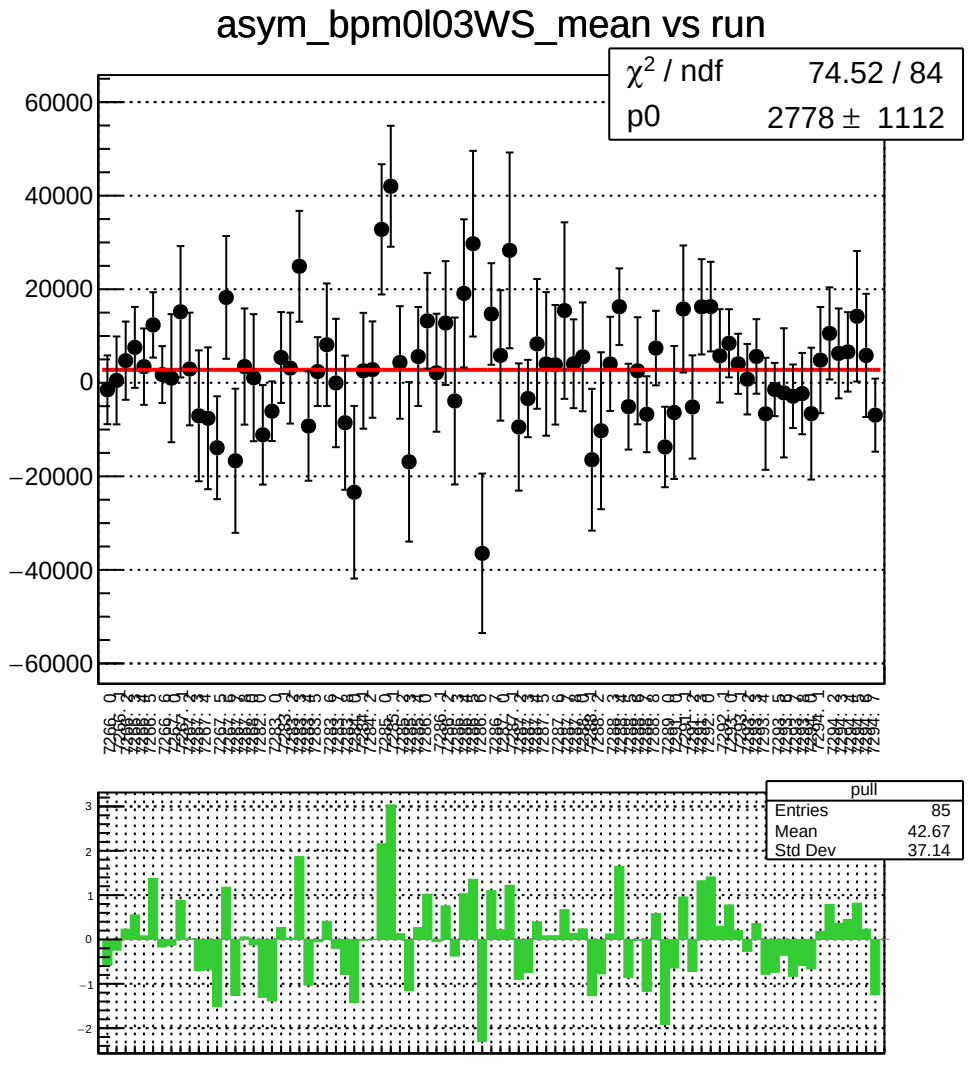

pull1D
Entries 85
Mean 0.007547
Std Dev 0.7838

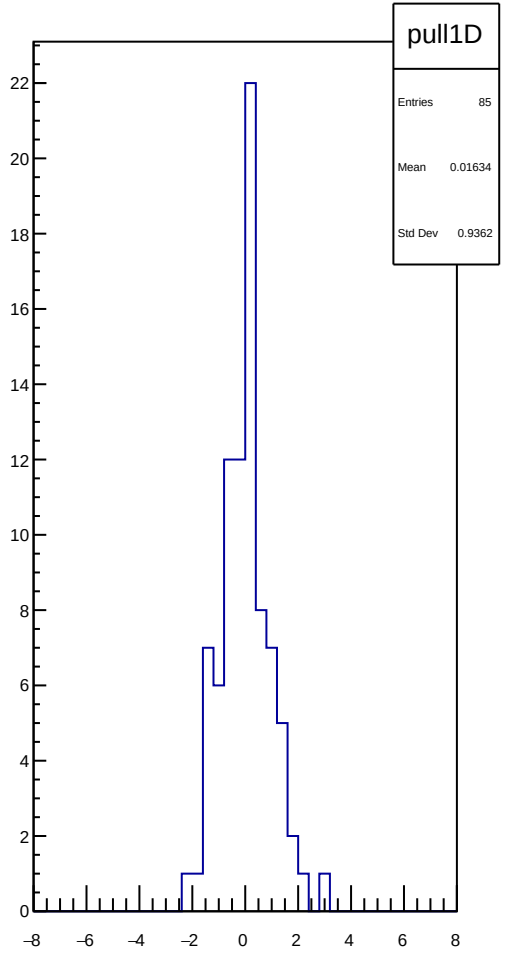

asym_bpm0l01WS_rms vs run
χ² / ndf 7400 / 84
p0 301.2 ± 0.2349
400
380
360
340
320
300
280
260

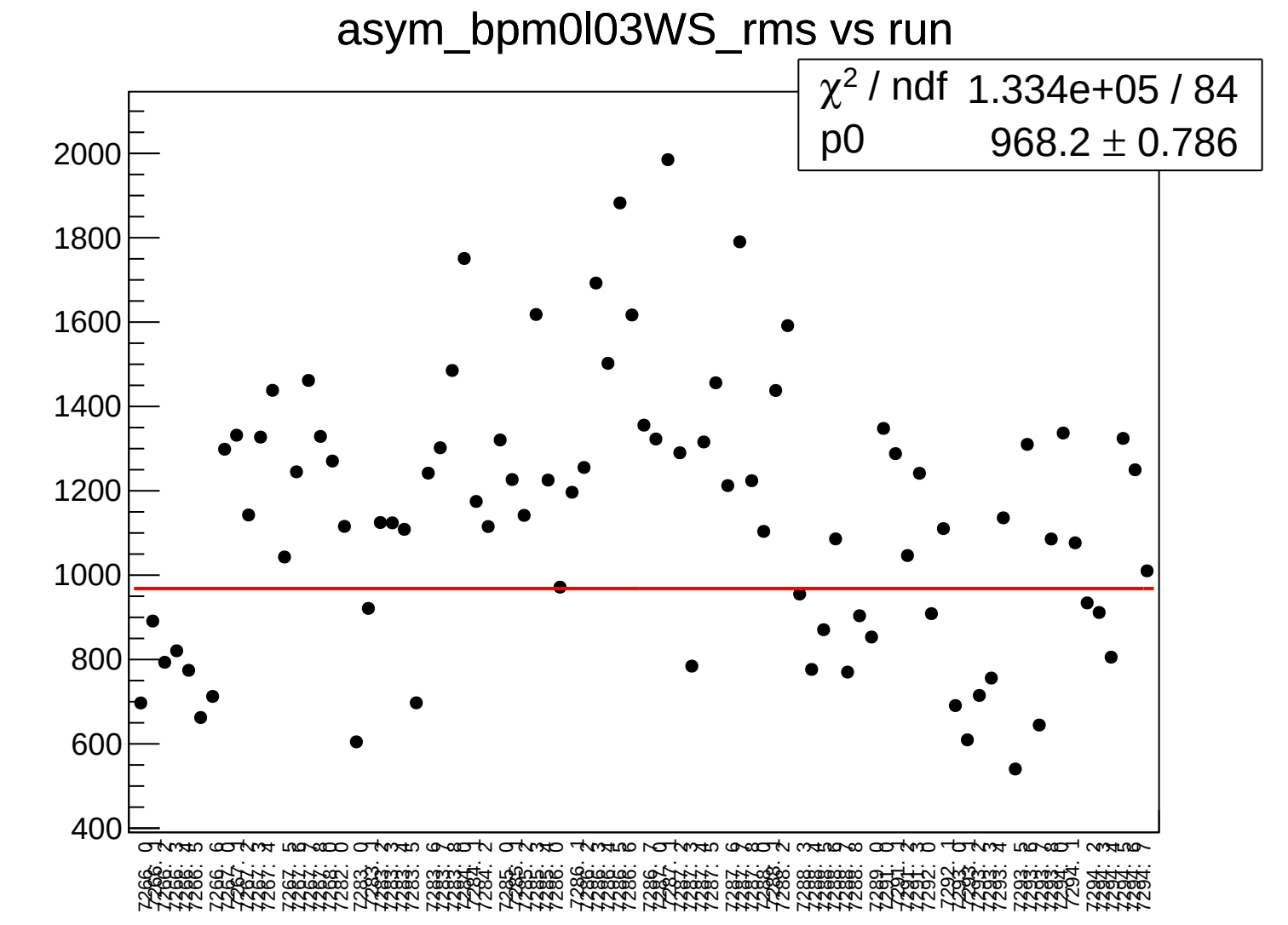

asym_bpm0l02WS_mean vs run
χ² / ndf 64.93 / 84
p0 2531 ± 481.7
pull
Entries 85
Mean 125.4
Std Dev 144.4

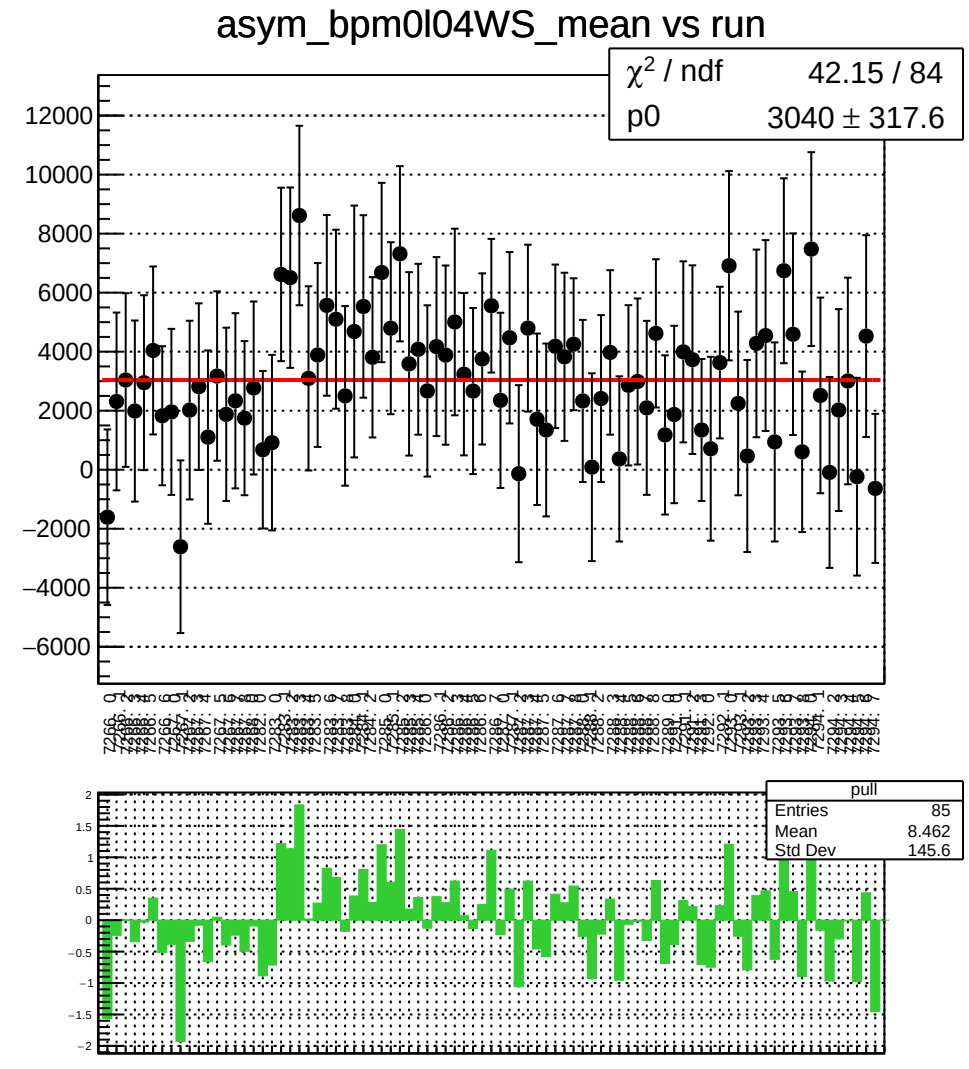

pull1D
Entries 85
Mean 0.009018
Std Dev 0.8739

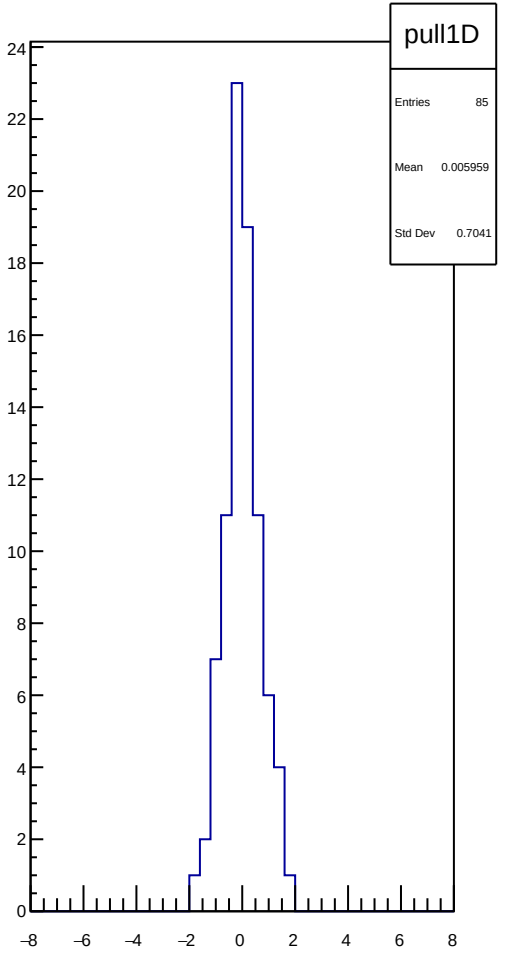

asym_bpm0l02WS_rms vs run
χ^2 / ndf 4236 / 84
p0 437 ± 0.3406
540
520
500
480
460
440
420
400
380

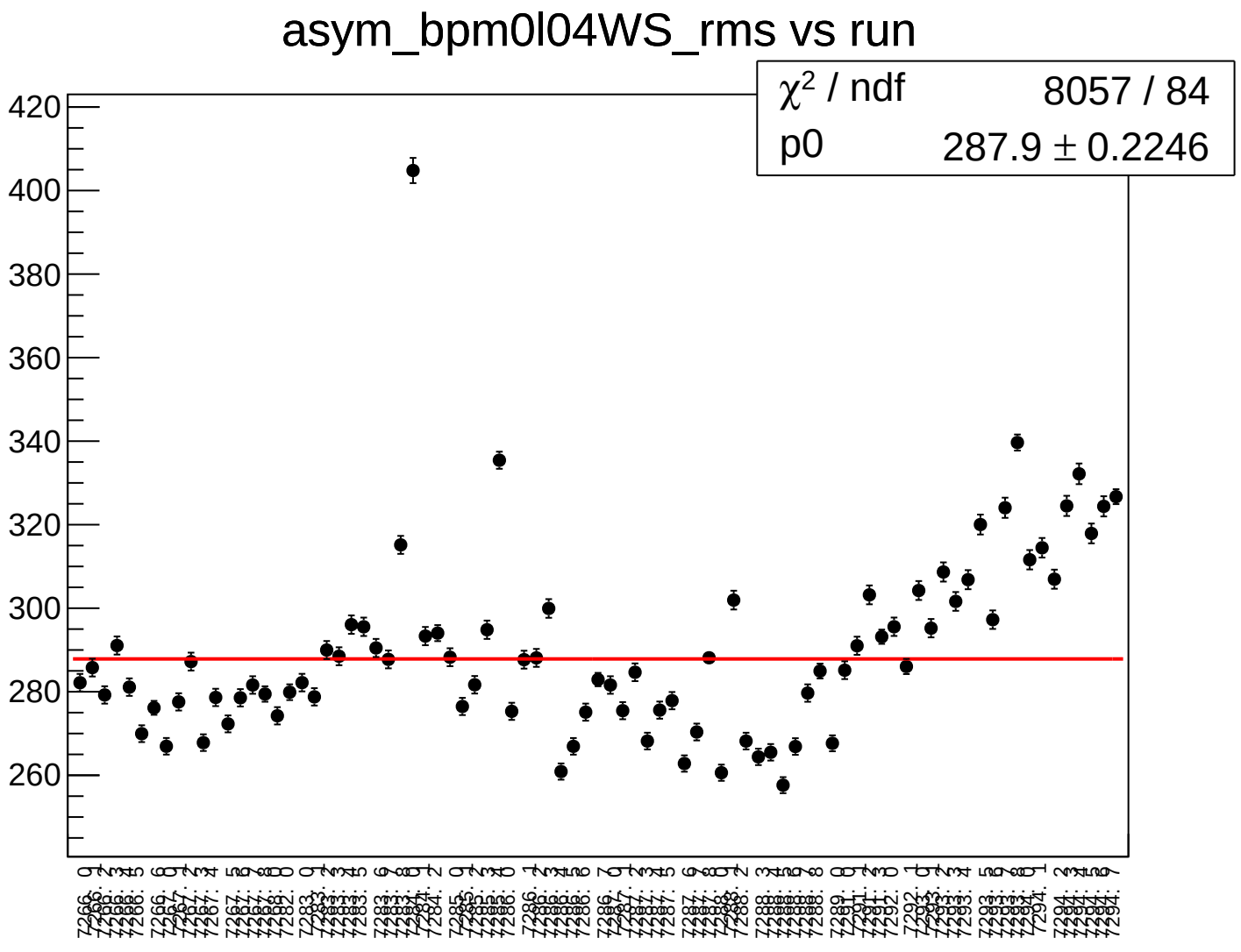

asym_bpm0l03WS_mean vs run
χ² / ndf 74.52 / 84
p0 2778 ± 1112
pull
Entries 85
Mean 42.67
Std Dev 37.14

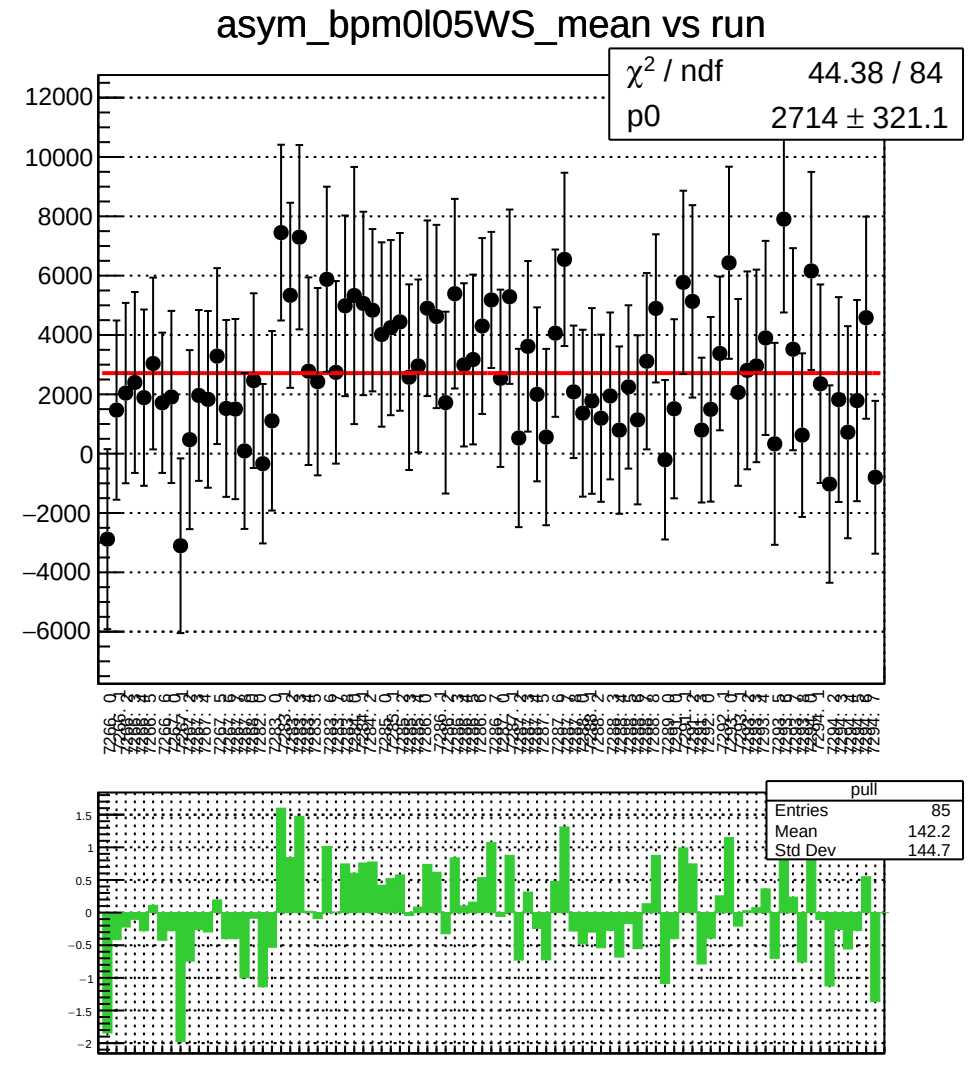

pull1D
Entries 85
Mean 0.01634
Std Dev 0.9362

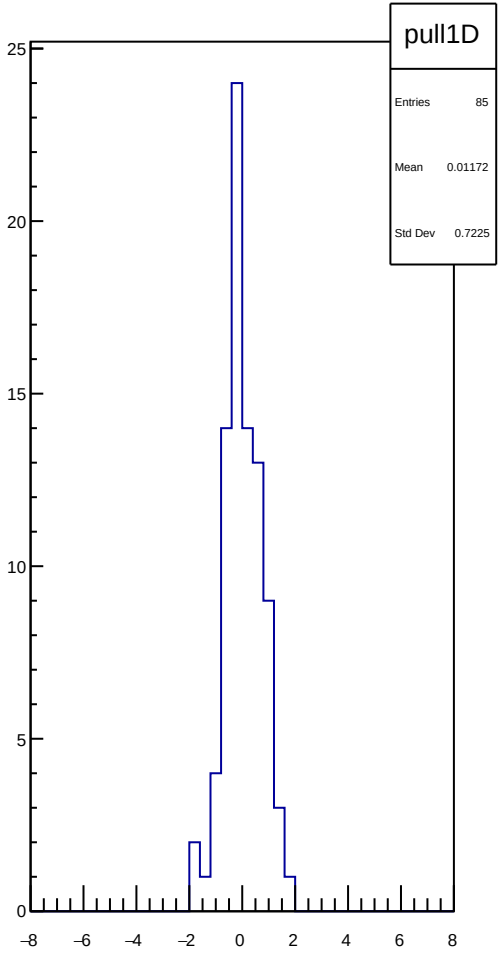

asym_bpm0l03WS_rms vs run
χ² / ndf 1.334e+05 / 84
p0 968.2 ± 0.786
2000
1800
1600
1400
1200
1000
800
600
400

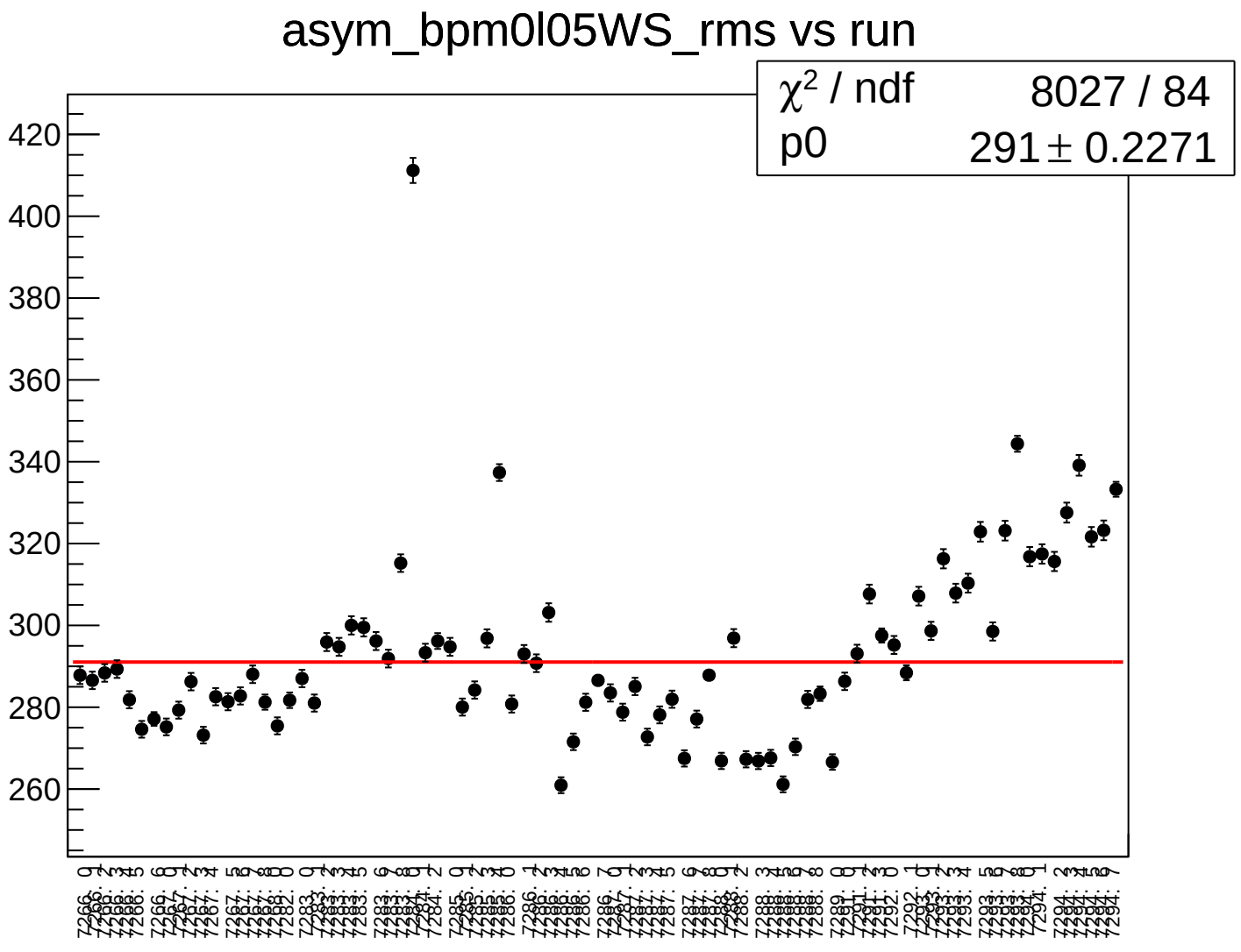

asym_bpm0l04WS_mean vs run
χ^2 / ndf 42.15 / 84
p0 3040 ± 317.6
pull
Entries 85
Mean 8.462
Std Dev 145.6

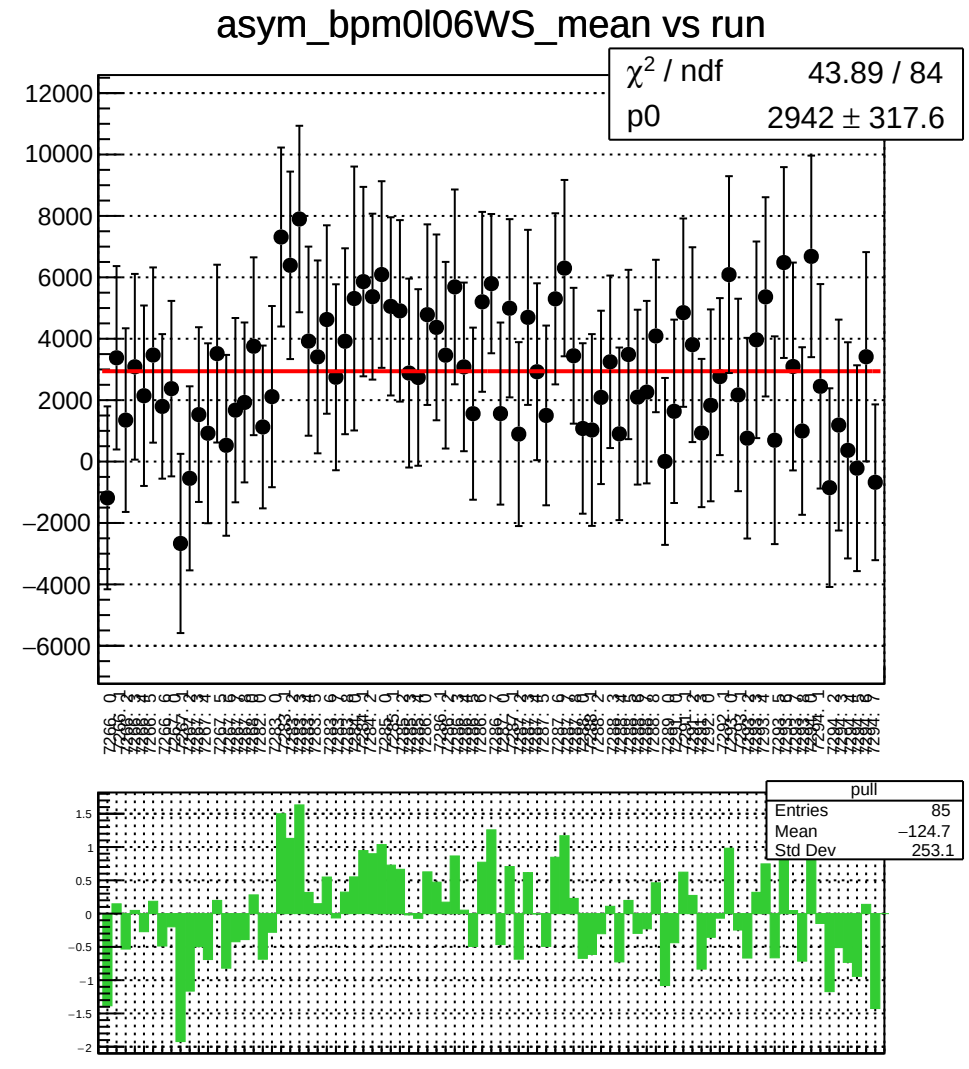

pull1D
Entries 85
Mean 0.005959
Std Dev 0.7041

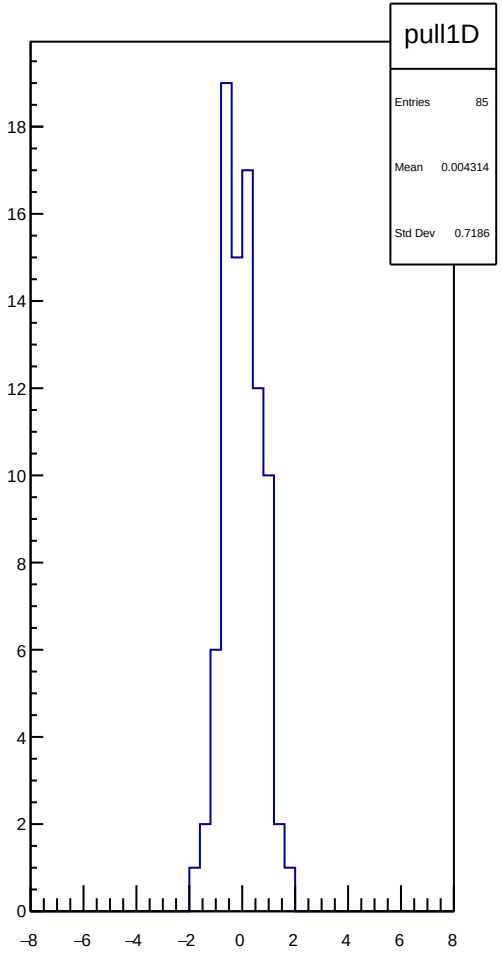

asym_bpm0l04WS_rms vs run
χ² / ndf 8057 / 84
p0 287.9 ± 0.2246
420
400
380
360
340
320
300
280
260

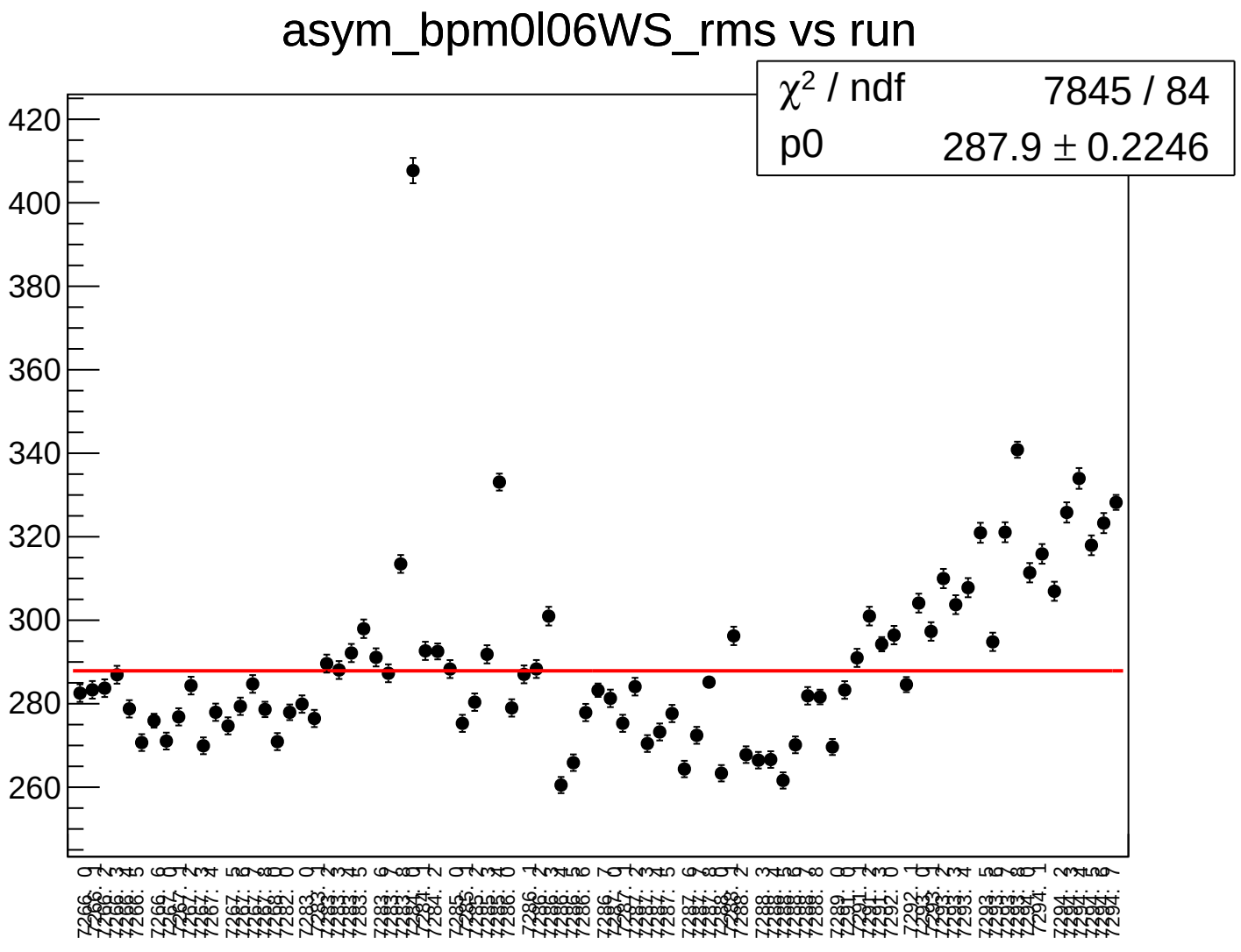

asym_bpm0l05WS_mean vs run
χ² / ndf 44.38 / 84
p0 2714 ± 321.1
pull
Entries 85
Mean 142.2
Std Dev 144.7

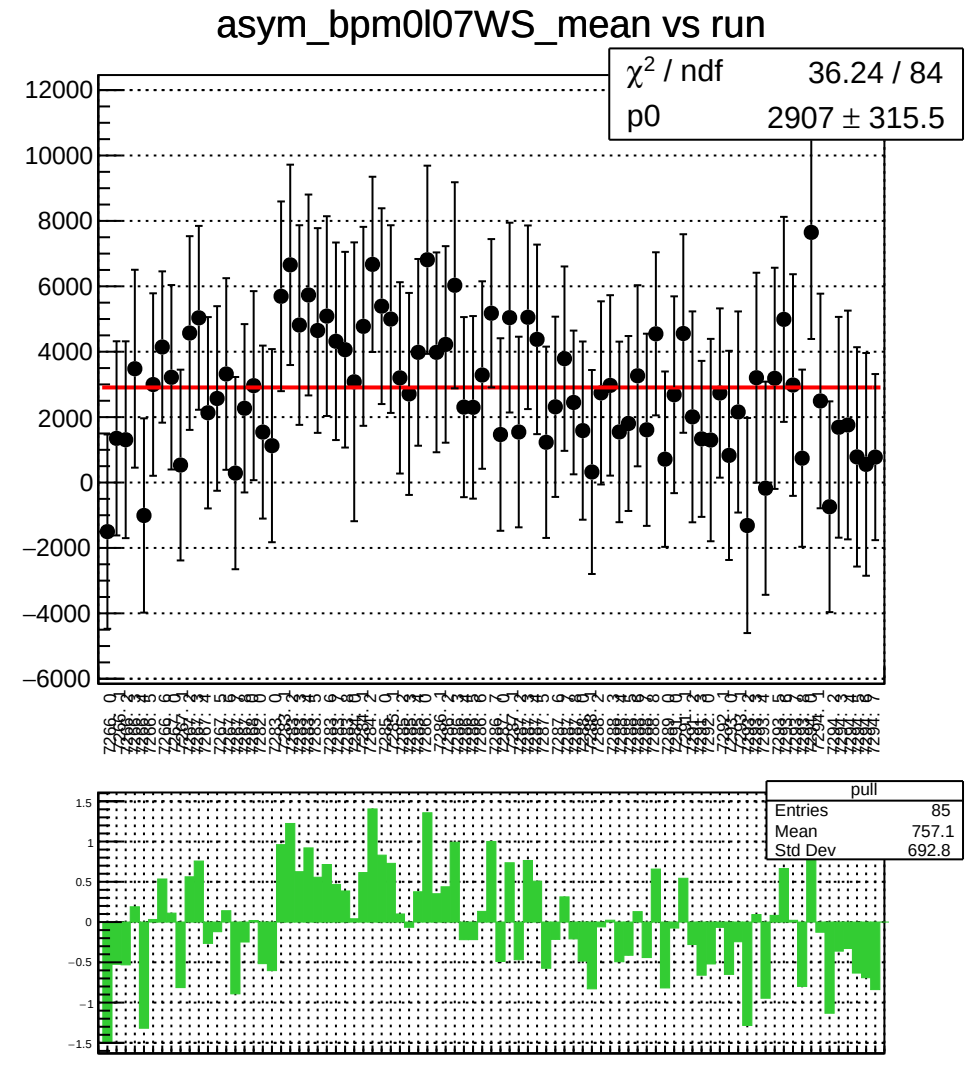

pull1D
Entries 85
Mean 0.01172
Std Dev 0.7225

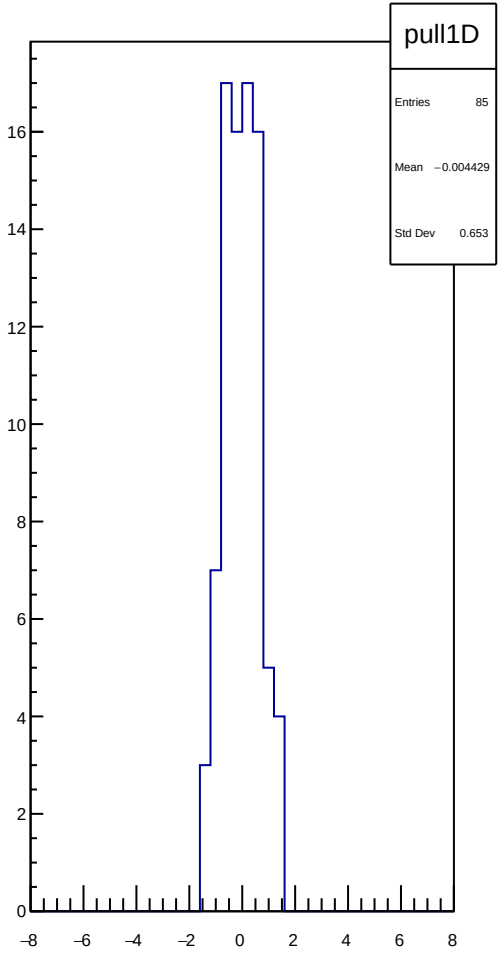

asym_bpm0l05WS_rms vs run
χ² / ndf 8027 / 84
p0 291 ± 0.2271
420
400
380
360
340
320
300
280
260

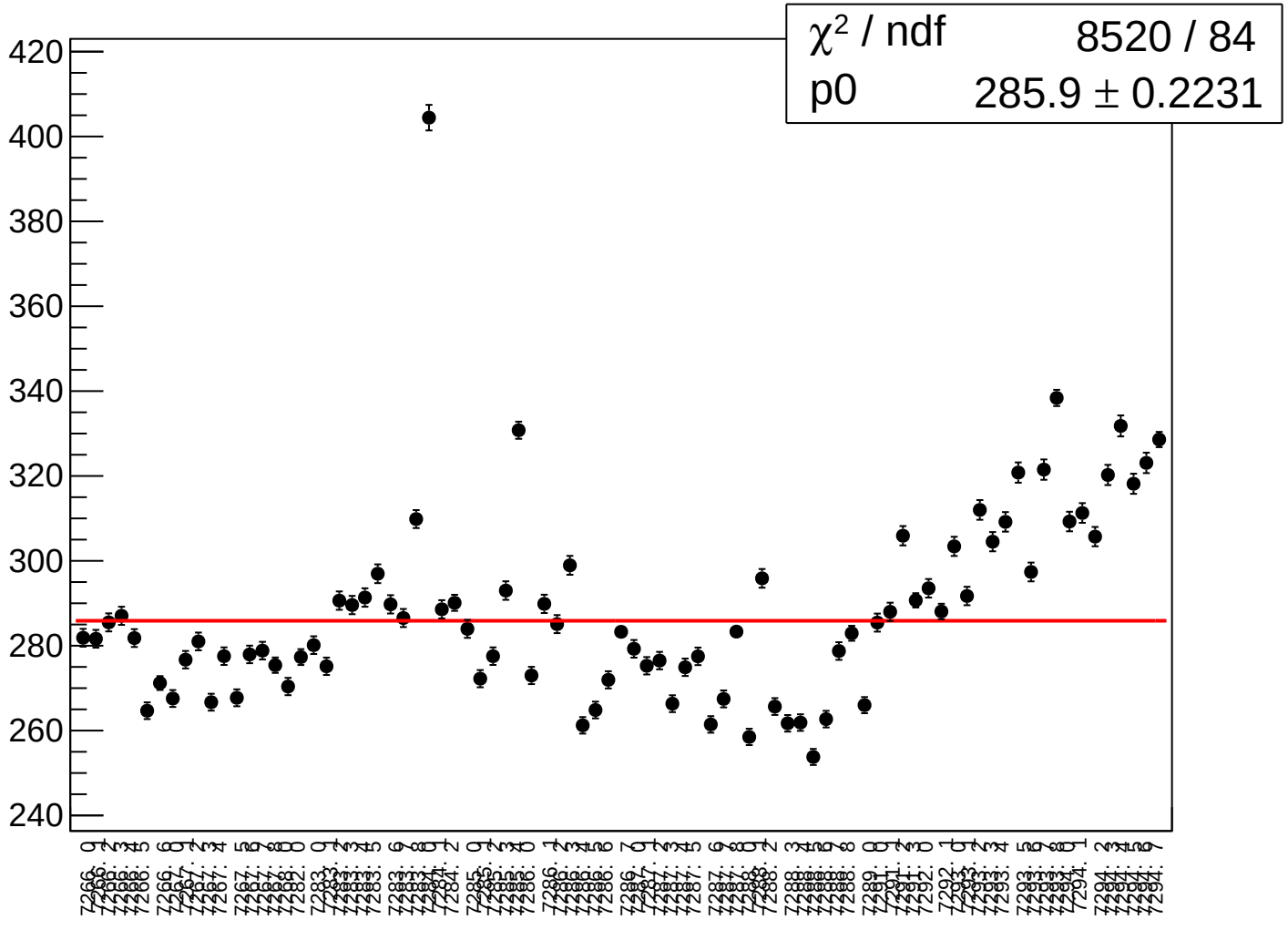

asym_bpm0l06WS_mean vs run
χ² / ndf 43.89 / 84
p0 2942 ± 317.6
pull
Entries 85
Mean −124.7
Std Dev 253.1

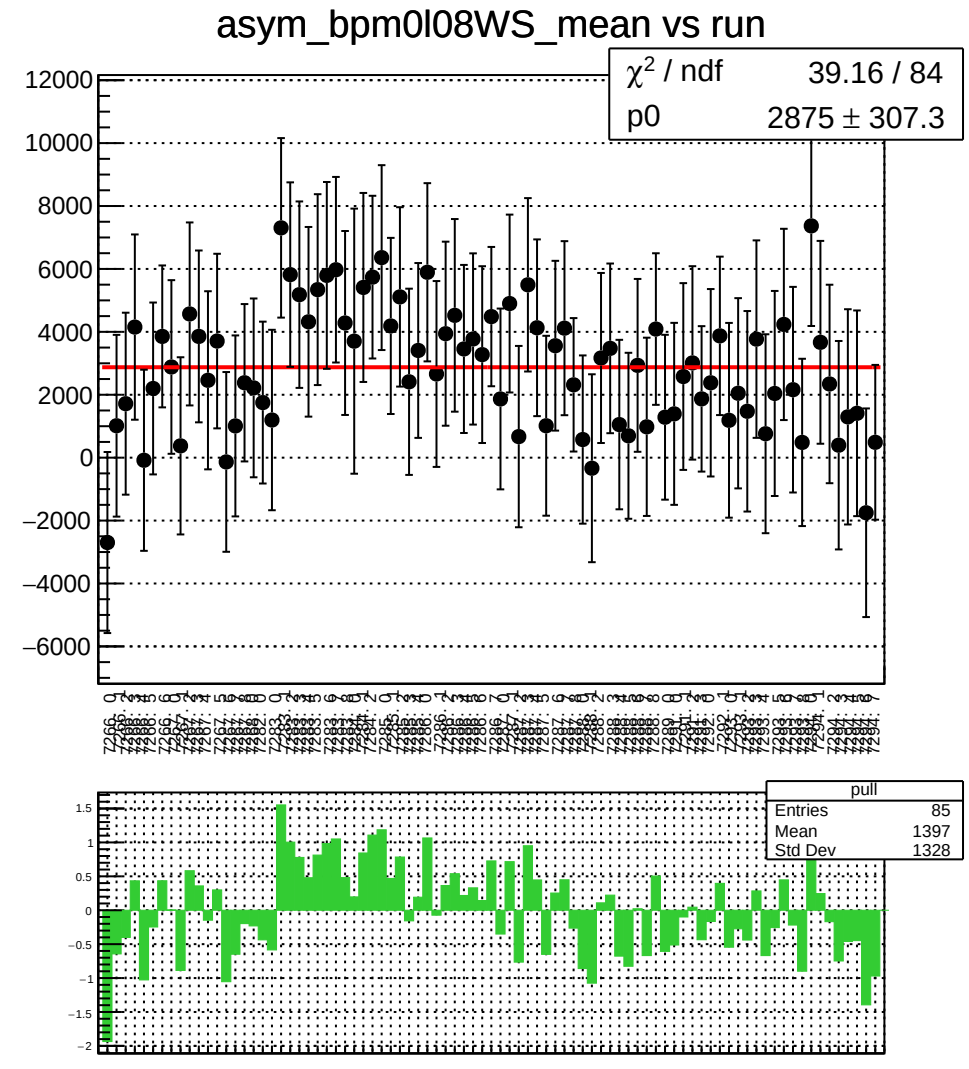

pull1D
Entries 85
Mean 0.004314
Std Dev 0.7186

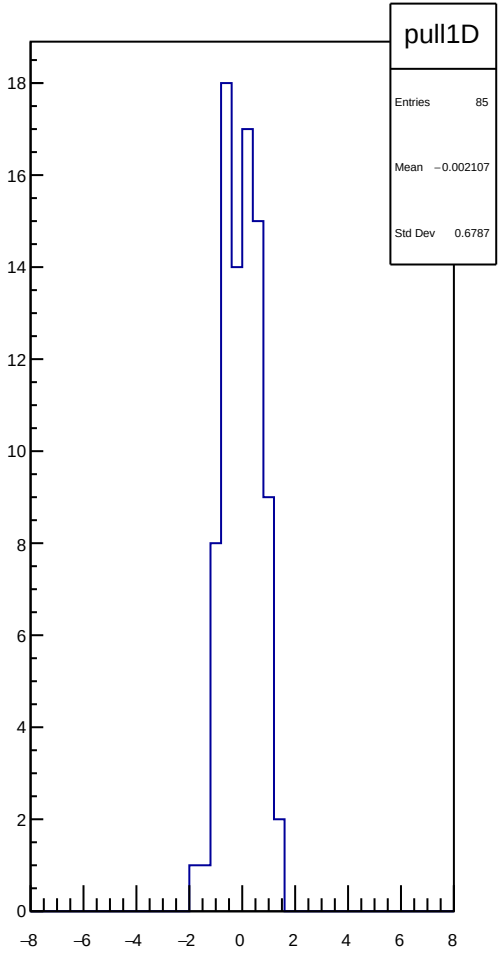

asym_bpm0l06WS_rms vs run
χ² / ndf 7845 / 84
p0 287.9 ± 0.2246
420
400
380
360
340
320
300
280
260

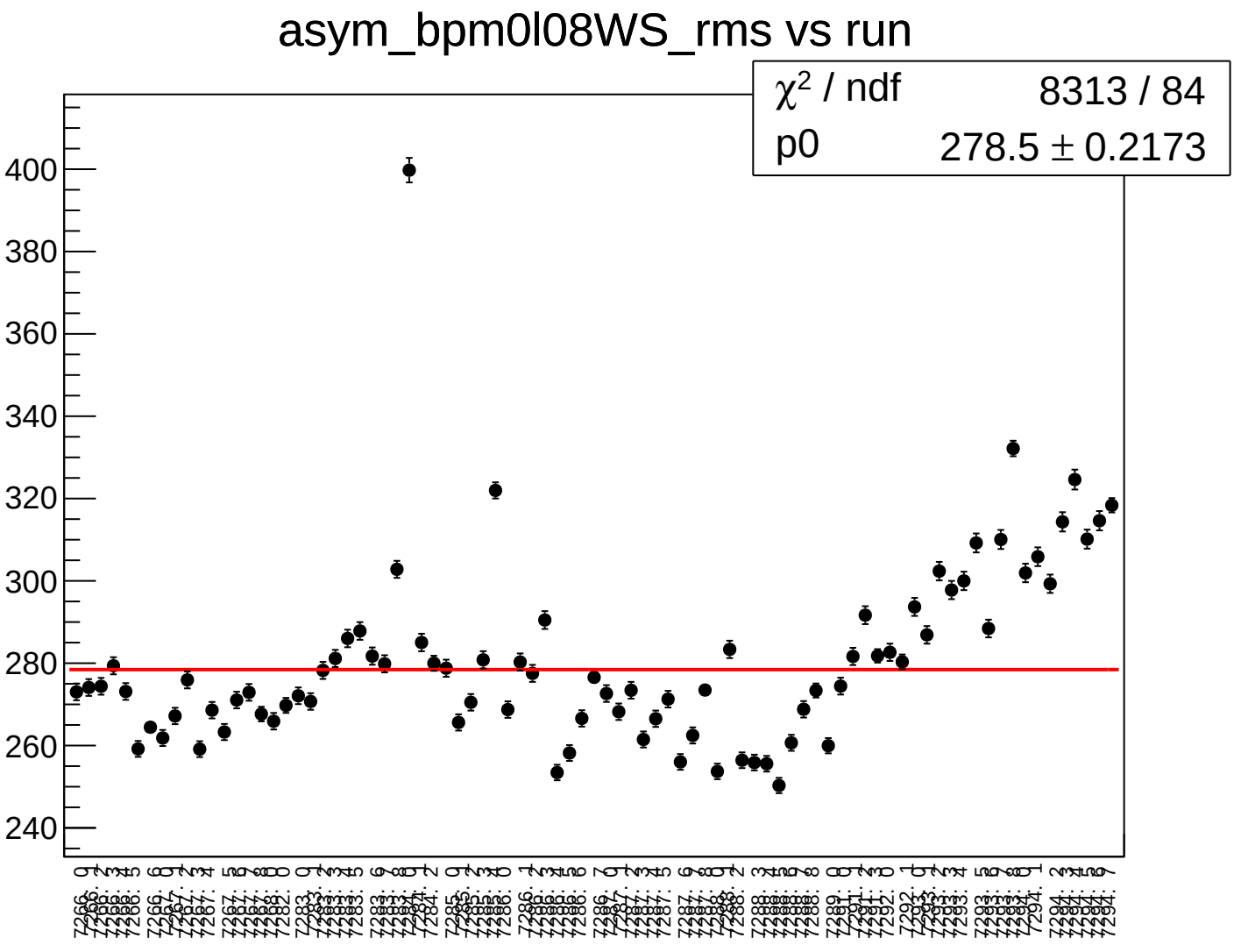

asym_bpm0l07WS_mean vs run
χ² / ndf 36.24 / 84
p0 2907 ± 315.5
pull
Entries 85
Mean 757.1
Std Dev 692.8

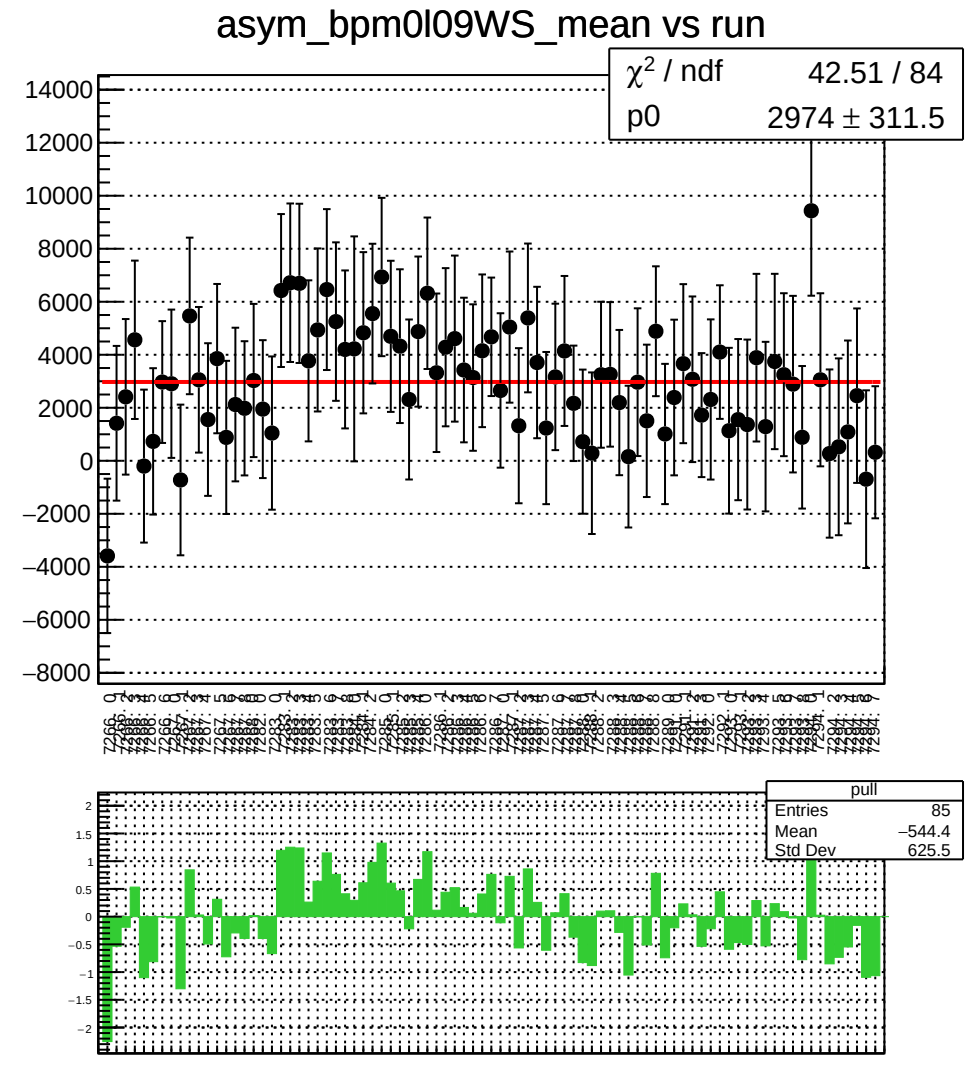

pull1D
Entries 85
Mean −0.004429
Std Dev 0.653

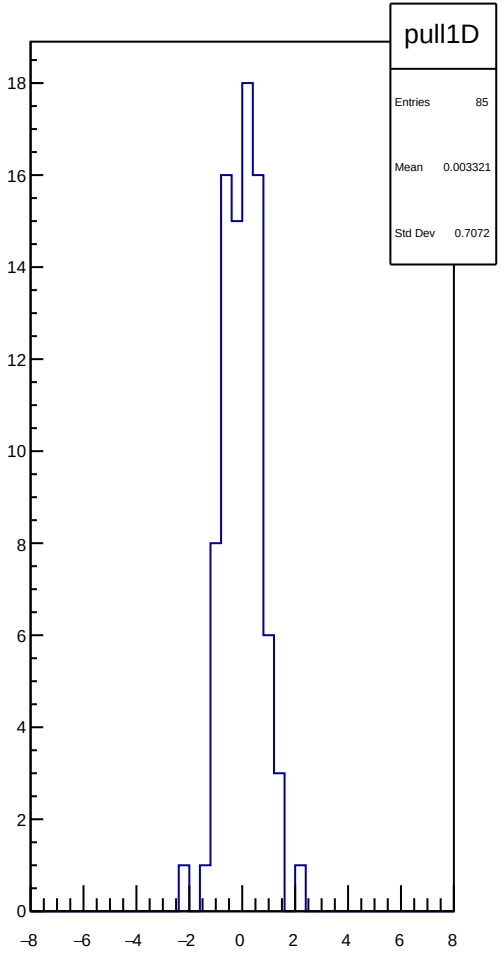

asym_bpm0l07WS_rms vs run
χ² / ndf 8520 / 84
p0 285.9 ± 0.2231
420
400
380
360
340
320
300
280
260
240

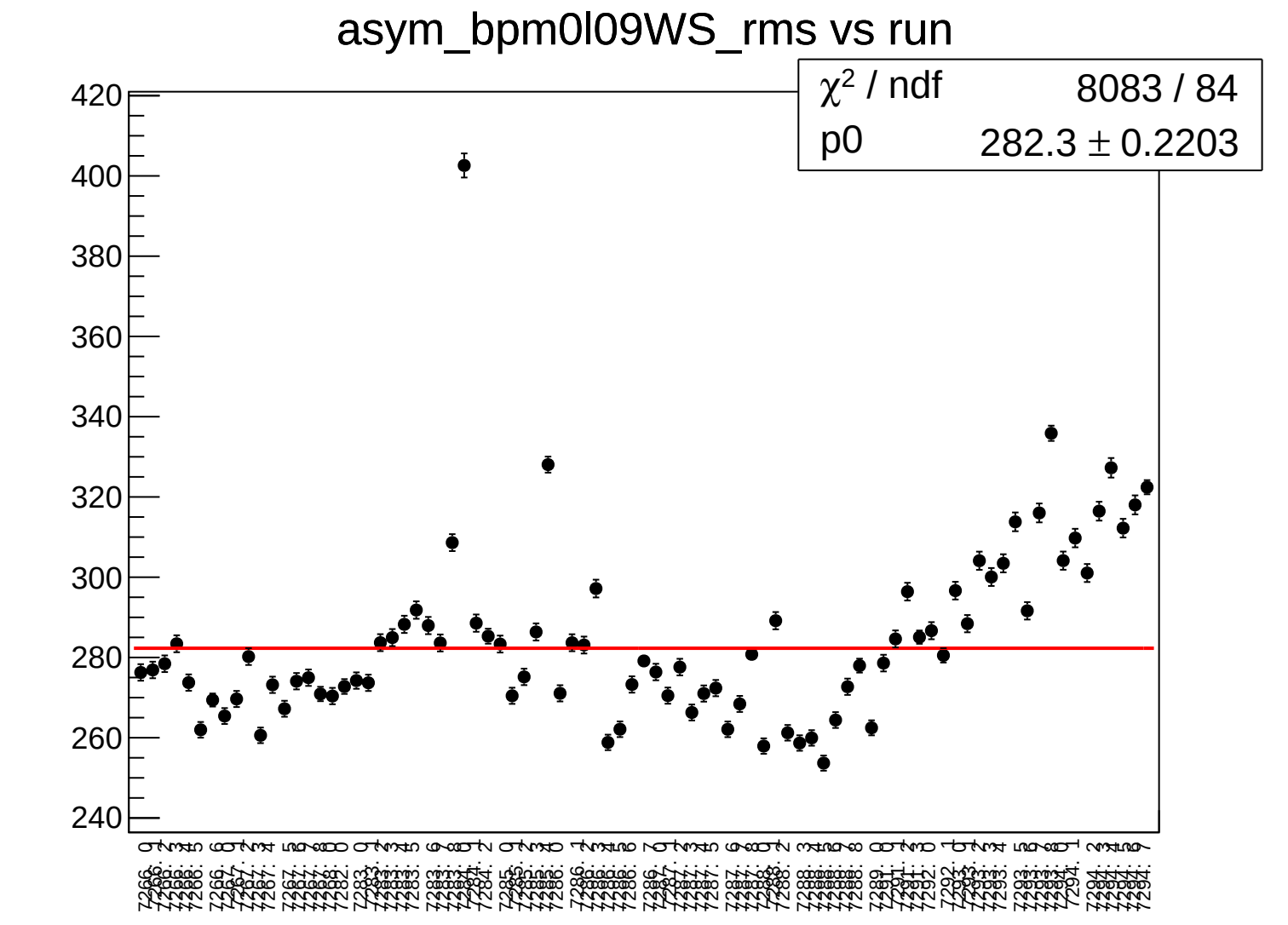

asym_bpm0l08WS_mean vs run
χ^2 / ndf 39.16 / 84
p0 2875 ± 307.3
pull
Entries 85
Mean 1397
Std Dev 1328

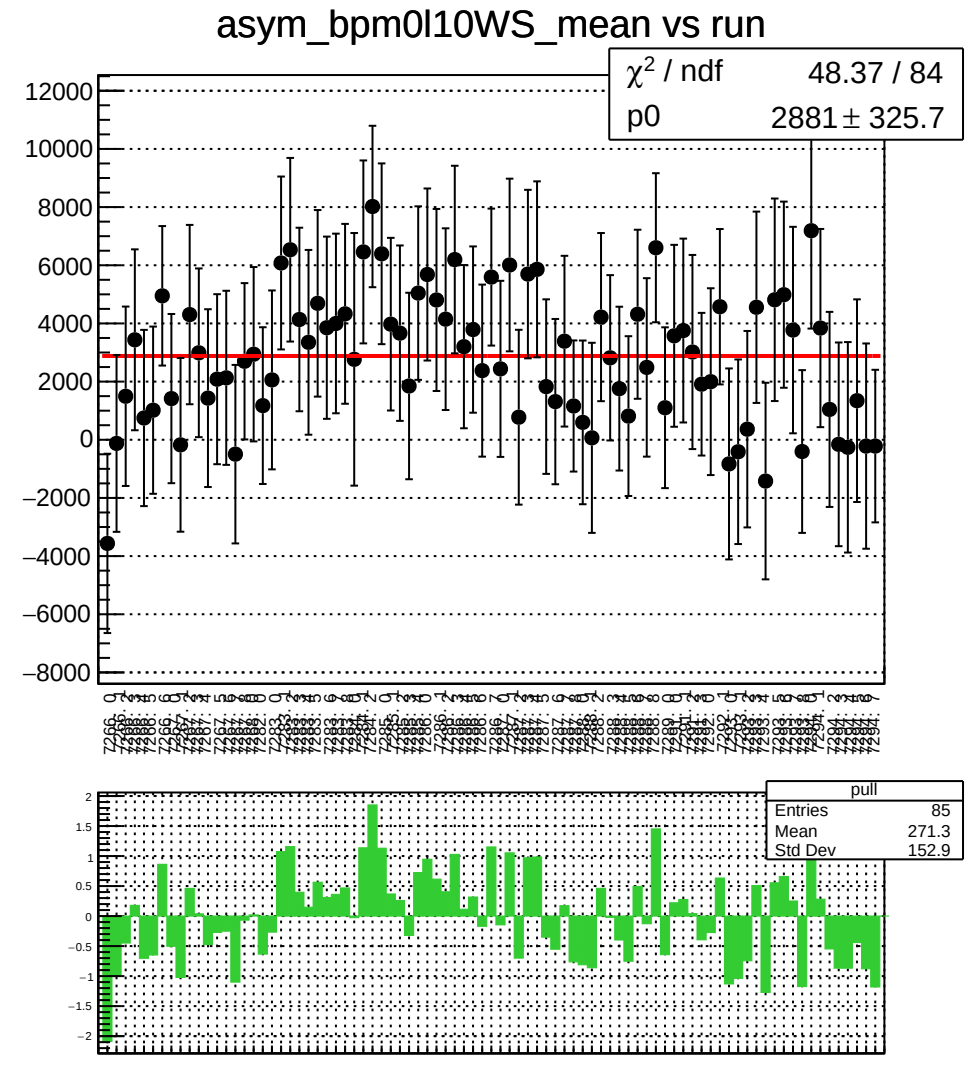

pull1D
Entries 85
Mean −0.002107
Std Dev 0.6787

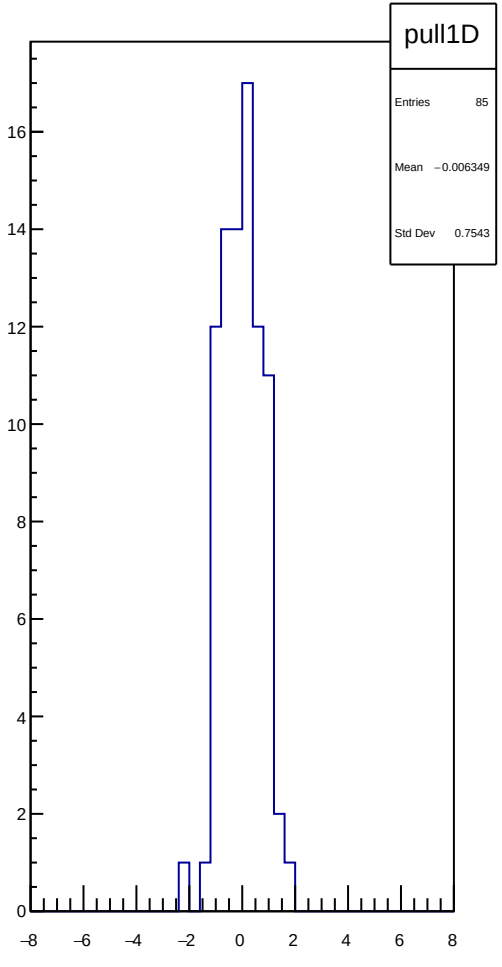

asym_bpm0l08WS_rms vs run
χ² / ndf 8313 / 84
p0 278.5 ± 0.2173
400
380
360
340
320
300
280
260
240

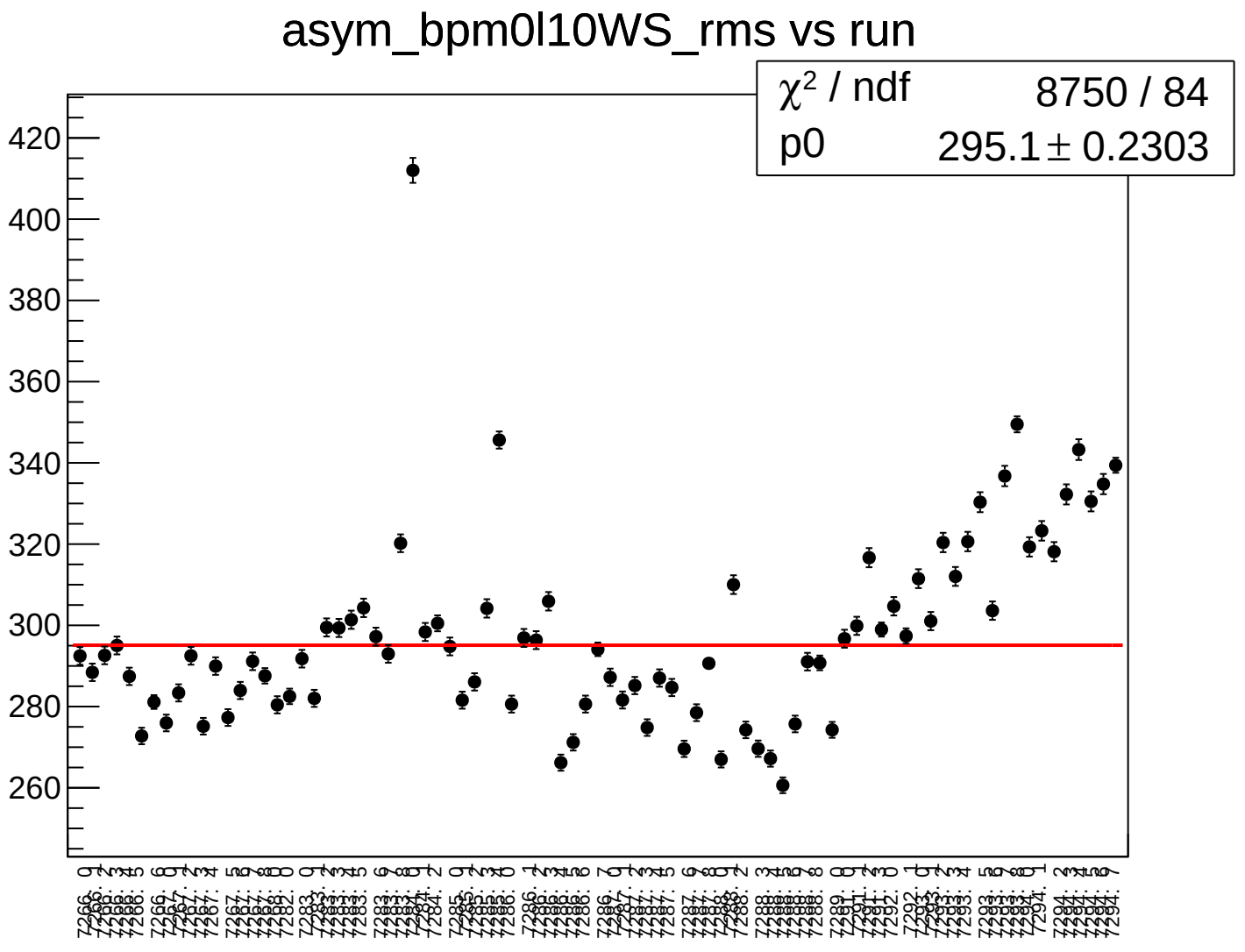

asym_bpm0l09WS_mean vs run
χ² / ndf 42.51 / 84
p0 2974 ± 311.5
pull
Entries 85
Mean −544.4
Std Dev 625.5

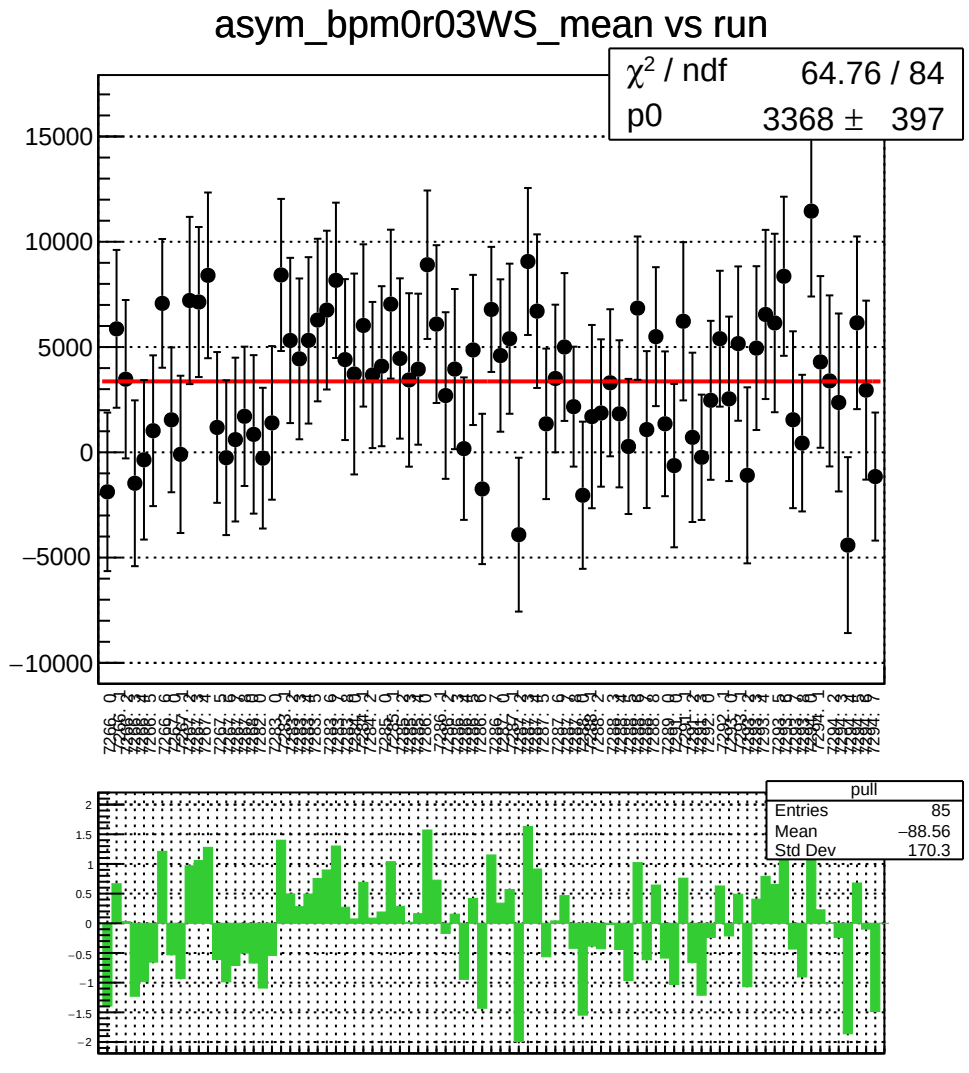

pull1D
Entries 85
Mean 0.003321
Std Dev 0.7072

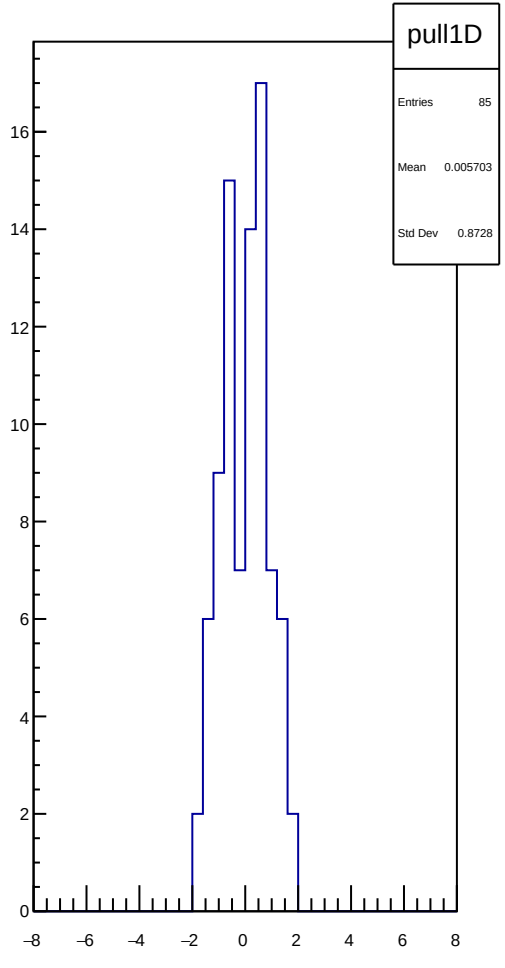

asym_bpm0l09WS_rms vs run
χ² / ndf 8083 / 84
p0 282.3 ± 0.2203
420
400
380
360
340
320
300
280
260
240

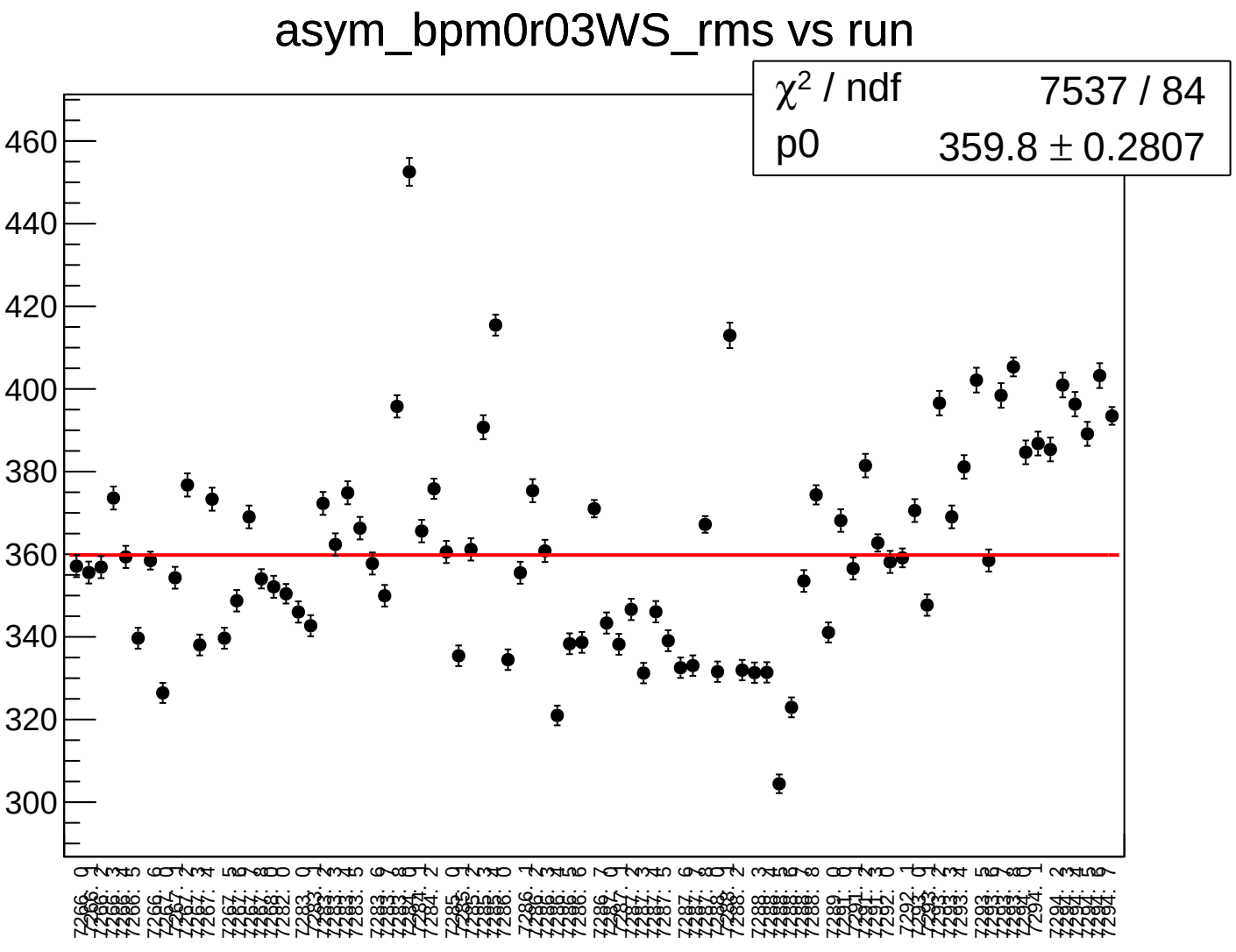

asym_bpm0l10WS_mean vs run
χ² / ndf 48.37 / 84
p0 2881 ± 325.7
pull
Entries 85
Mean 271.3
Std Dev 152.9

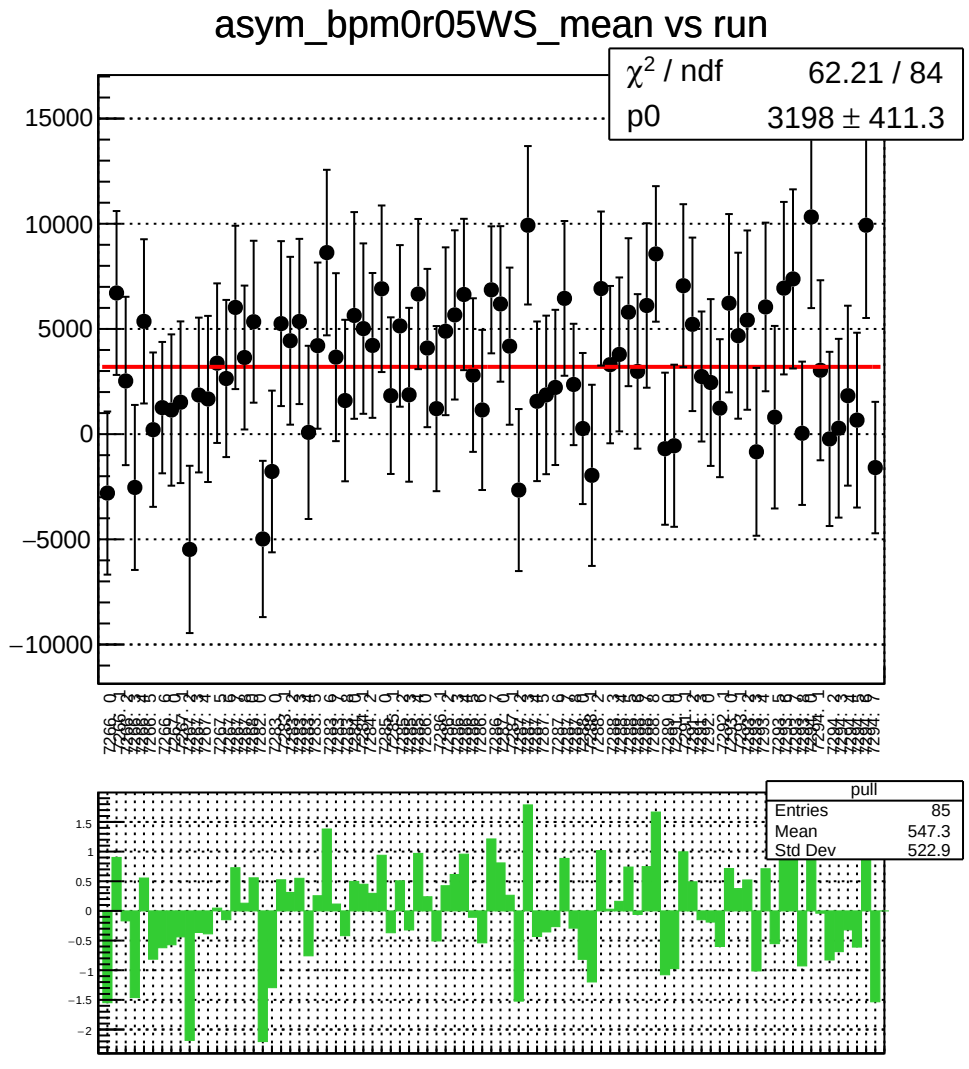

pull1D
Entries 85
Mean −0.006349
Std Dev 0.7543

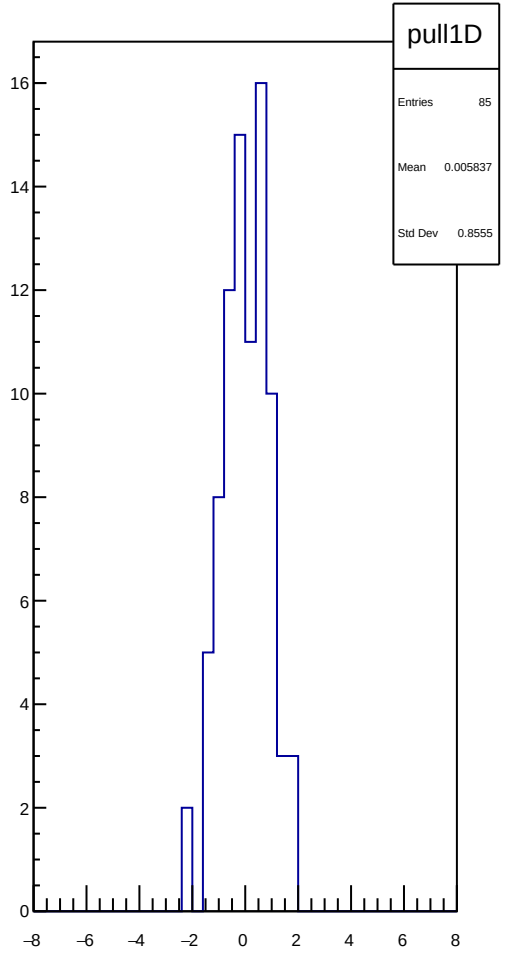

asym_bpm0l10WS_rms vs run
χ² / ndf 8750 / 84
p0 295.1 ± 0.2303
420
400
380
360
340
320
300
280
260

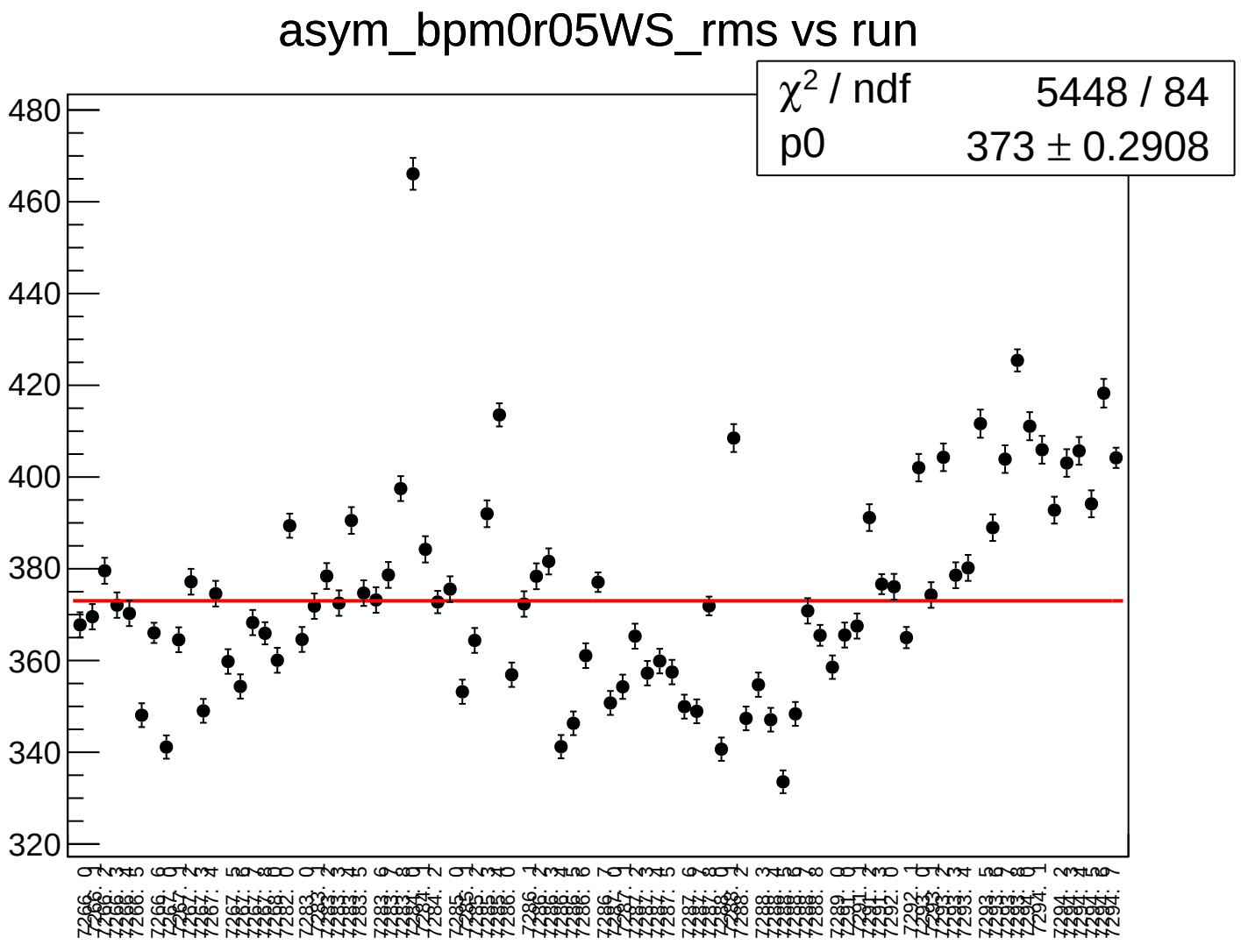

asym_bpm0r03WS_mean vs run
χ² / ndf 64.76 / 84
p0 3368 ± 397
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean −88.56
Std Dev 170.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

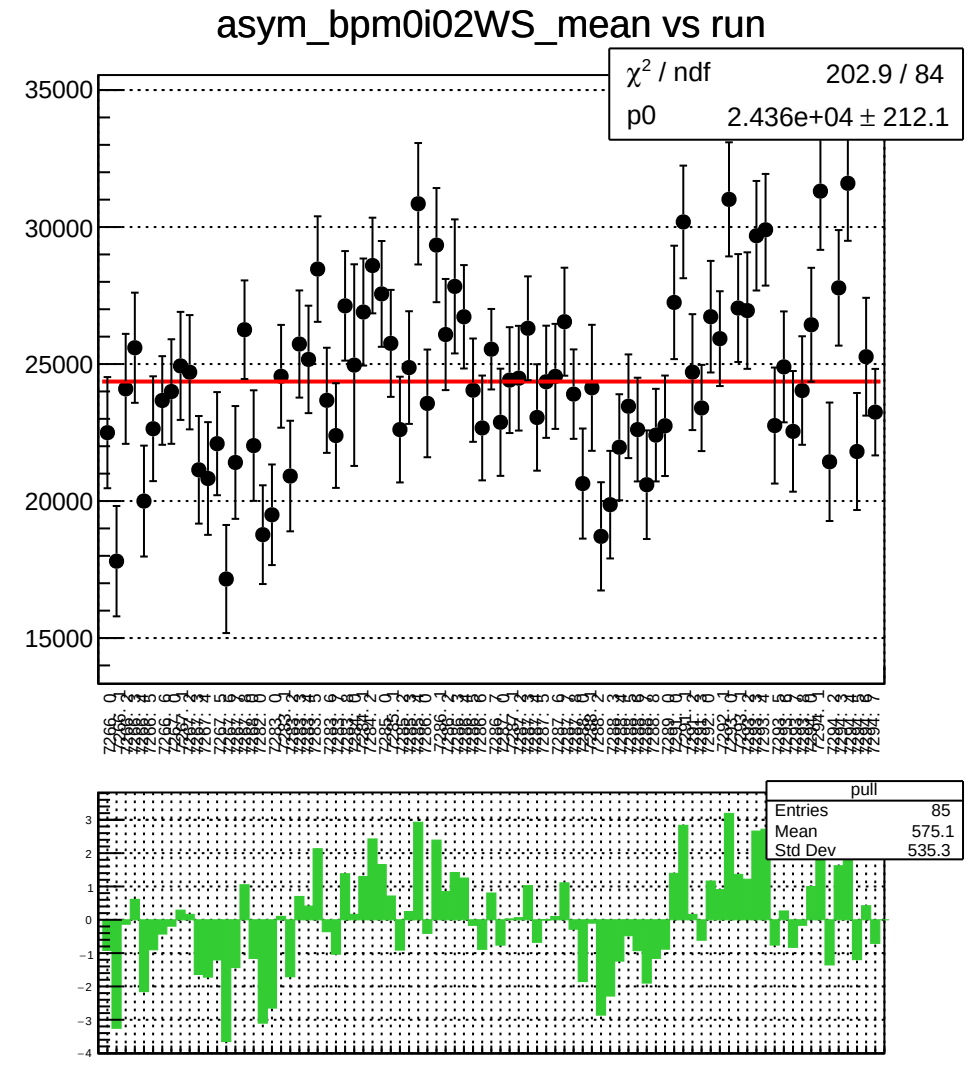

pull1D
Entries 85
Mean 0.005703
Std Dev 0.8728
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

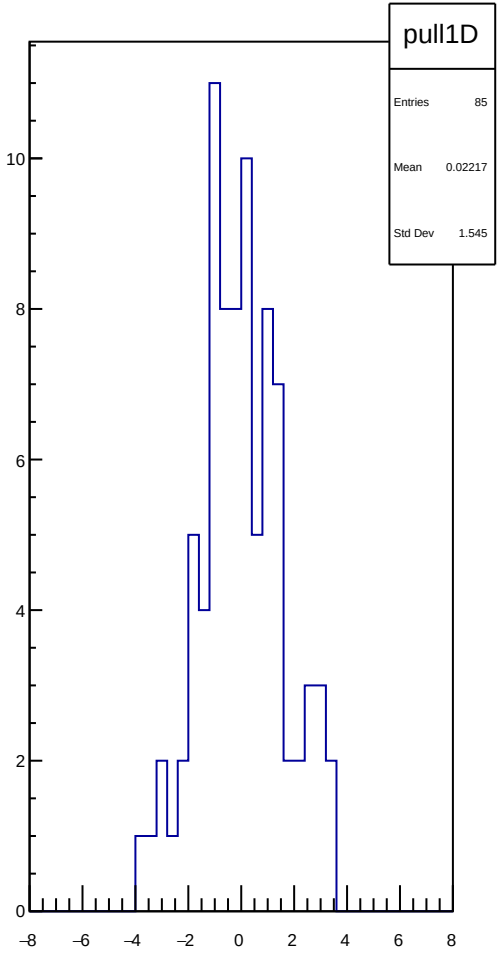

asym_bpm0r03WS_rms vs run
χ² / ndf 7537 / 84
p0 359.8 ± 0.2807
460
440
420
400
380
360
340
320
300

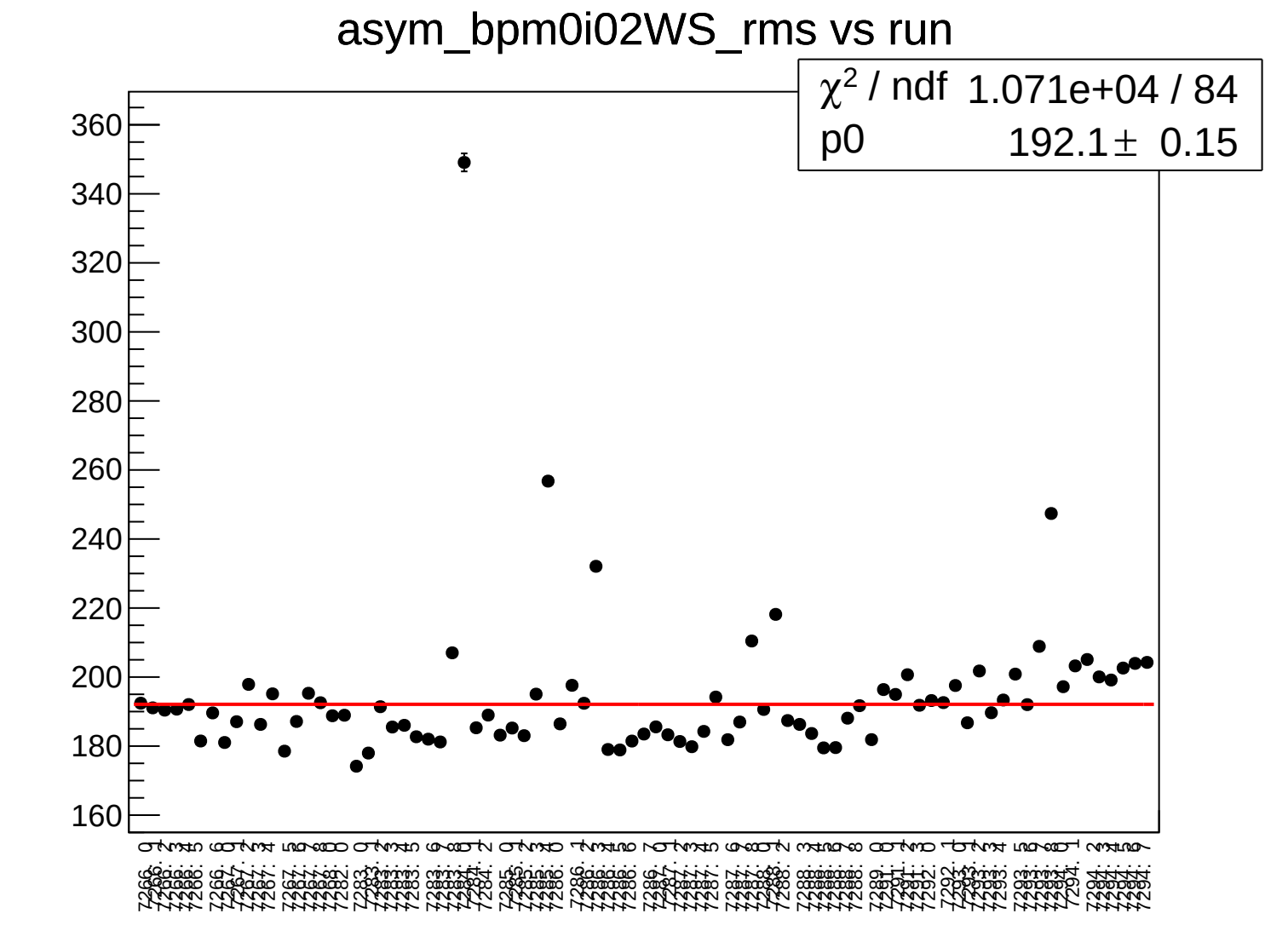

asym_bpm0r05WS_mean vs run
χ² / ndf 62.21 / 84
p0 3198 ± 411.3
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 547.3
Std Dev 522.9
1.5
1
0.5
0
−0.5
−1
−1.5
−2

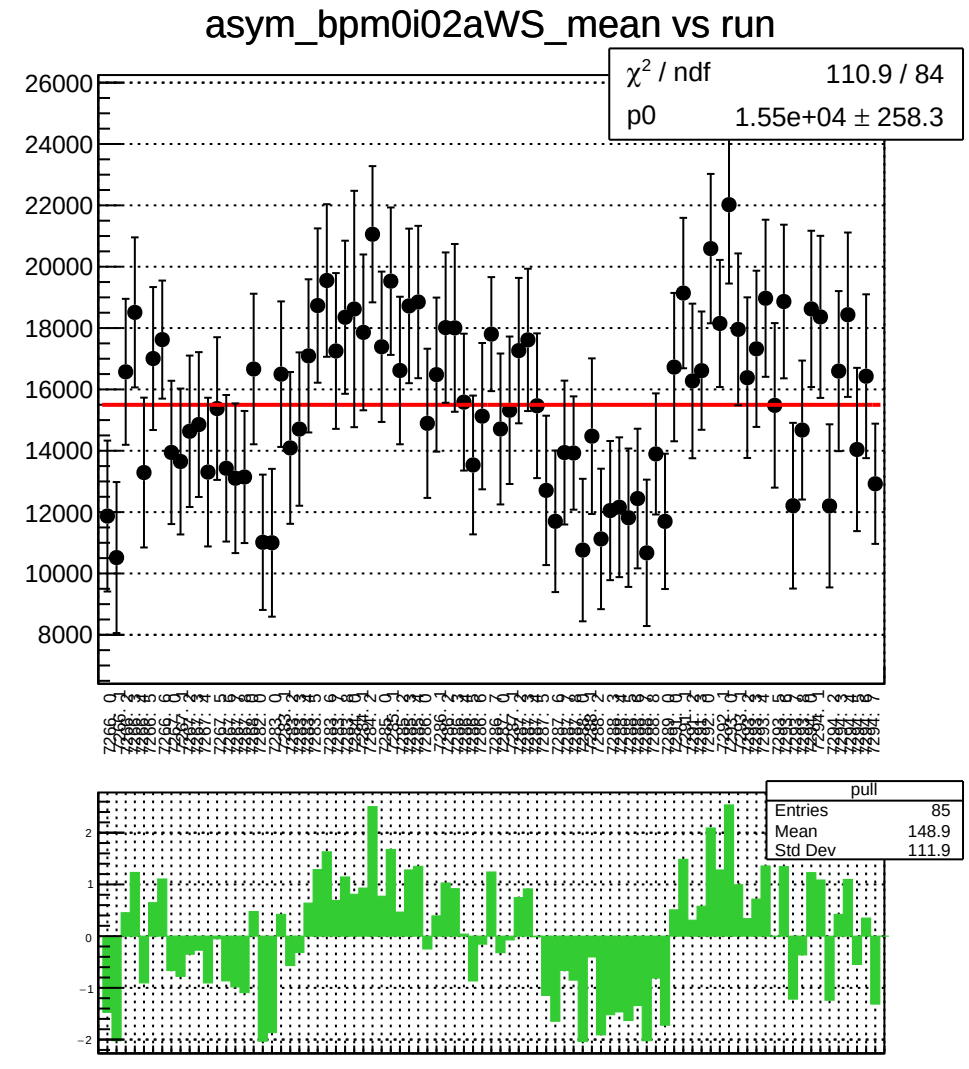

pull1D
Entries 85
Mean 0.005837
Std Dev 0.8555
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

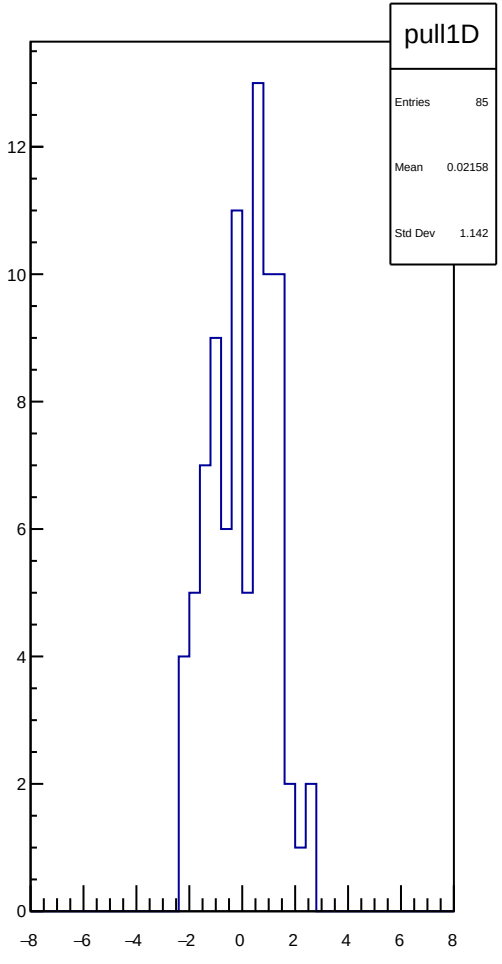

asym_bpm0r05WS_rms vs run
χ² / ndf 5448 / 84
p0 373 ± 0.2908
480
460
440
420
400
380
360
340
320

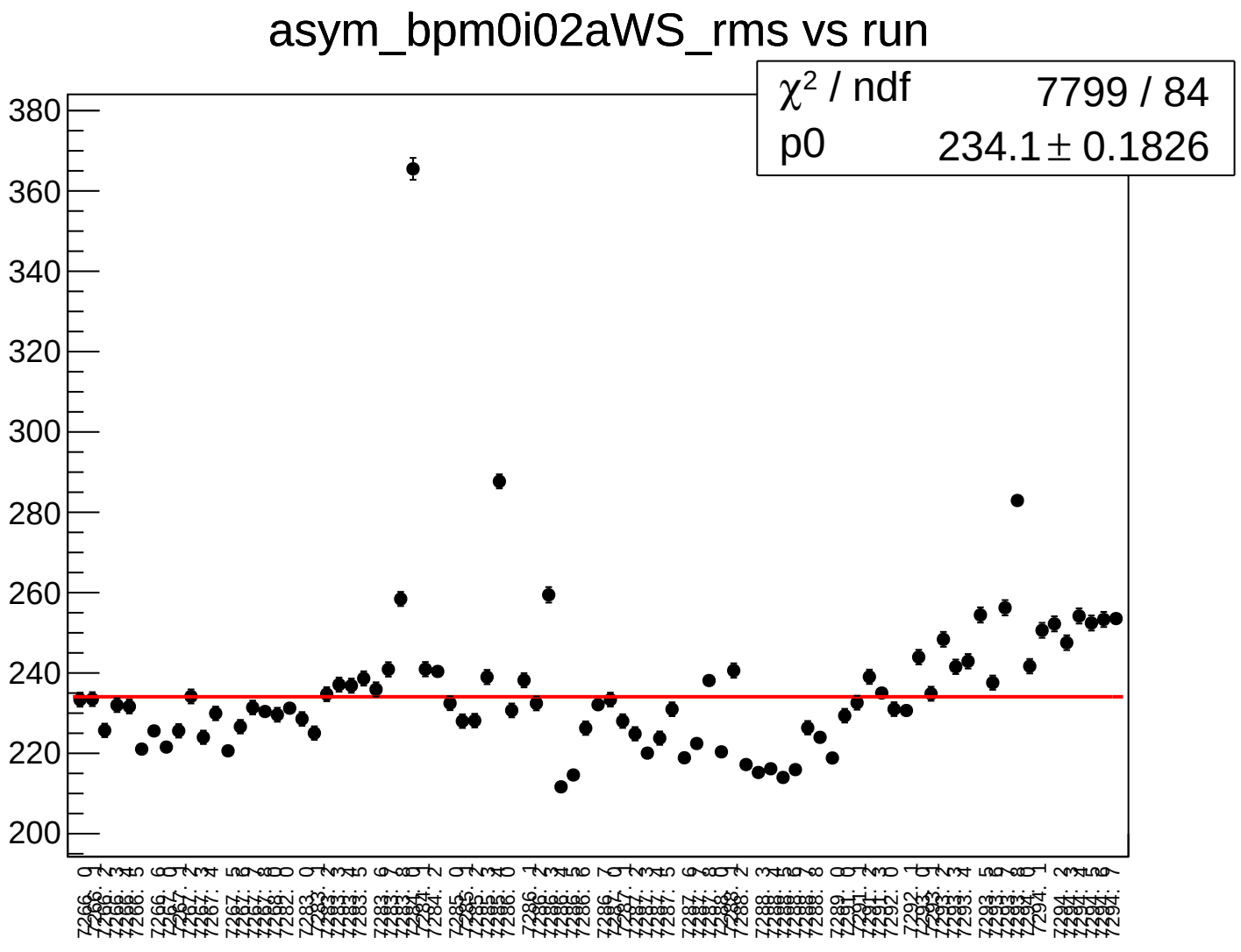

asym_bpm0i02WS_mean vs run
χ² / ndf 202.9 / 84
p0 2.436e+04 ± 212.1
pull
Entries 85
Mean 575.1
Std Dev 535.3

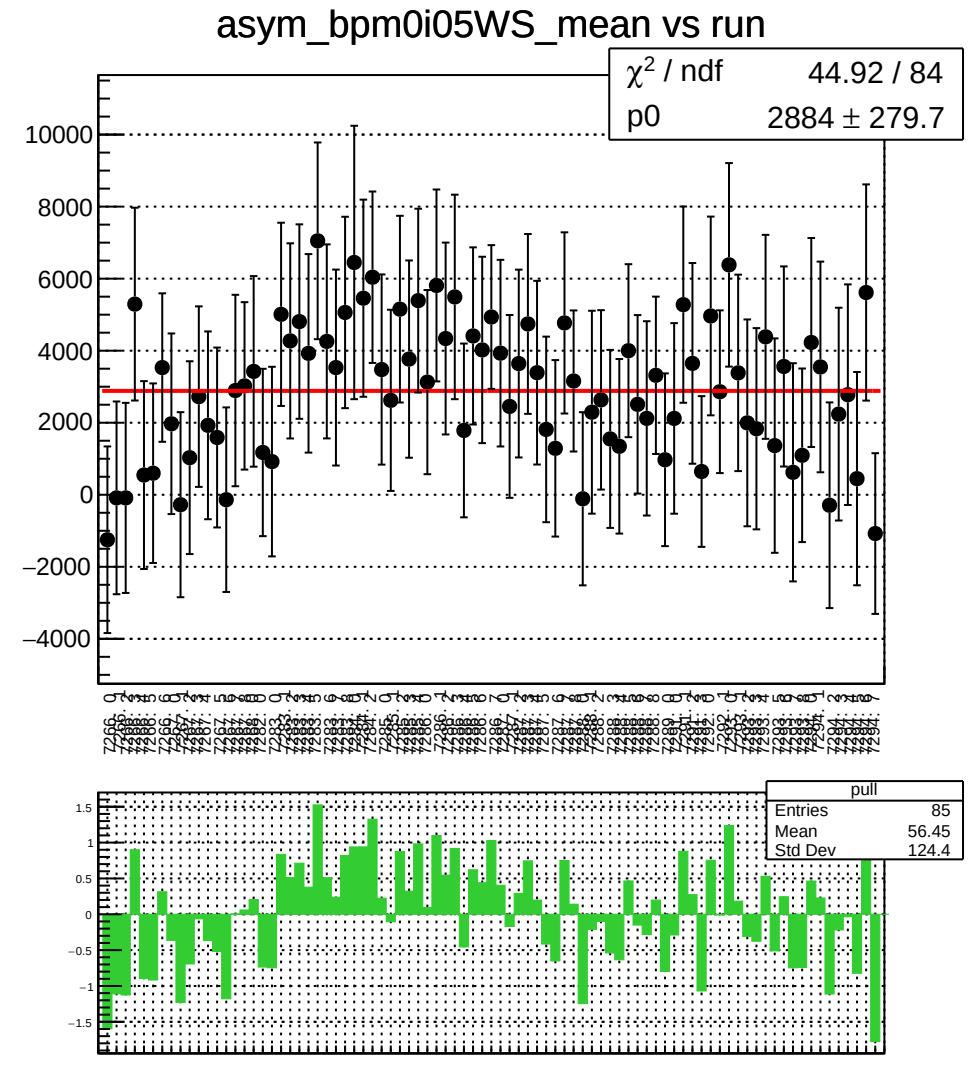

pull1D
Entries 85
Mean 0.02217
Std Dev 1.545

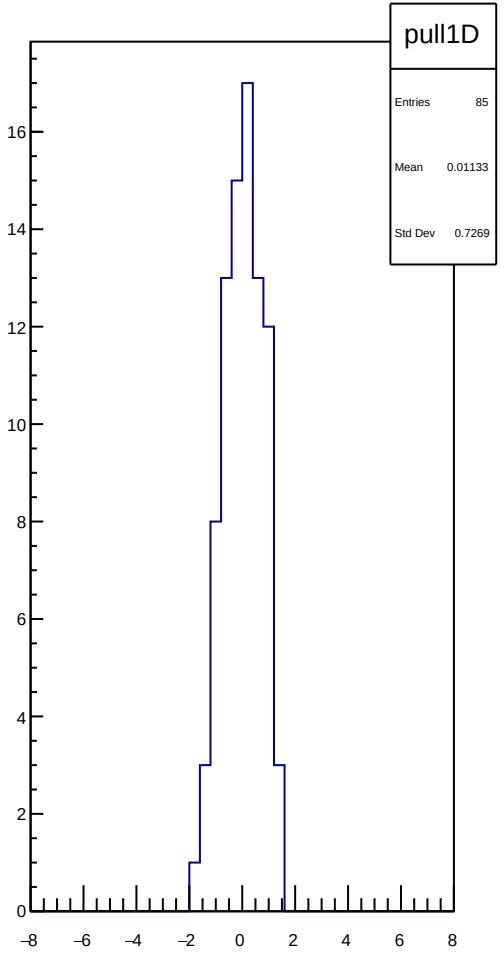

asym_bpm0i02WS_rms vs run
χ^2 / ndf 1.071e+04 / 84
p0 192.1 ± 0.15
360
340
320
300
280
260
240
220
200
180
160

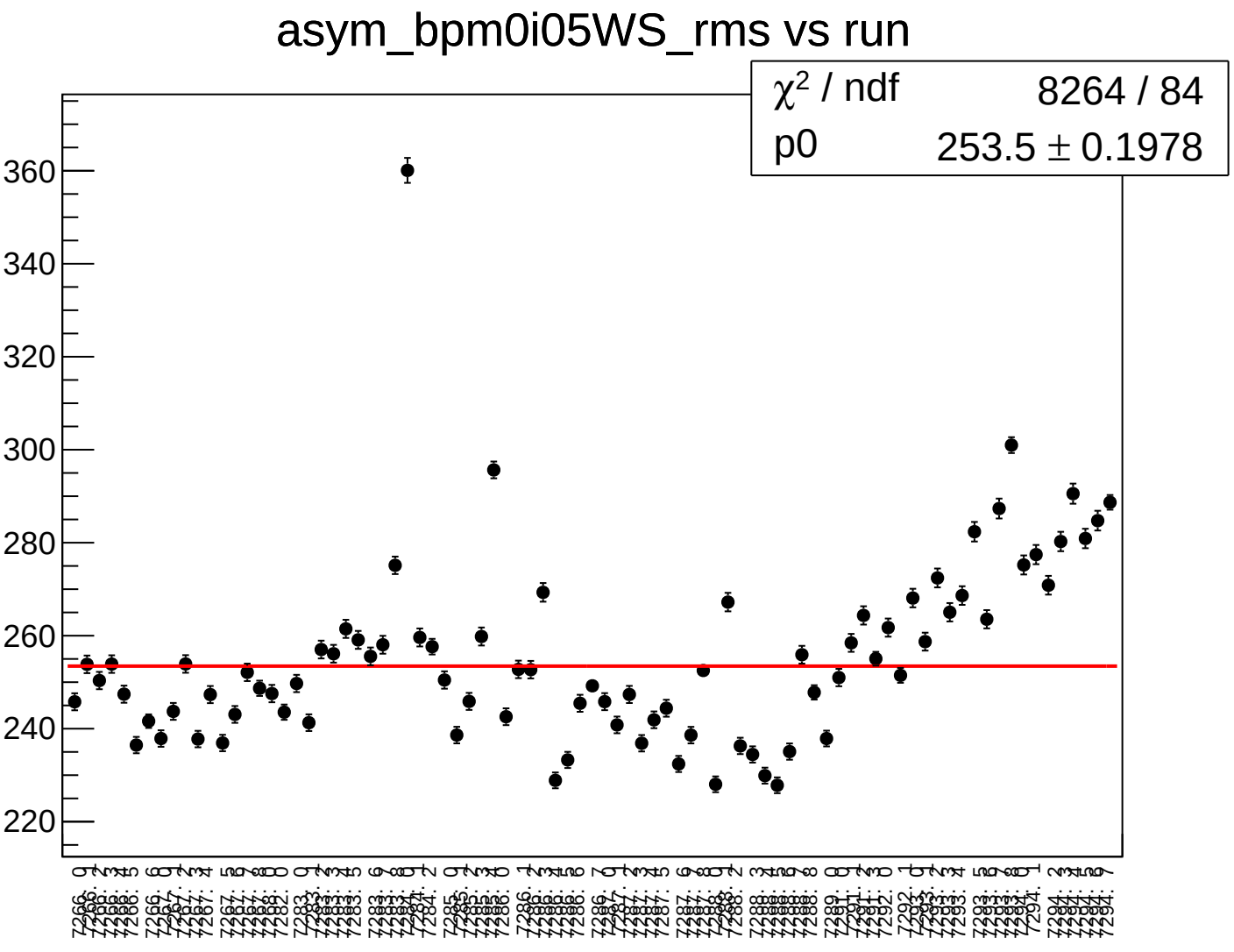

asym_bpm0i02aWS_mean vs run
χ² / ndf 110.9 / 84
p0 1.55e+04 ± 258.3
pull
Entries 85
Mean 148.9
Std Dev 111.9

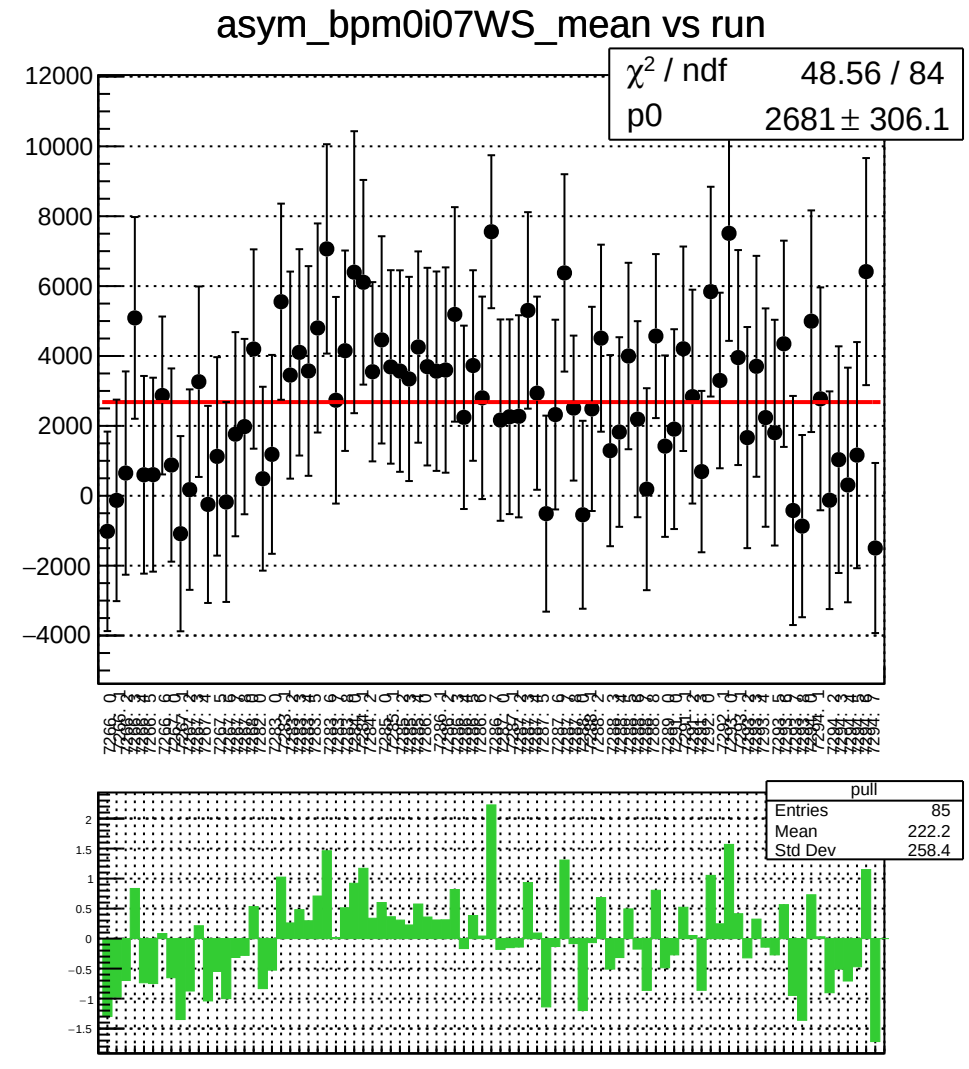

pull1D
Entries 85
Mean 0.02158
Std Dev 1.142

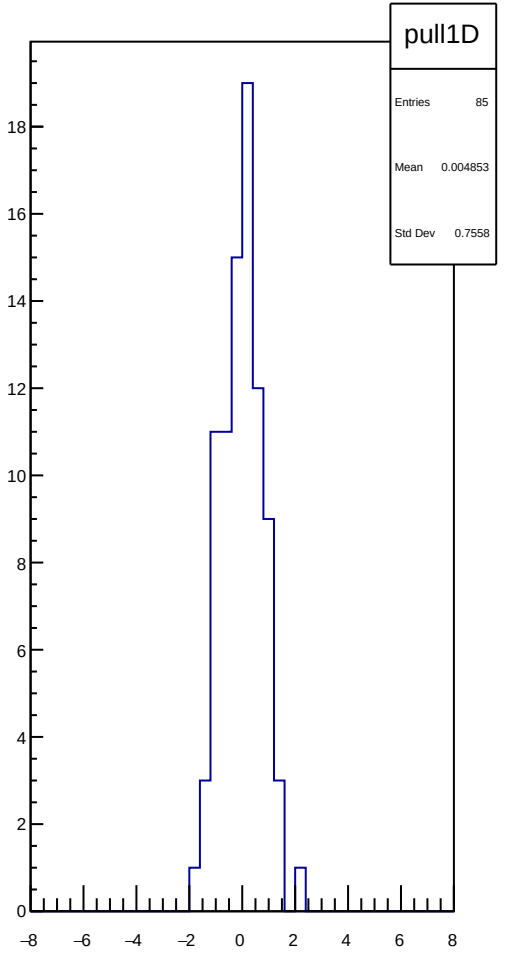

asym_bpm0i02aWS_rms vs run
χ² / ndf 7799 / 84
p0 234.1 ± 0.1826
380
360
340
320
300
280
260
240
220
200

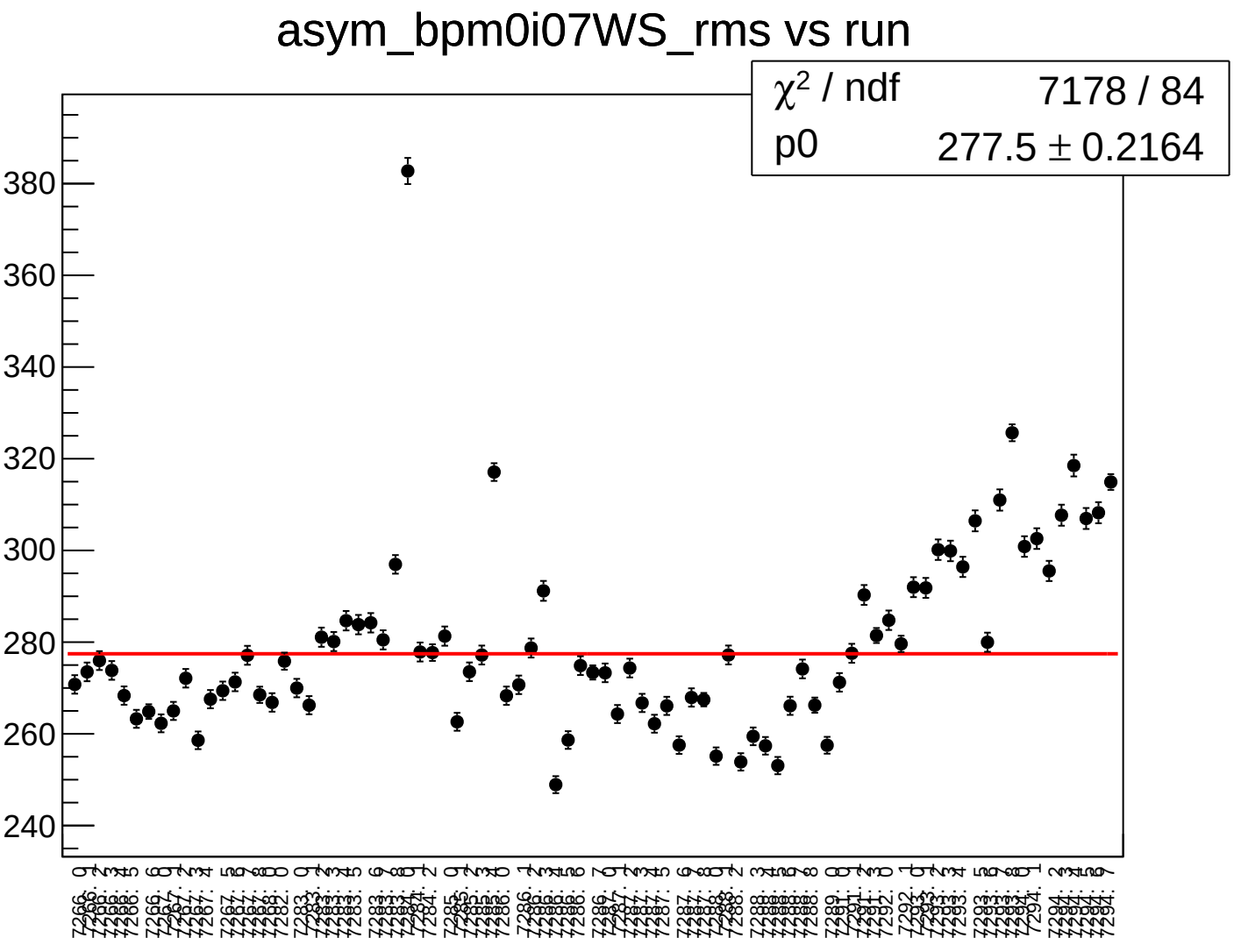

asym_bpm0i05WS_mean vs run
χ² / ndf 44.92 / 84
p0 2884 ± 279.7
pull
Entries 85
Mean 56.45
Std Dev 124.4

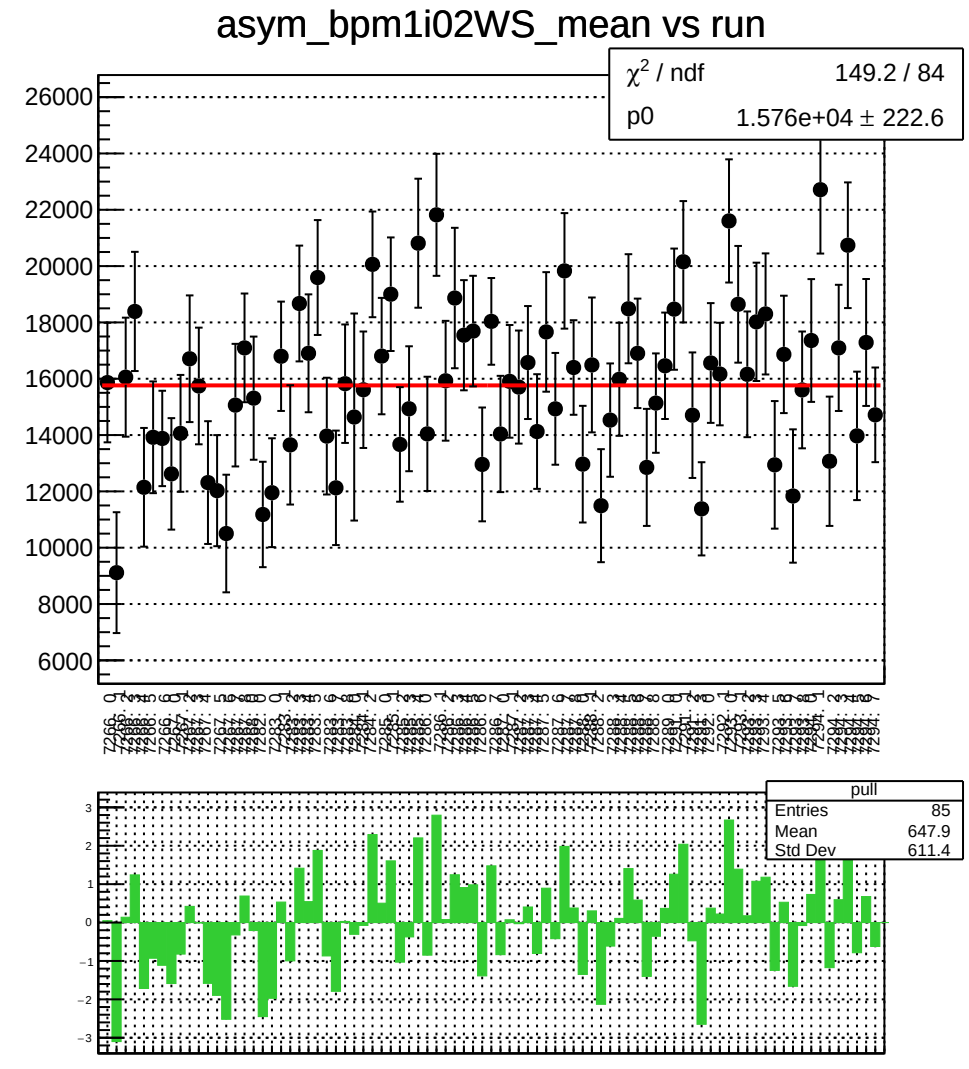

pull1D
Entries 85
Mean 0.01133
Std Dev 0.7269

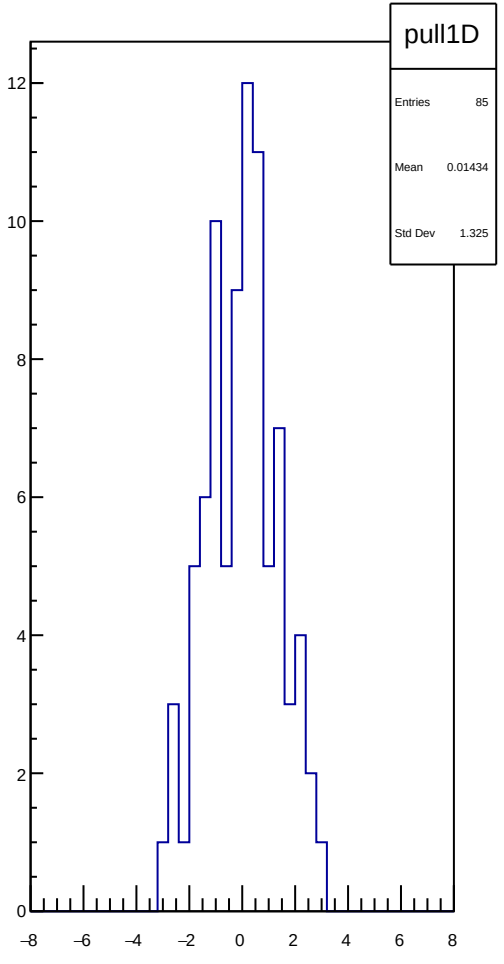

asym_bpm0i05WS_rms vs run
χ² / ndf 8264 / 84
p0 253.5 ± 0.1978
360
340
320
300
280
260
240
220

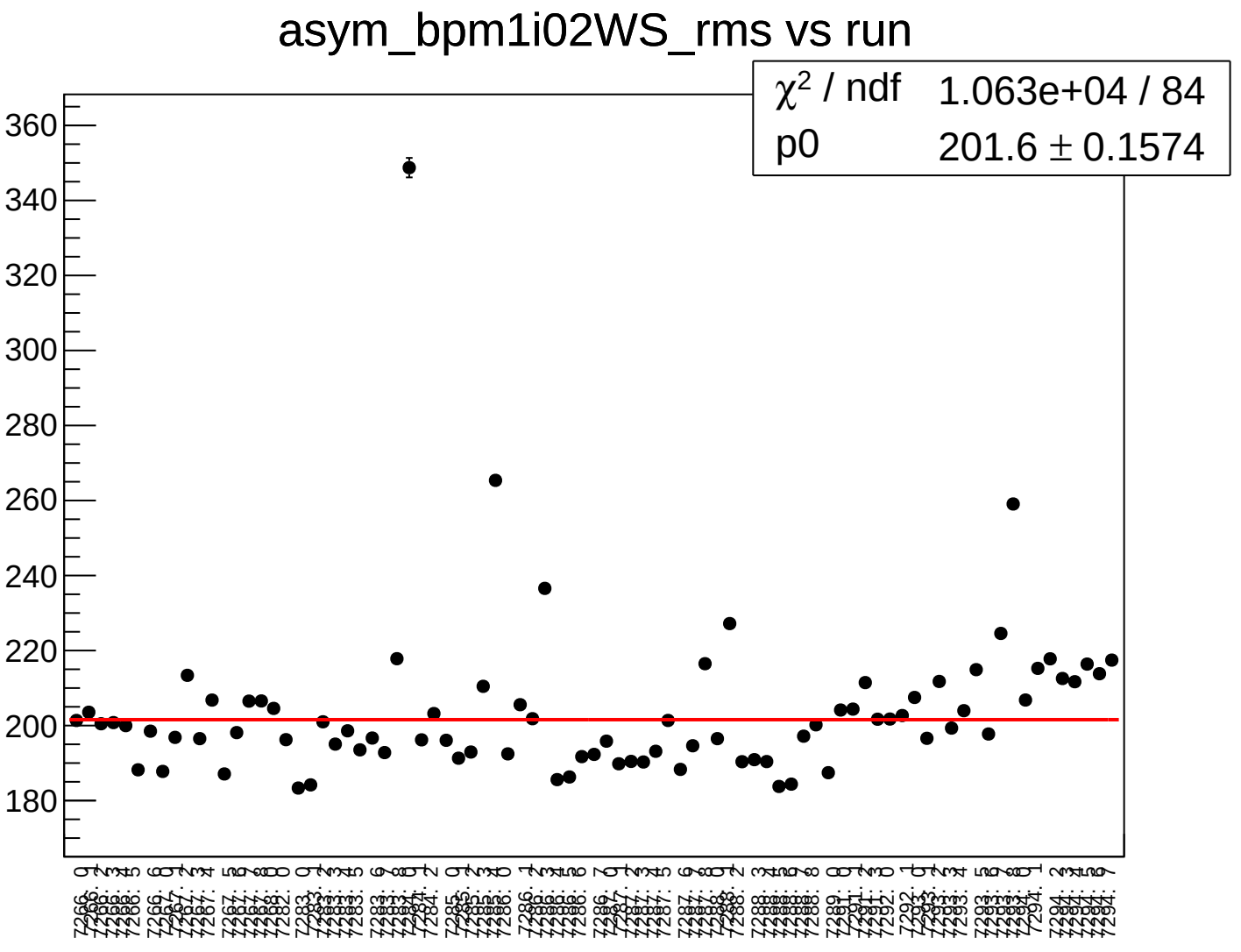

asym_bpm0i07WS_mean vs run
χ² / ndf 48.56 / 84
p0 2681 ± 306.1
pull
Entries 85
Mean 222.2
Std Dev 258.4

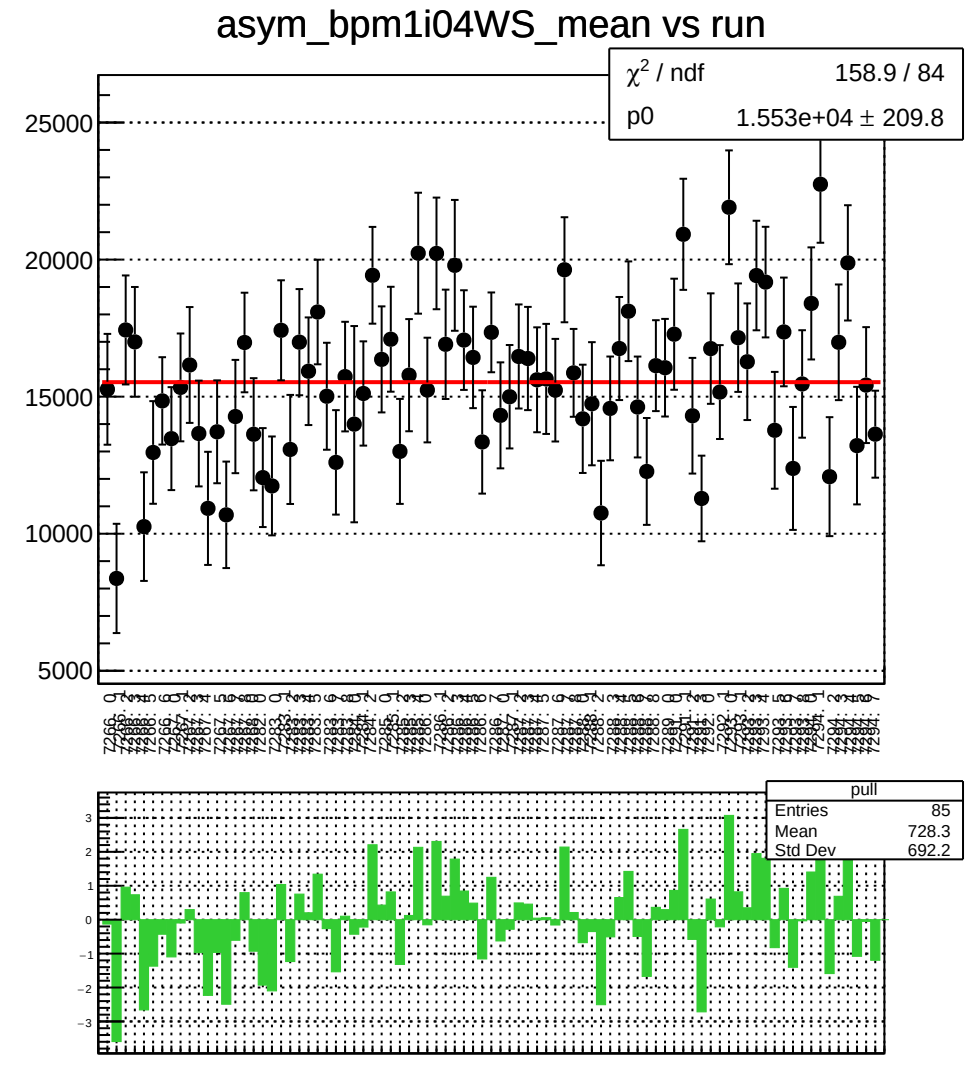

pull1D
Entries 85
Mean 0.004853
Std Dev 0.7558

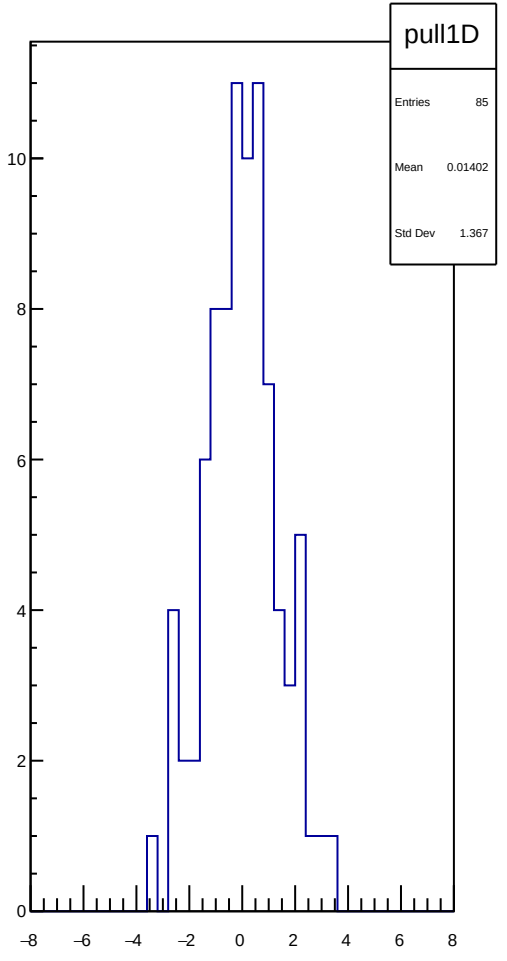

asym_bpm0i07WS_rms vs run
χ² / ndf 7178 / 84
p0 277.5 ± 0.2164
380
360
340
320
300
280
260
240

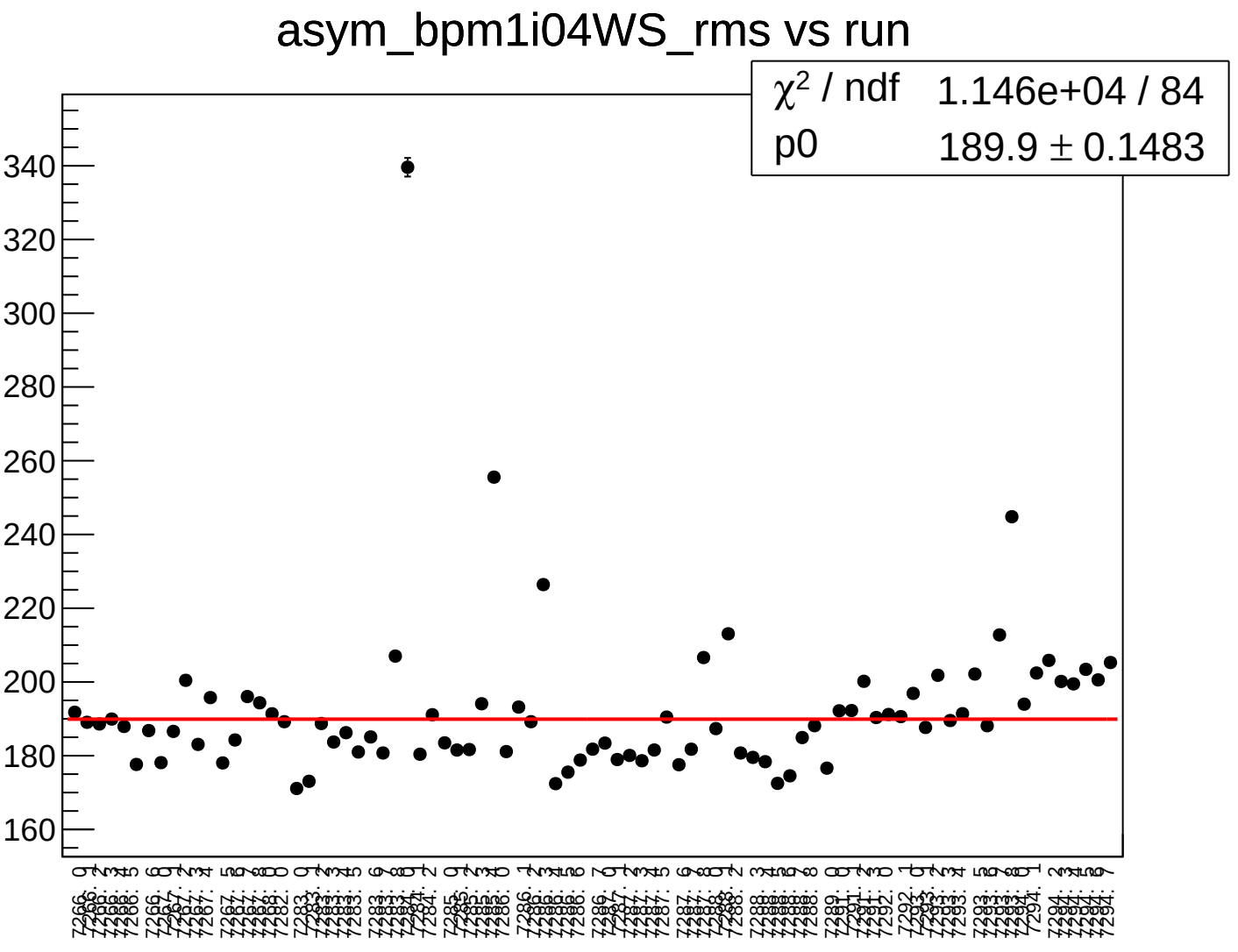

asym_bpm1i02WS_mean vs run
χ² / ndf 149.2 / 84
p0 1.576e+04 ± 222.6
pull
Entries 85
Mean 647.9
Std Dev 611.4

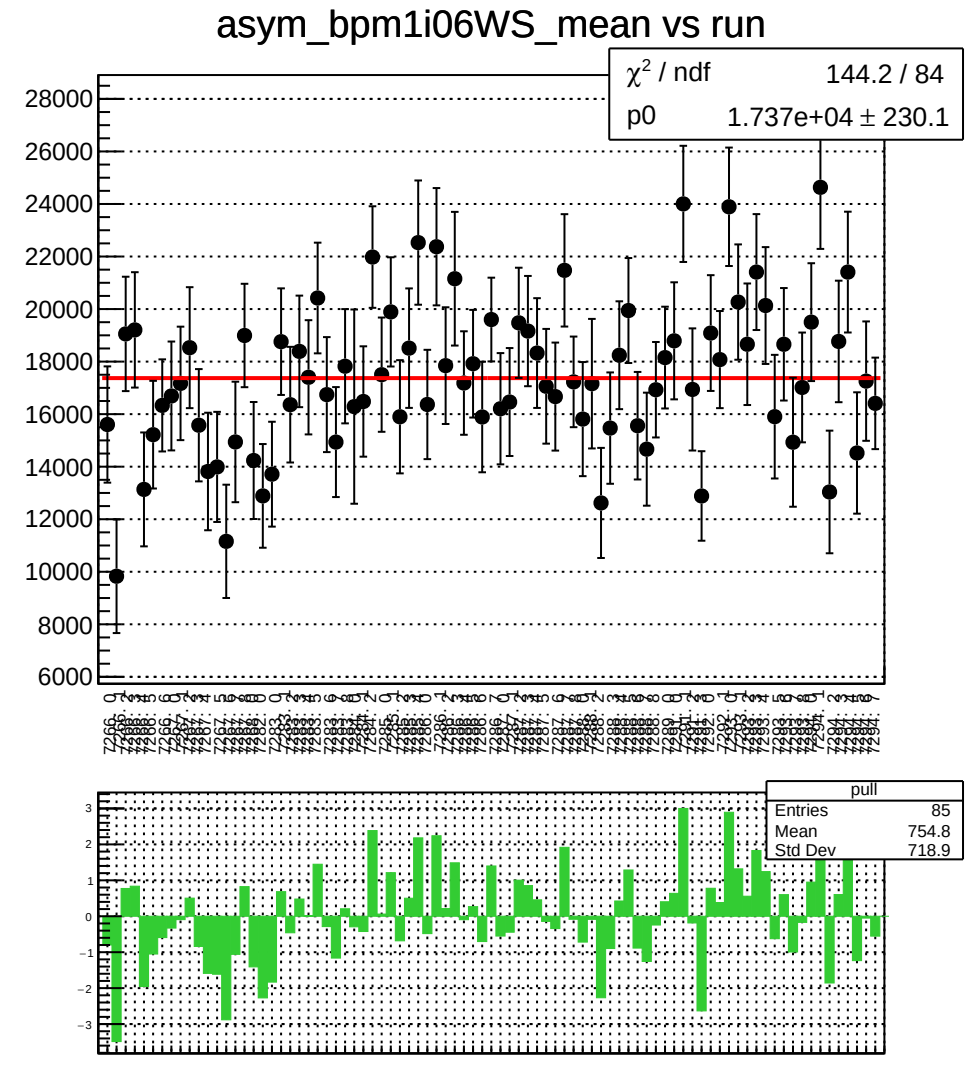

pull1D
Entries 85
Mean 0.01434
Std Dev 1.325

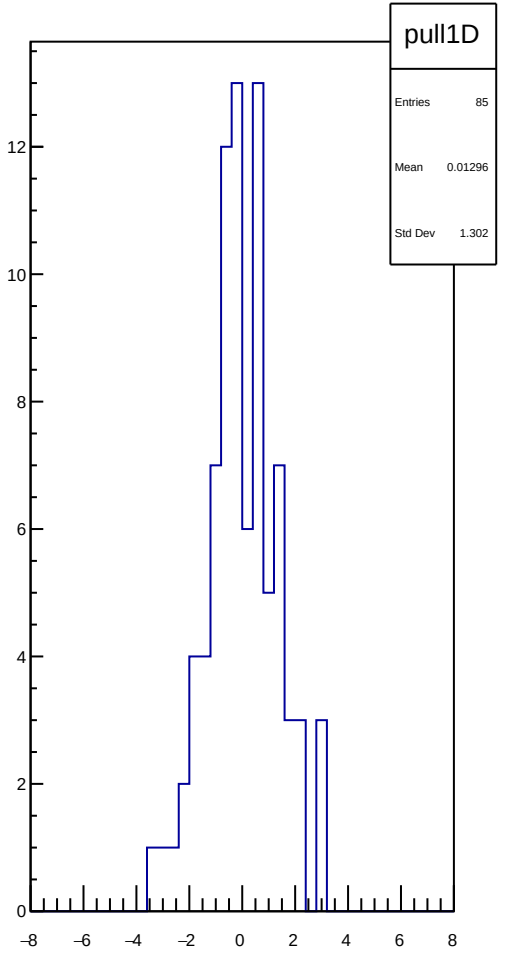

asym_bpm1i02WS_rms vs run
χ² / ndf 1.063e+04 / 84
p0 201.6 ± 0.1574
360
340
320
300
280
260
240
220
200
180

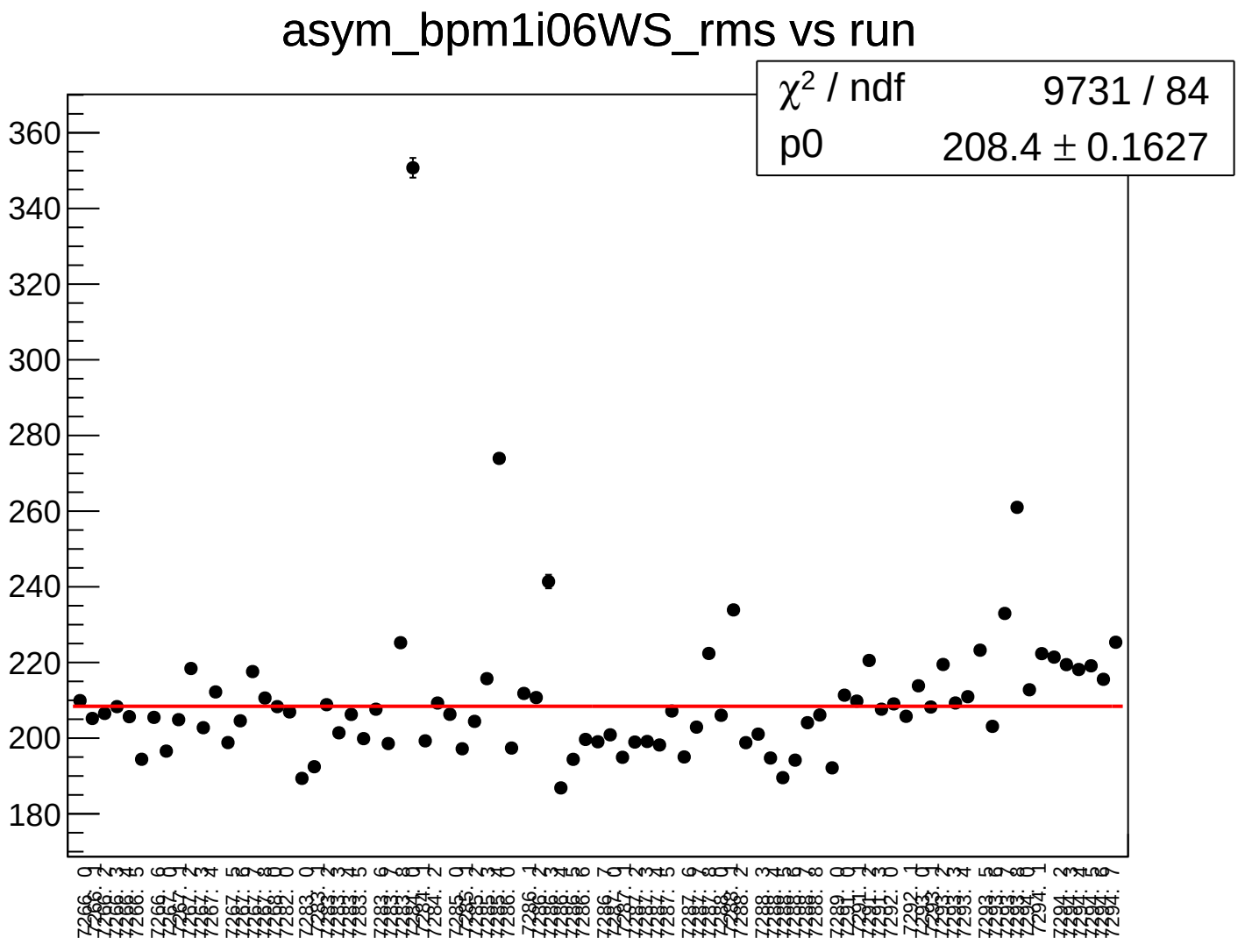

asym_bpm1i04WS_mean vs run
χ² / ndf 158.9 / 84
p0 1.553e+04 ± 209.8
25000
20000
15000
10000
5000
pull
Entries 85
Mean 728.3
Std Dev 692.2
3
2
1
0
−1
−2
−3

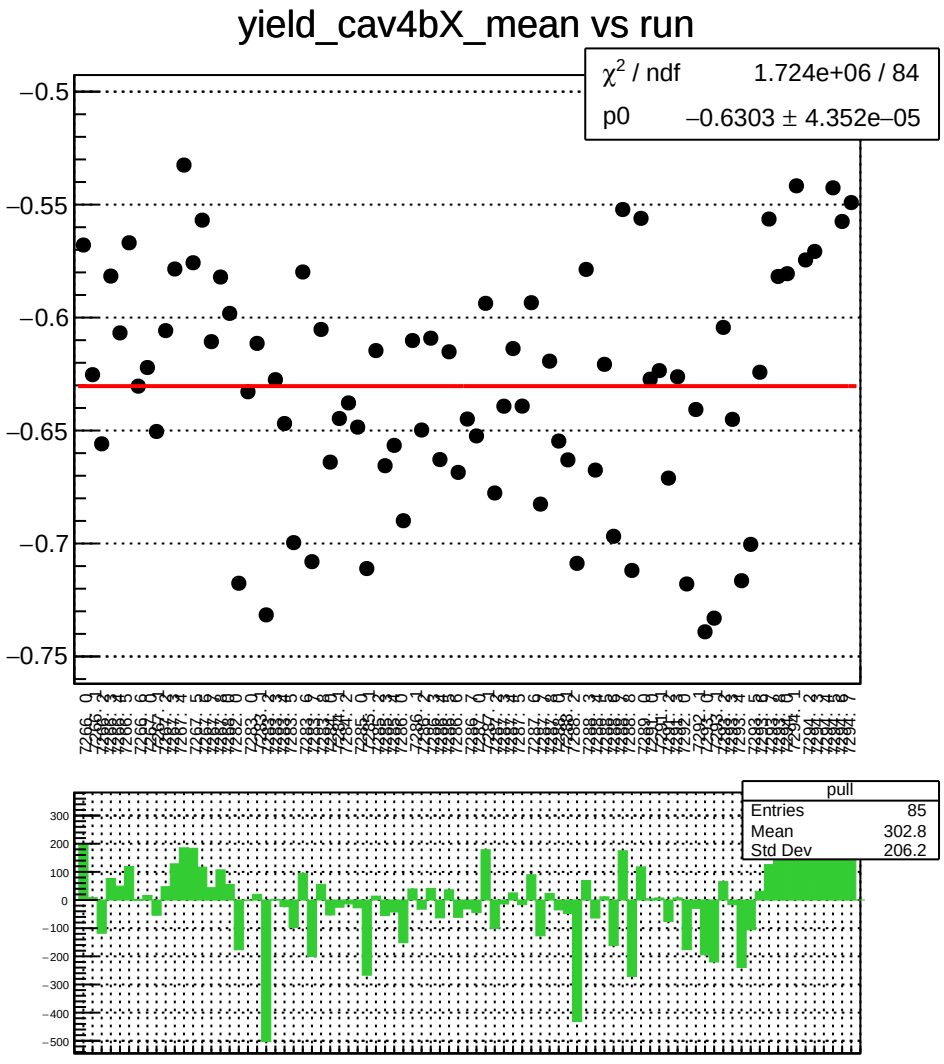

pull1D
Entries 85
Mean 0.01402
Std Dev 1.367
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

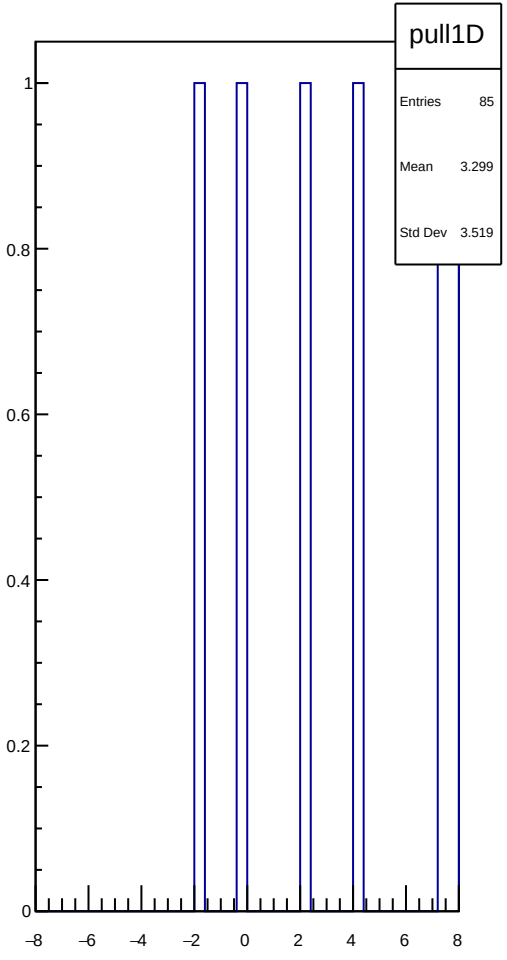

asym_bpm1i04WS_rms vs run
χ^2 / ndf 1.146e+04 / 84
p0 189.9 ± 0.1483
340
320
300
280
260
240
220
200
180
160

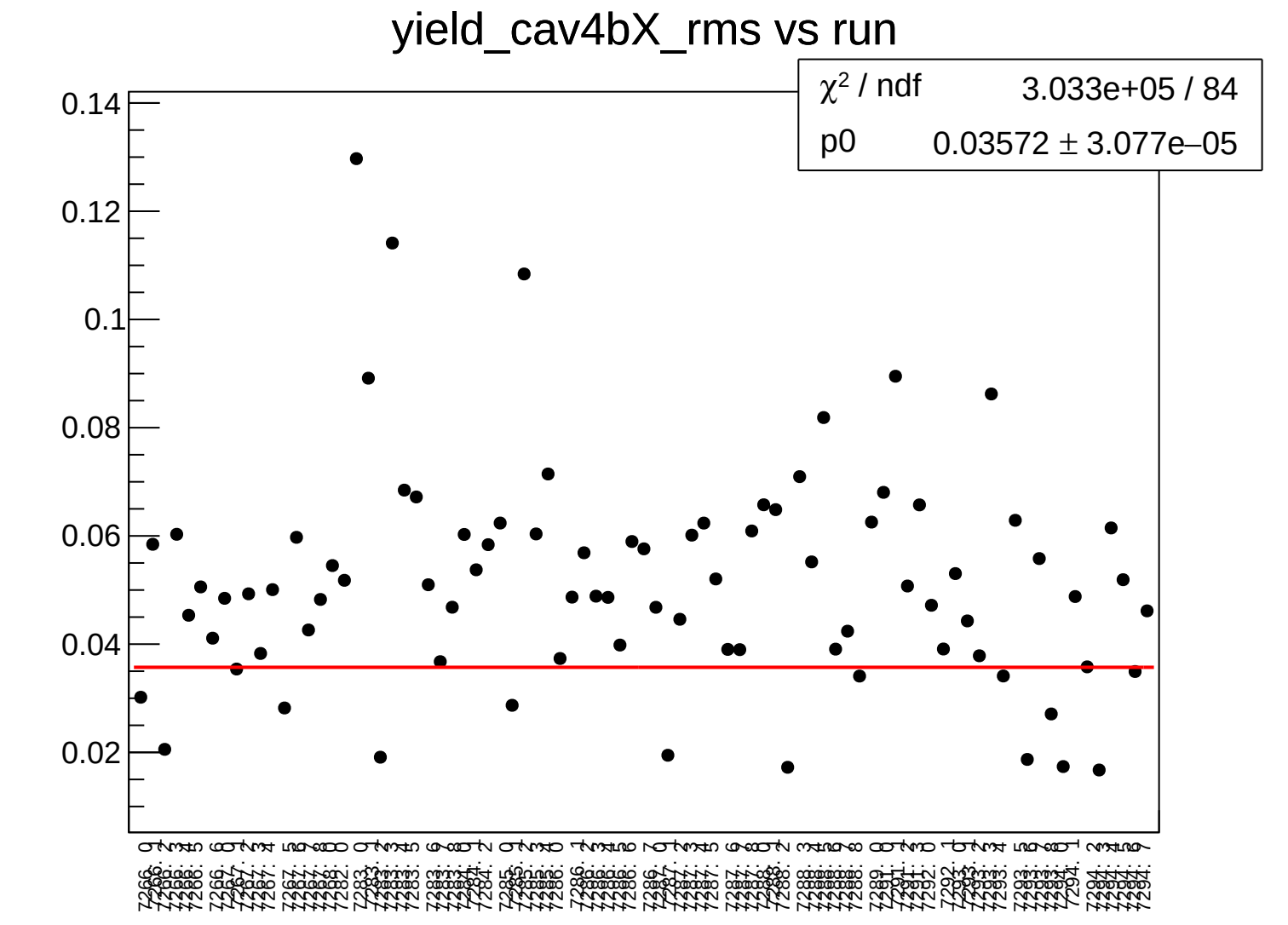

asym_bpm1i06WS_mean vs run
χ² / ndf 144.2 / 84
p0 1.737e+04 ± 230.1
pull
Entries 85
Mean 754.8
Std Dev 718.9

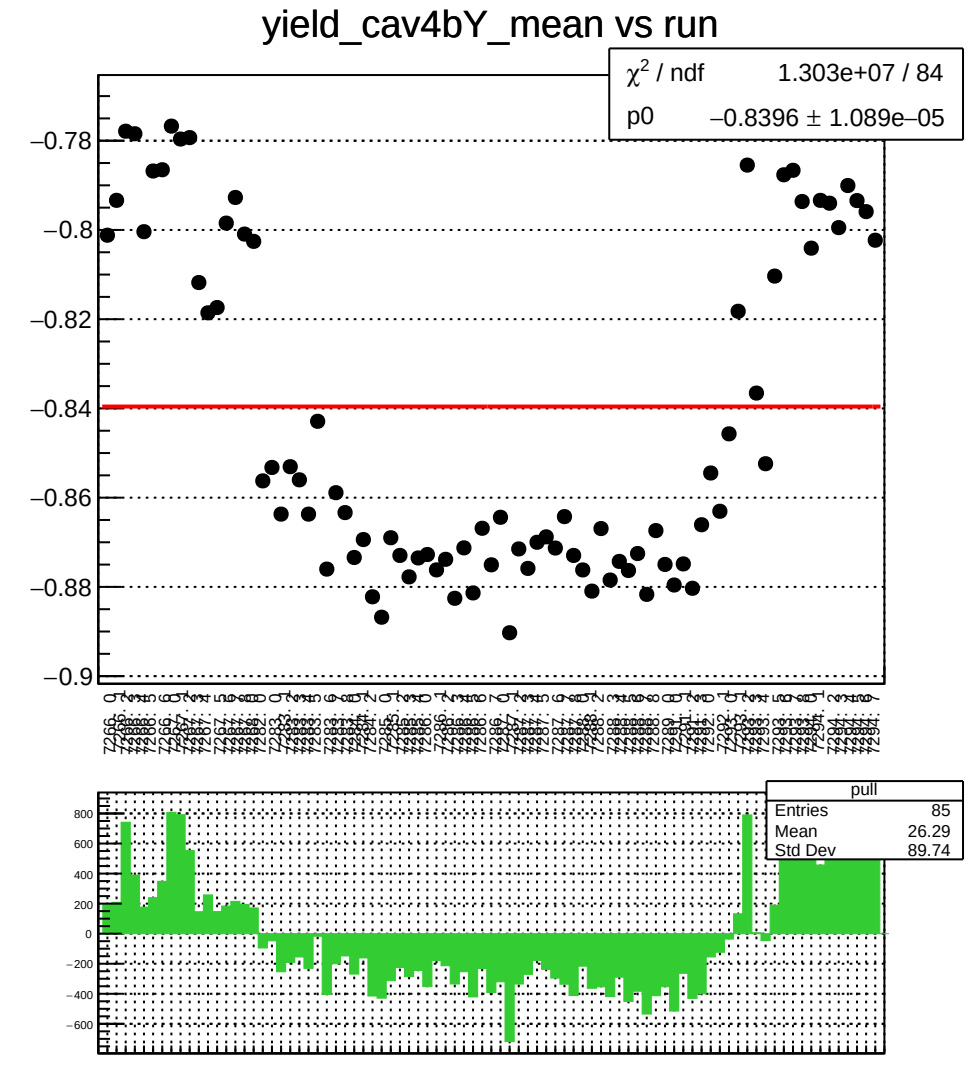

pull1D
Entries 85
Mean 0.01296
Std Dev 1.302

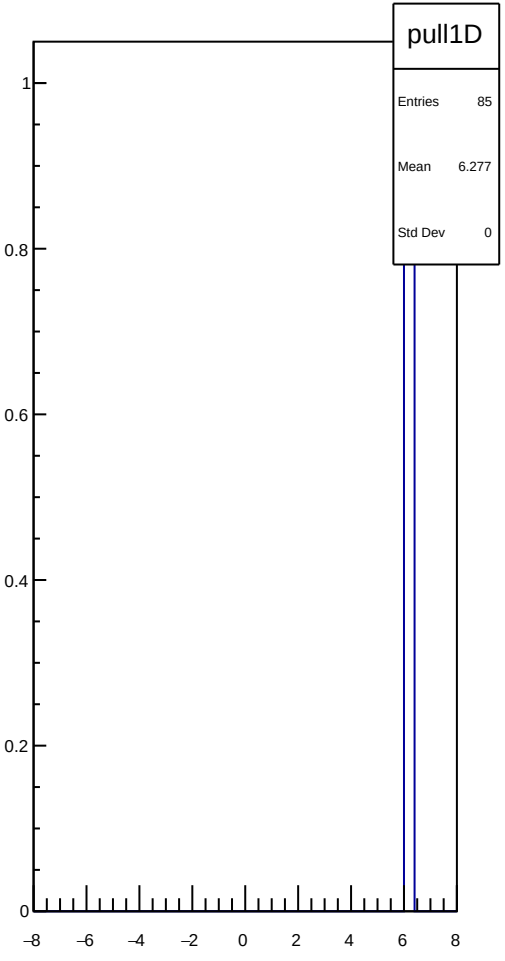

asym_bpm1i06WS_rms vs run
χ^2 / ndf 9731 / 84
p0 208.4 ± 0.1627
360
340
320
300
280
260
240
220
200
180

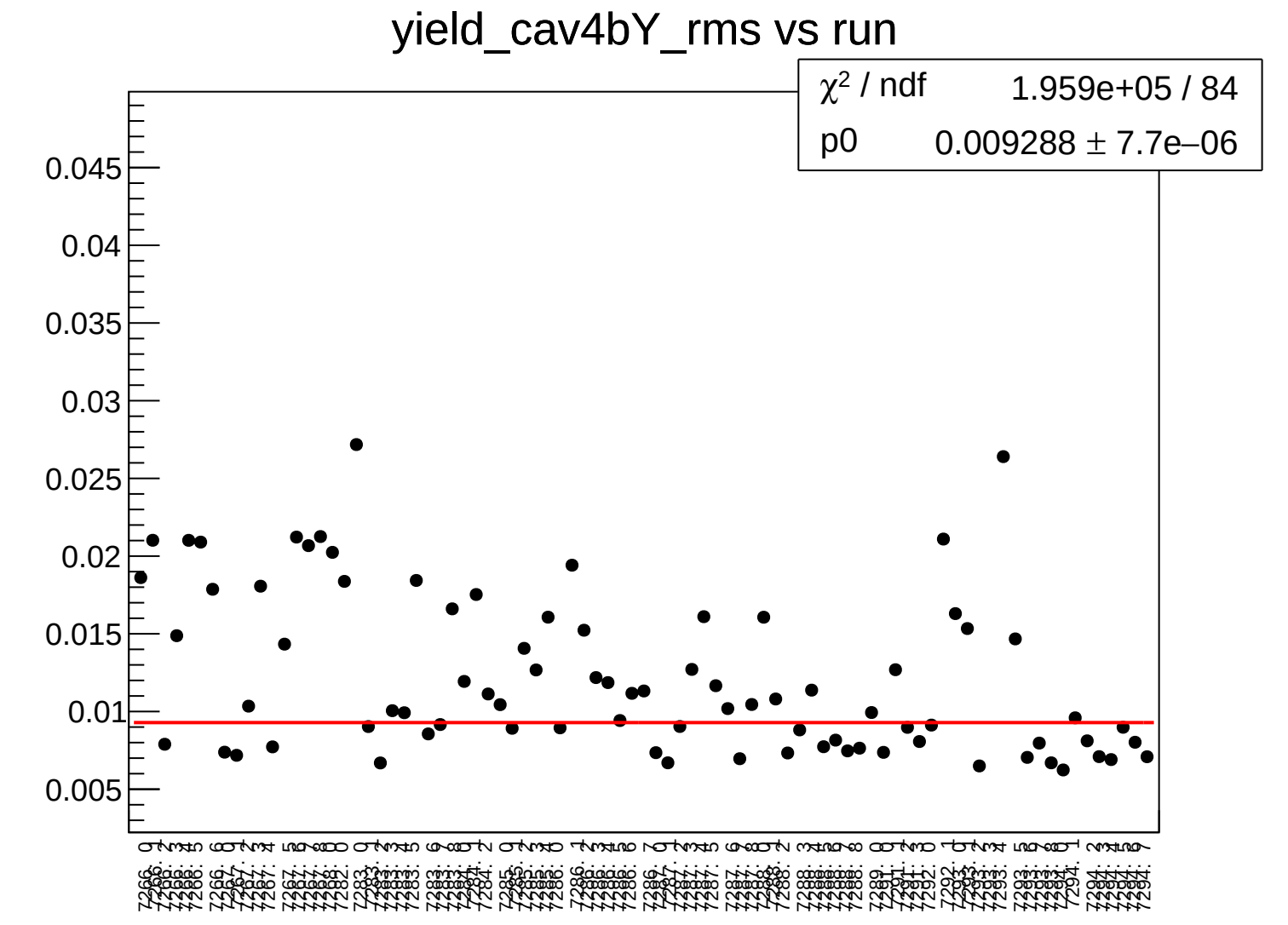

yield_cav4bX_mean vs run
χ² / ndf 1.724e+06 / 84
p0 −0.6303 ± 4.352e−05
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 85
Mean 302.8
Std Dev 206.2
300
200
100
0
−100
−200
−300
−400
−500

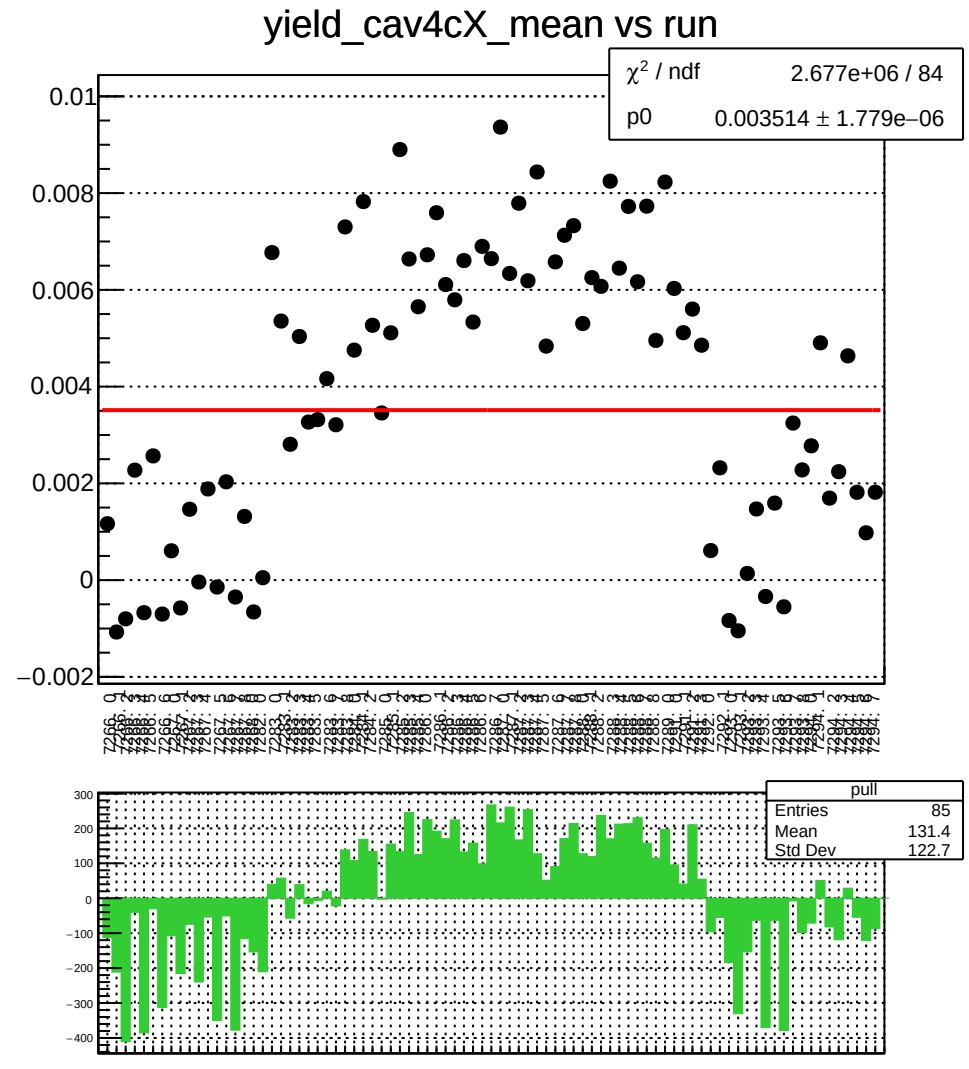

pull1D
Entries 85
Mean 3.299
Std Dev 3.519
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

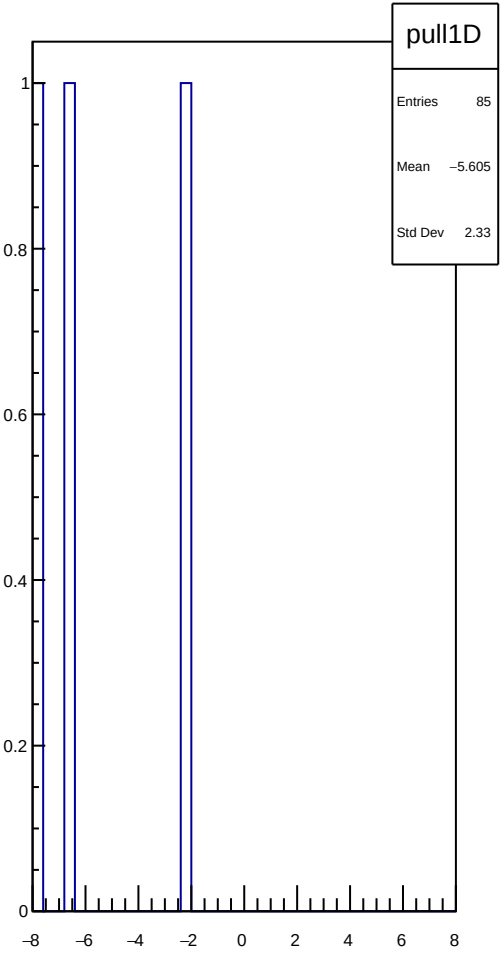

yield_cav4bX_rms vs run
χ² / ndf 3.033e+05 / 84
p0 0.03572 ± 3.077e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

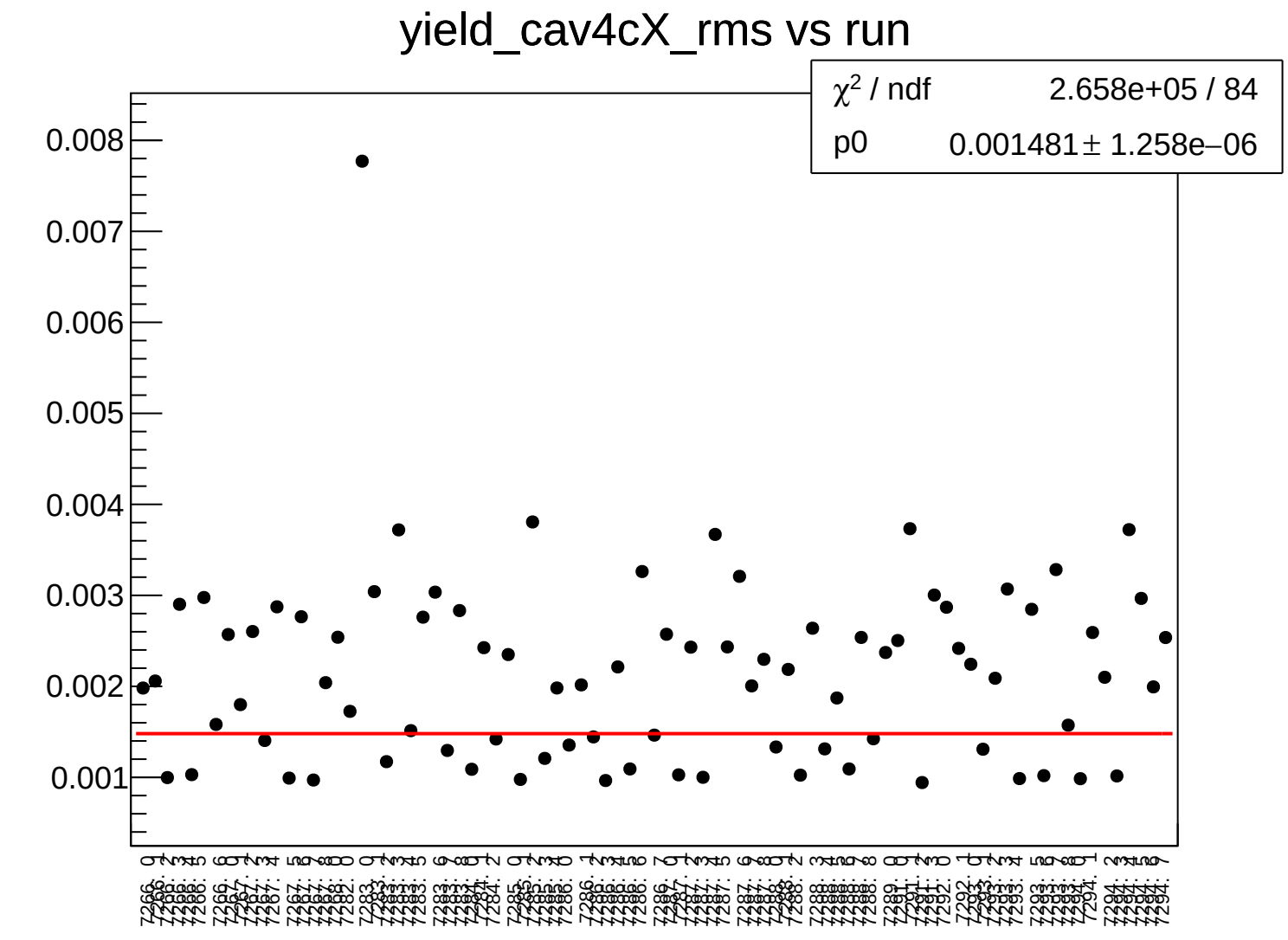

yield_cav4bY_mean vs run
χ² / ndf 1.303e+07 / 84
p0 −0.8396 ± 1.089e−05
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
pull
Entries 85
Mean 26.29
Std Dev 89.74
800
600
400
200
0
−200
−400
−600

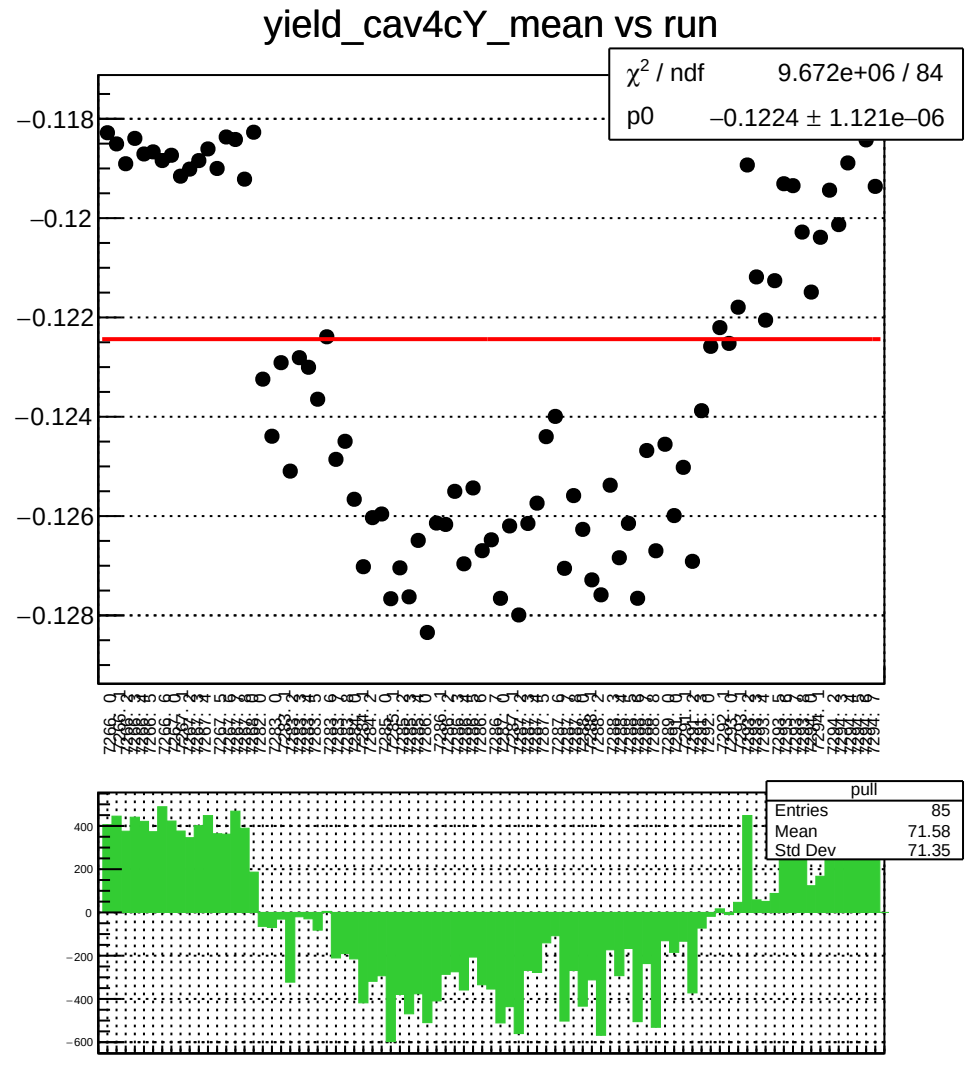

pull1D
Entries 85
Mean 6.277
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

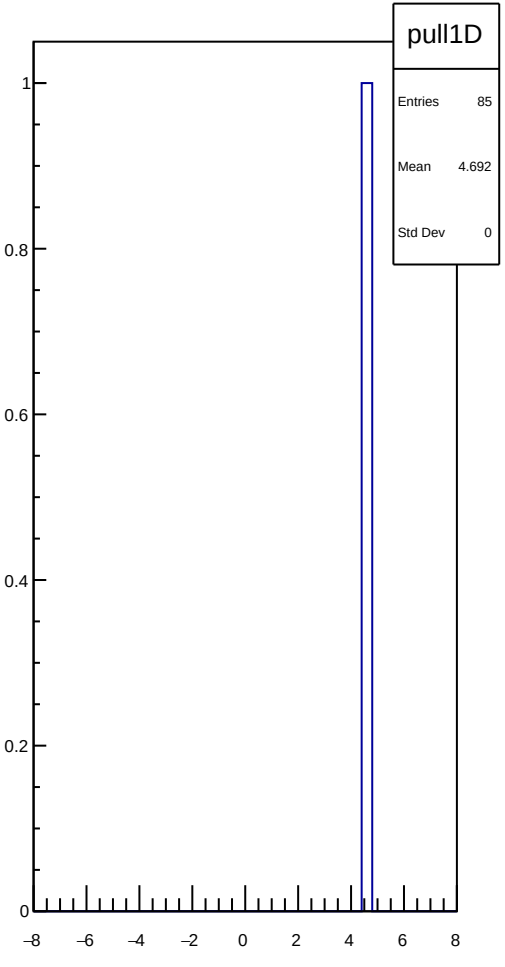

yield_cav4bY_rms vs run
χ² / ndf 1.959e+05 / 84
p0 0.009288 ± 7.7e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

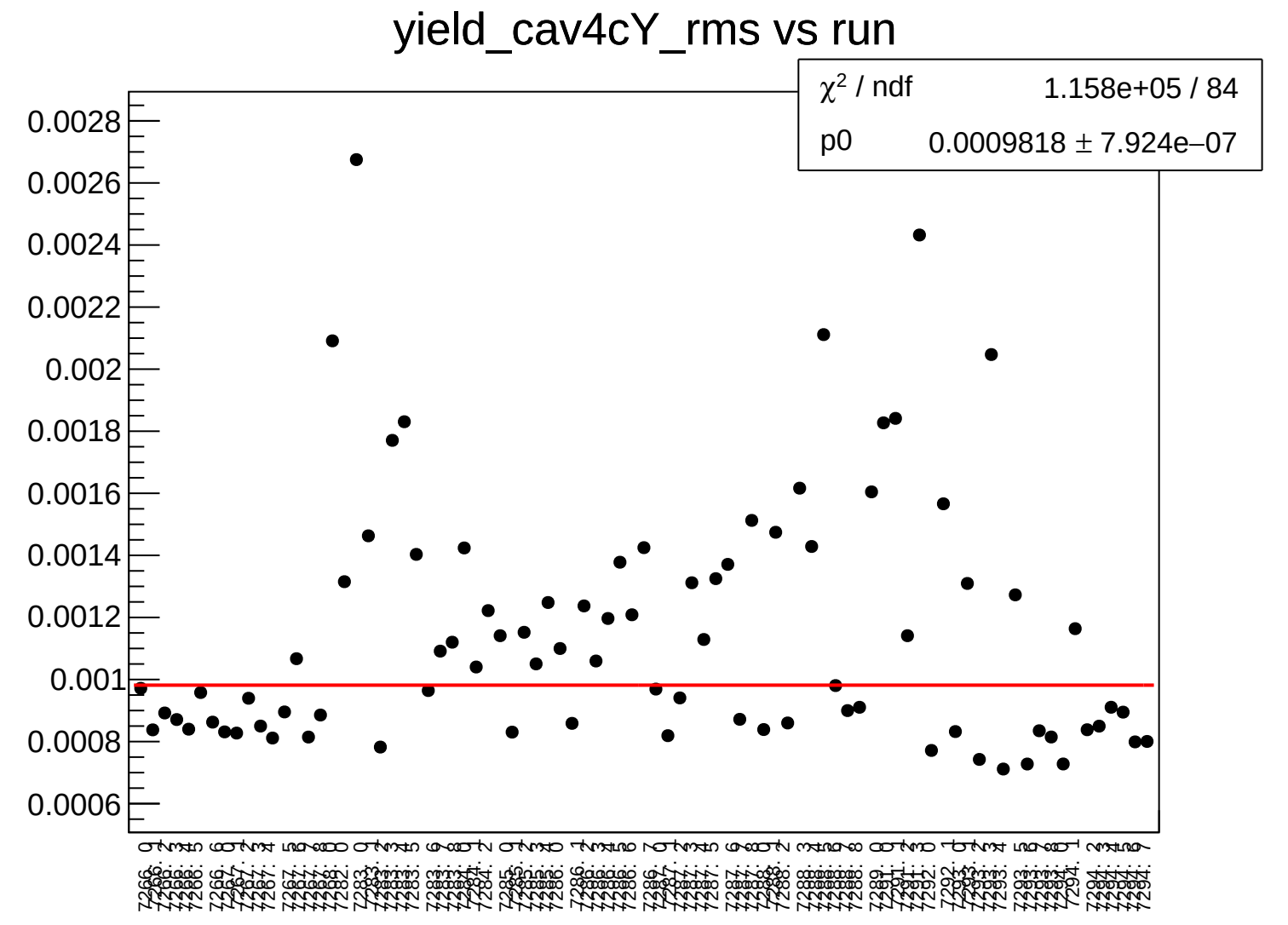

yield_cav4cX_mean vs run
χ² / ndf 2.677e+06 / 84
p0 0.003514 ± 1.779e−06
pull
Entries 85
Mean 131.4
Std Dev 122.7

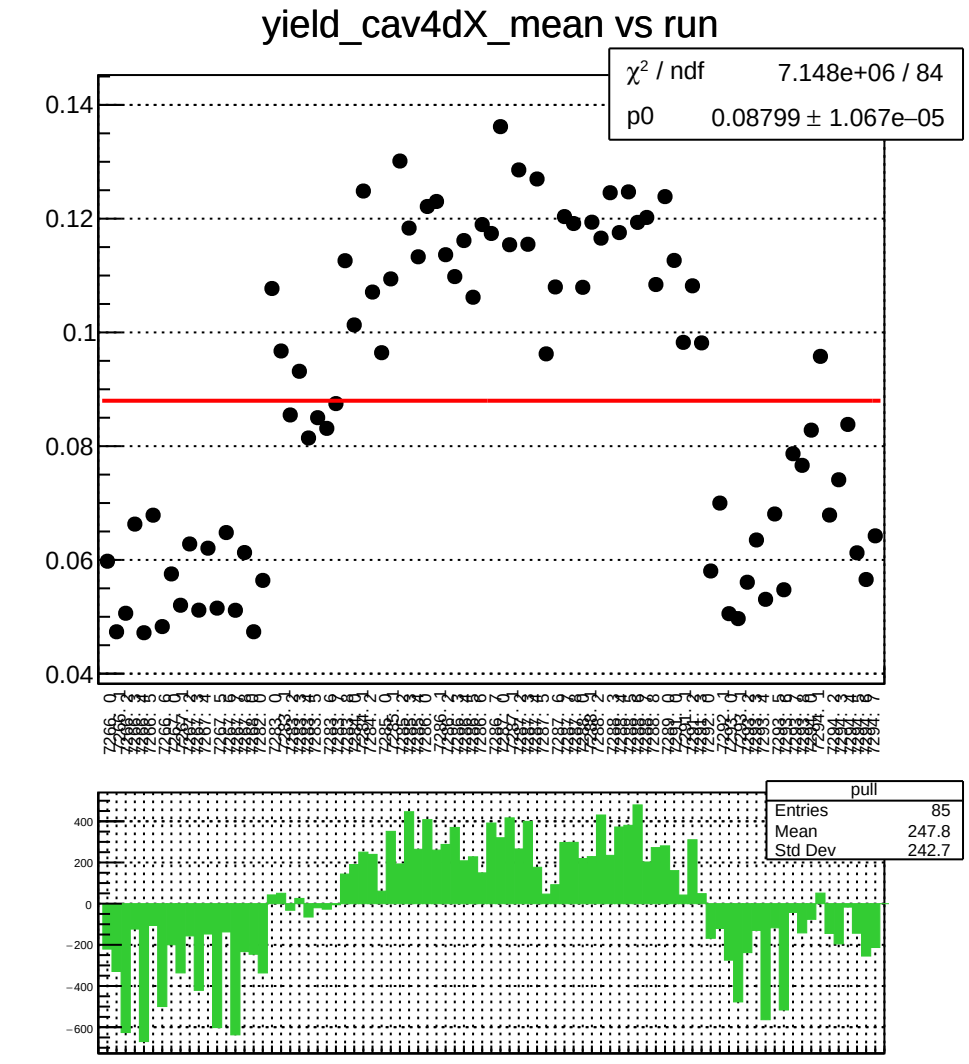

pull1D
Entries 85
Mean −5.605
Std Dev 2.33

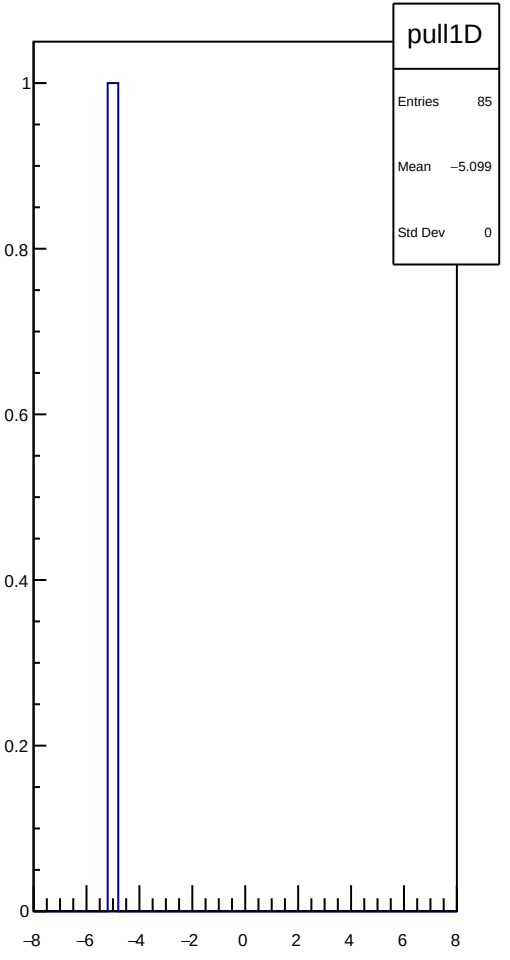

yield_cav4cX_rms vs run
χ² / ndf 2.658e+05 / 84
p0 0.001481 ± 1.258e−06
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

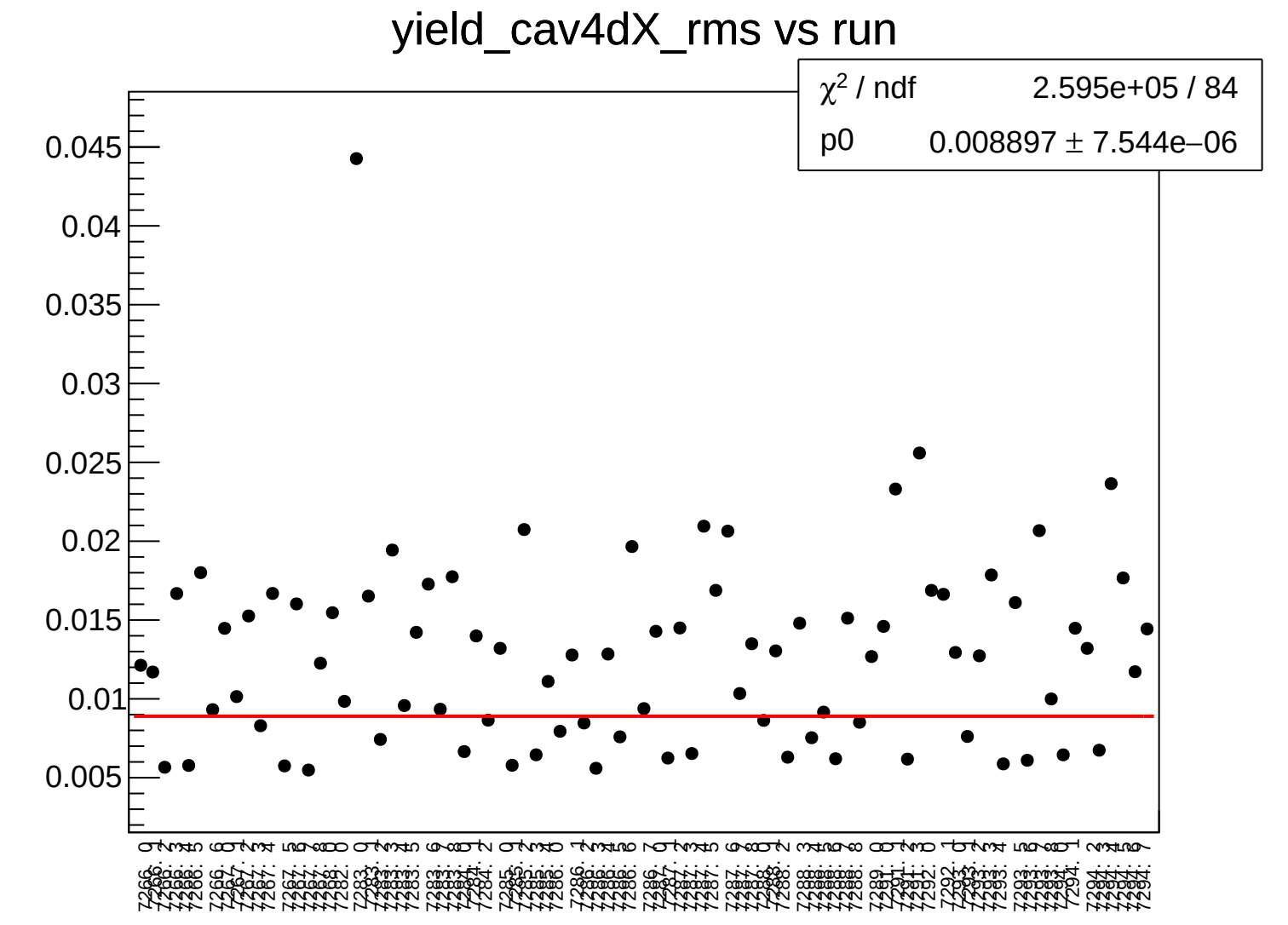

yield_cav4cY_mean vs run
χ² / ndf 9.672e+06 / 84
p0 −0.1224 ± 1.121e−06
−0.118
−0.12
−0.122
−0.124
−0.126
−0.128
pull
Entries 85
Mean 71.58
Std Dev 71.35
400
200
0
−200
−400
−600

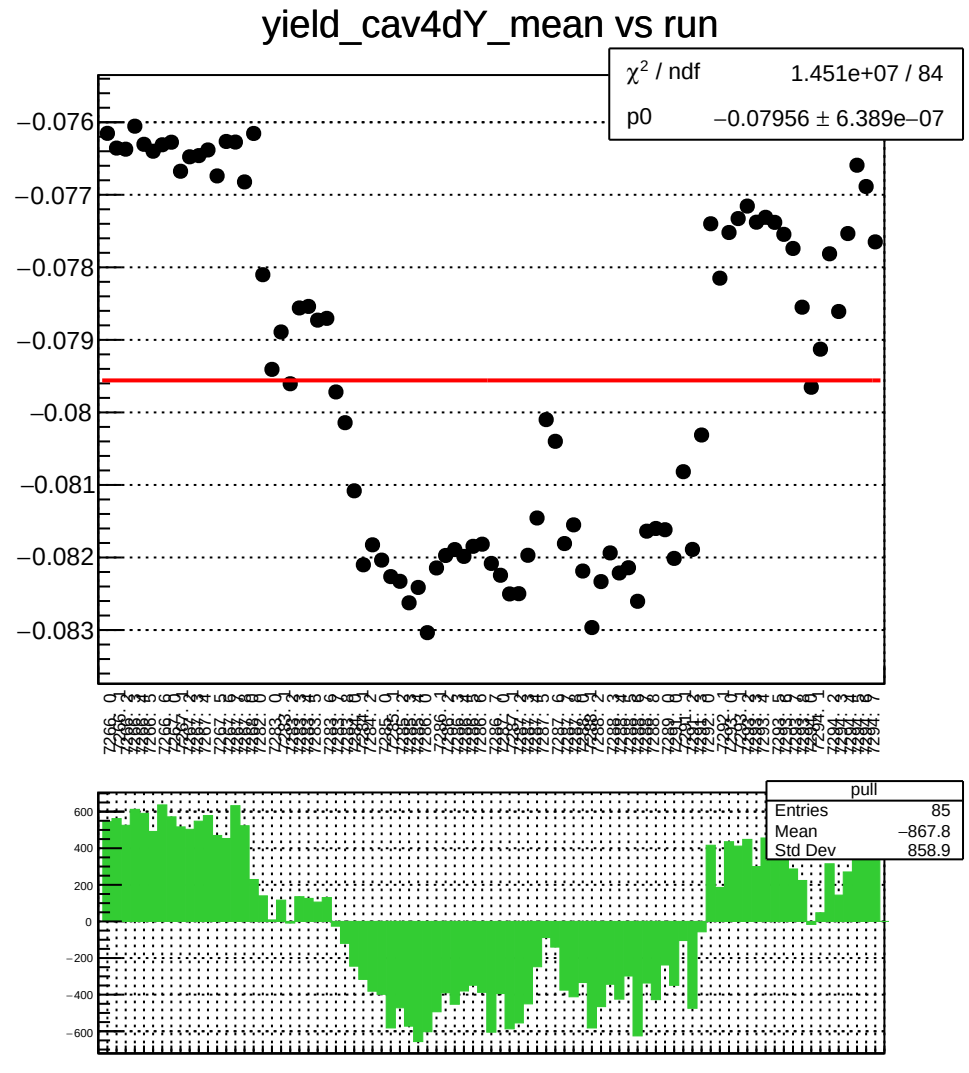

pull1D
Entries 85
Mean 4.692
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

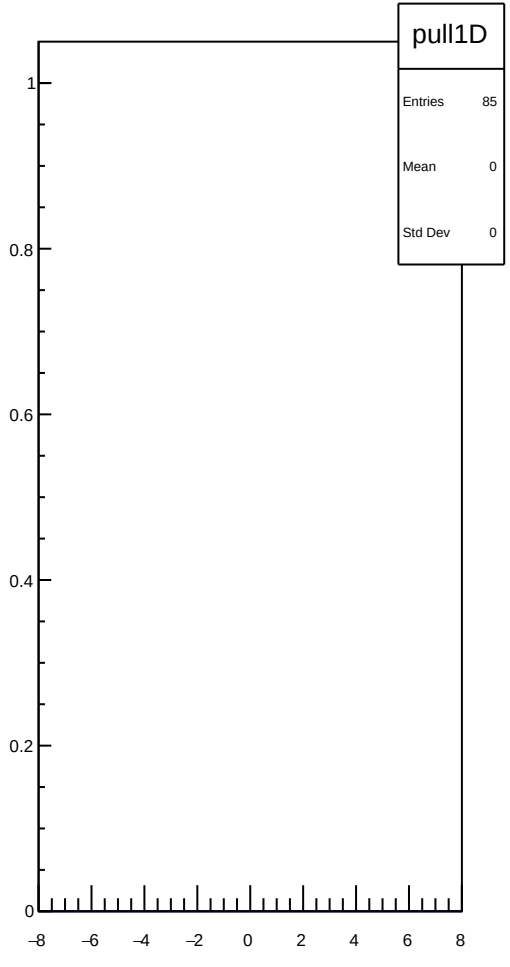

yield_cav4cY_rms vs run
χ² / ndf 1.158e+05 / 84
p0 0.0009818 ± 7.924e−07
0.0028
0.0026
0.0024
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006

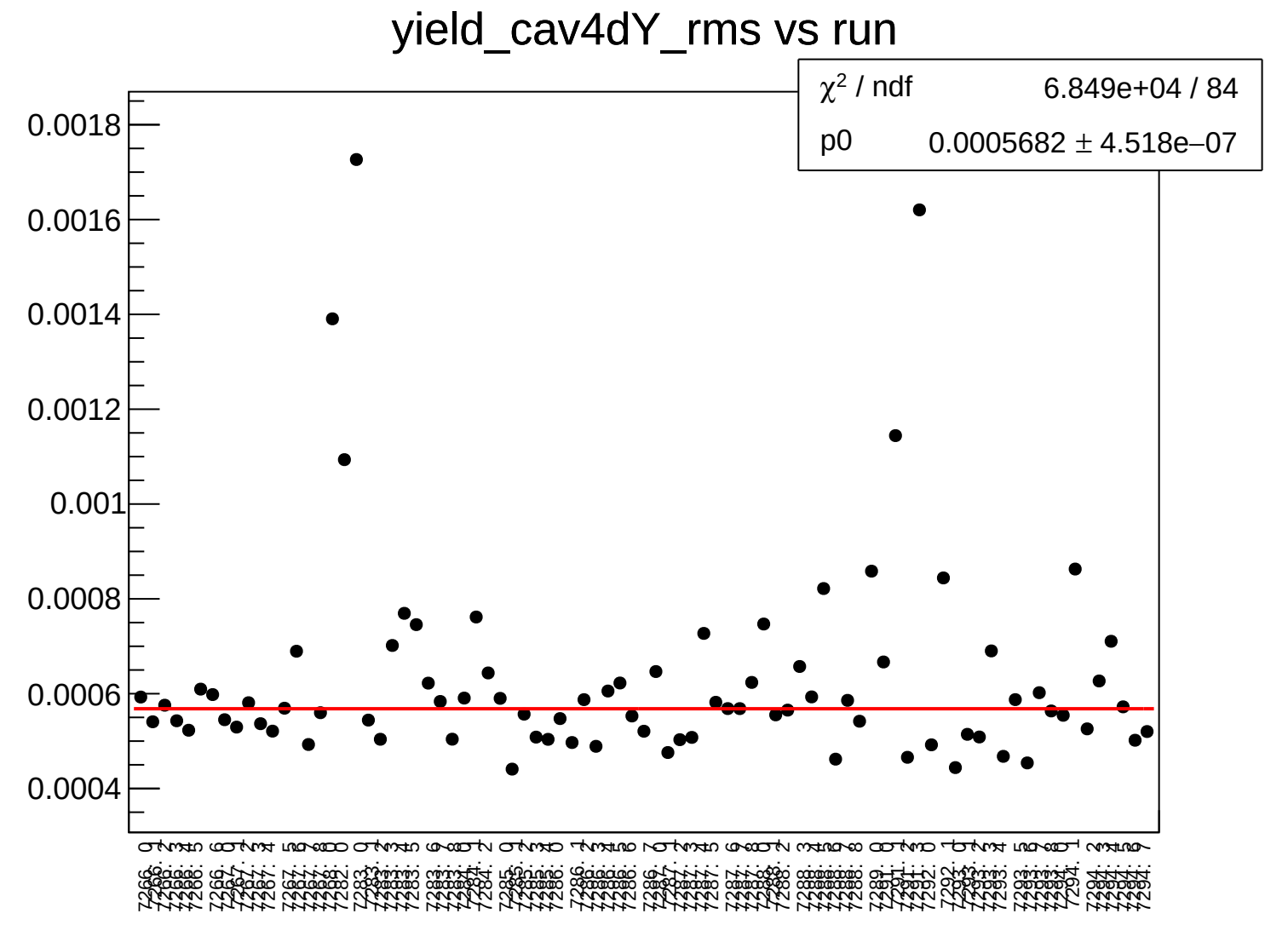

yield_cav4dX_mean vs run
χ² / ndf 7.148e+06 / 84
p0 0.08799 ± 1.067e−05
0.14
0.12
0.1
0.08
0.06
0.04
pull
Entries 85
Mean 247.8
Std Dev 242.7
400
200
0
−200
−400
−600

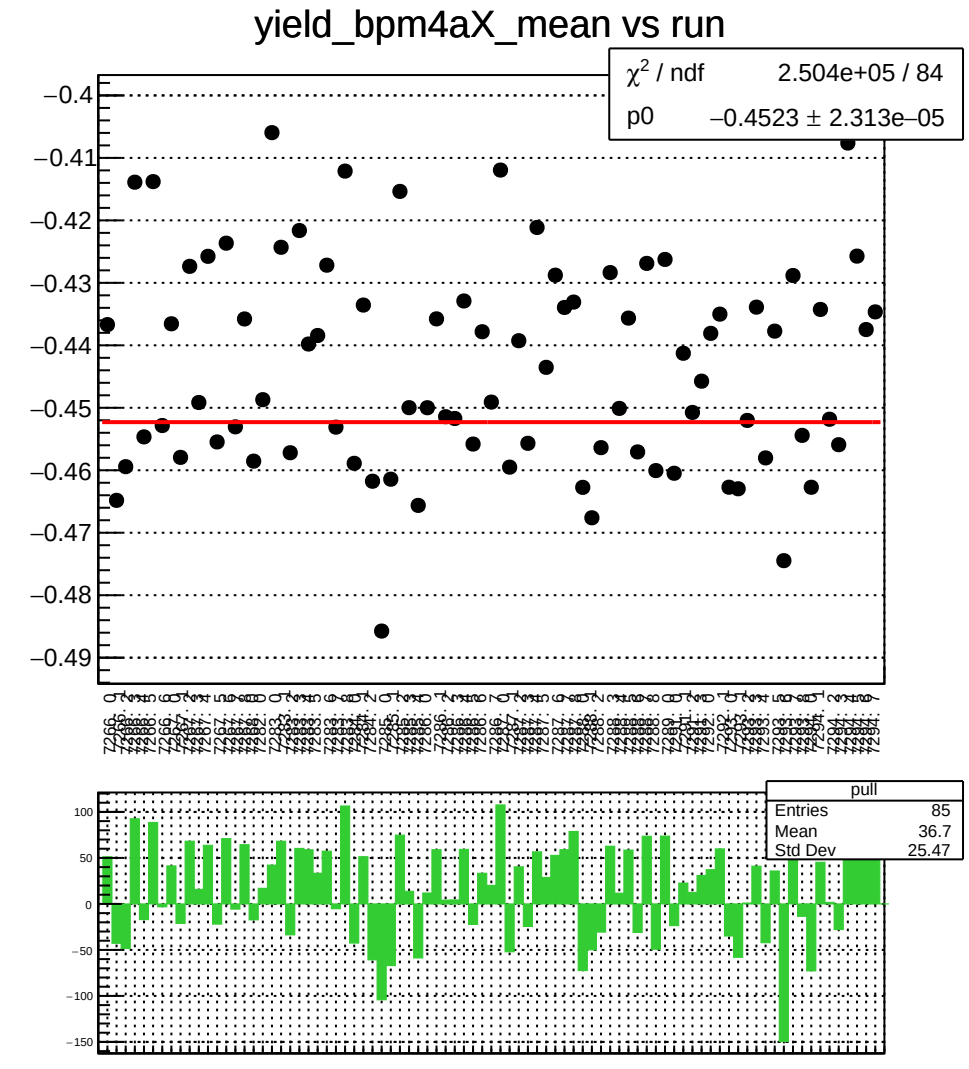

pull1D
Entries 85
Mean −5.099
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

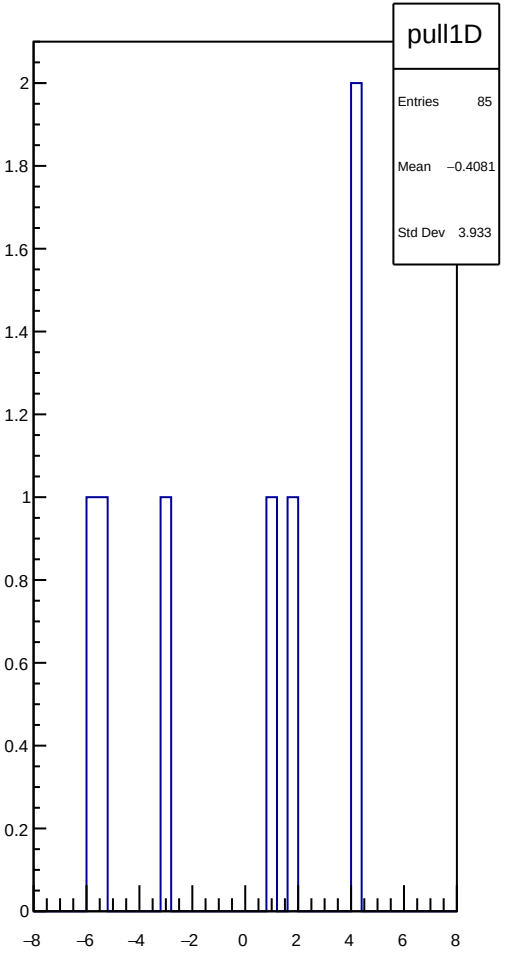

yield_cav4dX_rms vs run
χ² / ndf 2.595e+05 / 84
p0 0.008897 ± 7.544e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

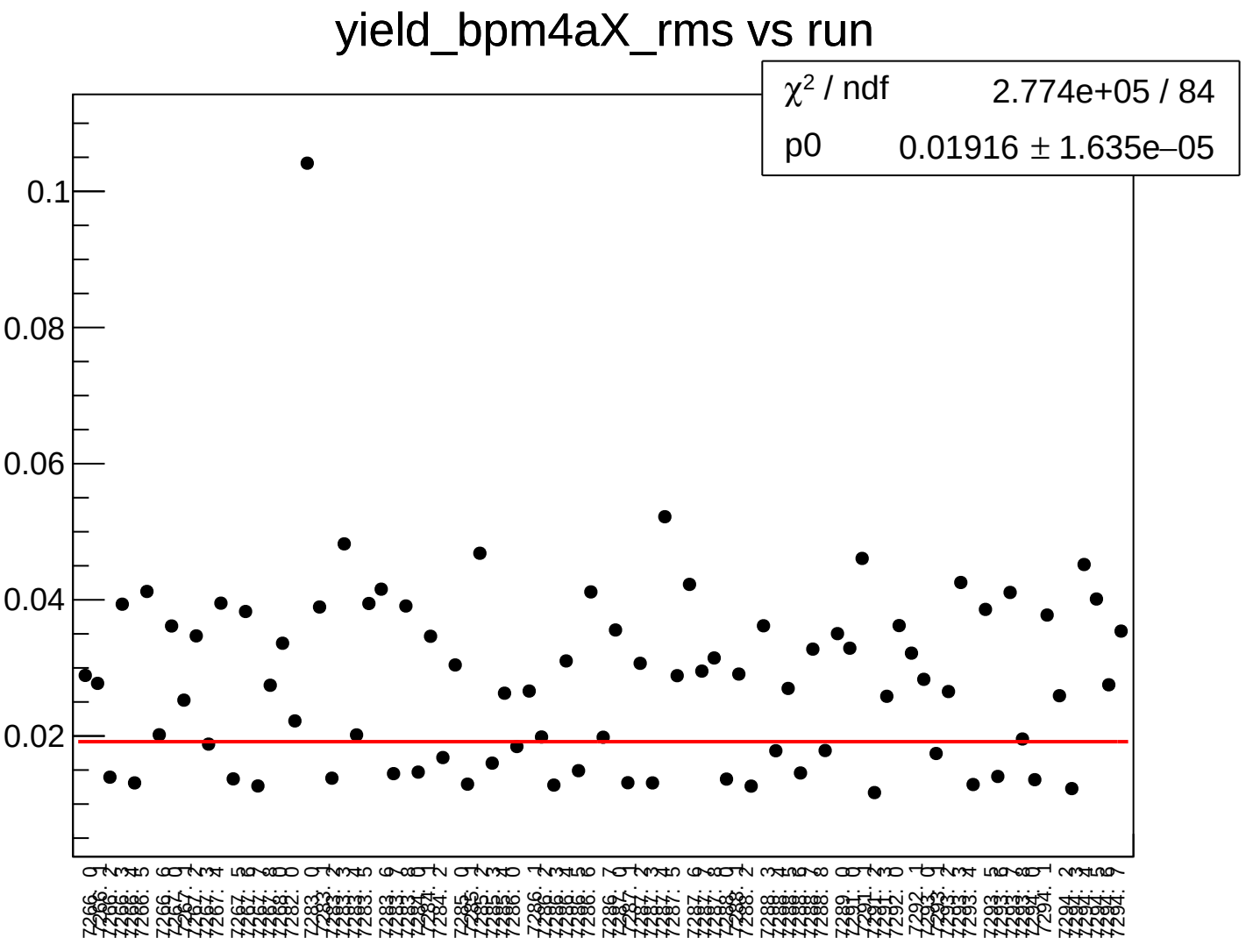

yield_cav4dY_mean vs run
χ² / ndf 1.451e+07 / 84
p0 −0.07956 ± 6.389e−07
−0.076
−0.077
−0.078
−0.079
−0.08
−0.081
−0.082
−0.083
pull
Entries 85
Mean −867.8
Std Dev 858.9
600
400
200
0
−200
−400
−600

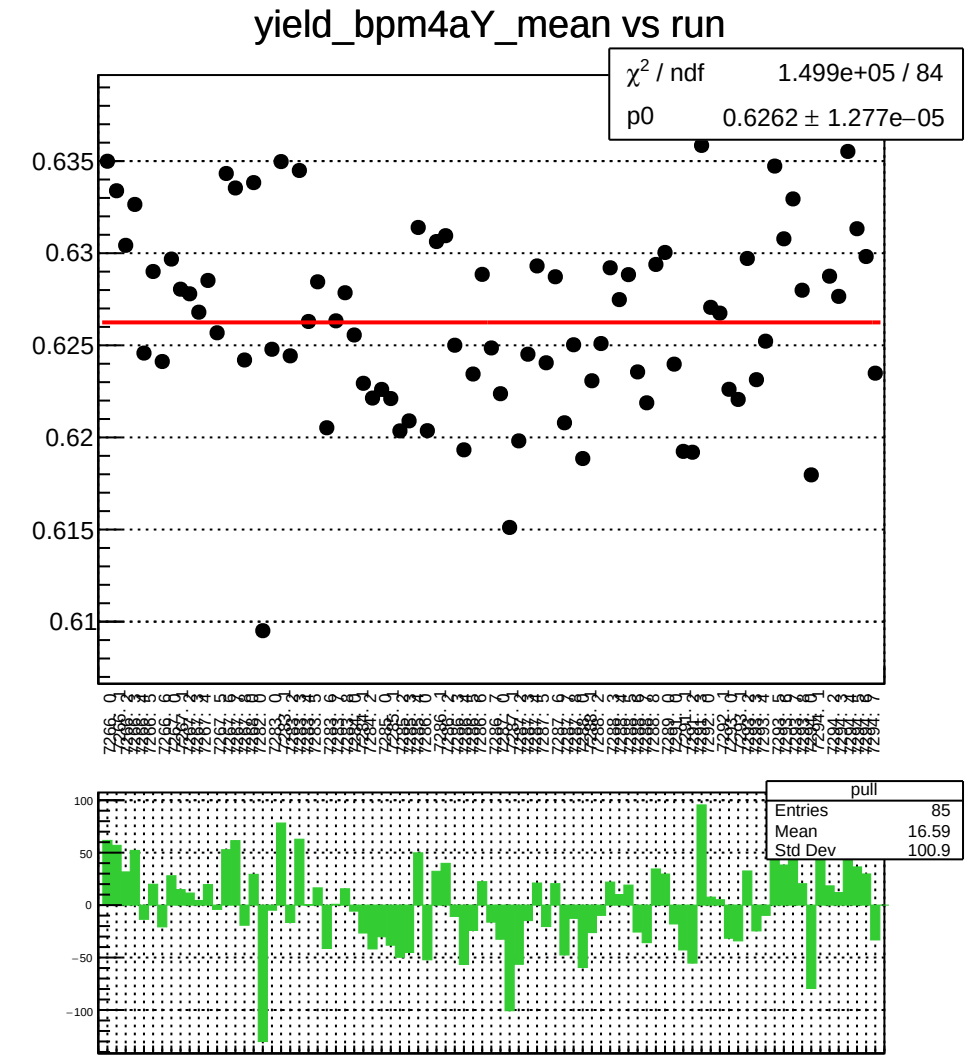

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

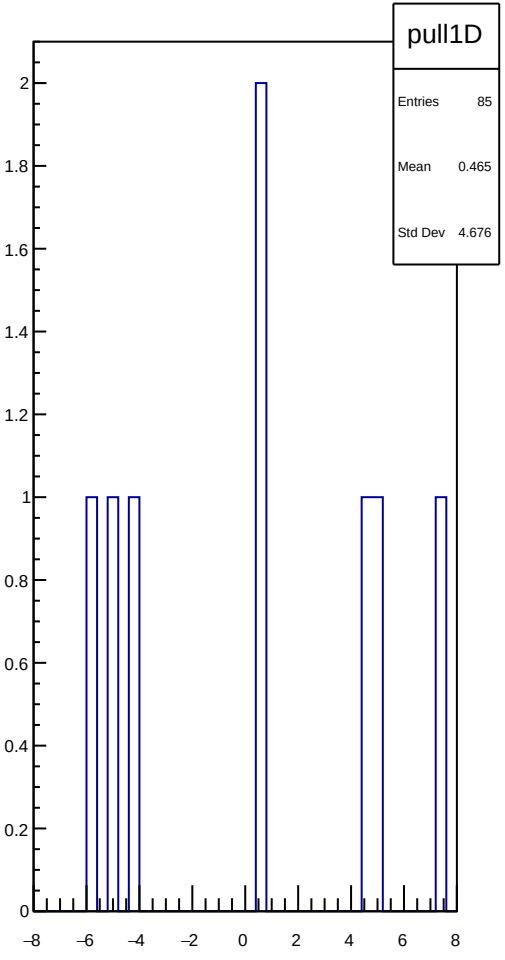

yield_cav4dY_rms vs run
χ² / ndf 6.849e+04 / 84
p0 0.0005682 ± 4.518e−07
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

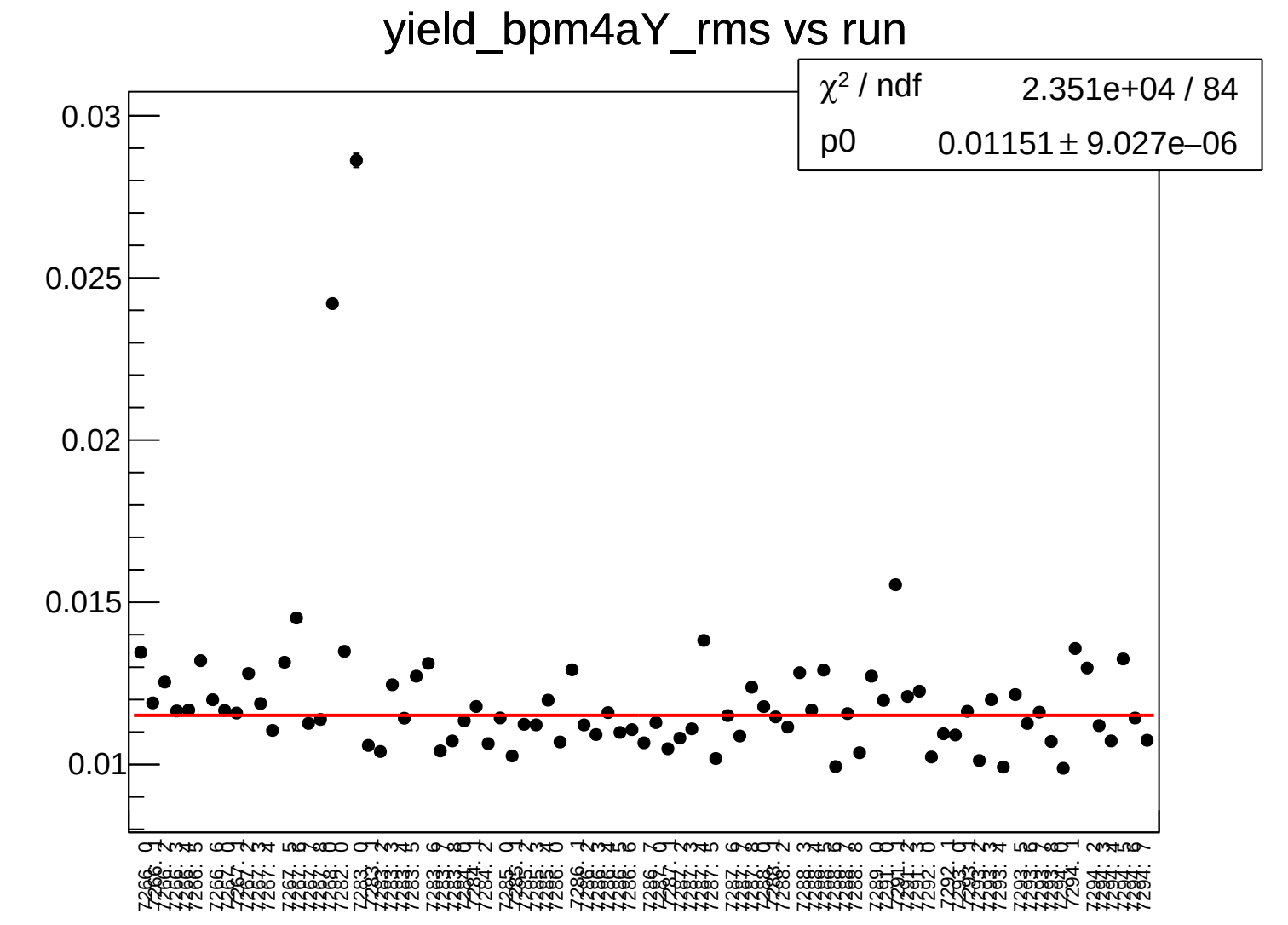

yield_bpm4aX_mean vs run
χ² / ndf 2.504e+05 / 84
p0 −0.4523 ± 2.313e−05
pull
Entries 85
Mean 36.7
Std Dev 25.47

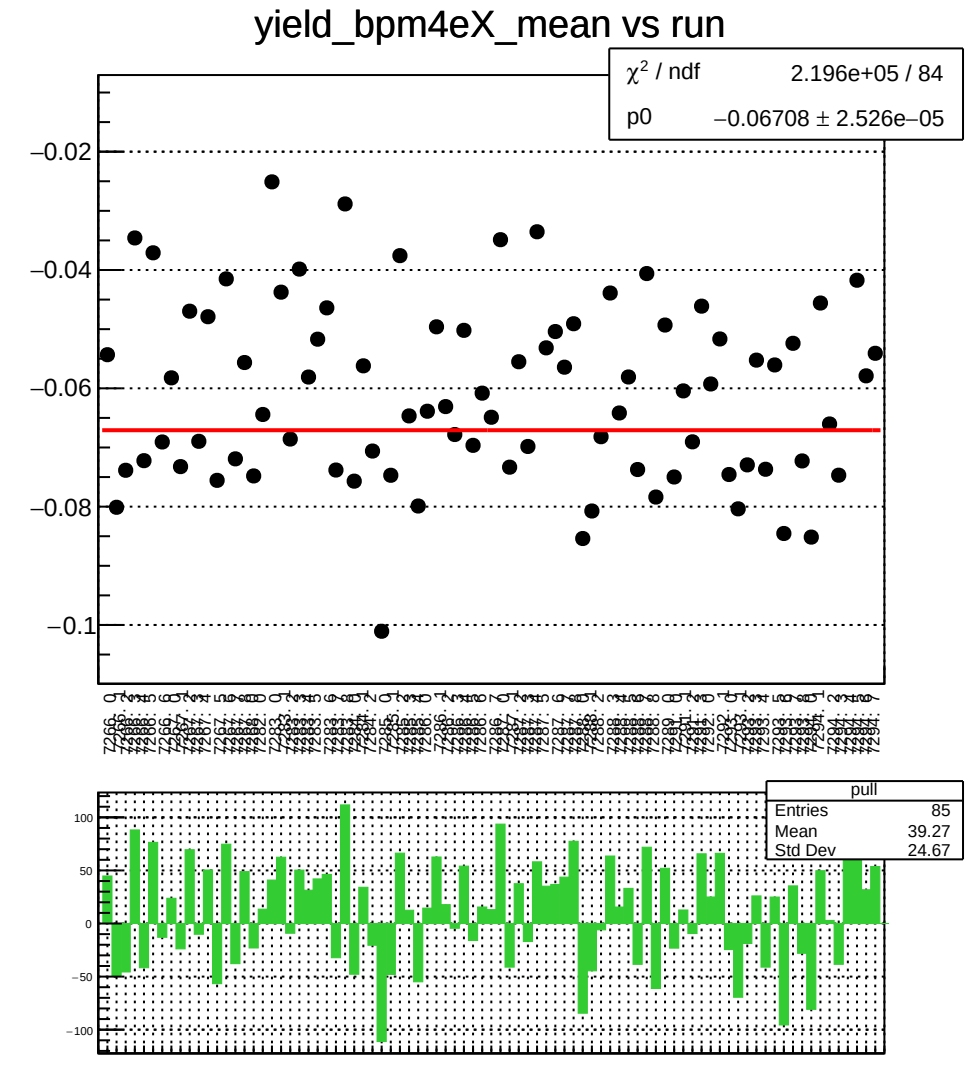

pull1D
Entries 85
Mean −0.4081
Std Dev 3.933

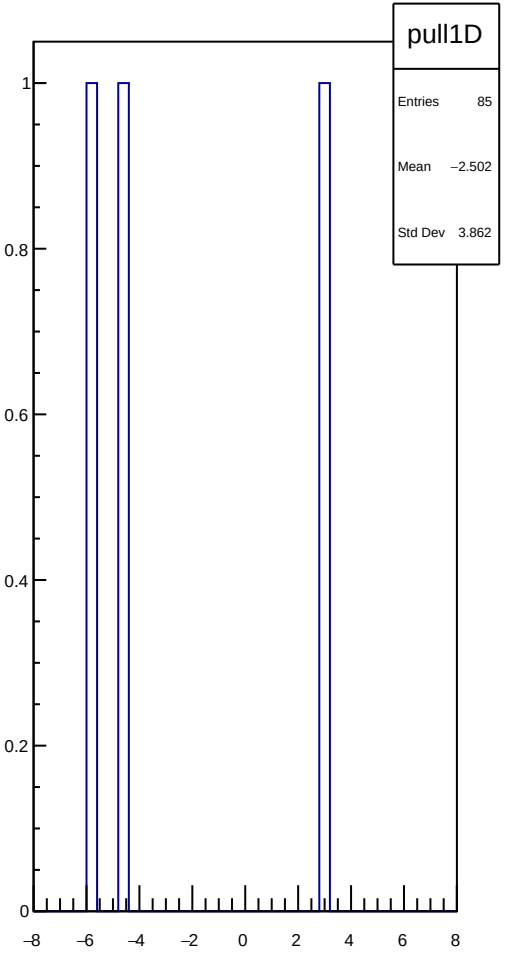

yield_bpm4aX_rms vs run
χ² / ndf 2.774e+05 / 84
p0 0.01916 ± 1.635e−05
0.1
0.08
0.06
0.04
0.02

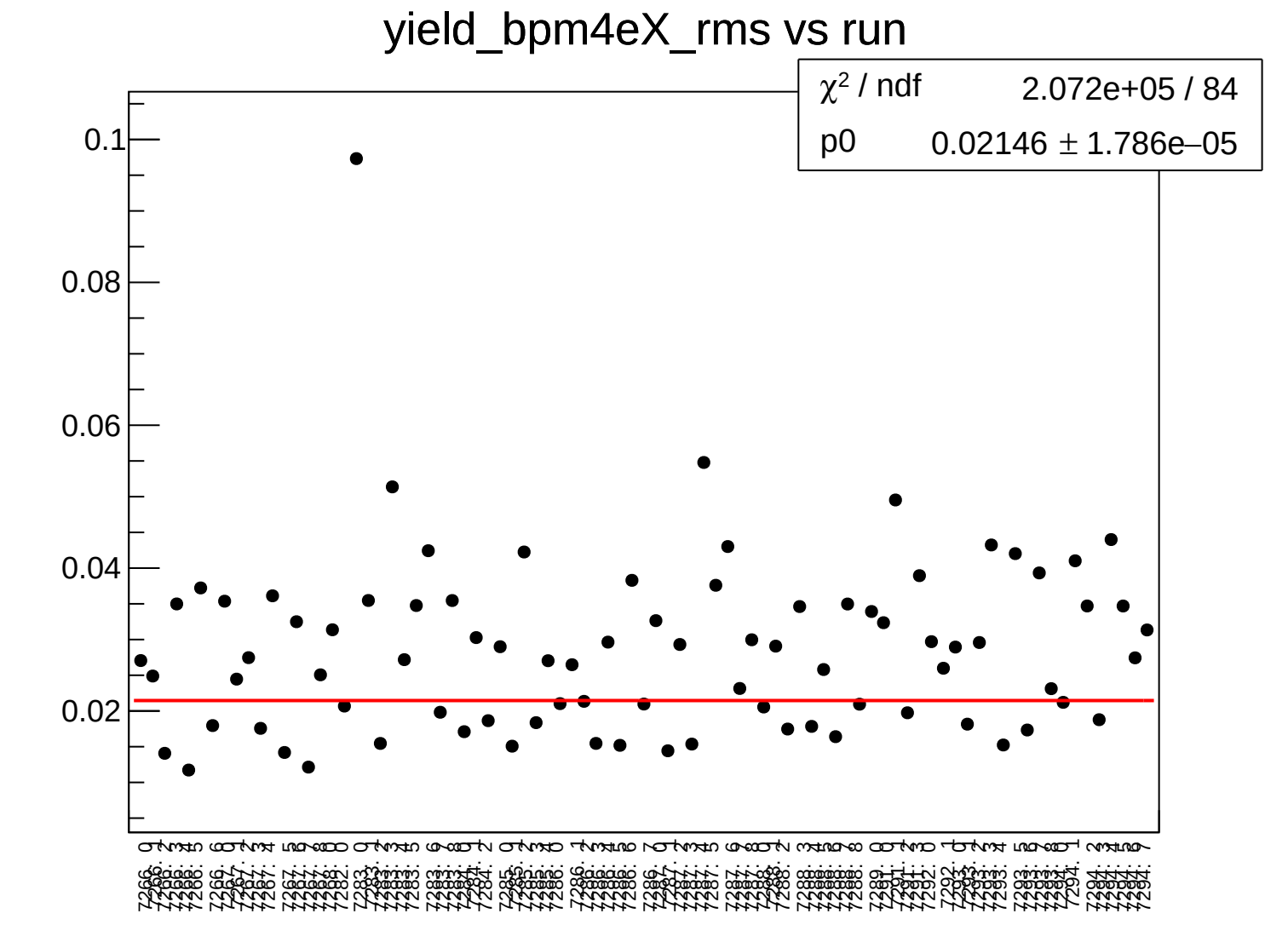

yield_bpm4aY_mean vs run
χ² / ndf 1.499e+05 / 84
p0 0.6262 ± 1.277e−05
0.635
0.63
0.625
0.62
0.615
0.61
pull
Entries 85
Mean 16.59
Std Dev 100.9
100
50
0
−50
−100

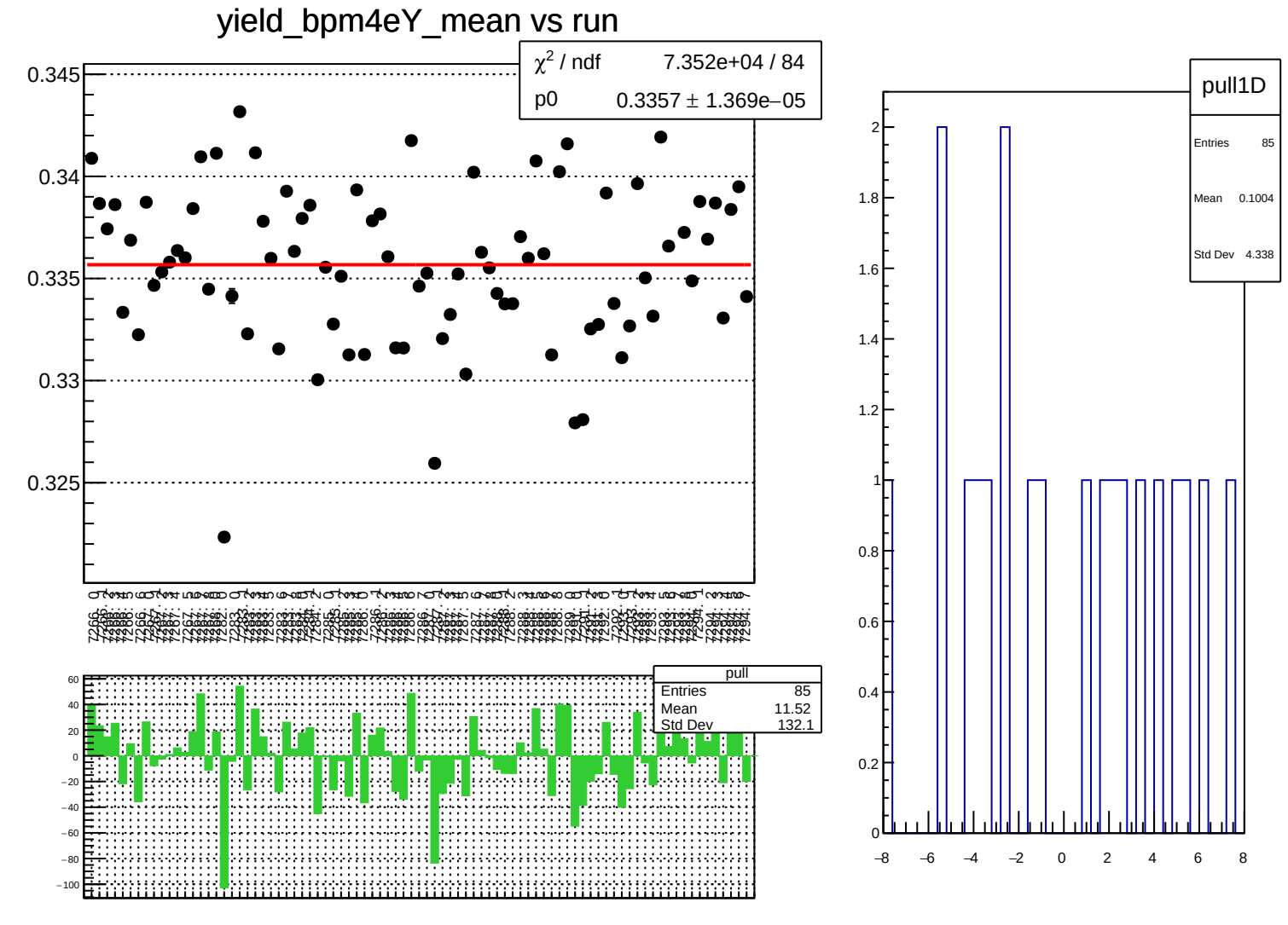

pull1D
Entries 85
Mean 0.465
Std Dev 4.676
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

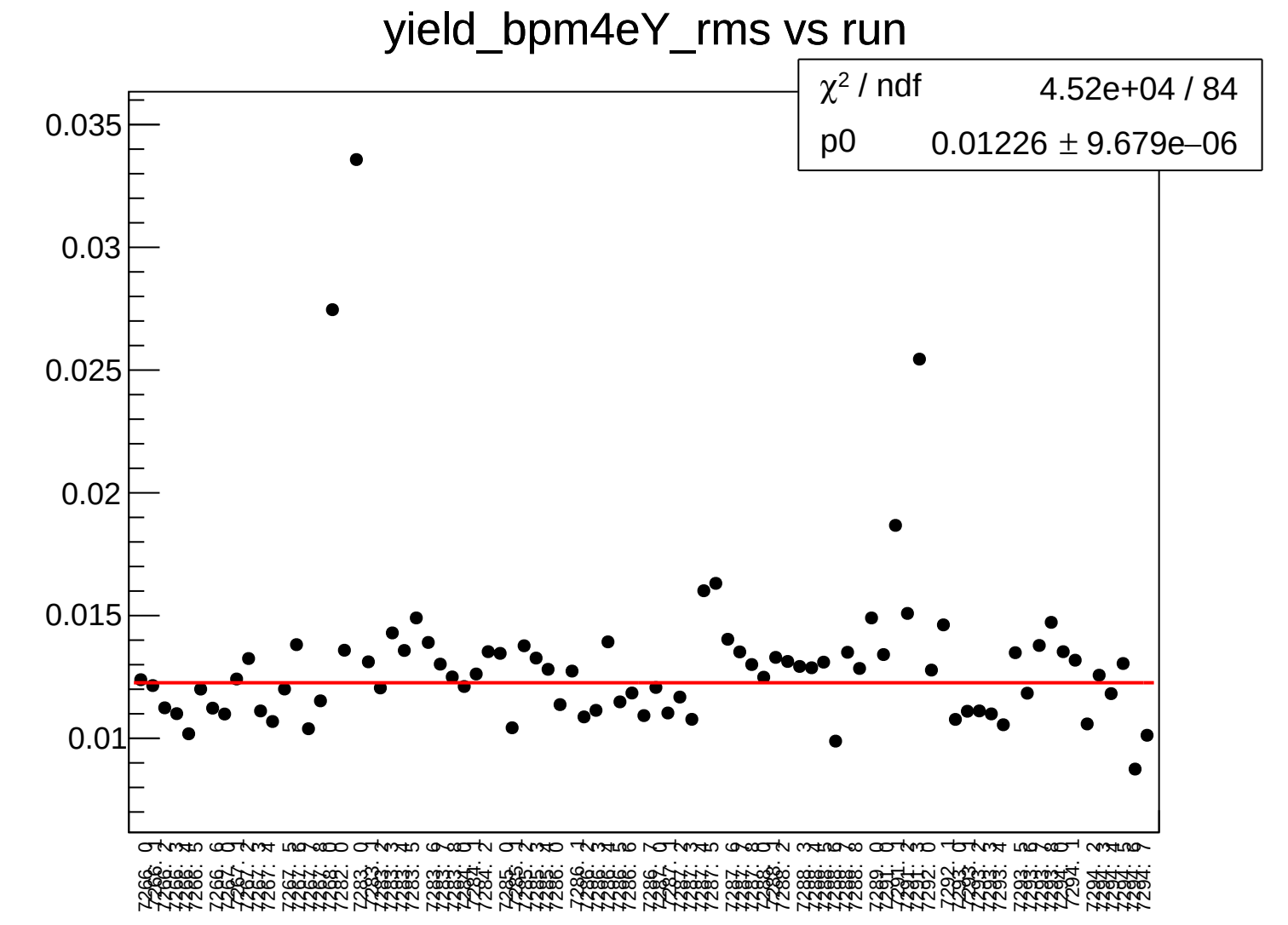

yield_bpm4aY_rms vs run
χ² / ndf 2.351e+04 / 84
p0 0.01151 ± 9.027e–06
0.03
0.025
0.02
0.015
0.01

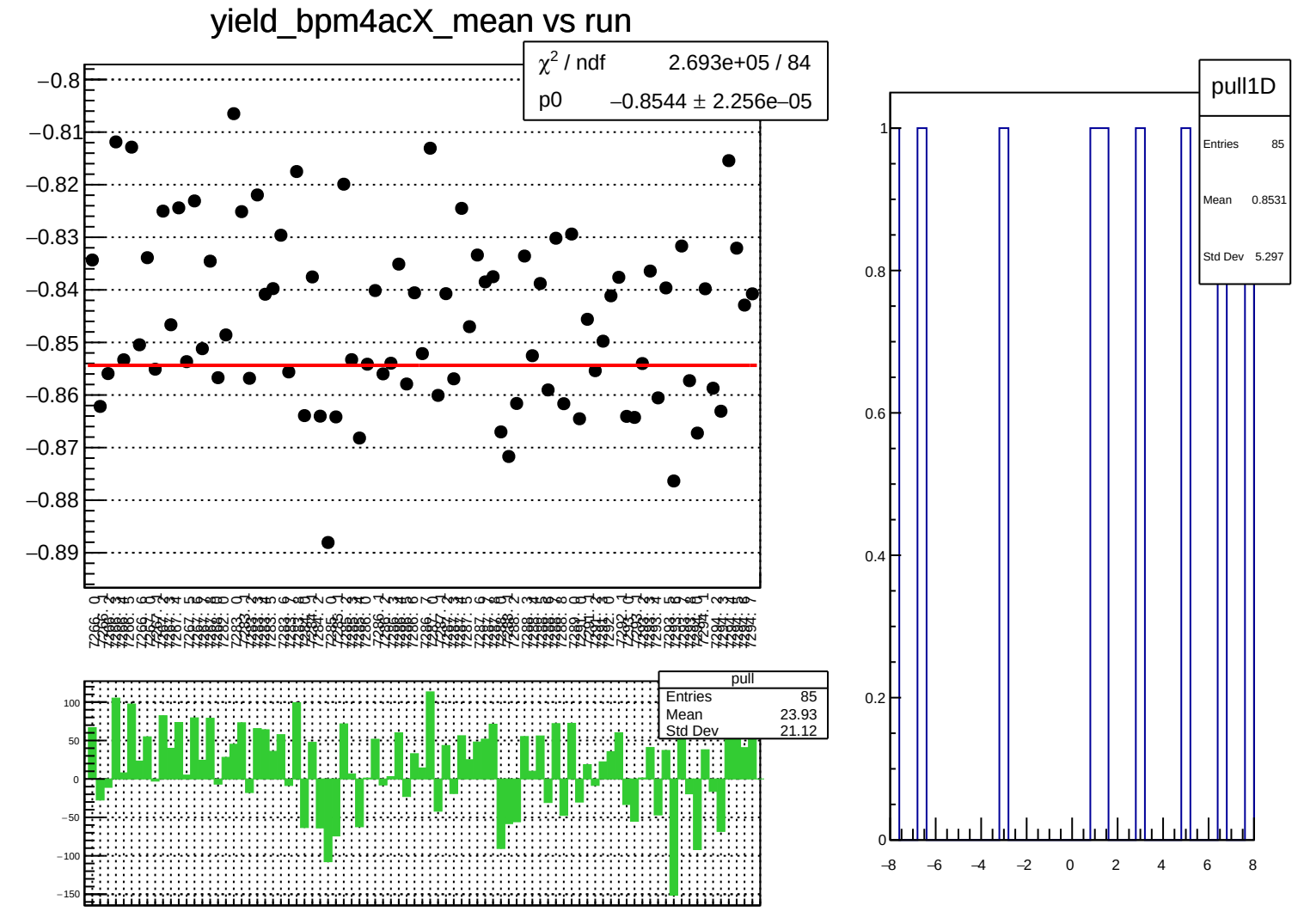

yield_bpm4eX_mean vs run
χ² / ndf 2.196e+05 / 84
p0 −0.06708 ± 2.526e−05
−0.02
−0.04
−0.06
−0.08
−0.1
pull
Entries 85
Mean 39.27
Std Dev 24.67
100
50
0
−50
−100

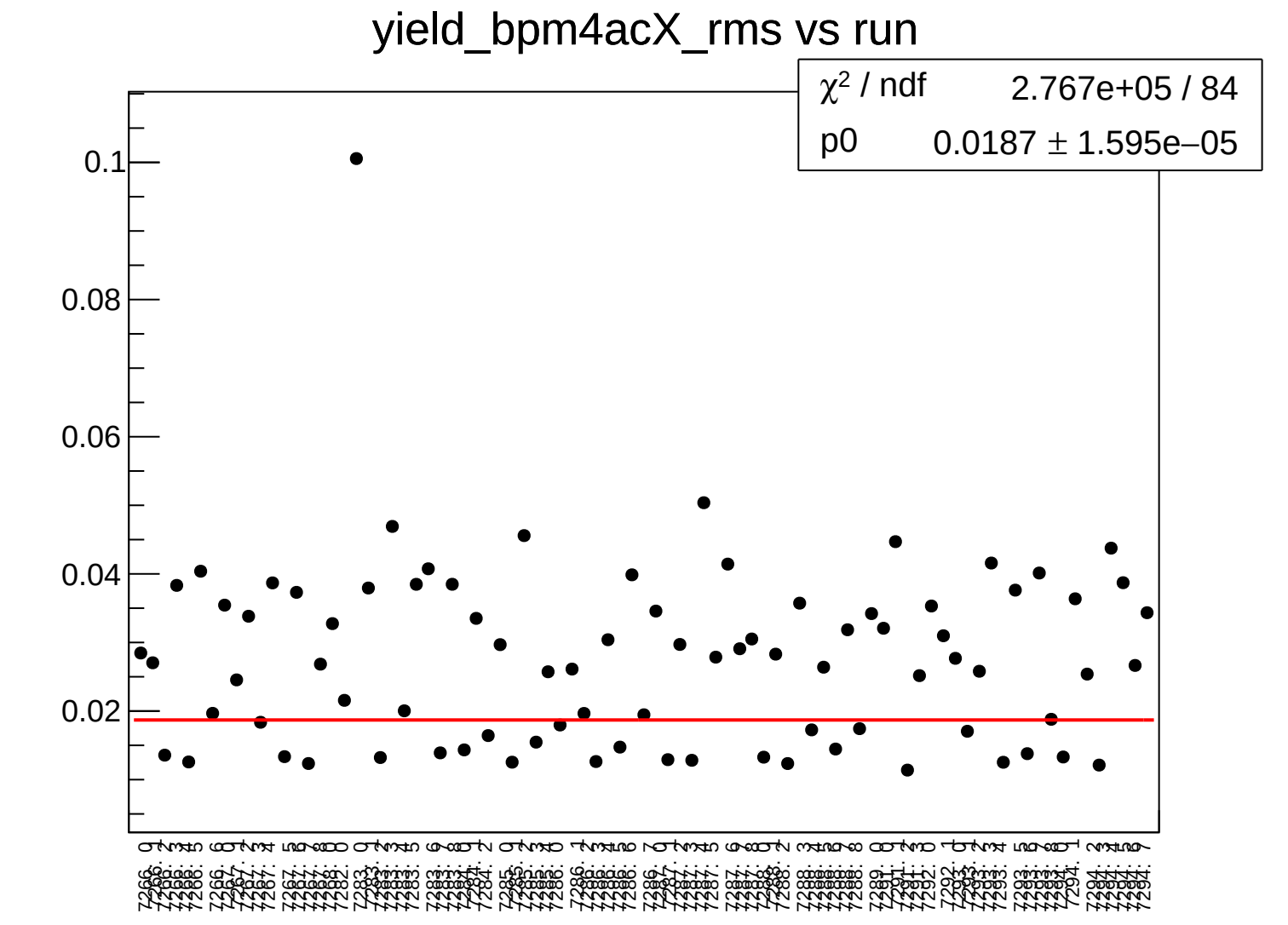

pull1D
Entries 85
Mean −2.502
Std Dev 3.862
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

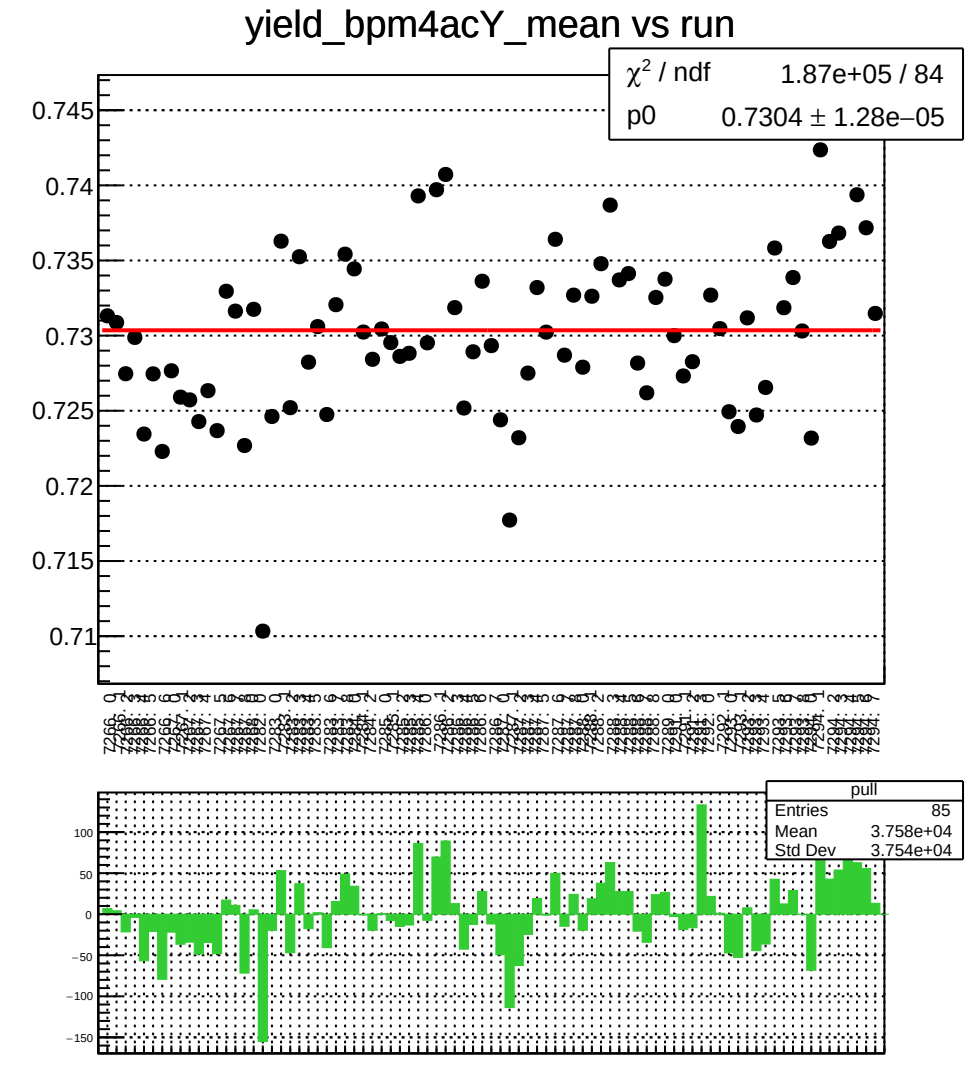

yield_bpm4eX_rms vs run
χ² / ndf 2.072e+05 / 84
p0 0.02146 ± 1.786e−05
0.1
0.08
0.06
0.04
0.02

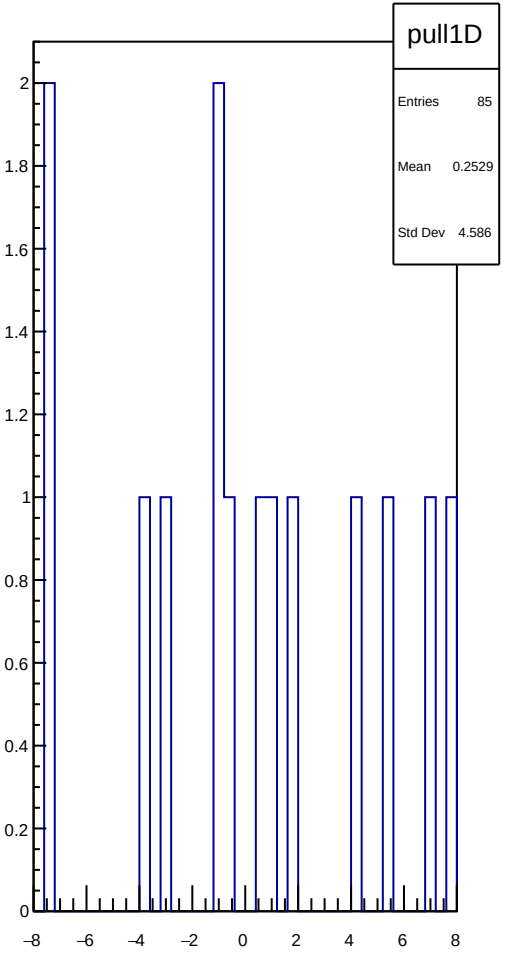

yield_bpm4eY_mean vs run
χ² / ndf 7.352e+04 / 84
p0 0.3357 ± 1.369e−05
0.345
0.34
0.335
0.33
0.325
pull
Entries 85
Mean 11.52
Std Dev 132.1
60
40
20
0
−20
−40
−60
−80
−100
pull1D
Entries 85
Mean 0.1004
Std Dev 4.338
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

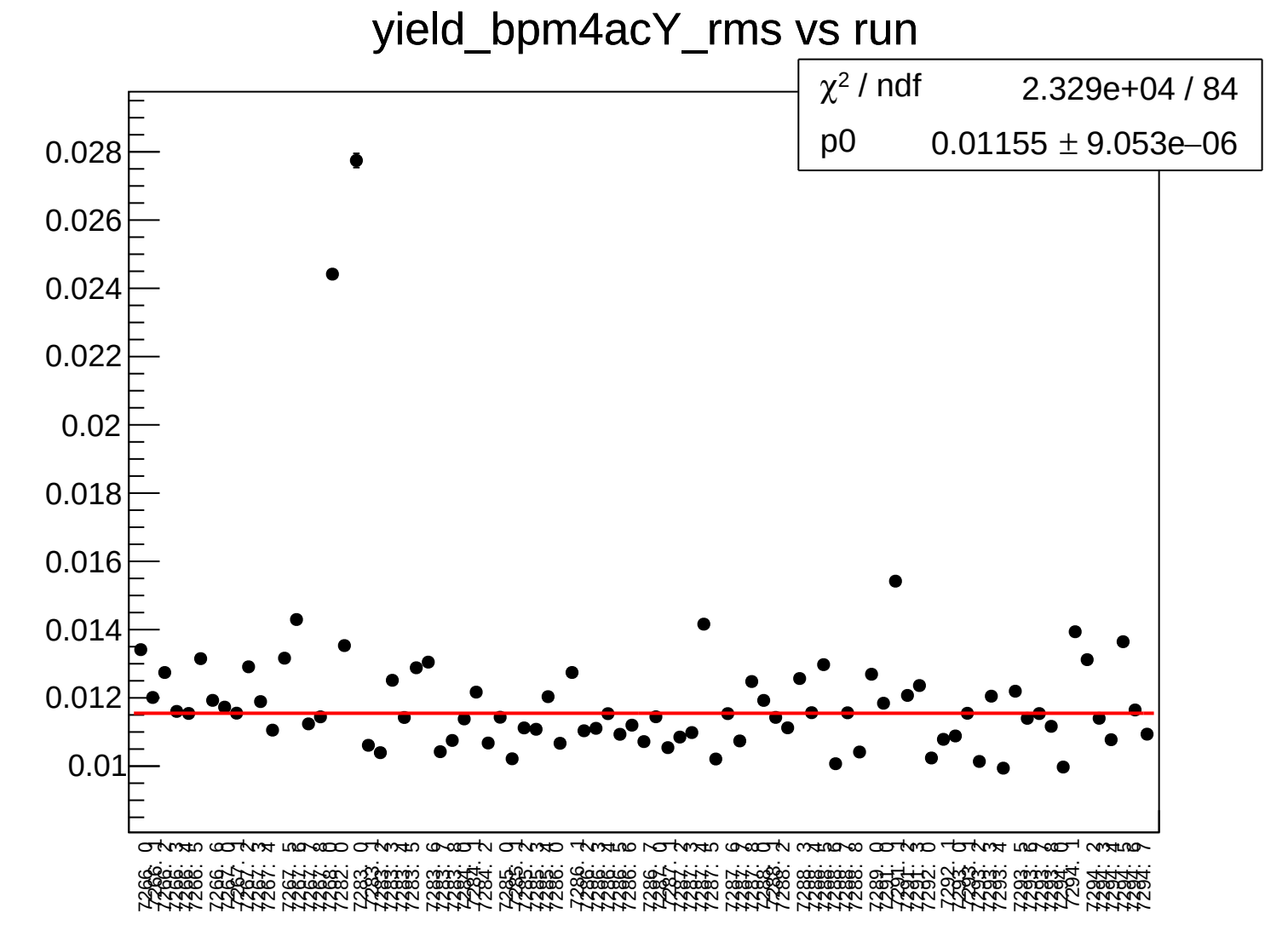

yield_bpm4eY_rms vs run
χ² / ndf 4.52e+04 / 84
p0 0.01226 ± 9.679e–06
0.035
0.03
0.025
0.02
0.015
0.01

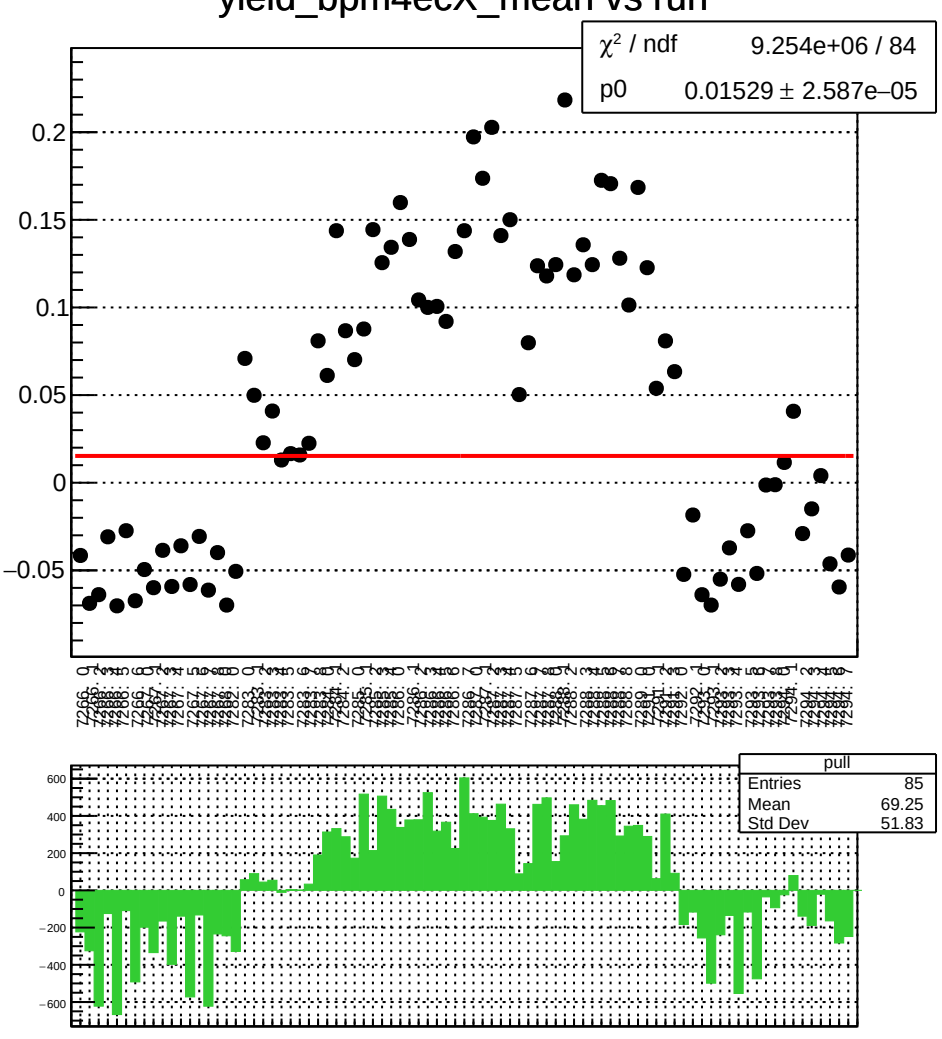

yield_bpm4acX_mean vs run
χ² / ndf 2.693e+05 / 84
p0 −0.8544 ± 2.256e−05
pull
Entries 85
Mean 23.93
Std Dev 21.12
pull1D
Entries 85
Mean 0.8531
Std Dev 5.297

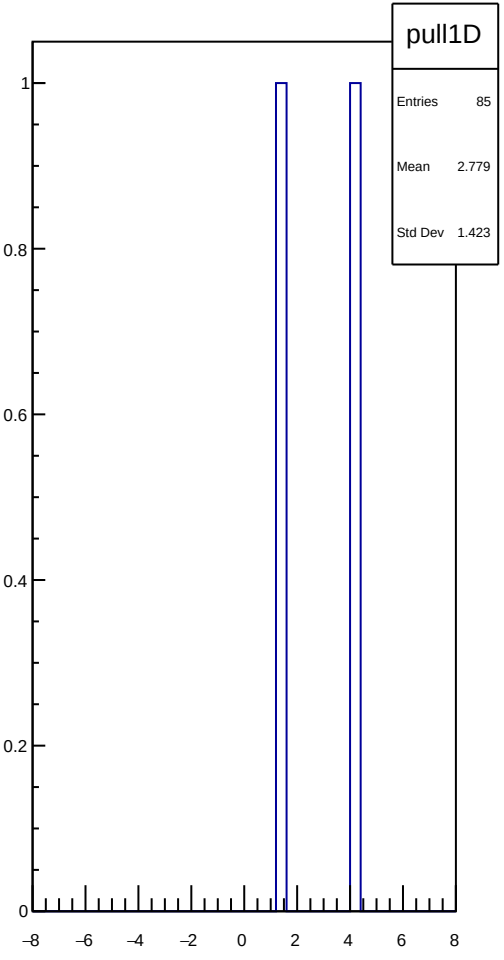

yield_bpm4acX_rms vs run
χ² / ndf 2.767e+05 / 84
p0 0.0187 ± 1.595e−05
0.1
0.08
0.06
0.04
0.02

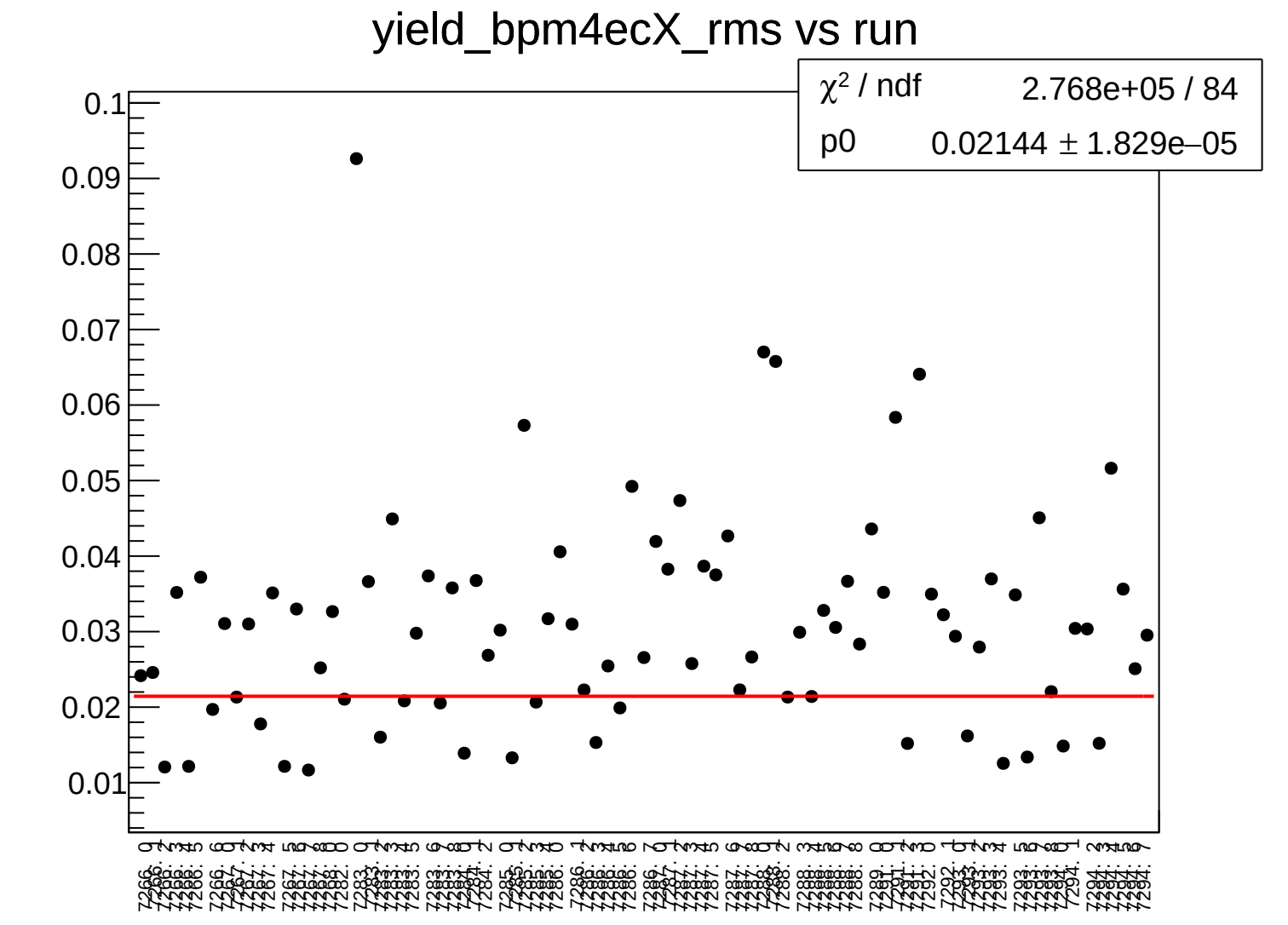

yield_bpm4acY_mean vs run
χ² / ndf 1.87e+05 / 84
p0 0.7304 ± 1.28e−05
0.745
0.74
0.735
0.73
0.725
0.72
0.715
0.71
pull
Entries 85
Mean 3.758e+04
Std Dev 3.754e+04
100
50
0
−50
−100
−150

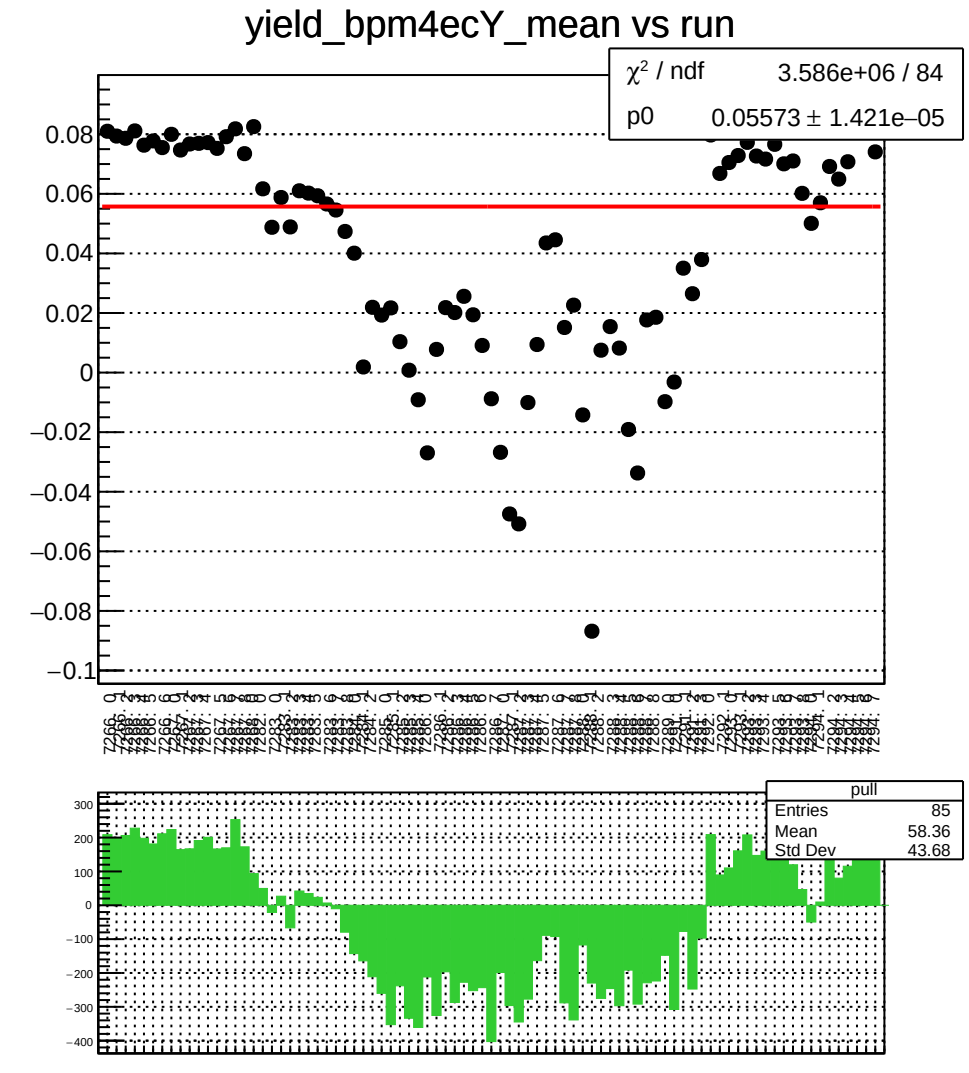

pull1D
Entries 85
Mean 0.2529
Std Dev 4.586
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

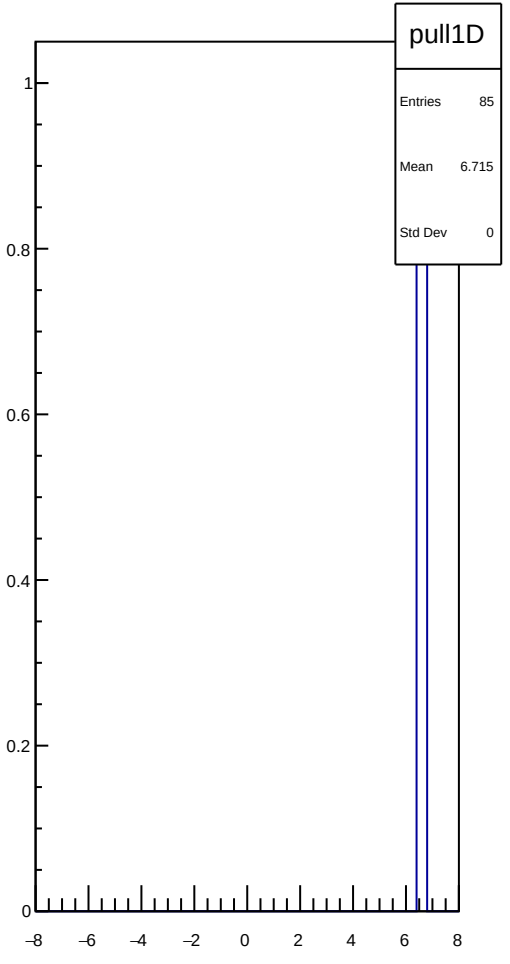

yield_bpm4acY_rms vs run
χ² / ndf 2.329e+04 / 84
p0 0.01155 ± 9.053e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

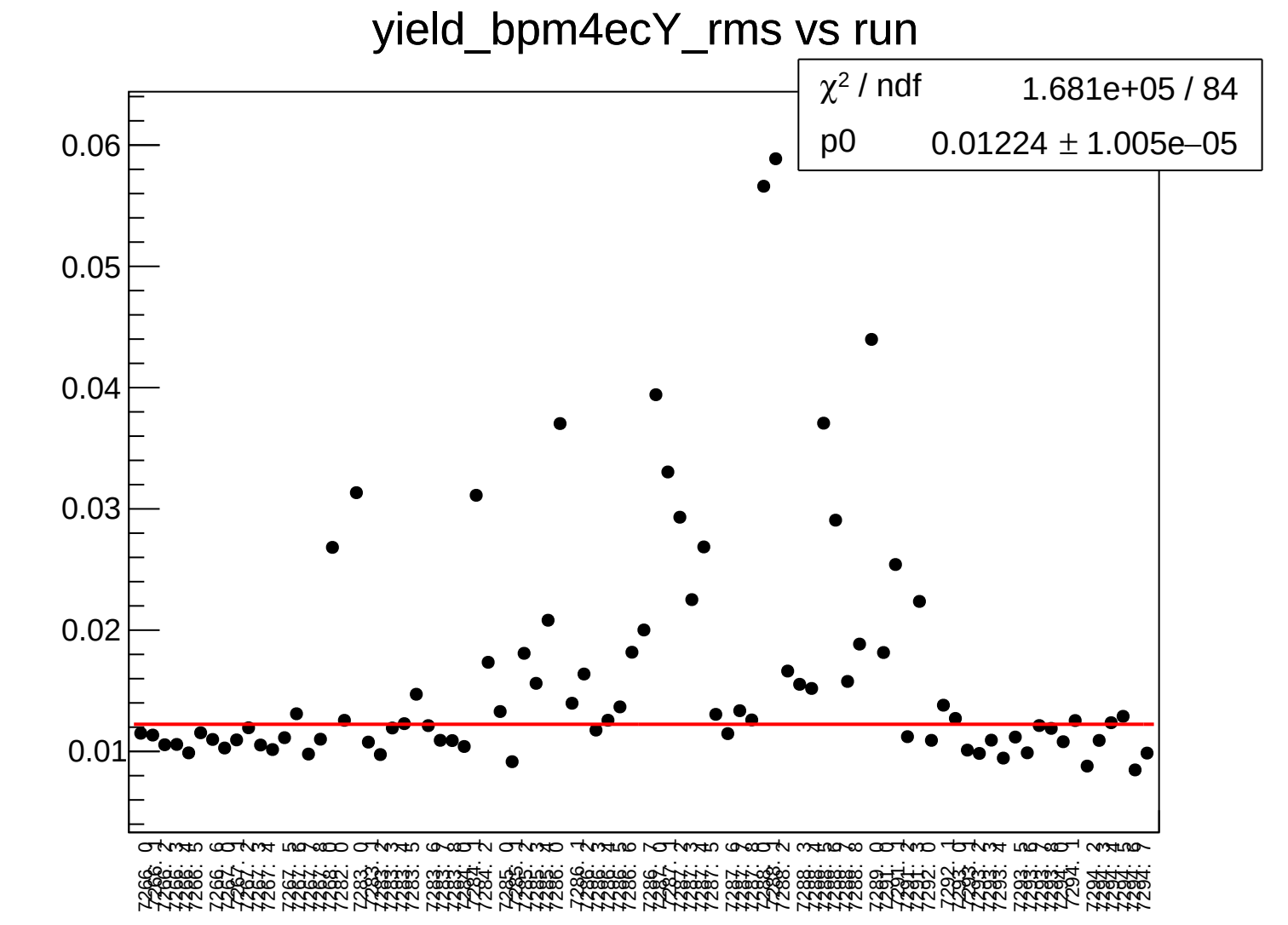

yield_bpm4ecX_mean vs run
χ² / ndf 9.254e+06 / 84
p0 0.01529 ± 2.587e−05
0.2
0.15
0.1
0.05
0
−0.05
pull
Entries 85
Mean 69.25
Std Dev 51.83
600
400
200
0
−200
−400
−600

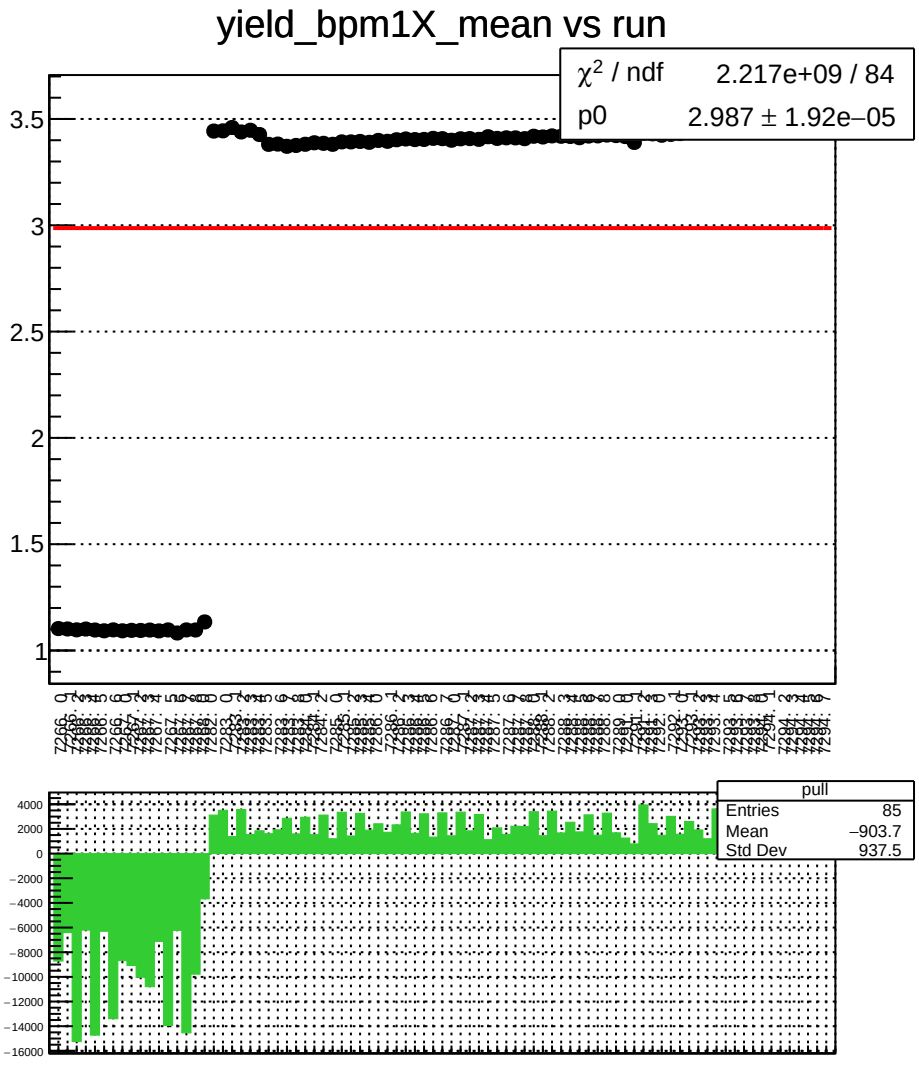

pull1D
Entries 85
Mean 2.779
Std Dev 1.423
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

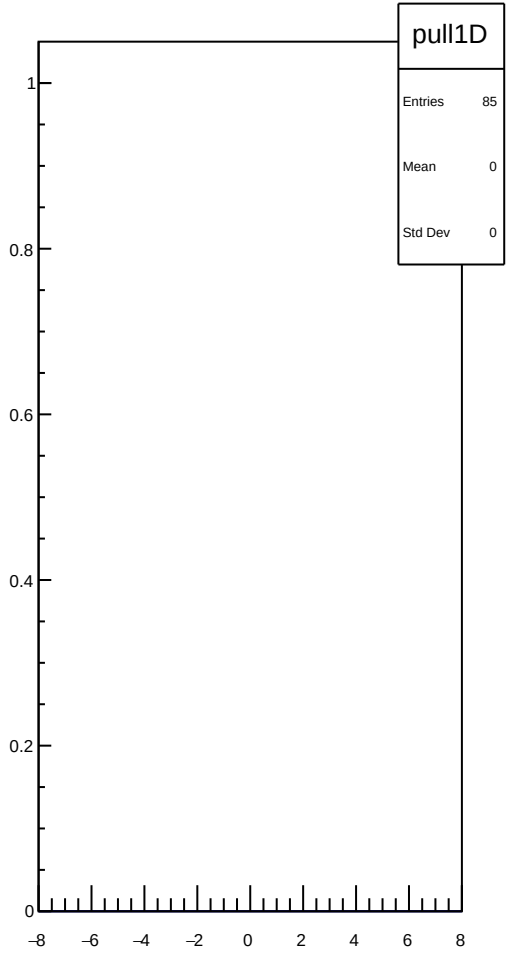

yield_bpm4ecX_rms vs run
χ² / ndf 2.768e+05 / 84
p0 0.02144 ± 1.829e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

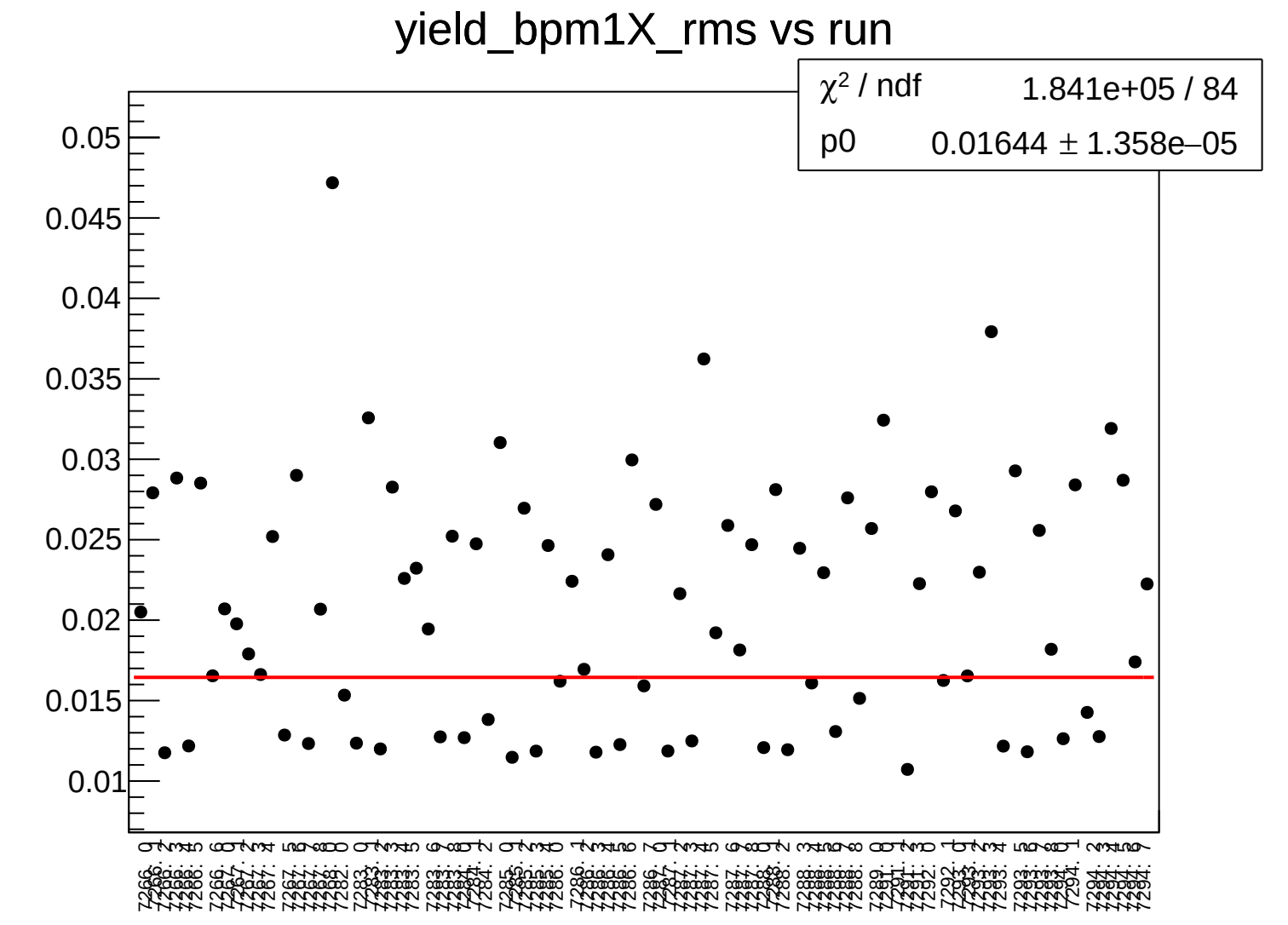

yield_bpm4ecY_mean vs run
χ² / ndf 3.586e+06 / 84
p0 0.05573 ± 1.421e–05
0.08
0.06
0.04
0.02
0
–0.02
–0.04
–0.06
–0.08
–0.1
pull
Entries 85
Mean 58.36
Std Dev 43.68
300
200
100
0
–100
–200
–300
–400

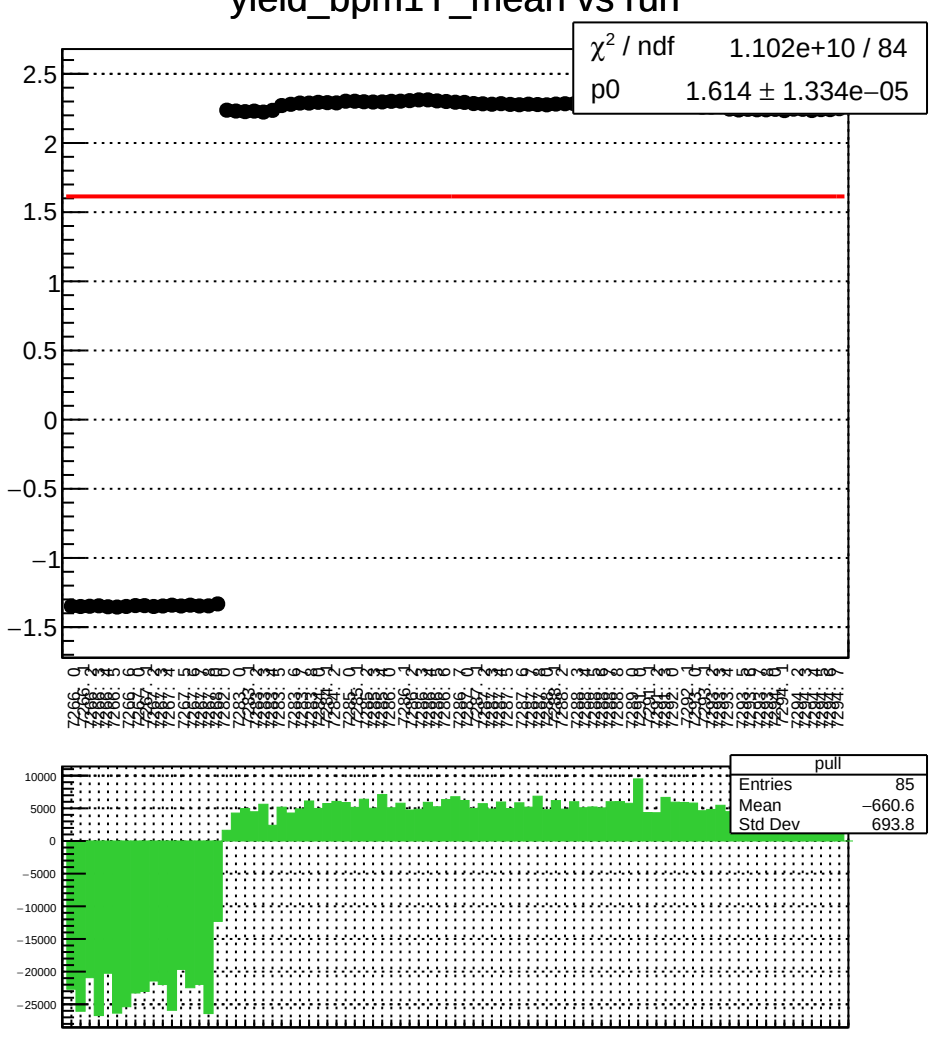

pull1D
Entries 85
Mean 6.715
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

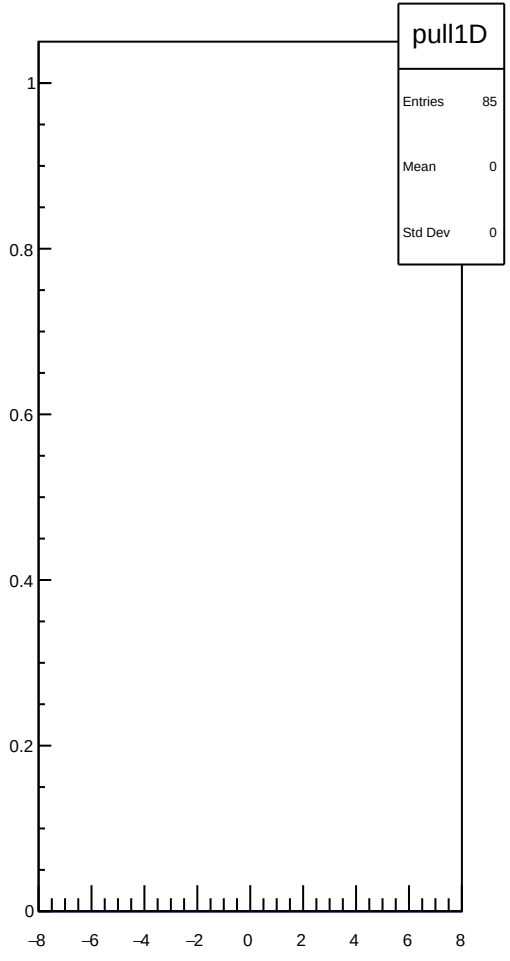

yield_bpm4ecY_rms vs run
χ² / ndf 1.681e+05 / 84
p0 0.01224 ± 1.005e−05
0.06
0.05
0.04
0.03
0.02
0.01

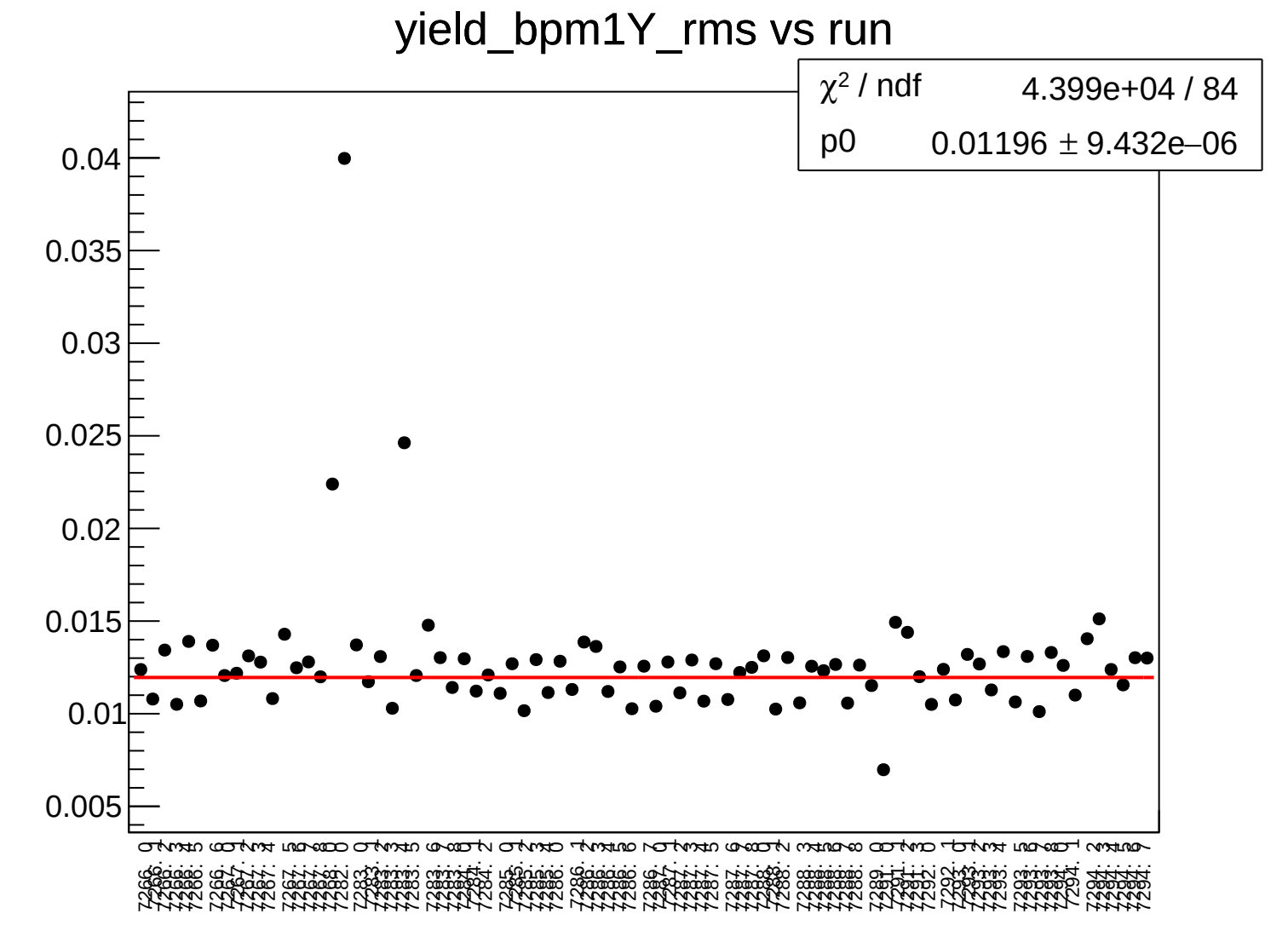

yield_bpm1X_mean vs run
χ² / ndf 2.217e+09 / 84
p0 2.987 ± 1.92e−05
pull
Entries 85
Mean −903.7
Std Dev 937.5

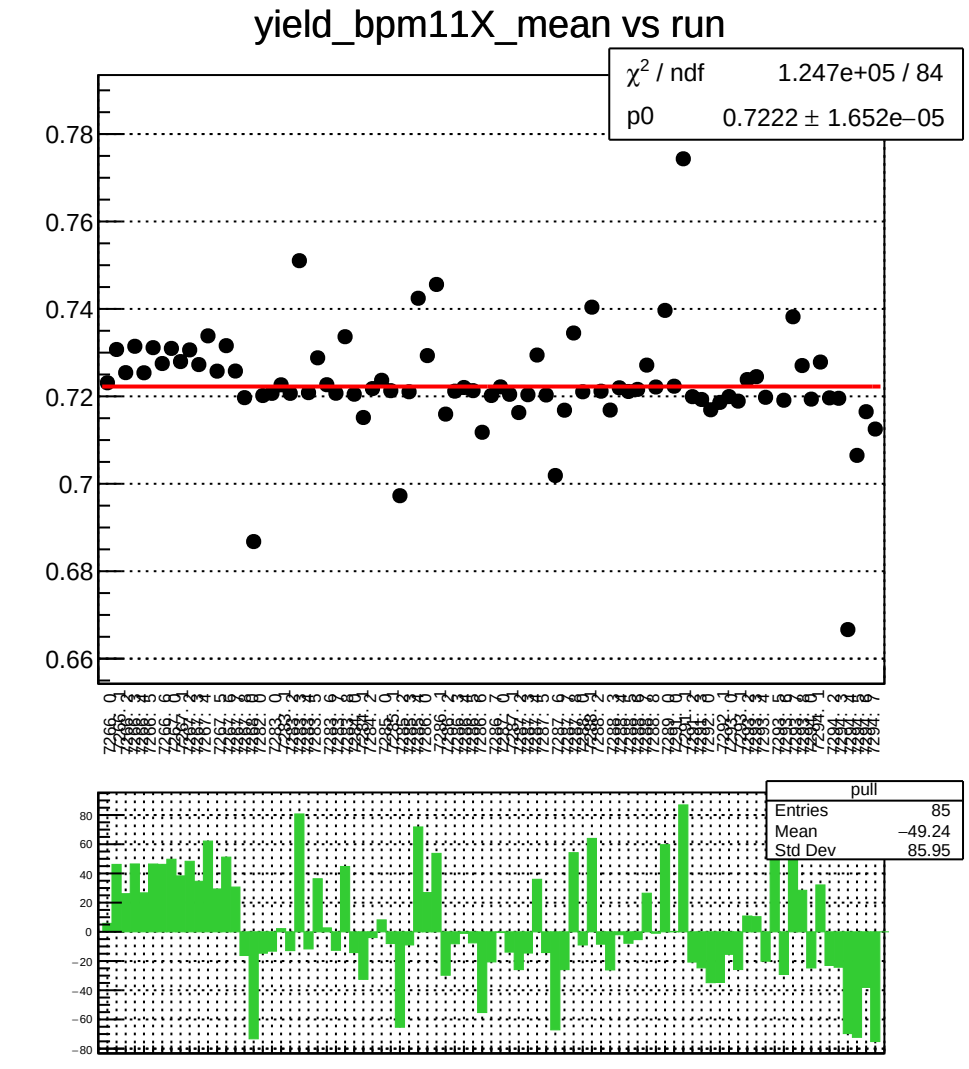

pull1D
Entries 85
Mean 0
Std Dev 0

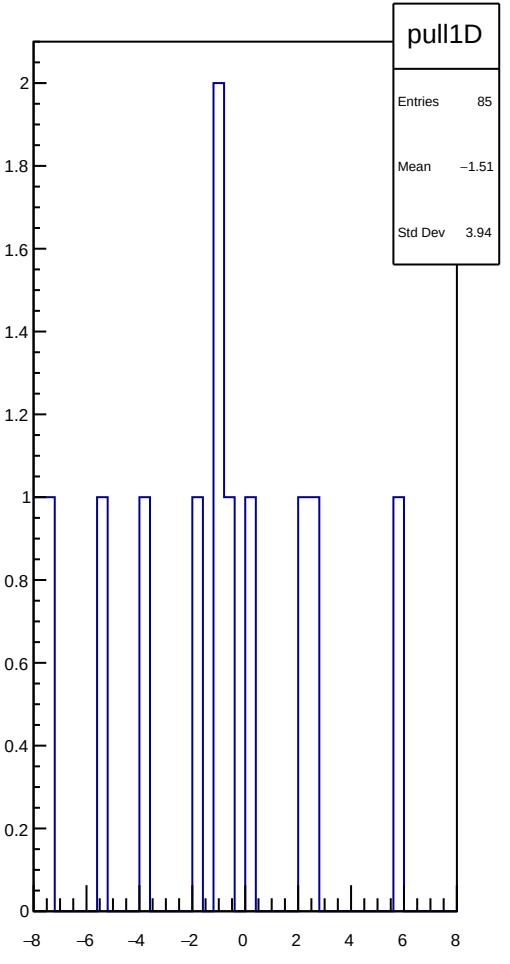

yield_bpm1X_rms vs run
χ² / ndf 1.841e+05 / 84
p0 0.01644 ± 1.358e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

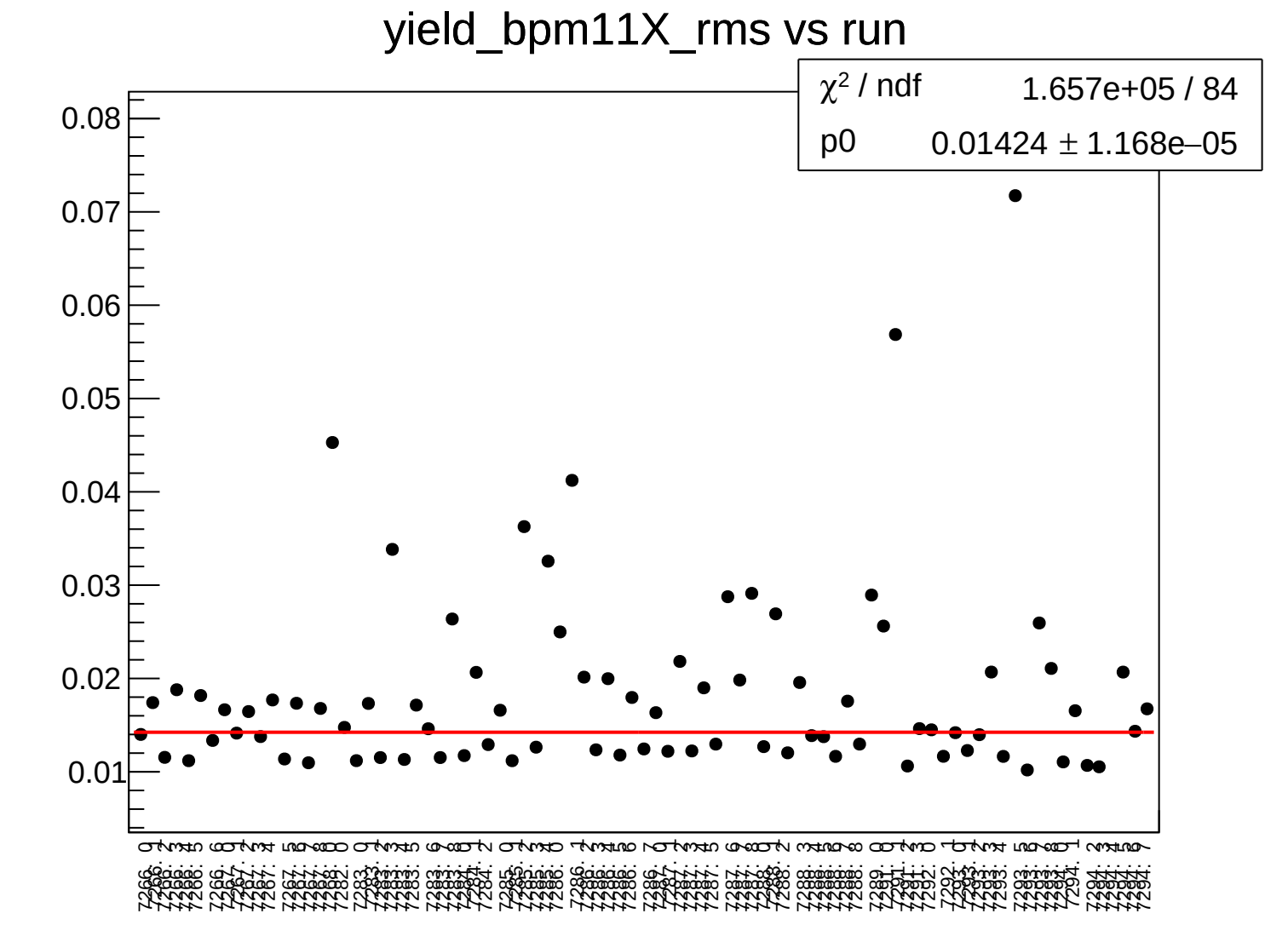

yield_bpm1Y_mean vs run
χ² / ndf 1.102e+10 / 84
p0 1.614 ± 1.334e−05
pull
Entries 85
Mean −660.6
Std Dev 693.8

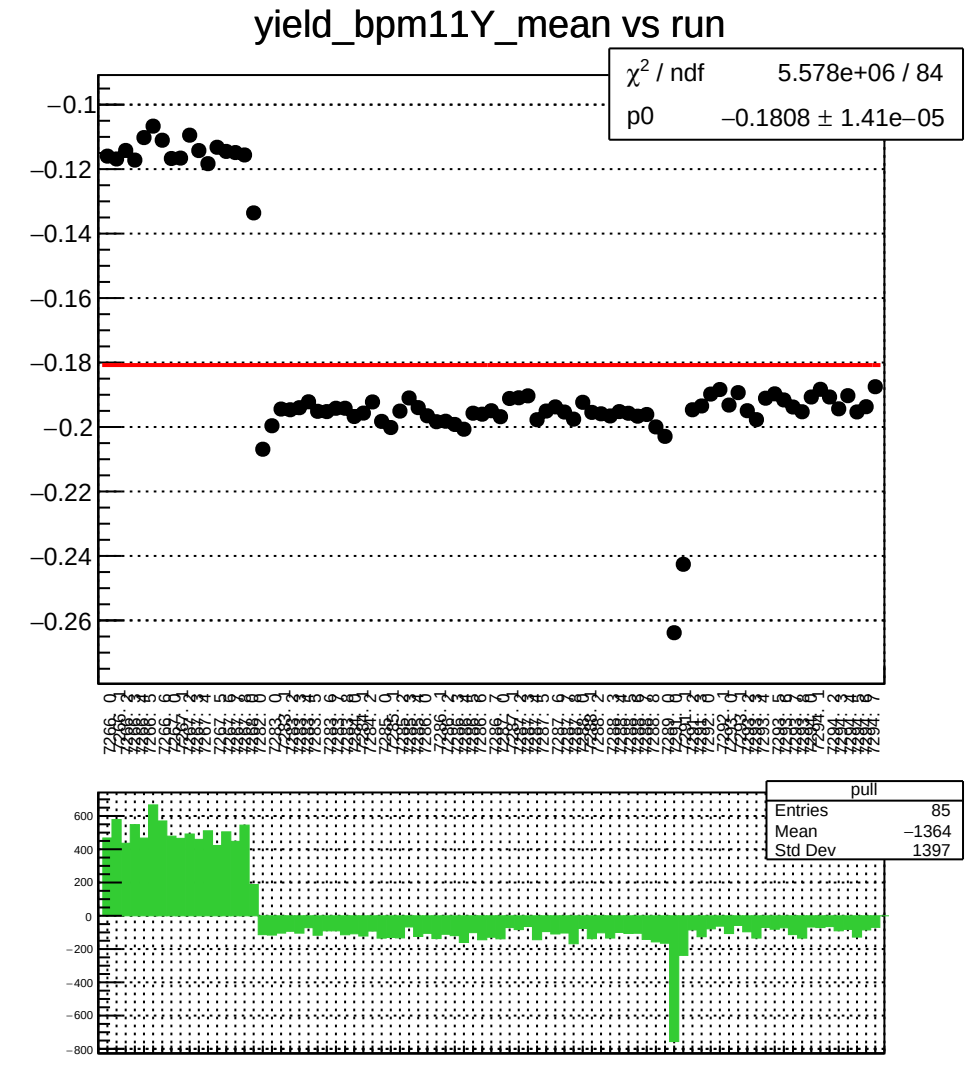

pull1D
Entries 85
Mean 0
Std Dev 0

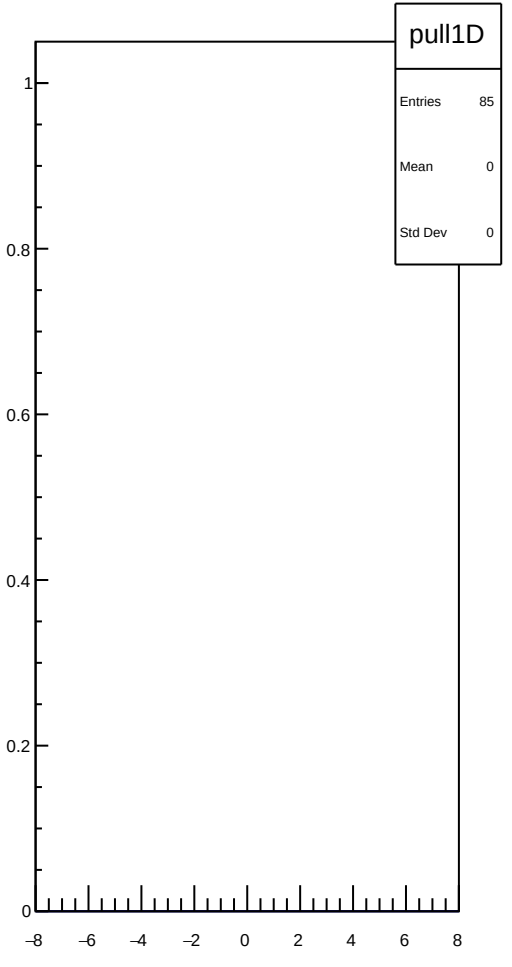

yield_bpm1Y_rms vs run
χ² / ndf 4.399e+04 / 84
p0 0.01196 ± 9.432e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

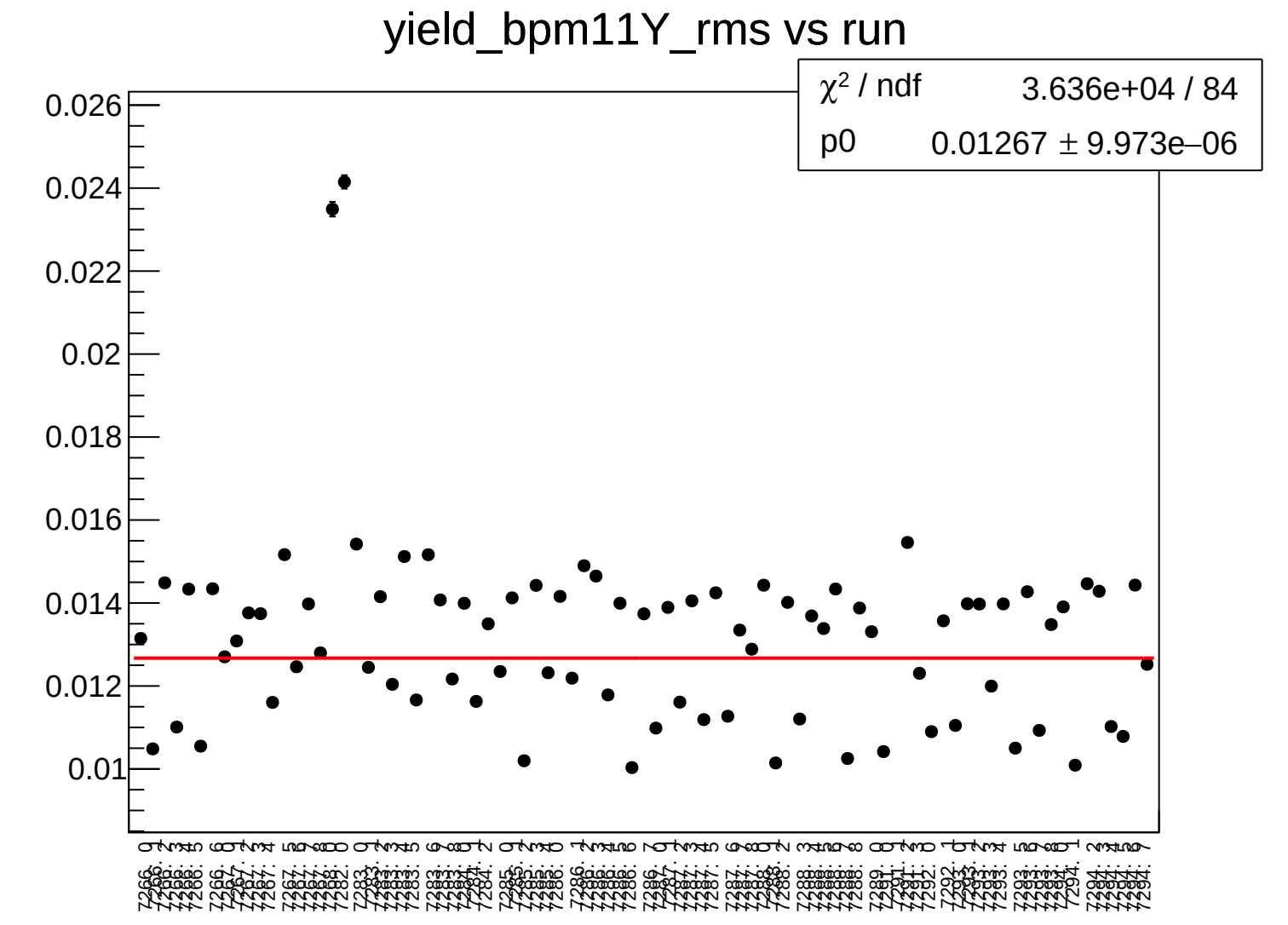

yield_bpm11X_mean vs run
χ² / ndf 1.247e+05 / 84
p0 0.7222 ± 1.652e−05
0.78
0.76
0.74
0.72
0.7
0.68
0.66
pull
Entries 85
Mean −49.24
Std Dev 85.95
80
60
40
20
0
−20
−40
−60
−80

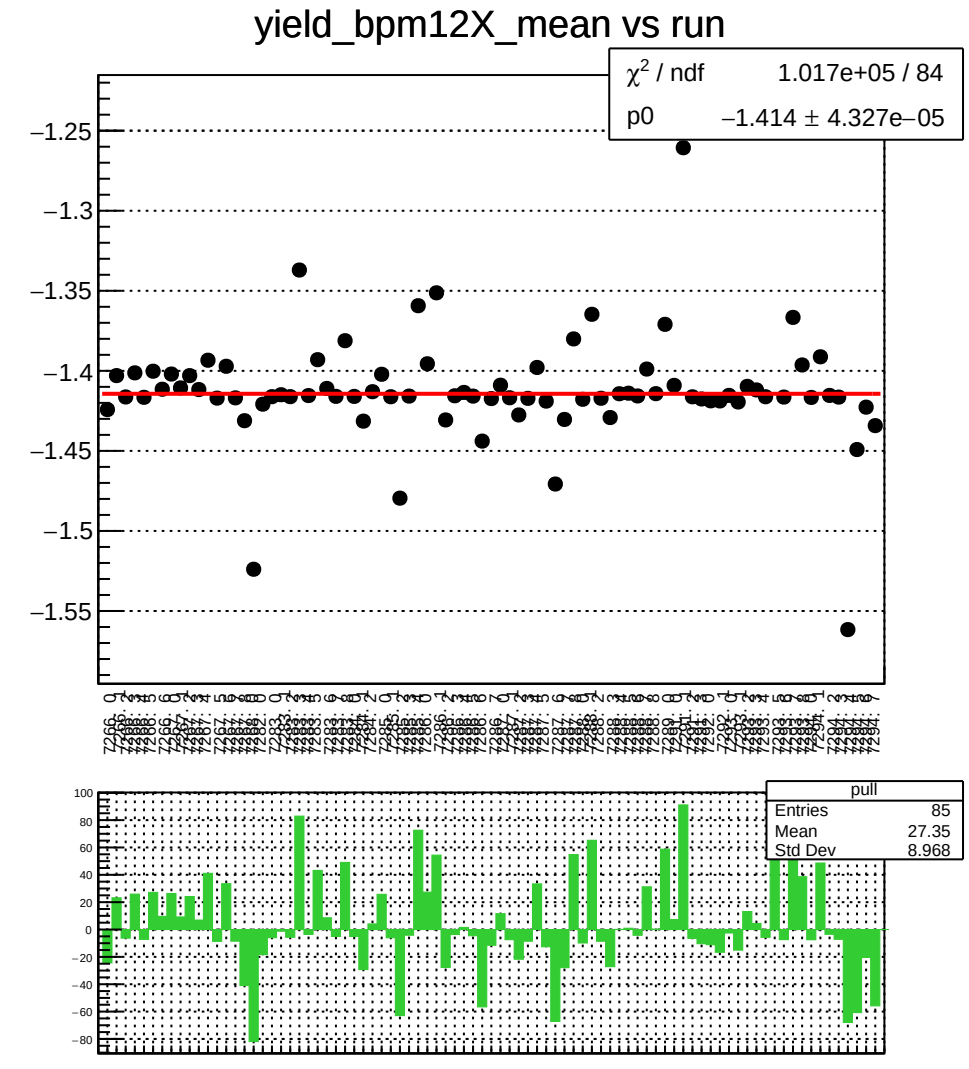

pull1D
Entries 85
Mean −1.51
Std Dev 3.94
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

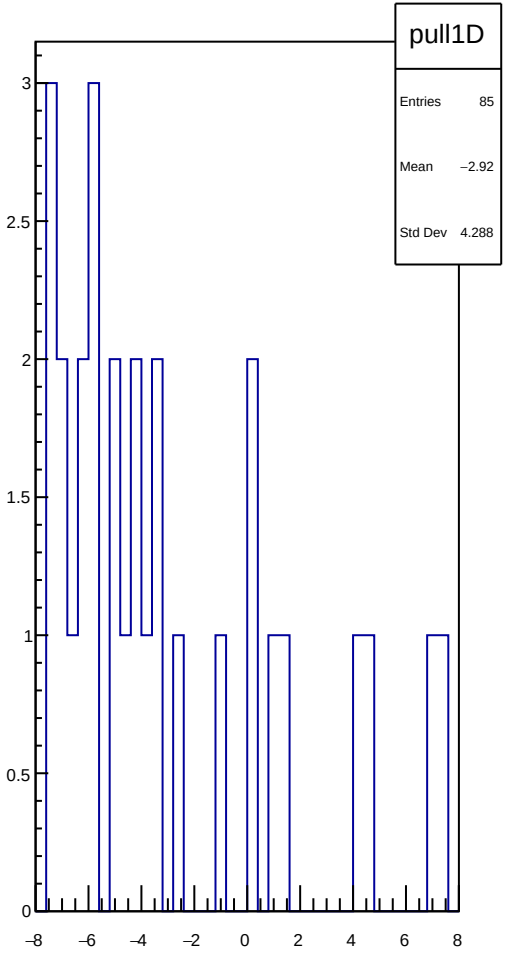

yield_bpm11X_rms vs run
χ² / ndf 1.657e+05 / 84
p0 0.01424 ± 1.168e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

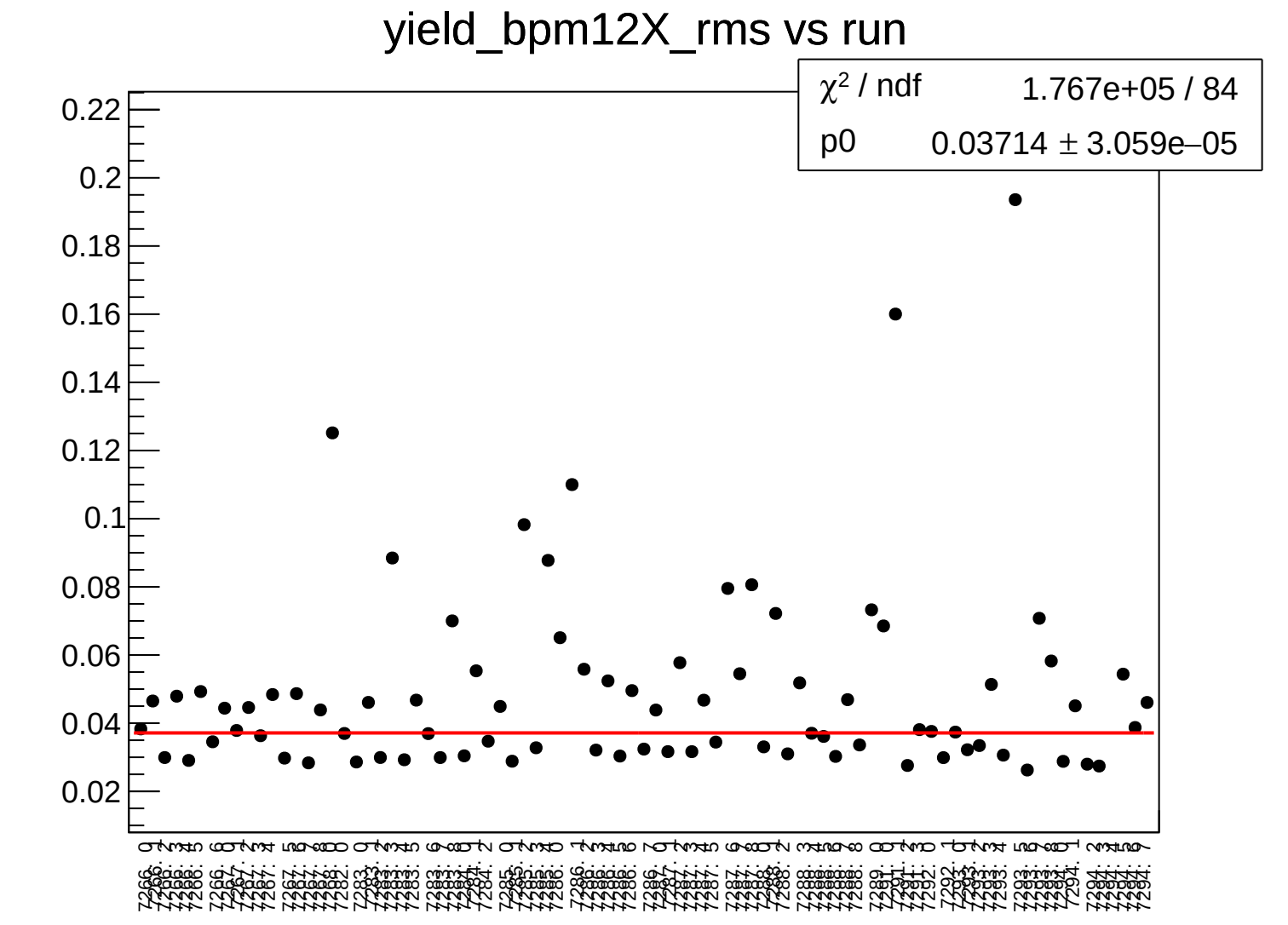

yield_bpm11Y_mean vs run
χ² / ndf 5.578e+06 / 84
p0 −0.1808 ± 1.41e−05
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
−0.22
−0.24
−0.26
pull
Entries 85
Mean −1364
Std Dev 1397
600
400
200
0
−200
−400
−600
−800

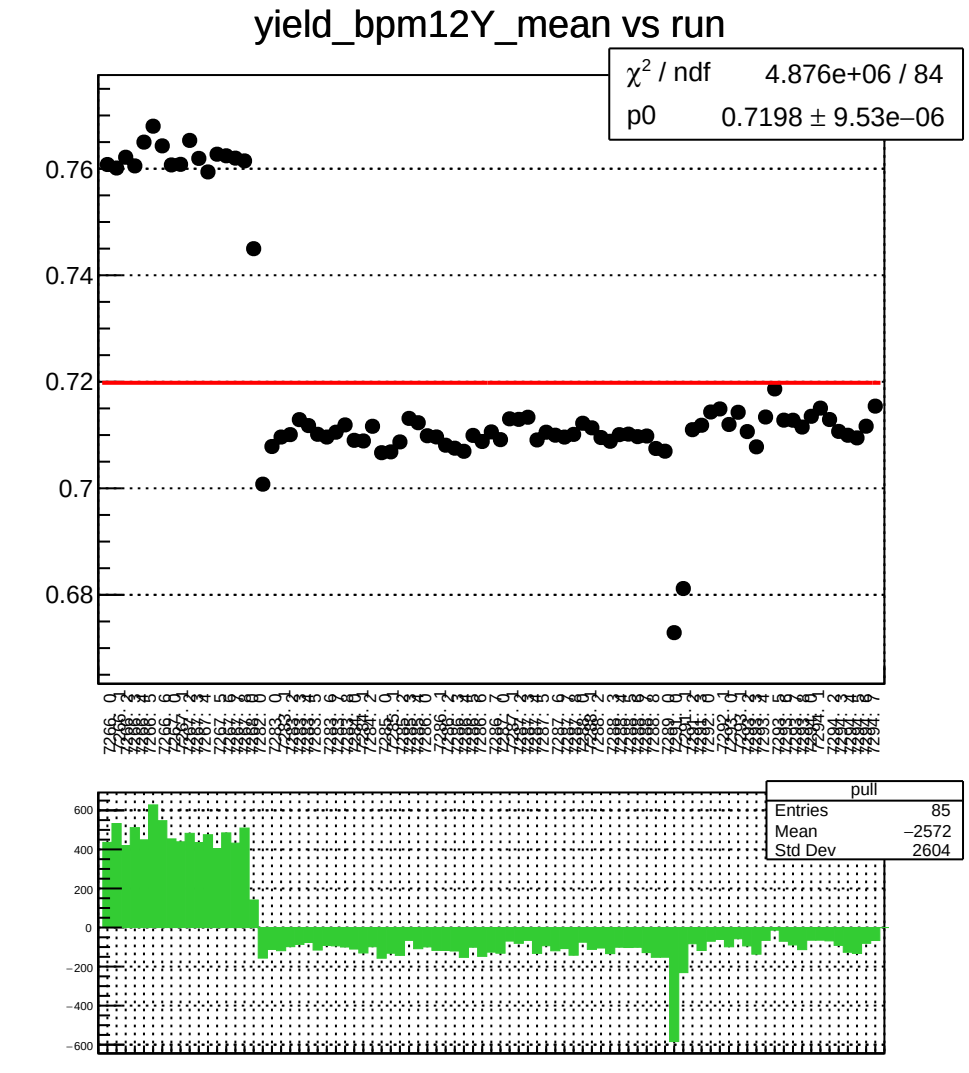

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

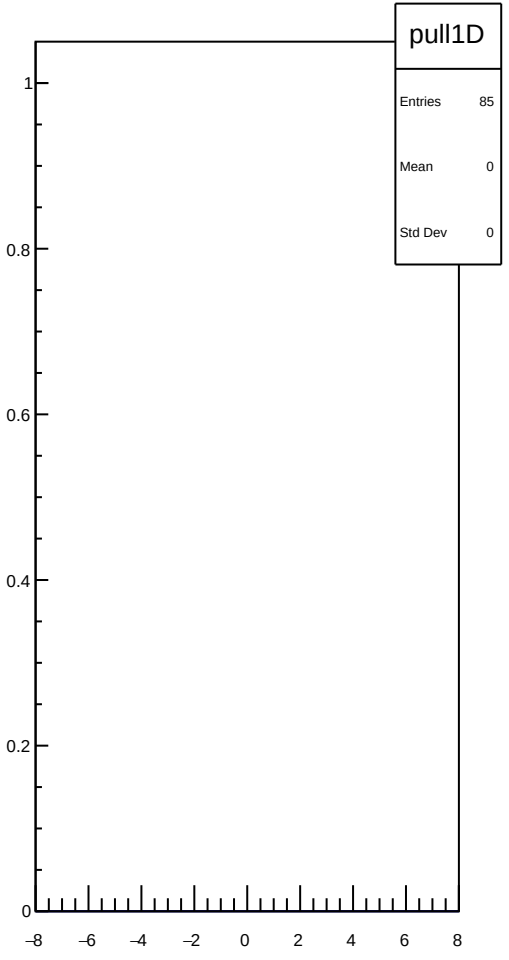

yield_bpm11Y_rms vs run
χ² / ndf 3.636e+04 / 84
p0 0.01267 ± 9.973e–06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

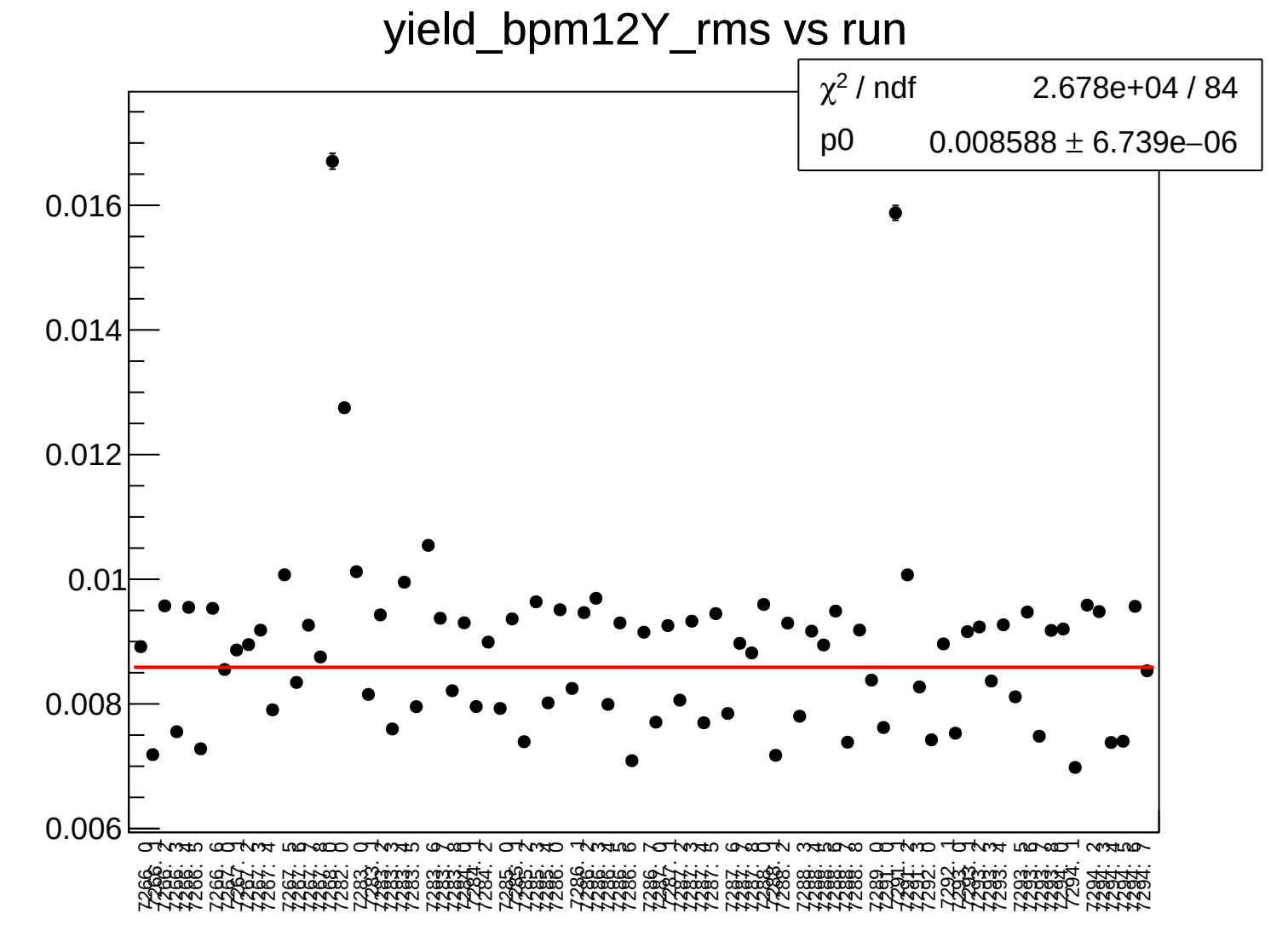

yield_bpm12X_mean vs run
χ² / ndf 1.017e+05 / 84
p0 −1.414 ± 4.327e−05
pull
Entries 85
Mean 27.35
Std Dev 8.968

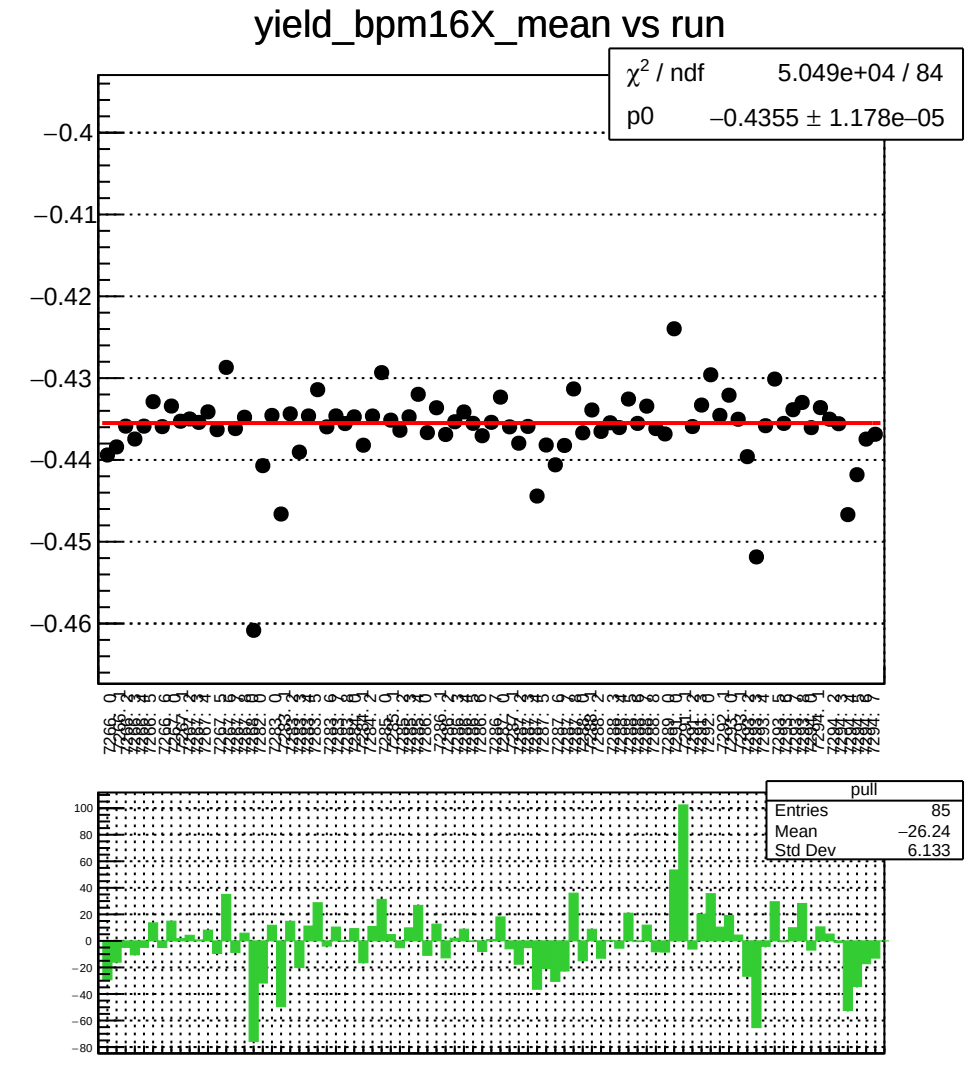

pull1D
Entries 85
Mean −2.92
Std Dev 4.288

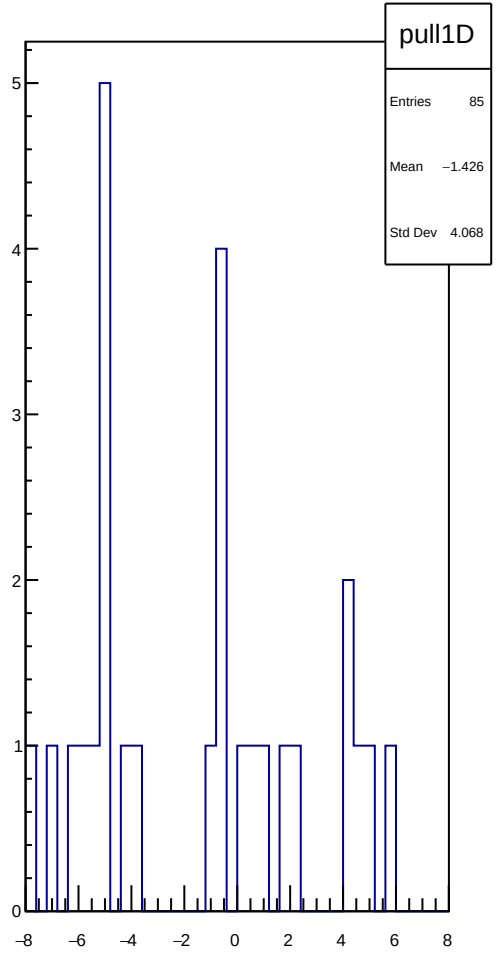

yield_bpm12X_rms vs run
χ² / ndf 1.767e+05 / 84
p0 0.03714 ± 3.059e–05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

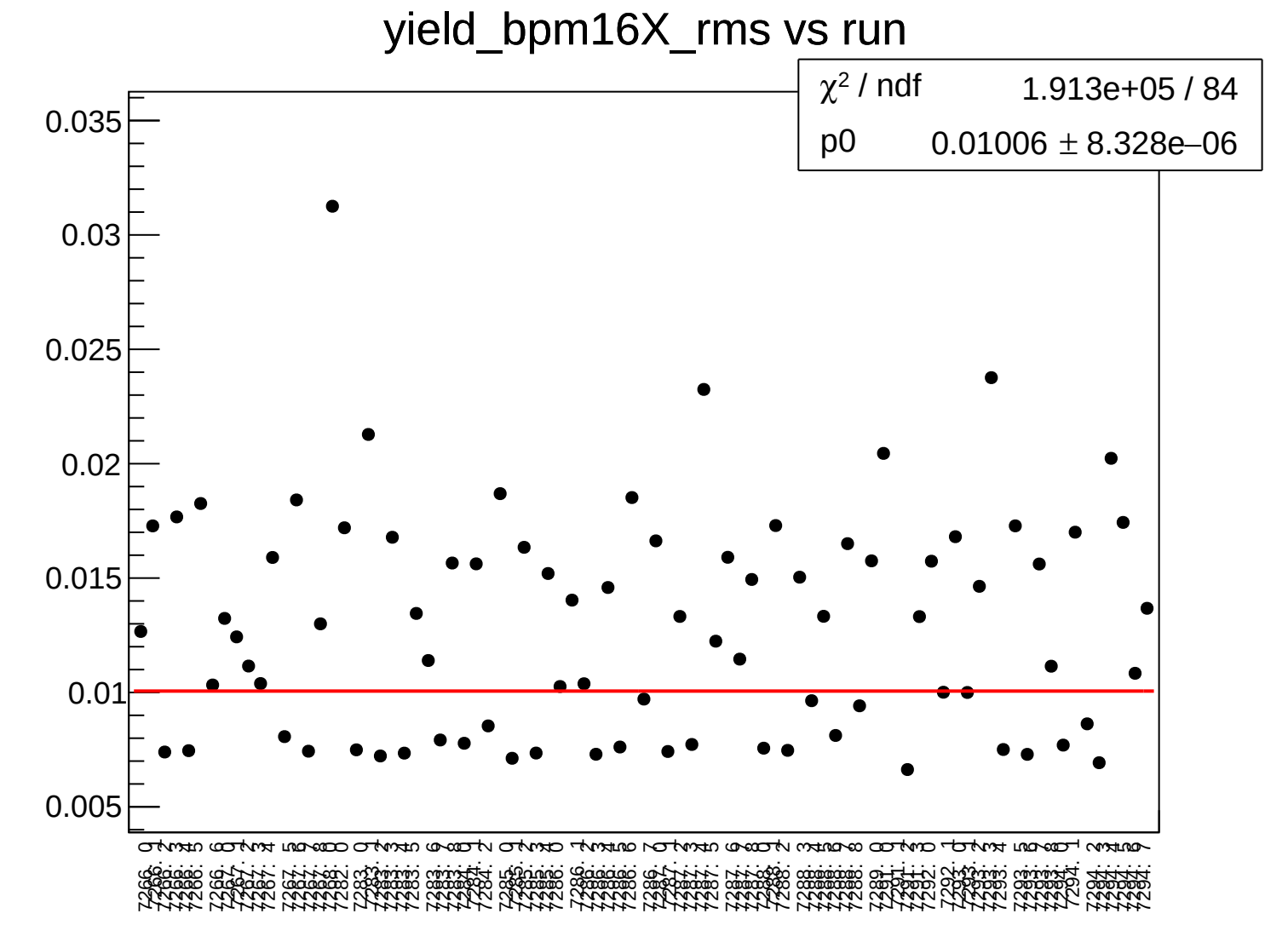

yield_bpm12Y_mean vs run
χ² / ndf 4.876e+06 / 84
p0 0.7198 ± 9.53e−06
0.76
0.74
0.72
0.7
0.68
pull
Entries 85
Mean −2572
Std Dev 2604
600
400
200
0
−200
−400
−600

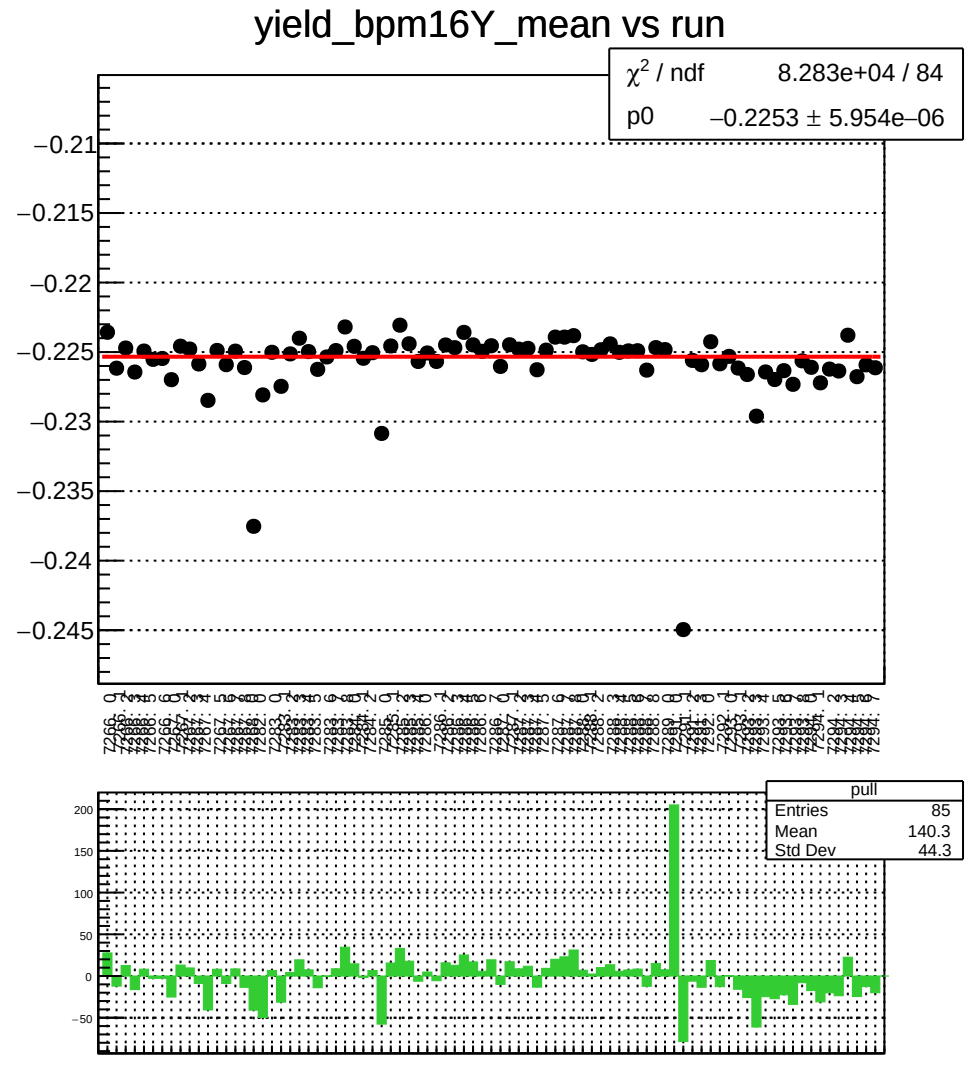

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

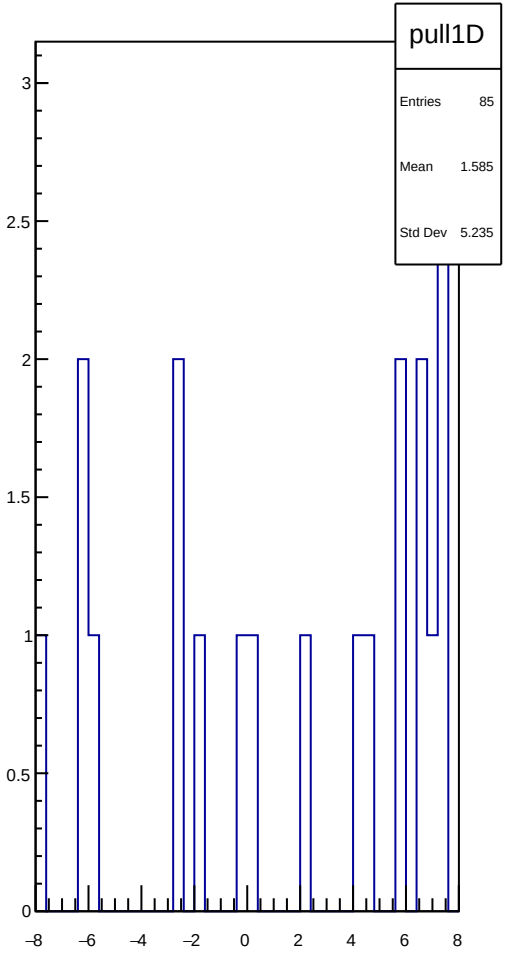

yield_bpm12Y_rms vs run
χ^2 / ndf 2.678e+04 / 84
p0 0.008588 ± 6.739e−06
0.016
0.014
0.012
0.01
0.008
0.006

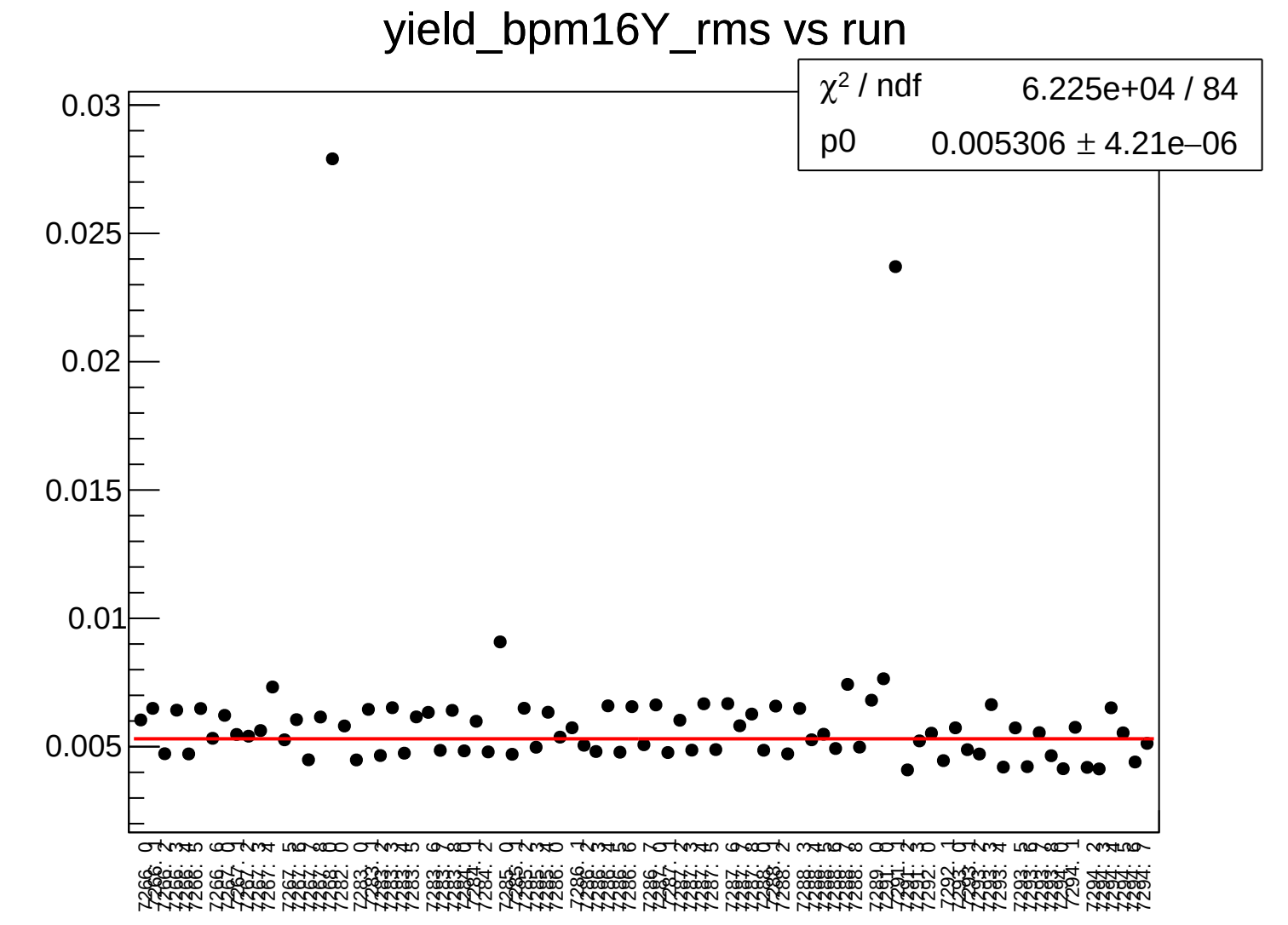

yield_bpm16X_mean vs run
χ² / ndf 5.049e+04 / 84
p0 −0.4355 ± 1.178e−05
pull
Entries 85
Mean −26.24
Std Dev 6.133

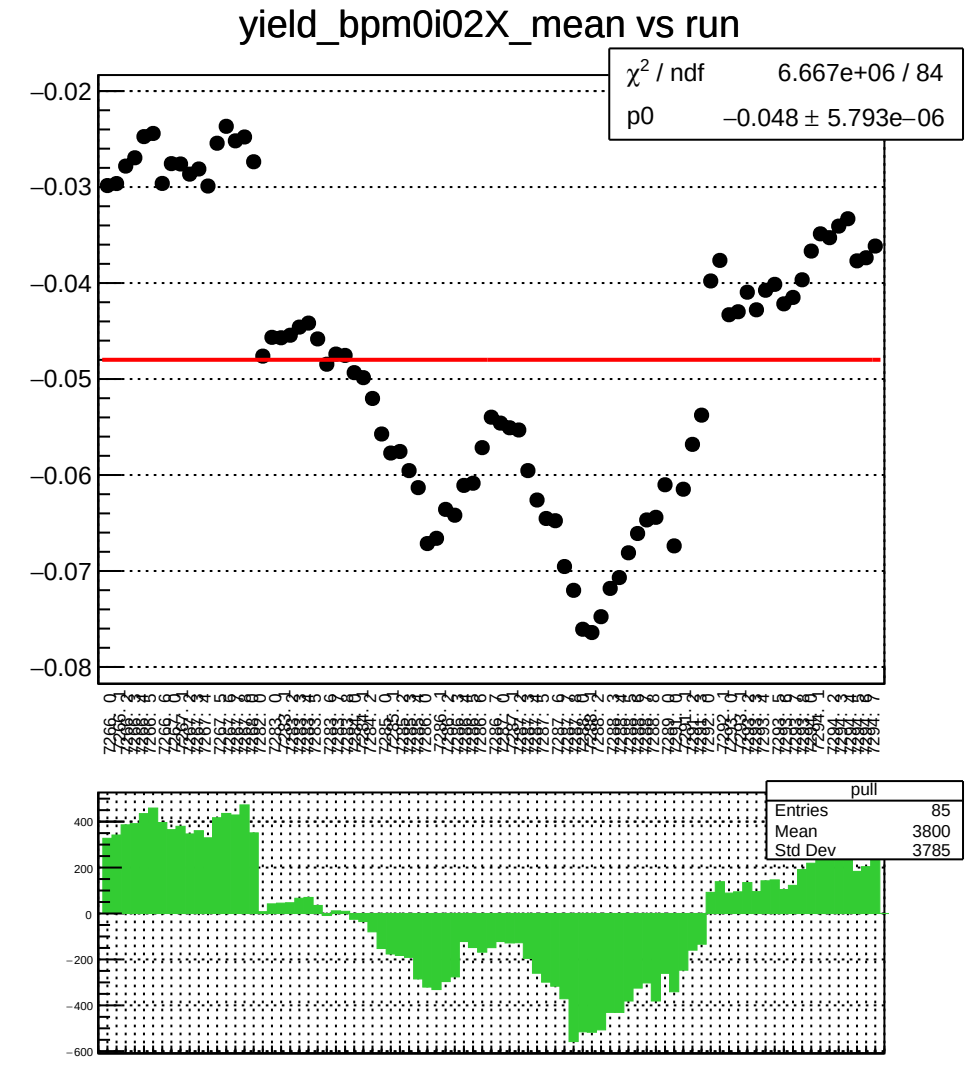

pull1D
Entries 85
Mean −1.426
Std Dev 4.068

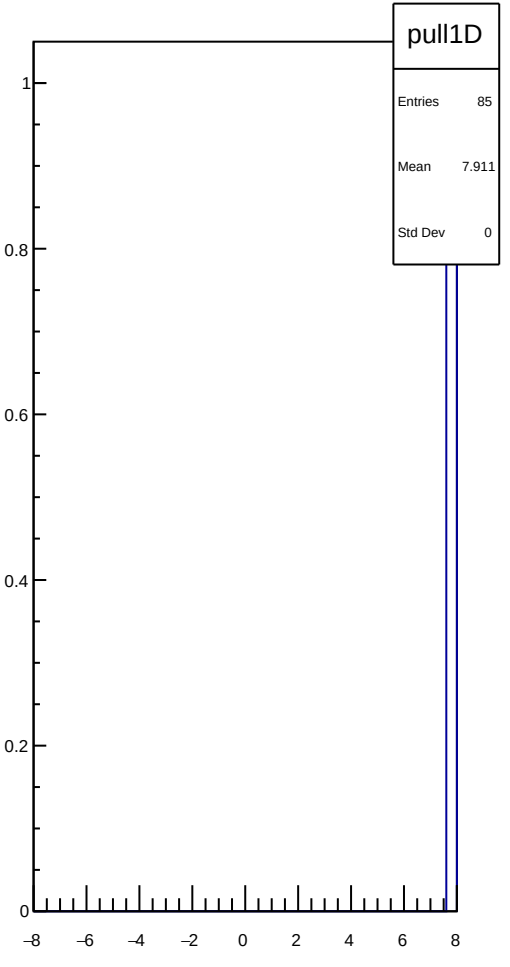

yield_bpm16X_rms vs run
χ² / ndf 1.913e+05 / 84
p0 0.01006 ± 8.328e–06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

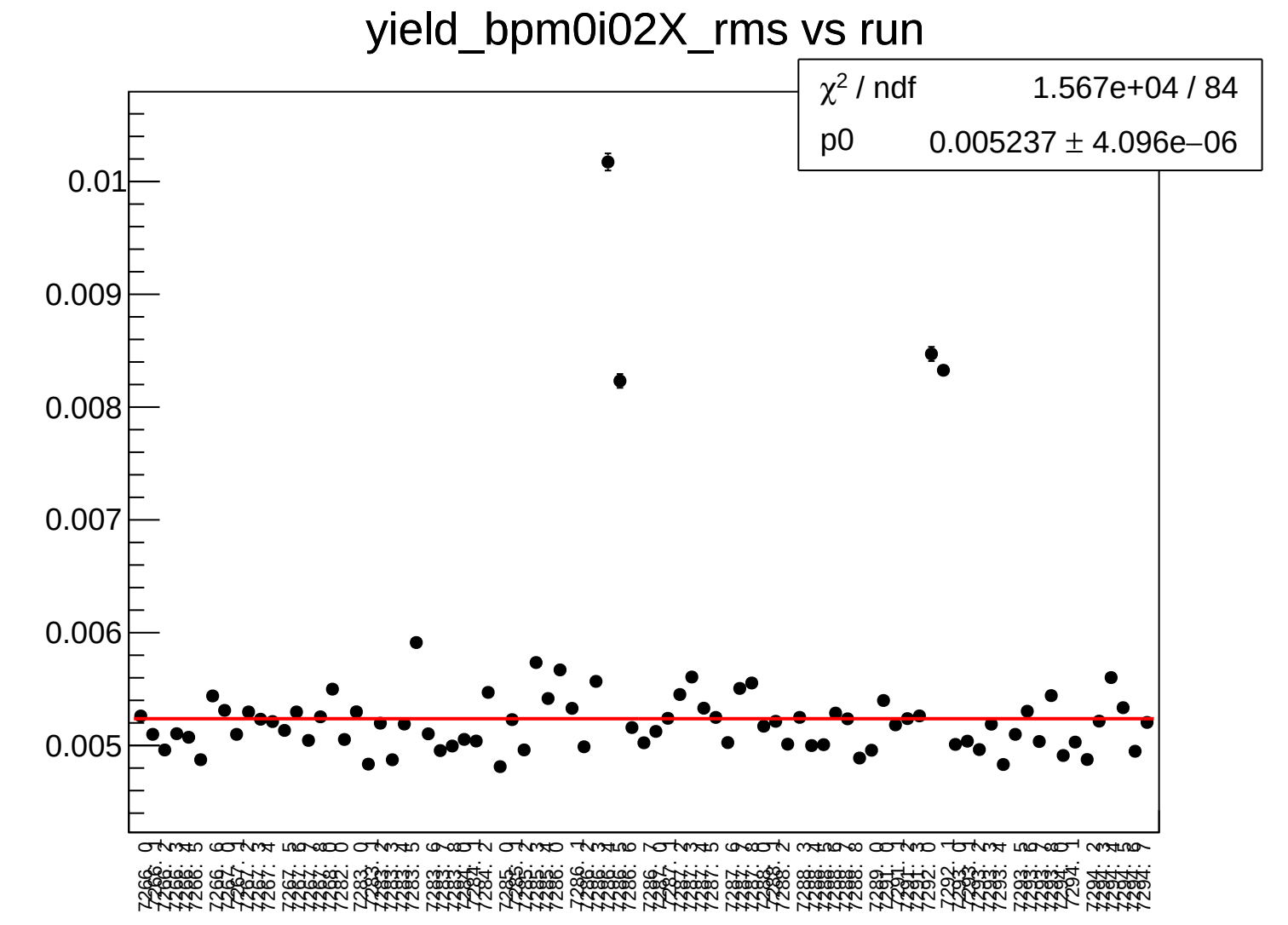

yield_bpm16Y_mean vs run
χ² / ndf 8.283e+04 / 84
p0 −0.2253 ± 5.954e−06
−0.21
−0.215
−0.22
−0.225
−0.23
−0.235
−0.24
−0.245
pull
Entries 85
Mean 140.3
Std Dev 44.3
200
150
100
50
0
−50

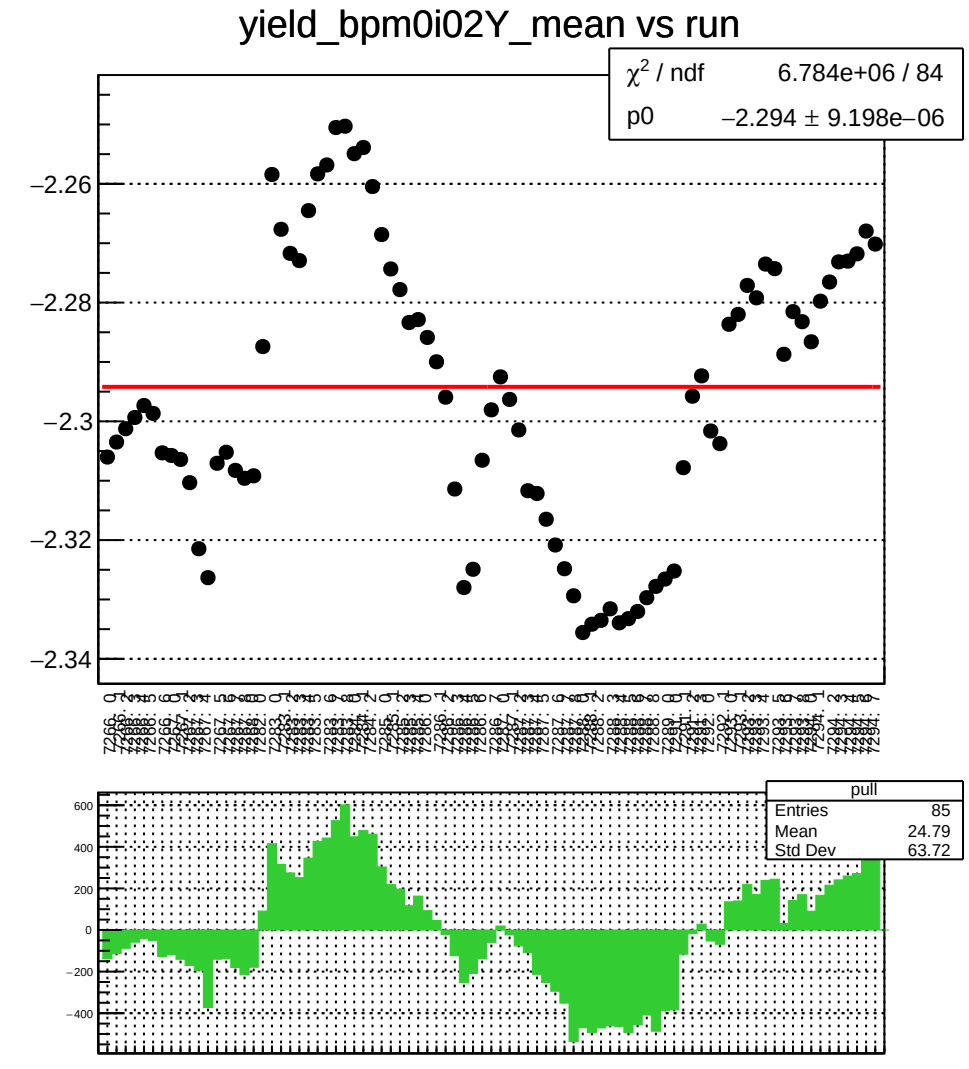

pull1D
Entries 85
Mean 1.585
Std Dev 5.235
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

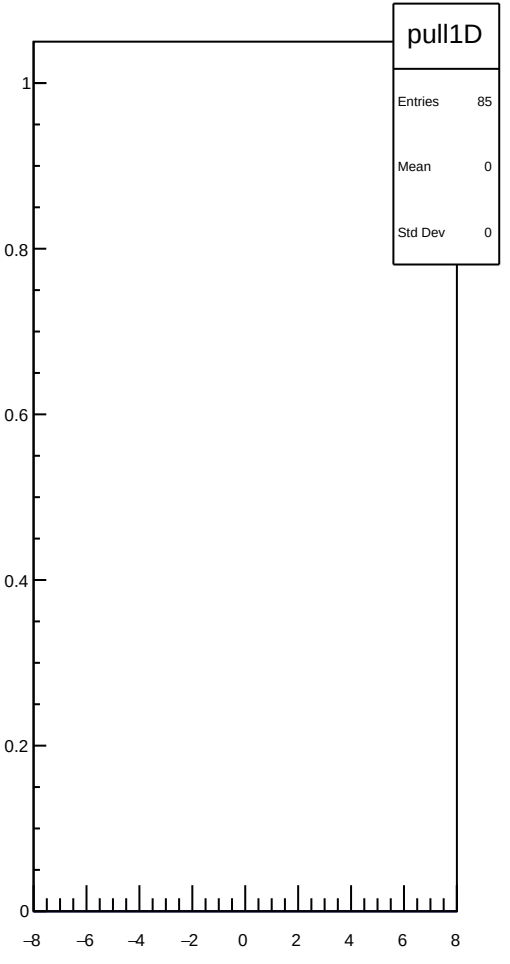

yield_bpm16Y_rms vs run
χ² / ndf 6.225e+04 / 84
p0 0.005306 ± 4.21e–06
0.03
0.025
0.02
0.015
0.01
0.005

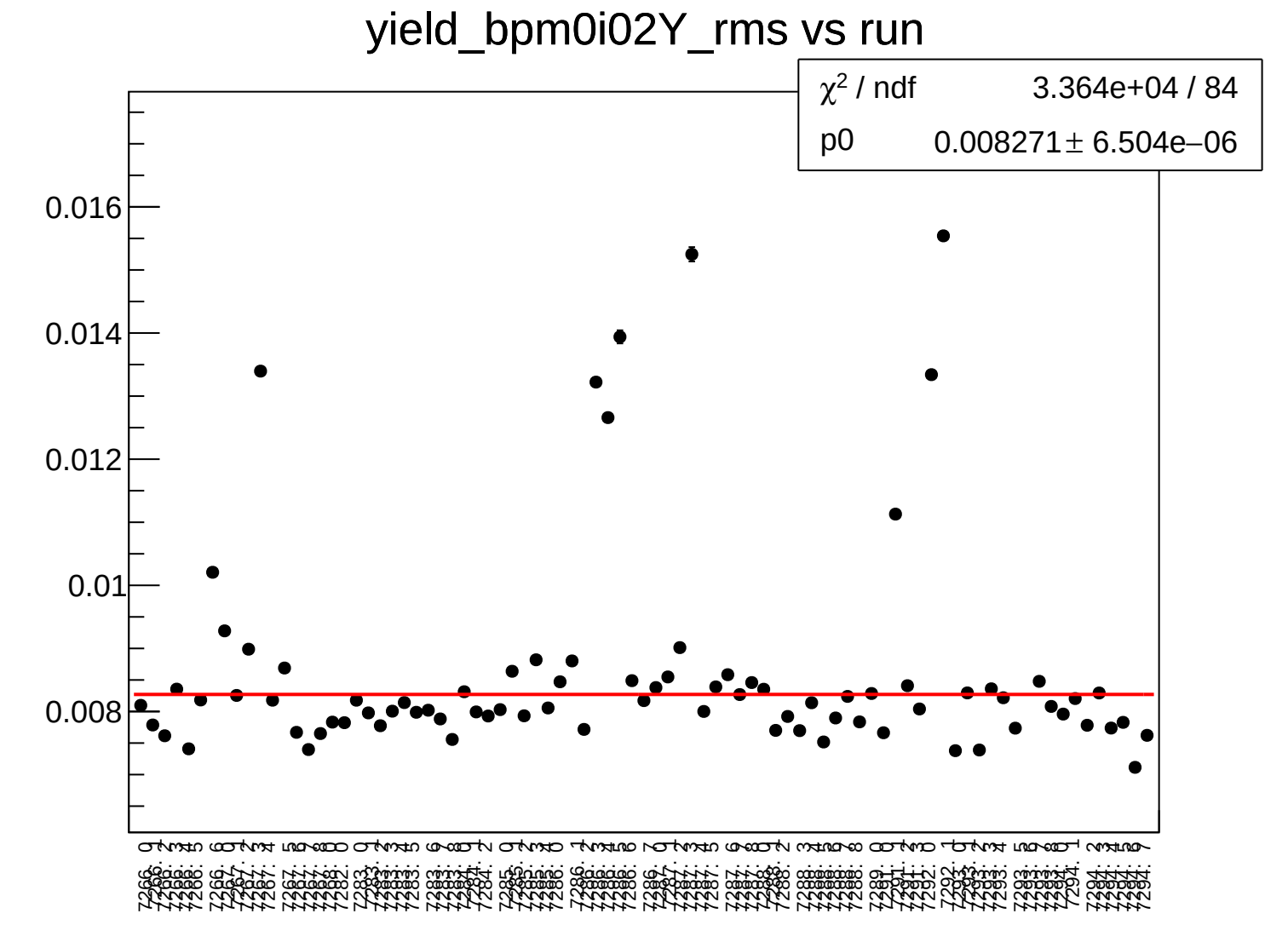

yield_bpm0i02X_mean vs run
χ² / ndf 6.667e+06 / 84
p0 −0.048 ± 5.793e−06
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
−0.08
pull
Entries 85
Mean 3800
Std Dev 3785
400
200
0
−200
−400
−600

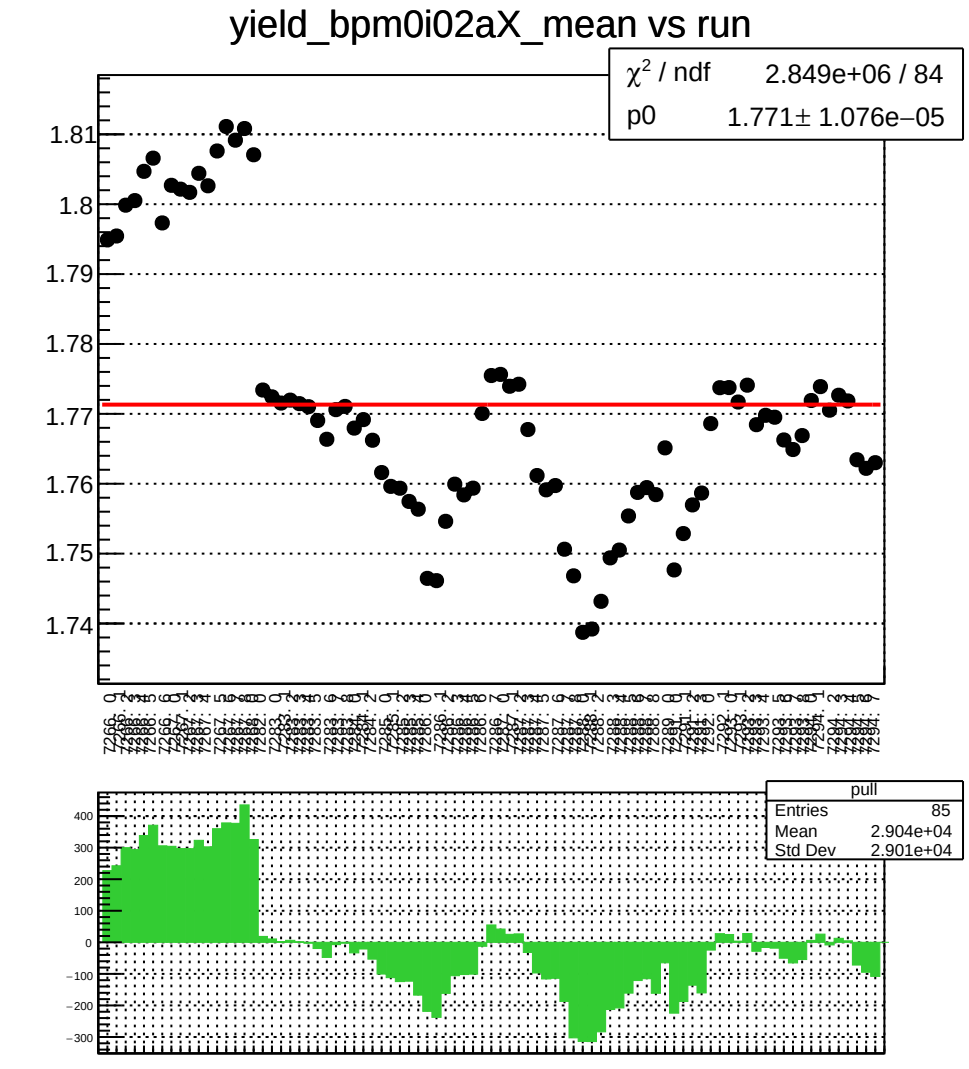

pull1D
Entries 85
Mean 7.911
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

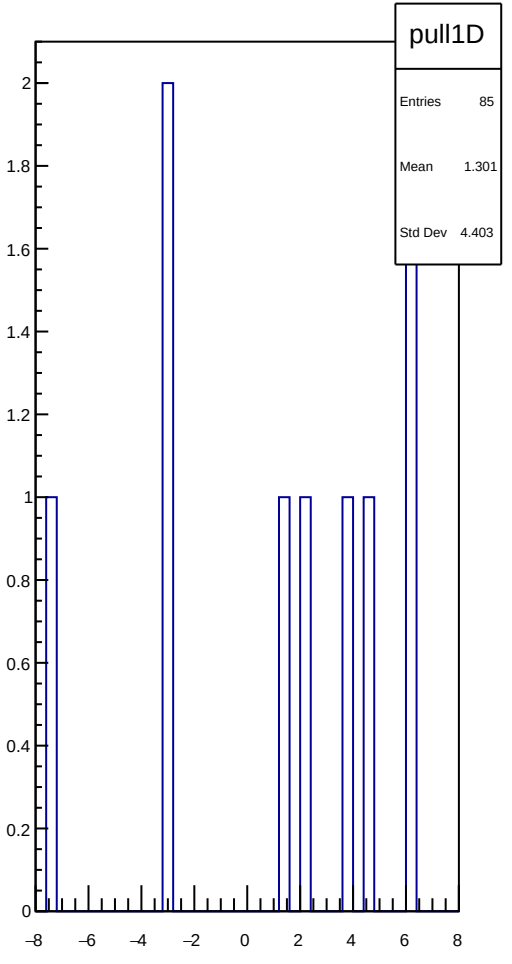

yield_bpm0i02X_rms vs run
χ^2 / ndf 1.567e+04 / 84
p0 0.005237 ± 4.096e−06
0.01
0.009
0.008
0.007
0.006
0.005

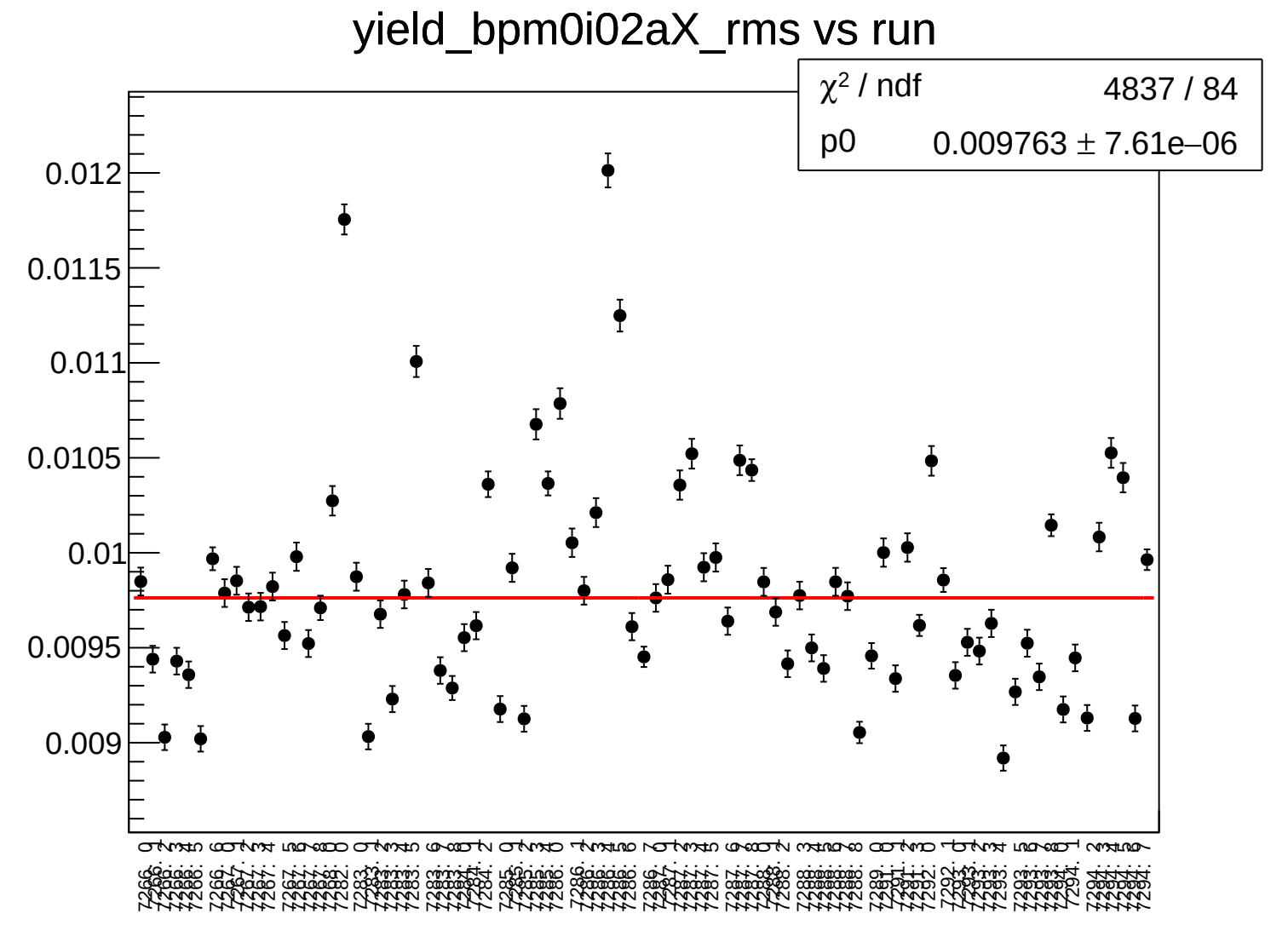

yield_bpm0i02Y_mean vs run
χ² / ndf 6.784e+06 / 84
p0 −2.294 ± 9.198e−06
−2.26
−2.28
−2.3
−2.32
−2.34
pull
Entries 85
Mean 24.79
Std Dev 63.72
600
400
200
0
−200
−400

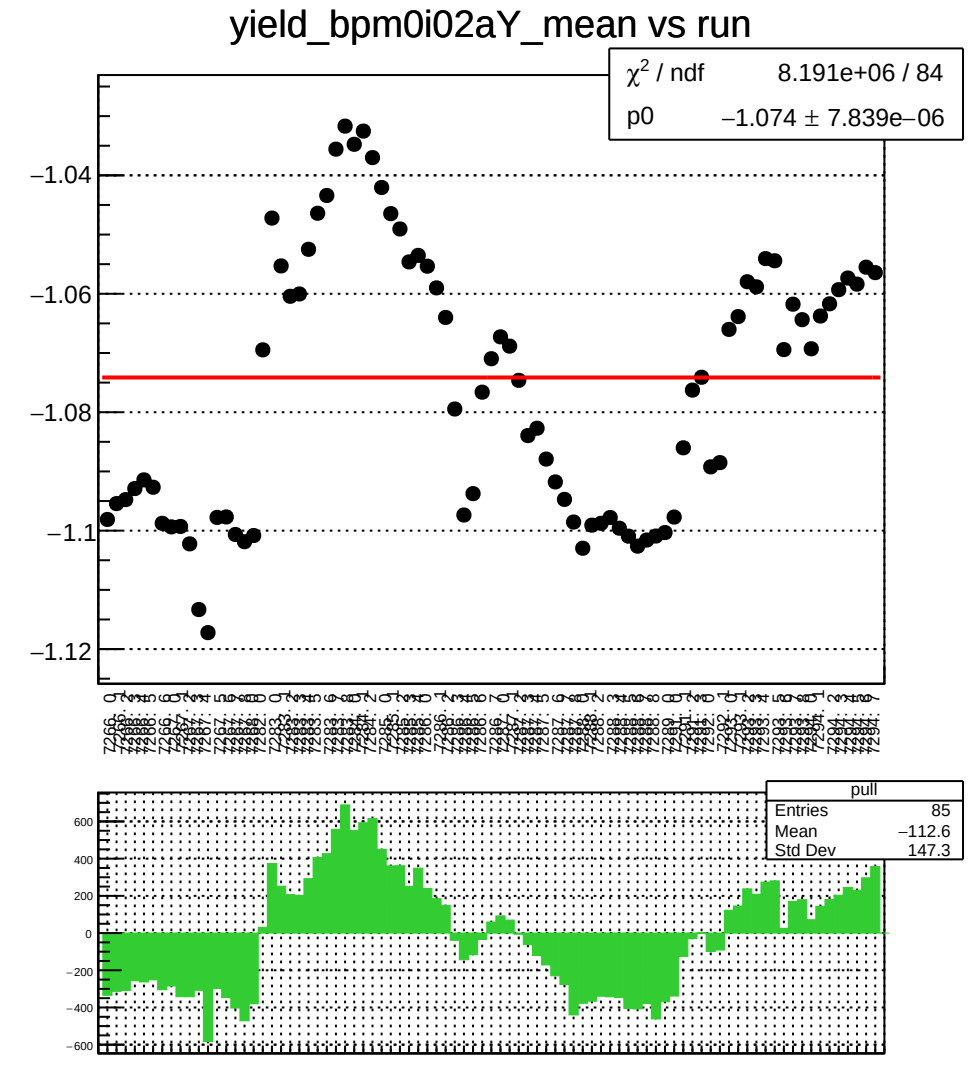

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

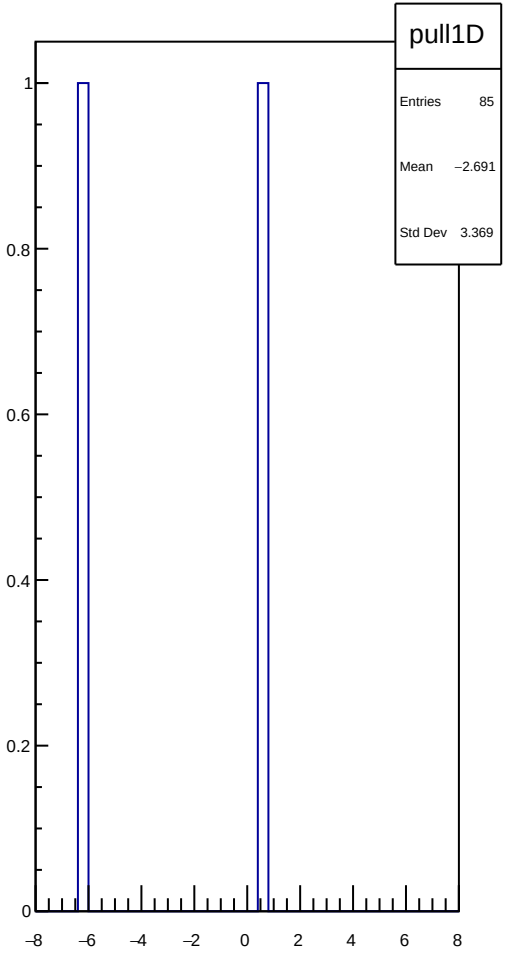

yield_bpm0i02Y_rms vs run
χ² / ndf 3.364e+04 / 84
p0 0.008271 ± 6.504e−06
0.016
0.014
0.012
0.01
0.008

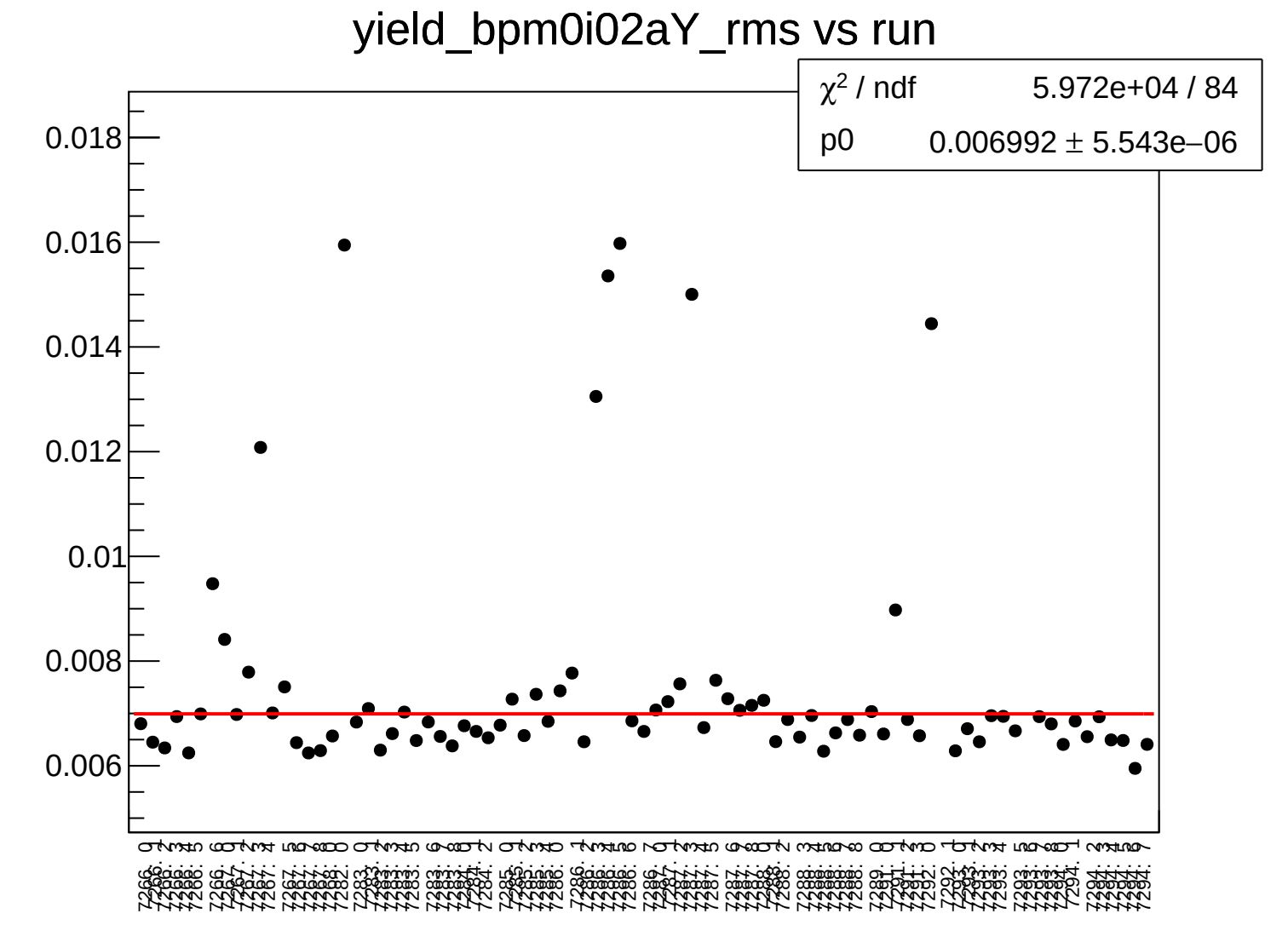

yield_bpm0i02aX_mean vs run
χ² / ndf 2.849e+06 / 84
p0 1.771± 1.076e−05
1.81
1.8
1.79
1.78
1.77
1.76
1.75
1.74
pull
Entries 85
Mean 2.904e+04
Std Dev 2.901e+04
400
300
200
100
0
−100
−200
−300

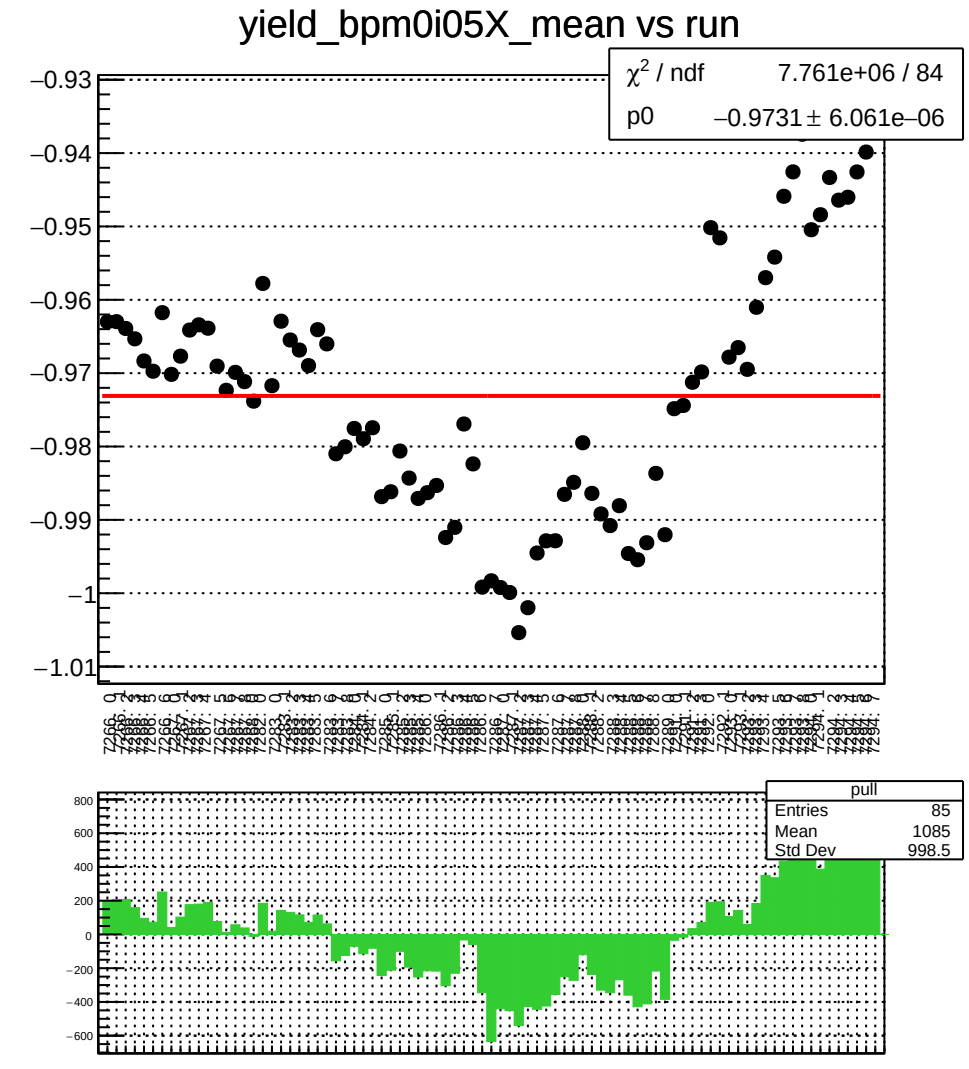

pull1D
Entries 85
Mean 1.301
Std Dev 4.403
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

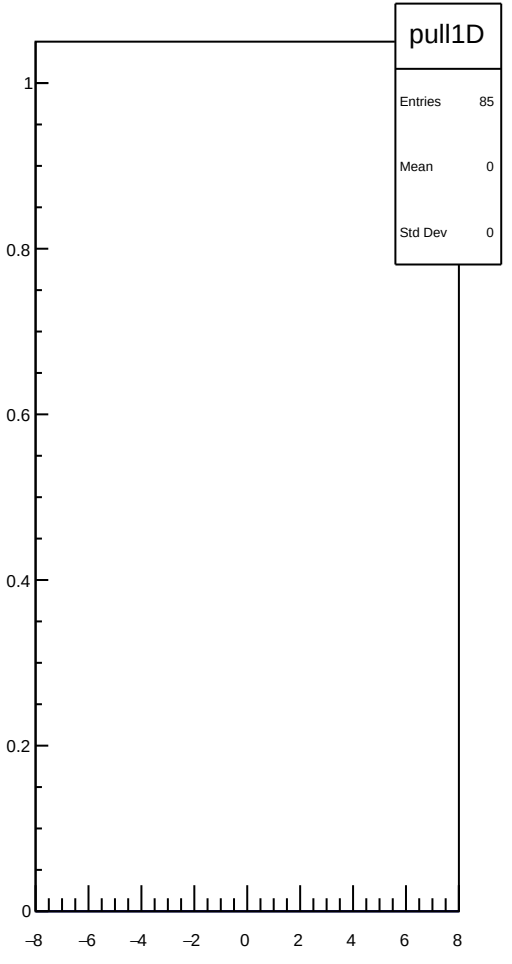

yield_bpm0i02aX_rms vs run
χ² / ndf 4837 / 84
p0 0.009763 ± 7.61e–06
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009

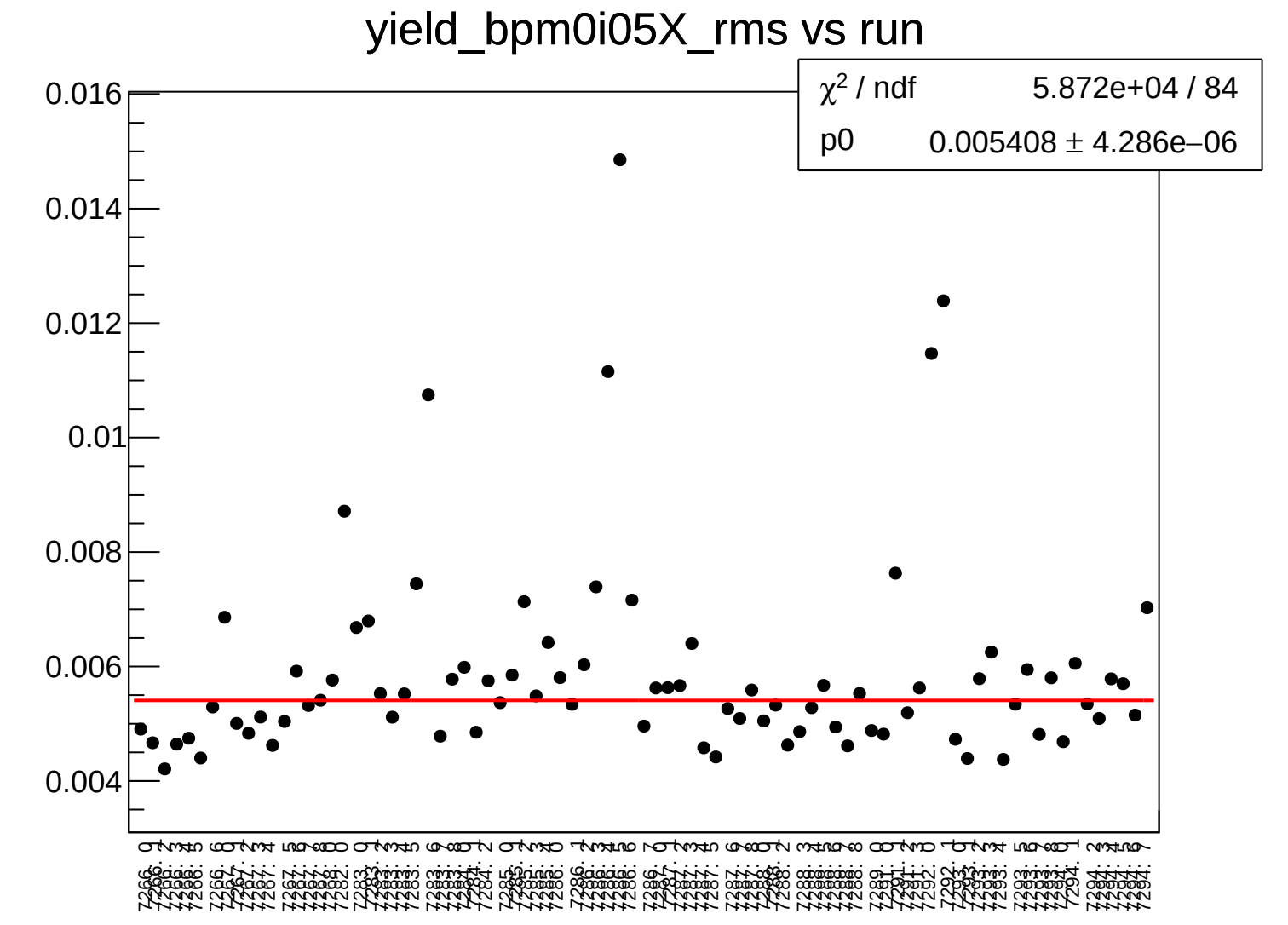

yield_bpm0i02aY_mean vs run
χ² / ndf 8.191e+06 / 84
p0 −1.074 ± 7.839e−06
−1.04
−1.06
−1.08
−1.1
−1.12
pull
Entries 85
Mean −112.6
Std Dev 147.3
600
400
200
0
−200
−400
−600

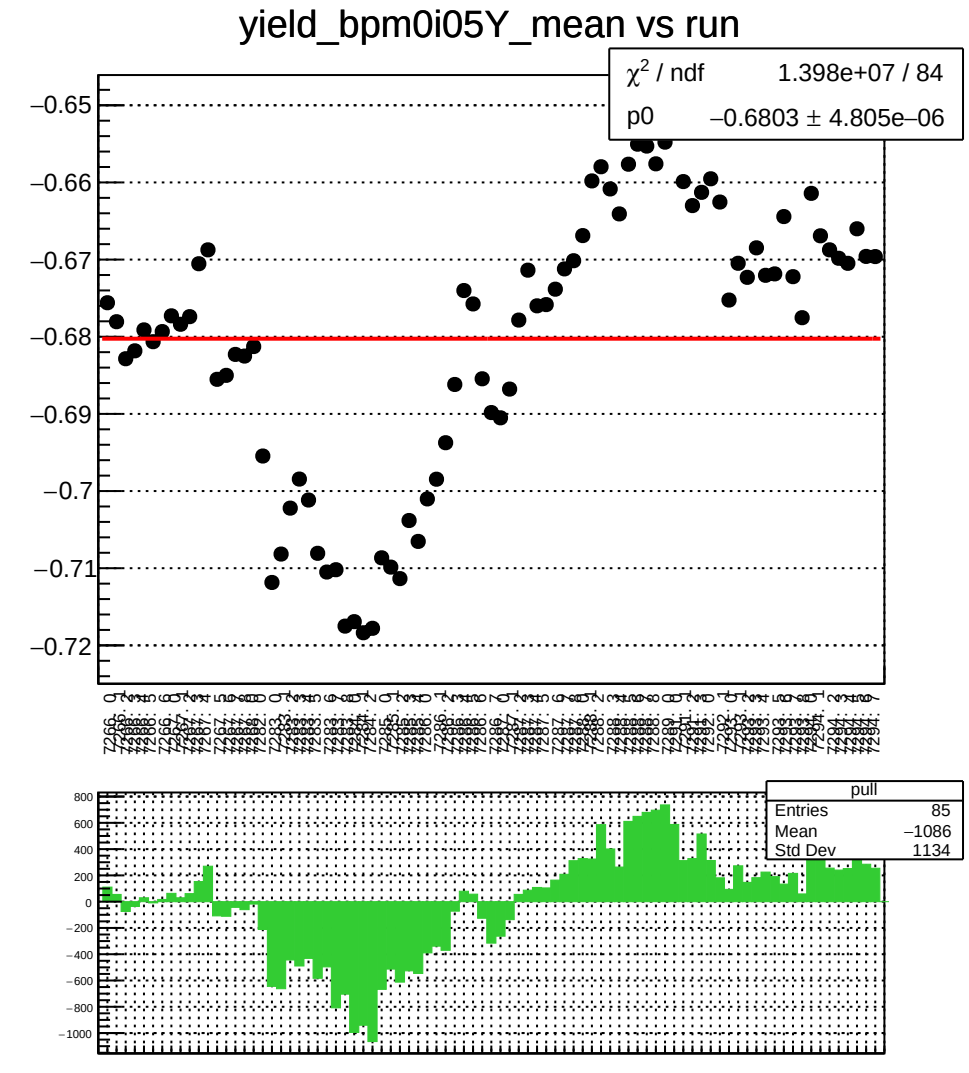

pull1D
Entries 85
Mean −2.691
Std Dev 3.369
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

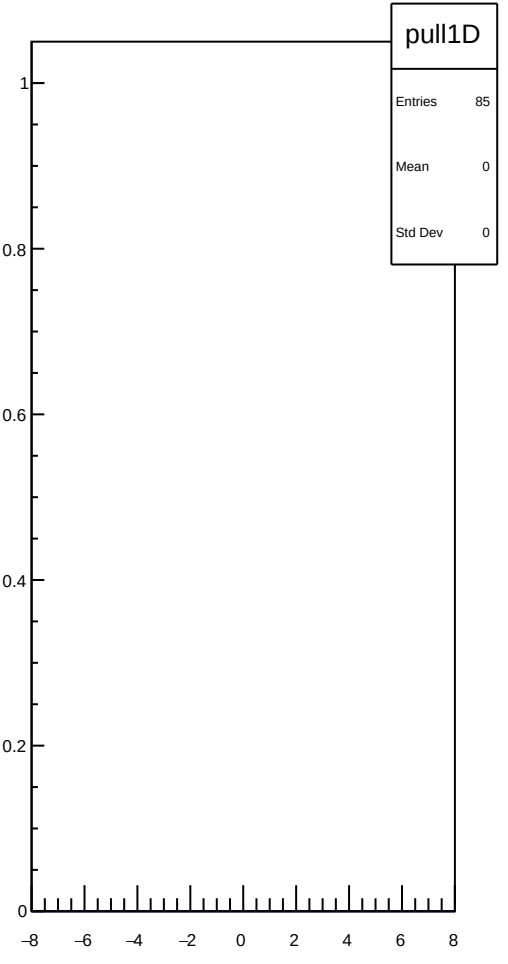

yield_bpm0i02aY_rms vs run
χ^2 / ndf 5.972e+04 / 84
p0 0.006992 ± 5.543e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

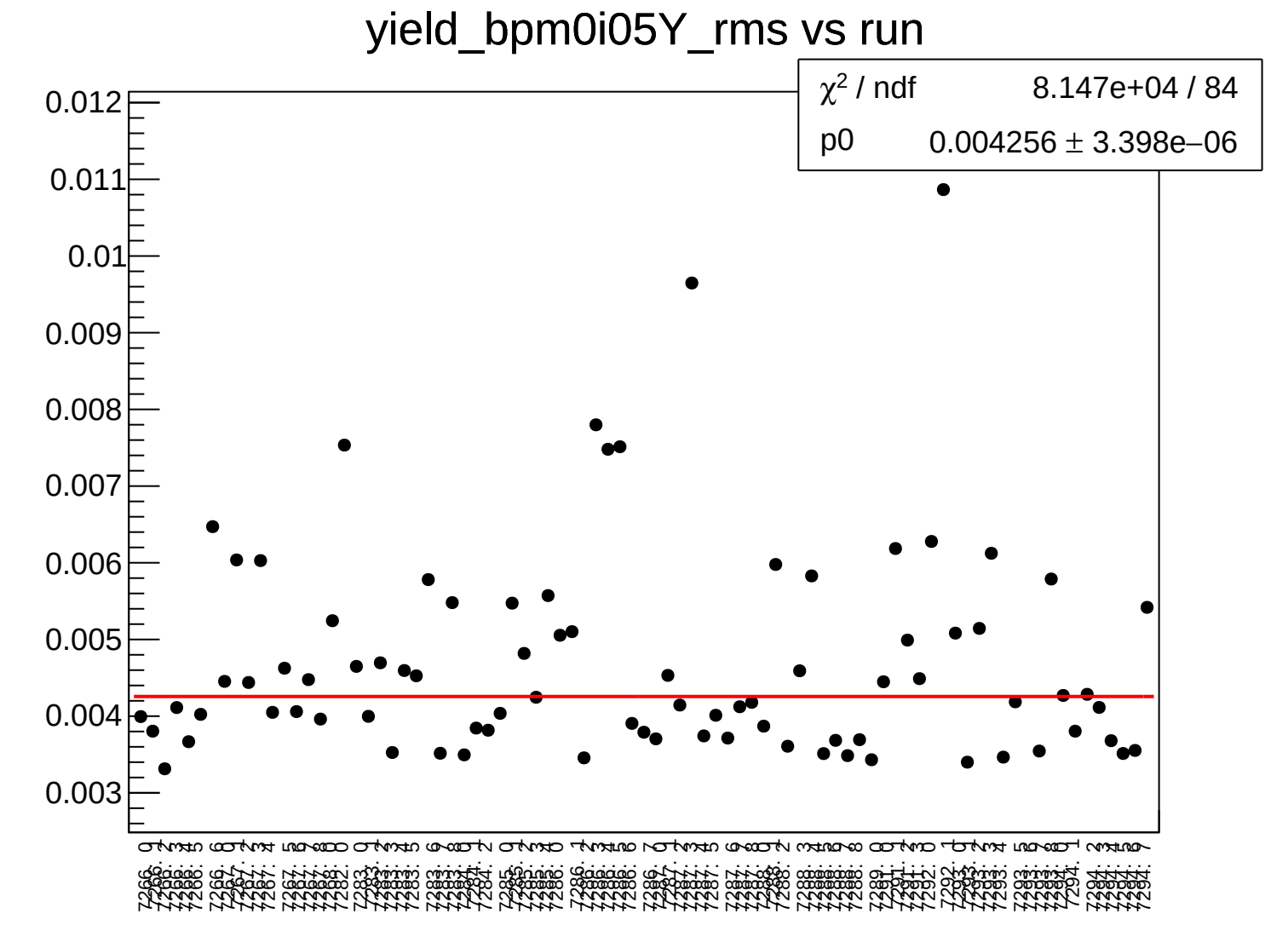

yield_bpm0i05X_mean vs run
χ² / ndf 7.761e+06 / 84
p0 −0.9731 ± 6.061e−06
−0.93
−0.94
−0.95
−0.96
−0.97
−0.98
−0.99
−1
−1.01
pull
Entries 85
Mean 1085
Std Dev 998.5
800
600
400
200
0
−200
−400
−600

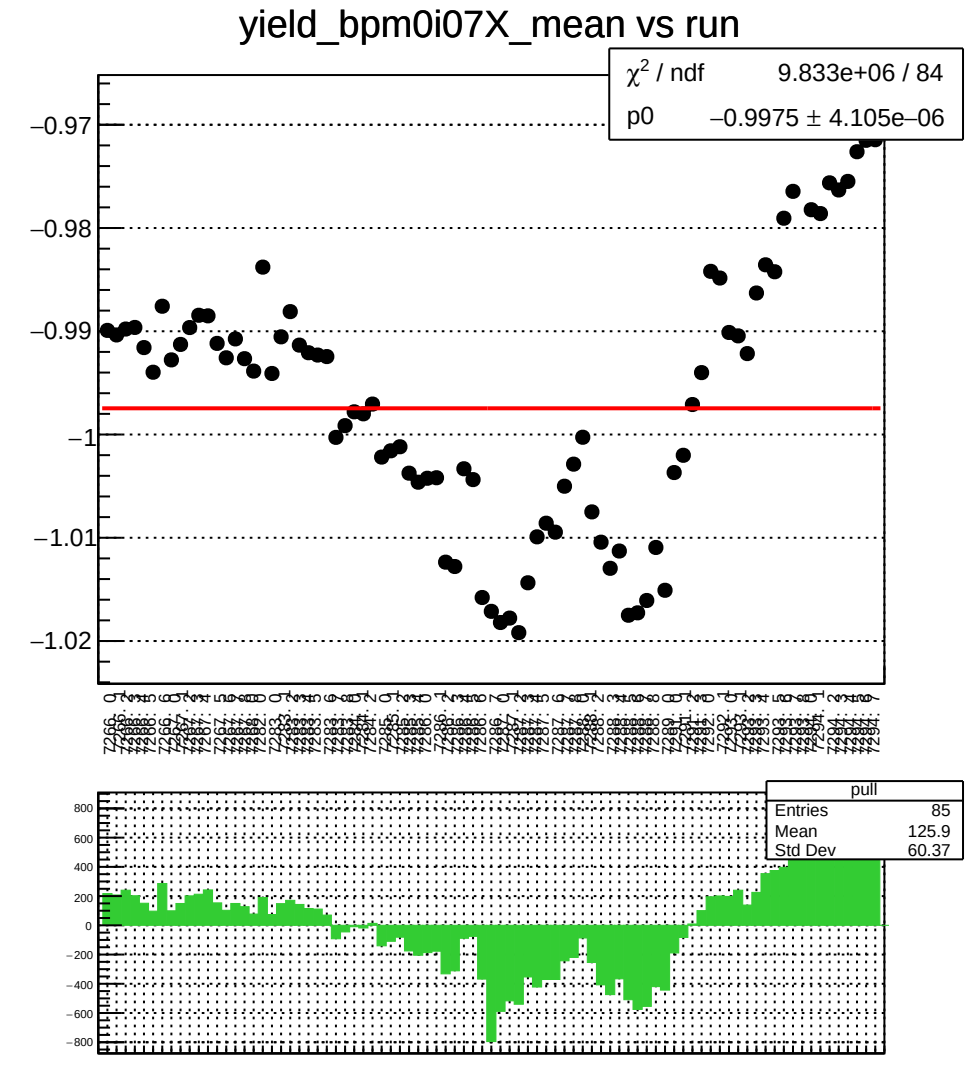

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

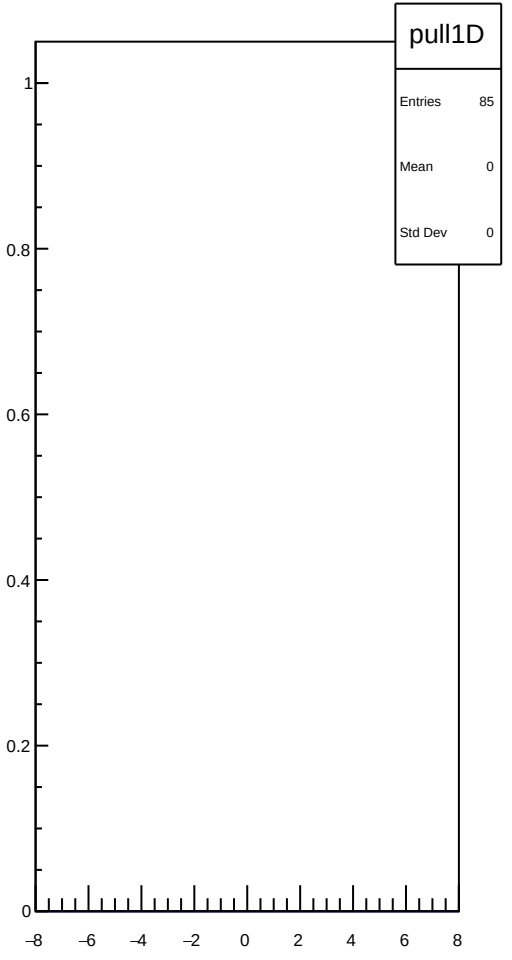

yield_bpm0i05X_rms vs run
χ^2 / ndf 5.872e+04 / 84
p0 0.005408 ± 4.286e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004

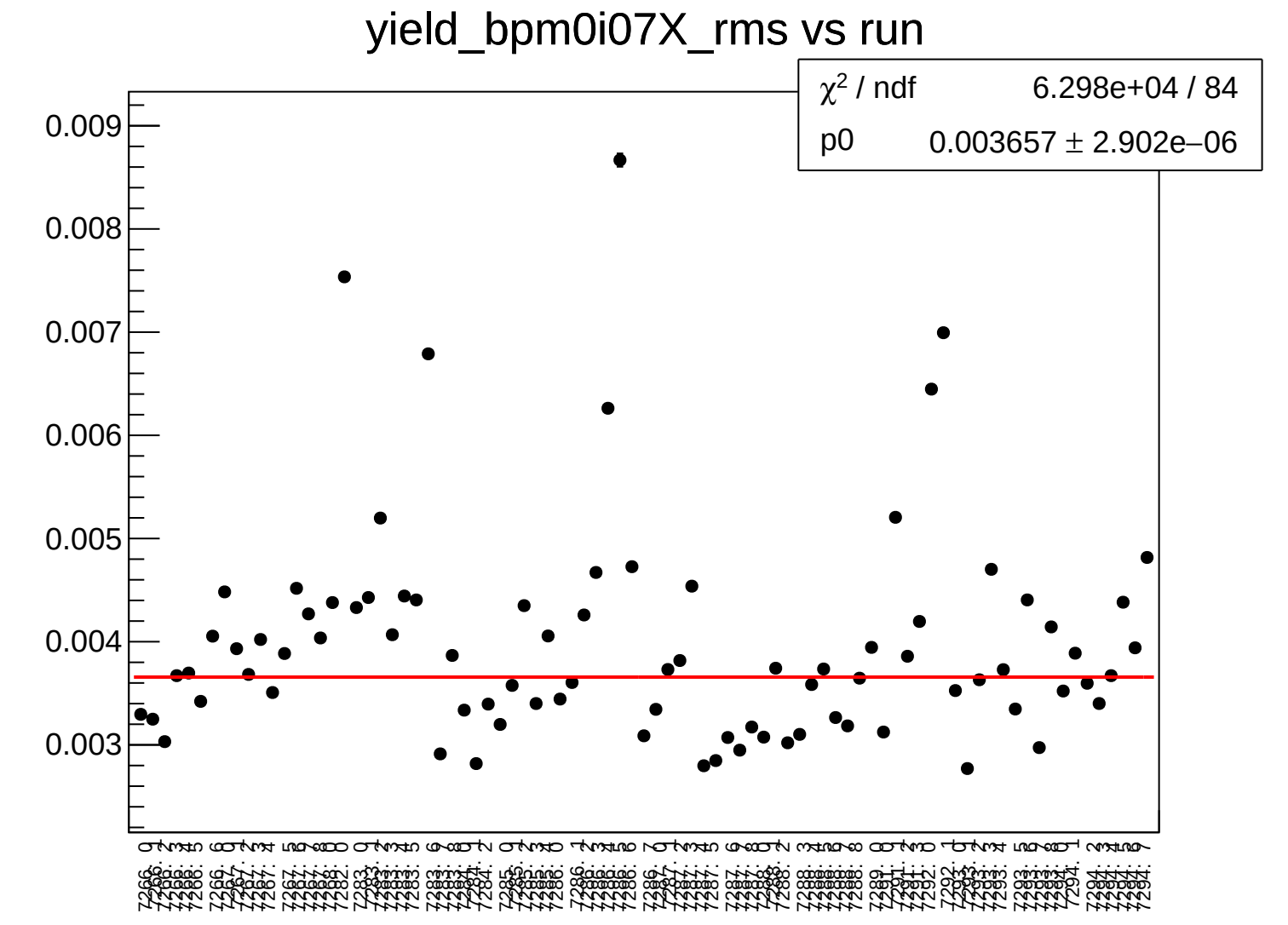

yield_bpm0i05Y_mean vs run
χ² / ndf 1.398e+07 / 84
p0 −0.6803 ± 4.805e−06
pull
Entries 85
Mean −1086
Std Dev 1134

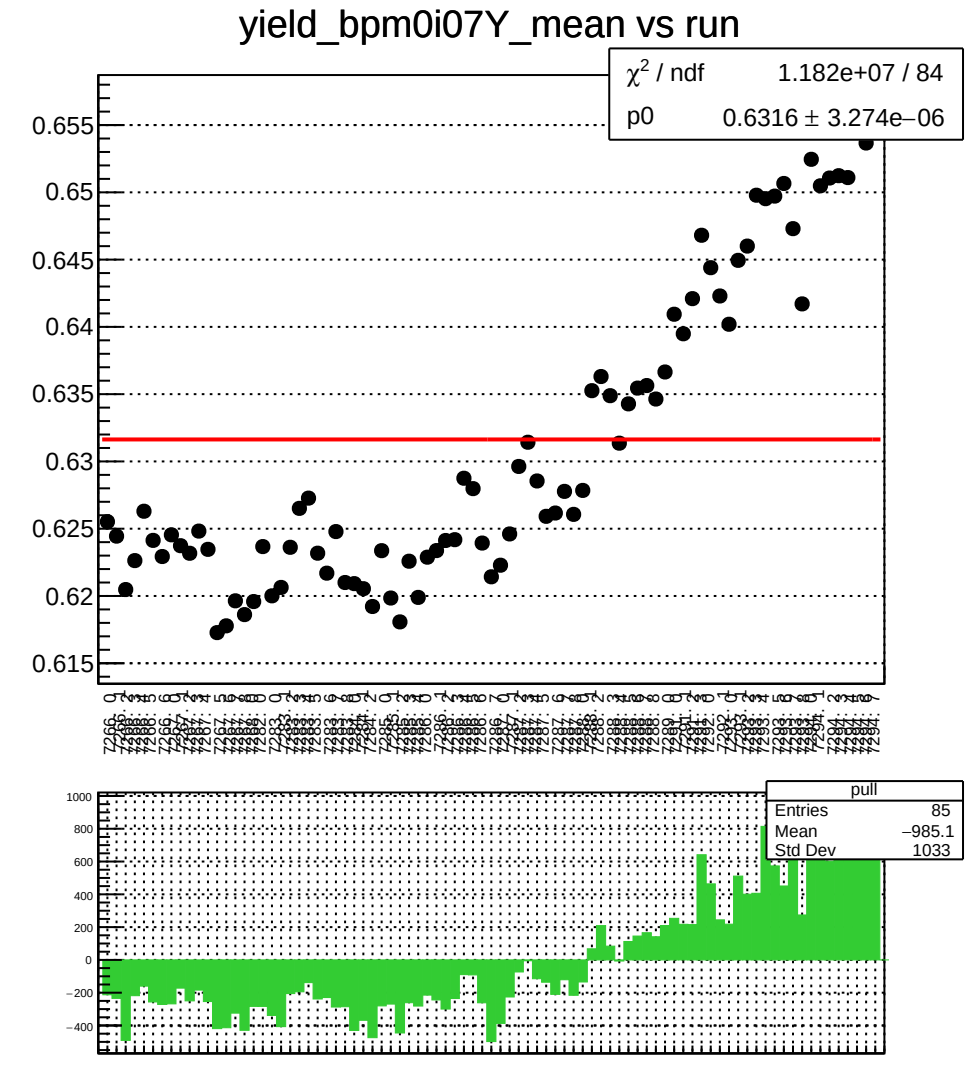

pull1D
Entries 85
Mean 0
Std Dev 0

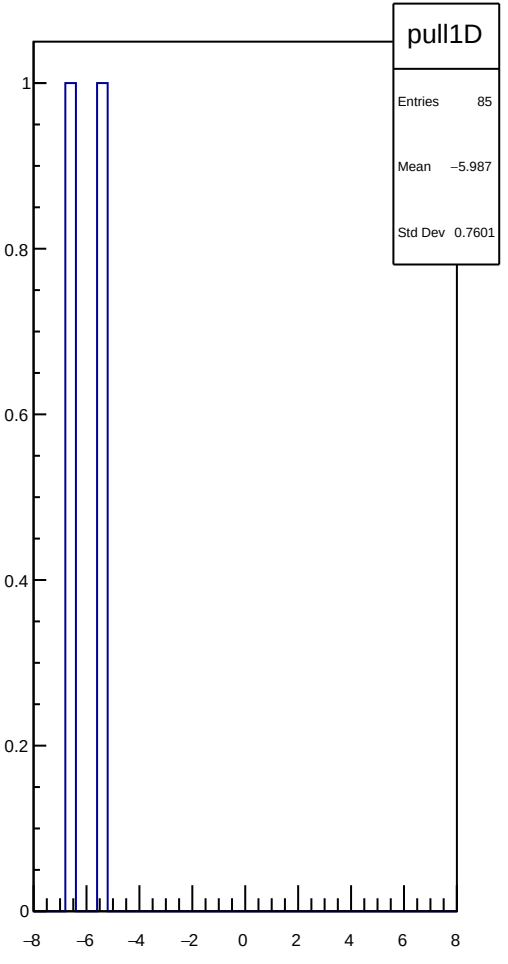

yield_bpm0i05Y_rms vs run
χ² / ndf 8.147e+04 / 84
p0 0.004256 ± 3.398e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

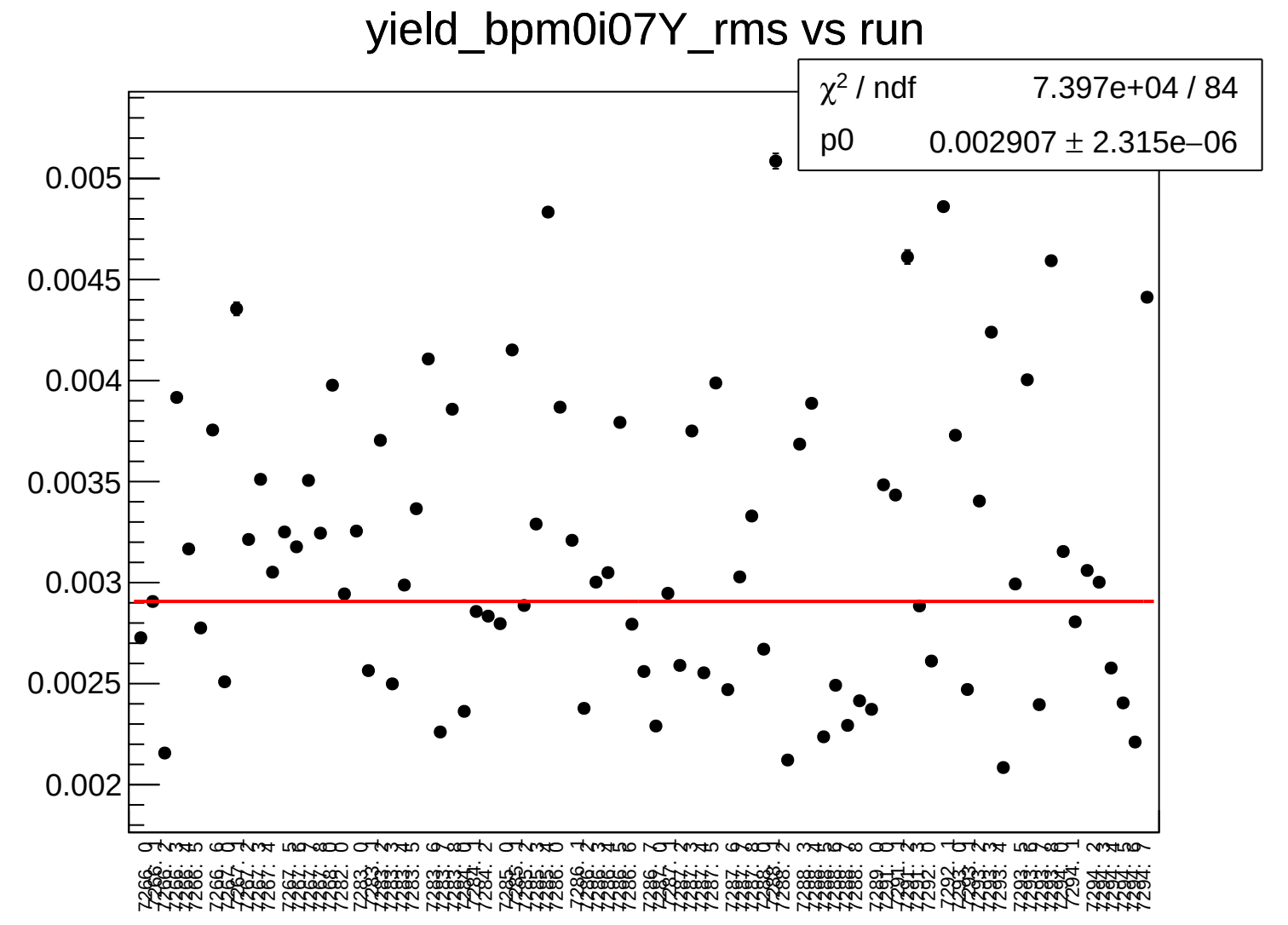

yield_bpm0i07X_mean vs run
χ² / ndf 9.833e+06 / 84
p0 −0.9975 ± 4.105e−06
−0.97
−0.98
−0.99
−1
−1.01
−1.02
pull
Entries 85
Mean 125.9
Std Dev 60.37
800
600
400
200
0
−200
−400
−600
−800

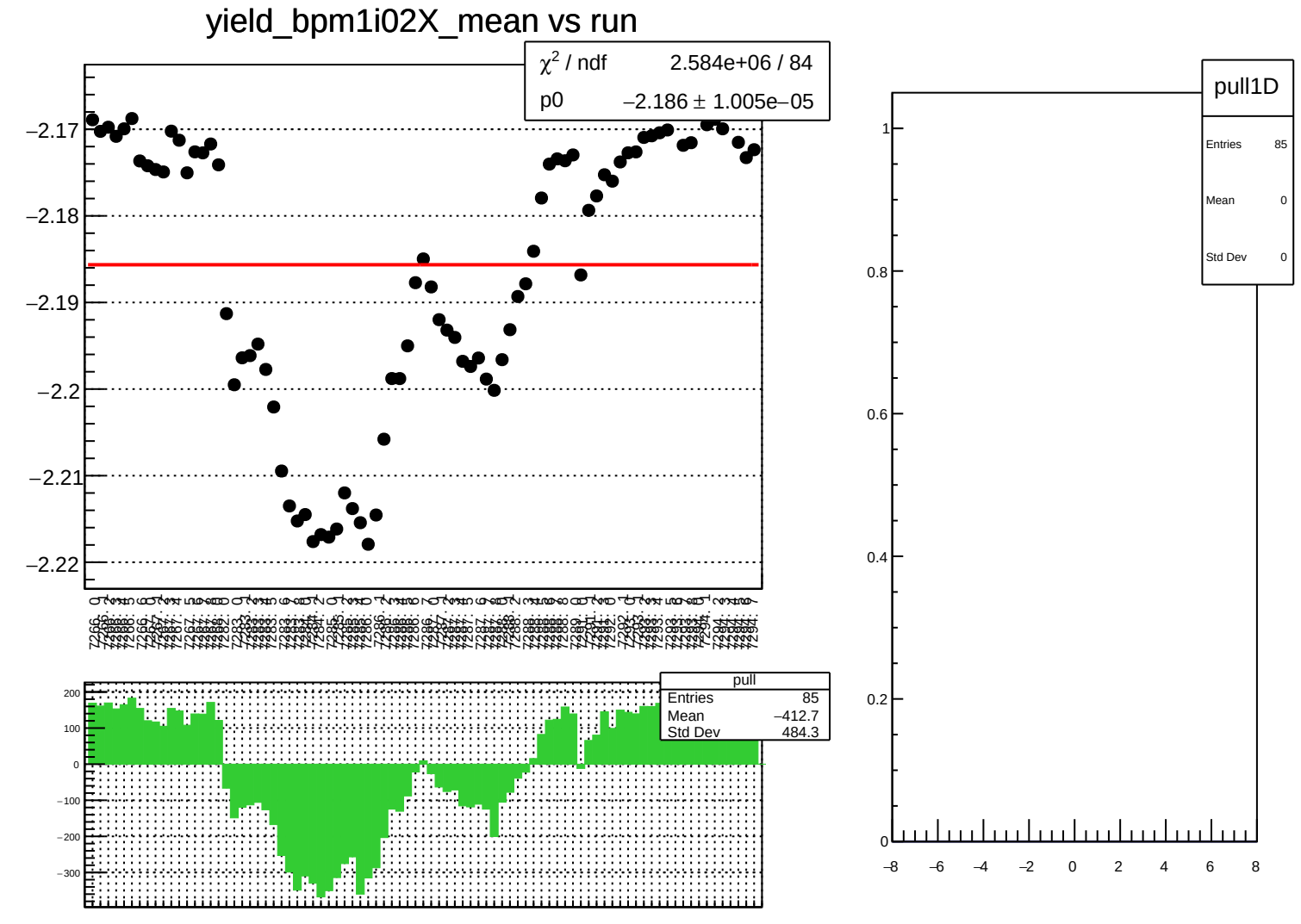

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

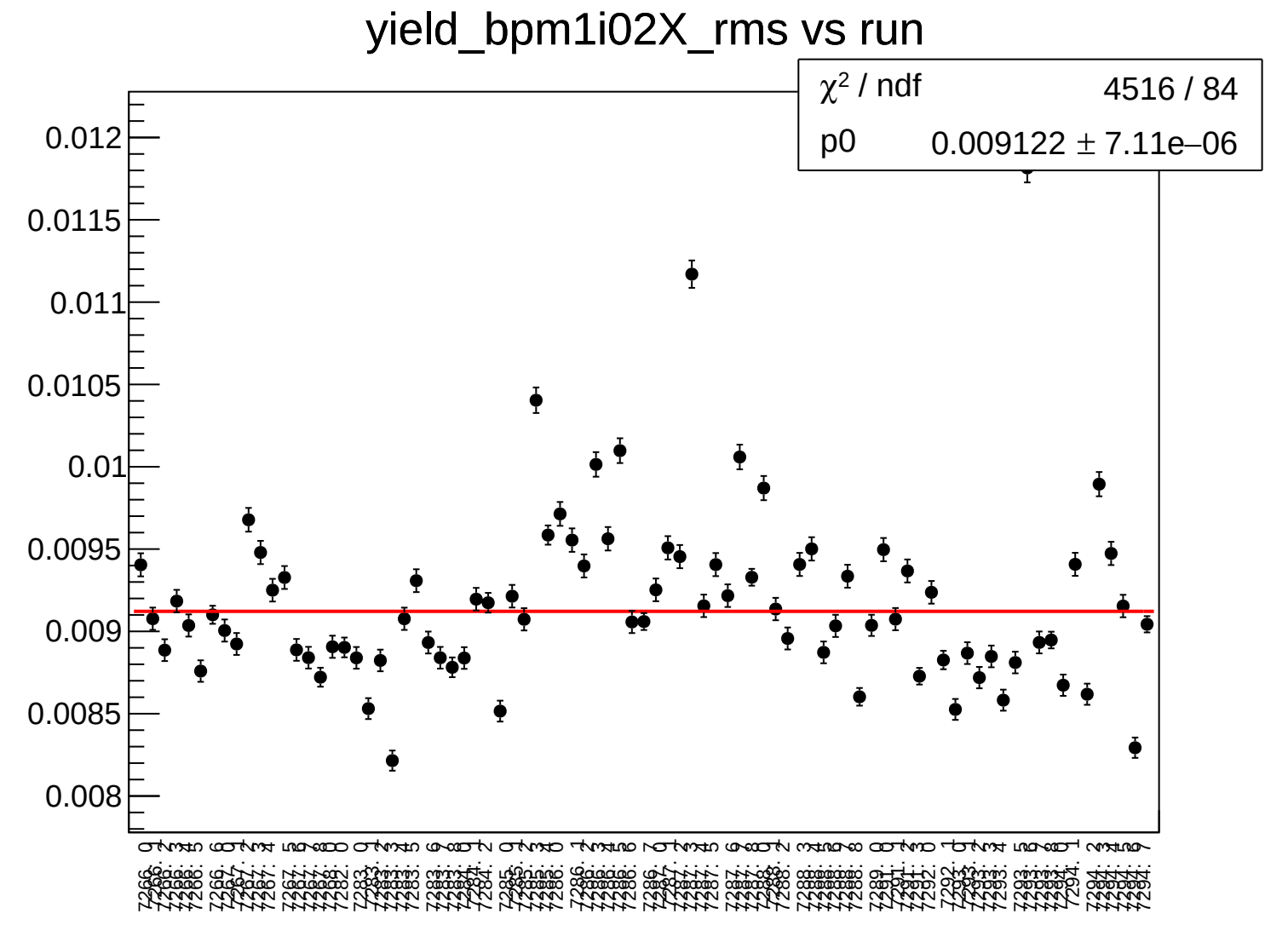

yield_bpm0i07X_rms vs run
χ² / ndf 6.298e+04 / 84
p0 0.003657 ± 2.902e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003

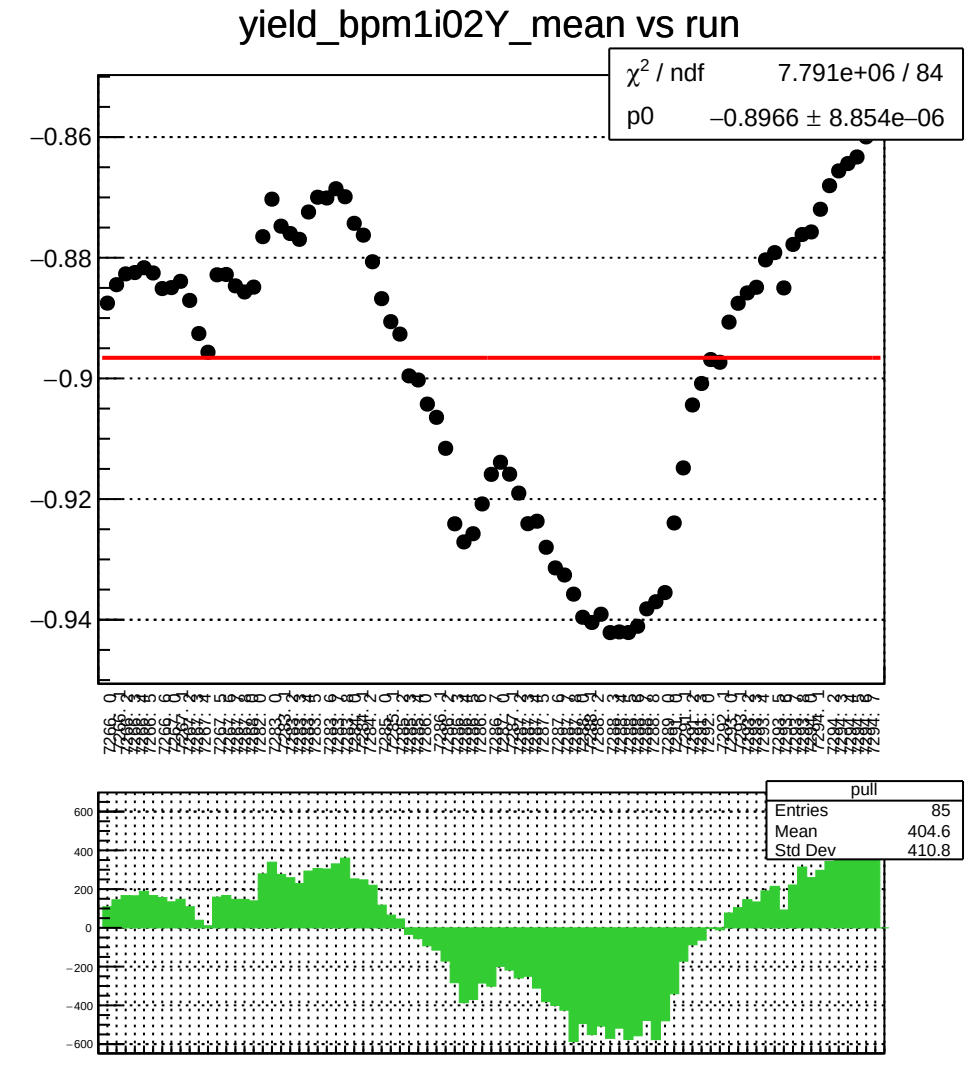

yield_bpm0i07Y_mean vs run
χ² / ndf 1.182e+07 / 84
p0 0.6316 ± 3.274e−06
0.655
0.65
0.645
0.64
0.635
0.63
0.625
0.62
0.615
pull
Entries 85
Mean −985.1
Std Dev 1033
1000
800
600
400
200
0
−200
−400

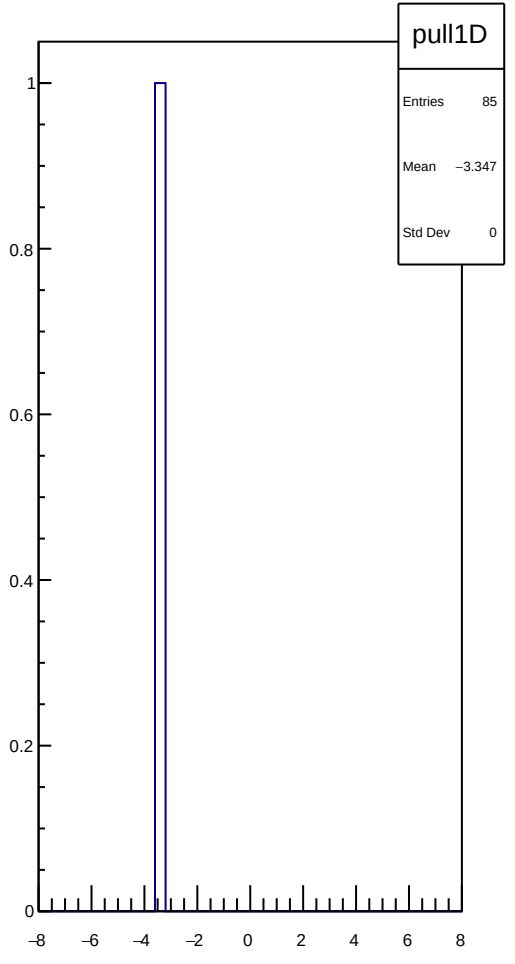

pull1D
Entries 85
Mean −5.987
Std Dev 0.7601
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

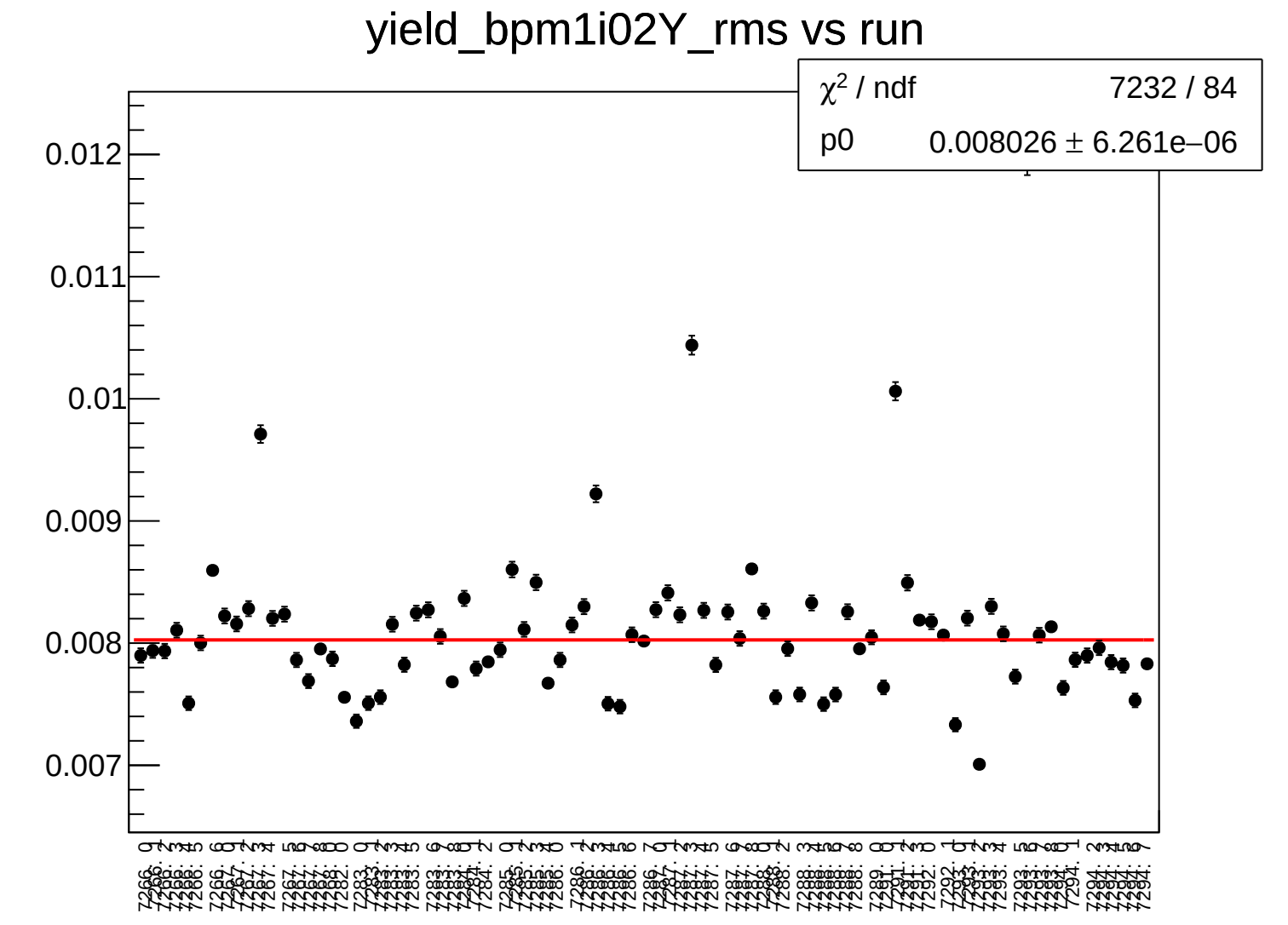

yield_bpm0i07Y_rms vs run
χ^2 / ndf 7.397e+04 / 84
p0 0.002907 ± 2.315e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

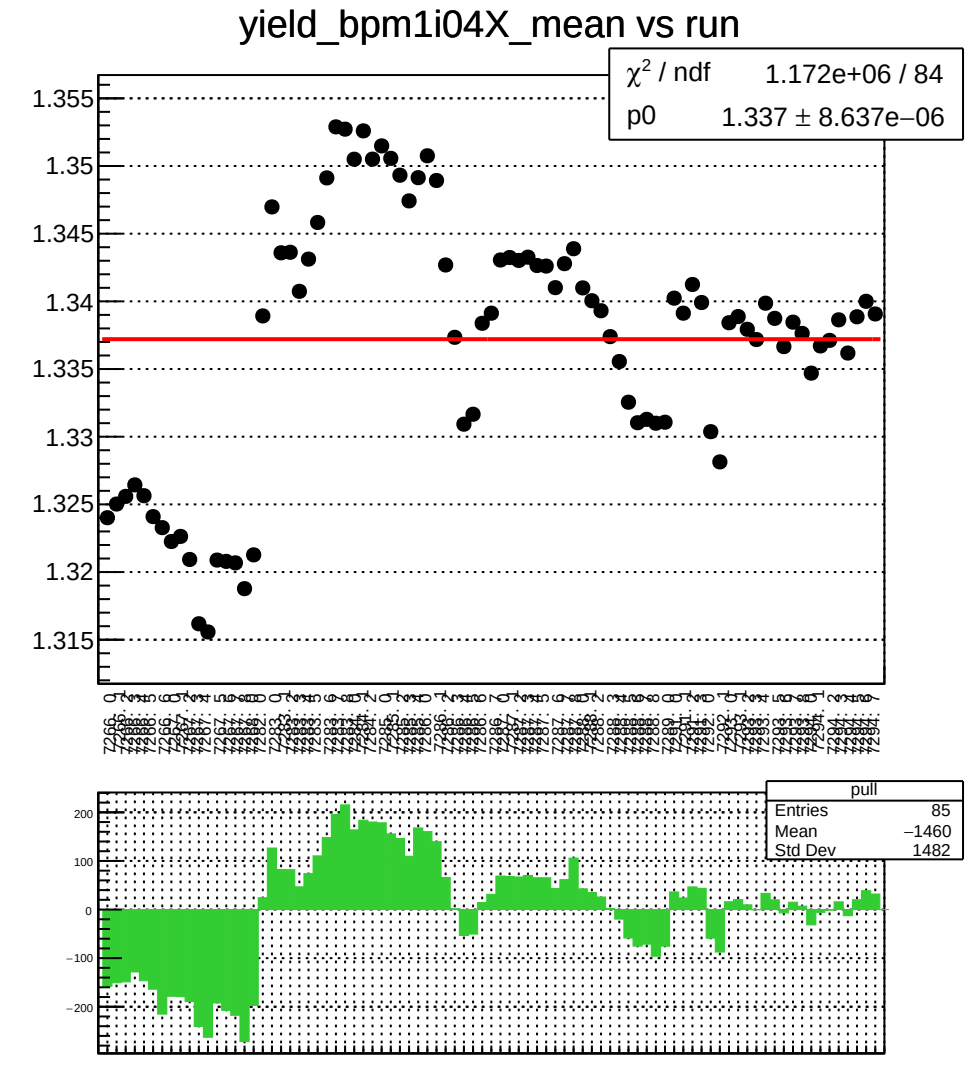

yield_bpm1i02X_mean vs run
χ² / ndf 2.584e+06 / 84
p0 −2.186 ± 1.005e−05
−2.17
−2.18
−2.19
−2.2
−2.21
−2.22
pull
Entries 85
Mean −412.7
Std Dev 484.3
200
100
0
−100
−200
−300
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

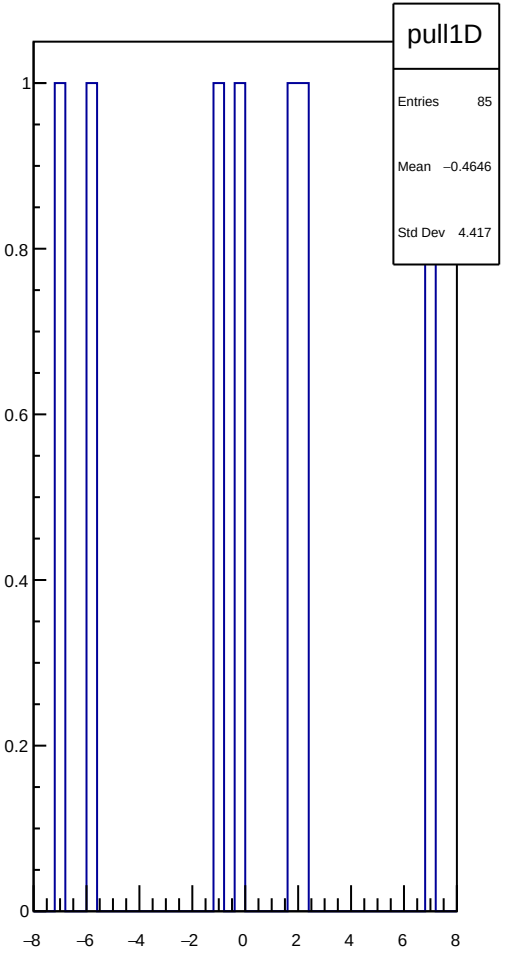

yield_bpm1i02X_rms vs run
χ² / ndf 4516 / 84
p0 0.009122 ± 7.11e–06
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008

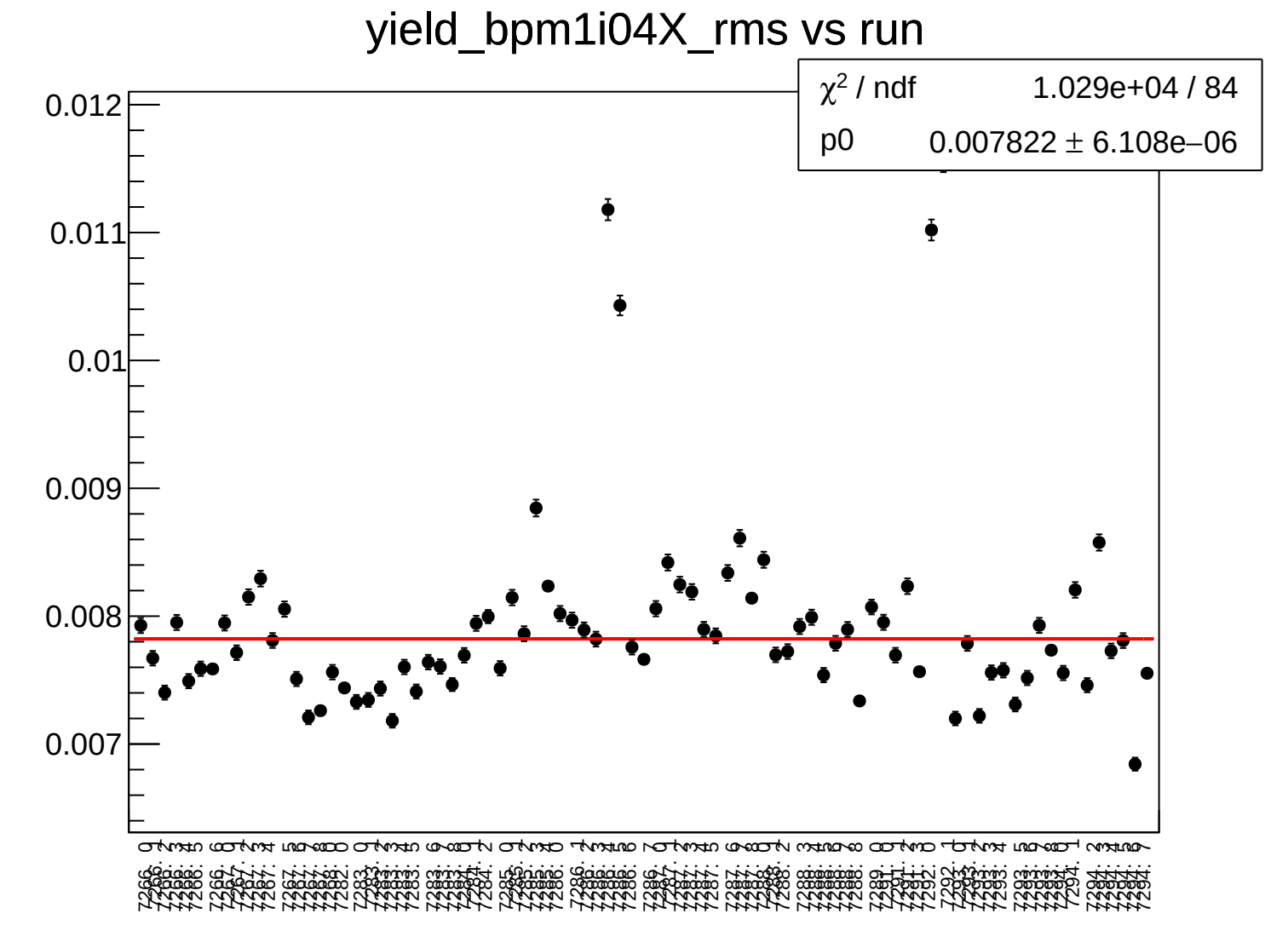

yield_bpm1i02Y_mean vs run
χ² / ndf 7.791e+06 / 84
p0 −0.8966 ± 8.854e−06
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 85
Mean 404.6
Std Dev 410.8
600
400
200
0
−200
−400
−600

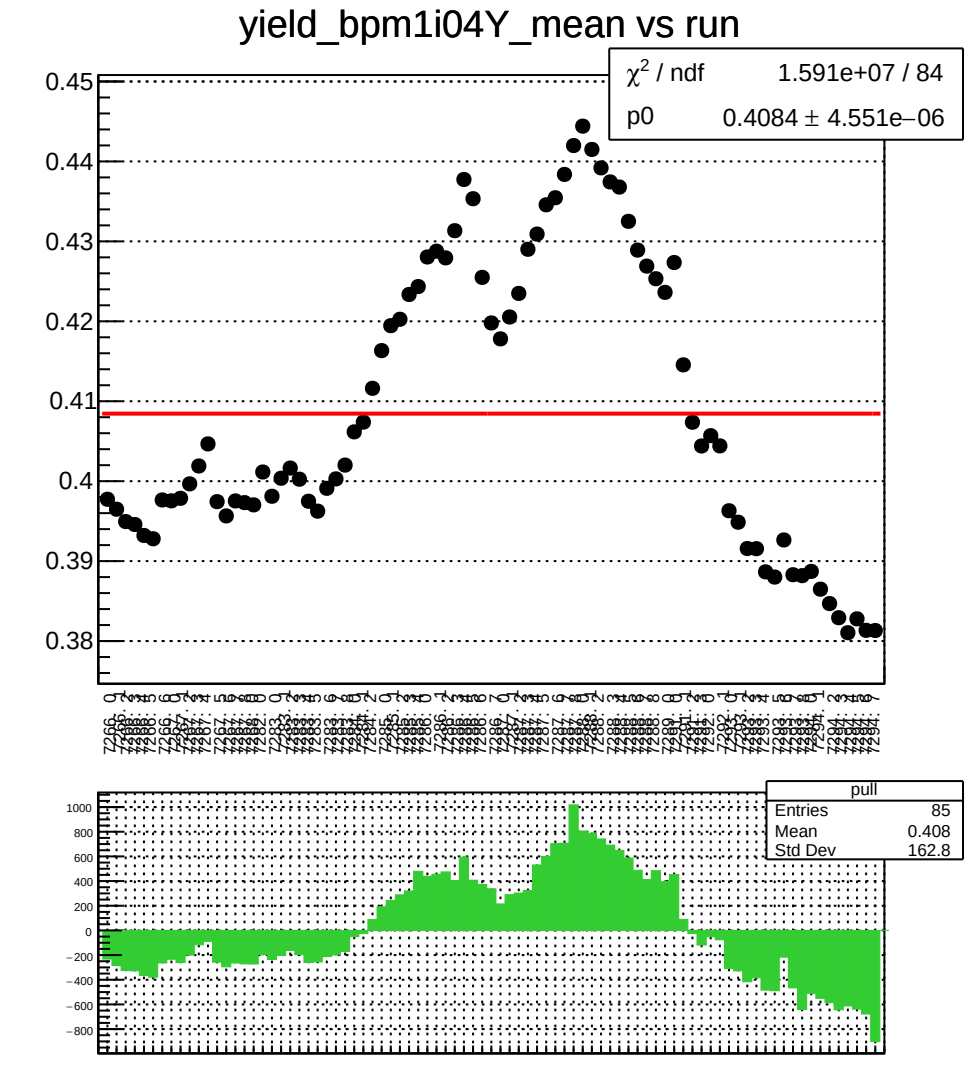

pull1D
Entries 85
Mean −3.347
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

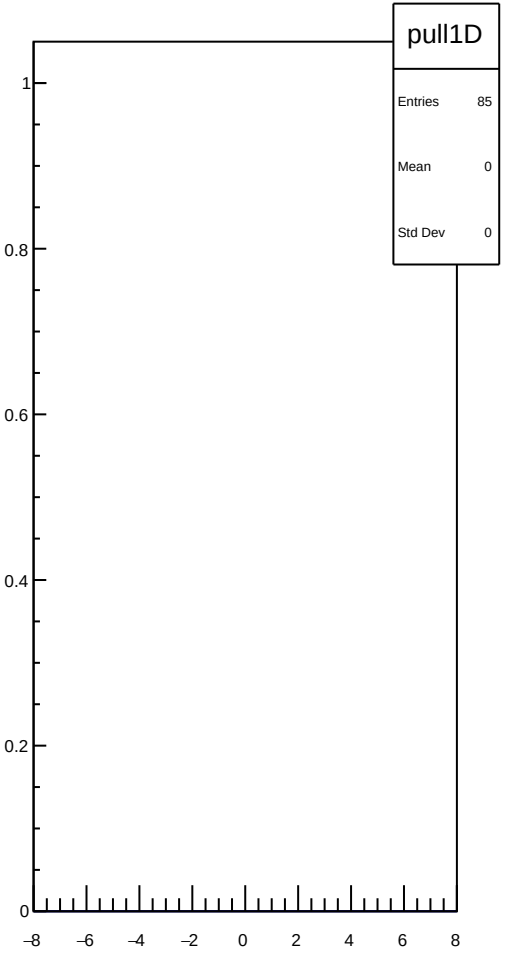

yield_bpm1i02Y_rms vs run
χ² / ndf 7232 / 84
p0 0.008026 ± 6.261e−06
0.012
0.011
0.01
0.009
0.008
0.007

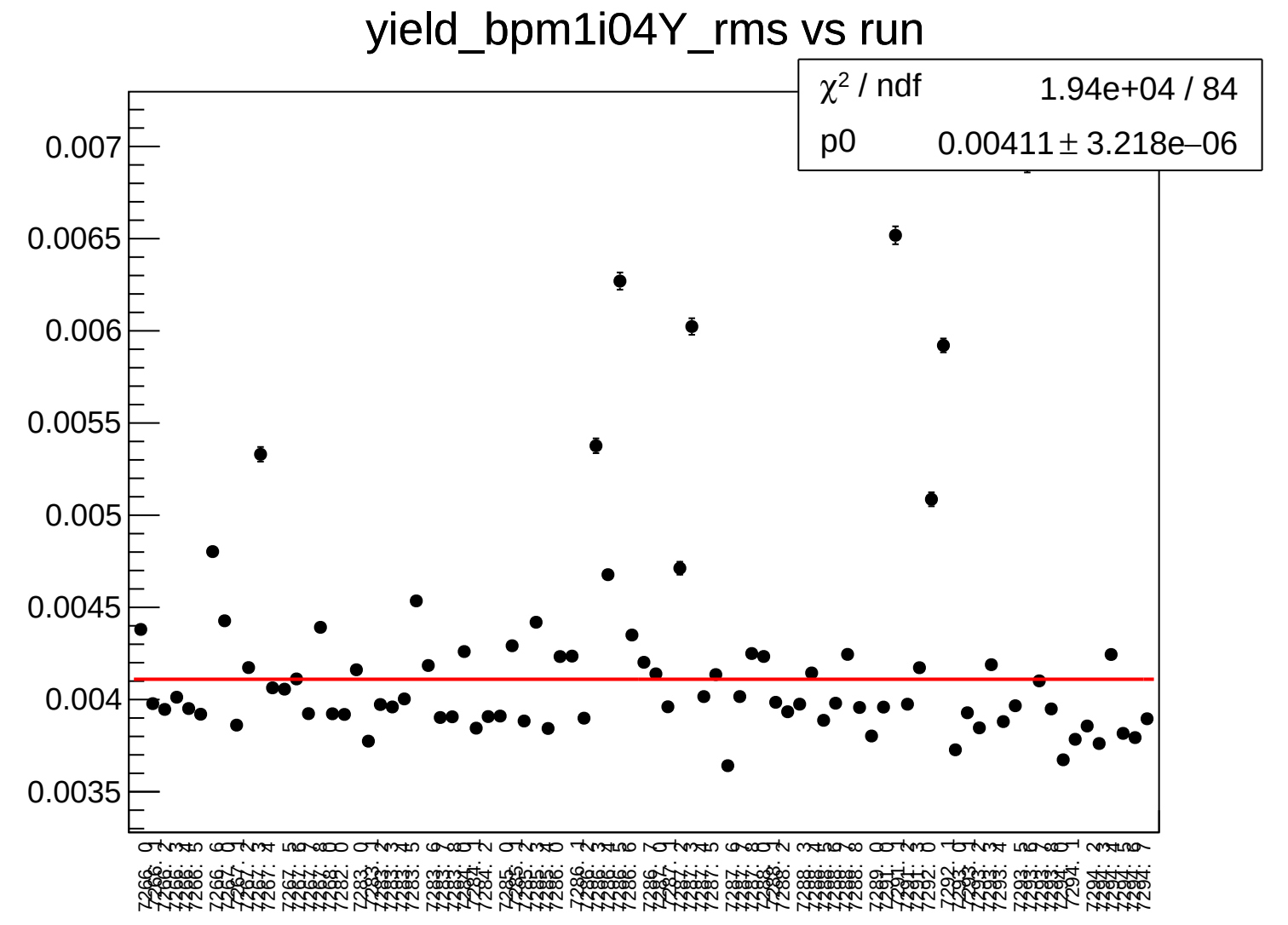

yield_bpm1i04X_mean vs run
χ² / ndf 1.172e+06 / 84
p0 1.337 ± 8.637e−06
1.355
1.35
1.345
1.34
1.335
1.33
1.325
1.32
1.315
pull
Entries 85
Mean −1460
Std Dev 1482
200
100
0
−100
−200

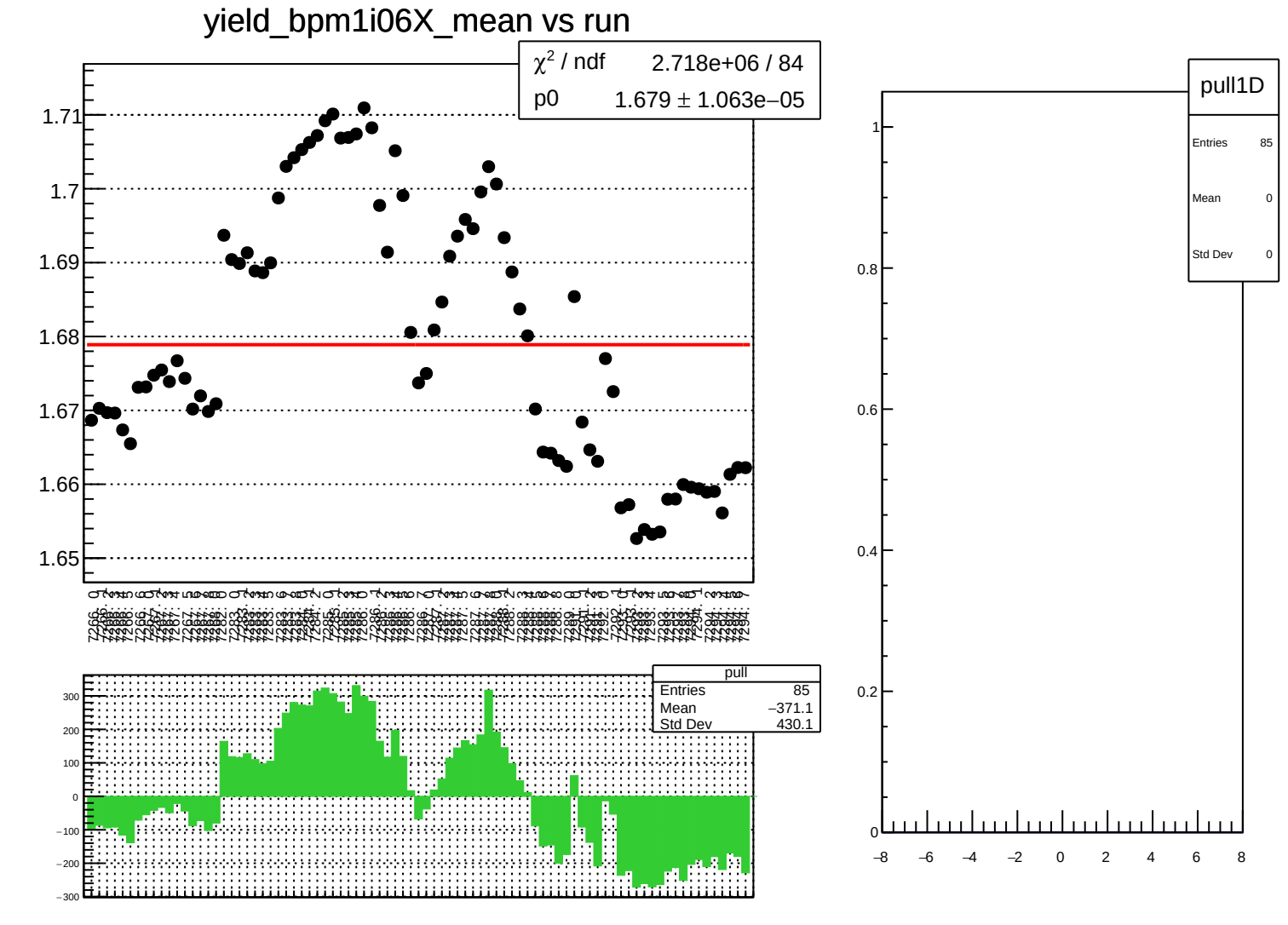

pull1D
Entries 85
Mean −0.4646
Std Dev 4.417
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

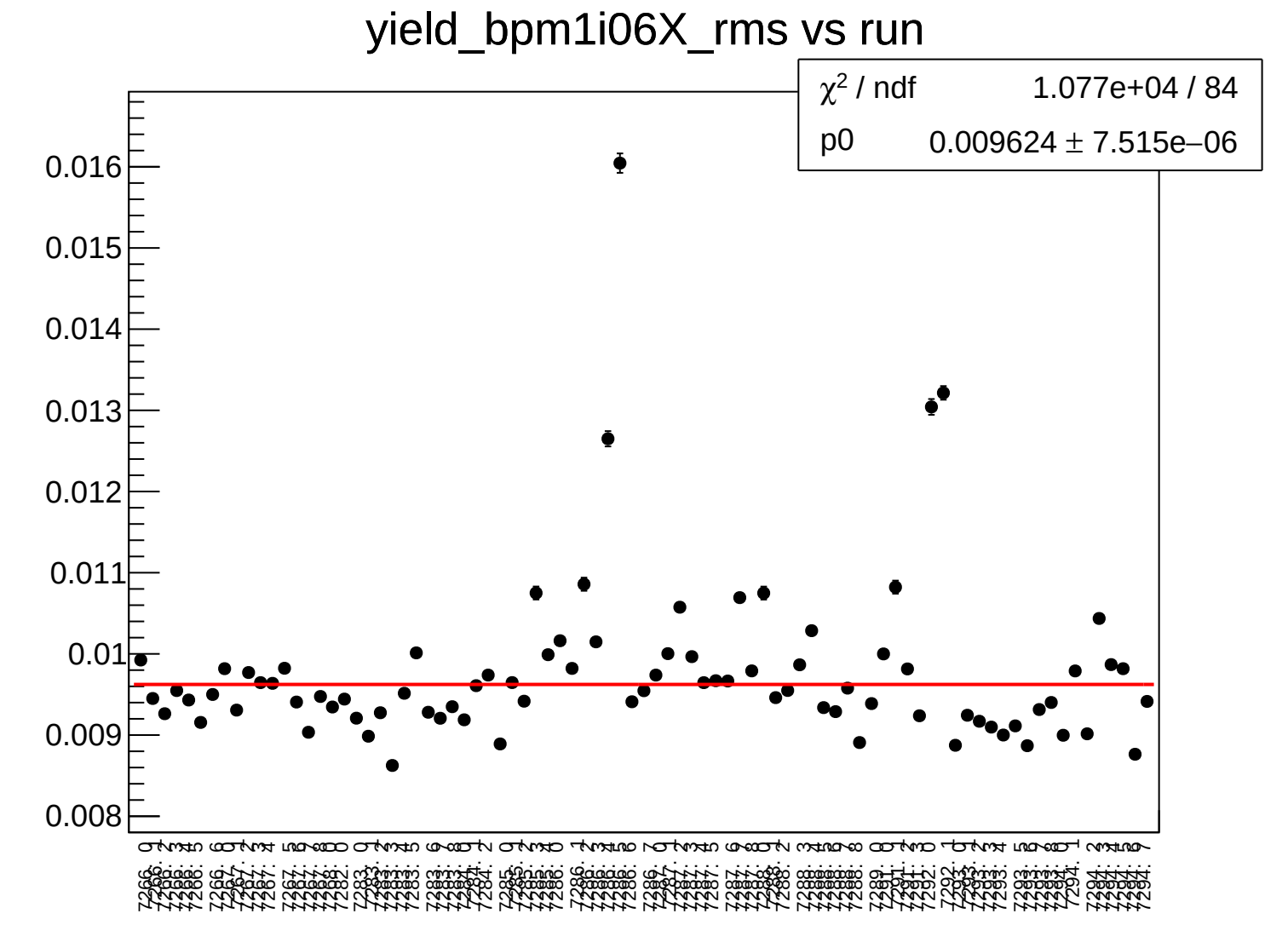

yield_bpm1i04X_rms vs run
χ² / ndf 1.029e+04 / 84
p0 0.007822 ± 6.108e−06
0.012
0.011
0.01
0.009
0.008
0.007

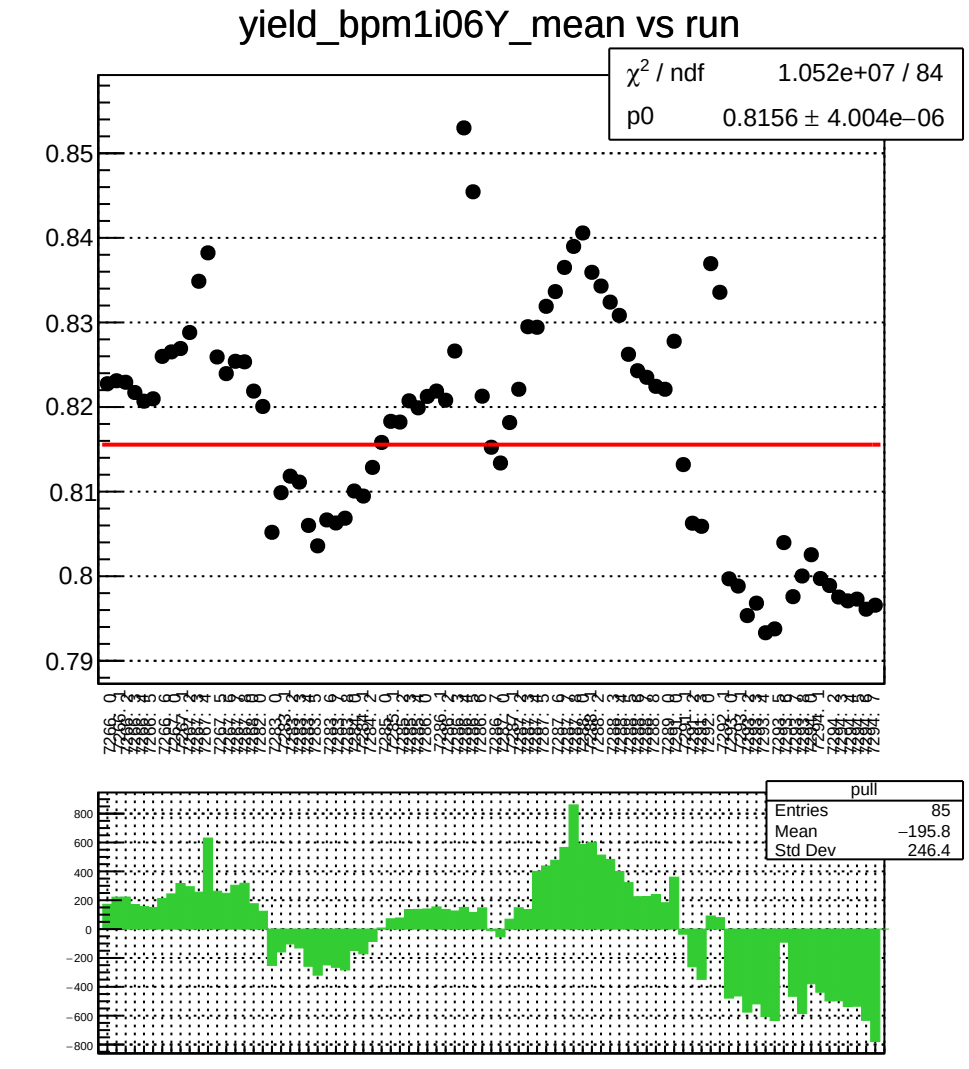

yield_bpm1i04Y_mean vs run
χ² / ndf 1.591e+07 / 84
p0 0.4084 ± 4.551e−06
0.45
0.44
0.43
0.42
0.41
0.4
0.39
0.38
pull
Entries 85
Mean 0.408
Std Dev 162.8
1000
800
600
400
200
0
−200
−400
−600
−800

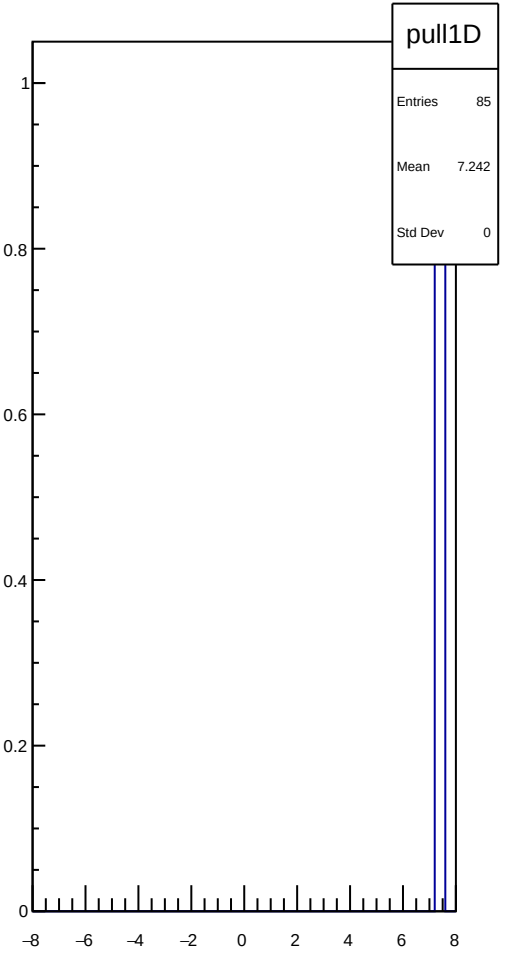

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

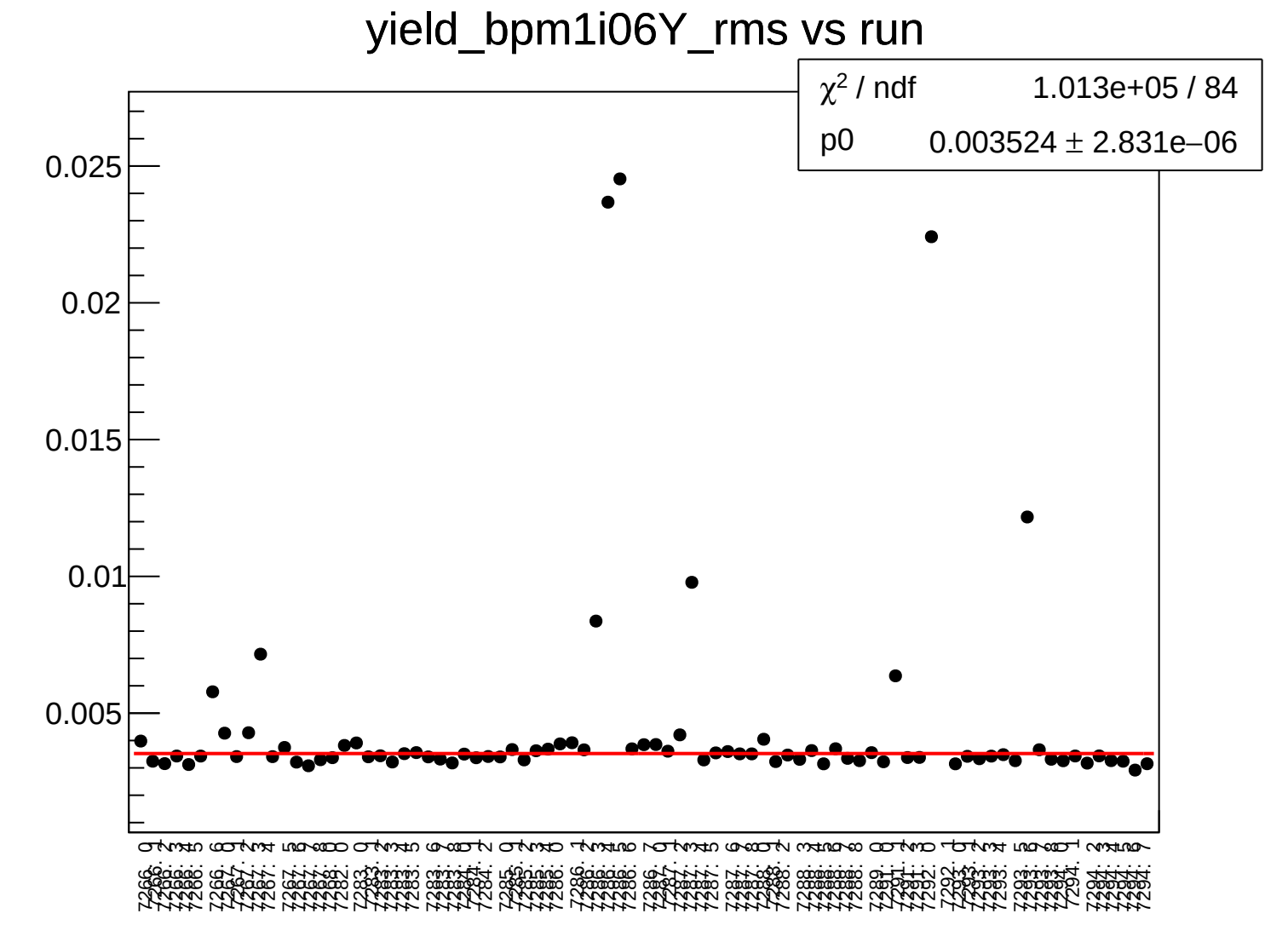

yield_bpm1i04Y_rms vs run
χ² / ndf 1.94e+04 / 84
p0 0.00411 ± 3.218e–06
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035

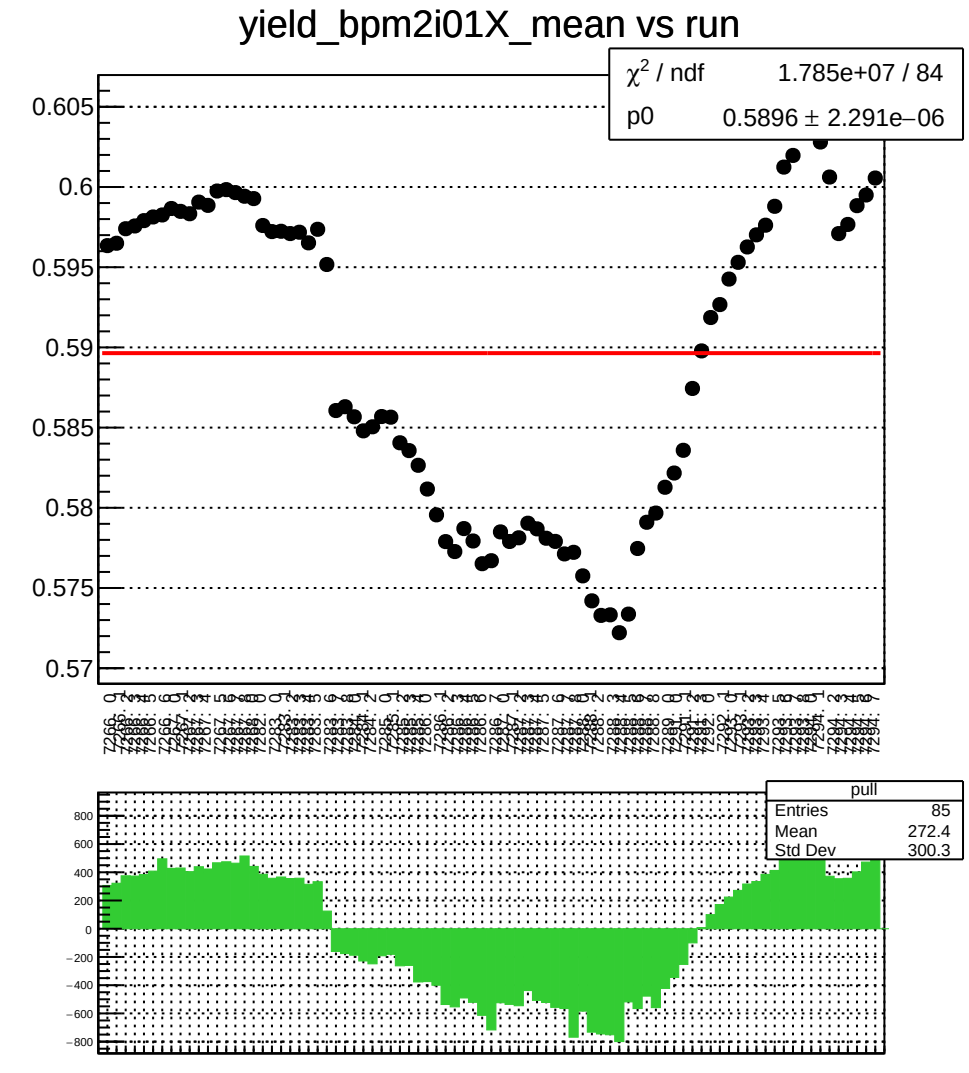

yield_bpm1i06X_mean vs run
χ² / ndf 2.718e+06 / 84
p0 1.679 ± 1.063e−05
1.71
1.7
1.69
1.68
1.67
1.66
1.65
pull
Entries 85
Mean −371.1
Std Dev 430.1
300
200
100
0
−100
−200
−300
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

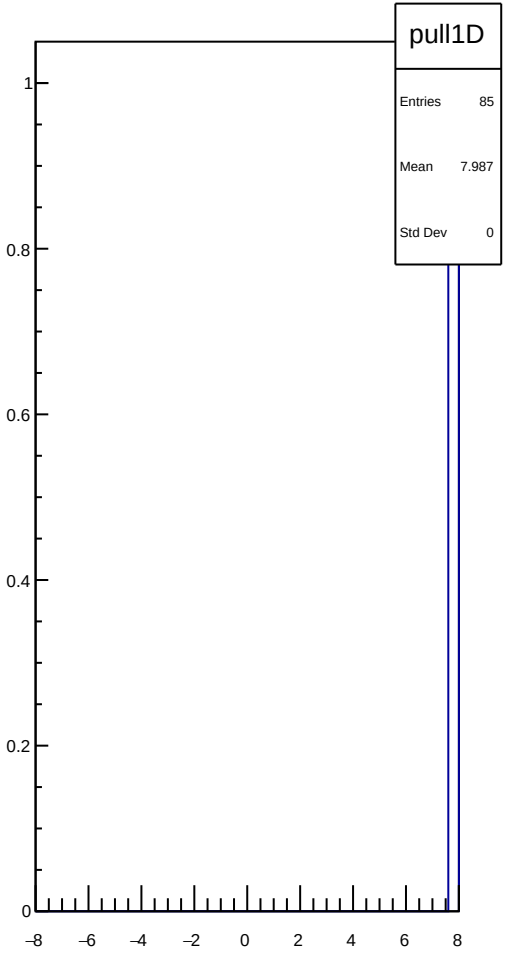

yield_bpm1i06X_rms vs run
χ² / ndf 1.077e+04 / 84
p0 0.009624 ± 7.515e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

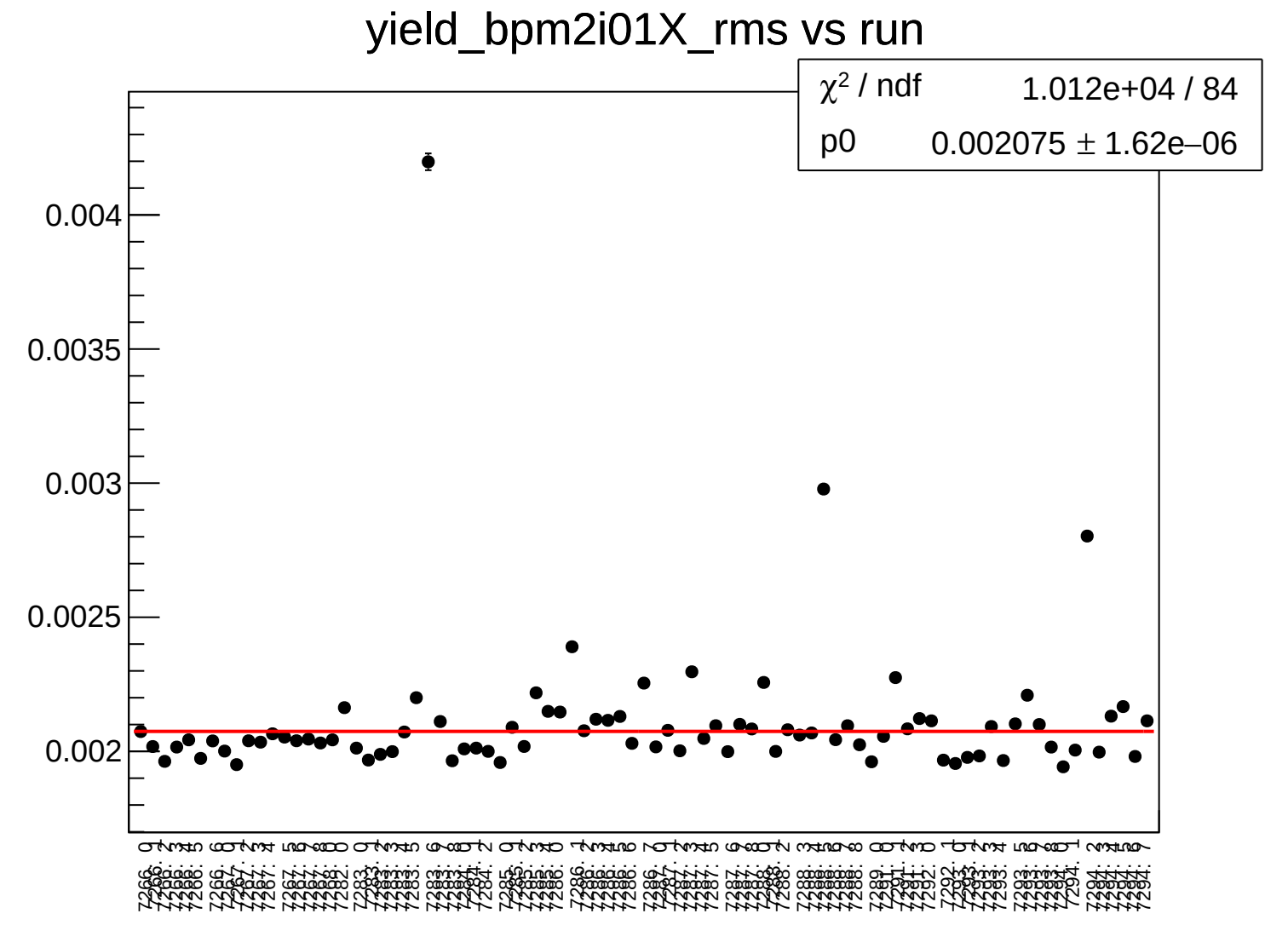

yield_bpm1i06Y_mean vs run
χ² / ndf 1.052e+07 / 84
p0 0.8156 ± 4.004e−06
0.85
0.84
0.83
0.82
0.81
0.8
0.79
pull
Entries 85
Mean −195.8
Std Dev 246.4
800
600
400
200
0
−200
−400
−600
−800

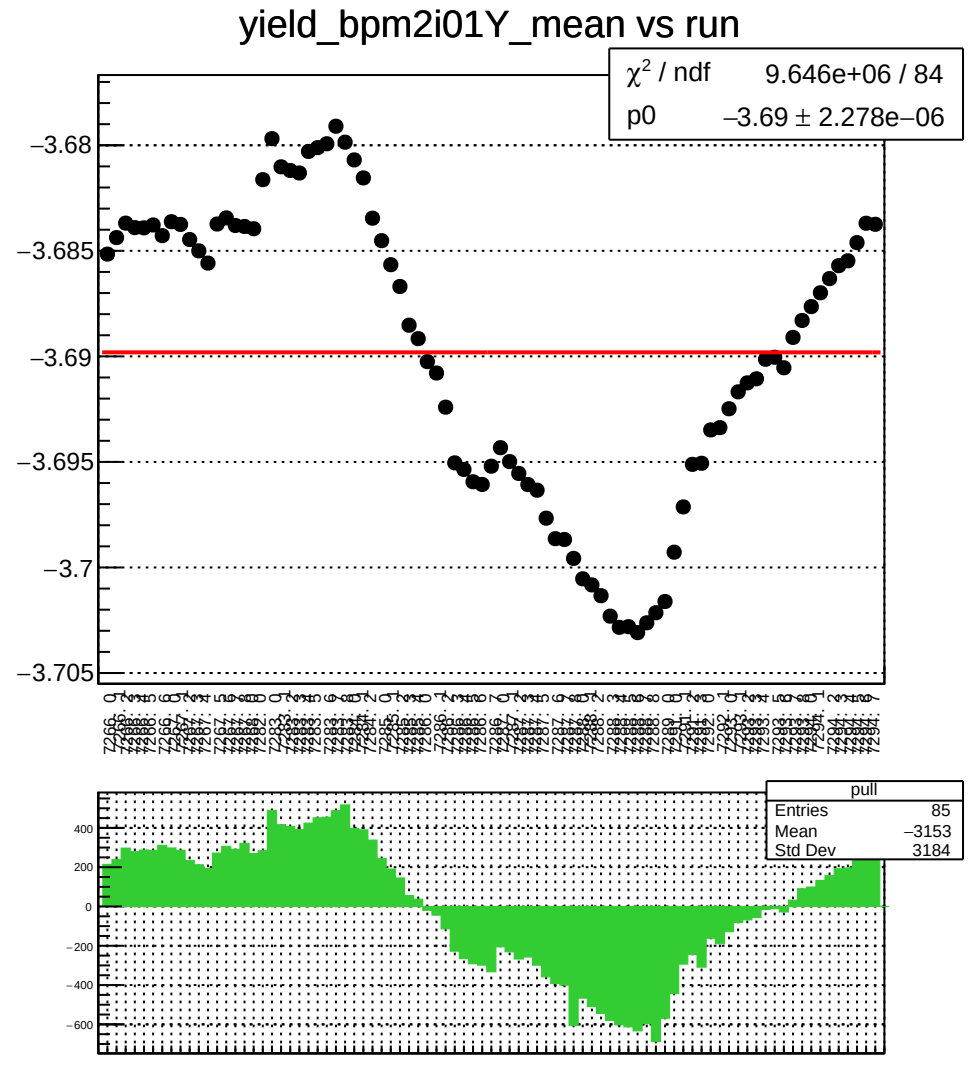

pull1D
Entries 85
Mean 7.242
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

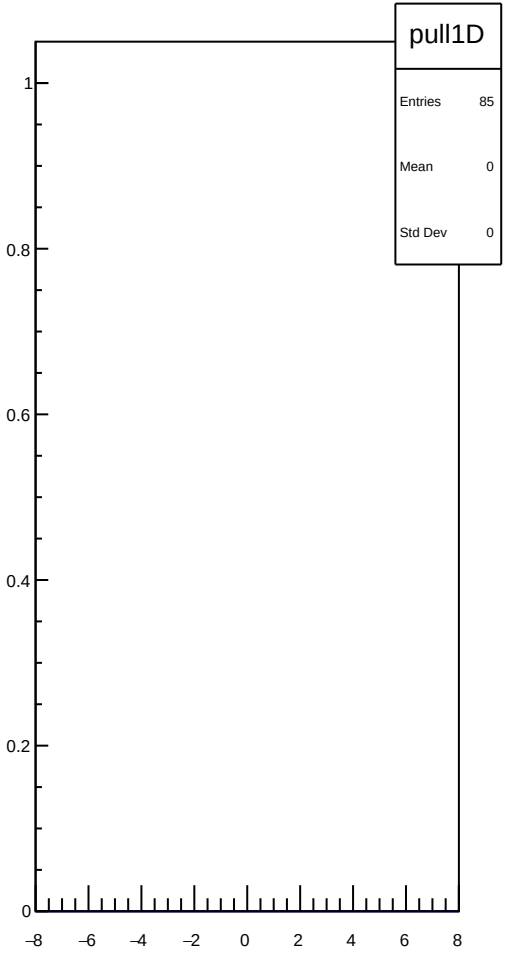

yield_bpm1i06Y_rms vs run
χ² / ndf 1.013e+05 / 84
p0 0.003524 ± 2.831e−06
0.025
0.02
0.015
0.01
0.005

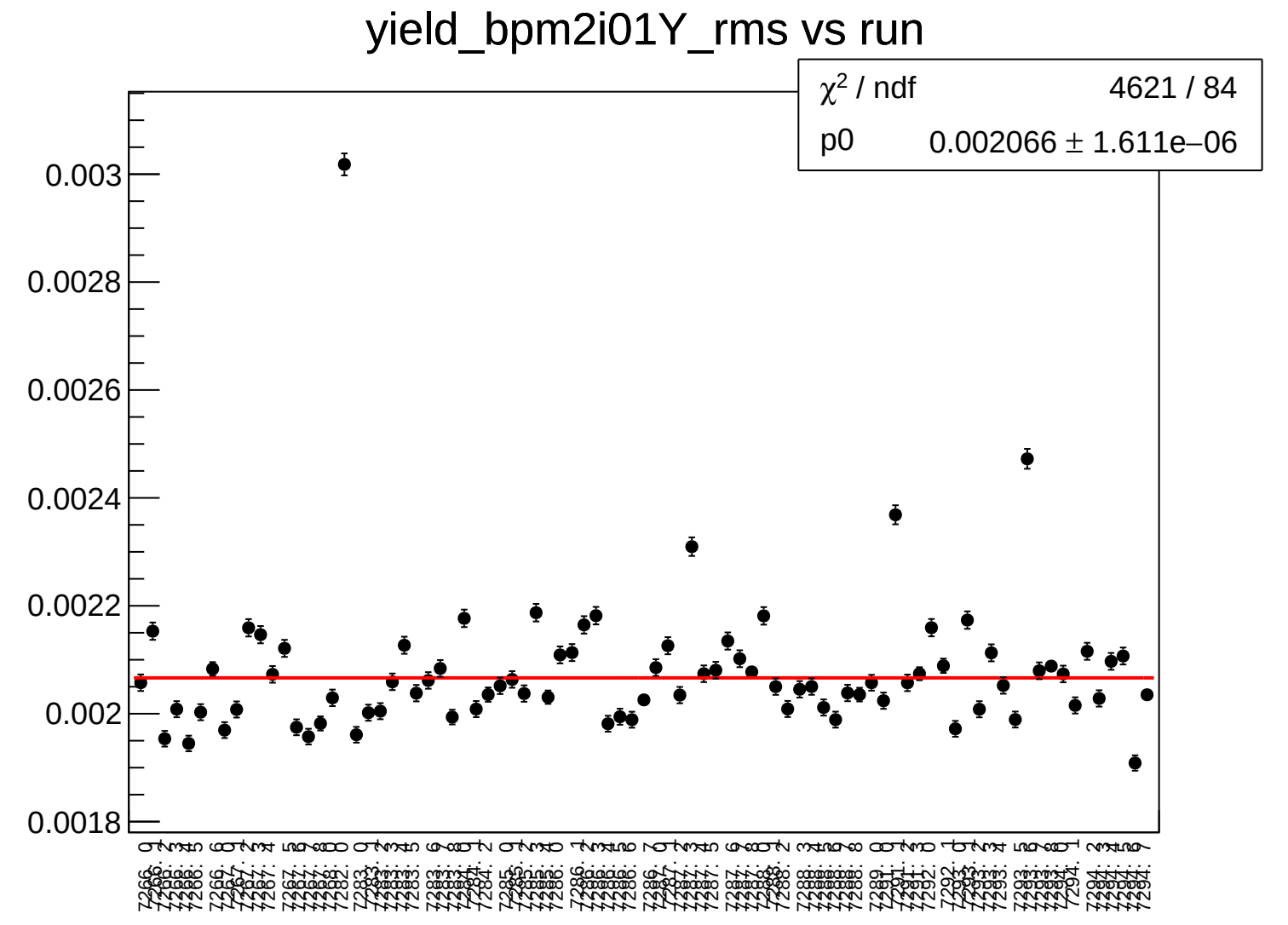

yield_bpm2i01X_mean vs run
χ² / ndf 1.785e+07 / 84
p0 0.5896 ± 2.291e−06
0.605
0.6
0.595
0.59
0.585
0.58
0.575
0.57
pull
Entries 85
Mean 272.4
Std Dev 300.3
800
600
400
200
0
−200
−400
−600
−800

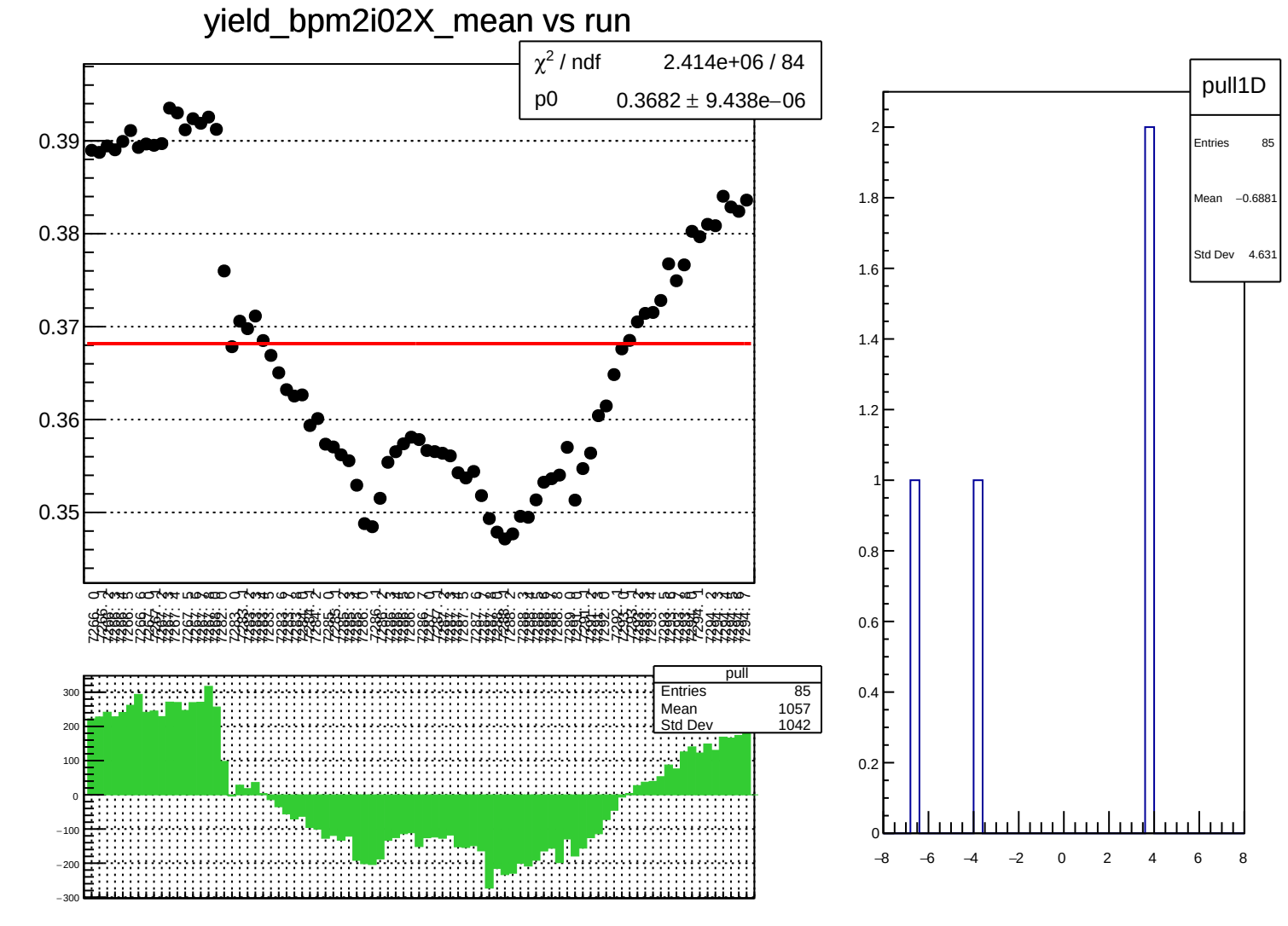

pull1D
Entries 85
Mean 7.987
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

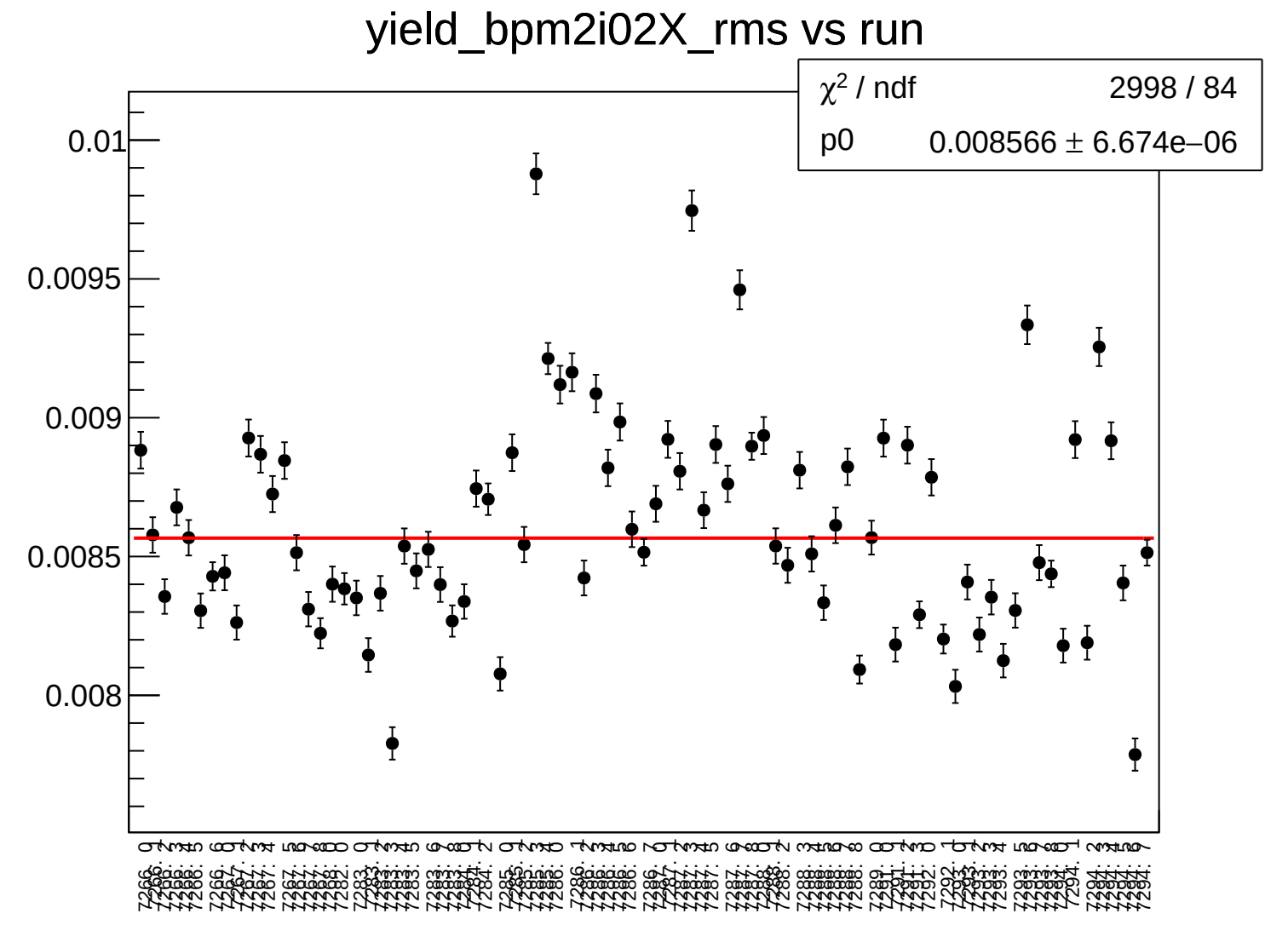

yield_bpm2i01X_rms vs run
χ² / ndf 1.012e+04 / 84
p0 0.002075 ± 1.62e–06
0.004
0.0035
0.003
0.0025
0.002

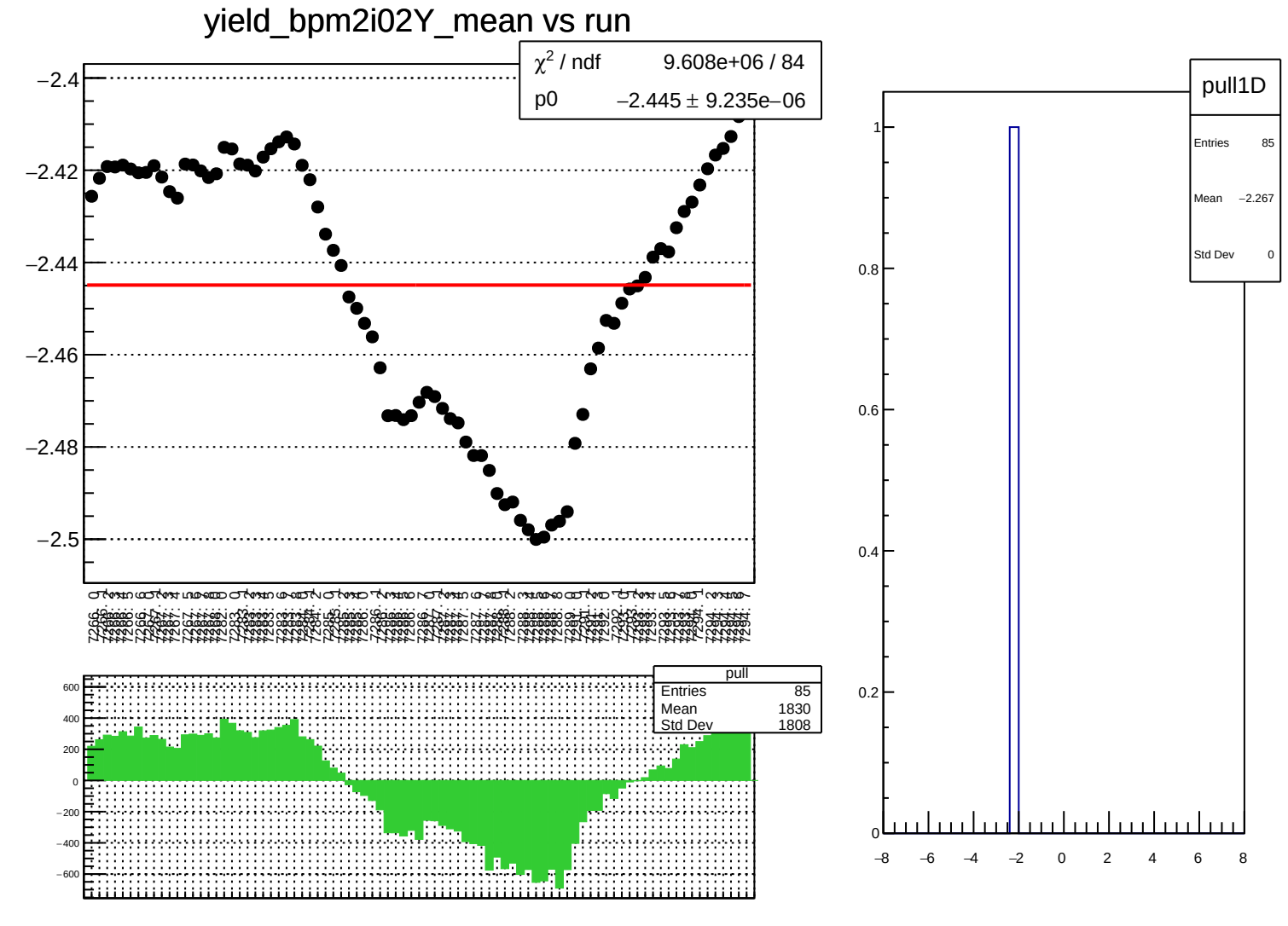

yield_bpm2i01Y_mean vs run
χ² / ndf 9.646e+06 / 84
p0 −3.69 ± 2.278e−06
−3.68
−3.685
−3.69
−3.695
−3.7
−3.705
pull
Entries 85
Mean −3153
Std Dev 3184
400
200
0
−200
−400
−600

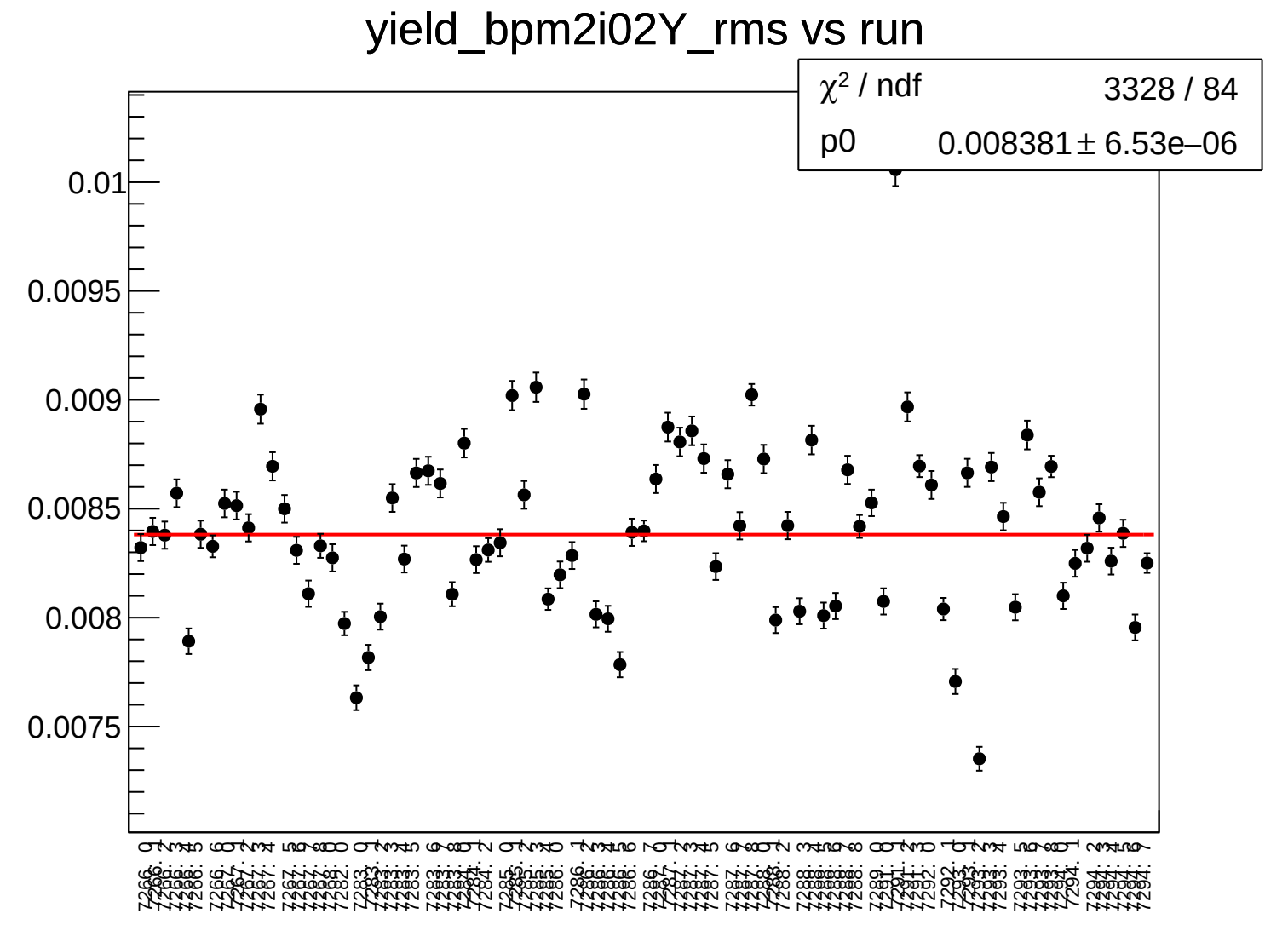

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

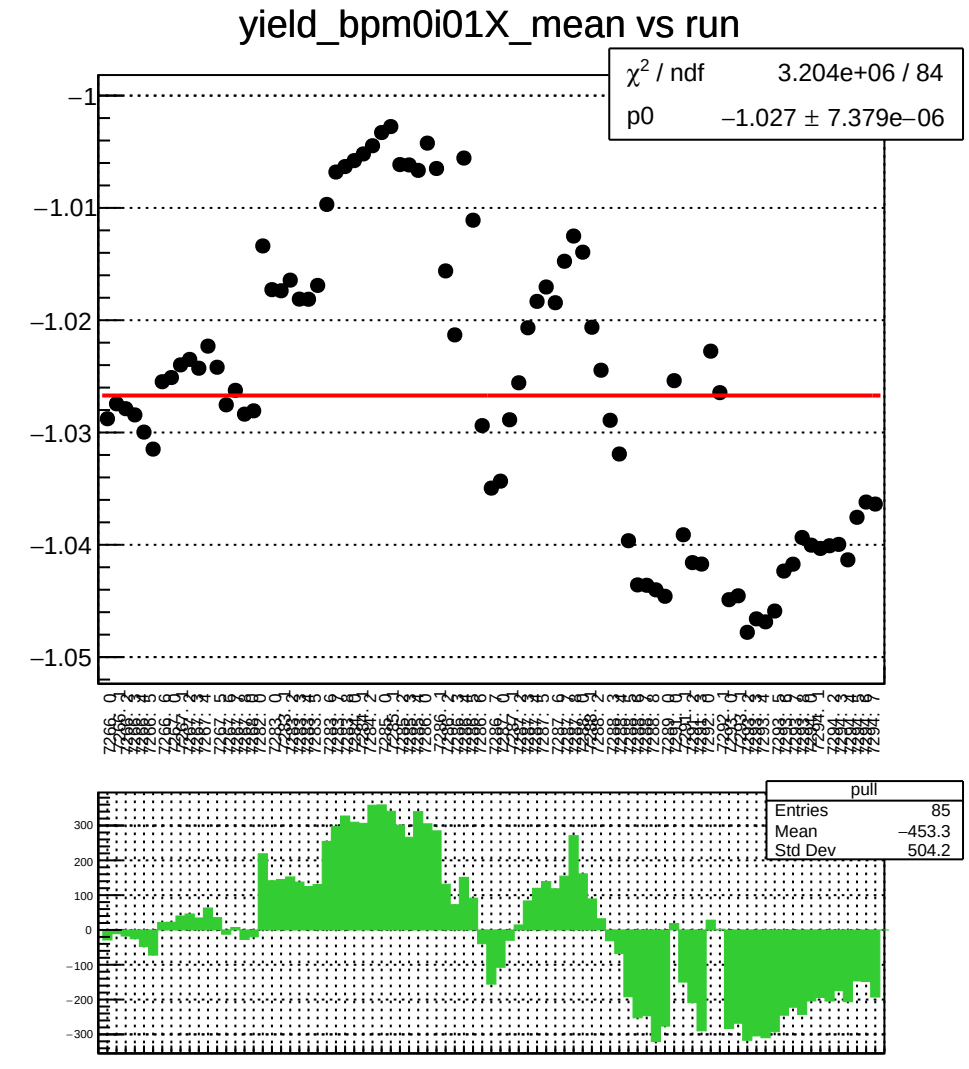

yield_bpm2i01Y_rms vs run
χ² / ndf 4621 / 84
p0 0.002066 ± 1.611e−06
0.003
0.0028
0.0026
0.0024
0.0022
0.002
0.0018

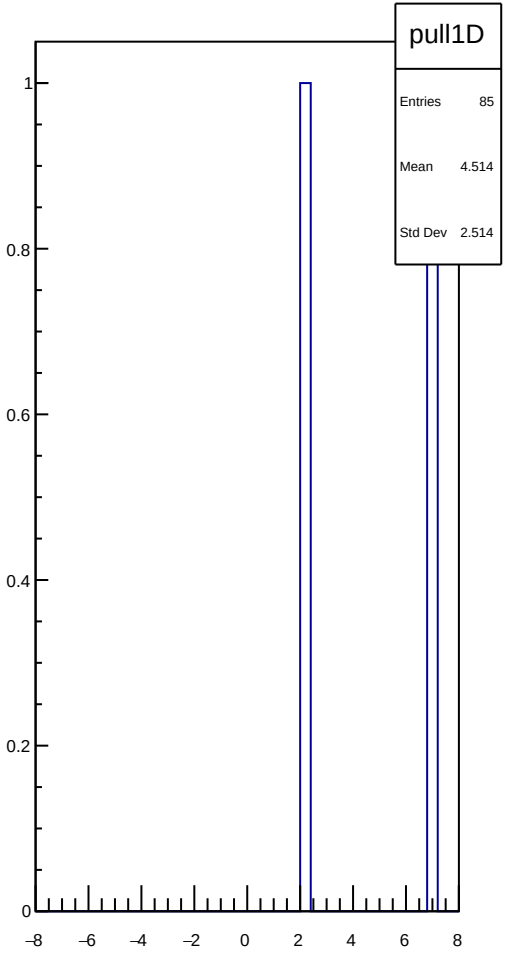

yield_bpm2i02X_mean vs run
χ² / ndf 2.414e+06 / 84
p0 0.3682 ± 9.438e−06
0.39
0.38
0.37
0.36
0.35
pull
Entries 85
Mean 1057
Std Dev 1042
300
200
100
0
−100
−200
−300
pull1D
Entries 85
Mean −0.6881
Std Dev 4.631
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

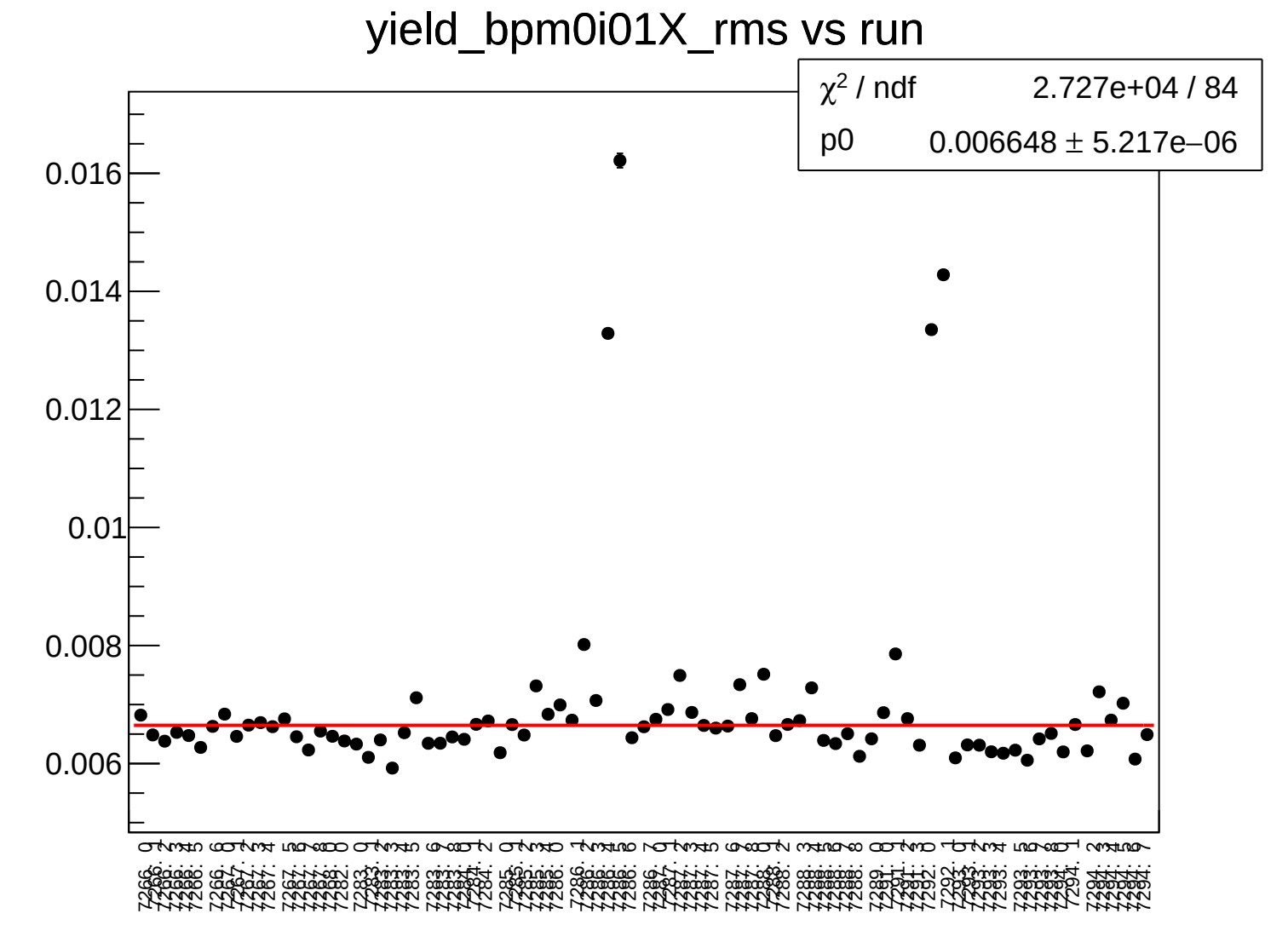

yield_bpm2i02X_rms vs run
χ² / ndf 2998 / 84
p0 0.008566 ± 6.674e−06
0.01
0.0095
0.009
0.0085
0.008

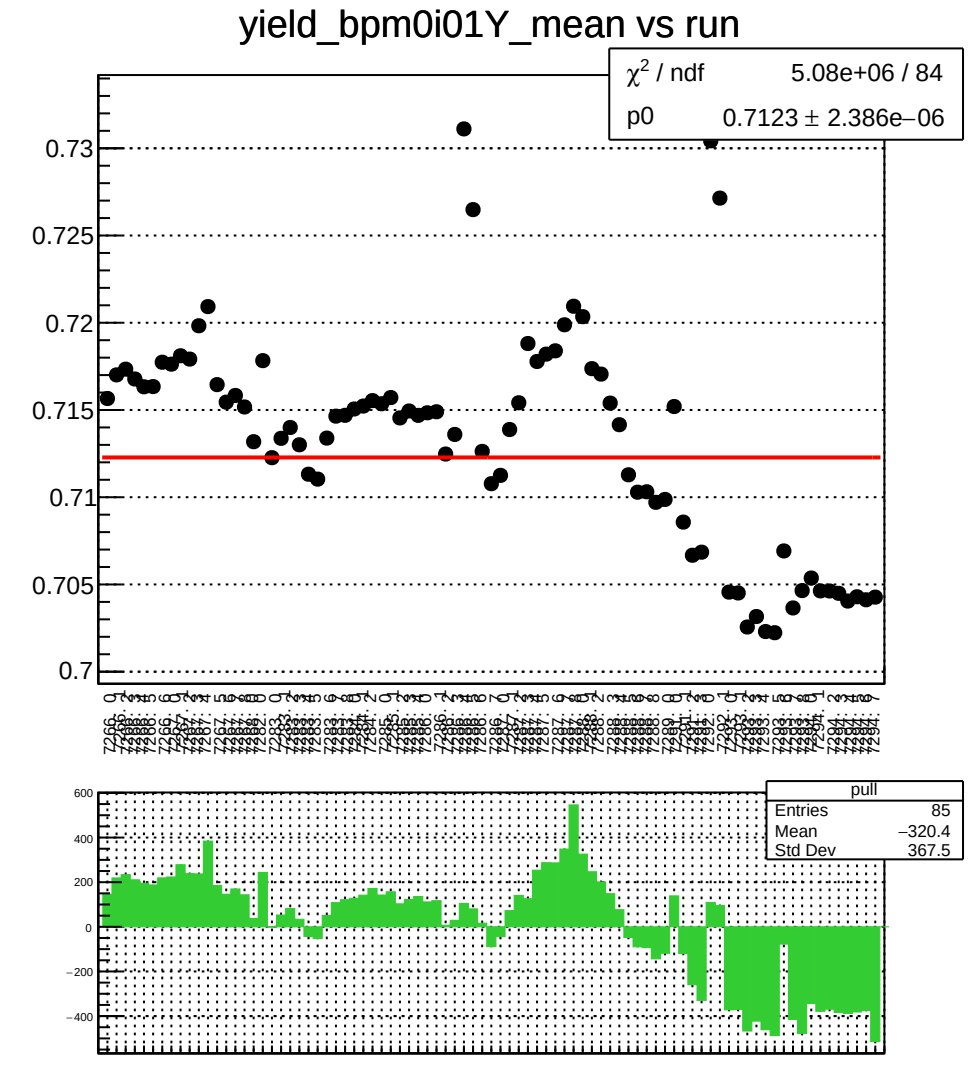

yield_bpm2i02Y_mean vs run
χ² / ndf 9.608e+06 / 84
p0 −2.445 ± 9.235e−06
−2.4
−2.42
−2.44
−2.46
−2.48
−2.5
pull
Entries 85
Mean 1830
Std Dev 1808
600
400
200
0
−200
−400
−600
pull1D
Entries 85
Mean −2.267
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

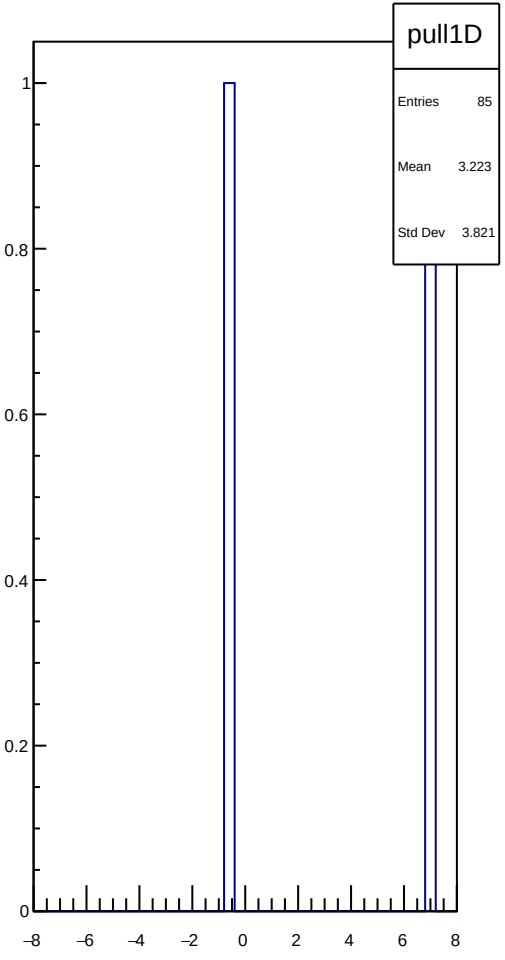

yield_bpm2i02Y_rms vs run
χ² / ndf 3328 / 84
p0 0.008381 ± 6.53e–06
0.01
0.0095
0.009
0.0085
0.008
0.0075

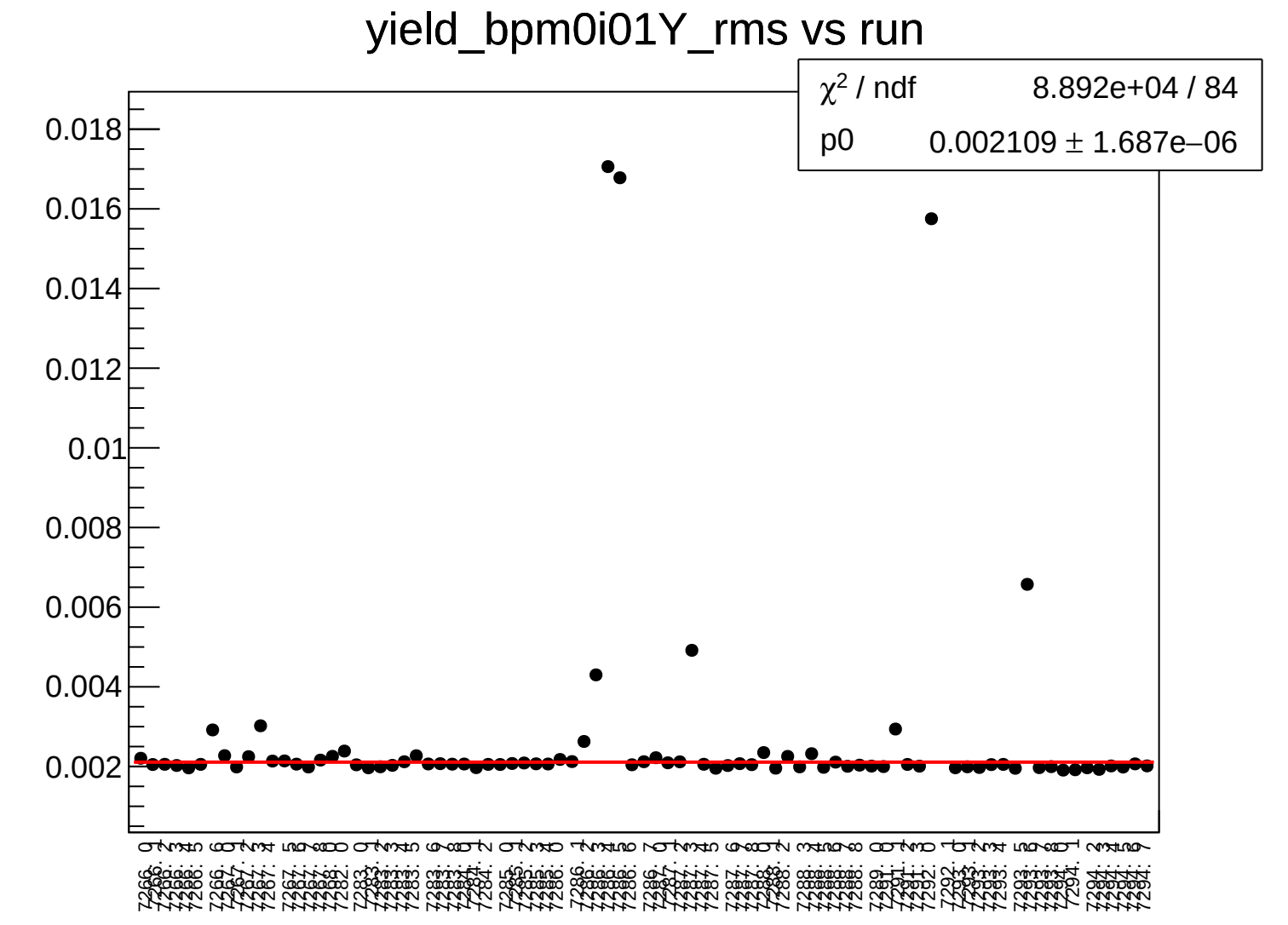

yield_bpm0i01X_mean vs run
χ² / ndf 3.204e+06 / 84
p0 −1.027 ± 7.379e−06
−1
−1.01
−1.02
−1.03
−1.04
−1.05
pull
Entries 85
Mean −453.3
Std Dev 504.2
300
200
100
0
−100
−200
−300

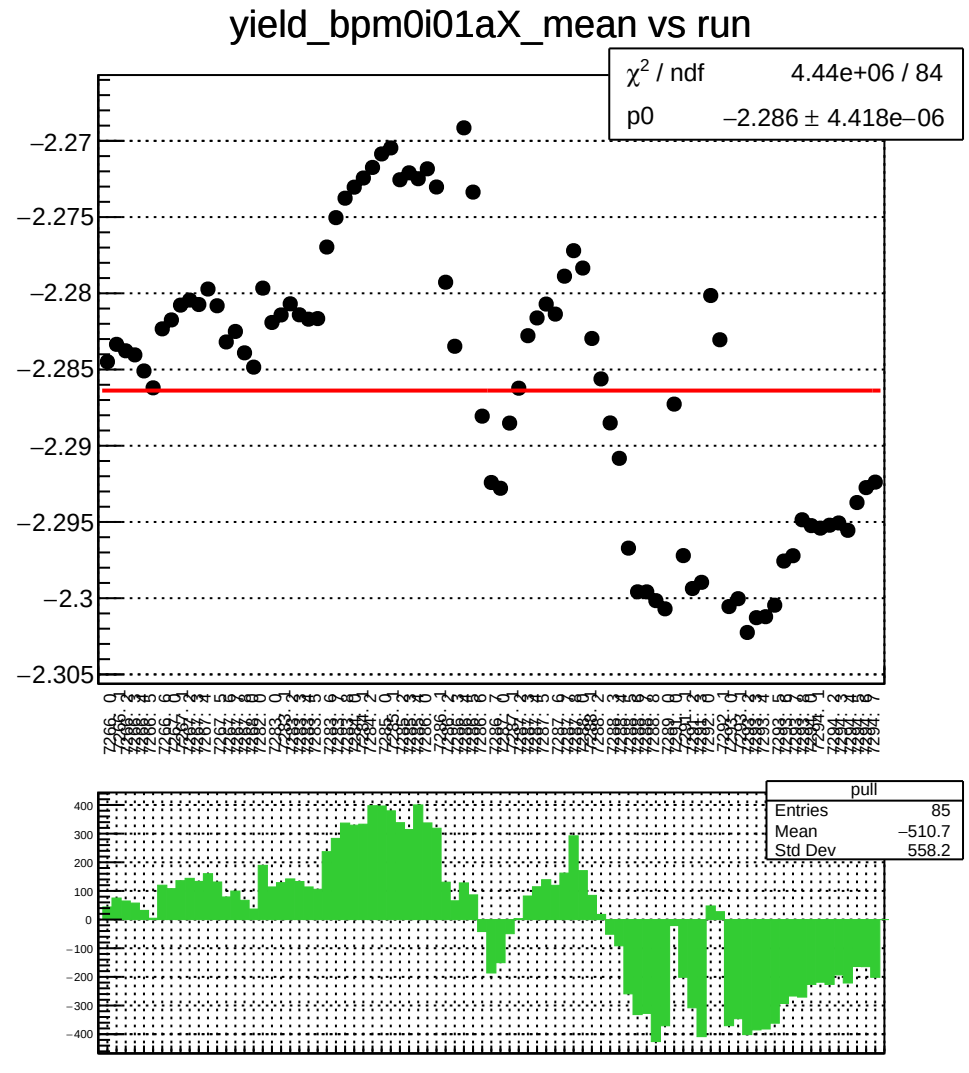

pull1D
Entries 85
Mean 4.514
Std Dev 2.514
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

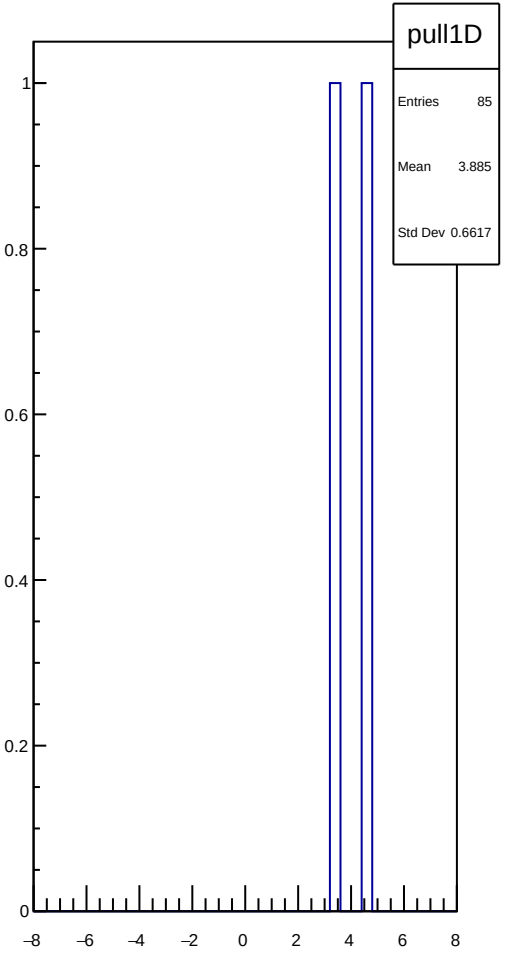

yield_bpm0i01X_rms vs run
χ² / ndf 2.727e+04 / 84
p0 0.006648 ± 5.217e−06
0.016
0.014
0.012
0.01
0.008
0.006

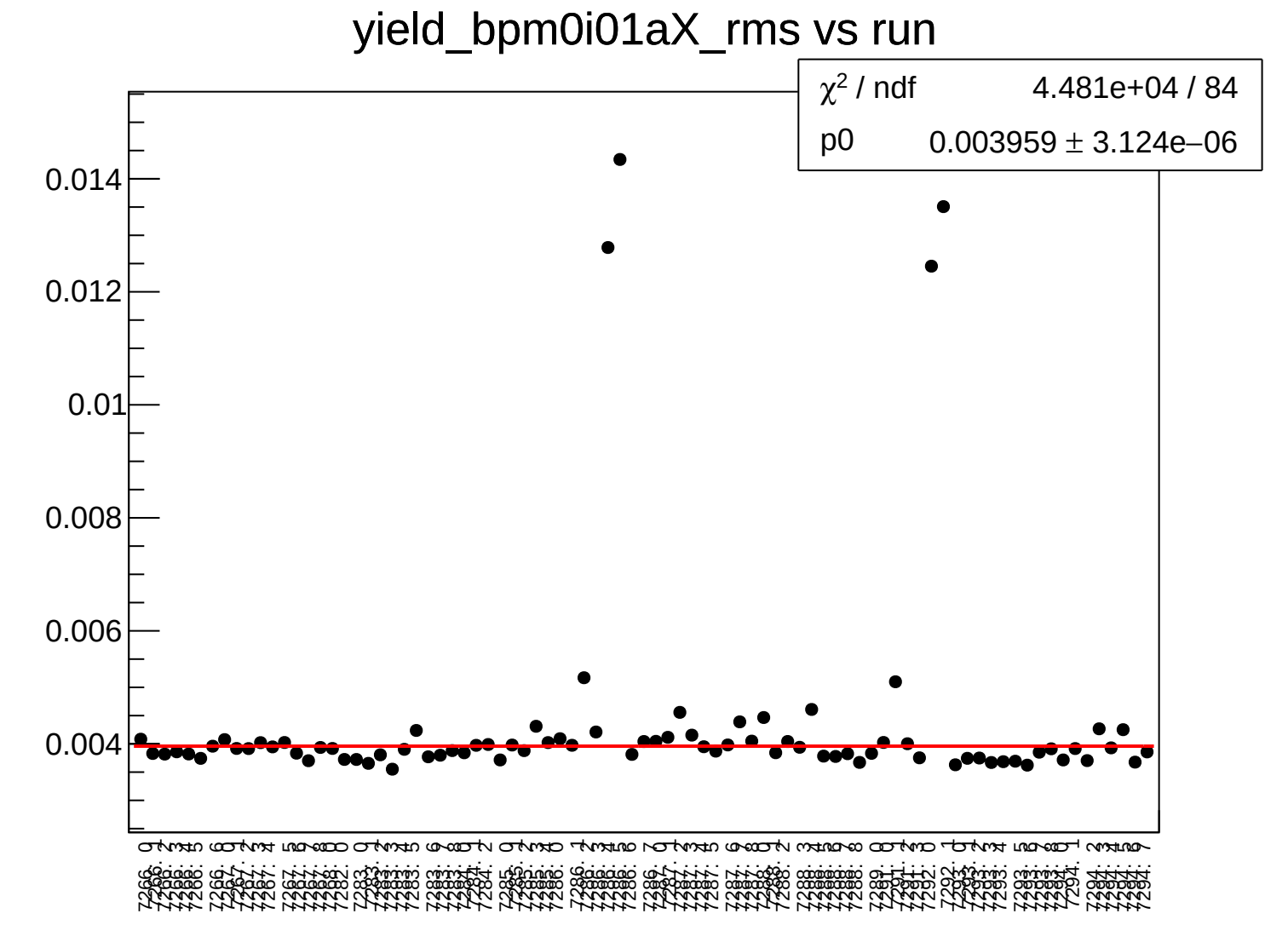

yield_bpm0i01Y_mean vs run
χ² / ndf 5.08e+06 / 84
p0 0.7123 ± 2.386e−06
0.73
0.725
0.72
0.715
0.71
0.705
0.7
pull
Entries 85
Mean −320.4
Std Dev 367.5
600
400
200
0
−200
−400

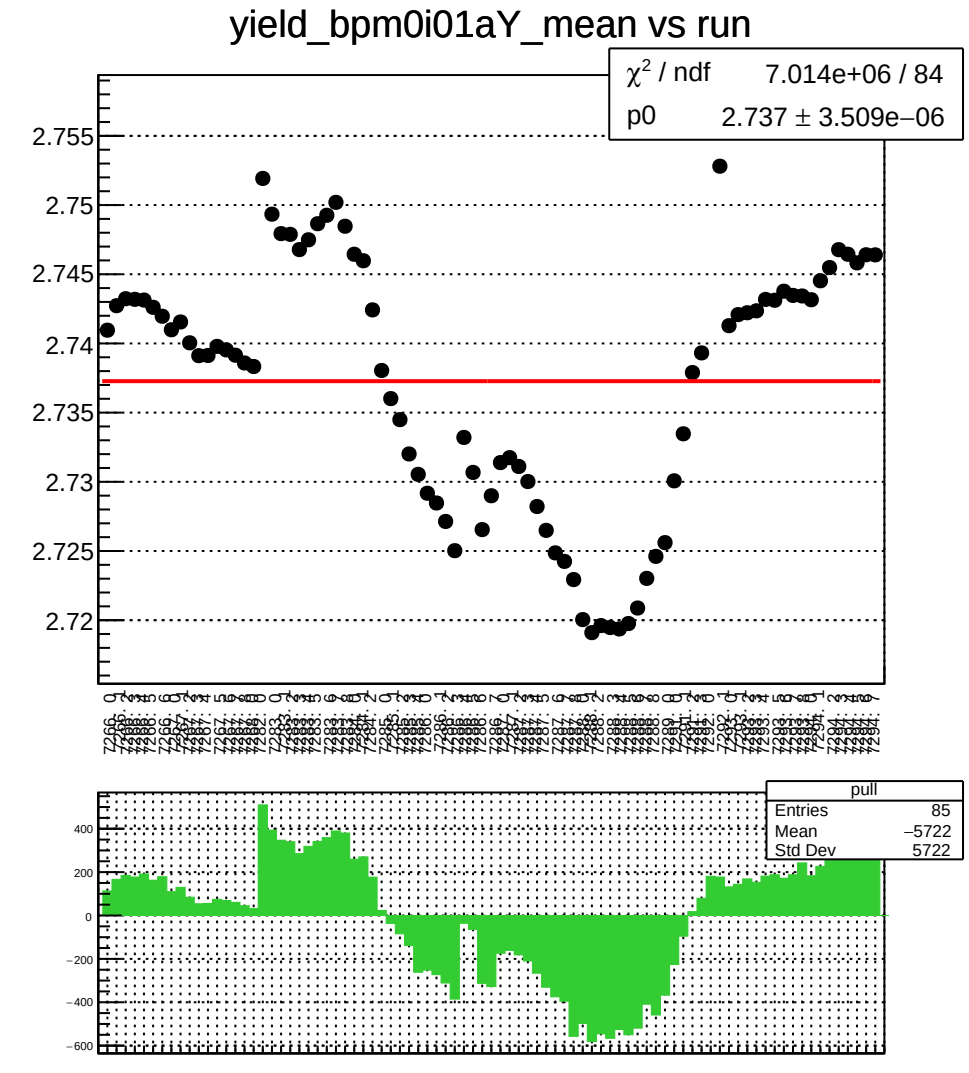

pull1D
Entries 85
Mean 3.223
Std Dev 3.821
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

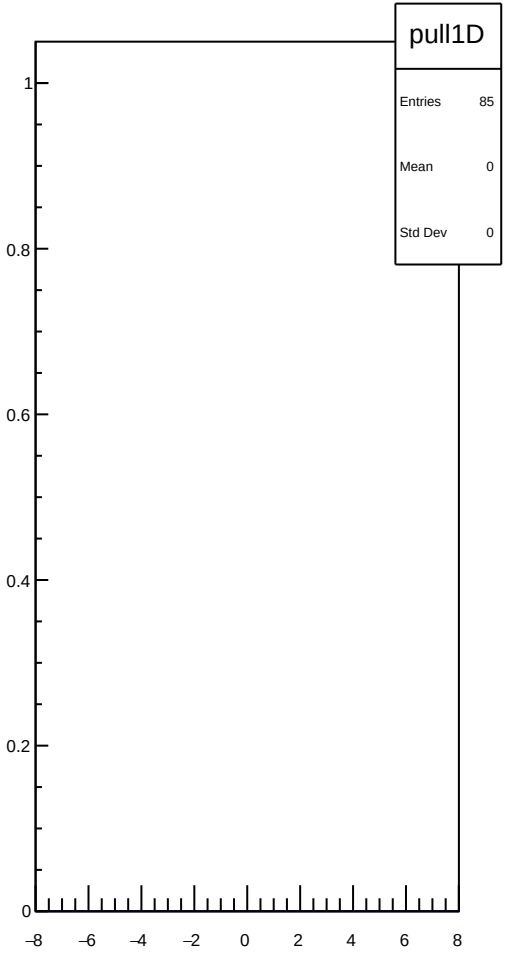

yield_bpm0i01Y_rms vs run
χ² / ndf 8.892e+04 / 84
p0 0.002109 ± 1.687e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

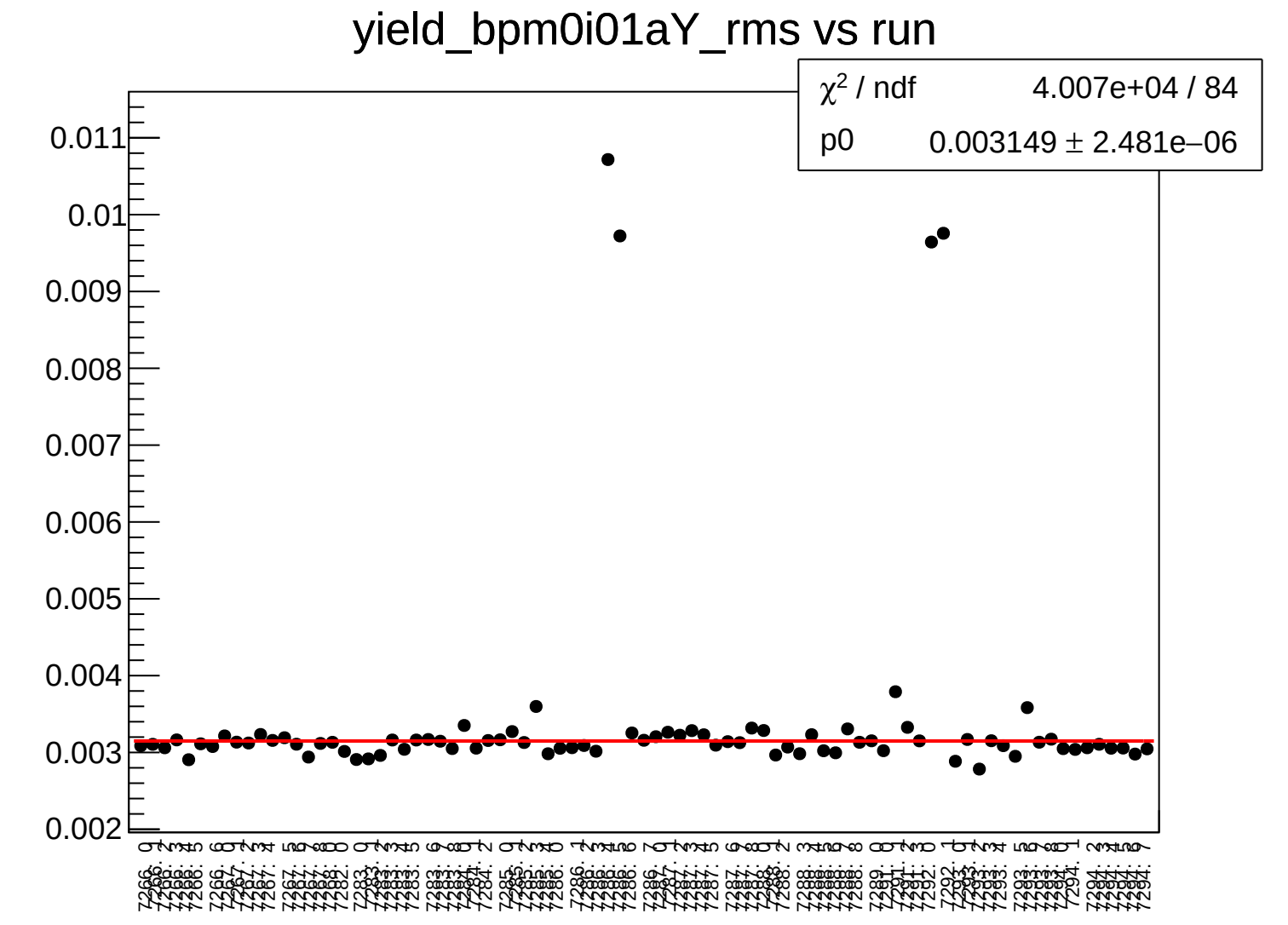

yield_bpm0i01aX_mean vs run
χ² / ndf 4.44e+06 / 84
p0 −2.286 ± 4.418e−06
−2.27
−2.275
−2.28
−2.285
−2.29
−2.295
−2.3
−2.305
pull
Entries 85
Mean −510.7
Std Dev 558.2
400
300
200
100
0
−100
−200
−300
−400

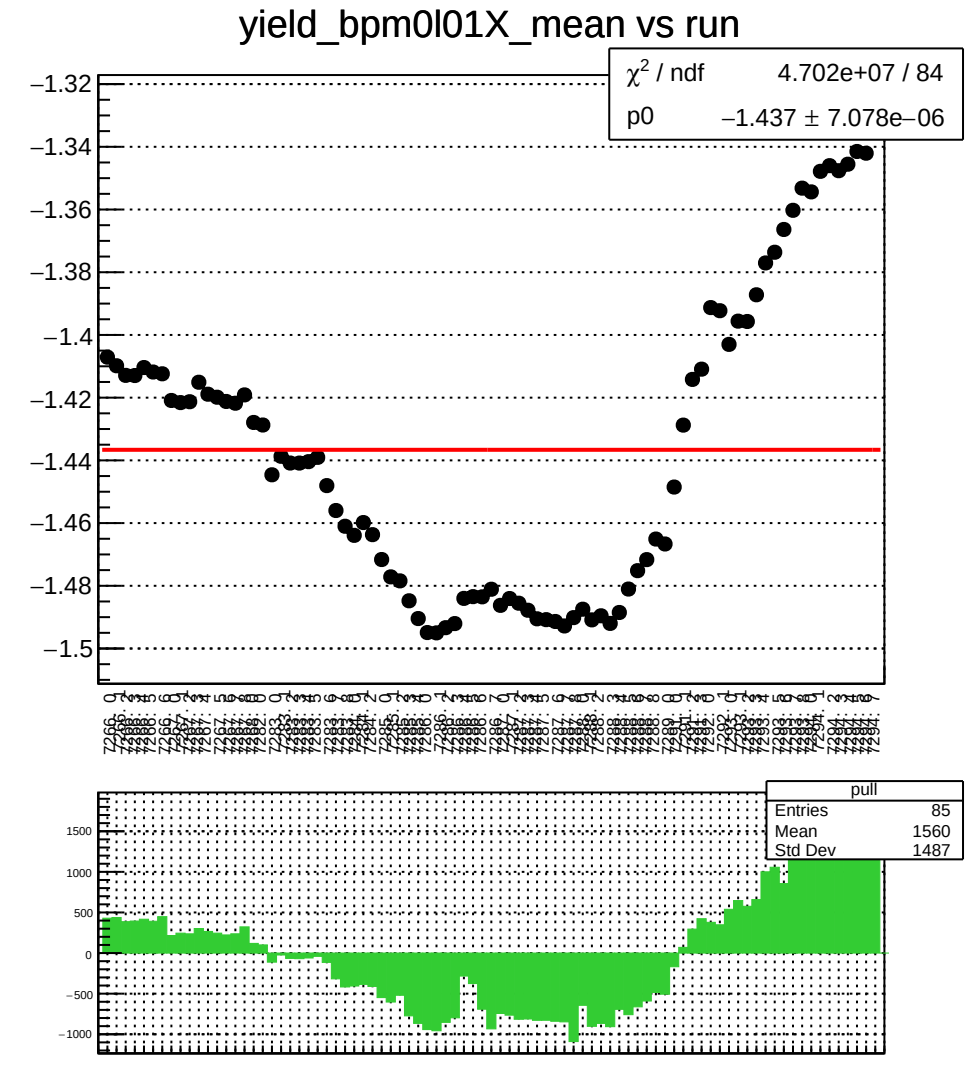

pull1D
Entries 85
Mean 3.885
Std Dev 0.6617
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

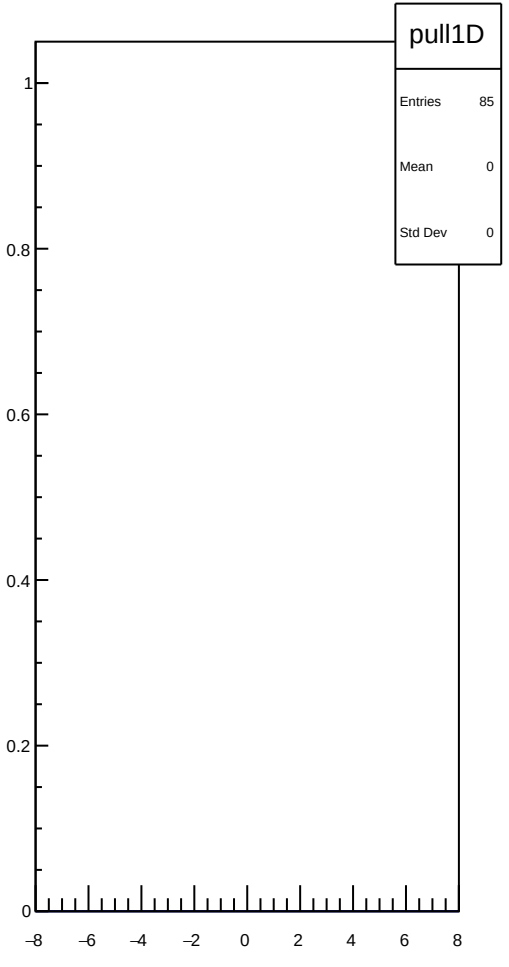

yield_bpm0i01aX_rms vs run
χ² / ndf 4.481e+04 / 84
p0 0.003959 ± 3.124e−06
0.014
0.012
0.01
0.008
0.006
0.004

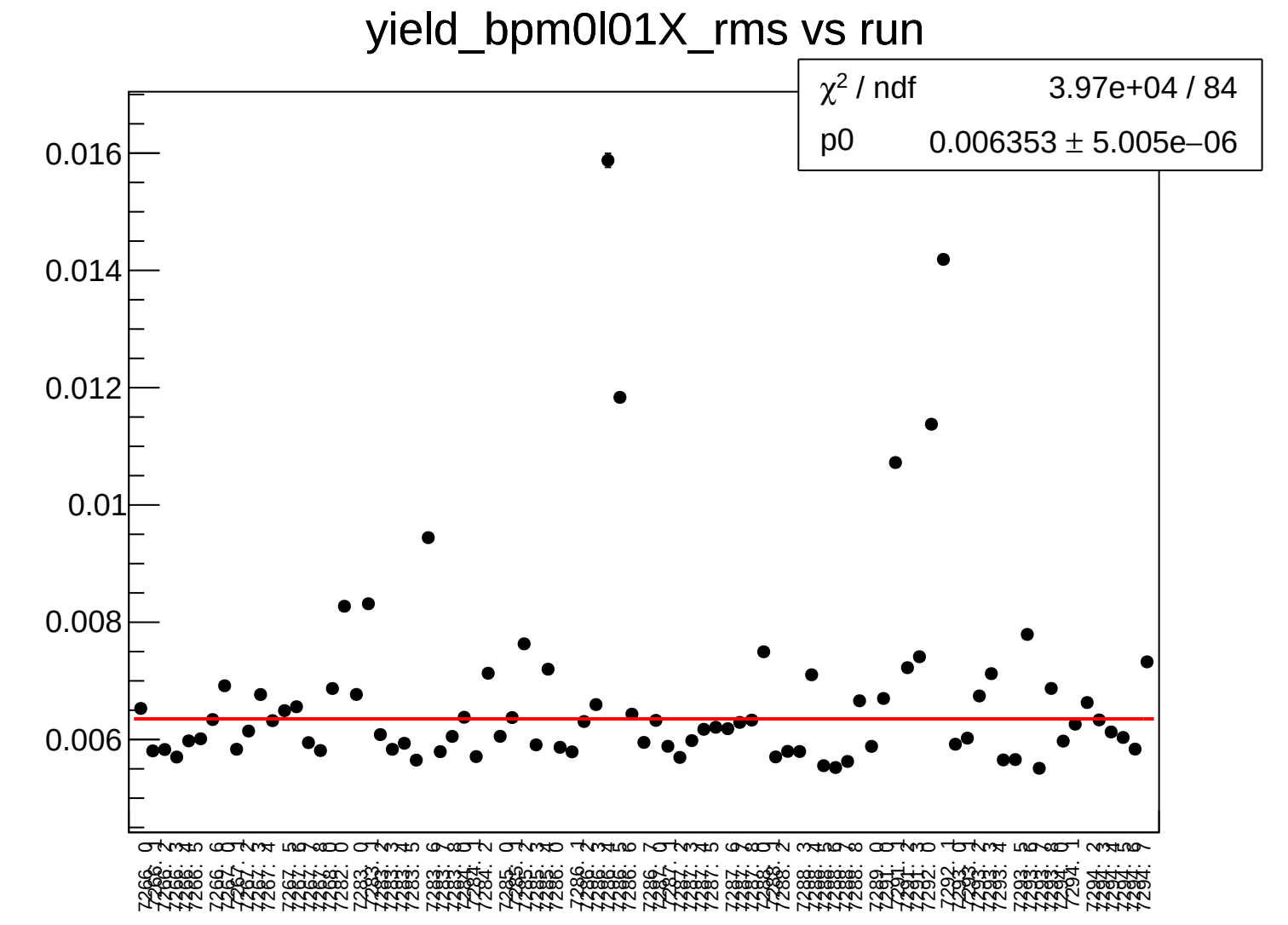

yield_bpm0i01aY_mean vs run
χ² / ndf 7.014e+06 / 84
p0 2.737 ± 3.509e−06
2.755
2.75
2.745
2.74
2.735
2.73
2.725
2.72
pull
Entries 85
Mean −5722
Std Dev 5722
400
200
0
−200
−400
−600

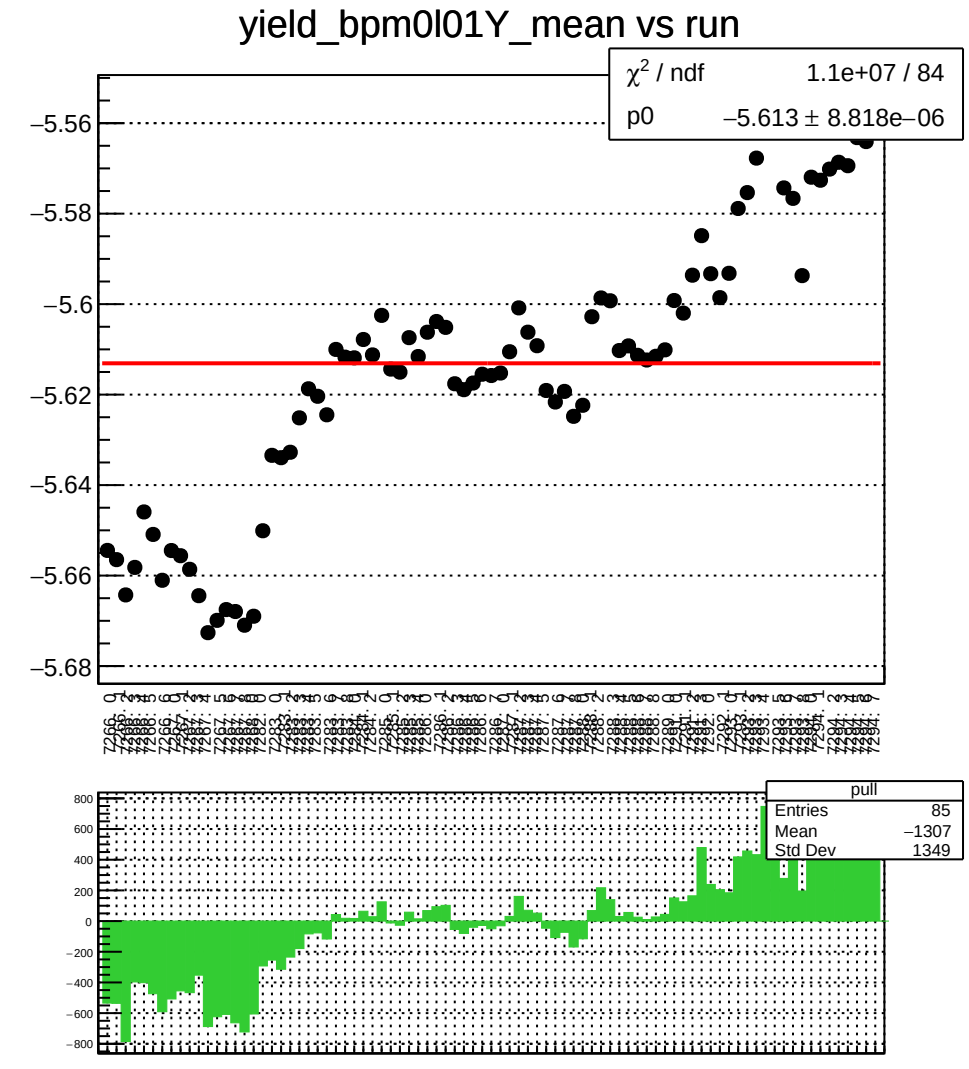

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

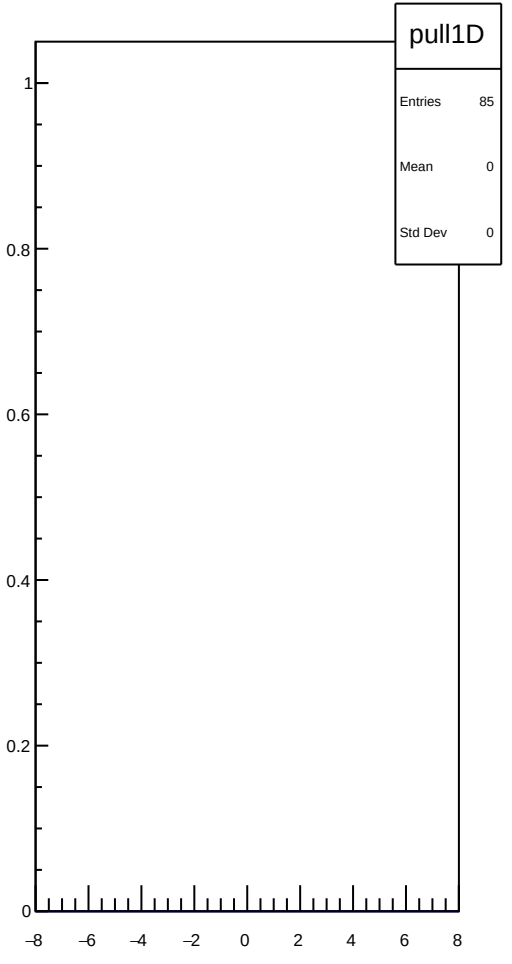

yield_bpm0i01aY_rms vs run
χ² / ndf 4.007e+04 / 84
p0 0.003149 ± 2.481e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

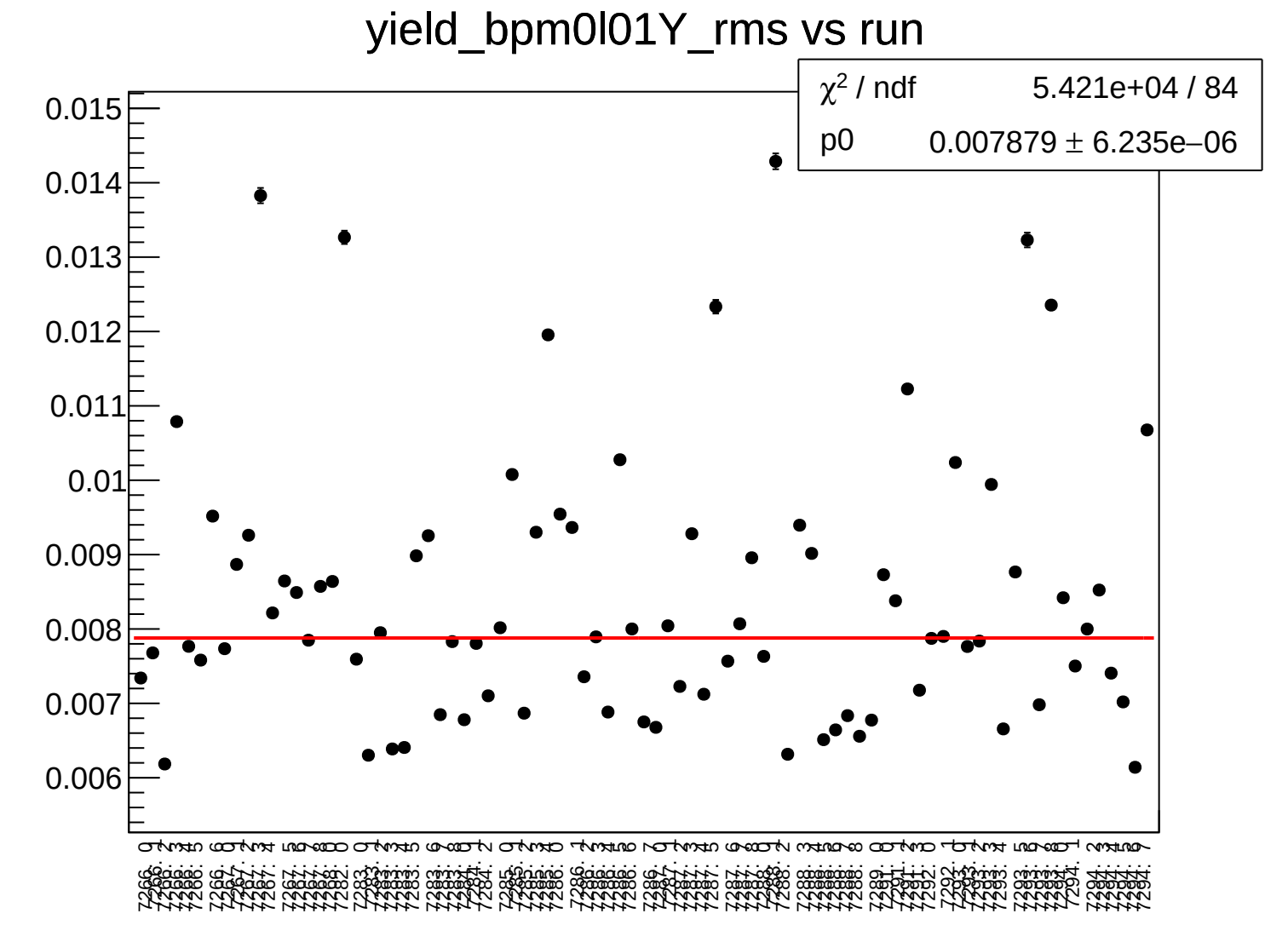

yield_bpm0l01X_mean vs run
χ² / ndf 4.702e+07 / 84
p0 −1.437 ± 7.078e−06
−1.32
−1.34
−1.36
−1.38
−1.4
−1.42
−1.44
−1.46
−1.48
−1.5
pull
Entries 85
Mean 1560
Std Dev 1487
1500
1000
500
0
−500
−1000

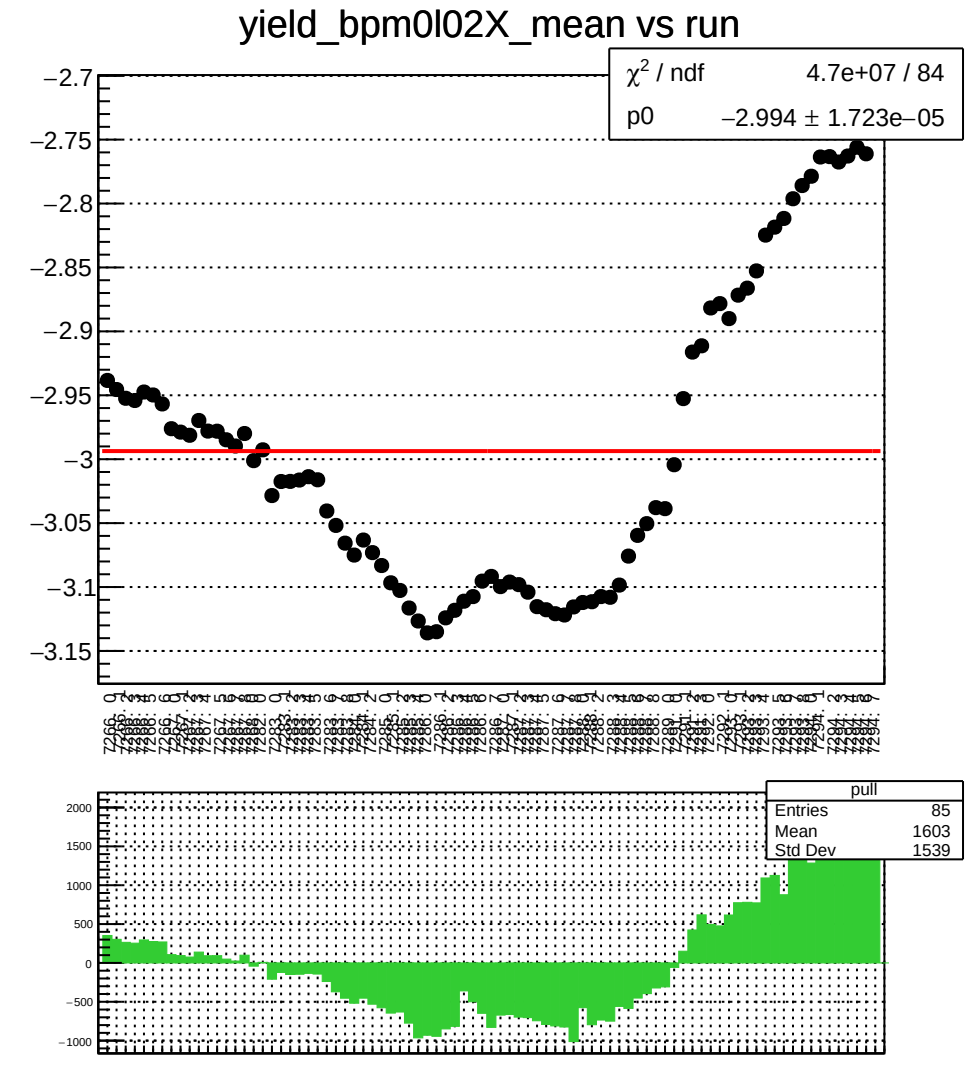

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

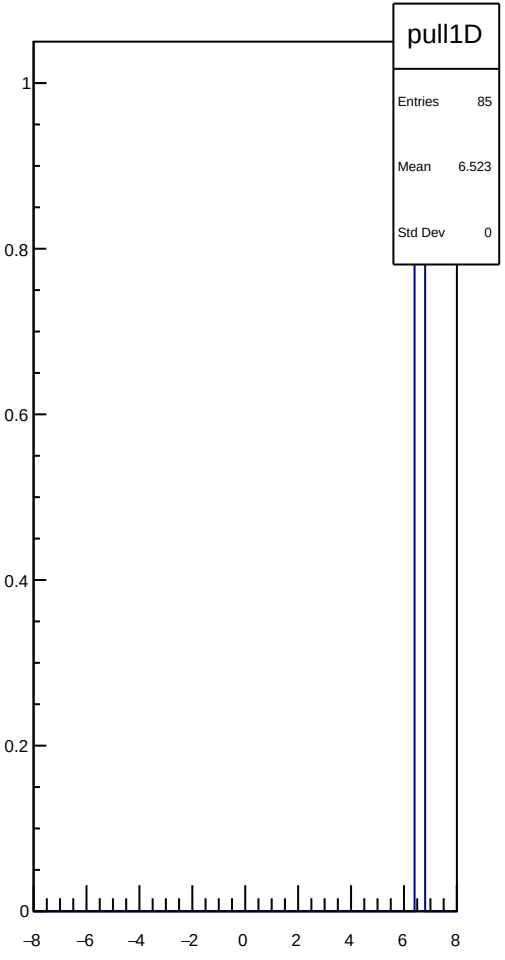

yield_bpm0l01X_rms vs run
χ² / ndf 3.97e+04 / 84
p0 0.006353 ± 5.005e−06
0.016
0.014
0.012
0.01
0.008
0.006

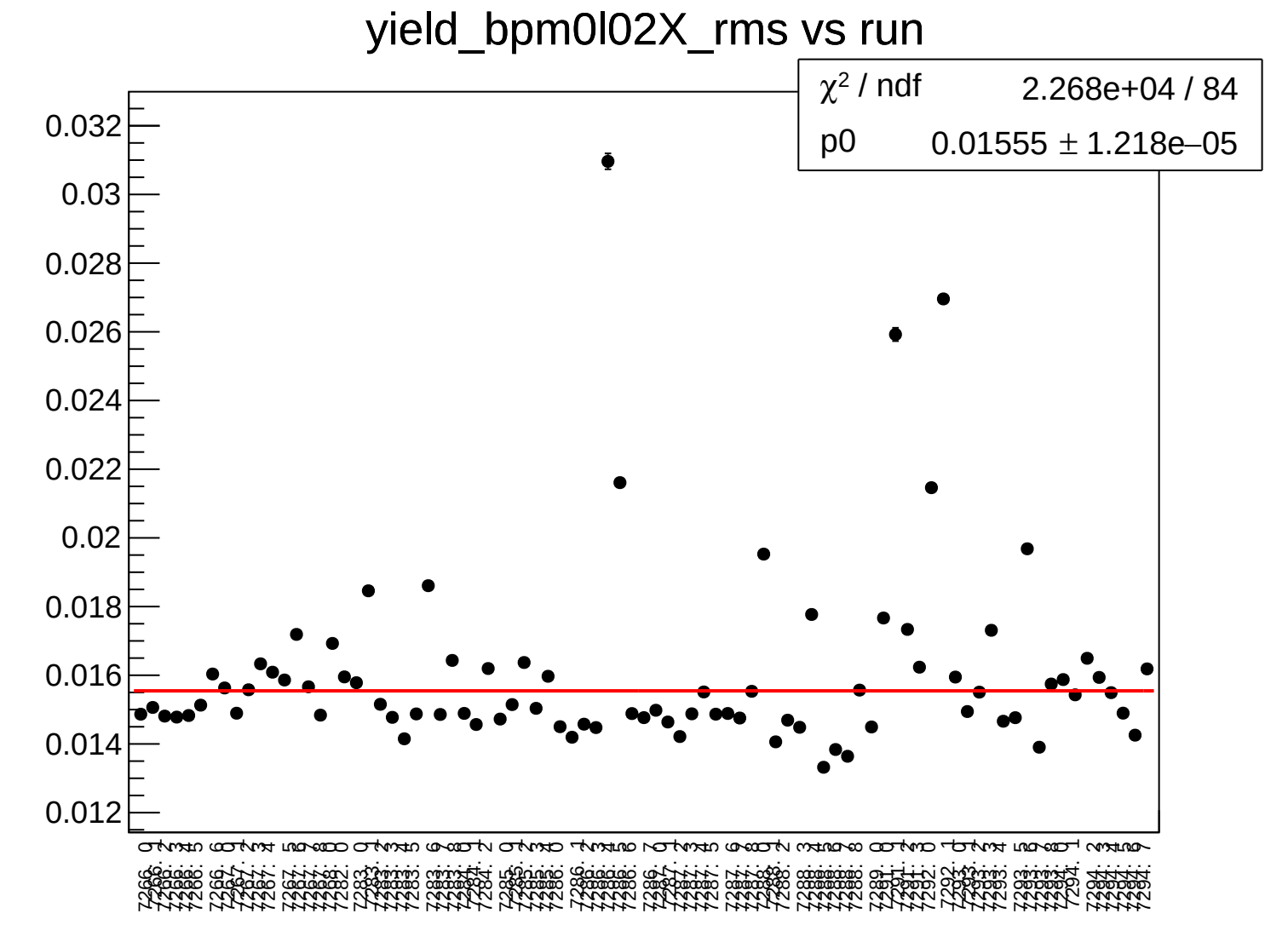

yield_bpm0l01Y_mean vs run
χ² / ndf 1.1e+07 / 84
p0 −5.613 ± 8.818e−06
−5.56
−5.58
−5.6
−5.62
−5.64
−5.66
−5.68
pull
Entries 85
Mean −1307
Std Dev 1349
800
600
400
200
0
−200
−400
−600
−800

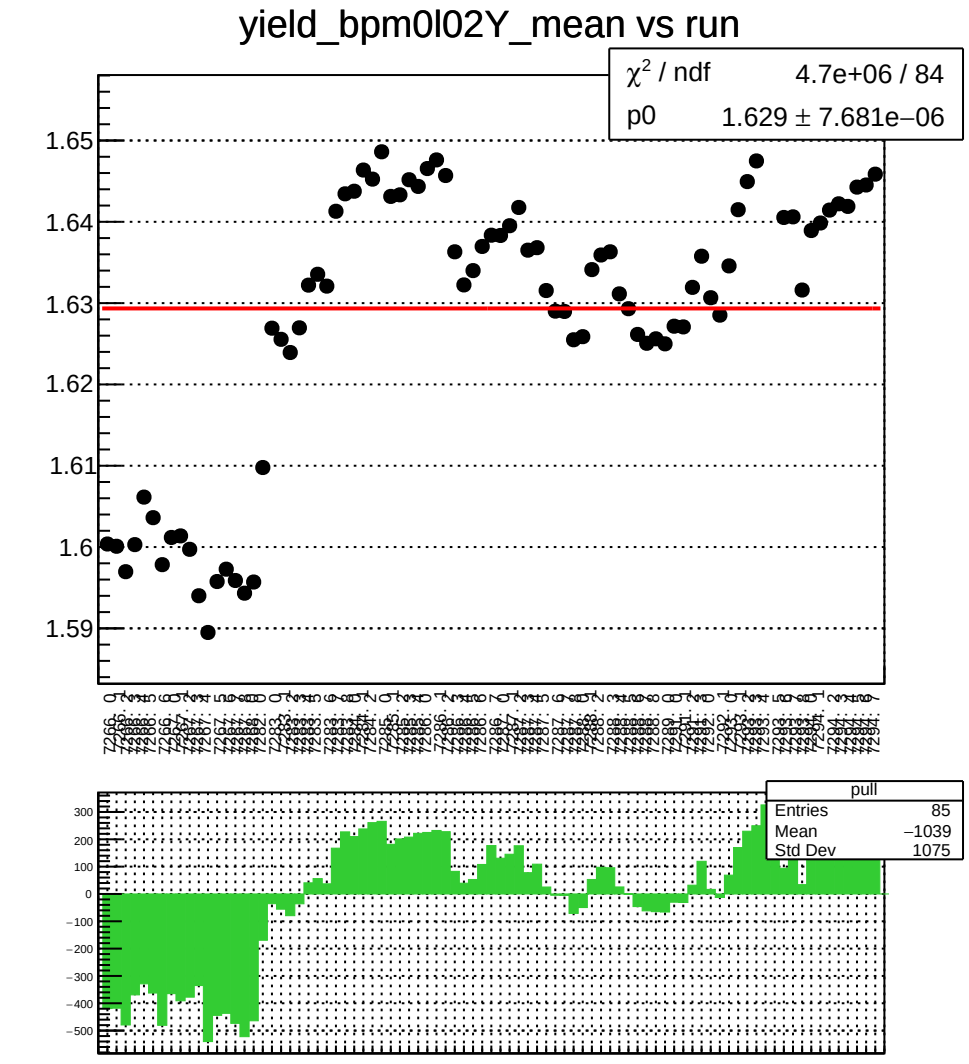

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

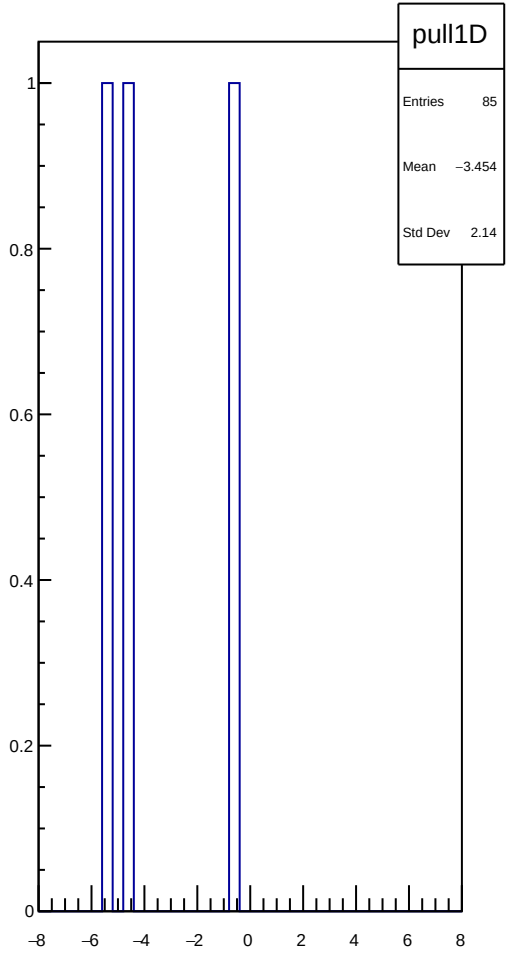

yield_bpm0l01Y_rms vs run
χ^2 / ndf 5.421e+04 / 84
p0 0.007879 ± 6.235e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

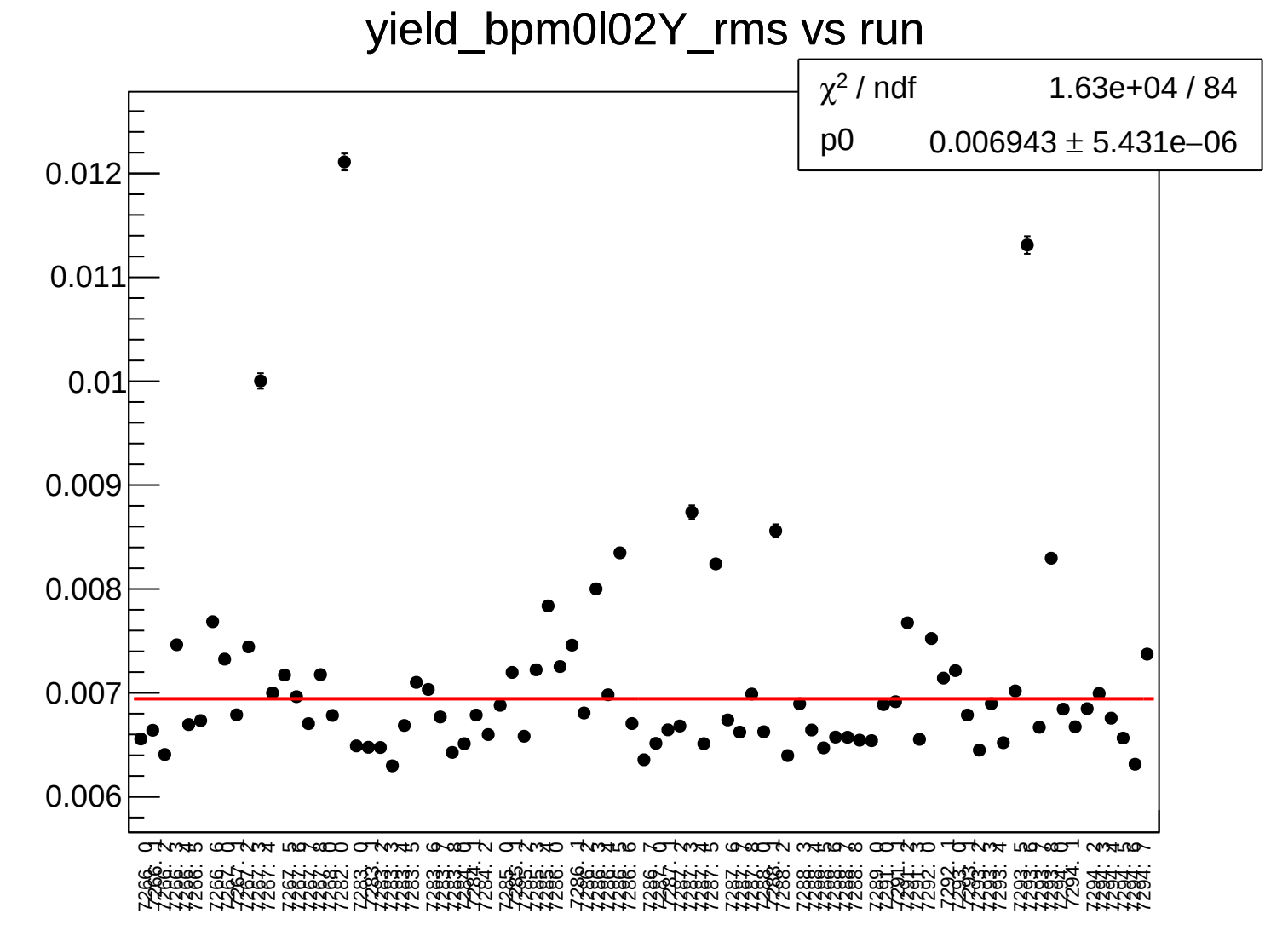

yield_bpm0l02X_mean vs run
χ² / ndf 4.7e+07 / 84
p0 −2.994 ± 1.723e−05
pull
Entries 85
Mean 1603
Std Dev 1539

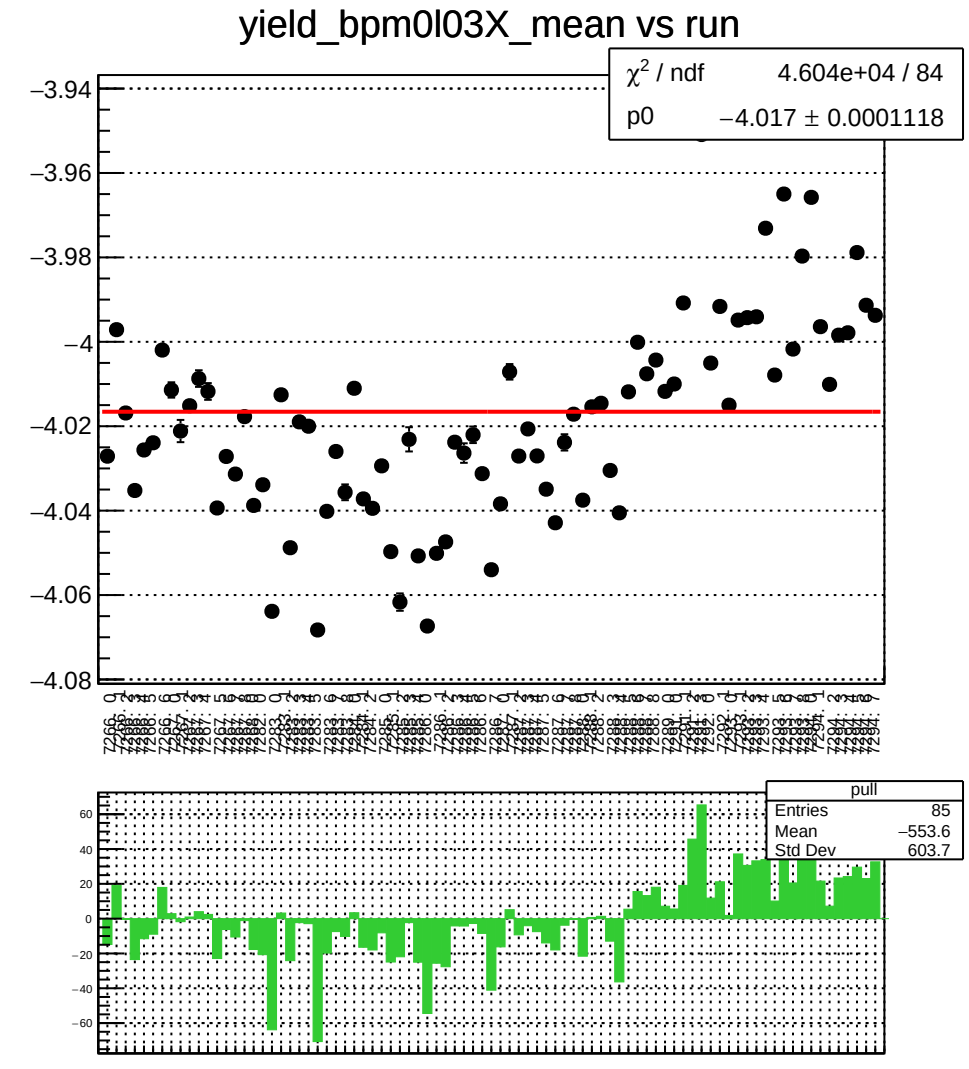

pull1D
Entries 85
Mean 6.523
Std Dev 0

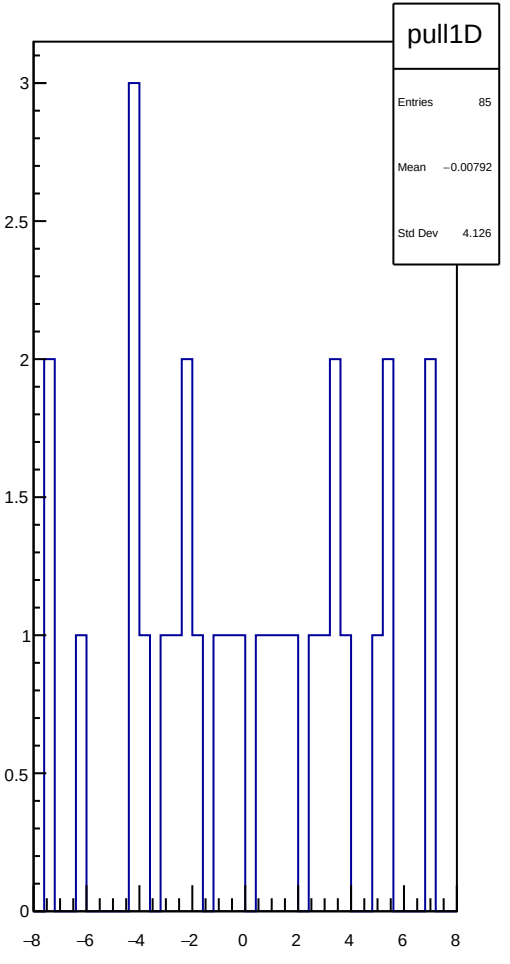

yield_bpm0l02X_rms vs run
χ² / ndf 2.268e+04 / 84
p0 0.01555 ± 1.218e–05
0.032
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

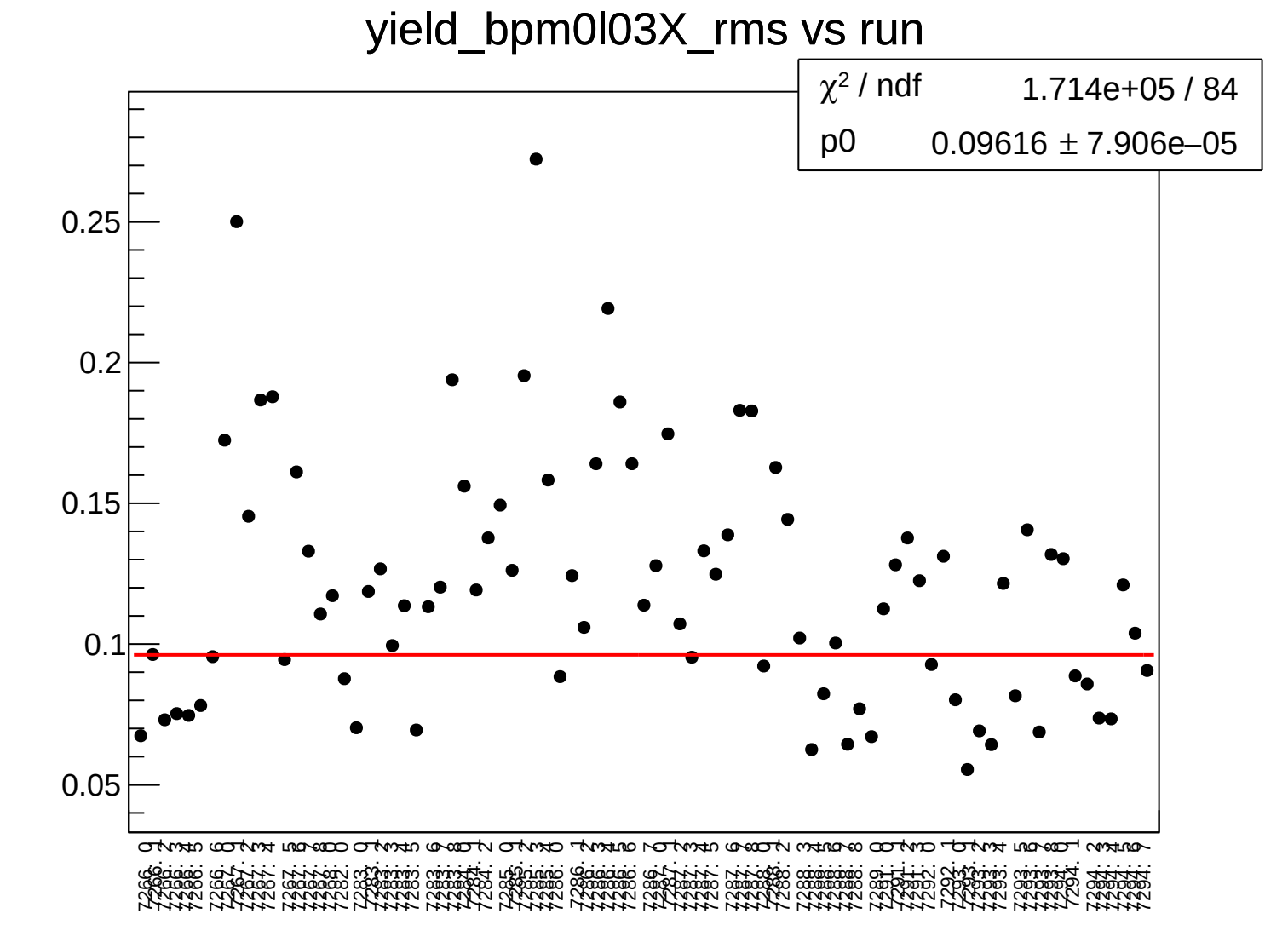

yield_bpm0l02Y_mean vs run
χ² / ndf 4.7e+06 / 84
p0 1.629 ± 7.681e−06
1.65
1.64
1.63
1.62
1.61
1.6
1.59
pull
Entries 85
Mean −1039
Std Dev 1075
300
200
100
0
−100
−200
−300
−400
−500

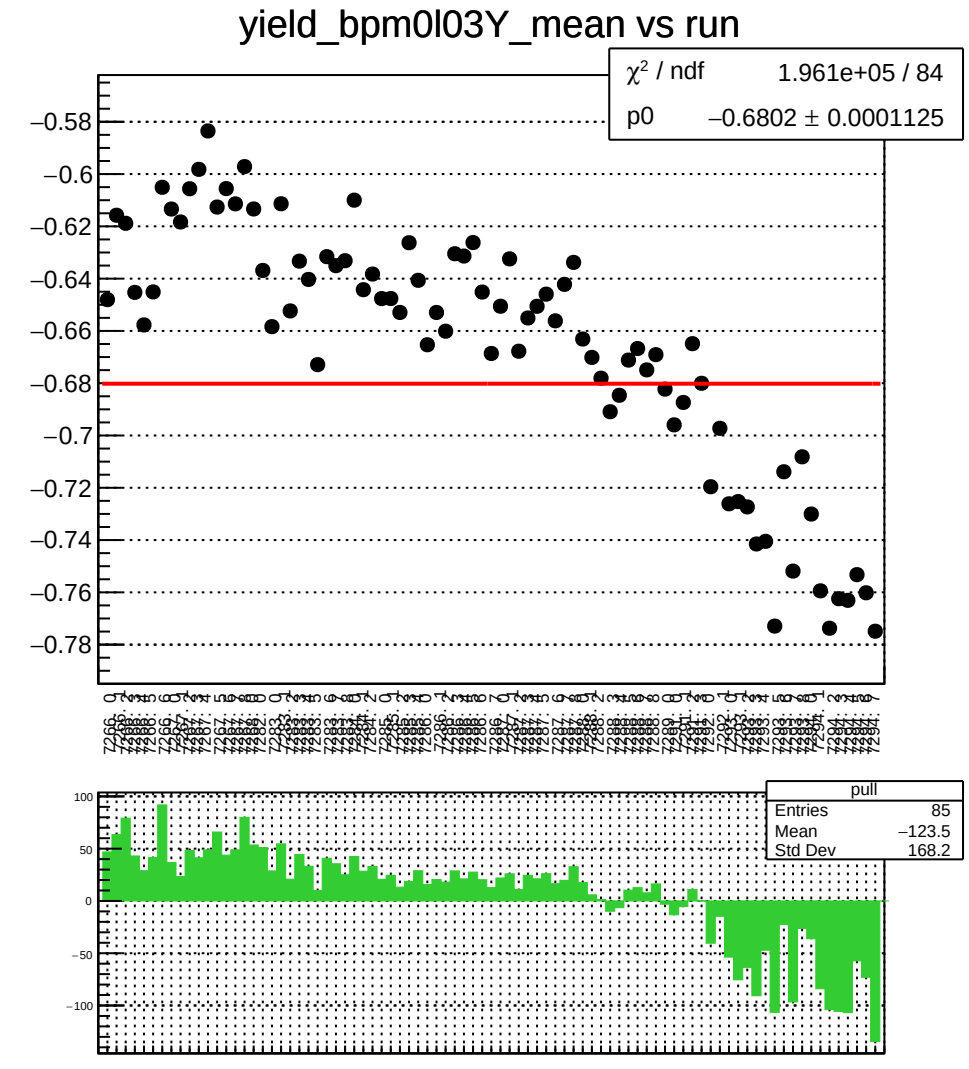

pull1D
Entries 85
Mean −3.454
Std Dev 2.14
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

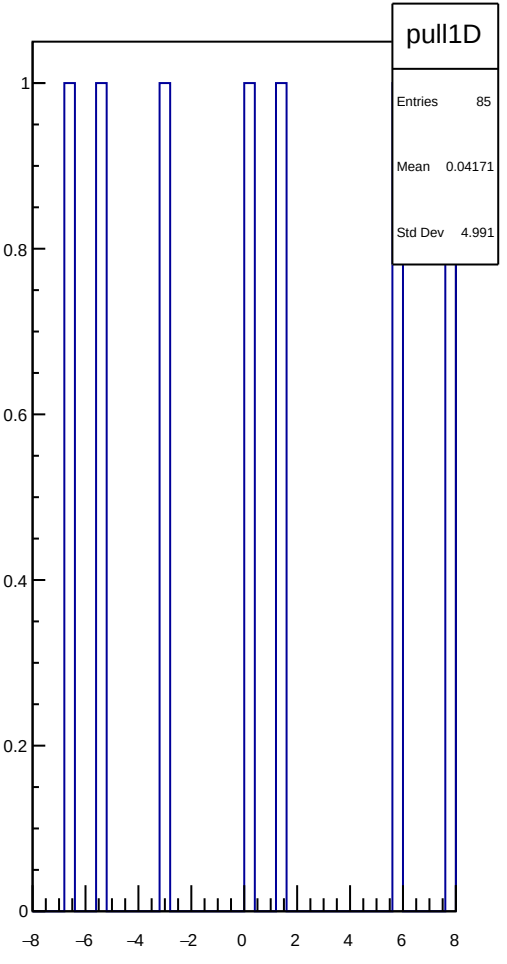

yield_bpm0l02Y_rms vs run
χ² / ndf 1.63e+04 / 84
p0 0.006943 ± 5.431e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006

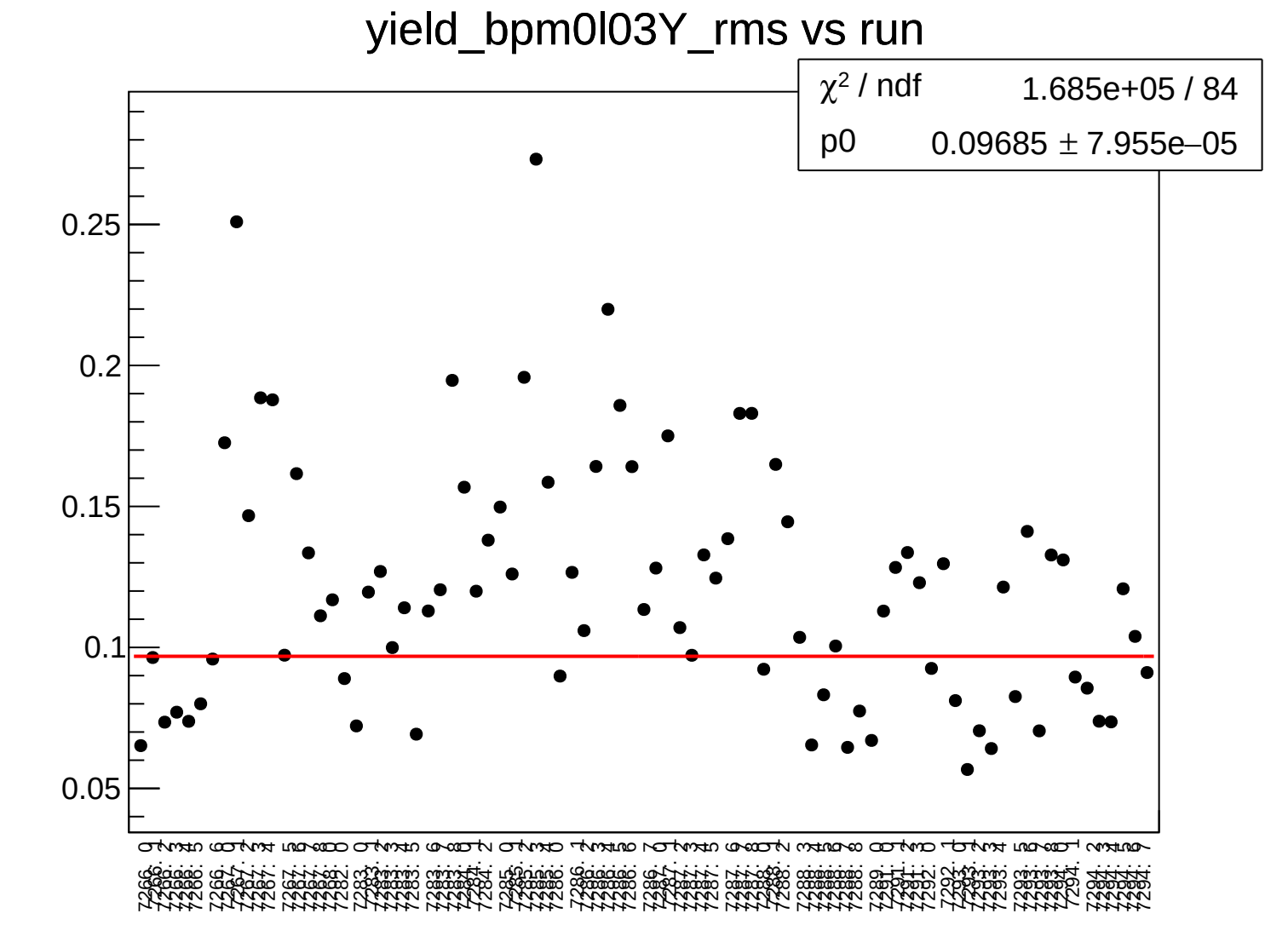

yield_bpm0l03X_mean vs run
χ² / ndf 4.604e+04 / 84
p0 −4.017 ± 0.0001118
−3.94
−3.96
−3.98
−4
−4.02
−4.04
−4.06
−4.08
pull
Entries 85
Mean −553.6
Std Dev 603.7
60
40
20
0
−20
−40
−60

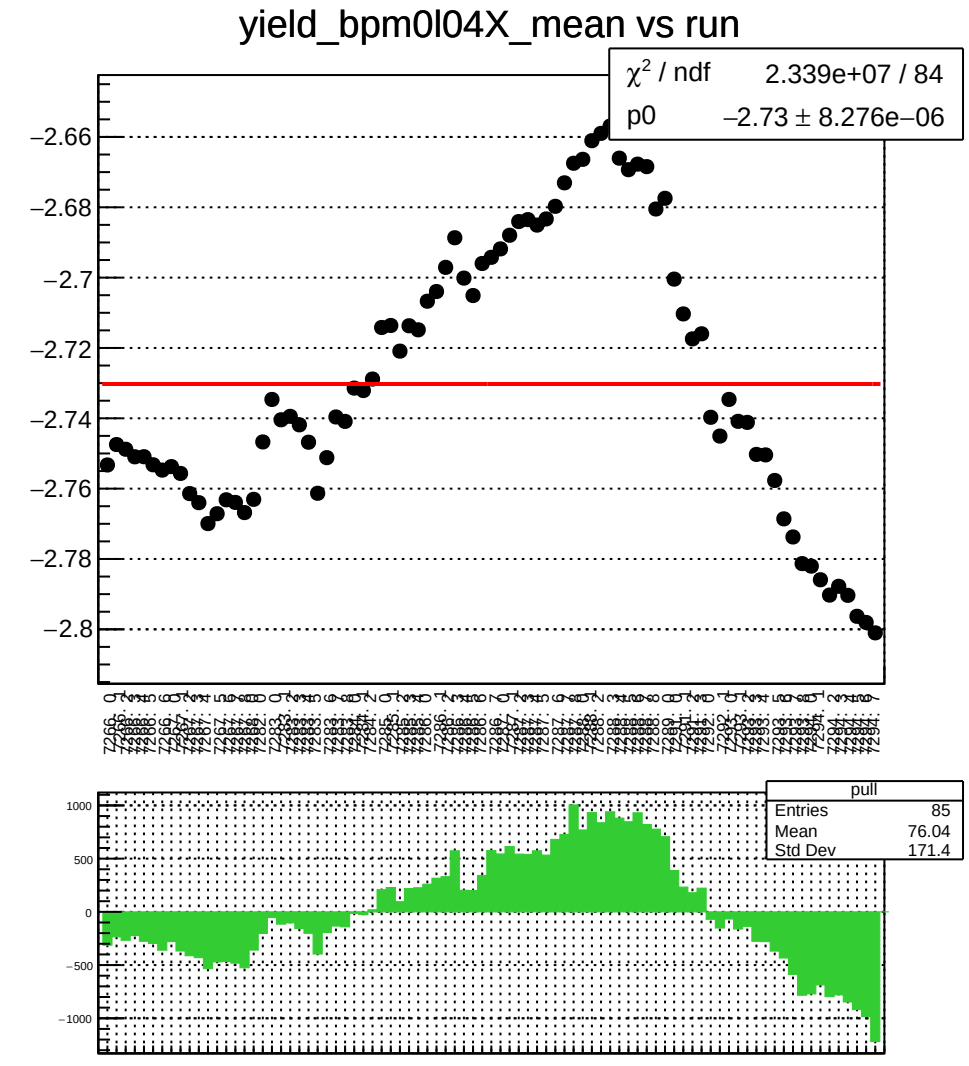

pull1D
Entries 85
Mean −0.00792
Std Dev 4.126
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

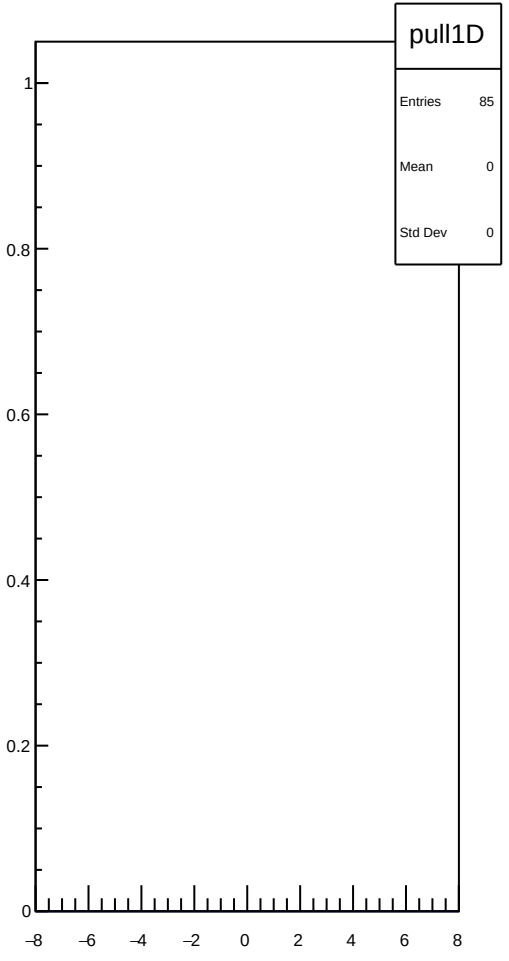

yield_bpm0l03X_rms vs run
χ² / ndf 1.714e+05 / 84
p0 0.09616 ± 7.906e–05
0.25
0.2
0.15
0.1
0.05

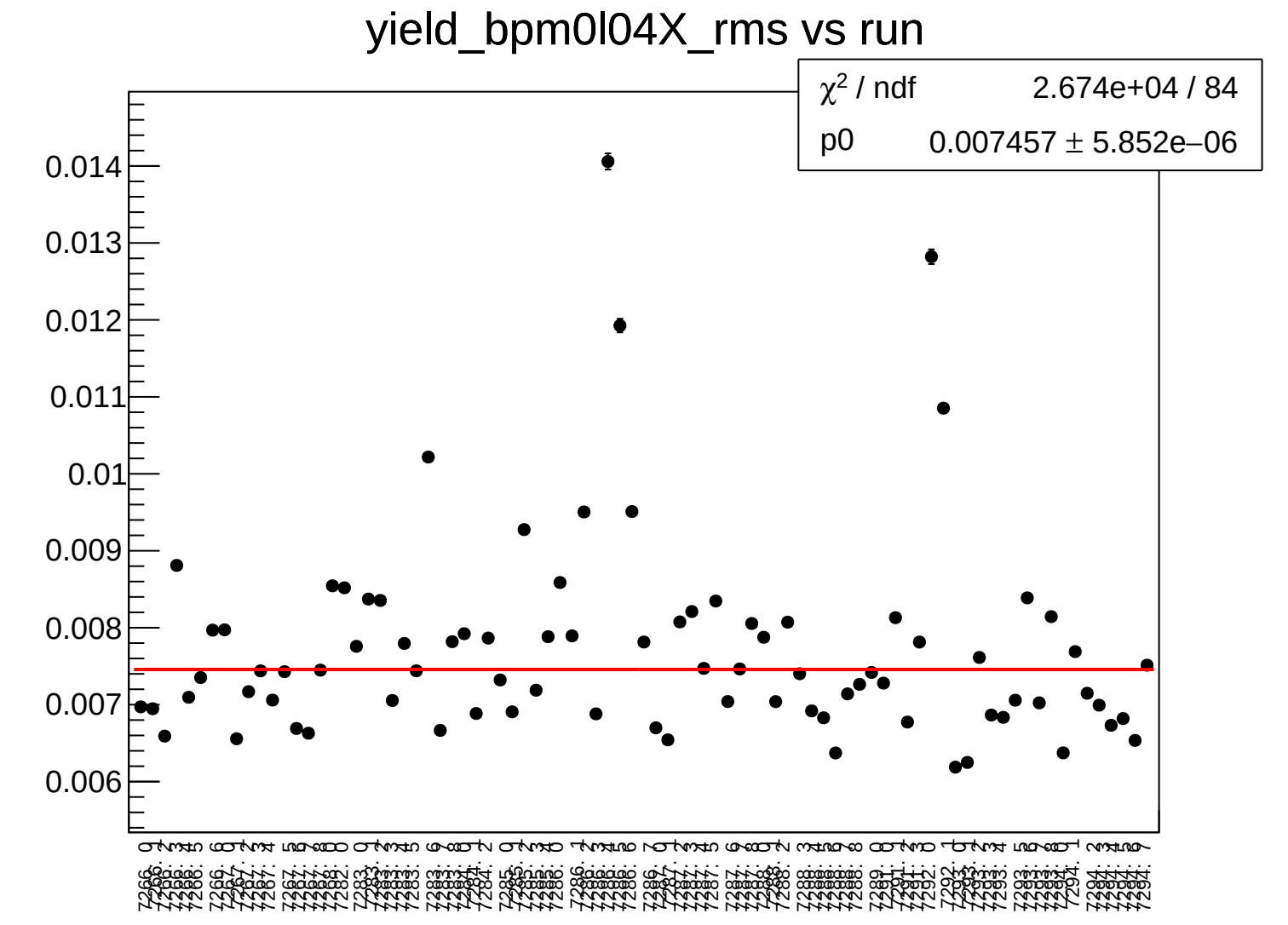

yield_bpm0l03Y_mean vs run
χ² / ndf 1.961e+05 / 84
p0 −0.6802 ± 0.0001125
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
−0.74
−0.76
−0.78
pull
Entries 85
Mean −123.5
Std Dev 168.2
100
50
0
−50
−100

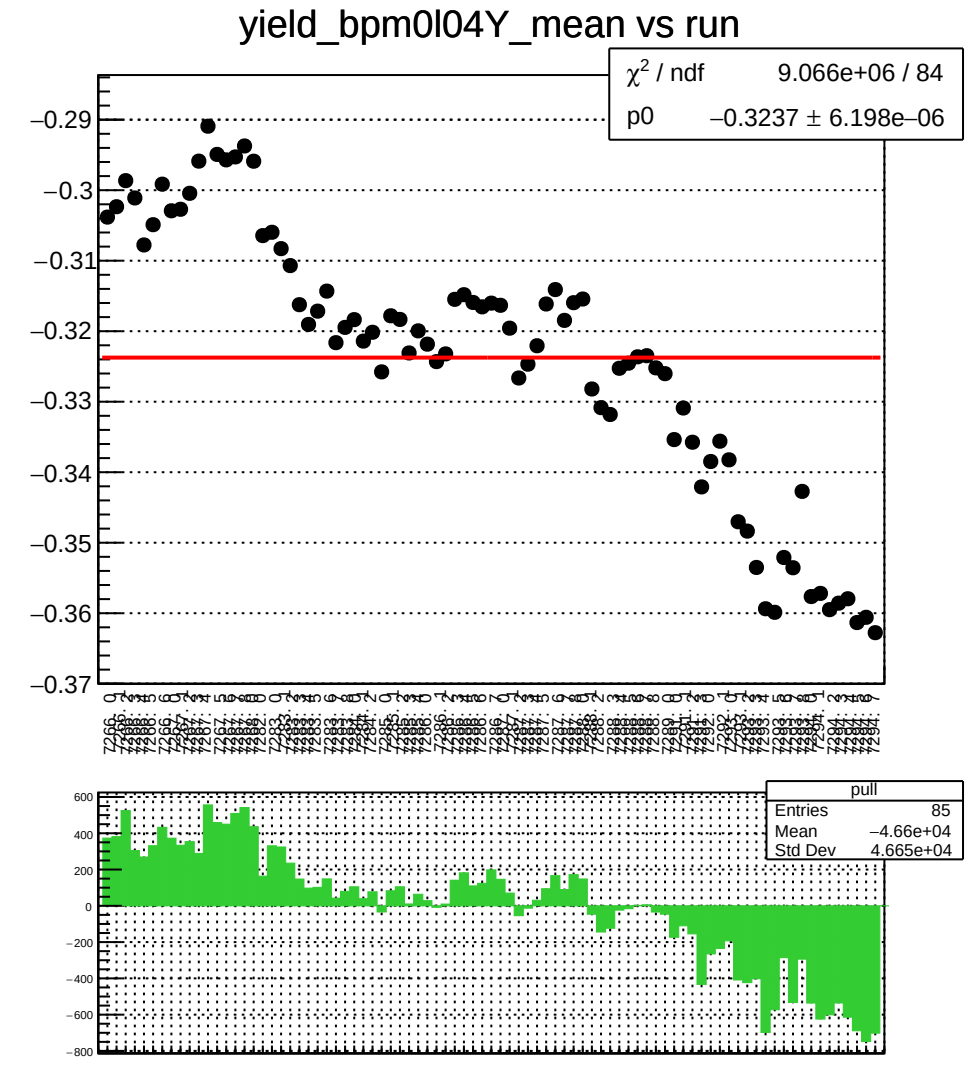

pull1D
Entries 85
Mean 0.04171
Std Dev 4.991
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

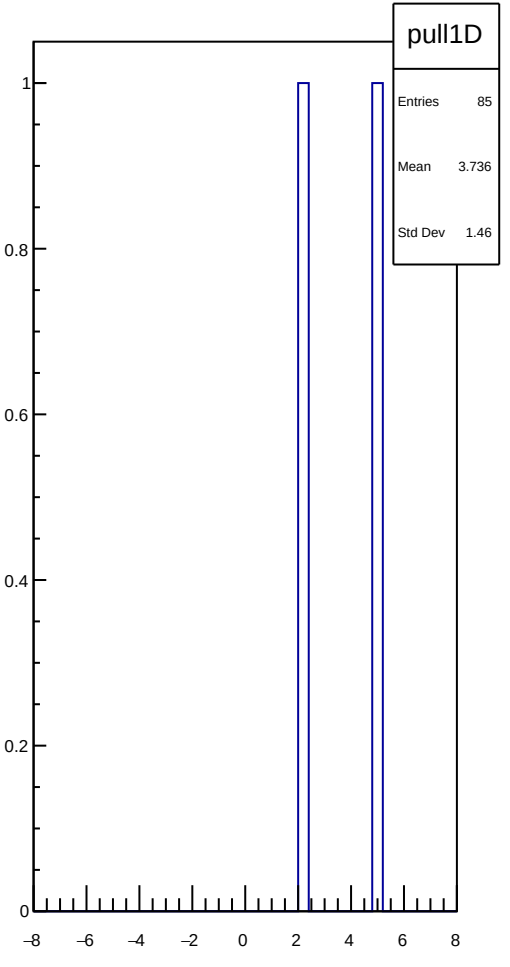

yield_bpm0l03Y_rms vs run
χ² / ndf 1.685e+05 / 84
p0 0.09685 ± 7.955e–05
0.25
0.2
0.15
0.1
0.05

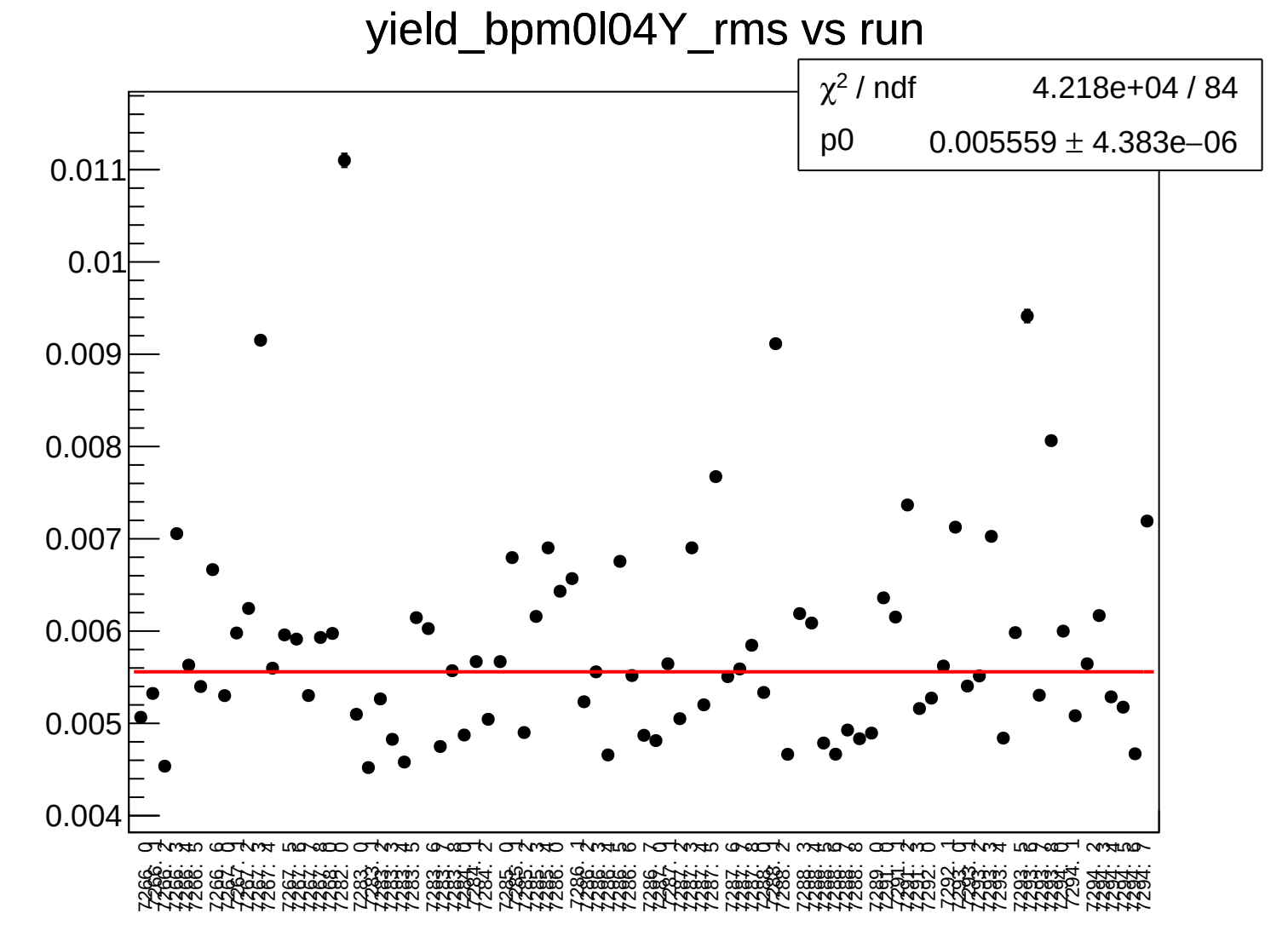

yield_bpm0l04X_mean vs run
χ² / ndf 2.339e+07 / 84
p0 −2.73 ± 8.276e−06
−2.66
−2.68
−2.7
−2.72
−2.74
−2.76
−2.78
−2.8
pull
Entries 85
Mean 76.04
Std Dev 171.4
1000
500
0
−500
−1000

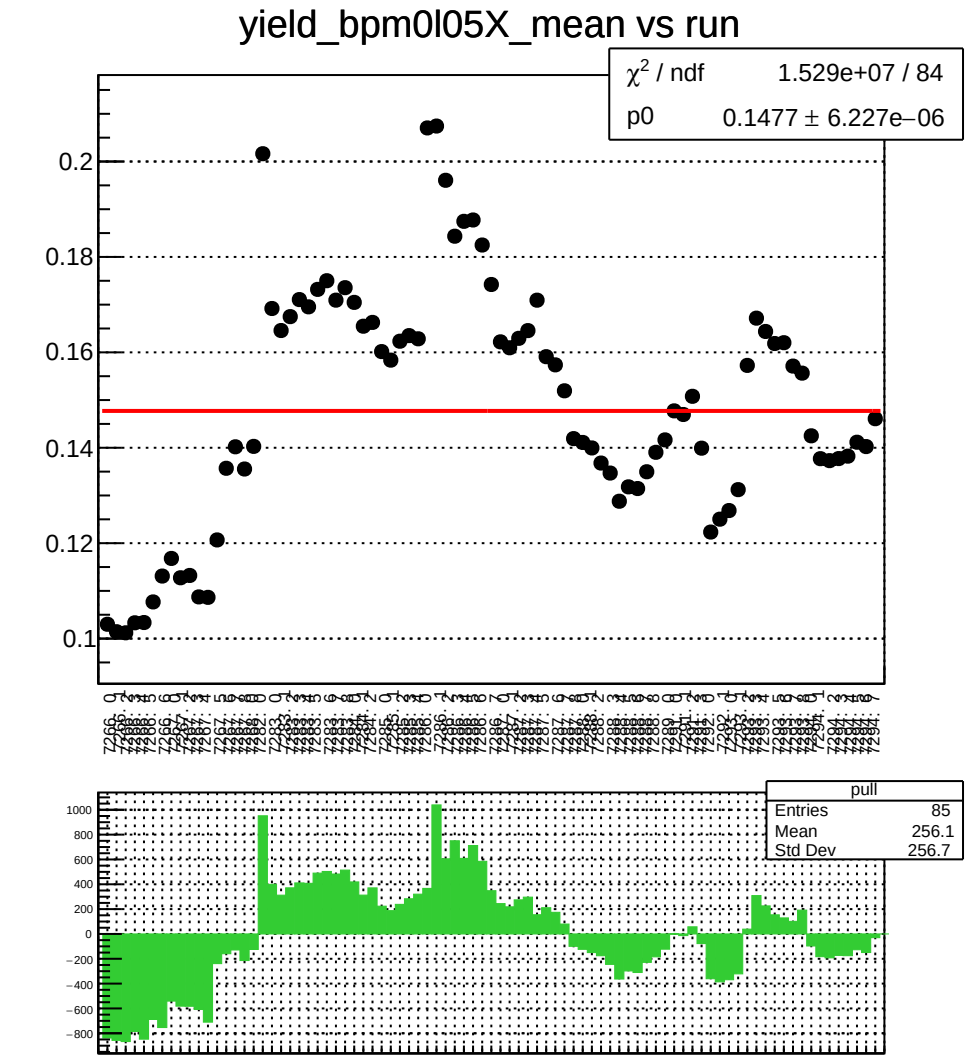

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

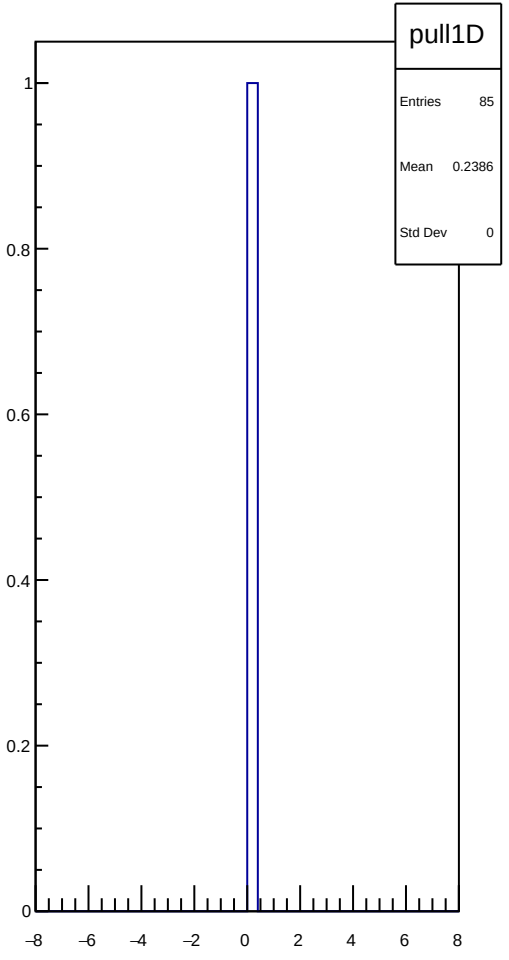

yield_bpm0l04X_rms vs run
χ² / ndf 2.674e+04 / 84
p0 0.007457 ± 5.852e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

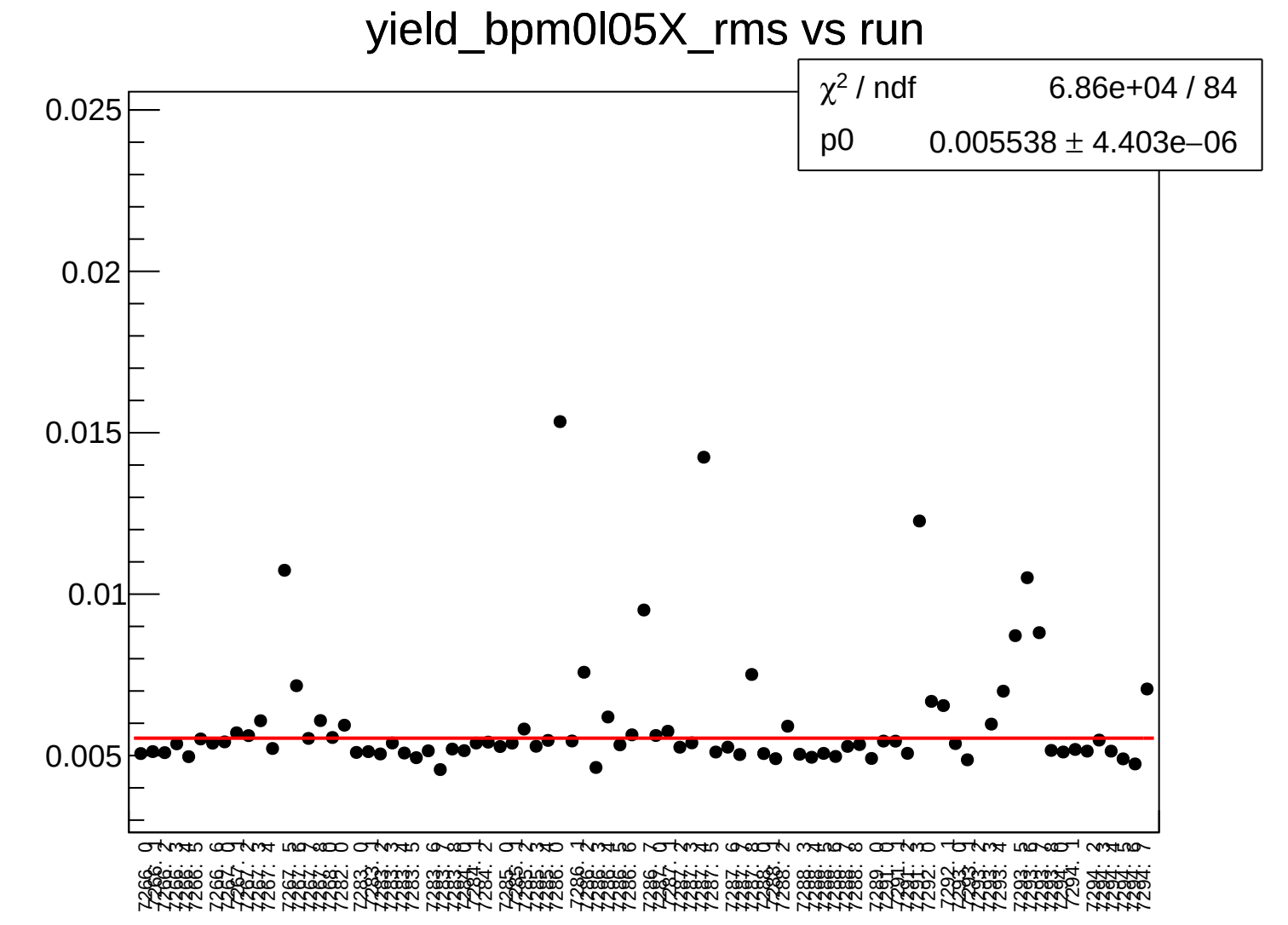

yield_bpm0l04Y_mean vs run
χ² / ndf 9.066e+06 / 84
p0 −0.3237 ± 6.198e−06
−0.29
−0.3
−0.31
−0.32
−0.33
−0.34
−0.35
−0.36
−0.37
pull
Entries 85
Mean −4.66e+04
Std Dev 4.665e+04
600
400
200
0
−200
−400
−600
−800

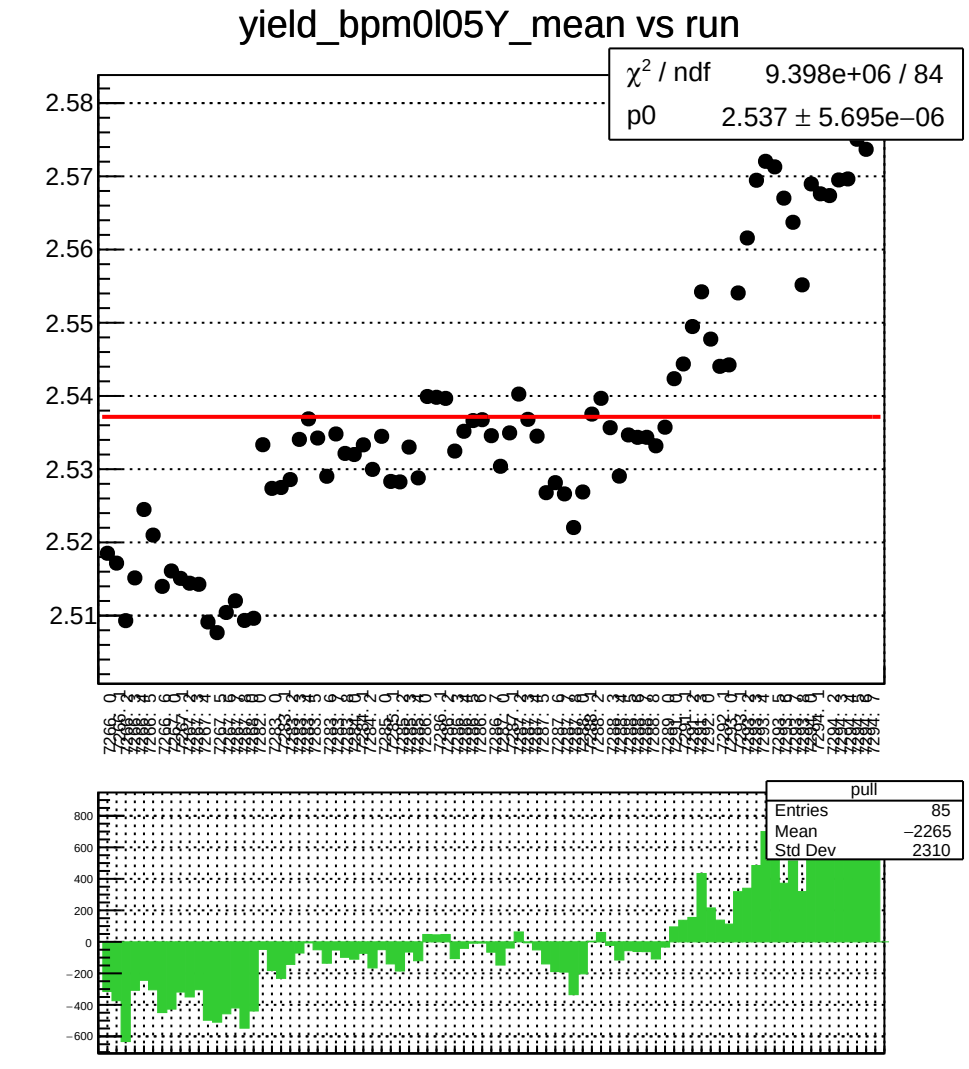

pull1D
Entries 85
Mean 3.736
Std Dev 1.46
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

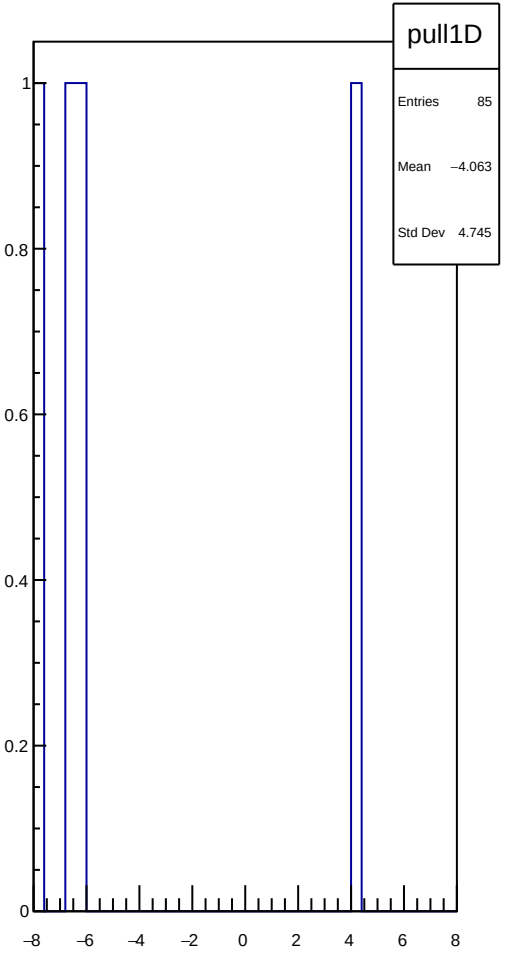

yield_bpm0l04Y_rms vs run
χ² / ndf 4.218e+04 / 84
p0 0.005559 ± 4.383e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

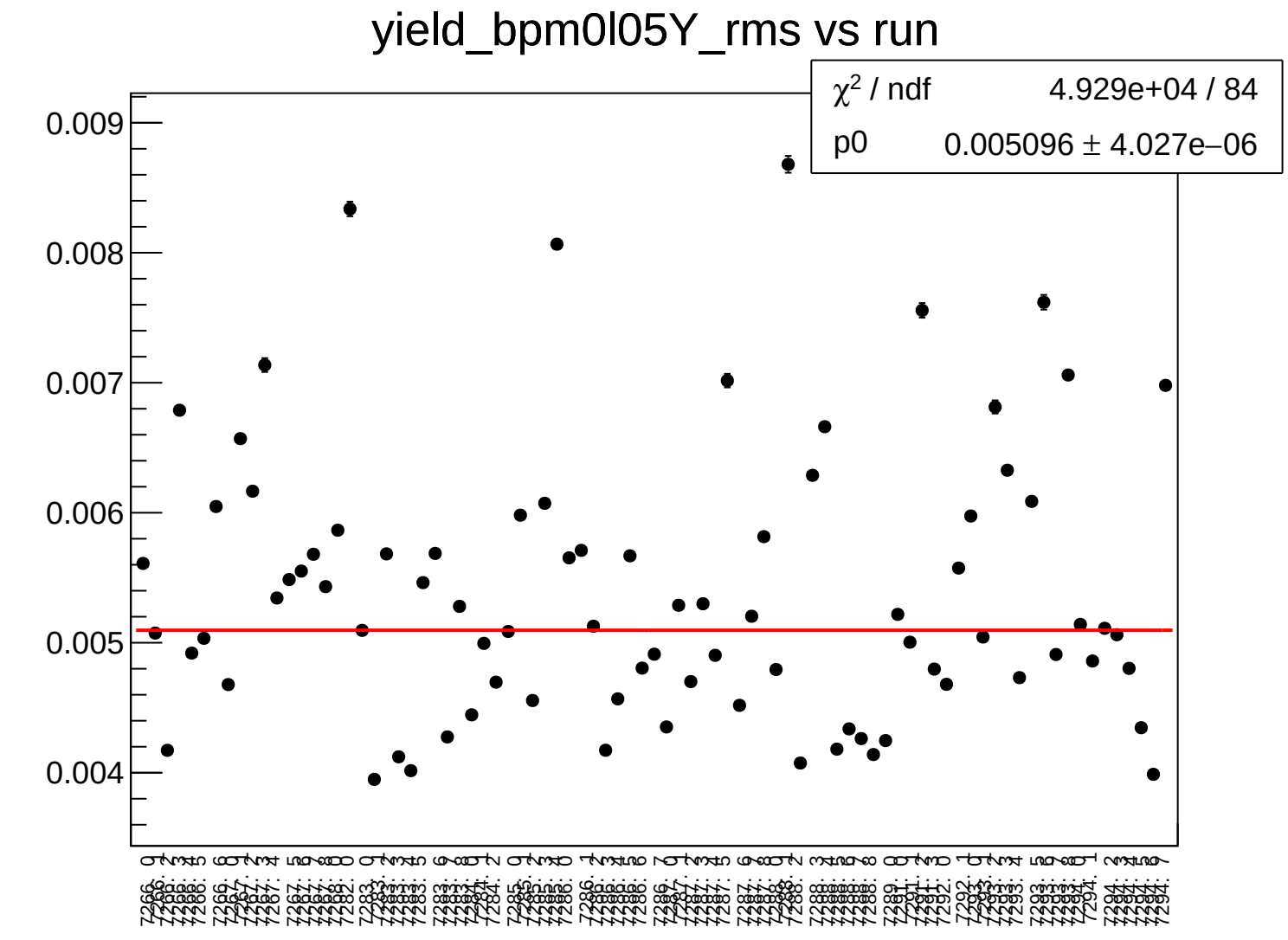

yield_bpm0l05X_mean vs run
χ² / ndf 1.529e+07 / 84
p0 0.1477 ± 6.227e−06
0.2
0.18
0.16
0.14
0.12
0.1
pull
Entries 85
Mean 256.1
Std Dev 256.7
1000
800
600
400
200
0
−200
−400
−600
−800

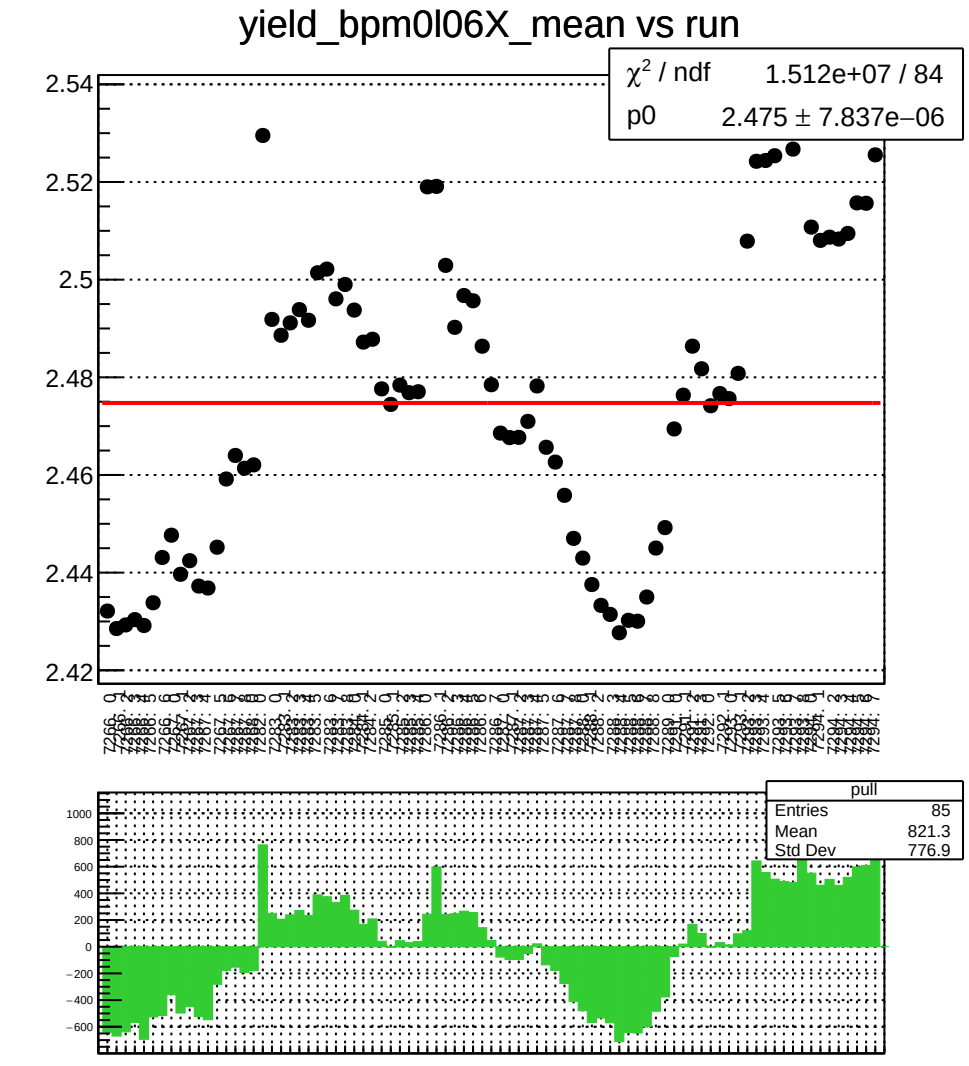

pull1D
Entries 85
Mean 0.2386
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

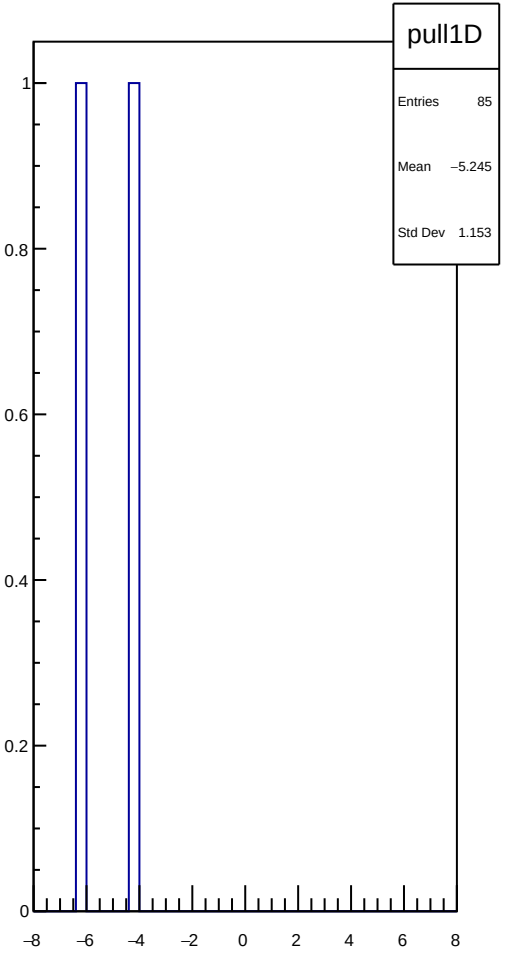

yield_bpm0l05X_rms vs run
χ² / ndf 6.86e+04 / 84
p0 0.005538 ± 4.403e−06
0.025
0.02
0.015
0.01
0.005

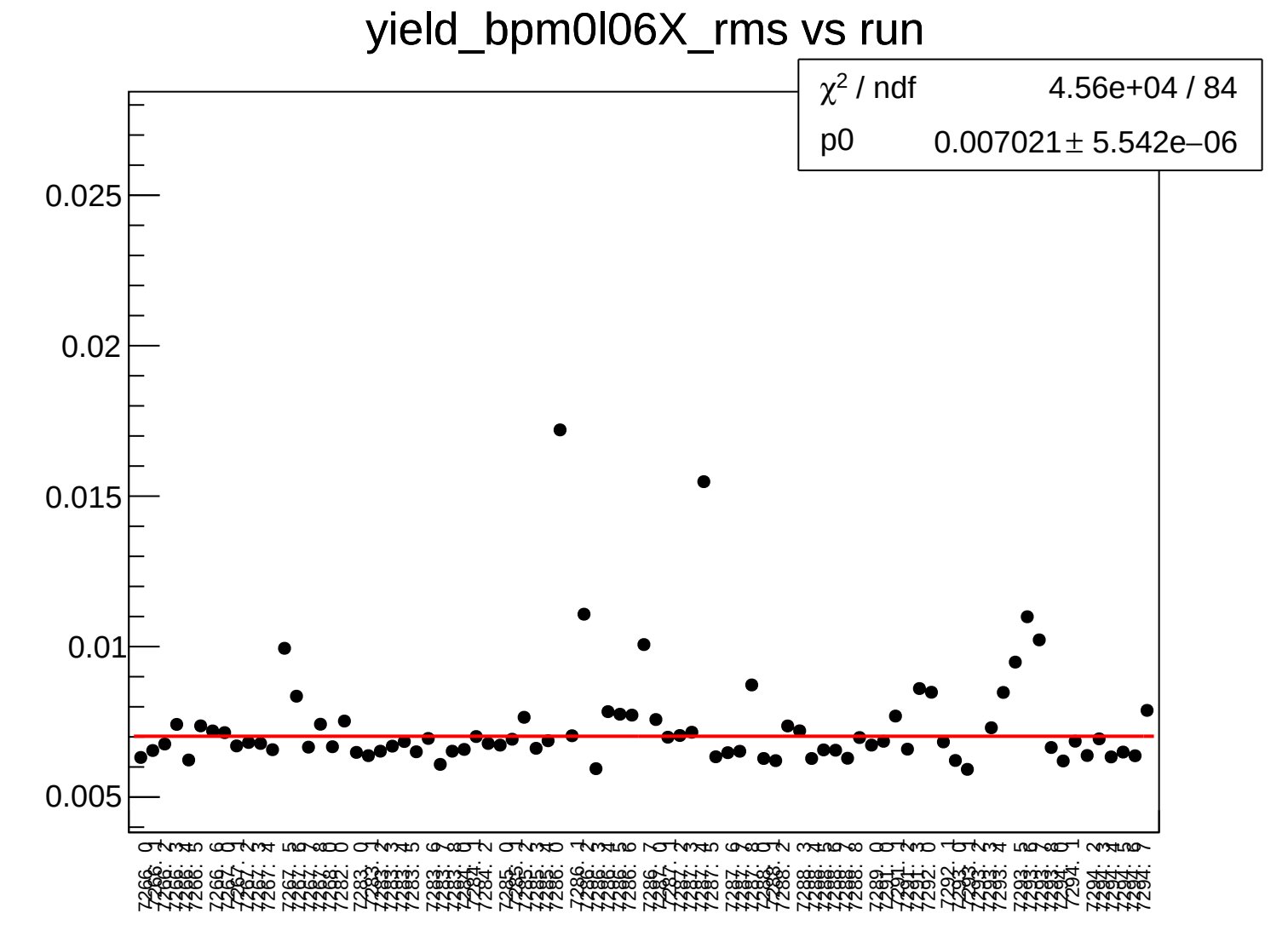

yield_bpm0l05Y_mean vs run
χ² / ndf 9.398e+06 / 84
p0 2.537 ± 5.695e−06
2.58
2.57
2.56
2.55
2.54
2.53
2.52
2.51
pull
Entries 85
Mean −2265
Std Dev 2310
800
600
400
200
0
−200
−400
−600

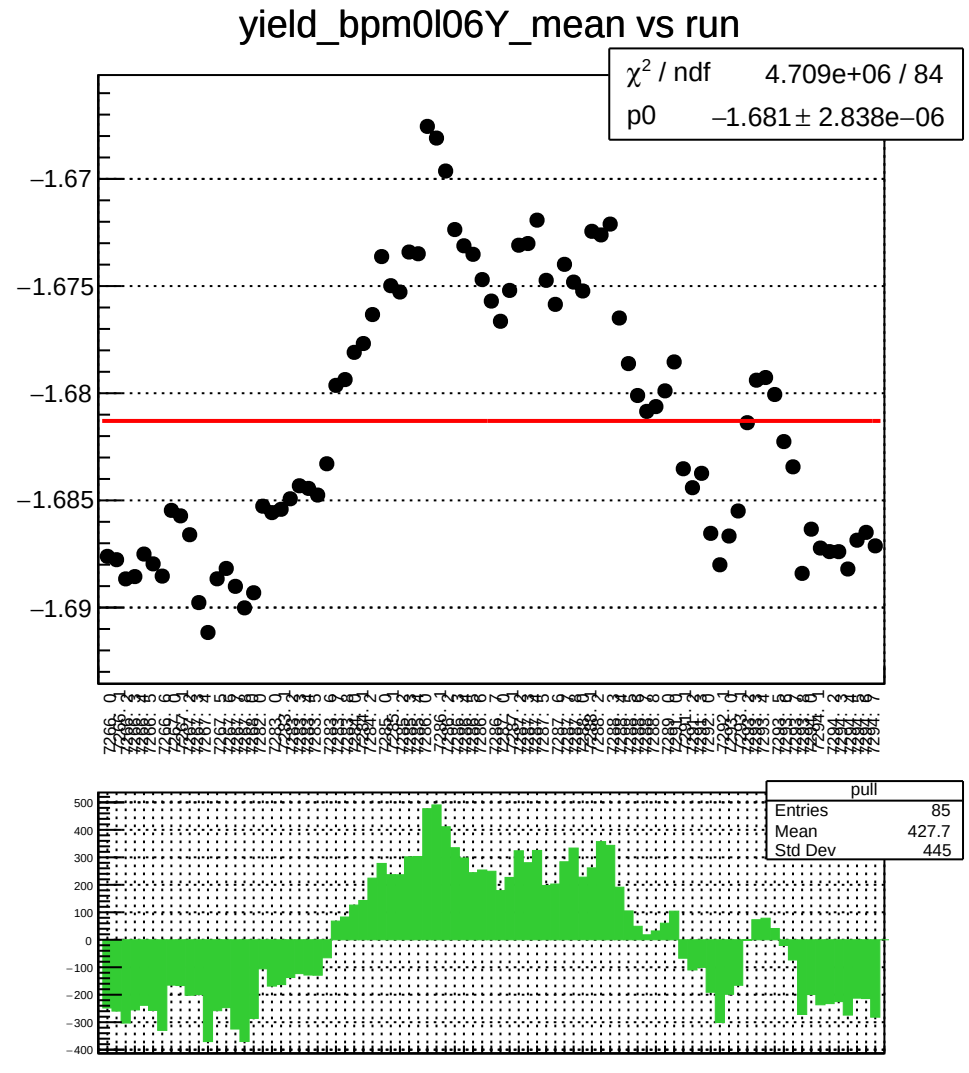

pull1D
Entries 85
Mean −4.063
Std Dev 4.745
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

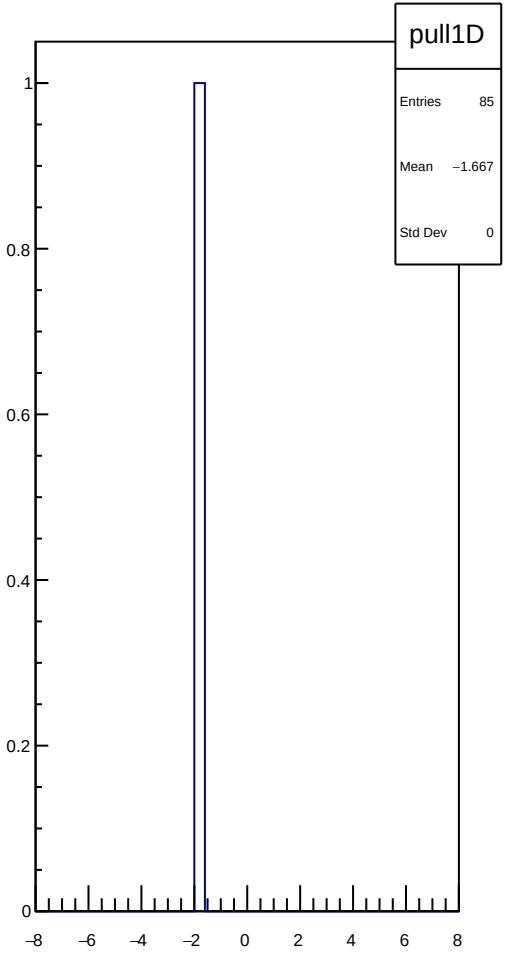

yield_bpm0l05Y_rms vs run
χ² / ndf 4.929e+04 / 84
p0 0.005096 ± 4.027e−06
0.009
0.008
0.007
0.006
0.005
0.004

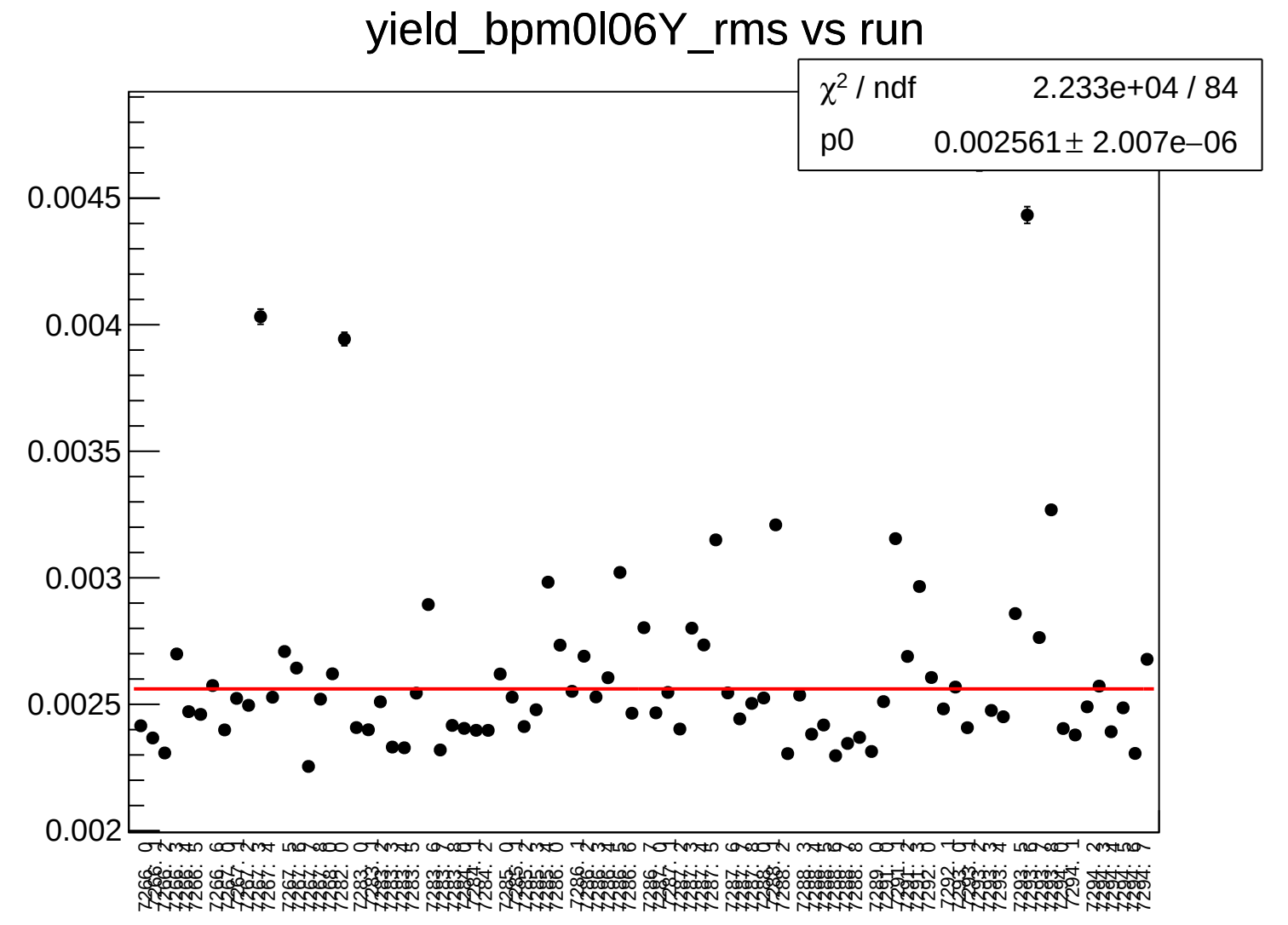

yield_bpm0l06X_mean vs run
χ² / ndf 1.512e+07 / 84
p0 2.475 ± 7.837e−06
2.54
2.52
2.5
2.48
2.46
2.44
2.42
pull
Entries 85
Mean 821.3
Std Dev 776.9
1000
800
600
400
200
0
−200
−400
−600

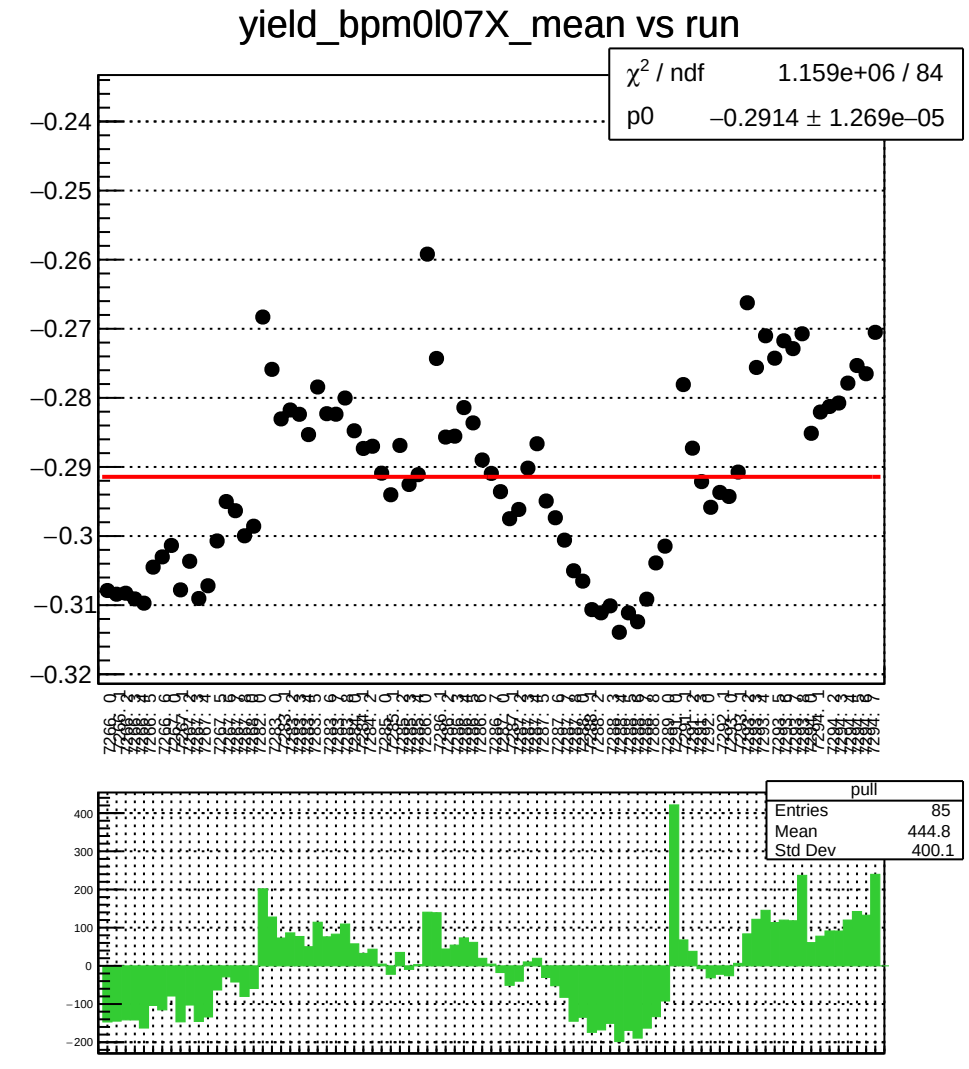

pull1D
Entries 85
Mean −5.245
Std Dev 1.153
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

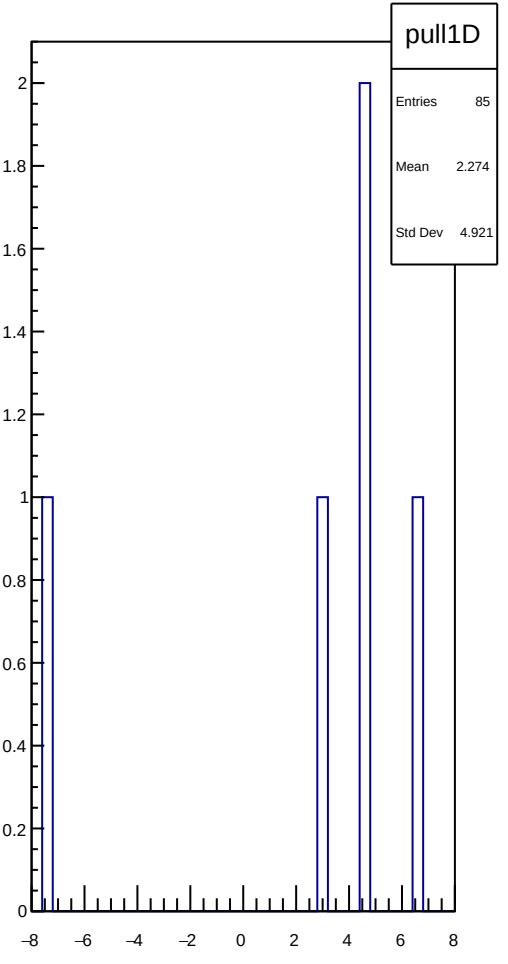

yield_bpm0l06X_rms vs run
χ² / ndf 4.56e+04 / 84
p0 0.007021 ± 5.542e−06
0.025
0.02
0.015
0.01
0.005

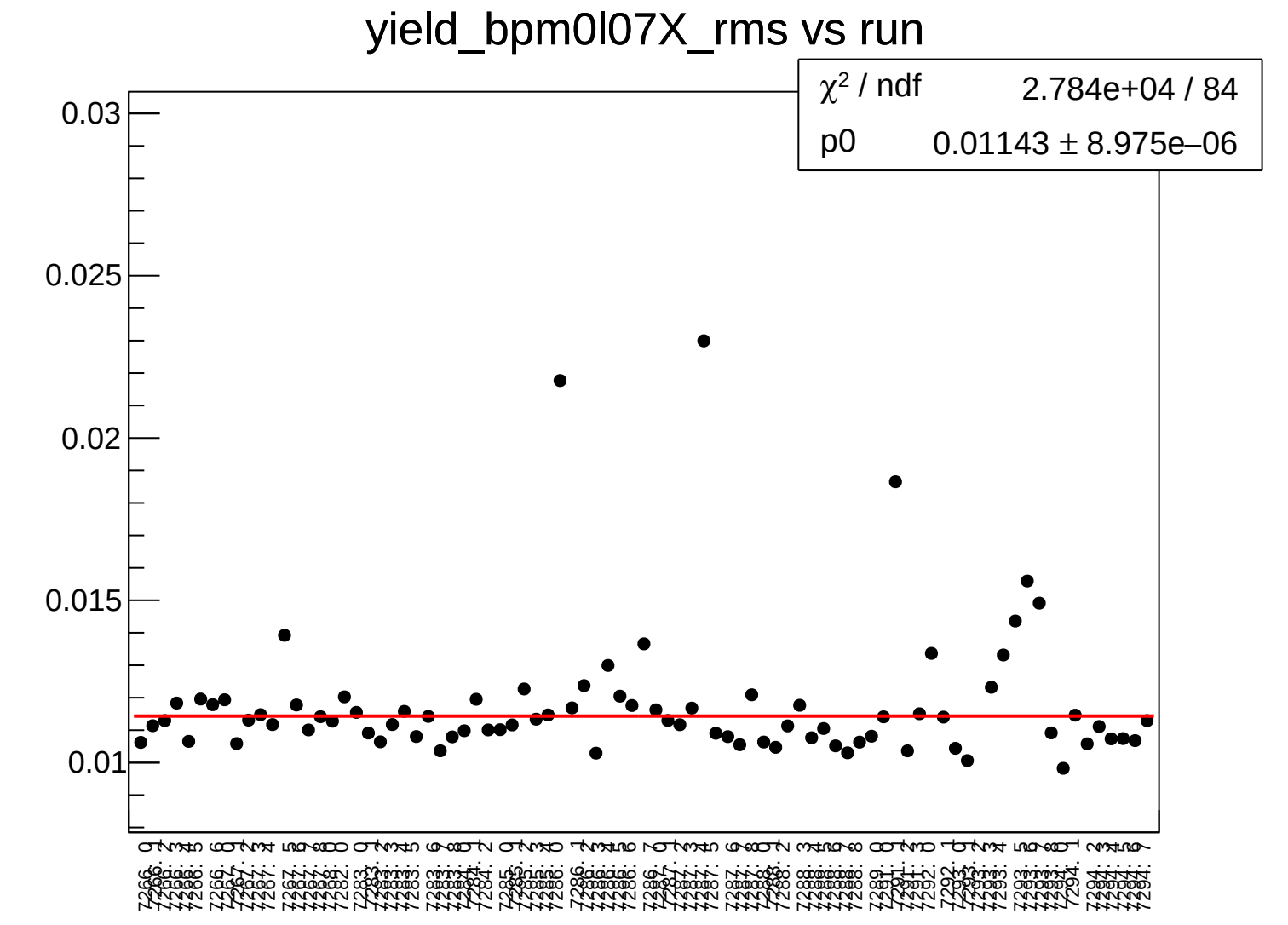

yield_bpm0l06Y_mean vs run
χ² / ndf 4.709e+06 / 84
p0 −1.681 ± 2.838e−06
−1.67
−1.675
−1.68
−1.685
−1.69
pull
Entries 85
Mean 427.7
Std Dev 445
500
400
300
200
100
0
−100
−200
−300
−400

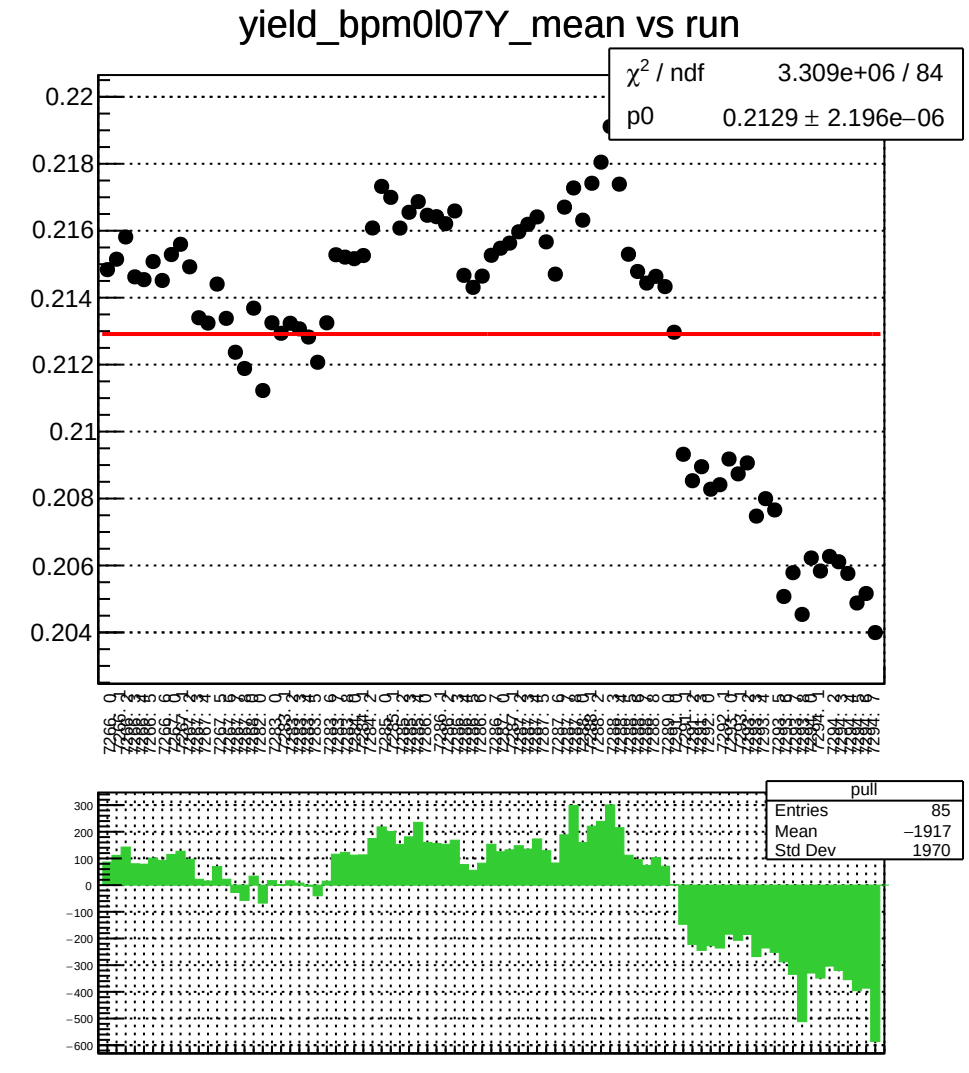

pull1D
Entries 85
Mean −1.667
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

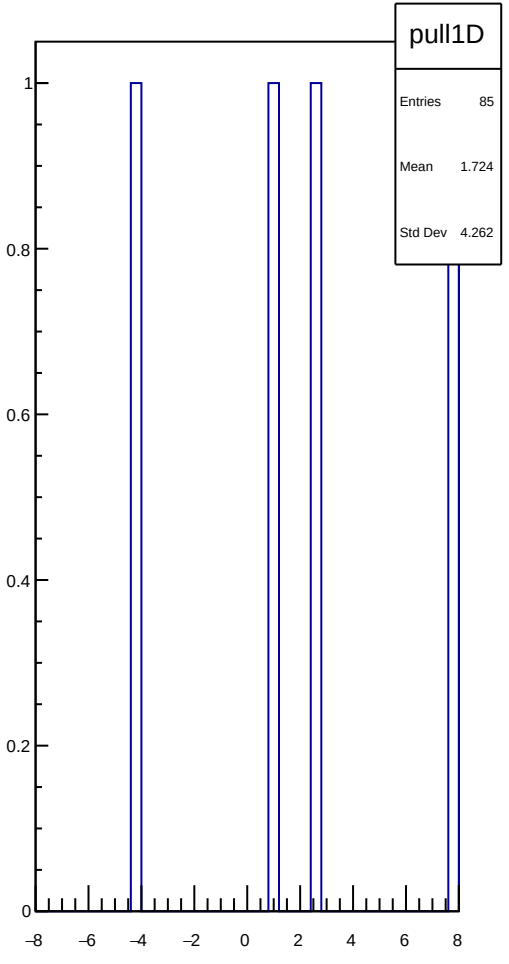

yield_bpm0l06Y_rms vs run
χ² / ndf 2.233e+04 / 84
p0 0.002561 ± 2.007e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002

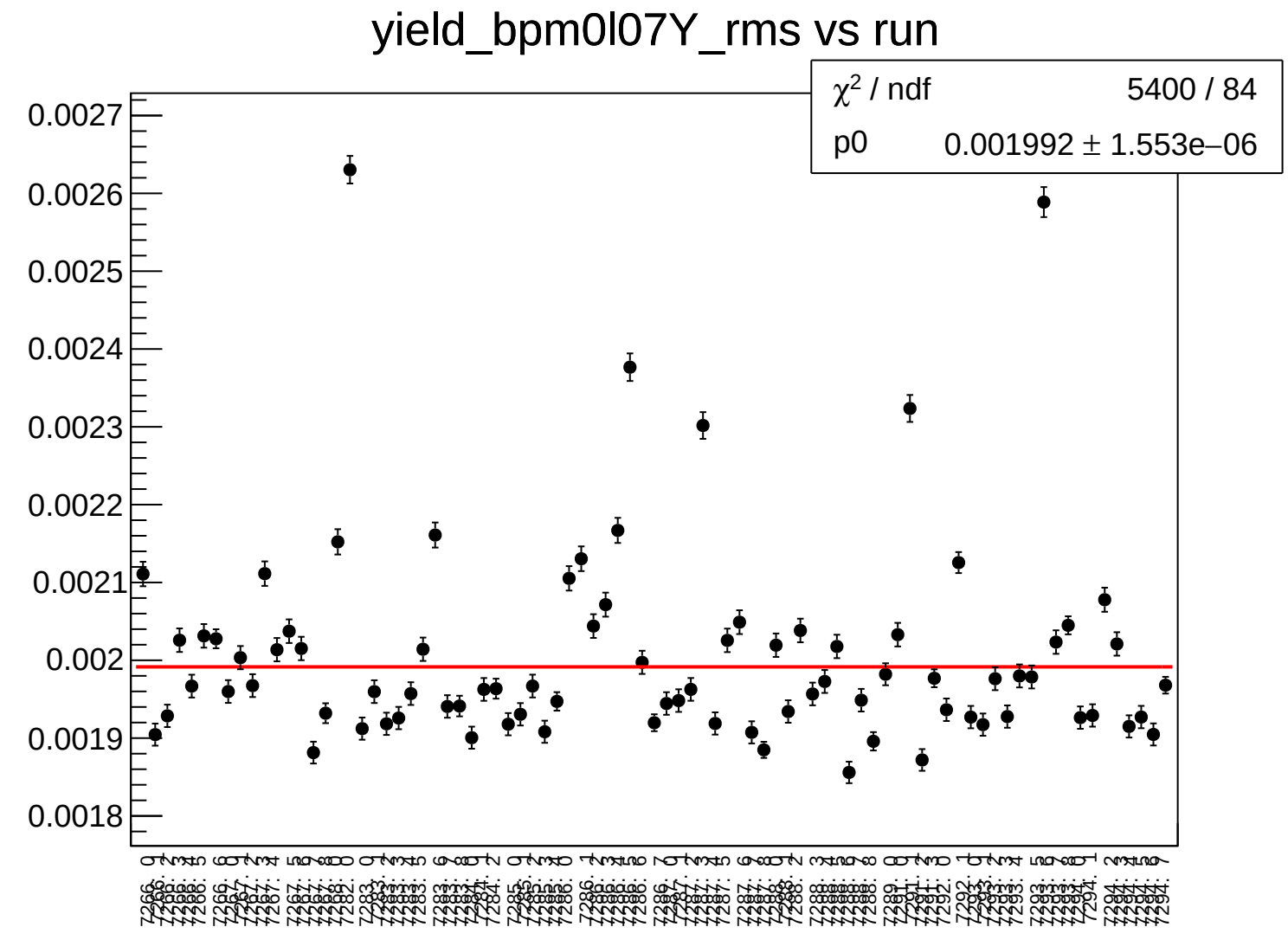

yield_bpm0l07X_mean vs run
χ² / ndf 1.159e+06 / 84
p0 −0.2914 ± 1.269e−05
−0.24
−0.25
−0.26
−0.27
−0.28
−0.29
−0.3
−0.31
−0.32
pull
Entries 85
Mean 444.8
Std Dev 400.1
400
300
200
100
0
−100
−200

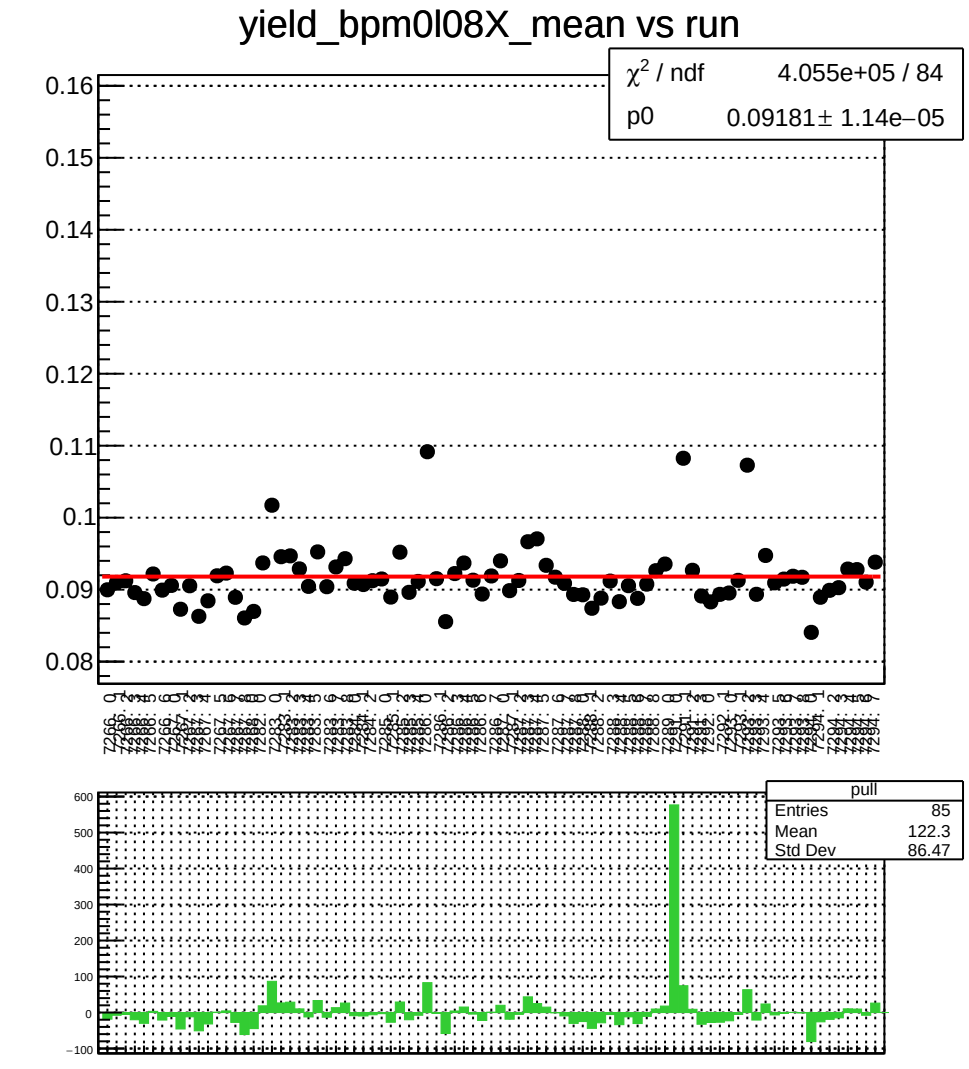

pull1D
Entries 85
Mean 2.274
Std Dev 4.921
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

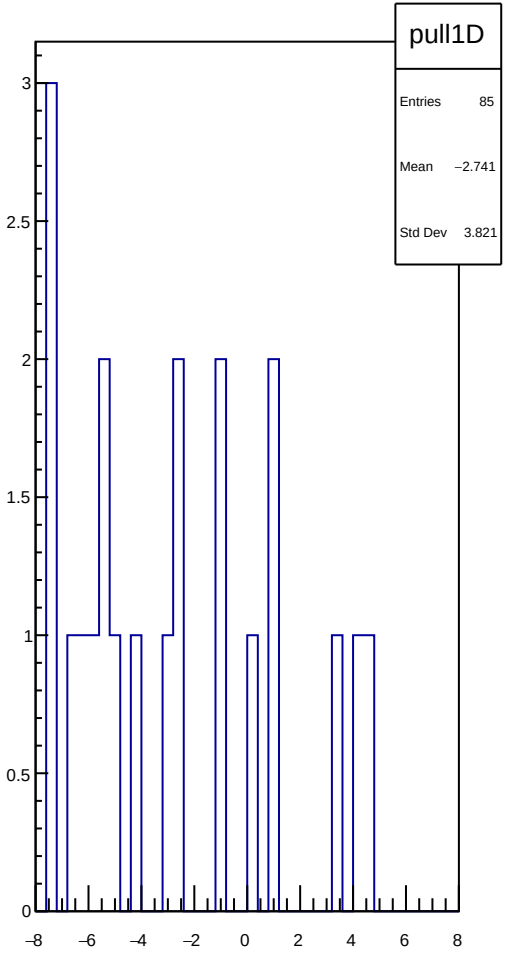

yield_bpm0l07X_rms vs run
χ² / ndf 2.784e+04 / 84
p0 0.01143 ± 8.975e−06
0.03
0.025
0.02
0.015
0.01

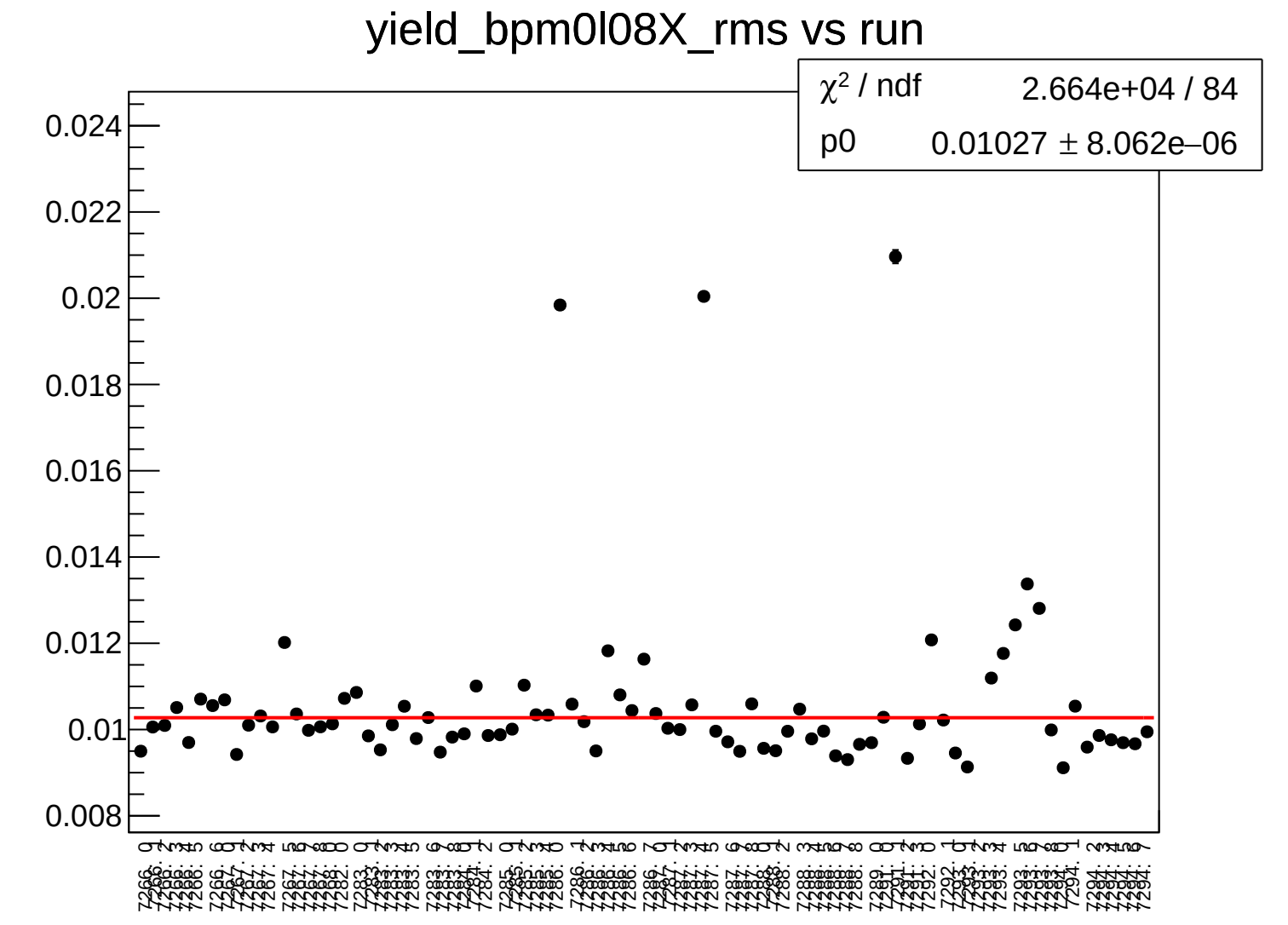

yield_bpm0l07Y_mean vs run
χ² / ndf 3.309e+06 / 84
p0 0.2129 ± 2.196e−06
0.22
0.218
0.216
0.214
0.212
0.21
0.208
0.206
0.204
pull
Entries 85
Mean −1917
Std Dev 1970
300
200
100
0
−100
−200
−300
−400
−500
−600

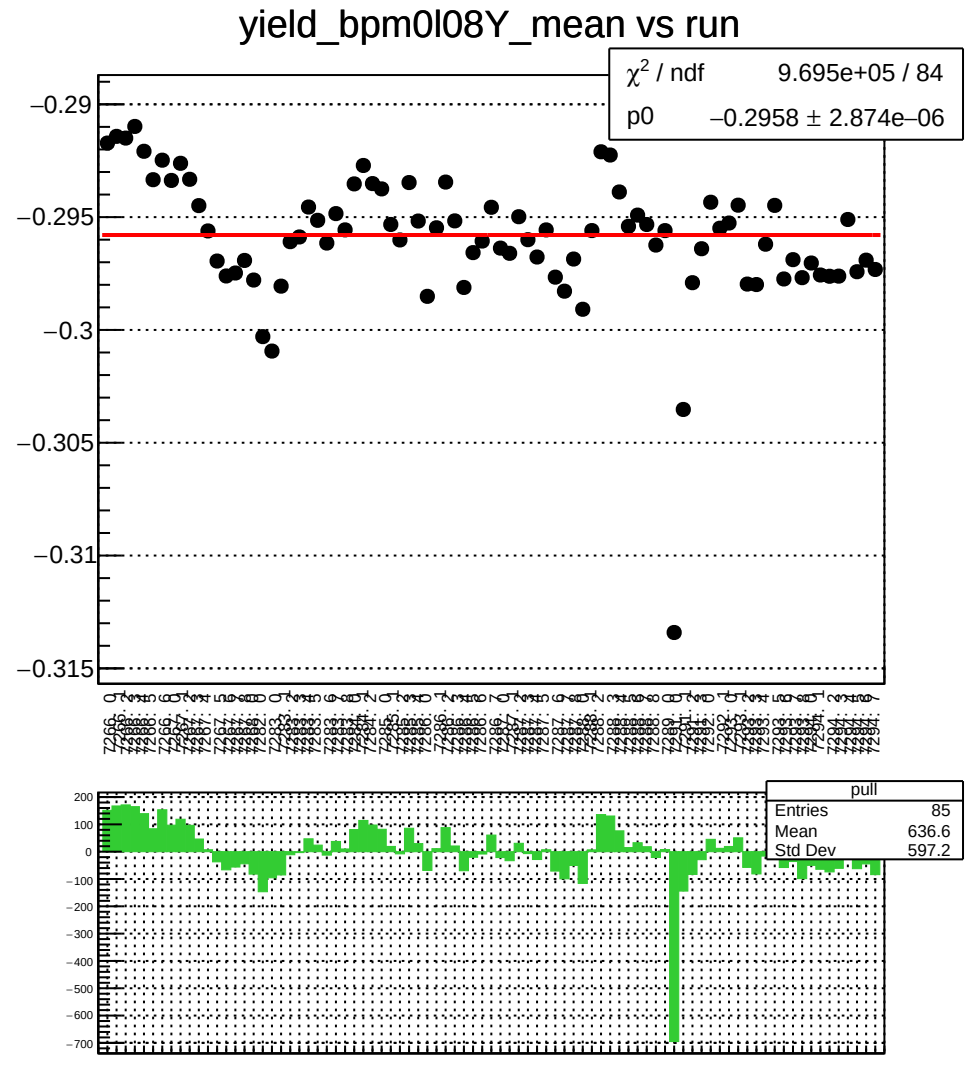

pull1D
Entries 85
Mean 1.724
Std Dev 4.262
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

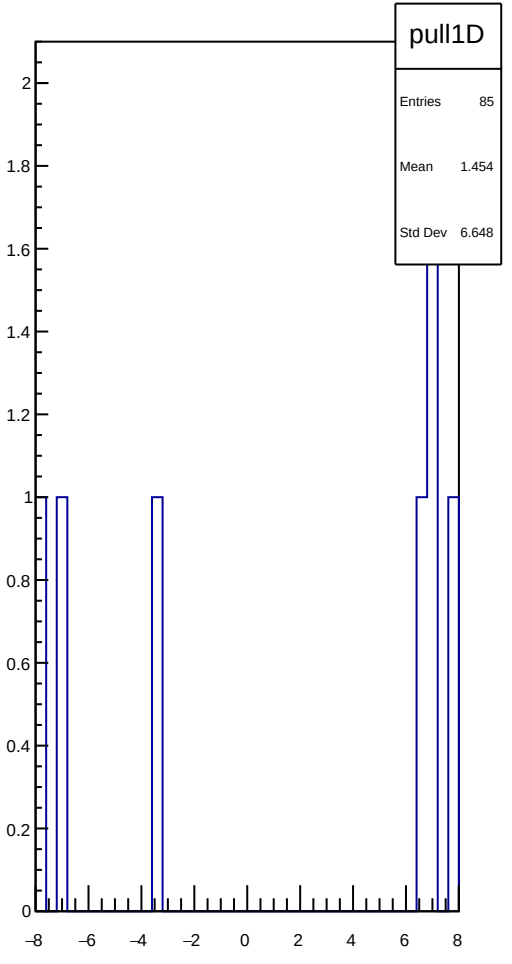

yield_bpm0l07Y_rms vs run
χ² / ndf 5400 / 84
p0 0.001992 ± 1.553e−06
0.0027
0.0026
0.0025
0.0024
0.0023
0.0022
0.0021
0.002
0.0019
0.0018

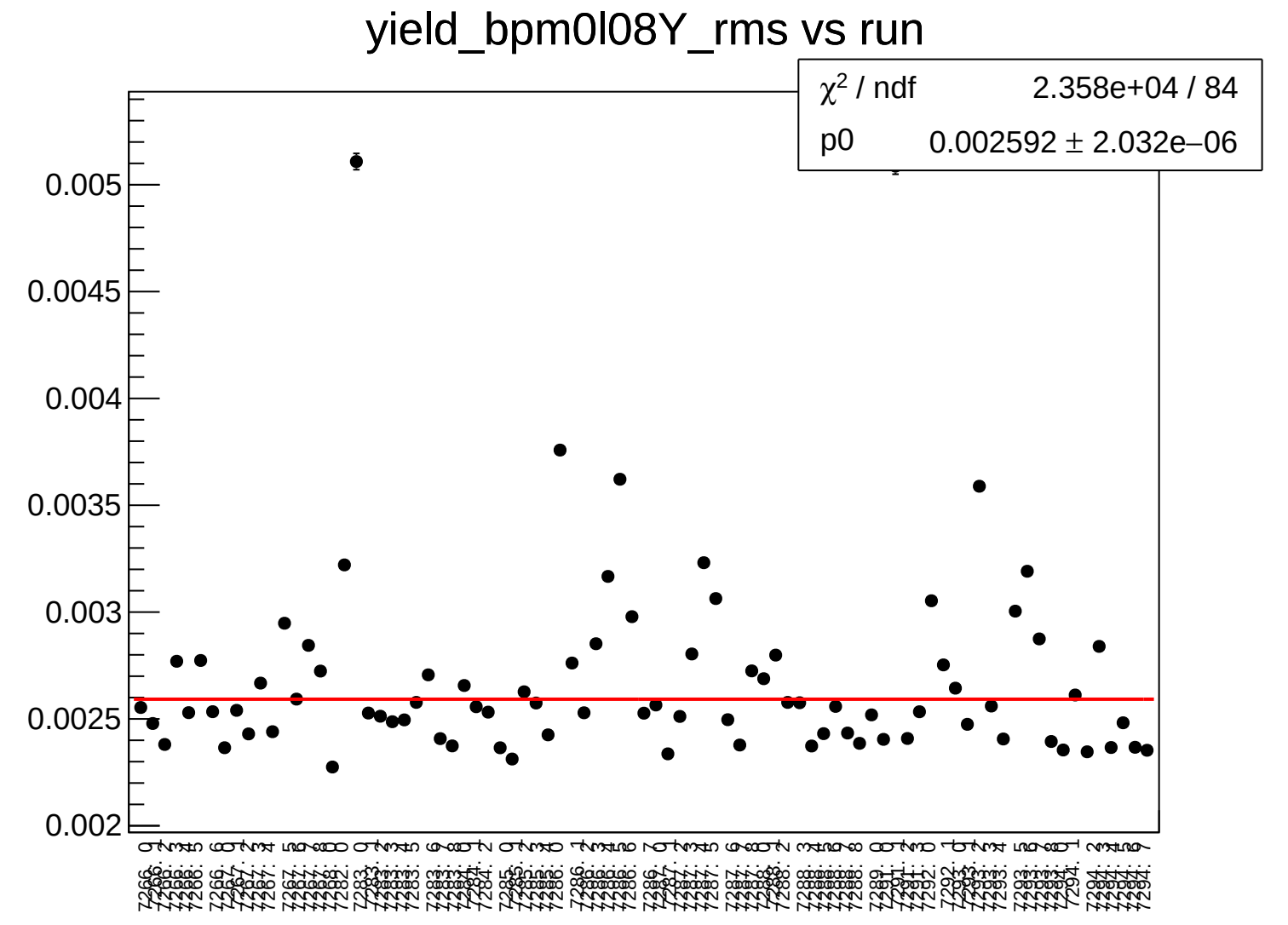

yield_bpm0l08X_mean vs run
χ² / ndf 4.055e+05 / 84
p0 0.09181± 1.14e−05
pull
Entries 85
Mean 122.3
Std Dev 86.47

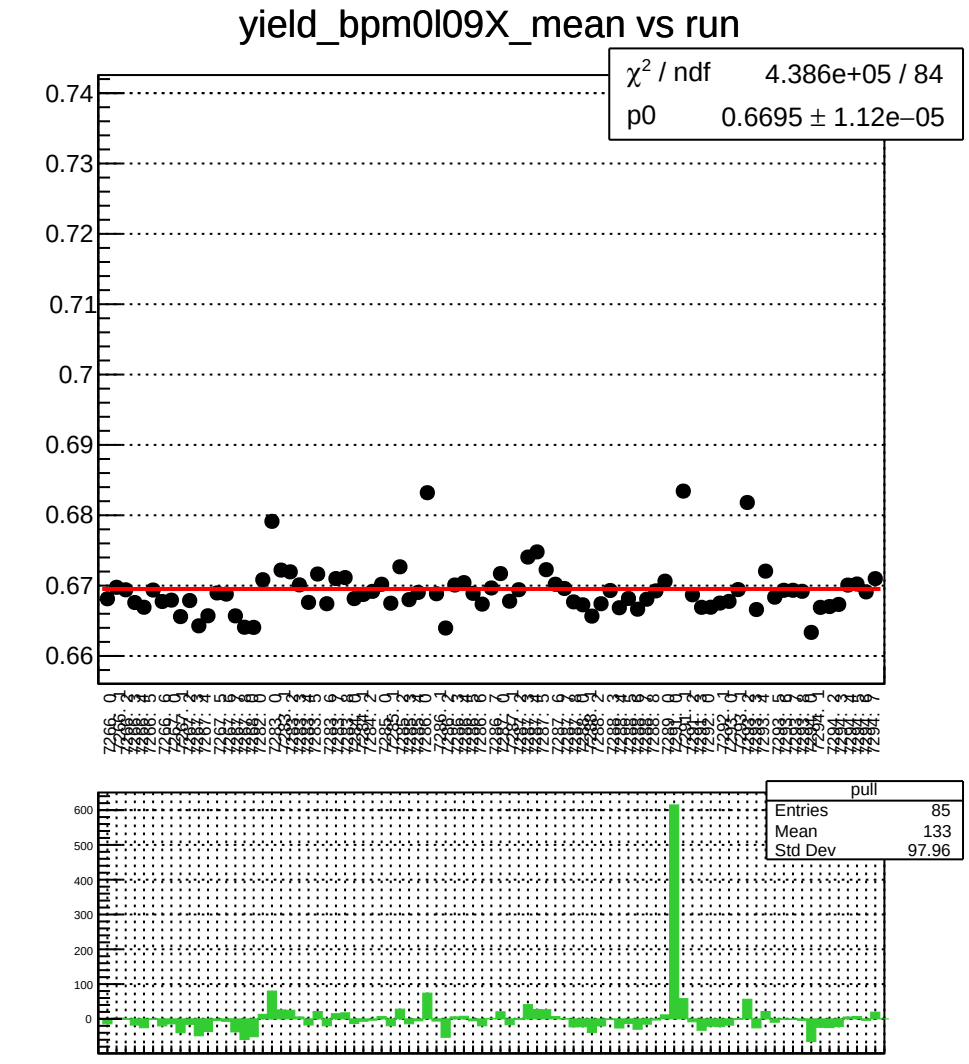

pull1D
Entries 85
Mean −2.741
Std Dev 3.821

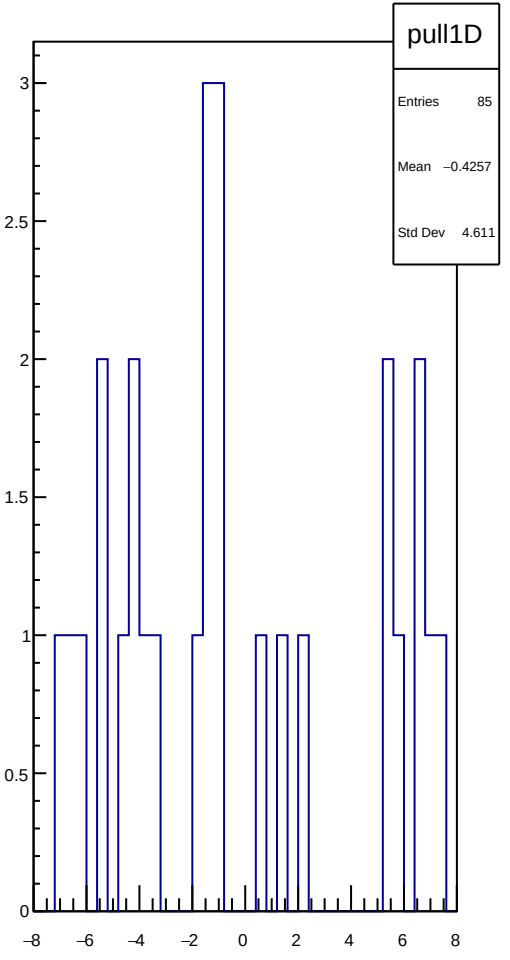

yield_bpm0l08X_rms vs run
χ² / ndf 2.664e+04 / 84
p0 0.01027 ± 8.062e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

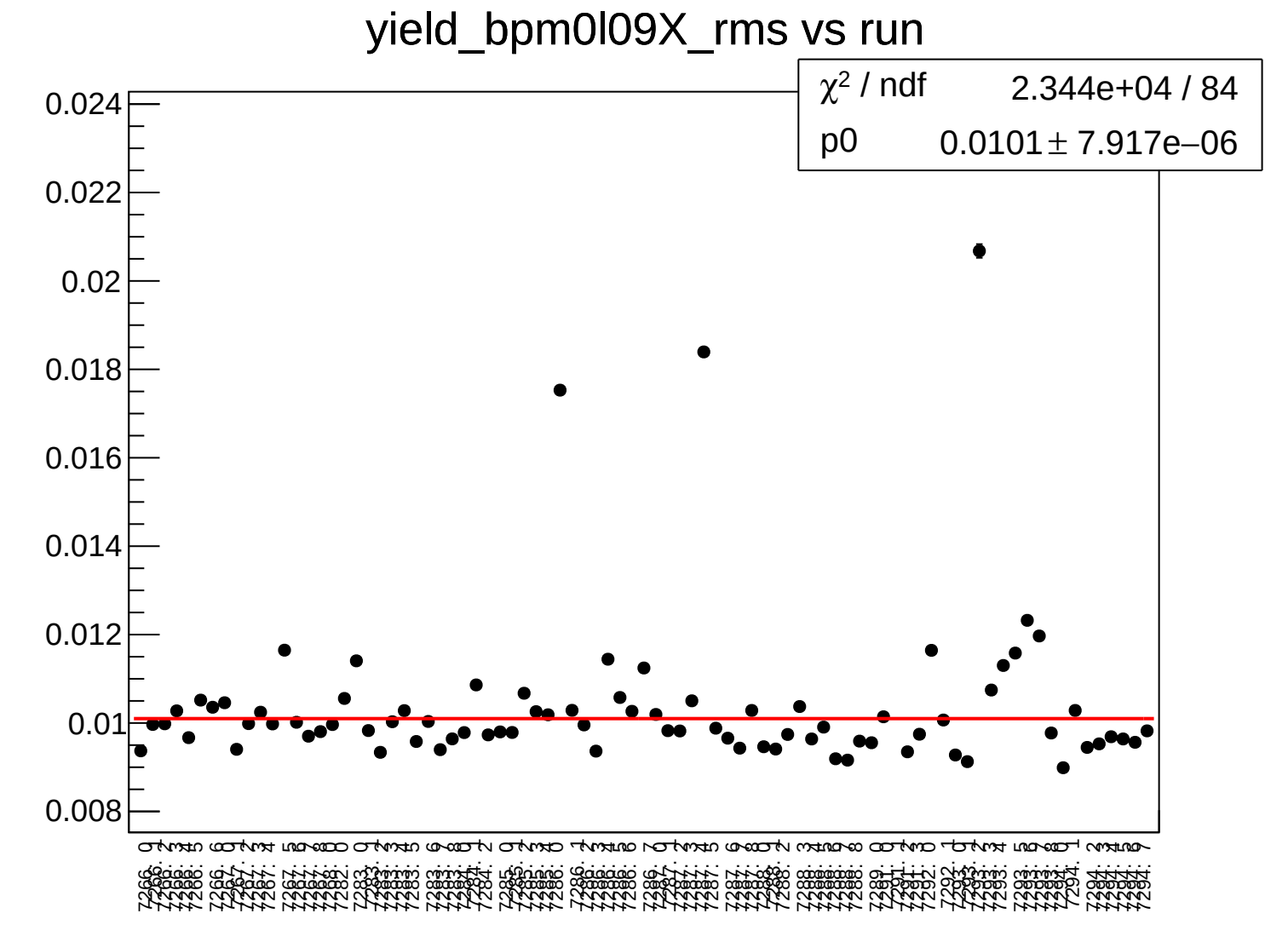

yield_bpm0l08Y_mean vs run
χ² / ndf 9.695e+05 / 84
p0 −0.2958 ± 2.874e−06
−0.29
−0.295
−0.3
−0.305
−0.31
−0.315
pull
Entries 85
Mean 636.6
Std Dev 597.2
200
100
0
−100
−200
−300
−400
−500
−600
−700

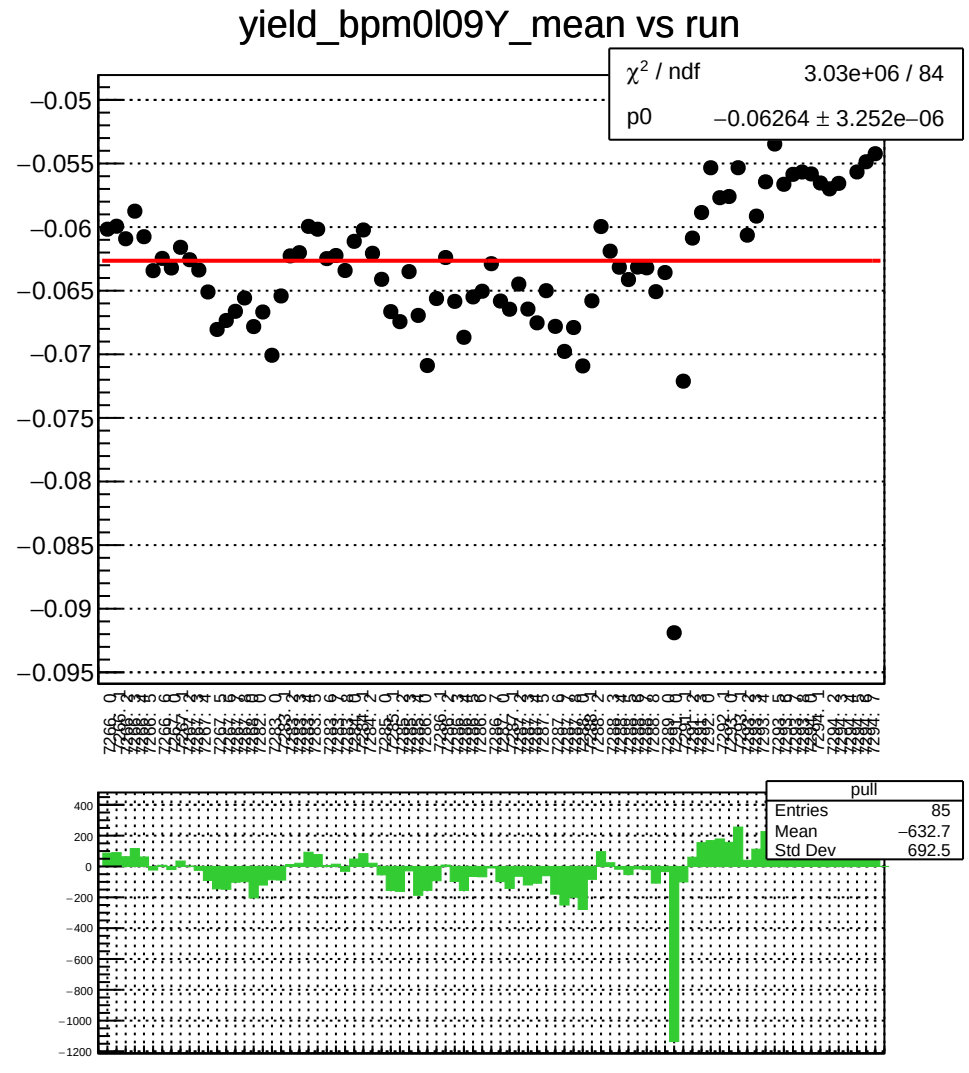

pull1D
Entries 85
Mean 1.454
Std Dev 6.648
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

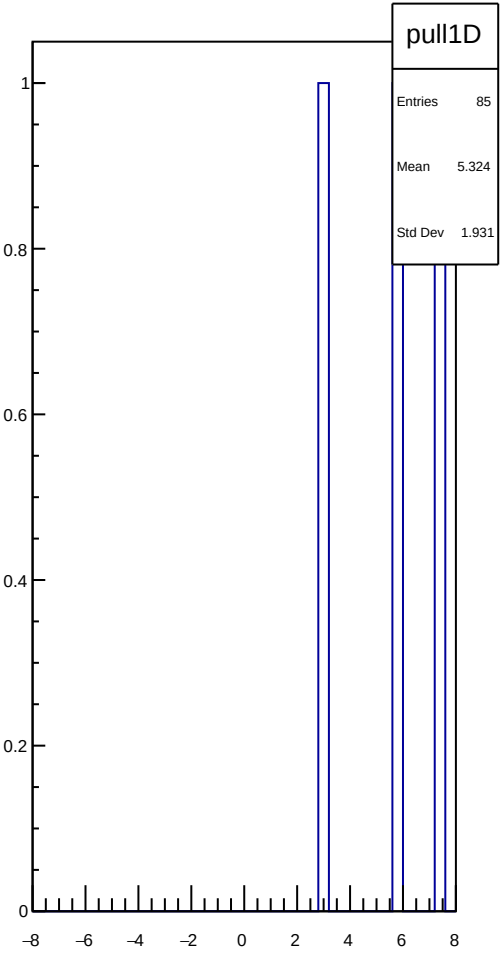

yield_bpm0l08Y_rms vs run
χ² / ndf 2.358e+04 / 84
p0 0.002592 ± 2.032e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

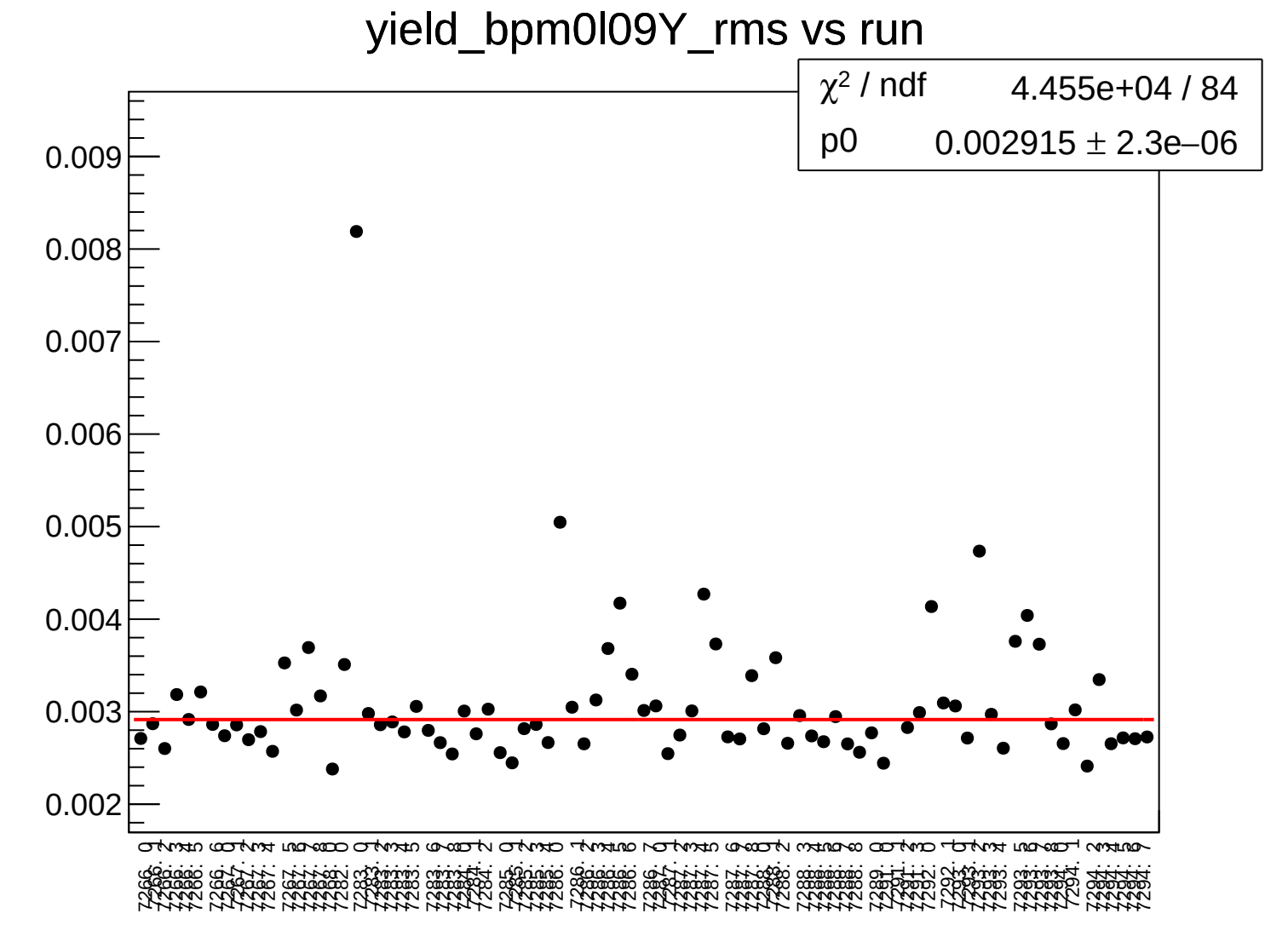

yield_bpm0l09X_mean vs run
χ² / ndf 4.386e+05 / 84
p0 0.6695 ± 1.12e−05
0.74
0.73
0.72
0.71
0.7
0.69
0.68
0.67
0.66
pull
Entries 85
Mean 133
Std Dev 97.96
600
500
400
300
200
100
0

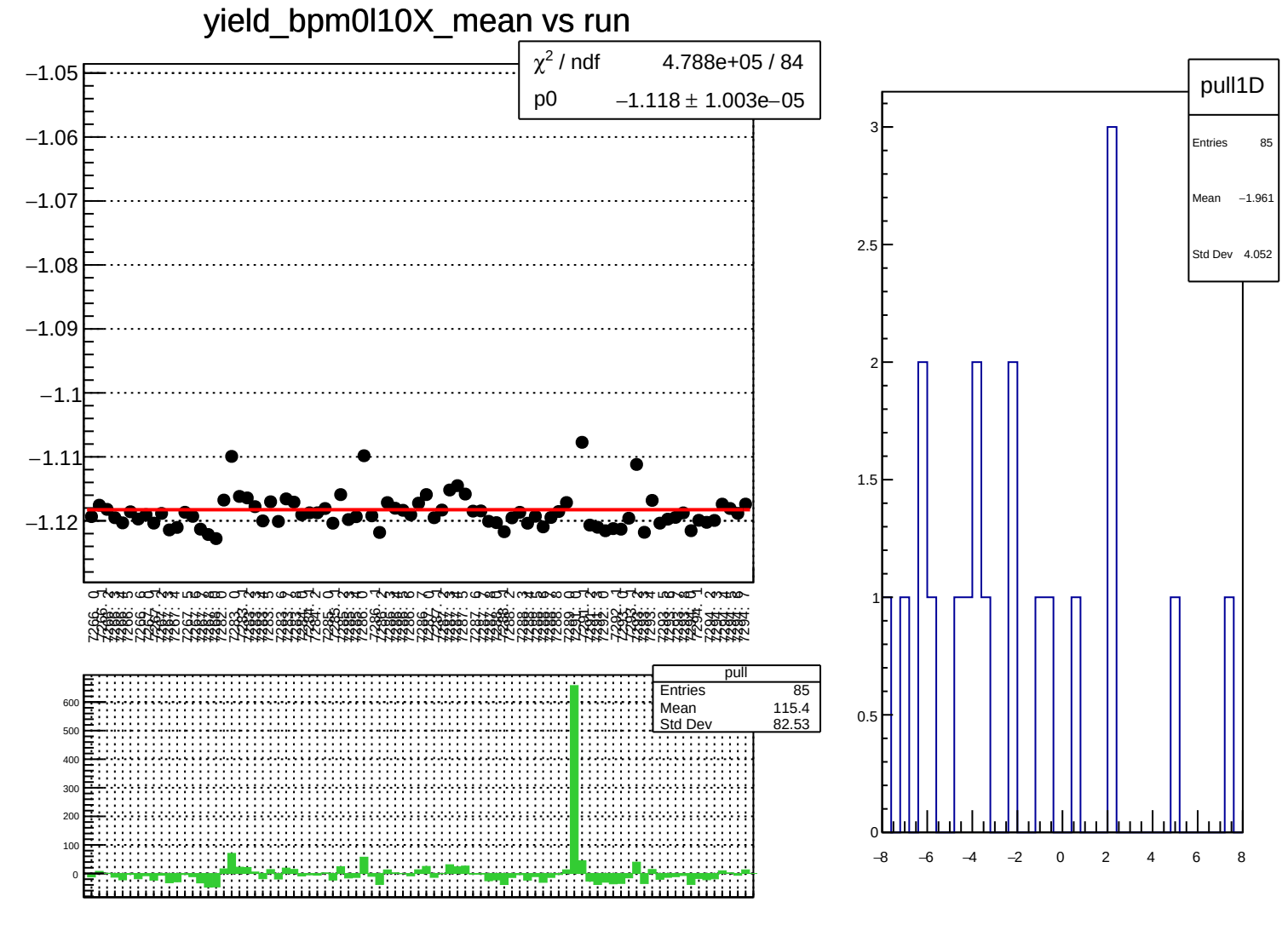

pull1D
Entries 85
Mean −0.4257
Std Dev 4.611
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

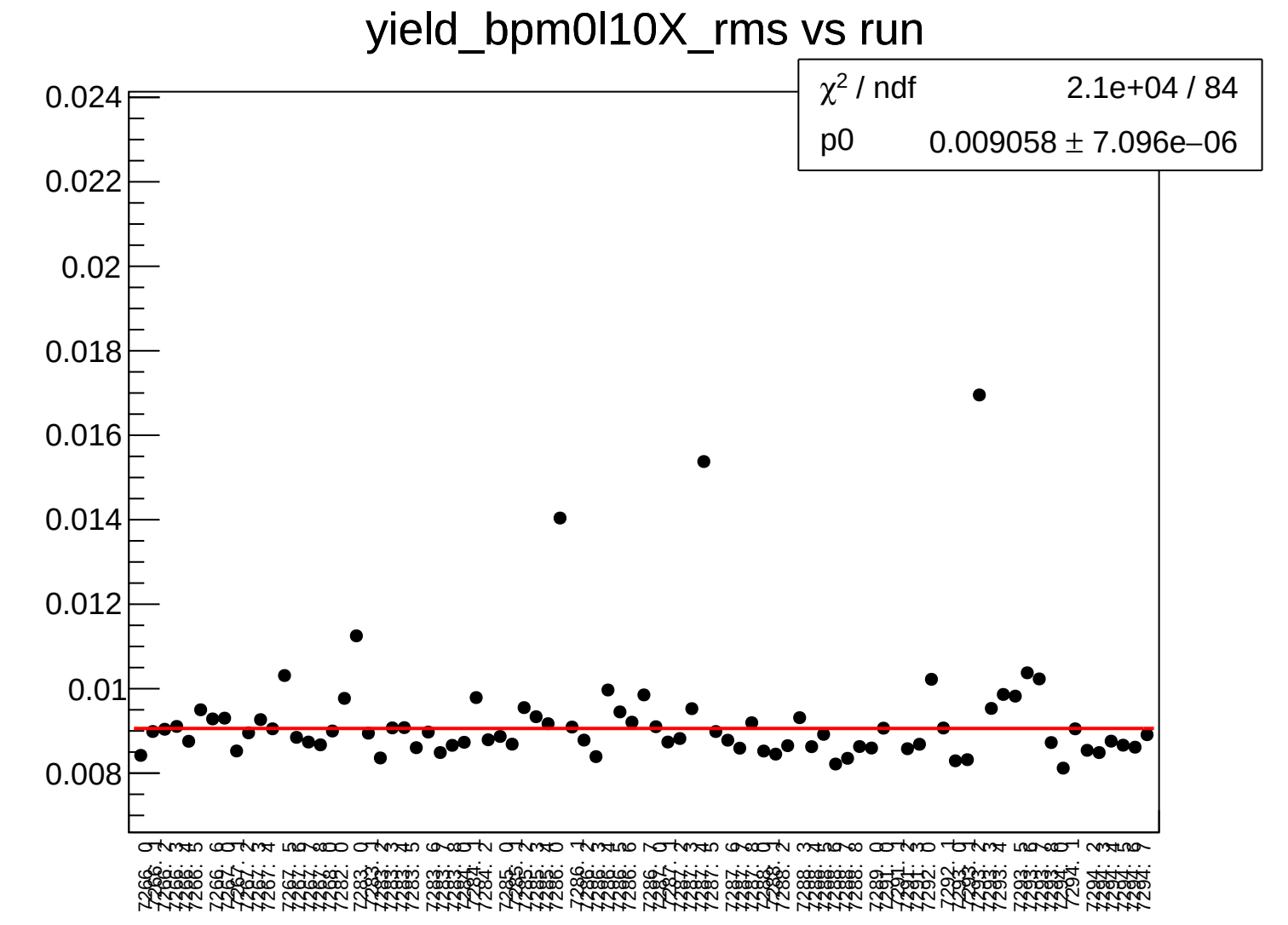

yield_bpm0l09X_rms vs run
χ² / ndf 2.344e+04 / 84
p0 0.0101 ± 7.917e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

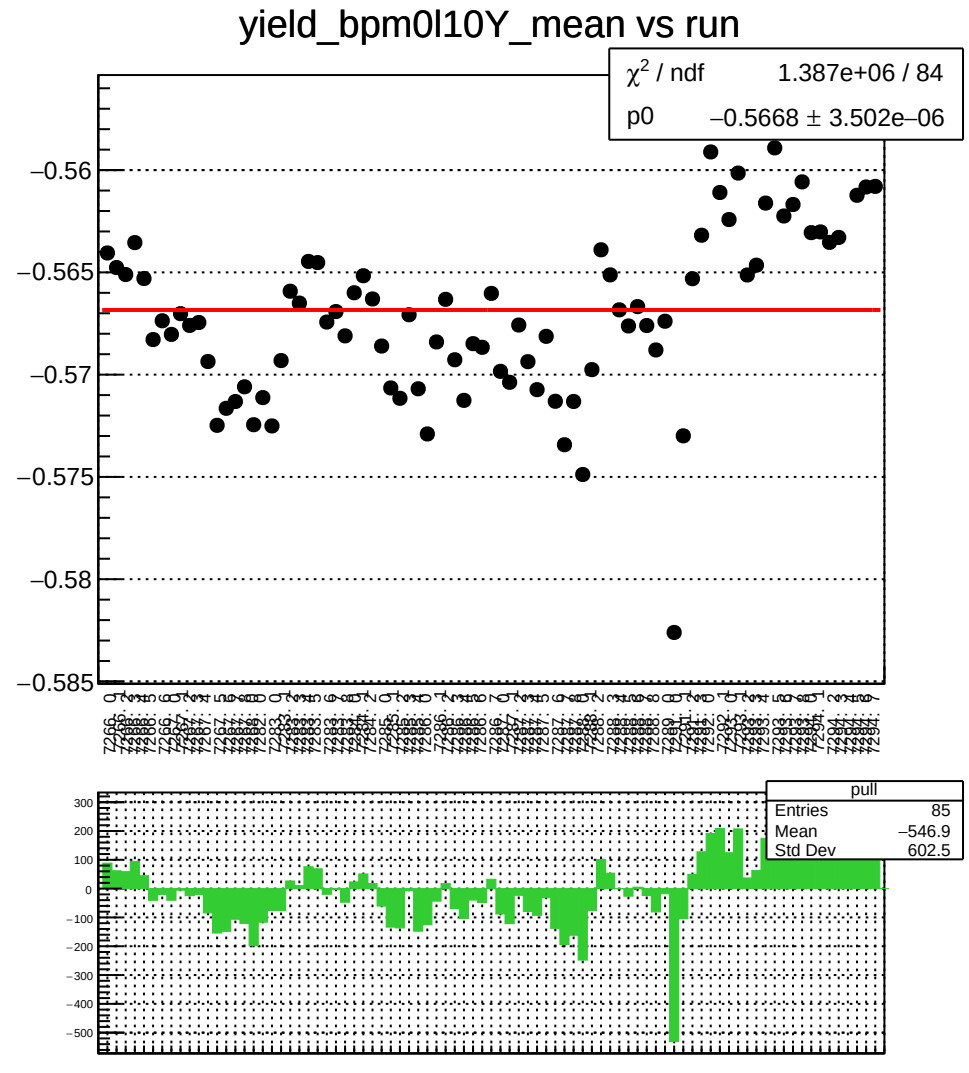

yield_bpm0l09Y_mean vs run
χ² / ndf 3.03e+06 / 84
p0 −0.06264 ± 3.252e−06
pull
Entries 85
Mean −632.7
Std Dev 692.5

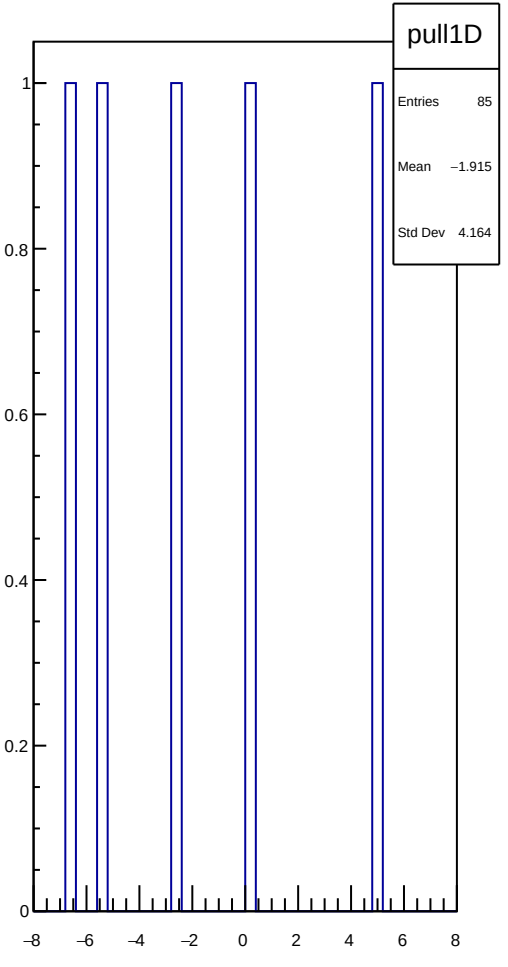

pull1D
Entries 85
Mean 5.324
Std Dev 1.931

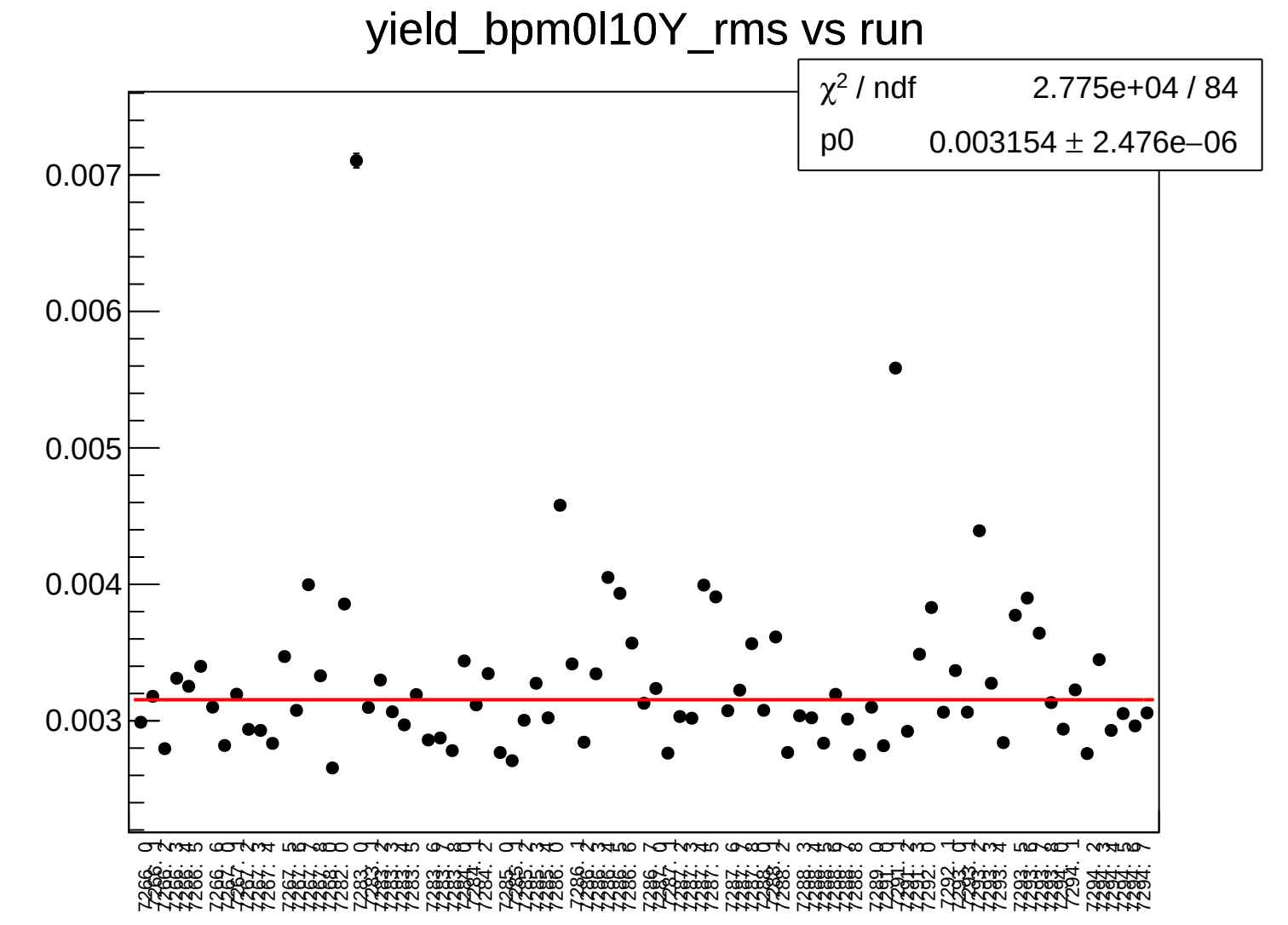

yield_bpm0l09Y_rms vs run
χ² / ndf 4.455e+04 / 84
p0 0.002915 ± 2.3e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

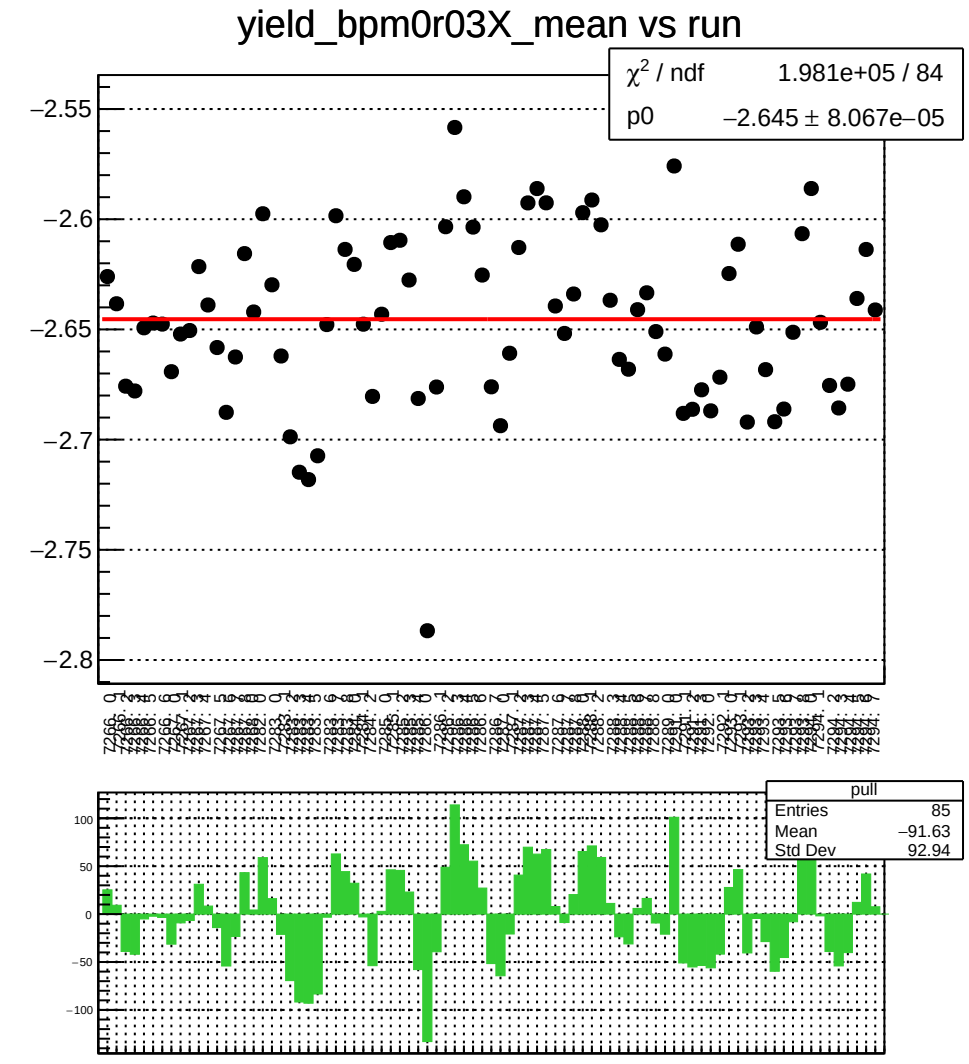

yield_bpm0l10X_mean vs run
χ² / ndf 4.788e+05 / 84
p0 −1.118 ± 1.003e−05
−1.05
−1.06
−1.07
−1.08
−1.09
−1.1
−1.11
−1.12
pull
Entries 85
Mean 115.4
Std Dev 82.53
600
500
400
300
200
100
0
pull1D
Entries 85
Mean −1.961
Std Dev 4.052
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

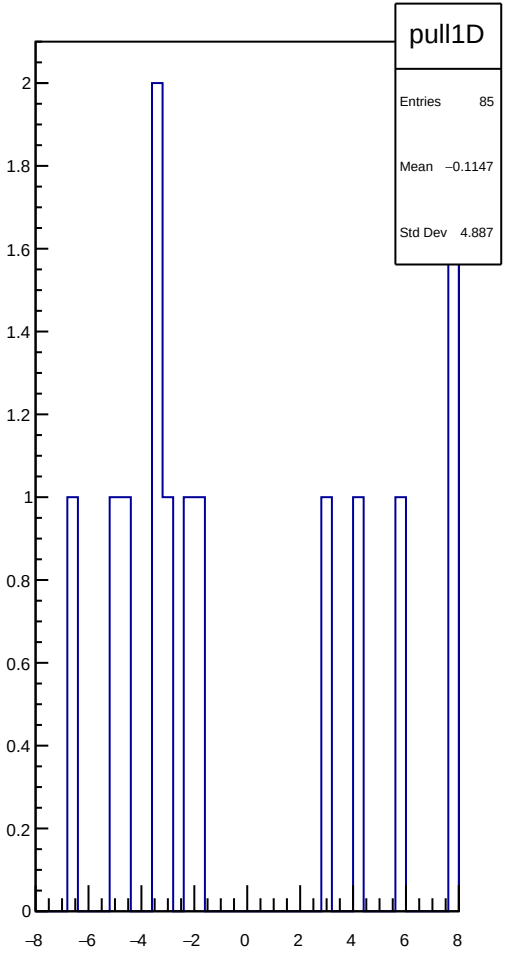

yield_bpm0l10X_rms vs run
χ^2 / ndf 2.1e+04 / 84
p0 0.009058 ± 7.096e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

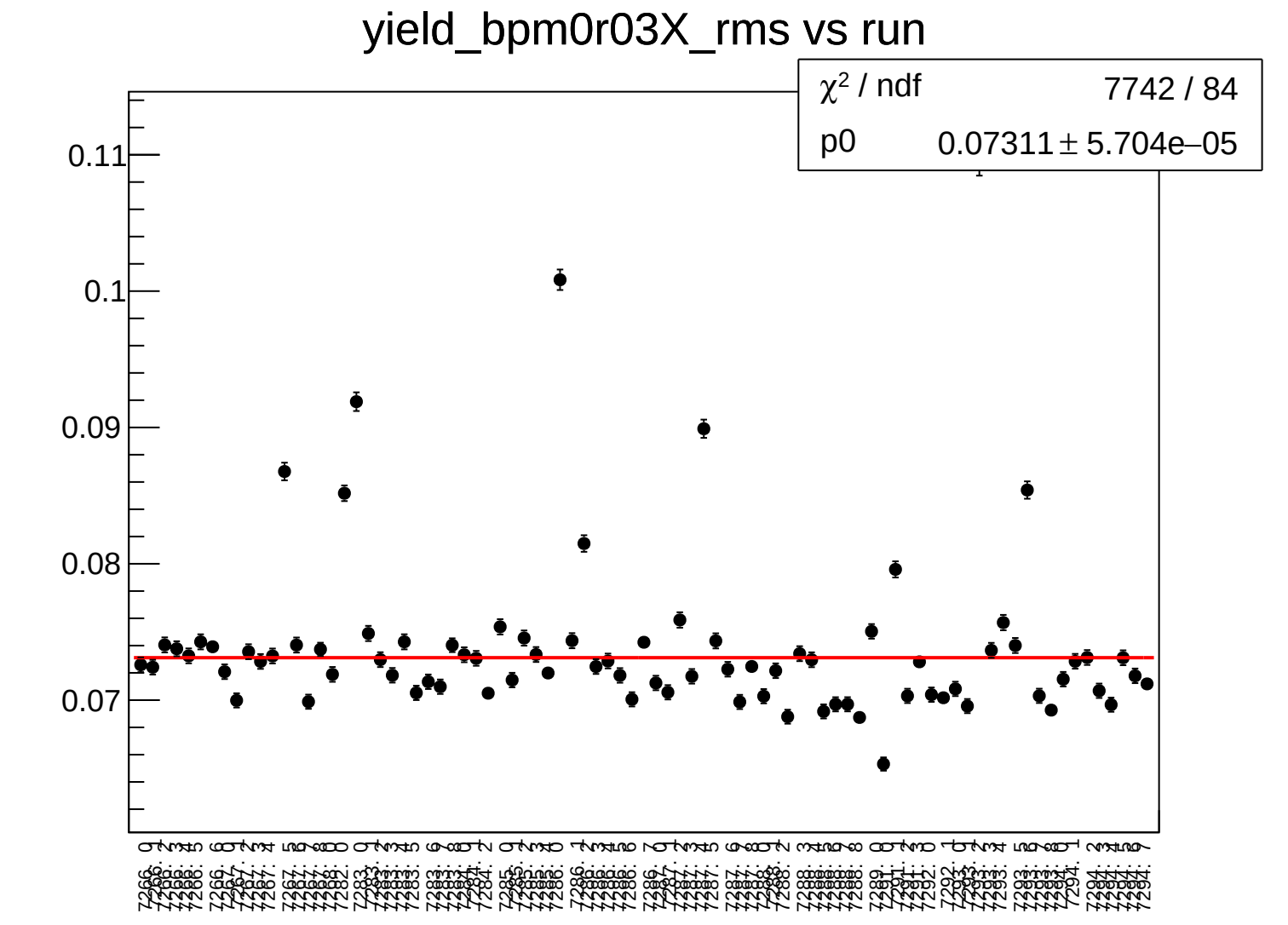

yield_bpm0l10Y_mean vs run
χ² / ndf 1.387e+06 / 84
p0 −0.5668 ± 3.502e−06
−0.56
−0.565
−0.57
−0.575
−0.58
−0.585
pull
Entries 85
Mean −546.9
Std Dev 602.5
300
200
100
0
−100
−200
−300
−400
−500

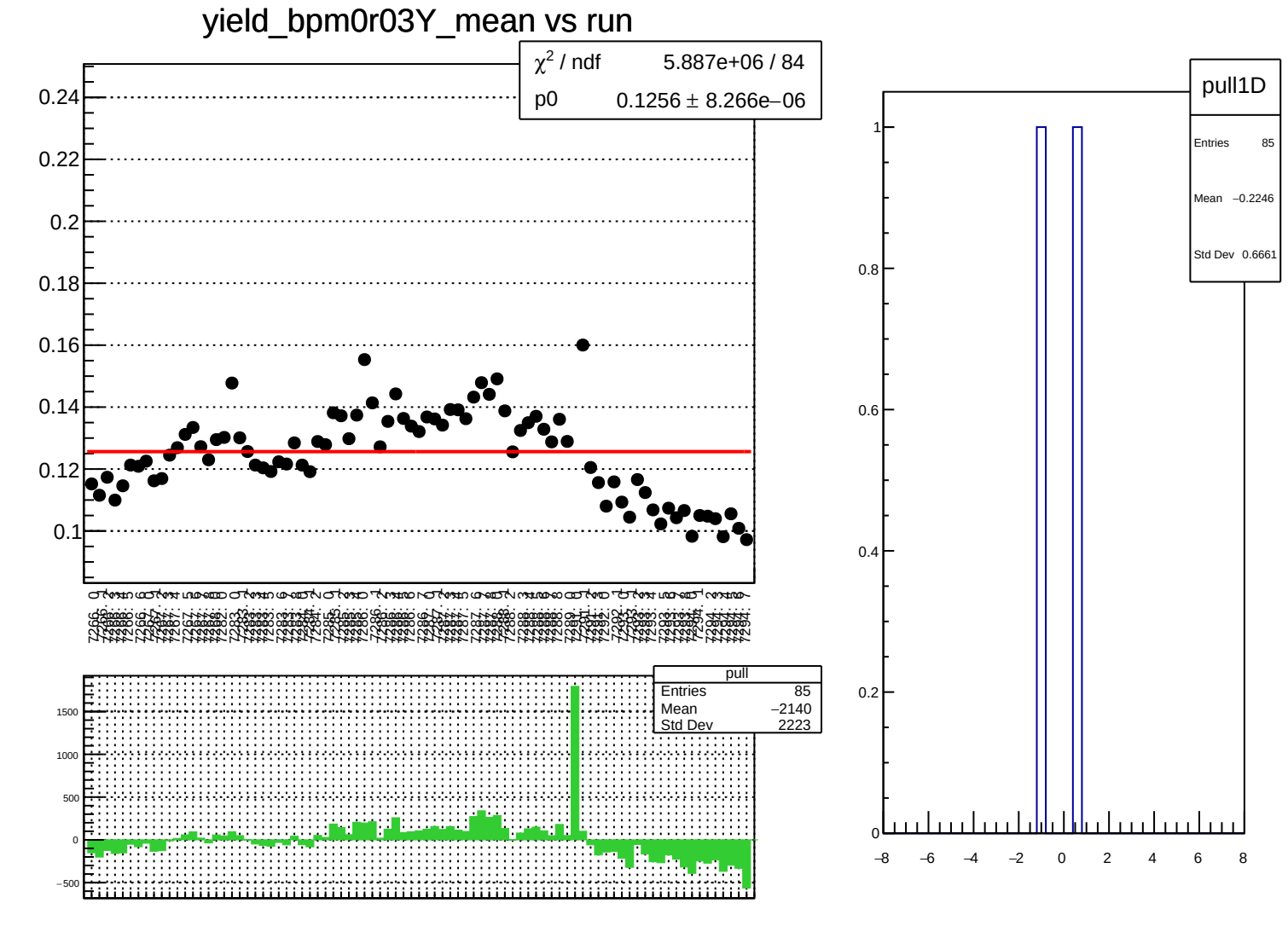

pull1D
Entries 85
Mean −1.915
Std Dev 4.164
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

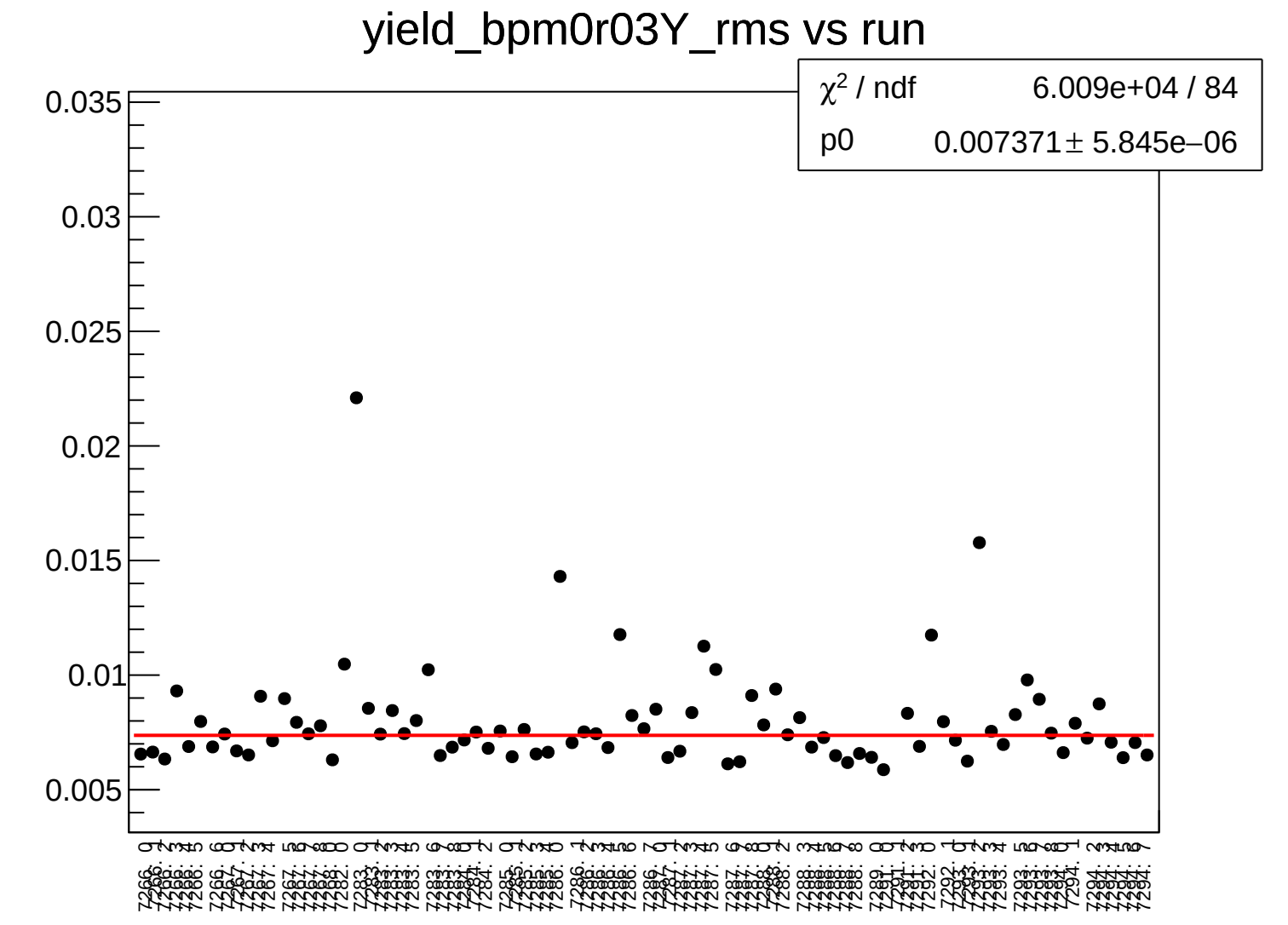

yield_bpm0l10Y_rms vs run
χ² / ndf 2.775e+04 / 84
p0 0.003154 ± 2.476e−06
0.007
0.006
0.005
0.004
0.003

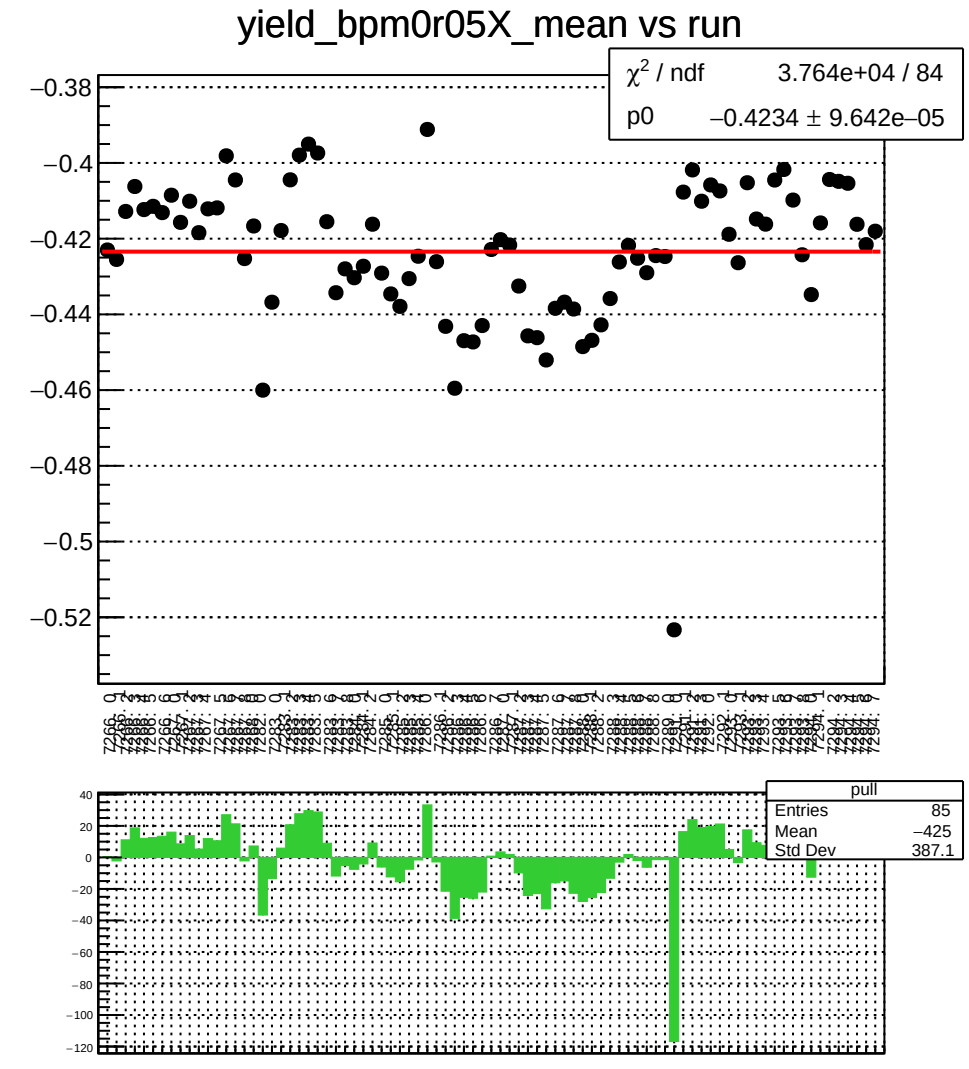

yield_bpm0r03X_mean vs run
χ² / ndf 1.981e+05 / 84
p0 −2.645 ± 8.067e−05
−2.55
−2.6
−2.65
−2.7
−2.75
−2.8
pull
Entries 85
Mean −91.63
Std Dev 92.94
100
50
0
−50
−100

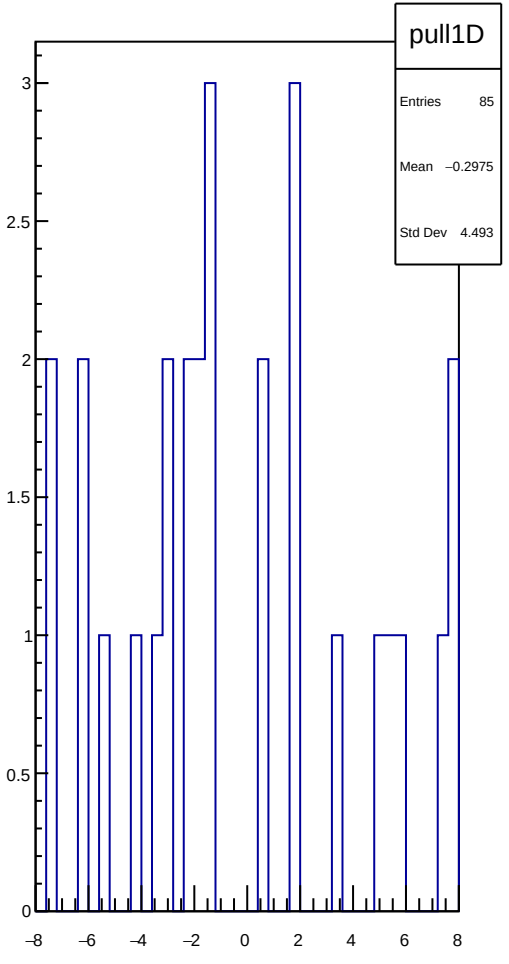

pull1D
Entries 85
Mean −0.1147
Std Dev 4.887
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

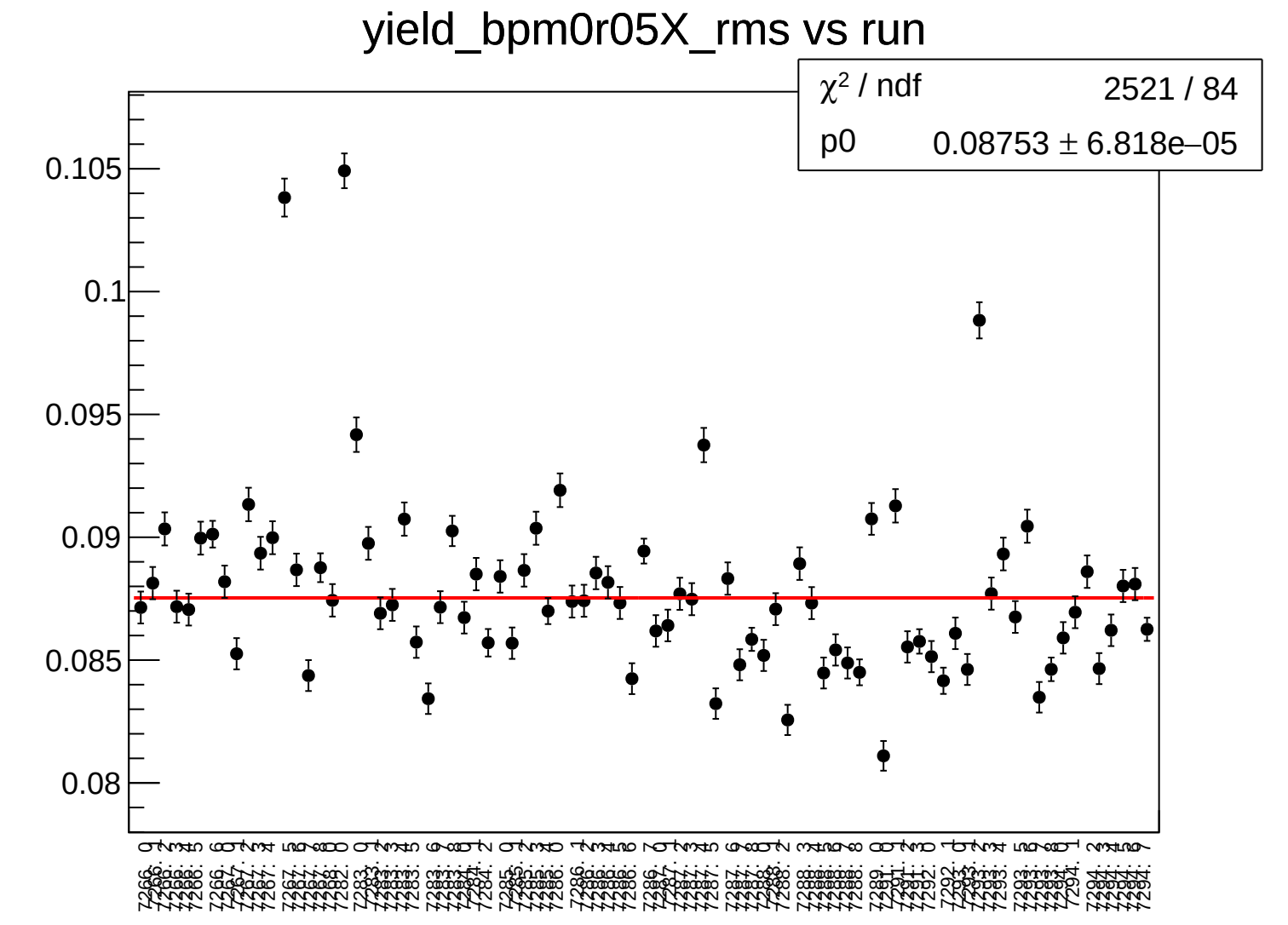

yield_bpm0r03X_rms vs run
χ² / ndf 7742 / 84
p0 0.07311 ± 5.704e–05
0.11
0.1
0.09
0.08
0.07

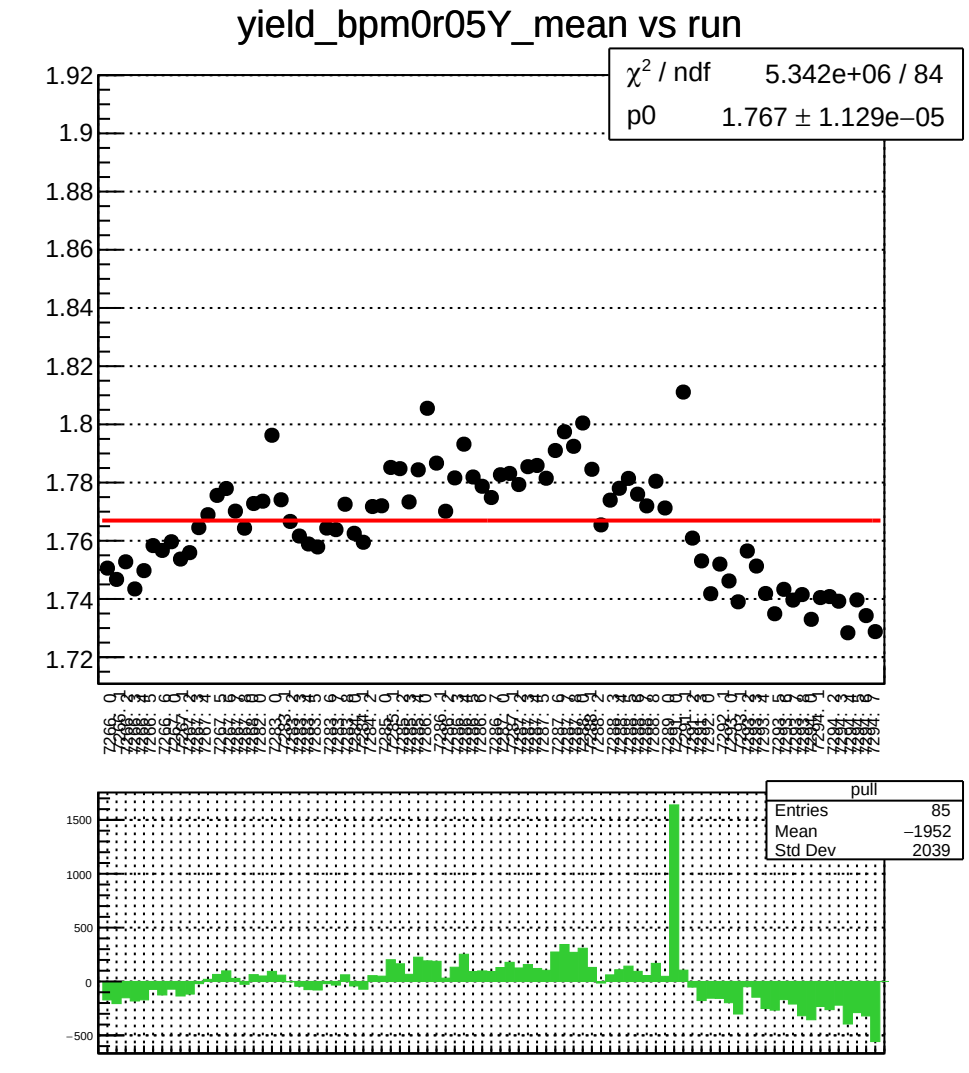

yield_bpm0r03Y_mean vs run
χ² / ndf 5.887e+06 / 84
p0 0.1256 ± 8.266e−06
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
pull
Entries 85
Mean −2140
Std Dev 2223
1500
1000
500
0
−500
pull1D
Entries 85
Mean −0.2246
Std Dev 0.6661
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

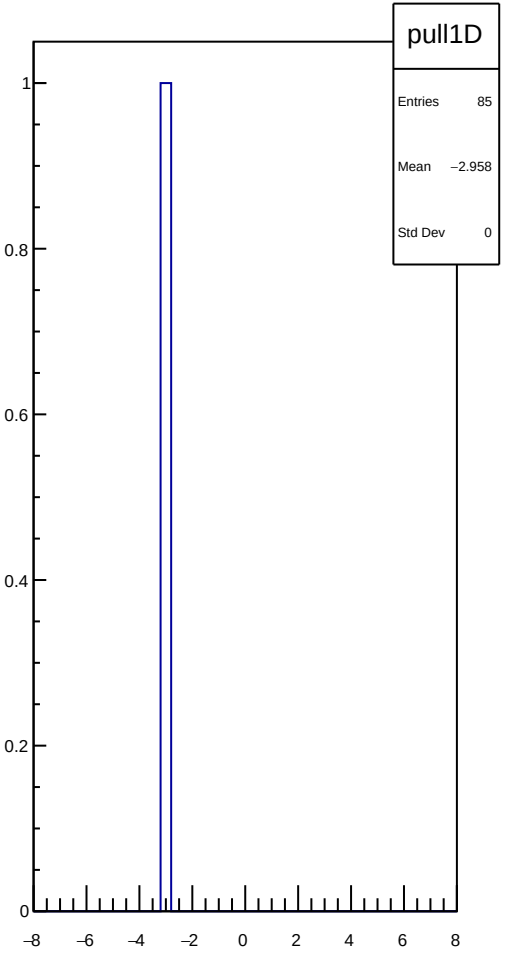

yield_bpm0r03Y_rms vs run
χ^2 / ndf 6.009e+04 / 84
p0 0.007371 ± 5.845e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

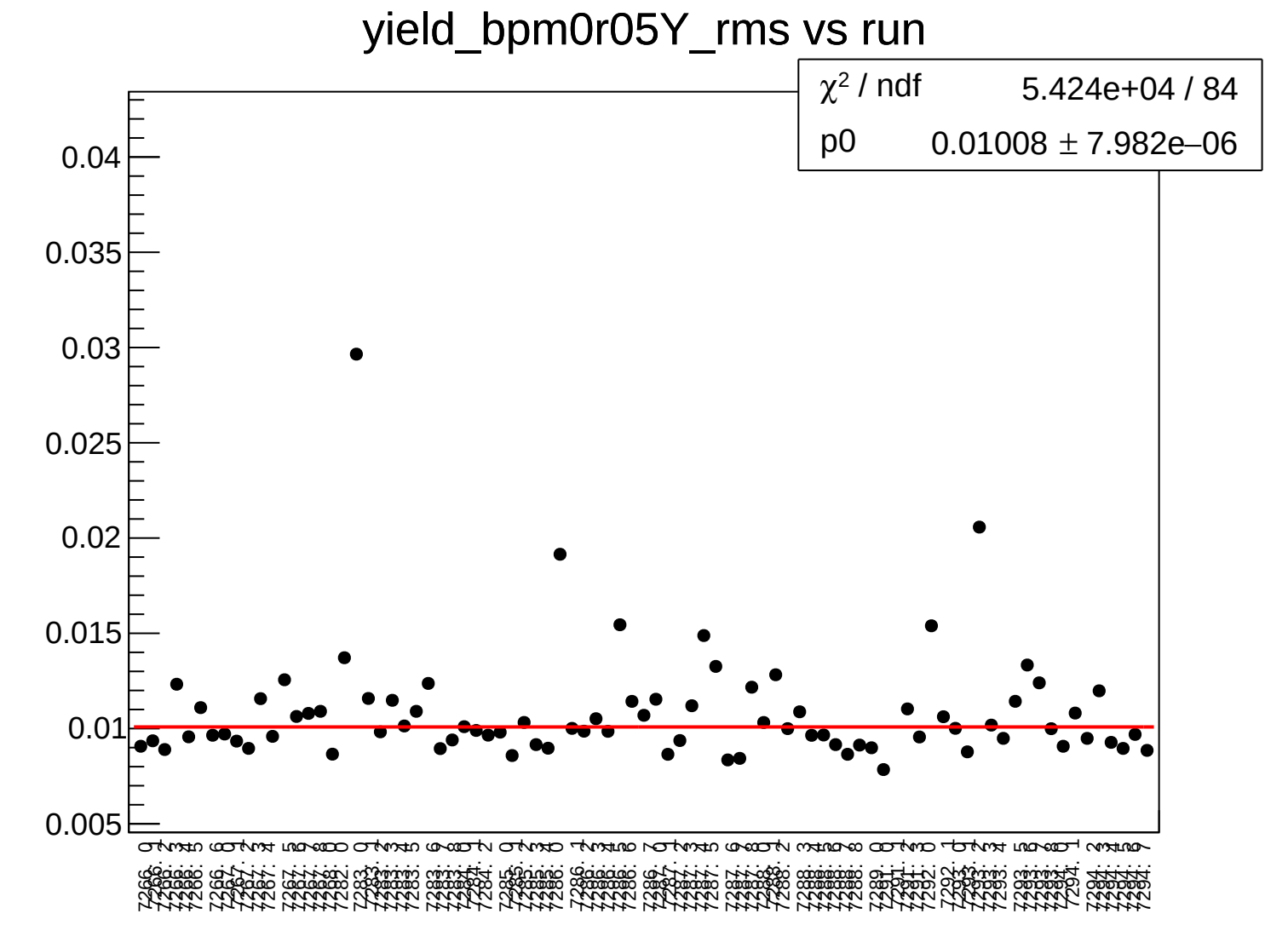

yield_bpm0r05X_mean vs run
χ² / ndf 3.764e+04 / 84
p0 −0.4234 ± 9.642e−05
pull
Entries 85
Mean −425
Std Dev 387.1

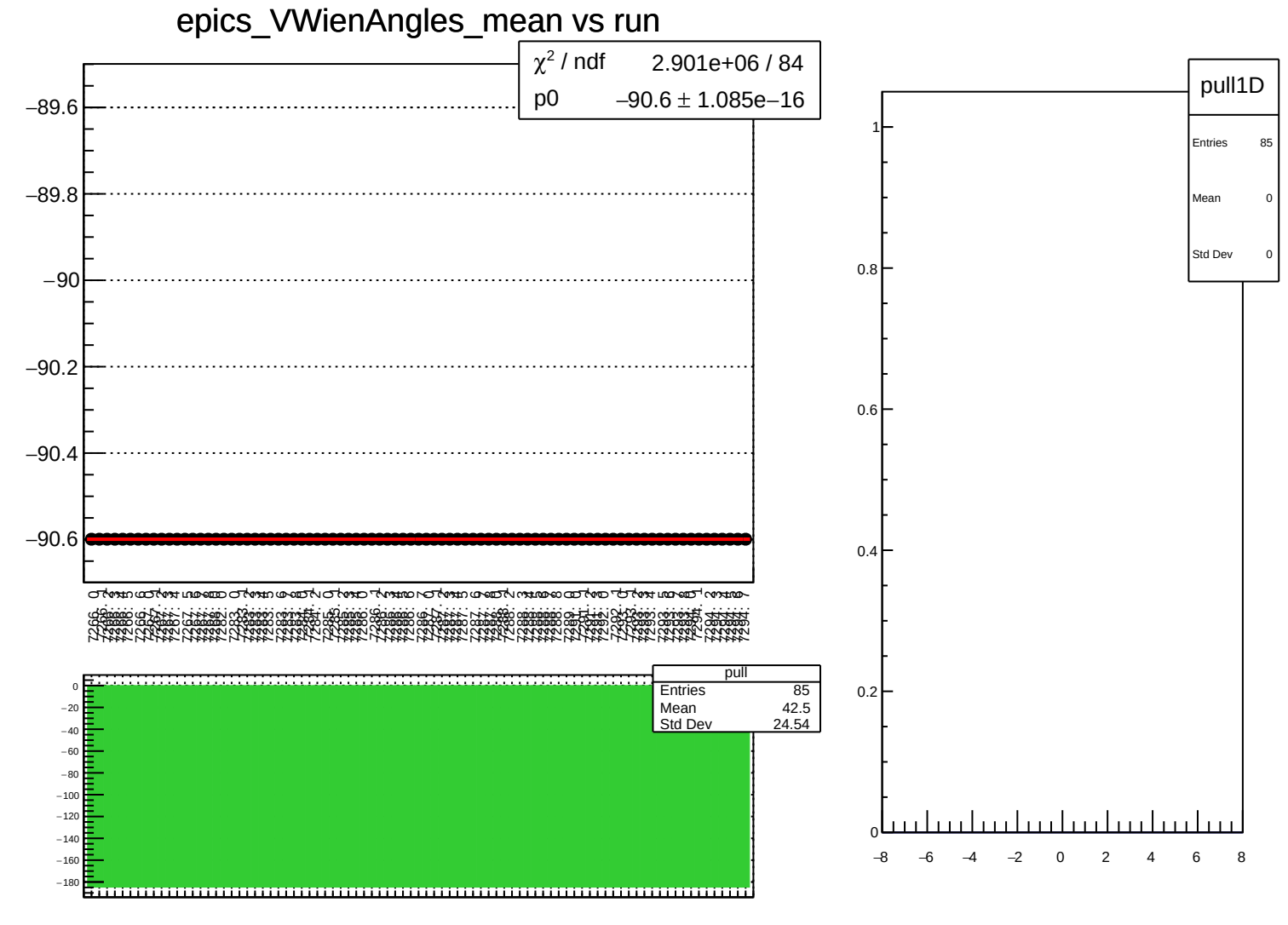

pull1D
Entries 85
Mean −0.2975
Std Dev 4.493

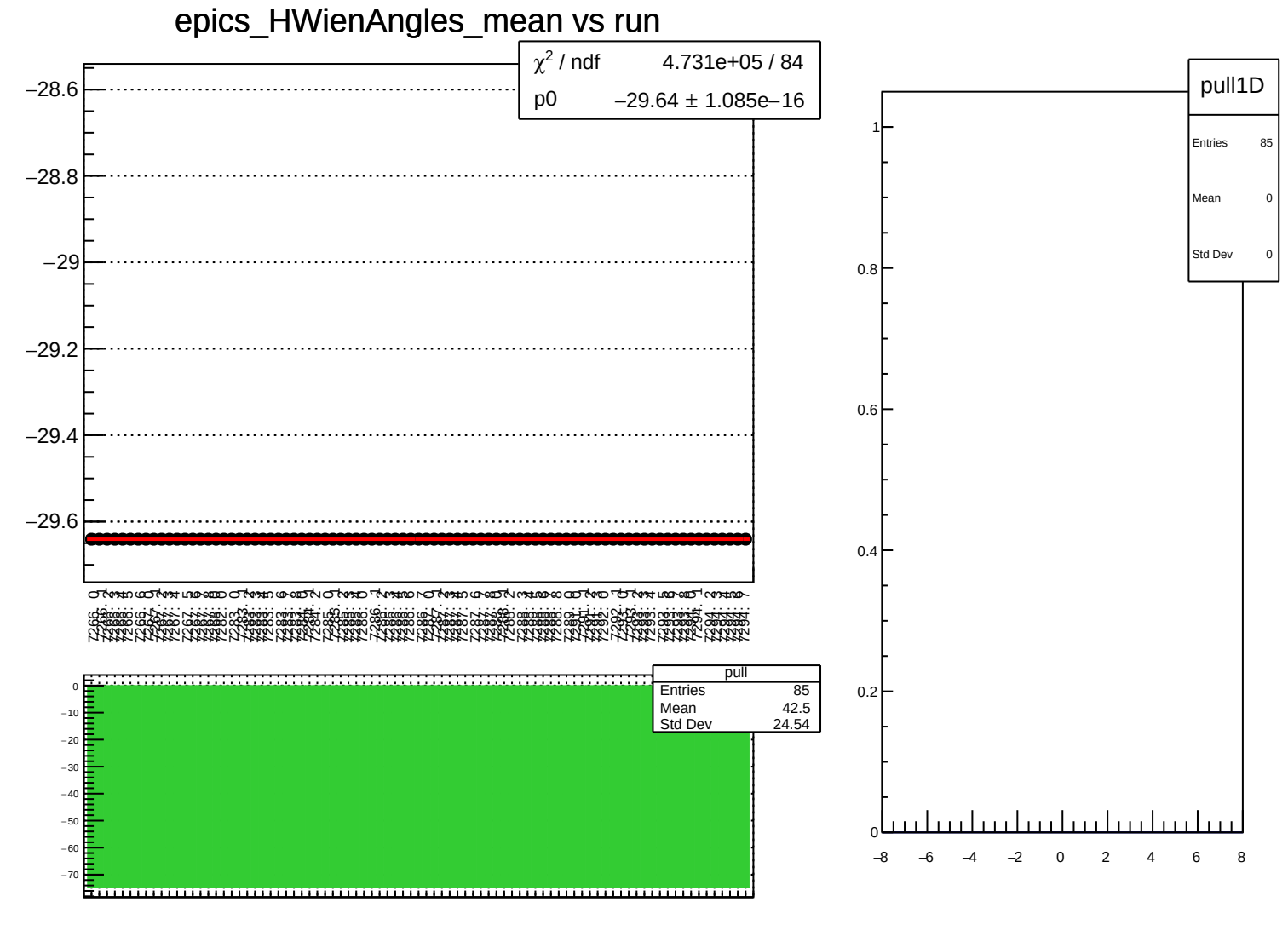

yield_bpm0r05X_rms vs run
χ² / ndf 2521 / 84
p0 0.08753 ± 6.818e–05
0.105
0.1
0.095
0.09
0.085
0.08

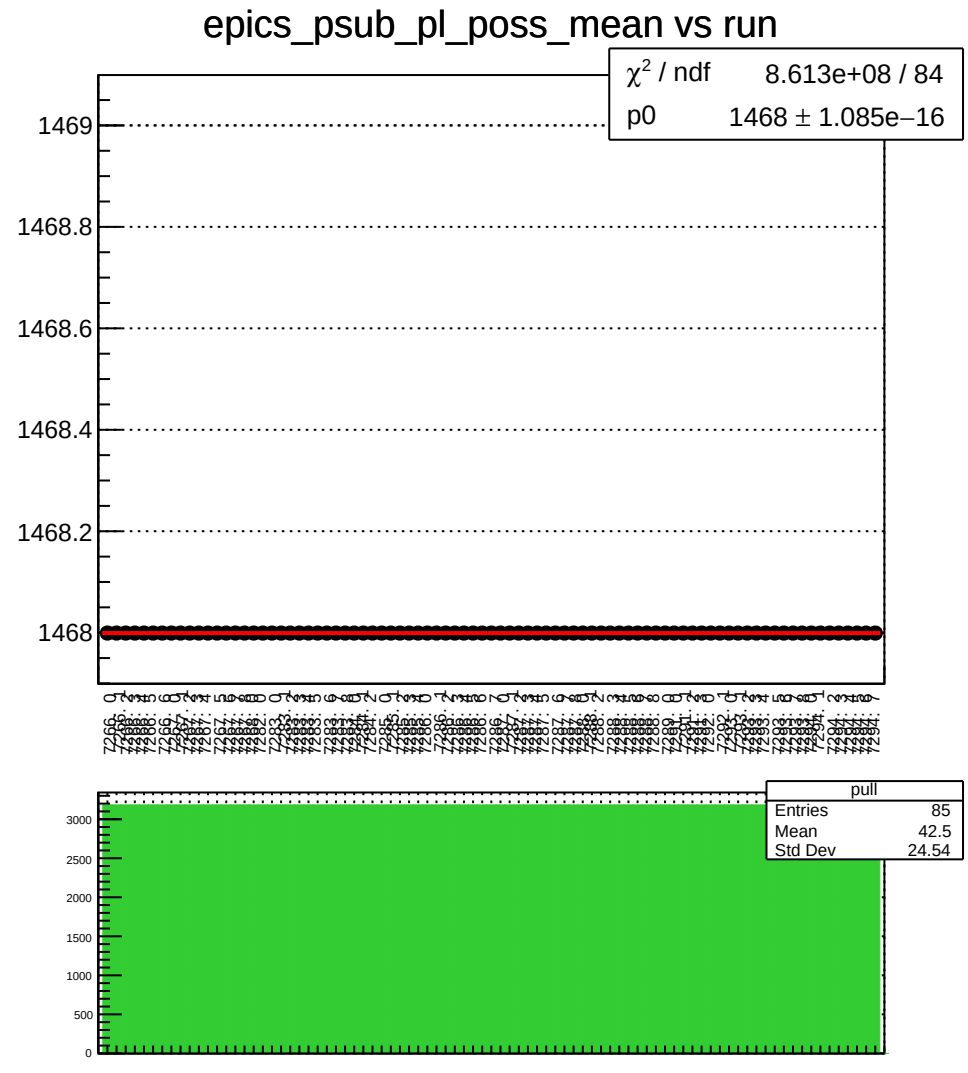

yield_bpm0r05Y_mean vs run
χ² / ndf 5.342e+06 / 84
p0 1.767 ± 1.129e−05
pull
Entries 85
Mean −1952
Std Dev 2039

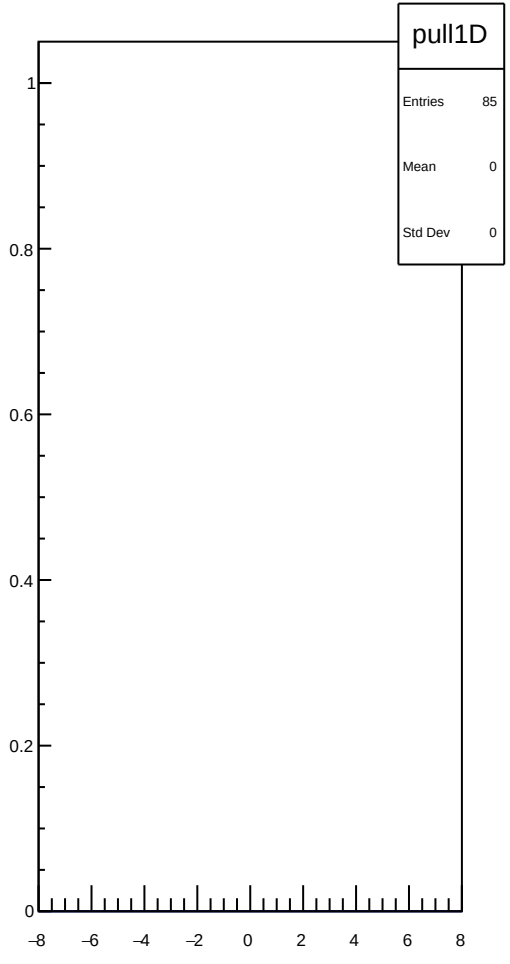

pull1D
Entries 85
Mean −2.958
Std Dev 0

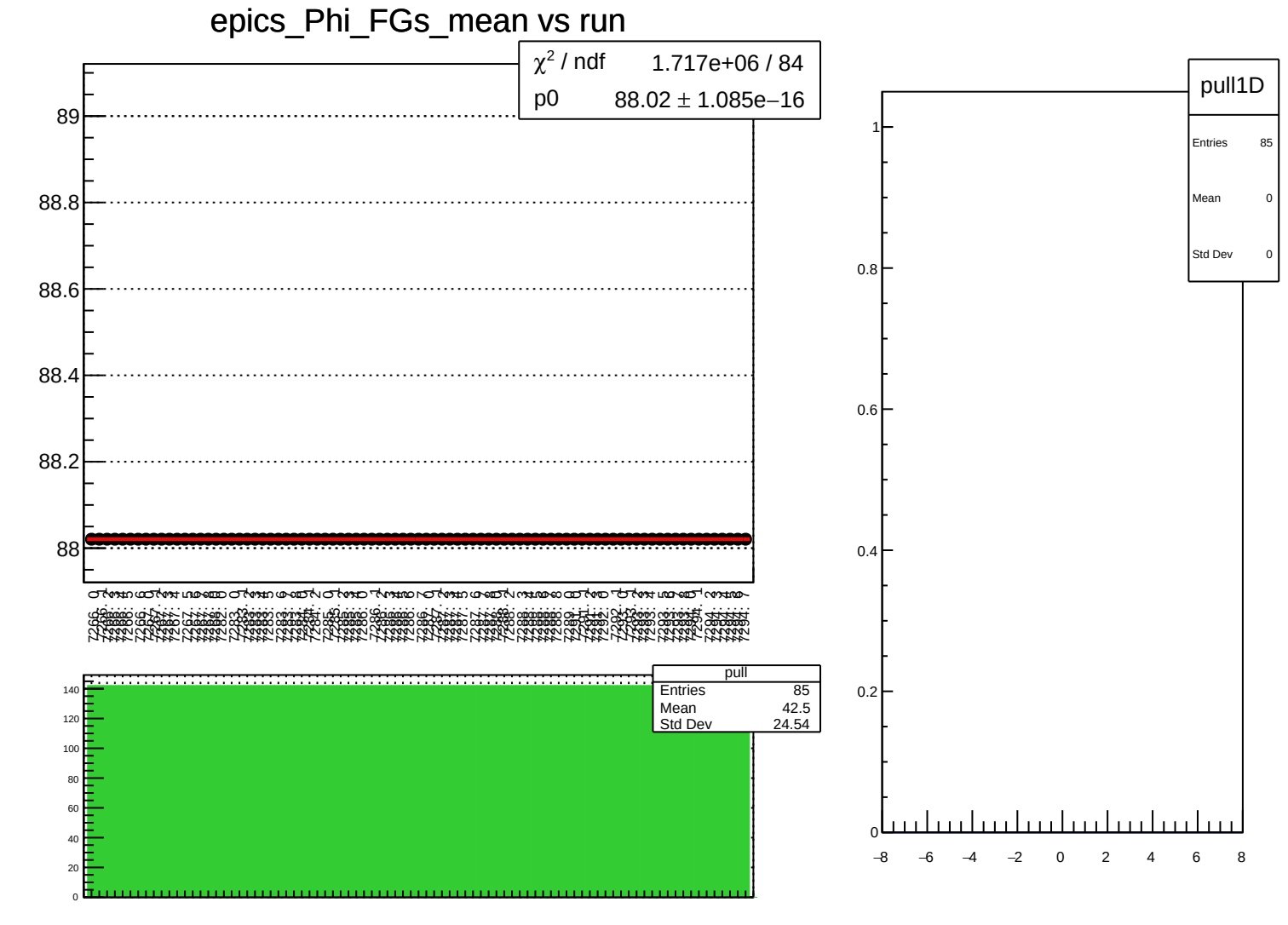

yield_bpm0r05Y_rms vs run
χ² / ndf 5.424e+04 / 84
p0 0.01008 ± 7.982e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

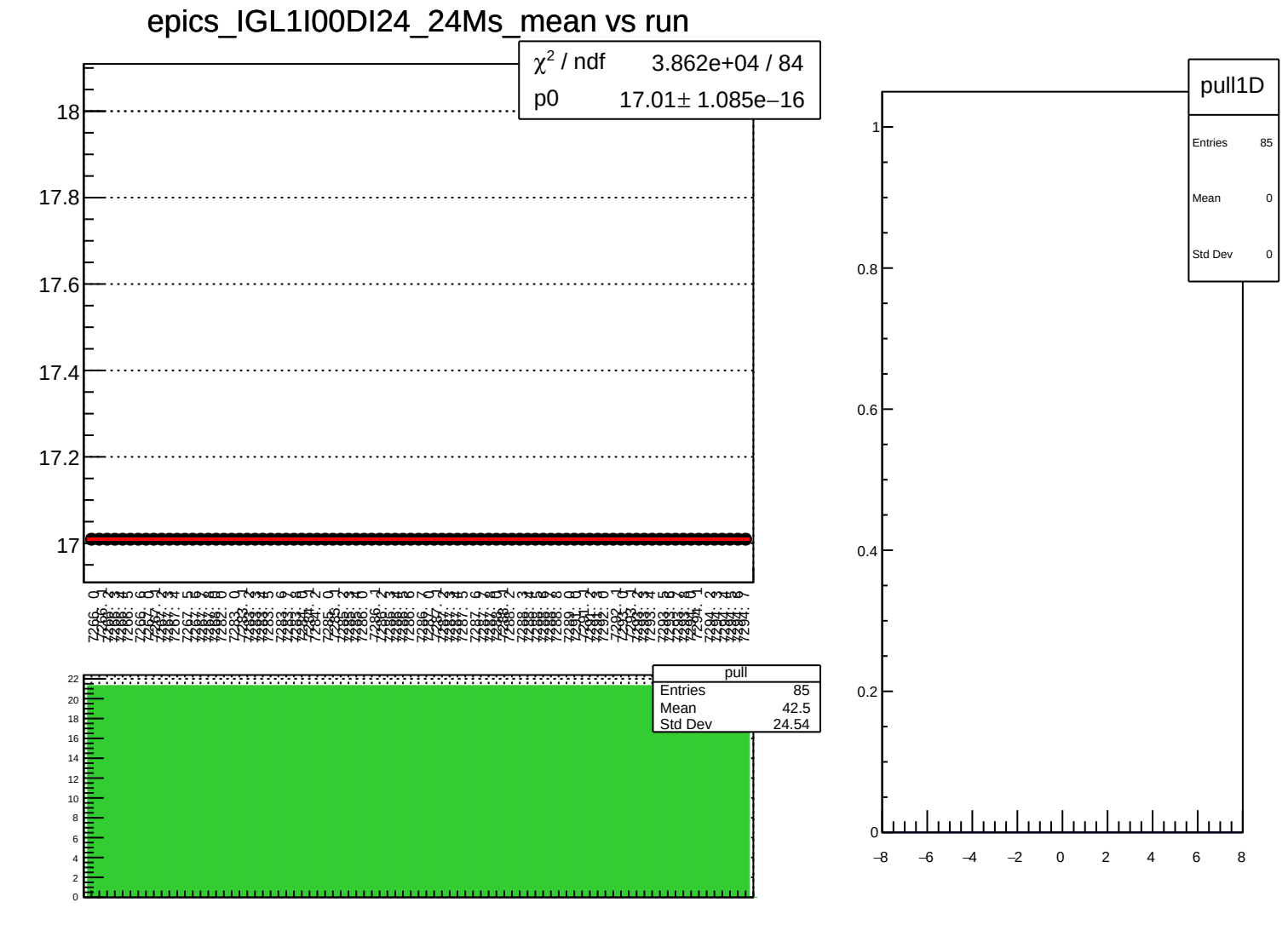

epics_VWienAngles_mean vs run
χ² / ndf 2.901e+06 / 84
p0 −90.6 ± 1.085e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−20
−40
−60
−80
−100
−120
−140
−160
−180
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

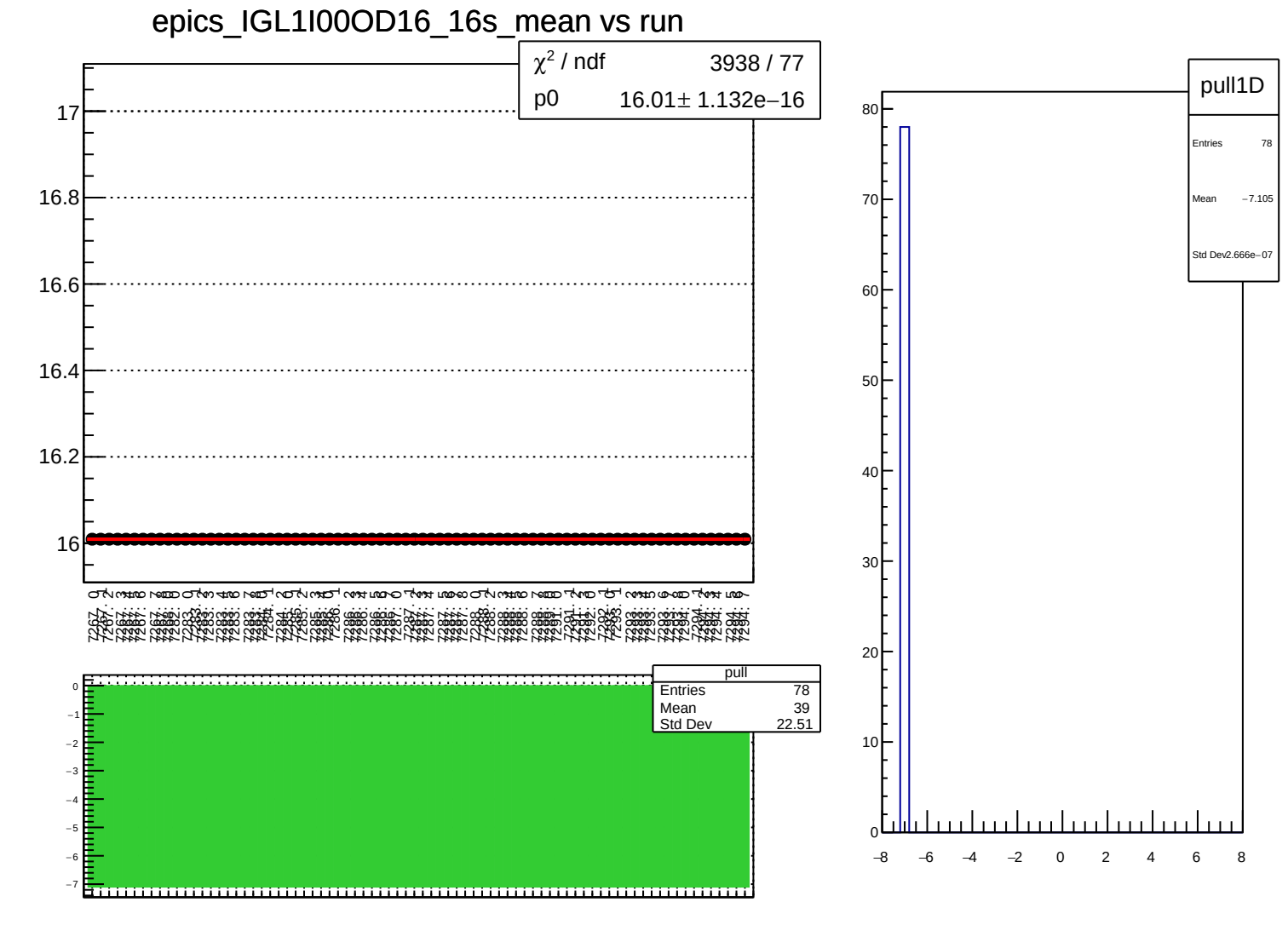

epics_HWienAngles_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

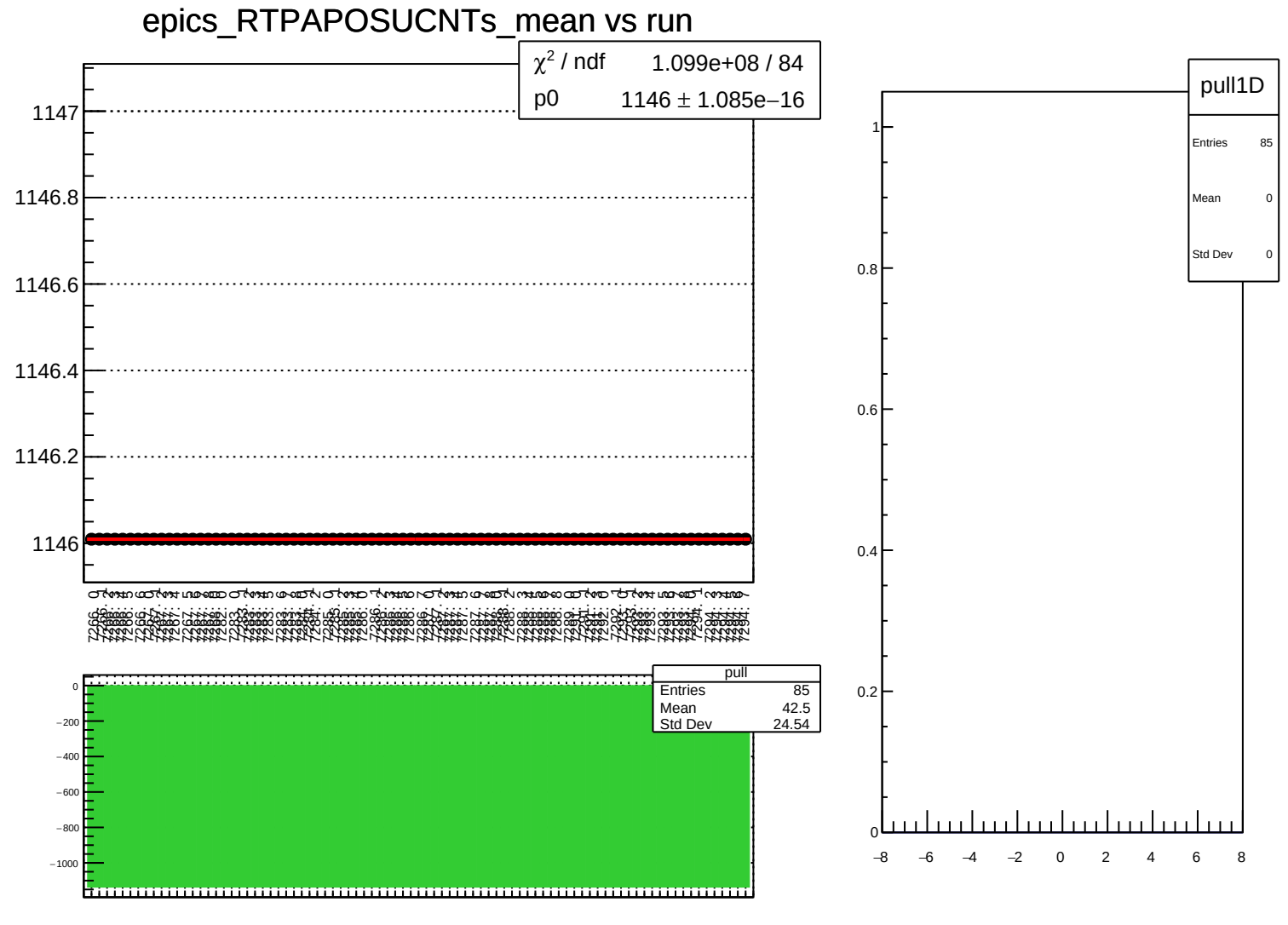

epics_psub_pl_poss_mean vs run
χ² / ndf 8.613e+08 / 84
p0 1468 ± 1.085e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 85
Mean 42.5
Std Dev 24.54
3000
2500
2000
1500
1000
500
0

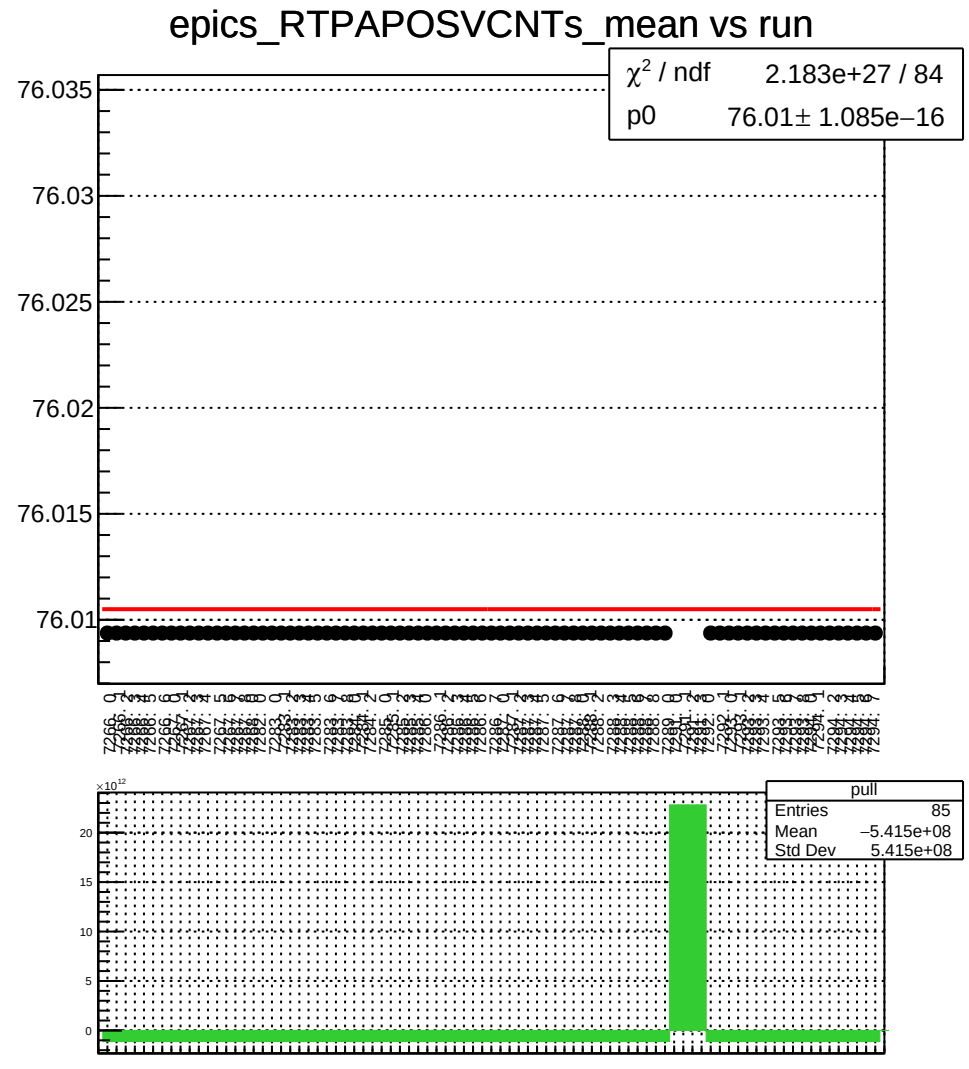

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

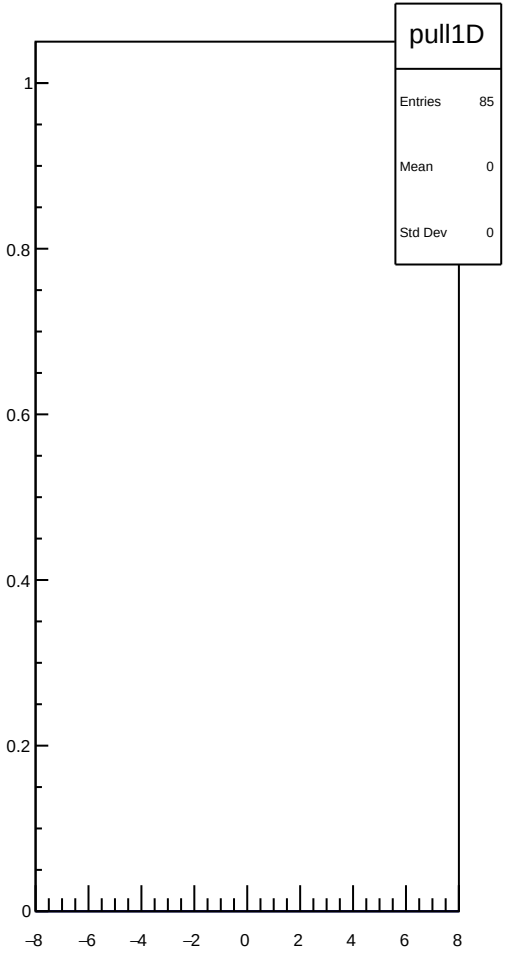

epics_Phi_FGs_mean vs run
χ² / ndf 1.717e+06 / 84
p0 88.02 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
140
120
100
80
60
40
20
0
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 3.862e+04 / 84
p0 17.01± 1.085e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 85
Mean 42.5
Std Dev 24.54
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 85
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 1.099e+08 / 84
p0 1146 ± 1.085e−16
1147
1146.8
1146.6
1146.4
1146.2
1146
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−200
−400
−600
−800
−1000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 2.183e+27 / 84
p0 76.01± 1.085e−16
76.035
76.03
76.025
76.02
76.015
76.01
pull
Entries 85
Mean −5.415e+08
Std Dev 5.415e+08
×10¹²
20
15
10
5
0


pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8